U.S. General Services Administration

NOVEMBER 2021 SOIL SAMPLING REPORT

This soil sampling report presents a summary of field activities conducted and analytical data collected at the Goodfellow Federal Center, 4300 Goodfellow Blvd. in St. Louis, Missouri. GSA undertook this sampling according to the Remedial Investigation Work Plan that the Missouri Department of Natural Resources approved in March 2021.

Surface and subsurface soil samples were collected and tested from each of 71 soil borings. The soil samples were tested for several analytical parameters (including metals, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, total petroleum hydrocarbons, volatile organic compounds and/or explosives), which you can get more information at Section 4.0 of this report.

The soil analytical results were compared to project action limits, which are the lowest EPA screening levels for soil. The laboratory results are at Section 5.0 of this report. Surface soil analytical data are summarized in Tables 3 and 4, and subsurface soil analytical data are summarized in Tables 5 and 6. Tables 7 through 10 summarize the number of detections and PAL exceedances.

Arsenic and five polycyclic aromatic hydrocarbons were detected in the soil samples above their respective PALs. The remaining results were either detections below their respective PALs or compounds the lab did not detect.

Additional soil sampling at the exceedance locations will be completed in fiscal year 2022 to define nature and extent, as necessary. Once soil sampling is completed, GSA will complete a baseline human health risk assessment.

These activities are part of the remedial investigation, one step in the CERCLA process, which GSA is following in preparation for transferring ownership of the property sometime around 2024.

If you have any questions, please email r6environmental@gsa.gov, and GSA will provide responses from the appropriate experts.

Please note: The tables and figures in this over 5,700-page plan may not be accessible for people using screen reader technology. The information can be furnished upon request by contacting 816-223-6198 or r6environmental@gsa.gov.

Goodfellow Federal Complex
Soil Sampling Report

General Services Administration
Kansas City, Missouri

Goodfellow Federal Complex
4300 Goodfellow Boulevard
St. Louis, Missouri

Project No. 133835

November 2021

Goodfellow Federal Complex
Soil Sampling Report
Goodfellow Federal Complex; 4300 Goodfellow Boulevard
St. Louis, Missouri

November 2021

Prepared for

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Burns & McDonnell
Kansas City, Missouri

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LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
Alpha-Omega	Alpha-Omega Geotech, Inc.
ASTM	American Society for Testing and Materials
Baker	Baker Utility Partners, LLC
bgs	below ground surface
CSR	Code of State Regulations
David Mason	David Mason & Associates
Data Validation Memorandum	*Data Validation Memorandum; QA/QC Review of Analytical Data; Soil Sampling Event – July 2021; Goodfellow Federal Complex; St. Louis, Missouri*
DRO	diesel range organics
Etegra	Etegra, Inc.
eV	electron volt
FOC	Fraction of Organic Carbon
FSP	*Final Field Sampling Plan; Goodfellow Federal Complex, St. Louis, Missouri*
GFC	Goodfellow Federal Complex
GRO	gasoline range organics
GSA	General Services Administration
HASP	*Final Health and Safety Plan for Remedial Investigation Activities at the Goodfellow Federal Complex; St. Louis, Missouri*
HSA	hollow stem auger
IDW	Investigation-derived waste
J	estimated value
LB	lower bound
LOD	limit of detection
MB	medium bound
MDNR	Missouri Department of Natural Resources
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicate
ng/kg	nanograms per kilogram
NELAP	National Environmental Laboratory Accreditation Program
ORO	oil range organics
Pace	Pace Analytical Services, LLC
PAH	polycyclic aromatic hydrocarbon
PAL	project action limit
PCB	polychlorinated biphenyl
PID	photoionization detector
QA	quality assurance
QAPP	*Final Quality Assurance Project Plan; Goodfellow Federal Complex, St. Louis, Missouri*
QC	quality control
R	rejected
RA Work Plan	*Final Risk Assessment Work Plan; Goodfellow Federal Complex, St. Louis, Missouri*

Abbreviation	Term/Phrase/Name
REDI	Roberts Environmental Drilling, Inc.
RI	remedial investigation
SLOP	St. Louis Ordnance Plant
SSSP	*Final Site Specific Safety Plan for Remedial Investigation Activities at the Goodfellow Federal Complex; St. Louis Missouri*
SW-846 Methods	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015)*
TEF	toxicity equivalence factor
TEQ	toxicity equivalents
TPH	total petroleum hydrocarbon
UB	upper bound
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound
Work Plan	*Final Remedial Investigation Work Plan; Goodfellow Federal Complex, St. Louis, Missouri*
2,3,7,8-TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin

1.0 INTRODUCTION

The General Services Administration (GSA) tasked Burns & McDonnell to conduct a remedial investigation (RI) at the Goodfellow Federal Complex (GFC) to identify, characterize, and delineate contamination that may be present from historical operations. RI activities include installation of 19 monitoring wells, quarterly groundwater sampling of the 19 monitoring wells, and collection of direct-push surface and subsurface soil samples. This Soil Sampling Report presents a summary of field activities conducted and analytical data collected during the soil sampling activities.

The GFC is located at 4300 Goodfellow Boulevard in St. Louis, Missouri and occupies a portion of the former St. Louis Ordnance Plant (SLOP) near the western boundary of the City of St. Louis, Missouri (see Figure 1). The GFC property is owned and operated by the GSA. The GFC encompasses approximately 66 acres, and is bordered northeast by the former SLOP, southeast by Planned Industrial Drive, southwest by Lincoln Way, and northwest by Goodfellow Boulevard. The site location is shown on Figure 2. The GFC is developed with buildings, utility tunnels, and a combined stormwater and sanitary sewer collection system.

The former SLOP was constructed in the early 1940s and fabricated .30 and .50 caliber ammunition. Previous environmental investigations at the GFC and SLOP have identified contamination present in soil and groundwater.

1.1 Project Documentation

The following planning documents provided general guidance for the soil sampling activities:

- The Missouri Department of Natural Resources (MDNR)-approved *Final Remedial Investigation Work Plan; Goodfellow Federal Complex, St. Louis, Missouri* (Work Plan) (Etegra, Inc. [Etegra], 2021), which consist of the following:
    - *Final Field Sampling Plan; Goodfellow Federal Complex, St. Louis, Missouri* (FSP),
    - *Final Quality Assurance Project Plan; Goodfellow Federal Complex, St. Louis, Missouri* (QAPP), and
    - *Final Risk Assessment Work Plan*; *Goodfellow Federal Complex, St. Louis, Missouri* (RA Work Plan)*;*
- *Final Health and Safety Plan for Remedial Investigation Activities at the Goodfellow Federal Complex; St. Louis, Missouri* (HASP) (Burns & McDonnell, 2021a); and

- *Final Site Specific Safety Plan for Remedial Investigation Activities at the Goodfellow Federal Complex; St. Louis Missouri* (SSSP) (Burns & McDonnell, 2021b).

1.2 Objective

The primary objective was to collect sufficient soil data to assess risk to the potential human exposure scenarios identified in the MDNR-approved RA Work Plan. The vertical and horizontal extent of the impacts at the GFC will be assessed to support the human health risk assessment process. To support the objective, the following soil sampling activities were identified:

- Collect surface and subsurface soil samples at 71 boring locations for chemical analysis;
- Collect soil samples at 10 boring locations for geotechnical analysis; and
- Survey the boring locations.

Burns & McDonnell's scope of services completed for this project were conducted in general accordance with the Work Plan. The objectives were completed as identified above.

1.3 Responsible Agency

The MDNR is the regulatory agency responsible for this project. Deliverables will be submitted to MDNR for review and approval.

1.4 Contaminants of Concern

The soil contaminants of concern that are being investigated as part of this RI include the following:

- Metals (antimony, arsenic, copper, lead, and zinc);
- Polychlorinated biphenyls (PCBs) (aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260);
- PCB congeners (PCBs-77, 81, 105, 114, 118, 123, 126, 156/157, 167, 169, and 189);
- Polycyclic aromatic hydrocarbons (PAHs);
- Total petroleum hydrocarbons (TPH) (gasoline range organics [GRO], diesel range organics [DRO], and oil range organics [ORO]);
- Volatile organic compounds (VOCs); and
- Explosives.

1.5 General Comments

Burns & McDonnell's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Burns & McDonnell makes no warranties, express or implied, regarding the findings, conclusions, or recommendations. Burns & McDonnell does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report.

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents of concern may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this sampling event. Subsurface conditions may vary from those encountered at specific borings, wells, or during other surveys; tests; assessments; investigations; or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

2.0 REPORT ORGANIZATION

This Soil Sampling Report has been divided into six sections as follows:

- Section 1.0, Introduction, discusses the project objectives, site location, and other general project information.
- Section 2.0, Report Organization, discusses this Soil Sampling Report sectional outline.
- Section 3.0, Field Activities, discusses the field activities that were conducted at the GFC during soil sampling activities.
- Section 4.0, Laboratory Methods, presents the analytical and geotechnical methods that soil samples were analyzed for during soil sampling activities.
- Section 5.0, Soil Analytical Results, discusses the soil analytical results for the soil sampling activities.
- Section 6.0, Soil Geotechnical Results, discusses the soil geotechnical results for the soil sampling activities.
- Section 7.0, Data Validation, discusses data validation related aspects of the soil sampling activities.
- Section 8.0, References, includes a list of references used in the report.

Included as attachments to this Soil Sampling Report are supporting tables, figures, and appendices. Appendix A includes the field notes; Appendix B includes drilling logs; Appendix C includes the Monitoring Well/Test Hole/Soil and Geotechnical Boring Plugging Registration Reports; Appendix D includes the survey data; Appendix E includes the analytical laboratory test reports; Appendix F includes geotechnical laboratory data; and Appendix G includes the *Data Validation Memorandum; QA/QC Review of Analytical Data; Soil Sampling Event – July 2021; Goodfellow Federal Complex; St. Louis, Missouri* (Data Validation Memorandum) (Burns & McDonnell, 2021d).

3.0 FIELD ACTIVITIES

Field activities were completed to meet the project objectives and were conducted in general accordance with the MDNR-approved FSP. The field activities conducted at the GFC during soil sampling activities consisted of the following activities:

- Conduct underground utility locates;
- Collect surface and subsurface soil samples at 71 boring locations for analytical analysis;
- Collect soil samples at 10 boring locations for geotechnical analysis; and
- Survey the 71 boring locations.

3.1 Deviations from Work Plan

Deviations from the MDNR-approved Work Plan are noted below.

- Geotechnical drilling and sampling activities were not included in the MDNR-approved Work Plan; however, during the project contracting phase, it was determined that collection of geotechnical data would be useful for risk assessment modeling. As drilling and soil sampling services were included in the MDNR-approved Work Plan, an addendum to the Work Plan was not prepared. Geotechnical boring activities are presented in Section 3.5.
- Boreholes (direct-push and geotechnical) were abandoned using bentonite chips hydrated in 1-foot lifts versus being abandoned with cement bentonite grout. It should be noted that both abandonment techniques are in compliance with applicable sections of the 10 Code of State Regulations (CSR) Division 23 (Missouri Well Construction Rules), Chapter 4 (Monitoring Well Construction Code) (Missouri Secretary of State, 2019). Borehole abandonment activities are presented in Section 3.6.

3.2 Health and Safety

Burns & McDonnell conducted the fieldwork under a HASP and a SSSP developed for this project. Work was performed using Level D personal protective equipment in accordance with Burns & McDonnell's core safety rules and practices. There were no safety incidents reported during soil sampling activities conducted in July 2021.

3.3 Underground Utility Locates

Burns & McDonnell's drilling subcontractor, Roberts Environmental Drilling, Inc. (REDI) of Milstadt, Illinois, a Missouri-licensed water well driller, contacted the State of Missouri's One Call service to

locate underground utilities prior to commencement of onsite activities. As the GFC is a secured federal facility, no public utilities were marked at the facility.

Burns & McDonnell also subcontracted Baker Utility Partners, LLC (Baker) of St. Louis, Missouri to provide private utility locating services. Baker performed an initial survey of proposed boring locations with a receiver to detect live power or radio frequency signals. The areas were then scanned using a 400-megahertz ground penetrating radar antenna to locate any subsurface anomalies or potential utilities. Baker's private utility locating services were performed on July 12 through 16, 2021, prior to drilling activities.

3.4 Direct-Push Soil Sampling

Seventy-one direct-push soil borings (GB-01 through GB-71) were advanced using direct-push technology by REDI from July 19 through 27, 2021. The locations of the soil borings are illustrated on Figure 3. At each soil boring location, a track-mounted direct-push rig (Geoprobe® 8040DT) was used to advance a MacroCore® sampler and continuously sample the soil. Each soil boring was advanced to a minimum depth of 10 feet below ground surface (bgs), and soil cores were obtained continuously. A Burns & McDonnell field geologist classified the soil cores in general accordance with the Unified Soil Classification System, screened the recovered soil with a photoionization detector (PID) equipped with a 10.6 electron volt (eV) ultraviolet lamp. Based on PID field screening and visual and olfactory observations, if impacts were present at depth, the soil borings were advanced to a depth where impacts were not present. Of the 71 soil borings completed, three were advanced to a depth greater than 10 feet bgs (GB-01 at 13 feet bgs, GB-07 at 13 feet bgs, and GB-40 at 15 feet bgs).

Soil samples for chemical analysis were collected from each of the 71 soil borings. At each soil boring, except GB-01, a single surface and subsurface soil was collected. One surface and two subsurface soil samples were collected at GB-01. Surface soil samples were collected from the 0 to 2-foot interval, if pavement (concrete/asphalt and subbase) was not present. If pavement was present, the representative surface soil sample was collected from a 1- to 2-foot interval immediately below the pavement and associated pavement base aggregate. Of the 71 soil borings completed, 55 were advance through pavement. Pavement thickness in these borings ranged from 0.5 to 5 feet and are summarized on Table 1. Subsurface soil samples were collected from a 1- to 2-foot interval that exhibited the highest impacts based on PID field screening and visual and olfactory observations. If no impacts were detected via PID field screening or observations (visual or olfactory), a shallow subsurface soil sample was collected from a 1- to 2-foot interval immediately below the surface soil sample. Table 1 presents a summary of the

direct-push soil borings and soil samples including depth intervals; survey locations and elevations; analytical analyses; and associated quality assurance (QA)/quality control (QC) samples.

Soil samples for chemical analysis were collected in laboratory provided containers, labeled, and immediately placed on ice in a cooler following sample collection. The cooler was secured with a custody seal prior to shipment. Samples were shipped or provided to a laboratory courier under chain-of-custody to the contract laboratory, Pace Analytical Services, LLC (Pace) of Lenexa, Kansas, a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory.

3.5 Geotechnical Borings

Of the 71 direct-push soil borings, 10 locations (GB-01, GB-07, GB-11, GB-18, GB-22, GB-34, GB-40, GB-47, GB-51, and GB-59) were also drilled as geotechnical borings. Geotechnical borings were advanced within the risk exposure areas defined in the MDNR-approved RA Work Plan. Soil physical properties derived from geotechnical data will be used for risk assessment modeling. Geotechnical borings were drilled by REDI using a track-mounted direct-push rig (Geoprobe® 8040DT) equipped with hollow stem augers (HSAs) on July 27 and 28, 2021. Geotechnical samples were collected by pushing standard 2-foot Shelby tubes through HSAs at discrete depth intervals. Two Shelby tubes and 1-gallon bulk bag samples were collected from each soil boring. One of the Shelby tubes at GB-07 was damaged and was not submitted to the geotechnical laboratory for analysis. Table 2 presents a summary of the geotechnical samples including depth intervals and laboratory analyses.

Soil samples for geotechnical analysis were collected in Shelby tubes provided by the REDI. The geotechnical samples were hand delivered to the geotechnical laboratory, Alpha-Omega Geotech, Inc. (Alpha-Omega) of Kansas City, Kansas.

3.5.1 Geology

Based on the field observations during continuous sampling of the soil borings, the shallow subsurface geology up to 15 feet bgs at the GFC generally consisted of fine-grained deposits composed of silty clay and clay. Free groundwater was not observed in any of the soil borings during direct-push advancement. Lithologic descriptions are presented on the drilling logs provided in Appendix B.

3.5.2 Field Screening

Direct-push soil cores were collected continuously to observe and document soil lithology, color, moisture characteristics, and visual and olfactory indicators of potential impact. Burns & McDonnell field screened soil cores for organic vapors using a PID. This device provides a direct reading in parts per million isobutylene equivalents. Upon removal of the sampler from the borehole, a Burns & McDonnell

geologist field screened recovered soil cores with a PID equipped with a 10.6 eV ultraviolet lamp source. Field screening results for each soil boring are presented on the drilling logs provided in Appendix B.

3.6 Borehole Abandonment

Following sampling, each of the direct-push and geotechnical soil borings were abandoned by REDI using bentonite chips hydrated in 1-foot lifts in accordance with applicable sections of the 10 CFR Division 23 (Missouri Well Construction Rules), Chapter 4 (Monitoring Well Construction Code) (Missouri Secretary of State, 2019). The surface at each boring location was restored to match adjacent surface (i.e., concrete, asphalt, soil). Abandonment activities were completed on the same day the borings were completed. Monitoring Well/Test Hole/Soil and Geotechnical Boring Plugging Registration Reports are provided in Appendix C.

3.7 Decontamination

Decontamination of drilling and sampling equipment was performed prior to beginning soil sampling activities and after completing each soil boring. Drilling and sampling equipment was decontaminated with alconox and potable water. An equipment rinsate blank sample was collected during each day of field work in which decontamination was conducted. Samples were submitted to Pace for analysis of PCBs, PAHs, VOCs, and TPH-GRO.

3.8 Surveying

David Mason & Associates (David Mason) of St. Louis, Missouri, a Missouri-licensed surveyor, surveyed the 71 soil borings on August 2 through 5, 2021. David Mason surveyed the location (northing and easting) and elevation of the ground surface for each of the 71 direct-push soil borings. Geotechnical soil borings were not surveyed as they were completed adjacent to their corresponding direct-push soil borings. A copy of the survey data is provided in Appendix D, and the survey data is summarized in Table 1.

3.9 Investigation-Derived Waste

Investigation-derived waste (IDW) generated from soil sampling activities (e.g., soil cuttings and decontamination water) were containerized onsite. Soil cuttings and decontamination water were added to the roll off containers and 300-gallon totes that were used during monitoring well installation activities. The characterization and disposal of this IDW is documented in the *Goodfellow Federal Complex Monitoring Well Installation Summary Report; Goodfellow Federal Complex; St. Louis, Missouri* (Burns & McDonnell, 2021c). Used personal protective equipment and general trash were disposed of as municipal solid waste.

4.0 LABORATORY METHODS

4.1 Analytical Laboratory Methods

Soil samples were analyzed for the following analytical methods as outlined in the MDNR-approved QAPP:

- Metals (antimony, arsenic, copper, lead, and zinc) by U.S. Environmental Protection Agency (USEPA) *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995a), IIA (1994), IIB (1995b), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015)* (SW-846 Methods) 6020B;
- PCBs (arochlors 1016, 1221, 1232, 1242, 1248, 1254, and 1260) by USEPA SW-846 Method 8082;
- PCB congeners (PCBs-77, 81, 105, 114, 118, 123, 126, 156/157, 167, 169, and 189) by USEPA SW-846 Method 1668A;
- PAHs by USEPA SW-846 Method 8270C selective ion monitoring (SIM);
- TPH-GRO by USEPA SW-846 Method 8260B;
- TPH-DRO and TPH-ORO by USEPA SW-846 Method 8270C;
- VOCs by USEPA SW-846 Method 8260B;
- Explosives by USEPA SW-846 Method 8330B; and
- Moisture content by American Society for Testing and Material (ASTM) Method D2974.

Soil samples for metals, PCBs, PCB congeners, PAHs, TPH, VOCs, and explosives analysis were submitted under chain-of-custody to Pace in Lenexa, Kansas. The soil samples for PCB congeners and explosives analysis were subcontracted by the Lenexa laboratory to other laboratories within the Pace laboratory network. PCB congeners analyses were subcontracted to Pace in Minneapolis, Minnesota, and the explosives analyses were subcontracted to Pace Analytical National Center for Testing & Innovation in Mt. Juliet, Tennessee. Both subcontract laboratories are NELAP accredited laboratories. Table 1 presents a summary of the direct-push soil borings and soil samples including depth intervals; survey locations and elevations; chemical analyses; and associated QA/QC samples.

4.2 Geotechnical Laboratory Methods

Soil samples were analyzed for the following geotechnical methods:

- Dry bulk density by ASTM Method D2937;
- Moisture content by ASTM Method D2216;

- Fraction of organic carbon (FOC) by ASTM Method D2974;
- Grain size analysis by ASTM Method D422; and
- Porosity (calculated).

The geotechnical soil samples were submitted under chain-of-custody to Alpha-Omega. Table 2 presents a summary of the geotechnical samples including depth intervals and laboratory analyses.

5.0 ANALYTICAL RESULTS

Surface and subsurface soil analytical results were compared to project action limits (PALs) for solid samples listed in Table 1 of the MDNR-approved QAPP (see Exhibit 1). Surface soil analytical data are summarized in Tables 3 and 4, and subsurface soil analytical data are summarized in Tables 5 and 6. Copies of the laboratory analytical reports are provided in Appendix E.

5.1 Surface Soil

5.1.1 Metals

Arsenic, copper, lead, and zinc were detected in surface soil samples. There were no detections of antimony in the surface soil samples above its respective laboratory reporting limits. Analytical results for metals in surface soil are summarized on Table 3. Table 7 summarizes the frequency of metals detections in surface soil. Metals PAL exceedances in surface soil are illustrated on Figure 4.

5.1.1.1 Arsenic

Arsenic was detected in surface soil in each of the 70 samples in which metals were collected for analysis. Detections ranged from 2.9 milligrams per kilogram (mg/kg) (GB-67/5-6) to 22.7 mg/kg (GB-53/0-2). Five samples (GB-10/1.5-2.5 [13.1 mg/kg], GB-16/3-4 [12.6 mg/kg], GB-29/1.5-2.5 [22.6 mg/kg], GB-43/3-5 [12.7 mg/kg], and GB-53/0-2 [22.7 mg/kg]) had detections above the PAL of 12.3 mg/kg.

5.1.1.2 Copper

Copper was detected in surface soil in each of the 70 samples in which metals were collected for analysis. Copper detections ranged from 8.6 mg/kg (GB-68/1-3) to 29.9 mg/kg (GB-69/2-3). None of the detections exceeded the PAL of 310 mg/kg.

5.1.1.3 Lead

Lead was detected in surface soil in each of the 70 samples in which metals were collected for analysis. Lead detections ranged from 7.6 mg/kg (GB-17/1-3) to 158 mg/kg (GB-10/1.5-2.5). None of the detections exceeded the PAL of 400 mg/kg.

5.1.1.4 Zinc

Zinc was detected in surface soil in each of the 70 samples in which metals were collected for analysis. Zinc detections ranged from 30.8 mg/kg (GB-48/3-5) to 173 mg/kg (GB-71/0-2). None of the detections exceeded the PAL of 2,300 mg/kg.

5.1.2 Polychlorinated Biphenyls

PCBs (aroclors) 1016, 1221, 1232, 1242, 1248, and 1254 were not detected in any surface soil samples above their respective laboratory reporting limits. PCB 1260 was detected in surface soil in 10 of the 67 samples in which PCBs were collected for analysis. Detections ranged from 0.0083 estimated value (J) mg/kg (GB-50/0-2) to 0.0525 mg/kg (GB-23/2.5-3.5). None of the detections of PCB 1260 exceeded the PAL of 0.24 mg/kg. Analytical results for PCBs in surface soil are summarized on Table 3. Table 7 summarizes the frequency of PCB detections in surface soil.

5.1.3 Polychlorinated Biphenyl Congeners

PCB (congeners) – 118, 123, 126, 156/157, 167, and 189 were detected in surface soil samples. None of the other PCB congeners analyzed were detected above their respective laboratory reporting limits. Analytical results for PCB congeners in surface soil are summarized on Table 4. Table 8 summarizes the frequency of PCB congener detections in surface soil.

5.1.3.1 Polychlorinated Biphenyl Congener – 118

PCB-118 was detected in surface soil from one of the eight samples in which PCB congeners were collected for analysis. PCB-118 was detected in the sample GB-22/1-3 at a concentration of 267 nanograms per kilogram (ng/kg) below the individual PAL of 120,000 ng/kg.

5.1.3.2 Polychlorinated Biphenyl Congener – 123

PCB-123 was detected in surface soil from one of the eight samples in which PCB congeners were collected for analysis. PCB-123 was detected in the sample GB-71/0-2 at a concentration of 1.55 J ng/kg below the individual PAL of 120,000 ng/kg.

5.1.3.3 Polychlorinated Biphenyl Congener – 126

PCB-126 was detected in surface soil from one of the eight samples in which PCB congeners were collected for analysis. PCB-126 was detected in the sample GB-22/1-3 at a concentration of 2.25 J ng/kg below the individual PAL of 36 ng/kg.

5.1.3.4 Polychlorinated Biphenyl Congeners – 156/157

PCBs-156/157 were detected in surface soil from two of the eight samples in which PCB congeners were collected for analysis. PCBs-156/157 were detected at GB-22/1-3 and GB-46/2-4 with concentrations of 261 ng/kg and 3.01 ng/kg, respectively. None of the detections exceeded the individual PAL of 120,000 ng/kg.

5.1.3.5 Polychlorinated Biphenyl Congeners – 167

PCB-167 was detected in surface soil from three of the eight samples in which PCB congeners were collected for analysis. PCB-167 was detected at GB-22/1-3, GB-46/2-4, and GB-64/3-4 with concentrations of 100 ng/kg, 1.25 J ng/kg, and 0.952 J ng/kg, respectively. None of the detections exceeded the individual PAL of 120,000 ng/kg.

5.1.3.6 Polychlorinated Biphenyl Congeners – 189

PCB-189 was detected in surface soil from two of the eight samples in which PCB congeners were collected for analysis. PCB-189 were detected at GB-22/1-3 and GB-71/0-2 with concentrations of 63.5 ng/kg and 1.89 J ng/kg, respectively. None of the detections exceeded the individual PAL of 130,000 ng/kg.

5.1.3.7 Total 2,3,7,8-Tetrachlorodibenzo-p-Dioxin Toxicity Equivalents

None of the surface soil samples analyzed for PCB congeners analysis had calculated lower bound (LB), medium bound (MB), or upper bound (UB) confidence limit total 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) toxicity equivalences (TEQs) greater than the respective total 2,3,7,8-TCDD TEQ PAL of 4.8 ng/kg. Calculated LB, MB, and UB total 2,3,7,8-TCDD TEQs in surface soil are summarized on Table 4.

To compare the analytical results of the individual PCB congeners to the media-specific PAL for 2,3,7,8-TCDD, the total 2,3,7,8-TCDD TEQ for each sample analyzed was calculated. Determining the total 2,3,7,8-TCDD TEQ is a two-step process. The first step is to determine the LB, MB, UB confidence limit TEQs for each individual PCB congener. In Step 2, the TEQs for the individual congeners are summed to determine the LB, MB, and UB total 2,3,7,8-TCDD TEQs. The total 2,3,7,8-TCDD TEQ calculation process is presented below:

Step 1

$$TEF_i \times {}^{LB}C_i = {}^{LB}TEQ_i$$

Where:
TEF_i = Toxicity equivalence factor of an individual PCB congener
${}^{LB}C_i$ = Lower bound concentration of an individual PCB congener (where non detects = 0)
${}^{LB}TEQ_i$ = Lower bound toxicity equivalent concentration of an individual PCB congener

$$TEF_i \times {}^{MB}C_i = {}^{MB}TEQ_i$$

Where:
TEF_i = Toxicity equivalence factor of an individual PCB congener
${}^{MB}C_i$ = Medium bound concentration of an individual PCB congener (where non detects = limit of detection [LOD]/2)
${}^{MB}TEQ_i$ = Medium bound toxicity equivalent concentration of an individual PCB congener

$$TEF_i \times {}^{UB}C_i = {}^{UB}TEQ_i$$

Where:
TEF_i = Toxicity equivalence factor of an individual PCB congener
${}^{UB}C_i$ = Upper bound concentration of an individual PCB congener (where non detects = LOD)
${}^{UB}TEQ_i$ = Upper bound toxicity equivalent concentration of an individual PCB congener

Toxicity equivalence factors (TEFs) have been developed to reflect the variability in toxicity between the different PCB congeners. The World Health Organization's 2005 consensus TEFs (Van den Berg et al., 2006) were used for the calculations presented above. TEFs used are presented on Tables 4 and 6.

Step 2

$$\Sigma({}^{LB}TEQ_i) = \text{Total 2,3,7,8-TCDD } {}^{LB}TEQ$$

Where:
${}^{LB}TEQ_i$ = Lower bound toxicity equivalent concentration of an individual PCB congener
Total 2,3,7,8-TCDD ${}^{LB}TEQ$ = Total lower bound calculated toxicity equivalence for 2,3,7,8-TCDD

$$\Sigma({}^{MB}TEQ_i) = \text{Total 2,3,7,8-TCDD } {}^{MB}TEQ$$

Where:
${}^{MB}TEQ_i$ = Medium bound toxicity equivalent concentration of an individual PCB congener
Total 2,3,7,8-TCDD ${}^{MB}TEQ$ = Total medium bound calculated toxicity equivalence for 2,3,7,8-TCDD

$$\Sigma({}^{UB}TEQ_i) = \text{Total 2,3,7,8-TCDD } {}^{UB}TEQ$$

Where:
TEQ_i = Upper bound toxicity equivalent concentration of an individual PCB congener
Total 2,3,7,8-TCDD ${}^{UB}TEQ$ = Total upper bound calculated toxicity equivalence for 2,3,7,8-TCDD

5.1.4 Polycyclic Aromatic Hydrocarbons

Each of the 16 PAH constituents – acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene were detected in surface soil samples. The highest concentrations of each PAH constituent occurred in on sample (GB-45/0-2). Analytical results for PAHs in surface soil are summarized on Table

3. Table 7 summarizes the frequency of PAH detections in surface soil. PAH PAL exceedances in surface soil are illustrated on Figure 5.

5.1.4.1 Acenaphthene

Acenaphthene was detected in surface soil from 23 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0015 J mg/kg (GB-06/2-3) to 1.23 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 360 mg/kg.

5.1.4.2 Acenaphthylene

Acenaphthylene was detected in surface soil from 15 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0027 J mg/kg (GB-38/0-2) to 0.0684 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 4,180 mg/kg.

5.1.4.3 Anthracene

Anthracene was detected in surface soil from 34 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0034 J mg/kg (GB-57/3.5-5.5) to 2.88 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 1,800 mg/kg.

5.1.4.4 Benzo(a)anthracene

Benzo(a)anthracene was detected in surface soil from 42 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0035 J mg/kg (GB-43/3-5) to 7.60 mg/kg (GB-45/0-2). Three samples (GB-13/0-2 [1.86 mg/kg], GB-19/0-2 [2.24 mg/kg], and GB-45/0-2 [7.60 mg/kg]) had detections above the PAL of 1.1 mg/kg.

5.1.4.5 Benzo(a)pyrene

Benzo(a)pyrene was detected in surface soil from 39 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0022 J mg/kg (GB-41/4-6) to 6.31 mg/kg (GB-45/0-2). Sixteen samples had detections above the PAL of 0.11 mg/kg. PAL exceedances ranged from 0.1260 mg/kg at GB-07/2.5-3.5 to 6.31 mg/kg at GB-45/0-2.

5.1.4.6 Benzo(b)fluoranthene

Benzo(b)fluoranthene was detected in surface soil from 47 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0023 J mg/kg (GB-70/3-5) to 10.1 mg/kg (GB-45/0-2). Five samples (GB-09/1.5-3 [1.12 mg/kg], GB-13/0-2 [2.73 mg/kg], GB-19/0-2 [2.87 mg/kg], GB-45/0-2 [10.1 mg/kg], and GB-50/0-2 [1.71 mg/kg]) had detections above the PAL of 1.1 mg/kg.

5.1.4.7 Benzo(g,h,i)perylene

Benzo(g,h,i)perylene was detected in surface soil from 41 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0022 J mg/kg (GB-43/3-5) to 3.63 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 1,720 mg/kg.

5.1.4.8 Benzo(k)fluoranthene

Benzo(k)fluoranthene was detected in surface soil from 42 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0023 J mg/kg (GB-08/2.5-3.5) to 3.58 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 11 mg/kg.

5.1.4.9 Chrysene

Chrysene was detected in surface soil from 44 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0022 J mg/kg (GB-39/5-6) to 7.59 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 110 mg/kg.

5.1.4.10 Dibenzo(a,h)anthracene

Dibenzo(a,h)anthracene was detected in surface soil from 23 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0026 J mg/kg (GB-52/2-3) to 0.7290 mg/kg (GB-45/0-2). Four samples (GB-13/0-2 [0.2990 mg/kg], GB-19/0-2 [0.2710 mg/kg], GB-45/0-2 [0.7290 mg/kg], and GB-62/0-2 [0.1160 mg/kg]) had detections above the PAL of 0.11 mg/kg.

5.1.4.11 Fluoranthene

Fluoranthene was detected in surface soil from 46 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0044 mg/kg (GB-48/3-5) to 17.8 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 240 mg/kg.

5.1.4.12 Fluorene

Fluorene was detected in surface soil from 24 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0200 mg/kg (GB-02/2-3) to 1.28 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 240 mg/kg.

5.1.4.13 Indeno(1,2,3-cd)pyrene

Indeno(1,2,3-cd)pyrene was detected in surface soil from 40 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0023 J mg/kg (GB-08/2.5-3.5) to 2.88 mg/kg (GB-45/0-2). Two samples (GB-13/0-2 [1.18 mg/kg] and GB-45/0-2 [2.88 mg/kg]) had detections above the PAL of 1.1 mg/kg.

5.1.4.14 Naphthalene

Naphthalene was detected in surface soil from 15 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0019 J mg/kg (GB-06/2-3) to 0.2540 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 3.8 mg/kg.

5.1.4.15 Phenanthrene

Phenanthrene was detected in surface soil from 45 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0041 mg/kg (GB-48/3-5) to 17.2 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 2,170 mg/kg.

5.1.4.16 Pyrene

Pyrene was detected in surface soil from 47 of the 53 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0036 J mg/kg (GB-56/3-5) to 15.2 mg/kg (GB-45/0-2). None of the detections exceeded the PAL of 180 mg/kg.

5.1.5 Total Petroleum Hydrocarbons

DRO and ORO were the only TPH constituents detected in the 11 surface soil samples which submitted for TPH analysis. Analytical results for TPH are summarized on Table 3. Table 7 summarized the frequency of TPH detections in surface soil.

5.1.5.1 Gasoline Range Organics

TPH-GRO was not detected in any surface soil samples above their respective laboratory reporting limits. Analytical results for TPH-GRO in surface soil are summarized on Table 3. Table 7 summarizes the frequency of TPH-GRO detections in surface soil.

5.1.5.2 Diesel Range Organics

TPH-DRO was detected in surface soil in 10 of the 11 of the soil samples in which TPH-DRO were collected for analysis. Detections ranged from 2.0 J mg/kg (GB-67/5-6) to 31.0 mg/kg (GB-03/1-3). None of the detections of TPH-DRO exceeded the PAL of 4,150 mg/kg.

5.1.5.3 Oil Range Organics

TPH-ORO was detected in surface soil in seven of the 11 of the soil samples in which TPH-ORO were collected for analysis. Detections ranged from 11.2 J mg/kg (GB-02/2-3) to 66.5 mg/kg (GB-62/0-2). None of the detections of TPH-ORO exceeded the PAL of 124,000 mg/kg.

5.1.6 Volatile Organic Compounds

VOCs were detected in surface soil in seven of the 11 soil samples in which VOCs were collected for analysis. The VOCs – 2-butanone, acetone, benzene, carbon disulfide, and toluene were detected in surface soil samples. None of the other VOCs were detected above their respective laboratory reporting limits. Analytical results for VOCs in surface soil are summarized on Table 3. Table 7 summarizes the frequency of detections in surface soil.

5.1.6.1 2-Butanone

2-Butanone was detected at low-level concentrations in four of the 11 surface soil samples in which VOCs were collected for analysis. Results for the four samples (GB-14/0-2 [0.00840 J mg/kg], GB-54/0-2 [0.00500 J mg/kg], GB-62/0-2 [0.01970 mg/kg], and GB-68/1-3 [0.00590 J]) were below the PAL of 2,700 mg/kg.

5.1.6.2 Acetone

Acetone was detected at low-level concentrations in four of the 11 surface soil samples in which VOCs were collected for analysis. Results for the four samples (GB-14/0-2 [0.04660 mg/kg], GB-54/0-2 [0.0215 mg/kg], GB-62/0-2 [0.07480 mg/kg], and GB-68/1-3 [0.04310 mg/kg]) were below the PAL of 6,100 mg/kg.

5.1.6.3 Benzene

Benzene was detected at low-level concentrations in one of the 11 surface soil samples in which VOCs were collected for analysis. Benzene was detected in the sample GB-03/1-3 at a concentration of 0.00054 J mg/kg below the PAL of 1.2 mg/kg.

5.1.6.4 Carbon Disulfide

Carbon disulfide was detected at low-level concentrations in two of the 11 surface soil samples in which VOCs were collected for analysis. Carbon disulfide was detected in samples GB-03/1-3 and GB-61/3-4 at concentrations of 0.00160 J mg/kg and 0.00200 J mg/kg, respectively. Both detections were below the PAL of 77 mg/kg.

5.1.6.5 Toluene

Toluene was detected at low-level concentrations in two of the 11 surface soil samples in which VOCs were collected for analysis. Toluene was detected in samples GB-03/1-3 and GB-07/2.5-3.5 at concentrations of 0.00030 J mg/kg and 0.00034 J mg/kg, respectively. Both detections were below the PAL of 490 mg/kg.

5.1.7 Explosives

No explosives compounds were detected above their respective laboratory reporting limits in the four surface soil samples which explosives were selected for analysis. Analytical results for explosives in surface soil are summarized on Table 3. Table 7 summarizes the frequency of explosives detections in surface soil.

5.2 Subsurface Soil

5.2.1 Metals

Antimony, arsenic, copper, lead, and zinc were detected in subsurface soil samples. Analytical results for metals in subsurface soil are summarized on Table 5. Table 9 summarizes the frequency of metals detections in subsurface soil. Metals PAL exceedances in subsurface soil are illustrated on Figure 6.

5.2.1.1 Antimony

Antimony was detected in one of the 71 subsurface soil samples in which metals were collected for analysis. Antimony was detected at a concentration of 1.8 mg/kg at GB-64/5-7, which is below the PAL of 10 mg/kg.

5.2.1.2 Arsenic

Arsenic was detected in each of the 71 subsurface soil samples in which metals were collected for analysis. Detections ranged from 2.4 mg/kg (GB-43/5-7) to 80.3 mg/kg (GB-64/5-7). Nine samples (GB-01/11-13 [12.4 mg/kg], GB-09/4-6 [14.8 mg/kg], GB-16/4-5 [12.7 mg/kg], GB-30/4-5 [17.7 mg/kg], GB-35/3-5 [14.9 J mg/kg], GB-52/3-5 [13.7 mg/kg], GB-60/5-7 [15.2 mg/kg], GB-64/5-7 [80.3 mg/kg], and GB-66/5-7 [28.7 mg/kg]) had detections above the PAL of 12.3 mg/kg. Analytical results for metals in subsurface soil are summarized on Table 5. Table 9 summarizes the frequency of metals detections and PAL exceedances in subsurface soil.

5.2.1.3 Copper

Copper was detected in each of the 71 subsurface samples in which metals were collected for analysis. Copper detections ranged from 10.1 mg/kg (GB-43/5-7) to 85.6 mg/kg (GB-64/5-7). None of the detections exceeded the PAL of 310 mg/kg.

5.2.1.4 Lead

Lead was detected in each of the 71 subsurface soil samples in which metals were collected for analysis. Lead detections ranged from 7.2 mg/kg (GB-27/3-5 and GB-43/5-7) to 102 mg/kg (GB-01/11-13). None of the detections exceeded the PAL of 400 mg/kg.

5.2.1.5 Zinc

Zinc was detected in each of the 71 subsurface soil samples in which metals were collected for analysis. Zinc detections ranged from 4.7 mg/kg (GB-18/5-7) to 104 mg/kg (GB-64/5-7). None of the detections exceeded the PAL of 2,300 mg/kg.

5.2.2 Polychlorinated Biphenyls

PCBs (aroclors) 1016, 1221, 1232, 1242, and 1248 were not detected in any subsurface soil samples above their respective laboratory reporting limits. PCBs 1254 and 1260 were each detected in one subsurface soil sample. PCB 1245 was detected at a concentration of 0.0090 J mg/kg at GB-03/4-6, and PCB 1260 was detected at a concentration of 0.0719 mg/kg at GB-22/3-5. The detections of PCBs 1245 and 1260 were below their PALs of 0.12 mg/kg and 0.24 mg/kg, respectively. Analytical results for PCBs in subsurface soil are summarized on Table 5. Table 9 summarizes the frequency of PCB detections in subsurface soil.

5.2.3 Polychlorinated Biphenyl Congeners

PCBs-156/157 were detected in one of six subsurface soil samples submitted for PCB congener analysis. PCBs-156/157 were detected in the sample GB-01/8-10 at a concentration of 2.05 J ng/kg below the individual PAL of 120,000 ng/kg. Additionally, the sample had a calculated total 2,3,7,8-TCDD TEQ less than the 2,3,7,8-TCDD TEQ PAL of 4.8 ng/kg. None of the other PCB congeners analyzed were detected above their respective laboratory reporting limits. Analytical results for PCB congeners in subsurface soil are summarized on Table 6. Table 10 summarizes the frequency of PCB congener detections in subsurface soil.

None of the subsurface soil samples analyzed for PCB congeners analysis had calculated LB, MB, or UB 2,3,7,8-TCDD TEQs greater than the respective total 2,3,7,8-TCDD TEQ PAL of 4.8 ng/kg. Calculated LB, MB, and UB total 2,3,7,8-TCDD TEQs in subsurface soil are summarized on Table 6.

5.2.4 Polycyclic Aromatic Hydrocarbons

Each of the 16 PAHs constituents – acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene were detected in subsurface soil samples. Analytical results for PAHs in subsurface soil are summarized on Table 5. Table 9 summarizes the frequency of PAH detections in subsurface soil. PAH PAL exceedances in subsurface soil are illustrated on Figure 7.

5.2.4.1 Acenaphthene

Acenaphthene was detected in subsurface soil from seven of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0024 J mg/kg (GB-21/3-5) to 0.9310 mg/kg (GB-13/3-5). None of the detections exceeded the PAL of 360 mg/kg.

5.2.4.2 Acenaphthylene

Acenaphthylene was detected in subsurface soil from three of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0030 J mg/kg (GB-44/5-7) to 0.7850 mg/kg (GB-13/3-5). None of the detections exceeded the PAL of 4,180 mg/kg.

5.2.4.3 Anthracene

Anthracene was detected in subsurface soil from 17 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0022 J mg/kg (GB-51/3-5) to 0.5750 mg/kg (GB-03/4-6). None of the detections exceeded the PAL of 1,800 mg/kg.

5.2.4.4 Benzo(a)anthracene

Benzo(a)anthracene was detected in subsurface soil from 28 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0025 J mg/kg (GB-43/5-7) to 1.00 mg/kg (GB-03/4-6). None of the detections exceeded the PAL of 1.1 mg/kg.

5.2.4.5 Benzo(a)pyrene

Benzo(a)pyrene was detected in subsurface soil from 24 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0038 J mg/kg (GB-57/6-8) to 0.8210 mg/kg (GB-03/4-6). Three samples (GB-03/4-6 [0.8210 mg/kg], GB-13/3-5 [0.1100 mg/kg], and GB-40/11-13 [0.2330 mg/kg]) had detections above the PAL of 0.11 mg/kg.

5.2.4.6 Benzo(b)fluoranthene

Benzo(b)fluoranthene was detected in subsurface soil from 35 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0023 J mg/kg (GB-35/3-5) to 1.36 mg/kg (GB-03/4-6). One sample (GB-03/4-6 [1.36 mg/kg]) had a detection above the PAL of 1.1 mg/kg.

5.2.4.7 Benzo(g,h,i)perylene

Benzo(g,h,i)perylene was detected in subsurface soil from 25 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0028 J mg/kg (GB-29/3-5) to 0.4440 mg/kg (GB-03/4-6). None of the detections exceeded the PAL of 1,720 mg/kg.

5.2.4.8 Benzo(k)fluoranthene

Benzo(k)fluoranthene was detected in subsurface soil from 24 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0026 J mg/kg (GB-09/4-6) to 0.6020 mg/kg (GB-13/3-5). None of the detections exceeded the PAL of 11 mg/kg.

5.2.4.9 Chrysene

Chrysene was detected in subsurface soil from 32 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0022 J mg/kg (GB-06/3-5) to 0.9240 mg/kg (GB-03/4-6). None of the detections exceeded the PAL of 110 mg/kg.

5.2.4.10 Dibenzo(a,h)anthracene

Dibenzo(a,h)anthracene was detected in subsurface soil from seven of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0027 J mg/kg (GB-22/3-5) to 0.3050 mg/kg (GB-13/3-5). There were two samples (GB-03/4-6 [0.1100 mg/kg] and GB-13/3-5 [0.3050 mg/kg]) that had detections at or above the PAL of 0.11 mg/kg.

5.2.4.11 Fluoranthene

Fluoranthene was detected in subsurface soil from 37 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0031 J mg/kg (GB-56/5-7 and GB-70/5-7) to 2.71 mg/kg (GB-03/4-6). None of the detections exceeded the PAL of 240 mg/kg.

5.2.4.12 Fluorene

Fluorene was detected in subsurface soil from 10 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0020 J mg/kg (GB-71/3-5) to 0.2490 mg/kg (GB-03/4-6). None of the detections exceeded the PAL of 240 mg/kg.

5.2.4.13 Indeno(1,2,3-cd)pyrene

Indeno(1,2,3-cd)pyrene was detected in subsurface soil from 25 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0023 J mg/kg (GB-29/3-4) to 0.3840 mg/kg (GB-03/46). None of the detections exceeded the PAL of 1.1 mg/kg.

5.2.4.14 Naphthalene

Naphthalene was detected in subsurface soil from nine of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0030 J mg/kg (GB-40/11-13) to 0.2350 mg/kg (GB-03/4-6). None of the detections exceeded the PAL of 3.8 mg/kg.

5.2.4.15 Phenanthrene

Phenanthrene was detected in subsurface soil from 33 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0039 J mg/kg (GB-06/3-5) to 2.40 mg/kg (GB-03/4-6). None of the detections exceeded the PAL of 2,170 mg/kg.

5.2.4.16 Pyrene

Pyrene was detected in surface soil from 39 of the 54 soil samples in which PAHs were collected for analysis. Detections ranged from 0.0022 J mg/kg (GB-71/3-5) to 2.08 mg/kg (GB-03/4-6). None of the detections exceeded the PAL of 180 mg/kg.

5.2.5 Total Petroleum Hydrocarbons

DRO and ORO were the only TPH constituents detected in the 12 subsurface soil samples which submitted for TPH analysis. Analytical results for TPH are summarized on Table 5. Table 9 summarized the frequency of TPH detections in surface soil

5.2.5.1 Gasoline Range Organics

TPH-GRO was not detected in any subsurface soil samples above the respective laboratory reporting limits.

5.2.5.2 Diesel Range Organics

TPH-DRO was detected in 10 of the 12 subsurface soil samples in which TPH-DRO were collected for analysis. Detections ranged from 1.8 J mg/kg (GB-55/2-4) to 85.0 mg/kg (GB-03/4-6). None of the detections of TPH-DRO exceeded the PAL of 4,150 mg/kg.

5.2.5.3 Oil Range Organics

TPH-ORO was detected in seven of the 12 subsurface soil samples in which TPH-ORO were collected for analysis. Detections ranged from 8.5 J mg/kg (GB-14/3-5) to 298 mg/kg (GB-03/4-6). None of the detections of TPH-ORO exceeded the PAL of 124,000 mg/kg.

5.2.6 Volatile Organic Compounds

VOCs were detected in eight of the 11 subsurface soil samples in which VOCs were collected for analysis. The VOCs – 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 2-butanone, acetone, benzene, carbon disulfide, naphthalene, and p-isopropyltoluene were detected in subsurface soil samples. None of the other VOCs were detected above their respective laboratory reporting limits. Analytical results for VOCs in subsurface soil are summarized on Table 5. Table 9 summarizes the frequency of detections in subsurface soil.

5.2.6.1 1,2,3-Trichlorobenzene

1,2,3-Trichlorobenzene was detected at low-level concentrations in two of the 12 subsurface soil samples in which VOCs were collected for analysis. 1,2,3-Trichlorobenzene was detected in samples GB-01/8-10 and GB-02/8-9 at concentrations of 0.00130 J mg/kg and 0.00190 J mg/kg, respectively. Both detections were below the PAL of 6.3 mg/kg.

5.2.6.2 1,2,4-Trichlorobenzene

1,2,4-Trichlorobenzene was detected at low-level concentrations in two of the 12 subsurface soil samples in which VOCs were collected for analysis. 1,2,4-Trichlorobenzene was detected in samples GB-01/8-10 and GB-02/8-9 at concentrations of 0.00092 J mg/kg and 0.00140 J mg/kg, respectively. Both detections were below the PAL of 5.8 mg/kg.

5.2.6.3 2-Butanone

2-Butanone was detected at low-level concentrations in five of the 12 subsurface soil samples in which VOCs were collected for analysis. Results for the five samples (GB-01/11-13 [0.04480 mg/kg], GB-03/4-6 [0.00590 J mg/kg], GB-07/7-9 [0.00880 mg/kg], GB-51/2-4 [0.00470 J] and GB-61/5-7 [0.00460 J]) were below the PAL of 2,700 mg/kg.

5.2.6.4 Acetone

Acetone was detected at low-level concentrations in seven of the 12 subsurface soil samples in which VOCs were collected for analysis. The seven samples with detections (GB-01/11-13 [0.24800 mg/kg], GB-02/8-9 [0.01670 J mg/kg], GB-03/4-6 [0.02630 mg/kg], GB-07/7-9 [0.04660 mg/kg], GB-54/2-4 [0.02550 J mg/kg], GB-61/5-7 [0.03020 mg/kg], GB-68/3-5 [0.02300 mg/kg]) were below the PAL of 6,100 mg/kg.

5.2.6.5 Benzene

Benzene was detected at low-level concentrations in one of the 12 subsurface soil samples in which VOCs were collected for analysis. Benzene was detected in the sample GB-03/4-6 at a concentration of 0.00072 J mg/kg below the PAL of 1.2 mg/kg.

5.2.6.1 Carbon Disulfide

Carbon disulfide was detected at low-level concentrations in four of the 12 subsurface soil samples in which VOCs were collected for analysis. The four samples with detections (GB-01/11-13 [0.00570 J mg/kg], GB-02/8-9 [0.00350 J mg/kg], GB-03/4-6 [0.00140 J mg/kg], and GB-07/7-9 [0.00520 J mg/kg]) were below the PAL of 77 mg/kg.

5.2.6.2 Naphthalene

Naphthalene was detected at low-level concentrations in three of the 12 subsurface soil samples in which VOCs were collected for analysis. Naphthalene was detected in samples GB-01/8-10, GB-02/8-9 and GB-07/7-9 at concentrations of 0.00330 J mg/kg, 0.00440 J mg/kg, and 0.01390 mg/kg, respectively. These detections were below the PAL of 3.8 mg/kg.

5.2.6.3 p-Isopropyltoluene

p-Isopropyltoluene was detected at low-level concentrations in two of the 12 subsurface soil samples in which VOCs were collected for analysis. p-Isopropyltoluene was detected in samples GB-02/8-9 and GB-07/7-9 at concentrations of 0.00077 J mg/kg and 0.00140 J mg/kg, respectively. Both detections were below the PAL of 1,100 mg/kg.

5.2.7 Explosives

No explosives compounds were detected above their respective laboratory reporting limits in the four subsurface soil samples submitted for explosives analysis. Analytical results for explosives in subsurface soil are summarized on Table 5. Table 9 summarizes the frequency of explosives detections in subsurface soil.

5.3 Quality Control Samples

QC samples were collected in accordance with the MDNR-approved QAPP for this sampling event and included eight field duplicate samples, seven matrix spike (MS) sample/matrix spike duplicate (MSD) sample pairs, eight equipment rinsate blank samples, and seven trip blanks. Copies of the laboratory analytical reports are provided in Appendix E. QC sample results were evaluated during data validation and results are summarized in Section 7.0.

6.0 GEOTECHNICAL RESULTS

A total of 19 undisturbed soil samples were collected from 10 geotechnical boring locations and submitted to Alpha-Omega for testing of the geotechnical methods identified in **Section 4.2**. Results of the geotechnical data are summarized in the sections below. Geotechnical results are provided in the geotechnical laboratory reports which are provided in Appendix F.

6.1 Moisture Content

The moisture content of soil is described as the ratio of the mass of water held in the soil to the dry soil. The moisture content in geotechnical soil samples ranged from 18.0 percent (%) at GB-18/6-8 to 28.1% at GB-59/8-10. The measured moisture contents were consistent with the measured moisture contents form the analytical samples and field observations.

6.2 Dry Bulk Density

Dry bulk density of soil is defined as the ratio of mass of soil to the total volume of soil. The dry bulk density in geotechnical soil samples ranged from 93.0 pounds per cubic foot (pcf) at GB-59/2-4 to 110.0 pcf at GB-18/6-8. Measured dry bulk densities were in the typical range for compacted fine-grained material (silt and clay).

6.3 Fraction of Organic Carbon

FOC is a dimensionless mass measure of the quantity of soil organic carbon relative to soil media. FOC can be used to estimate the capacity of a soil to adsorb or bind certain contaminants. The FOC in geotechnical soil samples ranged from 0.004 grams of carbon per grams of soil (g-c/g-soil) at GB-51/2-4 to 0.027 g-c/g-soil at GB-18/6-8.

6.4 Grain Size Analysis

Grain size analysis is a test that determines the relative proportions of divergent grainsizes as they are distributed among certain size ranges. Grain size analysis of the geotechnical soil samples indicated that all the geotechnical samples were primarily comprised of fine-grained material (silt and clay) at various proportions with very minor components of sand. Material from all but one sample (GB-18/2-4), had 96% or more passing No. 200 sieve. Silt composition ranged from 86.7% at GB-51/2-4 to 35.2% at GB-18/6-8 and the clay composition ranged from 13.2% at GB-51/2-4 to 64.7% at GB-11/6-8. Results of the grain size analyses are consistent with what was recorded on drilling logs during monitoring well installation and soil sampling activities.

6.5 Porosity

Soil porosity is a unitless measure that refers to the fraction of the total soil volume that is taken up by the pore space. Pore spaces facilitate the availability and movement of air or water within the soil environment. The porosity in the geotechnical soil samples ranged from 0.340 at GB-18/6-8 to 0.446 at GB-59/2-4. Calculated porosities were in the typical range for compacted fine-grained material (silt and clay).

7.0 DATA VALIDATION AND QUALTIY CONTROL SAMPLE RESULTS

7.1 Data Validation

The data were reviewed for achievement of any method-specified QA/QC criteria in accordance with the MDNR-approved QAPP. Data qualifiers added as a result of the data validation review are included in the Data Validation Memorandum. With the exception of the rejected (R) 1,1,2,2-tetrachloroethane and methyl acetate results for samples GB-02/2-3 and GB-07/7-9 due to lack of MS/MSD spike recovery, all data are valid for use, as qualified, in reporting the results of this sampling event. A copy of the Data Validation Memorandum is provided in Appendix G.

7.2 Quality Control Samples Results

QC samples were collected in accordance with the MDNR-approved QAPP for this sampling event and included eight field duplicate samples, seven MS/MSD sample pairs, eight equipment rinsate blank samples, and seven trip blanks. Copies of the laboratory analytical reports are provided in Appendix E.

7.2.1 Field Duplicate Samples

Eight field duplicate samples (GB-04/3-5D, GB-35/3-5D, GB-46/2-4D, GB-50/3-5D, GB-55/3-5D, GB-57/6-8D, GB-66/3-5D, and GB-68/3-5D) were collected during soil sampling activities. The field duplicate samples were collocated with their respective parent samples (GB-04/3-5, GB-35/3-5, GB-46/2-4, GB-50/3-5, GB-55/3-5, GB-57/6-8, GB-66/3-5, and GB-68/3-5). Field duplicate samples were analyzed for the same analytical suite as their respective parent samples (see Table 1). Analytical results for field duplicate samples from surface soil are presented on Tables 3 and 4. Analytical results for field duplicate samples from subsurface soil are presented on Tables 5 and 6.

7.2.2 Matrix Spike / Matrix Duplicate Samples

Seven MS/MSD sample pairs were collected during soil sampling activities. The MS/MSD samples pairs were collocated with their respective parent samples (GB-02/2-3, GB-07/7-9, GB-25/2-4, GB-32/2-4, GB-38/3-5, GB-48/3-5, and GB-58/4-6). MS/MSD sample pairs were analyzed for the same analytical suite as their respective parent samples (see Table 1).

7.2.3 Equipment Rinsate Blank Samples

Eight equipment rinsate blank samples (RB-01, RB-02, RB-03, RB-04, RB-05, RB-06, RB-07, and RB-08) were collected during soil sampling activities. Equipment Rinsate Blank Samples RB-01 through RB-06 were collected following decontamination of direct-push sampling equipment used for collection of soil samples for analytical analysis. Equipment Rinsate Blank Sample RB-07 was collected following

decontamination of direct-push sampling equipment and drilling equipment used for collection of soil samples for analytical analysis and geotechnical analysis. Equipment Rinsate Blank Sample RB-08 was collected following decontamination of drilling equipment used for collection of soil samples for geotechnical analysis. Equipment rinsate blank sample results are summarized on Table 11. Equipment rinsate blank sample results were compared to PALs for aqueous samples listed in Table 2 of the MDNR-approved QAPP (see Exhibit 2).

PAH constituents – benzo(a)pyrene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene were detected Equipment Rinsate Blank Sample RB-03. PAH constituents – fluoranthene, phenanthrene, and pyrene were detected Equipment Rinsate Blank Sample RB-05. PAH detections were below their respective PALs. VOCs – bromodichloromethane and chloroform were detected in Equipment Rinsate Blank Samples RB-01 and RB-06. VOCs – acetone and chloroform were detected in Equipment Rinsate Blank Sample RB-04. Additionally, Equipment Rinsate Blank Samples RB-03 and RB-05 had detections of acetone only. With the exception of the chloroform detection in Equipment Rinsate Blank Sample RB-01 of 0.006900 milligrams per liter (mg/L), no detections exceeded their respective PALs. However, it should be noted that no soil samples for VOCs analysis were collected on the day (July 19, 2021) that Equipment Rinsate Blank Sample RB-01 was collected.

7.2.4 Trip Blank Samples

Seven trip blank samples (TB-01, TB-02, TB-03, TB-3, TB-04, TB-05, and TB-72721) were collected during soil sampling activities for VOC analysis. Analytical results for equipment rinsate blank samples are presented on Table 11. Trip blank sample results were compared to PALs for aqueous samples listed in Table 2 of the MDNR-approved QAPP (see Exhibit 2). With the exception of a detection of m/p-xylene in TB-01 (0.0023 J mg/L), VOCs were not detected above laboratory reporting limits in the trip blanks.

8.0 REFERENCES

Burns & McDonnell, 2021a. *Final Health and Safety Plan for Remedial Investigation Activities at the Goodfellow Federal Complex; St. Louis, Missouri*, February.

Burns & McDonnell, 2021b. *Final Site Specific Safety Plan for Remedial Investigation Activities at the Goodfellow Federal Complex; St. Louis, Missouri*, May.

Burns & McDonnell, 2021c. *Goodfellow Federal Complex Monitoring Well Installation Summary Report; Goodfellow Federal Complex; St. Louis, Missouri,* August.

Burns & McDonnell, 2021d. *Data Validation Memorandum; QA/QC Review of Analytical Data; Soil Sampling Event – July 2021; Goodfellow Federal Complex; St. Louis, Missouri,* October.

Etegra, 2021. *Final Remedial Investigation Work Plan; Goodfellow Federal Complex, St. Louis, Missouri*, February.

Missouri Secretary of State, 2019. *Rules of Department of Natural Resources; Division 23 – Well Installation; Chapter 4 – Monitoring Well Construction Code*. January.

Van den Berg M, et al., 2006, *The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds.* Tox Sci 93(2):223-241. July.

USEPA, 1993, 1994, 1995a, 1995b, 1997, 1999, 2005, 2008, and 2015. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995a), IIA (1994), IIB (1995b), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015).*

EXHIBITS

TABLE 1
PROJECT ACTION LIMITS AND LABORATORY DETECTION/QUANTITATION LIMITS - SOLID SAMPLES
GOODFELLOW FEDERAL COMPLEX
REMEDIAL INVESTIGATION WORK PLAN

Analyte	Category	Test	PAL	PAL Reference	PQL Goal	PQL	MDL
Antimony	Metal	SW6010B	10	Technology Limit	10	5	1.23
Arsenic	Metal	SW6010B	12.3	URS 2008 UTL	12.3	2.5	0.97
Copper	Metal	SW6010B	310	RSL (Res, 0.1)	2.5	0.5	0.21
Lead	Metal	SW6010B	400	RSL (Res, 0.1)	7.5	1.5	0.59
Zinc	Metal	SW6010B	2300	RSL (Res, 0.1)	15	3	1.1
Aroclor 1016	PCB	SW8082	0.41	RSL (Res, 0.1)	0.12	0.0375	0.0045
Aroclor 1221	PCB	SW8082	0.2	RSL (Res, 0.1)	0.12	0.0375	0.0042
Aroclor 1232	PCB	SW8082	0.17	RSL (Res, 0.1)	0.12	0.0375	0.0036
Aroclor 1242	PCB	SW8082	0.23	RSL (Res, 0.1)	0.12	0.0375	0.0039
Aroclor 1248	PCB	SW8082	0.23	RSL (Res, 0.1)	0.12	0.0375	0.003
Aroclor 1254	PCB	SW8082	0.12	RSL (Res, 0.1)	0.12	0.0375	0.0045
Aroclor 1260	PCB	SW8082	0.24	RSL (Res, 0.1)	0.12	0.0375	0.0055
PCB-77	PCB Congeners	1668C	0.038	RSL (Res, 0.1)	0.000025	0.000005	0.0000014
PCB-81	PCB Congeners	1668C	0.012	RSL (Res, 0.1)	0.000025	0.000005	0.0000018
PCB-126	PCB Congeners	1668C	0.000036	RSL (Res, 0.1)	0.000025	0.000005	0.0000016
PCB-169	PCB Congeners	1668C	0.00012	RSL (Res, 0.1)	0.000025	0.000005	0.0000015
PCB-105	PCB Congeners	1668C	0.12	RSL (Res, 0.1)	0.000025	0.000005	0.0000017
PCB-114	PCB Congeners	1668C	0.12	RSL (Res, 0.1)	0.000025	0.000005	0.0000015
PCB-118	PCB Congeners	1668C	0.12	RSL (Res, 0.1)	0.00005	0.00001	0.000003
PCB-123	PCB Congeners	1668C	0.12	RSL (Res, 0.1)	0.000025	0.000005	0.0000017
PCB-156	PCB Congeners	1668C	0.12	RSL (Res, 0.1)	0.00005	0.00001	0.0000023
PCB-157	PCB Congeners	1668C	0.12	RSL (Res, 0.1)	0.00005	0.00001	0.0000023
PCB-167	PCB Congeners	1668C	0.12	RSL (Res, 0.1)	0.000025	0.000005	0.0000013
PCB-189	PCB Congeners	1668C	0.13	RSL (Res, 0.1)	0.000025	0.000005	0.0000013
Acenaphthene	SVOC	SW8270C	360	RSL (Res, 0.1)	0.17	0.034	0.01
Acenaphthylene	SVOC	SW8270C	4180	MDNR RBTL (Surf)	0.17	0.034	0.011
Anthracene	SVOC	SW8270C	1800	RSL (Res, 0.1)	0.17	0.034	0.005
Benzo(a)anthracene	SVOC	SW8270C	1.1	RSL (Res, 0.1)	0.17	0.034	0.011
Benzo(a)pyrene	SVOC	SW8270C	0.11	RSL (Res, 0.1)	0.11	0.034	0.006
Benzo(b)fluoranthene	SVOC	SW8270C	1.1	RSL (Res, 0.1)	0.17	0.034	0.006
Benzo(g,h,i)perylene	SVOC	SW8270C	1720	MDNR RBTL (Surf)	0.17	0.034	0.01
Benzo(k)fluoranthene	SVOC	SW8270C	11	RSL (Res, 0.1)	0.17	0.034	0.005
Chrysene	SVOC	SW8270C	110	RSL (Res, 0.1)	0.17	0.034	0.012
Dibenzo(a,h)anthracene	SVOC	SW8270C	0.11	RSL (Res, 0.1)	0.11	0.034	0.009
Fluoranthene	SVOC	SW8270C	240	RSL (Res, 0.1)	0.17	0.034	0.012
Fluorene	SVOC	SW8270C	240	RSL (Res, 0.1)	0.17	0.034	0.01
Indeno(1,2,3-cd)pyrene	SVOC	SW8270C	1.1	RSL (Res, 0.1)	0.17	0.034	0.008
Naphthalene	SVOC	SW8270C	3.8	RSL (Res, 0.1)	0.17	0.034	0.01
Phenanthrene	SVOC	SW8270C	2170	MDNR RBTL (Surf)	0.17	0.034	0.011
Pyrene	SVOC	SW8270C	180	RSL (Res, 0.1)	0.17	0.034	0.012
1,1,1,2-Tetrachloroethane	VOC	SW8260B	2	RSL (Res, 0.1)	0.01	0.002	0.00056
1,1,1-Trichloroethane	VOC	SW8260B	810	RSL (Res, 0.1)	0.01	0.002	0.00029
1,1,2,2-Tetrachloroethane	VOC	SW8260B	0.6	RSL (Res, 0.1)	0.01	0.002	0.00038
1,1,2-Trichloro-1,2,2-trifluoroethane	VOC	SW8260B	670	RSL (Res, 0.1)	0.01	0.002	0.00086
1,1,2-Trichloroethane	VOC	SW8260B	0.15	RSL (Res, 0.1)	0.025	0.005	0.00032
1,1-Dichloro-2-propanone	VOC	SW8260B	NE	NE	0.25	0.05	0.00698
1,1-Dichloroethane	VOC	SW8260B	3.6	RSL (Res, 0.1)	0.01	0.002	0.00054
1,1-Dichloroethene	VOC	SW8260B	23	RSL (Res, 0.1)	0.01	0.002	0.00019
1,1-Dichloropropene	VOC	SW8260B	NE	NE	0.01	0.002	0.00041
1,2,3-Trichlorobenzene	VOC	SW8260B	6.3	RSL (Res, 0.1)	0.01	0.002	0.00061
1,2,3-Trichloropropane	VOC	SW8260B	0.0051	RSL (Res, 0.1)	0.0051	0.002	0.00072
1,2,3-Trimethylbenzene	VOC	SW8260B	34	RSL (Res, 0.1)	0.01	0.002	0.00067
1,2,4-Trichlorobenzene	VOC	SW8260B	5.8	RSL (Res, 0.1)	0.01	0.002	0.00048
1,2,4-Trimethylbenzene	VOC	SW8260B	30	RSL (Res, 0.1)	0.01	0.002	0.00063
1,2-Dibromo-3-chloropropane	VOC	SW8260B	0.01	Technology Limit	0.01	0.005	0.00079
1,2-Dibromoethane	VOC	SW8260B	0.036	RSL (Res, 0.1)	0.01	0.002	0.00011
1,2-Dichlorobenzene	VOC	SW8260B	180	RSL (Res, 0.1)	0.01	0.002	0.00033
1,2-Dichloroethane	VOC	SW8260B	0.46	RSL (Res, 0.1)	0.01	0.002	0.00015
1,2-Dichloropropane	VOC	SW8260B	1.6	RSL (Res, 0.1)	0.01	0.002	0.00021
1,3,5-Trimethylbenzene	VOC	SW8260B	27	RSL (Res, 0.1)	0.01	0.002	0.00052
1,3-Dichlorobenzene	VOC	SW8260B	148	MDNR RBTL (Sub)	0.01	0.002	0.00052
1,3-Dichloropropane	VOC	SW8260B	160	RSL (Res, 0.1)	0.01	0.002	0.00028
1,4-Dichlorobenzene	VOC	SW8260B	2.6	RSL (Res, 0.1)	0.01	0.002	0.00046
1-Chlorobutane	VOC	SW8260B	310	RSL (Res, 0.1)	0.01	0.002	0.00038
2,2-Dichloropropane	VOC	SW8260B	NE	NE	0.01	0.002	0.0002
2-Butanone	VOC	SW8260B	2700	RSL (Res, 0.1)	0.125	0.025	0.00325
2-Chlorotoluene	VOC	SW8260B	160	RSL (Res, 0.1)	0.01	0.002	0.00043
2-Hexanone	VOC	SW8260B	20	RSL (Res, 0.1)	0.125	0.025	0.00204
2-Nitropropane	VOC	SW8260B	0.1	Technology Limit	0.1	0.05	0.00456
4-Chlorotoluene	VOC	SW8260B	160	RSL (Res, 0.1)	0.01	0.002	0.00054

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Analyte	Category	Test	PAL	PAL Reference	PQL Goal	PQL	MDL
4-Methyl-2-pentanone	VOC	SW8260B	3300	RSL (Res, 0.1)	0.125	0.025	0.0022
Acetone	VOC	SW8260B	6100	RSL (Res, 0.1)	0.125	0.025	0.01073
Acrolein	VOC	SW8260B	0.1	Technology Limit	0.1	0.05	0.0207
Acrylonitrile	VOC	SW8260B	0.25	RSL (Res, 0.1)	0.025	0.005	0.00097
Allyl chloride	VOC	SW8260B	0.17	RSL (Res, 0.1)	0.01	0.002	0.00026
Benzene	VOC	SW8260B	1.2	RSL (Res, 0.1)	0.005	0.001	0.00027
Bromobenzene	VOC	SW8260B	29	RSL (Res, 0.1)	0.01	0.002	0.00039
Bromochloromethane	VOC	SW8260B	15	RSL (Res, 0.1)	0.01	0.002	0.00031
Bromodichloromethane	VOC	SW8260B	0.29	RSL (Res, 0.1)	0.01	0.002	0.0003
Bromoform	VOC	SW8260B	19	RSL (Res, 0.1)	0.025	0.005	0.00037
Bromomethane	VOC	SW8260B	0.68	RSL (Res, 0.1)	0.05	0.01	0.00131
Carbon disulfide	VOC	SW8260B	77	RSL (Res, 0.1)	0.01	0.002	0.00172
Carbon tetrachloride	VOC	SW8260B	0.65	RSL (Res, 0.1)	0.01	0.002	0.00021
Chlorobenzene	VOC	SW8260B	28	RSL (Res, 0.1)	0.01	0.002	0.00035
Chloroethane	VOC	SW8260B	1400	RSL (Res, 0.1)	0.05	0.01	0.00155
Chloroform	VOC	SW8260B	0.32	RSL (Res, 0.1)	0.01	0.002	0.00034
Chloromethane	VOC	SW8260B	11	RSL (Res, 0.1)	0.05	0.01	0.00123
cis-1,2-Dichloroethene	VOC	SW8260B	16	RSL (Res, 0.1)	0.01	0.002	0.00022
cis-1,3-Dichloropropene	VOC	SW8260B	0.224	MDNR RBTL (Sub)	0.01	0.002	0.00025
Cyclohexanone	VOC	SW8260B	2800	RSL (Res, 0.1)	0.25	0.05	0.01836
Dibromochloromethane	VOC	SW8260B	8.3	RSL (Res, 0.1)	0.01	0.002	0.0003
Dibromomethane	VOC	SW8260B	2.4	RSL (Res, 0.1)	0.01	0.002	0.00023
Dichlorodifluoromethane	VOC	SW8260B	8.7	RSL (Res, 0.1)	0.05	0.01	0.00157
Ethyl ether	VOC	SW8260B	1600	RSL (Res, 0.1)	0.01	0.002	0.00031
Ethyl methacrylate	VOC	SW8260B	180	RSL (Res, 0.1)	0.01	0.002	0.00042
Ethylbenzene	VOC	SW8260B	5.8	RSL (Res, 0.1)	0.01	0.002	0.00056
Hexachlorobutadiene	VOC	SW8260B	1.2	RSL (Res, 0.1)	0.01	0.002	0.0004
Hexachloroethane	VOC	SW8260B	1.8	RSL (Res, 0.1)	0.01	0.002	0.00038
Iodomethane	VOC	SW8260B	NE	NE	0.05	0.01	0.00312
Isopropylbenzene	VOC	SW8260B	190	RSL (Res, 0.1)	0.01	0.002	0.00056
m,p-Xylenes	VOC	SW8260B	NE	NE	0.02	0.004	0.0012
Methacrylonitrile	VOC	SW8260B	0.75	RSL (Res, 0.1)	0.025	0.005	0.00102
Methyl Methacrylate	VOC	SW8260B	440	RSL (Res, 0.1)	0.025	0.005	0.00065
Methyl tert-butyl ether	VOC	SW8260B	47	RSL (Res, 0.1)	0.01	0.002	0.00026
Methylacrylate	VOC	SW8260B	15	RSL (Res, 0.1)	0.025	0.005	0.00062
Methylene chloride	VOC	SW8260B	35	RSL (Res, 0.1)	0.05	0.01	0.00689
Naphthalene	VOC	SW8260B	3.8	RSL (Res, 0.1)	0.025	0.005	0.0012
n-Butylbenzene	VOC	SW8260B	390	RSL (Res, 0.1)	0.01	0.002	0.00055
n-Heptane	VOC	SW8260B	2.2	RSL (Res, 0.1)	0.1	0.02	0.0007
n-Hexane	VOC	SW8260B	61	RSL (Res, 0.1)	0.1	0.02	0.00347
Nitrobenzene	VOC	SW8260B	5.1	RSL (Res, 0.1)	0.25	0.05	0.03306
n-Propylbenzene	VOC	SW8260B	380	RSL (Res, 0.1)	0.01	0.002	0.00045
o-Xylene	VOC	SW8260B	65	RSL (Res, 0.1)	0.02	0.004	0.00054
Pentachloroethane	VOC	SW8260B	7.7	RSL (Res, 0.1)	0.025	0.005	0.0003
p-Isopropyltoluene	VOC	SW8260B	1100	MDNR RBTL (Sub)	0.01	0.002	0.0006
Propionitrile	VOC	SW8260B	NE	NE	0.25	0.05	0.00682
sec-Butylbenzene	VOC	SW8260B	780	RSL (Res, 0.1)	0.01	0.002	0.0005
Styrene	VOC	SW8260B	600	RSL (Res, 0.1)	0.01	0.002	0.00058
tert-Butylbenzene	VOC	SW8260B	780	RSL (Res, 0.1)	0.01	0.002	0.00046
Tetrachloroethene	VOC	SW8260B	8.1	RSL (Res, 0.1)	0.01	0.002	0.00045
Tetrahydrofuran	VOC	SW8260B	1800	RSL (Res, 0.1)	0.05	0.01	0.00131
Toluene	VOC	SW8260B	490	RSL (Res, 0.1)	0.01	0.002	0.00035
trans-1,2-Dichloroethene	VOC	SW8260B	160	RSL (Res, 0.1)	0.01	0.002	0.00018
trans-1,3-Dichloropropene	VOC	SW8260B	0.224	MDNR RBTL (Sub)	0.01	0.002	0.00027
Trichloroethene	VOC	SW8260B	0.41	RSL (Res, 0.1)	0.01	0.002	0.0003
Trichlorofluoromethane	VOC	SW8260B	2300	RSL (Res, 0.1)	0.025	0.005	0.00039
Vinyl acetate	VOC	SW8260B	91	RSL (Res, 0.1)	0.25	0.05	0.00102
Vinyl chloride	VOC	SW8260B	0.059	RSL (Res, 0.1)	0.01	0.002	0.00032

PAL = Project Action Limit
PQL = Practical Quantitation Limit
MDL = Minimum Detection Limit
Values reported in units of mg/kg.
RSL = USEPA Regional Screening Level, THQ = 0.1, TR = 1E-06
MDNR RBTL (Surf) = Missouri Department of Natural Resources Risk-Based Target Level for Residential Sites, Surficial Soils
MDNR RBTL (Sub) = Missouri Department of Natural Resources Risk-Based Target Level for Residential Sites, Subsurface Soils
NE = Limit not established.

TABLE 2
PROJECT ACTION LIMITS AND LABORATORY DETECTION/QUANTITATION LIMITS - AQUEOUS SAMPLES
GOODFELLOW FEDERAL COMPLEX
REMEDIAL INVESTIGATION WORK PLAN

Analyte	Category	Test	PAL	PAL Reference	PQL Goal	PQL	MDL
Antimony	Metal	E200.7	6	MCL	0.25	0.05	0.0068
Arsenic	Metal	E200.7	10	MCL	0.125	0.025	0.0087
Copper	Metal	E200.7	1300	MCL	0.025	0.005	0.0013
Lead	Metal	E200.7	15	MCL	0.075	0.015	0.004
Zinc	Metal	E200.7	4.69	MDNR RBTL (Ingest)	0.05	0.01	0.005
Aroclor 1016	PCB	SW8082	0.0172	VISL	0.005	0.001	0.0002
Aroclor 1221	PCB	SW8082	0.002	Technology Limit	0.002	0.001	0.00016
Aroclor 1232	PCB	SW8082	0.002	Technology Limit	0.002	0.001	0.00012
Aroclor 1242	PCB	SW8082	0.00101	VISL	0.00101	0.001	0.00013
Aroclor 1248	PCB	SW8082	0.002	Technology Limit	0.002	0.001	0.00016
Aroclor 1254	PCB	SW8082	0.00125	VISL	0.00125	0.001	0.00022
Aroclor 1260	PCB	SW8082	0.002	Technology Limit	0.002	0.001	0.0001
Acenaphthene	SVOC	SW8270C	1610	MDNR RBTL (Inhal)	0.05	0.01	0.001
Acenaphthylene	SVOC	SW8270C	2060	MDNR RBTL (Inhal)	0.05	0.01	0.001
Anthracene	SVOC	SW8270C	2290	MDNR RBTL (Inhal)	0.05	0.01	0.001
Benzo(a)anthracene	SVOC	SW8270C	0.133	VISL	0.05	0.01	0.001
Benzo(a)pyrene	SVOC	SW8270C	0.2	MCL	0.05	0.01	0.001
Benzo(b)fluoranthene	SVOC	SW8270C	7.65	MDNR RBTL (Inhal)	0.05	0.01	0.001
Benzo(g,h,i)perylene	SVOC	SW8270C	218000	MDNR RBTL (Inhal)	0.05	0.01	0.001
Benzo(k)fluoranthene	SVOC	SW8270C	937	MDNR RBTL (Inhal)	0.05	0.01	0.001
Chrysene	SVOC	SW8270C	81.7	MDNR RBTL (Inhal)	0.05	0.01	0.001
Dibenzo(a,h)anthracene	SVOC	SW8270C	985	MDNR RBTL (Inhal)	0.05	0.01	0.001
Fluoranthene	SVOC	SW8270C	14200	MDNR RBTL (Inhal)	0.05	0.01	0.001
Fluorene	SVOC	SW8270C	3010	MDNR RBTL (Inhal)	0.05	0.01	0.001
Indeno(1,2,3-cd)pyrene	SVOC	SW8270C	596	MDNR RBTL (Inhal)	0.05	0.01	0.001
Naphthalene	SVOC	SW8270C	0.1	Technology Limit	0.1	0.01	0.001
Phenanthrene	SVOC	SW8270C	1190	MDNR RBTL (Inhal)	0.05	0.01	0.001
Pyrene	SVOC	SW8270C	17300	MDNR RBTL (Inhal)	0.05	0.01	0.001
1,1,1,2-Tetrachloroethane	VOC	SW8260B	0.00699	VISL	0.004	0.002	0.00022
1,1,1-Trichloroethane	VOC	SW8260B	1.13	VISL	0.01	0.002	0.00033
1,1,2,2-Tetrachloroethane	VOC	SW8260B	0.00582	VISL	0.004	0.002	0.0001
1,1,2-Trichloro-1,2,2-trifluoroethane	VOC	SW8260B	0.0351	VISL	0.025	0.005	0.00036
1,1,2-Trichloroethane	VOC	SW8260B	0.00105	VISL	0.001	0.0005	0.0001
1,1-Dichloro-2-propanone	VOC	SW8260B	NE	NE	0.15	0.03	0.00273
1,1-Dichloroethane	VOC	SW8260B	0.0114	VISL	0.01	0.002	0.00039
1,1-Dichloroethene	VOC	SW8260B	0.0276	VISL	0.01	0.002	0.00038
1,1-Dichloropropene	VOC	SW8260B	NE	NE	0.01	0.002	0.0001
1,2,3-Trichlorobenzene	VOC	SW8260B	NE	NE	0.01	0.002	0.00018
1,2,3-Trichloropropane	VOC	SW8260B	0.00411	VISL	0.004	0.002	0.00017
1,2,3-Trimethylbenzene	VOC	SW8260B	0.0794	VISL	0.01	0.002	0.00014
1,2,4-Trichlorobenzene	VOC	SW8260B	0.00752	VISL	0.004	0.002	0.00024
1,2,4-Trimethylbenzene	VOC	SW8260B	0.0475	VISL	0.01	0.002	0.0001
1,2-Dibromo-3-chloropropane	VOC	SW8260B	0.004	Technology Limit	0.004	0.002	0.00034
1,2-Dibromoethane	VOC	SW8260B	0.004	Technology Limit	0.004	0.002	0.00012
1,2-Dichlorobenzene	VOC	SW8260B	0.5	VISL	0.01	0.002	0.00022
1,2-Dichloroethane	VOC	SW8260B	0.00355	VISL	0.003	0.002	0.00011
1,2-Dichloropropane	VOC	SW8260B	0.00577	VISL	0.004	0.002	0.00011
1,3,5-Trimethylbenzene	VOC	SW8260B	0.0333	VISL	0.01	0.002	0.00014
1,3-Dichlorobenzene	VOC	SW8260B	43.6	MDNR RBTL (Inhal)	0.01	0.002	0.0001
1,3-Dichloropropane	VOC	SW8260B	NE	NE	0.01	0.002	0.0001
1,4-Dichlorobenzene	VOC	SW8260B	0.00488	VISL	0.004	0.002	0.00014
1-Chlorobutane	VOC	SW8260B	NE	NE	0.025	0.005	0.0001
2,2-Dichloropropane	VOC	SW8260B	NE	NE	0.01	0.002	0.0001
2-Butanone	VOC	SW8260B	354	VISL	0.05	0.01	0.00112
2-Chloroethyl vinyl ether	VOC	SW8260B	NE	NE	0.025	0.005	0.00045
2-Chlorotoluene	VOC	SW8260B	17.1	MDNR RBTL (Inhal)	0.01	0.002	0.0001
2-Hexanone	VOC	SW8260B	1.46	VISL	0.05	0.01	0.0004
2-Nitropropane	VOC	SW8260B	0.02	Technology Limit	0.02	0.01	0.00229
4-Chlorotoluene	VOC	SW8260B	0.0666	MDNR RBTL (Inhal)	0.01	0.002	0.0001
4-Methyl-2-pentanone	VOC	SW8260B	94.9	VISL	0.05	0.01	0.00043
Acetone	VOC	SW8260B	3370	VISL	0.05	0.01	0.00244
Acetonitrile	VOC	SW8260B	6.82	VISL	0.05	0.01	0.00142
Acrolein	VOC	SW8260B	0.04	Technology Limit	0.04	0.02	0.00214
Acrylonitrile	VOC	SW8260B	0.0117	VISL	0.01	0.005	0.00025
Allyl chloride	VOC	SW8260B	0.01	Technology Limit	0.01	0.005	0.00021
Benzene	VOC	SW8260B	0.00246	VISL	0.001	0.0005	0.00005
Bromobenzene	VOC	SW8260B	0.125	VISL	0.01	0.002	0.00017
Bromochloromethane	VOC	SW8260B	0.106	VISL	0.01	0.002	0.00016
Bromodichloromethane	VOC	SW8260B	0.004	Technology Limit	0.004	0.002	0.0001
Bromoform	VOC	SW8260B	0.214	VISL	0.01	0.002	0.0001

TABLE 2
PROJECT ACTION LIMITS AND LABORATORY DETECTION/QUANTITATION LIMITS - AQUEOUS SAMPLES
GOODFELLOW FEDERAL COMPLEX
REMEDIAL INVESTIGATION WORK PLAN

Analyte	Category	Test	PAL	PAL Reference	PQL Goal	PQL	MDL
Bromomethane	VOC	SW8260B	0.01	Technology Limit	0.01	0.005	0.00101
Carbon disulfide	VOC	SW8260B	0.177	VISL	0.01	0.002	0.00046
Carbon tetrachloride	VOC	SW8260B	0.004	Technology Limit	0.004	0.002	0.0001
Chlorobenzene	VOC	SW8260B	0.0702	VISL	0.01	0.002	0.0001
Chloroethane	VOC	SW8260B	3.13	VISL	0.01	0.002	0.00021
Chloroform	VOC	SW8260B	0.004	Technology Limit	0.004	0.002	0.00021
Chloromethane	VOC	SW8260B	0.0331	VISL	0.025	0.005	0.00018
Chloroprene	VOC	SW8260B	0.01	Technology Limit	0.01	0.005	0.00012
cis-1,2-Dichloroethene	VOC	SW8260B	70	MCL	0.01	0.002	0.00015
cis-1,3-Dichloropropene	VOC	SW8260B	0.596	MDNR RBTL (Inhal)	0.01	0.002	0.00012
cis-1,4-Dichloro-2-butene	VOC	SW8260B	0.004	Technology Limit	0.004	0.002	0.00018
Cyclohexanone	VOC	SW8260B	404	VISL	0.1	0.02	0.016
Dibromochloromethane	VOC	SW8260B	80	MCL	0.01	0.002	0.00017
Dibromomethane	VOC	SW8260B	0.0199	VISL	0.01	0.002	0.00016
Dichlorodifluoromethane	VOC	SW8260B	0.004	Technology Limit	0.004	0.002	0.00015
Ethyl acetate	VOC	SW8260B	2.13	VISL	0.05	0.01	0.00107
Ethyl ether	VOC	SW8260B	NE	NE	0.025	0.005	0.00017
Ethyl methacrylate	VOC	SW8260B	2.76	VISL	0.025	0.005	0.00029
Ethylbenzene	VOC	SW8260B	0.00609	VISL	0.006	0.002	0.0001
Hexachlorobutadiene	VOC	SW8260B	0.01	Technology Limit	0.01	0.005	0.00027
Hexachloroethane	VOC	SW8260B	0.01	Technology Limit	0.01	0.005	0.00025
Iodomethane	VOC	SW8260B	NE	NE	0.025	0.005	0.0026
Isopropylbenzene	VOC	SW8260B	0.179	VISL	0.01	0.002	0.00012
m,p-Xylenes	VOC	SW8260B	NE	NE	0.01	0.002	0.00018
Methacrylonitrile	VOC	SW8260B	0.495	VISL	0.025	0.005	0.00051
Methyl Methacrylate	VOC	SW8260B	10.1	VISL	0.025	0.005	0.00023
Methyl tert-butyl ether	VOC	SW8260B	0.664	VISL	0.01	0.002	0.0001
Methylacrylate	VOC	SW8260B	0.417	VISL	0.025	0.005	0.00025
Methylene chloride	VOC	SW8260B	0.685	VISL	0.01	0.002	0.00087
Naphthalene	VOC	SW8260B	0.01	Technology Limit	0.01	0.005	0.00036
n-Butyl acetate	VOC	SW8260B	NE	NE	0.01	0.002	0.00028
n-Butylbenzene	VOC	SW8260B	8.76	MDNR RBTL (Inhal)	0.01	0.002	0.00011
n-Heptane	VOC	SW8260B	0.01	Technology Limit	0.01	0.005	0.0002
n-Hexane	VOC	SW8260B	0.01	Technology Limit	0.01	0.005	0.00154
Nitrobenzene	VOC	SW8260B	0.151	VISL	0.1	0.05	0.01
n-Propylbenzene	VOC	SW8260B	0.452	VISL	0.01	0.002	0.0001
o-Xylene	VOC	SW8260B	0.0873	VISL	0.01	0.002	0.0001
Pentachloroethane	VOC	SW8260B	NE	NE	0.025	0.005	0.00036
p-Isopropyltoluene	VOC	SW8260B	98.5	MDNR RBTL (Inhal)	0.01	0.002	0.0001
Propionitrile	VOC	SW8260B	NE	NE	0.05	0.01	0.00092
sec-Butylbenzene	VOC	SW8260B	6.23	MDNR RBTL (Inhal)	0.01	0.002	0.0001
Styrene	VOC	SW8260B	1.65	VISL	0.01	0.002	0.00014
tert-Butylbenzene	VOC	SW8260B	9.43	MDNR RBTL (Inhal)	0.01	0.002	0.00011
Tetrachloroethene	VOC	SW8260B	0.00972	VISL	0.0025	0.0005	0.0001
Tetrahydrofuran	VOC	SW8260B	109	VISL	0.025	0.005	0.00081
Toluene	VOC	SW8260B	3.16	VISL	0.01	0.002	0.0001
trans-1,2-Dichloroethene	VOC	SW8260B	100	MCL	0.01	0.002	0.0001
trans-1,3-Dichloropropene	VOC	SW8260B	0.596	MDNR RBTL (Inhal)	0.01	0.002	0.00012
trans-1,4-Dichloro-2-butene	VOC	SW8260B	0.004	Technology Limit	0.004	0.002	0.00017
Trichloroethene	VOC	SW8260B	0.004	Technology Limit	0.004	0.002	0.00018
Trichlorofluoromethane	VOC	SW8260B	5.36	MDNR RBTL (Inhal)	0.025	0.005	0.00013
Vinyl acetate	VOC	SW8260B	1.61	VISL	0.025	0.005	0.00033
Vinyl chloride	VOC	SW8260B	0.004	Technology Limit	0.004	0.002	0.0001

PAL = Project Action Limit
PQL = Practical Quantitation Limit
MDL = Minimum Detection Limit
Values reported in units of mg/L.
VISL = USEPA Vapor Intrusion Screening Level for residential sites using default inputs
MCL = USEPA Maximum Contaminant Level for drinking water
MDNR RBTL (Inhal) = Missouri Department of Natural Resources Risk-Based Target Level for Residential Sites, Inhalation Pathway
MDNR RBTL (Ingest) = Missouri Department of Natural Resources Risk-Based Target Level for Residential Sites, Ingestion Pathway
NE = Limit not established.

TABLES

Table 1
Direct-Push Soil Boring and Sample Collection Summary
Goodfellow Federal Complex
St. Louis, Missouri

Group Name	Soil Boring ID	Sample ID	Sample Interval (feet bgs)	Soil Sample Type	Location[1]		Elevation (feet MSL)	Boring Depth (feet bgs)	Pavement Thickness[2] (feet)	Analytical Suite									QA/QC Samples	
					Northing (feet)	Easting (feet)				PAHs (8270C SIM)	Metals[3] (6020B)	PCBs[4] (8082)	PCB Congeners[5] (1668A)	VOCs (8260B)	TPH-GRO (8260B)	TPH-DRO (8270C)	TPH-ORO (8270C)	Explosives (8330B)	Duplicate	MS/MSD
GFC	GB-01	GB-01/2-3	2-3	Surface	1041447.237	888115.284	524.707	13	2.0	X	X	X	--	X	X	X	X	--		
		GB-01/8-10	8-10	Subsurface						X	X	X	X	X	X	X	X	--		
		GB-01/11-13	11-13	Subsurface						X	X	X	--	X	X	X	X	--		
	GB-02	GB-02/2-3	2-3	Surface	1041459.486	887896.804	524.664	10	2.0	X	X	X	--	X	X	X	X	--		X
		GB-02/8-9	8-9	Subsurface						X	X	X	--	X	X	X	X	--		
	GB-03	GB-03/1-3	1-3	Surface	1041338.241	888070.539	526.248	10	1.0	X	X	X	--	X	X	X	X	--		
		GB-03/4-6	4-6	Subsurface						X	X	X	--	X	X	X	X	--		
	GB-04	GB-04/2-3	2-3	Surface	1041580.208	886849.055	564.120	10	2.0	X	X	--	--	--	--	--	--	--		
		GB-04/3-5	3-5	Subsurface						X	X	--	--	--	--	--	--	--	X	
	GB-05	GB-05/3-5	3-5	Surface	1041478.465	887036.89	558.392	10	3.0	X	X	X	--	--	--	--	--	--		
		GB-05/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-06	GB-06/2-3	2-3	Surface	1041400.659	887215.183	555.119	10	2.0	X	X	X		--	--	--	--	--		
		GB-06/3-5	3-5	Subsurface						X	X	X	X	--	--	--	--	--		
	GB-07	GB-07/2.5-3.5	2.5-3.5	Surface	1041291.607	887387.503	551.619	13	2.4	X	X	X	--	X	X	X	X	--		
		GB-07/7-9	7-9	Subsurface						X	X	X	--	X	X	X	X	--		X
	GB-08	GB-08/2.5-3.5	2.5-3.5	Surface	1041194.021	887547.189	548.162	10	2.4	X	X	X	--	--	--	--	--	--		
		GB-08/4-6	4-6	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-09	GB-09/1.5-3	1.5-3	Surface	1041081.763	887700.16	545.091	10	1.5	X	X	X	--	--	--	--	--	--		
		GB-09/4-6	4-6	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-10	GB-10/1.5-2.5	1.5-2.5	Surface	1040974.081	887924.951	539.583	10	1.4	--	X	X	X	--	--	--	--	--		
		GB-10/3-5	3-5	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-11	GB-11/1-3	1-3	Surface	1041400.859	886757.892	562.099	10	1.0	--	X	X	--	--	--	--	--	--		
		GB-11/3-5	3-5	Subsurface						--	X	X	X	--	--	--	--	--		
	GB-12	GB-12/2.5-3.5	2.5-3.5	Surface	1041279.163	886972.033	557.088	10	2.4	X	X	X	--	--	--	--	--	--		
		GB-12/4-6	4-6	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-13	GB-13/0-2	0-2	Surface	1041182.456	887077.531	553.299	10	0.0	X	X	X	--	--	--	--	--	--		
		GB-13/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-14	GB-14/0-2	0-2	Surface	1041046.397	887277.408	550.458	10	0.0	X	X	X	--	X	X	X	X	--		
		GB-14/3-5	3-5	Subsurface						X	X	X	--	X	X	X	X	--		
	GB-15	GB-15/2-3	2-3	Surface	1040897.229	887631.644	545.625	10	2.0	--	X	X	--	--	--	--	--	--		
		GB-15/3-5	3-5	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-16	GB-16/3-4	3-4	Surface	1040797.624	887854.168	540.180	10	3.0	--	X	X	--	--	--	--	--	--		
		GB-16/4-5	4-5	Subsurface						--	X	X	--	--	--	--	--	--		

Table 1
Direct-Push Soil Boring and Sample Collection Summary
Goodfellow Federal Complex
St. Louis, Missouri

Group Name	Soil Boring ID	Sample ID	Sample Interval (feet bgs)	Soil Sample Type	Location[1]		Elevation (feet MSL)	Boring Depth (feet bgs)	Pavement Thickness[2] (feet)	Analytical Suite									QA/QC Samples	
					Northing (feet)	Easting (feet)				PAHs (8270C SIM)	Metals[3] (6020B)	PCBs[4] (8082)	PCB Congeners[5] (1668A)	VOCs (8260B)	TPH-GRO (8260B)	TPH-DRO (8270C)	TPH-ORO (8270C)	Explosives (8330B)	Duplicate	MS/MSD
GFC	GB-17	GB-17/1-3	1-3	Surface	1041329.985	886484.462	572.826	10	1.0	X	X	X	--	--	--	--	--	--		
		GB-17/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-18	GB-18/3-5	3-5	Surface	1041235.289	886677.445	561.825	10	3.0	X	X	X	--	--	--	--	--	--		
		GB-18/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-19	GB-19/0-2	0-2	Surface	1041063.289	886851.502	557.714	10	0.0	X	X	X	X	--	--	--	--	--		
		GB-19/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-20	GB-20/0-2	0-2	Surface	1041065.748	886979.466	553.732	10	0.0	--	X	X	--	--	--	--	--	--		
		GB-20/3-4	3-4	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-21	GB-21/0.5-2.5	0.5-2.5	Surface	1040840.135	887184.603	548.724	10	0.5	X	X	X	--	--	--	--	--	--		
		GB-21/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-22	GB-22/1-3	1-3	Surface	1040829.828	887498.781	545.459	10	1.0	X	X	X	X	--	--	--	--	--		
		GB-22/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-23	GB-23/2.5-3.5	2.5-3.5	Surface	1040623.099	887755.895	539.811	10	2.4	--	X	X	--	--	--	--	--	--		
		GB-23/4-6	4-6	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-24	GB-24/1-3	1-3	Surface	1041175.222	886434.853	580.506	10	1.0	X	X	X	--	--	--	--	--	--		
		GB-24/3-5	3-5	Subsurface						X	X	X	X	--	--	--	--	--		
	GB-25	GB-25/0-2	0-2	Surface	1041030.278	886532.581	560.193	10	0.0	--	X	X	--	--	--	--	--	--		
		GB-25/2-4	2-4	Subsurface						--	X	X	--	--	--	--	--	--		X
	GB-26	GB-26/3-4	3-4	Surface	1040910.21	886770.952	557.184	10	3.0	--	X	X	--	--	--	--	--	--		
		GB-26/4-5	4-5	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-27	GB-27/0.5-2	0.5-2	Surface	1040882.105	886862.9	553.986	10	0.5	X	X	X	--	--	--	--	--	--		
		GB-27/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-28	GB-28/1.5-2.5	1.5-2.5	Surface	1040733.842	887101.654	551.101	10	1.5	X	X	X	X	--	--	--	--	--		
		GB-28/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-29	GB-29/1.5-2.5	1.5-2.5	Surface	1040577.751	887394.198	544.729	10	1.4	X	X	X	--	--	--	--	--	--		
		GB-29/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-30	GB-30/3-4	3-4	Surface	1040499.778	887686.5	540.353	10	3.0	--	X	X	X	--	--	--	--	--		
		GB-30/4-5	4-5	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-31	GB-31/3-5	3-5	Surface	1040928.93	886289.979	587.803	10	2.6	X	X	X	--	--	--	--	--	--		
		GB-31/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-32	GB-32/0-2	0-2	Surface	1040843.148	886453.39	561.252	10	0.0	X	X	X	--	--	--	--	--	--		
		GB-32/2-4	2-4	Subsurface						X	X	X	--	--	--	--	--	--		X

Table 1
Direct-Push Soil Boring and Sample Collection Summary
Goodfellow Federal Complex
St. Louis, Missouri

Group Name	Soil Boring ID	Sample ID	Sample Interval (feet bgs)	Soil Sample Type	Location[1]		Elevation (feet MSL)	Boring Depth (feet bgs)	Pavement Thickness[2] (feet)	Analytical Suite									QA/QC Samples	
					Northing (feet)	Easting (feet)				PAHs (8270C SIM)	Metals[3] (6020B)	PCBs[4] (8082)	PCB Congeners[5] (1668A)	VOCs (8260B)	TPH-GRO (8260B)	TPH-DRO (8270C)	TPH-ORO (8270C)	Explosives (8330B)	Duplicate	MS/MSD
GFC	GB-33	GB-33/2-4	2-4	Surface	1040755.266	886656.916	557.986	10	2.0	--	X	X	--	--	--	--	--	--		
		GB-33/4-6	4-6	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-34	GB-34/1-3	1-3	Surface	1040650.601	886804.633	554.662	10	1.0	X	X	X	--	--	--	--	--	--		
		GB-34/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-35	GB-35/2-3	2-3	Surface	1040509.569	886974.661	550.740	10	2.0	X	X	X	--	--	--	--	--	--		
		GB-35/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--	X	
	GB-36	GB-36/0-2	0-2	Surface	1040369.538	887354.896	542.712	10	0.0	--	X	X	--	--	--	--	--	--		
		GB-36/2-4	2-4	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-37	GB-37/3-5	3-5	Surface	1040347.046	887601.738	540.175	10	3.0	X	X	X	--	--	--	--	--	--		
		GB-37/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-38	GB-38/0-2	0-2	Surface	1040728.021	886244.364	587.645	10	0.0	X	X	X	--	--	--	--	--	--		
		GB-38/3-5	3-5	Subsurface						X	X	X	X	--	--	--	--	--		X
	GB-39	GB-39/5-6	5-6	Surface	1040726.507	886456.101	561.995	10	5.0	X	X	X	-	--	--	--	--	X		
		GB-39/6-7	6-7	Subsurface						X	X	X	--	--	--	--	--	X		
	GB-40	GB-40/1.5-3.5	1.5-3.5	Surface	1040649.108	886484.548	561.335	15	1.5	X	X	X	--	--	--	--	--	--		
		GB-40/11-13	11-13	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-41	GB-41/4-6	4-6	Surface	1040547.898	886710.002	555.639	10	4.0	X	X	X	--	--	--	--	--	X		
		GB-41/6-8	6-8	Subsurface						X	X	X	--	--	--	--	--	X		
	GB-42	GB-42/2-3	2-3	Surface	1040420.142	886878.499	550.850	10	2.0	X	X	X	--	--	--	--	--	--		
		GB-42/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-43	GB-43/3-5	3-5	Surface	1040249.009	887207.074	545.297	10	3.0	X	X	X	--	--	--	--	--	--		
		GB-43/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-44	GB-44/3-5	3-5	Surface	1040126.989	887481.7	539.910	10	3.0	X	X	X	--	--	--	--	--	--		
		GB-44/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-45	GB-45/0-2	0-2	Surface	1040548.346	886269.793	578.059	10	0.0	X	X	X	--	--	--	--	--	--		
		GB-45/2-4	2-4	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-46	GB-46/2-4	2-4	Surface	1040414.624	886443.178	563.137	10	2.0	--	X	X	X	--	--	--	--	--	X	
		GB-46/4-6	4-6	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-47	GB-47/3-5	3-5	Surface	1040334.725	886626.462	553.301	10	3.0	X	X	X	--	--	--	--	--	--		
		GB-47/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-48	GB-48/3-5	3-5	Surface	1040219.911	886736.446	550.978	10	3.0	X	X	X	--	--	--	--	--	X		X
		GB-48/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	X		

Table 1
Direct-Push Soil Boring and Sample Collection Summary
Goodfellow Federal Complex
St. Louis, Missouri

Group Name	Soil Boring ID	Sample ID	Sample Interval (feet bgs)	Soil Sample Type	Location[1]		Elevation (feet MSL)	Boring Depth (feet bgs)	Pavement Thickness[2] (feet)	Analytical Suite									QA/QC Samples	
					Northing (feet)	Easting (feet)				PAHs (8270C SIM)	Metals[3] (6020B)	PCBs[4] (8082)	PCB Congeners[5] (1668A)	VOCs (8260B)	TPH-GRO (8260B)	TPH-DRO (8270C)	TPH-ORO (8270C)	Explosives (8330B)	Duplicate	MS/MSD
GFC	GB-49	GB-49/3.5-4.5	3.5-4.5	Surface	1040174.075	886898.689	548.970	10	3.2	--	X	X	--	--	--	--	--	--		
		GB-49/5-6	5-6	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-50	GB-50/0-2	0-2	Surface	1040031.925	887097.941	545.469	10	0.0	X	X	X	--	--	--	--	--	X		
		GB-50/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	X	X	
	GB-51	GB-51/1.5-3	1.5-3	Surface	1039929.44	887304.373	541.132	10	1.5	X	X	X	--	--	--	--	--	--		
		GB-51/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-52	GB-52/2-3	2-3	Surface	1040351.688	886180.635	577.977	10	2.0	X	X	X	--	--	--	--	--	--		
		GB-52/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-53	GB-53/0-2	0-2	Surface	1040193.003	886332.076	565.21	10	0.0	--	X	X	--	--	--	--	--	--		
		GB-53/3-5	3-5	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-54	GB-54/0-2	0-2	Surface	1040187.259	886505.792	551.192	10	0.0	X	X	X	--	X	X	X	X	--		
		GB-54/2-4	2-4	Subsurface						X	X	X	X	X	X	X	X	--		
	GB-55	GB-55/0-2	0-2	Surface	1040075.422	886713.92	547.879	10	0.0	X	X	X	--	X	X	X	X	--		
		GB-55/3-5	3-5	Subsurface						X	X	X	--	X	X	X	X	--	X	
	GB-56	GB-56/3-5	3-5	Surface	1040005.403	886785.994	546.811	10	3.0	X	X	X	--	--	--	--	--	--		
		GB-56/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-57	GB-57/3.5-5.5	3.5-5.5	Surface	1039873.717	887011.115	545.052	10	3.5	X	X	X	--	--	--	--	--	--		
		GB-57/6-8	6-8	Subsurface						X	X	X	--	--	--	--	--	--	X	
	GB-58	GB-58/1-3	1-3	Surface	1039766.139	887231.965	540.856	10	1.0	X	X	X	--	--	--	--	--	--		
		GB-58/4-6	4-6	Subsurface						X	X	X	--	--	--	--	--	--		X
	GB-59	GB-59/2-4	2-4	Surface	1040167.598	886066.708	577.361	10	2.0	X	X	X	--	--	--	--	--	--		
		GB-59/8-10	8-10	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-60	GB-60/2-4	2-4	Surface	1040089.233	886254.156	567.230	10	2.0	X	X	X	--	--	--	--	--	--		
		GB-60/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-61	GB-61/3-5	3-5	Surface	1040014.283	886386.262	548.623	10	3.0	X	--	--	--	X	X	X	X	--		
		GB-61/5-7	5-7	Subsurface						X	--	--	--	X	X	X	X	--		
	GB-62	GB-62/0-2	0-2	Surface	1039895.978	886628.455	541.364	10	0.0	X	X	--	--	X	X	X	X	--		
		GB-62/3-5	3-5	Subsurface						X	X	--	--	X	X	X	X	--		
	GB-63	GB-63/0-2	0-2	Surface	1039858.263	886678.129	543.525	10	0.0	--	X	--	--	--	--	--	--	--		
		GB-63/3-5	3-5	Subsurface						--	X	--	--	--	--	--	--	--		
	GB-64	GB-64/3-4	3-4	Surface	1039711.309	886942.616	543.286	10	3.0	X	X	X	X	--	--	--	--	--		
		GB-64/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		

Table 1
Direct-Push Soil Boring and Sample Collection Summary
Goodfellow Federal Complex
St. Louis, Missouri

Group Name	Soil Boring ID	Sample ID	Sample Interval (feet bgs)	Soil Sample Type	Location[1]		Elevation (feet MSL)	Boring Depth (feet bgs)	Pavement Thickness[2] (feet)	Analytical Suite									QA/QC Samples	
					Northing (feet)	Easting (feet)				PAHs (8270C SIM)	Metals[3] (6020B)	PCBs[4] (8082)	PCB Congeners[5] (1668A)	VOCs (8260B)	TPH-GRO (8260B)	TPH-DRO (8270C)	TPH-ORO (8270C)	Explosives (8330B)	Duplicate	MS/MSD
GFC	GB-65	GB-65/3-4	3-4	Surface	1039572.836	887125.208	538.992	10	3.0	X	X	X	--	--	--	--	--	--		
		GB-65/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-66	GB-66/3-5	3-5	Surface	1039914.82	886191.864	561.303	10	3.0	--	X	X	--	--	--	--	--	--	X	
		GB-66/5-7	5-7	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-67	GB-67/5-6	5-6	Surface	1039763.532	886331.065	546.531	10	5.0	--	X	X	--	X	X	X	X	--		
		GB-67/8-10	8-10	Subsurface						--	X	X	--	X	X	X	X	--		
	GB-68	GB-68/1-3	1-3	Surface	1039701.174	886515.018	548.944	10	1.0	X	X	X	--	X	X	X	X	--		
		GB-68/3-5	3-5	Subsurface						X	X	X	--	X	X	X	X	--	X	
	GB-69	GB-69/2-3	2-3	Surface	1039655.961	886717.685	545.563	10	2.0	--	X	X	--	--	--	--	--	--		
		GB-69/3-5	3-5	Subsurface						--	X	X	--	--	--	--	--	--		
	GB-70	GB-70/3-5	3-5	Surface	1039563.549	886892.221	542.215	10	3.0	X	X	X	--	--	--	--	--	--		
		GB-70/5-7	5-7	Subsurface						X	X	X	--	--	--	--	--	--		
	GB-71	GB-71/0-2	0-2	Surface	1039478.168	887061.014	539.053	10	0.0	X	X	X	X	--	--	--	--	--		
		GB-71/3-5	3-5	Subsurface						X	X	X	--	--	--	--	--	--		

Notes:

1. Coordinate System - Missouri State Plane (Missouri East 2401)
2. Pavement thickness includes the thickness of asphalt/concrete plus subbase material.
3. Metals analyzed for antimony, arsenic, copper, lead, and zinc.
4. PCBs analyzed for aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260.
5. PCB congeners analyzed for PCBs -77, 81, 105, 114, 118, 123, 126, 156/157, 167, 169, 189.

bgs - below ground surface
DRO - diesel range organics
GFC - Goodfellow Federal Complex
GRO - Gasoline Range Organics
ID - identification
MS - matrix spike
MSD - matrix spike duplicate
MSL - mean sea level
ORO - oil range organics
PAH - polycyclic aromatic hydrocarbon
PCB - polychlorinated biphenyl
QA - quality assurance
QC - quality control
SIM - selective ion monitoring
TPH - total petroleum hydrocarbon
VOC - volatile organic compound

Table 2
Geotechnical Soil Boring and Sample Collection Summary
Goodfellow Federal Complex
St. Louis, Missouri

Group Name	Soil Boring ID	Sample ID	Sample Interval (feet bgs)	Soil Sample Type	Location[1]		Elevation[2] (feet MSL)	Boring Depth (feet bgs)	Geotechnical Suite				
					Northing (feet)	Easting (feet)			Dry Bulk Density (ASTM D2937)	Moisture Content (ASTM D2216)	Fraction of Organic Carbon (ASTM D2974)	Grain Size Analysis (ASTM D422)	Porosity[3] (calculated)
GFC	GB-01	GB-01/3-5	3-5	Surface	1041447.237	888115.284	524.707	13	X	X	X	X	X
		GB-01/11-13	11-13	Subsurface					X	X	X	X	X
	GB-07	GB-07/2-4	2-4	Surface	1041291.607	887387.503	551.619	10	X	X	X	X	X
	GB-11	GB-11/2-4	2-4	Surface	1041400.859	886757.892	562.099	10	X	X	X	X	X
		GB-11/6-8	6-8	Subsurface					X	X	X	X	X
	GB-18	GB-18/2-4	2-4	Surface	1041235.289	886677.445	561.825	10	X	X	X	X	X
		GB-18/6-8	6-8	Subsurface					X	X	X	X	X
	GB-22	GB-22/2-4	2-4	Surface	1040829.828	887498.781	545.459	10	X	X	X	X	X
		GB-22/5-7	5-7	Subsurface					X	X	X	X	X
	GB-34	GB-34/1-3	1-3	Surface	1040650.601	886804.633	554.662	10	X	X	X	X	X
		GB-34/4-6	4-6	Subsurface					X	X	X	X	X
	GB-40	GB-40/2-4	2-4	Surface	1040649.108	886484.548	561.335	13	X	X	X	X	X
		GB-40/11-13	11-13	Subsurface					X	X	X	X	X
	GB-47	GB-47/3-5	3-5	Surface	1040334.725	886626.462	553.301	10	X	X	X	X	X
		GB-47/7-9	7-9	Subsurface					X	X	X	X	X
	GB-51	GB-51/2-4	2-4	Surface	1039929.44	887304.373	541.132	10	X	X	X	X	X
		GB-51/6-8	6-8	Subsurface					X	X	X	X	X
	GB-59	GB-59/2-4	2-4	Surface	1040167.598	886066.708	577.361	10	X	X	X	X	X
		GB-59/8-10	8-10	Subsurface					X	X	X	X	X

Notes:

1. Geotechnical boring locations were not surveyed. Survey data is from colocated direct-push borings.
2. Geotechnical boring elevations were not surveyed. Survey data is from colocated direct-push borings.
3. Porosity value determined by calculation Dry Unit Weight of Soil / (Unit Weight of Water x Specific Gravity)

ASTM - American Society for Testing and Materials
bgs - below ground surface
GFC - Goodfellow Federal Complex
ID - identification
MSL - mean sea level

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-01	GB-02	GB-03	GB-04	GB-05	GB-06	GB-07	GB-08	GB-09	GB-10	GB-11	GB-12	GB-13
			Sample Interval (feet bgs):	2-3	2-3	1-3	2-3	3-5	2-3	2.5-3.5	2.5-3.5	1.5-3	1.5-2.5	1-3	2.5-3.5	0-2
			Sample Date:	7/27/2021	7/26/2021	7/26/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/22/2021	7/22/2021	7/23/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Metals																
Antimony	mg/kg	10		0.57 U	0.55 UJ	0.54 U	1.0 U	0.86 U	0.58 U	0.61 U	0.52 U	0.65 U	0.53 U	1.1 UJ	1.1 U	0.59 U
Arsenic	mg/kg	12.3		**8.5**	**9.4**	**6.7**	**7.9**	**5.7**	**9.5**	**3.4**	**6.1**	**9.4**	**13.1**	**8.6**	**9.4**	**6.7**
Copper	mg/kg	310		**16.1**	**16.6**	**15.6**	**17.0**	**15.5**	**19.5**	**9.5**	**22.2**	**16.9**	**11.7**	**22.1**	**19.1**	**17.7**
Lead	mg/kg	400		**12.2**	**14.8**	**36.5**	**10.9**	**8.3**	**14.2**	**8.1**	**9.0**	**45.4**	**158**	**16.9**	**12.3**	**25.8**
Zinc	mg/kg	2300		**50.4**	**56.8**	**45.2**	**43.5**	**45.4**	**58.8**	**36.0**	**46.4**	**59.6**	**66.3**	**52.5**	**56.2**	**54.3**
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.41		0.0094 U	0.0100 U	0.0095 U	NS	0.0415 U	0.0096 U	0.0098 U	0.0099 U	0.0101 U	0.0098 U	0.0398 U	0.0403 U	0.0098 U
Aroclor 1221	mg/kg	0.20		0.0090 U	0.0096 U	0.0091 U	NS	0.0415 U	0.0092 U	0.0094 U	0.0095 U	0.0097 U	0.0094 U	0.0398 U	0.0403 U	0.0094 U
Aroclor 1232	mg/kg	0.17		0.0041 U	0.0044 U	0.0042 U	NS	0.0415 U	0.0042 U	0.0043 U	0.0043 U	0.0044 U	0.0043 U	0.0398 U	0.0403 U	0.0043 U
Aroclor 1242	mg/kg	0.23		0.0091 U	0.0097 U	0.0092 U	NS	0.0415 U	0.0093 U	0.0095 U	0.0096 U	0.0098 U	0.0095 U	0.0398 U	0.0403 U	0.0095 U
Aroclor 1248	mg/kg	0.23		0.0025 U	0.0027 U	0.0025 U	NS	0.0415 U	0.0026 U	0.0026 U	0.0026 U	0.0027 U	0.0026 U	0.0398 U	0.0403 U	0.0026 U
Aroclor 1254	mg/kg	0.12		0.0036 U	0.0038 U	0.0036 U	NS	0.0415 U	0.0036 U	0.0037 U	0.0037 U	0.0038 U	0.0037 U	0.0398 U	0.0403 U	0.0037 U
Aroclor 1260	mg/kg	0.24		0.0075 U	0.0079 U	0.0075 U	NS	0.0415 U	0.0076 U	0.0078 U	0.0078 U	**0.0092 J**	0.0078 U	0.0398 U	0.0403 U	0.0078 U
Polycyclic Aromatic Hydrocarbons																
Acenaphthene	mg/kg	360		0.0029 U	**0.0207**	**0.0468**	0.0041 U	0.0041 U	**0.0015 J**	**0.0357**	0.0015 U	**0.0645**	NS	NS	0.0040 U	**0.2370**
Acenaphthylene	mg/kg	4180		0.0029 U	**0.0054 J**	**0.0151**	0.0041 U	0.0041 U	0.0014 U	**0.0043 J**	0.0015 U	**0.0076**	NS	NS	0.0040 U	0.0150 U
Anthracene	mg/kg	1800		**0.0069 J**	**0.0293**	**0.0047 J**	0.0041 U	0.0041 U	**0.0046**	**0.0788**	0.0017 U	**0.1910**	NS	NS	**0.0063**	**0.6450**
Benzo(a)anthracene	mg/kg	1.1		**0.0266**	**0.0692 J**	**0.0245**	**0.0162**	0.0041 U	**0.0072**	**0.1630**	**0.0040**	**0.7520**	NS	NS	**0.0525**	**1.86**
Benzo(a)pyrene	mg/kg	0.11		**0.0225**	**0.0516**	**0.0250**	**0.0120**	0.0041 U	0.0014 U	**0.1260**	**0.0031 J**	**0.6330**	NS	NS	**0.0411**	**1.52**
Benzo(b)fluoranthene	mg/kg	1.1		**0.0428**	**0.0868 J**	**0.0180**	**0.0275**	0.0041 U	**0.0131**	**0.2030**	**0.0066**	**1.12**	NS	NS	**0.0813**	**2.73**
Benzo(g,h,i)perylene	mg/kg	1720		**0.0183**	**0.0334**	**0.0361**	**0.0111**	0.0041 U	**0.0044**	**0.0731**	**0.0032 J**	**0.5420**	NS	NS	**0.0322**	**1.50**
Benzo(k)fluoranthene	mg/kg	11		**0.0211**	**0.0466**	**0.0145**	**0.0148**	0.0041 U	**0.0053**	**0.1060**	**0.0023 J**	**0.4940**	NS	NS	**0.0395**	**0.7680**
Chrysene	mg/kg	110		**0.0299**	**0.0633 J**	**0.0149**	**0.0251**	0.0041 U	**0.0092**	**0.1530**	**0.0045**	**0.8100**	NS	NS	**0.0622**	**1.94**
Dibenzo(a,h)anthracene	mg/kg	0.11		0.0034 U	0.0035 U	**0.0296**	0.0041 U	0.0041 U	0.0016 U	**0.0173**	0.0017 U	**0.0964**	NS	NS	0.0040 U	**0.2990**
Fluoranthene	mg/kg	240		**0.0730**	**0.1750 J**	0.0032 U	**0.0621**	0.0041 U	**0.0199**	**0.3940**	**0.0109**	**1.94**	NS	NS	**0.1430**	**4.27**
Fluorene	mg/kg	240		0.0030 U	**0.0200**	**0.0835**	0.0041 U	0.0041 U	**0.0025 J**	**0.0205**	0.0016 U	**0.0482**	NS	NS	0.0040 U	**0.2980**
Indeno(1,2,3-cd)pyrene	mg/kg	1.1		**0.0136**	**0.0286**	**0.0260**	**0.0091**	0.0041 U	**0.0040**	**0.0635**	**0.0023 J**	**0.4150**	NS	NS	**0.0257**	**1.18**
Naphthalene	mg/kg	3.8		0.0033 U	**0.0087**	**0.0109**	0.0041 U	0.0041 U	**0.0019 J**	**0.0048 J**	0.0017 U	**0.0040 J**	NS	NS	0.0040 U	**0.0409**
Phenanthrene	mg/kg	2170		**0.0347**	**0.0941 J**	**0.0923**	**0.0192**	0.0041 U	**0.0088**	**0.3650**	**0.0051**	**0.9940**	NS	NS	**0.0306**	**3.52**
Pyrene	mg/kg	180		**0.0611**	**0.1490**	**0.2640**	**0.0507**	0.0041 U	**0.0247**	**0.3850**	**0.0090**	**1.67**	NS	NS	**0.1190**	**3.68**
Total Petroleum Hydrocarbons																
Gasoline Range Organics	mg/kg	385		0.052 U	0.054 U	0.047 U	NS	NS	NS	0.049 U	NS	NS	NS	NS	NS	NS
Diesel Range Organics	mg/kg	4150		**4.5 J**	5.1 JU	**31.0**	NS	NS	NS	**8.0 J**	NS	NS	NS	NS	NS	NS
Oil Range Organics	mg/kg	124000		**19.1**	**11.2 J**	**46.8**	NS	NS	NS	**16.5 J**	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-01	GB-02	GB-03	GB-04	GB-05	GB-06	GB-07	GB-08	GB-09	GB-10	GB-11	GB-12	GB-13
			Sample Interval (feet bgs):	2-3	2-3	1-3	2-3	3-5	2-3	2.5-3.5	2.5-3.5	1.5-3	1.5-2.5	1-3	2.5-3.5	0-2
			Sample Date:	7/27/2021	7/26/2021	7/26/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/22/2021	7/22/2021	7/23/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/kg	2	0.00098 U	0.00100 UR	0.00088 U	NS	NS	NS	0.00092 U	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	mg/kg	810	0.00072 U	0.00074 U	0.00064 U	NS	NS	NS	0.00067 U	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	mg/kg	0.6	0.00096 U	0.00099 U	0.00086 U	NS	NS	NS	0.00090 U	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	0.00480 U	0.00500 U	0.00430 U	NS	NS	NS	0.00450 U	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	mg/kg	0.15	0.00061 U	0.00062 U	0.00054 U	NS	NS	NS	0.00057 U	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	mg/kg	3.6	0.00037 U	0.00039 U	0.00033 U	NS	NS	NS	0.00035 U	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	mg/kg	23	0.00061 U	0.00063 U	0.00055 U	NS	NS	NS	0.00057 U	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloropropene	mg/kg	NE	0.00086 U	0.00089 U	0.00077 U	NS	NS	NS	0.00081 U	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	mg/kg	6.3	0.00077 U	0.00079 U	0.00068 U	NS	NS	NS	0.00072 U	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	mg/kg	0.0051	0.00210 U	0.00210 U	0.00180 U	NS	NS	NS	0.00190 U	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trimethylbenzene	mg/kg	34	0.00190 U	0.00200 U	0.00170 U	NS	NS	NS	0.00180 U	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	mg/kg	5.8	0.00077 U	0.00079 U	0.00068 U	NS	NS	NS	0.00072 U	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	mg/kg	30	0.00064 U	0.00066 U	0.00058 U	NS	NS	NS	0.00060 U	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	mg/kg	0.01	0.00180 U	0.00180 U	0.00160 U	NS	NS	NS	0.00160 U	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	mg/kg	0.036	0.00051 U	0.00053 U	0.00046 U	NS	NS	NS	0.00048 U	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	mg/kg	180	0.00060 U	0.00062 U	0.00054 U	NS	NS	NS	0.00056 U	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	mg/kg	0.46	0.00038 U	0.00040 U	0.00034 U	NS	NS	NS	0.00036 U	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethene	mg/kg	16	0.00110 U	0.00110 U	0.00095 U	NS	NS	NS	0.00100 U	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	mg/kg	1.6	0.00094 U	0.00097 U	0.00084 U	NS	NS	NS	0.00088 U	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	mg/kg	27	0.00060 U	0.00062 U	0.00054 U	NS	NS	NS	0.00056 U	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	mg/kg	148	0.00069 U	0.00071 U	0.00062 U	NS	NS	NS	0.00065 U	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	mg/kg	160	0.00066 U	0.00069 U	0.00059 U	NS	NS	NS	0.00062 U	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	mg/kg	2.6	0.00078 U	0.00080 U	0.00070 U	NS	NS	NS	0.00073 U	NS	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	mg/kg	NE	0.00046 U	0.00047 U	0.00041 U	NS	NS	NS	0.00043 U	NS	NS	NS	NS	NS	NS	NS
2-Butanone	mg/kg	2700	0.00330 U	0.00340 U	0.00290 U	NS	NS	NS	0.00310 U	NS	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	mg/kg	160	0.00070 U	0.00072 U	0.00063 U	NS	NS	NS	0.00065 U	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	mg/kg	20	0.00240 U	0.00250 U	0.00210 U	NS	NS	NS	0.00220 U	NS	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	mg/kg	160	0.00058 U	0.00059 U	0.00052 U	NS	NS	NS	0.00054 U	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	mg/kg	3300	0.00290 U	0.00300 U	0.00260 U	NS	NS	NS	0.00270 U	NS	NS	NS	NS	NS	NS	NS
Acetone	mg/kg	6100	0.01560 U	0.01610 U	0.01390 U	NS	NS	NS	0.01460 U	NS	NS	NS	NS	NS	NS	NS
Acrolein	mg/kg	0.1	0.07260 U	0.07490 U	0.06490 U	NS	NS	NS	0.06790 U	NS	NS	NS	NS	NS	NS	NS
Acrylonitrile	mg/kg	0.25	0.00300 U	0.00310 U	0.00270 U	NS	NS	NS	0.00280 U	NS	NS	NS	NS	NS	NS	NS
Benzene	mg/kg	1.2	0.00047 U	0.00049 U	**0.00054 J**	NS	NS	NS	0.00044 U	NS	NS	NS	NS	NS	NS	NS
Bromobenzene	mg/kg	29	0.00090 U	0.00093 U	0.00081 U	NS	NS	NS	0.00084 U	NS	NS	NS	NS	NS	NS	NS
Bromochloromethane	mg/kg	15	0.00058 U	0.00060 U	0.00052 U	NS	NS	NS	0.00054 U	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	mg/kg	0.29	0.00058 U	0.00060 U	0.00052 U	NS	NS	NS	0.00054 U	NS	NS	NS	NS	NS	NS	NS
Bromoform	mg/kg	19	0.00055 U	0.00057 U	0.00049 U	NS	NS	NS	0.00052 U	NS	NS	NS	NS	NS	NS	NS
Bromomethane	mg/kg	0.68	0.00280 U	0.00290 U	0.00250 U	NS	NS	NS	0.00260 U	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	mg/kg	77	0.00062 U	0.00064 U	**0.00160 J**	NS	NS	NS	0.00058 U	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	mg/kg	0.65	0.00082 U	0.00085 U	0.00074 U	NS	NS	NS	0.00077 U	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	mg/kg	28	0.00060 U	0.00062 U	0.00054 U	NS	NS	NS	0.00056 U	NS	NS	NS	NS	NS	NS	NS
Chloroethane	mg/kg	1400	0.00140 U	0.00150 U	0.00130 U	NS	NS	NS	0.00130 U	NS	NS	NS	NS	NS	NS	NS
Chloroform	mg/kg	0.32	0.00047 U	0.00049 U	0.00042 U	NS	NS	NS	0.00044 U	NS	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-01	GB-02	GB-03	GB-04	GB-05	GB-06	GB-07	GB-08	GB-09	GB-10	GB-11	GB-12	GB-13
			Sample Interval (feet bgs):	2-3	2-3	1-3	2-3	3-5	2-3	2.5-3.5	2.5-3.5	1.5-3	1.5-2.5	1-3	2.5-3.5	0-2
			Sample Date:	7/27/2021	7/26/2021	7/26/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/22/2021	7/22/2021	7/23/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds (continued)																
Chloromethane	mg/kg	11	0.00077 U	0.00079 U	0.00069 U	NS	NS	NS	0.00072 U	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16	0.00041 U	0.00043 U	0.00037 U	NS	NS	NS	0.00039 U	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224	0.00051 U	0.00053 U	0.00046 U	NS	NS	NS	0.00048 U	NS	NS	NS	NS	NS	NS	NS
Cyclohexanone	mg/kg	2800	0.01220 U	0.01260 U	0.01090 U	NS	NS	NS	0.01140 U	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	mg/kg	8.3	0.00062 U	0.00064 U	0.00055 U	NS	NS	NS	0.00058 U	NS	NS	NS	NS	NS	NS	NS
Ethyl ether	mg/kg	1600	0.00054 U	0.00056 U	0.00048 U	NS	NS	NS	0.00050 U	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	mg/kg	5.8	0.00044 U	0.00046 U	0.00040 U	NS	NS	NS	0.00041 U	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2	0.00082 U	0.00084 U	0.00073 U	NS	NS	NS	0.00076 U	NS	NS	NS	NS	NS	NS	NS
Iodomethane	mg/kg	NE	0.00150 U	0.00150 U	0.00130 U	NS	NS	NS	0.00140 U	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	mg/kg	190	0.00055 U	0.00057 U	0.00049 U	NS	NS	NS	0.00051 U	NS	NS	NS	NS	NS	NS	NS
m/p-Xylene	mg/kg	NE	0.00061 U	0.00063 U	0.00054 U	NS	NS	NS	0.00057 U	NS	NS	NS	NS	NS	NS	NS
Methyl acetate	mg/kg	7800	0.00100 U	0.00110 UR	0.00093 U	NS	NS	NS	0.00097 U	NS	NS	NS	NS	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47	0.00046 U	0.00048 U	0.00041 U	NS	NS	NS	0.00043 U	NS	NS	NS	NS	NS	NS	NS
Methylene bromide	mg/kg	2.4	0.00058 U	0.00059 U	0.00052 U	NS	NS	NS	0.00054 U	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	mg/kg	35	0.00260 U	0.00270 U	0.00240 U	NS	NS	NS	0.00250 U	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	mg/kg	390	0.00062 U	0.00064 U	0.00056 U	NS	NS	NS	0.00058 U	NS	NS	NS	NS	NS	NS	NS
n-Heptane	mg/kg	2.2	0.00440 U	0.00450 U	0.00390 U	NS	NS	NS	0.00410 U	NS	NS	NS	NS	NS	NS	NS
n-Hexane	mg/kg	61	0.00066 U	0.00068 U	0.00059 U	NS	NS	NS	0.00062 U	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	mg/kg	380	0.00077 U	0.00080 U	0.00069 U	NS	NS	NS	0.00072 U	NS	NS	NS	NS	NS	NS	NS
Naphthalene	mg/kg	3.8	0.00079 U	0.00081 U	0.00070 U	NS	NS	NS	0.00074 U	NS	NS	NS	NS	NS	NS	NS
o-Xylene	mg/kg	65	0.00036 U	0.00037 U	0.00032 U	NS	NS	NS	0.00034 U	NS	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100	0.00066 U	0.00068 U	0.00059 U	NS	NS	NS	0.00062 U	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	mg/kg	780	0.00070 U	0.00072 U	0.00063 U	NS	NS	NS	0.00066 U	NS	NS	NS	NS	NS	NS	NS
Styrene	mg/kg	600	0.00057 U	0.00058 U	0.00051 U	NS	NS	NS	0.00053 U	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	780	0.00085 U	0.00088 U	0.00076 U	NS	NS	NS	0.00079 U	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	mg/kg	8.1	0.00040 U	0.00041 U	0.00035 U	NS	NS	NS	0.00037 U	NS	NS	NS	NS	NS	NS	NS
Tetrahydrofuran	mg/kg	1800	0.00075 U	0.00078 U	0.00067 U	NS	NS	NS	0.00070 U	NS	NS	NS	NS	NS	NS	NS
Toluene	mg/kg	490	0.00034 U	0.00035 U	**0.00030 J**	NS	NS	NS	**0.00034 J**	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7	0.00065 U	0.00067 U	0.00058 U	NS	NS	NS	0.00061 U	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224	0.00044 U	0.00045 U	0.00039 U	NS	NS	NS	0.00041 U	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	mg/kg	0.41	0.00070 U	0.00072 U	0.00062 U	NS	NS	NS	0.00065 U	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300	0.00059 U	0.00061 U	0.00053 U	NS	NS	NS	0.00055 U	NS	NS	NS	NS	NS	NS	NS
Vinyl acetate	mg/kg	91	0.00054 U	0.00056 UJ	0.00048 U	NS	NS	NS	0.00051 U	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	mg/kg	0.059	0.00064 U	0.00066 U	0.00057 U	NS	NS	NS	0.00060 U	NS	NS	NS	NS	NS	NS	NS
Xylenes, Total	mg/kg	58	0.00110 U	0.00110 U	0.00098 U	NS	NS	NS	0.00100 U	NS	NS	NS	NS	NS	NS	NS

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Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-01	GB-02	GB-03	GB-04	GB-05	GB-06	GB-07	GB-08	GB-09	GB-10	GB-11	GB-12	GB-13
			Sample Interval (feet bgs):	2-3	2-3	1-3	2-3	3-5	2-3	2.5-3.5	2.5-3.5	1.5-3	1.5-2.5	1-3	2.5-3.5	0-2
			Sample Date:	7/27/2021	7/26/2021	7/26/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/22/2021	7/22/2021	7/23/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Explosives																
1,3,5-Trinitrobenzene	mg/kg	220		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrotoluene	mg/kg	2.6		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	mg/kg	1.7		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	mg/kg	0.36		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrotoluene	mg/kg	3.2		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitrotoluene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	mg/kg	5.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitroglycerine	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
mg/kg - milligrams per kilogram
NE - not established
NS - not sampled
U - compound was not detected
UJ - qualified as estimated at the reporting limit
UR - qualified as rejected at the reporting limit

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**
		Sample Point:	**GB-14**	**GB-15**	**GB-16**	**GB-17**	**GB-18**	**GB-19**	**GB-20**	**GB-21**	**GB-22**	**GB-23**	**GB-24**	**GB-25**	**GB-26**
		Sample Interval (feet bgs):	**0-2**	**2-3**	**3-4**	**1-3**	**3-5**	**0-2**	**0-2**	**0.5-2.5**	**1-3**	**2.5-3.5**	**1-3**	**0-2**	**3-4**
		Sample Date:	**7/23/2021**	**7/23/2021**	**7/26/2021**	**7/21/2021**	**7/22/2021**	**7/22/2021**	**7/23/2021**	**7/23/2021**	**7/23/2021**	**7/26/2021**	**7/21/2021**	**7/22/2021**	**7/22/2021**
		Notes:													
Parameter	**Units**	**PAL[1]**													
Metals															
Antimony	mg/kg	10	0.58 U	0.63 U	0.56 U	1.1 U	0.93 U	1.1 U	0.57 U	0.58 U	0.55 U	0.60 U	0.98 U	1.2 U	1.0 U
Arsenic	mg/kg	12.3	**6.3**	**10.6**	**12.6**	**5.0**	**6.6**	**5.4**	**5.8**	**6.5**	**5.2**	**10.2**	**6.5**	**8.2**	**6.1**
Copper	mg/kg	310	**14.6**	**19.8**	**22.6**	**12.4**	**17.3**	**17.0**	**11.2**	**13.6**	**11.3**	**17.7**	**16.0**	**24.6**	**13.6**
Lead	mg/kg	400	**13.1**	**19.8**	**17.2**	**7.6**	**13.7**	**81.5**	**14.5**	**11.5**	**9.1**	**22.6**	**14.2**	**88.3**	**14.4**
Zinc	mg/kg	2300	**39.0**	**63.2**	**67.3**	**40.7**	**34.1**	**66.7**	**34.0**	**33.9**	**32.3**	**53.9**	**68.2**	**82.3**	**44.9**
Polychlorinated Biphenyls															
Aroclor 1016	mg/kg	0.41	0.0100 U	0.0101 U	0.0097 U	0.0412 U	0.0427 U	0.0376 U	0.0098 U	0.0099 U	0.0097 U	0.0098 U	0.0390 U	0.0393 U	0.0387 U
Aroclor 1221	mg/kg	0.20	0.0095 U	0.0096 U	0.0093 U	0.0412 U	0.0427 U	0.0376 U	0.0094 U	0.0095 U	0.0093 U	0.0094 U	0.0390 U	0.0393 U	0.0387 U
Aroclor 1232	mg/kg	0.17	0.0044 U	0.0044 U	0.0043 U	0.0412 U	0.0427 U	0.0376 U	0.0043 U	0.0043 U	0.0043 U	0.0043 U	0.0390 U	0.0393 U	0.0387 U
Aroclor 1242	mg/kg	0.23	0.0096 U	0.0097 U	0.0094 U	0.0412 U	0.0427 U	0.0376 U	0.0095 U	0.0096 U	0.0094 U	0.0095 U	0.0390 U	0.0393 U	0.0387 U
Aroclor 1248	mg/kg	0.23	0.0026 U	0.0027 U	0.0026 U	0.0412 U	0.0427 U	0.0376 U	0.0026 U	0.0026 U	0.0026 U	0.0026 U	0.0390 U	0.0393 U	0.0387 U
Aroclor 1254	mg/kg	0.12	0.0038 U	0.0038 U	0.0037 U	0.0412 U	0.0427 U	0.0376 U	0.0037 U	0.0037 U	0.0037 U	0.0037 U	0.0390 U	0.0393 U	0.0387 U
Aroclor 1260	mg/kg	0.24	**0.0433 J**	0.0080 U	0.0077 U	0.0412 U	0.0427 U	0.0376 U	0.0077 U	0.0078 U	**0.0265 J**	**0.0525**	0.0390 U	0.0393 U	0.0387 U
Polycyclic Aromatic Hydrocarbons															
Acenaphthene	mg/kg	360	**0.0071 J**	NS	NS	0.0041 U	**0.0310**	**0.6860**	NS	**0.0106**	0.0015 U	NS	0.0039 U	NS	NS
Acenaphthylene	mg/kg	4180	0.0029 U	NS	NS	0.0041 U	**0.0180**	0.0377 U	NS	**0.0034 J**	0.0015 U	NS	0.0039 U	NS	NS
Anthracene	mg/kg	1800	**0.0155**	NS	NS	**0.0091**	**0.1240**	**1.16**	NS	**0.0206**	**0.0035 J**	NS	0.0039 U	NS	NS
Benzo(a)anthracene	mg/kg	1.1	**0.1140**	NS	NS	**0.0910**	**0.2370**	**2.24**	NS	**0.2430**	**0.0128**	NS	**0.0062**	NS	NS
Benzo(a)pyrene	mg/kg	0.11	**0.1280**	NS	NS	**0.0977**	**0.1830**	**1.64**	NS	**0.2950**	**0.0106**	NS	**0.0051**	NS	NS
Benzo(b)fluoranthene	mg/kg	1.1	**0.2520**	NS	NS	**0.2040**	**0.2290**	**2.87**	NS	**0.5660**	**0.0194 J**	NS	**0.0112**	NS	NS
Benzo(g,h,i)perylene	mg/kg	1720	**0.1190**	NS	NS	**0.1090**	**0.1180**	**1.21**	NS	**0.2550**	**0.0084**	NS	**0.0070**	NS	NS
Benzo(k)fluoranthene	mg/kg	11	**0.0780**	NS	NS	**0.0490**	**0.1360**	**1.06**	NS	**0.1540**	**0.0097**	NS	**0.0045**	NS	NS
Chrysene	mg/kg	110	**0.1590**	NS	NS	**0.1360**	**0.2360**	**2.17**	NS	**0.4070**	**0.0143 J**	NS	**0.0088**	NS	NS
Dibenzo(a,h)anthracene	mg/kg	0.11	**0.0228**	NS	NS	**0.0196**	**0.0226**	**0.2710**	NS	**0.0494**	0.0017 U	NS	0.0039 U	NS	NS
Fluoranthene	mg/kg	240	**0.3090**	NS	NS	**0.2400**	**0.4700**	**4.8900**	NS	**0.6390**	**0.0419 J**	NS	**0.0146**	NS	NS
Fluorene	mg/kg	240	**0.0074 J**	NS	NS	0.0041 U	**0.0402**	**0.5680**	NS	**0.0140**	0.0016 U	NS	0.0039 U	NS	NS
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	**0.0946**	NS	NS	**0.0866**	**0.0915**	**1.06**	NS	**0.2160**	**0.0066**	NS	**0.0044**	NS	NS
Naphthalene	mg/kg	3.8	0.0033 U	NS	NS	0.0041 U	**0.0083**	**0.0492**	NS	0.0017 U	0.0017 U	NS	0.0039 U	NS	NS
Phenanthrene	mg/kg	2170	**0.1330**	NS	NS	**0.0595**	**0.3280**	**4.38**	NS	**0.2880**	**0.0198 J**	NS	**0.0060**	NS	NS
Pyrene	mg/kg	180	**0.2480**	NS	NS	**0.2100**	**0.5860**	**4.12**	NS	**0.6100**	**0.0325**	NS	**0.0152**	NS	NS
Total Petroleum Hydrocarbons															
Gasoline Range Organics	mg/kg	385	0.053 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diesel Range Organics	mg/kg	4150	**9.5 J**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oil Range Organics	mg/kg	124000	**23.0**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Group Name:			**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**
Sample Point:			**GB-14**	**GB-15**	**GB-16**	**GB-17**	**GB-18**	**GB-19**	**GB-20**	**GB-21**	**GB-22**	**GB-23**	**GB-24**	**GB-25**	**GB-26**
Sample Interval (feet bgs):			**0-2**	**2-3**	**3-4**	**1-3**	**3-5**	**0-2**	**0-2**	**0.5-2.5**	**1-3**	**2.5-3.5**	**1-3**	**0-2**	**3-4**
Sample Date:			**7/23/2021**	**7/23/2021**	**7/26/2021**	**7/21/2021**	**7/22/2021**	**7/22/2021**	**7/23/2021**	**7/23/2021**	**7/23/2021**	**7/26/2021**	**7/21/2021**	**7/22/2021**	**7/22/2021**
Notes:															
Parameter	**Units**	**PAL[1]**													
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	2	0.00099 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	mg/kg	810	0.00073 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	mg/kg	0.6	0.00097 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	0.00490 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	mg/kg	0.15	0.00061 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	mg/kg	3.6	0.00038 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	mg/kg	23	0.00062 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloropropene	mg/kg	NE	0.00088 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	mg/kg	6.3	0.00078 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	mg/kg	0.0051	0.00210 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trimethylbenzene	mg/kg	34	0.00190 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	mg/kg	5.8	0.00078 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	mg/kg	30	0.00065 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	mg/kg	0.01	0.00180 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	mg/kg	0.036	0.00052 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	mg/kg	180	0.00061 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	mg/kg	0.46	0.00039 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethene	mg/kg	16	0.00110 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	mg/kg	1.6	0.00095 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	mg/kg	27	0.00061 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	mg/kg	148	0.00070 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	mg/kg	160	0.00067 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	mg/kg	2.6	0.00079 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	mg/kg	NE	0.00046 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone	mg/kg	2700	**0.00840 J**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	mg/kg	160	0.00071 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	mg/kg	20	0.00240 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	mg/kg	160	0.00058 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	mg/kg	3300	0.00300 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	mg/kg	6100	**0.04660**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrolein	mg/kg	0.1	0.07370 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrylonitrile	mg/kg	0.25	0.00310 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	mg/kg	1.2	0.00048 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromobenzene	mg/kg	29	0.00091 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromochloromethane	mg/kg	15	0.00059 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	mg/kg	0.29	0.00059 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	mg/kg	19	0.00056 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	mg/kg	0.68	0.00290 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	mg/kg	77	0.00063 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	mg/kg	0.65	0.00084 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	mg/kg	28	0.00061 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	mg/kg	1400	0.00150 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	mg/kg	0.32	0.00048 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-14	GB-15	GB-16	GB-17	GB-18	GB-19	GB-20	GB-21	GB-22	GB-23	GB-24	GB-25	GB-26
			Sample Interval (feet bgs):	0-2	2-3	3-4	1-3	3-5	0-2	0-2	0.5-2.5	1-3	2.5-3.5	1-3	0-2	3-4
			Sample Date:	7/23/2021	7/23/2021	7/26/2021	7/21/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/21/2021	7/22/2021	7/22/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds (continued)																
Chloromethane	mg/kg	11	0.00078 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16	0.00042 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224	0.00052 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyclohexanone	mg/kg	2800	0.01240 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	mg/kg	8.3	0.00063 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl ether	mg/kg	1600	0.00055 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	mg/kg	5.8	0.00045 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2	0.00083 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iodomethane	mg/kg	NE	0.00150 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	mg/kg	190	0.00056 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
m/p-Xylene	mg/kg	NE	0.00062 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl acetate	mg/kg	7800	0.00110 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47	0.00047 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene bromide	mg/kg	2.4	0.00058 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	mg/kg	35	0.00270 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	mg/kg	390	0.00063 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Heptane	mg/kg	2.2	0.00440 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Hexane	mg/kg	61	0.00067 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	mg/kg	380	0.00078 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	mg/kg	3.8	0.00080 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	mg/kg	65	0.00036 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100	0.00067 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	mg/kg	780	0.00071 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	mg/kg	600	0.00057 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	780	0.00086 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	mg/kg	8.1	0.00040 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrahydrofuran	mg/kg	1800	0.00076 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	mg/kg	490	0.00034 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7	0.00066 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224	0.00045 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	mg/kg	0.41	0.00071 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300	0.00060 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl acetate	mg/kg	91	0.00055 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	mg/kg	0.059	0.00065 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes, Total	mg/kg	58	0.00110 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-14	GB-15	GB-16	GB-17	GB-18	GB-19	GB-20	GB-21	GB-22	GB-23	GB-24	GB-25	GB-26
			Sample Interval (feet bgs):	0-2	2-3	3-4	1-3	3-5	0-2	0-2	0.5-2.5	1-3	2.5-3.5	1-3	0-2	3-4
			Sample Date:	7/23/2021	7/23/2021	7/26/2021	7/21/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/21/2021	7/22/2021	7/22/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Explosives																
1,3,5-Trinitrobenzene	mg/kg	220		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrotoluene	mg/kg	2.6		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	mg/kg	1.7		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	mg/kg	0.36		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrotoluene	mg/kg	3.2		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitrotoluene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	mg/kg	5.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitroglycerine	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
mg/kg - milligrams per kilogram
NE - not established
NS - not sampled
U - compound was not detected
UJ - qualified as estimated at the reporting limit
UR - qualified as rejected at the reporting limit

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-27	GB-28	GB-29	GB-30	GB-31	GB-32	GB-33	GB-34	GB-35	GB-36	GB-37	GB-38	GB-39
			Sample Interval (feet bgs):	0.5-2	1.5-2.5	1.5-2.5	3-4	3-5	0-2	2-4	1-3	2-3	0-2	3-5	0-2	5-6
			Sample Date:	7/23/2021	7/22/2021	7/26/2021	7/26/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/22/2021	7/26/2021	7/26/2021	7/26/2021	7/21/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Metals																
Antimony	mg/kg	10		0.56 U	0.62 U	0.61 U	0.53 U	1.0 U	0.49 U	0.53 U	0.64 U	0.63 U	0.45 U	0.61 U	0.53 U	0.55 U
Arsenic	mg/kg	12.3		**5.4**	**6.9**	**22.6**	**9.8**	**10.7**	**9.8**	**6.2**	**12.2**	**6.6**	**9.2**	**6.5**	**8.1**	**7.2**
Copper	mg/kg	310		**13.8**	**14.6**	**15.6**	**19.1**	**20.2**	**15.2**	**13.3**	**26.0**	**15.6**	**15.7**	**15.5**	**17.9**	**13.8**
Lead	mg/kg	400		**9.1**	**11.5**	**13.1**	**18.2**	**13.3**	**21.8**	**8.7**	**13.0**	**16.6**	**13.6**	**9.9**	**57.3**	**11.0**
Zinc	mg/kg	2300		**41.6**	**46.0**	**53.0**	**58.4**	**62.3**	**38.9**	**41.4**	**56.3**	**46.0**	**53.7**	**43.7**	**73.7**	**35.5**
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.41		0.0099 U	0.0102 U	0.0100 U	0.0099 U	0.0397 U	0.0099 U	0.010 U	0.0098 U	0.0096 U	0.0094 U	0.0100 U	0.0094 U	0.0098 U
Aroclor 1221	mg/kg	0.20		0.0095 U	0.0098 U	0.0096 U	0.0095 U	0.0397 U	0.0095 U	0.0096 U	0.0094 U	0.0092 U	0.0090 U	0.0096 U	0.0091 U	0.0094 U
Aroclor 1232	mg/kg	0.17		0.0044 U	0.0045 U	0.0044 U	0.0043 U	0.0397 U	0.0044 U	0.0044 U	0.0043 U	0.0042 U	0.0041 U	0.0044 U	0.0041 U	0.0043 U
Aroclor 1242	mg/kg	0.23		0.0096 U	0.0099 U	0.0097 U	0.0096 U	0.0397 U	0.0096 U	0.0097 U	0.0095 U	0.0093 U	0.0091 U	0.0097 U	0.0091 U	0.0095 U
Aroclor 1248	mg/kg	0.23		0.0026 U	0.0027 U	0.0027 U	0.0026 U	0.0397 U	0.0026 U	0.0027 U	0.0026 U	0.0026 U	0.0025 U	0.0027 U	0.0025 U	0.0026 U
Aroclor 1254	mg/kg	0.12		0.0037 U	0.0039 U	0.0038 U	0.0037 U	0.0397 U	0.0038 U	0.0038 U	0.0037 U	0.0036 U	0.0035 U	0.0038 U	0.0036 U	0.0037 U
Aroclor 1260	mg/kg	0.24		0.0079 U	0.0081 U	0.0079 U	0.0078 U	0.0397 U	**0.0146 J**	0.0079 U	0.0078 U	0.0076 U	**0.0089 J**	0.0079 U	0.0075 U	0.0078 U
Polycyclic Aromatic Hydrocarbons																
Acenaphthene	mg/kg	360		**0.0148**	0.0015 U	0.0015 U	NS	0.0040 U	**0.0445**	NS	0.0015 U	0.0015 U	NS	**0.0172**	**0.0030 J**	0.0015 U
Acenaphthylene	mg/kg	4180		**0.0093**	0.0015 U	0.0015 U	NS	0.0040 U	**0.0029 J**	NS	0.0015 U	0.0015 U	NS	**0.0133**	**0.0027 J**	0.0015 U
Anthracene	mg/kg	1800		**0.0460**	0.0017 U	**0.0039 J**	NS	0.0040 U	**0.0955**	NS	**0.0036 J**	**0.0077**	NS	**0.0488**	**0.0078**	0.0017 U
Benzo(a)anthracene	mg/kg	1.1		**0.2160**	**0.0074**	**0.0235**	NS	0.0040 U	**0.4740**	NS	**0.0102**	**0.0402**	NS	**0.1520**	**0.0382**	0.0019 U
Benzo(a)pyrene	mg/kg	0.11		**0.1920**	0.0015 U	**0.0278**	NS	0.0040 U	**0.4190**	NS	**0.0082**	**0.0350**	NS	**0.1330**	**0.0338**	0.0015 U
Benzo(b)fluoranthene	mg/kg	1.1		**0.3160**	**0.0140**	**0.0609**	NS	0.0040 U	**0.6610**	NS	**0.0141**	**0.0640**	NS	**0.2020**	**0.0567**	**0.0033 J**
Benzo(g,h,i)perylene	mg/kg	1720		**0.1670**	**0.0061**	**0.0255**	NS	0.0040 U	**0.3320**	NS	**0.0077**	**0.0271**	NS	**0.1000**	**0.0278**	0.0018 U
Benzo(k)fluoranthene	mg/kg	11		**0.1080**	**0.0043**	**0.0199**	NS	0.0040 U	**0.2170**	NS	**0.0078**	**0.0196**	NS	**0.1150**	**0.0269**	0.0023 U
Chrysene	mg/kg	110		**0.2190**	**0.0099**	**0.0379**	NS	0.0040 U	**0.5190**	NS	**0.0107**	**0.0444**	NS	**0.1540**	**0.0417**	**0.0022 J**
Dibenzo(a,h)anthracene	mg/kg	0.11		**0.0298**	0.0018 U	**0.0041**	NS	0.0040 U	**0.0689**	NS	0.0017 U	**0.0050**	NS	**0.0214**	**0.0056**	0.0017 U
Fluoranthene	mg/kg	240		**0.3760**	**0.0247**	**0.0656**	NS	0.0040 U	**1.09**	NS	**0.0286**	**0.1050**	NS	**0.2890**	**0.0741**	**0.0070**
Fluorene	mg/kg	240		**0.0099**	0.0016 U	0.0016 U	NS	0.0040 U	**0.0335**	NS	0.0015 U	**0.0020 J**	NS	**0.0152**	**0.0024 J**	0.0016 U
Indeno(1,2,3-cd)pyrene	mg/kg	1.1		**0.1320**	**0.0048**	**0.0200**	NS	0.0040 U	**0.2720**	NS	**0.0059**	**0.0223**	NS	**0.0827**	**0.0222**	0.0017 U
Naphthalene	mg/kg	3.8		**0.0074**	0.0017 U	0.0018 U	NS	0.0040 U	**0.0036 J**	NS	0.0017 U	0.0017 U	NS	**0.0082**	0.0016 U	0.0017 U
Phenanthrene	mg/kg	2170		**0.1850**	**0.0087**	**0.0202**	NS	0.0040 U	**0.4980**	NS	**0.0182**	**0.0406**	NS	**0.2180**	**0.0436**	**0.0057**
Pyrene	mg/kg	180		**0.4010**	**0.0196**	**0.0646**	NS	0.0040 U	**0.8660**	NS	**0.0219**	**0.0860**	NS	**0.3070**	**0.0678**	**0.0050**
Total Petroleum Hydrocarbons																
Gasoline Range Organics	mg/kg	385		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diesel Range Organics	mg/kg	4150		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oil Range Organics	mg/kg	124000		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**
		Sample Point:	**GB-27**	**GB-28**	**GB-29**	**GB-30**	**GB-31**	**GB-32**	**GB-33**	**GB-34**	**GB-35**	**GB-36**	**GB-37**	**GB-38**	**GB-39**
		Sample Interval (feet bgs):	**0.5-2**	**1.5-2.5**	**1.5-2.5**	**3-4**	**3-5**	**0-2**	**2-4**	**1-3**	**2-3**	**0-2**	**3-5**	**0-2**	**5-6**
		Sample Date:	**7/23/2021**	**7/22/2021**	**7/26/2021**	**7/26/2021**	**7/21/2021**	**7/21/2021**	**7/20/2021**	**7/20/2021**	**7/22/2021**	**7/26/2021**	**7/26/2021**	**7/26/2021**	**7/21/2021**
		Notes:													
Parameter	**Units**	**PAL[1]**													
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	mg/kg	810	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	mg/kg	0.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	mg/kg	0.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	mg/kg	3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	mg/kg	23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloropropene	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	mg/kg	6.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	mg/kg	0.0051	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trimethylbenzene	mg/kg	34	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	mg/kg	5.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	mg/kg	30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	mg/kg	0.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	mg/kg	0.036	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	mg/kg	180	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	mg/kg	0.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethene	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	mg/kg	1.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	mg/kg	27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	mg/kg	148	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	mg/kg	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone	mg/kg	2700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	mg/kg	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	mg/kg	3300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	mg/kg	6100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrolein	mg/kg	0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrylonitrile	mg/kg	0.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	mg/kg	1.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromobenzene	mg/kg	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromochloromethane	mg/kg	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	mg/kg	0.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	mg/kg	19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	mg/kg	0.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	mg/kg	77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	mg/kg	0.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	mg/kg	28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	mg/kg	1400	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	mg/kg	0.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**
		Sample Point:	**GB-27**	**GB-28**	**GB-29**	**GB-30**	**GB-31**	**GB-32**	**GB-33**	**GB-34**	**GB-35**	**GB-36**	**GB-37**	**GB-38**	**GB-39**
		Sample Interval (feet bgs):	**0.5-2**	**1.5-2.5**	**1.5-2.5**	**3-4**	**3-5**	**0-2**	**2-4**	**1-3**	**2-3**	**0-2**	**3-5**	**0-2**	**5-6**
		Sample Date:	**7/23/2021**	**7/22/2021**	**7/26/2021**	**7/26/2021**	**7/21/2021**	**7/21/2021**	**7/20/2021**	**7/20/2021**	**7/22/2021**	**7/26/2021**	**7/26/2021**	**7/26/2021**	**7/21/2021**
		Notes:													
Parameter	**Units**	**PAL[1]**													
Volatile Organic Compounds (continued)															
Chloromethane	mg/kg	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyclohexanone	mg/kg	2800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	mg/kg	8.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl ether	mg/kg	1600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	mg/kg	5.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iodomethane	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	mg/kg	190	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
m/p-Xylene	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl acetate	mg/kg	7800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene bromide	mg/kg	2.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	mg/kg	35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	mg/kg	390	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Heptane	mg/kg	2.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Hexane	mg/kg	61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	mg/kg	380	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	mg/kg	3.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	mg/kg	65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	mg/kg	780	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	mg/kg	600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	780	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	mg/kg	8.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrahydrofuran	mg/kg	1800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	mg/kg	490	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	mg/kg	0.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl acetate	mg/kg	91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	mg/kg	0.059	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes, Total	mg/kg	58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-27	GB-28	GB-29	GB-30	GB-31	GB-32	GB-33	GB-34	GB-35	GB-36	GB-37	GB-38	GB-39
			Sample Interval (feet bgs):	0.5-2	1.5-2.5	1.5-2.5	3-4	3-5	0-2	2-4	1-3	2-3	0-2	3-5	0-2	5-6
			Sample Date:	7/23/2021	7/22/2021	7/26/2021	7/26/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/22/2021	7/26/2021	7/26/2021	7/26/2021	7/21/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Explosives																
1,3,5-Trinitrobenzene	mg/kg	220		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0486 U
1,3-Dinitrobenzene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0639 U
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.109 U
2,4,6-Trinitrotoluene	mg/kg	2.6		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0782 U
2,4-Dinitrotoluene	mg/kg	1.7		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0972 U
2,6-Dinitrotoluene	mg/kg	0.36		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.107 U
2-Nitrotoluene	mg/kg	3.2		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.113 U
3-Nitrotoluene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.140 U
4-Nitrotoluene (4-NT)	mg/kg	1.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.171 U
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0791 U
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0710 U
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0966 U
Nitrobenzene	mg/kg	5.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.107 U
Nitroglycerine	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.191 U
Pentaerythritol tetranitrate (PETN)	mg/kg	13		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.263 U
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.135 U

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
mg/kg - milligrams per kilogram
NE - not established
NS - not sampled
U - compound was not detected
UJ - qualified as estimated at the reporting limit
UR - qualified as rejected at the reporting limit

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-40	GB-41	GB-42	GB-43	GB-44	GB-45	GB-46	GB-46	GB-47	GB-48	GB-49	GB-50	GB-51
			Sample Interval (feet bgs):	1.5-3.5	4-6	2-3	3-5	3-5	0-2	2-4	2-4D	3-5	3-5	3.5-5	0-2	1.5-3
			Sample Date:	7/20/2021	7/20/2021	7/22/2021	7/26/2021	7/26/2021	7/21/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/19/2021
			Notes:								Duplicate					
Parameter	**Units**	**PAL[1]**														
Metals																
Antimony	mg/kg	10		0.49 U	0.45 U	0.59 U	0.62 U	0.62 U	0.59 U	0.50	0.49 U	0.53 U	0.58 UJ	0.55 U	0.58 U	0.49 U
Arsenic	mg/kg	12.3		**4.8**	**4.8**	**7.8**	**12.7**	**5.4**	**10.5**	**9.8**	**9.1**	**6.0**	**7.9**	**4.5**	**6.3**	**6.3**
Copper	mg/kg	310		**11.4**	**12.1**	**15.6**	**23.4**	**18.2**	**19.3**	**17.9**	**16.9**	**12.0**	**14.8**	**12.6**	**14.3**	**15.3**
Lead	mg/kg	400		**10.5**	**8.2**	**9.6**	**14.8**	**26.8**	**13.9**	**10.8**	**11.2**	**10.1**	**33.8**	**10.7**	**11.6**	**11.1**
Zinc	mg/kg	2300		**32.4**	**33.0**	**48.9**	**58.5**	**54.2**	**66.6**	**52.6**	**56.8**	**32.7**	**30.8**	**35.6**	**47.6**	**47.3**
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.41		0.0101 U	0.0099 U	0.0100 U	0.0103 U	0.0099 U	0.0101 U	0.0099 U	0.0101 U	0.0101 U	0.0100 U	0.0102 U	0.0095 U	0.0099 U
Aroclor 1221	mg/kg	0.20		0.0097 U	0.0095 U	0.0096 U	0.0099 U	0.0095 U	0.0097 U	0.0095 U	0.0097 U	0.0097 U	0.0096 U	0.0098 U	0.0091 U	0.0095 U
Aroclor 1232	mg/kg	0.17		0.0044 U	0.0044 U	0.0044 U	0.0045 U	0.0044 U	0.0045 U	0.0044 U	0.0044 U	0.0045 U	0.0044 U	0.0045 U	0.0042 U	0.0044 U
Aroclor 1242	mg/kg	0.23		0.0098 U	0.0096 U	0.0097 U	0.0100 U	0.0096 U	0.0098 U	0.0096 U	0.0098 U	0.0098 U	0.0097 U	0.0099 U	0.0092 U	0.0096 U
Aroclor 1248	mg/kg	0.23		0.0027 U	0.0026 U	0.0027 U	0.0027 U	0.0026 U	0.0027 U	0.0026 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0025 U	0.0026 U
Aroclor 1254	mg/kg	0.12		0.0038 U	0.0037 U	0.0038 U	0.0039 U	0.0037 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0036 U	0.0038 U
Aroclor 1260	mg/kg	0.24		0.0080 U	0.0079 U	0.0079 U	0.0082 U	0.0079 U	**0.0099 J**	0.0079 U	0.0080 U	0.0080 U	0.0080 U	0.0081 U	**0.0083 J**	0.0079 U
Polycyclic Aromatic Hydrocarbons																
Acenaphthene	mg/kg	360		**0.1470 J**	0.0015 U	0.0014 U	0.0015 U	**0.0886**	**1.23**	NS	NS	0.0015 U	0.0015 U	NS	**0.0598**	0.0030 U
Acenaphthylene	mg/kg	4180		0.0743 U	0.0015 U	0.0014 U	0.0015 U	**0.0423 J**	**0.0684**	NS	NS	0.0015 U	0.0015 U	NS	**0.0182**	0.0030 U
Anthracene	mg/kg	1800		**0.5460**	0.0017 U	0.0016 U	0.0017 U	**0.2900**	**2.88**	NS	NS	0.0017 U	0.0016 U	NS	**0.1930**	**0.0119**
Benzo(a)anthracene	mg/kg	1.1		**0.9780**	0.0019 U	0.0018 U	**0.0035 J**	**0.7990**	**7.60**	NS	NS	0.0019 U	0.0018 U	NS	**0.9540**	**0.0891**
Benzo(a)pyrene	mg/kg	0.11		**0.6660**	**0.0022 J**	0.0014 U	0.0015 U	**0.6570**	**6.31**	NS	NS	0.0015 U	0.0014 U	NS	**0.8080**	**0.0952**
Benzo(b)fluoranthene	mg/kg	1.1		**1.01**	**0.0043**	0.0019 U	**0.0061**	**0.8940**	**10.1**	NS	NS	0.0020 U	0.0019 U	NS	**1.71**	**0.2170**
Benzo(g,h,i)perylene	mg/kg	1720		**0.4700**	0.0018 U	0.0017 U	**0.0022 J**	**0.4220**	**3.63**	NS	NS	0.0018 U	0.0018 U	NS	**0.3080**	**0.0411**
Benzo(k)fluoranthene	mg/kg	11		**0.5790**	0.0022 U	0.0022 U	**0.0029 J**	**0.5160**	**3.58**	NS	NS	0.0022 U	0.0022 U	NS	**0.4230**	**0.0550**
Chrysene	mg/kg	110		**0.9080**	**0.0034 J**	0.0018 U	**0.0045**	**0.7070**	**7.59**	NS	NS	0.0019 U	0.0019 U	NS	**1.11**	**0.1140**
Dibenzo(a,h)anthracene	mg/kg	0.11		0.0858 U	0.0017 U	0.0017 U	0.0018 U	**0.0898**	**0.7290**	NS	NS	0.0017 U	0.0017 U	NS	**0.0862**	0.0034 U
Fluoranthene	mg/kg	240		**2.50**	**0.0108**	0.0029 U	**0.0118**	**1.56**	**17.8**	NS	NS	0.0030 U	**0.0044**	NS	**2.55**	**0.2360**
Fluorene	mg/kg	240		**0.2100**	0.0016 U	0.0015 U	0.0016 U	**0.0765 J**	**1.28**	NS	NS	0.0016 U	0.0015 U	NS	**0.0536**	0.0031 U
Indeno(1,2,3-cd)pyrene	mg/kg	1.1		**0.3950**	0.0017 U	0.0017 U	0.0018 U	**0.3220**	**2.88**	NS	NS	0.0017 U	0.0017 U	NS	**0.3110**	**0.0411**
Naphthalene	mg/kg	3.8		0.0852 U	0.0017 U	0.0017 U	0.0018 U	0.0343 U	**0.2540**	NS	NS	0.0017 U	0.0017 U	NS	**0.0069 J**	0.0034 U
Phenanthrene	mg/kg	2170		**2.06**	**0.0053**	0.0032 U	**0.0052**	**0.6910**	**17.2**	NS	NS	0.0033 U	**0.0041**	NS	**0.9830**	**0.0648**
Pyrene	mg/kg	180		**1.82**	**0.0080**	0.0021 U	**0.0099**	**1.62**	**15.2**	NS	NS	0.0022 U	**0.0037 J**	NS	**1.98**	**0.1910**
Total Petroleum Hydrocarbons																
Gasoline Range Organics	mg/kg	385		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diesel Range Organics	mg/kg	4150		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oil Range Organics	mg/kg	124000		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**
		Sample Point:	**GB-40**	**GB-41**	**GB-42**	**GB-43**	**GB-44**	**GB-45**	**GB-46**	**GB-46**	**GB-47**	**GB-48**	**GB-49**	**GB-50**	**GB-51**
		Sample Interval (feet bgs):	**1.5-3.5**	**4-6**	**2-3**	**3-5**	**3-5**	**0-2**	**2-4**	**2-4D**	**3-5**	**3-5**	**3.5-5**	**0-2**	**1.5-3**
		Sample Date:	**7/20/2021**	**7/20/2021**	**7/22/2021**	**7/26/2021**	**7/26/2021**	**7/21/2021**	**7/21/2021**	**7/21/2021**	**7/20/2021**	**7/20/2021**	**7/19/2021**	**7/19/2021**	**7/19/2021**
		Notes:								**Duplicate**					
Parameter	**Units**	**PAL[1]**													
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	mg/kg	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	mg/kg	810	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	mg/kg	0.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	mg/kg	0.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	mg/kg	3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	mg/kg	23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloropropene	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	mg/kg	6.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	mg/kg	0.0051	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trimethylbenzene	mg/kg	34	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	mg/kg	5.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	mg/kg	30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	mg/kg	0.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	mg/kg	0.036	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	mg/kg	180	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	mg/kg	0.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethene	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	mg/kg	1.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	mg/kg	27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	mg/kg	148	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	mg/kg	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone	mg/kg	2700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	mg/kg	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	mg/kg	3300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	mg/kg	6100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrolein	mg/kg	0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrylonitrile	mg/kg	0.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	mg/kg	1.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromobenzene	mg/kg	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromochloromethane	mg/kg	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	mg/kg	0.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	mg/kg	19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	mg/kg	0.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	mg/kg	77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	mg/kg	0.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	mg/kg	28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	mg/kg	1400	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	mg/kg	0.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Group Name:			**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**
Sample Point:			**GB-40**	**GB-41**	**GB-42**	**GB-43**	**GB-44**	**GB-45**	**GB-46**	**GB-46**	**GB-47**	**GB-48**	**GB-49**	**GB-50**	**GB-51**
Sample Interval (feet bgs):			**1.5-3.5**	**4-6**	**2-3**	**3-5**	**3-5**	**0-2**	**2-4**	**2-4D**	**3-5**	**3-5**	**3.5-5**	**0-2**	**1.5-3**
Sample Date:			**7/20/2021**	**7/20/2021**	**7/22/2021**	**7/26/2021**	**7/26/2021**	**7/21/2021**	**7/21/2021**	**7/21/2021**	**7/20/2021**	**7/20/2021**	**7/19/2021**	**7/19/2021**	**7/19/2021**
Notes:										**Duplicate**					
Parameter	**Units**	**PAL[1]**													
Volatile Organic Compounds (continued)															
Chloromethane	mg/kg	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyclohexanone	mg/kg	2800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	mg/kg	8.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl ether	mg/kg	1600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	mg/kg	5.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iodomethane	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	mg/kg	190	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
m/p-Xylene	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl acetate	mg/kg	7800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene bromide	mg/kg	2.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	mg/kg	35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	mg/kg	390	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Heptane	mg/kg	2.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Hexane	mg/kg	61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	mg/kg	380	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	mg/kg	3.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	mg/kg	65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	mg/kg	780	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	mg/kg	600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	780	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	mg/kg	8.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrahydrofuran	mg/kg	1800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	mg/kg	490	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	mg/kg	0.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl acetate	mg/kg	91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	mg/kg	0.059	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes, Total	mg/kg	58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-40	GB-41	GB-42	GB-43	GB-44	GB-45	GB-46	GB-46	GB-47	GB-48	GB-49	GB-50	GB-51
			Sample Interval (feet bgs):	1.5-3.5	4-6	2-3	3-5	3-5	0-2	2-4	2-4D	3-5	3-5	3.5-5	0-2	1.5-3
			Sample Date:	7/20/2021	7/20/2021	7/22/2021	7/26/2021	7/26/2021	7/21/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/19/2021
			Notes:								Duplicate					
Parameter	**Units**	**PAL[1]**														
Explosives																
1,3,5-Trinitrobenzene	mg/kg	220		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.0478 U	NS	0.0473 U	NS
1,3-Dinitrobenzene	mg/kg	0.63		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.0628 U	NS	0.0622 U	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.107 U	NS	0.106 U	NS
2,4,6-Trinitrotoluene	mg/kg	2.6		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.0770 U	NS	0.0762 U	NS
2,4-Dinitrotoluene	mg/kg	1.7		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.0957 U	NS	0.0946 U	NS
2,6-Dinitrotoluene	mg/kg	0.36		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.105 U	NS	0.104 U	NS
2-Nitrotoluene	mg/kg	3.2		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.112 U	NS	0.110 U	NS
3-Nitrotoluene	mg/kg	0.63		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.138 U	NS	0.136 U	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.168 U	NS	0.167 U	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.0779 U	NS	0.0770 U	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.0699 U	NS	0.0692 U	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.0951 U	NS	0.0940 U	NS
Nitrobenzene	mg/kg	5.1		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.105 U	NS	0.104 U	NS
Nitroglycerine	mg/kg	0.63		NS	2.47 U	NS	NS	NS	NS	NS	NS	NS	0.188 U	NS	0.186 U	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.259 U	NS	0.256 U	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3		NS	0.617 U	NS	NS	NS	NS	NS	NS	NS	0.133 U	NS	0.132 U	NS

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
mg/kg - milligrams per kilogram
NE - not established
NS - not sampled
U - compound was not detected
UJ - qualified as estimated at the reporting limit
UR - qualified as rejected at the reporting limit

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Group Name:			**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**
Sample Point:			**GB-52**	**GB-53**	**GB-54**	**GB-55**	**GB-56**	**GB-57**	**GB-58**	**GB-59**	**GB-60**	**GB-61**	**GB-62**	**GB-63**	**GB-64**
Sample Interval (feet bgs):			**2-3**	**0-2**	**0-2**	**0-2**	**3-5**	**3.5-5.5**	**1-3**	**2-4**	**2-4**	**3-5**	**0-2**	**0-2**	**3-4**
Sample Date:			**7/21/2021**	**7/21/2021**	**7/20/2021**	**7/20/2021**	**7/19/2021**	**7/19/2021**	**7/19/2021**	**7/21/2021**	**7/21/2021**	**7/20/2021**	**7/20/2021**	**7/20/2021**	**7/19/2021**
Notes:															
Parameter	**Units**	**PAL[1]**													
Metals															
Antimony	mg/kg	10	0.55 U	0.62 U	0.58 U	0.51 U	0.61 U	0.58 U	0.57 U	0.56 U	0.51 U	NS	0.65 U	0.62 U	0.59 U
Arsenic	mg/kg	12.3	**7.4**	**22.7**	**9.9**	**12.1**	**6.2**	**4.6**	**7.0**	**7.7**	**9.8**	NS	**6.7**	**10.8**	**12.1**
Copper	mg/kg	310	**16.1**	**25.2**	**20.7**	**17.1**	**13.0**	**13.7**	**20.6**	**19.0**	**17.8**	NS	**15.1**	**21.2**	**19.9**
Lead	mg/kg	400	**12.8**	**52.2**	**13.8**	**9.9**	**8.9**	**9.8**	**9.8**	**115**	**19.2**	NS	**36.0**	**13.6**	**14.8**
Zinc	mg/kg	2300	**54.9**	**77.6**	**63.0**	**43.8**	**43.1**	**40.1**	**75.1**	**80.1**	**58.1**	NS	**68.6**	**69.9**	**68.1**
Polychlorinated Biphenyls															
Aroclor 1016	mg/kg	0.41	0.0099 U	0.0100 U	0.0091 U	0.0094 U	0.0101 U	0.0096 U	0.0101 U	0.0100 U	0.0101 U	NS	NS	NS	0.0102 U
Aroclor 1221	mg/kg	0.20	0.0095 U	0.0096 U	0.0087 U	0.0091 U	0.0097 U	0.0092 U	0.0097 U	0.0096 U	0.0097 U	NS	NS	NS	0.0098 U
Aroclor 1232	mg/kg	0.17	0.0043 U	0.0044 U	0.0040 U	0.0041 U	0.0044 U	0.0042 U	0.0045 U	0.0044 U	0.0044 U	NS	NS	NS	0.0045 U
Aroclor 1242	mg/kg	0.23	0.0096 U	0.0097 U	0.0088 U	0.0092 U	0.0098 U	0.0093 U	0.0098 U	0.0097 U	0.0098 U	NS	NS	NS	0.0099 U
Aroclor 1248	mg/kg	0.23	0.0026 U	0.0027 U	0.0024 U	0.0025 U	0.0027 U	0.0025 U	0.0027 U	0.0027 U	0.0027 U	NS	NS	NS	0.0027 U
Aroclor 1254	mg/kg	0.12	0.0037 U	0.0038 U	0.0034 U	0.0036 U	0.0038 U	0.0036 U	0.0038 U	0.0038 U	0.0038 U	NS	NS	NS	0.0039 U
Aroclor 1260	mg/kg	0.24	0.0078 U	**0.0104 J**	0.0072 U	0.0075 U	0.0080 U	0.0076 U	0.0080 U	0.0079 U	0.0080 U	NS	NS	NS	0.0081 U
Polycyclic Aromatic Hydrocarbons															
Acenaphthene	mg/kg	360	0.0015 U	NS	0.0027 U	0.0027 U	0.0015 U	0.0014 U	**0.0035 J**	**0.0022 J**	**0.0181 J**	0.0032 U	**0.0482 J**	NS	0.0015 U
Acenaphthylene	mg/kg	4180	0.0015 U	NS	0.0027 U	0.0027 U	0.0015 U	0.0014 U	0.0015 U	**0.0082**	0.0075 U	0.0032 U	0.0292 U	NS	0.0015 U
Anthracene	mg/kg	1800	0.0016 U	NS	0.0030 U	0.0030 U	0.0017 U	**0.0034 J**	**0.0230**	**0.0148**	**0.0261**	**0.0060 J**	**0.1840**	NS	0.0017 U
Benzo(a)anthracene	mg/kg	1.1	**0.0111**	NS	**0.0127**	0.0034 U	0.0019 U	**0.0083**	**0.2060**	**0.0642**	**0.0543**	**0.0275**	**0.6530**	NS	**0.0054**
Benzo(a)pyrene	mg/kg	0.11	0.0014 U	NS	**0.0125**	0.0027 U	0.0014 U	**0.0068**	**0.2030**	**0.0569**	**0.0479**	**0.0235**	**0.5750**	NS	**0.0043**
Benzo(b)fluoranthene	mg/kg	1.1	**0.0285**	NS	**0.0214**	**0.0052 J**	**0.0027 J**	**0.0160**	**0.4920**	**0.1010**	**0.0752**	**0.0428**	**0.9280**	NS	**0.0107**
Benzo(g,h,i)perylene	mg/kg	1720	**0.0154**	NS	**0.0097**	0.0033 U	0.0018 U	**0.0026 J**	**0.0910**	**0.0442**	**0.0393**	**0.0166**	**0.3700**	NS	0.0018 U
Benzo(k)fluoranthene	mg/kg	11	**0.0109**	NS	**0.0138**	0.0041 U	0.0022 U	**0.0024 J**	**0.0738**	**0.0375**	**0.0372**	**0.0259**	**0.4460**	NS	**0.0029 J**
Chrysene	mg/kg	110	**0.0173**	NS	**0.0149**	0.0035 U	0.0019 U	**0.0089**	**0.2600**	**0.0735**	**0.0730**	**0.0370**	**0.6420**	NS	**0.0067**
Dibenzo(a,h)anthracene	mg/kg	0.11	**0.0026 J**	NS	0.0031 U	0.0031 U	0.0017 U	0.0016 U	**0.0227**	**0.0086**	0.0087 U	0.0037 U	**0.1160**	NS	0.0017 U
Fluoranthene	mg/kg	240	**0.0273**	NS	**0.0317**	**0.0057 J**	**0.0047**	**0.0276**	**0.5040**	**0.1370**	**0.1930**	**0.0957**	**1.46**	NS	**0.0195**
Fluorene	mg/kg	240	0.0015 U	NS	0.0028 U	0.0029 U	0.0016 U	0.0015 U	**0.0056**	**0.0043**	**0.0129 J**	0.0033 U	**0.0456 J**	NS	0.0016 U
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	**0.0113**	NS	**0.0080**	0.0031 U	0.0017 U	**0.0025 J**	**0.0911**	**0.0349**	**0.0268**	**0.0146**	**0.3350**	NS	0.0017 U
Naphthalene	mg/kg	3.8	0.0017 U	NS	0.0031 U	0.0031 U	0.0017 U	0.0016 U	0.0017 U	**0.0039 J**	0.0086 U	0.0037 U	0.0335 U	NS	0.0017 U
Phenanthrene	mg/kg	2170	**0.0109**	NS	**0.0128**	0.0060 U	0.0033 U	**0.0441**	**0.1630**	**0.0747**	**0.1110**	**0.0339**	**0.8380**	NS	**0.0075**
Pyrene	mg/kg	180	**0.0246**	NS	**0.0237**	**0.0042 J**	**0.0036 J**	**0.0215**	**0.4690**	**0.1450**	**0.1710**	**0.0758**	**1.21**	NS	**0.0152**
Total Petroleum Hydrocarbons															
Gasoline Range Organics	mg/kg	385	NS	NS	0.052 U	0.049 U	NS	NS	NS	NS	NS	0.056 U	0.051 U	NS	NS
Diesel Range Organics	mg/kg	4150	NS	NS	**2.9 J**	**2.9 J**	NS	NS	NS	NS	NS	**6.8 J**	**25.8**	NS	NS
Oil Range Organics	mg/kg	124000	NS	NS	9.1 JU	7.8 JU	NS	NS	NS	NS	NS	**17.4 J**	**66.5**	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-52	GB-53	GB-54	GB-55	GB-56	GB-57	GB-58	GB-59	GB-60	GB-61	GB-62	GB-63	GB-64
			Sample Interval (feet bgs):	2-3	0-2	0-2	0-2	3-5	3.5-5.5	1-3	2-4	2-4	3-5	0-2	0-2	3-4
			Sample Date:	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/19/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/kg	2		NS	NS	0.00097 U	0.00091 U	NS	NS	NS	NS	NS	0.00100 U	0.00095 U	NS	NS
1,1,1-Trichloroethane	mg/kg	810		NS	NS	0.00071 U	0.00067 U	NS	NS	NS	NS	NS	0.00077 U	0.00069 U	NS	NS
1,1,2,2-Tetrachloroethane	mg/kg	0.6		NS	NS	0.00095 U	0.00089 U	NS	NS	NS	NS	NS	0.00100 U	0.00093 U	NS	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670		NS	NS	0.00470 U	0.00450 U	NS	NS	NS	NS	NS	0.00510 U	0.00460 U	NS	NS
1,1,2-Trichloroethane	mg/kg	0.15		NS	NS	0.00060 U	0.00056 U	NS	NS	NS	NS	NS	0.00065 U	0.00059 U	NS	NS
1,1-Dichloroethane	mg/kg	3.6		NS	NS	0.00037 U	0.00035 U	NS	NS	NS	NS	NS	0.00040 U	0.00036 U	NS	NS
1,1-Dichloroethene	mg/kg	23		NS	NS	0.00061 U	0.00057 U	NS	NS	NS	NS	NS	0.00066 U	0.00059 U	NS	NS
1,1-Dichloropropene	mg/kg	NE		NS	NS	0.00085 U	0.00080 U	NS	NS	NS	NS	NS	0.00093 U	0.00084 U	NS	NS
1,2,3-Trichlorobenzene	mg/kg	6.3		NS	NS	0.00076 U	0.00071 U	NS	NS	NS	NS	NS	0.00082 U	0.00074 U	NS	NS
1,2,3-Trichloropropane	mg/kg	0.0051		NS	NS	0.00200 U	0.00190 U	NS	NS	NS	NS	NS	0.00220 U	0.00200 U	NS	NS
1,2,3-Trimethylbenzene	mg/kg	34		NS	NS	0.00190 U	0.00180 U	NS	NS	NS	NS	NS	0.00210 U	0.00190 U	NS	NS
1,2,4-Trichlorobenzene	mg/kg	5.8		NS	NS	0.00076 U	0.00071 U	NS	NS	NS	NS	NS	0.00082 U	0.00074 U	NS	NS
1,2,4-Trimethylbenzene	mg/kg	30		NS	NS	0.00064 U	0.00060 U	NS	NS	NS	NS	NS	0.00069 U	0.00062 U	NS	NS
1,2-Dibromo-3-chloropropane	mg/kg	0.01		NS	NS	0.00170 U	0.00160 U	NS	NS	NS	NS	NS	0.00190 U	0.00170 U	NS	NS
1,2-Dibromoethane	mg/kg	0.036		NS	NS	0.00051 U	0.00048 U	NS	NS	NS	NS	NS	0.00055 U	0.00050 U	NS	NS
1,2-Dichlorobenzene	mg/kg	180		NS	NS	0.00059 U	0.00056 U	NS	NS	NS	NS	NS	0.00064 U	0.00058 U	NS	NS
1,2-Dichloroethane	mg/kg	0.46		NS	NS	0.00038 U	0.00036 U	NS	NS	NS	NS	NS	0.00041 U	0.00037 U	NS	NS
1,2-Dichloroethene	mg/kg	16		NS	NS	0.00110 U	0.00099 U	NS	NS	NS	NS	NS	0.00110 U	0.00100 U	NS	NS
1,2-Dichloropropane	mg/kg	1.6		NS	NS	0.00093 U	0.00087 U	NS	NS	NS	NS	NS	0.00100 U	0.00091 U	NS	NS
1,3,5-Trimethylbenzene	mg/kg	27		NS	NS	0.00059 U	0.00056 U	NS	NS	NS	NS	NS	0.00065 U	0.00058 U	NS	NS
1,3-Dichlorobenzene	mg/kg	148		NS	NS	0.00068 U	0.00064 U	NS	NS	NS	NS	NS	0.00074 U	0.00067 U	NS	NS
1,3-Dichloropropane	mg/kg	160		NS	NS	0.00066 U	0.00062 U	NS	NS	NS	NS	NS	0.00071 U	0.00064 U	NS	NS
1,4-Dichlorobenzene	mg/kg	2.6		NS	NS	0.00077 U	0.00072 U	NS	NS	NS	NS	NS	0.00083 U	0.00075 U	NS	NS
2,2-Dichloropropane	mg/kg	NE		NS	NS	0.00045 U	0.00042 U	NS	NS	NS	NS	NS	0.00049 U	0.00044 U	NS	NS
2-Butanone	mg/kg	2700		NS	NS	**0.00500 J**	0.00300 U	NS	NS	NS	NS	NS	0.00350 U	**0.01970**	NS	NS
2-Chlorotoluene	mg/kg	160		NS	NS	0.00069 U	0.00065 U	NS	NS	NS	NS	NS	0.00075 U	0.00068 U	NS	NS
2-Hexanone	mg/kg	20		NS	NS	0.00240 U	0.00220 U	NS	NS	NS	NS	NS	0.00260 U	0.00230 U	NS	NS
4-Chlorotoluene	mg/kg	160		NS	NS	0.00057 U	0.00053 U	NS	NS	NS	NS	NS	0.00062 U	0.00056 U	NS	NS
4-Methyl-2-pentanone	mg/kg	3300		NS	NS	0.00290 U	0.00270 U	NS	NS	NS	NS	NS	0.00310 U	0.00280 U	NS	NS
Acetone	mg/kg	6100		NS	NS	**0.02150**	0.01440 U	NS	NS	NS	NS	NS	0.01670 U	**0.07480**	NS	NS
Acrolein	mg/kg	0.1		NS	NS	0.07170 U	0.06740 U	NS	NS	NS	NS	NS	0.07780 U	0.07020 U	NS	NS
Acrylonitrile	mg/kg	0.25		NS	NS	0.00300 U	0.00280 U	NS	NS	NS	NS	NS	0.00330 U	0.00290 U	NS	NS
Benzene	mg/kg	1.2		NS	NS	0.00047 U	0.00044 U	NS	NS	NS	NS	NS	0.00051 U	0.00046 U	NS	NS
Bromobenzene	mg/kg	29		NS	NS	0.00089 U	0.00084 U	NS	NS	NS	NS	NS	0.00097 U	0.00087 U	NS	NS
Bromochloromethane	mg/kg	15		NS	NS	0.00057 U	0.00054 U	NS	NS	NS	NS	NS	0.00062 U	0.00056 U	NS	NS
Bromodichloromethane	mg/kg	0.29		NS	NS	0.00057 U	0.00054 U	NS	NS	NS	NS	NS	0.00062 U	0.00056 U	NS	NS
Bromoform	mg/kg	19		NS	NS	0.00054 U	0.00051 U	NS	NS	NS	NS	NS	0.00059 U	0.00053 U	NS	NS
Bromomethane	mg/kg	0.68		NS	NS	0.00280 U	0.00260 U	NS	NS	NS	NS	NS	0.00300 U	0.00270 U	NS	NS
Carbon disulfide	mg/kg	77		NS	NS	0.00061 U	0.00057 U	NS	NS	NS	NS	NS	**0.00200 J**	0.00060 U	NS	NS
Carbon tetrachloride	mg/kg	0.65		NS	NS	0.00081 U	0.00076 U	NS	NS	NS	NS	NS	0.00088 U	0.00080 U	NS	NS
Chlorobenzene	mg/kg	28		NS	NS	0.00059 U	0.00056 U	NS	NS	NS	NS	NS	0.00065 U	0.00058 U	NS	NS
Chloroethane	mg/kg	1400		NS	NS	0.00140 U	0.00130 U	NS	NS	NS	NS	NS	0.00150 U	0.00140 U	NS	NS
Chloroform	mg/kg	0.32		NS	NS	0.00047 U	0.00044 U	NS	NS	NS	NS	NS	0.00051 U	0.00046 U	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-52	GB-53	GB-54	GB-55	GB-56	GB-57	GB-58	GB-59	GB-60	GB-61	GB-62	GB-63	GB-64
			Sample Interval (feet bgs):	2-3	0-2	0-2	0-2	3-5	3.5-5.5	1-3	2-4	2-4	3-5	0-2	0-2	3-4
			Sample Date:	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/19/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds (continued)																
Chloromethane	mg/kg	11	NS	NS	0.00076 U	0.00071 U	NS	NS	NS	NS	NS	0.00082 U	0.00074 U	NS	NS	
cis-1,2-Dichloroethene	mg/kg	16	NS	NS	0.00041 U	0.00038 U	NS	NS	NS	NS	NS	0.00044 U	0.00040 U	NS	NS	
cis-1,3-Dichloropropene	mg/kg	0.224	NS	NS	0.00050 U	0.00047 U	NS	NS	NS	NS	NS	0.00055 U	0.00049 U	NS	NS	
Cyclohexanone	mg/kg	2800	NS	NS	0.01200 U	0.01130 U	NS	NS	NS	NS	NS	0.01310 U	0.01180 U	NS	NS	
Dibromochloromethane	mg/kg	8.3	NS	NS	0.00061 U	0.00058 U	NS	NS	NS	NS	NS	0.00066 U	0.00060 U	NS	NS	
Ethyl ether	mg/kg	1600	NS	NS	0.00053 U	0.00050 U	NS	NS	NS	NS	NS	0.00058 U	0.00052 U	NS	NS	
Ethylbenzene	mg/kg	5.8	NS	NS	0.00044 U	0.00041 U	NS	NS	NS	NS	NS	0.00048 U	0.00043 U	NS	NS	
Hexachlorobutadiene	mg/kg	1.2	NS	NS	0.00081 U	0.00076 U	NS	NS	NS	NS	NS	0.00088 U	0.00079 U	NS	NS	
Iodomethane	mg/kg	NE	NS	NS	0.00140 U	0.00130 U	NS	NS	NS	NS	NS	0.00160 U	0.00140 U	NS	NS	
Isopropylbenzene	mg/kg	190	NS	NS	0.00054 U	0.00051 U	NS	NS	NS	NS	NS	0.00059 U	0.00053 U	NS	NS	
m/p-Xylene	mg/kg	NE	NS	NS	0.00060 U	0.00056 U	NS	NS	NS	NS	NS	0.00065 U	0.00059 U	NS	NS	
Methyl acetate	mg/kg	7800	NS	NS	0.00100 U	0.00096 U	NS	NS	NS	NS	NS	0.00110 U	0.00100 U	NS	NS	
Methyl tertiary-butyl ether	mg/kg	47	NS	NS	0.00046 U	0.00043 U	NS	NS	NS	NS	NS	0.00049 U	0.00045 U	NS	NS	
Methylene bromide	mg/kg	2.4	NS	NS	0.00057 U	0.00053 U	NS	NS	NS	NS	NS	0.00062 U	0.00056 U	NS	NS	
Methylene chloride	mg/kg	35	NS	NS	0.00260 U	0.00240 U	NS	NS	NS	NS	NS	0.00280 U	0.00250 U	NS	NS	
n-Butylbenzene	mg/kg	390	NS	NS	0.00062 U	0.00058 U	NS	NS	NS	NS	NS	0.00067 U	0.00060 U	NS	NS	
n-Heptane	mg/kg	2.2	NS	NS	0.00430 U	0.00400 U	NS	NS	NS	NS	NS	0.00470 U	0.00420 U	NS	NS	
n-Hexane	mg/kg	61	NS	NS	0.00065 U	0.00061 U	NS	NS	NS	NS	NS	0.00071 U	0.00064 U	NS	NS	
n-Propylbenzene	mg/kg	380	NS	NS	0.00076 U	0.00072 U	NS	NS	NS	NS	NS	0.00083 U	0.00075 U	NS	NS	
Naphthalene	mg/kg	3.8	NS	NS	0.00078 U	0.00073 U	NS	NS	NS	NS	NS	0.00084 U	0.00076 U	NS	NS	
o-Xylene	mg/kg	65	NS	NS	0.00035 U	0.00033 U	NS	NS	NS	NS	NS	0.00038 U	0.00035 U	NS	NS	
p-Isopropyltoluene	mg/kg	1100	NS	NS	0.00065 U	0.00061 U	NS	NS	NS	NS	NS	0.00071 U	0.00064 U	NS	NS	
sec-Butylbenzene	mg/kg	780	NS	NS	0.00069 U	0.00065 U	NS	NS	NS	NS	NS	0.00075 U	0.00068 U	NS	NS	
Styrene	mg/kg	600	NS	NS	0.00056 U	0.00052 U	NS	NS	NS	NS	NS	0.00061 U	0.00055 U	NS	NS	
tert-Butylbenzene	mg/kg	780	NS	NS	0.00084 U	0.00079 U	NS	NS	NS	NS	NS	0.00091 U	0.00082 U	NS	NS	
Tetrachloroethene	mg/kg	8.1	NS	NS	0.00039 U	0.00037 U	NS	NS	NS	NS	NS	0.00042 U	0.00038 U	NS	NS	
Tetrahydrofuran	mg/kg	1800	NS	NS	0.00074 U	0.00070 U	NS	NS	NS	NS	NS	0.00081 U	0.00073 UJ	NS	NS	
Toluene	mg/kg	490	NS	NS	0.00033 U	0.00031 U	NS	NS	NS	NS	NS	0.00036 U	0.00033 U	NS	NS	
trans-1,2-Dichloroethene	mg/kg	7	NS	NS	0.00064 U	0.00061 U	NS	NS	NS	NS	NS	0.00070 U	0.00063 U	NS	NS	
trans-1,3-Dichloropropene	mg/kg	0.224	NS	NS	0.00043 U	0.00041 U	NS	NS	NS	NS	NS	0.00047 U	0.00042 U	NS	NS	
Trichloroethene	mg/kg	0.41	NS	NS	0.00069 U	0.00065 U	NS	NS	NS	NS	NS	0.00075 U	0.00067 U	NS	NS	
Trichlorofluoromethane	mg/kg	2300	NS	NS	0.00058 U	0.00055 U	NS	NS	NS	NS	NS	0.00063 U	0.00057 U	NS	NS	
Vinyl acetate	mg/kg	91	NS	NS	0.00053 U	0.00050 U	NS	NS	NS	NS	NS	0.00058 U	0.00052 U	NS	NS	
Vinyl chloride	mg/kg	0.059	NS	NS	0.00063 U	0.00059 U	NS	NS	NS	NS	NS	0.00069 U	0.00062 U	NS	NS	
Xylenes, Total	mg/kg	58	NS	NS	0.00110 U	0.00100 U	NS	NS	NS	NS	NS	0.00120 U	0.00110 U	NS	NS	

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-52	GB-53	GB-54	GB-55	GB-56	GB-57	GB-58	GB-59	GB-60	GB-61	GB-62	GB-63	GB-64
			Sample Interval (feet bgs):	2-3	0-2	0-2	0-2	3-5	3.5-5.5	1-3	2-4	2-4	3-5	0-2	0-2	3-4
			Sample Date:	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/19/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Explosives																
1,3,5-Trinitrobenzene	mg/kg	220		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrotoluene	mg/kg	2.6		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	mg/kg	1.7		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	mg/kg	0.36		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrotoluene	mg/kg	3.2		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitrotoluene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	mg/kg	5.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitroglycerine	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
mg/kg - milligrams per kilogram
NE - not established
NS - not sampled
U - compound was not detected
UJ - qualified as estimated at the reporting limit
UR - qualified as rejected at the reporting limit

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-65	GB-66	GB-66	GB-67	GB-68	GB-69	GB-70	GB-71
			Sample Interval (feet bgs):	3-4	3-5	3-5D	5-6	1-3	2-3	3-5	0-2
			Sample Date:	7/19/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/19/2021
			Notes:			Duplicate					
Parameter	**Units**	**PAL[1]**									
Metals											
Antimony	mg/kg	10	0.59 U	0.52 U	0.60 U	0.47 U	0.55 U	0.46 UJ	0.62 U	0.62 U
Arsenic	mg/kg	12.3	**10.0**	**5.2**	**6.6**	**2.9**	**3.5**	**11.6**	**11.4**	**10.0**
Copper	mg/kg	310	**19.1**	**11.0**	**11.3**	**10.1**	**8.6**	**29.9**	**21.8**	**12.8**
Lead	mg/kg	400	**10.3**	**19.4**	**14.5**	**8.3**	**15.1**	**47.7**	**13.5**	**35.5**
Zinc	mg/kg	2300	**59.3**	**50.8**	**48.9**	**30.9**	**41.8**	**78.2**	**69.9**	**173**
Polychlorinated Biphenyls										
Aroclor 1016	mg/kg	0.41	0.0101 U	0.0099 U	0.0098 U	0.0100 U	0.0092 U	0.0101 U	0.0098 U	0.0100 U
Aroclor 1221	mg/kg	0.20	0.0097 U	0.0095 U	0.0094 U	0.0096 U	0.0089 U	0.0097 U	0.0094 U	0.0096 U
Aroclor 1232	mg/kg	0.17	0.0044 U	0.0043 U	0.0043 U	0.0044 U	0.0041 U	0.0044 U	0.0043 U	0.0044 U
Aroclor 1242	mg/kg	0.23	0.0098 U	0.0096 U	0.0095 U	0.0097 U	0.0090 U	0.0098 U	0.0095 U	0.0097 U
Aroclor 1248	mg/kg	0.23	0.0027 U	0.0026 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U	0.0026 U	0.0027 U
Aroclor 1254	mg/kg	0.12	0.0038 U	0.0037 U	0.0037 U	0.0038 U	0.0035 U	0.0038 U	0.0037 U	0.0038 U
Aroclor 1260	mg/kg	0.24	0.0080 U	0.0078 U	0.0078 U	0.0079 U	0.0073 U	**0.0199 J**	0.0078 U	0.0080 U
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	mg/kg	360	0.0015 U	NS	NS	NS	0.0027 U	NS	0.0015 U	**0.00390 J**
Acenaphthylene	mg/kg	4180	0.0015 U	NS	NS	NS	0.0027 U	NS	0.0015 U	**0.00610**
Anthracene	mg/kg	1800	**0.0039 J**	NS	NS	NS	0.0031 U	NS	0.0017 U	**0.02130**
Benzo(a)anthracene	mg/kg	1.1	**0.0195**	NS	NS	NS	0.0035 U	NS	0.0019 U	**0.09030**
Benzo(a)pyrene	mg/kg	0.11	**0.0149**	NS	NS	NS	0.0027 U	NS	0.0015 U	**0.08090**
Benzo(b)fluoranthene	mg/kg	1.1	**0.0372**	NS	NS	NS	0.0036 U	NS	**0.0023 J**	**0.21600**
Benzo(g,h,i)perylene	mg/kg	1720	**0.0067**	NS	NS	NS	0.0033 U	NS	0.0018 U	**0.04180**
Benzo(k)fluoranthene	mg/kg	11	**0.0088**	NS	NS	NS	0.0041 U	NS	0.0022 U	**0.06320**
Chrysene	mg/kg	110	**0.0247**	NS	NS	NS	0.0035 U	NS	0.0019 U	**0.15400**
Dibenzo(a,h)anthracene	mg/kg	0.11	0.0017 U	NS	NS	NS	0.0032 U	NS	0.0017 U	**0.01230**
Fluoranthene	mg/kg	240	**0.0874**	NS	NS	NS	0.0055 U	NS	0.0030 U	**0.21800**
Fluorene	mg/kg	240	0.0016 U	NS	NS	NS	0.0029 U	NS	0.0016 U	**0.01660**
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	**0.0067**	NS	NS	NS	0.0032 U	NS	0.0017 U	**0.03940**
Naphthalene	mg/kg	3.8	0.0017 U	NS	NS	NS	0.0031 U	NS	0.0017 U	**0.01340**
Phenanthrene	mg/kg	2170	**0.0227**	NS	NS	NS	0.0060 U	NS	0.0033 U	**0.21000**
Pyrene	mg/kg	180	**0.0660**	NS	NS	NS	0.0040 U	NS	0.0022 U	**0.20800**
Total Petroleum Hydrocarbons										
Gasoline Range Organics	mg/kg	385	NS	NS	NS	0.048 U	0.049 U	NS	NS	NS
Diesel Range Organics	mg/kg	4150	NS	NS	NS	**2.0 J**	**2.7 J**	NS	NS	NS
Oil Range Organics	mg/kg	124000	NS	NS	NS	6.7 JU	7.6 JU	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-65	GB-66	GB-66	GB-67	GB-68	GB-69	GB-70	GB-71
			Sample Interval (feet bgs):	3-4	3-5	3-5D	5-6	1-3	2-3	3-5	0-2
			Sample Date:	7/19/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/19/2021
			Notes:			Duplicate					
Parameter	**Units**	**PAL[1]**									
Volatile Organic Compounds											
1,1,1,2-Tetrachloroethane	mg/kg	2	NS	NS	NS	0.00091 U	0.00092 U	NS	NS	NS
1,1,1-Trichloroethane	mg/kg	810	NS	NS	NS	0.00066 U	0.00067 U	NS	NS	NS
1,1,2,2-Tetrachloroethane	mg/kg	0.6	NS	NS	NS	0.00089 U	0.00090 U	NS	NS	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	NS	NS	NS	0.00440 U	0.00450 U	NS	NS	NS
1,1,2-Trichloroethane	mg/kg	0.15	NS	NS	NS	0.00056 U	0.00057 U	NS	NS	NS
1,1-Dichloroethane	mg/kg	3.6	NS	NS	NS	0.00035 U	0.00035 U	NS	NS	NS
1,1-Dichloroethene	mg/kg	23	NS	NS	NS	0.00057 U	0.00058 U	NS	NS	NS
1,1-Dichloropropene	mg/kg	NE	NS	NS	NS	0.00080 U	0.00081 U	NS	NS	NS
1,2,3-Trichlorobenzene	mg/kg	6.3	NS	NS	NS	0.00071 U	0.00072 U	NS	NS	NS
1,2,3-Trichloropropane	mg/kg	0.0051	NS	NS	NS	0.00190 U	0.00190 U	NS	NS	NS
1,2,3-Trimethylbenzene	mg/kg	34	NS	NS	NS	0.00180 U	0.00180 U	NS	NS	NS
1,2,4-Trichlorobenzene	mg/kg	5.8	NS	NS	NS	0.00071 U	0.00072 U	NS	NS	NS
1,2,4-Trimethylbenzene	mg/kg	30	NS	NS	NS	0.00059 U	0.00060 U	NS	NS	NS
1,2-Dibromo-3-chloropropane	mg/kg	0.01	NS	NS	NS	0.00160 U	0.00160 U	NS	NS	NS
1,2-Dibromoethane	mg/kg	0.036	NS	NS	NS	0.00047 U	0.00048 U	NS	NS	NS
1,2-Dichlorobenzene	mg/kg	180	NS	NS	NS	0.00055 U	0.00056 U	NS	NS	NS
1,2-Dichloroethane	mg/kg	0.46	NS	NS	NS	0.00035 U	0.00036 U	NS	NS	NS
1,2-Dichloroethene	mg/kg	16	NS	NS	NS	0.00098 U	0.00100 U	NS	NS	NS
1,2-Dichloropropane	mg/kg	1.6	NS	NS	NS	0.00087 U	0.00088 U	NS	NS	NS
1,3,5-Trimethylbenzene	mg/kg	27	NS	NS	NS	0.00056 U	0.00057 U	NS	NS	NS
1,3-Dichlorobenzene	mg/kg	148	NS	NS	NS	0.00064 U	0.00065 U	NS	NS	NS
1,3-Dichloropropane	mg/kg	160	NS	NS	NS	0.00061 U	0.00062 U	NS	NS	NS
1,4-Dichlorobenzene	mg/kg	2.6	NS	NS	NS	0.00072 U	0.00073 U	NS	NS	NS
2,2-Dichloropropane	mg/kg	NE	NS	NS	NS	0.00042 U	0.00043 U	NS	NS	NS
2-Butanone	mg/kg	2700	NS	NS	NS	0.00300 U	**0.00590 J**	NS	NS	NS
2-Chlorotoluene	mg/kg	160	NS	NS	NS	0.00065 U	0.00066 U	NS	NS	NS
2-Hexanone	mg/kg	20	NS	NS	NS	0.00220 U	0.00220 U	NS	NS	NS
4-Chlorotoluene	mg/kg	160	NS	NS	NS	0.00053 U	0.00054 U	NS	NS	NS
4-Methyl-2-pentanone	mg/kg	3300	NS	NS	NS	0.00270 U	0.00270 U	NS	NS	NS
Acetone	mg/kg	6100	NS	NS	NS	0.01440 U	**0.04310**	NS	NS	NS
Acrolein	mg/kg	0.1	NS	NS	NS	0.06710 U	0.06820 U	NS	NS	NS
Acrylonitrile	mg/kg	0.25	NS	NS	NS	0.00280 U	0.00290 U	NS	NS	NS
Benzene	mg/kg	1.2	NS	NS	NS	0.00044 U	0.00044 U	NS	NS	NS
Bromobenzene	mg/kg	29	NS	NS	NS	0.00083 U	0.00085 U	NS	NS	NS
Bromochloromethane	mg/kg	15	NS	NS	NS	0.00053 U	0.00054 U	NS	NS	NS
Bromodichloromethane	mg/kg	0.29	NS	NS	NS	0.00053 U	0.00054 U	NS	NS	NS
Bromoform	mg/kg	19	NS	NS	NS	0.00051 U	0.00052 U	NS	NS	NS
Bromomethane	mg/kg	0.68	NS	NS	NS	0.00260 U	0.00270 U	NS	NS	NS
Carbon disulfide	mg/kg	77	NS	NS	NS	0.00057 U	0.00058 U	NS	NS	NS
Carbon tetrachloride	mg/kg	0.65	NS	NS	NS	0.00076 U	0.00077 U	NS	NS	NS
Chlorobenzene	mg/kg	28	NS	NS	NS	0.00056 U	0.00057 U	NS	NS	NS
Chloroethane	mg/kg	1400	NS	NS	NS	0.00130 U	0.00140 U	NS	NS	NS
Chloroform	mg/kg	0.32	NS	NS	NS	0.00044 U	0.00044 U	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-65	GB-66	GB-66	GB-67	GB-68	GB-69	GB-70	GB-71
			Sample Interval (feet bgs):	3-4	3-5	3-5D	5-6	1-3	2-3	3-5	0-2
			Sample Date:	7/19/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/19/2021
			Notes:			Duplicate					
Parameter	**Units**	**PAL[1]**									
Volatile Organic Compounds (continued)											
Chloromethane	mg/kg	11	NS	NS	NS	0.00071 U	0.00072 U	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16	NS	NS	NS	0.00038 U	0.00039 U	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	0.00047 U	0.00048 U	NS	NS	NS
Cyclohexanone	mg/kg	2800	NS	NS	NS	0.01130 U	0.01140 U	NS	NS	NS
Dibromochloromethane	mg/kg	8.3	NS	NS	NS	0.00057 U	0.00058 U	NS	NS	NS
Ethyl ether	mg/kg	1600	NS	NS	NS	0.00050 U	0.00050 U	NS	NS	NS
Ethylbenzene	mg/kg	5.8	NS	NS	NS	0.00041 U	0.00042 U	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2	NS	NS	NS	0.00076 U	0.00077 U	NS	NS	NS
Iodomethane	mg/kg	NE	NS	NS	NS	0.00130 U	0.00140 U	NS	NS	NS
Isopropylbenzene	mg/kg	190	NS	NS	NS	0.00051 U	0.00051 U	NS	NS	NS
m/p-Xylene	mg/kg	NE	NS	NS	NS	0.00056 U	0.00057 U	NS	NS	NS
Methyl acetate	mg/kg	7800	NS	NS	NS	0.00096 U	0.00097 U	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47	NS	NS	NS	0.00043 U	0.00043 U	NS	NS	NS
Methylene bromide	mg/kg	2.4	NS	NS	NS	0.00053 U	0.00054 U	NS	NS	NS
Methylene chloride	mg/kg	35	NS	NS	NS	0.00240 U	0.00250 U	NS	NS	NS
n-Butylbenzene	mg/kg	390	NS	NS	NS	0.00058 U	0.00059 U	NS	NS	NS
n-Heptane	mg/kg	2.2	NS	NS	NS	0.00400 U	0.00410 U	NS	NS	NS
n-Hexane	mg/kg	61	NS	NS	NS	0.00061 U	0.00062 U	NS	NS	NS
n-Propylbenzene	mg/kg	380	NS	NS	NS	0.00071 U	0.00072 U	NS	NS	NS
Naphthalene	mg/kg	3.8	NS	NS	NS	0.00073 U	0.00074 U	NS	NS	NS
o-Xylene	mg/kg	65	NS	NS	NS	0.00033 U	0.00034 U	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100	NS	NS	NS	0.00061 U	0.00062 U	NS	NS	NS
sec-Butylbenzene	mg/kg	780	NS	NS	NS	0.00065 U	0.00066 U	NS	NS	NS
Styrene	mg/kg	600	NS	NS	NS	0.00052 U	0.00053 U	NS	NS	NS
tert-Butylbenzene	mg/kg	780	NS	NS	NS	0.00078 U	0.00080 U	NS	NS	NS
Tetrachloroethene	mg/kg	8.1	NS	NS	NS	0.00037 U	0.00037 U	NS	NS	NS
Tetrahydrofuran	mg/kg	1800	NS	NS	NS	0.00069 U	0.00071 UJ	NS	NS	NS
Toluene	mg/kg	490	NS	NS	NS	0.00031 U	0.00032 U	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7	NS	NS	NS	0.00060 U	0.00061 U	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	0.00041 U	0.00041 U	NS	NS	NS
Trichloroethene	mg/kg	0.41	NS	NS	NS	0.00064 U	0.00065 U	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300	NS	NS	NS	0.00054 U	0.00055 U	NS	NS	NS
Vinyl acetate	mg/kg	91	NS	NS	NS	0.00050 U	0.00051 U	NS	NS	NS
Vinyl chloride	mg/kg	0.059	NS	NS	NS	0.00059 U	0.00060 U	NS	NS	NS
Xylenes, Total	mg/kg	58	NS	NS	NS	0.00100 U	0.00100 U	NS	NS	NS

Table 3
Surface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**
		Sample Point:	**GB-65**	**GB-66**	**GB-66**	**GB-67**	**GB-68**	**GB-69**	**GB-70**	**GB-71**
		Sample Interval (feet bgs):	**3-4**	**3-5**	**3-5D**	**5-6**	**1-3**	**2-3**	**3-5**	**0-2**
		Sample Date:	**7/19/2021**	**7/21/2021**	**7/21/2021**	**7/20/2021**	**7/20/2021**	**7/19/2021**	**7/19/2021**	**7/19/2021**
		Notes:			**Duplicate**					
Parameter	**Units**	**PAL[1]**								
Explosives										
1,3,5-Trinitrobenzene	mg/kg	220	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	mg/kg	0.63	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrotoluene	mg/kg	2.6	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	mg/kg	1.7	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	mg/kg	0.36	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrotoluene	mg/kg	3.2	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitrotoluene	mg/kg	0.63	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1	NS	NS	NS	NS	NS	NS	NS	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77	NS	NS	NS	NS	NS	NS	NS	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	mg/kg	5.1	NS	NS	NS	NS	NS	NS	NS	NS
Nitroglycerine	mg/kg	0.63	NS	NS	NS	NS	NS	NS	NS	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
mg/kg - milligrams per kilogram
NE - not established
NS - not sampled
U - compound was not detected
UJ - qualified as estimated at the reporting limit
UR - qualified as rejected at the reporting limit

Table 4
Surface Soil Sample Results (PCB Congeners)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	**GFC**				**GFC**				**GFC**			
			Sample Point:	**GB-10**				**GB-19**				**GB-22**			
			Sample Interval (feet bgs):	**1.5-2.5**				**0-2**				**1-3**			
			Sample Date:	**7/26/2021**				**7/22/2021**				**7/23/2021**			
			Notes:												
Parameter	**Units**	**TEF**	**PAL**[1]	**Concentration**	**LB**	**MB**	**UB**	**Concentration**	**LB**	**MB**	**UB**	**Concentration**	**LB**	**MB**	**UB**
Polychlorinated Biphenyl Congeners															
PCB-77	ng/kg	0.0001	38000	5.04 U	0	0.00025	0.00050	2.26 JU	0	0.00011	0.00023	2.09 JU	0	0.00010	0.00021
PCB-81	ng/kg	0.0003	12000	5.26 U	0	0.00079	0.00158	1.88 U	0	0.00028	0.00056	1.61 U	0	0.00024	0.00048
PCB-105	ng/kg	0.00003	120000	4.29 U	0	0.00006	0.00013	4.84 JU	0	0.00007	0.00015	13.4 JU	0	0.00020	0.00040
PCB-114	ng/kg	0.00003	120000	4.73 U	0	0.00007	0.00014	1.56 U	0	0.00002	0.00005	1.79 U	0	0.00003	0.00005
PCB-118	ng/kg	0.00003	120000	17.9 JU	0	0.00027	0.00054	1.70 U	0	0.00003	0.00005	**267**	0.00801	0.00801	0.00801
PCB-123	ng/kg	0.00003	120000	3.82 U	0	0.00006	0.00011	1.82 U	0	0.00003	0.00005	2.22 U	0	0.00003	0.00007
PCB-126	ng/kg	0.1	36	5.47 U	0	0.27350	0.54700	1.88 U	0	0.09400	0.18800	**2.25 J**	0.22500	0.22500	0.22500
PCB-156/157	ng/kg	0.00003	120000	2.89 U	0	0.00004	0.00009	0.937 U	0	0.00001	0.00003	**261**	0.00783	0.00783	0.00783
PCB-167	ng/kg	0.00003	120000	2.31 U	0	0.00003	0.00007	0.762 U	0	0.00001	0.00002	**100**	0.00300	0.00300	0.00300
PCB-169	ng/kg	0.03	120	3.03 U	0	0.04545	0.09090	0.871 U	0	0.01307	0.02613	2.23 U	0	0.03345	0.06690
PCB-189	ng/kg	0.00003	130000	4.48 U	0	0.00007	0.00013	0.944 U	0	0.00001	0.00003	**63.5**	0.00191	0.00191	0.00191
Total 2,3,7,8-TCDD TEQ Equivalent	ng/kg	NA	4.8		0	0.32060	0.64119		0	0.10765	0.21530		0.24575	0.27980	0.31386

Notes:

[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected

Highlighted - concentration exceeds screening level

bgs - below ground surface

GFC - Goodfellow Federal Complex

J - estimated value

JU - estimated result qualified as nondetect

LB - lower bound; where non detect, TEQ equivalent concentration = 0

LOD - limit of detection

MB - medium bound; where non detect TEQ equivalent concentration = (LOD/2) * TEF

ng/kg - nanograms per kilogram

PAL - project action limit

PCB - polychlorinated biphenyl

TEF - toxicity equivalence factor

TEQ - toxicity equivalent

U - compound was not detected

UB - medium bound; where non detect TEQ equivalent concentration = LOD * TEF

2,3,7,8-TCDD - 2,3,7,8-tetrachlorodibenzo-p-dioxin

Table 4
Surface Soil Sample Results (PCB Congeners)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	**GFC**				**GFC**				**GFC**			
			Sample Point:	**GB-28**				**GB-30**				**GB-46**			
			Sample Interval (feet bgs):	**1.5-2.5**				**3-4**				**2-4**			
			Sample Date:	**7/22/2021**				**7/26/2021**				**7/21/2021**			
			Notes:												
Parameter	**Units**	**TEF**	**PAL[1]**	**Concentration**	**LB**	**MB**	**UB**	**Concentration**	**LB**	**MB**	**UB**	**Concentration**	**LB**	**MB**	**UB**
Polychlorinated Biphenyl Congeners															
PCB-77	ng/kg	0.0001	38000	2.74 JU	0	0.00014	0.00027	1.93 U	0	0.00010	0.00019	4.26 JU	0	0.00021	0.00043
PCB-81	ng/kg	0.0003	12000	1.74 U	0	0.00026	0.00052	2.05 U	0	0.00031	0.00062	2.62 U	0	0.00039	0.00079
PCB-105	ng/kg	0.00003	120000	4.18 JU	0	0.00006	0.00013	1.49 U	0	0.00002	0.00004	7.41 JU	0	0.00011	0.00022
PCB-114	ng/kg	0.00003	120000	1.63 U	0	0.00002	0.00005	1.59 U	0	0.00002	0.00005	2.24 U	0	0.00003	0.00007
PCB-118	ng/kg	0.00003	120000	7.02 JU	0	0.00011	0.00021	6.88 JU	0	0.00010	0.00021	14.9 JU	0	0.00022	0.00045
PCB-123	ng/kg	0.00003	120000	1.89 U	0	0.00003	0.00006	1.18 U	0	0.00002	0.00004	2.17 U	0	0.00003	0.00007
PCB-126	ng/kg	0.1	36	1.52 U	0	0.07600	0.15200	1.87 U	0	0.09350	0.18700	2.09 U	0	0.10450	0.20900
PCB-156/157	ng/kg	0.00003	120000	1.2 U	0	0.00002	0.00004	1.34 U	0	0.00002	0.00004	**3.01 J**	0.00009	0.00009	0.00009
PCB-167	ng/kg	0.00003	120000	0.757 U	0	0.00001	0.00002	0.96 U	0	0.00001	0.00003	**1.25 J**	0.00004	0.00004	0.00004
PCB-169	ng/kg	0.03	120	0.706 U	0	0.01059	0.02118	1.30 U	0	0.01950	0.03900	1.21 U	0	0.01815	0.03630
PCB-189	ng/kg	0.00003	130000	0.829 U	0	0.00001	0.00002	1.66 U	0	0.00002	0.00005	1.20 U	0	0.00002	0.00004
Total 2,3,7,8-TCDD TEQ Equivalent	ng/kg	NA	4.8		0	0.08725	0.17450		0	0.11363	0.22726		0.00013	0.12380	0.24748

Notes:

[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected

Highlighted - concentration exceeds screening level

bgs - below ground surface

GFC - Goodfellow Federal Complex

J - estimated value

JU - estimated result qualified as nondetect

LB - lower bound; where non detect, TEQ equivalent concentration = 0

LOD - limit of detection

MB - medium bound; where non detect TEQ equivalent concentration = (LOD/2) * TEF

ng/kg - nanograms per kilogram

PAL - project action limit

PCB - polychlorinated biphenyl

TEF - toxicity equivalence factor

TEQ - toxicity equivalent

U - compound was not detected

UB - medium bound; where non detect TEQ equivalent concentration = LOD * TEF

2,3,7,8-TCDD - 2,3,7,8-tetrachlorodibenzo-p-dioxin

Table 4
Surface Soil Sample Results (PCB Congeners)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	**GFC**				**GFC**				**GFC**			
			Sample Point:	**GB-46**				**GB-64**				**GB-71**			
			Sample Interval (feet bgs):	**2-4D**				**3-4**				**0-2**			
			Sample Date:	**7/21/2021**				**7/19/2021**				**7/19/2021**			
			Notes:	**Duplicate**											
Parameter	**Units**	**TEF**	**PAL**[1]	**Concentration**	**LB**	**MB**	**UB**	**Concentration**	**LB**	**MB**	**UB**	**Concentration**	**LB**	**MB**	**UB**
Polychlorinated Biphenyl Congeners															
PCB-77	ng/kg	0.0001	38000	2.55 JU	0	0.00013	0.00026	2.13 JU	0	0.00011	0.00021	4.59 JU	0	0.00023	0.00046
PCB-81	ng/kg	0.0003	12000	1.57 U	0	0.00024	0.00047	1.10 U	0	0.00017	0.00033	1.09 U	0	0.00016	0.00033
PCB-105	ng/kg	0.00003	120000	5.30 JU	0	0.00008	0.00016	3.64 JU	0	0.00005	0.00011	14.3 JU	0	0.00021	0.00043
PCB-114	ng/kg	0.00003	120000	2.31 U	0	0.00003	0.00007	1.25 U	0	0.00002	0.00004	1.94 JU	0	0.00003	0.00006
PCB-118	ng/kg	0.00003	120000	10.9 JU	0	0.00016	0.00033	6.91 JU	0	0.00010	0.00021	26.0 U	0	0.00039	0.00078
PCB-123	ng/kg	0.00003	120000	2.22 U	0	0.00003	0.00007	1.11 U	0	0.00002	0.00003	**1.55 J**	0.00005	0.00005	0.00005
PCB-126	ng/kg	0.1	36	3.25 U	0	0.16250	0.32500	1.07 U	0	0.05350	0.10700	1.72 U	0	0.08600	0.17200
PCB-156/157	ng/kg	0.00003	120000	4.08 JU	0	0.00006	0.00012	0.877 U	0	0.00001	0.00003	8.86 JU	0	0.00013	0.00027
PCB-167	ng/kg	0.00003	120000	2.67 U	0	0.00004	0.00008	**0.952 J**	0	0.00001	0.00003	3.64 U	0	0.00005	0.00011
PCB-169	ng/kg	0.03	120	2.59 U	0	0.03885	0.07770	0.722 U	0	0.01083	0.02166	1.63 U	0	0.02445	0.04890
PCB-189	ng/kg	0.00003	130000	1.05 U	0	0.00002	0.00003	0.675 U	0	0.00001	0.00002	**1.89 J**	0.00006	0.00006	0.00006
Total 2,3,7,8-TCDD TEQ Equivalent	ng/kg	NA	4.8		0	0.20214	0.40428		0	0.06483	0.12967		0.00010	0.11177	0.22343

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).
Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
LB - lower bound; where non detect, TEQ equivalent concentration = 0
LOD - limit of detection
MB - medium bound; where non detect TEQ equivalent concentration = (LOD/2) * TEF
ng/kg - nanograms per kilogram
PAL - project action limit
PCB - polychlorinated biphenyl
TEF - toxicity equivalence factor
TEQ - toxicity equivalent
U - compound was not detected
UB - medium bound; where non detect TEQ equivalent concentration = LOD * TEF
2,3,7,8-TCDD - 2,3,7,8-tetrachlorodibenzo-p-dioxin

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-01	GB-01	GB-02	GB-03	GB-04	GB-04	GB-05	GB-06	GB-07	GB-08	GB-09	GB-10	GB-11
			Sample Interval (feet bgs):	8-10	11-13	8-9	4-6	3-5	3-5D	5-7	3-5	7-9	4-6	4-6	3-5	3-5
			Sample Date:	7/26/2021	7/26/2021	7/26/2021	7/26/2021	7/22/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/22/2021
			Notes:						Duplicate							
Parameter	**Units**	**PAL[1]**														
Metals																
Antimony	mg/kg	10	0.63 U	0.51 U	0.60 U	0.45 U	1.1 U	0.86 U	1.2 U	0.65 U	0.52 UJ	0.68 U	0.57 U	0.63 UJ	1.3 U	
Arsenic	mg/kg	12.3	**6.0**	**12.4**	**5.3**	**6.9**	**7.9**	**7.4**	**6.1**	**11.7**	**9.8**	**6.6**	**14.8**	**10.9**	**8.7**	
Copper	mg/kg	310	**13.9**	**27.7**	**24.9**	**43.7**	**14.8**	**15.1**	**16.2**	**21.3**	**17.4**	**15.6**	**20.2**	**19.4**	**24.2**	
Lead	mg/kg	400	**9.4**	**102**	**22.8**	**48.2**	**10.2**	**9.8**	**9.7**	**15.3**	**14.3**	**11.5**	**17.0**	**15.2**	**14.5**	
Zinc	mg/kg	2300	**42.9**	**102**	**78.6**	**96.3**	**45.1**	**46.0**	**48.2**	**66.6**	**55.1**	**45.6**	**65.3**	**61.5**	**48.2**	
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.41	0.0098 U	0.0103 U	0.0104 U	0.0090 U	NS	NS	0.0420 U	0.0101 U	0.0106 U	0.0105 U	0.0098 U	0.0102 U	0.0447 U	
Aroclor 1221	mg/kg	0.20	0.0094 U	0.0099 U	0.0099 U	0.0086 U	NS	NS	0.0420 U	0.0097 U	0.0101 U	0.0100 U	0.0094 U	0.0098 U	0.0447 U	
Aroclor 1232	mg/kg	0.17	0.0043 U	0.0045 U	0.0046 U	0.0040 U	NS	NS	0.0420 U	0.0044 U	0.0046 U	0.0046 U	0.0043 U	0.0045 U	0.0447 U	
Aroclor 1242	mg/kg	0.23	0.0095 U	0.0100 U	0.0101 U	0.0087 U	NS	NS	0.0420 U	0.0098 U	0.0102 U	0.0102 U	0.0095 U	0.0099 U	0.0447 U	
Aroclor 1248	mg/kg	0.23	0.0026 U	0.0027 U	0.0028 U	0.0024 U	NS	NS	0.0420 U	0.0027 U	0.0028 U	0.0028 U	0.0026 U	0.0027 U	0.0447 U	
Aroclor 1254	mg/kg	0.12	0.0037 U	0.0039 U	0.0039 U	**0.0090 J**	NS	NS	0.0420 U	0.0038 U	0.0040 U	0.0039 U	0.0037 U	0.0038 U	0.0447 U	
Aroclor 1260	mg/kg	0.24	0.0078 U	0.0082 U	0.0082 U	0.0071 U	NS	NS	0.0420 U	0.0080 U	0.0084 U	0.0083 U	0.0078 U	0.0081 U	0.0447 U	
Polycyclic Aromatic Hydrocarbons																
Acenaphthene	mg/kg	360	0.0029 U	0.0031 U	**0.0056 J**	**0.2690**	0.0041 U	0.0040 U	0.0041 U	0.0015 U	**0.0389 J**	0.0016 U	0.0015 U	NS	NS	
Acenaphthylene	mg/kg	4180	0.0029 U	0.0031 U	0.0032 U	**0.0913**	0.0041 U	0.0040 U	0.0041 U	0.0015 U	0.0031 U	0.0016 U	0.0015 U	NS	NS	
Anthracene	mg/kg	1800	0.0032 U	**0.0123**	**0.0062 J**	**0.5750**	0.0041 U	0.0040 U	0.0041 U	0.0017 U	**0.0058 J**	**0.0034 J**	0.0017 U	NS	NS	
Benzo(a)anthracene	mg/kg	1.1	**0.0073 J**	**0.0437**	**0.0180**	**1.00**	0.0041 U	0.0040 U	0.0041 U	0.0019 U	**0.0080 J**	**0.0168**	**0.0050**	NS	NS	
Benzo(a)pyrene	mg/kg	0.11	0.0028 U	**0.0365**	**0.0139**	**0.8210**	0.0041 U	0.0040 U	0.0041 U	0.0015 U	**0.0063 J**	**0.0151**	**0.0042**	NS	NS	
Benzo(b)fluoranthene	mg/kg	1.1	**0.0113**	**0.0829**	**0.0258**	**1.36**	**0.0047**	0.0040 U	0.0041 U	**0.0026 J**	**0.0134**	**0.0291**	**0.0077**	NS	NS	
Benzo(g,h,i)perylene	mg/kg	1720	**0.0053 J**	**0.0299**	**0.0118**	**0.4440**	0.0041 U	0.0040 U	0.0041 U	0.0018 U	**0.0045 J**	**0.0115**	**0.0032 J**	NS	NS	
Benzo(k)fluoranthene	mg/kg	11	**0.0049 J**	**0.0335**	**0.0087**	**0.4880**	0.0041 U	0.0040 U	0.0041 U	0.0023 U	**0.0049 J**	**0.0141**	**0.0026 J**	NS	NS	
Chrysene	mg/kg	110	**0.0075 J**	**0.0613**	**0.0185**	**0.9240**	0.0041 U	0.0040 U	0.0041 U	**0.0022 J**	**0.0097**	**0.0218**	**0.0050**	NS	NS	
Dibenzo(a,h)anthracene	mg/kg	0.11	0.0033 U	**0.0058 J**	0.0037 U	**0.1100**	0.0041 U	0.0040 U	0.0041 U	0.0018 U	0.0036 U	0.0018 U	0.0017 U	NS	NS	
Fluoranthene	mg/kg	240	**0.0189**	**0.1370**	**0.0476**	**2.71**	**0.0067**	0.0040 U	0.0041 U	**0.0060**	**0.0242 J**	**0.0585**	**0.0133**	NS	NS	
Fluorene	mg/kg	240	0.0030 U	**0.0055 J**	**0.0056 J**	**0.2490**	0.0041 U	0.0040 U	0.0041 U	0.0016 U	**0.0415 J**	0.0016 U	0.0016 U	NS	NS	
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	**0.0042 J**	**0.0239**	**0.0091**	**0.3840**	0.0041 U	0.0040 U	0.0041 U	0.0018 U	0.0036 U	**0.0095**	**0.0026 J**	NS	NS	
Naphthalene	mg/kg	3.8	0.0033 U	**0.0164**	**0.0076 J**	**0.2110**	0.0041 U	0.0040 U	0.0041 U	0.0017 U	**0.1110 J**	0.0018 U	0.0017 U	NS	NS	
Phenanthrene	mg/kg	2170	**0.0079**	**0.0727**	**0.0247**	**2.40**	0.0041 U	0.0040 U	0.0041 U	**0.0039 J**	**0.0452 J**	**0.0217**	**0.0079**	NS	NS	
Pyrene	mg/kg	180	**0.0152**	**0.1070**	**0.0416**	**2.08**	**0.0051**	0.0040 U	0.0041 U	**0.0046**	**0.0210**	**0.0466**	**0.0111**	NS	NS	
Total Petroleum Hydrocarbons																
Gasoline Range Organics	mg/kg	385	0.053 U	0.063 U	0.056 U	0.051 U	NS	NS	NS	NS	0.058 U	NS	NS	NS	NS	
Diesel Range Organics	mg/kg	4150	3.2 JU	**18.3 J**	9.1 JU	**85.0**	NS	NS	NS	NS	**21.7**	NS	NS	NS	NS	
Oil Range Organics	mg/kg	124000	6.6 JU	**68.3 J**	**13.7 J**	**298**	NS	NS	NS	NS	**20.6**	NS	NS	NS	NS	

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-01	GB-01	GB-02	GB-03	GB-04	GB-04	GB-05	GB-06	GB-07	GB-08	GB-09	GB-10	GB-11
			Sample Interval (feet bgs):	8-10	11-13	8-9	4-6	3-5	3-5D	5-7	3-5	7-9	4-6	4-6	3-5	3-5
			Sample Date:	7/26/2021	7/26/2021	7/26/2021	7/26/2021	7/22/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/22/2021
			Notes:						Duplicate							
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/kg	2.0	0.00098 U	0.00120 U	0.00100 U	0.00096 U	NS	NS	NS	NS	0.00110 U	NS	NS	NS	NS	
1,1,1-Trichloroethane	mg/kg	810	0.00072 U	0.00087 U	0.00077 U	0.00070 U	NS	NS	NS	NS	0.00079 U	NS	NS	NS	NS	
1,1,2,2-Tetrachloroethane	mg/kg	0.6	0.00096 U	0.00120 U	0.00100 U	0.00094 U	NS	NS	NS	NS	0.00110 UR	NS	NS	NS	NS	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	0.00480 U	0.00580 U	0.00510 U	0.00470 U	NS	NS	NS	NS	0.00530 U	NS	NS	NS	NS	
1,1,2-Trichloroethane	mg/kg	0.15	0.00061 U	0.00073 U	0.00064 U	0.00059 U	NS	NS	NS	NS	0.00067 U	NS	NS	NS	NS	
1,1-Dichloroethane	mg/kg	3.6	0.00038 U	0.00045 U	0.00040 U	0.00037 U	NS	NS	NS	NS	0.00041 U	NS	NS	NS	NS	
1,1-Dichloroethene	mg/kg	23	0.00062 U	0.00074 U	0.00065 U	0.00060 U	NS	NS	NS	NS	0.00068 U	NS	NS	NS	NS	
1,1-Dichloropropene	mg/kg	NE	0.00087 U	0.00100 U	0.00092 U	0.00084 U	NS	NS	NS	NS	0.00095 U	NS	NS	NS	NS	
1,2,3-Trichlorobenzene	mg/kg	6.3	**0.00130 J**	0.00092 U	**0.00190 J**	0.00075 U	NS	NS	NS	NS	0.00084 U	NS	NS	NS	NS	
1,2,3-Trichloropropane	mg/kg	0.0051	0.00210 U	0.00250 U	0.00220 U	0.00200 U	NS	NS	NS	NS	0.00230 U	NS	NS	NS	NS	
1,2,3-Trimethylbenzene	mg/kg	34	0.00190 U	0.00230 U	0.00200 U	0.00190 U	NS	NS	NS	NS	0.00210 U	NS	NS	NS	NS	
1,2,4-Trichlorobenzene	mg/kg	5.8	**0.00092 J**	0.00092 U	**0.00140 J**	0.00075 U	NS	NS	NS	NS	0.00084 U	NS	NS	NS	NS	
1,2,4-Trimethylbenzene	mg/kg	30	0.00065 U	0.00078 U	0.00069 U	0.00063 U	NS	NS	NS	NS	0.00071 U	NS	NS	NS	NS	
1,2-Dibromo-3-chloropropane	mg/kg	0.01	0.00180 U	0.00210 U	0.00190 U	0.00170 U	NS	NS	NS	NS	0.00190 U	NS	NS	NS	NS	
1,2-Dibromoethane	mg/kg	0.036	0.00052 U	0.00062 U	0.00055 U	0.00050 U	NS	NS	NS	NS	0.00057 U	NS	NS	NS	NS	
1,2-Dichlorobenzene	mg/kg	180	0.00060 U	0.00072 U	0.00064 U	0.00059 U	NS	NS	NS	NS	0.00066 U	NS	NS	NS	NS	
1,2-Dichloroethane	mg/kg	0.46	0.00039 U	0.00046 U	0.00041 U	0.00038 U	NS	NS	NS	NS	0.00042 U	NS	NS	NS	NS	
1,2-Dichloroethene	mg/kg	16	0.00110 U	0.00130 U	0.00110 U	0.00100 U	NS	NS	NS	NS	0.00120 U	NS	NS	NS	NS	
1,2-Dichloropropane	mg/kg	1.6	0.00094 U	0.00110 U	0.00100 U	0.00092 U	NS	NS	NS	NS	0.00100 U	NS	NS	NS	NS	
1,3,5-Trimethylbenzene	mg/kg	27	0.00060 U	0.00073 U	0.00064 U	0.00059 U	NS	NS	NS	NS	0.00066 U	NS	NS	NS	NS	
1,3-Dichlorobenzene	mg/kg	148	0.00069 U	0.00083 U	0.00074 U	0.00067 U	NS	NS	NS	NS	0.00076 U	NS	NS	NS	NS	
1,3-Dichloropropane	mg/kg	160	0.00067 U	0.00080 U	0.00071 U	0.00065 U	NS	NS	NS	NS	0.00073 U	NS	NS	NS	NS	
1,4-Dichlorobenzene	mg/kg	2.6	0.00078 U	0.00094 U	0.00083 U	0.00076 U	NS	NS	NS	NS	0.00086 U	NS	NS	NS	NS	
2,2-Dichloropropane	mg/kg	NE	0.00046 U	0.00055 U	0.00049 U	0.00045 U	NS	NS	NS	NS	0.00050 U	NS	NS	NS	NS	
2-Butanone	mg/kg	2700	0.00330 U	**0.04480**	0.00350 U	**0.00590 J**	NS	NS	NS	NS	**0.00880 J**	NS	NS	NS	NS	
2-Chlorotoluene	mg/kg	160	0.00070 U	0.00084 U	0.00075 U	0.00068 U	NS	NS	NS	NS	0.00077 U	NS	NS	NS	NS	
2-Hexanone	mg/kg	20	0.00240 U	0.00290 U	0.00250 U	0.00230 U	NS	NS	NS	NS	0.00260 U	NS	NS	NS	NS	
4-Chlorotoluene	mg/kg	160	0.00058 U	0.00069 U	0.00061 U	0.00056 U	NS	NS	NS	NS	0.00063 U	NS	NS	NS	NS	
4-Methyl-2-pentanone	mg/kg	3300	0.00290 U	0.00350 U	0.00310 U	0.00280 U	NS	NS	NS	NS	0.00320 U	NS	NS	NS	NS	
Acetone	mg/kg	6100	0.01560 U	**0.24800**	**0.01670 J**	**0.02630**	NS	NS	NS	NS	**0.04660**	NS	NS	NS	NS	
Acrolein	mg/kg	0.1	0.07290 U	0.08760 U	0.07740 U	0.07090 U	NS	NS	NS	NS	0.07990 U	NS	NS	NS	NS	
Acrylonitrile	mg/kg	0.25	0.00310 U	0.00370 U	0.00320 U	0.00300 U	NS	NS	NS	NS	0.00340 U	NS	NS	NS	NS	
Benzene	mg/kg	1.2	0.00048 U	0.00057 U	0.00050 U	**0.00072 J**	NS	NS	NS	NS	0.00052 U	NS	NS	NS	NS	
Bromobenzene	mg/kg	29	0.00091 U	0.00110 U	0.00096 U	0.00088 U	NS	NS	NS	NS	0.00099 U	NS	NS	NS	NS	
Bromochloromethane	mg/kg	15	0.00058 U	0.00070 U	0.00062 U	0.00056 U	NS	NS	NS	NS	0.00064 U	NS	NS	NS	NS	
Bromodichloromethane	mg/kg	0.29	0.00058 U	0.00070 U	0.00062 U	0.00056 U	NS	NS	NS	NS	0.00064 U	NS	NS	NS	NS	
Bromoform	mg/kg	19	0.00055 U	0.00067 U	0.00059 U	0.00054 U	NS	NS	NS	NS	0.00061 U	NS	NS	NS	NS	
Bromomethane	mg/kg	0.68	0.00280 U	0.00340 U	0.00300 U	0.00280 U	NS	NS	NS	NS	0.00310 U	NS	NS	NS	NS	
Carbon disulfide	mg/kg	77	0.00062 U	**0.00570 J**	**0.00350 J**	**0.00140 J**	NS	NS	NS	NS	**0.00520 J**	NS	NS	NS	NS	
Carbon tetrachloride	mg/kg	0.65	0.00083 U	0.00099 U	0.00088 U	0.00080 U	NS	NS	NS	NS	0.00091 U	NS	NS	NS	NS	
Chlorobenzene	mg/kg	28	0.00060 U	0.00073 U	0.00064 U	0.00059 U	NS	NS	NS	NS	0.00066 U	NS	NS	NS	NS	
Chloroethane	mg/kg	1400	0.00140 U	0.00170 U	0.00150 U	0.00140 U	NS	NS	NS	NS	0.00160 U	NS	NS	NS	NS	
Chloroform	mg/kg	0.32	0.00048 U	0.00057 U	0.00050 U	0.00046 U	NS	NS	NS	NS	0.00052 U	NS	NS	NS	NS	

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
		Sample Point:	GB-01	GB-01	GB-02	GB-03	GB-04	GB-04	GB-05	GB-06	GB-07	GB-08	GB-09	GB-10	GB-11
		Sample Interval (feet bgs):	8-10	11-13	8-9	4-6	3-5	3-5D	5-7	3-5	7-9	4-6	4-6	3-5	3-5
		Sample Date:	7/26/2021	7/26/2021	7/26/2021	7/26/2021	7/22/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/22/2021
		Notes:						Duplicate							
Parameter	**Units**	**PAL[1]**													
Volatile Organic Compounds (continued)															
Chloromethane	mg/kg	11	0.00077 U	0.00092 U	0.00082 U	0.00075 U	NS	NS	NS	NS	0.00084 U	NS	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16	0.00042 U	0.00050 U	0.00044 U	0.00040 U	NS	NS	NS	NS	0.00046 U	NS	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224	0.00051 U	0.00062 U	0.00054 U	0.00050 U	NS	NS	NS	NS	0.00056 U	NS	NS	NS	NS
Cyclohexanone	mg/kg	2800	0.01220 U	0.01470 U	0.01300 U	0.01190 U	NS	NS	NS	NS	0.01340 U	NS	NS	NS	NS
Dibromochloromethane	mg/kg	8.3	0.00062 U	0.00075 U	0.00066 U	0.00061 U	NS	NS	NS	NS	0.00068 U	NS	NS	NS	NS
Ethyl ether	mg/kg	1600	0.00054 U	0.00065 U	0.00057 U	0.00053 U	NS	NS	NS	NS	0.00059 U	NS	NS	NS	NS
Ethylbenzene	mg/kg	5.8	0.00045 U	0.00054 U	0.00047 U	0.00043 U	NS	NS	NS	NS	0.00049 U	NS	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2	0.00082 U	0.00099 U	0.00087 U	0.00080 U	NS	NS	NS	NS	0.00090 U	NS	NS	NS	NS
Iodomethane	mg/kg	NE	0.00150 U	0.00170 U	0.00150 U	0.00140 U	NS	NS	NS	NS	0.00160 UJ	NS	NS	NS	NS
Isopropylbenzene	mg/kg	190	0.00055 U	0.00066 U	0.00058 U	0.00053 U	NS	NS	NS	NS	0.00060 U	NS	NS	NS	NS
m/p-Xylene	mg/kg	NE	0.00061 U	0.00073 U	0.00065 U	0.00059 U	NS	NS	NS	NS	0.00067 U	NS	NS	NS	NS
Methyl acetate	mg/kg	7800	0.00100 U	0.00130 U	0.00110 U	0.00100 U	NS	NS	NS	NS	0.00110 UR	NS	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47	0.00046 U	0.00056 U	0.00049 U	0.00045 U	NS	NS	NS	NS	0.00051 U	NS	NS	NS	NS
Methylene bromide	mg/kg	2.4	0.00058 U	0.00069 U	0.00061 U	0.00056 U	NS	NS	NS	NS	0.00063 U	NS	NS	NS	NS
Methylene chloride	mg/kg	35	0.00260 U	0.00320 U	0.00280 U	0.00260 U	NS	NS	NS	NS	0.00290 U	NS	NS	NS	NS
n-Butylbenzene	mg/kg	390	0.00063 U	0.00075 U	0.00067 U	0.00061 U	NS	NS	NS	NS	0.00069 U	NS	NS	NS	NS
n-Heptane	mg/kg	2.2	0.00440 U	0.00520 U	0.00460 U	0.00430 U	NS	NS	NS	NS	0.00480 U	NS	NS	NS	NS
n-Hexane	mg/kg	61	0.00067 U	0.00080 U	0.00071 U	0.00065 U	NS	NS	NS	NS	0.00073 U	NS	NS	NS	NS
n-Propylbenzene	mg/kg	380	0.00077 U	0.00093 U	0.00082 U	0.00075 U	NS	NS	NS	NS	0.00085 U	NS	NS	NS	NS
Naphthalene	mg/kg	3.8	**0.00330 J**	0.00095 U	**0.00440 J**	0.00077 U	NS	NS	NS	NS	**0.01390 J**	NS	NS	NS	NS
o-Xylene	mg/kg	65	0.00036 U	0.00043 U	0.00038 U	0.00035 U	NS	NS	NS	NS	0.00039 U	NS	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100	0.00066 U	0.00080 U	**0.00077 J**	0.00065 U	NS	NS	NS	NS	**0.00140 J**	NS	NS	NS	NS
sec-Butylbenzene	mg/kg	780	0.00070 U	0.00085 U	0.00075 U	0.00069 U	NS	NS	NS	NS	0.00077 U	NS	NS	NS	NS
Styrene	mg/kg	600	0.00057 U	0.00068 U	0.00060 U	0.00055 U	NS	NS	NS	NS	0.00062 U	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	780	0.00085 U	0.00100 U	0.00090 U	0.00083 U	NS	NS	NS	NS	0.00093 U	NS	NS	NS	NS
Tetrachloroethene	mg/kg	8.1	0.00040 U	0.00048 U	0.00042 U	0.00039 U	NS	NS	NS	NS	0.00044 U	NS	NS	NS	NS
Tetrahydrofuran	mg/kg	1800	0.00075 U	0.00091 U	0.00080 U	0.00073 U	NS	NS	NS	NS	0.00083 U	NS	NS	NS	NS
Toluene	mg/kg	490	0.00034 U	0.00041 U	0.00036 U	0.00033 U	NS	NS	NS	NS	0.00037 U	NS	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7.00	0.00065 U	0.00079 U	0.00069 U	0.00064 U	NS	NS	NS	NS	0.00072 U	NS	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224	0.00044 U	0.00053 U	0.00047 U	0.00043 U	NS	NS	NS	NS	0.00048 U	NS	NS	NS	NS
Trichloroethene	mg/kg	0.41	0.00070 U	0.00084 U	0.00074 U	0.00068 U	NS	NS	NS	NS	0.00077 U	NS	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300	0.00059 U	0.00071 U	0.00063 U	0.00058 U	NS	NS	NS	NS	0.00065 U	NS	NS	NS	NS
Vinyl acetate	mg/kg	91	0.00054 U	0.00065 U	0.00058 U	0.00053 U	NS	NS	NS	NS	0.00060 U	NS	NS	NS	NS
Vinyl chloride	mg/kg	0.059	0.00064 U	0.00077 U	0.00068 U	0.00062 U	NS	NS	NS	NS	0.00070 U	NS	NS	NS	NS
Xylenes, Total	mg/kg	58	0.00110 U	0.00130 U	0.00120 U	0.00110 U	NS	NS	NS	NS	0.00120 U	NS	NS	NS	NS

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**	**GFC**
		Sample Point:	**GB-01**	**GB-01**	**GB-02**	**GB-03**	**GB-04**	**GB-04**	**GB-05**	**GB-06**	**GB-07**	**GB-08**	**GB-09**	**GB-10**	**GB-11**
		Sample Interval (feet bgs):	**8-10**	**11-13**	**8-9**	**4-6**	**3-5**	**3-5D**	**5-7**	**3-5**	**7-9**	**4-6**	**4-6**	**3-5**	**3-5**
		Sample Date:	**7/26/2021**	**7/26/2021**	**7/26/2021**	**7/26/2021**	**7/22/2021**	**7/22/2021**	**7/22/2021**	**7/23/2021**	**7/23/2021**	**7/23/2021**	**7/23/2021**	**7/26/2021**	**7/22/2021**
		Notes:						**Duplicate**							
Parameter	**Units**	**PAL[1]**													
Explosives															
1,3,5-Trinitrobenzene	mg/kg	220	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	mg/kg	0.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrotoluene	mg/kg	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	mg/kg	1.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	mg/kg	0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrotoluene	mg/kg	3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitrotoluene	mg/kg	0.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	mg/kg	5.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitroglycerine	mg/kg	0.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected

Highlighted - concentration exceeds screening level

bgs - below ground surface

GFC - Goodfellow Federal Complex

J - estimated value

JU - estimated result qualified as nondetect

mg/kg - milligrams per kilogram

NE - not established

NS - not sampled

PAL - project action level

U - compound was not detected

UJ - qualified as estimated at the reporting limit

UR - qualified as rejected at the reporting limit

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-12	GB-13	GB-14	GB-15	GB-16	GB-17	GB-18	GB-19	GB-20	GB-21	GB-22	GB-23	GB-24
			Sample Interval (feet bgs):	4-6	3-5	3-5	3-5	4-5	3-5	5-7	3-5	3-4	3-5	3-5	4-6	3-5
			Sample Date:	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/21/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/21/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Metals																
Antimony	mg/kg	10	1.1 U	0.51 U	0.57 U	0.52 U	0.56 U	1.1 U	0.94 U	0.97 U	0.57 U	0.61 U	0.49 U	0.47 U	1.0 U	
Arsenic	mg/kg	12.3	**6.4**	**7.0**	**5.4**	**6.6**	**12.7**	**5.6**	**6.3**	**7.0**	**5.8**	**5.4**	**5.8**	**6.9**	**7.6**	
Copper	mg/kg	310	**30.0**	**16.3**	**11.2**	**14.9**	**21.4**	**13.1**	**40.4**	**14.8**	**11.2**	**11.1**	**12.5**	**15.1**	**15.9**	
Lead	mg/kg	400	**8.7**	**27.3**	**13.2**	**8.9**	**13.8**	**9.4**	**10.0**	**12.4**	**14.5**	**13.8**	**10.4**	**11.0**	**9.9**	
Zinc	mg/kg	2300	**34.4**	**44.1**	**35.8**	**42.6**	**54.0**	**42.6**	**4.7**	**34.5**	**34.0**	**30.7**	**31.8**	**46.6**	**42.9**	
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.41	0.0405 U	0.0095 U	0.0099 U	0.0102 U	0.0102 U	0.0413 U	0.0367 U	0.0381 U	0.0098 U	0.0098 U	0.0098 U	0.0103 U	0.0400 U	
Aroclor 1221	mg/kg	0.20	0.0405 U	0.0091 U	0.0095 U	0.0098 U	0.0098 U	0.0413 U	0.0367 U	0.0381 U	0.0094 U	0.0094 U	0.0094 U	0.0098 U	0.0400 U	
Aroclor 1232	mg/kg	0.17	0.0405 U	0.0042 U	0.0044 U	0.0045 U	0.0045 U	0.0413 U	0.0367 U	0.0381 U	0.0043 U	0.0043 U	0.0043 U	0.0045 U	0.0400 U	
Aroclor 1242	mg/kg	0.23	0.0405 U	0.0092 U	0.0096 U	0.0099 U	0.0099 U	0.0413 U	0.0367 U	0.0381 U	0.0095 U	0.0095 U	0.0095 U	0.0099 U	0.0400 U	
Aroclor 1248	mg/kg	0.23	0.0405 U	0.0025 U	0.0026 U	0.0027 U	0.0027 U	0.0413 U	0.0367 U	0.0381 U	0.0026 U	0.0026 U	0.0026 U	0.0027 U	0.0400 U	
Aroclor 1254	mg/kg	0.12	0.0405 U	0.0036 U	0.0037 U	0.0038 U	0.0038 U	0.0413 U	0.0367 U	0.0381 U	0.0037 U	0.0037 U	0.0037 U	0.0039 U	0.0400 U	
Aroclor 1260	mg/kg	0.24	0.0405 U	0.0075 U	0.0079 U	0.0081 U	0.0081 U	0.0413 U	0.0367 U	0.0381 U	0.0077 U	0.0077 U	**0.0719**	0.0081 U	0.0400 U	
Polycyclic Aromatic Hydrocarbons																
Acenaphthene	mg/kg	360	0.0041 U	**0.9310**	0.0029 U	NS	NS	0.0041 U	0.0038 U	0.0038 U	NS	**0.0024 J**	0.0015 U	NS	0.0041 U	
Acenaphthylene	mg/kg	4180	0.0041 U	**0.7850**	0.0029 U	NS	NS	0.0041 U	0.0038 U	0.0038 U	NS	0.0014 U	0.0015 U	NS	0.0041 U	
Anthracene	mg/kg	1800	0.0041 U	**0.0338**	0.0032 U	NS	NS	0.0041 U	0.0038 U	**0.0053**	NS	**0.0056**	**0.0064**	NS	0.0041 U	
Benzo(a)anthracene	mg/kg	1.1	**0.0094**	**0.0074**	0.0037 U	NS	NS	**0.0061**	0.0038 U	**0.0112**	NS	**0.0485**	**0.0253**	NS	0.0041 U	
Benzo(a)pyrene	mg/kg	0.11	**0.0072**	**0.1100**	0.0028 U	NS	NS	**0.0063**	0.0038 U	**0.0088**	NS	**0.0569**	**0.0212**	NS	0.0041 U	
Benzo(b)fluoranthene	mg/kg	1.1	**0.0155**	**0.4230**	**0.0046 J**	NS	NS	**0.0126**	0.0038 U	**0.0169**	NS	**0.1270**	**0.0404**	NS	0.0041 U	
Benzo(g,h,i)perylene	mg/kg	1720	**0.0061**	**0.3610**	0.0035 U	NS	NS	**0.0063**	0.0038 U	**0.0060**	NS	**0.0493**	**0.0151**	NS	0.0041 U	
Benzo(k)fluoranthene	mg/kg	11	0.0041 U	**0.6020**	0.0043 U	NS	NS	**0.0063**	0.0038 U	**0.0042**	NS	**0.0436**	**0.0137**	NS	0.0041 U	
Chrysene	mg/kg	110	**0.0112**	**0.2860**	0.0037 U	NS	NS	**0.0086**	0.0038 U	**0.0111**	NS	**0.0731**	**0.0307**	NS	0.0041 U	
Dibenzo(a,h)anthracene	mg/kg	0.11	0.0041 U	**0.3050**	0.0033 U	NS	NS	0.0041 U	0.0038 U	0.0038 U	NS	**0.0096**	**0.0027 J**	NS	0.0041 U	
Fluoranthene	mg/kg	240	**0.0268**	**0.4520**	**0.0082**	NS	NS	**0.0194**	**0.0071**	**0.0299**	NS	**0.1470**	**0.0810**	NS	0.0041 U	
Fluorene	mg/kg	240	0.0041 U	**0.0583**	0.0030 U	NS	NS	0.0041 U	0.0038 U	0.0038 U	NS	**0.0031 J**	0.0016 U	NS	0.0041 U	
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	**0.0050**	**0.0386**	0.0033 U	NS	NS	**0.0048**	0.0038 U	**0.0052**	NS	**0.0423**	**0.0122**	NS	0.0041 U	
Naphthalene	mg/kg	3.8	0.0041 U	**0.2350**	**0.0052 J**	NS	NS	**0.0054**	0.0038 U	0.0038 U	NS	0.0016 U	0.0017 U	NS	0.0041 U	
Phenanthrene	mg/kg	2170	**0.0057**	**0.0064**	0.0064 U	NS	NS	**0.0063**	**0.0047**	**0.0220**	NS	**0.0606**	**0.0372**	NS	0.0041 U	
Pyrene	mg/kg	180	**0.0212**	**0.5500**	**0.0065 J**	NS	NS	**0.0150**	**0.0062**	**0.0228**	NS	**0.1190**	**0.0676**	NS	0.0041 U	
Total Petroleum Hydrocarbons																
Gasoline Range Organics	mg/kg	385	NS	NS	0.054 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Diesel Range Organics	mg/kg	4150	NS	NS	**2.4 J**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Oil Range Organics	mg/kg	124000	NS	NS	**8.5 J**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-12	GB-13	GB-14	GB-15	GB-16	GB-17	GB-18	GB-19	GB-20	GB-21	GB-22	GB-23	GB-24
			Sample Interval (feet bgs):	4-6	3-5	3-5	3-5	4-5	3-5	5-7	3-5	3-4	3-5	3-5	4-6	3-5
			Sample Date:	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/21/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/21/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/kg	2.0	NS	NS	0.00100 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	mg/kg	810	NS	NS	0.00073 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	mg/kg	0.6	NS	NS	0.00098 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	NS	NS	0.00490 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	mg/kg	0.15	NS	NS	0.00062 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	mg/kg	3.6	NS	NS	0.00038 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	mg/kg	23	NS	NS	0.00063 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloropropene	mg/kg	NE	NS	NS	0.00088 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	mg/kg	6.3	NS	NS	0.00078 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	mg/kg	0.0051	NS	NS	0.00210 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trimethylbenzene	mg/kg	34	NS	NS	0.00200 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	mg/kg	5.8	NS	NS	0.00078 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	mg/kg	30	NS	NS	0.00066 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	mg/kg	0.01	NS	NS	0.00180 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	mg/kg	0.036	NS	NS	0.00052 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	mg/kg	180	NS	NS	0.00061 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	mg/kg	0.46	NS	NS	0.00039 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethene	mg/kg	16	NS	NS	0.00110 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	mg/kg	1.6	NS	NS	0.00096 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	mg/kg	27	NS	NS	0.00062 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	mg/kg	148	NS	NS	0.00071 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	mg/kg	160	NS	NS	0.00068 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	mg/kg	2.6	NS	NS	0.00079 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	mg/kg	NE	NS	NS	0.00047 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone	mg/kg	2700	NS	NS	0.00330 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	mg/kg	160	NS	NS	0.00071 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	mg/kg	20	NS	NS	0.00240 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	mg/kg	160	NS	NS	0.00059 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	mg/kg	3300	NS	NS	0.00300 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	mg/kg	6100	NS	NS	0.01590 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrolein	mg/kg	0.1	NS	NS	0.07420 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrylonitrile	mg/kg	0.25	NS	NS	0.00310 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	mg/kg	1.2	NS	NS	0.00048 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromobenzene	mg/kg	29	NS	NS	0.00092 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromochloromethane	mg/kg	15	NS	NS	0.00059 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	mg/kg	0.29	NS	NS	0.00059 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	mg/kg	19	NS	NS	0.00056 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	mg/kg	0.68	NS	NS	0.00290 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	mg/kg	77	NS	NS	0.00063 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	mg/kg	0.65	NS	NS	0.00084 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	mg/kg	28	NS	NS	0.00062 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	mg/kg	1400	NS	NS	0.00150 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	mg/kg	0.32	NS	NS	0.00048 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-12	GB-13	GB-14	GB-15	GB-16	GB-17	GB-18	GB-19	GB-20	GB-21	GB-22	GB-23	GB-24
			Sample Interval (feet bgs):	4-6	3-5	3-5	3-5	4-5	3-5	5-7	3-5	3-4	3-5	3-5	4-6	3-5
			Sample Date:	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/21/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/21/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds (continued)																
Chloromethane	mg/kg	11	NS	NS	0.00078 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16	NS	NS	0.00042 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224	NS	NS	0.00052 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyclohexanone	mg/kg	2800	NS	NS	0.01250 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	mg/kg	8.3	NS	NS	0.00063 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl ether	mg/kg	1600	NS	NS	0.00055 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	mg/kg	5.8	NS	NS	0.00045 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2	NS	NS	0.00083 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iodomethane	mg/kg	NE	NS	NS	0.00150 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	mg/kg	190	NS	NS	0.00056 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
m/p-Xylene	mg/kg	NE	NS	NS	0.00062 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl acetate	mg/kg	7800	NS	NS	0.00110 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47	NS	NS	0.00047 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene bromide	mg/kg	2.4	NS	NS	0.00059 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	mg/kg	35	NS	NS	0.00270 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	mg/kg	390	NS	NS	0.00064 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Heptane	mg/kg	2.2	NS	NS	0.00440 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Hexane	mg/kg	61	NS	NS	0.00068 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	mg/kg	380	NS	NS	0.00079 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	mg/kg	3.8	NS	NS	0.00081 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	mg/kg	65	NS	NS	0.00037 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100	NS	NS	0.00067 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	mg/kg	780	NS	NS	0.00072 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	mg/kg	600	NS	NS	0.00058 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	780	NS	NS	0.00087 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	mg/kg	8.1	NS	NS	0.00041 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrahydrofuran	mg/kg	1800	NS	NS	0.00077 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	mg/kg	490	NS	NS	0.00035 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7.00	NS	NS	0.00067 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224	NS	NS	0.00045 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	mg/kg	0.41	NS	NS	0.00071 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300	NS	NS	0.00060 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl acetate	mg/kg	91	NS	NS	0.00055 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	mg/kg	0.059	NS	NS	0.00065 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes, Total	mg/kg	58	NS	NS	0.00110 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-12	GB-13	GB-14	GB-15	GB-16	GB-17	GB-18	GB-19	GB-20	GB-21	GB-22	GB-23	GB-24
			Sample Interval (feet bgs):	4-6	3-5	3-5	3-5	4-5	3-5	5-7	3-5	3-4	3-5	3-5	4-6	3-5
			Sample Date:	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/21/2021	7/22/2021	7/22/2021	7/23/2021	7/23/2021	7/23/2021	7/26/2021	7/21/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Explosives																
1,3,5-Trinitrobenzene	mg/kg	220		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrotoluene	mg/kg	2.6		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	mg/kg	1.7		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	mg/kg	0.36		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrotoluene	mg/kg	3.2		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitrotoluene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	mg/kg	5.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitroglycerine	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
mg/kg - milligrams per kilogram
NE - not established
NS - not sampled
PAL - project action level
U - compound was not detected
UJ - qualified as estimated at the reporting limit
UR - qualified as rejected at the reporting limit

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-25	GB-26	GB-27	GB-28	GB-29	GB-30	GB-31	GB-32	GB-33	GB-34	GB-35	GB-35	GB-36
			Sample Interval (feet bgs):	2-4	4-5	3-5	3-5	3-5	4-5	5-7	2-4	4-6	3-5	3-5	3-5D	2-4
			Sample Date:	7/22/2021	7/22/2021	7/23/2021	7/22/2021	7/26/2021	7/26/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/22/2021	7/22/2021	7/26/2021
			Notes:												Duplicate	
Parameter	**Units**	**PAL[1]**														
Metals																
Antimony	mg/kg	10	1.1 UJ	0.90 U	0.49 UJ	0.48 U	0.50 U	0.67 U	0.84 U	0.62 UJ	0.48 U	0.50 U	0.62 U	0.59 U	0.61 U	
Arsenic	mg/kg	12.3	**6.8**	**7.6**	**5.7**	**5.2**	**7.5**	**17.7**	**7.9**	**6.6**	**8.5**	**6.0**	**14.9 J**	**6.2 J**	**5.6**	
Copper	mg/kg	310	**15.6**	**12.6**	**13.2**	**13.2**	**11.6**	**23.2**	**16.1**	**16.5**	**11.9**	**16.4**	**22.1 J**	**12.9 J**	**11.3**	
Lead	mg/kg	400	**11.7**	**11.7**	**7.2**	**11.7**	**10.1**	**20.7**	**10.2**	**12.4**	**10.0**	**8.8**	**17.6 J**	**10.7 J**	**10.3**	
Zinc	mg/kg	2300	**42.5**	**37.5**	**36.7**	**31.8**	**39.3**	**63.4**	**46.9**	**36.1**	**39.8**	**43.7**	**57.0**	**47.3**	**45.7**	
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.41	0.0395 U	0.0401 U	0.0099 U	0.0095 U	0.0099 U	0.0103 U	0.0405 U	0.0104 U	0.0105 U	0.0105 U	0.0101 U	0.0100 U	0.0100 U	
Aroclor 1221	mg/kg	0.20	0.0395 U	0.0401 U	0.0095 U	0.0091 U	0.0095 U	0.0099 U	0.0405 U	0.0100 U	0.0100 U	0.0101 U	0.0097 U	0.0096 U	0.0096 U	
Aroclor 1232	mg/kg	0.17	0.0395 U	0.0401 U	0.0043 U	0.0042 U	0.0044 U	0.0045 U	0.0405 U	0.0046 U	0.0046 U	0.0046 U	0.0044 U	0.0044 U	0.0044 U	
Aroclor 1242	mg/kg	0.23	0.0395 U	0.0401 U	0.0096 U	0.0092 U	0.0096 U	0.0100 U	0.0405 U	0.0101 U	0.0101 U	0.0102 U	0.0098 U	0.0097 U	0.0097 U	
Aroclor 1248	mg/kg	0.23	0.0395 U	0.0401 U	0.0026 U	0.0025 U	0.0026 U	0.0028 U	0.0405 U	0.0028 U	0.0028 U	0.0028 U	0.0027 U	0.0027 U	0.0027 U	
Aroclor 1254	mg/kg	0.12	0.0395 U	0.0401 U	0.0037 U	0.0036 U	0.0037 U	0.0039 U	0.0405 U	0.0039 U	0.0039 U	0.0040 U	0.0038 U	0.0038 U	0.0038 U	
Aroclor 1260	mg/kg	0.24	0.0395 U	0.0401 U	0.0079 U	0.0076 U	0.0079 U	0.0082 U	0.0405 U	0.0082 U	0.0083 U	0.0084 U	0.0080 U	0.0079 U	0.0079 U	
Polycyclic Aromatic Hydrocarbons																
Acenaphthene	mg/kg	360	NS	NS	0.0015 U	0.0015 U	0.0015 U	NS	0.0041 U	0.0015 U	NS	0.0015 U	0.0015 U	0.0015 U	NS	
Acenaphthylene	mg/kg	4180	NS	NS	0.0015 U	0.0015 U	0.0015 U	NS	0.0041 U	0.0015 U	NS	0.0015 U	0.0015 U	0.0015 U	NS	
Anthracene	mg/kg	1800	NS	NS	0.0017 U	0.0016 U	0.0017 U	NS	0.0041 U	0.0017 U	NS	0.0017 U	0.0017 U	0.0017 U	NS	
Benzo(a)anthracene	mg/kg	1.1	NS	NS	0.0019 U	**0.0103**	**0.0037 J**	NS	0.0041 U	0.0020 U	NS	**0.0056**	0.0019 U	**0.0076**	NS	
Benzo(a)pyrene	mg/kg	0.11	NS	NS	0.0015 U	**0.0097**	0.0015 U	NS	0.0041 U	0.0015 U	NS	**0.0064**	0.0015 U	**0.0061**	NS	
Benzo(b)fluoranthene	mg/kg	1.1	NS	NS	0.0020 U	**0.0200**	**0.0080**	NS	0.0041 U	**0.0033 J**	NS	**0.0125**	**0.0023 J**	**0.0120 J**	NS	
Benzo(g,h,i)perylene	mg/kg	1720	NS	NS	0.0018 U	**0.0081**	**0.0028 J**	NS	0.0041 U	0.0019 U	NS	**0.0060**	0.0018 U	**0.0052**	NS	
Benzo(k)fluoranthene	mg/kg	11	NS	NS	0.0022 U	**0.0062**	0.0023 U	NS	0.0041 U	0.0023 U	NS	**0.0067**	0.0023 U	**0.0035 J**	NS	
Chrysene	mg/kg	110	NS	NS	0.0019 U	**0.0142**	**0.0059**	NS	0.0041 U	**0.0025 J**	NS	**0.0099**	0.0020 U	**0.0088**	NS	
Dibenzo(a,h)anthracene	mg/kg	0.11	NS	NS	0.0017 U	0.0017 U	0.0017 U	NS	0.0041 U	0.0018 U	NS	0.0018 U	0.0018 U	0.0017 U	NS	
Fluoranthene	mg/kg	240	NS	NS	0.0030 U	**0.0359**	**0.0113**	NS	0.0041 U	**0.0069**	NS	**0.0229**	**0.0050 J**	**0.0248 J**	NS	
Fluorene	mg/kg	240	NS	NS	0.0016 U	0.0015 U	0.0016 U	NS	0.0041 U	0.0016 U	NS	0.0016 U	0.0016 U	0.0016 U	NS	
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	NS	NS	0.0017 U	**0.0065**	**0.0023 J**	NS	0.0041 U	0.0018 U	NS	**0.0048**	0.0018 U	**0.0041**	NS	
Naphthalene	mg/kg	3.8	NS	NS	0.0017 U	0.0017 U	0.0017 U	NS	0.0041 U	0.0018 U	NS	0.0018 U	0.0018 U	0.0017 U	NS	
Phenanthrene	mg/kg	2170	NS	NS	0.0033 U	**0.0116**	**0.0042**	NS	0.0041 U	**0.0047**	NS	**0.0066**	0.0034 U	**0.0110**	NS	
Pyrene	mg/kg	180	NS	NS	**0.0023 J**	**0.0279**	**0.0140**	NS	0.0041 U	**0.0052**	NS	**0.0176**	**0.0039 J**	**0.0193 J**	NS	
Total Petroleum Hydrocarbons																
Gasoline Range Organics	mg/kg	385	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Diesel Range Organics	mg/kg	4150	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Oil Range Organics	mg/kg	124000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-25	GB-26	GB-27	GB-28	GB-29	GB-30	GB-31	GB-32	GB-33	GB-34	GB-35	GB-35	GB-36
			Sample Interval (feet bgs):	2-4	4-5	3-5	3-5	3-5	4-5	5-7	2-4	4-6	3-5	3-5	3-5D	2-4
			Sample Date:	7/22/2021	7/22/2021	7/23/2021	7/22/2021	7/26/2021	7/26/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/22/2021	7/22/2021	7/26/2021
			Notes:												Duplicate	
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/kg	2.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	mg/kg	810	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	mg/kg	0.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	mg/kg	0.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	mg/kg	3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	mg/kg	23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloropropene	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	mg/kg	6.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	mg/kg	0.0051	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trimethylbenzene	mg/kg	34	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	mg/kg	5.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	mg/kg	30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	mg/kg	0.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	mg/kg	0.036	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	mg/kg	180	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	mg/kg	0.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethene	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	mg/kg	1.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	mg/kg	27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	mg/kg	148	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	mg/kg	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone	mg/kg	2700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	mg/kg	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	mg/kg	3300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	mg/kg	6100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrolein	mg/kg	0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrylonitrile	mg/kg	0.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	mg/kg	1.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromobenzene	mg/kg	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromochloromethane	mg/kg	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	mg/kg	0.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	mg/kg	19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	mg/kg	0.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	mg/kg	77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	mg/kg	0.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	mg/kg	28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	mg/kg	1400	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	mg/kg	0.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-25	GB-26	GB-27	GB-28	GB-29	GB-30	GB-31	GB-32	GB-33	GB-34	GB-35	GB-35	GB-36
			Sample Interval (feet bgs):	2-4	4-5	3-5	3-5	3-5	4-5	5-7	2-4	4-6	3-5	3-5	3-5D	2-4
			Sample Date:	7/22/2021	7/22/2021	7/23/2021	7/22/2021	7/26/2021	7/26/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/22/2021	7/22/2021	7/26/2021
			Notes:												Duplicate	
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds (continued)																
Chloromethane	mg/kg	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyclohexanone	mg/kg	2800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	mg/kg	8.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl ether	mg/kg	1600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	mg/kg	5.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iodomethane	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	mg/kg	190	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
m/p-Xylene	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl acetate	mg/kg	7800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene bromide	mg/kg	2.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	mg/kg	35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	mg/kg	390	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Heptane	mg/kg	2.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Hexane	mg/kg	61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	mg/kg	380	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	mg/kg	3.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	mg/kg	65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	mg/kg	780	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	mg/kg	600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	780	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	mg/kg	8.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrahydrofuran	mg/kg	1800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	mg/kg	490	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	mg/kg	0.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl acetate	mg/kg	91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	mg/kg	0.059	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes, Total	mg/kg	58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
		Sample Point:	GB-25	GB-26	GB-27	GB-28	GB-29	GB-30	GB-31	GB-32	GB-33	GB-34	GB-35	GB-35	GB-36
		Sample Interval (feet bgs):	2-4	4-5	3-5	3-5	3-5	4-5	5-7	2-4	4-6	3-5	3-5	3-5D	2-4
		Sample Date:	7/22/2021	7/22/2021	7/23/2021	7/22/2021	7/26/2021	7/26/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/22/2021	7/22/2021	7/26/2021
		Notes:												Duplicate	
Parameter	**Units**	**PAL[1]**													
Explosives															
1,3,5-Trinitrobenzene	mg/kg	220	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	mg/kg	0.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrotoluene	mg/kg	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	mg/kg	1.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	mg/kg	0.36	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrotoluene	mg/kg	3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitrotoluene	mg/kg	0.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	mg/kg	5.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitroglycerine	mg/kg	0.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected

Highlighted - concentration exceeds screening level

bgs - below ground surface

GFC - Goodfellow Federal Complex

J - estimated value

JU - estimated result qualified as nondetect

mg/kg - milligrams per kilogram

NE - not established

NS - not sampled

PAL - project action level

U - compound was not detected

UJ - qualified as estimated at the reporting limit

UR - qualified as rejected at the reporting limit

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-37	GB-38	GB-39	GB-40	GB-41	GB-42	GB-43	GB-44	GB-45	GB-46	GB-47	GB-48	GB-49
			Sample Interval (feet bgs):	5-7	3-5	6-7	11-13	6-8	3-5	5-7	5-7	2-4	4-6	5-7	5-7	5-6
			Sample Date:	7/26/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/22/2021	7/26/2021	7/26/2021	7/26/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Metals																
Antimony	mg/kg	10		0.51 U	0.60 UJ	0.53 U	0.50 U	0.53 U	0.52 U	0.45 U	0.59 U	0.59 U	0.66 U	0.47 U	0.51 U	0.62 U
Arsenic	mg/kg	12.3		**9.9**	**9.5 J**	**8.0**	**4.8**	**4.8**	**2.6**	**2.4**	**8.6**	**10.1**	**9.2**	**7.4**	**5.8**	**4.6**
Copper	mg/kg	310		**18.1**	**19.3 J**	**13.7**	**13.9**	**11.6**	**12.6**	**10.1**	**17.4**	**18.5**	**15.3**	**14.6**	**13.5**	**12.2**
Lead	mg/kg	400		**11.4**	**12.3 J**	**7.4**	**8.1**	**8.1**	**8.0**	**7.2**	**28.7**	**9.8**	**10.2**	**15.7**	**20.8**	**10.4**
Zinc	mg/kg	2300		**55.7**	**59.5**	**36.3**	**39.4**	**27.7**	**42.3**	**46.9**	**62.7**	**53.4**	**48.3**	**34.9**	**31.2**	**30.4**
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.41		0.0101 U	0.0101 U	0.0099 U	0.0105 U	0.0100 U	0.0099 U	0.0097 U	0.0099 U	0.0101 U	0.0104 U	0.0102 U	0.0100 U	0.0099 U
Aroclor 1221	mg/kg	0.20		0.0097 U	0.0097 U	0.0095 U	0.0100 U	0.0096 U	0.0095 U	0.0093 U	0.0095 U	0.0097 U	0.0100 U	0.0098 U	0.0096 U	0.0095 U
Aroclor 1232	mg/kg	0.17		0.0044 U	0.0044 U	0.0043 U	0.0046 U	0.0044 U	0.0043 U	0.0043 U	0.0043 U	0.0045 U	0.0046 U	0.0045 U	0.0044 U	0.0044 U
Aroclor 1242	mg/kg	0.23		0.0098 U	0.0098 U	0.0096 U	0.0101 U	0.0097 U	0.0096 U	0.0094 U	0.0096 U	0.0098 U	0.0101 U	0.0099 U	0.0097 U	0.0096 U
Aroclor 1248	mg/kg	0.23		0.0027 U	0.0027 U	0.0026 U	0.0028 U	0.0027 U	0.0026 U	0.0026 U	0.0026 U	0.0027 U	0.0028 U	0.0027 U	0.0027 U	0.0026 U
Aroclor 1254	mg/kg	0.12		0.0038 U	0.0038 U	0.0037 U	0.0039 U	0.0038 U	0.0037 U	0.0037 U	0.0037 U	0.0038 U	0.0039 U	0.0038 U	0.0038 U	0.0037 U
Aroclor 1260	mg/kg	0.24		0.0080 U	0.0080 U	0.0078 U	0.0083 U	0.0080 U	0.0078 U	0.0077 U	0.0079 U	0.0080 U	0.0082 U	0.0081 U	0.0079 U	0.0079 U
Polycyclic Aromatic Hydrocarbons																
Acenaphthene	mg/kg	360		0.0016 U	0.0015 U	0.0015 U	**0.0440**	0.0015 U	0.0015 U	0.0015 U	**0.0031 J**	0.0015 U	NS	0.0016 U	0.0015 U	NS
Acenaphthylene	mg/kg	4180		0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0015 U	0.0015 U	0.0015 U	**0.0030 J**	0.0015 U	NS	0.0016 U	0.0015 U	NS
Anthracene	mg/kg	1800		**0.0041 J**	0.0017 U	0.0017 U	**0.0784**	0.0017 U	0.0017 U	0.0017 U	**0.0095**	**0.0035 J**	NS	0.0018 U	0.0017 U	NS
Benzo(a)anthracene	mg/kg	1.1		**0.0066**	0.0019 U	0.0019 U	**0.2720**	0.0019 U	0.0019 U	**0.0025 J**	**0.0312**	**0.0083**	NS	0.0020 U	0.0019 U	NS
Benzo(a)pyrene	mg/kg	0.11		**0.0045**	0.0015 U	0.0015 U	**0.2330**	0.0015 U	0.0015 U	0.0015 U	**0.0256**	**0.0068**	NS	0.0016 U	0.0015 U	NS
Benzo(b)fluoranthene	mg/kg	1.1		**0.0085**	0.0020 U	0.0019 U	**0.4010**	0.0019 U	0.0020 U	**0.0035 J**	**0.0524**	**0.0121**	NS	0.0021 U	0.0019 U	NS
Benzo(g,h,i)perylene	mg/kg	1720		**0.0029 J**	0.0018 U	0.0018 U	**0.1890**	0.0018 U	0.0018 U	0.0018 U	**0.0179**	**0.0056**	NS	0.0019 U	0.0018 U	NS
Benzo(k)fluoranthene	mg/kg	11		0.0023 U	0.0023 U	0.0022 U	**0.1940**	0.0022 U	0.0023 U	0.0023 U	**0.0188**	**0.0058**	NS	0.0024 U	0.0022 U	NS
Chrysene	mg/kg	110		**0.0063**	0.0020 U	0.0019 U	**0.3020**	0.0019 U	0.0019 U	**0.0031 J**	**0.0393**	**0.0088**	NS	0.0020 U	0.0019 U	NS
Dibenzo(a,h)anthracene	mg/kg	0.11		0.0018 U	0.0018 U	0.0017 U	**0.0416**	0.0017 U	0.0017 U	0.0018 U	**0.0039**	0.0017 U	NS	0.0018 U	0.0017 U	NS
Fluoranthene	mg/kg	240		**0.0189**	0.0031 U	0.0030 U	**0.6180**	**0.0045**	0.0030 U	**0.0083**	**0.0869**	**0.0255**	NS	0.0032 U	0.0030 U	NS
Fluorene	mg/kg	240		0.0016 U	0.0016 U	0.0016 U	**0.0395**	0.0016 U	0.0016 U	0.0016 U	**0.0057**	0.0016 U	NS	0.0017 U	0.0016 U	NS
Indeno(1,2,3-cd)pyrene	mg/kg	1.1		**0.0024 J**	0.0018 U	0.0017 U	**0.1570**	0.0017 U	0.0017 U	0.0018 U	**0.0143**	**0.0045**	NS	0.0018 U	0.0017 U	NS
Naphthalene	mg/kg	3.8		0.0018 U	0.0018 U	0.0017 U	**0.0030 J**	0.0017 U	0.0017 U	0.0017 U	**0.0172**	0.0017 U	NS	0.0018 U	0.0017 U	NS
Phenanthrene	mg/kg	2170		**0.0152**	0.0034 U	0.0033 U	**0.4520**	0.0033 U	0.0033 U	**0.0041**	**0.0527**	**0.0202**	NS	0.0035 U	0.0033 U	NS
Pyrene	mg/kg	180		**0.0159**	0.0022 U	0.0022 U	**0.5480**	**0.0033 J**	0.0022 U	**0.0066**	**0.0702**	**0.0186**	NS	0.0023 U	0.0022 U	NS
Total Petroleum Hydrocarbons																
Gasoline Range Organics	mg/kg	385		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diesel Range Organics	mg/kg	4150		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Oil Range Organics	mg/kg	124000		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-37	GB-38	GB-39	GB-40	GB-41	GB-42	GB-43	GB-44	GB-45	GB-46	GB-47	GB-48	GB-49
			Sample Interval (feet bgs):	5-7	3-5	6-7	11-13	6-8	3-5	5-7	5-7	2-4	4-6	5-7	5-7	5-6
			Sample Date:	7/26/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/22/2021	7/26/2021	7/26/2021	7/26/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/kg	2.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	mg/kg	810	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	mg/kg	0.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	mg/kg	0.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	mg/kg	3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	mg/kg	23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloropropene	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	mg/kg	6.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	mg/kg	0.0051	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trimethylbenzene	mg/kg	34	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	mg/kg	5.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	mg/kg	30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane	mg/kg	0.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	mg/kg	0.036	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	mg/kg	180	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	mg/kg	0.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethene	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	mg/kg	1.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	mg/kg	27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	mg/kg	148	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	mg/kg	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone	mg/kg	2700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	mg/kg	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	mg/kg	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	mg/kg	3300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone	mg/kg	6100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrolein	mg/kg	0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acrylonitrile	mg/kg	0.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	mg/kg	1.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromobenzene	mg/kg	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromochloromethane	mg/kg	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	mg/kg	0.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	mg/kg	19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	mg/kg	0.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	mg/kg	77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	mg/kg	0.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	mg/kg	28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	mg/kg	1400	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	mg/kg	0.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-37	GB-38	GB-39	GB-40	GB-41	GB-42	GB-43	GB-44	GB-45	GB-46	GB-47	GB-48	GB-49
			Sample Interval (feet bgs):	5-7	3-5	6-7	11-13	6-8	3-5	5-7	5-7	2-4	4-6	5-7	5-7	5-6
			Sample Date:	7/26/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/22/2021	7/26/2021	7/26/2021	7/26/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds (continued)																
Chloromethane	mg/kg	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cyclohexanone	mg/kg	2800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	mg/kg	8.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl ether	mg/kg	1600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	mg/kg	5.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iodomethane	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	mg/kg	190	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
m/p-Xylene	mg/kg	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl acetate	mg/kg	7800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene bromide	mg/kg	2.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	mg/kg	35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	mg/kg	390	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Heptane	mg/kg	2.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Hexane	mg/kg	61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	mg/kg	380	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	mg/kg	3.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Xylene	mg/kg	65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	mg/kg	780	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	mg/kg	600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	780	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	mg/kg	8.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrahydrofuran	mg/kg	1800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	mg/kg	490	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	mg/kg	0.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl acetate	mg/kg	91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	mg/kg	0.059	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes, Total	mg/kg	58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-37	GB-38	GB-39	GB-40	GB-41	GB-42	GB-43	GB-44	GB-45	GB-46	GB-47	GB-48	GB-49
			Sample Interval (feet bgs):	5-7	3-5	6-7	11-13	6-8	3-5	5-7	5-7	2-4	4-6	5-7	5-7	5-6
			Sample Date:	7/26/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/22/2021	7/26/2021	7/26/2021	7/26/2021	7/21/2021	7/20/2021	7/20/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Explosives																
1,3,5-Trinitrobenzene	mg/kg	220		NS	NS	0.0479 U	NS	0.6200 U	NS	NS	NS	NS	NS	NS	0.0489 U	NS
1,3-Dinitrobenzene	mg/kg	0.63		NS	NS	0.0630 U	NS	0.6200 U	NS	NS	NS	NS	NS	NS	0.0643 U	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16		NS	NS	0.107 U	NS	0.620 U	NS	NS	NS	NS	NS	NS	0.109 U	NS
2,4,6-Trinitrotoluene	mg/kg	2.6		NS	NS	0.0771 U	NS	0.6200 U	NS	NS	NS	NS	NS	NS	0.0788 U	NS
2,4-Dinitrotoluene	mg/kg	1.7		NS	NS	0.0958 U	NS	0.6200 U	NS	NS	NS	NS	NS	NS	0.0979 U	NS
2,6-Dinitrotoluene	mg/kg	0.36		NS	NS	0.106 U	NS	0.620 U	NS	NS	NS	NS	NS	NS	0.108 U	NS
2-Nitrotoluene	mg/kg	3.2		NS	NS	0.112 U	NS	0.620 U	NS	NS	NS	NS	NS	NS	0.114 U	NS
3-Nitrotoluene	mg/kg	0.63		NS	NS	0.138 U	NS	0.620 U	NS	NS	NS	NS	NS	NS	0.141 U	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1		NS	NS	0.169 U	NS	0.620 U	NS	NS	NS	NS	NS	NS	0.172 U	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77		NS	NS	0.0780 U	NS	0.6200 U	NS	NS	NS	NS	NS	NS	0.0797 U	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77		NS	NS	0.0700 U	NS	0.6200 U	NS	NS	NS	NS	NS	NS	0.0715 U	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390		NS	NS	0.0952 U	NS	0.6200 U	NS	NS	NS	NS	NS	NS	0.0973 U	NS
Nitrobenzene	mg/kg	5.1		NS	NS	0.105 U	NS	0.620 U	NS	NS	NS	NS	NS	NS	0.108 U	NS
Nitroglycerine	mg/kg	0.63		NS	NS	0.188 U	NS	2.480 U	NS	NS	NS	NS	NS	NS	0.192 U	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13		NS	NS	0.259 U	NS	0.620 U	NS	NS	NS	NS	NS	NS	0.265 U	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3		NS	NS	0.133 U	NS	0.620 U	NS	NS	NS	NS	NS	NS	0.136 U	NS

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
mg/kg - milligrams per kilogram
NE - not established
NS - not sampled
PAL - project action level
U - compound was not detected
UJ - qualified as estimated at the reporting limit
UR - qualified as rejected at the reporting limit

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-50	GB-50	GB-51	GB-52	GB-53	GB-54	GB-55	GB-55	GB-56	GB-57	GB-57	GB-58	GB-59
			Sample Interval (feet bgs):	3-5	3-5D	3-5	3-5	3-5	2-4	3-5	3-5D	5-7	6-8	6-8D	4-6	8-10
			Sample Date:	7/19/2021	7/19/2021	7/19/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021	719/21	7/19/2021	7/19/2021	7/19/2021	7/21/2021
			Notes:		Duplicate						Duplicate			Duplicate		
Parameter	**Units**	**PAL[1]**														
Metals																
Antimony	mg/kg	10	0.66 U	0.53 U	0.58 U	0.60 U	0.57 U	0.47 U	0.56 U	0.59 UJ	0.49 U	0.46 U	0.60 U	0.59 UJ	0.49 U	
Arsenic	mg/kg	12.3	**5.6**	**5.4**	**3.6**	**13.7**	**6.1**	**6.7**	**5.2**	**5.0**	**5.5**	**4.3**	**4.3**	**10.8**	**10.7**	
Copper	mg/kg	310	**12.6**	**11.6**	**13.1**	**21.5**	**12.7**	**16.1**	**12.8**	**12.5**	**12.6**	**13.2**	**12.2**	**19.6**	**22.2**	
Lead	mg/kg	400	**8.2**	**7.7**	**11.0**	**13.6**	**12.0**	**8.9**	**8.8**	**8.7**	**7.8**	**7.9**	**7.8**	**11.0**	**10.3**	
Zinc	mg/kg	2300	**42.7**	**41.5**	**38.6**	**65.0**	**39.4**	**50.0**	**38.2**	**39.2**	**39.1**	**38.7**	**38.5**	**65.6**	**66.7**	
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.41	0.0096 U	0.0102 U	0.0100 U	0.0104 U	0.0097 U	0.0097 U	0.0096 U	0.0096 U	0.0101 U	0.0100 U	0.0101 U	0.0102 U	0.0098 U	
Aroclor 1221	mg/kg	0.20	0.0092 U	0.0098 U	0.0096 U	0.0100 U	0.0094 U	0.0093 U	0.0092 U	0.0092 U	0.0097 U	0.0096 U	0.0097 U	0.0097 U	0.0094 U	
Aroclor 1232	mg/kg	0.17	0.0042 U	0.0045 U	0.0044 U	0.0046 U	0.0043 U	0.0042 U	0.0042 U	0.0042 U	0.0044 U	0.0044 U	0.0044 U	0.0045 U	0.0043 U	
Aroclor 1242	mg/kg	0.23	0.0093 U	0.0099 U	0.0097 U	0.0101 U	0.0094 U	0.0094 U	0.0093 U	0.0093 U	0.0098 U	0.0097 U	0.0098 U	0.0098 U	0.0095 U	
Aroclor 1248	mg/kg	0.23	0.0026 U	0.0027 U	0.0027 U	0.0028 U	0.0026 U	0.0026 U	0.0025 U	0.0026 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0026 U	
Aroclor 1254	mg/kg	0.12	0.0036 U	0.0038 U	0.0038 U	0.0039 U	0.0037 U	0.0036 U	0.0036 U	0.0036 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0037 U	
Aroclor 1260	mg/kg	0.24	0.0076 U	0.0081 U	0.0080 U	0.0082 U	0.0077 U	0.0077 U	0.0076 U	0.0076 U	0.0080 U	0.0080 U	0.0080 U	0.0081 U	0.0078 U	
Polycyclic Aromatic Hydrocarbons																
Acenaphthene	mg/kg	360	0.0015 U	0.0015 U	0.0015 U	0.0016 U	NS	0.0029 U	0.0028 U	0.0029 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	
Acenaphthylene	mg/kg	4180	0.0015 U	0.0015 U	0.0015 U	0.0016 U	NS	0.0029 U	0.0028 U	0.0029 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	
Anthracene	mg/kg	1800	0.0017 U	0.0017 U	**0.0022 J**	0.0017 U	NS	0.0033 U	0.0031 U	0.0032 U	0.0016 U	0.0017 U	**0.0032 J**	**0.0098**	0.0017 U	
Benzo(a)anthracene	mg/kg	1.1	**0.0054**	0.0019 U	**0.0126**	**0.0046**	NS	0.0037 U	0.0035 U	0.0036 U	0.0019 U	**0.0043 J**	**0.0144 J**	**0.0504**	0.0019 U	
Benzo(a)pyrene	mg/kg	0.11	**0.0053**	0.0015 U	**0.0116**	0.0015 U	NS	0.0029 U	0.0027 U	0.0028 U	0.0014 U	**0.0038 J**	**0.0123 J**	**0.0388**	0.0015 U	
Benzo(b)fluoranthene	mg/kg	1.1	**0.0112 J**	**0.0035 J**	**0.0270**	**0.0095**	NS	0.0038 U	0.0036 U	0.0037 U	0.0019 U	**0.0081 J**	**0.0255 J**	**0.0924**	0.0020 U	
Benzo(g,h,i)perylene	mg/kg	1720	0.0018 U	0.0018 U	**0.0053**	**0.0051**	NS	0.0035 U	0.0034 U	0.0034 U	0.0018 U	0.0018 U	**0.0044**	**0.0158**	0.0018 U	
Benzo(k)fluoranthene	mg/kg	11	**0.0032 J**	0.0023 U	**0.0063**	**0.0051**	NS	0.0044 U	0.0042 U	0.0043 U	0.0022 U	**0.0028 J**	**0.0111 J**	**0.0223**	0.0023 U	
Chrysene	mg/kg	110	**0.0059**	0.0019 U	**0.0153**	**0.0070**	NS	0.0038 U	0.0036 U	0.0036 U	0.0019 U	**0.0046 J**	**0.0157 J**	**0.0579**	0.0020 U	
Dibenzo(a,h)anthracene	mg/kg	0.11	0.0017 U	0.0017 U	0.0017 U	0.0018 U	NS	0.0034 U	0.0032 U	0.0033 U	0.0017 U	0.0017 U	0.0017 U	0.0018 U	0.0018 U	
Fluoranthene	mg/kg	240	**0.0155 J**	**0.0045 J**	**0.0372**	**0.0146**	NS	0.0059 U	0.0056 U	0.0058 U	**0.0031 J**	**0.0123 J**	**0.0404 J**	**0.1600**	0.0031 U	
Fluorene	mg/kg	240	0.0016 U	0.0016 U	0.0016 U	0.0016 U	NS	0.0031 U	0.0029 U	0.0030 U	0.0015 U	0.0016 U	0.0016 U	**0.0025 J**	0.0016 U	
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	0.0017 U	0.0017 U	**0.0050**	**0.0040** J	NS	0.0034 U	0.0032 U	0.0033 U	0.0017 U	0.0017 U	**0.0043**	**0.0161**	0.0018 U	
Naphthalene	mg/kg	3.8	0.0017 U	0.0017 U	0.0017 U	0.0018 U	NS	0.0034 U	0.0032 U	0.0033 U	0.0017 U	0.0017 U	0.0017 U	0.0018 U	0.0018 U	
Phenanthrene	mg/kg	2170	**0.0065**	0.0033 U	**0.0144**	**0.0063**	NS	0.0065 U	0.0061 U	0.0063 U	0.0032 U	**0.0068 J**	**0.0189 J**	**0.0640**	0.0034 U	
Pyrene	mg/kg	180	**0.0122**	**0.0035 J**	**0.0294**	**0.0121**	NS	0.0043 U	0.0040 U	0.0041 U	**0.0023 J**	**0.0102 J**	**0.0332 J**	**0.1250**	0.0022 U	
Total Petroleum Hydrocarbons																
Gasoline Range Organics	mg/kg	385	NS	NS	NS	NS	NS	0.063 U	0.052 U	0.056 U	NS	NS	NS	NS	NS	
Diesel Range Organics	mg/kg	4150	NS	NS	NS	NS	NS	**3.6 J**	**1.8 J**	1.6 U	NS	NS	NS	NS	NS	
Oil Range Organics	mg/kg	124000	NS	NS	NS	NS	NS	10.4 JU	5.9 JU	4.6 JU	NS	NS	NS	NS	NS	

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-50	GB-50	GB-51	GB-52	GB-53	GB-54	GB-55	GB-55	GB-56	GB-57	GB-57	GB-58	GB-59
			Sample Interval (feet bgs):	3-5	3-5D	3-5	3-5	3-5	2-4	3-5	3-5D	5-7	6-8	6-8D	4-6	8-10
			Sample Date:	7/19/2021	7/19/2021	7/19/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021	719/21	7/19/2021	7/19/2021	7/19/2021	7/21/2021
			Notes:		Duplicate						Duplicate			Duplicate		
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/kg	2.0	NS	NS	NS	NS	NS	0.00120 U	0.00100 U	0.00100 U	NS	NS	NS	NS	NS	
1,1,1-Trichloroethane	mg/kg	810	NS	NS	NS	NS	NS	0.00090 U	0.00070 U	0.00080 U	NS	NS	NS	NS	NS	
1,1,2,2-Tetrachloroethane	mg/kg	0.6	NS	NS	NS	NS	NS	0.00120 U	0.00100 U	0.00100 U	NS	NS	NS	NS	NS	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	NS	NS	NS	NS	NS	0.00580 U	0.00480 U	0.00510 U	NS	NS	NS	NS	NS	
1,1,2-Trichloroethane	mg/kg	0.15	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	
1,1-Dichloroethane	mg/kg	3.6	NS	NS	NS	NS	NS	0.00050 U	0.00040 U	0.00040 U	NS	NS	NS	NS	NS	
1,1-Dichloroethene	mg/kg	23	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00070 U	NS	NS	NS	NS	NS	
1,1-Dichloropropene	mg/kg	NE	NS	NS	NS	NS	NS	0.00100 U	0.00090 U	0.00090 U	NS	NS	NS	NS	NS	
1,2,3-Trichlorobenzene	mg/kg	6.3	NS	NS	NS	NS	NS	0.00090 U	0.00080 U	0.00080 U	NS	NS	NS	NS	NS	
1,2,3-Trichloropropane	mg/kg	0.0051	NS	NS	NS	NS	NS	0.00250 U	0.00200 U	0.00220 U	NS	NS	NS	NS	NS	
1,2,3-Trimethylbenzene	mg/kg	34	NS	NS	NS	NS	NS	0.00230 U	0.00190 U	0.00200 U	NS	NS	NS	NS	NS	
1,2,4-Trichlorobenzene	mg/kg	5.8	NS	NS	NS	NS	NS	0.00090 U	0.00080 U	0.00080 U	NS	NS	NS	NS	NS	
1,2,4-Trimethylbenzene	mg/kg	30	NS	NS	NS	NS	NS	0.00080 U	0.00060 U	0.00070 U	NS	NS	NS	NS	NS	
1,2-Dibromo-3-chloropropane	mg/kg	0.01	NS	NS	NS	NS	NS	0.00210 U	0.00170 U	0.00190 U	NS	NS	NS	NS	NS	
1,2-Dibromoethane	mg/kg	0.036	NS	NS	NS	NS	NS	0.00060 U	0.00050 U	0.00060 U	NS	NS	NS	NS	NS	
1,2-Dichlorobenzene	mg/kg	180	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	
1,2-Dichloroethane	mg/kg	0.46	NS	NS	NS	NS	NS	0.00050 U	0.00040 U	0.00040 U	NS	NS	NS	NS	NS	
1,2-Dichloroethene	mg/kg	16	NS	NS	NS	NS	NS	0.00130 U	0.00110 U	0.00110 U	NS	NS	NS	NS	NS	
1,2-Dichloropropane	mg/kg	1.6	NS	NS	NS	NS	NS	0.00110 U	0.00090 U	0.00100 U	NS	NS	NS	NS	NS	
1,3,5-Trimethylbenzene	mg/kg	27	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	
1,3-Dichlorobenzene	mg/kg	148	NS	NS	NS	NS	NS	0.00080 U	0.00070 U	0.00070 U	NS	NS	NS	NS	NS	
1,3-Dichloropropane	mg/kg	160	NS	NS	NS	NS	NS	0.00080 U	0.00070 U	0.00070 U	NS	NS	NS	NS	NS	
1,4-Dichlorobenzene	mg/kg	2.6	NS	NS	NS	NS	NS	0.00090 U	0.00080 U	0.00080 U	NS	NS	NS	NS	NS	
2,2-Dichloropropane	mg/kg	NE	NS	NS	NS	NS	NS	0.00060 U	0.00050 U	0.00050 U	NS	NS	NS	NS	NS	
2-Butanone	mg/kg	2700	NS	NS	NS	NS	NS	**0.00470 J**	0.00320 U	0.00350 U	NS	NS	NS	NS	NS	
2-Chlorotoluene	mg/kg	160	NS	NS	NS	NS	NS	0.00090 U	0.00070 U	0.00070 U	NS	NS	NS	NS	NS	
2-Hexanone	mg/kg	20	NS	NS	NS	NS	NS	0.00290 U	0.00240 U	0.00250 U	NS	NS	NS	NS	NS	
4-Chlorotoluene	mg/kg	160	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	
4-Methyl-2-pentanone	mg/kg	3300	NS	NS	NS	NS	NS	0.00350 U	0.00290 U	0.00310 U	NS	NS	NS	NS	NS	
Acetone	mg/kg	6100	NS	NS	NS	NS	NS	**0.02250 J**	0.01540 U	0.01650 U	NS	NS	NS	NS	NS	
Acrolein	mg/kg	0.1	NS	NS	NS	NS	NS	0.08780 U	0.07190 U	0.07710 U	NS	NS	NS	NS	NS	
Acrylonitrile	mg/kg	0.25	NS	NS	NS	NS	NS	0.00370 U	0.00300 U	0.00320 U	NS	NS	NS	NS	NS	
Benzene	mg/kg	1.2	NS	NS	NS	NS	NS	0.00060 U	0.00050 U	0.00050 U	NS	NS	NS	NS	NS	
Bromobenzene	mg/kg	29	NS	NS	NS	NS	NS	0.00110 U	0.00090 U	0.00100 U	NS	NS	NS	NS	NS	
Bromochloromethane	mg/kg	15	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	
Bromodichloromethane	mg/kg	0.29	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	
Bromoform	mg/kg	19	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	
Bromomethane	mg/kg	0.68	NS	NS	NS	NS	NS	0.00340 U	0.00280 U	0.00300 U	NS	NS	NS	NS	NS	
Carbon disulfide	mg/kg	77	NS	NS	NS	NS	NS	0.00080 U	0.00060 U	0.00070 U	NS	NS	NS	NS	NS	
Carbon tetrachloride	mg/kg	0.65	NS	NS	NS	NS	NS	0.00100 U	0.00080 U	0.00090 U	NS	NS	NS	NS	NS	
Chlorobenzene	mg/kg	28	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	
Chloroethane	mg/kg	1400	NS	NS	NS	NS	NS	0.00170 U	0.00140 U	0.00150 U	NS	NS	NS	NS	NS	
Chloroform	mg/kg	0.32	NS	NS	NS	NS	NS	0.00060 U	0.00050 U	0.00050 U	NS	NS	NS	NS	NS	

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-50	GB-50	GB-51	GB-52	GB-53	GB-54	GB-55	GB-55	GB-56	GB-57	GB-57	GB-58	GB-59
			Sample Interval (feet bgs):	3-5	3-5D	3-5	3-5	3-5	2-4	3-5	3-5D	5-7	6-8	6-8D	4-6	8-10
			Sample Date:	7/19/2021	7/19/2021	7/19/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021	719/21	7/19/2021	7/19/2021	7/19/2021	7/21/2021
			Notes:		Duplicate						Duplicate			Duplicate		
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds (continued)																
Chloromethane	mg/kg	11	NS	NS	NS	NS	NS	0.00090 U	0.00080 U	0.00080 U	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16	NS	NS	NS	NS	NS	0.00050 U	0.00040 U	0.00040 U	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	NS	NS	0.00060 U	0.00050 U	0.00050 U	NS	NS	NS	NS	NS	NS
Cyclohexanone	mg/kg	2800	NS	NS	NS	NS	NS	0.01470 U	0.01210 U	0.01300 U	NS	NS	NS	NS	NS	NS
Dibromochloromethane	mg/kg	8.3	NS	NS	NS	NS	NS	0.00080 U	0.00060 U	0.00070 U	NS	NS	NS	NS	NS	NS
Ethyl ether	mg/kg	1600	NS	NS	NS	NS	NS	0.00070 U	0.00050 U	0.00060 U	NS	NS	NS	NS	NS	NS
Ethylbenzene	mg/kg	5.8	NS	NS	NS	NS	NS	0.00050 U	0.00040 U	0.00050 U	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2	NS	NS	NS	NS	NS	0.00100 U	0.00080 U	0.00090 U	NS	NS	NS	NS	NS	NS
Iodomethane	mg/kg	NE	NS	NS	NS	NS	NS	0.00180 U	0.00140 U	0.00150 U	NS	NS	NS	NS	NS	NS
Isopropylbenzene	mg/kg	190	NS	NS	NS	NS	NS	0.00070 U	0.00050 U	0.00060 U	NS	NS	NS	NS	NS	NS
m/p-Xylene	mg/kg	NE	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	NS
Methyl acetate	mg/kg	7800	NS	NS	NS	NS	NS	0.00130 U	0.00100 U	0.00110 U	NS	NS	NS	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47	NS	NS	NS	NS	NS	0.00060 U	0.00050 U	0.00050 U	NS	NS	NS	NS	NS	NS
Methylene bromide	mg/kg	2.4	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	NS
Methylene chloride	mg/kg	35	NS	NS	NS	NS	NS	0.00320 U	0.00260 U	0.00280 U	NS	NS	NS	NS	NS	NS
n-Butylbenzene	mg/kg	390	NS	NS	NS	NS	NS	0.00080 U	0.00060 U	0.00070 U	NS	NS	NS	NS	NS	NS
n-Heptane	mg/kg	2.2	NS	NS	NS	NS	NS	0.00530 U	0.00430 U	0.00460 U	NS	NS	NS	NS	NS	NS
n-Hexane	mg/kg	61	NS	NS	NS	NS	NS	0.00080 U	0.00070 U	0.00070 U	NS	NS	NS	NS	NS	NS
n-Propylbenzene	mg/kg	380	NS	NS	NS	NS	NS	0.00090 U	0.00080 U	0.00080 U	NS	NS	NS	NS	NS	NS
Naphthalene	mg/kg	3.8	NS	NS	NS	NS	NS	0.00100 U	0.00080 U	0.00080 U	NS	NS	NS	NS	NS	NS
o-Xylene	mg/kg	65	NS	NS	NS	NS	NS	0.00040 U	0.00040 U	0.00040 U	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100	NS	NS	NS	NS	NS	0.00080 U	0.00070 U	0.00070 U	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	mg/kg	780	NS	NS	NS	NS	NS	0.00090 U	0.00070 U	0.00080 U	NS	NS	NS	NS	NS	NS
Styrene	mg/kg	600	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	780	NS	NS	NS	NS	NS	0.00100 U	0.00080 U	0.00090 U	NS	NS	NS	NS	NS	NS
Tetrachloroethene	mg/kg	8.1	NS	NS	NS	NS	NS	0.00050 U	0.00040 U	0.00040 U	NS	NS	NS	NS	NS	NS
Tetrahydrofuran	mg/kg	1800	NS	NS	NS	NS	NS	0.00090 U	0.00080 U	0.00080 UJ	NS	NS	NS	NS	NS	NS
Toluene	mg/kg	490	NS	NS	NS	NS	NS	0.00040 U	0.00030 U	0.00040 U	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7.00	NS	NS	NS	NS	NS	0.00080 U	0.00070 U	0.00070 U	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224	NS	NS	NS	NS	NS	0.00050 U	0.00040 U	0.00050 U	NS	NS	NS	NS	NS	NS
Trichloroethene	mg/kg	0.41	NS	NS	NS	NS	NS	0.00080 U	0.00070 U	0.00070 U	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300	NS	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00060 U	NS	NS	NS	NS	NS	NS
Vinyl acetate	mg/kg	91	NS	NS	NS	NS	NS	0.00070 U	0.00050 U	0.00060 U	NS	NS	NS	NS	NS	NS
Vinyl chloride	mg/kg	0.059	NS	NS	NS	NS	NS	0.00080 U	0.00060 U	0.00070 U	NS	NS	NS	NS	NS	NS
Xylenes, Total	mg/kg	58	NS	NS	NS	NS	NS	0.00130 U	0.00110 U	0.00120 U	NS	NS	NS	NS	NS	NS

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-50	GB-50	GB-51	GB-52	GB-53	GB-54	GB-55	GB-55	GB-56	GB-57	GB-57	GB-58	GB-59
			Sample Interval (feet bgs):	3-5	3-5D	3-5	3-5	3-5	2-4	3-5	3-5D	5-7	6-8	6-8D	4-6	8-10
			Sample Date:	7/19/2021	7/19/2021	7/19/2021	7/21/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021	719/21	7/19/2021	7/19/2021	7/19/2021	7/21/2021
			Notes:		Duplicate						Duplicate			Duplicate		
Parameter	**Units**	**PAL[1]**														
Explosives																
1,3,5-Trinitrobenzene	mg/kg	220		0.0488 U	0.0486 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	mg/kg	0.63		0.0641 U	0.0639 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16		0.109 U	0.109 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrotoluene	mg/kg	2.6		0.08 U	0.08 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	mg/kg	1.7		0.10 U	0.10 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	mg/kg	0.36		0.108 U	0.107 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrotoluene	mg/kg	3.2		0.114 U	0.113 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitrotoluene	mg/kg	0.63		0.141 U	0.140 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1		0.172 U	0.171 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77		0.0795 U	0.0791 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77		0.0714 U	0.0710 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390		0.0970 U	0.0966 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	mg/kg	5.1		0.107 U	0.107 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitroglycerine	mg/kg	0.63		0.192 U	0.191 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13		0.264 U	0.263 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3		0.136 U	0.135 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected

Highlighted - concentration exceeds screening level

bgs - below ground surface

GFC - Goodfellow Federal Complex

J - estimated value

JU - estimated result qualified as nondetect

mg/kg - milligrams per kilogram

NE - not established

NS - not sampled

PAL - project action level

U - compound was not detected

UJ - qualified as estimated at the reporting limit

UR - qualified as rejected at the reporting limit

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-60	GB-61	GB-62	GB-63	GB-64	GB-65	GB-66	GB-67	GB-68	GB-68	GB-69	GB-70	GB-71
			Sample Interval (feet bgs):	5-7	5-7	3-5	3-5	5-7	5-7	5-7	8-10	3-5	3-5D	3-5	5-7	3-5
			Sample Date:	7/21/2021	7/20/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021 Duplicate	7/19/2021	7/19/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Metals																
Antimony	mg/kg	10		0.57 U	NS	0.51 U	0.56 U	**1.8**	0.53 U	0.51 U	0.45 U	0.54 U	0.64 U	0.54 U	0.56 U	0.62 U
Arsenic	mg/kg	12.3		**15.2**	NS	**3.8**	**4.1**	**80.3**	**6.1**	**28.7**	**4.3**	**9.3**	**8.5**	**6.5**	**10.6**	**6.6**
Copper	mg/kg	310		**13.5**	NS	**12.9**	**14.2**	**85.6**	**13.9**	**17.0**	**12.2**	**17.7**	**19.6**	**13.1**	**19.2**	**11.2**
Lead	mg/kg	400		**11.6**	NS	**8.2**	**9.1**	**14.7**	**7.9**	**15.8**	**10.2**	**13.2**	**10.3**	**10.4**	**13.4**	**11.3**
Zinc	mg/kg	2300		**46.0**	NS	**41.8**	**49.0**	**104**	**49.6**	**53.5**	**29.4**	**69.5**	**74.9**	**41.6**	**57.5**	**39.1**
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.41		0.0101 U	NS	NS	NS	0.0113 U	0.0102 U	0.0104 U	0.0097 U	0.0098 U	0.0102 U	0.0100 U	0.0098 U	0.0100 U
Aroclor 1221	mg/kg	0.20		0.0096 U	NS	NS	NS	0.0109 U	0.0098 U	0.0099 U	0.0093 U	0.0094 U	0.0097 U	0.0096 U	0.0094 U	0.0096 U
Aroclor 1232	mg/kg	0.17		0.0044 U	NS	NS	NS	0.0050 U	0.0045 U	0.0046 U	0.0042 U	0.0043 U	0.0045 U	0.0044 U	0.0043 U	0.0044 U
Aroclor 1242	mg/kg	0.23		0.0097 U	NS	NS	NS	0.0110 U	0.0099 U	0.0100 U	0.0094 U	0.0095 U	0.0098 U	0.0097 U	0.0095 U	0.0097 U
Aroclor 1248	mg/kg	0.23		0.0027 U	NS	NS	NS	0.0030 U	0.0027 U	0.0028 U	0.0026 U	0.0026 U	0.0027 U	0.0027 U	0.0026 U	0.0027 U
Aroclor 1254	mg/kg	0.12		0.0038 U	NS	NS	NS	0.0043 U	0.0038 U	0.0039 U	0.0036 U	0.0037 U	0.0038 U	0.0038 U	0.0037 U	0.0038 U
Aroclor 1260	mg/kg	0.24		0.0080 U	NS	NS	NS	0.0090 U	0.0081 U	0.0082 U	0.0077 U	0.0077 U	0.0081 U	0.0079 U	0.0077 U	0.0079 U
Polycyclic Aromatic Hydrocarbons																
Acenaphthene	mg/kg	360		0.0015 U	0.0031 U	0.0029 U	NS	0.0017 U	0.0015 U	NS	NS	0.0031 U	0.0030 U	NS	0.0014 U	0.0015 U
Acenaphthylene	mg/kg	4180		0.0015 U	0.0031 U	0.0029 U	NS	0.0017 U	0.0015 U	NS	NS	0.0031 U	0.0030 U	NS	0.0014 U	0.0015 U
Anthracene	mg/kg	1800		0.0017 U	0.0035 U	0.0032 U	NS	**0.0026 J**	0.0017 U	NS	NS	0.0034 U	0.0033 U	NS	0.0016 U	0.0017 U
Benzo(a)anthracene	mg/kg	1.1		0.0019 U	0.0039 U	0.0036 U	NS	**0.0082**	0.0019 U	NS	NS	0.0039 U	0.0038 U	NS	0.0018 U	0.0019 U
Benzo(a)pyrene	mg/kg	0.11		0.0015 U	0.0031 U	0.0028 U	NS	**0.0062**	0.0015 U	NS	NS	0.0030 U	0.0029 U	NS	0.0014 U	0.0015 U
Benzo(b)fluoranthene	mg/kg	1.1		0.0020 U	0.0041 U	0.0038 U	NS	**0.0147**	**0.0044**	NS	NS	0.0040 U	0.0039 U	NS	**0.0023 J**	**0.0033 J**
Benzo(g,h,i)perylene	mg/kg	1720		0.0018 U	0.0038 U	0.0035 U	NS	**0.0029 J**	0.0018 U	NS	NS	0.0037 U	0.0036 U	NS	0.0017 U	0.0018 U
Benzo(k)fluoranthene	mg/kg	11		0.0023 U	0.0047 U	0.0043 U	NS	**0.0041 J**	0.0022 U	NS	NS	0.0046 U	0.0045 U	NS	0.0022 U	0.0022 U
Chrysene	mg/kg	110		0.0019 U	0.0040 U	0.0037 U	NS	**0.0094**	**0.0030 J**	NS	NS	0.0039 U	0.0038 U	NS	0.0018 U	**0.0061**
Dibenzo(a,h)anthracene	mg/kg	0.11		0.0018 U	0.0036 U	0.0033 U	NS	0.0019 U	0.0017 U	NS	NS	0.0035 U	0.0034 U	NS	0.0017 U	0.0017 U
Fluoranthene	mg/kg	240		0.0031 U	0.0063 U	0.0058 U	NS	**0.0286**	**0.0104**	NS	NS	0.0062 U	0.0060 U	NS	**0.0031 J**	0.0030 U
Fluorene	mg/kg	240		0.0016 U	0.0033 U	0.0030 U	NS	0.0017 U	0.0016 U	NS	NS	0.0032 U	0.0031 U	NS	0.0015 U	**0.0022 J**
Indeno(1,2,3-cd)pyrene	mg/kg	1.1		0.0018 U	0.0036 U	0.0033 U	NS	**0.0029 J**	0.0017 U	NS	NS	0.0035 U	0.0034 U	NS	0.0017 U	0.0017 U
Naphthalene	mg/kg	3.8		0.0017 U	0.0036 U	0.0033 U	NS	0.0019 U	0.0017 U	NS	NS	0.0035 U	0.0034 U	NS	0.0017 U	0.0017 U
Phenanthrene	mg/kg	2170		0.0033 U	0.0069 U	0.0063 U	NS	**0.0121**	**0.0042**	NS	NS	0.0067 U	0.0065 U	NS	0.0032 U	**0.0139**
Pyrene	mg/kg	180		0.0022 U	0.0045 U	0.0042 U	NS	**0.0214**	**0.0079**	NS	NS	0.0044 U	0.0043 U	NS	**0.0024 J**	**0.0022 J**
Total Petroleum Hydrocarbons																
Gasoline Range Organics	mg/kg	385		NS	0.052 U	0.055 U	NS	NS	NS	NS	0.051 U	0.050 U	0.058 U	NS	NS	NS
Diesel Range Organics	mg/kg	4150		NS	**8.0 J**	**4.0 J**	NS	NS	NS	NS	**2.5 J**	**2.4 J**	**2.0 J**	NS	NS	NS
Oil Range Organics	mg/kg	124000		NS	**15.7 J**	**12.8 J**	NS	NS	NS	NS	8.5 JU	9.0 JU	8.9 JU	NS	NS	NS

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-60	GB-61	GB-62	GB-63	GB-64	GB-65	GB-66	GB-67	GB-68	GB-68	GB-69	GB-70	GB-71
			Sample Interval (feet bgs):	5-7	5-7	3-5	3-5	5-7	5-7	5-7	8-10	3-5	3-5D	3-5	5-7	3-5
			Sample Date:	7/21/2021	7/20/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021 Duplicate	7/19/2021	7/19/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	mg/kg	2.0	NS	0.00100 U	0.00100 U	NS	NS	NS	NS	0.00100 U	0.00090 U	0.00110 U	NS	NS	NS	
1,1,1-Trichloroethane	mg/kg	810	NS	0.00070 U	0.00080 U	NS	NS	NS	NS	0.00070 U	0.00070 U	0.00080 U	NS	NS	NS	
1,1,2,2-Tetrachloroethane	mg/kg	0.6	NS	0.00100 U	0.00100 U	NS	NS	NS	NS	0.00090 U	0.00090 U	0.00110 U	NS	NS	NS	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	670	NS	0.00480 U	0.00510 U	NS	NS	NS	NS	0.00470 U	0.00460 U	0.00530 U	NS	NS	NS	
1,1,2-Trichloroethane	mg/kg	0.15	NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS	
1,1-Dichloroethane	mg/kg	3.6	NS	0.00040 U	0.00040 U	NS	NS	NS	NS	0.00040 U	0.00040 U	0.00040 U	NS	NS	NS	
1,1-Dichloroethene	mg/kg	23	NS	0.00060 U	0.00070 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS	
1,1-Dichloropropene	mg/kg	NE	NS	0.00090 U	0.00090 U	NS	NS	NS	NS	0.00080 U	0.00080 U	0.00100 U	NS	NS	NS	
1,2,3-Trichlorobenzene	mg/kg	6.3	NS	0.00080 U	0.00080 U	NS	NS	NS	NS	0.00070 U	0.00070 U	0.00080 U	NS	NS	NS	
1,2,3-Trichloropropane	mg/kg	0.0051	NS	0.00210 U	0.00220 U	NS	NS	NS	NS	0.00200 U	0.00200 U	0.00230 U	NS	NS	NS	
1,2,3-Trimethylbenzene	mg/kg	34	NS	0.00190 U	0.00200 U	NS	NS	NS	NS	0.00190 U	0.00180 U	0.00210 U	NS	NS	NS	
1,2,4-Trichlorobenzene	mg/kg	5.8	NS	0.00080 U	0.00080 U	NS	NS	NS	NS	0.00070 U	0.00070 U	0.00080 U	NS	NS	NS	
1,2,4-Trimethylbenzene	mg/kg	30	NS	0.00060 U	0.00070 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS	
1,2-Dibromo-3-chloropropane	mg/kg	0.01	NS	0.00180 U	0.00190 U	NS	NS	NS	NS	0.00170 U	0.00170 U	0.00190 U	NS	NS	NS	
1,2-Dibromoethane	mg/kg	0.036	NS	0.00050 U	0.00050 U	NS	NS	NS	NS	0.00050 U	0.00050 U	0.00060 U	NS	NS	NS	
1,2-Dichlorobenzene	mg/kg	180	NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS	
1,2-Dichloroethane	mg/kg	0.46	NS	0.00040 U	0.00040 U	NS	NS	NS	NS	0.00040 U	0.00040 U	0.00040 U	NS	NS	NS	
1,2-Dichloroethene	mg/kg	16	NS	0.00110 U	0.00110 U	NS	NS	NS	NS	0.00100 U	0.00100 U	0.00120 U	NS	NS	NS	
1,2-Dichloropropane	mg/kg	1.6	NS	0.00090 U	0.00100 U	NS	NS	NS	NS	0.00090 U	0.00090 U	0.00100 U	NS	NS	NS	
1,3,5-Trimethylbenzene	mg/kg	27	NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS	
1,3-Dichlorobenzene	mg/kg	148	NS	0.00070 U	0.00070 U	NS	NS	NS	NS	0.00070 U	0.00070 U	0.00080 U	NS	NS	NS	
1,3-Dichloropropane	mg/kg	160	NS	0.00070 U	0.00070 U	NS	NS	NS	NS	0.00070 U	0.00060 U	0.00070 U	NS	NS	NS	
1,4-Dichlorobenzene	mg/kg	2.6	NS	0.00080 U	0.00080 U	NS	NS	NS	NS	0.00080 U	0.00070 U	0.00090 U	NS	NS	NS	
2,2-Dichloropropane	mg/kg	NE	NS	0.00050 U	0.00050 U	NS	NS	NS	NS	0.00040 U	0.00040 U	0.00050 U	NS	NS	NS	
2-Butanone	mg/kg	2700	NS	**0.00460 J**	0.00340 U	NS	NS	NS	NS	0.00320 U	0.00310 U	0.00360 U	NS	NS	NS	
2-Chlorotoluene	mg/kg	160	NS	0.00070 U	0.00070 U	NS	NS	NS	NS	0.00070 U	0.00070 U	0.00080 U	NS	NS	NS	
2-Hexanone	mg/kg	20	NS	0.00240 U	0.00250 U	NS	NS	NS	NS	0.00230 U	0.00230 U	0.00260 U	NS	NS	NS	
4-Chlorotoluene	mg/kg	160	NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00060 U	NS	NS	NS	
4-Methyl-2-pentanone	mg/kg	3300	NS	0.00290 U	0.00310 U	NS	NS	NS	NS	0.00280 U	0.00280 U	0.00320 U	NS	NS	NS	
Acetone	mg/kg	6100	NS	**0.03020**	0.01640 U	NS	NS	NS	NS	0.01510 U	**0.02300**	**0.02210**	NS	NS	NS	
Acrolein	mg/kg	0.1	NS	0.07250 U	0.07650 U	NS	NS	NS	NS	0.07070 U	0.06950 U	0.08010 U	NS	NS	NS	
Acrylonitrile	mg/kg	0.25	NS	0.00300 U	0.00320 U	NS	NS	NS	NS	0.00300 U	0.00290 U	0.00340 U	NS	NS	NS	
Benzene	mg/kg	1.2	NS	0.00050 U	0.00050 U	NS	NS	NS	NS	0.00050 U	0.00050 U	0.00050 U	NS	NS	NS	
Bromobenzene	mg/kg	29	NS	0.00090 U	0.00100 U	NS	NS	NS	NS	0.00090 U	0.00090 U	0.00100 U	NS	NS	NS	
Bromochloromethane	mg/kg	15	NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00060 U	NS	NS	NS	
Bromodichloromethane	mg/kg	0.29	NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00060 U	NS	NS	NS	
Bromoform	mg/kg	19	NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00050 U	0.00050 U	0.00060 U	NS	NS	NS	
Bromomethane	mg/kg	0.68	NS	0.00280 U	0.00300 U	NS	NS	NS	NS	0.00270 U	0.00270 U	0.00310 U	NS	NS	NS	
Carbon disulfide	mg/kg	77	NS	0.00060 U	0.00070 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS	
Carbon tetrachloride	mg/kg	0.65	NS	0.00080 U	0.00090 U	NS	NS	NS	NS	0.00080 U	0.00080 U	0.00090 U	NS	NS	NS	
Chlorobenzene	mg/kg	28	NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS	
Chloroethane	mg/kg	1400	NS	0.00140 U	0.00150 U	NS	NS	NS	NS	0.00140 U	0.00140 U	0.00160 U	NS	NS	NS	
Chloroform	mg/kg	0.32	NS	0.00050 U	0.00050 U	NS	NS	NS	NS	0.00050 U	0.00050 U	0.00050 U	NS	NS	NS	

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-60	GB-61	GB-62	GB-63	GB-64	GB-65	GB-66	GB-67	GB-68	GB-68	GB-69	GB-70	GB-71
			Sample Interval (feet bgs):	5-7	5-7	3-5	3-5	5-7	5-7	5-7	8-10	3-5	3-5D	3-5	5-7	3-5
			Sample Date:	7/21/2021	7/20/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021 Duplicate	7/19/2021	7/19/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Volatile Organic Compounds (continued)																
Chloromethane	mg/kg	11		NS	0.00080 U	0.00080 U	NS	NS	NS	NS	0.00080 U	0.00070 U	0.00090 U	NS	NS	NS
cis-1,2-Dichloroethene	mg/kg	16		NS	0.00040 U	0.00040 U	NS	NS	NS	NS	0.00040 U	0.00040 U	0.00050 U	NS	NS	NS
cis-1,3-Dichloropropene	mg/kg	0.224		NS	0.00050 U	0.00050 U	NS	NS	NS	NS	0.00050 U	0.00050 U	0.00060 U	NS	NS	NS
Cyclohexanone	mg/kg	2800		NS	0.01220 U	0.01280 U	NS	NS	NS	NS	0.01190 U	0.01170 U	0.01350 U	NS	NS	NS
Dibromochloromethane	mg/kg	8.3		NS	0.00060 U	0.00070 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS
Ethyl ether	mg/kg	1600		NS	0.00050 U	0.00060 U	NS	NS	NS	NS	0.00050 U	0.00050 U	0.00060 U	NS	NS	NS
Ethylbenzene	mg/kg	5.8		NS	0.00040 U	0.00050 U	NS	NS	NS	NS	0.00040 U	0.00040 U	0.00050 U	NS	NS	NS
Hexachlorobutadiene	mg/kg	1.2		NS	0.00080 U	0.00090 U	NS	NS	NS	NS	0.00080 U	0.00080 U	0.00090 U	NS	NS	NS
Iodomethane	mg/kg	NE		NS	0.00140 U	0.00150 U	NS	NS	NS	NS	0.00140 U	0.00140 U	0.00160 U	NS	NS	NS
Isopropylbenzene	mg/kg	190		NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00050 U	0.00050 U	0.00060 U	NS	NS	NS
m/p-Xylene	mg/kg	NE		NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS
Methyl acetate	mg/kg	7800		NS	0.00100 U	0.00110 U	NS	NS	NS	NS	0.00100 U	0.00100 U	0.00110 U	NS	NS	NS
Methyl tertiary-butyl ether	mg/kg	47		NS	0.00050 U	0.00050 U	NS	NS	NS	NS	0.00050 U	0.00040 U	0.00050 U	NS	NS	NS
Methylene bromide	mg/kg	2.4		NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00060 U	NS	NS	NS
Methylene chloride	mg/kg	35		NS	0.00260 U	0.00280 U	NS	NS	NS	NS	0.00260 U	0.00250 U	0.00290 U	NS	NS	NS
n-Butylbenzene	mg/kg	390		NS	0.00060 U	0.00070 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS
n-Heptane	mg/kg	2.2		NS	0.00430 U	0.00460 U	NS	NS	NS	NS	0.00420 U	0.00420 U	0.00480 U	NS	NS	NS
n-Hexane	mg/kg	61		NS	0.00070 U	0.00070 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS
n-Propylbenzene	mg/kg	380		NS	0.00080 U	0.00080 U	NS	NS	NS	NS	0.00080 U	0.00070 U	0.00090 U	NS	NS	NS
Naphthalene	mg/kg	3.8		NS	0.00080 U	0.00080 U	NS	NS	NS	NS	0.00080 U	0.00080 U	0.00090 U	NS	NS	NS
o-Xylene	mg/kg	65		NS	0.00040 U	0.00040 U	NS	NS	NS	NS	0.00040 U	0.00030 U	0.00040 U	NS	NS	NS
p-Isopropyltoluene	mg/kg	1100		NS	0.00070 U	0.00070 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS
sec-Butylbenzene	mg/kg	780		NS	0.00070 U	0.00070 U	NS	NS	NS	NS	0.00070 U	0.00070 U	0.00080 U	NS	NS	NS
Styrene	mg/kg	600		NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00050 U	0.00060 U	NS	NS	NS
tert-Butylbenzene	mg/kg	780		NS	0.00090 U	0.00090 U	NS	NS	NS	NS	0.00080 U	0.00080 U	0.00090 U	NS	NS	NS
Tetrachloroethene	mg/kg	8.1		NS	0.00040 U	0.00040 U	NS	NS	NS	NS	0.00040 U	0.00040 U	0.00040 U	NS	NS	NS
Tetrahydrofuran	mg/kg	1800		NS	0.00080 U	0.00080 UJ	NS	NS	NS	NS	0.00070 U	0.00070 U	0.00080 U	NS	NS	NS
Toluene	mg/kg	490		NS	0.00030 U	0.00040 U	NS	NS	NS	NS	0.00030 UJ	0.00030 UJ	0.00040 UJ	NS	NS	NS
trans-1,2-Dichloroethene	mg/kg	7.00		NS	0.00070 U	0.00070 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS
trans-1,3-Dichloropropene	mg/kg	0.224		NS	0.00040 U	0.00050 U	NS	NS	NS	NS	0.00040 U	0.00040 U	0.00050 U	NS	NS	NS
Trichloroethene	mg/kg	0.41		NS	0.00070 U	0.00070 U	NS	NS	NS	NS	0.00070 U	0.00070 U	0.00080 U	NS	NS	NS
Trichlorofluoromethane	mg/kg	2300		NS	0.00060 U	0.00060 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS
Vinyl acetate	mg/kg	91		NS	0.00050 U	0.00060 U	NS	NS	NS	NS	0.00050 U	0.00050 U	0.00060 U	NS	NS	NS
Vinyl chloride	mg/kg	0.059		NS	0.00060 U	0.00070 U	NS	NS	NS	NS	0.00060 U	0.00060 U	0.00070 U	NS	NS	NS
Xylenes, Total	mg/kg	58		NS	0.00110 U	0.00120 U	NS	NS	NS	NS	0.00110 U	0.00100 U	0.00120 U	NS	NS	NS

Table 5
Subsurface Soil Sample Results (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC	GFC
			Sample Point:	GB-60	GB-61	GB-62	GB-63	GB-64	GB-65	GB-66	GB-67	GB-68	GB-68	GB-69	GB-70	GB-71
			Sample Interval (feet bgs):	5-7	5-7	3-5	3-5	5-7	5-7	5-7	8-10	3-5	3-5D	3-5	5-7	3-5
			Sample Date:	7/21/2021	7/20/2021	7/20/2021	7/20/2021	7/19/2021	7/19/2021	7/21/2021	7/20/2021	7/20/2021	7/20/2021 Duplicate	7/19/2021	7/19/2021	7/19/2021
			Notes:													
Parameter	**Units**	**PAL[1]**														
Explosives																
1,3,5-Trinitrobenzene	mg/kg	220		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	mg/kg	16		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trinitrotoluene	mg/kg	2.6		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	mg/kg	1.7		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	mg/kg	0.36		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrotoluene	mg/kg	3.2		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitrotoluene	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrotoluene (4-NT)	mg/kg	1.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Amino-4,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Amino-2,6-Dinitrotoluene	mg/kg	0.77		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	mg/kg	390		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	mg/kg	5.1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitroglycerine	mg/kg	0.63		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentaerythritol tetranitrate (PETN)	mg/kg	13		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trinitro-1,3,5-triazinane (RDX)	mg/kg	8.3		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
mg/kg - milligrams per kilogram
NE - not established
NS - not sampled
PAL - project action level
U - compound was not detected
UJ - qualified as estimated at the reporting limit
UR - qualified as rejected at the reporting limit

Table 6
Subsurface Soil Sample Results (PCB Congeners)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	**GFC**				**GFC**				**GFC**			
			Sample Point:	**GB-01**				**GB-06**				**GB-11**			
			Sample Interval (feet bgs):	**8-10**				**3-5**				**3-5**			
			Sample Date:	**7/26/2021**				**7/23/2021**				**7/22/2021**			
			Notes:												
Parameter	**Units**	**TEF**	**PAL**[1]	**Concentration**	**LB**	**MB**	**UB**	**Concentration**	**LB**	**MB**	**UB**	**Concentration**	**LB**	**MB**	**UB**
Polychlorinated Biphenyl Congeners															
PCB-77	ng/kg	0.0001	38000	2.01 JU	0	0.00010	0.00020	1.76 U	0	0.00009	0.00018	1.77 U	0	0.00009	0.00018
PCB-81	ng/kg	0.0003	12000	1.43 U	0	0.00021	0.00043	2.40 U	0	0.00036	0.00072	1.78 U	0	0.00027	0.00053
PCB-105	ng/kg	0.00003	120000	6.57 JU	0	0.00010	0.00020	2.45 JU	0	0.00004	0.00007	1.94 JU	0	0.00003	0.00006
PCB-114	ng/kg	0.00003	120000	1.24 U	0	0.00002	0.00004	1.15 U	0	0.00002	0.00003	0.984 U	0	0.00001	0.00003
PCB-118	ng/kg	0.00003	120000	11.6 JU	0	0.00017	0.00035	4.25 JU	0	0.00006	0.00013	0.996 U	0	0.00001	0.00003
PCB-123	ng/kg	0.00003	120000	0.925 U	0	0.00001	0.00003	1.53 U	0	0.00002	0.00005	0.996 U	0	0.00001	0.00003
PCB-126	ng/kg	0.1	36	1.17 U	0	0.05850	0.11700	1.29 U	0	0.06450	0.12900	0.960 U	0	0.04800	0.09600
PCB-156/157	ng/kg	0.00003	120000	**2.05 J**	0.00006	0.00006	0.00006	1.83 JU	0	0.00003	0.00005	0.952 U	0	0.00001	0.00003
PCB-167	ng/kg	0.00003	120000	0.720 U	0	0.00001	0.00002	0.831 U	0	0.00001	0.00002	0.720 U	0	0.00001	0.00002
PCB-169	ng/kg	0.03	120	0.786 U	0	0.01179	0.02358	0.947 U	0	0.01421	0.02841	2.24 U	0	0.03360	0.06720
PCB-189	ng/kg	0.00003	130000	0.842 U	0	0.00001	0.00003	0.759 U	0	0.00001	0.00002	0.710 U	0	0.00001	0.00002
Total 2,3,7,8-TCDD TEQ Equivalent	ng/kg	NA	4.8		0.00006	0.07099	0.14193		0	0.07935	0.15869		0	0.08206	0.16413

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).
Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
LB - lower bound; where non detect TEQ equivalent concentration = 0
LOD - limit of detection
MB - medium bound; where non detect TEQ equivalent concentration = (LOD/2) * TEF
ng/kg - nanograms per kilogram
PAL - project action limit
PCB - polychlorinated biphenyl
TEF - toxicity equivalence factor
TEQ - toxicity equivalent
U - compound was not detected
UB - medium bound; where non detect TEQ equivalent concentration = LOD * TEF
2,3,7,8-TCDD - 2,3,7,8-tetrachlorodibenzo-p-dioxin

Table 6
Subsurface Soil Sample Results (PCB Congeners)
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	**GFC**				**GFC**				**GFC**			
			Sample Point:	**GB-24**				**GB-38**				**GB-54**			
			Sample Interval (feet bgs):	**3-5**				**3-5**				**2-4**			
			Sample Date:	**7/21/2021**				**7/21/2021**				**7/20/2021**			
			Notes:												
Parameter	**Units**	**TEF**	**PAL[1]**	**Concentration**	**LB**	**MB**	**UB**	**Concentration**	**LB**	**MB**	**UB**	**Concentration**	**LB**	**MB**	**UB**
Polychlorinated Biphenyl Congeners															
PCB-77	ng/kg	0.0001	38000	1.58 U	0	0.00008	0.00016	3.28 JU	0	0.00016	0.00033	2.69 UJ	0	0.00013	0.00027
PCB-81	ng/kg	0.0003	12000	1.27 U	0	0.00019	0.00038	2.27 U	0	0.00034	0.00068	1.45 U	0	0.00022	0.00044
PCB-105	ng/kg	0.00003	120000	1.11 U	0	0.00002	0.00003	3.71 JU	0	0.00006	0.00011	4.55 UJ	0	0.00007	0.00014
PCB-114	ng/kg	0.00003	120000	0.862 U	0	0.00001	0.00003	1.72 U	0	0.00003	0.00005	1.03 U	0	0.00002	0.00003
PCB-118	ng/kg	0.00003	120000	3.90 JU	0	0.00006	0.00012	6.92 JU	0	0.00010	0.00021	6.57 UJ	0	0.00010	0.00020
PCB-123	ng/kg	0.00003	120000	0.824 U	0	0.00001	0.00002	2.17 U	0	0.00003	0.00007	1.48 U	0	0.00002	0.00004
PCB-126	ng/kg	0.1	36	0.795 U	0	0.03975	0.07950	1.73 U	0	0.08650	0.17300	1.21 U	0	0.06050	0.12100
PCB-156/157	ng/kg	0.00003	120000	0.665 U	0	0.00001	0.00002	2.24 JU	0	0.00003	0.00007	0.880 U	0	0.00001	0.00003
PCB-167	ng/kg	0.00003	120000	0.494 U	0	0.00001	0.00001	0.722 U	0	0.00001	0.00002	0.818 U	0	0.00001	0.00002
PCB-169	ng/kg	0.03	120	0.495 U	0	0.00743	0.01485	0.662 U	0	0.00993	0.01986	0.931 U	0	0.01397	0.02793
PCB-189	ng/kg	0.00003	130000	0.409 U	0	0.00001	0.00001	0.74 U	0	0.00001	0.00002	0.662 U	0	0.00001	0.00002
Total 2,3,7,8-TCDD TEQ Equivalent	ng/kg	NA	4.8		0	0.04757	0.09514		0	0.09721	0.19442		0	0.07506	0.15011

Notes:
[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected
Highlighted - concentration exceeds screening level
bgs - below ground surface
GFC - Goodfellow Federal Complex
J - estimated value
JU - estimated result qualified as nondetect
LB - lower bound; where non detect TEQ equivalent concentration = 0
LOD - limit of detection
MB - medium bound; where non detect TEQ equivalent concentration = (LOD/2) * TEF
ng/kg - nanograms per kilogram
PAL - project action limit
PCB - polychlorinated biphenyl
TEF - toxicity equivalence factor
TEQ - toxicity equivalent
U - compound was not detected
UB - medium bound; where non detect TEQ equivalent concentration = LOD * TEF
2,3,7,8-TCDD - 2,3,7,8-tetrachlorodibenzo-p-dioxin

Table 7
Frequency of Detections in Surface Soil Samples (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Parent Samples	Frequency of Detections	Minimum Detected Concentration (mg/kg)	Location of Minimum Detection	Maximum Detected Concentration (mg/kg)	Location of Maximum Detection	PAL[1] (mg/kg)	Frequency of PAL Exceedances
Metals								
Antimony	70	0 / 70	NA	NA	NA	NA	10	0 / 70
Arsenic	70	70 / 70	2.9	GB-67/5-6	22.7	GB-53/0-2	12.3	5 / 70
Copper	70	70 / 70	8.6	GB-68/1-3	29.9	GB-69/2-3	310	0 / 70
Lead	70	70 / 70	7.6	GB-17/1-3	158	GB-10/1.5-2.5	400	0 / 70
Zinc	70	70 / 70	30.8	GB-48/3-5	173	GB-71/0-2	2300	0 / 70
Polychlorinated Biphenyls								
Aroclor 1016	67	0 / 67	NA	NA	NA	NA	0.41	0 / 67
Aroclor 1221	67	0 / 67	NA	NA	NA	NA	0.20	0 / 67
Aroclor 1232	67	0 / 67	NA	NA	NA	NA	0.17	0 / 67
Aroclor 1242	67	0 / 67	NA	NA	NA	NA	0.23	0 / 67
Aroclor 1248	67	0 / 67	NA	NA	NA	NA	0.23	0 / 67
Aroclor 1254	67	0 / 67	NA	NA	NA	NA	0.12	0 / 67
Aroclor 1260	67	10 / 67	0.0083 J	GB-50/0-2	0.0525	GB-23/2.5-3.5	0.24	0 / 67
Polycyclic Aromatic Hydrocarbons								
Acenaphthene	53	23 / 53	0.0015 J	GB-06/2-3	1.23	GB-45/0-2	360	0 / 53
Acenaphthylene	53	15 / 53	0.0027 J	GB-38/0-2	0.0684	GB-45/0-2	4180	0 / 53
Anthracene	53	34 / 53	0.0034 J	GB-57/3.5-5.5	2.88	GB-45/0-2	1800	0 / 53
Benzo(a)anthracene	53	42 / 53	0.0035 J	GB-43/3-5	7.60	GB-45/0-2	1.1	3 / 53
Benzo(a)pyrene	53	39 / 53	0.0022 J	GB-41/4-6	6.31	GB-45/0-2	0.11	16 / 53
Benzo(b)fluoranthene	53	47 / 53	0.0023 J	GB-70/3-5	10.1	GB-45/0-2	1.1	5 / 53
Benzo(g,h,i)perylene	53	41 / 53	0.0022 J	GB-43/3-5	3.63	GB-45/0-2	1720	0 / 53
Benzo(k)fluoranthene	53	42 / 53	0.0023 J	GB-08/2.5-3.5	3.58	GB-45/0-2	11	0 / 53
Chrysene	53	44 / 53	0.0022 J	GB-39/5-6	7.59	GB-45/0-2	110	0 / 53
Dibenzo(a,h)anthracene	53	23 / 53	0.0026 J	GB-52/2-3	0.7290	GB-45/0-2	0.11	4 / 53
Fluoranthene	53	46 / 53	0.0044	GB-48/3-5	17.8	GB-45/0-2	240	0 / 53
Fluorene	53	24 / 53	0.0200	GB-02/2-3	1.28	GB-45/0-2	240	0 / 53
Indeno(1,2,3-cd)pyrene	53	40 / 53	0.0023 J	GB-08/2.5-3.5	2.88	GB-45/0-2	1.1	2 / 53
Naphthalene	53	15 / 53	0.0019 J	GB-06/2-3	0.2540	GB-45/0-2	3.8	0 / 53
Phenanthrene	53	45 / 53	0.0041	GB-48/3-5	17.2	GB-45/0-2	2170	0 / 53
Pyrene	53	47 / 53	0.0036 J	GB-56/3-5	15.2	GB-45/0-2	180	0 / 53

Table 7
Frequency of Detections in Surface Soil Samples (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Parent Samples	Frequency of Detections	Minimum Detected Concentration (mg/kg)	Location of Minimum Detection	Maximum Detected Concentration (mg/kg)	Location of Maximum Detection	PAL[1] (mg/kg)	Frequency of PAL Exceedances
Total Petroleum Hydrocarbons								
Gasoline Range Organics	11	0 / 11	NA	NA	NA	NA	385	0 / 11
Diesel Range Organics	11	10 / 11	2.0 J	GB-67/5-6	31.0	GB-03/1-3	4150	0 / 11
Oil Range Organics	11	7 / 11	11.2 J	GB-02/2-3	66.5	GB-62/0-2	124000	0 / 11
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	11	0 / 11	NA	NA	NA	NA	2	0 / 11
1,1,1-Trichloroethane	11	0 / 11	NA	NA	NA	NA	810	0 / 11
1,1,2,2-Tetrachloroethane	11	0 / 11	NA	NA	NA	NA	0.6	0 / 11
1,1,2-Trichloro-1,2,2-trifluoroethane	11	0 / 11	NA	NA	NA	NA	670	0 / 11
1,1,2-Trichloroethane	11	0 / 11	NA	NA	NA	NA	0.15	0 / 11
1,1-Dichloroethane	11	0 / 11	NA	NA	NA	NA	3.6	0 / 11
1,1-Dichloroethene	11	0 / 11	NA	NA	NA	NA	23	0 / 11
1,1-Dichloropropene	11	0 / 11	NA	NA	NA	NA	NE	0 / 11
1,2,3-Trichlorobenzene	11	0 / 11	NA	NA	NA	NA	6.3	0 / 11
1,2,3-Trichloropropane	11	0 / 11	NA	NA	NA	NA	0.0051	0 / 11
1,2,3-Trimethylbenzene	11	0 / 11	NA	NA	NA	NA	34	0 / 11
1,2,4-Trichlorobenzene	11	0 / 11	NA	NA	NA	NA	5.8	0 / 11
1,2,4-Trimethylbenzene	11	0 / 11	NA	NA	NA	NA	30	0 / 11
1,2-Dibromo-3-chloropropane	11	0 / 11	NA	NA	NA	NA	0.01	0 / 11
1,2-Dibromoethane	11	0 / 11	NA	NA	NA	NA	0.036	0 / 11
1,2-Dichlorobenzene	11	0 / 11	NA	NA	NA	NA	180	0 / 11
1,2-Dichloroethane	11	0 / 11	NA	NA	NA	NA	0.46	0 / 11
1,2-Dichloroethene	11	0 / 11	NA	NA	NA	NA	16	0 / 11
1,2-Dichloropropane	11	0 / 11	NA	NA	NA	NA	1.6	0 / 11
1,3,5-Trimethylbenzene	11	0 / 11	NA	NA	NA	NA	27	0 / 11
1,3-Dichlorobenzene	11	0 / 11	NA	NA	NA	NA	148	0 / 11
1,3-Dichloropropane	11	0 / 11	NA	NA	NA	NA	160	0 / 11
1,4-Dichlorobenzene	11	0 / 11	NA	NA	NA	NA	2.6	0 / 11
2,2-Dichloropropane	11	0 / 11	NA	NA	NA	NA	NE	0 / 11
2-Butanone	11	4 / 11	0.00500 J	GB-54/0-2	0.01970	GB-62/0-2	2700	0 / 11
2-Chlorotoluene	11	0 / 11	NA	NA	NA	NA	160	0 / 11
2-Hexanone	11	0 / 11	NA	NA	NA	NA	20	0 / 11
4-Chlorotoluene	11	0 / 11	NA	NA	NA	NA	160	0 / 11
4-Methyl-2-pentanone	11	0 / 11	NA	NA	NA	NA	3300	0 / 11

Table 7
Frequency of Detections in Surface Soil Samples (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Parent Samples	Frequency of Detections	Minimum Detected Concentration (mg/kg)	Location of Minimum Detection	Maximum Detected Concentration (mg/kg)	Location of Maximum Detection	PAL[1] (mg/kg)	Frequency of PAL Exceedances
Volatile Organic Compounds (continued)								
Acetone	11	4 / 11	0.02150 J	GB-54/0-2	0.07480	GB-62/0-2	6100	0 / 11
Acrolein	11	0 / 11	NA	NA	NA	NA	0.1	0 / 11
Acrylonitrile	11	0 / 11	NA	NA	NA	NA	0.25	0 / 11
Benzene	11	1 / 11	0.00054 J	GB-03/2-3	0.00054 J	GB-03/2-3	1.2	0 / 11
Bromobenzene	11	0 / 11	NA	NA	NA	NA	29	0 / 11
Bromochloromethane	11	0 / 11	NA	NA	NA	NA	15	0 / 11
Bromodichloromethane	11	0 / 11	NA	NA	NA	NA	0.29	0 / 11
Bromoform	11	0 / 11	NA	NA	NA	NA	19	0 / 11
Bromomethane	11	0 / 11	NA	NA	NA	NA	0.68	0 / 11
Carbon disulfide	11	2 / 11	0.00160 J	GB-03/2-3	0.00200 J	GB-61/3-5	77	0 / 11
Carbon tetrachloride	11	0 / 11	NA	NA	NA	NA	0.65	0 / 11
Chlorobenzene	11	0 / 11	NA	NA	NA	NA	28	0 / 11
Chloroethane	11	0 / 11	NA	NA	NA	NA	1400	0 / 11
Chloroform	11	0 / 11	NA	NA	NA	NA	0.32	0 / 11
Chloromethane	11	0 / 11	NA	NA	NA	NA	11	0 / 11
cis-1,2-Dichloroethene	11	0 / 11	NA	NA	NA	NA	16	0 / 11
cis-1,3-Dichloropropene	11	0 / 11	NA	NA	NA	NA	0.224	0 / 11
Cyclohexanone	11	0 / 11	NA	NA	NA	NA	2800	0 / 11
Dibromochloromethane	11	0 / 11	NA	NA	NA	NA	8.3	0 / 11
Ethyl ether	11	0 / 11	NA	NA	NA	NA	1600	0 / 11
Ethylbenzene	11	0 / 11	NA	NA	NA	NA	5.8	0 / 11
Hexachlorobutadiene	11	0 / 11	NA	NA	NA	NA	1.2	0 / 11
Iodomethane	11	0 / 11	NA	NA	NA	NA	NE	0 / 11
Isopropylbenzene	11	0 / 11	NA	NA	NA	NA	190	0 / 11
m/p-Xylene	11	0 / 11	NA	NA	NA	NA	NE	0 / 11
Methyl acetate	11	0 / 11	NA	NA	NA	NA	7800	0 / 11
Methyl tertiary-butyl ether	11	0 / 11	NA	NA	NA	NA	47	0 / 11
Methylene bromide	11	0 / 11	NA	NA	NA	NA	2.4	0 / 11
Methylene chloride	11	0 / 11	NA	NA	NA	NA	35	0 / 11
n-Butylbenzene	11	0 / 11	NA	NA	NA	NA	390	0 / 11
n-Heptane	11	0 / 11	NA	NA	NA	NA	2.2	0 / 11
n-Hexane	11	0 / 11	NA	NA	NA	NA	61	0 / 11
n-Propylbenzene	11	0 / 11	NA	NA	NA	NA	380	0 / 11

Table 7
Frequency of Detections in Surface Soil Samples (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Parent Samples	Frequency of Detections	Minimum Detected Concentration (mg/kg)	Location of Minimum Detection	Maximum Detected Concentration (mg/kg)	Location of Maximum Detection	PAL[1] (mg/kg)	Frequency of PAL Exceedances
Volatile Organic Compounds (continued)								
Naphthalene	11	0 / 11	NA	NA	NA	NA	3.8	0 / 11
o-Xylene	11	0 / 11	NA	NA	NA	NA	65	0 / 11
p-Isopropyltoluene	11	0 / 11	NA	NA	NA	NA	1100	0 / 11
sec-Butylbenzene	11	0 / 11	NA	NA	NA	NA	780	0 / 11
Styrene	11	0 / 11	NA	NA	NA	NA	600	0 / 11
tert-Butylbenzene	11	0 / 11	NA	NA	NA	NA	780	0 / 11
Tetrachloroethene	11	0 / 11	NA	NA	NA	NA	8.1	0 / 11
Tetrahydrofuran	11	0 / 11	NA	NA	NA	NA	1800	0 / 11
Toluene	11	2 / 11	0.00030 J	GB-03/1-3	0.00034 J	GB-07/2.5-3.5	490	0 / 11
trans-1,2-Dichloroethene	11	0 / 11	NA	NA	NA	NA	7	0 / 11
trans-1,3-Dichloropropene	11	0 / 11	NA	NA	NA	NA	0.224	0 / 11
Trichloroethene	11	0 / 11	NA	NA	NA	NA	0.41	0 / 11
Trichlorofluoromethane	11	0 / 11	NA	NA	NA	NA	2300	0 / 11
Vinyl acetate	11	0 / 11	NA	NA	NA	NA	91	0 / 11
Vinyl chloride	11	0 / 11	NA	NA	NA	NA	0.059	0 / 11
Xylenes, Total	11	0 / 11	NA	NA	NA	NA	58	0 / 11
Explosives								
1,3,5-Trinitrobenzene	4	0 / 4	NA	NA	NA	NA	22	0 / 4
1,3-Dinitrobenzene	4	0 / 4	NA	NA	NA	NA	0.63	0 / 4
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	4	0 / 4	NA	NA	NA	NA	16	0 / 4
2,4,6-Trinitrotoluene	4	0 / 4	NA	NA	NA	NA	2.6	0 / 4
2,4-Dinitrotoluene	4	0 / 4	NA	NA	NA	NA	1.7	0 / 4
2,6-Dinitrotoluene	4	0 / 4	NA	NA	NA	NA	0.36	0 / 4
2-Nitrotoluene	4	0 / 4	NA	NA	NA	NA	3.2	0 / 4
3-Nitrotoluene	4	0 / 4	NA	NA	NA	NA	0.63	0 / 4
4-Nitrotoluene (4-NT)	4	0 / 4	NA	NA	NA	NA	1.1	0 / 4
2-Amino-4,6-Dinitrotoluene	4	0 / 4	NA	NA	NA	NA	0.77	0 / 4
4-Amino-2,6-Dinitrotoluene	4	0 / 4	NA	NA	NA	NA	0.77	0 / 4
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	4	0 / 4	NA	NA	NA	NA	390	0 / 4
Nitrobenzene	4	0 / 4	NA	NA	NA	NA	5.1	0 / 4
Nitroglycerine	4	0 / 4	NA	NA	NA	NA	0.63	0 / 4
Pentaerythritol tetranitrate (PETN)	4	0 / 4	NA	NA	NA	NA	13	0 / 4
1,3,5-Trinitro-1,3,5-triazinane (RDX)	4	0 / 4	NA	NA	NA	NA	8.3	0 / 4

Table 7
Frequency of Detections in Surface Soil Samples (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Parent Samples	Frequency of Detections	Minimum Detected Concentration (mg/kg)	Location of Minimum Detection	Maximum Detected Concentration (mg/kg)	Location of Maximum Detection	PAL[1] (mg/kg)	Frequency of PAL Exceedances

Notes:

[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

J - estimated value

mg/kg - milligrams per kilogram

NA - not applicable

PAL - project action level

Table 8
Frequency of Detections in Surface Soil Samples (PCB Congeners)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Samples	Frequency of Detections	Minimum Detected Concentration (ng/kg)	Location of Minimum Detection	Minimum LB Total 2,3,7,8-TCDD TEQ (ng/kg)	Minimum MB Total 2,3,7,8-TCDD TEQ (ng/kg)	Minimum UB Total 2,3,7,8-TCDD TEQ (ng/kg)	Maximum Detected Concentration (ng/kg)	Location of Maximum Detection	Maximum LB Total 2,3,7,8-TCDD TEQ (ng/kg)	Maximum MB Total 2,3,7,8-TCDD TEQ (ng/kg)	Maximum UB Total 2,3,7,8-TCDD TEQ (ng/kg)	Individual PALs (ng/kg)	Frequency of Individual PAL Exceedances	Total 2,3,7,8-TCDD TEQ PAL (ng/kg)	Frequency of Total 2,3,7,8-TCDD TEQ Exceedances
Polychlorinated Biphenyl Congeners																
PCB-77	8	0 / 8	NA	NA	0 (GB-10/1.5-2.5) (GB-19/0-2) (GB-28/1.5-2.5) (GB-30/3-4) (GB-64/3-4)	0.06483 (GB-64/3-4)	0.12967 (GB-64/3-4)	NA	NA	0.24574 (GB-22/1-3)	0.32060 (GB-10/1.5-2.5)	0.64119 (GB-10/1.5-2.5)	38000	0 / 8	4.8	0 / 8
PCB-81	8	0 / 8	NA	NA				NA	NA				12000	0 / 8		0 / 8
PCB-105	8	0 / 8	NA	NA				NA	NA				120000	0 / 8		0 / 8
PCB-114	8	0 / 8	NA	NA				NA	NA				120000	0 / 8		0 / 8
PCB-118	8	1 / 8	267	GB-22/1-3				267	GB-22/1-3				120000	0 / 8		0 / 8
PCB-123	8	1 / 8	1.55 J	GB-71/0-2				1.55 J	GB-71/0-2				120000	0 / 8		0 / 8
PCB-126	8	1 / 8	2.25 J	GB-22/1-3				2.25 J	GB-22/1-3				36	0 / 8		0 / 8
PCB-156/157	8	2 / 8	3.01 J	GB-46/2-4				261	GB-22/1-3				120000	0 / 8		0 / 8
PCB-167	8	3 / 8	0.952 J	GB-64/3-4				100	GB-22/1-3				120000	0 / 8		0 / 8
PCB-169	8	0 / 8	NA	NA				NA	NA				120	0 / 8		0 / 8
PCB-189	8	2 / 8	1.89 J	GB-71/0-2				63.5	GB-22/1-3				130000	0 / 8		0 / 8

Notes:

[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

J - estimated value

LB - lower bound; where non detect TEQ equivalent concentration = 0

LOD - limit of detection

MB - medium bound; where non detect TEQ equivalent concentration = (LOD/2) * TEF

NA - not applicable

ng/kg - nanograms per kilogram

PAL - project action level

PCB - polychlorinated biphenyl

TEF - toxicity equivalence factor

TEQ - toxicity equivalent

UB - medium bound; where non detect TEQ equivalent concentration = LOD * TEF

2,3,7,8-TCDD - 2,3,7,8-tetrachlorodibenzo-p-dioxin

Table 9
Frequency of Detections in Subsurface Soil Samples (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Samples	Frequency of Detections	Minimum Detected Concentration (mg/kg)	Location of Minimum Detection	Maximum Detected Concentration (mg/kg)	Location of Maximum Detection	PAL[1] (mg/kg)	Frequency of PAL Exceedances
Metals								
Antimony	71	1 / 71	1.8	GB-64/5-7	1.8	GB-64/5-7	10	0 / 71
Arsenic	71	71 / 71	2.4	GB-43/5-7	80.3	GB-64/5-7	12.3	9 / 71
Copper	71	71 / 71	10.1	GB-43/5-7	85.6	GB-64/5-7	310	0 / 71
Lead	71	71 / 71	7.2	GB-27/3-5 GB-43/5-7	102	GB-01/11-13	400	0 / 71
Zinc	71	71 / 71	4.7	GB-18/5-7	104	GB-64/5-7	2300	0 / 71
Polychlorinated Biphenyls								
Aroclor 1016	68	0 / 68	NA	NA	NA	NA	0.41	0 / 68
Aroclor 1221	68	0 / 68	NA	NA	NA	NA	0.20	0 / 68
Aroclor 1232	68	0 / 68	NA	NA	NA	NA	0.17	0 / 68
Aroclor 1242	68	0 / 68	NA	NA	NA	NA	0.23	0 / 68
Aroclor 1248	68	0 / 68	NA	NA	NA	NA	0.23	0 / 68
Aroclor 1254	68	1 / 68	0.0090 J	GB-03/4-6	0.0090 J	GB-03/4-6	0.12	0 / 68
Aroclor 1260	68	1 / 68	0.0719	GB-22/3-5	0.0719	GB-22/3-5	0.24	0 / 68
Polycyclic Aromatic Hydrocarbons								
Acenaphthene	54	7 / 54	0.0024 J	GB-21/3-5	0.9310	GB-13/3-5	360	0 / 54
Acenaphthylene	54	3 / 54	0.0030 J	GB-44/5-7	0.7850	GB-13/3-5	4180	0 / 54
Anthracene	54	17 / 54	0.0022 J	GB-51/3-5	0.5750	GB-03/4-6	1800	0 / 54
Benzo(a)anthracene	54	28 / 54	0.0025 J	GB-43/5-7	1.00	GB-03/4-6	1.1	0 / 54
Benzo(a)pyrene	54	24 / 54	0.0038 J	GB-57/6-8	0.8210	GB-03/4-6	0.11	3 / 54
Benzo(b)fluoranthene	54	35 / 54	0.0023 J	GB-35/3-5	1.36	GB-03/4-6	1.1	1 / 54
Benzo(g,h,i)perylene	54	25 / 54	0.0028 J	GB-29/3-5	0.4440	GB-03/4-6	1720	0 / 54
Benzo(k)fluoranthene	54	24 / 54	0.0026 J	GB-09/4-6	0.6020	GB-13/3-5	11	0 / 54
Chrysene	54	32 / 54	0.0022 J	GB-06/3-5	0.9240	GB-03/4-6	110	0 / 54
Dibenzo(a,h)anthracene	54	7 / 54	0.0027 J	GB-22/3-5	0.3050	GB-13/3-5	0.11	2 / 54
Fluoranthene	54	37 / 54	0.0031 J	GB-56/5-7 GB-70/5-7	2.71	GB-03/4-6	240	0 / 54
Fluorene	54	10 / 54	0.0022 J	GB-71/3-5	0.2490	GB-03/4-6	240	0 / 54
Indeno(1,2,3-cd)pyrene	54	25 / 54	0.0023 J	GB-29/3-5	0.3840	GB-03/4-6	1.1	0 / 54
Naphthalene	54	9 / 54	0.0030 J	GB-40/11-13	0.2350	GB-03/4-6	3.8	0 / 54
Phenanthrene	54	33 / 54	0.0039 J	GB-06/3-5	2.40	GB-03/4-6	2170	0 / 54
Pyrene	54	39 / 54	0.0022 J	GB-71/3-5	2.08	GB-03/4-6	180	0 / 54

Table 9
Frequency of Detections in Subsurface Soil Samples (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Samples	Frequency of Detections	Minimum Detected Concentration (mg/kg)	Location of Minimum Detection	Maximum Detected Concentration (mg/kg)	Location of Maximum Detection	PAL[1] (mg/kg)	Frequency of PAL Exceedances
Total Petroleum Hydrocarbons								
Gasoline Range Organics	12	0 / 12	NA	NA	NA	NA	385	0 / 12
Diesel Range Organics	12	10 / 12	1.8 J	GB-55/2-4	85.0	GB-03/4-6	4150	0 / 12
Oil Range Organics	12	7 / 12	8.5 J	GB-14/3-5	298	GB-03/4-6	124000	0 / 12
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	12	0 / 12	NA	NA	NA	NA	2	0 / 12
1,1,1-Trichloroethane	12	0 / 12	NA	NA	NA	NA	810	0 / 12
1,1,2,2-Tetrachloroethane	12	0 / 12	NA	NA	NA	NA	0.6	0 / 12
1,1,2-Trichloro-1,2,2-trifluoroethane	12	0 / 12	NA	NA	NA	NA	670	0 / 12
1,1,2-Trichloroethane	12	0 / 12	NA	NA	NA	NA	0.15	0 / 12
1,1-Dichloroethane	12	0 / 12	NA	NA	NA	NA	3.6	0 / 12
1,1-Dichloroethene	12	0 / 12	NA	NA	NA	NA	23	0 / 12
1,1-Dichloropropene	12	0 / 12	NA	NA	NA	NA	NE	0 / 12
1,2,3-Trichlorobenzene	12	2 / 12	0.00130 J	GB-01/8-10	0.00190 J	GB-02/8-9	6.3	0 / 12
1,2,3-Trichloropropane	12	0 / 12	NA	NA	NA	NA	0.0051	0 / 12
1,2,3-Trimethylbenzene	12	0 / 12	NA	NA	NA	NA	34	0 / 12
1,2,4-Trichlorobenzene	12	2 / 12	0.00092 J	GB-01/8-10	0.00140 J	GB-02/8-9	5.8	0 / 12
1,2,4-Trimethylbenzene	12	0 / 12	NA	NA	NA	NA	30	0 / 12
1,2-Dibromo-3-chloropropane	12	0 / 12	NA	NA	NA	NA	0.01	0 / 12
1,2-Dibromoethane	12	0 / 12	NA	NA	NA	NA	0.036	0 / 12
1,2-Dichlorobenzene	12	0 / 12	NA	NA	NA	NA	180	0 / 12
1,2-Dichloroethane	12	0 / 12	NA	NA	NA	NA	0.46	0 / 12
1,2-Dichloroethene	12	0 / 12	NA	NA	NA	NA	16	0 / 12
1,2-Dichloropropane	12	0 / 12	NA	NA	NA	NA	1.6	0 / 12
1,3,5-Trimethylbenzene	12	0 / 12	NA	NA	NA	NA	27	0 / 12
1,3-Dichlorobenzene	12	0 / 12	NA	NA	NA	NA	148	0 / 12
1,3-Dichloropropane	12	0 / 12	NA	NA	NA	NA	160	0 / 12
1,4-Dichlorobenzene	12	0 / 12	NA	NA	NA	NA	2.6	0 / 12
2,2-Dichloropropane	12	0 / 12	NA	NA	NA	NA	NE	0 / 12
2-Butanone	12	5 / 12	0.00460 J	GB-61/5-7	0.04480	GB-01/11-13	2700	0 / 12
2-Chlorotoluene	12	0 / 12	NA	NA	NA	NA	160	0 / 12
2-Hexanone	12	0 / 12	NA	NA	NA	NA	20	0 / 12
4-Chlorotoluene	12	0 / 12	NA	NA	NA	NA	160	0 / 12
4-Methyl-2-pentanone	12	0 / 12	NA	NA	NA	NA	3300	0 / 12

Table 9
Frequency of Detections in Subsurface Soil Samples (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Samples	Frequency of Detections	Minimum Detected Concentration (mg/kg)	Location of Minimum Detection	Maximum Detected Concentration (mg/kg)	Location of Maximum Detection	PAL[1] (mg/kg)	Frequency of PAL Exceedances
Volatile Organic Compounds (continued)								
Acetone	12	7 / 12	0.01670 J	GB-02/8-9	0.24800	GB-01/11-13	6100	0 / 12
Acrolein	12	0 / 12	NA	NA	NA	NA	0.1	0 / 12
Acrylonitrile	12	0 / 12	NA	NA	NA	NA	0.25	0 / 12
Benzene	12	1 / 12	0.00570 J	GB-01/11-13	0.00570 J	GB-01/11-13	1.2	0 / 12
Bromobenzene	12	0 / 12	NA	NA	NA	NA	29	0 / 12
Bromochloromethane	12	0 / 12	NA	NA	NA	NA	15	0 / 12
Bromodichloromethane	12	0 / 12	NA	NA	NA	NA	0.29	0 / 12
Bromoform	12	0 / 12	NA	NA	NA	NA	19	0 / 12
Bromomethane	12	0 / 12	NA	NA	NA	NA	0.68	0 / 12
Carbon disulfide	12	4 / 12	0.00140 J	GB-03/4-6	0.00570 J	GB-01/11-13	77	0 / 12
Carbon tetrachloride	12	0 / 12	NA	NA	NA	NA	0.65	0 / 12
Chlorobenzene	12	0 / 12	NA	NA	NA	NA	28	0 / 12
Chloroethane	12	0 / 12	NA	NA	NA	NA	1400	0 / 12
Chloroform	12	0 / 12	NA	NA	NA	NA	0.32	0 / 12
Chloromethane	12	0 / 12	NA	NA	NA	NA	11	0 / 12
cis-1,2-Dichloroethene	12	0 / 12	NA	NA	NA	NA	16	0 / 12
cis-1,3-Dichloropropene	12	0 / 12	NA	NA	NA	NA	0.224	0 / 12
Cyclohexanone	12	0 / 12	NA	NA	NA	NA	2800	0 / 12
Dibromochloromethane	12	0 / 12	NA	NA	NA	NA	8.3	0 / 12
Ethyl ether	12	0 / 12	NA	NA	NA	NA	1600	0 / 12
Ethylbenzene	12	0 / 12	NA	NA	NA	NA	5.8	0 / 12
Hexachlorobutadiene	12	0 / 12	NA	NA	NA	NA	1.2	0 / 12
Iodomethane	12	0 / 12	NA	NA	NA	NA	NE	0 / 12
Isopropylbenzene	12	0 / 12	NA	NA	NA	NA	190	0 / 12
m/p-Xylene	12	0 / 12	NA	NA	NA	NA	NE	0 / 12
Methyl acetate	12	0 / 12	NA	NA	NA	NA	7800	0 / 12
Methyl tertiary-butyl ether	12	0 / 12	NA	NA	NA	NA	47	0 / 12
Methylene bromide	12	0 / 12	NA	NA	NA	NA	2.4	0 / 12
Methylene chloride	12	0 / 12	NA	NA	NA	NA	35	0 / 12
n-Butylbenzene	12	0 / 12	NA	NA	NA	NA	390	0 / 12
n-Heptane	12	0 / 12	NA	NA	NA	NA	2.2	0 / 12
n-Hexane	12	0 / 12	NA	NA	NA	NA	61	0 / 12
n-Propylbenzene	12	NA	NA	NA	NA	NA	380	0 / 12

Table 9
Frequency of Detections in Subsurface Soil Samples (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Samples	Frequency of Detections	Minimum Detected Concentration (mg/kg)	Location of Minimum Detection	Maximum Detected Concentration (mg/kg)	Location of Maximum Detection	PAL[1] (mg/kg)	Frequency of PAL Exceedances
Volatile Organic Compounds (continued)								
Naphthalene	12	3 / 12	0.00330 J	GB-01/8-10	0.01390	GB-07/7-9	3.8	0 / 12
o-Xylene	12	0 / 12	NA	NA	NA	NA	65	0 / 12
p-Isopropyltoluene	12	2 / 12	0.00077 J	GB-02/8-9	0.00140 J	GB-07/7-9	1100	0 / 12
sec-Butylbenzene	12	0 / 12	NA	NA	NA	NA	780	0 / 12
Styrene	12	0 / 12	NA	NA	NA	NA	600	0 / 12
tert-Butylbenzene	12	0 / 12	NA	NA	NA	NA	780	0 / 12
Tetrachloroethene	12	0 / 12	NA	NA	NA	NA	8.1	0 / 12
Tetrahydrofuran	12	0 / 12	NA	NA	NA	NA	1800	0 / 12
Toluene	12	0 / 12	NA	NA	NA	NA	490	0 / 12
trans-1,2-Dichloroethene	12	0 / 12	NA	NA	NA	NA	7	0 / 12
trans-1,3-Dichloropropene	12	0 / 12	NA	NA	NA	NA	0.224	0 / 12
Trichloroethene	12	0 / 12	NA	NA	NA	NA	0.41	0 / 12
Trichlorofluoromethane	12	0 / 12	NA	NA	NA	NA	2300	0 / 12
Vinyl acetate	12	0 / 12	NA	NA	NA	NA	91	0 / 12
Vinyl chloride	12	0 / 12	NA	NA	NA	NA	0.059	0 / 12
Xylenes, Total	12	0 / 12	NA	NA	NA	NA	58	0 / 12
Explosives								
1,3,5-Trinitrobenzene	4	0 / 4	NA	NA	NA	NA	22	0 / 4
1,3-Dinitrobenzene	4	0 / 4	NA	NA	NA	NA	0.63	0 / 4
2,4,6-Trinitrophenylmethylnitramine (Tetryl)	4	0 / 4	NA	NA	NA	NA	16	0 / 4
2,4,6-Trinitrotoluene	4	0 / 4	NA	NA	NA	NA	2.6	0 / 4
2,4-Dinitrotoluene	4	0 / 4	NA	NA	NA	NA	1.7	0 / 4
2,6-Dinitrotoluene	4	0 / 4	NA	NA	NA	NA	0.36	0 / 4
2-Nitrotoluene	4	0 / 4	NA	NA	NA	NA	3.2	0 / 4
3-Nitrotoluene	4	0 / 4	NA	NA	NA	NA	0.63	0 / 4
4-Nitrotoluene (4-NT)	4	0 / 4	NA	NA	NA	NA	1.1	0 / 4
2-Amino-4,6-Dinitrotoluene	4	0 / 4	NA	NA	NA	NA	0.77	0 / 4
4-Amino-2,6-Dinitrotoluene	4	0 / 4	NA	NA	NA	NA	0.77	0 / 4
1,3,5,7-Tetranitro-1,3,5,7-tetrazocane (HMX)	4	0 / 4	NA	NA	NA	NA	390	0 / 4
Nitrobenzene	4	0 / 4	NA	NA	NA	NA	5.1	0 / 4
Nitroglycerine	4	0 / 4	NA	NA	NA	NA	0.63	0 / 4
Pentaerythritol tetranitrate (PETN)	4	0 / 4	NA	NA	NA	NA	13	0 / 4
1,3,5-Trinitro-1,3,5-triazinane (RDX)	4	0 / 4	NA	NA	NA	NA	8.3	0 / 4

Table 9
Frequency of Detections in Subsurface Soil Samples (Metals, PCBs, PAHs, TPH, VOCs, and Explosives)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Samples	Frequency of Detections	Minimum Detected Concentration (mg/kg)	Location of Minimum Detection	Maximum Detected Concentration (mg/kg)	Location of Maximum Detection	PAL[1] (mg/kg)	Frequency of PAL Exceedances

Notes:

[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

J - estimated value

mg/kg - milligrams per kilogram

NA - not applicable

PAL - project action level

Table 10
Frequency of Detections in Subsurface Soil Samples (PCB Congeners)
Goodfellow Federal Complex
St. Louis, Missouri

Parameter	Number of Samples	Frequency of Detections	Minimum Detected Concentration (ng/kg)	Location of Minimum Detection	Minimum LB Total 2,3,7,8-TCDD TEQ (ng/kg)	Minimum MB Total 2,3,7,8-TCDD TEQ (ng/kg)	Minimum UB Total 2,3,7,8-TCDD TEQ (ng/kg)	Maximum Detected Concentration (ng/kg)	Location of Maximum Detection	Maximum LB Total 2,3,7,8-TCDD TEQ (ng/kg)	Maximum MB Total 2,3,7,8-TCDD TEQ (ng/kg)	Maximum UB Total 2,3,7,8-TCDD TEQ (ng/kg)	Individual PALs (ng/kg)	Frequency of Individual PAL Exceedances	Total 2,3,7,8-TCDD TEQ PAL (ng/kg)	Frequency of Total 2,3,7,8-TCDD TEQ Exceedances
Polychlorinated Biphenyl Congeners																
PCB-77	6	0 / 6	NA	NA	0 (GB-06/3-5) (GB-11/3-5) (GB-24/3-5) (GB-38/3-5) (GB-54/2-4)	0.04757 (GB-24/3-5)	0.09514 (GB-24/3-5)	NA	NA	0.00006 (GB-01/8-10)	0.09721 (GB-38/3-5)	0.19442 (GB-38/3-5)	38000	0 / 6	4.8	0 / 6
PCB-81	6	0 / 6	NA	NA				NA	NA				12000	0 / 6		0 / 6
PCB-105	6	0 / 6	NA	NA				NA	NA				120000	0 / 6		0 / 6
PCB-114	6	0 / 6	NA	NA				NA	NA				120000	0 / 6		0 / 6
PCB-118	6	0 / 6	NA	NA				NA	NA				120000	0 / 6		0 / 6
PCB-123	6	0 / 6	NA	NA				NA	NA				120000	0 / 6		0 / 6
PCB-126	6	0 / 6	NA	NA				NA	NA				36	0 / 6		0 / 6
PCB-156/157	6	1 / 6	2.05 J	GB-01/8-10				2.05 J	GB-01/8-10				120000	0 / 6		0 / 6
PCB-167	6	0 / 6	NA	NA				NA	NA				120000	0 / 6		0 / 6
PCB-169	6	0 / 6	NA	NA				NA	NA				120	0 / 6		0 / 6
PCB-189	6	0 / 6	NA	NA				NA	NA				130000	0 / 6		0 / 6

Notes:

[1] For source of PALs, see Table 1 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

B - less than 10X higher than method blank level
J - estimated value
LB - lower bound; where non detect TEQ equivalent concentration = 0
LOD - limit of detection
MB - medium bound; where non detect TEQ equivalent concentration = (LOD/2) * TEF
NA - not applicable
ng/kg - nanograms per kilogram
PAL - project action level
PCB - polychlorinated biphenyl
TEF - toxicity equivalence factor
TEQ - toxicity equivalent
UB - medium bound; where non detect TEQ equivalent concentration = LOD * TEF
2,3,7,8-TCDD - 2,3,7,8-tetrachlorodibenzo-p-dioxin

Table 11
Equipment Rinsate and Trip Blank Sample Results
Goodfellow Federal Complex
St. Louis, Missouri

		Sample Point:	RB-01	RB-02	RB-03	RB-04	RB-05	RB-06	RB-07	RB-08
		Sample Date:	7/19/2021	7/20/2021	7/21/2021	7/22/2021	7/23/2021	7/26/2021	7/27/2021	7/28/2021
		Notes:	-	-	-	-	-	-	-	-
Parameter	**Units**	**PAL[1]**								
Polychlorinated Biphenyls										
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00015 U	0.00015 U	0.00015 U	0.00091 U	0.00091 U	0.00100 U
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00017 U	0.00017 U	0.00017 U	0.00091 U	0.00091 U	0.00100 U
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00017 U	0.00017 U	0.00017 U	0.00091 U	0.00091 U	0.00100 U
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00017 U	0.00017 U	0.00017 U	0.00091 U	0.00091 U	0.00100 U
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00017 U	0.00017 U	0.00017 U	0.00091 U	0.00091 U	0.00100 U
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00017 U	0.00017 U	0.00017 U	0.00091 U	0.00091 U	0.00100 U
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00019 U	0.00019 U	0.00019 U	0.00091 U	0.00091 U	0.00100 U
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	mg/L	1610	0.000110 U	0.000095 U	0.000055 U	0.000047 U	0.000049 U	0.000095 U	0.000091 U	0.000095 U
Acenaphthylene	mg/L	2060	0.000110 U	0.000095 U	0.000038 U	0.000033 U	0.000034 U	0.000095 U	0.000091 U	0.000095 U
Anthracene	mg/L	2290	0.000110 U	0.000095 U	0.000076 U	0.000065 U	0.000069 U	0.000095 U	0.000091 U	0.000095 U
Benzo(a)anthracene	mg/L	0.133	0.000110 U	0.000095 U	0.000041 U	0.000035 U	0.000037 U	0.000095 U	0.000091 U	0.000095 U
Benzo(a)pyrene	mg/L	0.2	0.000110 U	0.000095 U	**0.000092 J**	0.000071 U	0.000074 U	0.000095 U	0.000091 U	0.000095 U
Benzo(b)fluoranthene	mg/L	7.65	0.000110 U	0.000095 U	0.000059 U	0.000051 U	0.000053 U	0.000095 U	0.000091 U	0.000095 U
Benzo(g,h,i)perylene	mg/L	218000	0.000110 U	0.000095 U	0.000047 U	0.000040 U	0.000042 U	0.000095 U	0.000091 U	0.000095 U
Benzo(k)fluoranthene	mg/L	937	0.000110 U	0.000095 U	0.000049 U	0.000042 U	0.000044 U	0.000095 U	0.000091 U	0.000095 U
Chrysene	mg/L	81.7	0.000110 U	0.000095 U	0.000048 U	0.000041 U	0.000043 U	0.000095 U	0.000091 U	0.000095 U
Dibenzo(a,h)anthracene	mg/L	985	0.000110 U	0.000095 U	**0.000073 J**	0.000050 U	0.000053 U	0.000095 U	0.000091 U	0.000095 U
Fluoranthene	mg/L	14200	0.000530 U	0.000480 U	0.000220 U	0.000190 U	**0.000330 J**	0.000480 U	0.000450 U	0.000480 U
Fluorene	mg/L	3010	0.000110 U	0.000095 U	0.000077 U	0.000066 U	0.000070 U	0.000095 U	0.000091 U	0.000095 U
Indeno(1,2,3-cd)pyrene	mg/L	596	0.000110 U	0.000095 U	**0.000080 J**	0.000048 U	0.000050 U	0.000095 U	0.000091 U	0.000095 U
Naphthalene	mg/L	0.1	0.000530 U	0.000480 U	**0.000120 J**	0.000076 U	0.000080 U	0.000480 U	0.000450 U	0.000480 U
Phenanthrene	mg/L	1190	0.000530 U	0.000480 U	0.000460 U	0.000390 U	**0.000450 J**	0.000480 U	0.000450 U	0.000480 U
Pyrene	mg/L	17300	0.000110 U	0.000095 U	0.000086 U	0.000074 U	**0.000170**	0.000095 U	0.000091 U	0.000095 U
Total Petroleum Hydrocarbons										
Gasoline Range Organics	mg/L	18.1	0.500 U	0.500 U	0.0626 U	0.0626 U	0.0626 U	0.500 U	0.500 U	0.500 U
Volatile Organic Compounds										
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.001000 U	0.001000 U	0.000084 U	0.000084 U	0.000084 U	0.001000 U	0.001000 U	0.001000 U
1,1,1-Trichloroethane	mg/L	1.13	0.001000 U	0.001000 U	0.000110 U	0.000110 U	0.000110 U	0.001000 U	0.001000 U	0.001000 U
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.001000 U	0.001000 U	0.000150 U	0.000150 U	0.000150 U	0.001000 U	0.001000 U	0.001000 U
1,1,2-Trichloroethane	mg/L	0.00105	0.001000 U	0.001000 U	0.000140 U	0.000140 U	0.000140 U	0.001000 U	0.001000 U	0.001000 U
1,1-Dichloroethane	mg/L	0.0114	0.001000 U	0.001000 U	0.000120 U	0.000120 U	0.000120 U	0.001000 U	0.001000 U	0.001000 U
1,1-Dichloroethene	mg/L	0.0276	0.001000 U	0.001000 U	0.000220 U	0.000220 U	0.000220 U	0.001000 U	0.001000 U	0.001000 U
1,1-Dichloropropene	mg/L	NE	0.001000 U	0.001000 U	0.000140 U	0.000140 U	0.000140 U	0.001000 U	0.001000 U	0.001000 U
1,2,3-Trichlorobenzene	mg/L	NE	0.001000 U	0.001000 U	0.000930 U	0.000930 U	0.000930 U	0.001000 U	0.001000 U	0.001000 U
1,2,3-Trichloropropane	mg/L	0.00411	0.002500 U	0.002500 U	0.000410 U	0.000410 U	0.000410 U	0.002500 U	0.002500 U	0.002500 U
1,2,3-Trimethylbenzene	mg/L	0.0794	0.001000 U	0.001000 U	0.000930 U	0.000930 U	0.000930 U	0.001000 U	0.001000 U	0.001000 U
1,2,4-Trichlorobenzene	mg/L	0.00752	0.001000 U	0.001000 U	0.000730 U	0.000730 U	0.000730 U	0.001000 U	0.001000 U	0.001000 U
1,2,4-Trimethylbenzene	mg/L	0.0475	0.001000 U	0.001000 U	0.000320 U	0.000320 U	0.000320 U	0.001000 U	0.001000 U	0.001000 U
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002500 U	0.002500 U	0.000780 U	0.000780 U	0.000780 U	0.002500 U	0.002500 U	0.002500 U
1,2-Dibromoethane	mg/L	0.004	0.001000 U	0.001000 U	0.000200 U	0.000200 U	0.000200 U	0.001000 U	0.001000 U	0.001000 U
1,2-Dichlorobenzene	mg/L	0.5	0.001000 U	0.001000 U	0.000120 U	0.000120 U	0.000120 U	0.001000 U	0.001000 U	0.001000 U
1,2-Dichloroethane	mg/L	0.00355	0.001000 U	0.001000 U	0.000210 U	0.000210 U	0.000210 U	0.001000 U	0.001000 U	0.001000 U
1,2-Dichloroethene	mg/L	70	0.001000 U	0.001000 U	0.000220 U	0.000220 U	0.000220 U	0.001000 U	0.001000 U	0.001000 U
1,2-Dichloropropane	mg/L	0.00577	0.001000 U	0.001000 U	0.000140 U	0.000140 U	0.000140 U	0.001000 U	0.001000 U	0.001000 U

Table 11
Equipment Rinsate and Trip Blank Sample Results
Goodfellow Federal Complex
St. Louis, Missouri

		Sample Point:	RB-01	RB-02	RB-03	RB-04	RB-05	RB-06	RB-07	RB-08
		Sample Date:	7/19/2021	7/20/2021	7/21/2021	7/22/2021	7/23/2021	7/26/2021	7/27/2021	7/28/2021
		Notes:	-	-	-	-	-	-	-	-
Parameter	**Units**	**PAL[1]**								
Volatile Organic Compounds (continued)										
1,3,5-Trimethylbenzene	mg/L	0.0333	0.001000 U	0.001000 U	0.000090 U	0.000090 U	0.000090 U	0.001000 U	0.001000 U	0.001000 U
1,3-Dichlorobenzene	mg/L	43.6	0.001000 U	0.001000 U	0.000130 U	0.000130 U	0.000130 U	0.001000 U	0.001000 U	0.001000 U
1,3-Dichloropropane	mg/L	NE	0.001000 U	0.001000 U	0.000100 U	0.000100 U	0.000100 U	0.001000 U	0.001000 U	0.001000 U
1,4-Dichlorobenzene	mg/L	0.00488	0.001000 U	0.001000 U	0.000130 U	0.000130 U	0.000130 U	0.001000 U	0.001000 U	0.001000 U
1,4-Dioxane	mg/L	0.00046	0.100000 U	0.100000 U	0.004400 U	0.004400 U	0.004400 U	0.100000 U	0.100000 U	0.100000 U
1-Methylnaphthalene	mg/L	0.0011	0.010000 U	0.010000 U	0.002600 U	0.002600 U	0.002600 U	0.010000 U	0.010000 U	0.010000 U
2,2-Dichloropropane	mg/L	NE	0.001000 U	0.001000 U	0.000160 U	0.000160 U	0.000160 U	0.001000 U	0.001000 U	0.001000 U
2-Butanone	mg/L	354	0.010000 U	0.010000 U	0.000980 U	0.000980 U	0.000980 U	0.010000 U	0.010000 U	0.010000 U
2-Chloroethyl vinyl ether	mg/L	NE	0.010000 U	0.010000 U	0.001800 U	0.001800 U	0.001800 U	0.010000 U	0.010000 U	0.010000 U
2-Chlorotoluene	mg/L	17.1	0.001000 U	0.001000 U	0.000110 U	0.000110 U	0.000110 U	0.001000 U	0.001000 U	0.001000 U
2-Hexanone	mg/L	1.46	0.010000 U	0.010000 U	0.001100 U	0.001100 U	0.001100 U	0.010000 U	0.010000 U	0.010000 U
2-Methylnaphthalene	mg/L	0.0036	0.010000 U	0.010000 U	0.002700 U	0.002700 U	0.002700 U	0.010000 U	0.010000 U	0.010000 U
4-Chlorotoluene	mg/L	0.0666	0.001000 U	0.001000 U	0.000150 U	0.000150 U	0.000150 U	0.001000 U	0.001000 U	0.001000 U
4-Methyl-2-pentanone	mg/L	94.9	0.010000 U	0.010000 U	0.000740 U	0.000740 U	0.000740 U	0.010000 U	0.010000 U	0.010000 U
Acetone	mg/L	3370	0.010000 U	0.010000 U	0.002500 U	**0.004800 J**	0.002500 U	0.010000 U	0.010000 U	0.010000 U
Acetonitrile	mg/L	6.82	0.010000 U	0.010000 U	0.001100 U	0.001100 U	0.001100 U	0.010000 U	0.010000 U	0.010000 U
Acrolein	mg/L	0.04	0.050000 U	0.050000 U	0.004000 U	0.004000 U	0.004000 U	0.050000 U	0.050000 U	0.050000 U
Acrylonitrile	mg/L	0.0117	0.020000 U	0.020000 U	0.001400 U	0.001400 U	0.001400 U	0.020000 U	0.020000 U	0.020000 U
Benzene	mg/L	0.00246	0.001000 U	0.001000 U	0.000140 U	0.000140 U	0.000140 U	0.001000 U	0.001000 U	0.001000 U
Bromobenzene	mg/L	0.125	0.001000 U	0.001000 U	0.000088 U	0.000088 U	0.000088 U	0.001000 U	0.001000 U	0.001000 U
Bromochloromethane	mg/L	0.106	0.001000 U	0.001000 U	0.000200 U	0.000200 U	0.000200 U	0.001000 U	0.001000 U	0.001000 U
Bromodichloromethane	mg/L	0.004	**0.001800**	0.001000 U	0.000160 U	0.000160 U	0.000160 U	**0.001300**	0.001000 U	0.001000 U
Bromoform	mg/L	0.214	0.001000 U	0.001000 U	0.000680 U	0.000680 U	0.000680 U	0.001000 U	0.001000 U	0.001000 U
Bromomethane	mg/L	0.106	0.005000 U	0.005000 U	0.000460 U	0.000460 U	0.000460 U	0.005000 U	0.005000 U	0.005000 U
Carbon disulfide	mg/L	0.177	0.005000 U	0.005000 U	0.000980 U	0.000980 U	0.000980 U	0.005000 U	0.005000 U	0.005000 U
Carbon tetrachloride	mg/L	0.004	0.001000 U	0.001000 U	0.000170 U	0.000170 U	0.000170 U	0.001000 U	0.001000 U	0.001000 U
Chlorobenzene	mg/L	0.0702	0.001000 U	0.001000 U	0.000089 U	0.000089 U	0.000089 U	0.001000 U	0.001000 U	0.001000 U
Chloroethane	mg/L	3.13	0.001000 U	0.001000 U	0.000370 U	0.000370 U	0.000370 U	0.001000 U	0.001000 U	0.001000 U
Chloroform	mg/L	0.004	**0.006900**	0.001000 U	**0.000670** J	**0.000440 J**	**0.000520 J**	**0.004700**	0.001000 U	0.001000 U
Chloromethane	mg/L	0.0331	0.001000 U	0.001000 U	0.000280 U	0.000280 U	0.000280 U	0.001000 U	0.001000 U	0.001000 U
cis-1,2-Dichloroethene	mg/L	70	0.001000 U	0.001000 U	0.000130 U	0.000130 U	0.000130 U	0.001000 U	0.001000 U	0.001000 U
cis-1,3-Dichloropropene	mg/L	0.596	0.001000 U	0.001000 U	0.000078 U	0.000078 U	0.000078 U	0.001000 U	0.001000 U	0.001000 U
Cyclohexane	mg/L	1.3	0.001000 U	0.001000 U	0.000240 U	0.000240 U	0.000240 U	0.001000 U	0.001000 U	0.001000 U
Cyclohexanone	mg/L	404	0.020000 U	0.020000 U	0.003300 U	0.003300 U	0.003300 U	0.020000 U	0.020000 U	0.020000 U
Dibromochloromethane	mg/L	0.0199	0.001000 U	0.001000 U	0.000300 U	0.000300 U	0.000300 U	0.001000 U	0.001000 U	0.001000 U
Dichlorodifluoromethane	mg/L	0.004	0.001000 U	0.001000 U	0.000200 U	0.000200 U	0.000200 U	0.001000 U	0.001000 U	0.001000 U
Ethyl ether	mg/L	NE	0.001000 U	0.001000 U	0.000230 U	0.000230 U	0.000230 U	0.001000 U	0.001000 U	0.001000 U
Ethylbenzene	mg/L	0.00609	0.001000 U	0.001000 U	0.000120 U	0.000120 U	0.000120 U	0.001000 U	0.001000 U	0.001000 U
Hexachlorobutadiene	mg/L	0.01	0.001000 U	0.001000 U	0.000420 U	0.000420 U	0.000420 U	0.001000 U	0.001000 U	0.001000 U
Isopropylbenzene	mg/L	0.179	0.001000 U	0.001000 U	0.000097 U	0.000097 U	0.000097 U	0.001000 U	0.001000 U	0.001000 U
m/p-Xylene	mg/L	NE	0.002000 U	0.002000 U	0.000220 U	0.000220 U	0.000220 U	0.002000 U	0.002000 U	0.002000 U
Methyl Acetate	mg/L	2	0.001000 U	0.001000 U	0.000870 U	0.000870 U	0.000870 U	0.001000 U	0.001000 U	0.001000 U
Methyl tertiary-butyl ether	mg/L	0.664	0.001000 U	0.001000 U	0.000130 U	0.000130 U	0.000130 U	0.001000 U	0.001000 U	0.001000 U
Methylcyclohexane	mg/L	NE	0.001000 U	0.001000 U	0.000120 U	0.000120 U	0.000120 U	0.001000 U	0.001000 U	0.001000 U
Methylene bromide	mg/L	0.00083	0.001000 U	0.001000 U	0.000110 U	0.000110 U	0.000110 U	0.001000 U	0.001000 U	0.001000 U

Table 11
Equipment Rinsate and Trip Blank Sample Results
Goodfellow Federal Complex
St. Louis, Missouri

		Sample Point:	RB-01	RB-02	RB-03	RB-04	RB-05	RB-06	RB-07	RB-08
		Sample Date:	7/19/2021	7/20/2021	7/21/2021	7/22/2021	7/23/2021	7/26/2021	7/27/2021	7/28/2021
		Notes:	-	-	-	-	-	-	-	-
Parameter	**Units**	**PAL[1]**								
Volatile Organic Compounds (continued)										
Methylene chloride	mg/L	0.685	0.001000 U	0.001000 U	0.000390 U	0.000390 U	0.000390 U	0.001000 U	0.001000 U	0.001000 U
n-Butylbenzene	mg/L	8.76	0.001000 U	0.001000 U	0.000150 U	0.000150 U	0.000150 U	0.001000 U	0.001000 U	0.001000 U
n-heptane	mg/L	0.01	0.010000 U	0.010000 U	0.002600 U	0.002600 U	0.002600 U	0.010000 U	0.010000 U	0.010000 U
n-Hexane	mg/L	0.01	0.010000 U	0.010000 U	0.000220 U	0.000220 U	0.000220 U	0.010000 U	0.010000 U	0.010000 U
n-Propylbenzene	mg/L	0.452	0.001000 U	0.001000 U	0.000120 U	0.000120 U	0.000120 U	0.001000 U	0.001000 U	0.001000 U
Naphthalene	mg/L	0.01	0.010000 U	0.010000 U	0.000820 U	0.000820 U	0.000820 U	0.010000 U	0.010000 U	0.010000 U
o-Xylene	mg/L	0.0873	0.001000 U	0.001000 U	0.000082 U	0.000082 U	0.000082 U	0.001000 U	0.001000 U	0.001000 U
p-Isopropyltoluene	mg/L	98.5	0.001000 U	0.001000 U	0.000130 U	0.000130 U	0.000130 U	0.001000 U	0.001000 U	0.001000 U
sec-Butylbenzene	mg/L	6.23	0.001000 U	0.001000 U	0.000110 U	0.000110 U	0.000110 U	0.001000 U	0.001000 U	0.001000 U
Styrene	mg/L	1.65	0.001000 U	0.001000 U	0.000120 U	0.000120 U	0.000120 U	0.001000 U	0.001000 U	0.001000 U
tert-Butylbenzene	mg/L	9.43	0.001000 U	0.001000 U	0.000120 U	0.000120 U	0.000120 U	0.001000 U	0.001000 U	0.001000 U
Tetrachloroethene	mg/L	0.00972	0.001000 U	0.001000 U	0.000330 U	0.000330 U	0.000330 U	0.001000 U	0.001000 U	0.001000 U
Tetrahydrofuran	mg/L	109	0.005000 U	0.005000 U	0.002800 U	0.002800 U	0.002800 U	0.005000 U	0.005000 U	0.005000 U
Toluene	mg/L	3.16	0.001000 U	0.001000 U	0.000250 U	0.000250 U	0.000250 U	0.001000 U	0.001000 U	0.001000 U
trans-1,2-Dichloroethene	mg/L	100	0.001000 U	0.001000 U	0.000100 U	0.000100 U	0.000100 U	0.001000 U	0.001000 U	0.001000 U
trans-1,3-Dichloropropene	mg/L	0.596	0.001000 U	0.001000 U	0.000180 U	0.000180 U	0.000180 U	0.001000 U	0.001000 U	0.001000 U
Trichloroethene	mg/L	0.004	0.001000 U	0.001000 U	0.000210 U	0.000210 U	0.000210 U	0.001000 U	0.001000 U	0.001000 U
Trichlorofluoromethane	mg/L	5.36	0.001000 U	0.001000 U	0.000160 U	0.000160 U	0.000160 U	0.001000 U	0.001000 U	0.001000 U
Vinyl chloride	mg/L	0.004	0.001000 U	0.001000 U	0.000170 U	0.000170 U	0.000170 U	0.001000 U	0.001000 U	0.001000 U
Xylenes, Total	mg/L	10	0.003000 U	0.003000 U	0.000280 U	0.000280 U	0.000280 U	0.003000 U	0.003000 U	0.003000 U

Notes:

[1] For source of PALs, see Table 2 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected

Highlighted - concentration exceeds screening level

J - estimated value

mg/L - milligrams per liter

NA - not analyzed

NE - not established

PAL - project action limit

U - compound was not detected

UJ - qualified as estimated at the reporting limit

Table 11
Equipment Rinsate and Trip Blank Sample Results
Goodfellow Federal Complex
St. Louis, Missouri

		Sample Point:	TB-01	TB-02	TB-03	TB-3	TB-4	TB-5	TB-72721
		Sample Date:	7/20/2021	7/20/2021	7/19/2021	7/23/2021	7/23/2021	7/26/2021	7/27/2021
		Notes:	-	-	-	-	-	-	-
Parameter	**Units**	**PAL[1]**							
Polychlorinated Biphenyls									
Aroclor 1016	mg/L	0.0172	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221	mg/L	0.002	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232	mg/L	0.002	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	mg/L	0.00101	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248	mg/L	0.002	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254	mg/L	0.00125	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260	mg/L	0.002	NA	NA	NA	NA	NA	NA	NA
Polycyclic Aromatic Hydrocarbons									
Acenaphthene	mg/L	1610	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	mg/L	2060	NA	NA	NA	NA	NA	NA	NA
Anthracene	mg/L	2290	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	mg/L	0.133	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	mg/L	0.2	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	mg/L	7.65	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	mg/L	218000	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	mg/L	937	NA	NA	NA	NA	NA	NA	NA
Chrysene	mg/L	81.7	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	mg/L	985	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	mg/L	14200	NA	NA	NA	NA	NA	NA	NA
Fluorene	mg/L	3010	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	mg/L	596	NA	NA	NA	NA	NA	NA	NA
Naphthalene	mg/L	0.1	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	mg/L	1190	NA	NA	NA	NA	NA	NA	NA
Pyrene	mg/L	17300	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons									
Gasoline Range Organics	mg/L	18.1	NA	NA	NA	NA	NA	NA	NA
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.000084 U	0.000084 U	0.001000 UJ	0.000084 U	0.000084 U	0.000084 U	0.000084 U
1,1,1-Trichloroethane	mg/L	1.13	0.000110 U	0.000110 U	0.001000 UJ	0.000110 U	0.000110 U	0.000110 U	0.000110 U
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.000150 U	0.000150 U	0.001000 UJ	0.000150 U	0.000150 U	0.000150 U	0.000150 U
1,1,2-Trichloroethane	mg/L	0.00105	0.000140 U	0.000140 U	0.001000 UJ	0.000140 U	0.000140 U	0.000140 U	0.000140 U
1,1-Dichloroethane	mg/L	0.0114	0.000120 U	0.000120 U	0.001000 UJ	0.000120 U	0.000120 U	0.000120 U	0.000120 U
1,1-Dichloroethene	mg/L	0.0276	0.000220 U	0.000220 U	0.001000 UJ	0.000220 U	0.000220 U	0.000220 U	0.000220 U
1,1-Dichloropropene	mg/L	NE	0.000140 U	0.000140 U	0.001000 UJ	0.000140 U	0.000140 U	0.000140 U	0.000140 U
1,2,3-Trichlorobenzene	mg/L	NE	0.000930 U	0.000930 U	0.001000 UJ	0.000930 U	0.000930 U	0.000930 U	0.000930 U
1,2,3-Trichloropropane	mg/L	0.00411	0.000410 U	0.000410 U	0.002500 UJ	0.000410 U	0.000410 U	0.000410 U	0.000410 U
1,2,3-Trimethylbenzene	mg/L	0.0794	0.000930 U	0.000930 U	0.001000 UJ	0.000930 U	0.000930 U	0.000930 U	0.000930 U
1,2,4-Trichlorobenzene	mg/L	0.00752	0.000730 U	0.000730 U	0.001000 UJ	0.000730 U	0.000730 U	0.000730 U	0.000730 U
1,2,4-Trimethylbenzene	mg/L	0.0475	0.000320 U	0.000320 U	0.001000 UJ	0.000320 U	0.000320 U	0.000320 U	0.000320 U
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.000780 U	0.000780 U	0.002500 UJ	0.000780 U	0.000780 U	0.000780 U	0.000780 U
1,2-Dibromoethane	mg/L	0.004	0.000200 U	0.000200 U	0.001000 UJ	0.000200 U	0.000200 U	0.000200 U	0.000200 U
1,2-Dichlorobenzene	mg/L	0.5	0.000120 U	0.000120 U	0.001000 UJ	0.000120 U	0.000120 U	0.000120 U	0.000120 U
1,2-Dichloroethane	mg/L	0.00355	0.000210 U	0.000210 U	0.001000 UJ	0.000210 U	0.000210 U	0.000210 U	0.000210 U
1,2-Dichloroethene	mg/L	70	0.000220 U	0.000220 U	0.001000 UJ	0.000220 U	0.000220 U	0.000220 U	0.000220 U
1,2-Dichloropropane	mg/L	0.00577	0.000140 U	0.000140 U	0.001000 UJ	0.000140 U	0.000140 U	0.000140 U	0.000140 U

Table 11
Equipment Rinsate and Trip Blank Sample Results
Goodfellow Federal Complex
St. Louis, Missouri

		Sample Point:	TB-01	TB-02	TB-03	TB-3	TB-4	TB-5	TB-72721
		Sample Date:	7/20/2021	7/20/2021	7/19/2021	7/23/2021	7/23/2021	7/26/2021	7/27/2021
		Notes:	-	-	-	-	-	-	-
Parameter	**Units**	**PAL[1]**							
Volatile Organic Compounds (continued)									
1,3,5-Trimethylbenzene	mg/L	0.0333	0.000090 U	0.000090 U	0.001000 UJ	0.000090 U	0.000090 U	0.000090 U	0.000090 U
1,3-Dichlorobenzene	mg/L	43.6	0.000130 U	0.000130 U	0.001000 UJ	0.000130 U	0.000130 U	0.000130 U	0.000130 U
1,3-Dichloropropane	mg/L	NE	0.000100 U	0.000100 U	0.001000 UJ	0.000100 U	0.000100 U	0.000100 U	0.000100 U
1,4-Dichlorobenzene	mg/L	0.00488	0.000130 U	0.000130 U	0.001000 UJ	0.000130 U	0.000130 U	0.000130 U	0.000130 U
1,4-Dioxane	mg/L	0.00046	0.004400 U	0.004400 U	0.100000 UJ	0.004400 U	0.004400 U	0.004400 U	0.004400 U
1-Methylnaphthalene	mg/L	0.0011	0.002600 U	0.002600 U	0.010000 UJ	0.002600 U	0.002600 U	0.002600 U	0.002600 U
2,2-Dichloropropane	mg/L	NE	0.000160 U	0.000160 U	0.001000 UJ	0.000160 U	0.000160 U	0.000160 U	0.000160 U
2-Butanone	mg/L	354	0.000980 U	0.000980 U	0.010000 UJ	0.000980 U	0.000980 U	0.000980 U	0.000980 U
2-Chloroethyl vinyl ether	mg/L	NE	0.001800 U	0.001800 U	0.010000 UJ	0.001800 U	0.001800 U	0.001800 U	0.001800 U
2-Chlorotoluene	mg/L	17.1	0.000110 U	0.000110 U	0.001000 UJ	0.000110 U	0.000110 U	0.000110 U	0.000110 U
2-Hexanone	mg/L	1.46	0.001100 U	0.001100 U	0.010000 UJ	0.001100 U	0.001100 U	0.001100 U	0.001100 U
2-Methylnaphthalene	mg/L	0.0036	0.002700 U	0.002700 U	0.010000 UJ	0.002700 U	0.002700 U	0.002700 U	0.002700 U
4-Chlorotoluene	mg/L	0.0666	0.000150 U	0.000150 U	0.001000 UJ	0.000150 U	0.000150 U	0.000150 U	0.000150 U
4-Methyl-2-pentanone	mg/L	94.9	0.000740 U	0.000740 U	0.010000 UJ	0.000740 U	0.000740 U	0.000740 U	0.000740 U
Acetone	mg/L	3370	0.002500 U	0.002500 U	0.010000 UJ	0.002500 U	0.002500 U	0.002500 U	0.002500 U
Acetonitrile	mg/L	6.82	0.001100 U	0.001100 U	0.010000 UJ	0.001100 U	0.001100 U	0.001100 U	0.001100 U
Acrolein	mg/L	0.04	0.004000 U	0.004000 U	0.050000 UJ	0.004000 U	0.004000 U	0.004000 U	0.004000 U
Acrylonitrile	mg/L	0.0117	0.001400 U	0.001400 U	0.020000 UJ	0.001400 U	0.001400 U	0.001400 U	0.001400 U
Benzene	mg/L	0.00246	0.000140 U	0.000140 U	0.001000 UJ	0.000140 U	0.000140 U	0.000140 U	0.000140 U
Bromobenzene	mg/L	0.125	0.000088 U	0.000088 U	0.001000 UJ	0.000088 U	0.000088 U	0.000088 U	0.000088 U
Bromochloromethane	mg/L	0.106	0.000200 U	0.000200 U	0.001000 UJ	0.000200 U	0.000200 U	0.000200 U	0.000200 U
Bromodichloromethane	mg/L	0.004	0.000160 U	0.000160 U	0.001000 UJ	0.000160 U	0.000160 U	0.000160 U	0.000160 U
Bromoform	mg/L	0.214	0.000680 U	0.000680 U	0.001000 UJ	0.000680 U	0.000680 U	0.000680 U	0.000680 U
Bromomethane	mg/L	0.106	0.000460 U	0.000460 U	0.005000 UJ	0.000460 U	0.000460 U	0.000460 U	0.000460 U
Carbon disulfide	mg/L	0.177	0.000980 U	0.000980 U	0.005000 UJ	0.000980 U	0.000980 U	0.000980 U	0.000980 U
Carbon tetrachloride	mg/L	0.004	0.000170 U	0.000170 U	0.001000 UJ	0.000170 U	0.000170 U	0.000170 U	0.000170 U
Chlorobenzene	mg/L	0.0702	0.000089 U	0.000089 U	0.001000 UJ	0.000089 U	0.000089 U	0.000089 U	0.000089 U
Chloroethane	mg/L	3.13	0.000370 U	0.000370 U	0.001000 UJ	0.000370 U	0.000370 U	0.000370 U	0.000370 U
Chloroform	mg/L	0.004	0.000220 U	0.000220 U	0.001000 UJ	0.000220 U	0.000220 U	0.000220 U	0.000220 U
Chloromethane	mg/L	0.0331	0.000280 U	0.000280 U	0.001000 UJ	0.000280 U	0.000280 U	0.000280 U	0.000280 U
cis-1,2-Dichloroethene	mg/L	70	0.000130 U	0.000130 U	0.001000 UJ	0.000130 U	0.000130 U	0.000130 U	0.000130 U
cis-1,3-Dichloropropene	mg/L	0.596	0.000078 U	0.000078 U	0.001000 UJ	0.000078 U	0.000078 U	0.000078 U	0.000078 U
Cyclohexane	mg/L	1.3	0.000240 U	0.000240 U	0.001000 UJ	0.000240 U	0.000240 U	0.000240 U	0.000240 U
Cyclohexanone	mg/L	404	0.003300 U	0.003300 U	0.020000 UJ	0.003300 U	0.003300 U	0.003300 U	0.003300 U
Dibromochloromethane	mg/L	0.0199	0.000300 U	0.000300 U	0.001000 UJ	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Dichlorodifluoromethane	mg/L	0.004	0.000200 U	0.000200 U	0.001000 UJ	0.000200 U	0.000200 U	0.000200 U	0.000200 U
Ethyl ether	mg/L	NE	0.000230 U	0.000230 U	0.001000 UJ	0.000230 U	0.000230 U	0.000230 U	0.000230 U
Ethylbenzene	mg/L	0.00609	0.000120 U	0.000120 U	0.001000 UJ	0.000120 U	0.000120 U	0.000120 U	0.000120 U
Hexachlorobutadiene	mg/L	0.01	0.000420 U	0.000420 U	0.001000 UJ	0.000420 U	0.000420 U	0.000420 U	0.000420 U
Isopropylbenzene	mg/L	0.179	0.000097 U	0.000097 U	0.001000 UJ	0.000097 U	0.000097 U	0.000097 U	0.000097 U
m/p-Xylene	mg/L	NE	**0.000230 J**	0.000220 U	0.002000 UJ	0.000220 U	0.000220 U	0.000220 U	0.000220 U
Methyl Acetate	mg/L	2	0.000870 U	0.000870 U	0.001000 UJ	0.000870 U	0.000870 U	0.000870 U	0.000870 U
Methyl tertiary-butyl ether	mg/L	0.664	0.000130 U	0.000130 U	0.001000 UJ	0.000130 U	0.000130 U	0.000130 U	0.000130 U
Methylcyclohexane	mg/L	NE	0.000120 U	0.000120 U	0.001000 UJ	0.000120 U	0.000120 U	0.000120 U	0.000120 U
Methylene bromide	mg/L	0.00083	0.000110 U	0.000110 U	0.001000 UJ	0.000110 U	0.000110 U	0.000110 U	0.000110 U

Table 11
Equipment Rinsate and Trip Blank Sample Results
Goodfellow Federal Complex
St. Louis, Missouri

		Sample Point:	TB-01	TB-02	TB-03	TB-3	TB-4	TB-5	TB-72721
		Sample Date:	7/20/2021	7/20/2021	7/19/2021	7/23/2021	7/23/2021	7/26/2021	7/27/2021
		Notes:	-	-	-	-	-	-	-
Parameter	**Units**	**PAL[1]**							
Volatile Organic Compounds (continued)									
Methylene chloride	mg/L	0.685	0.000390 U	0.000390 U	0.001000 UJ	0.000390 U	0.000390 U	0.000390 U	0.000390 U
n-Butylbenzene	mg/L	8.76	0.000150 U	0.000150 U	0.001000 UJ	0.000150 U	0.000150 U	0.000150 U	0.000150 U
n-heptane	mg/L	0.01	0.002600 U	0.002600 U	0.010000 UJ	0.002600 U	0.002600 U	0.002600 U	0.002600 U
n-Hexane	mg/L	0.01	0.000220 U	0.000220 U	0.010000 UJ	0.000220 U	0.000220 U	0.000220 U	0.000220 U
n-Propylbenzene	mg/L	0.452	0.000120 U	0.000120 U	0.001000 UJ	0.000120 U	0.000120 U	0.000120 U	0.000120 U
Naphthalene	mg/L	0.01	0.000820 U	0.000820 U	0.010000 UJ	0.000820 U	0.000820 U	0.000820 U	0.000820 U
o-Xylene	mg/L	0.0873	0.000082 U	0.000082 U	0.001000 UJ	0.000082 U	0.000082 U	0.000082 U	0.000082 U
p-Isopropyltoluene	mg/L	98.5	0.000130 U	0.000130 U	0.001000 UJ	0.000130 U	0.000130 U	0.000130 U	0.000130 U
sec-Butylbenzene	mg/L	6.23	0.000110 U	0.000110 U	0.001000 UJ	0.000110 U	0.000110 U	0.000110 U	0.000110 U
Styrene	mg/L	1.65	0.000120 U	0.000120 U	0.001000 UJ	0.000120 U	0.000120 U	0.000120 U	0.000120 U
tert-Butylbenzene	mg/L	9.43	0.000120 U	0.000120 U	0.001000 UJ	0.000120 U	0.000120 U	0.000120 U	0.000120 U
Tetrachloroethene	mg/L	0.00972	0.000330 U	0.000330 U	0.001000 UJ	0.000330 U	0.000330 U	0.000330 U	0.000330 U
Tetrahydrofuran	mg/L	109	0.002800 U	0.002800 U	0.005000 UJ	0.002800 U	0.002800 U	0.002800 U	0.002800 U
Toluene	mg/L	3.16	0.000250 U	0.000250 U	0.001000 UJ	0.000250 U	0.000250 U	0.000250 U	0.000250 U
trans-1,2-Dichloroethene	mg/L	100	0.000100 U	0.000100 U	0.001000 UJ	0.000100 U	0.000100 U	0.000100 U	0.000100 U
trans-1,3-Dichloropropene	mg/L	0.596	0.000180 U	0.000180 U	0.001000 UJ	0.000180 U	0.000180 U	0.000180 U	0.000180 U
Trichloroethene	mg/L	0.004	0.000210 U	0.000210 U	0.001000 UJ	0.000210 U	0.000210 U	0.000210 U	0.000210 U
Trichlorofluoromethane	mg/L	5.36	0.000160 U	0.000160 U	0.001000 UJ	0.000160 U	0.000160 U	0.000160 U	0.000160 U
Vinyl chloride	mg/L	0.004	0.000170 U	0.000170 U	0.001000 UJ	0.000170 U	0.000170 U	0.000170 U	0.000170 U
Xylenes, Total	mg/L	10	0.000280 U	0.000280 U	0.003000 UJ	0.000280 U	0.000280 U	0.000280 U	0.000280 U

Notes:

[1] For source of PALs, see Table 2 in the *Final Quality Assurance Project Plan, Goodfellow Federal Complex, St. Louis, Missouri* (Etegra, 2021).

Bold - compound was detected

Highlighted - concentration exceeds screening level

J - estimated value

mg/L - milligrams per liter

NA - not analyzed

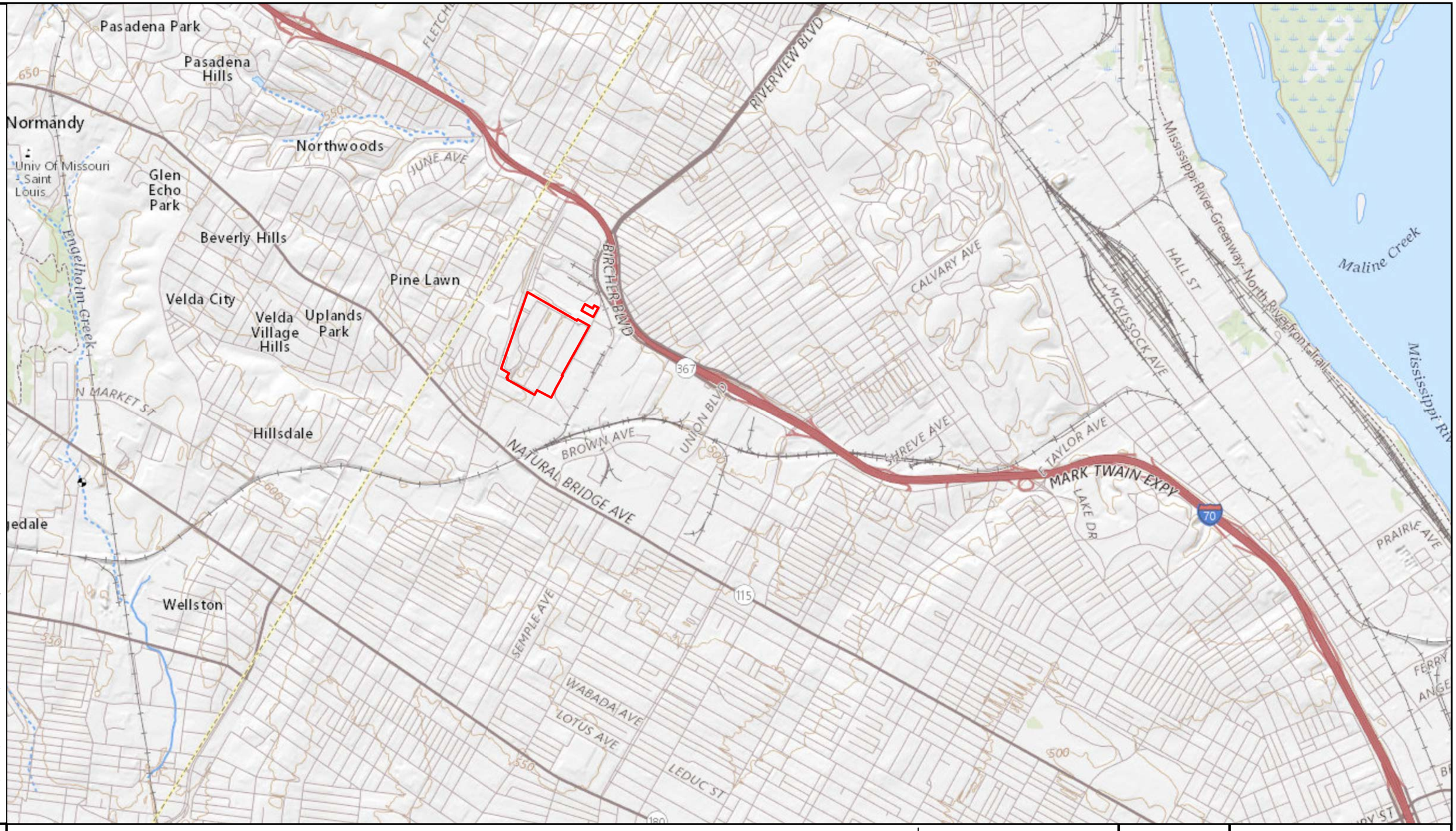
NE - not established

PAL - project action limit

U - compound was not detected

UJ - qualified as estimated at the reporting limit

FIGURES



Site Boundary

Notes:
Site is approximately 66 acres.

NORTH

1 0.5 0 1

Miles

BURNS McDONNELL

Figure 1
Area Location Map
Goodfellow Federal Complex
St. Louis, Missouri

Issued: 8/16/2021

Source: ESRI, Burns & McDonnell

Path: Z:\Clients\ENS\USGSA\128487_GoodfellowMW\Studies\Geospatial\DataFiles\ArcDocs\figures\figures.aprx irradler 8/16/2021
Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed June, 2020.

MW-18
MW-14
MW-17
MW-16
MW-11
MW-15
MW-13
MW-12
MW-10
MW-06
MW-09
MW-07
MW-08
MW-05
MW-04
MW-02
MW-03
MW-01
MW-19

BLDG 107
BLDG 106
BLDG 102
BLDG 102E
BLDG 102D
BLDG 103E
BLDG 103
BLDG 103D
BLDG 104F
BLDG 104
BLDG 115
BLDG 108B
BLDG 105L
BLDG 105F
BLDG 105
BLDG 103F
BLDG 104E
BLDG 105E
BLDG 101
BLDG 110
BLDG 108A
BLDG 122B
BLDG 141C
BLDG 208B

Former BLDG 211
Former BLDGS 102F, 102G, 102H
Former BLDGS 103F, 103G, 103H
Former BLDGS 104G, 104H, 104I
Former BLDGS 105G, 105H, 105S

Goodfellow Boulevard
Planned Industrial Drive

Legend
- Monitoring Well
- Former Railroad Track
- Former Powder Storage Bunkers (102G, 103G, 104H, and 105H)
- Site Boundary

NORTH
0 125 250 500
Feet

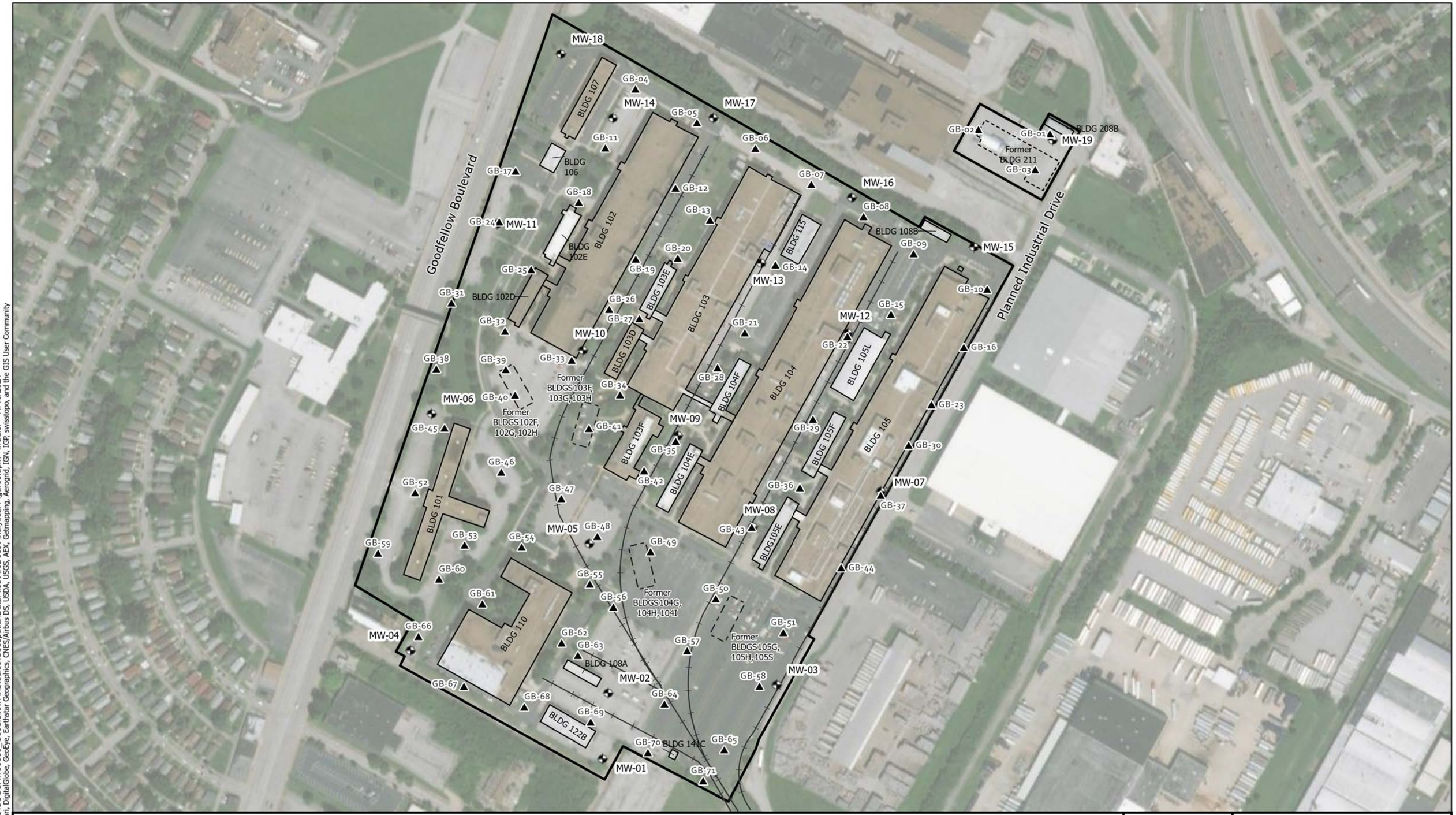
BURNS McDONNELL

Figure 2
Site Location Map
Goodfellow Federal Complex
St. Louis, Missouri

Issued: 11/15/2021

Source: ESRI, Burns & McDonnell

Path: \\bmcd\dfs\Clients\ENS\USGSA\133835_GoodfellowRI\Studies\Geospatial\DataFiles\ArcDocs\Analytical Figures.aprx irradler 11/15/2021
Service Layer Credits: Maxar, Microsoft



Legend

- Soil Boring Location
- Monitoring Well
- Former Railroad Track
- Former Powder Storage Bunkers (102G, 103G, 104H, and 105H)
- Site Boundary

NORTH

0 125 250 500

Feet

BURNS McDONNELL

Figure 3
Soil Boring Location Map
Goodfellow Federal Complex
St. Louis, Missouri

Source: ESRI, Burns & McDonnell

Issued: 11/15/2021

Path: \\bmod\dfs\Clients\ENS\USGSA\133835_GoodfellowRI\Studies\Geospatial\DataFiles\ArcDocs\Analytical Figures.aprx irradler 11/15/2021
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Parameter	PAL
Arsenic	12.3

GB-10/1.5-2.5
Arsenic **13.1**

GB-16/3-4
Arsenic **12.6**

GB-29/1.5-2.5
Arsenic **22.6**

GB-53/0-2
Arsenic **22.7**

GB-43/3-5
Arsenic **12.7**

Legend
- Monitoring Well
- Former Railroad Track
- Former Powder Storage Bunkers (102G, 103G, 104H, and 105H)
- Site Boundary

PAL - Project Action Limit

Notes:
1. All concentrations shown in milligrams per kilogram (mg/kg).
2. Concentrations in bold indicate a positive detection.
3. Highlighted values represent PAL exceedances.
4. Figure only shows the metals that had PAL exceedances in surface or subsurface.

NORTH
0 125 250 500
Feet

BURNS McDONNELL

Figure 4
Surface Soil Exceedances (Metals)
Goodfellow Federal Complex
St. Louis, Missouri

Issued: 11/15/2021

Source: ESRI, Burns & McDonnell

Path: \\bmcd\dfs\Clients\ENS\USGSA\133835_GoodfellowRI\Studies\Geospatial\DataFiles\ArcDocs\Analytical Figures.aprx irradler 11/15/2021
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

GB-18/3-5	
Benzo(a)anthracene	**0.2370**
Benzo(a)pyrene	**0.1830**
Benzo(b)fluoranthene	**0.2290**
Dibenzo(a,h)anthracene	**0.0226**
Indeno(1,2,3-cd)pyrene	**0.0915**

GB-19/0-2	
Benzo(a)anthracene	**2.24**
Benzo(a)pyrene	**1.64**
Benzo(b)fluoranthene	**2.87**
Dibenzo(a,h)anthracene	**0.2710**
Indeno(1,2,3-cd)pyrene	**1.06**

GB-27/0.5-2.5	
Benzo(a)anthracene	**0.2160**
Benzo(a)pyrene	**0.1920**
Benzo(b)fluoranthene	**0.3160**
Dibenzo(a,h)anthracene	**0.0298**
Indeno(1,2,3-cd)pyrene	**0.1320**

GB-32/0-2	
Benzo(a)anthracene	**0.4740**
Benzo(a)pyrene	**0.4190**
Benzo(b)fluoranthene	**0.6610**
Dibenzo(a,h)anthracene	**0.0689**
Indeno(1,2,3-cd)pyrene	**0.2720**

GB-40/1.5-3.5	
Benzo(a)anthracene	**0.9780**
Benzo(a)pyrene	**0.6660**
Benzo(b)fluoranthene	**1.01**
Dibenzo(a,h)anthracene	0.0858 U
Indeno(1,2,3-cd)pyrene	**0.3950**

GB-45/0-2	
Benzo(a)anthracene	**7.60**
Benzo(a)pyrene	**6.31**
Benzo(b)fluoranthene	**10.1**
Dibenzo(a,h)anthracene	**0.7290**
Indeno(1,2,3-cd)pyrene	**2.88**

GB-62/0-2	
Benzo(a)anthracene	**0.6530**
Benzo(a)pyrene	**0.5750**
Benzo(b)fluoranthene	**0.9280**
Dibenzo(a,h)anthracene	**0.1160**
Indeno(1,2,3-cd)pyrene	**0.3350**

GB-13/0-2	
Benzo(a)anthracene	**1.86**
Benzo(a)pyrene	**1.52**
Benzo(b)fluoranthene	**2.73**
Dibenzo(a,h)anthracene	**0.2990**
Indeno(1,2,3-cd)pyrene	**1.18**

GB-07/2.5-3.5	
Benzo(a)anthracene	**0.1630**
Benzo(a)pyrene	**0.1260**
Benzo(b)fluoranthene	**0.2030**
Dibenzo(a,h)anthracene	**0.0173**
Indeno(1,2,3-cd)pyrene	**0.0635**

Parameter	PAL
Benzo(a)anthracene	1.1
Benzo(a)pyrene	0.11
Benzo(b)fluoranthene	1.1
Dibenzo(a,h)anthracene	0.11
Indeno(1,2,3-cd)pyrene	1.1

GB-09/1.5-3	
Benzo(a)anthracene	**0.7520**
Benzo(a)pyrene	**0.6330**
Benzo(b)fluoranthene	**1.12**
Dibenzo(a,h)anthracene	**0.0964**
Indeno(1,2,3-cd)pyrene	**0.4150**

GB-14/0-2	
Benzo(a)anthracene	**0.1140**
Benzo(a)pyrene	**0.1280**
Benzo(b)fluoranthene	**0.2520**
Dibenzo(a,h)anthracene	**0.0228**
Indeno(1,2,3-cd)pyrene	**0.0946**

GB-21/0.5-2.5	
Benzo(a)anthracene	**0.2430**
Benzo(a)pyrene	**0.2950**
Benzo(b)fluoranthene	**0.5660**
Dibenzo(a,h)anthracene	**0.0494**
Indeno(1,2,3-cd)pyrene	**0.2160**

GB-37/3-5	
Benzo(a)anthracene	**0.1520**
Benzo(a)pyrene	**0.1330**
Benzo(b)fluoranthene	**0.2020**
Dibenzo(a,h)anthracene	**0.0214**
Indeno(1,2,3-cd)pyrene	**0.0827**

GB-44/3-5	
Benzo(a)anthracene	**0.7990**
Benzo(a)pyrene	**0.6570**
Benzo(b)fluoranthene	**0.8940**
Dibenzo(a,h)anthracene	**0.0898**
Indeno(1,2,3-cd)pyrene	**0.3220**

GB-50/0-2	
Benzo(a)anthracene	**0.9540**
Benzo(a)pyrene	**0.8080**
Benzo(b)fluoranthene	**1.71**
Dibenzo(a,h)anthracene	**0.0862**
Indeno(1,2,3-cd)pyrene	**0.3110**

GB-58/1-3	
Benzo(a)anthracene	**0.2060**
Benzo(a)pyrene	**0.2030**
Benzo(b)fluoranthene	**0.4920**
Dibenzo(a,h)anthracene	**0.0227**
Indeno(1,2,3-cd)pyrene	**0.0911**

Legend
- Soil Boring Location
- Monitoring Well
- Former Railroad Track
- Former Powder Storage Bunkers (102G, 103G, 104H, and 105H)
- Site Boundary

PAH - Polycyclic Aromatic Hydrocarbon
PAL - Project Action Limit
U - Compound was not detected

Notes:
1. All concentrations shown in milligrams per kilogram (mg/kg).
2. Concentrations in bold indicate a positive detection.
3. Highlighted values represent PAL exceedances.
4. Figure only shows the PAHs that had PAL exceedances in surface or subsurface.

NORTH
0 125 250 500
Feet

BURNS McDONNELL

Figure 5
Surface Soil Exceedances (PAHs)
Goodfellow Federal Complex
St. Louis, Missouri

Issued: 11/15/2021

Source: ESRI, Burns & McDonnell

Path: \\bmcd\dfs\Clients\ENS\USGSA\133835_GoodfellowRI\Studies\Geospatial\DataFiles\ArcDocs\Analytical Figures.aprx irradler 11/15/2021
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Parameter	PAL
Arsenic	12.3

GB-01/11-13	
Arsenic	**12.4**

GB-09/4-6	
Arsenic	**14.8**

GB-16/4-5	
Arsenic	**12.7**

GB-30/4-5	
Arsenic	**17.7**

GB-35/3-5	
Arsenic	**14.9J**

GB-52/3-5	
Arsenic	**13.7**

GB-60/5-7	
Arsenic	**15.2**

GB-66/5-7	
Arsenic	**28.7**

GB-64/5-7	
Arsenic	**80.3**

Goodfellow Boulevard

Planned Industrial Drive

BLDG 107, BLDG 106, BLDG 102, BLDG 102E, BLDG 102D, BLDG 103, BLDG 103E, BLDG 103D, BLDG 104, BLDG 104F, BLDG 115, BLDG 105L, BLDG 105F, BLDG 105, BLDG 105E, BLDG 101, BLDG 110, BLDG 108A, BLDG 122B, BLDG 141C, BLDG 108B, BLDG 208B, Former BLDG 211

Former BLDGS 103F, 103G, 103H

Former BLDGS 102F, 102G, 102H

Former BLDGS 104G, 104H, 104I

Former BLDGS 105G, 105H, 105S

MW-01, MW-02, MW-03, MW-04, MW-05, MW-06, MW-07, MW-08, MW-09, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19

GB-01, GB-02, GB-03, GB-04, GB-05, GB-06, GB-07, GB-08, GB-09, GB-10, GB-11, GB-12, GB-13, GB-14, GB-15, GB-16, GB-17, GB-18, GB-19, GB-20, GB-21, GB-22, GB-23, GB-24, GB-25, GB-26, GB-27, GB-28, GB-29, GB-30, GB-31, GB-32, GB-33, GB-34, GB-35, GB-36, GB-37, GB-38, GB-39, GB-40, GB-41, GB-42, GB-43, GB-44, GB-45, GB-46, GB-47, GB-48, GB-49, GB-50, GB-51, GB-52, GB-53, GB-54, GB-55, GB-56, GB-57, GB-58, GB-59, GB-60, GB-61, GB-62, GB-63, GB-64, GB-65, GB-66, GB-67, GB-68, GB-69, GB-70, GB-71

Legend
- Soil Boring Location
- Monitoring Well
- Former Railroad Track
- Former Powder Storage Bunkers (102G, 103G, 104H, and 105H)
- Site Boundary

PAL - Project Action Limit
J - Estimated Value

Notes:
1. All concentrations shown in milligrams per kilogram (mg/kg).
2. Concentrations in bold indicate a positive detection.
3. Highlighted values represent PAL exceedances.
4. Figure only shows the metals that had PAL exceedances in surface or subsurface.

NORTH

0 125 250 500

Feet

BURNS McDONNELL

Figure 6
Subsurface Soil Exceedances (Metals)
Goodfellow Federal Complex
St. Louis, Missouri

Issued: 11/15/2021

Path: \\bmcd\dfs\Clients\ENS\USGSA\133835_GoodfellowRI\Studies\Geospatial\DataFiles\ArcDocs\Analytical Figures.aprx irradler 11/15/2021
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Source: ESRI, Burns & McDonnell

GB-13/3-5	
Benzo(a)anthracene	**0.0074**
Benzo(a)pyrene	**0.1100**
Benzo(b)fluoranthene	**0.4230**
Dibenzo(a,h)anthracene	**0.3050**
Indeno(1,2,3-cd)pyrene	**0.0386**

GB-03/4-6	
Benzo(a)anthracene	**1.00**
Benzo(a)pyrene	**0.8210**
Benzo(b)fluoranthene	**1.36**
Dibenzo(a,h)anthracene	**0.1100**
Indeno(1,2,3-cd)pyrene	**0.3840**

GB-40/11-13	
Benzo(a)anthracene	**0.2720**
Benzo(a)pyrene	**0.2330**
Benzo(b)fluoranthene	**0.4010**
Dibenzo(a,h)anthracene	**0.0416**
Indeno(1,2,3-cd)pyrene	**0.1570**

Parameter	PAL
Benzo(a)anthracene	1.1
Benzo(a)pyrene	0.11
Benzo(b)fluoranthene	1.1
Dibenzo(a,h)anthracene	0.11
Indeno(1,2,3-cd)pyrene	1.1

Legend
- Soil Boring Location
- Monitoring Well
- Former Railroad Track
- Former Powder Storage Bunkers (102G, 103G, 104H, and 105H)
- Site Boundary

PAH - Polycyclic Aromatic Hydrocarbon
PAL - Project Action Limit

Notes:
1. All concentrations shown in milligrams per kilogram (mg/kg).
2. Concentrations in bold indicate a positive detection.
3. Highlighted values represent PAL exceedances.
4. Figure only shows the PAHs that had PAL exceedances in surface or subsurface.

NORTH
0 125 250 500
Feet

BURNS McDONNELL

Figure 7
Subsurface Soil Exceedances (PAHs)
Goodfellow Federal Complex
St. Louis, Missouri

Issued: 11/15/2021

Source: ESRI, Burns & McDonnell

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Service Layer Credits: Maxar, Microsoft

APPENDIX A – FIELD NOTES

Blackwood
Z Verrecchia

7/4/21 133835

Task: Soil Borings/sampling

Weather: 90s, Sunny, dry.

735 Lockwood onsite. (Blwd)
740 Verrecchia onsite (Blwd)
759 Redi onsite.
830 Safety Briefing Further. Begin Unloading Rig
850 Setup on GB-69
900 Begin drilling GB-69
- Refusal at ~1.5'
- Offset 1' North & resume drilling
913 Collect sample GB-69/2'-3'
920 Collect Sample GB-69-3'-5'
- Complete boring to 10' BGS
- Backfill
932 Begin drilling GB-70
940 Collect sample GB-70/3'-5'
945 - Complet boring GB-70 to 10' BGS
- Backfill borehole
- Collect sample GB-70/5'-7'
1000 Roberts Accon rods
1005 Centurylink utility locate onsite to flag unmarked communication lines. B. Lockwood to speak with security to grant him access to the site.

133835

1010 Lockwood to continue logging & Sampling while Verrecchia escorts utility locator
1017 Begin Drilling GB-71
1025 Complete Boring GB-71
1030 Collect GB-71/0-2
1035 Collect GB-71/3-5
1041 Begin Drilling GB-65
1050 Collect sample GB-65/3'-4'
1055 Collect sample GB-65/5'-7'
- Complete boring GB-65 to 10' BGS
- Backfill borehole
1100 Roberts Accon rods
1110 Begin drilling GB-64
1120 Collect sample GB-64/3'-4'
1125 Collect sample GB-64/5'-7'
- Complete boring GB-64 to 10' BGS
- Backfill borehole
1140 Begin Drilling GB-57
1145 Collect sample GB-57/3.5'-5.5'
1150 Collect samples GB-57/6'-8' + GB-57/6'-8'D
- Complete boring GB-57 to 10' BGS
- Backfill borehole
1210 Break for lunch
1305 Back from lunch

126
7/19/21 133837

1310 Begin drilling GB-58
1325 Collect sample GB-58/1-3
1350 Collect samples GB-58/4-6 GB-58/4-6MS & GB-58/4-6MSD
- Complete boring GB-58 to 10' BGS
- Backfill borehole
1348 Begin drilling GB-51
1354 Collect sample GB-51/1.5-3
1400 Collect sample GB-51/3-5
- complete boring GB-51 to 10' BGS
- backfill borehole
1405 Decon rods
1420 Begin drilling GB-50
1430 Collect sample GB-50/3-5 & GB-50/3-5D
- Complete boring GB-50 to 10' BGS
- backfill borehole
1450 Begin drilling GB-49
1500 Collect sample GB-49/3.5-4.5
1505 Collect sample GB-49/5-6
Complet boring GB-49 to 10' BGS
- Backfill borehole
1530 ~~Collect~~ EV Begin drilling GB-56
- Decon rods
- Refusal at 1' BGS
- offset 2' South

7/19/21 133838

1540 Refusal at 1' BGS
- offset 10' West
1545 Refusal at 1' BGS
- offset 50' west
1555 Collect sample GB-56/3-5
1600 Collect sample GB-56/5-7
1610 Begin drilling GB-63 EV
~~Collect sample~~
- Refusal at 8' BGS
- Both runs up to 8' were uncons. fill material + gravel
- offset ~ 60' Southwest
1630 Refusal at 10' BGS
- Entire 10' was unconsolidated fill
1640 Plan to decon rods and call it a day. Will start at another offset of GB-63 in the morning.
1705 Decon augers
1710 Collect RB-01 OFF SHOE
~~1712~~ - Roberts sign out + offsite
1715 Lakewood / Vorhees office.

(b) (6)

7/20/21 133835 Z. Verrier B. Lockwood

TASK: SOIL SAMPLING

WEATHER: 90s, MOSTLY SUNNY, HUMID.

700 VERRIER ONSITE

705 LOCKWOOD ONSITE.

710 FILL OUT PTA

715 CALIBRATE PID

740 BEGIN DRILLING GB-63

748 COLLECT SAMPLE GB-63/0-2

752 COLLECT SAMPLE GB-63/3-5

- COMPLETE BORING GB-63 TO 10' BGS
- BACKFILL BOREHOLE

810 BEGIN DRILLING GB-48

825 COLLECT SAMPLE GB-48/3-5, GB-48/3-5MS, + GB-48/3-5MSD

828 COLLECT SAMPLE GB-48/5-7

- COMPLETE BORING GB-48 TO 10' BGS
- BACKFILL BOREHOLE

847 BEGIN DRILLING GB-55

850 COLLECT GB-55/0-2

855 COLLECT SAMPLE GB-55/3-5; GB-55/3-5D

- COMPLETE GB-55 TO 10' BGS

920 BEGIN DRILLING GB-62

925 COLLECT SAMPLE GB-62/0-2

930 COLLECT SAMPLE GB-62/3-5

- COMPLETE GB-62 TO 10' BGS

7/20/21 133835 J. Burch B. Lockwood

945 DECON RODS

1005 BEGIN DRILLING GB-68

1010 COLLECT SAMPLE GB-68/1-3

1017 COLLECT SAMPLE GB-68/3-5 + GB-68/3-5D

- COMPLETE GB-68 TO 10' BGS
- BACKFILL BOREHOLE

1040 BEGIN DRILLING GB-67

1047 COLLECT SAMPLE GB-67/5-6

1050 COLLECT SAMPLE GB-67/8-10

- COMPLETE GB-67 TO 10' BGS
- BACKFILL BOREHOLE

1100 PICK UP JACOB BURCH @ GATE

1113 BEGIN DRILLING GB-61

1120 COLLECT SAMPLE GB-61/3-5

1127 COLLECT SAMPLE GB-61/5-7

- COMPLETE GB-61 TO 10' BGS
- BACKFILL BOREHOLE

1145 LUNCH; VERRIER OFFSITE FOR DAY.

1230 FINISH LUNCH

1235 BEGIN DRILLING GB-54

1240 COLLECT SAMPLE GB-54/0-2

1250 COLLECT SAMPLE GB-54/2-4

- COMPLETE GB-54 TO 10' BGS
- BACKFILL HOLE

7/20/21 133835

1322 Begin Drilling GB-47
1325 Collect GB-47/3-5
1330 Collect GB-47/5-7
- Complete GB-47 to 10' bgs
- Backfill Boring.
1352 Begin Drilling GB-41
1400 Collect GB-41/4-6
1405 Collect GB-41/6-8
- Complete GB-41 to 10' ; Backfill w/ chips
1420 Begin Boring GB-34
1425 Collect GB-34/1'-3'
1430 Collect GB-34/3'-5'
- Complete GB-34 to 10'
- Backfill Boring.
1450 Begin Boring GB-33
1455 Collect GB-33/2-4
1500 Collect GB-33/4-6
- Complete GB-33 to 10'
- Backfill Boring.
1540 Begin Drilling GB-40
1545 Collect GB-40/1.5-3.5
1600 Collect GB-40/11-13
- Complete GB-40 to 15'
- Backfill Boring.

7/20/21 133835

1605 RIDI offsite for day
1620 Collect RB-02 off site.
1635 Technician Burrell offsite

[redacted]

B Lockwood
Z. Verret

7/21/21 133835

Task: Soil Boring

Weather: 90s, Sunny, some wind.

700 Verret onsite : Lockwood onsite

710 Roberts onsite
- Fill out PTA
- Decon rods
- Calibrate PID

741 Begin Drilling GB-39

745 NIOSH 90 sec Aug
- By Truck (Bmco) not Drilling : 64 DB
- By Truck while Drilling : 77DB

750 Collect sample GB-39/5-6

755 Collect sample GB-39/7-6
- Complete GB-39 to 10' BGS
- Backfill borehole

803 NIOSH 30 sec noise Aug.
- By Truck while pulling Rods: 69.9 DB

817 Begin Drilling GB-32

821 Collect sample GB-32/0-2

825 Collect samples GB-32/2-4, GB-32/2-4MS, + GB-32/2-4MSD
- complete GB-32 to 10' BGS
- backfill borehole

842 Begin Drilling GB-46

B. Lockwood
Z. Verret

7/21/21 133835

847 Collect samples GB-46/2-4
+ GB-46/2-4D

852 Collect sample ~~GB-52~~ GB-46/4-6
- Complete GB-46 to 10' BGS
- Backfill borehole

907 Begin drilling GB-53

910 Collect sample GB-53/0-2

915 Collect sample GB-53/3-5
- Complete GB-53 to 10' BGS
- Backfill borehole

925 Decon rods
- NIOSH Sound level (30sec) w/ power washer: 72.9dB

957 Begin drilling GB-60

1000 Collect sample GB-60/2-4

1010 Collect sample GB-60/5-7

1023 Begin drilling GB-66

1030 Collect sample GB-66/3-5
+ GB-66/3-5D

1035 Collect sample GB-66/5-7
- Complete GB-66 to 10' BGS

40 - Backfill Hole

1048 Begin Drilling GB-59

1052 Collect sample GB-59/2-4

1105 Collect sample GB-59/8-10
- Complete GB-59 to 10' BGS
- Backfill borehole

Z. Verret
B. Lockwood

7/21/21 133831

1118 Begin drilling GB-52
1124 Collect sample GB-52/2-3
1128 Collect sample GB-52/3-5
- Complete GB-52 to 10' BGS
- Backfill borehole
1153 ~~Break for lunch~~ Decon rods
1205 Break for lunch
1245 Back from lunch
1252 Begin drilling ~~GB-45~~ GB-45
1255 Collect sample GB-45/0-2
1300 Collect sample GB-45/2-4
- complete GB-45 to 10' BGS
- Backfill borehole
1330 Begin drilling GB-38
1340 Collect sample GB-38/0-2
1345 Collect samples GB-38/3-5
GB-38/3.5MS & GB-38/3.5MSD
- Complete GB-38 to 10' BGS
- Backfill borehole
1405 Relinquish samples to T. Finocharo
1410 Begin drilling GB-31
1418 Collect sample GB-31/3-5
1422 Collect sample GB-31/5-7
- Complete GB-31 to 10' BGS
- Backfill borehole

B. Lockwood
Z. Verret

7/21/21 133831

1436 Begin drilling GB-24
1440 Collect GB-24/1-3
1445 Collect sample GB-24/3-5
- complete GB-24 to 10' BGS
- Backfill borehole
1455 Decon rods
1510 Collect sample FB-03
1520 Begin drilling GB-17
1522 Collect sample GB-17/1-3
1530 Collect sample ~~GB-17/3-5~~ GB-17/3-5
- Complete GB-17 to 10' BGS
- Backfill borehole
1545 Begin drilling GB-25
~~Collect sample GB-25/~~
1550 Refusal at ~7' BGS
- offset ~ 10' West
1600 Refusal at ~7' BGS
- will try offset in the morning
1620 Roberts sign out & off site
1635 Lockwood: vacate offsite

[redacted]

7/22/21 133835 B. Lockwood Z. Verret

TASK: Soil Sampling

WEATHER: 90s, Sunny, High Humid, light wind

700 BMcD onsite
- B. Lockwood offsite for PED

715 Roberts onsite
- PTA + safety meeting

725 Decon rods

745 Mob to GB-25

750 Begin drilling GB-25
- offset 20'W & 25' South
- B. Lock wood onsite

810 Collect sample GB-25/0-2

818 Collect samples GB-25/2-4, GB-25/2-4MS, & GB-25/2-4MSD

825 Complete GB-25 to 10' BGS
- Backfill borehole

842 Begin drilling GB-18

850 Collect sample GB-18/3-5

855 Collect sample GB-18/5-7
- Complete GB-18 to 10' BGS
- Backfill borehole

920 Begin drilling GB-11

923 Collect sample GB-11/1-3

930 Collect sample GB-11/3-5
- Complete GB-11 to 10' BGS

7/22/21 133831 B. Lockwood Z. Verret

950 Decon rods

1005 Begin drilling GB-04

1010 Collect sample GB-04/2-3

1015 Collect samples GB-04/3-5 + GB-04/3-5D
- Complete GB-04 to 10' BGS
- Backfill borehole

1030 Begin drilling GB-05

1037 Collect sample GB-05/3-5

1042 Collect sample GB-05/5-7
- complete GB-05 to 10' BGS
- Backfill borehole

1058 Begin drilling GB-12

1105 Collect sample GB-12/2.5-3.5

1110 Collect sample GB-12/4-6
- complete GB-21 to 10' BGS
- Backfill borehole

1127 Begin drilling GB-19

1135 Collect sample GB-19/0-2

1141 Collect sample GB-19/3-5
- complete GB-19 to 10' BGS
- Backfill borehole

1210 Break for lunch

1240 Back from lunch
- Decon drilling rods

7/22/21 1328ET

1253 Begin drilling GB-26
1300 Collect sample GB-26/3-4
1305 Collect sample GB-26/4-5
- Complete GB-26 to 10' BGS
- Backfill borehole
1322 Mob to GB-41 to collect explosives samples that were missed the first time around. Push macro core from 4'-9'.
1330 Collect sample GB-41/4-6
1332 Collect sample GB-41/6-8
- Backfill borehole
1405 Relinquish samples to T. Finocharo (Pace)
1410 Begin drilling GB-42
1418 Collect sample GB-42/2-3
1425 Collect sample GB-42/3-5
- complete GB-42 to 10' BGS
- Backfill GB-42
1436 Begin drilling GB-35
1440 Collect sample GB-35/2-3
1445 Collect samples GB-35/3-5 & GB-35/3-5D
- complete GB-35 to 10' BGS
- Backfill borehole
1458 Decon drill rods

7/22/21 1328ET

1515 Collect sample RB-04
1524 Begin drilling GB-28
1527 Collect sample GB-28/1.5-2.5
1533 Collect sample GB-28/3-5
-Complete GB-28 to 10' BGS
- Backfill borehole
1546 Begin drilling GB-21
1555 Refusal at 8.5' BGS
-Offset ~40' West
1621 Refusal at ~16' BGS
-Will attempt new offset first thing in the morning
1635 Roberts offsite
[illegible] Vault offsite
[illegible] Dolimost offsite

(b) (6)

7/23/21 133835 B. Lockwood Z. Vonnet

Task: Soil Sampling

Weather: Sunny, 90s, Humid

700 Vonnet onsite

710 Lockwood onsite.

720 Roberts onsite (Local sub for Hunter)
- Fill out PTA

735 Begin drilling GB-21
- ~35' South of First offset

741 Collect sample GB-21/0.5-2.5

745 Collect sample GB-21/3-5
- Complete GB-21 to 10' BGS
- Backfill borehole

801 Decon drill rods

805 Collect sample RB-05

833 Begin drilling GB-14
- Refusal at ~3' BGS
- Offset ~6' South

845 Collect sample GB-14/0-2

850 Collect sample GB-14/3-5
- Complete GB-14 to 10' BGS

907 Begin drilling GB-07

913 Collect sample GB-07/2.5-3.5

936 Collect Samples GB-07/7-9, GB-07/7-9MS, & GB-07/7-9MSD
- Complete GB-07 to 15' BGS

7/23/21 133835 B. Lockwood Z. Vonnet

959 Begin drilling GB-06

1005 Collect sample GB-06/2-3

1010 Collect sample GB-06/3-5
- Complete GB-06 to 10' BGS

1027 Begin drilling GB-13

1032 Collect sample GB-13/0-2

1036 Collect sample GB-13/3-5
- Complete GB-13 to 10' BGS
- Backfill borehole

1054 Begin drilling GB-20

1102 Collect sample GB-20/0-2

1107 Collect sample GB-20/3-4

1130 Begin drilling GB-27

1135 Collect sample GB-27/0.5-2

1139 Collect sample GB-27/3-5
- Complete GB-27 to 10' BGS

1205 Lunch

1300 Finish Lunch.

1302 Begin Driving GB-08

1307 Collect sample GB-08/2.5-3.5

1312 Collect sample GB-08/3-5
- Complete GB-08 to 10' BGS
- Back Fill borehole

1328 Begin drilling GB-09

1333 Collect sample GB-09/1.5-3

7/23/21

B. Lockwood

1338 ET

1337 Collect sample GB-09/4-6
- Complete GB-09 to 10' BGS
Relinquish samples to T. Finocchario
1400 Begin drilling GB-15
1409 Collect sample GB-15/2-3
1412 Collect sample GB-15/3-5
- Complete GB-15 to 10' BGS
- Backfill borehole
Begin drilling GB-22
1432 Collect sample GB-22/1-3
1436 Collect sample GB-22/3-5
- Complete GB-22 to 10' BGS
- Backfill borehole

1440 MOB to Decon pad GB-20+27, Put up Caution Tape around Decon pad & IDW.
1505 Vistor offsite.
1510 Caution Tape Added around liquid IDW Tanks & Decon pad, Roberts & Drill Rig Trailer.
1518 Roberts offsite
1520 Lockwood offsite.

(b) (6)

9/26/21

2. Gravlee
3. Lockwood

Task: Soil Sampling
Weather: 92°, Humid, Sunny

730 Lockwood & Parsons onsite.
735 Vistor onsite.
740 Fill out PTA
809 Begin drilling GB-29
812 Collect sample GB-29/1.5-2.5
817 Collect sample GB-29/
- Complete GB-29 to 10' BGS
- Backfill borehole
843 Begin drilling GB-36
846 Collect sample GB-36/0-2
850 Collect sample GB-36/2-4
- Complete GB-43 to 10' BGS
- Backfill borehole
910 Begin drilling GB-43
920 Collect sample GB-43/3-5
926 Collect sample GB-43/5-7
- Complete GB-43 to 10' BGS
- Backfill borehole
950 Begin drilling GB-01
- low recovery in first 0-8 feet.
- offset 2' South
1001 Refusal at ~2' BGS
- offset 4' South

7/26/21

B. Lockwood
Z. Verret

1004 Refusal at ~2' BGS
- offset 30' West
1013 Noise Sound Readings (30 secs)
Hearing Rig: 73.6 dB
Hammer Rig: 74.8 dB
1027 Collect sample GB-01/8-10
1032 Collect sample GB-01/11-13
- Complete GB-01 to 13' BGS
1053 Begin drilling GB-03
1056 Collect sample GB-03/1-3
1118 Collect sample GB-03/4-6
- Complete GB-03 to 12' BGS
1139 Begin drilling GB-02
1141 Collect sample GB-02/2-3
~~Collect Samples GB-02/~~
GB-02/2-3MS, & GB-02/2-3MSD
1158 Collect Sample GB-02/8-9
- Complete GB-02 to 10' BGS
1220 Break for lunch
1250 Back from lunch
1255 Decon drilling rods
1318 Begin drilling GB-44
1325 Collect sample GB-44/3-5
1328 Collect sample GB-44/5-7
- Complete GB-44 to 10' BGS
- Backfill borehole

7/26/21

B. Lockwood
Z. Verret

1400 Relinquish samples to T. Finnochario
1405 Begin drilling GB-37
1412 Collect sample GB-37/3-5
1416 Collect sample GB-37/5-7
- Complete GB-37 to 10' BGS
- Backfill borehole
1436 Begin drilling GB-30
- Refusal at ~3' BGS
- offset ~15' North
1452 Collect sample GB-30/3-4
1455 Collect sample GB-30/4-5
- Complete GB-30 to 10' BGS
- Backfill borehole
1507 Begin drilling GB-23
1516 Collect sample GB-23/2.5-3.5
1520 Collect sample GB-23/4-6
- Complete GB-23 to 10' BGS
- Backfill borehole
1532 Begin drilling GB-16
1538 Collect sample GB-16/3-4
1542 Collect sample GB-16/4.5
- Complete GB-16 to 10' BGS
- Backfill borehole
1557 Begin drilling GB-10
1600 Collect sample GB-10/1.5-2.5

7/26/21

B. Lockwood
Z. Verret

1605 Collect sample GB-10/35
- Complete GB-10 to 10'365
- Backfill borehole
1620 Decon drill rods
1630 Collect sample RB-06
1640 Respond offsite.
1645 Collect Water offsite

(b) (6)

7/27/21 133835 B. Lockwood

Task: Geoprobe Borings

Weather: Sunny 90s Humid

735 Leave for site

740 Tailgate onsite (TLZ: Mud)

750 MOB to GB-51 for Geoprobe Borings
- Collect Shelby Tube from 2-4' & 1 gal Bag from each

~~Collect Shelby Tube for GB-51 & 1 gal Bag from each~~

825 2-4' Shelby Tube Stuck Down Hole

835 Unable to recover Tube Refusal ~ 4' Borings Two Times

840 Collect GB-51/2-4' Shelby & 1 gallon Bag

850 Collect GB-51/6-8 Shelby Tube

855 Collect GB-51/6-8 1 gallon bag.

900 Abandon Boring GB-51

902 Decon Rotohammer, MOB to GB-01

915 Pause Driving for Safety Review with Crew

930 Begin Boring GB-01 3-5 & 11-13

957 Collect GB-01/3-5 1 gallon Bag.

1000 Collect GB-01/3-5 Shelby Tube

1015 Collect GB-01/11-13 Shelby Tube

1020 Collect GB-01/13-13' 1 gallon Bag

1025 Pause for more Safety

1050 Finish Safety Review, MOB to GB-22

1102 Begin Drilling GB-22

7/27/21 133835 Blakiston

1130 We recovery in 2-4' Shelby Tube

1133 Will depart to collect Bucket Sand for a 1 gallon Bag

1135 collect GB-22/2-4' Shelby Tube.

1145 collect GB-22/5-7 Shelby Tube.

1148 collect GB-22/5-7 1 gallon Bag (5-7')

1155 Collect GB-22/2-4 1 gallon Bag (2-4')

1200 collect GB-01/2-3' for PSD, MECHAL, PSD, GEO, VOCS, Dec/ORO

1210 Rest Depart for Lunch

1235 Arrive (Wx-cl)

DTW: 14.19

DTB: 24.26

1236 Rest over for

1240 Lakinson Depart for Supplies / Lunch

1305 Lakinson Arrive

1315 Begin Boring GB-47

1322 Shelby Tube Lost Down Hole, will depart & TRY Again

1330 Collect GB-47/3-5 1 gallon Bag

1335 Collect GB-47/3-5 Shelby Tube.

1358 Collect GB-47/7-9 Shelby Tube

1357 collect GB-47/7-9 1 gallon Bag

1405 Samples Relinquished to PMC Courier

1410 Setup on GB-34

7/27/21 B Lakinson

1430 collect GB-34/1-3 Shelby Tube

1434 collect GB-34/13 Gallon Bag

1439 collect GB-34/4-6 Shelby Tube

1441 Collect GB-34/4-6 Shelby Gallon Bag

1454 move to GB-40 : Decon

1502 Begin Drilling GB-40 2-4 : 11-13'

1510 See note items to pull Shelby Tube w/o ~~at~~ of Boring will reuse w 3' TRY Again.

1515 Steve Trainor will assist w/ Start of GB-40 Boring

1531 Recvd down will collect 1-2' Bag Sample ? Report to the Robots is out of Shelby Tubes

~~1535 collect GB-10/1-2~~ See 7/28/21 comment

1550 Collect GB-07 Off the Shoe.

1557 Robots Arrive.

1615 Crew will Return to Decon Pad.

1620 Lakinson Depart

[redacted]

7/28/21 133835 B. Lockwood

Task: Soil Borings (Geotech)

Weather: 90-100, Humid, Mostly Sun

656 Lockwood onsite.

715 Robots onsite

738 Safety paperwork complete & tailgate Reviewed.

742 Offset -10' East from previous Offset.

- Begin Drilling GB-40

744 No Recovery ; Shelby Tube Damaged, will offset -10' East Again.

753 Collect GB-40/2-4 Shelby Tube.

757 Recollect GB-40/2-4 1 Gallon Bag w/ Wet Material

806 Collect GB-40/N-13 Shelby Tube.

810 Collect GB-40/13-13 1 Gallon Bag.

828 Collect RB-08 off the shoe.

840 Rods Driller ; moved to GB-59

846 Collect GB-59/2-4 1 gal bag.

850 Collect GB-59/2-4 Shelby Tube.

900 Collect GB-59/8-10 Shelby Tube

905 Collect GB-59/8-10 1 gal Bag.

910 Move to GB-11 ; Drill Rods.

925 ~~Begin Drilling GB-11 2-4 ; 6-5~~

938 ~~Collect GB-11/2-4 1 gal Bag~~

940 ~~Collect GB-11/6-8 Shelby Tube~~

950

7/28/21

Task: Soil Borings (Geotech)

Summary

947 ~~Collect GB-11/8-9~~ 1 gal bag.

950 ~~Pull Recovery~~ For 2-4' Shelby ; Shelby Damaged. ~~Move offset~~ ; Collect 2-4' Shelby

953 ~~Collect GB-11/2-4' Shelby~~

958 Incollect Boring Location Necessity Samples GB-18 not GB-11 Samples moved ; Move to Collect GB-11 location.

1020 Begin Drilling GB-11

1026 Collect GB-11/2-4' Shelby Tube

1028 Collect GB-11/2-4 1 Gallon Bag.

1030 8-8' Shelby Backed off Down 6"/6 will offset ; Try Again.

1038 Collect GB-11/6-8 Shelby Tube

1045 Collect GB-11/6-8 1 Gallon Bag.

1050 Move to GB-07 ; Drill.

1102 Begin Boring GB-07 2-4 ; 7-9

1116 Driller not confident in Shelby Tube Sucking Based on 0-2' Material ; Recovery will offset -5' West to look for Better Materials.

1125 No Sampleable Material in 0-2' Run. Clay @ Bottom w 2" wet push Shelby Tubes ; Offset to Collect Soil from 2-3'

7/25/24 133831

1120 Collect GB-07/2-4 Shelby Tube

1135 Set Recovery on Shelby Tube Insert to clean for next use cover Safety stuff with other wind towards for night

1150 Night located 3 Shelby Tubes, will Clean Here Attempt 2nd Recovery

1205 Faces to Recover Anything From 7-9 will offset ~4ft & TL# to collect Soil For Bag From 2-4, Shelby Tube From 6-8 & Bag From 8-9

1210 Collect GB-07/2-4 last bag

1220 Strip no Screws w/ the Shelby Tube, Returns to Lund Ladwood to Clean Chatter to Discuss

1230 From Cameron use Shallow Slurry & 1 gallon bag Fence GB-07 Core Run Good with Also Submit GB-18 Shelby Tubes.

1300 Need Key to Core Barrel & Head to 107 for Safety Talk Plan on Drive

1400 Mon Back In Core Barrel for Drive Beginning

1455 Returns Clean Offset Shimmed out & Packed up Bolts & Wash Pans Secured.

1500 Returns Offsite

1525 Ladwood offsite to office

1630 Groundout Samples & COC's Handed to Duke

(b) (6) [redacted]

APPENDIX B – DRILLING LOGS

List of Acronyms

bgs	below ground surface
CH	high plasticity clay
CL	low plasticity clay
DUP	duplicate sample
GW	clean gravel – well graded
MC	MacroCore®
MS	matrix spike
MSD	matrix spike duplicate
MSL	mean sea level
NA	not applicable
PID	photoionization detector
ppm	parts per million
SM	silty sand
SP	clean sand – poorly graded
SW	clean sand – well graded
tsf	tons per square foot

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-01
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 13 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt (4.0")									Depth to water while drilling ▽ / Depth to water after drilling ▼
		Gravel (Fine-Coarse), with Cobbles (Fine)		MC	1		NA	1.0/3.0	NA	NA	
	2	silty CLAY, Yellowish Brown (10YR 5/4), with Very Dark Grayish Brown (10YR 3/2) mottle, moist, high plasticity, no odor	CL								
	3										Collect GB-01/2-3 (7/27/21 1200)
	4								2.0	0.0	
	5			MC	2		NA	1.0/5.0	-	0.0	No free water observed
	6										
	7										
	8										
	9			MC	3		NA	5.0/5.0	2.0	0.0	
	10								3.5	0.0	Collect GB-01/8-10 (1027)
	11	silty CLAY, Dark Greenish Gray (Gley 1 4/5GY), with Olive (10YR 4/4) and Yellowish Brown (10YR 3/6) mottles, moist, high plasticity, no odor	CL						2.5	0.0	
	12	-12-12.25': silty CLAY lense, Black (10YR 2/1)							2.5	0.0	
	13										Collect GB-01/11-13 (1032)
		Boring terminated at 13 feet bgs.									Abandoned with hydrated bentonite chips on 7/26/2021

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-02
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
		Gravel Fill (Fine-Corase)		MC	1		NA	3.0/3.0	-	0.0	
	1								-	0.0	
	2	silty CLAY, Dark Yellowish Brown (10YR 4/4), with Gray (10YR 5/1) and Black (10YR 2/1) mottles, moist, high plasticity, no odor	CH						2.0	0.0	
	3										Collect GB-02/2-3 & MS/MSD (1141)
	4	silty CLAY, trace limestone gravel (coarse), Dark Gray (10YR 4/1), with Olive Brown (2.5YR 4/3) mottles, moist, high plasticity, no odor	CH	MC	2		NA	4.0/5.0	2.0	0.0	
	5								2.0	0.0	No free water observed
	6								2.5	0.0	
	7	silty CLAY, Dark Yellowish Brown (10YR 4/4), with Very Dark Grayish Brown (10YR 3/2) mottles, moist, high plasticity, no odor	CH						3.0	0.0	
	8	Asphalt									
		silty CLAY, Dark Greenish Gray (Gley 1 4/10GY), moist, soft, high plasticity, slight petrol odor -2" SAND (fine)	CH	MC	3		NA	1.5/2	0.5	0.0	Collect GB-02/8-9 (1158)
	9										
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/26/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-03
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt (4")									Depth to water while drilling ▽ / Depth to water after drilling ▼
		Asphalt and Limestone Gravel (Fine-Coarse)									
	1	Silty CLAY, Dark Yellowish Brown (10YR 4/4), with Dark Gray (10YR 4/1) and Black (10YR 2/1) mottles, moist, hard, medium plasticity, no odor	CL	MC	1		NA	3.0/3.0	-	-	
	2								- 4.5	0.0 0.6	
		Silty SAND, fine grained, Black (10YR 2/1), trace cinders, moist, slight petrol odor	SW-SM						4.5	0.0	
	3	Silty CLAY, Dark Yellowish Brown (10YR 4/4), with Dark Gray (10YR 4/1) and Black (10YR 2/1) mottles, moist, hard, medium plasticity, no odor	CL								Collect GB-03/1-3 (1056)
		Silty SAND, fine grained, Black (10YR 2/1), trace cinders, moist, slight petrol odor	SW-SM						2.5	-	
	4								4	0.0	
	5								2.5	0.0	No free water observed
		silty CLAY, Dark Yellowish Brown (10YR 4/4), with Dark Gray (10YR 4/1) and Black (10YR 2/1) mottles, moist, hard, medium plasticity, no odor	CL	MC	2		NA	5.0/5.0	4.5	0.0	
	6	Concrete (old foundation)									Collect GB-03/4-6 (1118)
	7								-	-	
	8	-Chert concrete fragments									
	9			MC	3		NA	1.0/2.0	-	-	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/23/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-04
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt (7")									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Gravel and Clay									
	1	Concrete (0.8")		MC	1		NA	3.0/3.0			
	2	Silty CLAY, Dark Yellowish Brown (10YR 4/6), trace iron nodules (fine), moist, high plasticity, no odor							1.0	0.0	
	3	-Gravel seam (fine), 2"							1.0	0.0	Collect GB-04/2-3 (1010)
	4								0.5	0.0	
	5	-becomes trace Brown (10YR 3/3) mottles		MC	2		NA	5.0/5.0	0.5	0.0	No free water observed
	6								0.5	0.0	Collect GB-04/3-5 & DUP (1015)
	7								0.5	0.0	
	8								0.5	0.0	
	9			MC	3		NA	2.0/2.0	1.5	0.0	
	10	Boring terminated at 10 feet bgs.							-	0.0	Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-05
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽
		Concrete									Depth to water after drilling ▼
	1	Poor Recovery, gravel fill		MC	1		NA	1.0/3.0	-	-	
	2										
	3	silty CLAY, Dark Yellowish Brown (10YR 4/4) with trace Black (10YR 2/1) mottles, moist, high plasticity, no odor									
	4								0.5	0.0	Collect GB-05/3-5 (1037)
	5			MC	2		NA	4.0/5.0	0.5	0.0	No free water observed
	6								0.5	0.0	
	7								0.5	0.0	Collect GB-05/5-7 (1042)
	8	-becomes with some silt, increasing Black (10YR 2/1) mottles							2.5	0.0	
	9			MC	3		NA	2.0/2.0	2.5	0.0	
									2.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-06
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass and Clay									
	1	Gravel (fine) and Sand		MC	1		NA	3.0/3.0	3.5	0.0	
	2	silty CLAY, Dark Yellowish Brown (10YR 3/6) with Dark Gray (Gley 1 4/N) mottles, moist, high plasticity, no odor	CL						3.5	0.0	
	3								3.5	0.0	Collect GB-06/2-3 (1005)
	4	silty CLAY, Dark Yellowish Brown (10YR 4/6), with Light Brownish Gray (10YR 6/2) mottles and trace Black (10YR 2/1) mottles, moist, soft, high plasticity, no odor							1.5	0.0	Collect GB-06/3-5 (1010)
	5			MC	2		NA	5.0/5.0	0.5	0.0	No free water observed
	6								0.5	0.0	
	7								0.5	0.0	
	8										
	9			MC	3		NA	2.0/2.0	1.0	0.0	
	10	Boring terminated at 10 feet bgs.							1.0	0.0	
	11								0.5	0.0	Abandoned with hydrated bentonite chips on 7/23/2021
	12										
	13										

Depth to water while drilling

Depth to water after drilling

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-07
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 13 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt and Limestone gravel (fine-coase), (FILL)		MC	1		NA	3.0/3.0	-	-	
	2										
	3	silty CLAY, Grayish Brown (10YR5/2), with Dark Yellowish Brown (10YR 4/6) mottles, moist, high plasticity, no odor	CH						2.5	0.0	
	4								-	-	Collect GB-07/2.5-3.5 (913)
	5			MC	2		NA	4.0/5.0	-	-	No free water observed
	6	Brick fragments and Sand (medium)							2.5	0.0	
	7	silty CLAY, Very dark greenish gray (Gley 1 3/10Y), with Black (10YR 2/1) mottles, moist, low-medium plasticity, slight petrol odor	CH						1.5	0.0	
	8										
	9	silty CLAY, Brown (10YR 4/3),with Gray (10YR 6/1) and Dark Grayish Brown (10YR 3/2) mottles, moist, medium plasticity, no odor	CH	MC	3		NA	5.0/5.0	3.0	0.0	Collect GB-07/7-9 & MS/MSD (936)
	10								3.5	0.0	
	11	-Becomes soft							1.5	0.0	
	12								2.0	0.0	
	13	Boring terminated at 13 feet bgs.									Abandoned with hydrated bentonite chips on 7/23/2021

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-08
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt and Limestone gravel (fine-coarse)		MC	1		NA	2.5/3.0	-	0.0	
	2								-	0.0	
	3	silty CLAY, dark yellowish brown (10YR 4/4), with some Black (10YR 2/1) mottles, moist, high plasiticity, no odor							1.5	0.0	
	4	-Becomes with light gray (Gley 1 7/N) and yellowish brown (10YR 5/8) mottles							2.0	0.0	Collect GB-08/2.5-3.5 (1307)
	5			MC	2		NA	3.5/5.0	2.0	0.0	No free water observed
	6	-Brick fragments (3") -Limestone gravel (3")							3.0	0.0	Collect GB-08/3-5 (1312)
	7								2.0	0.0	
	8	-Becomes with dark brown (10YR 3/3 mottles)									
	9			MC	3		NA	1.5/2.0	- 3.0 - 2.0 -	0.0 - 0.0 - 0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/23/2021
	11										
	12										
	13										

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-09
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt and Limestone Gravel (fine-coarse)		MC	1		NA	2.5/3.0	-	0.0	
									-	0.0	
	2	silty CLAY, Gray (10YR 5/1), with dark yellowish brown (10YR 4/6) mottles, trace iron nodules, moist, high plasticity, no odor Brick fragments	CH						3.0	0.0	
									3.0	0.0	
	3	silty CLAY, Gray (10YR 5/1), with dark yellowish brown (10YR 4/6) mottles, trace iron nodules, moist, high plasticity, no odor Brick fragments	CH								Collect GB-09/1.5-3 (1333)
	4	silty CLAY, Gray (10YR 5/1), with dark yellowish brown (10YR 4/6) and very dark yellowish brown (10YR 3/2) mottles, moist, high plasticity, no odor							2.5	0.0	
	5			MC	2		NA	5.0/5.0	2.5	0.0	No free water observed
	6	-Becomes soft							2.0	0.0	Collect GB-09/4-6 (1337)
	7								1.5	0.0	
	8										
									1.0	0.0	
	9			MC	3		NA	2.0/2.0	-	0.0	
									1.0	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/23/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-10
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
0	Asphalt									
	Asphalt and Limestone Gravel							-	0.0	
1	silty CLAY, Greenish Gray (Gley 1 6/10Y), with Very Dark Gray (10YR 3/1) mottles, moist, high plasticity, no odor	CH	MC	1		NA	2.5/3.0	2.5	0.0	
2	Brick fragments	CH								
	silty CLAY, very dark gray (10YR 3/1), with black (10YR 2/1) mottles, moist, high plasticity, no odor	CH						2.5	0.0	Collect GB-10/1.5-2.5 (1600)
3	silty CLAY, Yellowish brown (10YR 5/4), with Gray (10YR 5/1), yellowish brown (10YR 5/8), and dark brown (10YR 5/3) mottles, moist, high plasticity, no odor	CH								
4								3.0	0.0	Collect GB-10/3-5 (1605)
5			MC	2		NA	5.0/5.0	3.5	0.0	No free water observed
6								2.5	0.0	
7	-Becomes soft							2.5	0.0	
8										
			MC	3		NA	1.5/2.0	0.5	0.0	
9								-	0.0	
								0.5	0.0	
10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/26/2021
11										
12										
13										

Depth to water while drilling

Depth to water after drilling

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-11
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽
		Asphalt and Limestone Gravel									Depth to water after drilling ▼
	1	silty CLAY, Yellowish brown (10YR 5/6), fine-medium iron nodules, moist, high plasticity, no odor	CL	MC	1		NA	2.5/3.0	-	0.0	
	2								2.5	0.0	
	3								2.5	0.0	Collect GB-11/1-3 (923)
	4	silty CLAY, Gray (10Yr 6/1), with yellowish brown (10YR 5/6), black (10YR 2/1), and white mottles, moist, friable, no odor	CL						2.5	0.0	Collect GB-11/3-5 (930)
	5	silty CLAY, greenish gray (Gley 1 6/10Y), with brownish yellow (10 YR 6/8) mottles, moist, low plasticity, hard	CL	MC	2		NA	5.0/5.0	3.0	0.0	No free water observed
	6								3.5	0.0	
	7								4.5	0.0	
	8								>4.5	0.0	
	9	-Becomes tace silt, high plasticity		MC	3		NA	2.5/2.0	>4.5	0.0	
									>4.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-12
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt and Limestone Gravel (fine-coarse), with sandy clay fill		MC	1		NA	2.5/3.0	-	0.0	
	2	silty CLAY, Brown (10YR 4/3), with Gray (10YR 5/1) mottles, moist, high plasticity, no odor	CH						2.5	0.0	
	3	CLAY trace silt, yellowish brown (10YR 5/6), with Black (10YR 2/1) mottles, moist, high plasticity, no odor	CH						3.0	0.0	Collect GB-12/2.5-3.5 (1105)
	4	- Gravel seam (4") fine-medium grained		MC	2		NA	5.0/5.0	3.0	0.0	No free water observed
	5								3.5	0.0	Collect GB-12/4-6 (1110)
	6	silty CLAY, weak red (10R 4/3), with Gray (10YR 6/1) and Yellow (2.5Y 7/6) mottles, moist, hard, friable/low plasticity, no odor	CL						4.0	0.0	
	7								4.0	0.0	
	8			MC	3		NA	2.25/2.0	-	0.0	
	9								4.0	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-13
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									▽ Depth to water while drilling ▼ Depth to water after drilling
	0	silty CLAY, trace coarse sand and gine gravel, dark yellowish brown (10YR 3/6), with very dark brown (10YR 3/1) mottles, moist, high plasticity, no odor	CH						1.5	0.0	
	1								-	0.0	
	1			MC	1		NA	1.5/3.0	1.0	0.0	
	2										Collect GB-13/0-2 (1032)
	3								1.5	0.0	
	4								-	0.0	Collect GB-13/3-5 (1036)
	4								1.5	0.0	
	5								1.0	0.0	No free water observed
	5			MC	2		NA	2.5/5.0			
	6										
	7										
	8										
	8								1.0	0.0	
	9			MC	3		NA	2.2/2.0	1.5	0.0	
	9								1.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/23/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-14
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	silty CLAY, Dark yellowish brown (10YR 4/6) with very dark grayish brown (10YR 3/2) mottles, some coarse iron nodules, moist, medium plasticity, no odor	CH	MC	1		NA	2.0/3.0	- 2.5 3.0	0.0 0.0 0.0	Collect GB-14/0-2 (845)
	3	Limestone gravel (fine-coarse)									
	4	silty CLAY, dark yellowish brown (10YR 4/4), with very dark grayish brown (10YR 3/2) and light brownish gray (10YR 6/2) mottles, moist, high plasticity, no odor	CH	MC	2		NA	2.8/5.0	- 2.5 2.5 2.5	0.0 0.0 0.0 0.0	Collect GB-14/3-5 (850) No free water observed
	8	CLAY, trace silt, Brown (7.5YR 4/4) with Black (10YR 2/1), moist-wet, high plasticity, no odor	CH	MC	3		NA	1.8/2.0	3.0 - 3.5	0.0 0.0 0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/23/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-15
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt and Limestone Gravel (fine-coarse)		MC	1		NA	3.0/3.0	3.0	0.0	
	2	silty CLAY, dark yellowish brown (10YR 4/6), with light brownish gray (10YR 6/2) mottles, moist, high plasticity, no odor	CL						-	0.0	
	3								3.0	0.0	Collect GB-15/2-3 (1409)
	4								3.0	0.0	Collect GB-15/3-5 (1412)
	5			MC	2		NA	4.0/5.0	0.5	0.0	No free water observed
	6								0.5	0.0	
	7								0.5	0.0	
	8								1.5	0.0	
	9			MC	3		NA	1.7/2.0	1.0	0.0	
	10	Boring terminated at 10 feet bgs.							1.5	0.0	Abandoned with hydrated bentonite chips on 7/23/2021
	11										
	12										
	13										

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-16
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass and silty CLAY, friable, FILL							-	0.0	
	1								-	0.0	
				MC	1		NA	2.0/3.0			
	2	Limestone gravel (fine-coarse)							-	0.0	
	3	silty CLAY, yellowish brown (10YR 5/6), with gray (10YR 6/1), weathered iron nodules, moist, high plasticity, no odor	CL								
	4								2.0	0.0	Collect GB-16/3-4 (1538)
	5								2.0	0.0	No free water observed
		-Becomes soft		MC	2		NA	3.5/5.0			Collect GB-16/4-5 (1542)
	6								1.0	0.0	
	7								1.0	0.0	
	8	-Becomes trace dark brown (10YR 3/3) mottles							1.0	0.0	
	9			MC	3		NA	2.0/2.0	1.0	0.0	
									1.0	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/26/2021
	11										
	12										
	13										

Depth to water while drilling

Depth to water after drilling

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-17
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽
		Asphalt and CLAY fill									Depth to water after drilling ▼
	1	silty CLAY, yellowish brown (10YR 5/4), moist, high plasticity, no odor	CH	MC	1		NA	3.0/3.0	3.5	0.0	
	2	-Becomes soft							1.0	0.0	
	3								1.0	0.0	Collect GB-17/1-3 (1522)
	4								2.0	0.0	Collect GB-17/3-5 (1530)
	5			MC	2		NA	5.0/5.0	2.0	0.0	No free water observed
	6								2.5	0.0	
	7	CLAY trace silt, yellowish brown (10YR 5/4), with trace black (10YR 2/1) mottles, moist, high plasticity, no odor	CH						2.5	0.0	
	8	-Becomes with Black (10YR 2/1) mottles							2.5	0.0	
	9	sandy CLAY, wet, mostly water		MC	3		NA	3.0/2.0	-	0.0	
		silty CLAY, light gray (10YR 7/2) with yellowish brown (10YR 5/8) mottles, iron nodules (fine-medium), moist, high plasticity, no odor	CH						2.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-18
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt Concrete Poor recovery, gravel		MC	1		NA	0.0/3.0	NA	NA	
	3	silty CLAY, some coarse sand, yellowish brown (10YR 5/4), moist, high plasticity, slight sweet odor (rosemary?)		MC	2		NA	3.5/5.0	1.0 1.0 4.0	0.0 0.0 0.0	Collect GB-18/3-5 (850) No free water observed
	6.5	CLAY some silt, light greenish gray (Gley 1 8/10Y) with olive yellow (2.5Y 6/6) mottles, moist, hard, high plasticity, no odor									
	7	CLAY trace silt, dark reddish gray (10R 4/1) with light greenish gray (Gley 1 8/10Y) and olive yellow (2.5Y 6/6) mottles, trace weak red (10R 5/3) mottles, moist, friable, no odor							4.0	0.0	Collect GB-18/5-7 (855)
	8			MC	3		NA	2.7/2.0	4.0 - 4.0	0.0 0.0 0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/22/2021

Depth to water while drilling

Depth to water after drilling

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-19
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass and clay fill							-	0.0	
	1	silty CLAY, dark reddish gray (5YR 4/3) with light greenish gray (Gley 1 7/10Y) mottles, dry, friable, no odor	CL	MC	1		NA	1.5/3.0	3.5	0.0	
	2										Collect GB-19/0-2 (1135)
	3								3.5	0.0	
	4	CLAY trace silt, yellowish brown (10YR 5/6) with trace black (10YR 2/1) mottles, moist, high plasticity, no odor	CH						4.5	0.0	Collect GB-19/3-5 (1141)
	5			MC	2		NA	5.0/5.0	4.5	0.0	No free water observed
	6								4.5	0.0	
	7								4.5	0.0	
	8	CLAY some silt, dark reddish brown (2.5YR 3/3) with light greenish gray (Gley 1 7/N) and yellow (2.5Y 7/8) mottles, moist, friable/low plasticity, no odor	CL						4.0	0.0	
	9			MC	3		NA	2.5/2.0	-	0.0	
	10	Boring terminated at 10 feet bgs.							4.0	0.0	Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

Depth to water while drilling

Depth to water after drilling

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-20
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass and silty clay fill							-	0.0	
		Poor Recovery		MC	1		NA	0.5/3.0	-	-	Collect GB-20/0-2 (1102)
	3	Limestone gravel (fine-coarse) at bottom (FILL)									
		silty CLAY, dark brown (7.5YR 3/4) with yellow (10YR 7/8) mottles, medium iron nodules, moist, high plasticity, no odor, hard							3.5	0.0	
		-Poor recovery							3.5	0.0	Collect GB-20/3-4 (1107)
				MC	2		NA	1.5/5.0	3.5	0.0	No free water observed
	8										
				MC	3		NA	2.6/2.0	3.5	0.0	
									-	0.0	
	10								3.5	0.0	
		Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/23/2021
	13										

Depth to water while drilling

Depth to water after drilling

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-21
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽
		Asphalt gravel (fine-medium)									Depth to water after drilling ▼
		CLAY, yellowish brown (10YR 5/4), moist, high plasticity, no odor	CL	MC	1		NA	3.0/3.0	-	0.0	
	1								2.0	0.0	
	2								2.5	0.0	Collect GB-21/0.5-2.5 (741)
	3	-Becomes with light gray (10YR 7/1) mottles and medium iron nodules							3.5	0.0	Collect GB-21/3-5 (745)
	4								4.0	0.0	
	5	-Becomes with black (10YR 2/1) mottles		MC	2		NA	5.0/5.0			No free water observed
	6								4.0	0.0	
	7								4.0	0.0	
	8								3.5	0.0	
	9			MC	3		NA	2.5/2.0	-	0.0	
	10	Boring terminated at 10 feet bgs.							4.0	0.0	Abandoned with hydrated bentonite chips on 7/23/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-22
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	0.5	Asphalt and Limestone gravel (fine-coarse)									
	1	silty CLAY, brown (7.5YR 4/4) with trace black (10YR 2/1) mottles, moist, high plasticity, no odor	CL	MC	1		NA	3.0/3.0			
	2								2.0	0.0	
	3								1.5	0.0	Collect GB-22/1-3 (1432)
	4								2.5	0.0	Collect GB-22/3-5 (1436)
	5	-Becomes with light brownish gray (10YR 6/2) mottles		MC	2		NA	5.0/5.0	2.5	0.0	No free water observed
	6								3.0	0.0	
	7								3.0	0.0	
	8								3.0	0.0	
	9			MC	3		NA	2.5/2.0	-	0.0	
	10	Boring terminated at 10 feet bgs.							3.5	0.0	Abandoned with hydrated bentonite chips on 7/23/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-23
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt and Limestone gravel		MC	1		NA	2.6/3.0			
	2								-	-	
		medium SAND and brick fragments									
	3	silty CLAY, Gray (10YR 3/1) with dark yellowish brown (10YR 5/8) and dark brown (10YR 3/3) mottles, moist, high plasticity, no odor							2.0	0.0	
	4								1.0	0.0	Collect GB-23/2.5-3.5 (1516)
	5			MC	2		NA	4.0/5.0	1.0	0.0	No free water observed
	6								1.0	0.0	Collect GB-23/4-6 (1520)
	7								1.0	0.0	
	8								1.0	0.0	
	9			MC	3		NA	2.0/2.0	1.0	0.0	
	10	Boring terminated at 10 feet bgs.							1.0	0.0	Abandoned with hydrated bentonite chips on 7/26/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-24
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽
		Asphalt and Limestone gravel									Depth to water after drilling ▼
	1	silty CLAY, yellowish brown (10YR 5/4), moist, medium plasticity, no odor	CL	MC	1		NA	3.0/3.0	2.5	0.0	
	2								2.5	0.0	
	3								2.5	0.0	Collect GB-24/1-3 (1440)
	4	-Becomes soft, high plasticity							1.0	0.0	Collect GB-24/3-5 (1445)
	5			MC	2		NA	5.0/5.0	1.0	0.0	No free water observed
	6								1.0	0.0	
	7								1.0	0.0	
	8										
	9			MC	3		NA	2.0/2.0	1.5 - 1.5	0.0 0.0 0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-25
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass	CH								Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	silty CLAY, dark yellowish brown (10YR 4/4) with gray (10YR 6/1) mottles, moist, high plasticity, no odor		MC	1		NA	2.5/3.0	2.5	0.0	
	2								2.0	0.0	Collect GB-25/0-2 (810)
	3								1.5	0.0	
	4								2.0	0.0	Collect GB-25/2-4 with MS/MSD (818)
	4.5	SAND, well sorted, medium grained, moist	SW								
	5	silty CLAY, dark yellowish brown (10YR 4/4) with gray (10YR 6/1) mottles, moist, high plasticity, no odor	CH	MC	2		NA	4.0/5.0	2.0	0.0	No free water observed
	6								2.5	0.0	
	7								2.5	0.0	
	8	-Becomes with medium iron nodules							4.0	0.0	
	9			MC	3		NA	2.6/2.0	4.0	0.0	
	10	Boring terminated at 10 feet bgs.							4.0	0.0	Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-26
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Concrete									Depth to water while drilling ▽
		Limestone and Chert gravel									Depth to water after drilling ▼
	1			MC	1		NA	1.25/3.0	-	0.0	
	2										
	3	silty CLAY, light brownish gray (10YR 6/2) with yellowish brown (10YR 5/6) and dark brown (10YR 3/3) mottles, moist, high plasticity, no odor									
	4								2.5	0.0	Collect GB-26/3-4 (1300)
	5			MC	2		NA	4.0/5.0	2.5	0.0	No free water observed
	6								3.0	0.0	Collect GB-26/4-5 (1305)
	7								2.5	0.0	
	8										
	9	-Becomes CLAY trace silt		MC	3		NA	3.0/2.0	2.0 2.0 2.0	0.0 0.0 0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-27
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/23/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Concrete									Depth to water while drilling ▽
		Chert and Limestone gravel (fine-medium)									Depth to water after drilling ▼
	1	silty CLAY, dark yellowish brown (10YR 3/6) with black (10YR 2/1) mottles, moist, high plasticity, slight musky(?) odor	CH	MC	1		NA	1.0/3.0	1.5	0.0	
	2								-	0.0	Collect GB-27/0-2 (1135)
	3	-Becomes trace black (10YR 2/1) mottles							2.5	0.0	
	4								2.5	0.0	Collect GB-27/3-5 (1139)
	5			MC	2		NA	3.8/5.0	2.5	0.0	No free water observed
	6								-	0.0	
	7	silty CLAY, Gray (10YR 6/1) with dark yellowish brown (10YR 4/6) mottles, moist, high plasticity, no odor	CH								
	8								3.0	0.0	
	9	-Becomes trace silt, with black (10YR 2/1) mottles		MC	3		NA	2.0/2.0	-	0.0	
									3.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/23/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-28
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt and Limestone gravel (fine-coarse)							-	-	
	2	silty CLAY, dark yellowish brown (10YR 4/6) with trace black (10YR 2/1) mottles, moist, high plasticity, no odor	CH	MC	1		NA	2.5/3	1.5	0.0	
	3								-	0.0	Collect GB-28/1.5-2.5 (1527)
	4								2.5	0.0	Collect GB-28/3-5 (1533)
	5								2.5	0.0	No free water observed
	6	CLAY trace silt, dark yellowish brown (10YR 4/6) with light brownish gray (10YR 6/2) mottles, moist, hard, high plasticity, no odor	CH	MC	2		NA	5/5	4.0	0.0	
	7								4.0	0.0	
	8	-Becomes no light brownish gray (10YR 6/2) mottles							4.0	0.0	
	9			MC	3		NA	2.3/2	-	0.0	
	10	Boring terminated at 10 feet bgs.							4.0	0.0	Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-29
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
0	Asphalt									
	Asphalt and Limestone gravel (fine-coarse)							-	0.0	
1										
	silty CLAY, dark yellowish brown (10YR 4/6), moist, high plasticity, no odor	CH	MC	1		NA	2.5/3			
2								2.0	0.0	
								1.5	0.0	Collect GB-29/1.5-2.5 (812)
3										
4	-Becomes with pale brown (10YR 6/3) mottles and trace fine-medium iron nodules							1.5	0.0	Collect GB-29/3-5 (817)
5								2.0	0.0	No free water observed
			MC	2		NA	5/5			
6	-Becomes with some silt							2.5	0.0	
7								2.5	0.0	
8	-Becomes trace silt							-	0.0	
								3.5	0.0	
9			MC	3		NA	2/2	3.5	0.0	
								3.5	0.0	
10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/26/2021
11										
12										
13										

Depth to water while drilling

Depth to water after drilling

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-30
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass and silty CLAY							-	0.0	
	1	Poor Recovery		MC	1		NA	1/3			
	2										
	2.5	Limestone gravel (fine-medium)							-	0.0	
	3	silty CLAY, gray (10YR 6/1) with yellowish brown (10YR 5/8) and dark brown (10YR 3/3) mottles, trace weathered medium iron nodules, trace brick fragments, moist, soft, high plasticity, no odor	CL						1.5	0.0	
	4								-	0.0	Collect GB-30/3-4 (1452)
									1.5	0.0	
	5			MC	2		NA	2/5			No free water observed Collect GB-30/4-5 (1455)
	6										
	7										
	8	silty CLAY some medium sand, yellowish brown (10YR 5/4) with gray (10YR 5/1) mottles, moist, soft, high plasticity, no odor	CL						1.0	0.0	
	9			MC	3		NA	1/2	1.0	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/26/2021
	11										
	12										
	13										

▽ Depth to water while drilling

▼ Depth to water after drilling

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-31
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass and silty CLAY		MC	1		NA	2.5/3	-	0.0	
	1								-	0.0	
	2	Asphalt and Limestone gravel									
		silty CLAY, yellowish brown (10YR 5/4) trace dark gray (10YR 3/1) mottles, moist, medium plasticity, no odor							2.5	0.0	
	3										
	4								2.5	0.0	Collect GB-31/3-5 (1418)
	5	-Becomes soft, high plasticity		MC	2		NA	5/5	1.5	0.0	No free water observed
	6								1.0	0.0	
	7								1.0	0.0	Collect GB-31/5-7 (1422)
	8										
	9			MC	3		NA	2/2	0.5	0.0	
	10	Boring terminated at 10 feet bgs.							1.0	0.0	Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

Depth to water while drilling

Depth to water after drilling

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-32
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass and CLAY with (medium-coarse) gravel									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	CLAY trace silt, dark yellowish brown (10YR 4/6), trace fine iron nodules, moist, high plasticity, no odor		MC	1		NA	2.7/3	2.0	0.0	
	2								1.5	0.0	Collect GB-32/0-2 (821)
	3								2.0	0.0	
	4								2.0	0.0	Collect GB-32/2-4 & MS/MSD (825)
	5								2.0	0.0	No free water observed
	6	-Becomes with medium iron nodules		MC	2		NA	5/5		NA	
	7								3.5	0.0	
	8	-Increasing iron nodule size							4.0	0.0	
	9			MC	3		NA	2.4/2	3.0		
	10	Boring terminated at 10 feet bgs.							3.5	0.0	
	11								-	0.0	
	12								3.5	0.0	Abandoned with hydrated bentonite chips on 7/21/2021
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-33
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Aspalt Concrete Gravel									Depth to water while drilling Depth to water after drilling
	1			MC	1		NA	3/3	1.5	0.0	
	2	silty CLAY, gray (10YR 6/1) with dark yellowish brown (10YR 4/6) and black (10YR 2/1) mottles, moist, soft, high plasticity, no odor							1.5	0.0	
	3								1.5	0.0	
	4								1.5	0.0	Collect GB-33/2-4 (1455)
	5			MC	2		NA	5/5	2.0	0.0	No free water observed
	6								3.5	0.0	Collect GB-33/4-6 (1500)
	7	-Becomes no black (10YR 2/1) mottles							3.5	0.0	
	8								4.0	0.0	
	9			MC	3		NA	2.5/2	-	0.0	
	10	Boring terminated at 10 feet bgs.							3.5	0.0	Abandoned with hydrated bentonite chips on 7/20/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-34
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass and Gravel									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	silty CLAY, Gray (10YR 6/1) with strong brown (7.5YR 5/8) and dark gray (10YR 3/1) mottles, moist, high plasticity, no odor		MC	1		NA	3/3	3.0	0.0	
	2								2.5	0.0	
	3								2.0	0.0	Collect GB-34/1-3 (1425)
	4								2.0	0.0	Collect GB-34/3-5 (1430)
	5	silty CLAY, brown (10YR 5/3) with yellowish brown (10YR 5/8) and black (10YR 2/1) mottles, moist, soft, high plasticity, no odor		MC	2		NA	5/5	2.0	0.0	No free water observed
	6								2.0	0.0	
	7								3.0	0.0	
	8								2.5	0.0	
	9			MC	3		NA	3/2	2.5	0.0	
	10	Boring terminated at 10 feet bgs.							3.0	0.0	Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-35
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt and Limestones Gravel		MC	1		NA	2.4/3	2.5	0.0	
	2	silty CLAY, dark gray (10YR 4/1) with dark yellowish brown (10YR 4/6) mottles, moist, low plasticity, no odor	CL						4.0	0.0	
	3	silty CLAY, greenish gray (Gley 1 6/10Y) with yellowish brown (10YR 5/8) mottles, weathered medium iron nodules, moist, high plasticity, no odor	CL								Collect GB-35/2-3 (1440)
	4								3.5	0.0	Collect GB-35/3-5 & DUP (1445)
	5			MC	2		NA	4.5/5	2.5	0.0	No free water observed
	6								1.5	0.0	
	7								1.5	0.0	
	8										
	9	-Becomes trace iron nodules and yuellowish brown (10YR 5/8) mottles		MC	3		NA	1.8/2	2.5	0.0	
									-	0.0	
	10	Boring terminated at 10 feet bgs.							2.0	0.0	Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-36
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	silty CLAY, grayish brown (10YR 5/2) with dark yellowish brown (10YR 4/4) mottles, moist, low plasticity, friable, no odor	CH	MC	1		NA	3/3	3.5	0.0	
	2	-trace brick and gravel (fine-medium) -limestone gravel (fine-medium) lense (4")							-	0.0	Collect GB-36/0-2 (846)
	3	silty CLAY, dark yellowish brown (10YR 4/6) with yellowish brown (10YR 5/8) mottles, moist, high plasticity, no odor	CH						4.0	0.0	
	4								2.5	0.0	Collect GB-36/2-4 (850)
	5	silty CLAY, olive (5Y 4/3) with dark gray (Gley 1 4/N) mottles, moist, high plasticity, no odor	CH	MC	2		NA	3/5	1.5	0.0	No free water observed
	6								0.5	0.0	
	7	silty CLAY, pale brown (10YR 6/3) with yellowish brown (10YR 5/6) and black (10YR 2/1) mottles, moist, high plasticity, no odor	CH						1.0	0.0	
	8								2.0	0.0	
	9			MC	3		NA	2/2	2.0	0.0	
	10	Boring terminated at 10 feet bgs.							2.5	0.0	Abandoned with hydrated bentonite chips on 7/26/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-37
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
		Limestone gravel (fine-medium)		MC	1		NA	2/3	3.5	0.0	
	1										
	2								3.5	0.0	
		silty CLAY, dark yellowish brown (10YR 4/4) with dark yellowish brown (10YR 3/6) mottles, dry, friable, no odor	CH								
	3	silty CLAY, dark yellowish brown (10YR 4/4) with gray (10YR 6/1) and very dark grayish brown (10YR 3/3) mottles, moist, high plasticity, no odor	CH								
	4								1.5	0.0	Collect GB-37/3-5 (1412)
	5			MC	2		NA	5/5	1.0	0.0	No free water observed
	6								1.0	0.0	
	7								1.0	0.0	Collect GB-37/5-7 (1416)
	8										
		-Becomes some very dark grayish brown (10YR 3/3) mottles		MC	3		NA	2/2	2.0	0.0	
	9								1.5	0.0	
									1.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/26/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-38
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
		silty CLAY, dark brown (10YR 3/3), trace gravel (medium), moist, friable/low plasticity, no odor	CL								
	1			MC	1		NA	2.5/3	3.5	0.0	
	2								4.5	0.0	Collect GB-38/0-2 (1340)
	3								4.0	0.0	
	4	-Becomes soft							2.0	0.0	Collect GB-38/3-5 & MS/MSD (1345)
	5			MC	2		NA	5/5	1.0	0.0	No free water observed
	6								1.0	0.0	
	7								0.5	0.0	
	8								1.0	0.0	
	9			MC	3		NA	2.4/2	0.5	0.0	
	10	Boring terminated at 10 feet bgs.							1.0	0.0	Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-39
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
		Asphalt gravel (fine-coarse)									
	1			MC	1		NA	2/3	-	0.0	
	2								-	0.0	
	3	-weathered asphalt							-	0.0	
	4	-concrete							-	0.0	
	5	CLAY trace silt, dark yellowish brown (10YR 4/6) with gray (10YR 6/1) mottles, moist, high plasticity, stiff, no odor	CL	MC	2		NA	4.5/5	3.5	0.0	No free water observed
	6								4.5	0.0	Collect GB-39/5-6 (750)
	7	-Becomes trace medium iron nodules							4.0	0.0	Collect GB-39/6-7 (755)
	8	-increasing medium iron nodules							3.5	0.0	
	9			MC	3		NA	2.5/2	3.5	0.0	
									3.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-40
	Coordinates:	Ground Elevation:	Page: 1 of 2
	Total Depth (feet): 15 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
		Asphalt gravel (fine-med)									
	1	Clay fill							-	0.0	
		-Black gravel (fine) lense (3")		MC	1		NA	2.5/3	-	2.4	
	2								-	0.0	
		-Coarse sand lense									
	3	Cherty concrete fragments (4")							-	0.0	
		-Coarse sand lense									Collect GB-40/1.5-3.5 (1545)
	4								-	0.0	
	5								-	0.0	No free water observed
		Cherty concrete fragments (3")		MC	2		NA	3.5/5			
		-Coarse sand lense									
	6								-	0.0	
	7								-	0.0	
	8								-	0.0	
	9	Cherty concrete fragments (4")		MC	3		NA	1.5/2			
		-Coarse sand lense							-	0.0	
	10								-	0.0	
	11	sandy CLAY, dark greenish gray (Gley 1 4/10Y), wet, high plasticity, no odor	CH						-	0.0	
	12	CLAY trace silt, Brown (7.5YR 4/4), trace fine iron nodules, moist, high plasticity, no odor	CH	MC	4		NA	3/5	2.0	0.0	
	13								3.0	0.0	Collect GB-40/11-13 (1600)

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log, continued

BURNS McDONNELL

		Boring/Monitoring Well Number	GB-40
Project Name	Goodfellow Remedial Investigation	Page	2 of 2
Project Number	133835	Date	7/20/2021

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	15	CLAY trace silt, Brown (7.5YR 4/4), trace fine iron nodules, moist, high plasticity, no odor	CL	MC	4		NA	3/5	4.0	0.0	
		Boring terminated at 15 feet bgs.							-	0.0	Abandoned with hydrated bentonite chips on 7/20/2021
	16										
	17										
	18										
	19										
	20										
	21										
	22										
	23										
	24										
	25										
	26										
	27										
	28										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-41
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	0.5	Limestone gravel							-	0.0	
	1	CLAY with gravel (medium-coarse) and concrete gravel		MC	1		NA	2.5/3	-	0.0	
	2								-	0.0	
	3								3.0	0.0	
	4	silty CLAY, yellowish brown (10YR 5/6) with brown (10YR 5/3) and black (10YR 2/1) mottles, moist, high plasticity, no odor		MC	2		NA	4/5	3.0	0.0	No free water observed
	5								3.0	0.0	Collect GB-41/4-6 (1400)
	6	-Becomes with gray (10YR 6/1) mottles							3.0	0.0	
	7								4.0	-	Collect GB-41/6-8 (1405)
	8			MC	3		NA	2.2/2	-	0.0	
	9								4.0	0.0	
	10	Boring terminated at 10 feet bgs.							4.0	0.0	Abandoned with hydrated bentonite chips on 7/20/2021
	11										
	12										
	13										

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-42
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/22/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽
		Limestone gravel and clay fill									Depth to water after drilling ▼
	1			MC	1		NA	3/3	-	0.0	
	2	silty CLAY, dark yellowish brown (10YR 4/4) with gray (10YR 6/1) mottles and trace dark grayish brown (10YR 3/2) mottles, moist, high plasticity							-	0.0	
	3								2.0	0.0	Collect GB-42/2-3 (1418)
	4								1.0	0.0	Collect GB-42/3-5 (1425)
	5	silty CLAY, Dark yellowish brown (10YR 4/4) with yellowish brown (10YR 5/4) mottles and trace black (10YR 2/1) mottles, moist, high plasticity, no odor		MC	2		NA	4.5/5	1.5	0.0	No free water observed
	6								2.0	0.0	
	7								2.5	0.0	
	8								2.5	0.0	
	9			MC	3		NA	2/2	-	0.0	
	10	Boring terminated at 10 feet bgs.							3.0	0.0	Abandoned with hydrated bentonite chips on 7/22/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-43
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt							-	-	
	1	Asphalt and limestone gravel (fine-coarse)		MC	1		NA	1.5/3	-	0.0	
	2										
	3	silty CLAY, gray (10YR 6/1) with yellowish brown (10YR 5/8) and black (10YR 2/1) mottles, moist, high plasticity, no odor							-	0.0	
	4								1.5	0.0	Collect GB-43/3-5 (920)
	5			MC	2		NA	3.6/5	1.5	0.0	No free water observed
	6								1.5	0.0	
	7	-Becomes trace black (10YR 2/1) mottles							1.5	0.0	Collect GB-43/5-7 (925)
	8								1.5	0.0	
	9			MC	3		NA	4/2	1.5	0.0	
	10	Boring terminated at 10 feet bgs.							1.5	0.0	Abandoned with hydrated bentonite chips on 7/26/2021
	11										
	12										
	13										

Depth to water while drilling

Depth to water after drilling

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-44
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/26/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt and Limestone fill		MC	1		NA	2.4/3	-	0.0	
	2								-	0.0	
	3	Brick Fragments							-	0.0	
	4	silty CLAY, Dark Grau (10YR 4/1) with dark grayish brown (10YR 4/2) mottles, moist, medium plasticity, no odor							2.5	0.0	Collect GB-44/3-5 (1325)
	5	silty CLAY, very dark gray (10YR 3/1) with trace dark brown (10YR 3/3) mottles, moist, high plasticity, no odor		MC	2		NA	4.5/5	1.5	0.0	No free water observed
	6								2.0	0.0	
	7								3.0	0.0	Collect GB-44/5-7 (1328)
	8	silty CLAY, grayish brown (10YR 5/2) with yellowish brown (10YR 5/8) and black (10YR 2/1) mottles, moist, medium plasticity, no odor							2.5	0.0	
	9			MC	3		NA	1.8/2	-	0.0	
	10	Boring terminated at 10 feet bgs.							2.5	0.0	Abandoned with hydrated bentonite chips on 7/26/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-45
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	silty CLAY, dark yellowish brown (10YR 3/6) with light yellowish brown (2.5Y 6/4) mottles, moist, low-medium plasticity, no odor	CH	MC	1		NA	3/3	1.5	0.0	
	2								2.0	0.0	Collect GB-45/0-2 (1255)
	3								2.5	0.0	
	4	-Becomes very dark grayish brown (10YR 3/2)							2.0	0.0	Collect GB-45/2-4 (1300)
	5			MC	2		NA	5/5	1.0	0.0	No free water observed
	6	-Becomes trace light yellowish brown (2.5Y 6/4) mottles							1.0	0.0	
	7								1.5	0.0	
	8								1.0	0.0	
	9			MC	3		NA	2/2	-	0.0	
	10	Boring terminated at 10 feet bgs.							1.0	0.0	Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-46
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt gravel (fine-coarse)							-	0.0	
		Limestone gravel (medium-coarse)		MC	1		NA	3/3			
	2	silty CLAY, yellowish brown (10YR 5/4) with gray (10YR 6/1) and black (10YR 2/1) mottles, moist, high plasticity, no odor							-	0.0	
	3								1.5	0.0	
	4								2.0	0.0	Collect GB-46/2-4 (847)
	5			MC	2		NA	5/5	2.0	0.0	No free water observed
	6	silty CLAY, yellowish brown (10YR 5/4) with light brownish gray (10YR 6/2) mottles, some iron nodules (fine), moist, high plasticity, no odor							2.0	0.0	Collect GB-46/4-6 (852)
	7								2.0	0.0	
	8								3.0	0.0	
	9			MC	3		NA	2.2/2	-	0.0	
	10	Boring terminated at 10 feet bgs.							2.5	0.0	Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-47
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt gravel (fine-coarse)									
	2	silty CLAY FILL with coarse gravel	CH	MC	1		NA	2/3	3.5	0.0	
	3	silty CLAY, dark yellowish brown (10YR 4/6) with very dark gray (10YR 3/1) mottles, moist, high plasticity, no odor	CH						3.5	0.0	
	4								2.5	0.0	Collect GB-47/3-5 (1325)
	5	CLAY trace silt, dark yellowish brown (10YR6/4) with trace black (10YR 2/1) mottles, moist, hard, medium-high plasticity, no odor	CH	MC	2		NA	5/5	3.5	0.0	No free water observed
	6								4.0	0.0	
	7								4.0	0.0	Collect GB-47/5-7 (1330)
	8								4.0	0.0	
	9			MC	3		NA	3/2	-	0.0	
	10	Boring terminated at 10 feet bgs.							4.0	0.0	Abandoned with hydrated bentonite chips on 7/20/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-48
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
1	Limestone fill (fine-coarse)							-	0.0	
2	sand and gravel fill (fine-coarse)		MC	1		NA	2.5/3	-	0.0	
3	silty CLAY trace medium sand, gray (10YR 6/1) with yellowish brown (10YR 5/6) mottles, moist, medium plasticity, no odor	CH						-	0.0	
4								3.5	0.0	Collect GB-48/3-5 (825)
5	CLAY trace silt, dark yellowish brown (10YR 4/6), moist, hard, high plasticity, no odor	CH	MC	2		NA	5/5	3.5	0.0	No free water observed
6								4.0	0.0	
7								4.0	0.0	Collect GB-48/5-7 (828)
8	CLAY with silt, dark yellowish brown (10YR 4/6) with light brownish gray (10YR 6/2) and trace black (10YR 2/1) mottles, moist, medium-high plasticity, no odor	CH						4.0	0.0	
9			MC	3		NA	3/2	4.0	0.0	
10	Boring terminated at 10 feet bgs.							4.0	0.0	Abandoned with hydrated bentonite chips on 7/20/2021
11										
12										
13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-49
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
1	Asphalt gravel and silty CLAY with medium-coarse sand (FILL)		MC	1		NA	2.4/3	1.0	0.0	
2								-	0.0	
	SAND (medium-coarse)	SP								
3								-	0.0	
	silty CLAY, brown (10YR 4/3) with gray (10YR 5/1) mottles, moist, medium-high plasticity, no odor	CH						-	5.1	
4	-Large wood fragment @ 3.5', smells smokey							3.5	0.0	
	-Large wood fragment @ 4.5', smells smokey	CH								
5	silty CLAY, Gray (10YR 2/1), moist, high plasticity, no odor	CH						3.5	0.0	Collect GB-49/3.5-4.5 No free water observed
	CLAY trace silt and trace fine gravel, gray (10YR 6/1) with yellowish brown (10YR 5/4) mottles, moist, medium plasticity, no odor		MC	2		NA	5/5			
6								4.5	0.0	Collect GB-49/5-6 (1505)
7								4.5	0.0	
8										
	-Becomes with trace iron nodules (fine)							4.5	0.0	
9			MC	3		NA	3/2	-	0.0	
								4.5	0.0	
10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/19/2021
11										
12										
13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-50
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
		silty CLAY trace gravel (coarse), dark yellowish brown (10YR 4/4) with light brownish gray (10YR 6/2) mottles, moist, medium plasticity, no odor	CL	MC	1		NA	3/3	2.0	0.0	
	1								2.0	0.0	
	2								3.0	0.0	Collect GB-50/0-2 (1430)
	3								1.5	0.0	
	4	-Becomes with trace very dark grayish brown (10YR 3/2) mottles		MC	2		NA	5/5	2.0	0.0	Collect GB-50/3-5 (1435)
	5								3.0	0.0	No free water observed
	6								2.5	0.0	
	7								1.5	0.0	
	8	-Decreasing very dark grayish brown mottles		MC	3		NA	2.2/2	1.5	0.0	
	9								3.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/19/2021
	11										
	12										
	13										

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-51
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt and Limestone gravel (fine-coarse)							-	0.0	
	2	silty CLAY, yellowish brown (10YR 5/6) with light brownish gray (10YR 6/2) and 7.5YR (5/8) strong brown mottles, moist, high plasticity, no odor	CH	MC	1		NA	3/3	2.0	0.0	
	3								2.0	0.0	Collect GB-51/1.5-3 (1354)
	4								1.5	0.0	Collect GB-51/3-5 (1400)
	5								1.5	0.0	No free water observed
	6			MC	2		NA	5/5	1.0	0.0	
	7								2.0	0.0	
	8	-Becomes with black (10YR 2/1) mottles and weathered iron nodules (fine-medium)							2.0	0.0	
	9			MC	3		NA	2.5/2	2.5	0.0	
	10	Boring terminated at 10 feet bgs.							2.0	0.0	Abandoned with hydrated bentonite chips on 7/19/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-52
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽
		Asphalt gravel									Depth to water after drilling ▼
	1	CLAY FILL	CH	MC	1		NA	3/3			
		Limestone Gravel									
		CLAY FILL	CH								
	2	silty CLAY, dark gray (10YR 3/1), moist, high plasticity, no odor	CH						-	0.0	
	3								1.0	0.0	Collect GB-52/2-3 (1124)
	4								2.0	0.0	Collect GB-52/3-5 (1128)
		silty CLAY, dark yellowish brown (10YR 4/4) with trace dark gray (10YR 3/1) mottles, moist, high plasticity, no odor	CH								
	5								1.5	0.0	No free water observed
				MC	2		NA	5/5			
	6								1.5	0.0	
	7	-Becomes with trace light brownish gray (10YR 6/2) mottles							1.0	0.0	
	8								0.5	0.0	
	9	-Becomes some fine iron nodules		MC	3		NA	2.9/3	0.5	0.0	
									0.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-53
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
		silty CLAY with fine gravel (FILL)	CH						-	18.7	
	1								-	0.0	
				MC	1		NA	0.7/3			
	2	-Poor Recovery									Collect GB-53/0-2 (910)
	3										
		silty CLAY, dark yellowish brown (10YR 4/6) with dark gray (Gley 1 4/N) and some very dark brown (10YR 2/2) mottles, moist, high plasticity, no odor	CH						3.0	0.0	Collect GB-53/3-5 (915)
	4										
	5								3.0	0.0	No free water observed
				MC	2		NA	4.5/5			
	6								2.0	0.0	
	7								1.5	0.0	
	8								1.5	0.0	
	9			MC	3		NA	2/2	-	0.0	
									1.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-54
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	silty CLAY, gray (10YR 6/1) with yellowish brown (10YR 5/4) and black (10YR 2/1) mottles, moist, crumbly, low plasticity, no odor	CL	MC	1		NA	2.6/3	-	0.0	
	2								1.5	0.0	Collect GB-54/0-2 (1240)
	3								1.5	0.0	
	4	silty CLAY, gray (10YR 6/1) with yellowish brown (10YR 5/4) mottles, moist, high plasticity, no odor	CL						2.5	0.0	Collect GB-54/2-4 (1245)
	5			MC	2		NA	4/5	2.0	0.0	No free water observed
	6								2.0	0.0	
	7								2.0	0.0	
	8										
	9	-Becomes with yellowish brown (10YR 5/6) mottles		MC	3		NA	2/2	2.5 2.5 2.5	0.0 0.0 0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/20/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-55
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
1	Large gravel chunk									
	silty CLAY, yellowish brown (10YR 5/6), moist, medium plasticity, no odor	CH	MC	1		NA	2/3	1.5	0.0	
2								2.0	0.0	Collect GB-55/0-2 (850)
3	-Becomes with light brownish gray (10YR 6/2) mottles									
4								2.5	0.0	Collect GB-55/3-5 (855)
5			MC	2		NA	5/5	2.5	0.0	No free water observed
6								3.0	0.0	
7								4.0	0.0	
	-Becomes with black (10YR 2/1) mottles									
8	CLAY trace silt, dark yellowish brown (10YR 4/6), moist, hard, high plasticity, no odor	CH						4.0	0.0	
9			MC	3		NA	2.8/2	4.0	0.0	
								4.0	0.0	
	-Becomes with light brownish gray (10YR 6/2) mottles									
10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/20/2021
11										
12										
13										

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-56
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽
		Asphat and Limestone gravel with clay fill									Depth to water after drilling ▼
	1			MC	1		NA	2.5/3	-	0.0	
	2								-	0.0	
	3	silty CLAY, brown (7.5YR 4/4) with some black (10YR 2/1) mottles, moist, high plasticity, no odor	CL						2.0	0.0	
	4								2.5	0.0	Collect GB-56/3-5 (1555)
	5	-Becomes with strong brown (10YR 4/6)		MC	2		NA	4/5	2.5	0.0	No free water observed
	6								2.5	0.0	
	7								2.5	0.0	Collect GB-56/5-7 (1600)
	8	-Becomes trace silt							3.0	0.0	
	9			MC	3		NA	3/2	4.0	0.0	
	10	Boring terminated at 10 feet bgs.							4.5	0.0	
									-	0.0	Abandoned with hydrated bentonite chips on 7/19/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-57
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	Grass and silty clay fill							2.0	-	Depth to water while drilling ▽ / Depth to water after drilling ▼
1	poorly graded sand	SP	MC	1		NA	2.5/3	0.5	6.0	
	silty CLAY (friable (FILL)	CH								
2	Brick fragments							3.0	0.0	
3	Limestone gravel (medium-coarse)							3.5	0.0	
	silty CLAY, brown (10YR 5/2) with strong brown (7.5YR 5/6) and black (10YR 2/1) mottles, moist, soft, medium-high plasticity, no odor	CH								
4								3.0	0.0	
5			MC	2		NA	4.6/5	2.0	0.0	No free water observed Collect GB-57/3.5-5.5 (1145)
6								2.0	0.0	
7								2.0	0.0	
8	-Becomes trace black (10YR 2/1) mottles									Collect GB-57/6-8 & DUP (1150)
	-Becomes trace iron nodules (fine)							2.0	0.0	
9			MC	3		NA	3/2	2.5	0.0	
								3.0	0.0	
10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/19/2021
11										
12										
13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-58
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
		Asphalt gravel (fine-coarse)									
	1	silty CLAY, dark yellowish brown (10YR 4/6) with very dark gray (10YR 3/1) mottles, moist, medium plasticity, no odor		MC	1		NA	3.5/3	3.0	0.0	
	2								3.0	0.0	
	3								-	0.0	Collect GB-58/1-3 (1325)
	4	silty CLAY, gray (2.5Y 6/1) with yellowish brown (10YR 5/6) and black (10YR 2/1) mottles, moist, medium-high plasticity, no odor							3.0	0.0	
	5			MC	2		NA	5/5	2.0	0.0	No free water observed
	6								2.0	0.0	Collect GB-58/4-6 & MS/MSD (1330)
	7								2.0	0.0	
	8								1.0	0.0	
	9			MC	3		NA	2/2	1.5	0.0	
	10	Boring terminated at 10 feet bgs.							2.5	0.0	Abandoned with hydrated bentonite chips on 7/19/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-59
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽
		Asphalt and Limestone gravel (fine-coarse)							-	0.0	Depth to water after drilling ▼
	1			MC	1		NA	2.5/3			
	2	silty CLAY trace gravel (fine-medium), dark grayish brown (10YR 4/2) with dark gray (10YR 3/1) mottles, moist, soft, high plasticity, no odor	CL						-	0.0	
	3								2.0	0.0	
									-	1.0	
	4	silty CLAY, yellowish brown (10YR 5/4) and very dark grayish brown (10YR 3/2) mottles, moist, high plasticity, slightly sweet odor	CL						1.0	0.0	Collect GB-59/2-4 (1052)
	5								1.0	0.0	No free water observed
		silty CLAY, very dark gray (10YR 3/1), moist-wet, high plasticity, no odor	CL	MC	2		NA	3.5/5			
	6								2.0	0.0	
		silty CLAY, yellowish brown (10YR 5/4) with trace very dark grayish brown (10YR 3/2) mottles, moist, high plasticity, no odor	CL						2.5	0.0	
	7								-	0.0	
	8								1.5	38.3	
	9	-Becomes soft		MC	3		NA	2.5/2	1.0	0.0	
									1.0	0.0	Collect GB-59/8-10 (1105)
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

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Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-60
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Ashpat & Limestone gravel with clay fill		MC	1		NA	3/3	-	0.0	
	2	silty CLAY, yellowish brown (10YR 5/4) with very dark gray (10YR 3/1) mottles, moist, high plasticity, no odor	CL						-	0.0	
	3								1.5	0.0	
	4								2.0	0.0	Collect GB-60/2-4 (1000)
	5	silty CLAY, trace bricks, very dark gray (10YR 3/1) with black (10YR 2/1) mottles, moist, high plasticity, slight petrol odor	CL	MC	2		NA	3.5/5	2.5	0.0	No free water observed
	6	silty CLAY, yellowish brown (10YR 5/4) with very dark gray (10YR 3/1) mottles, moist, high plasticity, no odor	CL						3.0	0.0	
	7								2.5	0.0	Collect GB-60/5-7 (1010)
	8	-Becomes with very dark grayish brown (10YR 3/2) mottles	CL						2.0	0.0	
	9			MC	3		NA	2/2	-	0.0	
	10	Boring terminated at 10 feet bgs.							1.5	0.0	Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-61
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
		Concrete									
	1	Asphalt and Limestone gravel (fine-coarse)		MC	1		NA	2/3	-	0.0	
	2	CLAY with gravel (medium-coarse)	CH						-	0.0	
	3	silty CLAY, dark greenish gray (Gley 1 4/10Y) with very dark gray (10YR 3/1), moist, high plasticity, no odor	CH						1.0	0.0	
	4								2.0	0.0	Collect GB-61/3-5 (1120)
	5	silty CLAY, dark gray (2.5Y 4/1), moist, high plasticity, no odor	CH	MC	2		NA	4/5	2.0	0.0	No free water observed
	6								2.0	0.0	
	7	silty CLAY, gray (2.5Y 5/1) with very dark gray (2.5Y 3/1) and yellowish brown (10YR 5/8) mottles, moist, high plasticity, no odor	CH						2.0	0.0	Collect GB-61/5-7 (1127)
	8								2.0	0.0	
	9			MC	3		NA	2/2	2.0	0.0	
	10	Boring terminated at 10 feet bgs.							1.5	0.0	Abandoned with hydrated bentonite chips on 7/20/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-62
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	silty CLAY, dark yellowish brown (10YR 4/4) with gray (10YR 5/1) mottles, trace iron nodules (fine), moist, high plasticity, no odor	CH	MC	1		NA	2.7/3	3.0	0.0	
	2								3.0	0.0	Collect GB-62/0-2 (925)
	3								3.0	0.0	
	4								3.0	0.0	Collect GB-62/3-5 (930)
	5			MC	2		NA	5/5	2.5	0.0	No free water observed
	6								2.5	0.0	
	7								2.0	0.0	
	8	silty CLAY, gray (10YR 6/1) with olive yellow (2.5Y 6/6) and black (10YR 2/1) mottles, moist, high plasticity, no odor	CH								
	9			MC	3		NA	2/2	3.0	0.0	
	10	Boring terminated at 10 feet bgs.							3.5	0.0	
	11								3.5	0.0	Abandoned with hydrated bentonite chips on 7/20/2021
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-63
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	silty CLAY, gray (10YR 6/1) with yellowish brown (10YR 5/8) mottles, weathered iron nodules, moist, medium plasticity, no odor	CH	MC	1		NA	3.3/3	4.0	0.0	
	2								3.5	0.0	Collect GB-63/0-2 (748)
	3								2.0	0.0	
	4								3.0	0.0	Collect GB-63/3-5 (752)
	5			MC	2		NA	5/5	2.0	0.0	No free water observed
	6								1.5	0.0	
	7	silty CLAY, grayish brown (10YR 5/2) with yellowish brown (10YR 5/8), trace iron nodules (fine), moist, high plasticity, no odor	CH						1.5	0.0	
	8								2.0	0.0	
	9			MC	3		NA	2/2	2.5	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-64
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
	1	Asphalt gravel (medium-coarse)									
	1	silty CLAY, dark grayish brown (2.5Y 4/2) with gray (10YR 5/1) mottles, moist, medium plasticity	CH	MC	1		NA	1.2/3			
	2								3.0	0.0	
	2	Limestone gravel (fine-coarse)									
	3	silty CLAY, yellowish brown (10YR 5/4) with dark gray (10YR 4/1) and very dark gray (7.5YR 3/1) mottles, moist, medium-high plasticity, no odor	CH						-	0.0	
	4								3.0	0.0	Collect GB-64/3-4 (1120)
	5			MC	2		NA	3.6/5	2.5	0.0	No free water observed
	6								3.0	0.0	
	7								2.5	0.0	Collect GB-64/5-7 (1125)
	8	-Becomes some 10YR 4/1 mottles and no 7.5YR 3/1 mottles							3.0	0.0	
	9			MC	3		NA	2/2	3.0	0.0	
	10								3.0	0.0	
	10	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/19/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-65
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
0	Asphalt									
0.5	Asphalt Gravel									
1								-	0.0	
1.5	silty CLAY, dark gray (10YR 4/2) mottles, brick fragments, moist, high plasticity	CH	MC	1		NA	2.6/3			
2	Limestone gravel (fine-coarse)							-	0.0	
								-	0.0	
3								-	0.0	
	silty CLAY, yellowish brown (10YR 5/4) with dark gray (10YR 4/1) and very dark gray (7.5YR 3/1) mottles, moist, soft, high plasticity, no odor	CH								
4								2.5	0.0	Collect GB-65/3-4 (1050)
5								1.5	0.0	No free water observed
			MC	2		NA	5/5			
6								2.0	0.0	
7								2.0	0.0	Collect GB-65/5-7 (1055)
7.5	silty CLAY, brown (10YR 5/2) with strong brown (7.5YR 5/6) and black (10Yr 2/1) mottles, moist, soft, high plasticity, no odor	CH								
8										
9			MC	3		NA	2.7/2	2.0	0.0	
								-	0.0	
10								1.5	0.0	
	Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/19/2021
11										
12										
13										

Depth to water while drilling

Depth to water after drilling

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-66
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/21/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽ / Depth to water after drilling ▼
		Asphalt and Limestone gravel (fine-coarse) and clay FILL		MC	1		NA	2.5/3	-	0.0	
	1								-	0.0	
	2								-	0.0	
	3	silty CLAY, gray (Gley 1 5/N) with yellowish brown (10YR 5/8) mottles, moist, high plasticity, no odor							1.0	0.0	Collect GB-66/3-5 & DUP (1030)
	4								1.5	0.0	No free water observed
	5	-Increasing yellowish brown (10YR 5/8) mottles		MC	2		NA	3/5	1.5	0.0	
	6								1.5	0.0	Collect GB-66/5-7 (1035)
	7								1.5	0.0	
	8	-Becomes with iron nodules (fine)		MC	3		NA	2/2	1.5	0.0	
	9								-	0.0	
	10	Boring terminated at 10 feet bgs.							1.5	0.0	Abandoned with hydrated bentonite chips on 7/21/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-67
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽
	1	Asphalt and Limestone gravel (medium-coarse)		MC	1		NA	2/3	-	0.0	Depth to water after drilling ▼
	2								-	0.0	
	3								-	0.0	
	4	Poor Recovery									
	5	silty CLAY, gray (10YR 6/1) with strong brown (7.5YR 5/8) and black (10Yr 2/1) mottles, moist, medium-high plasticity, no odor.		MC	2		NA	1.5/5			No free water observed
	6										Collect GB-67/5-6 (1047)
	7								-	0.0	
	8								3.5	0.0	
	9	-Becomes with no black (10YR 2/1) mottles -Becomes with strong brown (7.5YR 5/8) mottles (fine speckling)		MC	3		NA	2.7/2	3.0 3.5 3.0	0.0 0.0 0.0	Collect GB-67/8-10 (1050)
	10	-Becomes with trace black 10YR 2/1 mottles Boring terminated at 10 feet bgs.									Abandoned with hydrated bentonite chips on 7/20/2021
	11										
	12										
	13										

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-68
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/20/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽ / Depth to water after drilling ▼
		Gravel (fine-medium)									
	1	silty CLAY, gray (10Yr 6/1) with brown (10YR 4/3) and black (10YR 2/1) mottles, moist, friable/low plasticity, no odor	CL	MC	1		NA	2.8/3	-	0.0	
	2								3.5	0.0	
	3	-Becomes with trace black (10YR 2/1) mottles							3.5	0.0	Collect GB-68/1-3 (1010)
	4								4.0	0.0	Collect GB-68/3-5 & DUP (1017)
		silty CLAY, gray (10YR 6/1) with strong brown (7.5YR 5/8) and black (10YR 2/1) mottles, moist, medium plasticity, no odor	CL								
	5			MC	2		NA	5/5	3.0	0.0	No free water observed
	6								2.0	0.0	
	7								2.0	0.0	
	8								2.0	0.0	
	9	-Becomes trace black (10YR 2/1) mottles		MC	3		NA	2/2	-	0.0	
	10	Boring terminated at 10 feet bgs.							2.0	0.0	Abandoned with hydrated bentonite chips on 7/20/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-69
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	Asphalt									
1	Asphalt fravel (fine-coarse)		MC	1		NA	2/3	-	-	
2	silty CLAY trace gravel (fine), very dark grayish brown (10YR 3/2), moist, high plasticity, no odor	CH						-	0.0	
3	Limestone gravel (coarse) with fine gravel at 3.4'	GP						-	0.0	Collect GB-69/2-3 (913)
4	silty CLAY, yellowish brown (10YR 5/6) with gray (10YR 6/1) mottles, moist, high plasticity	CH						2.0	0.0	Collect GB-69/3-5 (920)
5	silty CLAY, grayish brown (10YR 5/2) with reddish brown (5YR 4/4) and brown (10YR 3/4) mottles, moist, high plasticity, no odor	CH	MC	2		NA	3.5/5	2.0	0.0	No free water observed
6								2.0	0.0	
7								2.0	0.0	
8	CLAY trace silt, light brownish gray (10YR 6/2) with yellowish red (5YR 4/6) mottles in fractal pattern, moist, low plasticity, no odor	CH								
9			MC	3		NA	2/2	3.5	0.0	
10	Boring terminated at 10 feet bgs.							3.5	0.0	Abandoned with hydrated bentonite chips on 7/19/2021
11										
12										
13										

Depth to water while drilling

Depth to water after drilling

2021 GSA DRILLING LOGS (SOIL BORINGS).GPJ 9/28/21

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-70
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Asphalt									Depth to water while drilling ▽
		Asphalt gravel (fine-coarse)									Depth to water after drilling ▼
	1	Limestone gravel (fine-coarse)		MC	1		NA	1.4/3	-	0.0	
	2								-	0.0	
	3	CLAY trace silt, dark yellowish brown (10YR 4/4) with grayish brown (10YR 5/2) mottles, moist, hard, high plasticity, no odor	CH								Collect GB-70/3-5 (940)
	4								3.0	0.0	
	5			MC	2		NA	5/5	3.0	0.0	No free water observed
	6								3.5	0.0	
	7	silty CLAY, dark yellowish brown (10YR 4/4), wet, soft, high plasticity, no odor	CH						3.0	0.0	Collect GB-70/5-7 (945)
	8	silty CLAY, dark greenish gray (Gley 1 4/10Y) with black (Gley 1 2.5/N) mottles, moist, soft, high plasticity, no odor	CH								
	9			MC	3		NA	1.5/2	3.5	0.0	
	10	Boring terminated at 10 feet bgs.							3.5	0.0	Abandoned with hydrated bentonite chips on 7/19/2021
	11										
	12										
	13										

Drilling Log

BURNS McDONNELL	Project Name: Goodfellow Remedial Investigation	Project No.: 133835	Boring/Monitoring Well Number: GB-71
	Coordinates:	Ground Elevation:	Page: 1 of 1
	Total Depth (feet): 10 / Hole Size (inches): 3	Driller: Matt Kwiatkowski	
Drilling Rig: Geoprobe 8040DT		Drilling Company: Roberts Environmental Drilling, Inc.	
Date: 7/19/2021	Logged By: B. Lockwood	Reviewed by: Z. Verret	Approved by:

Elevation (MSL)	Depth (feet bgs)	Description	Graphic Log	Sample Type	Sample Number	Blow Count	N Value	Sample Recovery/Length (inches)	Penetrometer (tsf)	PID Reading (ppm)	Remarks
	0	Grass									Depth to water while drilling ▽
		silty CLAY, dark grayish brown (10YR 4/2), moist, high plasticity, no odor	CH								Depth to water after drilling ▼
	1								2.5	0.0	
		Cinders		MC	1		NA	1.5/3			
		silty CLAY, dark grayish brown (10YR 4/2), moist, high plasticity, no odor	CH								
	2								2.0	0.0	Collect GB-71/0-2 (1030)
		silty CLAY, grayish brown (10YR 5/2), moist, high plasticity, no odor	CH						2.0	0.0	Collect GB-71/3-5 (1035)
	3										
		silty CLAY, grayish brown (10YR 5/2) with yellowish brown (10YR 5/6) and black (10YR 2/1) mottles, moist, firm, high plasticity, no odor	CH						3.0	0.0	
	4										
									3.0	0.0	No free water observed
	5			MC	2		NA	5/5			
									3.0	0.0	
	6										
									2.5	0.0	
	7										
		-Becomes soft									
	8										
		-Becomes no black (10YR 2/1) mottles		MC	3		NA	2/2	1.0	0.0	
	9										
		Boring terminated at 10 feet bgs.							1.0	0.0	Abandoned with hydrated bentonite chips on 7/19/2021
	10										
	11										
	12										
	13										

APPENDIX C – MONITORING WELL/TESTHOLE SOIL AND GEOTECHNICAL BORING PLUGGING REGISTRATION REPORTS

MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM

MONITORING WELL/TEST HOLE/SOIL AND GEOTECHNICAL BORING PLUGGING REGISTRATION REPORT

FOR OFFICE USE ONLY	
REF NO.	DATE RECEIVED
CR NO.	CHECK NO.

ROUTE	APPROVED	DATE	ENTERED	STATE CERT NO.	REVENUE NO.
/ /					

OWNER AND SITE INFORMATION

PROPERTY OWNER NAME WHERE WELL IS LOCATED	PRIMARY PHONE NUMBER WITH AREA CODE
St. Louis Federal Center	

PROPERTY OWNER MAILING ADDRESS	CITY	STATE	ZIP CODE
4300 Goodfellow Blvd.	St. Louis	MO	63120

PHYSICAL ADDRESS OF PROPERTY WHERE WELL IS LOCATED	CITY
4300 Goodfellow Blvd	St. Louis

NAME OF SITE, BUSINESS, OR CLEANUP PROJECT	DNR/EPA PROJECT NUMBER OR REGULATORY SITE ID NUMBER (IF APPLICABLE)	VARIANCE NUMBER (IF ISSUED)
GSA Goodfellow		

PRIMARY CONTRACTOR NAME (PLEASE PRINT)	PERMIT NUMBER	
Burns & McDonnell Eng. Co., Inc.	004054M	Section 256.607(3), RSMo, requires all primary contractors to comply with all rules and regulations promulgated pursuant to Sections 256.600 to 256.640 RSMo.

LOCATION INFORMATION

Latitude N 38 ° 41 ′ 31.80 ″
Longitude W 90 ° 15 ′ 57.27 ″

COUNTY: St. Louis

____ ¼ ____ ¼ ____ ¼
Section ____ Township ____N Range ____ ☐ E ☐ W

MONITORING WELL INFORMATION

DATE WELL PLUGGED	ORIGINAL DRILLER (IF KNOWN)	DATE ORIGINALLY DRILLED (IF KNOWN)	REFERENCE NUMBER (IF KNOWN)	WELL NUMBER

DEPTH OF WELL	STATIC WATER LEVEL	LENGTH OF RISER AND SCREEN	DIAMETER OF RISER AND SCREEN	RISER AND SCREEN PLUGGED IN PLACE	PUMP OR SAMPLING EQUIPMENT REMOVED	CASING REMOVED
ft.	ft.	ft.	in.	☐ Yes ☐ No (Removed)	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A

TEMPORARY MONITORING WELL/SOIL BORING/GEOTECHNICAL BORING INFORMATION

Quantity	Depth of Well or Boring (ft.)	Diameter (in.)	Total Depth (Linear Feet) of All Wells or Borings
69	10	2.25	690
2	13	2.25	26

TOTAL NUMBER OF WELLS/BORINGS: 71

AVERAGE DEPTH OF ALL WELLS/BORINGS: 10.08

DATE FIRST WELL/BORING WAS PLUGGED	DATE LAST WELL/BORING WAS PLUGGED
7-19-2021	7-26-2021

TEST HOLE INFORMATION

DATE TEST HOLE PLUGGED	DEPTH OF WELL	LENGTH OF GROUT PLUG	DAVIS FORMATION REACHED	MECHANICAL PACKER (IF USED)	AMOUNT OF CLEAN FILL (IF USED)	CASING REMOVED (CHOOSE ONE)
	ft.	Bottom ____ ft. Top ____ ft.	☐ Yes ☐ No	☐ Yes, Depth ____ ft. ☐ No	____ Tons or ____ Cubic Yards	☐ Yes, Diameter of Remaining Borehole ____ in. ☐ No, Diameter of Casing ____ in.

PLUGGING INFORMATION (This section is required in addition to one of the well, soil boring or test hole sections above.)

WELL REMOVED BY EXCAVATION	GROUT INSTALLATION METHOD	GROUT MATERIAL USED	NUMBER OF SACKS OF GROUT USED	NUMBER OF GALLONS OF WATER USED PER SACK	GROUT HYDRATED TO SATURATION
☐ Yes ☐ No	☑ Gravity ☐ Tremie ☐ Pressure	CEMENT: ☐ Type I ☐ Type III BENTONITE: ☑ Chips ☐ Granular ☐ Pellets ☐ Slurry ☐ Other	27 LBS PER SACK 50		☑ Yes ☐ No

FINISHED SURFACE MATERIAL	SURFACE MATERIAL DEPTH	DRILLER NOTES
☑ Asphalt ☐ Concrete ☐ Soil ☐ Other	<1 ft. ____ in.	REDI# 212114-G

I hereby certify that the monitoring well herein described was plugged in accordance with the Department of Natural Resources requirements.

MONITORING WELL INSTALLATION CONTRACTOR	PERMIT NUMBER	DATE
Roberts Environmental Drilling, Inc. - Pat Seymour	004438-M	08-31-2021
MONITORING WELL INSTALLATION CONTRACTOR APPRENTICE (IF APPLICABLE)	PERMIT NUMBER	DATE

MO-780-2161 (06-19) **SEND COMPLETED FORM ALONG WITH $50 REGISTRATION FEE TO: MISSOURI DEPARTMENT OF NATURAL RESOURCES, MISSOURI GEOLOGICAL SURVEY, WELL INSTALLATION SECTION, PO BOX 250, ROLLA, MO 65402 PHONE: 573-368-2165 FAX: 573-368-2317 EMAIL: welldrillers@dnr.mo.gov**
SUBMIT RECORD AND FEE WITHIN 60 DAYS AFTER WELL PLUGGING OR WITHIN 180 DAYS AFTER THE PLUGGING OF TEMPORARY WELLS
RECORD (AND FEE) MAY BE SUBMITTED ONLINE: dnr.mo.gov/mowells

MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM

MONITORING WELL/TEST HOLE/SOIL AND GEOTECHNICAL BORING PLUGGING REGISTRATION REPORT

FOR OFFICE USE ONLY	
REF NO.	DATE RECEIVED
CR NO.	CHECK NO.

ROUTE	APPROVED	DATE	ENTERED	STATE CERT NO.	REVENUE NO.
/ /					

OWNER AND SITE INFORMATION

PROPERTY OWNER NAME WHERE WELL IS LOCATED	PRIMARY PHONE NUMBER WITH AREA CODE
St. Louis Federal Center	

PROPERTY OWNER MAILING ADDRESS	CITY	STATE	ZIP CODE
4300 Goodfellow Blvd.	St. Louis	MO	63120

PHYSICAL ADDRESS OF PROPERTY WHERE WELL IS LOCATED	CITY
4300 Goodfellow Blvd	St. Louis

NAME OF SITE, BUSINESS, OR CLEANUP PROJECT	DNR/EPA PROJECT NUMBER OR REGULATORY SITE ID NUMBER (IF APPLICABLE)	VARIANCE NUMBER (IF ISSUED)
GSA Goodfellow		

PRIMARY CONTRACTOR NAME (PLEASE PRINT)	PERMIT NUMBER	
Burns & McDonnell Eng. Co., Inc.	004054M	Section 256.607(3), RSMo, requires all primary contractors to comply with all rules and regulations promulgated pursuant to Sections 256.600 to 256.640 RSMo.

LOCATION INFORMATION

Latitude N 38 ° 41 ′ 31.80 ″
Longitude W 90 ° 15 ′ 57.27 ″

COUNTY: St. Louis

____ ¼ ____ ¼ ____ ¼ Section ____ Township ____N Range ____ ☐ E ☐ W

MONITORING WELL INFORMATION

DATE WELL PLUGGED	ORIGINAL DRILLER (IF KNOWN)	DATE ORIGINALLY DRILLED (IF KNOWN)	REFERENCE NUMBER (IF KNOWN)	WELL NUMBER

DEPTH OF WELL	STATIC WATER LEVEL	LENGTH OF RISER AND SCREEN	DIAMETER OF RISER AND SCREEN	RISER AND SCREEN PLUGGED IN PLACE	PUMP OR SAMPLING EQUIPMENT REMOVED	CASING REMOVED
ft.	ft.	ft.	in.	☐ Yes ☐ No (Removed)	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A

TEMPORARY MONITORING WELL/SOIL BORING/GEOTECHNICAL BORING INFORMATION

Quantity	Depth of Well or Boring (ft.)	Diameter (in.)	Total Depth (Linear Feet) of All Wells or Borings
9	10	7.625	90
1	13	7.625	13

TOTAL NUMBER OF WELLS/BORINGS: 10

AVERAGE DEPTH OF ALL WELLS/BORINGS: 9.3

DATE FIRST WELL/BORING WAS PLUGGED	DATE LAST WELL/BORING WAS PLUGGED
7-27-2021	7-28-2021

TEST HOLE INFORMATION

DATE TEST HOLE PLUGGED	DEPTH OF WELL	LENGTH OF GROUT PLUG	DAVIS FORMATION REACHED	MECHANICAL PACKER (IF USED)	AMOUNT OF CLEAN FILL (IF USED)	CASING REMOVED (CHOOSE ONE)
	ft.	Bottom ____ ft. Top ____ ft.	☐ Yes ☐ No	☐ Yes, Depth ____ft. ☐ No	____ Tons or ____ Cubic Yards	☐ Yes, Diameter of Remaining Borehole ____ in. ☐ No, Diameter of Casing ____ in.

PLUGGING INFORMATION (This section is required in addition to one of the well, soil boring or test hole sections above.)

WELL REMOVED BY EXCAVATION	GROUT INSTALLATION METHOD	GROUT MATERIAL USED	NUMBER OF SACKS OF GROUT USED	NUMBER OF GALLONS OF WATER USED PER SACK	GROUT HYDRATED TO SATURATION
☐ Yes ☐ No	☑ Gravity ☐ Tremie ☐ Pressure	CEMENT: ☐ Type I ☐ Type III; BENTONITE: ☑ Chips ☐ Pellets ☐ Other; ☐ Granular ☐ Slurry	30		☑ Yes ☐ No

LBS PER SACK: 50

FINISHED SURFACE MATERIAL	SURFACE MATERIAL DEPTH	DRILLER NOTES
☑ Asphalt ☐ Concrete ☐ Soil ☐ Other	<1 ____ ft. ____ in.	REDI# 212114-G

I hereby certify that the monitoring well herein described was plugged in accordance with the Department of Natural Resources requirements.

MONITORING WELL INSTALLATION CONTRACTOR	PERMIT NUMBER	DATE
Roberts Environmental Drilling, Inc. - Pat Seymour	004438-M	08-31-2021
MONITORING WELL INSTALLATION CONTRACTOR APPRENTICE (IF APPLICABLE)	PERMIT NUMBER	DATE

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SUBMIT RECORD AND FEE WITHIN 60 DAYS AFTER WELL PLUGGING OR WITHIN 180 DAYS AFTER THE PLUGGING OF TEMPORARY WELLS
RECORD (AND FEE) MAY BE SUBMITTED ONLINE: dnr.mo.gov/mowells

APPENDIX D – SURVEY DATA

Project file data		Coordinate System	
Name:	R:\2021158-00 BMCD-Goodfellow Boring Locations\Trimble\2021158-00.vce	Name:	United States/State Plane 1983
Size:	90 KB	Datum:	NAD 1983 (Conus)
Modified:	8/3/2021 2:02:22 PM (UTC:-5)	Zone:	Missouri East 2401
Time zone:	Central Standard Time	Geoid:	GEOID18 (Conus)
Reference number:		Vertical datum:	
Description:		Calibrated site:	
Comment 1:			
Comment 2:			
Comment 3:			

Point List

ID	Northing (US survey foot)	Easting (US survey foot)	Elevation (US survey foot)	Feature Code
1000	1039655.961	886717.685	545.563	120/GB 69
1001	1039858.263	886678.129	543.525	120/GB 63
1002	1039711.309	886942.616	543.286	120/GB 64
1003	1039563.549	886892.221	542.215	120/GB 70
1004	1039478.168	887061.014	539.053	120/GB 71
1005	1039572.836	887125.208	538.992	120/GB 65
1006	1039766.139	887231.965	540.856	120/GB 58
1007	1039929.440	887304.373	541.132	120/GB 51
1008	1040031.925	887097.941	545.469	120/GB 50
1009	1039873.717	887011.115	545.052	120/GB 57
1010	1040005.403	886785.994	546.811	120/GB 56
1011	1040174.075	886898.689	548.970	120/GB 49
1012	1040219.911	886736.446	550.978	120/GB 48
1013	1040075.422	886713.920	547.879	120/GB 55
1014	1039895.978	886628.455	541.364	120/GB 62
1015	1039701.174	886515.018	548.944	120/GB 68
1016	1039763.532	886331.065	546.531	120/GB 67
1017	1040014.283	886386.262	548.623	120/GB 61
1018	1040187.259	886505.792	551.192	120/GB 54
1019	1040334.725	886626.462	553.301	120/GB 47
1020	1040547.898	886710.002	555.639	120/GB 41
1021	1040650.601	886804.633	554.662	120/GB 34
1022	1040755.266	886656.916	557.986	120/GB 33
1023	1040843.148	886453.390	561.252	120/GB 32
1024	1040726.507	886456.101	561.995	120/GB 39

1025	1040649.108	886484.548	561.335	120/GB 40
1026	1040414.624	886443.178	563.137	120/GB 46
1027	1040193.003	886332.076	565.210	120/GB 53
1028	1040089.233	886254.156	567.230	120/GB 60
1029	1039914.820	886191.864	561.303	120/GB 66
1030	1040167.598	886066.708	577.361	120/GB 59
1031	1040351.688	886180.635	577.977	120/GB 52
1032	1040548.346	886269.793	578.059	120/GB 45
1033	1040728.021	886244.364	587.645	120/GB 38
1034	1040928.930	886289.979	587.803	120/GB 31
1035	1041175.222	886434.853	580.506	120/GB 24
1036	1041329.985	886484.462	572.826	120/GB 17
1037	1041235.289	886677.445	561.825	120/GB 18
1038	1041400.859	886757.892	562.099	120/GB 11
1039	1041030.278	886532.581	560.193	120/GB 25
1040	1041580.208	886849.055	564.120	120/GB 4
1041	1041478.465	887036.890	558.392	120/GB 5
1042	1041400.659	887215.183	555.119	120/GB 6
1043	1041182.456	887077.531	553.299	120/GB 13
1044	1041065.748	886979.466	553.732	120/GB 20
1045	1041279.163	886972.033	557.088	120/GB 12
1046	1041063.289	886851.502	557.714	120/GB 19
1047	1040910.210	886770.952	557.184	120/GB 26
1048	1040420.142	886878.499	550.850	120/GB 42
1049	1040509.569	886974.661	550.740	120/GB 35
1050	1040733.842	887101.654	551.101	120/GB 28
1051	1040840.135	887184.603	548.724	120/GB 21
1052	1041046.397	887277.408	550.458	120/GB 14
1053	1041291.607	887387.503	551.619	120/GB 7
1054	1041194.021	887547.189	548.162	120/GB 8
1055	1041081.763	887700.160	545.091	120/GB 9
1056	1040897.229	887631.644	545.625	120/GB 15
1057	1040829.828	887498.781	545.459	120/GB 22
1058	1040577.751	887394.198	544.729	120/GB 29
1059	1040369.538	887354.896	542.712	120/GB 36
1060	1040249.009	887207.074	545.297	120/GB 43
1061	1040126.989	887481.700	539.910	120/GB 44
1062	1040347.046	887601.738	540.175	120/GB 37
1063	1040499.778	887686.500	540.353	120/GB 30

1064	1040623.099	887755.895	539.811	120/GB 23
1065	1040797.624	887854.168	540.180	120/GB 16
1066	1040974.081	887924.951	539.583	120/GB 10
1067	1040882.105	886862.900	553.986	120/GB-27
1068	1041447.237	888115.284	524.707	120/GB 1
1069	1041338.241	888070.539	526.248	120/GB 3
1070	1041459.486	887896.804	524.664	120/GB 2

8/9/2021 4:03:42 PM	R:\202 Loc

(b) (6)

8/9/21

APPENDIX E – ANALYTICAL LABORATORY TEST REPORTS

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 60375481

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Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 20, 2021

Justin Carter
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: GSA GOODFELLOW
Pace Project No.: 60375481

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on July 21, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

Revised report_rev2

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

(b) (6)

Jeffrey Shopper
jeff.shopper@pacelabs.com
1(913)563-1408
Project Manager

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL
Jacquelin Lee, Burns & McDonnell

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 20-020-0
Arkansas Drinking Water
Illinois Certification #: 2000302021-3
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212020-2
Oklahoma Certification #: 9205/9935
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-19-12
Utah Certification #: KS000212019-9
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Services National
12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375
North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Mold Certification #: LAB0152
Texas Certification #: T 104704245-17-14
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Virginia Certification #: VT2006
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

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Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60375481001	GB-69/2'-3'	Solid	07/19/21 09:13	07/21/21 04:30
60375481002	GB-69/3'-5'	Solid	07/19/21 09:20	07/21/21 04:30
60375481003	GB-70/3'-5'	Solid	07/19/21 09:40	07/21/21 04:30
60375481004	GB-70/5'-7'	Solid	07/19/21 09:45	07/21/21 04:30
60375481005	GB-71/0'-2'	Solid	07/19/21 10:30	07/21/21 04:30
60375481006	GB-71/3'-5'	Solid	07/19/21 10:35	07/21/21 04:30
60375481007	GB-65/3'-4'	Solid	07/19/21 10:50	07/21/21 04:30
60375481008	GB-65/5'-7'	Solid	07/19/21 10:55	07/21/21 04:30
60375481009	GB-64/3'-4'	Solid	07/19/21 11:20	07/21/21 04:30
60375481010	GB-64/5'-7'	Solid	07/19/21 11:25	07/21/21 04:30
60375481011	GB-57/3.5'-5.5'	Solid	07/19/21 11:45	07/21/21 04:30
60375481012	GB-57/6.0'-8.0'	Solid	07/19/21 11:50	07/21/21 04:30
60375481013	GB-57/6.0'-8.0' D	Solid	07/19/21 11:50	07/21/21 04:30
60375481014	GB-56/3-5'	Solid	07/19/21 15:55	07/21/21 04:30
60375481015	GB-56/5-7'	Solid	07/19/21 16:00	07/21/21 04:30
60375481016	GB-58/1-3'	Solid	07/19/21 13:25	07/21/21 04:30
60375481017	GB-58/4-6'	Solid	07/19/21 13:30	07/21/21 04:30
60375481018	GB-51/1.5-3'	Solid	07/19/21 13:54	07/21/21 04:30
60375481019	GB-51/3-5'	Solid	07/19/21 14:00	07/21/21 04:30
60375481020	GB-50/0-2'	Solid	07/19/21 14:30	07/21/21 04:30
60375481021	GB-50/3-5'	Solid	07/19/21 14:35	07/21/21 04:30
60375481022	GB-50/3-5'D	Solid	07/19/21 14:35	07/21/21 04:30
60375481023	GB-49/3.5-4.5'	Solid	07/19/21 15:00	07/21/21 04:30
60375481024	GB-49/5-6'	Solid	07/19/21 15:05	07/21/21 04:30
60375481025	GB-63/0-2'	Solid	07/20/21 07:48	07/21/21 04:30
60375481026	GB-63/3-5'	Solid	07/20/21 07:52	07/21/21 04:30
60375481027	GB-48/3-5'	Solid	07/20/21 08:25	07/21/21 04:30
60375481028	GB-48/5-7'	Solid	07/20/21 08:28	07/21/21 04:30
60375481029	GB-55/0-2'	Solid	07/20/21 08:50	07/21/21 04:30
60375481030	GB-55/3-5'	Solid	07/20/21 08:55	07/21/21 04:30
60375481031	GB-55/3-5'D	Solid	07/20/21 08:55	07/21/21 04:30
60375481032	GB-62/0-2'	Solid	07/20/21 09:25	07/21/21 04:30
60375481033	GB-62/3-5'	Solid	07/20/21 09:30	07/21/21 04:30
60375481034	GB-68/1-3'	Solid	07/20/21 10:10	07/21/21 04:30
60375481035	GB-68/3-5'	Solid	07/20/21 10:17	07/21/21 04:30
60375481036	GB-68/3-5'D	Solid	07/20/21 10:17	07/21/21 04:30
60375481037	GB-67/5-6'	Solid	07/20/21 10:47	07/21/21 04:30

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Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60375481038	**GB-67/8-10'**	Solid	07/20/21 10:50	07/21/21 04:30
60375481039	**TB-01**	Water	07/20/21 08:00	07/21/21 04:30
60375481040	**GB-61/3-5'**	Solid	07/20/21 11:20	07/21/21 04:30
60375481041	**GB-61/5-7'**	Solid	07/20/21 11:27	07/21/21 04:30
60375481042	**GB-54/0-2'**	Solid	07/20/21 12:40	07/21/21 04:30
60375481043	**GB-54/2-4'**	Solid	07/20/21 12:50	07/21/21 04:30
60375481044	**TB-02**	Water	07/20/21 08:00	07/21/21 04:30

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60375481001	**GB-69/2'-3'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481002	**GB-69/3'-5'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481003	**GB-70/3'-5'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481004	**GB-70/5'-7'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481005	**GB-71/0'-2'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481006	**GB-71/3'-5'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481007	**GB-65/3'-4'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481008	**GB-65/5'-7'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481009	**GB-64/3'-4'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481010	**GB-64/5'-7'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	DWC	1	PASI-K
60375481011	GB-57/3.5'-5.5'	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481012	GB-57/6.0'-8.0'	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481013	GB-57/6.0'-8.0' D	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481014	GB-56/3-5'	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481015	GB-56/5-7'	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481016	GB-58/1-3'	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481017	GB-58/4-6'	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481018	GB-51/1.5-3'	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481019	GB-51/3-5'	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60375481020	**GB-50/0-2'**	EPA 8082	AJA1	8	PASI-K
		EPA 8330	GKM	17	PAN
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN
60375481021	**GB-50/3-5'**	EPA 8082	AJA1	8	PASI-K
		EPA 8330	GKM	17	PAN
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN
60375481022	**GB-50/3-5'D**	EPA 8082	AJA1	8	PASI-K
		EPA 8330	GKM	17	PAN
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN
60375481023	**GB-49/3.5-4.5'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481024	**GB-49/5-6'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481025	**GB-63/0-2'**	EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481026	**GB-63/3-5'**	EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481027	**GB-48/3-5'**	EPA 8082	AJA1	8	PASI-K
		EPA 8330	GKM	17	PAN
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	JAV	1	PAN
60375481028	**GB-48/5-7'**	EPA 8082	AJA1	8	PASI-K
		EPA 8330	GKM	17	PAN
		EPA 6020	JGP	5	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	JAV	1	PAN
60375481029	**GB-55/0-2'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481030	**GB-55/3-5'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481031	**GB-55/3-5'D**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481032	**GB-62/0-2'**	EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481033	**GB-62/3-5'**	EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481034	**GB-68/1-3'**	EPA 8082	AJA1	8	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481035	**GB-68/3-5'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481036	**GB-68/3-5'D**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481037	**GB-67/5-6'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481038	**GB-67/8-10'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481039	**TB-01**	EPA 5030B/8260	PGH	87	PASI-K
60375481040	**GB-61/3-5'**	EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	DWC	1	PASI-K
60375481041	**GB-61/5-7'**	EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481042	**GB-54/0-2'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481043	**GB-54/2-4'**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375481044	**TB-02**	EPA 5030B/8260	PGH	87	PASI-K

PAN = Pace National - Mt. Juliet
PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: October 20, 2021

General Information:
36 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 8330**
Description: SVOA (HPLC) 8330B
Client: BURNS & MCDONNELL
Date: October 20, 2021

General Information:
5 samples were analyzed for EPA 8330 by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BURNS & MCDONNELL
Date: October 20, 2021

General Information:
40 samples were analyzed for EPA 6020 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 736024

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375481001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2951949)
  - Antimony
- MSD (Lab ID: 2951950)
  - Antimony

R1: RPD value was outside control limits.

- MSD (Lab ID: 2951950)
  - Antimony

QC Batch: 736067

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375481017,60375481027

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2952105)

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BURNS & MCDONNELL
Date: October 20, 2021

QC Batch: 736067

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375481017,60375481027

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Antimony
- MS (Lab ID: 2952107)
  - Antimony
- MSD (Lab ID: 2952106)
  - Antimony
- MSD (Lab ID: 2952108)
  - Antimony

QC Batch: 736069

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375481031

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2952114)
  - Antimony
- MSD (Lab ID: 2952115)
  - Antimony

R1: RPD value was outside control limits.

- MSD (Lab ID: 2952115)
  - Antimony

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: October 20, 2021

General Information:
34 samples were analyzed for EPA 8270 by SIM by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 733755

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- GB-62/0-2' (Lab ID: 60375481032)
  - 2-Fluorobiphenyl (S)

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 8270**
Description: 8270 MSSV DRO/ORO
Client: BURNS & MCDONNELL
Date: October 20, 2021

General Information:
14 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: October 20, 2021

General Information:
14 samples were analyzed for EPA 8260B by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035A/5030 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 734480

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 2947095)
  - Tetrahydrofuran

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 734679

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375838013

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2947594)
  - 1,1,2,2-Tetrachloroethane
  - Iodomethane

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: October 20, 2021

QC Batch: 734679

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375838013

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Methyl acetate
- MSD (Lab ID: 2947595)
  - 1,1,2,2-Tetrachloroethane
  - 1,1-Dichloroethene
  - Methyl acetate
  - Trichloroethene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2947595)
  - Iodomethane

Additional Comments:

Analyte Comments:

QC Batch: 734436

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 2946895)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-55/0-2' (Lab ID: 60375481029)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-55/3-5' (Lab ID: 60375481030)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- LCS (Lab ID: 2946896)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

QC Batch: 734480

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 2947094)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-55/3-5'D (Lab ID: 60375481031)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-62/0-2' (Lab ID: 60375481032)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-62/3-5' (Lab ID: 60375481033)
  - Tetrahydrofuran

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: October 20, 2021

Analyte Comments:

QC Batch: 734480

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- GB-62/3-5' (Lab ID: 60375481033)
  - 1,1,2-Trichlorotrifluoroethane
- GB-67/5-6' (Lab ID: 60375481037)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-68/1-3' (Lab ID: 60375481034)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-68/3-5' (Lab ID: 60375481035)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-68/3-5'D (Lab ID: 60375481036)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- LCS (Lab ID: 2947095)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

QC Batch: 734679

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 2947592)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-54/0-2' (Lab ID: 60375481042)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-54/2-4' (Lab ID: 60375481043)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-61/3-5' (Lab ID: 60375481040)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-61/5-7' (Lab ID: 60375481041)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-67/8-10' (Lab ID: 60375481038)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- LCS (Lab ID: 2947593)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: October 20, 2021

Analyte Comments:

QC Batch: 734679

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- MS (Lab ID: 2947594)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MSD (Lab ID: 2947595)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: BURNS & MCDONNELL
Date: October 20, 2021

General Information:
2 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 734572

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **EPA 8260**
Description: 8260 MSV GRO and Oxygenates
Client: BURNS & MCDONNELL
Date: October 20, 2021

General Information:
14 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Method: **SM 2540G**
Description: Total Solids 2540 G-2011
Client: BURNS & MCDONNELL
Date: October 20, 2021

General Information:
5 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-69/2'-3' **Lab ID: 60375481001** Collected: 07/19/21 09:13 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.6	10.1	1	07/22/21 12:56	07/26/21 18:08	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.6	9.7	1	07/22/21 12:56	07/26/21 18:08	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.6	4.4	1	07/22/21 12:56	07/26/21 18:08	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.6	9.8	1	07/22/21 12:56	07/26/21 18:08	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.6	2.7	1	07/22/21 12:56	07/26/21 18:08	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.6	3.8	1	07/22/21 12:56	07/26/21 18:08	11097-69-1	
PCB-1260 (Aroclor 1260)	**19.9J**	ug/kg	40.6	8.0	1	07/22/21 12:56	07/26/21 18:08	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	90	%	35-120		1	07/22/21 12:56	07/26/21 18:08	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.46**	mg/kg	0.86	0.46	10	08/04/21 10:12	08/05/21 10:03	7440-36-0	M1,R1
Arsenic	**11.6**	mg/kg	0.86	0.091	10	08/04/21 10:12	08/05/21 10:03	7440-38-2	
Copper	**29.9**	mg/kg	0.86	0.27	10	08/04/21 10:12	08/05/21 10:03	7440-50-8	
Lead	**47.7**	mg/kg	0.43	0.11	10	08/04/21 10:12	08/05/21 10:03	7439-92-1	
Zinc	**78.2**	mg/kg	4.3	0.73	10	08/04/21 10:12	08/05/21 10:03	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.4**	%	0.50	0.50	1		07/22/21 11:10		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-69/3'-5' **Lab ID: 60375481002** Collected: 07/19/21 09:20 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10**	ug/kg	40.1	10	1	07/22/21 12:56	07/26/21 18:25	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.1	9.6	1	07/22/21 12:56	07/26/21 18:25	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.1	4.4	1	07/22/21 12:56	07/26/21 18:25	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.1	9.7	1	07/22/21 12:56	07/26/21 18:25	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.1	2.7	1	07/22/21 12:56	07/26/21 18:25	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.1	3.8	1	07/22/21 12:56	07/26/21 18:25	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.1	7.9	1	07/22/21 12:56	07/26/21 18:25	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	91	%	35-120		1	07/22/21 12:56	07/26/21 18:25	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.54**	mg/kg	1.0	0.54	10	08/04/21 10:12	08/05/21 10:08	7440-36-0	
Arsenic	**6.5**	mg/kg	1.0	0.11	10	08/04/21 10:12	08/05/21 10:08	7440-38-2	
Copper	**13.1**	mg/kg	1.0	0.31	10	08/04/21 10:12	08/05/21 10:08	7440-50-8	
Lead	**10.4**	mg/kg	0.50	0.13	10	08/04/21 10:12	08/05/21 10:08	7439-92-1	
Zinc	**41.6**	mg/kg	5.0	0.85	10	08/04/21 10:12	08/05/21 10:08	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**18.5**	%	0.50	0.50	1		07/22/21 11:10		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-70/3'-5' **Lab ID: 60375481003** Collected: 07/19/21 09:40 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.4	9.8	1	07/22/21 12:56	07/26/21 18:43	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.4	9.4	1	07/22/21 12:56	07/26/21 18:43	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.4	4.3	1	07/22/21 12:56	07/26/21 18:43	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.4	9.5	1	07/22/21 12:56	07/26/21 18:43	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.4	2.6	1	07/22/21 12:56	07/26/21 18:43	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.4	3.7	1	07/22/21 12:56	07/26/21 18:43	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.4	7.8	1	07/22/21 12:56	07/26/21 18:43	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	86	%	35-120		1	07/22/21 12:56	07/26/21 18:43	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.62**	mg/kg	1.1	0.62	10	08/04/21 10:12	08/05/21 10:09	7440-36-0	
Arsenic	**11.4**	mg/kg	1.1	0.12	10	08/04/21 10:12	08/05/21 10:09	7440-38-2	
Copper	**21.8**	mg/kg	1.1	0.36	10	08/04/21 10:12	08/05/21 10:09	7440-50-8	
Lead	**13.5**	mg/kg	0.57	0.15	10	08/04/21 10:12	08/05/21 10:09	7439-92-1	
Zinc	**69.9**	mg/kg	5.7	0.97	10	08/04/21 10:12	08/05/21 10:09	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 18:42	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 18:42	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 18:42	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 18:42	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 18:42	50-32-8	
Benzo(b)fluoranthene	**2.3J**	ug/kg	4.0	2.0	1	07/22/21 16:57	07/26/21 18:42	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/22/21 16:57	07/26/21 18:42	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 18:42	207-08-9	
Chrysene	**<1.9**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 18:42	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 18:42	53-70-3	
Fluoranthene	**<3.0**	ug/kg	4.0	3.0	1	07/22/21 16:57	07/26/21 18:42	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/26/21 18:42	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 18:42	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 18:42	91-20-3	
Phenanthrene	**<3.3**	ug/kg	4.0	3.3	1	07/22/21 16:57	07/26/21 18:42	85-01-8	
Pyrene	**<2.2**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 18:42	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	75	%	40-120		1	07/22/21 16:57	07/26/21 18:42	321-60-8	
Terphenyl-d14 (S)	95	%	45-130		1	07/22/21 16:57	07/26/21 18:42	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.2**	%	0.50	0.50	1		07/22/21 11:10		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-70/5'-7' **Lab ID: 60375481004** Collected: 07/19/21 09:45 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.3	9.8	1	07/22/21 12:56	07/26/21 19:01	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.3	9.4	1	07/22/21 12:56	07/26/21 19:01	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.3	4.3	1	07/22/21 12:56	07/26/21 19:01	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.3	9.5	1	07/22/21 12:56	07/26/21 19:01	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.3	2.6	1	07/22/21 12:56	07/26/21 19:01	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.3	3.7	1	07/22/21 12:56	07/26/21 19:01	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.7**	ug/kg	39.3	7.7	1	07/22/21 12:56	07/26/21 19:01	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	86	%	35-120		1	07/22/21 12:56	07/26/21 19:01	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.56**	mg/kg	1.0	0.56	10	08/04/21 10:12	08/05/21 10:11	7440-36-0	
Arsenic	**10.6**	mg/kg	1.0	0.11	10	08/04/21 10:12	08/05/21 10:11	7440-38-2	
Copper	**19.2**	mg/kg	1.0	0.32	10	08/04/21 10:12	08/05/21 10:11	7440-50-8	
Lead	**13.4**	mg/kg	0.52	0.14	10	08/04/21 10:12	08/05/21 10:11	7439-92-1	
Zinc	**57.5**	mg/kg	5.2	0.89	10	08/04/21 10:12	08/05/21 10:11	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.4**	ug/kg	3.9	1.4	1	07/22/21 16:57	07/26/21 18:59	83-32-9	
Acenaphthylene	**<1.4**	ug/kg	3.9	1.4	1	07/22/21 16:57	07/26/21 18:59	208-96-8	
Anthracene	**<1.6**	ug/kg	3.9	1.6	1	07/22/21 16:57	07/26/21 18:59	120-12-7	
Benzo(a)anthracene	**<1.8**	ug/kg	3.9	1.8	1	07/22/21 16:57	07/26/21 18:59	56-55-3	
Benzo(a)pyrene	**<1.4**	ug/kg	3.9	1.4	1	07/22/21 16:57	07/26/21 18:59	50-32-8	
Benzo(b)fluoranthene	**2.3J**	ug/kg	3.9	1.9	1	07/22/21 16:57	07/26/21 18:59	205-99-2	
Benzo(g,h,i)perylene	**<1.7**	ug/kg	3.9	1.7	1	07/22/21 16:57	07/26/21 18:59	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	3.9	2.2	1	07/22/21 16:57	07/26/21 18:59	207-08-9	
Chrysene	**<1.8**	ug/kg	3.9	1.8	1	07/22/21 16:57	07/26/21 18:59	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	3.9	1.7	1	07/22/21 16:57	07/26/21 18:59	53-70-3	
Fluoranthene	**3.1J**	ug/kg	3.9	2.9	1	07/22/21 16:57	07/26/21 18:59	206-44-0	
Fluorene	**<1.5**	ug/kg	3.9	1.5	1	07/22/21 16:57	07/26/21 18:59	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	3.9	1.7	1	07/22/21 16:57	07/26/21 18:59	193-39-5	
Naphthalene	**<1.7**	ug/kg	3.9	1.7	1	07/22/21 16:57	07/26/21 18:59	91-20-3	
Phenanthrene	**<3.2**	ug/kg	3.9	3.2	1	07/22/21 16:57	07/26/21 18:59	85-01-8	
Pyrene	**2.4J**	ug/kg	3.9	2.1	1	07/22/21 16:57	07/26/21 18:59	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	72	%	40-120		1	07/22/21 16:57	07/26/21 18:59	321-60-8	
Terphenyl-d14 (S)	92	%	45-130		1	07/22/21 16:57	07/26/21 18:59	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**16.3**	%	0.50	0.50	1		07/22/21 11:10		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-71/0'-2' **Lab ID: 60375481005** Collected: 07/19/21 10:30 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.0**	ug/kg	40.4	10.0	1	07/22/21 12:56	07/26/21 19:19	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.4	9.6	1	07/22/21 12:56	07/26/21 19:19	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.4	4.4	1	07/22/21 12:56	07/26/21 19:19	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.4	9.7	1	07/22/21 12:56	07/26/21 19:19	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.4	2.7	1	07/22/21 12:56	07/26/21 19:19	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.4	3.8	1	07/22/21 12:56	07/26/21 19:19	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.4	8.0	1	07/22/21 12:56	07/26/21 19:19	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	97	%	35-120		1	07/22/21 12:56	07/26/21 19:19	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.62**	mg/kg	1.2	0.62	10	08/04/21 10:12	08/05/21 10:17	7440-36-0	
Arsenic	**10**	mg/kg	1.2	0.12	10	08/04/21 10:12	08/05/21 10:17	7440-38-2	
Copper	**12.8**	mg/kg	1.2	0.36	10	08/04/21 10:12	08/05/21 10:17	7440-50-8	
Lead	**35.5**	mg/kg	0.58	0.15	10	08/04/21 10:12	08/05/21 10:17	7439-92-1	
Zinc	**173**	mg/kg	5.8	0.98	10	08/04/21 10:12	08/05/21 10:17	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**3.9J**	ug/kg	6.0	2.2	1	07/22/21 16:57	07/26/21 19:16	83-32-9	
Acenaphthylene	**6.1**	ug/kg	6.0	2.2	1	07/22/21 16:57	07/26/21 19:16	208-96-8	
Anthracene	**21.3**	ug/kg	6.0	2.5	1	07/22/21 16:57	07/26/21 19:16	120-12-7	
Benzo(a)anthracene	**90.3**	ug/kg	6.0	2.8	1	07/22/21 16:57	07/26/21 19:16	56-55-3	
Benzo(a)pyrene	**80.9**	ug/kg	6.0	2.2	1	07/22/21 16:57	07/26/21 19:16	50-32-8	
Benzo(b)fluoranthene	**216**	ug/kg	6.0	2.9	1	07/22/21 16:57	07/26/21 19:16	205-99-2	
Benzo(g,h,i)perylene	**41.8**	ug/kg	6.0	2.7	1	07/22/21 16:57	07/26/21 19:16	191-24-2	
Benzo(k)fluoranthene	**63.2**	ug/kg	6.0	3.4	1	07/22/21 16:57	07/26/21 19:16	207-08-9	
Chrysene	**154**	ug/kg	6.0	2.9	1	07/22/21 16:57	07/26/21 19:16	218-01-9	
Dibenz(a,h)anthracene	**12.3**	ug/kg	6.0	2.6	1	07/22/21 16:57	07/26/21 19:16	53-70-3	
Fluoranthene	**218**	ug/kg	6.0	4.5	1	07/22/21 16:57	07/26/21 19:16	206-44-0	
Fluorene	**16.6**	ug/kg	6.0	2.4	1	07/22/21 16:57	07/26/21 19:16	86-73-7	
Indeno(1,2,3-cd)pyrene	**39.4**	ug/kg	6.0	2.6	1	07/22/21 16:57	07/26/21 19:16	193-39-5	
Naphthalene	**13.4**	ug/kg	6.0	2.6	1	07/22/21 16:57	07/26/21 19:16	91-20-3	
Phenanthrene	**210**	ug/kg	6.0	4.9	1	07/22/21 16:57	07/26/21 19:16	85-01-8	
Pyrene	**208**	ug/kg	6.0	3.2	1	07/22/21 16:57	07/26/21 19:16	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	68	%	40-120		1	07/22/21 16:57	07/26/21 19:16	321-60-8	
Terphenyl-d14 (S)	89	%	45-130		1	07/22/21 16:57	07/26/21 19:16	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**18.6**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-71/3'-5' **Lab ID: 60375481006** Collected: 07/19/21 10:35 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10**	ug/kg	40.2	10	1	07/22/21 12:56	07/26/21 19:37	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.2	9.6	1	07/22/21 12:56	07/26/21 19:37	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.2	4.4	1	07/22/21 12:56	07/26/21 19:37	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.2	9.7	1	07/22/21 12:56	07/26/21 19:37	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.2	2.7	1	07/22/21 12:56	07/26/21 19:37	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.2	3.8	1	07/22/21 12:56	07/26/21 19:37	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.2	7.9	1	07/22/21 12:56	07/26/21 19:37	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	92	%	35-120		1	07/22/21 12:56	07/26/21 19:37	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.62**	mg/kg	1.2	0.62	10	08/04/21 10:12	08/05/21 10:19	7440-36-0	
Arsenic	**6.6**	mg/kg	1.2	0.12	10	08/04/21 10:12	08/05/21 10:19	7440-38-2	
Copper	**11.2**	mg/kg	1.2	0.36	10	08/04/21 10:12	08/05/21 10:19	7440-50-8	
Lead	**11.3**	mg/kg	0.58	0.15	10	08/04/21 10:12	08/05/21 10:19	7439-92-1	
Zinc	**39.1**	mg/kg	5.8	0.97	10	08/04/21 10:12	08/05/21 10:19	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 19:34	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 19:34	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 19:34	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 19:34	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 19:34	50-32-8	
Benzo(b)fluoranthene	**3.3J**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 19:34	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/22/21 16:57	07/26/21 19:34	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 19:34	207-08-9	
Chrysene	**6.1**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 19:34	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 19:34	53-70-3	
Fluoranthene	**<3.0**	ug/kg	4.0	3.0	1	07/22/21 16:57	07/26/21 19:34	206-44-0	
Fluorene	**2.2J**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/26/21 19:34	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 19:34	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 19:34	91-20-3	
Phenanthrene	**13.9**	ug/kg	4.0	3.3	1	07/22/21 16:57	07/26/21 19:34	85-01-8	
Pyrene	**2.2J**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 19:34	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	78	%	40-120		1	07/22/21 16:57	07/26/21 19:34	321-60-8	
Terphenyl-d14 (S)	95	%	45-130		1	07/22/21 16:57	07/26/21 19:34	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**18.1**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-65/3'-4' **Lab ID: 60375481007** Collected: 07/19/21 10:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.6	10.1	1	07/22/21 12:56	07/26/21 19:55	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.6	9.7	1	07/22/21 12:56	07/26/21 19:55	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.6	4.4	1	07/22/21 12:56	07/26/21 19:55	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.6	9.8	1	07/22/21 12:56	07/26/21 19:55	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.6	2.7	1	07/22/21 12:56	07/26/21 19:55	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.6	3.8	1	07/22/21 12:56	07/26/21 19:55	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.6	8.0	1	07/22/21 12:56	07/26/21 19:55	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	89	%	35-120		1	07/22/21 12:56	07/26/21 19:55	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.59**	mg/kg	1.1	0.59	10	08/04/21 10:12	08/05/21 10:20	7440-36-0	
Arsenic	**10**	mg/kg	1.1	0.12	10	08/04/21 10:12	08/05/21 10:20	7440-38-2	
Copper	**19.1**	mg/kg	1.1	0.34	10	08/04/21 10:12	08/05/21 10:20	7440-50-8	
Lead	**10.3**	mg/kg	0.55	0.14	10	08/04/21 10:12	08/05/21 10:20	7439-92-1	
Zinc	**59.3**	mg/kg	5.5	0.93	10	08/04/21 10:12	08/05/21 10:20	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 19:51	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 19:51	208-96-8	
Anthracene	**3.9J**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 19:51	120-12-7	
Benzo(a)anthracene	**19.5**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 19:51	56-55-3	
Benzo(a)pyrene	**14.9**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 19:51	50-32-8	
Benzo(b)fluoranthene	**37.2**	ug/kg	4.0	2.0	1	07/22/21 16:57	07/26/21 19:51	205-99-2	
Benzo(g,h,i)perylene	**6.7**	ug/kg	4.0	1.8	1	07/22/21 16:57	07/26/21 19:51	191-24-2	
Benzo(k)fluoranthene	**8.8**	ug/kg	4.0	2.3	1	07/22/21 16:57	07/26/21 19:51	207-08-9	
Chrysene	**24.7**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 19:51	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 19:51	53-70-3	
Fluoranthene	**87.4**	ug/kg	4.0	3.0	1	07/22/21 16:57	07/26/21 19:51	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/26/21 19:51	86-73-7	
Indeno(1,2,3-cd)pyrene	**6.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 19:51	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 19:51	91-20-3	
Phenanthrene	**22.7**	ug/kg	4.0	3.3	1	07/22/21 16:57	07/26/21 19:51	85-01-8	
Pyrene	**66.0**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 19:51	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	69	%	40-120		1	07/22/21 16:57	07/26/21 19:51	321-60-8	
Terphenyl-d14 (S)	83	%	45-130		1	07/22/21 16:57	07/26/21 19:51	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**18.7**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-65/5'-7' **Lab ID: 60375481008** Collected: 07/19/21 10:55 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.2**	ug/kg	41.0	10.2	1	07/22/21 12:56	07/26/21 20:13	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.8**	ug/kg	41.0	9.8	1	07/22/21 12:56	07/26/21 20:13	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.0	4.5	1	07/22/21 12:56	07/26/21 20:13	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.9**	ug/kg	41.0	9.9	1	07/22/21 12:56	07/26/21 20:13	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.0	2.7	1	07/22/21 12:56	07/26/21 20:13	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	41.0	3.8	1	07/22/21 12:56	07/26/21 20:13	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	41.0	8.1	1	07/22/21 12:56	07/26/21 20:13	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	86	%	35-120		1	07/22/21 12:56	07/26/21 20:13	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.53**	mg/kg	0.98	0.53	10	08/04/21 10:12	08/05/21 10:22	7440-36-0	
Arsenic	**6.1**	mg/kg	0.98	0.10	10	08/04/21 10:12	08/05/21 10:22	7440-38-2	
Copper	**13.9**	mg/kg	0.98	0.30	10	08/04/21 10:12	08/05/21 10:22	7440-50-8	
Lead	**7.9**	mg/kg	0.49	0.13	10	08/04/21 10:12	08/05/21 10:22	7439-92-1	
Zinc	**49.6**	mg/kg	4.9	0.83	10	08/04/21 10:12	08/05/21 10:22	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 20:08	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 20:08	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 20:08	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 20:08	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 20:08	50-32-8	
Benzo(b)fluoranthene	**4.4**	ug/kg	4.0	2.0	1	07/22/21 16:57	07/26/21 20:08	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/22/21 16:57	07/26/21 20:08	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 20:08	207-08-9	
Chrysene	**3.0J**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 20:08	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 20:08	53-70-3	
Fluoranthene	**10.4**	ug/kg	4.0	3.0	1	07/22/21 16:57	07/26/21 20:08	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/26/21 20:08	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 20:08	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 20:08	91-20-3	
Phenanthrene	**4.2**	ug/kg	4.0	3.3	1	07/22/21 16:57	07/26/21 20:08	85-01-8	
Pyrene	**7.9**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 20:08	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	84	%	40-120		1	07/22/21 16:57	07/26/21 20:08	321-60-8	
Terphenyl-d14 (S)	97	%	45-130		1	07/22/21 16:57	07/26/21 20:08	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.5**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-64/3'-4' **Lab ID: 60375481009** Collected: 07/19/21 11:20 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.2**	ug/kg	41.2	10.2	1	07/22/21 12:56	07/26/21 20:31	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.8**	ug/kg	41.2	9.8	1	07/22/21 12:56	07/26/21 20:31	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.2	4.5	1	07/22/21 12:56	07/26/21 20:31	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.9**	ug/kg	41.2	9.9	1	07/22/21 12:56	07/26/21 20:31	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.2	2.7	1	07/22/21 12:56	07/26/21 20:31	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.2	3.9	1	07/22/21 12:56	07/26/21 20:31	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	41.2	8.1	1	07/22/21 12:56	07/26/21 20:31	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	89	%	35-120		1	07/22/21 12:56	07/26/21 20:31	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.59**	mg/kg	1.1	0.59	10	08/04/21 10:12	08/05/21 10:24	7440-36-0	
Arsenic	**12.1**	mg/kg	1.1	0.12	10	08/04/21 10:12	08/05/21 10:24	7440-38-2	
Copper	**19.9**	mg/kg	1.1	0.34	10	08/04/21 10:12	08/05/21 10:24	7440-50-8	
Lead	**14.8**	mg/kg	0.54	0.14	10	08/04/21 10:12	08/05/21 10:24	7439-92-1	
Zinc	**68.1**	mg/kg	5.4	0.92	10	08/04/21 10:12	08/05/21 10:24	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 20:25	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 20:25	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 20:25	120-12-7	
Benzo(a)anthracene	**5.4**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 20:25	56-55-3	
Benzo(a)pyrene	**4.3**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 20:25	50-32-8	
Benzo(b)fluoranthene	**10.7**	ug/kg	4.0	2.0	1	07/22/21 16:57	07/26/21 20:25	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/22/21 16:57	07/26/21 20:25	191-24-2	
Benzo(k)fluoranthene	**2.9J**	ug/kg	4.0	2.3	1	07/22/21 16:57	07/26/21 20:25	207-08-9	
Chrysene	**6.7**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 20:25	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 20:25	53-70-3	
Fluoranthene	**19.5**	ug/kg	4.0	3.0	1	07/22/21 16:57	07/26/21 20:25	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/26/21 20:25	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 20:25	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 20:25	91-20-3	
Phenanthrene	**7.5**	ug/kg	4.0	3.3	1	07/22/21 16:57	07/26/21 20:25	85-01-8	
Pyrene	**15.2**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 20:25	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%	40-120		1	07/22/21 16:57	07/26/21 20:25	321-60-8	
Terphenyl-d14 (S)	83	%	45-130		1	07/22/21 16:57	07/26/21 20:25	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.6**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-64/5'-7' **Lab ID: 60375481010** Collected: 07/19/21 11:25 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<11.3**	ug/kg	45.6	11.3	1	07/22/21 12:56	07/26/21 20:49	12674-11-2	
PCB-1221 (Aroclor 1221)	**<10.9**	ug/kg	45.6	10.9	1	07/22/21 12:56	07/26/21 20:49	11104-28-2	
PCB-1232 (Aroclor 1232)	**<5.0**	ug/kg	45.6	5.0	1	07/22/21 12:56	07/26/21 20:49	11141-16-5	
PCB-1242 (Aroclor 1242)	**<11.0**	ug/kg	45.6	11.0	1	07/22/21 12:56	07/26/21 20:49	53469-21-9	
PCB-1248 (Aroclor 1248)	**<3.0**	ug/kg	45.6	3.0	1	07/22/21 12:56	07/26/21 20:49	12672-29-6	
PCB-1254 (Aroclor 1254)	**<4.3**	ug/kg	45.6	4.3	1	07/22/21 12:56	07/26/21 20:49	11097-69-1	
PCB-1260 (Aroclor 1260)	**<9.0**	ug/kg	45.6	9.0	1	07/22/21 12:56	07/26/21 20:49	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	94	%	35-120		1	07/22/21 12:56	07/26/21 20:49	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**1.8**	mg/kg	0.99	0.53	10	08/04/21 10:12	08/05/21 10:25	7440-36-0	
Arsenic	**80.3**	mg/kg	0.99	0.10	10	08/04/21 10:12	08/05/21 10:25	7440-38-2	
Copper	**85.6**	mg/kg	0.99	0.31	10	08/04/21 10:12	08/05/21 10:25	7440-50-8	
Lead	**14.7**	mg/kg	0.49	0.13	10	08/04/21 10:12	08/05/21 10:25	7439-92-1	
Zinc	**104**	mg/kg	4.9	0.84	10	08/04/21 10:12	08/05/21 10:25	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.7**	ug/kg	4.5	1.7	1	07/22/21 16:57	07/26/21 20:42	83-32-9	
Acenaphthylene	**<1.7**	ug/kg	4.5	1.7	1	07/22/21 16:57	07/26/21 20:42	208-96-8	
Anthracene	**2.6J**	ug/kg	4.5	1.9	1	07/22/21 16:57	07/26/21 20:42	120-12-7	
Benzo(a)anthracene	**8.2**	ug/kg	4.5	2.1	1	07/22/21 16:57	07/26/21 20:42	56-55-3	
Benzo(a)pyrene	**6.2**	ug/kg	4.5	1.6	1	07/22/21 16:57	07/26/21 20:42	50-32-8	
Benzo(b)fluoranthene	**14.7**	ug/kg	4.5	2.2	1	07/22/21 16:57	07/26/21 20:42	205-99-2	
Benzo(g,h,i)perylene	**2.9J**	ug/kg	4.5	2.0	1	07/22/21 16:57	07/26/21 20:42	191-24-2	
Benzo(k)fluoranthene	**4.1J**	ug/kg	4.5	2.5	1	07/22/21 16:57	07/26/21 20:42	207-08-9	
Chrysene	**9.4**	ug/kg	4.5	2.1	1	07/22/21 16:57	07/26/21 20:42	218-01-9	
Dibenz(a,h)anthracene	**<1.9**	ug/kg	4.5	1.9	1	07/22/21 16:57	07/26/21 20:42	53-70-3	
Fluoranthene	**28.6**	ug/kg	4.5	3.4	1	07/22/21 16:57	07/26/21 20:42	206-44-0	
Fluorene	**<1.7**	ug/kg	4.5	1.7	1	07/22/21 16:57	07/26/21 20:42	86-73-7	
Indeno(1,2,3-cd)pyrene	**2.9J**	ug/kg	4.5	1.9	1	07/22/21 16:57	07/26/21 20:42	193-39-5	
Naphthalene	**<1.9**	ug/kg	4.5	1.9	1	07/22/21 16:57	07/26/21 20:42	91-20-3	
Phenanthrene	**12.1**	ug/kg	4.5	3.7	1	07/22/21 16:57	07/26/21 20:42	85-01-8	
Pyrene	**21.4**	ug/kg	4.5	2.4	1	07/22/21 16:57	07/26/21 20:42	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	78	%	40-120		1	07/22/21 16:57	07/26/21 20:42	321-60-8	
Terphenyl-d14 (S)	93	%	45-130		1	07/22/21 16:57	07/26/21 20:42	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**27.7**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-57/3.5'-5.5' **Lab ID: 60375481011** Collected: 07/19/21 11:45 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.6**	ug/kg	38.5	9.6	1	07/22/21 12:56	07/26/21 21:06	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.2**	ug/kg	38.5	9.2	1	07/22/21 12:56	07/26/21 21:06	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.5	4.2	1	07/22/21 12:56	07/26/21 21:06	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.3**	ug/kg	38.5	9.3	1	07/22/21 12:56	07/26/21 21:06	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	38.5	2.5	1	07/22/21 12:56	07/26/21 21:06	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.5	3.6	1	07/22/21 12:56	07/26/21 21:06	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.6**	ug/kg	38.5	7.6	1	07/22/21 12:56	07/26/21 21:06	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	87	%	35-120		1	07/22/21 12:56	07/26/21 21:06	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.58**	mg/kg	1.1	0.58	10	08/04/21 10:12	08/05/21 10:27	7440-36-0	
Arsenic	**4.6**	mg/kg	1.1	0.11	10	08/04/21 10:12	08/05/21 10:27	7440-38-2	
Copper	**13.7**	mg/kg	1.1	0.34	10	08/04/21 10:12	08/05/21 10:27	7440-50-8	
Lead	**9.8**	mg/kg	0.54	0.14	10	08/04/21 10:12	08/05/21 10:27	7439-92-1	
Zinc	**40.1**	mg/kg	5.4	0.91	10	08/04/21 10:12	08/05/21 10:27	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.4**	ug/kg	3.8	1.4	1	07/22/21 16:57	07/26/21 20:59	83-32-9	
Acenaphthylene	**<1.4**	ug/kg	3.8	1.4	1	07/22/21 16:57	07/26/21 20:59	208-96-8	
Anthracene	**3.4J**	ug/kg	3.8	1.6	1	07/22/21 16:57	07/26/21 20:59	120-12-7	
Benzo(a)anthracene	**8.3**	ug/kg	3.8	1.8	1	07/22/21 16:57	07/26/21 20:59	56-55-3	
Benzo(a)pyrene	**6.8**	ug/kg	3.8	1.4	1	07/22/21 16:57	07/26/21 20:59	50-32-8	
Benzo(b)fluoranthene	**16.0**	ug/kg	3.8	1.8	1	07/22/21 16:57	07/26/21 20:59	205-99-2	
Benzo(g,h,i)perylene	**2.6J**	ug/kg	3.8	1.7	1	07/22/21 16:57	07/26/21 20:59	191-24-2	
Benzo(k)fluoranthene	**2.4J**	ug/kg	3.8	2.1	1	07/22/21 16:57	07/26/21 20:59	207-08-9	
Chrysene	**8.9**	ug/kg	3.8	1.8	1	07/22/21 16:57	07/26/21 20:59	218-01-9	
Dibenz(a,h)anthracene	**<1.6**	ug/kg	3.8	1.6	1	07/22/21 16:57	07/26/21 20:59	53-70-3	
Fluoranthene	**27.6**	ug/kg	3.8	2.8	1	07/22/21 16:57	07/26/21 20:59	206-44-0	
Fluorene	**<1.5**	ug/kg	3.8	1.5	1	07/22/21 16:57	07/26/21 20:59	86-73-7	
Indeno(1,2,3-cd)pyrene	**2.5J**	ug/kg	3.8	1.6	1	07/22/21 16:57	07/26/21 20:59	193-39-5	
Naphthalene	**<1.6**	ug/kg	3.8	1.6	1	07/22/21 16:57	07/26/21 20:59	91-20-3	
Phenanthrene	**44.1**	ug/kg	3.8	3.1	1	07/22/21 16:57	07/26/21 20:59	85-01-8	
Pyrene	**21.5**	ug/kg	3.8	2.0	1	07/22/21 16:57	07/26/21 20:59	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	78	%	40-120		1	07/22/21 16:57	07/26/21 20:59	321-60-8	
Terphenyl-d14 (S)	89	%	45-130		1	07/22/21 16:57	07/26/21 20:59	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**15.9**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-57/6.0'-8.0' **Lab ID: 60375481012** Collected: 07/19/21 11:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.0**	ug/kg	40.4	10.0	1	07/22/21 12:56	07/26/21 22:00	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.4	9.6	1	07/22/21 12:56	07/26/21 22:00	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.4	4.4	1	07/22/21 12:56	07/26/21 22:00	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.4	9.7	1	07/22/21 12:56	07/26/21 22:00	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.4	2.7	1	07/22/21 12:56	07/26/21 22:00	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.4	3.8	1	07/22/21 12:56	07/26/21 22:00	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.4	8.0	1	07/22/21 12:56	07/26/21 22:00	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	96	%	35-120		1	07/22/21 12:56	07/26/21 22:00	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.46**	mg/kg	0.85	0.46	10	08/04/21 10:12	08/05/21 10:28	7440-36-0	
Arsenic	**4.3**	mg/kg	0.85	0.091	10	08/04/21 10:12	08/05/21 10:28	7440-38-2	
Copper	**13.2**	mg/kg	0.85	0.26	10	08/04/21 10:12	08/05/21 10:28	7440-50-8	
Lead	**7.9**	mg/kg	0.43	0.11	10	08/04/21 10:12	08/05/21 10:28	7439-92-1	
Zinc	**38.7**	mg/kg	4.3	0.72	10	08/04/21 10:12	08/05/21 10:28	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 21:16	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 21:16	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:16	120-12-7	
Benzo(a)anthracene	**4.3**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 21:16	56-55-3	
Benzo(a)pyrene	**3.8J**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 21:16	50-32-8	
Benzo(b)fluoranthene	**8.1**	ug/kg	4.0	2.0	1	07/22/21 16:57	07/26/21 21:16	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/22/21 16:57	07/26/21 21:16	191-24-2	
Benzo(k)fluoranthene	**2.8J**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 21:16	207-08-9	
Chrysene	**4.6**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 21:16	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:16	53-70-3	
Fluoranthene	**12.3**	ug/kg	4.0	3.0	1	07/22/21 16:57	07/26/21 21:16	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/26/21 21:16	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:16	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:16	91-20-3	
Phenanthrene	**6.8**	ug/kg	4.0	3.3	1	07/22/21 16:57	07/26/21 21:16	85-01-8	
Pyrene	**10.2**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 21:16	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	73	%	40-120		1	07/22/21 16:57	07/26/21 21:16	321-60-8	
Terphenyl-d14 (S)	92	%	45-130		1	07/22/21 16:57	07/26/21 21:16	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**18.7**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-57/6.0'-8.0' D **Lab ID: 60375481013** Collected: 07/19/21 11:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.8	10.1	1	07/22/21 12:56	07/26/21 22:18	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.8	9.7	1	07/22/21 12:56	07/26/21 22:18	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.8	4.4	1	07/22/21 12:56	07/26/21 22:18	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.8	9.8	1	07/22/21 12:56	07/26/21 22:18	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.8	2.7	1	07/22/21 12:56	07/26/21 22:18	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.8	3.8	1	07/22/21 12:56	07/26/21 22:18	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.8	8.0	1	07/22/21 12:56	07/26/21 22:18	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	83	%	35-120		1	07/22/21 12:56	07/26/21 22:18	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.60**	mg/kg	1.1	0.60	10	08/04/21 11:31	08/05/21 12:34	7440-36-0	
Arsenic	**4.3**	mg/kg	1.1	0.12	10	08/04/21 11:31	08/05/21 12:34	7440-38-2	
Copper	**12.2**	mg/kg	1.1	0.35	10	08/04/21 11:31	08/05/21 12:34	7440-50-8	
Lead	**7.8**	mg/kg	0.56	0.14	10	08/04/21 11:31	08/05/21 12:34	7439-92-1	
Zinc	**38.5**	mg/kg	5.6	0.94	10	08/04/21 11:31	08/05/21 12:34	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 21:33	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 21:33	208-96-8	
Anthracene	**3.2J**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:33	120-12-7	
Benzo(a)anthracene	**14.4**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 21:33	56-55-3	
Benzo(a)pyrene	**12.3**	ug/kg	4.0	1.4	1	07/22/21 16:57	07/26/21 21:33	50-32-8	
Benzo(b)fluoranthene	**25.5**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 21:33	205-99-2	
Benzo(g,h,i)perylene	**4.4**	ug/kg	4.0	1.8	1	07/22/21 16:57	07/26/21 21:33	191-24-2	
Benzo(k)fluoranthene	**11.1**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 21:33	207-08-9	
Chrysene	**15.7**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 21:33	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:33	53-70-3	
Fluoranthene	**40.4**	ug/kg	4.0	3.0	1	07/22/21 16:57	07/26/21 21:33	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/26/21 21:33	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.3**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:33	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:33	91-20-3	
Phenanthrene	**18.9**	ug/kg	4.0	3.3	1	07/22/21 16:57	07/26/21 21:33	85-01-8	
Pyrene	**33.2**	ug/kg	4.0	2.1	1	07/22/21 16:57	07/26/21 21:33	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	74	%	40-120		1	07/22/21 16:57	07/26/21 21:33	321-60-8	
Terphenyl-d14 (S)	92	%	45-130		1	07/22/21 16:57	07/26/21 21:33	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.8**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-56/3-5' **Lab ID: 60375481014** Collected: 07/19/21 15:55 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.7	10.1	1	07/22/21 12:56	07/26/21 22:36	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.7	9.7	1	07/22/21 12:56	07/26/21 22:36	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.7	4.4	1	07/22/21 12:56	07/26/21 22:36	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.7	9.8	1	07/22/21 12:56	07/26/21 22:36	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.7	2.7	1	07/22/21 12:56	07/26/21 22:36	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.7	3.8	1	07/22/21 12:56	07/26/21 22:36	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.7	8.0	1	07/22/21 12:56	07/26/21 22:36	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	98	%	35-120		1	07/22/21 12:56	07/26/21 22:36	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.61**	mg/kg	1.1	0.61	10	08/04/21 11:31	08/05/21 12:36	7440-36-0	
Arsenic	**6.2**	mg/kg	1.1	0.12	10	08/04/21 11:31	08/05/21 12:36	7440-38-2	
Copper	**13.0**	mg/kg	1.1	0.35	10	08/04/21 11:31	08/05/21 12:36	7440-50-8	
Lead	**8.9**	mg/kg	0.57	0.15	10	08/04/21 11:31	08/05/21 12:36	7439-92-1	
Zinc	**43.1**	mg/kg	5.7	0.96	10	08/04/21 11:31	08/05/21 12:36	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 21:50	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 21:50	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:50	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 21:50	56-55-3	
Benzo(a)pyrene	**<1.4**	ug/kg	4.0	1.4	1	07/22/21 16:57	07/26/21 21:50	50-32-8	
Benzo(b)fluoranthene	**2.7J**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 21:50	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/22/21 16:57	07/26/21 21:50	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 21:50	207-08-9	
Chrysene	**<1.9**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 21:50	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:50	53-70-3	
Fluoranthene	**4.7**	ug/kg	4.0	3.0	1	07/22/21 16:57	07/26/21 21:50	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/26/21 21:50	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:50	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 21:50	91-20-3	
Phenanthrene	**<3.3**	ug/kg	4.0	3.3	1	07/22/21 16:57	07/26/21 21:50	85-01-8	
Pyrene	**3.6J**	ug/kg	4.0	2.1	1	07/22/21 16:57	07/26/21 21:50	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%	40-120		1	07/22/21 16:57	07/26/21 21:50	321-60-8	
Terphenyl-d14 (S)	88	%	45-130		1	07/22/21 16:57	07/26/21 21:50	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.0**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-56/5-7' **Lab ID: 60375481015** Collected: 07/19/21 16:00 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.7	10.1	1	07/22/21 12:56	07/26/21 22:54	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.7	9.7	1	07/22/21 12:56	07/26/21 22:54	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.7	4.4	1	07/22/21 12:56	07/26/21 22:54	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.7	9.8	1	07/22/21 12:56	07/26/21 22:54	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.7	2.7	1	07/22/21 12:56	07/26/21 22:54	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.7	3.8	1	07/22/21 12:56	07/26/21 22:54	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.7	8.0	1	07/22/21 12:56	07/26/21 22:54	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	101	%	35-120		1	07/22/21 12:56	07/26/21 22:54	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.49**	mg/kg	0.91	0.49	10	08/04/21 11:31	08/05/21 12:37	7440-36-0	
Arsenic	**5.5**	mg/kg	0.91	0.096	10	08/04/21 11:31	08/05/21 12:37	7440-38-2	
Copper	**12.6**	mg/kg	0.91	0.28	10	08/04/21 11:31	08/05/21 12:37	7440-50-8	
Lead	**7.8**	mg/kg	0.45	0.12	10	08/04/21 11:31	08/05/21 12:37	7439-92-1	
Zinc	**39.1**	mg/kg	4.5	0.77	10	08/04/21 11:31	08/05/21 12:37	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	3.9	1.5	1	07/22/21 16:57	07/26/21 22:08	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	3.9	1.5	1	07/22/21 16:57	07/26/21 22:08	208-96-8	
Anthracene	**<1.6**	ug/kg	3.9	1.6	1	07/22/21 16:57	07/26/21 22:08	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	3.9	1.9	1	07/22/21 16:57	07/26/21 22:08	56-55-3	
Benzo(a)pyrene	**<1.4**	ug/kg	3.9	1.4	1	07/22/21 16:57	07/26/21 22:08	50-32-8	
Benzo(b)fluoranthene	**<1.9**	ug/kg	3.9	1.9	1	07/22/21 16:57	07/26/21 22:08	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	3.9	1.8	1	07/22/21 16:57	07/26/21 22:08	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	3.9	2.2	1	07/22/21 16:57	07/26/21 22:08	207-08-9	
Chrysene	**<1.9**	ug/kg	3.9	1.9	1	07/22/21 16:57	07/26/21 22:08	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	3.9	1.7	1	07/22/21 16:57	07/26/21 22:08	53-70-3	
Fluoranthene	**3.1J**	ug/kg	3.9	3.0	1	07/22/21 16:57	07/26/21 22:08	206-44-0	
Fluorene	**<1.5**	ug/kg	3.9	1.5	1	07/22/21 16:57	07/26/21 22:08	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	3.9	1.7	1	07/22/21 16:57	07/26/21 22:08	193-39-5	
Naphthalene	**<1.7**	ug/kg	3.9	1.7	1	07/22/21 16:57	07/26/21 22:08	91-20-3	
Phenanthrene	**<3.2**	ug/kg	3.9	3.2	1	07/22/21 16:57	07/26/21 22:08	85-01-8	
Pyrene	**2.3J**	ug/kg	3.9	2.1	1	07/22/21 16:57	07/26/21 22:08	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	72	%	40-120		1	07/22/21 16:57	07/26/21 22:08	321-60-8	
Terphenyl-d14 (S)	91	%	45-130		1	07/22/21 16:57	07/26/21 22:08	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.3**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-58/1-3' **Lab ID: 60375481016** Collected: 07/19/21 13:25 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.8	10.1	1	07/22/21 12:56	07/26/21 23:12	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.8	9.7	1	07/22/21 12:56	07/26/21 23:12	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	40.8	4.5	1	07/22/21 12:56	07/26/21 23:12	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.8	9.8	1	07/22/21 12:56	07/26/21 23:12	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.8	2.7	1	07/22/21 12:56	07/26/21 23:12	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.8	3.8	1	07/22/21 12:56	07/26/21 23:12	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.8	8.0	1	07/22/21 12:56	07/26/21 23:12	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	94	%	35-120		1	07/22/21 12:56	07/26/21 23:12	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.57**	mg/kg	1.1	0.57	10	08/04/21 11:31	08/05/21 12:39	7440-36-0	
Arsenic	**7.0**	mg/kg	1.1	0.11	10	08/04/21 11:31	08/05/21 12:39	7440-38-2	
Copper	**20.6**	mg/kg	1.1	0.33	10	08/04/21 11:31	08/05/21 12:39	7440-50-8	
Lead	**9.8**	mg/kg	0.53	0.14	10	08/04/21 11:31	08/05/21 12:39	7439-92-1	
Zinc	**75.1**	mg/kg	5.3	0.90	10	08/04/21 11:31	08/05/21 12:39	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**3.5J**	ug/kg	4.1	1.5	1	07/22/21 16:57	07/26/21 22:25	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1.5	1	07/22/21 16:57	07/26/21 22:25	208-96-8	
Anthracene	**23.0**	ug/kg	4.1	1.7	1	07/22/21 16:57	07/26/21 22:25	120-12-7	
Benzo(a)anthracene	**206**	ug/kg	4.1	1.9	1	07/22/21 16:57	07/26/21 22:25	56-55-3	
Benzo(a)pyrene	**203**	ug/kg	4.1	1.5	1	07/22/21 16:57	07/26/21 22:25	50-32-8	
Benzo(b)fluoranthene	**492**	ug/kg	4.1	2.0	1	07/22/21 16:57	07/26/21 22:25	205-99-2	
Benzo(g,h,i)perylene	**91.0**	ug/kg	4.1	1.8	1	07/22/21 16:57	07/26/21 22:25	191-24-2	
Benzo(k)fluoranthene	**73.8**	ug/kg	4.1	2.3	1	07/22/21 16:57	07/26/21 22:25	207-08-9	
Chrysene	**260**	ug/kg	4.1	1.9	1	07/22/21 16:57	07/26/21 22:25	218-01-9	
Dibenz(a,h)anthracene	**22.7**	ug/kg	4.1	1.8	1	07/22/21 16:57	07/26/21 22:25	53-70-3	
Fluoranthene	**504**	ug/kg	4.1	3.1	1	07/22/21 16:57	07/26/21 22:25	206-44-0	
Fluorene	**5.6**	ug/kg	4.1	1.6	1	07/22/21 16:57	07/26/21 22:25	86-73-7	
Indeno(1,2,3-cd)pyrene	**91.1**	ug/kg	4.1	1.8	1	07/22/21 16:57	07/26/21 22:25	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.1	1.7	1	07/22/21 16:57	07/26/21 22:25	91-20-3	
Phenanthrene	**163**	ug/kg	4.1	3.3	1	07/22/21 16:57	07/26/21 22:25	85-01-8	
Pyrene	**469**	ug/kg	4.1	2.2	1	07/22/21 16:57	07/26/21 22:25	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	81	%	40-120		1	07/22/21 16:57	07/26/21 22:25	321-60-8	
Terphenyl-d14 (S)	105	%	45-130		1	07/22/21 16:57	07/26/21 22:25	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.3**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-58/4-6' **Lab ID: 60375481017** Collected: 07/19/21 13:30 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.2**	ug/kg	40.9	10.2	1	07/22/21 12:56	07/26/21 23:29	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.9	9.7	1	07/22/21 12:56	07/26/21 23:29	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	40.9	4.5	1	07/22/21 12:56	07/26/21 23:29	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.9	9.8	1	07/22/21 12:56	07/26/21 23:29	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.9	2.7	1	07/22/21 12:56	07/26/21 23:29	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.9	3.8	1	07/22/21 12:56	07/26/21 23:29	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	40.9	8.1	1	07/22/21 12:56	07/26/21 23:29	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	83	%	35-120		1	07/22/21 12:56	07/26/21 23:29	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.59**	mg/kg	1.1	0.59	10	08/04/21 11:31	08/05/21 12:41	7440-36-0	M1
Arsenic	**10.8**	mg/kg	1.1	0.12	10	08/04/21 11:31	08/05/21 12:41	7440-38-2	
Copper	**19.6**	mg/kg	1.1	0.34	10	08/04/21 11:31	08/05/21 12:41	7440-50-8	
Lead	**11.0**	mg/kg	0.54	0.14	10	08/04/21 11:31	08/05/21 12:41	7439-92-1	
Zinc	**65.6**	mg/kg	5.4	0.92	10	08/04/21 11:31	08/05/21 12:41	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.1	1.5	1	07/22/21 16:57	07/26/21 22:42	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1.5	1	07/22/21 16:57	07/26/21 22:42	208-96-8	
Anthracene	**9.8**	ug/kg	4.1	1.7	1	07/22/21 16:57	07/26/21 22:42	120-12-7	
Benzo(a)anthracene	**50.4**	ug/kg	4.1	1.9	1	07/22/21 16:57	07/26/21 22:42	56-55-3	
Benzo(a)pyrene	**38.8**	ug/kg	4.1	1.5	1	07/22/21 16:57	07/26/21 22:42	50-32-8	
Benzo(b)fluoranthene	**92.4**	ug/kg	4.1	2.0	1	07/22/21 16:57	07/26/21 22:42	205-99-2	
Benzo(g,h,i)perylene	**15.8**	ug/kg	4.1	1.8	1	07/22/21 16:57	07/26/21 22:42	191-24-2	
Benzo(k)fluoranthene	**22.3**	ug/kg	4.1	2.3	1	07/22/21 16:57	07/26/21 22:42	207-08-9	
Chrysene	**57.9**	ug/kg	4.1	2.0	1	07/22/21 16:57	07/26/21 22:42	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.1	1.8	1	07/22/21 16:57	07/26/21 22:42	53-70-3	
Fluoranthene	**160**	ug/kg	4.1	3.1	1	07/22/21 16:57	07/26/21 22:42	206-44-0	
Fluorene	**2.5J**	ug/kg	4.1	1.6	1	07/22/21 16:57	07/26/21 22:42	86-73-7	
Indeno(1,2,3-cd)pyrene	**16.1**	ug/kg	4.1	1.8	1	07/22/21 16:57	07/26/21 22:42	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.1	1.8	1	07/22/21 16:57	07/26/21 22:42	91-20-3	
Phenanthrene	**64.0**	ug/kg	4.1	3.4	1	07/22/21 16:57	07/26/21 22:42	85-01-8	
Pyrene	**125**	ug/kg	4.1	2.2	1	07/22/21 16:57	07/26/21 22:42	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	68	%	40-120		1	07/22/21 16:57	07/26/21 22:42	321-60-8	
Terphenyl-d14 (S)	84	%	45-130		1	07/22/21 16:57	07/26/21 22:42	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.7**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-51/1.5-3' **Lab ID: 60375481018** Collected: 07/19/21 13:54 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	40.0	9.9	1	07/22/21 12:56	07/27/21 00:23	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	40.0	9.5	1	07/22/21 12:56	07/27/21 00:23	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.0	4.4	1	07/22/21 12:56	07/27/21 00:23	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	40.0	9.6	1	07/22/21 12:56	07/27/21 00:23	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	40.0	2.6	1	07/22/21 12:56	07/27/21 00:23	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.0	3.8	1	07/22/21 12:56	07/27/21 00:23	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.0	7.9	1	07/22/21 12:56	07/27/21 00:23	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	88	%	35-120		1	07/22/21 12:56	07/27/21 00:23	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.49**	mg/kg	0.92	0.49	10	08/04/21 11:31	08/05/21 12:50	7440-36-0	
Arsenic	**6.3**	mg/kg	0.92	0.097	10	08/04/21 11:31	08/05/21 12:50	7440-38-2	
Copper	**15.3**	mg/kg	0.92	0.28	10	08/04/21 11:31	08/05/21 12:50	7440-50-8	
Lead	**11.1**	mg/kg	0.46	0.12	10	08/04/21 11:31	08/05/21 12:50	7439-92-1	
Zinc	**47.3**	mg/kg	4.6	0.77	10	08/04/21 11:31	08/05/21 12:50	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<3.0**	ug/kg	7.9	3.0	1	07/22/21 16:57	07/26/21 23:33	83-32-9	
Acenaphthylene	**<3.0**	ug/kg	7.9	3.0	1	07/22/21 16:57	07/26/21 23:33	208-96-8	
Anthracene	**11.9**	ug/kg	7.9	3.3	1	07/22/21 16:57	07/26/21 23:33	120-12-7	
Benzo(a)anthracene	**89.1**	ug/kg	7.9	3.7	1	07/22/21 16:57	07/26/21 23:33	56-55-3	
Benzo(a)pyrene	**95.2**	ug/kg	7.9	2.9	1	07/22/21 16:57	07/26/21 23:33	50-32-8	
Benzo(b)fluoranthene	**217**	ug/kg	7.9	3.8	1	07/22/21 16:57	07/26/21 23:33	205-99-2	
Benzo(g,h,i)perylene	**41.1**	ug/kg	7.9	3.6	1	07/22/21 16:57	07/26/21 23:33	191-24-2	
Benzo(k)fluoranthene	**55.0**	ug/kg	7.9	4.4	1	07/22/21 16:57	07/26/21 23:33	207-08-9	
Chrysene	**114**	ug/kg	7.9	3.8	1	07/22/21 16:57	07/26/21 23:33	218-01-9	
Dibenz(a,h)anthracene	**<3.4**	ug/kg	7.9	3.4	1	07/22/21 16:57	07/26/21 23:33	53-70-3	
Fluoranthene	**236**	ug/kg	7.9	6.0	1	07/22/21 16:57	07/26/21 23:33	206-44-0	
Fluorene	**<3.1**	ug/kg	7.9	3.1	1	07/22/21 16:57	07/26/21 23:33	86-73-7	
Indeno(1,2,3-cd)pyrene	**41.1**	ug/kg	7.9	3.4	1	07/22/21 16:57	07/26/21 23:33	193-39-5	
Naphthalene	**<3.4**	ug/kg	7.9	3.4	1	07/22/21 16:57	07/26/21 23:33	91-20-3	
Phenanthrene	**64.8**	ug/kg	7.9	6.5	1	07/22/21 16:57	07/26/21 23:33	85-01-8	
Pyrene	**191**	ug/kg	7.9	4.3	1	07/22/21 16:57	07/26/21 23:33	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	79	%	40-120		1	07/22/21 16:57	07/26/21 23:33	321-60-8	
Terphenyl-d14 (S)	97	%	45-130		1	07/22/21 16:57	07/26/21 23:33	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**18.5**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-51/3-5' **Lab ID: 60375481019** Collected: 07/19/21 14:00 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.0**	ug/kg	40.4	10.0	1	07/22/21 12:56	07/27/21 00:41	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.4	9.6	1	07/22/21 12:56	07/27/21 00:41	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.4	4.4	1	07/22/21 12:56	07/27/21 00:41	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.4	9.7	1	07/22/21 12:56	07/27/21 00:41	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.4	2.7	1	07/22/21 12:56	07/27/21 00:41	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.4	3.8	1	07/22/21 12:56	07/27/21 00:41	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.4	8.0	1	07/22/21 12:56	07/27/21 00:41	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	98	%	35-120		1	07/22/21 12:56	07/27/21 00:41	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.58**	mg/kg	1.1	0.58	10	08/04/21 11:31	08/05/21 12:52	7440-36-0	
Arsenic	**3.6**	mg/kg	1.1	0.11	10	08/04/21 11:31	08/05/21 12:52	7440-38-2	
Copper	**13.1**	mg/kg	1.1	0.33	10	08/04/21 11:31	08/05/21 12:52	7440-50-8	
Lead	**11.0**	mg/kg	0.53	0.14	10	08/04/21 11:31	08/05/21 12:52	7439-92-1	
Zinc	**38.6**	mg/kg	5.3	0.90	10	08/04/21 11:31	08/05/21 12:52	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 23:50	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/26/21 23:50	208-96-8	
Anthracene	**2.2J**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/26/21 23:50	120-12-7	
Benzo(a)anthracene	**12.6**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 23:50	56-55-3	
Benzo(a)pyrene	**11.6**	ug/kg	4.0	1.4	1	07/22/21 16:57	07/26/21 23:50	50-32-8	
Benzo(b)fluoranthene	**27.0**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 23:50	205-99-2	
Benzo(g,h,i)perylene	**5.3**	ug/kg	4.0	1.8	1	07/22/21 16:57	07/26/21 23:50	191-24-2	
Benzo(k)fluoranthene	**6.3**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/26/21 23:50	207-08-9	
Chrysene	**15.3**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/26/21 23:50	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 23:50	53-70-3	
Fluoranthene	**37.2**	ug/kg	4.0	3.0	1	07/22/21 16:57	07/26/21 23:50	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/26/21 23:50	86-73-7	
Indeno(1,2,3-cd)pyrene	**5.0**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 23:50	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/26/21 23:50	91-20-3	
Phenanthrene	**14.4**	ug/kg	4.0	3.2	1	07/22/21 16:57	07/26/21 23:50	85-01-8	
Pyrene	**29.4**	ug/kg	4.0	2.1	1	07/22/21 16:57	07/26/21 23:50	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	75	%	40-120		1	07/22/21 16:57	07/26/21 23:50	321-60-8	
Terphenyl-d14 (S)	92	%	45-130		1	07/22/21 16:57	07/26/21 23:50	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.3**	%	0.50	0.50	1		07/22/21 11:11		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-50/0-2' **Lab ID: 60375481020** Collected: 07/19/21 14:30 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.5**	ug/kg	38.2	9.5	1	07/22/21 12:56	07/27/21 00:59	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.1**	ug/kg	38.2	9.1	1	07/22/21 12:56	07/27/21 00:59	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.2	4.2	1	07/22/21 12:56	07/27/21 00:59	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.2**	ug/kg	38.2	9.2	1	07/22/21 12:56	07/27/21 00:59	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	38.2	2.5	1	07/22/21 12:56	07/27/21 00:59	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.2	3.6	1	07/22/21 12:56	07/27/21 00:59	11097-69-1	
PCB-1260 (Aroclor 1260)	**8.3J**	ug/kg	38.2	7.5	1	07/22/21 12:56	07/27/21 00:59	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	100	%	35-120		1	07/22/21 12:56	07/27/21 00:59	2051-24-3	
SVOA (HPLC) 8330B	Analytical Method: EPA 8330 Preparation Method: 8330 Pace National - Mt. Juliet								
Tetryl	**<0.106**	mg/kg	0.604	0.106	1	07/26/21 17:15	07/28/21 15:49	479-45-8	
2,4-Dinitrotoluene	**<0.0946**	mg/kg	0.604	0.0946	1	07/26/21 17:15	07/28/21 15:49	121-14-2	
4-Nitrotoluene	**<0.167**	mg/kg	0.604	0.167	1	07/26/21 17:15	07/28/21 15:49	99-99-0	
RDX (Hexahydro-1,3,5-Trinitro-	**<0.132**	mg/kg	0.604	0.132	1	07/26/21 17:15	07/28/21 15:49	121-82-4	
Nitrobenzene	**<0.104**	mg/kg	0.604	0.104	1	07/26/21 17:15	07/28/21 15:49	98-95-3	
2,6-Dinitrotoluene	**<0.104**	mg/kg	0.604	0.104	1	07/26/21 17:15	07/28/21 15:49	606-20-2	
2-Nitrotoluene	**<0.110**	mg/kg	0.604	0.110	1	07/26/21 17:15	07/28/21 15:49	88-72-2	
3-Nitrotoluene	**<0.136**	mg/kg	0.604	0.136	1	07/26/21 17:15	07/28/21 15:49	99-08-1	
1,3,5-Trinitrobenzene	**<0.0473**	mg/kg	0.604	0.0473	1	07/26/21 17:15	07/28/21 15:49	99-35-4	
1,3-Dinitrobenzene	**<0.0622**	mg/kg	0.604	0.0622	1	07/26/21 17:15	07/28/21 15:49	99-65-0	
2,4,6-Trinitrotoluene	**<0.0762**	mg/kg	0.604	0.0762	1	07/26/21 17:15	07/28/21 15:49	118-96-7	
4-Amino-2,6-dinitrotoluene	**<0.0692**	mg/kg	0.604	0.0692	1	07/26/21 17:15	07/28/21 15:49	19406-51-0	
2-Amino-4,6-dinitrotoluene	**<0.0770**	mg/kg	0.604	0.0770	1	07/26/21 17:15	07/28/21 15:49	35572-78-2	
HMX (Octahydro-1,3,5,7-Tetrani	**<0.0940**	mg/kg	0.604	0.0940	1	07/26/21 17:15	07/28/21 15:49	2691-41-0	
PETN	**<0.256**	mg/kg	0.604	0.256	1	07/26/21 17:15	07/28/21 15:49	78-11-5	
Nitroglycerin	**<0.186**	mg/kg	2.41	0.186	1	07/26/21 17:15	07/28/21 15:49	55-63-0	
Surrogates									
1,3-Dimethyl-2-nitrobenzene	95.0	%	80.0-128		1	07/26/21 17:15	07/28/21 15:49	81-20-9	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.58**	mg/kg	1.1	0.58	10	08/04/21 11:31	08/05/21 12:53	7440-36-0	
Arsenic	**6.3**	mg/kg	1.1	0.12	10	08/04/21 11:31	08/05/21 12:53	7440-38-2	
Copper	**14.3**	mg/kg	1.1	0.34	10	08/04/21 11:31	08/05/21 12:53	7440-50-8	
Lead	**11.6**	mg/kg	0.54	0.14	10	08/04/21 11:31	08/05/21 12:53	7439-92-1	
Zinc	**47.6**	mg/kg	5.4	0.92	10	08/04/21 11:31	08/05/21 12:53	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**59.8**	ug/kg	7.5	2.8	1	07/22/21 16:57	07/27/21 00:07	83-32-9	
Acenaphthylene	**18.2**	ug/kg	7.5	2.8	1	07/22/21 16:57	07/27/21 00:07	208-96-8	
Anthracene	**193**	ug/kg	7.5	3.1	1	07/22/21 16:57	07/27/21 00:07	120-12-7	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-50/0-2' **Lab ID: 60375481020** Collected: 07/19/21 14:30 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Benzo(a)anthracene	**954**	ug/kg	7.5	3.5	1	07/22/21 16:57	07/27/21 00:07	56-55-3	
Benzo(a)pyrene	**808**	ug/kg	7.5	2.7	1	07/22/21 16:57	07/27/21 00:07	50-32-8	
Benzo(b)fluoranthene	**1710**	ug/kg	74.9	36.3	10	07/22/21 16:57	07/27/21 12:24	205-99-2	
Benzo(g,h,i)perylene	**308**	ug/kg	7.5	3.4	1	07/22/21 16:57	07/27/21 00:07	191-24-2	
Benzo(k)fluoranthene	**423**	ug/kg	7.5	4.2	1	07/22/21 16:57	07/27/21 00:07	207-08-9	
Chrysene	**1110**	ug/kg	7.5	3.6	1	07/22/21 16:57	07/27/21 00:07	218-01-9	
Dibenz(a,h)anthracene	**86.2**	ug/kg	7.5	3.2	1	07/22/21 16:57	07/27/21 00:07	53-70-3	
Fluoranthene	**2550**	ug/kg	74.9	56.3	10	07/22/21 16:57	07/27/21 12:24	206-44-0	
Fluorene	**53.6**	ug/kg	7.5	2.9	1	07/22/21 16:57	07/27/21 00:07	86-73-7	
Indeno(1,2,3-cd)pyrene	**311**	ug/kg	7.5	3.2	1	07/22/21 16:57	07/27/21 00:07	193-39-5	
Naphthalene	**6.9J**	ug/kg	7.5	3.2	1	07/22/21 16:57	07/27/21 00:07	91-20-3	
Phenanthrene	**983**	ug/kg	7.5	6.1	1	07/22/21 16:57	07/27/21 00:07	85-01-8	
Pyrene	**1980**	ug/kg	74.9	40.4	10	07/22/21 16:57	07/27/21 12:24	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	80	%	40-120		1	07/22/21 16:57	07/27/21 00:07	321-60-8	
Terphenyl-d14 (S)	104	%	45-130		1	07/22/21 16:57	07/27/21 00:07	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**16.2**	%	0.50	0.50	1		07/22/21 11:11		
Total Solids 2540 G-2011	Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet								
Total Solids	**82.8**	%			1	07/30/21 18:15	07/30/21 18:20		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-50/3-5' **Lab ID: 60375481021** Collected: 07/19/21 14:35 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.6**	ug/kg	38.7	9.6	1	07/22/21 18:03	07/23/21 09:03	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.2**	ug/kg	38.7	9.2	1	07/22/21 18:03	07/23/21 09:03	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.7	4.2	1	07/22/21 18:03	07/23/21 09:03	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.3**	ug/kg	38.7	9.3	1	07/22/21 18:03	07/23/21 09:03	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	38.7	2.6	1	07/22/21 18:03	07/23/21 09:03	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.7	3.6	1	07/22/21 18:03	07/23/21 09:03	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.6**	ug/kg	38.7	7.6	1	07/22/21 18:03	07/23/21 09:03	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	92	%	35-120		1	07/22/21 18:03	07/23/21 09:03	2051-24-3	
SVOA (HPLC) 8330B	Analytical Method: EPA 8330 Preparation Method: 8330 Pace National - Mt. Juliet								
Tetryl	**<0.109**	mg/kg	0.623	0.109	1	07/26/21 17:15	07/28/21 16:17	479-45-8	
2,4-Dinitrotoluene	**<0.0976**	mg/kg	0.623	0.0976	1	07/26/21 17:15	07/28/21 16:17	121-14-2	
4-Nitrotoluene	**<0.172**	mg/kg	0.623	0.172	1	07/26/21 17:15	07/28/21 16:17	99-99-0	
RDX (Hexahydro-1,3,5-Trinitro-	**<0.136**	mg/kg	0.623	0.136	1	07/26/21 17:15	07/28/21 16:17	121-82-4	
Nitrobenzene	**<0.107**	mg/kg	0.623	0.107	1	07/26/21 17:15	07/28/21 16:17	98-95-3	
2,6-Dinitrotoluene	**<0.108**	mg/kg	0.623	0.108	1	07/26/21 17:15	07/28/21 16:17	606-20-2	
2-Nitrotoluene	**<0.114**	mg/kg	0.623	0.114	1	07/26/21 17:15	07/28/21 16:17	88-72-2	
3-Nitrotoluene	**<0.141**	mg/kg	0.623	0.141	1	07/26/21 17:15	07/28/21 16:17	99-08-1	
1,3,5-Trinitrobenzene	**<0.0488**	mg/kg	0.623	0.0488	1	07/26/21 17:15	07/28/21 16:17	99-35-4	
1,3-Dinitrobenzene	**<0.0641**	mg/kg	0.623	0.0641	1	07/26/21 17:15	07/28/21 16:17	99-65-0	
2,4,6-Trinitrotoluene	**<0.0786**	mg/kg	0.623	0.0786	1	07/26/21 17:15	07/28/21 16:17	118-96-7	
4-Amino-2,6-dinitrotoluene	**<0.0714**	mg/kg	0.623	0.0714	1	07/26/21 17:15	07/28/21 16:17	19406-51-0	
2-Amino-4,6-dinitrotoluene	**<0.0795**	mg/kg	0.623	0.0795	1	07/26/21 17:15	07/28/21 16:17	35572-78-2	
HMX (Octahydro-1,3,5,7-Tetrani	**<0.0970**	mg/kg	0.623	0.0970	1	07/26/21 17:15	07/28/21 16:17	2691-41-0	
PETN	**<0.264**	mg/kg	0.623	0.264	1	07/26/21 17:15	07/28/21 16:17	78-11-5	
Nitroglycerin	**<0.192**	mg/kg	2.49	0.192	1	07/26/21 17:15	07/28/21 16:17	55-63-0	
Surrogates									
1,3-Dimethyl-2-nitrobenzene	97.6	%	80.0-128		1	07/26/21 17:15	07/28/21 16:17	81-20-9	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.66**	mg/kg	1.2	0.66	10	08/04/21 11:31	08/05/21 12:55	7440-36-0	
Arsenic	**5.6**	mg/kg	1.2	0.13	10	08/04/21 11:31	08/05/21 12:55	7440-38-2	
Copper	**12.6**	mg/kg	1.2	0.38	10	08/04/21 11:31	08/05/21 12:55	7440-50-8	
Lead	**8.2**	mg/kg	0.61	0.16	10	08/04/21 11:31	08/05/21 12:55	7439-92-1	
Zinc	**42.7**	mg/kg	6.1	1.0	10	08/04/21 11:31	08/05/21 12:55	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/27/21 00:24	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/27/21 00:24	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/27/21 00:24	120-12-7	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-50/3-5' **Lab ID: 60375481021** Collected: 07/19/21 14:35 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Benzo(a)anthracene	**5.4**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/27/21 00:24	56-55-3	
Benzo(a)pyrene	**5.3**	ug/kg	4.0	1.5	1	07/22/21 16:57	07/27/21 00:24	50-32-8	
Benzo(b)fluoranthene	**11.2**	ug/kg	4.0	2.0	1	07/22/21 16:57	07/27/21 00:24	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/22/21 16:57	07/27/21 00:24	191-24-2	
Benzo(k)fluoranthene	**3.2J**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/27/21 00:24	207-08-9	
Chrysene	**5.9**	ug/kg	4.0	1.9	1	07/22/21 16:57	07/27/21 00:24	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/27/21 00:24	53-70-3	
Fluoranthene	**15.5**	ug/kg	4.0	3.0	1	07/22/21 16:57	07/27/21 00:24	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/22/21 16:57	07/27/21 00:24	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/27/21 00:24	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 16:57	07/27/21 00:24	91-20-3	
Phenanthrene	**6.5**	ug/kg	4.0	3.3	1	07/22/21 16:57	07/27/21 00:24	85-01-8	
Pyrene	**12.2**	ug/kg	4.0	2.2	1	07/22/21 16:57	07/27/21 00:24	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	72	%	40-120		1	07/22/21 16:57	07/27/21 00:24	321-60-8	
Terphenyl-d14 (S)	90	%	45-130		1	07/22/21 16:57	07/27/21 00:24	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.5**	%	0.50	0.50	1		07/22/21 11:38		
Total Solids 2540 G-2011	Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet								
Total Solids	**80.3**	%			1	07/30/21 18:15	07/30/21 18:20		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-50/3-5'D **Lab ID: 60375481022** Collected: 07/19/21 14:35 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.2**	ug/kg	41.0	10.2	1	07/22/21 18:03	07/23/21 09:21	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.8**	ug/kg	41.0	9.8	1	07/22/21 18:03	07/23/21 09:21	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.0	4.5	1	07/22/21 18:03	07/23/21 09:21	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.9**	ug/kg	41.0	9.9	1	07/22/21 18:03	07/23/21 09:21	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.0	2.7	1	07/22/21 18:03	07/23/21 09:21	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	41.0	3.8	1	07/22/21 18:03	07/23/21 09:21	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	41.0	8.1	1	07/22/21 18:03	07/23/21 09:21	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	100	%	35-120		1	07/22/21 18:03	07/23/21 09:21	2051-24-3	
SVOA (HPLC) 8330B	Analytical Method: EPA 8330 Preparation Method: 8330 Pace National - Mt. Juliet								
Tetryl	**<0.109**	mg/kg	0.620	0.109	1	07/26/21 17:15	07/28/21 16:45	479-45-8	
2,4-Dinitrotoluene	**<0.0972**	mg/kg	0.620	0.0972	1	07/26/21 17:15	07/28/21 16:45	121-14-2	
4-Nitrotoluene	**<0.171**	mg/kg	0.620	0.171	1	07/26/21 17:15	07/28/21 16:45	99-99-0	
RDX (Hexahydro-1,3,5-Trinitro-	**<0.135**	mg/kg	0.620	0.135	1	07/26/21 17:15	07/28/21 16:45	121-82-4	
Nitrobenzene	**<0.107**	mg/kg	0.620	0.107	1	07/26/21 17:15	07/28/21 16:45	98-95-3	
2,6-Dinitrotoluene	**<0.107**	mg/kg	0.620	0.107	1	07/26/21 17:15	07/28/21 16:45	606-20-2	
2-Nitrotoluene	**<0.113**	mg/kg	0.620	0.113	1	07/26/21 17:15	07/28/21 16:45	88-72-2	
3-Nitrotoluene	**<0.140**	mg/kg	0.620	0.140	1	07/26/21 17:15	07/28/21 16:45	99-08-1	
1,3,5-Trinitrobenzene	**<0.0486**	mg/kg	0.620	0.0486	1	07/26/21 17:15	07/28/21 16:45	99-35-4	
1,3-Dinitrobenzene	**<0.0639**	mg/kg	0.620	0.0639	1	07/26/21 17:15	07/28/21 16:45	99-65-0	
2,4,6-Trinitrotoluene	**<0.0782**	mg/kg	0.620	0.0782	1	07/26/21 17:15	07/28/21 16:45	118-96-7	
4-Amino-2,6-dinitrotoluene	**<0.0710**	mg/kg	0.620	0.0710	1	07/26/21 17:15	07/28/21 16:45	19406-51-0	
2-Amino-4,6-dinitrotoluene	**<0.0791**	mg/kg	0.620	0.0791	1	07/26/21 17:15	07/28/21 16:45	35572-78-2	
HMX (Octahydro-1,3,5,7-Tetrani	**<0.0966**	mg/kg	0.620	0.0966	1	07/26/21 17:15	07/28/21 16:45	2691-41-0	
PETN	**<0.263**	mg/kg	0.620	0.263	1	07/26/21 17:15	07/28/21 16:45	78-11-5	
Nitroglycerin	**<0.191**	mg/kg	2.48	0.191	1	07/26/21 17:15	07/28/21 16:45	55-63-0	
Surrogates									
1,3-Dimethyl-2-nitrobenzene	96.2	%	80.0-128		1	07/26/21 17:15	07/28/21 16:45	81-20-9	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.53**	mg/kg	0.99	0.53	10	08/04/21 11:31	08/05/21 12:57	7440-36-0	
Arsenic	**5.4**	mg/kg	0.99	0.10	10	08/04/21 11:31	08/05/21 12:57	7440-38-2	
Copper	**11.6**	mg/kg	0.99	0.31	10	08/04/21 11:31	08/05/21 12:57	7440-50-8	
Lead	**7.7**	mg/kg	0.49	0.13	10	08/04/21 11:31	08/05/21 12:57	7439-92-1	
Zinc	**41.5**	mg/kg	4.9	0.84	10	08/04/21 11:31	08/05/21 12:57	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.1	1.5	1	07/22/21 16:57	07/27/21 00:41	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1.5	1	07/22/21 16:57	07/27/21 00:41	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1.7	1	07/22/21 16:57	07/27/21 00:41	120-12-7	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-50/3-5'D **Lab ID: 60375481022** Collected: 07/19/21 14:35 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Benzo(a)anthracene	**<1.9**	ug/kg	4.1	1.9	1	07/22/21 16:57	07/27/21 00:41	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.1	1.5	1	07/22/21 16:57	07/27/21 00:41	50-32-8	
Benzo(b)fluoranthene	**3.5J**	ug/kg	4.1	2.0	1	07/22/21 16:57	07/27/21 00:41	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.1	1.8	1	07/22/21 16:57	07/27/21 00:41	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.1	2.3	1	07/22/21 16:57	07/27/21 00:41	207-08-9	
Chrysene	**<1.9**	ug/kg	4.1	1.9	1	07/22/21 16:57	07/27/21 00:41	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.1	1.7	1	07/22/21 16:57	07/27/21 00:41	53-70-3	
Fluoranthene	**4.5**	ug/kg	4.1	3.0	1	07/22/21 16:57	07/27/21 00:41	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1.6	1	07/22/21 16:57	07/27/21 00:41	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.1	1.7	1	07/22/21 16:57	07/27/21 00:41	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.1	1.7	1	07/22/21 16:57	07/27/21 00:41	91-20-3	
Phenanthrene	**<3.3**	ug/kg	4.1	3.3	1	07/22/21 16:57	07/27/21 00:41	85-01-8	
Pyrene	**3.5J**	ug/kg	4.1	2.2	1	07/22/21 16:57	07/27/21 00:41	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%	40-120		1	07/22/21 16:57	07/27/21 00:41	321-60-8	
Terphenyl-d14 (S)	87	%	45-130		1	07/22/21 16:57	07/27/21 00:41	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.8**	%	0.50	0.50	1		07/22/21 11:38		
Total Solids 2540 G-2011	Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet								
Total Solids	**80.6**	%			1	07/30/21 18:15	07/30/21 18:20		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-49/3.5-4.5' **Lab ID: 60375481023** Collected: 07/19/21 15:00 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.2**	ug/kg	40.9	10.2	1	07/22/21 18:03	07/23/21 09:39	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.8**	ug/kg	40.9	9.8	1	07/22/21 18:03	07/23/21 09:39	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	40.9	4.5	1	07/22/21 18:03	07/23/21 09:39	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.9**	ug/kg	40.9	9.9	1	07/22/21 18:03	07/23/21 09:39	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.9	2.7	1	07/22/21 18:03	07/23/21 09:39	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.9	3.8	1	07/22/21 18:03	07/23/21 09:39	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	40.9	8.1	1	07/22/21 18:03	07/23/21 09:39	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	99	%	35-120		1	07/22/21 18:03	07/23/21 09:39	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.55**	mg/kg	1.0	0.55	10	08/04/21 11:31	08/05/21 12:58	7440-36-0	
Arsenic	**4.5**	mg/kg	1.0	0.11	10	08/04/21 11:31	08/05/21 12:58	7440-38-2	
Copper	**12.6**	mg/kg	1.0	0.32	10	08/04/21 11:31	08/05/21 12:58	7440-50-8	
Lead	**10.7**	mg/kg	0.51	0.13	10	08/04/21 11:31	08/05/21 12:58	7439-92-1	
Zinc	**35.6**	mg/kg	5.1	0.86	10	08/04/21 11:31	08/05/21 12:58	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.9**	%	0.50	0.50	1		07/22/21 11:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-49/5-6' **Lab ID: 60375481024** Collected: 07/19/21 15:05 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	40.0	9.9	1	07/22/21 18:03	07/23/21 09:57	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	40.0	9.5	1	07/22/21 18:03	07/23/21 09:57	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.0	4.4	1	07/22/21 18:03	07/23/21 09:57	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	40.0	9.6	1	07/22/21 18:03	07/23/21 09:57	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	40.0	2.6	1	07/22/21 18:03	07/23/21 09:57	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	40.0	3.7	1	07/22/21 18:03	07/23/21 09:57	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.0	7.9	1	07/22/21 18:03	07/23/21 09:57	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	96	%	35-120		1	07/22/21 18:03	07/23/21 09:57	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.62**	mg/kg	1.2	0.62	10	08/04/21 11:31	08/05/21 13:00	7440-36-0	
Arsenic	**4.6**	mg/kg	1.2	0.12	10	08/04/21 11:31	08/05/21 13:00	7440-38-2	
Copper	**12.2**	mg/kg	1.2	0.36	10	08/04/21 11:31	08/05/21 13:00	7440-50-8	
Lead	**10.4**	mg/kg	0.58	0.15	10	08/04/21 11:31	08/05/21 13:00	7439-92-1	
Zinc	**30.4**	mg/kg	5.8	0.98	10	08/04/21 11:31	08/05/21 13:00	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**18.6**	%	0.50	0.50	1		07/22/21 11:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-63/0-2' **Lab ID: 60375481025** Collected: 07/20/21 07:48 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050								
	Pace Analytical Services - Kansas City								
Antimony	**<0.62**	mg/kg	1.1	0.62	10	08/04/21 11:31	08/05/21 13:01	7440-36-0	
Arsenic	**10.8**	mg/kg	1.1	0.12	10	08/04/21 11:31	08/05/21 13:01	7440-38-2	
Copper	**21.2**	mg/kg	1.1	0.35	10	08/04/21 11:31	08/05/21 13:01	7440-50-8	
Lead	**13.6**	mg/kg	0.57	0.15	10	08/04/21 11:31	08/05/21 13:01	7439-92-1	
Zinc	**69.9**	mg/kg	5.7	0.96	10	08/04/21 11:31	08/05/21 13:01	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974								
	Pace Analytical Services - Kansas City								
Percent Moisture	**14.1**	%	0.50	0.50	1		07/22/21 11:38		

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-63/3-5' **Lab ID: 60375481026** Collected: 07/20/21 07:52 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050								
	Pace Analytical Services - Kansas City								
Antimony	**<0.56**	mg/kg	1.0	0.56	10	08/04/21 11:31	08/05/21 13:03	7440-36-0	
Arsenic	**4.1**	mg/kg	1.0	0.11	10	08/04/21 11:31	08/05/21 13:03	7440-38-2	
Copper	**14.2**	mg/kg	1.0	0.32	10	08/04/21 11:31	08/05/21 13:03	7440-50-8	
Lead	**9.1**	mg/kg	0.52	0.14	10	08/04/21 11:31	08/05/21 13:03	7439-92-1	
Zinc	**49.0**	mg/kg	5.2	0.89	10	08/04/21 11:31	08/05/21 13:03	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974								
	Pace Analytical Services - Kansas City								
Percent Moisture	**19.1**	%	0.50	0.50	1		07/22/21 11:38		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-48/3-5' **Lab ID: 60375481027** Collected: 07/20/21 08:25 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.0**	ug/kg	40.4	10.0	1	07/22/21 18:03	07/23/21 10:15	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.4	9.6	1	07/22/21 18:03	07/23/21 10:15	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.4	4.4	1	07/22/21 18:03	07/23/21 10:15	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.4	9.7	1	07/22/21 18:03	07/23/21 10:15	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.4	2.7	1	07/22/21 18:03	07/23/21 10:15	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.4	3.8	1	07/22/21 18:03	07/23/21 10:15	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.4	8.0	1	07/22/21 18:03	07/23/21 10:15	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	91	%	35-120		1	07/22/21 18:03	07/23/21 10:15	2051-24-3	
SVOA (HPLC) 8330B	Analytical Method: EPA 8330 Preparation Method: 8330 Pace National - Mt. Juliet								
Tetryl	**<0.107**	mg/kg	0.610	0.107	1	07/26/21 17:15	07/28/21 17:12	479-45-8	
2,4-Dinitrotoluene	**<0.0957**	mg/kg	0.610	0.0957	1	07/26/21 17:15	07/28/21 17:12	121-14-2	
4-Nitrotoluene	**<0.168**	mg/kg	0.610	0.168	1	07/26/21 17:15	07/28/21 17:12	99-99-0	
RDX (Hexahydro-1,3,5-Trinitro-	**<0.133**	mg/kg	0.610	0.133	1	07/26/21 17:15	07/28/21 17:12	121-82-4	
Nitrobenzene	**<0.105**	mg/kg	0.610	0.105	1	07/26/21 17:15	07/28/21 17:12	98-95-3	
2,6-Dinitrotoluene	**<0.105**	mg/kg	0.610	0.105	1	07/26/21 17:15	07/28/21 17:12	606-20-2	
2-Nitrotoluene	**<0.112**	mg/kg	0.610	0.112	1	07/26/21 17:15	07/28/21 17:12	88-72-2	
3-Nitrotoluene	**<0.138**	mg/kg	0.610	0.138	1	07/26/21 17:15	07/28/21 17:12	99-08-1	
1,3,5-Trinitrobenzene	**<0.0478**	mg/kg	0.610	0.0478	1	07/26/21 17:15	07/28/21 17:12	99-35-4	
1,3-Dinitrobenzene	**<0.0628**	mg/kg	0.610	0.0628	1	07/26/21 17:15	07/28/21 17:12	99-65-0	
2,4,6-Trinitrotoluene	**<0.0770**	mg/kg	0.610	0.0770	1	07/26/21 17:15	07/28/21 17:12	118-96-7	
4-Amino-2,6-dinitrotoluene	**<0.0699**	mg/kg	0.610	0.0699	1	07/26/21 17:15	07/28/21 17:12	19406-51-0	
2-Amino-4,6-dinitrotoluene	**<0.0779**	mg/kg	0.610	0.0779	1	07/26/21 17:15	07/28/21 17:12	35572-78-2	
HMX (Octahydro-1,3,5,7-Tetrani	**<0.0951**	mg/kg	0.610	0.0951	1	07/26/21 17:15	07/28/21 17:12	2691-41-0	
PETN	**<0.259**	mg/kg	0.610	0.259	1	07/26/21 17:15	07/28/21 17:12	78-11-5	
Nitroglycerin	**<0.188**	mg/kg	2.44	0.188	1	07/26/21 17:15	07/28/21 17:12	55-63-0	
Surrogates									
1,3-Dimethyl-2-nitrobenzene	100	%	80.0-128		1	07/26/21 17:15	07/28/21 17:12	81-20-9	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.58**	mg/kg	1.1	0.58	10	08/04/21 11:31	08/05/21 13:09	7440-36-0	M1
Arsenic	**7.9**	mg/kg	1.1	0.11	10	08/04/21 11:31	08/05/21 13:09	7440-38-2	
Copper	**14.8**	mg/kg	1.1	0.34	10	08/04/21 11:31	08/05/21 13:09	7440-50-8	
Lead	**33.8**	mg/kg	0.54	0.14	10	08/04/21 11:31	08/05/21 13:09	7439-92-1	
Zinc	**30.8**	mg/kg	5.4	0.91	10	08/04/21 11:31	08/05/21 13:09	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	3.9	1.5	1	07/22/21 19:44	07/27/21 15:20	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	3.9	1.5	1	07/22/21 19:44	07/27/21 15:20	208-96-8	
Anthracene	**<1.6**	ug/kg	3.9	1.6	1	07/22/21 19:44	07/27/21 15:20	120-12-7	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-48/3-5' **Lab ID: 60375481027** Collected: 07/20/21 08:25 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Benzo(a)anthracene	**<1.8**	ug/kg	3.9	1.8	1	07/22/21 19:44	07/27/21 15:20	56-55-3	
Benzo(a)pyrene	**<1.4**	ug/kg	3.9	1.4	1	07/22/21 19:44	07/27/21 15:20	50-32-8	
Benzo(b)fluoranthene	**<1.9**	ug/kg	3.9	1.9	1	07/22/21 19:44	07/27/21 15:20	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	3.9	1.8	1	07/22/21 19:44	07/27/21 15:20	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	3.9	2.2	1	07/22/21 19:44	07/27/21 15:20	207-08-9	
Chrysene	**<1.9**	ug/kg	3.9	1.9	1	07/22/21 19:44	07/27/21 15:20	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	3.9	1.7	1	07/22/21 19:44	07/27/21 15:20	53-70-3	
Fluoranthene	**4.4**	ug/kg	3.9	3.0	1	07/22/21 19:44	07/27/21 15:20	206-44-0	
Fluorene	**<1.5**	ug/kg	3.9	1.5	1	07/22/21 19:44	07/27/21 15:20	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	3.9	1.7	1	07/22/21 19:44	07/27/21 15:20	193-39-5	
Naphthalene	**<1.7**	ug/kg	3.9	1.7	1	07/22/21 19:44	07/27/21 15:20	91-20-3	
Phenanthrene	**4.1**	ug/kg	3.9	3.2	1	07/22/21 19:44	07/27/21 15:20	85-01-8	
Pyrene	**3.7J**	ug/kg	3.9	2.1	1	07/22/21 19:44	07/27/21 15:20	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	83	%	40-120		1	07/22/21 19:44	07/27/21 15:20	321-60-8	
Terphenyl-d14 (S)	94	%	45-130		1	07/22/21 19:44	07/27/21 15:20	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.0**	%	0.50	0.50	1		07/22/21 11:39		
Total Solids 2540 G-2011	Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet								
Total Solids	**81.9**	%			1	07/28/21 13:52	07/28/21 13:59		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-48/5-7' **Lab ID: 60375481028** Collected: 07/20/21 08:28 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10**	ug/kg	40.2	10	1	07/22/21 18:03	07/23/21 11:08	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.2	9.6	1	07/22/21 18:03	07/23/21 11:08	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.2	4.4	1	07/22/21 18:03	07/23/21 11:08	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.2	9.7	1	07/22/21 18:03	07/23/21 11:08	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.2	2.7	1	07/22/21 18:03	07/23/21 11:08	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.2	3.8	1	07/22/21 18:03	07/23/21 11:08	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.2	7.9	1	07/22/21 18:03	07/23/21 11:08	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	103	%	35-120		1	07/22/21 18:03	07/23/21 11:08	2051-24-3	
SVOA (HPLC) 8330B	Analytical Method: EPA 8330 Preparation Method: 8330 Pace National - Mt. Juliet								
Tetryl	**<0.109**	mg/kg	0.624	0.109	1	07/26/21 17:15	07/28/21 17:40	479-45-8	
2,4-Dinitrotoluene	**<0.0979**	mg/kg	0.624	0.0979	1	07/26/21 17:15	07/28/21 17:40	121-14-2	
4-Nitrotoluene	**<0.172**	mg/kg	0.624	0.172	1	07/26/21 17:15	07/28/21 17:40	99-99-0	
RDX (Hexahydro-1,3,5-Trinitro-	**<0.136**	mg/kg	0.624	0.136	1	07/26/21 17:15	07/28/21 17:40	121-82-4	
Nitrobenzene	**<0.108**	mg/kg	0.624	0.108	1	07/26/21 17:15	07/28/21 17:40	98-95-3	
2,6-Dinitrotoluene	**<0.108**	mg/kg	0.624	0.108	1	07/26/21 17:15	07/28/21 17:40	606-20-2	
2-Nitrotoluene	**<0.114**	mg/kg	0.624	0.114	1	07/26/21 17:15	07/28/21 17:40	88-72-2	
3-Nitrotoluene	**<0.141**	mg/kg	0.624	0.141	1	07/26/21 17:15	07/28/21 17:40	99-08-1	
1,3,5-Trinitrobenzene	**<0.0489**	mg/kg	0.624	0.0489	1	07/26/21 17:15	07/28/21 17:40	99-35-4	
1,3-Dinitrobenzene	**<0.0643**	mg/kg	0.624	0.0643	1	07/26/21 17:15	07/28/21 17:40	99-65-0	
2,4,6-Trinitrotoluene	**<0.0788**	mg/kg	0.624	0.0788	1	07/26/21 17:15	07/28/21 17:40	118-96-7	
4-Amino-2,6-dinitrotoluene	**<0.0715**	mg/kg	0.624	0.0715	1	07/26/21 17:15	07/28/21 17:40	19406-51-0	
2-Amino-4,6-dinitrotoluene	**<0.0797**	mg/kg	0.624	0.0797	1	07/26/21 17:15	07/28/21 17:40	35572-78-2	
HMX (Octahydro-1,3,5,7-Tetrani	**<0.0973**	mg/kg	0.624	0.0973	1	07/26/21 17:15	07/28/21 17:40	2691-41-0	
PETN	**<0.265**	mg/kg	0.624	0.265	1	07/26/21 17:15	07/28/21 17:40	78-11-5	
Nitroglycerin	**<0.192**	mg/kg	2.50	0.192	1	07/26/21 17:15	07/28/21 17:40	55-63-0	
Surrogates									
1,3-Dimethyl-2-nitrobenzene	98.2	%	80.0-128		1	07/26/21 17:15	07/28/21 17:40	81-20-9	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.51**	mg/kg	0.94	0.51	10	08/04/21 11:31	08/05/21 13:14	7440-36-0	
Arsenic	**5.8**	mg/kg	0.94	0.10	10	08/04/21 11:31	08/05/21 13:14	7440-38-2	
Copper	**13.5**	mg/kg	0.94	0.29	10	08/04/21 11:31	08/05/21 13:14	7440-50-8	
Lead	**20.8**	mg/kg	0.47	0.12	10	08/04/21 11:31	08/05/21 13:14	7439-92-1	
Zinc	**31.2**	mg/kg	4.7	0.79	10	08/04/21 11:31	08/05/21 13:14	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 19:44	07/27/21 15:37	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 19:44	07/27/21 15:37	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 19:44	07/27/21 15:37	120-12-7	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-48/5-7' **Lab ID: 60375481028** Collected: 07/20/21 08:28 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1.9	1	07/22/21 19:44	07/27/21 15:37	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.0	1.5	1	07/22/21 19:44	07/27/21 15:37	50-32-8	
Benzo(b)fluoranthene	**<1.9**	ug/kg	4.0	1.9	1	07/22/21 19:44	07/27/21 15:37	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/22/21 19:44	07/27/21 15:37	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	4.0	2.2	1	07/22/21 19:44	07/27/21 15:37	207-08-9	
Chrysene	**<1.9**	ug/kg	4.0	1.9	1	07/22/21 19:44	07/27/21 15:37	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 19:44	07/27/21 15:37	53-70-3	
Fluoranthene	**<3.0**	ug/kg	4.0	3.0	1	07/22/21 19:44	07/27/21 15:37	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/22/21 19:44	07/27/21 15:37	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 19:44	07/27/21 15:37	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/22/21 19:44	07/27/21 15:37	91-20-3	
Phenanthrene	**<3.3**	ug/kg	4.0	3.3	1	07/22/21 19:44	07/27/21 15:37	85-01-8	
Pyrene	**<2.2**	ug/kg	4.0	2.2	1	07/22/21 19:44	07/27/21 15:37	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	82	%	40-120		1	07/22/21 19:44	07/27/21 15:37	321-60-8	
Terphenyl-d14 (S)	94	%	45-130		1	07/22/21 19:44	07/27/21 15:37	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.6**	%	0.50	0.50	1		07/22/21 11:39		
Total Solids 2540 G-2011	Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet								
Total Solids	**80.1**	%			1	07/28/21 13:52	07/28/21 13:59		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/0-2' **Lab ID: 60375481029** Collected: 07/20/21 08:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.4**	ug/kg	38.0	9.4	1	07/22/21 18:03	07/23/21 11:26	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.1**	ug/kg	38.0	9.1	1	07/22/21 18:03	07/23/21 11:26	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.1**	ug/kg	38.0	4.1	1	07/22/21 18:03	07/23/21 11:26	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.2**	ug/kg	38.0	9.2	1	07/22/21 18:03	07/23/21 11:26	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	38.0	2.5	1	07/22/21 18:03	07/23/21 11:26	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.0	3.6	1	07/22/21 18:03	07/23/21 11:26	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.5**	ug/kg	38.0	7.5	1	07/22/21 18:03	07/23/21 11:26	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	89	%	35-120		1	07/22/21 18:03	07/23/21 11:26	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.51**	mg/kg	0.94	0.51	10	08/04/21 11:31	08/05/21 13:16	7440-36-0	
Arsenic	**12.1**	mg/kg	0.94	0.099	10	08/04/21 11:31	08/05/21 13:16	7440-38-2	
Copper	**17.1**	mg/kg	0.94	0.29	10	08/04/21 11:31	08/05/21 13:16	7440-50-8	
Lead	**9.9**	mg/kg	0.47	0.12	10	08/04/21 11:31	08/05/21 13:16	7439-92-1	
Zinc	**43.8**	mg/kg	4.7	0.79	10	08/04/21 11:31	08/05/21 13:16	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<2.7**	ug/kg	7.3	2.7	1	07/22/21 20:05	07/23/21 16:45	83-32-9	
Acenaphthylene	**<2.7**	ug/kg	7.3	2.7	1	07/22/21 20:05	07/23/21 16:45	208-96-8	
Anthracene	**<3.0**	ug/kg	7.3	3.0	1	07/22/21 20:05	07/23/21 16:45	120-12-7	
Benzo(a)anthracene	**<3.4**	ug/kg	7.3	3.4	1	07/22/21 20:05	07/23/21 16:45	56-55-3	
Benzo(a)pyrene	**<2.7**	ug/kg	7.3	2.7	1	07/22/21 20:05	07/23/21 16:45	50-32-8	
Benzo(b)fluoranthene	**5.2J**	ug/kg	7.3	3.5	1	07/22/21 20:05	07/23/21 16:45	205-99-2	
Benzo(g,h,i)perylene	**<3.3**	ug/kg	7.3	3.3	1	07/22/21 20:05	07/23/21 16:45	191-24-2	
Benzo(k)fluoranthene	**<4.1**	ug/kg	7.3	4.1	1	07/22/21 20:05	07/23/21 16:45	207-08-9	
Chrysene	**<3.5**	ug/kg	7.3	3.5	1	07/22/21 20:05	07/23/21 16:45	218-01-9	
Dibenz(a,h)anthracene	**<3.1**	ug/kg	7.3	3.1	1	07/22/21 20:05	07/23/21 16:45	53-70-3	
Fluoranthene	**5.7J**	ug/kg	7.3	5.5	1	07/22/21 20:05	07/23/21 16:45	206-44-0	
Fluorene	**<2.9**	ug/kg	7.3	2.9	1	07/22/21 20:05	07/23/21 16:45	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.1**	ug/kg	7.3	3.1	1	07/22/21 20:05	07/23/21 16:45	193-39-5	
Naphthalene	**<3.1**	ug/kg	7.3	3.1	1	07/22/21 20:05	07/23/21 16:45	91-20-3	
Phenanthrene	**<6.0**	ug/kg	7.3	6.0	1	07/22/21 20:05	07/23/21 16:45	85-01-8	
Pyrene	**4.2J**	ug/kg	7.3	3.9	1	07/22/21 20:05	07/23/21 16:45	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	69	%	40-120		1	07/22/21 20:05	07/23/21 16:45	321-60-8	
Terphenyl-d14 (S)	70	%	45-130		1	07/22/21 20:05	07/23/21 16:45	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**7.8J**	mg/kg	16.6	1.6	1	07/22/21 20:05	07/28/21 21:28		
TPH-DRO	**2.9J**	mg/kg	16.6	1.6	1	07/22/21 20:05	07/28/21 21:28		

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/0-2' **Lab ID: 60375481029** Collected: 07/20/21 08:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Surrogates									
Nitrobenzene-d5 (S)	76	%	30-120		1	07/22/21 20:05	07/28/21 21:28	4165-60-0	
2-Fluorobiphenyl (S)	77	%	40-120		1	07/22/21 20:05	07/28/21 21:28	321-60-8	
Terphenyl-d14 (S)	71	%	45-120		1	07/22/21 20:05	07/28/21 21:28	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**<14.4**	ug/kg	17.8	14.4	1	07/27/21 08:11	07/27/21 12:37	67-64-1	
Acrolein	**<67.4**	ug/kg	89.1	67.4	1	07/27/21 08:11	07/27/21 12:37	107-02-8	
Acrylonitrile	**<2.8**	ug/kg	89.1	2.8	1	07/27/21 08:11	07/27/21 12:37	107-13-1	
Benzene	**<0.44**	ug/kg	4.5	0.44	1	07/27/21 08:11	07/27/21 12:37	71-43-2	
Bromobenzene	**<0.84**	ug/kg	4.5	0.84	1	07/27/21 08:11	07/27/21 12:37	108-86-1	
Bromochloromethane	**<0.54**	ug/kg	4.5	0.54	1	07/27/21 08:11	07/27/21 12:37	74-97-5	
Bromodichloromethane	**<0.54**	ug/kg	4.5	0.54	1	07/27/21 08:11	07/27/21 12:37	75-27-4	
Bromoform	**<0.51**	ug/kg	4.5	0.51	1	07/27/21 08:11	07/27/21 12:37	75-25-2	
Bromomethane	**<2.6**	ug/kg	4.5	2.6	1	07/27/21 08:11	07/27/21 12:37	74-83-9	
2-Butanone (MEK)	**<3.0**	ug/kg	8.9	3.0	1	07/27/21 08:11	07/27/21 12:37	78-93-3	
n-Butylbenzene	**<0.58**	ug/kg	4.5	0.58	1	07/27/21 08:11	07/27/21 12:37	104-51-8	
sec-Butylbenzene	**<0.65**	ug/kg	4.5	0.65	1	07/27/21 08:11	07/27/21 12:37	135-98-8	
tert-Butylbenzene	**<0.79**	ug/kg	22.3	0.79	1	07/27/21 08:11	07/27/21 12:37	98-06-6	
Carbon disulfide	**<0.57**	ug/kg	4.5	0.57	1	07/27/21 08:11	07/27/21 12:37	75-15-0	
Carbon tetrachloride	**<0.76**	ug/kg	4.5	0.76	1	07/27/21 08:11	07/27/21 12:37	56-23-5	
Chlorobenzene	**<0.56**	ug/kg	4.5	0.56	1	07/27/21 08:11	07/27/21 12:37	108-90-7	
Chloroethane	**<1.3**	ug/kg	4.5	1.3	1	07/27/21 08:11	07/27/21 12:37	75-00-3	
Chloroform	**<0.44**	ug/kg	4.5	0.44	1	07/27/21 08:11	07/27/21 12:37	67-66-3	
Chloromethane	**<0.71**	ug/kg	4.5	0.71	1	07/27/21 08:11	07/27/21 12:37	74-87-3	
2-Chlorotoluene	**<0.65**	ug/kg	4.5	0.65	1	07/27/21 08:11	07/27/21 12:37	95-49-8	
4-Chlorotoluene	**<0.53**	ug/kg	4.5	0.53	1	07/27/21 08:11	07/27/21 12:37	106-43-4	
Cyclohexanone	**<11.3**	ug/kg	17.8	11.3	1	07/27/21 08:11	07/27/21 12:37	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.6**	ug/kg	8.9	1.6	1	07/27/21 08:11	07/27/21 12:37	96-12-8	
Dibromochloromethane	**<0.58**	ug/kg	4.5	0.58	1	07/27/21 08:11	07/27/21 12:37	124-48-1	
1,2-Dibromoethane (EDB)	**<0.48**	ug/kg	4.5	0.48	1	07/27/21 08:11	07/27/21 12:37	106-93-4	
Dibromomethane	**<0.53**	ug/kg	4.5	0.53	1	07/27/21 08:11	07/27/21 12:37	74-95-3	
1,2-Dichlorobenzene	**<0.56**	ug/kg	4.5	0.56	1	07/27/21 08:11	07/27/21 12:37	95-50-1	
1,3-Dichlorobenzene	**<0.64**	ug/kg	4.5	0.64	1	07/27/21 08:11	07/27/21 12:37	541-73-1	
1,4-Dichlorobenzene	**<0.72**	ug/kg	4.5	0.72	1	07/27/21 08:11	07/27/21 12:37	106-46-7	
1,1-Dichloroethane	**<0.35**	ug/kg	4.5	0.35	1	07/27/21 08:11	07/27/21 12:37	75-34-3	
1,2-Dichloroethane	**<0.36**	ug/kg	4.5	0.36	1	07/27/21 08:11	07/27/21 12:37	107-06-2	
1,2-Dichloroethene (Total)	**<0.99**	ug/kg	4.5	0.99	1	07/27/21 08:11	07/27/21 12:37	540-59-0	
1,1-Dichloroethene	**<0.57**	ug/kg	4.5	0.57	1	07/27/21 08:11	07/27/21 12:37	75-35-4	
cis-1,2-Dichloroethene	**<0.38**	ug/kg	4.5	0.38	1	07/27/21 08:11	07/27/21 12:37	156-59-2	
trans-1,2-Dichloroethene	**<0.61**	ug/kg	4.5	0.61	1	07/27/21 08:11	07/27/21 12:37	156-60-5	
1,2-Dichloropropane	**<0.87**	ug/kg	4.5	0.87	1	07/27/21 08:11	07/27/21 12:37	78-87-5	
1,3-Dichloropropane	**<0.62**	ug/kg	4.5	0.62	1	07/27/21 08:11	07/27/21 12:37	142-28-9	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/0-2' **Lab ID: 60375481029** Collected: 07/20/21 08:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
2,2-Dichloropropane	**<0.42**	ug/kg	4.5	0.42	1	07/27/21 08:11	07/27/21 12:37	594-20-7	
1,1-Dichloropropene	**<0.80**	ug/kg	4.5	0.80	1	07/27/21 08:11	07/27/21 12:37	563-58-6	
cis-1,3-Dichloropropene	**<0.47**	ug/kg	4.5	0.47	1	07/27/21 08:11	07/27/21 12:37	10061-01-5	
trans-1,3-Dichloropropene	**<0.41**	ug/kg	4.5	0.41	1	07/27/21 08:11	07/27/21 12:37	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.50**	ug/kg	4.5	0.50	1	07/27/21 08:11	07/27/21 12:37	60-29-7	
Ethylbenzene	**<0.41**	ug/kg	4.5	0.41	1	07/27/21 08:11	07/27/21 12:37	100-41-4	
n-Heptane	**<4.0**	ug/kg	8.9	4.0	1	07/27/21 08:11	07/27/21 12:37	142-82-5	
Hexachloro-1,3-butadiene	**<0.76**	ug/kg	4.5	0.76	1	07/27/21 08:11	07/27/21 12:37	87-68-3	
n-Hexane	**<0.61**	ug/kg	8.9	0.61	1	07/27/21 08:11	07/27/21 12:37	110-54-3	
2-Hexanone	**<2.2**	ug/kg	17.8	2.2	1	07/27/21 08:11	07/27/21 12:37	591-78-6	
Iodomethane	**<1.3**	ug/kg	8.9	1.3	1	07/27/21 08:11	07/27/21 12:37	74-88-4	
Isopropylbenzene (Cumene)	**<0.51**	ug/kg	4.5	0.51	1	07/27/21 08:11	07/27/21 12:37	98-82-8	
p-Isopropyltoluene	**<0.61**	ug/kg	4.5	0.61	1	07/27/21 08:11	07/27/21 12:37	99-87-6	
Methyl acetate	**<0.96**	ug/kg	89.1	0.96	1	07/27/21 08:11	07/27/21 12:37	79-20-9	
Methylene Chloride	**<2.4**	ug/kg	4.5	2.4	1	07/27/21 08:11	07/27/21 12:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.7**	ug/kg	8.9	2.7	1	07/27/21 08:11	07/27/21 12:37	108-10-1	
Methyl-tert-butyl ether	**<0.43**	ug/kg	4.5	0.43	1	07/27/21 08:11	07/27/21 12:37	1634-04-4	
Naphthalene	**<0.73**	ug/kg	8.9	0.73	1	07/27/21 08:11	07/27/21 12:37	91-20-3	
n-Propylbenzene	**<0.72**	ug/kg	4.5	0.72	1	07/27/21 08:11	07/27/21 12:37	103-65-1	
Styrene	**<0.52**	ug/kg	4.5	0.52	1	07/27/21 08:11	07/27/21 12:37	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.91**	ug/kg	4.5	0.91	1	07/27/21 08:11	07/27/21 12:37	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.89**	ug/kg	4.5	0.89	1	07/27/21 08:11	07/27/21 12:37	79-34-5	
Tetrachloroethene	**<0.37**	ug/kg	4.5	0.37	1	07/27/21 08:11	07/27/21 12:37	127-18-4	
Tetrahydrofuran	**<0.70**	ug/kg	4.5	0.70	1	07/27/21 08:11	07/27/21 12:37	109-99-9	N2
Toluene	**<0.31**	ug/kg	4.5	0.31	1	07/27/21 08:11	07/27/21 12:37	108-88-3	
1,2,3-Trichlorobenzene	**<0.71**	ug/kg	4.5	0.71	1	07/27/21 08:11	07/27/21 12:37	87-61-6	
1,2,4-Trichlorobenzene	**<0.71**	ug/kg	4.5	0.71	1	07/27/21 08:11	07/27/21 12:37	120-82-1	
1,1,1-Trichloroethane	**<0.67**	ug/kg	4.5	0.67	1	07/27/21 08:11	07/27/21 12:37	71-55-6	
1,1,2-Trichloroethane	**<0.56**	ug/kg	4.5	0.56	1	07/27/21 08:11	07/27/21 12:37	79-00-5	
Trichloroethene	**<0.65**	ug/kg	4.5	0.65	1	07/27/21 08:11	07/27/21 12:37	79-01-6	
Trichlorofluoromethane	**<0.55**	ug/kg	4.5	0.55	1	07/27/21 08:11	07/27/21 12:37	75-69-4	
1,2,3-Trichloropropane	**<1.9**	ug/kg	4.5	1.9	1	07/27/21 08:11	07/27/21 12:37	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.5**	ug/kg	4.5	4.5	1	07/27/21 08:11	07/27/21 12:37	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.8**	ug/kg	4.5	1.8	1	07/27/21 08:11	07/27/21 12:37	526-73-8	
1,2,4-Trimethylbenzene	**<0.60**	ug/kg	4.5	0.60	1	07/27/21 08:11	07/27/21 12:37	95-63-6	
1,3,5-Trimethylbenzene	**<0.56**	ug/kg	4.5	0.56	1	07/27/21 08:11	07/27/21 12:37	108-67-8	
Vinyl acetate	**<0.50**	ug/kg	89.1	0.50	1	07/27/21 08:11	07/27/21 12:37	108-05-4	
Vinyl chloride	**<0.59**	ug/kg	4.5	0.59	1	07/27/21 08:11	07/27/21 12:37	75-01-4	
Xylene (Total)	**<1.0**	ug/kg	4.5	1.0	1	07/27/21 08:11	07/27/21 12:37	1330-20-7	
m&p-Xylene	**<0.56**	ug/kg	4.5	0.56	1	07/27/21 08:11	07/27/21 12:37	179601-23-1	
o-Xylene	**<0.33**	ug/kg	4.5	0.33	1	07/27/21 08:11	07/27/21 12:37	95-47-6	
Surrogates									
Toluene-d8 (S)	97	%	80-120		1	07/27/21 08:11	07/27/21 12:37	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120		1	07/27/21 08:11	07/27/21 12:37	460-00-4	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/0-2' **Lab ID: 60375481029** Collected: 07/20/21 08:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Surrogates									
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1	07/27/21 08:11	07/27/21 12:37	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.049**	mg/kg	0.45	0.049	1	07/27/21 09:23	07/27/21 12:37		
Surrogates									
Toluene-d8 (S)	97	%	78-122		1	07/27/21 09:23	07/27/21 12:37	2037-26-5	
4-Bromofluorobenzene (S)	101	%	69-133		1	07/27/21 09:23	07/27/21 12:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1	07/27/21 09:23	07/27/21 12:37	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**14.0**	%	0.50	0.50	1		07/22/21 11:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/3-5' **Lab ID: 60375481030** Collected: 07/20/21 08:55 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.6**	ug/kg	38.5	9.6	1	07/22/21 18:03	07/23/21 11:44	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.2**	ug/kg	38.5	9.2	1	07/22/21 18:03	07/23/21 11:44	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.5	4.2	1	07/22/21 18:03	07/23/21 11:44	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.3**	ug/kg	38.5	9.3	1	07/22/21 18:03	07/23/21 11:44	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	38.5	2.5	1	07/22/21 18:03	07/23/21 11:44	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.5	3.6	1	07/22/21 18:03	07/23/21 11:44	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.6**	ug/kg	38.5	7.6	1	07/22/21 18:03	07/23/21 11:44	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	95	%	35-120		1	07/22/21 18:03	07/23/21 11:44	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.56**	mg/kg	1.0	0.56	10	08/04/21 11:31	08/05/21 13:17	7440-36-0	
Arsenic	**5.2**	mg/kg	1.0	0.11	10	08/04/21 11:31	08/05/21 13:17	7440-38-2	
Copper	**12.8**	mg/kg	1.0	0.32	10	08/04/21 11:31	08/05/21 13:17	7440-50-8	
Lead	**8.8**	mg/kg	0.52	0.14	10	08/04/21 11:31	08/05/21 13:17	7439-92-1	
Zinc	**38.2**	mg/kg	5.2	0.88	10	08/04/21 11:31	08/05/21 13:17	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<2.8**	ug/kg	7.5	2.8	1	07/22/21 20:05	07/23/21 17:02	83-32-9	
Acenaphthylene	**<2.8**	ug/kg	7.5	2.8	1	07/22/21 20:05	07/23/21 17:02	208-96-8	
Anthracene	**<3.1**	ug/kg	7.5	3.1	1	07/22/21 20:05	07/23/21 17:02	120-12-7	
Benzo(a)anthracene	**<3.5**	ug/kg	7.5	3.5	1	07/22/21 20:05	07/23/21 17:02	56-55-3	
Benzo(a)pyrene	**<2.7**	ug/kg	7.5	2.7	1	07/22/21 20:05	07/23/21 17:02	50-32-8	
Benzo(b)fluoranthene	**<3.6**	ug/kg	7.5	3.6	1	07/22/21 20:05	07/23/21 17:02	205-99-2	
Benzo(g,h,i)perylene	**<3.4**	ug/kg	7.5	3.4	1	07/22/21 20:05	07/23/21 17:02	191-24-2	
Benzo(k)fluoranthene	**<4.2**	ug/kg	7.5	4.2	1	07/22/21 20:05	07/23/21 17:02	207-08-9	
Chrysene	**<3.6**	ug/kg	7.5	3.6	1	07/22/21 20:05	07/23/21 17:02	218-01-9	
Dibenz(a,h)anthracene	**<3.2**	ug/kg	7.5	3.2	1	07/22/21 20:05	07/23/21 17:02	53-70-3	
Fluoranthene	**<5.6**	ug/kg	7.5	5.6	1	07/22/21 20:05	07/23/21 17:02	206-44-0	
Fluorene	**<2.9**	ug/kg	7.5	2.9	1	07/22/21 20:05	07/23/21 17:02	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.2**	ug/kg	7.5	3.2	1	07/22/21 20:05	07/23/21 17:02	193-39-5	
Naphthalene	**<3.2**	ug/kg	7.5	3.2	1	07/22/21 20:05	07/23/21 17:02	91-20-3	
Phenanthrene	**<6.1**	ug/kg	7.5	6.1	1	07/22/21 20:05	07/23/21 17:02	85-01-8	
Pyrene	**<4.0**	ug/kg	7.5	4.0	1	07/22/21 20:05	07/23/21 17:02	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%	40-120		1	07/22/21 20:05	07/23/21 17:02	321-60-8	
Terphenyl-d14 (S)	65	%	45-130		1	07/22/21 20:05	07/23/21 17:02	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**5.9J**	mg/kg	17.1	1.6	1	07/22/21 20:05	07/28/21 22:27		
TPH-DRO	**1.8J**	mg/kg	17.1	1.6	1	07/22/21 20:05	07/28/21 22:27		

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/3-5' **Lab ID: 60375481030** Collected: 07/20/21 08:55 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Surrogates									
Nitrobenzene-d5 (S)	69	%	30-120		1	07/22/21 20:05	07/28/21 22:27	4165-60-0	
2-Fluorobiphenyl (S)	70	%	40-120		1	07/22/21 20:05	07/28/21 22:27	321-60-8	
Terphenyl-d14 (S)	63	%	45-120		1	07/22/21 20:05	07/28/21 22:27	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**<15.4**	ug/kg	19.0	15.4	1	07/27/21 08:11	07/27/21 12:52	67-64-1	
Acrolein	**<71.9**	ug/kg	95.2	71.9	1	07/27/21 08:11	07/27/21 12:52	107-02-8	
Acrylonitrile	**<3.0**	ug/kg	95.2	3.0	1	07/27/21 08:11	07/27/21 12:52	107-13-1	
Benzene	**<0.47**	ug/kg	4.8	0.47	1	07/27/21 08:11	07/27/21 12:52	71-43-2	
Bromobenzene	**<0.89**	ug/kg	4.8	0.89	1	07/27/21 08:11	07/27/21 12:52	108-86-1	
Bromochloromethane	**<0.57**	ug/kg	4.8	0.57	1	07/27/21 08:11	07/27/21 12:52	74-97-5	
Bromodichloromethane	**<0.57**	ug/kg	4.8	0.57	1	07/27/21 08:11	07/27/21 12:52	75-27-4	
Bromoform	**<0.55**	ug/kg	4.8	0.55	1	07/27/21 08:11	07/27/21 12:52	75-25-2	
Bromomethane	**<2.8**	ug/kg	4.8	2.8	1	07/27/21 08:11	07/27/21 12:52	74-83-9	
2-Butanone (MEK)	**<3.2**	ug/kg	9.5	3.2	1	07/27/21 08:11	07/27/21 12:52	78-93-3	
n-Butylbenzene	**<0.62**	ug/kg	4.8	0.62	1	07/27/21 08:11	07/27/21 12:52	104-51-8	
sec-Butylbenzene	**<0.70**	ug/kg	4.8	0.70	1	07/27/21 08:11	07/27/21 12:52	135-98-8	
tert-Butylbenzene	**<0.84**	ug/kg	23.8	0.84	1	07/27/21 08:11	07/27/21 12:52	98-06-6	
Carbon disulfide	**<0.61**	ug/kg	4.8	0.61	1	07/27/21 08:11	07/27/21 12:52	75-15-0	
Carbon tetrachloride	**<0.82**	ug/kg	4.8	0.82	1	07/27/21 08:11	07/27/21 12:52	56-23-5	
Chlorobenzene	**<0.60**	ug/kg	4.8	0.60	1	07/27/21 08:11	07/27/21 12:52	108-90-7	
Chloroethane	**<1.4**	ug/kg	4.8	1.4	1	07/27/21 08:11	07/27/21 12:52	75-00-3	
Chloroform	**<0.47**	ug/kg	4.8	0.47	1	07/27/21 08:11	07/27/21 12:52	67-66-3	
Chloromethane	**<0.76**	ug/kg	4.8	0.76	1	07/27/21 08:11	07/27/21 12:52	74-87-3	
2-Chlorotoluene	**<0.69**	ug/kg	4.8	0.69	1	07/27/21 08:11	07/27/21 12:52	95-49-8	
4-Chlorotoluene	**<0.57**	ug/kg	4.8	0.57	1	07/27/21 08:11	07/27/21 12:52	106-43-4	
Cyclohexanone	**<12.1**	ug/kg	19.0	12.1	1	07/27/21 08:11	07/27/21 12:52	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.7**	ug/kg	9.5	1.7	1	07/27/21 08:11	07/27/21 12:52	96-12-8	
Dibromochloromethane	**<0.61**	ug/kg	4.8	0.61	1	07/27/21 08:11	07/27/21 12:52	124-48-1	
1,2-Dibromoethane (EDB)	**<0.51**	ug/kg	4.8	0.51	1	07/27/21 08:11	07/27/21 12:52	106-93-4	
Dibromomethane	**<0.57**	ug/kg	4.8	0.57	1	07/27/21 08:11	07/27/21 12:52	74-95-3	
1,2-Dichlorobenzene	**<0.59**	ug/kg	4.8	0.59	1	07/27/21 08:11	07/27/21 12:52	95-50-1	
1,3-Dichlorobenzene	**<0.68**	ug/kg	4.8	0.68	1	07/27/21 08:11	07/27/21 12:52	541-73-1	
1,4-Dichlorobenzene	**<0.77**	ug/kg	4.8	0.77	1	07/27/21 08:11	07/27/21 12:52	106-46-7	
1,1-Dichloroethane	**<0.37**	ug/kg	4.8	0.37	1	07/27/21 08:11	07/27/21 12:52	75-34-3	
1,2-Dichloroethane	**<0.38**	ug/kg	4.8	0.38	1	07/27/21 08:11	07/27/21 12:52	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	4.8	1.1	1	07/27/21 08:11	07/27/21 12:52	540-59-0	
1,1-Dichloroethene	**<0.61**	ug/kg	4.8	0.61	1	07/27/21 08:11	07/27/21 12:52	75-35-4	
cis-1,2-Dichloroethene	**<0.41**	ug/kg	4.8	0.41	1	07/27/21 08:11	07/27/21 12:52	156-59-2	
trans-1,2-Dichloroethene	**<0.65**	ug/kg	4.8	0.65	1	07/27/21 08:11	07/27/21 12:52	156-60-5	
1,2-Dichloropropane	**<0.93**	ug/kg	4.8	0.93	1	07/27/21 08:11	07/27/21 12:52	78-87-5	
1,3-Dichloropropane	**<0.66**	ug/kg	4.8	0.66	1	07/27/21 08:11	07/27/21 12:52	142-28-9	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/3-5' **Lab ID: 60375481030** Collected: 07/20/21 08:55 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
2,2-Dichloropropane	**<0.45**	ug/kg	4.8	0.45	1	07/27/21 08:11	07/27/21 12:52	594-20-7	
1,1-Dichloropropene	**<0.86**	ug/kg	4.8	0.86	1	07/27/21 08:11	07/27/21 12:52	563-58-6	
cis-1,3-Dichloropropene	**<0.51**	ug/kg	4.8	0.51	1	07/27/21 08:11	07/27/21 12:52	10061-01-5	
trans-1,3-Dichloropropene	**<0.43**	ug/kg	4.8	0.43	1	07/27/21 08:11	07/27/21 12:52	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.53**	ug/kg	4.8	0.53	1	07/27/21 08:11	07/27/21 12:52	60-29-7	
Ethylbenzene	**<0.44**	ug/kg	4.8	0.44	1	07/27/21 08:11	07/27/21 12:52	100-41-4	
n-Heptane	**<4.3**	ug/kg	9.5	4.3	1	07/27/21 08:11	07/27/21 12:52	142-82-5	
Hexachloro-1,3-butadiene	**<0.81**	ug/kg	4.8	0.81	1	07/27/21 08:11	07/27/21 12:52	87-68-3	
n-Hexane	**<0.66**	ug/kg	9.5	0.66	1	07/27/21 08:11	07/27/21 12:52	110-54-3	
2-Hexanone	**<2.4**	ug/kg	19.0	2.4	1	07/27/21 08:11	07/27/21 12:52	591-78-6	
Iodomethane	**<1.4**	ug/kg	9.5	1.4	1	07/27/21 08:11	07/27/21 12:52	74-88-4	
Isopropylbenzene (Cumene)	**<0.54**	ug/kg	4.8	0.54	1	07/27/21 08:11	07/27/21 12:52	98-82-8	
p-Isopropyltoluene	**<0.65**	ug/kg	4.8	0.65	1	07/27/21 08:11	07/27/21 12:52	99-87-6	
Methyl acetate	**<1.0**	ug/kg	95.2	1.0	1	07/27/21 08:11	07/27/21 12:52	79-20-9	
Methylene Chloride	**<2.6**	ug/kg	4.8	2.6	1	07/27/21 08:11	07/27/21 12:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.9**	ug/kg	9.5	2.9	1	07/27/21 08:11	07/27/21 12:52	108-10-1	
Methyl-tert-butyl ether	**<0.46**	ug/kg	4.8	0.46	1	07/27/21 08:11	07/27/21 12:52	1634-04-4	
Naphthalene	**<0.78**	ug/kg	9.5	0.78	1	07/27/21 08:11	07/27/21 12:52	91-20-3	
n-Propylbenzene	**<0.76**	ug/kg	4.8	0.76	1	07/27/21 08:11	07/27/21 12:52	103-65-1	
Styrene	**<0.56**	ug/kg	4.8	0.56	1	07/27/21 08:11	07/27/21 12:52	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.97**	ug/kg	4.8	0.97	1	07/27/21 08:11	07/27/21 12:52	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.95**	ug/kg	4.8	0.95	1	07/27/21 08:11	07/27/21 12:52	79-34-5	
Tetrachloroethene	**<0.39**	ug/kg	4.8	0.39	1	07/27/21 08:11	07/27/21 12:52	127-18-4	
Tetrahydrofuran	**<0.75**	ug/kg	4.8	0.75	1	07/27/21 08:11	07/27/21 12:52	109-99-9	N2
Toluene	**<0.33**	ug/kg	4.8	0.33	1	07/27/21 08:11	07/27/21 12:52	108-88-3	
1,2,3-Trichlorobenzene	**<0.76**	ug/kg	4.8	0.76	1	07/27/21 08:11	07/27/21 12:52	87-61-6	
1,2,4-Trichlorobenzene	**<0.76**	ug/kg	4.8	0.76	1	07/27/21 08:11	07/27/21 12:52	120-82-1	
1,1,1-Trichloroethane	**<0.71**	ug/kg	4.8	0.71	1	07/27/21 08:11	07/27/21 12:52	71-55-6	
1,1,2-Trichloroethane	**<0.60**	ug/kg	4.8	0.60	1	07/27/21 08:11	07/27/21 12:52	79-00-5	
Trichloroethene	**<0.69**	ug/kg	4.8	0.69	1	07/27/21 08:11	07/27/21 12:52	79-01-6	
Trichlorofluoromethane	**<0.58**	ug/kg	4.8	0.58	1	07/27/21 08:11	07/27/21 12:52	75-69-4	
1,2,3-Trichloropropane	**<2.0**	ug/kg	4.8	2.0	1	07/27/21 08:11	07/27/21 12:52	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.8**	ug/kg	4.8	4.8	1	07/27/21 08:11	07/27/21 12:52	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.9**	ug/kg	4.8	1.9	1	07/27/21 08:11	07/27/21 12:52	526-73-8	
1,2,4-Trimethylbenzene	**<0.64**	ug/kg	4.8	0.64	1	07/27/21 08:11	07/27/21 12:52	95-63-6	
1,3,5-Trimethylbenzene	**<0.60**	ug/kg	4.8	0.60	1	07/27/21 08:11	07/27/21 12:52	108-67-8	
Vinyl acetate	**<0.54**	ug/kg	95.2	0.54	1	07/27/21 08:11	07/27/21 12:52	108-05-4	
Vinyl chloride	**<0.63**	ug/kg	4.8	0.63	1	07/27/21 08:11	07/27/21 12:52	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	4.8	1.1	1	07/27/21 08:11	07/27/21 12:52	1330-20-7	
m&p-Xylene	**<0.60**	ug/kg	4.8	0.60	1	07/27/21 08:11	07/27/21 12:52	179601-23-1	
o-Xylene	**<0.35**	ug/kg	4.8	0.35	1	07/27/21 08:11	07/27/21 12:52	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1	07/27/21 08:11	07/27/21 12:52	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-120		1	07/27/21 08:11	07/27/21 12:52	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/3-5' **Lab ID: 60375481030** Collected: 07/20/21 08:55 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Surrogates									
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1	07/27/21 08:11	07/27/21 12:52	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.052**	mg/kg	0.48	0.052	1	07/27/21 09:23	07/27/21 12:52		
Surrogates									
Toluene-d8 (S)	99	%	78-122		1	07/27/21 09:23	07/27/21 12:52	2037-26-5	
4-Bromofluorobenzene (S)	107	%	69-133		1	07/27/21 09:23	07/27/21 12:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1	07/27/21 09:23	07/27/21 12:52	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**16.2**	%	0.50	0.50	1		07/22/21 11:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/3-5'D **Lab ID: 60375481031** Collected: 07/20/21 08:55 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.6**	ug/kg	38.6	9.6	1	07/22/21 18:03	07/23/21 12:38	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.2**	ug/kg	38.6	9.2	1	07/22/21 18:03	07/23/21 12:38	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.6	4.2	1	07/22/21 18:03	07/23/21 12:38	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.3**	ug/kg	38.6	9.3	1	07/22/21 18:03	07/23/21 12:38	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	38.6	2.6	1	07/22/21 18:03	07/23/21 12:38	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.6	3.6	1	07/22/21 18:03	07/23/21 12:38	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.6**	ug/kg	38.6	7.6	1	07/22/21 18:03	07/23/21 12:38	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	98	%	35-120		1	07/22/21 18:03	07/23/21 12:38	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.59**	mg/kg	1.1	0.59	10	08/04/21 11:31	08/05/21 13:32	7440-36-0	M1,R1
Arsenic	**5.0**	mg/kg	1.1	0.12	10	08/04/21 11:31	08/05/21 13:32	7440-38-2	
Copper	**12.5**	mg/kg	1.1	0.34	10	08/04/21 11:31	08/05/21 13:32	7440-50-8	
Lead	**8.7**	mg/kg	0.55	0.14	10	08/04/21 11:31	08/05/21 13:32	7439-92-1	
Zinc	**39.2**	mg/kg	5.5	0.92	10	08/04/21 11:31	08/05/21 13:32	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<2.9**	ug/kg	7.7	2.9	1	07/22/21 20:05	07/23/21 17:54	83-32-9	
Acenaphthylene	**<2.9**	ug/kg	7.7	2.9	1	07/22/21 20:05	07/23/21 17:54	208-96-8	
Anthracene	**<3.2**	ug/kg	7.7	3.2	1	07/22/21 20:05	07/23/21 17:54	120-12-7	
Benzo(a)anthracene	**<3.6**	ug/kg	7.7	3.6	1	07/22/21 20:05	07/23/21 17:54	56-55-3	
Benzo(a)pyrene	**<2.8**	ug/kg	7.7	2.8	1	07/22/21 20:05	07/23/21 17:54	50-32-8	
Benzo(b)fluoranthene	**<3.7**	ug/kg	7.7	3.7	1	07/22/21 20:05	07/23/21 17:54	205-99-2	
Benzo(g,h,i)perylene	**<3.4**	ug/kg	7.7	3.4	1	07/22/21 20:05	07/23/21 17:54	191-24-2	
Benzo(k)fluoranthene	**<4.3**	ug/kg	7.7	4.3	1	07/22/21 20:05	07/23/21 17:54	207-08-9	
Chrysene	**<3.6**	ug/kg	7.7	3.6	1	07/22/21 20:05	07/23/21 17:54	218-01-9	
Dibenz(a,h)anthracene	**<3.3**	ug/kg	7.7	3.3	1	07/22/21 20:05	07/23/21 17:54	53-70-3	
Fluoranthene	**<5.8**	ug/kg	7.7	5.8	1	07/22/21 20:05	07/23/21 17:54	206-44-0	
Fluorene	**<3.0**	ug/kg	7.7	3.0	1	07/22/21 20:05	07/23/21 17:54	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.3**	ug/kg	7.7	3.3	1	07/22/21 20:05	07/23/21 17:54	193-39-5	
Naphthalene	**<3.3**	ug/kg	7.7	3.3	1	07/22/21 20:05	07/23/21 17:54	91-20-3	
Phenanthrene	**<6.3**	ug/kg	7.7	6.3	1	07/22/21 20:05	07/23/21 17:54	85-01-8	
Pyrene	**<4.1**	ug/kg	7.7	4.1	1	07/22/21 20:05	07/23/21 17:54	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	71	%	40-120		1	07/22/21 20:05	07/23/21 17:54	321-60-8	
Terphenyl-d14 (S)	76	%	45-130		1	07/22/21 20:05	07/23/21 17:54	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**4.6J**	mg/kg	17.4	1.6	1	07/22/21 20:05	07/28/21 22:46		
TPH-DRO	**<1.6**	mg/kg	17.4	1.6	1	07/22/21 20:05	07/28/21 22:46		

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/3-5'D **Lab ID: 60375481031** Collected: 07/20/21 08:55 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Surrogates									
Nitrobenzene-d5 (S)	79	%	30-120		1	07/22/21 20:05	07/28/21 22:46	4165-60-0	
2-Fluorobiphenyl (S)	78	%	40-120		1	07/22/21 20:05	07/28/21 22:46	321-60-8	
Terphenyl-d14 (S)	72	%	45-120		1	07/22/21 20:05	07/28/21 22:46	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**<16.5**	ug/kg	20.4	16.5	1	07/27/21 13:59	07/27/21 18:05	67-64-1	
Acrolein	**<77.1**	ug/kg	102	77.1	1	07/27/21 13:59	07/27/21 18:05	107-02-8	
Acrylonitrile	**<3.2**	ug/kg	102	3.2	1	07/27/21 13:59	07/27/21 18:05	107-13-1	
Benzene	**<0.50**	ug/kg	5.1	0.50	1	07/27/21 13:59	07/27/21 18:05	71-43-2	
Bromobenzene	**<0.96**	ug/kg	5.1	0.96	1	07/27/21 13:59	07/27/21 18:05	108-86-1	
Bromochloromethane	**<0.61**	ug/kg	5.1	0.61	1	07/27/21 13:59	07/27/21 18:05	74-97-5	
Bromodichloromethane	**<0.61**	ug/kg	5.1	0.61	1	07/27/21 13:59	07/27/21 18:05	75-27-4	
Bromoform	**<0.59**	ug/kg	5.1	0.59	1	07/27/21 13:59	07/27/21 18:05	75-25-2	
Bromomethane	**<3.0**	ug/kg	5.1	3.0	1	07/27/21 13:59	07/27/21 18:05	74-83-9	
2-Butanone (MEK)	**<3.5**	ug/kg	10.2	3.5	1	07/27/21 13:59	07/27/21 18:05	78-93-3	
n-Butylbenzene	**<0.66**	ug/kg	5.1	0.66	1	07/27/21 13:59	07/27/21 18:05	104-51-8	
sec-Butylbenzene	**<0.75**	ug/kg	5.1	0.75	1	07/27/21 13:59	07/27/21 18:05	135-98-8	
tert-Butylbenzene	**<0.90**	ug/kg	25.5	0.90	1	07/27/21 13:59	07/27/21 18:05	98-06-6	
Carbon disulfide	**<0.66**	ug/kg	5.1	0.66	1	07/27/21 13:59	07/27/21 18:05	75-15-0	
Carbon tetrachloride	**<0.87**	ug/kg	5.1	0.87	1	07/27/21 13:59	07/27/21 18:05	56-23-5	
Chlorobenzene	**<0.64**	ug/kg	5.1	0.64	1	07/27/21 13:59	07/27/21 18:05	108-90-7	
Chloroethane	**<1.5**	ug/kg	5.1	1.5	1	07/27/21 13:59	07/27/21 18:05	75-00-3	
Chloroform	**<0.50**	ug/kg	5.1	0.50	1	07/27/21 13:59	07/27/21 18:05	67-66-3	
Chloromethane	**<0.81**	ug/kg	5.1	0.81	1	07/27/21 13:59	07/27/21 18:05	74-87-3	
2-Chlorotoluene	**<0.74**	ug/kg	5.1	0.74	1	07/27/21 13:59	07/27/21 18:05	95-49-8	
4-Chlorotoluene	**<0.61**	ug/kg	5.1	0.61	1	07/27/21 13:59	07/27/21 18:05	106-43-4	
Cyclohexanone	**<13.0**	ug/kg	20.4	13.0	1	07/27/21 13:59	07/27/21 18:05	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.9**	ug/kg	10.2	1.9	1	07/27/21 13:59	07/27/21 18:05	96-12-8	
Dibromochloromethane	**<0.66**	ug/kg	5.1	0.66	1	07/27/21 13:59	07/27/21 18:05	124-48-1	
1,2-Dibromoethane (EDB)	**<0.55**	ug/kg	5.1	0.55	1	07/27/21 13:59	07/27/21 18:05	106-93-4	
Dibromomethane	**<0.61**	ug/kg	5.1	0.61	1	07/27/21 13:59	07/27/21 18:05	74-95-3	
1,2-Dichlorobenzene	**<0.64**	ug/kg	5.1	0.64	1	07/27/21 13:59	07/27/21 18:05	95-50-1	
1,3-Dichlorobenzene	**<0.73**	ug/kg	5.1	0.73	1	07/27/21 13:59	07/27/21 18:05	541-73-1	
1,4-Dichlorobenzene	**<0.83**	ug/kg	5.1	0.83	1	07/27/21 13:59	07/27/21 18:05	106-46-7	
1,1-Dichloroethane	**<0.40**	ug/kg	5.1	0.40	1	07/27/21 13:59	07/27/21 18:05	75-34-3	
1,2-Dichloroethane	**<0.41**	ug/kg	5.1	0.41	1	07/27/21 13:59	07/27/21 18:05	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	5.1	1.1	1	07/27/21 13:59	07/27/21 18:05	540-59-0	
1,1-Dichloroethene	**<0.65**	ug/kg	5.1	0.65	1	07/27/21 13:59	07/27/21 18:05	75-35-4	
cis-1,2-Dichloroethene	**<0.44**	ug/kg	5.1	0.44	1	07/27/21 13:59	07/27/21 18:05	156-59-2	
trans-1,2-Dichloroethene	**<0.69**	ug/kg	5.1	0.69	1	07/27/21 13:59	07/27/21 18:05	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/kg	5.1	1.0	1	07/27/21 13:59	07/27/21 18:05	78-87-5	
1,3-Dichloropropane	**<0.71**	ug/kg	5.1	0.71	1	07/27/21 13:59	07/27/21 18:05	142-28-9	

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/3-5'D **Lab ID: 60375481031** Collected: 07/20/21 08:55 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
2,2-Dichloropropane	**<0.48**	ug/kg	5.1	0.48	1	07/27/21 13:59	07/27/21 18:05	594-20-7	
1,1-Dichloropropene	**<0.92**	ug/kg	5.1	0.92	1	07/27/21 13:59	07/27/21 18:05	563-58-6	
cis-1,3-Dichloropropene	**<0.54**	ug/kg	5.1	0.54	1	07/27/21 13:59	07/27/21 18:05	10061-01-5	
trans-1,3-Dichloropropene	**<0.47**	ug/kg	5.1	0.47	1	07/27/21 13:59	07/27/21 18:05	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.57**	ug/kg	5.1	0.57	1	07/27/21 13:59	07/27/21 18:05	60-29-7	
Ethylbenzene	**<0.47**	ug/kg	5.1	0.47	1	07/27/21 13:59	07/27/21 18:05	100-41-4	
n-Heptane	**<4.6**	ug/kg	10.2	4.6	1	07/27/21 13:59	07/27/21 18:05	142-82-5	
Hexachloro-1,3-butadiene	**<0.87**	ug/kg	5.1	0.87	1	07/27/21 13:59	07/27/21 18:05	87-68-3	
n-Hexane	**<0.70**	ug/kg	10.2	0.70	1	07/27/21 13:59	07/27/21 18:05	110-54-3	
2-Hexanone	**<2.5**	ug/kg	20.4	2.5	1	07/27/21 13:59	07/27/21 18:05	591-78-6	
Iodomethane	**<1.5**	ug/kg	10.2	1.5	1	07/27/21 13:59	07/27/21 18:05	74-88-4	
Isopropylbenzene (Cumene)	**<0.58**	ug/kg	5.1	0.58	1	07/27/21 13:59	07/27/21 18:05	98-82-8	
p-Isopropyltoluene	**<0.70**	ug/kg	5.1	0.70	1	07/27/21 13:59	07/27/21 18:05	99-87-6	
Methyl acetate	**<1.1**	ug/kg	102	1.1	1	07/27/21 13:59	07/27/21 18:05	79-20-9	
Methylene Chloride	**<2.8**	ug/kg	5.1	2.8	1	07/27/21 13:59	07/27/21 18:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.1**	ug/kg	10.2	3.1	1	07/27/21 13:59	07/27/21 18:05	108-10-1	
Methyl-tert-butyl ether	**<0.49**	ug/kg	5.1	0.49	1	07/27/21 13:59	07/27/21 18:05	1634-04-4	
Naphthalene	**<0.84**	ug/kg	10.2	0.84	1	07/27/21 13:59	07/27/21 18:05	91-20-3	
n-Propylbenzene	**<0.82**	ug/kg	5.1	0.82	1	07/27/21 13:59	07/27/21 18:05	103-65-1	
Styrene	**<0.60**	ug/kg	5.1	0.60	1	07/27/21 13:59	07/27/21 18:05	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/kg	5.1	1.0	1	07/27/21 13:59	07/27/21 18:05	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/kg	5.1	1.0	1	07/27/21 13:59	07/27/21 18:05	79-34-5	
Tetrachloroethene	**<0.42**	ug/kg	5.1	0.42	1	07/27/21 13:59	07/27/21 18:05	127-18-4	
Tetrahydrofuran	**<0.80**	ug/kg	5.1	0.80	1	07/27/21 13:59	07/27/21 18:05	109-99-9	L2,N2
Toluene	**<0.36**	ug/kg	5.1	0.36	1	07/27/21 13:59	07/27/21 18:05	108-88-3	
1,2,3-Trichlorobenzene	**<0.81**	ug/kg	5.1	0.81	1	07/27/21 13:59	07/27/21 18:05	87-61-6	
1,2,4-Trichlorobenzene	**<0.81**	ug/kg	5.1	0.81	1	07/27/21 13:59	07/27/21 18:05	120-82-1	
1,1,1-Trichloroethane	**<0.76**	ug/kg	5.1	0.76	1	07/27/21 13:59	07/27/21 18:05	71-55-6	
1,1,2-Trichloroethane	**<0.64**	ug/kg	5.1	0.64	1	07/27/21 13:59	07/27/21 18:05	79-00-5	
Trichloroethene	**<0.74**	ug/kg	5.1	0.74	1	07/27/21 13:59	07/27/21 18:05	79-01-6	
Trichlorofluoromethane	**<0.63**	ug/kg	5.1	0.63	1	07/27/21 13:59	07/27/21 18:05	75-69-4	
1,2,3-Trichloropropane	**<2.2**	ug/kg	5.1	2.2	1	07/27/21 13:59	07/27/21 18:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<5.1**	ug/kg	5.1	5.1	1	07/27/21 13:59	07/27/21 18:05	76-13-1	N2
1,2,3-Trimethylbenzene	**<2.0**	ug/kg	5.1	2.0	1	07/27/21 13:59	07/27/21 18:05	526-73-8	
1,2,4-Trimethylbenzene	**<0.68**	ug/kg	5.1	0.68	1	07/27/21 13:59	07/27/21 18:05	95-63-6	
1,3,5-Trimethylbenzene	**<0.64**	ug/kg	5.1	0.64	1	07/27/21 13:59	07/27/21 18:05	108-67-8	
Vinyl acetate	**<0.57**	ug/kg	102	0.57	1	07/27/21 13:59	07/27/21 18:05	108-05-4	
Vinyl chloride	**<0.68**	ug/kg	5.1	0.68	1	07/27/21 13:59	07/27/21 18:05	75-01-4	
Xylene (Total)	**<1.2**	ug/kg	5.1	1.2	1	07/27/21 13:59	07/27/21 18:05	1330-20-7	
m&p-Xylene	**<0.64**	ug/kg	5.1	0.64	1	07/27/21 13:59	07/27/21 18:05	179601-23-1	
o-Xylene	**<0.38**	ug/kg	5.1	0.38	1	07/27/21 13:59	07/27/21 18:05	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	80-120		1	07/27/21 13:59	07/27/21 18:05	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120		1	07/27/21 13:59	07/27/21 18:05	460-00-4	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-55/3-5'D **Lab ID: 60375481031** Collected: 07/20/21 08:55 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Surrogates									
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1	07/27/21 13:59	07/27/21 18:05	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.056**	mg/kg	0.51	0.056	1	07/27/21 14:02	07/27/21 18:05		
Surrogates									
Toluene-d8 (S)	101	%	78-122		1	07/27/21 14:02	07/27/21 18:05	2037-26-5	
4-Bromofluorobenzene (S)	99	%	69-133		1	07/27/21 14:02	07/27/21 18:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1	07/27/21 14:02	07/27/21 18:05	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**16.8**	%	0.50	0.50	1		07/22/21 11:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-62/0-2' **Lab ID: 60375481032** Collected: 07/20/21 09:25 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.65**	mg/kg	1.2	0.65	10	08/04/21 11:31	08/05/21 13:37	7440-36-0	
Arsenic	**6.7**	mg/kg	1.2	0.13	10	08/04/21 11:31	08/05/21 13:37	7440-38-2	
Copper	**15.1**	mg/kg	1.2	0.37	10	08/04/21 11:31	08/05/21 13:37	7440-50-8	
Lead	**36.0**	mg/kg	0.60	0.16	10	08/04/21 11:31	08/05/21 13:37	7439-92-1	
Zinc	**68.6**	mg/kg	6.0	1.0	10	08/04/21 11:31	08/05/21 13:37	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**48.2J**	ug/kg	78.4	29.2	10	07/22/21 20:05	07/23/21 18:11	83-32-9	
Acenaphthylene	**<29.2**	ug/kg	78.4	29.2	10	07/22/21 20:05	07/23/21 18:11	208-96-8	
Anthracene	**184**	ug/kg	78.4	32.5	10	07/22/21 20:05	07/23/21 18:11	120-12-7	
Benzo(a)anthracene	**653**	ug/kg	78.4	36.8	10	07/22/21 20:05	07/23/21 18:11	56-55-3	
Benzo(a)pyrene	**575**	ug/kg	78.4	28.5	10	07/22/21 20:05	07/23/21 18:11	50-32-8	
Benzo(b)fluoranthene	**928**	ug/kg	78.4	38.0	10	07/22/21 20:05	07/23/21 18:11	205-99-2	
Benzo(g,h,i)perylene	**370**	ug/kg	78.4	35.1	10	07/22/21 20:05	07/23/21 18:11	191-24-2	
Benzo(k)fluoranthene	**446**	ug/kg	78.4	43.7	10	07/22/21 20:05	07/23/21 18:11	207-08-9	
Chrysene	**642**	ug/kg	78.4	37.3	10	07/22/21 20:05	07/23/21 18:11	218-01-9	
Dibenz(a,h)anthracene	**116**	ug/kg	78.4	33.7	10	07/22/21 20:05	07/23/21 18:11	53-70-3	
Fluoranthene	**1460**	ug/kg	78.4	58.9	10	07/22/21 20:05	07/23/21 18:11	206-44-0	
Fluorene	**45.6J**	ug/kg	78.4	30.6	10	07/22/21 20:05	07/23/21 18:11	86-73-7	
Indeno(1,2,3-cd)pyrene	**335**	ug/kg	78.4	33.7	10	07/22/21 20:05	07/23/21 18:11	193-39-5	
Naphthalene	**<33.5**	ug/kg	78.4	33.5	10	07/22/21 20:05	07/23/21 18:11	91-20-3	
Phenanthrene	**838**	ug/kg	78.4	64.1	10	07/22/21 20:05	07/23/21 18:11	85-01-8	
Pyrene	**1210**	ug/kg	78.4	42.3	10	07/22/21 20:05	07/23/21 18:11	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	90	%	40-120		10	07/22/21 20:05	07/23/21 18:11	321-60-8	D3
Terphenyl-d14 (S)	105	%	45-130		10	07/22/21 20:05	07/23/21 18:11	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**66.5**	mg/kg	17.8	1.7	1	07/22/21 20:05	07/29/21 18:20		
TPH-DRO	**25.8**	mg/kg	17.8	1.7	1	07/22/21 20:05	07/29/21 18:20		
Surrogates									
Nitrobenzene-d5 (S)	81	%	30-120		1	07/22/21 20:05	07/29/21 18:20	4165-60-0	
2-Fluorobiphenyl (S)	85	%	40-120		1	07/22/21 20:05	07/29/21 18:20	321-60-8	
Terphenyl-d14 (S)	82	%	45-120		1	07/22/21 20:05	07/29/21 18:20	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**74.8**	ug/kg	18.6	15.1	1	07/27/21 13:59	07/27/21 18:20	67-64-1	
Acrolein	**<70.2**	ug/kg	92.9	70.2	1	07/27/21 13:59	07/27/21 18:20	107-02-8	
Acrylonitrile	**<2.9**	ug/kg	92.9	2.9	1	07/27/21 13:59	07/27/21 18:20	107-13-1	
Benzene	**<0.46**	ug/kg	4.6	0.46	1	07/27/21 13:59	07/27/21 18:20	71-43-2	
Bromobenzene	**<0.87**	ug/kg	4.6	0.87	1	07/27/21 13:59	07/27/21 18:20	108-86-1	

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-62/0-2' **Lab ID: 60375481032** Collected: 07/20/21 09:25 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Bromochloromethane	**<0.56**	ug/kg	4.6	0.56	1	07/27/21 13:59	07/27/21 18:20	74-97-5	
Bromodichloromethane	**<0.56**	ug/kg	4.6	0.56	1	07/27/21 13:59	07/27/21 18:20	75-27-4	
Bromoform	**<0.53**	ug/kg	4.6	0.53	1	07/27/21 13:59	07/27/21 18:20	75-25-2	
Bromomethane	**<2.7**	ug/kg	4.6	2.7	1	07/27/21 13:59	07/27/21 18:20	74-83-9	
2-Butanone (MEK)	**19.7**	ug/kg	9.3	3.2	1	07/27/21 13:59	07/27/21 18:20	78-93-3	
n-Butylbenzene	**<0.60**	ug/kg	4.6	0.60	1	07/27/21 13:59	07/27/21 18:20	104-51-8	
sec-Butylbenzene	**<0.68**	ug/kg	4.6	0.68	1	07/27/21 13:59	07/27/21 18:20	135-98-8	
tert-Butylbenzene	**<0.82**	ug/kg	23.2	0.82	1	07/27/21 13:59	07/27/21 18:20	98-06-6	
Carbon disulfide	**<0.60**	ug/kg	4.6	0.60	1	07/27/21 13:59	07/27/21 18:20	75-15-0	
Carbon tetrachloride	**<0.80**	ug/kg	4.6	0.80	1	07/27/21 13:59	07/27/21 18:20	56-23-5	
Chlorobenzene	**<0.58**	ug/kg	4.6	0.58	1	07/27/21 13:59	07/27/21 18:20	108-90-7	
Chloroethane	**<1.4**	ug/kg	4.6	1.4	1	07/27/21 13:59	07/27/21 18:20	75-00-3	
Chloroform	**<0.46**	ug/kg	4.6	0.46	1	07/27/21 13:59	07/27/21 18:20	67-66-3	
Chloromethane	**<0.74**	ug/kg	4.6	0.74	1	07/27/21 13:59	07/27/21 18:20	74-87-3	
2-Chlorotoluene	**<0.68**	ug/kg	4.6	0.68	1	07/27/21 13:59	07/27/21 18:20	95-49-8	
4-Chlorotoluene	**<0.56**	ug/kg	4.6	0.56	1	07/27/21 13:59	07/27/21 18:20	106-43-4	
Cyclohexanone	**<11.8**	ug/kg	18.6	11.8	1	07/27/21 13:59	07/27/21 18:20	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.7**	ug/kg	9.3	1.7	1	07/27/21 13:59	07/27/21 18:20	96-12-8	
Dibromochloromethane	**<0.60**	ug/kg	4.6	0.60	1	07/27/21 13:59	07/27/21 18:20	124-48-1	
1,2-Dibromoethane (EDB)	**<0.50**	ug/kg	4.6	0.50	1	07/27/21 13:59	07/27/21 18:20	106-93-4	
Dibromomethane	**<0.56**	ug/kg	4.6	0.56	1	07/27/21 13:59	07/27/21 18:20	74-95-3	
1,2-Dichlorobenzene	**<0.58**	ug/kg	4.6	0.58	1	07/27/21 13:59	07/27/21 18:20	95-50-1	
1,3-Dichlorobenzene	**<0.67**	ug/kg	4.6	0.67	1	07/27/21 13:59	07/27/21 18:20	541-73-1	
1,4-Dichlorobenzene	**<0.75**	ug/kg	4.6	0.75	1	07/27/21 13:59	07/27/21 18:20	106-46-7	
1,1-Dichloroethane	**<0.36**	ug/kg	4.6	0.36	1	07/27/21 13:59	07/27/21 18:20	75-34-3	
1,2-Dichloroethane	**<0.37**	ug/kg	4.6	0.37	1	07/27/21 13:59	07/27/21 18:20	107-06-2	
1,2-Dichloroethene (Total)	**<1.0**	ug/kg	4.6	1.0	1	07/27/21 13:59	07/27/21 18:20	540-59-0	
1,1-Dichloroethene	**<0.59**	ug/kg	4.6	0.59	1	07/27/21 13:59	07/27/21 18:20	75-35-4	
cis-1,2-Dichloroethene	**<0.40**	ug/kg	4.6	0.40	1	07/27/21 13:59	07/27/21 18:20	156-59-2	
trans-1,2-Dichloroethene	**<0.63**	ug/kg	4.6	0.63	1	07/27/21 13:59	07/27/21 18:20	156-60-5	
1,2-Dichloropropane	**<0.91**	ug/kg	4.6	0.91	1	07/27/21 13:59	07/27/21 18:20	78-87-5	
1,3-Dichloropropane	**<0.64**	ug/kg	4.6	0.64	1	07/27/21 13:59	07/27/21 18:20	142-28-9	
2,2-Dichloropropane	**<0.44**	ug/kg	4.6	0.44	1	07/27/21 13:59	07/27/21 18:20	594-20-7	
1,1-Dichloropropene	**<0.84**	ug/kg	4.6	0.84	1	07/27/21 13:59	07/27/21 18:20	563-58-6	
cis-1,3-Dichloropropene	**<0.49**	ug/kg	4.6	0.49	1	07/27/21 13:59	07/27/21 18:20	10061-01-5	
trans-1,3-Dichloropropene	**<0.42**	ug/kg	4.6	0.42	1	07/27/21 13:59	07/27/21 18:20	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.52**	ug/kg	4.6	0.52	1	07/27/21 13:59	07/27/21 18:20	60-29-7	
Ethylbenzene	**<0.43**	ug/kg	4.6	0.43	1	07/27/21 13:59	07/27/21 18:20	100-41-4	
n-Heptane	**<4.2**	ug/kg	9.3	4.2	1	07/27/21 13:59	07/27/21 18:20	142-82-5	
Hexachloro-1,3-butadiene	**<0.79**	ug/kg	4.6	0.79	1	07/27/21 13:59	07/27/21 18:20	87-68-3	
n-Hexane	**<0.64**	ug/kg	9.3	0.64	1	07/27/21 13:59	07/27/21 18:20	110-54-3	
2-Hexanone	**<2.3**	ug/kg	18.6	2.3	1	07/27/21 13:59	07/27/21 18:20	591-78-6	
Iodomethane	**<1.4**	ug/kg	9.3	1.4	1	07/27/21 13:59	07/27/21 18:20	74-88-4	
Isopropylbenzene (Cumene)	**<0.53**	ug/kg	4.6	0.53	1	07/27/21 13:59	07/27/21 18:20	98-82-8	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-62/0-2' **Lab ID: 60375481032** Collected: 07/20/21 09:25 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
p-Isopropyltoluene	**<0.64**	ug/kg	4.6	0.64	1	07/27/21 13:59	07/27/21 18:20	99-87-6	
Methyl acetate	**<1.0**	ug/kg	92.9	1.0	1	07/27/21 13:59	07/27/21 18:20	79-20-9	
Methylene Chloride	**<2.5**	ug/kg	4.6	2.5	1	07/27/21 13:59	07/27/21 18:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.8**	ug/kg	9.3	2.8	1	07/27/21 13:59	07/27/21 18:20	108-10-1	
Methyl-tert-butyl ether	**<0.45**	ug/kg	4.6	0.45	1	07/27/21 13:59	07/27/21 18:20	1634-04-4	
Naphthalene	**<0.76**	ug/kg	9.3	0.76	1	07/27/21 13:59	07/27/21 18:20	91-20-3	
n-Propylbenzene	**<0.75**	ug/kg	4.6	0.75	1	07/27/21 13:59	07/27/21 18:20	103-65-1	
Styrene	**<0.55**	ug/kg	4.6	0.55	1	07/27/21 13:59	07/27/21 18:20	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.95**	ug/kg	4.6	0.95	1	07/27/21 13:59	07/27/21 18:20	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.93**	ug/kg	4.6	0.93	1	07/27/21 13:59	07/27/21 18:20	79-34-5	
Tetrachloroethene	**<0.38**	ug/kg	4.6	0.38	1	07/27/21 13:59	07/27/21 18:20	127-18-4	
Tetrahydrofuran	**<0.73**	ug/kg	4.6	0.73	1	07/27/21 13:59	07/27/21 18:20	109-99-9	L2,N2
Toluene	**<0.33**	ug/kg	4.6	0.33	1	07/27/21 13:59	07/27/21 18:20	108-88-3	
1,2,3-Trichlorobenzene	**<0.74**	ug/kg	4.6	0.74	1	07/27/21 13:59	07/27/21 18:20	87-61-6	
1,2,4-Trichlorobenzene	**<0.74**	ug/kg	4.6	0.74	1	07/27/21 13:59	07/27/21 18:20	120-82-1	
1,1,1-Trichloroethane	**<0.69**	ug/kg	4.6	0.69	1	07/27/21 13:59	07/27/21 18:20	71-55-6	
1,1,2-Trichloroethane	**<0.59**	ug/kg	4.6	0.59	1	07/27/21 13:59	07/27/21 18:20	79-00-5	
Trichloroethene	**<0.67**	ug/kg	4.6	0.67	1	07/27/21 13:59	07/27/21 18:20	79-01-6	
Trichlorofluoromethane	**<0.57**	ug/kg	4.6	0.57	1	07/27/21 13:59	07/27/21 18:20	75-69-4	
1,2,3-Trichloropropane	**<2.0**	ug/kg	4.6	2.0	1	07/27/21 13:59	07/27/21 18:20	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.6**	ug/kg	4.6	4.6	1	07/27/21 13:59	07/27/21 18:20	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.9**	ug/kg	4.6	1.9	1	07/27/21 13:59	07/27/21 18:20	526-73-8	
1,2,4-Trimethylbenzene	**<0.62**	ug/kg	4.6	0.62	1	07/27/21 13:59	07/27/21 18:20	95-63-6	
1,3,5-Trimethylbenzene	**<0.58**	ug/kg	4.6	0.58	1	07/27/21 13:59	07/27/21 18:20	108-67-8	
Vinyl acetate	**<0.52**	ug/kg	92.9	0.52	1	07/27/21 13:59	07/27/21 18:20	108-05-4	
Vinyl chloride	**<0.62**	ug/kg	4.6	0.62	1	07/27/21 13:59	07/27/21 18:20	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	4.6	1.1	1	07/27/21 13:59	07/27/21 18:20	1330-20-7	
m&p-Xylene	**<0.59**	ug/kg	4.6	0.59	1	07/27/21 13:59	07/27/21 18:20	179601-23-1	
o-Xylene	**<0.35**	ug/kg	4.6	0.35	1	07/27/21 13:59	07/27/21 18:20	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1	07/27/21 13:59	07/27/21 18:20	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120		1	07/27/21 13:59	07/27/21 18:20	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1	07/27/21 13:59	07/27/21 18:20	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.051**	mg/kg	0.46	0.051	1	07/27/21 14:02	07/27/21 18:20		
Surrogates									
Toluene-d8 (S)	99	%	78-122		1	07/27/21 14:02	07/27/21 18:20	2037-26-5	
4-Bromofluorobenzene (S)	101	%	69-133		1	07/27/21 14:02	07/27/21 18:20	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1	07/27/21 14:02	07/27/21 18:20	2199-69-1	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-62/0-2' **Lab ID: 60375481032** Collected: 07/20/21 09:25 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**17.2**	%	0.50	0.50	1		07/22/21 11:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-62/3-5' **Lab ID: 60375481033** Collected: 07/20/21 09:30 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.51**	mg/kg	0.94	0.51	10	08/04/21 11:31	08/05/21 13:38	7440-36-0	
Arsenic	**3.8**	mg/kg	0.94	0.10	10	08/04/21 11:31	08/05/21 13:38	7440-38-2	
Copper	**12.9**	mg/kg	0.94	0.29	10	08/04/21 11:31	08/05/21 13:38	7440-50-8	
Lead	**8.2**	mg/kg	0.47	0.12	10	08/04/21 11:31	08/05/21 13:38	7439-92-1	
Zinc	**41.8**	mg/kg	4.7	0.80	10	08/04/21 11:31	08/05/21 13:38	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<2.9**	ug/kg	7.7	2.9	1	07/22/21 20:05	07/23/21 18:28	83-32-9	
Acenaphthylene	**<2.9**	ug/kg	7.7	2.9	1	07/22/21 20:05	07/23/21 18:28	208-96-8	
Anthracene	**<3.2**	ug/kg	7.7	3.2	1	07/22/21 20:05	07/23/21 18:28	120-12-7	
Benzo(a)anthracene	**<3.6**	ug/kg	7.7	3.6	1	07/22/21 20:05	07/23/21 18:28	56-55-3	
Benzo(a)pyrene	**<2.8**	ug/kg	7.7	2.8	1	07/22/21 20:05	07/23/21 18:28	50-32-8	
Benzo(b)fluoranthene	**<3.8**	ug/kg	7.7	3.8	1	07/22/21 20:05	07/23/21 18:28	205-99-2	
Benzo(g,h,i)perylene	**<3.5**	ug/kg	7.7	3.5	1	07/22/21 20:05	07/23/21 18:28	191-24-2	
Benzo(k)fluoranthene	**<4.3**	ug/kg	7.7	4.3	1	07/22/21 20:05	07/23/21 18:28	207-08-9	
Chrysene	**<3.7**	ug/kg	7.7	3.7	1	07/22/21 20:05	07/23/21 18:28	218-01-9	
Dibenz(a,h)anthracene	**<3.3**	ug/kg	7.7	3.3	1	07/22/21 20:05	07/23/21 18:28	53-70-3	
Fluoranthene	**<5.8**	ug/kg	7.7	5.8	1	07/22/21 20:05	07/23/21 18:28	206-44-0	
Fluorene	**<3.0**	ug/kg	7.7	3.0	1	07/22/21 20:05	07/23/21 18:28	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.3**	ug/kg	7.7	3.3	1	07/22/21 20:05	07/23/21 18:28	193-39-5	
Naphthalene	**<3.3**	ug/kg	7.7	3.3	1	07/22/21 20:05	07/23/21 18:28	91-20-3	
Phenanthrene	**<6.3**	ug/kg	7.7	6.3	1	07/22/21 20:05	07/23/21 18:28	85-01-8	
Pyrene	**<4.2**	ug/kg	7.7	4.2	1	07/22/21 20:05	07/23/21 18:28	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	71	%	40-120		1	07/22/21 20:05	07/23/21 18:28	321-60-8	
Terphenyl-d14 (S)	74	%	45-130		1	07/22/21 20:05	07/23/21 18:28	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**12.8J**	mg/kg	17.6	1.7	1	07/22/21 20:05	07/29/21 18:40		
TPH-DRO	**4.0J**	mg/kg	17.6	1.7	1	07/22/21 20:05	07/29/21 18:40		
Surrogates									
Nitrobenzene-d5 (S)	75	%	30-120		1	07/22/21 20:05	07/29/21 18:40	4165-60-0	
2-Fluorobiphenyl (S)	77	%	40-120		1	07/22/21 20:05	07/29/21 18:40	321-60-8	
Terphenyl-d14 (S)	81	%	45-120		1	07/22/21 20:05	07/29/21 18:40	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**<16.4**	ug/kg	20.2	16.4	1	07/27/21 13:59	07/27/21 18:36	67-64-1	
Acrolein	**<76.5**	ug/kg	101	76.5	1	07/27/21 13:59	07/27/21 18:36	107-02-8	
Acrylonitrile	**<3.2**	ug/kg	101	3.2	1	07/27/21 13:59	07/27/21 18:36	107-13-1	
Benzene	**<0.50**	ug/kg	5.1	0.50	1	07/27/21 13:59	07/27/21 18:36	71-43-2	
Bromobenzene	**<0.95**	ug/kg	5.1	0.95	1	07/27/21 13:59	07/27/21 18:36	108-86-1	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-62/3-5' **Lab ID: 60375481033** Collected: 07/20/21 09:30 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Bromochloromethane	**<0.61**	ug/kg	5.1	0.61	1	07/27/21 13:59	07/27/21 18:36	74-97-5	
Bromodichloromethane	**<0.61**	ug/kg	5.1	0.61	1	07/27/21 13:59	07/27/21 18:36	75-27-4	
Bromoform	**<0.58**	ug/kg	5.1	0.58	1	07/27/21 13:59	07/27/21 18:36	75-25-2	
Bromomethane	**<3.0**	ug/kg	5.1	3.0	1	07/27/21 13:59	07/27/21 18:36	74-83-9	
2-Butanone (MEK)	**<3.4**	ug/kg	10.1	3.4	1	07/27/21 13:59	07/27/21 18:36	78-93-3	
n-Butylbenzene	**<0.66**	ug/kg	5.1	0.66	1	07/27/21 13:59	07/27/21 18:36	104-51-8	
sec-Butylbenzene	**<0.74**	ug/kg	5.1	0.74	1	07/27/21 13:59	07/27/21 18:36	135-98-8	
tert-Butylbenzene	**<0.89**	ug/kg	25.3	0.89	1	07/27/21 13:59	07/27/21 18:36	98-06-6	
Carbon disulfide	**<0.65**	ug/kg	5.1	0.65	1	07/27/21 13:59	07/27/21 18:36	75-15-0	
Carbon tetrachloride	**<0.87**	ug/kg	5.1	0.87	1	07/27/21 13:59	07/27/21 18:36	56-23-5	
Chlorobenzene	**<0.63**	ug/kg	5.1	0.63	1	07/27/21 13:59	07/27/21 18:36	108-90-7	
Chloroethane	**<1.5**	ug/kg	5.1	1.5	1	07/27/21 13:59	07/27/21 18:36	75-00-3	
Chloroform	**<0.50**	ug/kg	5.1	0.50	1	07/27/21 13:59	07/27/21 18:36	67-66-3	
Chloromethane	**<0.81**	ug/kg	5.1	0.81	1	07/27/21 13:59	07/27/21 18:36	74-87-3	
2-Chlorotoluene	**<0.74**	ug/kg	5.1	0.74	1	07/27/21 13:59	07/27/21 18:36	95-49-8	
4-Chlorotoluene	**<0.61**	ug/kg	5.1	0.61	1	07/27/21 13:59	07/27/21 18:36	106-43-4	
Cyclohexanone	**<12.8**	ug/kg	20.2	12.8	1	07/27/21 13:59	07/27/21 18:36	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.9**	ug/kg	10.1	1.9	1	07/27/21 13:59	07/27/21 18:36	96-12-8	
Dibromochloromethane	**<0.65**	ug/kg	5.1	0.65	1	07/27/21 13:59	07/27/21 18:36	124-48-1	
1,2-Dibromoethane (EDB)	**<0.54**	ug/kg	5.1	0.54	1	07/27/21 13:59	07/27/21 18:36	106-93-4	
Dibromomethane	**<0.61**	ug/kg	5.1	0.61	1	07/27/21 13:59	07/27/21 18:36	74-95-3	
1,2-Dichlorobenzene	**<0.63**	ug/kg	5.1	0.63	1	07/27/21 13:59	07/27/21 18:36	95-50-1	
1,3-Dichlorobenzene	**<0.73**	ug/kg	5.1	0.73	1	07/27/21 13:59	07/27/21 18:36	541-73-1	
1,4-Dichlorobenzene	**<0.82**	ug/kg	5.1	0.82	1	07/27/21 13:59	07/27/21 18:36	106-46-7	
1,1-Dichloroethane	**<0.39**	ug/kg	5.1	0.39	1	07/27/21 13:59	07/27/21 18:36	75-34-3	
1,2-Dichloroethane	**<0.40**	ug/kg	5.1	0.40	1	07/27/21 13:59	07/27/21 18:36	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	5.1	1.1	1	07/27/21 13:59	07/27/21 18:36	540-59-0	
1,1-Dichloroethene	**<0.65**	ug/kg	5.1	0.65	1	07/27/21 13:59	07/27/21 18:36	75-35-4	
cis-1,2-Dichloroethene	**<0.44**	ug/kg	5.1	0.44	1	07/27/21 13:59	07/27/21 18:36	156-59-2	
trans-1,2-Dichloroethene	**<0.69**	ug/kg	5.1	0.69	1	07/27/21 13:59	07/27/21 18:36	156-60-5	
1,2-Dichloropropane	**<0.99**	ug/kg	5.1	0.99	1	07/27/21 13:59	07/27/21 18:36	78-87-5	
1,3-Dichloropropane	**<0.70**	ug/kg	5.1	0.70	1	07/27/21 13:59	07/27/21 18:36	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/kg	5.1	0.48	1	07/27/21 13:59	07/27/21 18:36	594-20-7	
1,1-Dichloropropene	**<0.91**	ug/kg	5.1	0.91	1	07/27/21 13:59	07/27/21 18:36	563-58-6	
cis-1,3-Dichloropropene	**<0.54**	ug/kg	5.1	0.54	1	07/27/21 13:59	07/27/21 18:36	10061-01-5	
trans-1,3-Dichloropropene	**<0.46**	ug/kg	5.1	0.46	1	07/27/21 13:59	07/27/21 18:36	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.57**	ug/kg	5.1	0.57	1	07/27/21 13:59	07/27/21 18:36	60-29-7	
Ethylbenzene	**<0.47**	ug/kg	5.1	0.47	1	07/27/21 13:59	07/27/21 18:36	100-41-4	
n-Heptane	**<4.6**	ug/kg	10.1	4.6	1	07/27/21 13:59	07/27/21 18:36	142-82-5	
Hexachloro-1,3-butadiene	**<0.86**	ug/kg	5.1	0.86	1	07/27/21 13:59	07/27/21 18:36	87-68-3	
n-Hexane	**<0.70**	ug/kg	10.1	0.70	1	07/27/21 13:59	07/27/21 18:36	110-54-3	
2-Hexanone	**<2.5**	ug/kg	20.2	2.5	1	07/27/21 13:59	07/27/21 18:36	591-78-6	
Iodomethane	**<1.5**	ug/kg	10.1	1.5	1	07/27/21 13:59	07/27/21 18:36	74-88-4	
Isopropylbenzene (Cumene)	**<0.58**	ug/kg	5.1	0.58	1	07/27/21 13:59	07/27/21 18:36	98-82-8	

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-62/3-5' **Lab ID: 60375481033** Collected: 07/20/21 09:30 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
p-Isopropyltoluene	**<0.70**	ug/kg	5.1	0.70	1	07/27/21 13:59	07/27/21 18:36	99-87-6	
Methyl acetate	**<1.1**	ug/kg	101	1.1	1	07/27/21 13:59	07/27/21 18:36	79-20-9	
Methylene Chloride	**<2.8**	ug/kg	5.1	2.8	1	07/27/21 13:59	07/27/21 18:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.1**	ug/kg	10.1	3.1	1	07/27/21 13:59	07/27/21 18:36	108-10-1	
Methyl-tert-butyl ether	**<0.49**	ug/kg	5.1	0.49	1	07/27/21 13:59	07/27/21 18:36	1634-04-4	
Naphthalene	**<0.83**	ug/kg	10.1	0.83	1	07/27/21 13:59	07/27/21 18:36	91-20-3	
n-Propylbenzene	**<0.81**	ug/kg	5.1	0.81	1	07/27/21 13:59	07/27/21 18:36	103-65-1	
Styrene	**<0.60**	ug/kg	5.1	0.60	1	07/27/21 13:59	07/27/21 18:36	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/kg	5.1	1.0	1	07/27/21 13:59	07/27/21 18:36	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/kg	5.1	1.0	1	07/27/21 13:59	07/27/21 18:36	79-34-5	
Tetrachloroethene	**<0.42**	ug/kg	5.1	0.42	1	07/27/21 13:59	07/27/21 18:36	127-18-4	
Tetrahydrofuran	**<0.79**	ug/kg	5.1	0.79	1	07/27/21 13:59	07/27/21 18:36	109-99-9	L2,N2
Toluene	**<0.36**	ug/kg	5.1	0.36	1	07/27/21 13:59	07/27/21 18:36	108-88-3	
1,2,3-Trichlorobenzene	**<0.81**	ug/kg	5.1	0.81	1	07/27/21 13:59	07/27/21 18:36	87-61-6	
1,2,4-Trichlorobenzene	**<0.81**	ug/kg	5.1	0.81	1	07/27/21 13:59	07/27/21 18:36	120-82-1	
1,1,1-Trichloroethane	**<0.76**	ug/kg	5.1	0.76	1	07/27/21 13:59	07/27/21 18:36	71-55-6	
1,1,2-Trichloroethane	**<0.64**	ug/kg	5.1	0.64	1	07/27/21 13:59	07/27/21 18:36	79-00-5	
Trichloroethene	**<0.73**	ug/kg	5.1	0.73	1	07/27/21 13:59	07/27/21 18:36	79-01-6	
Trichlorofluoromethane	**<0.62**	ug/kg	5.1	0.62	1	07/27/21 13:59	07/27/21 18:36	75-69-4	
1,2,3-Trichloropropane	**<2.2**	ug/kg	5.1	2.2	1	07/27/21 13:59	07/27/21 18:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<5.1**	ug/kg	5.1	5.1	1	07/27/21 13:59	07/27/21 18:36	76-13-1	N2
1,2,3-Trimethylbenzene	**<2.0**	ug/kg	5.1	2.0	1	07/27/21 13:59	07/27/21 18:36	526-73-8	
1,2,4-Trimethylbenzene	**<0.68**	ug/kg	5.1	0.68	1	07/27/21 13:59	07/27/21 18:36	95-63-6	
1,3,5-Trimethylbenzene	**<0.63**	ug/kg	5.1	0.63	1	07/27/21 13:59	07/27/21 18:36	108-67-8	
Vinyl acetate	**<0.57**	ug/kg	101	0.57	1	07/27/21 13:59	07/27/21 18:36	108-05-4	
Vinyl chloride	**<0.67**	ug/kg	5.1	0.67	1	07/27/21 13:59	07/27/21 18:36	75-01-4	
Xylene (Total)	**<1.2**	ug/kg	5.1	1.2	1	07/27/21 13:59	07/27/21 18:36	1330-20-7	
m&p-Xylene	**<0.64**	ug/kg	5.1	0.64	1	07/27/21 13:59	07/27/21 18:36	179601-23-1	
o-Xylene	**<0.38**	ug/kg	5.1	0.38	1	07/27/21 13:59	07/27/21 18:36	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	80-120		1	07/27/21 13:59	07/27/21 18:36	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-120		1	07/27/21 13:59	07/27/21 18:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1	07/27/21 13:59	07/27/21 18:36	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.055**	mg/kg	0.51	0.055	1	07/27/21 14:02	07/27/21 18:36		
Surrogates									
Toluene-d8 (S)	101	%	78-122		1	07/27/21 14:02	07/27/21 18:36	2037-26-5	
4-Bromofluorobenzene (S)	106	%	69-133		1	07/27/21 14:02	07/27/21 18:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1	07/27/21 14:02	07/27/21 18:36	2199-69-1	

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-62/3-5' **Lab ID: 60375481033** Collected: 07/20/21 09:30 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**18.6**	%	0.50	0.50	1		07/22/21 11:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/1-3' **Lab ID: 60375481034** Collected: 07/20/21 10:10 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.2**	ug/kg	37.2	9.2	1	07/22/21 18:03	07/23/21 12:56	12674-11-2	
PCB-1221 (Aroclor 1221)	**<8.9**	ug/kg	37.2	8.9	1	07/22/21 18:03	07/23/21 12:56	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.1**	ug/kg	37.2	4.1	1	07/22/21 18:03	07/23/21 12:56	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.0**	ug/kg	37.2	9.0	1	07/22/21 18:03	07/23/21 12:56	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	37.2	2.5	1	07/22/21 18:03	07/23/21 12:56	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.5**	ug/kg	37.2	3.5	1	07/22/21 18:03	07/23/21 12:56	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.3**	ug/kg	37.2	7.3	1	07/22/21 18:03	07/23/21 12:56	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	85	%	35-120		1	07/22/21 18:03	07/23/21 12:56	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.55**	mg/kg	1.0	0.55	10	08/04/21 11:31	08/05/21 13:40	7440-36-0	
Arsenic	**3.5**	mg/kg	1.0	0.11	10	08/04/21 11:31	08/05/21 13:40	7440-38-2	
Copper	**8.6**	mg/kg	1.0	0.32	10	08/04/21 11:31	08/05/21 13:40	7440-50-8	
Lead	**15.1**	mg/kg	0.51	0.13	10	08/04/21 11:31	08/05/21 13:40	7439-92-1	
Zinc	**41.8**	mg/kg	5.1	0.87	10	08/04/21 11:31	08/05/21 13:40	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<2.7**	ug/kg	7.4	2.7	1	07/22/21 20:05	07/23/21 18:45	83-32-9	
Acenaphthylene	**<2.7**	ug/kg	7.4	2.7	1	07/22/21 20:05	07/23/21 18:45	208-96-8	
Anthracene	**<3.1**	ug/kg	7.4	3.1	1	07/22/21 20:05	07/23/21 18:45	120-12-7	
Benzo(a)anthracene	**<3.5**	ug/kg	7.4	3.5	1	07/22/21 20:05	07/23/21 18:45	56-55-3	
Benzo(a)pyrene	**<2.7**	ug/kg	7.4	2.7	1	07/22/21 20:05	07/23/21 18:45	50-32-8	
Benzo(b)fluoranthene	**<3.6**	ug/kg	7.4	3.6	1	07/22/21 20:05	07/23/21 18:45	205-99-2	
Benzo(g,h,i)perylene	**<3.3**	ug/kg	7.4	3.3	1	07/22/21 20:05	07/23/21 18:45	191-24-2	
Benzo(k)fluoranthene	**<4.1**	ug/kg	7.4	4.1	1	07/22/21 20:05	07/23/21 18:45	207-08-9	
Chrysene	**<3.5**	ug/kg	7.4	3.5	1	07/22/21 20:05	07/23/21 18:45	218-01-9	
Dibenz(a,h)anthracene	**<3.2**	ug/kg	7.4	3.2	1	07/22/21 20:05	07/23/21 18:45	53-70-3	
Fluoranthene	**<5.5**	ug/kg	7.4	5.5	1	07/22/21 20:05	07/23/21 18:45	206-44-0	
Fluorene	**<2.9**	ug/kg	7.4	2.9	1	07/22/21 20:05	07/23/21 18:45	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.2**	ug/kg	7.4	3.2	1	07/22/21 20:05	07/23/21 18:45	193-39-5	
Naphthalene	**<3.1**	ug/kg	7.4	3.1	1	07/22/21 20:05	07/23/21 18:45	91-20-3	
Phenanthrene	**<6.0**	ug/kg	7.4	6.0	1	07/22/21 20:05	07/23/21 18:45	85-01-8	
Pyrene	**<4.0**	ug/kg	7.4	4.0	1	07/22/21 20:05	07/23/21 18:45	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	76	%	40-120		1	07/22/21 20:05	07/23/21 18:45	321-60-8	
Terphenyl-d14 (S)	82	%	45-130		1	07/22/21 20:05	07/23/21 18:45	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**7.6J**	mg/kg	16.7	1.6	1	07/22/21 20:05	07/29/21 19:00		
TPH-DRO	**2.7J**	mg/kg	16.7	1.6	1	07/22/21 20:05	07/29/21 19:00		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/1-3' **Lab ID: 60375481034** Collected: 07/20/21 10:10 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Surrogates									
Nitrobenzene-d5 (S)	78	%	30-120		1	07/22/21 20:05	07/29/21 19:00	4165-60-0	
2-Fluorobiphenyl (S)	79	%	40-120		1	07/22/21 20:05	07/29/21 19:00	321-60-8	
Terphenyl-d14 (S)	82	%	45-120		1	07/22/21 20:05	07/29/21 19:00	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**43.1**	ug/kg	18.0	14.6	1	07/27/21 13:59	07/27/21 18:52	67-64-1	
Acrolein	**<68.2**	ug/kg	90.2	68.2	1	07/27/21 13:59	07/27/21 18:52	107-02-8	
Acrylonitrile	**<2.9**	ug/kg	90.2	2.9	1	07/27/21 13:59	07/27/21 18:52	107-13-1	
Benzene	**<0.44**	ug/kg	4.5	0.44	1	07/27/21 13:59	07/27/21 18:52	71-43-2	
Bromobenzene	**<0.85**	ug/kg	4.5	0.85	1	07/27/21 13:59	07/27/21 18:52	108-86-1	
Bromochloromethane	**<0.54**	ug/kg	4.5	0.54	1	07/27/21 13:59	07/27/21 18:52	74-97-5	
Bromodichloromethane	**<0.54**	ug/kg	4.5	0.54	1	07/27/21 13:59	07/27/21 18:52	75-27-4	
Bromoform	**<0.52**	ug/kg	4.5	0.52	1	07/27/21 13:59	07/27/21 18:52	75-25-2	
Bromomethane	**<2.7**	ug/kg	4.5	2.7	1	07/27/21 13:59	07/27/21 18:52	74-83-9	
2-Butanone (MEK)	**5.9J**	ug/kg	9.0	3.1	1	07/27/21 13:59	07/27/21 18:52	78-93-3	
n-Butylbenzene	**<0.59**	ug/kg	4.5	0.59	1	07/27/21 13:59	07/27/21 18:52	104-51-8	
sec-Butylbenzene	**<0.66**	ug/kg	4.5	0.66	1	07/27/21 13:59	07/27/21 18:52	135-98-8	
tert-Butylbenzene	**<0.80**	ug/kg	22.5	0.80	1	07/27/21 13:59	07/27/21 18:52	98-06-6	
Carbon disulfide	**<0.58**	ug/kg	4.5	0.58	1	07/27/21 13:59	07/27/21 18:52	75-15-0	
Carbon tetrachloride	**<0.77**	ug/kg	4.5	0.77	1	07/27/21 13:59	07/27/21 18:52	56-23-5	
Chlorobenzene	**<0.57**	ug/kg	4.5	0.57	1	07/27/21 13:59	07/27/21 18:52	108-90-7	
Chloroethane	**<1.4**	ug/kg	4.5	1.4	1	07/27/21 13:59	07/27/21 18:52	75-00-3	
Chloroform	**<0.44**	ug/kg	4.5	0.44	1	07/27/21 13:59	07/27/21 18:52	67-66-3	
Chloromethane	**<0.72**	ug/kg	4.5	0.72	1	07/27/21 13:59	07/27/21 18:52	74-87-3	
2-Chlorotoluene	**<0.66**	ug/kg	4.5	0.66	1	07/27/21 13:59	07/27/21 18:52	95-49-8	
4-Chlorotoluene	**<0.54**	ug/kg	4.5	0.54	1	07/27/21 13:59	07/27/21 18:52	106-43-4	
Cyclohexanone	**<11.4**	ug/kg	18.0	11.4	1	07/27/21 13:59	07/27/21 18:52	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.6**	ug/kg	9.0	1.6	1	07/27/21 13:59	07/27/21 18:52	96-12-8	
Dibromochloromethane	**<0.58**	ug/kg	4.5	0.58	1	07/27/21 13:59	07/27/21 18:52	124-48-1	
1,2-Dibromoethane (EDB)	**<0.48**	ug/kg	4.5	0.48	1	07/27/21 13:59	07/27/21 18:52	106-93-4	
Dibromomethane	**<0.54**	ug/kg	4.5	0.54	1	07/27/21 13:59	07/27/21 18:52	74-95-3	
1,2-Dichlorobenzene	**<0.56**	ug/kg	4.5	0.56	1	07/27/21 13:59	07/27/21 18:52	95-50-1	
1,3-Dichlorobenzene	**<0.65**	ug/kg	4.5	0.65	1	07/27/21 13:59	07/27/21 18:52	541-73-1	
1,4-Dichlorobenzene	**<0.73**	ug/kg	4.5	0.73	1	07/27/21 13:59	07/27/21 18:52	106-46-7	
1,1-Dichloroethane	**<0.35**	ug/kg	4.5	0.35	1	07/27/21 13:59	07/27/21 18:52	75-34-3	
1,2-Dichloroethane	**<0.36**	ug/kg	4.5	0.36	1	07/27/21 13:59	07/27/21 18:52	107-06-2	
1,2-Dichloroethene (Total)	**<1.0**	ug/kg	4.5	1.0	1	07/27/21 13:59	07/27/21 18:52	540-59-0	
1,1-Dichloroethene	**<0.58**	ug/kg	4.5	0.58	1	07/27/21 13:59	07/27/21 18:52	75-35-4	
cis-1,2-Dichloroethene	**<0.39**	ug/kg	4.5	0.39	1	07/27/21 13:59	07/27/21 18:52	156-59-2	
trans-1,2-Dichloroethene	**<0.61**	ug/kg	4.5	0.61	1	07/27/21 13:59	07/27/21 18:52	156-60-5	
1,2-Dichloropropane	**<0.88**	ug/kg	4.5	0.88	1	07/27/21 13:59	07/27/21 18:52	78-87-5	
1,3-Dichloropropane	**<0.62**	ug/kg	4.5	0.62	1	07/27/21 13:59	07/27/21 18:52	142-28-9	

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/1-3' **Lab ID: 60375481034** Collected: 07/20/21 10:10 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
2,2-Dichloropropane	**<0.43**	ug/kg	4.5	0.43	1	07/27/21 13:59	07/27/21 18:52	594-20-7	
1,1-Dichloropropene	**<0.81**	ug/kg	4.5	0.81	1	07/27/21 13:59	07/27/21 18:52	563-58-6	
cis-1,3-Dichloropropene	**<0.48**	ug/kg	4.5	0.48	1	07/27/21 13:59	07/27/21 18:52	10061-01-5	
trans-1,3-Dichloropropene	**<0.41**	ug/kg	4.5	0.41	1	07/27/21 13:59	07/27/21 18:52	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.50**	ug/kg	4.5	0.50	1	07/27/21 13:59	07/27/21 18:52	60-29-7	
Ethylbenzene	**<0.42**	ug/kg	4.5	0.42	1	07/27/21 13:59	07/27/21 18:52	100-41-4	
n-Heptane	**<4.1**	ug/kg	9.0	4.1	1	07/27/21 13:59	07/27/21 18:52	142-82-5	
Hexachloro-1,3-butadiene	**<0.77**	ug/kg	4.5	0.77	1	07/27/21 13:59	07/27/21 18:52	87-68-3	
n-Hexane	**<0.62**	ug/kg	9.0	0.62	1	07/27/21 13:59	07/27/21 18:52	110-54-3	
2-Hexanone	**<2.2**	ug/kg	18.0	2.2	1	07/27/21 13:59	07/27/21 18:52	591-78-6	
Iodomethane	**<1.4**	ug/kg	9.0	1.4	1	07/27/21 13:59	07/27/21 18:52	74-88-4	
Isopropylbenzene (Cumene)	**<0.51**	ug/kg	4.5	0.51	1	07/27/21 13:59	07/27/21 18:52	98-82-8	
p-Isopropyltoluene	**<0.62**	ug/kg	4.5	0.62	1	07/27/21 13:59	07/27/21 18:52	99-87-6	
Methyl acetate	**<0.97**	ug/kg	90.2	0.97	1	07/27/21 13:59	07/27/21 18:52	79-20-9	
Methylene Chloride	**<2.5**	ug/kg	4.5	2.5	1	07/27/21 13:59	07/27/21 18:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.7**	ug/kg	9.0	2.7	1	07/27/21 13:59	07/27/21 18:52	108-10-1	
Methyl-tert-butyl ether	**<0.43**	ug/kg	4.5	0.43	1	07/27/21 13:59	07/27/21 18:52	1634-04-4	
Naphthalene	**<0.74**	ug/kg	9.0	0.74	1	07/27/21 13:59	07/27/21 18:52	91-20-3	
n-Propylbenzene	**<0.72**	ug/kg	4.5	0.72	1	07/27/21 13:59	07/27/21 18:52	103-65-1	
Styrene	**<0.53**	ug/kg	4.5	0.53	1	07/27/21 13:59	07/27/21 18:52	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.92**	ug/kg	4.5	0.92	1	07/27/21 13:59	07/27/21 18:52	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.90**	ug/kg	4.5	0.90	1	07/27/21 13:59	07/27/21 18:52	79-34-5	
Tetrachloroethene	**<0.37**	ug/kg	4.5	0.37	1	07/27/21 13:59	07/27/21 18:52	127-18-4	
Tetrahydrofuran	**<0.71**	ug/kg	4.5	0.71	1	07/27/21 13:59	07/27/21 18:52	109-99-9	L2,N2
Toluene	**<0.32**	ug/kg	4.5	0.32	1	07/27/21 13:59	07/27/21 18:52	108-88-3	
1,2,3-Trichlorobenzene	**<0.72**	ug/kg	4.5	0.72	1	07/27/21 13:59	07/27/21 18:52	87-61-6	
1,2,4-Trichlorobenzene	**<0.72**	ug/kg	4.5	0.72	1	07/27/21 13:59	07/27/21 18:52	120-82-1	
1,1,1-Trichloroethane	**<0.67**	ug/kg	4.5	0.67	1	07/27/21 13:59	07/27/21 18:52	71-55-6	
1,1,2-Trichloroethane	**<0.57**	ug/kg	4.5	0.57	1	07/27/21 13:59	07/27/21 18:52	79-00-5	
Trichloroethene	**<0.65**	ug/kg	4.5	0.65	1	07/27/21 13:59	07/27/21 18:52	79-01-6	
Trichlorofluoromethane	**<0.55**	ug/kg	4.5	0.55	1	07/27/21 13:59	07/27/21 18:52	75-69-4	
1,2,3-Trichloropropane	**<1.9**	ug/kg	4.5	1.9	1	07/27/21 13:59	07/27/21 18:52	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.5**	ug/kg	4.5	4.5	1	07/27/21 13:59	07/27/21 18:52	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.8**	ug/kg	4.5	1.8	1	07/27/21 13:59	07/27/21 18:52	526-73-8	
1,2,4-Trimethylbenzene	**<0.60**	ug/kg	4.5	0.60	1	07/27/21 13:59	07/27/21 18:52	95-63-6	
1,3,5-Trimethylbenzene	**<0.57**	ug/kg	4.5	0.57	1	07/27/21 13:59	07/27/21 18:52	108-67-8	
Vinyl acetate	**<0.51**	ug/kg	90.2	0.51	1	07/27/21 13:59	07/27/21 18:52	108-05-4	
Vinyl chloride	**<0.60**	ug/kg	4.5	0.60	1	07/27/21 13:59	07/27/21 18:52	75-01-4	
Xylene (Total)	**<1.0**	ug/kg	4.5	1.0	1	07/27/21 13:59	07/27/21 18:52	1330-20-7	
m&p-Xylene	**<0.57**	ug/kg	4.5	0.57	1	07/27/21 13:59	07/27/21 18:52	179601-23-1	
o-Xylene	**<0.34**	ug/kg	4.5	0.34	1	07/27/21 13:59	07/27/21 18:52	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1	07/27/21 13:59	07/27/21 18:52	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-120		1	07/27/21 13:59	07/27/21 18:52	460-00-4	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/1-3' **Lab ID: 60375481034** Collected: 07/20/21 10:10 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Surrogates									
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1	07/27/21 13:59	07/27/21 18:52	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.049**	mg/kg	0.45	0.049	1	07/27/21 14:02	07/27/21 18:52		
Surrogates									
Toluene-d8 (S)	99	%	78-122		1	07/27/21 14:02	07/27/21 18:52	2037-26-5	
4-Bromofluorobenzene (S)	105	%	69-133		1	07/27/21 14:02	07/27/21 18:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1	07/27/21 14:02	07/27/21 18:52	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**14.7**	%	0.50	0.50	1		07/22/21 11:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/3-5' **Lab ID: 60375481035** Collected: 07/20/21 10:17 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.3	9.8	1	07/22/21 18:03	07/23/21 13:13	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.3	9.4	1	07/22/21 18:03	07/23/21 13:13	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.3	4.3	1	07/22/21 18:03	07/23/21 13:13	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.3	9.5	1	07/22/21 18:03	07/23/21 13:13	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.3	2.6	1	07/22/21 18:03	07/23/21 13:13	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.3	3.7	1	07/22/21 18:03	07/23/21 13:13	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.7**	ug/kg	39.3	7.7	1	07/22/21 18:03	07/23/21 13:13	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	101	%	35-120		1	07/22/21 18:03	07/23/21 13:13	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.54**	mg/kg	1.0	0.54	10	08/04/21 11:31	08/05/21 13:46	7440-36-0	
Arsenic	**9.3**	mg/kg	1.0	0.11	10	08/04/21 11:31	08/05/21 13:46	7440-38-2	
Copper	**17.7**	mg/kg	1.0	0.31	10	08/04/21 11:31	08/05/21 13:46	7440-50-8	
Lead	**13.2**	mg/kg	0.50	0.13	10	08/04/21 11:31	08/05/21 13:46	7439-92-1	
Zinc	**69.5**	mg/kg	5.0	0.85	10	08/04/21 11:31	08/05/21 13:46	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<3.1**	ug/kg	8.2	3.1	1	07/22/21 20:05	07/23/21 19:02	83-32-9	
Acenaphthylene	**<3.1**	ug/kg	8.2	3.1	1	07/22/21 20:05	07/23/21 19:02	208-96-8	
Anthracene	**<3.4**	ug/kg	8.2	3.4	1	07/22/21 20:05	07/23/21 19:02	120-12-7	
Benzo(a)anthracene	**<3.9**	ug/kg	8.2	3.9	1	07/22/21 20:05	07/23/21 19:02	56-55-3	
Benzo(a)pyrene	**<3.0**	ug/kg	8.2	3.0	1	07/22/21 20:05	07/23/21 19:02	50-32-8	
Benzo(b)fluoranthene	**<4.0**	ug/kg	8.2	4.0	1	07/22/21 20:05	07/23/21 19:02	205-99-2	
Benzo(g,h,i)perylene	**<3.7**	ug/kg	8.2	3.7	1	07/22/21 20:05	07/23/21 19:02	191-24-2	
Benzo(k)fluoranthene	**<4.6**	ug/kg	8.2	4.6	1	07/22/21 20:05	07/23/21 19:02	207-08-9	
Chrysene	**<3.9**	ug/kg	8.2	3.9	1	07/22/21 20:05	07/23/21 19:02	218-01-9	
Dibenz(a,h)anthracene	**<3.5**	ug/kg	8.2	3.5	1	07/22/21 20:05	07/23/21 19:02	53-70-3	
Fluoranthene	**<6.2**	ug/kg	8.2	6.2	1	07/22/21 20:05	07/23/21 19:02	206-44-0	
Fluorene	**<3.2**	ug/kg	8.2	3.2	1	07/22/21 20:05	07/23/21 19:02	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.5**	ug/kg	8.2	3.5	1	07/22/21 20:05	07/23/21 19:02	193-39-5	
Naphthalene	**<3.5**	ug/kg	8.2	3.5	1	07/22/21 20:05	07/23/21 19:02	91-20-3	
Phenanthrene	**<6.7**	ug/kg	8.2	6.7	1	07/22/21 20:05	07/23/21 19:02	85-01-8	
Pyrene	**<4.4**	ug/kg	8.2	4.4	1	07/22/21 20:05	07/23/21 19:02	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%	40-120		1	07/22/21 20:05	07/23/21 19:02	321-60-8	
Terphenyl-d14 (S)	72	%	45-130		1	07/22/21 20:05	07/23/21 19:02	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**9.0J**	mg/kg	18.6	1.8	1	07/22/21 20:05	07/29/21 19:20		
TPH-DRO	**2.4J**	mg/kg	18.6	1.8	1	07/22/21 20:05	07/29/21 19:20		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/3-5' **Lab ID: 60375481035** Collected: 07/20/21 10:17 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Surrogates									
Nitrobenzene-d5 (S)	74	%	30-120		1	07/22/21 20:05	07/29/21 19:20	4165-60-0	
2-Fluorobiphenyl (S)	76	%	40-120		1	07/22/21 20:05	07/29/21 19:20	321-60-8	
Terphenyl-d14 (S)	77	%	45-120		1	07/22/21 20:05	07/29/21 19:20	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**23.0**	ug/kg	18.4	14.9	1	07/27/21 13:59	07/27/21 19:07	67-64-1	
Acrolein	**<69.5**	ug/kg	92.0	69.5	1	07/27/21 13:59	07/27/21 19:07	107-02-8	
Acrylonitrile	**<2.9**	ug/kg	92.0	2.9	1	07/27/21 13:59	07/27/21 19:07	107-13-1	
Benzene	**<0.45**	ug/kg	4.6	0.45	1	07/27/21 13:59	07/27/21 19:07	71-43-2	
Bromobenzene	**<0.86**	ug/kg	4.6	0.86	1	07/27/21 13:59	07/27/21 19:07	108-86-1	
Bromochloromethane	**<0.55**	ug/kg	4.6	0.55	1	07/27/21 13:59	07/27/21 19:07	74-97-5	
Bromodichloromethane	**<0.55**	ug/kg	4.6	0.55	1	07/27/21 13:59	07/27/21 19:07	75-27-4	
Bromoform	**<0.53**	ug/kg	4.6	0.53	1	07/27/21 13:59	07/27/21 19:07	75-25-2	
Bromomethane	**<2.7**	ug/kg	4.6	2.7	1	07/27/21 13:59	07/27/21 19:07	74-83-9	
2-Butanone (MEK)	**<3.1**	ug/kg	9.2	3.1	1	07/27/21 13:59	07/27/21 19:07	78-93-3	
n-Butylbenzene	**<0.60**	ug/kg	4.6	0.60	1	07/27/21 13:59	07/27/21 19:07	104-51-8	
sec-Butylbenzene	**<0.67**	ug/kg	4.6	0.67	1	07/27/21 13:59	07/27/21 19:07	135-98-8	
tert-Butylbenzene	**<0.81**	ug/kg	23.0	0.81	1	07/27/21 13:59	07/27/21 19:07	98-06-6	
Carbon disulfide	**<0.59**	ug/kg	4.6	0.59	1	07/27/21 13:59	07/27/21 19:07	75-15-0	
Carbon tetrachloride	**<0.79**	ug/kg	4.6	0.79	1	07/27/21 13:59	07/27/21 19:07	56-23-5	
Chlorobenzene	**<0.58**	ug/kg	4.6	0.58	1	07/27/21 13:59	07/27/21 19:07	108-90-7	
Chloroethane	**<1.4**	ug/kg	4.6	1.4	1	07/27/21 13:59	07/27/21 19:07	75-00-3	
Chloroform	**<0.45**	ug/kg	4.6	0.45	1	07/27/21 13:59	07/27/21 19:07	67-66-3	
Chloromethane	**<0.73**	ug/kg	4.6	0.73	1	07/27/21 13:59	07/27/21 19:07	74-87-3	
2-Chlorotoluene	**<0.67**	ug/kg	4.6	0.67	1	07/27/21 13:59	07/27/21 19:07	95-49-8	
4-Chlorotoluene	**<0.55**	ug/kg	4.6	0.55	1	07/27/21 13:59	07/27/21 19:07	106-43-4	
Cyclohexanone	**<11.7**	ug/kg	18.4	11.7	1	07/27/21 13:59	07/27/21 19:07	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.7**	ug/kg	9.2	1.7	1	07/27/21 13:59	07/27/21 19:07	96-12-8	
Dibromochloromethane	**<0.59**	ug/kg	4.6	0.59	1	07/27/21 13:59	07/27/21 19:07	124-48-1	
1,2-Dibromoethane (EDB)	**<0.49**	ug/kg	4.6	0.49	1	07/27/21 13:59	07/27/21 19:07	106-93-4	
Dibromomethane	**<0.55**	ug/kg	4.6	0.55	1	07/27/21 13:59	07/27/21 19:07	74-95-3	
1,2-Dichlorobenzene	**<0.57**	ug/kg	4.6	0.57	1	07/27/21 13:59	07/27/21 19:07	95-50-1	
1,3-Dichlorobenzene	**<0.66**	ug/kg	4.6	0.66	1	07/27/21 13:59	07/27/21 19:07	541-73-1	
1,4-Dichlorobenzene	**<0.74**	ug/kg	4.6	0.74	1	07/27/21 13:59	07/27/21 19:07	106-46-7	
1,1-Dichloroethane	**<0.36**	ug/kg	4.6	0.36	1	07/27/21 13:59	07/27/21 19:07	75-34-3	
1,2-Dichloroethane	**<0.37**	ug/kg	4.6	0.37	1	07/27/21 13:59	07/27/21 19:07	107-06-2	
1,2-Dichloroethene (Total)	**<1.0**	ug/kg	4.6	1.0	1	07/27/21 13:59	07/27/21 19:07	540-59-0	
1,1-Dichloroethene	**<0.59**	ug/kg	4.6	0.59	1	07/27/21 13:59	07/27/21 19:07	75-35-4	
cis-1,2-Dichloroethene	**<0.40**	ug/kg	4.6	0.40	1	07/27/21 13:59	07/27/21 19:07	156-59-2	
trans-1,2-Dichloroethene	**<0.62**	ug/kg	4.6	0.62	1	07/27/21 13:59	07/27/21 19:07	156-60-5	
1,2-Dichloropropane	**<0.90**	ug/kg	4.6	0.90	1	07/27/21 13:59	07/27/21 19:07	78-87-5	
1,3-Dichloropropane	**<0.64**	ug/kg	4.6	0.64	1	07/27/21 13:59	07/27/21 19:07	142-28-9	

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/3-5' **Lab ID: 60375481035** Collected: 07/20/21 10:17 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
2,2-Dichloropropane	**<0.44**	ug/kg	4.6	0.44	1	07/27/21 13:59	07/27/21 19:07	594-20-7	
1,1-Dichloropropene	**<0.83**	ug/kg	4.6	0.83	1	07/27/21 13:59	07/27/21 19:07	563-58-6	
cis-1,3-Dichloropropene	**<0.49**	ug/kg	4.6	0.49	1	07/27/21 13:59	07/27/21 19:07	10061-01-5	
trans-1,3-Dichloropropene	**<0.42**	ug/kg	4.6	0.42	1	07/27/21 13:59	07/27/21 19:07	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.51**	ug/kg	4.6	0.51	1	07/27/21 13:59	07/27/21 19:07	60-29-7	
Ethylbenzene	**<0.42**	ug/kg	4.6	0.42	1	07/27/21 13:59	07/27/21 19:07	100-41-4	
n-Heptane	**<4.2**	ug/kg	9.2	4.2	1	07/27/21 13:59	07/27/21 19:07	142-82-5	
Hexachloro-1,3-butadiene	**<0.78**	ug/kg	4.6	0.78	1	07/27/21 13:59	07/27/21 19:07	87-68-3	
n-Hexane	**<0.63**	ug/kg	9.2	0.63	1	07/27/21 13:59	07/27/21 19:07	110-54-3	
2-Hexanone	**<2.3**	ug/kg	18.4	2.3	1	07/27/21 13:59	07/27/21 19:07	591-78-6	
Iodomethane	**<1.4**	ug/kg	9.2	1.4	1	07/27/21 13:59	07/27/21 19:07	74-88-4	
Isopropylbenzene (Cumene)	**<0.52**	ug/kg	4.6	0.52	1	07/27/21 13:59	07/27/21 19:07	98-82-8	
p-Isopropyltoluene	**<0.63**	ug/kg	4.6	0.63	1	07/27/21 13:59	07/27/21 19:07	99-87-6	
Methyl acetate	**<0.99**	ug/kg	92.0	0.99	1	07/27/21 13:59	07/27/21 19:07	79-20-9	
Methylene Chloride	**<2.5**	ug/kg	4.6	2.5	1	07/27/21 13:59	07/27/21 19:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.8**	ug/kg	9.2	2.8	1	07/27/21 13:59	07/27/21 19:07	108-10-1	
Methyl-tert-butyl ether	**<0.44**	ug/kg	4.6	0.44	1	07/27/21 13:59	07/27/21 19:07	1634-04-4	
Naphthalene	**<0.75**	ug/kg	9.2	0.75	1	07/27/21 13:59	07/27/21 19:07	91-20-3	
n-Propylbenzene	**<0.74**	ug/kg	4.6	0.74	1	07/27/21 13:59	07/27/21 19:07	103-65-1	
Styrene	**<0.54**	ug/kg	4.6	0.54	1	07/27/21 13:59	07/27/21 19:07	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.94**	ug/kg	4.6	0.94	1	07/27/21 13:59	07/27/21 19:07	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.92**	ug/kg	4.6	0.92	1	07/27/21 13:59	07/27/21 19:07	79-34-5	
Tetrachloroethene	**<0.38**	ug/kg	4.6	0.38	1	07/27/21 13:59	07/27/21 19:07	127-18-4	
Tetrahydrofuran	**<0.72**	ug/kg	4.6	0.72	1	07/27/21 13:59	07/27/21 19:07	109-99-9	L2,N2
Toluene	**<0.32**	ug/kg	4.6	0.32	1	07/27/21 13:59	07/27/21 19:07	108-88-3	
1,2,3-Trichlorobenzene	**<0.73**	ug/kg	4.6	0.73	1	07/27/21 13:59	07/27/21 19:07	87-61-6	
1,2,4-Trichlorobenzene	**<0.73**	ug/kg	4.6	0.73	1	07/27/21 13:59	07/27/21 19:07	120-82-1	
1,1,1-Trichloroethane	**<0.69**	ug/kg	4.6	0.69	1	07/27/21 13:59	07/27/21 19:07	71-55-6	
1,1,2-Trichloroethane	**<0.58**	ug/kg	4.6	0.58	1	07/27/21 13:59	07/27/21 19:07	79-00-5	
Trichloroethene	**<0.67**	ug/kg	4.6	0.67	1	07/27/21 13:59	07/27/21 19:07	79-01-6	
Trichlorofluoromethane	**<0.56**	ug/kg	4.6	0.56	1	07/27/21 13:59	07/27/21 19:07	75-69-4	
1,2,3-Trichloropropane	**<2.0**	ug/kg	4.6	2.0	1	07/27/21 13:59	07/27/21 19:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.6**	ug/kg	4.6	4.6	1	07/27/21 13:59	07/27/21 19:07	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.8**	ug/kg	4.6	1.8	1	07/27/21 13:59	07/27/21 19:07	526-73-8	
1,2,4-Trimethylbenzene	**<0.62**	ug/kg	4.6	0.62	1	07/27/21 13:59	07/27/21 19:07	95-63-6	
1,3,5-Trimethylbenzene	**<0.58**	ug/kg	4.6	0.58	1	07/27/21 13:59	07/27/21 19:07	108-67-8	
Vinyl acetate	**<0.52**	ug/kg	92.0	0.52	1	07/27/21 13:59	07/27/21 19:07	108-05-4	
Vinyl chloride	**<0.61**	ug/kg	4.6	0.61	1	07/27/21 13:59	07/27/21 19:07	75-01-4	
Xylene (Total)	**<1.0**	ug/kg	4.6	1.0	1	07/27/21 13:59	07/27/21 19:07	1330-20-7	
m&p-Xylene	**<0.58**	ug/kg	4.6	0.58	1	07/27/21 13:59	07/27/21 19:07	179601-23-1	
o-Xylene	**<0.34**	ug/kg	4.6	0.34	1	07/27/21 13:59	07/27/21 19:07	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	80-120		1	07/27/21 13:59	07/27/21 19:07	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-120		1	07/27/21 13:59	07/27/21 19:07	460-00-4	

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/3-5' **Lab ID: 60375481035** Collected: 07/20/21 10:17 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Surrogates									
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1	07/27/21 13:59	07/27/21 19:07	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.050**	mg/kg	0.46	0.050	1	07/27/21 14:02	07/27/21 19:07		
Surrogates									
Toluene-d8 (S)	98	%	78-122		1	07/27/21 14:02	07/27/21 19:07	2037-26-5	
4-Bromofluorobenzene (S)	105	%	69-133		1	07/27/21 14:02	07/27/21 19:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1	07/27/21 14:02	07/27/21 19:07	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.7**	%	0.50	0.50	1		07/22/21 11:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/3-5'D **Lab ID: 60375481036** Collected: 07/20/21 10:17 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.2**	ug/kg	40.9	10.2	1	07/22/21 18:03	07/23/21 13:31	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.9	9.7	1	07/22/21 18:03	07/23/21 13:31	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	40.9	4.5	1	07/22/21 18:03	07/23/21 13:31	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.9	9.8	1	07/22/21 18:03	07/23/21 13:31	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.9	2.7	1	07/22/21 18:03	07/23/21 13:31	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.9	3.8	1	07/22/21 18:03	07/23/21 13:31	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	40.9	8.1	1	07/22/21 18:03	07/23/21 13:31	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	103	%	35-120		1	07/22/21 18:03	07/23/21 13:31	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.64**	mg/kg	1.2	0.64	10	08/04/21 11:31	08/05/21 13:48	7440-36-0	
Arsenic	**8.5**	mg/kg	1.2	0.13	10	08/04/21 11:31	08/05/21 13:48	7440-38-2	
Copper	**19.6**	mg/kg	1.2	0.37	10	08/04/21 11:31	08/05/21 13:48	7440-50-8	
Lead	**10.3**	mg/kg	0.59	0.15	10	08/04/21 11:31	08/05/21 13:48	7439-92-1	
Zinc	**74.9**	mg/kg	5.9	1.0	10	08/04/21 11:31	08/05/21 13:48	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<3.0**	ug/kg	8.0	3.0	1	07/22/21 20:05	07/23/21 19:19	83-32-9	
Acenaphthylene	**<3.0**	ug/kg	8.0	3.0	1	07/22/21 20:05	07/23/21 19:19	208-96-8	
Anthracene	**<3.3**	ug/kg	8.0	3.3	1	07/22/21 20:05	07/23/21 19:19	120-12-7	
Benzo(a)anthracene	**<3.8**	ug/kg	8.0	3.8	1	07/22/21 20:05	07/23/21 19:19	56-55-3	
Benzo(a)pyrene	**<2.9**	ug/kg	8.0	2.9	1	07/22/21 20:05	07/23/21 19:19	50-32-8	
Benzo(b)fluoranthene	**<3.9**	ug/kg	8.0	3.9	1	07/22/21 20:05	07/23/21 19:19	205-99-2	
Benzo(g,h,i)perylene	**<3.6**	ug/kg	8.0	3.6	1	07/22/21 20:05	07/23/21 19:19	191-24-2	
Benzo(k)fluoranthene	**<4.5**	ug/kg	8.0	4.5	1	07/22/21 20:05	07/23/21 19:19	207-08-9	
Chrysene	**<3.8**	ug/kg	8.0	3.8	1	07/22/21 20:05	07/23/21 19:19	218-01-9	
Dibenz(a,h)anthracene	**<3.4**	ug/kg	8.0	3.4	1	07/22/21 20:05	07/23/21 19:19	53-70-3	
Fluoranthene	**<6.0**	ug/kg	8.0	6.0	1	07/22/21 20:05	07/23/21 19:19	206-44-0	
Fluorene	**<3.1**	ug/kg	8.0	3.1	1	07/22/21 20:05	07/23/21 19:19	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.4**	ug/kg	8.0	3.4	1	07/22/21 20:05	07/23/21 19:19	193-39-5	
Naphthalene	**<3.4**	ug/kg	8.0	3.4	1	07/22/21 20:05	07/23/21 19:19	91-20-3	
Phenanthrene	**<6.5**	ug/kg	8.0	6.5	1	07/22/21 20:05	07/23/21 19:19	85-01-8	
Pyrene	**<4.3**	ug/kg	8.0	4.3	1	07/22/21 20:05	07/23/21 19:19	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%	40-120		1	07/22/21 20:05	07/23/21 19:19	321-60-8	
Terphenyl-d14 (S)	62	%	45-130		1	07/22/21 20:05	07/23/21 19:19	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**8.9J**	mg/kg	18.2	1.7	1	07/22/21 20:05	07/29/21 19:40		
TPH-DRO	**2.0J**	mg/kg	18.2	1.7	1	07/22/21 20:05	07/29/21 19:40		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/3-5'D **Lab ID: 60375481036** Collected: 07/20/21 10:17 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Surrogates									
Nitrobenzene-d5 (S)	66	%	30-120		1	07/22/21 20:05	07/29/21 19:40	4165-60-0	
2-Fluorobiphenyl (S)	67	%	40-120		1	07/22/21 20:05	07/29/21 19:40	321-60-8	
Terphenyl-d14 (S)	68	%	45-120		1	07/22/21 20:05	07/29/21 19:40	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**22.1**	ug/kg	21.2	17.2	1	07/27/21 13:59	07/27/21 19:23	67-64-1	
Acrolein	**<80.1**	ug/kg	106	80.1	1	07/27/21 13:59	07/27/21 19:23	107-02-8	
Acrylonitrile	**<3.4**	ug/kg	106	3.4	1	07/27/21 13:59	07/27/21 19:23	107-13-1	
Benzene	**<0.52**	ug/kg	5.3	0.52	1	07/27/21 13:59	07/27/21 19:23	71-43-2	
Bromobenzene	**<1.0**	ug/kg	5.3	1.0	1	07/27/21 13:59	07/27/21 19:23	108-86-1	
Bromochloromethane	**<0.64**	ug/kg	5.3	0.64	1	07/27/21 13:59	07/27/21 19:23	74-97-5	
Bromodichloromethane	**<0.64**	ug/kg	5.3	0.64	1	07/27/21 13:59	07/27/21 19:23	75-27-4	
Bromoform	**<0.61**	ug/kg	5.3	0.61	1	07/27/21 13:59	07/27/21 19:23	75-25-2	
Bromomethane	**<3.1**	ug/kg	5.3	3.1	1	07/27/21 13:59	07/27/21 19:23	74-83-9	
2-Butanone (MEK)	**<3.6**	ug/kg	10.6	3.6	1	07/27/21 13:59	07/27/21 19:23	78-93-3	
n-Butylbenzene	**<0.69**	ug/kg	5.3	0.69	1	07/27/21 13:59	07/27/21 19:23	104-51-8	
sec-Butylbenzene	**<0.77**	ug/kg	5.3	0.77	1	07/27/21 13:59	07/27/21 19:23	135-98-8	
tert-Butylbenzene	**<0.94**	ug/kg	26.5	0.94	1	07/27/21 13:59	07/27/21 19:23	98-06-6	
Carbon disulfide	**<0.68**	ug/kg	5.3	0.68	1	07/27/21 13:59	07/27/21 19:23	75-15-0	
Carbon tetrachloride	**<0.91**	ug/kg	5.3	0.91	1	07/27/21 13:59	07/27/21 19:23	56-23-5	
Chlorobenzene	**<0.66**	ug/kg	5.3	0.66	1	07/27/21 13:59	07/27/21 19:23	108-90-7	
Chloroethane	**<1.6**	ug/kg	5.3	1.6	1	07/27/21 13:59	07/27/21 19:23	75-00-3	
Chloroform	**<0.52**	ug/kg	5.3	0.52	1	07/27/21 13:59	07/27/21 19:23	67-66-3	
Chloromethane	**<0.85**	ug/kg	5.3	0.85	1	07/27/21 13:59	07/27/21 19:23	74-87-3	
2-Chlorotoluene	**<0.77**	ug/kg	5.3	0.77	1	07/27/21 13:59	07/27/21 19:23	95-49-8	
4-Chlorotoluene	**<0.64**	ug/kg	5.3	0.64	1	07/27/21 13:59	07/27/21 19:23	106-43-4	
Cyclohexanone	**<13.5**	ug/kg	21.2	13.5	1	07/27/21 13:59	07/27/21 19:23	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.9**	ug/kg	10.6	1.9	1	07/27/21 13:59	07/27/21 19:23	96-12-8	
Dibromochloromethane	**<0.68**	ug/kg	5.3	0.68	1	07/27/21 13:59	07/27/21 19:23	124-48-1	
1,2-Dibromoethane (EDB)	**<0.57**	ug/kg	5.3	0.57	1	07/27/21 13:59	07/27/21 19:23	106-93-4	
Dibromomethane	**<0.64**	ug/kg	5.3	0.64	1	07/27/21 13:59	07/27/21 19:23	74-95-3	
1,2-Dichlorobenzene	**<0.66**	ug/kg	5.3	0.66	1	07/27/21 13:59	07/27/21 19:23	95-50-1	
1,3-Dichlorobenzene	**<0.76**	ug/kg	5.3	0.76	1	07/27/21 13:59	07/27/21 19:23	541-73-1	
1,4-Dichlorobenzene	**<0.86**	ug/kg	5.3	0.86	1	07/27/21 13:59	07/27/21 19:23	106-46-7	
1,1-Dichloroethane	**<0.41**	ug/kg	5.3	0.41	1	07/27/21 13:59	07/27/21 19:23	75-34-3	
1,2-Dichloroethane	**<0.42**	ug/kg	5.3	0.42	1	07/27/21 13:59	07/27/21 19:23	107-06-2	
1,2-Dichloroethene (Total)	**<1.2**	ug/kg	5.3	1.2	1	07/27/21 13:59	07/27/21 19:23	540-59-0	
1,1-Dichloroethene	**<0.68**	ug/kg	5.3	0.68	1	07/27/21 13:59	07/27/21 19:23	75-35-4	
cis-1,2-Dichloroethene	**<0.46**	ug/kg	5.3	0.46	1	07/27/21 13:59	07/27/21 19:23	156-59-2	
trans-1,2-Dichloroethene	**<0.72**	ug/kg	5.3	0.72	1	07/27/21 13:59	07/27/21 19:23	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/kg	5.3	1.0	1	07/27/21 13:59	07/27/21 19:23	78-87-5	
1,3-Dichloropropane	**<0.73**	ug/kg	5.3	0.73	1	07/27/21 13:59	07/27/21 19:23	142-28-9	

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/3-5'D **Lab ID: 60375481036** Collected: 07/20/21 10:17 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
2,2-Dichloropropane	**<0.50**	ug/kg	5.3	0.50	1	07/27/21 13:59	07/27/21 19:23	594-20-7	
1,1-Dichloropropene	**<0.95**	ug/kg	5.3	0.95	1	07/27/21 13:59	07/27/21 19:23	563-58-6	
cis-1,3-Dichloropropene	**<0.56**	ug/kg	5.3	0.56	1	07/27/21 13:59	07/27/21 19:23	10061-01-5	
trans-1,3-Dichloropropene	**<0.48**	ug/kg	5.3	0.48	1	07/27/21 13:59	07/27/21 19:23	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.59**	ug/kg	5.3	0.59	1	07/27/21 13:59	07/27/21 19:23	60-29-7	
Ethylbenzene	**<0.49**	ug/kg	5.3	0.49	1	07/27/21 13:59	07/27/21 19:23	100-41-4	
n-Heptane	**<4.8**	ug/kg	10.6	4.8	1	07/27/21 13:59	07/27/21 19:23	142-82-5	
Hexachloro-1,3-butadiene	**<0.90**	ug/kg	5.3	0.90	1	07/27/21 13:59	07/27/21 19:23	87-68-3	
n-Hexane	**<0.73**	ug/kg	10.6	0.73	1	07/27/21 13:59	07/27/21 19:23	110-54-3	
2-Hexanone	**<2.6**	ug/kg	21.2	2.6	1	07/27/21 13:59	07/27/21 19:23	591-78-6	
Iodomethane	**<1.6**	ug/kg	10.6	1.6	1	07/27/21 13:59	07/27/21 19:23	74-88-4	
Isopropylbenzene (Cumene)	**<0.60**	ug/kg	5.3	0.60	1	07/27/21 13:59	07/27/21 19:23	98-82-8	
p-Isopropyltoluene	**<0.73**	ug/kg	5.3	0.73	1	07/27/21 13:59	07/27/21 19:23	99-87-6	
Methyl acetate	**<1.1**	ug/kg	106	1.1	1	07/27/21 13:59	07/27/21 19:23	79-20-9	
Methylene Chloride	**<2.9**	ug/kg	5.3	2.9	1	07/27/21 13:59	07/27/21 19:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.2**	ug/kg	10.6	3.2	1	07/27/21 13:59	07/27/21 19:23	108-10-1	
Methyl-tert-butyl ether	**<0.51**	ug/kg	5.3	0.51	1	07/27/21 13:59	07/27/21 19:23	1634-04-4	
Naphthalene	**<0.87**	ug/kg	10.6	0.87	1	07/27/21 13:59	07/27/21 19:23	91-20-3	
n-Propylbenzene	**<0.85**	ug/kg	5.3	0.85	1	07/27/21 13:59	07/27/21 19:23	103-65-1	
Styrene	**<0.62**	ug/kg	5.3	0.62	1	07/27/21 13:59	07/27/21 19:23	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.1**	ug/kg	5.3	1.1	1	07/27/21 13:59	07/27/21 19:23	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.1**	ug/kg	5.3	1.1	1	07/27/21 13:59	07/27/21 19:23	79-34-5	
Tetrachloroethene	**<0.44**	ug/kg	5.3	0.44	1	07/27/21 13:59	07/27/21 19:23	127-18-4	
Tetrahydrofuran	**<0.83**	ug/kg	5.3	0.83	1	07/27/21 13:59	07/27/21 19:23	109-99-9	L2,N2
Toluene	**<0.37**	ug/kg	5.3	0.37	1	07/27/21 13:59	07/27/21 19:23	108-88-3	
1,2,3-Trichlorobenzene	**<0.84**	ug/kg	5.3	0.84	1	07/27/21 13:59	07/27/21 19:23	87-61-6	
1,2,4-Trichlorobenzene	**<0.84**	ug/kg	5.3	0.84	1	07/27/21 13:59	07/27/21 19:23	120-82-1	
1,1,1-Trichloroethane	**<0.79**	ug/kg	5.3	0.79	1	07/27/21 13:59	07/27/21 19:23	71-55-6	
1,1,2-Trichloroethane	**<0.67**	ug/kg	5.3	0.67	1	07/27/21 13:59	07/27/21 19:23	79-00-5	
Trichloroethene	**<0.77**	ug/kg	5.3	0.77	1	07/27/21 13:59	07/27/21 19:23	79-01-6	
Trichlorofluoromethane	**<0.65**	ug/kg	5.3	0.65	1	07/27/21 13:59	07/27/21 19:23	75-69-4	
1,2,3-Trichloropropane	**<2.3**	ug/kg	5.3	2.3	1	07/27/21 13:59	07/27/21 19:23	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<5.3**	ug/kg	5.3	5.3	1	07/27/21 13:59	07/27/21 19:23	76-13-1	N2
1,2,3-Trimethylbenzene	**<2.1**	ug/kg	5.3	2.1	1	07/27/21 13:59	07/27/21 19:23	526-73-8	
1,2,4-Trimethylbenzene	**<0.71**	ug/kg	5.3	0.71	1	07/27/21 13:59	07/27/21 19:23	95-63-6	
1,3,5-Trimethylbenzene	**<0.66**	ug/kg	5.3	0.66	1	07/27/21 13:59	07/27/21 19:23	108-67-8	
Vinyl acetate	**<0.60**	ug/kg	106	0.60	1	07/27/21 13:59	07/27/21 19:23	108-05-4	
Vinyl chloride	**<0.71**	ug/kg	5.3	0.71	1	07/27/21 13:59	07/27/21 19:23	75-01-4	
Xylene (Total)	**<1.2**	ug/kg	5.3	1.2	1	07/27/21 13:59	07/27/21 19:23	1330-20-7	
m&p-Xylene	**<0.67**	ug/kg	5.3	0.67	1	07/27/21 13:59	07/27/21 19:23	179601-23-1	
o-Xylene	**<0.40**	ug/kg	5.3	0.40	1	07/27/21 13:59	07/27/21 19:23	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	80-120		1	07/27/21 13:59	07/27/21 19:23	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-120		1	07/27/21 13:59	07/27/21 19:23	460-00-4	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-68/3-5'D **Lab ID: 60375481036** Collected: 07/20/21 10:17 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Surrogates									
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1	07/27/21 13:59	07/27/21 19:23	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.058**	mg/kg	0.53	0.058	1	07/27/21 14:02	07/27/21 19:23		
Surrogates									
Toluene-d8 (S)	100	%	78-122		1	07/27/21 14:02	07/27/21 19:23	2037-26-5	
4-Bromofluorobenzene (S)	106	%	69-133		1	07/27/21 14:02	07/27/21 19:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1	07/27/21 14:02	07/27/21 19:23	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.2**	%	0.50	0.50	1		07/22/21 11:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-67/5-6' **Lab ID: 60375481037** Collected: 07/20/21 10:47 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.0**	ug/kg	40.3	10.0	1	07/22/21 18:03	07/23/21 13:49	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.3	9.6	1	07/22/21 18:03	07/23/21 13:49	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.3	4.4	1	07/22/21 18:03	07/23/21 13:49	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.3	9.7	1	07/22/21 18:03	07/23/21 13:49	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.3	2.7	1	07/22/21 18:03	07/23/21 13:49	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.3	3.8	1	07/22/21 18:03	07/23/21 13:49	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.3	7.9	1	07/22/21 18:03	07/23/21 13:49	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	99	%	35-120		1	07/22/21 18:03	07/23/21 13:49	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.47**	mg/kg	0.88	0.47	10	08/04/21 11:31	08/05/21 13:49	7440-36-0	
Arsenic	**2.9**	mg/kg	0.88	0.093	10	08/04/21 11:31	08/05/21 13:49	7440-38-2	
Copper	**10.1**	mg/kg	0.88	0.27	10	08/04/21 11:31	08/05/21 13:49	7440-50-8	
Lead	**8.3**	mg/kg	0.44	0.11	10	08/04/21 11:31	08/05/21 13:49	7439-92-1	
Zinc	**30.9**	mg/kg	4.4	0.74	10	08/04/21 11:31	08/05/21 13:49	7440-66-6	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**6.7J**	mg/kg	18.2	1.7	1	07/22/21 20:05	07/29/21 20:00		
TPH-DRO	**2.0J**	mg/kg	18.2	1.7	1	07/22/21 20:05	07/29/21 20:00		
Surrogates									
Nitrobenzene-d5 (S)	74	%	30-120		1	07/22/21 20:05	07/29/21 20:00	4165-60-0	
2-Fluorobiphenyl (S)	73	%	40-120		1	07/22/21 20:05	07/29/21 20:00	321-60-8	
Terphenyl-d14 (S)	74	%	45-120		1	07/22/21 20:05	07/29/21 20:00	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**<14.4**	ug/kg	17.7	14.4	1	07/27/21 13:59	07/27/21 19:38	67-64-1	
Acrolein	**<67.1**	ug/kg	88.7	67.1	1	07/27/21 13:59	07/27/21 19:38	107-02-8	
Acrylonitrile	**<2.8**	ug/kg	88.7	2.8	1	07/27/21 13:59	07/27/21 19:38	107-13-1	
Benzene	**<0.44**	ug/kg	4.4	0.44	1	07/27/21 13:59	07/27/21 19:38	71-43-2	
Bromobenzene	**<0.83**	ug/kg	4.4	0.83	1	07/27/21 13:59	07/27/21 19:38	108-86-1	
Bromochloromethane	**<0.53**	ug/kg	4.4	0.53	1	07/27/21 13:59	07/27/21 19:38	74-97-5	
Bromodichloromethane	**<0.53**	ug/kg	4.4	0.53	1	07/27/21 13:59	07/27/21 19:38	75-27-4	
Bromoform	**<0.51**	ug/kg	4.4	0.51	1	07/27/21 13:59	07/27/21 19:38	75-25-2	
Bromomethane	**<2.6**	ug/kg	4.4	2.6	1	07/27/21 13:59	07/27/21 19:38	74-83-9	
2-Butanone (MEK)	**<3.0**	ug/kg	8.9	3.0	1	07/27/21 13:59	07/27/21 19:38	78-93-3	
n-Butylbenzene	**<0.58**	ug/kg	4.4	0.58	1	07/27/21 13:59	07/27/21 19:38	104-51-8	
sec-Butylbenzene	**<0.65**	ug/kg	4.4	0.65	1	07/27/21 13:59	07/27/21 19:38	135-98-8	
tert-Butylbenzene	**<0.78**	ug/kg	22.2	0.78	1	07/27/21 13:59	07/27/21 19:38	98-06-6	
Carbon disulfide	**<0.57**	ug/kg	4.4	0.57	1	07/27/21 13:59	07/27/21 19:38	75-15-0	
Carbon tetrachloride	**<0.76**	ug/kg	4.4	0.76	1	07/27/21 13:59	07/27/21 19:38	56-23-5	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-67/5-6' **Lab ID: 60375481037** Collected: 07/20/21 10:47 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Chlorobenzene	**<0.56**	ug/kg	4.4	0.56	1	07/27/21 13:59	07/27/21 19:38	108-90-7	
Chloroethane	**<1.3**	ug/kg	4.4	1.3	1	07/27/21 13:59	07/27/21 19:38	75-00-3	
Chloroform	**<0.44**	ug/kg	4.4	0.44	1	07/27/21 13:59	07/27/21 19:38	67-66-3	
Chloromethane	**<0.71**	ug/kg	4.4	0.71	1	07/27/21 13:59	07/27/21 19:38	74-87-3	
2-Chlorotoluene	**<0.65**	ug/kg	4.4	0.65	1	07/27/21 13:59	07/27/21 19:38	95-49-8	
4-Chlorotoluene	**<0.53**	ug/kg	4.4	0.53	1	07/27/21 13:59	07/27/21 19:38	106-43-4	
Cyclohexanone	**<11.3**	ug/kg	17.7	11.3	1	07/27/21 13:59	07/27/21 19:38	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.6**	ug/kg	8.9	1.6	1	07/27/21 13:59	07/27/21 19:38	96-12-8	
Dibromochloromethane	**<0.57**	ug/kg	4.4	0.57	1	07/27/21 13:59	07/27/21 19:38	124-48-1	
1,2-Dibromoethane (EDB)	**<0.47**	ug/kg	4.4	0.47	1	07/27/21 13:59	07/27/21 19:38	106-93-4	
Dibromomethane	**<0.53**	ug/kg	4.4	0.53	1	07/27/21 13:59	07/27/21 19:38	74-95-3	
1,2-Dichlorobenzene	**<0.55**	ug/kg	4.4	0.55	1	07/27/21 13:59	07/27/21 19:38	95-50-1	
1,3-Dichlorobenzene	**<0.64**	ug/kg	4.4	0.64	1	07/27/21 13:59	07/27/21 19:38	541-73-1	
1,4-Dichlorobenzene	**<0.72**	ug/kg	4.4	0.72	1	07/27/21 13:59	07/27/21 19:38	106-46-7	
1,1-Dichloroethane	**<0.35**	ug/kg	4.4	0.35	1	07/27/21 13:59	07/27/21 19:38	75-34-3	
1,2-Dichloroethane	**<0.35**	ug/kg	4.4	0.35	1	07/27/21 13:59	07/27/21 19:38	107-06-2	
1,2-Dichloroethene (Total)	**<0.98**	ug/kg	4.4	0.98	1	07/27/21 13:59	07/27/21 19:38	540-59-0	
1,1-Dichloroethene	**<0.57**	ug/kg	4.4	0.57	1	07/27/21 13:59	07/27/21 19:38	75-35-4	
cis-1,2-Dichloroethene	**<0.38**	ug/kg	4.4	0.38	1	07/27/21 13:59	07/27/21 19:38	156-59-2	
trans-1,2-Dichloroethene	**<0.60**	ug/kg	4.4	0.60	1	07/27/21 13:59	07/27/21 19:38	156-60-5	
1,2-Dichloropropane	**<0.87**	ug/kg	4.4	0.87	1	07/27/21 13:59	07/27/21 19:38	78-87-5	
1,3-Dichloropropane	**<0.61**	ug/kg	4.4	0.61	1	07/27/21 13:59	07/27/21 19:38	142-28-9	
2,2-Dichloropropane	**<0.42**	ug/kg	4.4	0.42	1	07/27/21 13:59	07/27/21 19:38	594-20-7	
1,1-Dichloropropene	**<0.80**	ug/kg	4.4	0.80	1	07/27/21 13:59	07/27/21 19:38	563-58-6	
cis-1,3-Dichloropropene	**<0.47**	ug/kg	4.4	0.47	1	07/27/21 13:59	07/27/21 19:38	10061-01-5	
trans-1,3-Dichloropropene	**<0.41**	ug/kg	4.4	0.41	1	07/27/21 13:59	07/27/21 19:38	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.50**	ug/kg	4.4	0.50	1	07/27/21 13:59	07/27/21 19:38	60-29-7	
Ethylbenzene	**<0.41**	ug/kg	4.4	0.41	1	07/27/21 13:59	07/27/21 19:38	100-41-4	
n-Heptane	**<4.0**	ug/kg	8.9	4.0	1	07/27/21 13:59	07/27/21 19:38	142-82-5	
Hexachloro-1,3-butadiene	**<0.76**	ug/kg	4.4	0.76	1	07/27/21 13:59	07/27/21 19:38	87-68-3	
n-Hexane	**<0.61**	ug/kg	8.9	0.61	1	07/27/21 13:59	07/27/21 19:38	110-54-3	
2-Hexanone	**<2.2**	ug/kg	17.7	2.2	1	07/27/21 13:59	07/27/21 19:38	591-78-6	
Iodomethane	**<1.3**	ug/kg	8.9	1.3	1	07/27/21 13:59	07/27/21 19:38	74-88-4	
Isopropylbenzene (Cumene)	**<0.51**	ug/kg	4.4	0.51	1	07/27/21 13:59	07/27/21 19:38	98-82-8	
p-Isopropyltoluene	**<0.61**	ug/kg	4.4	0.61	1	07/27/21 13:59	07/27/21 19:38	99-87-6	
Methyl acetate	**<0.96**	ug/kg	88.7	0.96	1	07/27/21 13:59	07/27/21 19:38	79-20-9	
Methylene Chloride	**<2.4**	ug/kg	4.4	2.4	1	07/27/21 13:59	07/27/21 19:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.7**	ug/kg	8.9	2.7	1	07/27/21 13:59	07/27/21 19:38	108-10-1	
Methyl-tert-butyl ether	**<0.43**	ug/kg	4.4	0.43	1	07/27/21 13:59	07/27/21 19:38	1634-04-4	
Naphthalene	**<0.73**	ug/kg	8.9	0.73	1	07/27/21 13:59	07/27/21 19:38	91-20-3	
n-Propylbenzene	**<0.71**	ug/kg	4.4	0.71	1	07/27/21 13:59	07/27/21 19:38	103-65-1	
Styrene	**<0.52**	ug/kg	4.4	0.52	1	07/27/21 13:59	07/27/21 19:38	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.91**	ug/kg	4.4	0.91	1	07/27/21 13:59	07/27/21 19:38	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.89**	ug/kg	4.4	0.89	1	07/27/21 13:59	07/27/21 19:38	79-34-5	

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-67/5-6' **Lab ID: 60375481037** Collected: 07/20/21 10:47 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030								
	Pace Analytical Services - Kansas City								
Tetrachloroethene	**<0.37**	ug/kg	4.4	0.37	1	07/27/21 13:59	07/27/21 19:38	127-18-4	
Tetrahydrofuran	**<0.69**	ug/kg	4.4	0.69	1	07/27/21 13:59	07/27/21 19:38	109-99-9	L2,N2
Toluene	**<0.31**	ug/kg	4.4	0.31	1	07/27/21 13:59	07/27/21 19:38	108-88-3	
1,2,3-Trichlorobenzene	**<0.71**	ug/kg	4.4	0.71	1	07/27/21 13:59	07/27/21 19:38	87-61-6	
1,2,4-Trichlorobenzene	**<0.71**	ug/kg	4.4	0.71	1	07/27/21 13:59	07/27/21 19:38	120-82-1	
1,1,1-Trichloroethane	**<0.66**	ug/kg	4.4	0.66	1	07/27/21 13:59	07/27/21 19:38	71-55-6	
1,1,2-Trichloroethane	**<0.56**	ug/kg	4.4	0.56	1	07/27/21 13:59	07/27/21 19:38	79-00-5	
Trichloroethene	**<0.64**	ug/kg	4.4	0.64	1	07/27/21 13:59	07/27/21 19:38	79-01-6	
Trichlorofluoromethane	**<0.54**	ug/kg	4.4	0.54	1	07/27/21 13:59	07/27/21 19:38	75-69-4	
1,2,3-Trichloropropane	**<1.9**	ug/kg	4.4	1.9	1	07/27/21 13:59	07/27/21 19:38	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.4**	ug/kg	4.4	4.4	1	07/27/21 13:59	07/27/21 19:38	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.8**	ug/kg	4.4	1.8	1	07/27/21 13:59	07/27/21 19:38	526-73-8	
1,2,4-Trimethylbenzene	**<0.59**	ug/kg	4.4	0.59	1	07/27/21 13:59	07/27/21 19:38	95-63-6	
1,3,5-Trimethylbenzene	**<0.56**	ug/kg	4.4	0.56	1	07/27/21 13:59	07/27/21 19:38	108-67-8	
Vinyl acetate	**<0.50**	ug/kg	88.7	0.50	1	07/27/21 13:59	07/27/21 19:38	108-05-4	
Vinyl chloride	**<0.59**	ug/kg	4.4	0.59	1	07/27/21 13:59	07/27/21 19:38	75-01-4	
Xylene (Total)	**<1.0**	ug/kg	4.4	1.0	1	07/27/21 13:59	07/27/21 19:38	1330-20-7	
m&p-Xylene	**<0.56**	ug/kg	4.4	0.56	1	07/27/21 13:59	07/27/21 19:38	179601-23-1	
o-Xylene	**<0.33**	ug/kg	4.4	0.33	1	07/27/21 13:59	07/27/21 19:38	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	80-120		1	07/27/21 13:59	07/27/21 19:38	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120		1	07/27/21 13:59	07/27/21 19:38	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1	07/27/21 13:59	07/27/21 19:38	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035								
	Pace Analytical Services - Kansas City								
TPH-GRO	**<0.048**	mg/kg	0.44	0.048	1	07/27/21 14:02	07/27/21 19:38		
Surrogates									
Toluene-d8 (S)	101	%	78-122		1	07/27/21 14:02	07/27/21 19:38	2037-26-5	
4-Bromofluorobenzene (S)	103	%	69-133		1	07/27/21 14:02	07/27/21 19:38	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1	07/27/21 14:02	07/27/21 19:38	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974								
	Pace Analytical Services - Kansas City								
Percent Moisture	**18.5**	%	0.50	0.50	1		07/22/21 11:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-67/8-10' **Lab ID: 60375481038** Collected: 07/20/21 10:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.7**	ug/kg	38.9	9.7	1	07/22/21 18:03	07/23/21 14:07	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.3**	ug/kg	38.9	9.3	1	07/22/21 18:03	07/23/21 14:07	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.9	4.2	1	07/22/21 18:03	07/23/21 14:07	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.4**	ug/kg	38.9	9.4	1	07/22/21 18:03	07/23/21 14:07	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	38.9	2.6	1	07/22/21 18:03	07/23/21 14:07	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.9	3.6	1	07/22/21 18:03	07/23/21 14:07	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.7**	ug/kg	38.9	7.7	1	07/22/21 18:03	07/23/21 14:07	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	102	%	35-120		1	07/22/21 18:03	07/23/21 14:07	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.45**	mg/kg	0.84	0.45	10	08/04/21 11:31	08/05/21 13:51	7440-36-0	
Arsenic	**4.3**	mg/kg	0.84	0.089	10	08/04/21 11:31	08/05/21 13:51	7440-38-2	
Copper	**12.2**	mg/kg	0.84	0.26	10	08/04/21 11:31	08/05/21 13:51	7440-50-8	
Lead	**10.2**	mg/kg	0.42	0.11	10	08/04/21 11:31	08/05/21 13:51	7439-92-1	
Zinc	**29.4**	mg/kg	4.2	0.71	10	08/04/21 11:31	08/05/21 13:51	7440-66-6	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**8.5J**	mg/kg	17.9	1.7	1	07/22/21 20:05	07/29/21 20:20		
TPH-DRO	**2.5J**	mg/kg	17.9	1.7	1	07/22/21 20:05	07/29/21 20:20		
Surrogates									
Nitrobenzene-d5 (S)	72	%	30-120		1	07/22/21 20:05	07/29/21 20:20	4165-60-0	
2-Fluorobiphenyl (S)	74	%	40-120		1	07/22/21 20:05	07/29/21 20:20	321-60-8	
Terphenyl-d14 (S)	73	%	45-120		1	07/22/21 20:05	07/29/21 20:20	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**<15.1**	ug/kg	18.7	15.1	1	07/28/21 08:05	07/28/21 09:40	67-64-1	
Acrolein	**<70.7**	ug/kg	93.5	70.7	1	07/28/21 08:05	07/28/21 09:40	107-02-8	
Acrylonitrile	**<3.0**	ug/kg	93.5	3.0	1	07/28/21 08:05	07/28/21 09:40	107-13-1	
Benzene	**<0.46**	ug/kg	4.7	0.46	1	07/28/21 08:05	07/28/21 09:40	71-43-2	
Bromobenzene	**<0.88**	ug/kg	4.7	0.88	1	07/28/21 08:05	07/28/21 09:40	108-86-1	
Bromochloromethane	**<0.56**	ug/kg	4.7	0.56	1	07/28/21 08:05	07/28/21 09:40	74-97-5	
Bromodichloromethane	**<0.56**	ug/kg	4.7	0.56	1	07/28/21 08:05	07/28/21 09:40	75-27-4	
Bromoform	**<0.54**	ug/kg	4.7	0.54	1	07/28/21 08:05	07/28/21 09:40	75-25-2	
Bromomethane	**<2.7**	ug/kg	4.7	2.7	1	07/28/21 08:05	07/28/21 09:40	74-83-9	
2-Butanone (MEK)	**<3.2**	ug/kg	9.3	3.2	1	07/28/21 08:05	07/28/21 09:40	78-93-3	
n-Butylbenzene	**<0.61**	ug/kg	4.7	0.61	1	07/28/21 08:05	07/28/21 09:40	104-51-8	
sec-Butylbenzene	**<0.68**	ug/kg	4.7	0.68	1	07/28/21 08:05	07/28/21 09:40	135-98-8	
tert-Butylbenzene	**<0.83**	ug/kg	23.4	0.83	1	07/28/21 08:05	07/28/21 09:40	98-06-6	
Carbon disulfide	**<0.60**	ug/kg	4.7	0.60	1	07/28/21 08:05	07/28/21 09:40	75-15-0	
Carbon tetrachloride	**<0.80**	ug/kg	4.7	0.80	1	07/28/21 08:05	07/28/21 09:40	56-23-5	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-67/8-10' **Lab ID: 60375481038** Collected: 07/20/21 10:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Chlorobenzene	**<0.59**	ug/kg	4.7	0.59	1	07/28/21 08:05	07/28/21 09:40	108-90-7	
Chloroethane	**<1.4**	ug/kg	4.7	1.4	1	07/28/21 08:05	07/28/21 09:40	75-00-3	
Chloroform	**<0.46**	ug/kg	4.7	0.46	1	07/28/21 08:05	07/28/21 09:40	67-66-3	
Chloromethane	**<0.75**	ug/kg	4.7	0.75	1	07/28/21 08:05	07/28/21 09:40	74-87-3	
2-Chlorotoluene	**<0.68**	ug/kg	4.7	0.68	1	07/28/21 08:05	07/28/21 09:40	95-49-8	
4-Chlorotoluene	**<0.56**	ug/kg	4.7	0.56	1	07/28/21 08:05	07/28/21 09:40	106-43-4	
Cyclohexanone	**<11.9**	ug/kg	18.7	11.9	1	07/28/21 08:05	07/28/21 09:40	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.7**	ug/kg	9.3	1.7	1	07/28/21 08:05	07/28/21 09:40	96-12-8	
Dibromochloromethane	**<0.60**	ug/kg	4.7	0.60	1	07/28/21 08:05	07/28/21 09:40	124-48-1	
1,2-Dibromoethane (EDB)	**<0.50**	ug/kg	4.7	0.50	1	07/28/21 08:05	07/28/21 09:40	106-93-4	
Dibromomethane	**<0.56**	ug/kg	4.7	0.56	1	07/28/21 08:05	07/28/21 09:40	74-95-3	
1,2-Dichlorobenzene	**<0.58**	ug/kg	4.7	0.58	1	07/28/21 08:05	07/28/21 09:40	95-50-1	
1,3-Dichlorobenzene	**<0.67**	ug/kg	4.7	0.67	1	07/28/21 08:05	07/28/21 09:40	541-73-1	
1,4-Dichlorobenzene	**<0.76**	ug/kg	4.7	0.76	1	07/28/21 08:05	07/28/21 09:40	106-46-7	
1,1-Dichloroethane	**<0.36**	ug/kg	4.7	0.36	1	07/28/21 08:05	07/28/21 09:40	75-34-3	
1,2-Dichloroethane	**<0.37**	ug/kg	4.7	0.37	1	07/28/21 08:05	07/28/21 09:40	107-06-2	
1,2-Dichloroethene (Total)	**<1.0**	ug/kg	4.7	1.0	1	07/28/21 08:05	07/28/21 09:40	540-59-0	
1,1-Dichloroethene	**<0.60**	ug/kg	4.7	0.60	1	07/28/21 08:05	07/28/21 09:40	75-35-4	
cis-1,2-Dichloroethene	**<0.40**	ug/kg	4.7	0.40	1	07/28/21 08:05	07/28/21 09:40	156-59-2	
trans-1,2-Dichloroethene	**<0.63**	ug/kg	4.7	0.63	1	07/28/21 08:05	07/28/21 09:40	156-60-5	
1,2-Dichloropropane	**<0.91**	ug/kg	4.7	0.91	1	07/28/21 08:05	07/28/21 09:40	78-87-5	
1,3-Dichloropropane	**<0.65**	ug/kg	4.7	0.65	1	07/28/21 08:05	07/28/21 09:40	142-28-9	
2,2-Dichloropropane	**<0.44**	ug/kg	4.7	0.44	1	07/28/21 08:05	07/28/21 09:40	594-20-7	
1,1-Dichloropropene	**<0.84**	ug/kg	4.7	0.84	1	07/28/21 08:05	07/28/21 09:40	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/kg	4.7	0.50	1	07/28/21 08:05	07/28/21 09:40	10061-01-5	
trans-1,3-Dichloropropene	**<0.43**	ug/kg	4.7	0.43	1	07/28/21 08:05	07/28/21 09:40	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.52**	ug/kg	4.7	0.52	1	07/28/21 08:05	07/28/21 09:40	60-29-7	
Ethylbenzene	**<0.43**	ug/kg	4.7	0.43	1	07/28/21 08:05	07/28/21 09:40	100-41-4	
n-Heptane	**<4.2**	ug/kg	9.3	4.2	1	07/28/21 08:05	07/28/21 09:40	142-82-5	
Hexachloro-1,3-butadiene	**<0.80**	ug/kg	4.7	0.80	1	07/28/21 08:05	07/28/21 09:40	87-68-3	
n-Hexane	**<0.64**	ug/kg	9.3	0.64	1	07/28/21 08:05	07/28/21 09:40	110-54-3	
2-Hexanone	**<2.3**	ug/kg	18.7	2.3	1	07/28/21 08:05	07/28/21 09:40	591-78-6	
Iodomethane	**<1.4**	ug/kg	9.3	1.4	1	07/28/21 08:05	07/28/21 09:40	74-88-4	
Isopropylbenzene (Cumene)	**<0.53**	ug/kg	4.7	0.53	1	07/28/21 08:05	07/28/21 09:40	98-82-8	
p-Isopropyltoluene	**<0.64**	ug/kg	4.7	0.64	1	07/28/21 08:05	07/28/21 09:40	99-87-6	
Methyl acetate	**<1.0**	ug/kg	93.5	1.0	1	07/28/21 08:05	07/28/21 09:40	79-20-9	
Methylene Chloride	**<2.6**	ug/kg	4.7	2.6	1	07/28/21 08:05	07/28/21 09:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.8**	ug/kg	9.3	2.8	1	07/28/21 08:05	07/28/21 09:40	108-10-1	
Methyl-tert-butyl ether	**<0.45**	ug/kg	4.7	0.45	1	07/28/21 08:05	07/28/21 09:40	1634-04-4	
Naphthalene	**<0.77**	ug/kg	9.3	0.77	1	07/28/21 08:05	07/28/21 09:40	91-20-3	
n-Propylbenzene	**<0.75**	ug/kg	4.7	0.75	1	07/28/21 08:05	07/28/21 09:40	103-65-1	
Styrene	**<0.55**	ug/kg	4.7	0.55	1	07/28/21 08:05	07/28/21 09:40	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.95**	ug/kg	4.7	0.95	1	07/28/21 08:05	07/28/21 09:40	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.93**	ug/kg	4.7	0.93	1	07/28/21 08:05	07/28/21 09:40	79-34-5	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-67/8-10' **Lab ID: 60375481038** Collected: 07/20/21 10:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030								
	Pace Analytical Services - Kansas City								
Tetrachloroethene	**<0.39**	ug/kg	4.7	0.39	1	07/28/21 08:05	07/28/21 09:40	127-18-4	
Tetrahydrofuran	**<0.73**	ug/kg	4.7	0.73	1	07/28/21 08:05	07/28/21 09:40	109-99-9	N2
Toluene	**<0.33**	ug/kg	4.7	0.33	1	07/28/21 08:05	07/28/21 09:40	108-88-3	
1,2,3-Trichlorobenzene	**<0.74**	ug/kg	4.7	0.74	1	07/28/21 08:05	07/28/21 09:40	87-61-6	
1,2,4-Trichlorobenzene	**<0.74**	ug/kg	4.7	0.74	1	07/28/21 08:05	07/28/21 09:40	120-82-1	
1,1,1-Trichloroethane	**<0.70**	ug/kg	4.7	0.70	1	07/28/21 08:05	07/28/21 09:40	71-55-6	
1,1,2-Trichloroethane	**<0.59**	ug/kg	4.7	0.59	1	07/28/21 08:05	07/28/21 09:40	79-00-5	
Trichloroethene	**<0.68**	ug/kg	4.7	0.68	1	07/28/21 08:05	07/28/21 09:40	79-01-6	
Trichlorofluoromethane	**<0.57**	ug/kg	4.7	0.57	1	07/28/21 08:05	07/28/21 09:40	75-69-4	
1,2,3-Trichloropropane	**<2.0**	ug/kg	4.7	2.0	1	07/28/21 08:05	07/28/21 09:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.7**	ug/kg	4.7	4.7	1	07/28/21 08:05	07/28/21 09:40	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.9**	ug/kg	4.7	1.9	1	07/28/21 08:05	07/28/21 09:40	526-73-8	
1,2,4-Trimethylbenzene	**<0.63**	ug/kg	4.7	0.63	1	07/28/21 08:05	07/28/21 09:40	95-63-6	
1,3,5-Trimethylbenzene	**<0.59**	ug/kg	4.7	0.59	1	07/28/21 08:05	07/28/21 09:40	108-67-8	
Vinyl acetate	**<0.53**	ug/kg	93.5	0.53	1	07/28/21 08:05	07/28/21 09:40	108-05-4	
Vinyl chloride	**<0.62**	ug/kg	4.7	0.62	1	07/28/21 08:05	07/28/21 09:40	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	4.7	1.1	1	07/28/21 08:05	07/28/21 09:40	1330-20-7	
m&p-Xylene	**<0.59**	ug/kg	4.7	0.59	1	07/28/21 08:05	07/28/21 09:40	179601-23-1	
o-Xylene	**<0.35**	ug/kg	4.7	0.35	1	07/28/21 08:05	07/28/21 09:40	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	80-120		1	07/28/21 08:05	07/28/21 09:40	2037-26-5	
4-Bromofluorobenzene (S)	104	%	80-120		1	07/28/21 08:05	07/28/21 09:40	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1	07/28/21 08:05	07/28/21 09:40	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035								
	Pace Analytical Services - Kansas City								
TPH-GRO	**<0.051**	mg/kg	0.47	0.051	1	07/28/21 08:05	07/28/21 09:40		
Surrogates									
Toluene-d8 (S)	101	%	78-122		1	07/28/21 08:05	07/28/21 09:40	2037-26-5	
4-Bromofluorobenzene (S)	104	%	69-133		1	07/28/21 08:05	07/28/21 09:40	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1	07/28/21 08:05	07/28/21 09:40	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974								
	Pace Analytical Services - Kansas City								
Percent Moisture	**19.6**	%	0.50	0.50	1		07/22/21 11:39		

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: TB-01 **Lab ID: 60375481039** Collected: 07/20/21 08:00 Received: 07/21/21 04:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	**<2.5**	ug/L	10.0	2.5	1		07/28/21 13:49	67-64-1	
Acetonitrile	**<1.1**	ug/L	10.0	1.1	1		07/28/21 13:49	75-05-8	
Acrolein	**<4.0**	ug/L	50.0	4.0	1		07/28/21 13:49	107-02-8	
Acrylonitrile	**<1.4**	ug/L	20.0	1.4	1		07/28/21 13:49	107-13-1	
Benzene	**<0.14**	ug/L	1.0	0.14	1		07/28/21 13:49	71-43-2	
Bromobenzene	**<0.088**	ug/L	1.0	0.088	1		07/28/21 13:49	108-86-1	
Bromochloromethane	**<0.20**	ug/L	1.0	0.20	1		07/28/21 13:49	74-97-5	
Bromodichloromethane	**<0.16**	ug/L	1.0	0.16	1		07/28/21 13:49	75-27-4	
Bromoform	**<0.68**	ug/L	1.0	0.68	1		07/28/21 13:49	75-25-2	
Bromomethane	**<0.46**	ug/L	5.0	0.46	1		07/28/21 13:49	74-83-9	
2-Butanone (MEK)	**<0.98**	ug/L	10.0	0.98	1		07/28/21 13:49	78-93-3	
n-Butylbenzene	**<0.15**	ug/L	1.0	0.15	1		07/28/21 13:49	104-51-8	
sec-Butylbenzene	**<0.11**	ug/L	1.0	0.11	1		07/28/21 13:49	135-98-8	
tert-Butylbenzene	**<0.12**	ug/L	1.0	0.12	1		07/28/21 13:49	98-06-6	
Carbon disulfide	**<0.98**	ug/L	5.0	0.98	1		07/28/21 13:49	75-15-0	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		07/28/21 13:49	56-23-5	
Chlorobenzene	**<0.089**	ug/L	1.0	0.089	1		07/28/21 13:49	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		07/28/21 13:49	75-00-3	
2-Chloroethylvinyl ether	**<1.8**	ug/L	10.0	1.8	1		07/28/21 13:49	110-75-8	c2
Chloroform	**<0.22**	ug/L	1.0	0.22	1		07/28/21 13:49	67-66-3	
Chloromethane	**<0.28**	ug/L	1.0	0.28	1		07/28/21 13:49	74-87-3	
2-Chlorotoluene	**<0.11**	ug/L	1.0	0.11	1		07/28/21 13:49	95-49-8	
4-Chlorotoluene	**<0.15**	ug/L	1.0	0.15	1		07/28/21 13:49	106-43-4	
Cyclohexane	**<0.24**	ug/L	1.0	0.24	1		07/28/21 13:49	110-82-7	
Cyclohexanone	**<3.3**	ug/L	20.0	3.3	1		07/28/21 13:49	108-94-1	
1,2-Dibromo-3-chloropropane	**<0.78**	ug/L	2.5	0.78	1		07/28/21 13:49	96-12-8	
Dibromochloromethane	**<0.30**	ug/L	1.0	0.30	1		07/28/21 13:49	124-48-1	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		07/28/21 13:49	106-93-4	
Dibromomethane	**<0.11**	ug/L	1.0	0.11	1		07/28/21 13:49	74-95-3	
1,2-Dichlorobenzene	**<0.12**	ug/L	1.0	0.12	1		07/28/21 13:49	95-50-1	
1,3-Dichlorobenzene	**<0.13**	ug/L	1.0	0.13	1		07/28/21 13:49	541-73-1	
1,4-Dichlorobenzene	**<0.13**	ug/L	1.0	0.13	1		07/28/21 13:49	106-46-7	
Dichlorodifluoromethane	**<0.20**	ug/L	1.0	0.20	1		07/28/21 13:49	75-71-8	
1,1-Dichloroethane	**<0.12**	ug/L	1.0	0.12	1		07/28/21 13:49	75-34-3	
1,2-Dichloroethane	**<0.21**	ug/L	1.0	0.21	1		07/28/21 13:49	107-06-2	
1,2-Dichloroethene (Total)	**<0.22**	ug/L	1.0	0.22	1		07/28/21 13:49	540-59-0	
1,1-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		07/28/21 13:49	75-35-4	
cis-1,2-Dichloroethene	**<0.13**	ug/L	1.0	0.13	1		07/28/21 13:49	156-59-2	
trans-1,2-Dichloroethene	**<0.10**	ug/L	1.0	0.10	1		07/28/21 13:49	156-60-5	
1,2-Dichloropropane	**<0.14**	ug/L	1.0	0.14	1		07/28/21 13:49	78-87-5	
1,3-Dichloropropane	**<0.10**	ug/L	1.0	0.10	1		07/28/21 13:49	142-28-9	
2,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		07/28/21 13:49	594-20-7	
1,1-Dichloropropene	**<0.14**	ug/L	1.0	0.14	1		07/28/21 13:49	563-58-6	
cis-1,3-Dichloropropene	**<0.078**	ug/L	1.0	0.078	1		07/28/21 13:49	10061-01-5	
trans-1,3-Dichloropropene	**<0.18**	ug/L	1.0	0.18	1		07/28/21 13:49	10061-02-6	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: TB-01 **Lab ID: 60375481039** Collected: 07/20/21 08:00 Received: 07/21/21 04:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Diethyl ether (Ethyl ether)	**<0.23**	ug/L	1.0	0.23	1		07/28/21 13:49	60-29-7	
1,4-Dioxane (p-Dioxane)	**<4.4**	ug/L	100	4.4	1		07/28/21 13:49	123-91-1	
Ethylbenzene	**<0.12**	ug/L	1.0	0.12	1		07/28/21 13:49	100-41-4	
n-Heptane	**<2.6**	ug/L	10.0	2.6	1		07/28/21 13:49	142-82-5	
Hexachloro-1,3-butadiene	**<0.42**	ug/L	1.0	0.42	1		07/28/21 13:49	87-68-3	
n-Hexane	**<0.22**	ug/L	10.0	0.22	1		07/28/21 13:49	110-54-3	
2-Hexanone	**<1.1**	ug/L	10.0	1.1	1		07/28/21 13:49	591-78-6	
Isopropylbenzene (Cumene)	**<0.097**	ug/L	1.0	0.097	1		07/28/21 13:49	98-82-8	
p-Isopropyltoluene	**<0.13**	ug/L	1.0	0.13	1		07/28/21 13:49	99-87-6	
Methyl acetate	**<0.87**	ug/L	1.0	0.87	1		07/28/21 13:49	79-20-9	
Methylcyclohexane	**<0.12**	ug/L	1.0	0.12	1		07/28/21 13:49	108-87-2	
Methylene Chloride	**<0.39**	ug/L	1.0	0.39	1		07/28/21 13:49	75-09-2	
1-Methylnaphthalene	**<2.6**	ug/L	10.0	2.6	1		07/28/21 13:49	90-12-0	
2-Methylnaphthalene	**<2.7**	ug/L	10.0	2.7	1		07/28/21 13:49	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<0.74**	ug/L	10.0	0.74	1		07/28/21 13:49	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/L	1.0	0.13	1		07/28/21 13:49	1634-04-4	
Naphthalene	**<0.82**	ug/L	10.0	0.82	1		07/28/21 13:49	91-20-3	
n-Propylbenzene	**<0.12**	ug/L	1.0	0.12	1		07/28/21 13:49	103-65-1	
Styrene	**<0.12**	ug/L	1.0	0.12	1		07/28/21 13:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.084**	ug/L	1.0	0.084	1		07/28/21 13:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		07/28/21 13:49	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.0	0.33	1		07/28/21 13:49	127-18-4	
Tetrahydrofuran	**<2.8**	ug/L	5.0	2.8	1		07/28/21 13:49	109-99-9	
Toluene	**<0.25**	ug/L	1.0	0.25	1		07/28/21 13:49	108-88-3	
1,2,3-Trichlorobenzene	**<0.93**	ug/L	1.0	0.93	1		07/28/21 13:49	87-61-6	
1,2,4-Trichlorobenzene	**<0.73**	ug/L	1.0	0.73	1		07/28/21 13:49	120-82-1	
1,1,1-Trichloroethane	**<0.11**	ug/L	1.0	0.11	1		07/28/21 13:49	71-55-6	
1,1,2-Trichloroethane	**<0.14**	ug/L	1.0	0.14	1		07/28/21 13:49	79-00-5	
Trichloroethene	**<0.21**	ug/L	1.0	0.21	1		07/28/21 13:49	79-01-6	
Trichlorofluoromethane	**<0.16**	ug/L	1.0	0.16	1		07/28/21 13:49	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	2.5	0.41	1		07/28/21 13:49	96-18-4	
1,2,3-Trimethylbenzene	**<0.93**	ug/L	1.0	0.93	1		07/28/21 13:49	526-73-8	
1,2,4-Trimethylbenzene	**<0.32**	ug/L	1.0	0.32	1		07/28/21 13:49	95-63-6	
1,3,5-Trimethylbenzene	**<0.090**	ug/L	1.0	0.090	1		07/28/21 13:49	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		07/28/21 13:49	75-01-4	
Xylene (Total)	**<0.28**	ug/L	3.0	0.28	1		07/28/21 13:49	1330-20-7	
m&p-Xylene	**0.23J**	ug/L	2.0	0.22	1		07/28/21 13:49	179601-23-1	
o-Xylene	**<0.082**	ug/L	1.0	0.082	1		07/28/21 13:49	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		07/28/21 13:49	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		07/28/21 13:49	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		07/28/21 13:49	2199-69-1	
Preservation pH	**1.0**		0.10		1		07/28/21 13:49		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-61/3-5' **Lab ID: 60375481040** Collected: 07/20/21 11:20 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<3.2**	ug/kg	8.6	3.2	1	07/22/21 20:05	07/23/21 19:37	83-32-9	
Acenaphthylene	**<3.2**	ug/kg	8.6	3.2	1	07/22/21 20:05	07/23/21 19:37	208-96-8	
Anthracene	**6.0J**	ug/kg	8.6	3.6	1	07/22/21 20:05	07/23/21 19:37	120-12-7	
Benzo(a)anthracene	**27.5**	ug/kg	8.6	4.0	1	07/22/21 20:05	07/23/21 19:37	56-55-3	
Benzo(a)pyrene	**23.5**	ug/kg	8.6	3.1	1	07/22/21 20:05	07/23/21 19:37	50-32-8	
Benzo(b)fluoranthene	**42.8**	ug/kg	8.6	4.1	1	07/22/21 20:05	07/23/21 19:37	205-99-2	
Benzo(g,h,i)perylene	**16.6**	ug/kg	8.6	3.8	1	07/22/21 20:05	07/23/21 19:37	191-24-2	
Benzo(k)fluoranthene	**25.9**	ug/kg	8.6	4.8	1	07/22/21 20:05	07/23/21 19:37	207-08-9	
Chrysene	**37.0**	ug/kg	8.6	4.1	1	07/22/21 20:05	07/23/21 19:37	218-01-9	
Dibenz(a,h)anthracene	**<3.7**	ug/kg	8.6	3.7	1	07/22/21 20:05	07/23/21 19:37	53-70-3	
Fluoranthene	**95.7**	ug/kg	8.6	6.4	1	07/22/21 20:05	07/23/21 19:37	206-44-0	
Fluorene	**<3.3**	ug/kg	8.6	3.3	1	07/22/21 20:05	07/23/21 19:37	86-73-7	
Indeno(1,2,3-cd)pyrene	**14.6**	ug/kg	8.6	3.7	1	07/22/21 20:05	07/23/21 19:37	193-39-5	
Naphthalene	**<3.7**	ug/kg	8.6	3.7	1	07/22/21 20:05	07/23/21 19:37	91-20-3	
Phenanthrene	**33.9**	ug/kg	8.6	7.0	1	07/22/21 20:05	07/23/21 19:37	85-01-8	
Pyrene	**75.8**	ug/kg	8.6	4.6	1	07/22/21 20:05	07/23/21 19:37	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	71	%	40-120		1	07/22/21 20:05	07/23/21 19:37	321-60-8	
Terphenyl-d14 (S)	77	%	45-130		1	07/22/21 20:05	07/23/21 19:37	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**17.4J**	mg/kg	19.5	1.8	1	07/22/21 20:05	07/29/21 20:40		
TPH-DRO	**6.8J**	mg/kg	19.5	1.8	1	07/22/21 20:05	07/29/21 20:40		
Surrogates									
Nitrobenzene-d5 (S)	72	%	30-120		1	07/22/21 20:05	07/29/21 20:40	4165-60-0	
2-Fluorobiphenyl (S)	78	%	40-120		1	07/22/21 20:05	07/29/21 20:40	321-60-8	
Terphenyl-d14 (S)	83	%	45-120		1	07/22/21 20:05	07/29/21 20:40	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**<16.7**	ug/kg	20.6	16.7	1	07/28/21 08:05	07/28/21 09:56	67-64-1	
Acrolein	**<77.8**	ug/kg	103	77.8	1	07/28/21 08:05	07/28/21 09:56	107-02-8	
Acrylonitrile	**<3.3**	ug/kg	103	3.3	1	07/28/21 08:05	07/28/21 09:56	107-13-1	
Benzene	**<0.51**	ug/kg	5.1	0.51	1	07/28/21 08:05	07/28/21 09:56	71-43-2	
Bromobenzene	**<0.97**	ug/kg	5.1	0.97	1	07/28/21 08:05	07/28/21 09:56	108-86-1	
Bromochloromethane	**<0.62**	ug/kg	5.1	0.62	1	07/28/21 08:05	07/28/21 09:56	74-97-5	
Bromodichloromethane	**<0.62**	ug/kg	5.1	0.62	1	07/28/21 08:05	07/28/21 09:56	75-27-4	
Bromoform	**<0.59**	ug/kg	5.1	0.59	1	07/28/21 08:05	07/28/21 09:56	75-25-2	
Bromomethane	**<3.0**	ug/kg	5.1	3.0	1	07/28/21 08:05	07/28/21 09:56	74-83-9	
2-Butanone (MEK)	**<3.5**	ug/kg	10.3	3.5	1	07/28/21 08:05	07/28/21 09:56	78-93-3	
n-Butylbenzene	**<0.67**	ug/kg	5.1	0.67	1	07/28/21 08:05	07/28/21 09:56	104-51-8	
sec-Butylbenzene	**<0.75**	ug/kg	5.1	0.75	1	07/28/21 08:05	07/28/21 09:56	135-98-8	
tert-Butylbenzene	**<0.91**	ug/kg	25.7	0.91	1	07/28/21 08:05	07/28/21 09:56	98-06-6	

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-61/3-5' **Lab ID: 60375481040** Collected: 07/20/21 11:20 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Carbon disulfide	**2.0J**	ug/kg	5.1	0.66	1	07/28/21 08:05	07/28/21 09:56	75-15-0	
Carbon tetrachloride	**<0.88**	ug/kg	5.1	0.88	1	07/28/21 08:05	07/28/21 09:56	56-23-5	
Chlorobenzene	**<0.65**	ug/kg	5.1	0.65	1	07/28/21 08:05	07/28/21 09:56	108-90-7	
Chloroethane	**<1.5**	ug/kg	5.1	1.5	1	07/28/21 08:05	07/28/21 09:56	75-00-3	
Chloroform	**<0.51**	ug/kg	5.1	0.51	1	07/28/21 08:05	07/28/21 09:56	67-66-3	
Chloromethane	**<0.82**	ug/kg	5.1	0.82	1	07/28/21 08:05	07/28/21 09:56	74-87-3	
2-Chlorotoluene	**<0.75**	ug/kg	5.1	0.75	1	07/28/21 08:05	07/28/21 09:56	95-49-8	
4-Chlorotoluene	**<0.62**	ug/kg	5.1	0.62	1	07/28/21 08:05	07/28/21 09:56	106-43-4	
Cyclohexanone	**<13.1**	ug/kg	20.6	13.1	1	07/28/21 08:05	07/28/21 09:56	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.9**	ug/kg	10.3	1.9	1	07/28/21 08:05	07/28/21 09:56	96-12-8	
Dibromochloromethane	**<0.66**	ug/kg	5.1	0.66	1	07/28/21 08:05	07/28/21 09:56	124-48-1	
1,2-Dibromoethane (EDB)	**<0.55**	ug/kg	5.1	0.55	1	07/28/21 08:05	07/28/21 09:56	106-93-4	
Dibromomethane	**<0.62**	ug/kg	5.1	0.62	1	07/28/21 08:05	07/28/21 09:56	74-95-3	
1,2-Dichlorobenzene	**<0.64**	ug/kg	5.1	0.64	1	07/28/21 08:05	07/28/21 09:56	95-50-1	
1,3-Dichlorobenzene	**<0.74**	ug/kg	5.1	0.74	1	07/28/21 08:05	07/28/21 09:56	541-73-1	
1,4-Dichlorobenzene	**<0.83**	ug/kg	5.1	0.83	1	07/28/21 08:05	07/28/21 09:56	106-46-7	
1,1-Dichloroethane	**<0.40**	ug/kg	5.1	0.40	1	07/28/21 08:05	07/28/21 09:56	75-34-3	
1,2-Dichloroethane	**<0.41**	ug/kg	5.1	0.41	1	07/28/21 08:05	07/28/21 09:56	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	5.1	1.1	1	07/28/21 08:05	07/28/21 09:56	540-59-0	
1,1-Dichloroethene	**<0.66**	ug/kg	5.1	0.66	1	07/28/21 08:05	07/28/21 09:56	75-35-4	
cis-1,2-Dichloroethene	**<0.44**	ug/kg	5.1	0.44	1	07/28/21 08:05	07/28/21 09:56	156-59-2	
trans-1,2-Dichloroethene	**<0.70**	ug/kg	5.1	0.70	1	07/28/21 08:05	07/28/21 09:56	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/kg	5.1	1.0	1	07/28/21 08:05	07/28/21 09:56	78-87-5	
1,3-Dichloropropane	**<0.71**	ug/kg	5.1	0.71	1	07/28/21 08:05	07/28/21 09:56	142-28-9	
2,2-Dichloropropane	**<0.49**	ug/kg	5.1	0.49	1	07/28/21 08:05	07/28/21 09:56	594-20-7	
1,1-Dichloropropene	**<0.93**	ug/kg	5.1	0.93	1	07/28/21 08:05	07/28/21 09:56	563-58-6	
cis-1,3-Dichloropropene	**<0.55**	ug/kg	5.1	0.55	1	07/28/21 08:05	07/28/21 09:56	10061-01-5	
trans-1,3-Dichloropropene	**<0.47**	ug/kg	5.1	0.47	1	07/28/21 08:05	07/28/21 09:56	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.58**	ug/kg	5.1	0.58	1	07/28/21 08:05	07/28/21 09:56	60-29-7	
Ethylbenzene	**<0.48**	ug/kg	5.1	0.48	1	07/28/21 08:05	07/28/21 09:56	100-41-4	
n-Heptane	**<4.7**	ug/kg	10.3	4.7	1	07/28/21 08:05	07/28/21 09:56	142-82-5	
Hexachloro-1,3-butadiene	**<0.88**	ug/kg	5.1	0.88	1	07/28/21 08:05	07/28/21 09:56	87-68-3	
n-Hexane	**<0.71**	ug/kg	10.3	0.71	1	07/28/21 08:05	07/28/21 09:56	110-54-3	
2-Hexanone	**<2.6**	ug/kg	20.6	2.6	1	07/28/21 08:05	07/28/21 09:56	591-78-6	
Iodomethane	**<1.6**	ug/kg	10.3	1.6	1	07/28/21 08:05	07/28/21 09:56	74-88-4	
Isopropylbenzene (Cumene)	**<0.59**	ug/kg	5.1	0.59	1	07/28/21 08:05	07/28/21 09:56	98-82-8	
p-Isopropyltoluene	**<0.71**	ug/kg	5.1	0.71	1	07/28/21 08:05	07/28/21 09:56	99-87-6	
Methyl acetate	**<1.1**	ug/kg	103	1.1	1	07/28/21 08:05	07/28/21 09:56	79-20-9	
Methylene Chloride	**<2.8**	ug/kg	5.1	2.8	1	07/28/21 08:05	07/28/21 09:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.1**	ug/kg	10.3	3.1	1	07/28/21 08:05	07/28/21 09:56	108-10-1	
Methyl-tert-butyl ether	**<0.49**	ug/kg	5.1	0.49	1	07/28/21 08:05	07/28/21 09:56	1634-04-4	
Naphthalene	**<0.84**	ug/kg	10.3	0.84	1	07/28/21 08:05	07/28/21 09:56	91-20-3	
n-Propylbenzene	**<0.83**	ug/kg	5.1	0.83	1	07/28/21 08:05	07/28/21 09:56	103-65-1	
Styrene	**<0.61**	ug/kg	5.1	0.61	1	07/28/21 08:05	07/28/21 09:56	100-42-5	

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-61/3-5' **Lab ID: 60375481040** Collected: 07/20/21 11:20 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030								
	Pace Analytical Services - Kansas City								
1,1,1,2-Tetrachloroethane	**<1.0**	ug/kg	5.1	1.0	1	07/28/21 08:05	07/28/21 09:56	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/kg	5.1	1.0	1	07/28/21 08:05	07/28/21 09:56	79-34-5	
Tetrachloroethene	**<0.42**	ug/kg	5.1	0.42	1	07/28/21 08:05	07/28/21 09:56	127-18-4	
Tetrahydrofuran	**<0.81**	ug/kg	5.1	0.81	1	07/28/21 08:05	07/28/21 09:56	109-99-9	N2
Toluene	**<0.36**	ug/kg	5.1	0.36	1	07/28/21 08:05	07/28/21 09:56	108-88-3	
1,2,3-Trichlorobenzene	**<0.82**	ug/kg	5.1	0.82	1	07/28/21 08:05	07/28/21 09:56	87-61-6	
1,2,4-Trichlorobenzene	**<0.82**	ug/kg	5.1	0.82	1	07/28/21 08:05	07/28/21 09:56	120-82-1	
1,1,1-Trichloroethane	**<0.77**	ug/kg	5.1	0.77	1	07/28/21 08:05	07/28/21 09:56	71-55-6	
1,1,2-Trichloroethane	**<0.65**	ug/kg	5.1	0.65	1	07/28/21 08:05	07/28/21 09:56	79-00-5	
Trichloroethene	**<0.75**	ug/kg	5.1	0.75	1	07/28/21 08:05	07/28/21 09:56	79-01-6	
Trichlorofluoromethane	**<0.63**	ug/kg	5.1	0.63	1	07/28/21 08:05	07/28/21 09:56	75-69-4	
1,2,3-Trichloropropane	**<2.2**	ug/kg	5.1	2.2	1	07/28/21 08:05	07/28/21 09:56	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<5.1**	ug/kg	5.1	5.1	1	07/28/21 08:05	07/28/21 09:56	76-13-1	N2
1,2,3-Trimethylbenzene	**<2.1**	ug/kg	5.1	2.1	1	07/28/21 08:05	07/28/21 09:56	526-73-8	
1,2,4-Trimethylbenzene	**<0.69**	ug/kg	5.1	0.69	1	07/28/21 08:05	07/28/21 09:56	95-63-6	
1,3,5-Trimethylbenzene	**<0.65**	ug/kg	5.1	0.65	1	07/28/21 08:05	07/28/21 09:56	108-67-8	
Vinyl acetate	**<0.58**	ug/kg	103	0.58	1	07/28/21 08:05	07/28/21 09:56	108-05-4	
Vinyl chloride	**<0.69**	ug/kg	5.1	0.69	1	07/28/21 08:05	07/28/21 09:56	75-01-4	
Xylene (Total)	**<1.2**	ug/kg	5.1	1.2	1	07/28/21 08:05	07/28/21 09:56	1330-20-7	
m&p-Xylene	**<0.65**	ug/kg	5.1	0.65	1	07/28/21 08:05	07/28/21 09:56	179601-23-1	
o-Xylene	**<0.38**	ug/kg	5.1	0.38	1	07/28/21 08:05	07/28/21 09:56	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1	07/28/21 08:05	07/28/21 09:56	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120		1	07/28/21 08:05	07/28/21 09:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1	07/28/21 08:05	07/28/21 09:56	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035								
	Pace Analytical Services - Kansas City								
TPH-GRO	**<0.056**	mg/kg	0.51	0.056	1	07/28/21 08:05	07/28/21 09:56		
Surrogates									
Toluene-d8 (S)	99	%	78-122		1	07/28/21 08:05	07/28/21 09:56	2037-26-5	
4-Bromofluorobenzene (S)	101	%	69-133		1	07/28/21 08:05	07/28/21 09:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1	07/28/21 08:05	07/28/21 09:56	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974								
	Pace Analytical Services - Kansas City								
Percent Moisture	**24.6**	%	0.50	0.50	1		07/22/21 11:39		

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-61/5-7' **Lab ID: 60375481041** Collected: 07/20/21 11:27 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<3.1**	ug/kg	8.4	3.1	1	07/22/21 20:05	07/23/21 19:54	83-32-9	
Acenaphthylene	**<3.1**	ug/kg	8.4	3.1	1	07/22/21 20:05	07/23/21 19:54	208-96-8	
Anthracene	**<3.5**	ug/kg	8.4	3.5	1	07/22/21 20:05	07/23/21 19:54	120-12-7	
Benzo(a)anthracene	**<3.9**	ug/kg	8.4	3.9	1	07/22/21 20:05	07/23/21 19:54	56-55-3	
Benzo(a)pyrene	**<3.1**	ug/kg	8.4	3.1	1	07/22/21 20:05	07/23/21 19:54	50-32-8	
Benzo(b)fluoranthene	**<4.1**	ug/kg	8.4	4.1	1	07/22/21 20:05	07/23/21 19:54	205-99-2	
Benzo(g,h,i)perylene	**<3.8**	ug/kg	8.4	3.8	1	07/22/21 20:05	07/23/21 19:54	191-24-2	
Benzo(k)fluoranthene	**<4.7**	ug/kg	8.4	4.7	1	07/22/21 20:05	07/23/21 19:54	207-08-9	
Chrysene	**<4.0**	ug/kg	8.4	4.0	1	07/22/21 20:05	07/23/21 19:54	218-01-9	
Dibenz(a,h)anthracene	**<3.6**	ug/kg	8.4	3.6	1	07/22/21 20:05	07/23/21 19:54	53-70-3	
Fluoranthene	**<6.3**	ug/kg	8.4	6.3	1	07/22/21 20:05	07/23/21 19:54	206-44-0	
Fluorene	**<3.3**	ug/kg	8.4	3.3	1	07/22/21 20:05	07/23/21 19:54	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.6**	ug/kg	8.4	3.6	1	07/22/21 20:05	07/23/21 19:54	193-39-5	
Naphthalene	**<3.6**	ug/kg	8.4	3.6	1	07/22/21 20:05	07/23/21 19:54	91-20-3	
Phenanthrene	**<6.9**	ug/kg	8.4	6.9	1	07/22/21 20:05	07/23/21 19:54	85-01-8	
Pyrene	**<4.5**	ug/kg	8.4	4.5	1	07/22/21 20:05	07/23/21 19:54	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	69	%	40-120		1	07/22/21 20:05	07/23/21 19:54	321-60-8	
Terphenyl-d14 (S)	69	%	45-130		1	07/22/21 20:05	07/23/21 19:54	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**15.7J**	mg/kg	19.1	1.8	1	07/22/21 20:05	07/29/21 20:59		
TPH-DRO	**8.0J**	mg/kg	19.1	1.8	1	07/22/21 20:05	07/29/21 20:59		
Surrogates									
Nitrobenzene-d5 (S)	77	%	30-120		1	07/22/21 20:05	07/29/21 20:59	4165-60-0	
2-Fluorobiphenyl (S)	77	%	40-120		1	07/22/21 20:05	07/29/21 20:59	321-60-8	
Terphenyl-d14 (S)	77	%	45-120		1	07/22/21 20:05	07/29/21 20:59	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**30.2**	ug/kg	19.2	15.5	1	07/28/21 08:05	07/28/21 10:11	67-64-1	
Acrolein	**<72.5**	ug/kg	96.0	72.5	1	07/28/21 08:05	07/28/21 10:11	107-02-8	
Acrylonitrile	**<3.0**	ug/kg	96.0	3.0	1	07/28/21 08:05	07/28/21 10:11	107-13-1	
Benzene	**<0.47**	ug/kg	4.8	0.47	1	07/28/21 08:05	07/28/21 10:11	71-43-2	
Bromobenzene	**<0.90**	ug/kg	4.8	0.90	1	07/28/21 08:05	07/28/21 10:11	108-86-1	
Bromochloromethane	**<0.58**	ug/kg	4.8	0.58	1	07/28/21 08:05	07/28/21 10:11	74-97-5	
Bromodichloromethane	**<0.58**	ug/kg	4.8	0.58	1	07/28/21 08:05	07/28/21 10:11	75-27-4	
Bromoform	**<0.55**	ug/kg	4.8	0.55	1	07/28/21 08:05	07/28/21 10:11	75-25-2	
Bromomethane	**<2.8**	ug/kg	4.8	2.8	1	07/28/21 08:05	07/28/21 10:11	74-83-9	
2-Butanone (MEK)	**4.6J**	ug/kg	9.6	3.3	1	07/28/21 08:05	07/28/21 10:11	78-93-3	
n-Butylbenzene	**<0.62**	ug/kg	4.8	0.62	1	07/28/21 08:05	07/28/21 10:11	104-51-8	
sec-Butylbenzene	**<0.70**	ug/kg	4.8	0.70	1	07/28/21 08:05	07/28/21 10:11	135-98-8	
tert-Butylbenzene	**<0.85**	ug/kg	24.0	0.85	1	07/28/21 08:05	07/28/21 10:11	98-06-6	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-61/5-7' **Lab ID: 60375481041** Collected: 07/20/21 11:27 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Carbon disulfide	**<0.62**	ug/kg	4.8	0.62	1	07/28/21 08:05	07/28/21 10:11	75-15-0	
Carbon tetrachloride	**<0.82**	ug/kg	4.8	0.82	1	07/28/21 08:05	07/28/21 10:11	56-23-5	
Chlorobenzene	**<0.60**	ug/kg	4.8	0.60	1	07/28/21 08:05	07/28/21 10:11	108-90-7	
Chloroethane	**<1.4**	ug/kg	4.8	1.4	1	07/28/21 08:05	07/28/21 10:11	75-00-3	
Chloroform	**<0.47**	ug/kg	4.8	0.47	1	07/28/21 08:05	07/28/21 10:11	67-66-3	
Chloromethane	**<0.77**	ug/kg	4.8	0.77	1	07/28/21 08:05	07/28/21 10:11	74-87-3	
2-Chlorotoluene	**<0.70**	ug/kg	4.8	0.70	1	07/28/21 08:05	07/28/21 10:11	95-49-8	
4-Chlorotoluene	**<0.58**	ug/kg	4.8	0.58	1	07/28/21 08:05	07/28/21 10:11	106-43-4	
Cyclohexanone	**<12.2**	ug/kg	19.2	12.2	1	07/28/21 08:05	07/28/21 10:11	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/kg	9.6	1.8	1	07/28/21 08:05	07/28/21 10:11	96-12-8	
Dibromochloromethane	**<0.62**	ug/kg	4.8	0.62	1	07/28/21 08:05	07/28/21 10:11	124-48-1	
1,2-Dibromoethane (EDB)	**<0.51**	ug/kg	4.8	0.51	1	07/28/21 08:05	07/28/21 10:11	106-93-4	
Dibromomethane	**<0.58**	ug/kg	4.8	0.58	1	07/28/21 08:05	07/28/21 10:11	74-95-3	
1,2-Dichlorobenzene	**<0.60**	ug/kg	4.8	0.60	1	07/28/21 08:05	07/28/21 10:11	95-50-1	
1,3-Dichlorobenzene	**<0.69**	ug/kg	4.8	0.69	1	07/28/21 08:05	07/28/21 10:11	541-73-1	
1,4-Dichlorobenzene	**<0.78**	ug/kg	4.8	0.78	1	07/28/21 08:05	07/28/21 10:11	106-46-7	
1,1-Dichloroethane	**<0.37**	ug/kg	4.8	0.37	1	07/28/21 08:05	07/28/21 10:11	75-34-3	
1,2-Dichloroethane	**<0.38**	ug/kg	4.8	0.38	1	07/28/21 08:05	07/28/21 10:11	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	4.8	1.1	1	07/28/21 08:05	07/28/21 10:11	540-59-0	
1,1-Dichloroethene	**<0.61**	ug/kg	4.8	0.61	1	07/28/21 08:05	07/28/21 10:11	75-35-4	
cis-1,2-Dichloroethene	**<0.41**	ug/kg	4.8	0.41	1	07/28/21 08:05	07/28/21 10:11	156-59-2	
trans-1,2-Dichloroethene	**<0.65**	ug/kg	4.8	0.65	1	07/28/21 08:05	07/28/21 10:11	156-60-5	
1,2-Dichloropropane	**<0.94**	ug/kg	4.8	0.94	1	07/28/21 08:05	07/28/21 10:11	78-87-5	
1,3-Dichloropropane	**<0.66**	ug/kg	4.8	0.66	1	07/28/21 08:05	07/28/21 10:11	142-28-9	
2,2-Dichloropropane	**<0.46**	ug/kg	4.8	0.46	1	07/28/21 08:05	07/28/21 10:11	594-20-7	
1,1-Dichloropropene	**<0.86**	ug/kg	4.8	0.86	1	07/28/21 08:05	07/28/21 10:11	563-58-6	
cis-1,3-Dichloropropene	**<0.51**	ug/kg	4.8	0.51	1	07/28/21 08:05	07/28/21 10:11	10061-01-5	
trans-1,3-Dichloropropene	**<0.44**	ug/kg	4.8	0.44	1	07/28/21 08:05	07/28/21 10:11	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.54**	ug/kg	4.8	0.54	1	07/28/21 08:05	07/28/21 10:11	60-29-7	
Ethylbenzene	**<0.44**	ug/kg	4.8	0.44	1	07/28/21 08:05	07/28/21 10:11	100-41-4	
n-Heptane	**<4.3**	ug/kg	9.6	4.3	1	07/28/21 08:05	07/28/21 10:11	142-82-5	
Hexachloro-1,3-butadiene	**<0.82**	ug/kg	4.8	0.82	1	07/28/21 08:05	07/28/21 10:11	87-68-3	
n-Hexane	**<0.66**	ug/kg	9.6	0.66	1	07/28/21 08:05	07/28/21 10:11	110-54-3	
2-Hexanone	**<2.4**	ug/kg	19.2	2.4	1	07/28/21 08:05	07/28/21 10:11	591-78-6	
Iodomethane	**<1.4**	ug/kg	9.6	1.4	1	07/28/21 08:05	07/28/21 10:11	74-88-4	
Isopropylbenzene (Cumene)	**<0.55**	ug/kg	4.8	0.55	1	07/28/21 08:05	07/28/21 10:11	98-82-8	
p-Isopropyltoluene	**<0.66**	ug/kg	4.8	0.66	1	07/28/21 08:05	07/28/21 10:11	99-87-6	
Methyl acetate	**<1.0**	ug/kg	96.0	1.0	1	07/28/21 08:05	07/28/21 10:11	79-20-9	
Methylene Chloride	**<2.6**	ug/kg	4.8	2.6	1	07/28/21 08:05	07/28/21 10:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.9**	ug/kg	9.6	2.9	1	07/28/21 08:05	07/28/21 10:11	108-10-1	
Methyl-tert-butyl ether	**<0.46**	ug/kg	4.8	0.46	1	07/28/21 08:05	07/28/21 10:11	1634-04-4	
Naphthalene	**<0.79**	ug/kg	9.6	0.79	1	07/28/21 08:05	07/28/21 10:11	91-20-3	
n-Propylbenzene	**<0.77**	ug/kg	4.8	0.77	1	07/28/21 08:05	07/28/21 10:11	103-65-1	
Styrene	**<0.57**	ug/kg	4.8	0.57	1	07/28/21 08:05	07/28/21 10:11	100-42-5	

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-61/5-7' **Lab ID: 60375481041** Collected: 07/20/21 11:27 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
1,1,1,2-Tetrachloroethane	**<0.98**	ug/kg	4.8	0.98	1	07/28/21 08:05	07/28/21 10:11	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.96**	ug/kg	4.8	0.96	1	07/28/21 08:05	07/28/21 10:11	79-34-5	
Tetrachloroethene	**<0.40**	ug/kg	4.8	0.40	1	07/28/21 08:05	07/28/21 10:11	127-18-4	
Tetrahydrofuran	**<0.75**	ug/kg	4.8	0.75	1	07/28/21 08:05	07/28/21 10:11	109-99-9	N2
Toluene	**<0.34**	ug/kg	4.8	0.34	1	07/28/21 08:05	07/28/21 10:11	108-88-3	
1,2,3-Trichlorobenzene	**<0.76**	ug/kg	4.8	0.76	1	07/28/21 08:05	07/28/21 10:11	87-61-6	
1,2,4-Trichlorobenzene	**<0.76**	ug/kg	4.8	0.76	1	07/28/21 08:05	07/28/21 10:11	120-82-1	
1,1,1-Trichloroethane	**<0.72**	ug/kg	4.8	0.72	1	07/28/21 08:05	07/28/21 10:11	71-55-6	
1,1,2-Trichloroethane	**<0.60**	ug/kg	4.8	0.60	1	07/28/21 08:05	07/28/21 10:11	79-00-5	
Trichloroethene	**<0.70**	ug/kg	4.8	0.70	1	07/28/21 08:05	07/28/21 10:11	79-01-6	
Trichlorofluoromethane	**<0.59**	ug/kg	4.8	0.59	1	07/28/21 08:05	07/28/21 10:11	75-69-4	
1,2,3-Trichloropropane	**<2.1**	ug/kg	4.8	2.1	1	07/28/21 08:05	07/28/21 10:11	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.8**	ug/kg	4.8	4.8	1	07/28/21 08:05	07/28/21 10:11	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.9**	ug/kg	4.8	1.9	1	07/28/21 08:05	07/28/21 10:11	526-73-8	
1,2,4-Trimethylbenzene	**<0.64**	ug/kg	4.8	0.64	1	07/28/21 08:05	07/28/21 10:11	95-63-6	
1,3,5-Trimethylbenzene	**<0.60**	ug/kg	4.8	0.60	1	07/28/21 08:05	07/28/21 10:11	108-67-8	
Vinyl acetate	**<0.54**	ug/kg	96.0	0.54	1	07/28/21 08:05	07/28/21 10:11	108-05-4	
Vinyl chloride	**<0.64**	ug/kg	4.8	0.64	1	07/28/21 08:05	07/28/21 10:11	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	4.8	1.1	1	07/28/21 08:05	07/28/21 10:11	1330-20-7	
m&p-Xylene	**<0.61**	ug/kg	4.8	0.61	1	07/28/21 08:05	07/28/21 10:11	179601-23-1	
o-Xylene	**<0.36**	ug/kg	4.8	0.36	1	07/28/21 08:05	07/28/21 10:11	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	80-120		1	07/28/21 08:05	07/28/21 10:11	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-120		1	07/28/21 08:05	07/28/21 10:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1	07/28/21 08:05	07/28/21 10:11	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.052**	mg/kg	0.48	0.052	1	07/28/21 08:05	07/28/21 10:11		
Surrogates									
Toluene-d8 (S)	100	%	78-122		1	07/28/21 08:05	07/28/21 10:11	2037-26-5	
4-Bromofluorobenzene (S)	107	%	69-133		1	07/28/21 08:05	07/28/21 10:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1	07/28/21 08:05	07/28/21 10:11	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**22.0**	%	0.50	0.50	1		07/22/21 11:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-54/0-2' **Lab ID: 60375481042** Collected: 07/20/21 12:40 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.1**	ug/kg	36.6	9.1	1	07/22/21 18:03	07/23/21 14:25	12674-11-2	
PCB-1221 (Aroclor 1221)	**<8.7**	ug/kg	36.6	8.7	1	07/22/21 18:03	07/23/21 14:25	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.0**	ug/kg	36.6	4.0	1	07/22/21 18:03	07/23/21 14:25	11141-16-5	
PCB-1242 (Aroclor 1242)	**<8.8**	ug/kg	36.6	8.8	1	07/22/21 18:03	07/23/21 14:25	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.4**	ug/kg	36.6	2.4	1	07/22/21 18:03	07/23/21 14:25	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.4**	ug/kg	36.6	3.4	1	07/22/21 18:03	07/23/21 14:25	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.2**	ug/kg	36.6	7.2	1	07/22/21 18:03	07/23/21 14:25	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	96	%	35-120		1	07/22/21 18:03	07/23/21 14:25	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.58**	mg/kg	1.1	0.58	10	08/04/21 11:31	08/05/21 13:53	7440-36-0	
Arsenic	**9.9**	mg/kg	1.1	0.11	10	08/04/21 11:31	08/05/21 13:53	7440-38-2	
Copper	**20.7**	mg/kg	1.1	0.33	10	08/04/21 11:31	08/05/21 13:53	7440-50-8	
Lead	**13.8**	mg/kg	0.53	0.14	10	08/04/21 11:31	08/05/21 13:53	7439-92-1	
Zinc	**63.0**	mg/kg	5.3	0.90	10	08/04/21 11:31	08/05/21 13:53	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<2.7**	ug/kg	7.3	2.7	1	07/22/21 20:05	07/23/21 20:11	83-32-9	
Acenaphthylene	**<2.7**	ug/kg	7.3	2.7	1	07/22/21 20:05	07/23/21 20:11	208-96-8	
Anthracene	**<3.0**	ug/kg	7.3	3.0	1	07/22/21 20:05	07/23/21 20:11	120-12-7	
Benzo(a)anthracene	**12.7**	ug/kg	7.3	3.4	1	07/22/21 20:05	07/23/21 20:11	56-55-3	
Benzo(a)pyrene	**12.5**	ug/kg	7.3	2.6	1	07/22/21 20:05	07/23/21 20:11	50-32-8	
Benzo(b)fluoranthene	**21.4**	ug/kg	7.3	3.5	1	07/22/21 20:05	07/23/21 20:11	205-99-2	
Benzo(g,h,i)perylene	**9.7**	ug/kg	7.3	3.3	1	07/22/21 20:05	07/23/21 20:11	191-24-2	
Benzo(k)fluoranthene	**13.8**	ug/kg	7.3	4.1	1	07/22/21 20:05	07/23/21 20:11	207-08-9	
Chrysene	**14.9**	ug/kg	7.3	3.5	1	07/22/21 20:05	07/23/21 20:11	218-01-9	
Dibenz(a,h)anthracene	**<3.1**	ug/kg	7.3	3.1	1	07/22/21 20:05	07/23/21 20:11	53-70-3	
Fluoranthene	**31.7**	ug/kg	7.3	5.5	1	07/22/21 20:05	07/23/21 20:11	206-44-0	
Fluorene	**<2.8**	ug/kg	7.3	2.8	1	07/22/21 20:05	07/23/21 20:11	86-73-7	
Indeno(1,2,3-cd)pyrene	**8.0**	ug/kg	7.3	3.1	1	07/22/21 20:05	07/23/21 20:11	193-39-5	
Naphthalene	**<3.1**	ug/kg	7.3	3.1	1	07/22/21 20:05	07/23/21 20:11	91-20-3	
Phenanthrene	**12.8**	ug/kg	7.3	6.0	1	07/22/21 20:05	07/23/21 20:11	85-01-8	
Pyrene	**23.7**	ug/kg	7.3	3.9	1	07/22/21 20:05	07/23/21 20:11	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	62	%	40-120		1	07/22/21 20:05	07/23/21 20:11	321-60-8	
Terphenyl-d14 (S)	64	%	45-130		1	07/22/21 20:05	07/23/21 20:11	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**9.1J**	mg/kg	16.5	1.6	1	07/22/21 20:05	07/29/21 21:19		
TPH-DRO	**2.9J**	mg/kg	16.5	1.6	1	07/22/21 20:05	07/29/21 21:19		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-54/0-2' **Lab ID: 60375481042** Collected: 07/20/21 12:40 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Surrogates									
Nitrobenzene-d5 (S)	72	%	30-120		1	07/22/21 20:05	07/29/21 21:19	4165-60-0	
2-Fluorobiphenyl (S)	73	%	40-120		1	07/22/21 20:05	07/29/21 21:19	321-60-8	
Terphenyl-d14 (S)	75	%	45-120		1	07/22/21 20:05	07/29/21 21:19	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**21.5**	ug/kg	19.0	15.4	1	07/28/21 08:05	07/28/21 10:27	67-64-1	
Acrolein	**<71.7**	ug/kg	94.8	71.7	1	07/28/21 08:05	07/28/21 10:27	107-02-8	
Acrylonitrile	**<3.0**	ug/kg	94.8	3.0	1	07/28/21 08:05	07/28/21 10:27	107-13-1	
Benzene	**<0.47**	ug/kg	4.7	0.47	1	07/28/21 08:05	07/28/21 10:27	71-43-2	
Bromobenzene	**<0.89**	ug/kg	4.7	0.89	1	07/28/21 08:05	07/28/21 10:27	108-86-1	
Bromochloromethane	**<0.57**	ug/kg	4.7	0.57	1	07/28/21 08:05	07/28/21 10:27	74-97-5	
Bromodichloromethane	**<0.57**	ug/kg	4.7	0.57	1	07/28/21 08:05	07/28/21 10:27	75-27-4	
Bromoform	**<0.54**	ug/kg	4.7	0.54	1	07/28/21 08:05	07/28/21 10:27	75-25-2	
Bromomethane	**<2.8**	ug/kg	4.7	2.8	1	07/28/21 08:05	07/28/21 10:27	74-83-9	
2-Butanone (MEK)	**5.0J**	ug/kg	9.5	3.2	1	07/28/21 08:05	07/28/21 10:27	78-93-3	
n-Butylbenzene	**<0.62**	ug/kg	4.7	0.62	1	07/28/21 08:05	07/28/21 10:27	104-51-8	
sec-Butylbenzene	**<0.69**	ug/kg	4.7	0.69	1	07/28/21 08:05	07/28/21 10:27	135-98-8	
tert-Butylbenzene	**<0.84**	ug/kg	23.7	0.84	1	07/28/21 08:05	07/28/21 10:27	98-06-6	
Carbon disulfide	**<0.61**	ug/kg	4.7	0.61	1	07/28/21 08:05	07/28/21 10:27	75-15-0	
Carbon tetrachloride	**<0.81**	ug/kg	4.7	0.81	1	07/28/21 08:05	07/28/21 10:27	56-23-5	
Chlorobenzene	**<0.59**	ug/kg	4.7	0.59	1	07/28/21 08:05	07/28/21 10:27	108-90-7	
Chloroethane	**<1.4**	ug/kg	4.7	1.4	1	07/28/21 08:05	07/28/21 10:27	75-00-3	
Chloroform	**<0.47**	ug/kg	4.7	0.47	1	07/28/21 08:05	07/28/21 10:27	67-66-3	
Chloromethane	**<0.76**	ug/kg	4.7	0.76	1	07/28/21 08:05	07/28/21 10:27	74-87-3	
2-Chlorotoluene	**<0.69**	ug/kg	4.7	0.69	1	07/28/21 08:05	07/28/21 10:27	95-49-8	
4-Chlorotoluene	**<0.57**	ug/kg	4.7	0.57	1	07/28/21 08:05	07/28/21 10:27	106-43-4	
Cyclohexanone	**<12.0**	ug/kg	19.0	12.0	1	07/28/21 08:05	07/28/21 10:27	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.7**	ug/kg	9.5	1.7	1	07/28/21 08:05	07/28/21 10:27	96-12-8	
Dibromochloromethane	**<0.61**	ug/kg	4.7	0.61	1	07/28/21 08:05	07/28/21 10:27	124-48-1	
1,2-Dibromoethane (EDB)	**<0.51**	ug/kg	4.7	0.51	1	07/28/21 08:05	07/28/21 10:27	106-93-4	
Dibromomethane	**<0.57**	ug/kg	4.7	0.57	1	07/28/21 08:05	07/28/21 10:27	74-95-3	
1,2-Dichlorobenzene	**<0.59**	ug/kg	4.7	0.59	1	07/28/21 08:05	07/28/21 10:27	95-50-1	
1,3-Dichlorobenzene	**<0.68**	ug/kg	4.7	0.68	1	07/28/21 08:05	07/28/21 10:27	541-73-1	
1,4-Dichlorobenzene	**<0.77**	ug/kg	4.7	0.77	1	07/28/21 08:05	07/28/21 10:27	106-46-7	
1,1-Dichloroethane	**<0.37**	ug/kg	4.7	0.37	1	07/28/21 08:05	07/28/21 10:27	75-34-3	
1,2-Dichloroethane	**<0.38**	ug/kg	4.7	0.38	1	07/28/21 08:05	07/28/21 10:27	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	4.7	1.1	1	07/28/21 08:05	07/28/21 10:27	540-59-0	
1,1-Dichloroethene	**<0.61**	ug/kg	4.7	0.61	1	07/28/21 08:05	07/28/21 10:27	75-35-4	
cis-1,2-Dichloroethene	**<0.41**	ug/kg	4.7	0.41	1	07/28/21 08:05	07/28/21 10:27	156-59-2	
trans-1,2-Dichloroethene	**<0.64**	ug/kg	4.7	0.64	1	07/28/21 08:05	07/28/21 10:27	156-60-5	
1,2-Dichloropropane	**<0.93**	ug/kg	4.7	0.93	1	07/28/21 08:05	07/28/21 10:27	78-87-5	
1,3-Dichloropropane	**<0.66**	ug/kg	4.7	0.66	1	07/28/21 08:05	07/28/21 10:27	142-28-9	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-54/0-2' **Lab ID: 60375481042** Collected: 07/20/21 12:40 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
2,2-Dichloropropane	**<0.45**	ug/kg	4.7	0.45	1	07/28/21 08:05	07/28/21 10:27	594-20-7	
1,1-Dichloropropene	**<0.85**	ug/kg	4.7	0.85	1	07/28/21 08:05	07/28/21 10:27	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/kg	4.7	0.50	1	07/28/21 08:05	07/28/21 10:27	10061-01-5	
trans-1,3-Dichloropropene	**<0.43**	ug/kg	4.7	0.43	1	07/28/21 08:05	07/28/21 10:27	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.53**	ug/kg	4.7	0.53	1	07/28/21 08:05	07/28/21 10:27	60-29-7	
Ethylbenzene	**<0.44**	ug/kg	4.7	0.44	1	07/28/21 08:05	07/28/21 10:27	100-41-4	
n-Heptane	**<4.3**	ug/kg	9.5	4.3	1	07/28/21 08:05	07/28/21 10:27	142-82-5	
Hexachloro-1,3-butadiene	**<0.81**	ug/kg	4.7	0.81	1	07/28/21 08:05	07/28/21 10:27	87-68-3	
n-Hexane	**<0.65**	ug/kg	9.5	0.65	1	07/28/21 08:05	07/28/21 10:27	110-54-3	
2-Hexanone	**<2.4**	ug/kg	19.0	2.4	1	07/28/21 08:05	07/28/21 10:27	591-78-6	
Iodomethane	**<1.4**	ug/kg	9.5	1.4	1	07/28/21 08:05	07/28/21 10:27	74-88-4	
Isopropylbenzene (Cumene)	**<0.54**	ug/kg	4.7	0.54	1	07/28/21 08:05	07/28/21 10:27	98-82-8	
p-Isopropyltoluene	**<0.65**	ug/kg	4.7	0.65	1	07/28/21 08:05	07/28/21 10:27	99-87-6	
Methyl acetate	**<1.0**	ug/kg	94.8	1.0	1	07/28/21 08:05	07/28/21 10:27	79-20-9	
Methylene Chloride	**<2.6**	ug/kg	4.7	2.6	1	07/28/21 08:05	07/28/21 10:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.9**	ug/kg	9.5	2.9	1	07/28/21 08:05	07/28/21 10:27	108-10-1	
Methyl-tert-butyl ether	**<0.46**	ug/kg	4.7	0.46	1	07/28/21 08:05	07/28/21 10:27	1634-04-4	
Naphthalene	**<0.78**	ug/kg	9.5	0.78	1	07/28/21 08:05	07/28/21 10:27	91-20-3	
n-Propylbenzene	**<0.76**	ug/kg	4.7	0.76	1	07/28/21 08:05	07/28/21 10:27	103-65-1	
Styrene	**<0.56**	ug/kg	4.7	0.56	1	07/28/21 08:05	07/28/21 10:27	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.97**	ug/kg	4.7	0.97	1	07/28/21 08:05	07/28/21 10:27	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.95**	ug/kg	4.7	0.95	1	07/28/21 08:05	07/28/21 10:27	79-34-5	
Tetrachloroethene	**<0.39**	ug/kg	4.7	0.39	1	07/28/21 08:05	07/28/21 10:27	127-18-4	
Tetrahydrofuran	**<0.74**	ug/kg	4.7	0.74	1	07/28/21 08:05	07/28/21 10:27	109-99-9	N2
Toluene	**<0.33**	ug/kg	4.7	0.33	1	07/28/21 08:05	07/28/21 10:27	108-88-3	
1,2,3-Trichlorobenzene	**<0.76**	ug/kg	4.7	0.76	1	07/28/21 08:05	07/28/21 10:27	87-61-6	
1,2,4-Trichlorobenzene	**<0.76**	ug/kg	4.7	0.76	1	07/28/21 08:05	07/28/21 10:27	120-82-1	
1,1,1-Trichloroethane	**<0.71**	ug/kg	4.7	0.71	1	07/28/21 08:05	07/28/21 10:27	71-55-6	
1,1,2-Trichloroethane	**<0.60**	ug/kg	4.7	0.60	1	07/28/21 08:05	07/28/21 10:27	79-00-5	
Trichloroethene	**<0.69**	ug/kg	4.7	0.69	1	07/28/21 08:05	07/28/21 10:27	79-01-6	
Trichlorofluoromethane	**<0.58**	ug/kg	4.7	0.58	1	07/28/21 08:05	07/28/21 10:27	75-69-4	
1,2,3-Trichloropropane	**<2.0**	ug/kg	4.7	2.0	1	07/28/21 08:05	07/28/21 10:27	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.7**	ug/kg	4.7	4.7	1	07/28/21 08:05	07/28/21 10:27	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.9**	ug/kg	4.7	1.9	1	07/28/21 08:05	07/28/21 10:27	526-73-8	
1,2,4-Trimethylbenzene	**<0.64**	ug/kg	4.7	0.64	1	07/28/21 08:05	07/28/21 10:27	95-63-6	
1,3,5-Trimethylbenzene	**<0.59**	ug/kg	4.7	0.59	1	07/28/21 08:05	07/28/21 10:27	108-67-8	
Vinyl acetate	**<0.53**	ug/kg	94.8	0.53	1	07/28/21 08:05	07/28/21 10:27	108-05-4	
Vinyl chloride	**<0.63**	ug/kg	4.7	0.63	1	07/28/21 08:05	07/28/21 10:27	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	4.7	1.1	1	07/28/21 08:05	07/28/21 10:27	1330-20-7	
m&p-Xylene	**<0.60**	ug/kg	4.7	0.60	1	07/28/21 08:05	07/28/21 10:27	179601-23-1	
o-Xylene	**<0.35**	ug/kg	4.7	0.35	1	07/28/21 08:05	07/28/21 10:27	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	80-120		1	07/28/21 08:05	07/28/21 10:27	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120		1	07/28/21 08:05	07/28/21 10:27	460-00-4	

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-54/0-2' **Lab ID: 60375481042** Collected: 07/20/21 12:40 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Surrogates									
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1	07/28/21 08:05	07/28/21 10:27	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.052**	mg/kg	0.47	0.052	1	07/28/21 08:05	07/28/21 10:27		
Surrogates									
Toluene-d8 (S)	98	%	78-122		1	07/28/21 08:05	07/28/21 10:27	2037-26-5	
4-Bromofluorobenzene (S)	103	%	69-133		1	07/28/21 08:05	07/28/21 10:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1	07/28/21 08:05	07/28/21 10:27	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**11.8**	%	0.50	0.50	1		07/23/21 14:27		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-54/2-4' **Lab ID: 60375481043** Collected: 07/20/21 12:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.7**	ug/kg	38.9	9.7	1	07/22/21 18:03	07/23/21 14:43	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.3**	ug/kg	38.9	9.3	1	07/22/21 18:03	07/23/21 14:43	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.9	4.2	1	07/22/21 18:03	07/23/21 14:43	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.4**	ug/kg	38.9	9.4	1	07/22/21 18:03	07/23/21 14:43	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	38.9	2.6	1	07/22/21 18:03	07/23/21 14:43	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.9	3.6	1	07/22/21 18:03	07/23/21 14:43	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.7**	ug/kg	38.9	7.7	1	07/22/21 18:03	07/23/21 14:43	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	99	%	35-120		1	07/22/21 18:03	07/23/21 14:43	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.47**	mg/kg	0.87	0.47	10	08/04/21 11:31	08/05/21 13:54	7440-36-0	
Arsenic	**6.7**	mg/kg	0.87	0.092	10	08/04/21 11:31	08/05/21 13:54	7440-38-2	
Copper	**16.1**	mg/kg	0.87	0.27	10	08/04/21 11:31	08/05/21 13:54	7440-50-8	
Lead	**8.9**	mg/kg	0.43	0.11	10	08/04/21 11:31	08/05/21 13:54	7439-92-1	
Zinc	**50.0**	mg/kg	4.3	0.73	10	08/04/21 11:31	08/05/21 13:54	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<2.9**	ug/kg	7.9	2.9	1	07/22/21 20:05	07/23/21 20:28	83-32-9	
Acenaphthylene	**<2.9**	ug/kg	7.9	2.9	1	07/22/21 20:05	07/23/21 20:28	208-96-8	
Anthracene	**<3.3**	ug/kg	7.9	3.3	1	07/22/21 20:05	07/23/21 20:28	120-12-7	
Benzo(a)anthracene	**<3.7**	ug/kg	7.9	3.7	1	07/22/21 20:05	07/23/21 20:28	56-55-3	
Benzo(a)pyrene	**<2.9**	ug/kg	7.9	2.9	1	07/22/21 20:05	07/23/21 20:28	50-32-8	
Benzo(b)fluoranthene	**<3.8**	ug/kg	7.9	3.8	1	07/22/21 20:05	07/23/21 20:28	205-99-2	
Benzo(g,h,i)perylene	**<3.5**	ug/kg	7.9	3.5	1	07/22/21 20:05	07/23/21 20:28	191-24-2	
Benzo(k)fluoranthene	**<4.4**	ug/kg	7.9	4.4	1	07/22/21 20:05	07/23/21 20:28	207-08-9	
Chrysene	**<3.8**	ug/kg	7.9	3.8	1	07/22/21 20:05	07/23/21 20:28	218-01-9	
Dibenz(a,h)anthracene	**<3.4**	ug/kg	7.9	3.4	1	07/22/21 20:05	07/23/21 20:28	53-70-3	
Fluoranthene	**<5.9**	ug/kg	7.9	5.9	1	07/22/21 20:05	07/23/21 20:28	206-44-0	
Fluorene	**<3.1**	ug/kg	7.9	3.1	1	07/22/21 20:05	07/23/21 20:28	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.4**	ug/kg	7.9	3.4	1	07/22/21 20:05	07/23/21 20:28	193-39-5	
Naphthalene	**<3.4**	ug/kg	7.9	3.4	1	07/22/21 20:05	07/23/21 20:28	91-20-3	
Phenanthrene	**<6.5**	ug/kg	7.9	6.5	1	07/22/21 20:05	07/23/21 20:28	85-01-8	
Pyrene	**<4.3**	ug/kg	7.9	4.3	1	07/22/21 20:05	07/23/21 20:28	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	67	%	40-120		1	07/22/21 20:05	07/23/21 20:28	321-60-8	
Terphenyl-d14 (S)	69	%	45-130		1	07/22/21 20:05	07/23/21 20:28	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
TPH-ORO	**10.4J**	mg/kg	17.9	1.7	1	07/22/21 20:05	07/29/21 21:39		
TPH-DRO	**3.6J**	mg/kg	17.9	1.7	1	07/22/21 20:05	07/29/21 21:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-54/2-4' **Lab ID: 60375481043** Collected: 07/20/21 12:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Surrogates									
Nitrobenzene-d5 (S)	70	%	30-120		1	07/22/21 20:05	07/29/21 21:39	4165-60-0	
2-Fluorobiphenyl (S)	71	%	40-120		1	07/22/21 20:05	07/29/21 21:39	321-60-8	
Terphenyl-d14 (S)	73	%	45-120		1	07/22/21 20:05	07/29/21 21:39	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Acetone	**22.5J**	ug/kg	23.2	18.8	1	07/28/21 08:05	07/28/21 10:43	67-64-1	
Acrolein	**<87.8**	ug/kg	116	87.8	1	07/28/21 08:05	07/28/21 10:43	107-02-8	
Acrylonitrile	**<3.7**	ug/kg	116	3.7	1	07/28/21 08:05	07/28/21 10:43	107-13-1	
Benzene	**<0.57**	ug/kg	5.8	0.57	1	07/28/21 08:05	07/28/21 10:43	71-43-2	
Bromobenzene	**<1.1**	ug/kg	5.8	1.1	1	07/28/21 08:05	07/28/21 10:43	108-86-1	
Bromochloromethane	**<0.70**	ug/kg	5.8	0.70	1	07/28/21 08:05	07/28/21 10:43	74-97-5	
Bromodichloromethane	**<0.70**	ug/kg	5.8	0.70	1	07/28/21 08:05	07/28/21 10:43	75-27-4	
Bromoform	**<0.67**	ug/kg	5.8	0.67	1	07/28/21 08:05	07/28/21 10:43	75-25-2	
Bromomethane	**<3.4**	ug/kg	5.8	3.4	1	07/28/21 08:05	07/28/21 10:43	74-83-9	
2-Butanone (MEK)	**4.7J**	ug/kg	11.6	4.0	1	07/28/21 08:05	07/28/21 10:43	78-93-3	
n-Butylbenzene	**<0.75**	ug/kg	5.8	0.75	1	07/28/21 08:05	07/28/21 10:43	104-51-8	
sec-Butylbenzene	**<0.85**	ug/kg	5.8	0.85	1	07/28/21 08:05	07/28/21 10:43	135-98-8	
tert-Butylbenzene	**<1.0**	ug/kg	29.0	1.0	1	07/28/21 08:05	07/28/21 10:43	98-06-6	
Carbon disulfide	**<0.75**	ug/kg	5.8	0.75	1	07/28/21 08:05	07/28/21 10:43	75-15-0	
Carbon tetrachloride	**<0.99**	ug/kg	5.8	0.99	1	07/28/21 08:05	07/28/21 10:43	56-23-5	
Chlorobenzene	**<0.73**	ug/kg	5.8	0.73	1	07/28/21 08:05	07/28/21 10:43	108-90-7	
Chloroethane	**<1.7**	ug/kg	5.8	1.7	1	07/28/21 08:05	07/28/21 10:43	75-00-3	
Chloroform	**<0.57**	ug/kg	5.8	0.57	1	07/28/21 08:05	07/28/21 10:43	67-66-3	
Chloromethane	**<0.93**	ug/kg	5.8	0.93	1	07/28/21 08:05	07/28/21 10:43	74-87-3	
2-Chlorotoluene	**<0.85**	ug/kg	5.8	0.85	1	07/28/21 08:05	07/28/21 10:43	95-49-8	
4-Chlorotoluene	**<0.70**	ug/kg	5.8	0.70	1	07/28/21 08:05	07/28/21 10:43	106-43-4	
Cyclohexanone	**<14.7**	ug/kg	23.2	14.7	1	07/28/21 08:05	07/28/21 10:43	108-94-1	
1,2-Dibromo-3-chloropropane	**<2.1**	ug/kg	11.6	2.1	1	07/28/21 08:05	07/28/21 10:43	96-12-8	
Dibromochloromethane	**<0.75**	ug/kg	5.8	0.75	1	07/28/21 08:05	07/28/21 10:43	124-48-1	
1,2-Dibromoethane (EDB)	**<0.62**	ug/kg	5.8	0.62	1	07/28/21 08:05	07/28/21 10:43	106-93-4	
Dibromomethane	**<0.70**	ug/kg	5.8	0.70	1	07/28/21 08:05	07/28/21 10:43	74-95-3	
1,2-Dichlorobenzene	**<0.73**	ug/kg	5.8	0.73	1	07/28/21 08:05	07/28/21 10:43	95-50-1	
1,3-Dichlorobenzene	**<0.83**	ug/kg	5.8	0.83	1	07/28/21 08:05	07/28/21 10:43	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/kg	5.8	0.94	1	07/28/21 08:05	07/28/21 10:43	106-46-7	
1,1-Dichloroethane	**<0.45**	ug/kg	5.8	0.45	1	07/28/21 08:05	07/28/21 10:43	75-34-3	
1,2-Dichloroethane	**<0.46**	ug/kg	5.8	0.46	1	07/28/21 08:05	07/28/21 10:43	107-06-2	
1,2-Dichloroethene (Total)	**<1.3**	ug/kg	5.8	1.3	1	07/28/21 08:05	07/28/21 10:43	540-59-0	
1,1-Dichloroethene	**<0.74**	ug/kg	5.8	0.74	1	07/28/21 08:05	07/28/21 10:43	75-35-4	
cis-1,2-Dichloroethene	**<0.50**	ug/kg	5.8	0.50	1	07/28/21 08:05	07/28/21 10:43	156-59-2	
trans-1,2-Dichloroethene	**<0.79**	ug/kg	5.8	0.79	1	07/28/21 08:05	07/28/21 10:43	156-60-5	
1,2-Dichloropropane	**<1.1**	ug/kg	5.8	1.1	1	07/28/21 08:05	07/28/21 10:43	78-87-5	
1,3-Dichloropropane	**<0.80**	ug/kg	5.8	0.80	1	07/28/21 08:05	07/28/21 10:43	142-28-9	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-54/2-4' **Lab ID: 60375481043** Collected: 07/20/21 12:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
2,2-Dichloropropane	**<0.55**	ug/kg	5.8	0.55	1	07/28/21 08:05	07/28/21 10:43	594-20-7	
1,1-Dichloropropene	**<1.0**	ug/kg	5.8	1.0	1	07/28/21 08:05	07/28/21 10:43	563-58-6	
cis-1,3-Dichloropropene	**<0.62**	ug/kg	5.8	0.62	1	07/28/21 08:05	07/28/21 10:43	10061-01-5	
trans-1,3-Dichloropropene	**<0.53**	ug/kg	5.8	0.53	1	07/28/21 08:05	07/28/21 10:43	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.65**	ug/kg	5.8	0.65	1	07/28/21 08:05	07/28/21 10:43	60-29-7	
Ethylbenzene	**<0.54**	ug/kg	5.8	0.54	1	07/28/21 08:05	07/28/21 10:43	100-41-4	
n-Heptane	**<5.3**	ug/kg	11.6	5.3	1	07/28/21 08:05	07/28/21 10:43	142-82-5	
Hexachloro-1,3-butadiene	**<0.99**	ug/kg	5.8	0.99	1	07/28/21 08:05	07/28/21 10:43	87-68-3	
n-Hexane	**<0.80**	ug/kg	11.6	0.80	1	07/28/21 08:05	07/28/21 10:43	110-54-3	
2-Hexanone	**<2.9**	ug/kg	23.2	2.9	1	07/28/21 08:05	07/28/21 10:43	591-78-6	
Iodomethane	**<1.8**	ug/kg	11.6	1.8	1	07/28/21 08:05	07/28/21 10:43	74-88-4	
Isopropylbenzene (Cumene)	**<0.66**	ug/kg	5.8	0.66	1	07/28/21 08:05	07/28/21 10:43	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/kg	5.8	0.80	1	07/28/21 08:05	07/28/21 10:43	99-87-6	
Methyl acetate	**<1.3**	ug/kg	116	1.3	1	07/28/21 08:05	07/28/21 10:43	79-20-9	
Methylene Chloride	**<3.2**	ug/kg	5.8	3.2	1	07/28/21 08:05	07/28/21 10:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.5**	ug/kg	11.6	3.5	1	07/28/21 08:05	07/28/21 10:43	108-10-1	
Methyl-tert-butyl ether	**<0.56**	ug/kg	5.8	0.56	1	07/28/21 08:05	07/28/21 10:43	1634-04-4	
Naphthalene	**<0.95**	ug/kg	11.6	0.95	1	07/28/21 08:05	07/28/21 10:43	91-20-3	
n-Propylbenzene	**<0.93**	ug/kg	5.8	0.93	1	07/28/21 08:05	07/28/21 10:43	103-65-1	
Styrene	**<0.68**	ug/kg	5.8	0.68	1	07/28/21 08:05	07/28/21 10:43	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.2**	ug/kg	5.8	1.2	1	07/28/21 08:05	07/28/21 10:43	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.2**	ug/kg	5.8	1.2	1	07/28/21 08:05	07/28/21 10:43	79-34-5	
Tetrachloroethene	**<0.48**	ug/kg	5.8	0.48	1	07/28/21 08:05	07/28/21 10:43	127-18-4	
Tetrahydrofuran	**<0.91**	ug/kg	5.8	0.91	1	07/28/21 08:05	07/28/21 10:43	109-99-9	N2
Toluene	**<0.41**	ug/kg	5.8	0.41	1	07/28/21 08:05	07/28/21 10:43	108-88-3	
1,2,3-Trichlorobenzene	**<0.93**	ug/kg	5.8	0.93	1	07/28/21 08:05	07/28/21 10:43	87-61-6	
1,2,4-Trichlorobenzene	**<0.93**	ug/kg	5.8	0.93	1	07/28/21 08:05	07/28/21 10:43	120-82-1	
1,1,1-Trichloroethane	**<0.87**	ug/kg	5.8	0.87	1	07/28/21 08:05	07/28/21 10:43	71-55-6	
1,1,2-Trichloroethane	**<0.73**	ug/kg	5.8	0.73	1	07/28/21 08:05	07/28/21 10:43	79-00-5	
Trichloroethene	**<0.84**	ug/kg	5.8	0.84	1	07/28/21 08:05	07/28/21 10:43	79-01-6	
Trichlorofluoromethane	**<0.71**	ug/kg	5.8	0.71	1	07/28/21 08:05	07/28/21 10:43	75-69-4	
1,2,3-Trichloropropane	**<2.5**	ug/kg	5.8	2.5	1	07/28/21 08:05	07/28/21 10:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<5.8**	ug/kg	5.8	5.8	1	07/28/21 08:05	07/28/21 10:43	76-13-1	N2
1,2,3-Trimethylbenzene	**<2.3**	ug/kg	5.8	2.3	1	07/28/21 08:05	07/28/21 10:43	526-73-8	
1,2,4-Trimethylbenzene	**<0.78**	ug/kg	5.8	0.78	1	07/28/21 08:05	07/28/21 10:43	95-63-6	
1,3,5-Trimethylbenzene	**<0.73**	ug/kg	5.8	0.73	1	07/28/21 08:05	07/28/21 10:43	108-67-8	
Vinyl acetate	**<0.65**	ug/kg	116	0.65	1	07/28/21 08:05	07/28/21 10:43	108-05-4	
Vinyl chloride	**<0.77**	ug/kg	5.8	0.77	1	07/28/21 08:05	07/28/21 10:43	75-01-4	
Xylene (Total)	**<1.3**	ug/kg	5.8	1.3	1	07/28/21 08:05	07/28/21 10:43	1330-20-7	
m&p-Xylene	**<0.73**	ug/kg	5.8	0.73	1	07/28/21 08:05	07/28/21 10:43	179601-23-1	
o-Xylene	**<0.43**	ug/kg	5.8	0.43	1	07/28/21 08:05	07/28/21 10:43	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1	07/28/21 08:05	07/28/21 10:43	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-120		1	07/28/21 08:05	07/28/21 10:43	460-00-4	

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: GB-54/2-4' **Lab ID: 60375481043** Collected: 07/20/21 12:50 Received: 07/21/21 04:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City								
Surrogates									
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1	07/28/21 08:05	07/28/21 10:43	2199-69-1	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City								
TPH-GRO	**<0.063**	mg/kg	0.58	0.063	1	07/28/21 08:05	07/28/21 10:43		
Surrogates									
Toluene-d8 (S)	99	%	78-122		1	07/28/21 08:05	07/28/21 10:43	2037-26-5	
4-Bromofluorobenzene (S)	106	%	69-133		1	07/28/21 08:05	07/28/21 10:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1	07/28/21 08:05	07/28/21 10:43	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**16.7**	%	0.50	0.50	1		07/23/21 14:27		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: TB-02 **Lab ID: 60375481044** Collected: 07/20/21 08:00 Received: 07/21/21 04:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	**<2.5**	ug/L	10.0	2.5	1		07/28/21 14:03	67-64-1	
Acetonitrile	**<1.1**	ug/L	10.0	1.1	1		07/28/21 14:03	75-05-8	
Acrolein	**<4.0**	ug/L	50.0	4.0	1		07/28/21 14:03	107-02-8	
Acrylonitrile	**<1.4**	ug/L	20.0	1.4	1		07/28/21 14:03	107-13-1	
Benzene	**<0.14**	ug/L	1.0	0.14	1		07/28/21 14:03	71-43-2	
Bromobenzene	**<0.088**	ug/L	1.0	0.088	1		07/28/21 14:03	108-86-1	
Bromochloromethane	**<0.20**	ug/L	1.0	0.20	1		07/28/21 14:03	74-97-5	
Bromodichloromethane	**<0.16**	ug/L	1.0	0.16	1		07/28/21 14:03	75-27-4	
Bromoform	**<0.68**	ug/L	1.0	0.68	1		07/28/21 14:03	75-25-2	
Bromomethane	**<0.46**	ug/L	5.0	0.46	1		07/28/21 14:03	74-83-9	
2-Butanone (MEK)	**<0.98**	ug/L	10.0	0.98	1		07/28/21 14:03	78-93-3	
n-Butylbenzene	**<0.15**	ug/L	1.0	0.15	1		07/28/21 14:03	104-51-8	
sec-Butylbenzene	**<0.11**	ug/L	1.0	0.11	1		07/28/21 14:03	135-98-8	
tert-Butylbenzene	**<0.12**	ug/L	1.0	0.12	1		07/28/21 14:03	98-06-6	
Carbon disulfide	**<0.98**	ug/L	5.0	0.98	1		07/28/21 14:03	75-15-0	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		07/28/21 14:03	56-23-5	
Chlorobenzene	**<0.089**	ug/L	1.0	0.089	1		07/28/21 14:03	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		07/28/21 14:03	75-00-3	
2-Chloroethylvinyl ether	**<1.8**	ug/L	10.0	1.8	1		07/28/21 14:03	110-75-8	c2
Chloroform	**<0.22**	ug/L	1.0	0.22	1		07/28/21 14:03	67-66-3	
Chloromethane	**<0.28**	ug/L	1.0	0.28	1		07/28/21 14:03	74-87-3	
2-Chlorotoluene	**<0.11**	ug/L	1.0	0.11	1		07/28/21 14:03	95-49-8	
4-Chlorotoluene	**<0.15**	ug/L	1.0	0.15	1		07/28/21 14:03	106-43-4	
Cyclohexane	**<0.24**	ug/L	1.0	0.24	1		07/28/21 14:03	110-82-7	
Cyclohexanone	**<3.3**	ug/L	20.0	3.3	1		07/28/21 14:03	108-94-1	
1,2-Dibromo-3-chloropropane	**<0.78**	ug/L	2.5	0.78	1		07/28/21 14:03	96-12-8	
Dibromochloromethane	**<0.30**	ug/L	1.0	0.30	1		07/28/21 14:03	124-48-1	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		07/28/21 14:03	106-93-4	
Dibromomethane	**<0.11**	ug/L	1.0	0.11	1		07/28/21 14:03	74-95-3	
1,2-Dichlorobenzene	**<0.12**	ug/L	1.0	0.12	1		07/28/21 14:03	95-50-1	
1,3-Dichlorobenzene	**<0.13**	ug/L	1.0	0.13	1		07/28/21 14:03	541-73-1	
1,4-Dichlorobenzene	**<0.13**	ug/L	1.0	0.13	1		07/28/21 14:03	106-46-7	
Dichlorodifluoromethane	**<0.20**	ug/L	1.0	0.20	1		07/28/21 14:03	75-71-8	
1,1-Dichloroethane	**<0.12**	ug/L	1.0	0.12	1		07/28/21 14:03	75-34-3	
1,2-Dichloroethane	**<0.21**	ug/L	1.0	0.21	1		07/28/21 14:03	107-06-2	
1,2-Dichloroethene (Total)	**<0.22**	ug/L	1.0	0.22	1		07/28/21 14:03	540-59-0	
1,1-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		07/28/21 14:03	75-35-4	
cis-1,2-Dichloroethene	**<0.13**	ug/L	1.0	0.13	1		07/28/21 14:03	156-59-2	
trans-1,2-Dichloroethene	**<0.10**	ug/L	1.0	0.10	1		07/28/21 14:03	156-60-5	
1,2-Dichloropropane	**<0.14**	ug/L	1.0	0.14	1		07/28/21 14:03	78-87-5	
1,3-Dichloropropane	**<0.10**	ug/L	1.0	0.10	1		07/28/21 14:03	142-28-9	
2,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		07/28/21 14:03	594-20-7	
1,1-Dichloropropene	**<0.14**	ug/L	1.0	0.14	1		07/28/21 14:03	563-58-6	
cis-1,3-Dichloropropene	**<0.078**	ug/L	1.0	0.078	1		07/28/21 14:03	10061-01-5	
trans-1,3-Dichloropropene	**<0.18**	ug/L	1.0	0.18	1		07/28/21 14:03	10061-02-6	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Sample: TB-02 **Lab ID: 60375481044** Collected: 07/20/21 08:00 Received: 07/21/21 04:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Diethyl ether (Ethyl ether)	**<0.23**	ug/L	1.0	0.23	1		07/28/21 14:03	60-29-7	
1,4-Dioxane (p-Dioxane)	**<4.4**	ug/L	100	4.4	1		07/28/21 14:03	123-91-1	
Ethylbenzene	**<0.12**	ug/L	1.0	0.12	1		07/28/21 14:03	100-41-4	
n-Heptane	**<2.6**	ug/L	10.0	2.6	1		07/28/21 14:03	142-82-5	
Hexachloro-1,3-butadiene	**<0.42**	ug/L	1.0	0.42	1		07/28/21 14:03	87-68-3	
n-Hexane	**<0.22**	ug/L	10.0	0.22	1		07/28/21 14:03	110-54-3	
2-Hexanone	**<1.1**	ug/L	10.0	1.1	1		07/28/21 14:03	591-78-6	
Isopropylbenzene (Cumene)	**<0.097**	ug/L	1.0	0.097	1		07/28/21 14:03	98-82-8	
p-Isopropyltoluene	**<0.13**	ug/L	1.0	0.13	1		07/28/21 14:03	99-87-6	
Methyl acetate	**<0.87**	ug/L	1.0	0.87	1		07/28/21 14:03	79-20-9	
Methylcyclohexane	**<0.12**	ug/L	1.0	0.12	1		07/28/21 14:03	108-87-2	
Methylene Chloride	**<0.39**	ug/L	1.0	0.39	1		07/28/21 14:03	75-09-2	
1-Methylnaphthalene	**<2.6**	ug/L	10.0	2.6	1		07/28/21 14:03	90-12-0	
2-Methylnaphthalene	**<2.7**	ug/L	10.0	2.7	1		07/28/21 14:03	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<0.74**	ug/L	10.0	0.74	1		07/28/21 14:03	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/L	1.0	0.13	1		07/28/21 14:03	1634-04-4	
Naphthalene	**<0.82**	ug/L	10.0	0.82	1		07/28/21 14:03	91-20-3	
n-Propylbenzene	**<0.12**	ug/L	1.0	0.12	1		07/28/21 14:03	103-65-1	
Styrene	**<0.12**	ug/L	1.0	0.12	1		07/28/21 14:03	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.084**	ug/L	1.0	0.084	1		07/28/21 14:03	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		07/28/21 14:03	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.0	0.33	1		07/28/21 14:03	127-18-4	
Tetrahydrofuran	**<2.8**	ug/L	5.0	2.8	1		07/28/21 14:03	109-99-9	
Toluene	**<0.25**	ug/L	1.0	0.25	1		07/28/21 14:03	108-88-3	
1,2,3-Trichlorobenzene	**<0.93**	ug/L	1.0	0.93	1		07/28/21 14:03	87-61-6	
1,2,4-Trichlorobenzene	**<0.73**	ug/L	1.0	0.73	1		07/28/21 14:03	120-82-1	
1,1,1-Trichloroethane	**<0.11**	ug/L	1.0	0.11	1		07/28/21 14:03	71-55-6	
1,1,2-Trichloroethane	**<0.14**	ug/L	1.0	0.14	1		07/28/21 14:03	79-00-5	
Trichloroethene	**<0.21**	ug/L	1.0	0.21	1		07/28/21 14:03	79-01-6	
Trichlorofluoromethane	**<0.16**	ug/L	1.0	0.16	1		07/28/21 14:03	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	2.5	0.41	1		07/28/21 14:03	96-18-4	
1,2,3-Trimethylbenzene	**<0.93**	ug/L	1.0	0.93	1		07/28/21 14:03	526-73-8	
1,2,4-Trimethylbenzene	**<0.32**	ug/L	1.0	0.32	1		07/28/21 14:03	95-63-6	
1,3,5-Trimethylbenzene	**<0.090**	ug/L	1.0	0.090	1		07/28/21 14:03	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		07/28/21 14:03	75-01-4	
Xylene (Total)	**<0.28**	ug/L	3.0	0.28	1		07/28/21 14:03	1330-20-7	
m&p-Xylene	**<0.22**	ug/L	2.0	0.22	1		07/28/21 14:03	179601-23-1	
o-Xylene	**<0.082**	ug/L	1.0	0.082	1		07/28/21 14:03	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		07/28/21 14:03	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		07/28/21 14:03	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		07/28/21 14:03	2199-69-1	
Preservation pH	**1.0**		0.10		1		07/28/21 14:03		

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 1710286
QC Batch Method: 8330
Analysis Method: EPA 8330
Analysis Description: SVOA (HPLC) 8330B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 60375481020, 60375481021, 60375481022, 60375481027, 60375481028

METHOD BLANK: R3685137-1 Matrix: Solid
Associated Lab Samples: 60375481020, 60375481021, 60375481022, 60375481027, 60375481028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetryl	mg/kg	<0.0876	0.500	0.0876	07/28/21 13:57	
2,4-Dinitrotoluene	mg/kg	<0.0784	0.500	0.0784	07/28/21 13:57	
4-Nitrotoluene	mg/kg	<0.138	0.500	0.138	07/28/21 13:57	
RDX (Hexahydro-1,3,5-Trinitro-	mg/kg	<0.109	0.500	0.109	07/28/21 13:57	
Nitrobenzene	mg/kg	<0.0862	0.500	0.0862	07/28/21 13:57	
2,6-Dinitrotoluene	mg/kg	<0.0864	0.500	0.0864	07/28/21 13:57	
2-Nitrotoluene	mg/kg	<0.0915	0.500	0.0915	07/28/21 13:57	
3-Nitrotoluene	mg/kg	<0.113	0.500	0.113	07/28/21 13:57	
1,3,5-Trinitrobenzene	mg/kg	<0.0392	0.500	0.0392	07/28/21 13:57	
1,3-Dinitrobenzene	mg/kg	<0.0515	0.500	0.0515	07/28/21 13:57	
2,4,6-Trinitrotoluene	mg/kg	<0.0631	0.500	0.0631	07/28/21 13:57	
4-Amino-2,6-dinitrotoluene	mg/kg	<0.0573	0.500	0.0573	07/28/21 13:57	
2-Amino-4,6-dinitrotoluene	mg/kg	<0.0638	0.500	0.0638	07/28/21 13:57	
HMX (Octahydro-1,3,5,7-Tetrani	mg/kg	<0.0779	0.500	0.0779	07/28/21 13:57	
PETN	mg/kg	<0.212	0.500	0.212	07/28/21 13:57	
Nitroglycerin	mg/kg	<0.154	2.00	0.154	07/28/21 13:57	
1,3-Dimethyl-2-nitrobenzene	%	103	80.0-128		07/28/21 13:57	

LABORATORY CONTROL SAMPLE: R3685137-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetryl	mg/kg	8.00	7.60	95.0	80.0-122	
2,4-Dinitrotoluene	mg/kg	8.00	7.55	94.4	80.0-120	
4-Nitrotoluene	mg/kg	8.00	7.39	92.4	80.0-121	
RDX (Hexahydro-1,3,5-Trinitro-	mg/kg	8.00	7.47	93.4	80.0-120	
Nitrobenzene	mg/kg	8.00	7.54	94.3	80.0-120	
2,6-Dinitrotoluene	mg/kg	8.00	7.45	93.1	80.0-120	
2-Nitrotoluene	mg/kg	8.00	7.49	93.6	80.0-120	
3-Nitrotoluene	mg/kg	8.00	7.56	94.5	80.0-120	
1,3,5-Trinitrobenzene	mg/kg	8.00	7.49	93.6	80.0-124	
1,3-Dinitrobenzene	mg/kg	8.00	7.49	93.6	80.0-122	
2,4,6-Trinitrotoluene	mg/kg	8.00	7.31	91.4	80.0-120	
4-Amino-2,6-dinitrotoluene	mg/kg	8.00	7.43	92.9	80.0-120	
2-Amino-4,6-dinitrotoluene	mg/kg	8.00	7.25	90.6	80.0-123	
HMX (Octahydro-1,3,5,7-Tetrani	mg/kg	8.00	7.53	94.1	80.0-120	
PETN	mg/kg	8.00	7.70	96.3	80.0-137	
Nitroglycerin	mg/kg	8.00	7.32	91.5	78.0-120	
1,3-Dimethyl-2-nitrobenzene	%			95.3	80.0-128	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3685137-3 R3685137-4

Parameter	Units	60375481027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Tetryl	mg/kg	ND	9.71	9.71	10.2	10.5	105	108	46.0-158	2.60	20	
2,4-Dinitrotoluene	mg/kg	ND	9.71	9.71	9.40	9.58	96.7	98.6	78.0-138	1.93	20	
4-Nitrotoluene	mg/kg	ND	9.71	9.71	9.32	9.47	96.0	97.5	80.0-129	1.56	20	
RDX (Hexahydro-1,3,5-Trinitro-	mg/kg	ND	9.71	9.71	8.57	8.87	88.2	91.3	57.0-126	3.50	20	
Nitrobenzene	mg/kg	ND	9.71	9.71	9.48	9.71	97.6	100	80.0-126	2.42	20	
2,6-Dinitrotoluene	mg/kg	ND	9.71	9.71	9.29	9.59	95.6	98.7	80.0-125	3.23	20	
2-Nitrotoluene	mg/kg	ND	9.71	9.71	9.30	9.59	95.7	98.7	80.0-125	3.10	20	
3-Nitrotoluene	mg/kg	ND	9.71	9.71	9.46	9.73	97.4	100	80.0-120	2.80	20	
1,3,5-Trinitrobenzene	mg/kg	ND	9.71	9.71	9.53	9.81	98.1	101	80.0-133	2.90	20	
1,3-Dinitrobenzene	mg/kg	ND	9.71	9.71	9.29	9.60	95.6	98.9	80.0-138	3.36	20	
2,4,6-Trinitrotoluene	mg/kg	ND	9.71	9.71	9.31	9.51	95.9	97.9	80.0-127	2.08	20	
4-Amino-2,6-dinitrotoluene	mg/kg	ND	9.71	9.71	9.23	9.48	95.0	97.6	80.0-127	2.74	20	
2-Amino-4,6-dinitrotoluene	mg/kg	ND	9.71	9.71	9.10	9.37	93.7	96.5	80.0-135	2.91	20	
HMX (Octahydro-1,3,5,7-Tetrani	mg/kg	ND	9.71	9.71	9.49	9.73	97.7	100	79.0-125	2.41	20	
PETN	mg/kg	ND	9.71	9.71	10.3	9.82	106	101	77.0-145	4.85	20	
Nitroglycerin	mg/kg	ND	9.71	9.71	9.26	9.40	95.4	96.7	66.0-137	1.44	20	
1,3-Dimethyl-2-nitrobenzene	%						98.1	101	80.0-128			

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 736024
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481001, 60375481002, 60375481003, 60375481004, 60375481005, 60375481006, 60375481007, 60375481008, 60375481009, 60375481010, 60375481011, 60375481012

METHOD BLANK: 2951947 Matrix: Solid
Associated Lab Samples: 60375481001, 60375481002, 60375481003, 60375481004, 60375481005, 60375481006, 60375481007, 60375481008, 60375481009, 60375481010, 60375481011, 60375481012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	0.54	08/05/21 10:00	
Arsenic	mg/kg	<0.11	1.0	0.11	08/05/21 10:00	
Copper	mg/kg	<0.31	1.0	0.31	08/05/21 10:00	
Lead	mg/kg	<0.13	0.50	0.13	08/05/21 10:00	
Zinc	mg/kg	<0.84	5.0	0.84	08/05/21 10:00	

LABORATORY CONTROL SAMPLE: 2951948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	96.3	96	80-120	
Arsenic	mg/kg	100	95.4	95	80-120	
Copper	mg/kg	100	102	102	80-120	
Lead	mg/kg	100	96.2	96	80-120	
Zinc	mg/kg	100	94.8	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2951949 2951950

Parameter	Units	60375481001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.46	122	102	58.3	47.3	48	46	75-125	21	20	M1,R1
Arsenic	mg/kg	11.6	122	102	127	107	95	93	75-125	17	20	
Copper	mg/kg	29.9	122	102	145	126	95	95	75-125	14	20	
Lead	mg/kg	47.7	122	102	175	151	105	102	75-125	14	20	
Zinc	mg/kg	78.2	122	102	178	162	82	82	75-125	10	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 736067
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481013, 60375481014, 60375481015, 60375481016, 60375481017, 60375481018, 60375481019, 60375481020, 60375481021, 60375481022, 60375481023, 60375481024, 60375481025, 60375481026, 60375481027, 60375481028, 60375481029, 60375481030

METHOD BLANK: 2952103 Matrix: Solid
Associated Lab Samples: 60375481013, 60375481014, 60375481015, 60375481016, 60375481017, 60375481018, 60375481019, 60375481020, 60375481021, 60375481022, 60375481023, 60375481024, 60375481025, 60375481026, 60375481027, 60375481028, 60375481029, 60375481030

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	0.54	08/05/21 12:31	
Arsenic	mg/kg	<0.11	1.0	0.11	08/05/21 12:31	
Copper	mg/kg	<0.31	1.0	0.31	08/05/21 12:31	
Lead	mg/kg	<0.13	0.50	0.13	08/05/21 12:31	
Zinc	mg/kg	<0.84	5.0	0.84	08/05/21 12:31	

LABORATORY CONTROL SAMPLE: 2952104

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	95.3	95	80-120	
Arsenic	mg/kg	100	94.6	95	80-120	
Copper	mg/kg	100	102	102	80-120	
Lead	mg/kg	100	95.9	96	80-120	
Zinc	mg/kg	100	94.6	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952105 2952106

Parameter	Units	60375481017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.59	90	96.9	32.6	38.3	36	39	75-125	16	20	M1
Arsenic	mg/kg	10.8	90	96.9	91.5	100	90	92	75-125	9	20	
Copper	mg/kg	19.6	90	96.9	105	115	95	98	75-125	9	20	
Lead	mg/kg	11.0	90	96.9	98.8	109	98	101	75-125	10	20	
Zinc	mg/kg	65.6	90	96.9	148	157	91	94	75-125	6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952107 2952108

Parameter	Units	60375481027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.58	101	108	52.3	48.5	52	45	75-125	8	20	M1
Arsenic	mg/kg	7.9	101	108	98.6	105	90	90	75-125	7	20	
Copper	mg/kg	14.8	101	108	111	118	95	96	75-125	6	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952107 2952108

Parameter	Units	60375481027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/kg	33.8	101	108	122	129	87	88	75-125	6	20	
Zinc	mg/kg	30.8	101	108	124	131	92	92	75-125	5	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 736069
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037, 60375481038, 60375481042, 60375481043

METHOD BLANK: 2952112 Matrix: Solid
Associated Lab Samples: 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037, 60375481038, 60375481042, 60375481043

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	0.54	08/05/21 13:29	
Arsenic	mg/kg	<0.11	1.0	0.11	08/05/21 13:29	
Copper	mg/kg	<0.31	1.0	0.31	08/05/21 13:29	
Lead	mg/kg	<0.13	0.50	0.13	08/05/21 13:29	
Zinc	mg/kg	<0.84	5.0	0.84	08/05/21 13:29	

LABORATORY CONTROL SAMPLE: 2952113

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	95.1	95	80-120	
Arsenic	mg/kg	100	95.7	96	80-120	
Copper	mg/kg	100	102	102	80-120	
Lead	mg/kg	100	96.0	96	80-120	
Zinc	mg/kg	100	95.3	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952114 2952115

Parameter	Units	60375481031 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.59	98.5	113	34.3	44.6	35	39	75-125	26	20	M1,R1
Arsenic	mg/kg	5.0	98.5	113	93.4	110	90	92	75-125	16	20	
Copper	mg/kg	12.5	98.5	113	106	122	94	96	75-125	14	20	
Lead	mg/kg	8.7	98.5	113	102	119	95	97	75-125	15	20	
Zinc	mg/kg	39.2	98.5	113	130	145	92	93	75-125	11	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 734436
QC Batch Method: EPA 5035A/5030
Analysis Method: EPA 8260B
Analysis Description: 8260 MSV 5035A Volatile Organics
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481029, 60375481030

METHOD BLANK: 2946895 Matrix: Solid
Associated Lab Samples: 60375481029, 60375481030

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<1.0	5.0	1.0	07/27/21 10:47	
1,1,1-Trichloroethane	ug/kg	<0.75	5.0	0.75	07/27/21 10:47	
1,1,2,2-Tetrachloroethane	ug/kg	<1.0	5.0	1.0	07/27/21 10:47	
1,1,2-Trichloroethane	ug/kg	<0.63	5.0	0.63	07/27/21 10:47	
1,1,2-Trichlorotrifluoroethane	ug/kg	<5.0	5.0	5.0	07/27/21 10:47	N2
1,1-Dichloroethane	ug/kg	<0.39	5.0	0.39	07/27/21 10:47	
1,1-Dichloroethene	ug/kg	<0.64	5.0	0.64	07/27/21 10:47	
1,1-Dichloropropene	ug/kg	<0.90	5.0	0.90	07/27/21 10:47	
1,2,3-Trichlorobenzene	ug/kg	<0.80	5.0	0.80	07/27/21 10:47	
1,2,3-Trichloropropane	ug/kg	<2.1	5.0	2.1	07/27/21 10:47	
1,2,3-Trimethylbenzene	ug/kg	<2.0	5.0	2.0	07/27/21 10:47	
1,2,4-Trichlorobenzene	ug/kg	<0.80	5.0	0.80	07/27/21 10:47	
1,2,4-Trimethylbenzene	ug/kg	<0.67	5.0	0.67	07/27/21 10:47	
1,2-Dibromo-3-chloropropane	ug/kg	<1.8	10.0	1.8	07/27/21 10:47	
1,2-Dibromoethane (EDB)	ug/kg	<0.54	5.0	0.54	07/27/21 10:47	
1,2-Dichlorobenzene	ug/kg	<0.62	5.0	0.62	07/27/21 10:47	
1,2-Dichloroethane	ug/kg	<0.40	5.0	0.40	07/27/21 10:47	
1,2-Dichloroethene (Total)	ug/kg	<1.1	5.0	1.1	07/27/21 10:47	
1,2-Dichloropropane	ug/kg	<0.98	5.0	0.98	07/27/21 10:47	
1,3,5-Trimethylbenzene	ug/kg	<0.63	5.0	0.63	07/27/21 10:47	
1,3-Dichlorobenzene	ug/kg	<0.72	5.0	0.72	07/27/21 10:47	
1,3-Dichloropropane	ug/kg	<0.69	5.0	0.69	07/27/21 10:47	
1,4-Dichlorobenzene	ug/kg	<0.81	5.0	0.81	07/27/21 10:47	
2,2-Dichloropropane	ug/kg	<0.48	5.0	0.48	07/27/21 10:47	
2-Butanone (MEK)	ug/kg	<3.4	10.0	3.4	07/27/21 10:47	
2-Chlorotoluene	ug/kg	<0.73	5.0	0.73	07/27/21 10:47	
2-Hexanone	ug/kg	<2.5	20.0	2.5	07/27/21 10:47	
4-Chlorotoluene	ug/kg	<0.60	5.0	0.60	07/27/21 10:47	
4-Methyl-2-pentanone (MIBK)	ug/kg	<3.0	10.0	3.0	07/27/21 10:47	
Acetone	ug/kg	<16.2	20.0	16.2	07/27/21 10:47	
Acrolein	ug/kg	<75.6	100	75.6	07/27/21 10:47	
Acrylonitrile	ug/kg	<3.2	100	3.2	07/27/21 10:47	
Benzene	ug/kg	<0.49	5.0	0.49	07/27/21 10:47	
Bromobenzene	ug/kg	<0.94	5.0	0.94	07/27/21 10:47	
Bromochloromethane	ug/kg	<0.60	5.0	0.60	07/27/21 10:47	
Bromodichloromethane	ug/kg	<0.60	5.0	0.60	07/27/21 10:47	
Bromoform	ug/kg	<0.58	5.0	0.58	07/27/21 10:47	
Bromomethane	ug/kg	<2.9	5.0	2.9	07/27/21 10:47	
Carbon disulfide	ug/kg	<0.64	5.0	0.64	07/27/21 10:47	
Carbon tetrachloride	ug/kg	<0.86	5.0	0.86	07/27/21 10:47	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

METHOD BLANK: 2946895 Matrix: Solid
Associated Lab Samples: 60375481029, 60375481030

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chlorobenzene	ug/kg	<0.63	5.0	0.63	07/27/21 10:47	
Chloroethane	ug/kg	<1.5	5.0	1.5	07/27/21 10:47	
Chloroform	ug/kg	<0.49	5.0	0.49	07/27/21 10:47	
Chloromethane	ug/kg	<0.80	5.0	0.80	07/27/21 10:47	
cis-1,2-Dichloroethene	ug/kg	<0.43	5.0	0.43	07/27/21 10:47	
cis-1,3-Dichloropropene	ug/kg	<0.53	5.0	0.53	07/27/21 10:47	
Cyclohexanone	ug/kg	<12.7	20.0	12.7	07/27/21 10:47	
Dibromochloromethane	ug/kg	<0.65	5.0	0.65	07/27/21 10:47	
Dibromomethane	ug/kg	<0.60	5.0	0.60	07/27/21 10:47	
Diethyl ether (Ethyl ether)	ug/kg	<0.56	5.0	0.56	07/27/21 10:47	
Ethylbenzene	ug/kg	<0.46	5.0	0.46	07/27/21 10:47	
Hexachloro-1,3-butadiene	ug/kg	<0.85	5.0	0.85	07/27/21 10:47	
Iodomethane	ug/kg	<1.5	10.0	1.5	07/27/21 10:47	
Isopropylbenzene (Cumene)	ug/kg	<0.57	5.0	0.57	07/27/21 10:47	
m&p-Xylene	ug/kg	<0.63	5.0	0.63	07/27/21 10:47	
Methyl acetate	ug/kg	<1.1	100	1.1	07/27/21 10:47	
Methyl-tert-butyl ether	ug/kg	<0.48	5.0	0.48	07/27/21 10:47	
Methylene Chloride	ug/kg	<2.7	5.0	2.7	07/27/21 10:47	
n-Butylbenzene	ug/kg	<0.65	5.0	0.65	07/27/21 10:47	
n-Heptane	ug/kg	<4.5	10.0	4.5	07/27/21 10:47	
n-Hexane	ug/kg	<0.69	10.0	0.69	07/27/21 10:47	
n-Propylbenzene	ug/kg	<0.80	5.0	0.80	07/27/21 10:47	
Naphthalene	ug/kg	<0.82	10.0	0.82	07/27/21 10:47	
o-Xylene	ug/kg	<0.37	5.0	0.37	07/27/21 10:47	
p-Isopropyltoluene	ug/kg	<0.69	5.0	0.69	07/27/21 10:47	
sec-Butylbenzene	ug/kg	<0.73	5.0	0.73	07/27/21 10:47	
Styrene	ug/kg	<0.59	5.0	0.59	07/27/21 10:47	
tert-Butylbenzene	ug/kg	<0.88	25.0	0.88	07/27/21 10:47	
Tetrachloroethene	ug/kg	<0.41	5.0	0.41	07/27/21 10:47	
Tetrahydrofuran	ug/kg	<0.78	5.0	0.78	07/27/21 10:47	N2
Toluene	ug/kg	<0.35	5.0	0.35	07/27/21 10:47	
trans-1,2-Dichloroethene	ug/kg	<0.68	5.0	0.68	07/27/21 10:47	
trans-1,3-Dichloropropene	ug/kg	<0.46	5.0	0.46	07/27/21 10:47	
Trichloroethene	ug/kg	<0.72	5.0	0.72	07/27/21 10:47	
Trichlorofluoromethane	ug/kg	<0.61	5.0	0.61	07/27/21 10:47	
Vinyl acetate	ug/kg	<0.56	100	0.56	07/27/21 10:47	
Vinyl chloride	ug/kg	<0.67	5.0	0.67	07/27/21 10:47	
Xylene (Total)	ug/kg	<1.1	5.0	1.1	07/27/21 10:47	
1,2-Dichlorobenzene-d4 (S)	%	103	80-120		07/27/21 10:47	
4-Bromofluorobenzene (S)	%	103	80-120		07/27/21 10:47	
Toluene-d8 (S)	%	101	80-120		07/27/21 10:47	

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(913)599-5665

QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

LABORATORY CONTROL SAMPLE: 2946896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	104	104	80-130	
1,1,1-Trichloroethane	ug/kg	100	102	102	75-130	
1,1,2,2-Tetrachloroethane	ug/kg	100	96.2	96	75-120	
1,1,2-Trichloroethane	ug/kg	100	97.5	97	80-120	
1,1,2-Trichlorotrifluoroethane	ug/kg	100	110	110	80-120	N2
1,1-Dichloroethane	ug/kg	100	102	102	75-125	
1,1-Dichloroethene	ug/kg	100	107	107	70-130	
1,1-Dichloropropene	ug/kg	100	104	104	60-140	
1,2,3-Trichlorobenzene	ug/kg	100	101	101	80-125	
1,2,3-Trichloropropane	ug/kg	100	95.5	95	80-120	
1,2,3-Trimethylbenzene	ug/kg	100	97.7	98	80-120	
1,2,4-Trichlorobenzene	ug/kg	100	105	105	80-125	
1,2,4-Trimethylbenzene	ug/kg	100	96.3	96	80-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	105	105	75-135	
1,2-Dibromoethane (EDB)	ug/kg	100	102	102	80-125	
1,2-Dichlorobenzene	ug/kg	100	94.7	95	80-120	
1,2-Dichloroethane	ug/kg	100	97.0	97	80-120	
1,2-Dichloroethene (Total)	ug/kg	200	204	102	80-120	
1,2-Dichloropropane	ug/kg	100	99.8	100	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	98.8	99	80-125	
1,3-Dichlorobenzene	ug/kg	100	98.4	98	80-120	
1,3-Dichloropropane	ug/kg	100	97.2	97	80-120	
1,4-Dichlorobenzene	ug/kg	100	97.8	98	80-120	
2,2-Dichloropropane	ug/kg	100	108	108	75-130	
2-Butanone (MEK)	ug/kg	500	621	124	60-135	
2-Chlorotoluene	ug/kg	100	96.3	96	80-120	
2-Hexanone	ug/kg	500	598	120	70-135	
4-Chlorotoluene	ug/kg	100	98.8	99	80-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	479	96	75-130	
Acetone	ug/kg	500	621	124	50-150	
Acrolein	ug/kg	500	525	105	10-180	
Acrylonitrile	ug/kg	500	479	96	80-120	
Benzene	ug/kg	100	98.3	98	80-120	
Bromobenzene	ug/kg	100	96.5	97	80-120	
Bromochloromethane	ug/kg	100	98.5	98	75-120	
Bromodichloromethane	ug/kg	100	109	109	80-125	
Bromoform	ug/kg	100	93.0	93	80-135	
Bromomethane	ug/kg	100	91.2	91	35-135	
Carbon disulfide	ug/kg	100	109	109	65-140	
Carbon tetrachloride	ug/kg	100	111	111	75-140	
Chlorobenzene	ug/kg	100	99.3	99	80-120	
Chloroethane	ug/kg	100	106	106	50-135	
Chloroform	ug/kg	100	101	101	80-120	
Chloromethane	ug/kg	100	99.3	99	15-155	
cis-1,2-Dichloroethene	ug/kg	100	100	100	80-120	
cis-1,3-Dichloropropene	ug/kg	100	111	111	80-125	
Cyclohexanone	ug/kg	500	544	109	80-120	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

LABORATORY CONTROL SAMPLE: 2946896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/kg	100	112	112	80-130	
Dibromomethane	ug/kg	100	98.3	98	80-120	
Diethyl ether (Ethyl ether)	ug/kg	100	98.4	98	80-120	
Ethylbenzene	ug/kg	100	100	100	80-120	
Hexachloro-1,3-butadiene	ug/kg	100	108	108	80-135	
Iodomethane	ug/kg	100	102	102	65-145	
Isopropylbenzene (Cumene)	ug/kg	100	105	105	75-135	
m&p-Xylene	ug/kg	200	197	99	80-125	
Methyl acetate	ug/kg	500	464	93	80-120	
Methyl-tert-butyl ether	ug/kg	100	98.1	98	75-130	
Methylene Chloride	ug/kg	100	89.1	89	65-120	
n-Butylbenzene	ug/kg	100	103	103	80-135	
n-Heptane	ug/kg	100	111	111	80-120	
n-Hexane	ug/kg	100	126	126	55-150	
n-Propylbenzene	ug/kg	100	101	101	80-125	
Naphthalene	ug/kg	100	102	102	80-120	
o-Xylene	ug/kg	100	98.2	98	80-125	
p-Isopropyltoluene	ug/kg	100	103	103	65-145	
sec-Butylbenzene	ug/kg	100	98.0	98	80-135	
Styrene	ug/kg	100	100	100	85-125	
tert-Butylbenzene	ug/kg	100	98.6	99	80-125	
Tetrachloroethene	ug/kg	100	103	103	80-130	
Tetrahydrofuran	ug/kg	500	447	89	80-120	N2
Toluene	ug/kg	100	98.5	99	80-120	
trans-1,2-Dichloroethene	ug/kg	100	104	104	75-125	
trans-1,3-Dichloropropene	ug/kg	100	110	110	80-130	
Trichloroethene	ug/kg	100	106	106	80-125	
Trichlorofluoromethane	ug/kg	100	113	113	65-135	
Vinyl acetate	ug/kg	100	95.7J	96	80-120	
Vinyl chloride	ug/kg	100	105	105	35-145	
Xylene (Total)	ug/kg	300	296	99	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 734480 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A/5030 Analysis Description: 8260 MSV 5035A Volatile Organics
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037

METHOD BLANK: 2947094 Matrix: Solid
Associated Lab Samples: 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<1.0	5.0	1.0	07/27/21 17:49	
1,1,1-Trichloroethane	ug/kg	<0.75	5.0	0.75	07/27/21 17:49	
1,1,2,2-Tetrachloroethane	ug/kg	<1.0	5.0	1.0	07/27/21 17:49	
1,1,2-Trichloroethane	ug/kg	<0.63	5.0	0.63	07/27/21 17:49	
1,1,2-Trichlorotrifluoroethane	ug/kg	<5.0	5.0	5.0	07/27/21 17:49	N2
1,1-Dichloroethane	ug/kg	<0.39	5.0	0.39	07/27/21 17:49	
1,1-Dichloroethene	ug/kg	<0.64	5.0	0.64	07/27/21 17:49	
1,1-Dichloropropene	ug/kg	<0.90	5.0	0.90	07/27/21 17:49	
1,2,3-Trichlorobenzene	ug/kg	<0.80	5.0	0.80	07/27/21 17:49	
1,2,3-Trichloropropane	ug/kg	<2.1	5.0	2.1	07/27/21 17:49	
1,2,3-Trimethylbenzene	ug/kg	<2.0	5.0	2.0	07/27/21 17:49	
1,2,4-Trichlorobenzene	ug/kg	<0.80	5.0	0.80	07/27/21 17:49	
1,2,4-Trimethylbenzene	ug/kg	<0.67	5.0	0.67	07/27/21 17:49	
1,2-Dibromo-3-chloropropane	ug/kg	<1.8	10.0	1.8	07/27/21 17:49	
1,2-Dibromoethane (EDB)	ug/kg	<0.54	5.0	0.54	07/27/21 17:49	
1,2-Dichlorobenzene	ug/kg	<0.62	5.0	0.62	07/27/21 17:49	
1,2-Dichloroethane	ug/kg	<0.40	5.0	0.40	07/27/21 17:49	
1,2-Dichloroethene (Total)	ug/kg	<1.1	5.0	1.1	07/27/21 17:49	
1,2-Dichloropropane	ug/kg	<0.98	5.0	0.98	07/27/21 17:49	
1,3,5-Trimethylbenzene	ug/kg	<0.63	5.0	0.63	07/27/21 17:49	
1,3-Dichlorobenzene	ug/kg	<0.72	5.0	0.72	07/27/21 17:49	
1,3-Dichloropropane	ug/kg	<0.69	5.0	0.69	07/27/21 17:49	
1,4-Dichlorobenzene	ug/kg	<0.81	5.0	0.81	07/27/21 17:49	
2,2-Dichloropropane	ug/kg	<0.48	5.0	0.48	07/27/21 17:49	
2-Butanone (MEK)	ug/kg	<3.4	10.0	3.4	07/27/21 17:49	
2-Chlorotoluene	ug/kg	<0.73	5.0	0.73	07/27/21 17:49	
2-Hexanone	ug/kg	<2.5	20.0	2.5	07/27/21 17:49	
4-Chlorotoluene	ug/kg	<0.60	5.0	0.60	07/27/21 17:49	
4-Methyl-2-pentanone (MIBK)	ug/kg	<3.0	10.0	3.0	07/27/21 17:49	
Acetone	ug/kg	<16.2	20.0	16.2	07/27/21 17:49	
Acrolein	ug/kg	<75.6	100	75.6	07/27/21 17:49	
Acrylonitrile	ug/kg	<3.2	100	3.2	07/27/21 17:49	
Benzene	ug/kg	<0.49	5.0	0.49	07/27/21 17:49	
Bromobenzene	ug/kg	<0.94	5.0	0.94	07/27/21 17:49	
Bromochloromethane	ug/kg	<0.60	5.0	0.60	07/27/21 17:49	
Bromodichloromethane	ug/kg	<0.60	5.0	0.60	07/27/21 17:49	
Bromoform	ug/kg	<0.58	5.0	0.58	07/27/21 17:49	
Bromomethane	ug/kg	<2.9	5.0	2.9	07/27/21 17:49	
Carbon disulfide	ug/kg	<0.64	5.0	0.64	07/27/21 17:49	
Carbon tetrachloride	ug/kg	<0.86	5.0	0.86	07/27/21 17:49	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

METHOD BLANK: 2947094 Matrix: Solid
Associated Lab Samples: 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chlorobenzene	ug/kg	<0.63	5.0	0.63	07/27/21 17:49	
Chloroethane	ug/kg	<1.5	5.0	1.5	07/27/21 17:49	
Chloroform	ug/kg	<0.49	5.0	0.49	07/27/21 17:49	
Chloromethane	ug/kg	<0.80	5.0	0.80	07/27/21 17:49	
cis-1,2-Dichloroethene	ug/kg	<0.43	5.0	0.43	07/27/21 17:49	
cis-1,3-Dichloropropene	ug/kg	<0.53	5.0	0.53	07/27/21 17:49	
Cyclohexanone	ug/kg	<12.7	20.0	12.7	07/27/21 17:49	
Dibromochloromethane	ug/kg	<0.65	5.0	0.65	07/27/21 17:49	
Dibromomethane	ug/kg	<0.60	5.0	0.60	07/27/21 17:49	
Diethyl ether (Ethyl ether)	ug/kg	<0.56	5.0	0.56	07/27/21 17:49	
Ethylbenzene	ug/kg	<0.46	5.0	0.46	07/27/21 17:49	
Hexachloro-1,3-butadiene	ug/kg	<0.85	5.0	0.85	07/27/21 17:49	
Iodomethane	ug/kg	<1.5	10.0	1.5	07/27/21 17:49	
Isopropylbenzene (Cumene)	ug/kg	<0.57	5.0	0.57	07/27/21 17:49	
m&p-Xylene	ug/kg	<0.63	5.0	0.63	07/27/21 17:49	
Methyl acetate	ug/kg	<1.1	100	1.1	07/27/21 17:49	
Methyl-tert-butyl ether	ug/kg	<0.48	5.0	0.48	07/27/21 17:49	
Methylene Chloride	ug/kg	<2.7	5.0	2.7	07/27/21 17:49	
n-Butylbenzene	ug/kg	<0.65	5.0	0.65	07/27/21 17:49	
n-Heptane	ug/kg	<4.5	10.0	4.5	07/27/21 17:49	
n-Hexane	ug/kg	<0.69	10.0	0.69	07/27/21 17:49	
n-Propylbenzene	ug/kg	<0.80	5.0	0.80	07/27/21 17:49	
Naphthalene	ug/kg	<0.82	10.0	0.82	07/27/21 17:49	
o-Xylene	ug/kg	<0.37	5.0	0.37	07/27/21 17:49	
p-Isopropyltoluene	ug/kg	<0.69	5.0	0.69	07/27/21 17:49	
sec-Butylbenzene	ug/kg	<0.73	5.0	0.73	07/27/21 17:49	
Styrene	ug/kg	<0.59	5.0	0.59	07/27/21 17:49	
tert-Butylbenzene	ug/kg	<0.88	25.0	0.88	07/27/21 17:49	
Tetrachloroethene	ug/kg	<0.41	5.0	0.41	07/27/21 17:49	
Tetrahydrofuran	ug/kg	<0.78	5.0	0.78	07/27/21 17:49	N2
Toluene	ug/kg	<0.35	5.0	0.35	07/27/21 17:49	
trans-1,2-Dichloroethene	ug/kg	<0.68	5.0	0.68	07/27/21 17:49	
trans-1,3-Dichloropropene	ug/kg	<0.46	5.0	0.46	07/27/21 17:49	
Trichloroethene	ug/kg	<0.72	5.0	0.72	07/27/21 17:49	
Trichlorofluoromethane	ug/kg	<0.61	5.0	0.61	07/27/21 17:49	
Vinyl acetate	ug/kg	<0.56	100	0.56	07/27/21 17:49	
Vinyl chloride	ug/kg	<0.67	5.0	0.67	07/27/21 17:49	
Xylene (Total)	ug/kg	<1.1	5.0	1.1	07/27/21 17:49	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		07/27/21 17:49	
4-Bromofluorobenzene (S)	%	104	80-120		07/27/21 17:49	
Toluene-d8 (S)	%	100	80-120		07/27/21 17:49	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

LABORATORY CONTROL SAMPLE: 2947095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	98.7	99	80-130	
1,1,1-Trichloroethane	ug/kg	100	91.7	92	75-130	
1,1,2,2-Tetrachloroethane	ug/kg	100	93.8	94	75-120	
1,1,2-Trichloroethane	ug/kg	100	98.4	98	80-120	
1,1,2-Trichlorotrifluoroethane	ug/kg	100	97.7	98	80-120	N2
1,1-Dichloroethane	ug/kg	100	97.2	97	75-125	
1,1-Dichloroethene	ug/kg	100	97.2	97	70-130	
1,1-Dichloropropene	ug/kg	100	91.9	92	60-140	
1,2,3-Trichlorobenzene	ug/kg	100	101	101	80-125	
1,2,3-Trichloropropane	ug/kg	100	92.9	93	80-120	
1,2,3-Trimethylbenzene	ug/kg	100	95.0	95	80-120	
1,2,4-Trichlorobenzene	ug/kg	100	101	101	80-125	
1,2,4-Trimethylbenzene	ug/kg	100	91.0	91	80-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	109	109	75-135	
1,2-Dibromoethane (EDB)	ug/kg	100	102	102	80-125	
1,2-Dichlorobenzene	ug/kg	100	92.8	93	80-120	
1,2-Dichloroethane	ug/kg	100	96.3	96	80-120	
1,2-Dichloroethene (Total)	ug/kg	200	193	96	80-120	
1,2-Dichloropropane	ug/kg	100	96.6	97	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	91.7	92	80-125	
1,3-Dichlorobenzene	ug/kg	100	93.7	94	80-120	
1,3-Dichloropropane	ug/kg	100	96.5	97	80-120	
1,4-Dichlorobenzene	ug/kg	100	95.2	95	80-120	
2,2-Dichloropropane	ug/kg	100	93.8	94	75-130	
2-Butanone (MEK)	ug/kg	500	627	125	60-135	
2-Chlorotoluene	ug/kg	100	90.9	91	80-120	
2-Hexanone	ug/kg	500	580	116	70-135	
4-Chlorotoluene	ug/kg	100	94.3	94	80-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	487	97	75-130	
Acetone	ug/kg	500	606	121	50-150	
Acrolein	ug/kg	500	550	110	10-180	
Acrylonitrile	ug/kg	500	497	99	80-120	
Benzene	ug/kg	100	93.4	93	80-120	
Bromobenzene	ug/kg	100	91.4	91	80-120	
Bromochloromethane	ug/kg	100	100	100	75-120	
Bromodichloromethane	ug/kg	100	106	106	80-125	
Bromoform	ug/kg	100	88.3	88	80-135	
Bromomethane	ug/kg	100	79.8	80	35-135	
Carbon disulfide	ug/kg	100	97.7	98	65-140	
Carbon tetrachloride	ug/kg	100	97.2	97	75-140	
Chlorobenzene	ug/kg	100	95.3	95	80-120	
Chloroethane	ug/kg	100	100	100	50-135	
Chloroform	ug/kg	100	97.0	97	80-120	
Chloromethane	ug/kg	100	93.3	93	15-155	
cis-1,2-Dichloroethene	ug/kg	100	97.5	97	80-120	
cis-1,3-Dichloropropene	ug/kg	100	105	105	80-125	
Cyclohexanone	ug/kg	500	545	109	80-120	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

LABORATORY CONTROL SAMPLE: 2947095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/kg	100	108	108	80-130	
Dibromomethane	ug/kg	100	100	100	80-120	
Diethyl ether (Ethyl ether)	ug/kg	100	101	101	80-120	
Ethylbenzene	ug/kg	100	91.9	92	80-120	
Hexachloro-1,3-butadiene	ug/kg	100	96.6	97	80-135	
Iodomethane	ug/kg	100	78.0	78	65-145	
Isopropylbenzene (Cumene)	ug/kg	100	92.5	92	75-135	
m&p-Xylene	ug/kg	200	178	89	80-125	
Methyl acetate	ug/kg	500	486	97	80-120	
Methyl-tert-butyl ether	ug/kg	100	98.3	98	75-130	
Methylene Chloride	ug/kg	100	90.2	90	65-120	
n-Butylbenzene	ug/kg	100	93.2	93	80-135	
n-Heptane	ug/kg	100	97.7	98	80-120	
n-Hexane	ug/kg	100	92.8	93	55-150	
n-Propylbenzene	ug/kg	100	89.0	89	80-125	
Naphthalene	ug/kg	100	103	103	80-120	
o-Xylene	ug/kg	100	92.6	93	80-125	
p-Isopropyltoluene	ug/kg	100	91.8	92	65-145	
sec-Butylbenzene	ug/kg	100	90.3	90	80-135	
Styrene	ug/kg	100	95.5	96	85-125	
tert-Butylbenzene	ug/kg	100	90.6	91	80-125	
Tetrachloroethene	ug/kg	100	92.2	92	80-130	
Tetrahydrofuran	ug/kg	500	94.7	19	80-120	L2,N2
Toluene	ug/kg	100	91.1	91	80-120	
trans-1,2-Dichloroethene	ug/kg	100	95.4	95	75-125	
trans-1,3-Dichloropropene	ug/kg	100	107	107	80-130	
Trichloroethene	ug/kg	100	95.7	96	80-125	
Trichlorofluoromethane	ug/kg	100	99.7	100	65-135	
Vinyl acetate	ug/kg	100	93.5J	94	80-120	
Vinyl chloride	ug/kg	100	95.3	95	35-145	
Xylene (Total)	ug/kg	300	271	90	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			95	80-120	
Toluene-d8 (S)	%			100	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 734679
QC Batch Method: EPA 5035A/5030
Analysis Method: EPA 8260B
Analysis Description: 8260 MSV 5035A Volatile Organics
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481038, 60375481040, 60375481041, 60375481042, 60375481043

METHOD BLANK: 2947592 Matrix: Solid
Associated Lab Samples: 60375481038, 60375481040, 60375481041, 60375481042, 60375481043

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<1.0	5.0	1.0	07/28/21 09:09	
1,1,1-Trichloroethane	ug/kg	<0.75	5.0	0.75	07/28/21 09:09	
1,1,2,2-Tetrachloroethane	ug/kg	<1.0	5.0	1.0	07/28/21 09:09	
1,1,2-Trichloroethane	ug/kg	<0.63	5.0	0.63	07/28/21 09:09	
1,1,2-Trichlorotrifluoroethane	ug/kg	<5.0	5.0	5.0	07/28/21 09:09	N2
1,1-Dichloroethane	ug/kg	<0.39	5.0	0.39	07/28/21 09:09	
1,1-Dichloroethene	ug/kg	<0.64	5.0	0.64	07/28/21 09:09	
1,1-Dichloropropene	ug/kg	<0.90	5.0	0.90	07/28/21 09:09	
1,2,3-Trichlorobenzene	ug/kg	<0.80	5.0	0.80	07/28/21 09:09	
1,2,3-Trichloropropane	ug/kg	<2.1	5.0	2.1	07/28/21 09:09	
1,2,3-Trimethylbenzene	ug/kg	<2.0	5.0	2.0	07/28/21 09:09	
1,2,4-Trichlorobenzene	ug/kg	<0.80	5.0	0.80	07/28/21 09:09	
1,2,4-Trimethylbenzene	ug/kg	<0.67	5.0	0.67	07/28/21 09:09	
1,2-Dibromo-3-chloropropane	ug/kg	<1.8	10.0	1.8	07/28/21 09:09	
1,2-Dibromoethane (EDB)	ug/kg	<0.54	5.0	0.54	07/28/21 09:09	
1,2-Dichlorobenzene	ug/kg	<0.62	5.0	0.62	07/28/21 09:09	
1,2-Dichloroethane	ug/kg	<0.40	5.0	0.40	07/28/21 09:09	
1,2-Dichloroethene (Total)	ug/kg	<1.1	5.0	1.1	07/28/21 09:09	
1,2-Dichloropropane	ug/kg	<0.98	5.0	0.98	07/28/21 09:09	
1,3,5-Trimethylbenzene	ug/kg	<0.63	5.0	0.63	07/28/21 09:09	
1,3-Dichlorobenzene	ug/kg	<0.72	5.0	0.72	07/28/21 09:09	
1,3-Dichloropropane	ug/kg	<0.69	5.0	0.69	07/28/21 09:09	
1,4-Dichlorobenzene	ug/kg	<0.81	5.0	0.81	07/28/21 09:09	
2,2-Dichloropropane	ug/kg	<0.48	5.0	0.48	07/28/21 09:09	
2-Butanone (MEK)	ug/kg	<3.4	10.0	3.4	07/28/21 09:09	
2-Chlorotoluene	ug/kg	<0.73	5.0	0.73	07/28/21 09:09	
2-Hexanone	ug/kg	<2.5	20.0	2.5	07/28/21 09:09	
4-Chlorotoluene	ug/kg	<0.60	5.0	0.60	07/28/21 09:09	
4-Methyl-2-pentanone (MIBK)	ug/kg	<3.0	10.0	3.0	07/28/21 09:09	
Acetone	ug/kg	<16.2	20.0	16.2	07/28/21 09:09	
Acrolein	ug/kg	<75.6	100	75.6	07/28/21 09:09	
Acrylonitrile	ug/kg	<3.2	100	3.2	07/28/21 09:09	
Benzene	ug/kg	<0.49	5.0	0.49	07/28/21 09:09	
Bromobenzene	ug/kg	<0.94	5.0	0.94	07/28/21 09:09	
Bromochloromethane	ug/kg	<0.60	5.0	0.60	07/28/21 09:09	
Bromodichloromethane	ug/kg	<0.60	5.0	0.60	07/28/21 09:09	
Bromoform	ug/kg	<0.58	5.0	0.58	07/28/21 09:09	
Bromomethane	ug/kg	<2.9	5.0	2.9	07/28/21 09:09	
Carbon disulfide	ug/kg	<0.64	5.0	0.64	07/28/21 09:09	
Carbon tetrachloride	ug/kg	<0.86	5.0	0.86	07/28/21 09:09	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

METHOD BLANK: 2947592 Matrix: Solid
Associated Lab Samples: 60375481038, 60375481040, 60375481041, 60375481042, 60375481043

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chlorobenzene	ug/kg	<0.63	5.0	0.63	07/28/21 09:09	
Chloroethane	ug/kg	<1.5	5.0	1.5	07/28/21 09:09	
Chloroform	ug/kg	<0.49	5.0	0.49	07/28/21 09:09	
Chloromethane	ug/kg	<0.80	5.0	0.80	07/28/21 09:09	
cis-1,2-Dichloroethene	ug/kg	<0.43	5.0	0.43	07/28/21 09:09	
cis-1,3-Dichloropropene	ug/kg	<0.53	5.0	0.53	07/28/21 09:09	
Cyclohexanone	ug/kg	<12.7	20.0	12.7	07/28/21 09:09	
Dibromochloromethane	ug/kg	<0.65	5.0	0.65	07/28/21 09:09	
Dibromomethane	ug/kg	<0.60	5.0	0.60	07/28/21 09:09	
Diethyl ether (Ethyl ether)	ug/kg	<0.56	5.0	0.56	07/28/21 09:09	
Ethylbenzene	ug/kg	<0.46	5.0	0.46	07/28/21 09:09	
Hexachloro-1,3-butadiene	ug/kg	<0.85	5.0	0.85	07/28/21 09:09	
Iodomethane	ug/kg	<1.5	10.0	1.5	07/28/21 09:09	
Isopropylbenzene (Cumene)	ug/kg	<0.57	5.0	0.57	07/28/21 09:09	
m&p-Xylene	ug/kg	<0.63	5.0	0.63	07/28/21 09:09	
Methyl acetate	ug/kg	<1.1	100	1.1	07/28/21 09:09	
Methyl-tert-butyl ether	ug/kg	<0.48	5.0	0.48	07/28/21 09:09	
Methylene Chloride	ug/kg	<2.7	5.0	2.7	07/28/21 09:09	
n-Butylbenzene	ug/kg	<0.65	5.0	0.65	07/28/21 09:09	
n-Heptane	ug/kg	<4.5	10.0	4.5	07/28/21 09:09	
n-Hexane	ug/kg	<0.69	10.0	0.69	07/28/21 09:09	
n-Propylbenzene	ug/kg	<0.80	5.0	0.80	07/28/21 09:09	
Naphthalene	ug/kg	<0.82	10.0	0.82	07/28/21 09:09	
o-Xylene	ug/kg	<0.37	5.0	0.37	07/28/21 09:09	
p-Isopropyltoluene	ug/kg	<0.69	5.0	0.69	07/28/21 09:09	
sec-Butylbenzene	ug/kg	<0.73	5.0	0.73	07/28/21 09:09	
Styrene	ug/kg	<0.59	5.0	0.59	07/28/21 09:09	
tert-Butylbenzene	ug/kg	<0.88	25.0	0.88	07/28/21 09:09	
Tetrachloroethene	ug/kg	<0.41	5.0	0.41	07/28/21 09:09	
Tetrahydrofuran	ug/kg	<0.78	5.0	0.78	07/28/21 09:09	N2
Toluene	ug/kg	<0.35	5.0	0.35	07/28/21 09:09	
trans-1,2-Dichloroethene	ug/kg	<0.68	5.0	0.68	07/28/21 09:09	
trans-1,3-Dichloropropene	ug/kg	<0.46	5.0	0.46	07/28/21 09:09	
Trichloroethene	ug/kg	<0.72	5.0	0.72	07/28/21 09:09	
Trichlorofluoromethane	ug/kg	<0.61	5.0	0.61	07/28/21 09:09	
Vinyl acetate	ug/kg	<0.56	100	0.56	07/28/21 09:09	
Vinyl chloride	ug/kg	<0.67	5.0	0.67	07/28/21 09:09	
Xylene (Total)	ug/kg	<1.1	5.0	1.1	07/28/21 09:09	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		07/28/21 09:09	
4-Bromofluorobenzene (S)	%	103	80-120		07/28/21 09:09	
Toluene-d8 (S)	%	100	80-120		07/28/21 09:09	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

LABORATORY CONTROL SAMPLE: 2947593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	104	104	80-130	
1,1,1-Trichloroethane	ug/kg	100	103	103	75-130	
1,1,2,2-Tetrachloroethane	ug/kg	100	93.5	94	75-120	
1,1,2-Trichloroethane	ug/kg	100	98.3	98	80-120	
1,1,2-Trichlorotrifluoroethane	ug/kg	100	112	112	80-120	N2
1,1-Dichloroethane	ug/kg	100	103	103	75-125	
1,1-Dichloroethene	ug/kg	100	109	109	70-130	
1,1-Dichloropropene	ug/kg	100	105	105	60-140	
1,2,3-Trichlorobenzene	ug/kg	100	101	101	80-125	
1,2,3-Trichloropropane	ug/kg	100	92.8	93	80-120	
1,2,3-Trimethylbenzene	ug/kg	100	98.0	98	80-120	
1,2,4-Trichlorobenzene	ug/kg	100	97.4	97	80-125	
1,2,4-Trimethylbenzene	ug/kg	100	98.3	98	80-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	103	103	75-135	
1,2-Dibromoethane (EDB)	ug/kg	100	101	101	80-125	
1,2-Dichlorobenzene	ug/kg	100	94.6	95	80-120	
1,2-Dichloroethane	ug/kg	100	95.3	95	80-120	
1,2-Dichloroethene (Total)	ug/kg	200	206	103	80-120	
1,2-Dichloropropane	ug/kg	100	99.4	99	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	101	101	80-125	
1,3-Dichlorobenzene	ug/kg	100	99.4	99	80-120	
1,3-Dichloropropane	ug/kg	100	96.3	96	80-120	
1,4-Dichlorobenzene	ug/kg	100	100	100	80-120	
2,2-Dichloropropane	ug/kg	100	109	109	75-130	
2-Butanone (MEK)	ug/kg	500	570	114	60-135	
2-Chlorotoluene	ug/kg	100	97.7	98	80-120	
2-Hexanone	ug/kg	500	555	111	70-135	
4-Chlorotoluene	ug/kg	100	100	100	80-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	460	92	75-130	
Acetone	ug/kg	500	591	118	50-150	
Acrolein	ug/kg	500	506	101	10-180	
Acrylonitrile	ug/kg	500	470	94	80-120	
Benzene	ug/kg	100	99.3	99	80-120	
Bromobenzene	ug/kg	100	96.3	96	80-120	
Bromochloromethane	ug/kg	100	100	100	75-120	
Bromodichloromethane	ug/kg	100	109	109	80-125	
Bromoform	ug/kg	100	90.9	91	80-135	
Bromomethane	ug/kg	100	98.4	98	35-135	
Carbon disulfide	ug/kg	100	109	109	65-140	
Carbon tetrachloride	ug/kg	100	113	113	75-140	
Chlorobenzene	ug/kg	100	99.7	100	80-120	
Chloroethane	ug/kg	100	87.7	88	50-135	
Chloroform	ug/kg	100	101	101	80-120	
Chloromethane	ug/kg	100	97.9	98	15-155	
cis-1,2-Dichloroethene	ug/kg	100	101	101	80-120	
cis-1,3-Dichloropropene	ug/kg	100	109	109	80-125	
Cyclohexanone	ug/kg	500	499	100	80-120	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

LABORATORY CONTROL SAMPLE: 2947593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/kg	100	113	113	80-130	
Dibromomethane	ug/kg	100	98.3	98	80-120	
Diethyl ether (Ethyl ether)	ug/kg	100	99.5	99	80-120	
Ethylbenzene	ug/kg	100	100	100	80-120	
Hexachloro-1,3-butadiene	ug/kg	100	110	110	80-135	
Iodomethane	ug/kg	100	108	108	65-145	
Isopropylbenzene (Cumene)	ug/kg	100	103	103	75-135	
m&p-Xylene	ug/kg	200	201	101	80-125	
Methyl acetate	ug/kg	500	449	90	80-120	
Methyl-tert-butyl ether	ug/kg	100	96.7	97	75-130	
Methylene Chloride	ug/kg	100	90.4	90	65-120	
n-Butylbenzene	ug/kg	100	104	104	80-135	
n-Heptane	ug/kg	100	111	111	80-120	
n-Hexane	ug/kg	100	107	107	55-150	
n-Propylbenzene	ug/kg	100	101	101	80-125	
Naphthalene	ug/kg	100	97.8	98	80-120	
o-Xylene	ug/kg	100	98.9	99	80-125	
p-Isopropyltoluene	ug/kg	100	103	103	65-145	
sec-Butylbenzene	ug/kg	100	100	100	80-135	
Styrene	ug/kg	100	101	101	85-125	
tert-Butylbenzene	ug/kg	100	101	101	80-125	
Tetrachloroethene	ug/kg	100	105	105	80-130	
Tetrahydrofuran	ug/kg	500	432	86	80-120	N2
Toluene	ug/kg	100	99.3	99	80-120	
trans-1,2-Dichloroethene	ug/kg	100	105	105	75-125	
trans-1,3-Dichloropropene	ug/kg	100	109	109	80-130	
Trichloroethene	ug/kg	100	105	105	80-125	
Trichlorofluoromethane	ug/kg	100	113	113	65-135	
Vinyl acetate	ug/kg	100	96.2J	96	80-120	
Vinyl chloride	ug/kg	100	79.0	79	35-145	
Xylene (Total)	ug/kg	300	300	100	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947594 2947595

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	<1.1	101	99.9	57.7	71.1	57	71	25-130	21	35	
1,1,1-Trichloroethane	ug/kg	<0.79	101	99.9	69.8	80.8	69	81	45-120	15	35	
1,1,2,2-Tetrachloroethane	ug/kg	<1.1	101	99.9	1.7J	<1.0	2	0	10-145		35	M1
1,1,2-Trichloroethane	ug/kg	<0.67	101	99.9	39.1	47.8	39	48	25-130	20	35	
1,1,2-Trichlorotrifluoroethane	ug/kg	<5.3	101	99.9	70.8	83.0	70	83	35-120	16	35	N2

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947594 2947595

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/kg	<0.41	101	99.9	73.2	82.3	72	82	40-120	12	35	
1,1-Dichloroethene	ug/kg	<0.68	101	99.9	115	128	114	128	35-120	11	35	M1
1,1-Dichloropropene	ug/kg	<0.95	101	99.9	70.4	81.0	70	81	40-125	14	35	
1,2,3-Trichlorobenzene	ug/kg	<0.84	101	99.9	51.2	63.5	51	64	10-125	21	50	
1,2,3-Trichloropropane	ug/kg	<2.3	101	99.9	79.4	91.8	79	92	25-135	15	35	
1,2,3-Trimethylbenzene	ug/kg	<2.1	101	99.9	62.9	72.6	62	72	35-120	14	35	
1,2,4-Trichlorobenzene	ug/kg	<0.84	101	99.9	49.9	60.2	49	60	10-125	19	50	
1,2,4-Trimethylbenzene	ug/kg	<0.71	101	99.9	62.0	70.1	61	70	35-120	12	35	
1,2-Dibromo-3-chloropropane	ug/kg	<1.9	101	99.9	37.0	48.9	37	49	10-145	28	35	
1,2-Dibromoethane (EDB)	ug/kg	<0.57	101	99.9	80.5	94.1	80	94	30-140	15	35	
1,2-Dichlorobenzene	ug/kg	<0.66	101	99.9	59.7	69.6	59	70	10-125	15	35	
1,2-Dichloroethane	ug/kg	<0.42	101	99.9	74.9	85.8	74	86	35-120	14	35	
1,2-Dichloroethene (Total)	ug/kg	<1.2	202	199	144	164	71	82	40-120	13	35	
1,2-Dichloropropane	ug/kg	<1.0	101	99.9	72.5	82.4	72	83	35-120	13	35	
1,3,5-Trimethylbenzene	ug/kg	<0.66	101	99.9	61.1	71.3	60	71	15-130	15	35	
1,3-Dichlorobenzene	ug/kg	<0.76	101	99.9	59.2	68.9	59	69	10-125	15	37	
1,3-Dichloropropane	ug/kg	<0.73	101	99.9	76.9	89.7	76	90	30-120	15	35	
1,4-Dichlorobenzene	ug/kg	<0.86	101	99.9	59.0	68.8	58	69	10-125	15	35	
2,2-Dichloropropane	ug/kg	<0.50	101	99.9	70.4	81.3	70	81	40-120	14	35	
2-Butanone (MEK)	ug/kg	8.8J	506	499	513	576	100	114	20-145	11	35	
2-Chlorotoluene	ug/kg	<0.77	101	99.9	62.2	72.0	61	72	15-125	15	35	
2-Hexanone	ug/kg	<2.6	506	499	525	601	104	120	15-150	13	35	
4-Chlorotoluene	ug/kg	<0.63	101	99.9	60.3	71.5	60	72	10-125	17	35	
4-Methyl-2-pentanone (MIBK)	ug/kg	<3.2	506	499	480	550	95	110	30-140	14	35	
Acetone	ug/kg	46.6	506	499	528	549	95	101	10-165	4	35	
Acrolein	ug/kg	<79.9	506	499	488	542	96	109	10-200	11	60	
Acrylonitrile	ug/kg	<3.4	506	499	312	385	62	77	10-145	21	35	
Benzene	ug/kg	<0.52	101	99.9	69.6	79.2	69	79	35-120	13	35	
Bromobenzene	ug/kg	<0.99	101	99.9	63.0	73.1	62	73	15-125	15	35	
Bromochloromethane	ug/kg	<0.64	101	99.9	75.8	86.8	75	87	35-120	14	35	
Bromodichloromethane	ug/kg	<0.64	101	99.9	49.1	63.2	49	63	30-130	25	35	
Bromoform	ug/kg	<0.61	101	99.9	46.5	62.5	46	63	15-135	29	35	
Bromomethane	ug/kg	<3.1	101	99.9	29.2	36.0	29	36	10-120	21	35	
Carbon disulfide	ug/kg	5.2J	101	99.9	34.7	47.4	29	42	20-120	31	35	
Carbon tetrachloride	ug/kg	<0.91	101	99.9	54.6	71.9	54	72	40-125	27	35	
Chlorobenzene	ug/kg	<0.66	101	99.9	66.9	76.6	66	77	20-125	13	35	
Chloroethane	ug/kg	<1.6	101	99.9	68.9	76.5	68	77	25-120	10	35	
Chloroform	ug/kg	<0.52	101	99.9	76.8	87.2	76	87	40-125	13	35	
Chloromethane	ug/kg	<0.84	101	99.9	49.2	56.1	49	56	10-120	13	35	
cis-1,2-Dichloroethene	ug/kg	<0.46	101	99.9	72.3	82.8	72	83	35-120	13	35	
cis-1,3-Dichloropropene	ug/kg	<0.56	101	99.9	46.1	58.6	46	59	20-130	24	35	
Cyclohexanone	ug/kg	<13.4	506	499	458	534	91	107	35-120	15	35	
Dibromochloromethane	ug/kg	<0.68	101	99.9	51.2	67.2	51	67	25-135	27	35	
Dibromomethane	ug/kg	<0.63	101	99.9	77.8	92.0	77	92	30-125	17	35	

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(913)599-5665

QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947594 2947595

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Diethyl ether (Ethyl ether)	ug/kg	<0.59	101	99.9	75.6	86.2	75	86	35-120	13	35	
Ethylbenzene	ug/kg	<0.49	101	99.9	67.4	76.4	67	77	35-120	13	35	
Hexachloro-1,3-butadiene	ug/kg	<0.90	101	99.9	50.2	55.4	50	56	10-125	10	45	
Iodomethane	ug/kg	<1.6	101	99.9	27.6	40.2	27	40	30-120	37	35	M1,R1
Isopropylbenzene (Cumene)	ug/kg	<0.60	101	99.9	67.0	75.8	66	76	20-135	12	35	
m&p-Xylene	ug/kg	<0.67	202	199	131	153	65	76	30-145	15	35	
Methyl acetate	ug/kg	<1.1	506	499	<1.1	<1.1	0	0	30-120		35	M1
Methyl-tert-butyl ether	ug/kg	<0.51	101	99.9	78.9	90.5	78	91	35-140	14	35	
Methylene Chloride	ug/kg	<2.9	101	99.9	66.4	75.9	65	76	10-135	13	35	
n-Butylbenzene	ug/kg	<0.69	101	99.9	58.0	64.2	57	64	10-130	10	35	
n-Heptane	ug/kg	<4.8	101	99.9	57.6	62.7	57	63	35-120	8	35	
n-Hexane	ug/kg	<0.73	101	99.9	59.0	65.9	58	66	10-150	11	35	
n-Propylbenzene	ug/kg	<0.85	101	99.9	61.8	71.2	61	71	20-125	14	35	
Naphthalene	ug/kg	13.9	101	99.9	102	108	87	94	10-160	6	35	
o-Xylene	ug/kg	<0.39	101	99.9	65.7	75.0	65	75	30-145	13	35	
p-Isopropyltoluene	ug/kg	1.4J	101	99.9	62.8	68.8	61	68	10-135	9	35	
sec-Butylbenzene	ug/kg	<0.77	101	99.9	60.3	66.0	60	66	15-135	9	35	
Styrene	ug/kg	<0.62	101	99.9	64.6	75.3	64	75	15-130	15	35	
tert-Butylbenzene	ug/kg	<0.93	101	99.9	62.4	71.9	62	72	15-135	14	35	
Tetrachloroethene	ug/kg	<0.44	101	99.9	82.9	85.6	82	86	30-125	3	35	
Tetrahydrofuran	ug/kg	<0.83	506	499	462	518	91	104	35-120	11	35	N2
Toluene	ug/kg	<0.37	101	99.9	68.5	77.6	68	78	35-120	12	35	
trans-1,2-Dichloroethene	ug/kg	<0.72	101	99.9	71.7	81.6	71	82	40-120	13	35	
trans-1,3-Dichloropropene	ug/kg	<0.48	101	99.9	50.6	63.6	50	64	20-135	23	35	
Trichloroethene	ug/kg	<0.77	101	99.9	133	153	132	154	25-140	14	35	M1
Trichlorofluoromethane	ug/kg	<0.65	101	99.9	65.5	78.6	65	79	35-120	18	35	
Vinyl acetate	ug/kg	<0.60	101	99.9	31.5J	36.2J	31	36	30-120		35	
Vinyl chloride	ug/kg	<0.70	101	99.9	61.1	67.5	60	68	10-120	10	35	
Xylene (Total)	ug/kg	<1.2	303	299	197	228	65	76	35-120	15	35	
1,2-Dichlorobenzene-d4 (S)	%						100	101	80-120			
4-Bromofluorobenzene (S)	%						98	98	80-120			
Toluene-d8 (S)	%						101	100	80-120			

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 734572
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481039, 60375481044

METHOD BLANK: 2947372 Matrix: Water
Associated Lab Samples: 60375481039, 60375481044

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.084	1.0	0.084	07/28/21 13:35	
1,1,1-Trichloroethane	ug/L	<0.11	1.0	0.11	07/28/21 13:35	
1,1,2,2-Tetrachloroethane	ug/L	<0.15	1.0	0.15	07/28/21 13:35	
1,1,2-Trichloroethane	ug/L	<0.14	1.0	0.14	07/28/21 13:35	
1,1-Dichloroethane	ug/L	<0.12	1.0	0.12	07/28/21 13:35	
1,1-Dichloroethene	ug/L	<0.22	1.0	0.22	07/28/21 13:35	
1,1-Dichloropropene	ug/L	<0.14	1.0	0.14	07/28/21 13:35	
1,2,3-Trichlorobenzene	ug/L	<0.93	1.0	0.93	07/28/21 13:35	
1,2,3-Trichloropropane	ug/L	<0.41	2.5	0.41	07/28/21 13:35	
1,2,3-Trimethylbenzene	ug/L	<0.93	1.0	0.93	07/28/21 13:35	
1,2,4-Trichlorobenzene	ug/L	<0.73	1.0	0.73	07/28/21 13:35	
1,2,4-Trimethylbenzene	ug/L	<0.32	1.0	0.32	07/28/21 13:35	
1,2-Dibromo-3-chloropropane	ug/L	<0.78	2.5	0.78	07/28/21 13:35	
1,2-Dibromoethane (EDB)	ug/L	<0.20	1.0	0.20	07/28/21 13:35	
1,2-Dichlorobenzene	ug/L	<0.12	1.0	0.12	07/28/21 13:35	
1,2-Dichloroethane	ug/L	<0.21	1.0	0.21	07/28/21 13:35	
1,2-Dichloroethene (Total)	ug/L	<0.22	1.0	0.22	07/28/21 13:35	
1,2-Dichloropropane	ug/L	<0.14	1.0	0.14	07/28/21 13:35	
1,3,5-Trimethylbenzene	ug/L	<0.090	1.0	0.090	07/28/21 13:35	
1,3-Dichlorobenzene	ug/L	<0.13	1.0	0.13	07/28/21 13:35	
1,3-Dichloropropane	ug/L	<0.10	1.0	0.10	07/28/21 13:35	
1,4-Dichlorobenzene	ug/L	<0.13	1.0	0.13	07/28/21 13:35	
1,4-Dioxane (p-Dioxane)	ug/L	<4.4	100	4.4	07/28/21 13:35	
1-Methylnaphthalene	ug/L	<2.6	10.0	2.6	07/28/21 13:35	
2,2-Dichloropropane	ug/L	<0.16	1.0	0.16	07/28/21 13:35	
2-Butanone (MEK)	ug/L	<0.98	10.0	0.98	07/28/21 13:35	
2-Chloroethylvinyl ether	ug/L	<1.8	10.0	1.8	07/28/21 13:35	
2-Chlorotoluene	ug/L	<0.11	1.0	0.11	07/28/21 13:35	
2-Hexanone	ug/L	<1.1	10.0	1.1	07/28/21 13:35	
2-Methylnaphthalene	ug/L	<2.7	10.0	2.7	07/28/21 13:35	
4-Chlorotoluene	ug/L	<0.15	1.0	0.15	07/28/21 13:35	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	10.0	0.74	07/28/21 13:35	
Acetone	ug/L	<2.5	10.0	2.5	07/28/21 13:35	
Acetonitrile	ug/L	<1.1	10.0	1.1	07/28/21 13:35	
Acrolein	ug/L	<4.0	50.0	4.0	07/28/21 13:35	
Acrylonitrile	ug/L	<1.4	20.0	1.4	07/28/21 13:35	
Benzene	ug/L	<0.14	1.0	0.14	07/28/21 13:35	
Bromobenzene	ug/L	<0.088	1.0	0.088	07/28/21 13:35	
Bromochloromethane	ug/L	<0.20	1.0	0.20	07/28/21 13:35	
Bromodichloromethane	ug/L	<0.16	1.0	0.16	07/28/21 13:35	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

METHOD BLANK: 2947372 Matrix: Water
Associated Lab Samples: 60375481039, 60375481044

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Bromoform	ug/L	<0.68	1.0	0.68	07/28/21 13:35	
Bromomethane	ug/L	<0.46	5.0	0.46	07/28/21 13:35	
Carbon disulfide	ug/L	<0.98	5.0	0.98	07/28/21 13:35	
Carbon tetrachloride	ug/L	<0.17	1.0	0.17	07/28/21 13:35	
Chlorobenzene	ug/L	<0.089	1.0	0.089	07/28/21 13:35	
Chloroethane	ug/L	<0.37	1.0	0.37	07/28/21 13:35	
Chloroform	ug/L	<0.22	1.0	0.22	07/28/21 13:35	
Chloromethane	ug/L	<0.28	1.0	0.28	07/28/21 13:35	
cis-1,2-Dichloroethene	ug/L	<0.13	1.0	0.13	07/28/21 13:35	
cis-1,3-Dichloropropene	ug/L	<0.078	1.0	0.078	07/28/21 13:35	
Cyclohexane	ug/L	<0.24	1.0	0.24	07/28/21 13:35	
Cyclohexanone	ug/L	<3.3	20.0	3.3	07/28/21 13:35	
Dibromochloromethane	ug/L	<0.30	1.0	0.30	07/28/21 13:35	
Dibromomethane	ug/L	<0.11	1.0	0.11	07/28/21 13:35	
Dichlorodifluoromethane	ug/L	<0.20	1.0	0.20	07/28/21 13:35	
Diethyl ether (Ethyl ether)	ug/L	<0.23	1.0	0.23	07/28/21 13:35	
Ethylbenzene	ug/L	<0.12	1.0	0.12	07/28/21 13:35	
Hexachloro-1,3-butadiene	ug/L	<0.42	1.0	0.42	07/28/21 13:35	
Isopropylbenzene (Cumene)	ug/L	<0.097	1.0	0.097	07/28/21 13:35	
m&p-Xylene	ug/L	<0.22	2.0	0.22	07/28/21 13:35	
Methyl acetate	ug/L	<0.87	1.0	0.87	07/28/21 13:35	
Methyl-tert-butyl ether	ug/L	<0.13	1.0	0.13	07/28/21 13:35	
Methylcyclohexane	ug/L	<0.12	1.0	0.12	07/28/21 13:35	
Methylene Chloride	ug/L	<0.39	1.0	0.39	07/28/21 13:35	
n-Butylbenzene	ug/L	<0.15	1.0	0.15	07/28/21 13:35	
n-Heptane	ug/L	<2.6	10.0	2.6	07/28/21 13:35	
n-Hexane	ug/L	<0.22	10.0	0.22	07/28/21 13:35	
n-Propylbenzene	ug/L	<0.12	1.0	0.12	07/28/21 13:35	
Naphthalene	ug/L	<0.82	10.0	0.82	07/28/21 13:35	
o-Xylene	ug/L	<0.082	1.0	0.082	07/28/21 13:35	
p-Isopropyltoluene	ug/L	<0.13	1.0	0.13	07/28/21 13:35	
sec-Butylbenzene	ug/L	<0.11	1.0	0.11	07/28/21 13:35	
Styrene	ug/L	<0.12	1.0	0.12	07/28/21 13:35	
tert-Butylbenzene	ug/L	<0.12	1.0	0.12	07/28/21 13:35	
Tetrachloroethene	ug/L	<0.33	1.0	0.33	07/28/21 13:35	
Tetrahydrofuran	ug/L	<2.8	5.0	2.8	07/28/21 13:35	
Toluene	ug/L	<0.25	1.0	0.25	07/28/21 13:35	
trans-1,2-Dichloroethene	ug/L	<0.10	1.0	0.10	07/28/21 13:35	
trans-1,3-Dichloropropene	ug/L	<0.18	1.0	0.18	07/28/21 13:35	
Trichloroethene	ug/L	<0.21	1.0	0.21	07/28/21 13:35	
Trichlorofluoromethane	ug/L	<0.16	1.0	0.16	07/28/21 13:35	
Vinyl chloride	ug/L	<0.17	1.0	0.17	07/28/21 13:35	
Xylene (Total)	ug/L	<0.28	3.0	0.28	07/28/21 13:35	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		07/28/21 13:35	
4-Bromofluorobenzene (S)	%	100	80-120		07/28/21 13:35	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

METHOD BLANK: 2947372 Matrix: Water
Associated Lab Samples: 60375481039, 60375481044

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Toluene-d8 (S)	%	102	80-120		07/28/21 13:35	

LABORATORY CONTROL SAMPLE: 2947373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.6	93	80-120	
1,1,1-Trichloroethane	ug/L	20	17.6	88	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	16.8	84	75-125	
1,1,2-Trichloroethane	ug/L	20	18.3	92	80-120	
1,1-Dichloroethane	ug/L	20	19.2	96	75-125	
1,1-Dichloroethene	ug/L	20	18.9	95	80-120	
1,1-Dichloropropene	ug/L	20	18.7	94	80-125	
1,2,3-Trichlorobenzene	ug/L	20	17.1	86	75-125	
1,2,3-Trichloropropane	ug/L	20	18.2	91	80-125	
1,2,3-Trimethylbenzene	ug/L	20	19.1	96	80-125	
1,2,4-Trichlorobenzene	ug/L	20	17.5	88	75-120	
1,2,4-Trimethylbenzene	ug/L	20	19.4	97	80-125	
1,2-Dibromo-3-chloropropane	ug/L	20	16.2	81	70-120	
1,2-Dibromoethane (EDB)	ug/L	20	19.1	95	80-120	
1,2-Dichlorobenzene	ug/L	20	17.8	89	80-120	
1,2-Dichloroethane	ug/L	20	17.8	89	75-120	
1,2-Dichloroethene (Total)	ug/L	40	38.1	95	80-120	
1,2-Dichloropropane	ug/L	20	18.8	94	80-125	
1,3,5-Trimethylbenzene	ug/L	20	19.1	96	80-125	
1,3-Dichlorobenzene	ug/L	20	18.5	93	80-120	
1,3-Dichloropropane	ug/L	20	18.5	92	80-120	
1,4-Dichlorobenzene	ug/L	20	18.4	92	80-120	
1,4-Dioxane (p-Dioxane)	ug/L	100	80.2J	80	10-180	
1-Methylnaphthalene	ug/L	20	15.4	77	40-160	
2,2-Dichloropropane	ug/L	20	15.9	79	60-130	
2-Butanone (MEK)	ug/L	100	94.4	94	40-150	
2-Chloroethylvinyl ether	ug/L	100	97.3	97	30-165	
2-Chlorotoluene	ug/L	20	19.3	96	80-120	
2-Hexanone	ug/L	100	97.2	97	45-150	
2-Methylnaphthalene	ug/L	20	13.4	67	55-150	
4-Chlorotoluene	ug/L	20	19.0	95	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	88.8	89	65-140	
Acetone	ug/L	100	95.9	96	20-175	
Acetonitrile	ug/L	100	92.1	92	25-180	
Acrolein	ug/L	100	85.4	85	10-200	
Acrylonitrile	ug/L	100	93.2	93	70-135	
Benzene	ug/L	20	19.2	96	80-120	
Bromobenzene	ug/L	20	18.3	92	80-120	
Bromochloromethane	ug/L	20	19.6	98	80-125	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

LABORATORY CONTROL SAMPLE: 2947373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	20	18.7	94	80-125	
Bromoform	ug/L	20	18.4	92	60-135	
Bromomethane	ug/L	20	11.9	59	10-165	
Carbon disulfide	ug/L	20	18.6	93	75-135	
Carbon tetrachloride	ug/L	20	18.2	91	80-125	
Chlorobenzene	ug/L	20	19.1	96	80-120	
Chloroethane	ug/L	20	19.5	97	70-130	
Chloroform	ug/L	20	18.8	94	80-120	
Chloromethane	ug/L	20	17.8	89	35-155	
cis-1,2-Dichloroethene	ug/L	20	19.0	95	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.2	91	80-125	
Cyclohexane	ug/L	20	19.1	96	80-130	
Cyclohexanone	ug/L	100	83.6	84	10-180	
Dibromochloromethane	ug/L	20	18.5	92	70-120	
Dibromomethane	ug/L	20	17.9	90	80-120	
Dichlorodifluoromethane	ug/L	20	20.3	101	50-150	
Diethyl ether (Ethyl ether)	ug/L	20	19.0	95	70-140	
Ethylbenzene	ug/L	20	19.4	97	80-120	
Hexachloro-1,3-butadiene	ug/L	20	17.1	86	65-135	
Isopropylbenzene (Cumene)	ug/L	20	19.8	99	80-125	
m&p-Xylene	ug/L	40	38.2	96	75-130	
Methyl acetate	ug/L	100	87.4	87	45-140	
Methyl-tert-butyl ether	ug/L	20	18.4	92	65-130	
Methylcyclohexane	ug/L	20	19.4	97	80-125	
Methylene Chloride	ug/L	20	18.5	92	75-120	
n-Butylbenzene	ug/L	20	17.8	89	80-125	
n-Heptane	ug/L	20	18.9	94	10-180	
n-Hexane	ug/L	20	18.4	92	60-135	
n-Propylbenzene	ug/L	20	18.8	94	80-120	
Naphthalene	ug/L	20	17.1	85	70-120	
o-Xylene	ug/L	20	19.2	96	75-130	
p-Isopropyltoluene	ug/L	20	19.8	99	80-135	
sec-Butylbenzene	ug/L	20	19.3	97	80-120	
Styrene	ug/L	20	19.3	96	80-120	
tert-Butylbenzene	ug/L	20	19.2	96	80-120	
Tetrachloroethene	ug/L	20	19.5	97	80-120	
Tetrahydrofuran	ug/L	100	91.8	92	75-125	
Toluene	ug/L	20	19.2	96	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.1	95	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.2	91	75-120	
Trichloroethene	ug/L	20	19.8	99	80-120	
Trichlorofluoromethane	ug/L	20	19.5	98	80-130	
Vinyl chloride	ug/L	20	19.1	96	65-130	
Xylene (Total)	ug/L	60	57.4	96	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 734438
QC Batch Method: EPA 5035
Analysis Method: EPA 8260
Analysis Description: 8260 MSV GRO and Oxygenates
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481029, 60375481030

METHOD BLANK: 2946897 Matrix: Solid
Associated Lab Samples: 60375481029, 60375481030

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.055	0.50	0.055	07/27/21 10:47	
1,2-Dichlorobenzene-d4 (S)	%	103	80-120		07/27/21 10:47	
4-Bromofluorobenzene (S)	%	103	69-133		07/27/21 10:47	
Toluene-d8 (S)	%	101	78-122		07/27/21 10:47	

LABORATORY CONTROL SAMPLE: 2946898

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.5	86	61-140	
1,2-Dichlorobenzene-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			104	69-133	
Toluene-d8 (S)	%			100	78-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2946899 2946900

Parameter	Units	60375642003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-GRO	mg/kg	ND	4.8	4.8	3.3	4.5	70	94	40-160	30	35	
1,2-Dichlorobenzene-d4 (S)	%						101	101	80-120			
4-Bromofluorobenzene (S)	%						102	103	69-133			
Toluene-d8 (S)	%						101	98	78-122			

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 734481
QC Batch Method: EPA 5035
Analysis Method: EPA 8260
Analysis Description: 8260 MSV GRO and Oxygenates
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037

METHOD BLANK: 2947096 Matrix: Solid
Associated Lab Samples: 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.055	0.50	0.055	07/27/21 17:49	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		07/27/21 17:49	
4-Bromofluorobenzene (S)	%	104	69-133		07/27/21 17:49	
Toluene-d8 (S)	%	100	78-122		07/27/21 17:49	

LABORATORY CONTROL SAMPLE: 2947097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.9	97	61-140	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			102	69-133	
Toluene-d8 (S)	%			101	78-122	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 734681
QC Batch Method: EPA 5035
Analysis Method: EPA 8260
Analysis Description: 8260 MSV GRO and Oxygenates
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481038, 60375481040, 60375481041, 60375481042, 60375481043

METHOD BLANK: 2947600 Matrix: Solid
Associated Lab Samples: 60375481038, 60375481040, 60375481041, 60375481042, 60375481043

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.055	0.50	0.055	07/28/21 09:09	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		07/28/21 09:09	
4-Bromofluorobenzene (S)	%	103	69-133		07/28/21 09:09	
Toluene-d8 (S)	%	100	78-122		07/28/21 09:09	

LABORATORY CONTROL SAMPLE: 2947601

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.3	82	61-140	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			96	69-133	
Toluene-d8 (S)	%			100	78-122	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 733706
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481001, 60375481002, 60375481003, 60375481004, 60375481005, 60375481006, 60375481007, 60375481008, 60375481009, 60375481010, 60375481011, 60375481012, 60375481013, 60375481014, 60375481015, 60375481016, 60375481017, 60375481018, 60375481019, 60375481020

METHOD BLANK: 2944188 Matrix: Solid
Associated Lab Samples: 60375481001, 60375481002, 60375481003, 60375481004, 60375481005, 60375481006, 60375481007, 60375481008, 60375481009, 60375481010, 60375481011, 60375481012, 60375481013, 60375481014, 60375481015, 60375481016, 60375481017, 60375481018, 60375481019, 60375481020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<7.7	31.0	7.7	07/26/21 13:57	
PCB-1221 (Aroclor 1221)	ug/kg	<7.4	31.0	7.4	07/26/21 13:57	
PCB-1232 (Aroclor 1232)	ug/kg	<3.4	31.0	3.4	07/26/21 13:57	
PCB-1242 (Aroclor 1242)	ug/kg	<7.5	31.0	7.5	07/26/21 13:57	
PCB-1248 (Aroclor 1248)	ug/kg	<2.1	31.0	2.1	07/26/21 13:57	
PCB-1254 (Aroclor 1254)	ug/kg	<2.9	31.0	2.9	07/26/21 13:57	
PCB-1260 (Aroclor 1260)	ug/kg	<6.1	31.0	6.1	07/26/21 13:57	
Decachlorobiphenyl (S)	%	83	35-120		07/26/21 13:57	

LABORATORY CONTROL SAMPLE: 2944189

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	162	155	96	65-120	
PCB-1260 (Aroclor 1260)	ug/kg	162	156	96	65-120	
Decachlorobiphenyl (S)	%			93	35-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944190 2944191

Parameter	Units	60375481017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<10.2	210	208	232	204	110	98	30-130	13	40	
PCB-1260 (Aroclor 1260)	ug/kg	<8.1	210	208	231	211	110	101	15-155	9	40	
Decachlorobiphenyl (S)	%						101	94	35-120		50	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 733707
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481021, 60375481022, 60375481023, 60375481024, 60375481027, 60375481028, 60375481029, 60375481030, 60375481031, 60375481034, 60375481035, 60375481036, 60375481037, 60375481038, 60375481042, 60375481043

METHOD BLANK: 2944193 Matrix: Solid
Associated Lab Samples: 60375481021, 60375481022, 60375481023, 60375481024, 60375481027, 60375481028, 60375481029, 60375481030, 60375481031, 60375481034, 60375481035, 60375481036, 60375481037, 60375481038, 60375481042, 60375481043

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<8.0	32.2	8.0	07/23/21 07:52	
PCB-1221 (Aroclor 1221)	ug/kg	<7.7	32.2	7.7	07/23/21 07:52	
PCB-1232 (Aroclor 1232)	ug/kg	<3.5	32.2	3.5	07/23/21 07:52	
PCB-1242 (Aroclor 1242)	ug/kg	<7.8	32.2	7.8	07/23/21 07:52	
PCB-1248 (Aroclor 1248)	ug/kg	<2.1	32.2	2.1	07/23/21 07:52	
PCB-1254 (Aroclor 1254)	ug/kg	<3.0	32.2	3.0	07/23/21 07:52	
PCB-1260 (Aroclor 1260)	ug/kg	<6.3	32.2	6.3	07/23/21 07:52	
Decachlorobiphenyl (S)	%	98	35-120		07/23/21 07:52	

LABORATORY CONTROL SAMPLE: 2944194

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	166	165	99	65-120	
PCB-1260 (Aroclor 1260)	ug/kg	166	167	101	65-120	
Decachlorobiphenyl (S)	%			99	35-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944195 2944196

Parameter	Units	60375481027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<10.0	206	194	182	169	88	87	30-130	7	40	
PCB-1260 (Aroclor 1260)	ug/kg	<8.0	206	194	185	177	90	91	15-155	5	40	
Decachlorobiphenyl (S)	%						86	89	35-120		50	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 733755
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481029, 60375481030, 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481040, 60375481041, 60375481042, 60375481043

METHOD BLANK: 2944445 Matrix: Solid
Associated Lab Samples: 60375481029, 60375481030, 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481040, 60375481041, 60375481042, 60375481043

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	<2.4	6.5	2.4	07/23/21 16:11	
Acenaphthylene	ug/kg	<2.4	6.5	2.4	07/23/21 16:11	
Anthracene	ug/kg	<2.7	6.5	2.7	07/23/21 16:11	
Benzo(a)anthracene	ug/kg	<3.0	6.5	3.0	07/23/21 16:11	
Benzo(a)pyrene	ug/kg	<2.4	6.5	2.4	07/23/21 16:11	
Benzo(b)fluoranthene	ug/kg	<3.1	6.5	3.1	07/23/21 16:11	
Benzo(g,h,i)perylene	ug/kg	<2.9	6.5	2.9	07/23/21 16:11	
Benzo(k)fluoranthene	ug/kg	<3.6	6.5	3.6	07/23/21 16:11	
Chrysene	ug/kg	<3.1	6.5	3.1	07/23/21 16:11	
Dibenz(a,h)anthracene	ug/kg	<2.8	6.5	2.8	07/23/21 16:11	
Fluoranthene	ug/kg	<4.9	6.5	4.9	07/23/21 16:11	
Fluorene	ug/kg	<2.5	6.5	2.5	07/23/21 16:11	
Indeno(1,2,3-cd)pyrene	ug/kg	<2.8	6.5	2.8	07/23/21 16:11	
Naphthalene	ug/kg	<2.8	6.5	2.8	07/23/21 16:11	
Phenanthrene	ug/kg	<5.3	6.5	5.3	07/23/21 16:11	
Pyrene	ug/kg	<3.5	6.5	3.5	07/23/21 16:11	
2-Fluorobiphenyl (S)	%	80	40-120		07/23/21 16:11	
Terphenyl-d14 (S)	%	81	45-130		07/23/21 16:11	

LABORATORY CONTROL SAMPLE: 2944446

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	31.4	32.1	102	45-120	
Acenaphthylene	ug/kg	31.4	32.6	104	50-120	
Anthracene	ug/kg	31.4	34.5	110	50-120	
Benzo(a)anthracene	ug/kg	31.4	35.8	114	55-125	
Benzo(a)pyrene	ug/kg	31.4	34.9	111	45-120	
Benzo(b)fluoranthene	ug/kg	31.4	35.4	113	50-125	
Benzo(g,h,i)perylene	ug/kg	31.4	30.9	98	40-120	
Benzo(k)fluoranthene	ug/kg	31.4	36.7	117	55-120	
Chrysene	ug/kg	31.4	33.8	108	55-120	
Dibenz(a,h)anthracene	ug/kg	31.4	34.3	109	40-125	
Fluoranthene	ug/kg	31.4	37.6	120	50-125	
Fluorene	ug/kg	31.4	33.7	107	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	31.4	32.3	103	44-125	
Naphthalene	ug/kg	31.4	31.7	101	45-120	
Phenanthrene	ug/kg	31.4	33.9	108	50-125	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

LABORATORY CONTROL SAMPLE: 2944446

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Pyrene	ug/kg	31.4	35.4	113	50-125	
2-Fluorobiphenyl (S)	%			110	40-120	
Terphenyl-d14 (S)	%			122	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944447 2944448

Parameter	Units	60375481030 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<2.8	39.4	38.4	33.2	35.3	84	92	10-150	6	42	
Acenaphthylene	ug/kg	<2.8	39.4	38.4	33.5	35.6	85	93	30-125	6	44	
Anthracene	ug/kg	<3.1	39.4	38.4	35.9	37.2	91	97	10-160	3	54	
Benzo(a)anthracene	ug/kg	<3.5	39.4	38.4	37.1	38.2	94	99	10-160	3	62	
Benzo(a)pyrene	ug/kg	<2.7	39.4	38.4	36.0	36.7	92	96	10-150	2	66	
Benzo(b)fluoranthene	ug/kg	<3.6	39.4	38.4	36.6	38.8	93	101	10-165	6	61	
Benzo(g,h,i)perylene	ug/kg	<3.4	39.4	38.4	31.7	32.4	81	84	10-155	2	58	
Benzo(k)fluoranthene	ug/kg	<4.2	39.4	38.4	39.3	38.2	100	99	10-165	3	53	
Chrysene	ug/kg	<3.6	39.4	38.4	35.5	36.0	90	94	10-150	2	57	
Dibenz(a,h)anthracene	ug/kg	<3.2	39.4	38.4	34.3	34.9	87	91	10-175	2	48	
Fluoranthene	ug/kg	<5.6	39.4	38.4	40.5	40.6	103	106	10-180	0	54	
Fluorene	ug/kg	<2.9	39.4	38.4	34.8	36.7	88	95	20-145	5	39	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.2	39.4	38.4	33.3	33.5	85	87	10-150	0	59	
Naphthalene	ug/kg	<3.2	39.4	38.4	32.7	34.7	83	90	10-165	6	54	
Phenanthrene	ug/kg	<6.1	39.4	38.4	36.7	37.5	93	98	10-170	2	51	
Pyrene	ug/kg	<4.0	39.4	38.4	38.6	39.0	98	101	10-180	1	61	
2-Fluorobiphenyl (S)	%						94	95	40-120			
Terphenyl-d14 (S)	%						102	102	45-130			

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 733756
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481003, 60375481004, 60375481005, 60375481006, 60375481007, 60375481008, 60375481009, 60375481010, 60375481011, 60375481012, 60375481013, 60375481014, 60375481015, 60375481016, 60375481017, 60375481018, 60375481019, 60375481020, 60375481021, 60375481022

METHOD BLANK: 2944450
Matrix: Solid
Associated Lab Samples: 60375481003, 60375481004, 60375481005, 60375481006, 60375481007, 60375481008, 60375481009, 60375481010, 60375481011, 60375481012, 60375481013, 60375481014, 60375481015, 60375481016, 60375481017, 60375481018, 60375481019, 60375481020, 60375481021, 60375481022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	<1.2	3.2	1.2	07/26/21 18:08	
Acenaphthylene	ug/kg	<1.2	3.2	1.2	07/26/21 18:08	
Anthracene	ug/kg	<1.3	3.2	1.3	07/26/21 18:08	
Benzo(a)anthracene	ug/kg	<1.5	3.2	1.5	07/26/21 18:08	
Benzo(a)pyrene	ug/kg	<1.2	3.2	1.2	07/26/21 18:08	
Benzo(b)fluoranthene	ug/kg	<1.6	3.2	1.6	07/26/21 18:08	
Benzo(g,h,i)perylene	ug/kg	<1.5	3.2	1.5	07/26/21 18:08	
Benzo(k)fluoranthene	ug/kg	<1.8	3.2	1.8	07/26/21 18:08	
Chrysene	ug/kg	<1.5	3.2	1.5	07/26/21 18:08	
Dibenz(a,h)anthracene	ug/kg	<1.4	3.2	1.4	07/26/21 18:08	
Fluoranthene	ug/kg	<2.4	3.2	2.4	07/26/21 18:08	
Fluorene	ug/kg	<1.3	3.2	1.3	07/26/21 18:08	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.4	3.2	1.4	07/26/21 18:08	
Naphthalene	ug/kg	<1.4	3.2	1.4	07/26/21 18:08	
Phenanthrene	ug/kg	<2.6	3.2	2.6	07/26/21 18:08	
Pyrene	ug/kg	<1.7	3.2	1.7	07/26/21 18:08	
2-Fluorobiphenyl (S)	%	78	40-120		07/26/21 18:08	
Terphenyl-d14 (S)	%	94	45-130		07/26/21 18:08	

LABORATORY CONTROL SAMPLE: 2944451

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	31.6	23.6	75	45-120	
Acenaphthylene	ug/kg	31.6	23.8	75	50-120	
Anthracene	ug/kg	31.6	26.2	83	50-120	
Benzo(a)anthracene	ug/kg	31.6	28.2	89	55-125	
Benzo(a)pyrene	ug/kg	31.6	26.8	85	45-120	
Benzo(b)fluoranthene	ug/kg	31.6	33.7	107	50-125	
Benzo(g,h,i)perylene	ug/kg	31.6	13.1	41	40-120	
Benzo(k)fluoranthene	ug/kg	31.6	29.9	95	55-120	
Chrysene	ug/kg	31.6	26.1	83	55-120	
Dibenz(a,h)anthracene	ug/kg	31.6	16.8	53	40-125	
Fluoranthene	ug/kg	31.6	29.8	94	50-125	
Fluorene	ug/kg	31.6	25.6	81	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	31.6	15.8	50	44-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

LABORATORY CONTROL SAMPLE: 2944451

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	31.6	22.7	72	45-120	
Phenanthrene	ug/kg	31.6	26.1	83	50-125	
Pyrene	ug/kg	31.6	29.7	94	50-125	
2-Fluorobiphenyl (S)	%			73	40-120	
Terphenyl-d14 (S)	%			90	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944452 2944453

Parameter	Units	60375481017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<1.5	41.3	40.8	31.4	29.3	76	72	10-150	7	42	
Acenaphthylene	ug/kg	<1.5	41.3	40.8	30.5	28.8	74	71	30-125	6	44	
Anthracene	ug/kg	9.8	41.3	40.8	44.5	42.0	84	79	10-160	6	54	
Benzo(a)anthracene	ug/kg	50.4	41.3	40.8	99.3	90.3	118	98	10-160	9	62	
Benzo(a)pyrene	ug/kg	38.8	41.3	40.8	84.4	73.8	110	86	10-150	13	66	
Benzo(b)fluoranthene	ug/kg	92.4	41.3	40.8	153	134	147	101	10-165	14	61	
Benzo(g,h,i)perylene	ug/kg	15.8	41.3	40.8	37.8	32.0	53	40	10-155	17	58	
Benzo(k)fluoranthene	ug/kg	22.3	41.3	40.8	70.1	68.8	115	114	10-165	2	53	
Chrysene	ug/kg	57.9	41.3	40.8	99.1	88.9	100	76	10-150	11	57	
Dibenz(a,h)anthracene	ug/kg	<1.8	41.3	40.8	26.1	23.7	63	58	10-175	10	48	
Fluoranthene	ug/kg	160	41.3	40.8	216	200	136	99	10-180	8	54	
Fluorene	ug/kg	2.5J	41.3	40.8	36.3	33.6	82	76	20-145	8	39	
Indeno(1,2,3-cd)pyrene	ug/kg	16.1	41.3	40.8	41.2	35.6	61	48	10-150	15	59	
Naphthalene	ug/kg	<1.8	41.3	40.8	29.1	27.0	71	66	10-165	8	54	
Phenanthrene	ug/kg	64.0	41.3	40.8	111	98.6	114	85	10-170	12	51	
Pyrene	ug/kg	125	41.3	40.8	191	174	158	121	10-180	9	61	
2-Fluorobiphenyl (S)	%						71	68	40-120			
Terphenyl-d14 (S)	%						95	91	45-130			

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 733762
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481027, 60375481028

METHOD BLANK: 2944481 Matrix: Solid
Associated Lab Samples: 60375481027, 60375481028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	<1.2	3.2	1.2	07/27/21 14:11	
Acenaphthylene	ug/kg	<1.2	3.2	1.2	07/27/21 14:11	
Anthracene	ug/kg	<1.3	3.2	1.3	07/27/21 14:11	
Benzo(a)anthracene	ug/kg	<1.5	3.2	1.5	07/27/21 14:11	
Benzo(a)pyrene	ug/kg	<1.2	3.2	1.2	07/27/21 14:11	
Benzo(b)fluoranthene	ug/kg	<1.5	3.2	1.5	07/27/21 14:11	
Benzo(g,h,i)perylene	ug/kg	<1.4	3.2	1.4	07/27/21 14:11	
Benzo(k)fluoranthene	ug/kg	<1.8	3.2	1.8	07/27/21 14:11	
Chrysene	ug/kg	<1.5	3.2	1.5	07/27/21 14:11	
Dibenz(a,h)anthracene	ug/kg	<1.4	3.2	1.4	07/27/21 14:11	
Fluoranthene	ug/kg	<2.4	3.2	2.4	07/27/21 14:11	
Fluorene	ug/kg	<1.2	3.2	1.2	07/27/21 14:11	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.4	3.2	1.4	07/27/21 14:11	
Naphthalene	ug/kg	<1.4	3.2	1.4	07/27/21 14:11	
Phenanthrene	ug/kg	<2.6	3.2	2.6	07/27/21 14:11	
Pyrene	ug/kg	<1.7	3.2	1.7	07/27/21 14:11	
2-Fluorobiphenyl (S)	%	93	40-120		07/27/21 14:11	
Terphenyl-d14 (S)	%	104	45-130		07/27/21 14:11	

LABORATORY CONTROL SAMPLE: 2944482

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	32.3	27.5	85	45-120	
Acenaphthylene	ug/kg	32.3	26.8	83	50-120	
Anthracene	ug/kg	32.3	30.0	93	50-120	
Benzo(a)anthracene	ug/kg	32.3	30.1	93	55-125	
Benzo(a)pyrene	ug/kg	32.3	28.7	89	45-120	
Benzo(b)fluoranthene	ug/kg	32.3	30.8	95	50-125	
Benzo(g,h,i)perylene	ug/kg	32.3	29.4	91	40-120	
Benzo(k)fluoranthene	ug/kg	32.3	29.0	90	55-120	
Chrysene	ug/kg	32.3	29.6	92	55-120	
Dibenz(a,h)anthracene	ug/kg	32.3	29.2	91	40-125	
Fluoranthene	ug/kg	32.3	31.7	98	50-125	
Fluorene	ug/kg	32.3	28.1	87	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	32.3	29.8	92	44-125	
Naphthalene	ug/kg	32.3	27.1	84	45-120	
Phenanthrene	ug/kg	32.3	31.6	98	50-125	
Pyrene	ug/kg	32.3	31.7	98	50-125	
2-Fluorobiphenyl (S)	%			83	40-120	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

LABORATORY CONTROL SAMPLE: 2944482

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			92	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944483 2944484

Parameter	Units	60375481027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<1.5	41.1	39.6	34.9	35.3	85	89	10-150	1	42	
Acenaphthylene	ug/kg	<1.5	41.1	39.6	34.5	35.1	84	89	30-125	2	44	
Anthracene	ug/kg	<1.6	41.1	39.6	39.7	39.5	96	100	10-160	0	54	
Benzo(a)anthracene	ug/kg	<1.8	41.1	39.6	40.5	40.0	99	101	10-160	1	62	
Benzo(a)pyrene	ug/kg	<1.4	41.1	39.6	38.2	37.8	93	95	10-150	1	66	
Benzo(b)fluoranthene	ug/kg	<1.9	41.1	39.6	42.0	38.6	102	97	10-165	9	61	
Benzo(g,h,i)perylene	ug/kg	<1.8	41.1	39.6	36.9	37.1	90	94	10-155	1	58	
Benzo(k)fluoranthene	ug/kg	<2.2	41.1	39.6	40.4	41.3	98	104	10-165	2	53	
Chrysene	ug/kg	<1.9	41.1	39.6	40.1	39.4	97	100	10-150	2	57	
Dibenz(a,h)anthracene	ug/kg	<1.7	41.1	39.6	36.5	37.0	89	93	10-175	1	48	
Fluoranthene	ug/kg	4.4	41.1	39.6	44.4	45.1	97	103	10-180	1	54	
Fluorene	ug/kg	<1.5	41.1	39.6	36.4	37.1	88	94	20-145	2	39	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.7	41.1	39.6	37.3	36.6	91	92	10-150	2	59	
Naphthalene	ug/kg	<1.7	41.1	39.6	35.9	34.7	87	88	10-165	3	54	
Phenanthrene	ug/kg	4.1	41.1	39.6	41.6	43.1	91	98	10-170	3	51	
Pyrene	ug/kg	3.7J	41.1	39.6	43.5	43.4	97	100	10-180	0	61	
2-Fluorobiphenyl (S)	%						84	86	40-120			
Terphenyl-d14 (S)	%						97	96	45-130			

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 733754
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 MSSV TPH ORO
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481029, 60375481030, 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037, 60375481038, 60375481040, 60375481041, 60375481042, 60375481043

METHOD BLANK: 2944441 Matrix: Solid
Associated Lab Samples: 60375481029, 60375481030, 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037, 60375481038, 60375481040, 60375481041, 60375481042, 60375481043

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-DRO	mg/kg	<1.4	14.7	1.4	07/28/21 20:48	
TPH-ORO	mg/kg	2.4J	14.7	1.4	07/28/21 20:48	
2-Fluorobiphenyl (S)	%	80	40-120		07/28/21 20:48	
Nitrobenzene-d5 (S)	%	81	30-120		07/28/21 20:48	
Terphenyl-d14 (S)	%	76	45-120		07/28/21 20:48	

LABORATORY CONTROL SAMPLE: 2944442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	325	297	91	40-120	
2-Fluorobiphenyl (S)	%			81	40-120	
Nitrobenzene-d5 (S)	%			92	30-120	
Terphenyl-d14 (S)	%			73	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944443 2944444

Parameter	Units	60375481029 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO	mg/kg	2.9J	368	379	296	327	80	86	10-145	10	38	
2-Fluorobiphenyl (S)	%						75	79	40-120			
Nitrobenzene-d5 (S)	%						78	84	30-120			
Terphenyl-d14 (S)	%						67	70	45-120			

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 733696
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481001, 60375481002, 60375481003, 60375481004, 60375481005, 60375481006, 60375481007, 60375481008, 60375481009, 60375481010, 60375481011, 60375481012, 60375481013, 60375481014, 60375481015, 60375481016, 60375481017, 60375481018, 60375481019, 60375481020

METHOD BLANK: 2944162
Matrix: Solid
Associated Lab Samples: 60375481001, 60375481002, 60375481003, 60375481004, 60375481005, 60375481006, 60375481007, 60375481008, 60375481009, 60375481010, 60375481011, 60375481012, 60375481013, 60375481014, 60375481015, 60375481016, 60375481017, 60375481018, 60375481019, 60375481020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	0.50	07/22/21 11:10	

SAMPLE DUPLICATE: 2944163

Parameter	Units	60375481017 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.7	20.8	1	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 733697
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481021, 60375481022, 60375481023, 60375481024, 60375481025, 60375481026, 60375481027, 60375481028, 60375481029, 60375481030, 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037, 60375481038, 60375481040, 60375481041

METHOD BLANK: 2944168
Matrix: Solid
Associated Lab Samples: 60375481021, 60375481022, 60375481023, 60375481024, 60375481025, 60375481026, 60375481027, 60375481028, 60375481029, 60375481030, 60375481031, 60375481032, 60375481033, 60375481034, 60375481035, 60375481036, 60375481037, 60375481038, 60375481040, 60375481041

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	0.50	07/22/21 11:38	

SAMPLE DUPLICATE: 2944169

Parameter	Units	60375481027 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.0	19.1	1	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 734005
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375481042, 60375481043

METHOD BLANK: 2945488 Matrix: Solid
Associated Lab Samples: 60375481042, 60375481043

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	0.50	07/23/21 14:27	

SAMPLE DUPLICATE: 2945489

Parameter	Units	60375461001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.3	13.6	11	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 1713011
QC Batch Method: SM 2540 G
Analysis Method: SM 2540G
Analysis Description: Total Solids 2540 G-2011
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 60375481020, 60375481021, 60375481022

METHOD BLANK: R3686215-1 Matrix: Solid
Associated Lab Samples: 60375481020, 60375481021, 60375481022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00200			07/30/21 18:20	

LABORATORY CONTROL SAMPLE: R3686215-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	99.9	85.0-115	

SAMPLE DUPLICATE: R3686215-3

Parameter	Units	L1381530-06 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	81.7	81.1	0.775	10	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375481

QC Batch: 1713014
QC Batch Method: SM 2540 G
Analysis Method: SM 2540G
Analysis Description: Total Solids 2540 G-2011
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 60375481027, 60375481028

METHOD BLANK: R3685338-1 Matrix: Solid
Associated Lab Samples: 60375481027, 60375481028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00300			07/28/21 13:59	

LABORATORY CONTROL SAMPLE: R3685338-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.1	100	85.0-115	

SAMPLE DUPLICATE: R3685338-3

Parameter	Units	60375481027 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	81.9	81.2	0.955	10	

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QUALIFIERS

Project: GSA GOODFELLOW
Pace Project No.: 60375481

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 734572

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
c2	Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375481001	GB-69/2'-3'	EPA 3546	733706	EPA 8082	734209
60375481002	GB-69/3'-5'	EPA 3546	733706	EPA 8082	734209
60375481003	GB-70/3'-5'	EPA 3546	733706	EPA 8082	734209
60375481004	GB-70/5'-7'	EPA 3546	733706	EPA 8082	734209
60375481005	GB-71/0'-2'	EPA 3546	733706	EPA 8082	734209
60375481006	GB-71/3'-5'	EPA 3546	733706	EPA 8082	734209
60375481007	GB-65/3'-4'	EPA 3546	733706	EPA 8082	734209
60375481008	GB-65/5'-7'	EPA 3546	733706	EPA 8082	734209
60375481009	GB-64/3'-4'	EPA 3546	733706	EPA 8082	734209
60375481010	GB-64/5'-7'	EPA 3546	733706	EPA 8082	734209
60375481011	GB-57/3.5'-5.5'	EPA 3546	733706	EPA 8082	734209
60375481012	GB-57/6.0'-8.0'	EPA 3546	733706	EPA 8082	734209
60375481013	GB-57/6.0'-8.0' D	EPA 3546	733706	EPA 8082	734209
60375481014	GB-56/3-5'	EPA 3546	733706	EPA 8082	734209
60375481015	GB-56/5-7'	EPA 3546	733706	EPA 8082	734209
60375481016	GB-58/1-3'	EPA 3546	733706	EPA 8082	734209
60375481017	GB-58/4-6'	EPA 3546	733706	EPA 8082	734209
60375481018	GB-51/1.5-3'	EPA 3546	733706	EPA 8082	734209
60375481019	GB-51/3-5'	EPA 3546	733706	EPA 8082	734209
60375481020	GB-50/0-2'	EPA 3546	733706	EPA 8082	734209
60375481021	GB-50/3-5'	EPA 3546	733707	EPA 8082	733855
60375481022	GB-50/3-5'D	EPA 3546	733707	EPA 8082	733855
60375481023	GB-49/3.5-4.5'	EPA 3546	733707	EPA 8082	733855
60375481024	GB-49/5-6'	EPA 3546	733707	EPA 8082	733855
60375481027	GB-48/3-5'	EPA 3546	733707	EPA 8082	733855
60375481028	GB-48/5-7'	EPA 3546	733707	EPA 8082	733855
60375481029	GB-55/0-2'	EPA 3546	733707	EPA 8082	733855
60375481030	GB-55/3-5'	EPA 3546	733707	EPA 8082	733855
60375481031	GB-55/3-5'D	EPA 3546	733707	EPA 8082	733855
60375481034	GB-68/1-3'	EPA 3546	733707	EPA 8082	733855
60375481035	GB-68/3-5'	EPA 3546	733707	EPA 8082	733855
60375481036	GB-68/3-5'D	EPA 3546	733707	EPA 8082	733855
60375481037	GB-67/5-6'	EPA 3546	733707	EPA 8082	733855
60375481038	GB-67/8-10'	EPA 3546	733707	EPA 8082	733855
60375481042	GB-54/0-2'	EPA 3546	733707	EPA 8082	733855
60375481043	GB-54/2-4'	EPA 3546	733707	EPA 8082	733855
60375481020	GB-50/0-2'	8330	1710286	EPA 8330	1710286
60375481021	GB-50/3-5'	8330	1710286	EPA 8330	1710286
60375481022	GB-50/3-5'D	8330	1710286	EPA 8330	1710286
60375481027	GB-48/3-5'	8330	1710286	EPA 8330	1710286
60375481028	GB-48/5-7'	8330	1710286	EPA 8330	1710286
60375481001	GB-69/2'-3'	EPA 3050	736024	EPA 6020	736184
60375481002	GB-69/3'-5'	EPA 3050	736024	EPA 6020	736184
60375481003	GB-70/3'-5'	EPA 3050	736024	EPA 6020	736184
60375481004	GB-70/5'-7'	EPA 3050	736024	EPA 6020	736184
60375481005	GB-71/0'-2'	EPA 3050	736024	EPA 6020	736184
60375481006	GB-71/3'-5'	EPA 3050	736024	EPA 6020	736184

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375481007	GB-65/3'-4'	EPA 3050	736024	EPA 6020	736184
60375481008	GB-65/5'-7'	EPA 3050	736024	EPA 6020	736184
60375481009	GB-64/3'-4'	EPA 3050	736024	EPA 6020	736184
60375481010	GB-64/5'-7'	EPA 3050	736024	EPA 6020	736184
60375481011	GB-57/3.5'-5.5'	EPA 3050	736024	EPA 6020	736184
60375481012	GB-57/6.0'-8.0'	EPA 3050	736024	EPA 6020	736184
60375481013	GB-57/6.0'-8.0' D	EPA 3050	736067	EPA 6020	736274
60375481014	GB-56/3-5'	EPA 3050	736067	EPA 6020	736274
60375481015	GB-56/5-7'	EPA 3050	736067	EPA 6020	736274
60375481016	GB-58/1-3'	EPA 3050	736067	EPA 6020	736274
60375481017	GB-58/4-6'	EPA 3050	736067	EPA 6020	736274
60375481018	GB-51/1.5-3'	EPA 3050	736067	EPA 6020	736274
60375481019	GB-51/3-5'	EPA 3050	736067	EPA 6020	736274
60375481020	GB-50/0-2'	EPA 3050	736067	EPA 6020	736274
60375481021	GB-50/3-5'	EPA 3050	736067	EPA 6020	736274
60375481022	GB-50/3-5'D	EPA 3050	736067	EPA 6020	736274
60375481023	GB-49/3.5-4.5'	EPA 3050	736067	EPA 6020	736274
60375481024	GB-49/5-6'	EPA 3050	736067	EPA 6020	736274
60375481025	GB-63/0-2'	EPA 3050	736067	EPA 6020	736274
60375481026	GB-63/3-5'	EPA 3050	736067	EPA 6020	736274
60375481027	GB-48/3-5'	EPA 3050	736067	EPA 6020	736274
60375481028	GB-48/5-7'	EPA 3050	736067	EPA 6020	736274
60375481029	GB-55/0-2'	EPA 3050	736067	EPA 6020	736274
60375481030	GB-55/3-5'	EPA 3050	736067	EPA 6020	736274
60375481031	GB-55/3-5'D	EPA 3050	736069	EPA 6020	736275
60375481032	GB-62/0-2'	EPA 3050	736069	EPA 6020	736275
60375481033	GB-62/3-5'	EPA 3050	736069	EPA 6020	736275
60375481034	GB-68/1-3'	EPA 3050	736069	EPA 6020	736275
60375481035	GB-68/3-5'	EPA 3050	736069	EPA 6020	736275
60375481036	GB-68/3-5'D	EPA 3050	736069	EPA 6020	736275
60375481037	GB-67/5-6'	EPA 3050	736069	EPA 6020	736275
60375481038	GB-67/8-10'	EPA 3050	736069	EPA 6020	736275
60375481042	GB-54/0-2'	EPA 3050	736069	EPA 6020	736275
60375481043	GB-54/2-4'	EPA 3050	736069	EPA 6020	736275
60375481003	GB-70/3'-5'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481004	GB-70/5'-7'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481005	GB-71/0'-2'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481006	GB-71/3'-5'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481007	GB-65/3'-4'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481008	GB-65/5'-7'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481009	GB-64/3'-4'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481010	GB-64/5'-7'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481011	GB-57/3.5'-5.5'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481012	GB-57/6.0'-8.0'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481013	GB-57/6.0'-8.0' D	EPA 3546	733756	EPA 8270 by SIM	734203
60375481014	GB-56/3-5'	EPA 3546	733756	EPA 8270 by SIM	734203
60375481015	GB-56/5-7'	EPA 3546	733756	EPA 8270 by SIM	734203

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375481016	**GB-58/1-3'**	EPA 3546	733756	EPA 8270 by SIM	734203
60375481017	**GB-58/4-6'**	EPA 3546	733756	EPA 8270 by SIM	734203
60375481018	**GB-51/1.5-3'**	EPA 3546	733756	EPA 8270 by SIM	734203
60375481019	**GB-51/3-5'**	EPA 3546	733756	EPA 8270 by SIM	734203
60375481020	**GB-50/0-2'**	EPA 3546	733756	EPA 8270 by SIM	734203
60375481021	**GB-50/3-5'**	EPA 3546	733756	EPA 8270 by SIM	734203
60375481022	**GB-50/3-5'D**	EPA 3546	733756	EPA 8270 by SIM	734203
60375481027	**GB-48/3-5'**	EPA 3546	733762	EPA 8270 by SIM	734453
60375481028	**GB-48/5-7'**	EPA 3546	733762	EPA 8270 by SIM	734453
60375481029	**GB-55/0-2'**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481030	**GB-55/3-5'**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481031	**GB-55/3-5'D**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481032	**GB-62/0-2'**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481033	**GB-62/3-5'**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481034	**GB-68/1-3'**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481035	**GB-68/3-5'**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481036	**GB-68/3-5'D**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481040	**GB-61/3-5'**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481041	**GB-61/5-7'**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481042	**GB-54/0-2'**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481043	**GB-54/2-4'**	EPA 3546	733755	EPA 8270 by SIM	733952
60375481029	**GB-55/0-2'**	EPA 3546	733754	EPA 8270	734771
60375481030	**GB-55/3-5'**	EPA 3546	733754	EPA 8270	734771
60375481031	**GB-55/3-5'D**	EPA 3546	733754	EPA 8270	734771
60375481032	**GB-62/0-2'**	EPA 3546	733754	EPA 8270	734771
60375481033	**GB-62/3-5'**	EPA 3546	733754	EPA 8270	734771
60375481034	**GB-68/1-3'**	EPA 3546	733754	EPA 8270	734771
60375481035	**GB-68/3-5'**	EPA 3546	733754	EPA 8270	734771
60375481036	**GB-68/3-5'D**	EPA 3546	733754	EPA 8270	734771
60375481037	**GB-67/5-6'**	EPA 3546	733754	EPA 8270	734771
60375481038	**GB-67/8-10'**	EPA 3546	733754	EPA 8270	734771
60375481040	**GB-61/3-5'**	EPA 3546	733754	EPA 8270	734771
60375481041	**GB-61/5-7'**	EPA 3546	733754	EPA 8270	734771
60375481042	**GB-54/0-2'**	EPA 3546	733754	EPA 8270	734771
60375481043	**GB-54/2-4'**	EPA 3546	733754	EPA 8270	734771
60375481029	**GB-55/0-2'**	EPA 5035A/5030	734436	EPA 8260B	734474
60375481030	**GB-55/3-5'**	EPA 5035A/5030	734436	EPA 8260B	734474
60375481031	**GB-55/3-5'D**	EPA 5035A/5030	734480	EPA 8260B	734576
60375481032	**GB-62/0-2'**	EPA 5035A/5030	734480	EPA 8260B	734576
60375481033	**GB-62/3-5'**	EPA 5035A/5030	734480	EPA 8260B	734576
60375481034	**GB-68/1-3'**	EPA 5035A/5030	734480	EPA 8260B	734576
60375481035	**GB-68/3-5'**	EPA 5035A/5030	734480	EPA 8260B	734576
60375481036	**GB-68/3-5'D**	EPA 5035A/5030	734480	EPA 8260B	734576
60375481037	**GB-67/5-6'**	EPA 5035A/5030	734480	EPA 8260B	734576
60375481038	**GB-67/8-10'**	EPA 5035A/5030	734679	EPA 8260B	734710
60375481040	**GB-61/3-5'**	EPA 5035A/5030	734679	EPA 8260B	734710

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375481041	GB-61/5-7'	EPA 5035A/5030	734679	EPA 8260B	734710
60375481042	GB-54/0-2'	EPA 5035A/5030	734679	EPA 8260B	734710
60375481043	GB-54/2-4'	EPA 5035A/5030	734679	EPA 8260B	734710
60375481039	TB-01	EPA 5030B/8260	734572		
60375481044	TB-02	EPA 5030B/8260	734572		
60375481029	GB-55/0-2'	EPA 5035	734438	EPA 8260	734473
60375481030	GB-55/3-5'	EPA 5035	734438	EPA 8260	734473
60375481031	GB-55/3-5'D	EPA 5035	734481	EPA 8260	734577
60375481032	GB-62/0-2'	EPA 5035	734481	EPA 8260	734577
60375481033	GB-62/3-5'	EPA 5035	734481	EPA 8260	734577
60375481034	GB-68/1-3'	EPA 5035	734481	EPA 8260	734577
60375481035	GB-68/3-5'	EPA 5035	734481	EPA 8260	734577
60375481036	GB-68/3-5'D	EPA 5035	734481	EPA 8260	734577
60375481037	GB-67/5-6'	EPA 5035	734481	EPA 8260	734577
60375481038	GB-67/8-10'	EPA 5035	734681	EPA 8260	734712
60375481040	GB-61/3-5'	EPA 5035	734681	EPA 8260	734712
60375481041	GB-61/5-7'	EPA 5035	734681	EPA 8260	734712
60375481042	GB-54/0-2'	EPA 5035	734681	EPA 8260	734712
60375481043	GB-54/2-4'	EPA 5035	734681	EPA 8260	734712
60375481001	GB-69/2'-3'	ASTM D2974	733696		
60375481002	GB-69/3'-5'	ASTM D2974	733696		
60375481003	GB-70/3'-5'	ASTM D2974	733696		
60375481004	GB-70/5'-7'	ASTM D2974	733696		
60375481005	GB-71/0'-2'	ASTM D2974	733696		
60375481006	GB-71/3'-5'	ASTM D2974	733696		
60375481007	GB-65/3'-4'	ASTM D2974	733696		
60375481008	GB-65/5'-7'	ASTM D2974	733696		
60375481009	GB-64/3'-4'	ASTM D2974	733696		
60375481010	GB-64/5'-7'	ASTM D2974	733696		
60375481011	GB-57/3.5'-5.5'	ASTM D2974	733696		
60375481012	GB-57/6.0'-8.0'	ASTM D2974	733696		
60375481013	GB-57/6.0'-8.0' D	ASTM D2974	733696		
60375481014	GB-56/3-5'	ASTM D2974	733696		
60375481015	GB-56/5-7'	ASTM D2974	733696		
60375481016	GB-58/1-3'	ASTM D2974	733696		
60375481017	GB-58/4-6'	ASTM D2974	733696		
60375481018	GB-51/1.5-3'	ASTM D2974	733696		
60375481019	GB-51/3-5'	ASTM D2974	733696		
60375481020	GB-50/0-2'	ASTM D2974	733696		
60375481021	GB-50/3-5'	ASTM D2974	733697		
60375481022	GB-50/3-5'D	ASTM D2974	733697		
60375481023	GB-49/3.5-4.5'	ASTM D2974	733697		
60375481024	GB-49/5-6'	ASTM D2974	733697		
60375481025	GB-63/0-2'	ASTM D2974	733697		
60375481026	GB-63/3-5'	ASTM D2974	733697		
60375481027	GB-48/3-5'	ASTM D2974	733697		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375481

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375481028	**GB-48/5-7'**	ASTM D2974	733697		
60375481029	**GB-55/0-2'**	ASTM D2974	733697		
60375481030	**GB-55/3-5'**	ASTM D2974	733697		
60375481031	**GB-55/3-5'D**	ASTM D2974	733697		
60375481032	**GB-62/0-2'**	ASTM D2974	733697		
60375481033	**GB-62/3-5'**	ASTM D2974	733697		
60375481034	**GB-68/1-3'**	ASTM D2974	733697		
60375481035	**GB-68/3-5'**	ASTM D2974	733697		
60375481036	**GB-68/3-5'D**	ASTM D2974	733697		
60375481037	**GB-67/5-6'**	ASTM D2974	733697		
60375481038	**GB-67/8-10'**	ASTM D2974	733697		
60375481040	**GB-61/3-5'**	ASTM D2974	733697		
60375481041	**GB-61/5-7'**	ASTM D2974	733697		
60375481042	**GB-54/0-2'**	ASTM D2974	734005		
60375481043	**GB-54/2-4'**	ASTM D2974	734005		
60375481020	**GB-50/0-2'**	SM 2540 G	1713011	SM 2540G	1713011
60375481021	**GB-50/3-5'**	SM 2540 G	1713011	SM 2540G	1713011
60375481022	**GB-50/3-5'D**	SM 2540 G	1713011	SM 2540G	1713011
60375481027	**GB-48/3-5'**	SM 2540 G	1713014	SM 2540G	1713014
60375481028	**GB-48/5-7'**	SM 2540 G	1713014	SM 2540G	1713014

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Sample Condition Upon Receipt

WO# : 60375481

60375481

Client Name: Burns & McDonnell

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☒ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☐ No ☒ Seals intact: Yes ☐ No ☒

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☒ None ☐ Other ☒ Zplc

Thermometer Used: T29 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 2.5 **Corr. Factor** −0.3 **Corrected** 2.2

Date and initials of person examining contents: 7/21/21 SK

Temperature should be above freezing to 6°C 2.3 → 2.0

Chain of Custody present: 3.0 2.7	☒Yes ☐No ☐N/A	2.7 2.4
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	
Samples arrived within holding time:	☒Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	7/21/21 SK
Sufficient volume:	☒Yes ☐No ☐N/A	~~Received 1AG5U Sample 6B3-55 to 2~~
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	
Containers intact:	☒Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☒N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	
Sample labels match COC: Date / time / ID / analyses	☒Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: ~~SL~~ SL WT 7/21/21 SK	☐Yes ☒No ☐N/A	
Containers requiring pH preservation in compliance? (HNO3, H2SO4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#	☐Yes ☐No ☒N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☒Yes ☐No ☐N/A	Received Water
Headspace in VOA vials (>6mm):	☐Yes ☐No ☒N/A	
Samples from USDA Regulated Area: State:	☐Yes ☒No ☐N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☒N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

BURNS McDONNELL

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: Justin Carter jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS
Telephone: 913-599-5665 913-563-1408

Document Control No: 133835-GG1
Lab. Reference No. or Episode No.:

Project Number: 133835
Client Name: GSA

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Matrix			Number of Containers	Analysis						Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		Metals	PCBs	PAHs	PCB Congeners			
GB-69	2'-3'				2.0	3.0	7/19/21	913		X		1	X	X					1-JGFU
GB-69	3'-5'				3.0	5.0		920		X		1	X	X					↓
GB-70	3'-5'				3.0	5.0		940		X		2	X	X	X				2 JGFU
GB-70	5'-7'				5.0	7.0		945		X		2	X	X	X				↓
GB-71	0'-2'				0	2.0		1030		X		3	X	X	X	X			3-JGFU
GB-71	3'-5'				3.0	5.0		1035		X		2	X	X	X				2 JGFU
GB-65	3'-4'				3.0	4.0		1050		X		2	X	X	X				↓
GB-65	5'-7'				5.0	7.0		1055		X		2	X	X	X				↓
GB-64	3'-4'				3.0	4.0		1120		X		3	X	X	X	X			3-JGFU
GB-64	5'-7'				5.0	7.0		1125		X		2	X	X	X				2 JGFU
GB-57	3.5'-5.5'				3.5	5.5		1145		X		2	X	X	X				↓
GB-57	6.0'-8.0'				6.0	8.0		1150		X		2	X	X	X				
GB-57	6.0'-8.0'D				6.0	8.0	↓	1150		X		2	X	X	X				
GB-56	3-5				3.0	5.0		1555		X		2	X	X	X				
GB-56	5-7				5.0	7.0	↓	1600		X		2	X	X	X				↓

Sampler (signature): [redacted] (6) (6)

Sampler (signature):

Special Instructions: SEE WORK ORDER

Relinquished By (signature): [redacted] (6) (6)
Date/Time 7/20/21 1505

Received By (signature): [redacted] (6) (6)
Date/Time 7/20/21 1505

Ice Present in Container: Yes X No
Temperature Upon Receipt: 2.2, 2.0, 2.7, 2.4

Relinquished By (signature): 2.
Date/Time

Received By (signature): [redacted] (6) (6)
Date/Time 7/21/21 0430

Laboratory Comments:

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: PACE ANALYTICAL
Address: 9608 CODY BLVD
City/State/Zip: LENEXA, KS 66219
Telephone: 913-563-1408

Document Control No: 133835-002
Lab. Reference No. or Episode No.:

Project Number: 133835
Client Name: GSA Goodfellow

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Matrix			Number of Containers	Analysis						Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		PAHs	Metals	PCBs	Explosives			
GB-58	1-3				1.0	3.0	7/19/21	1325		X		2	X	X	X				2-JGFU
GB-58	4-6				4.0	6.0		1330		X		2	X	X	X				
GB-58	4-6 MS				4.0	6.0		1330		X		2	X	X	X				
GB-58	4-6 MSD				4.0	6.0		1330		X		2	X	X	X				
GB-51	1.5-3				1.5	3.0		1354		X		2	X	X	X				
GB-51	3-5				3.0	5.0		1400		X		2	X	X	X				
GB-50	0-2				0	2.0		1430		X		3	X	X	X	X			3-JGFU
GB-50	3-5				3.0	5.0		1435		X		3	X	X	X	X			
GB-50	3-5D				3.0	5.0		1435		X		3	X	X	X	X			
GB-49	3.5-4.5				3.5	4.5		1500		X		1		X	X				1-JGFU
GB-49	5-6				5.0	6.0		1505		X		1		X	X				
GB-63	0-2				0	2.0	7/20/21	748		X		1		X					
GB-63	3-5				3.0	5.0		752		X		1		X					

Sampler (signature): [redacted] (6) (a)

Relinquished By (signature): [redacted] (6) (a) Date/Time 7/20/21 1505

Relinquished By (signature): 2. Date/Time

Sampler (signature): [redacted] (6) (a) 1505

Received By (signature): [redacted] (6) (a) Date/Time 7/20/21

Received By (signature): [redacted] (6) (a) Date/Time 7/21/21 0420

Special Instructions:

Ice Present in Container: Yes X No

Temperature Upon Receipt: 2.2, 2.0, 2.7, 2.4

Laboratory Comments:

BURNS McDONNELL

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS 66219
Telephone: 913-563-1408

Document Control No: 133835-003
Lab. Reference No. or Episode No.:

Project Number: 133835
Client Name: GSA Goodfellow

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Sample Type / Matrix			Number of Containers	Analysis							Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		PAHs	Metals	PCBs	Explosives	VOCs	GRO	MD DRO/ORO	
GB-48	3-5				3.0	5.0	7/26/21	825		X		3	X	X	X	X				3-JGFU
GB-48	3-5MS				3.0	5.0		825		X		3	X	X	X	X				
GB-48	3-5MSD				3.0	5.0		825		X		3	X	X	X	X				
GB-48	5-7				5.0	7.0		828		X		3	X	X	X	X				
GB-55	0-2				0	2.0		850		X		6	X	X	X		X	X	X	1-AGBU 2-DGAG 1-DGAM
GB-55	3-5				3.0	5.0		855		X		6	X	X	X		X	X	X	2-JGFU 1-AGBU 1-DGAM 2-DGAG
GB-55	3-5D				3.0	5.0		855		X		6	X	X	X		X	X	X	
GB-62	0-2				0	2.0		925		X		6	X	X			X	X	X	
GB-62	3-5				3.0	5.0		930		X		6	X	X			X	X	X	
GB-68	1-3				1.0	3.0		1010		X		6	X	X	X		X	X	X	
GB-68	3-5				3.0	5.0		1017		X		6	X	X	X		X	X	X	
GB-68	3-5D				3.0	5.0		1017		X		6	X	X	X		X	X	X	
GB-67	5-6				5.0	6.0		1047		X		6		X	X		X	X	X	
GB-67	8-10				8.0	10.0		1050		X		6		X	X		X	X	X	
TB-01							LAB PREPARED		X			2					X			1-VGFU 1-VGH 2-VGH

Sampler (signature): [redacted] (b) (6)

Relinquished By (signature): [redacted] (b) (6) — Date/Time 7/20/21 1505

Relinquished By (signature): 2. — Date/Time

Sampler (signature):

Received By (signature): [redacted] (b) (6) — Date/Time 7/20/21 15:05

Received By (signature): [redacted] (b) (6) — Date/Time 7/21/21 0430

Special Instructions:

Ice Present in Container: Yes [X] No [ ]

Temperature Upon Receipt: 2.2, 2.0, 2.7, 2.4

Laboratory Comments:

BURNS McDONNELL

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: 913-563-1408

Document Control No: 133835-0034
Lab. Reference No. or Episode No.:

Project Number: 133
Client Name: GSA Goodfellow

Sample Type: Matrix

Sample Number: Group or SWMU Name	Sample Point	Sample Designator	Sample Event: Round	Year	Sample Depth (in feet): From	To	Sample Collected: Date	Time	Liquid	Solid	Gas	Number of Containers	Analysis: PAHs	Metals	PCBs	VOCs	GRO	MO PRO/DRO	PCB Congeners	Remarks
GB-61/3-5					3.0	5.0	7/20/21	1120		X		5	X			X	X	X		1-JGFU 1-AG5U 2-DG9Q 1-DG9M
GB-61/5-7					5.0	7.0	↓	1127		X		5	X			X	X	X		↓
GB-54/0-2					0.0	2.0		1240		X		6	X	X	X	X	X	X		2-JGFU 1-AG5U 2-DG9Q 1-DG9M
GB-54/2-4					2.0	4.0	↓	1250		X		7	X	X	X	X	X	X	X	3-JGFU 1-AG5U 2-DG9Q 1-DG9M
TB-02							LAB PREPARED		X			2				X				2-VG9H

Sampler (signature): [redacted] (6) (6)

Sampler (signature): [redacted] (6) (6)

Special Instructions:

Relinquished By (signature): [redacted] (6) (6) — Date/Time 7/20/21 1500

Received By (signature): [redacted] (6) (6) — Date/Time 7/20/21 15:05

Relinquished By (signature): 2. — Date/Time

Received By (signature): [redacted] (6) (6) — Date/Time 7/21/21 0425

Ice Present in Container: Yes [X] No [ ]

Temperature Upon Receipt: 2.2, 2.0, 2.7, 2.4

Laboratory Comments:

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

www.pacelabs.com

Report Prepared for:

Jeffrey Shopper
PACE Kansas
9608 Loriet Blvd
Lenexa KS 66219

REPORT OF LABORATORY ANALYSIS FOR PCBs

Report Information:

Pace Project #: 10571304
Sample Receipt Date: 07/22/2021
Client Project #: 60375481 Burns & McDonnell
Client Sub PO #: N/A
State Cert #: N/A

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 4 PCB Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

(b) (6)

October 20, 2021

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
October 18, 2021

Report of Laboratory Analysis

This report should not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

The results relate only to the samples included in this report.

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

This report presents the results from the analyses performed on three samples submitted by a representative of Pace Analytical Services, Kansas. The samples were analyzed for the presence or absence of the twelve dioxin-like polychlorinated biphenyl (PCB) congeners using USEPA Method 1668A. Reporting limits were set to signal-to-noised based estimated detection limits based on the amount of dry sample weight extracted. Revision 1 was prepared to reduce the analyte list to include only the dioxin-like PCB congeners and to report to the EDLs. Revision 2 was prepared to correct the client sample identifications. Please note that the IDs provided on the CoC were not updated.

The dilution levels noted on the data tables is being adjusted to allow the correct data flags to populate the electronic deliverables as well as the data tables. Samples and MDL extracts were analyzed at elevated volumes. That volume is being treated as a 1x dilution for calculation purposes, with larger dilutions being factored from that volume.

The recoveries of the isotopically-labeled PCB internal standards in the sample extracts ranged from 46-88%. All of the laboratory spike results tables, the isotopically-labeled PCB internal standards in the extracts were recovered within the target ranges for this method. Since the quantification of the native PCB congeners was based on internal standard and isotope dilution methodology, the data were automatically corrected for variation in recovery and accurate values were obtained.

It should be noted that the extracts from this project were double spiked with cleanup standards. The additional standard was taken into account with the calculation of cleanup recoveries. Cleanup standards are used to troubleshoot recovery issues with the internal standards. Their use is not associated with quantitation, and does not impact the PCB content determinations.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to produce signal at the retention time of congeners 156/157 and to contain trace levels of several other PCB congeners. Congeners present in the sample extracts at levels similar to the method blank were flagged "B" and may have originated in the laboratory.

A laboratory spike sample was also prepared with the sample batch using a reference matrix that had been fortified with native standards. The results show that the spiked native compounds were recovered at 105-115%. These results were within the target ranges for this method. Matrix spikes were prepared with the sample batch using sample material from a separate project; results from that analysis will be provided

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Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

upon request.

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
		Missouri	10100
A2LA	2926.01	Montana	CERT0092
Alabama	40770	Nebraska	NE-OS-18-06
Alaska-DW	MN00064	Nevada	MN00064
Alaska-UST	17-009	New Hampshire	2081
Arizona	AZ0014	New Jersey	MN002
Arkansas - WW	88-0680	New York	11647
Arkansas-DW	MN00064	North Carolina-	27700
California	2929	North Carolina-	530
Colorado	MN00064	North Dakota	R-036
Connecticut	PH-0256	Ohio-DW	41244
Florida	E87605	Ohio-VAP (170	CL101
Georgia	959	Ohio-VAP (180	CL110
Hawaii	MN00064	Oklahoma	9507
Idaho	MN00064	Oregon- rimary	MN300001
Illinois	200011	Oregon-Second	MN200001
Indiana	C-MN-01	Pennsylvania	68-00563
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003
Kentucky-DW	90062	Tennessee	TN02818
Kentucky-WW	90062	Texas	T104704192
Louisiana-DEQ	AI-84596	Utah	MN00064
Louisiana-DW	MN00064	Vermont	VT-027053137
Maine	MN00064	Virginia	460163
Maryland	322	Washington	C486
Michigan	9909	West Virginia-D	382
Minnesota	027-053-137	West Virginia-D	9952C
Minnesota-Ag	via MN 027-053	Wisconsin	999407970
Minnesota-Petr	1240	Wyoming-UST	via A2LA 2926.
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise (EDL)

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

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Appendix A

Sample Management

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Sample ID Cross Reference

Client Sample ID	Pace Sample ID	Date Received	Sample Type
GB-71/0'-2'	60375481005-R	07/22/2021	Solid
GB-64/3'-4'	60375481009-R	07/22/2021	Solid
GB-54/2-4'	60375481043-R	07/22/2021	Solid

REPORT OF LABORATORY ANALYSIS

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Internal Transfer Chain of Custody

Pace Analytical
www.pacelabs.com

[X] Samples Pre-Logged into eCOC.

State Of Origin: MO
Cert. Needed: [ ] Yes [X] No
Owner Received Date: 7/21/2021 Results Requested By: 8/18/2021

Workorder: 60375481 **Workorder Name:** GSA GOODFELLOW

Report To	Subcontract To
Jeffrey Shopper Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 1(913)563-1408	Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

WO# : 10571304
10571304

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	1668A PCB Congeners	LAB USE ONLY
1	BG-71/0'-2'	PS	7/19/2021 10:30	60375481005	Solid	1	X	005
2	BG-64/3'-4'	PS	7/19/2021 11:20	60375481009	Solid	1	X	009
3	GB-54/2-4	PS	7/20/2021 12:50	60375481043	Solid	1	X	043
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	(6)	7/21/21 1800	(6)	7/21 8:30
2				
3				

Comments

Cooler Temperature on Receipt 1.0 °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Condition Upon Receipt

Client Name: Pace - Kans

Project #: WO#: 10571304

PM: RK1 Due Date: 08/20/21

CLIENT: PASI-KANS

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 2817 0796 2537 See Exceptions ☐ ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: _____ **Temp Blank?** ☐ Yes ☒ No

Thermometer: ☐ T1(0461) ☐ T2(1336) ☐ T3(0459) ☐ OS418-LS ☐ T4(0254) ☐ T5(0489) ☐ 160285052 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Dry ☐ Melted

Did Samples Originate in West Virginia? ☐ Yes ☒ No **Were All Container Temps Taken?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** _____ °C **Average Corrected Temp (no temp blank only):** 1.0 °C ☒ See Exceptions ENV-FRM-MIN4-0142 ☐ 1 Container

Correction Factor: 0.1 **Cooler Temp Corrected w/temp blank:** _____ °C

USDA Regulated Soil: (☐ N/A, water sample/Other: _____)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☒ No

Date/Initials of Person Examining Contents: 7/23/21 LS

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒ Yes	☐ No		1.
Chain of Custody Relinquished?	☒ Yes	☐ No		2.
Sampler Name and/or Signature on COC?	☐ Yes	☐ No	☒ N/A	3.
Samples Arrived within Hold Time?	☒ Yes	☐ No		4.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		5. ☐ Fecal Coliform ☐ HPC ☐ Total Coliform/E coli ☐ BOD/cBOD ☐ Hex Chrome ☐ Turbidity ☐ Nitrate ☐ Nitrite ☐ Orthophos ☐ Other_____
Rush Turn Around Time Requested?	☐ Yes	☒ No		6.
Sufficient Volume?	☒ Yes	☐ No		7.
Correct Containers Used?	☒ Yes	☐ No		8.
-Pace Containers Used?	☒ Yes	☐ No		
Containers Intact?	☒ Yes	☐ No		9.
Field Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	10. Is sediment visible in the dissolved container? ☐ Yes ☐ No
Is sufficient information available to reconcile the samples to the COC?	☒ Yes	☐ No		11. **If no, write ID/ Date/Time on Container Below:** See Exception ☐ ENV-FRM-MIN4-0142
Matrix: ☐ Water ☒ Soil ☐ Oil ☐ Other_____				
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO3, H2SO4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☐ Yes	☐ No	☒ N/A	☐ NaOH ☐ HNO_3 ☐ H_2SO_4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐ Yes	☐ No	☒ N/A	Positive for Res. Chlorine? ☐ Yes ☐ No **pH Paper Lot#** See Exception ☐ ENV-FRM-MIN4-0142
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐ Yes	☐ No	☒ N/A	13. See Exception ☐ ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)?	☐ Yes	☐ No	☒ N/A	
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	Pace Trip Blank Lot # (if purchased): _____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: (b) (6) [redacted] **Date:** 07/27/21

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: (b) (6) [redacted]

1668A - 209 | Solid | Soxhlet | EB-31098

Extract Solvents:

Extraction On (Date/Time): 08/10/21 14:15

QC Matrix Lot #: Silica 596 | **Toluene Lot #** 206135

Time of Spiking: 08/10/21 14:03 | **Hexane Lot #**

Extraction Off (Date/Time): 08/11/21 07:15

Balance: 10BALY | **MeCl Lot #**

Standards	Name/ID	Amount	Initial	Witness	Expiration Date	Dispenser
Internal Std.	209-I-20170-172	100	AH	SJ	07/20/22	Q763
Native	209-N-20170-144	100	AH	SJ	01/13/22	Q763
Cl37 Std.	209-CL-20170-174	100			07/29/22	Q678
Recovery	209R-20170-164	10	MCH		06/25/22	Q763
Tridecane	A0416109	10	MCH			Q763
Others						

#	Sample ID	Internal Standards	Native Standards	Extracted mL or g	Glassware Set	Location	Comments
1	BLANK-92218	x		10.7			
2	LCS-92217	x	x	10.5			
3	60375626032-MS-R	x	x	12.9		10-C16-049	
4	60375626032-MSD-R	x	x	12.6		10-C16-049	
5	60375481005-R	x		12.6		10-C16-046	
6	60375481009-R	x		12.9		10-C16-046	
7	60375481043-R	x		12.3		10-C16-046	
8	60375626013-R	x		13.1		10-C16-049	
9	60375626014-R	x		12.7		10-C16-049	
10	60375626032-R	x		12.6		10-C16-049	
11	60375692004-R	x		13.2		10-C16-053	
12	60375692012-R	x		13.6		10-C16-053	
13	60375692020-R	x		12.1		10-C16-053	
14	60375838006-R	x		12.9		10-C16-062	
15	60375838015-R	x		13.2		10-C16-062	

Relinquished By: M | Received By: | Date:

Batch Notes:

Silica		Alumina		Carbon		Florisil	
Initials	CW1/PED	Initials		Initials		Initials	
Date	8/11/2021	Date		Date		Date	
Neutral Batch	599	Alumina Lot #		Hexane Lot #		Florisil Lot #	
Basic Batch	750	Hexane Lot #		Dispenser		Hexane Lot #	
Acid Batch	876	Dispenser		50% Batch		Dispenser	
Hexane Lot #	213846	60% Batch		Dispenser		6% Batch	
Dispenser	Q758	Dispenser		75% Batch		Dispenser	
				Dispenser			
				Toluene Lot #			
				Dispenser			
				Methanol Lot #			
				Dispenser			

Acid Base

Sulphuric Acid Lot #
Base Batch

1 maybe double spiked with 209/cl. 8/13/21

Pace Analytical™

Solid Sample Moisture Log

Sample ID	Client Sample ID		% Moisture	% Solids	Amount Extracted	Assayed
60375481005	GB-71/0'-2'		18.5507	81.4493	12.59	7/23/2021
60375481009	GB-64/3'-4'		20.5854	79.4146	12.88	7/23/2021
60375481043	GB-54/2-4'		16.6829	83.3171	12.33	7/24/2021

Note:
Total weight is the amount of wet sample required to give 10g dry weight

Page 1 of 1

Client names have been blacked out on notebook pages in order to preserve client confidentiality

Analysis Key Code List

- = Not used

✔ = Worked up

= See comment # below

Li = Liner, replace or clean

Ba = Baseplate, change

SyB = Syringe, replace – bent

SyP = Syringe, replace – plugged

SyO = Syringe, replace – other

IS = Injector Septum, replace

BS = Batch Septum, replace

Fi = Filament, replace

Co = Contacts, adjust

Ca = re-Calibrate

Tu = Tune

TC = Tune and Calibrate

CC () = Cut Column (length cut)

CO = Carry-Over possible

RRM = ReRun - Matrix

RRLM = ReRun – Lock Mass

RRBI = ReRun – Bad Injection

RRRT = ReRun – Retention Time shift

RR>S = Rerun – need better Sensitivity

Re = Re-extract

AS = Adjust Slits

LC = Leak Check

RB = Re-Boot system

CiS = Cleaned inner Source

CoS = Cleaned outer Source

AiS = Alternate inner Source

AoS = Alternate outer Source

<Y = Adjust Y focus down

>Y = Adjust Y focus up

Di () = Dilution needed (amount needed)

FE = Front End – liner, baseplate and septum

Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210818B.SPL
Last Modified: Wednesday, August 18, 2021 19:39:42 Central Daylight Time
Printed: Thursday, August 19, 2021 09:36:01 Central Daylight Time

10MSHR12 8/18/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210818B_01	CAL CS3/CPM-20-123-058 - CVS liner, TC	220717	8290/1613B	dioxfurY	DioxFur_Y	Tray1:1	1.000000	---
2	Y210818B_02	Blank Nonane - CVS	---	8290/1613B	dioxfurY	DioxFur_Y	Tray1:3	1.000000	---
3	Y210818B_03	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
4	Y210818B_04	CAL CS3-20-123-060 - CVS windows	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
5	Y210818B_05	CAL CS3-20-123-060 - CVS TC	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
6	Y210818B_06	CAL CS2-20-123-053 - CVS TC	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:15	1.000000	---
7	Y210818B_07	CAL CS1-20-123-041 - CVS bad inj	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
8	Y210818B_08	CAL CS1-20-123-041 - CVS	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
9	Y210818B_09	CAL CS5-20-123-044 - CVS	220331	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:17	1.000000	---
10	Y210818B_10	CAL CS4-20-123-055 - CVS	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:18	1.000000	---
11	Y210818B_11	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
12	Y210818B_12	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
13	Y210818B_13	LCS LCS-92213 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:19	1.000000	---
14	Y210818B_14	LCS LCSD-92214 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:20	1.000000	---
15	Y210818B_15	Samp 60375626032-MS-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:21	1.000000	---
16	Y210818B_16	Samp 60375626032-MSD-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:22	1.000000	---
17	Y210818B_17	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
18	Y210818B_18	Samp 60375626032-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:23	1.000000	---
19	Y210818B_19	Samp 60375626013-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:24	1.000000	---
20	Y210818B_20	Samp 60375626014-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:25	1.000000	---
21	Y210818B_21	Samp 60375838006-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:26	1.000000	---
22	Y210818B_22	Samp 60375838015-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:27	1.000000	---
23	Y210818B_23	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

(6) (b) 8/20/21

Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210819A.SPL
Last Modified: Thursday, August 19, 2021 14:21:07 Central Daylight Time
Printed: Thursday, August 19, 2021 14:21:10 Central Daylight Time

10MSHR12 8/19/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210819A_01	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
2	Y210819A_02	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
3	Y210819A_03	LCS LCS-92217 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
4	Y210819A_04	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
5	Y210819A_05	Samp 10573340001 - CVS [redacted] 2x	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:28	1.000000	---
6	Y210819A_06	Samp 10574009001 - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:29	1.000000	---
7	Y210819A_07	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
8	Y210819A_08	Samp 60375481005-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:30	1.000000	---
9	Y210819A_09	Blank Blank-92218 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:31	1.000000	---
10	Y210819A_10	Samp 60375481009-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:32	1.000000	---
11	Y210819A_11	Samp 60375481043-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:33	1.000000	---
12	Y210819A_12	Samp 60375692004-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:34	1.000000	---
13	Y210819A_13	Samp 60375692012-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:35	1.000000	---
14	Y210819A_14	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

(b) (6) 8/20/21

Appendix B

Sample Analysis Summary

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-71/0'-2'		
Lab Sample ID	60375481005-R		
Filename	Y210819A_08		
Injected By	CVS		
Total Amount Extracted	12.6 g	Matrix	Solid
% Moisture	18.6	Dilution	NA
Dry Weight Extracted	10.3 g	Collected	07/19/2021 10:30
ICAL ID	Y210819A02	Received	07/22/2021 08:50
CCal Filename(s)	Y210819A_01	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 18:31

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.900	0.74	2.0	1.47	73
13C-3,3',4,4'-TeCB	77	35.470	0.80	2.0	1.46	73
13C-2,3,3',4,4'-PeCB	105	39.064	1.47	2.0	1.35	68
13C-2,3,4,4',5-PeCB	114	38.410	1.53	2.0	1.39	69
13C-2,3',4,4',5-PeCB	118	37.874	1.54	2.0	1.36	68
13C-2,3',4,4',5'-PeCB	123	37.538	1.51	2.0	1.33	67
13C-3,3',4,4',5-PeCB	126	42.217	1.53	2.0	1.41	70
13C-HxCB(156/157)	156/157	45.274	1.18	4.0	2.57	64
13C-2,3',4,4',5,5'-HxCB	167	44.117	1.23	2.0	1.33	67
13C-3,3',4,4',5,5'-HxCB	169	48.544	1.24	2.0	1.34	67
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.12	2.0	1.45	73
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.455	0.81	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.737	1.62	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.043	1.23	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.200	0.90	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-71/0'-2'
Lab Sample ID	60375481005-R
Filename	Y210819A_08

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		35.487	0.66	4.59 BJ	---	1.22
81		---	---	ND	---	1.09
105		39.064	1.46	14.3 BJ	---	0.938
114		---	---	ND	---	1.94
118		37.890	1.54	26.0 B	---	0.823
123		37.555	1.42	1.55 J	---	0.949
126		---	---	ND	---	1.72
156	156/157	45.290	1.20	8.86 BJ	---	1.62
157	156/157	45.290	1.20	(8.86) BJ	---	1.62
167		44.133	1.15	3.64 J	---	1.19
169		---	---	ND	---	1.63
189		51.109	1.03	1.89 J	---	1.45

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-71/0'-2'		
Lab Sample ID	60375481005-R		
Filename	Y210819A_08		
Injected By	CVS		
Total Amount Extracted	12.6 g	Matrix	Solid
% Moisture	18.6	Dilution	NA
Dry Weight Extracted	10.3 g	Collected	07/19/2021 10:30
ICAL ID	Y210819A02	Received	07/22/2021 08:50
CCal Filename(s)	Y210819A_01	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 18:31

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	4.6	1.2	0.00010	0.0005	0.0005	0.0005
81	ND	1.1	0.00030	0.0000	0.0002	0.0003
105	14	0.94	0.00003	0.0004	0.0004	0.0004
114	ND	1.9	0.00003	0.0000	0.0000	0.0001
118	26	0.82	0.00003	0.0008	0.0008	0.0008
123	1.5	0.95	0.00003	0.0000	0.0000	0.0000
126	ND	1.7	0.10000	0.0000	0.0861	0.1722
156/157	8.9	1.6	0.00003	0.0003	0.0003	0.0003
167	3.6	1.2	0.00003	0.0001	0.0001	0.0001
169	ND	1.6	0.03000	0.0000	0.0245	0.0490
189	1.9	1.4	0.00003	0.0001	0.0001	0.0001
				0.0021 ng TEQ/Kg	**0.11 ng TEQ/Kg**	**0.22 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-64/3'-4'		
Lab Sample ID	60375481009-R		
Filename	Y210819A_10		
Injected By	CVS		
Total Amount Extracted	12.9 g	Matrix	Solid
% Moisture	20.6	Dilution	NA
Dry Weight Extracted	10.2 g	Collected	07/19/2021 11:20
ICAL ID	Y210819A02	Received	07/22/2021 08:50
CCal Filename(s)	Y210819A_01	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 20:31

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.868	0.77	2.0	1.47	73
13C-3,3',4,4'-TeCB	77	35.454	0.79	2.0	1.54	77
13C-2,3,3',4,4'-PeCB	105	39.032	1.57	2.0	1.43	71
13C-2,3,4,4',5-PeCB	114	38.394	1.50	2.0	1.45	72
13C-2,3',4,4',5-PeCB	118	37.841	1.52	2.0	1.43	71
13C-2,3',4,4',5'-PeCB	123	37.505	1.58	2.0	1.41	71
13C-3,3',4,4',5-PeCB	126	42.184	1.49	2.0	1.52	76
13C-HxCB(156/157)	156/157	45.258	1.19	4.0	2.77	69
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.26	2.0	1.37	68
13C-3,3',4,4',5,5'-HxCB	169	48.528	1.24	2.0	1.39	69
13C-2,3,3',4,4',5,5'-HpCB	189	51.068	1.05	2.0	1.53	76
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.422	0.81	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.704	1.56	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.27	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.90	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-64/3'-4'
Lab Sample ID	60375481009-R
Filename	Y210819A_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg		EMPC ng/Kg	EML ng/Kg
77		35.438	0.68	2.13	BJ	---	1.38
81		---	---	ND		---	1.10
105		39.065	1.76	3.64	BJ	---	1.18
114		---	---	ND		---	1.25
118		37.874	1.62	6.91	BJ	---	0.979
123		---	---	ND		---	1.11
126		---	---	ND		---	1.07
156	156/157	45.241	0.93	---	IJ	1.10	0.877
157	156/157	45.241	0.93	---	IJ	(1.10)	0.877
167		44.101	1.24	0.952	J	---	0.620
169		---	---	ND		---	0.722
189		51.089	0.79	---	IJ	0.754	0.675

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-64/3'-4'		
Lab Sample ID	60375481009-R		
Filename	Y210819A_10		
Injected By	CVS		
Total Amount Extracted	12.9 g	Matrix	Solid
% Moisture	20.6	Dilution	NA
Dry Weight Extracted	10.2 g	Collected	07/19/2021 11:20
ICAL ID	Y210819A02	Received	07/22/2021 08:50
CCal Filename(s)	Y210819A_01	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 20:31

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.1	1.4	0.00010	0.0002	0.0002	0.0002
81	ND	1.1	0.00030	0.0000	0.0002	0.0003
105	3.6	1.2	0.00003	0.0001	0.0001	0.0001
114	ND	1.3	0.00003	0.0000	0.0000	0.0000
118	6.9	0.98	0.00003	0.0002	0.0002	0.0002
123	ND	1.1	0.00003	0.0000	0.0000	0.0000
126	ND	1.1	0.10000	0.0000	0.0534	0.1068
156/157	ND	0.88	0.00003	0.0000	0.0000	0.0000
167	0.95	0.62	0.00003	0.0000	0.0000	0.0000
169	ND	0.72	0.03000	0.0000	0.0108	0.0217
189	ND	0.68	0.00003	0.0000	0.0000	0.0000
				0.00061 ng TEQ/Kg	**0.065 ng TEQ/Kg**	**0.13 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-54/2-4'		
Lab Sample ID	60375481043-R		
Filename	Y210819A_11		
Injected By	CVS		
Total Amount Extracted	12.3 g	Matrix	Solid
% Moisture	16.7	Dilution	NA
Dry Weight Extracted	10.3 g	Collected	07/20/2021 12:50
ICAL ID	Y210819A02	Received	07/22/2021 08:50
CCal Filename(s)	Y210819A_01	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 21:30

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.83	2.0	1.56	78
13C-3,3',4,4'-TeCB	77	35.471	0.79	2.0	1.67	84
13C-2,3,3',4,4'-PeCB	105	39.048	1.54	2.0	1.53	76
13C-2,3,4,4',5-PeCB	114	38.394	1.56	2.0	1.51	76
13C-2,3',4,4',5-PeCB	118	37.857	1.54	2.0	1.46	73
13C-2,3',4,4',5'-PeCB	123	37.522	1.54	2.0	1.44	72
13C-3,3',4,4',5-PeCB	126	42.201	1.54	2.0	1.59	80
13C-HxCB(156/157)	156/157	45.258	1.23	4.0	2.72	68
13C-2,3',4,4',5,5'-HxCB	167	44.101	1.24	2.0	1.33	67
13C-3,3',4,4',5,5'-HxCB	169	48.528	1.19	2.0	1.40	70
13C-2,3,3',4,4',5,5'-HpCB	189	51.067	1.04	2.0	1.76	88
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.81	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.721	1.59	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.27	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.91	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

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Minneapolis, MN 55414

Tel: 612-607-1700
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Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-54/2-4'
Lab Sample ID	60375481043-R
Filename	Y210819A_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg		EMPC ng/Kg	EML ng/Kg
77		35.471	0.88	2.69	BJ	---	1.39
81		---	---	ND		---	1.45
105		39.065	1.60	4.55	BJ	---	1.12
114		---	---	ND		---	1.03
118		37.891	1.36	6.57	BJ	---	1.09
123		---	---	ND		---	1.48
126		---	---	ND		---	1.21
156	156/157	45.292	1.60	---	IJ	1.64	0.880
157	156/157	45.292	1.60	---	IJ	(1.64)	0.880
167		---	---	ND		---	0.818
169		---	---	ND		---	0.931
189		---	---	ND		---	0.662

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-54/2-4'		
Lab Sample ID	60375481043-R		
Filename	Y210819A_11		
Injected By	CVS		
Total Amount Extracted	12.3 g	Matrix	Solid
% Moisture	16.7	Dilution	NA
Dry Weight Extracted	10.3 g	Collected	07/20/2021 12:50
ICAL ID	Y210819A02	Received	07/22/2021 08:50
CCal Filename(s)	Y210819A_01	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 21:30

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.7	1.4	0.00010	0.0003	0.0003	0.0003
81	ND	1.5	0.00030	0.0000	0.0002	0.0004
105	4.5	1.1	0.00003	0.0001	0.0001	0.0001
114	ND	1.0	0.00003	0.0000	0.0000	0.0000
118	6.6	1.1	0.00003	0.0002	0.0002	0.0002
123	ND	1.5	0.00003	0.0000	0.0000	0.0000
126	ND	1.2	0.10000	0.0000	0.0603	0.1206
156/157	ND	0.88	0.00003	0.0000	0.0000	0.0000
167	ND	0.82	0.00003	0.0000	0.0000	0.0000
169	ND	0.93	0.03000	0.0000	0.0140	0.0279
189	ND	0.66	0.00003	0.0000	0.0000	0.0000
				0.00065 ng TEQ/Kg	**0.075 ng TEQ/Kg**	**0.15 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Appendix C

QC and Calibration Results Summary

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Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID	BLANK-92218		
Filename	Y210819A_09		
Injected By	CVS	Matrix	Solid
Total Amount Extracted	10.7 g	Extracted	08/10/2021 14:15
ICAL ID	Y210819A02	Analyzed	08/19/2021 19:31
CCal Filename(s)	Y210819A_01	Dilution	NA

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.78	2.0	1.35	68
13C-3,3',4,4'-TeCB	77	35.471	0.80	2.0	1.42	71
13C-2,3,3',4,4'-PeCB	105	39.048	1.57	2.0	1.29	64
13C-2,3,4,4',5-PeCB	114	38.411	1.52	2.0	1.34	67
13C-2,3',4,4',5-PeCB	118	37.857	1.54	2.0	1.28	64
13C-2,3',4,4',5'-PeCB	123	37.522	1.51	2.0	1.29	64
13C-3,3',4,4',5-PeCB	126	42.200	1.53	2.0	1.35	68
13C-HxCB (156/157)	156/157	45.274	1.24	4.0	2.46	61
13C-2,3',4,4',5,5'-HxCB	167	44.100	1.23	2.0	1.26	63
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.22	2.0	1.27	64
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.10	2.0	1.45	72
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.721	1.54	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.25	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.93	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a total weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
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ng's = Nanograms

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Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-92218
Filename Y210819A_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		35.538	0.79	2.07	---	1.69
81		---	---	ND	---	1.17
105		39.065	1.67	3.33	---	1.29
114		---	---	ND	---	1.14
118		37.891	1.62	7.71	---	0.966
123		---	---	ND	---	1.32
126		---	---	ND	---	1.19
156	156/157	45.257	1.17	4.24	---	1.00
157	156/157	45.257	1.17	(4.24)	---	1.00
167		44.151	0.52	---	0.728	0.694
169		---	---	ND	---	0.884
189		---	---	ND	---	0.735

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

Results reported on a total weight basis

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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	CBLKHX		
Lab Sample ID	BLANK-92218		
Filename	Y210819A_09		
Injected By	CVS		
Total Amount Extracted	10.7 g	Matrix	Solid
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	08/10/2021 07:27
ICAL ID	Y210819A02	Received	08/10/2021 07:27
CCal Filename(s)	Y210819A_01	Extracted	08/10/2021 14:15
Method Blank ID		Analyzed	08/19/2021 19:31

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.1	1.7	0.00010	0.0002	0.0002	0.0002
81	ND	1.2	0.00030	0.0000	0.0002	0.0004
105	3.3	1.3	0.00003	0.0001	0.0001	0.0001
114	ND	1.1	0.00003	0.0000	0.0000	0.0000
118	7.7	0.97	0.00003	0.0002	0.0002	0.0002
123	ND	1.3	0.00003	0.0000	0.0000	0.0000
126	ND	1.2	0.10000	0.0000	0.0595	0.1191
156/157	4.2	1.0	0.00003	0.0001	0.0001	0.0001
167	ND	0.69	0.00003	0.0000	0.0000	0.0000
169	ND	0.88	0.03000	0.0000	0.0133	0.0265
189	ND	0.73	0.00003	0.0000	0.0000	0.0000
			0.00069 ng TEQ/Kg	**0.074 ng TEQ/Kg**		**0.15 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Method 1668A Polychlorobiphenyls
Laboratory Control Spike Analysis Results

Lab Sample ID	LCS-92217		
Filename	Y210819A_03	Matrix	Solid
Total Amount Extracted	10.5 g	Dilution	NA
ICAL ID	Y210819A02	Extracted	08/10/2021 14:15
CCal Filename(s)	Y210819A_01	Analyzed	08/19/2021 13:33
Method Blank ID	BLANK-92218	Injected By	CVS

	Native Analytes			Labeled Analytes		
PCB Isomer	**Spiked (ng)**	**Found (ng)**	**% Recovery**	**Spiked (ng)**	**Found (ng)**	**% Recovery**
81	1.0	1.07	107	2.0	1.61	80
77	1.0	1.06	106	2.0	1.69	85
105	1.0	1.10	110	2.0	1.62	81
114	1.0	1.06	106	2.0	1.49	74
118	1.0	1.13	113	2.0	1.50	75
123	1.0	1.12	112	2.0	1.46	73
126	1.0	1.13	113	2.0	1.67	84
156/157	2.0	2.16	108	4.0	2.92	73
167	1.0	1.11	111	2.0	1.43	71
169	1.0	1.09	109	2.0	1.57	78
189	1.0	1.12	112	2.0	1.56	78

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

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1668A Polychlorobiphenyl Initial Calibration
Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Labeled Analytes								
13C-2-MoCB	1	1.1281	1.1371	1.1947	1.1760	1.1630	1.1598	2.37
13C-4-MoCB	3	1.0640	1.0801	1.1344	1.0704	1.0791	1.0856	2.59
13C-2,2'-DiCB	4	0.5838	0.5905	0.6159	0.6016	0.6160	0.6016	2.42
13C-4,4'-DiCB	15	0.8671	0.8674	0.9026	0.8890	0.8838	0.8820	1.71
13C-2,2',6-TrCB	19	0.6518	0.6583	0.6793	0.6781	0.6675	0.6670	1.81
13C-3,4,4'-TrCB	37	0.9136	0.9078	0.9320	0.9281	0.9441	0.9251	1.57
13C-2,2',6,6'-TeCB	54	1.2015	1.1982	1.2367	1.2062	1.1969	1.2079	1.37
13C-3,4,4',5-TeCB	81	0.8105	0.8243	0.7935	0.8226	0.8519	0.8206	2.61
13C-3,3',4,4'-TeCB	77	0.8084	0.8297	0.8099	0.8409	0.8536	0.8285	2.36
13C-2,2',4,6,6'-PeCB	104	0.8928	0.8966	0.9380	0.9285	0.9345	0.9181	2.36
13C-2,3',4,4',5-PeCB	118	0.8808	0.8918	0.8447	0.9031	0.9144	0.8870	3.02
13C-2,3,4,4',5-PeCB	114	0.8430	0.8396	0.7988	0.8641	0.8732	0.8437	3.42
13C-2,3,3',4,4'-PeCB	105	0.8233	0.8438	0.7770	0.8313	0.8727	0.8296	4.21
13C-3,3',4,4',5-PeCB	126	0.7093	0.7406	0.6920	0.7434	0.7610	0.7293	3.83
13C-2,2',4,4',6,6'-HxCB	155	1.0410	1.0674	1.1567	1.0944	1.1268	1.0973	4.19
13C-2,3',4,4',5,5'-HxCB	167	0.8607	0.8709	0.8428	0.8727	0.9011	0.8696	2.44
13C-HxCB (156/157)	156/157	0.8084	0.8217	0.7685	0.8390	0.8785	0.8232	4.90
13C-3,3',4,4',5,5'-HxCB	169	0.7050	0.7431	0.6956	0.7356	0.7809	0.7320	4.63
13C-2,2',3,4',5,6,6'-HpCB	188	1.8461	1.8051	2.0332	1.9010	1.9439	1.9059	4.65
13C-2,3,3',4,4',5,5'-HpCB	189	1.0396	1.0625	1.0342	1.0628	1.0998	1.0598	2.44
13C-2,2',3,3',5,5',6,6'-OcCB	202	1.8555	1.8001	1.9524	1.8751	1.8944	1.8755	2.96
13C-2,3,3',4,4',5,5',6-OcCB	205	1.2295	1.2273	1.2103	1.2660	1.3073	1.2481	3.11
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	1.4825	1.4561	1.5068	1.4918	1.5154	1.4905	1.55
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.9735	0.9677	0.9782	0.9890	1.0198	0.9856	2.09
13C-DeCB	209	0.9807	0.9725	0.9894	1.0166	1.0325	0.9983	2.54
Cleanup Standards								
13C-2,4,4'-TrCB	28	1.1279	1.1236	1.1438	1.1543	1.0942	1.1287	2.03
13C-2,3,3',5,5'-PeCB	111	1.2662	1.2655	1.2546	1.2941	1.3028	1.2766	1.62
13C-2,2',3,3',5,5',6-HpCB	178	0.9144	0.9189	0.9469	0.9290	0.9363	0.9291	1.41
Recovery Standards								
13C-2,5-DiCB	9	1.9945	2.0083	2.1584	1.9996	1.9991	2.0320	3.49
13C-2,2',5,5'-TeCB	52	1.3756	1.3814	1.4507	1.3625	1.3655	1.3872	2.62
13C-2,2',4,5,5'-PeCB	101	1.1775	1.1790	1.2057	1.1624	1.1699	1.1789	1.39
13C-2,2',3,4,4',5'-HxCB	138	1.0936	1.0882	1.0560	1.0765	1.0680	1.0765	1.41
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.7592	0.7796	0.7083	0.7500	0.7570	0.7508	3.49

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Native Analytes								
3,3',4,4'-TeCB	77	0.9461	0.9096	0.8769	0.8801	0.8880	0.9002	3.19
3,4,4',5-TeCB	81	0.9288	0.9668	0.9297	0.9336	0.9225	0.9363	1.87
2,3,3',4,4'-PeCB	105	0.8988	0.9291	0.8993	0.8788	0.8741	0.8960	2.43
2,3,4,4',5-PeCB	114	0.9491	0.9449	0.9221	0.9123	0.9181	0.9293	1.79
2,3',4,4',5-PeCB	118	0.9601	0.9450	0.9247	0.8931	0.9014	0.9249	3.06
2,3',4,4',5'-PeCB	123	0.9836	0.9286	0.9173	0.8958	0.9153	0.9281	3.58
3,3',4,4',5-PeCB	126	0.9251	0.9019	0.8951	0.8795	0.8782	0.8959	2.14
(156/157)	156/157	0.9991	0.9562	0.9359	0.9116	0.9040	0.9413	4.07
2,3',4,4',5,5'-HxCB	167	0.9772	0.9597	0.9103	0.9081	0.8965	0.9304	3.84
3,3',4,4',5,5'-HxCB	169	0.9875	0.9950	0.9320	0.9014	0.8811	0.9394	5.40
2,3,3',4,4',5,5'-HpCB	189	0.9406	0.9065	0.8652	0.8759	0.8749	0.8926	3.47

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

		Data Files:		Time	Injected
ICAL ID	Y210818	CS-1	Y210818B_08	18:49	CVS
Calibration Date	08/18/2021	CS-2	Y210818B_06	16:45	CVS
Instrument	10MSHR12 (Y)	CS-3	Y210818B_11	21:47	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-4	Y210818B_10	20:47	CVS
Column ID No.	261111-02	CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Labeled Analytes							
13C-2-MoCB	1	3.14	3.09	3.16	3.11	3.19	2.66-3.60
13C-4-MoCB	3	3.15	3.11	3.02	3.15	3.11	2.66-3.60
13C-2,2'-DiCB	4	1.71	1.68	1.66	1.70	1.74	1.33-1.81
13C-4,4'-DiCB	15	1.53	1.54	1.55	1.54	1.53	1.33-1.81
13C-2,2',6-TrCB	19	1.03	1.05	1.03	1.04	1.04	0.88-1.20
13C-3,4,4'-TrCB	37	1.04	1.02	1.05	1.04	1.02	0.88-1.20
13C-2,2',6,6'-TeCB	54	0.80	0.79	0.80	0.80	0.81	0.65-0.89
13C-3,4,4',5-TeCB	81	0.77	0.76	0.76	0.77	0.77	0.65-0.89
13C-3,3',4,4'-TeCB	77	0.78	0.77	0.80	0.79	0.79	0.65-0.89
13C-2,2',4,6,6'-PeCB	104	1.58	1.57	1.60	1.59	1.58	1.32-1.78
13C-2,3',4,4',5-PeCB	118	1.53	1.55	1.52	1.55	1.55	1.32-1.78
13C-2,3,4,4',5-PeCB	114	1.53	1.53	1.51	1.55	1.56	1.32-1.78
13C-2,3,3',4,4'-PeCB	105	1.54	1.54	1.50	1.51	1.54	1.32-1.78
13C-3,3',4,4',5-PeCB	126	1.57	1.53	1.54	1.53	1.55	1.32-1.78
13C-2,2',4,4',6,6'-HxCB	155	1.26	1.26	1.26	1.27	1.26	1.05-1.43
13C-2,3',4,4',5,5'-HxCB	167	1.23	1.21	1.21	1.25	1.24	1.05-1.43
13C-HxCB (156/157)	156/157	1.22	1.22	1.23	1.23	1.25	1.05-1.43
13C-3,3',4,4',5,5'-HxCB	169	1.23	1.24	1.22	1.24	1.23	1.05-1.43
13C-2,2',3,4',5,6,6'-HpCB	188	1.09	1.08	1.09	1.10	1.10	0.88-1.20
13C-2,3,3',4,4',5,5'-HpCB	189	1.02	1.02	1.03	1.03	1.04	0.88-1.20
13C-2,2',3,3',5,5',6,6'-OcCB	202	0.90	0.90	0.91	0.89	0.88	0.76-1.02
13C-2,3,3',4,4',5,5',6-OcCB	205	0.89	0.90	0.90	0.90	0.88	0.76-1.02
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	0.80	0.79	0.80	0.80	0.80	0.66-0.90
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.79	0.79	0.80	0.81	0.81	0.66-0.90
13C-DeCB	209	0.74	0.74	0.73	0.74	0.73	0.59-0.79
Cleanup Standards							
13C-2,4,4'-TrCB	28	1.03	1.01	1.03	1.02	1.02	0.88-1.20
13C-2,3,3',5,5'-PeCB	111	1.60	1.60	1.61	1.60	1.60	1.32-1.78
13C-2,2',3,3',5,5',6-HpCB	178	1.08	1.09	1.07	1.07	1.08	0.88-1.20
Recovery Standards							
13C-2,5-DiCB	9	1.54	1.53	1.55	1.53	1.52	1.33-1.81
13C-2,2',5,5'-TeCB	52	0.80	0.80	0.82	0.80	0.80	0.65-0.89
13C-2,2',4,5,5'-PeCB	101	1.61	1.59	1.59	1.62	1.61	1.32-1.78
13C-2,2',3,4,4',5'-HxCB	138	1.27	1.26	1.25	1.25	1.27	1.05-1.43
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.92	0.91	0.90	0.90	0.92	0.76-1.02

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Native Analytes							
3,3',4,4'-TeCB	77	0.83	0.74	0.75	0.77	0.76	0.65-0.89
3,4,4',5-TeCB	81	0.72	0.74	0.76	0.75	0.76	0.65-0.89
2,3,3',4,4'-PeCB	105	1.61	1.54	1.53	1.52	1.54	1.32-1.78
2,3,4,4',5-PeCB	114	1.53	1.41	1.50	1.51	1.52	1.32-1.78
2,3',4,4',5-PeCB	118	1.59	1.47	1.52	1.52	1.53	1.32-1.78
2,3',4,4',5'-PeCB	123	1.42	1.47	1.49	1.51	1.52	1.32-1.78
3,3',4,4',5-PeCB	126	1.49	1.47	1.53	1.50	1.52	1.32-1.78
(156/157)	156/157	1.25	1.19	1.22	1.23	1.22	1.05-1.43
2,3',4,4',5,5'-HxCB	167	1.25	1.18	1.25	1.22	1.22	1.05-1.43
3,3',4,4',5,5'-HxCB	169	1.14	1.21	1.21	1.21	1.22	1.05-1.43
2,3,3',4,4',5,5'-HpCB	189	1.10	1.00	0.99	1.01	1.01	0.88-1.20

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210819A02	Data File	Y210819A_02
Calibration Date	08/19/2021	Injected By	CVS
Initial Calibration	Y210819A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

PCB Isomer	IUPAC	RT	Ratio	209 RF	Ical RF	%RSD	RFc
Internal Standards							
13C-3,4,4',5-TeCB	81	34.867	0.78	0.8448	0.8206	2.95	0.8206
13C-3,3',4,4'-TeCB	77	35.437	0.78	0.8608	0.8285	3.89	0.8285
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	0.8090	0.8296	-2.49	0.8296
13C-2,3,4,4',5-PeCB	114	38.377	1.55	0.8482	0.8437	0.53	0.8437
13C-2,3',4,4',5-PeCB	118	37.824	1.56	0.6820	0.8870	-23.11	0.8870
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	0.8363	0.8549	-2.17	0.8549
13C-3,3',4,4',5-PeCB	126	42.183	1.54	0.7383	0.7293	1.24	0.7293
13C-HxCB (156/157)	156/157	45.240	1.24	0.6886	0.8232	-16.36	0.8232
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.23	0.8160	0.8696	-6.17	0.8696
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.22	0.6994	0.7320	-4.46	0.7320
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.04	1.0815	1.0598	2.05	1.0598
Cleanup Standards							
13C-2,4,4'-TrCB	28	23.426	1.02	1.1300	1.1287	0.11	1.1287
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	1.1864	1.2766	-7.07	1.2766
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	0.8726	0.9291	-6.08	0.9291
RecoveryStandards							
13C-2,5-DiCB	9	15.362	1.54	1.9596	2.0320	-3.56	2.0320
13C-2,2',5,5'-TeCB	52	25.422	0.80	1.4399	1.3872	3.80	1.3872
13C-2,2',4,5,5'-PeCB	101	32.704	1.59	1.2334	1.1789	4.63	1.1789
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.26	1.1460	1.0765	6.46	1.0765
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.178	0.91	0.6972	0.7508	-7.14	0.7508

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210819A02	Data File	Y210819A_02
Calibration Date	08/19/2021	Injected By	CVS
Initial Calibration	Y210819A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

IUPAC	Co-elutions	RT	Ratio	209 RF	Ical RF	%RSD	RFc
81		34.884	0.76	1.0428	0.9363	11.38	0.9363
77		35.454	0.76	0.9466	0.9002	5.16	0.9002
104		26.478	1.65	1.5830	1.4564	8.69	1.4564
105		39.048	1.53	1.0200	0.8960	13.84	0.8960
114		38.410	1.51	1.0136	0.9293	9.07	0.9293
118		37.874	1.54	1.0427	0.9249	12.75	0.9249
123		37.522	1.51	0.9961	0.9281	7.33	0.9281
126		42.200	1.51	0.9891	0.8959	10.40	0.8959
155		32.520	1.32	1.4099	1.3520	4.28	1.3520
156	156/157	45.257	1.21	1.0562	0.9413	12.20	0.9413
167		44.100	1.22	1.0739	0.9304	15.43	0.9304
169		48.527	1.22	1.0120	0.9394	7.72	0.9394
188		38.410	1.02	1.1577	1.0887	6.34	1.0887
189		51.088	1.01	0.9446	0.8926	5.82	0.8926

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210819A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
Labeled Analytes						
13C-2,2',6-TrCB	19	16:44	1.04	0.6793	0.6670	1.85
13C-3,4,4'-TrCB	37	27:47	1.02	0.9504	0.9251	2.73
13C-2,2',6,6'-TeCB	54	20:20	0.81	1.2111	1.2079	0.27
13C-3,4,4',5-TeCB	81	34:52	0.78	0.8286	0.8206	0.97
13C-3,3',4,4'-TeCB	77	35:27	0.78	0.8561	0.8285	3.32
13C-2,3,3',4,4'-PeCB	105	39:02	1.56	0.8425	0.8296	1.55
13C-2,3,4,4',5-PeCB	114	38:23	1.53	0.8568	0.8437	1.55
13C-2,3',4,4',5-PeCB	118	37:51	1.53	0.8883	0.8870	0.15
13C-2,3',4,4',5'-PeCB	123	37:30	1.52	0.8515	0.8549	-0.39
13C-3,3',4,4',5-PeCB	126	42:11	1.56	0.7652	0.7293	4.93
13C-HxCB (156/157)	156/157	45:15	1.22	0.8223	0.8232	-0.12
13C-2,3',4,4',5,5'-HxCB	167	44:05	1.24	0.8653	0.8696	-0.50
13C-3,3',4,4',5,5'-HxCB	169	48:31	1.25	0.7477	0.7320	2.15
13C-2,3,3',4,4',5,5'-HpCB	189	51:04	1.03	1.0923	1.0598	3.07
Cleanup Standards						
13C-2,4,4'-TrCB	28	23:26	1.02	1.1151	1.1287	-1.20
13C-2,3,3',5,5'-PeCB	111	35:30	1.57	1.3002	1.2766	1.85
13C-2,2',3,3',5,5',6-HpCB	178	41:28	1.09	0.9051	0.9291	-2.58
Recovery Standards						
13C-2,5-DiCB	9	15:23	1.54	2.0088	2.0320	-1.14
13C-2,2',5,5'-TeCB	52	25:26	0.80	1.3979	1.3872	0.77
13C-2,2',4,5,5'-PeCB	101	32:43	1.59	1.1890	1.1789	0.86
13C-2,2',3,4,4',5'-HxCB	138	41:01	1.26	1.1048	1.0765	2.63
13C-2,2',3,3',4,4',5,5'-OcCB	194	53:10	0.90	0.7301	0.7508	-2.76

X = Outside Quality Control limits

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Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210819A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
3,3',4,4'-TeCB	77	35:28	0.76	0.8761	0.9002	-2.67
3,4,4',5-TeCB	81	34:54	0.76	0.9341	0.9363	-0.24
2,2',4,6,6'-PeCB	104	26:29	1.66	1.4276	1.4564	-1.97
2,3,3',4,4'-PeCB	105	39:03	1.51	0.8516	0.8960	-4.96
2,3,4,4',5-PeCB	114	38:25	1.49	0.8784	0.9293	-5.48
2,3',4,4',5-PeCB	118	37:52	1.54	0.8900	0.9249	-3.77
2,3',4,4',5'-PeCB	123	37:32	1.52	0.8969	0.9281	-3.36
3,3',4,4',5-PeCB	126	42:13	1.51	0.8668	0.8959	-3.26
2,2',4,4',6,6'-HxCB	155	32:32	1.33	1.3238	1.3520	-2.08
HxCB (156/157)	156/157	45:16	1.21	0.8995	0.9413	-4.44
2,3',4,4',5,5'-HxCB	167	44:07	1.21	0.8966	0.9304	-3.63
3,3',4,4',5,5'-HxCB	169	48:32	1.22	0.8949	0.9394	-4.73
2,2',3,4',5,6,6'-HpCB	188	38:25	1.02	1.0496	1.0887	-3.59
2,3,3',4,4',5,5'-HpCB	189	51:05	1.01	0.8759	0.8926	-1.87

X = Outside Quality Control limits

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Appendix D

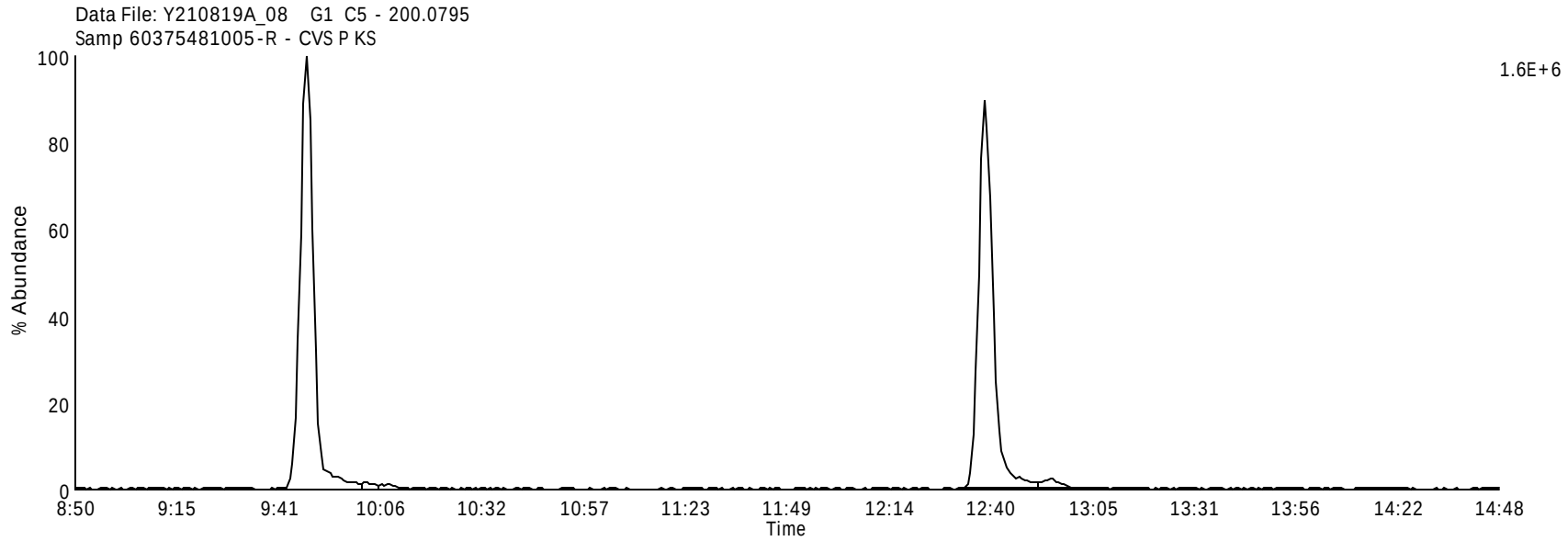
Sample Raw Data

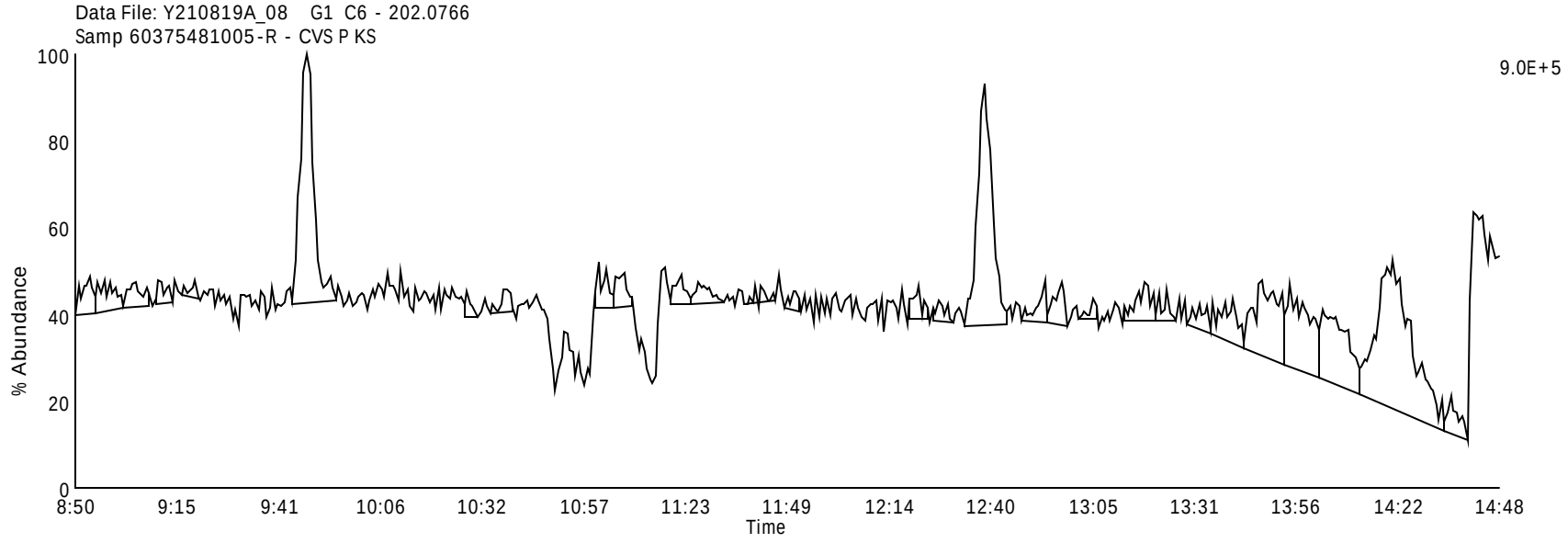
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210819A_08 | Lab Sample ID: 60375481005-R

Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

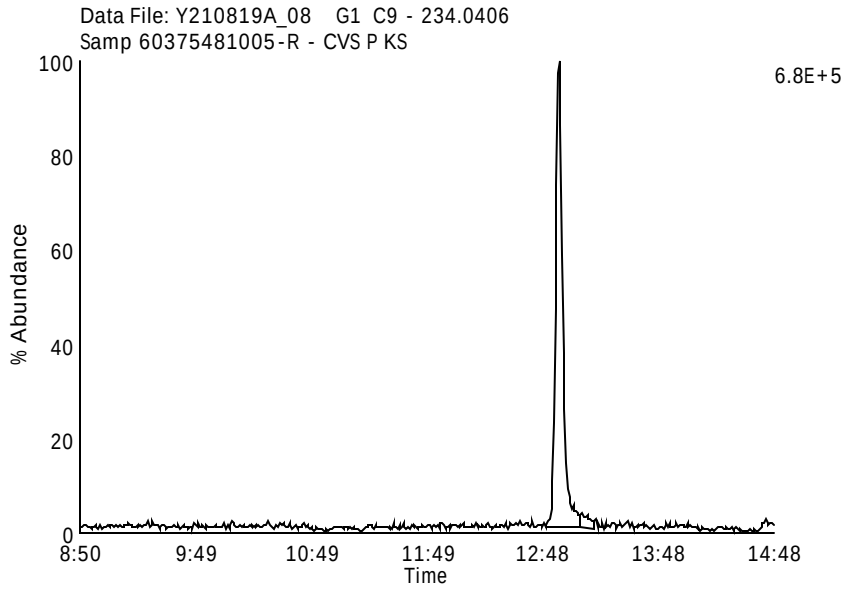
Sample Description: Samp 60375481005-R - CVS P KS | Client Sample ID: GB-71/0'-2'

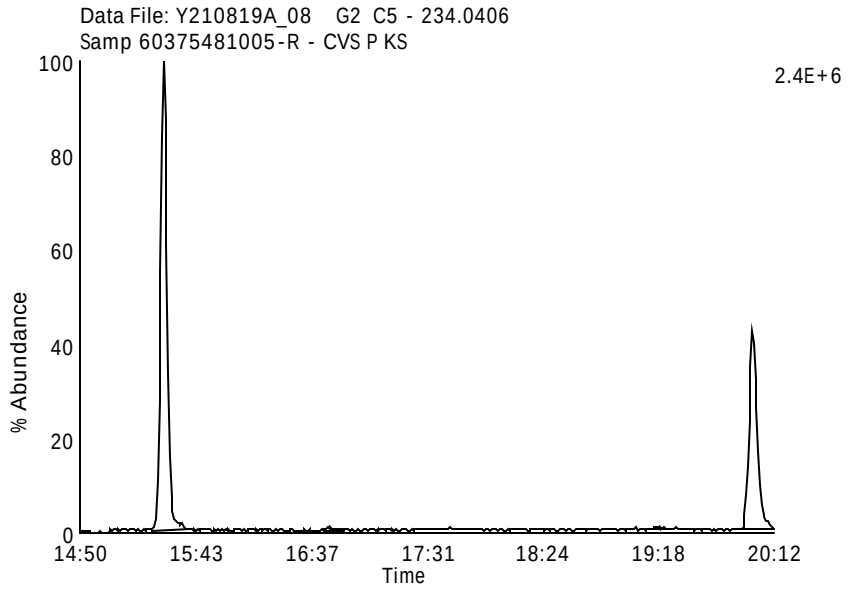


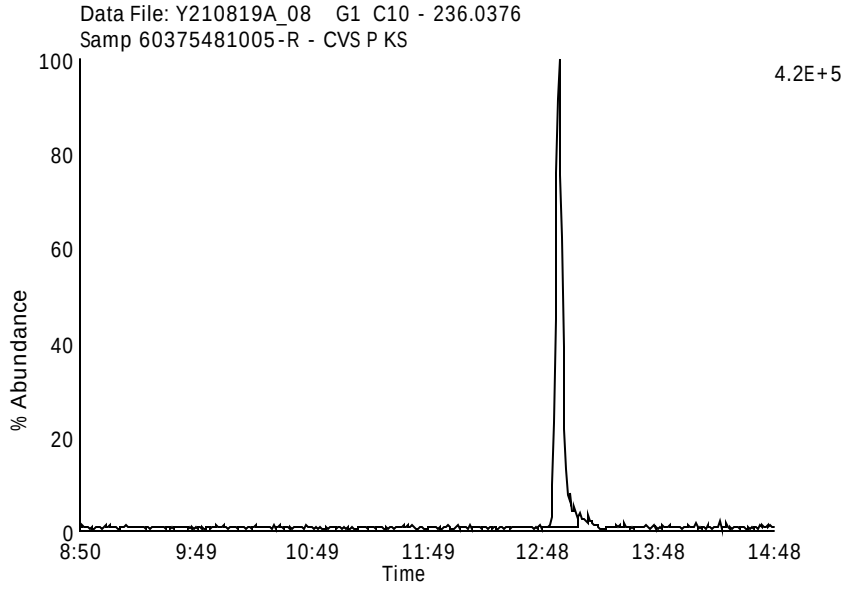


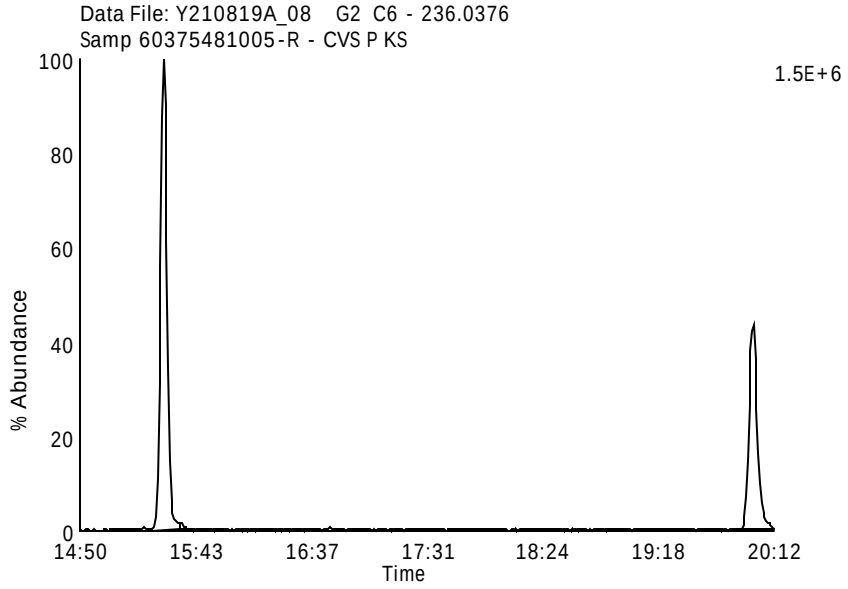
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



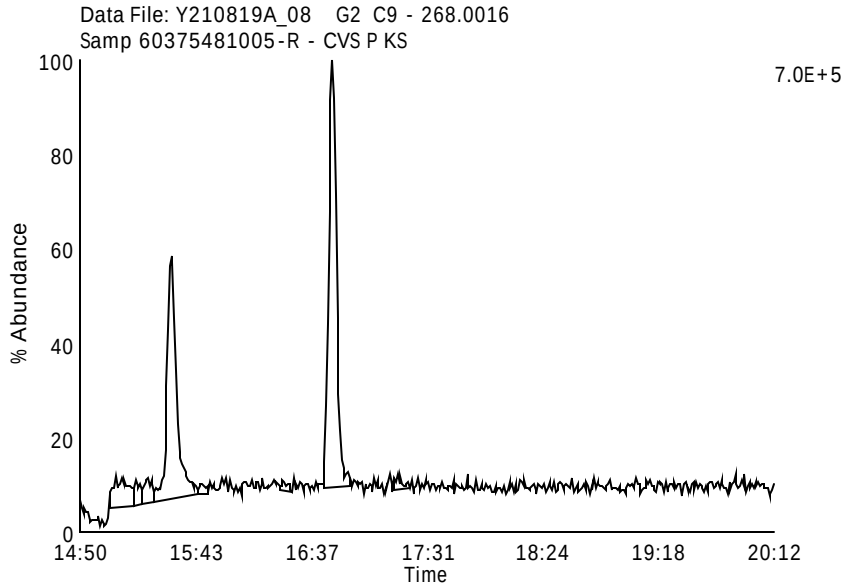


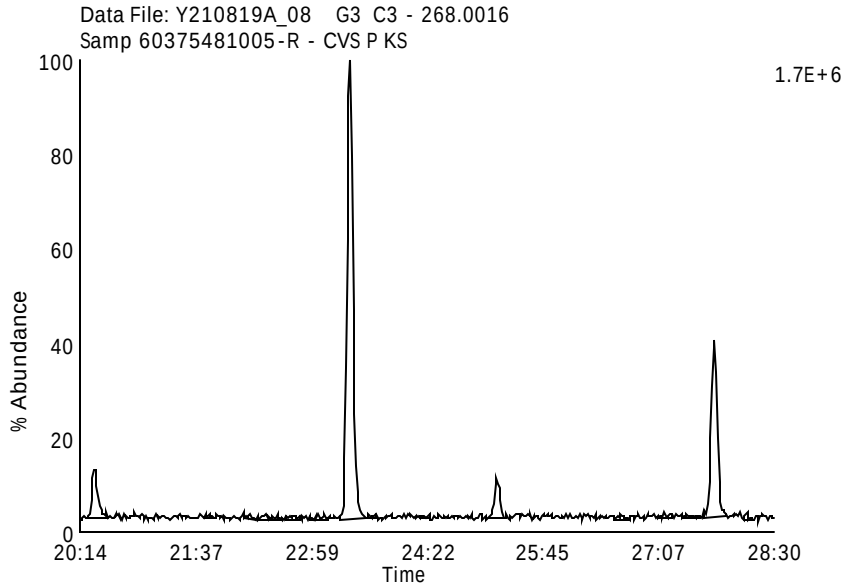


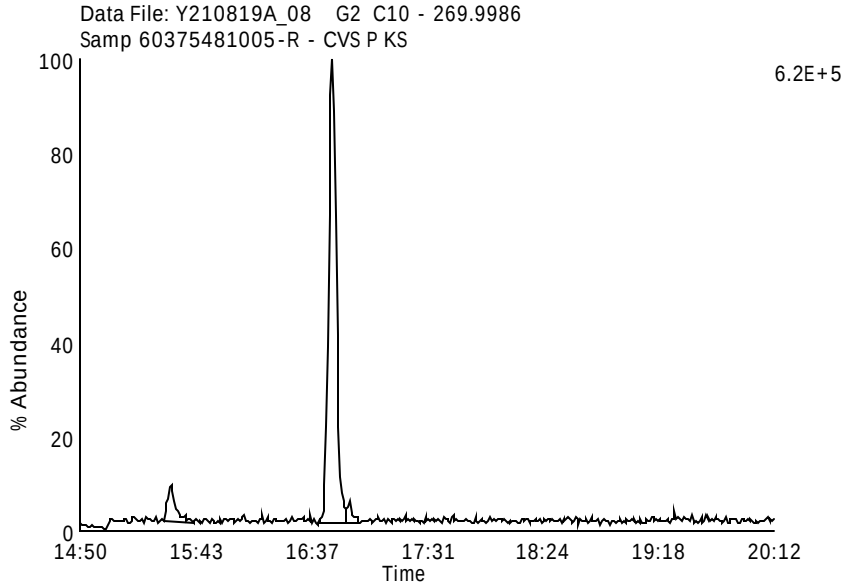


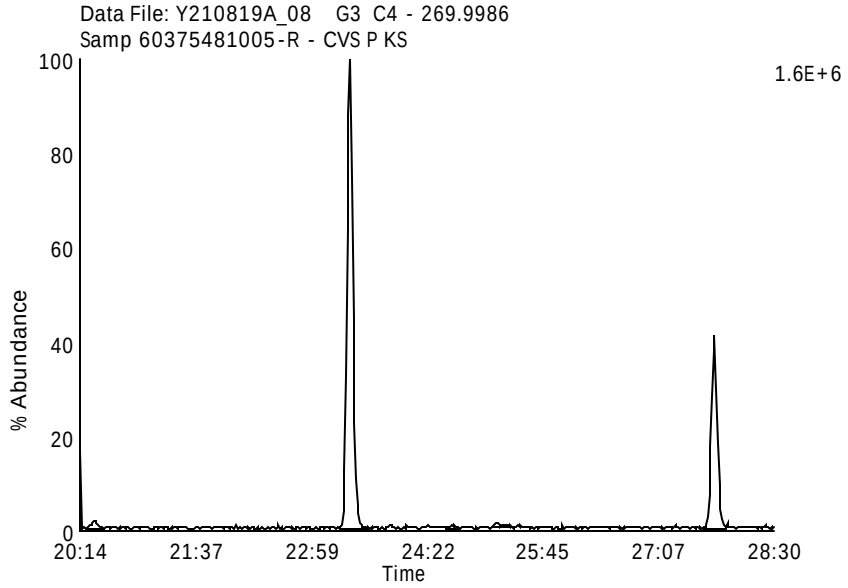
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



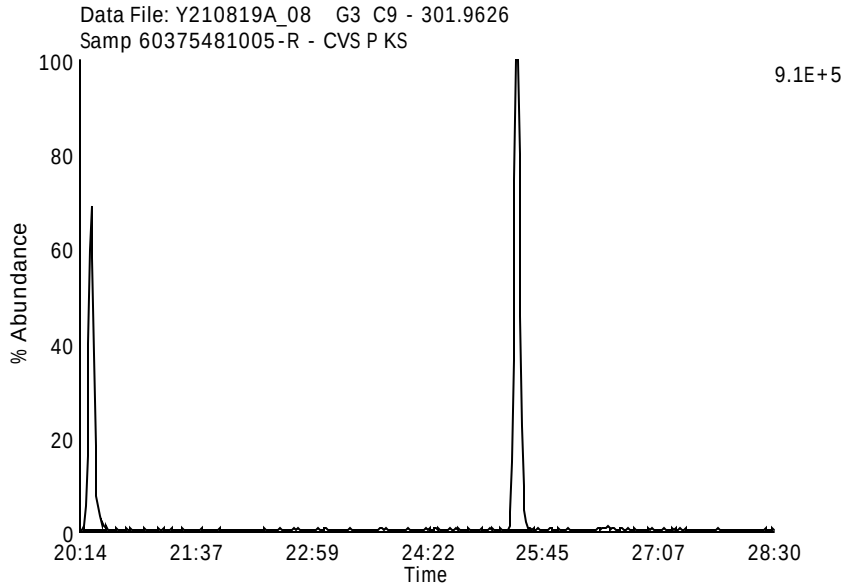


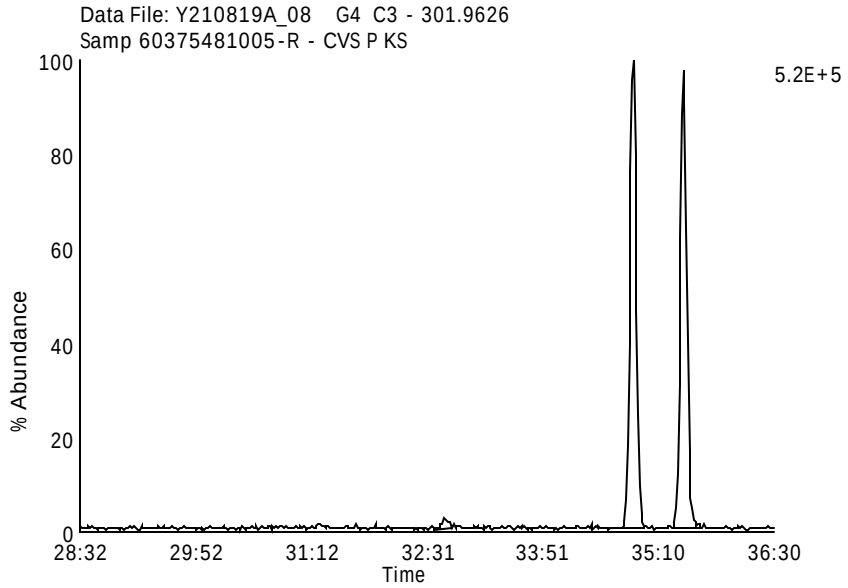


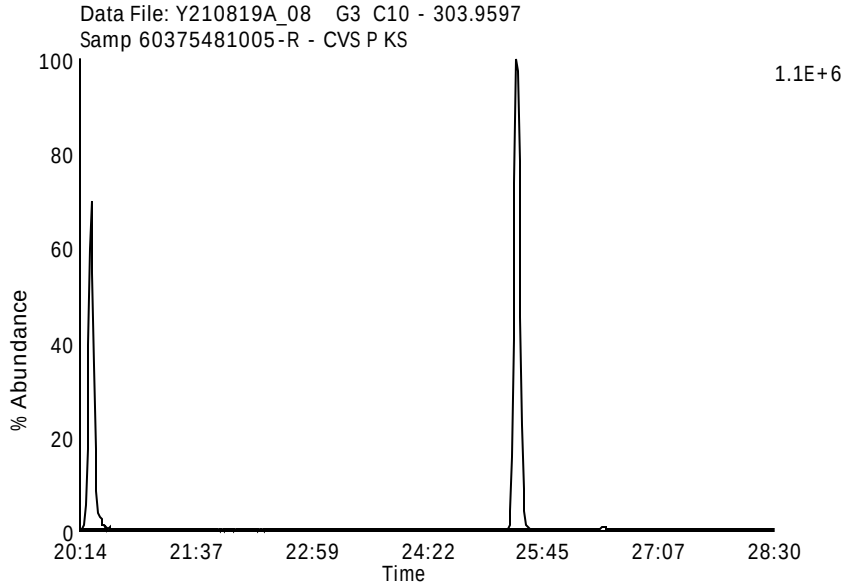


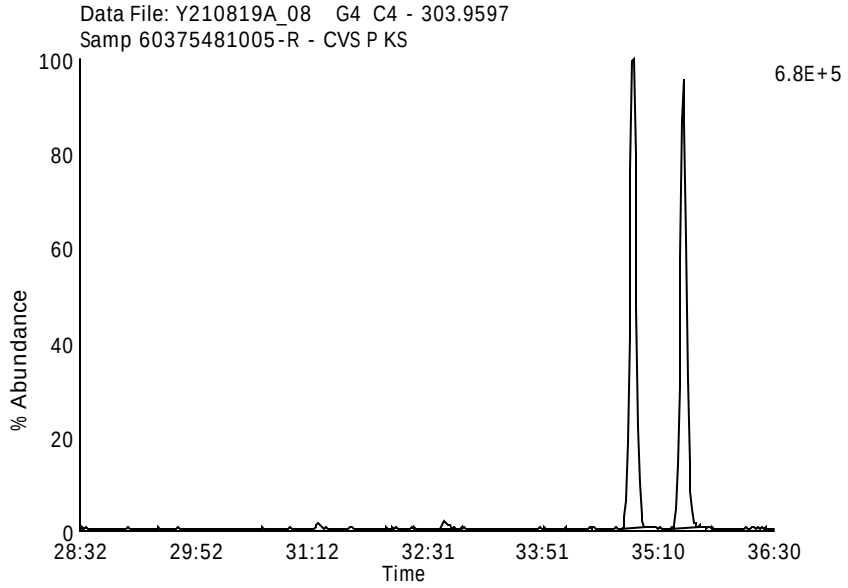
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



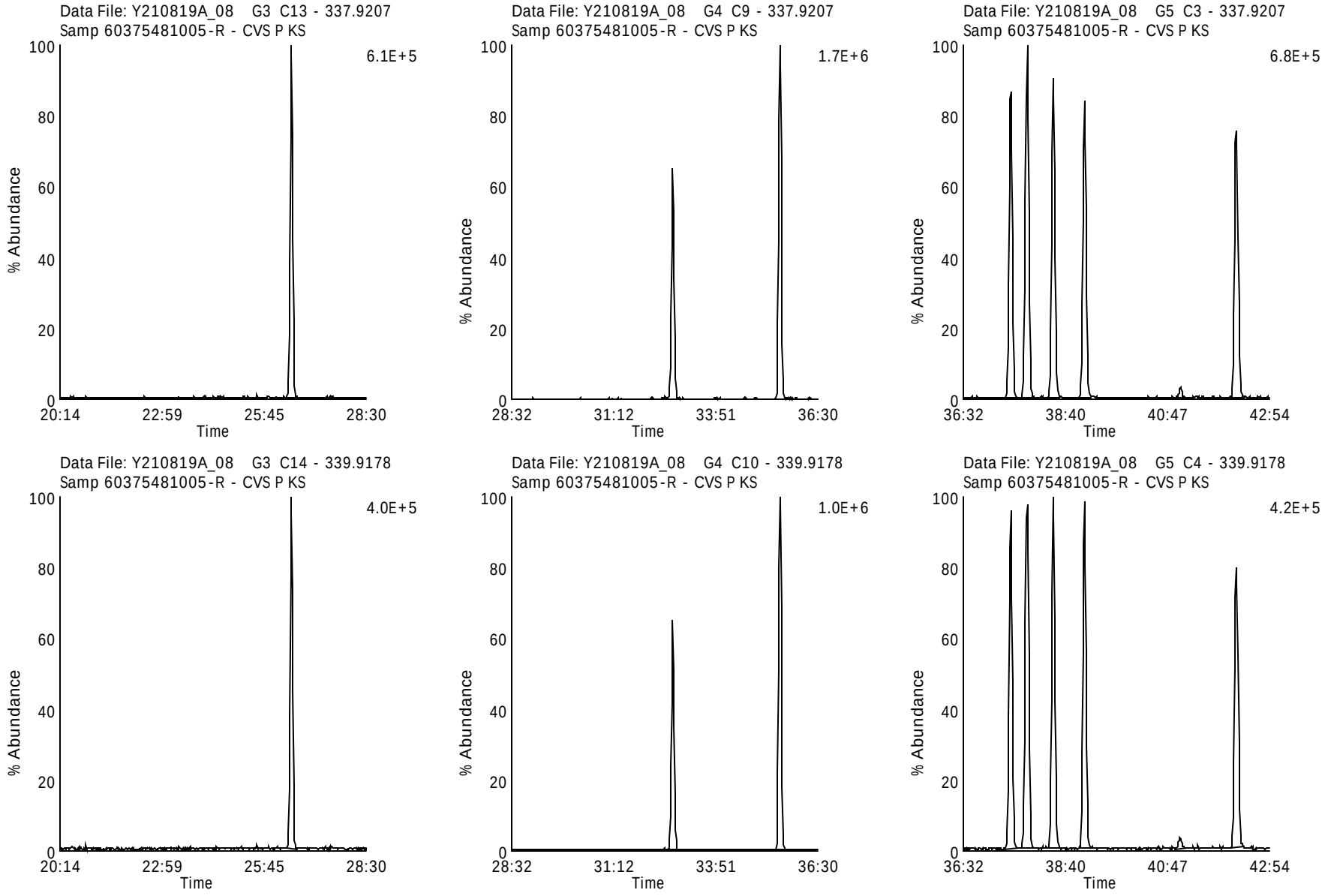






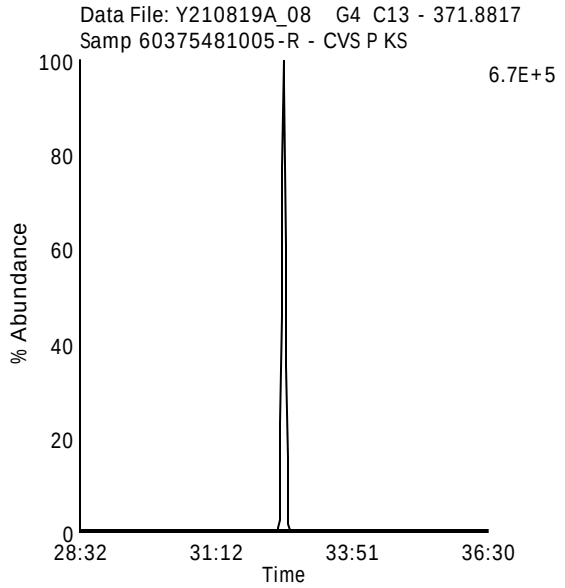
Labeled Penta Chlorinated Biphenyls

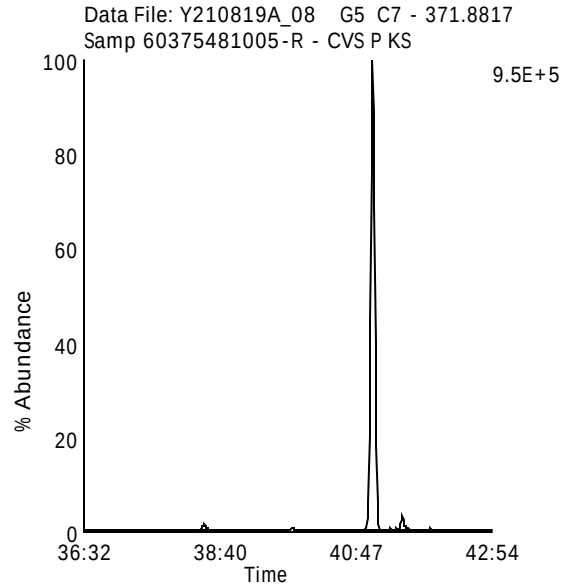
Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'

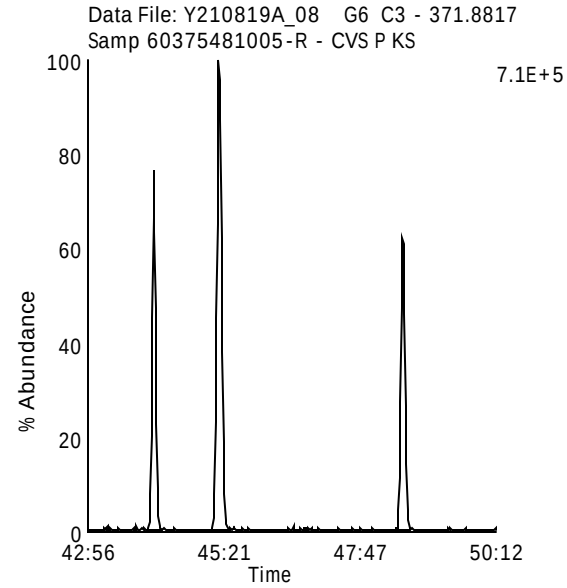


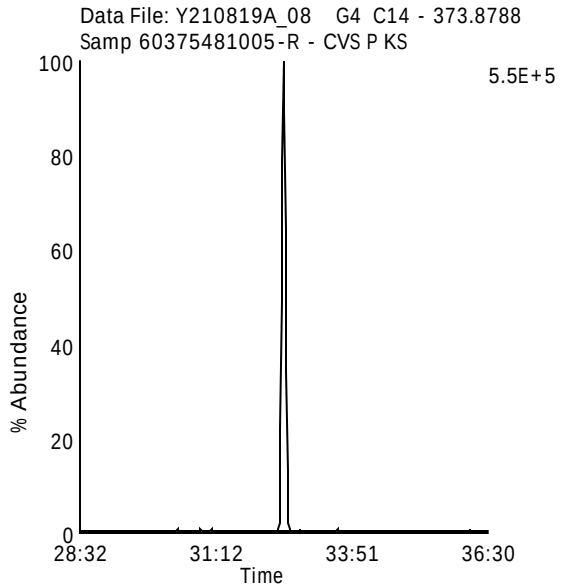
Labeled Hexa Chlorinated Biphenyls

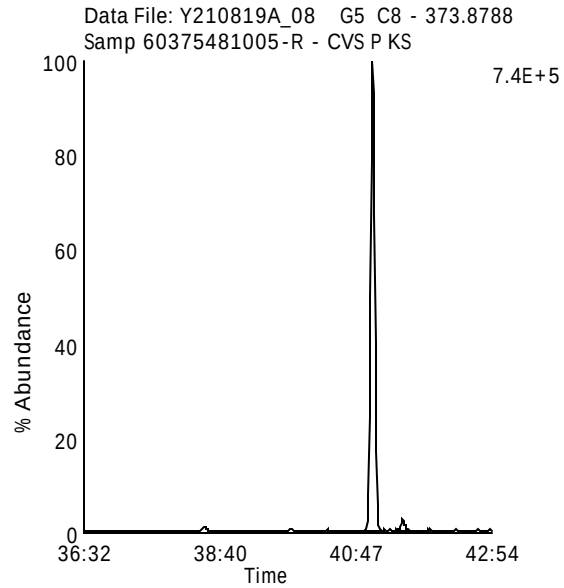
Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'

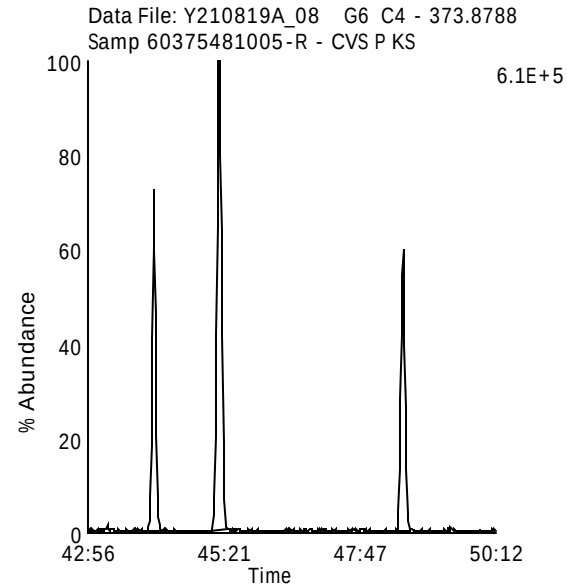






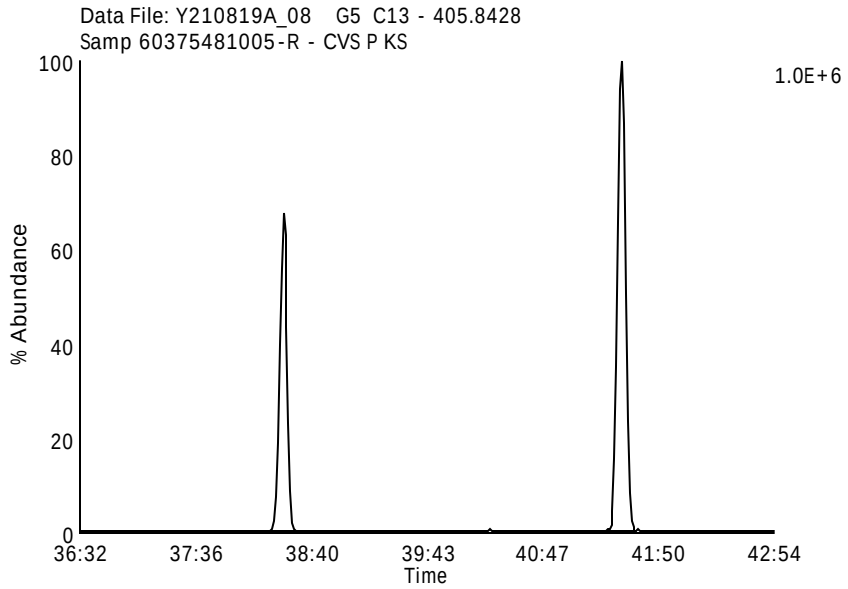


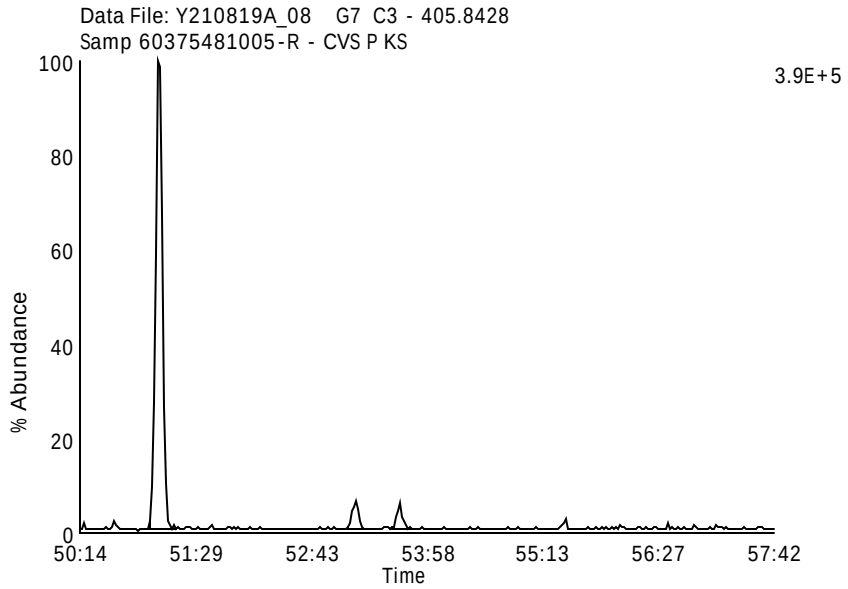


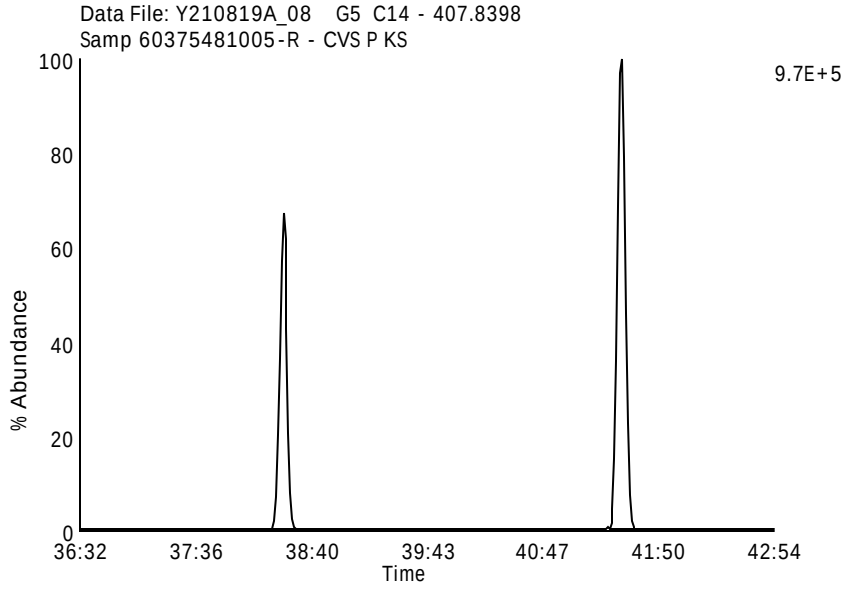


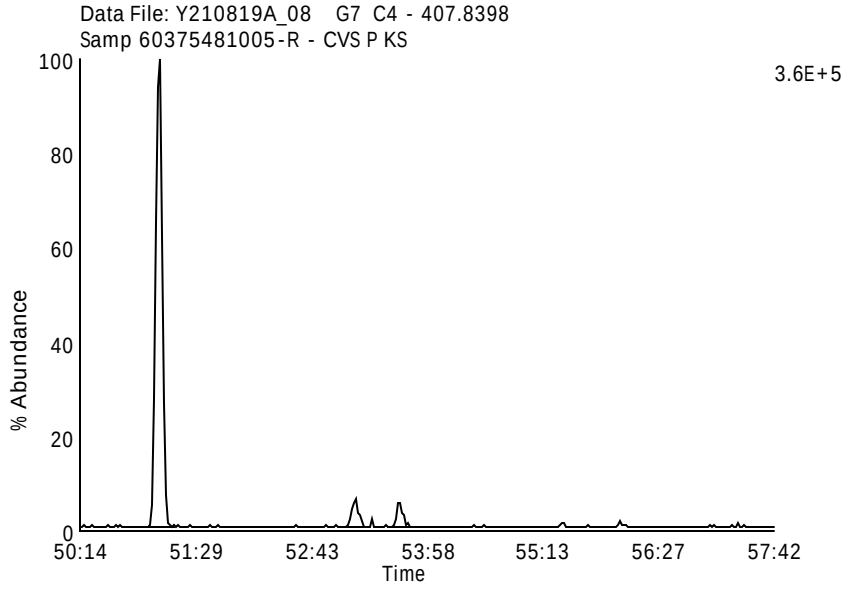
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



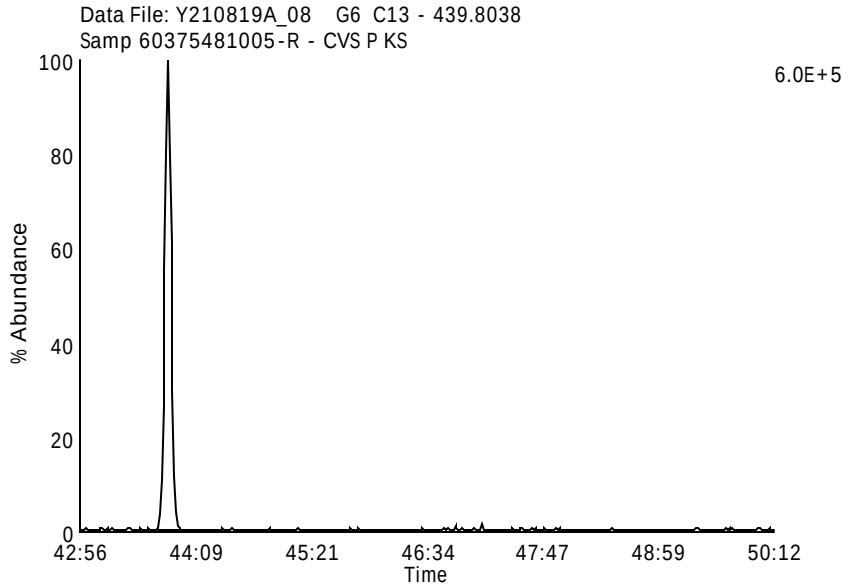


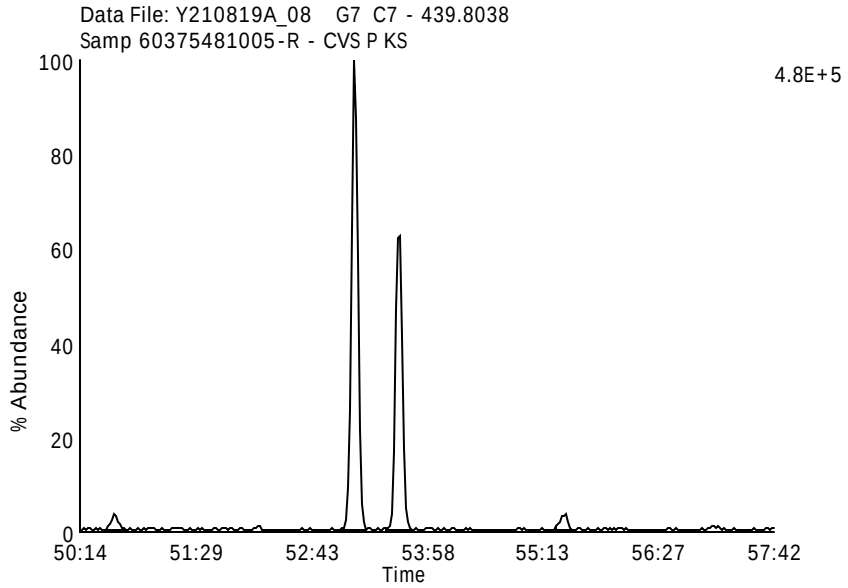


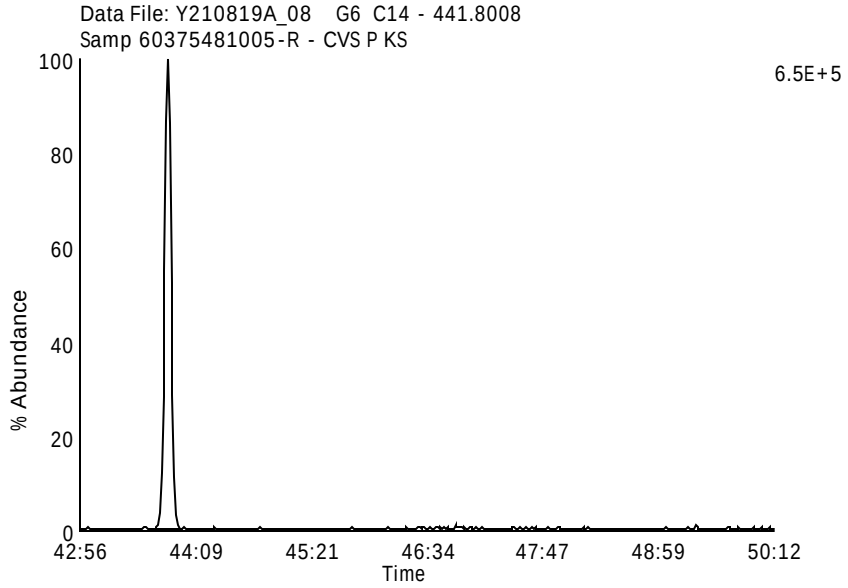


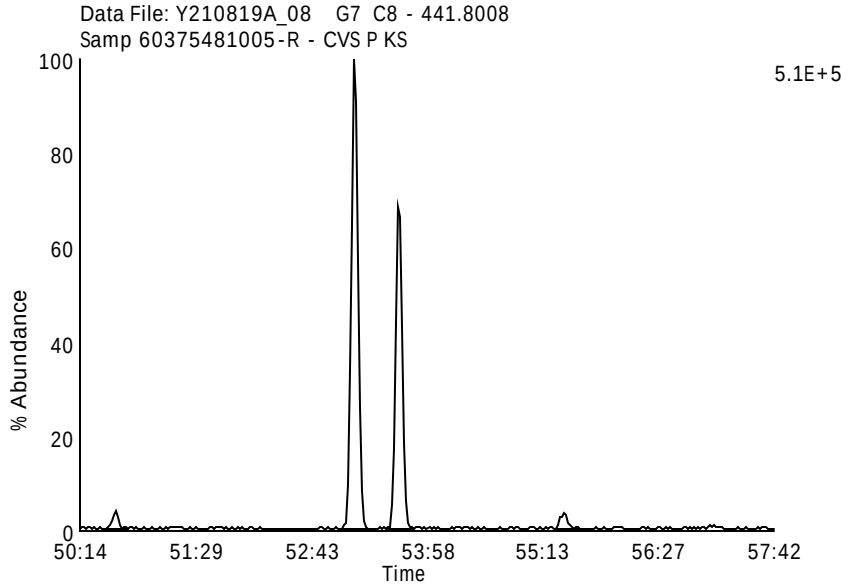
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



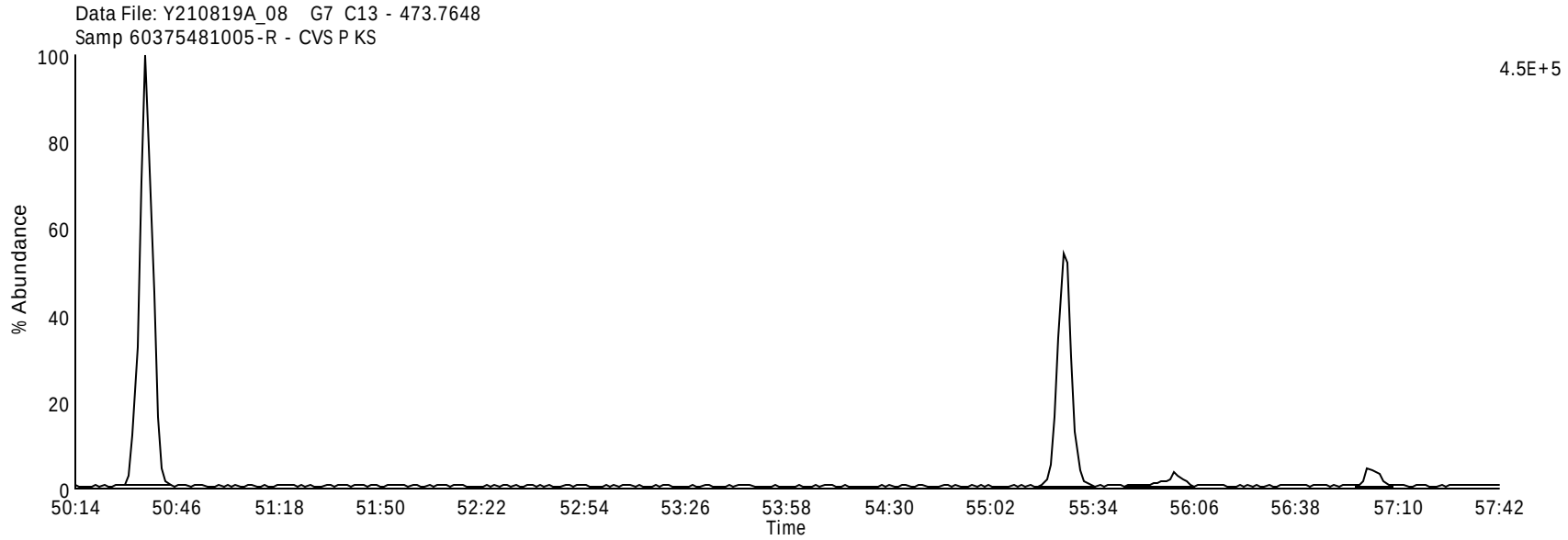


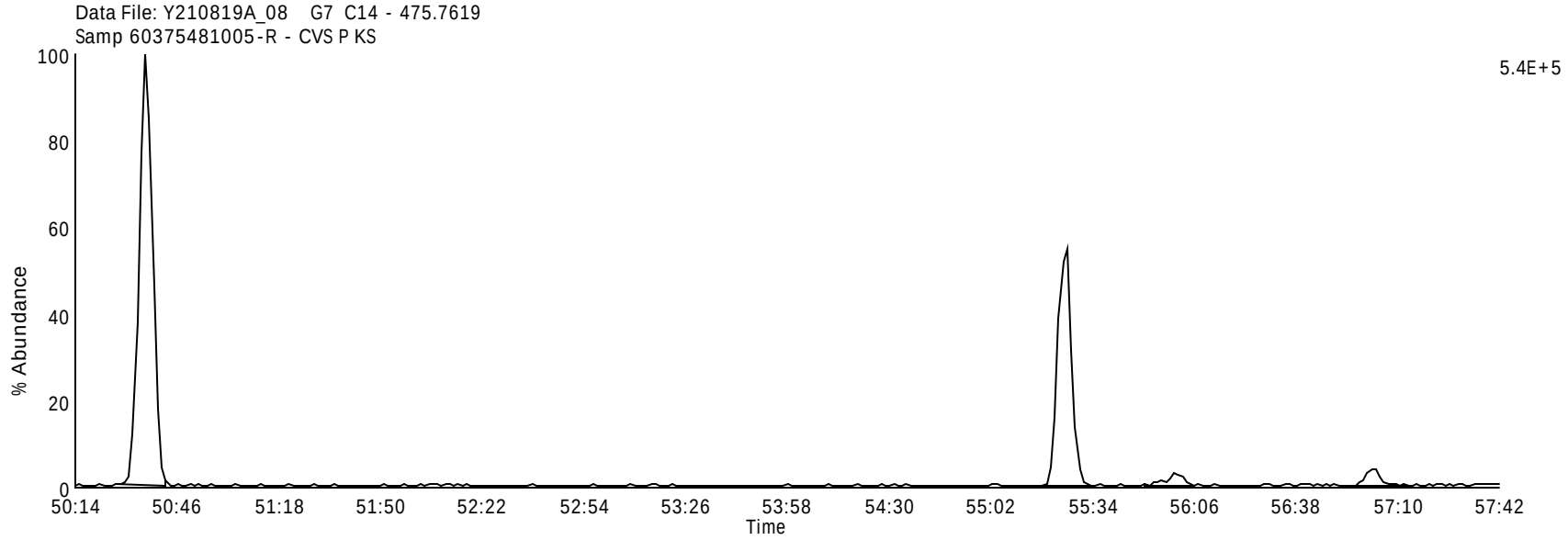




Labeled Nona Chlorinated Biphenyls

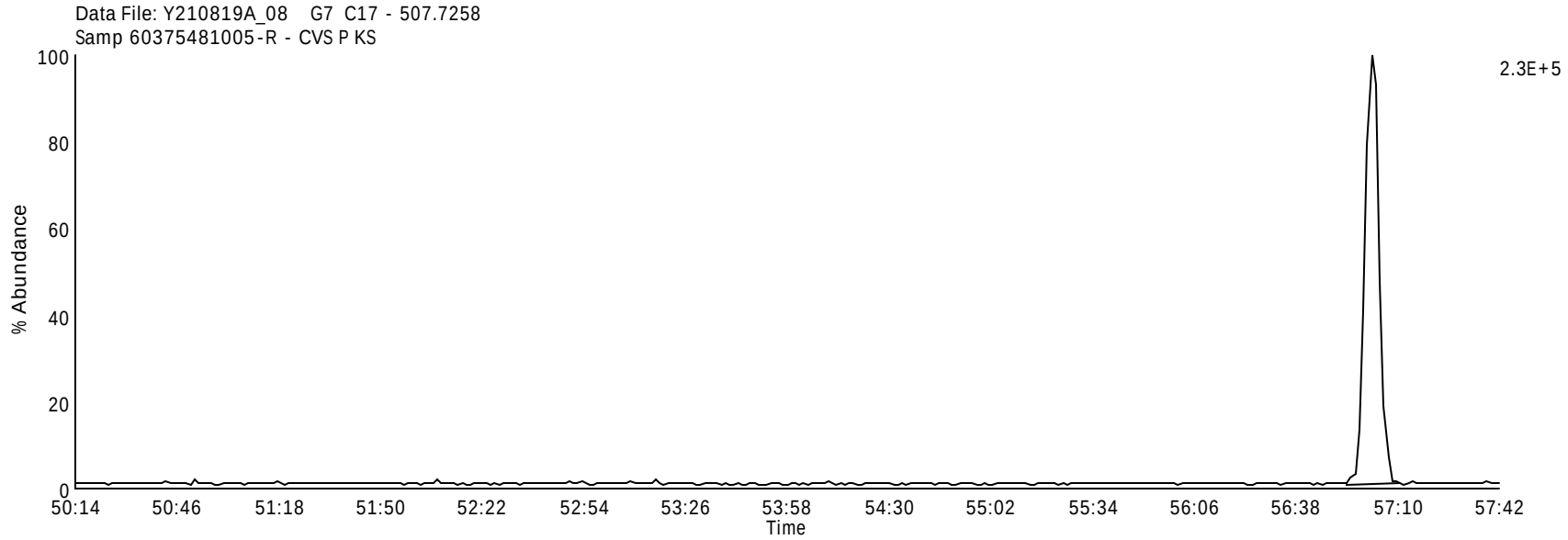
Data File Name: Y210819A_08	Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS	Client Sample ID: GB-71/0'-2'

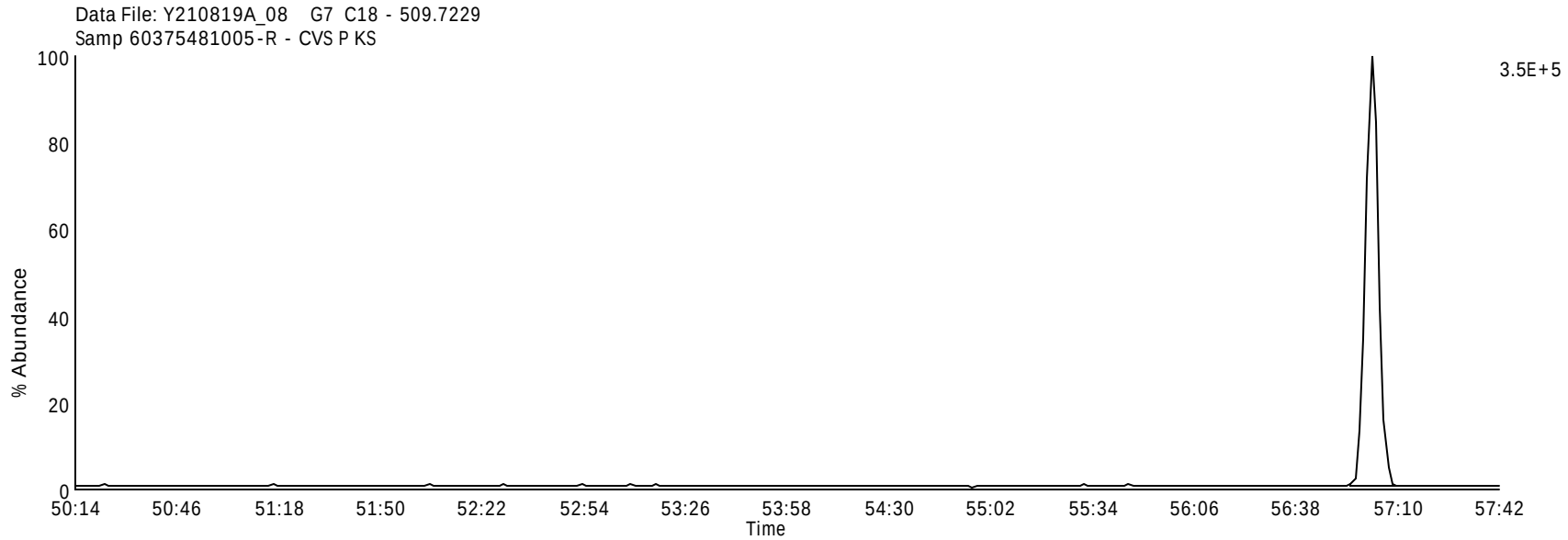




Labeled Deca Chlorinated Biphenyl

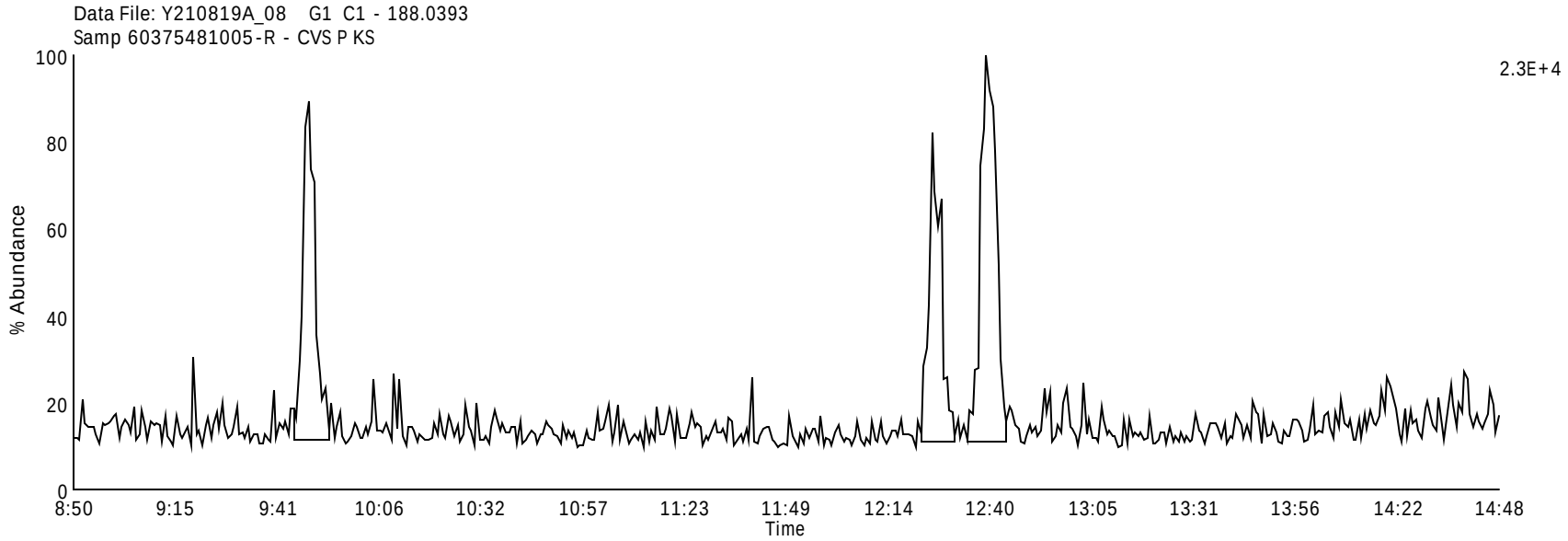
Data File Name: Y210819A_08	Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS	Client Sample ID: GB-71/0'-2'

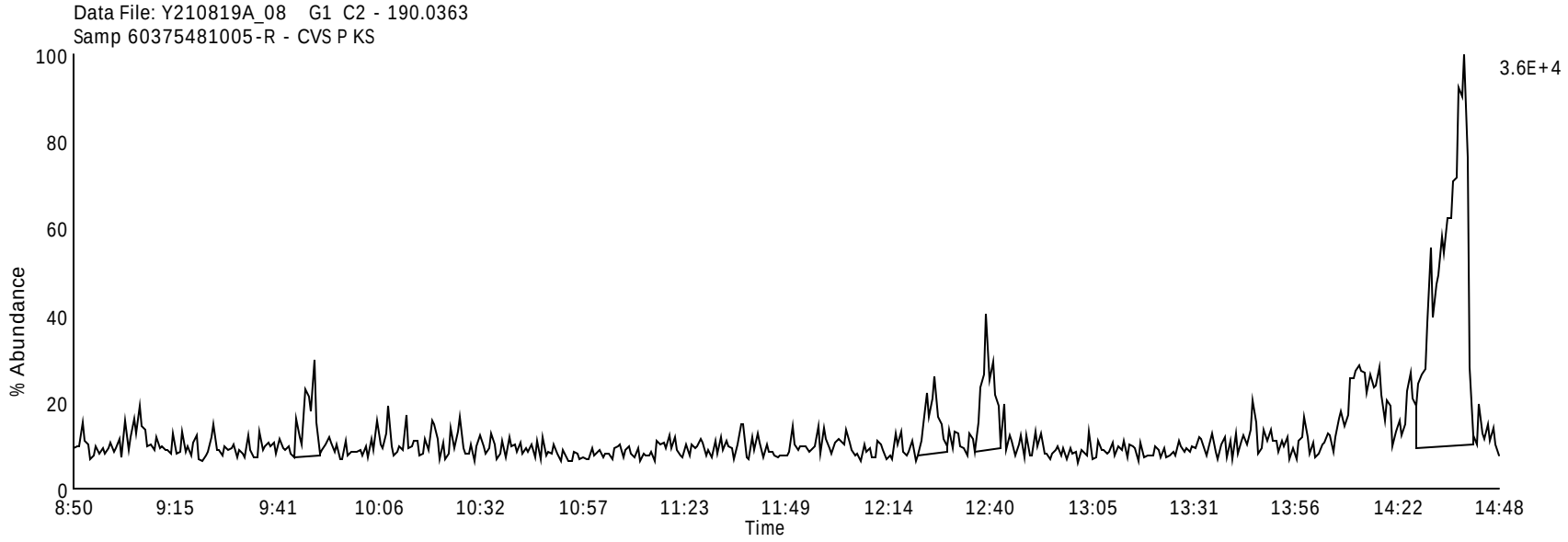




Mono Chlorinated Biphenyls

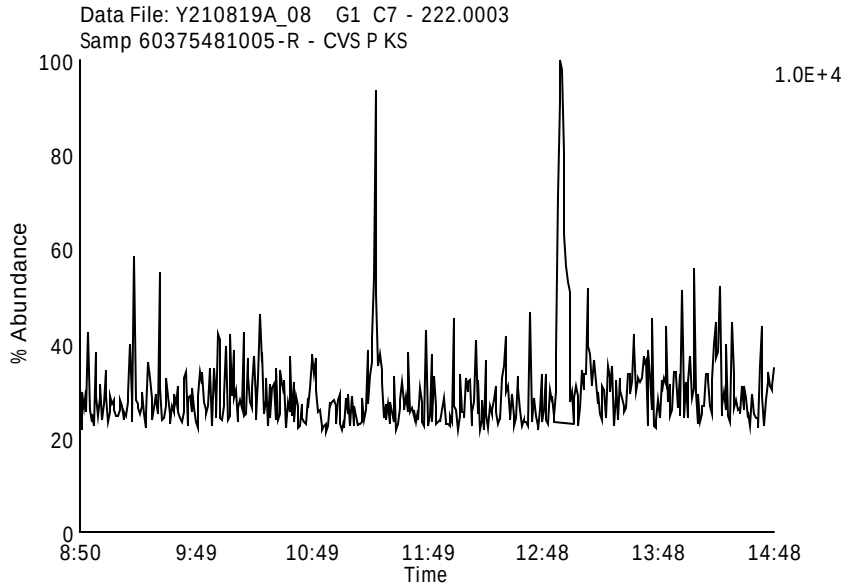
Data File Name: Y210819A_08	Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS	Client Sample ID: GB-71/0'-2'

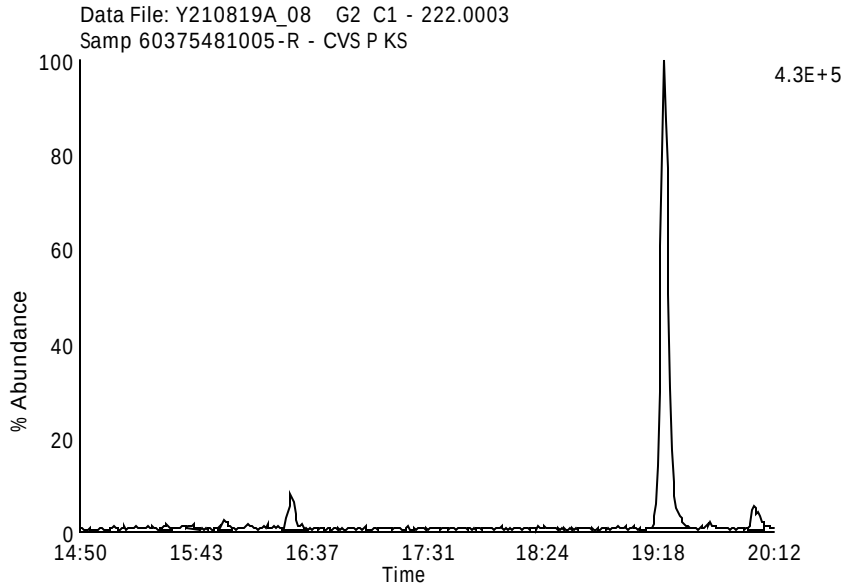


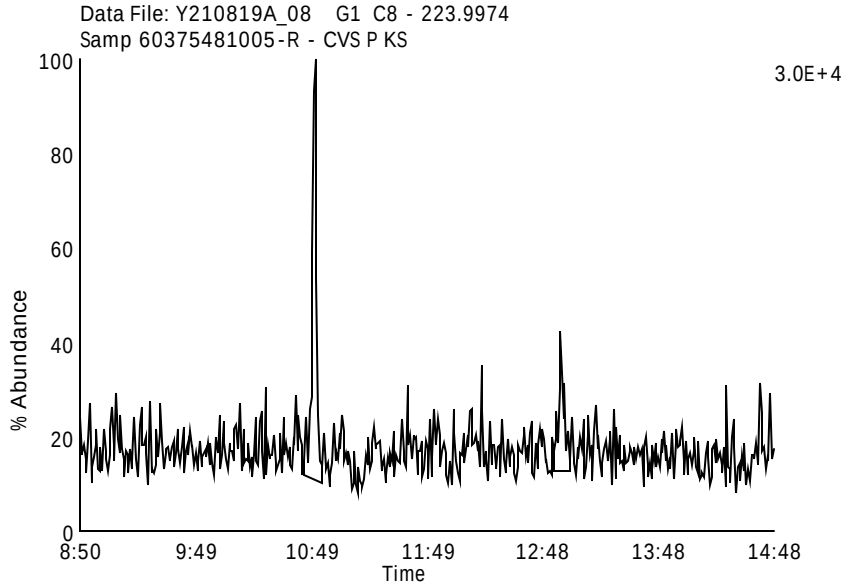


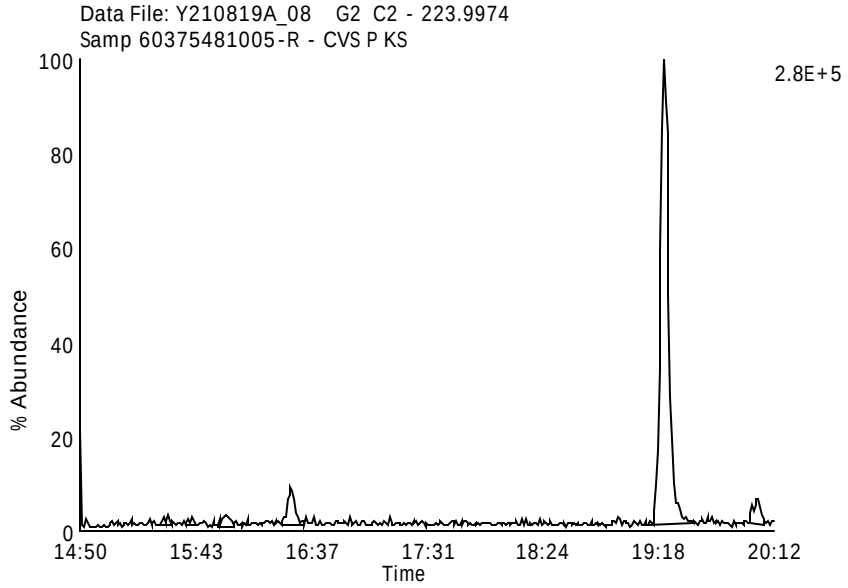
Di Chlorinated Biphenyls

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



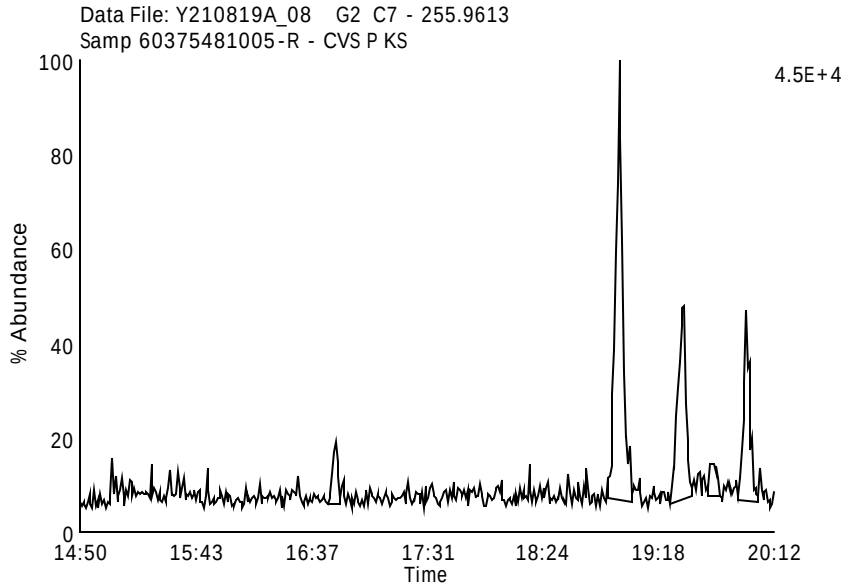


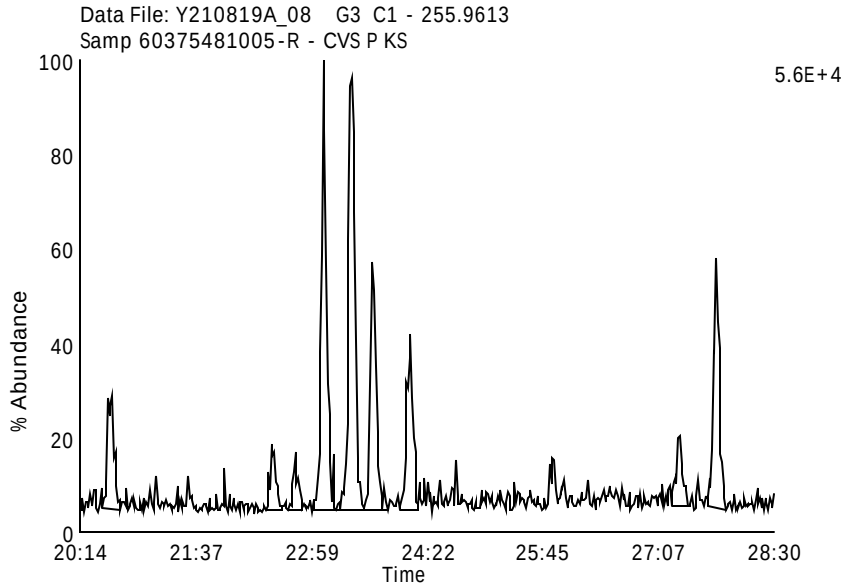


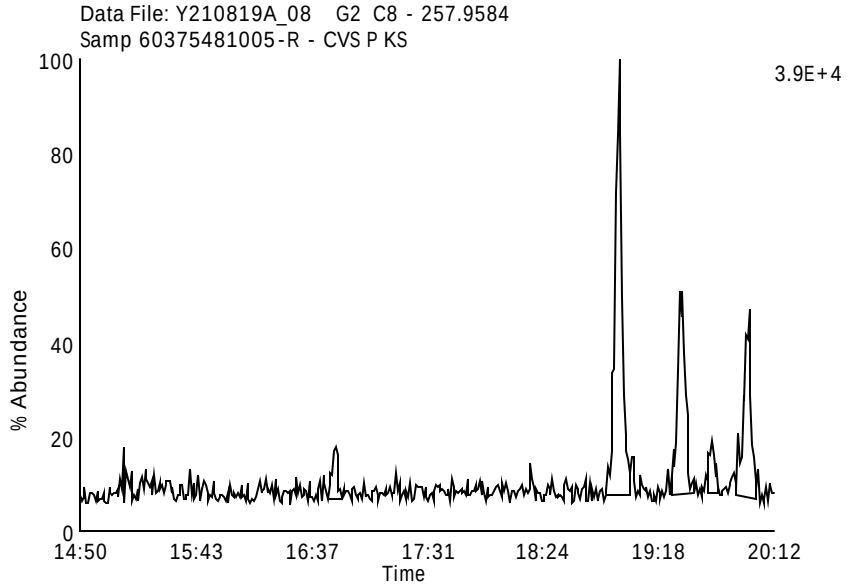


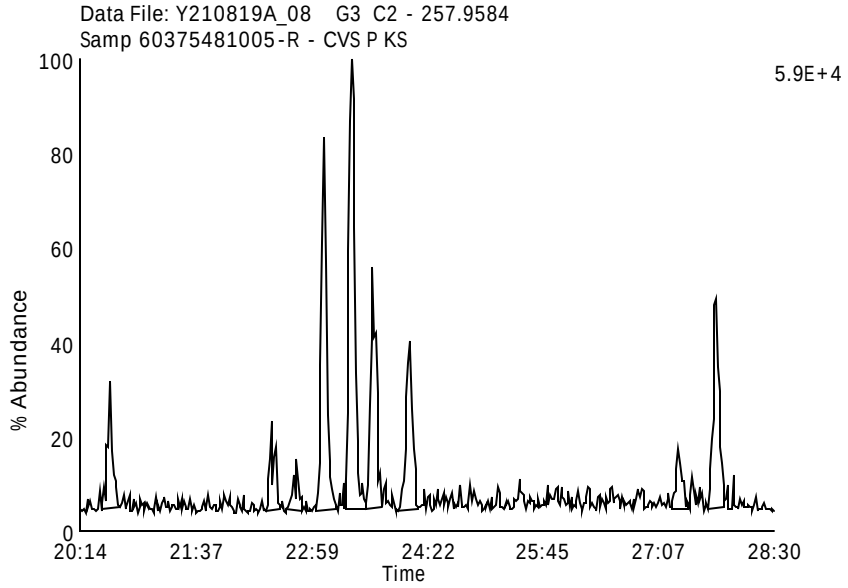
Tri Chlorinated Biphenyls

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



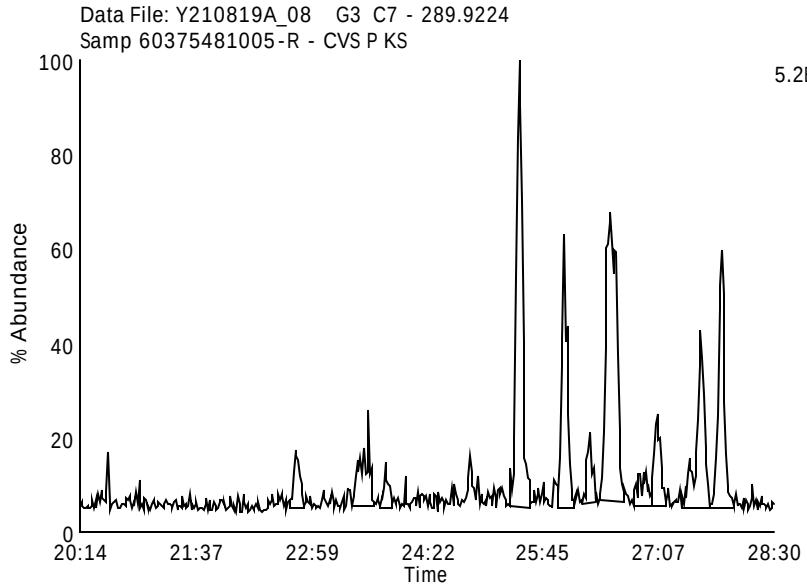


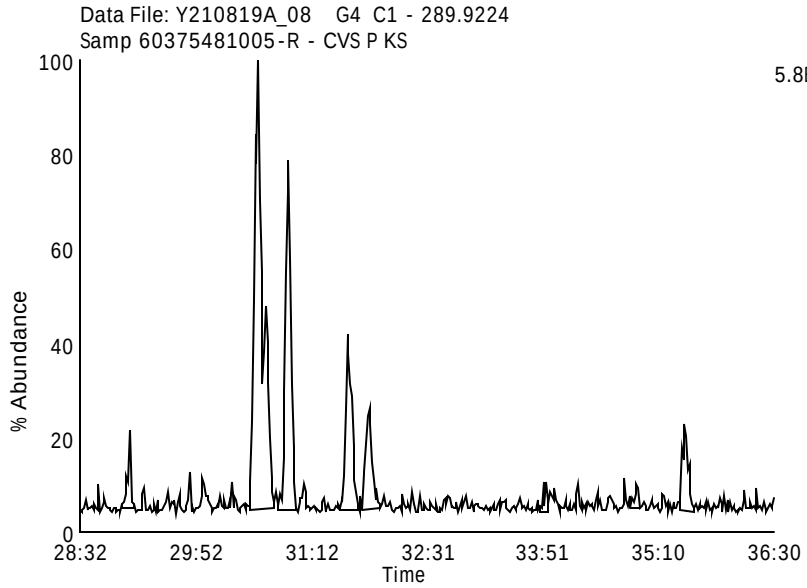


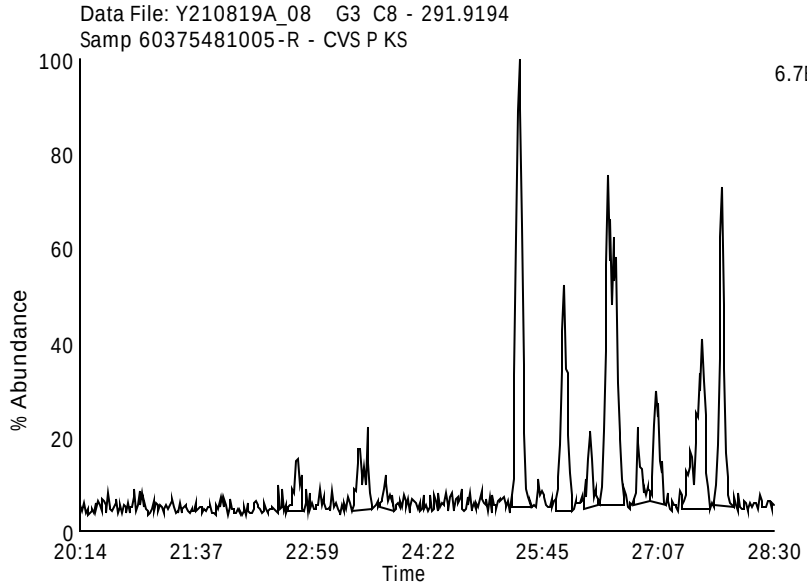


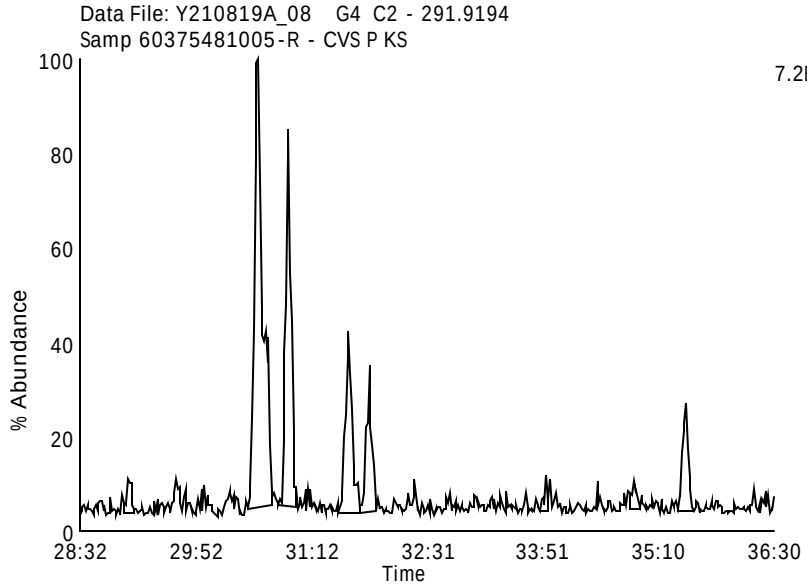
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



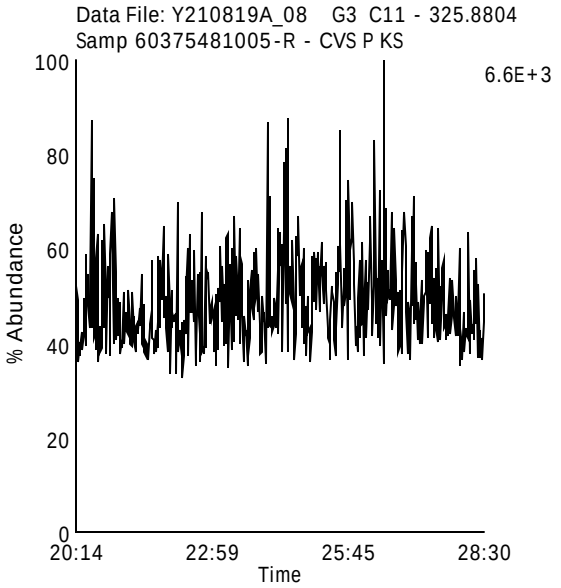


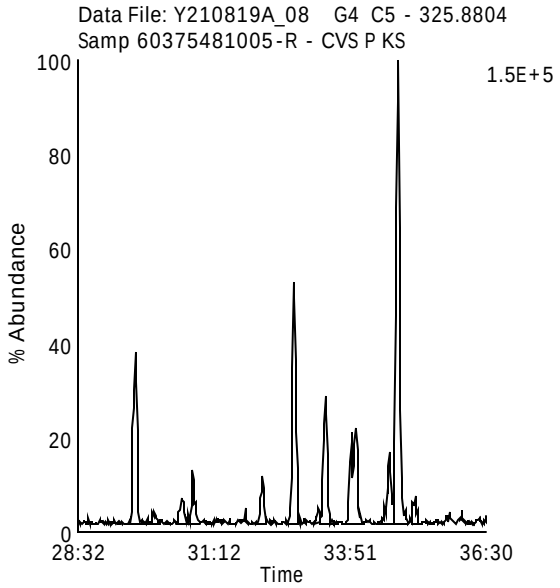


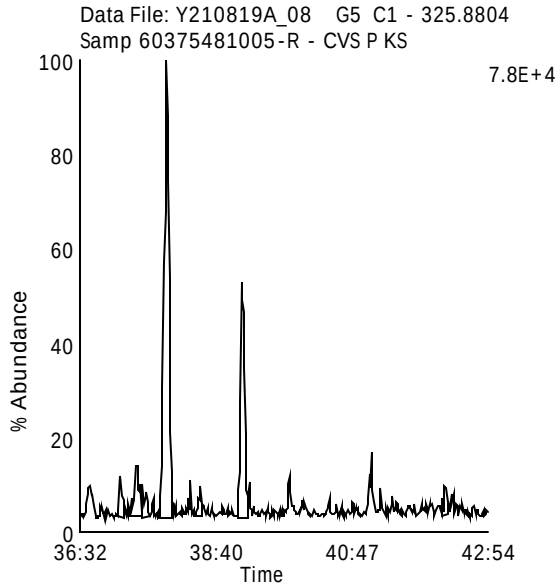


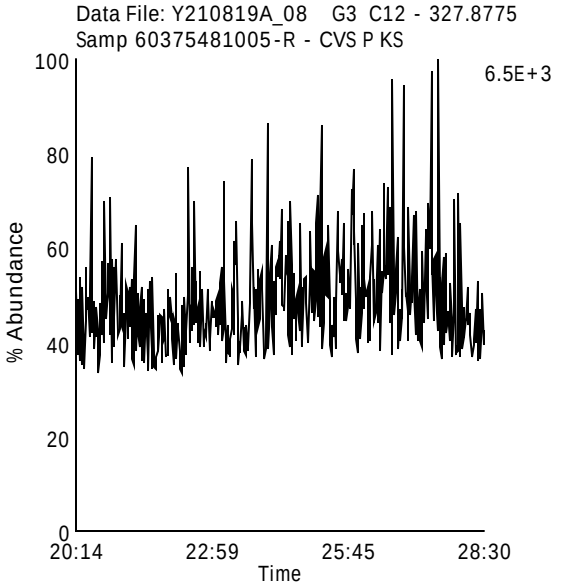
Penta Chlorinated Biphenyls

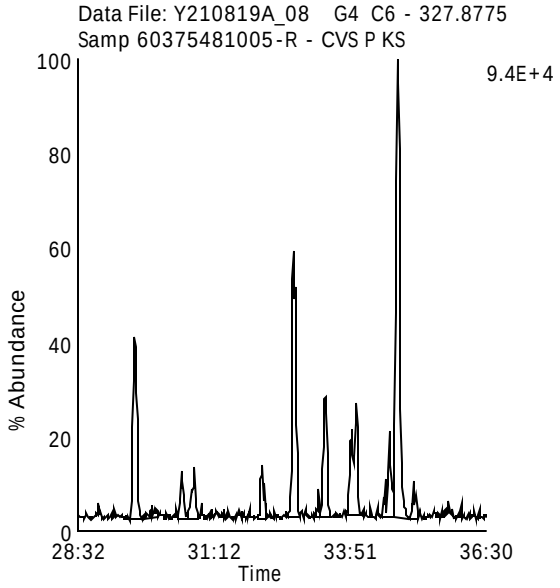
Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'

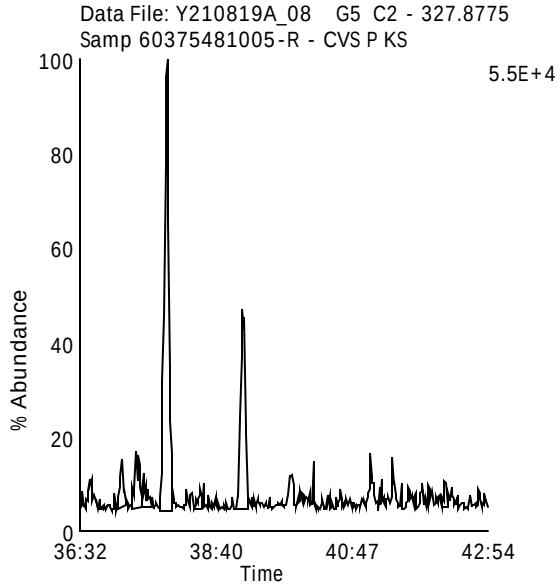






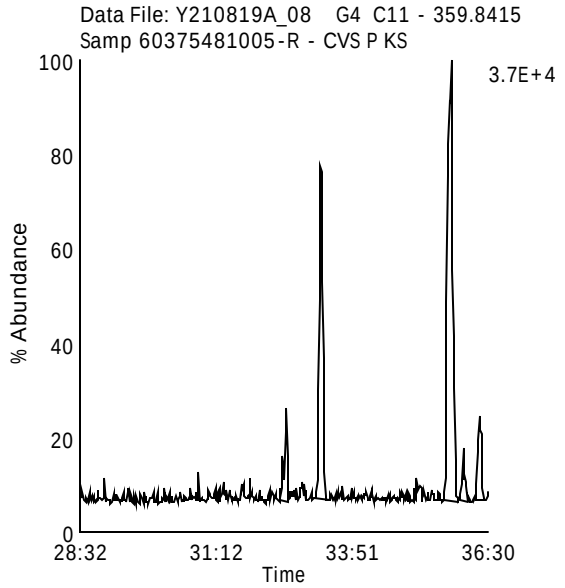


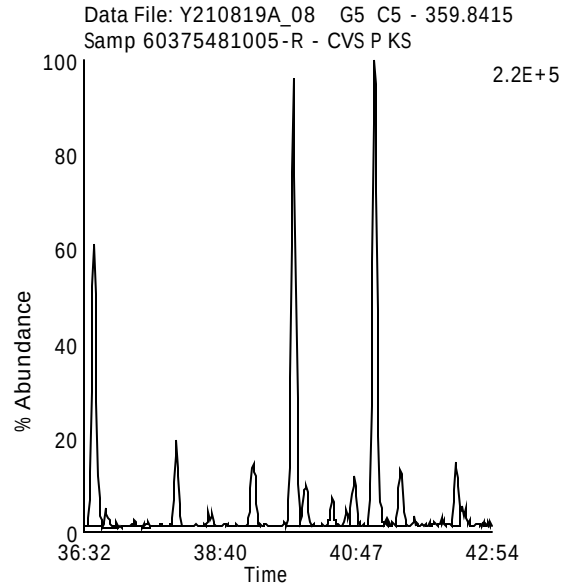


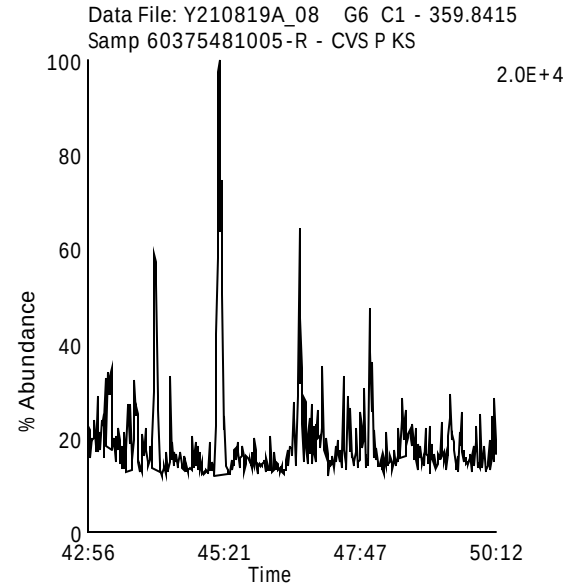


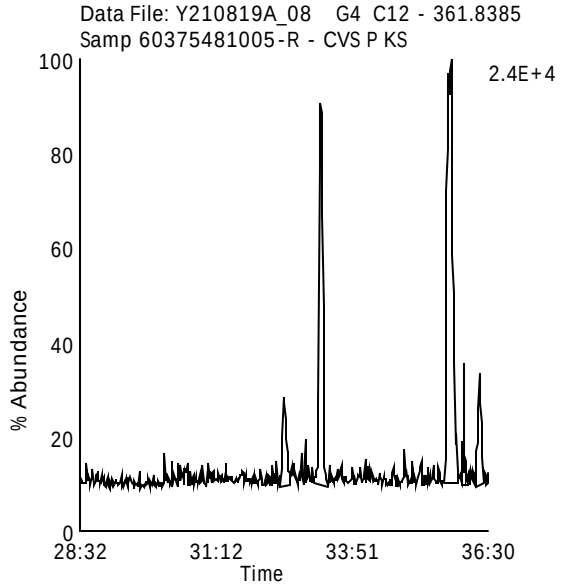
Hexa Chlorinated Biphenyls

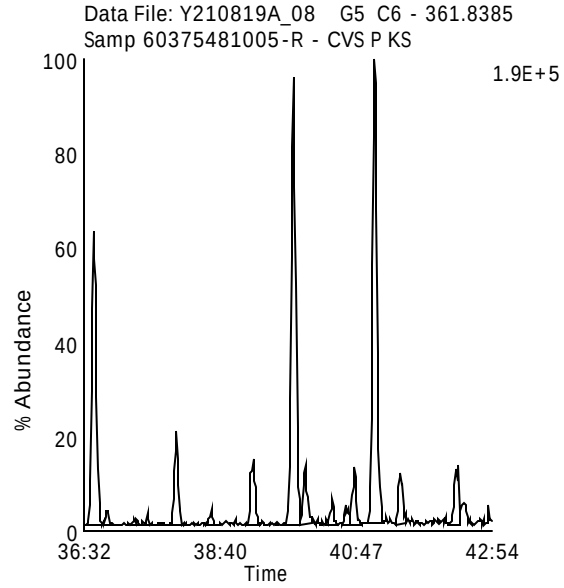
Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'

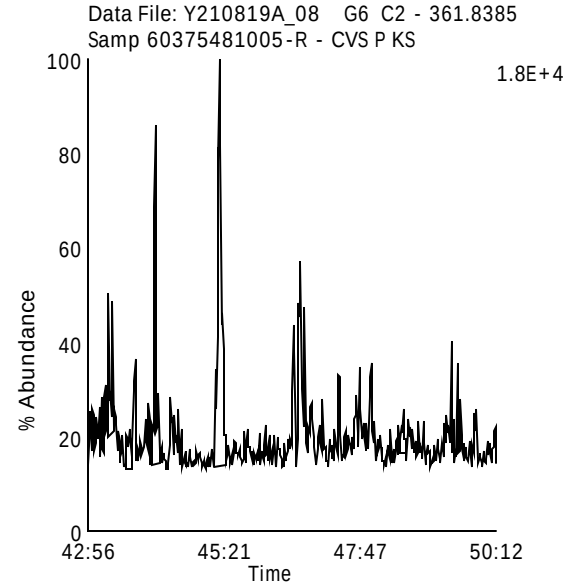






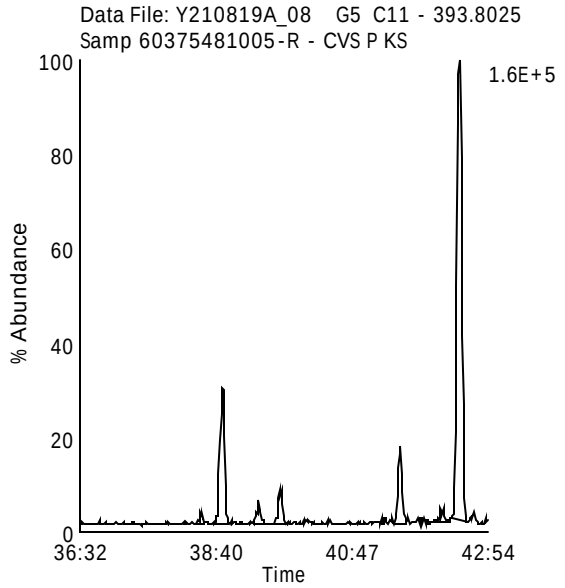


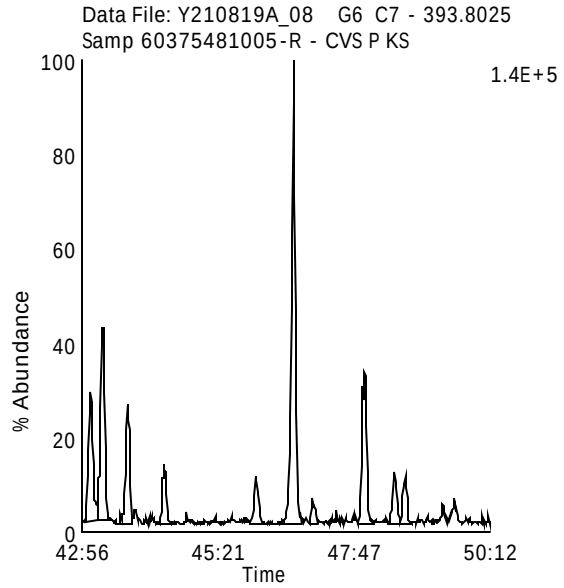


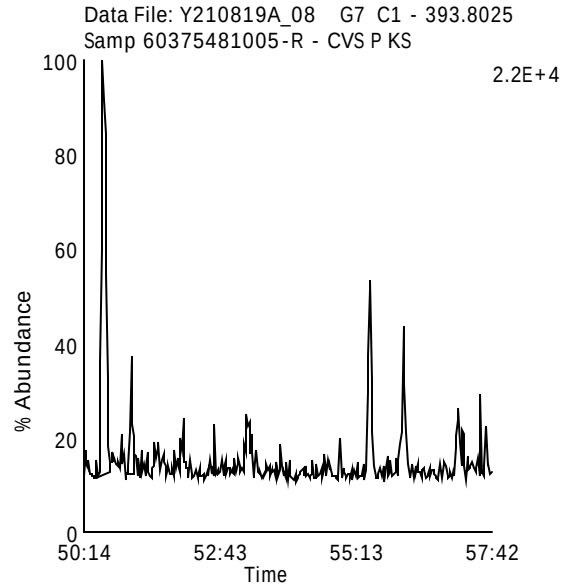


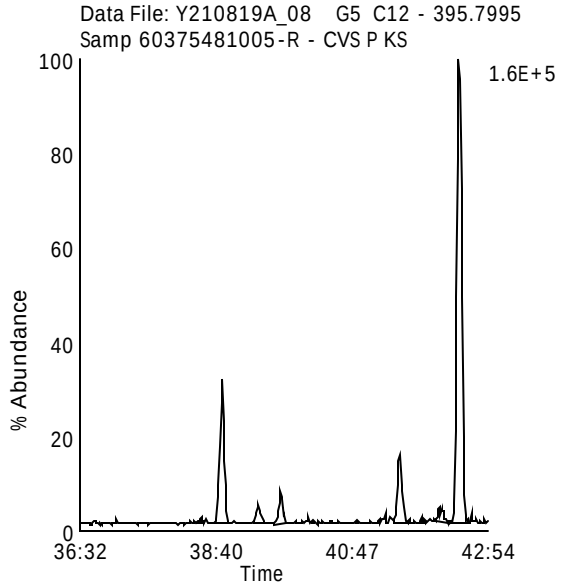
Hepta Chlorinated Biphenyls

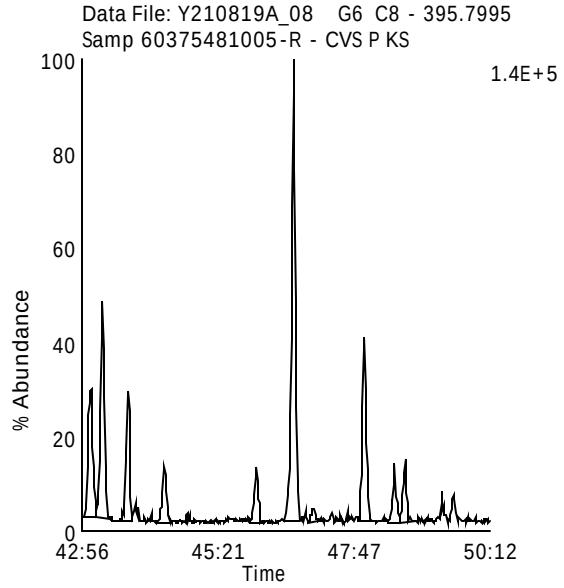
Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'

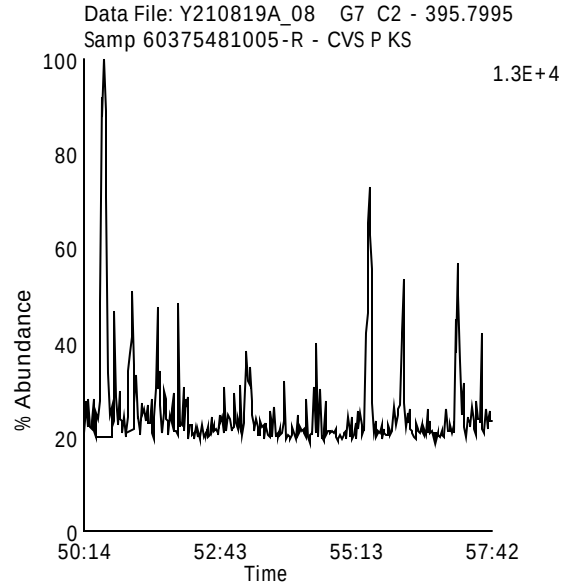






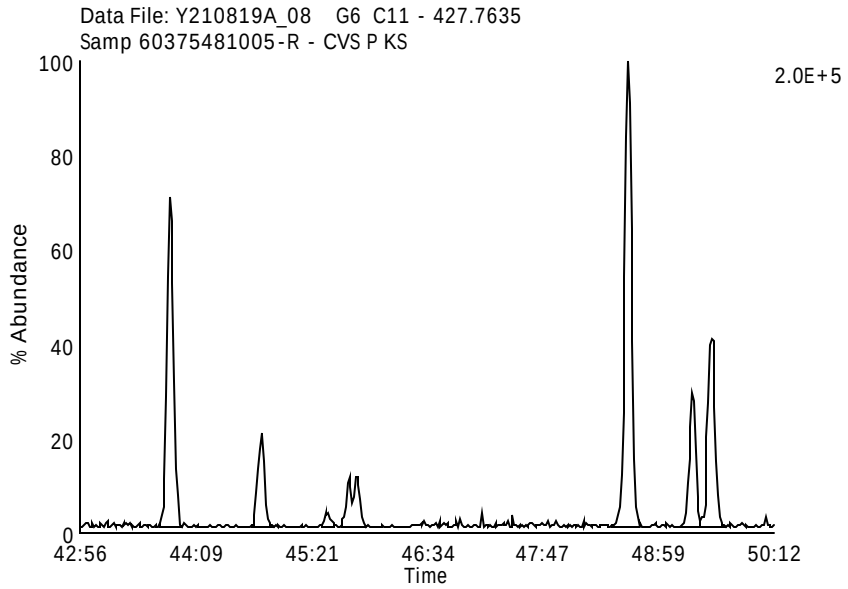


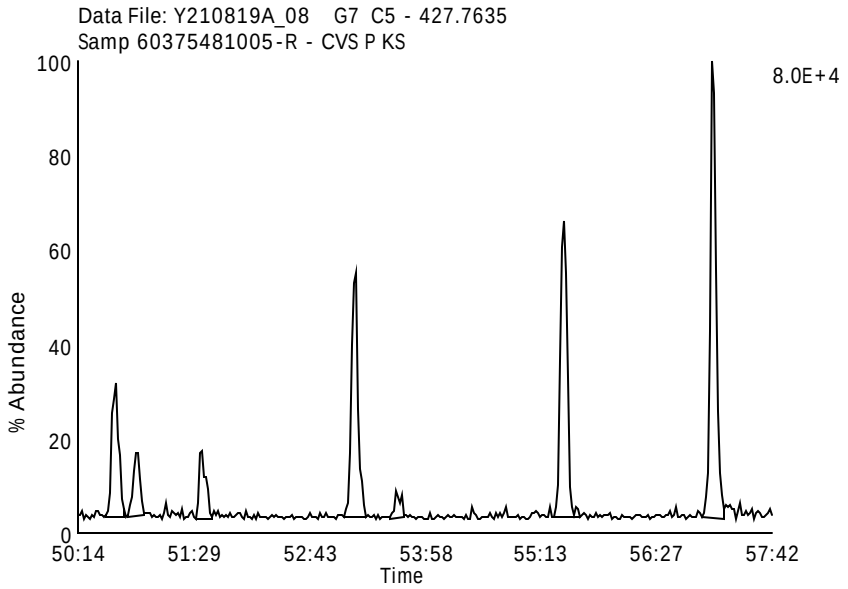


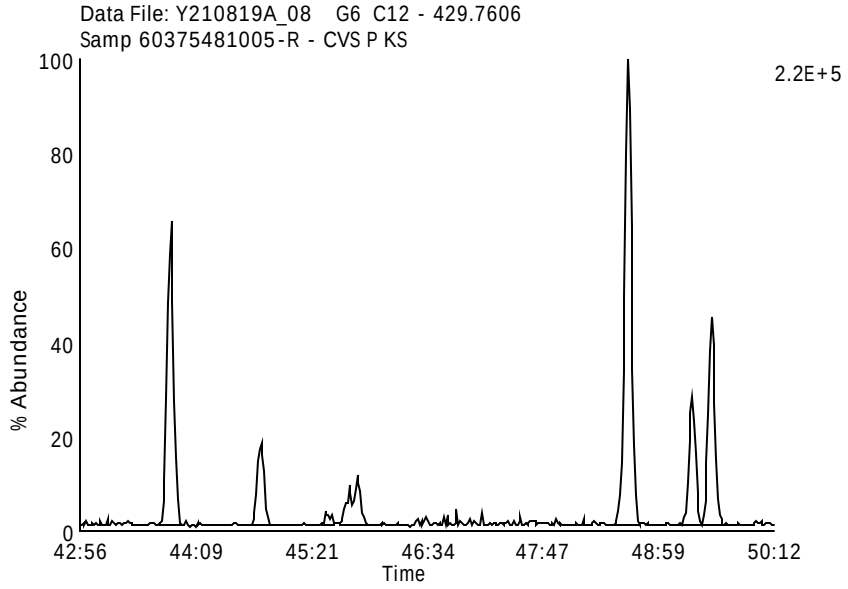


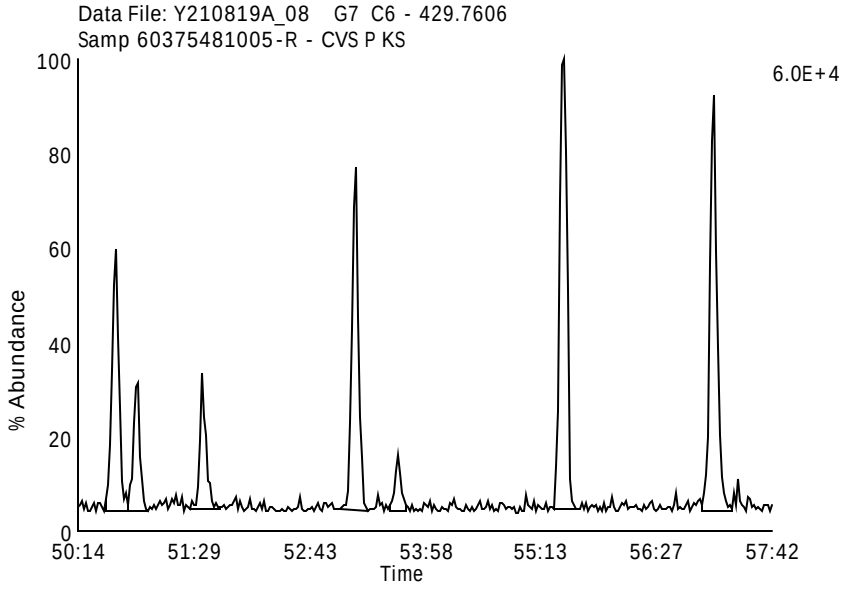
Octa Chlorinated Biphenyls

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



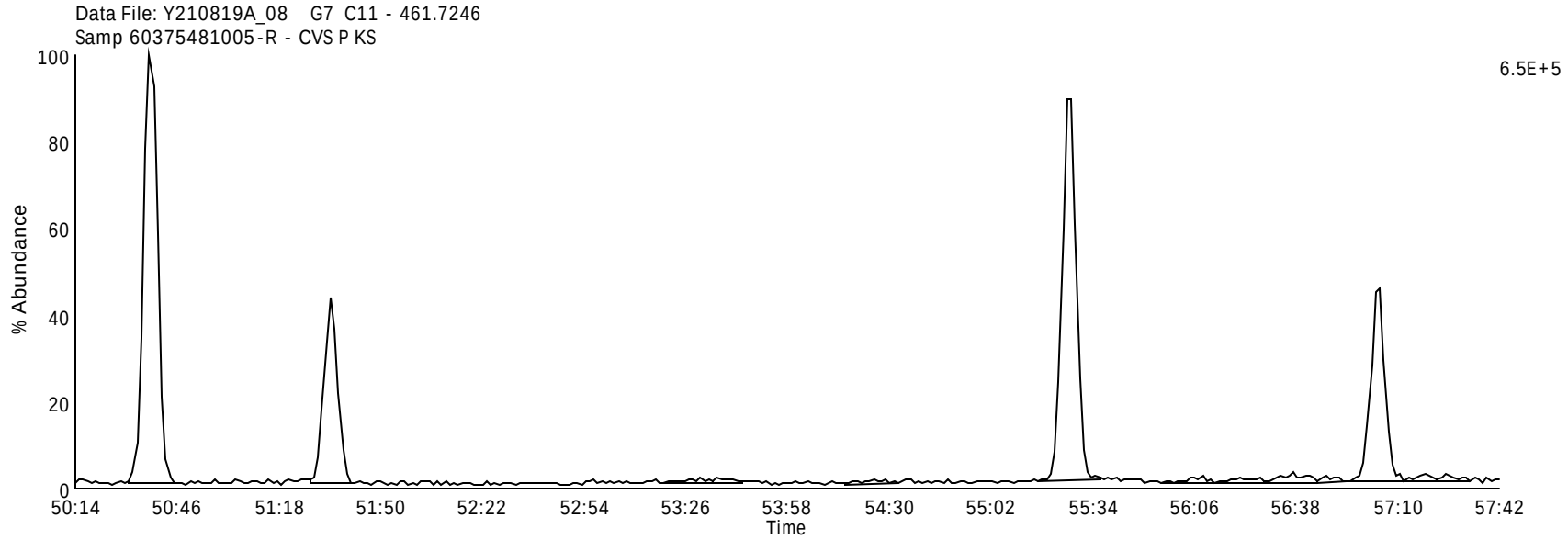


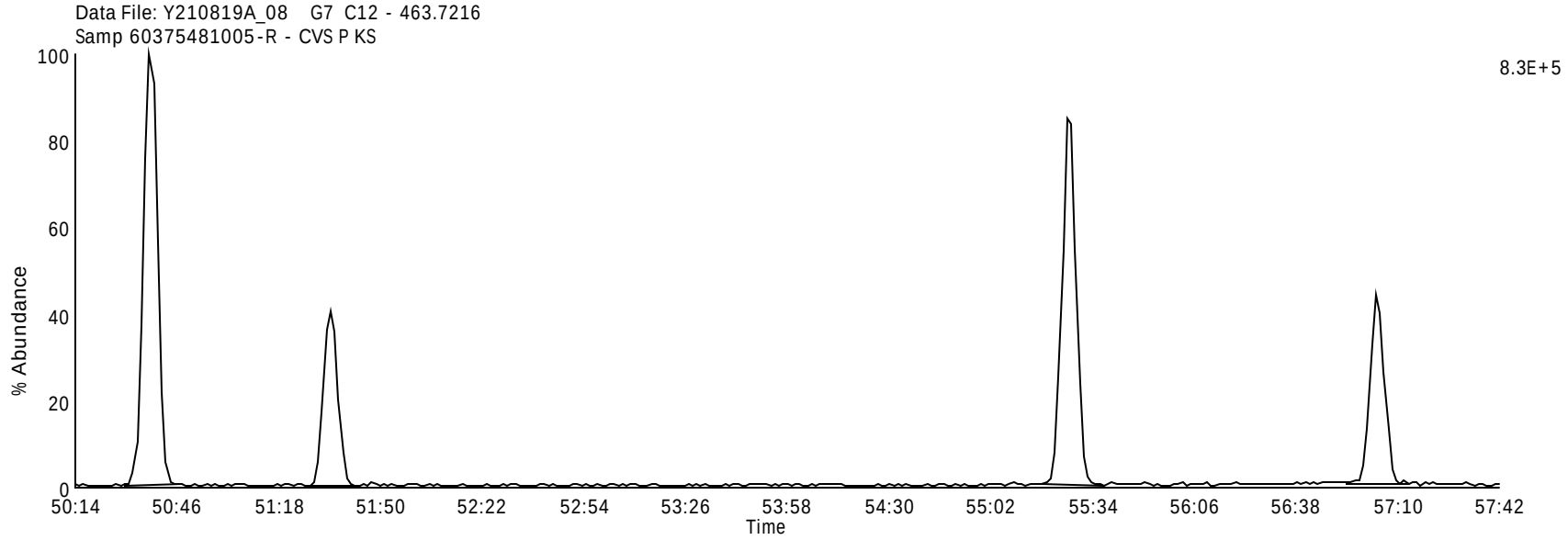




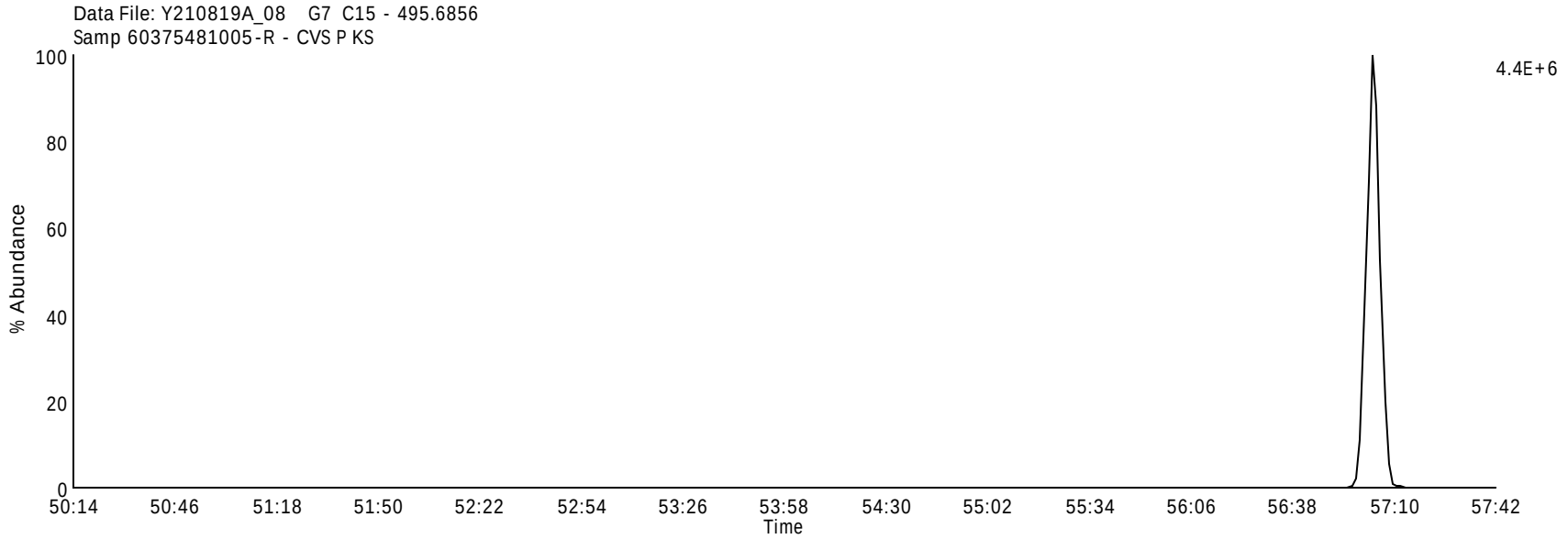
Nona Chlorinated Biphenyls

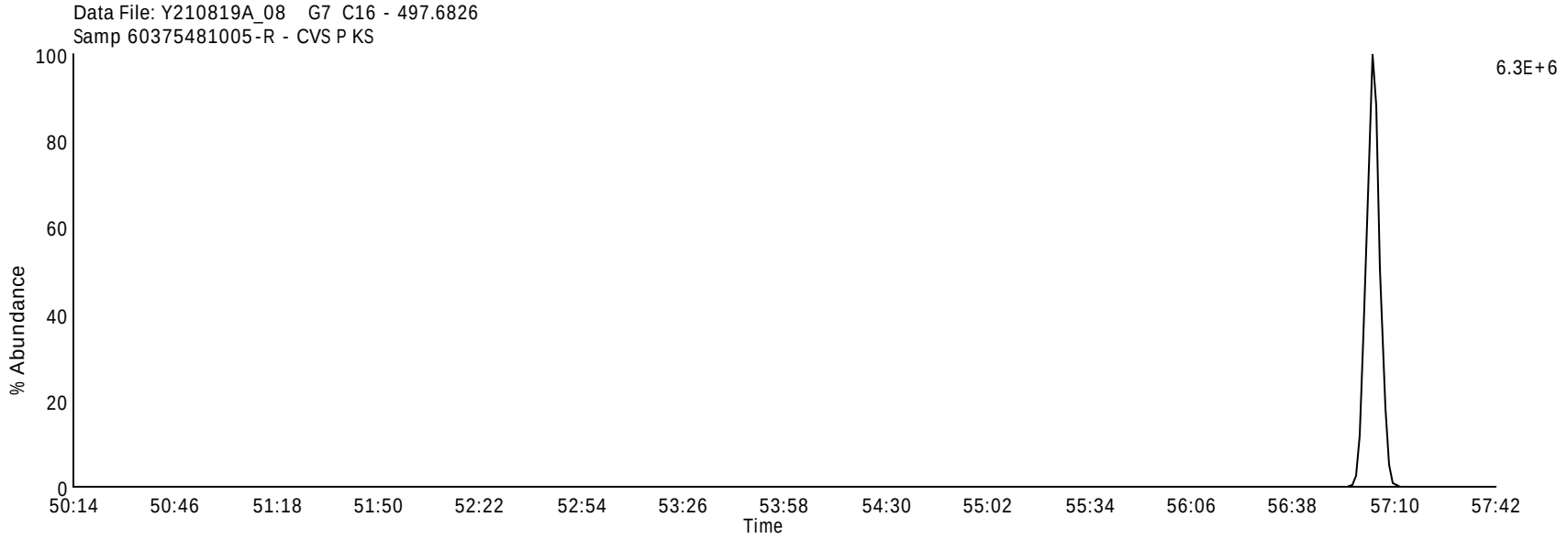
Data File Name: Y210819A_08	Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS	Client Sample ID: GB-71/0'-2'





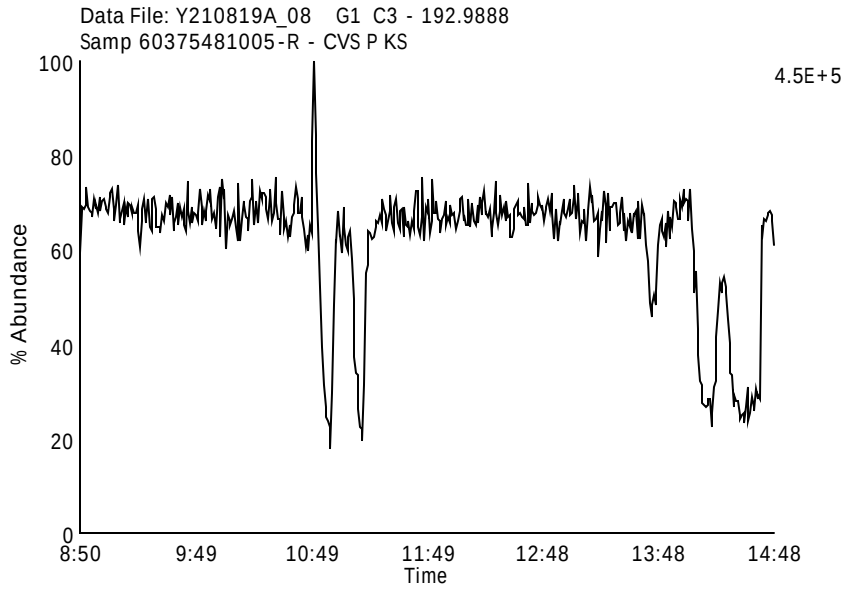
Deca Chlorinated Biphenyl	
Data File Name: Y210819A_08	Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS	Client Sample ID: GB-71/0'-2'

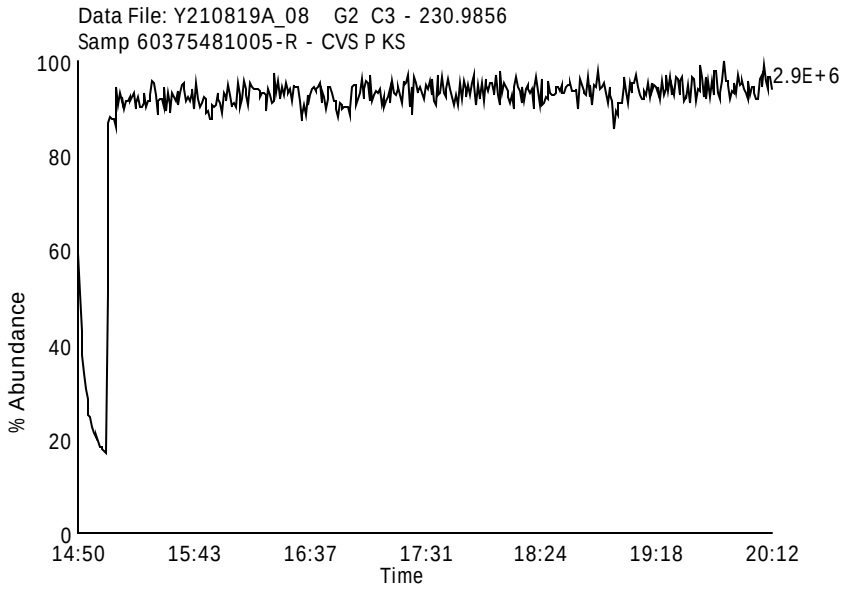


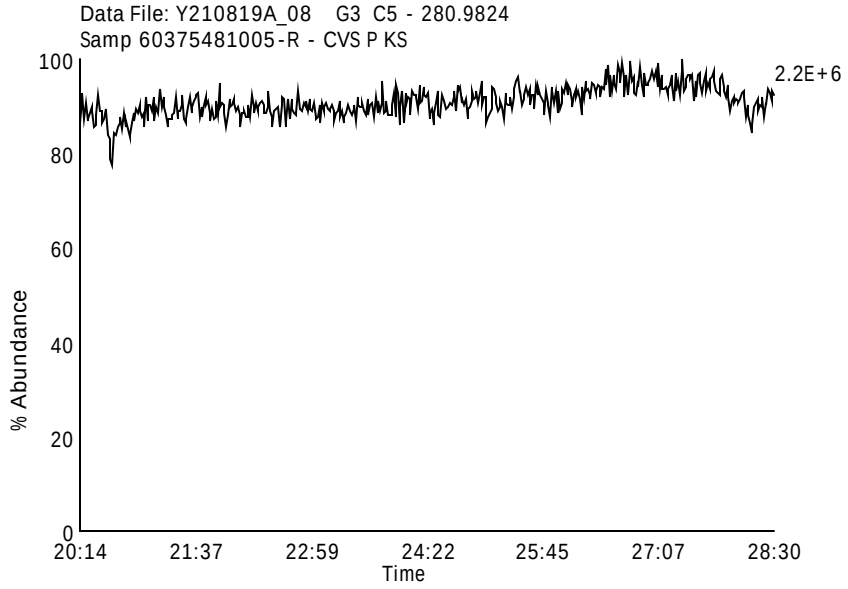


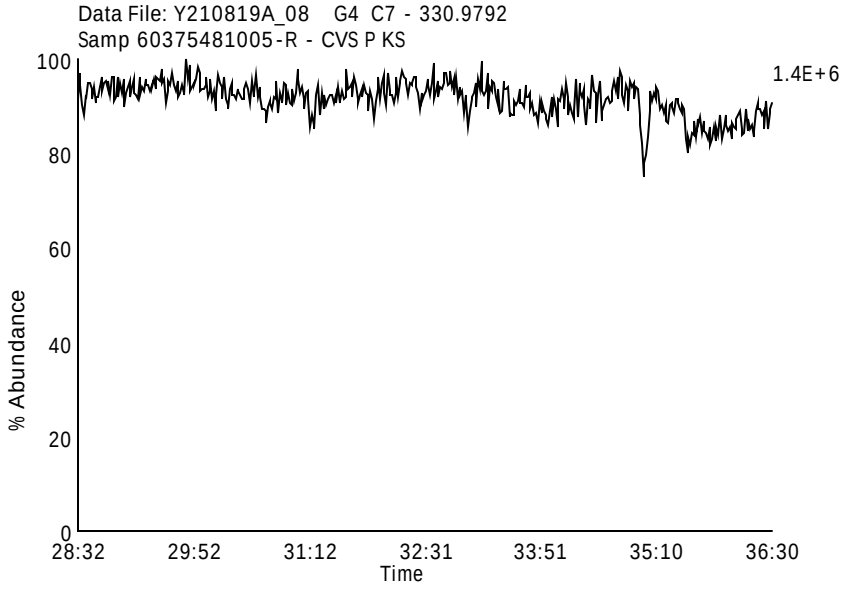
Group 1 - 4 Lock mass

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



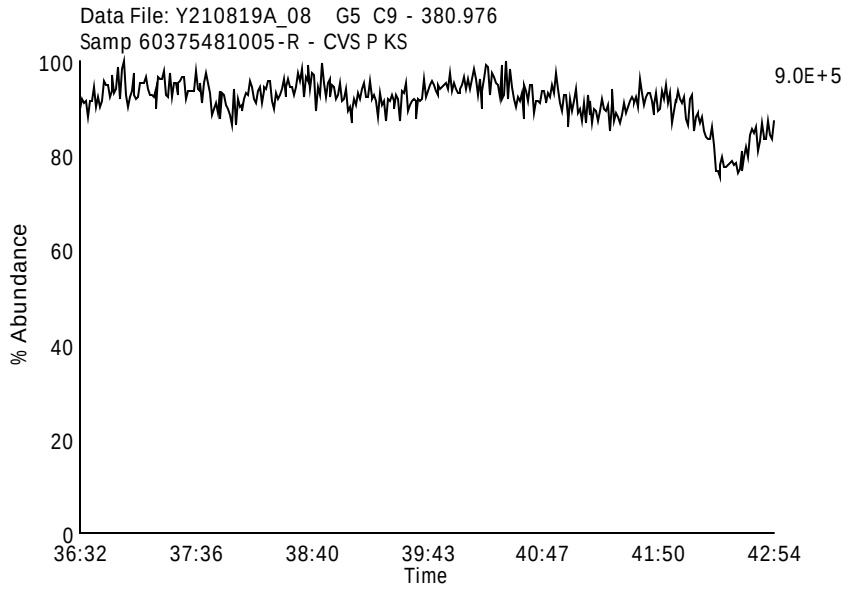


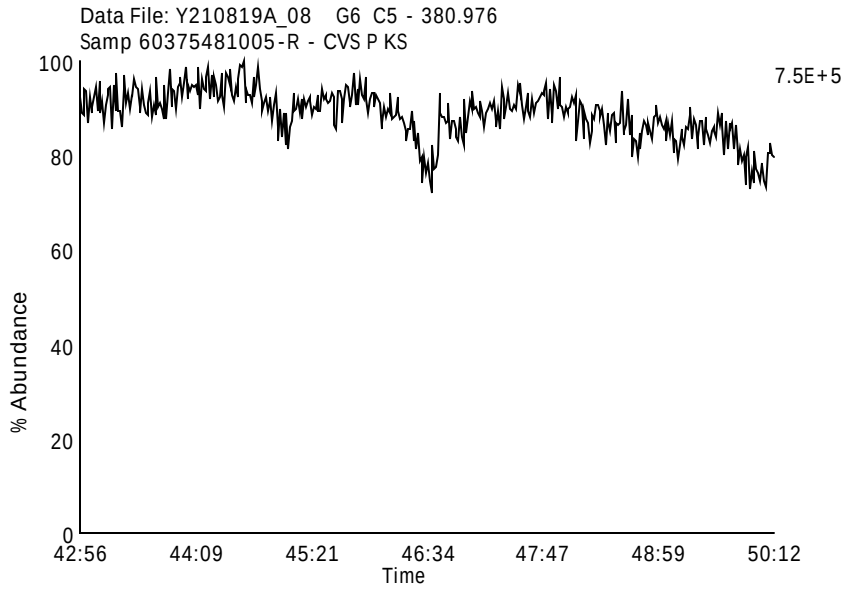


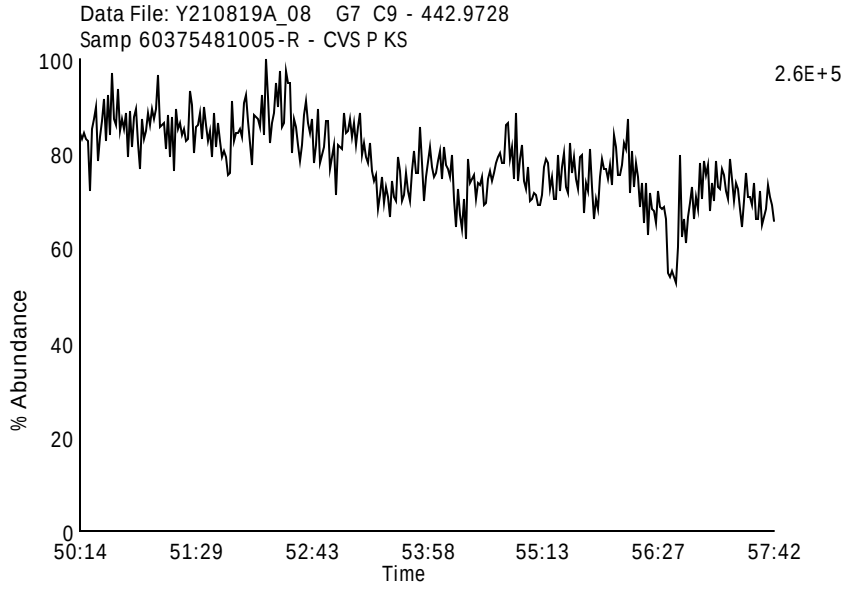


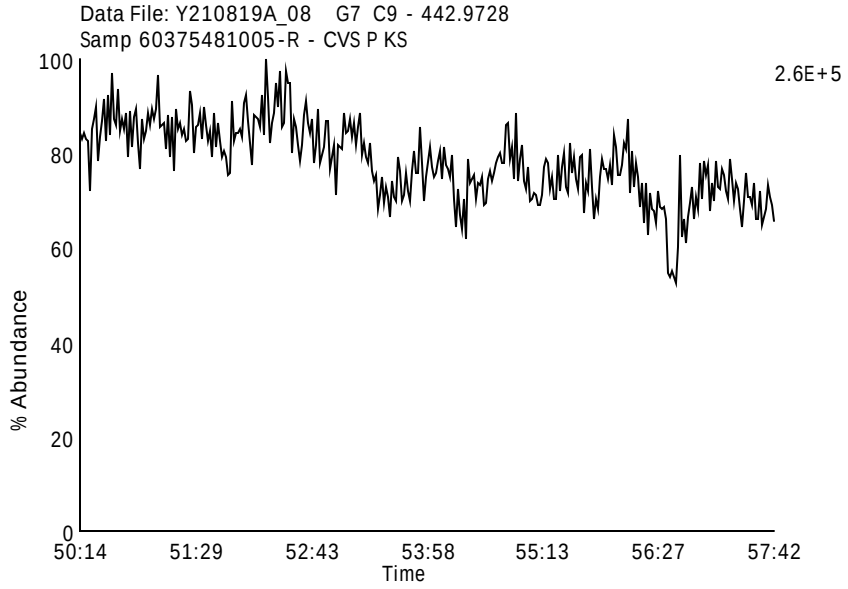
Group 5 - 7 Lock mass

Data File Name: Y210819A_08
Lab Sample ID: 60375481005-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481005-R - CVS P KS
Client Sample ID: GB-71/0'-2'



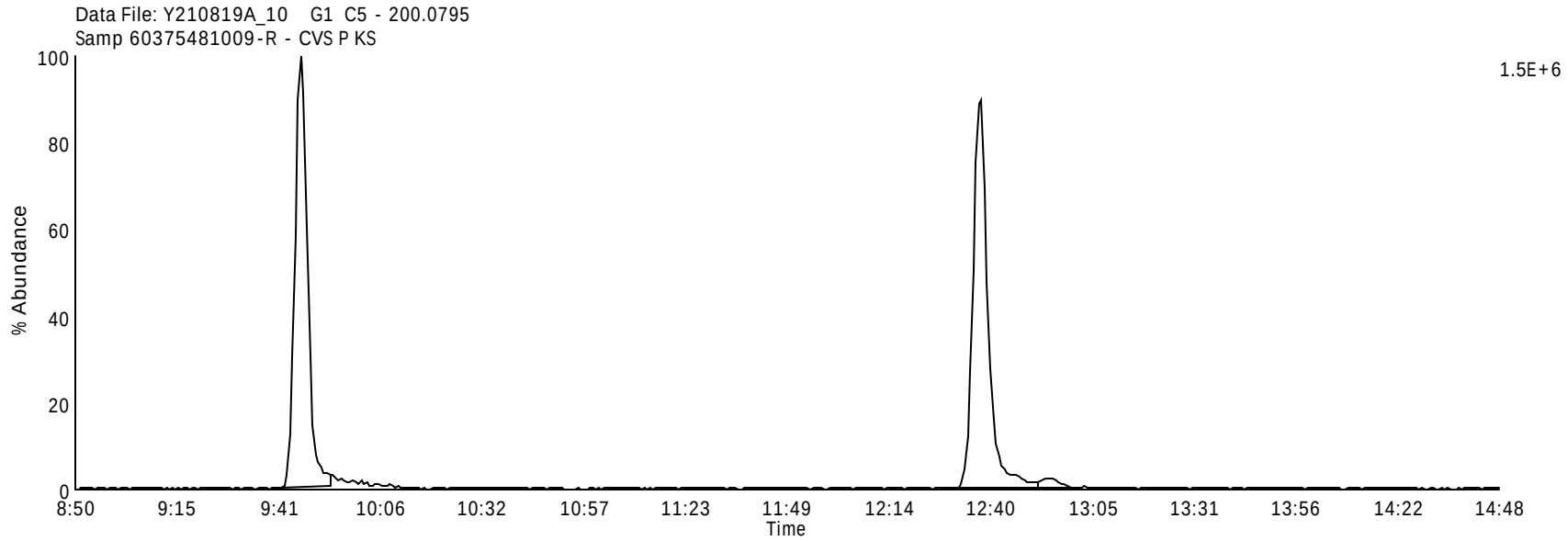


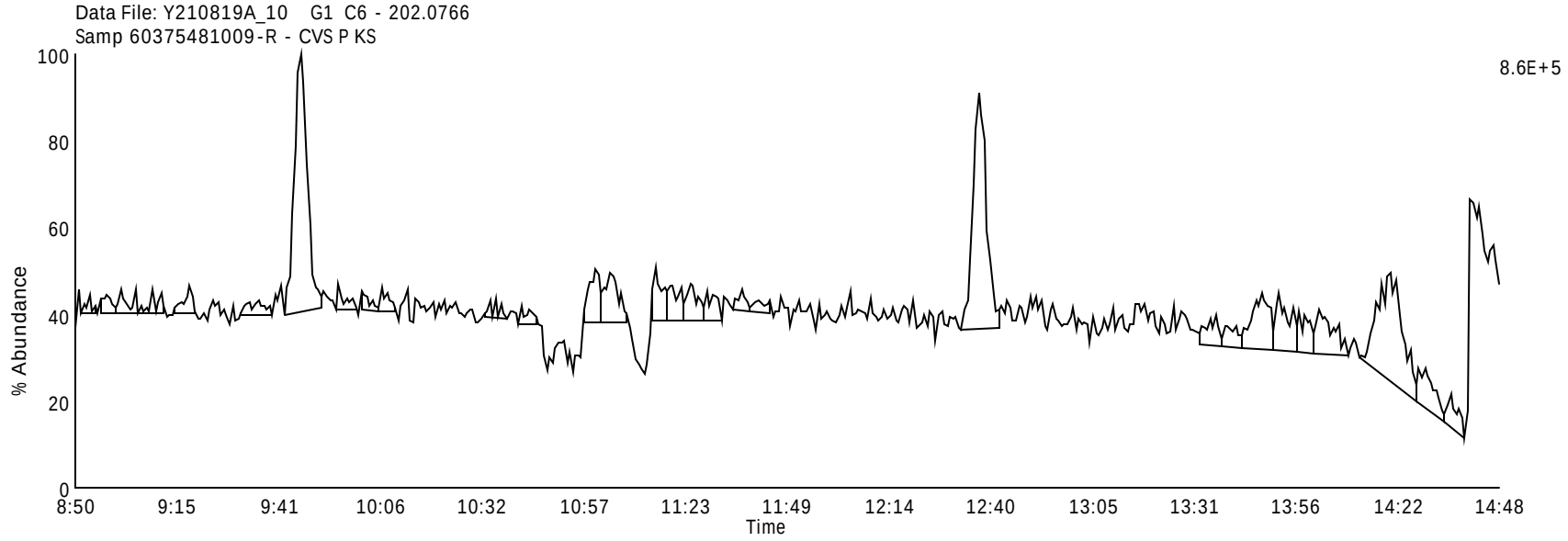




Labeled Mono Chlorinated Biphenyls

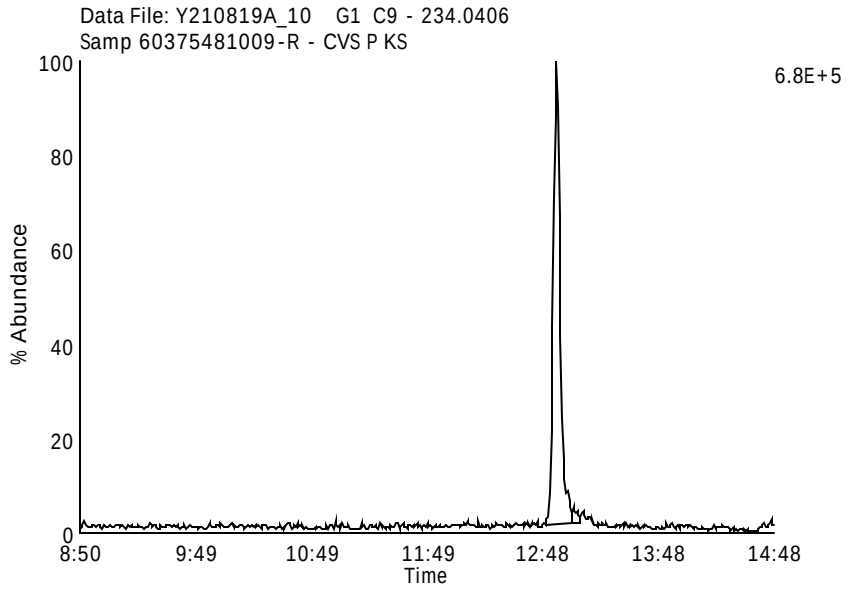
Data File Name: Y210819A_10	Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS	Client Sample ID: GB-64/3'-4'

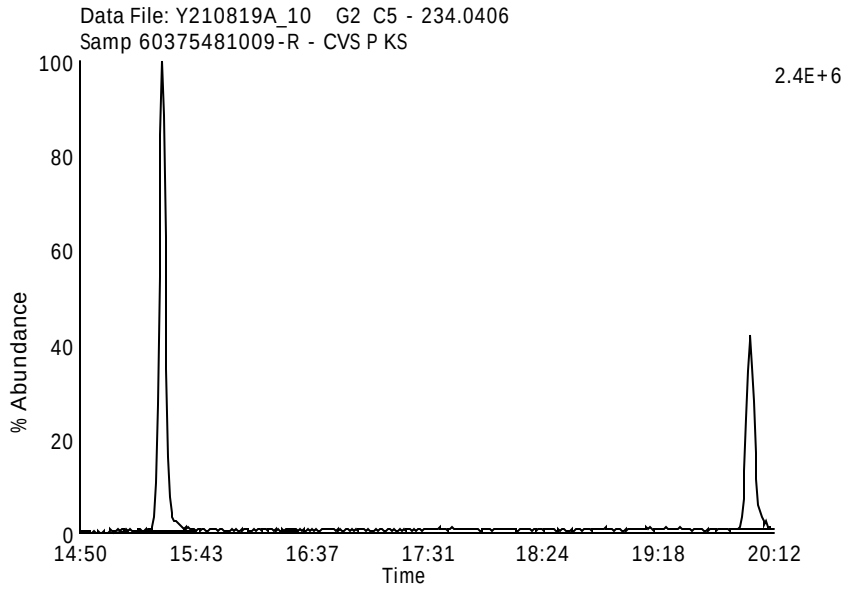


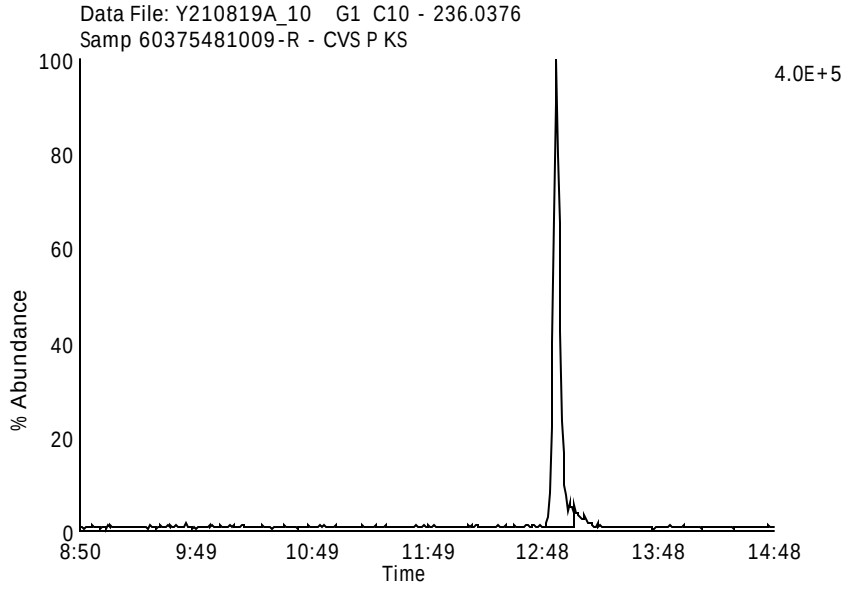


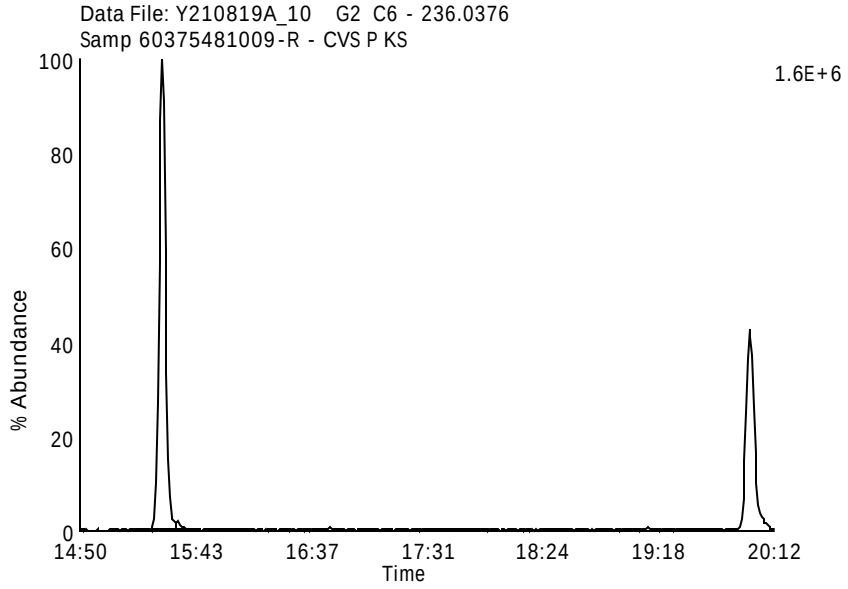
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'



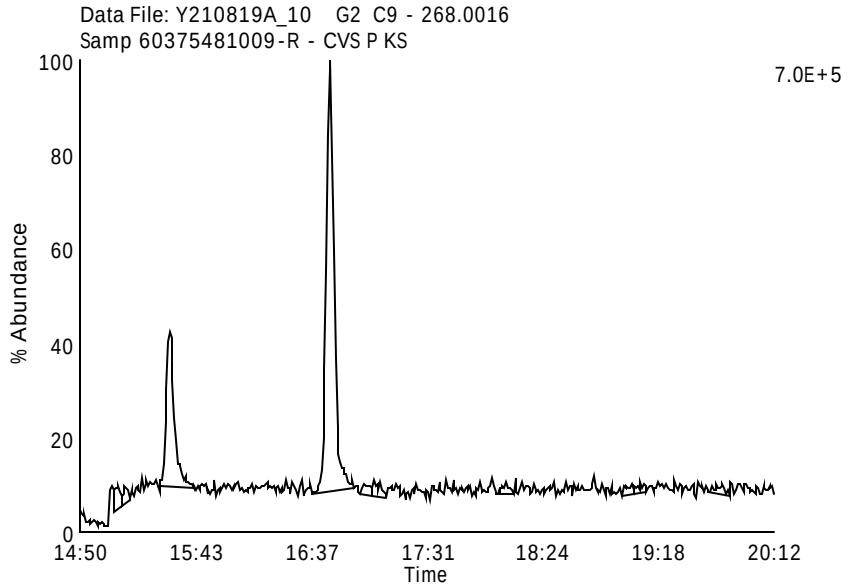


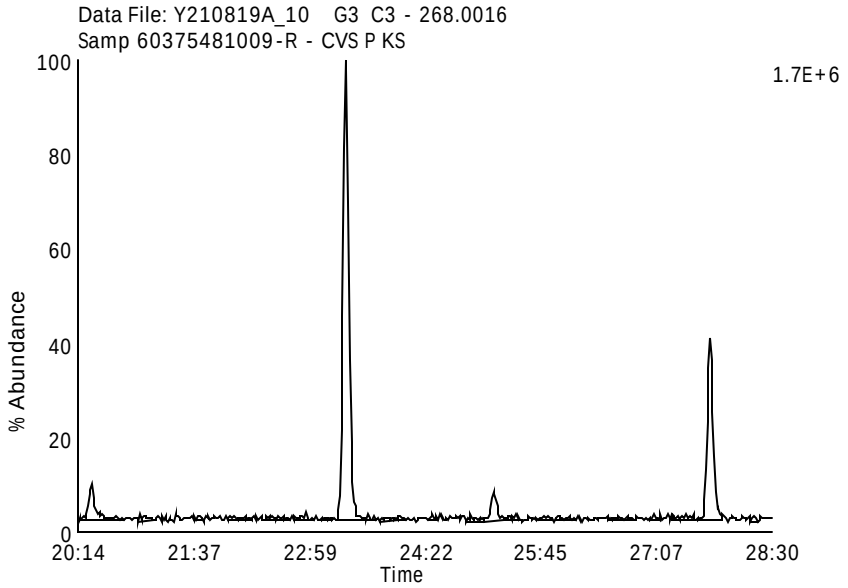


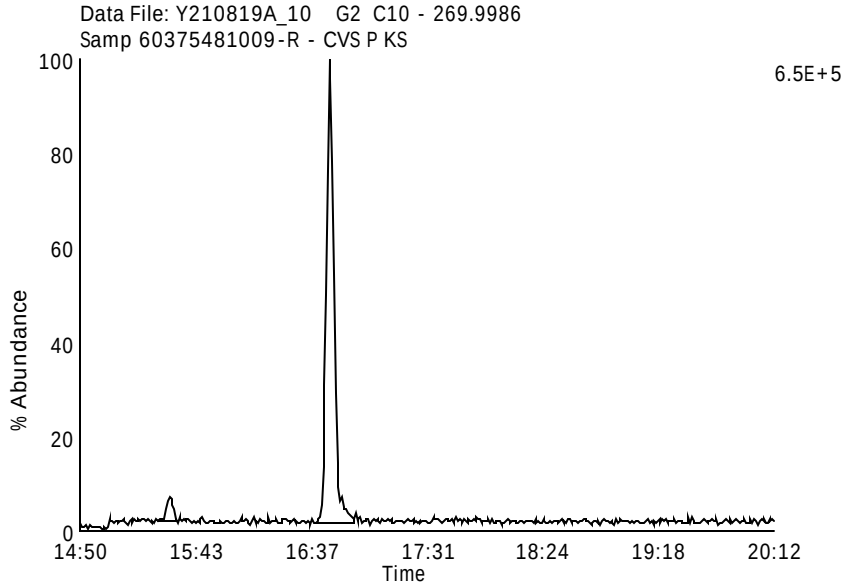


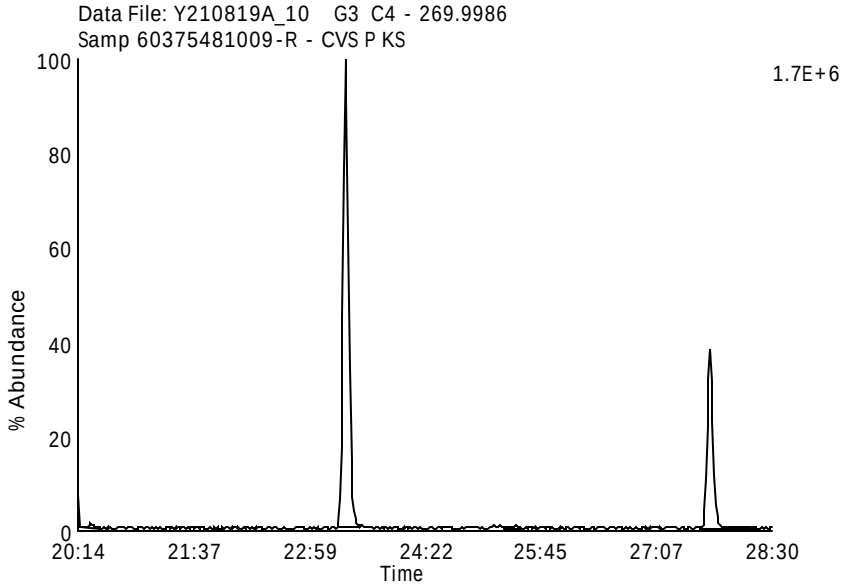
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'



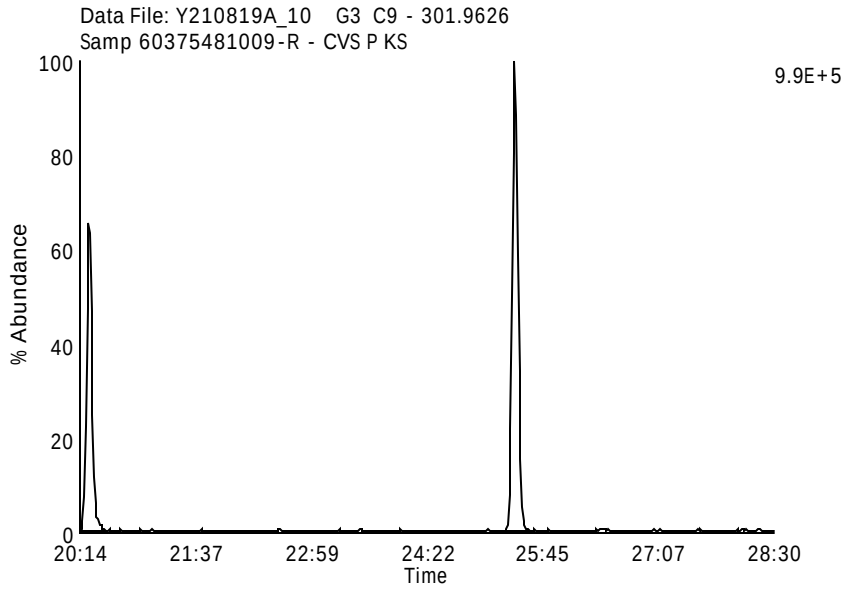


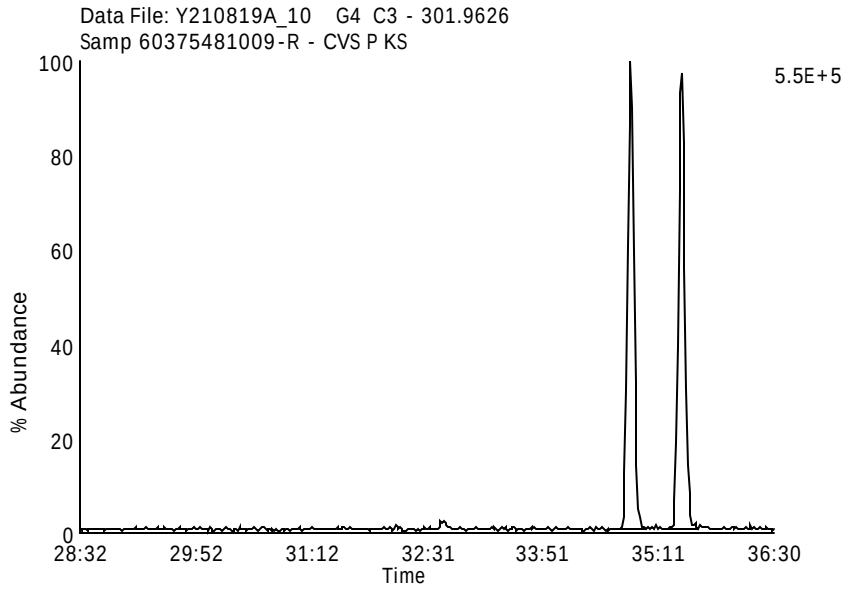


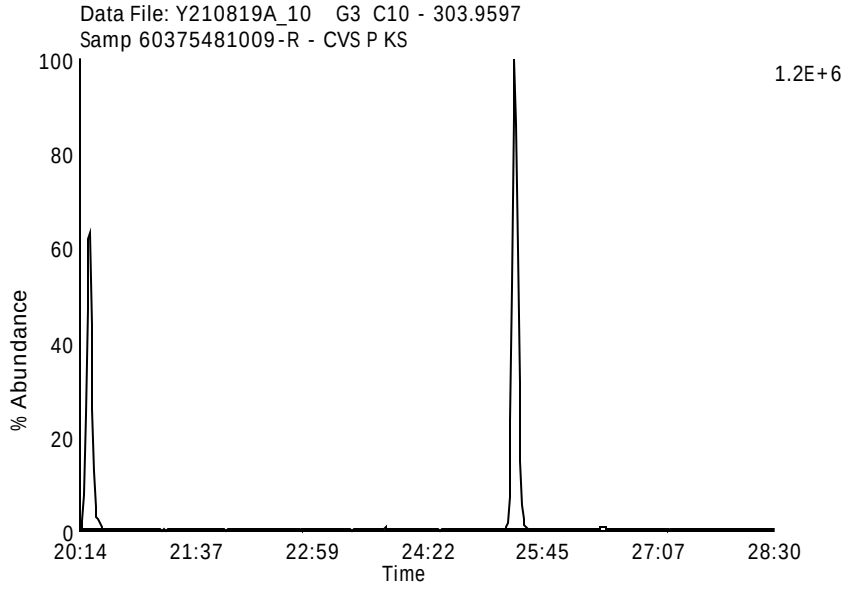


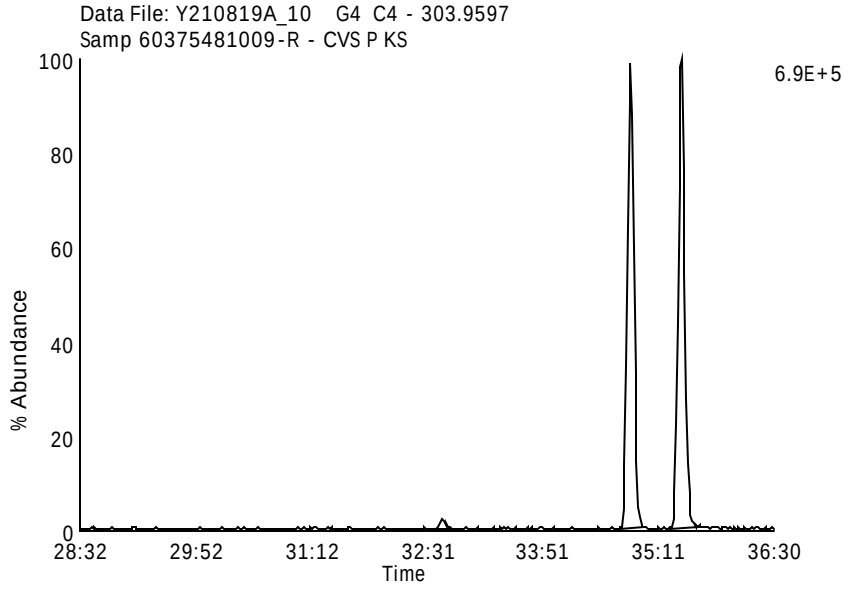
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'



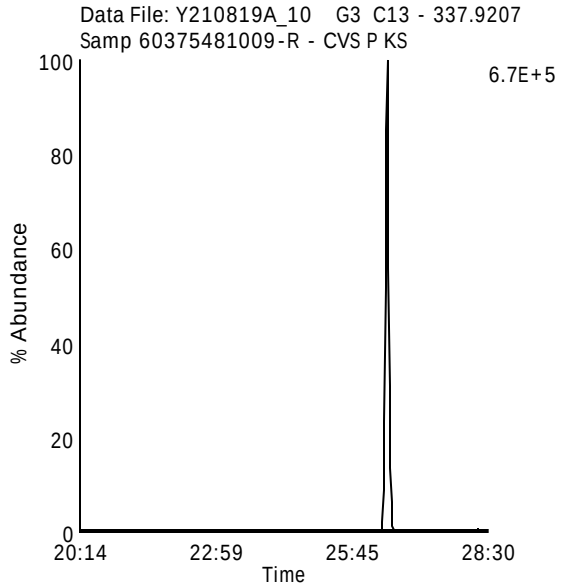


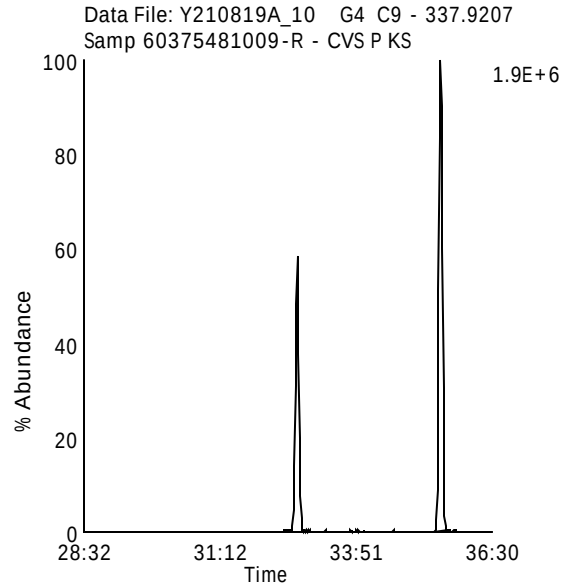


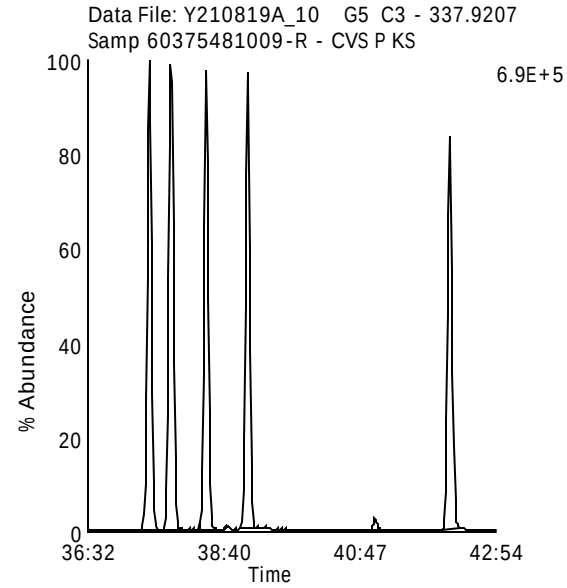


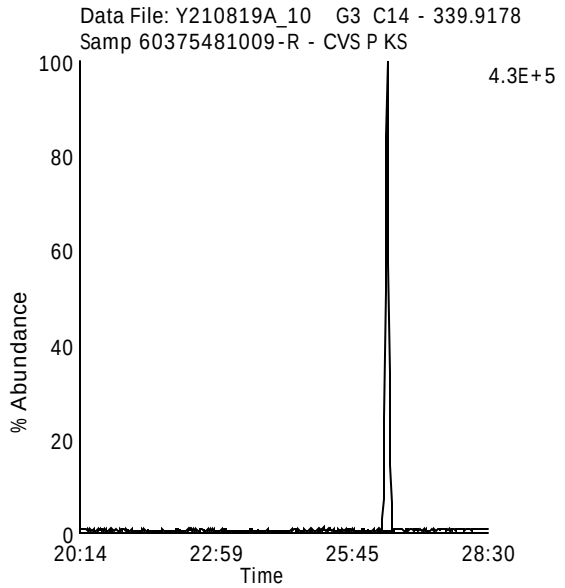
Labeled Penta Chlorinated Biphenyls

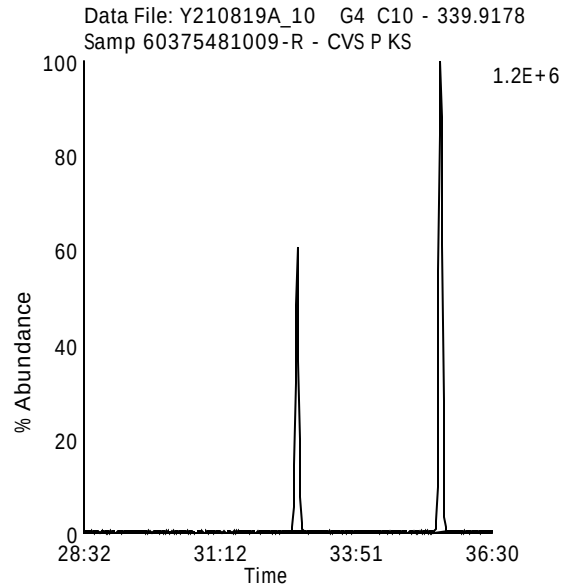
Data File Name: Y210819A_10 | Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS | Client Sample ID: GB-64/3'-4'

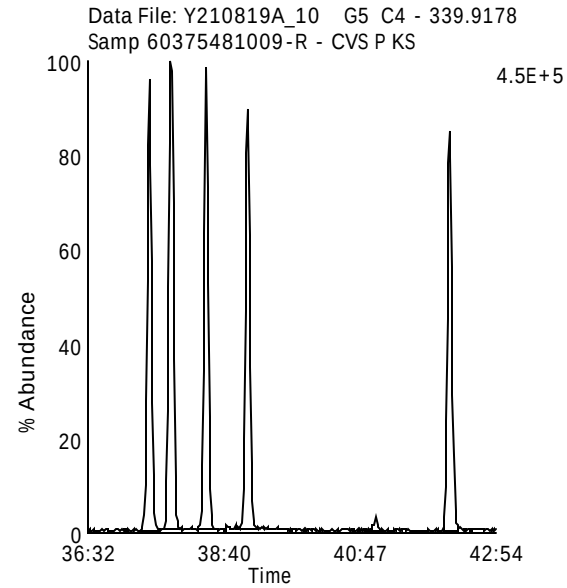






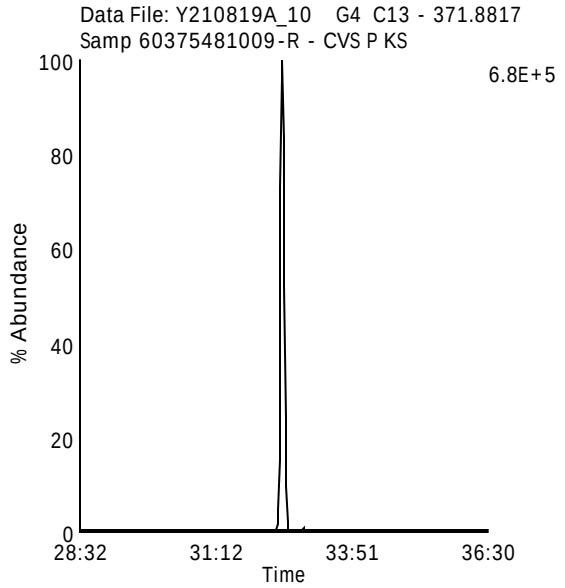


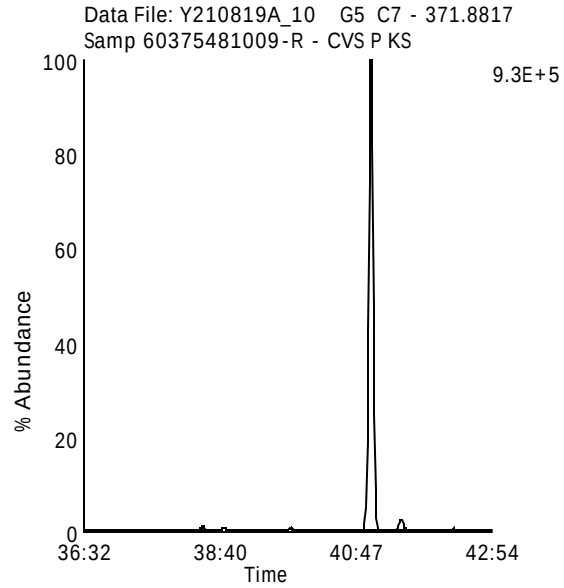


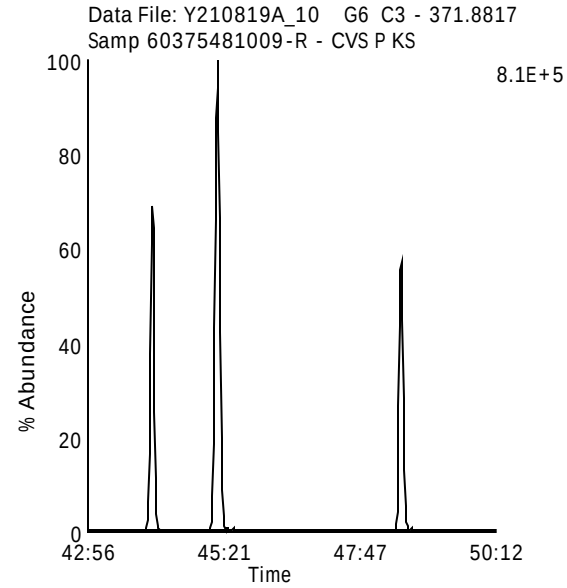


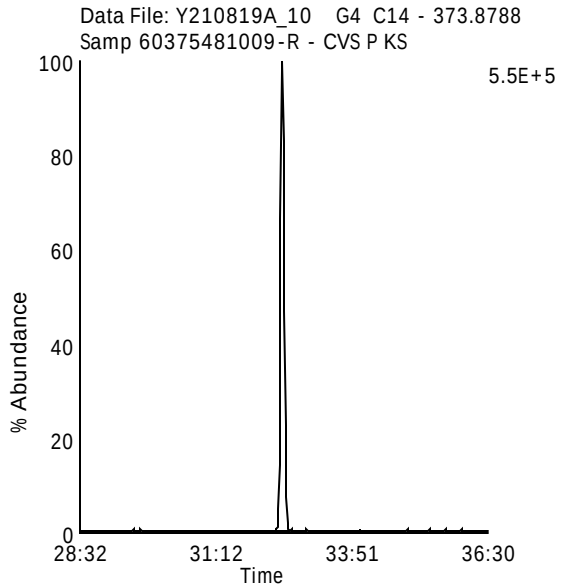
Labeled Hexa Chlorinated Biphenyls

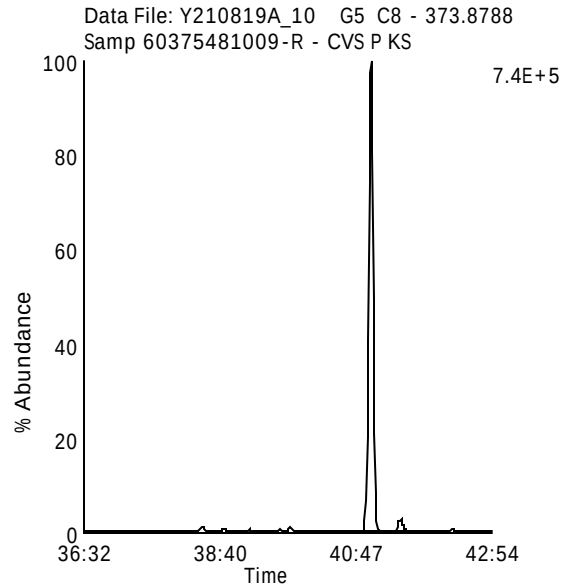
Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'

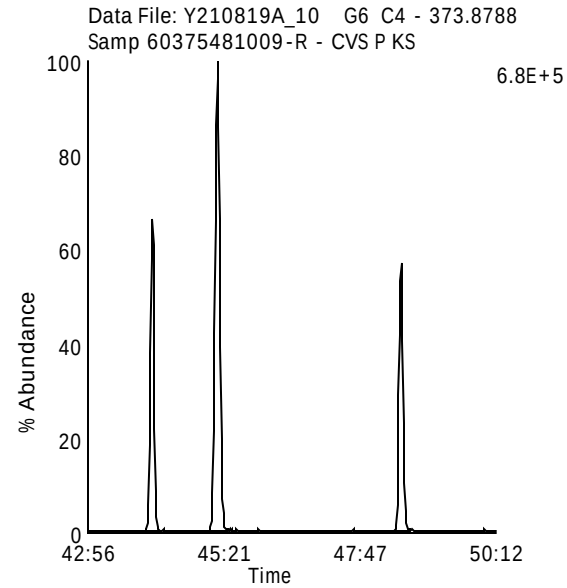






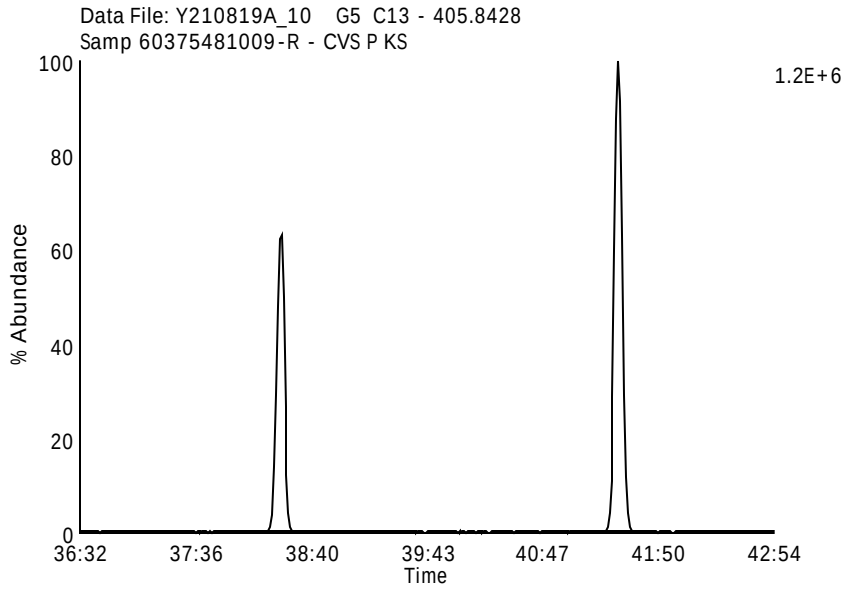


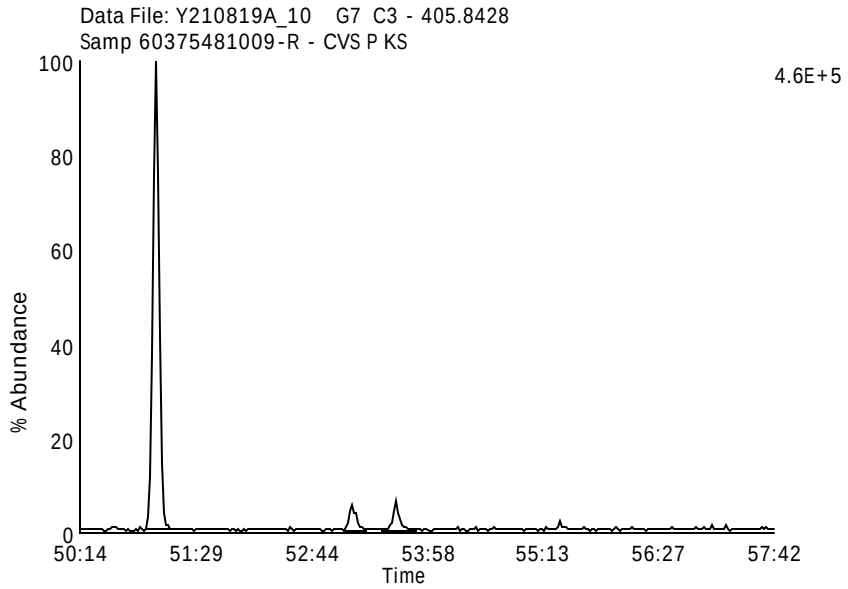


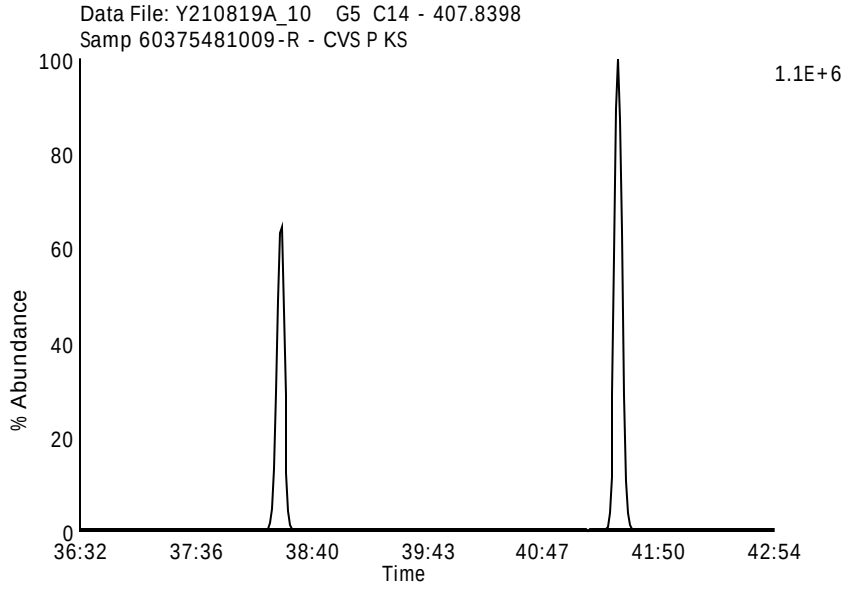


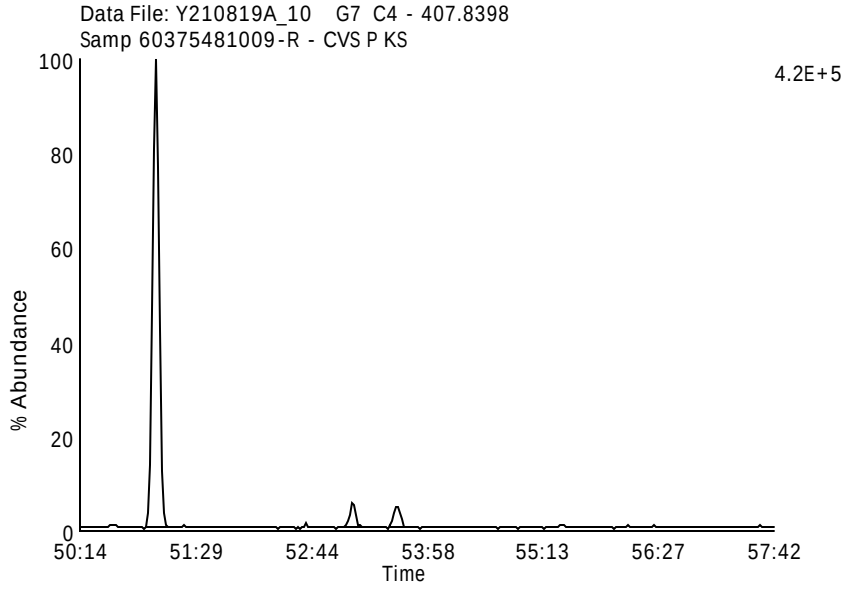
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'



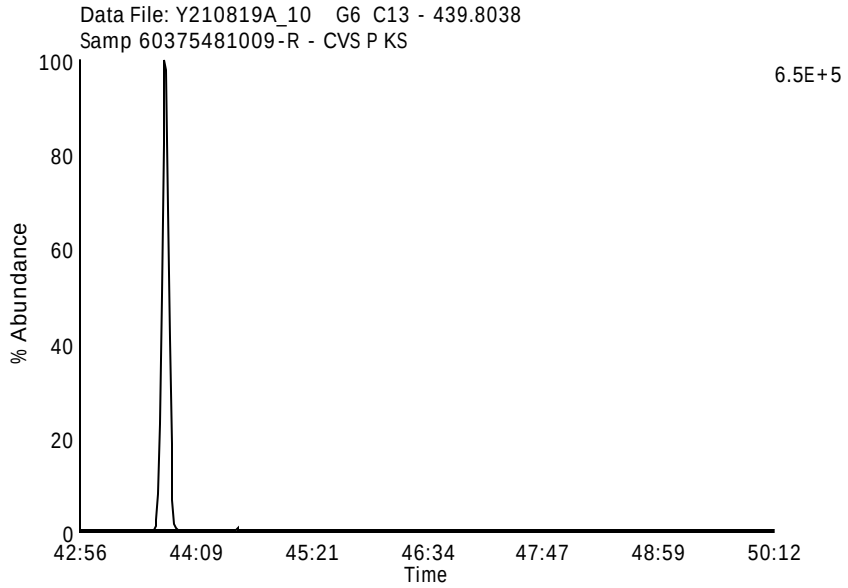


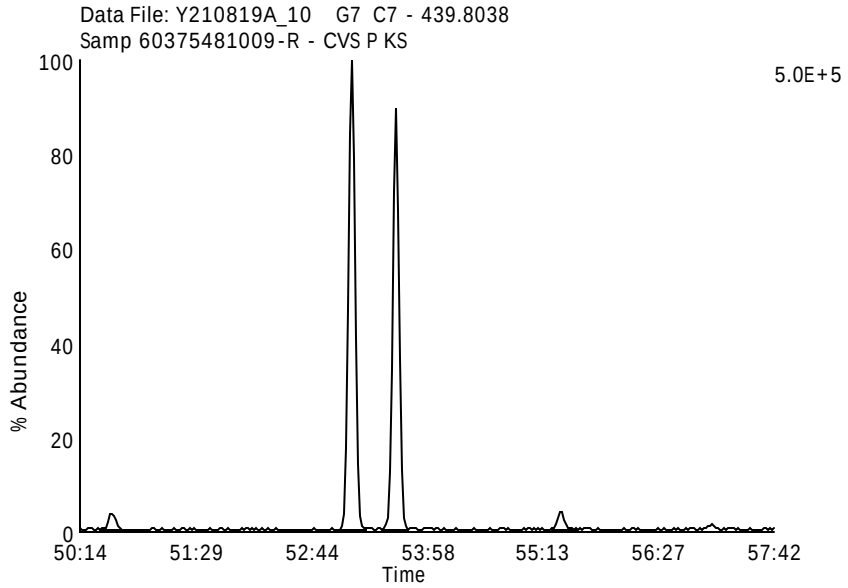


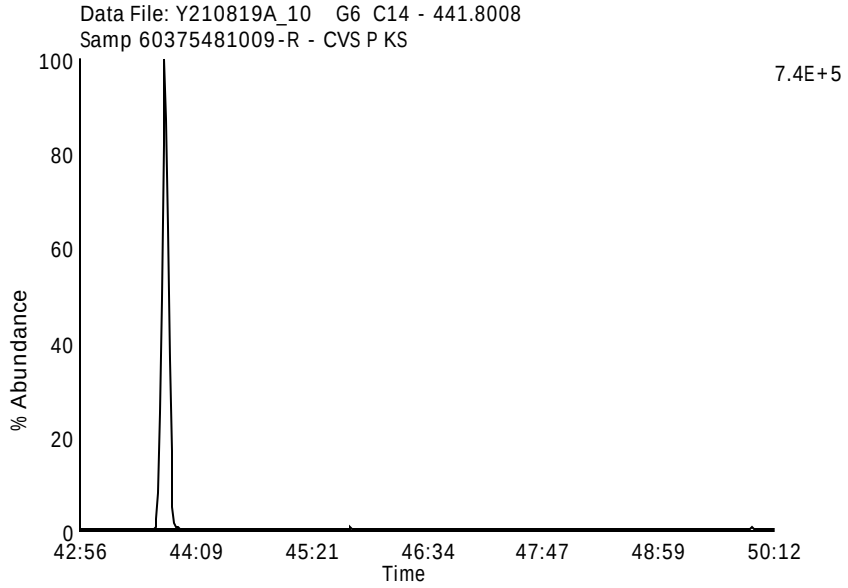


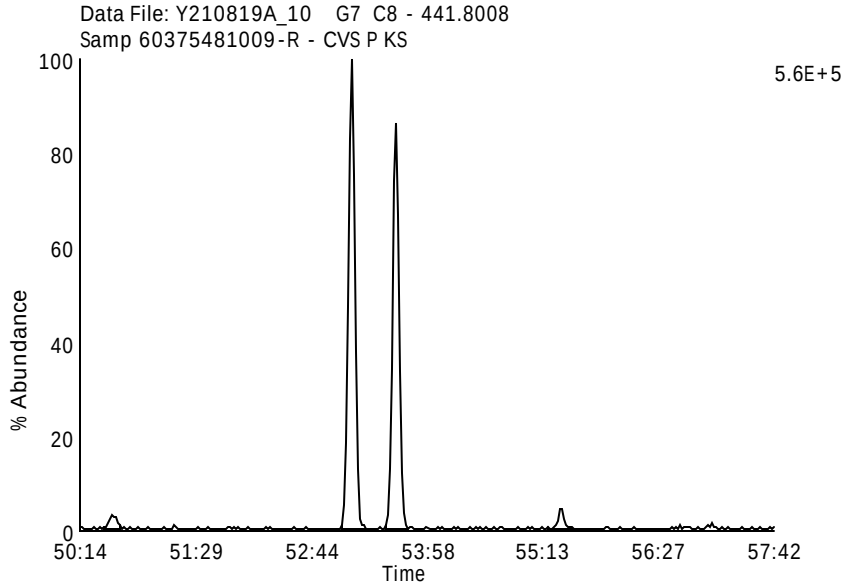
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'



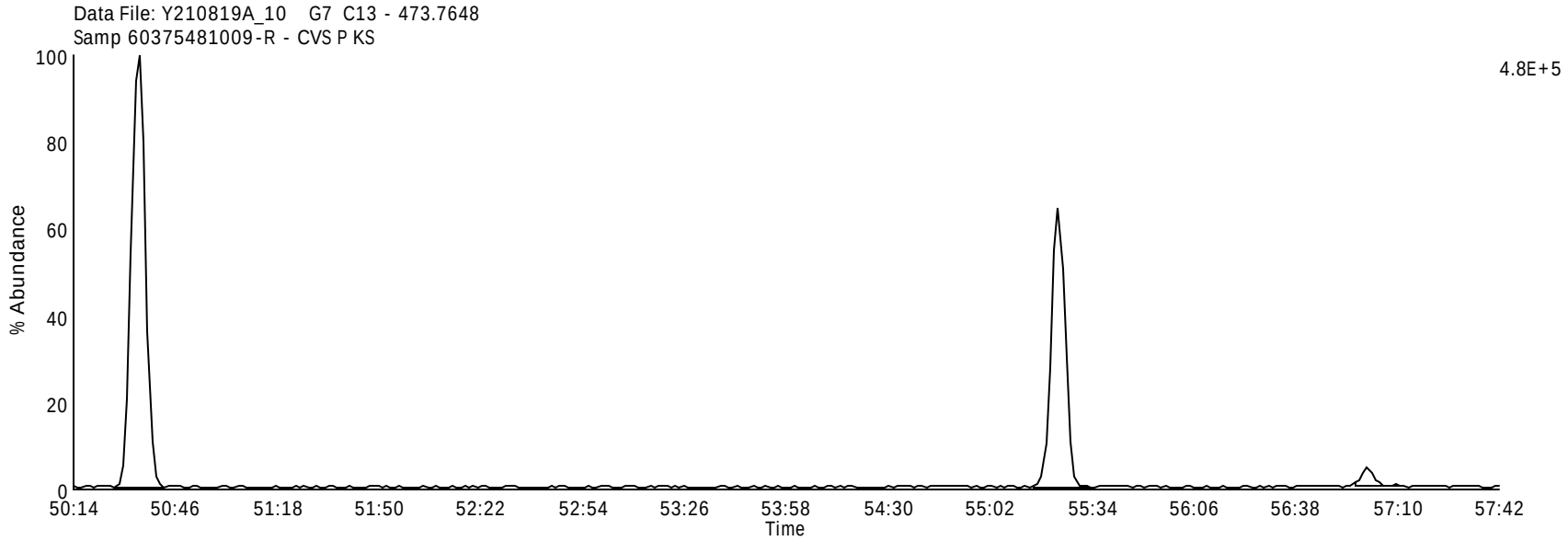


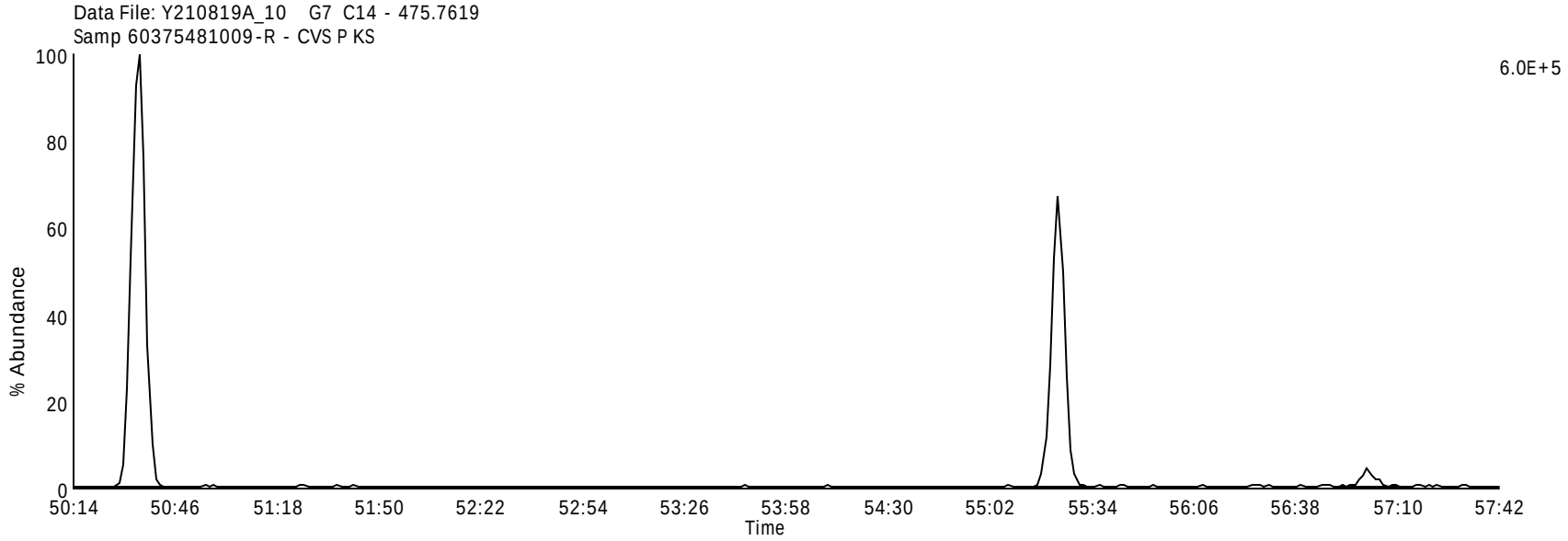




Labeled Nona Chlorinated Biphenyls

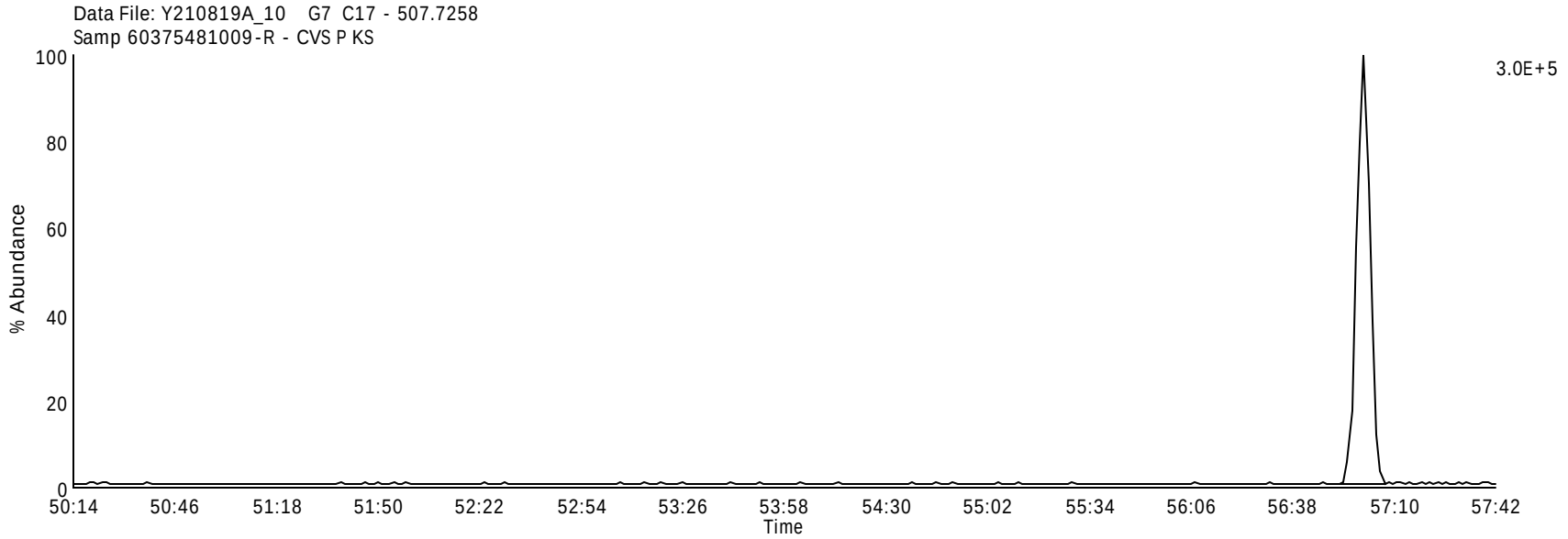
Data File Name: Y210819A_10	Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS	Client Sample ID: GB-64/3'-4'

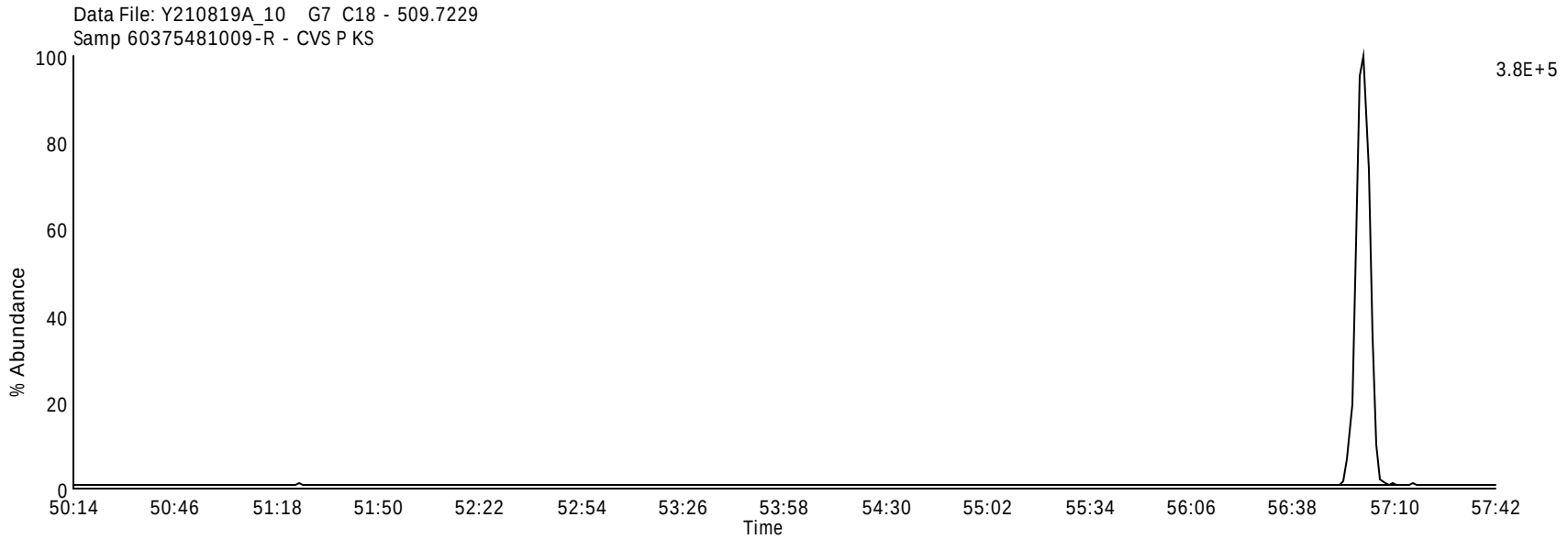




Labeled Deca Chlorinated Biphenyl

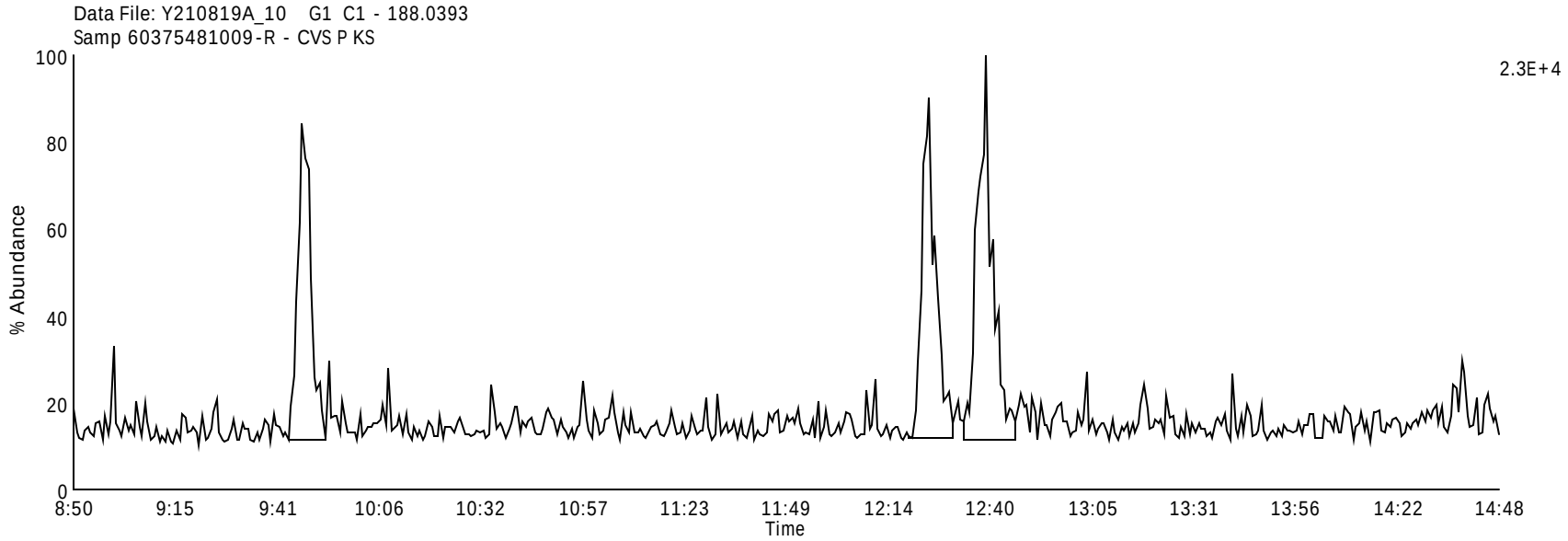
Data File Name: Y210819A_10	Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS	Client Sample ID: GB-64/3'-4'

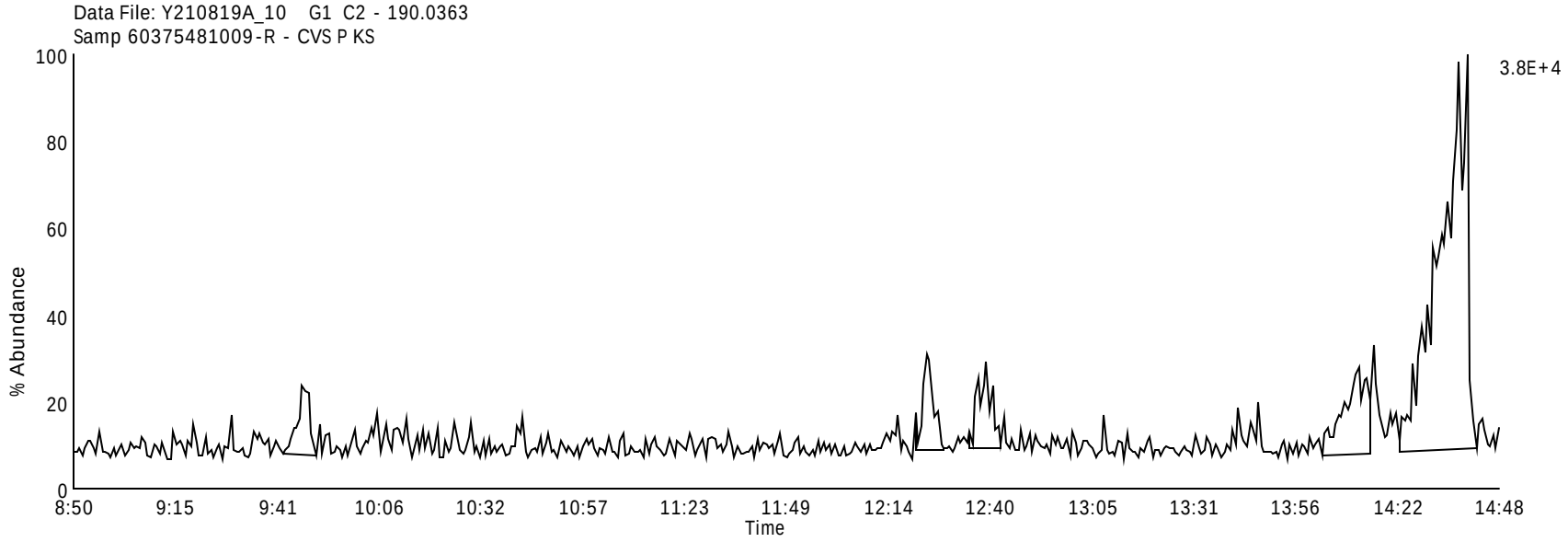




Mono Chlorinated Biphenyls

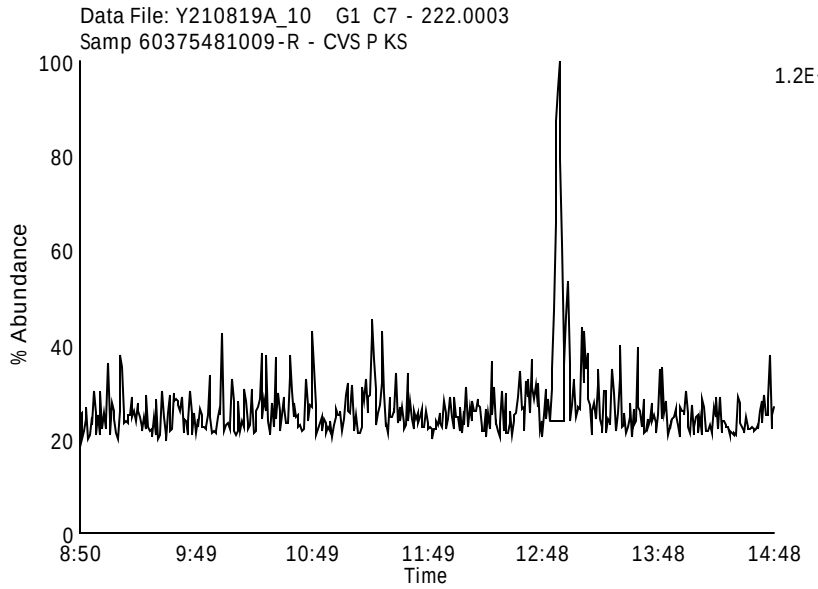
Data File Name: Y210819A_10	Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS	Client Sample ID: GB-64/3'-4'

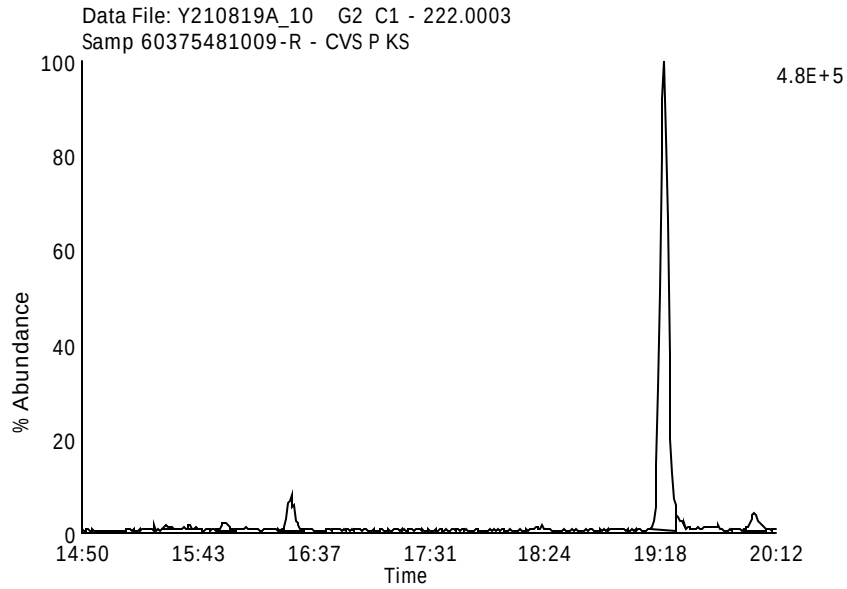


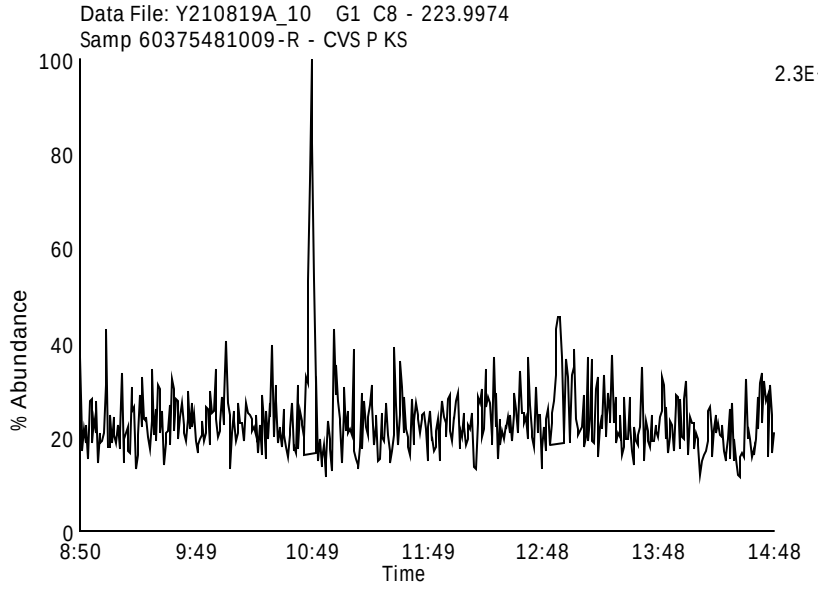


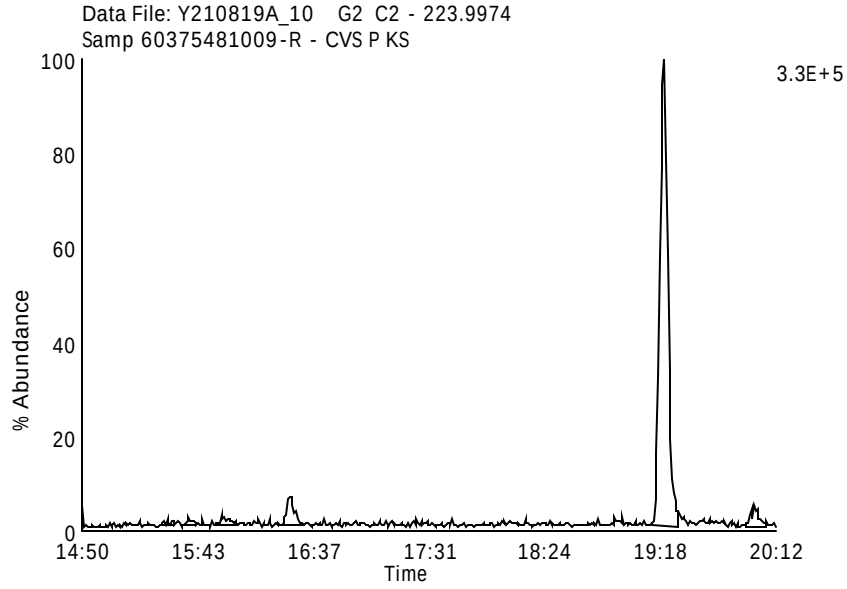
Di Chlorinated Biphenyls

Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'



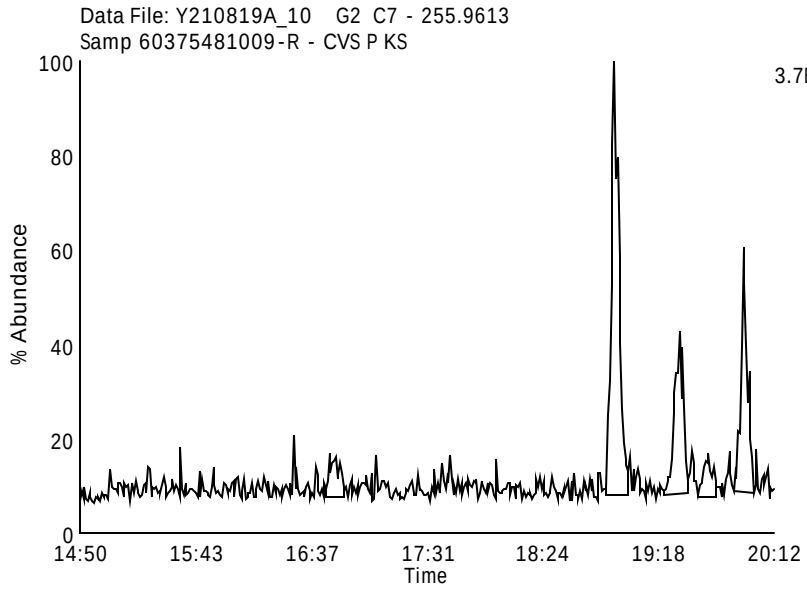


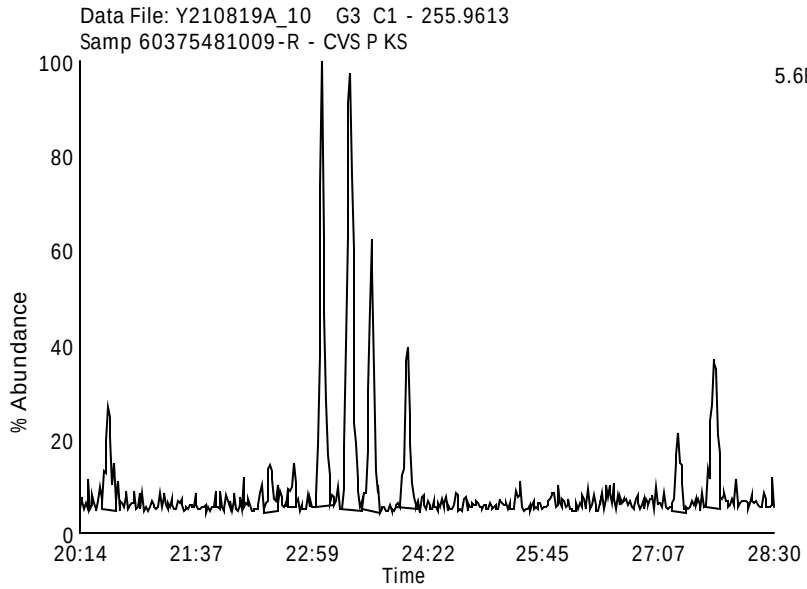


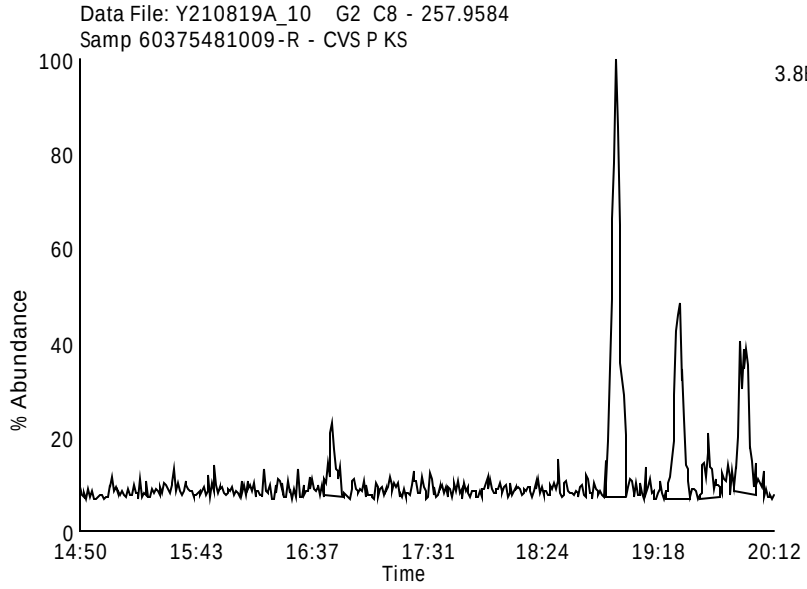


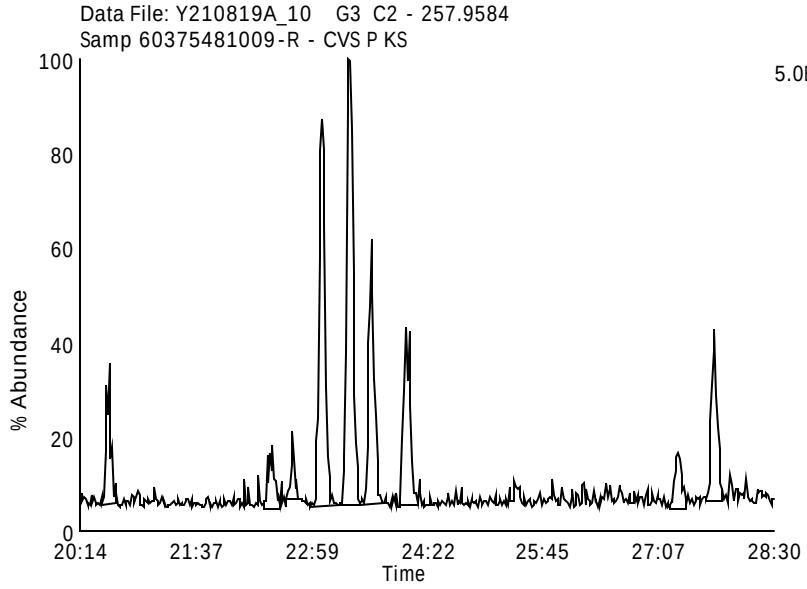
Tri Chlorinated Biphenyls

Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'



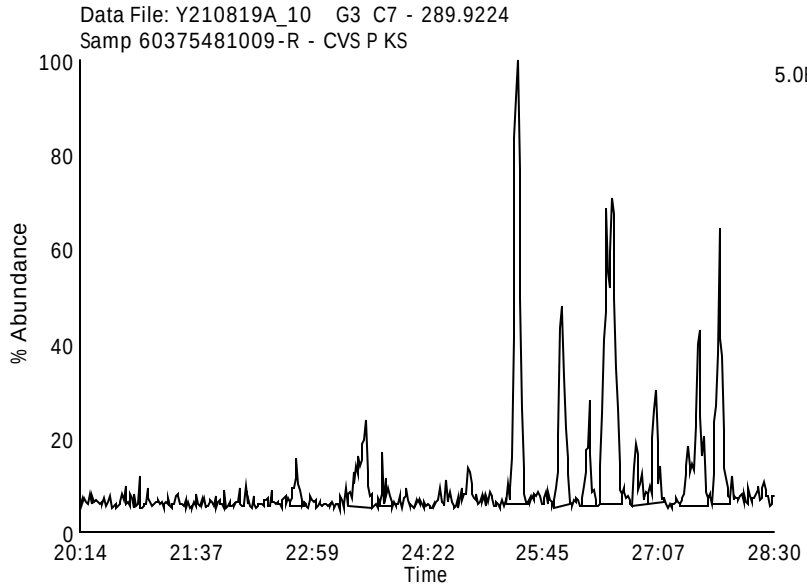


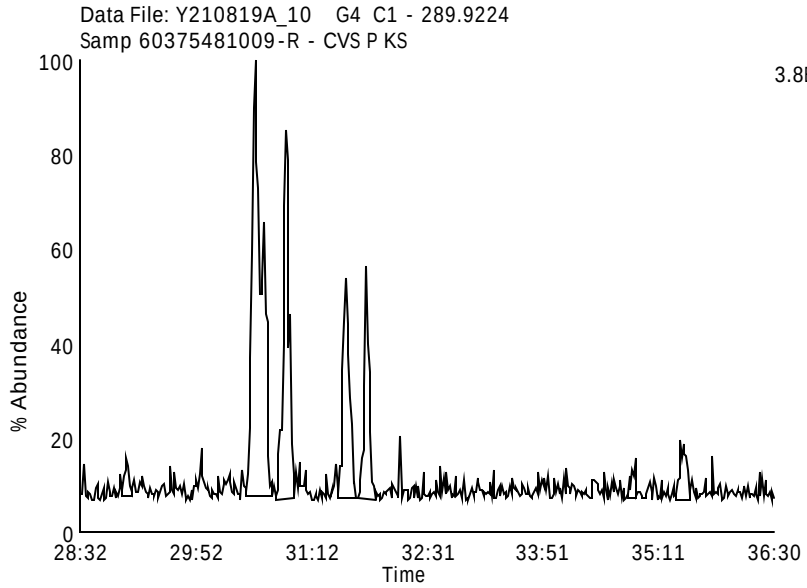


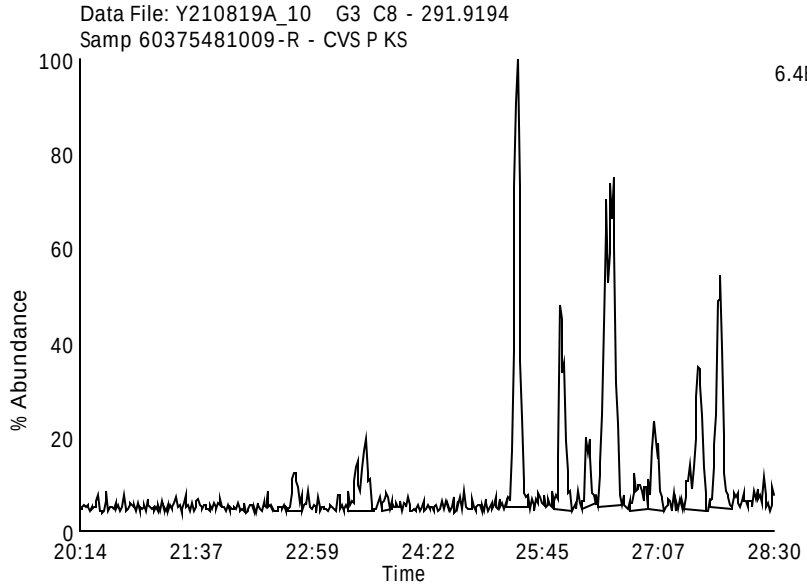


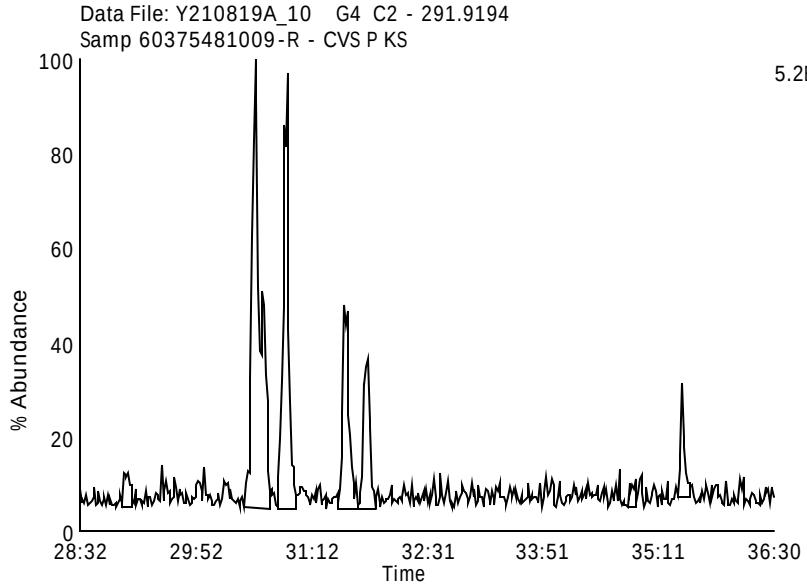
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'



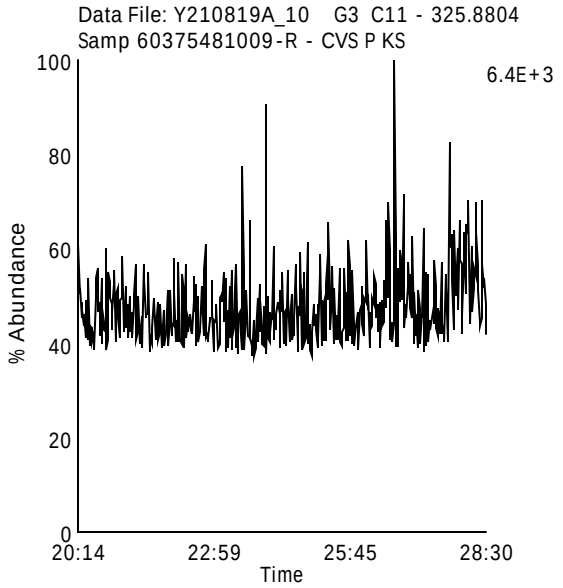


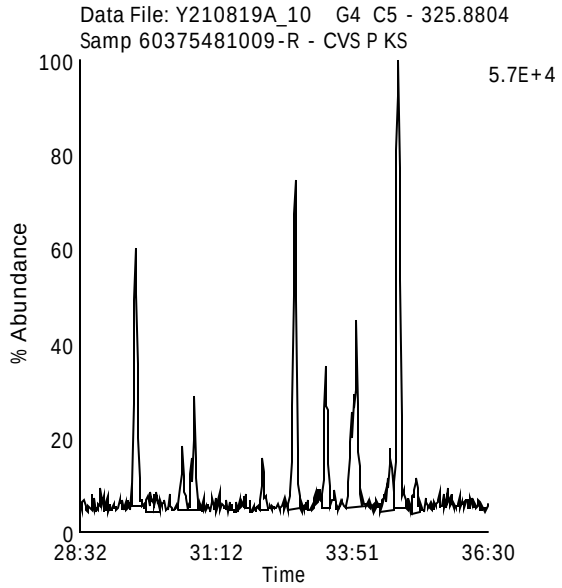


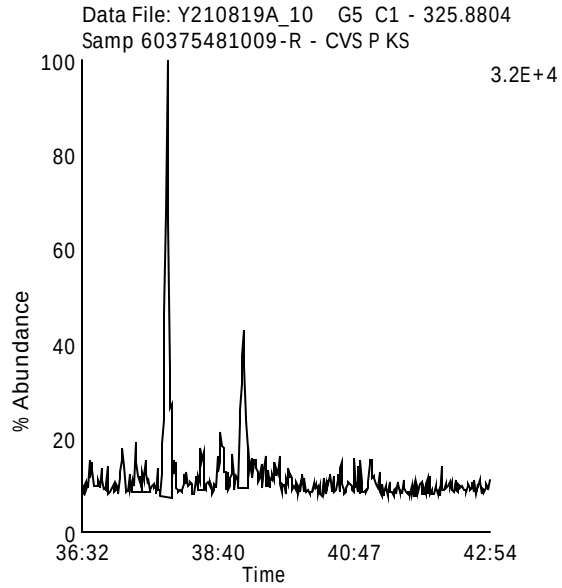


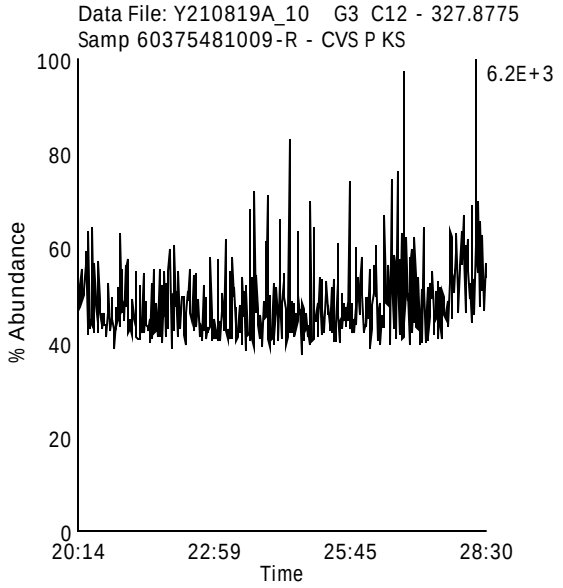
Penta Chlorinated Biphenyls

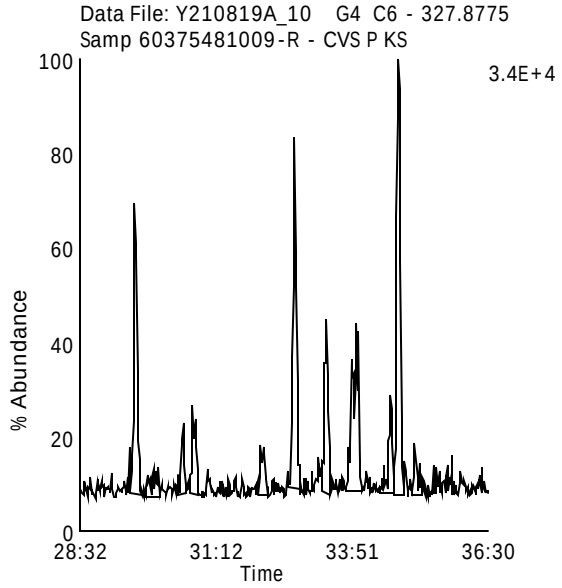
Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'

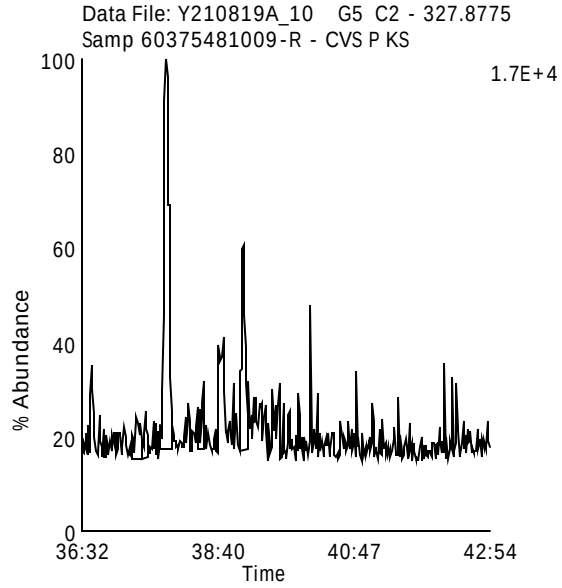






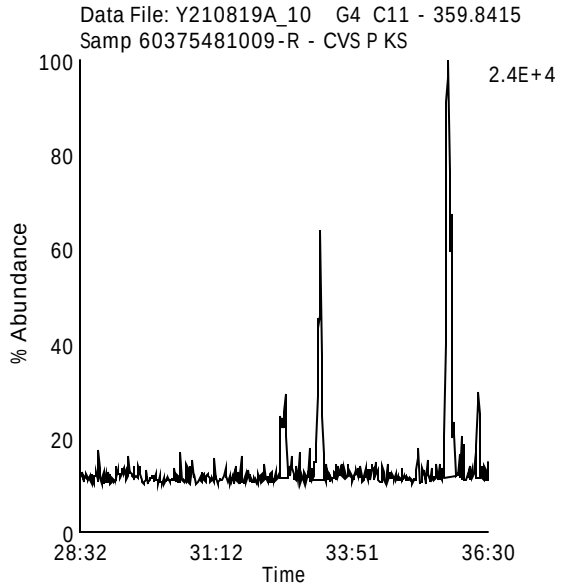


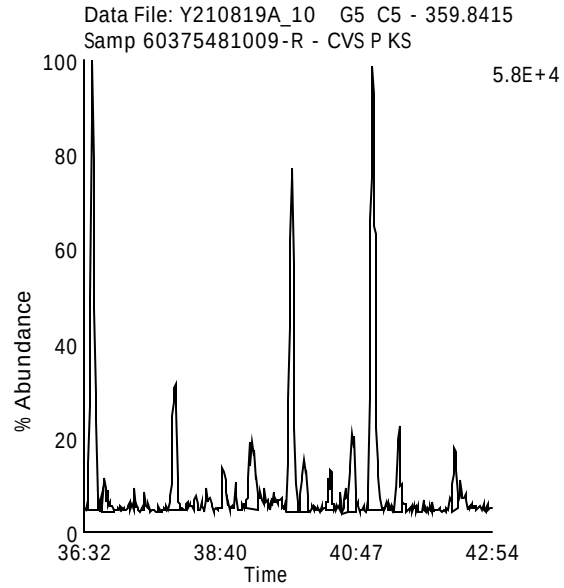


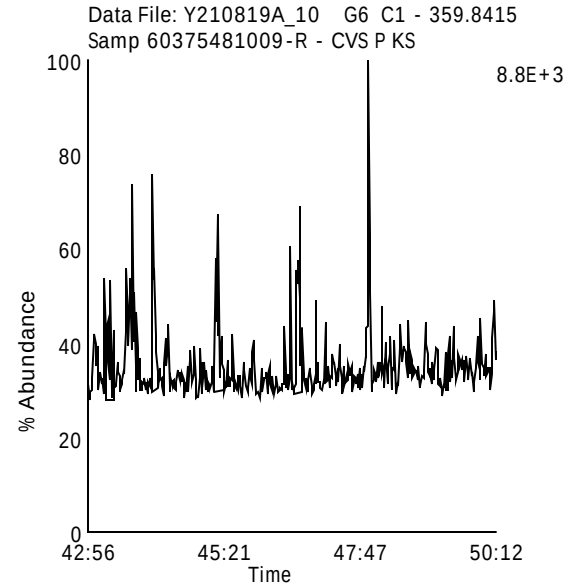


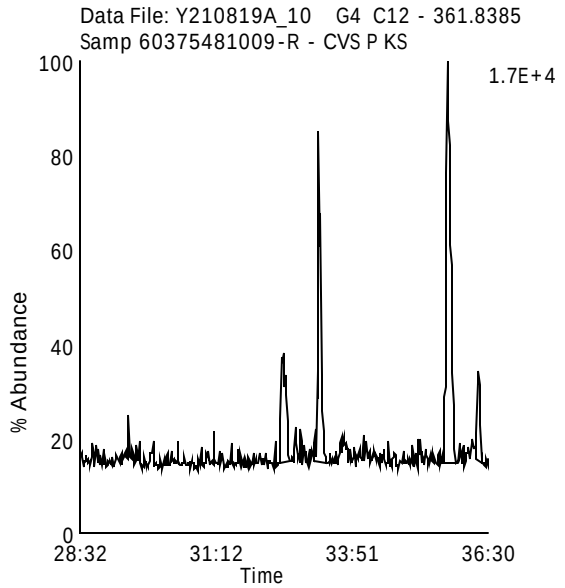
Hexa Chlorinated Biphenyls

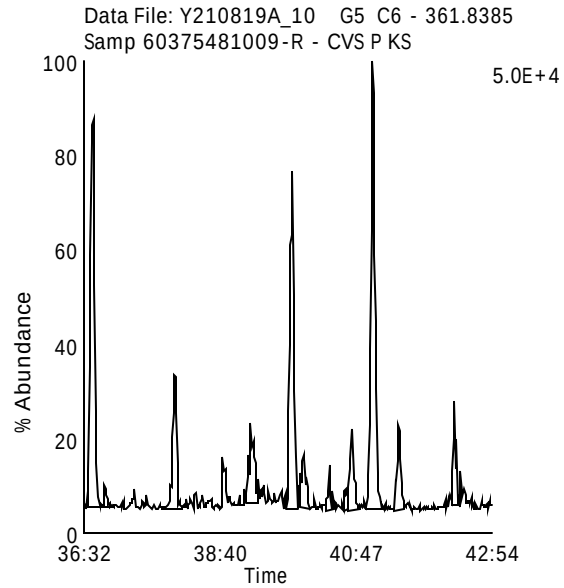
Data File Name: Y210819A_10 | Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS | Client Sample ID: GB-64/3'-4'

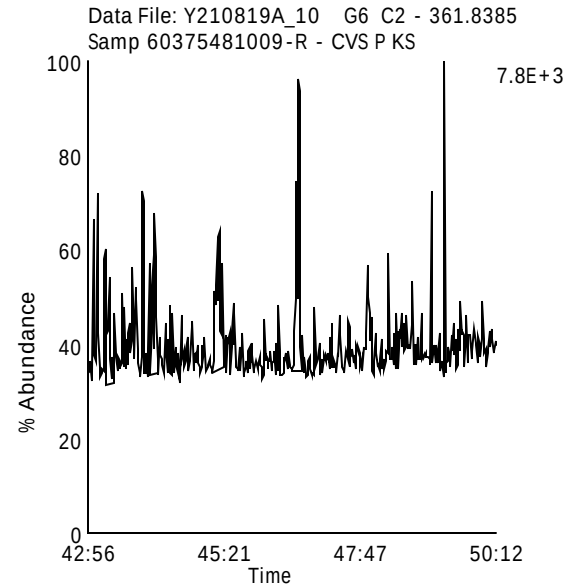






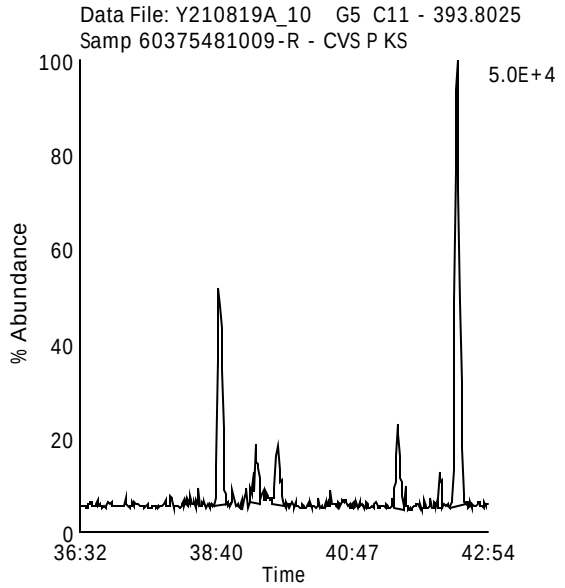


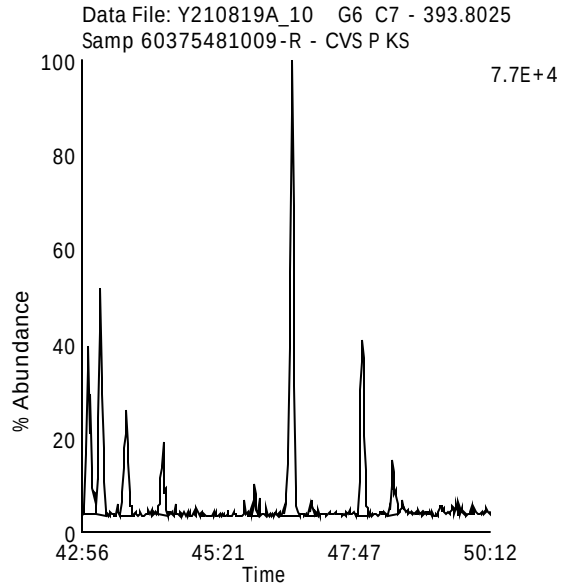


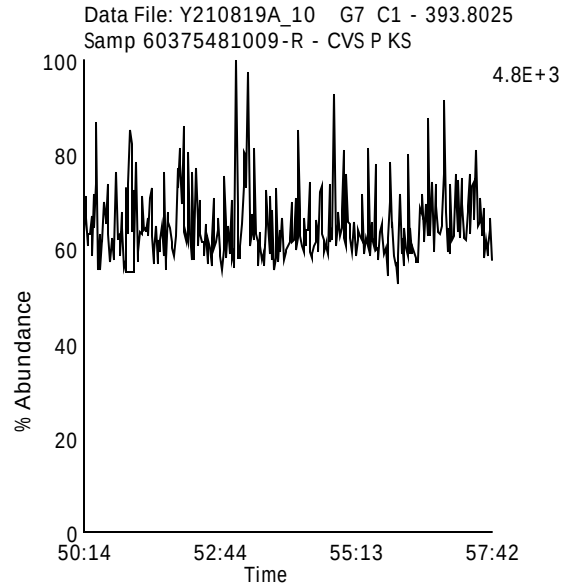


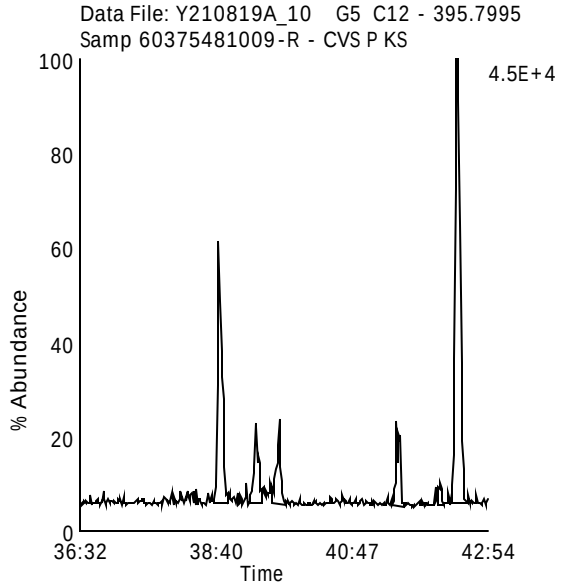
Hepta Chlorinated Biphenyls

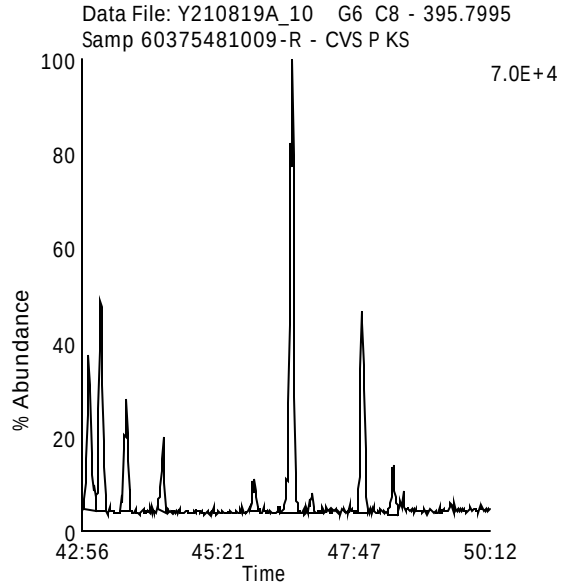
Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'

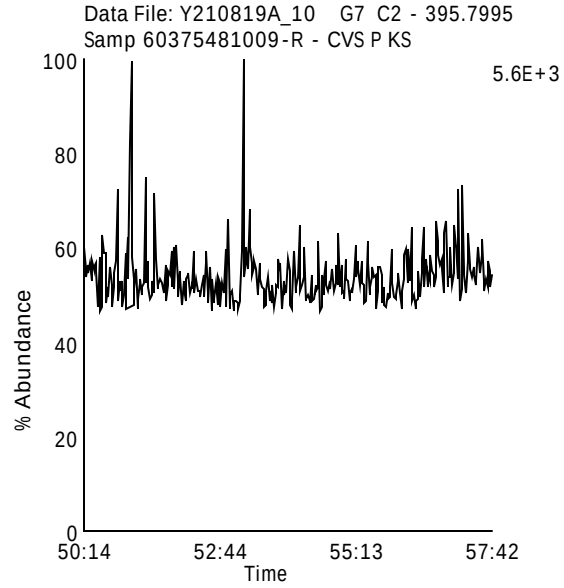






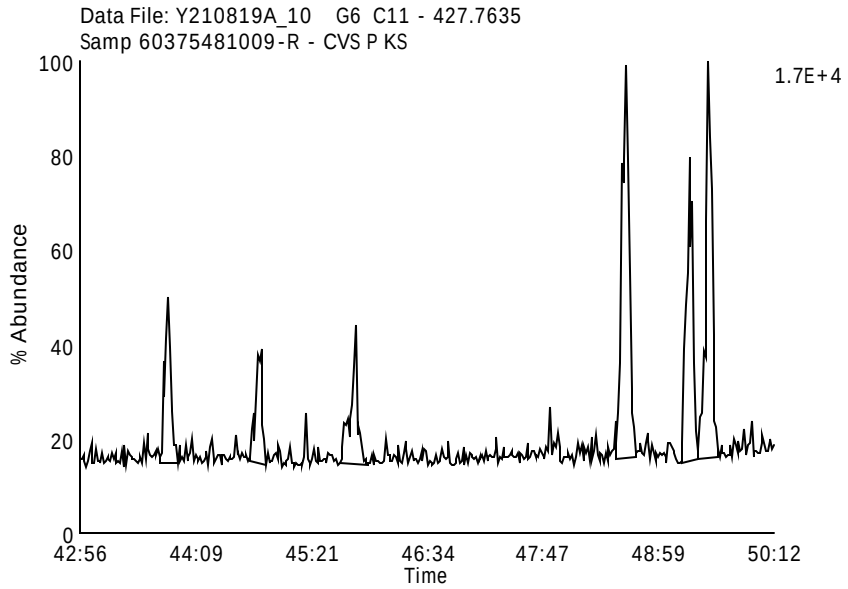


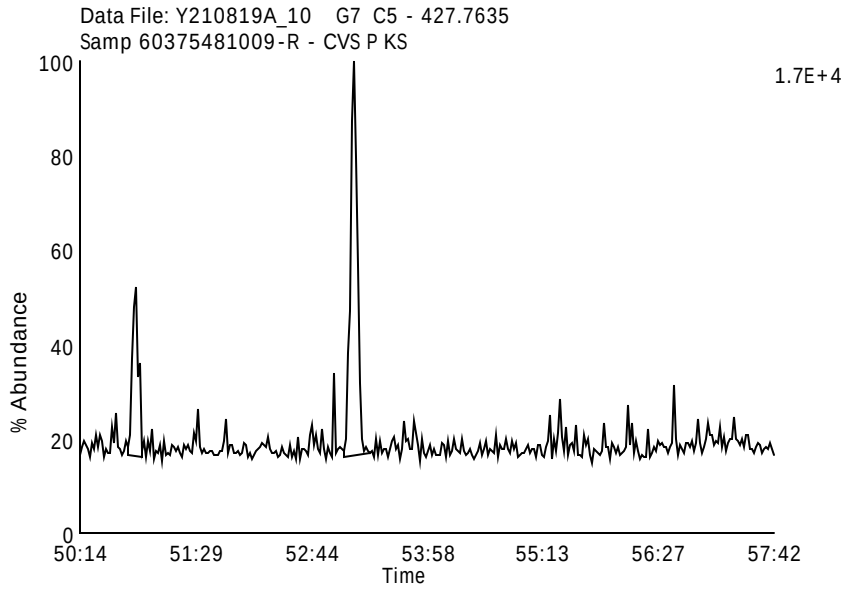


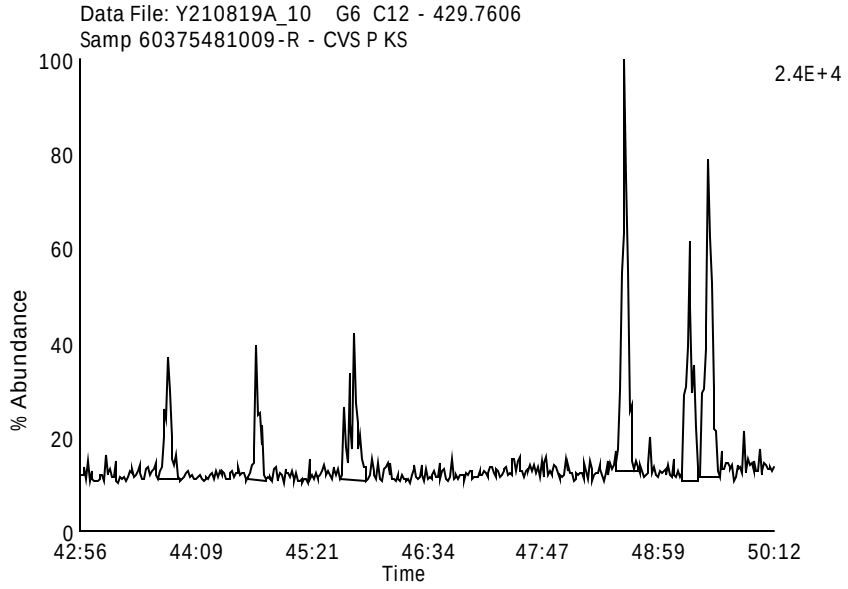


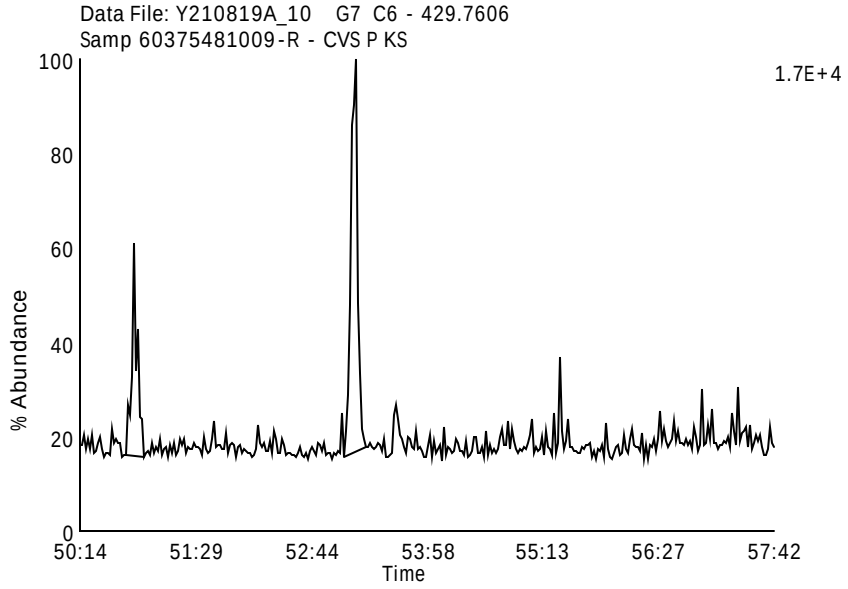
Octa Chlorinated Biphenyls

Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'



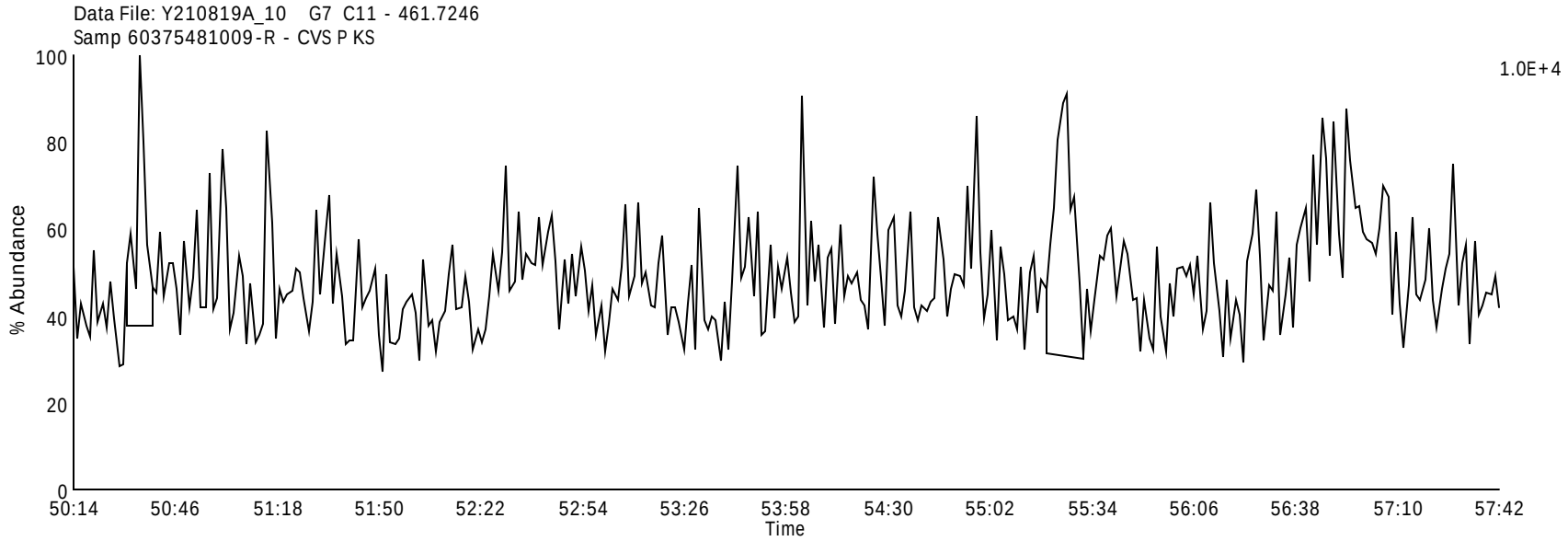


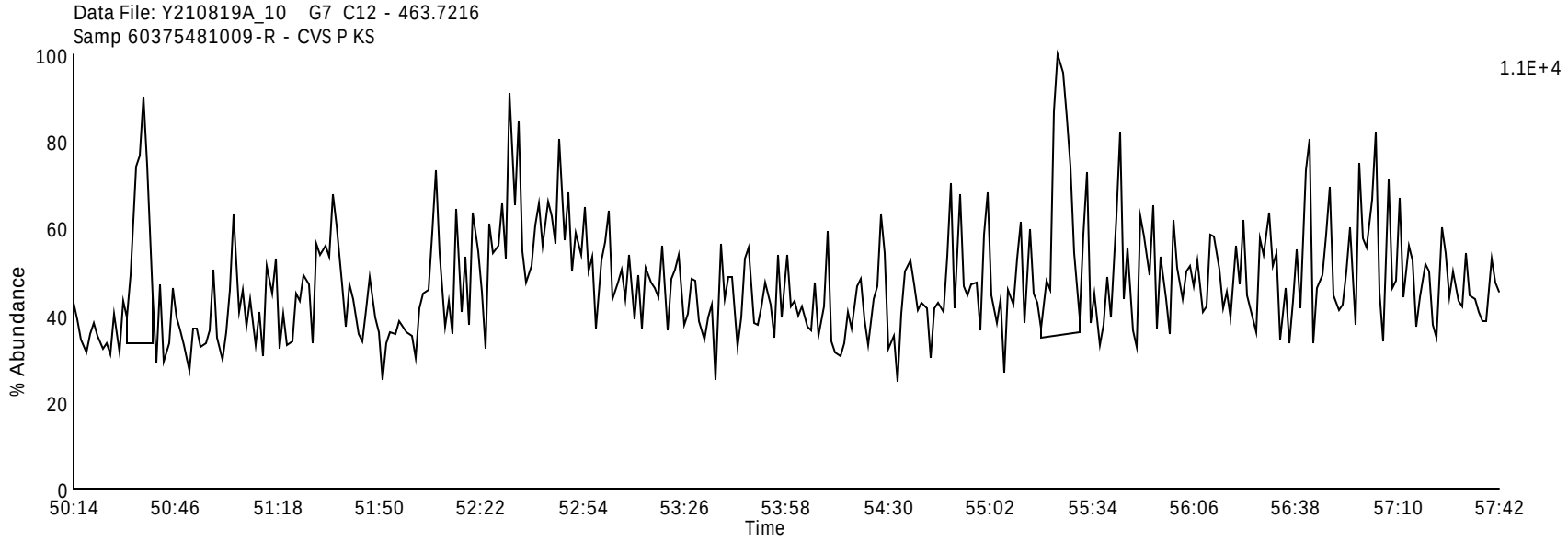




Nona Chlorinated Biphenyls

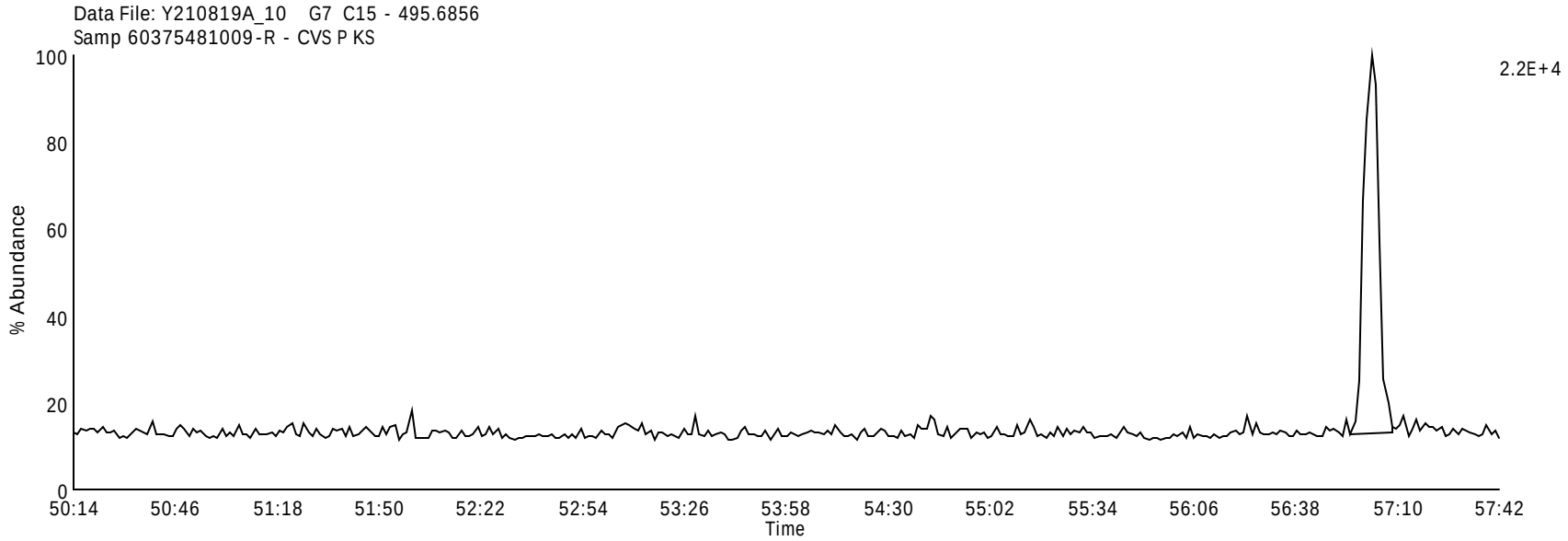
Data File Name: Y210819A_10	Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS	Client Sample ID: GB-64/3'-4'

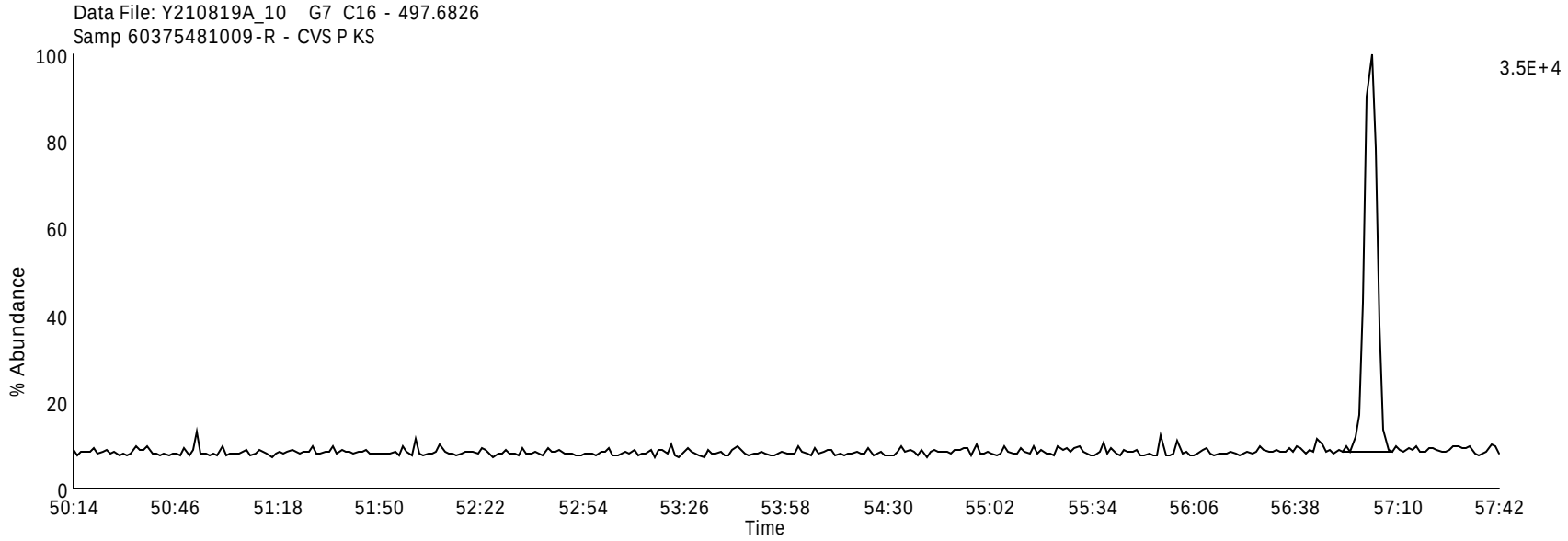




Deca Chlorinated Biphenyl

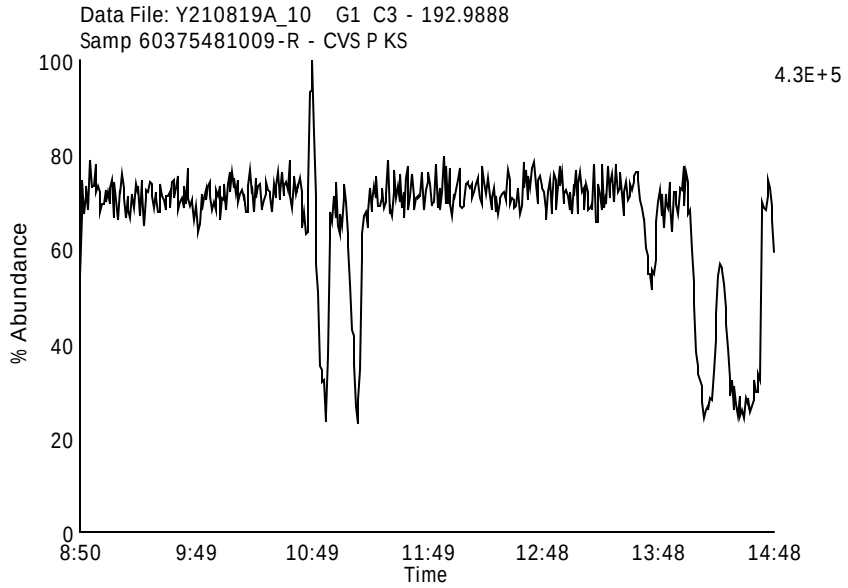
Data File Name: Y210819A_10	Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS	Client Sample ID: GB-64/3'-4'

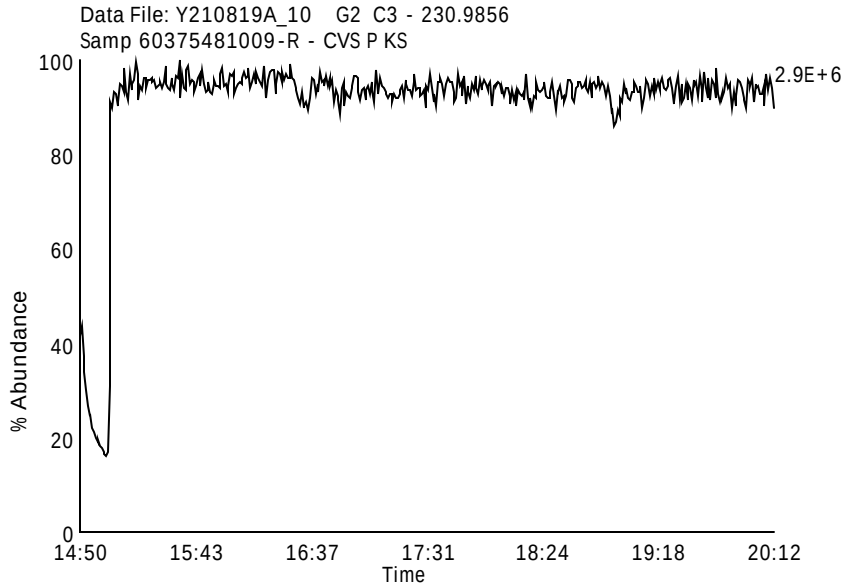


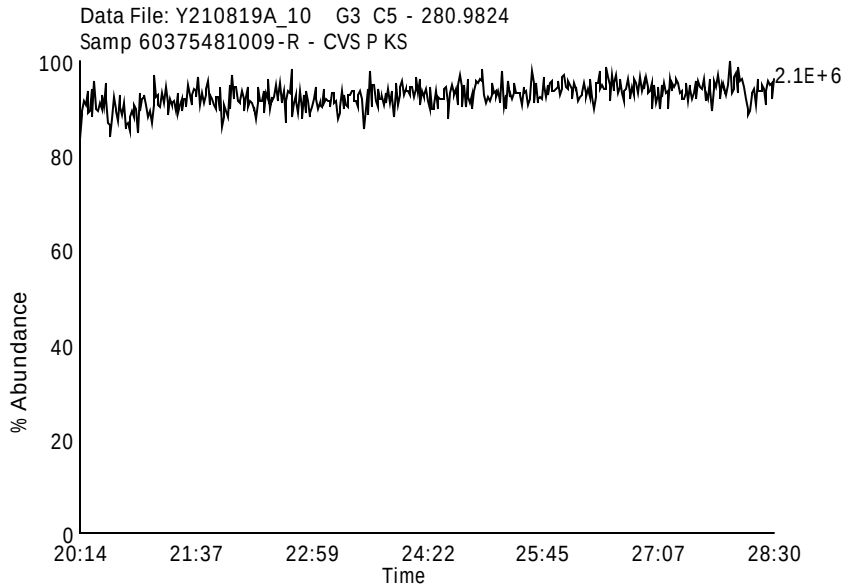


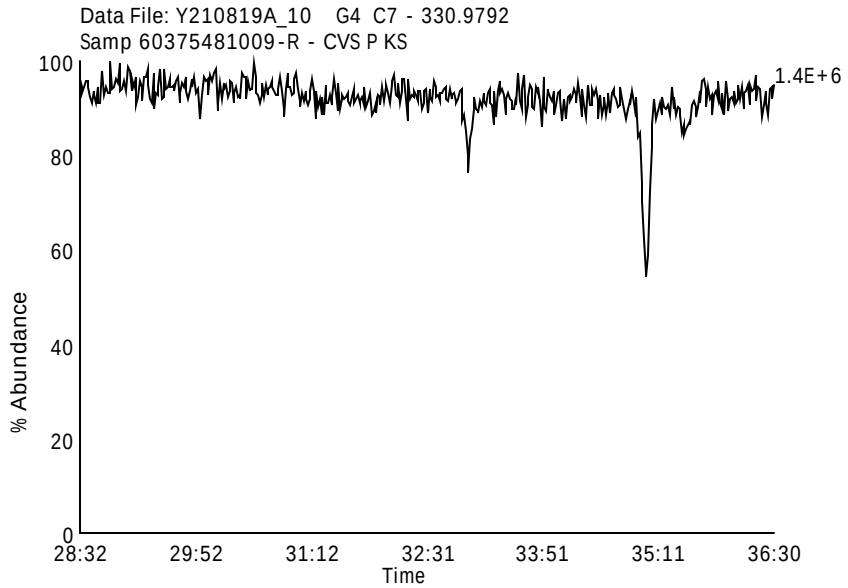
Group 1 - 4 Lock mass

Data File Name: Y210819A_10
Lab Sample ID: 60375481009-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481009-R - CVS P KS
Client Sample ID: GB-64/3'-4'





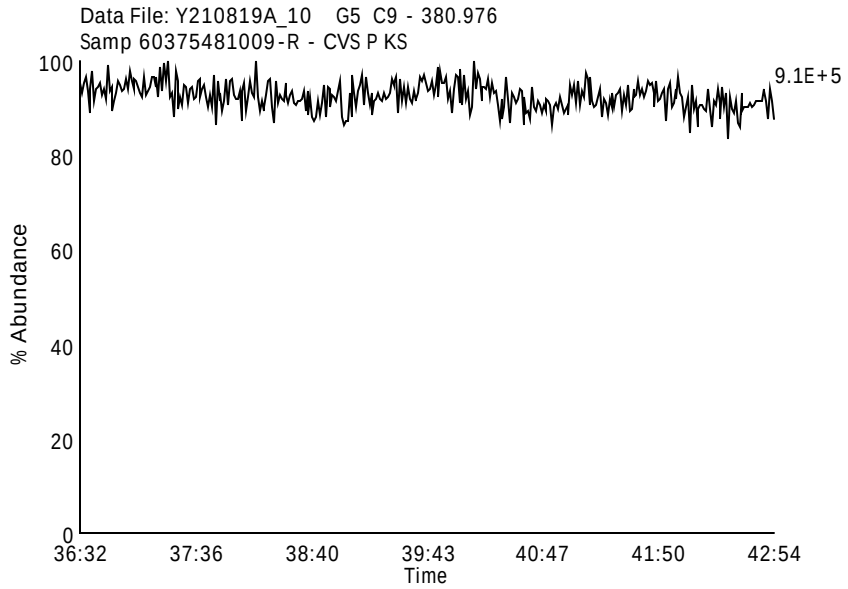


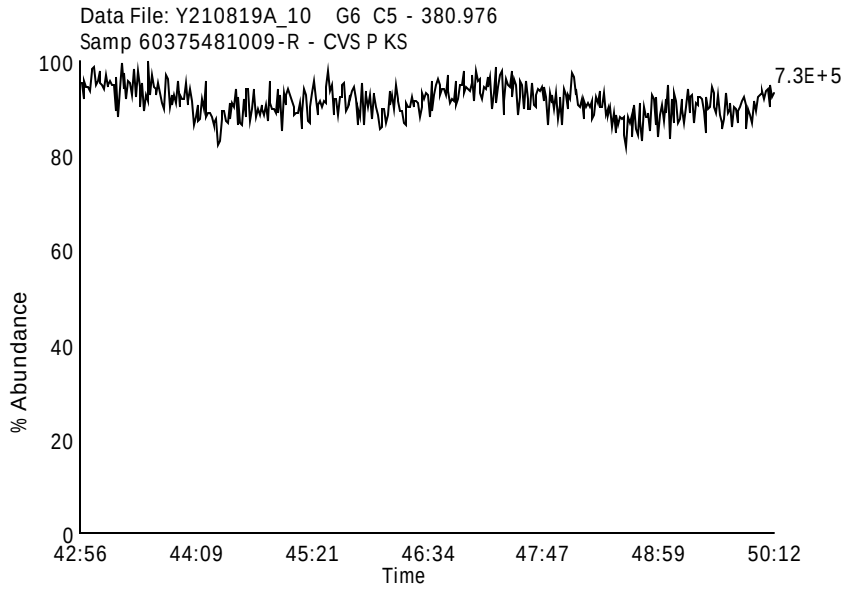


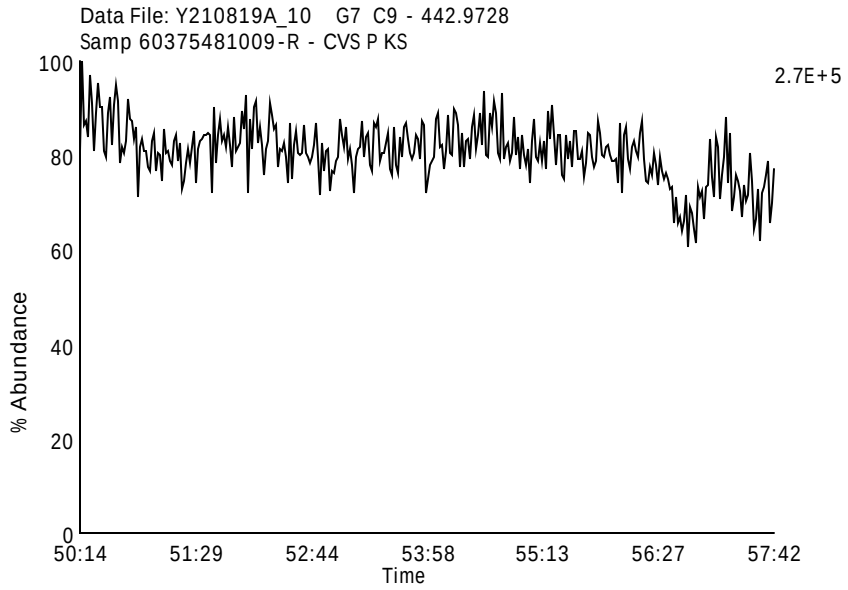
Group 5 - 7 Lock mass

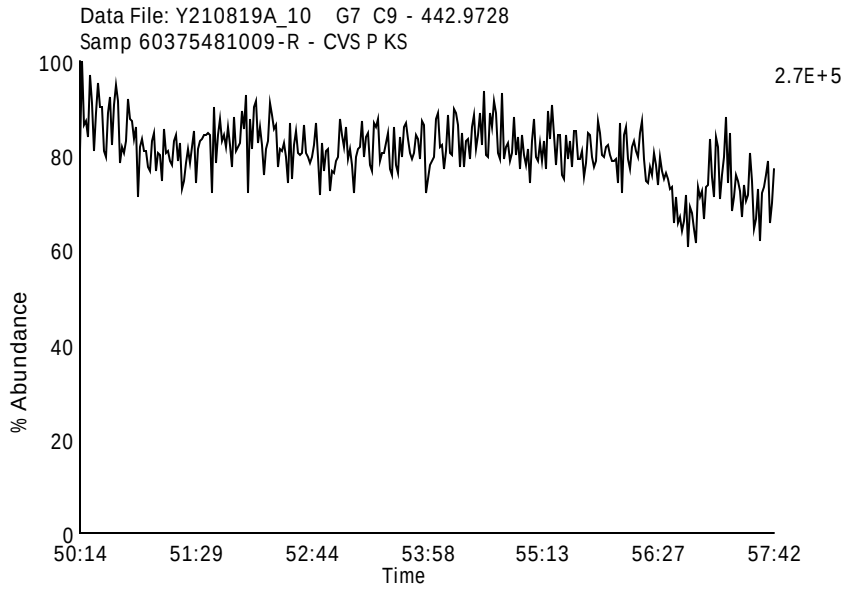
Data File Name: Y210819A_10
Date Acquired: 8/19/2021
Sample Description: Samp 60375481009-R - CVS P KS

Lab Sample ID: 60375481009-R
Instrument: 10MSHR12 (Y)
Client Sample ID: GB-64/3'-4'



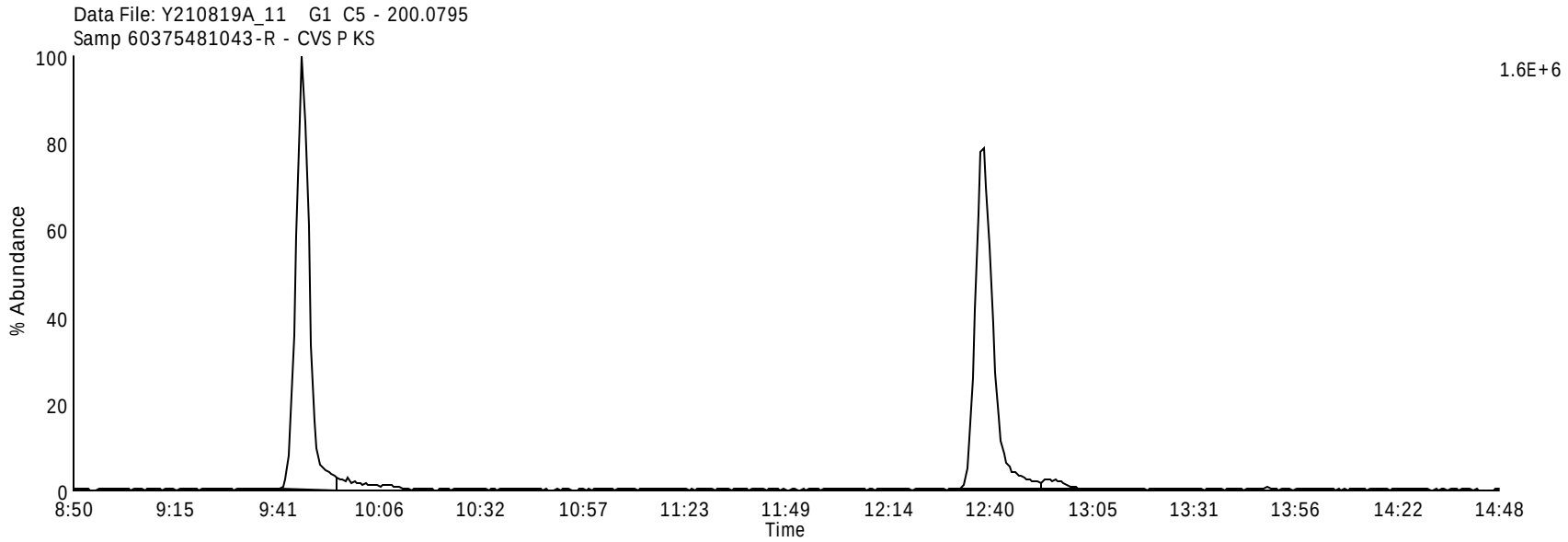


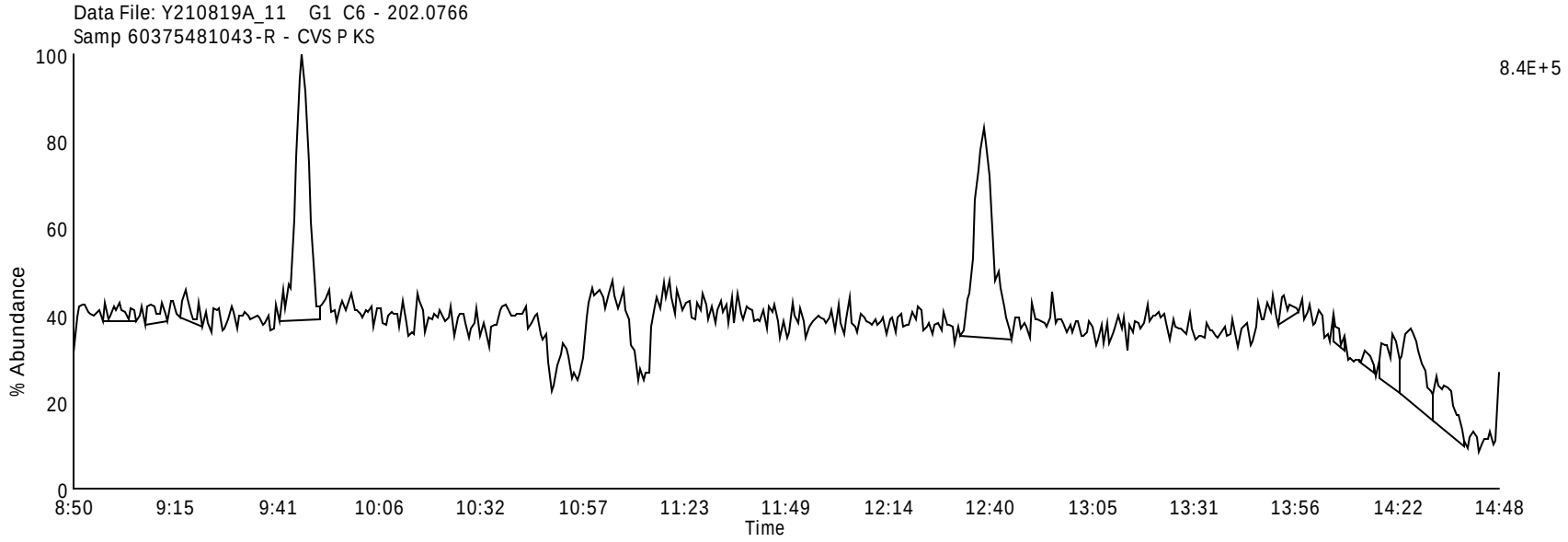




Labeled Mono Chlorinated Biphenyls

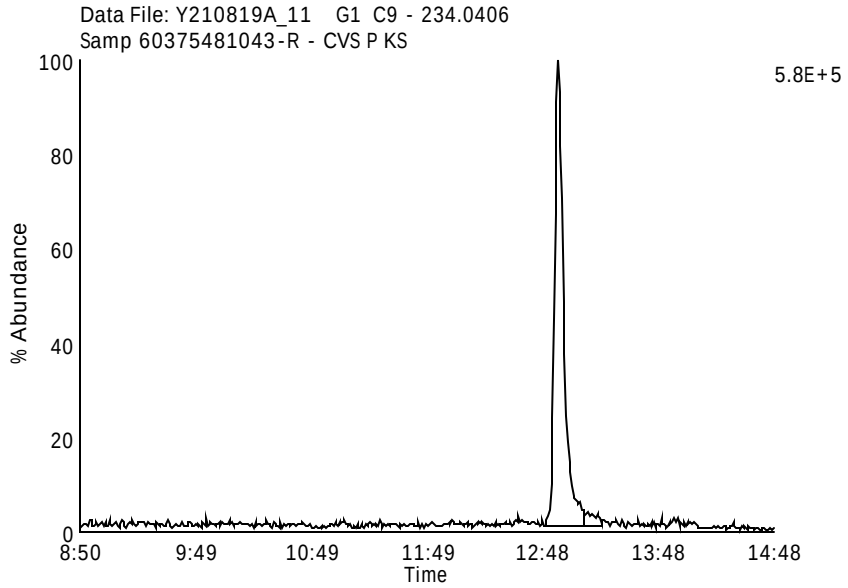
Data File Name: Y210819A_11	Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS	Client Sample ID: GB-54/2-4'

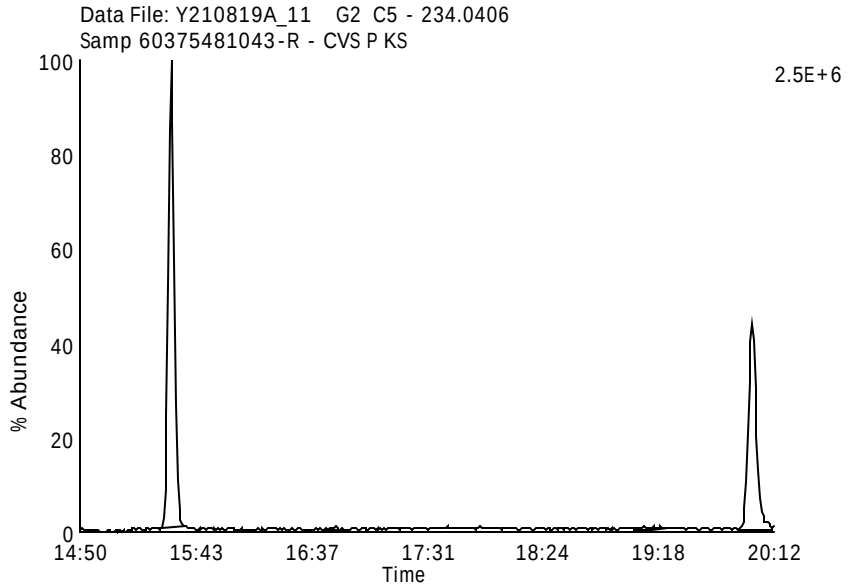


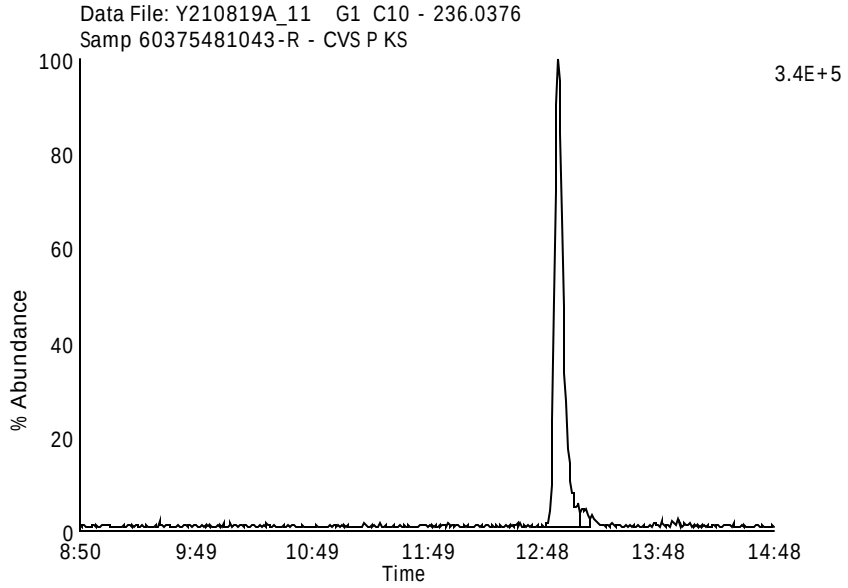


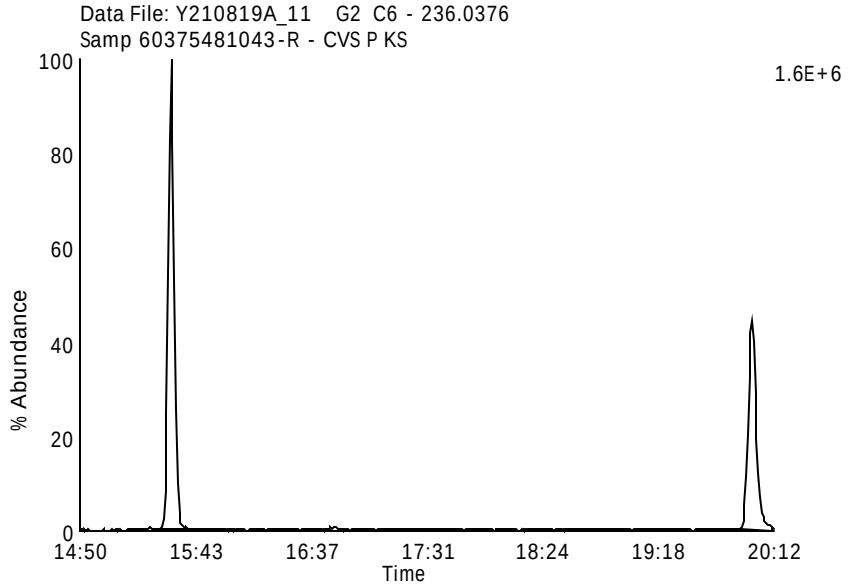
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'



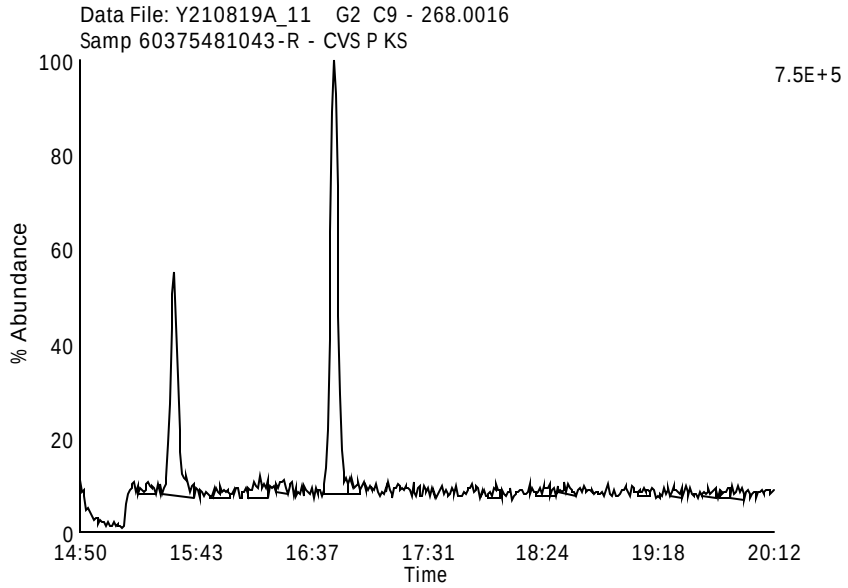


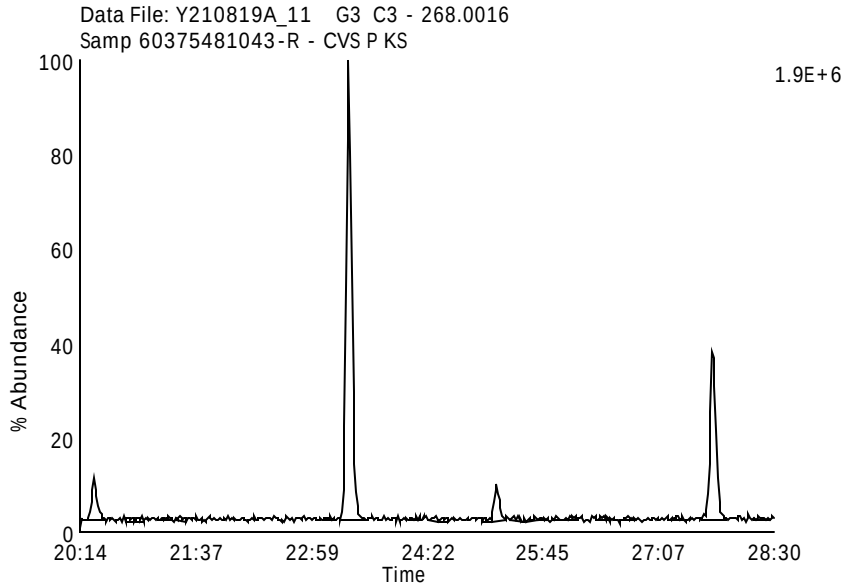


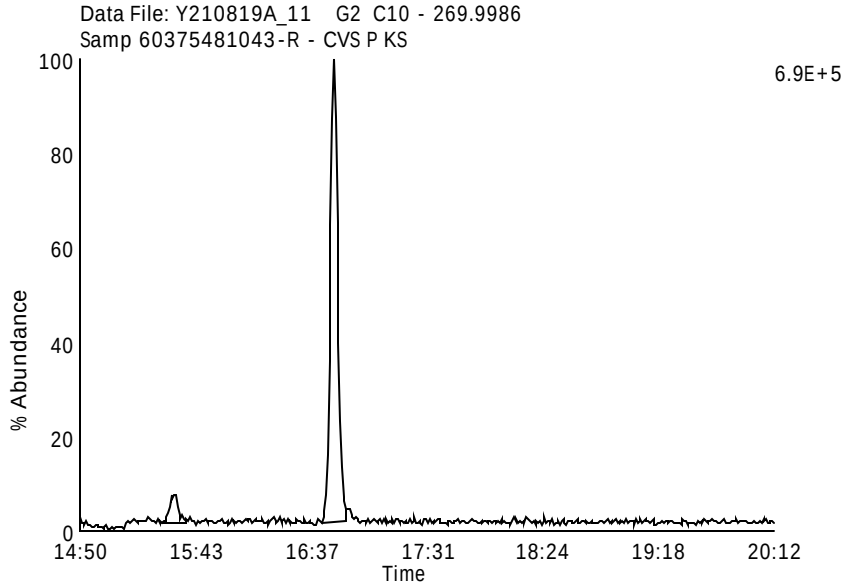


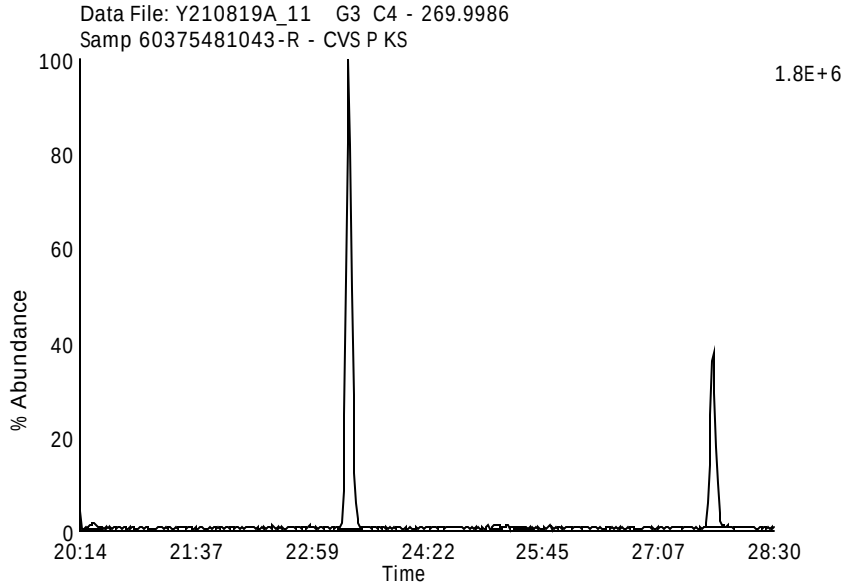
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'



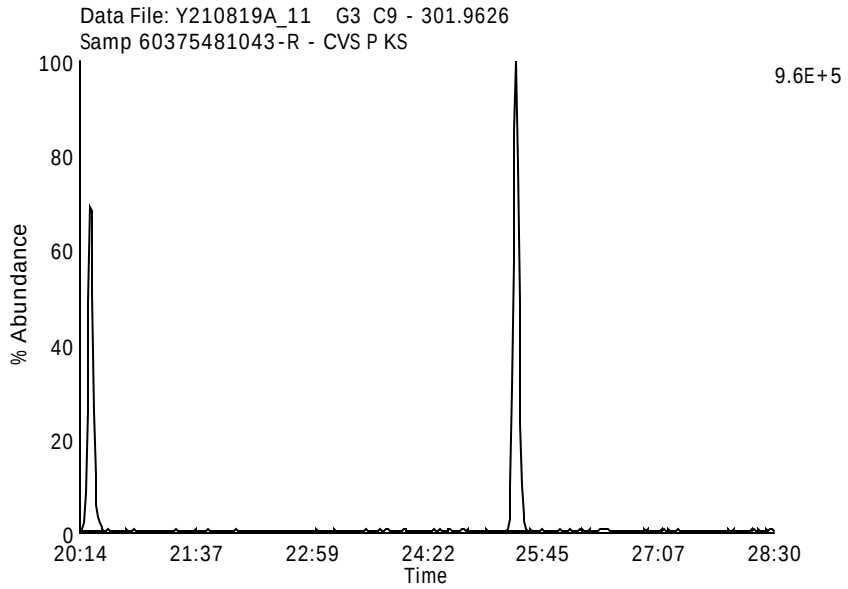


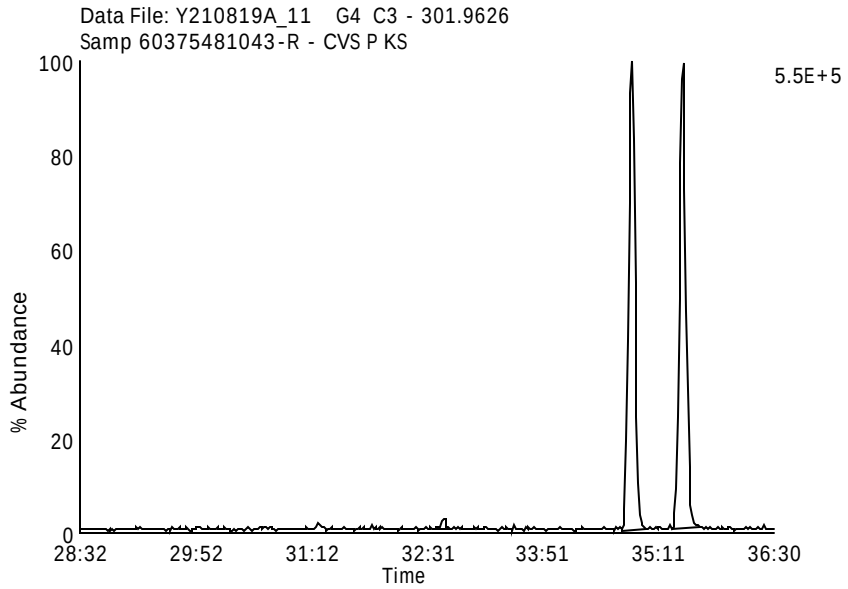


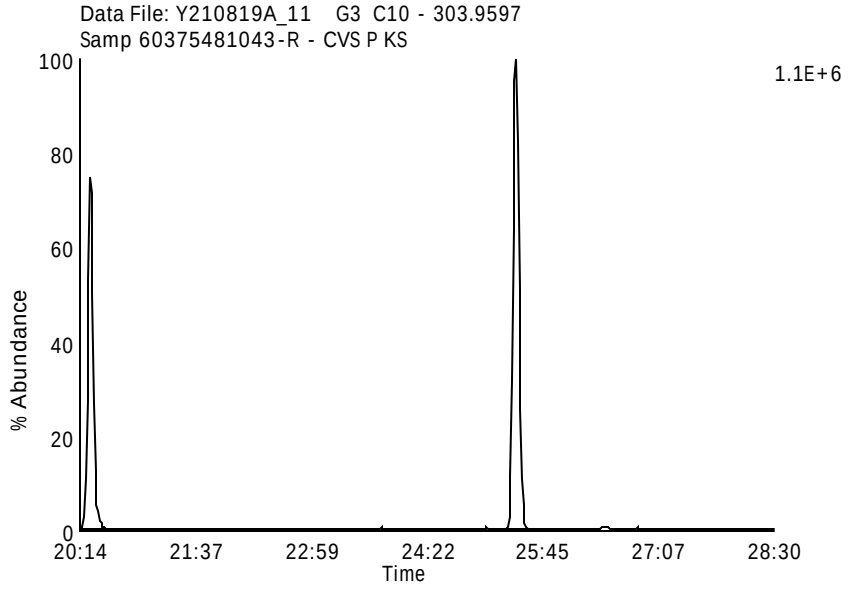


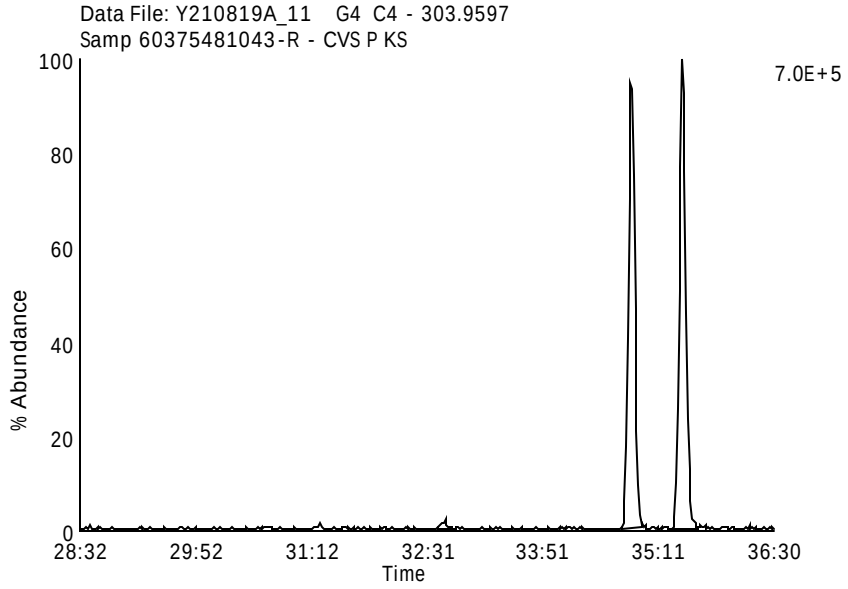
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'



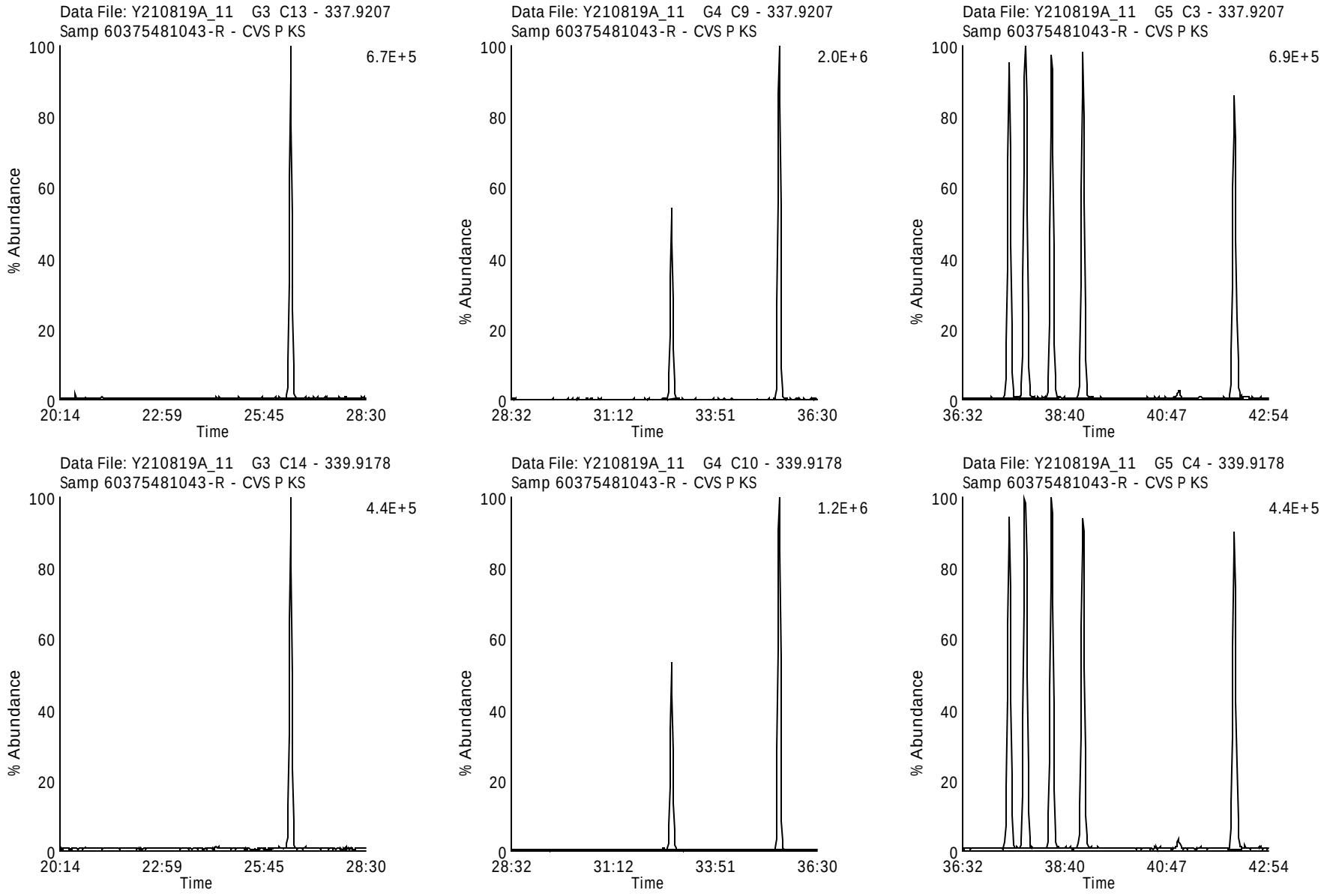






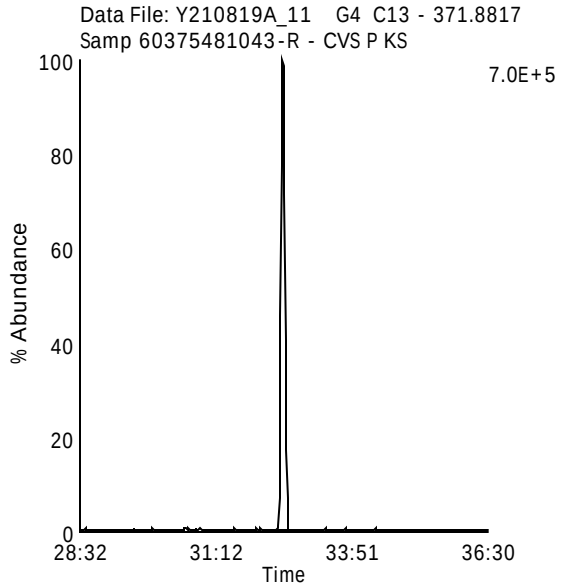
Labeled Penta Chlorinated Biphenyls

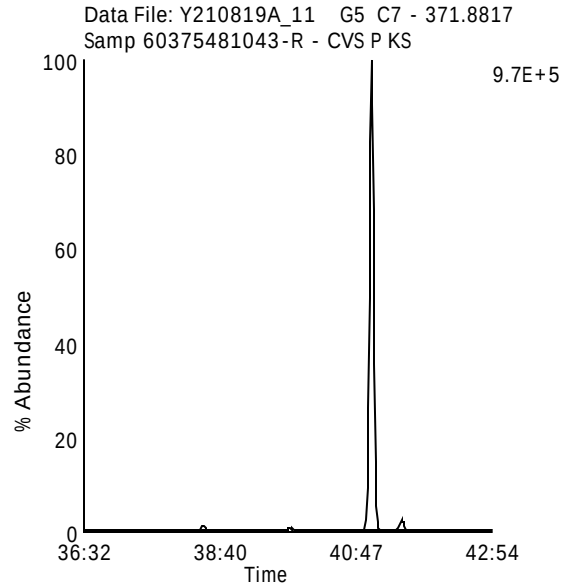
Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'

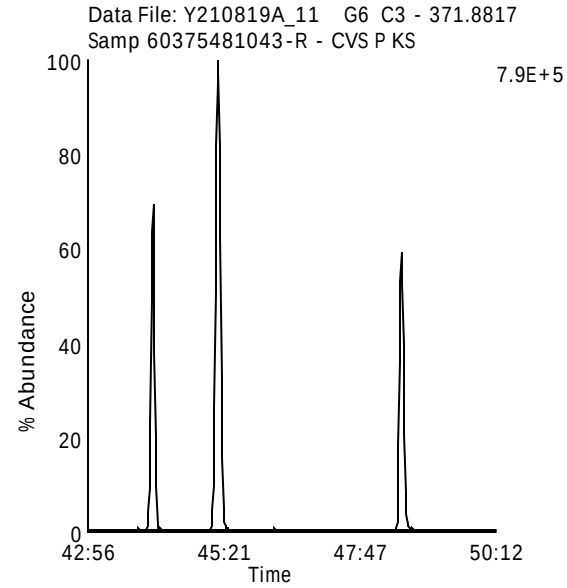


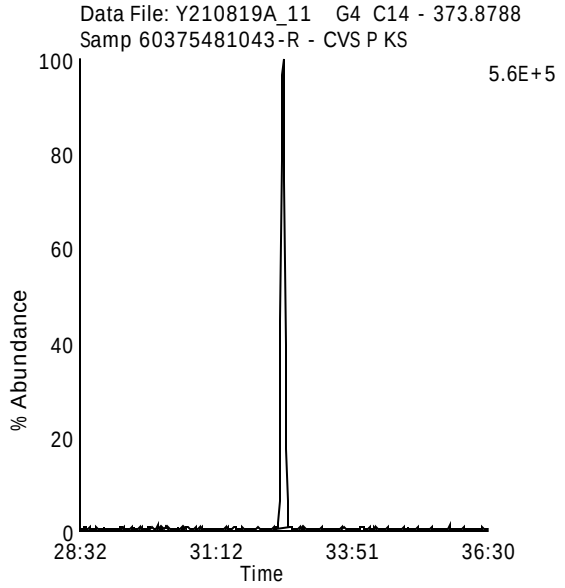
Labeled Hexa Chlorinated Biphenyls

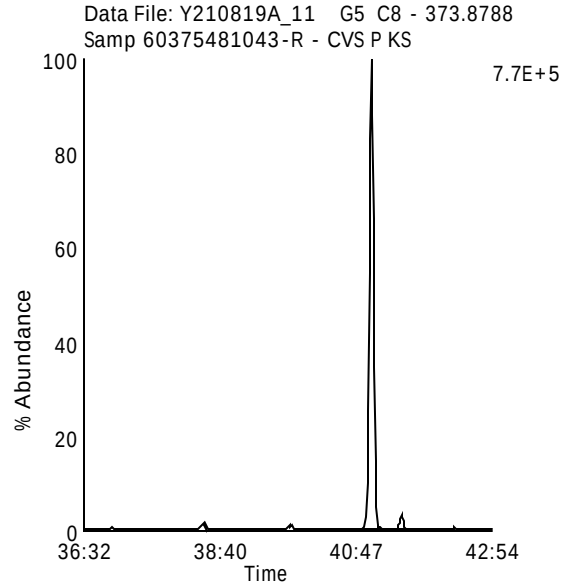
Data File Name: Y210819A_11 | Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS | Client Sample ID: GB-54/2-4'

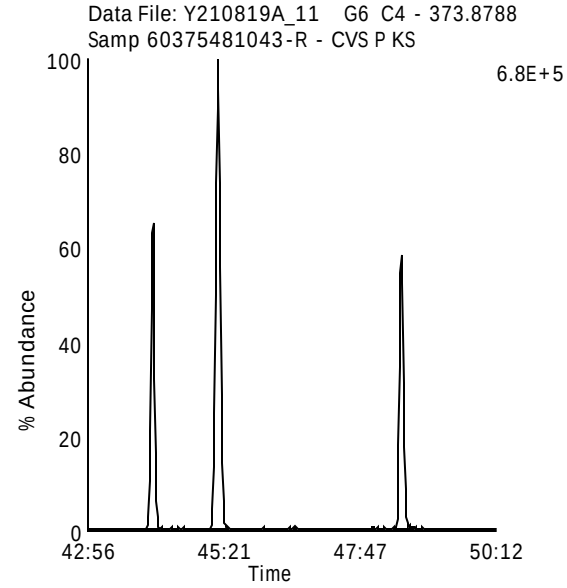






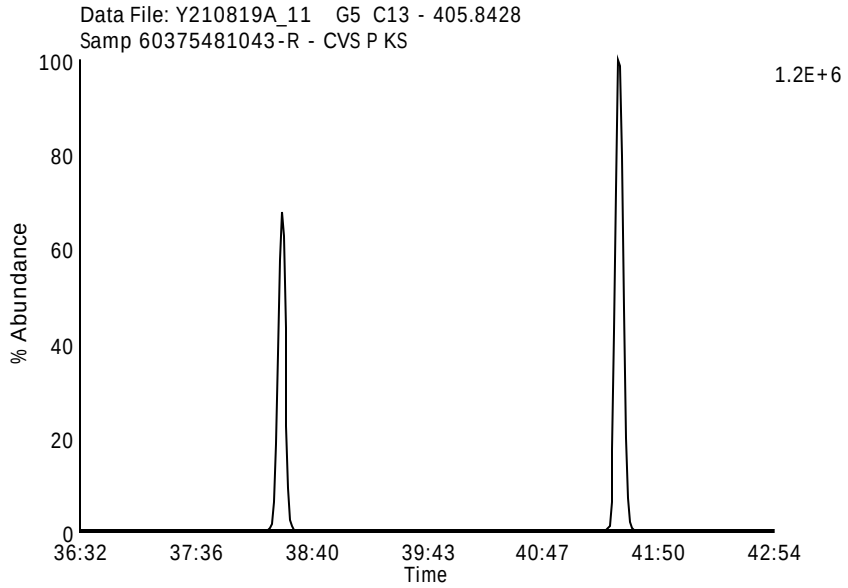


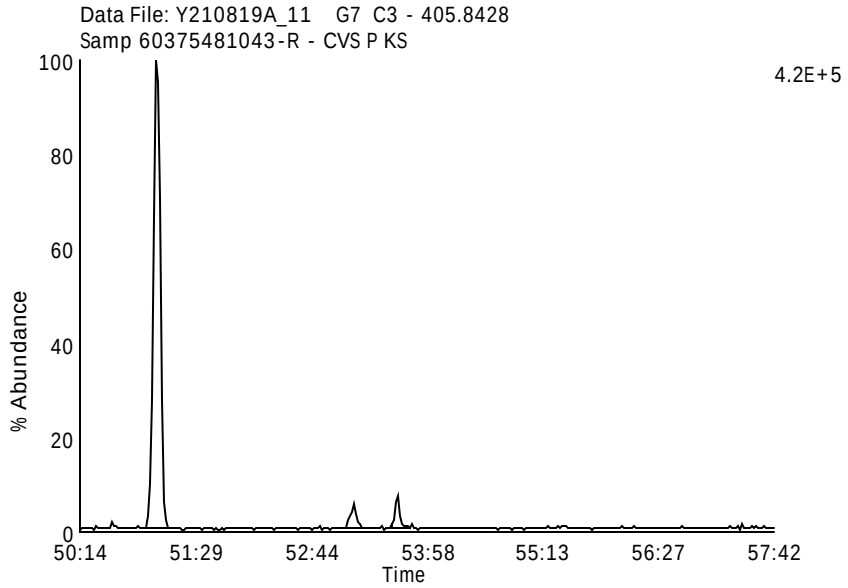


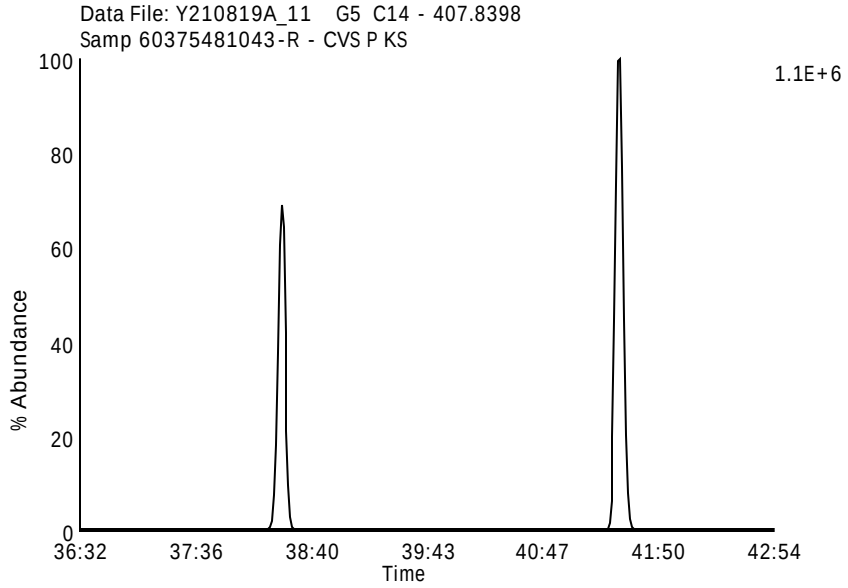


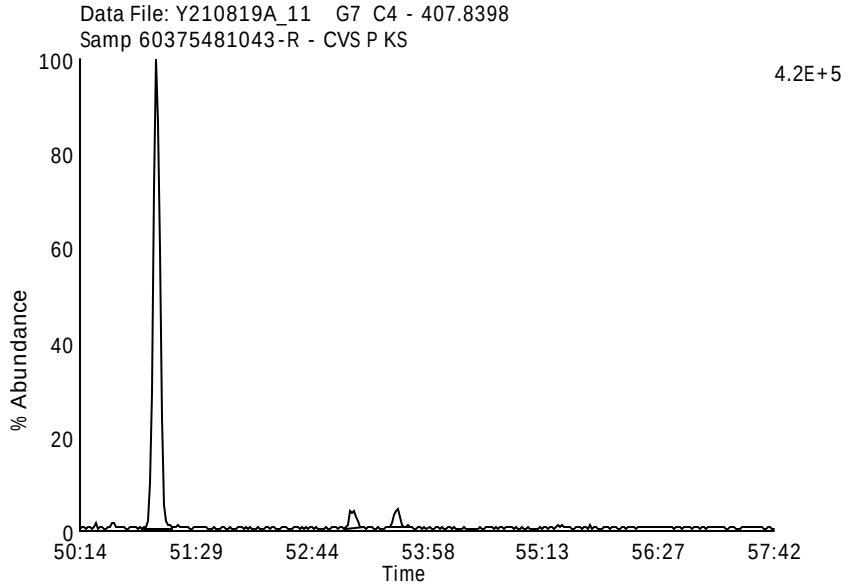
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'



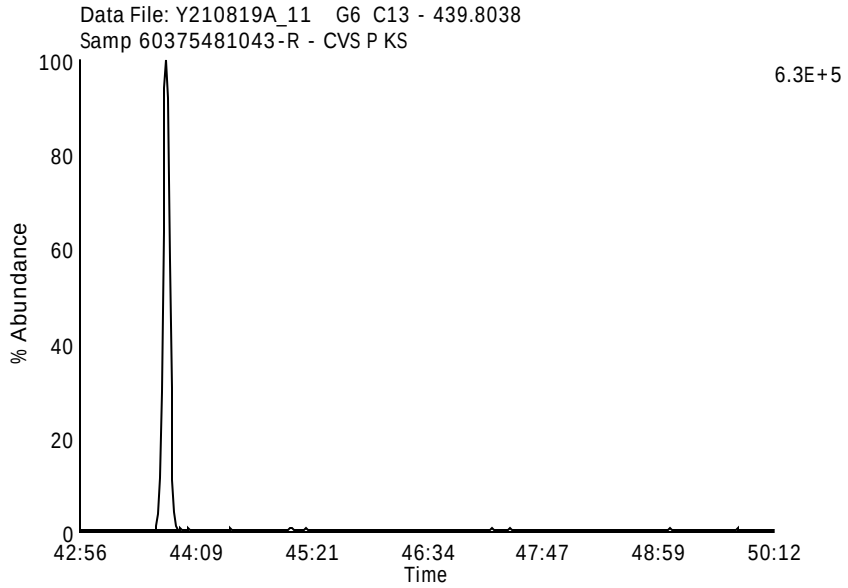


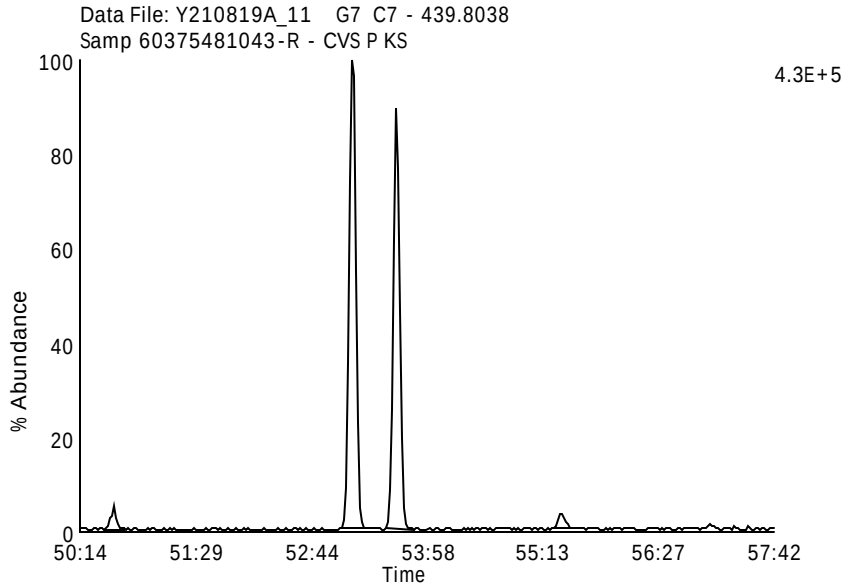


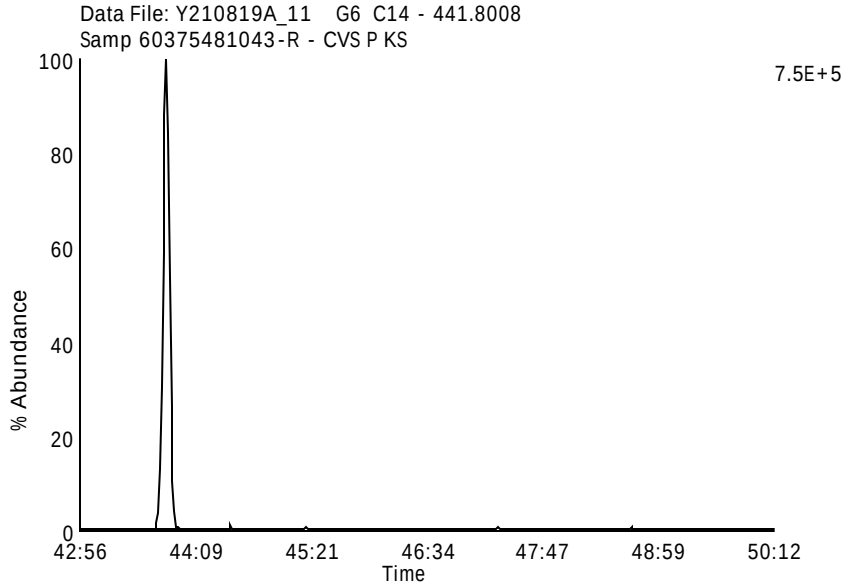


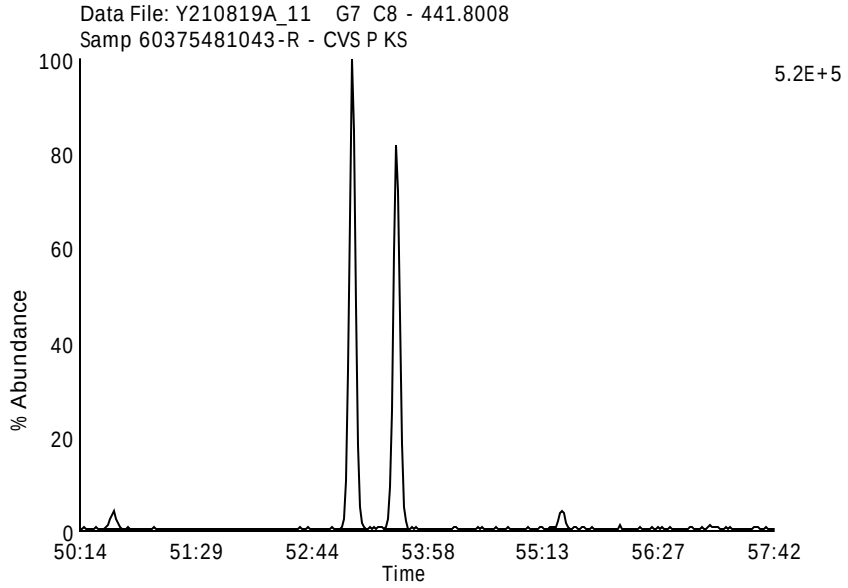
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'



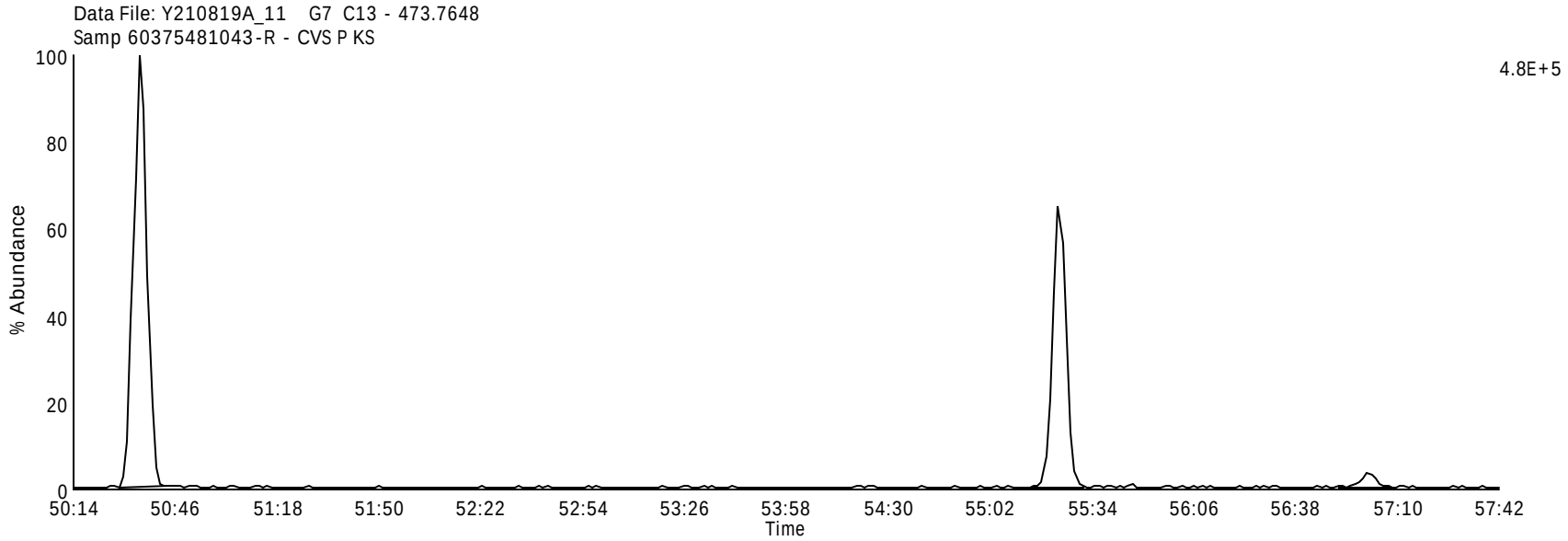


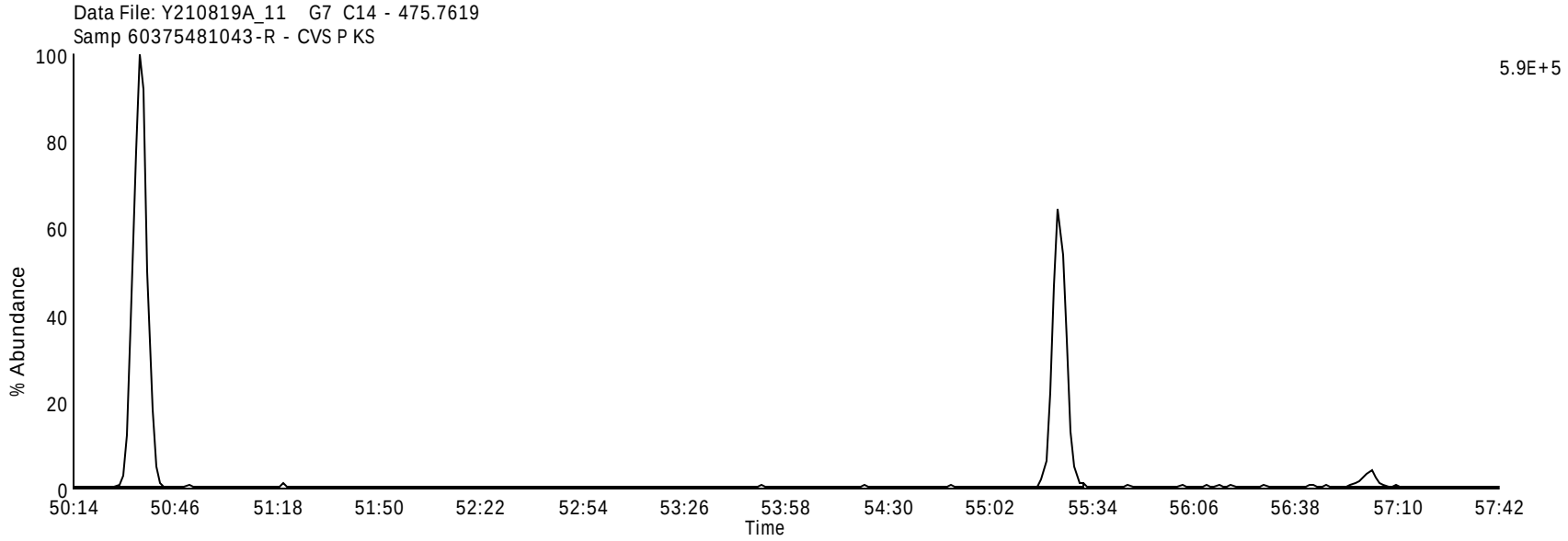




Labeled Nona Chlorinated Biphenyls

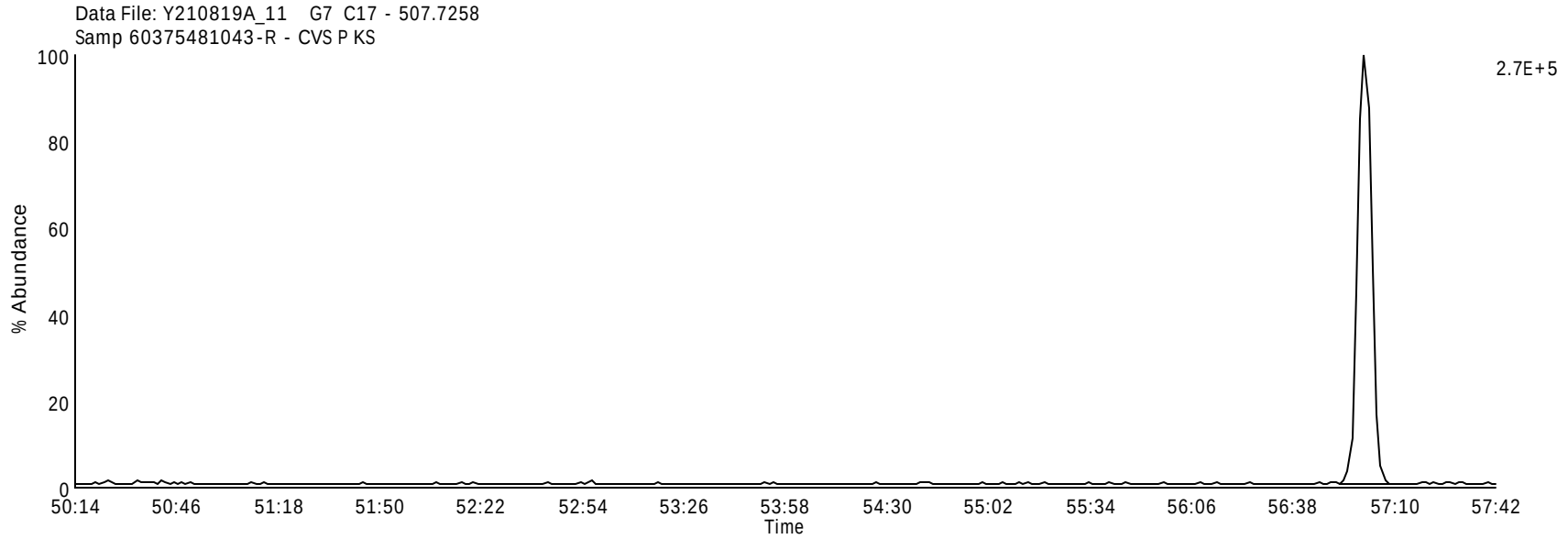
Data File Name: Y210819A_11	Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS	Client Sample ID: GB-54/2-4'

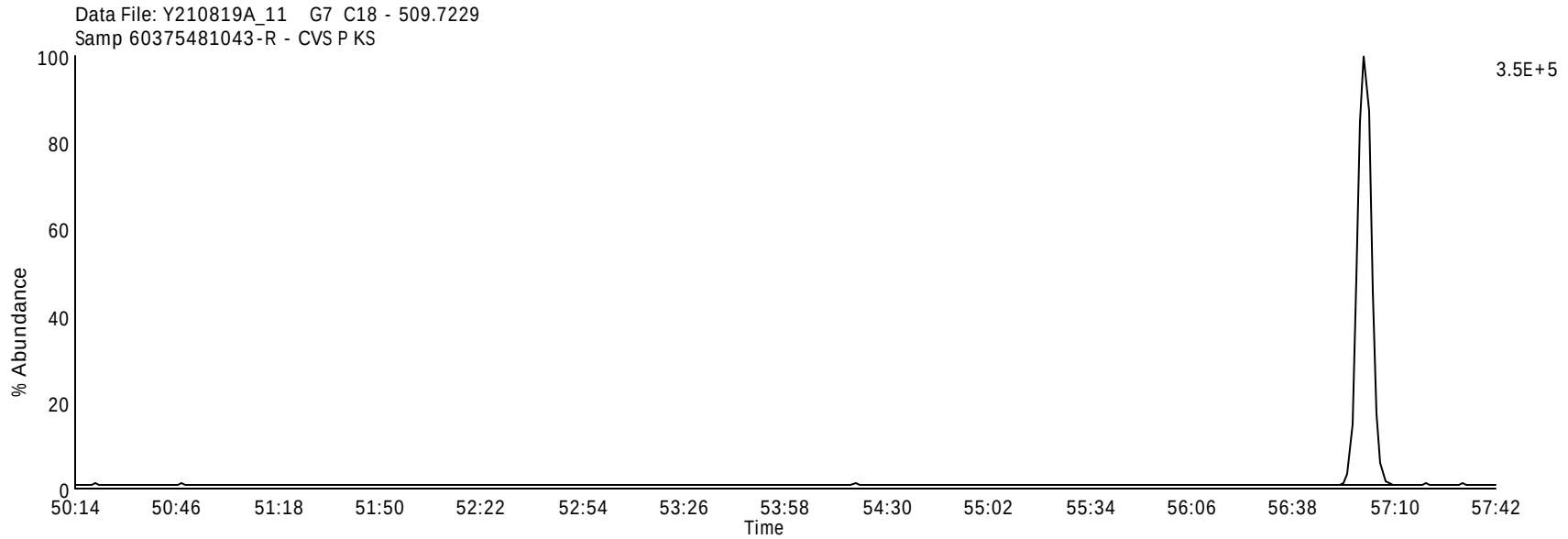




Labeled Deca Chlorinated Biphenyl

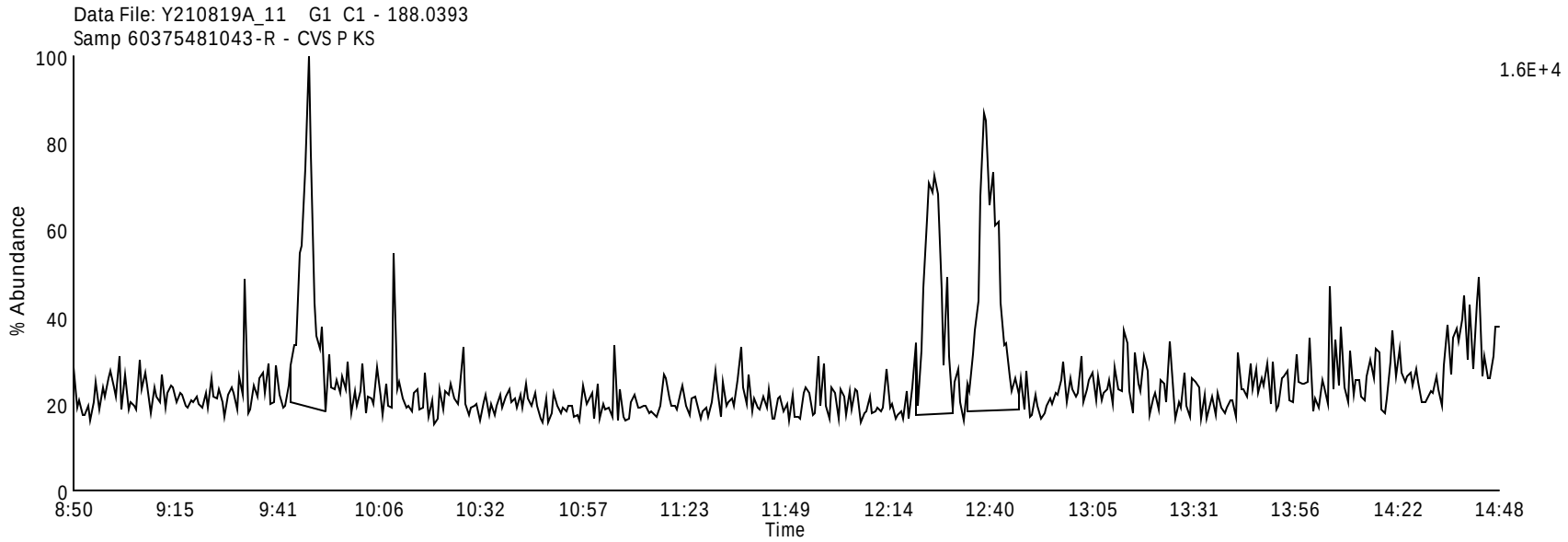
Data File Name: Y210819A_11	Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS	Client Sample ID: GB-54/2-4'

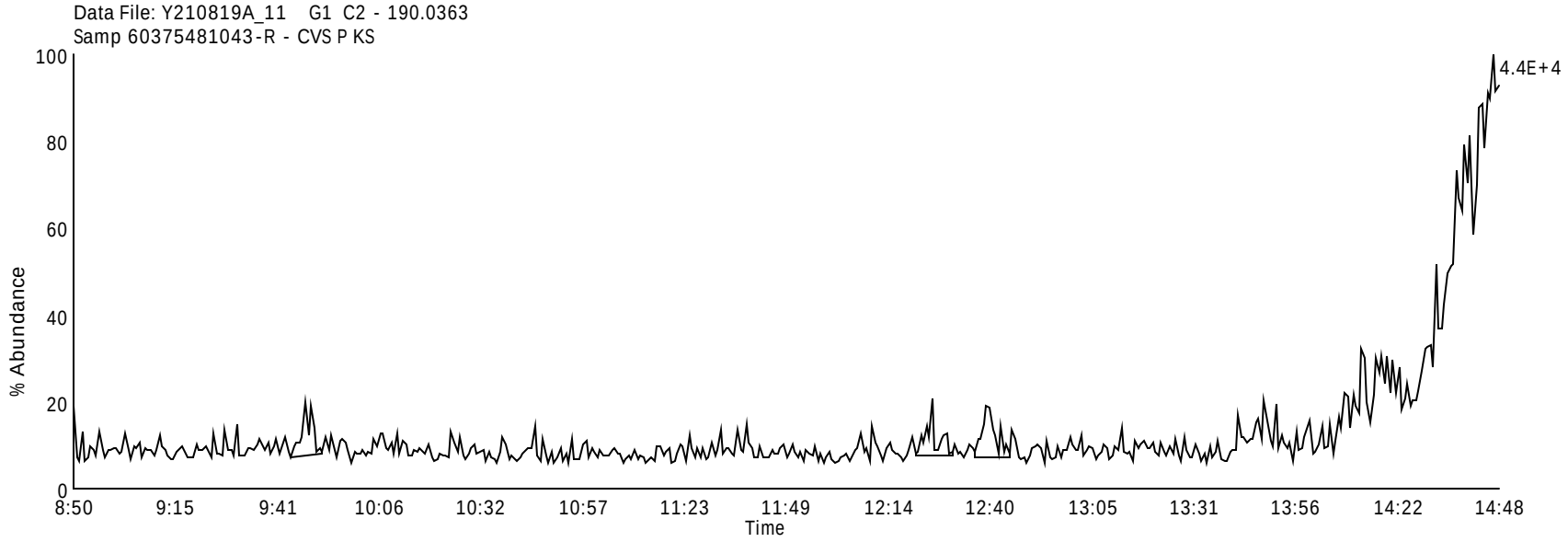




Mono Chlorinated Biphenyls

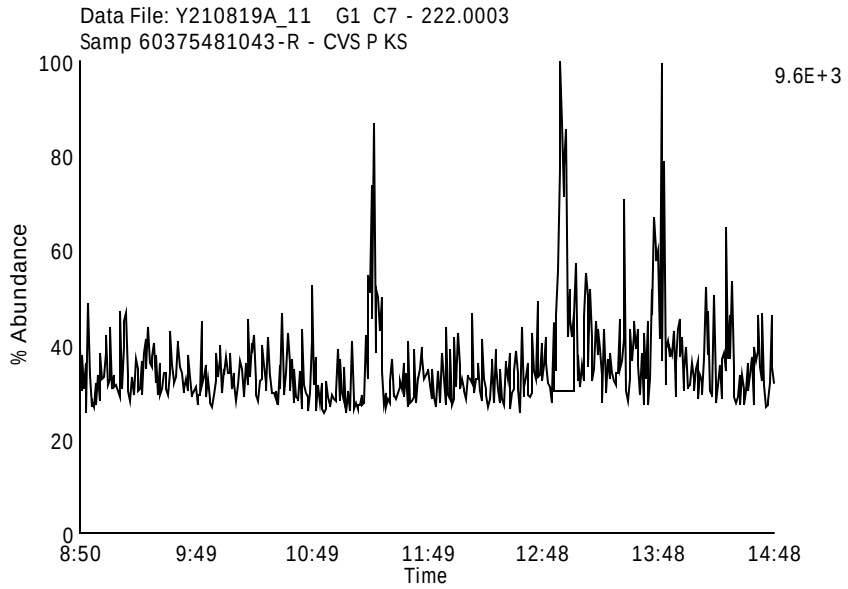
Data File Name: Y210819A_11	Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS	Client Sample ID: GB-54/2-4'

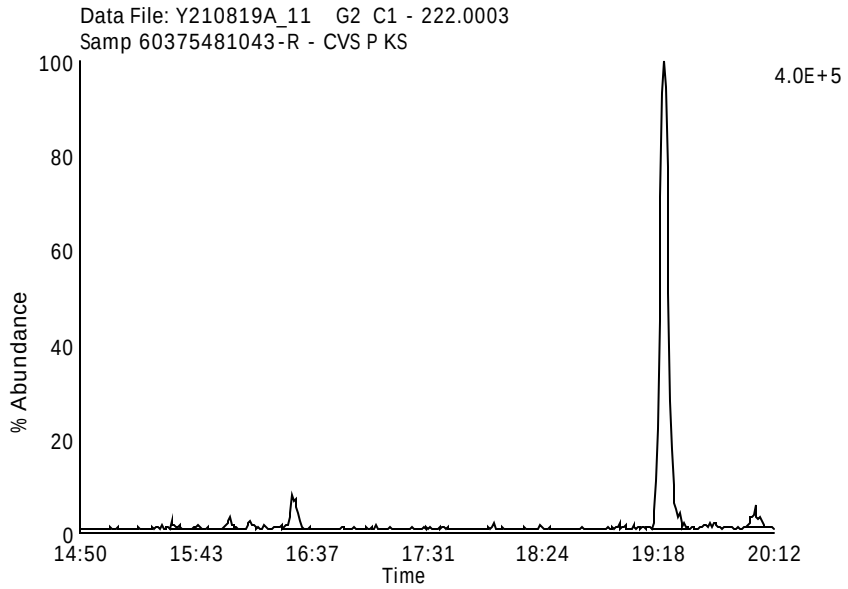


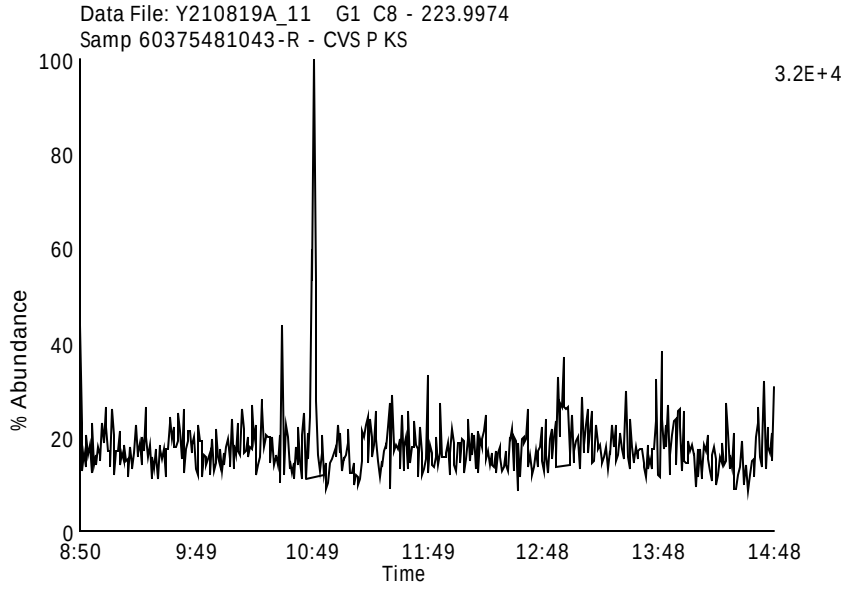


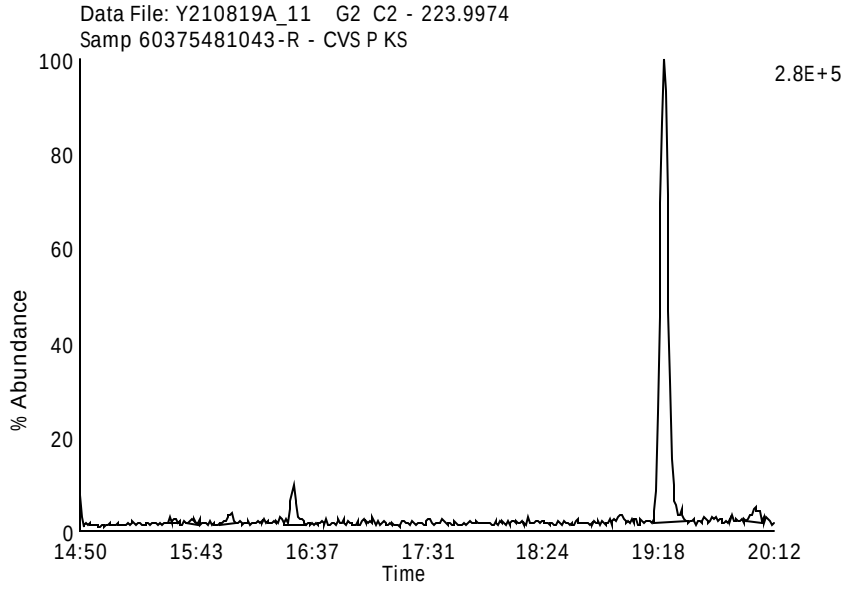
Di Chlorinated Biphenyls

Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'



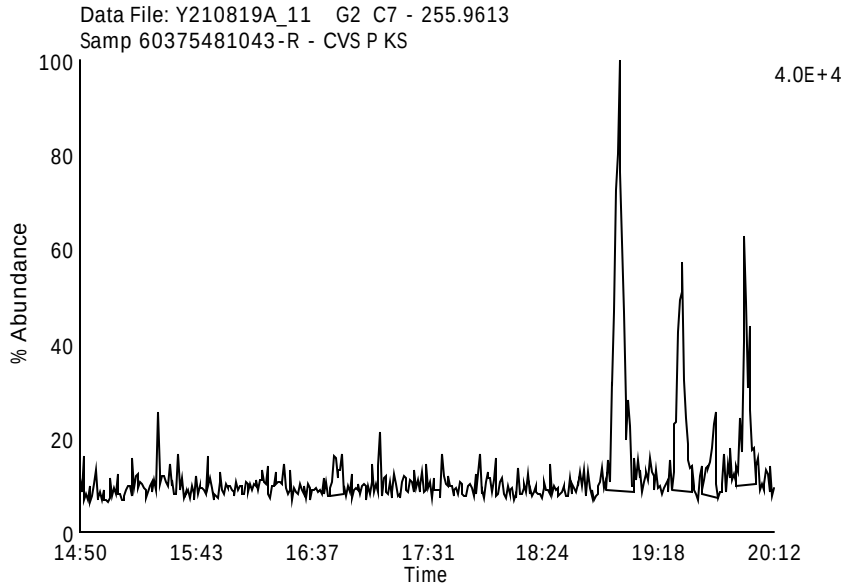


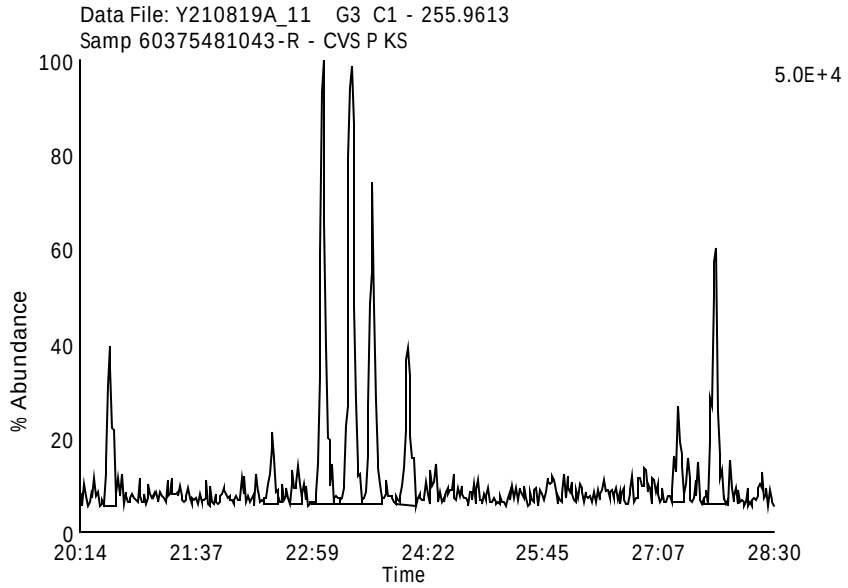


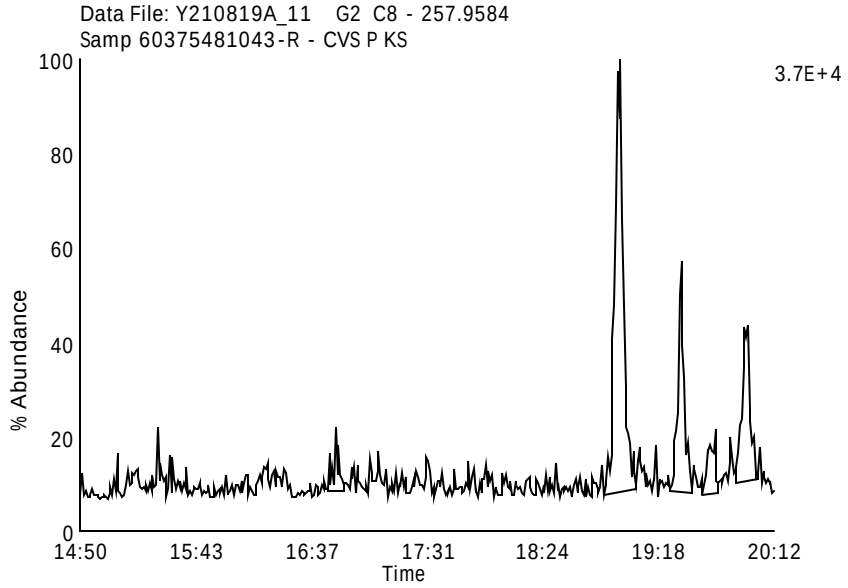


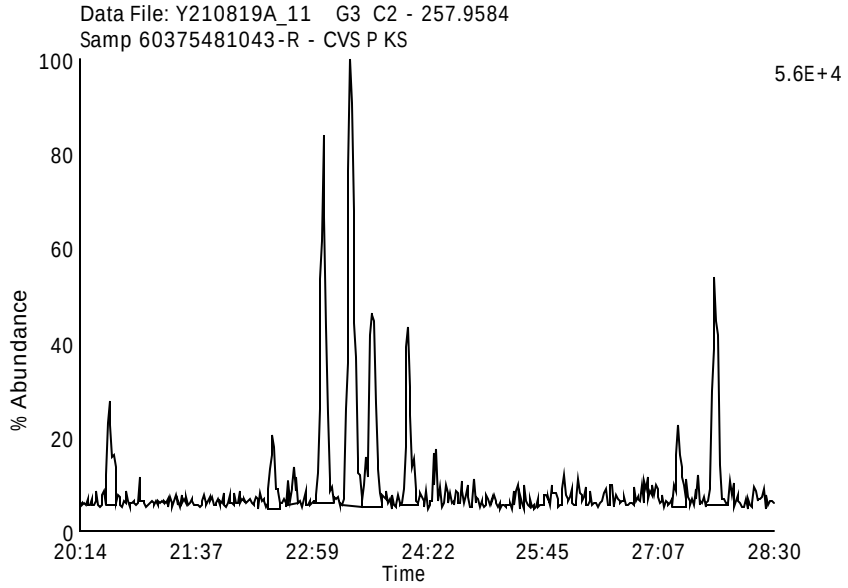
Tri Chlorinated Biphenyls

Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'



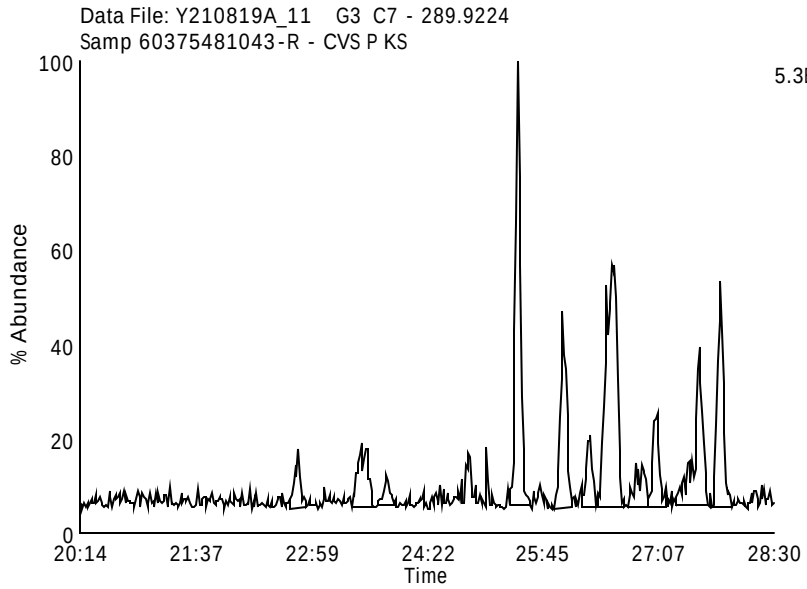


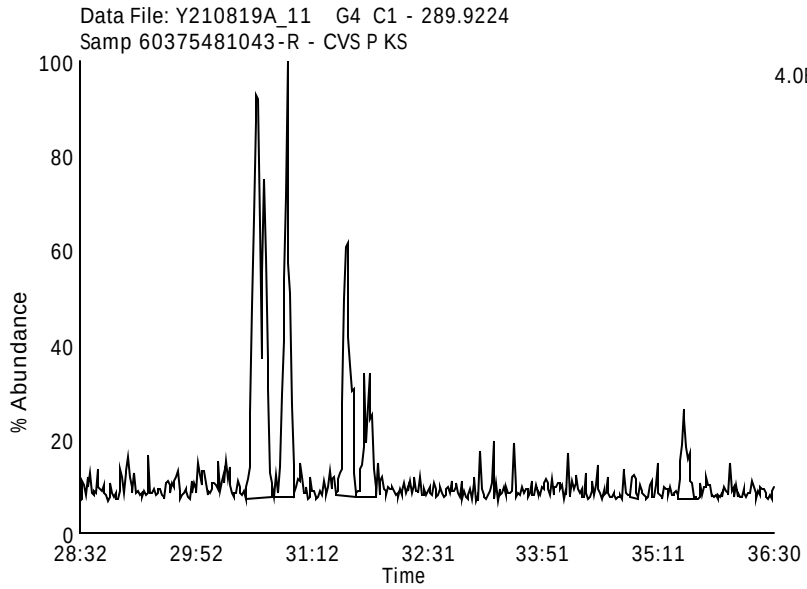


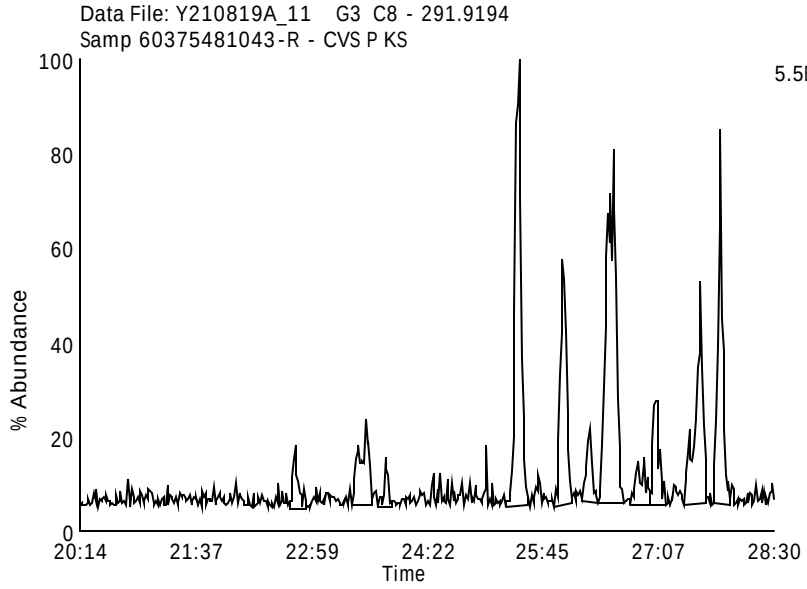


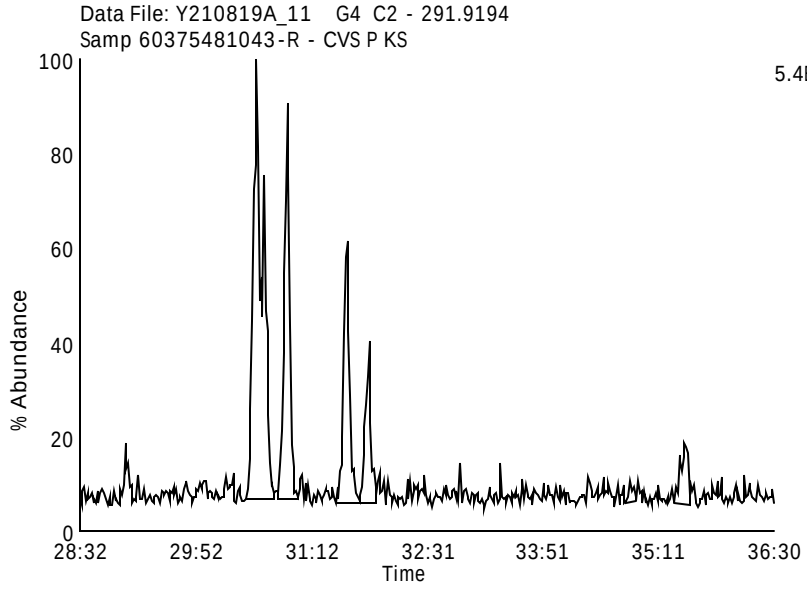
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'



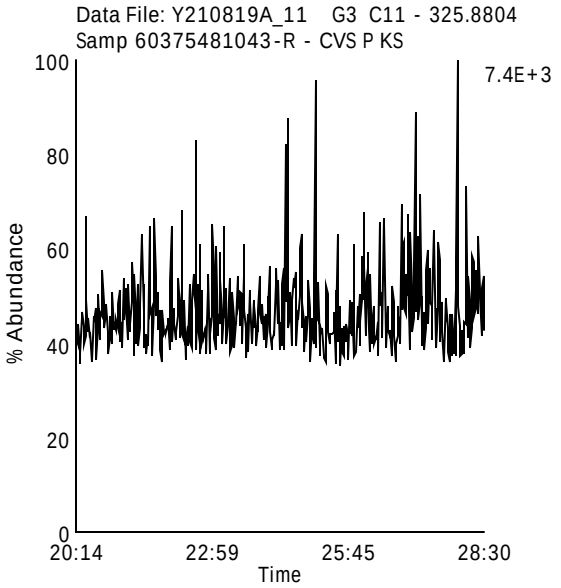


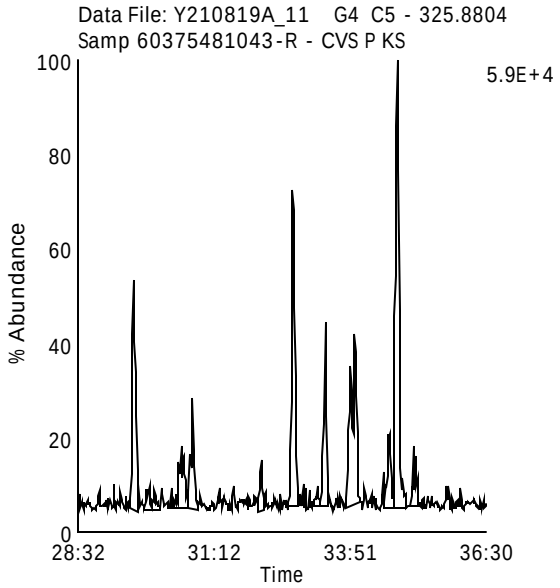


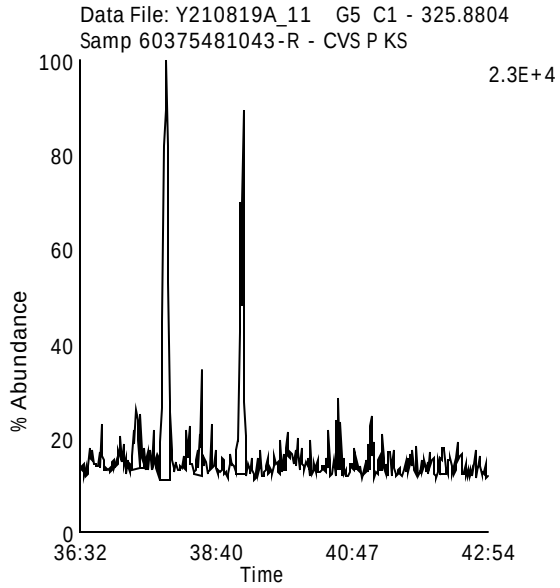


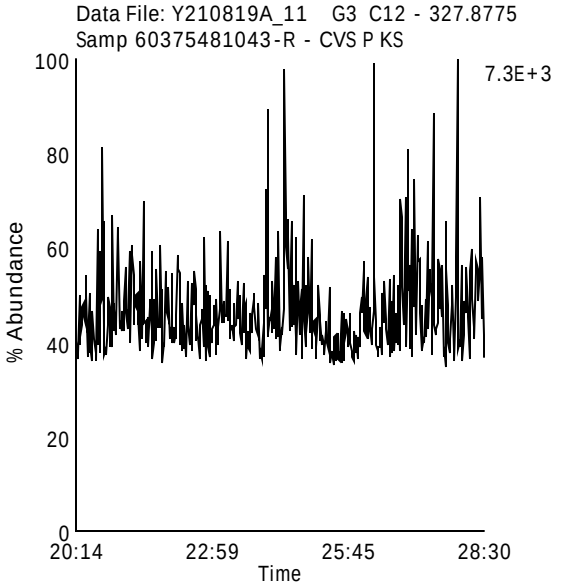
Penta Chlorinated Biphenyls

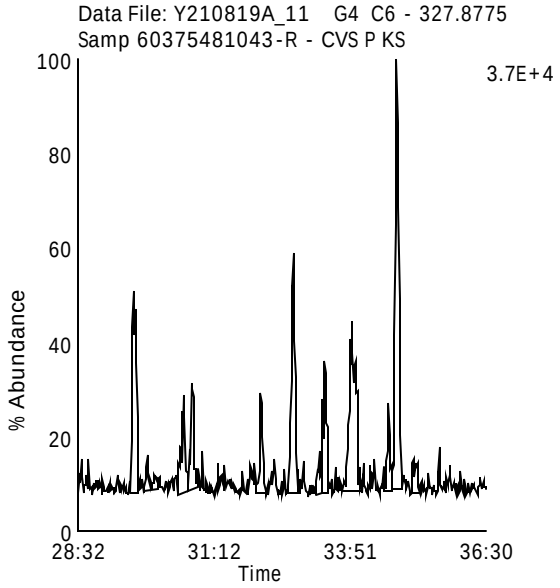
Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'

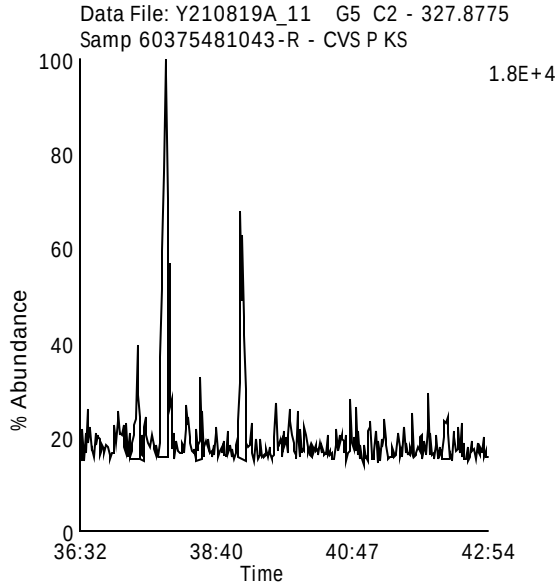






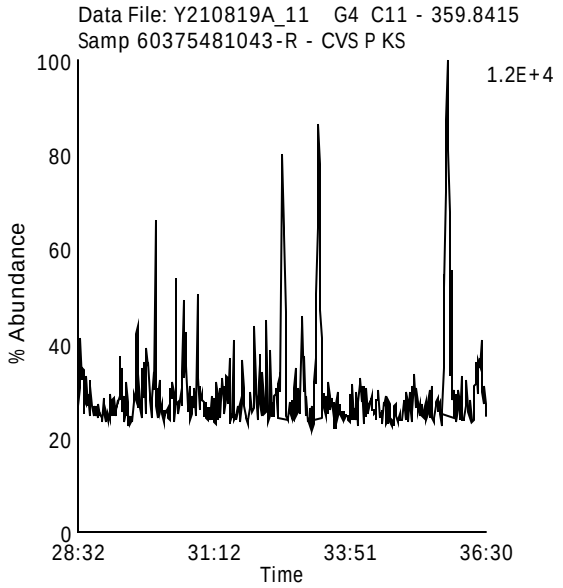


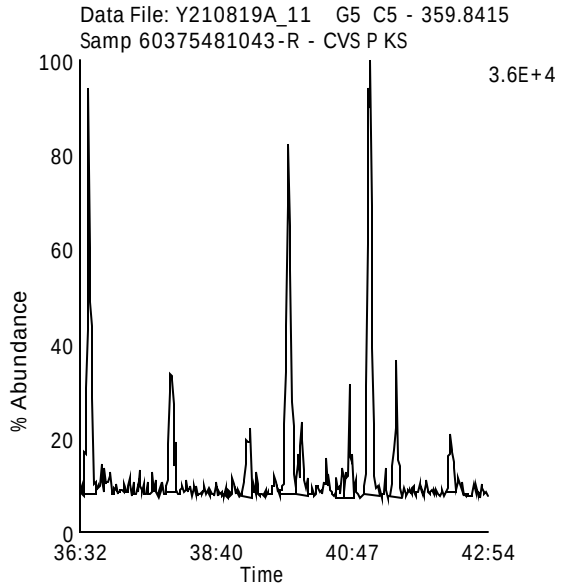


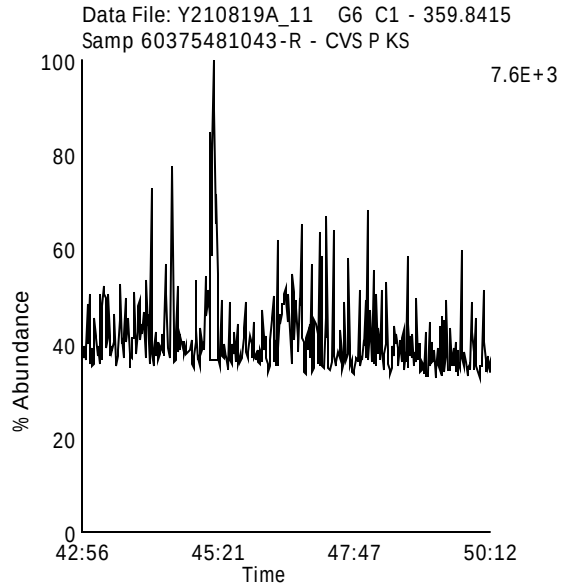


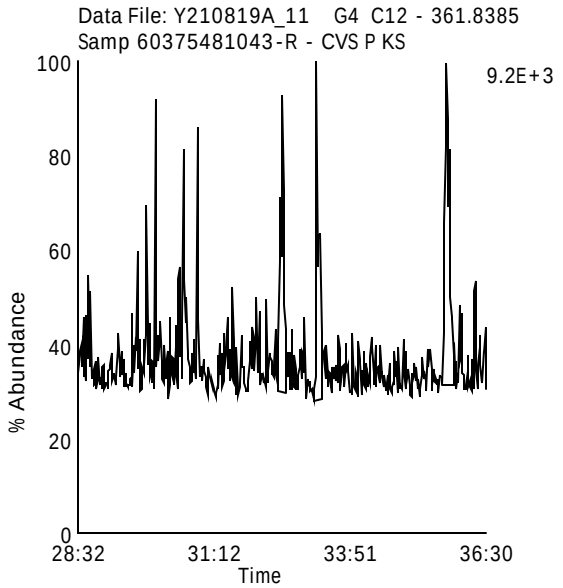
Hexa Chlorinated Biphenyls

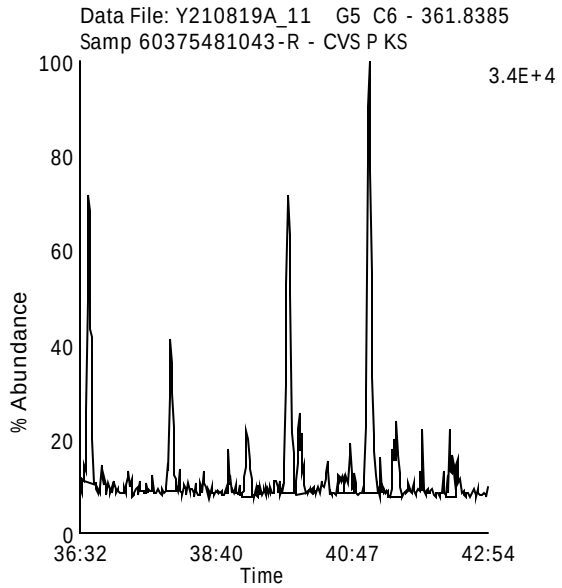
Data File Name: Y210819A_11 | Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS | Client Sample ID: GB-54/2-4'

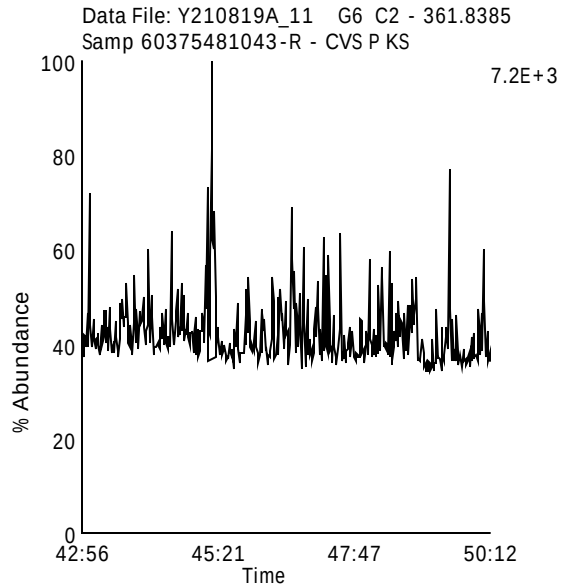






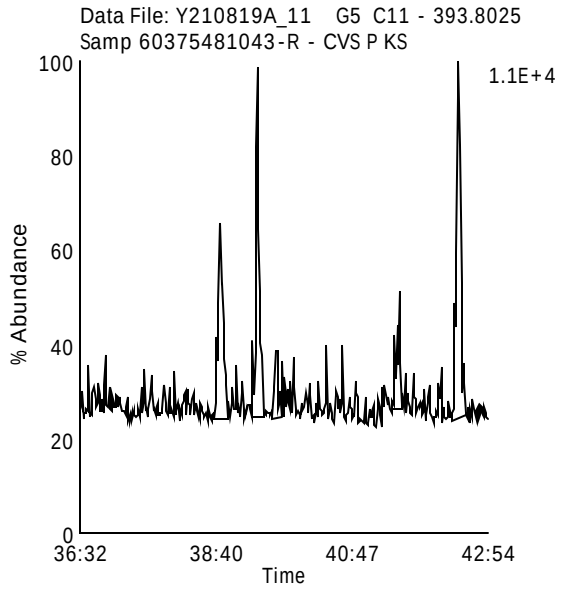


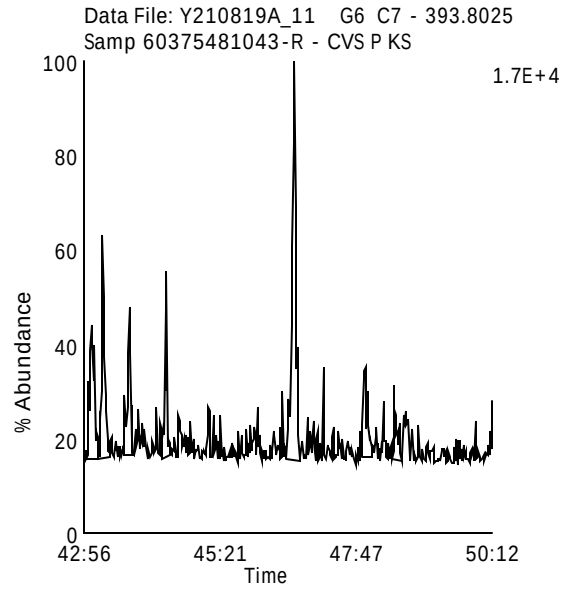


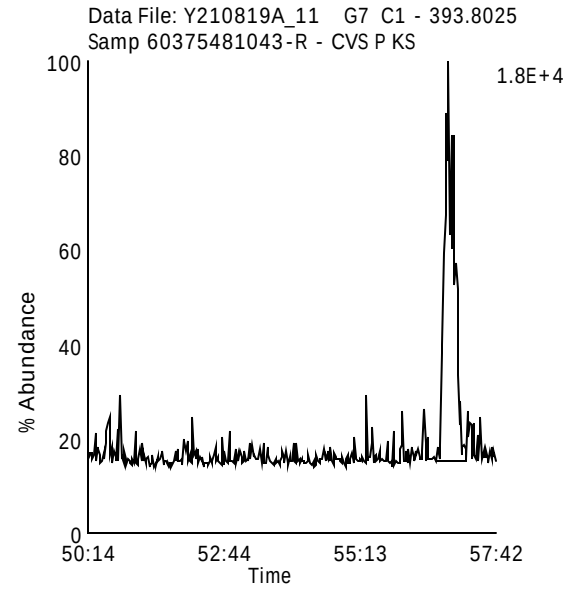


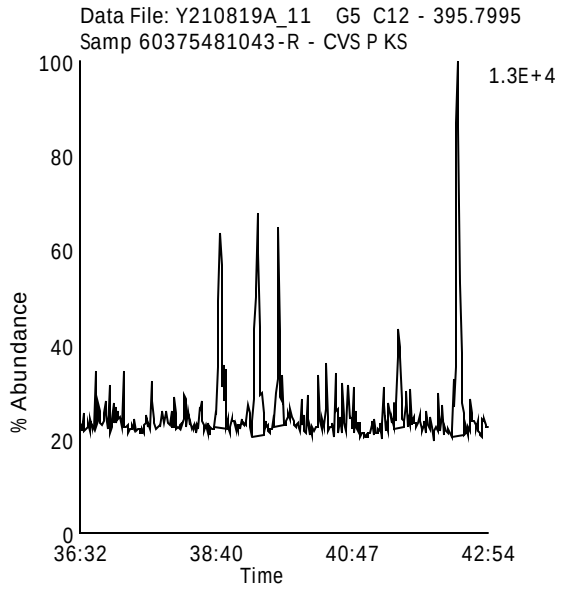
Hepta Chlorinated Biphenyls

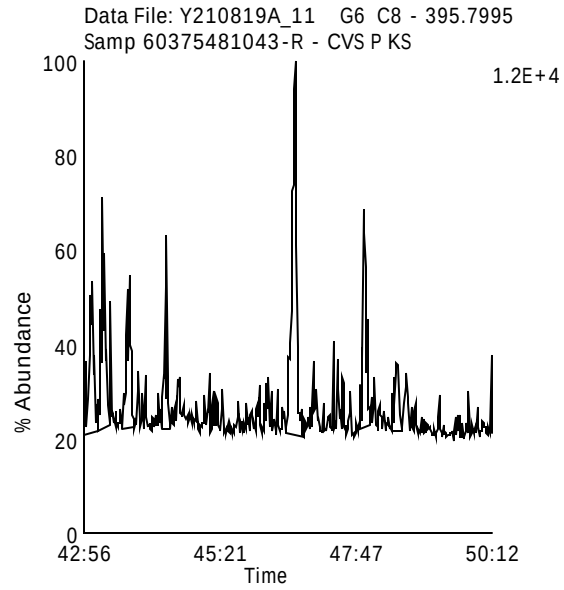
Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'

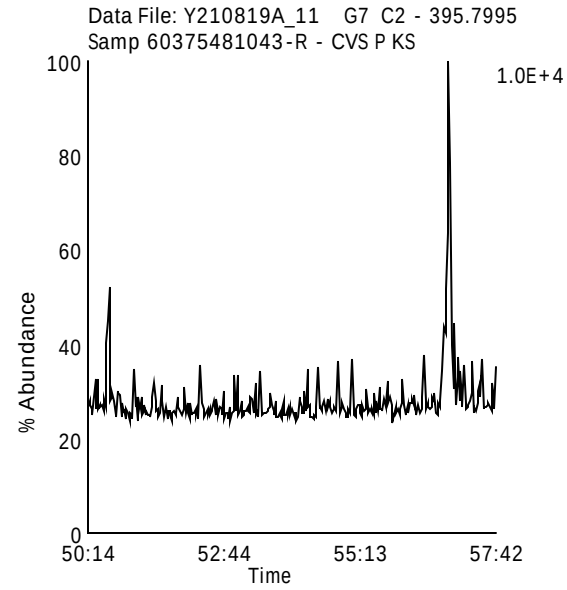






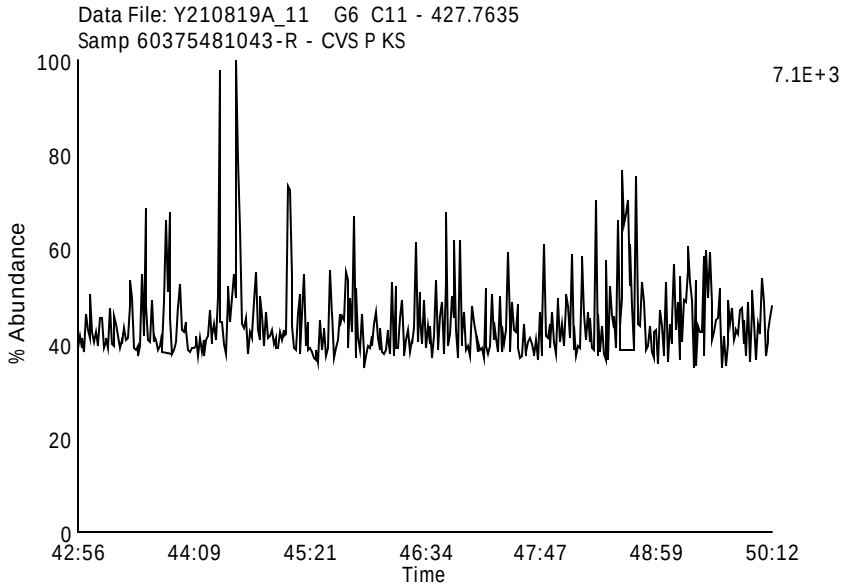


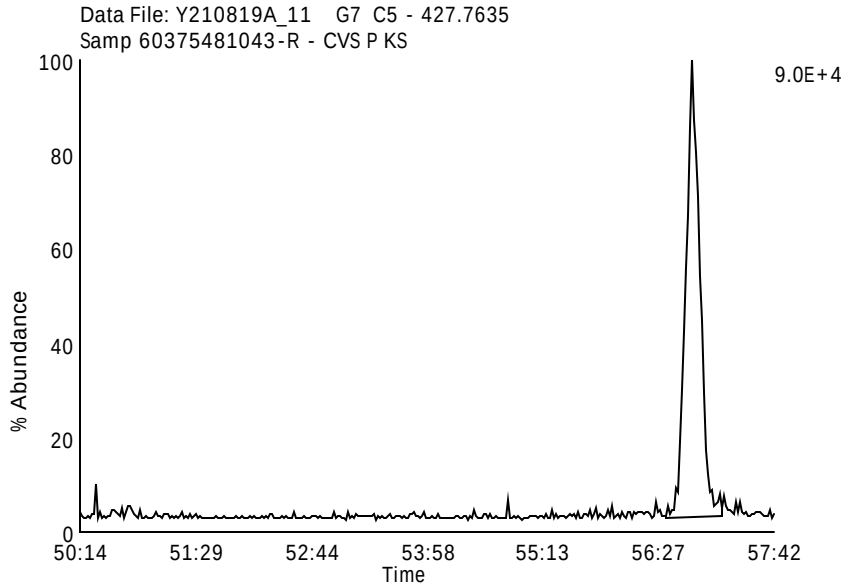


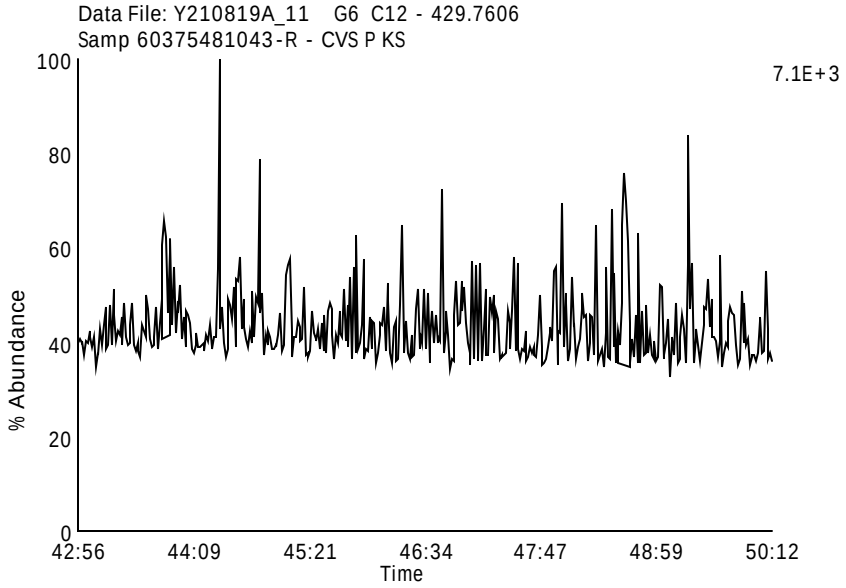


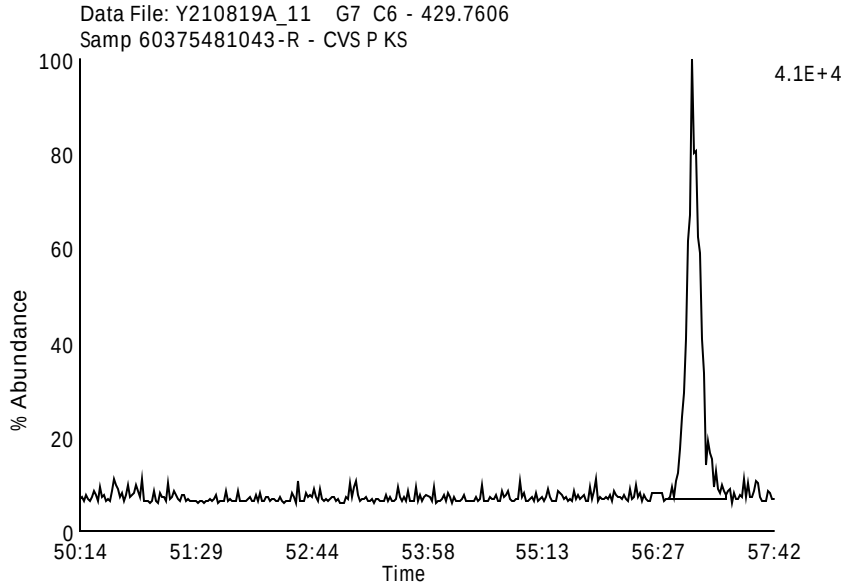
Octa Chlorinated Biphenyls

Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'



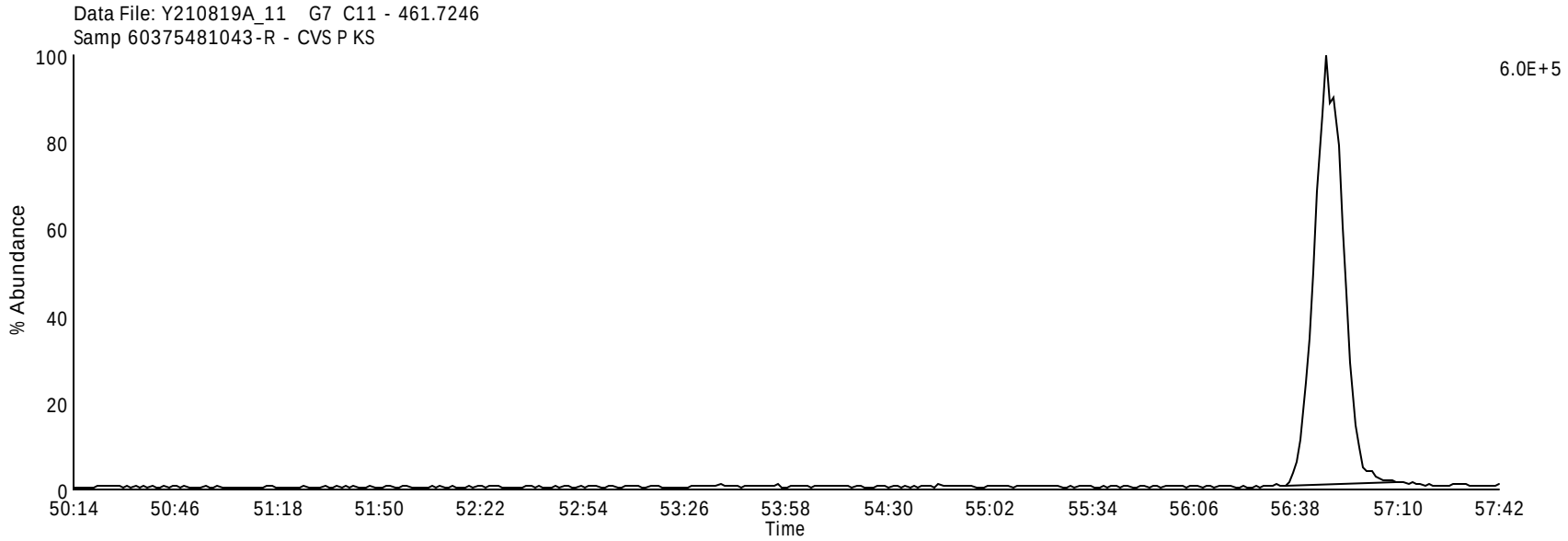


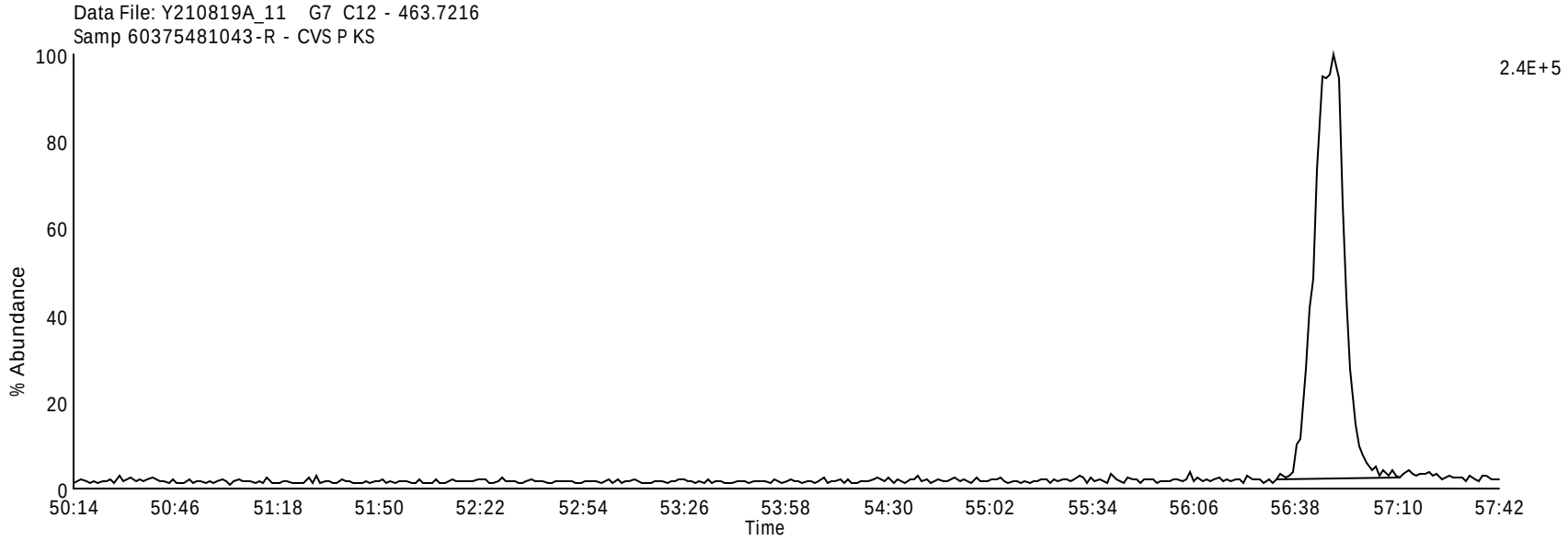




Nona Chlorinated Biphenyls

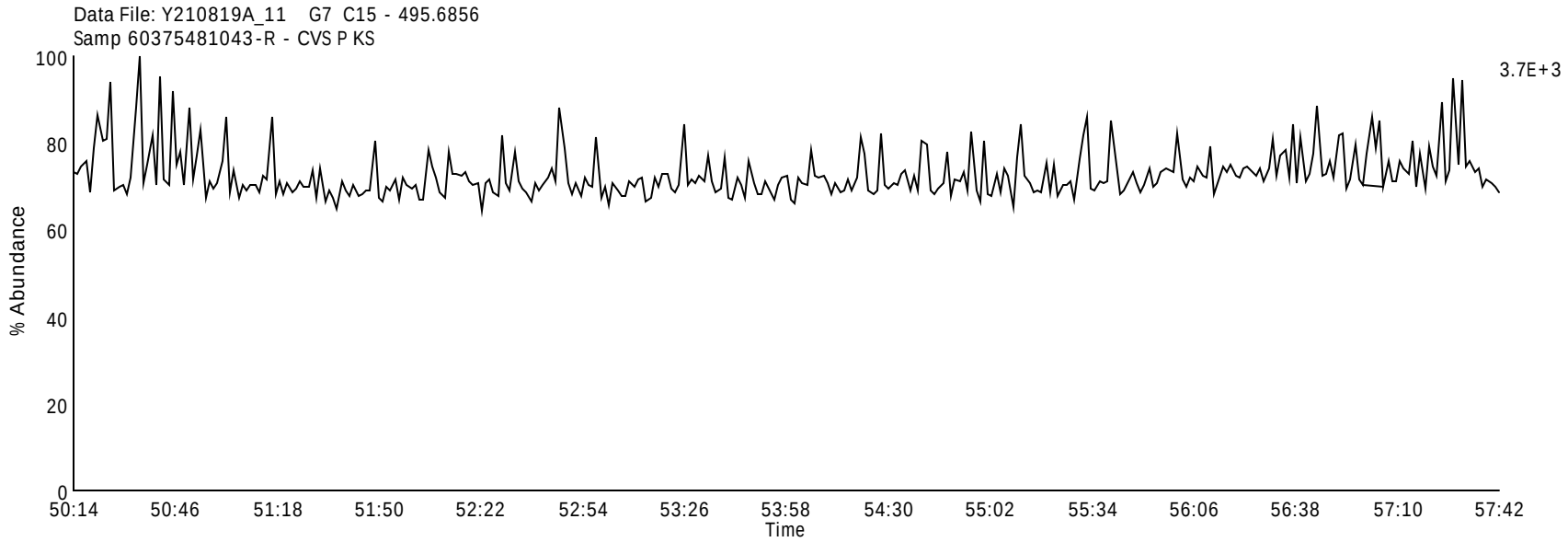
Data File Name: Y210819A_11	Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS	Client Sample ID: GB-54/2-4'

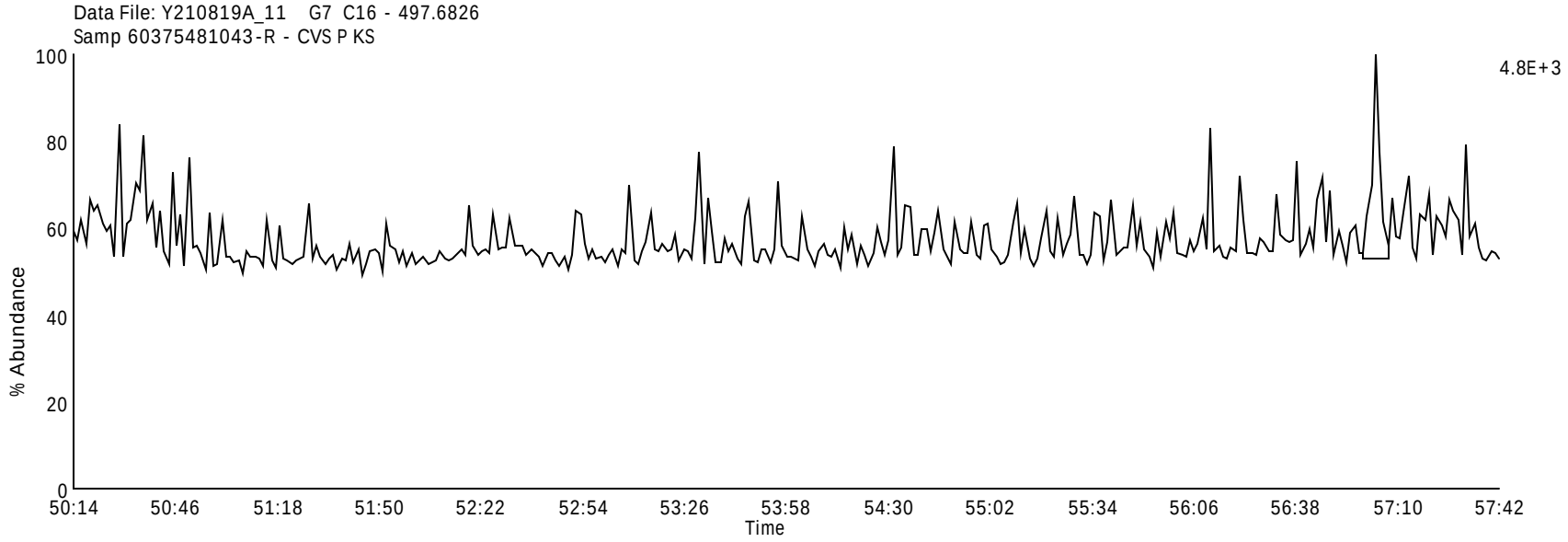




Deca Chlorinated Biphenyl

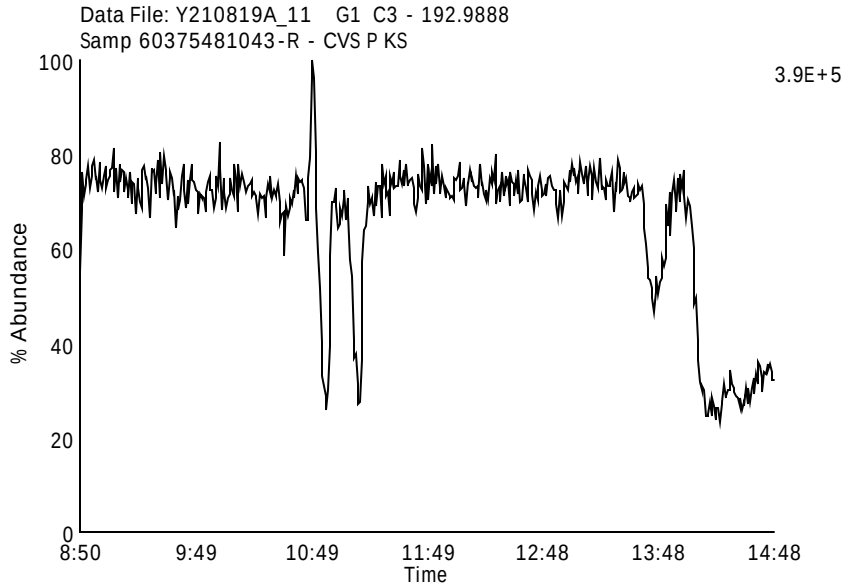
Data File Name: Y210819A_11	Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS	Client Sample ID: GB-54/2-4'

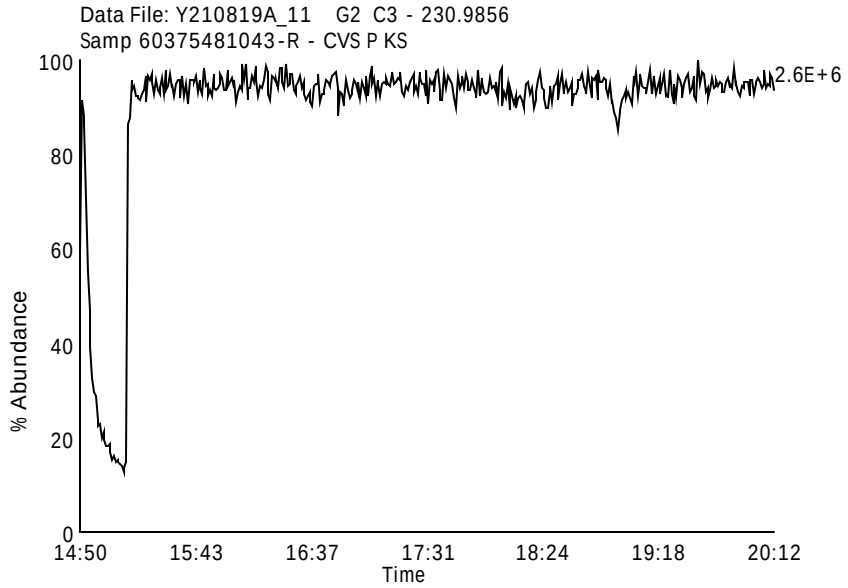


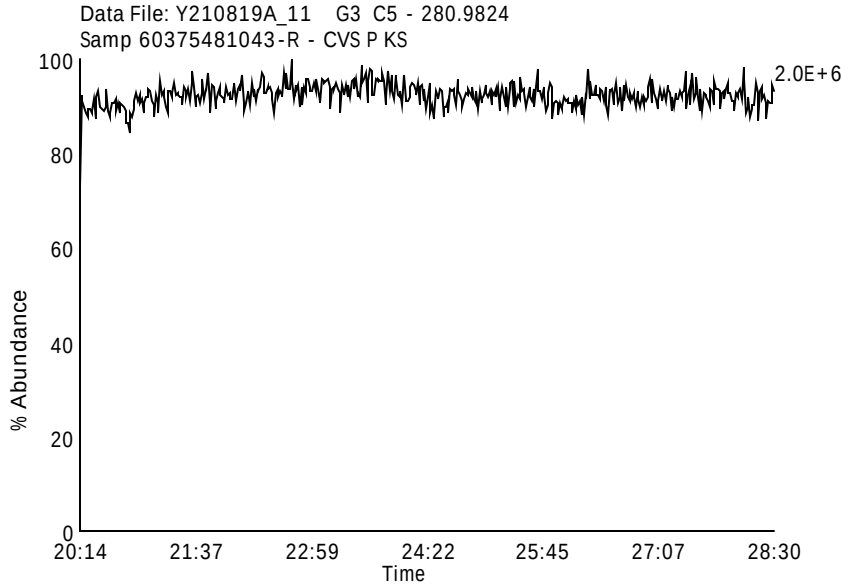


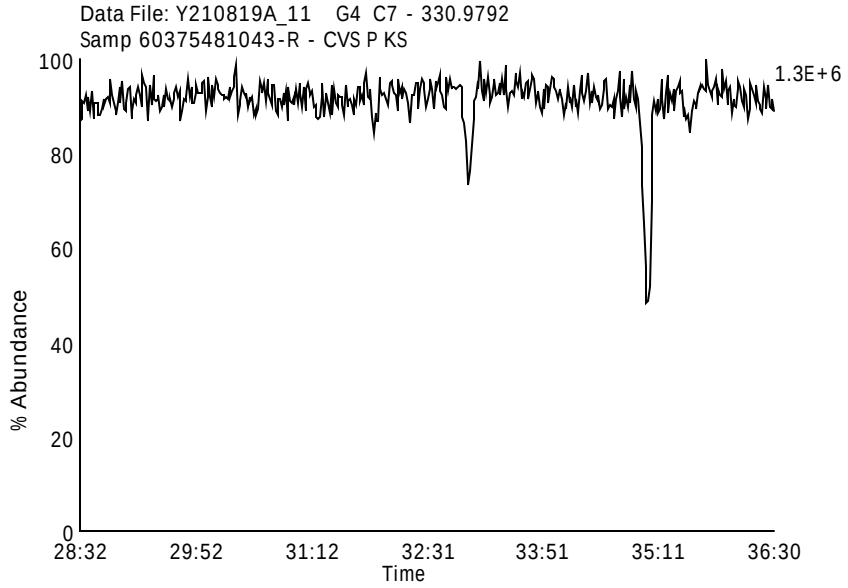
Group 1 - 4 Lock mass

Data File Name: Y210819A_11
Lab Sample ID: 60375481043-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375481043-R - CVS P KS
Client Sample ID: GB-54/2-4'





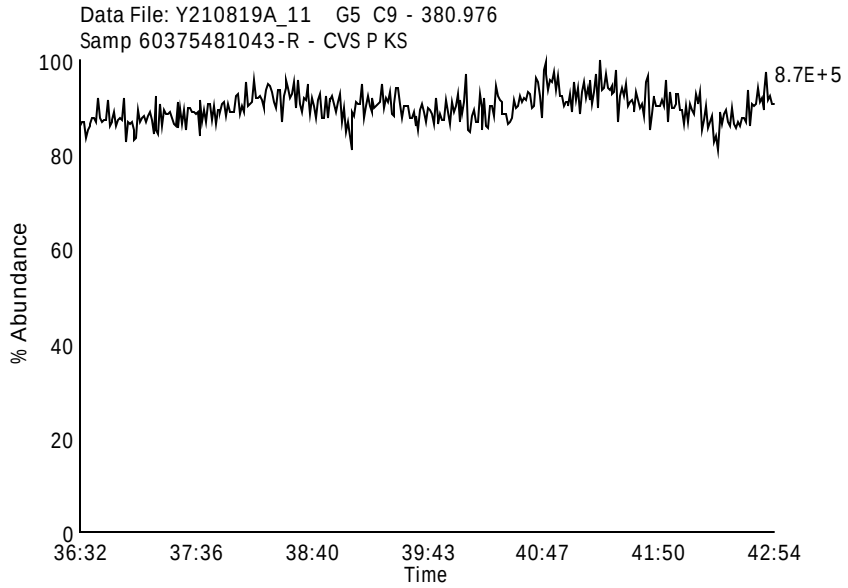


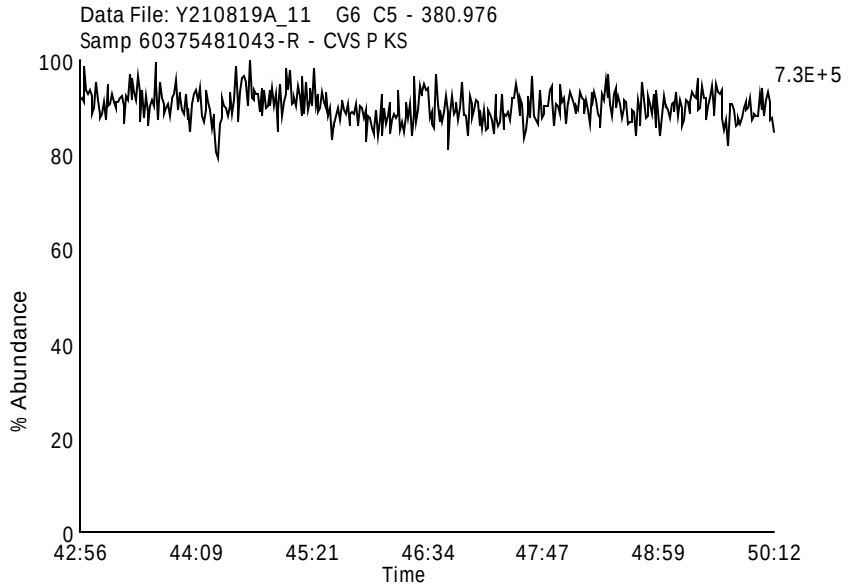


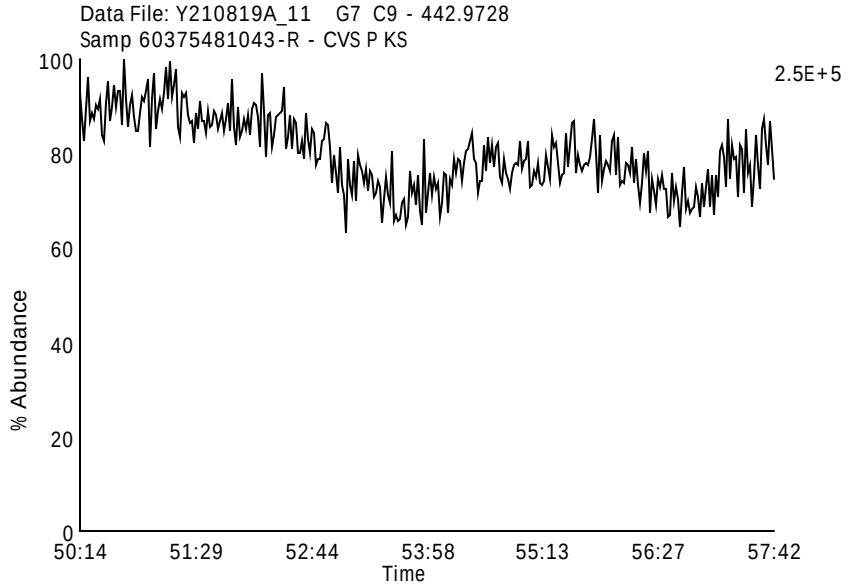
Group 5 - 7 Lock mass

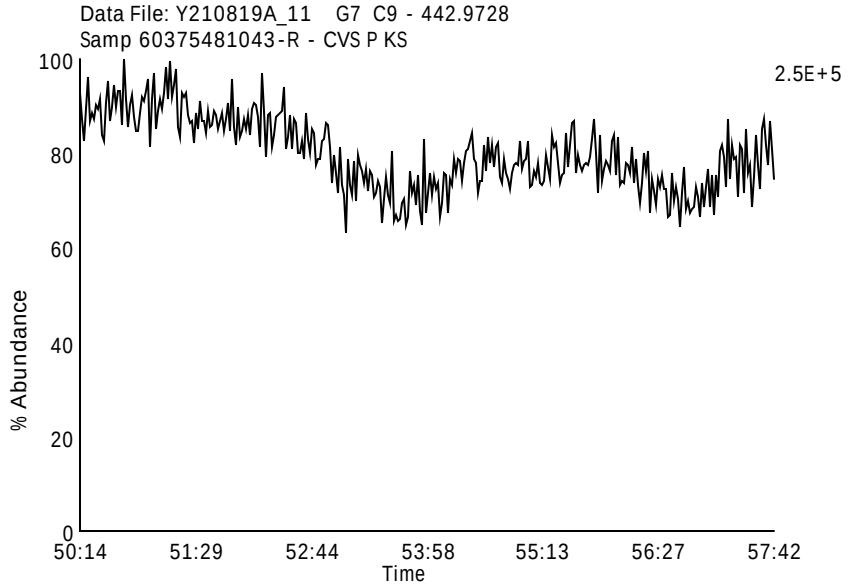
Data File Name: Y210819A_11
Date Acquired: 8/19/2021
Sample Description: Samp 60375481043-R - CVS P KS

Lab Sample ID: 60375481043-R
Instrument: 10MSHR12 (Y)
Client Sample ID: GB-54/2-4'









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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-71/0'-2'	Injected By	CVS
Lab ID	60375481005-R	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_08	GC Column ID	261111-02
Analyzed	08/19/2021 18:31	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.900	0.74	2561160	3441462	
13C-3,3',4,4'-TeCB	77	35.470	0.80	2689136	3347520	
13C-2,3,3',4,4'-PeCB	105	39.064	1.47	2875563	1956769	
13C-2,3,4,4',5-PeCB	114	38.410	1.53	3041271	1993035	
13C-2,3',4,4',5-PeCB	118	37.874	1.54	3157182	2047022	
13C-2,3',4,4',5'-PeCB	123	37.538	1.51	2947828	1948563	
13C-3,3',4,4',5-PeCB	126	42.217	1.53	2666089	1744435	
13C-HxCB(156/157)	156/157	45.274	1.18	4653121	3928017	
13C-2,3',4,4',5,5'-HxCB	167	44.117	1.23	2594008	2100423	
13C-3,3',4,4',5,5'-HxCB	169	48.544	1.24	2199811	1771054	
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.12	1989765	1780568	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.459	1.03	7879684	7686132	
13C-2,3,3',5,5'-PeCB	111	35.521	1.55	8009588	5153916	
13C-2,2',3,3',5,5',6-HpCB	178	41.513	1.11	5131628	4634379	
Recovery Standards						
13C-2,5-DiCB	9	15.481	1.57	8538389	5443156	
13C-2,2',5,5'-TeCB	52	25.455	0.81	4474401	5494885	
13C-2,2',4,5,5'-PeCB	101	32.737	1.62	5313392	3285569	
13C-2,2',3,4,4',5'-HxCB	138	41.043	1.23	4483502	3632391	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.200	0.90	2324654	2569731	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-71/0'-2'	Injected By	CVS
Lab ID	60375481005-R	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_08	GC Column ID	261111-02
Analyzed	08/19/2021 18:31	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.487	0.66	50974	76790	
81		34.917	0.67	9263	13846	
105		39.064	1.46	187868	128670	
114		38.410	1.82	16012	8789	
118		37.890	1.54	389007	252528	
123		37.555	1.42	21113	14902	
126		42.234	1.78	13458	7559	
156	156/157	45.290	1.20	100173	83327	
157	156/157	45.290	1.20	(100173)	(83327)	
167		44.133	1.15	43639	37806	
169		48.544	1.69	8591	5092	
189		51.109	1.03	16589	16075	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-64/3'-4'	Injected By	CVS
Lab ID	60375481009-R	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_10	GC Column ID	261111-02
Analyzed	08/19/2021 20:31	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.868	0.77	2708537	3509128	
13C-3,3',4,4'-TeCB	77	35.454	0.79	2905540	3664651	
13C-2,3,3',4,4'-PeCB	105	39.032	1.57	3184913	2034588	
13C-2,3,4,4',5-PeCB	114	38.394	1.50	3228548	2157822	
13C-2,3',4,4',5-PeCB	118	37.841	1.52	3365935	2212519	
13C-2,3',4,4',5'-PeCB	123	37.505	1.58	3261420	2063369	
13C-3,3',4,4',5-PeCB	126	42.184	1.49	2918541	1964951	
13C-HxCB(156/157)	156/157	45.258	1.19	5260417	4419175	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.26	2817469	2228038	
13C-3,3',4,4',5,5'-HxCB	169	48.528	1.24	2383655	1919332	
13C-2,3,3',4,4',5,5'-HpCB	189	51.068	1.05	2165259	2064656	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.04	8362020	8029514	
13C-2,3,3',5,5'-PeCB	111	35.505	1.58	9085243	5755248	
13C-2,2',3,3',5,5',6-HpCB	178	41.480	1.10	5871391	5332196	
Recovery Standards						
13C-2,5-DiCB	9	15.469	1.57	8791208	5595038	
13C-2,2',5,5'-TeCB	52	25.422	0.81	4607997	5706327	
13C-2,2',4,5,5'-PeCB	101	32.704	1.56	5377143	3449504	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.27	4753668	3733723	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.90	2474641	2750406	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-64/3'-4'	Injected By	CVS
Lab ID	60375481009-R	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_10	GC Column ID	261111-02
Analyzed	08/19/2021 20:31	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.438	0.68	25950	38427	
81		34.884	0.84	9714	11591	
105		39.065	1.76	55432	31531	
114		38.394	1.54	11294	7314	
118		37.874	1.62	112633	69712	
123		37.539	1.38	8056	5839	
156	156/157	45.241	0.93	14223	15233	
157	156/157	45.241	0.93	(14223)	(15233)	
167		44.101	1.24	12647	10205	
189		51.089	0.79	7419	9399	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-54/2-4'	Injected By	CVS
Lab ID	60375481043-R	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_11	GC Column ID	261111-02
Analyzed	08/19/2021 21:30	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.83	2809038	3379572	
13C-3,3',4,4'-TeCB	77	35.471	0.79	2953217	3752933	
13C-2,3,3',4,4'-PeCB	105	39.048	1.54	3237424	2102490	
13C-2,3,4,4',5-PeCB	114	38.394	1.56	3277084	2103032	
13C-2,3',4,4',5-PeCB	118	37.857	1.54	3310029	2147574	
13C-2,3',4,4',5'-PeCB	123	37.522	1.54	3145502	2046521	
13C-3,3',4,4',5-PeCB	126	42.201	1.54	2963142	1928400	
13C-HxCB(156/157)	156/157	45.258	1.23	5256310	4288048	
13C-2,3',4,4',5,5'-HxCB	167	44.101	1.24	2734443	2209310	
13C-3,3',4,4',5,5'-HxCB	169	48.528	1.19	2367524	1984216	
13C-2,3,3',4,4',5,5'-HpCB	189	51.067	1.04	2217222	2139332	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.01	8174814	8078185	
13C-2,3,3',5,5'-PeCB	111	35.521	1.57	9061554	5779363	
13C-2,2',3,3',5,5',6-HpCB	178	41.480	1.11	5843150	5260829	
Recovery Standards						
13C-2,5-DiCB	9	15.541	1.54	8073997	5236890	
13C-2,2',5,5'-TeCB	52	25.438	0.81	4341196	5328909	
13C-2,2',4,5,5'-PeCB	101	32.721	1.59	5172118	3253969	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.27	4762492	3760152	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.91	2224634	2451505	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-54/2-4'	Injected By	CVS
Lab ID	60375481043-R	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_11	GC Column ID	261111-02
Analyzed	08/19/2021 21:30	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.471	0.88	39056	44488	
81		34.901	0.70	6378	9124	
105		39.065	1.60	68792	42932	
114		38.411	1.41	8753	6229	
118		37.891	1.36	98000	72258	
123		37.489	1.58	4053	2567	
126		42.201	0.77	4935	6377	
156	156/157	45.292	1.60	26894	16850	
157	156/157	45.292	1.60	(26894)	(16850)	

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Appendix E

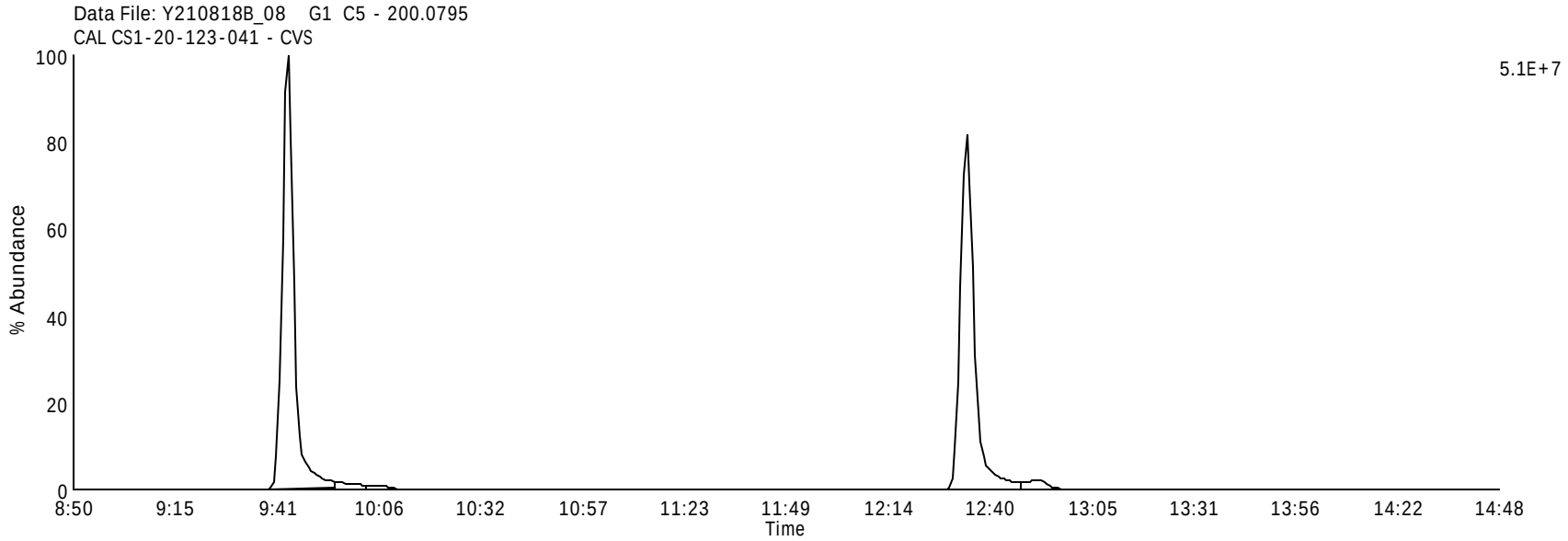
Calibration Raw Data

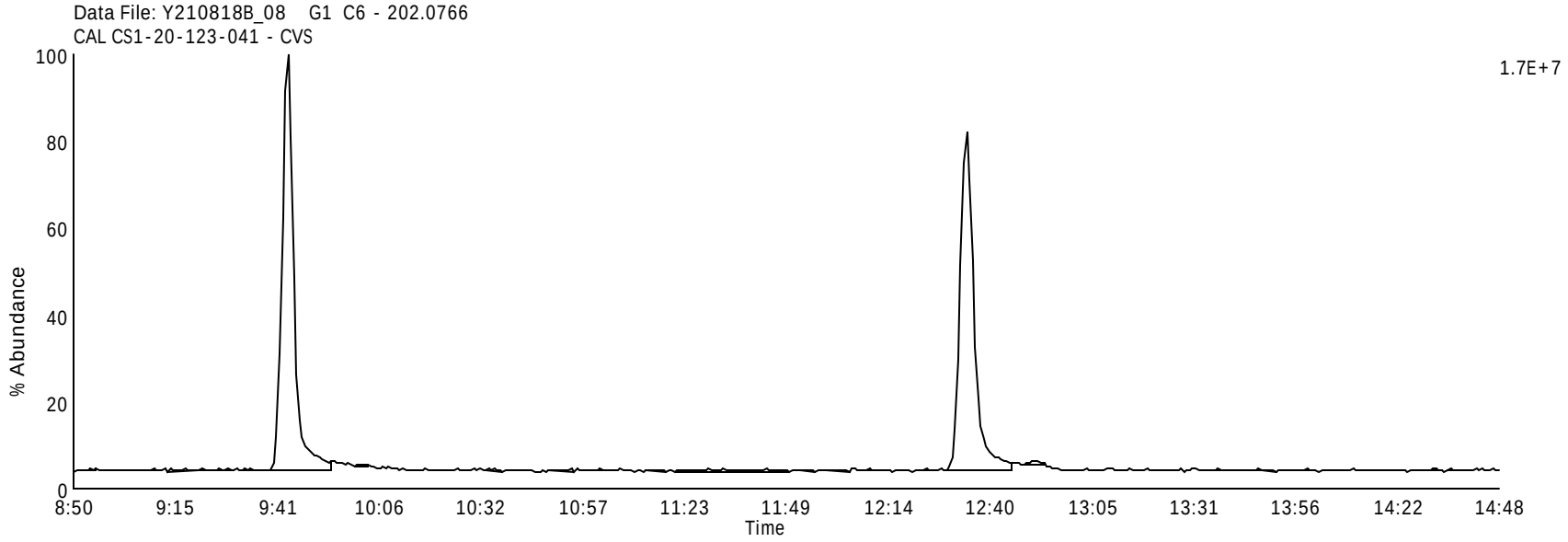
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

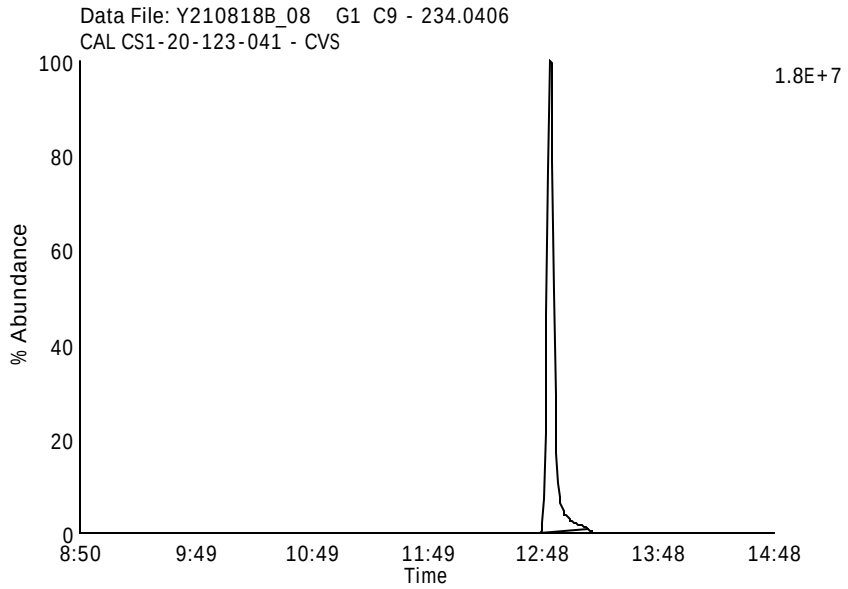
Sample Description: CAL CS1-20-123-041 - CVS

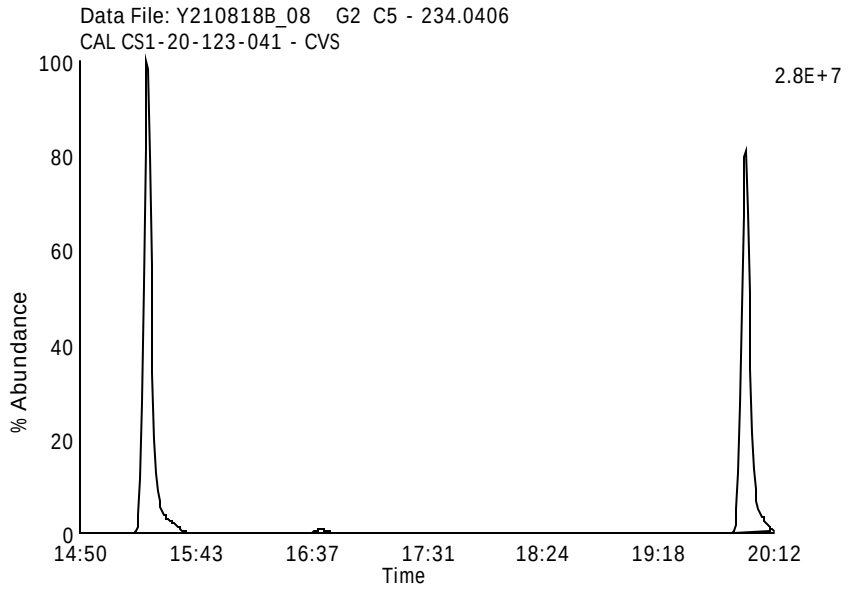


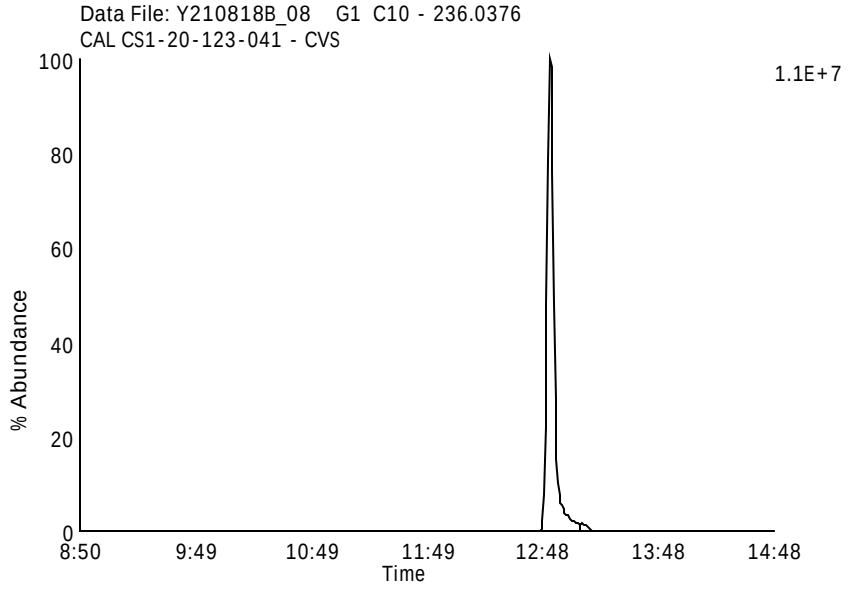


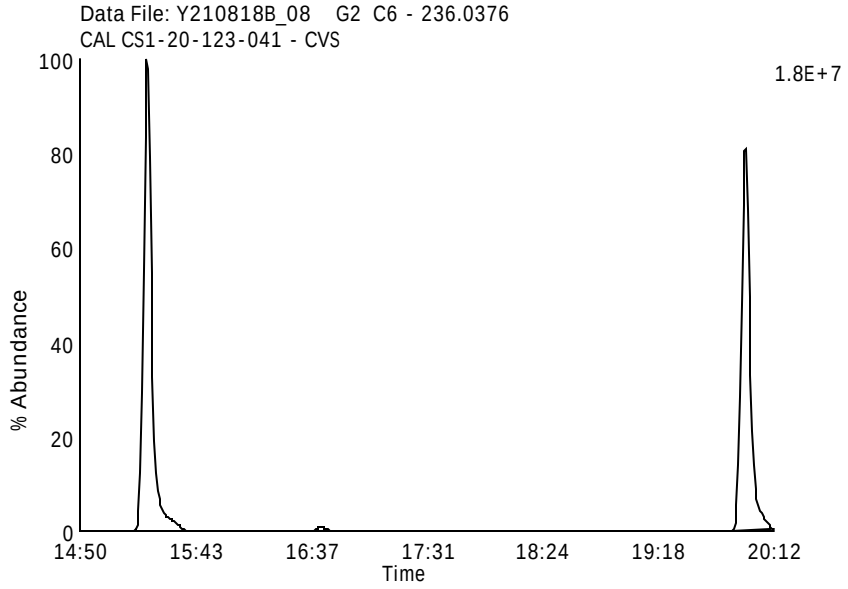
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



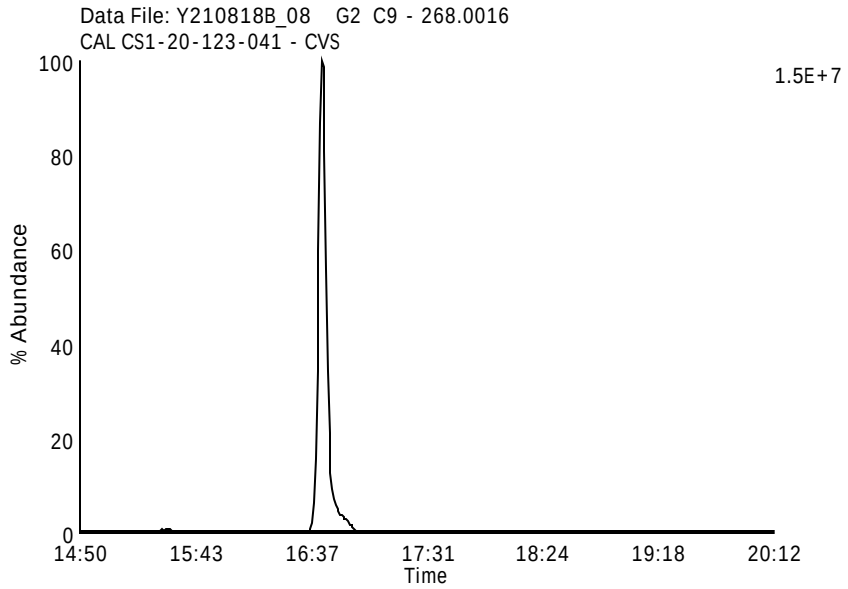


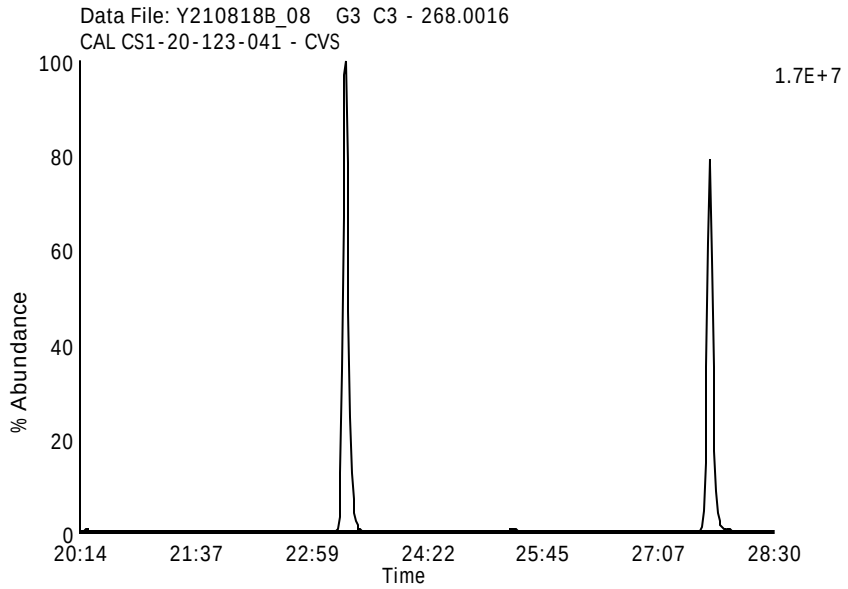


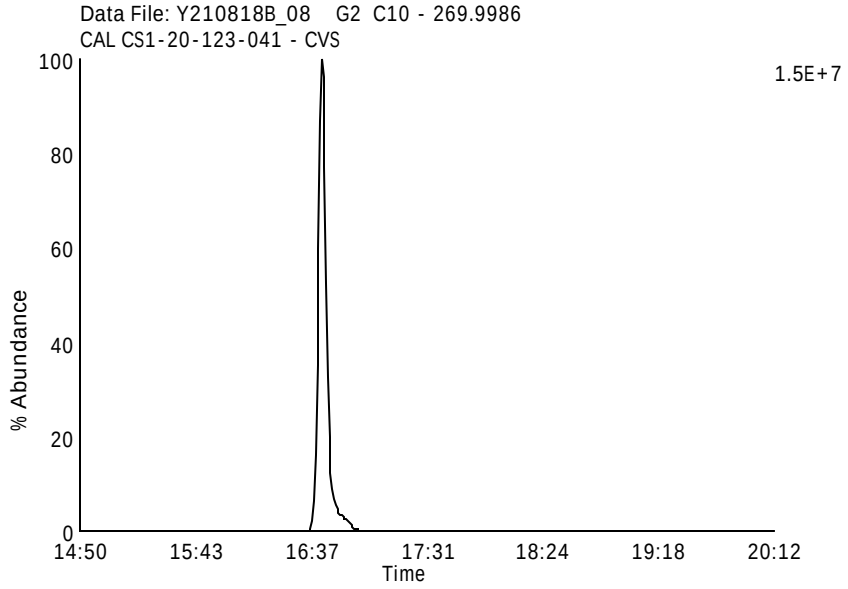


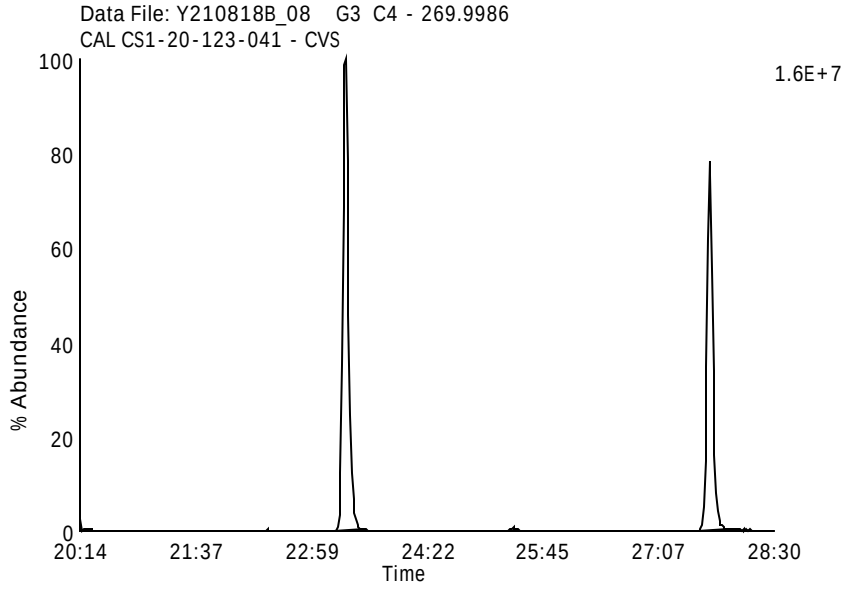
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



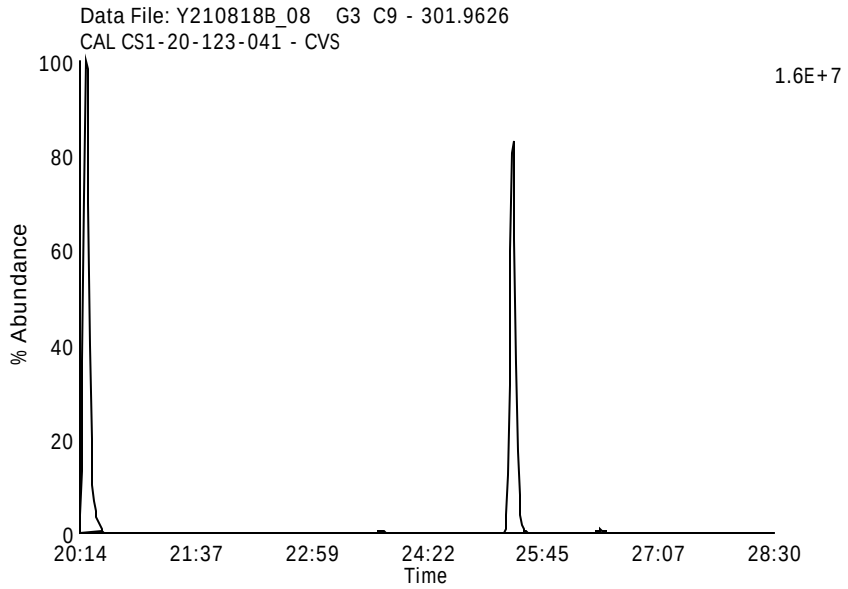


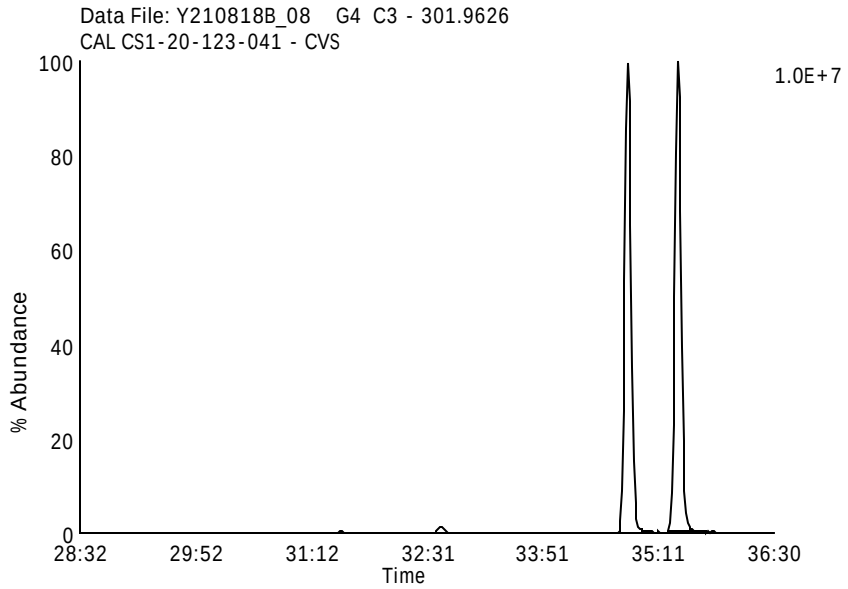


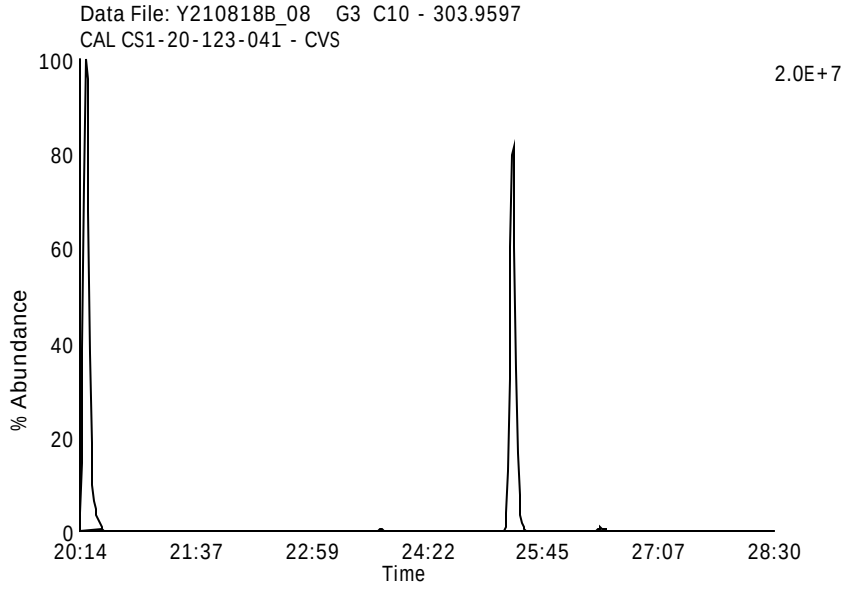


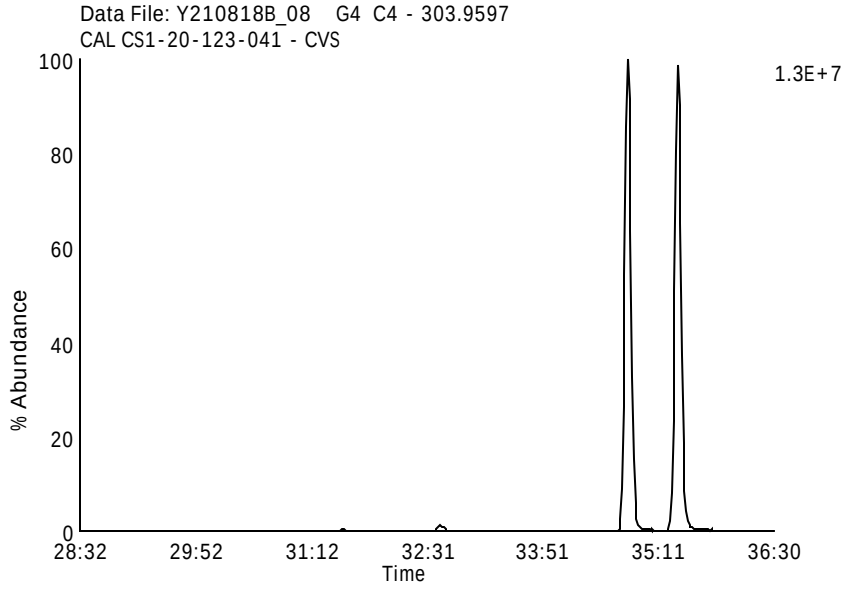
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







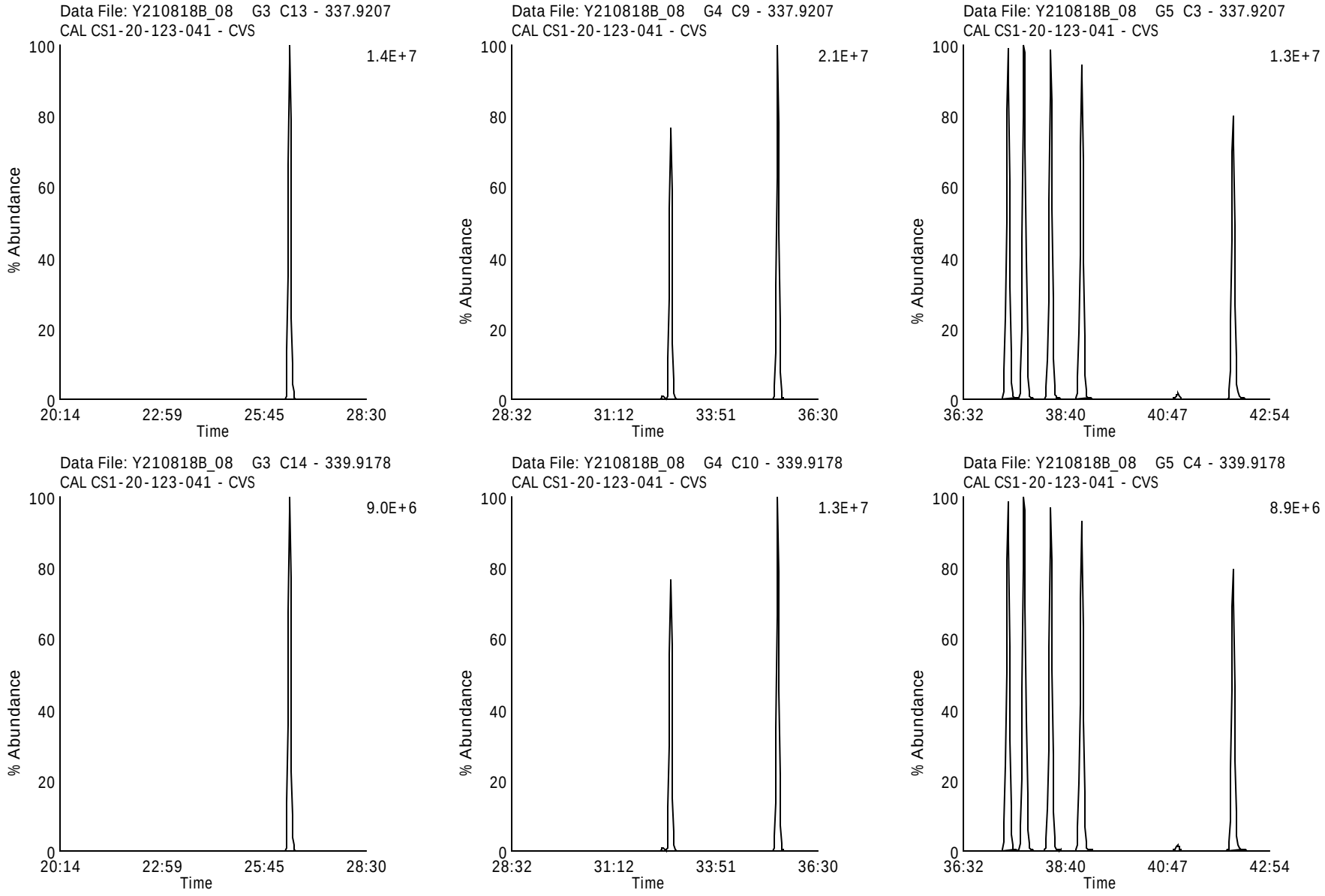


Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

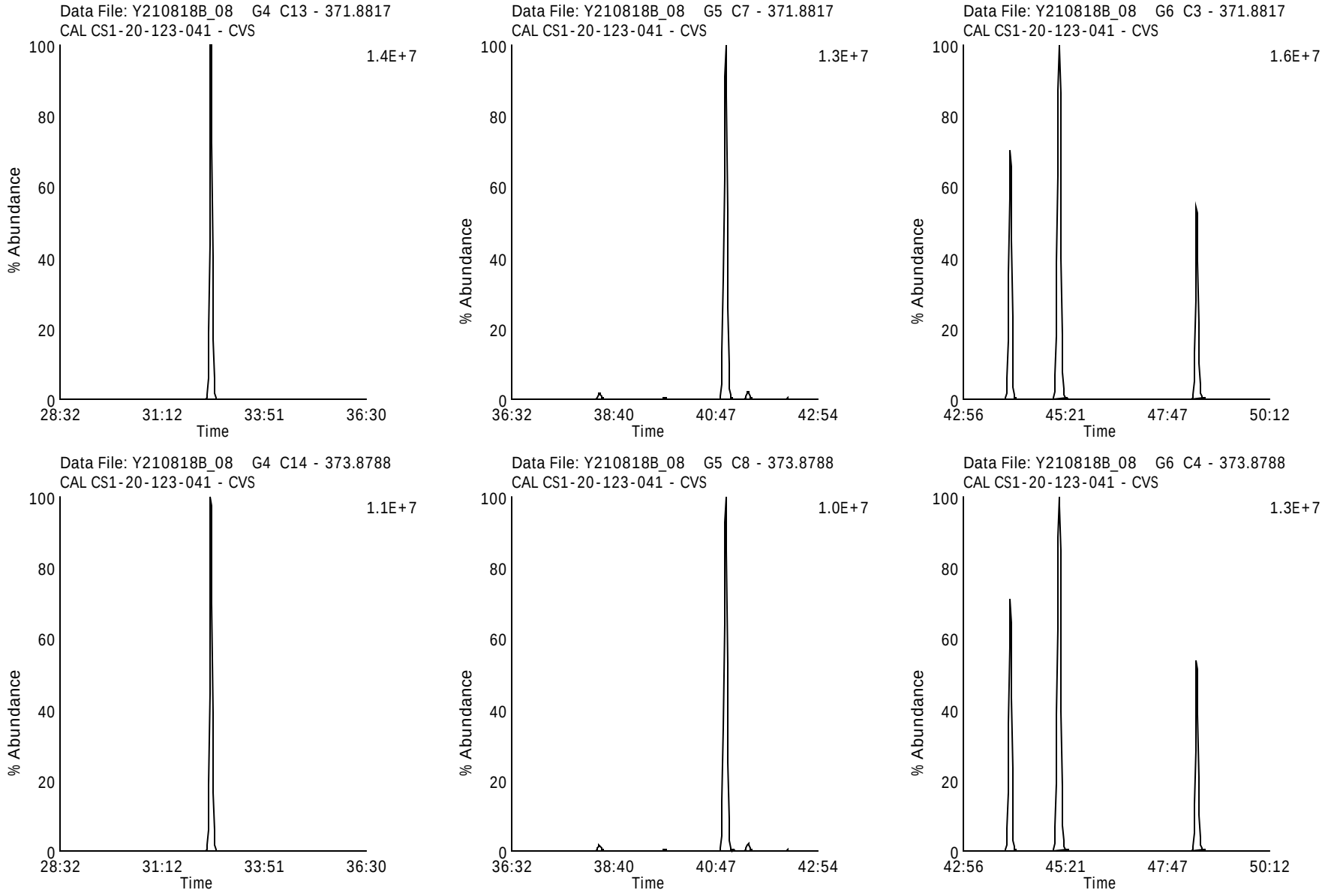


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

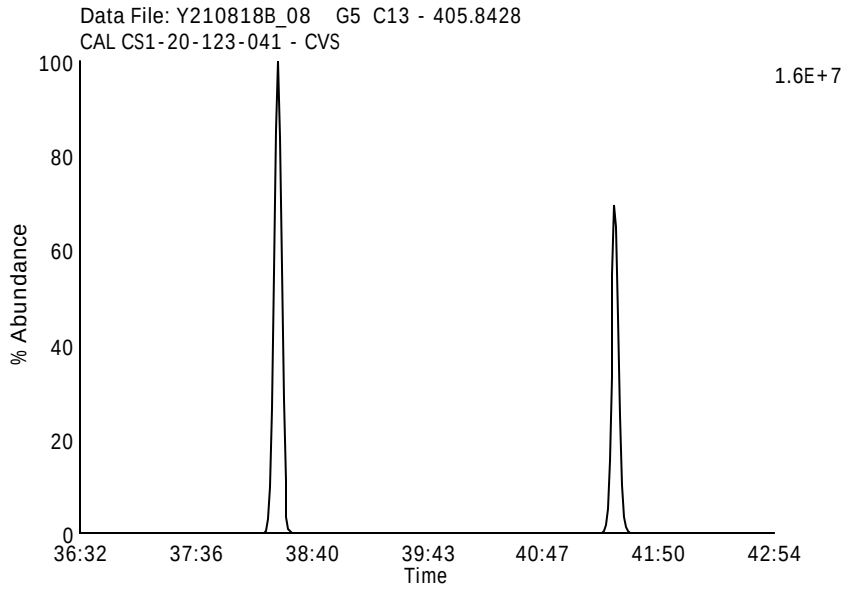
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

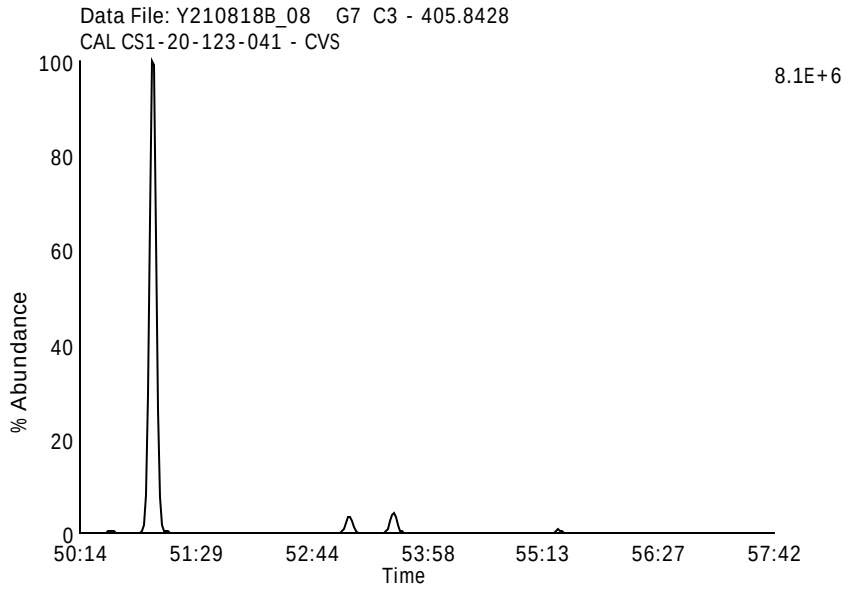
Sample Description: CAL CS1-20-123-041 - CVS

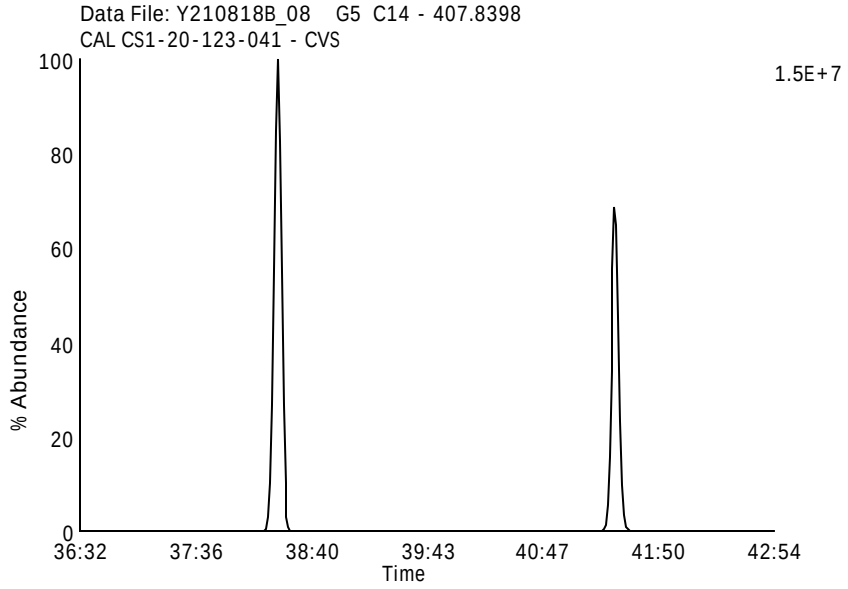


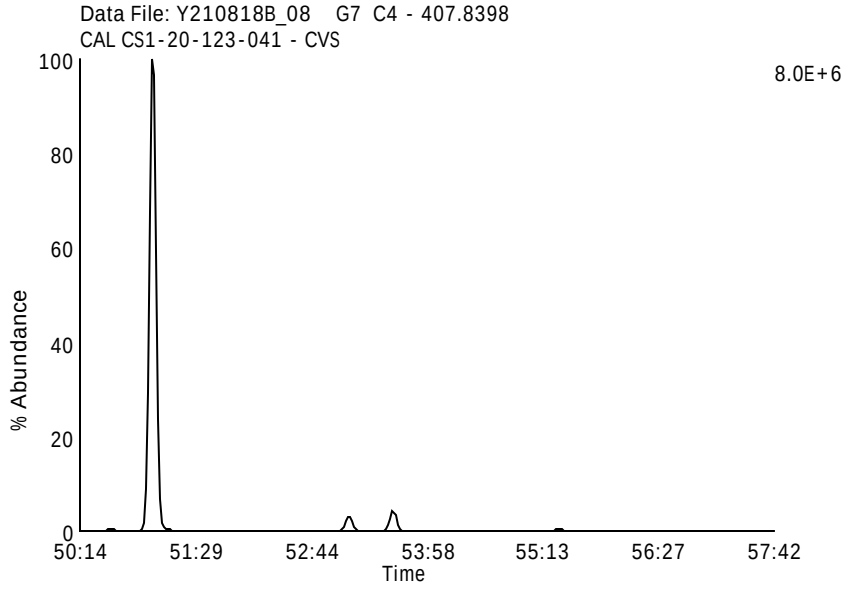
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



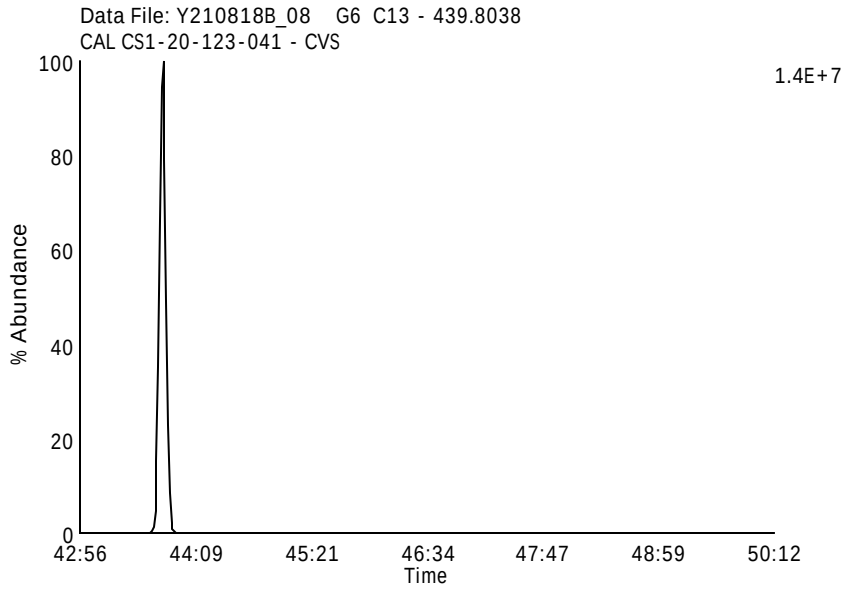


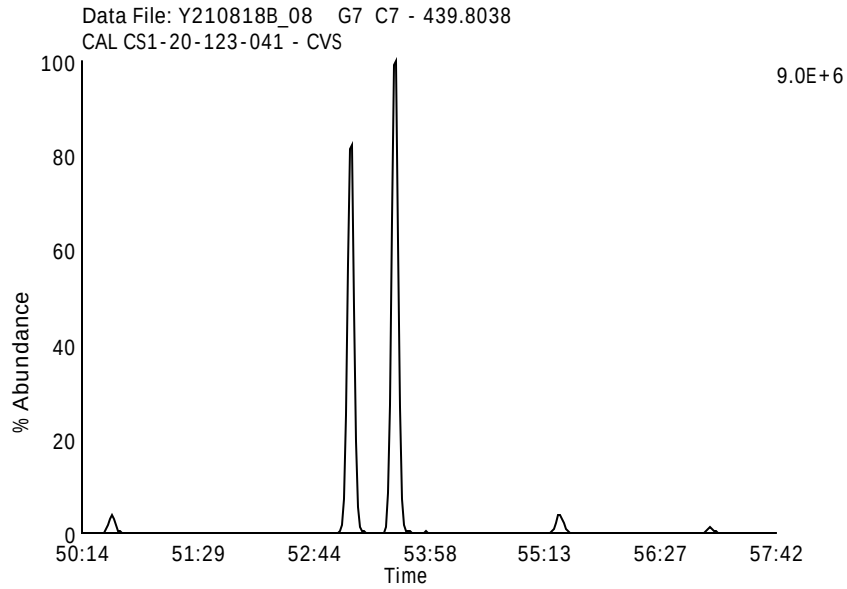


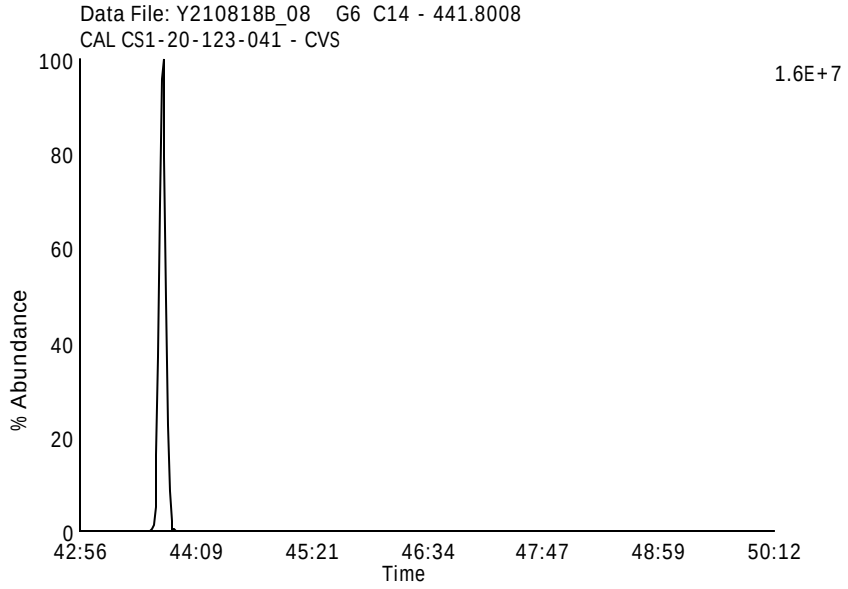


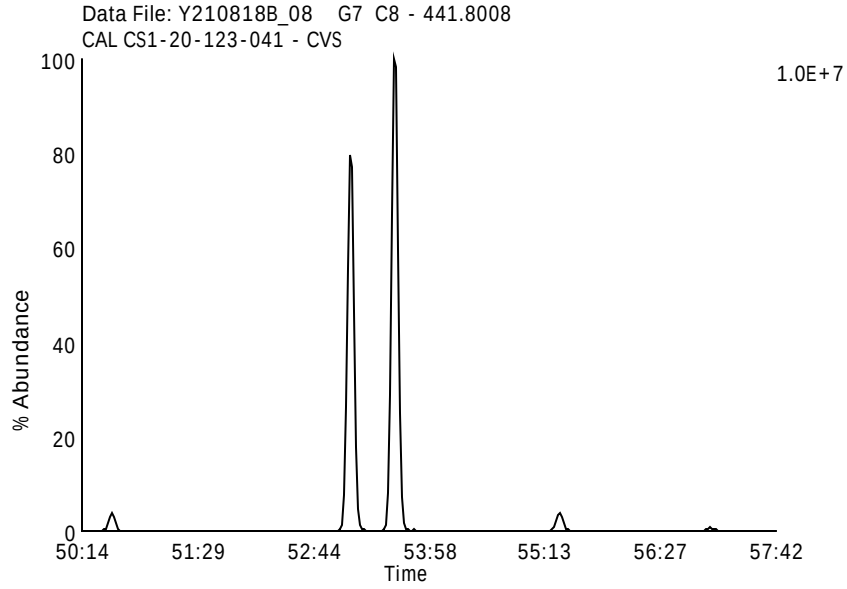
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







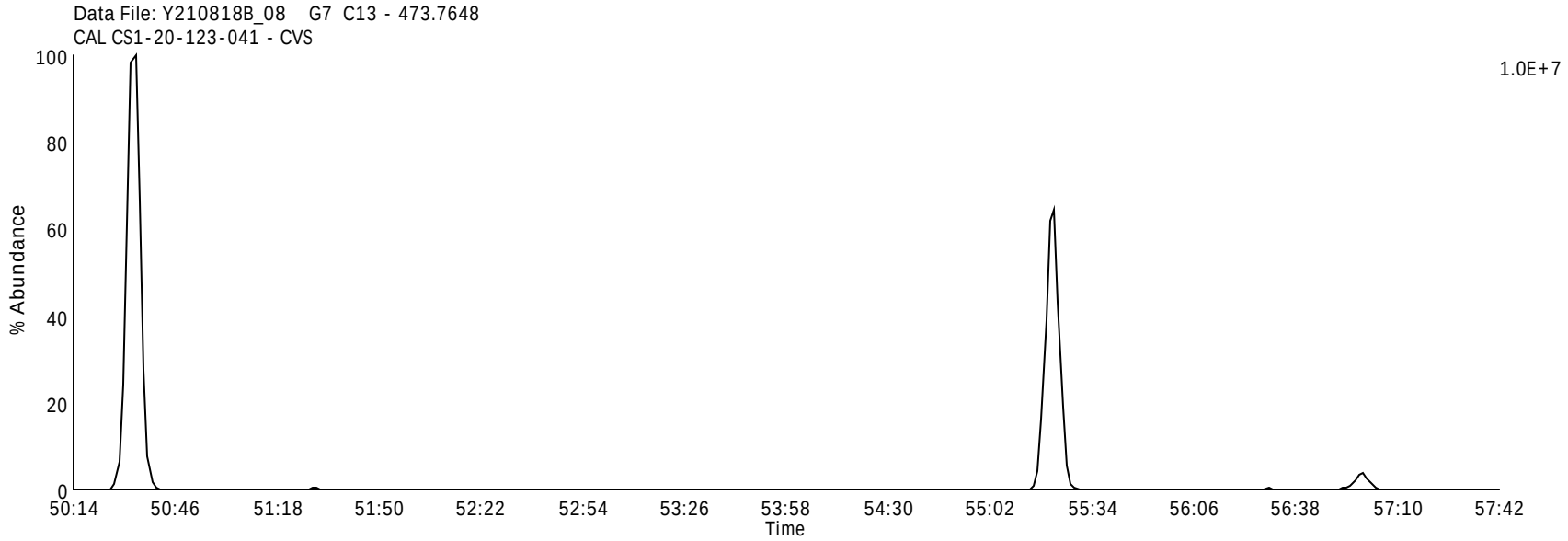


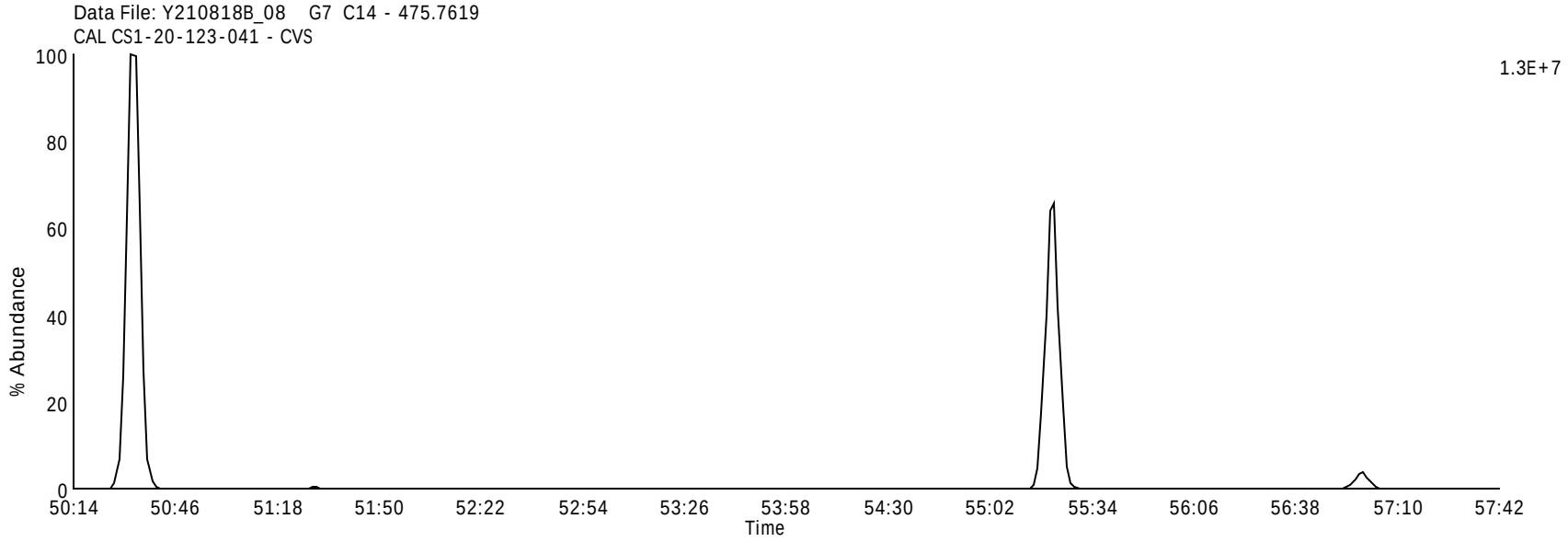
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



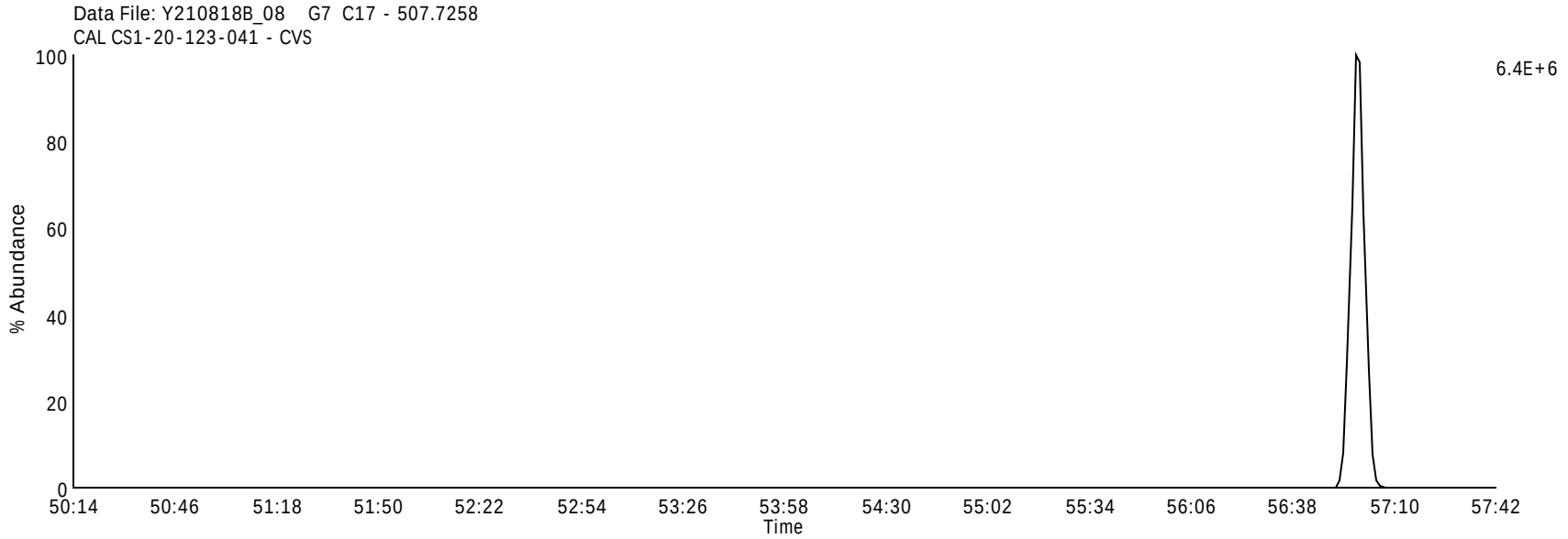


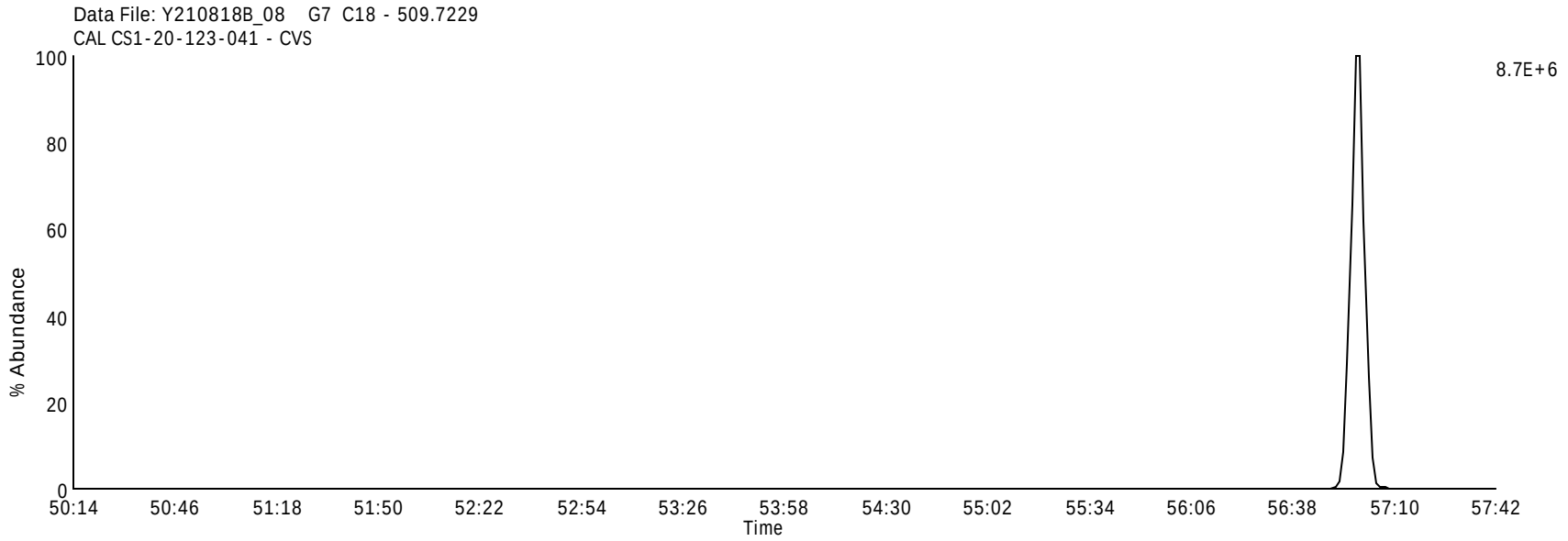
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



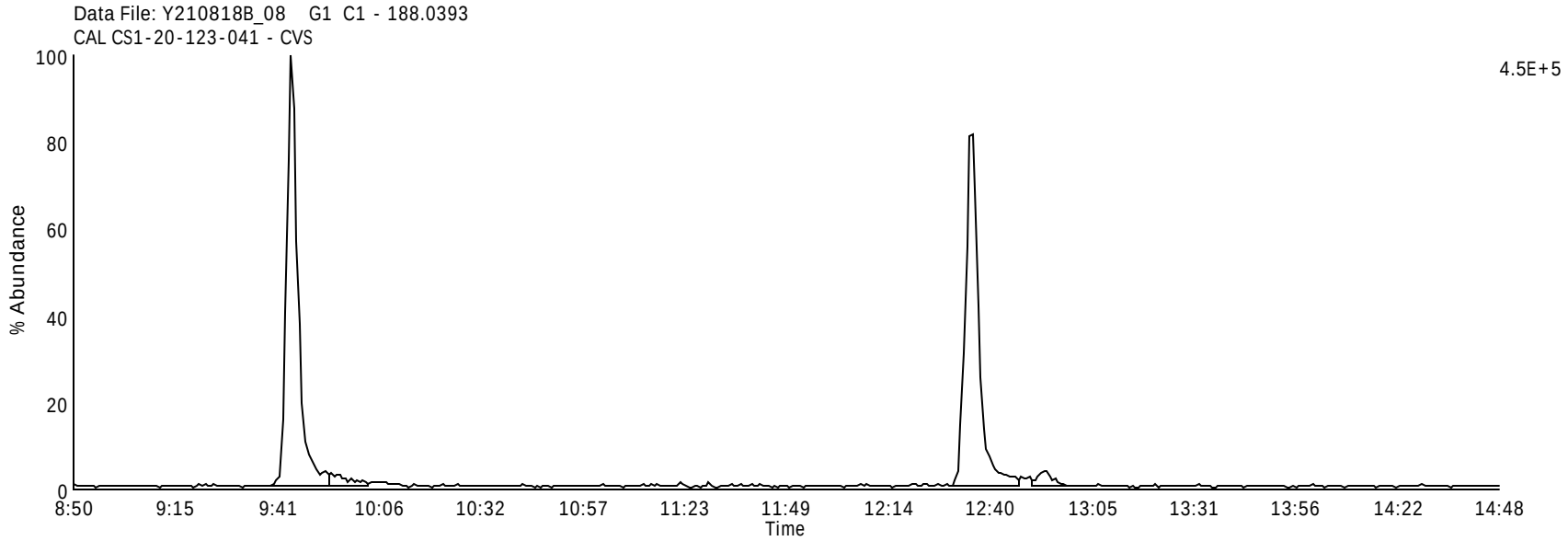


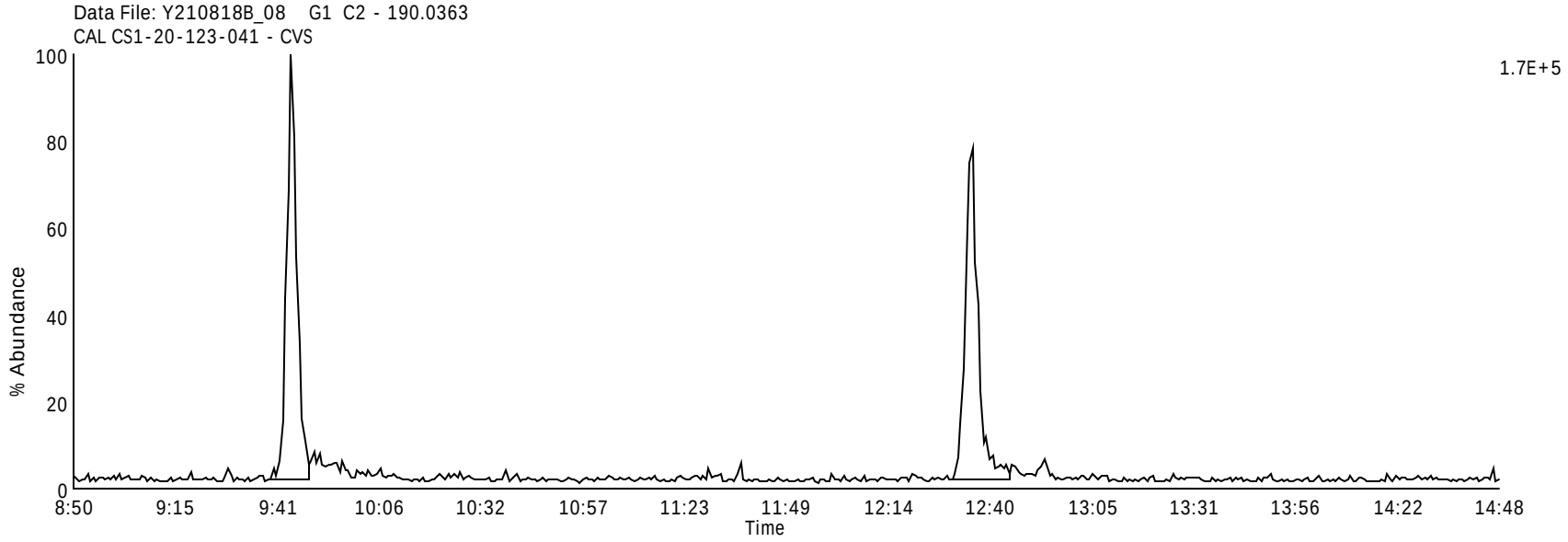
Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

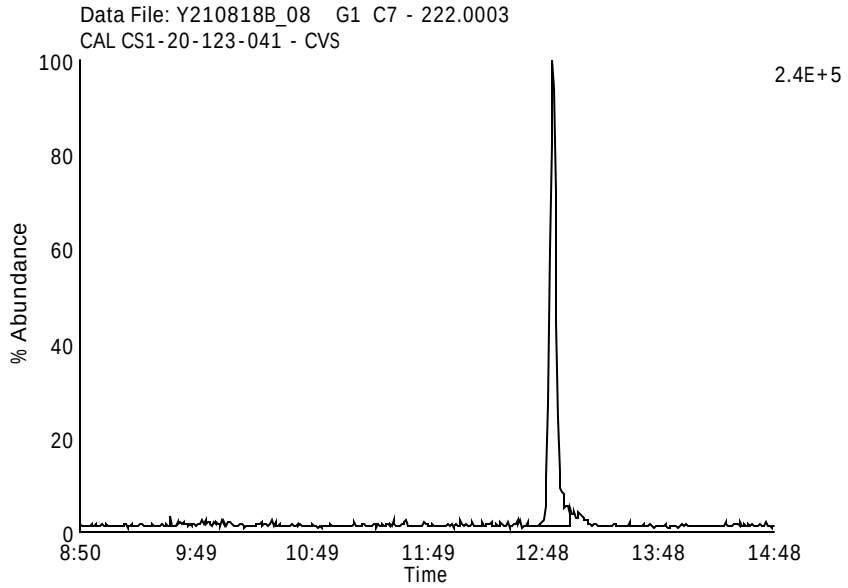
Sample Description: CAL CS1-20-123-041 - CVS

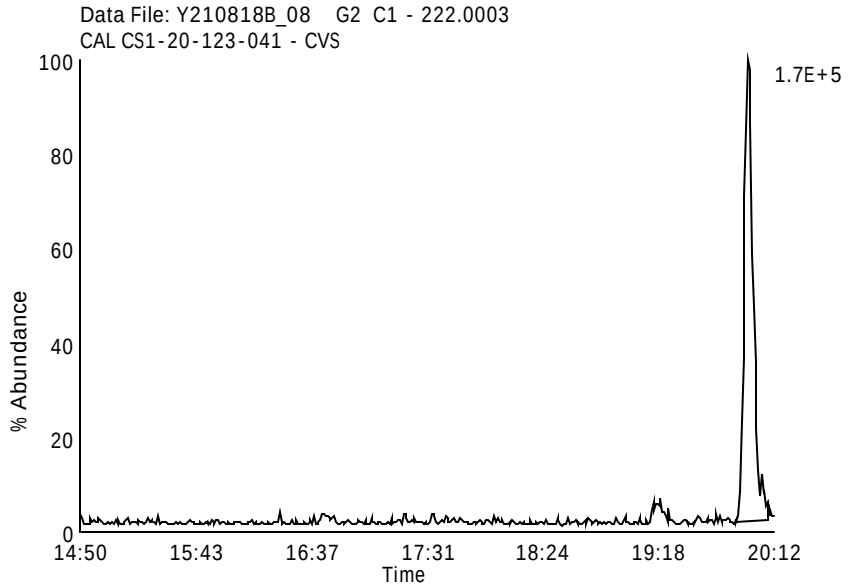


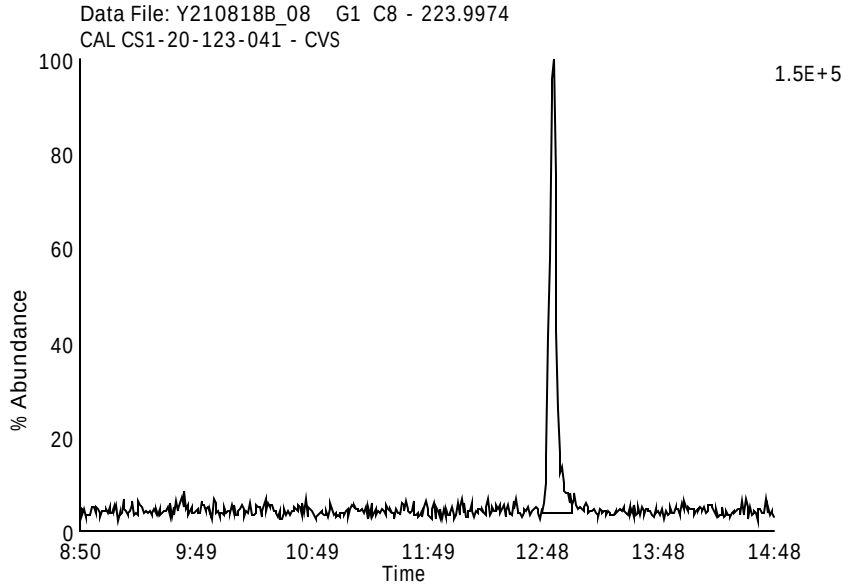


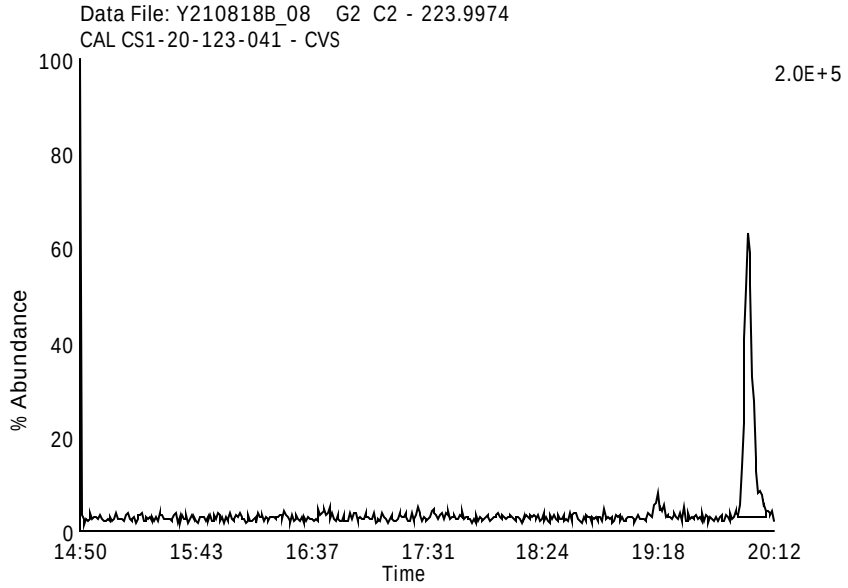
Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



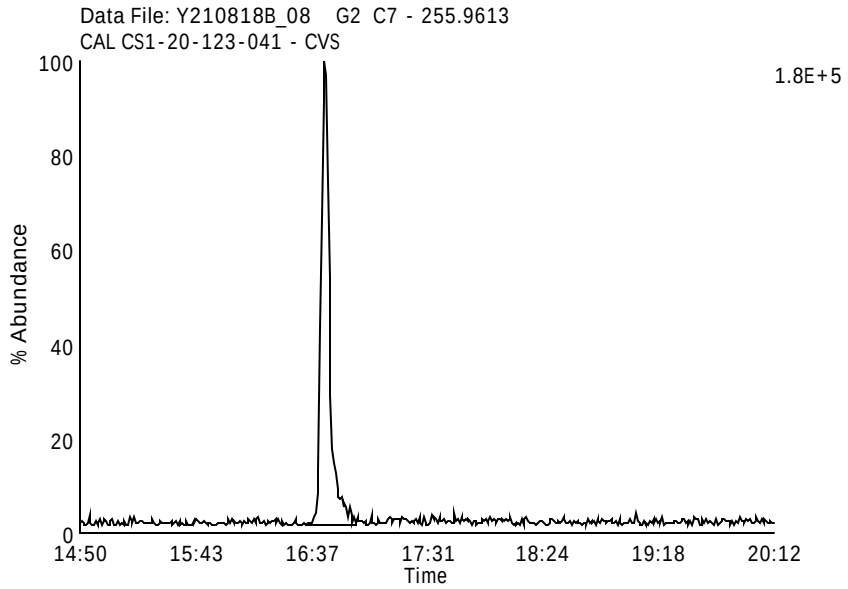


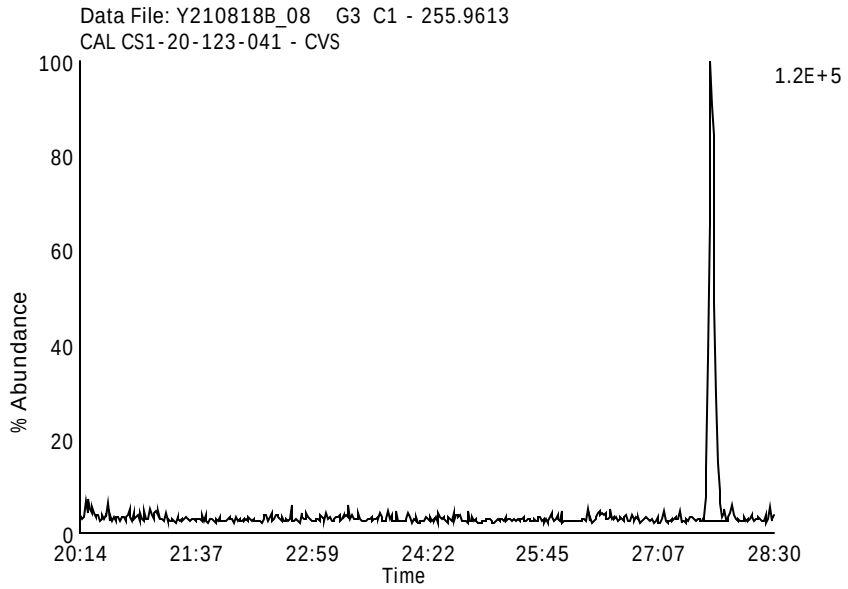


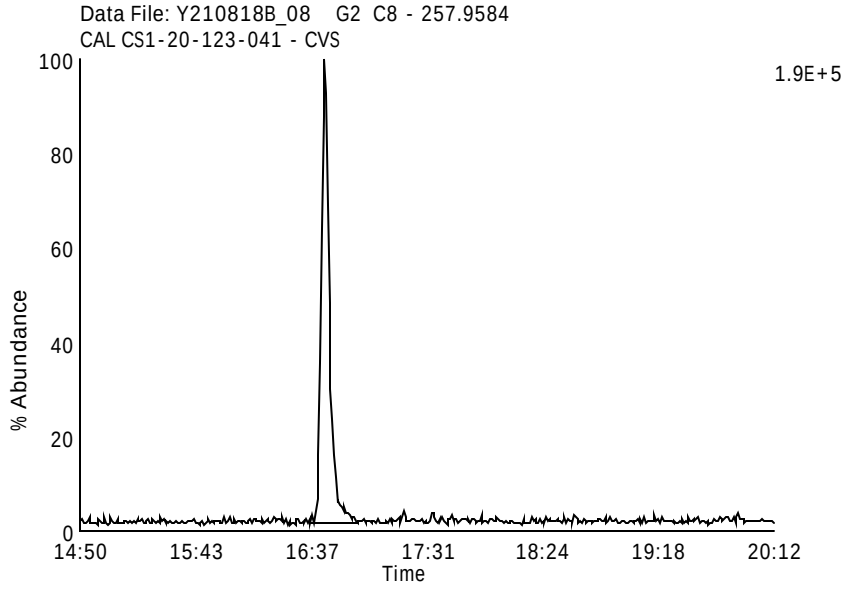


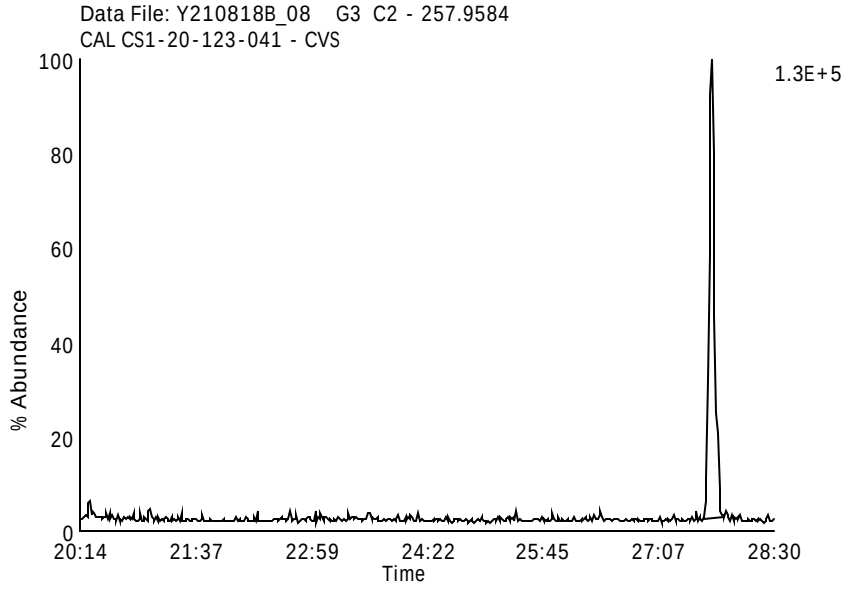
Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



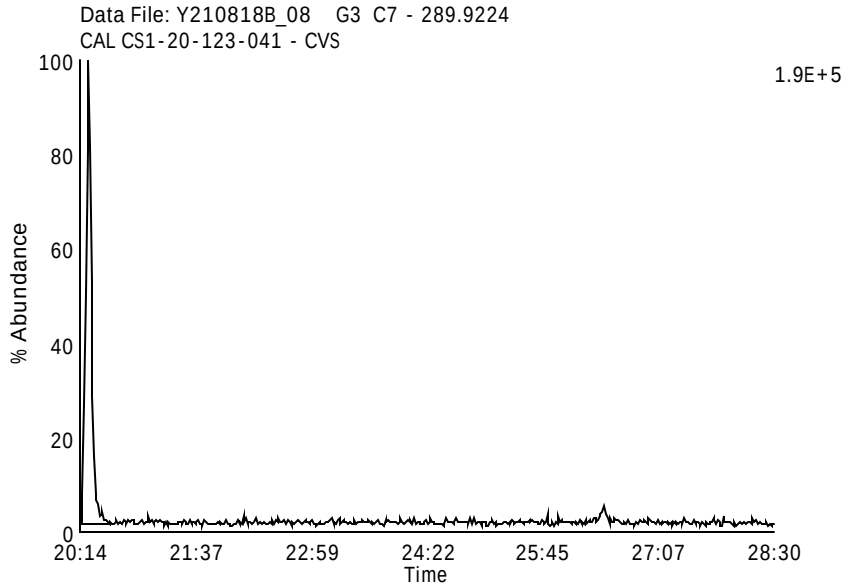


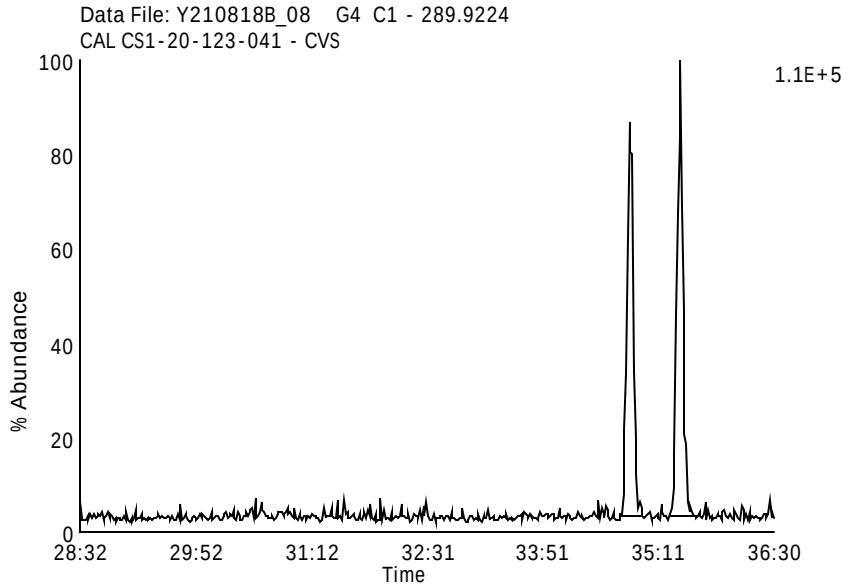


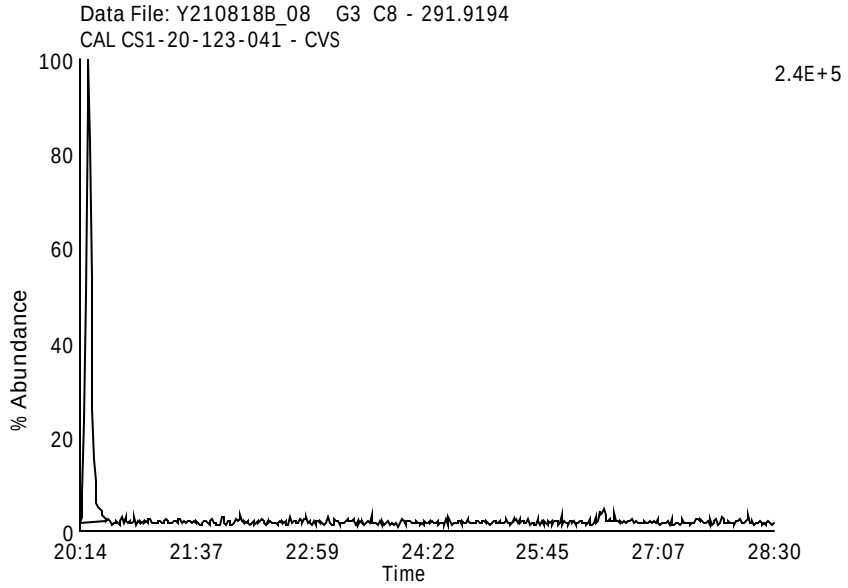


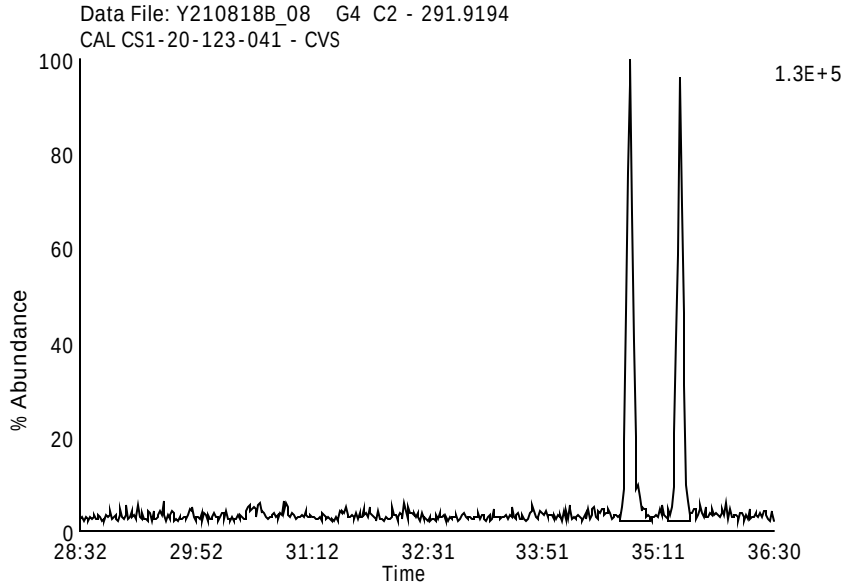
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



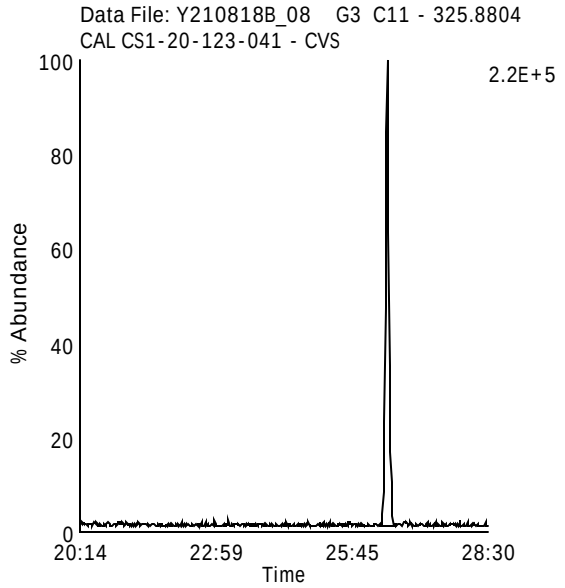


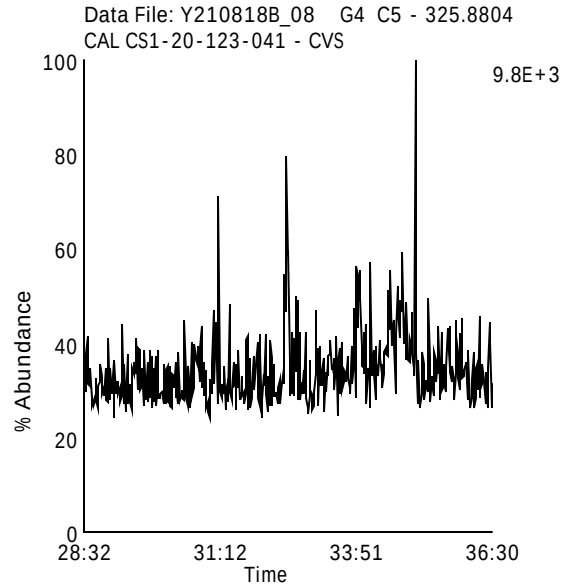


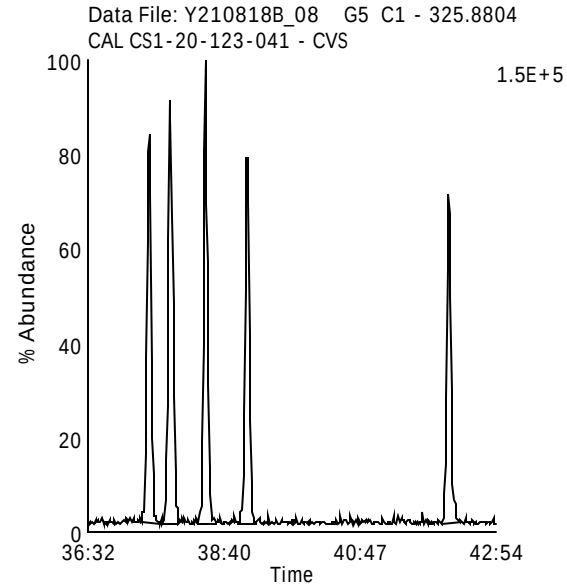


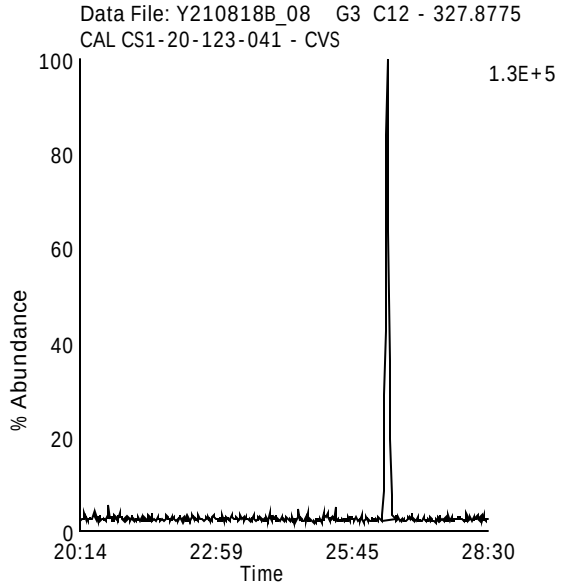
Penta Chlorinated Biphenyls

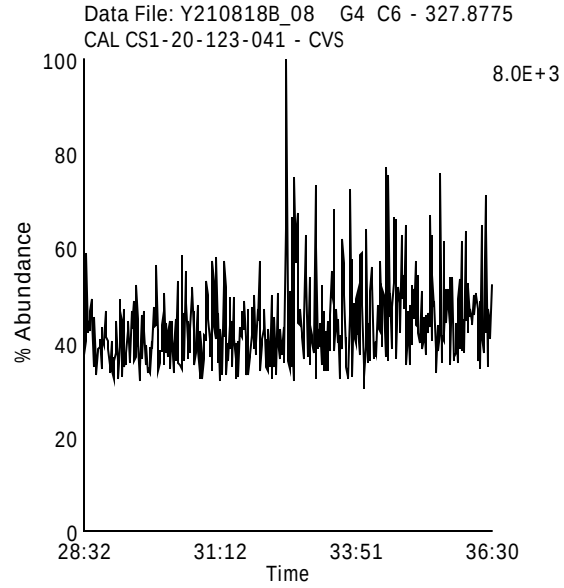
Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

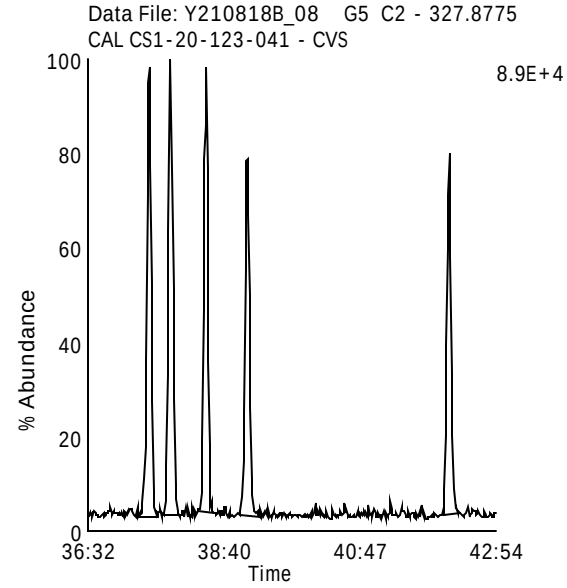








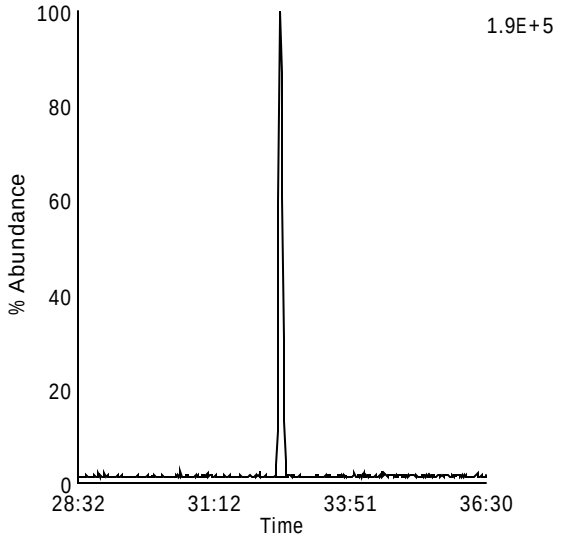




Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

Data File: Y210818B_08 G4 C11 - 359.8415
CAL CS1-20-123-041 - CVS



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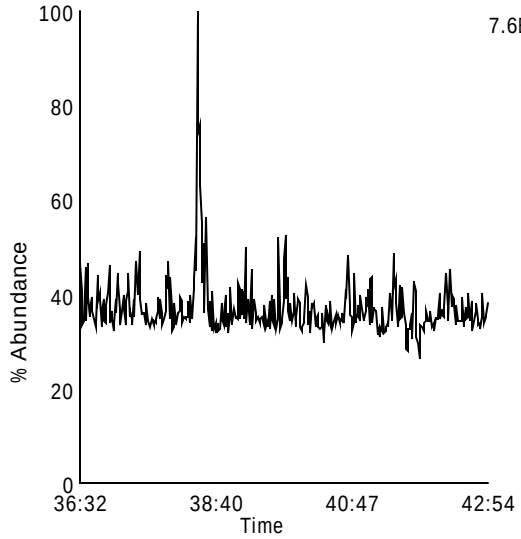
CAL CS1-20-123-041 - CVS



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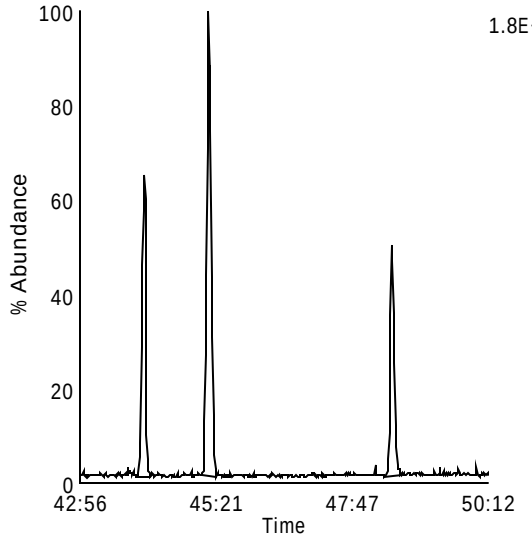
CAL CS1-20-123-041 - CVS



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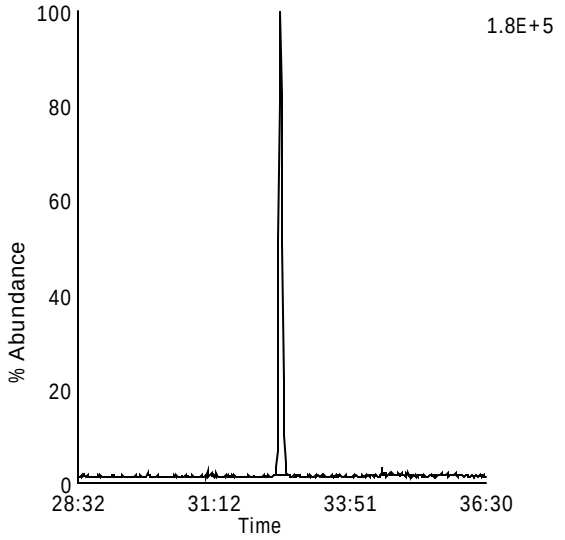
CAL CS1-20-123-041 - CVS



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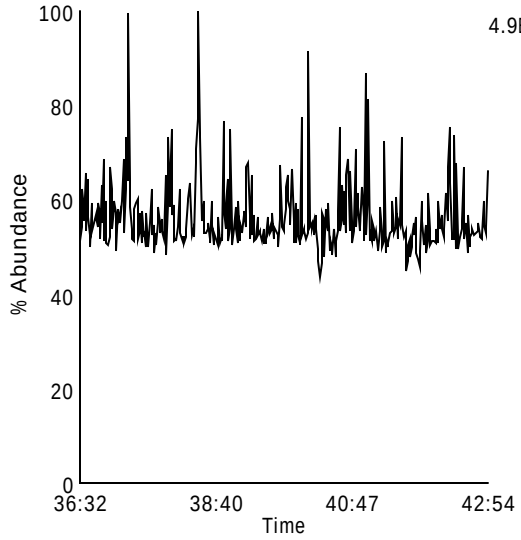
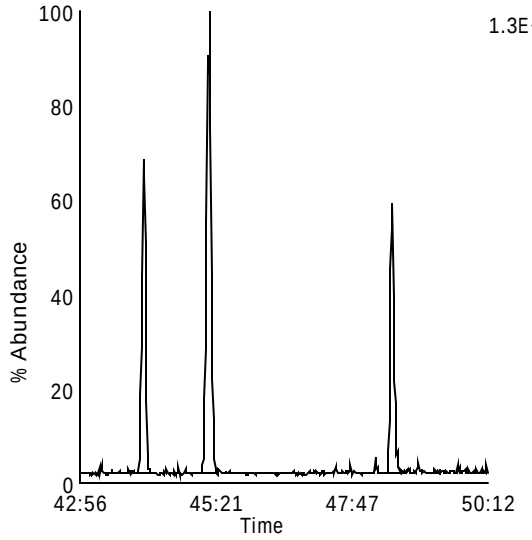
CAL CS1-20-123-041 - CVS

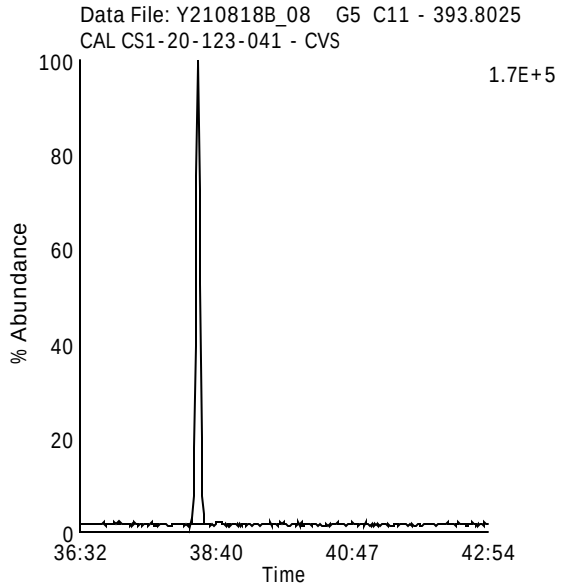


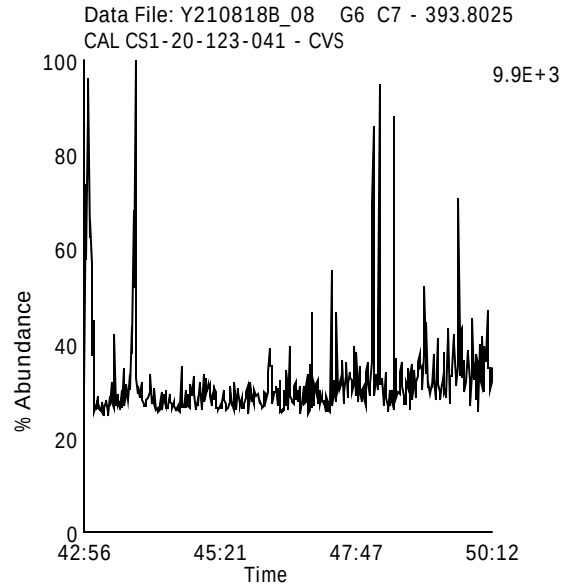
Data File: Y210818B_08 G6 C2 - 361.8385
CAL CS1-20-123-041 - CVS

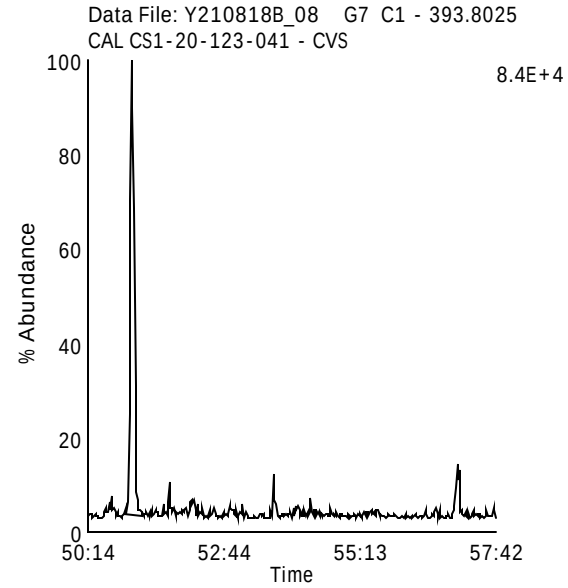


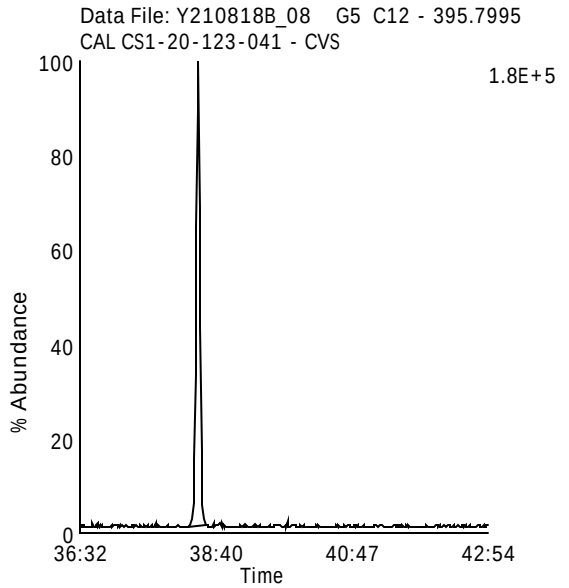
Hepta Chlorinated Biphenyls

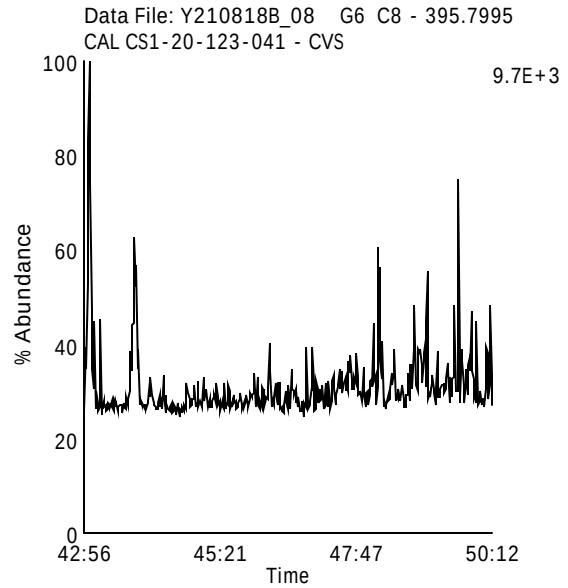
Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

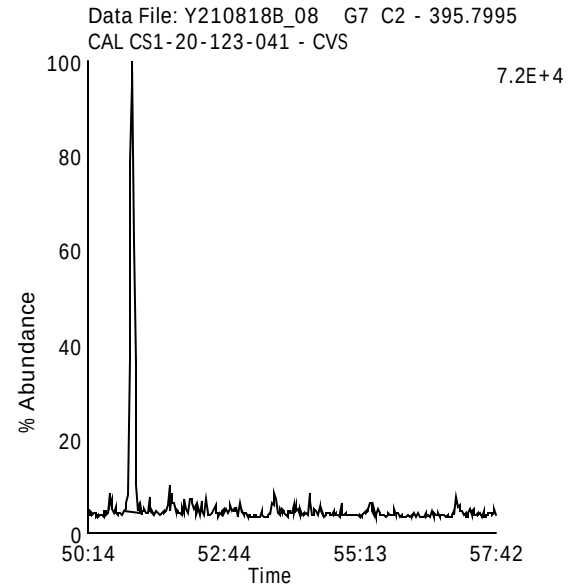










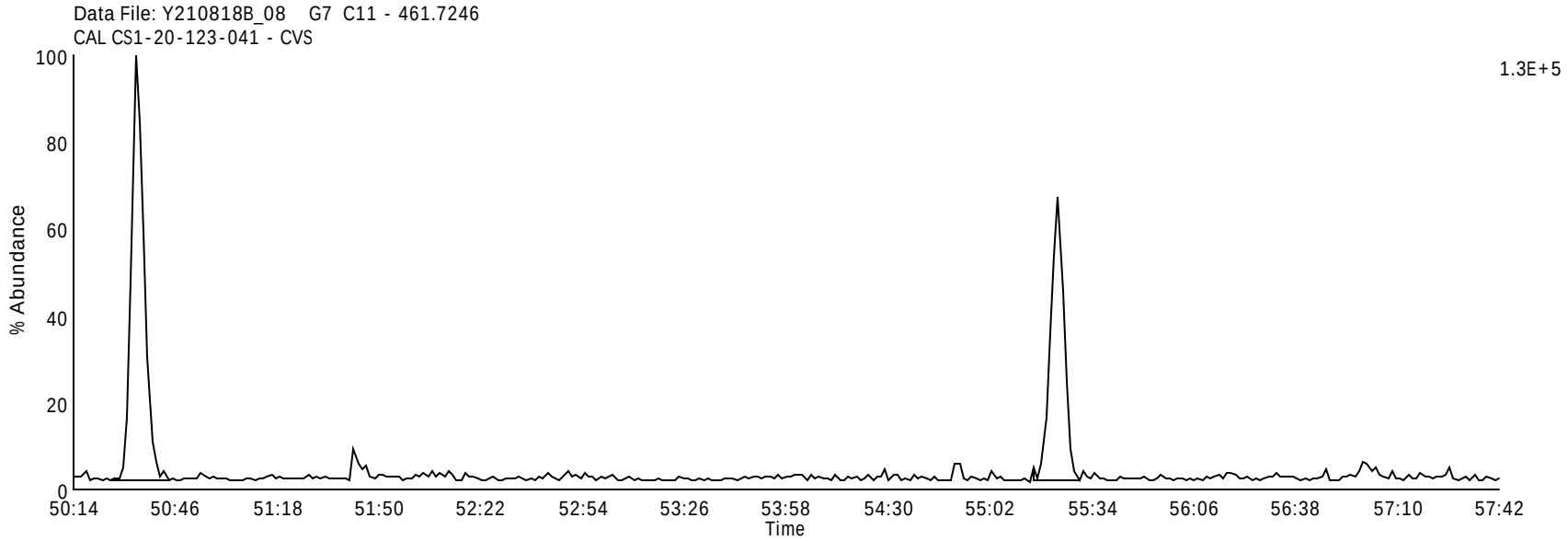


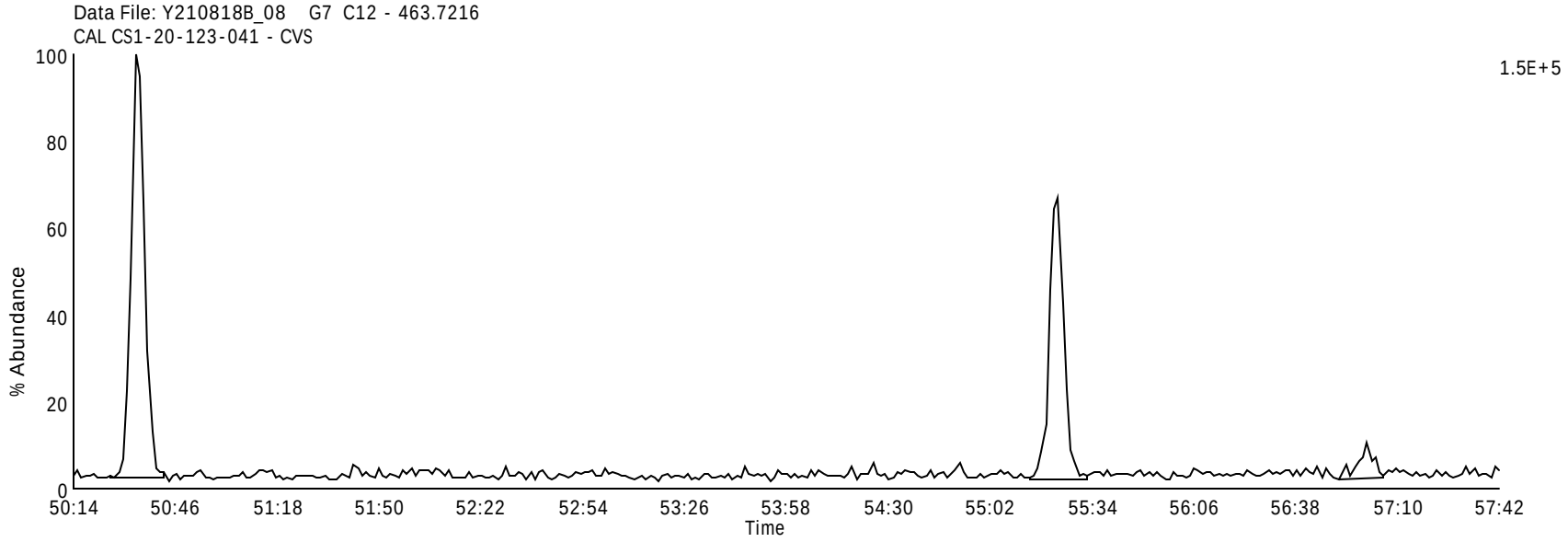
Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

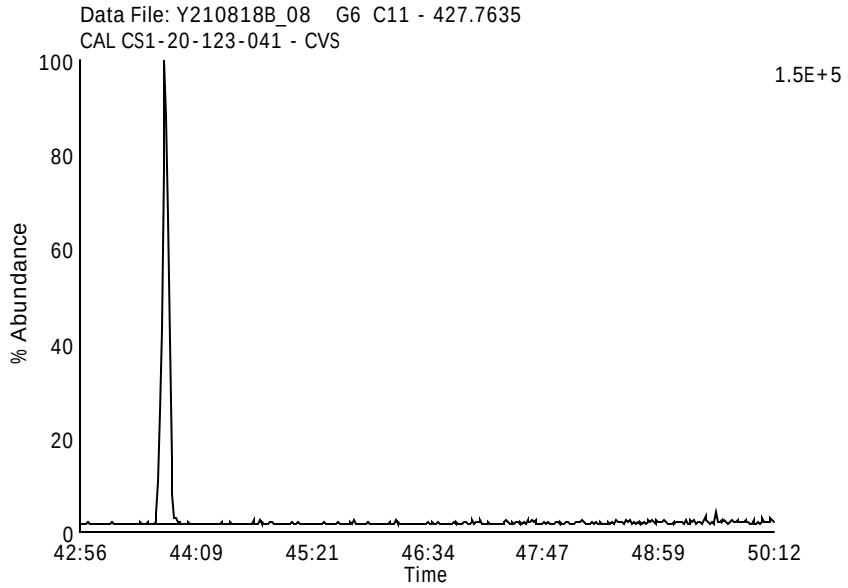
Sample Description: CAL CS1-20-123-041 - CVS

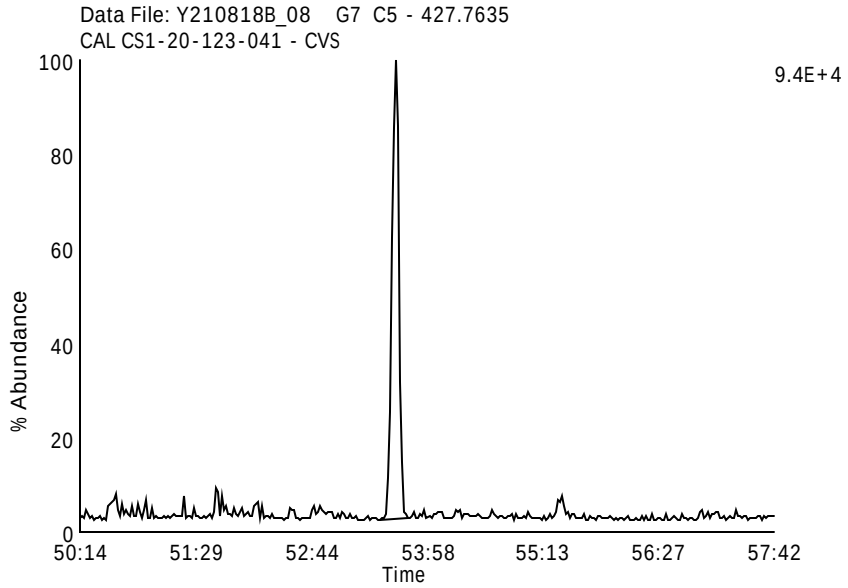


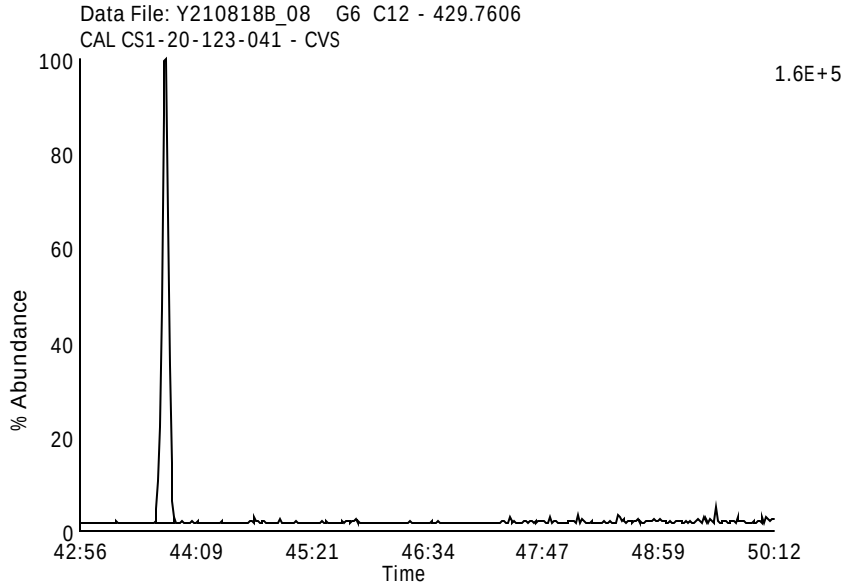


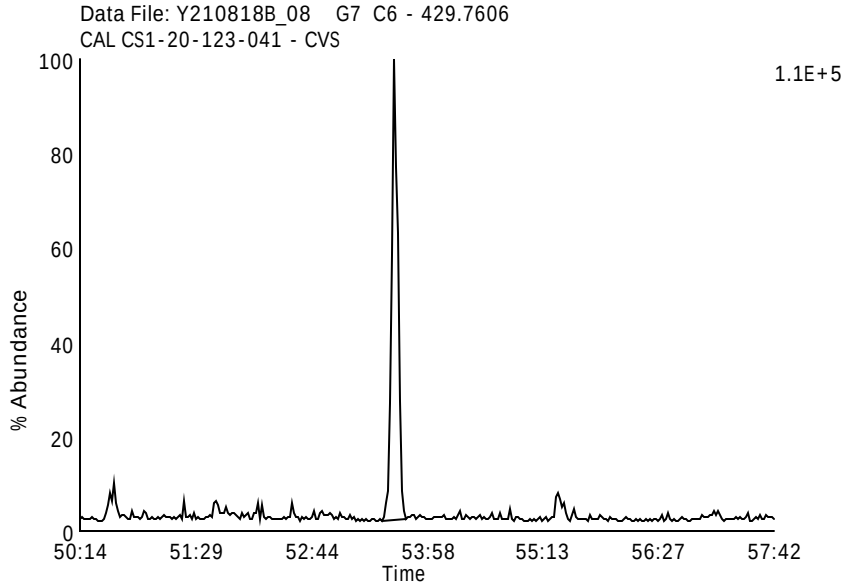
Octa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







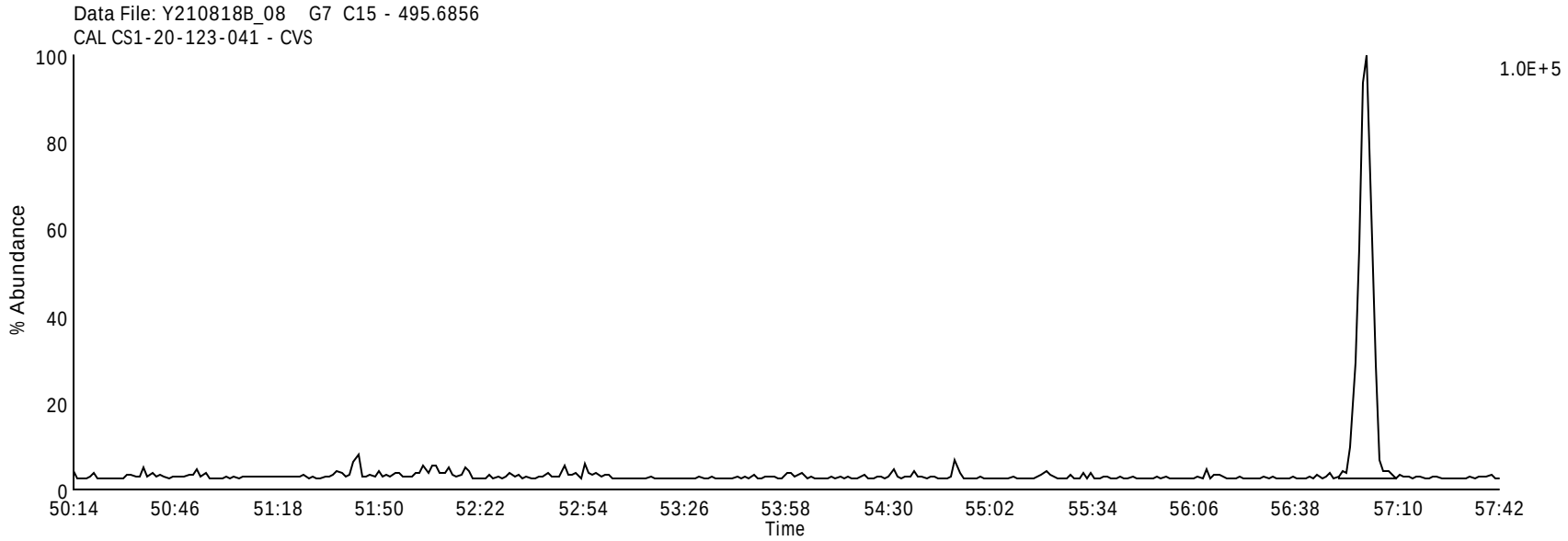


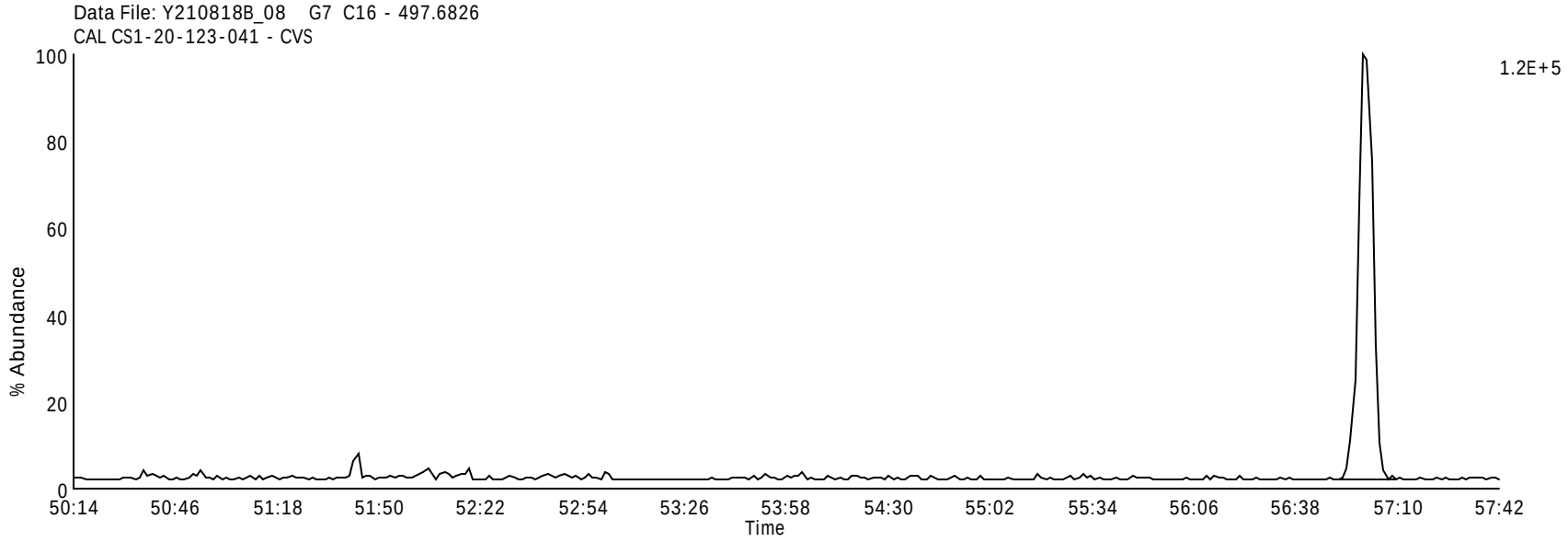
Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

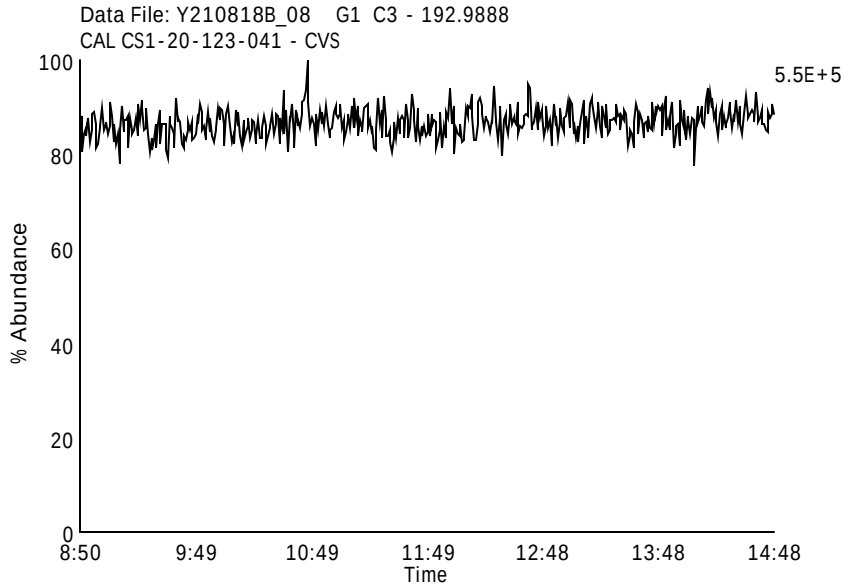


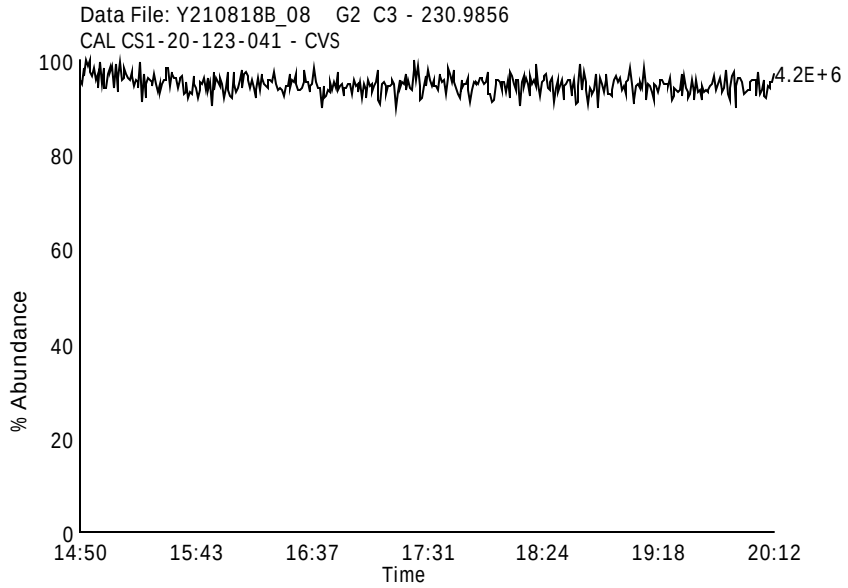


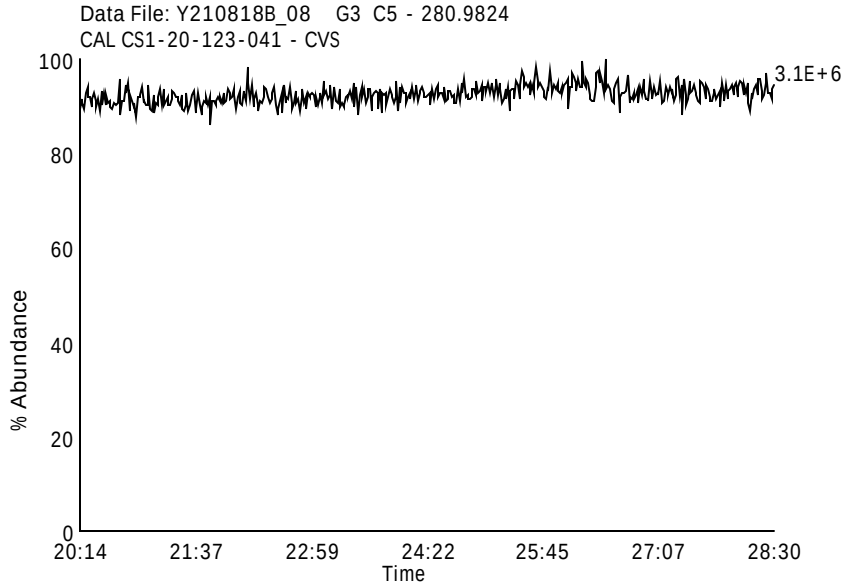
Group 1 - 4 Lock mass

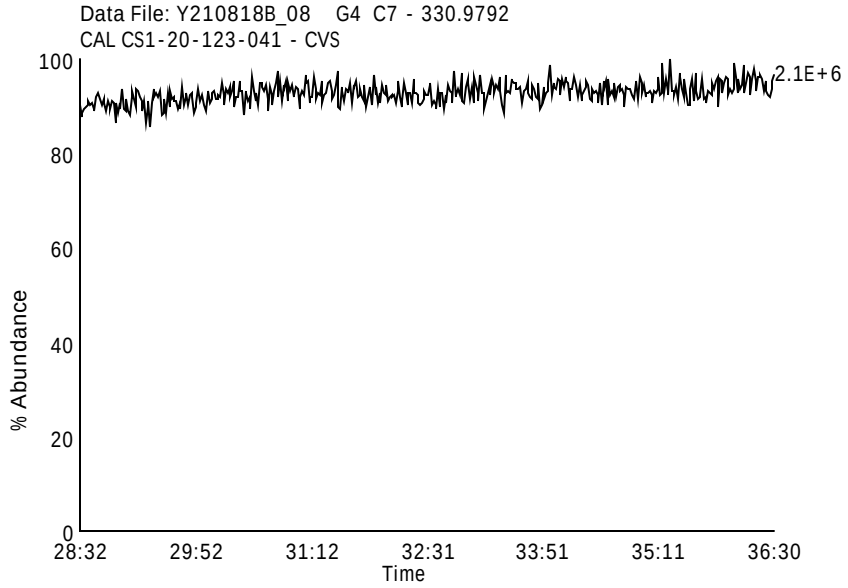
Data File Name: Y210818B_08
Date Acquired: 8/18/2021
Sample Description: CAL CS1-20-123-041 - CVS

Lab Sample ID: CS1-20-123-041
Instrument: 10MSHR12 (Y)





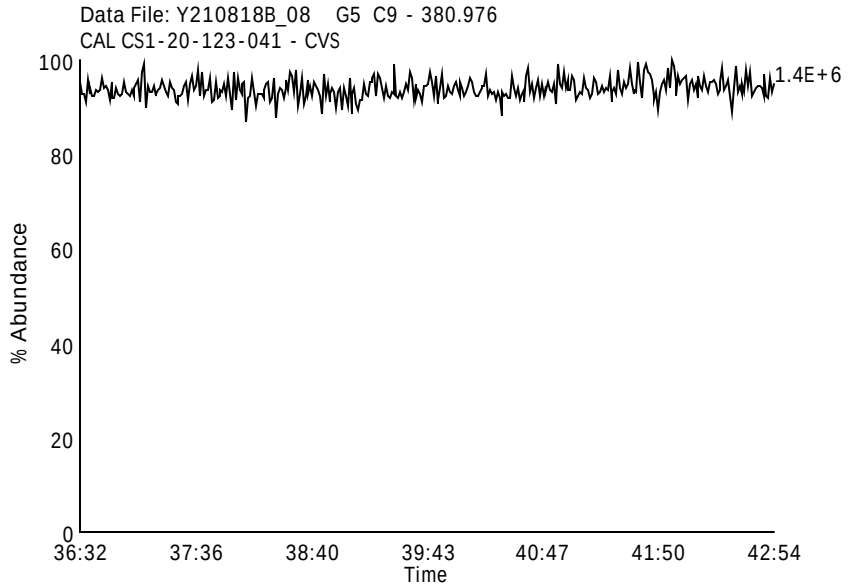


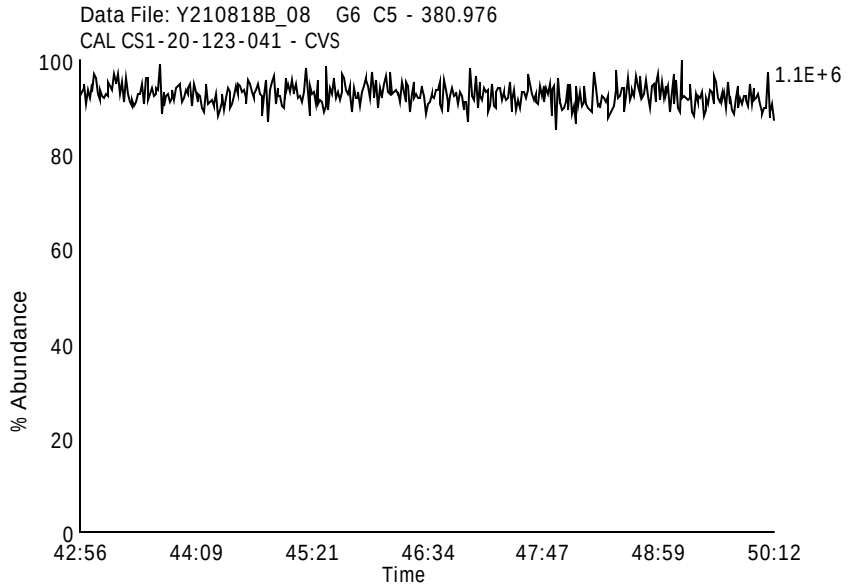


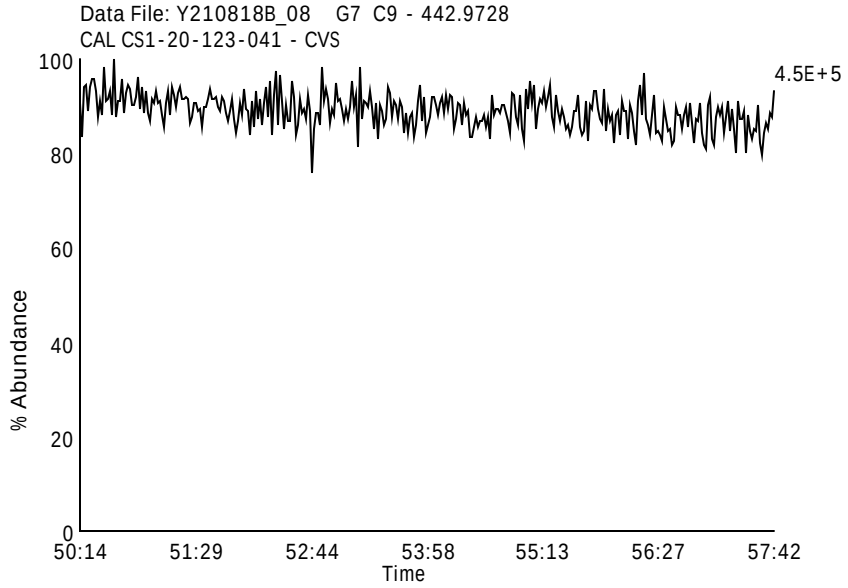
Group 5 - 7 Lock mass

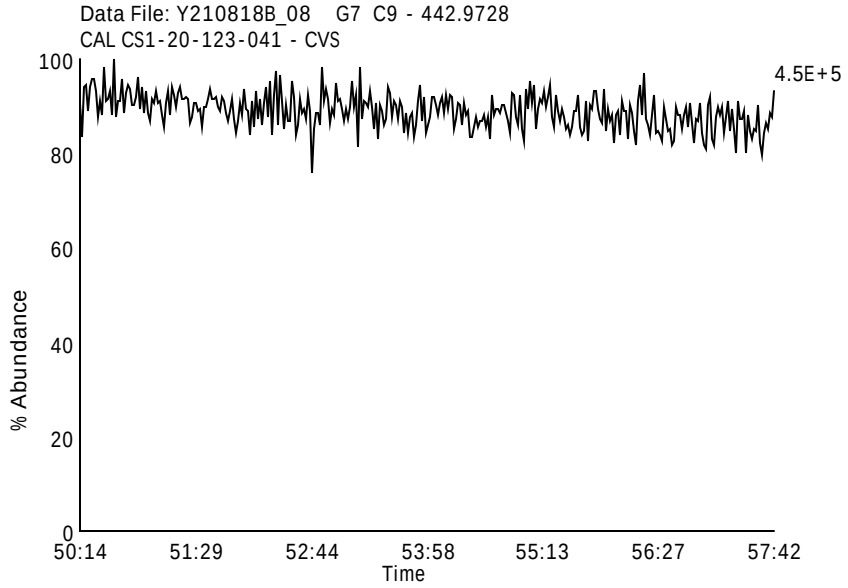
Data File Name: Y210818B_08
Date Acquired: 8/18/2021
Sample Description: CAL CS1-20-123-041 - CVS

Lab Sample ID: CS1-20-123-041
Instrument: 10MSHR12 (Y)







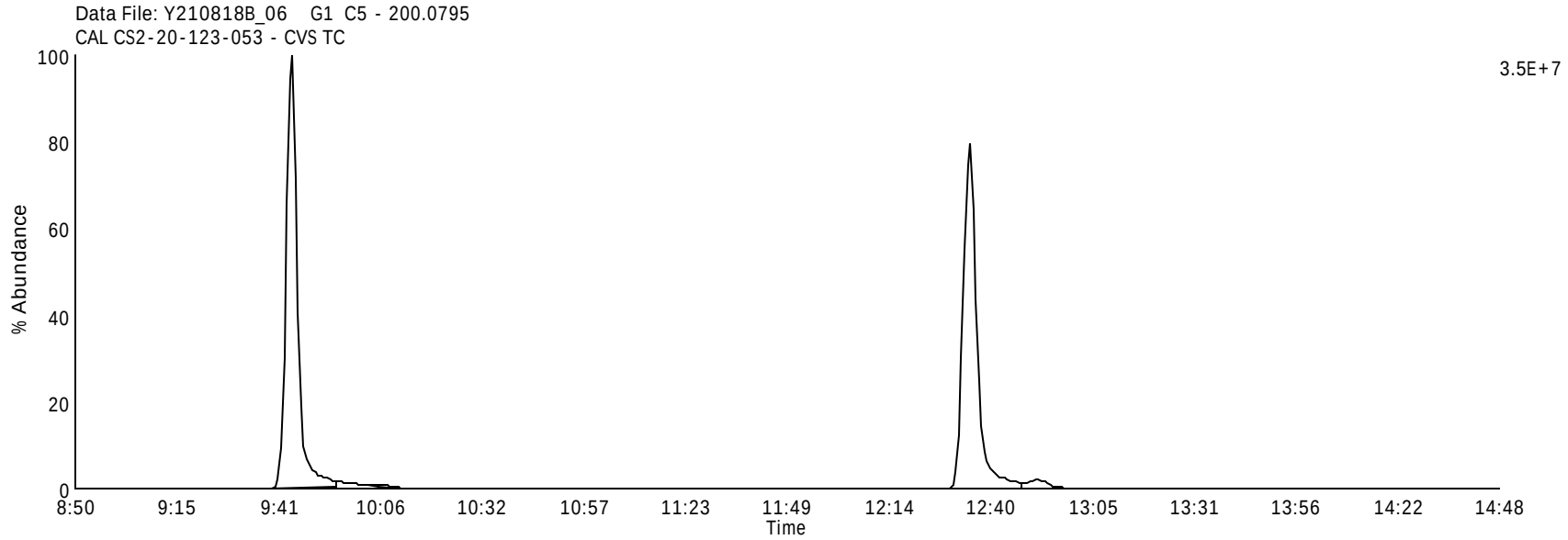


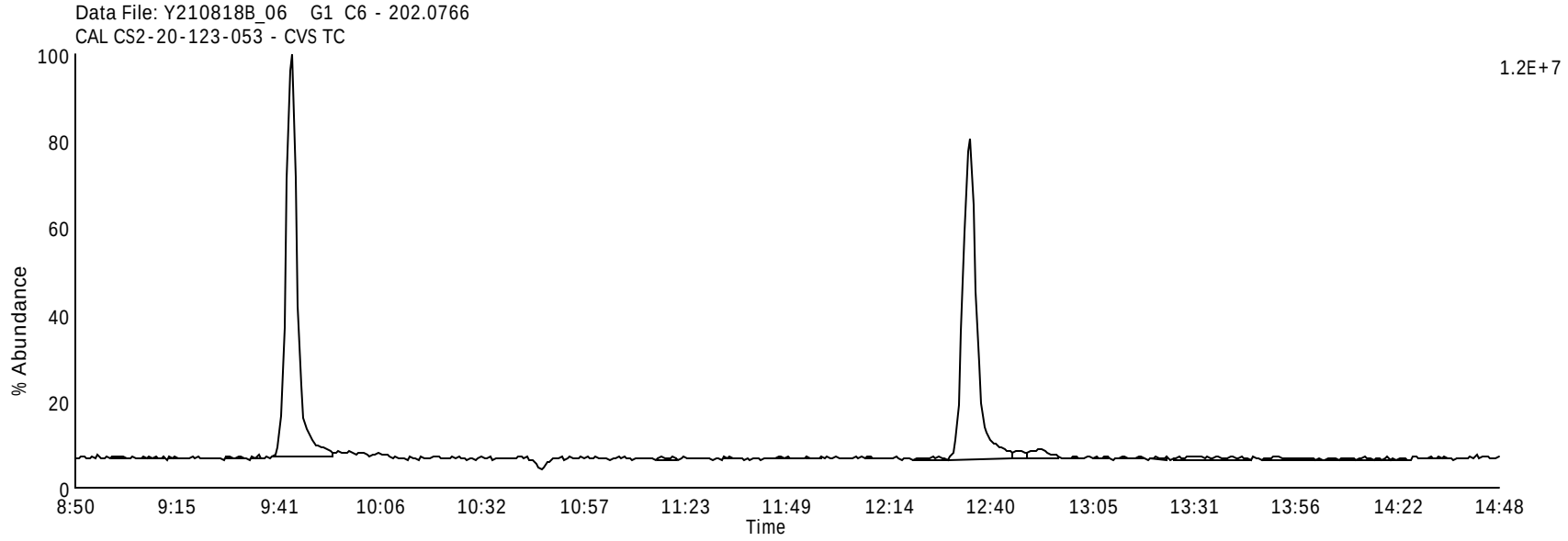
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

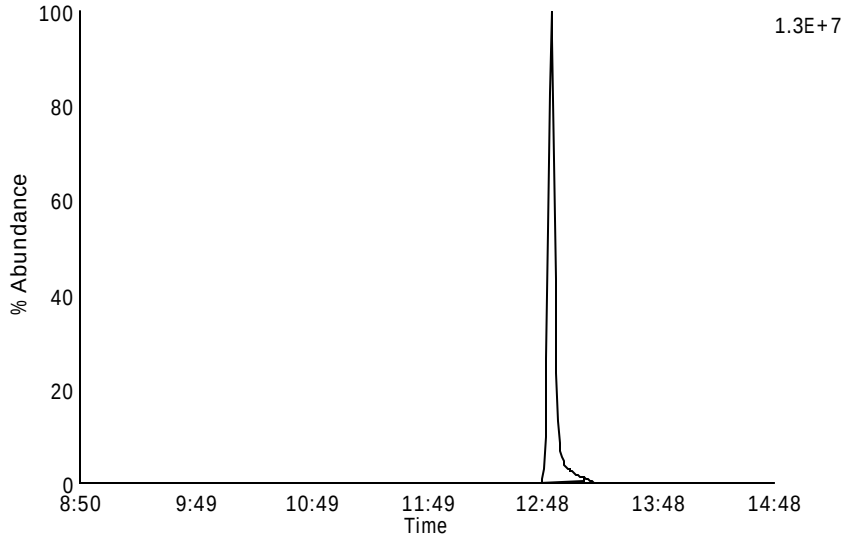




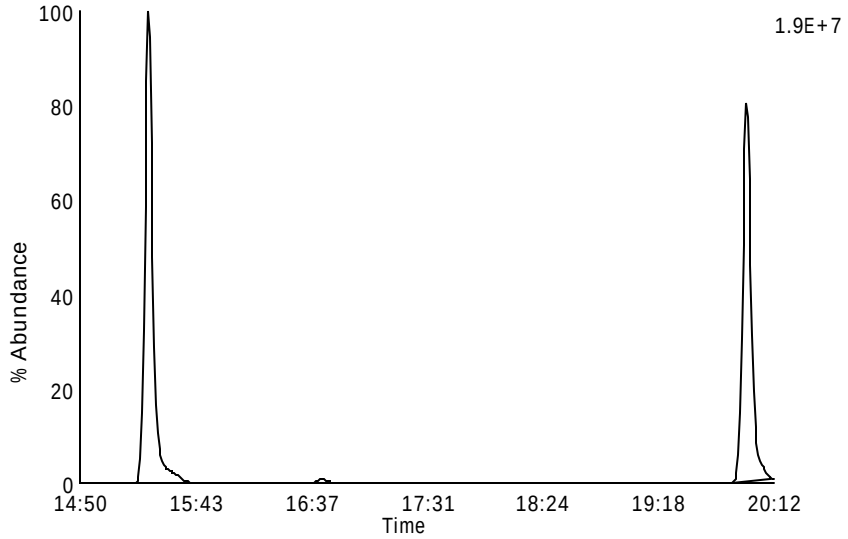
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC

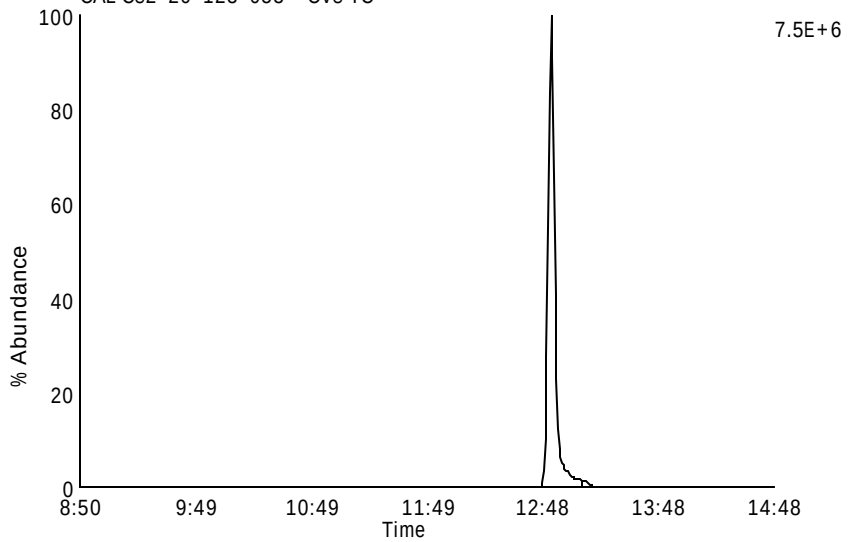
Data File: Y210818B_06 G1 C9 - 234.0406
CAL CS2-20-123-053 - CVS TC



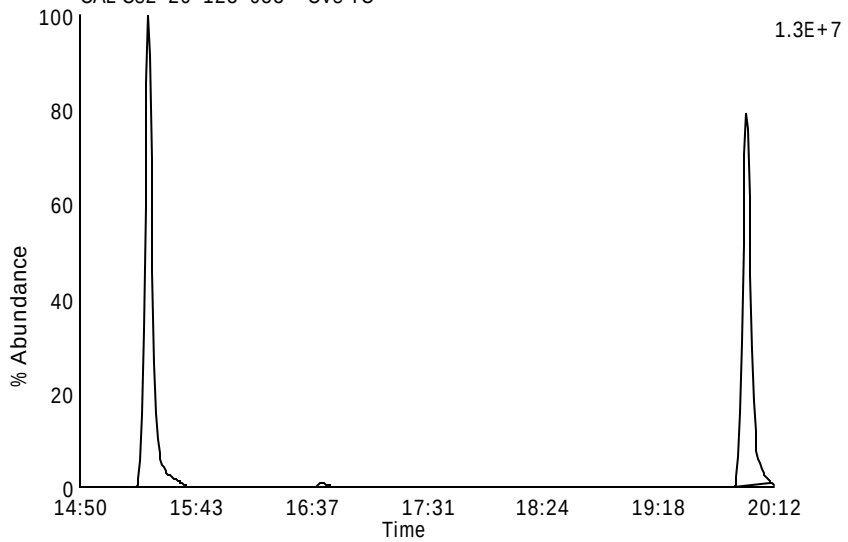
Data File: Y210818B_06 G2 C5 - 234.0406
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G1 C10 - 236.0376
CAL CS2-20-123-053 - CVS TC



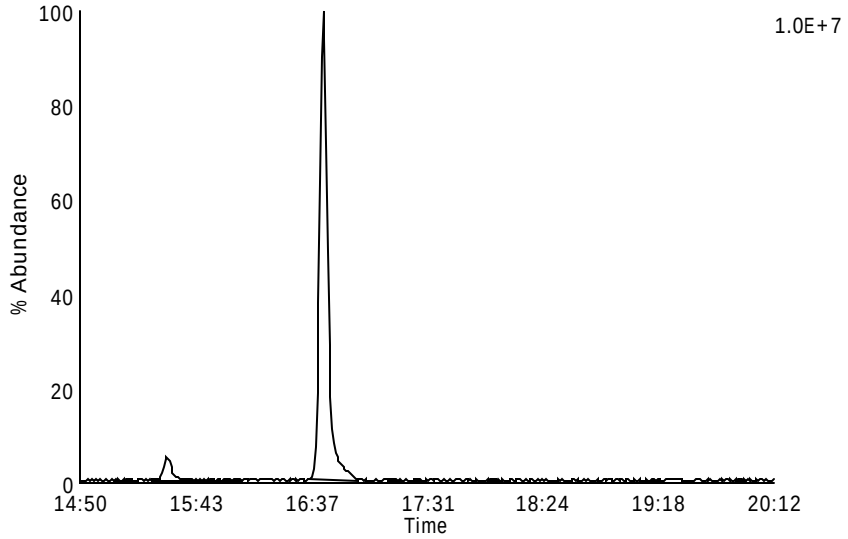
Data File: Y210818B_06 G2 C6 - 236.0376
CAL CS2-20-123-053 - CVS TC



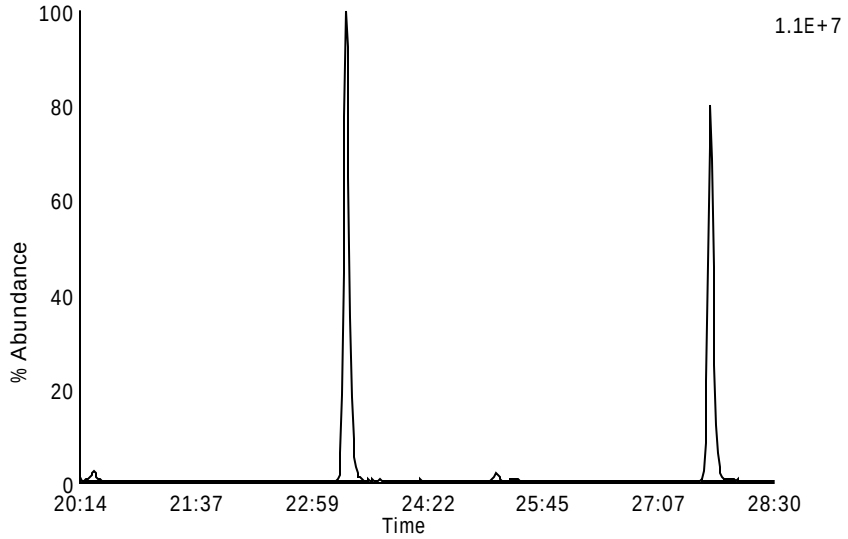
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC

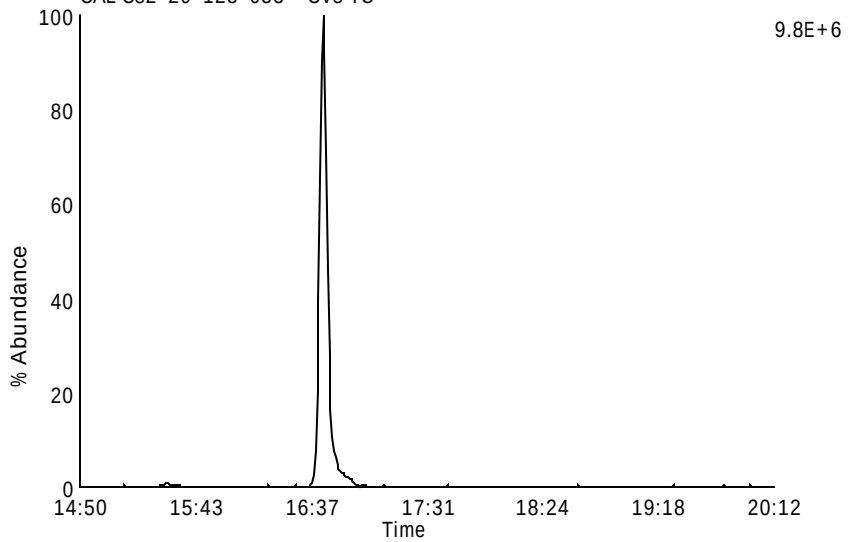
Data File: Y210818B_06 G2 C9 - 268.0016
CAL CS2-20-123-053 - CVS TC



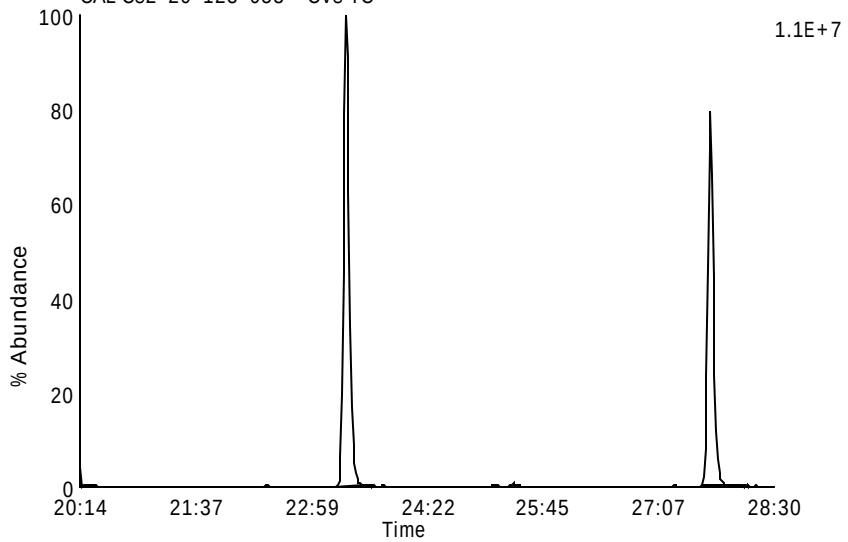
Data File: Y210818B_06 G3 C3 - 268.0016
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G2 C10 - 269.9986
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G3 C4 - 269.9986
CAL CS2-20-123-053 - CVS TC

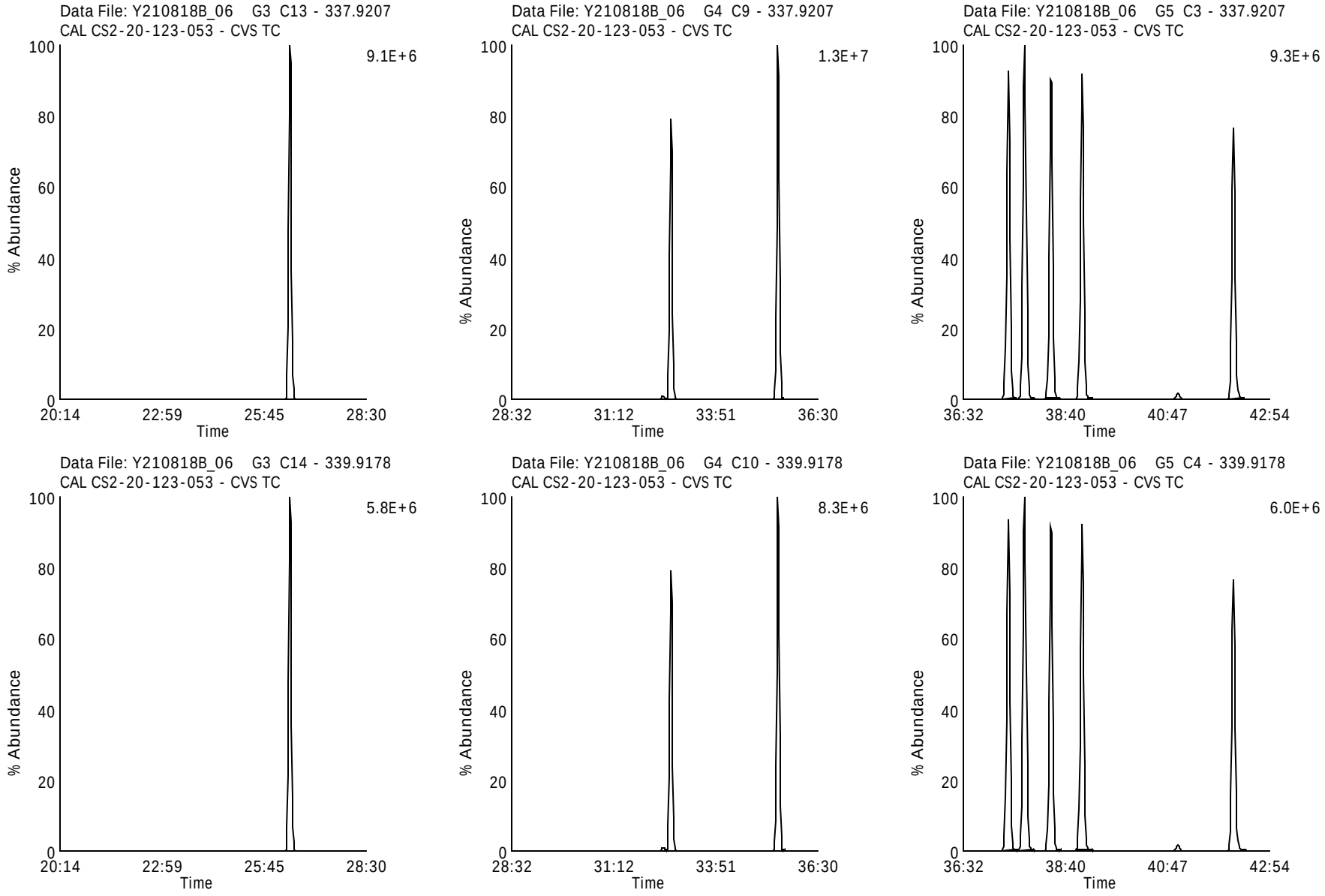


Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

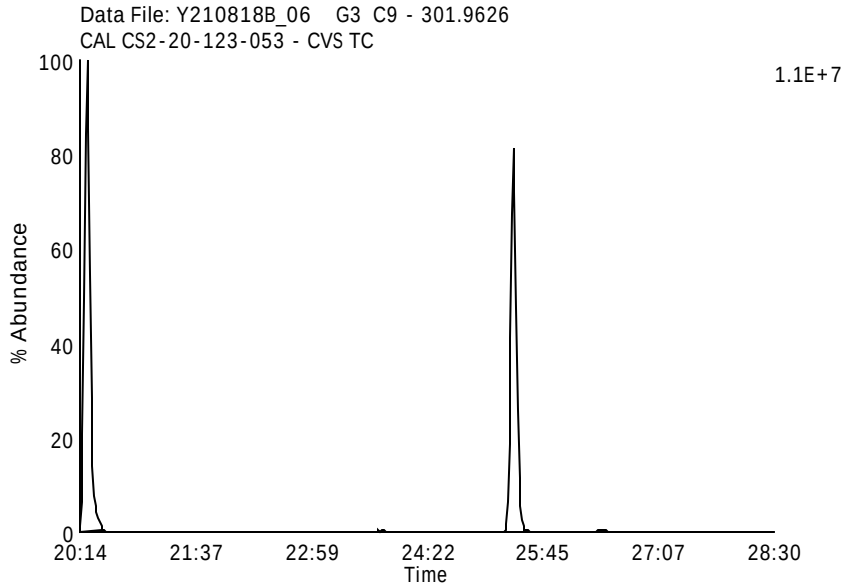


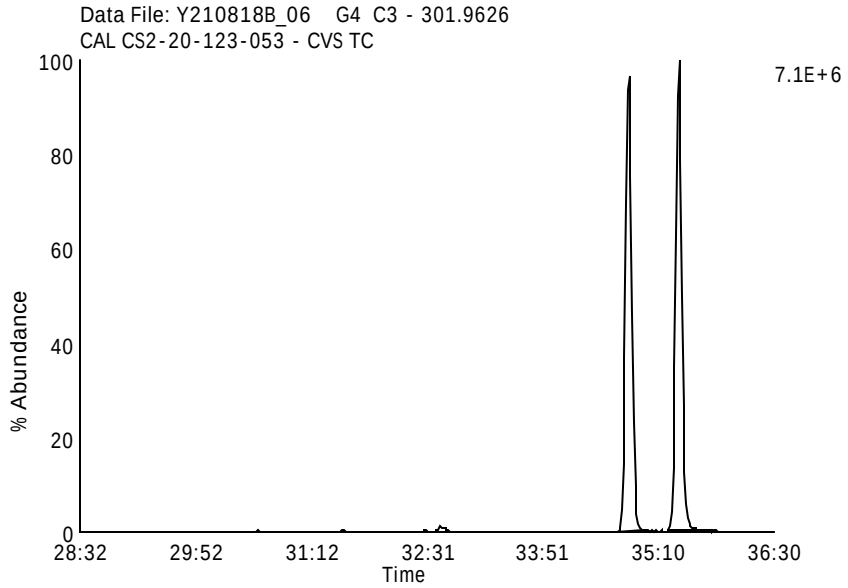
Labeled Tetra Chlorinated Biphenyls

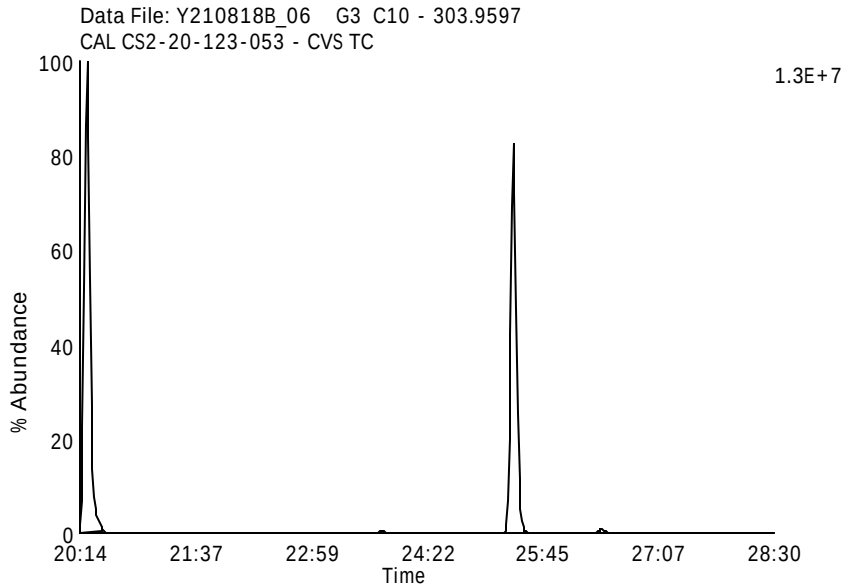
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

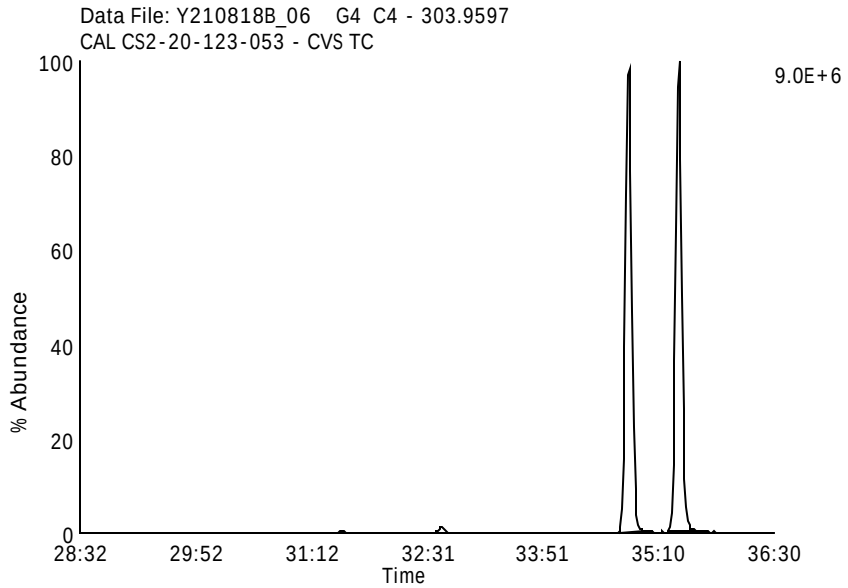
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC









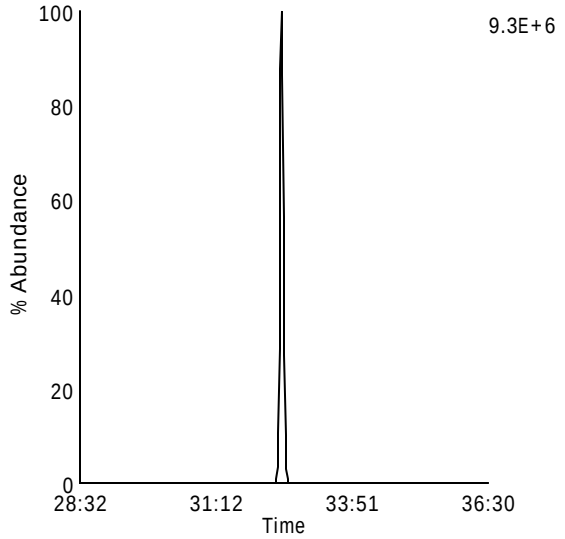
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

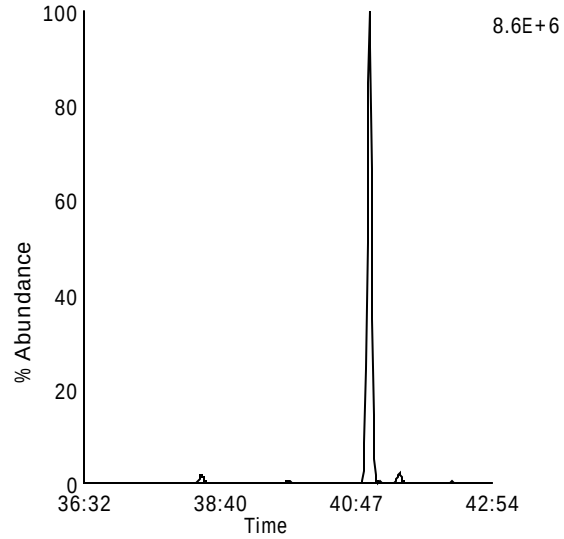
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

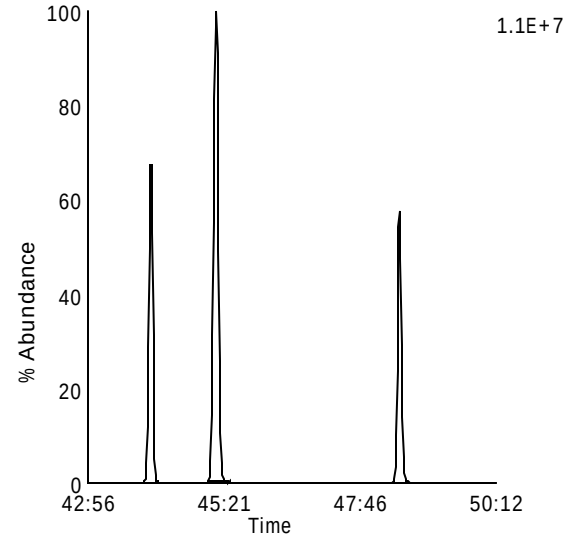
Data File: Y210818B_06 G4 C13 - 371.8817
CAL CS2-20-123-053 - CVS TC



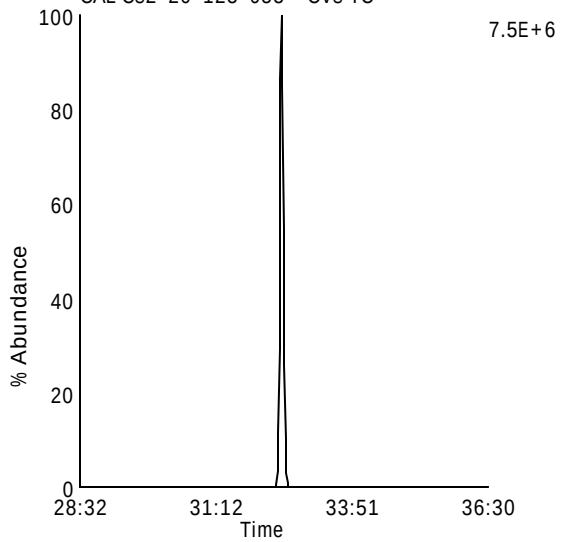
Data File: Y210818B_06 G5 C7 - 371.8817
CAL CS2-20-123-053 - CVS TC



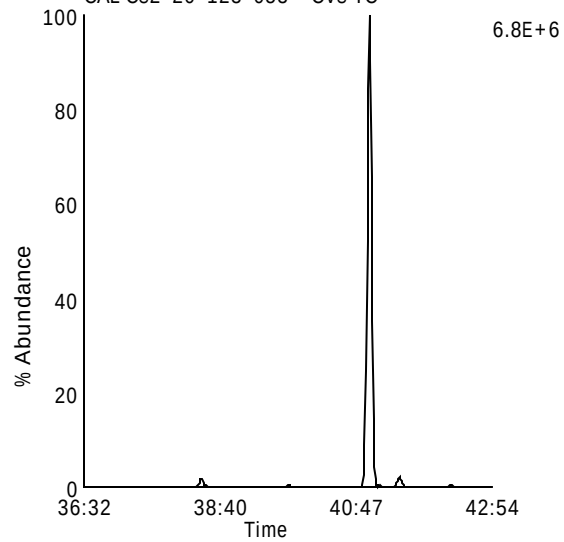
Data File: Y210818B_06 G6 C3 - 371.8817
CAL CS2-20-123-053 - CVS TC



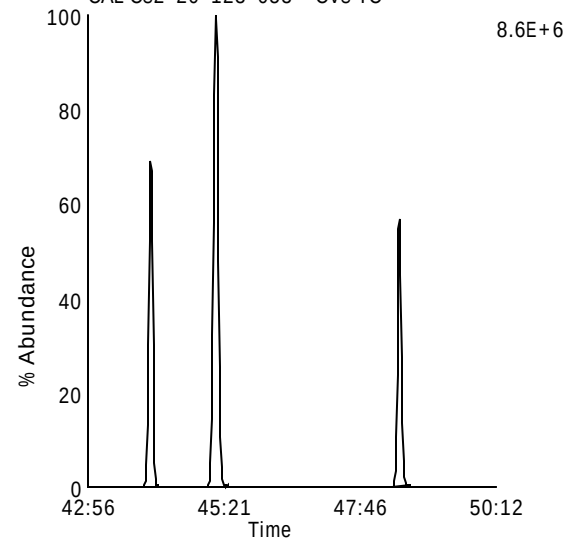
Data File: Y210818B_06 G4 C14 - 373.8788
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C8 - 373.8788
CAL CS2-20-123-053 - CVS TC

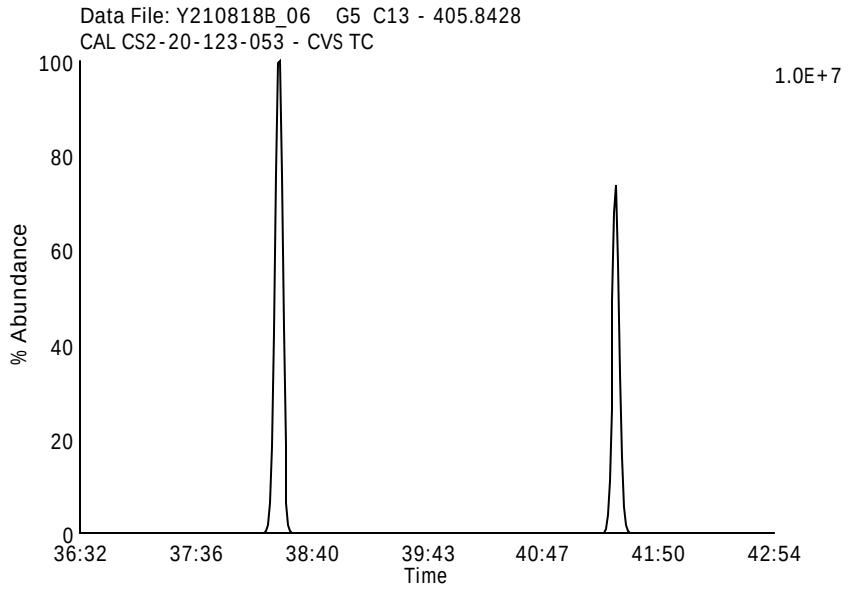


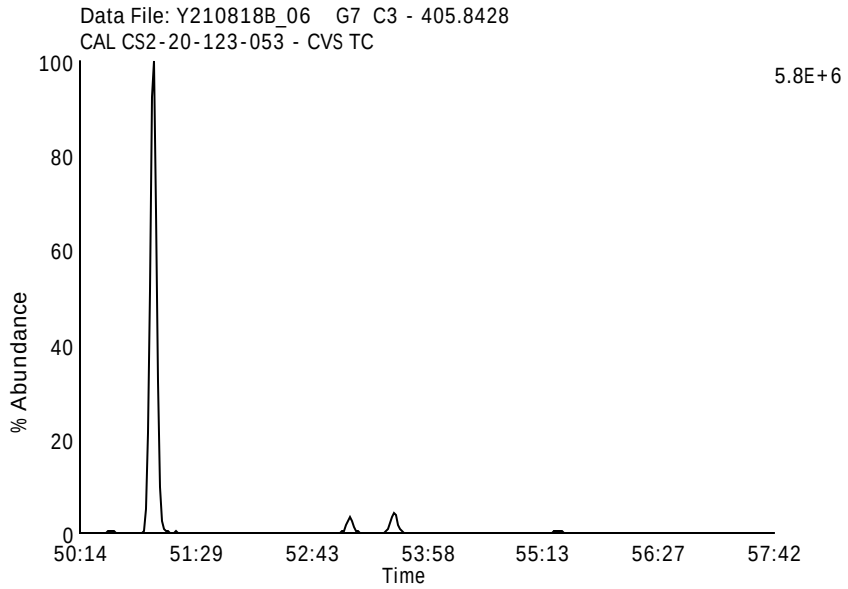
Data File: Y210818B_06 G6 C4 - 373.8788
CAL CS2-20-123-053 - CVS TC

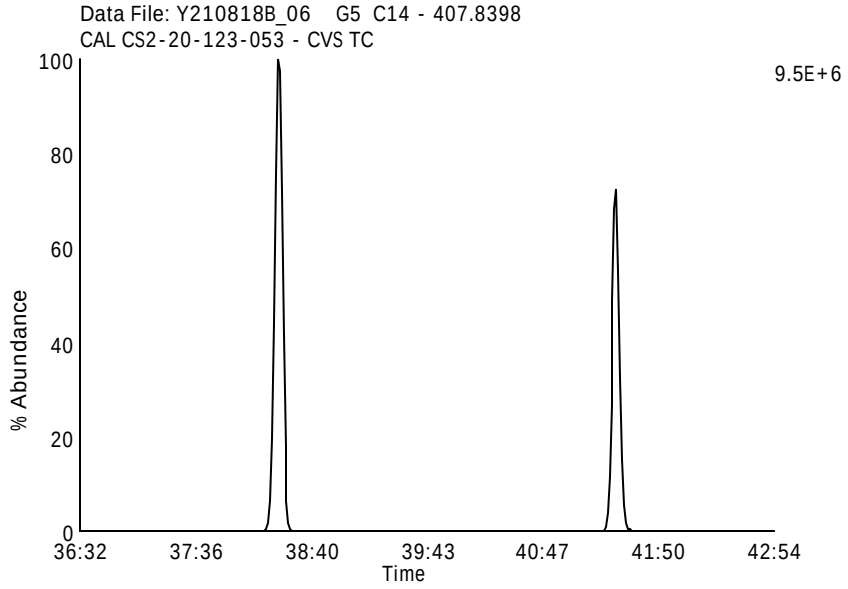


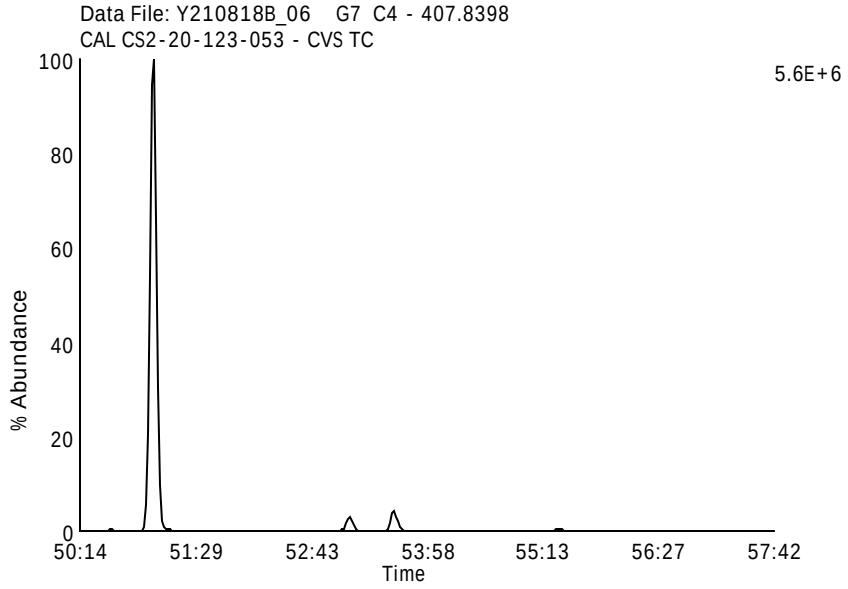
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC









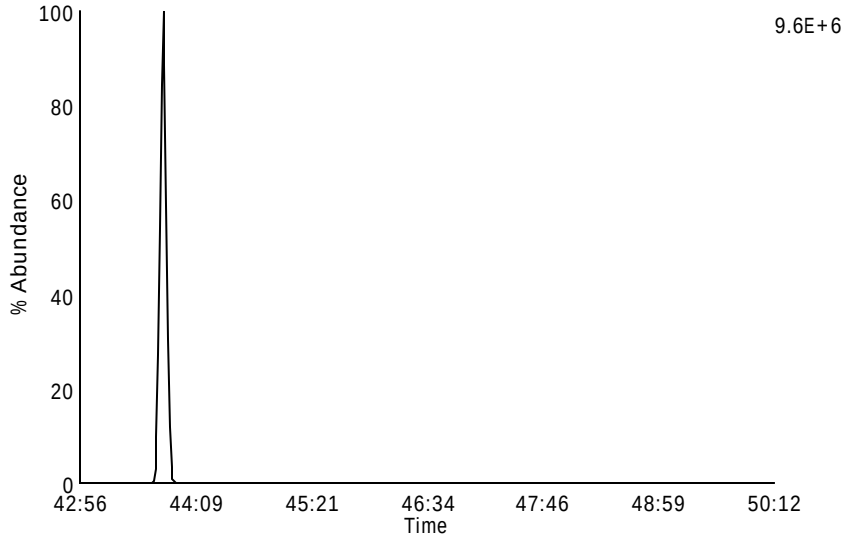
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

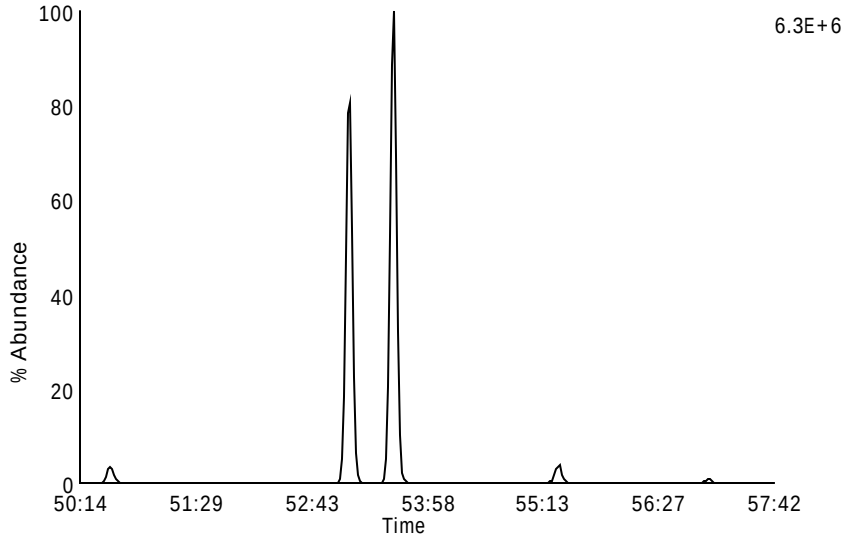
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

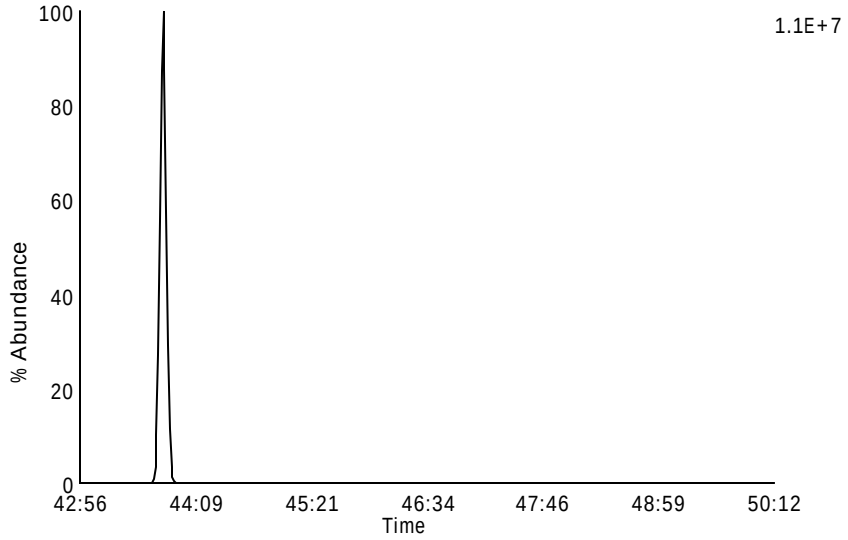
Data File: Y210818B_06 G6 C13 - 439.8038
CAL CS2-20-123-053 - CVS TC



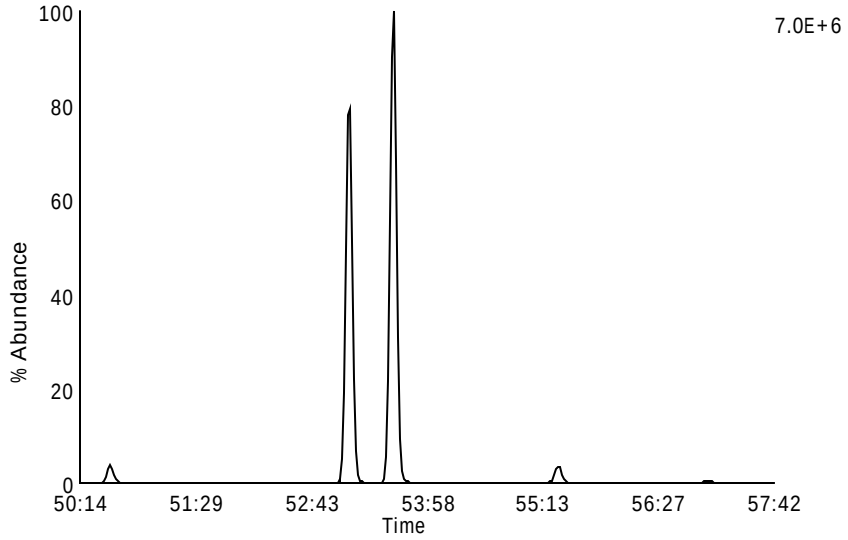
Data File: Y210818B_06 G7 C7 - 439.8038
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G6 C14 - 441.8008
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G7 C8 - 441.8008
CAL CS2-20-123-053 - CVS TC

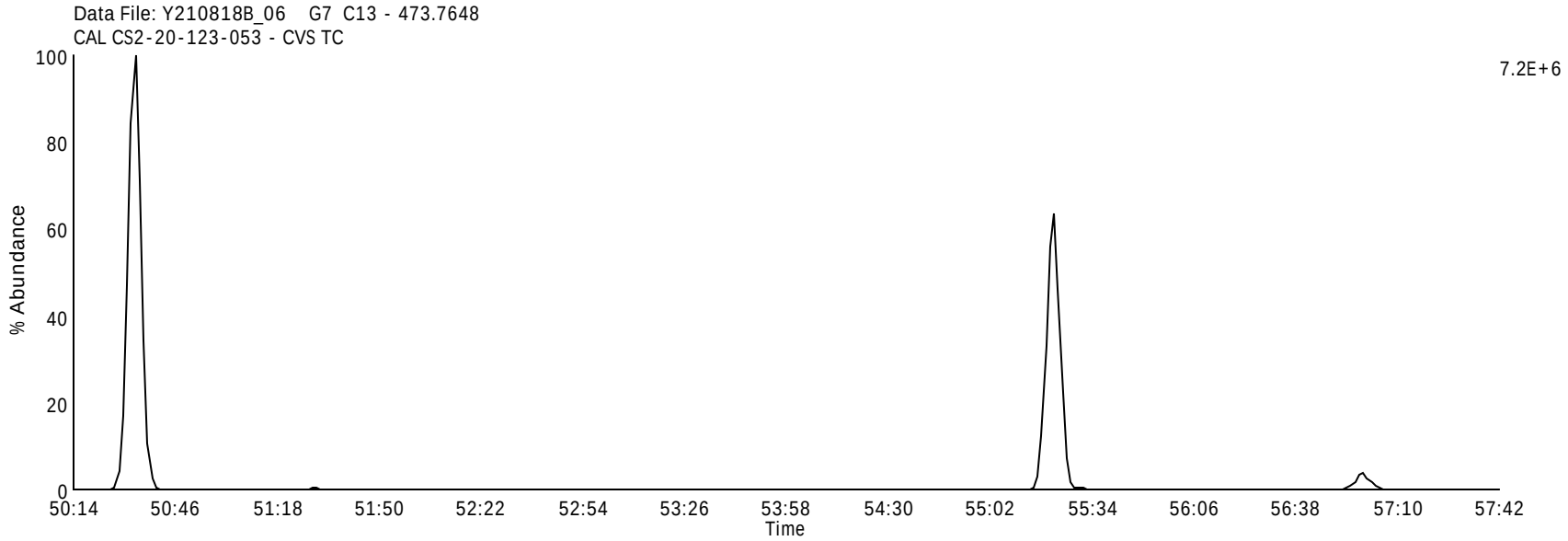


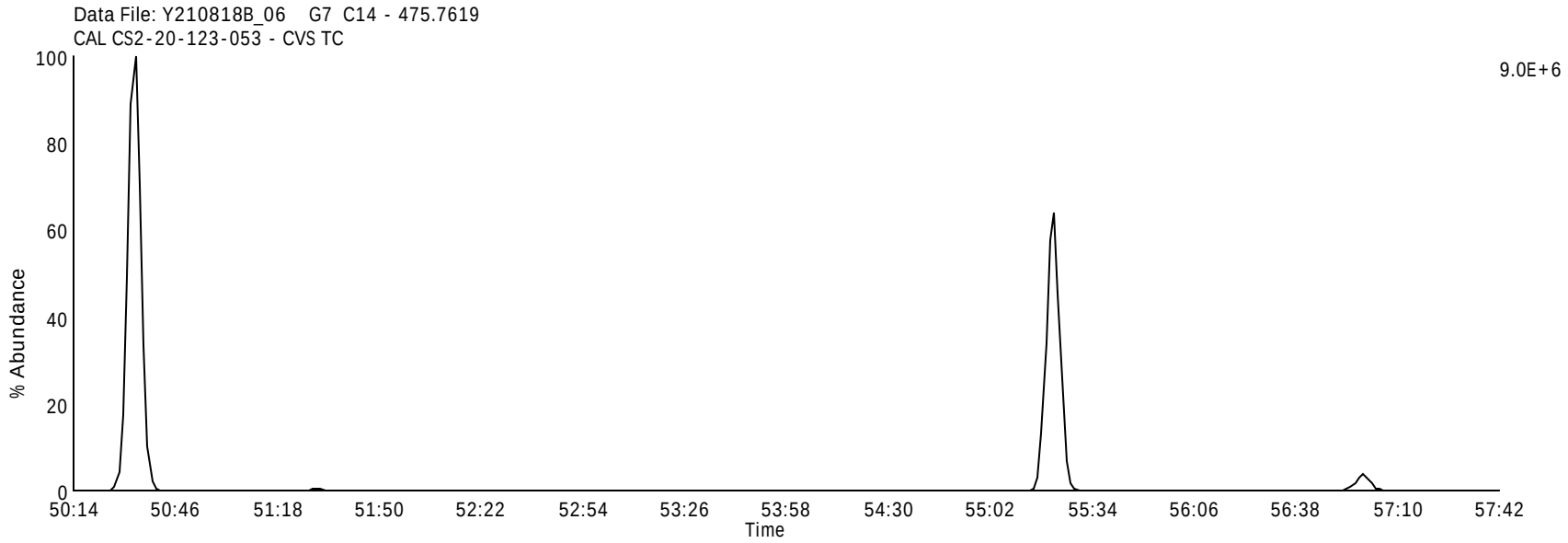
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



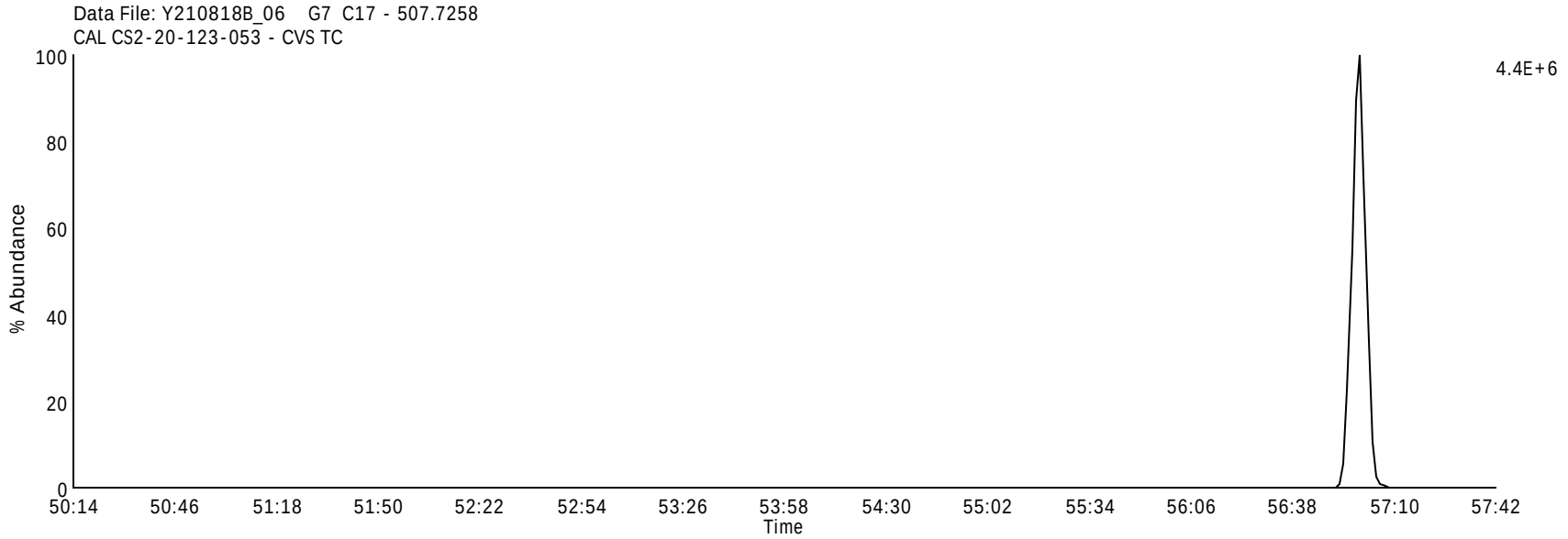


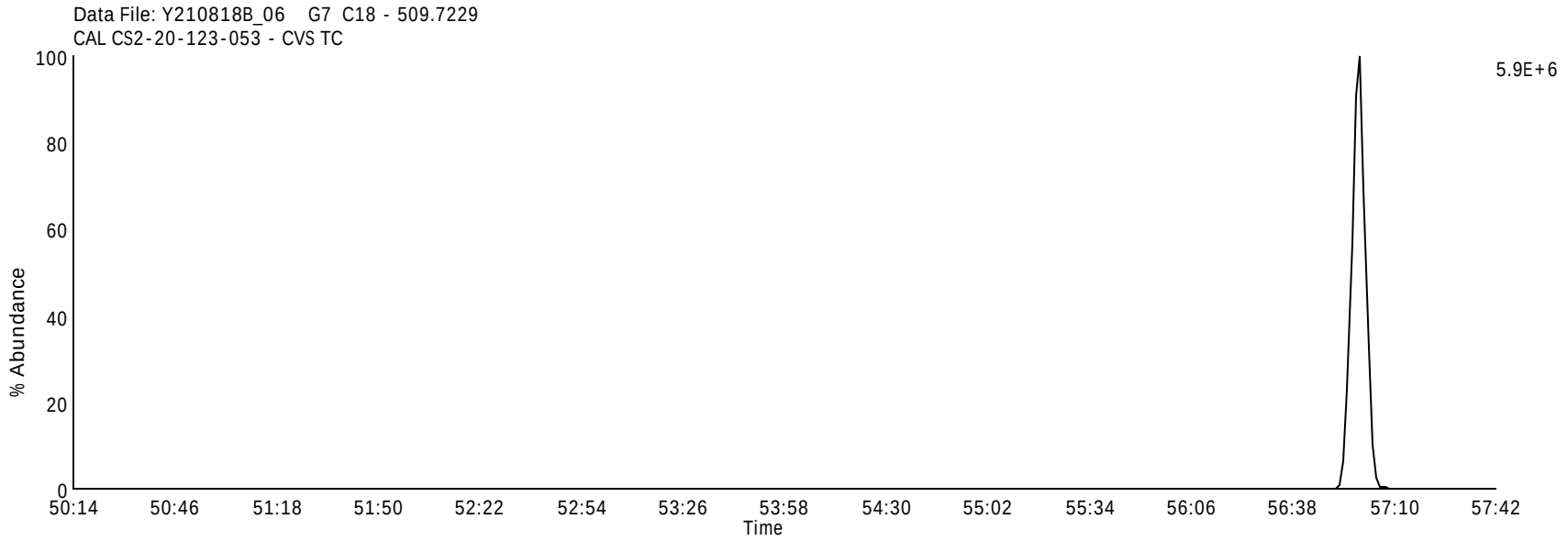
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



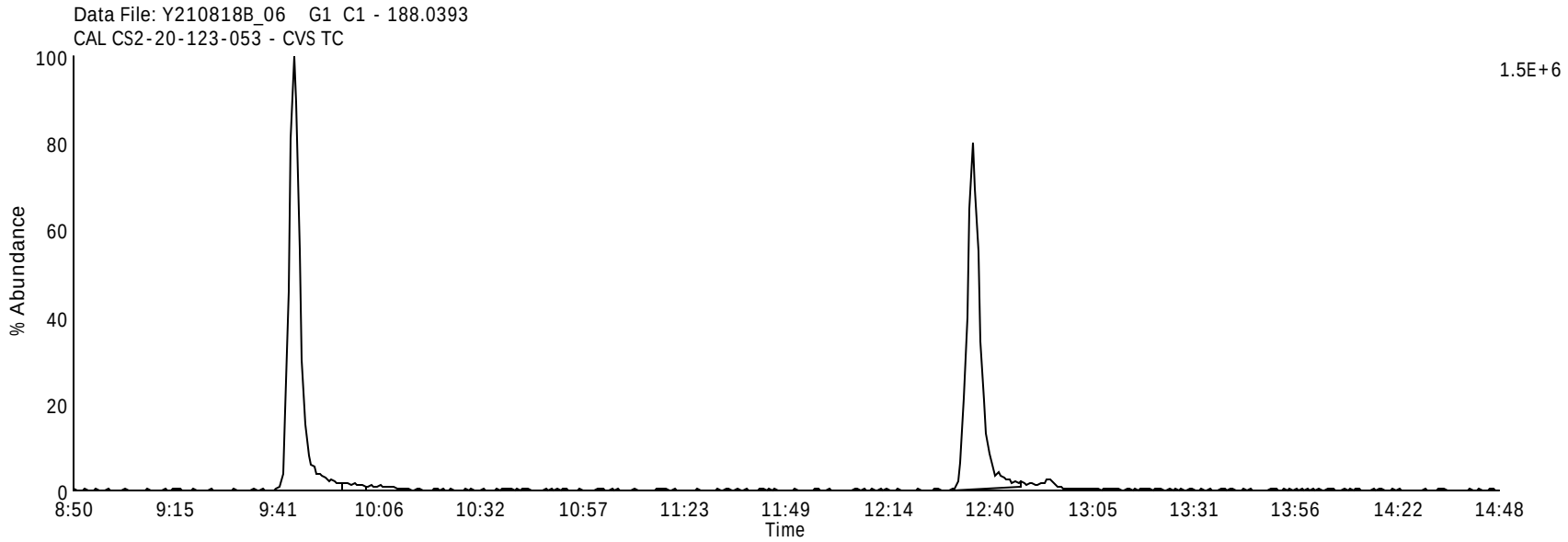


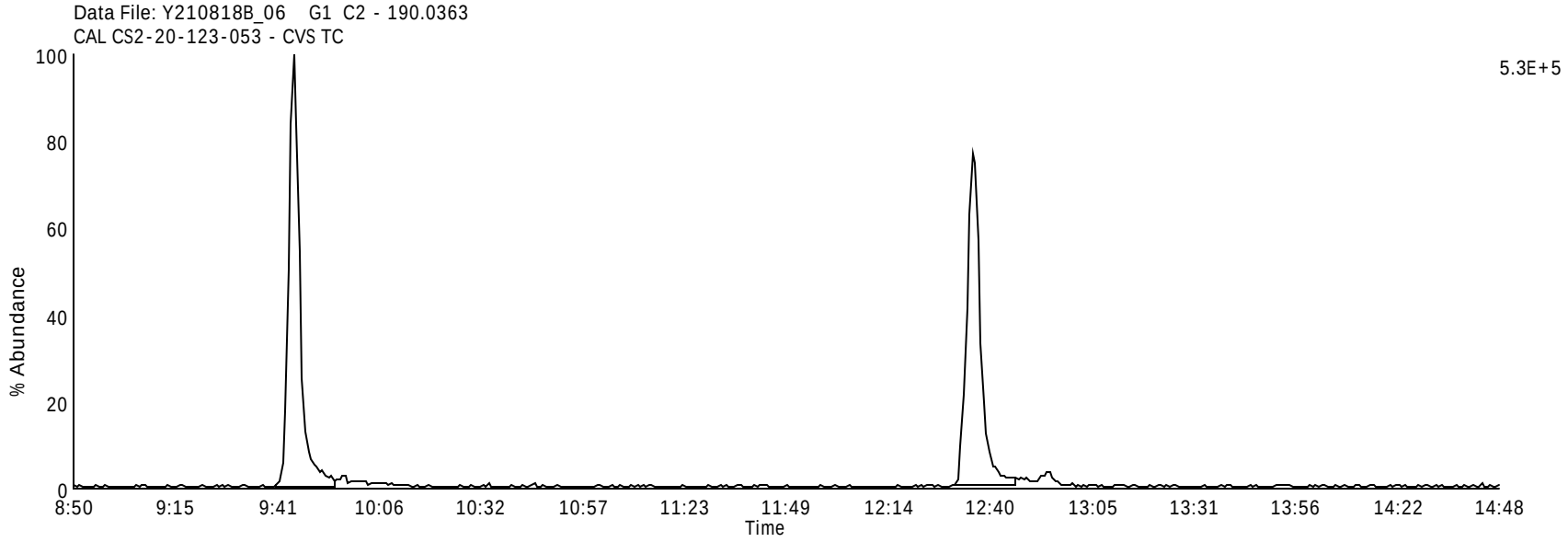
Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

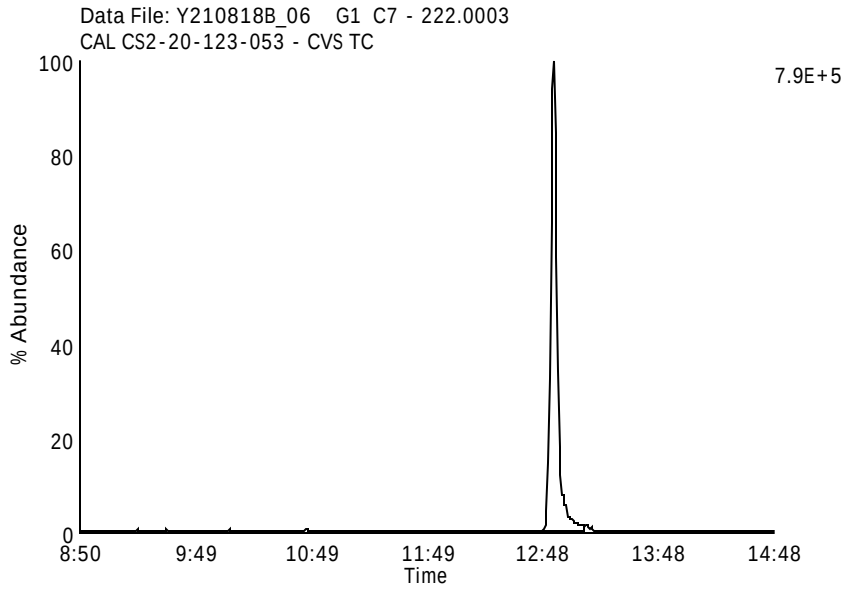
Sample Description: CAL CS2-20-123-053 - CVS TC

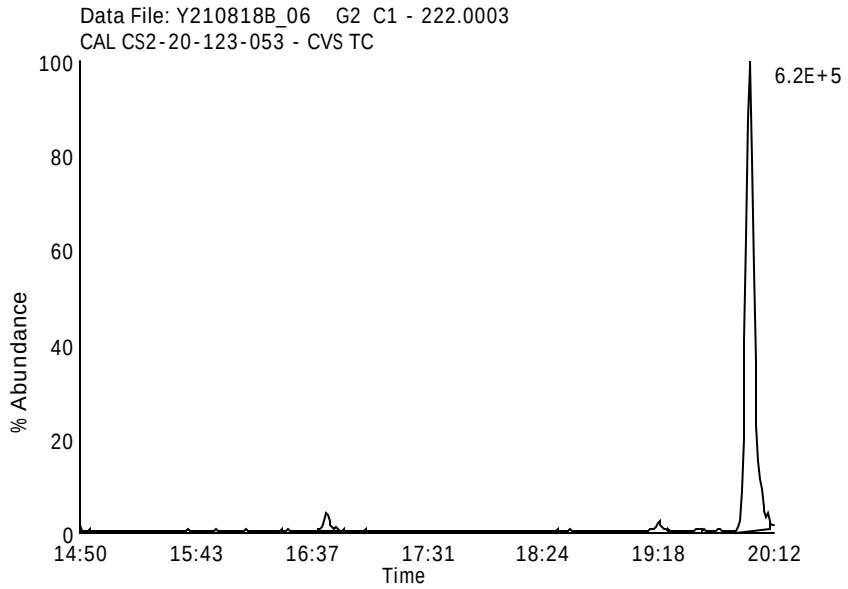


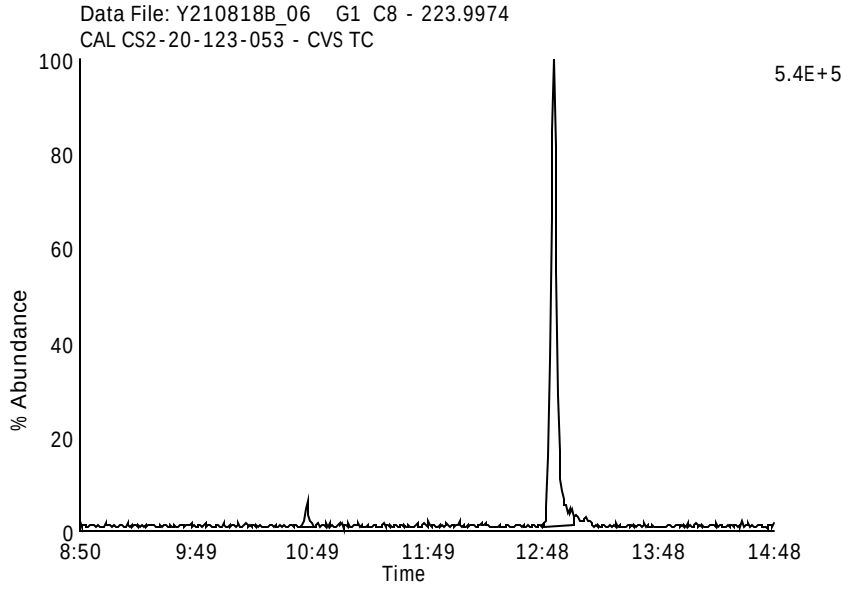


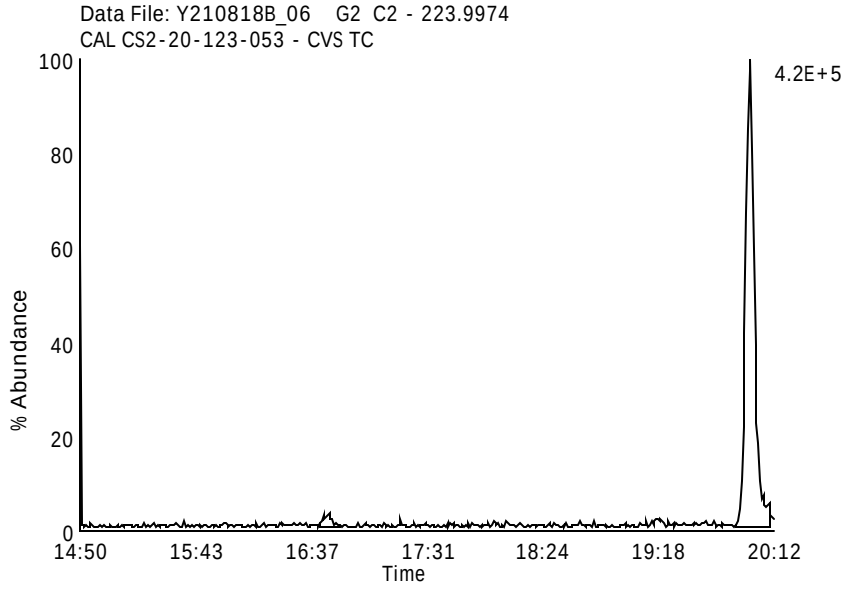
Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



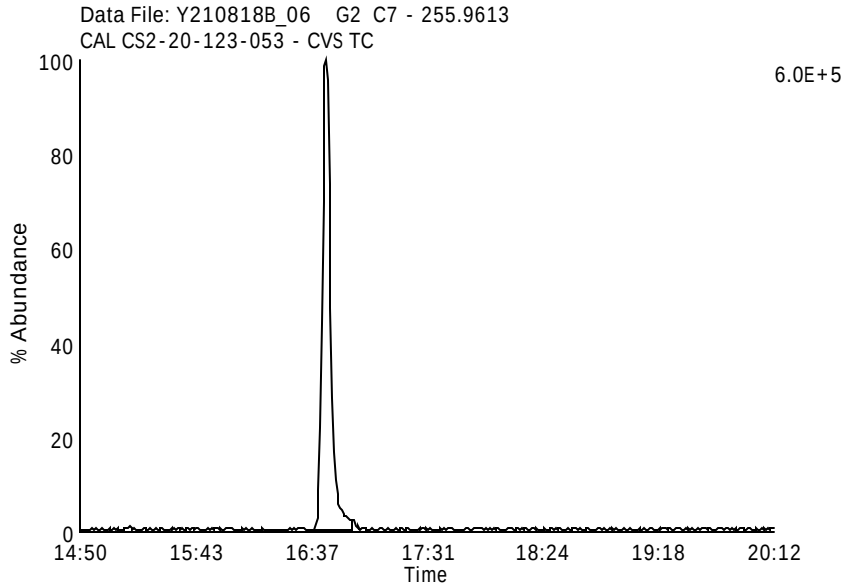


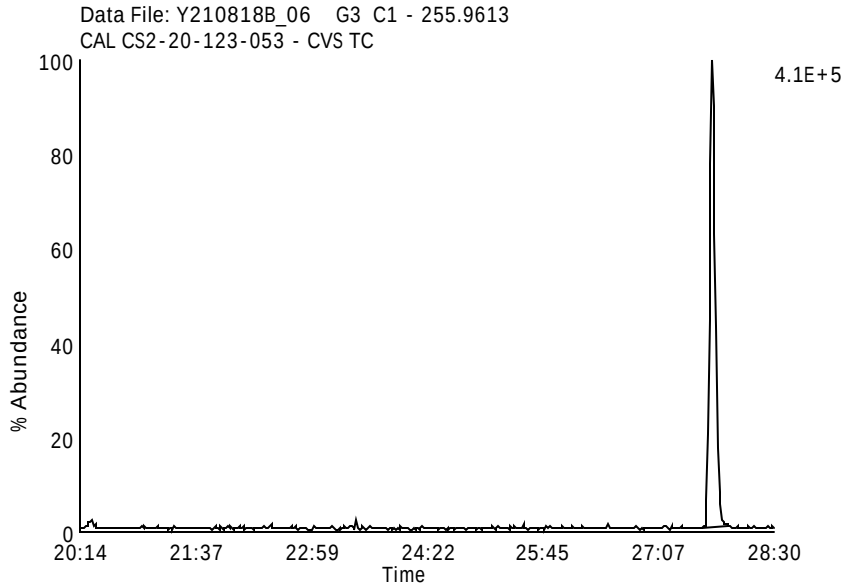


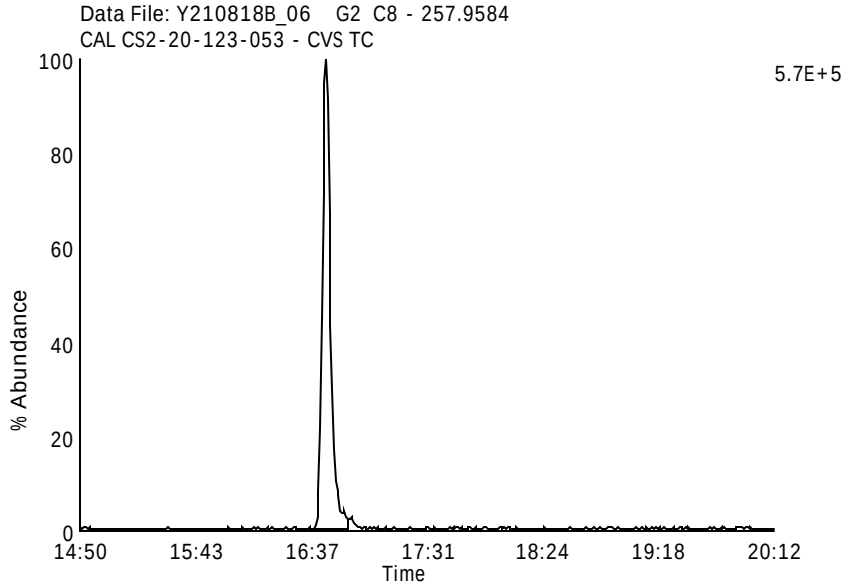


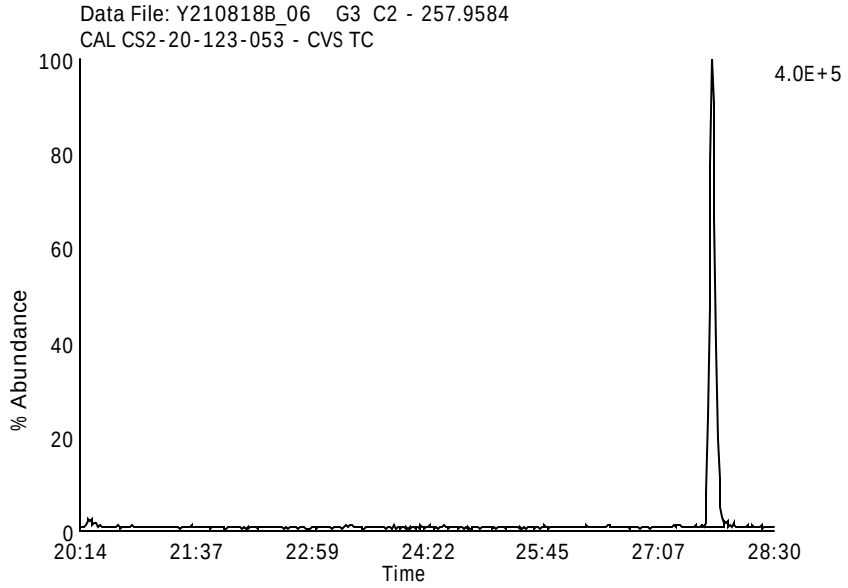
Tri Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



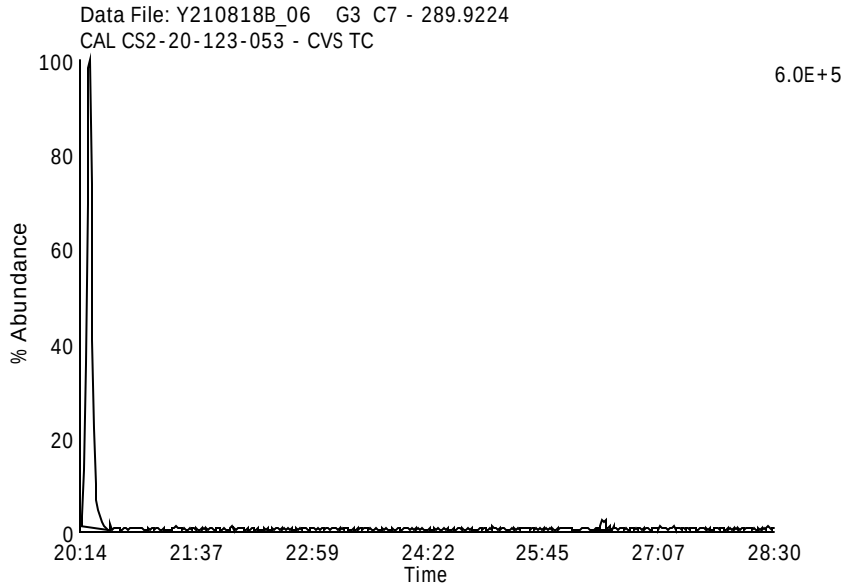


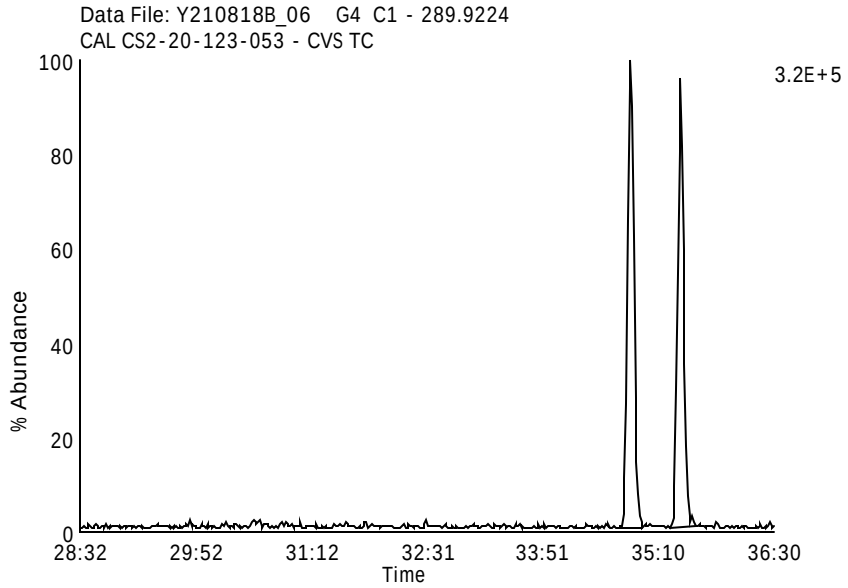


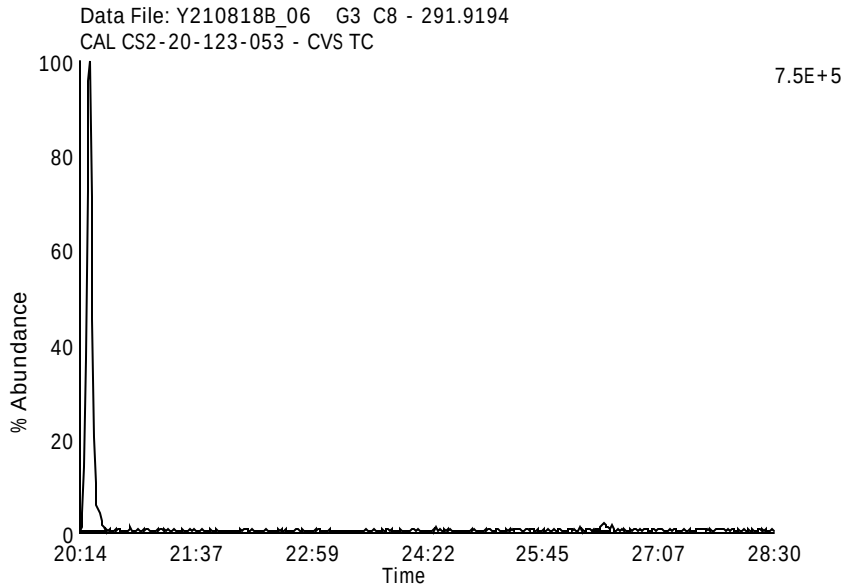


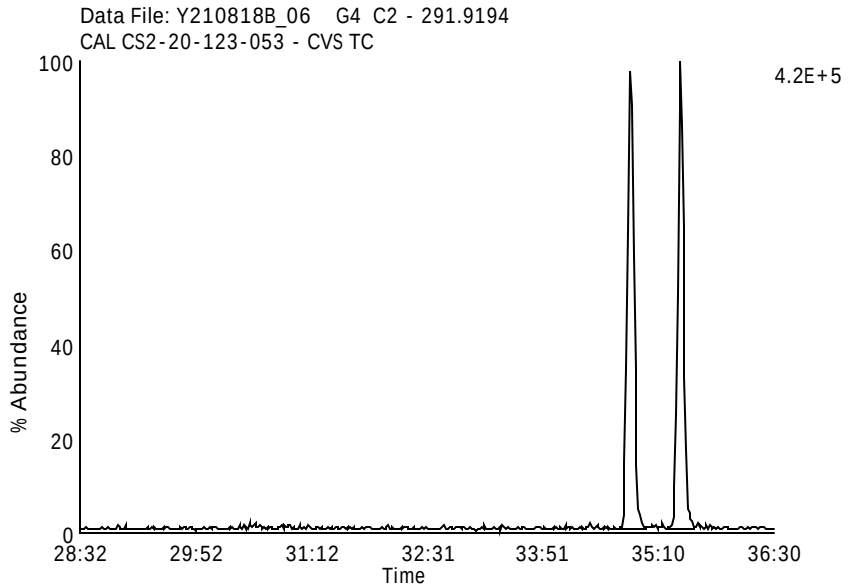
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC









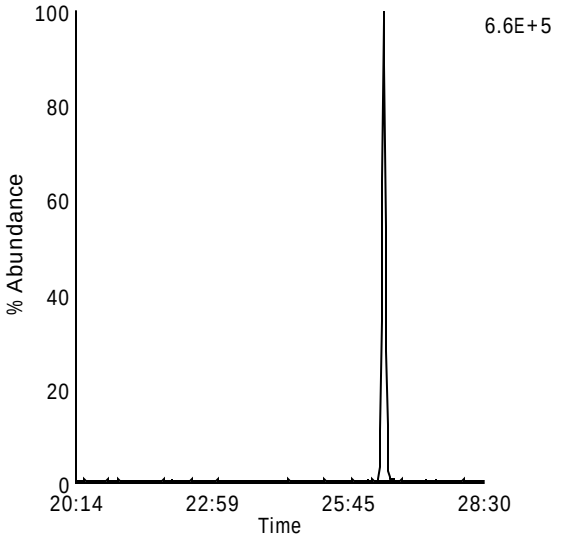
Penta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

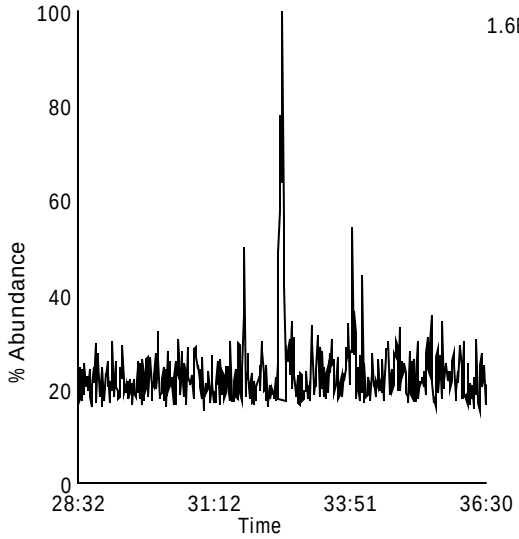
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

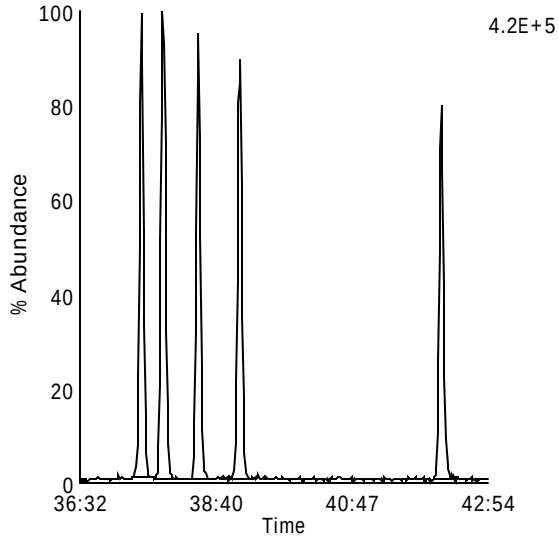
Data File: Y210818B_06 G3 C11 - 325.8804
CAL CS2-20-123-053 - CVS TC



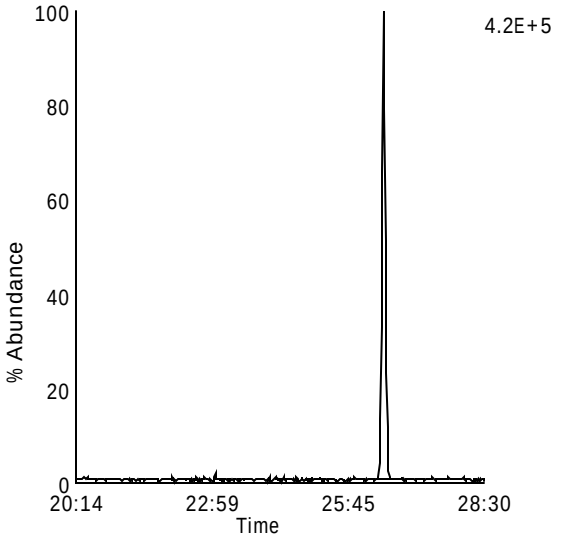
Data File: Y210818B_06 G4 C5 - 325.8804
CAL CS2-20-123-053 - CVS TC



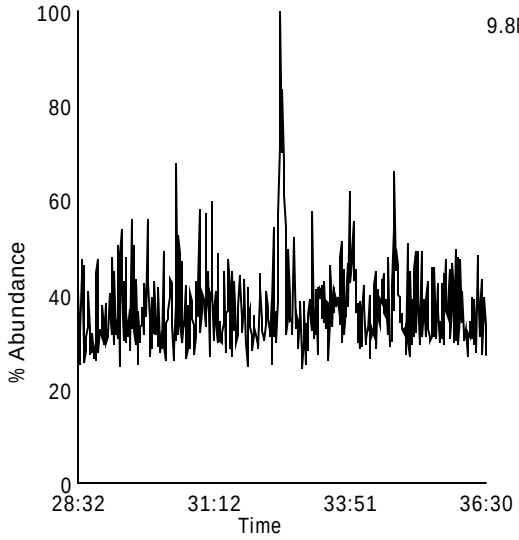
Data File: Y210818B_06 G5 C1 - 325.8804
CAL CS2-20-123-053 - CVS TC



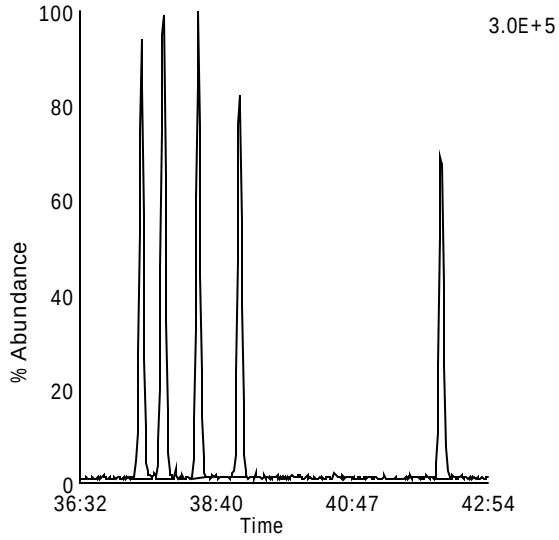
Data File: Y210818B_06 G3 C12 - 327.8775
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C6 - 327.8775
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C2 - 327.8775
CAL CS2-20-123-053 - CVS TC



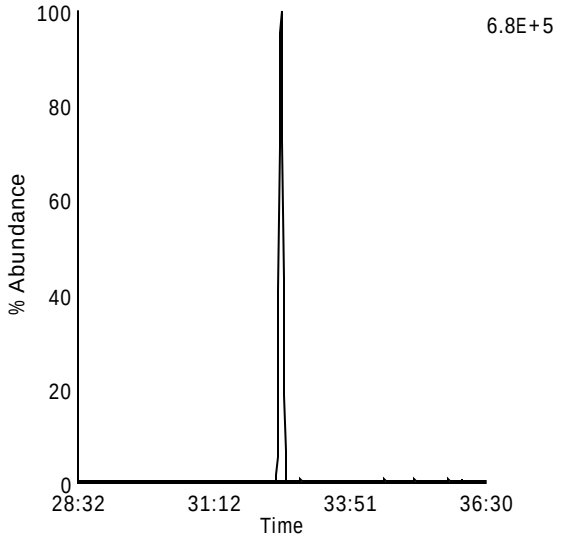
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

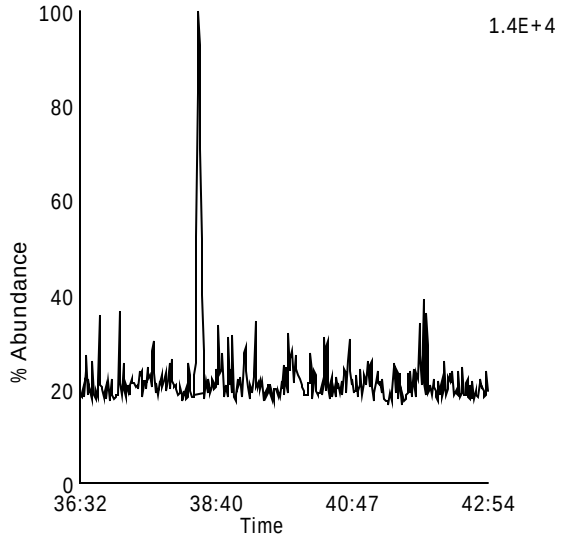
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

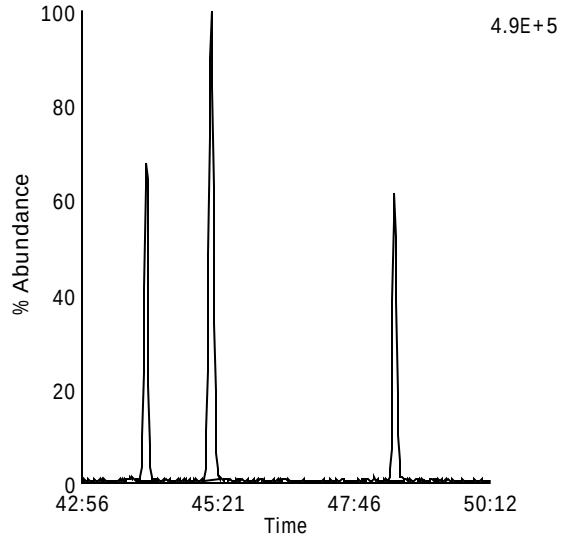
Data File: Y210818B_06 G4 C11 - 359.8415
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C5 - 359.8415
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G6 C1 - 359.8415
CAL CS2-20-123-053 - CVS TC



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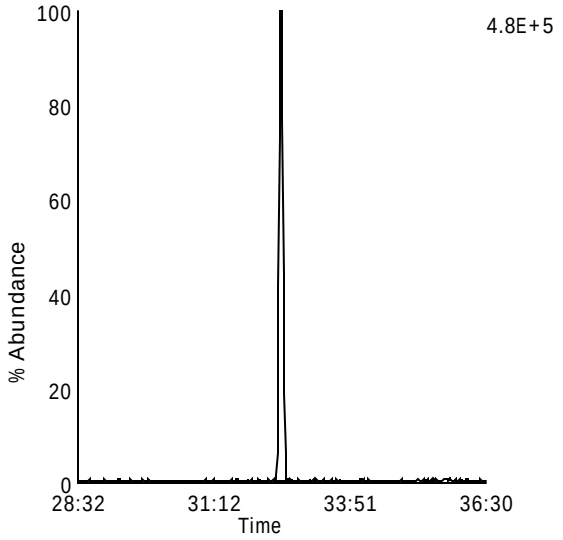
CAL CS2-20-123-053 - CVS TC



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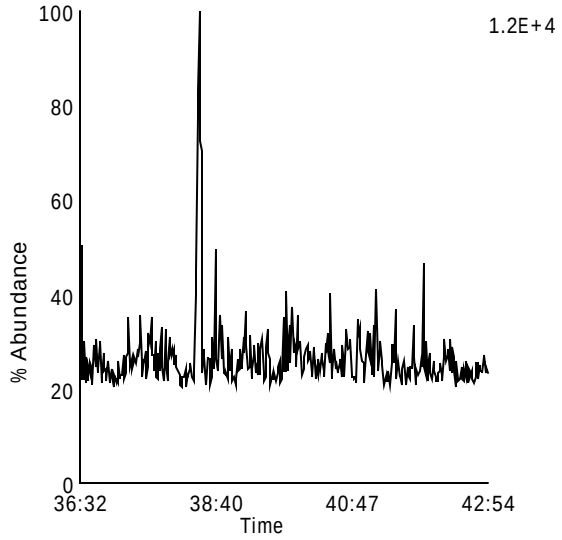
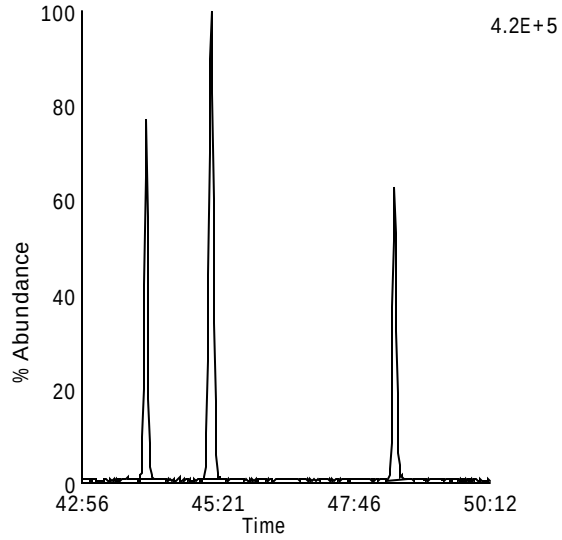
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G6 C2 - 361.8385
CAL CS2-20-123-053 - CVS TC

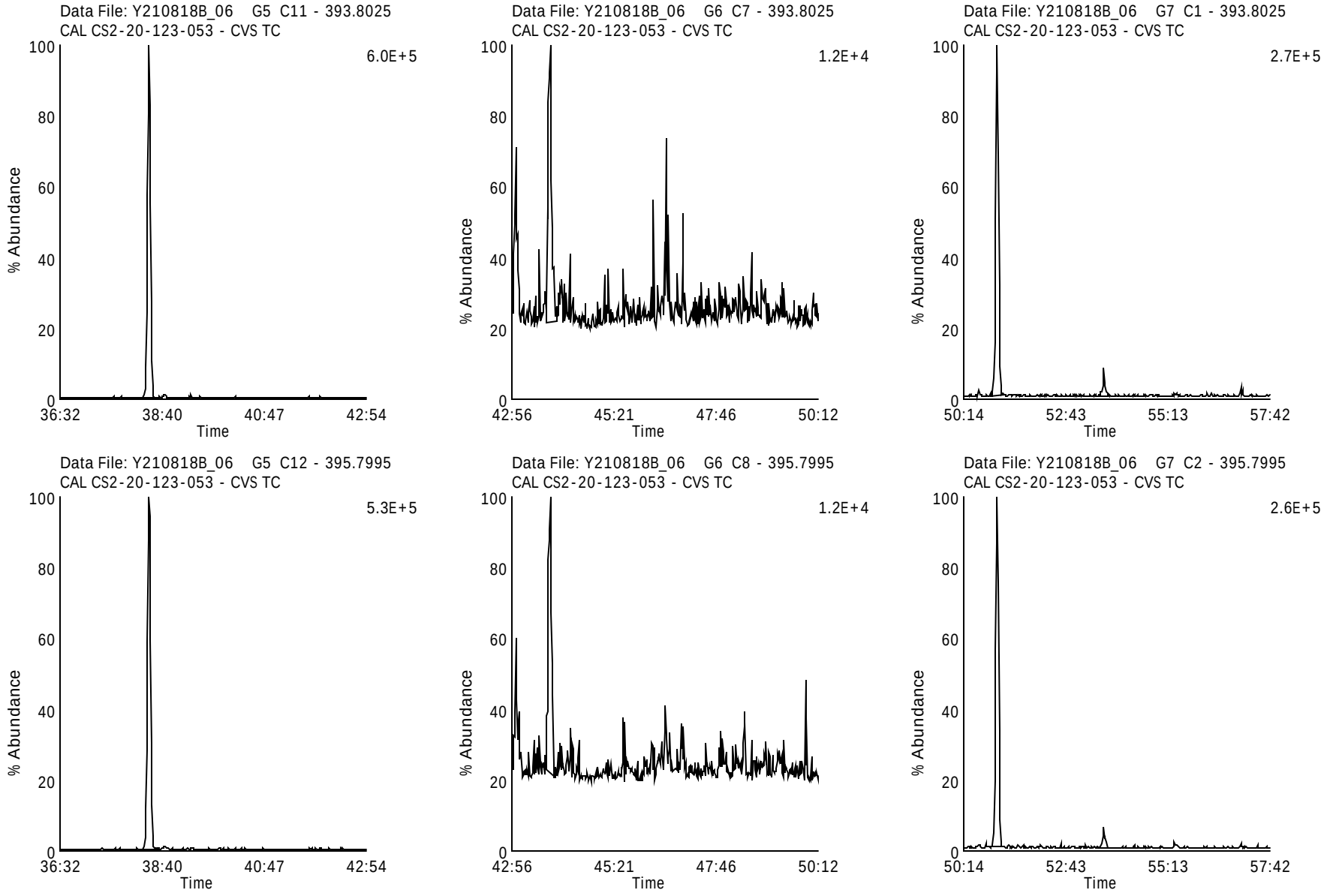


Hepta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

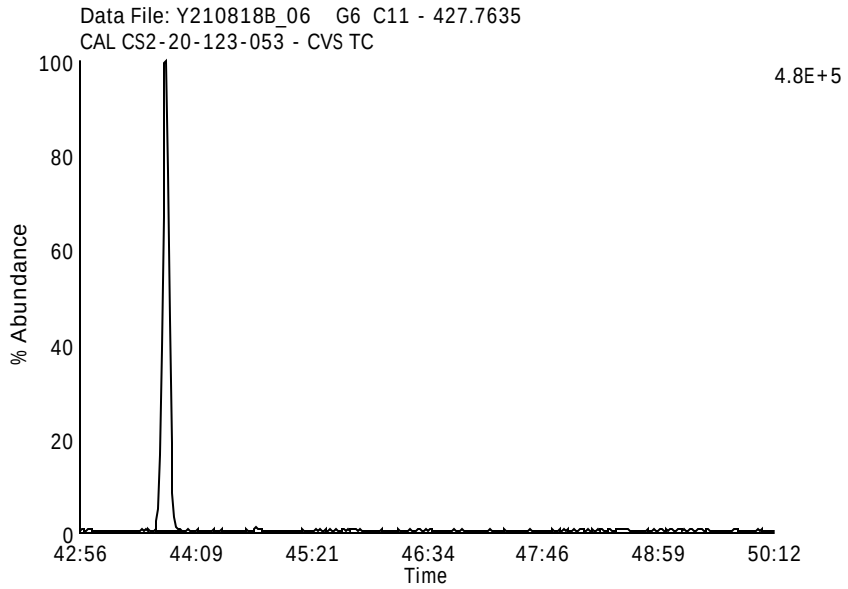
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

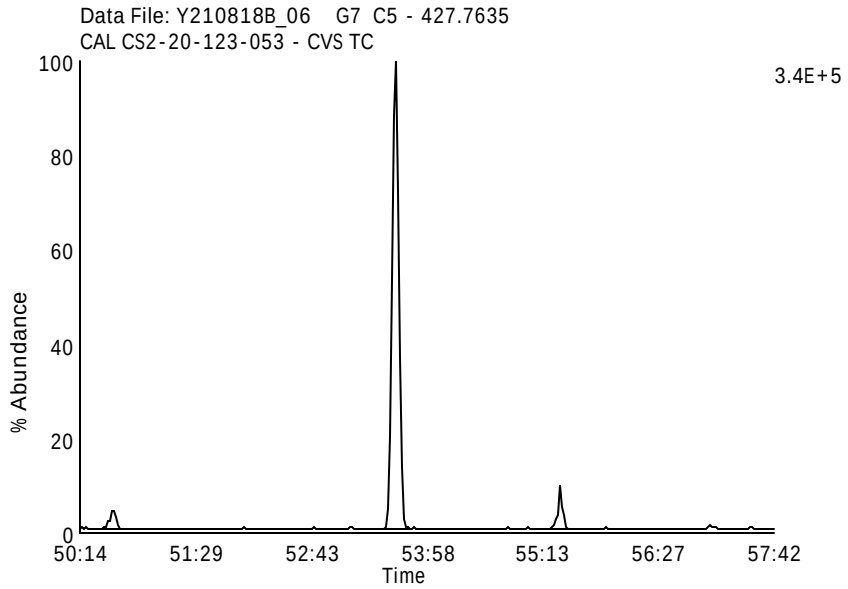
Sample Description: CAL CS2-20-123-053 - CVS TC

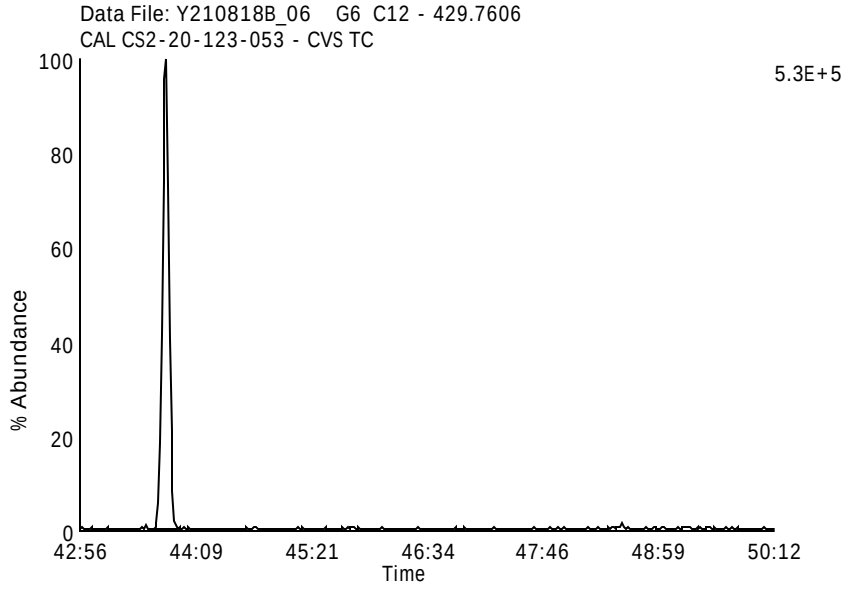


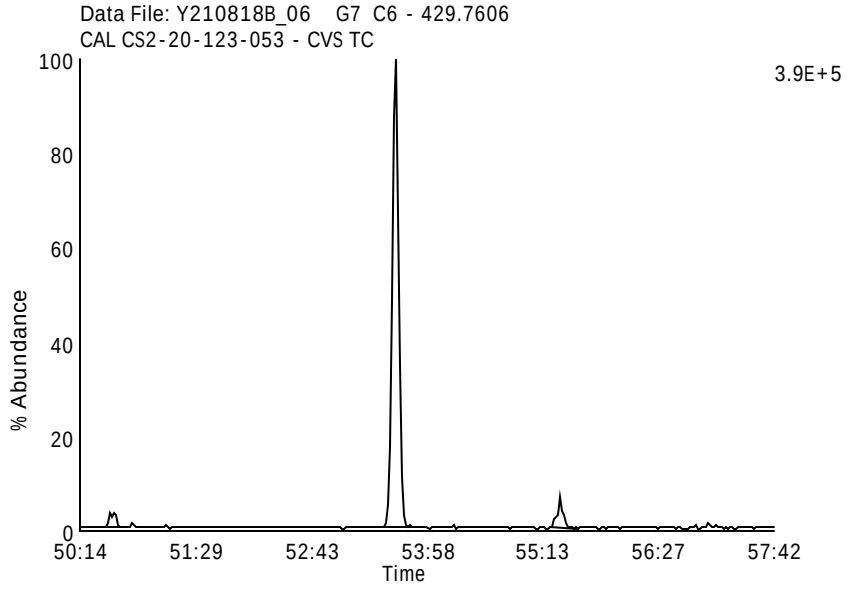
Octa Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







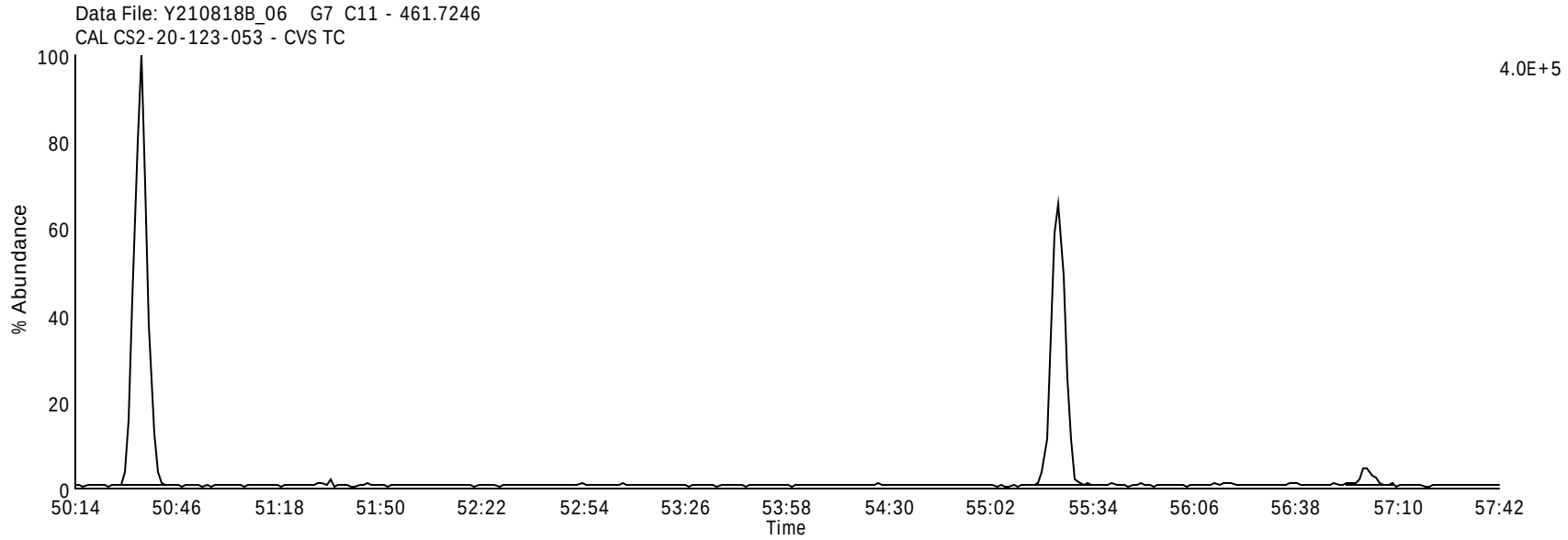


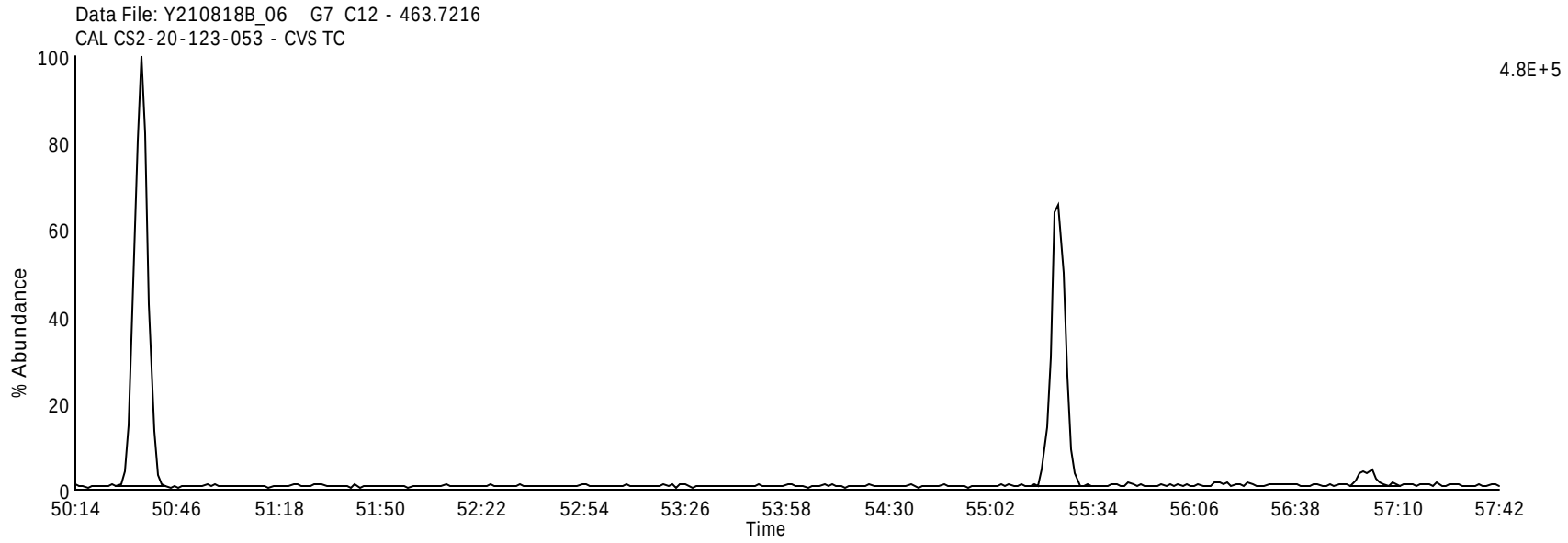
Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



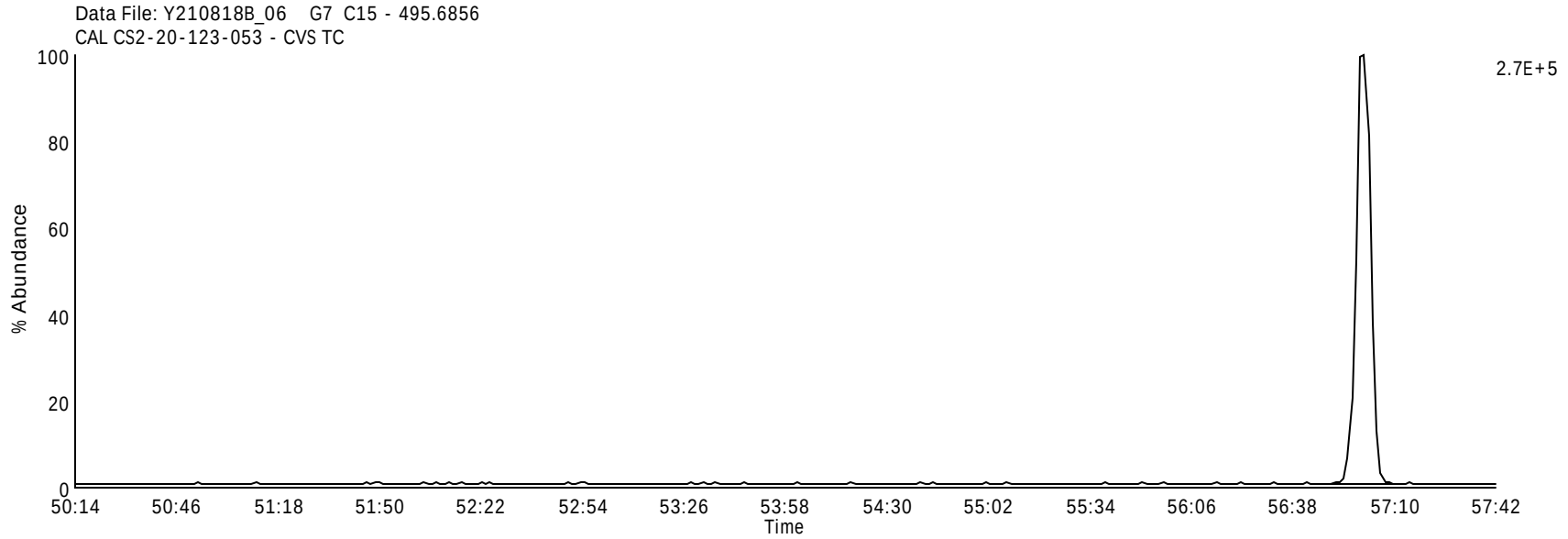


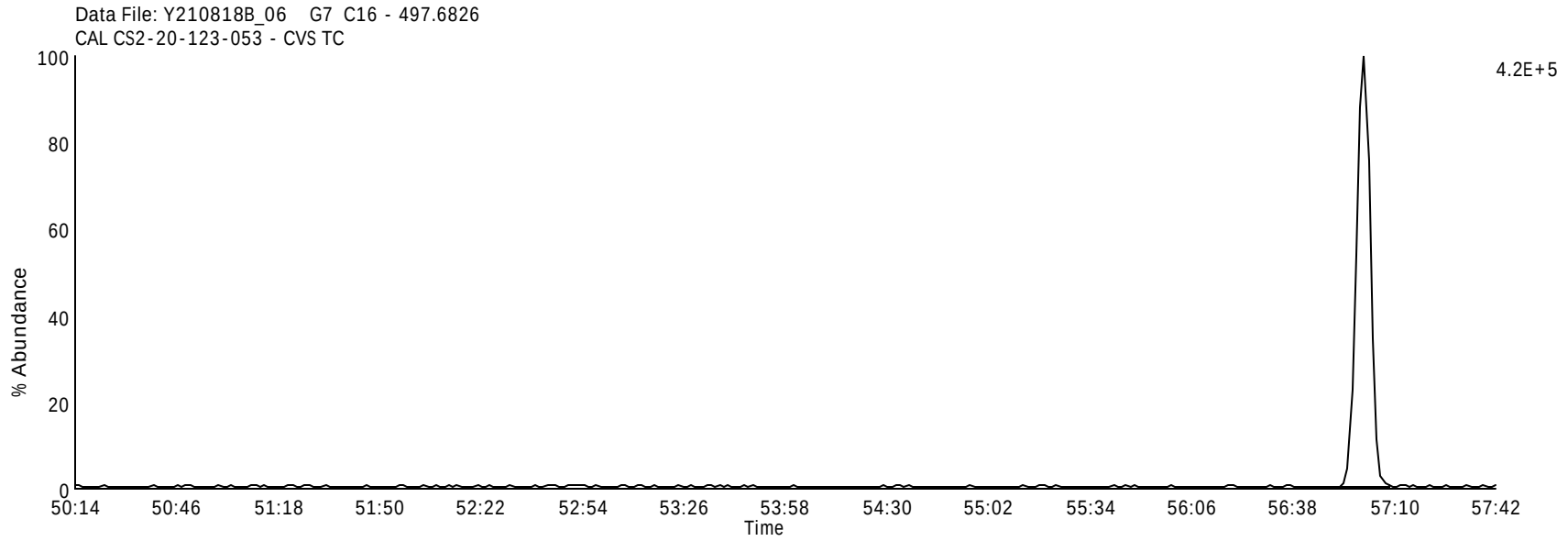
Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

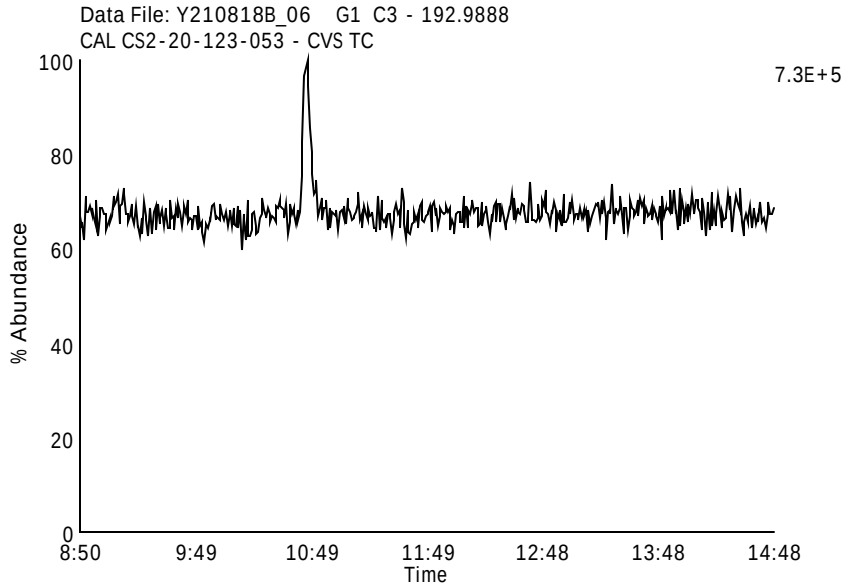
Sample Description: CAL CS2-20-123-053 - CVS TC

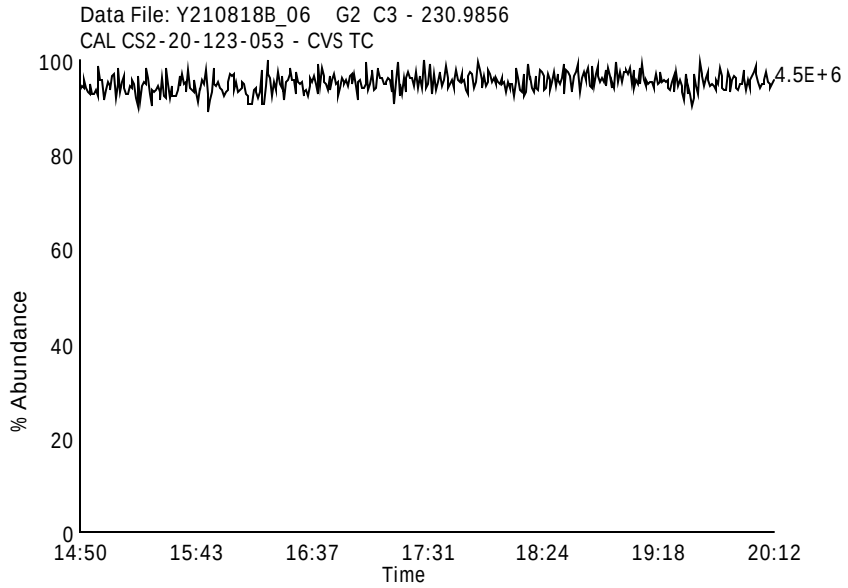


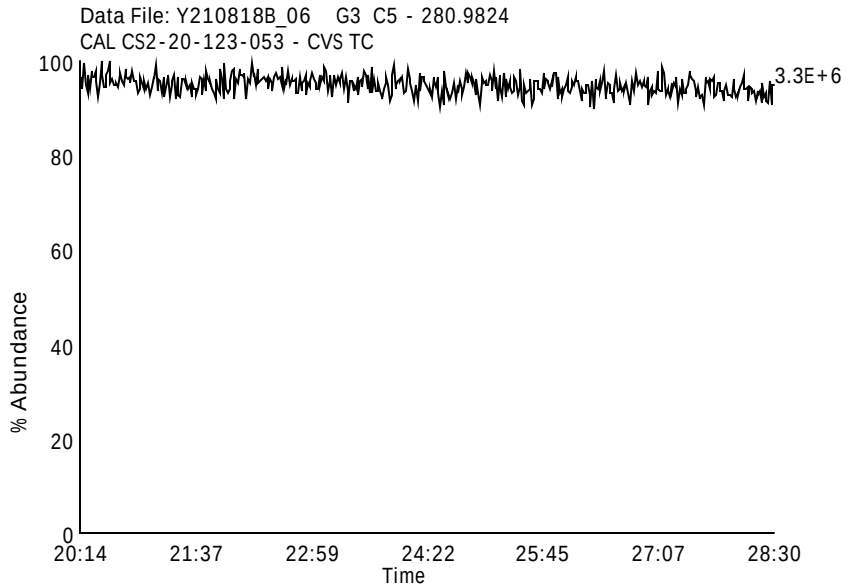


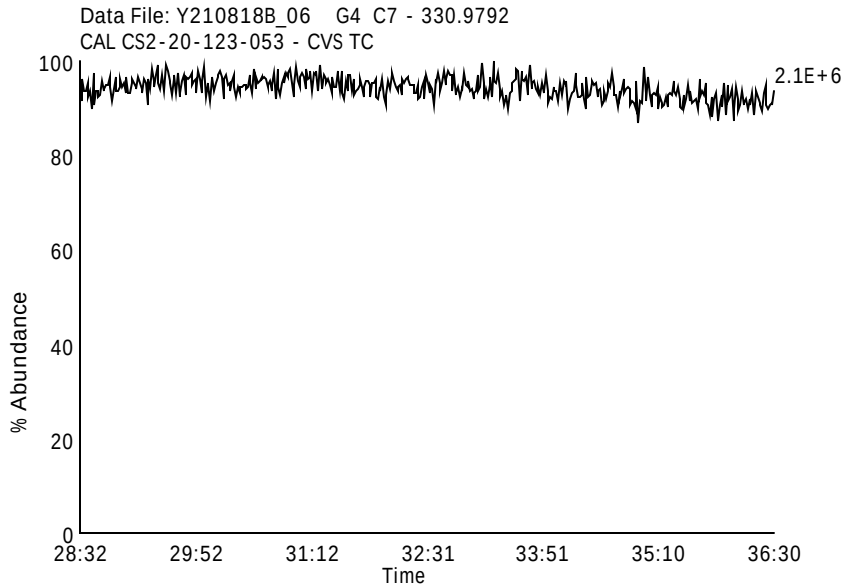
Group 1 - 4 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



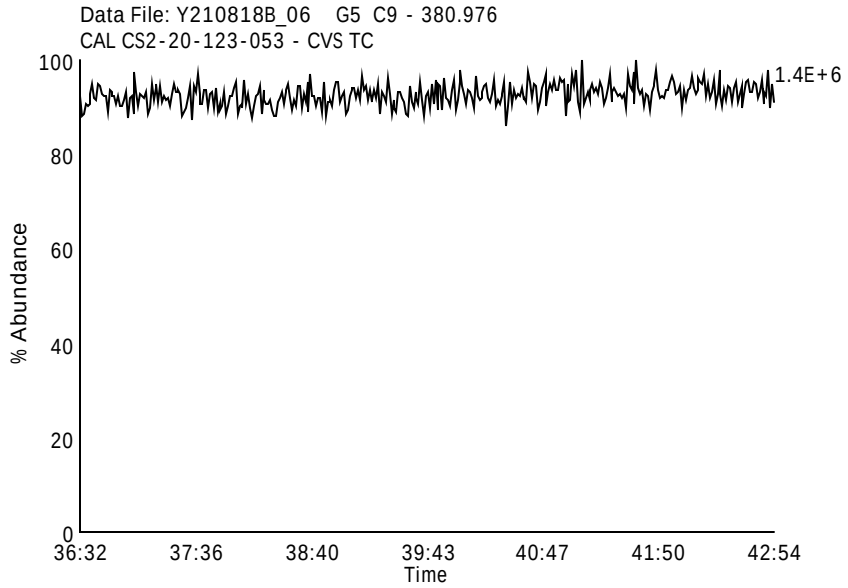


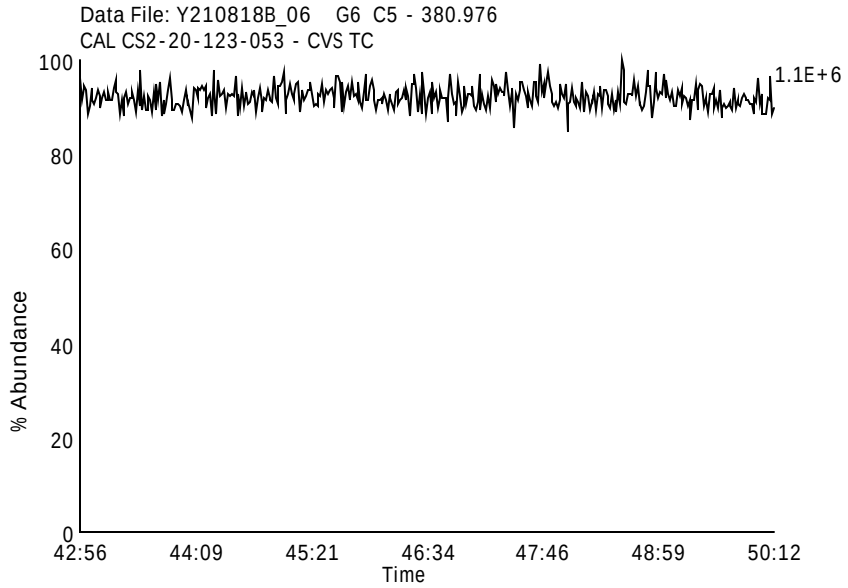


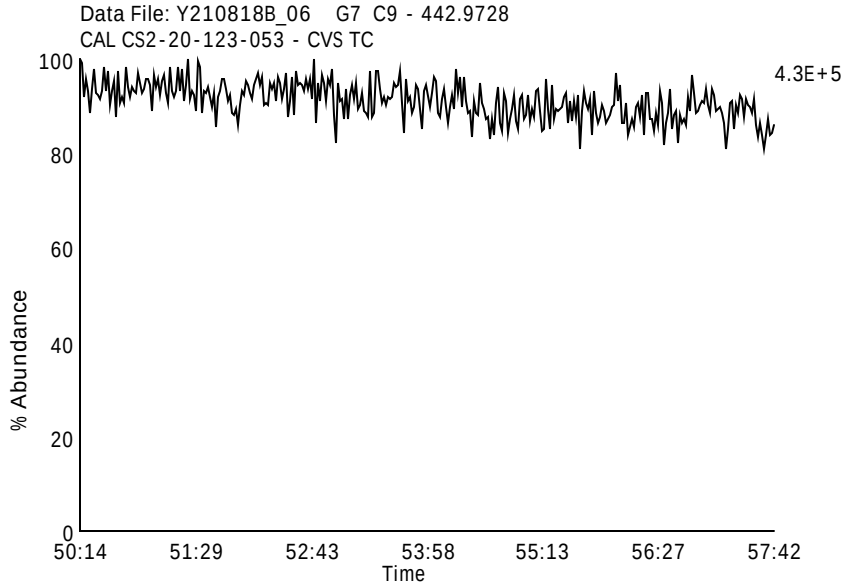


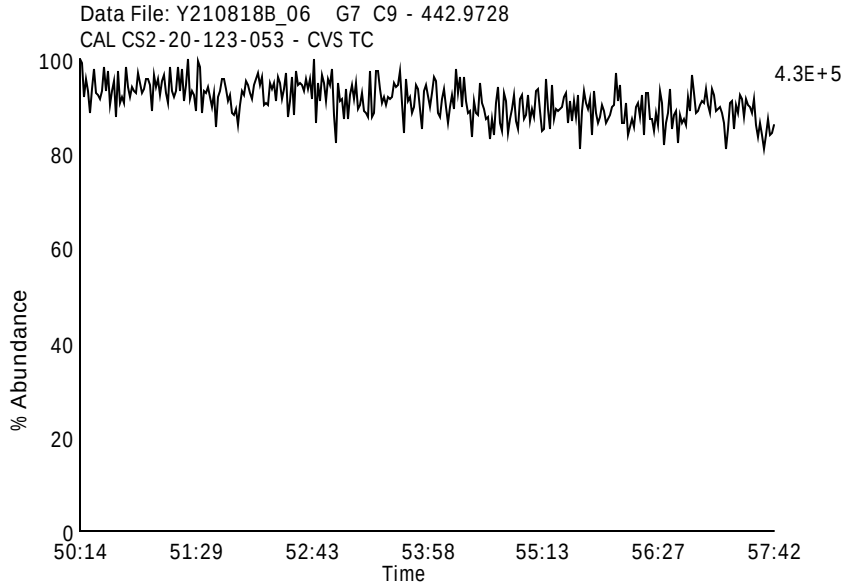
Group 5 - 7 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







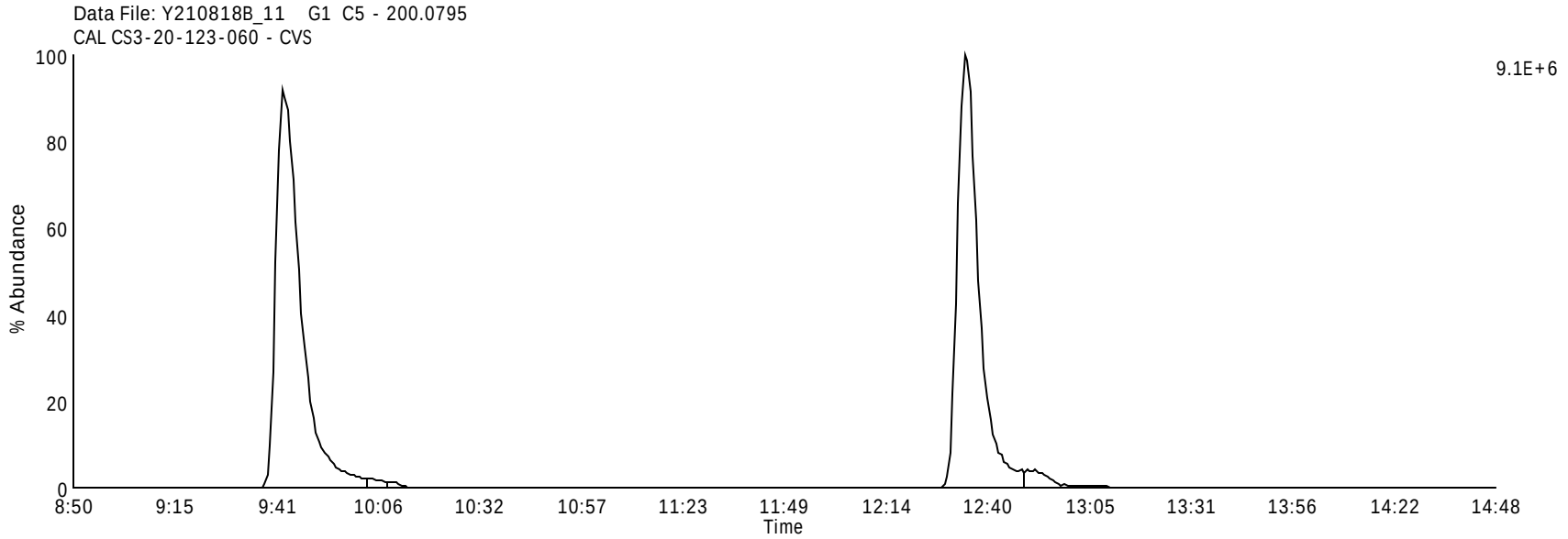


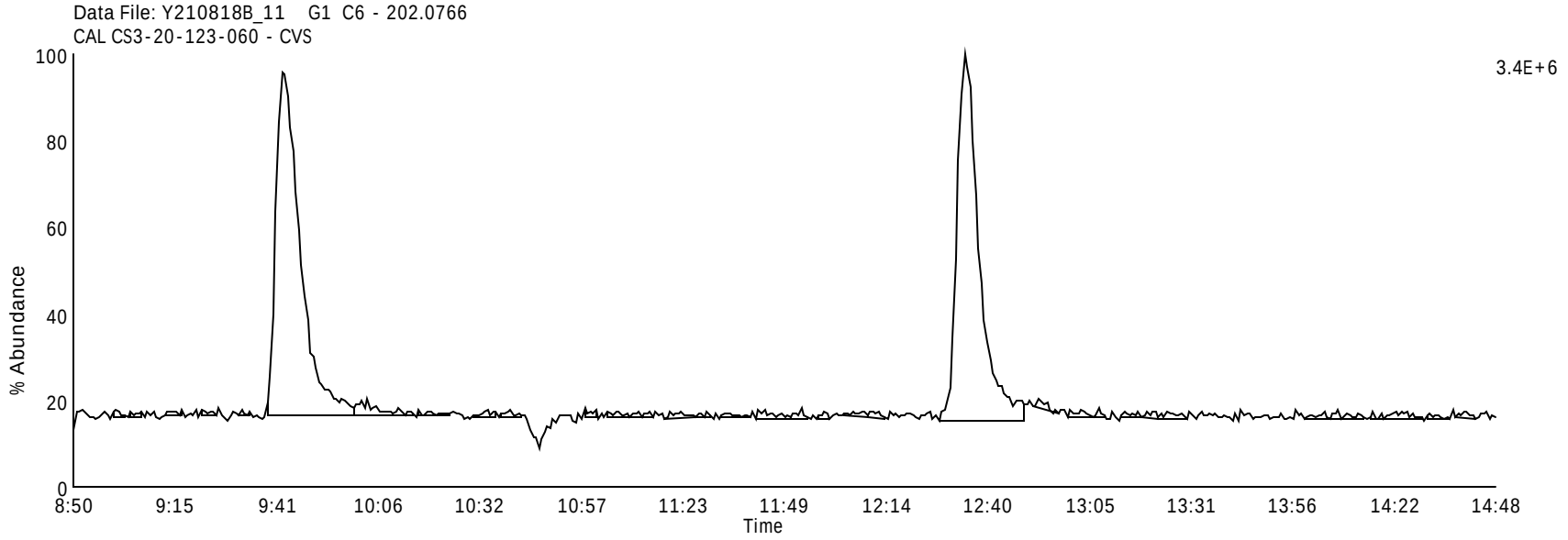
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS

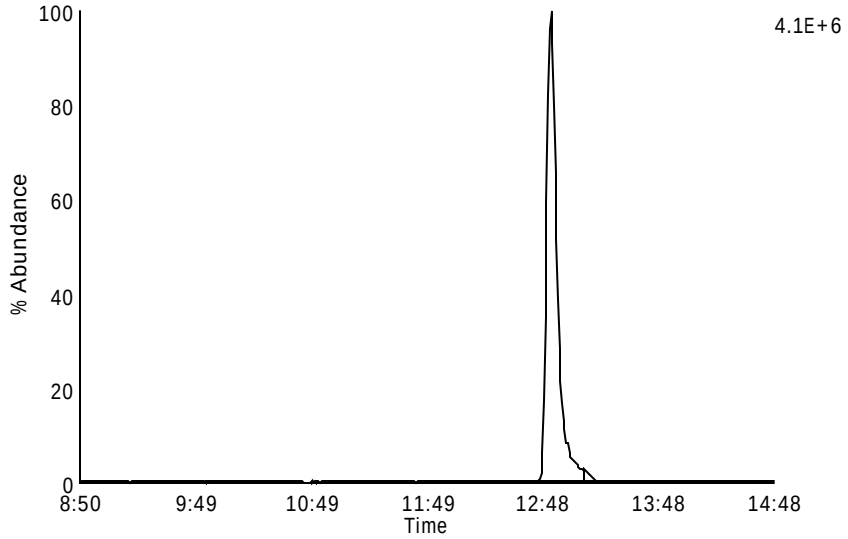




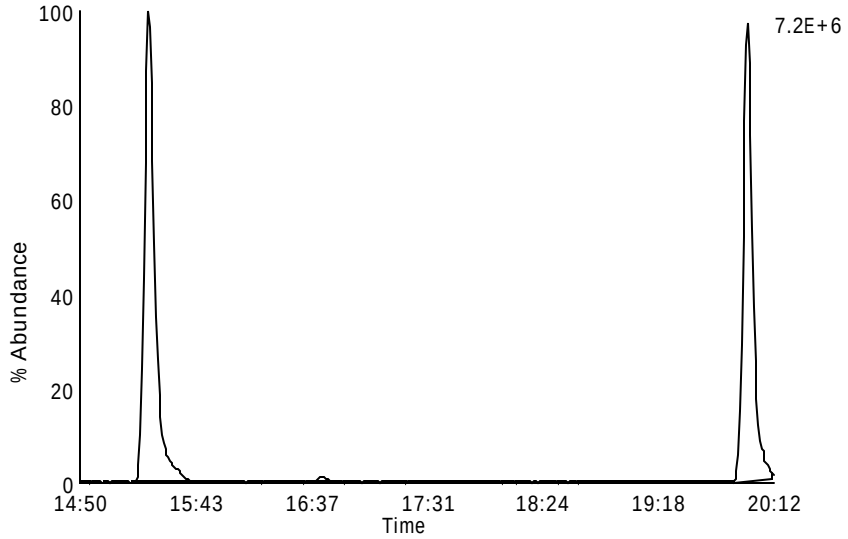
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

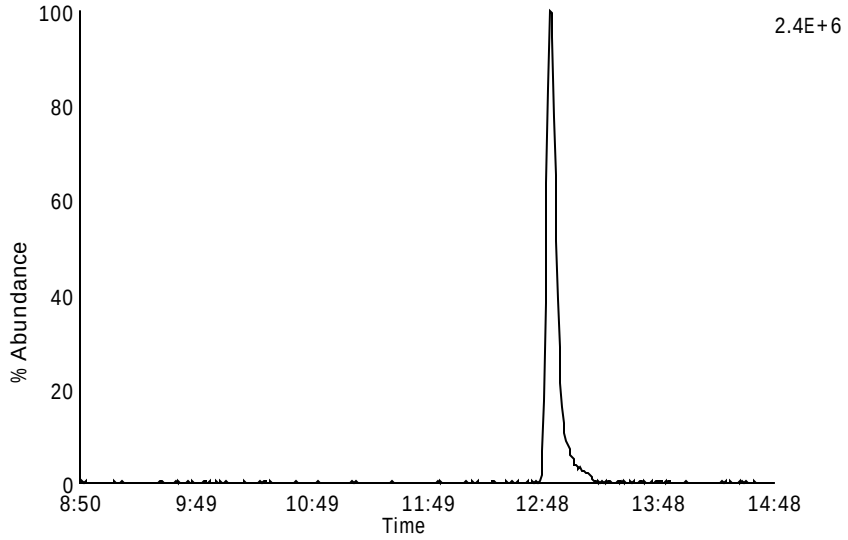
Data File: Y210818B_11 G1 C9 - 234.0406
CAL CS3-20-123-060 - CVS



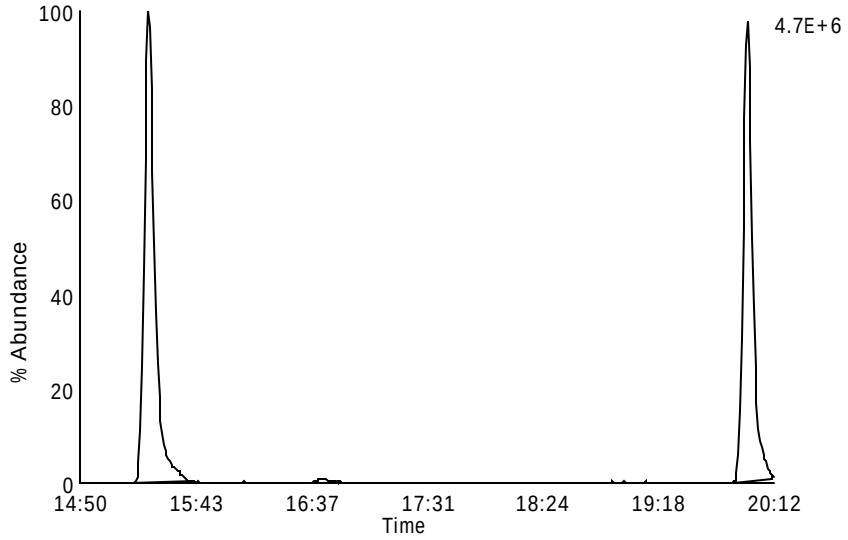
Data File: Y210818B_11 G2 C5 - 234.0406
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G1 C10 - 236.0376
CAL CS3-20-123-060 - CVS

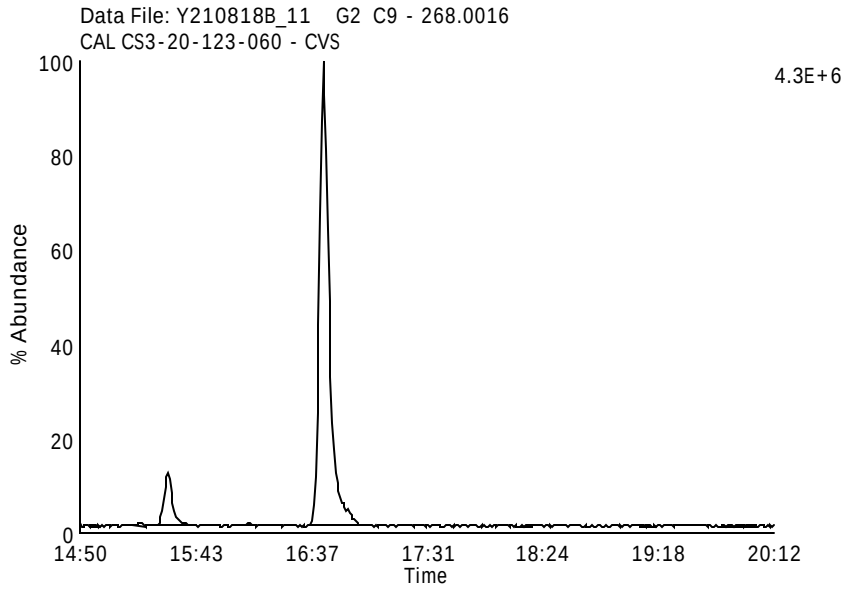


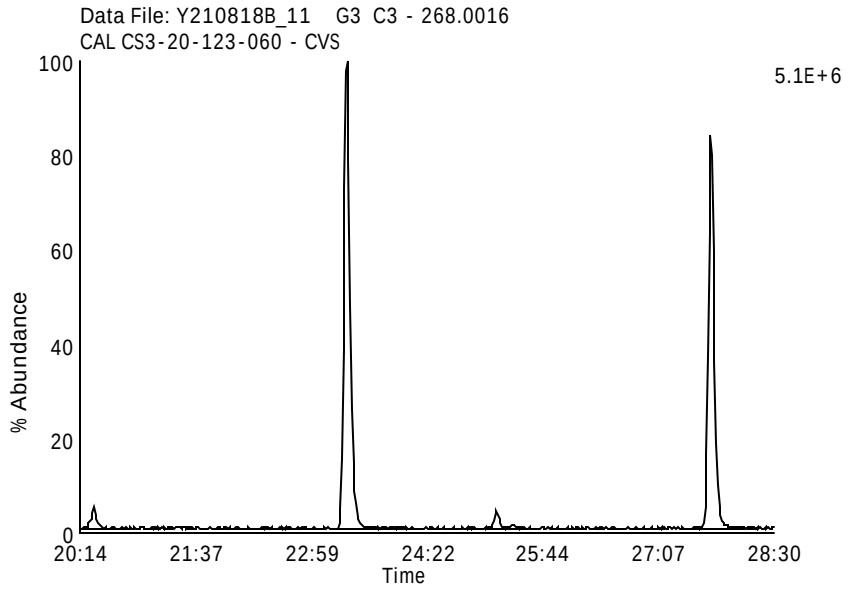
Data File: Y210818B_11 G2 C6 - 236.0376
CAL CS3-20-123-060 - CVS

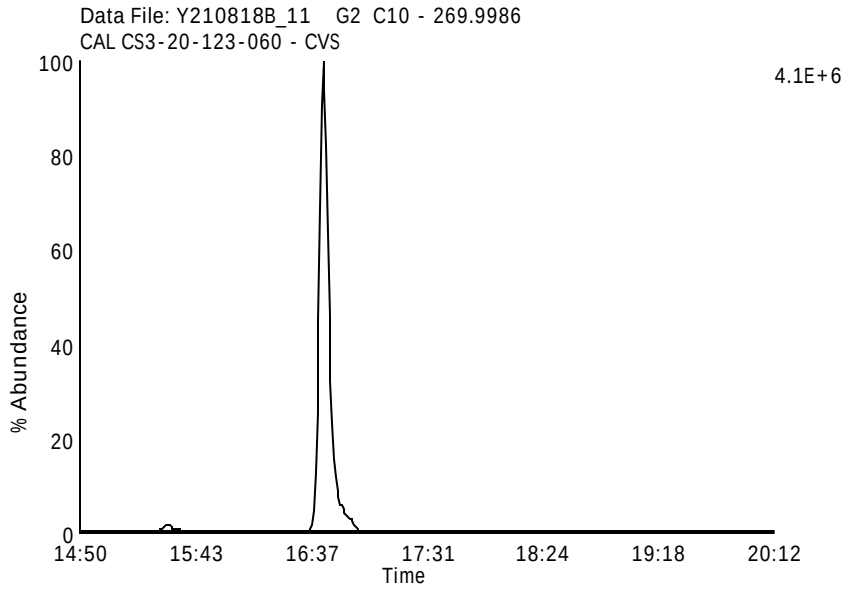


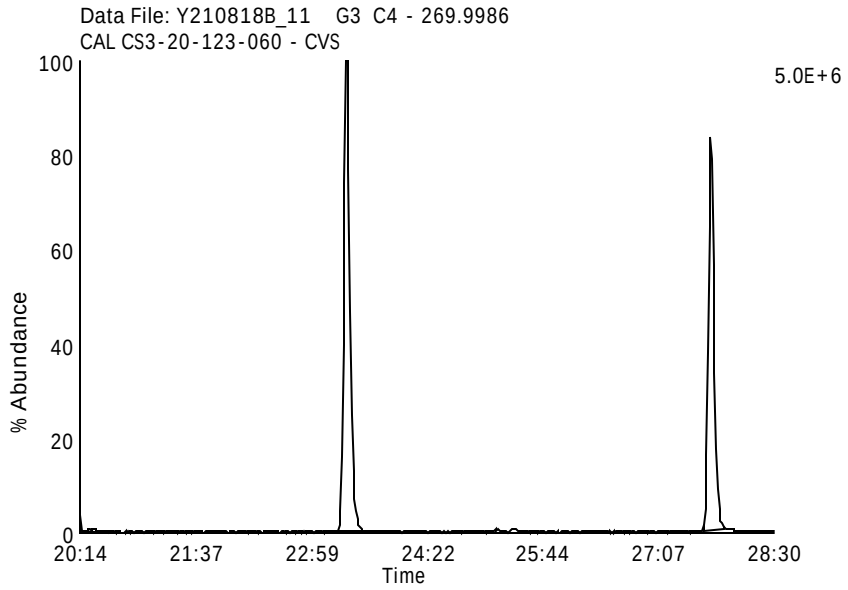
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



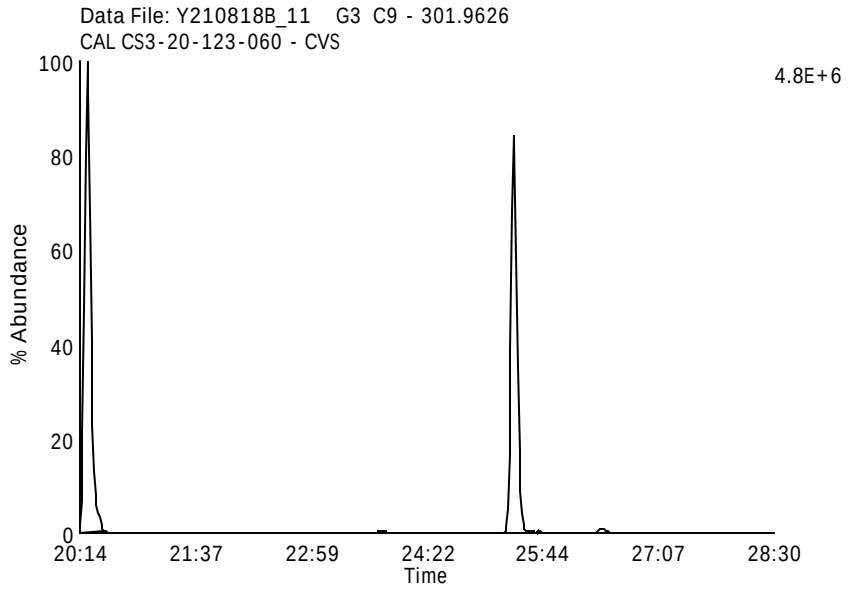


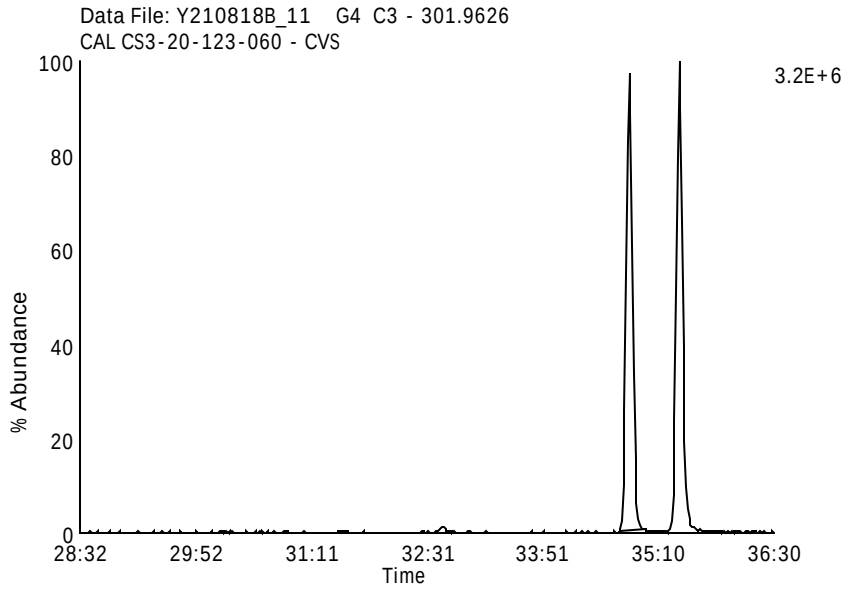


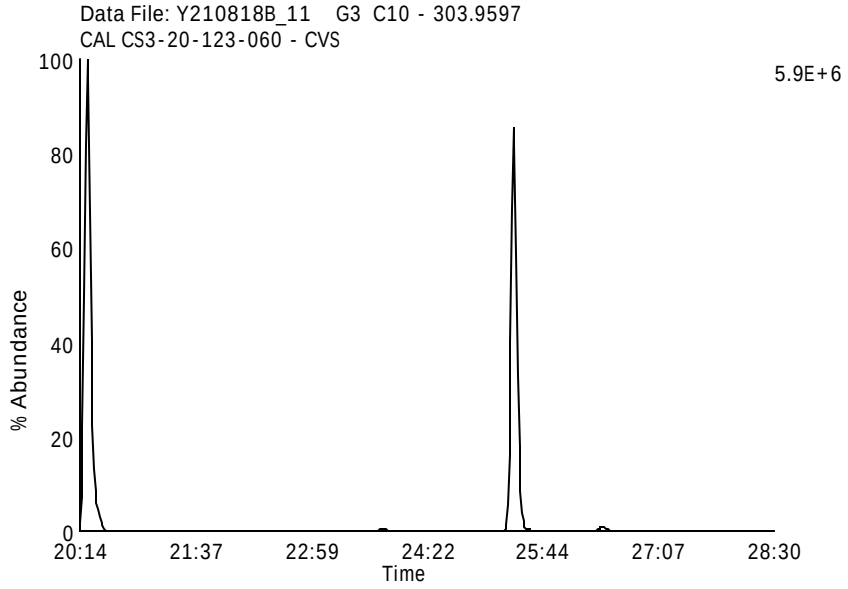


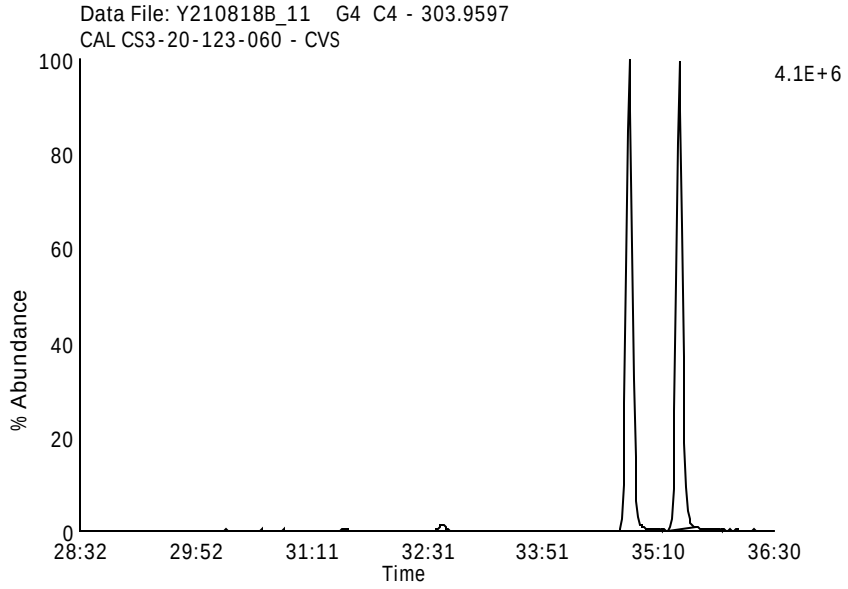
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







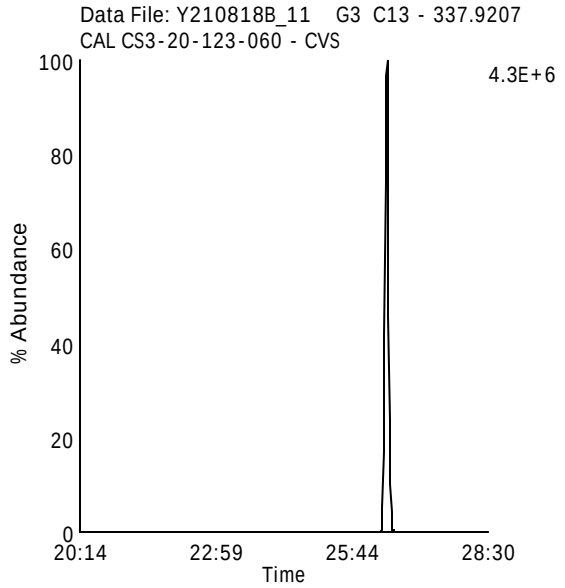


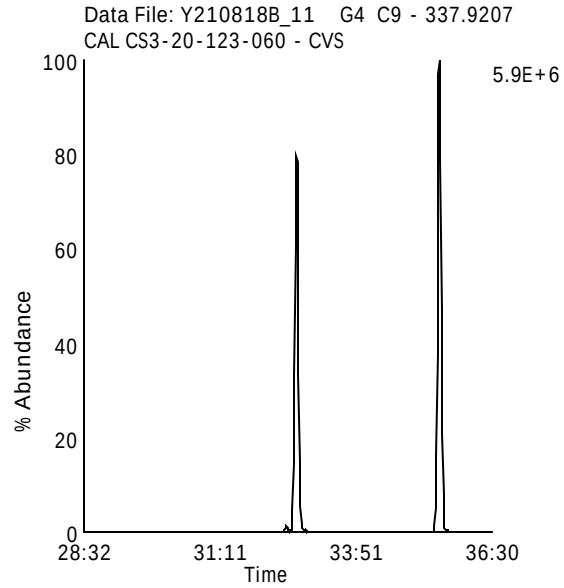
Labeled Penta Chlorinated Biphenyls

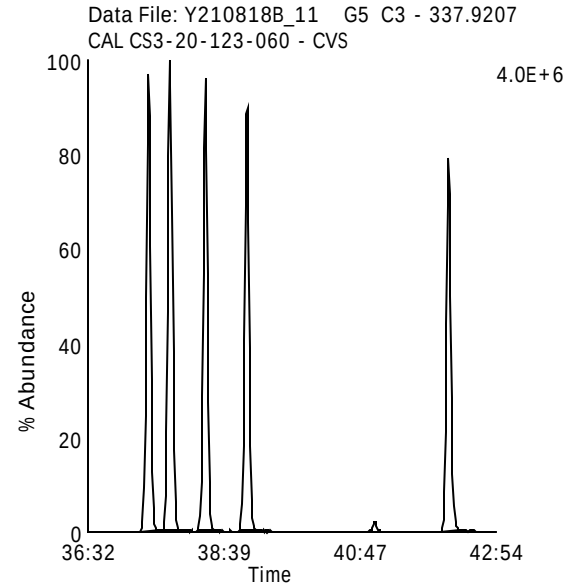
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

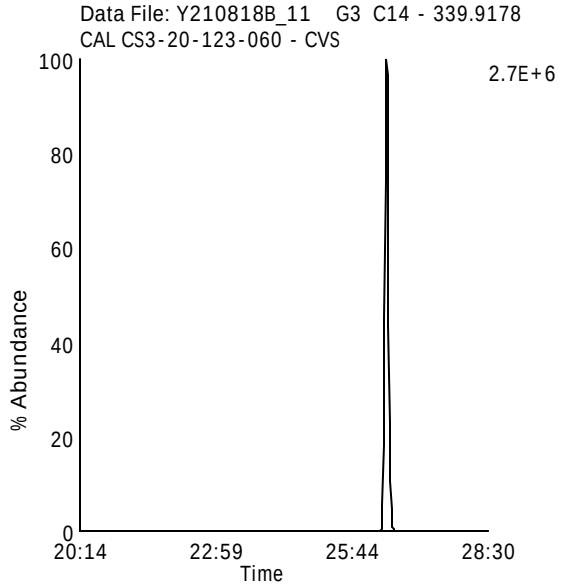
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

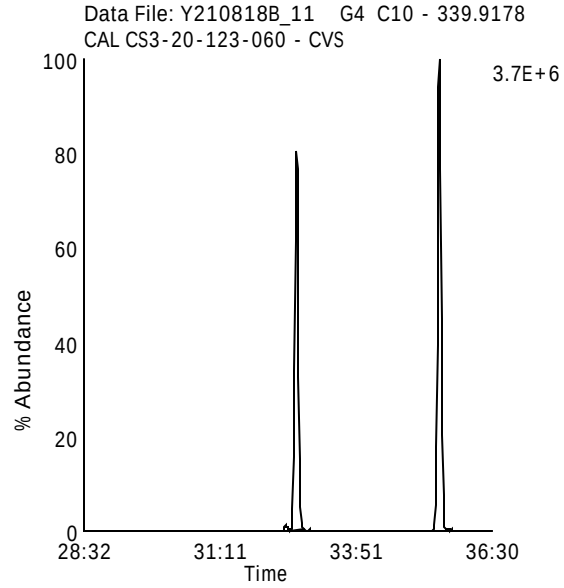
Sample Description: CAL CS3-20-123-060 - CVS

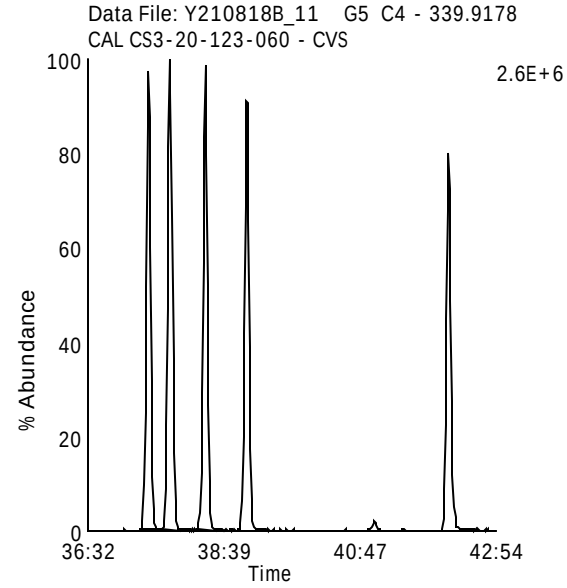












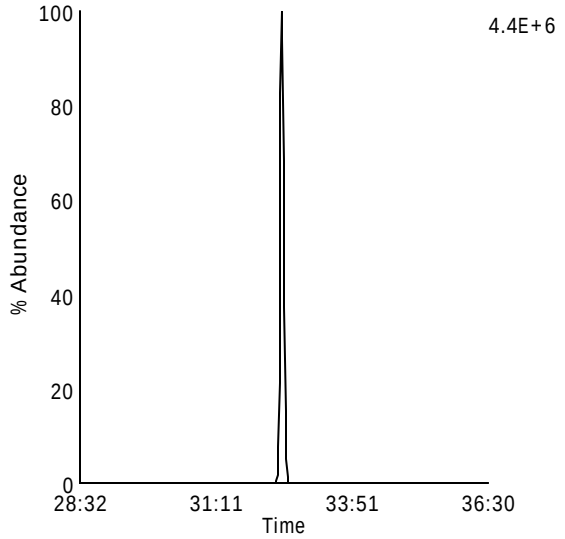
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

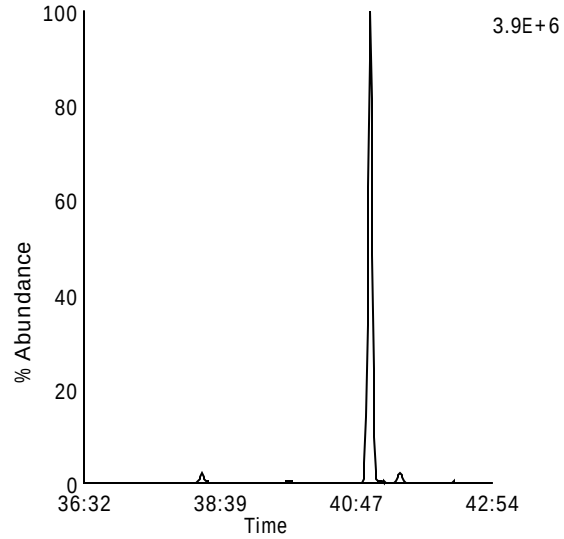
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS

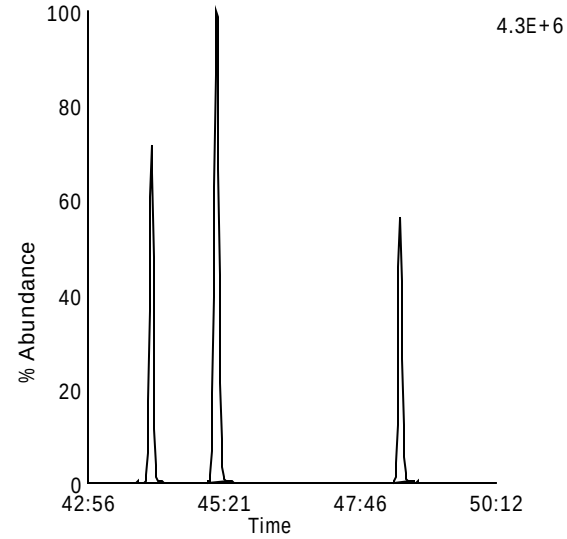
Data File: Y210818B_11 G4 C13 - 371.8817
CAL CS3-20-123-060 - CVS



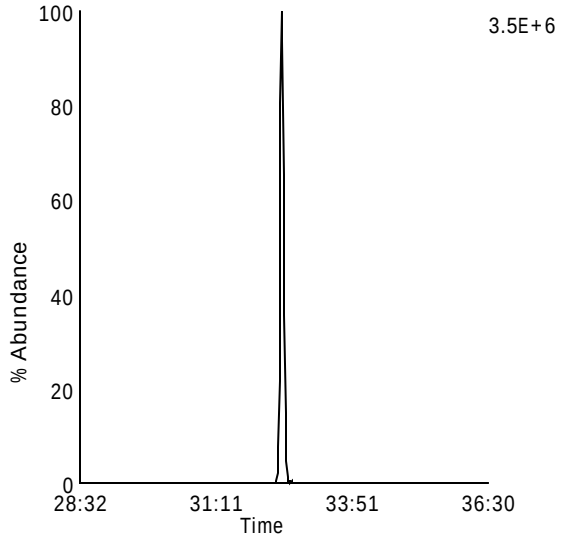
Data File: Y210818B_11 G5 C7 - 371.8817
CAL CS3-20-123-060 - CVS



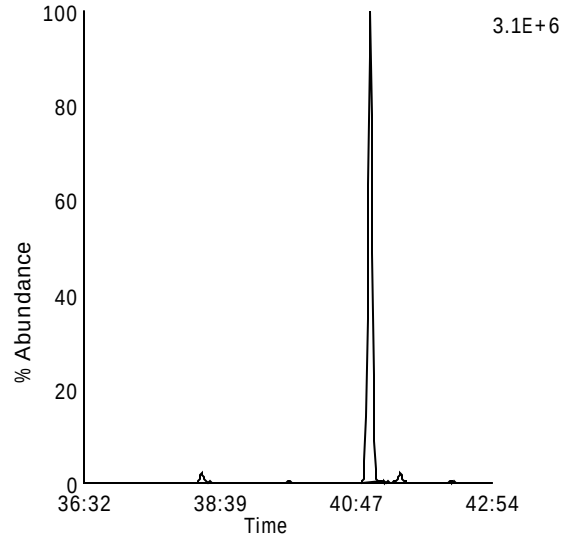
Data File: Y210818B_11 G6 C3 - 371.8817
CAL CS3-20-123-060 - CVS



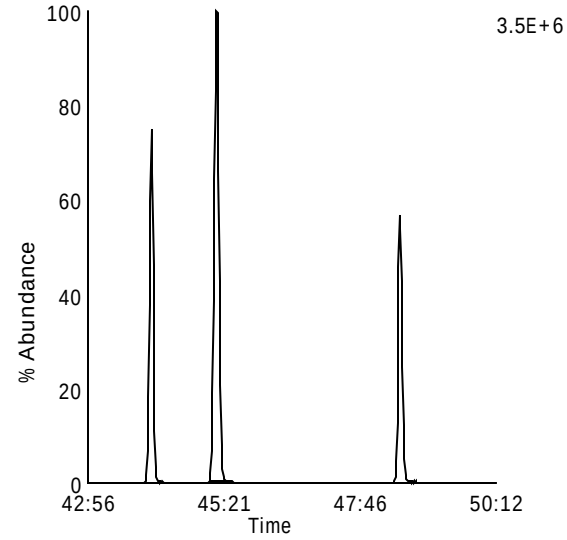
Data File: Y210818B_11 G4 C14 - 373.8788
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G5 C8 - 373.8788
CAL CS3-20-123-060 - CVS

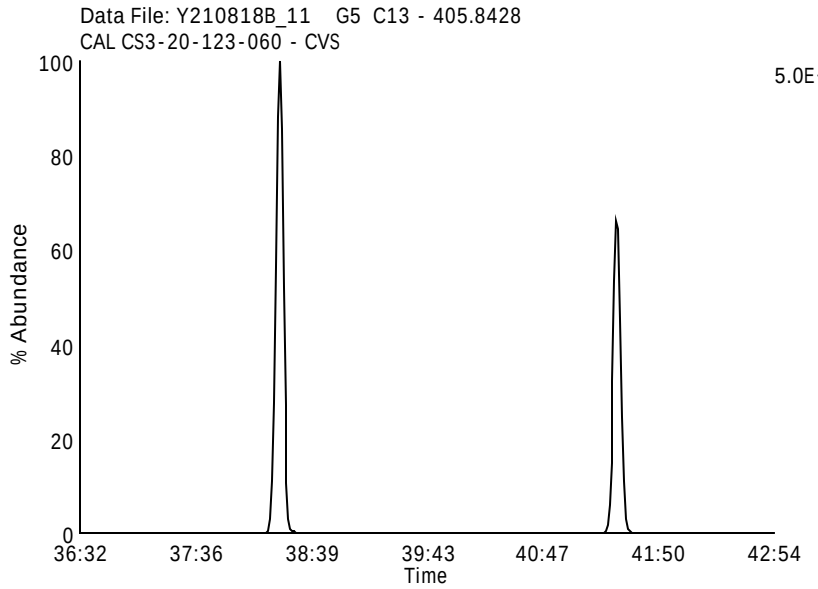


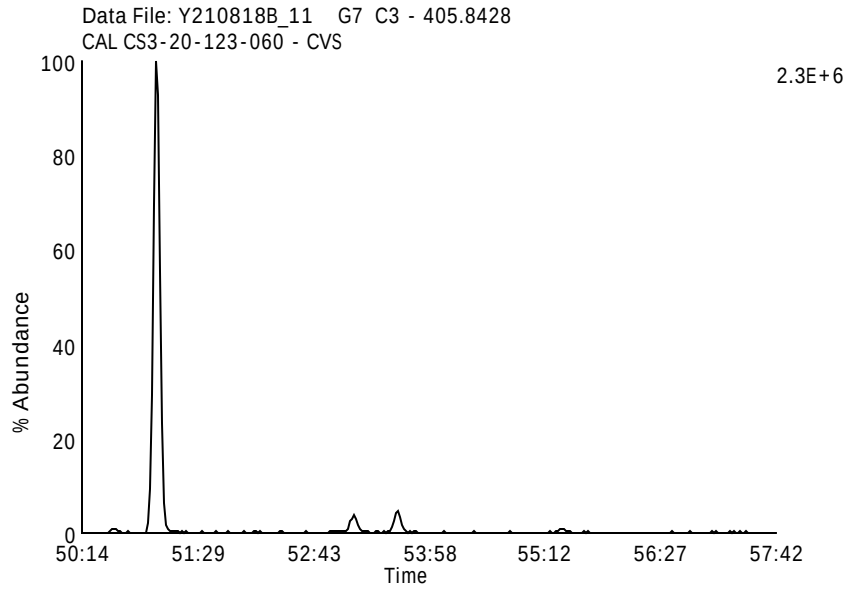
Data File: Y210818B_11 G6 C4 - 373.8788
CAL CS3-20-123-060 - CVS

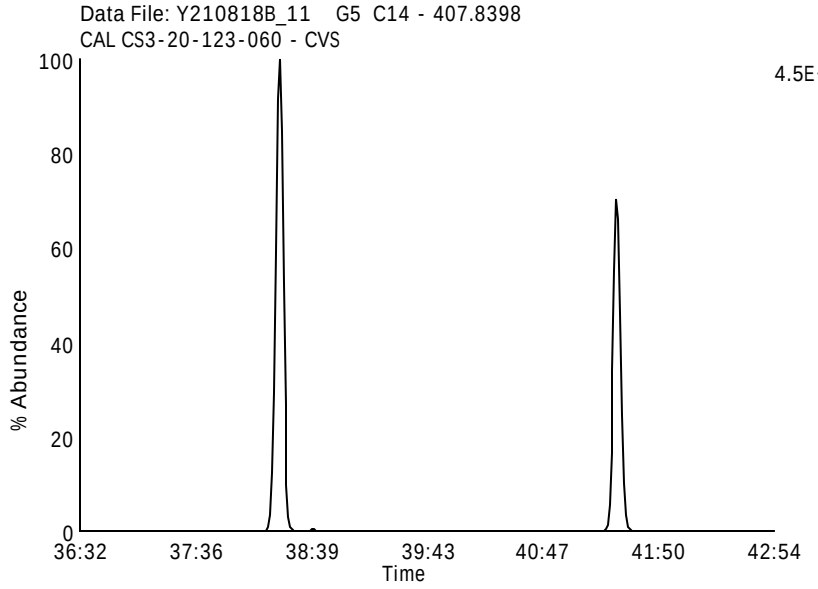


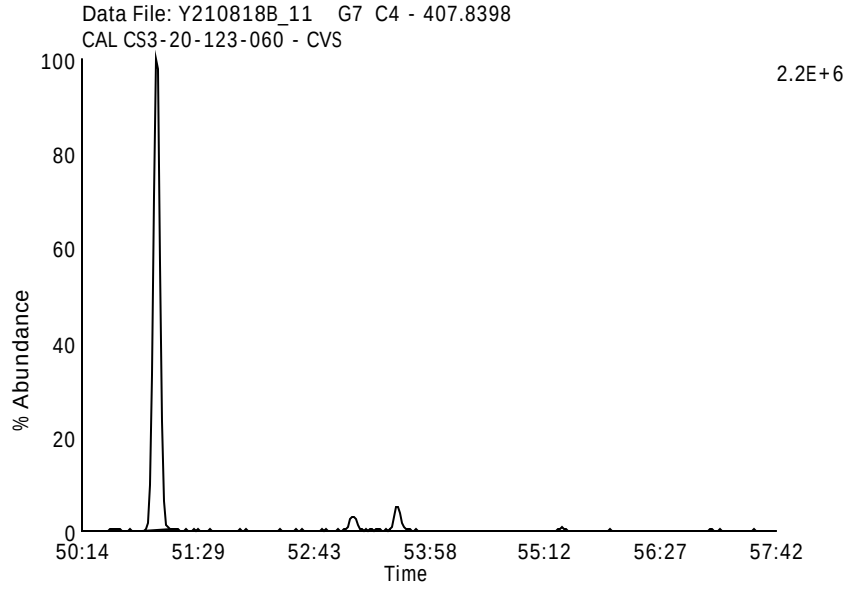
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





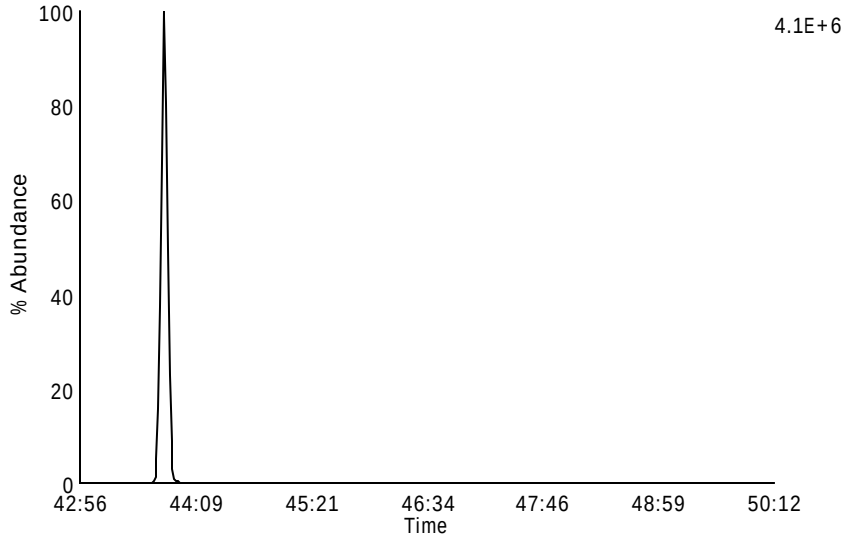




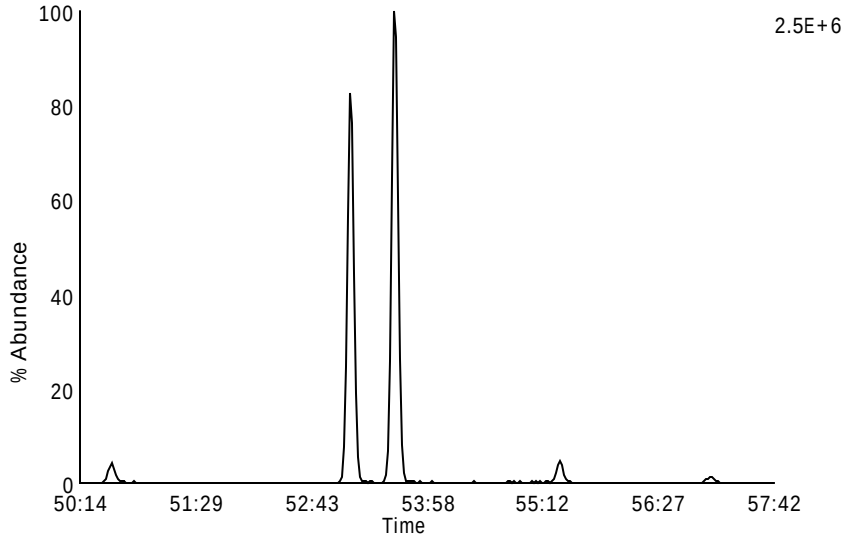
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

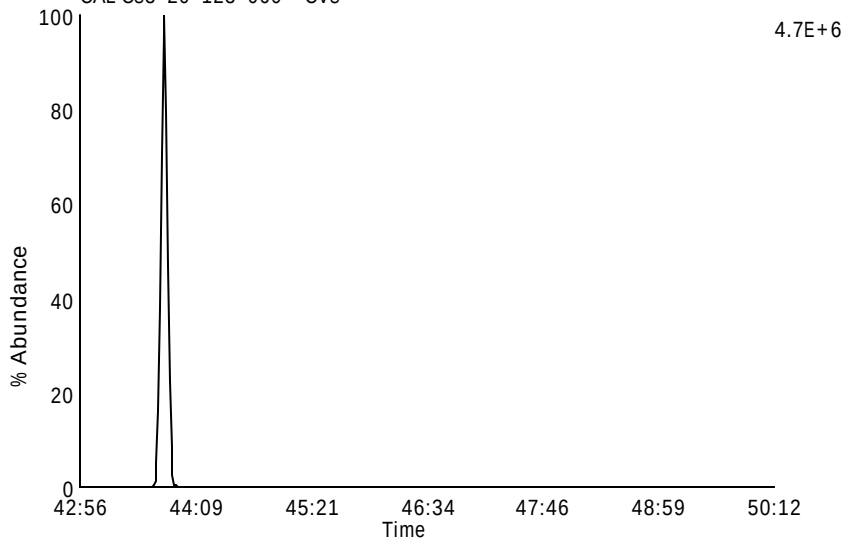
Data File: Y210818B_11 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



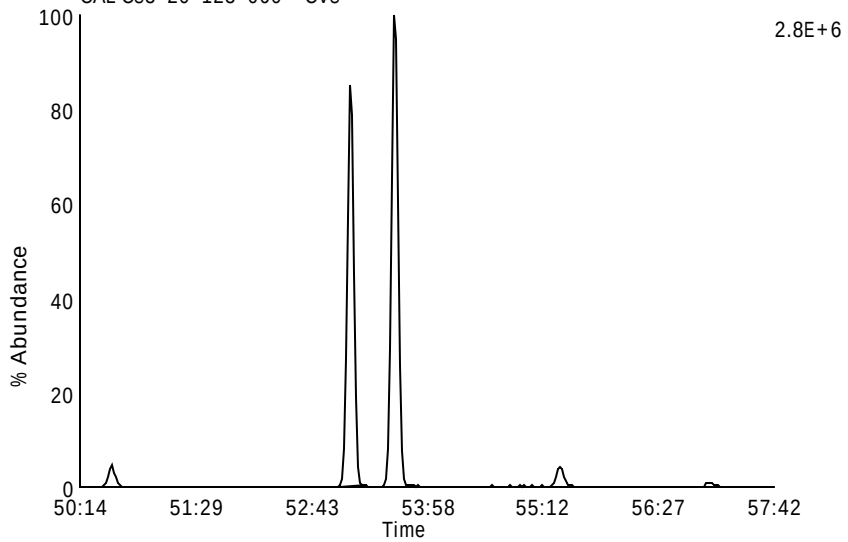
Data File: Y210818B_11 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G6 C14 - 441.8008
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

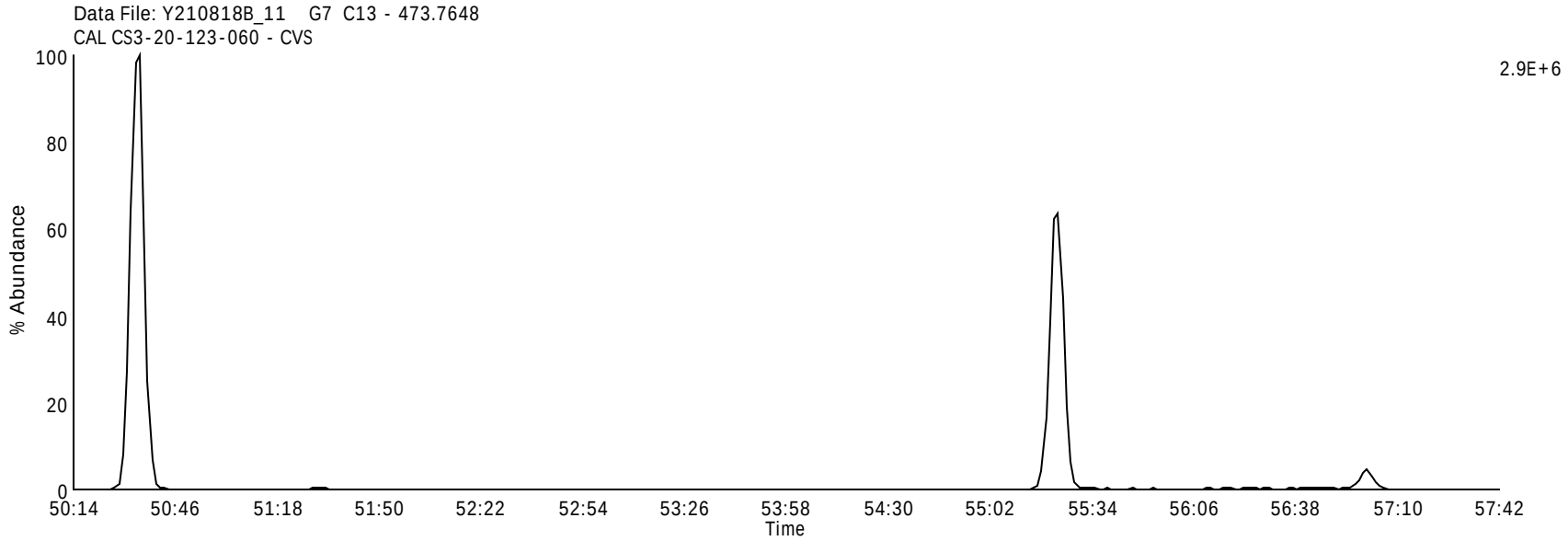


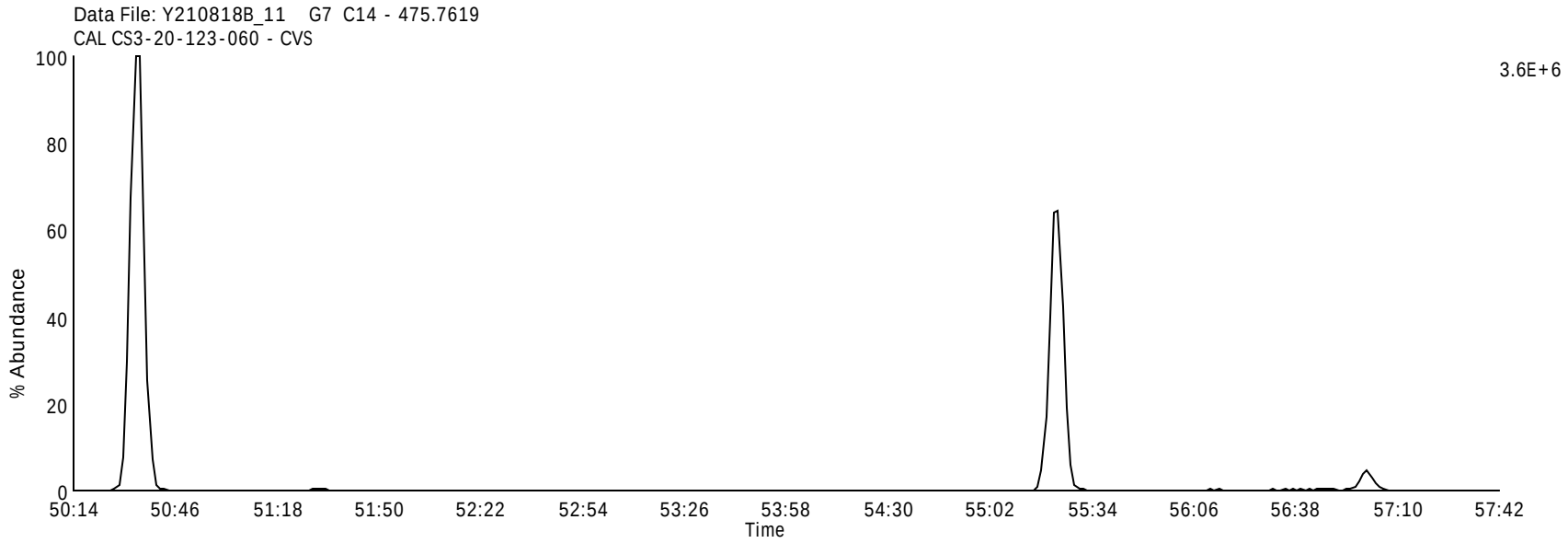
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



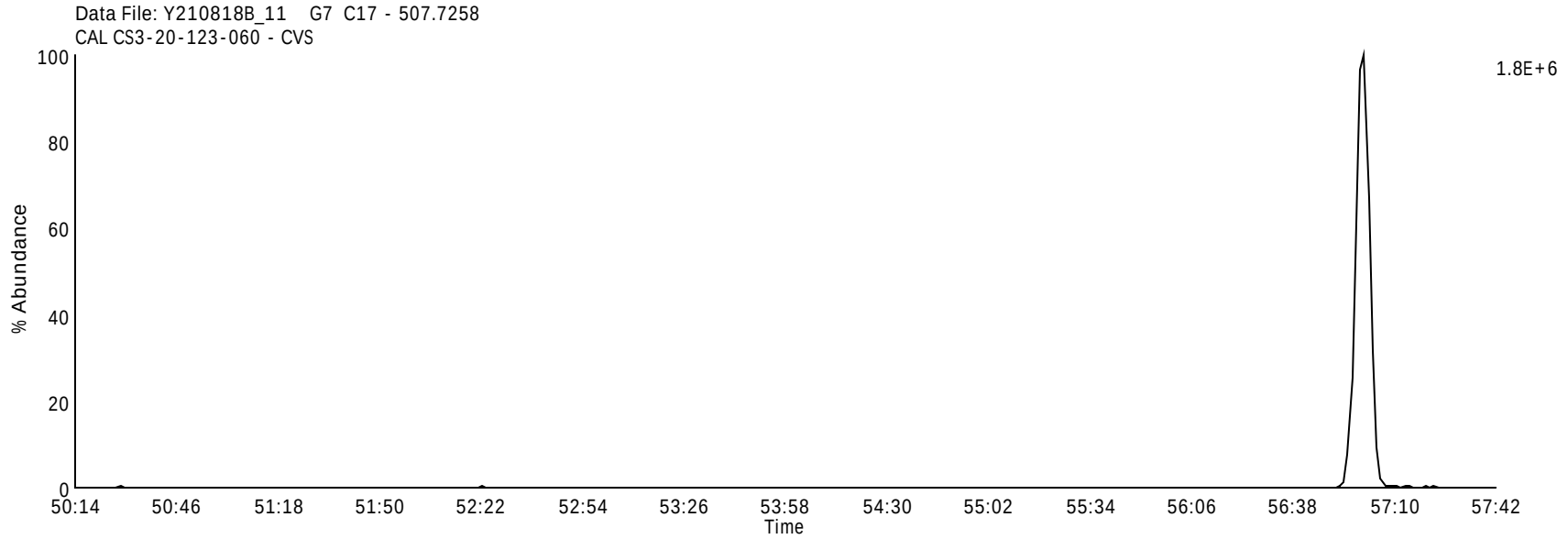


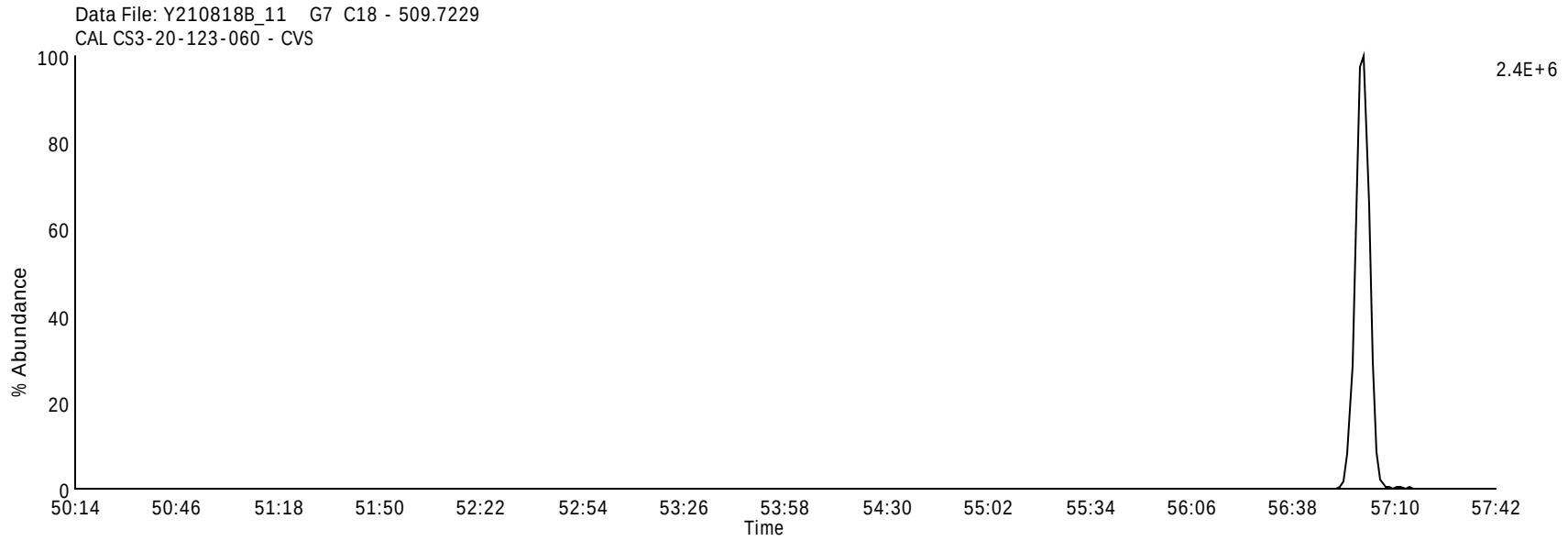
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



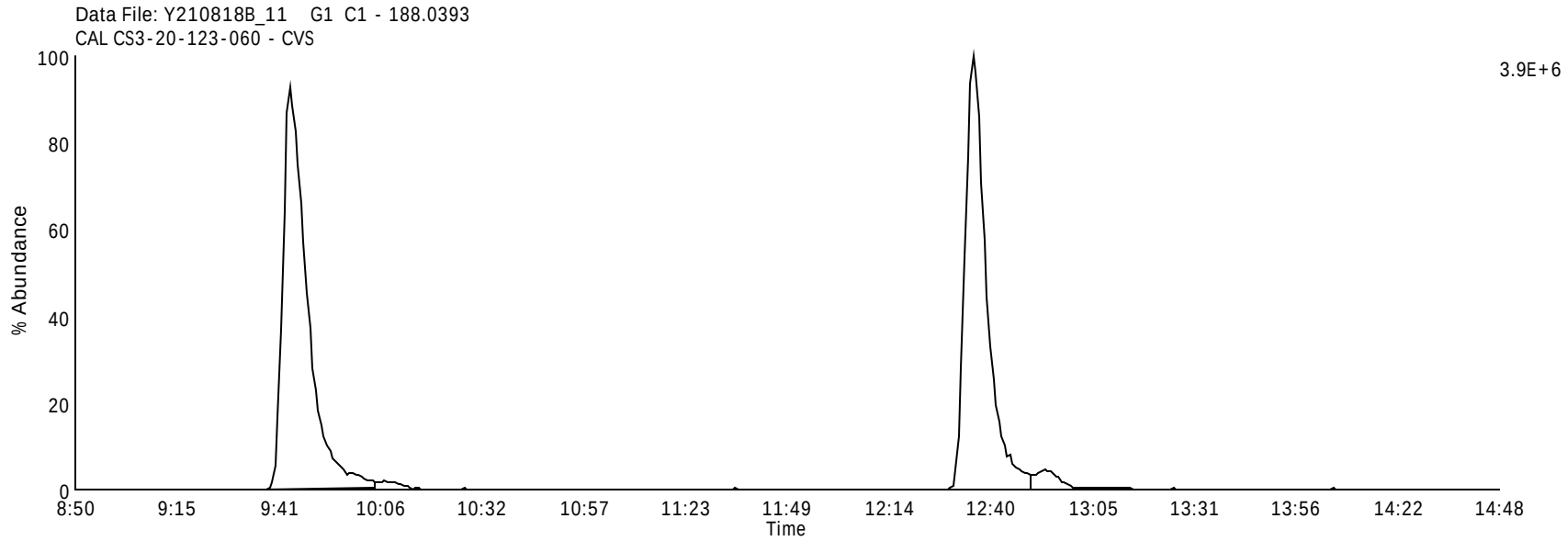


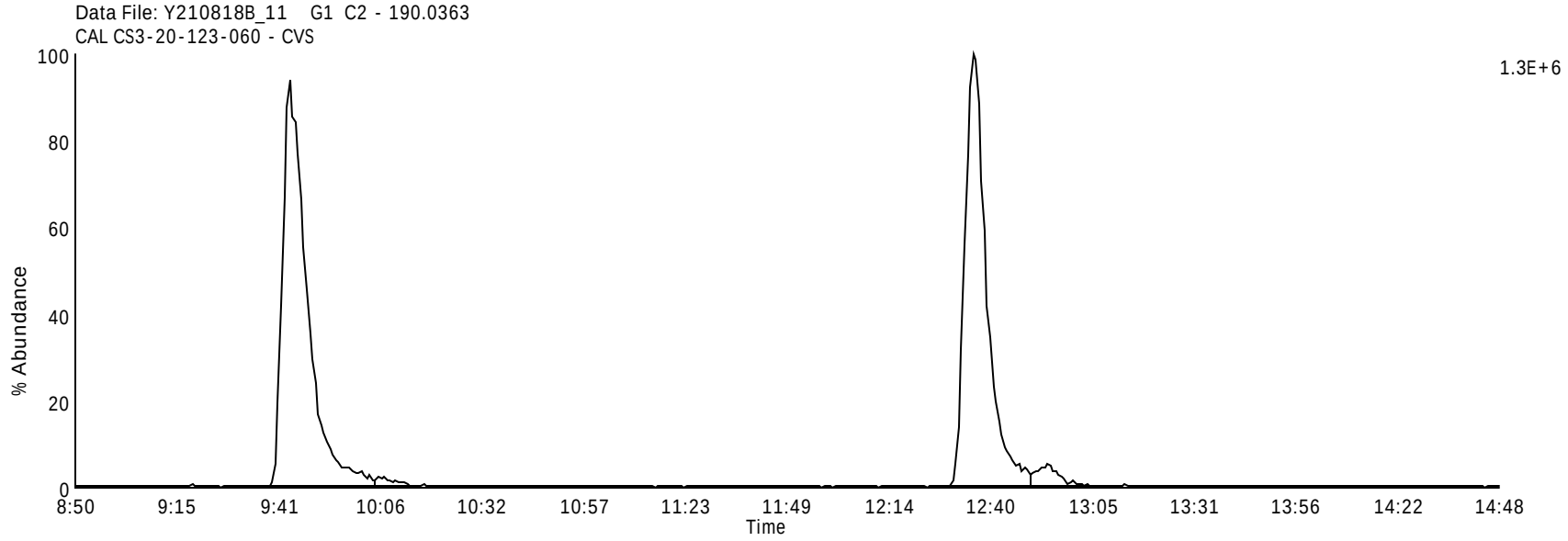
Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

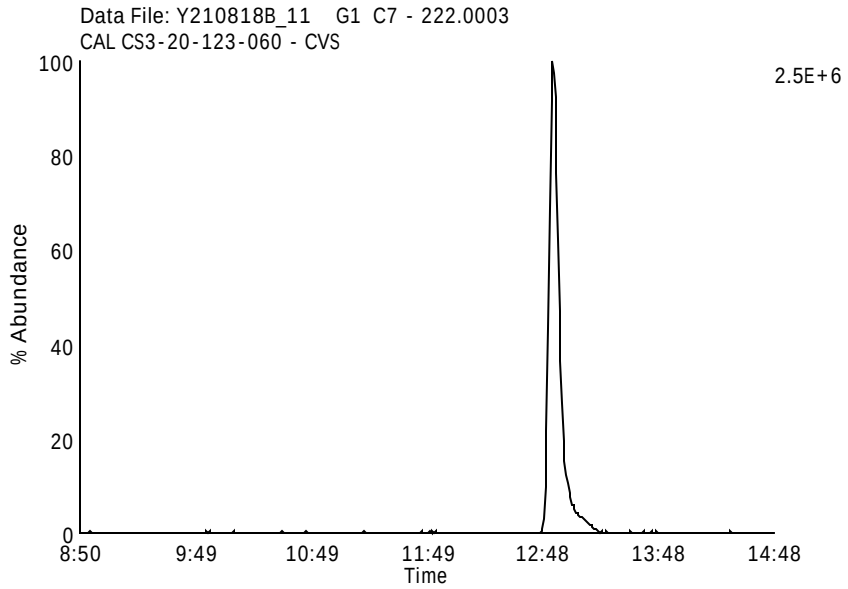
Sample Description: CAL CS3-20-123-060 - CVS

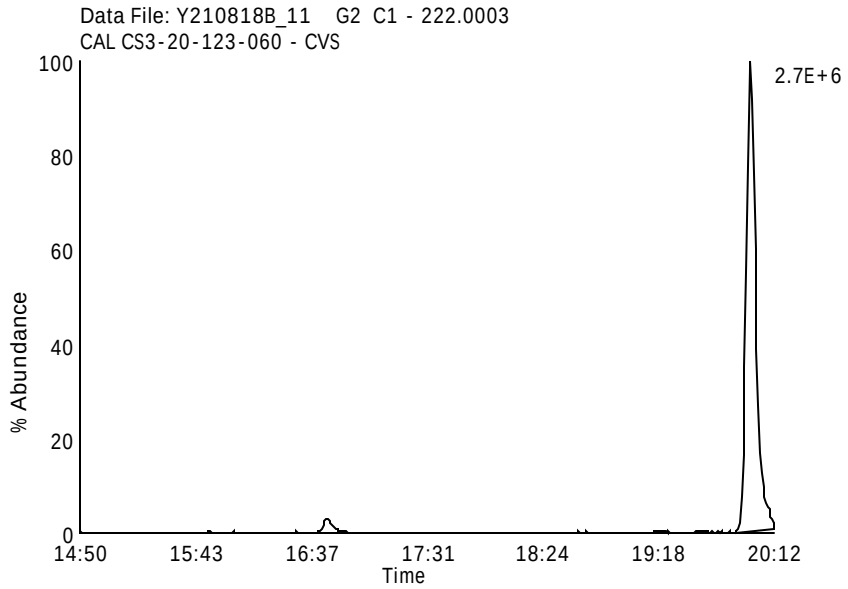


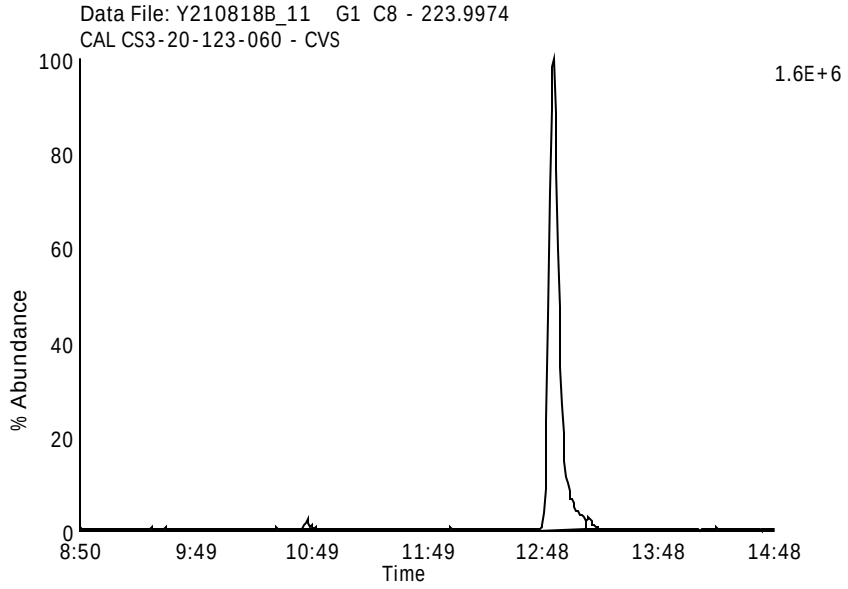


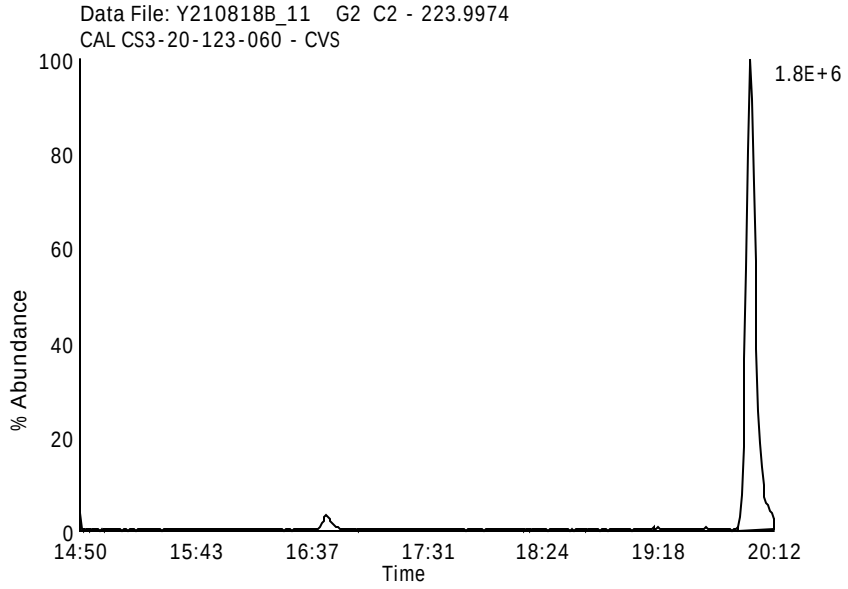
Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



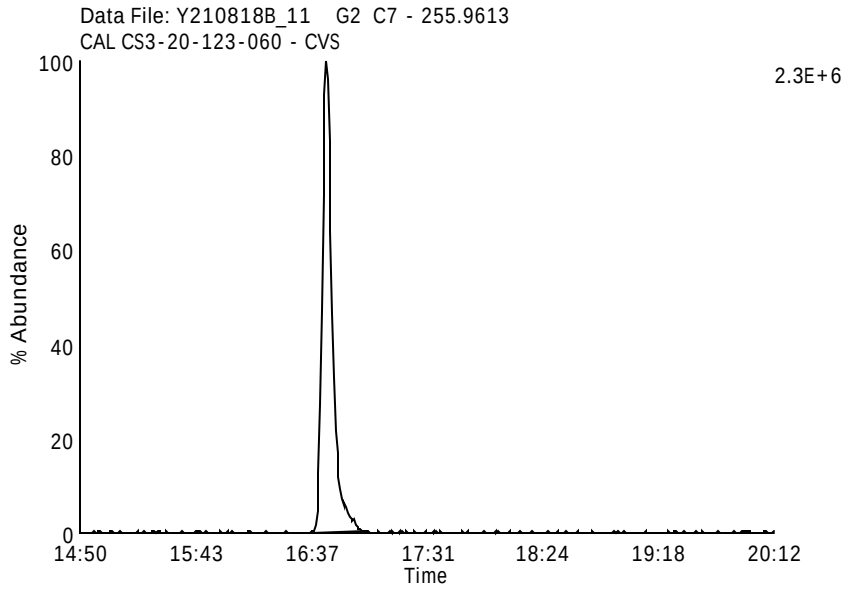


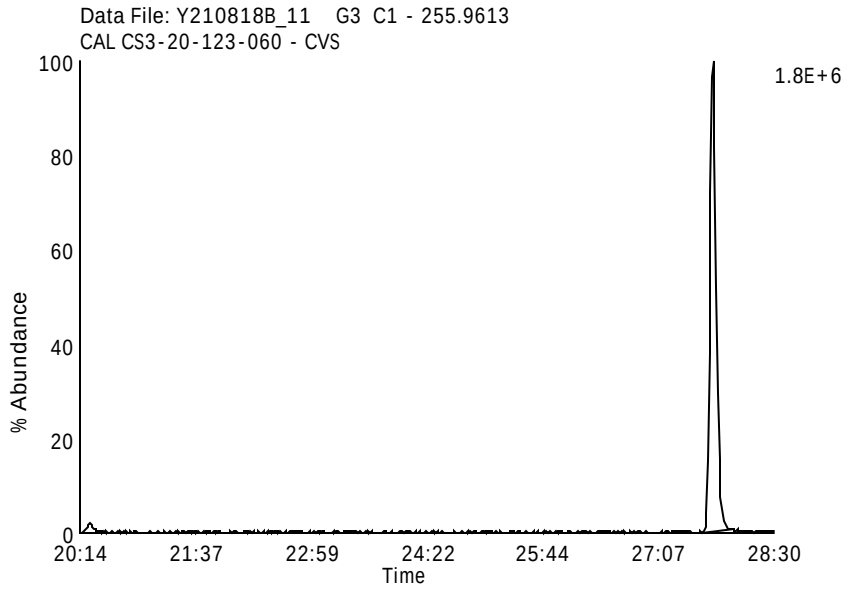


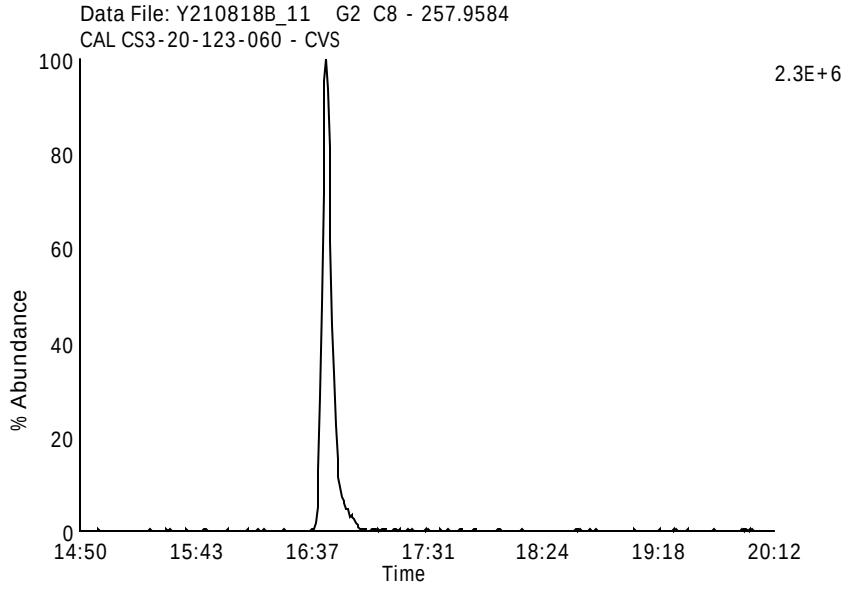


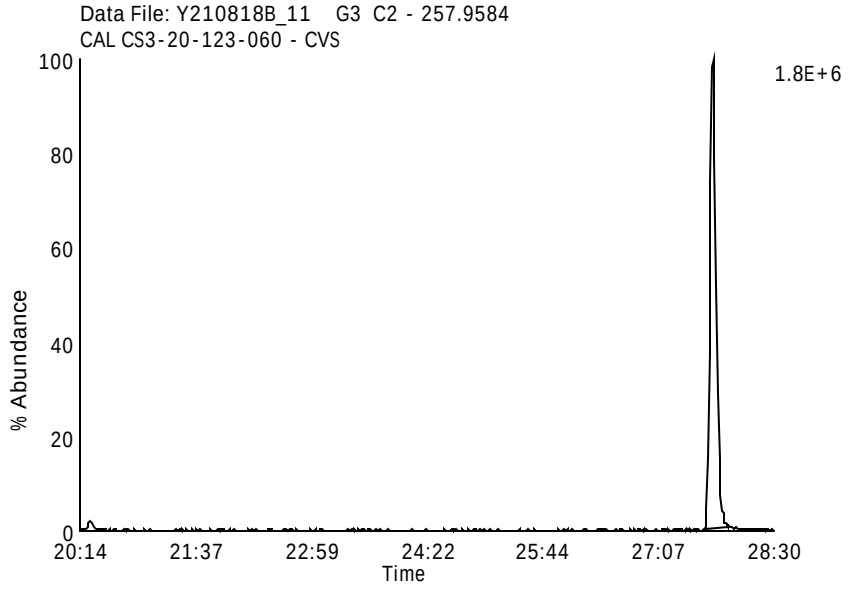
Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



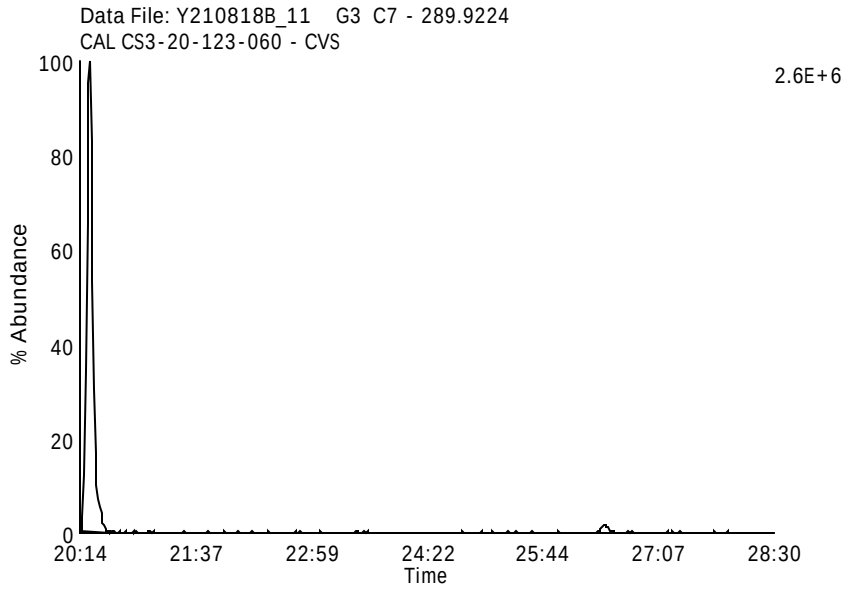


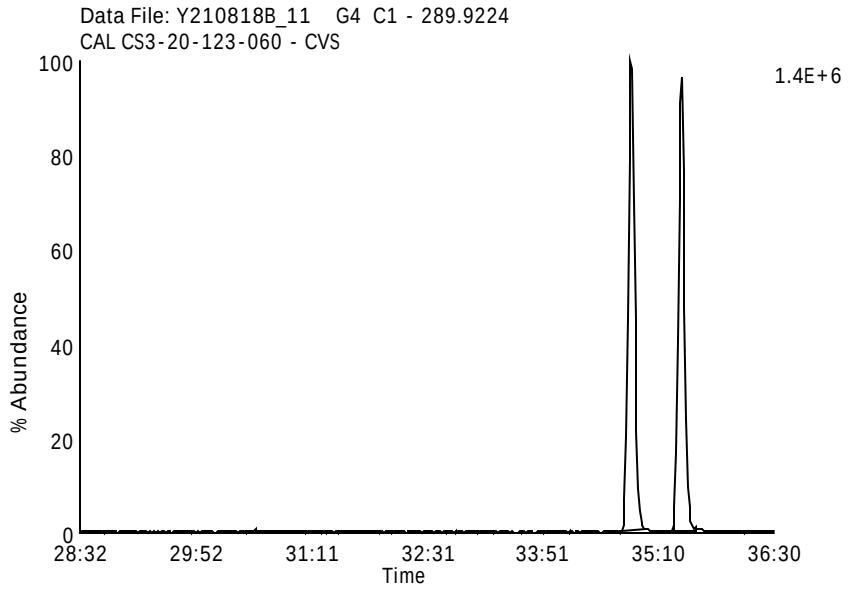


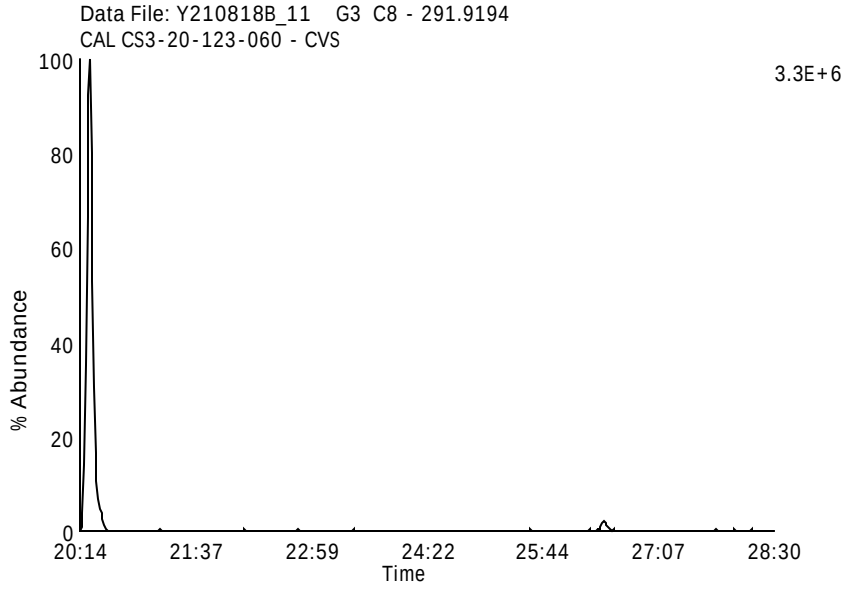


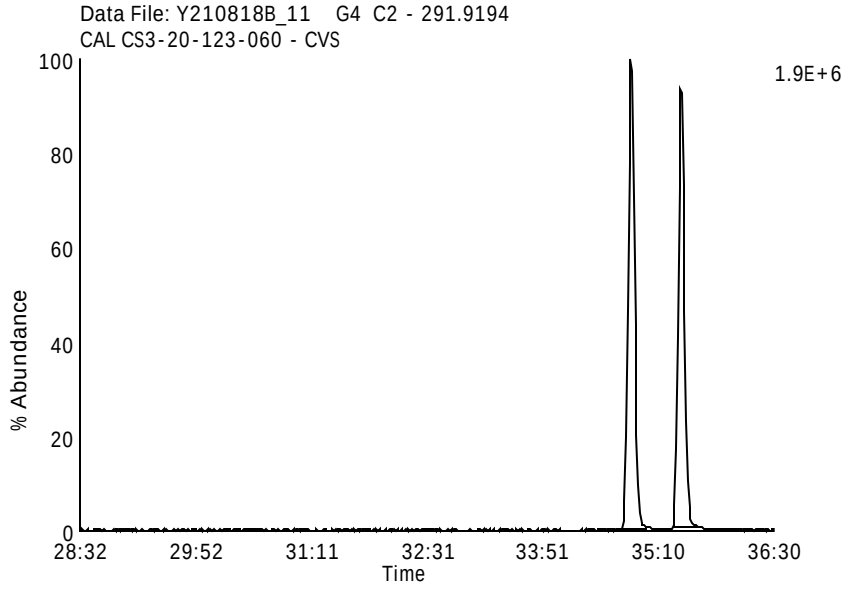
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







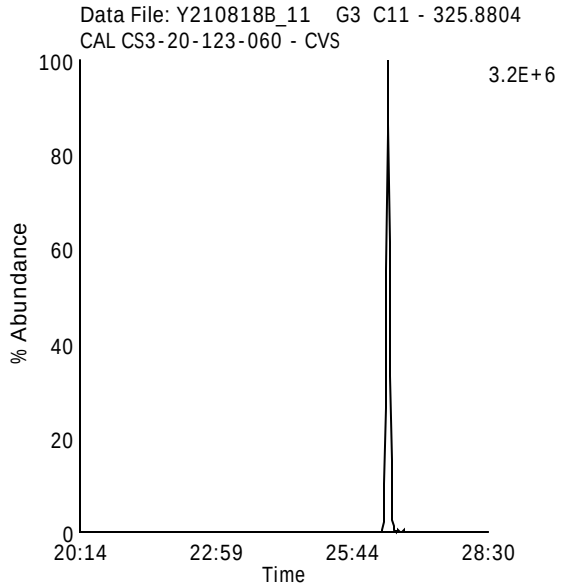


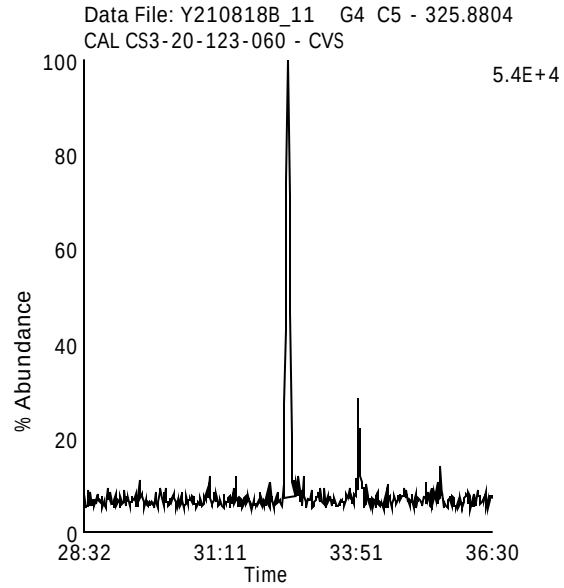
Penta Chlorinated Biphenyls

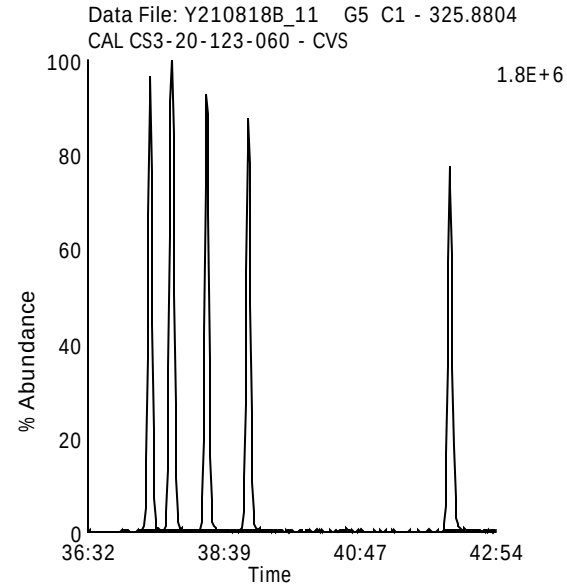
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

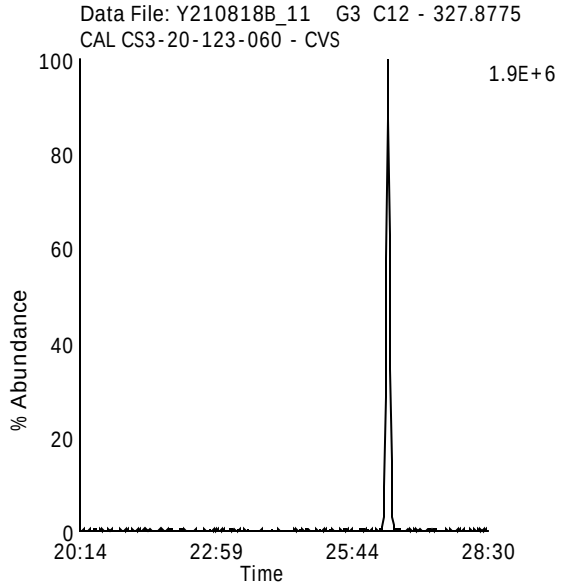
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

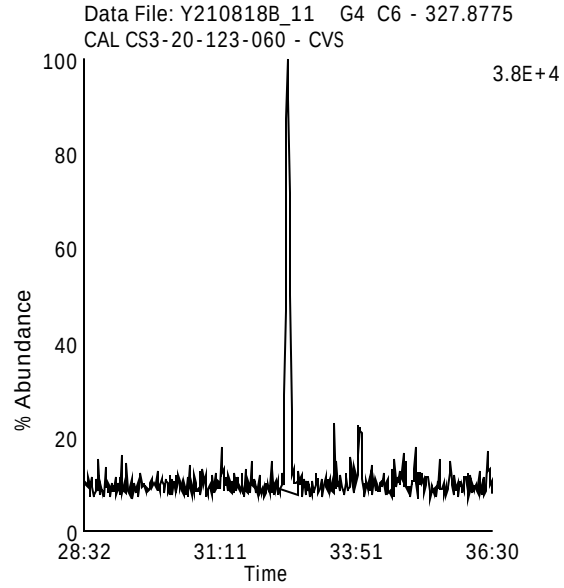
Sample Description: CAL CS3-20-123-060 - CVS

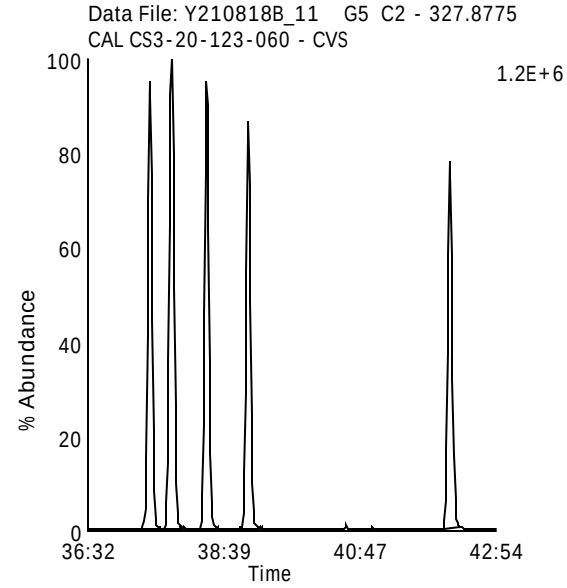










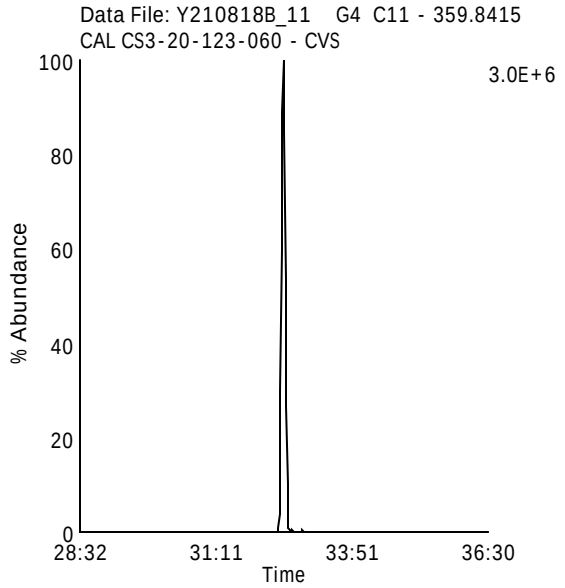


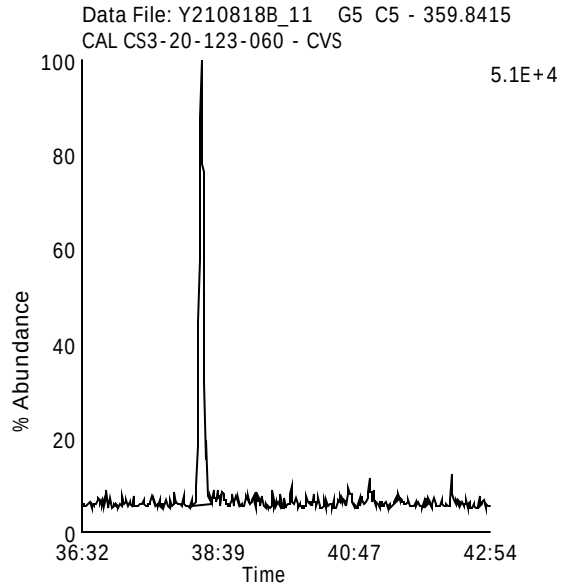
Hexa Chlorinated Biphenyls

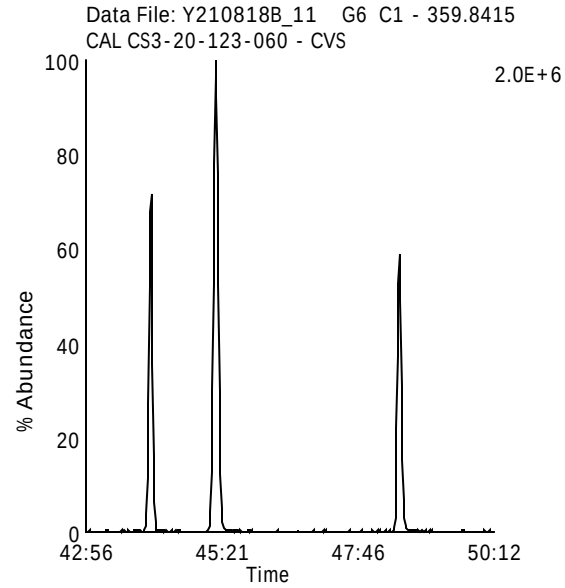
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

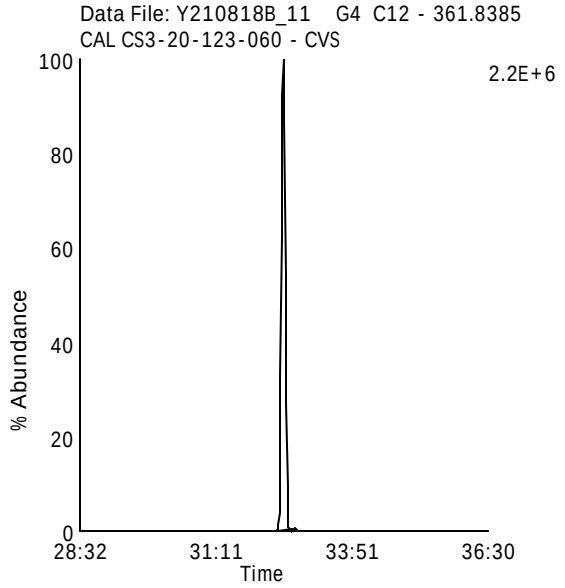
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

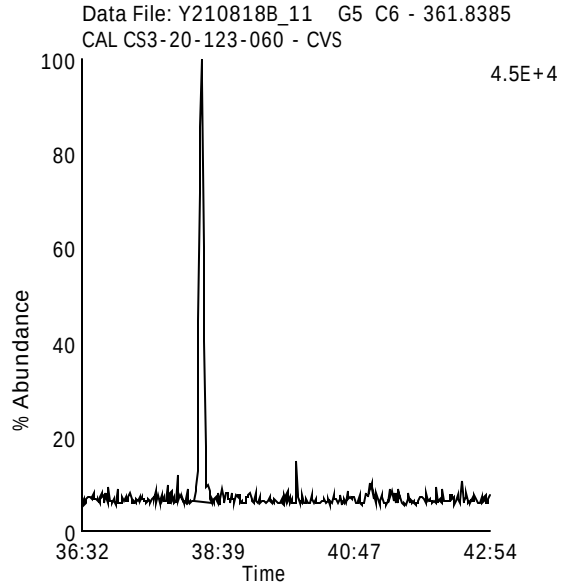
Sample Description: CAL CS3-20-123-060 - CVS

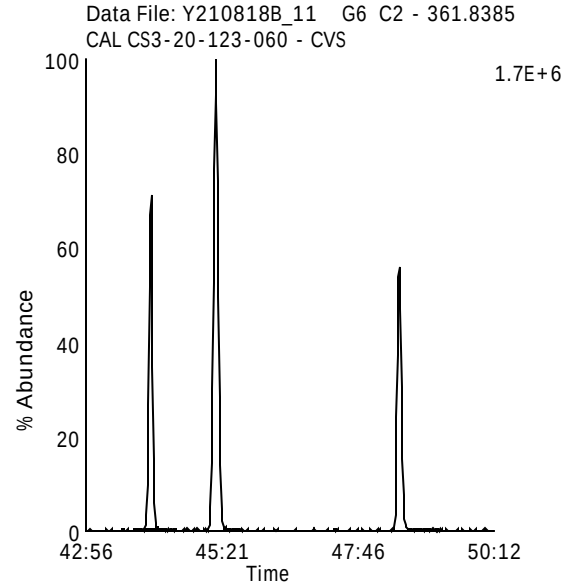






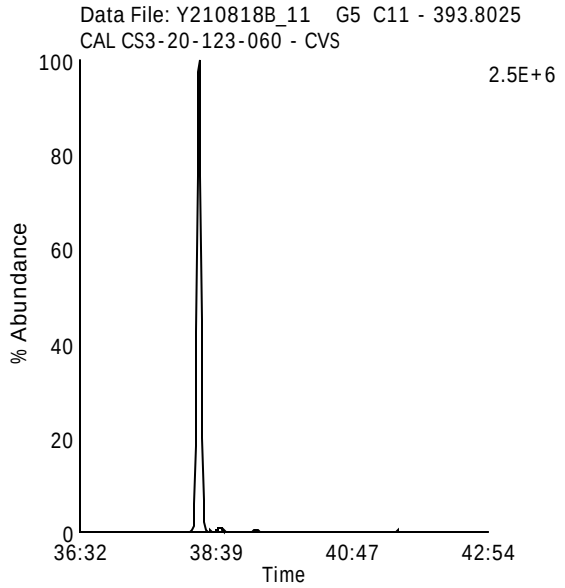


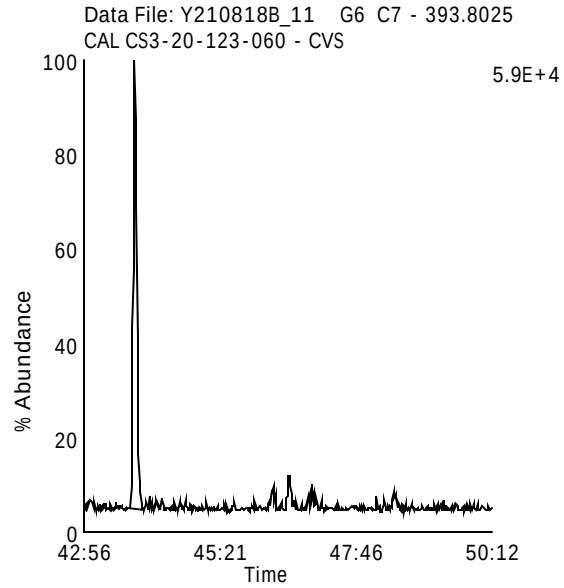


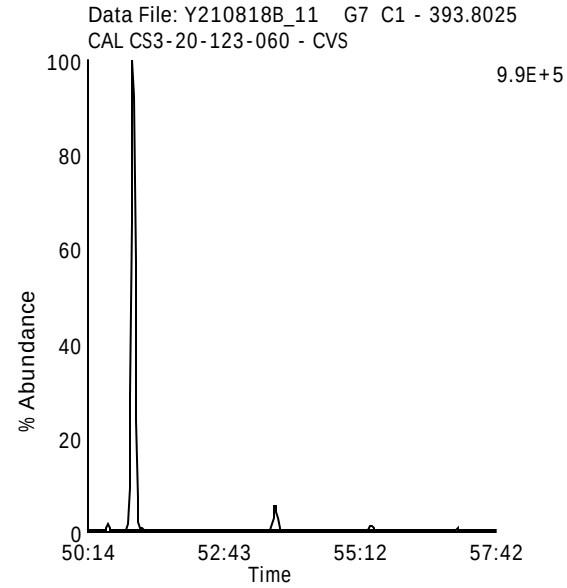


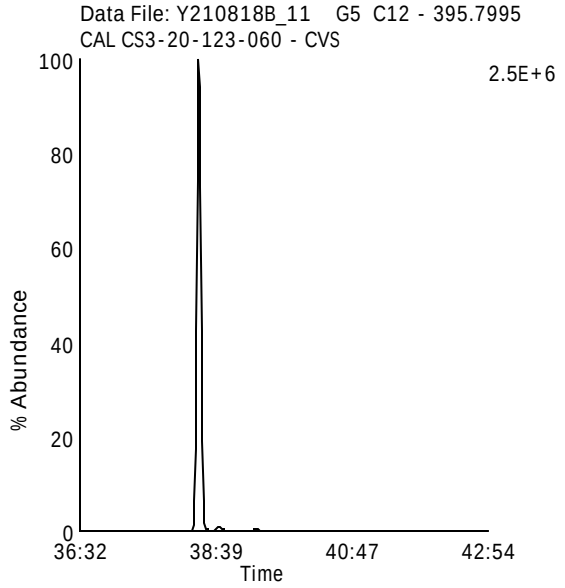
Hepta Chlorinated Biphenyls

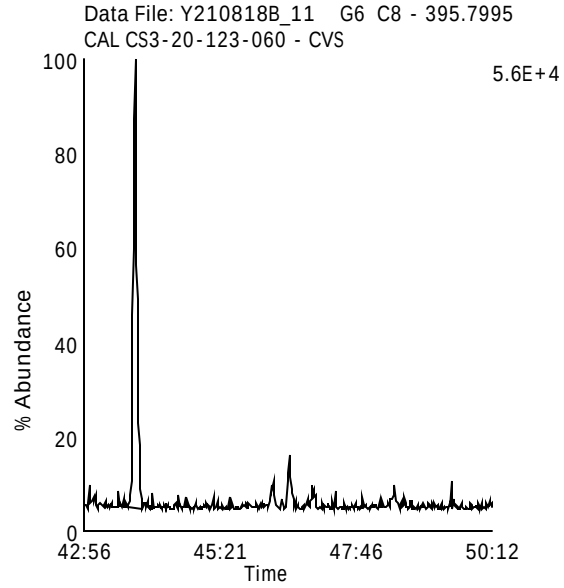
Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

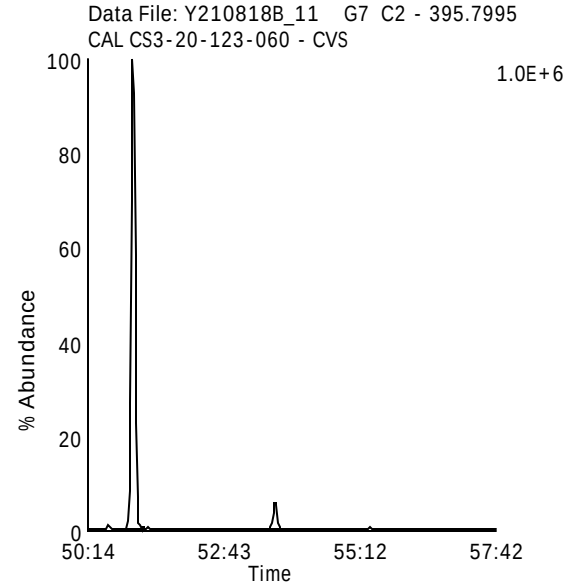






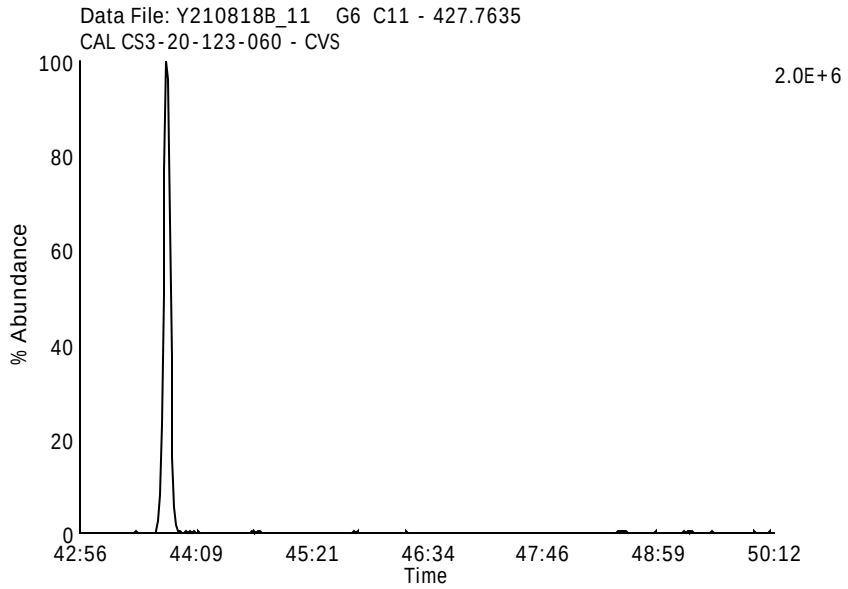


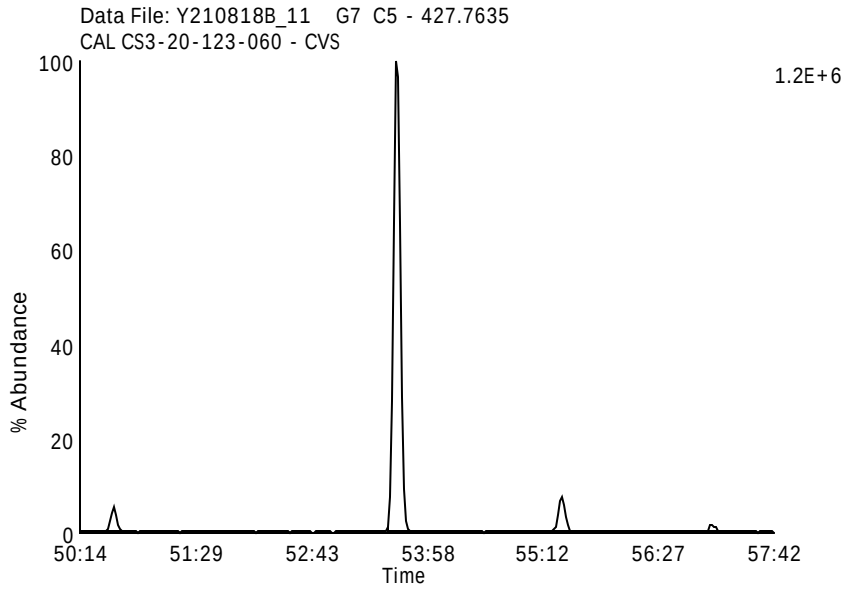


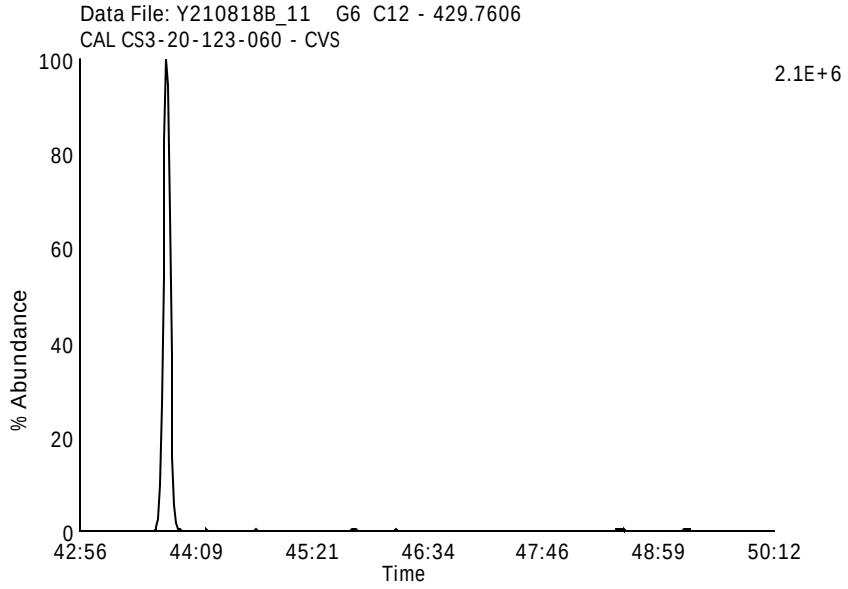


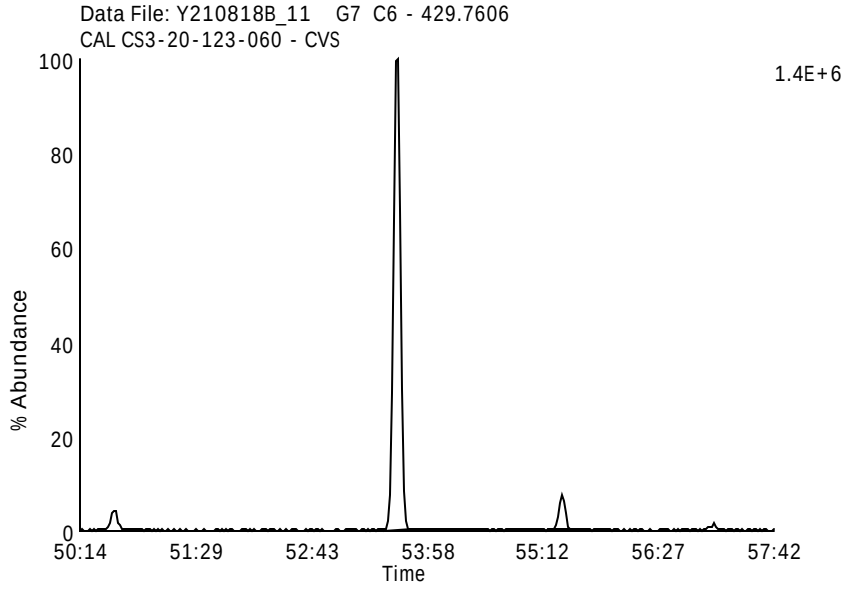
Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







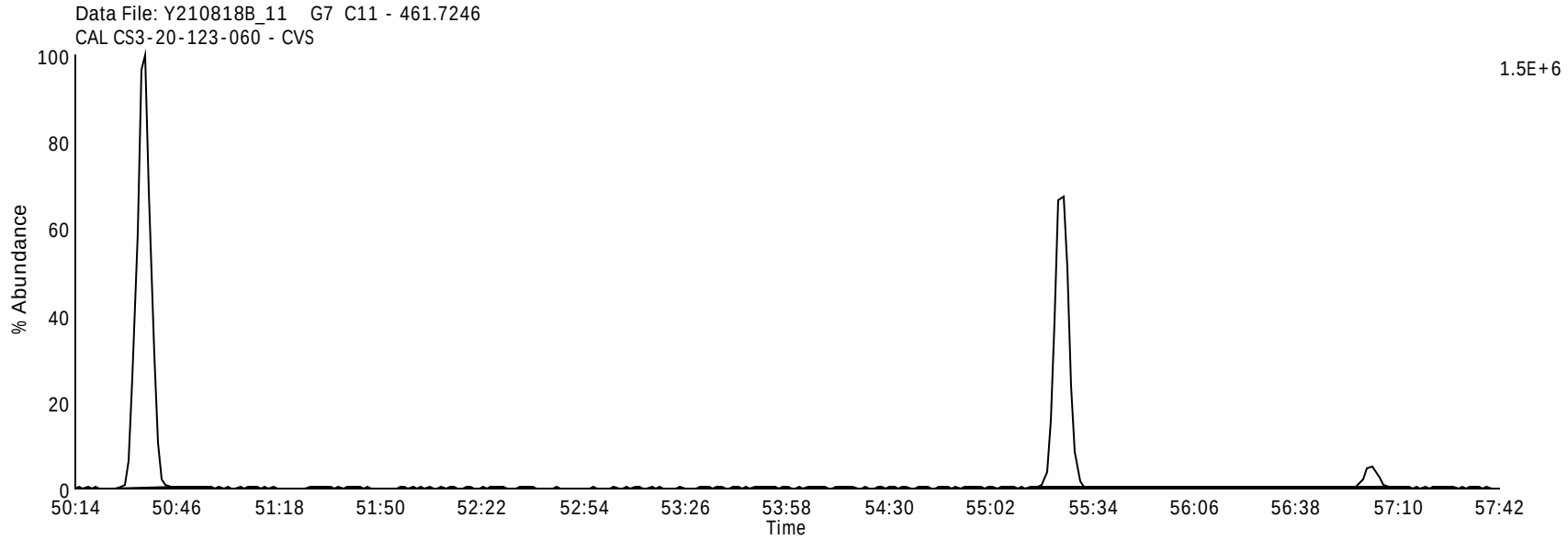


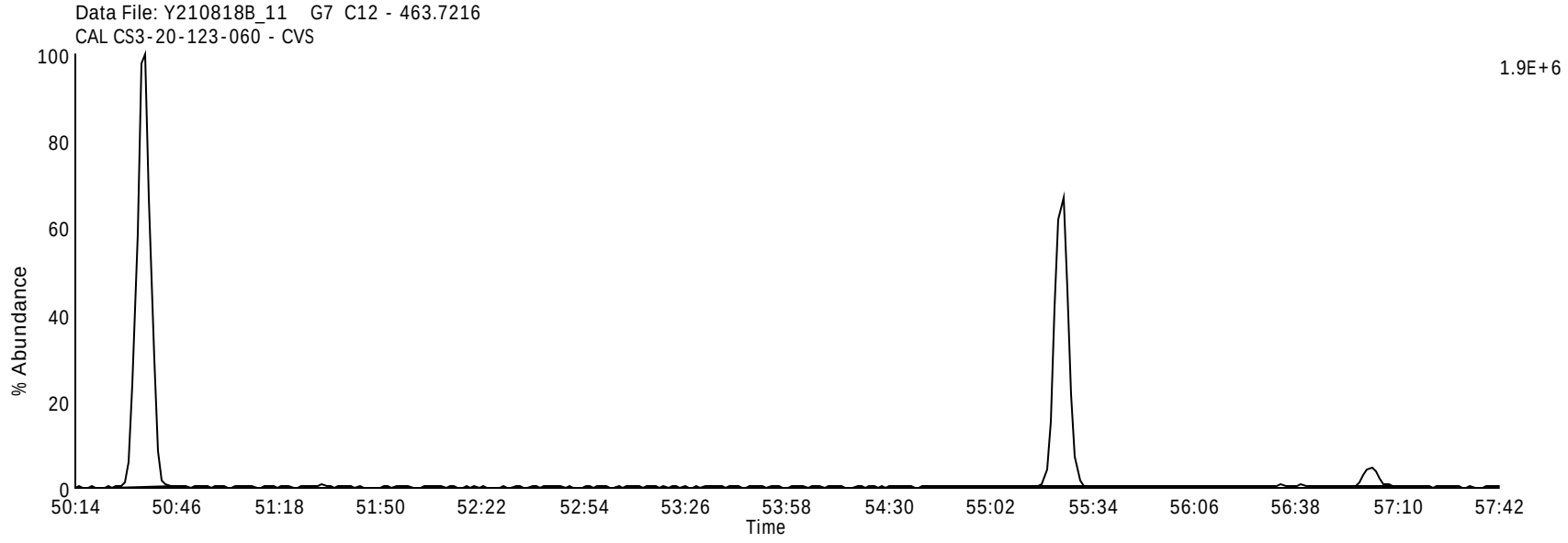
Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



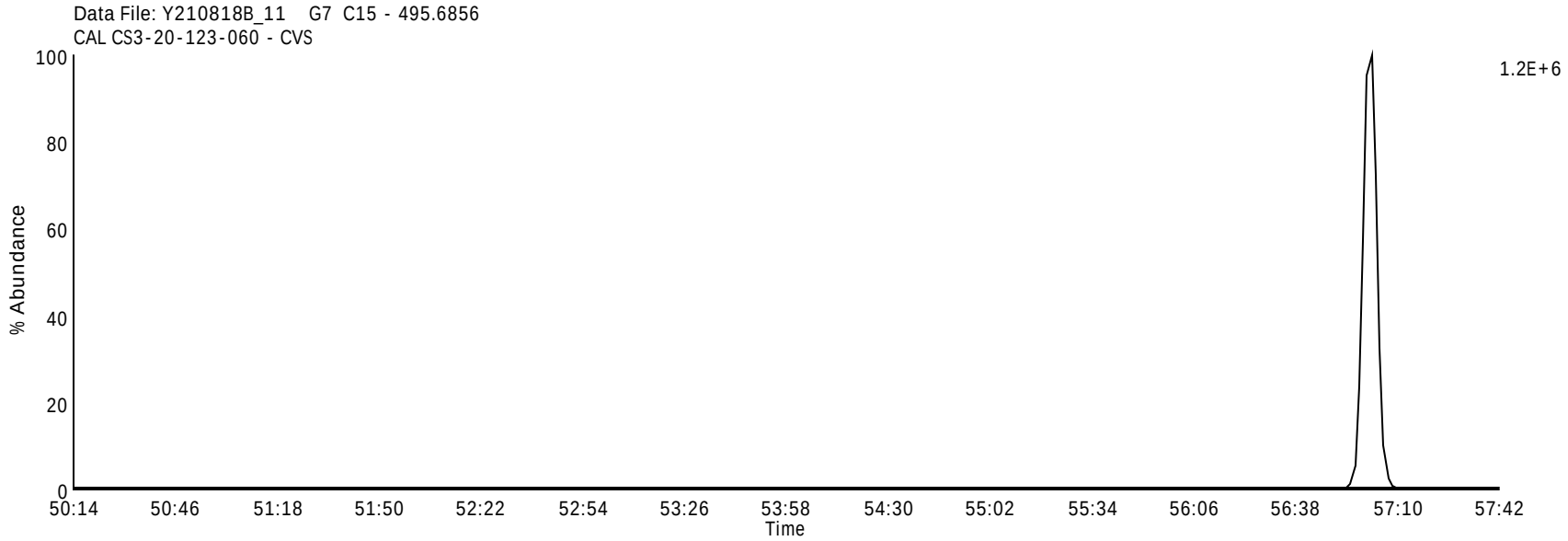


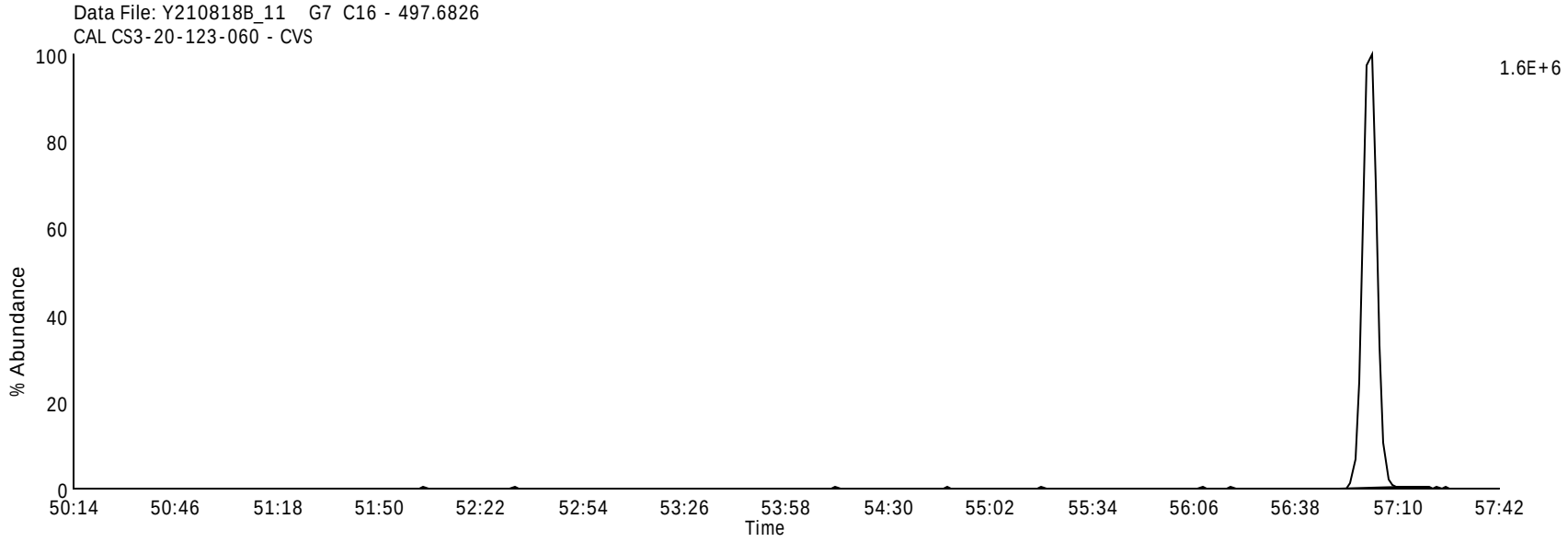
Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

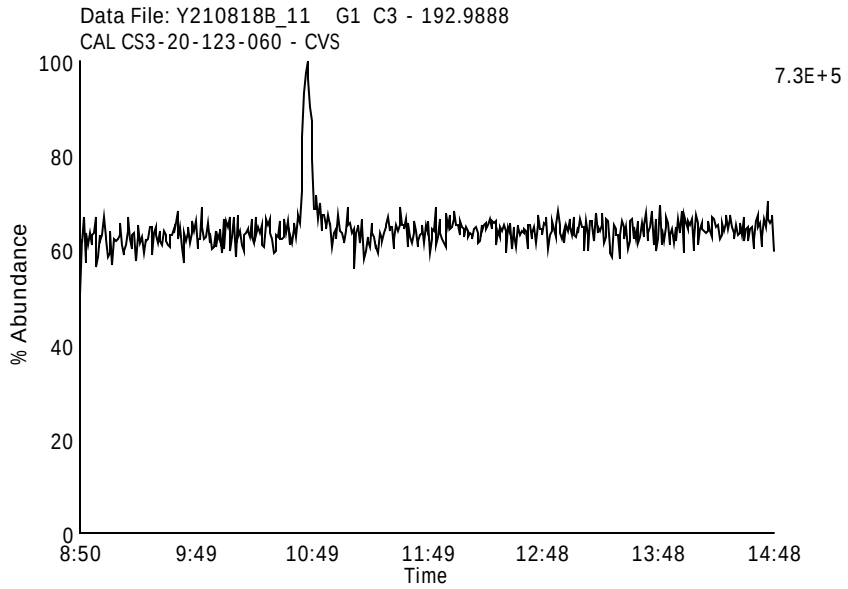
Sample Description: CAL CS3-20-123-060 - CVS

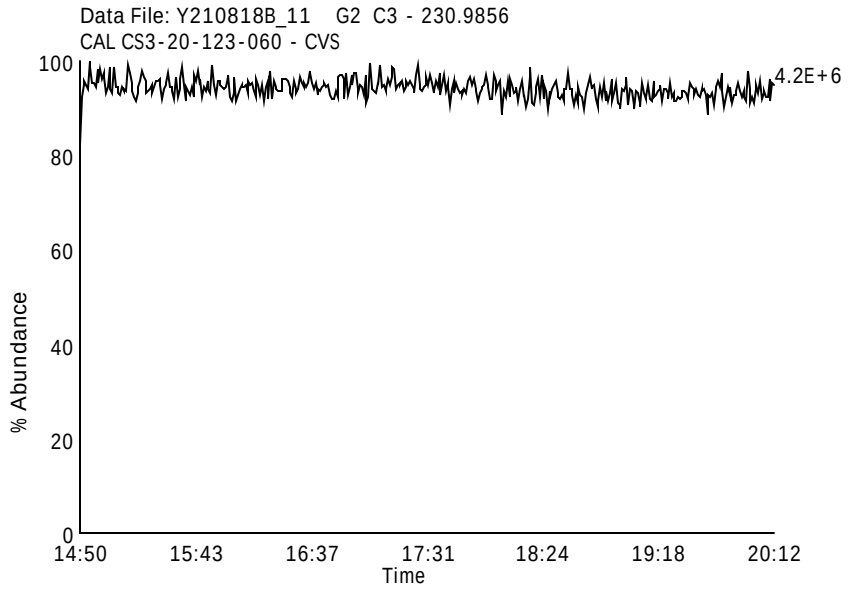


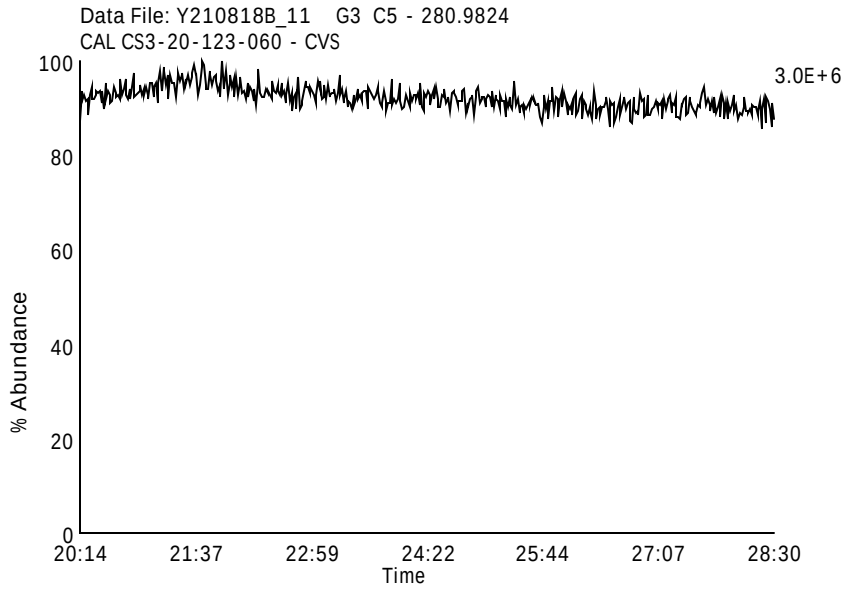


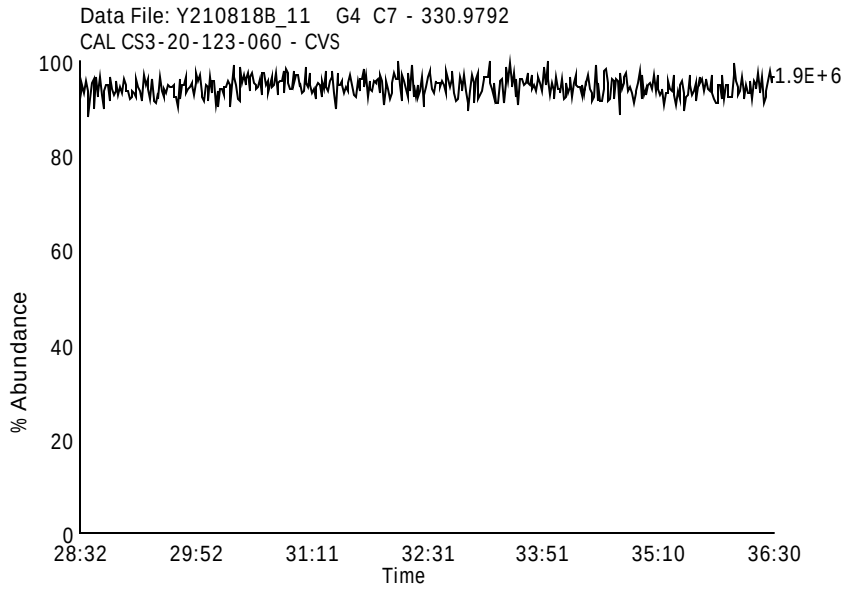
Group 1 - 4 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



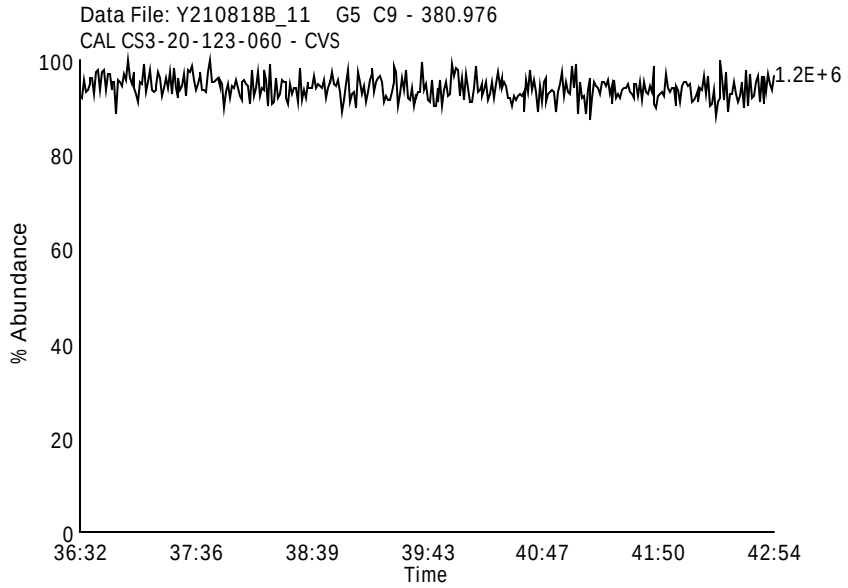


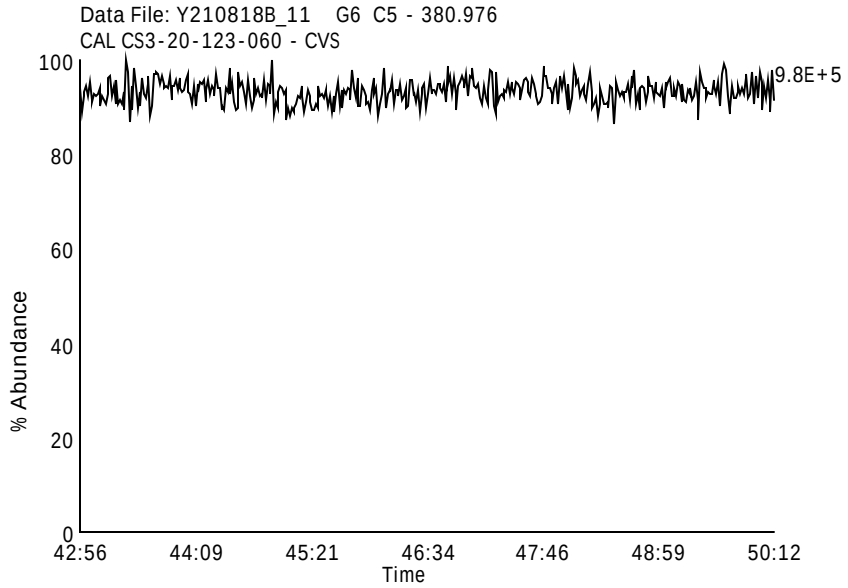


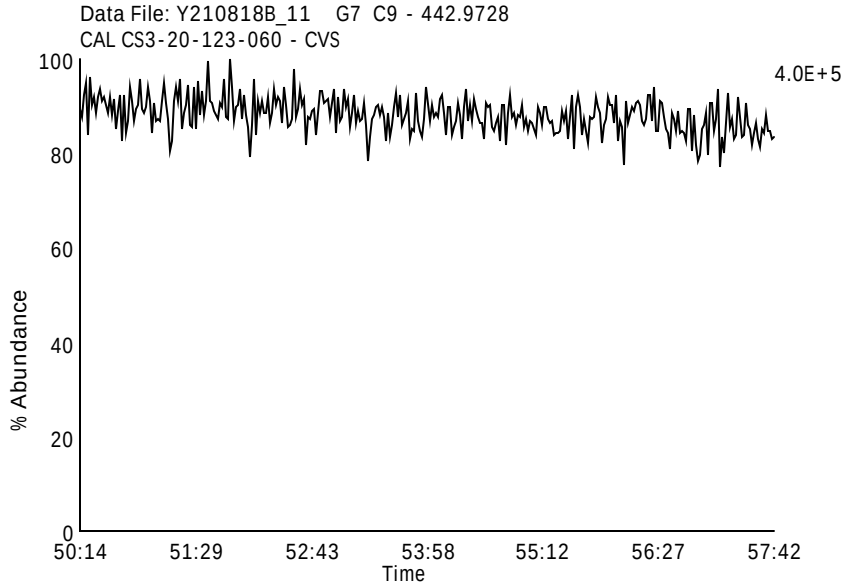


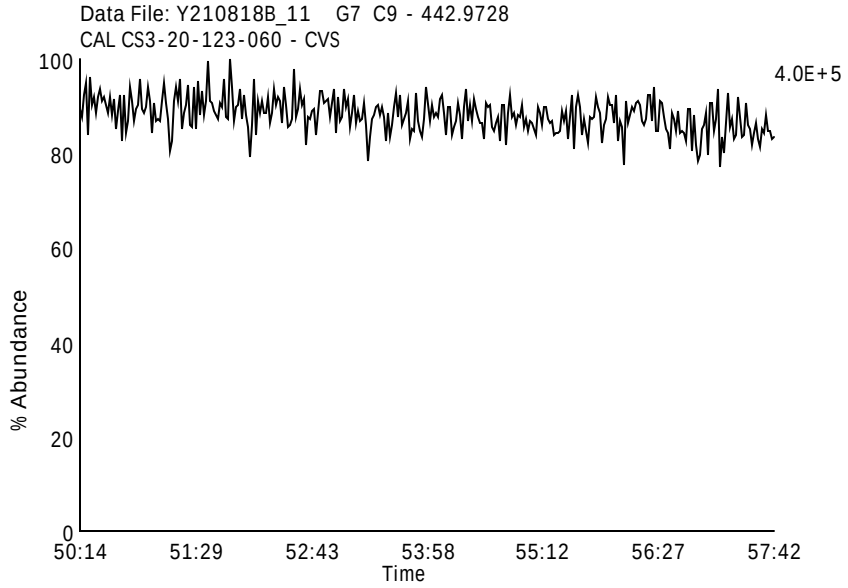
Group 5 - 7 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







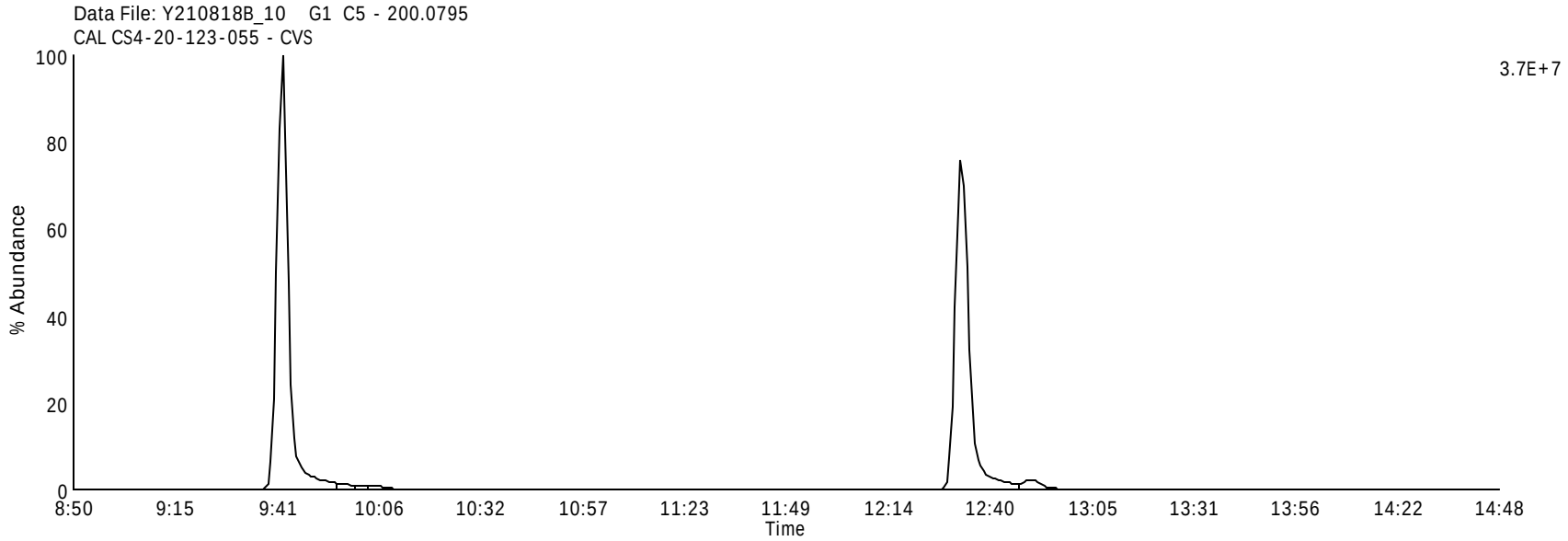


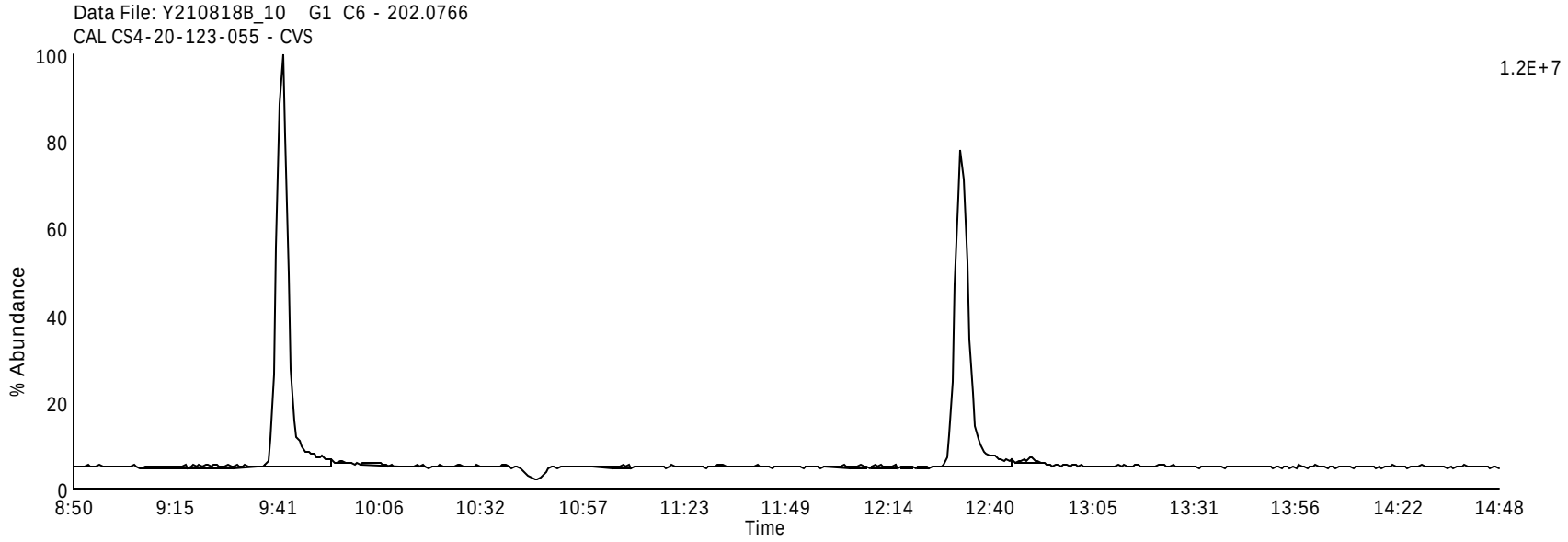
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

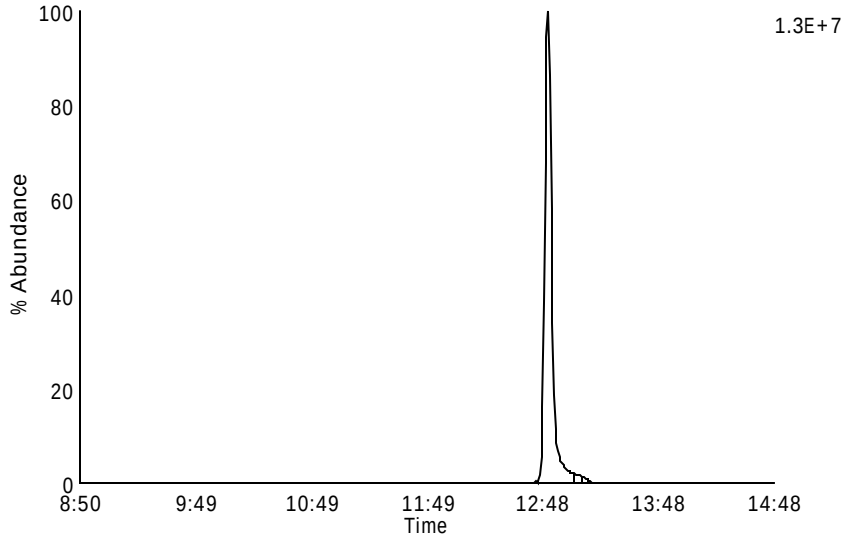




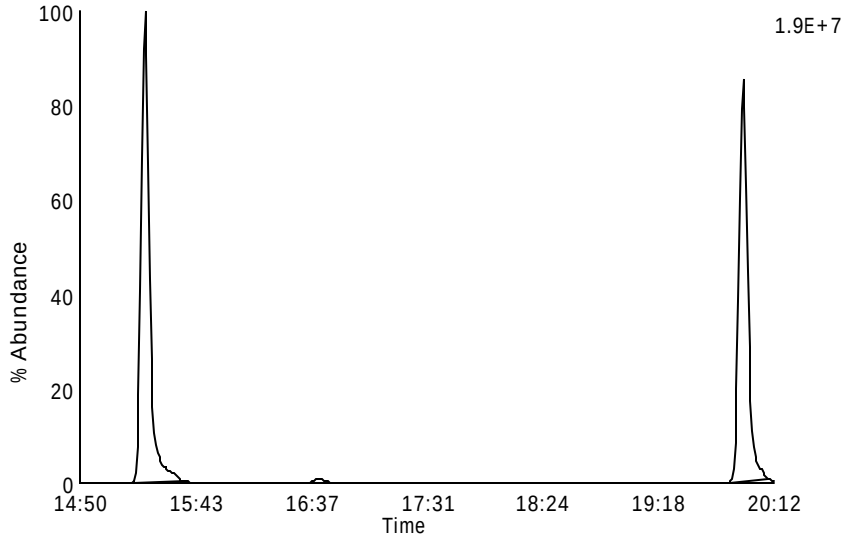
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

Data File: Y210818B_10 G1 C9 - 234.0406
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G2 C5 - 234.0406
CAL CS4-20-123-055 - CVS



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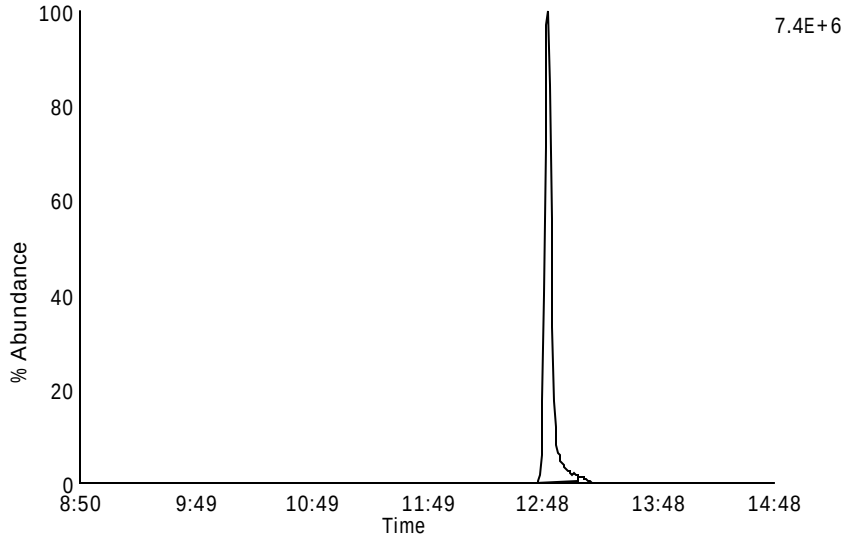
CAL CS4-20-123-055 - CVS



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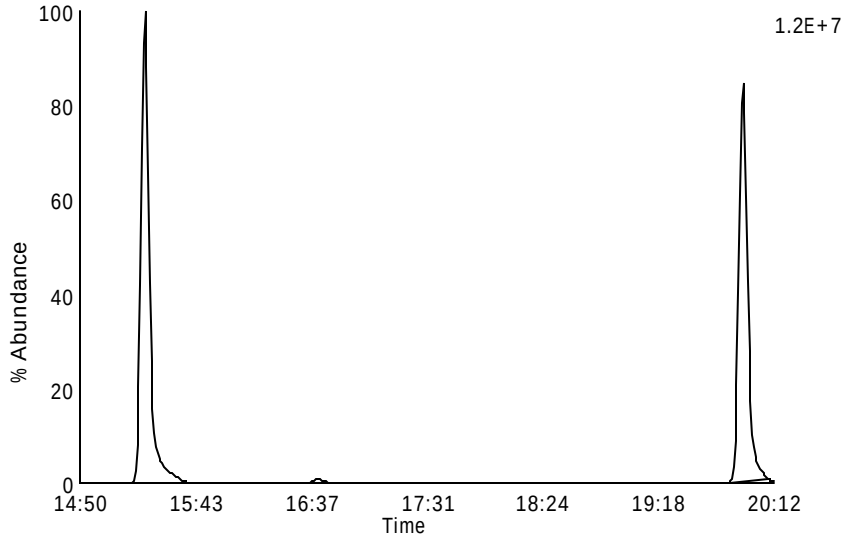
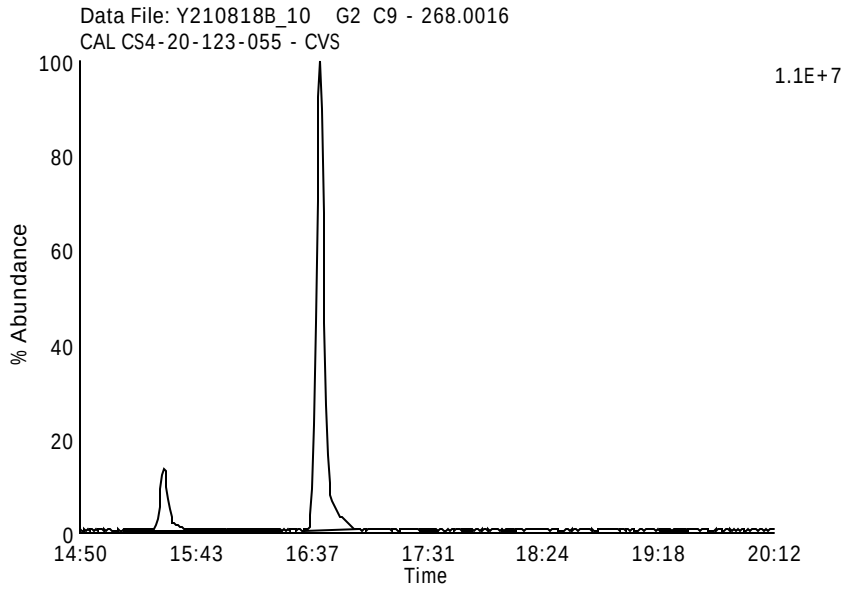
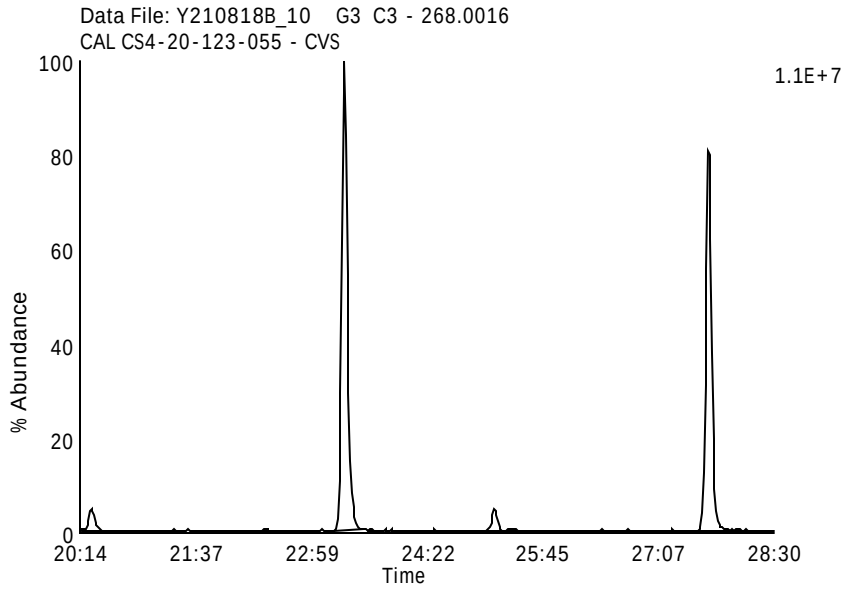
CAL CS4-20-123-055 - CVS

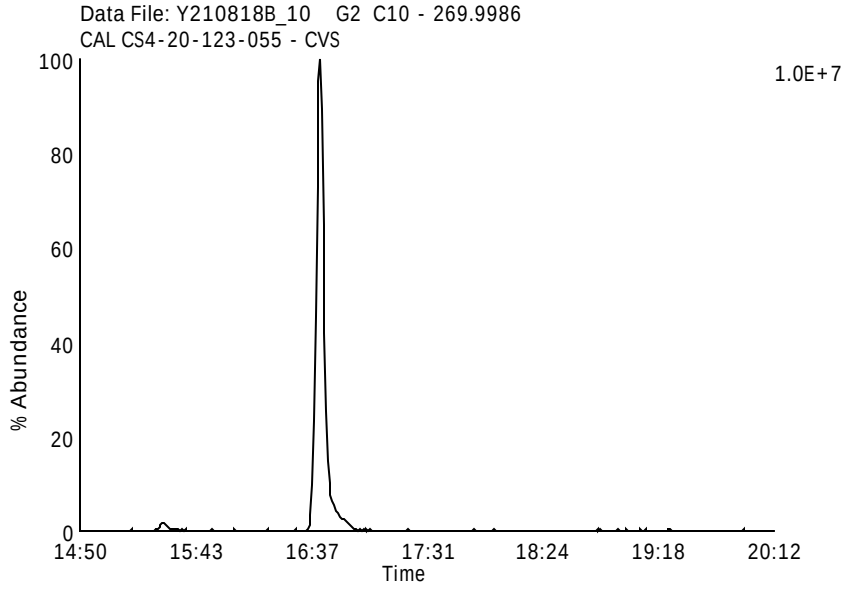


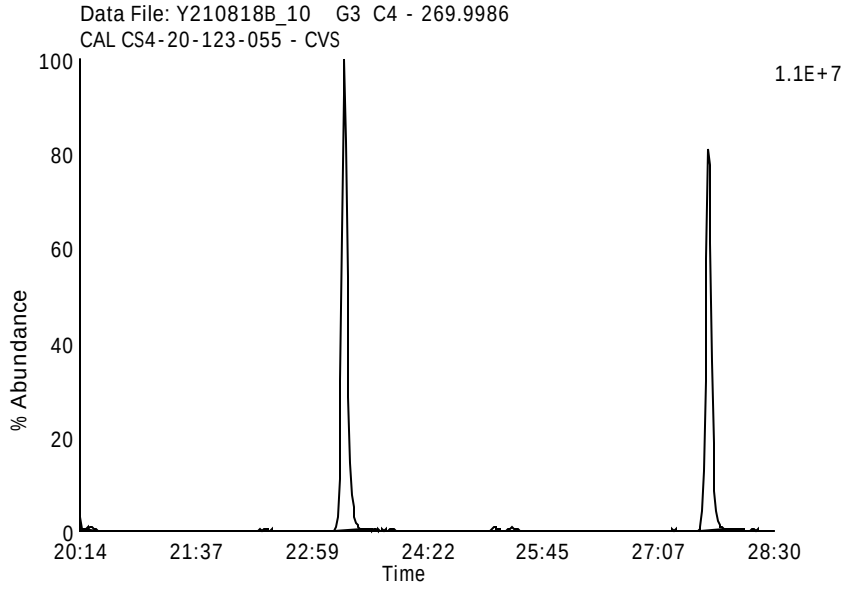
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS







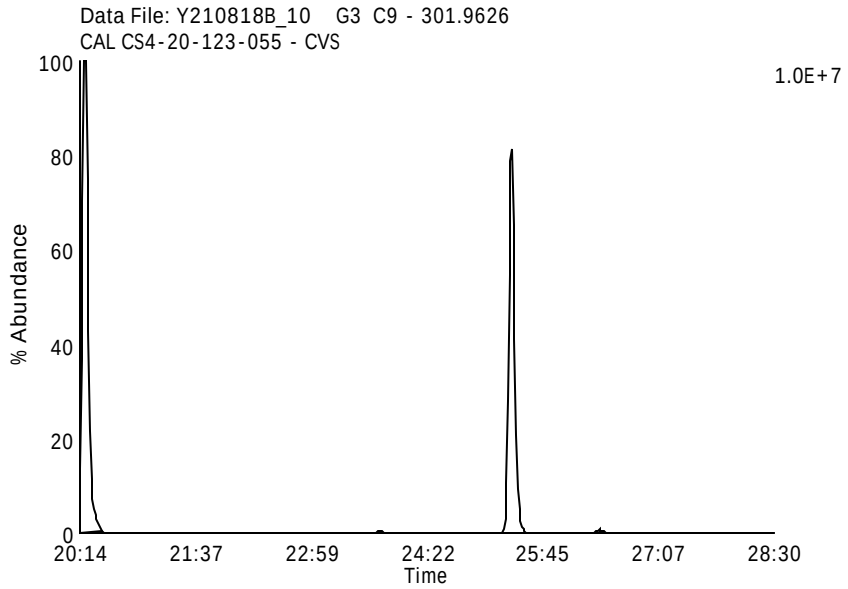


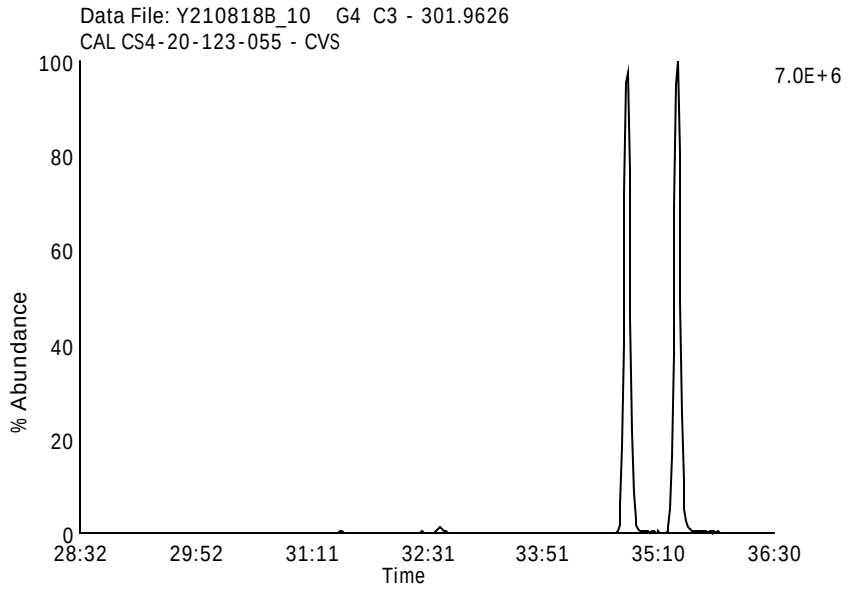
Labeled Tetra Chlorinated Biphenyls

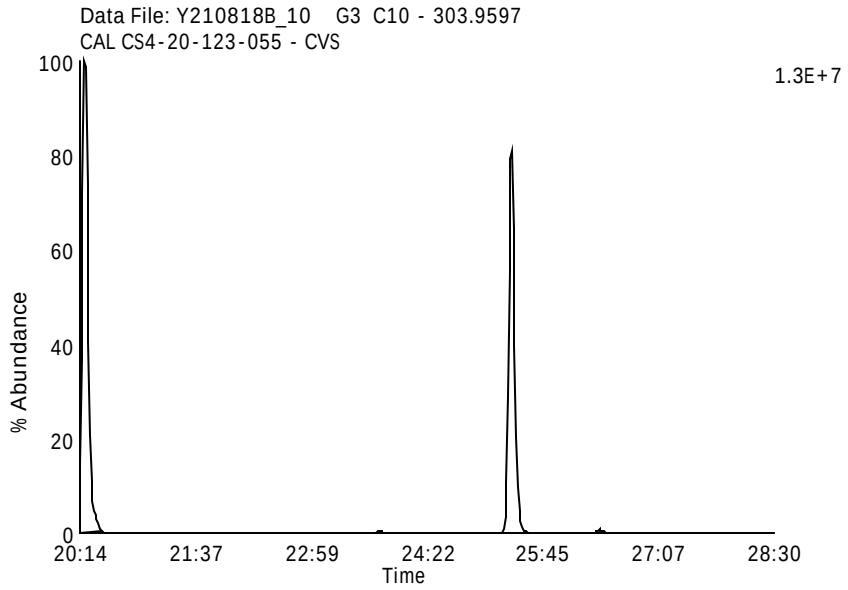
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

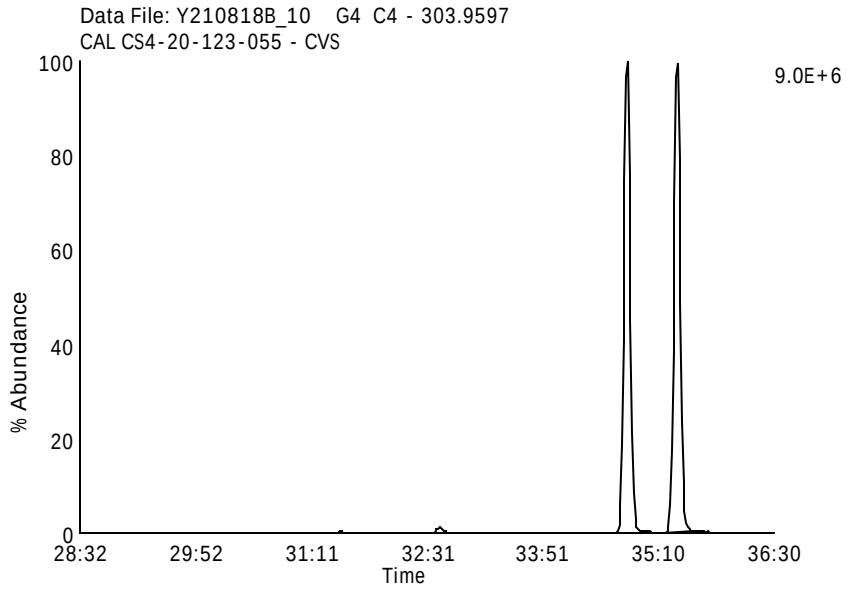
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS







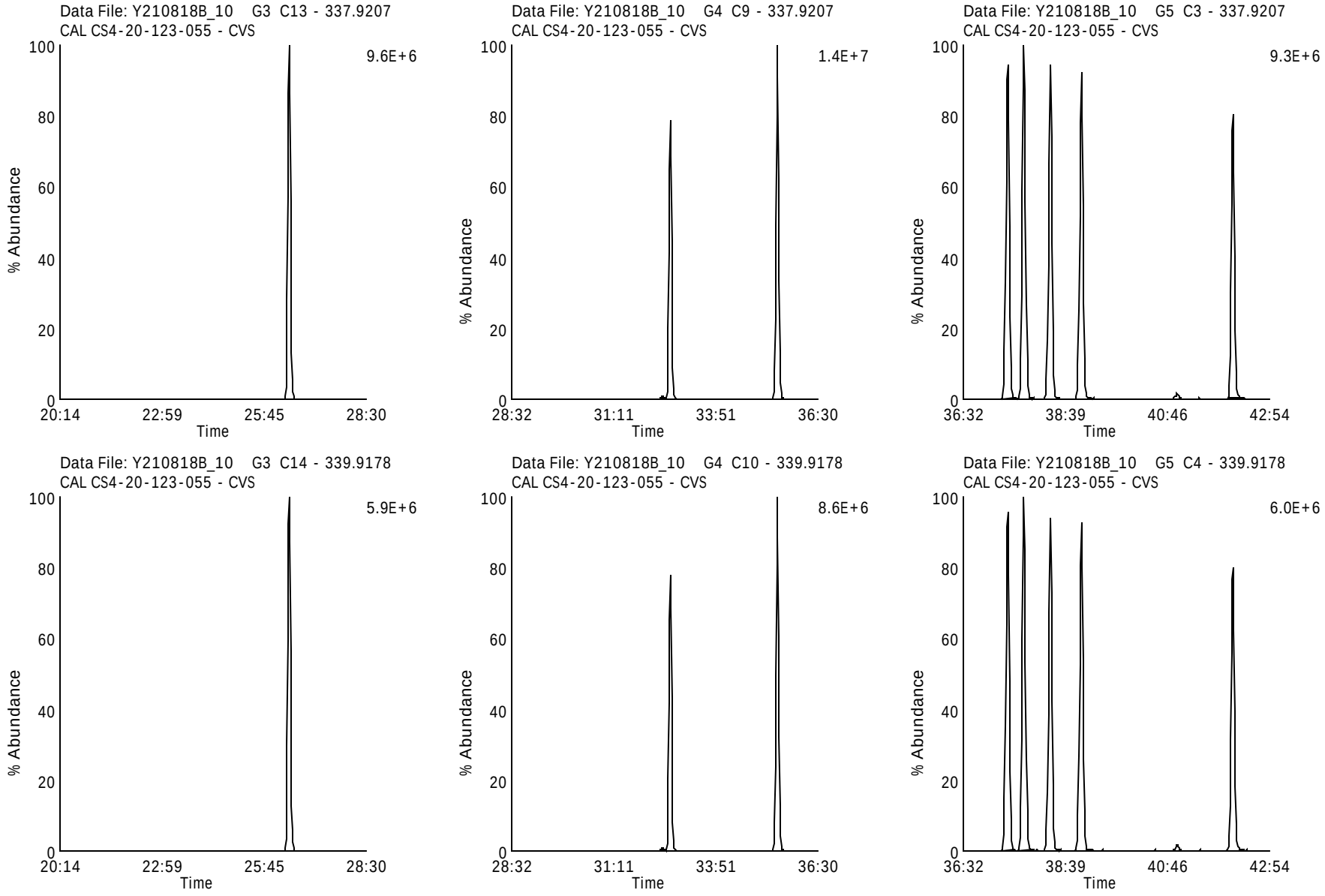


Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



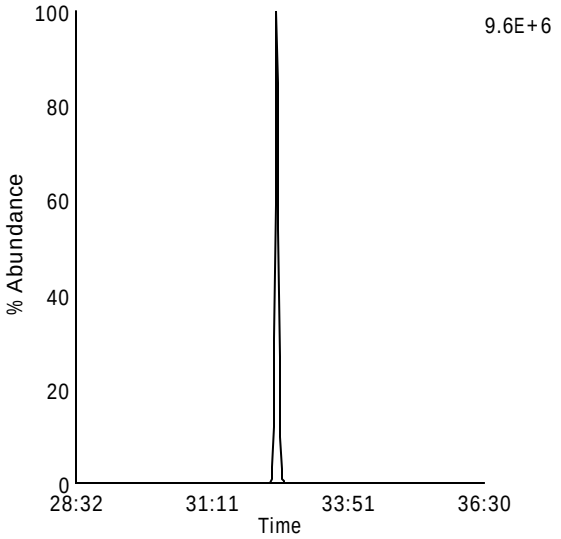
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

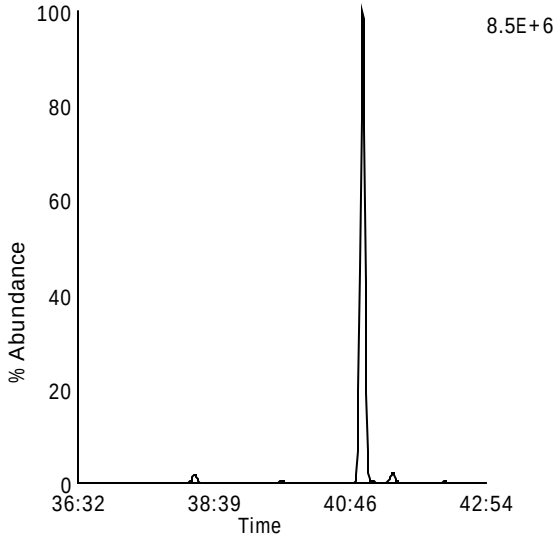
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

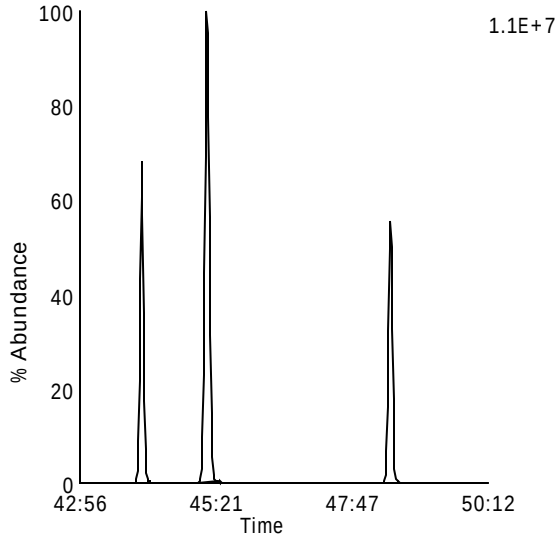
Data File: Y210818B_10 G4 C13 - 371.8817
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G5 C7 - 371.8817
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G6 C3 - 371.8817
CAL CS4-20-123-055 - CVS



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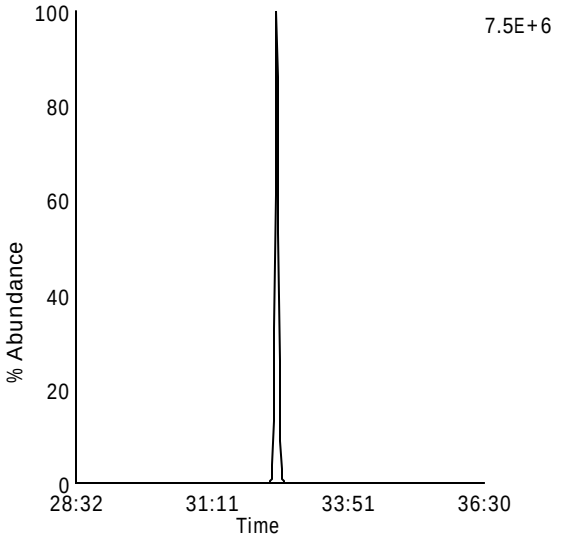
CAL CS4-20-123-055 - CVS



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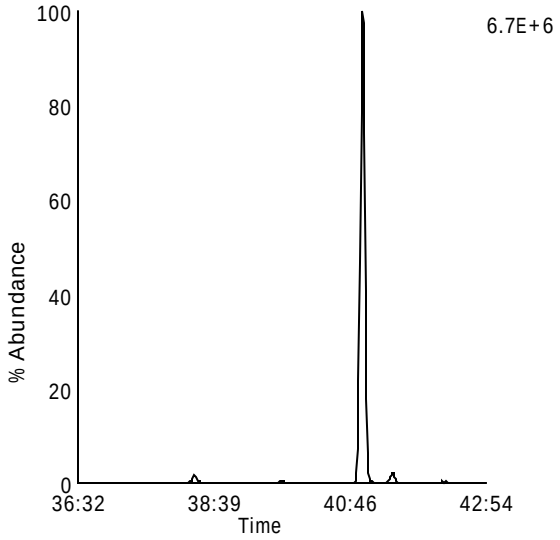
CAL CS4-20-123-055 - CVS



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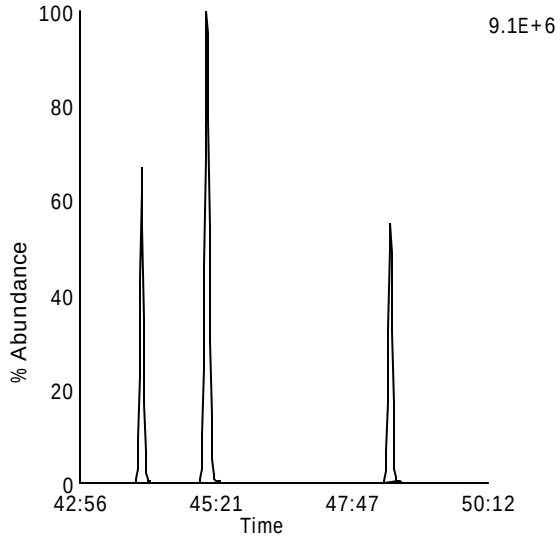
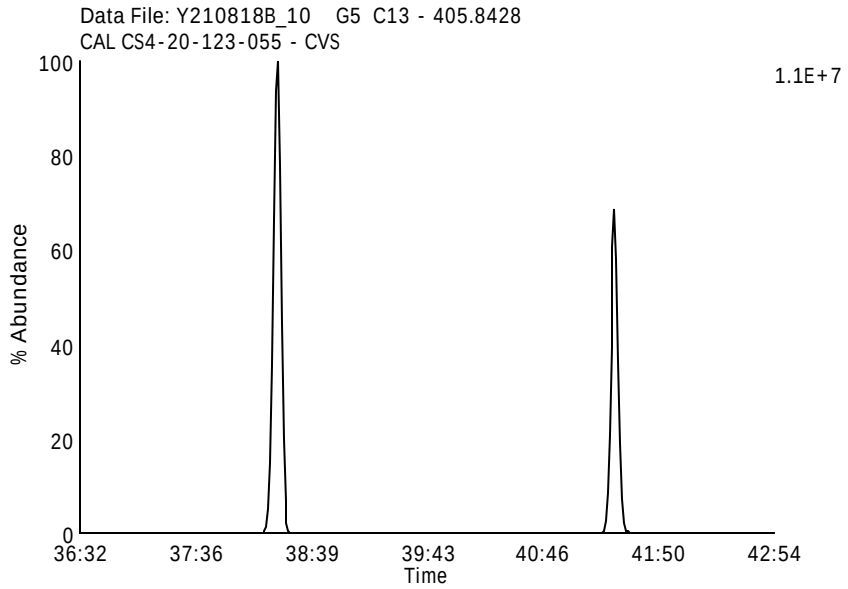
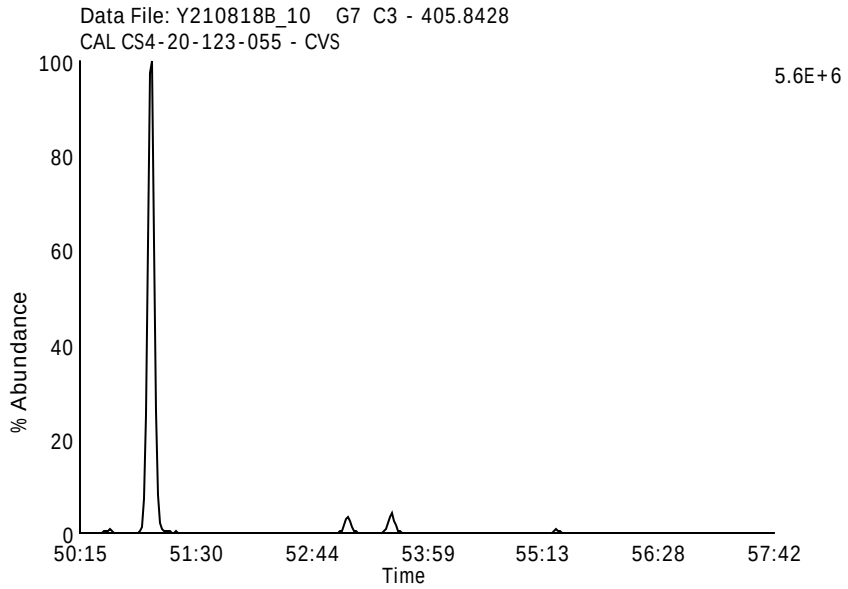
CAL CS4-20-123-055 - CVS

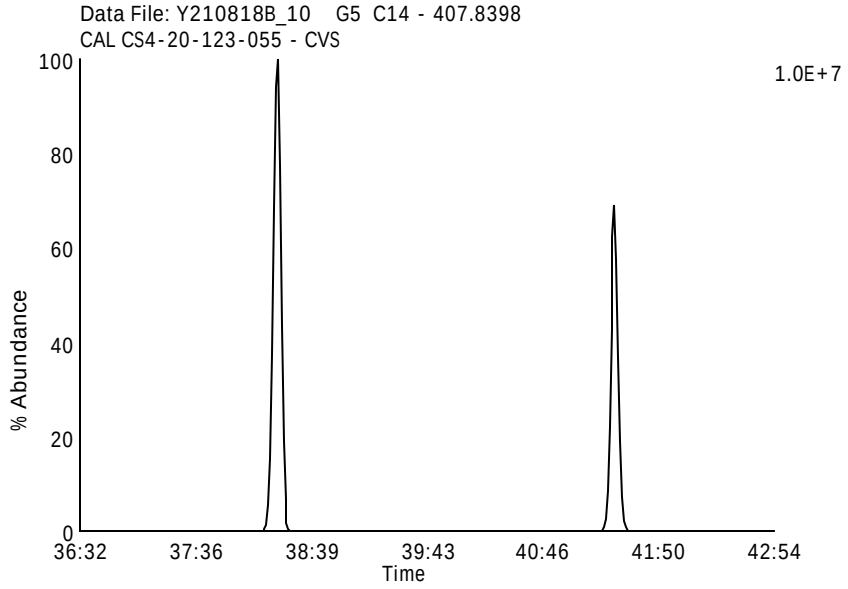


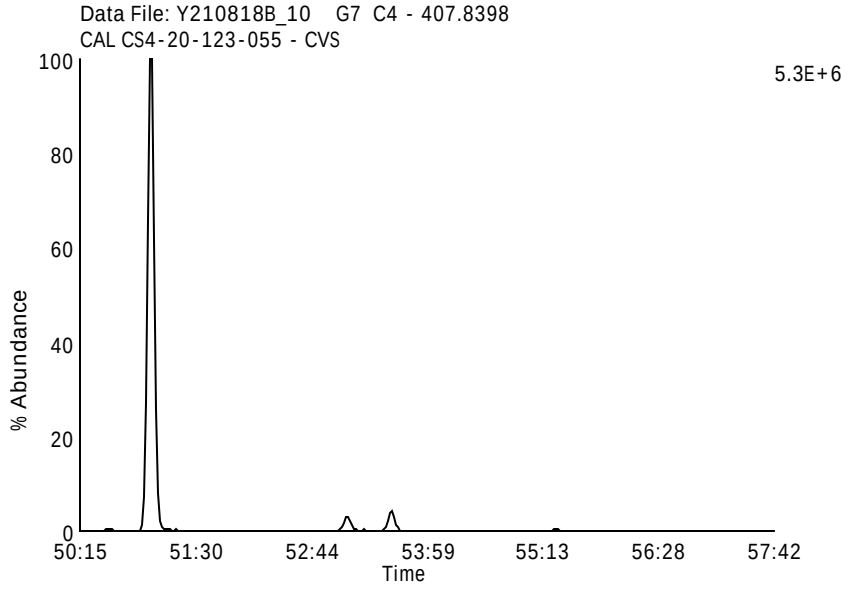
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS





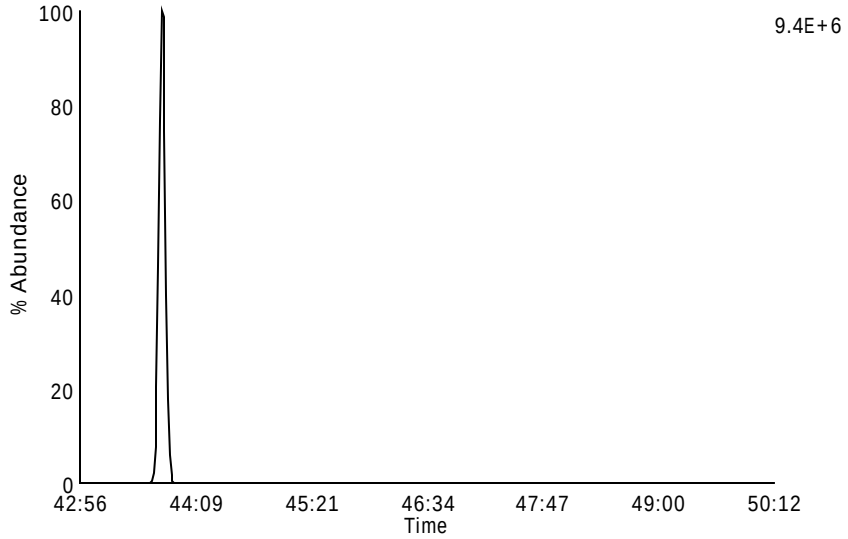




Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

Data File: Y210818B_10 G6 C13 - 439.8038
CAL CS4-20-123-055 - CVS



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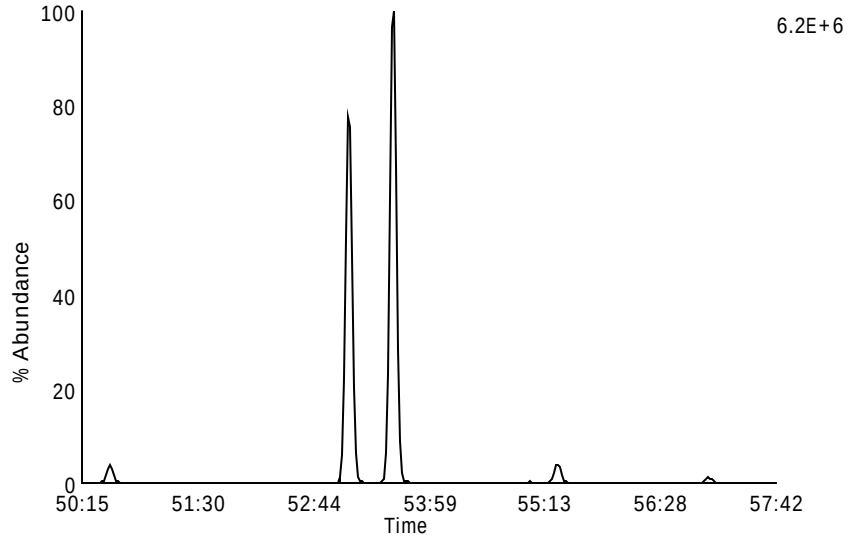
CAL CS4-20-123-055 - CVS



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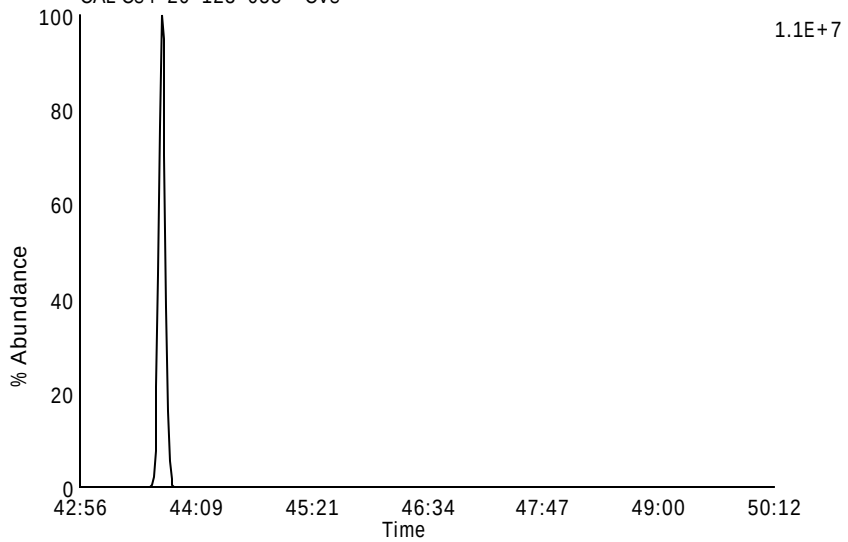
CAL CS4-20-123-055 - CVS



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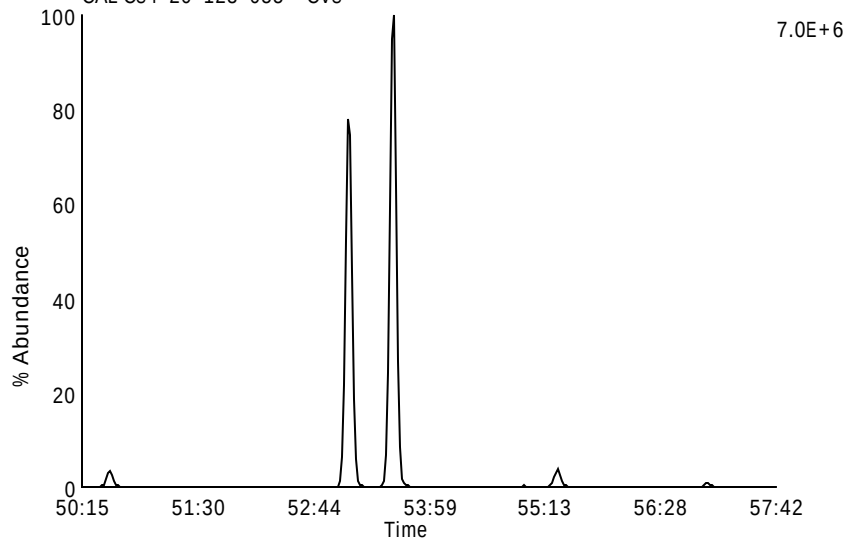
CAL CS4-20-123-055 - CVS



Labeled Nona Chlorinated Biphenyls

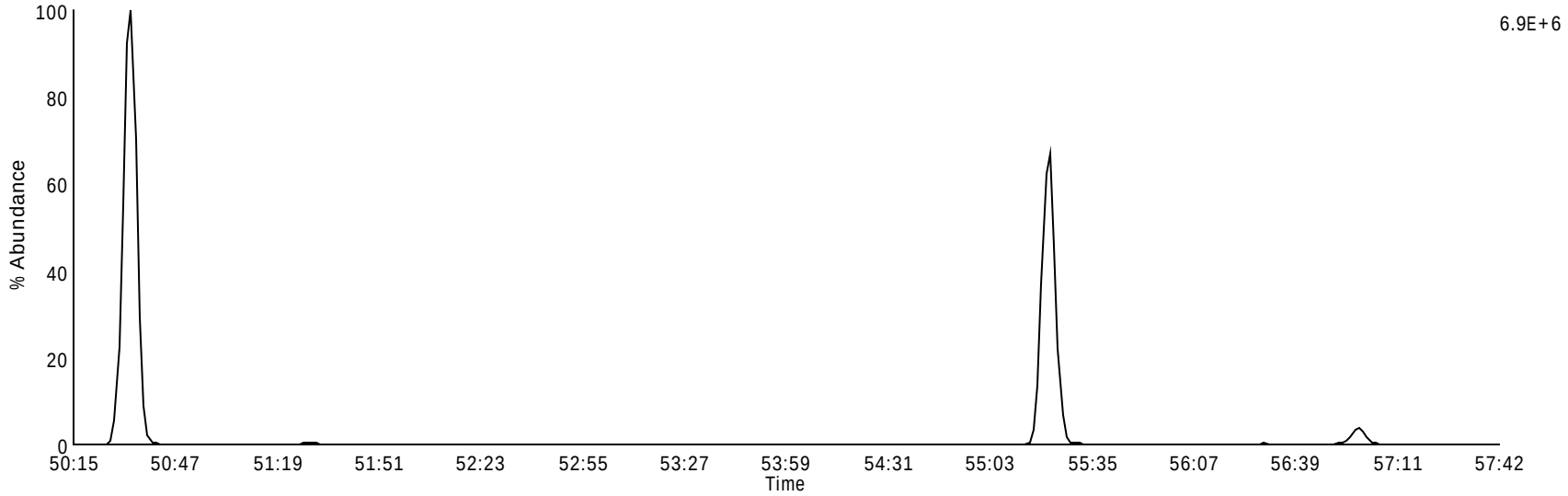
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

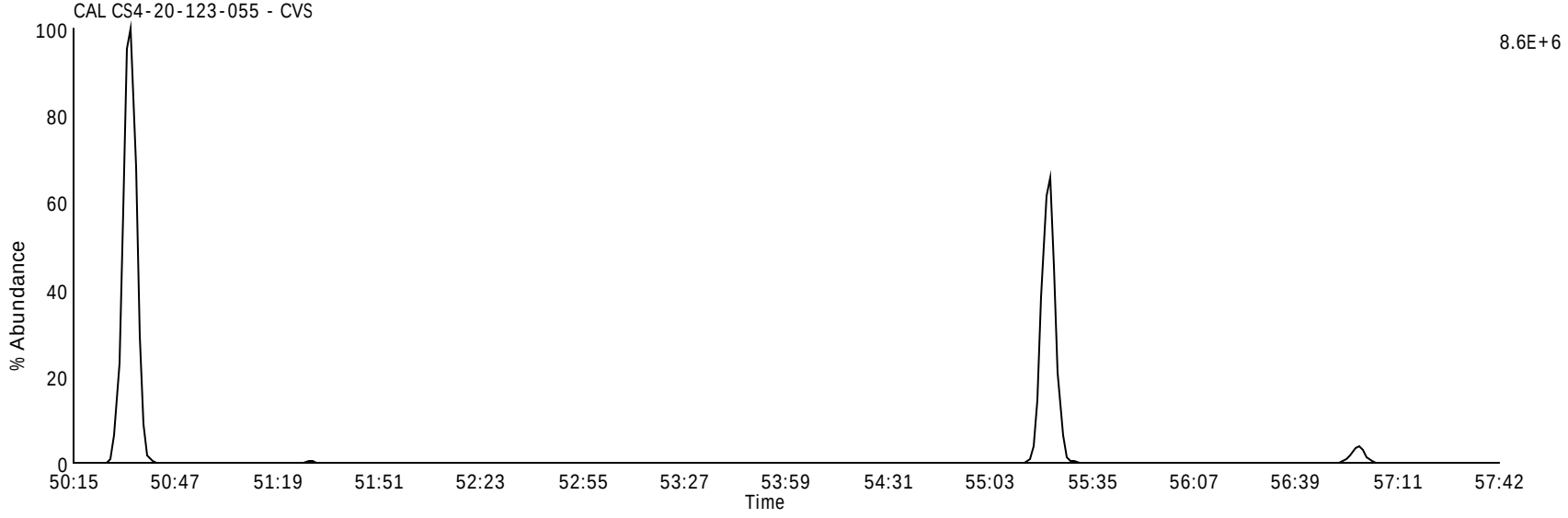
Data File: Y210818B_10 G7 C13 - 473.7648

CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G7 C14 - 475.7619

CAL CS4-20-123-055 - CVS

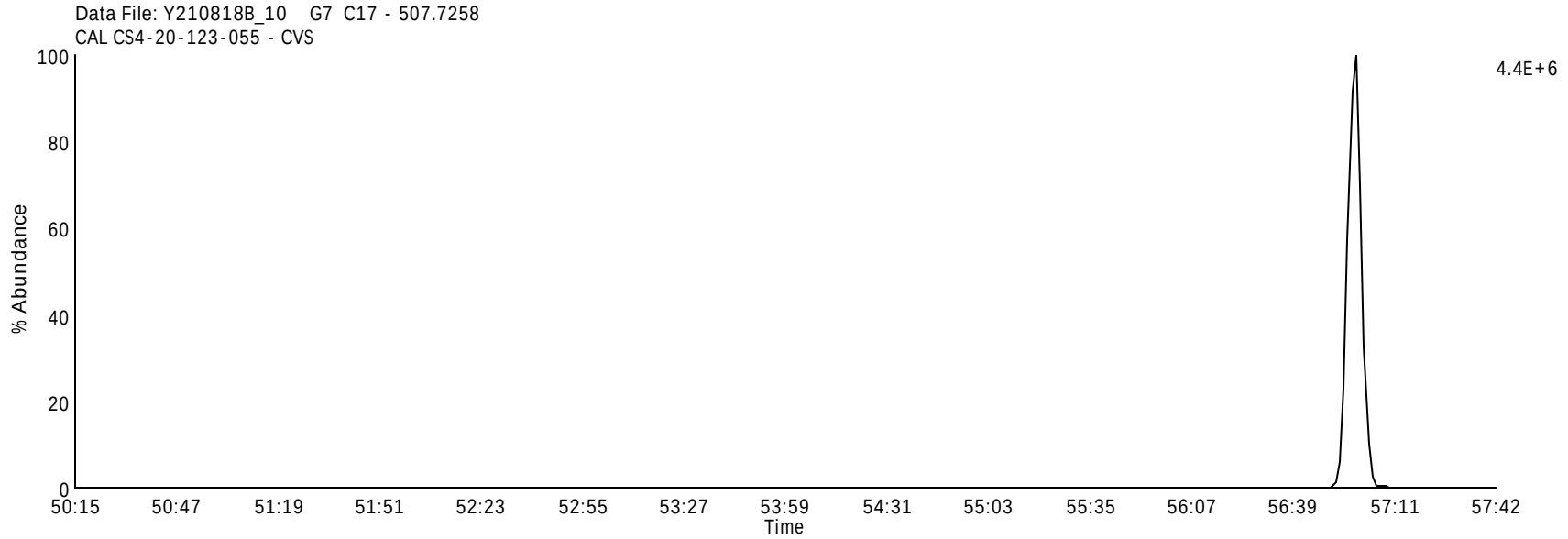


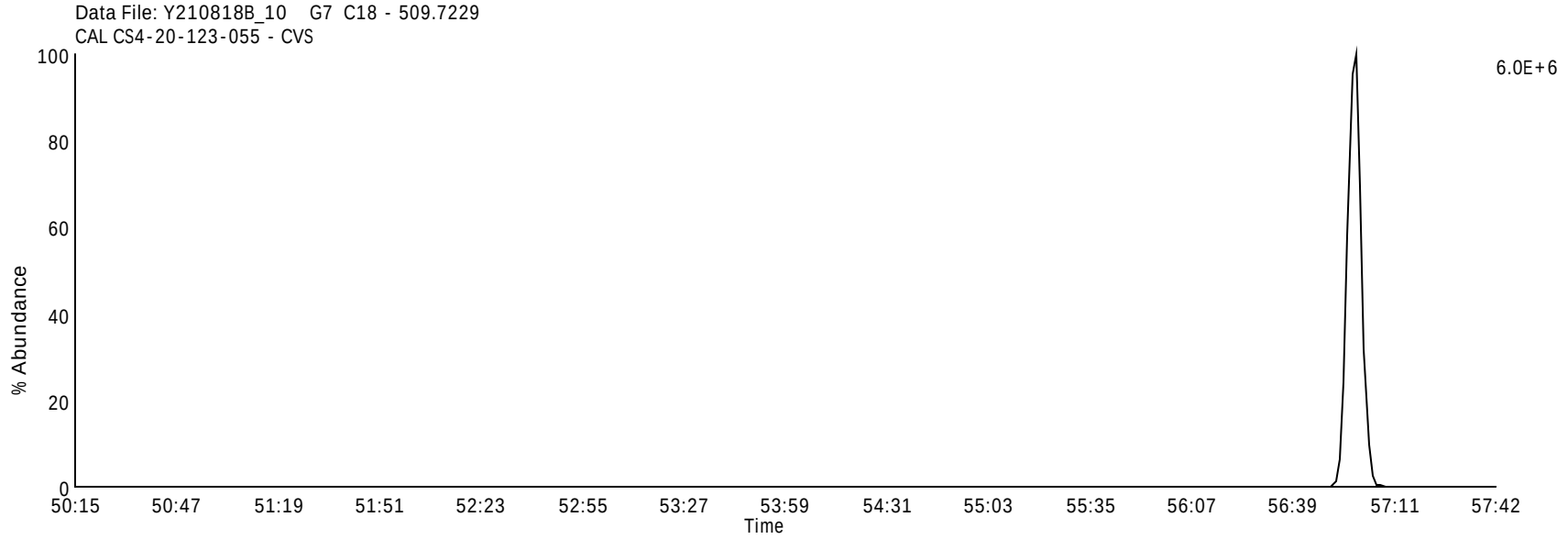
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



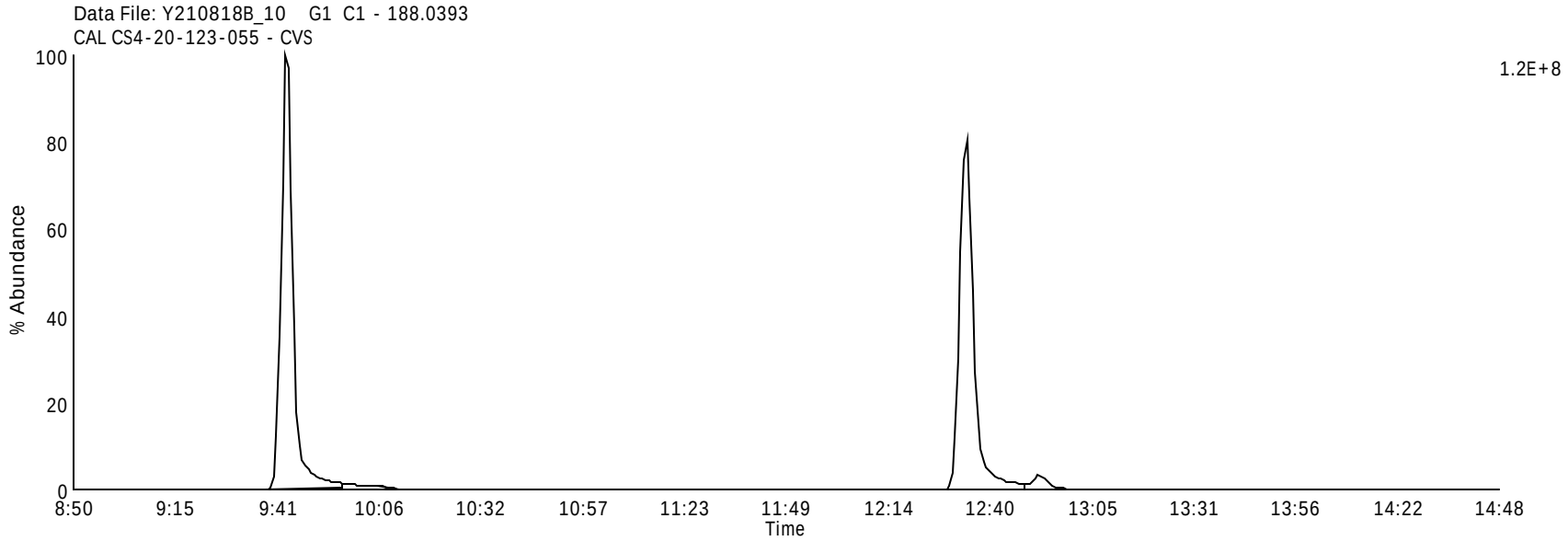


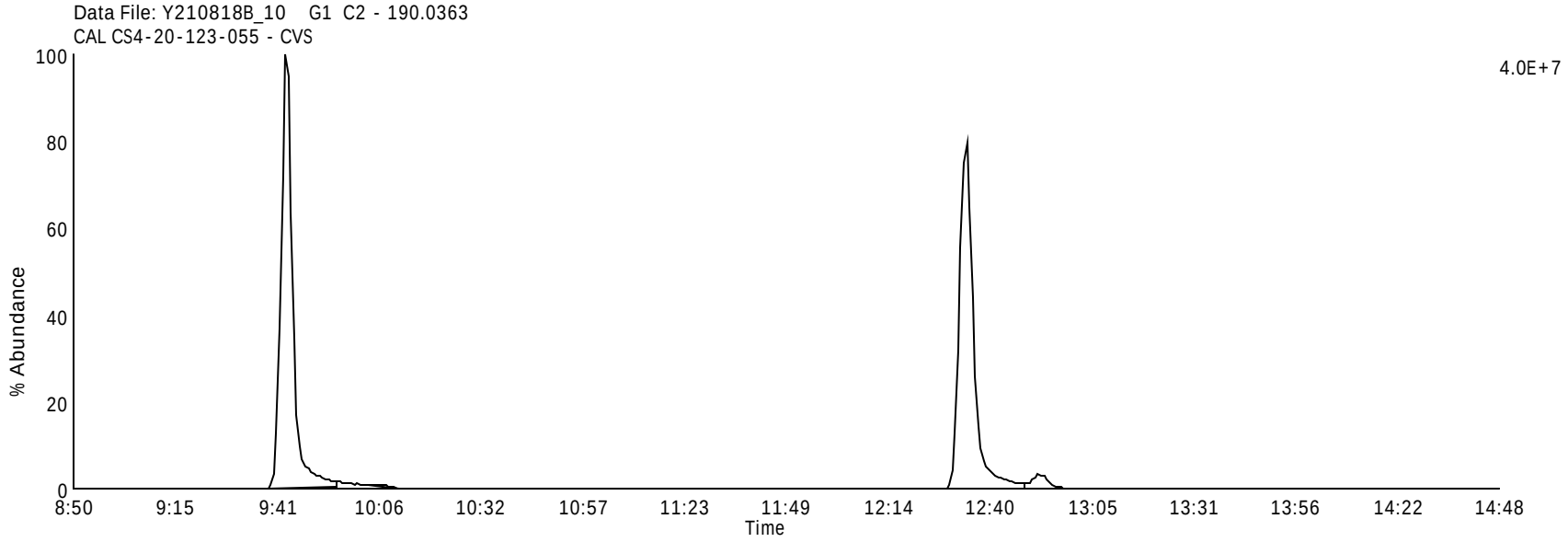
Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

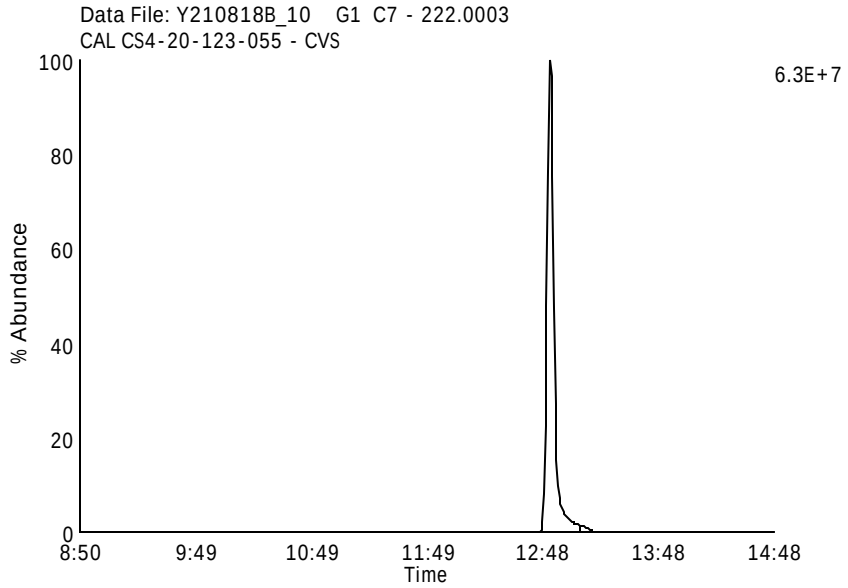
Sample Description: CAL CS4-20-123-055 - CVS

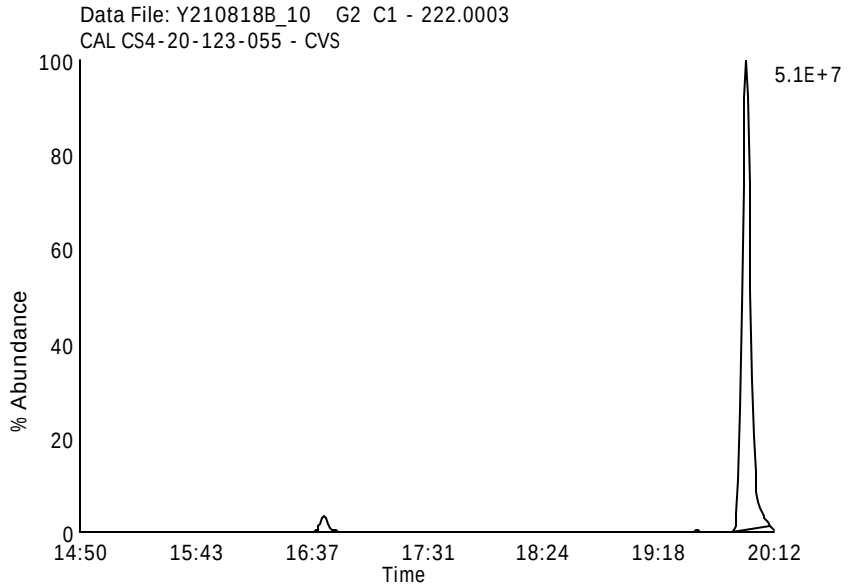


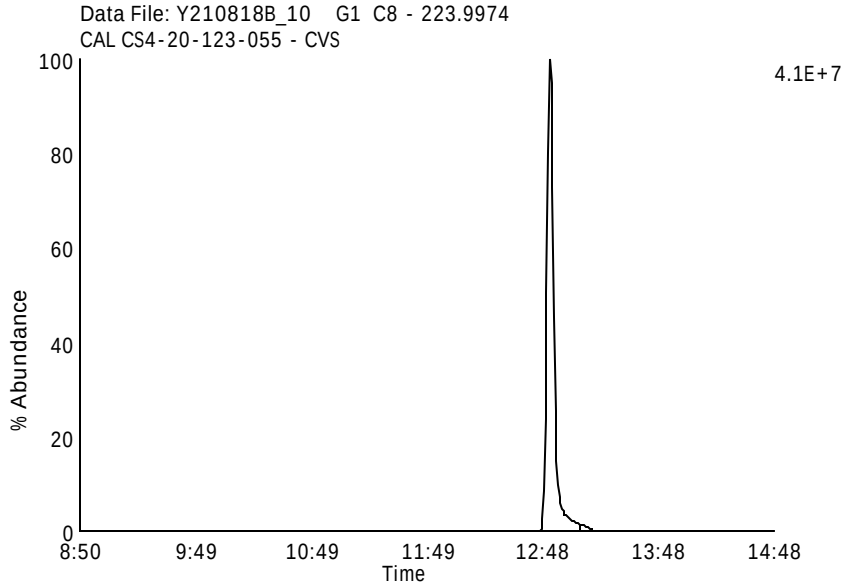


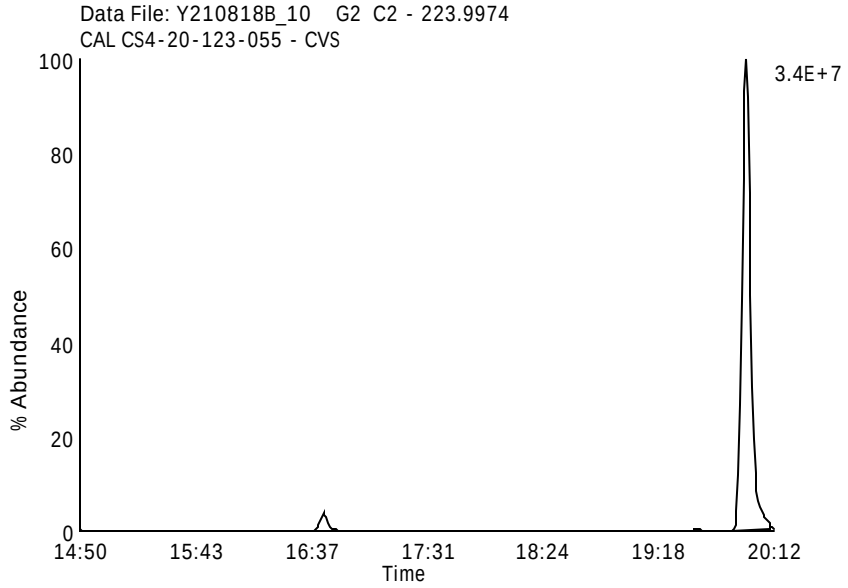
Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



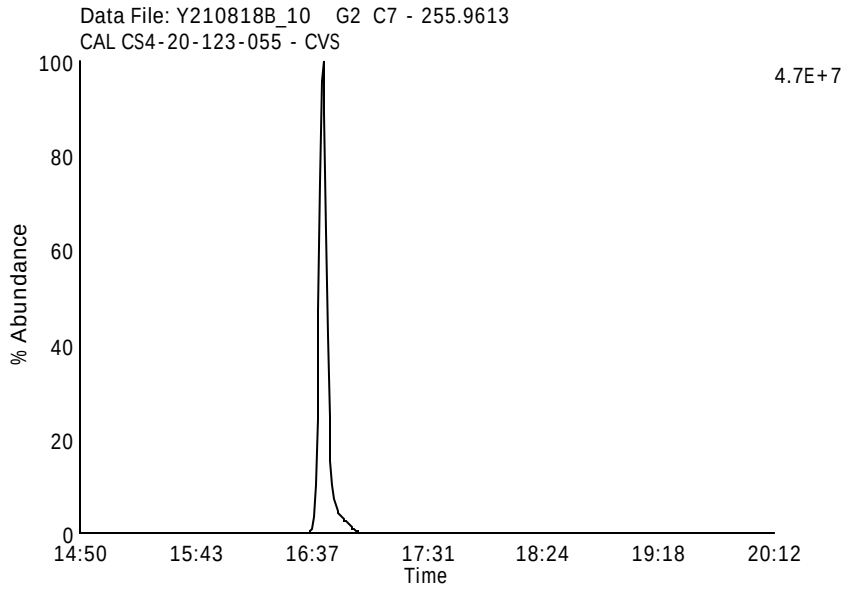


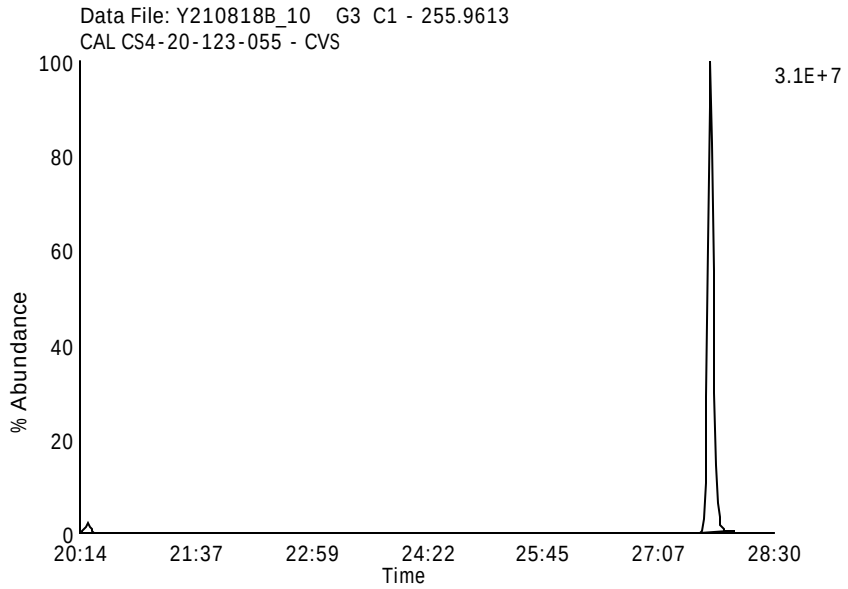


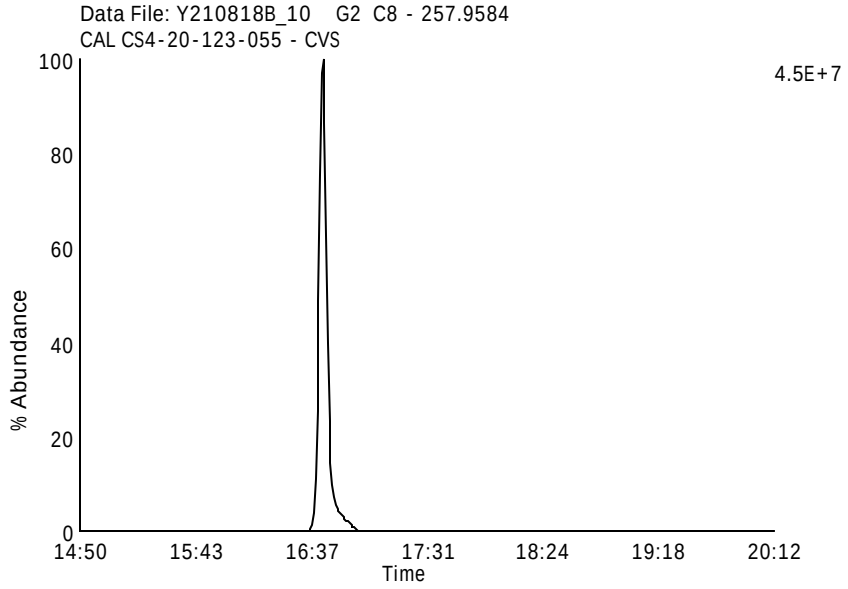


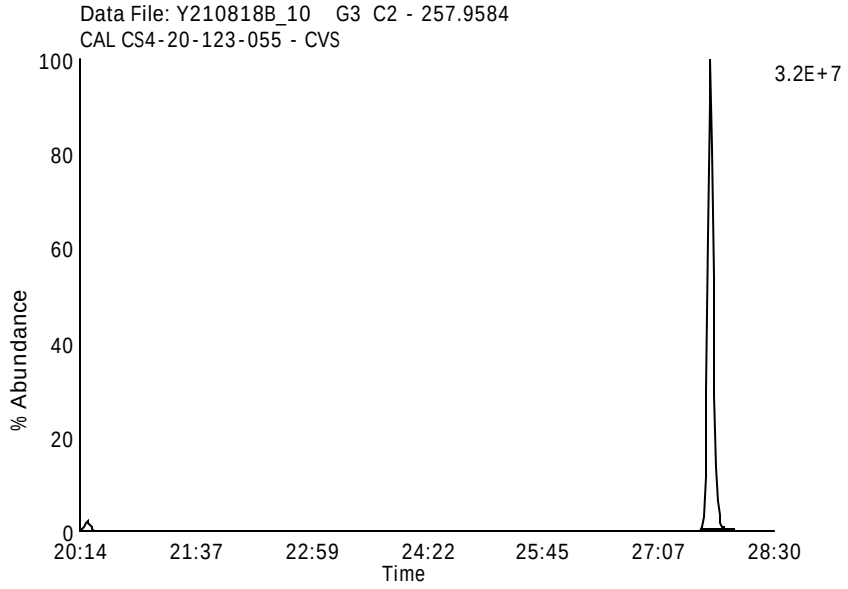
Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



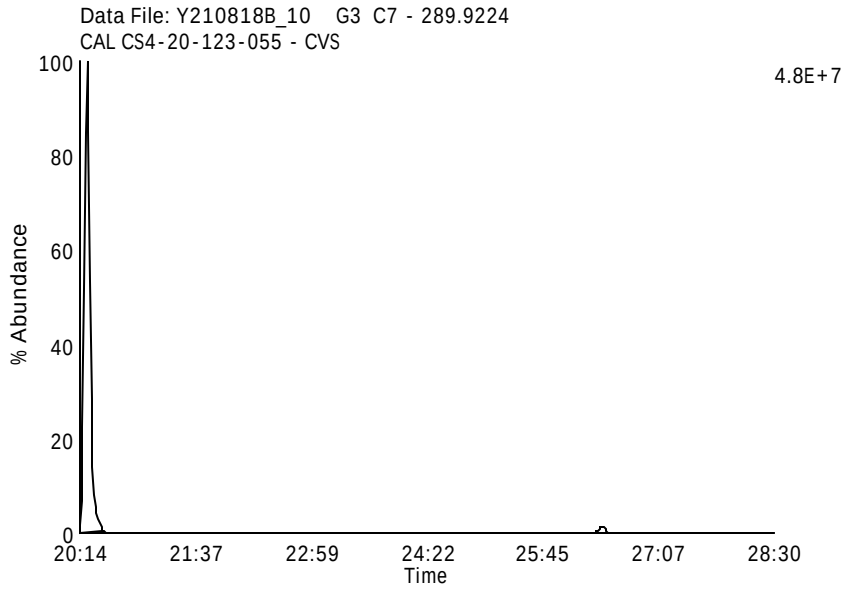


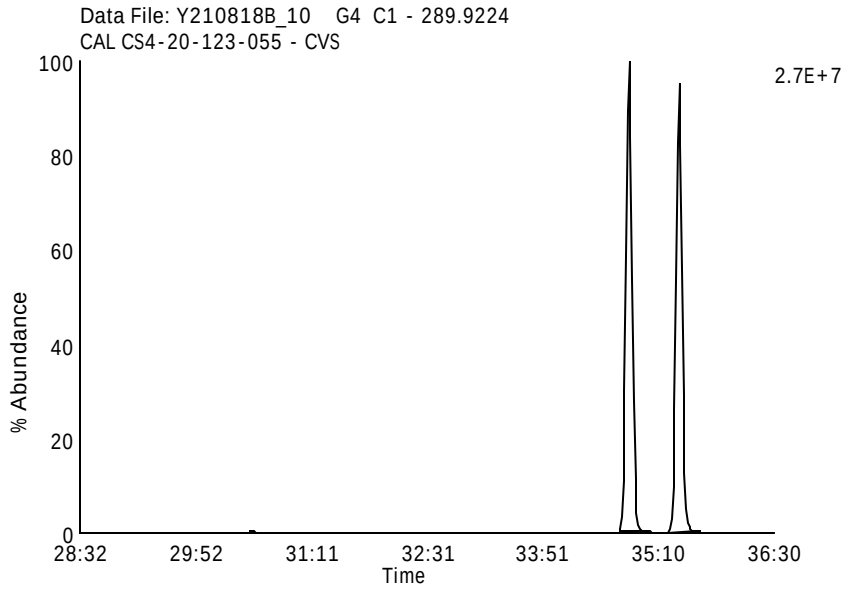


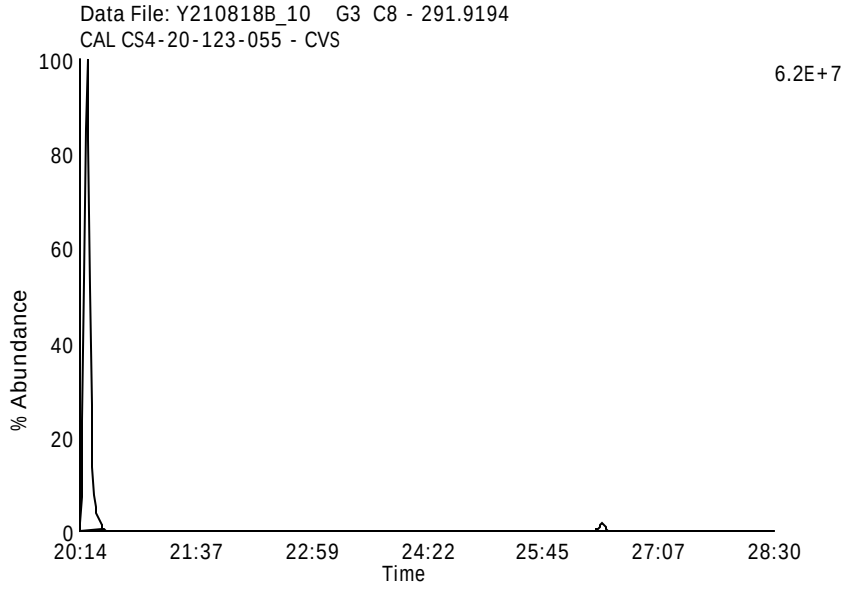


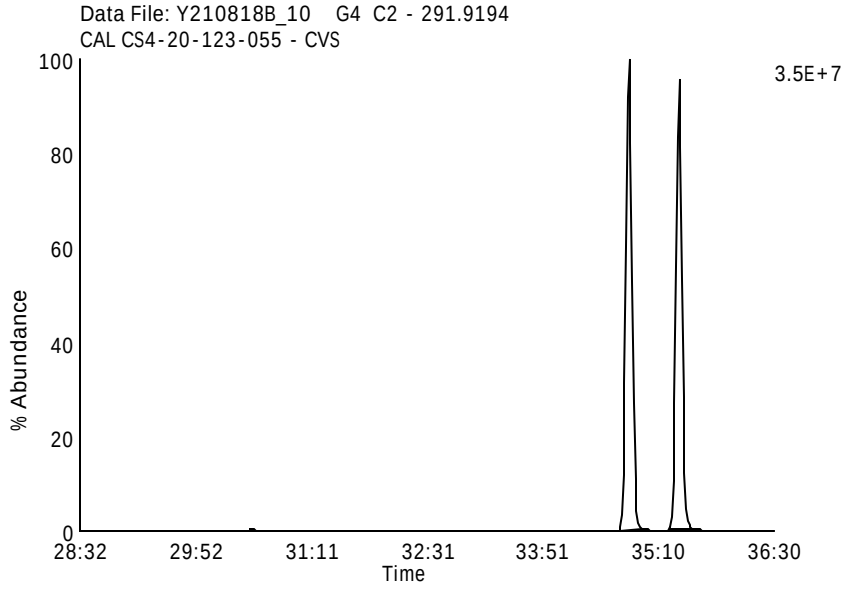
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS









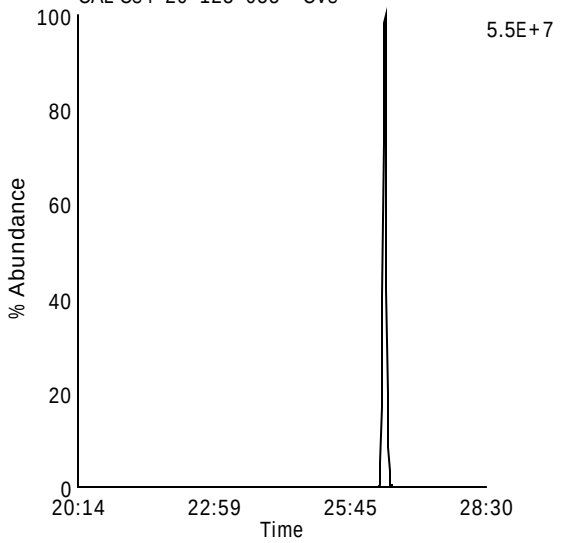
Penta Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

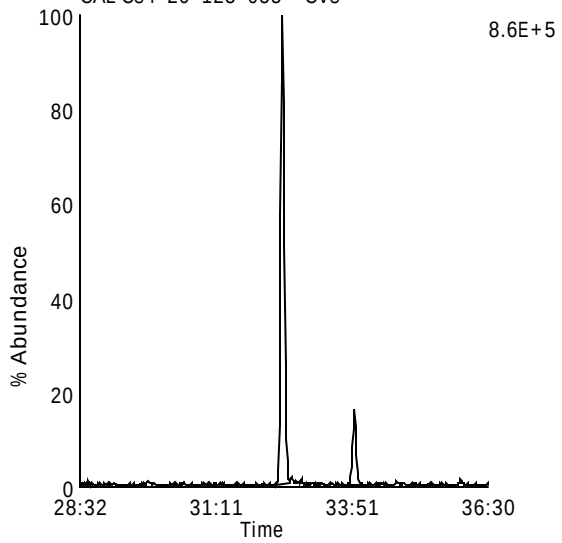
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

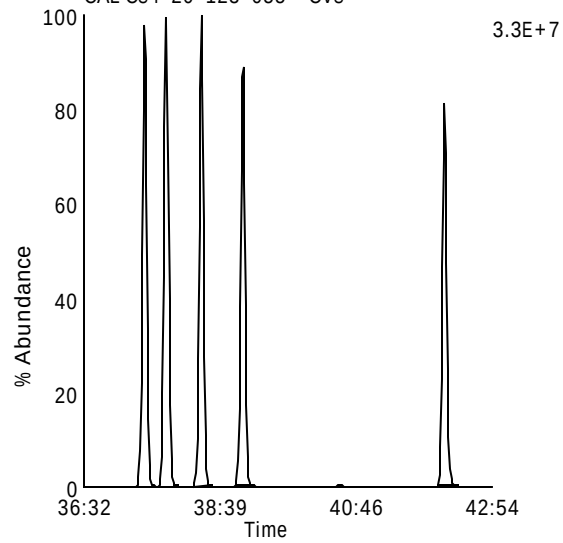
Data File: Y210818B_10 G3 C11 - 325.8804
CAL CS4-20-123-055 - CVS



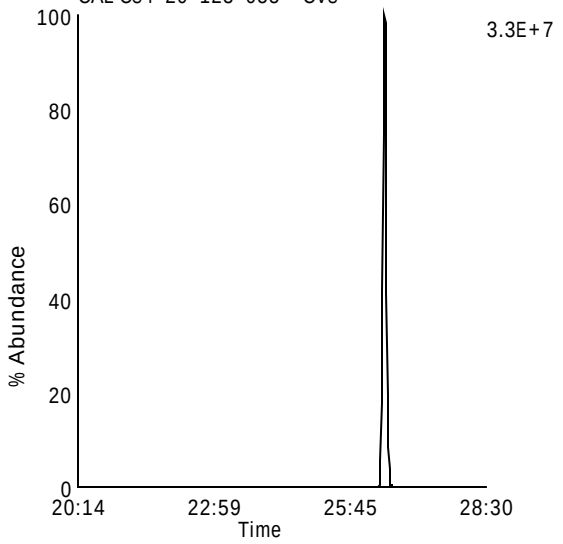
Data File: Y210818B_10 G4 C5 - 325.8804
CAL CS4-20-123-055 - CVS



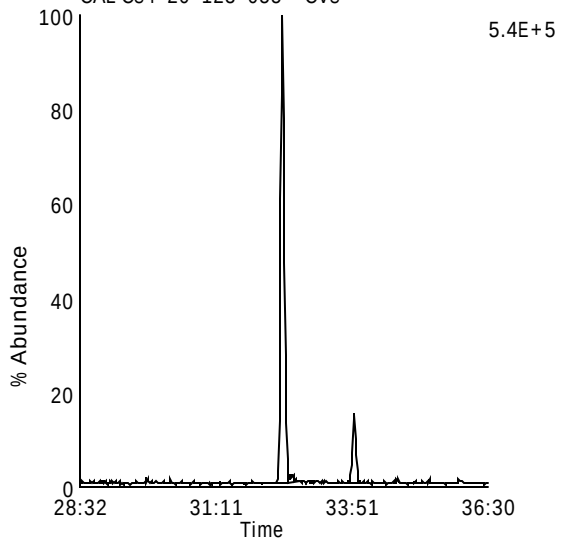
Data File: Y210818B_10 G5 C1 - 325.8804
CAL CS4-20-123-055 - CVS



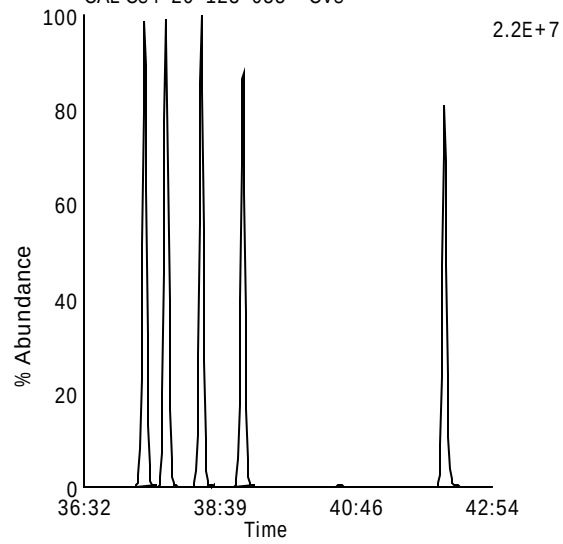
Data File: Y210818B_10 G3 C12 - 327.8775
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G4 C6 - 327.8775
CAL CS4-20-123-055 - CVS

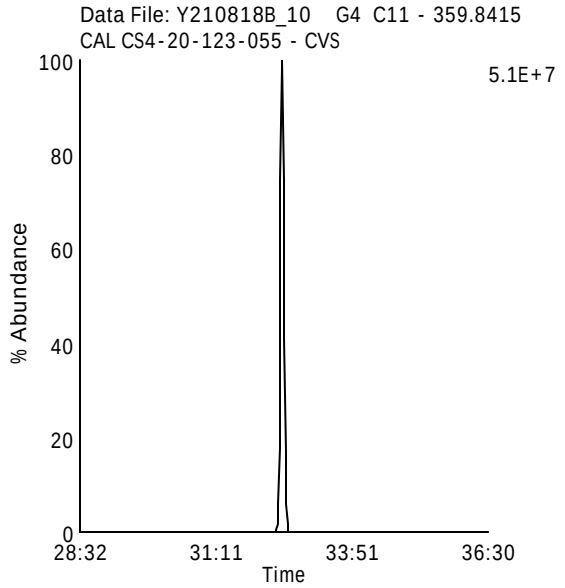


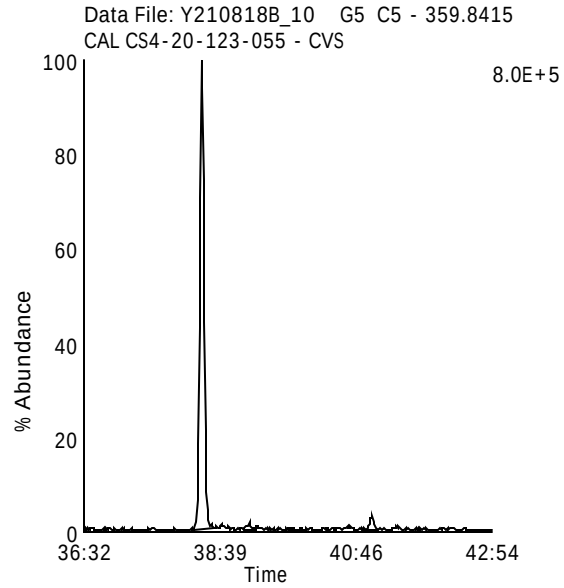
Data File: Y210818B_10 G5 C2 - 327.8775
CAL CS4-20-123-055 - CVS

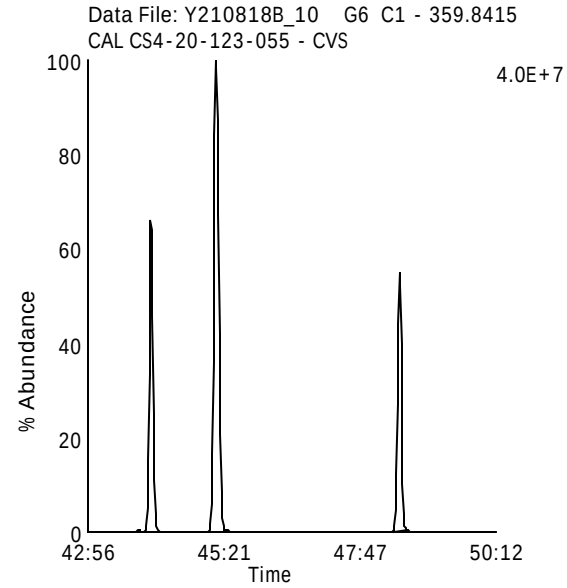


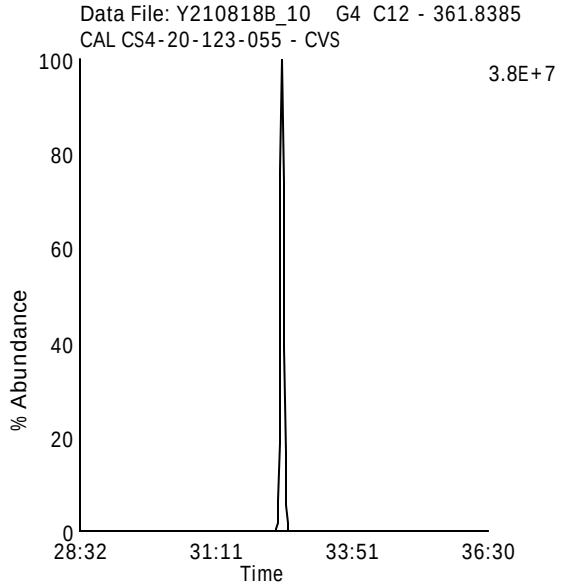
Hexa Chlorinated Biphenyls

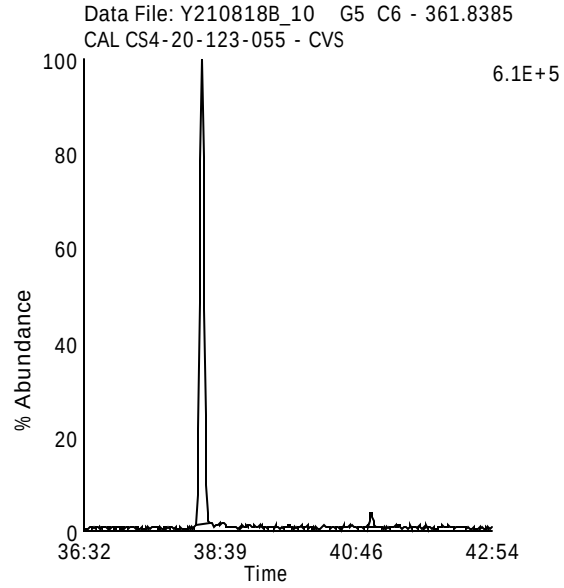
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

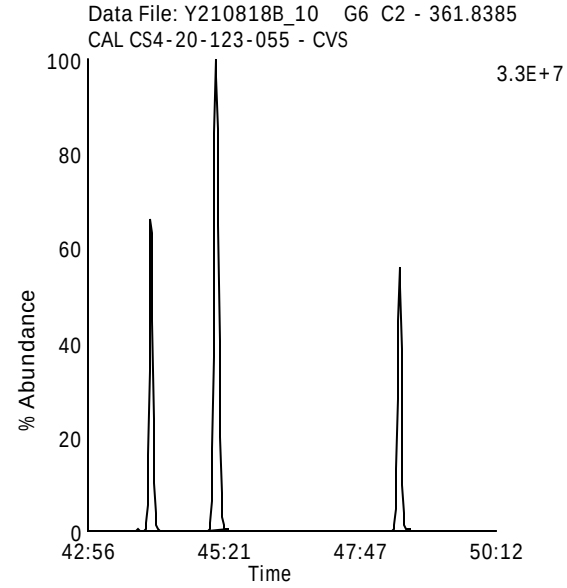






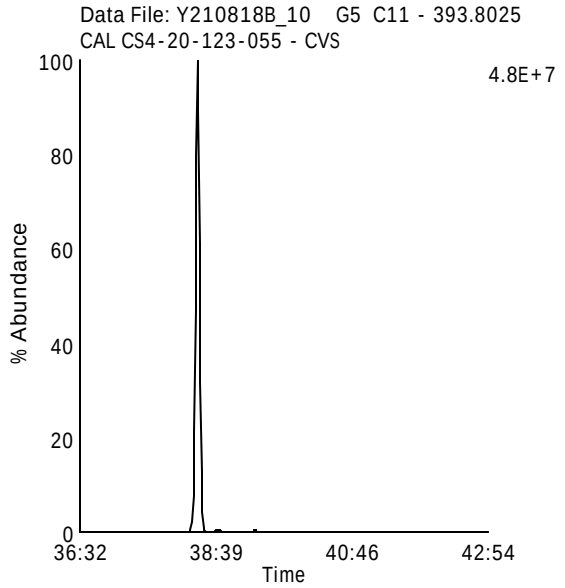


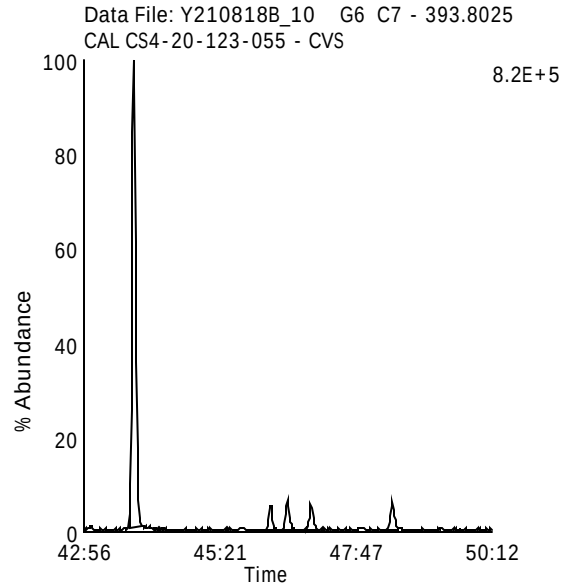


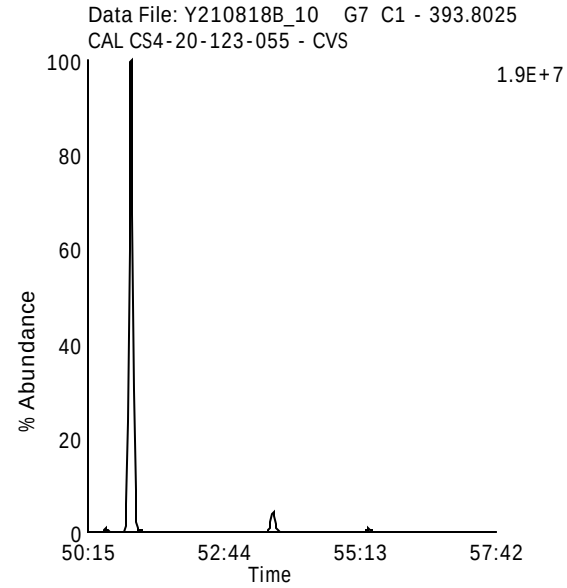


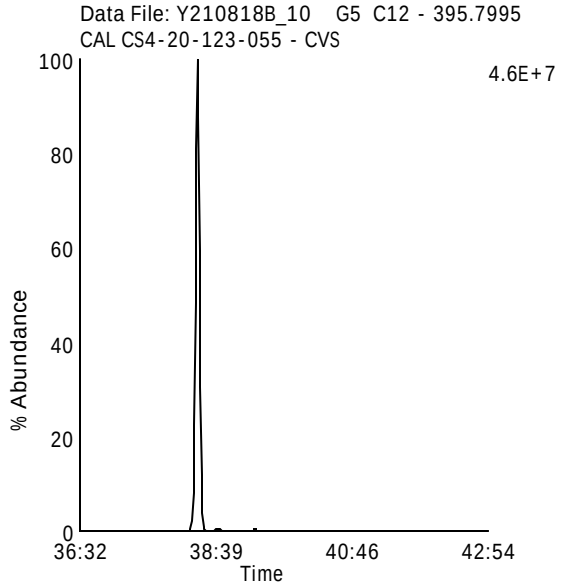
Hepta Chlorinated Biphenyls

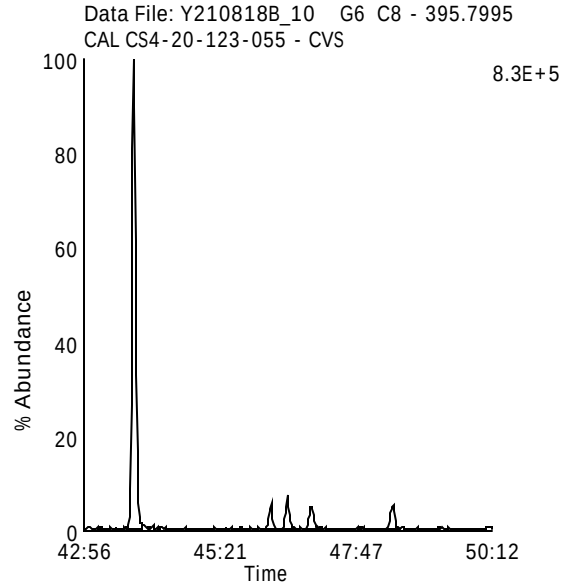
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

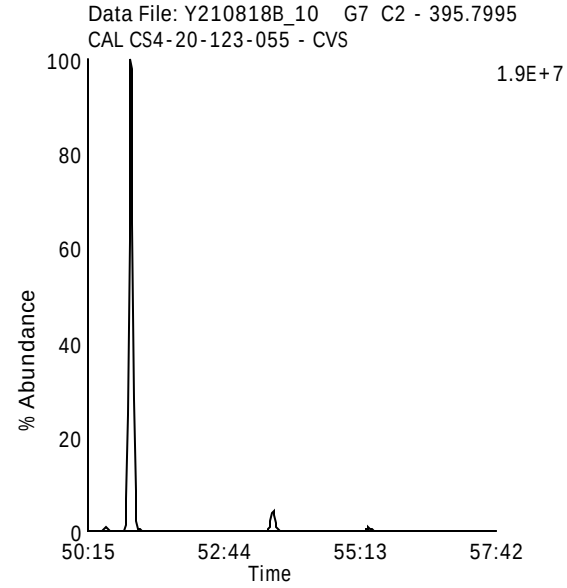






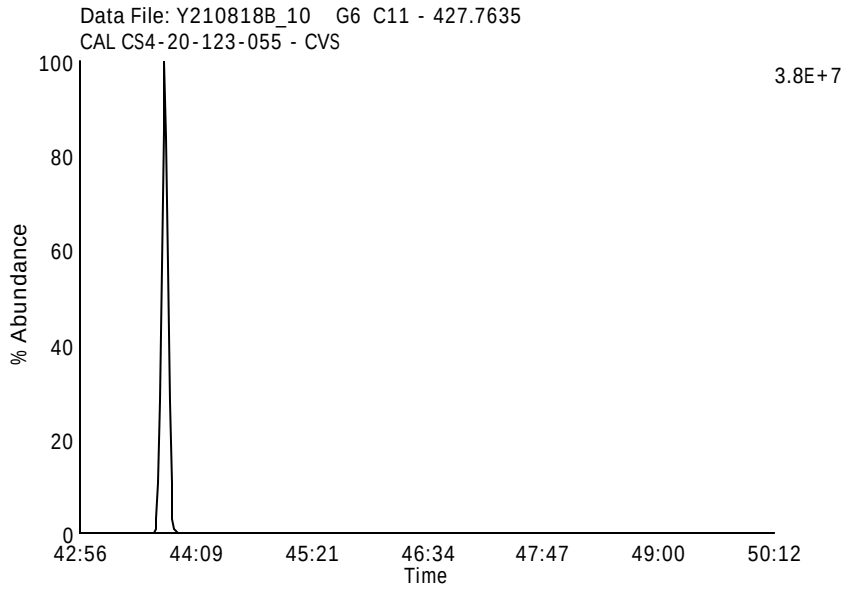


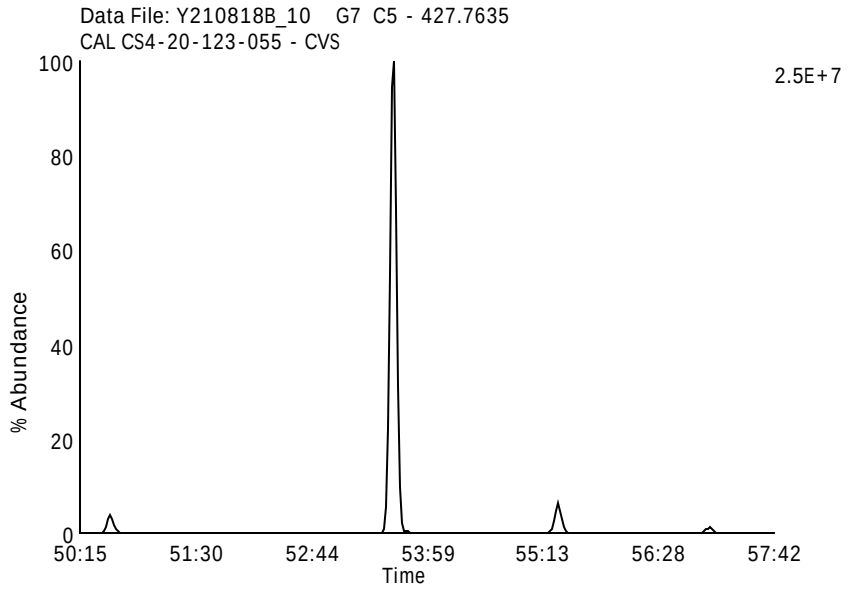


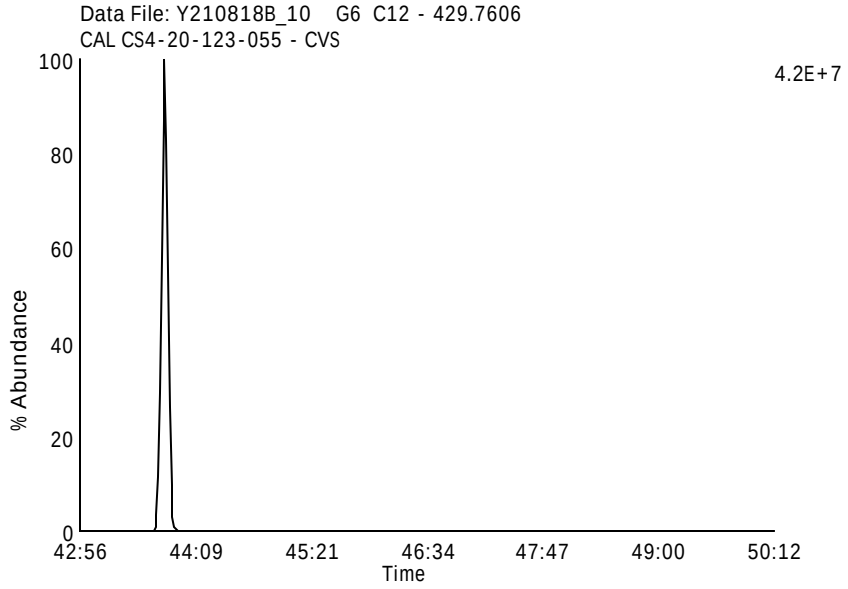


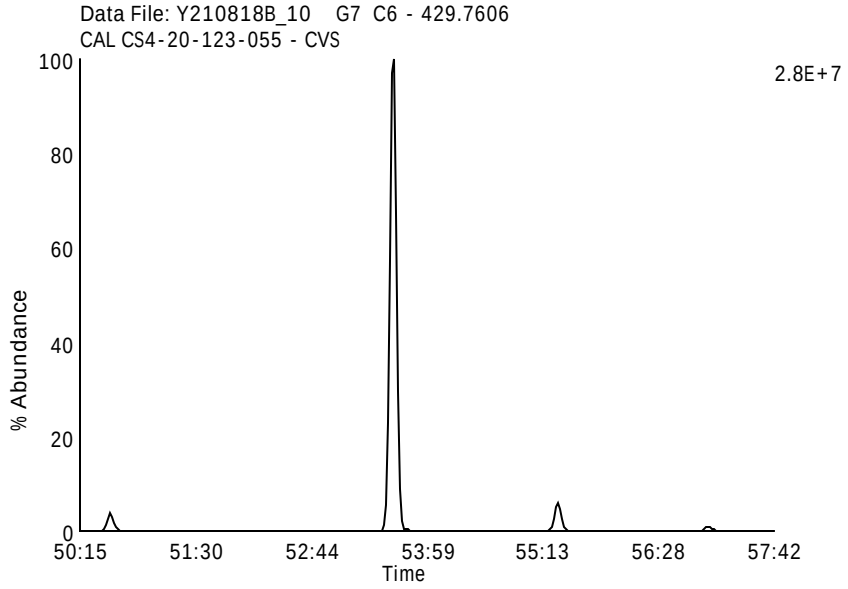
Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS









Nona Chlorinated Biphenyls

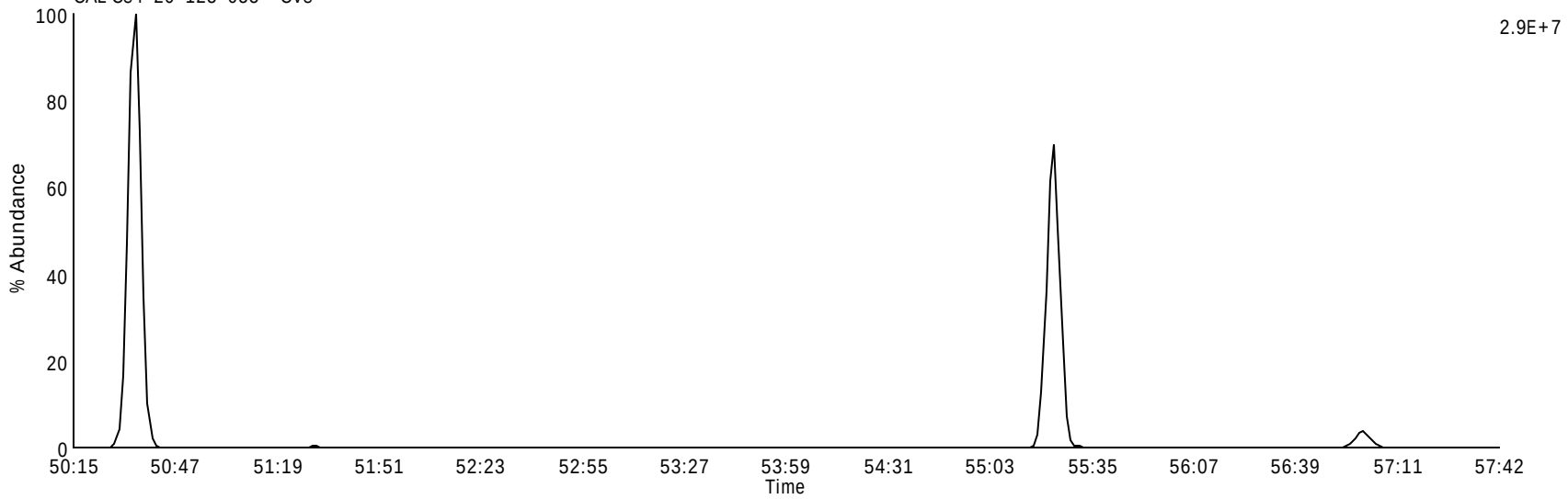
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

Data File: Y210818B_10 G7 C11 - 461.7246

CAL CS4-20-123-055 - CVS



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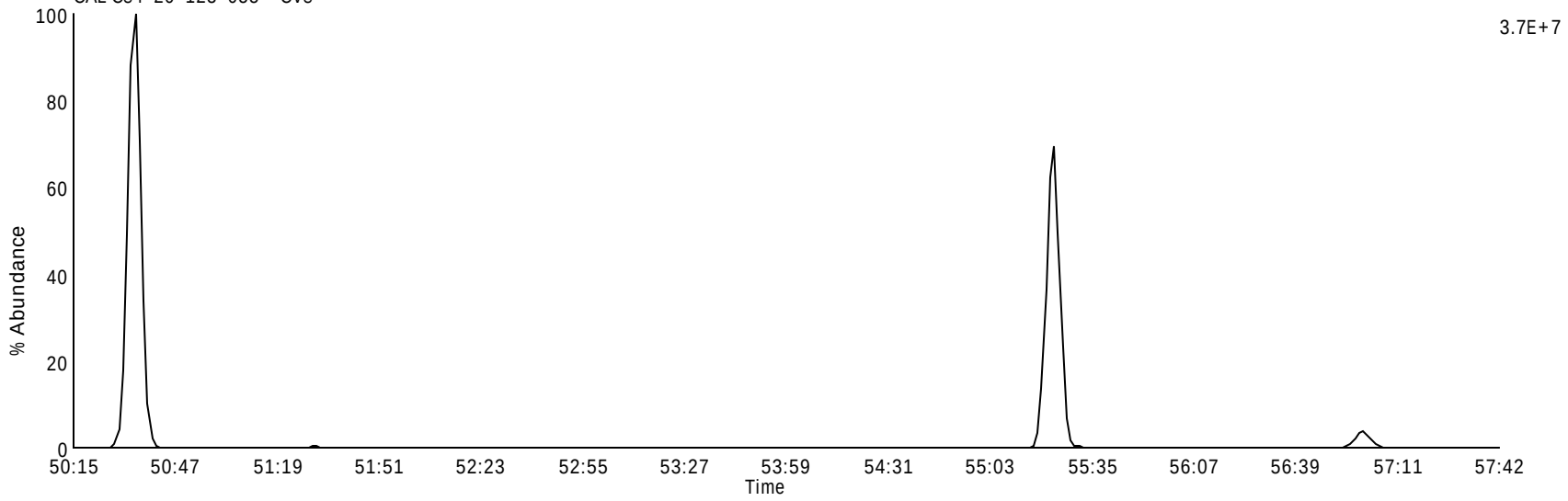
CAL CS4-20-123-055 - CVS

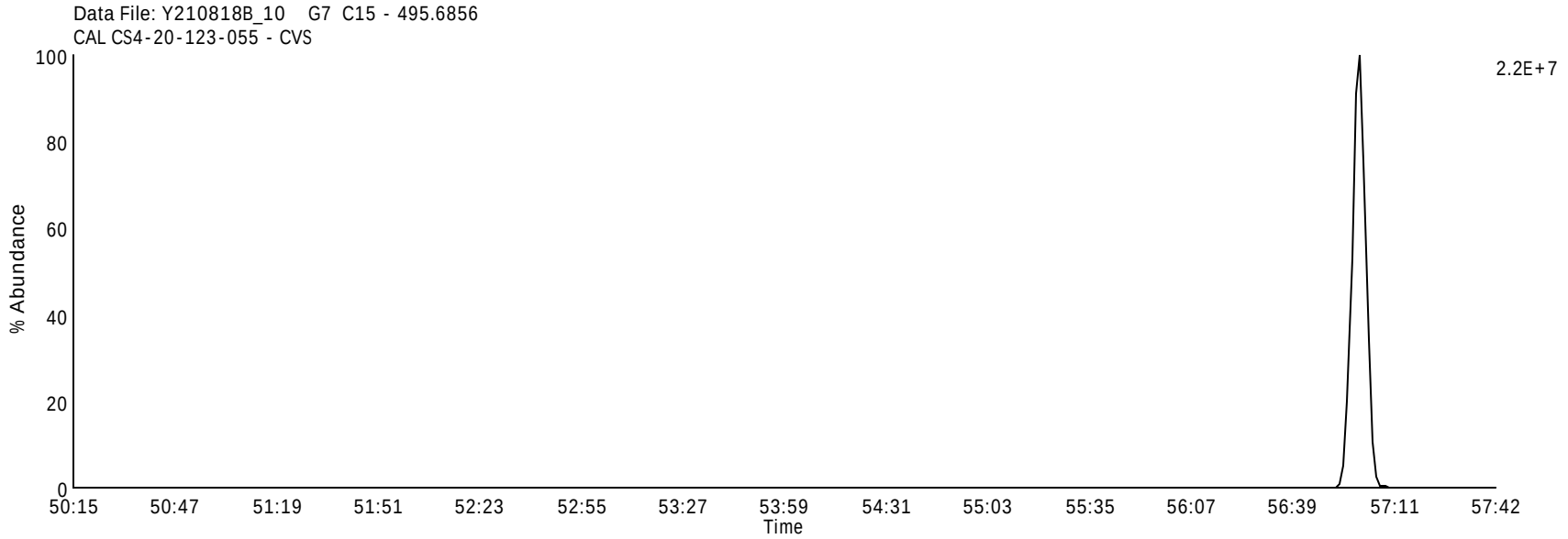


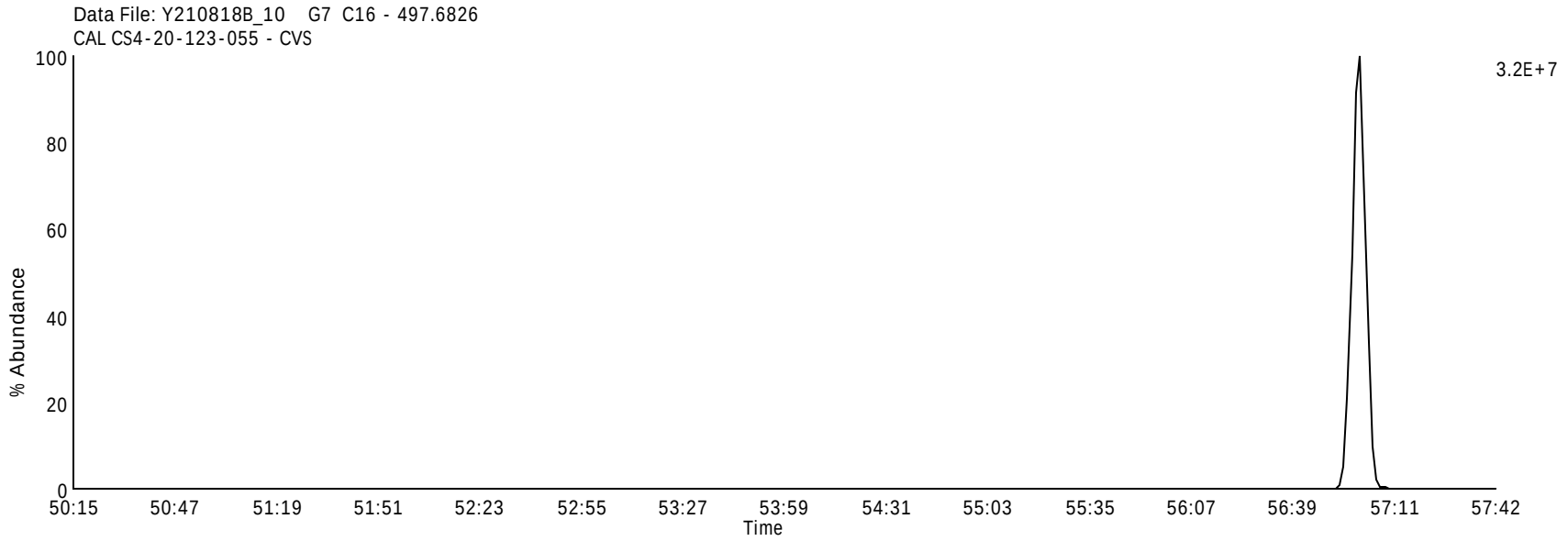
Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

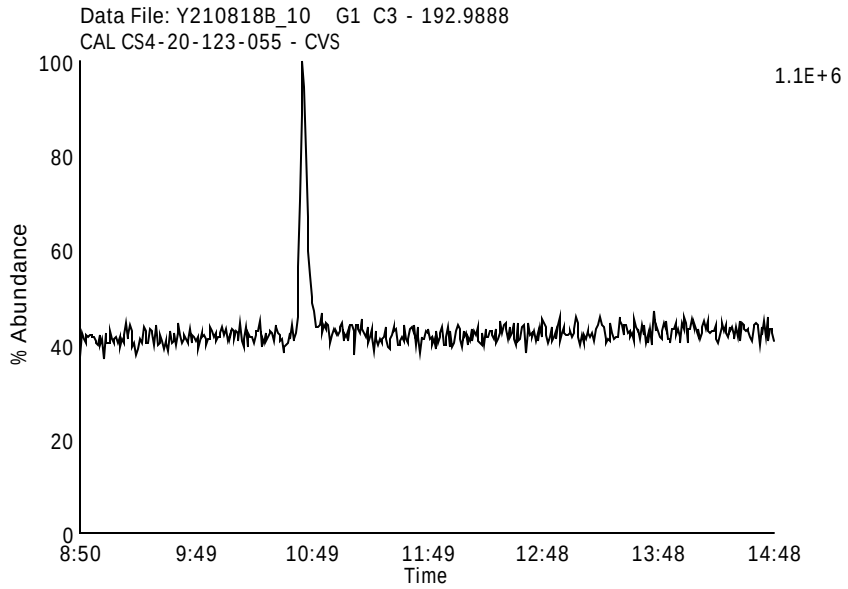
Sample Description: CAL CS4-20-123-055 - CVS

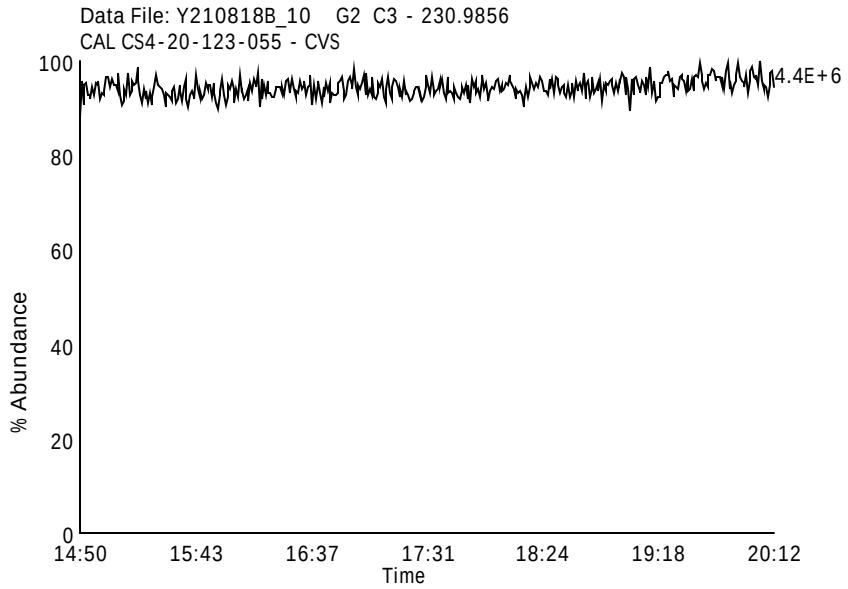


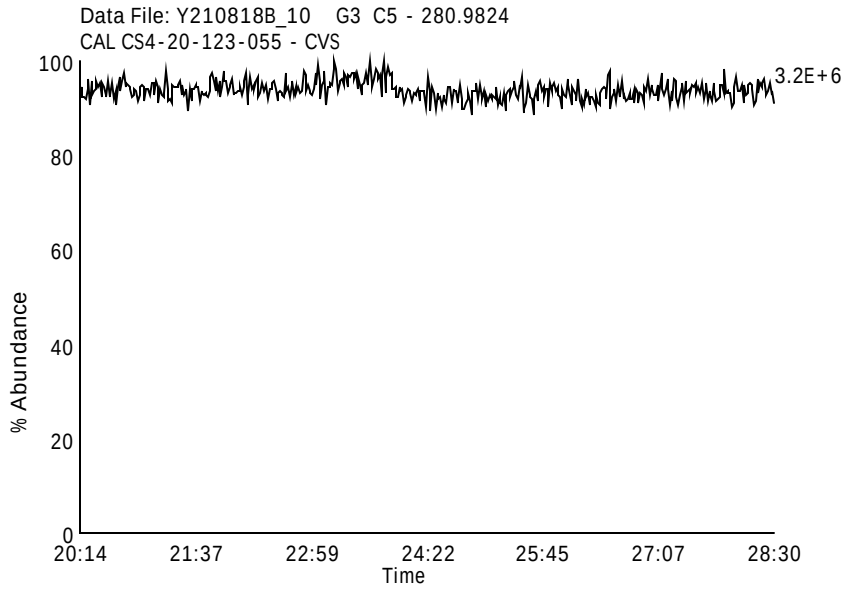


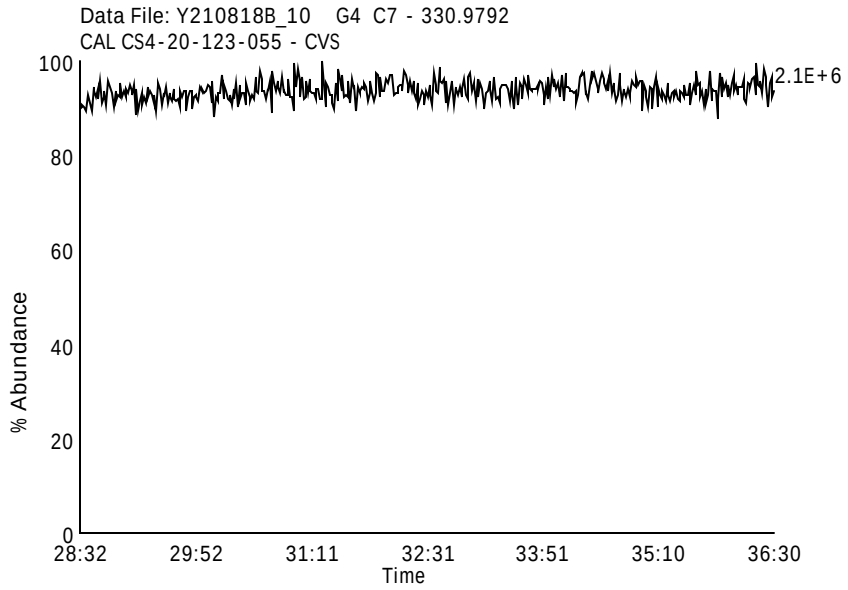
Group 1 - 4 Lock mass

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



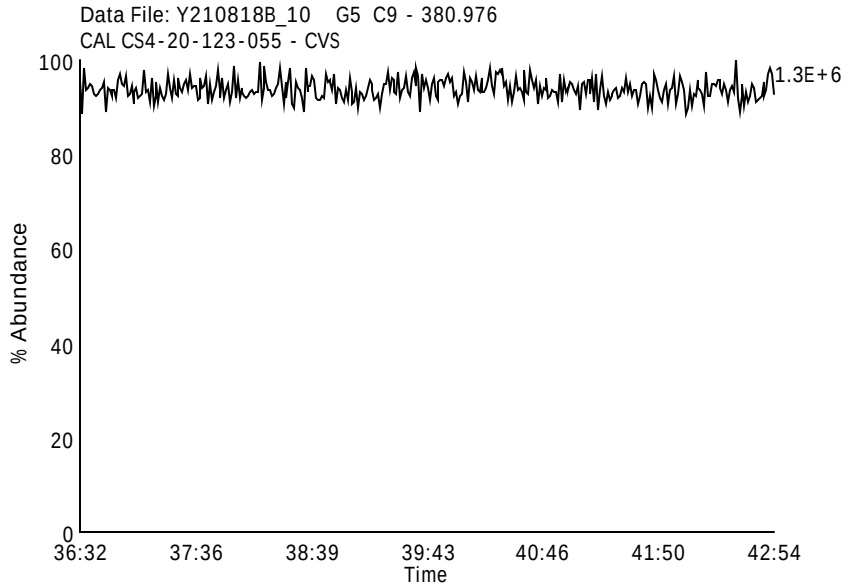


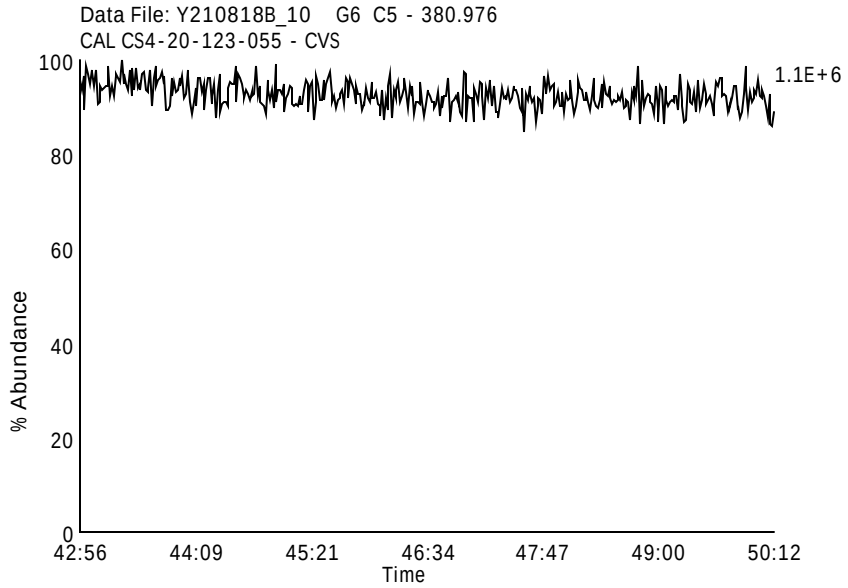


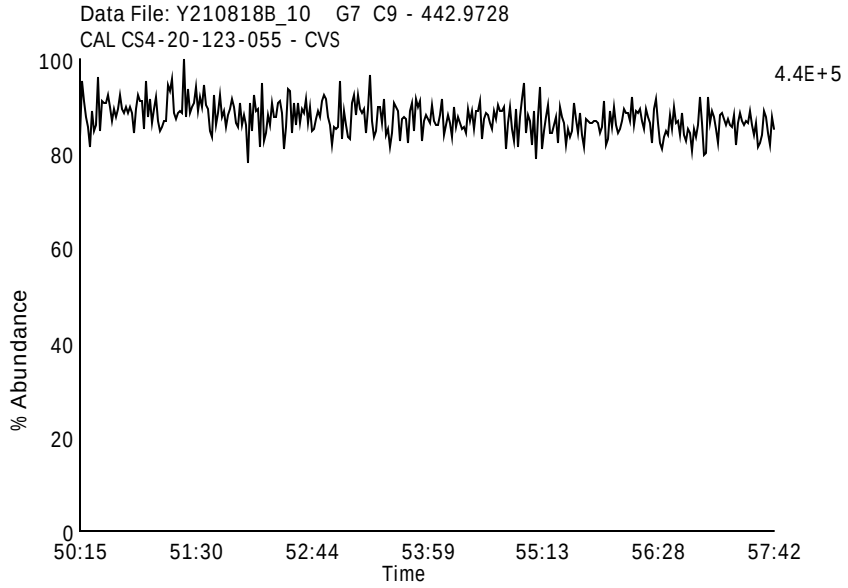


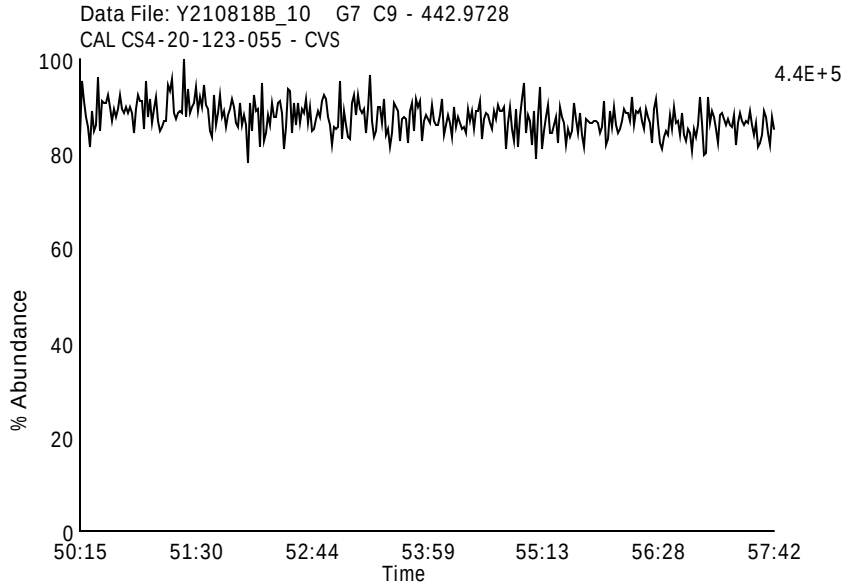
Group 5 - 7 Lock mass

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS







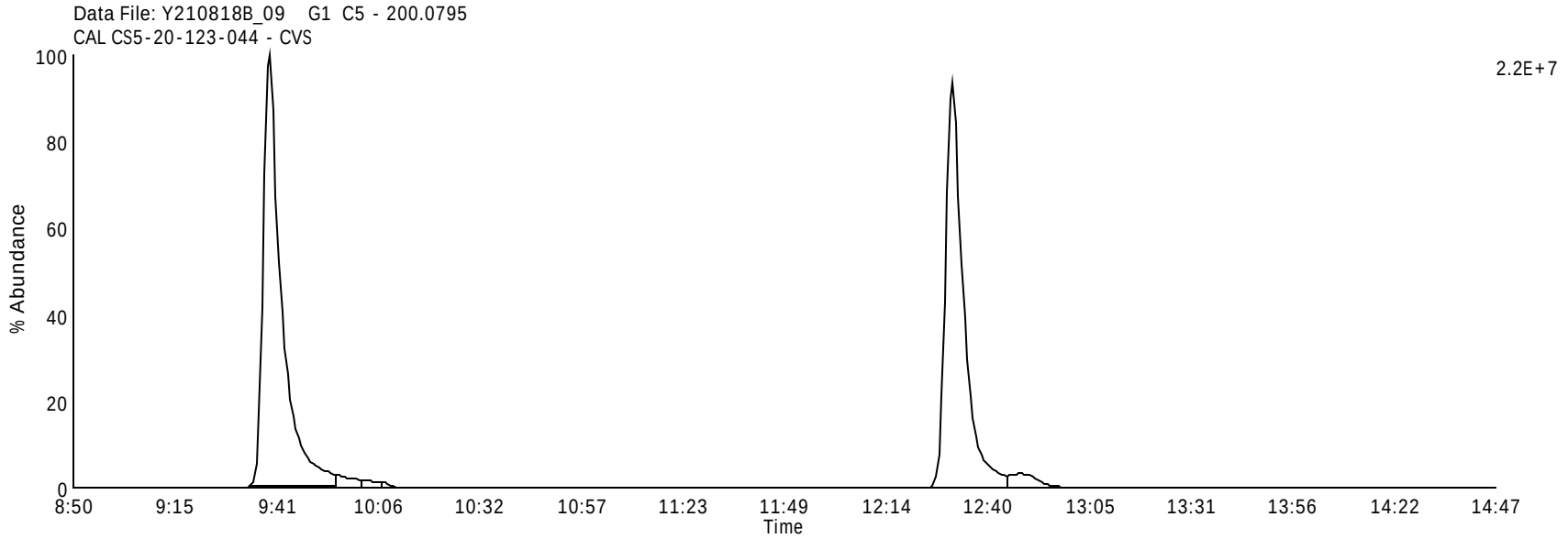


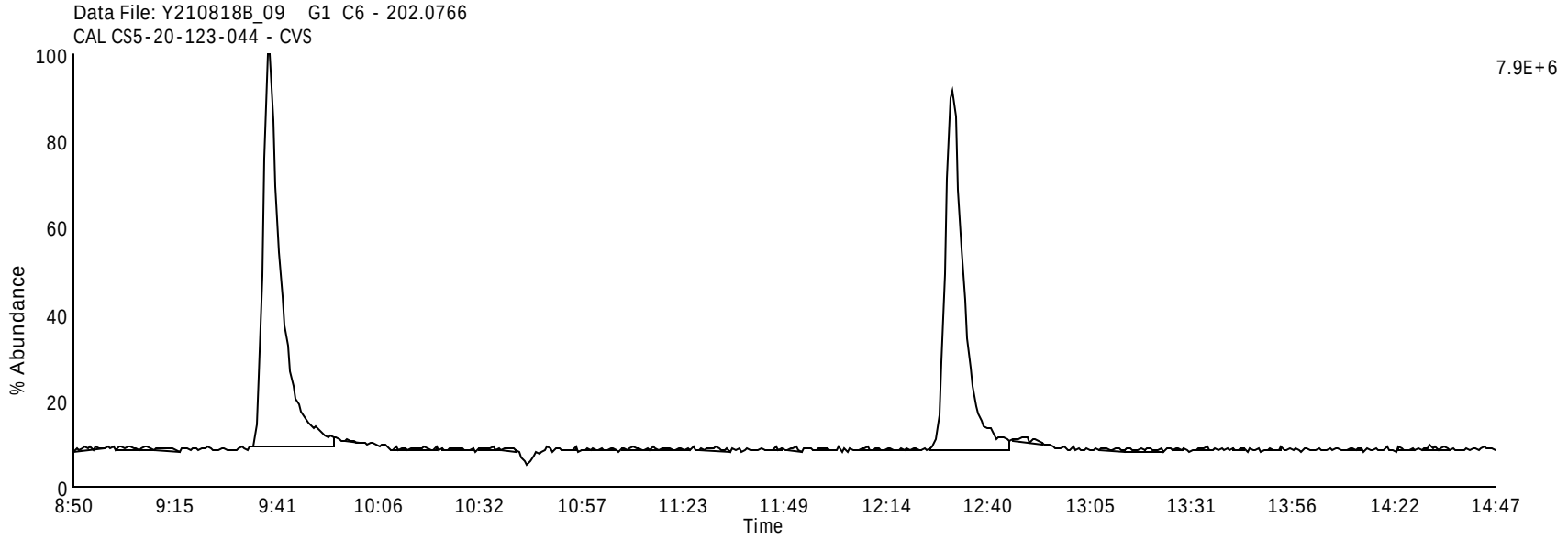
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

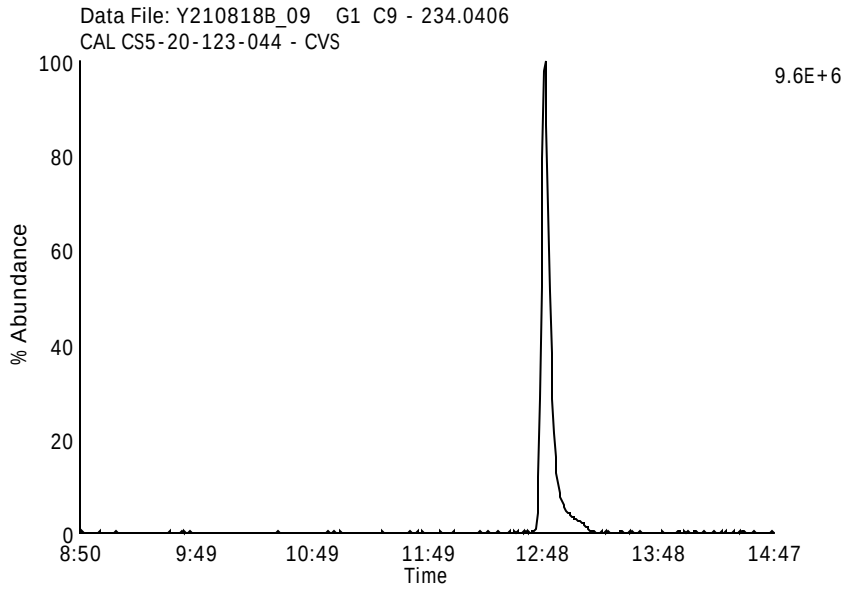
Sample Description: CAL CS5-20-123-044 - CVS

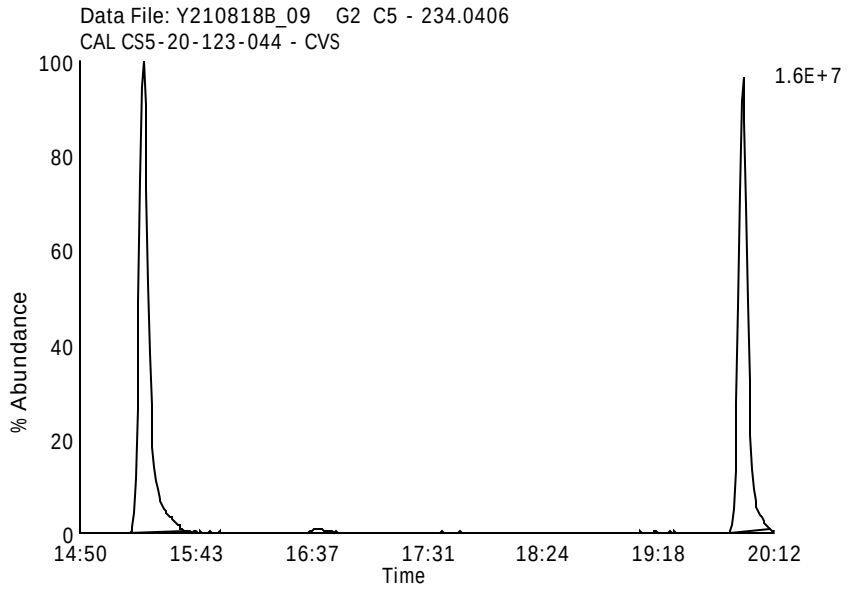


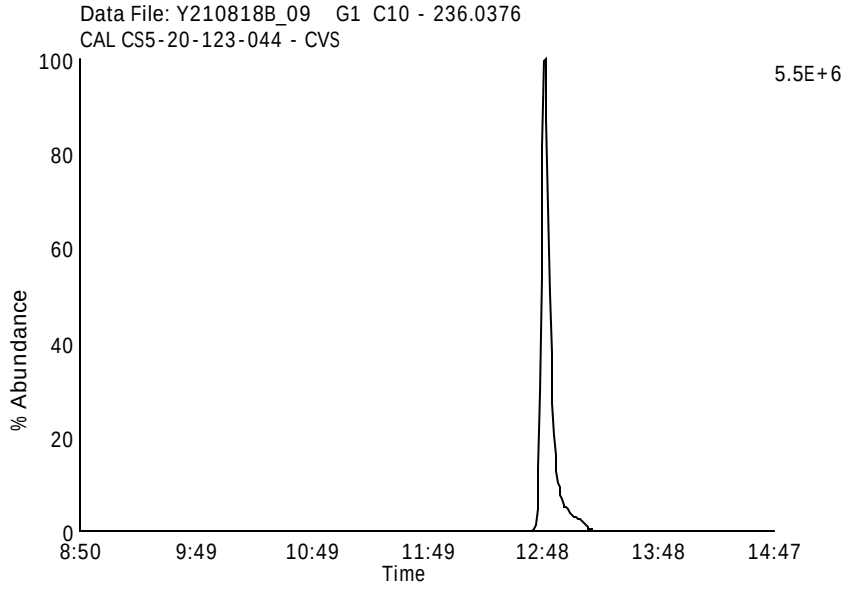


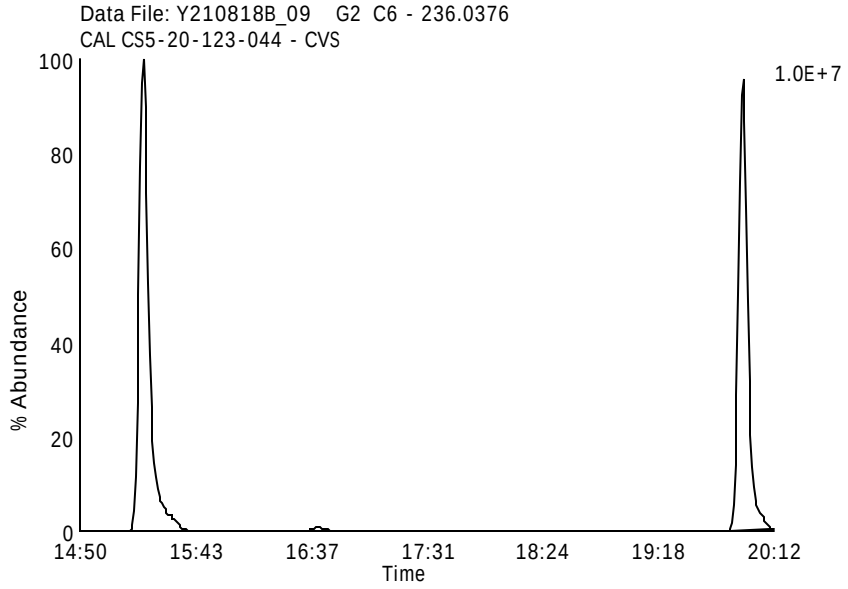
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS





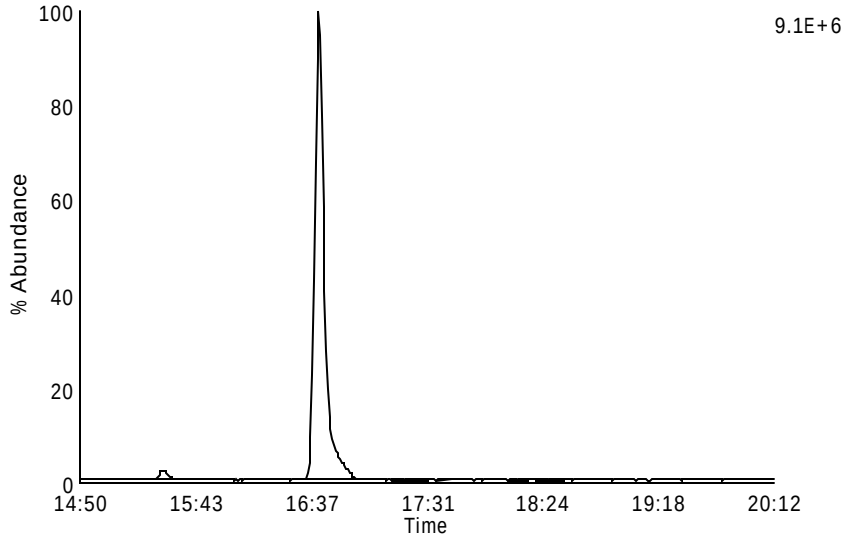




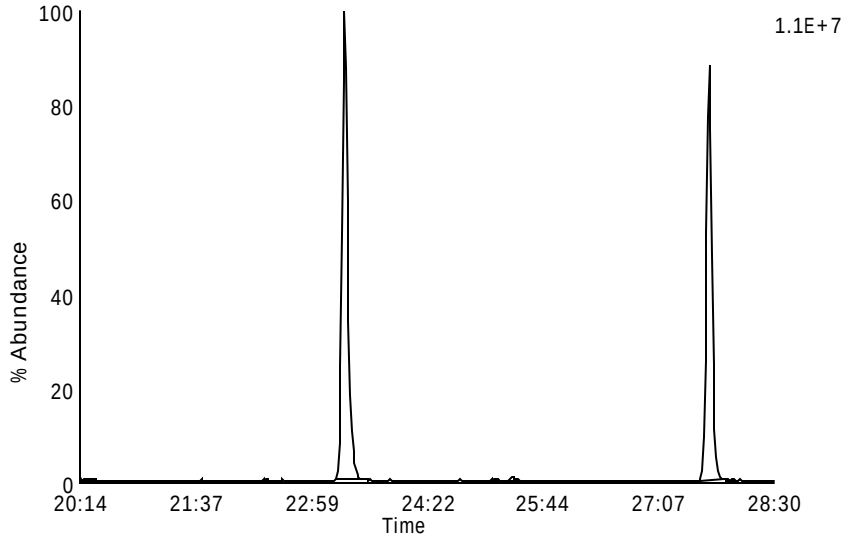
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

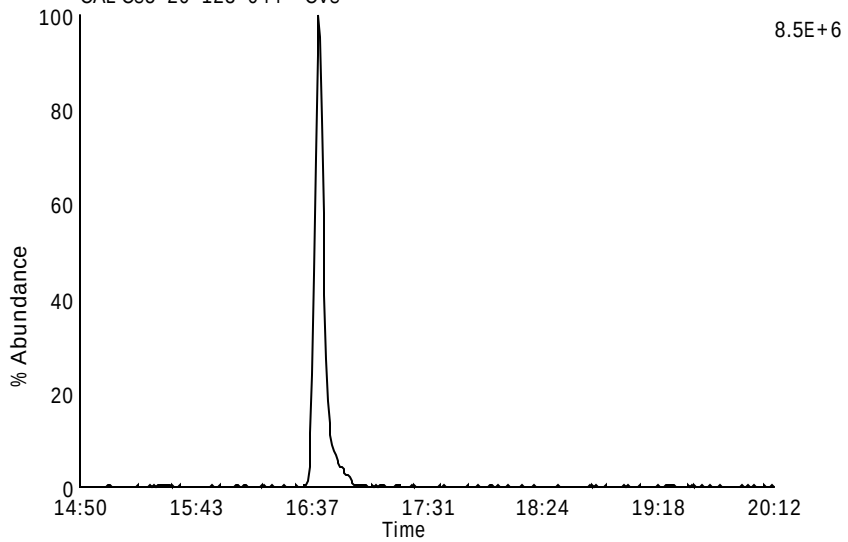
Data File: Y210818B_09 G2 C9 - 268.0016
CAL CS5-20-123-044 - CVS



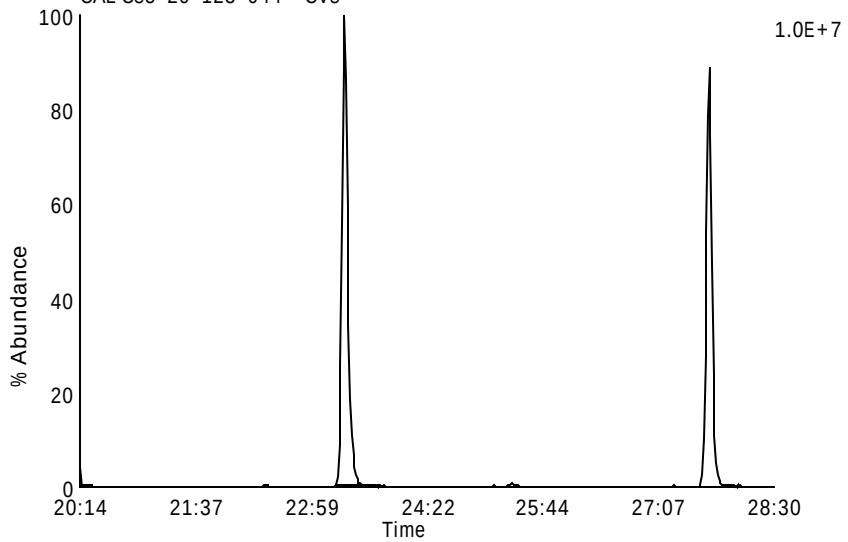
Data File: Y210818B_09 G3 C3 - 268.0016
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G2 C10 - 269.9986
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G3 C4 - 269.9986
CAL CS5-20-123-044 - CVS



Labeled Tetra Chlorinated Biphenyls

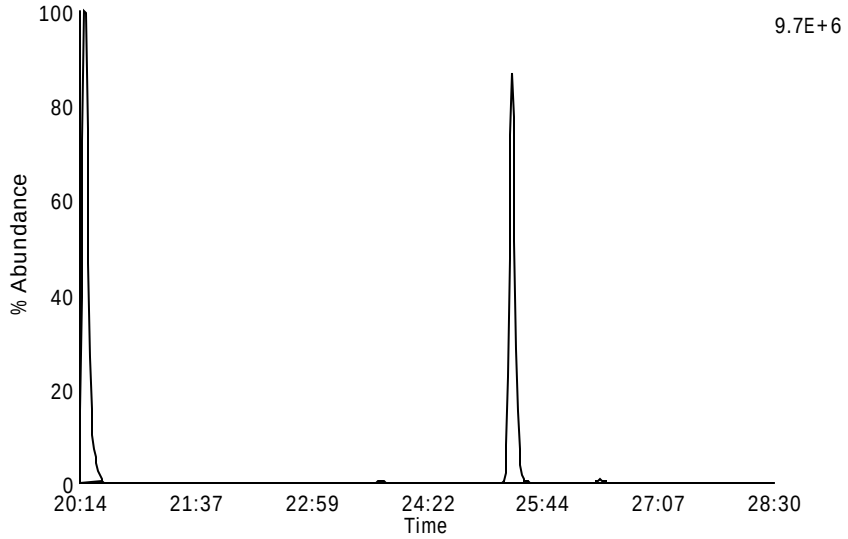
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

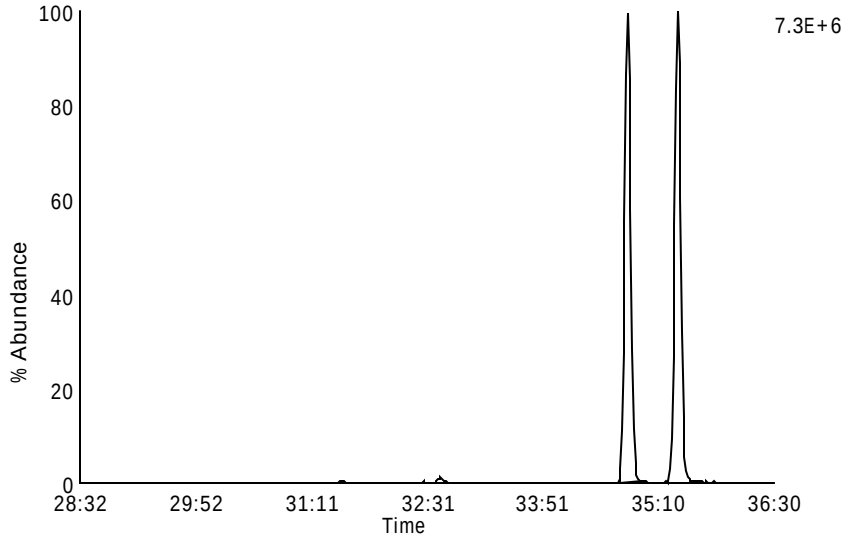
Data File: Y210818B_09 G3 C9 - 301.9626

CAL CS5-20-123-044 - CVS



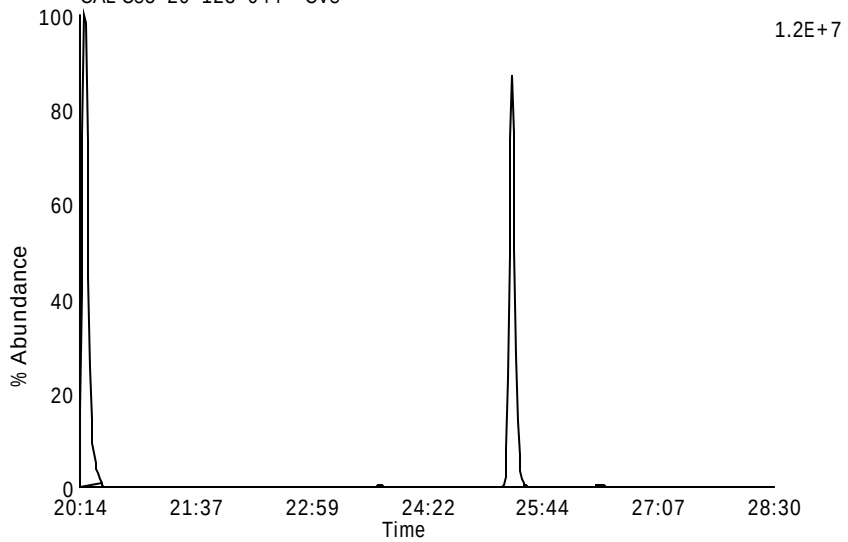
Data File: Y210818B_09 G4 C3 - 301.9626

CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G3 C10 - 303.9597

CAL CS5-20-123-044 - CVS



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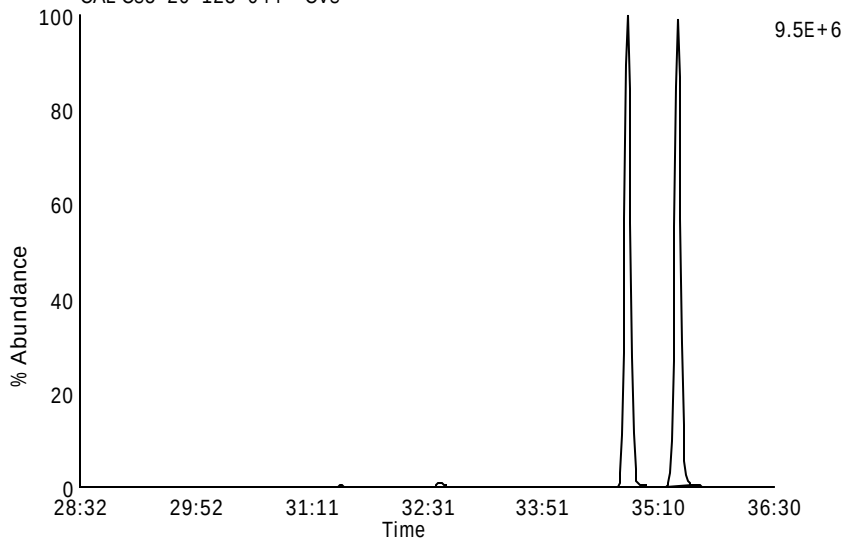
CAL CS5-20-123-044 - CVS

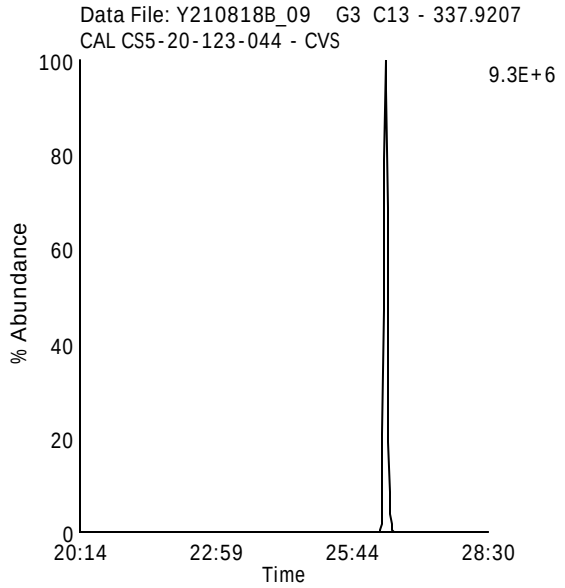


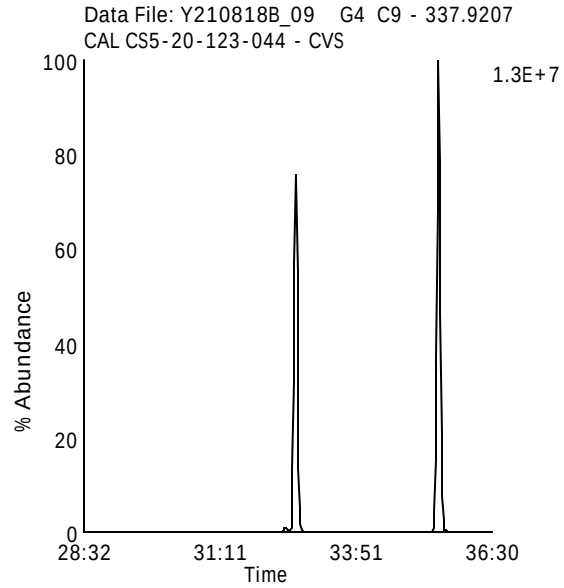
Labeled Penta Chlorinated Biphenyls

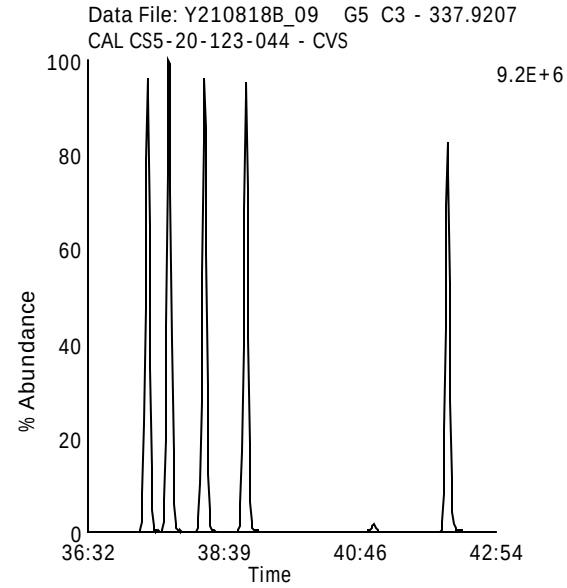
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

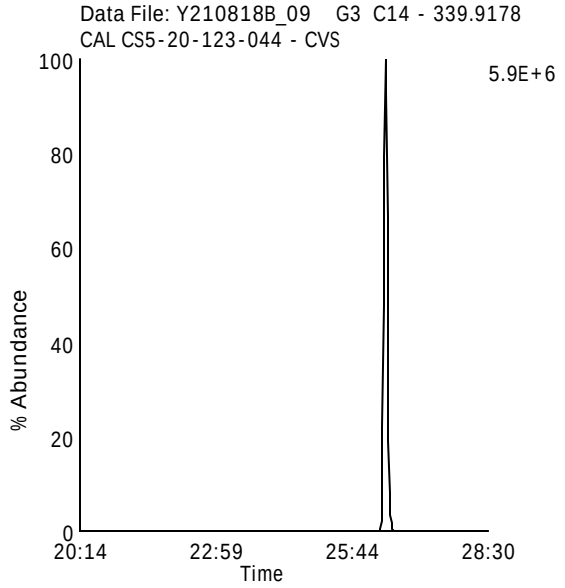
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

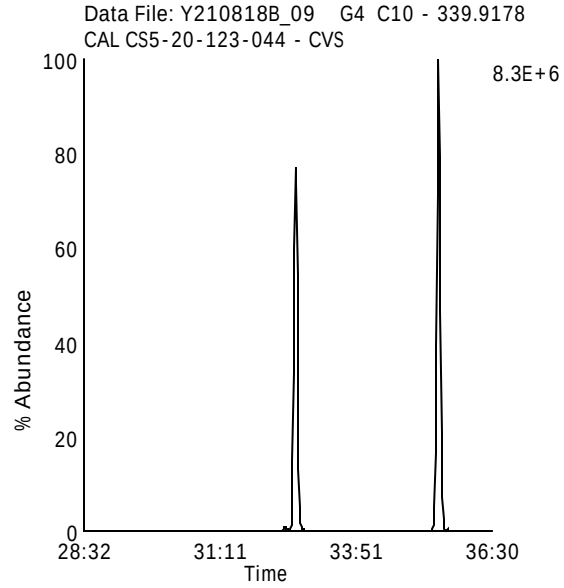
Sample Description: CAL CS5-20-123-044 - CVS

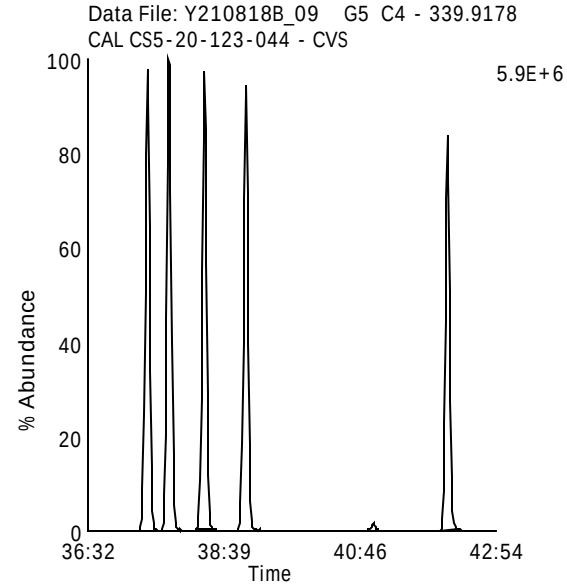










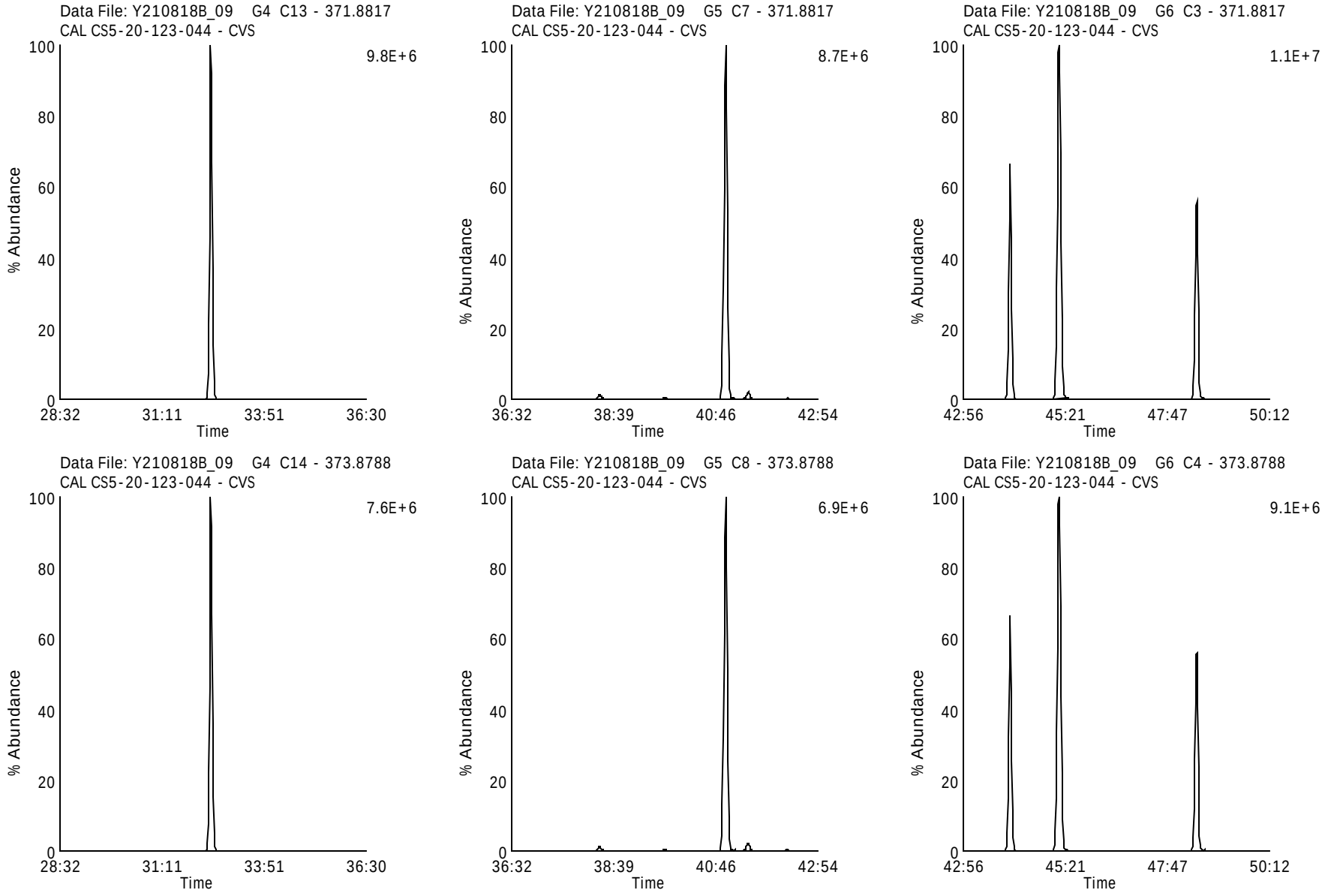


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

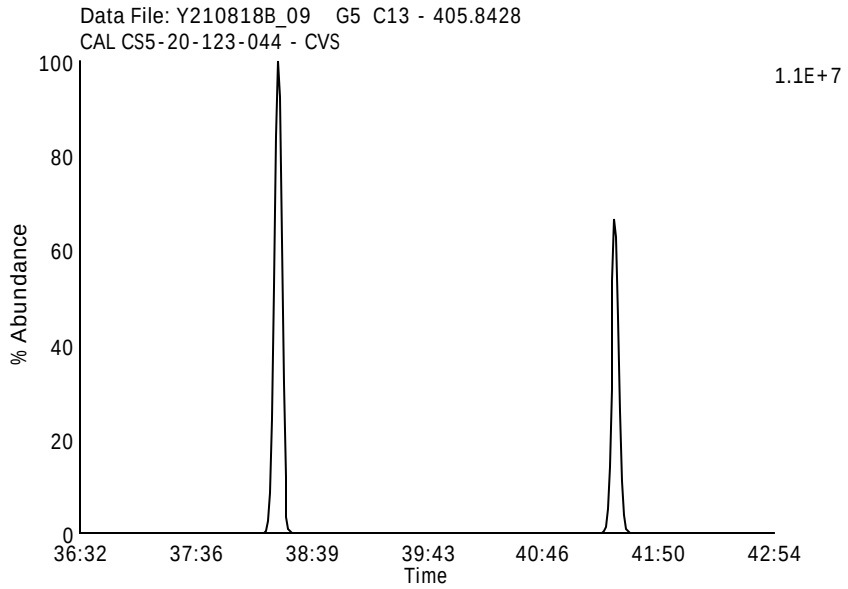
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

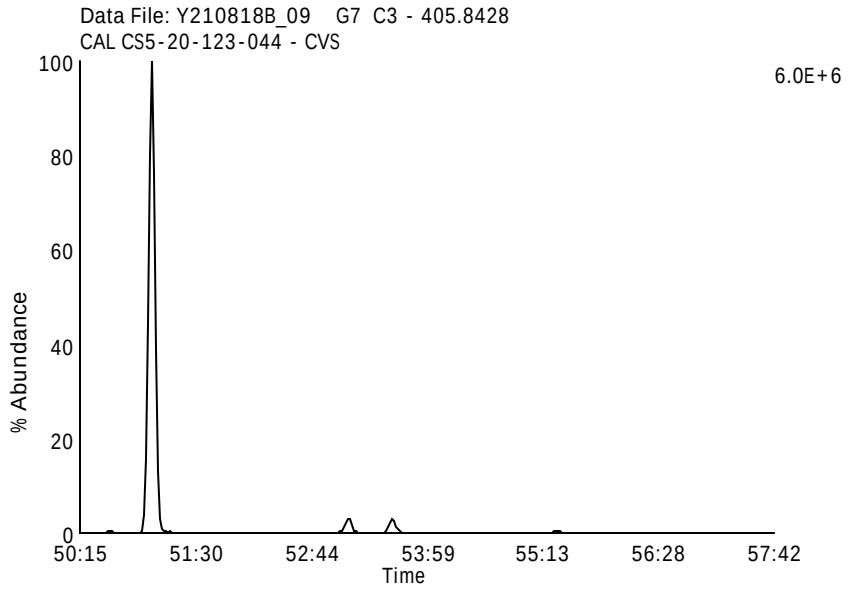
Sample Description: CAL CS5-20-123-044 - CVS

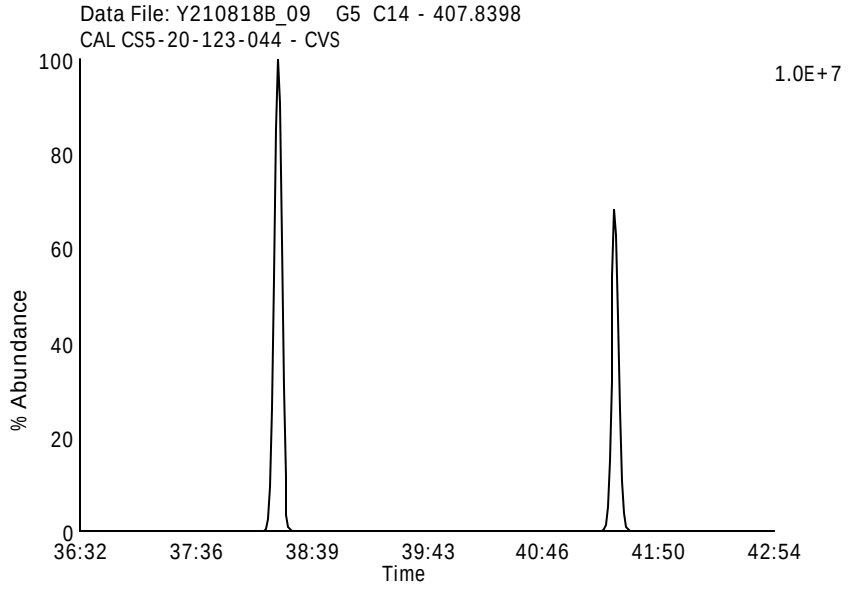


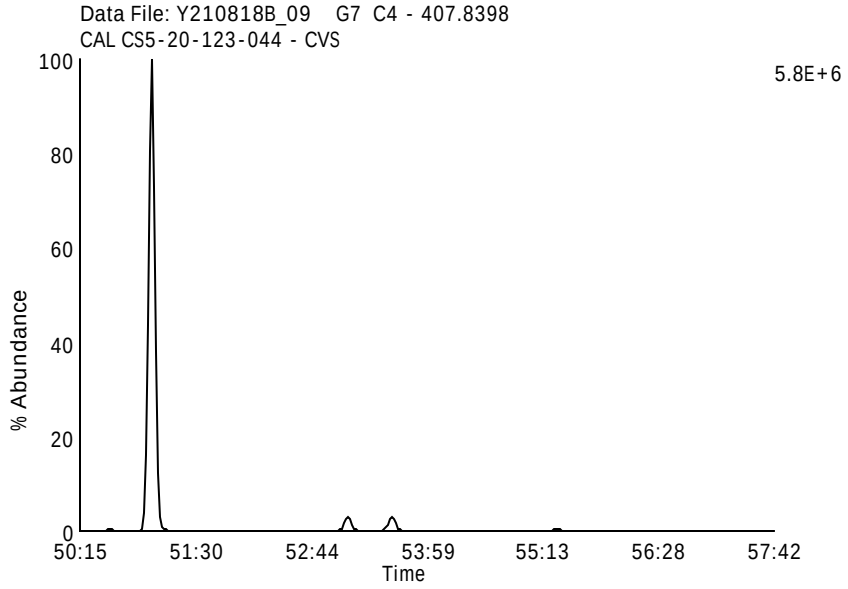
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS





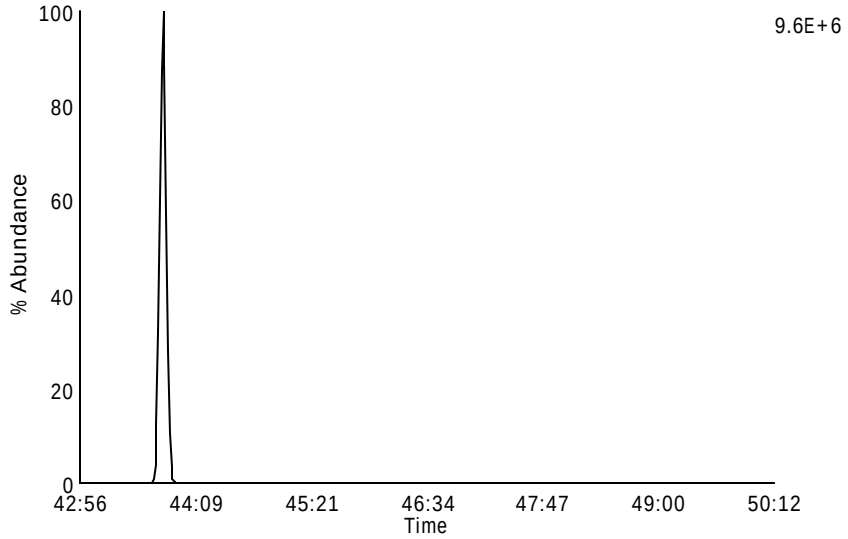




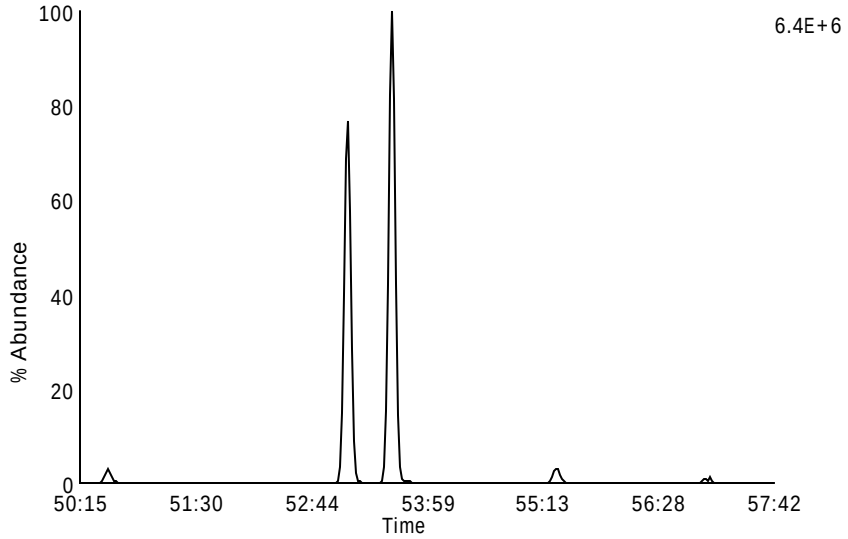
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

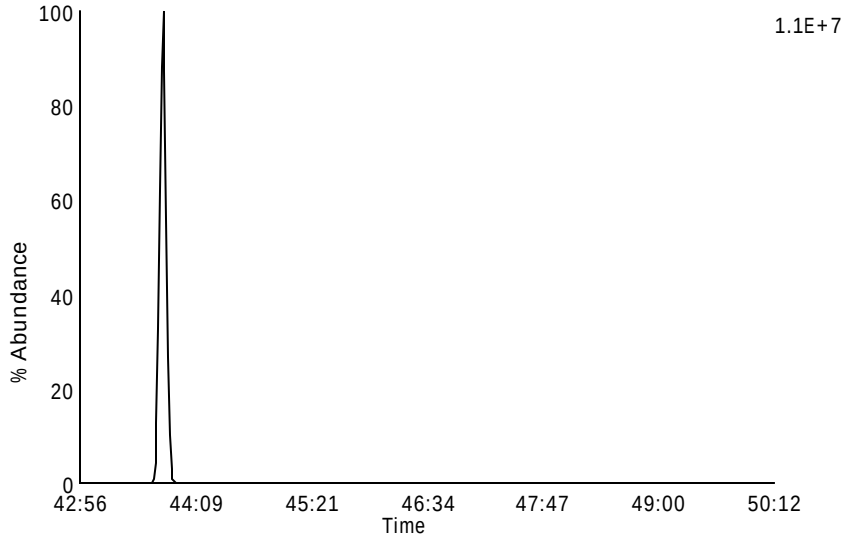
Data File: Y210818B_09 G6 C13 - 439.8038
CAL CS5-20-123-044 - CVS



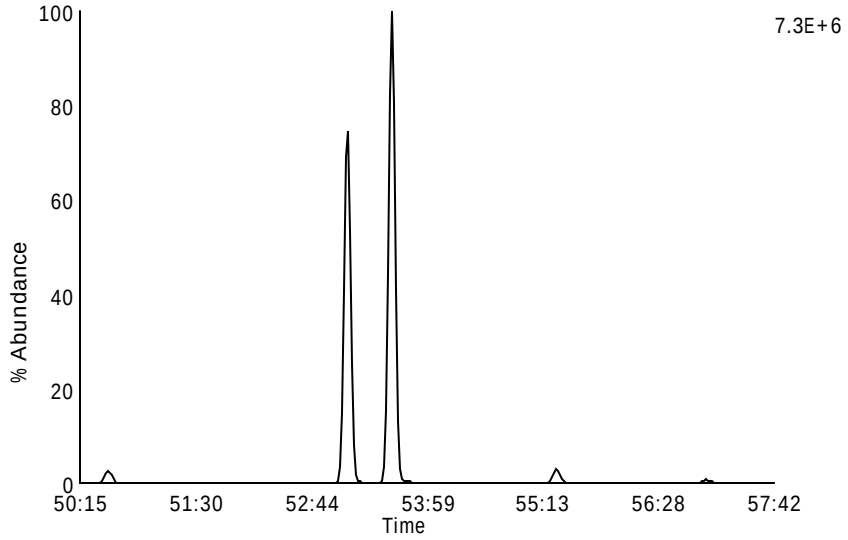
Data File: Y210818B_09 G7 C7 - 439.8038
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G6 C14 - 441.8008
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G7 C8 - 441.8008
CAL CS5-20-123-044 - CVS

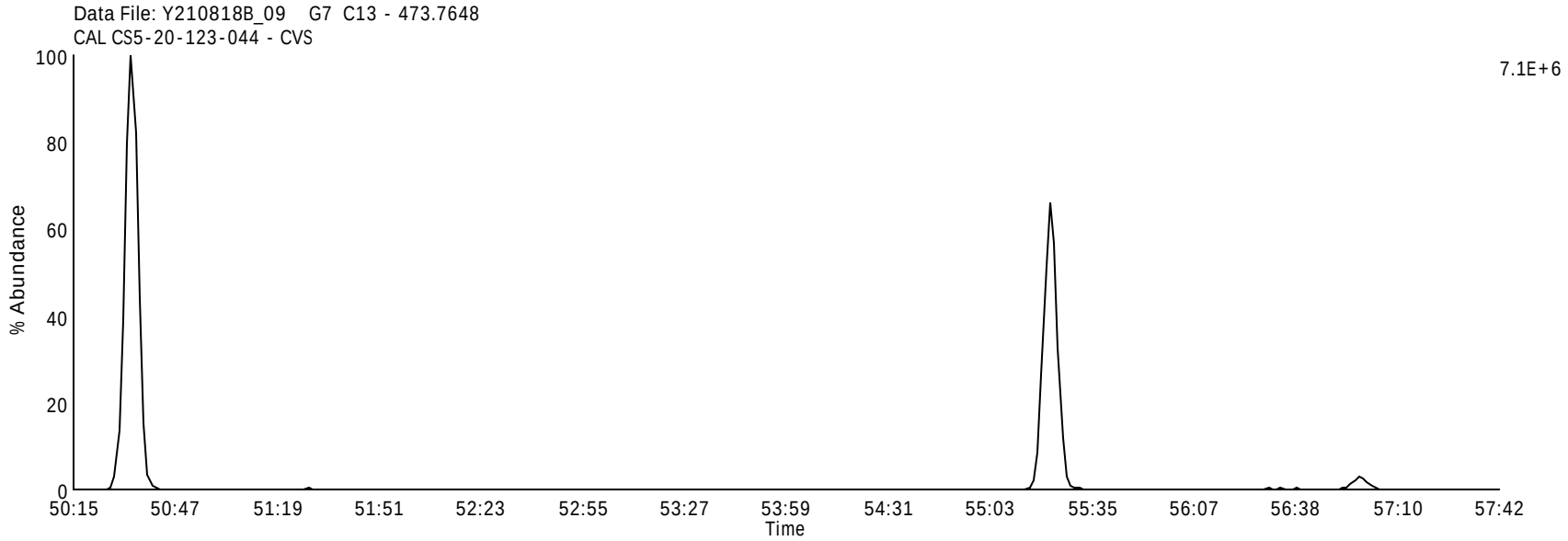


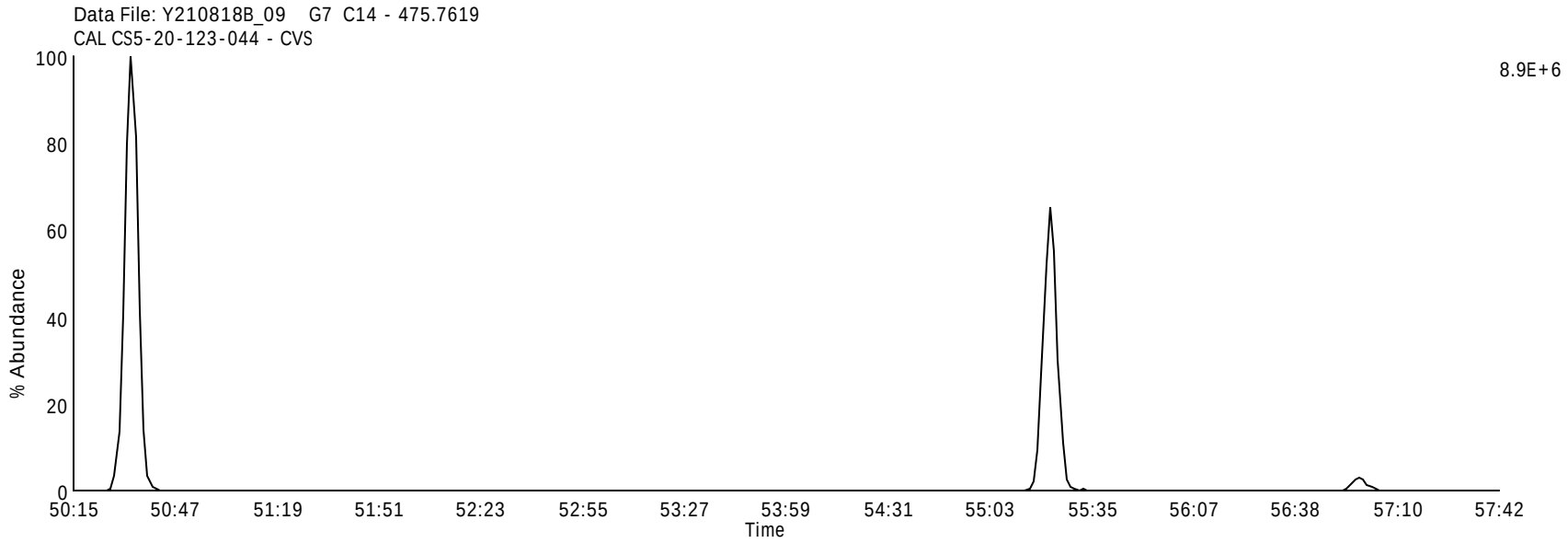
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



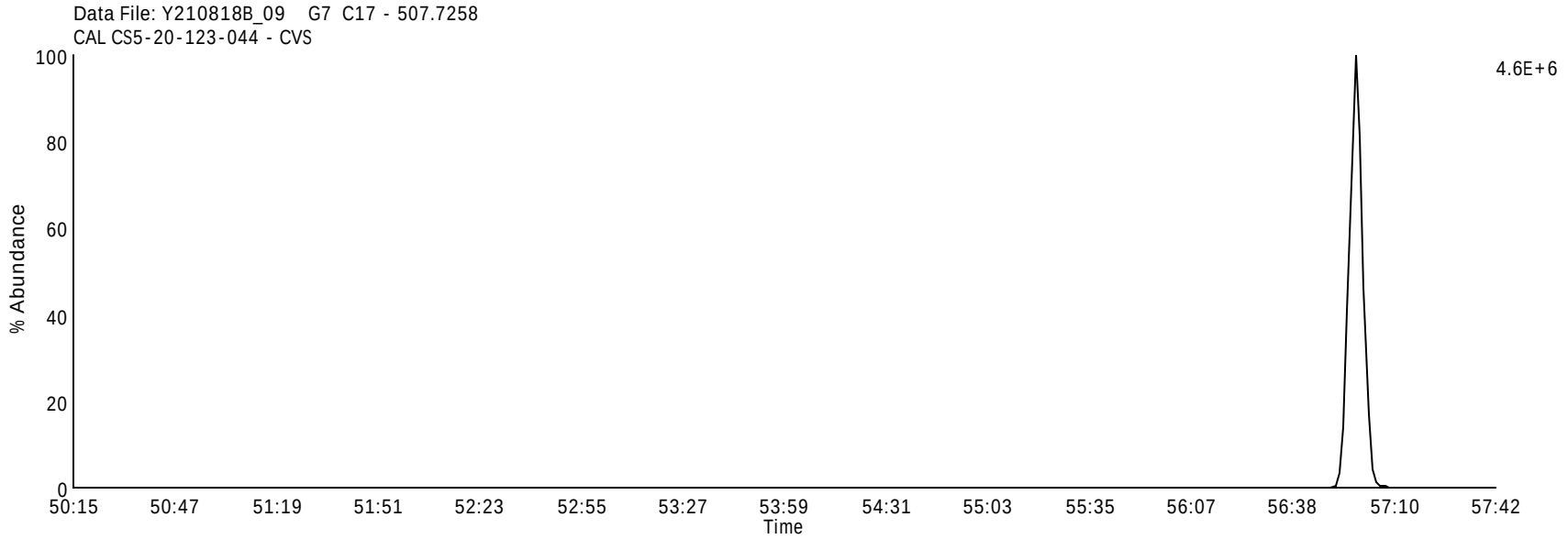


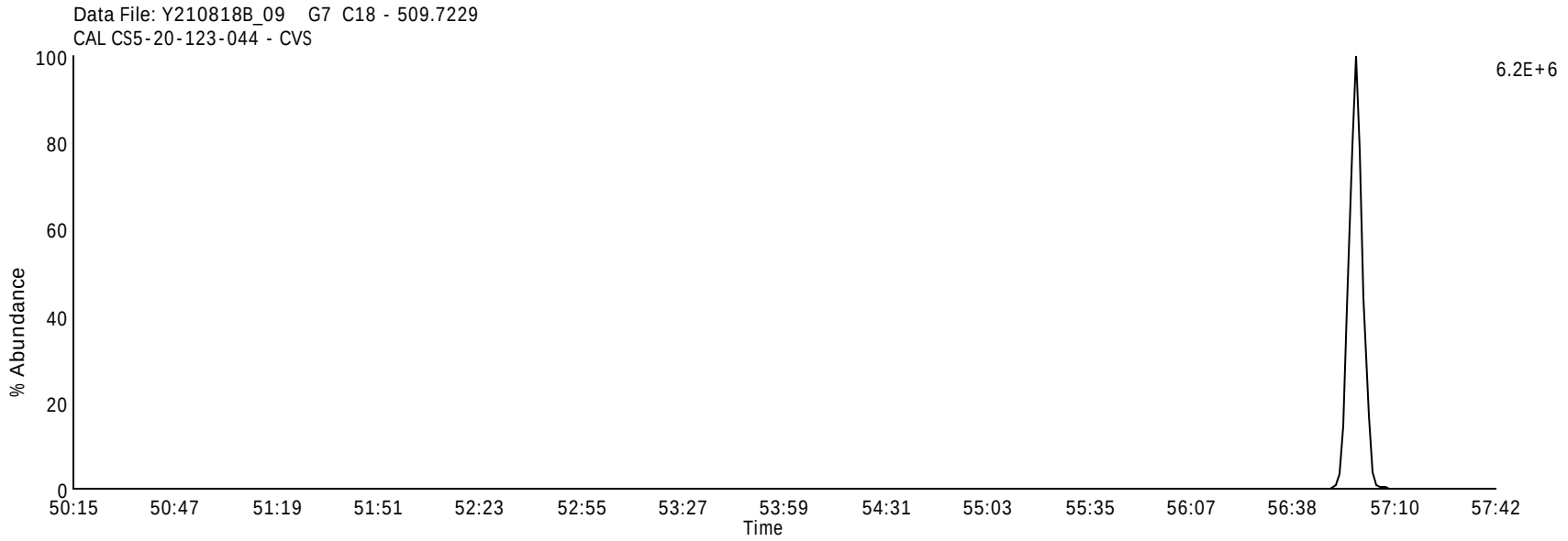
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

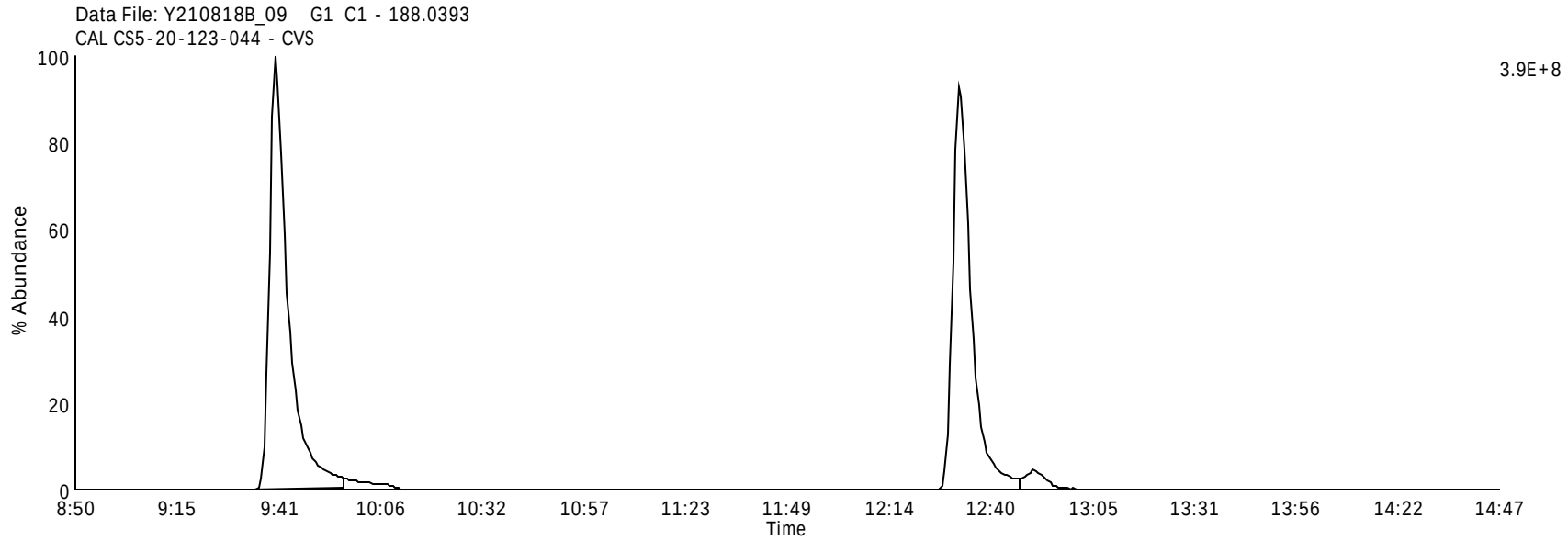
Sample Description: CAL CS5-20-123-044 - CVS

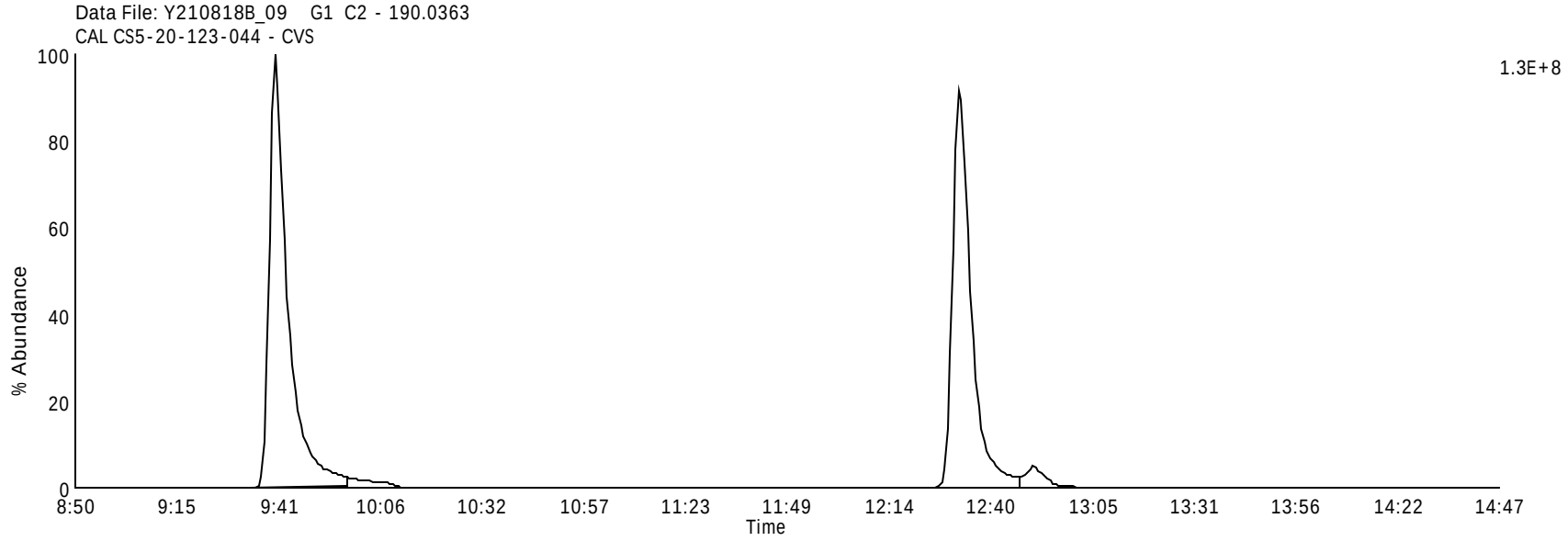




Mono Chlorinated Biphenyls

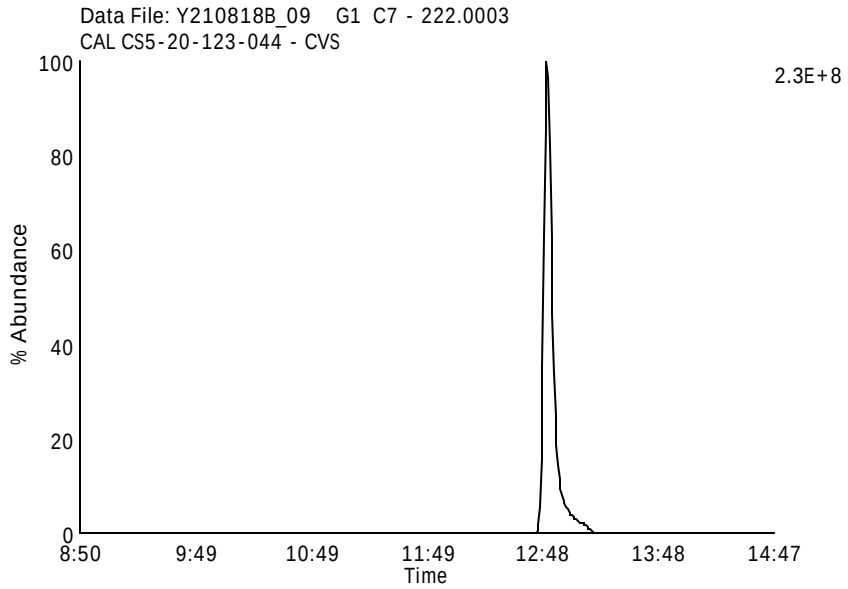
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

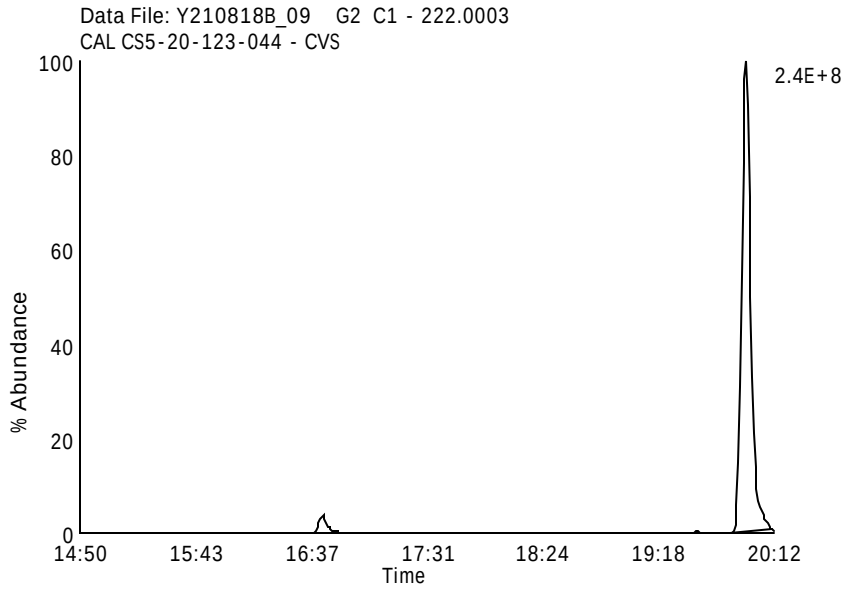


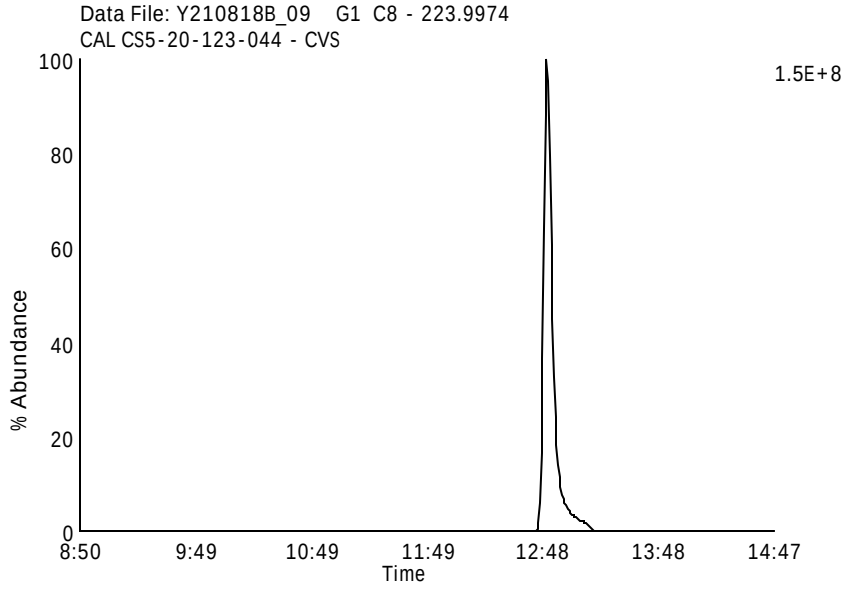


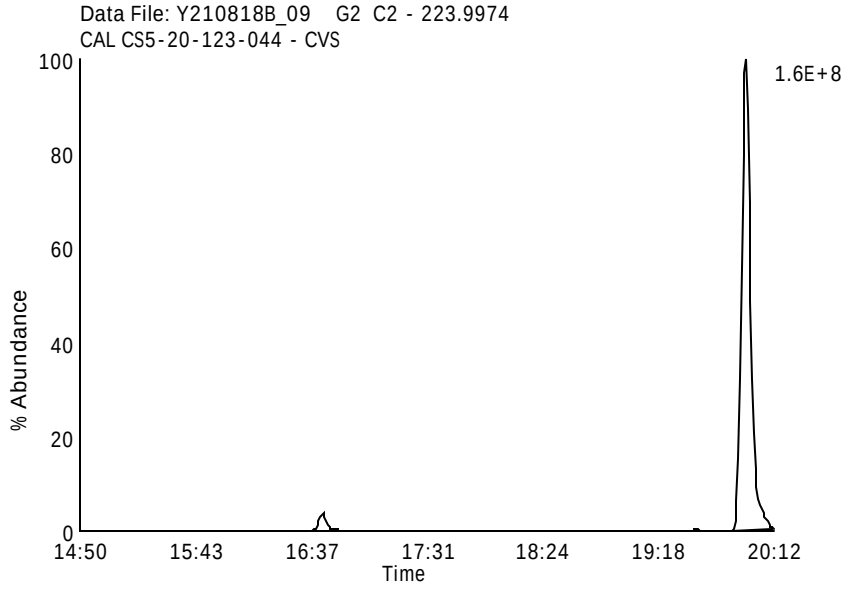
Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



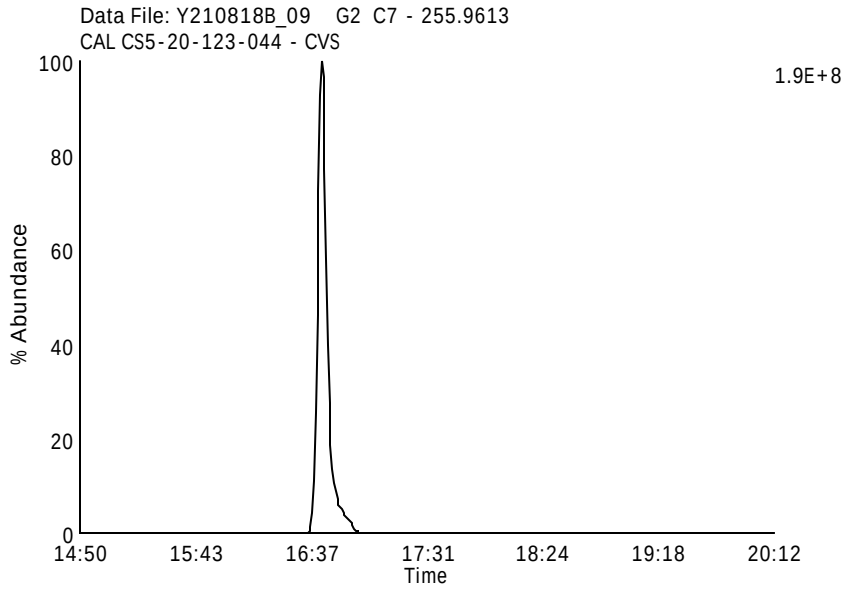


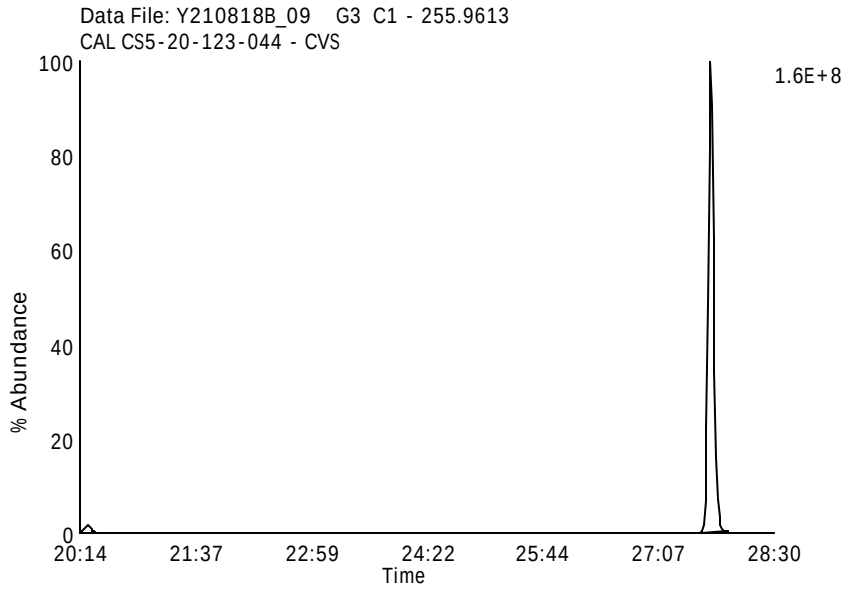


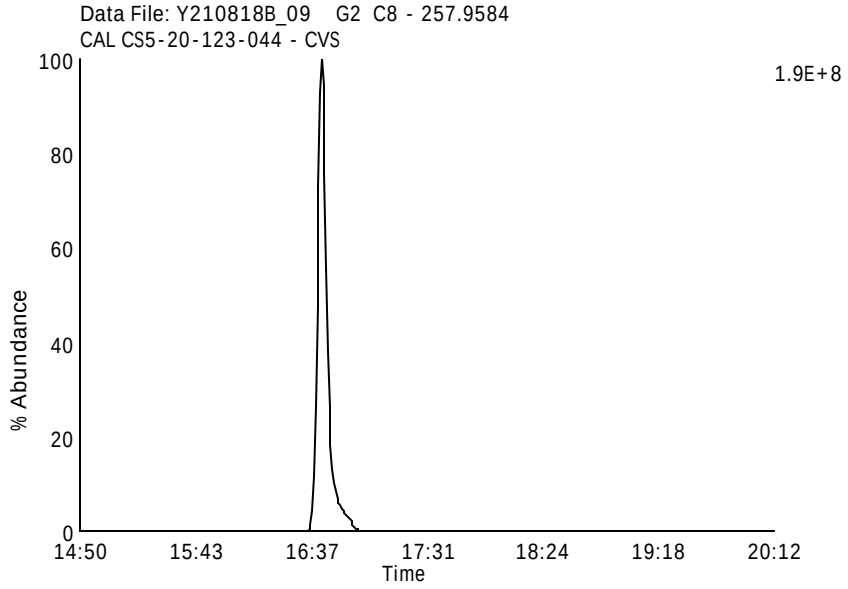


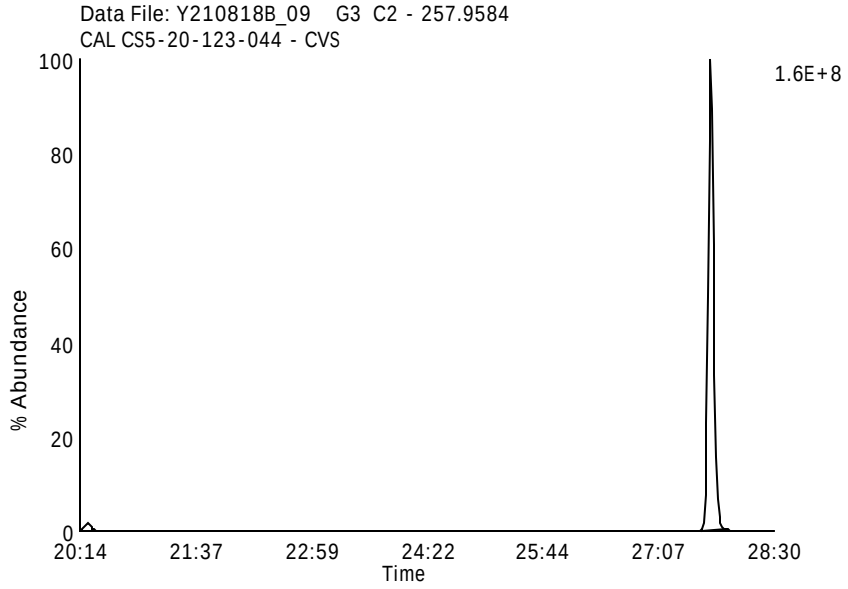
Tri Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



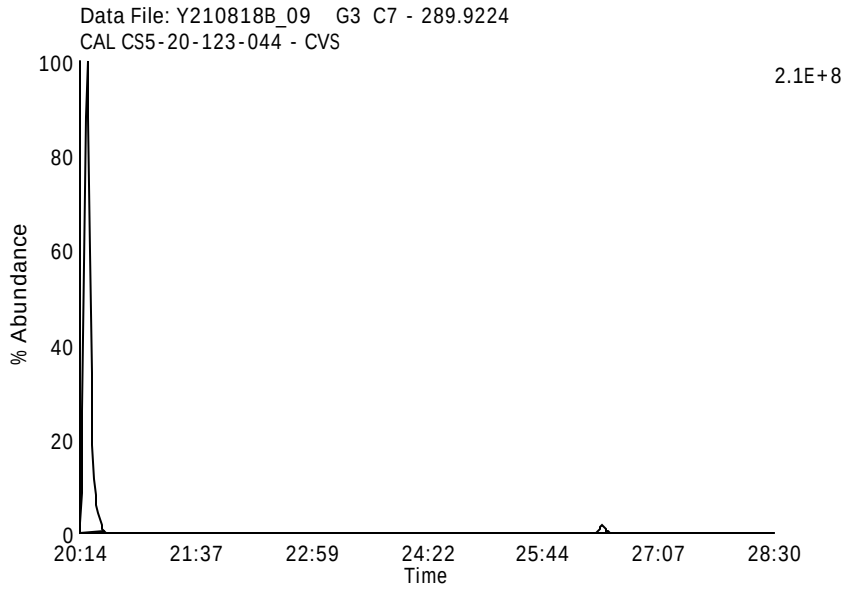


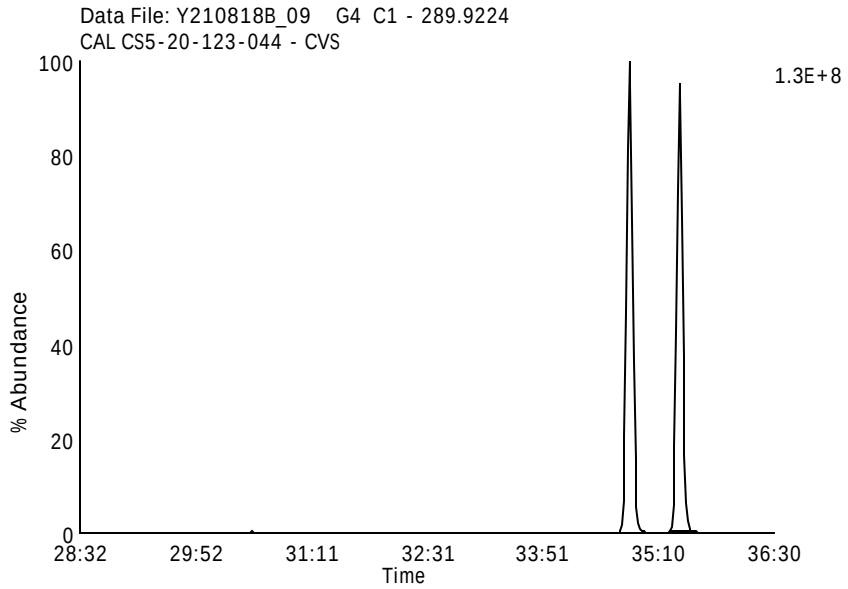


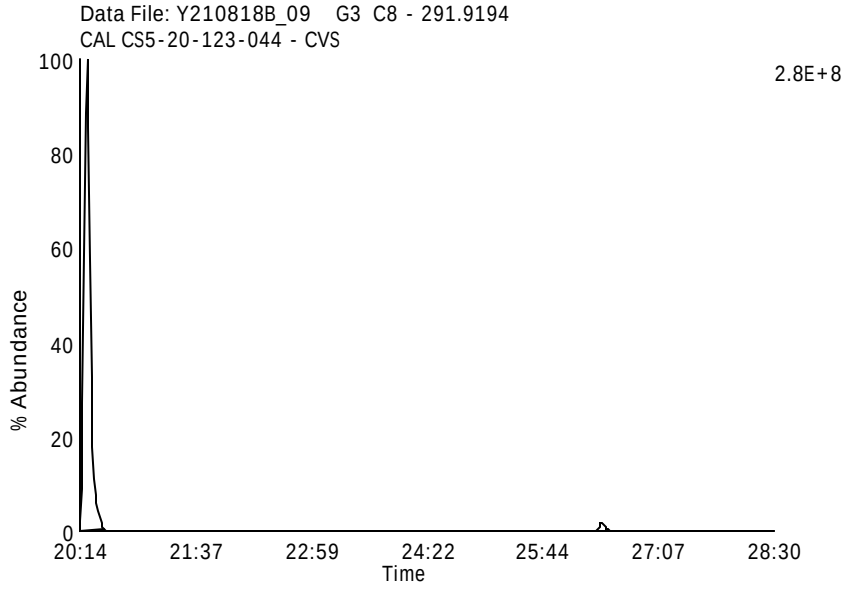


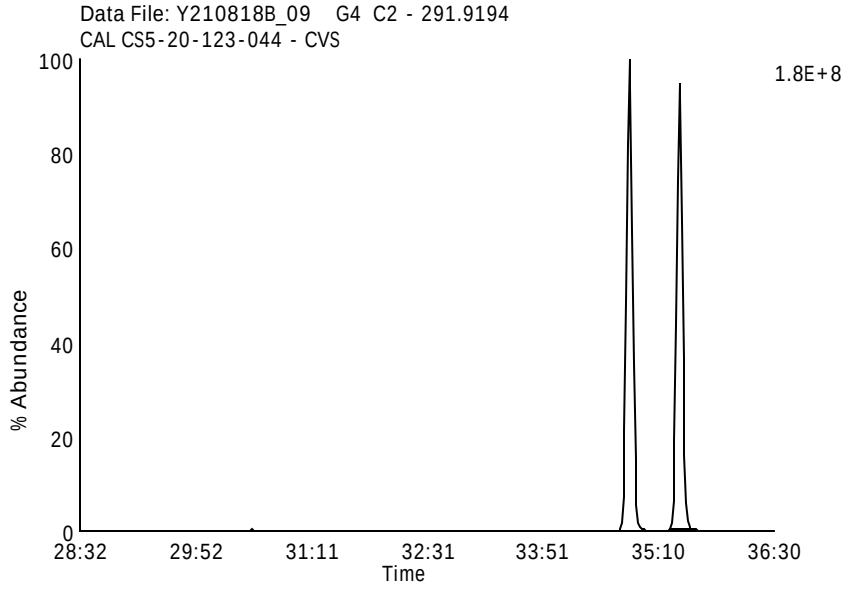
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS









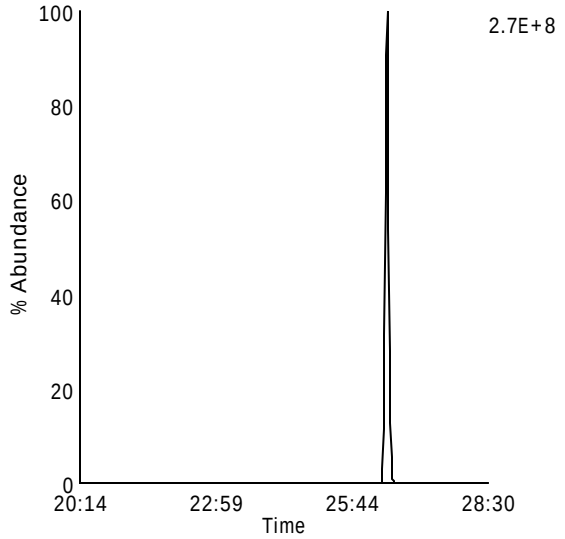
Penta Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

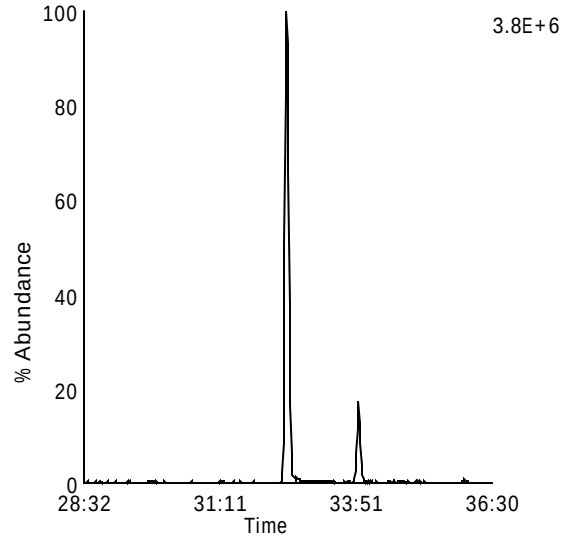
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

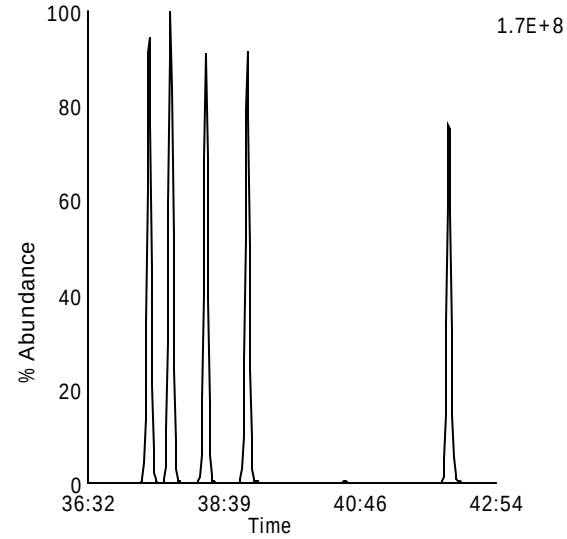
Data File: Y210818B_09 G3 C11 - 325.8804
CAL CS5-20-123-044 - CVS



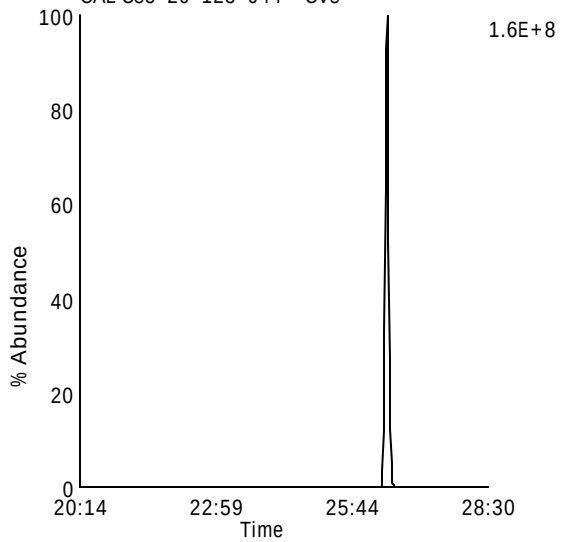
Data File: Y210818B_09 G4 C5 - 325.8804
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G5 C1 - 325.8804
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G3 C12 - 327.8775
CAL CS5-20-123-044 - CVS



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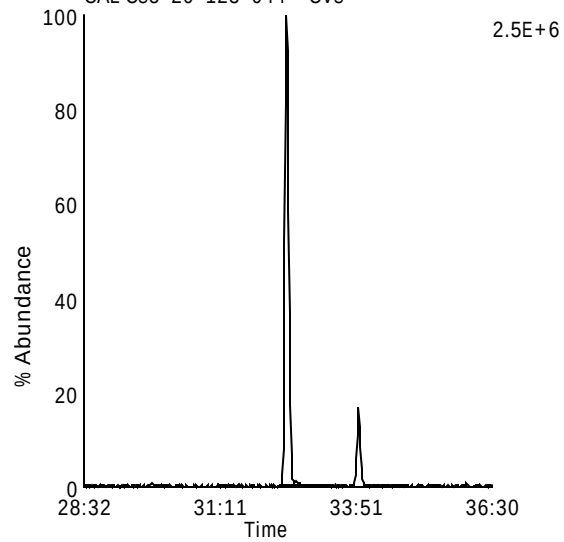
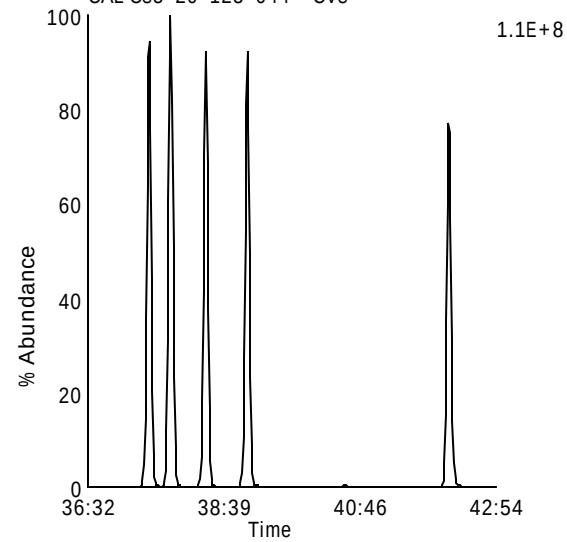
CAL CS5-20-123-044 - CVS



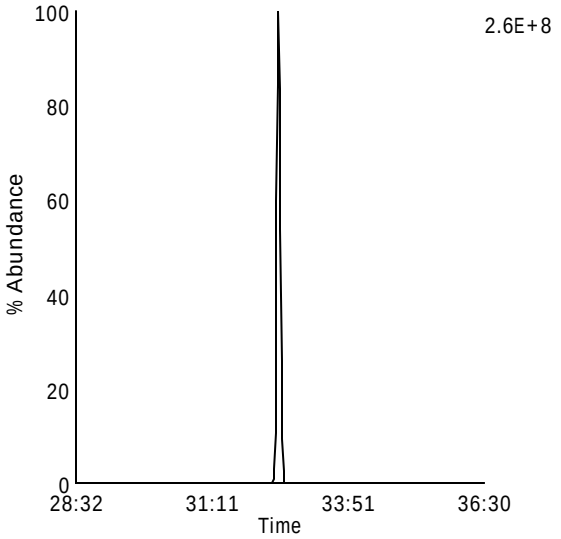
Data File: Y210818B_09 G5 C2 - 327.8775
CAL CS5-20-123-044 - CVS



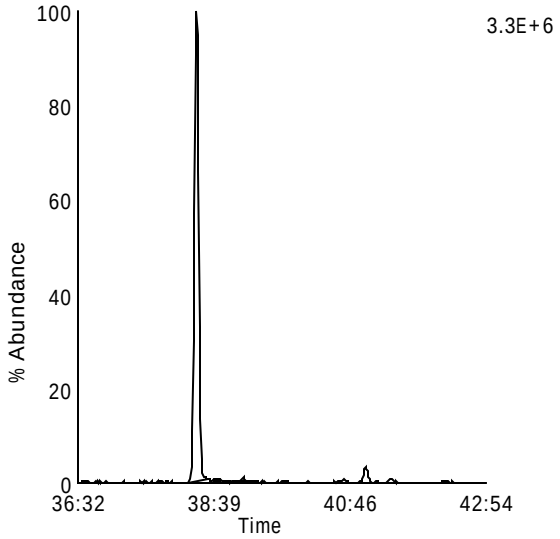
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

Data File: Y210818B_09 G4 C11 - 359.8415
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G5 C5 - 359.8415
CAL CS5-20-123-044 - CVS



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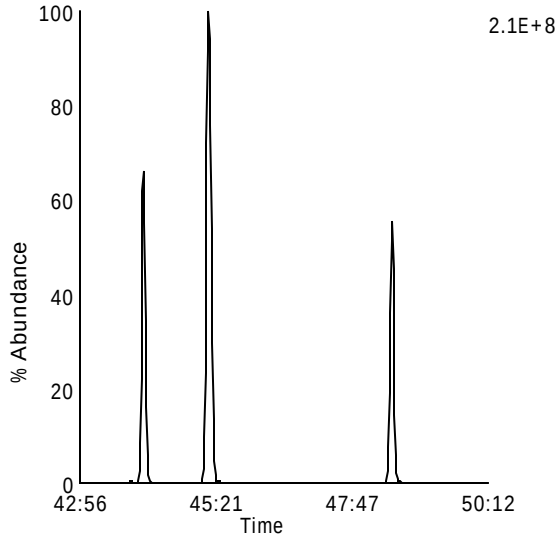
CAL CS5-20-123-044 - CVS



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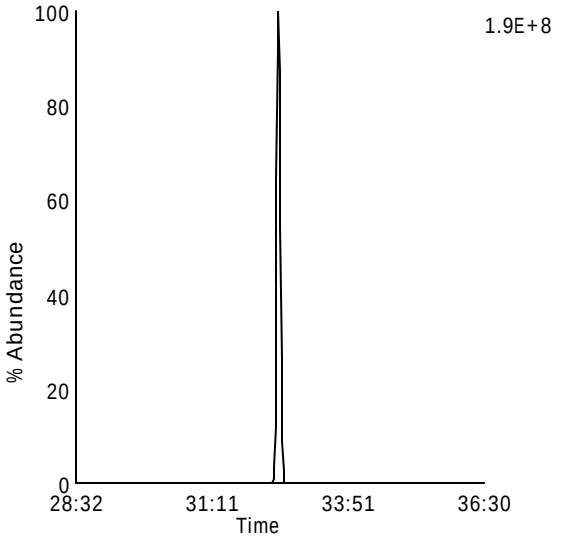
CAL CS5-20-123-044 - CVS



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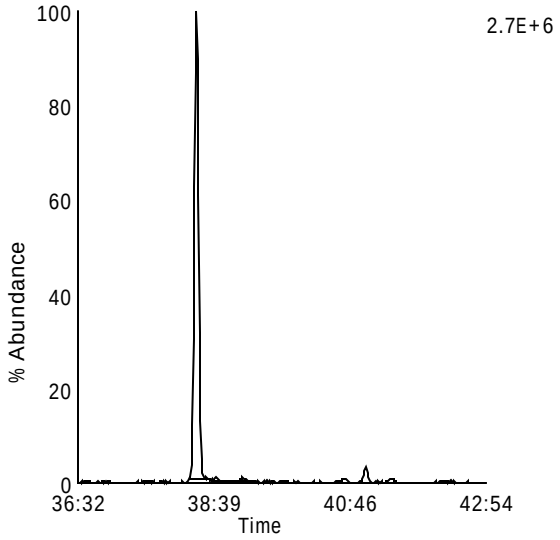
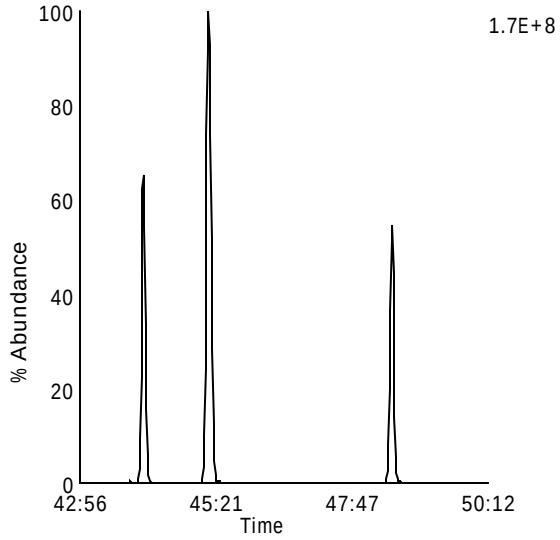
CAL CS5-20-123-044 - CVS

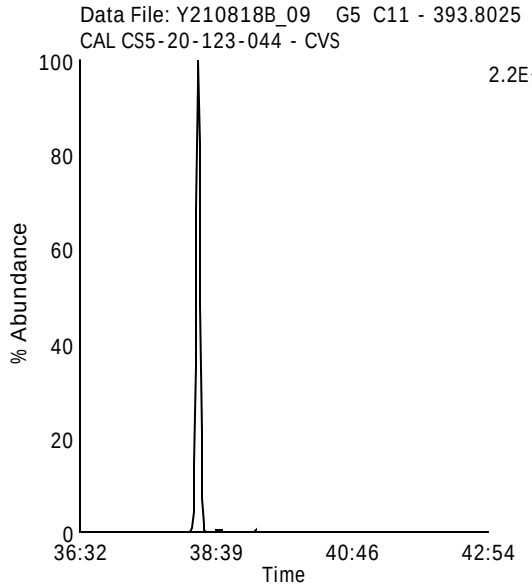


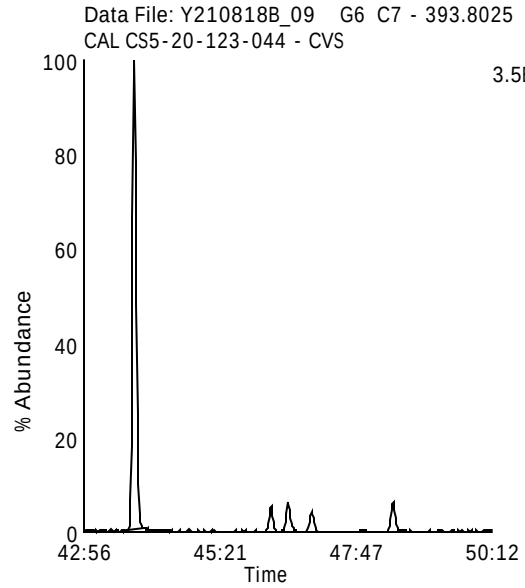
Data File: Y210818B_09 G6 C2 - 361.8385
CAL CS5-20-123-044 - CVS

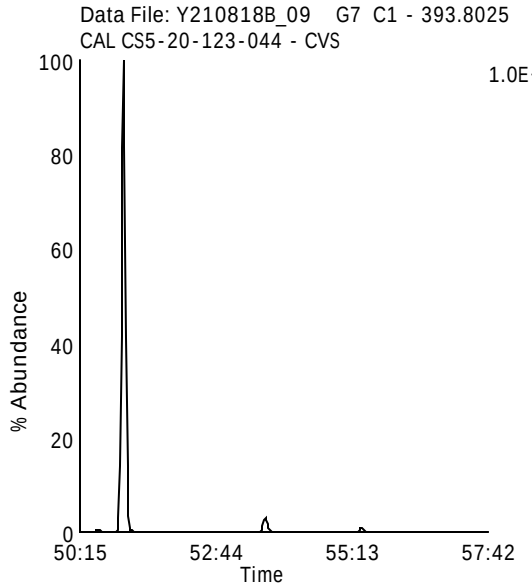


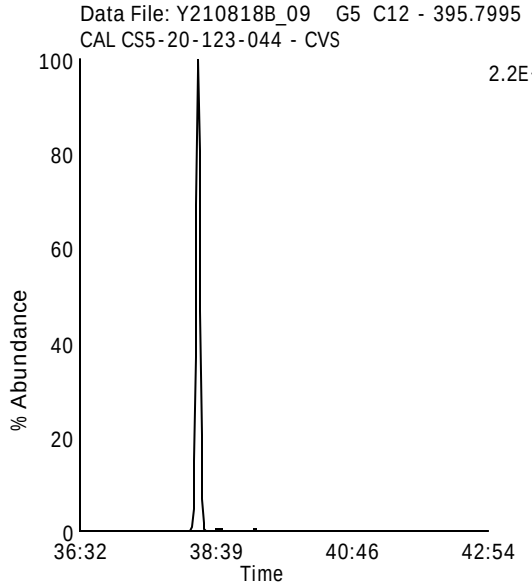
Hepta Chlorinated Biphenyls

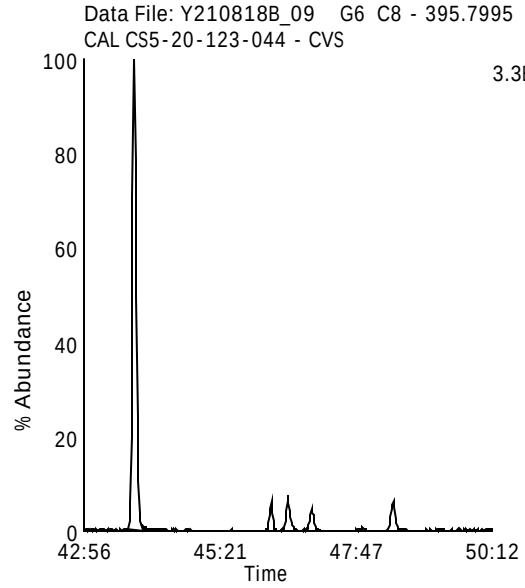
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

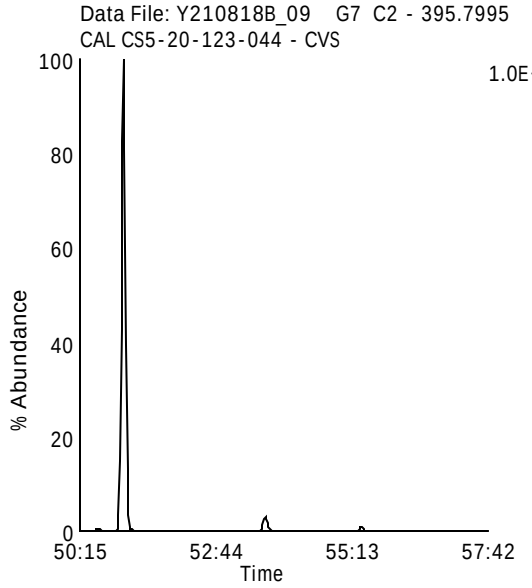






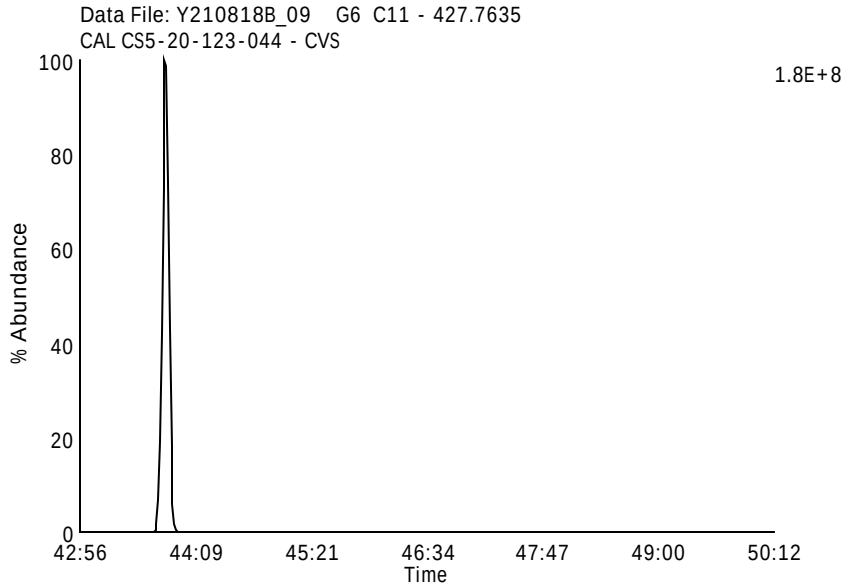


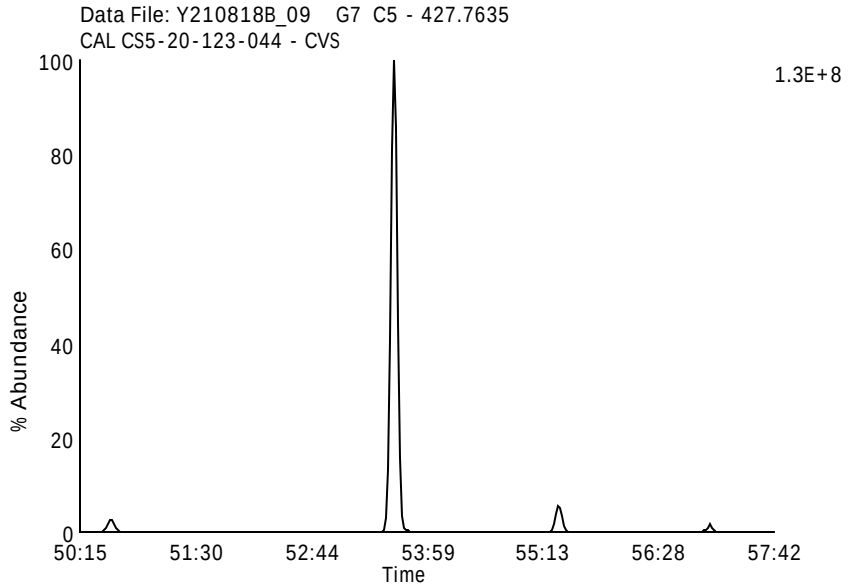


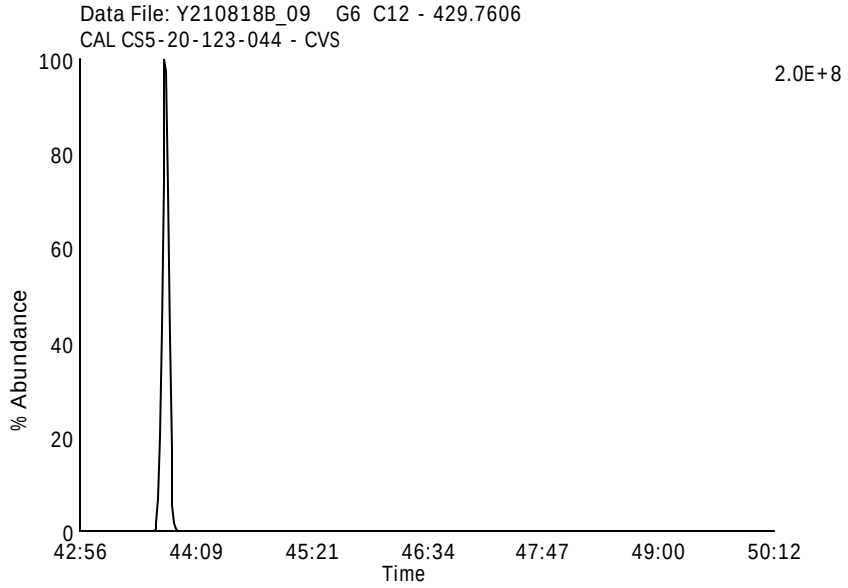


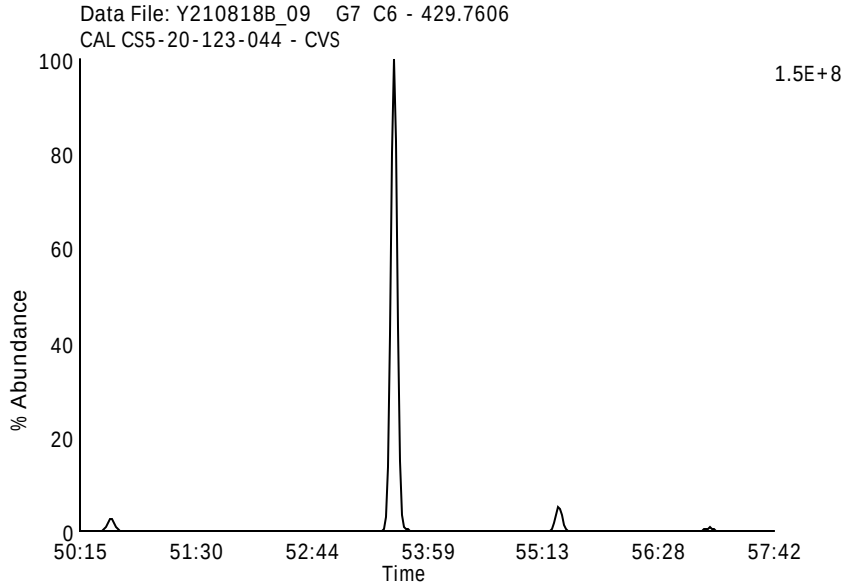
Octa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS









Nona Chlorinated Biphenyls

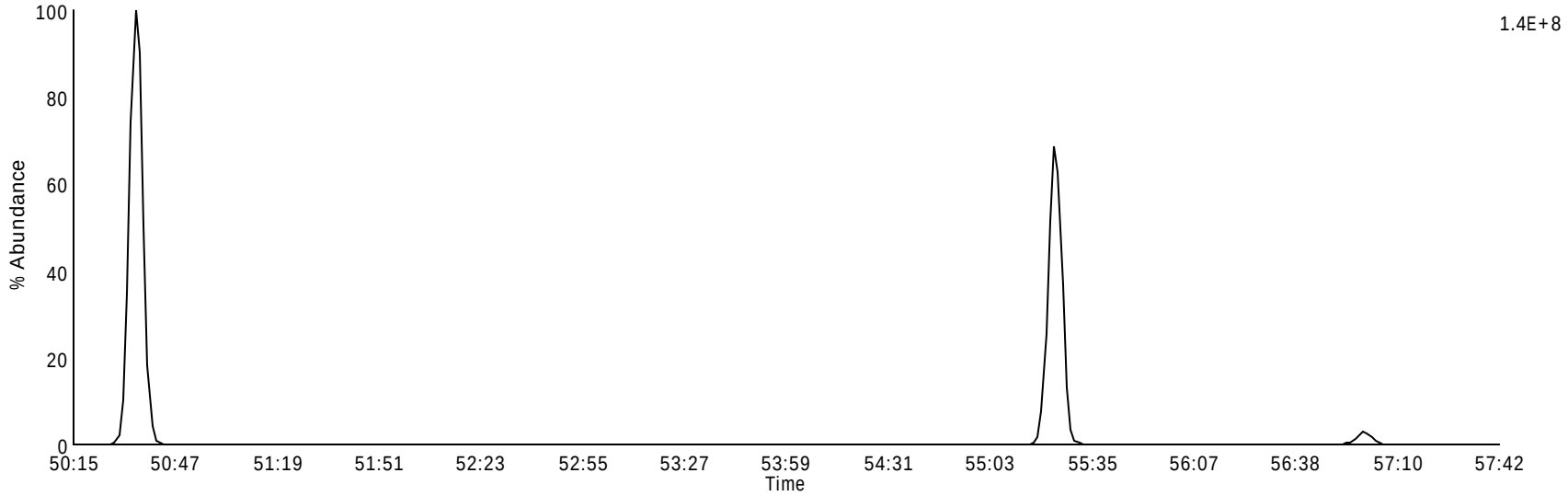
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

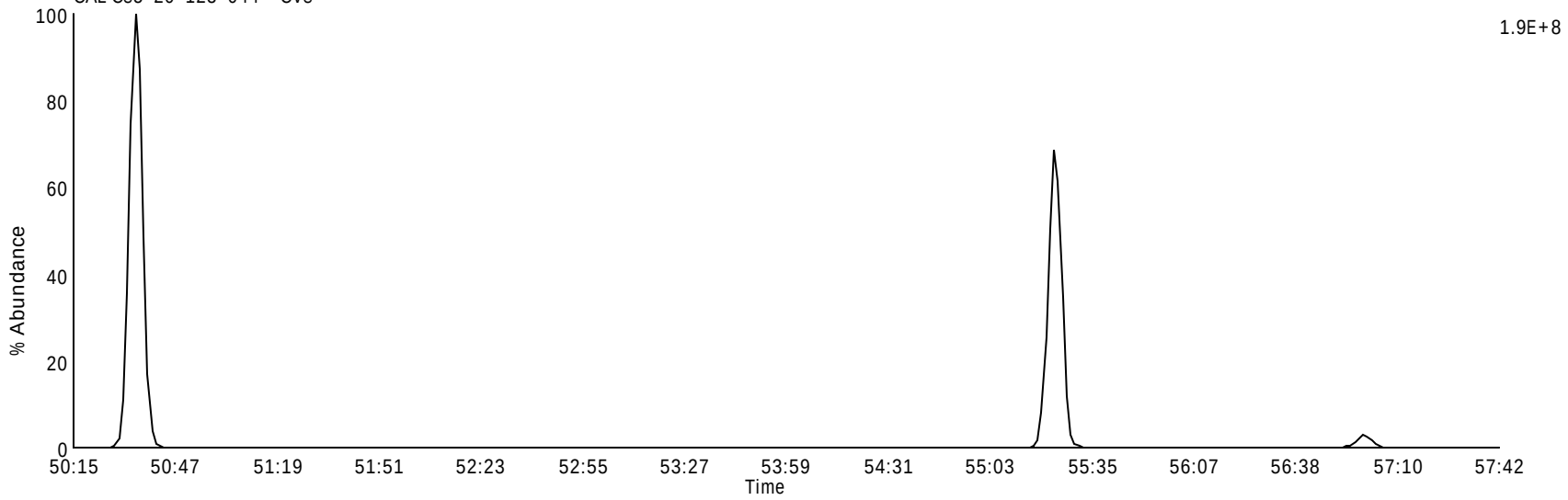
Data File: Y210818B_09 G7 C11 - 461.7246

CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G7 C12 - 463.7216

CAL CS5-20-123-044 - CVS

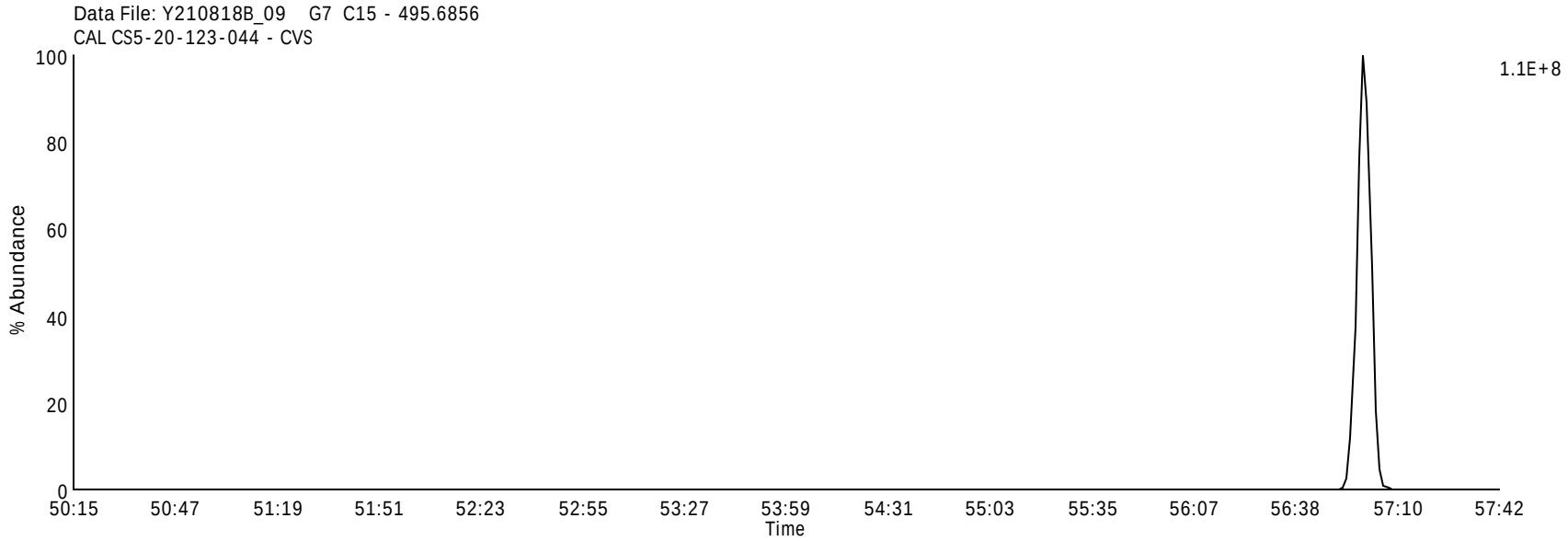


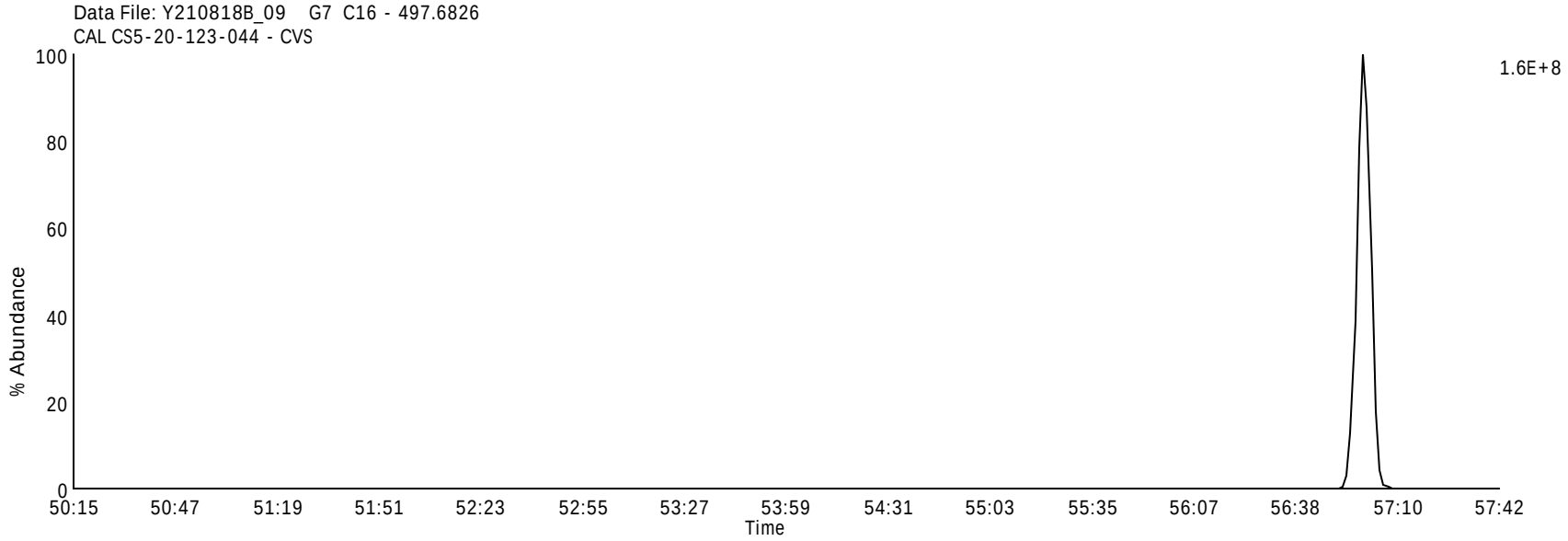
Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

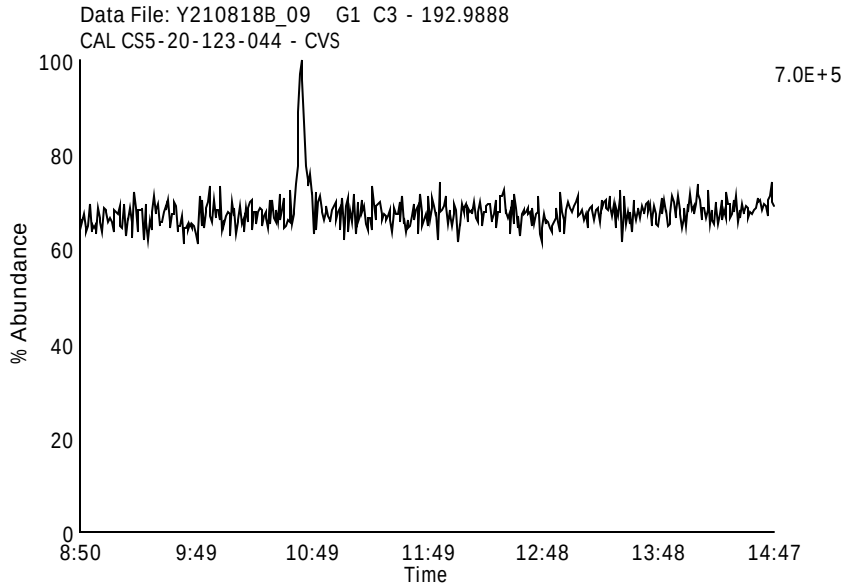


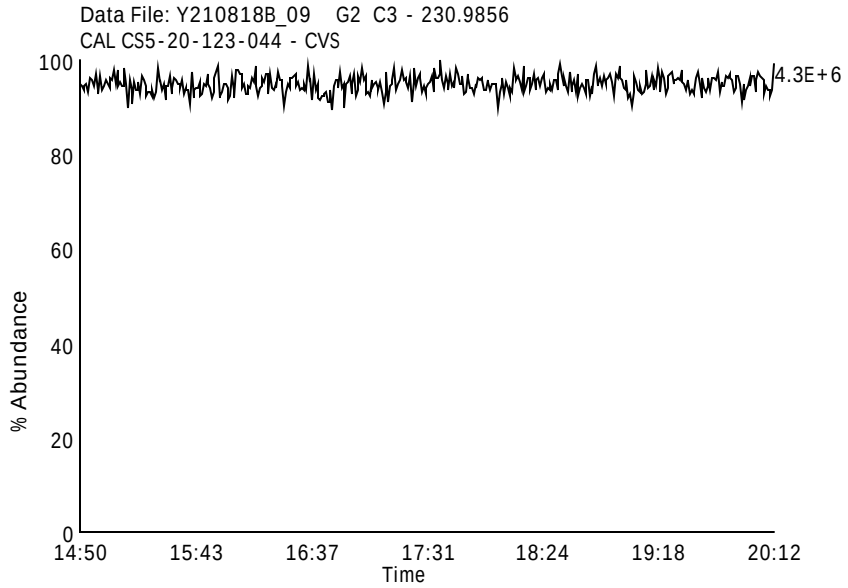


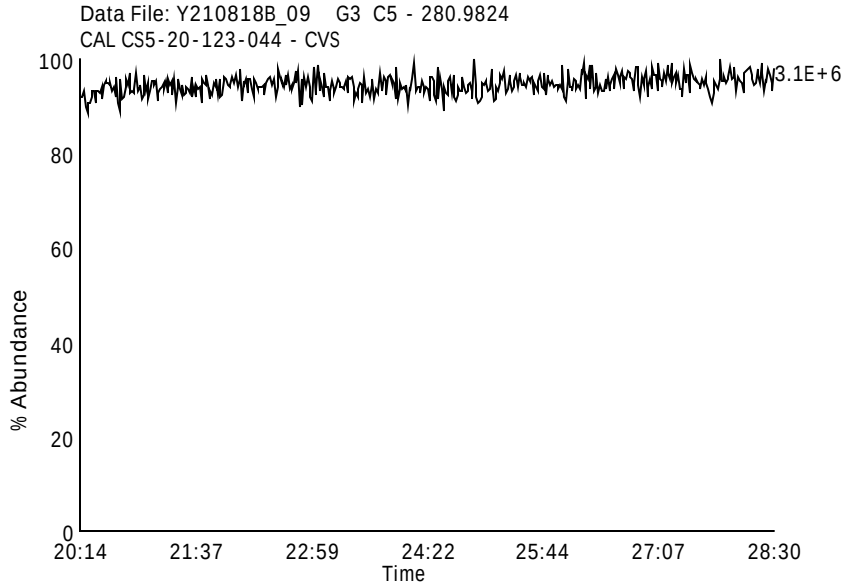
Group 1 - 4 Lock mass

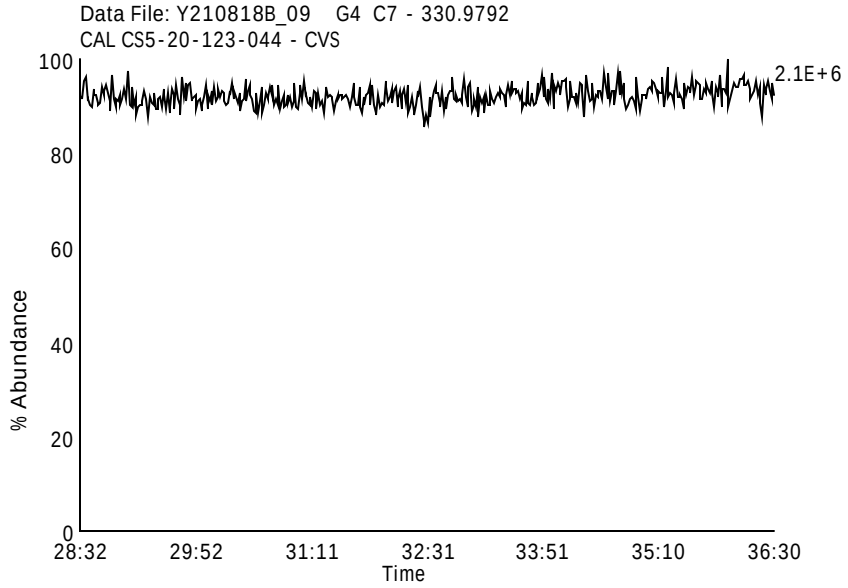
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)





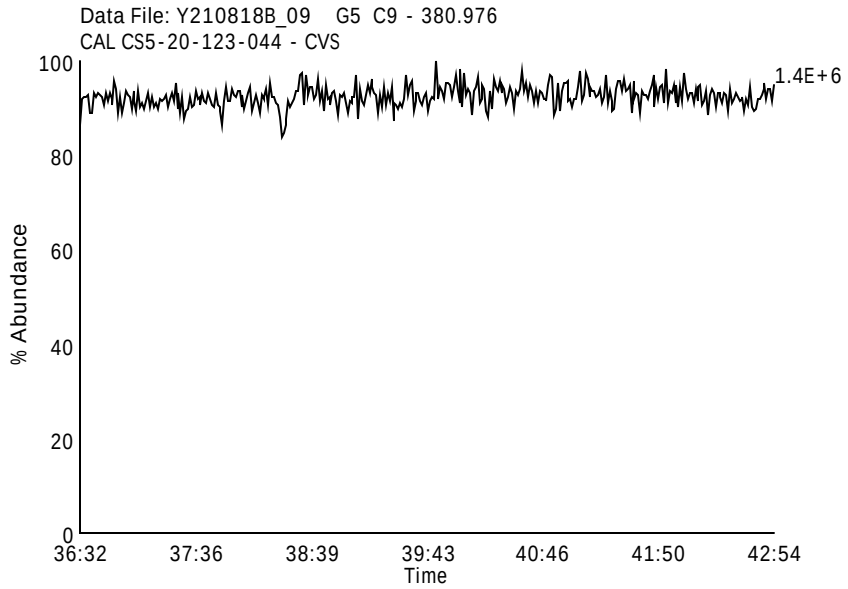


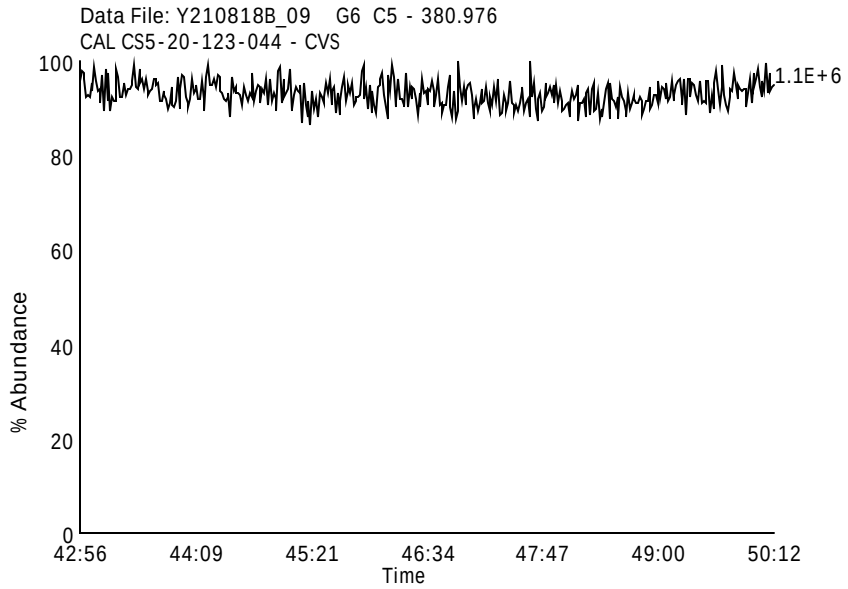


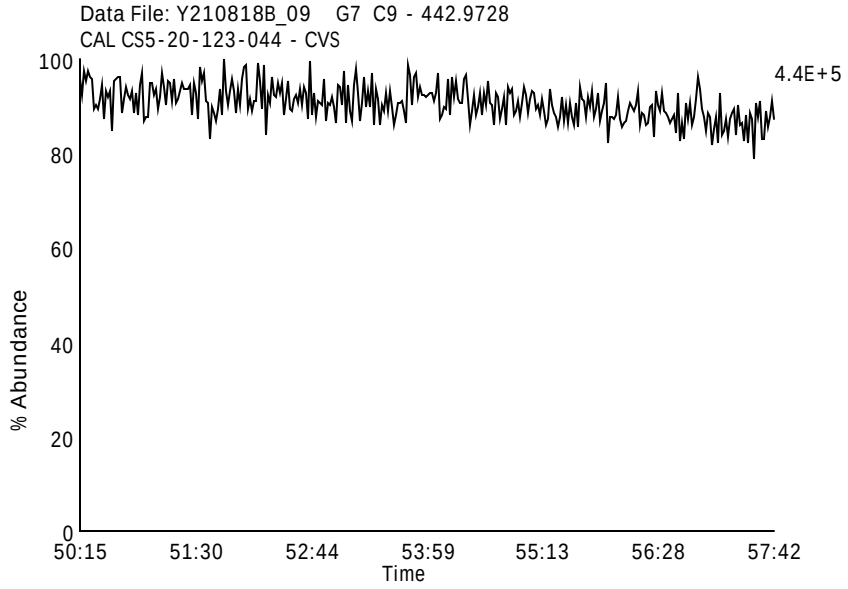
Group 5 - 7 Lock mass

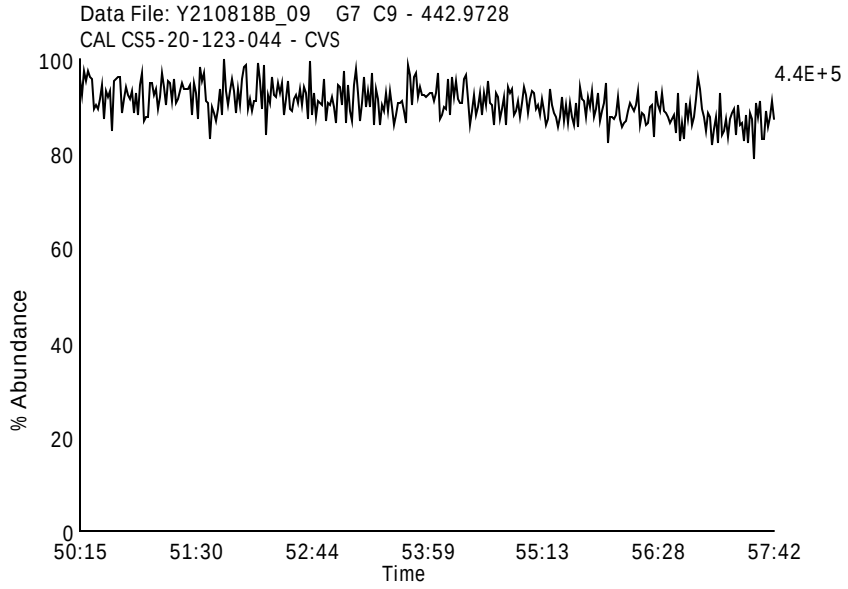
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)



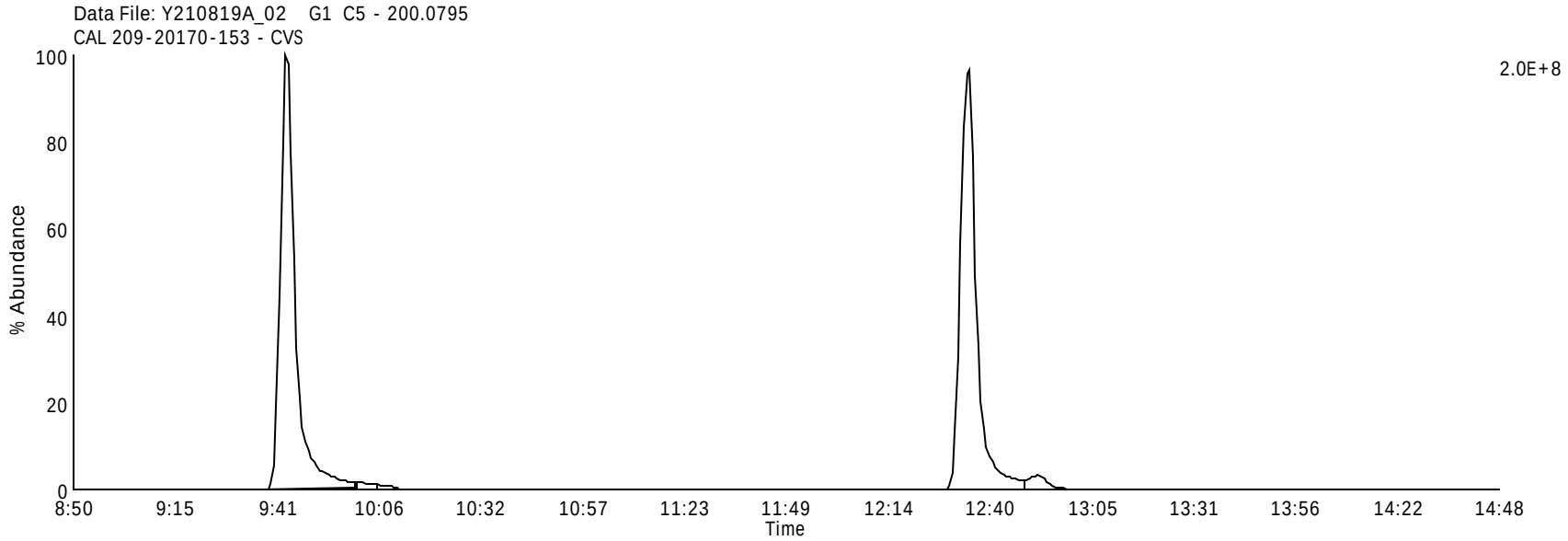


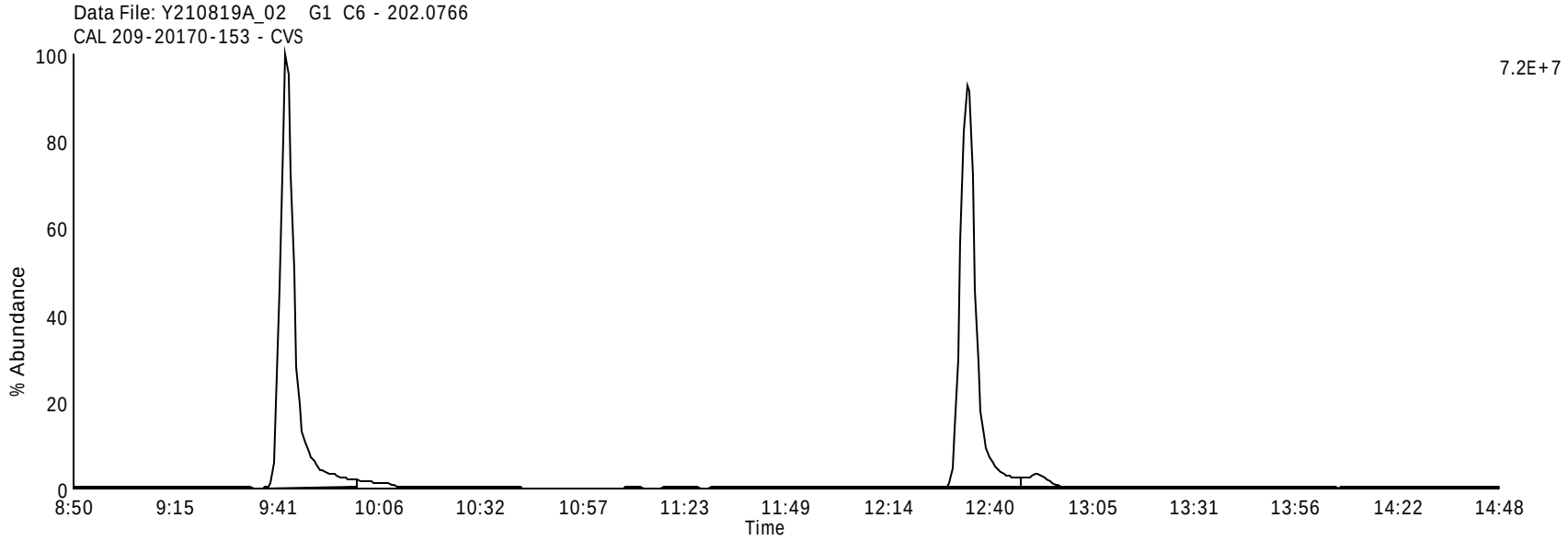




Labeled Mono Chlorinated Biphenyls

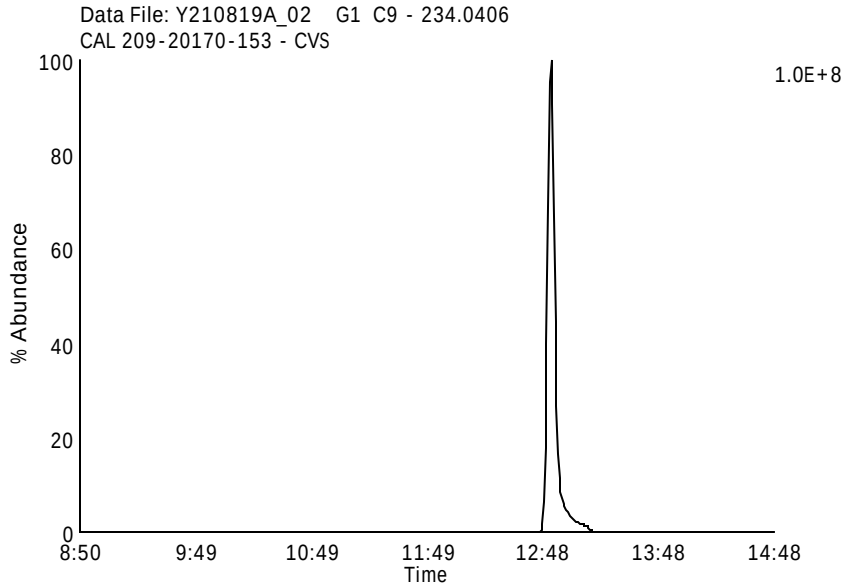
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

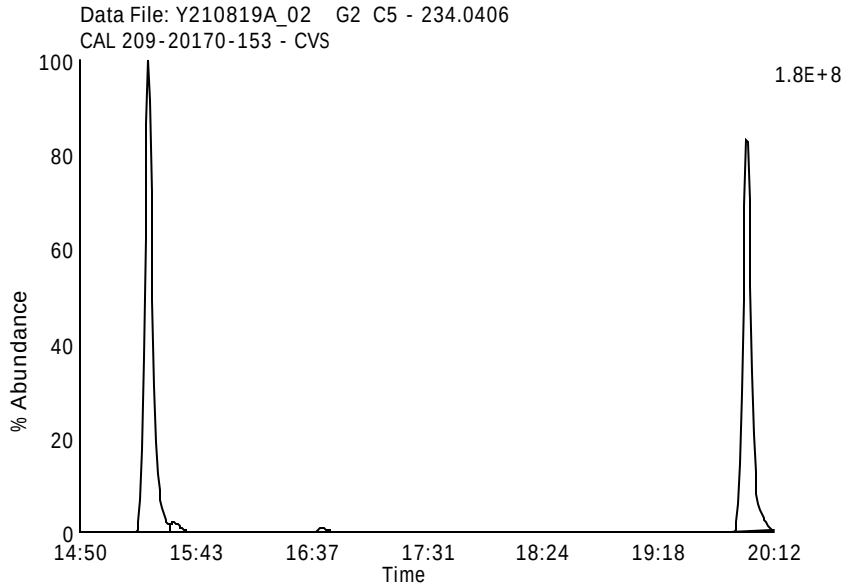


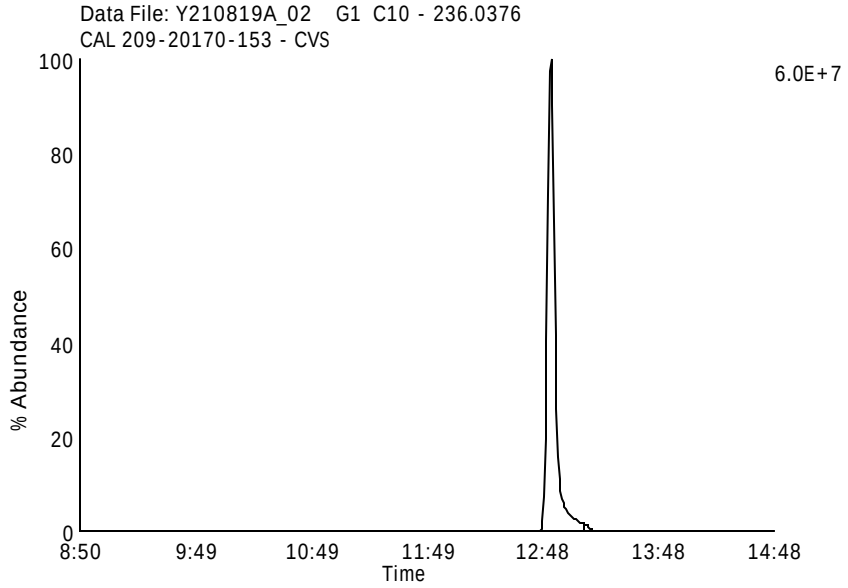


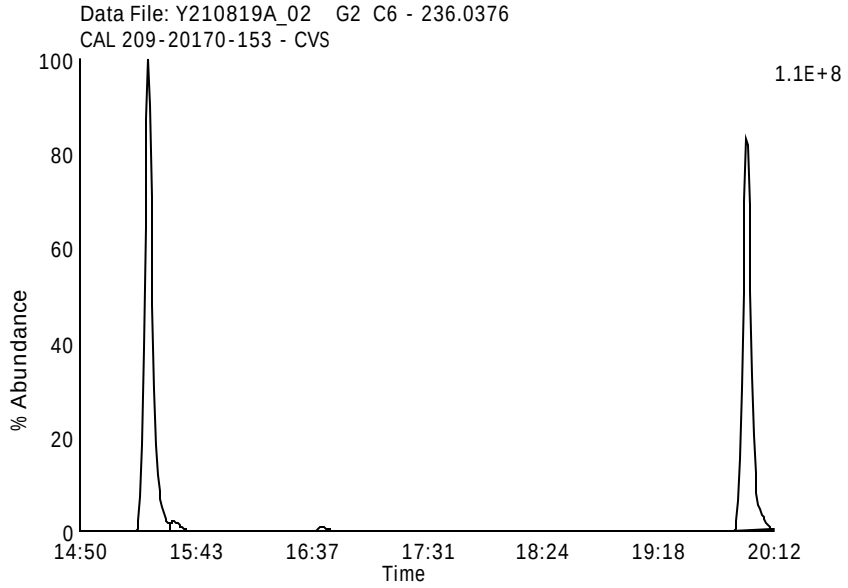
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



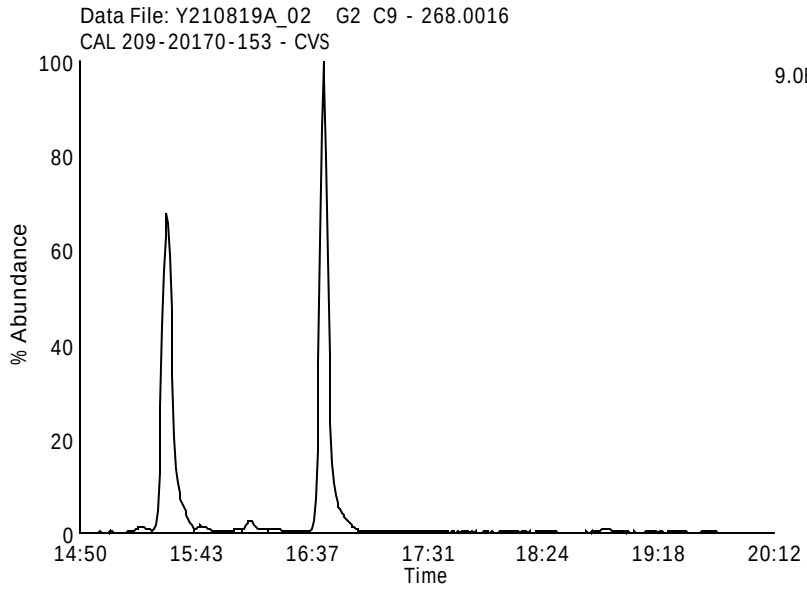


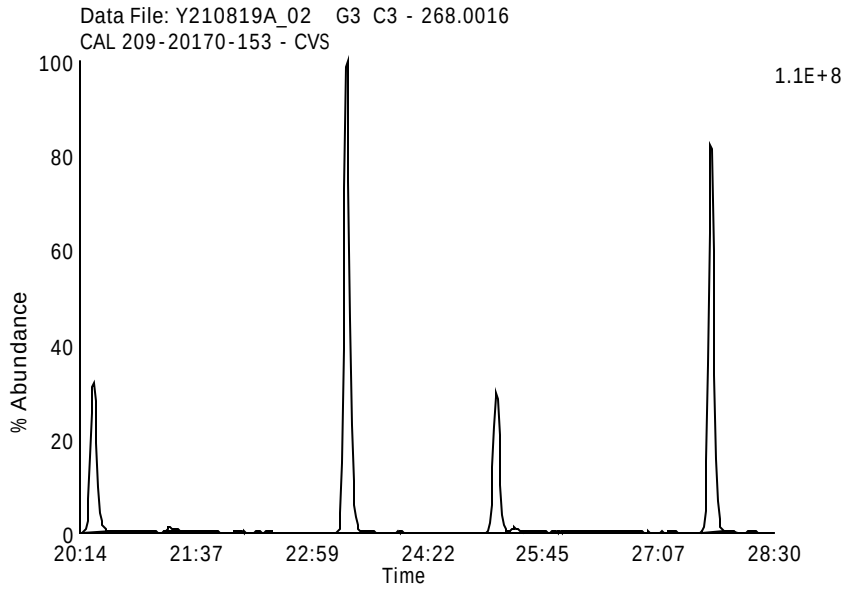


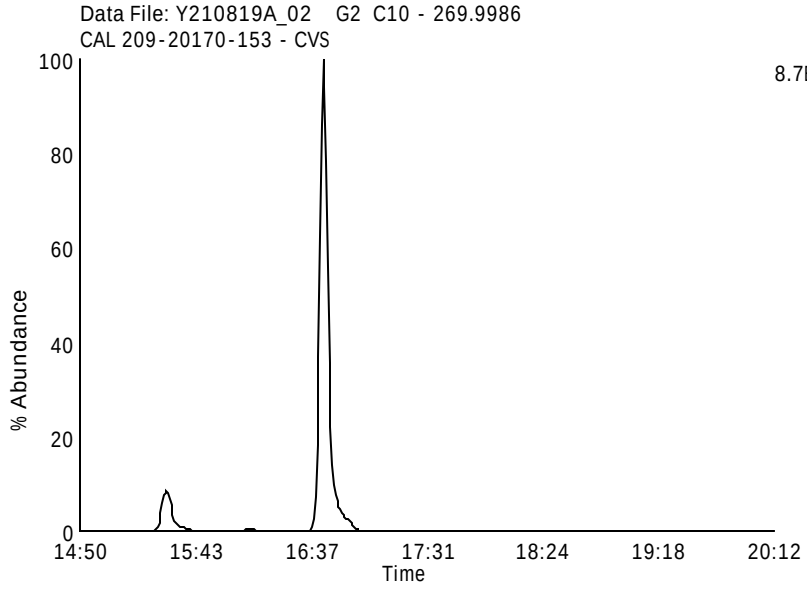


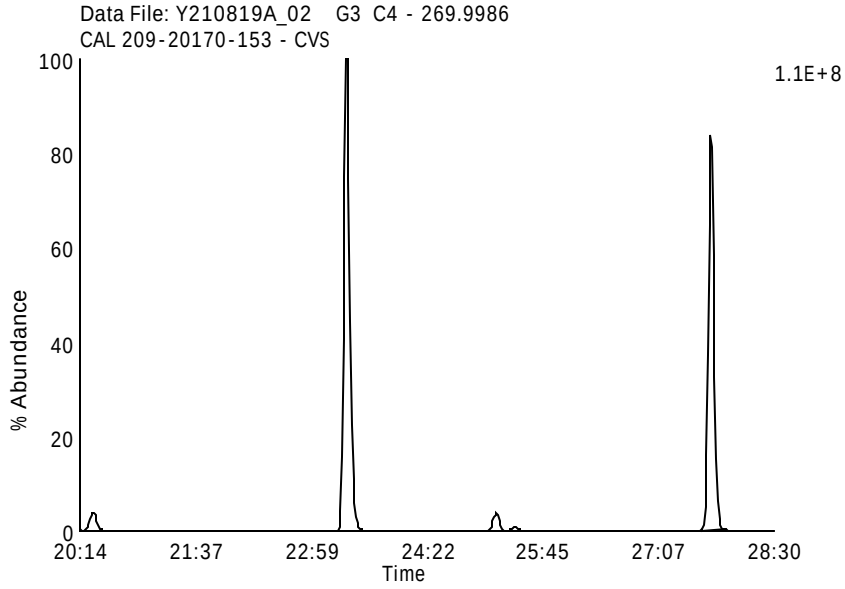
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





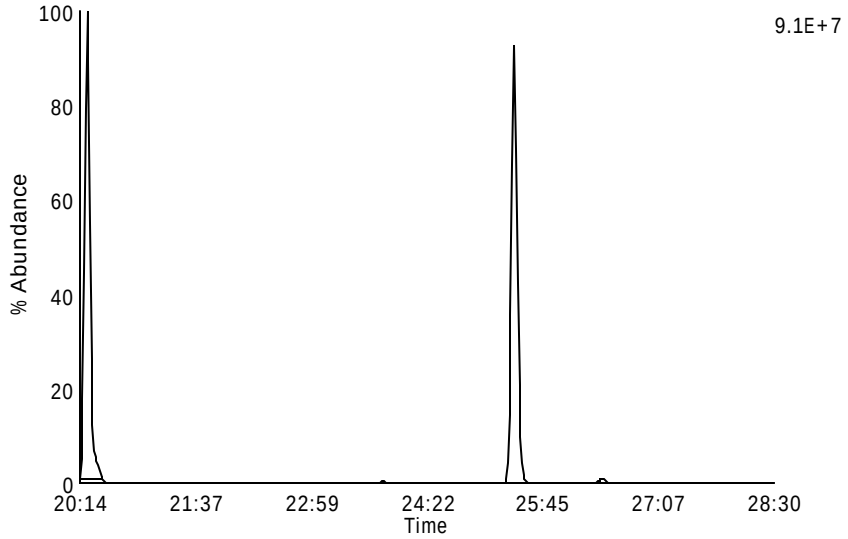




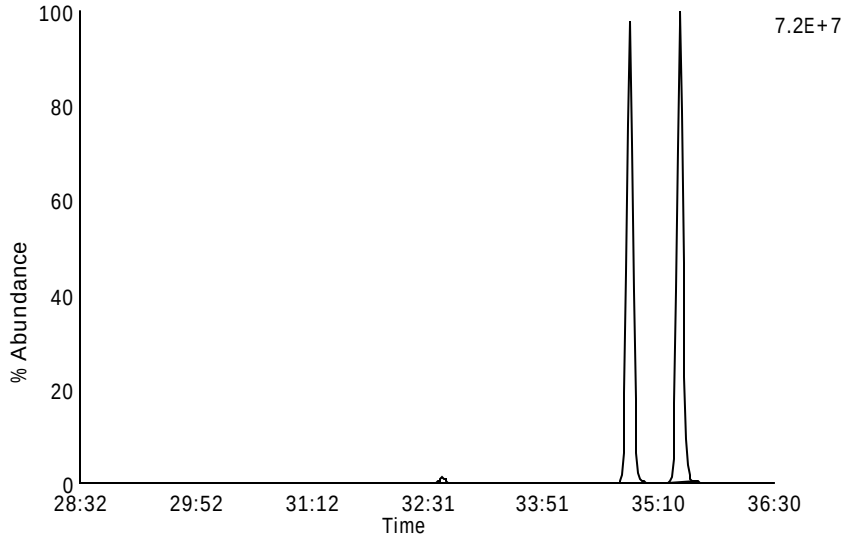
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

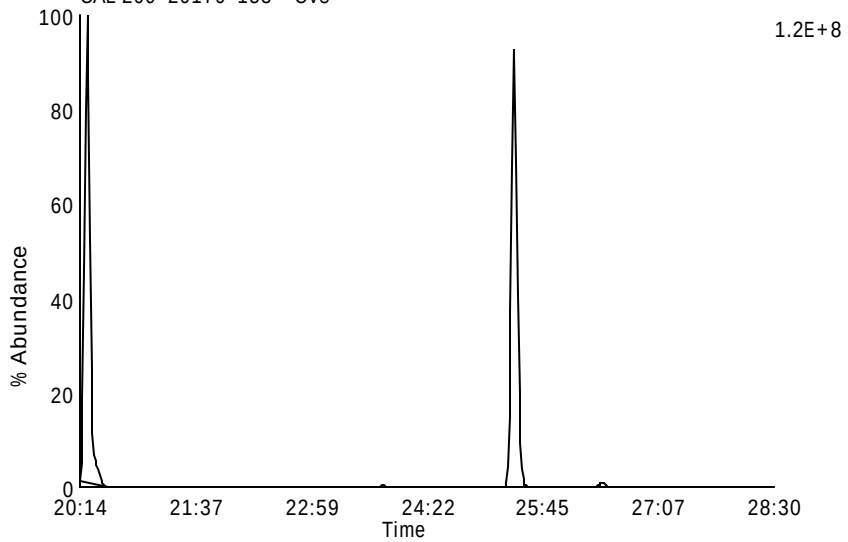
Data File: Y210819A_02 G3 C9 - 301.9626
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G4 C3 - 301.9626
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G3 C10 - 303.9597
CAL 209-20170-153 - CVS



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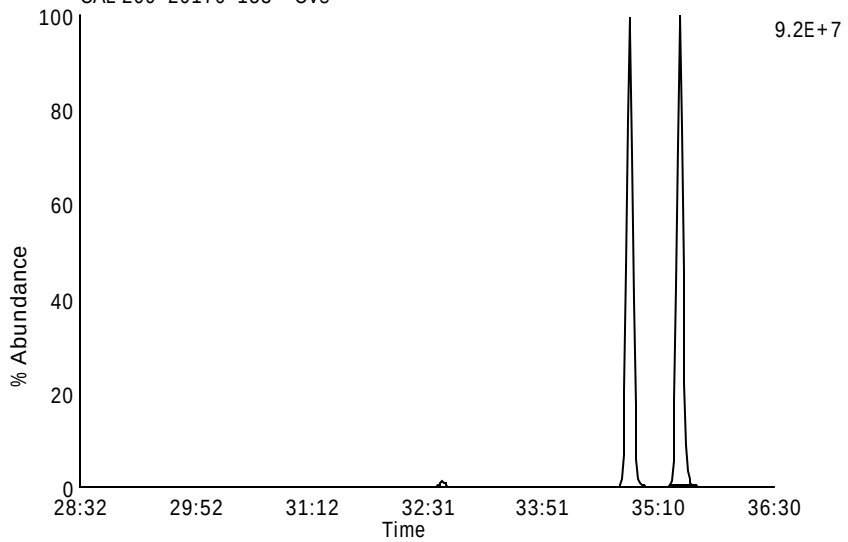
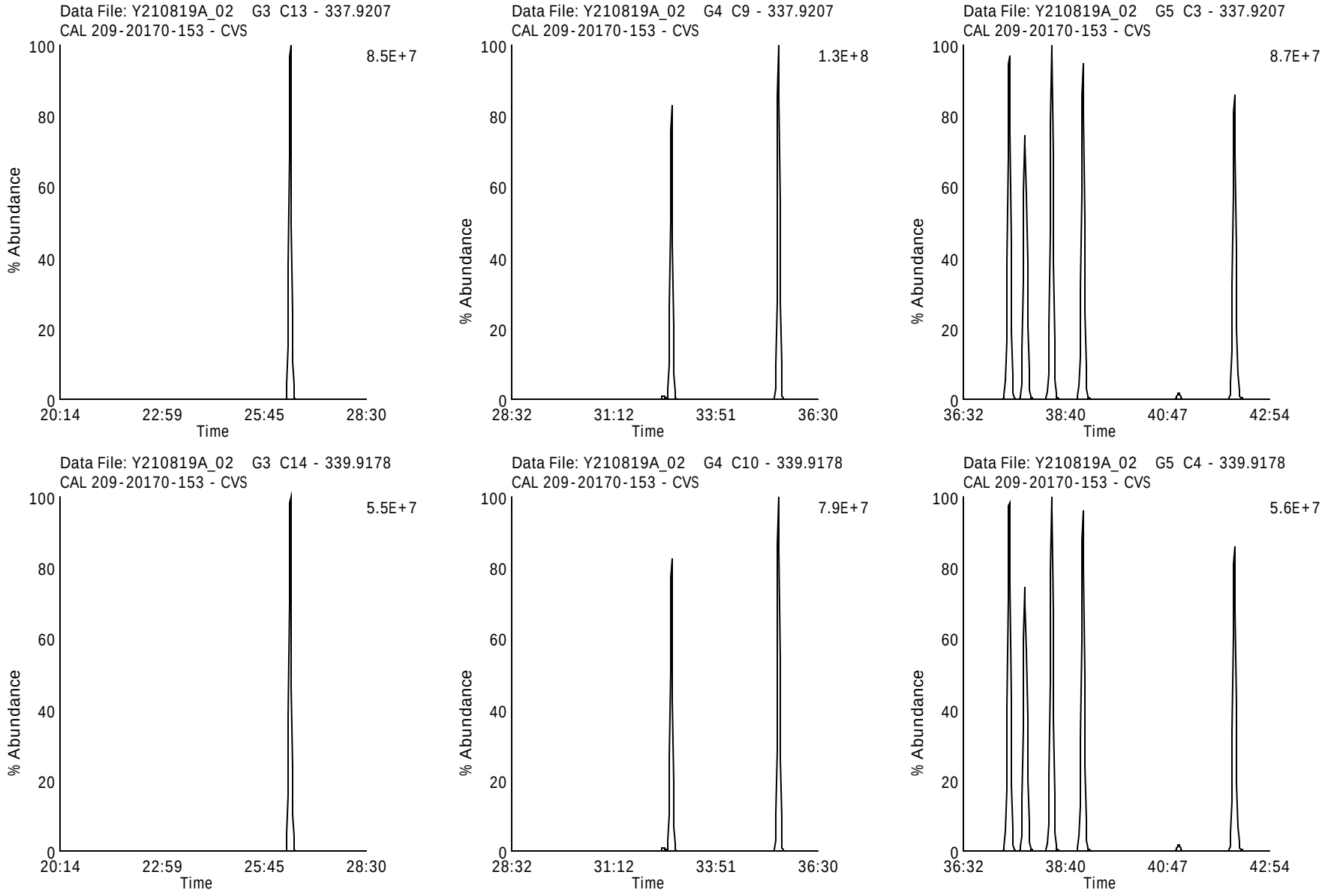
CAL 209-20170-153 - CVS



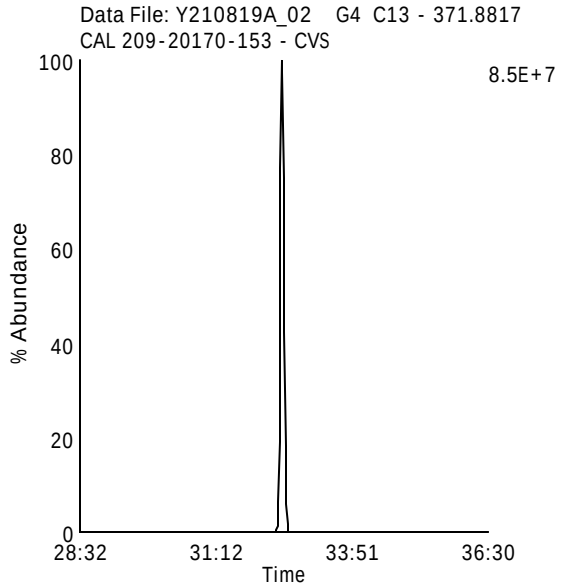
Labeled Penta Chlorinated Biphenyls

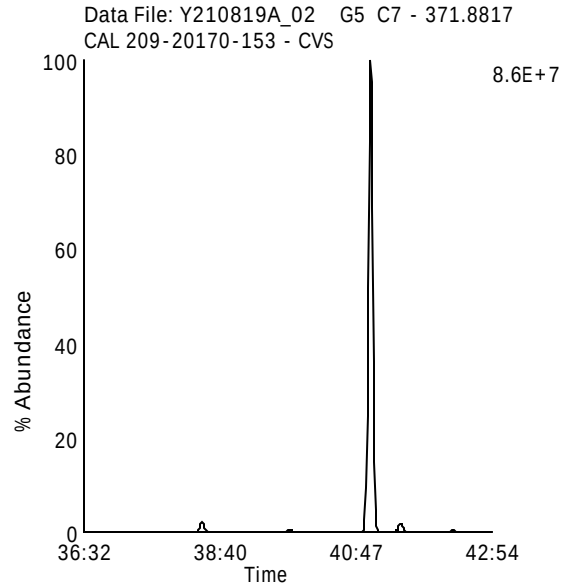
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

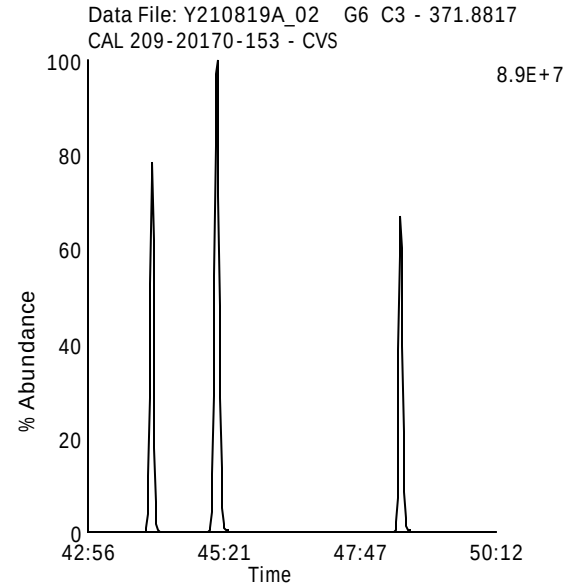


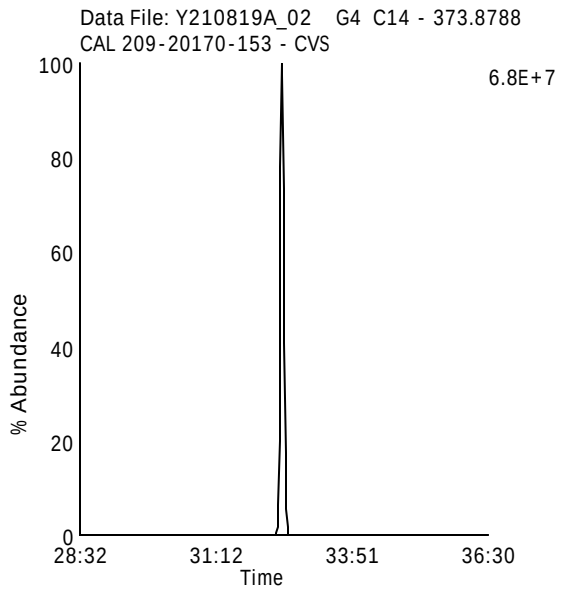
Labeled Hexa Chlorinated Biphenyls

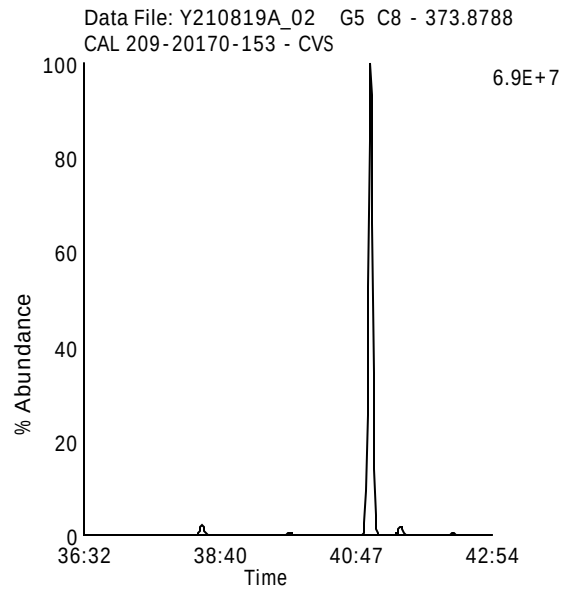
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

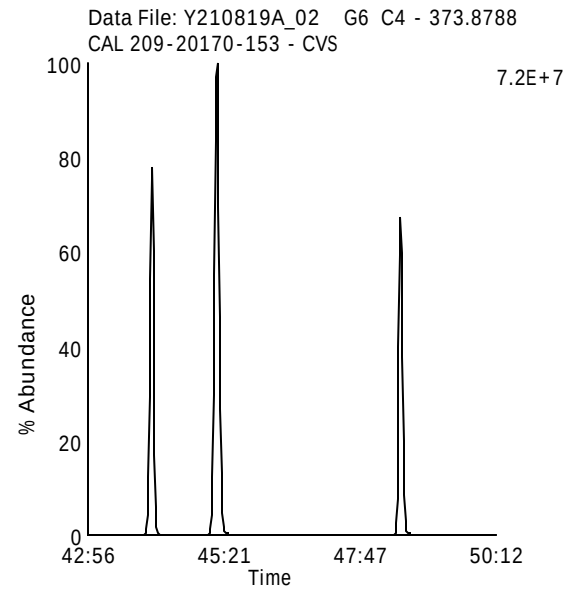








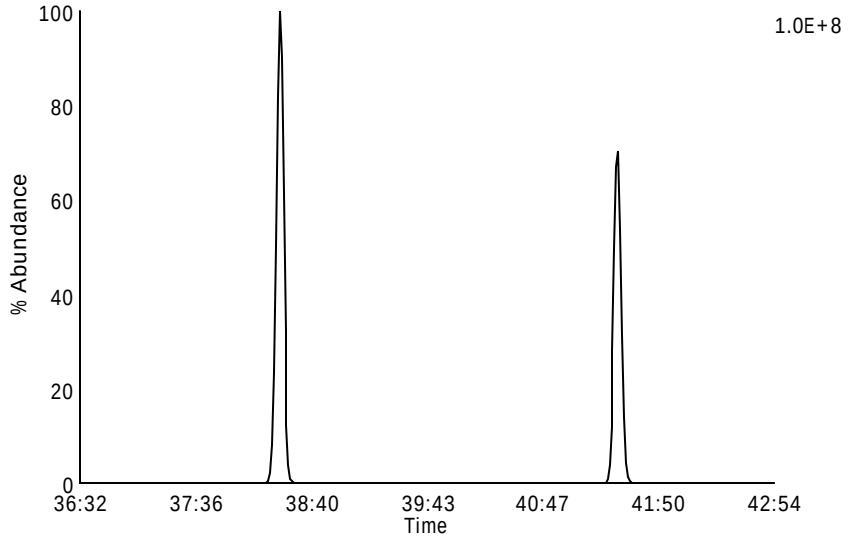




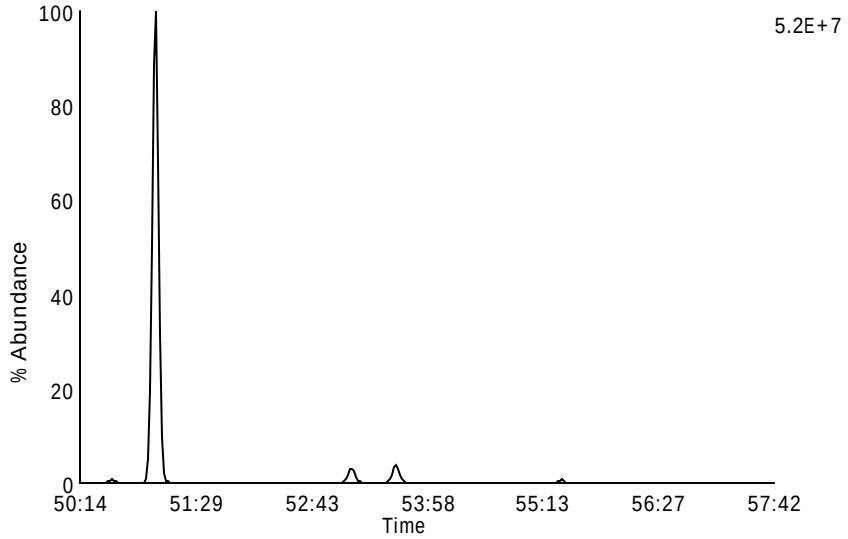
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

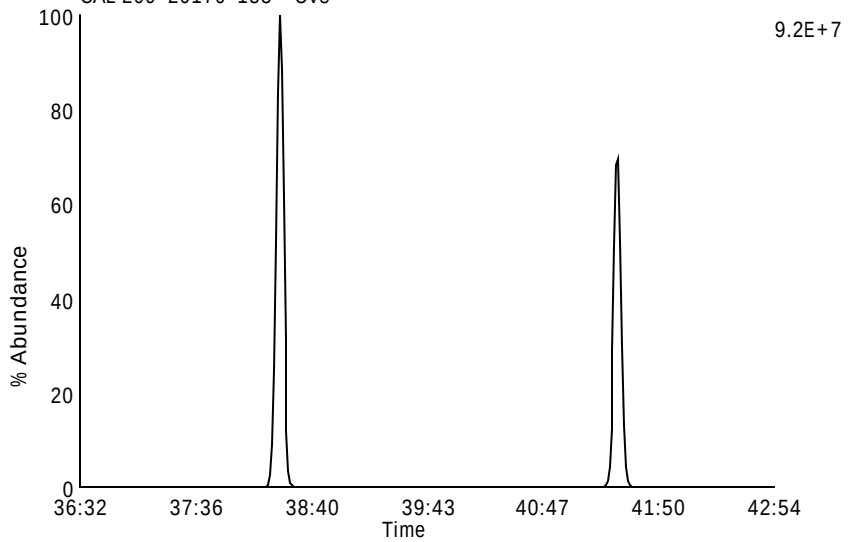
Data File: Y210819A_02 G5 C13 - 405.8428
CAL 209-20170-153 - CVS



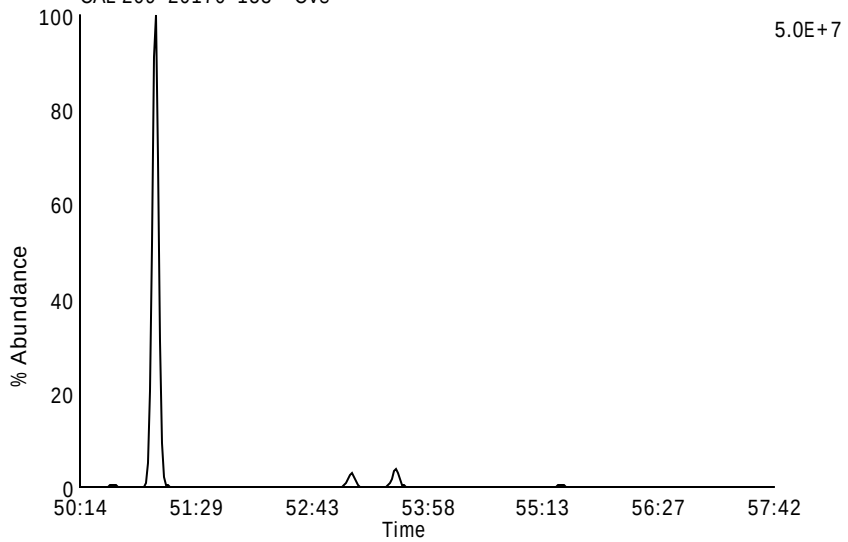
Data File: Y210819A_02 G7 C3 - 405.8428
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G5 C14 - 407.8398
CAL 209-20170-153 - CVS



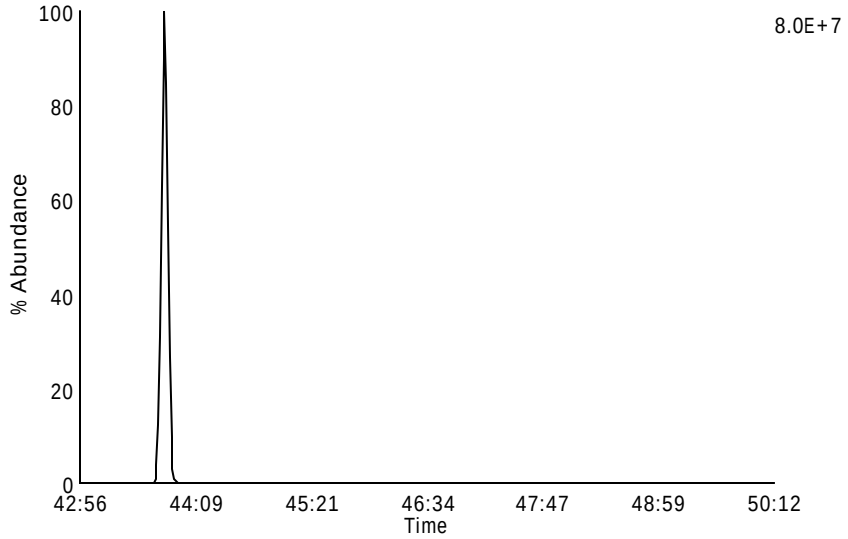
Data File: Y210819A_02 G7 C4 - 407.8398
CAL 209-20170-153 - CVS



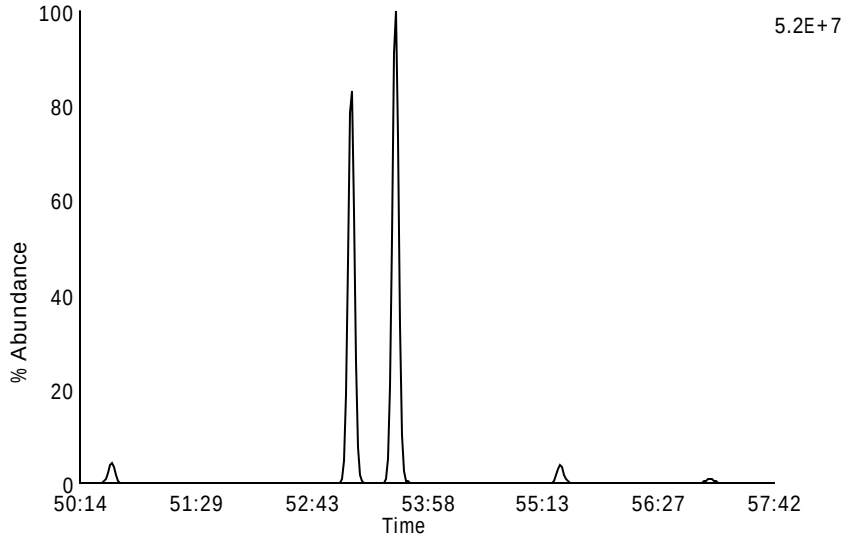
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

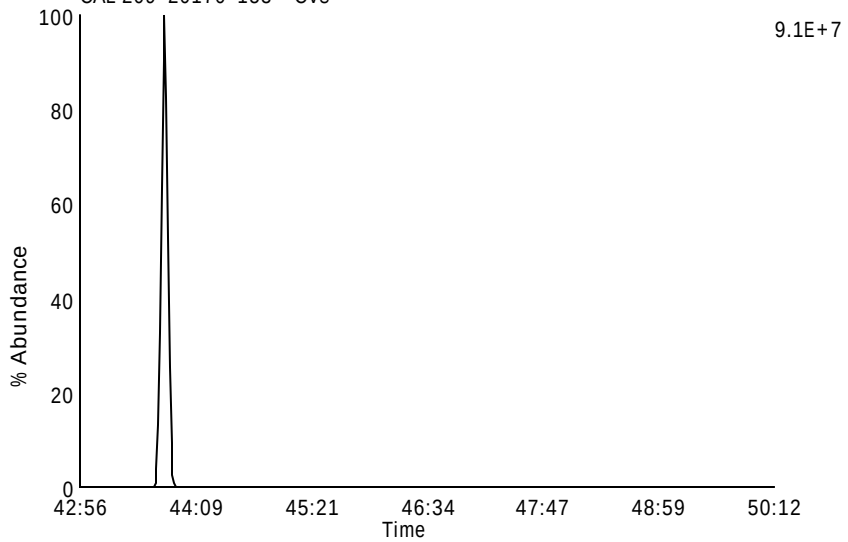
Data File: Y210819A_02 G6 C13 - 439.8038
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G7 C7 - 439.8038
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G6 C14 - 441.8008
CAL 209-20170-153 - CVS



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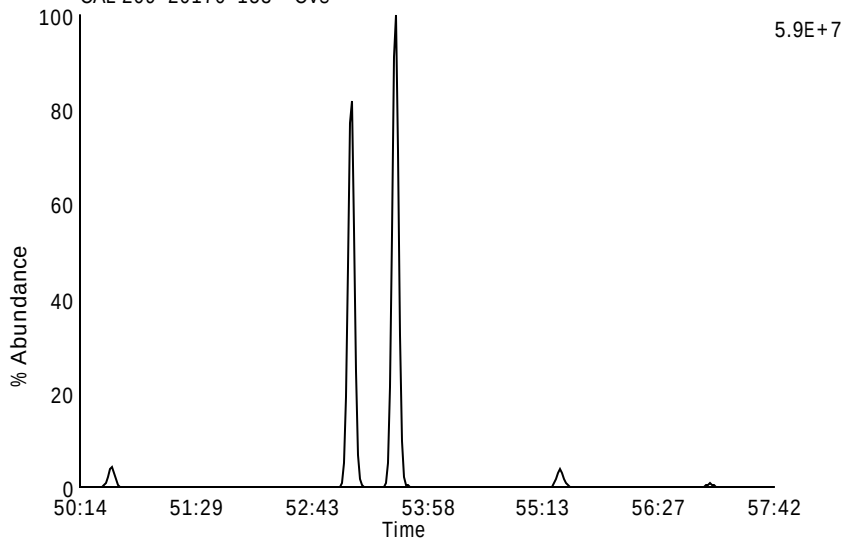
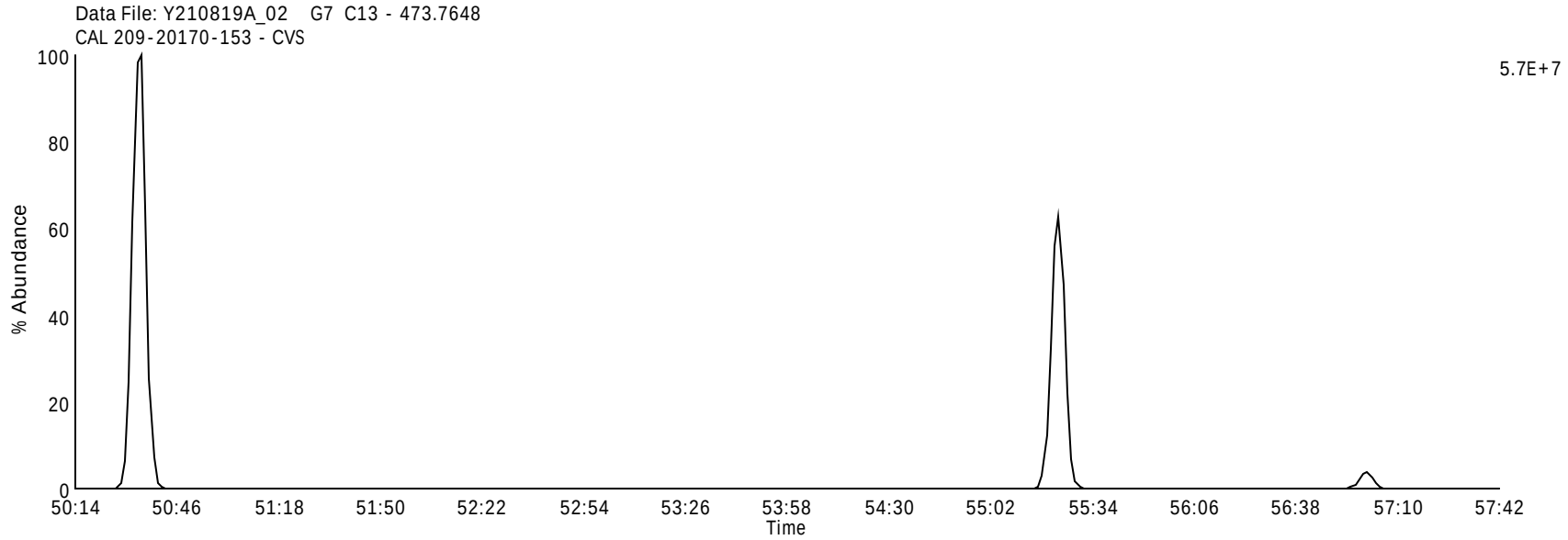
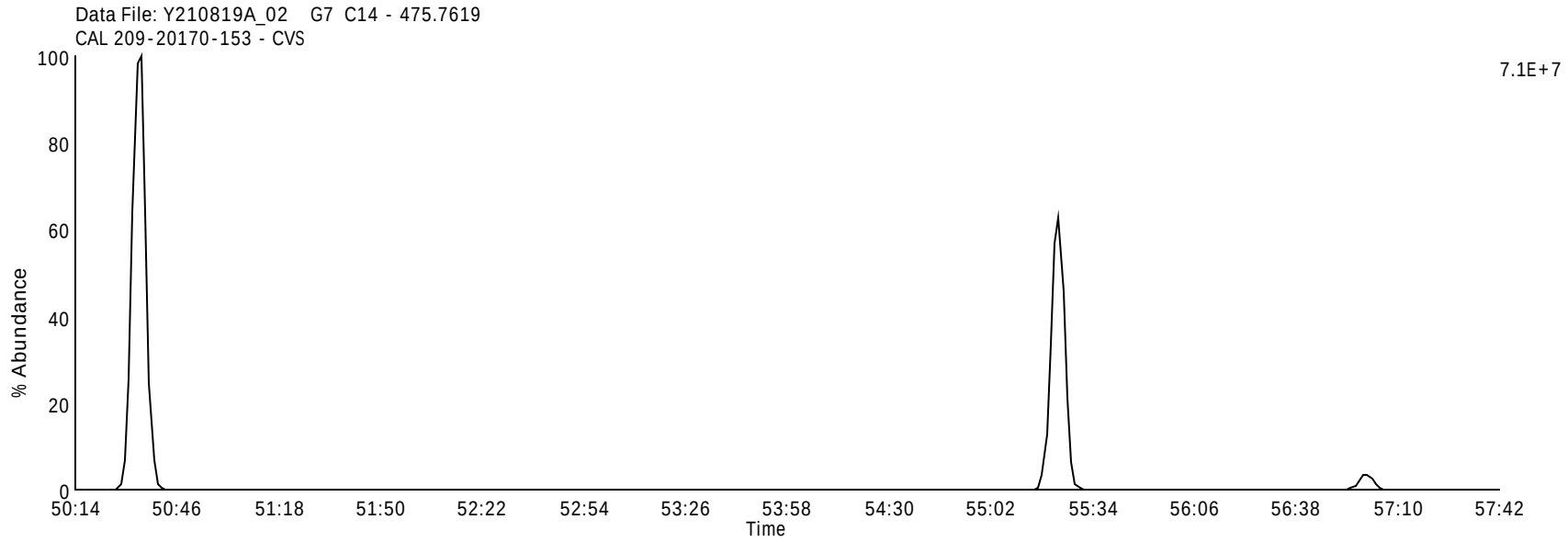
CAL 209-20170-153 - CVS



Labeled Nona Chlorinated Biphenyls

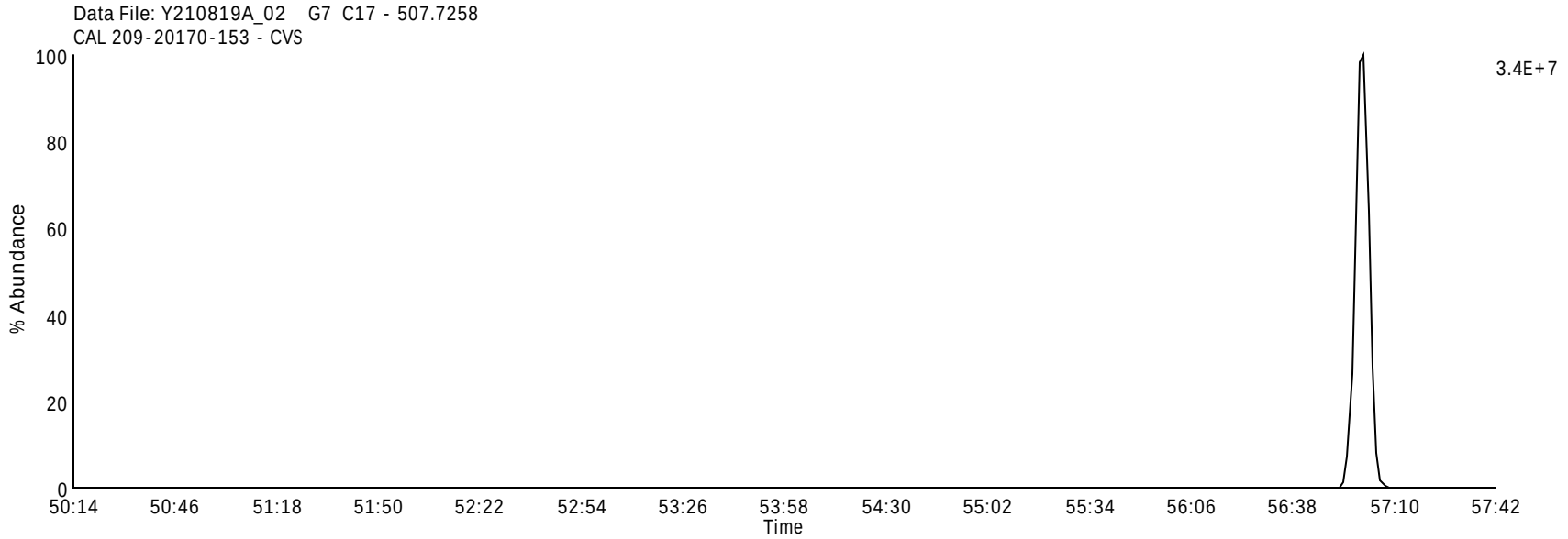
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

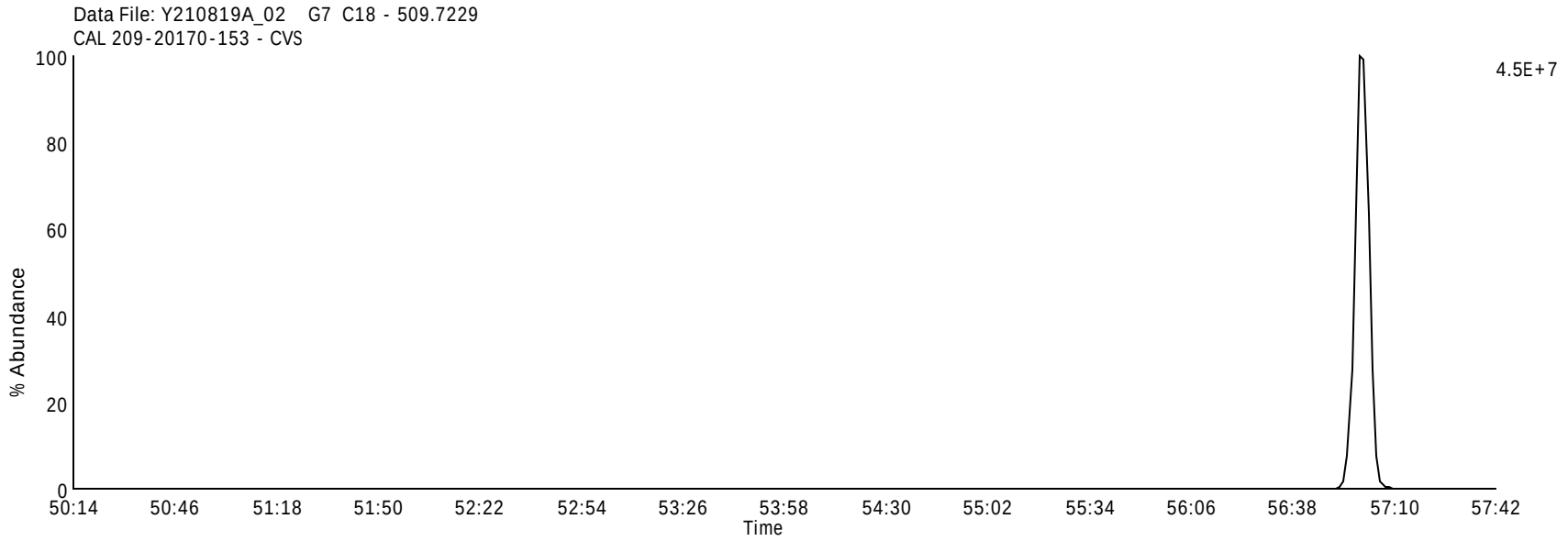




Labeled Deca Chlorinated Biphenyl

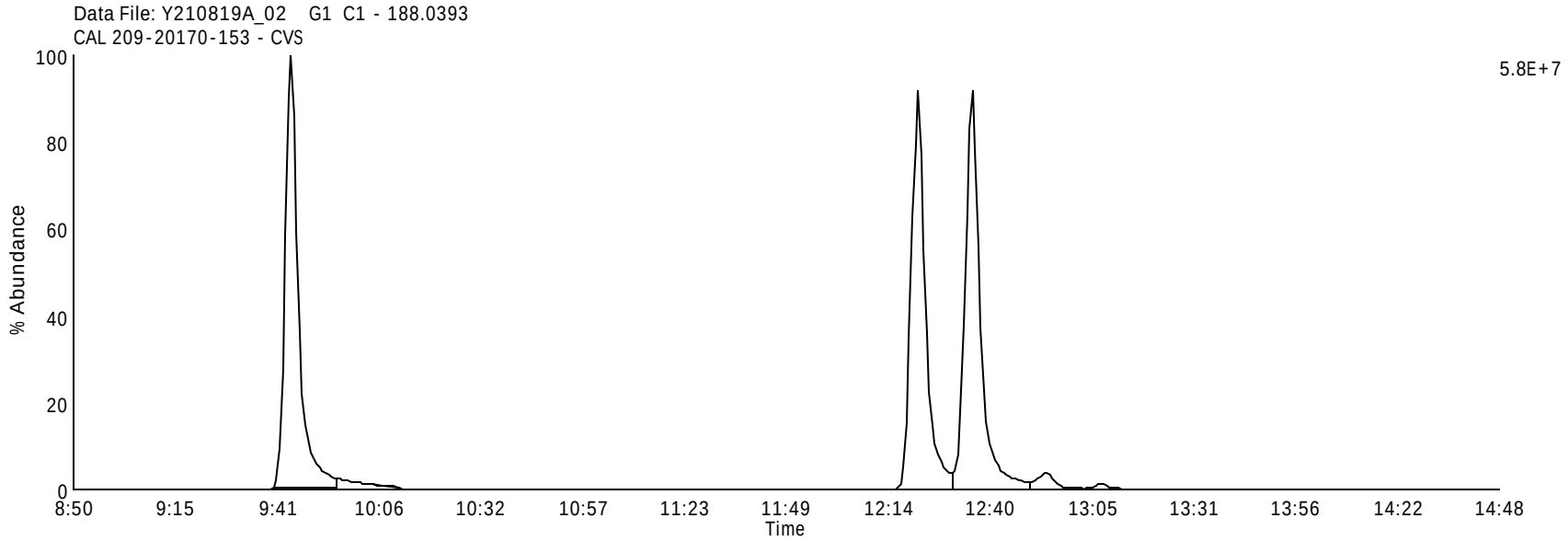
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

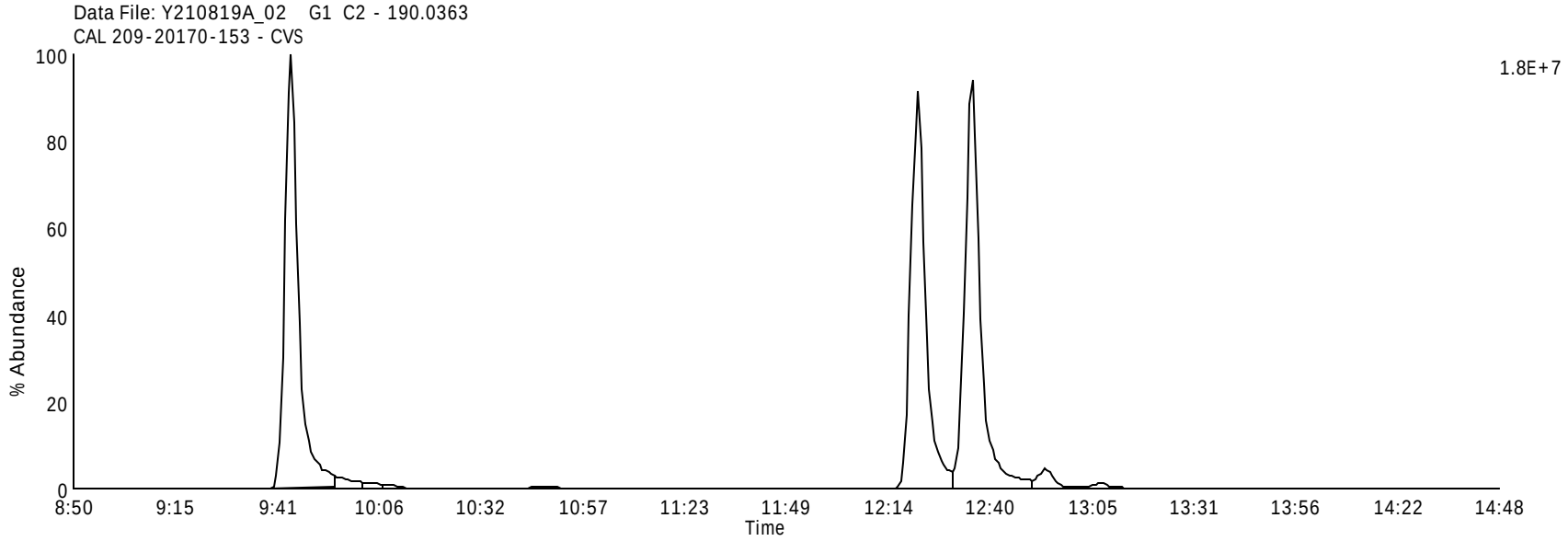




Mono Chlorinated Biphenyls

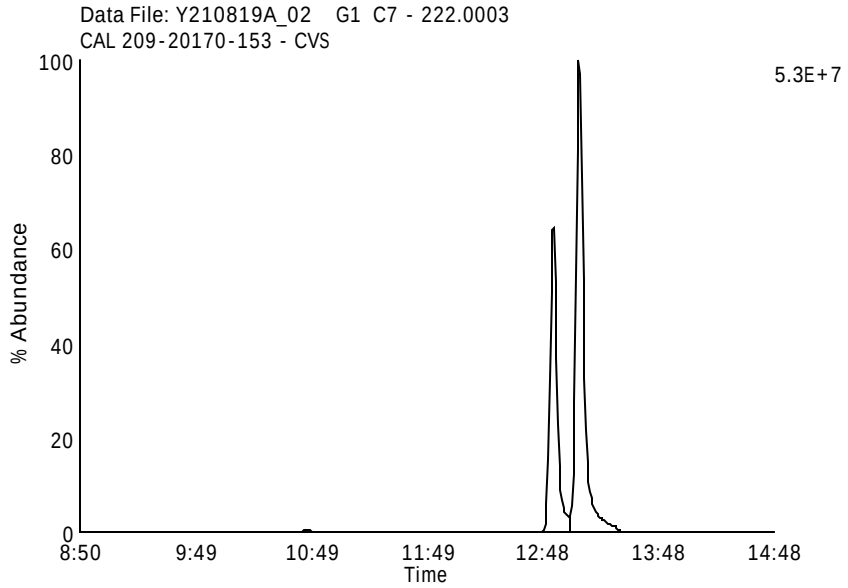
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

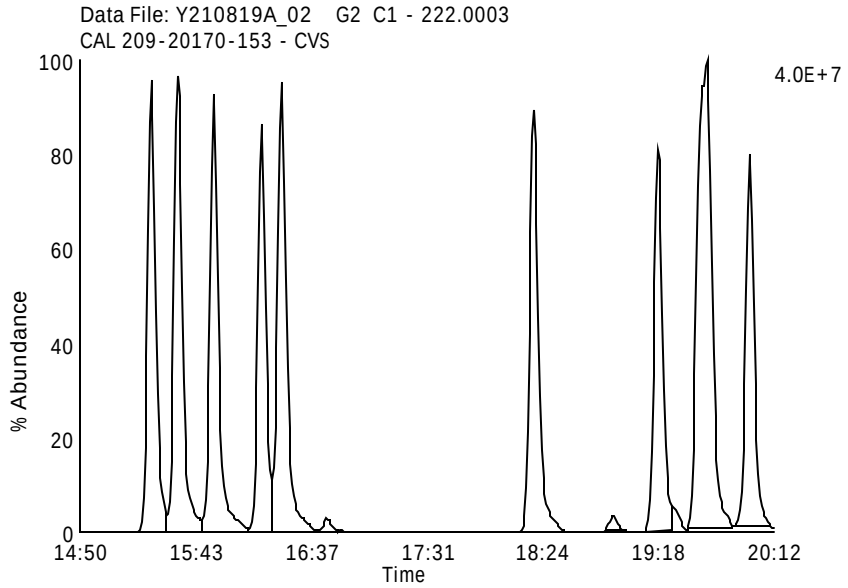


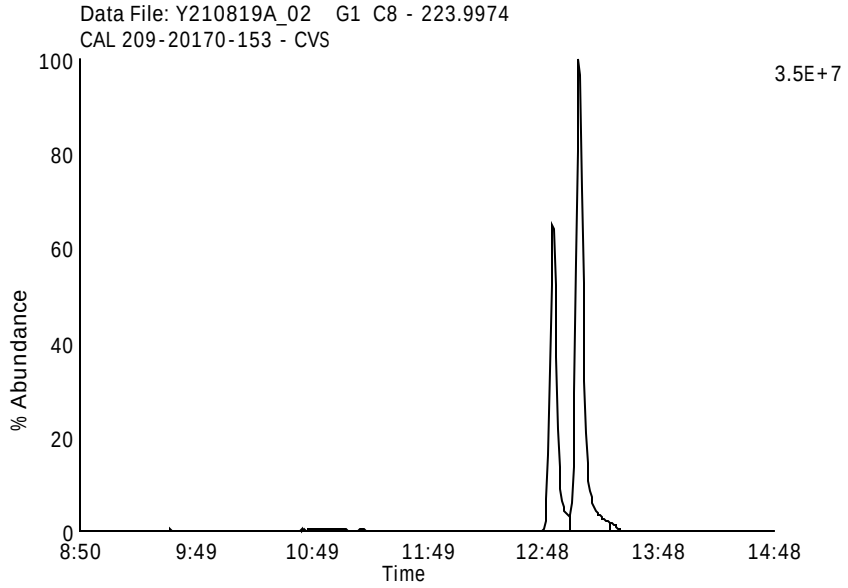


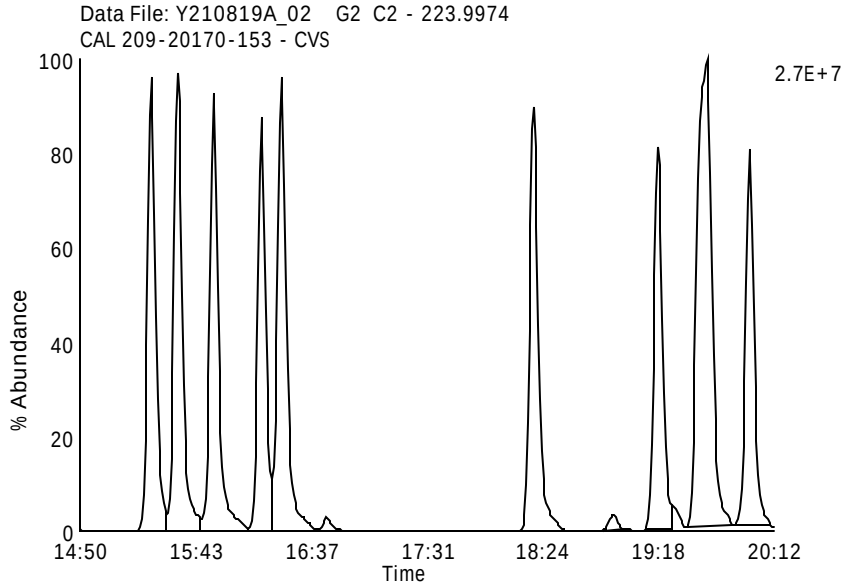
Di Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



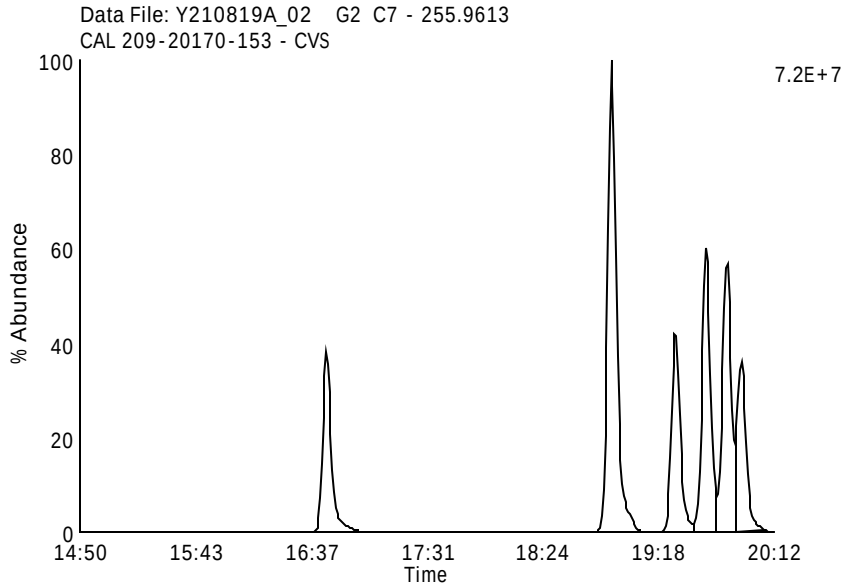


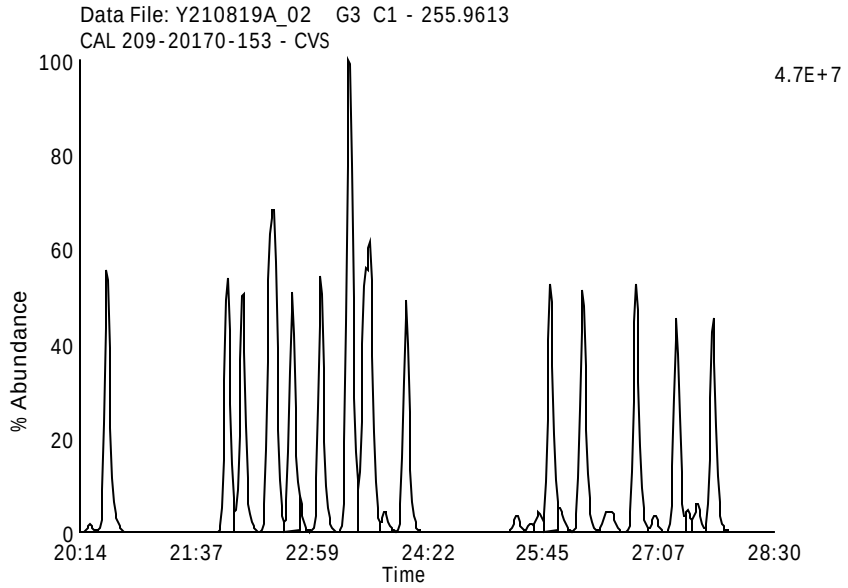


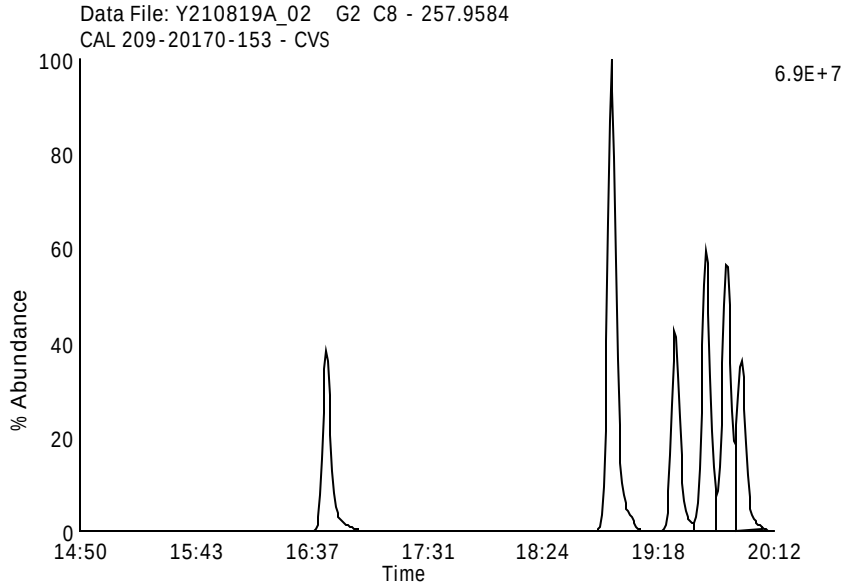


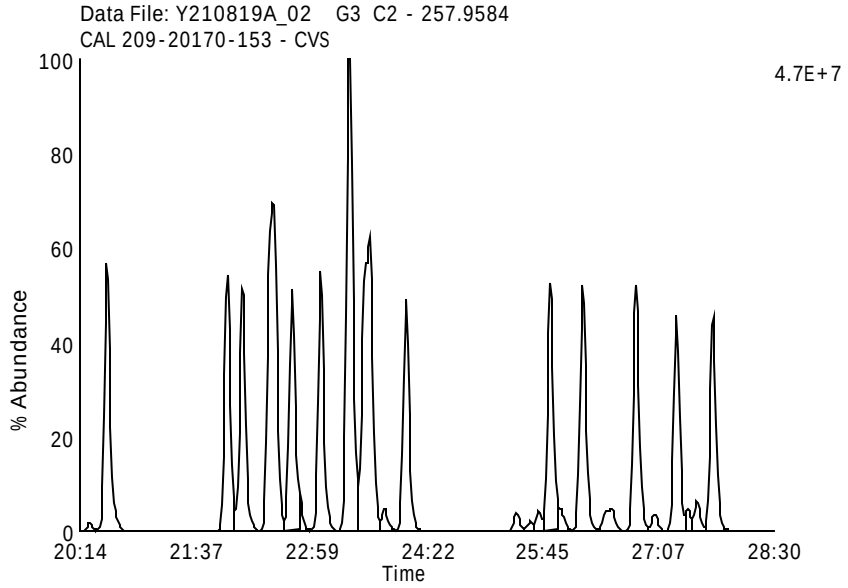
Tri Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



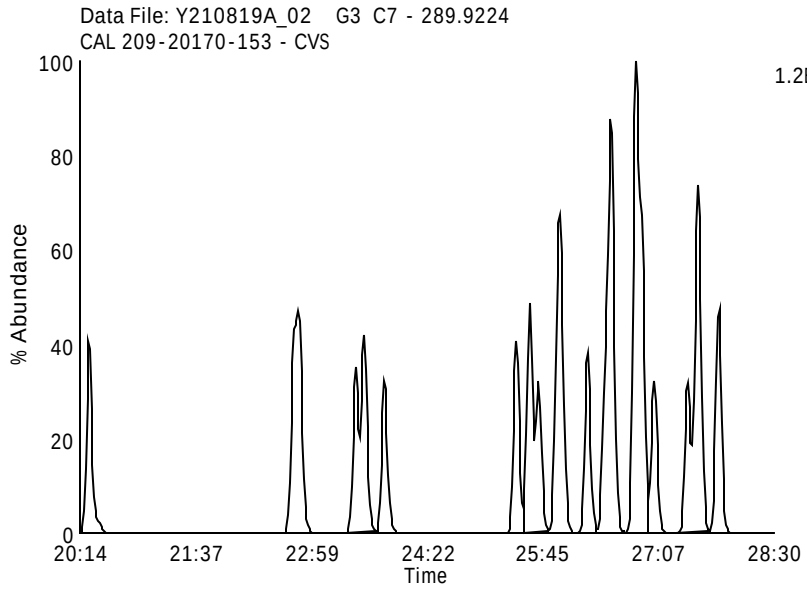


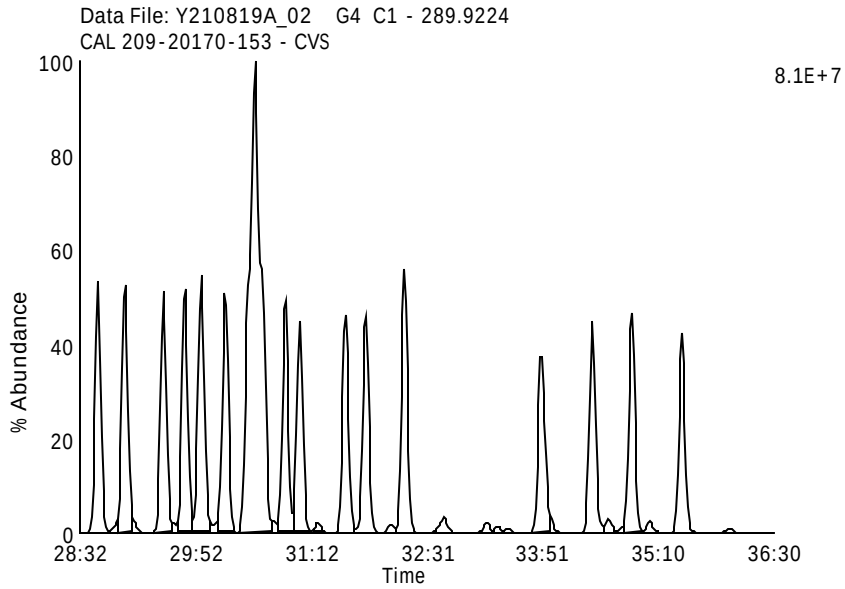


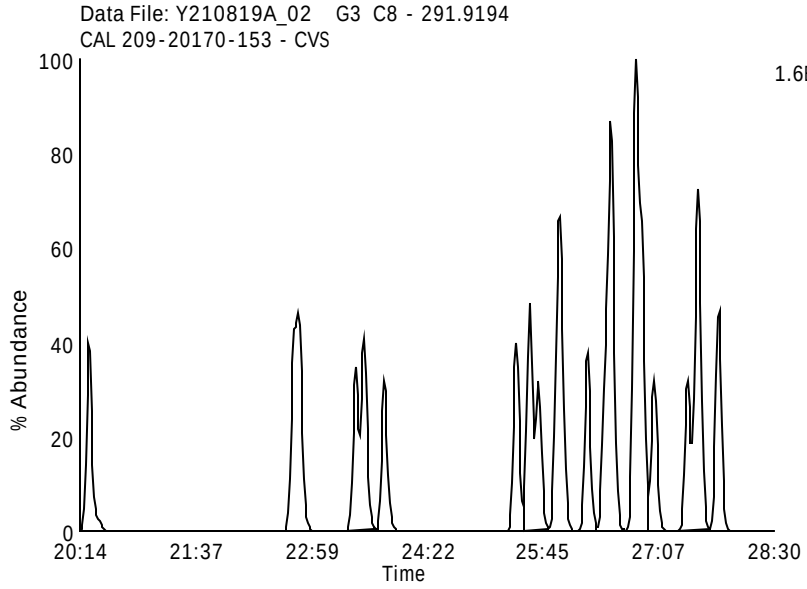


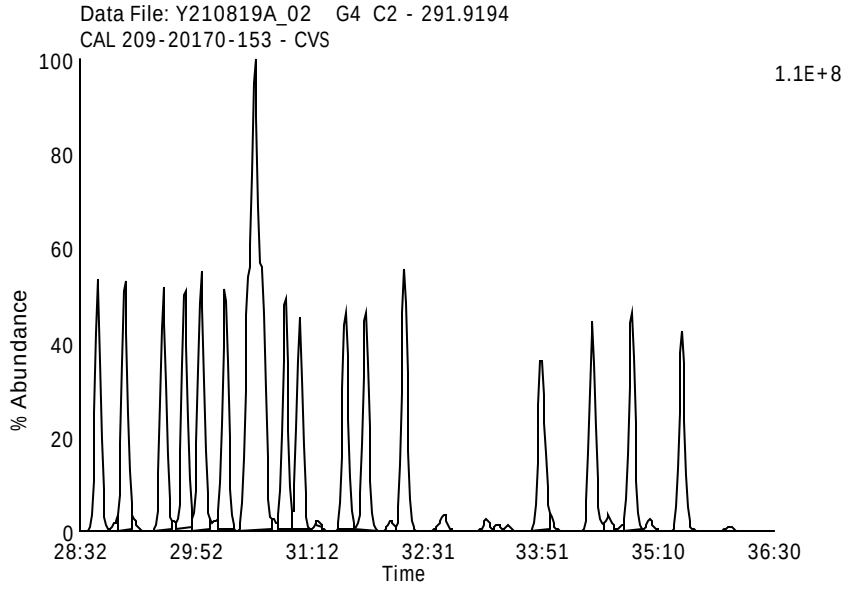
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



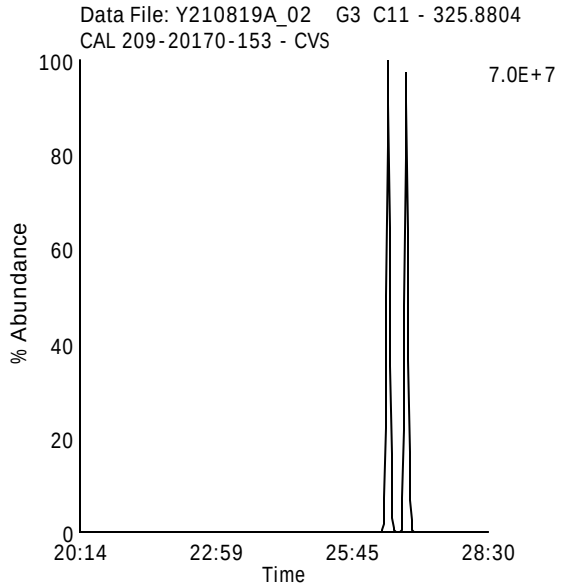


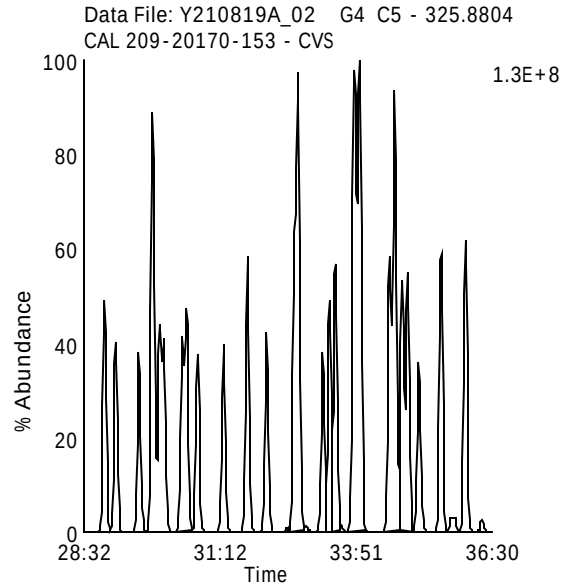


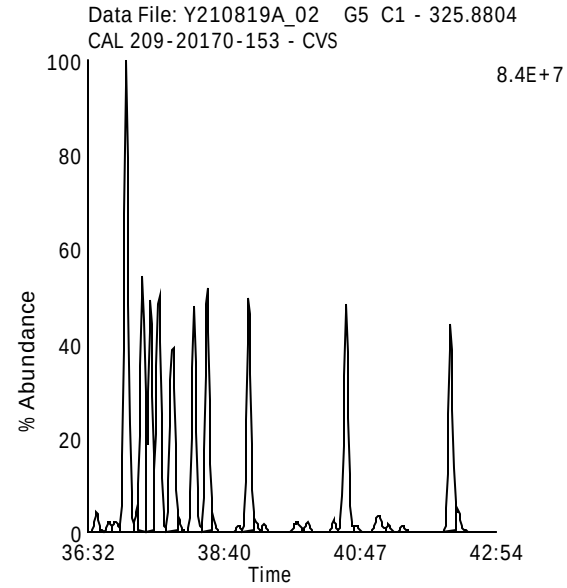


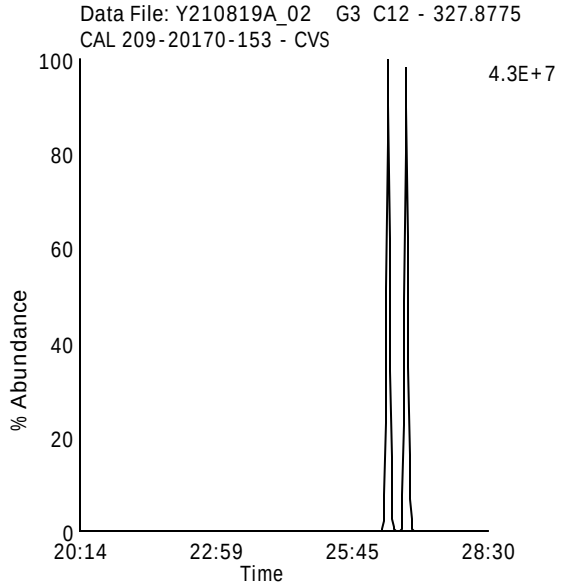
Penta Chlorinated Biphenyls

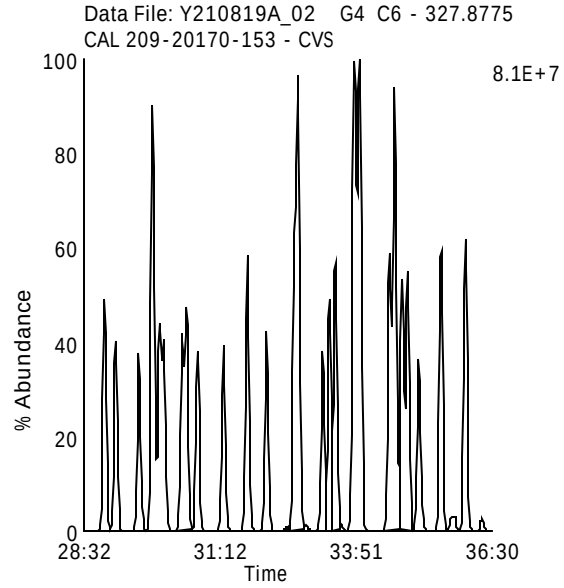
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

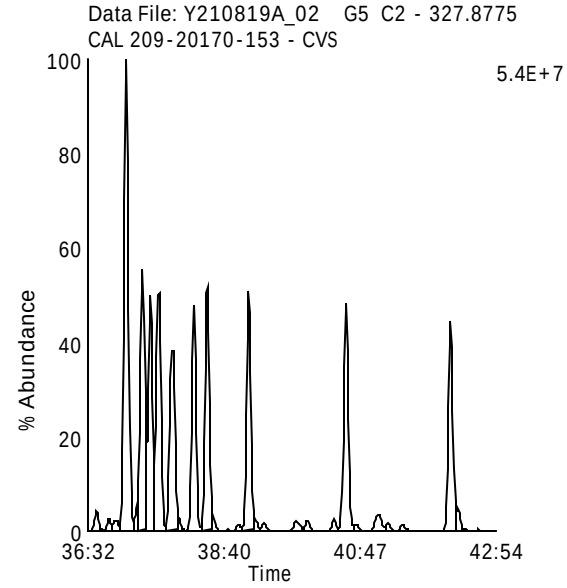






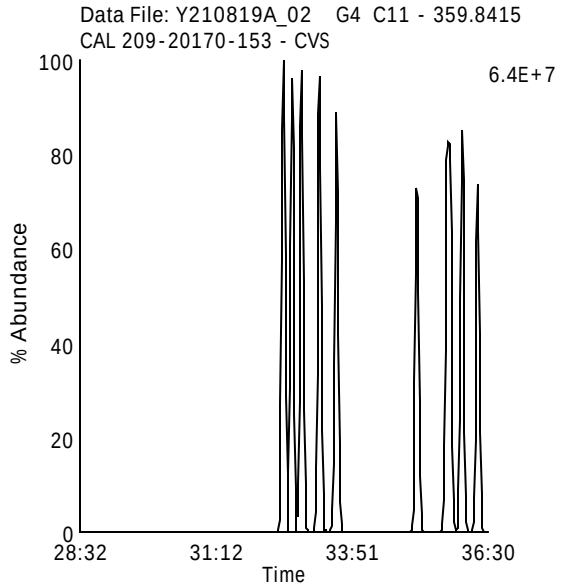


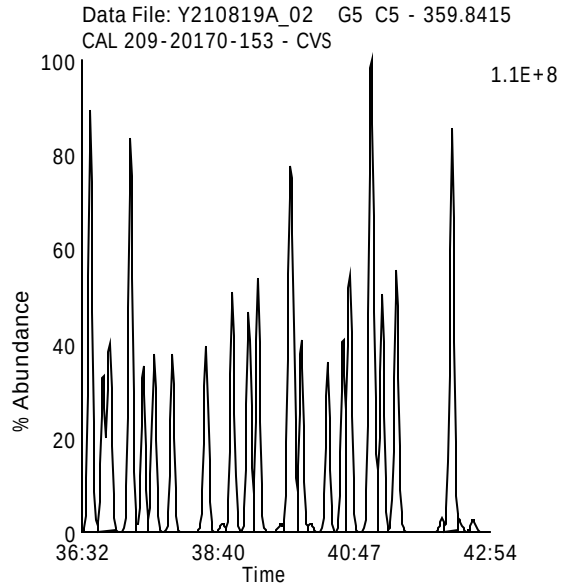


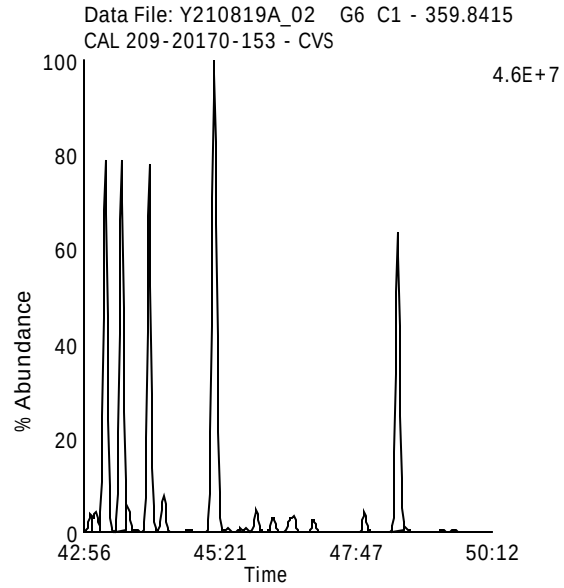


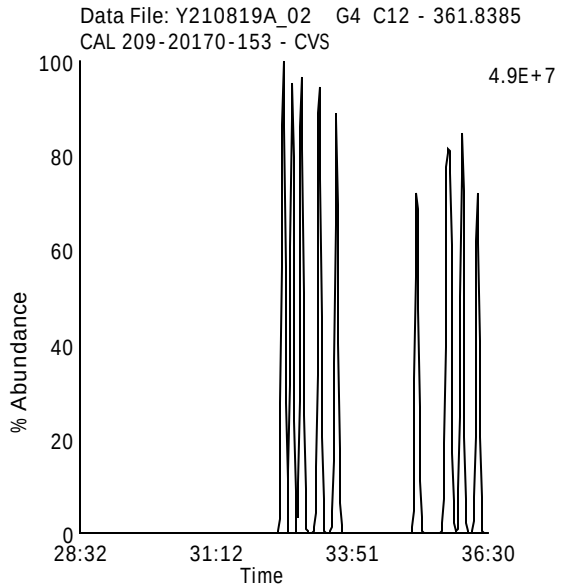
Hexa Chlorinated Biphenyls

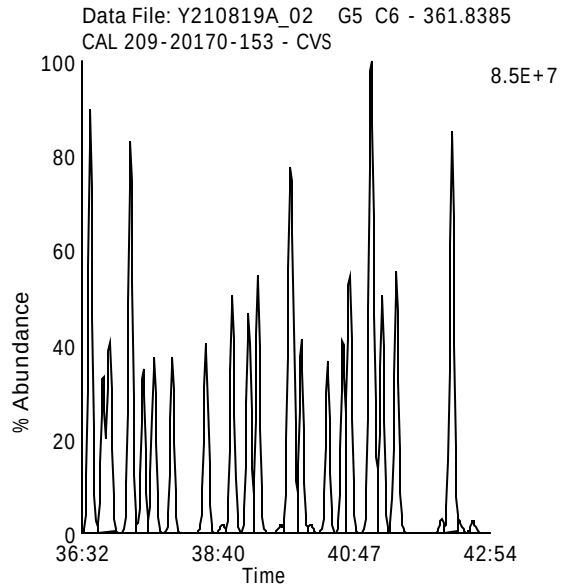
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

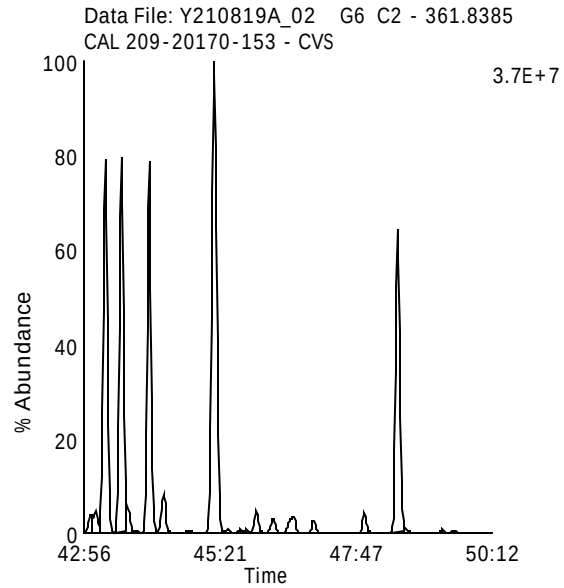






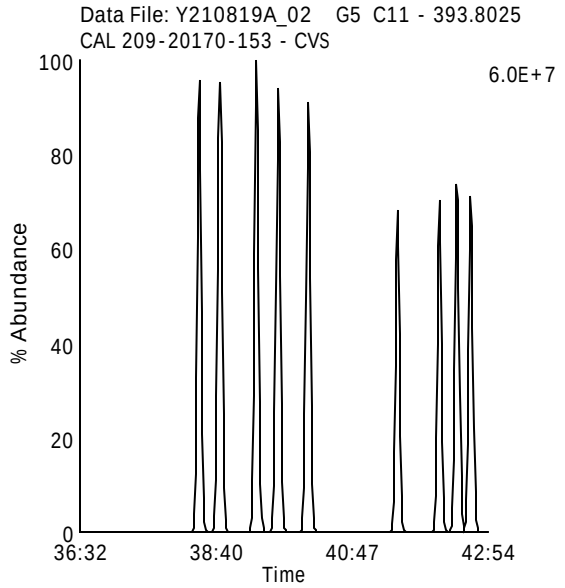


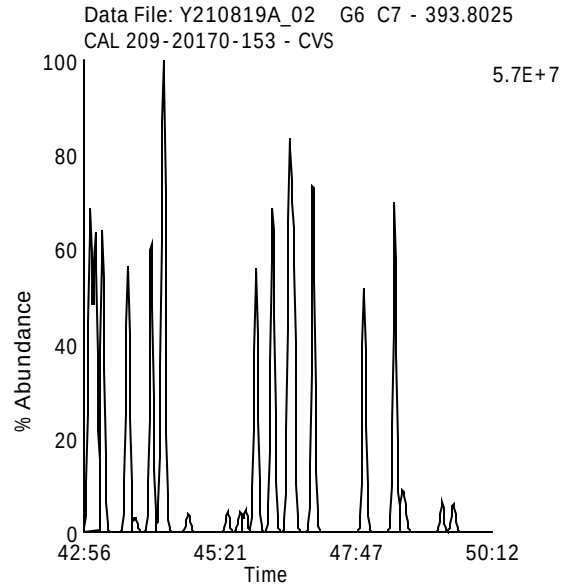


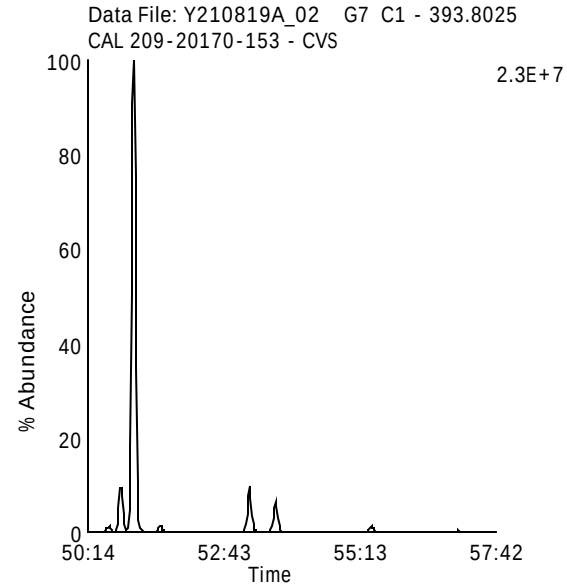


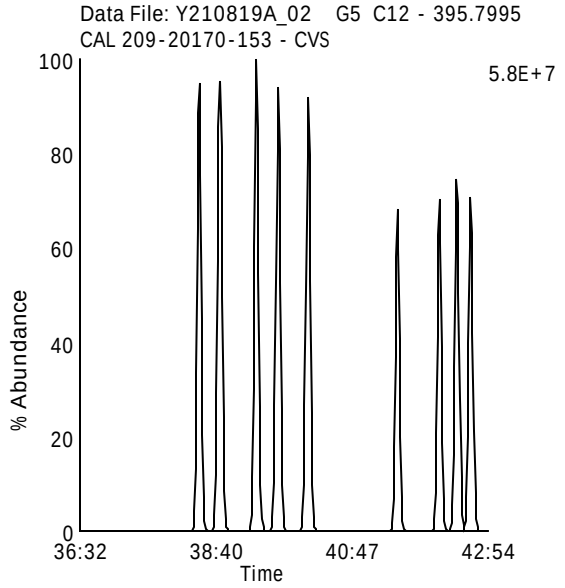
Hepta Chlorinated Biphenyls

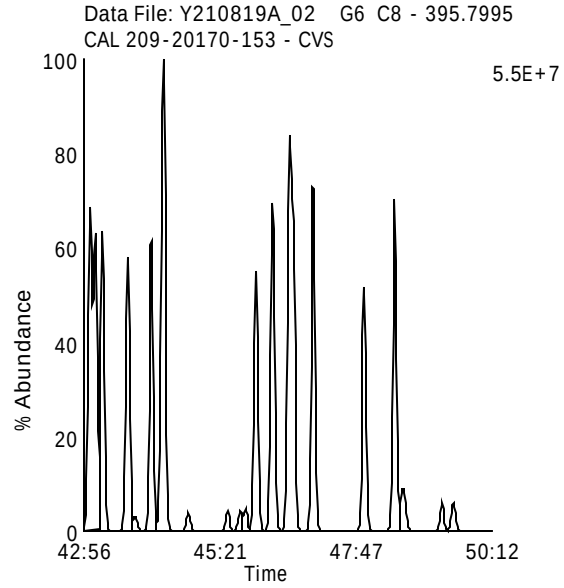
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

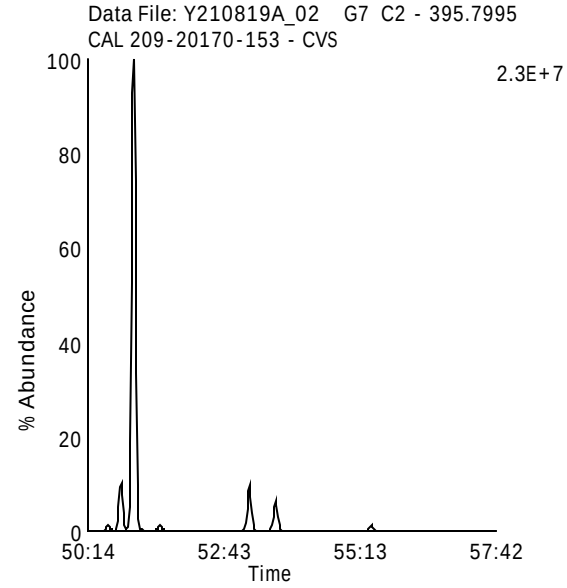






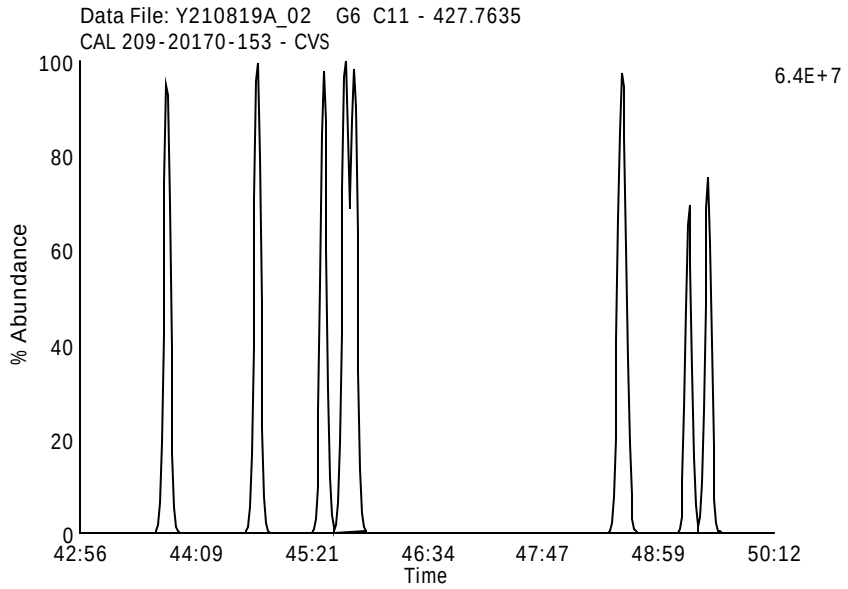


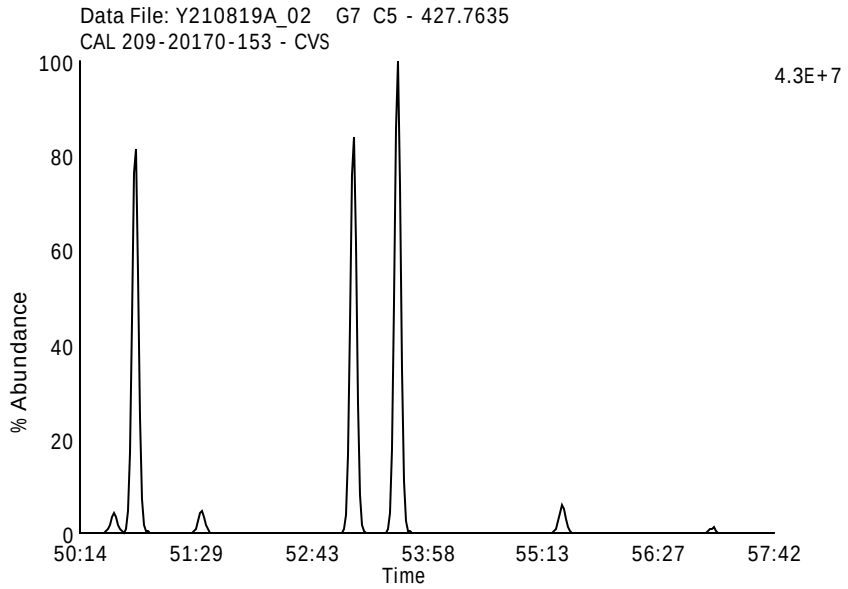


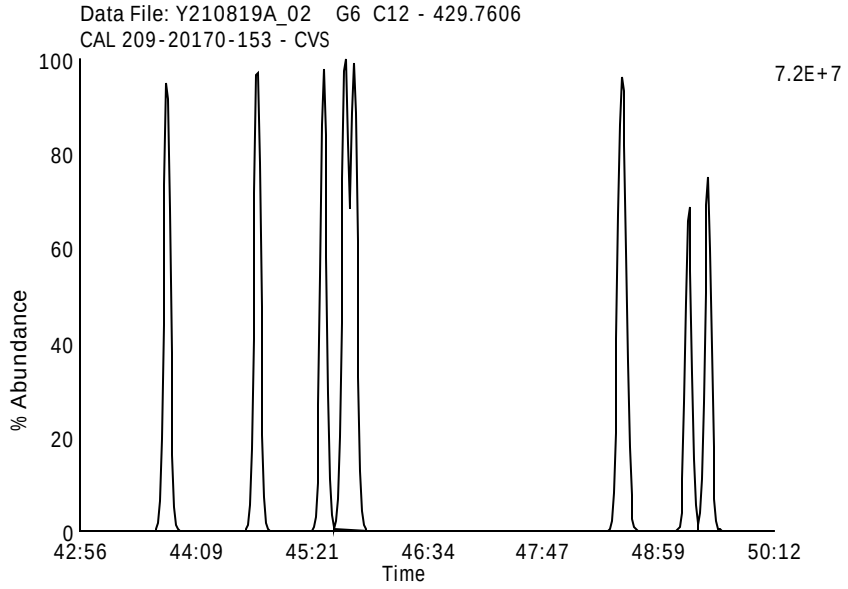


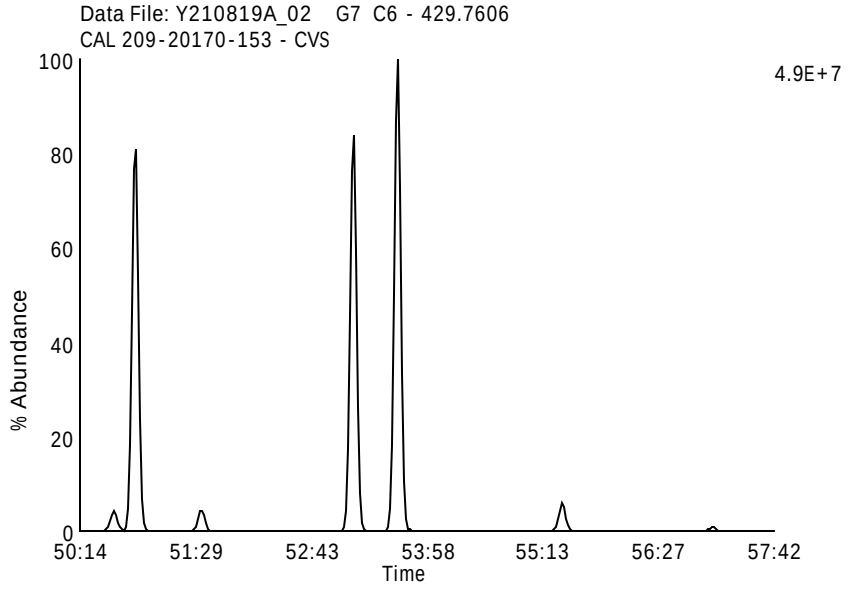
Octa Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



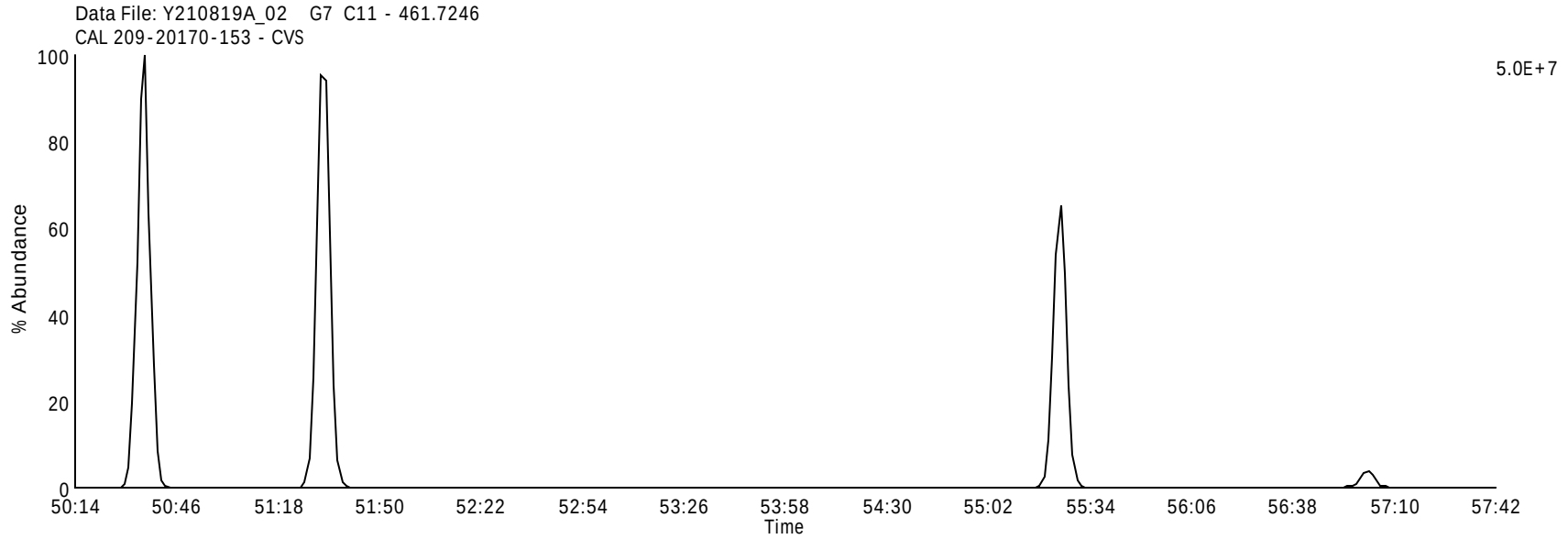


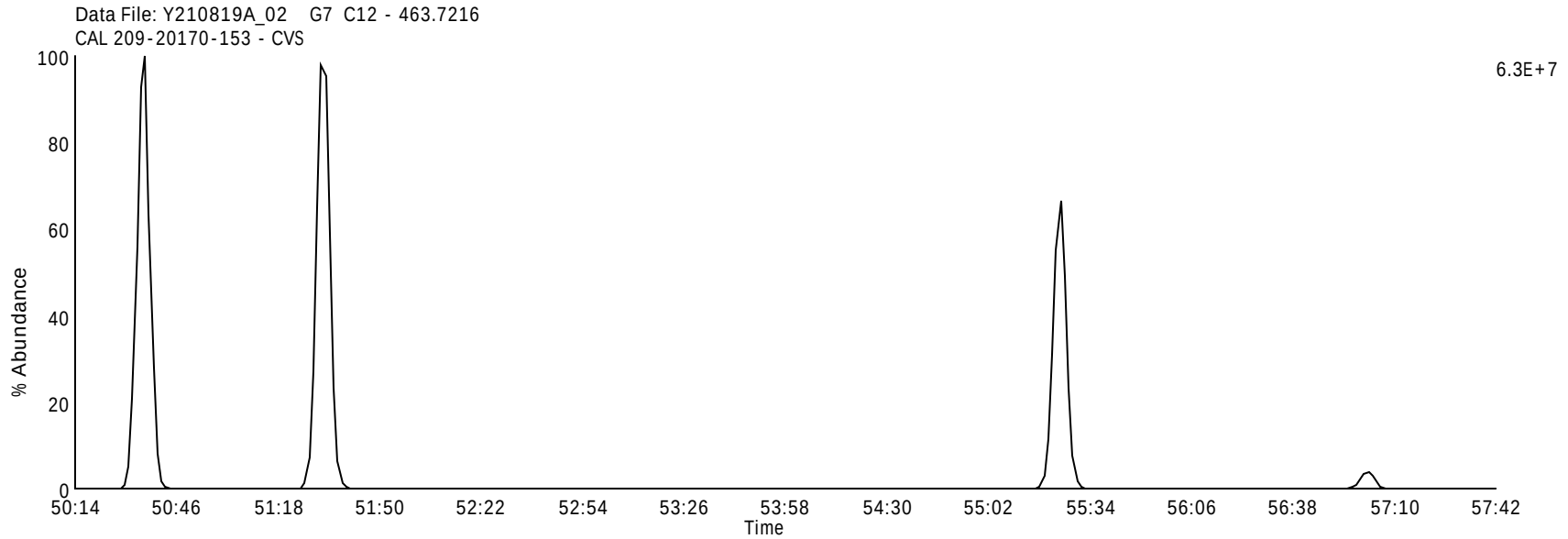




Nona Chlorinated Biphenyls

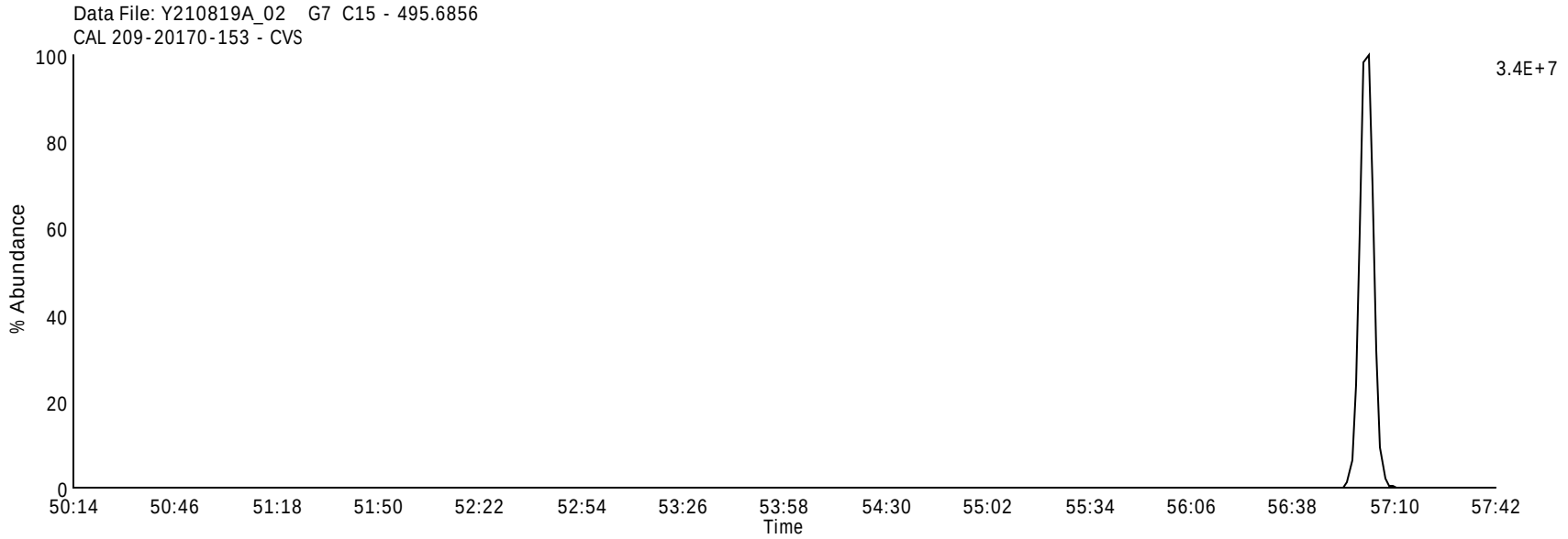
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

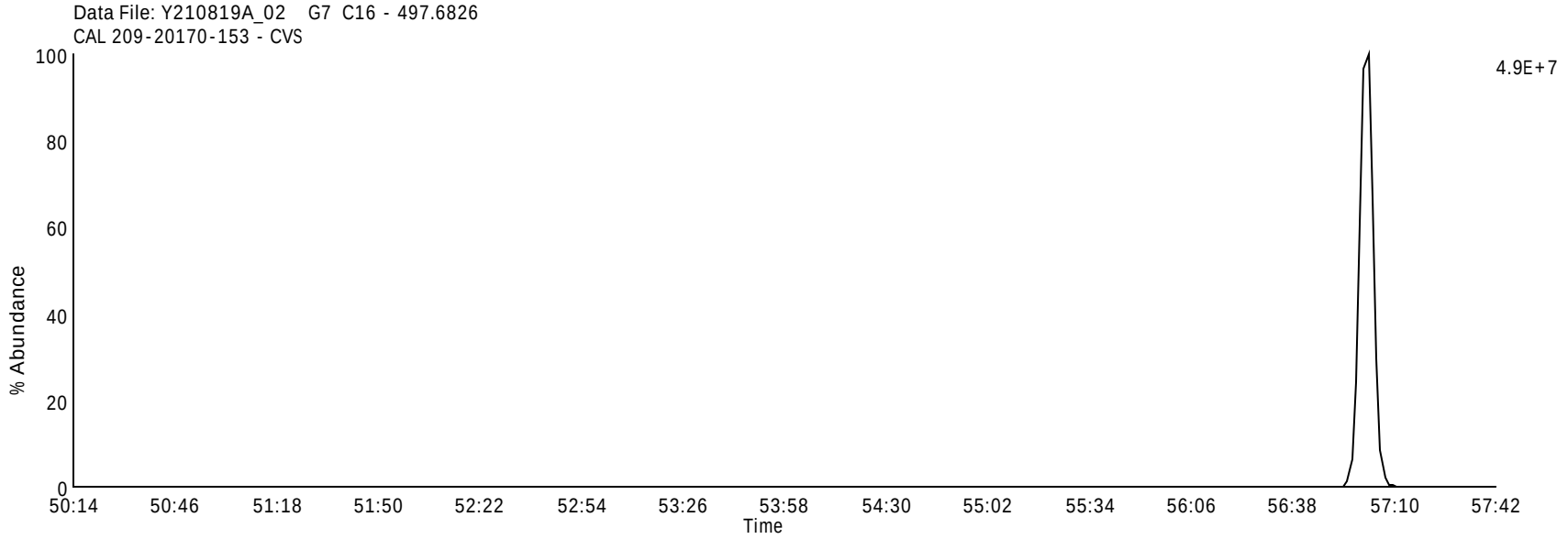




Deca Chlorinated Biphenyl

Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

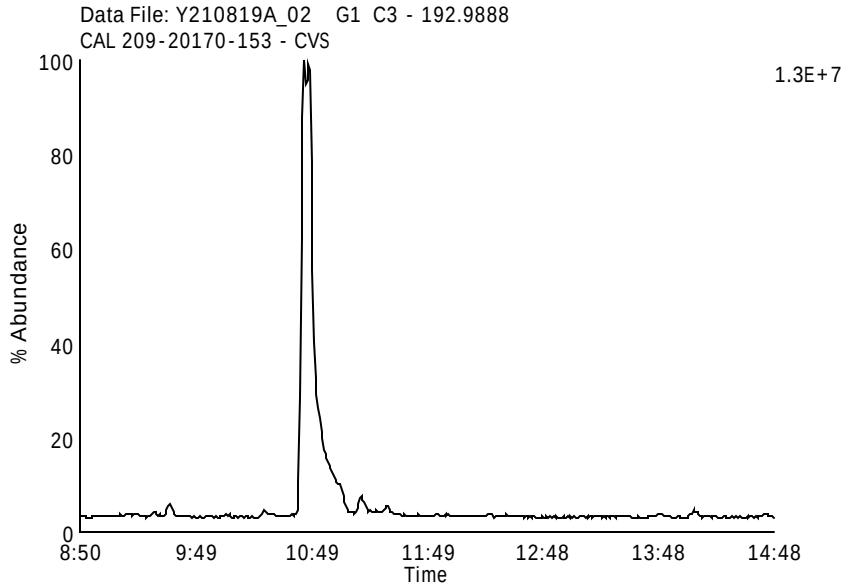


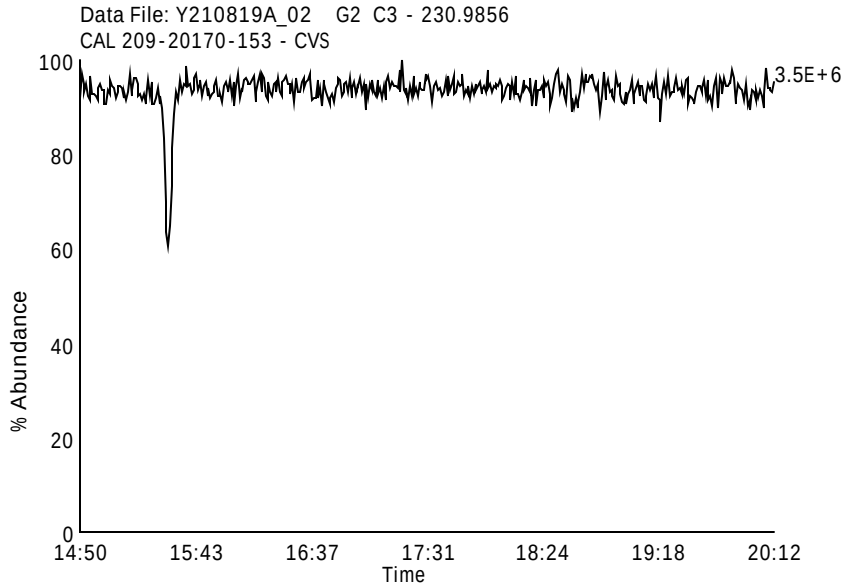


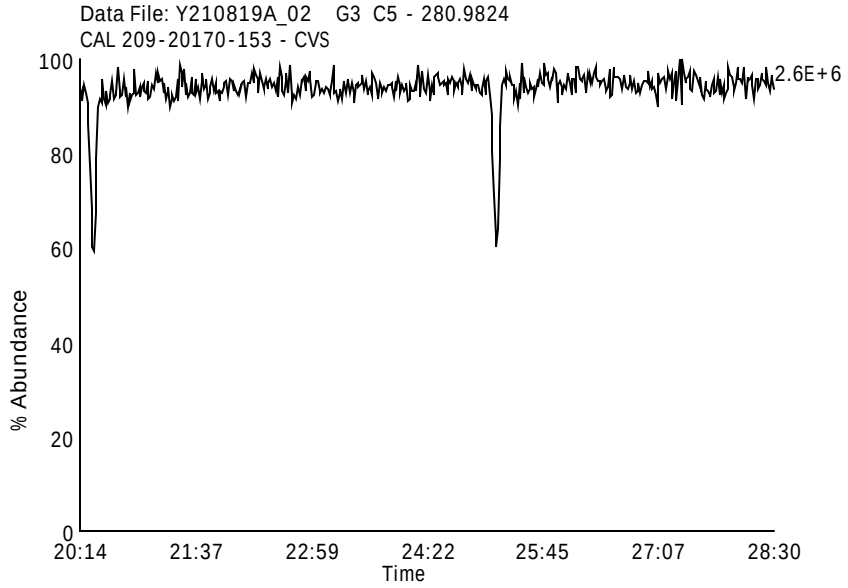
Group 1 - 4 Lock mass

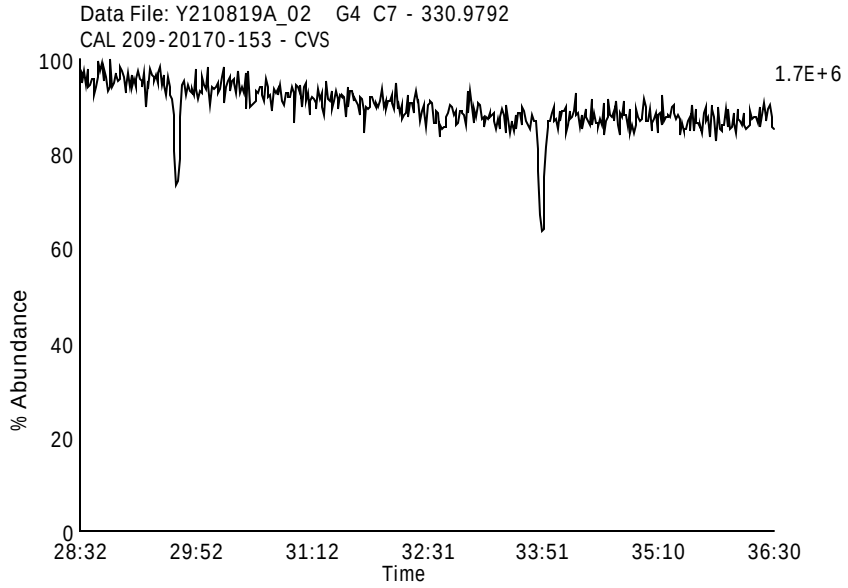
Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix





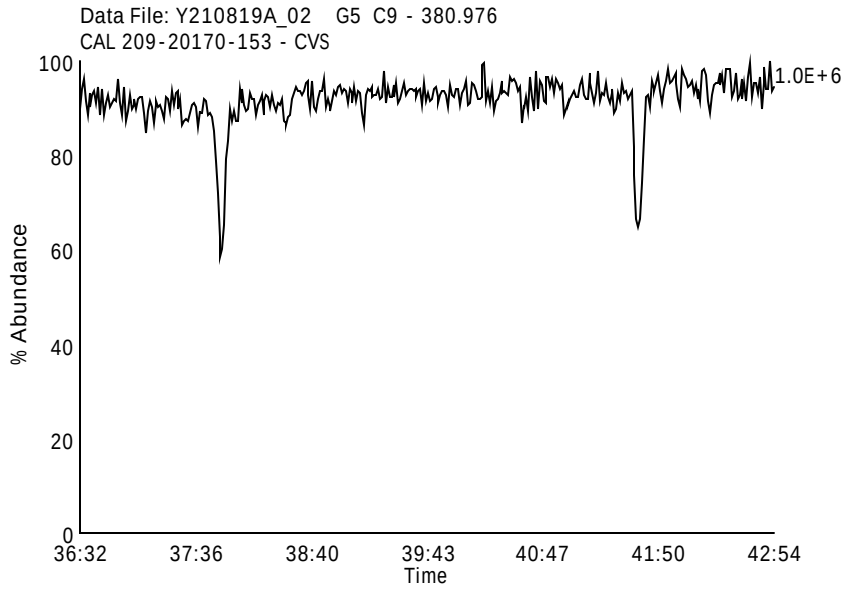


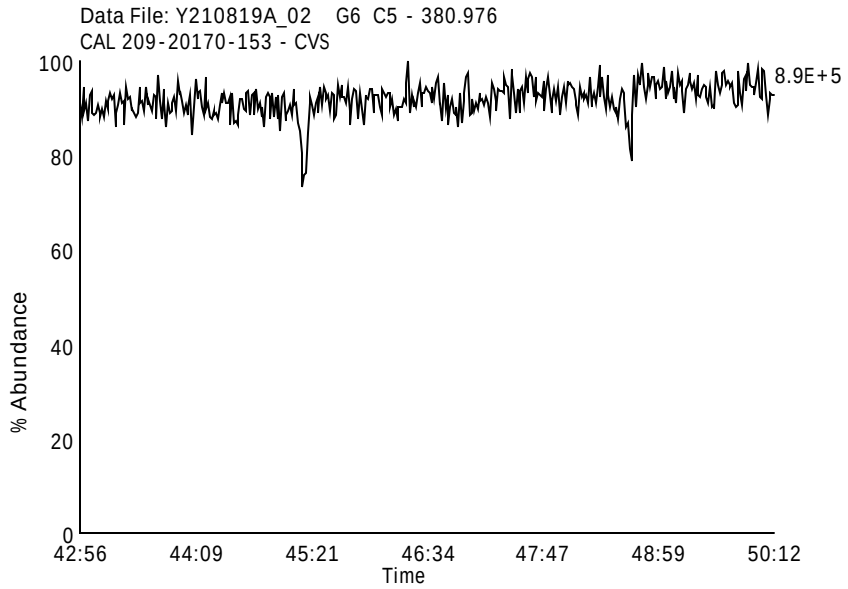


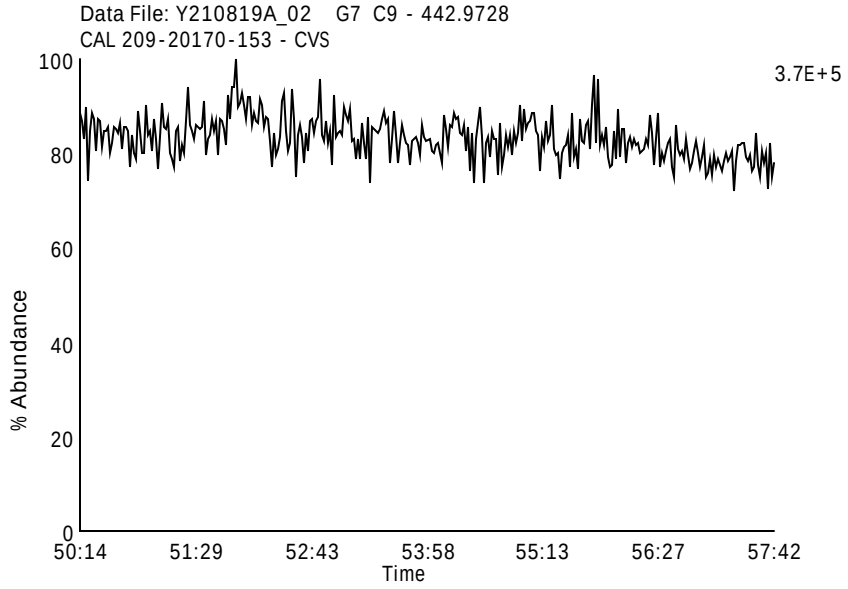
Group 5 - 7 Lock mass

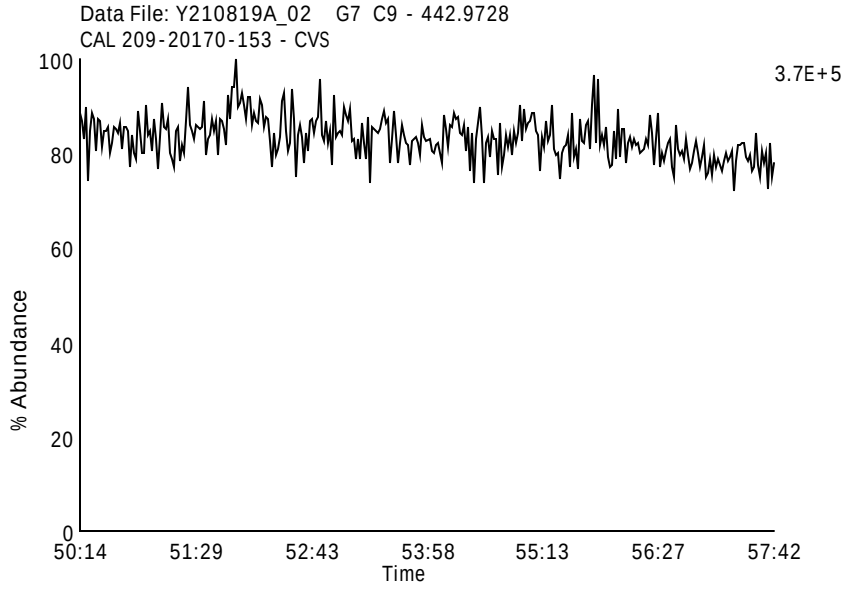
Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix







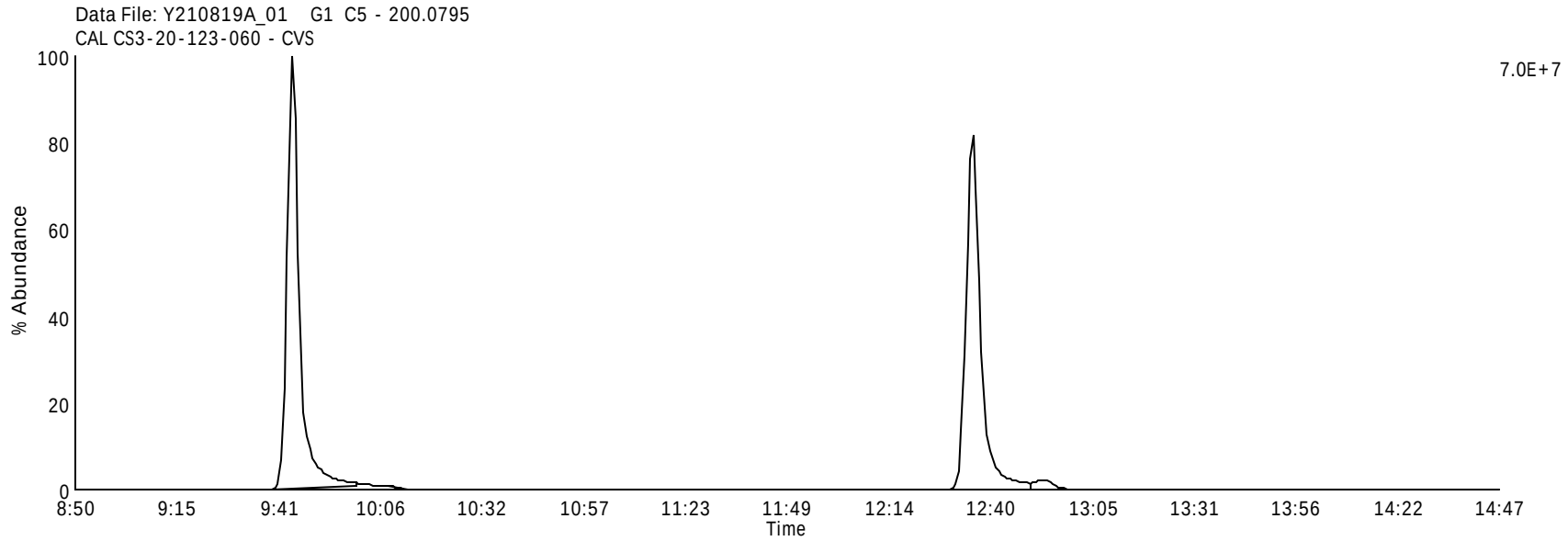


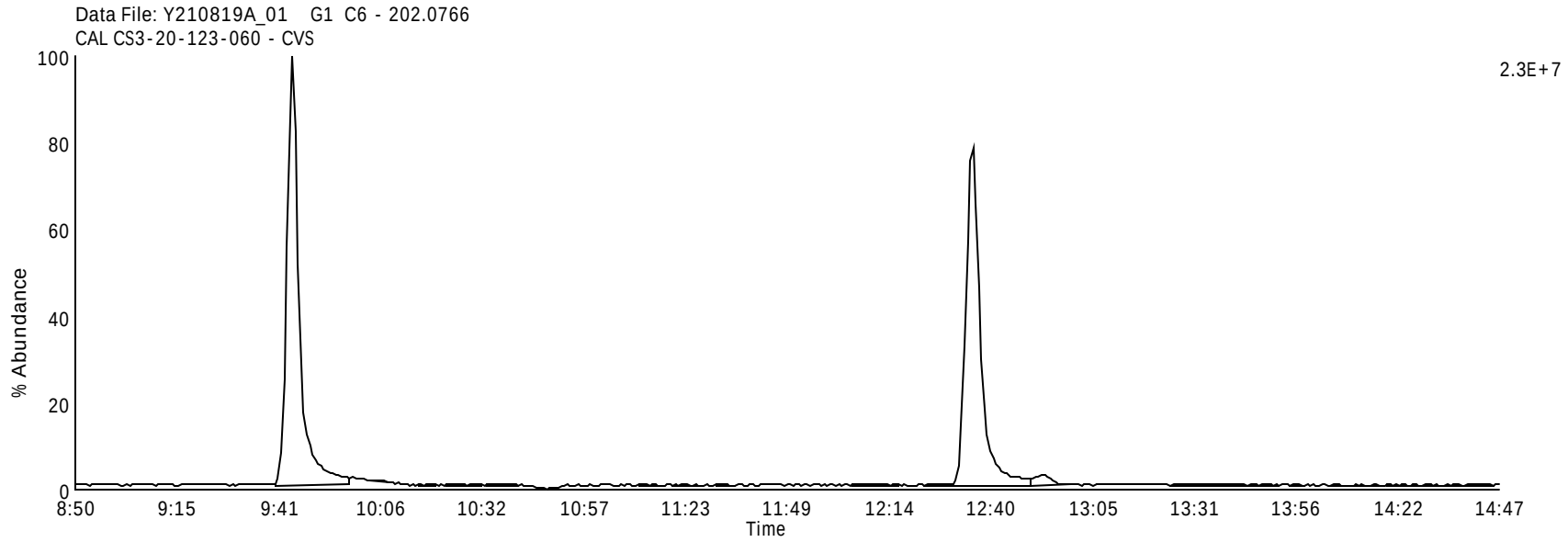
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

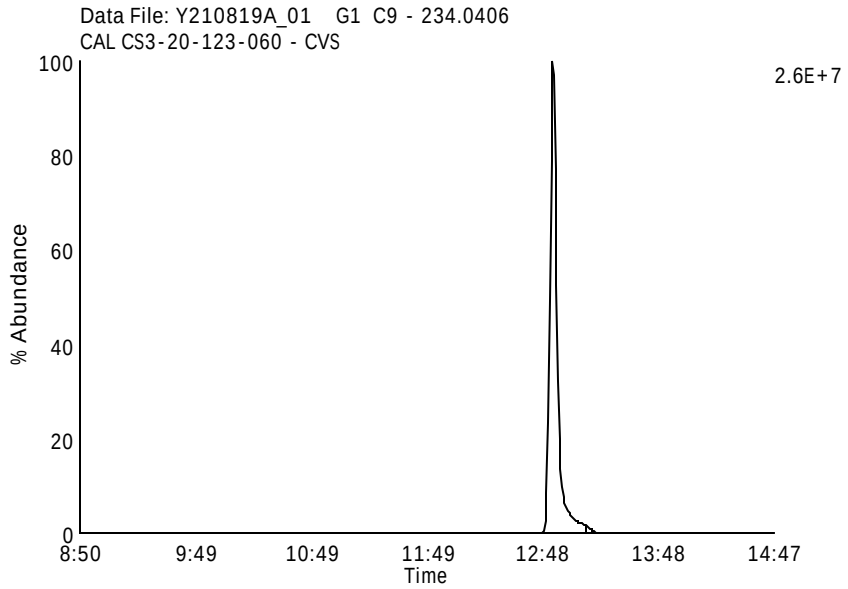
Sample Description: CAL CS3-20-123-060 - CVS

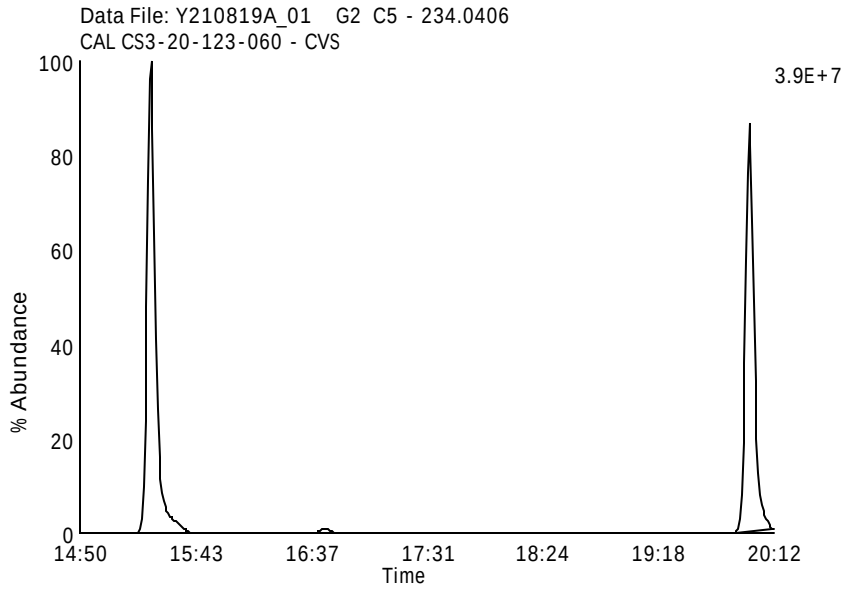


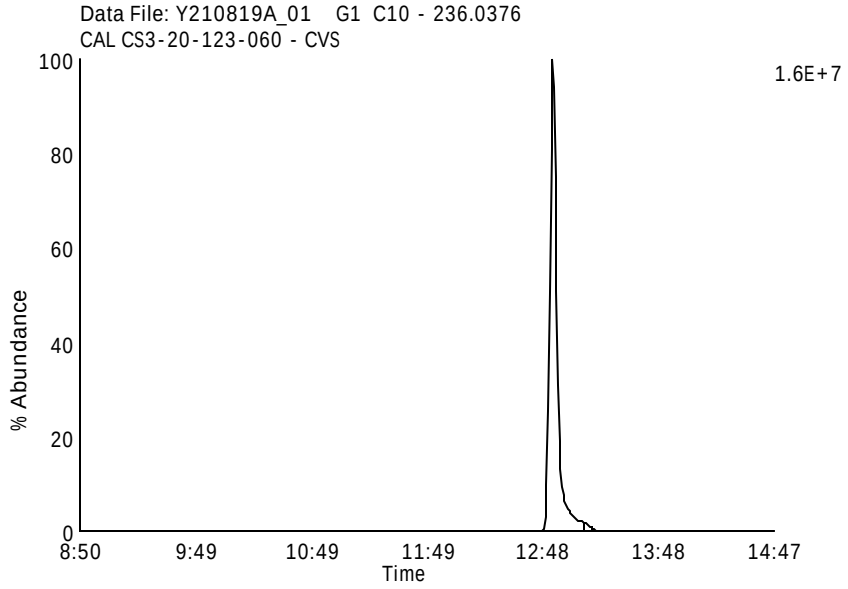


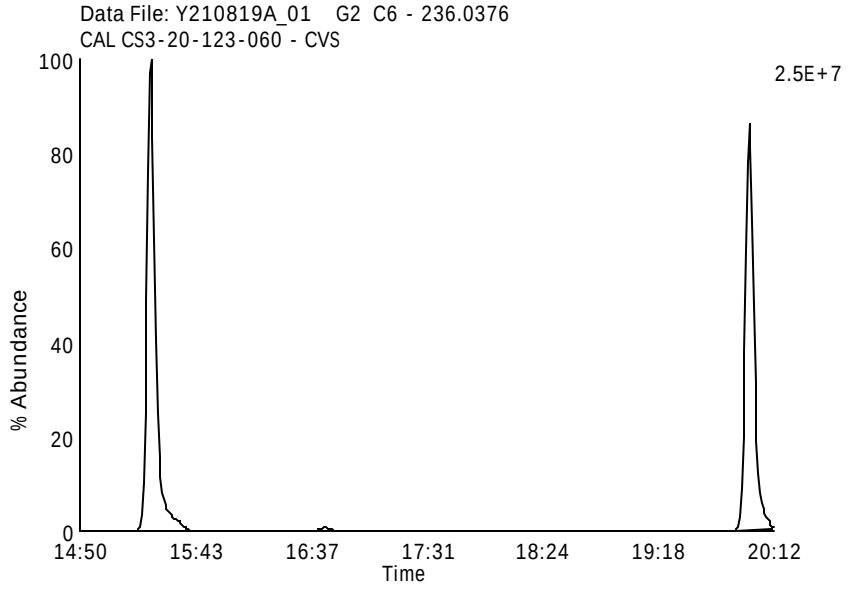
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





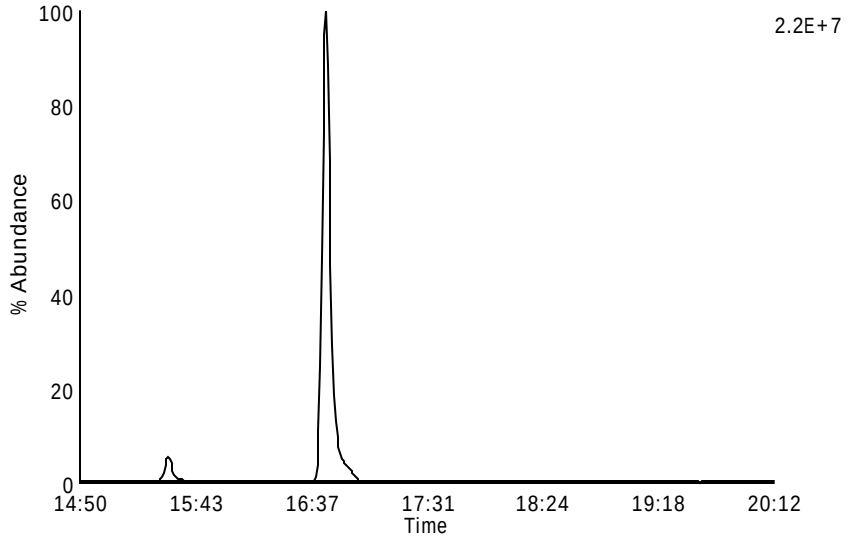




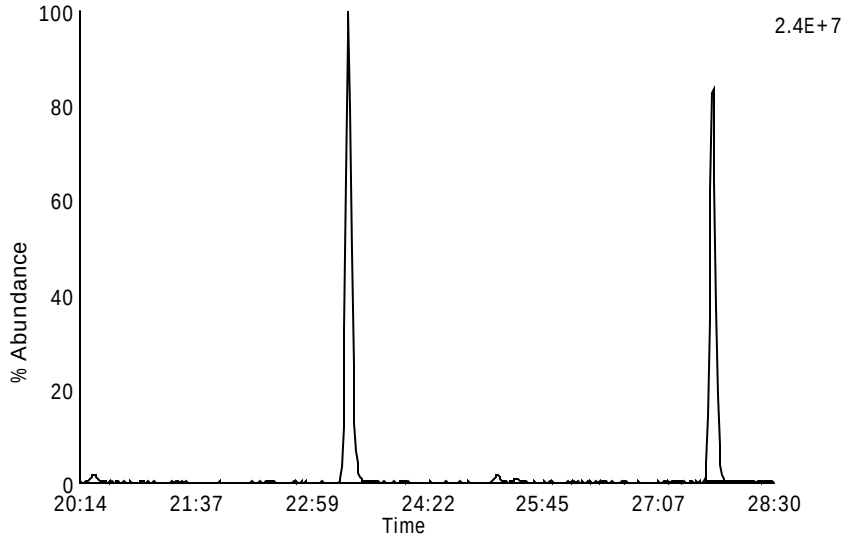
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

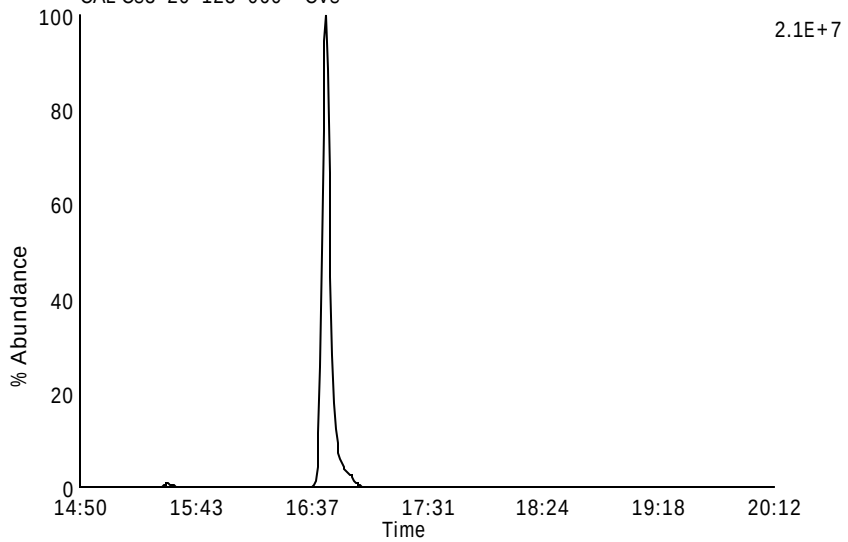
Data File: Y210819A_01 G2 C9 - 268.0016
CAL CS3-20-123-060 - CVS



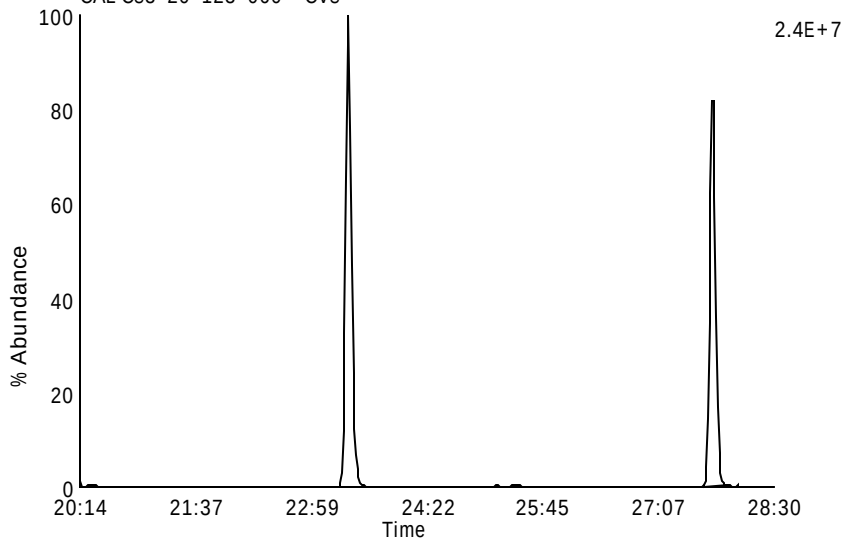
Data File: Y210819A_01 G3 C3 - 268.0016
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G2 C10 - 269.9986
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G3 C4 - 269.9986
CAL CS3-20-123-060 - CVS

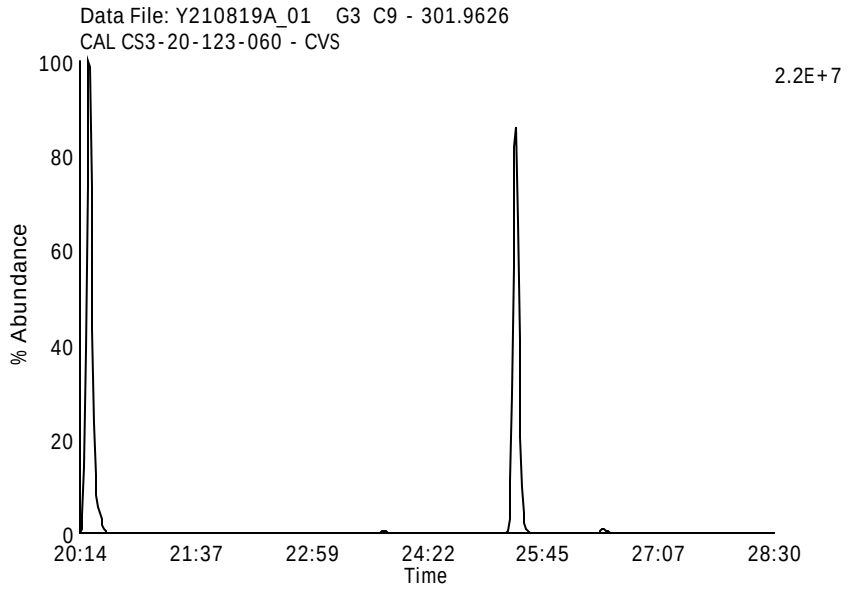


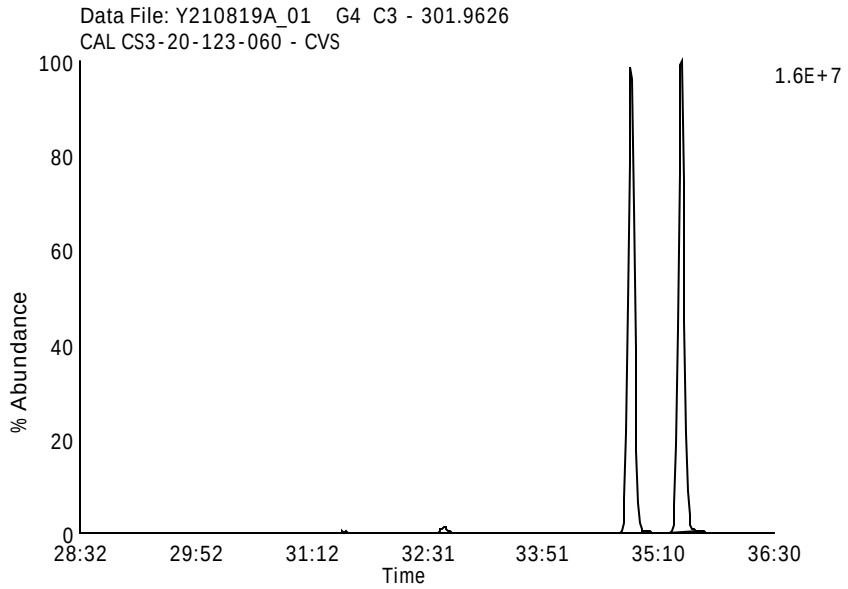
Labeled Tetra Chlorinated Biphenyls

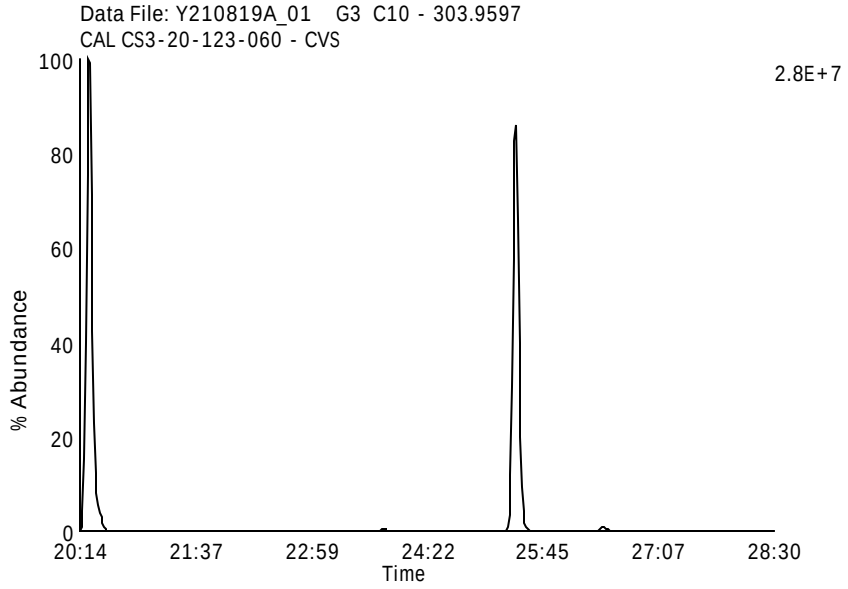
Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

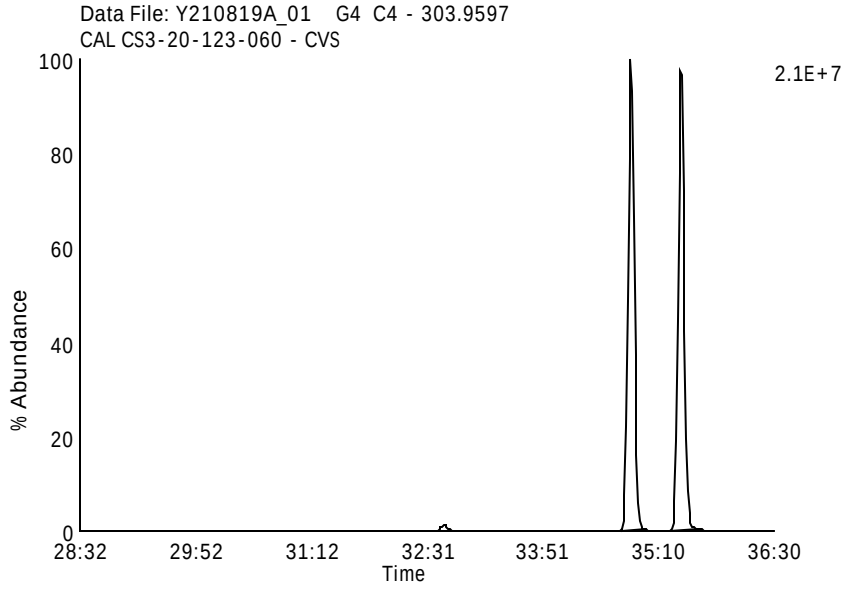
Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS









Labeled Penta Chlorinated Biphenyls

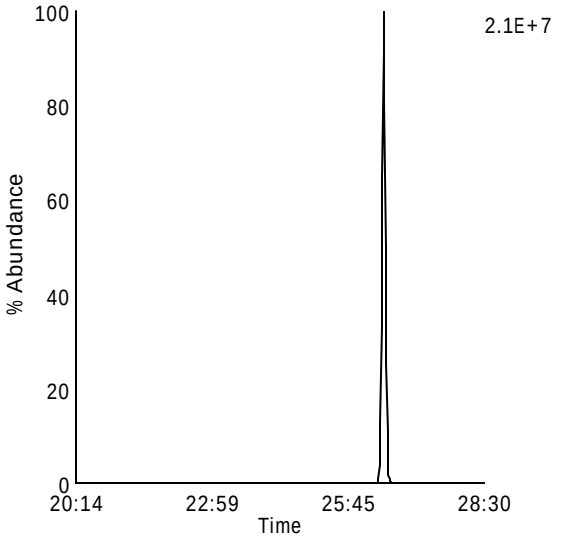
Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS

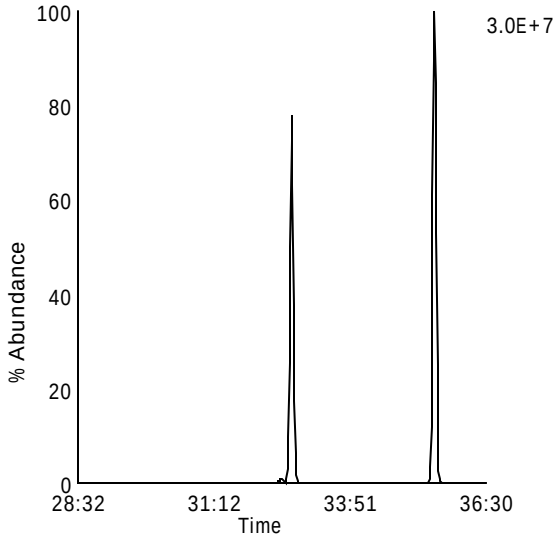
Data File: Y210819A_01 G3 C13 - 337.9207

CAL CS3-20-123-060 - CVS



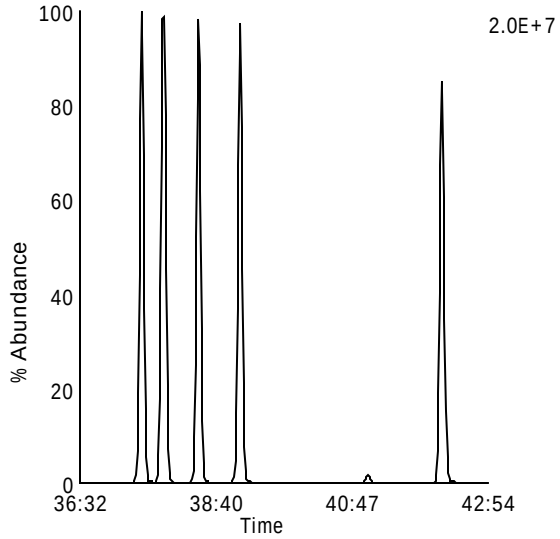
Data File: Y210819A_01 G4 C9 - 337.9207

CAL CS3-20-123-060 - CVS



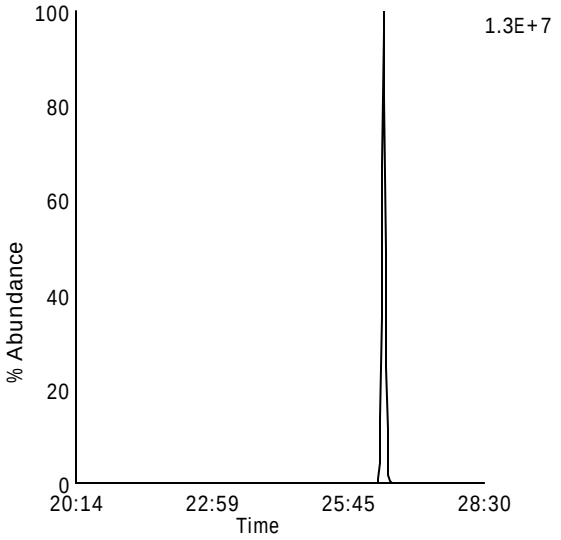
Data File: Y210819A_01 G5 C3 - 337.9207

CAL CS3-20-123-060 - CVS



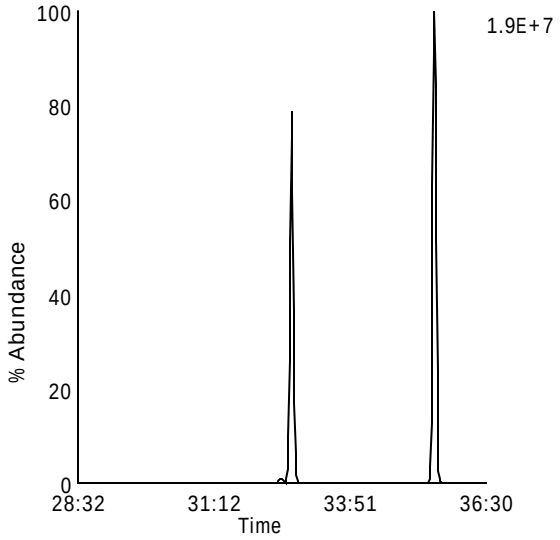
Data File: Y210819A_01 G3 C14 - 339.9178

CAL CS3-20-123-060 - CVS



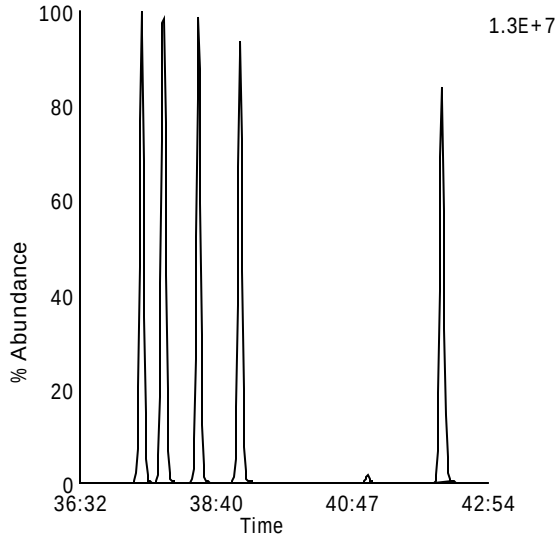
Data File: Y210819A_01 G4 C10 - 339.9178

CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G5 C4 - 339.9178

CAL CS3-20-123-060 - CVS

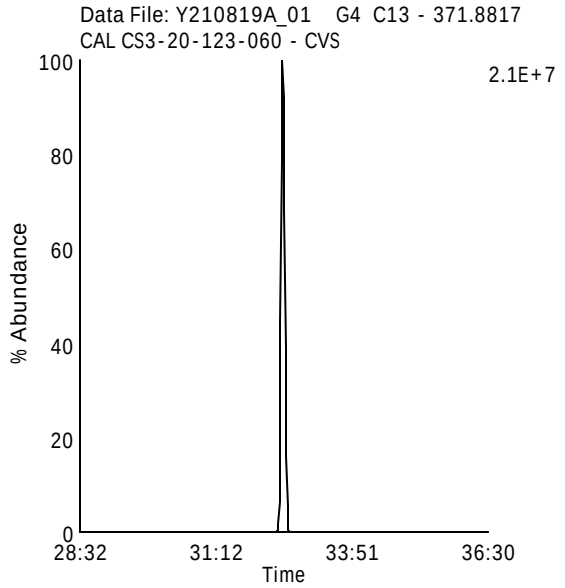


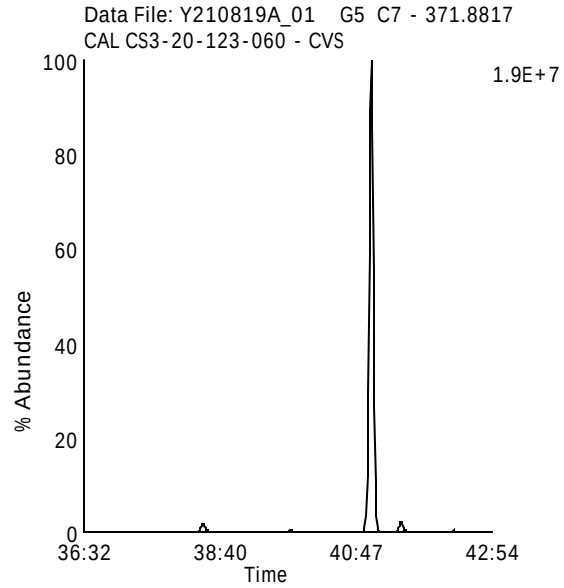
Labeled Hexa Chlorinated Biphenyls

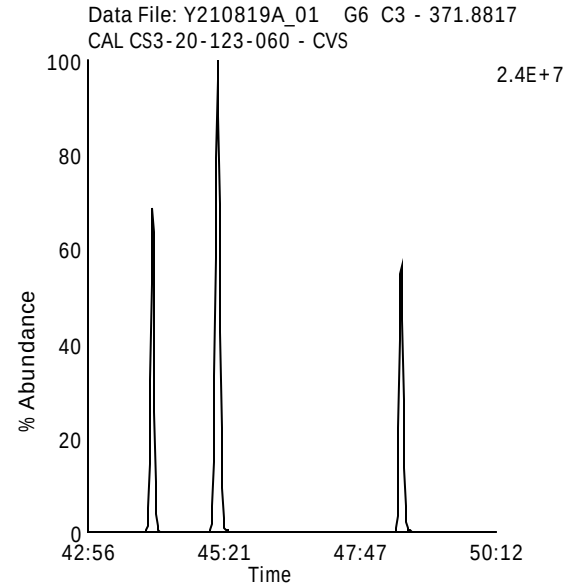
Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

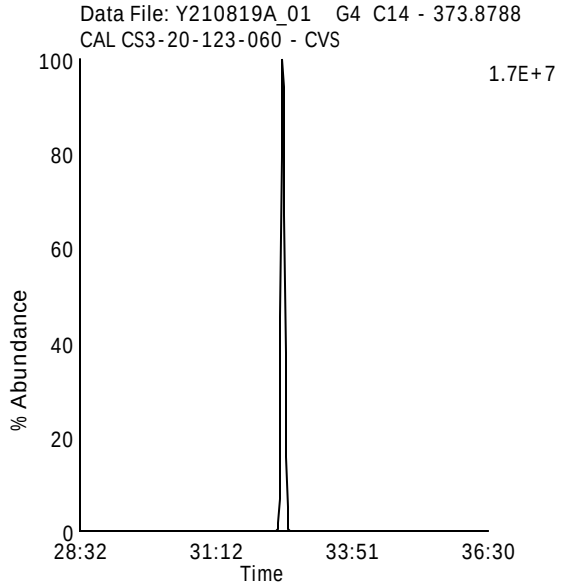
Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

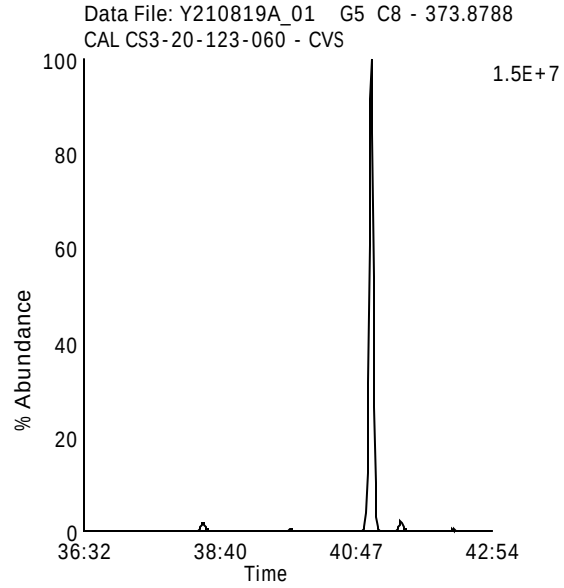
Sample Description: CAL CS3-20-123-060 - CVS

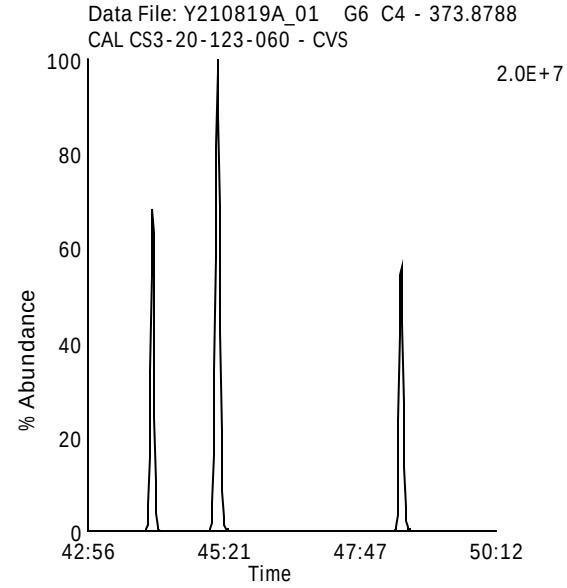






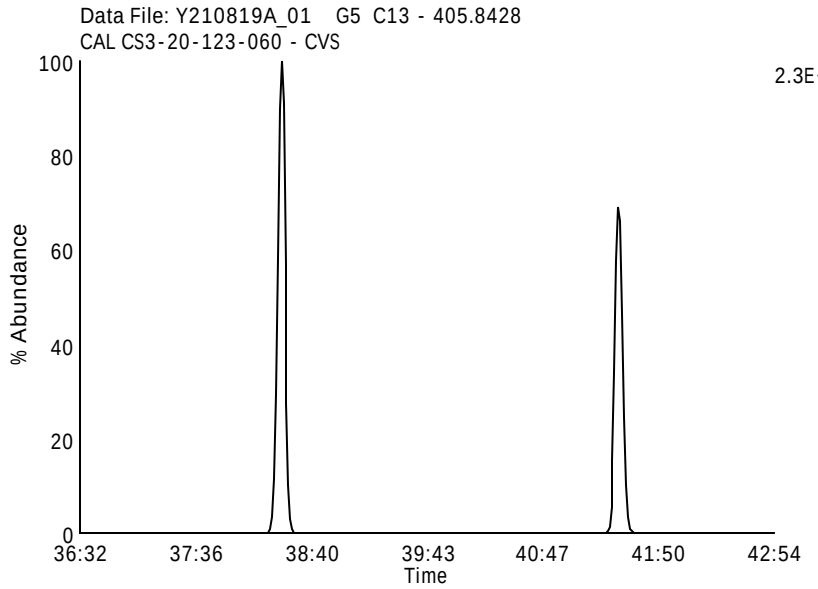


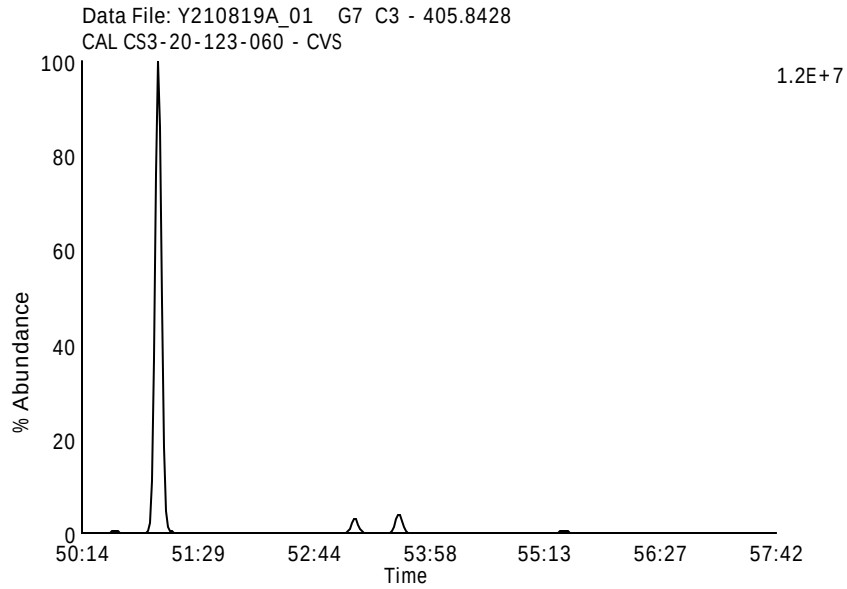


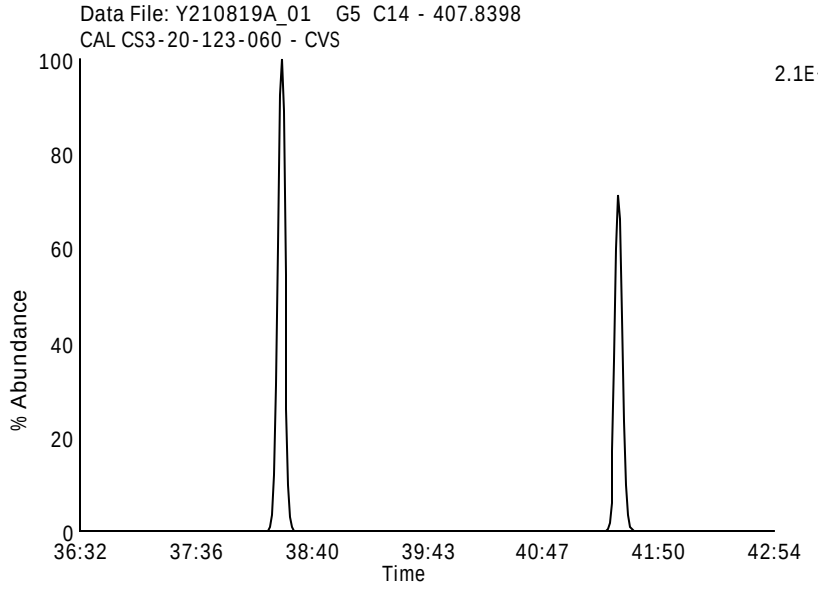


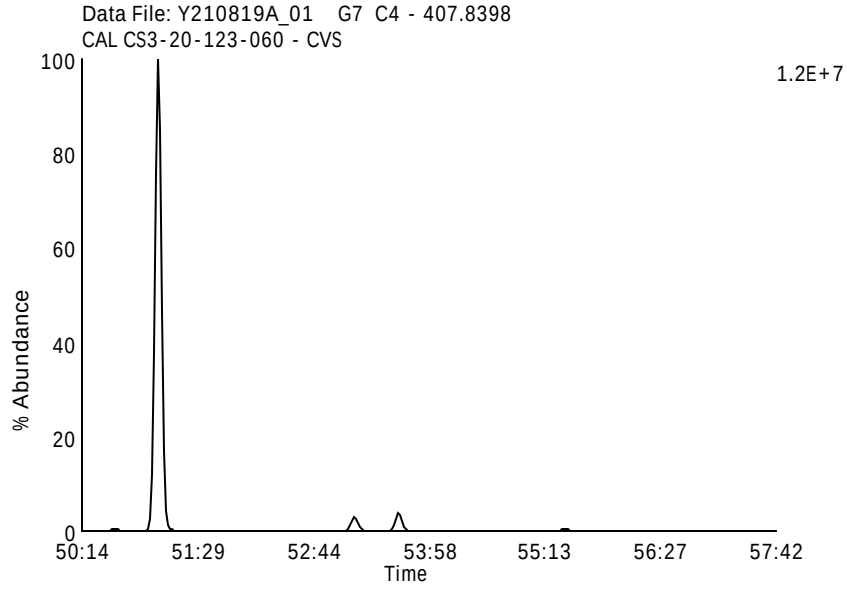
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





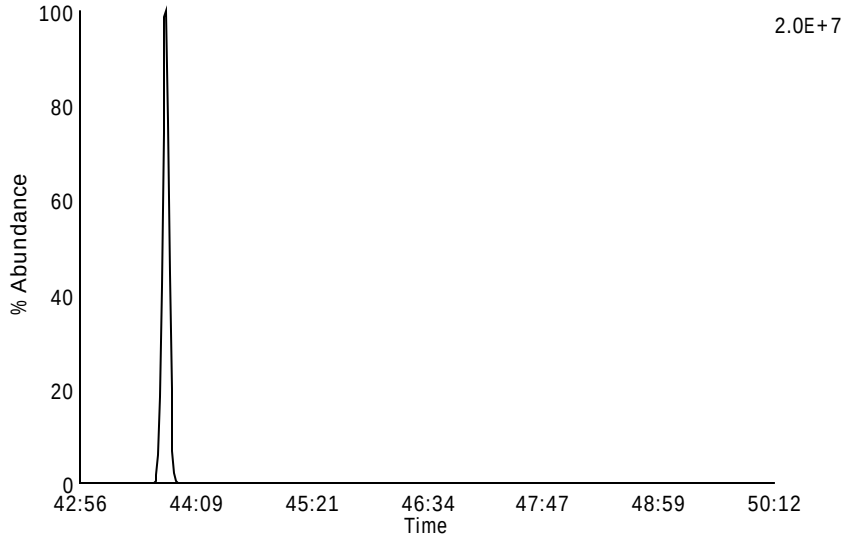




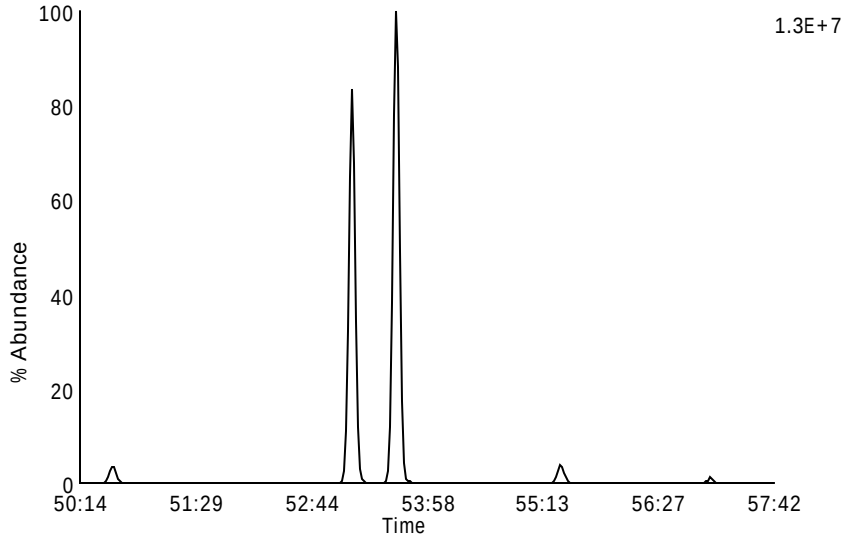
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

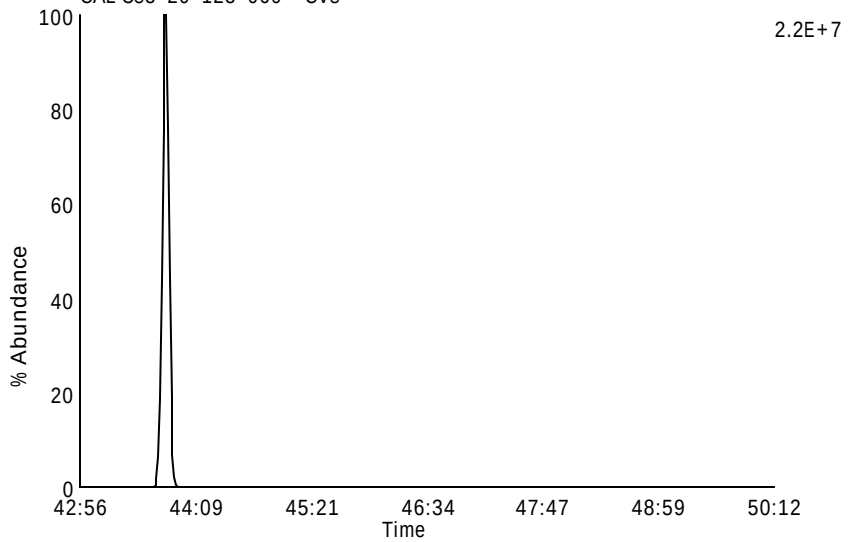
Data File: Y210819A_01 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



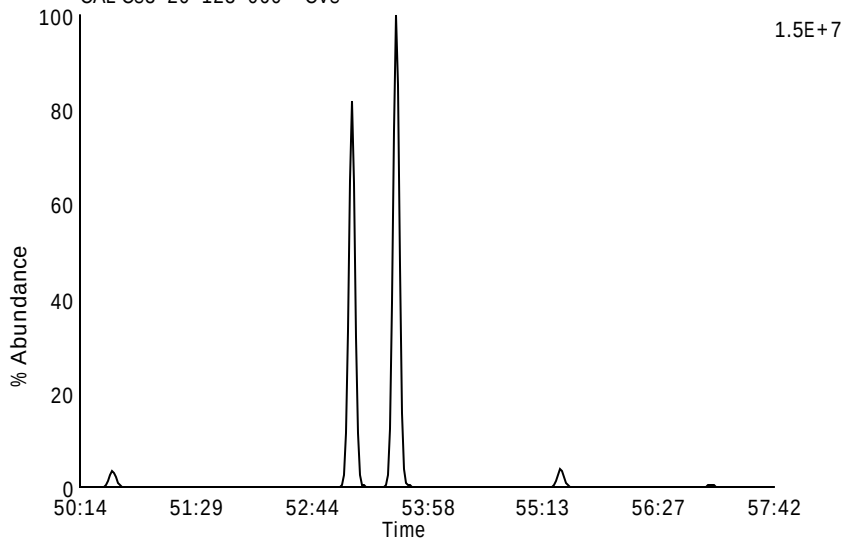
Data File: Y210819A_01 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G6 C14 - 441.8008
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

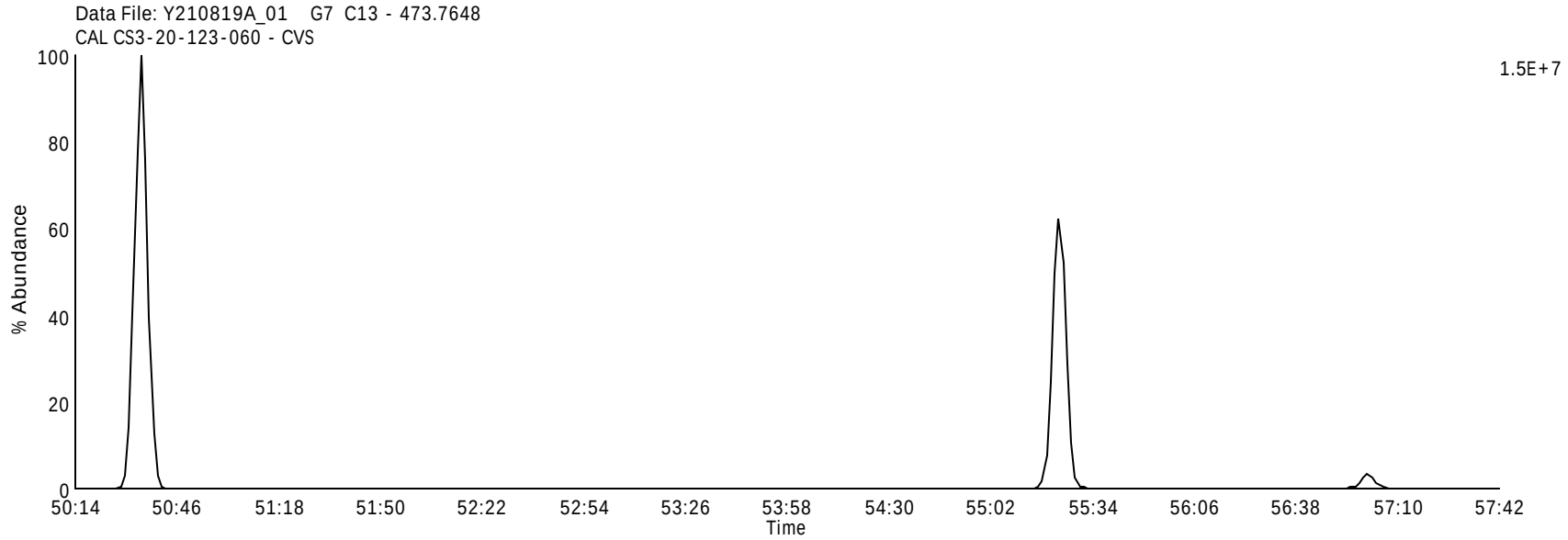


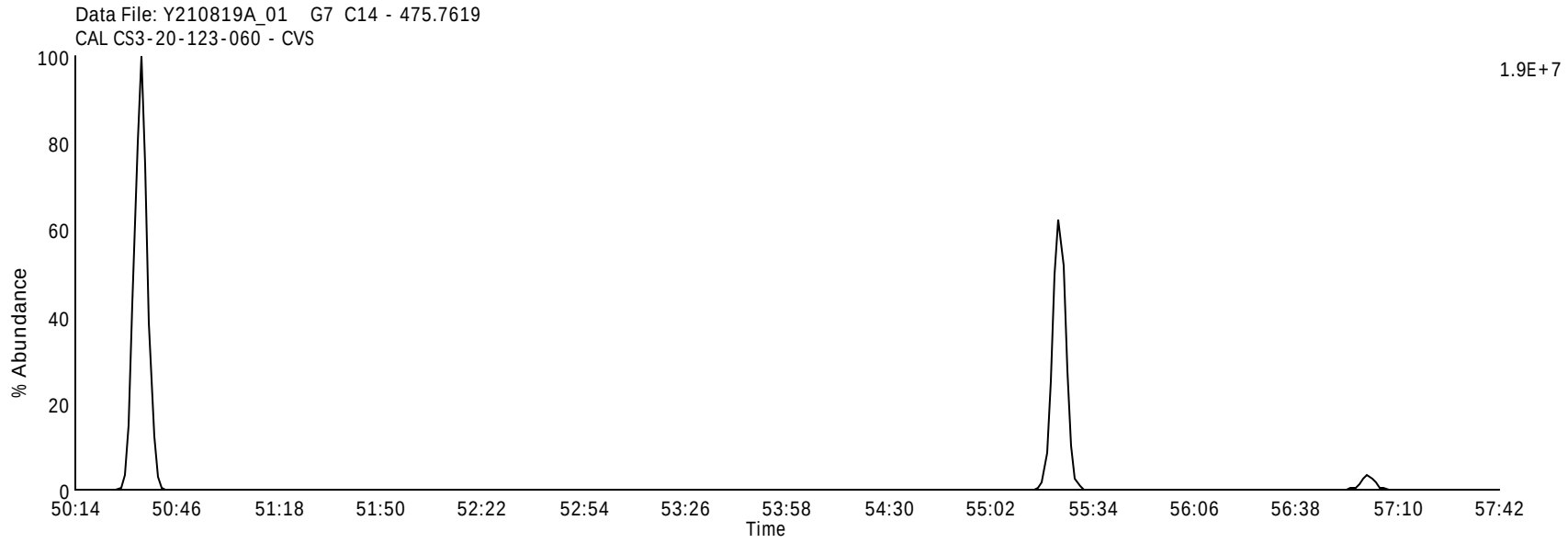
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



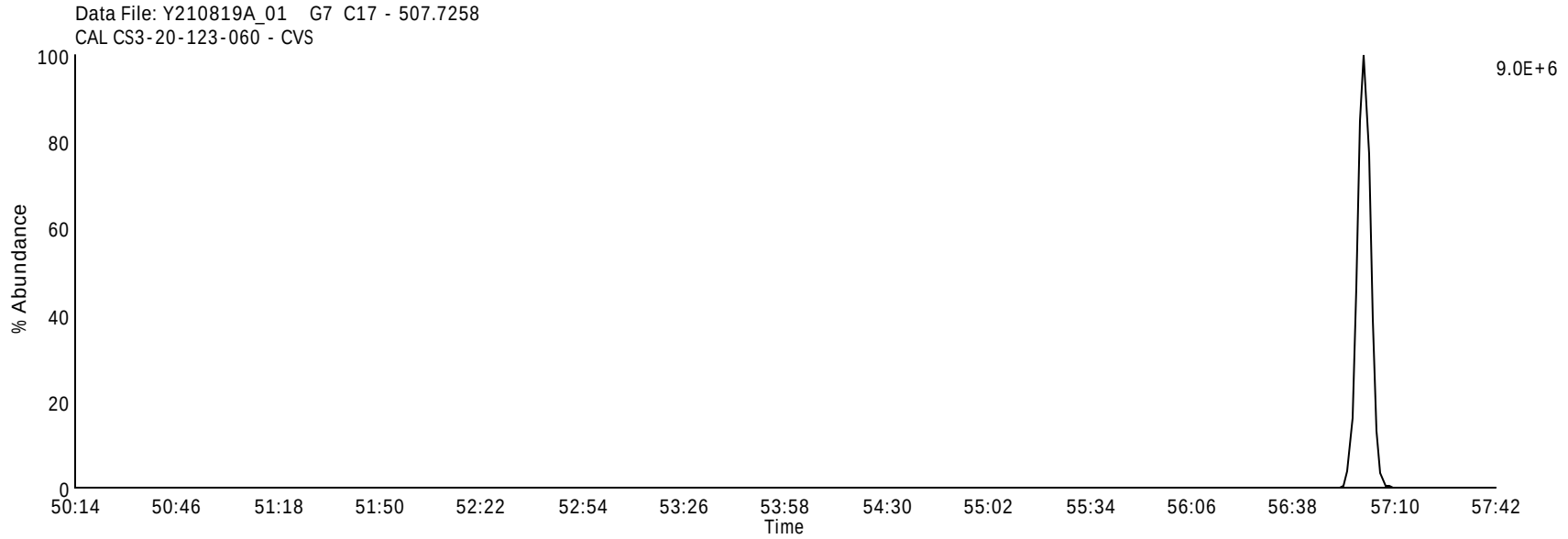


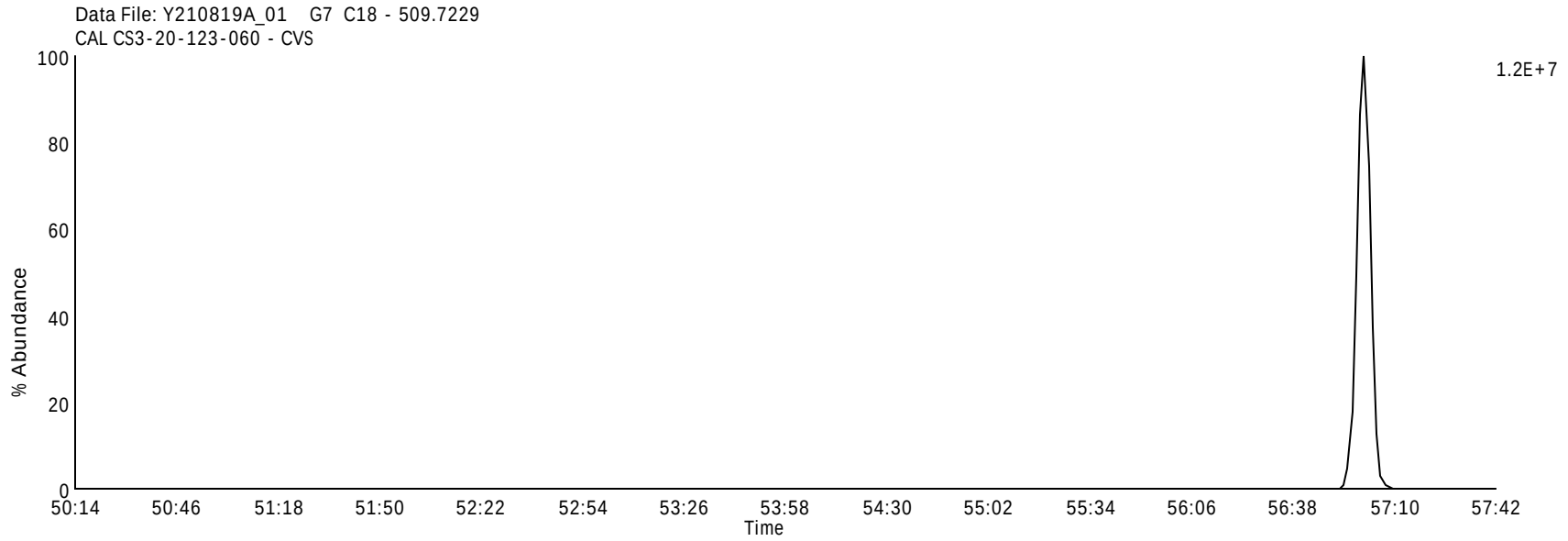
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



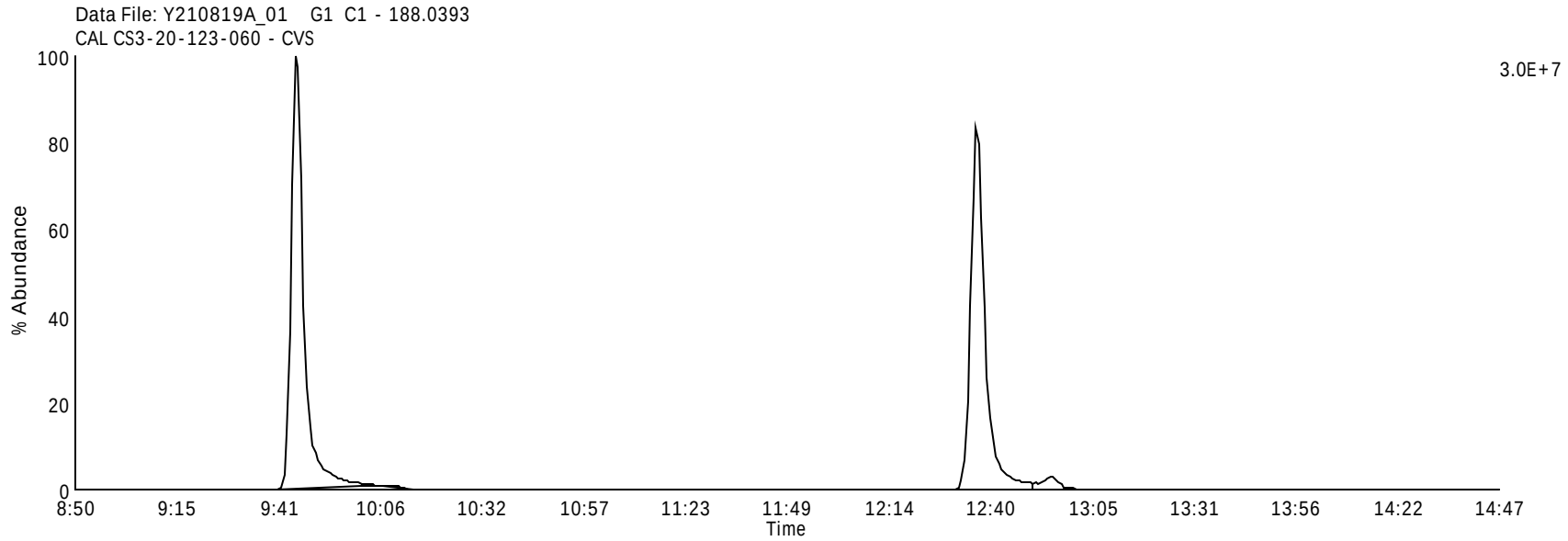


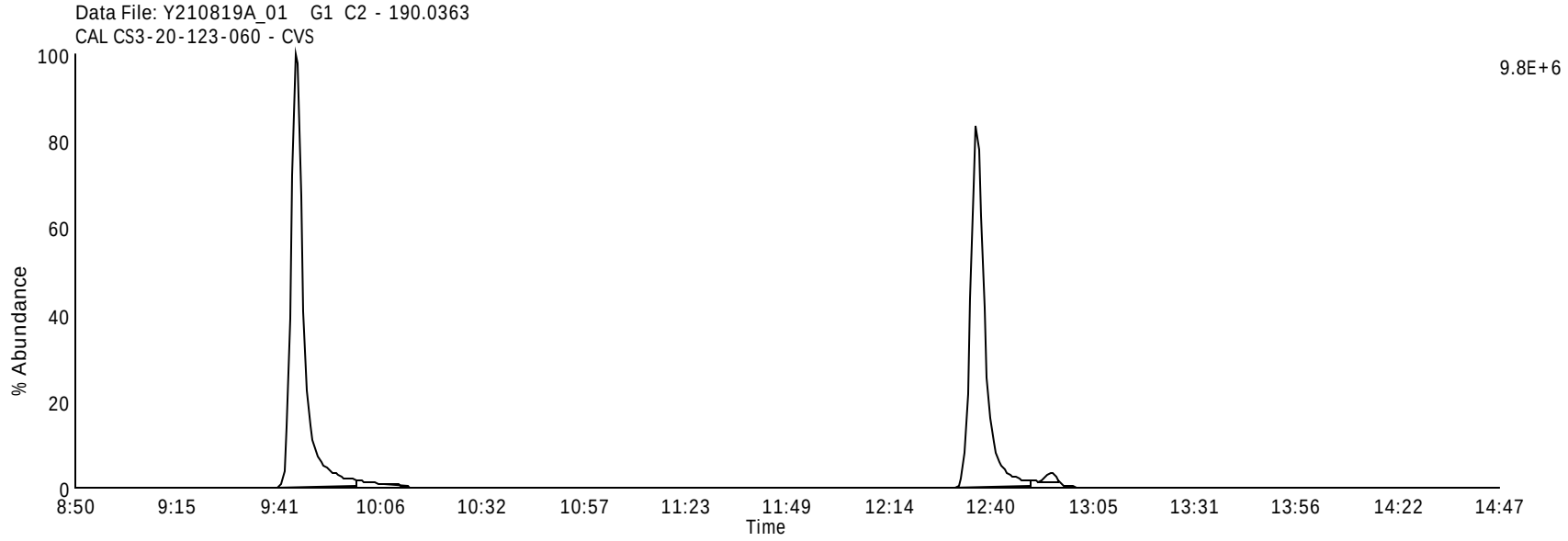
Mono Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

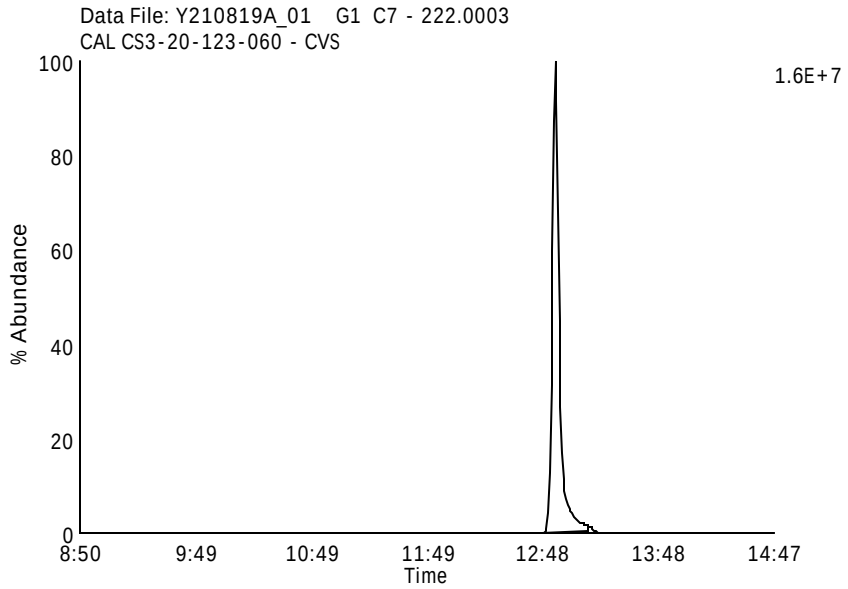
Sample Description: CAL CS3-20-123-060 - CVS

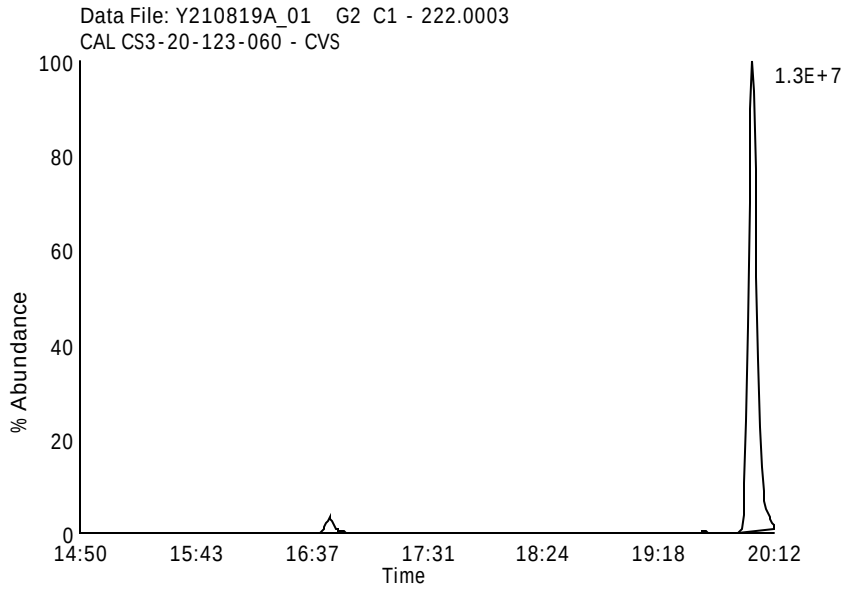


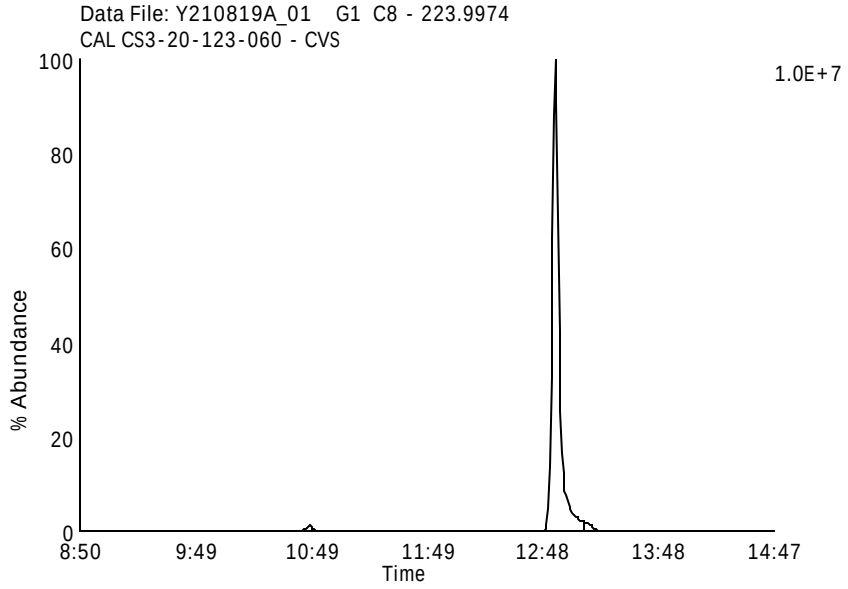


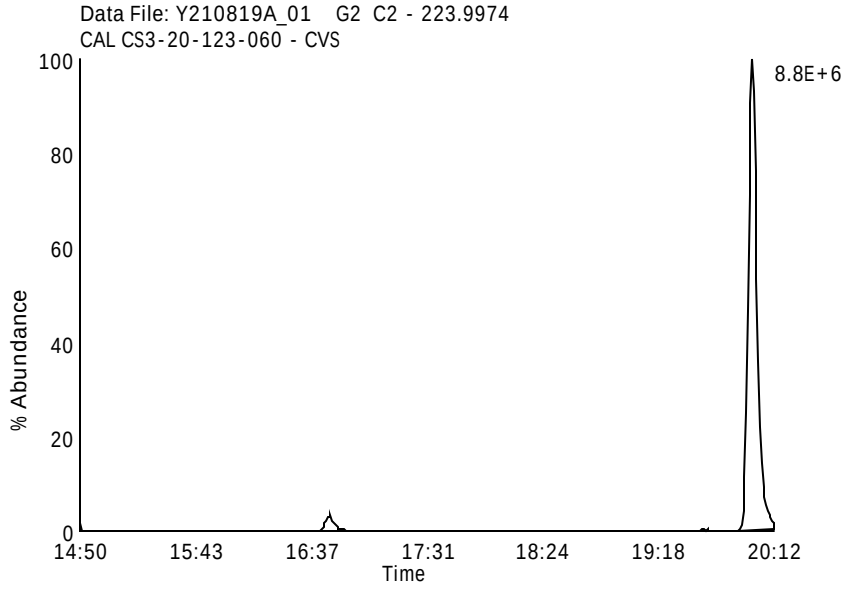
Di Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



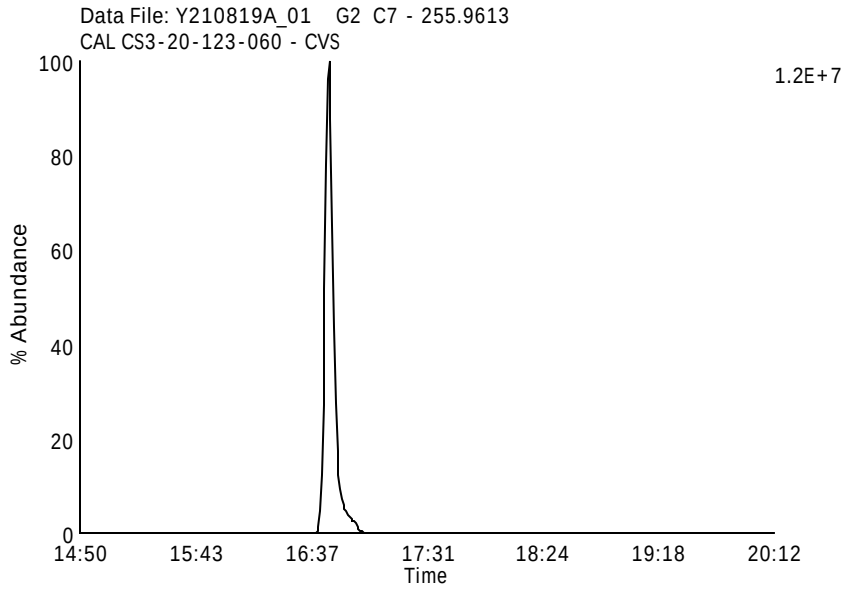


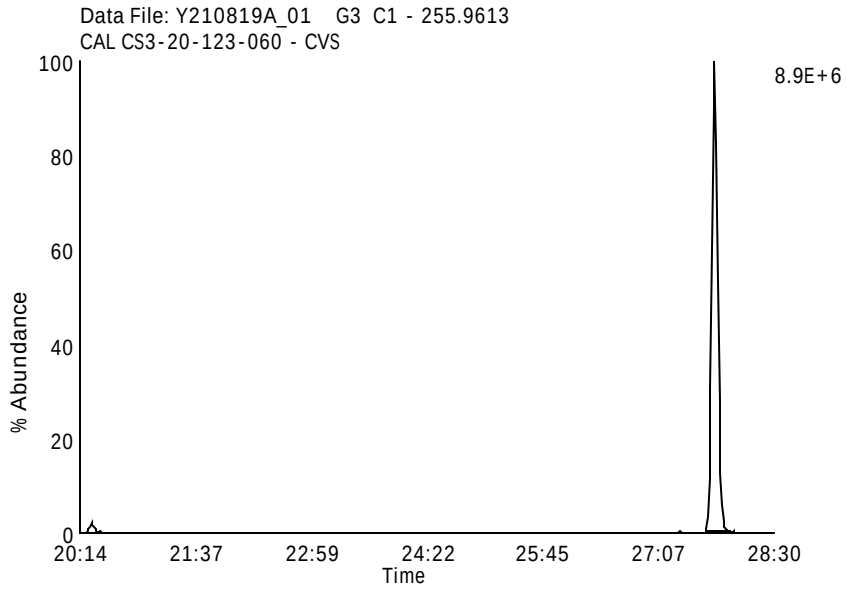


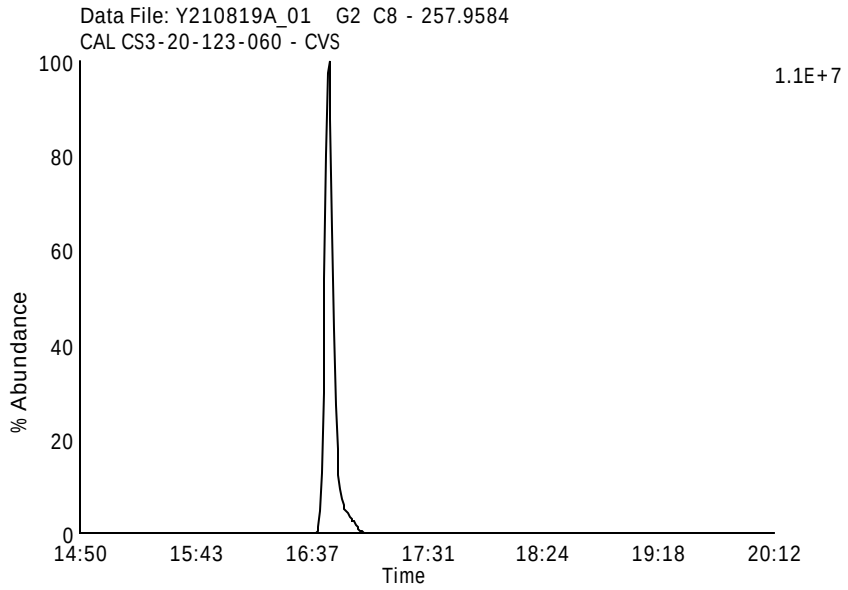


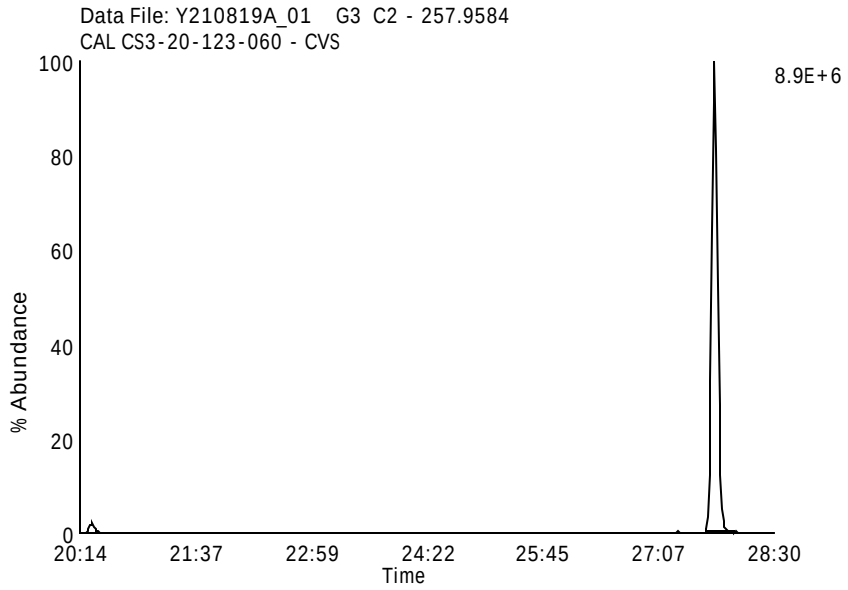
Tri Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





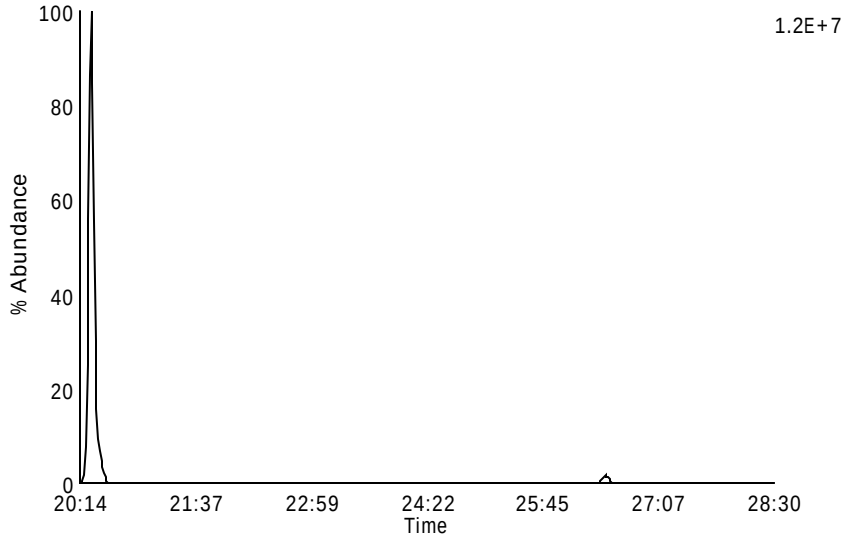




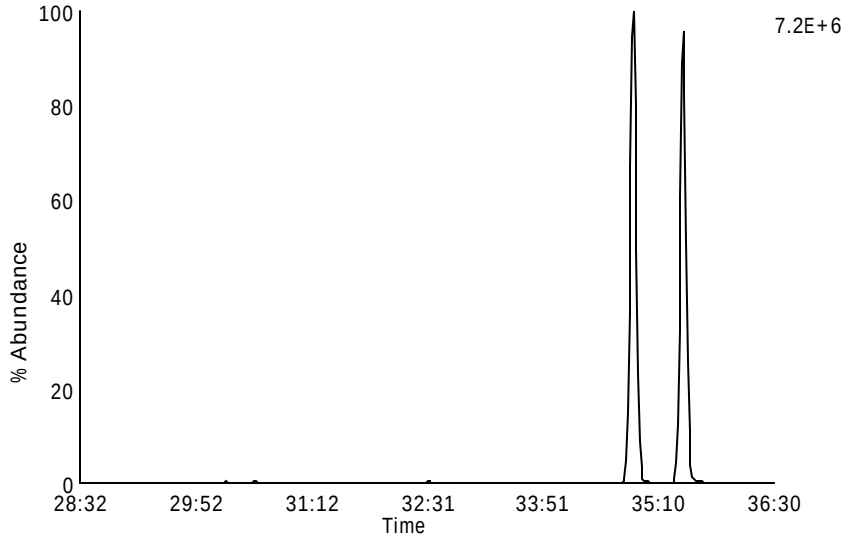
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

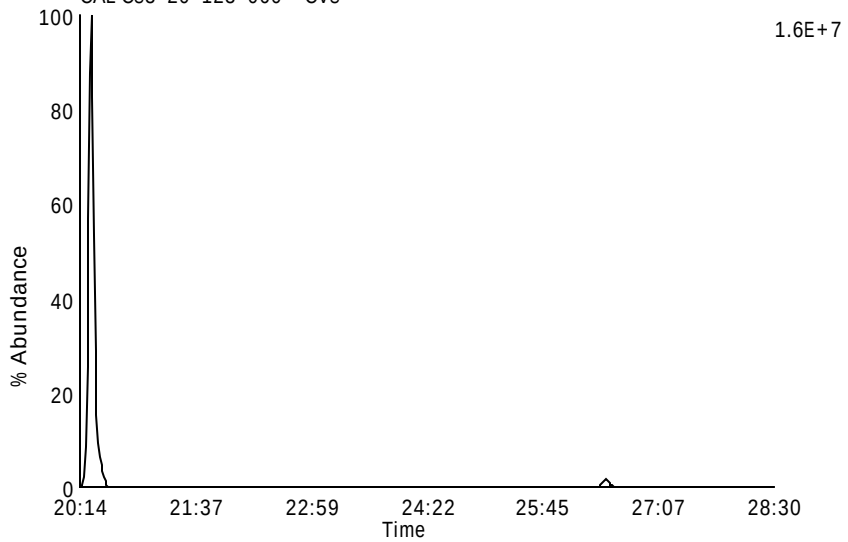
Data File: Y210819A_01 G3 C7 - 289.9224
CAL CS3-20-123-060 - CVS



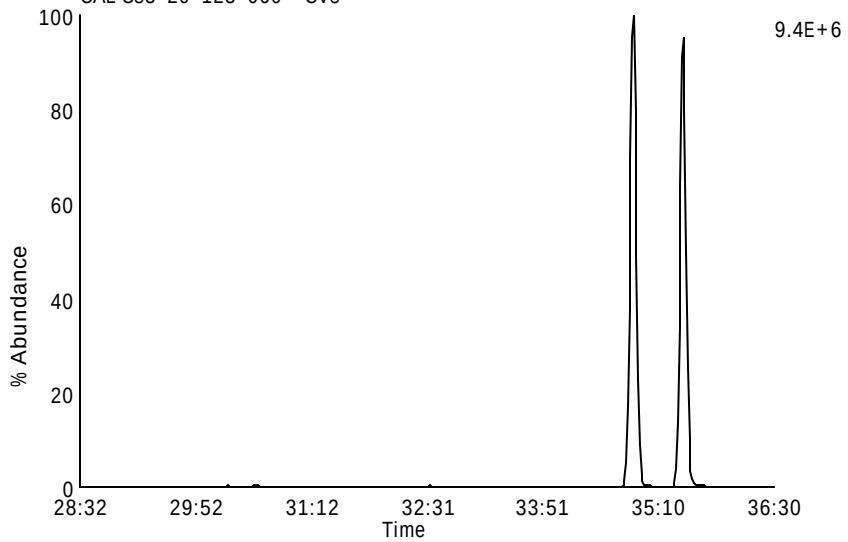
Data File: Y210819A_01 G4 C1 - 289.9224
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G3 C8 - 291.9194
CAL CS3-20-123-060 - CVS

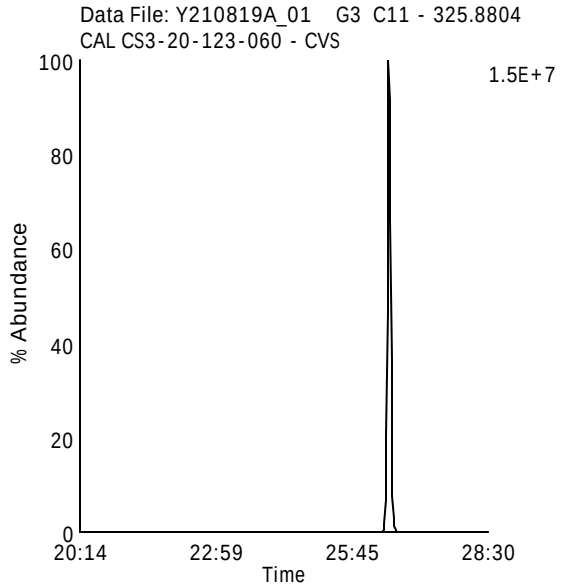


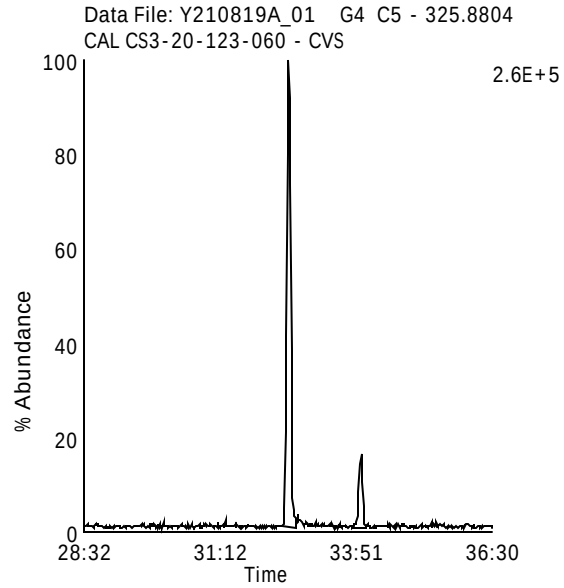
Data File: Y210819A_01 G4 C2 - 291.9194
CAL CS3-20-123-060 - CVS

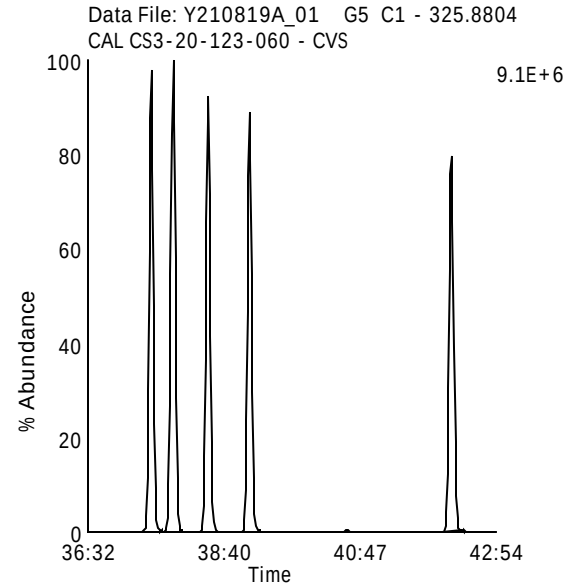


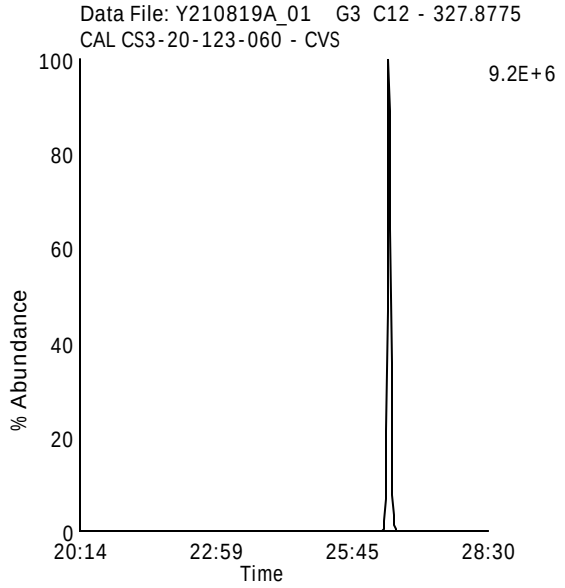
Penta Chlorinated Biphenyls

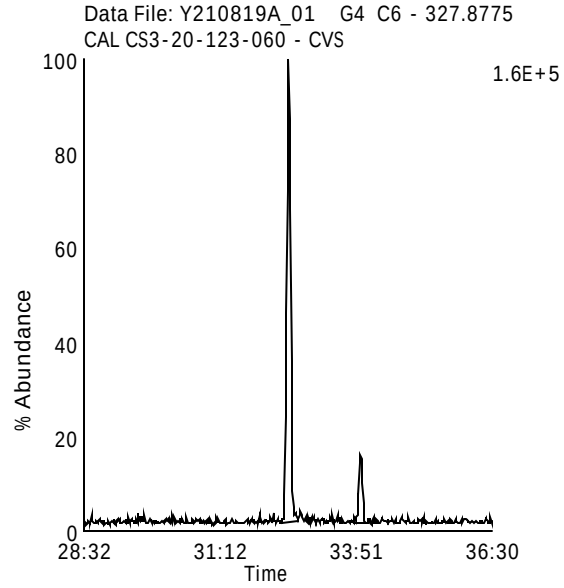
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

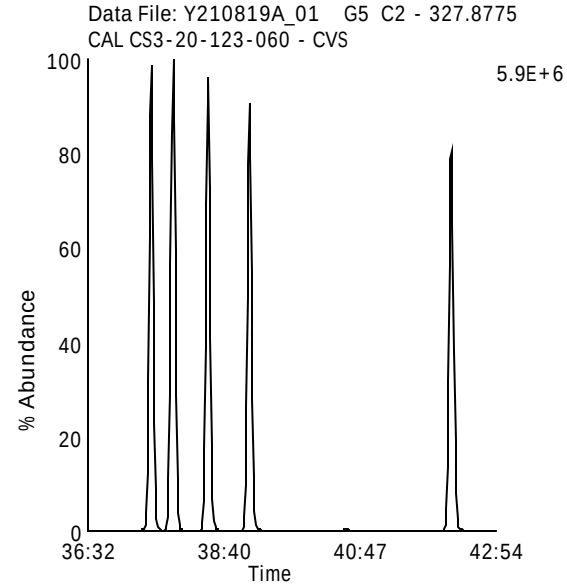










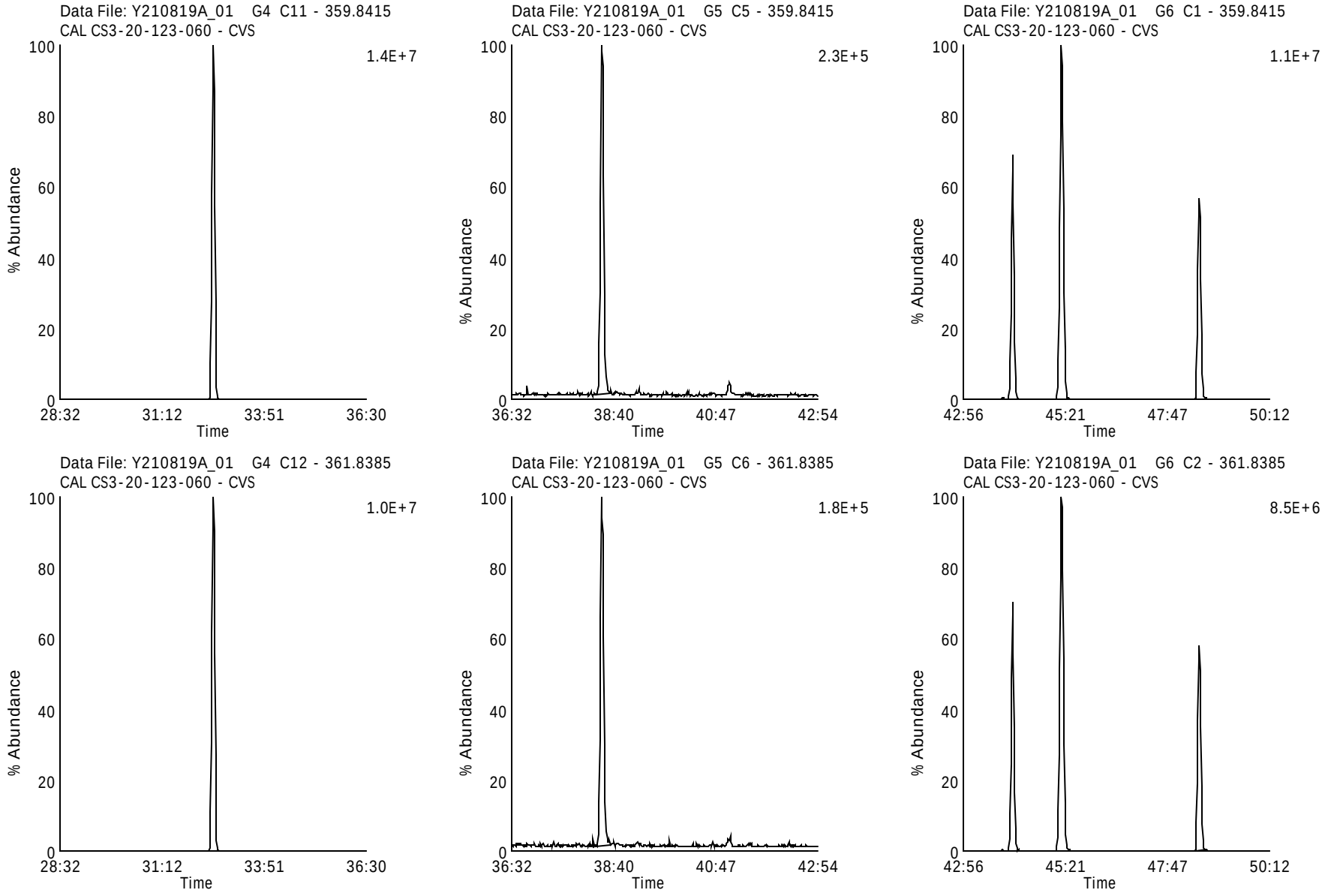


Hexa Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

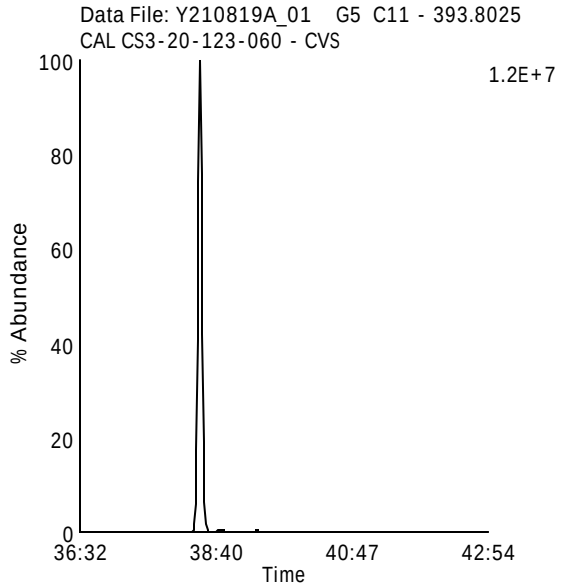
Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

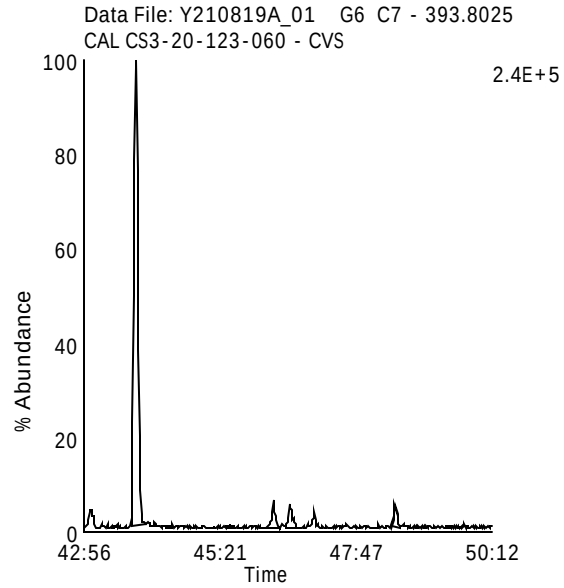
Sample Description: CAL CS3-20-123-060 - CVS

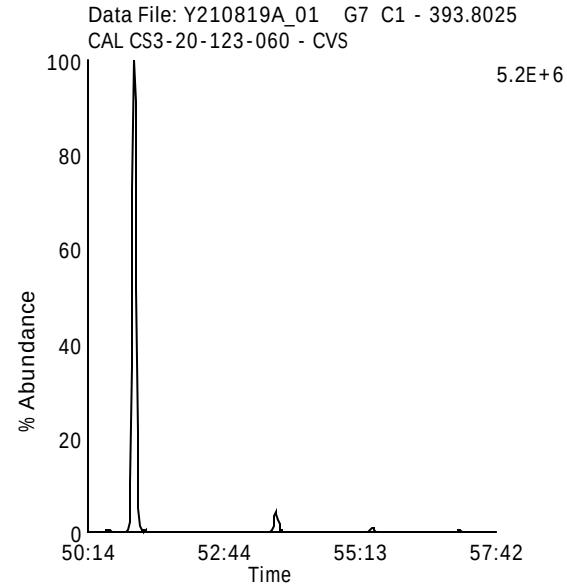


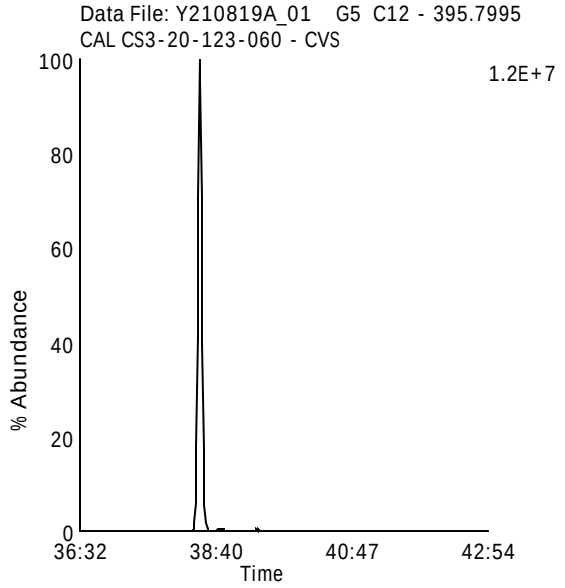
Hepta Chlorinated Biphenyls

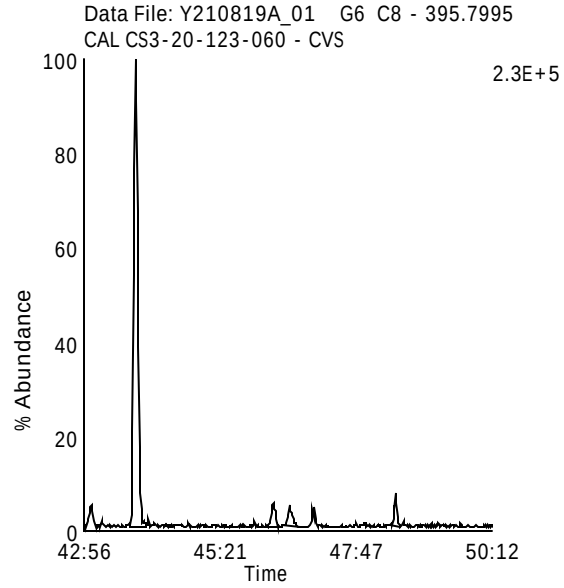
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

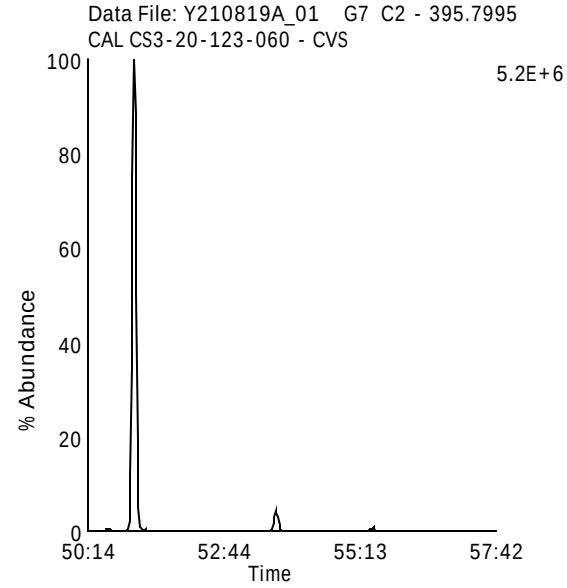






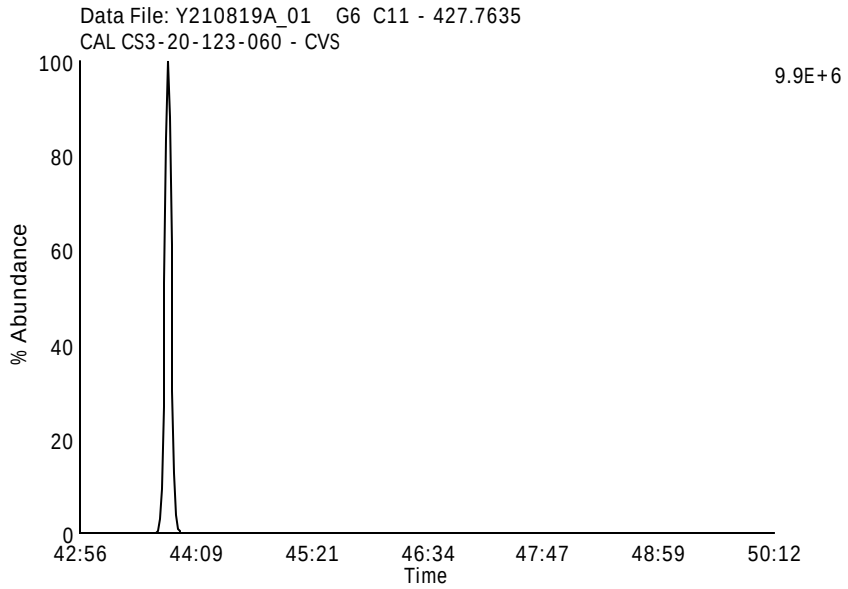


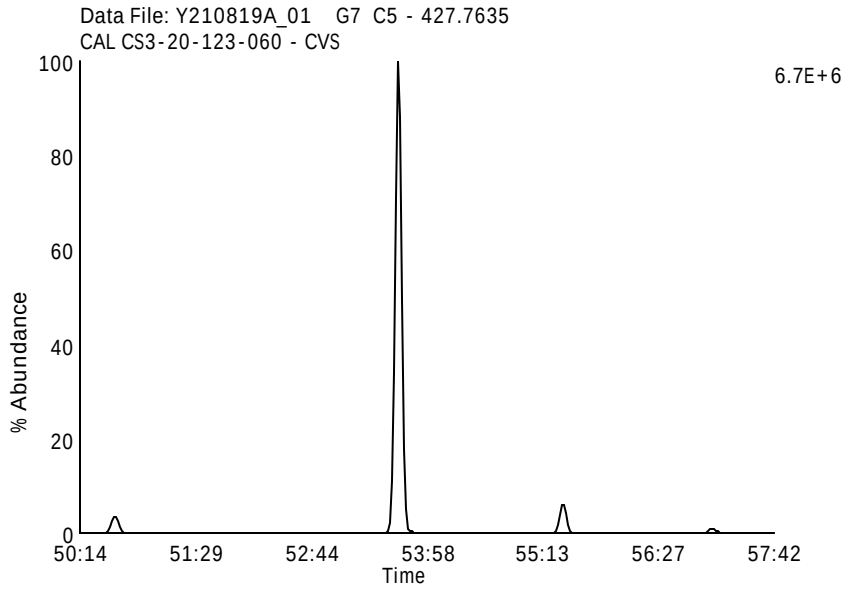


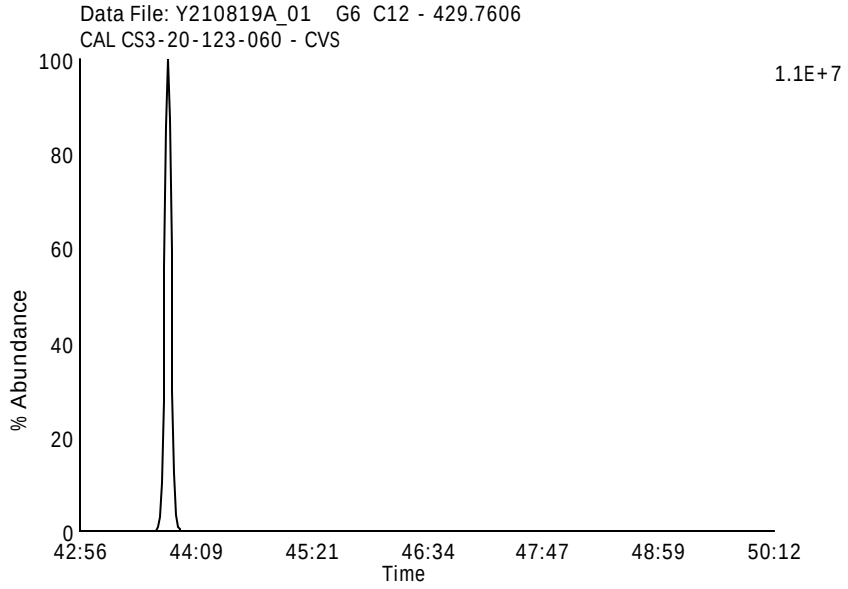


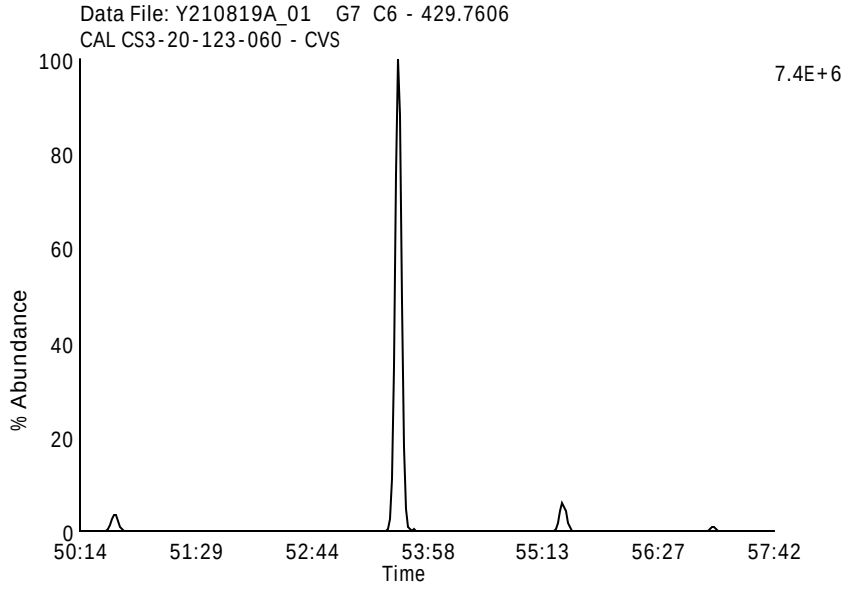
Octa Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







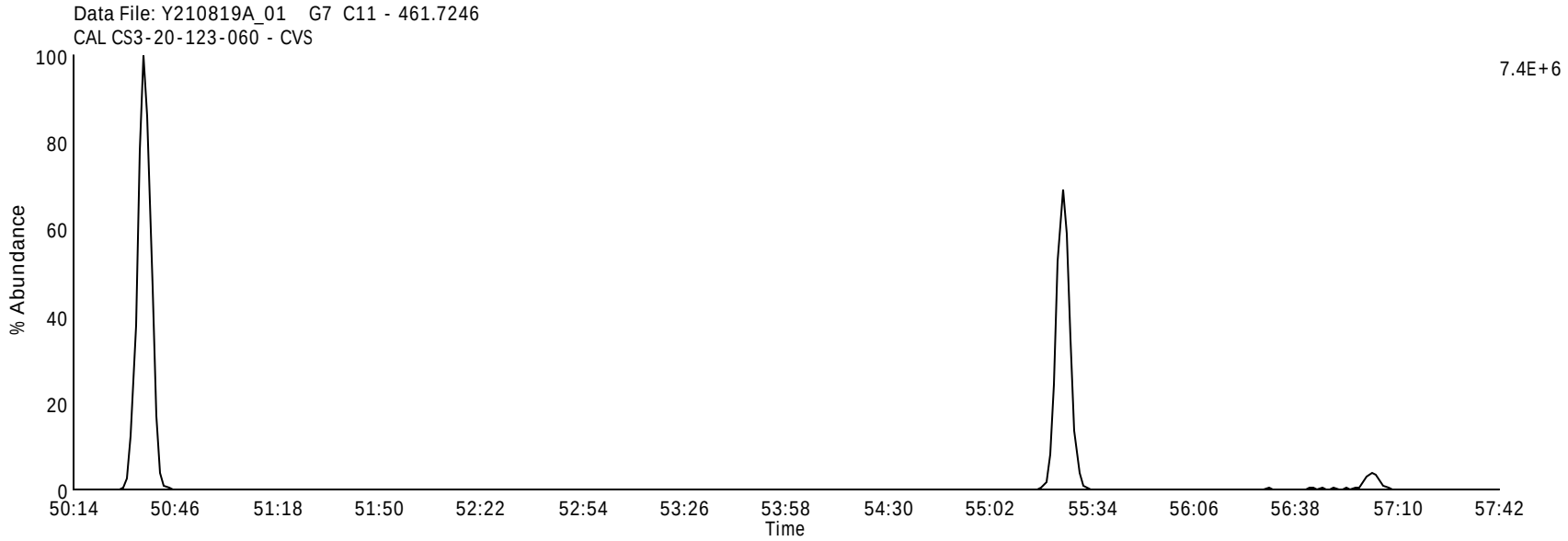


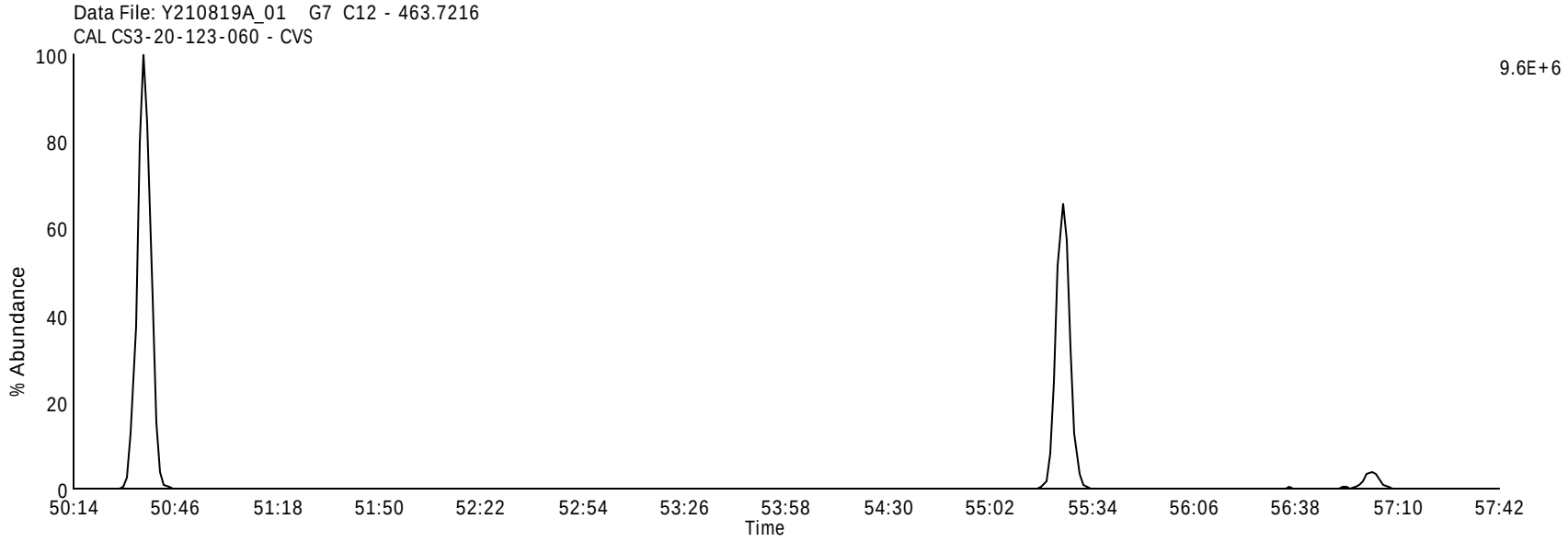
Nona Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



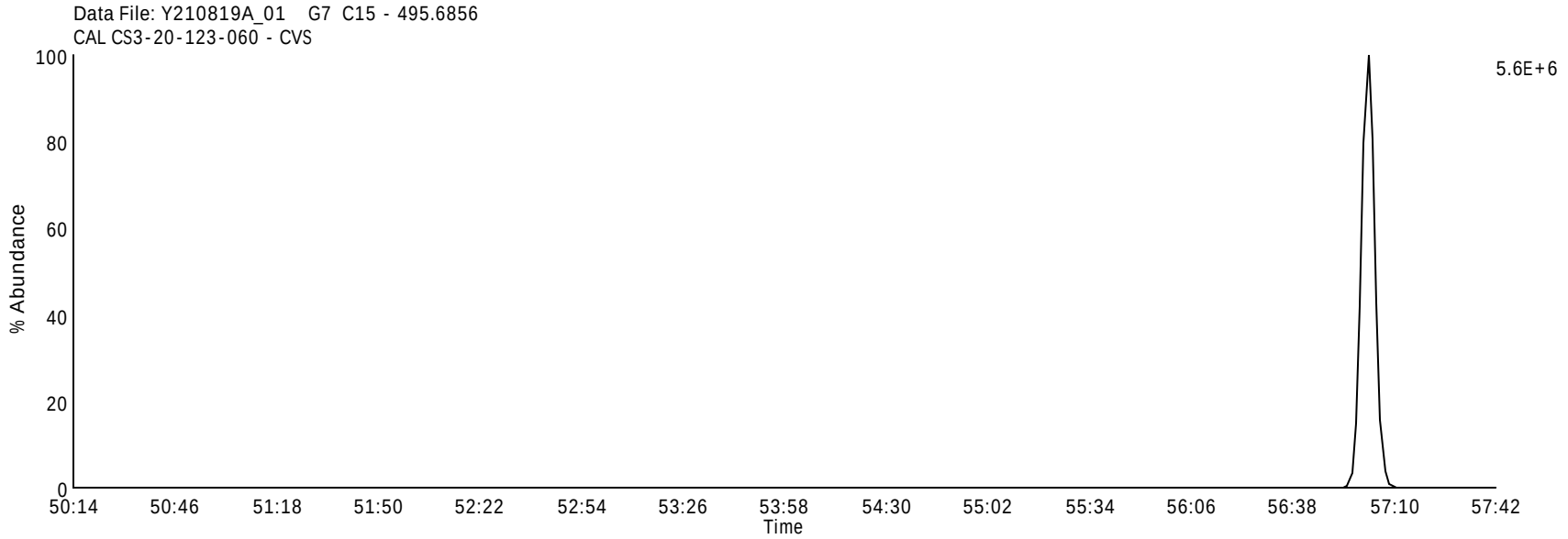


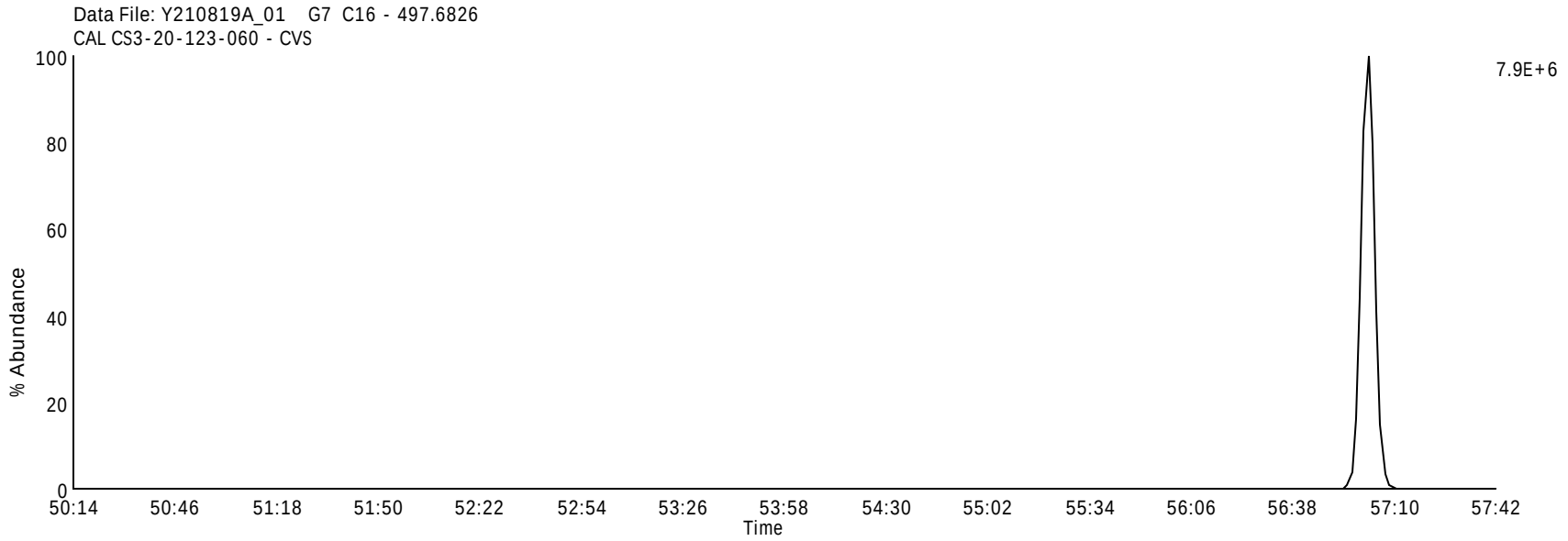
Deca Chlorinated Biphenyl

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

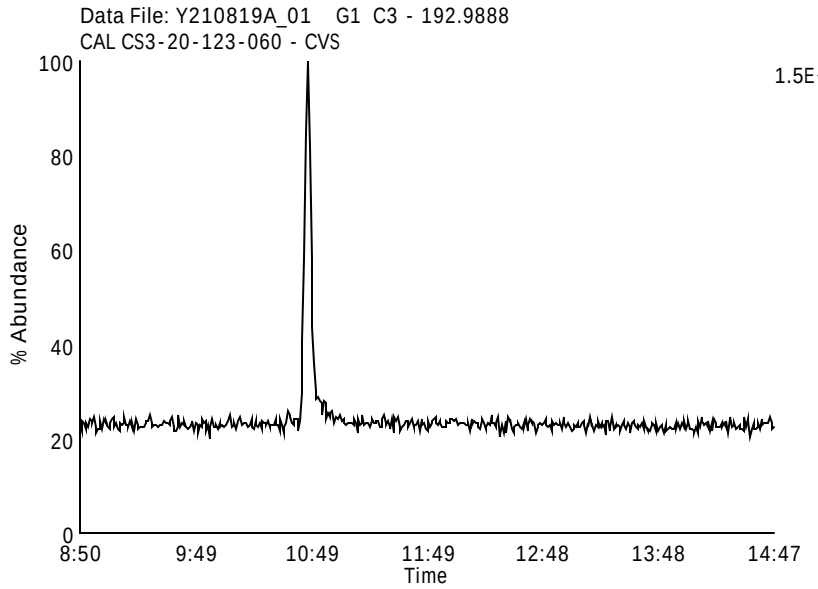
Sample Description: CAL CS3-20-123-060 - CVS

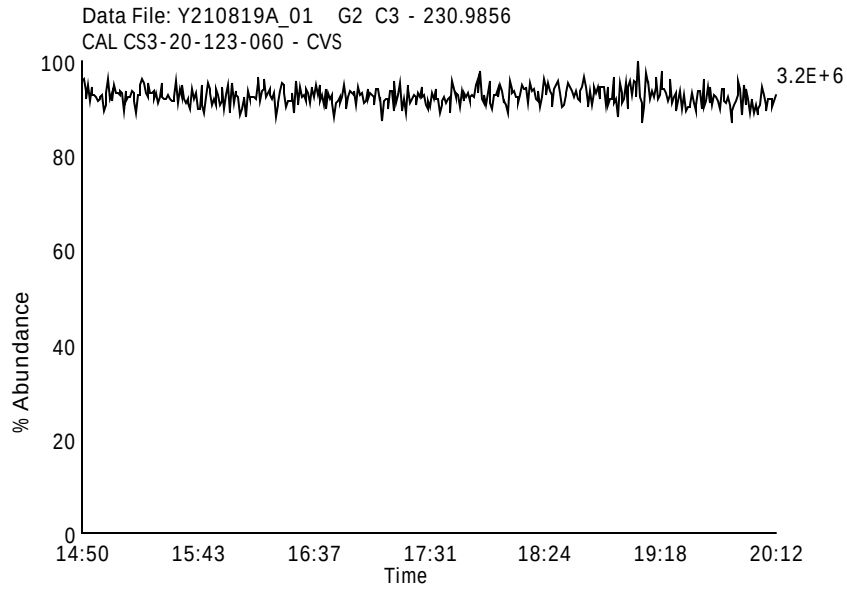


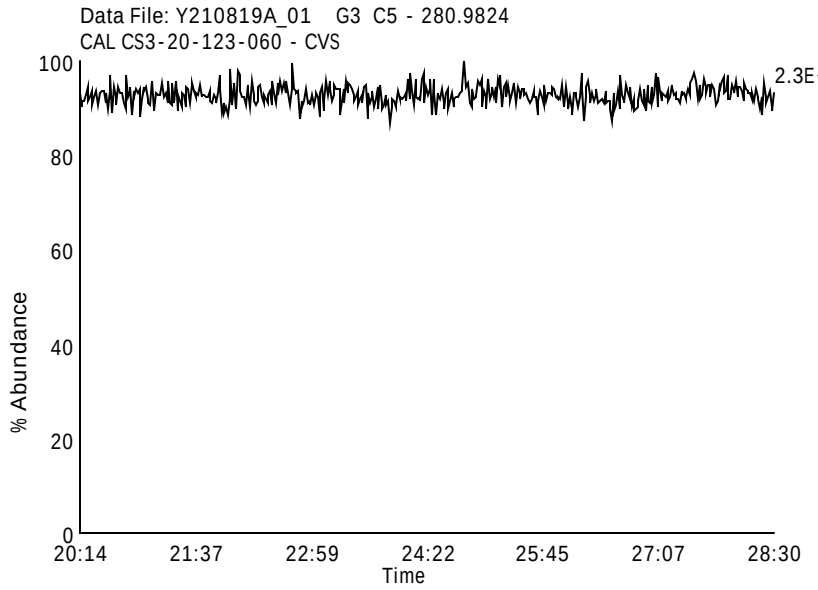


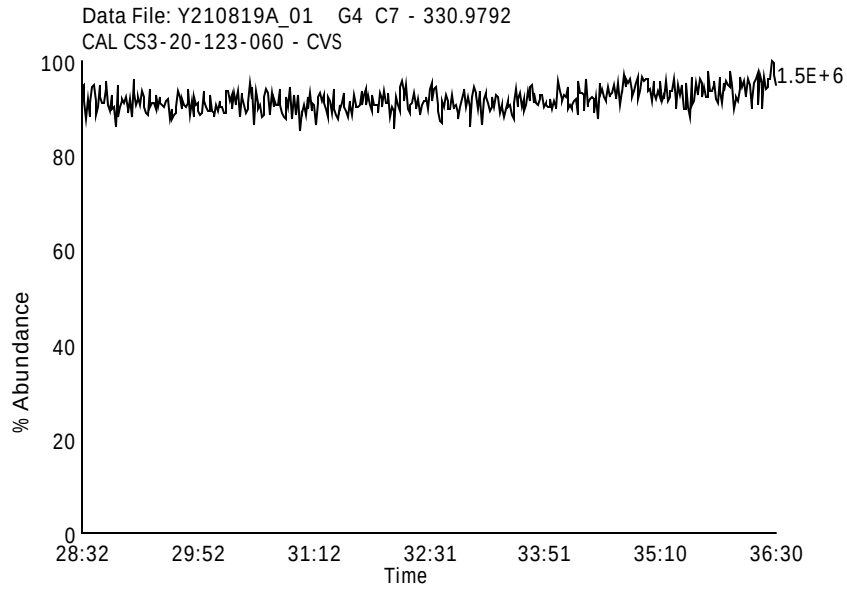
Group 1 - 4 Lock mass

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





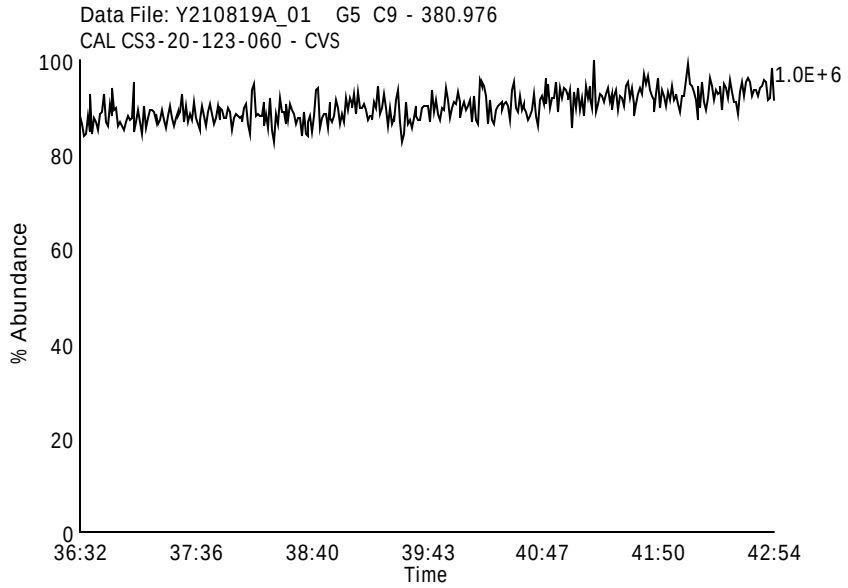


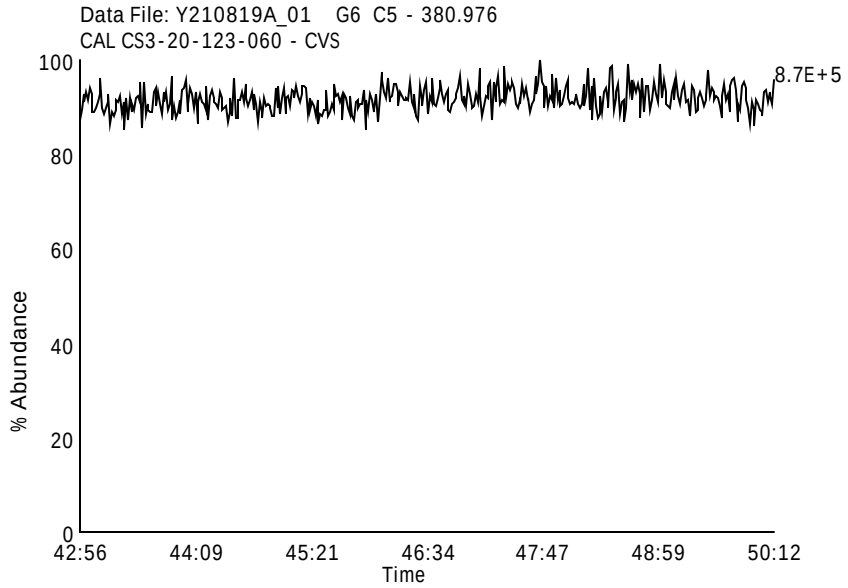


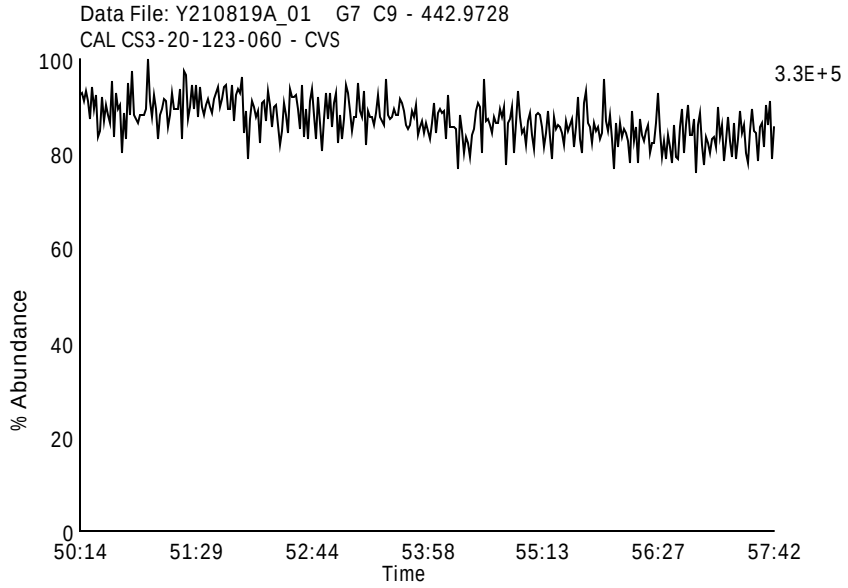
Group 5 - 7 Lock mass

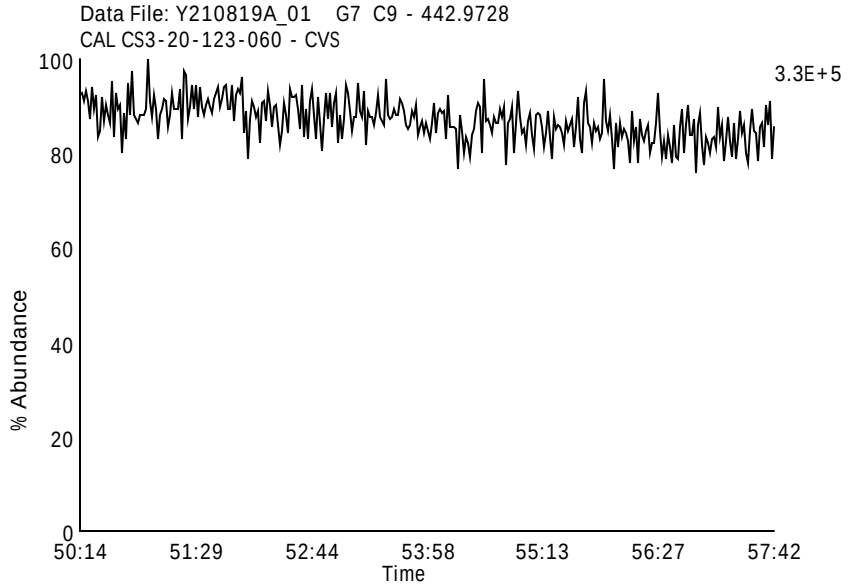
Data File Name: Y210819A_01
Date Acquired: 8/19/2021
Sample Description: CAL CS3-20-123-060 - CVS

Lab Sample ID: CS3-20-123-060
Instrument: 10MSHR12 (Y)









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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL Date	10/07/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.834	0.77	51208204	66385842	
13C-3,3',4,4'-TeCB	77	35.404	0.78	51510819	65778826	
13C-2,3,3',4,4'-PeCB	105	38.998	1.54	62053684	40199072	
13C-2,3,4,4',5-PeCB	114	38.361	1.53	63364259	41331947	
13C-2,3',4,4',5-PeCB	118	37.808	1.53	66222064	43162719	
13C-2,3',4,4',5'-PeCB	123	37.472	1.53	63261741	41245986	
13C-3,3',4,4',5-PeCB	126	42.151	1.57	53825037	34264684	
13C-HxCB(156/157)	156/157	45.208	1.22	102568128	83923047	
13C-2,3',4,4',5,5'-HxCB	167	44.051	1.23	54766966	44508663	
13C-3,3',4,4',5,5'-HxCB	169	48.479	1.23	44916129	36397189	
13C-2,3,3',4,4',5,5'-HpCB	189	51.026	1.02	42127094	41118145	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.03	82906534	80731238	
13C-2,3,3',5,5'-PeCB	111	35.471	1.60	96770041	60487785	
13C-2,2',3,3',5,5',6-HpCB	178	41.447	1.08	54880980	50588888	
Recovery Standards						
13C-2,5-DiCB	9	15.349	1.54	127392779	82964986	
13C-2,2',5,5'-TeCB	52	25.405	0.80	64362200	80721712	
13C-2,2',4,5,5'-PeCB	101	32.687	1.61	76585881	47607767	
13C-2,2',3,4,4',5'-HxCB	138	40.994	1.27	64490799	50853483	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.160	0.92	38348105	41726961	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy_____ Date _____

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL ID	Y211007

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.438	0.83	501814	607875	
81		34.851	0.72	456320	635945	
105		39.032	1.61	566945	352117	
114		38.378	1.53	600972	392715	
118		37.825	1.59	644411	405832	
123		37.506	1.42	603428	424525	
126		42.168	1.49	487021	327868	
156	156/157	45.225	1.25	1035842	827301	
157	156/157	45.225	1.25	(1035842)	(827301)	
167		44.084	1.25	538218	431899	
169		48.495	1.14	427965	374978	
189		51.047	1.10	410825	372156	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.850	0.76	33891332	44310376	
13C-3,3',4,4'-TeCB	77	35.420	0.77	34260374	44451965	
13C-2,3,3',4,4'-PeCB	105	39.014	1.54	41448453	26867484	
13C-2,3,4,4',5-PeCB	114	38.360	1.53	41156130	26821258	
13C-2,3',4,4',5-PeCB	118	37.823	1.55	43913917	28293186	
13C-2,3',4,4',5'-PeCB	123	37.488	1.53	42068498	27527636	
13C-3,3',4,4',5-PeCB	126	42.166	1.53	36221472	23742934	
13C-HxCB(156/157)	156/157	45.223	1.22	67390123	55431577	
13C-2,3',4,4',5,5'-HxCB	167	44.066	1.21	35666666	29418827	
13C-3,3',4,4',5,5'-HxCB	169	48.493	1.24	30688196	24842885	
13C-2,3,3',4,4',5,5'-HpCB	189	51.044	1.02	28764321	28122685	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.01	53600329	52989259	
13C-2,3,3',5,5'-PeCB	111	35.470	1.60	63084152	39378340	
13C-2,2',3,3',5,5',6-HpCB	178	41.462	1.09	35842158	32832358	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.53	83452779	54466090	
13C-2,2',5,5'-TeCB	52	25.404	0.80	42121385	52745355	
13C-2,2',4,5,5'-PeCB	101	32.687	1.59	49762849	31201326	
13C-2,2',3,4,4',5'-HxCB	138	40.992	1.26	41685419	33048264	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.156	0.91	25528617	28012392	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.437	0.74	1519692	2060098	
81		34.867	0.74	1604994	2175256	
105		39.047	1.54	1922768	1250991	
114		38.393	1.41	1876437	1335265	
118		37.840	1.47	2033118	1378641	
123		37.505	1.47	1924699	1306566	
126		42.183	1.47	1609066	1094892	
156	156/157	45.240	1.19	3194335	2677855	
157	156/157	45.240	1.19	(3194335)	(2677855)	
167		44.083	1.18	1689220	1433831	
169		48.510	1.21	1514546	1248104	
189		51.066	1.00	1288821	1289718	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.848	0.76	15482827	20415180	
13C-3,3',4,4'-TeCB	77	35.419	0.80	16235531	20406222	
13C-2,3,3',4,4'-PeCB	105	39.029	1.50	17530979	11682823	
13C-2,3,4,4',5-PeCB	114	38.375	1.51	18054772	11978158	
13C-2,3',4,4',5-PeCB	118	37.822	1.52	19150985	12610753	
13C-2,3',4,4',5'-PeCB	123	37.486	1.55	18627896	12055363	
13C-3,3',4,4',5-PeCB	126	42.165	1.54	15761201	10258884	
13C-HxCB(156/157)	156/157	45.222	1.23	27885801	22733884	
13C-2,3',4,4',5,5'-HxCB	167	44.065	1.21	15205904	12550764	
13C-3,3',4,4',5,5'-HxCB	169	48.508	1.22	12578703	10327607	
13C-2,3,3',4,4',5,5'-HpCB	189	51.043	1.03	11578654	11263039	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.425	1.03	26265414	25481217	
13C-2,3,3',5,5'-PeCB	111	35.486	1.61	29126575	18044938	
13C-2,2',3,3',5,5',6-HpCB	178	41.460	1.07	16153584	15031324	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.55	40918082	26392839	
13C-2,2',5,5'-TeCB	52	25.403	0.82	20417393	24823362	
13C-2,2',4,5,5'-PeCB	101	32.685	1.59	23106412	14493249	
13C-2,2',3,4,4',5'-HxCB	138	41.008	1.25	18284670	14647807	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.155	0.90	10479666	11607480	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy_____ Date _____

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.452	0.75	6908630	9157518	
81		34.865	0.76	7186537	9501154	
105		39.046	1.53	7946966	5189522	
114		38.392	1.50	8298330	5548139	
118		37.855	1.52	8853400	5831352	
123		37.520	1.49	8417688	5655194	
126		42.181	1.53	7036829	4607937	
156	156/157	45.255	1.22	13016131	10671543	
157	156/157	45.255	1.22	(13016131)	(10671543)	
167		44.098	1.25	7020713	5612988	
169		48.525	1.21	5836654	4837214	
189		51.064	0.99	4922715	4958579	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL Date	10/07/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.832	0.77	34210797	44266996	
13C-3,3',4,4'-TeCB	77	35.402	0.79	35395450	44823730	
13C-2,3,3',4,4'-PeCB	105	38.995	1.51	40728648	26923537	
13C-2,3,4,4',5-PeCB	114	38.357	1.55	42745928	27575415	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44657518	28840602	
13C-2,3',4,4',5'-PeCB	123	37.469	1.53	43022555	28210031	
13C-3,3',4,4',5-PeCB	126	42.147	1.53	36577625	23922117	
13C-HxCB(156/157)	156/157	45.203	1.23	69653134	56819445	
13C-2,3',4,4',5,5'-HxCB	167	44.046	1.25	36559258	29211015	
13C-3,3',4,4',5,5'-HxCB	169	48.472	1.24	30651857	24792300	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.03	28316147	27496668	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	55689198	54423067	
13C-2,3,3',5,5'-PeCB	111	35.452	1.60	64883754	40430467	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.07	36247946	33766626	
Recovery Standards						
13C-2,5-DiCB	9	15.337	1.53	84686939	55315081	
13C-2,2',5,5'-TeCB	52	25.387	0.80	42416046	52980659	
13C-2,2',4,5,5'-PeCB	101	32.668	1.62	50281923	31100077	
13C-2,2',3,4,4',5'-HxCB	138	40.973	1.25	41920878	33447291	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.126	0.90	24833766	27679627	

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Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy_____ Date _____

Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL ID	Y211007

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.418	0.77	122699703	159707089	
81		34.848	0.75	125942207	167138424	
105		39.028	1.52	143263175	94554749	
114		38.374	1.51	154363717	102247755	
118		37.821	1.52	158518382	104050458	
123		37.486	1.51	153580769	101647751	
126		42.163	1.50	127752628	85082410	
156	156/157	45.220	1.23	254098813	207052129	
157	156/157	45.220	1.23	(254098813)	(207052129)	
167		44.063	1.22	131084207	107816581	
169		48.489	1.21	109583957	90325860	
189		51.057	1.01	98180269	97375448	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.831	0.77	34784792	45413028	
13C-3,3',4,4'-TeCB	77	35.401	0.79	35556353	44802460	
13C-2,3,3',4,4'-PeCB	105	39.011	1.54	42719780	27666457	
13C-2,3,4,4',5-PeCB	114	38.357	1.56	42911393	27511946	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44868121	28881141	
13C-2,3',4,4',5'-PeCB	123	37.468	1.51	42837264	28287898	
13C-3,3',4,4',5-PeCB	126	42.146	1.55	37305170	24073584	
13C-HxCB(156/157)	156/157	45.219	1.25	71784489	57574094	
13C-2,3',4,4',5,5'-HxCB	167	44.045	1.24	36763440	29578303	
13C-3,3',4,4',5,5'-HxCB	169	48.488	1.23	31756784	25737966	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.04	29222728	28169942	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	51908930	51091675	
13C-2,3,3',5,5'-PeCB	111	35.468	1.60	64649598	40423708	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.08	35851672	33086489	
Recovery Standards						
13C-2,5-DiCB	9	15.325	1.52	83143628	54673112	
13C-2,2',5,5'-TeCB	52	25.386	0.80	41733434	52403278	
13C-2,2',4,5,5'-PeCB	101	32.668	1.61	49712591	30937614	
13C-2,2',3,4,4',5'-HxCB	138	40.989	1.27	41161616	32464857	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.146	0.92	24949098	27236268	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.417	0.76	616806932	810414208	
81		34.847	0.76	639607623	840095356	
105		39.027	1.54	745301804	485163987	
114		38.374	1.52	780283922	512899091	
118		37.837	1.53	803499802	526013471	
123		37.502	1.52	785601740	516404877	
126		42.162	1.52	649914791	428105060	
156	156/157	45.236	1.22	1286847987	1051857892	
157	156/157	45.236	1.22	(1286847987)	(1051857892)	
167		44.079	1.22	653652175	535863549	
169		48.505	1.22	557599158	455624388	
189		51.056	1.01	503772747	500470805	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	209 Mix	Injected By	BAL
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_02	GC Column ID	261111-02
Analyzed	08/19/2021 12:34	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.78	350345770	451311493	
13C-3,3',4,4'-TeCB	77	35.437	0.78	358586273	458242779	
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	398629988	258944921	
13C-2,3,4,4',5-PeCB	114	38.377	1.55	419130683	270353368	
13C-2,3',4,4',5-PeCB	118	37.824	1.56	337445748	216941583	
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	410374649	269449681	
13C-3,3',4,4',5-PeCB	126	42.183	1.54	364322549	235855149	
13C-HxCB(156/157)	156/157	45.240	1.24	575112371	464923773	
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.23	339862330	276398261	
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.22	290428710	237778570	
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.04	253341233	243605827	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.02	541390962	530905480	
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	591983650	372433434	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	345763984	313264751	
Recovery Standards						
13C-2,5-DiCB	9	15.362	1.54	782172916	509269814	
13C-2,2',5,5'-TeCB	52	25.422	0.80	421169308	527768351	
13C-2,2',4,5,5'-PeCB	101	32.704	1.59	499361743	313509468	
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.26	421031924	334204391	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.178	0.91	218688168	240803952	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	209 Mix	Injected By	BAL
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_02	GC Column ID	261111-02
Analyzed	08/19/2021 12:34	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.454	0.76	166566667	220048410	
81		34.884	0.76	181047236	236944635	
105		39.048	1.53	203070371	132300918	
114		38.410	1.51	210237379	139196253	
118		37.874	1.54	175160210	113880571	
123		37.522	1.51	203626798	134960104	
126		42.200	1.51	178649325	118163826	
156	156/157	45.257	1.21	301198333	248040417	
157	156/157	45.257	1.21	(301198333)	(248040417)	
167		44.100	1.22	181932165	148977128	
169		48.527	1.22	146914658	120346982	
189		51.088	1.01	117996108	116718149	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_01	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.78	76295120	98381686	
13C-3,3',4,4'-TeCB	77	35.454	0.78	78929962	101541891	
13C-2,3,3',4,4'-PeCB	105	39.048	1.56	92088980	58982498	
13C-2,3,4,4',5-PeCB	114	38.394	1.53	93027165	60623043	
13C-2,3',4,4',5-PeCB	118	37.857	1.53	96292104	62994671	
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	92167858	60532760	
13C-3,3',4,4',5-PeCB	126	42.184	1.56	83517503	53704511	
13C-HxCB(156/157)	156/157	45.257	1.22	150827777	123193956	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.24	79681101	64499936	
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.25	69189892	55401415	
13C-2,3,3',4,4',5,5'-HpCB	189	51.067	1.03	60877189	59391133	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.442	1.02	118547740	116543315	
13C-2,3,3',5,5'-PeCB	111	35.504	1.57	142505463	90652009	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.09	78675916	72137599	
Recovery Standards						
13C-2,5-DiCB	9	15.385	1.54	183687824	119270059	
13C-2,2',5,5'-TeCB	52	25.438	0.80	93852330	116963618	
13C-2,2',4,5,5'-PeCB	101	32.721	1.59	110190624	69130827	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.26	92932325	73691738	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.90	52289833	57816048	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_01	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.471	0.76	34209870	44847202	
81		34.900	0.76	35137052	46445203	
105		39.064	1.51	38743046	25583524	
114		38.427	1.49	40374102	27105487	
118		37.874	1.54	43020795	27862576	
123		37.538	1.52	41321952	27158569	
126		42.217	1.51	35736156	23732630	
156	156/157	45.274	1.21	67597404	55647357	
157	156/157	45.274	1.21	(67597404)	(55647357)	
167		44.117	1.21	35422374	29210651	
169		48.544	1.22	30673526	25077221	
189		51.089	1.01	26406961	26266614	

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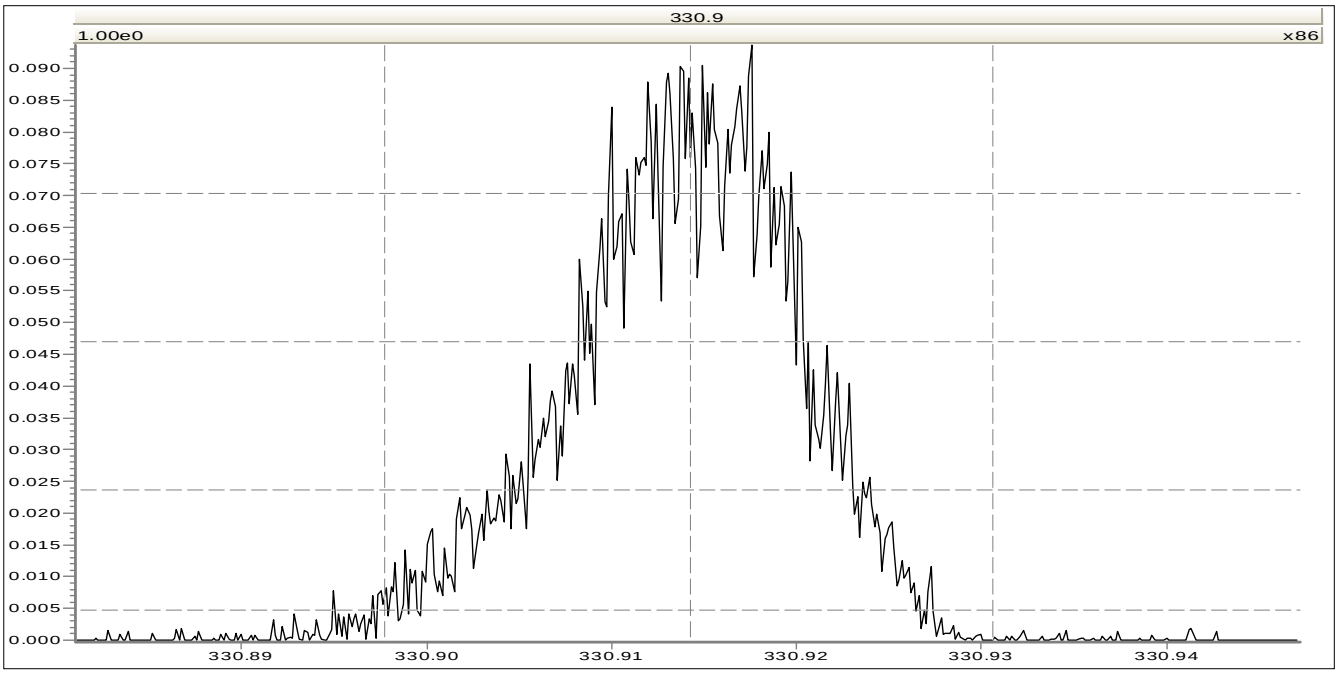

Source (EI+)

Ion Repeller (V)	-9.96
Focus 1	843
Beam Centre	37.3
Focus 2	4272
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-101.7
Z Deflect 1	-12.9
Z Deflect 2	-3.9
Z Focus 2	2338
Z Focus 3	0
Z Deflect 3	23.4
Y Focus	3492
Rotate 2	5.0
Curve 2	-4.1
Curve 3	0.8
Rotate 3	-40.5
Rotate 4	1.2
V Acc (V)	6495.96
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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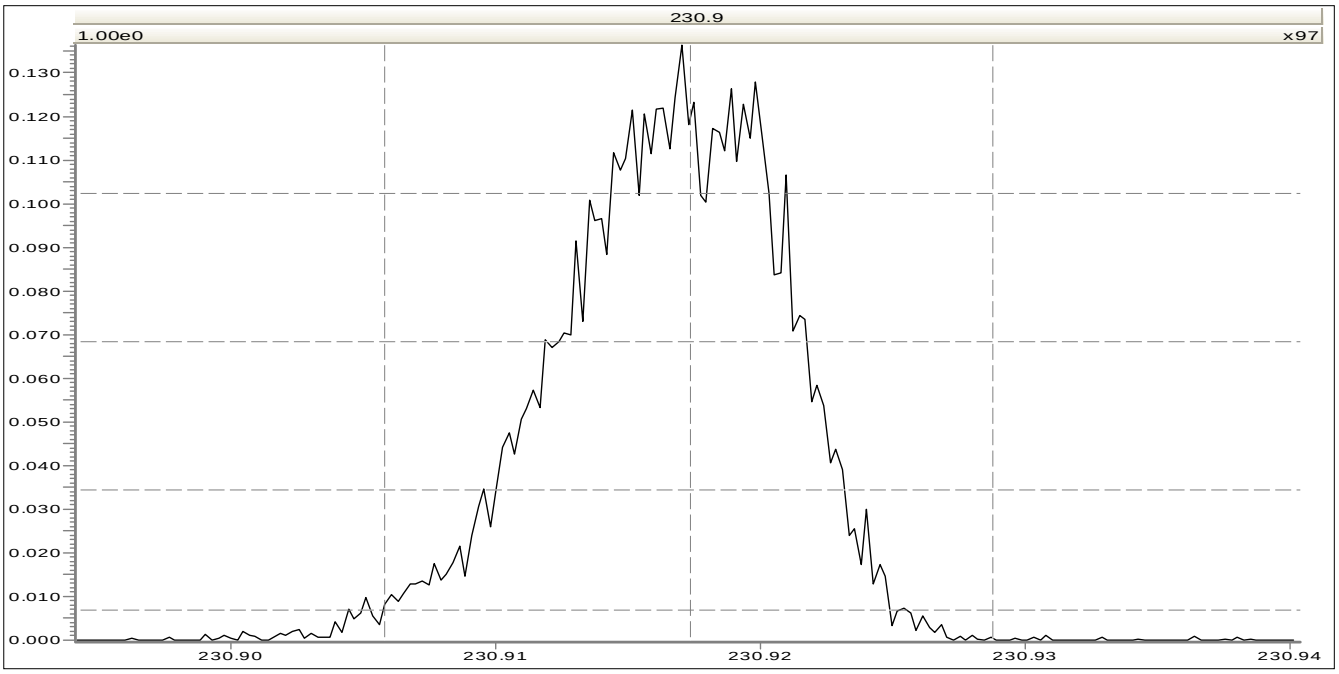

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.74
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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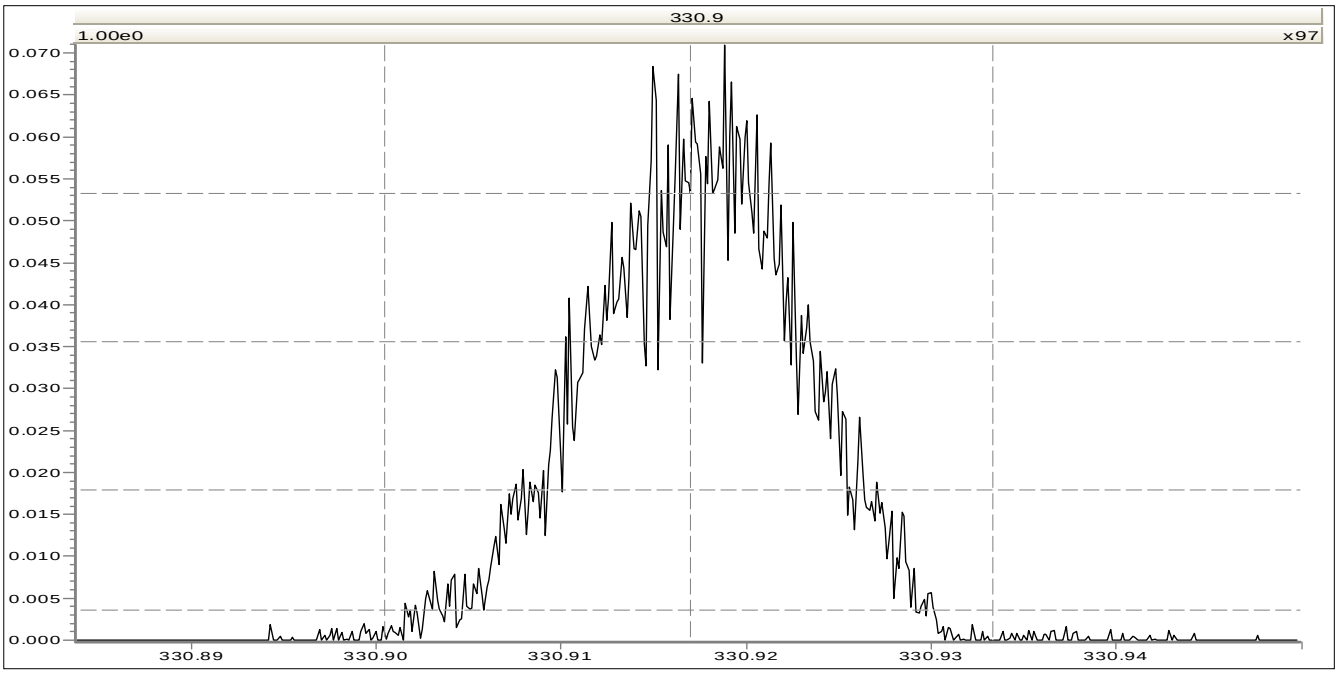

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.92
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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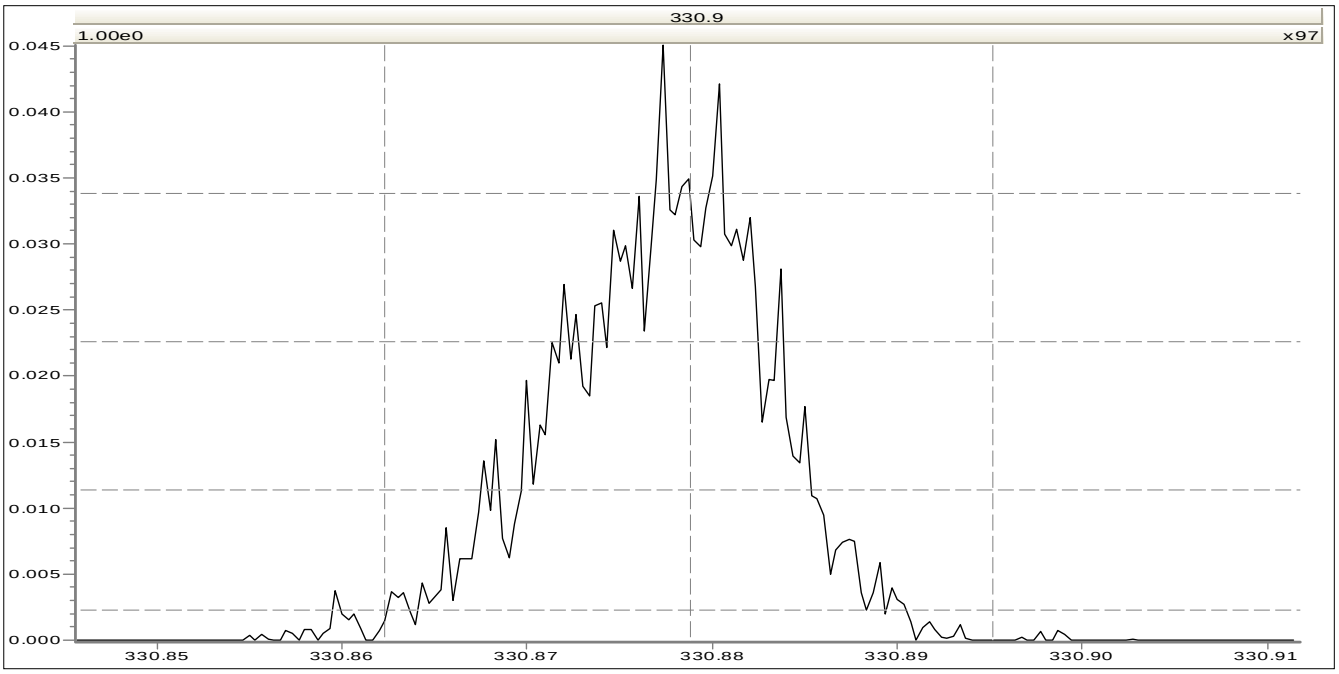


Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.92
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

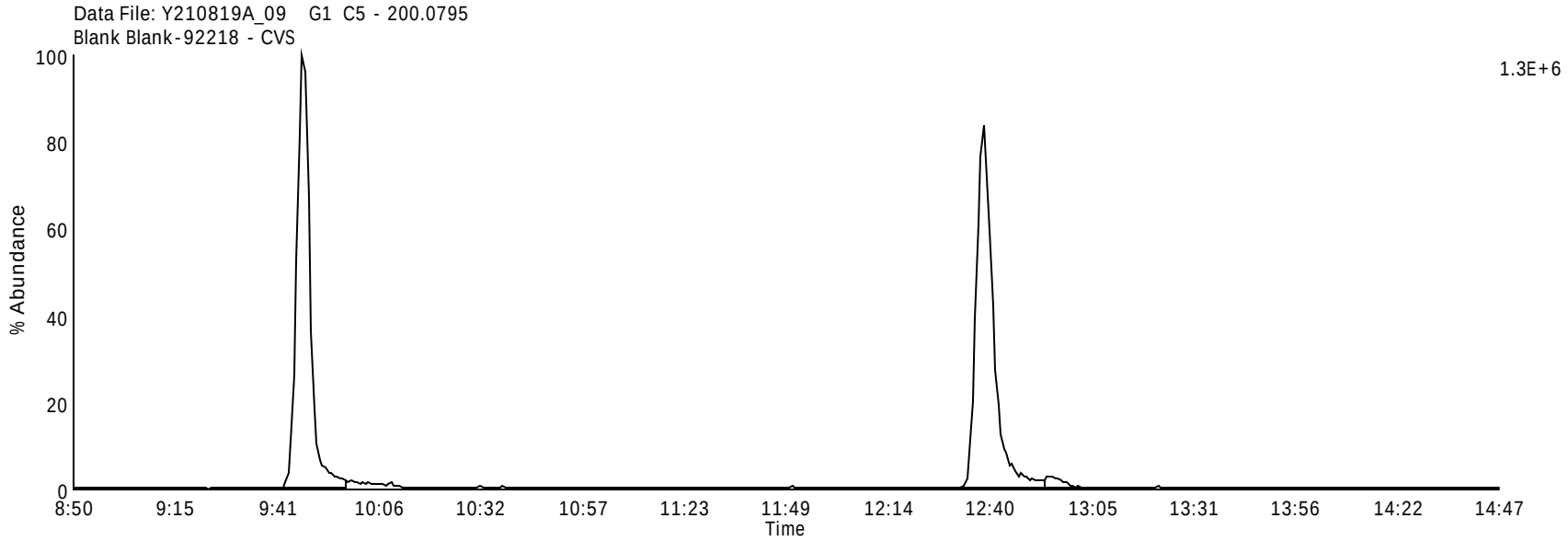
No information

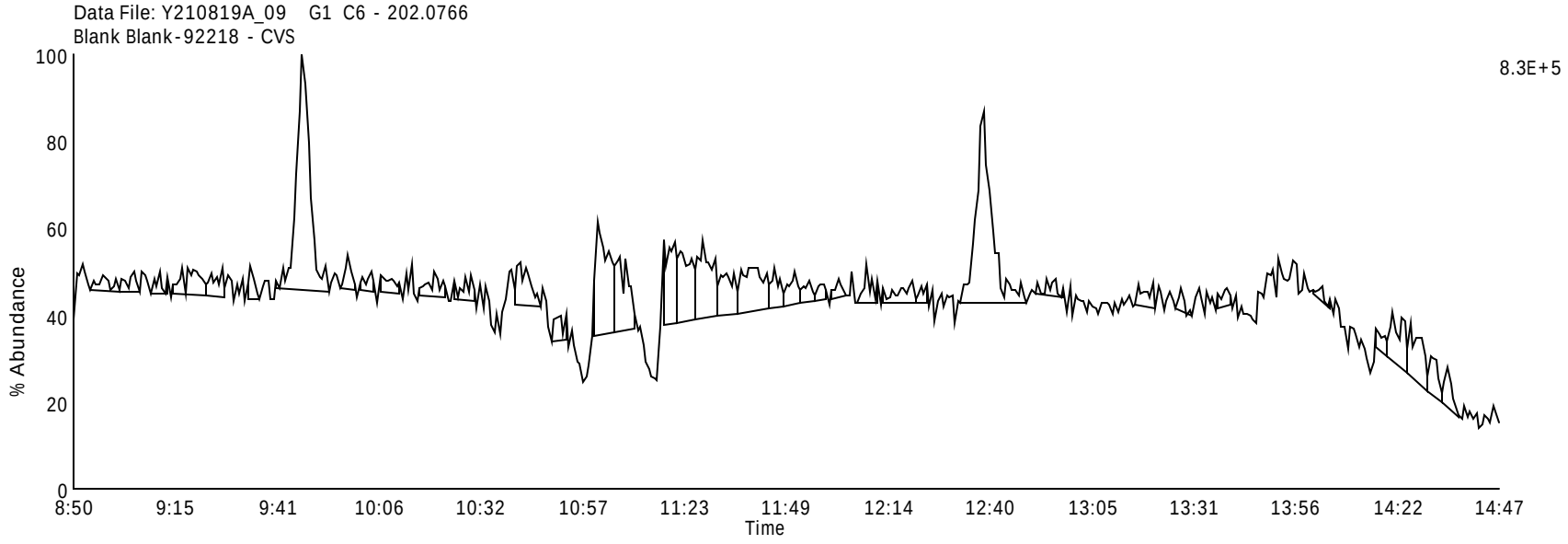
Appendix F

QC Raw Data

Labeled Mono Chlorinated Biphenyls

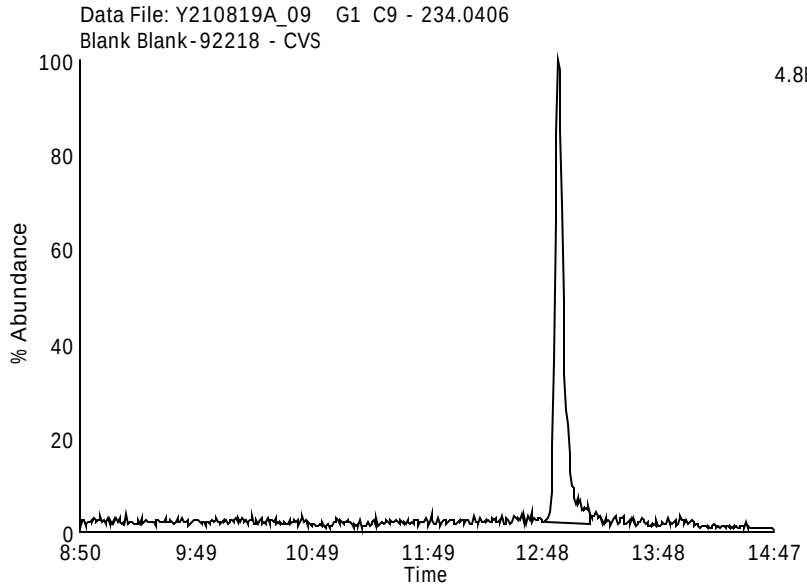
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

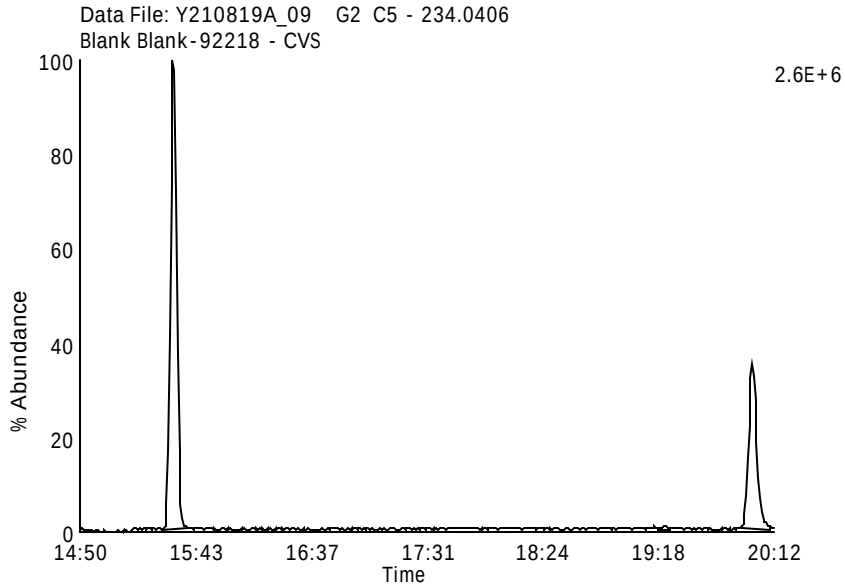


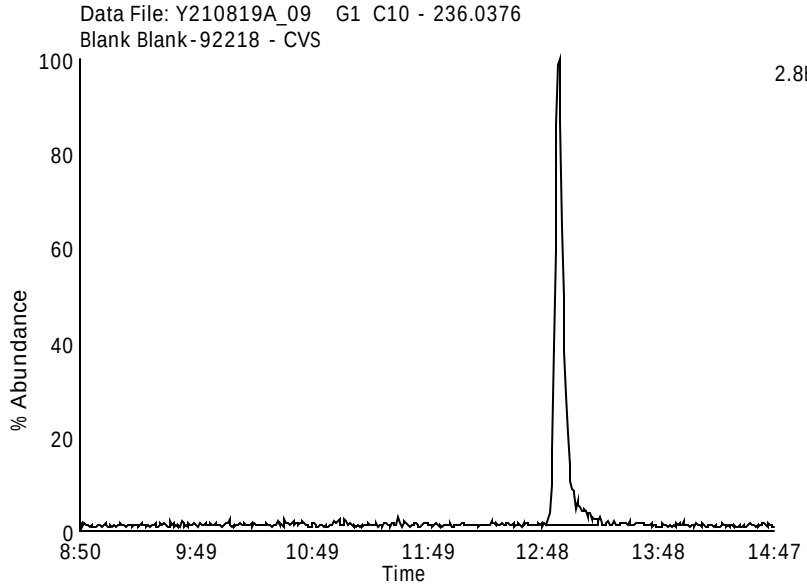


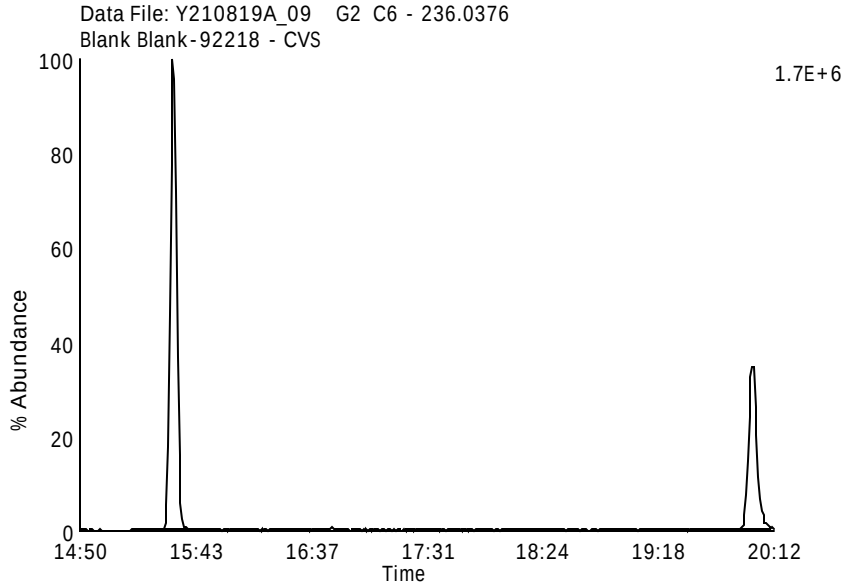
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



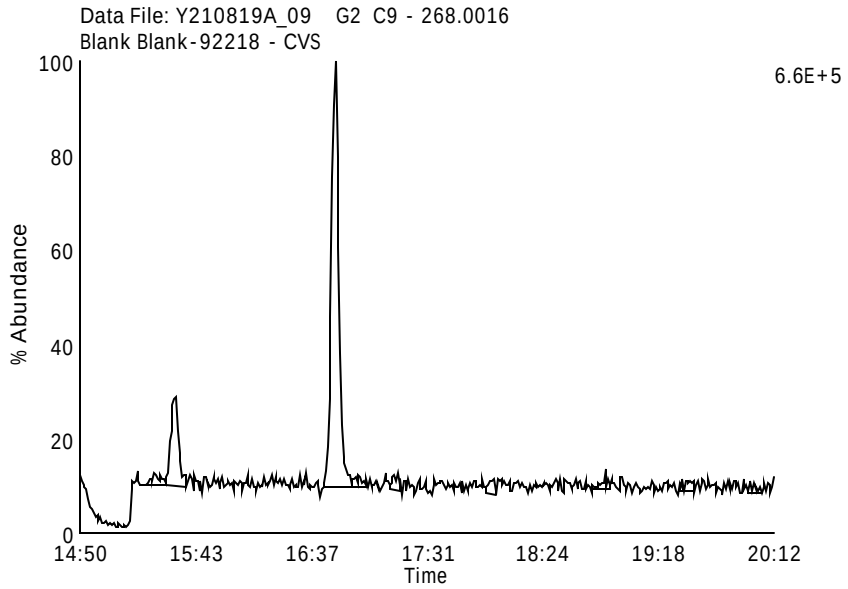


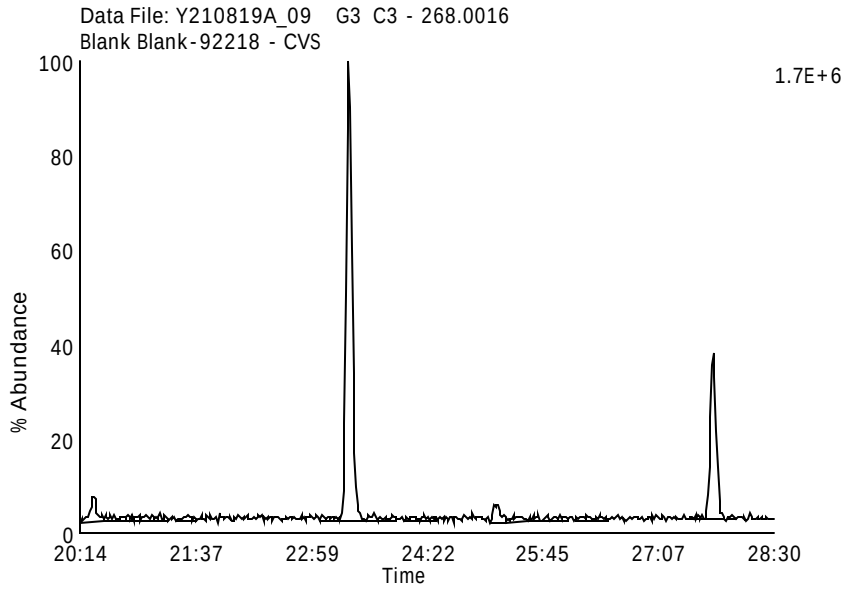


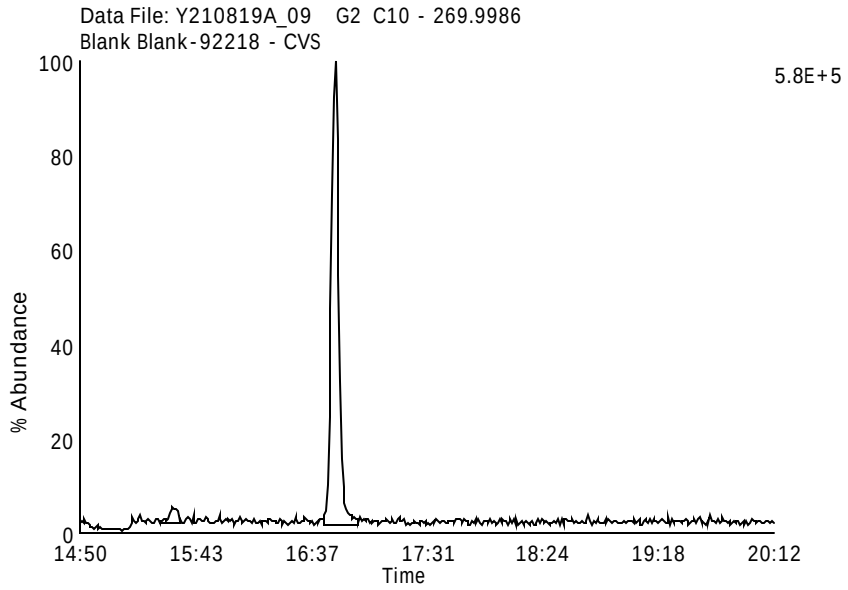


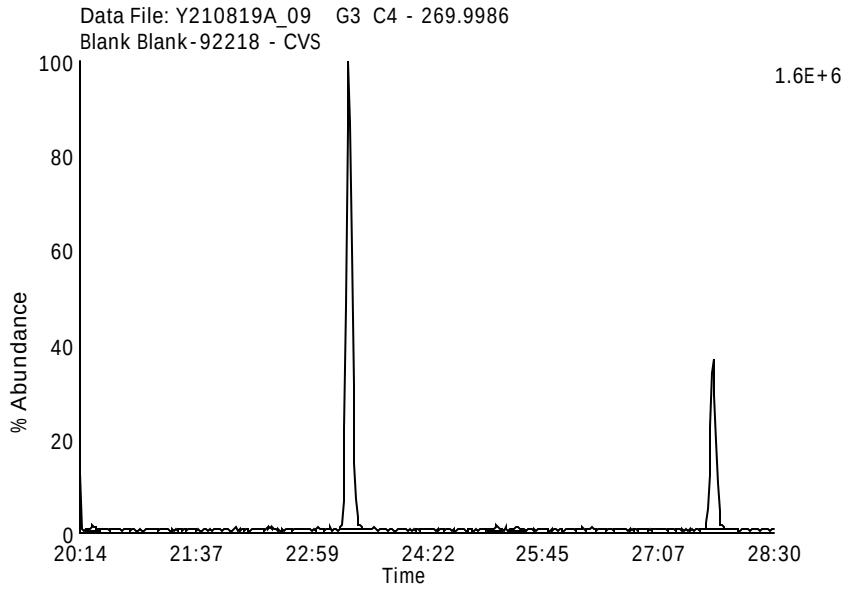
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



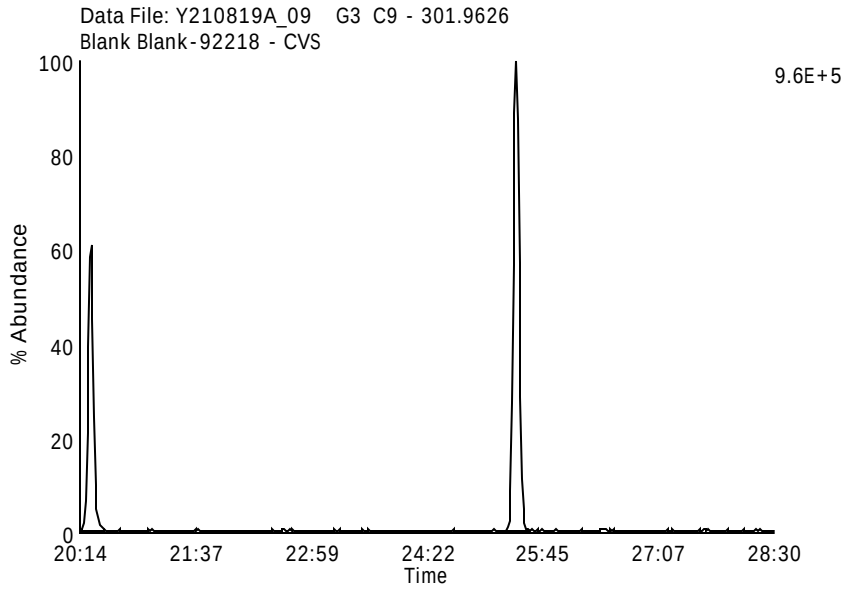


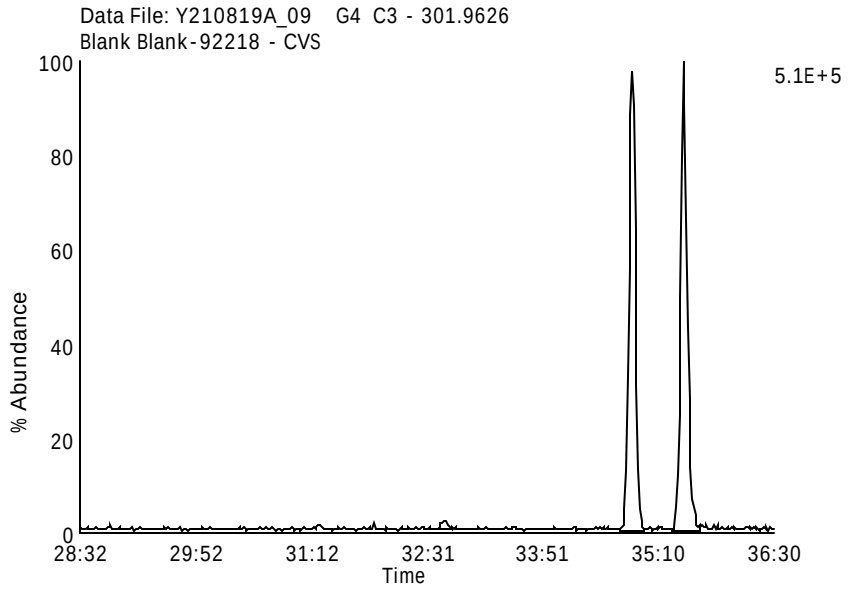


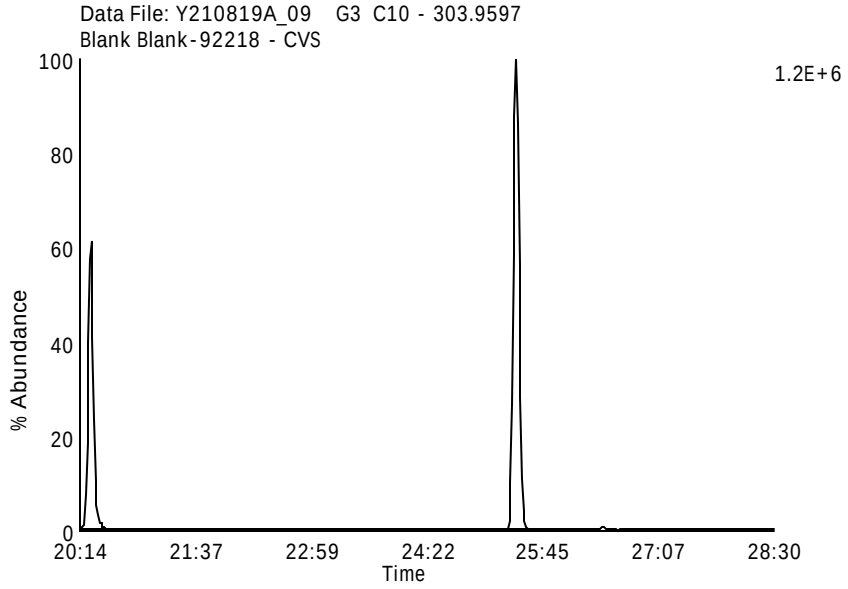


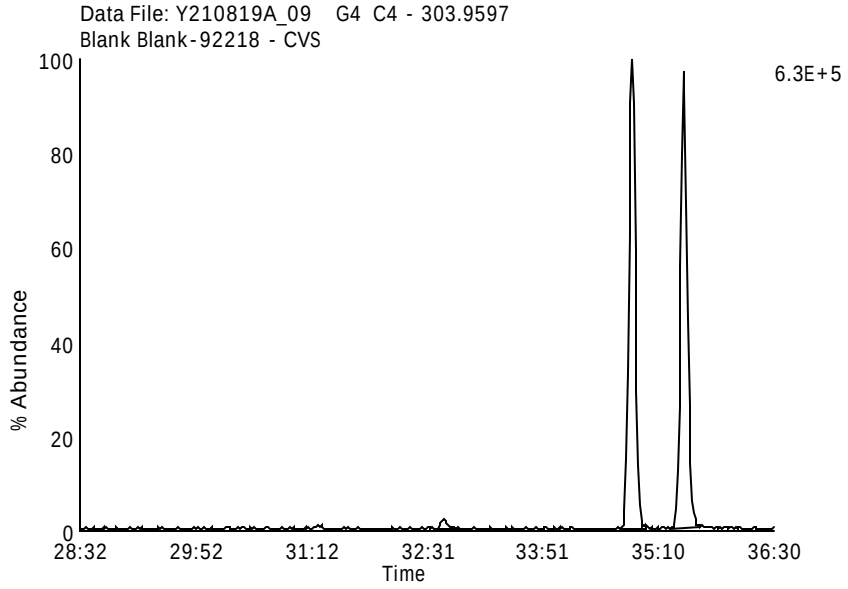
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



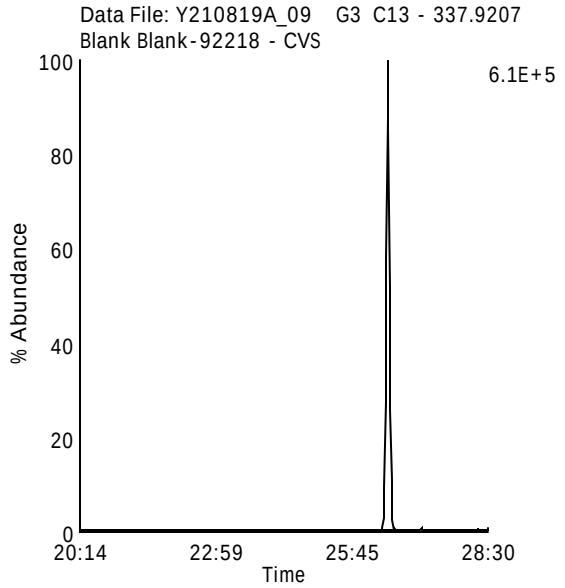


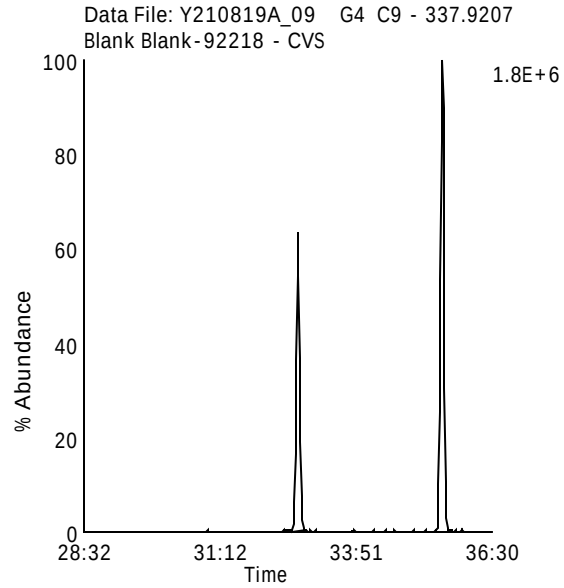


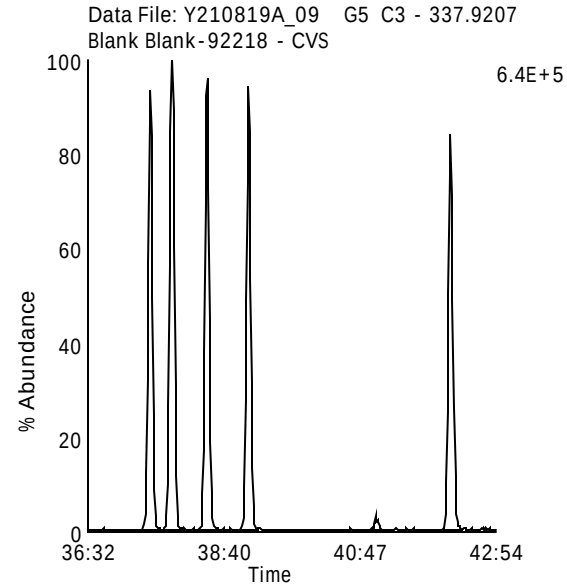


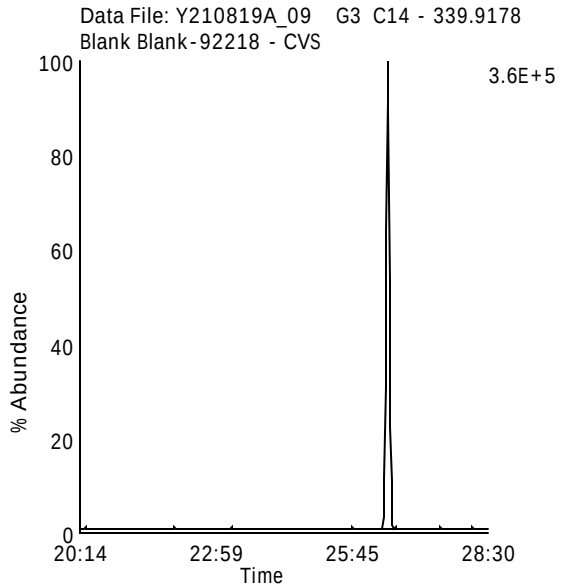
Labeled Penta Chlorinated Biphenyls

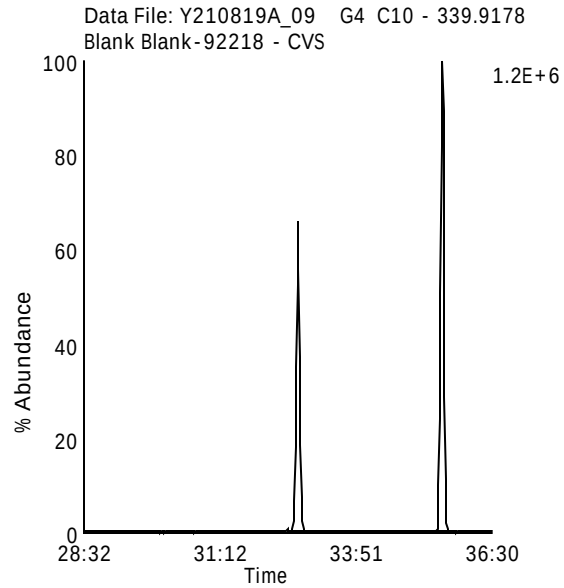
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

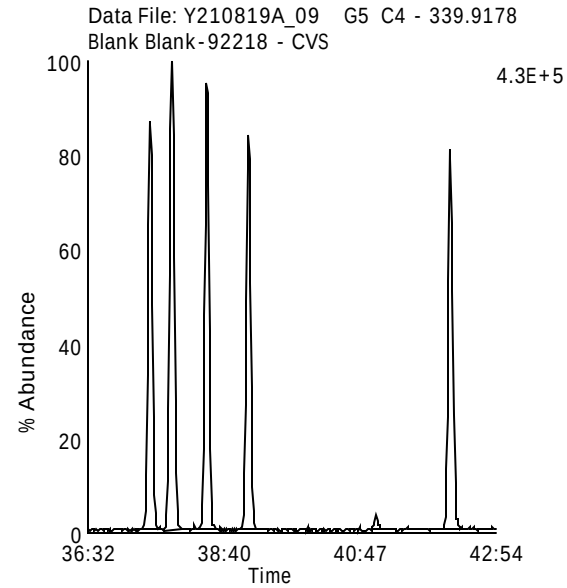






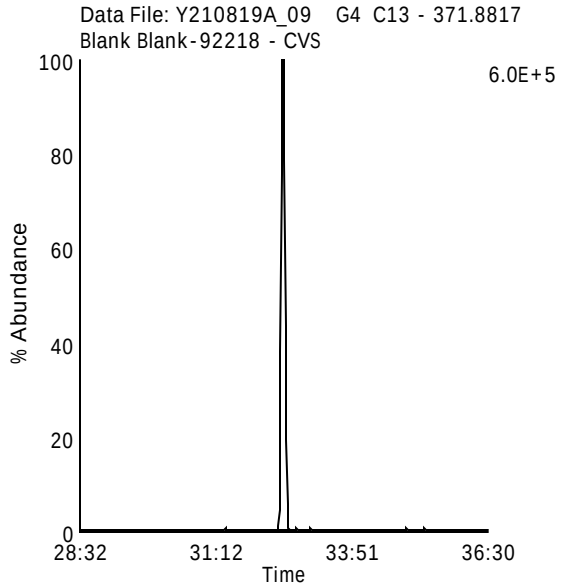


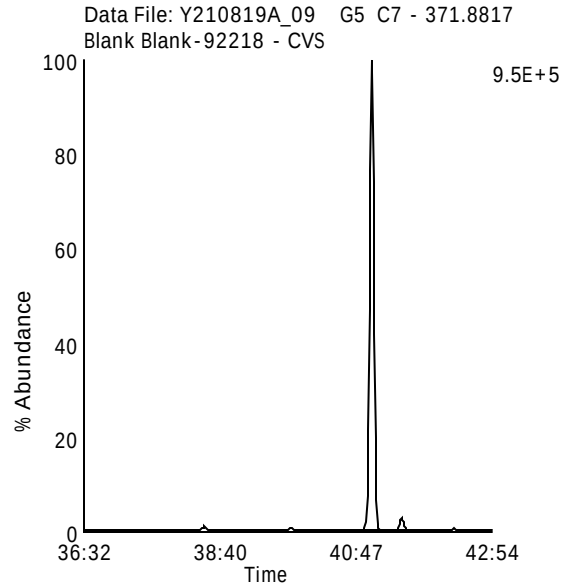


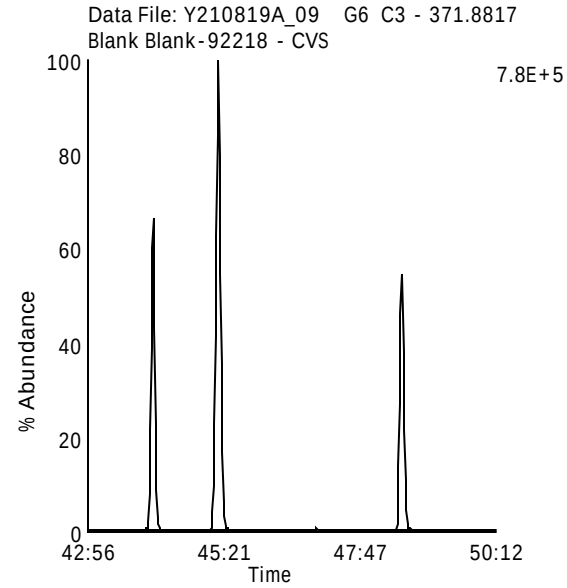


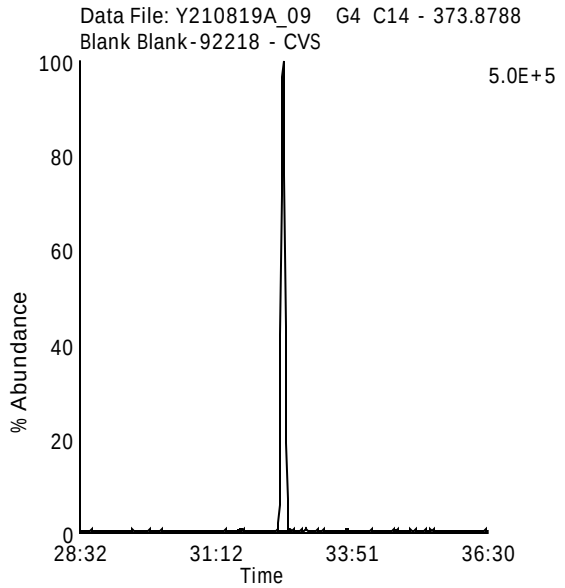
Labeled Hexa Chlorinated Biphenyls

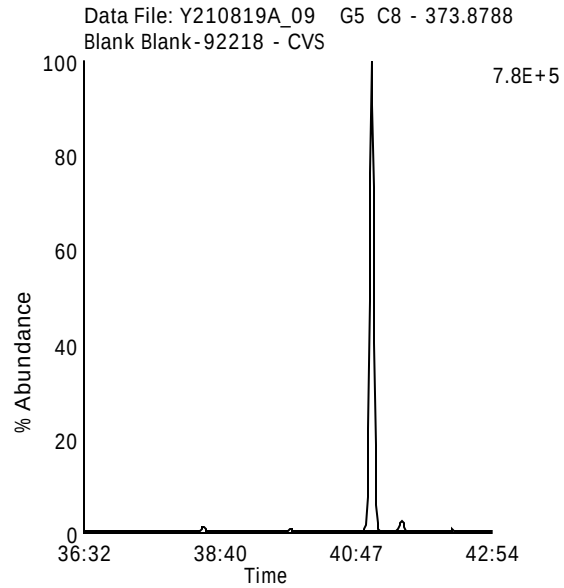
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

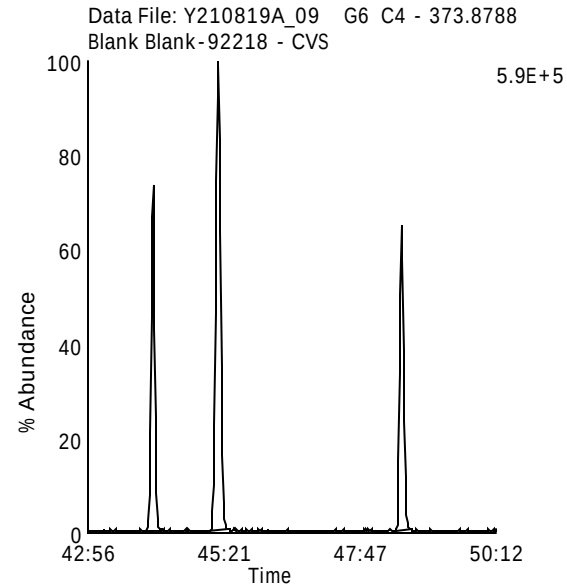






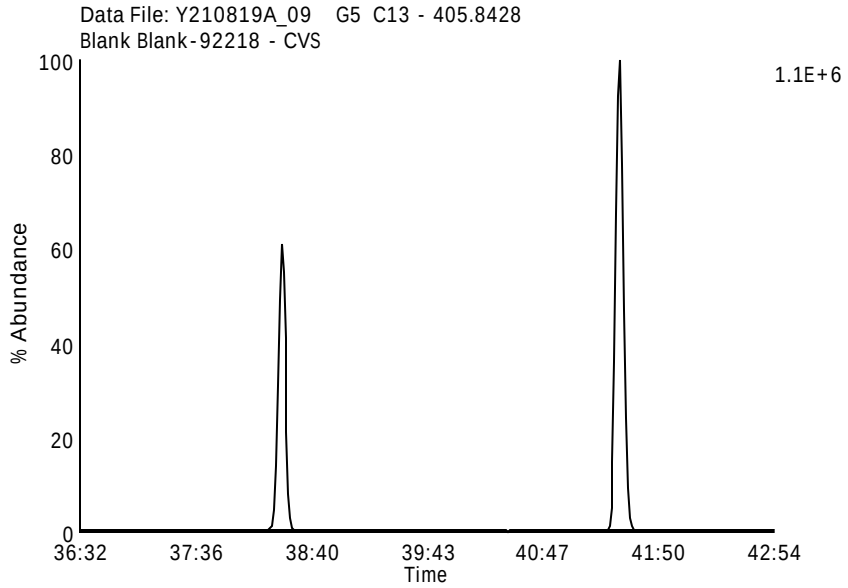


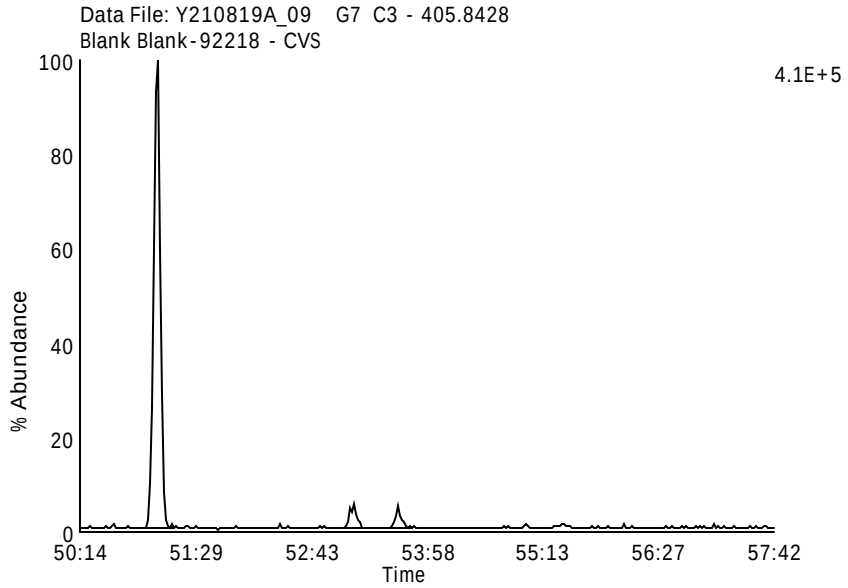


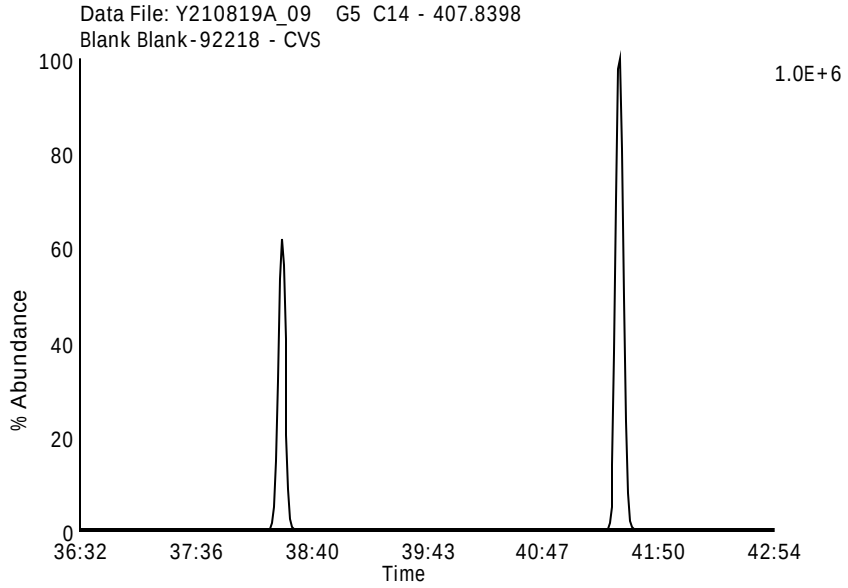


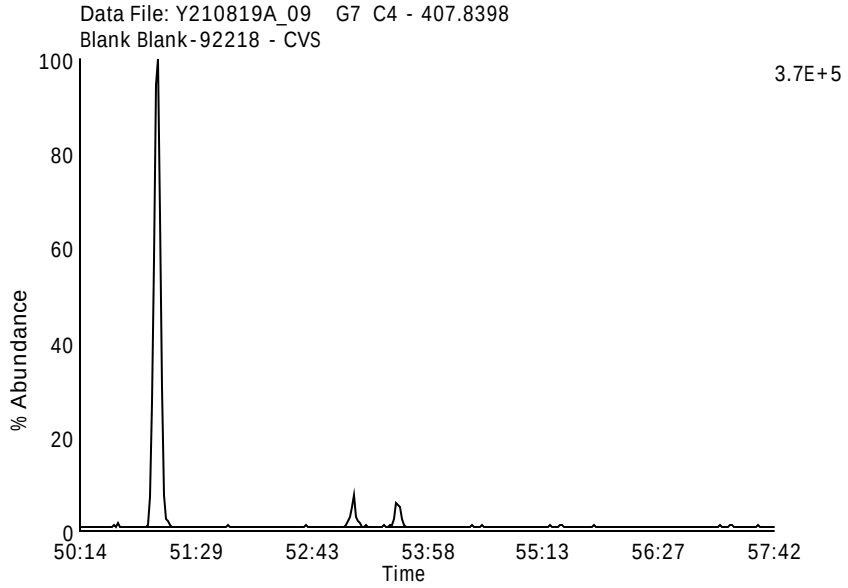
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



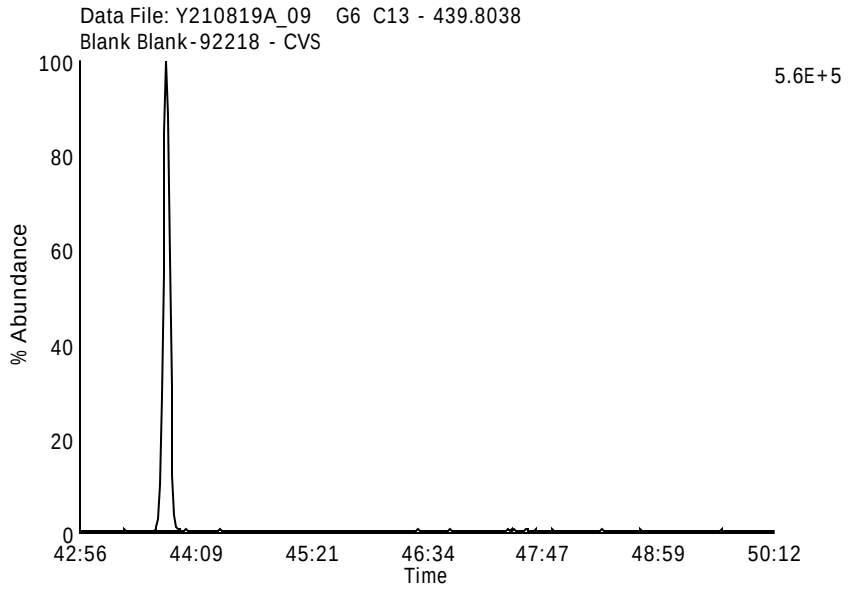


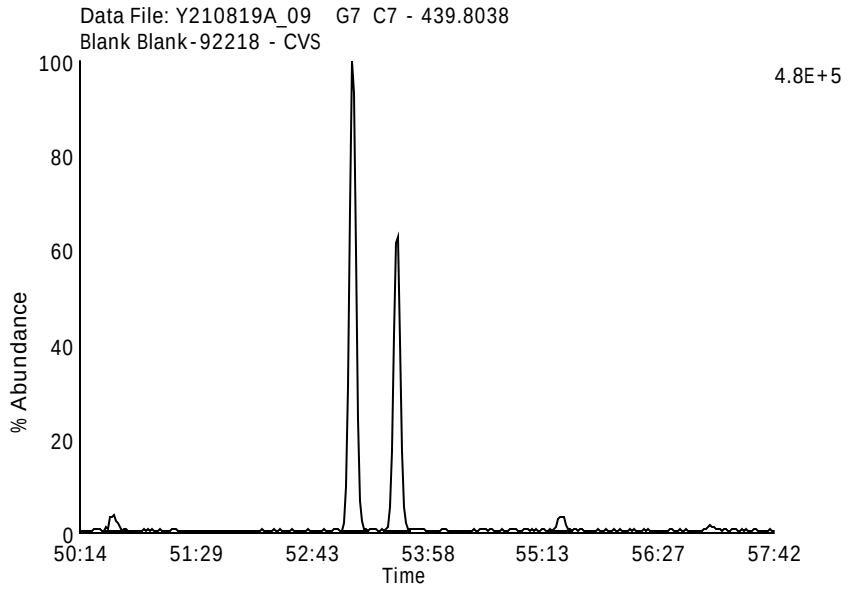


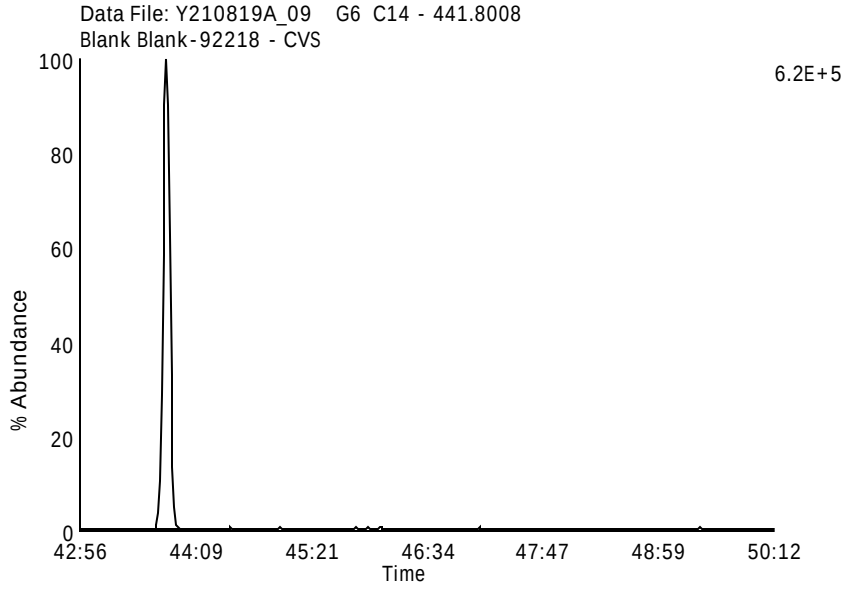


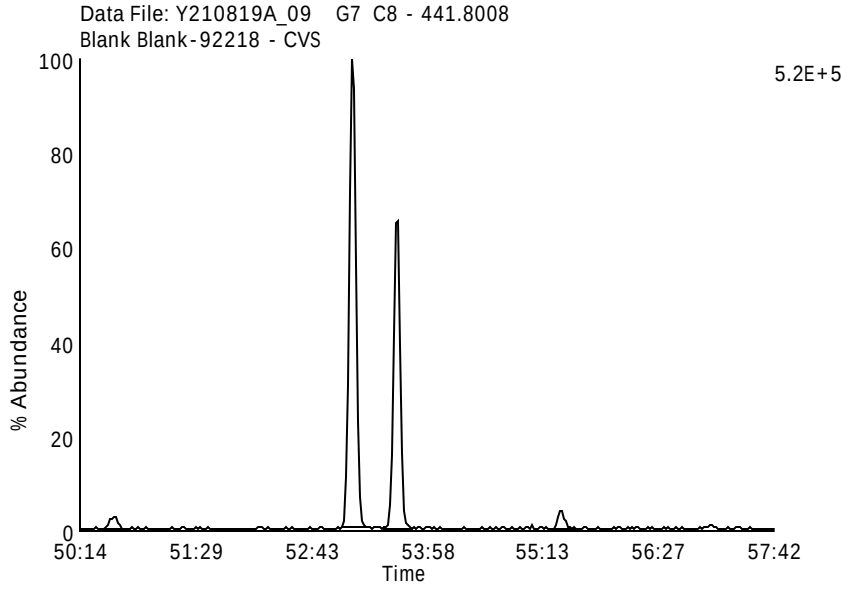
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



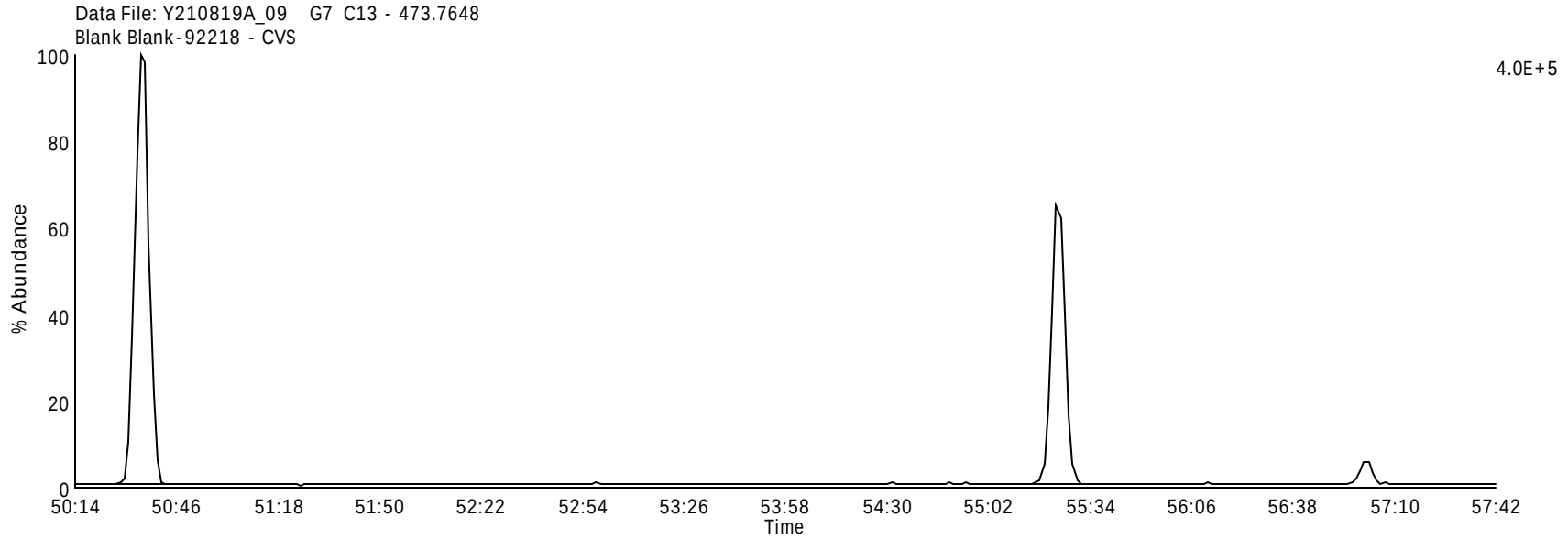


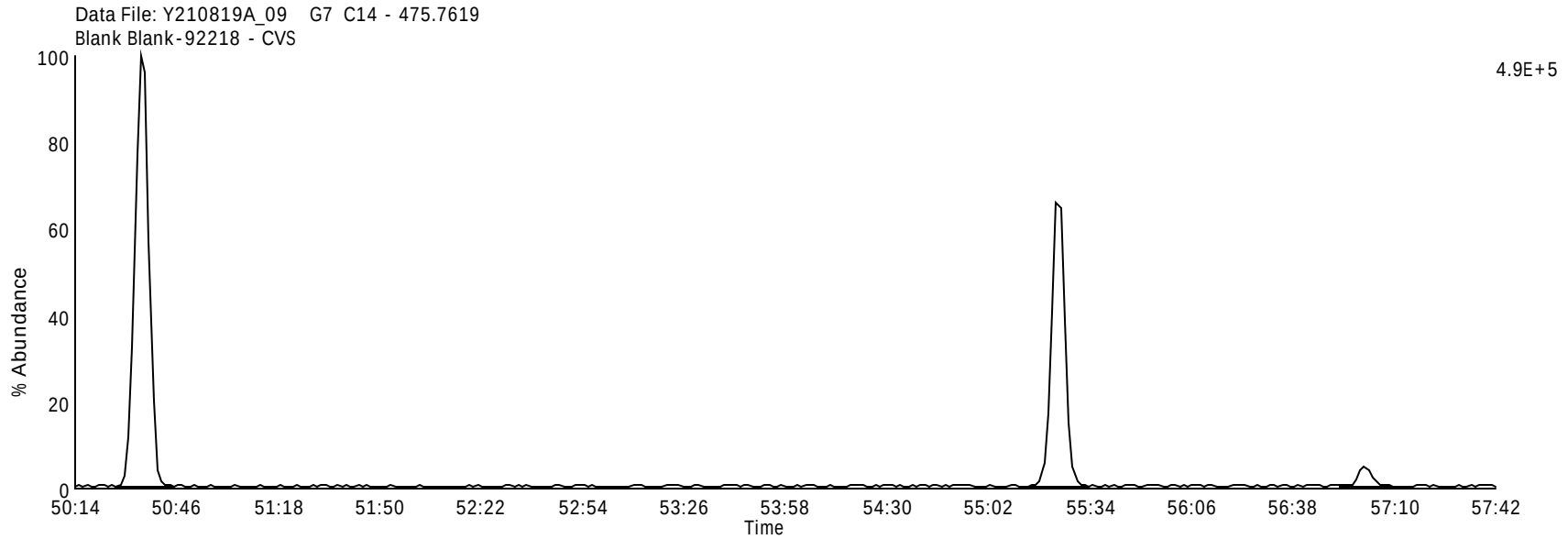




Labeled Nona Chlorinated Biphenyls

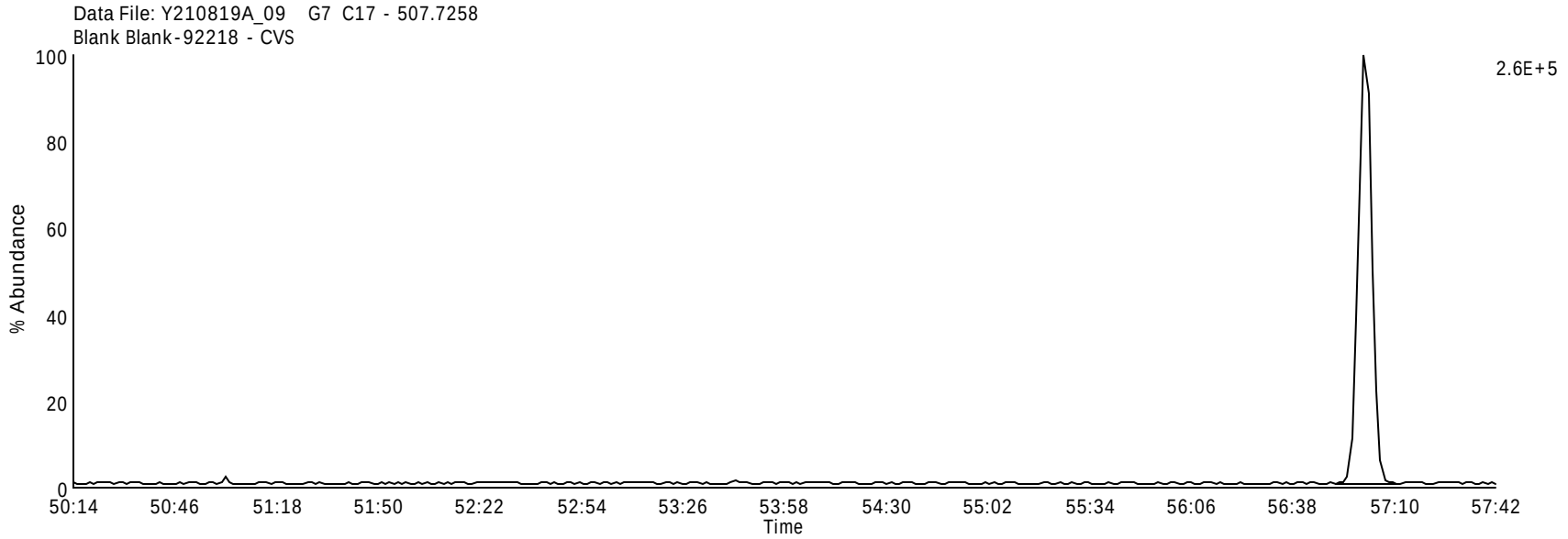
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

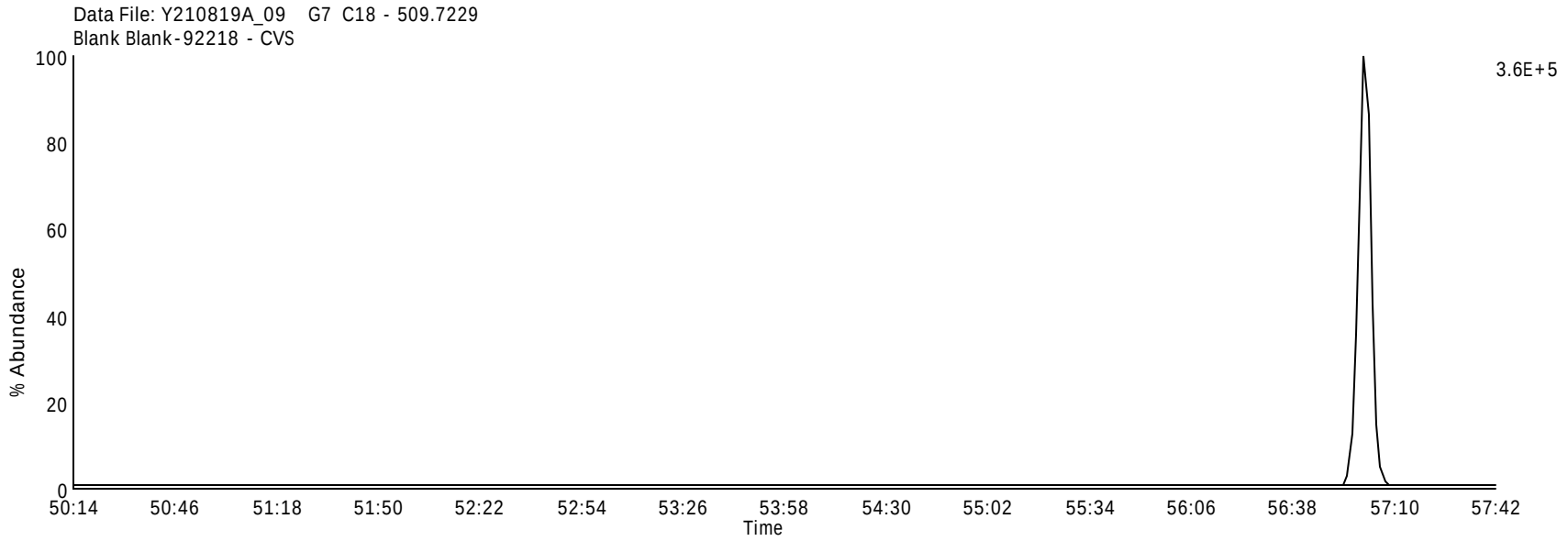




Labeled Deca Chlorinated Biphenyl

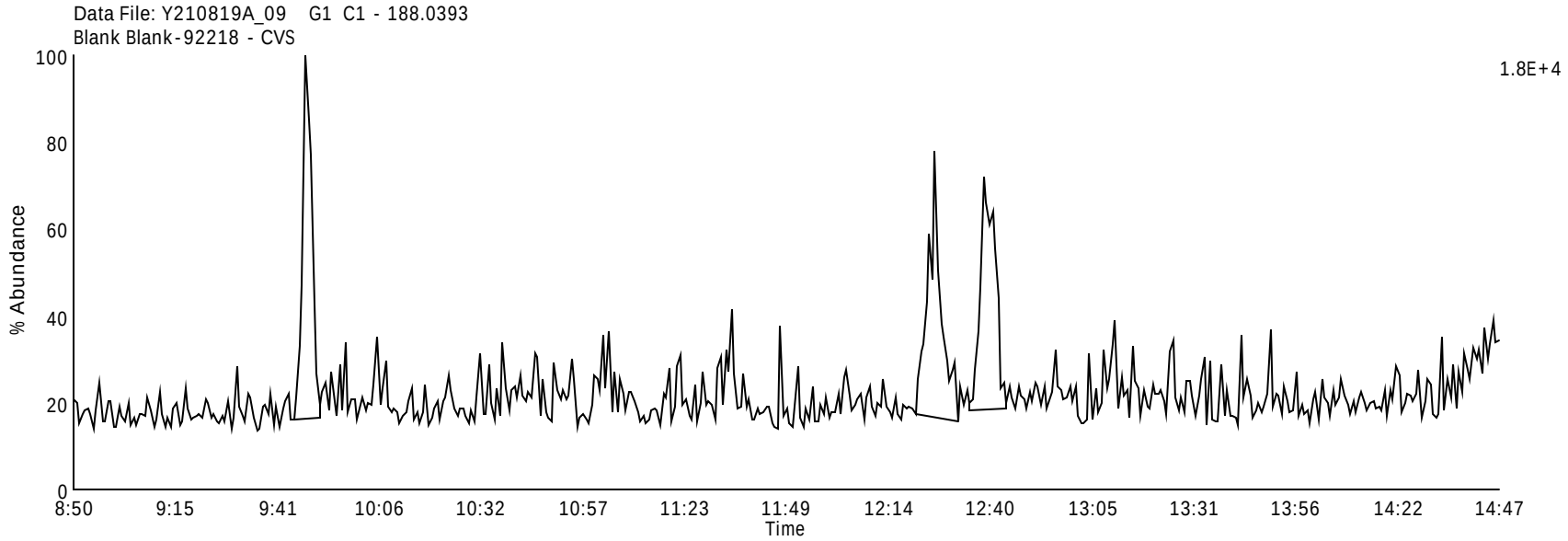
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

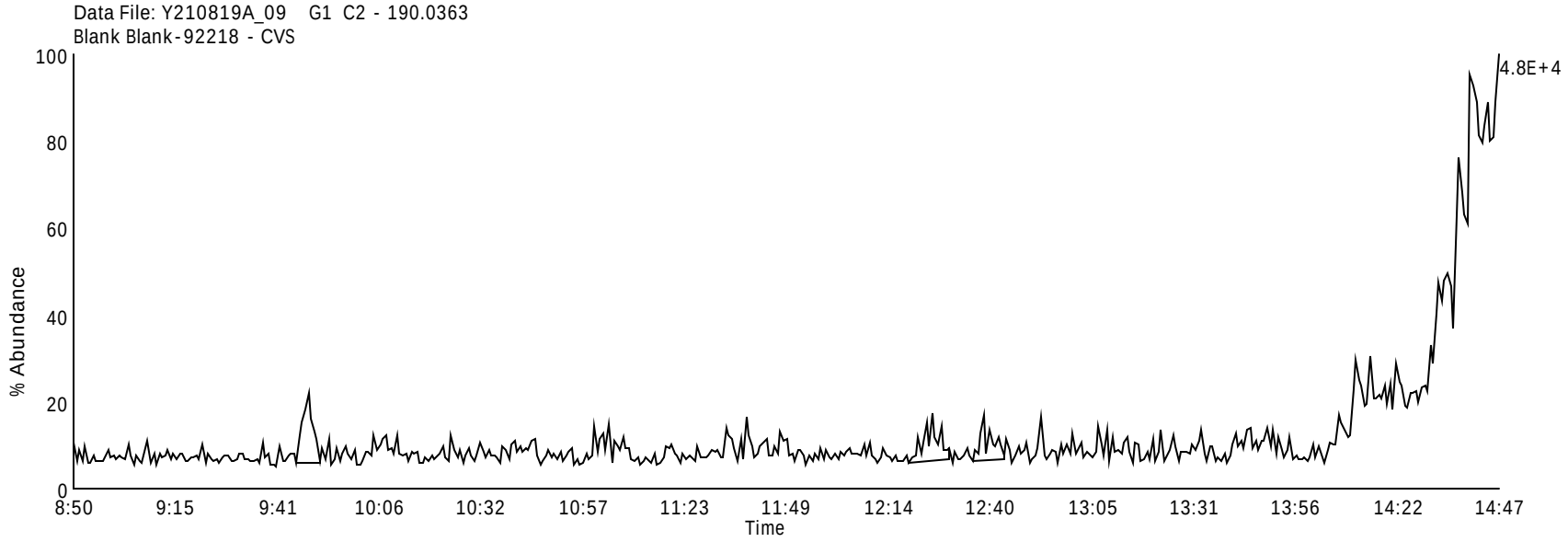




Mono Chlorinated Biphenyls

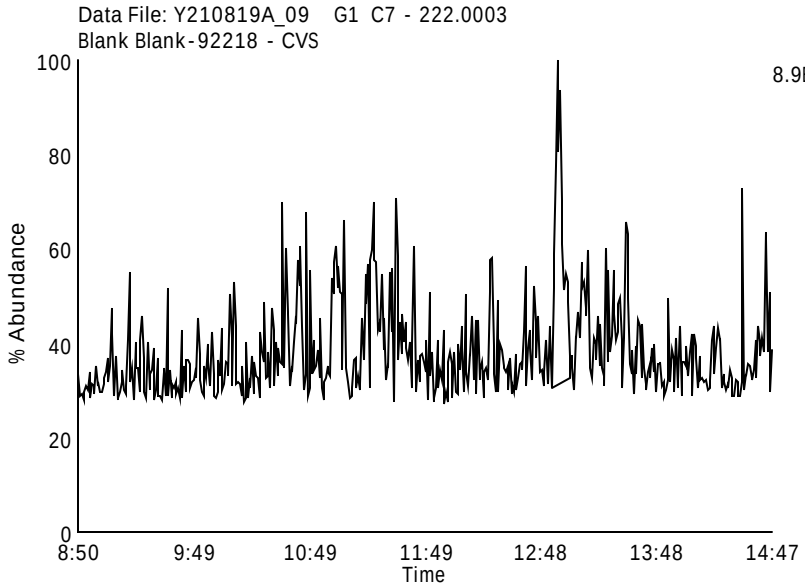
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

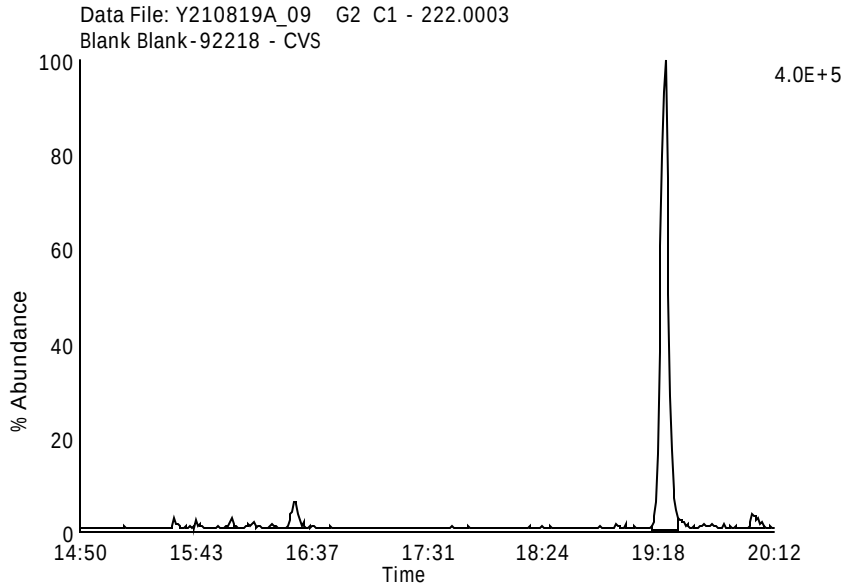


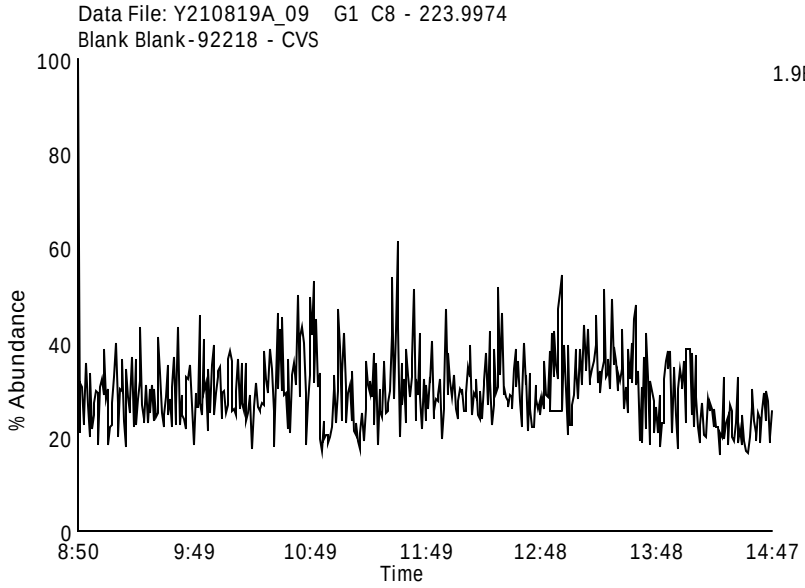


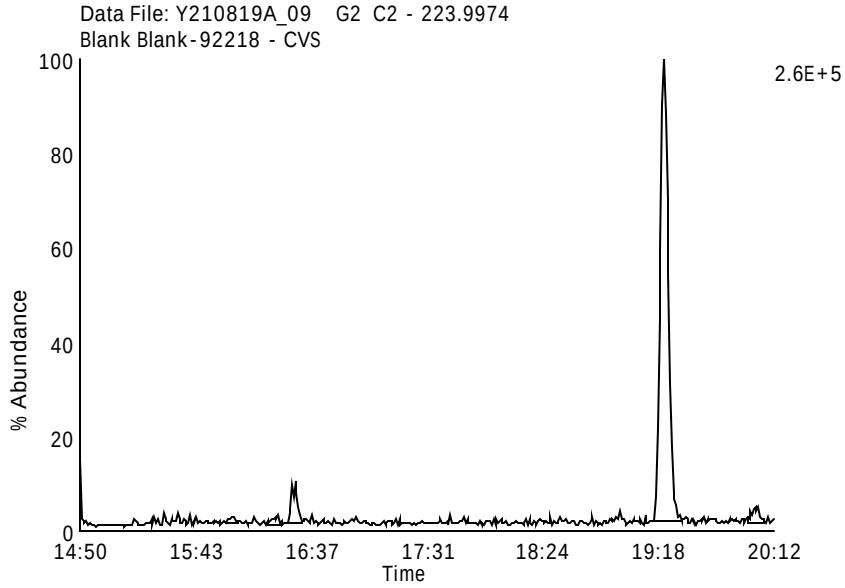
Di Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX







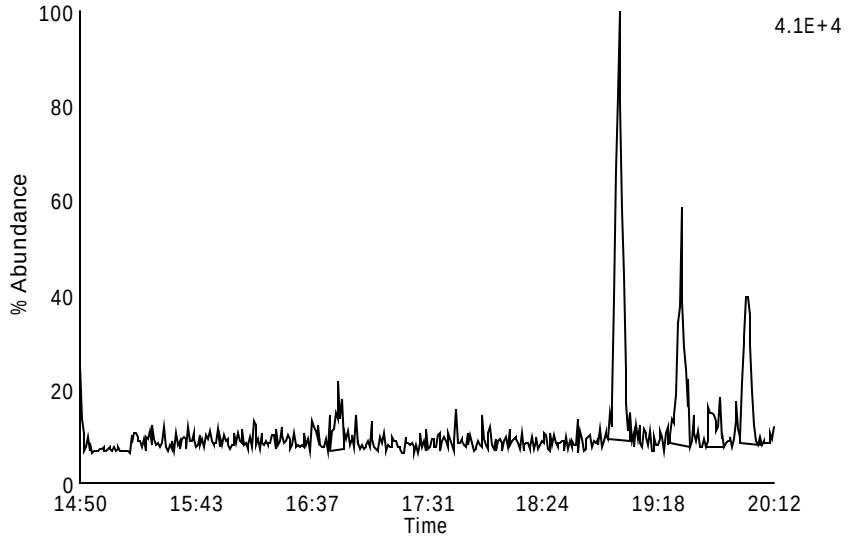


Tri Chlorinated Biphenyls

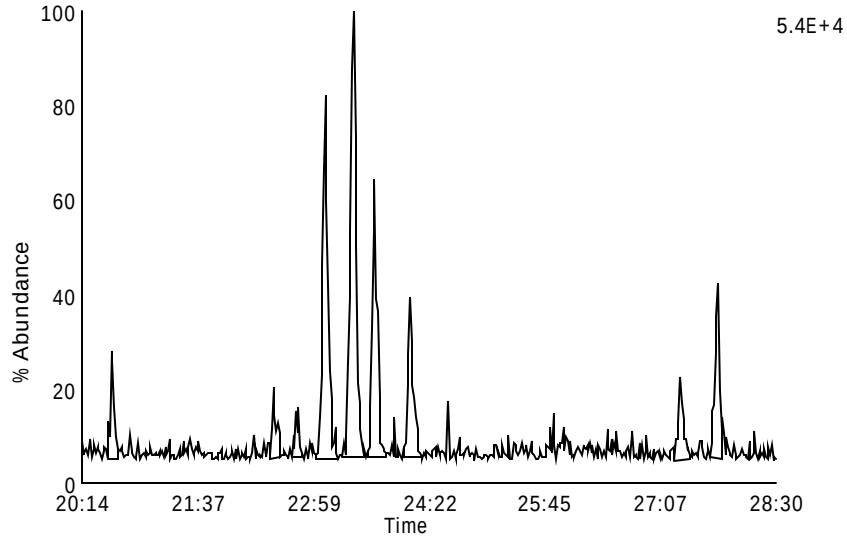
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX

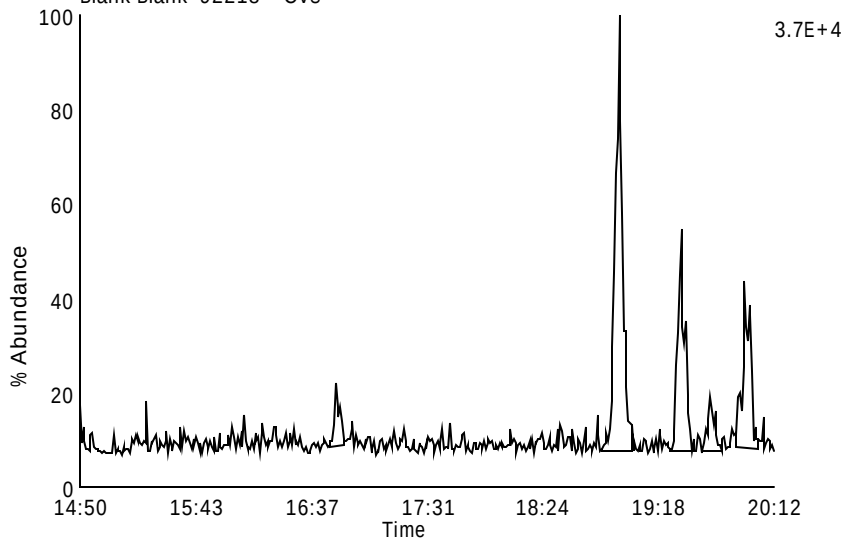
Data File: Y210819A_09 G2 C7 - 255.9613
Blank Blank-92218 - CVS



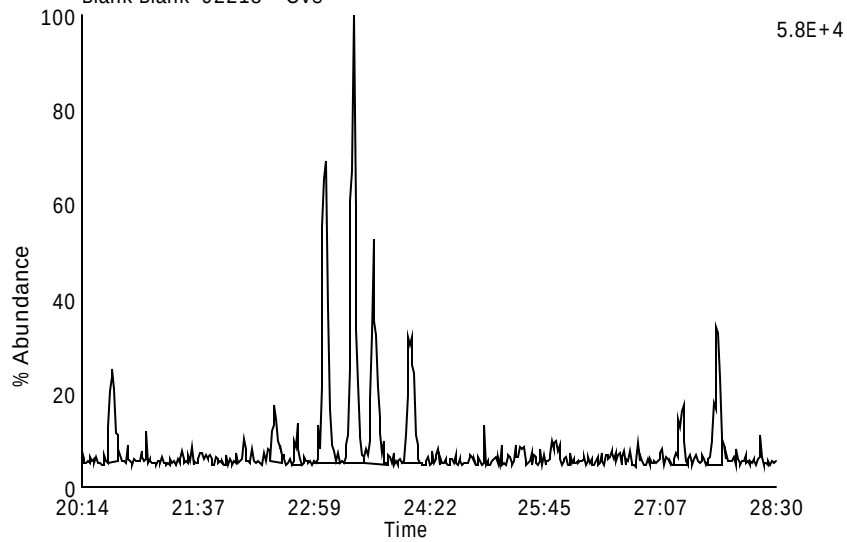
Data File: Y210819A_09 G3 C1 - 255.9613
Blank Blank-92218 - CVS



Data File: Y210819A_09 G2 C8 - 257.9584
Blank Blank-92218 - CVS

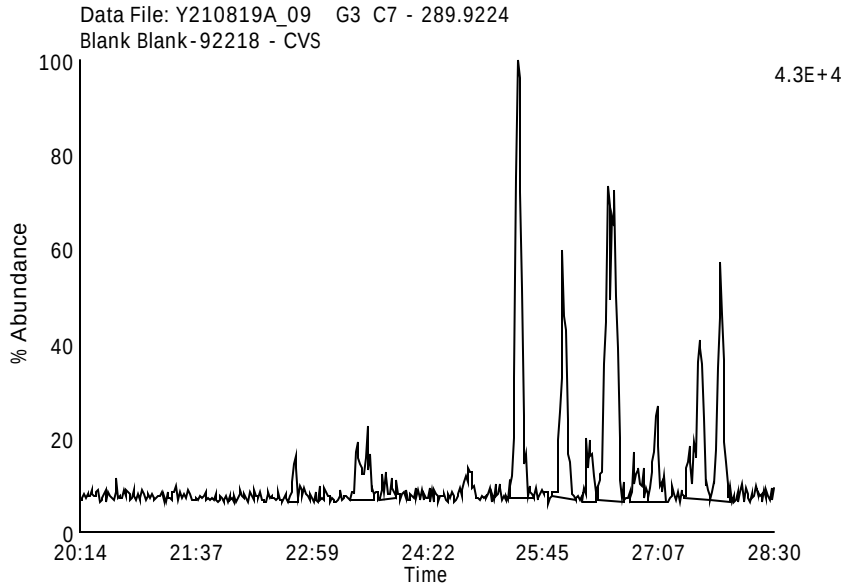


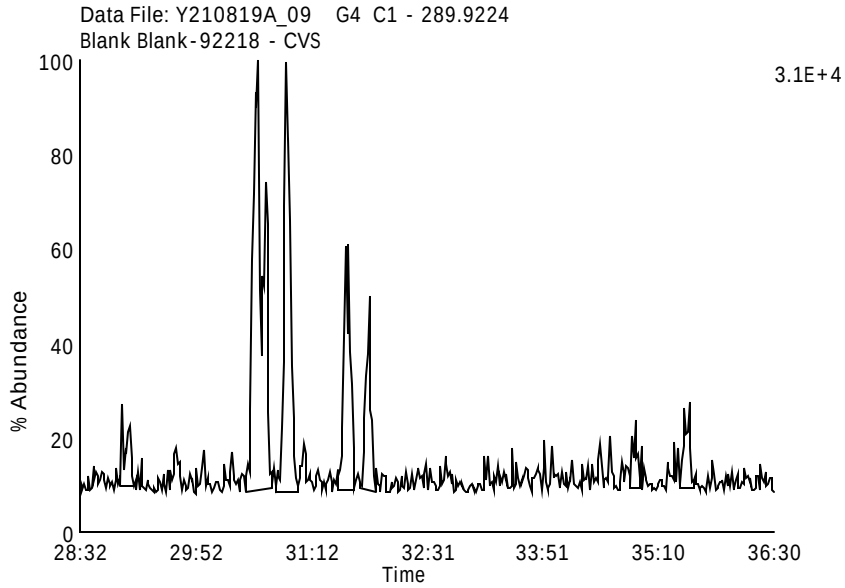
Data File: Y210819A_09 G3 C2 - 257.9584
Blank Blank-92218 - CVS

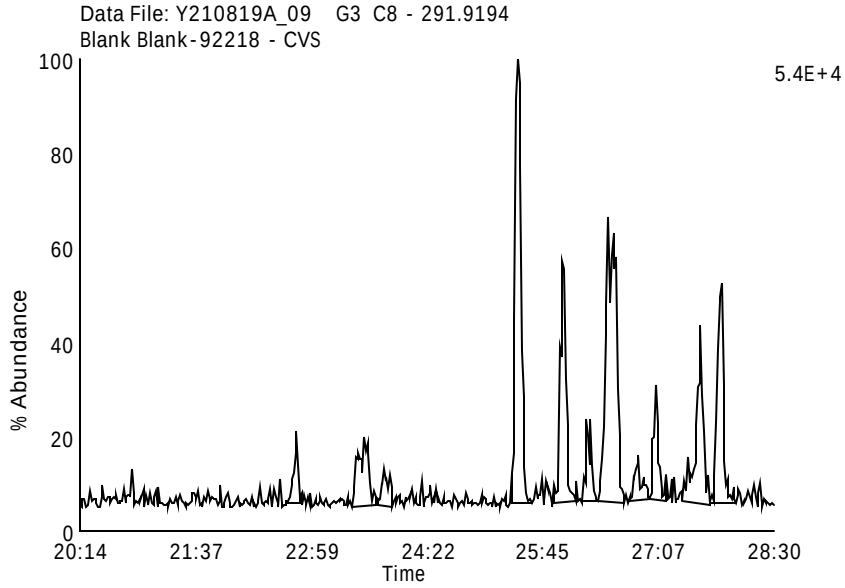


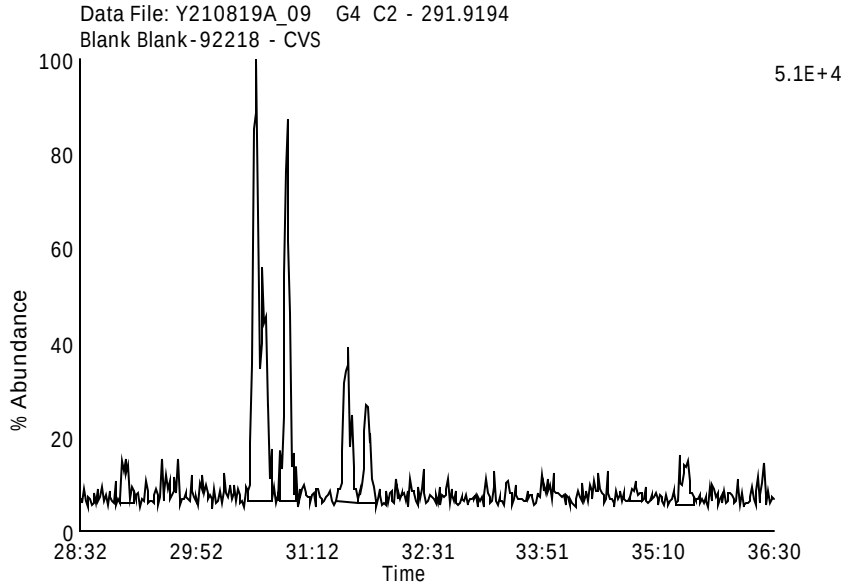
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



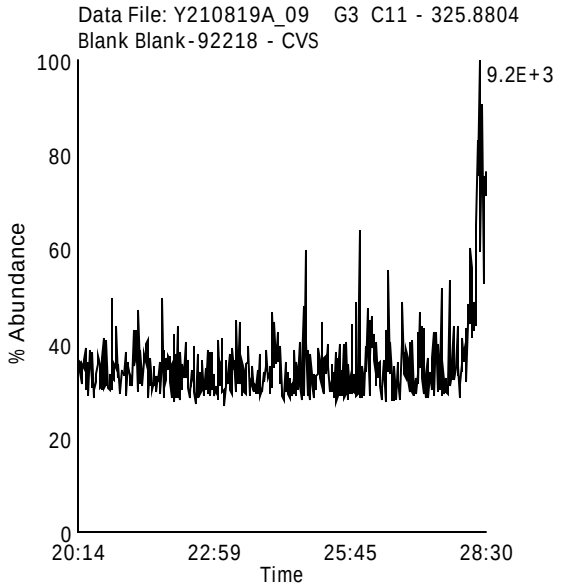


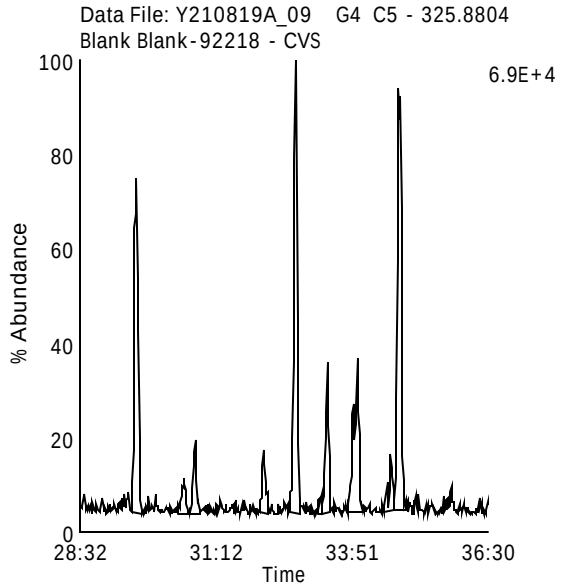


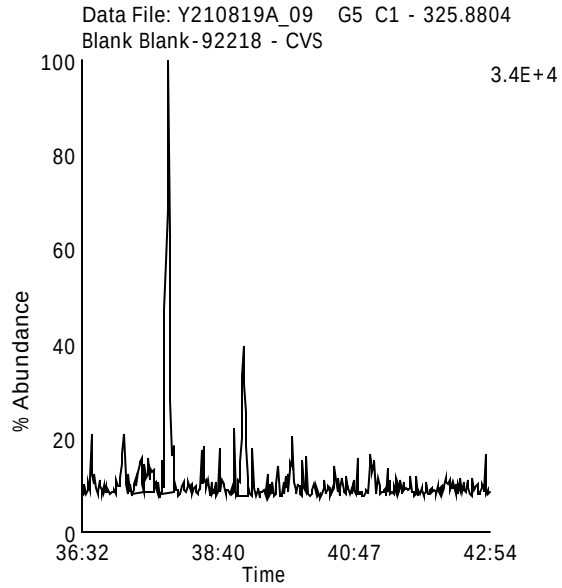


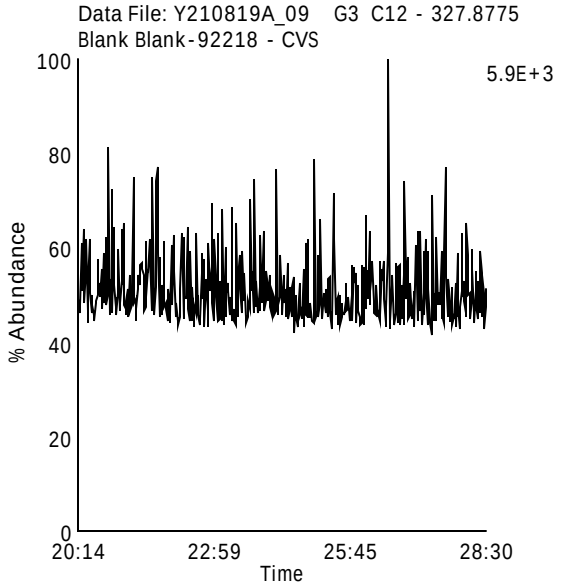
Penta Chlorinated Biphenyls

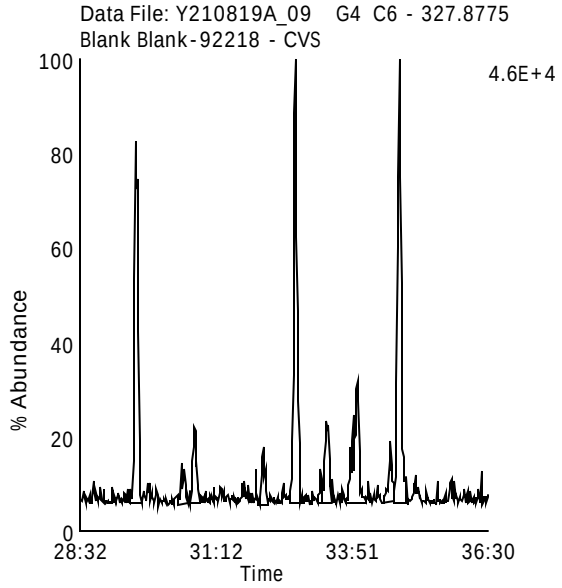
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

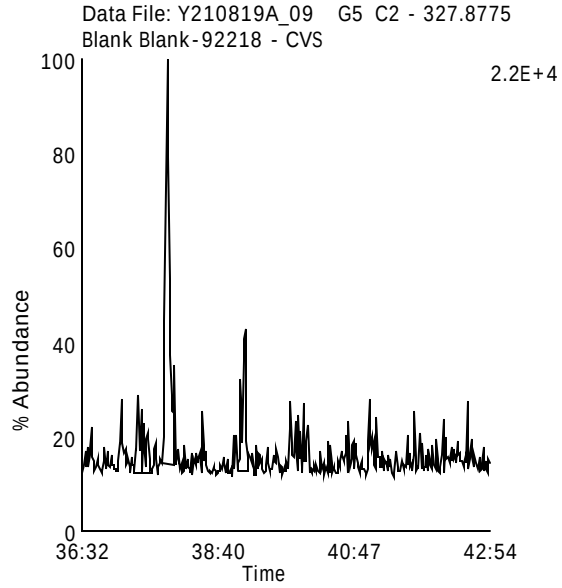






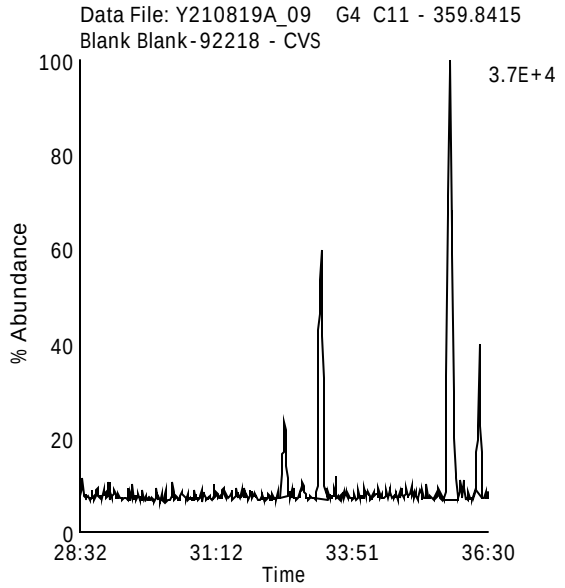


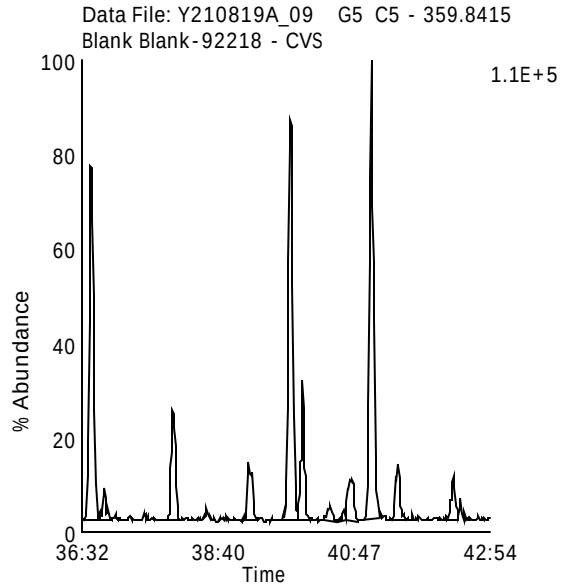


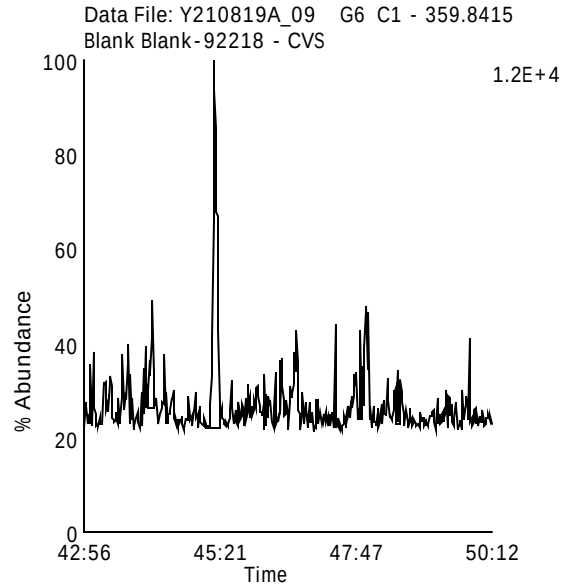


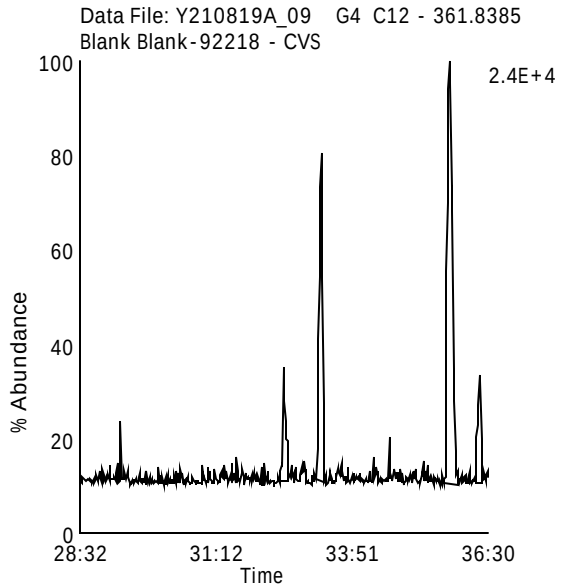
Hexa Chlorinated Biphenyls

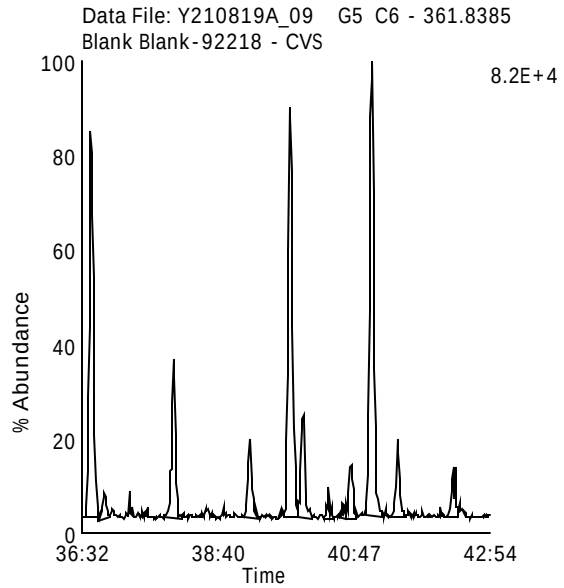
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

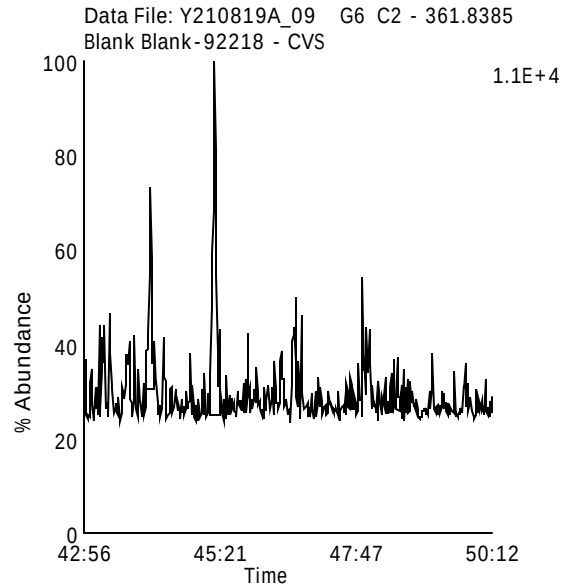






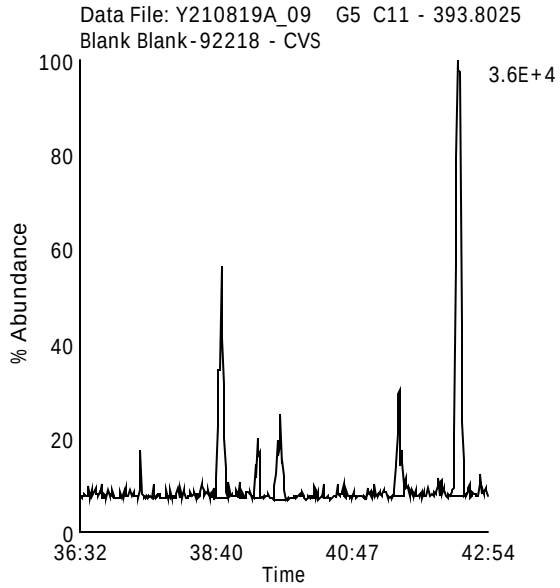


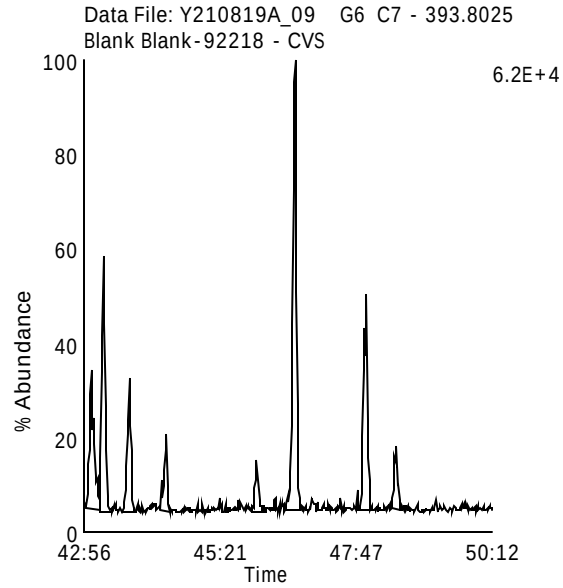


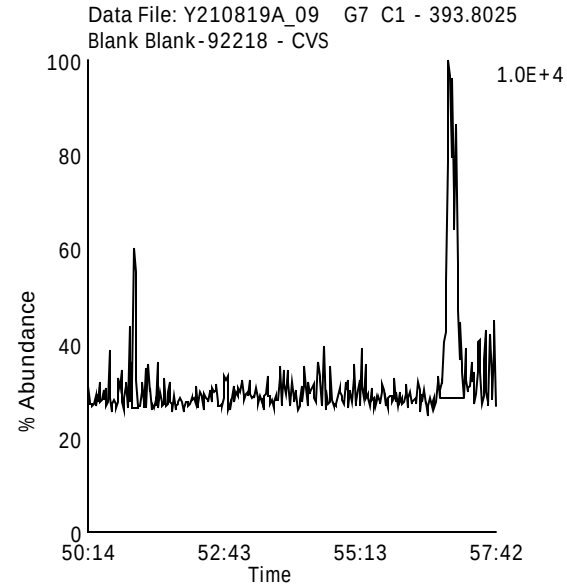


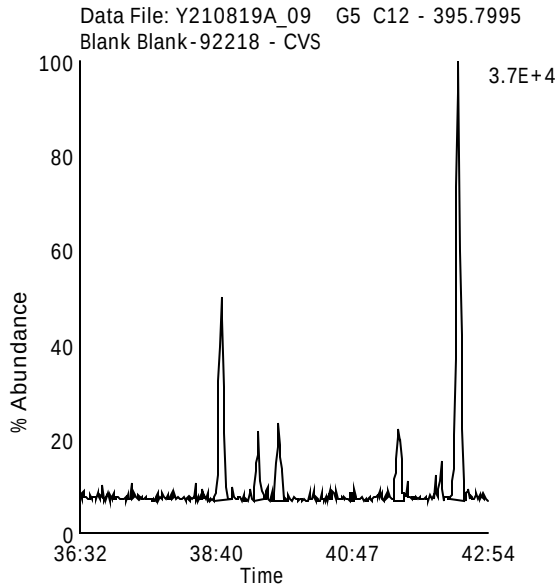
Hepta Chlorinated Biphenyls

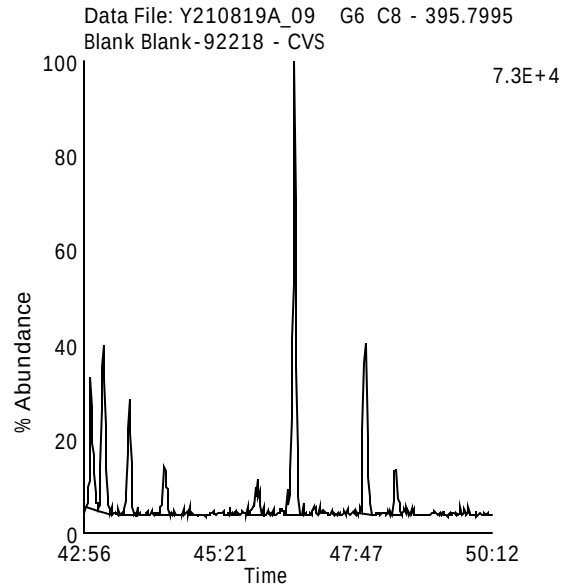
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

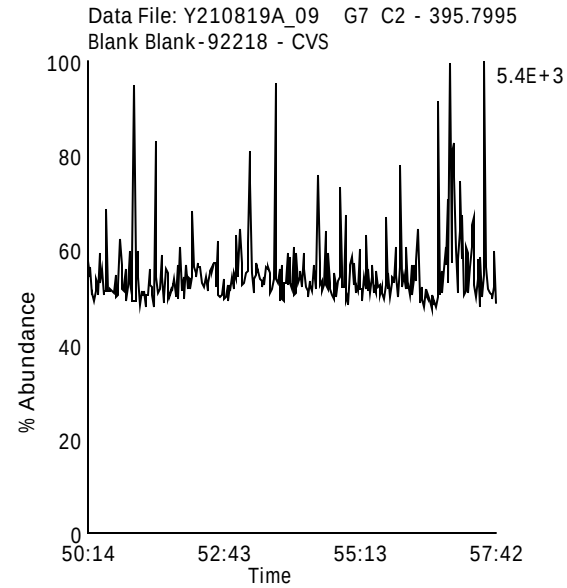






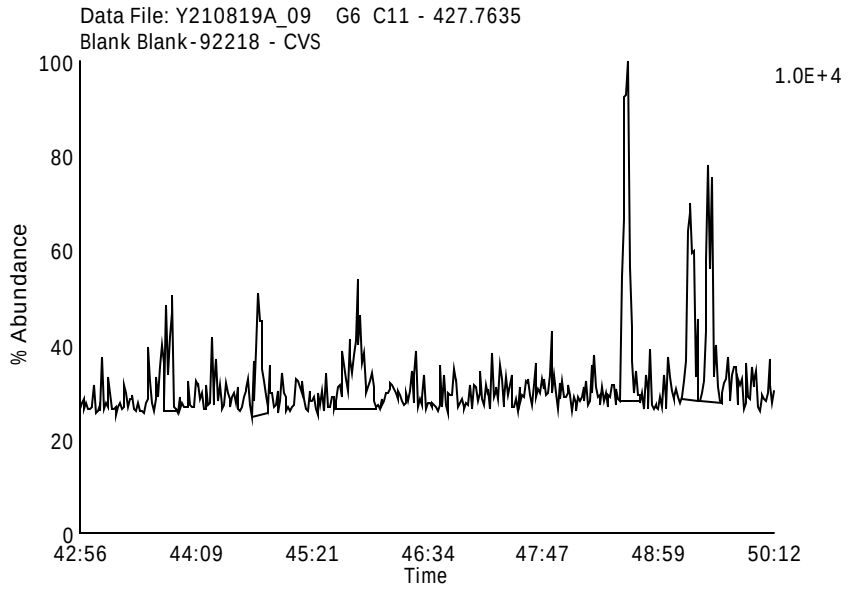


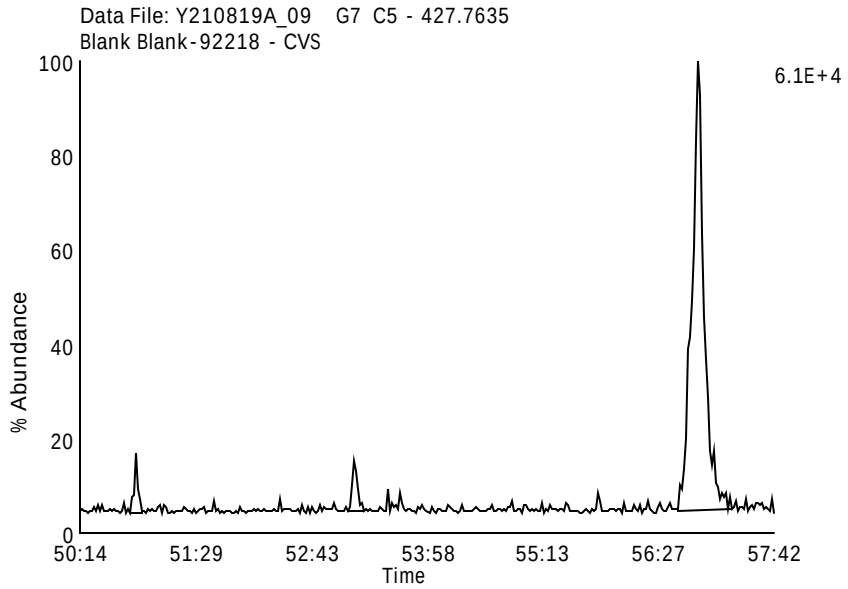


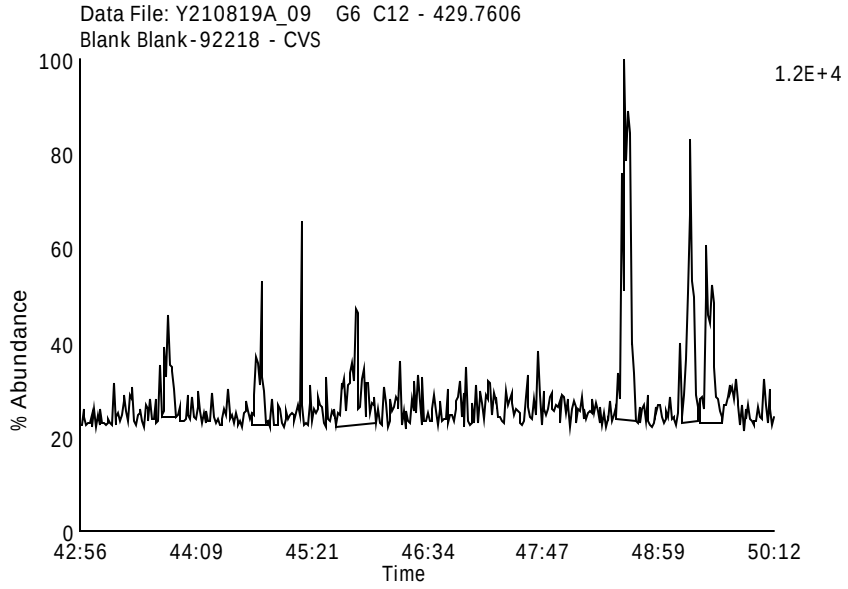


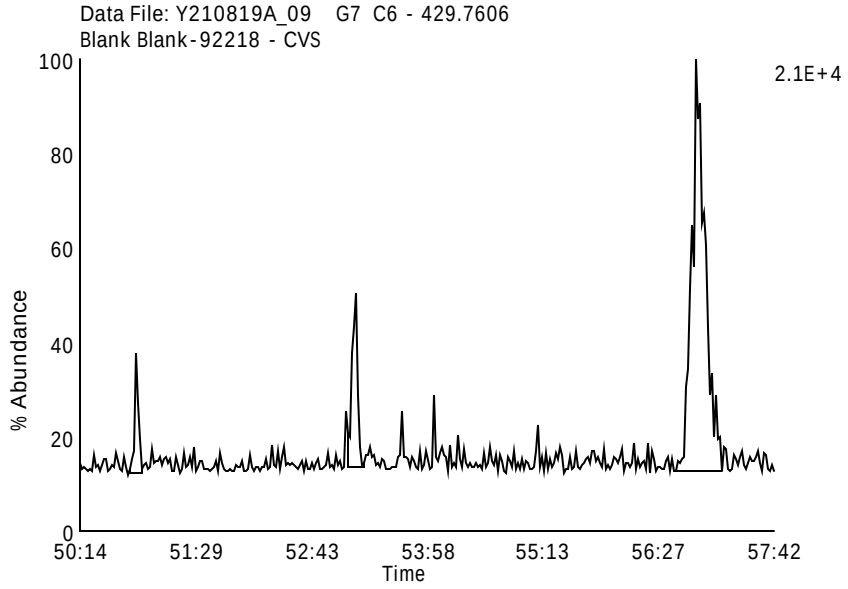
Octa Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



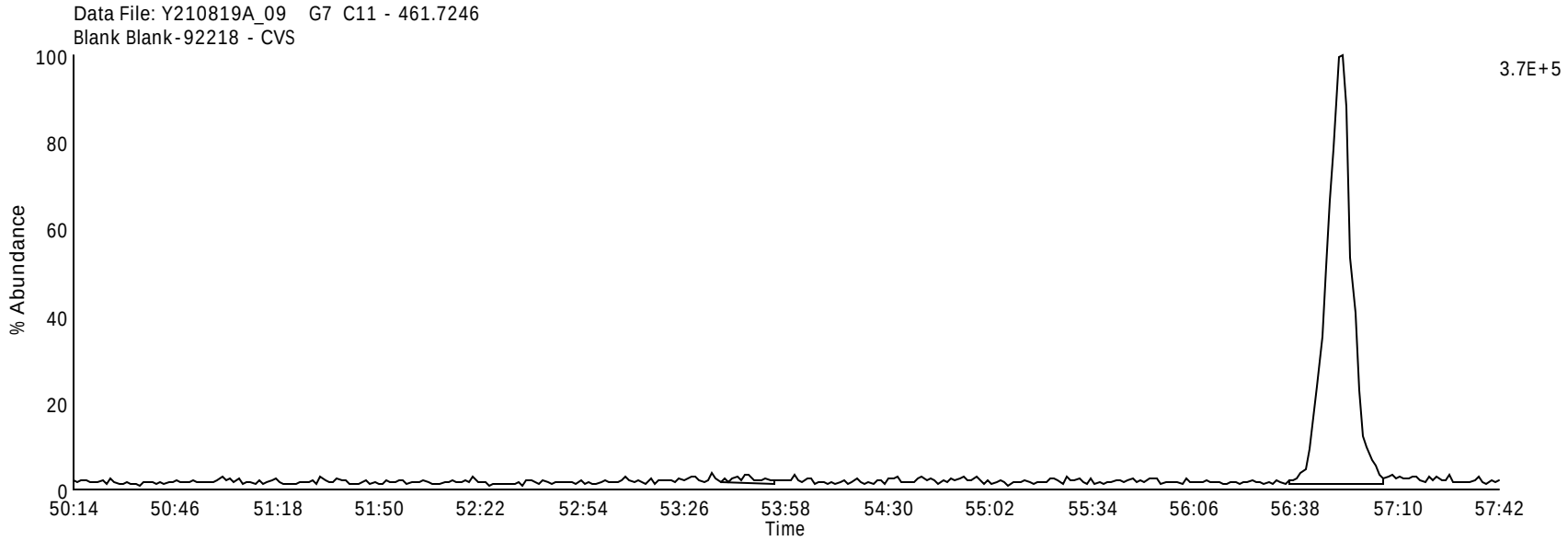


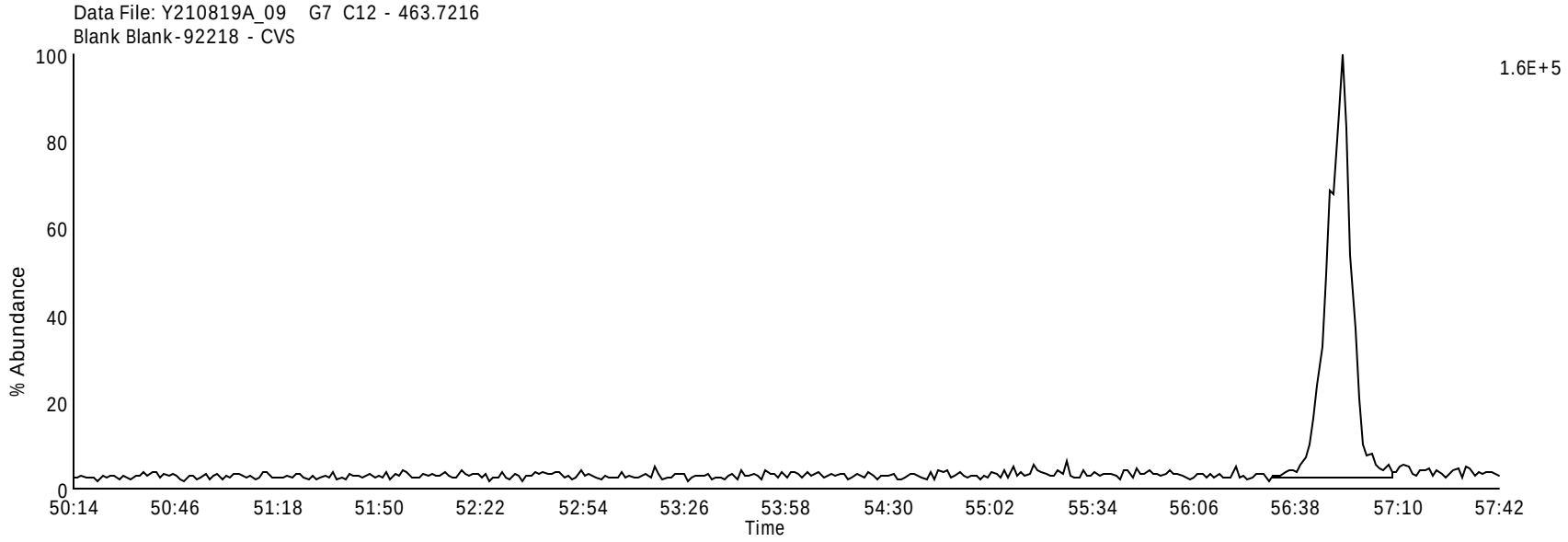




Nona Chlorinated Biphenyls

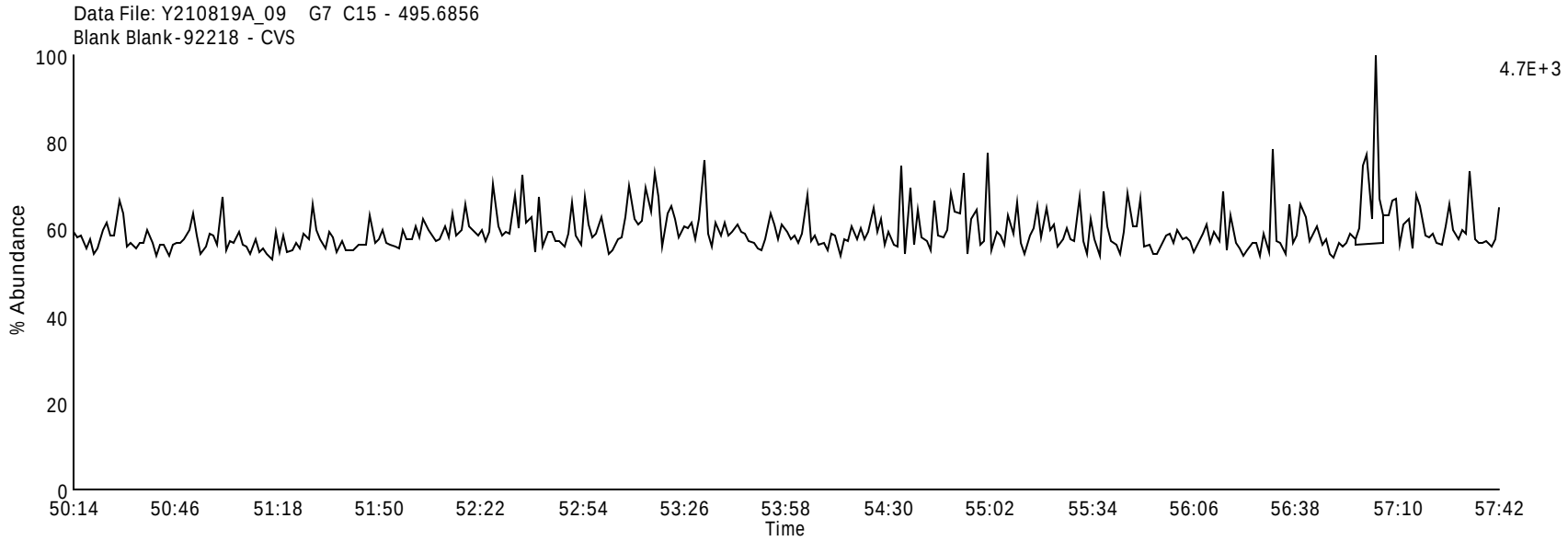
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

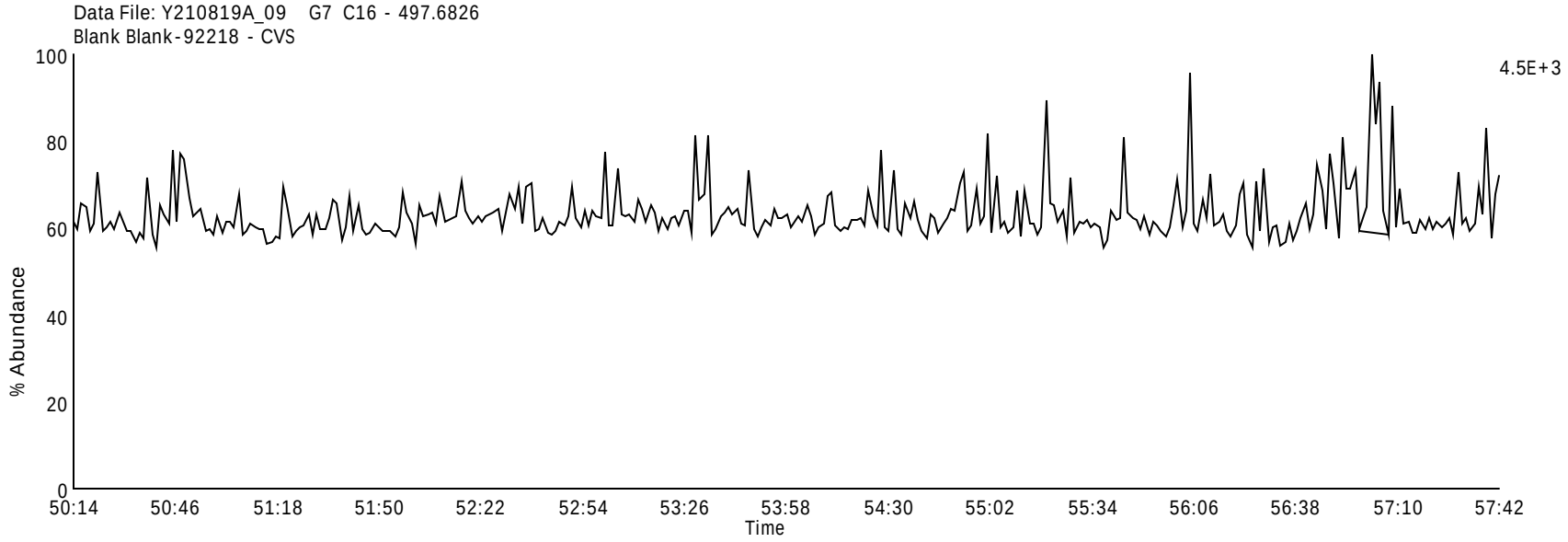




Deca Chlorinated Biphenyl

Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

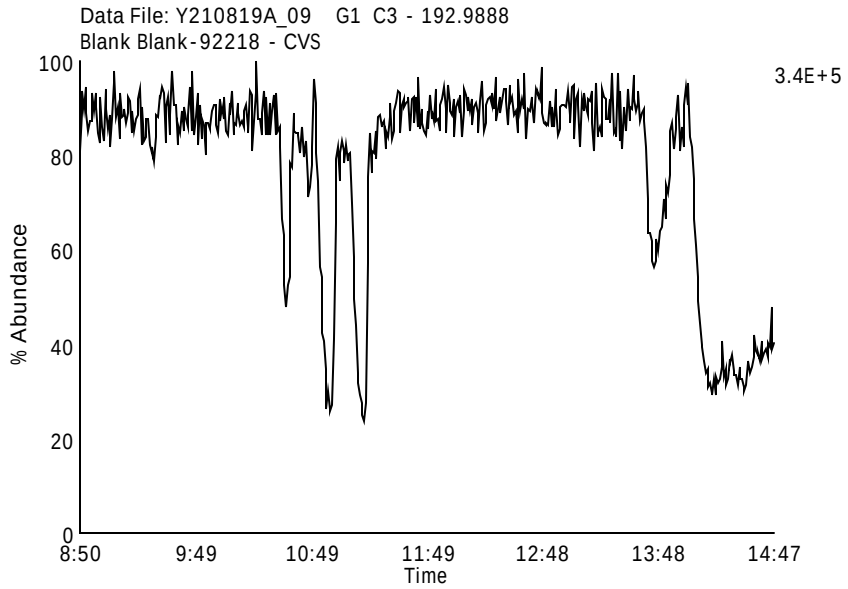


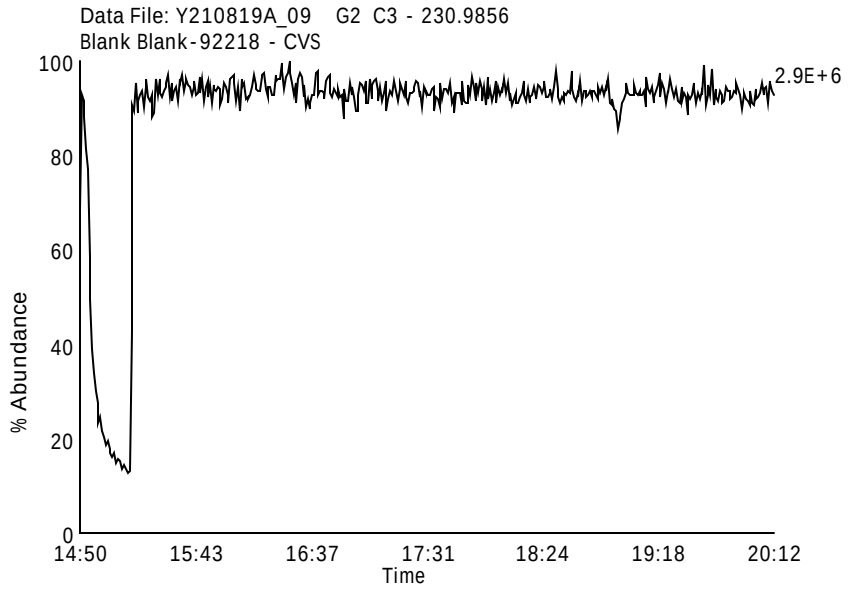


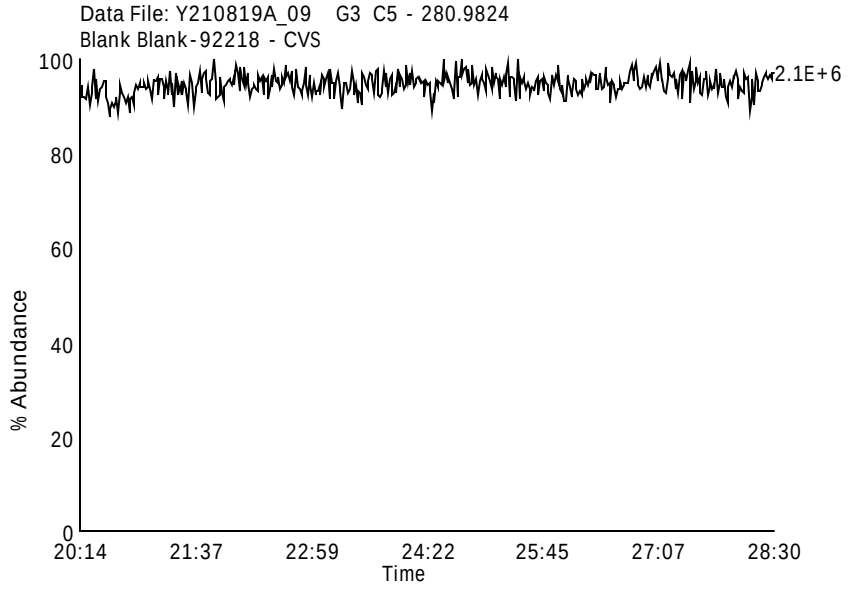
Group 1 - 4 Lock mass

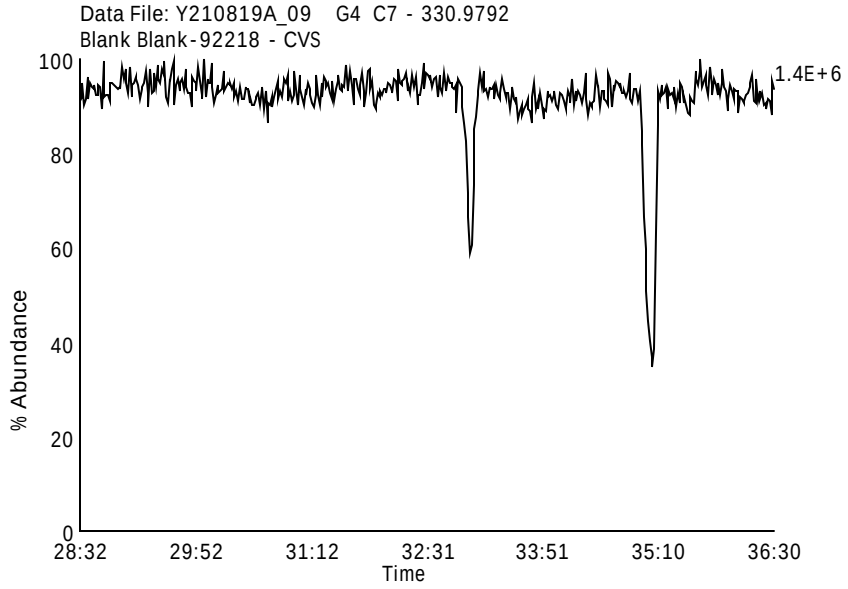
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX





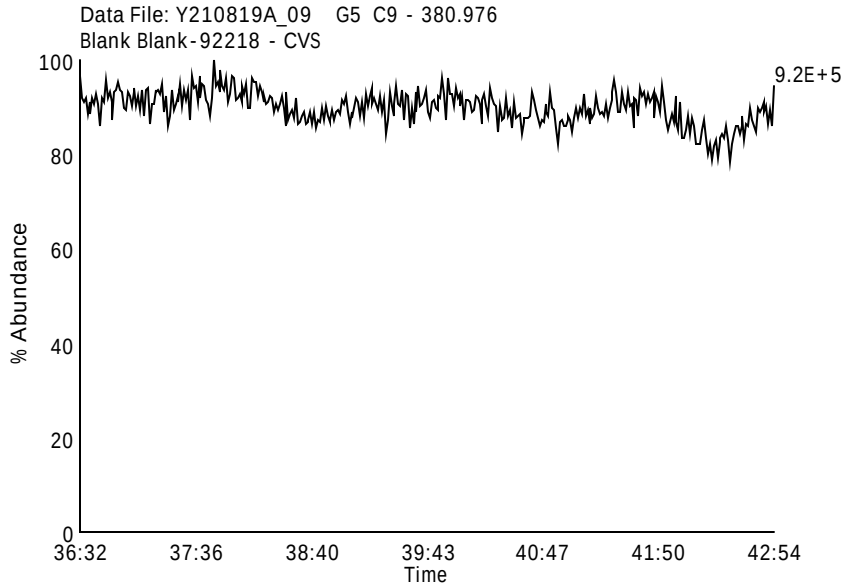


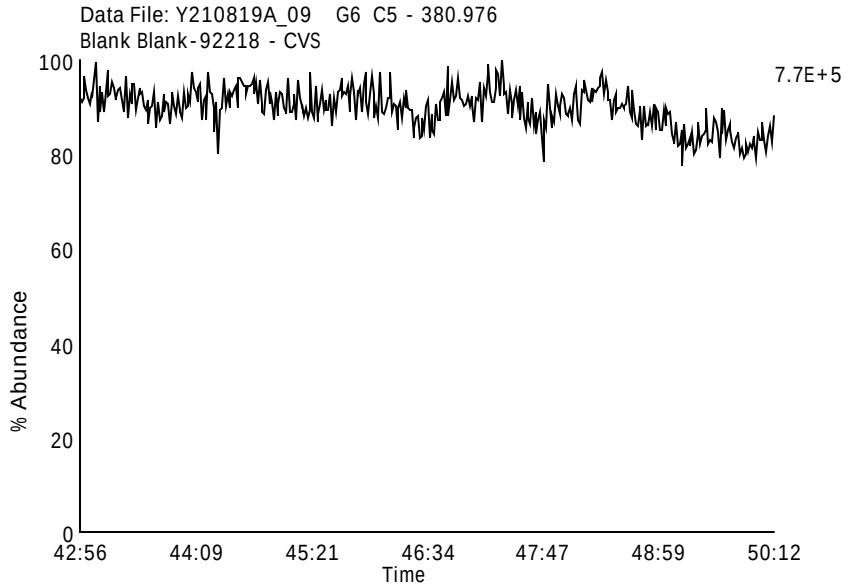


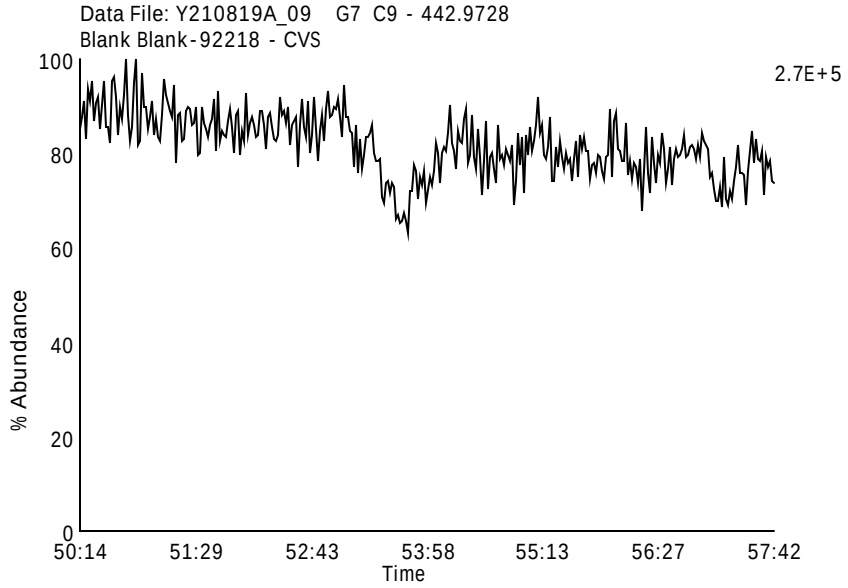
Group 5 - 7 Lock mass

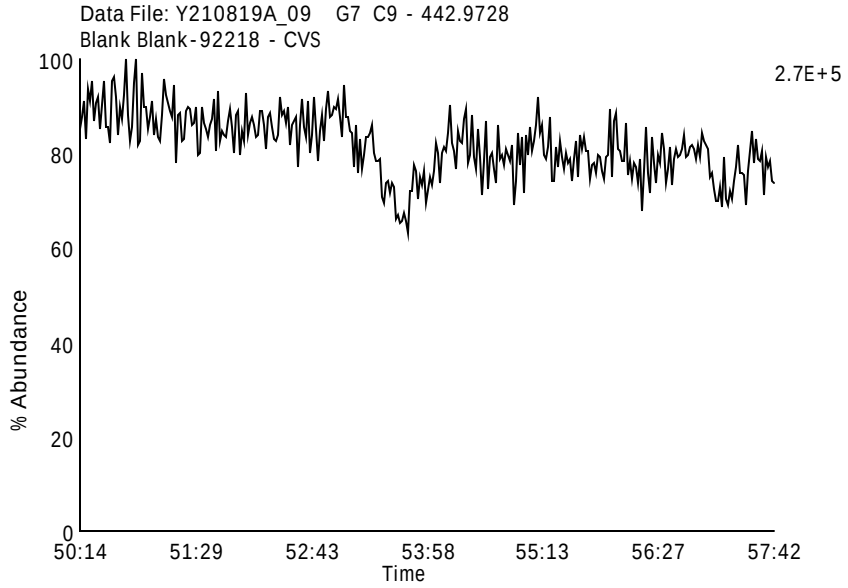
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX



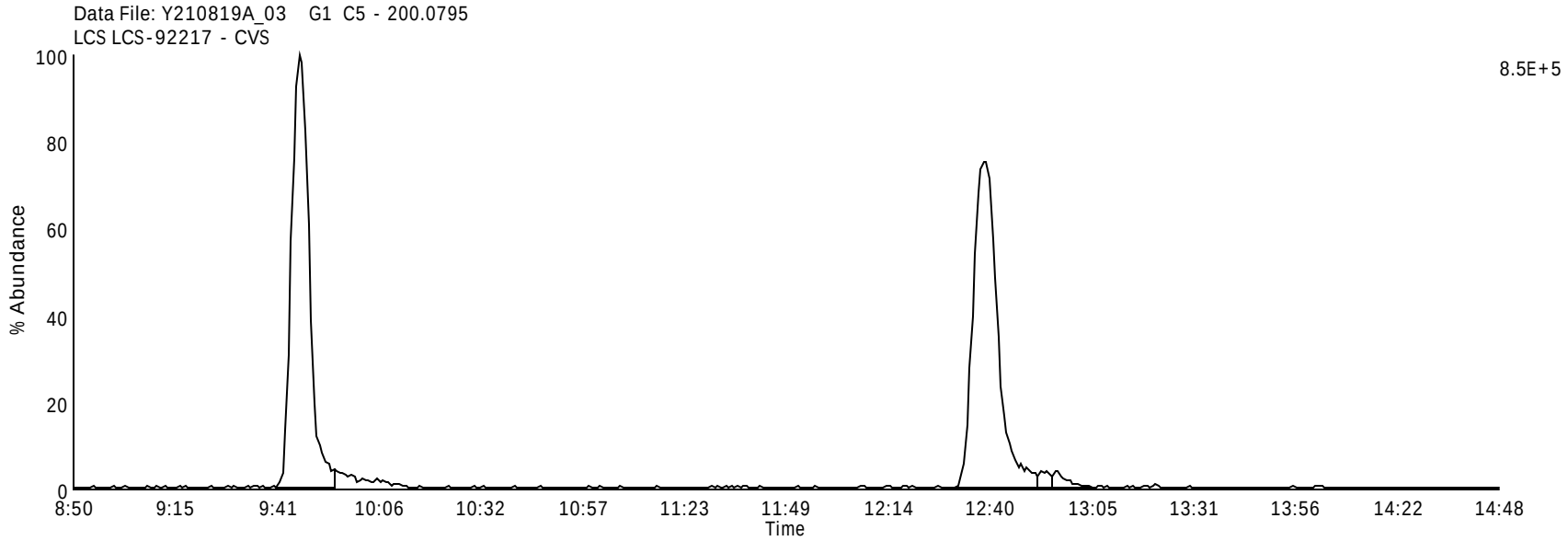


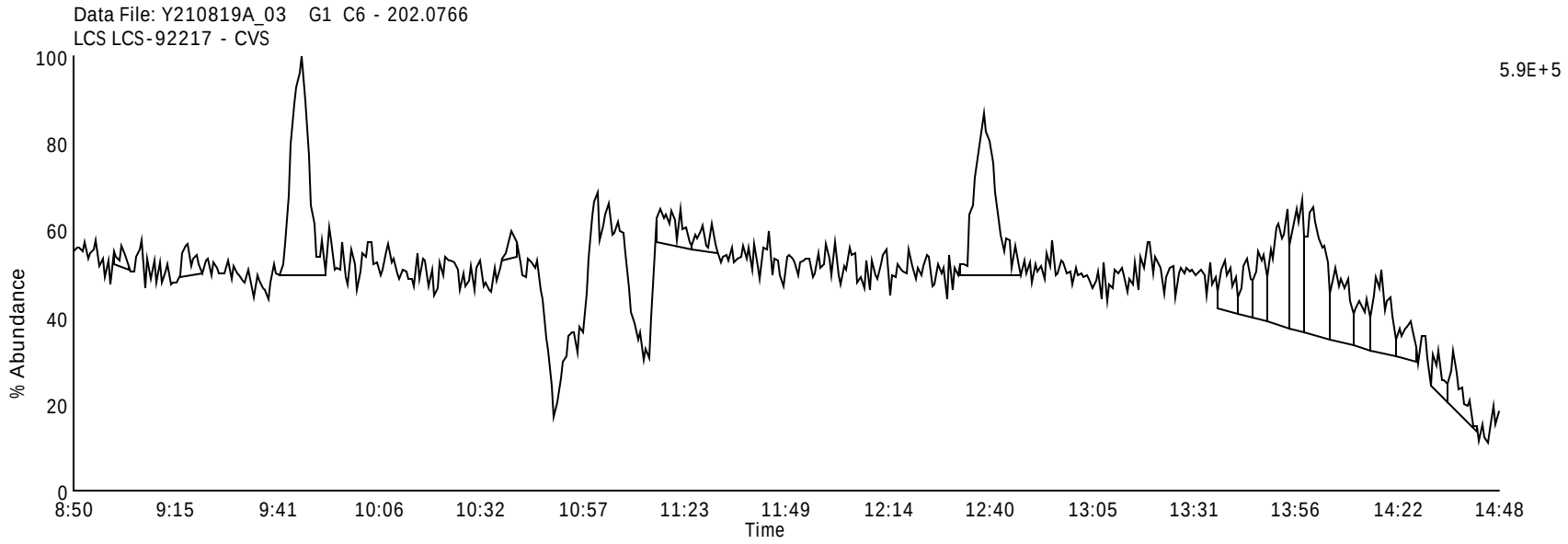




Labeled Mono Chlorinated Biphenyls

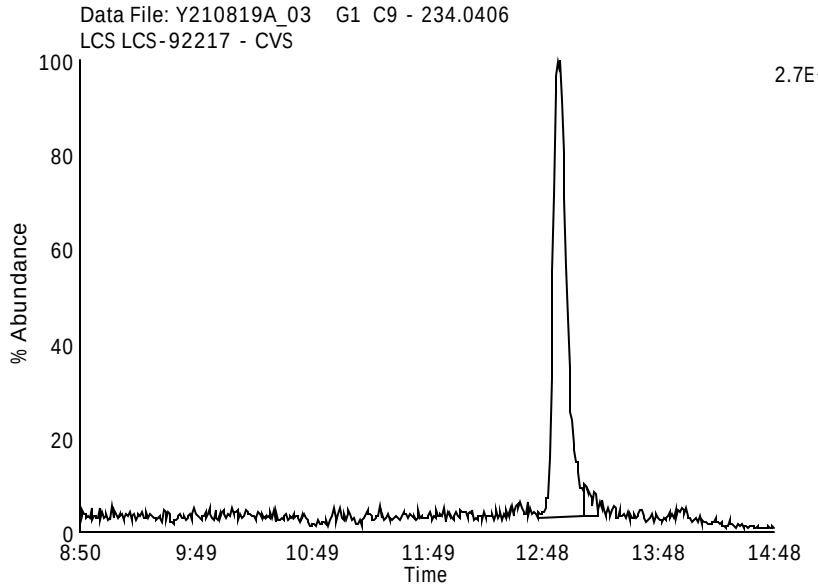
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

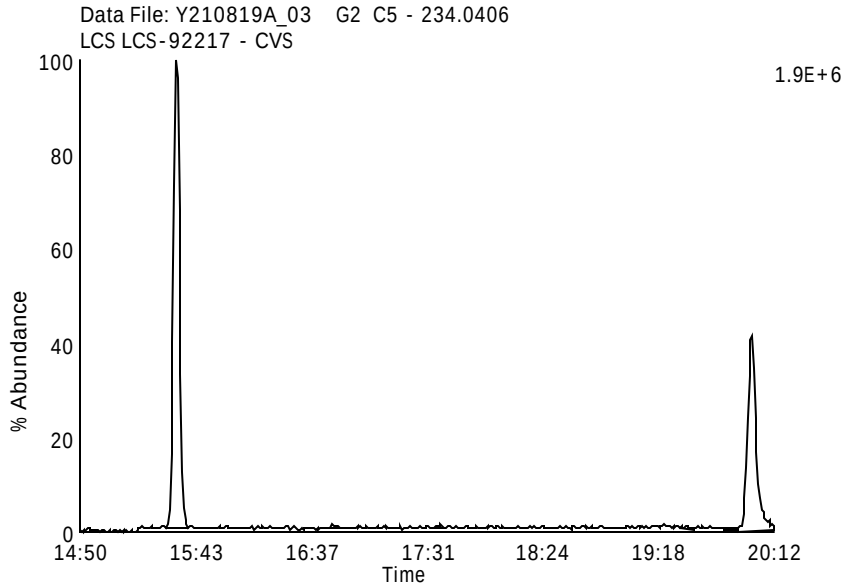


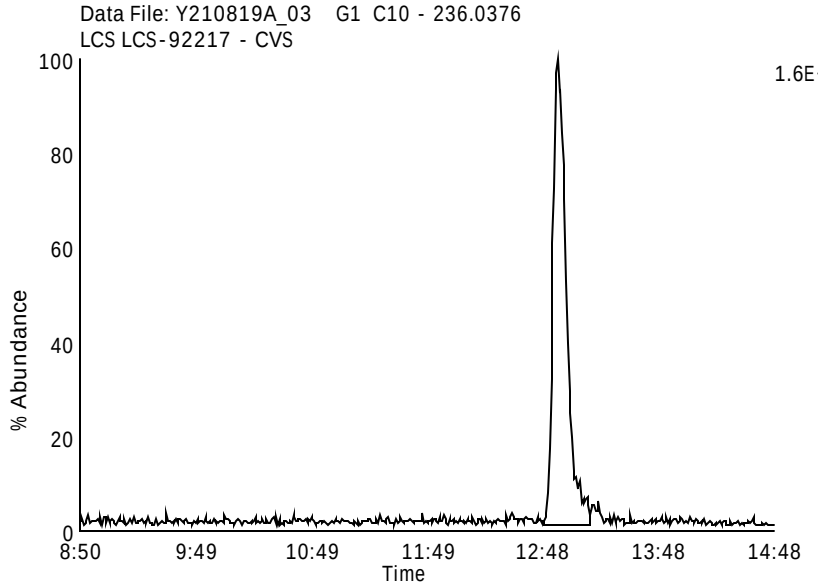


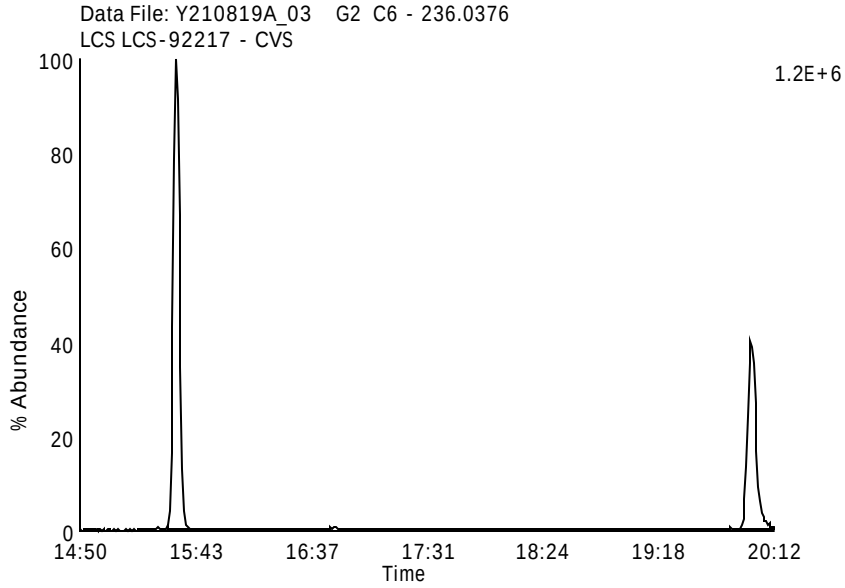
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



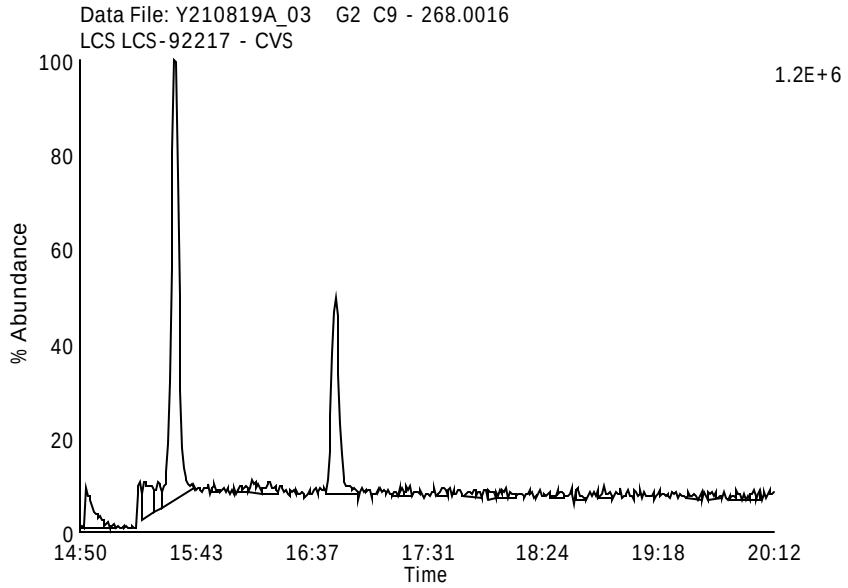


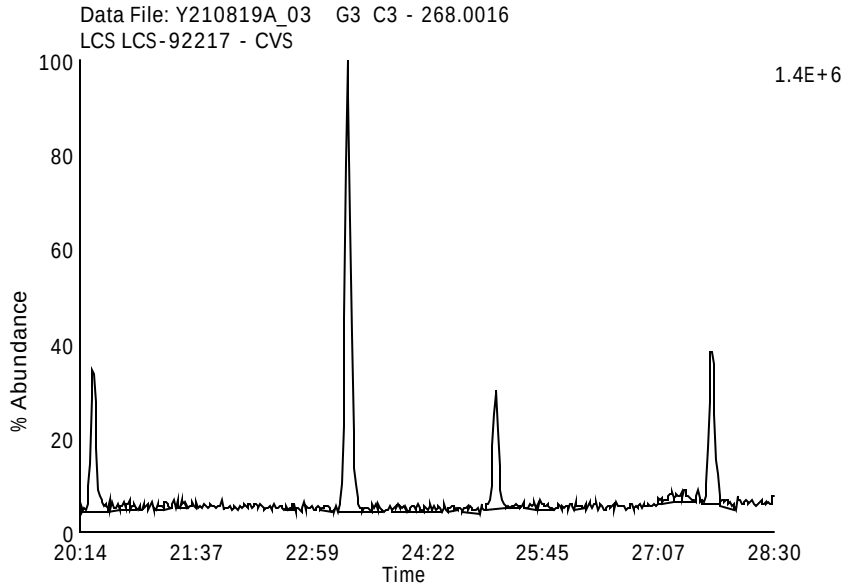


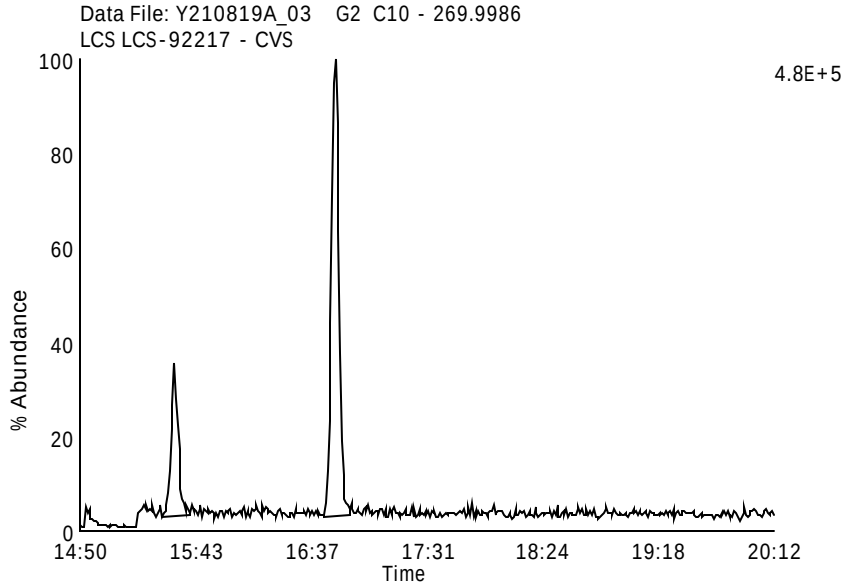


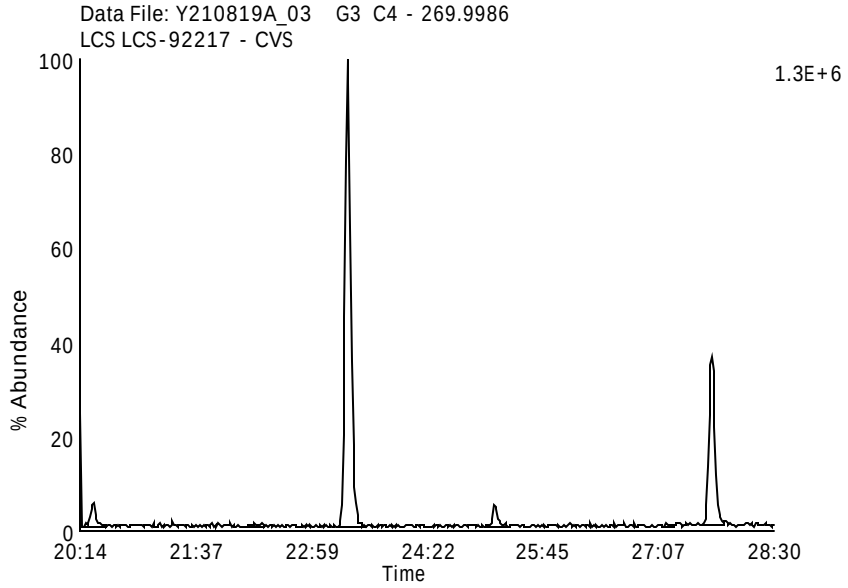
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



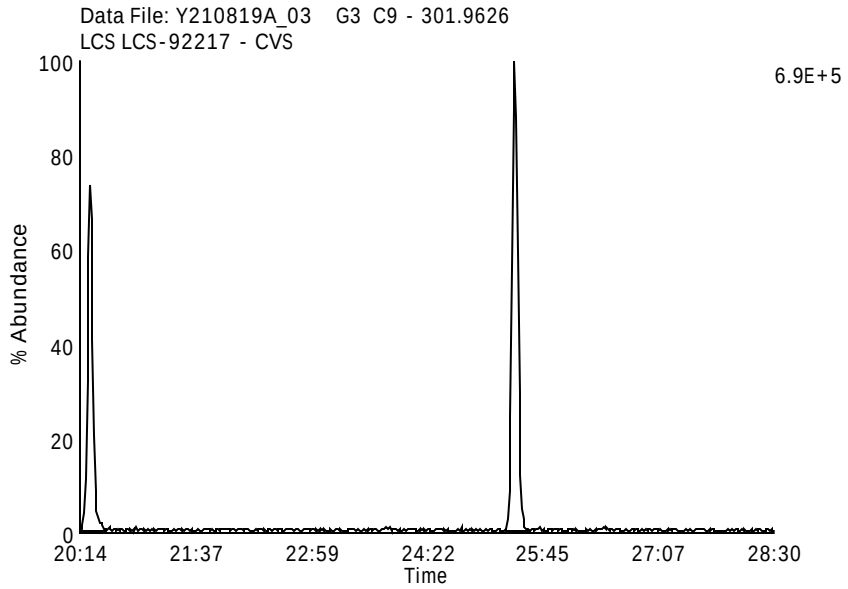


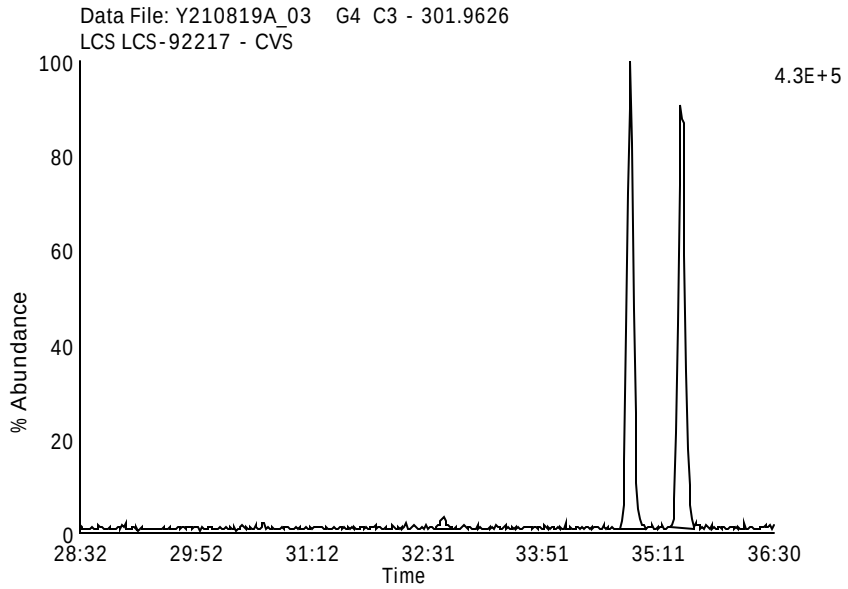


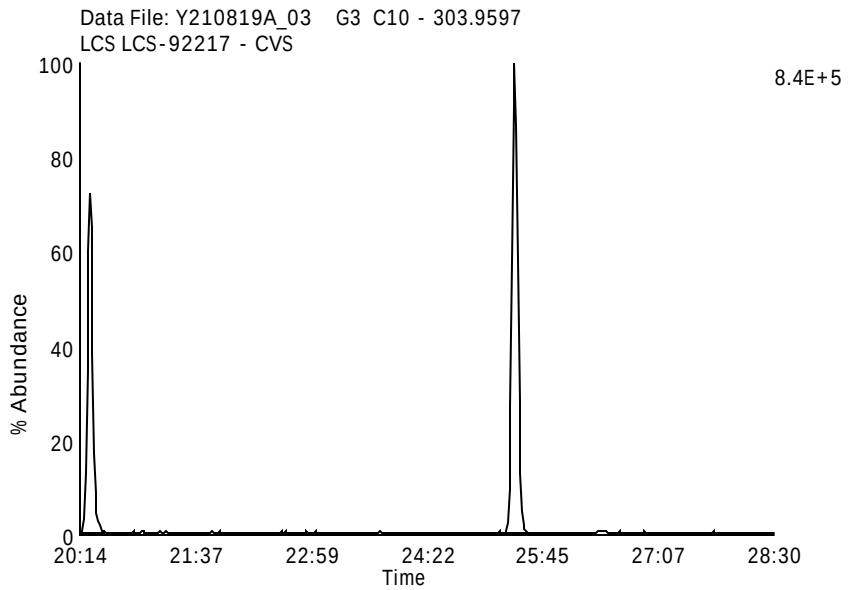


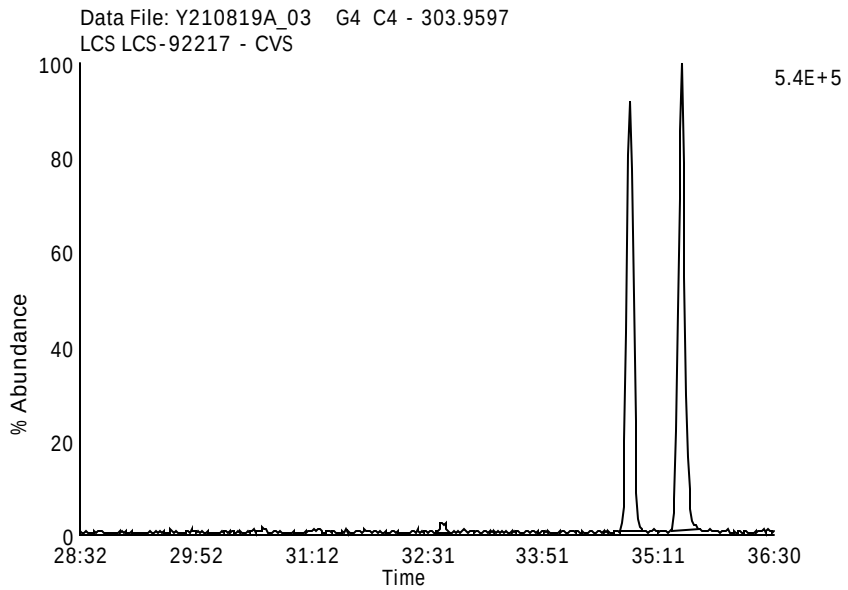
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



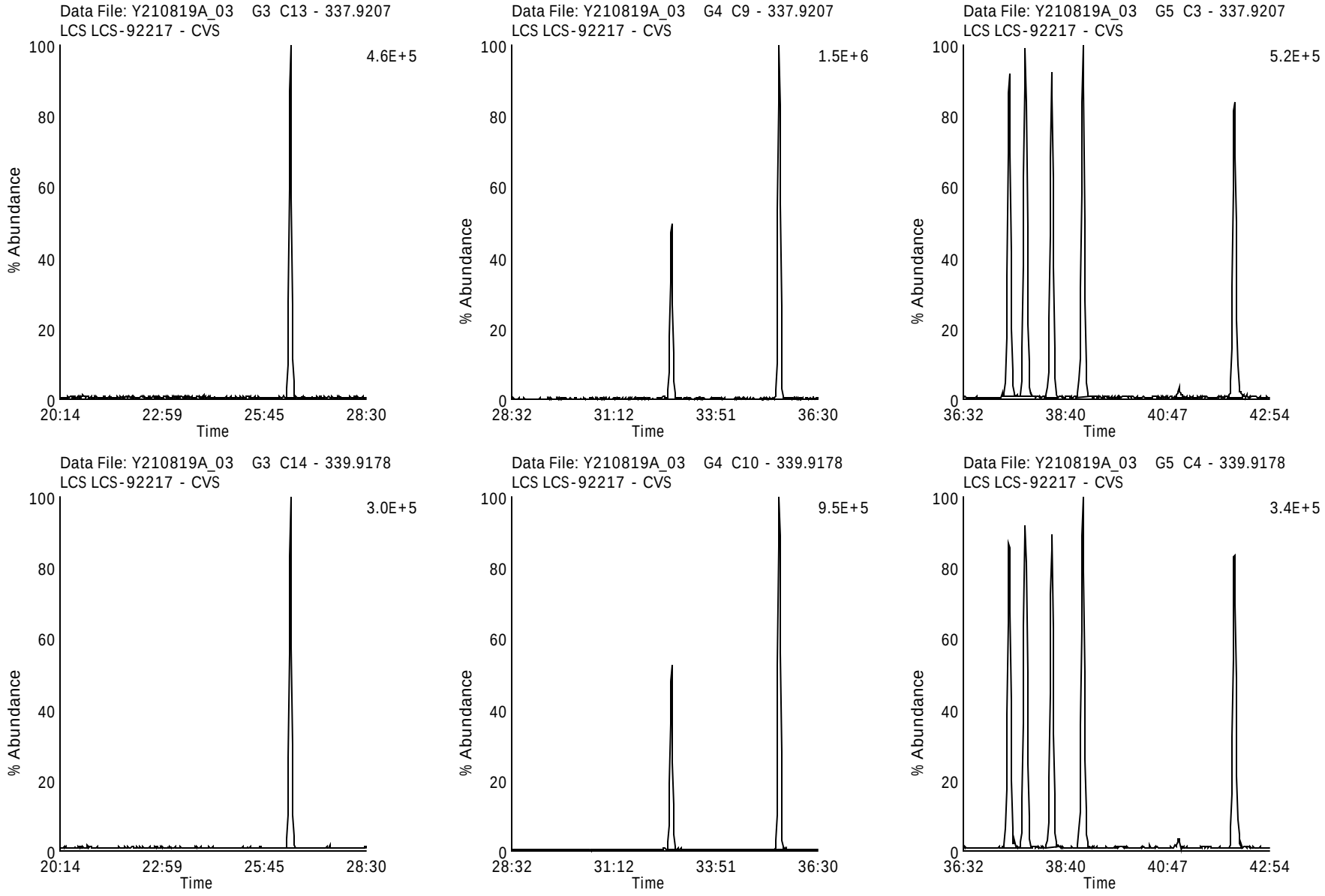






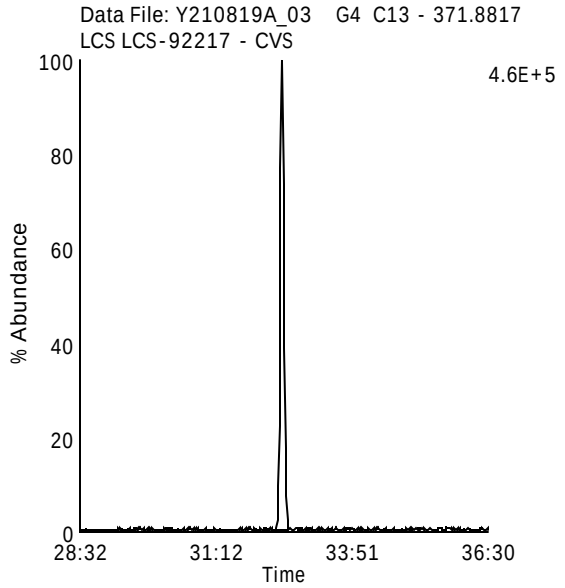
Labeled Penta Chlorinated Biphenyls

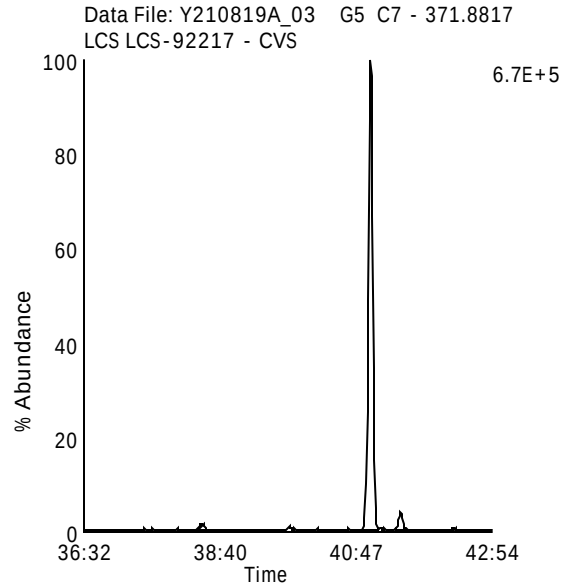
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

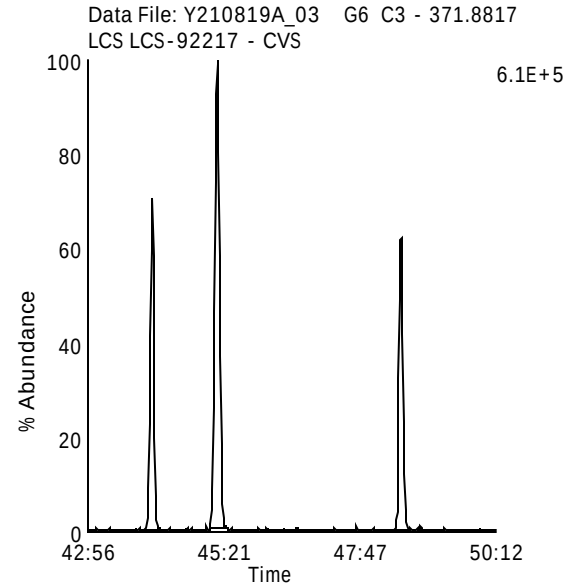


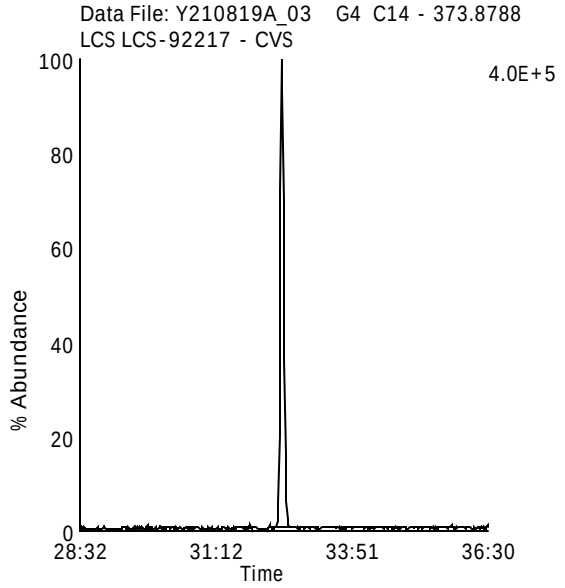
Labeled Hexa Chlorinated Biphenyls

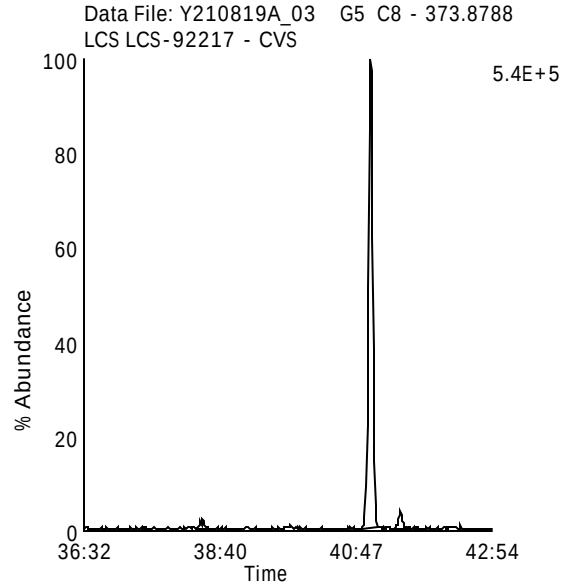
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

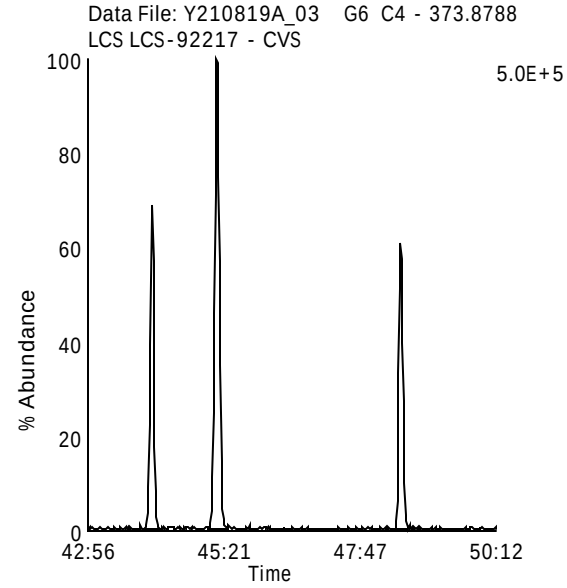








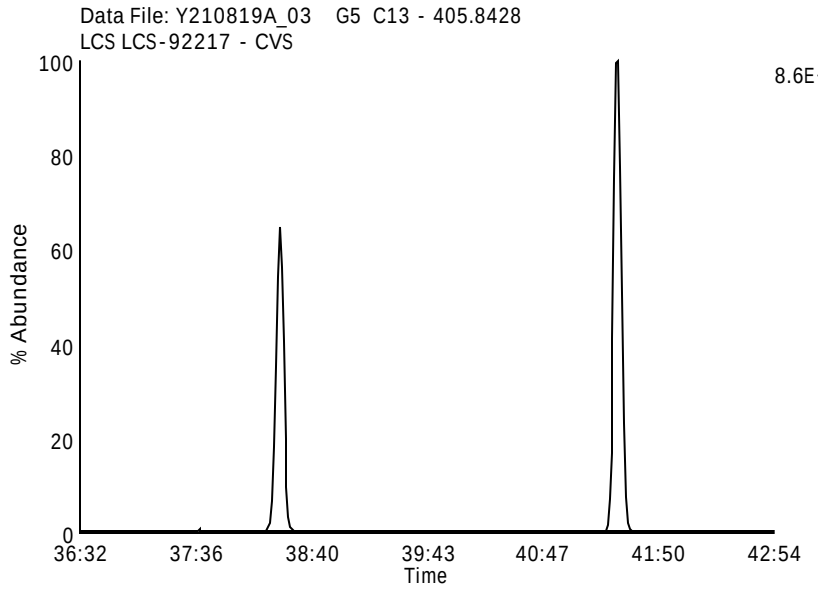


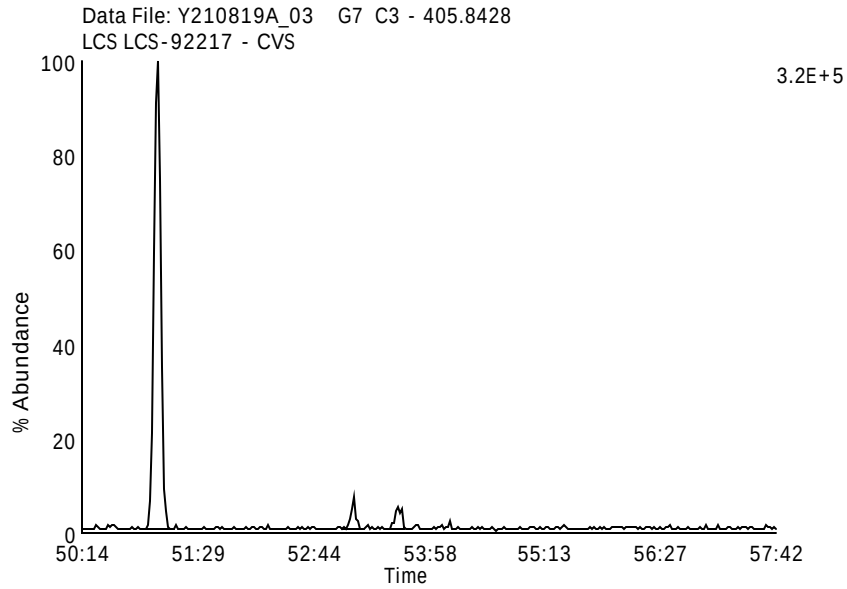


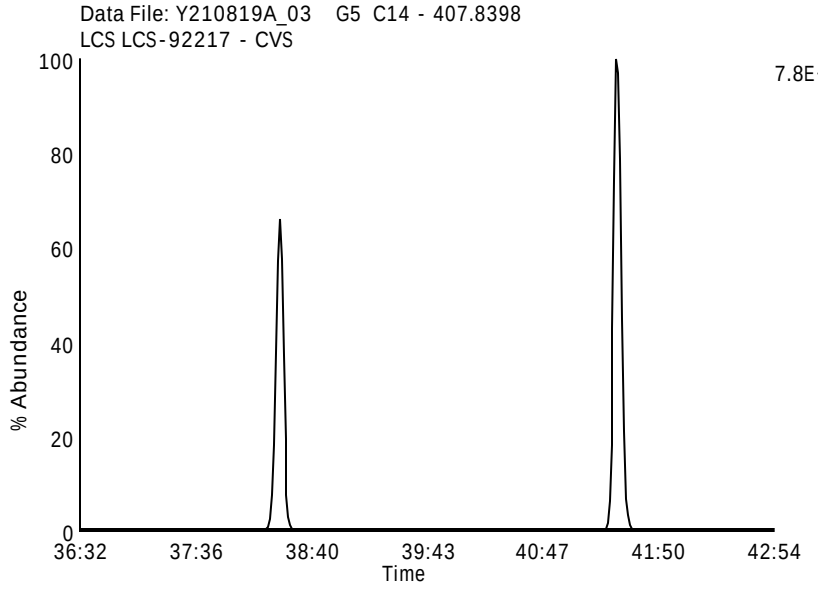
Labeled Hepta Chlorinated Biphenyls

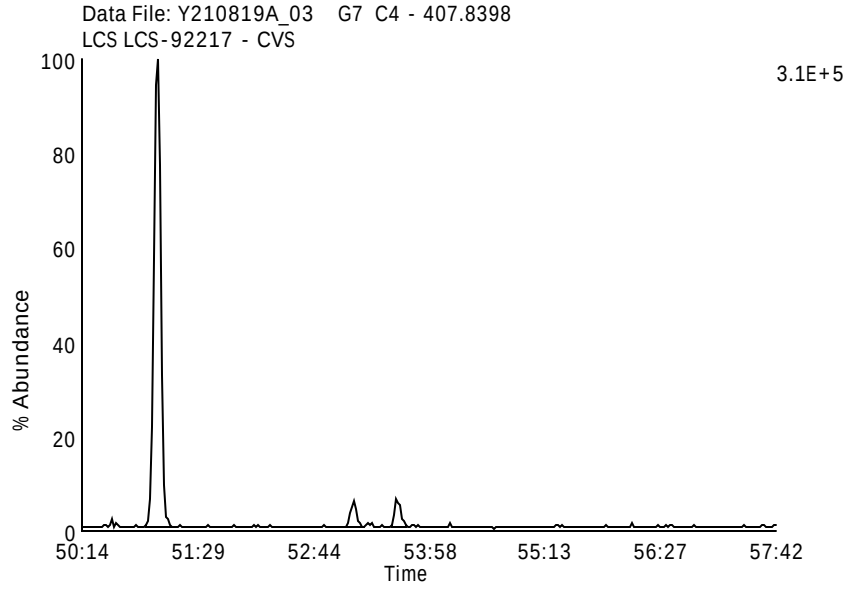
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV





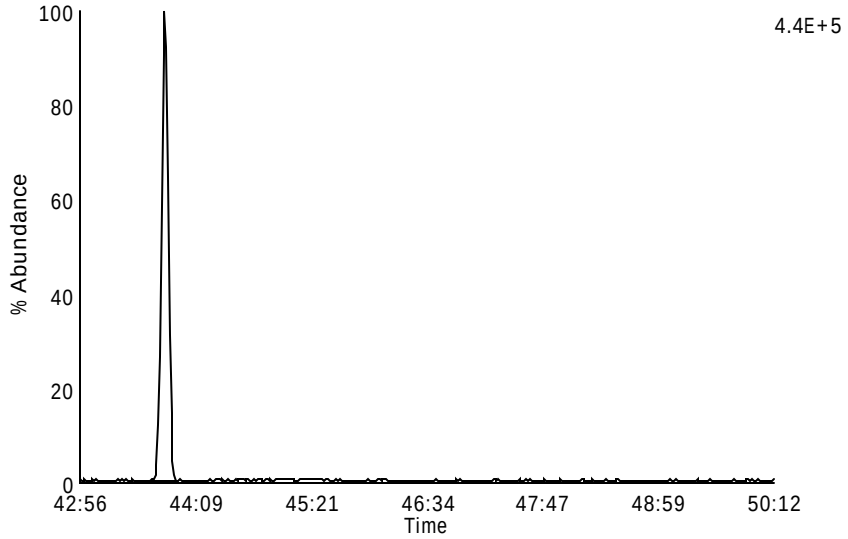




Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

Data File: Y210819A_03 G6 C13 - 439.8038
LCS LCS-92217 - CVS



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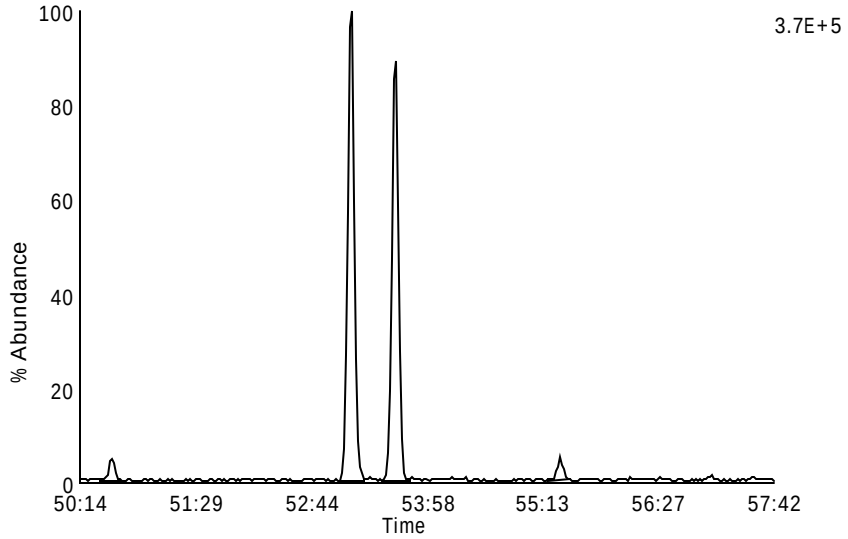
LCS LCS-92217 - CVS



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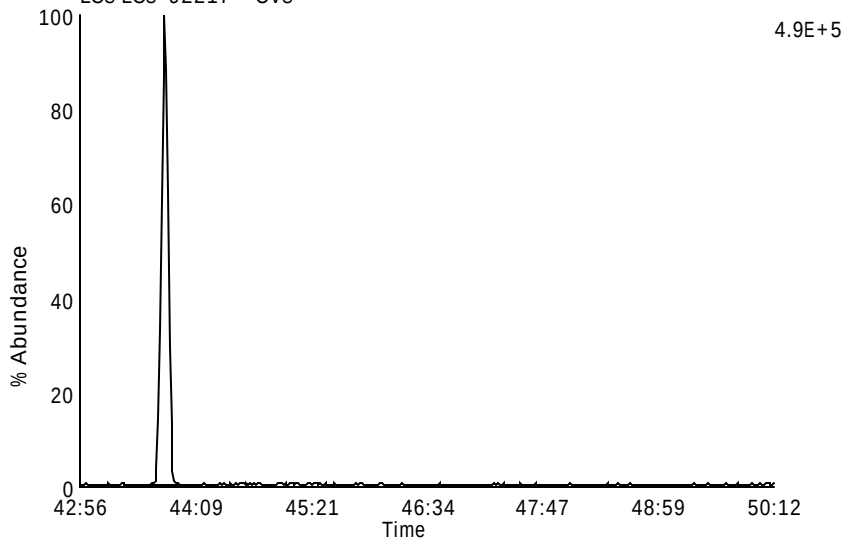
LCS LCS-92217 - CVS



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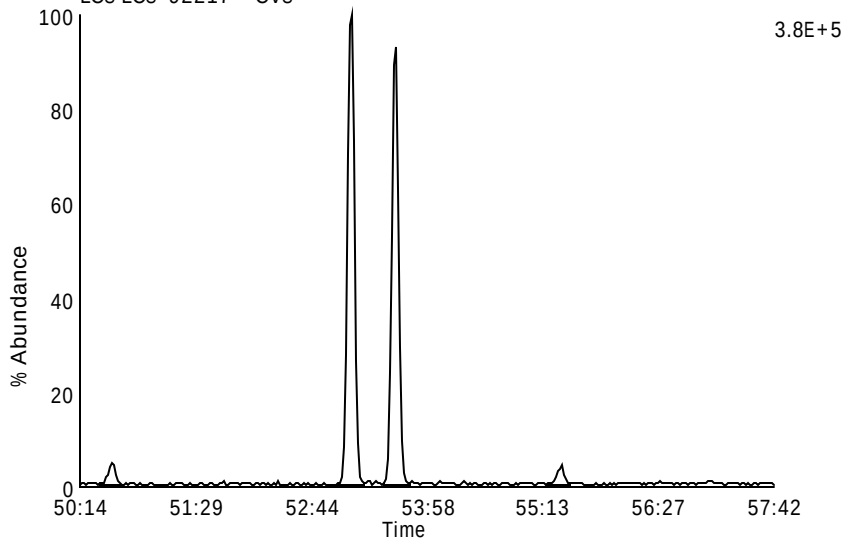
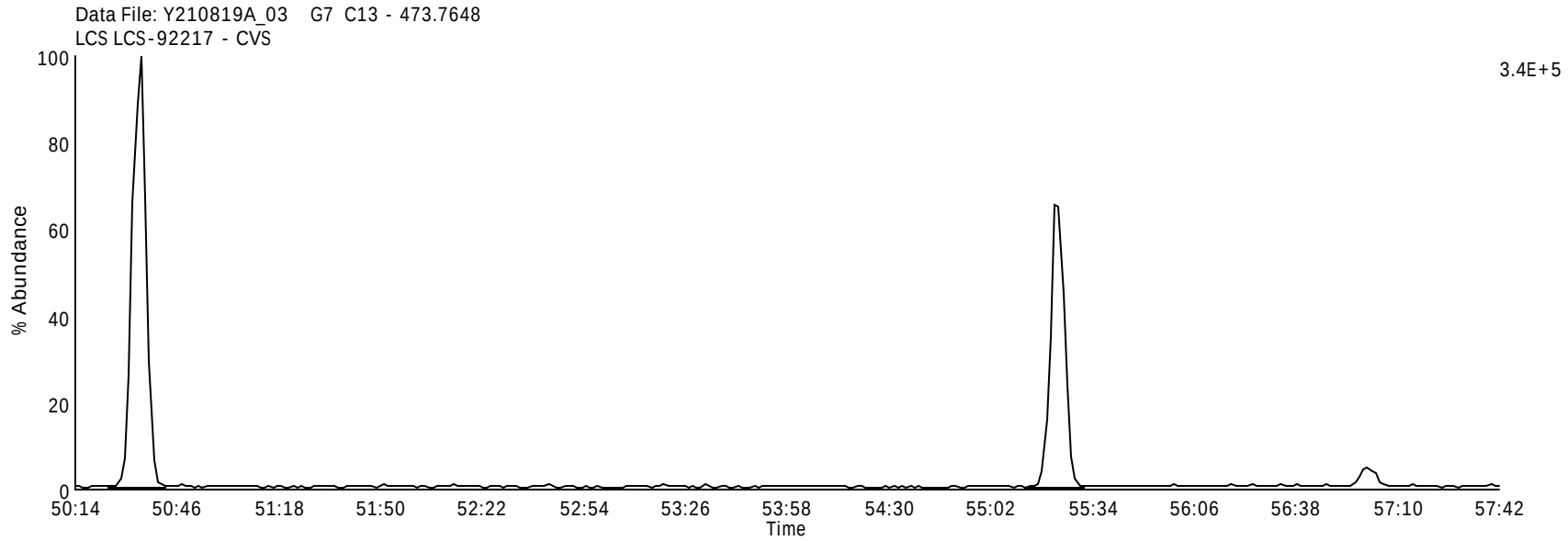
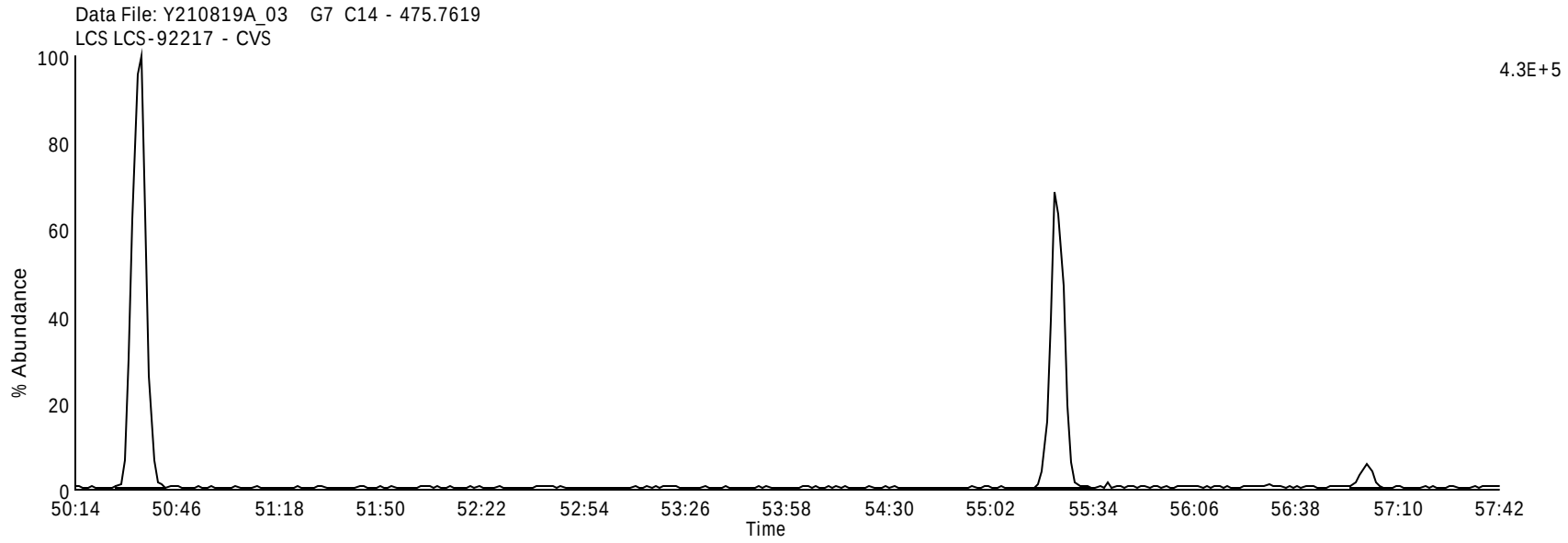
LCS LCS-92217 - CVS



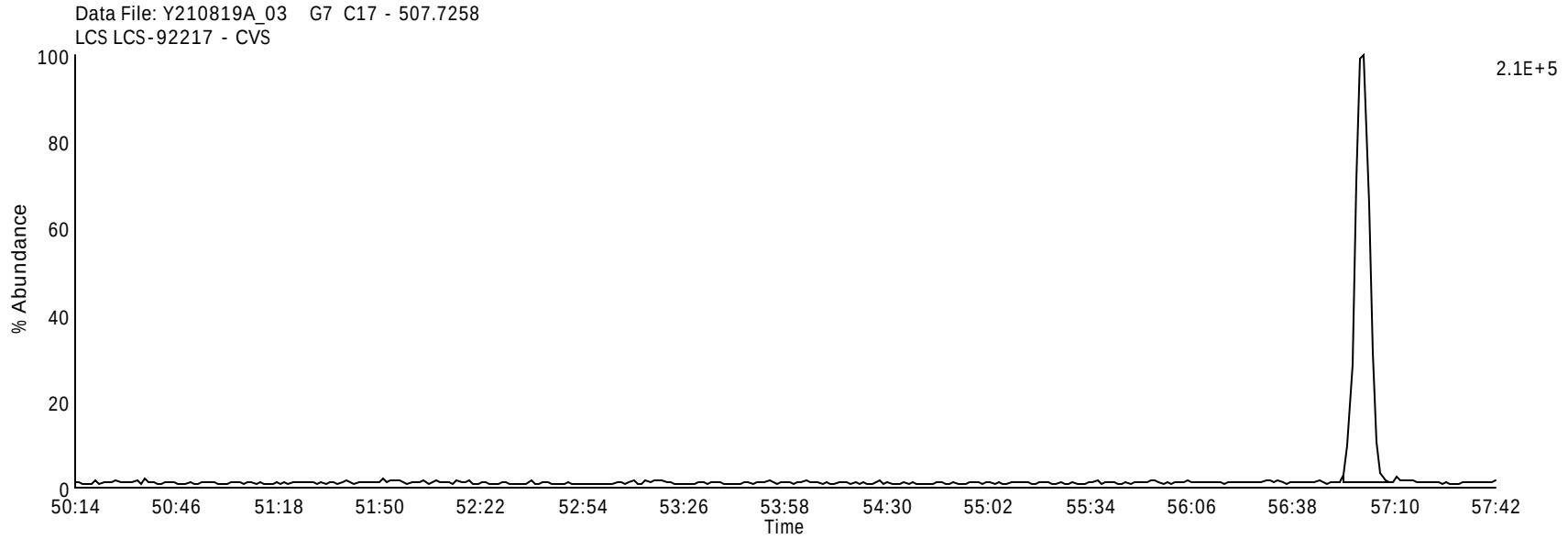
Labeled Nona Chlorinated Biphenyls

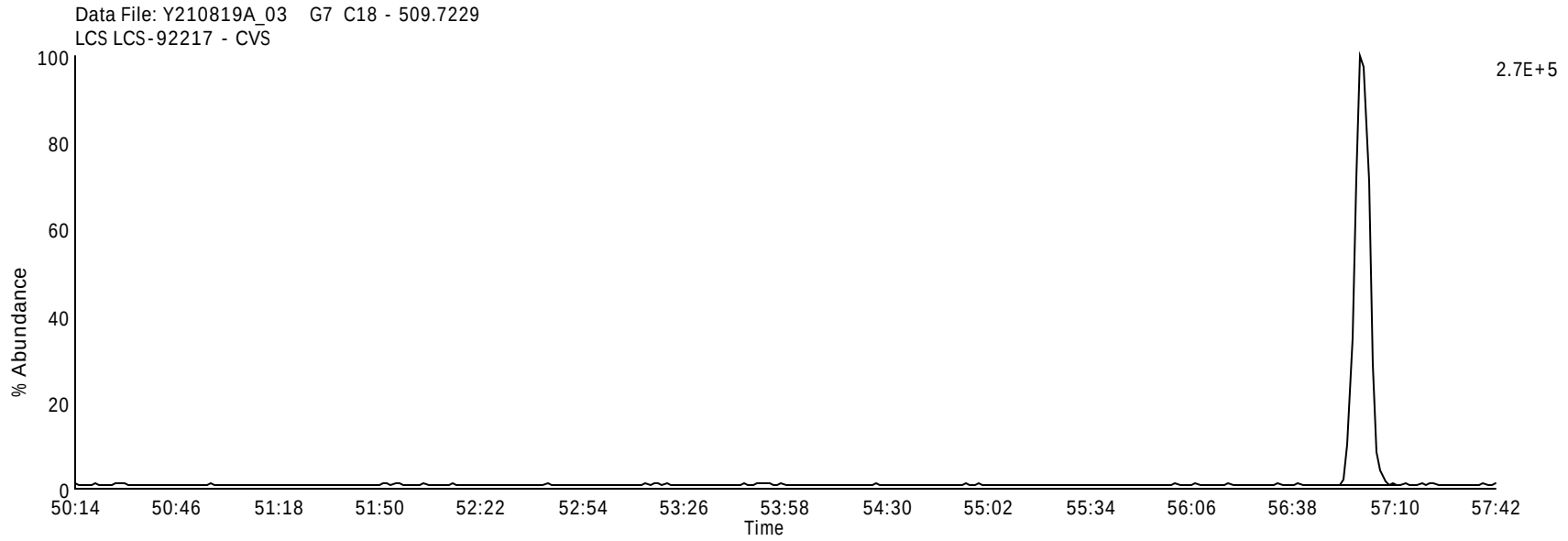
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV





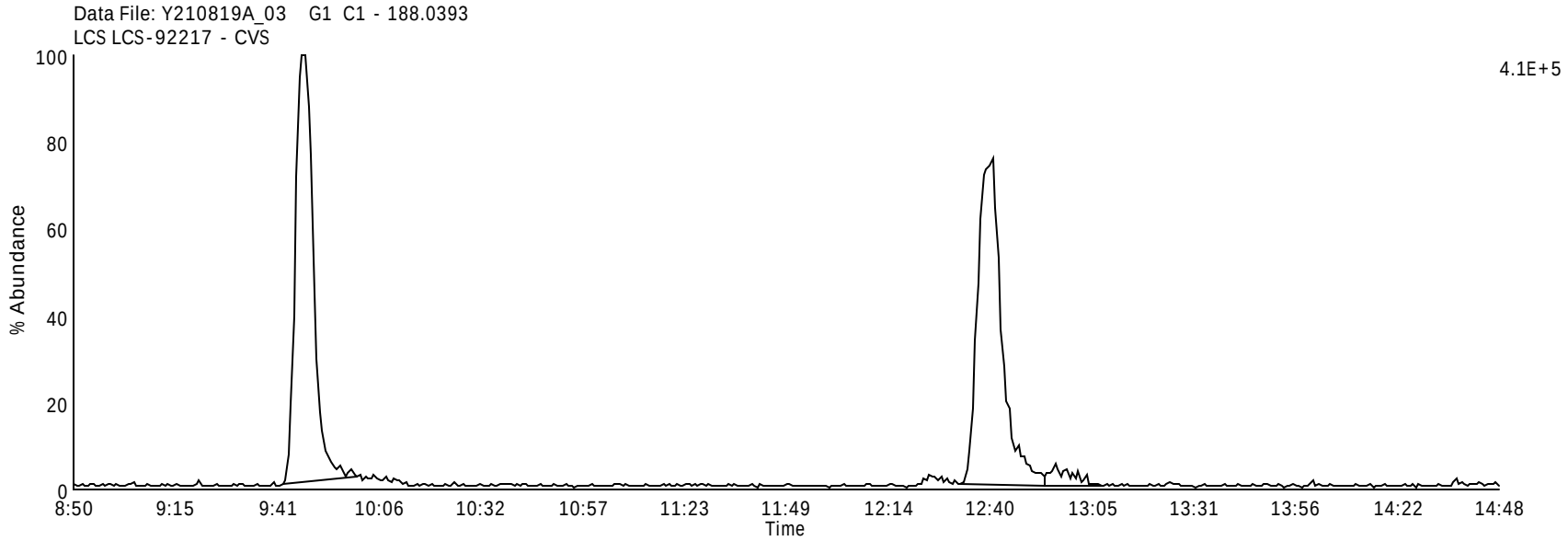
Labeled Deca Chlorinated Biphenyl	
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

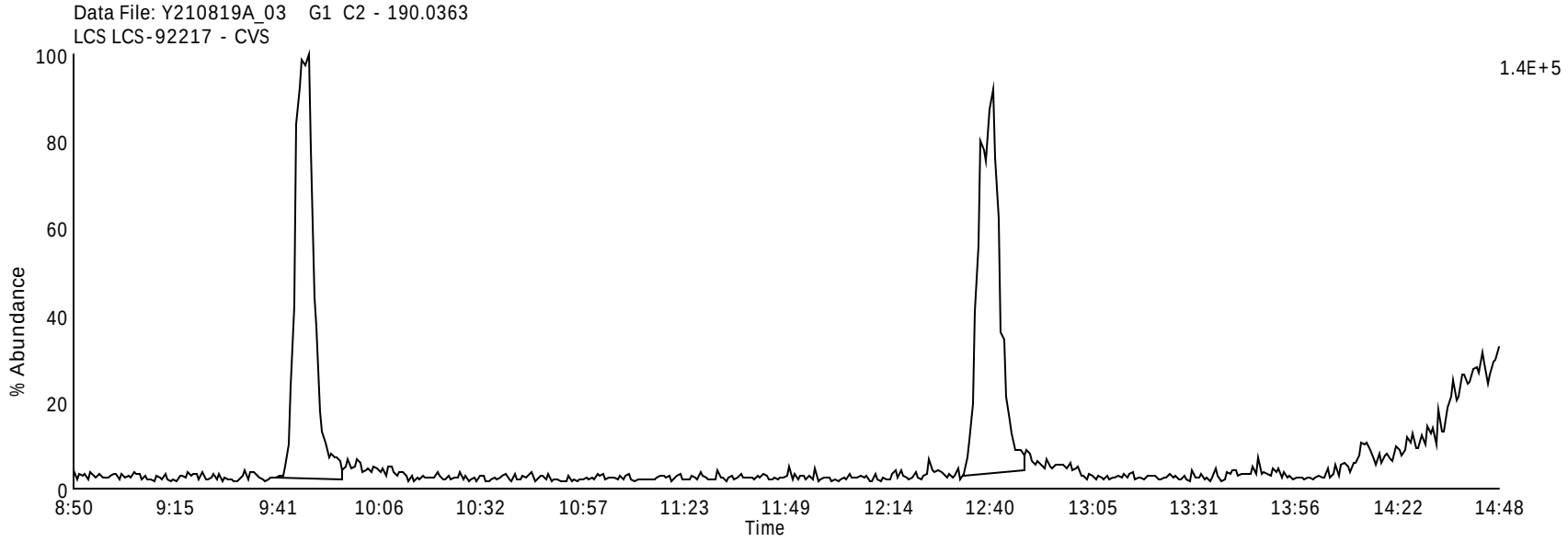




Mono Chlorinated Biphenyls

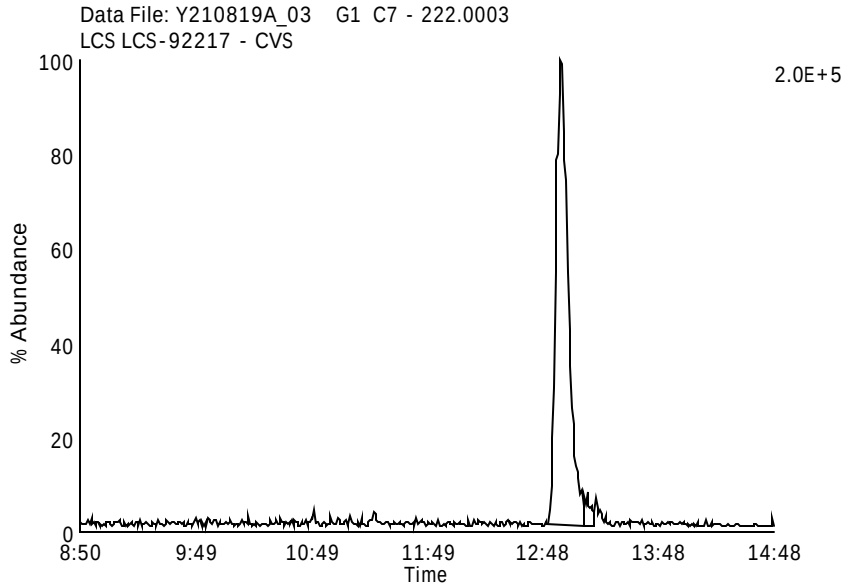
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

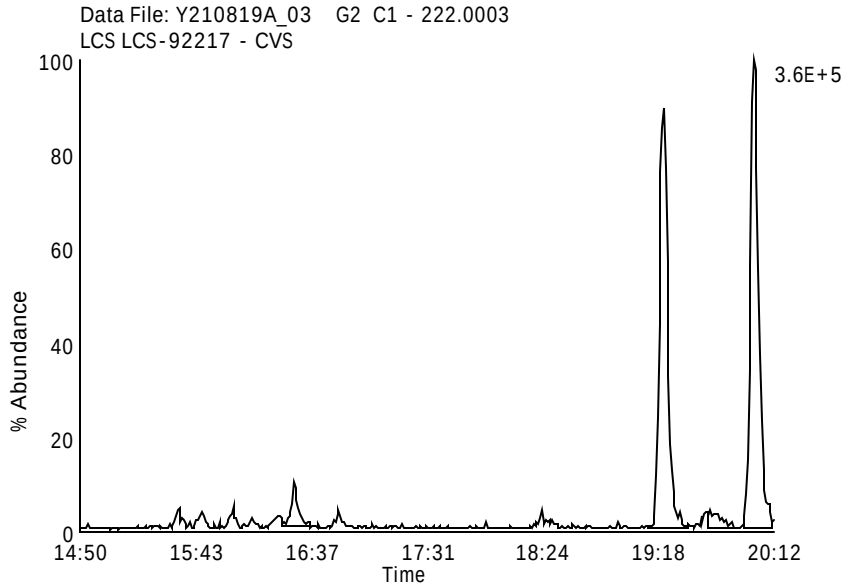


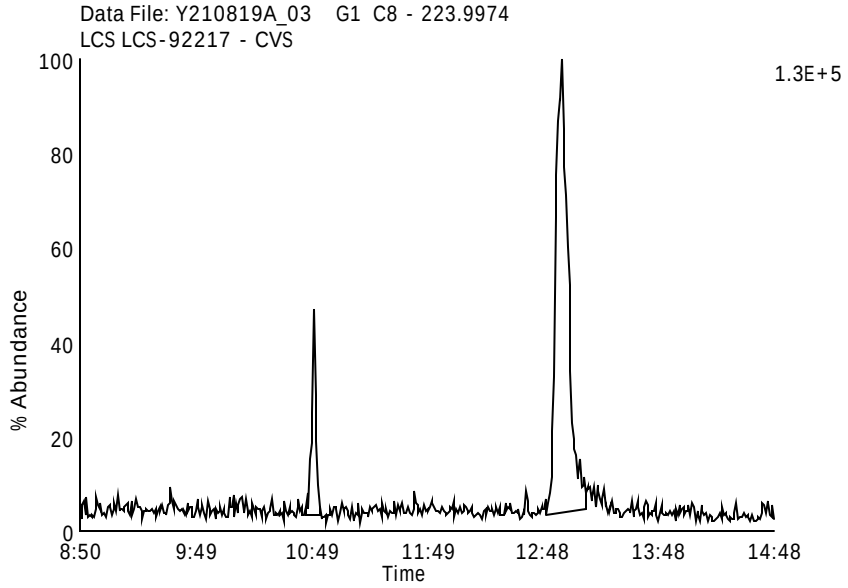


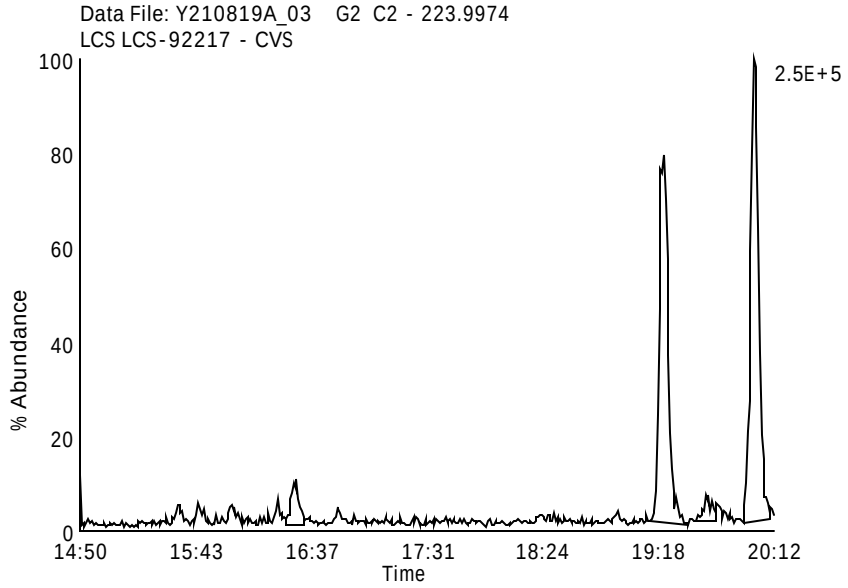
Di Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



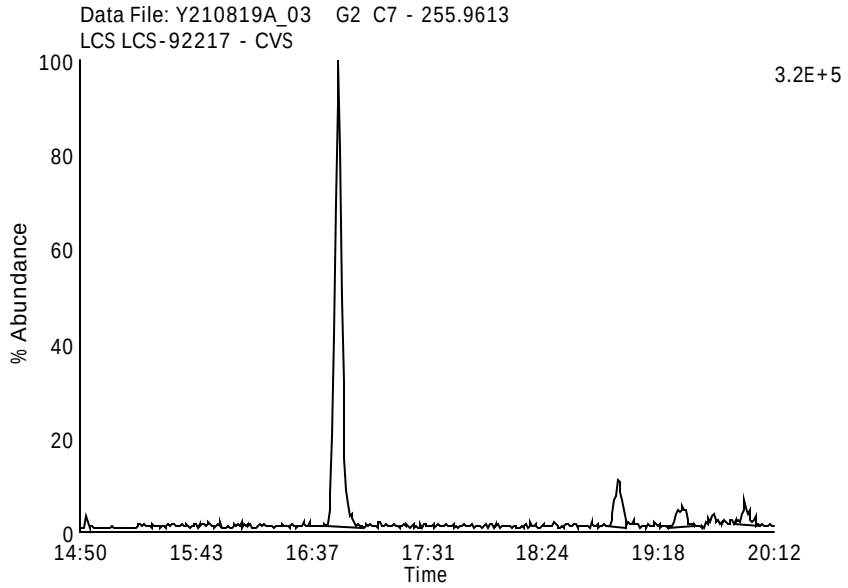


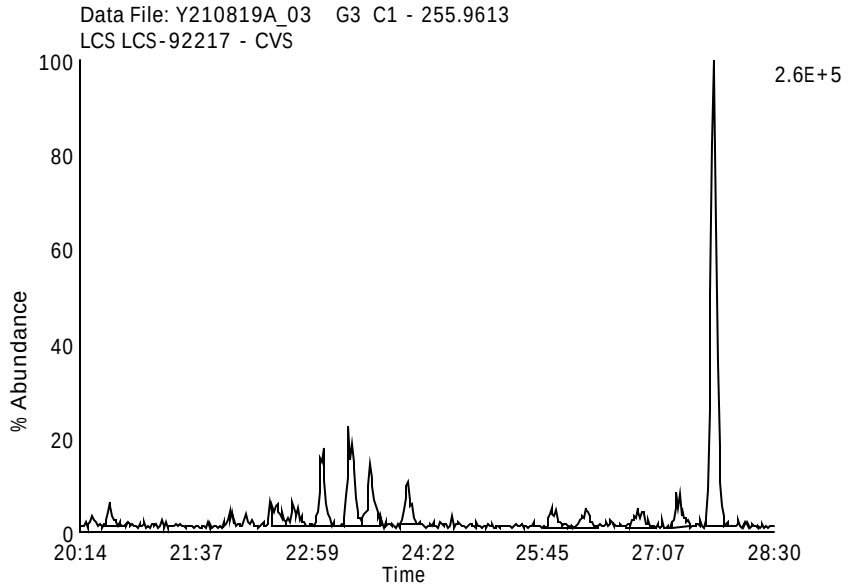


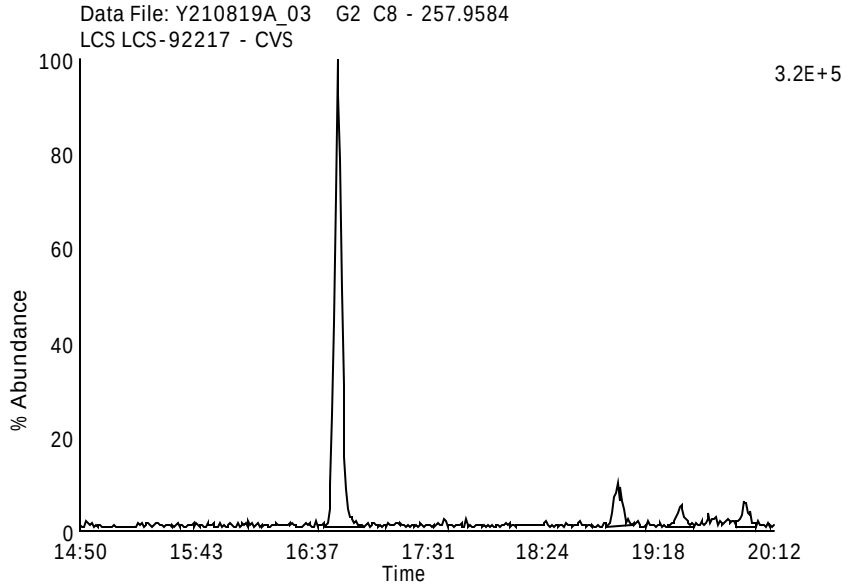


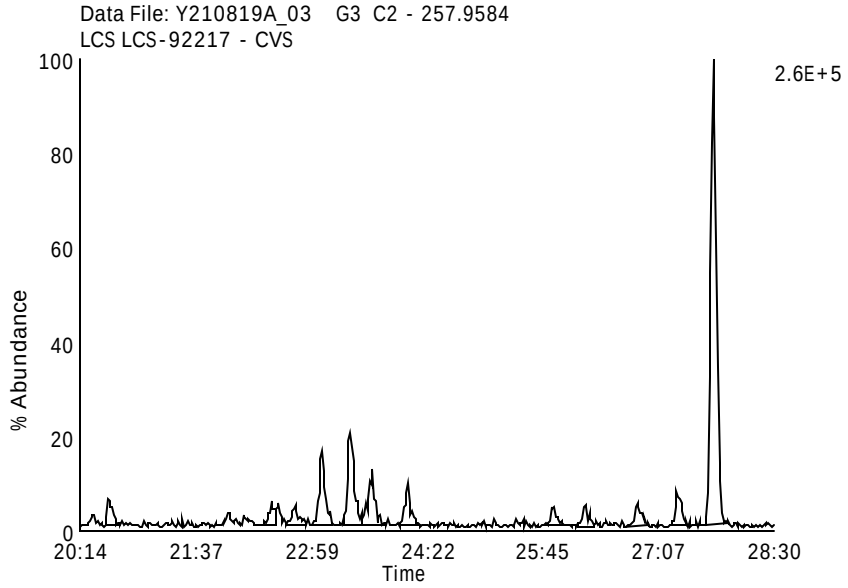
Tri Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



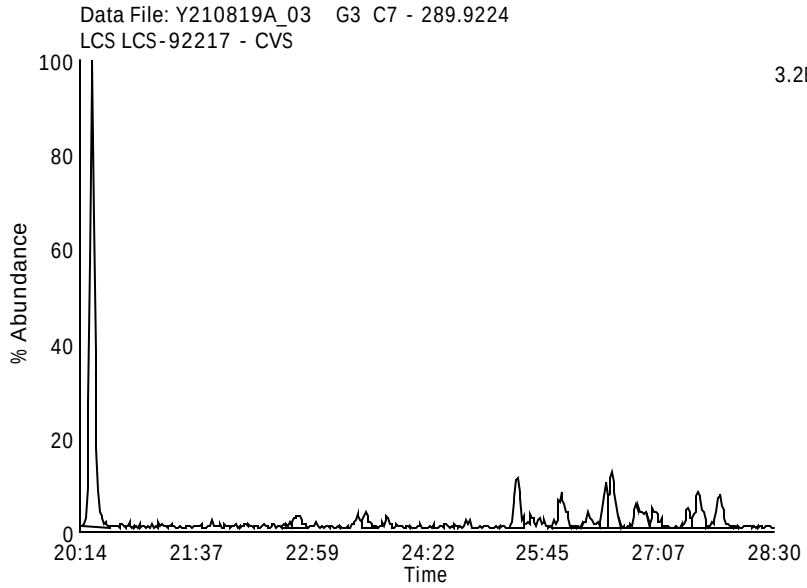


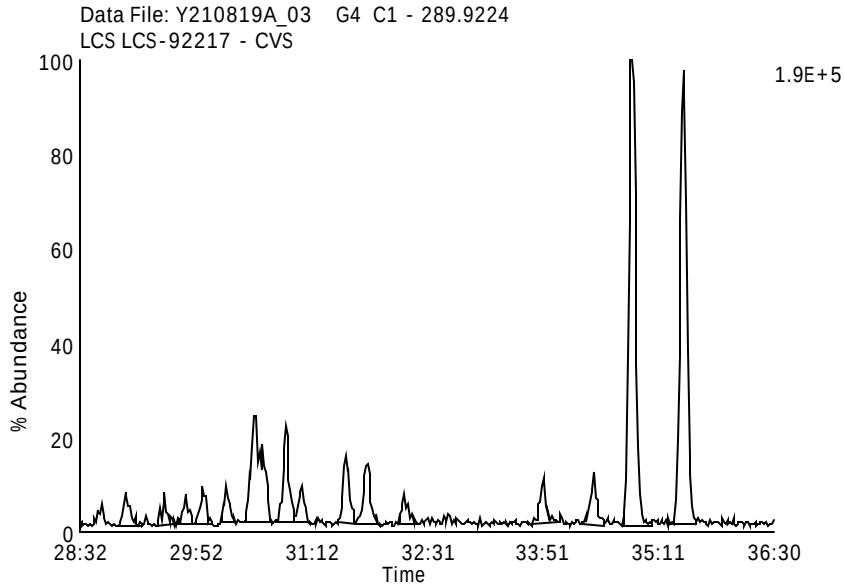


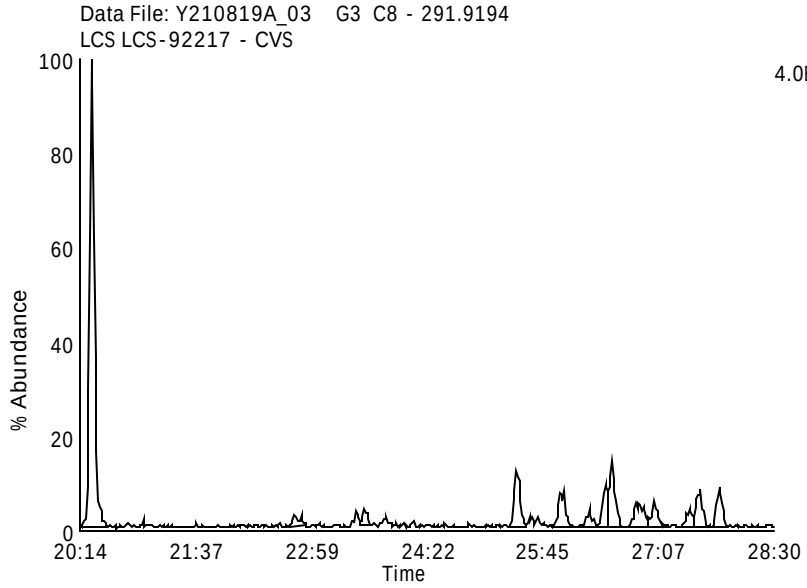


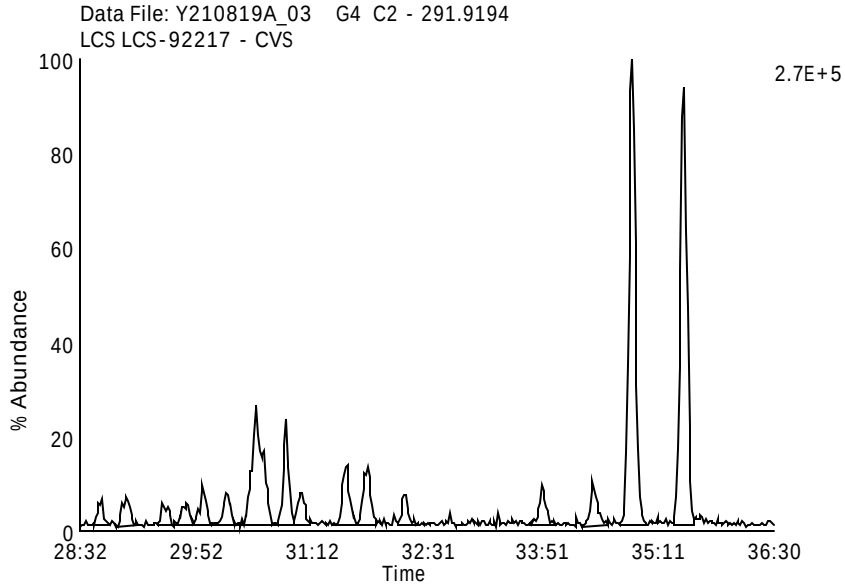
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV





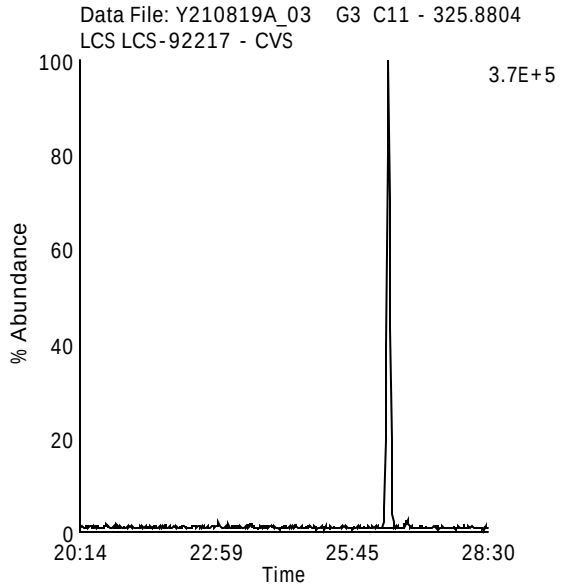


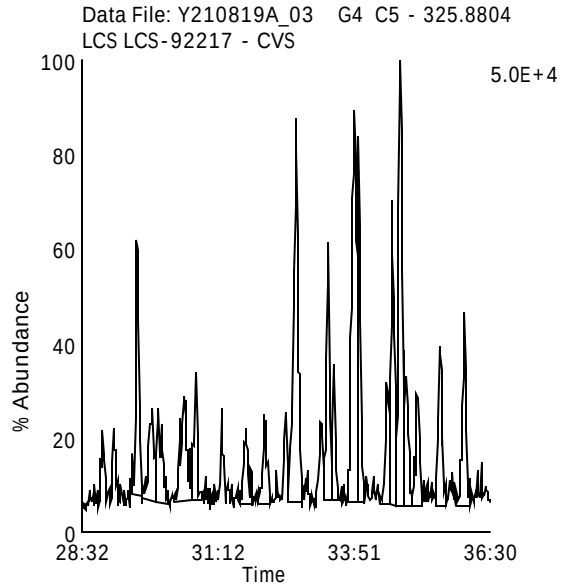


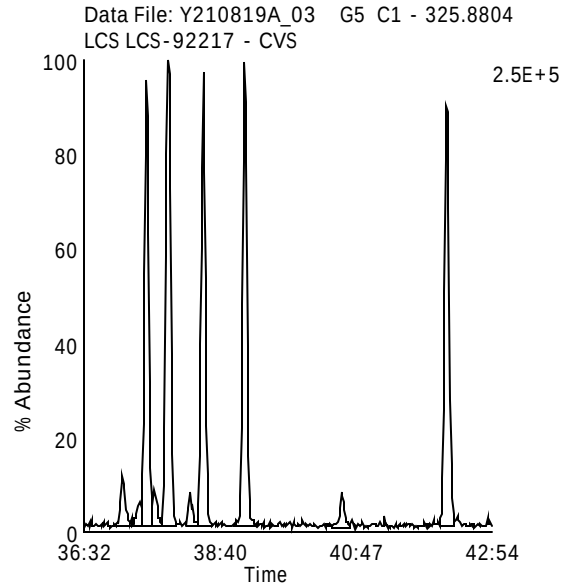
Penta Chlorinated Biphenyls

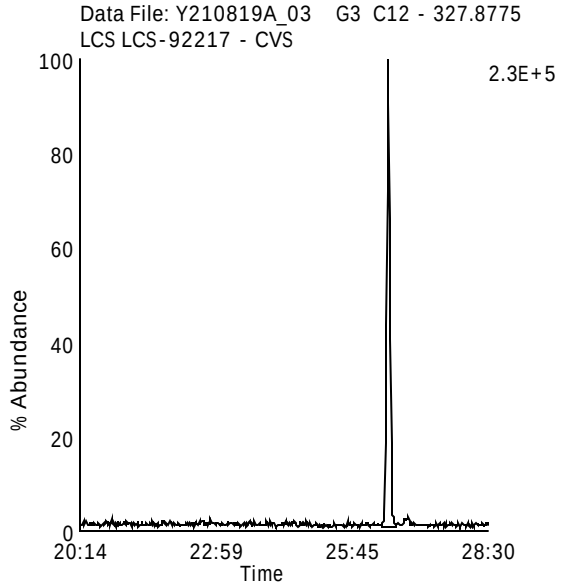
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

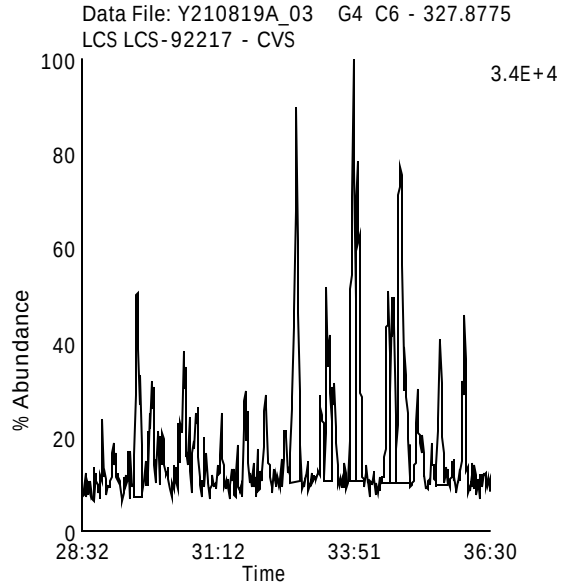
Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV

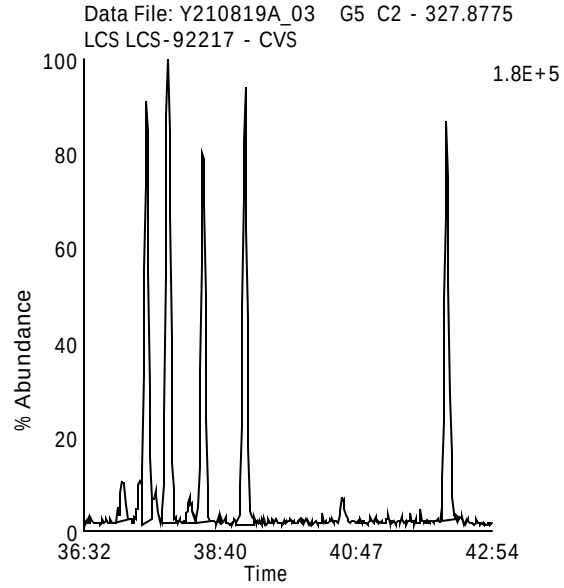






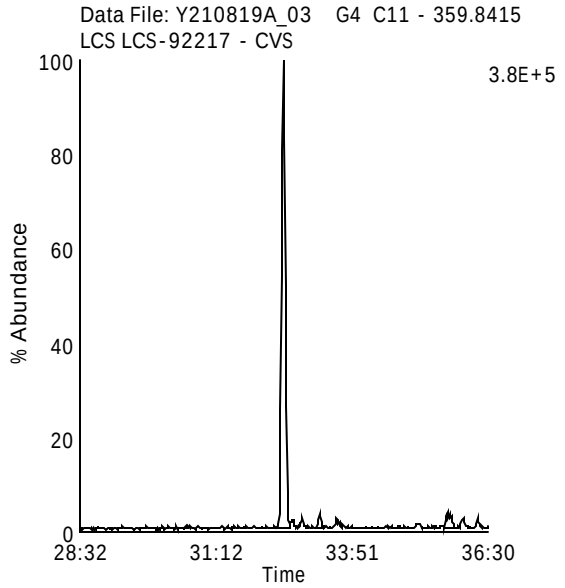


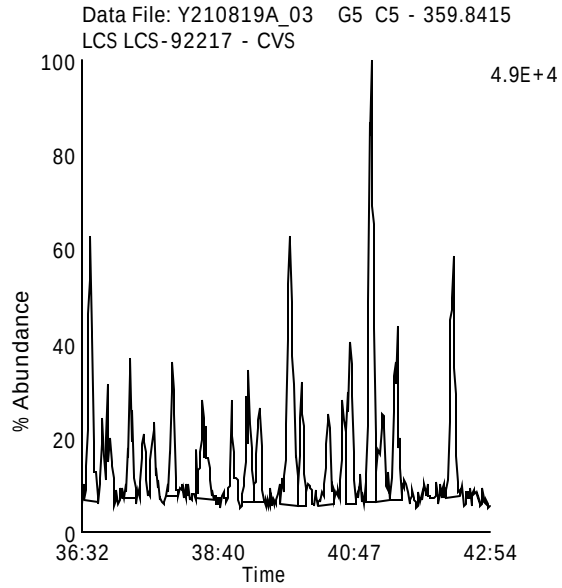


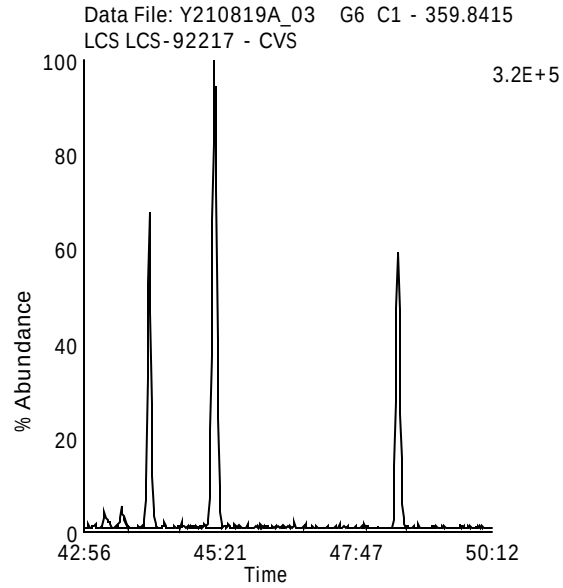


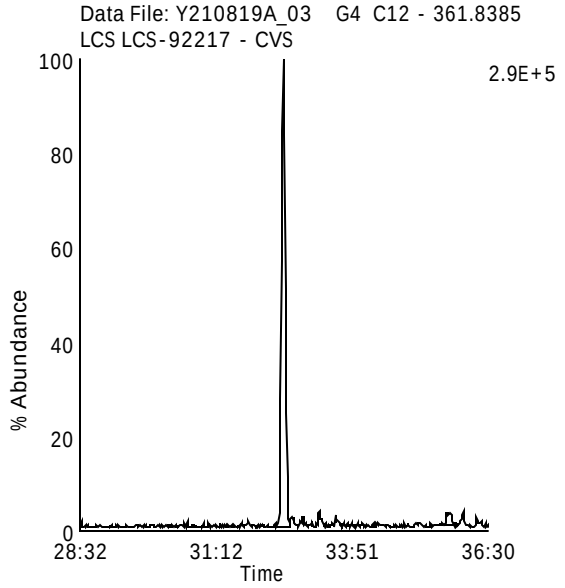
Hexa Chlorinated Biphenyls

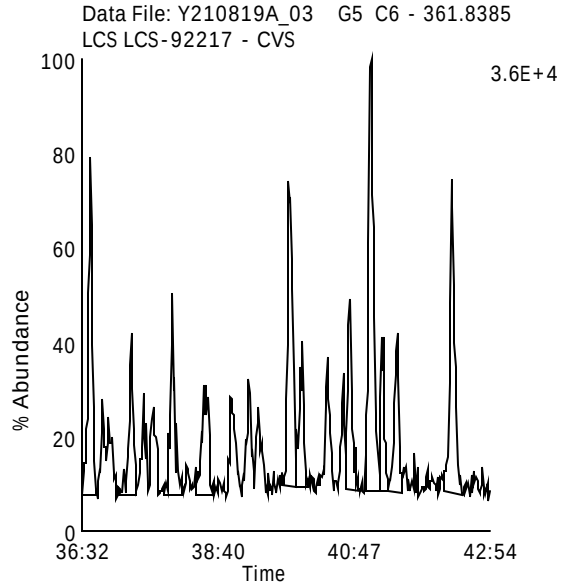
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

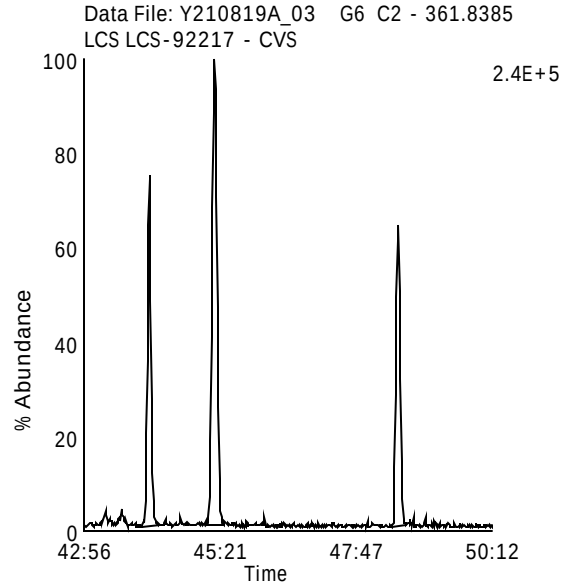






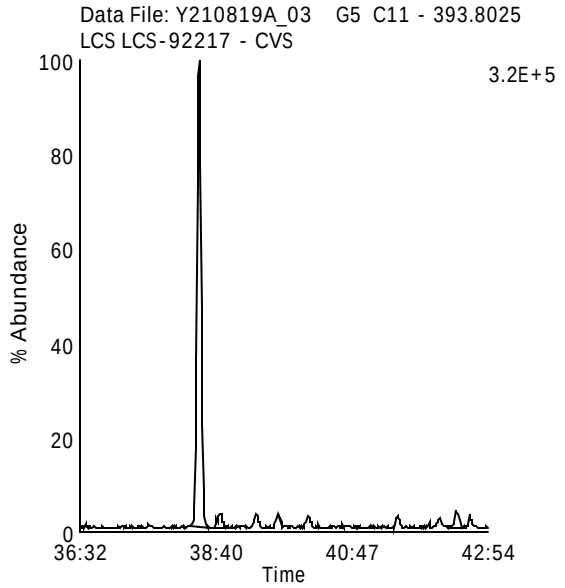


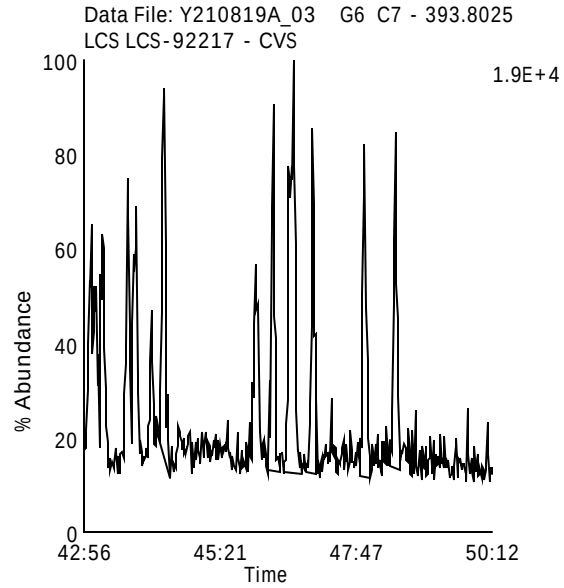


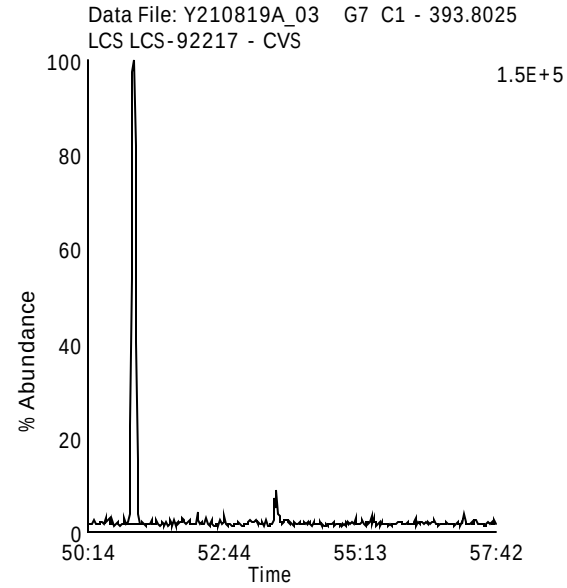


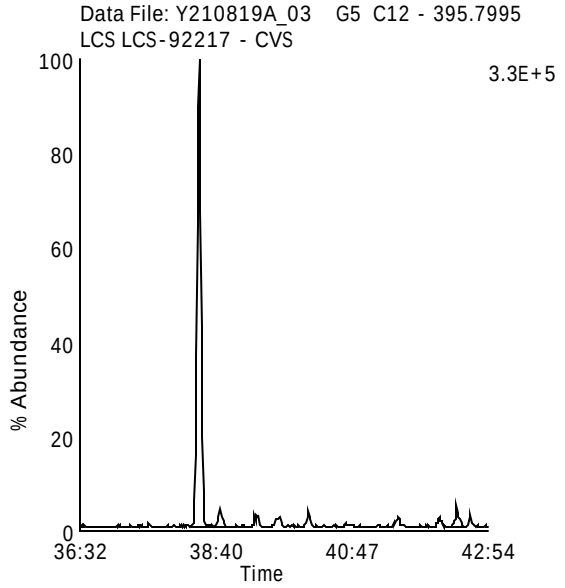
Hepta Chlorinated Biphenyls

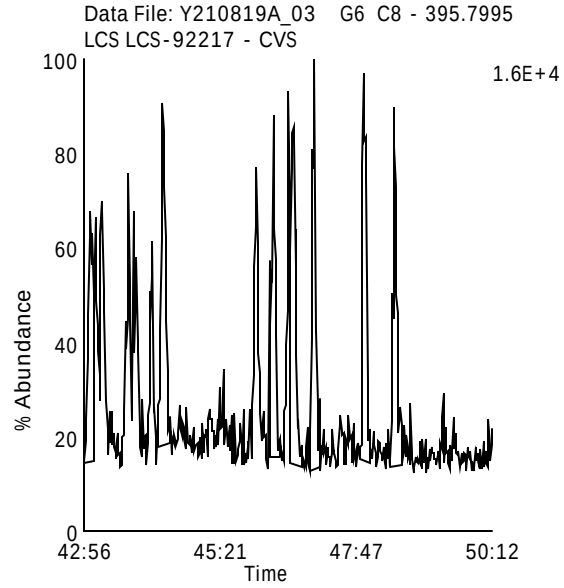
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

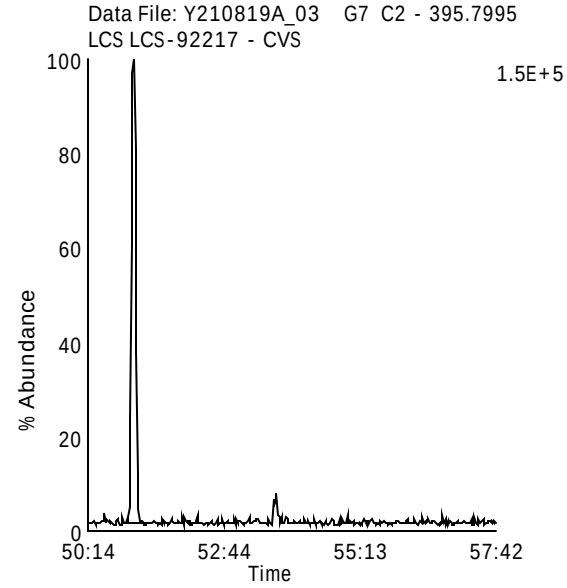








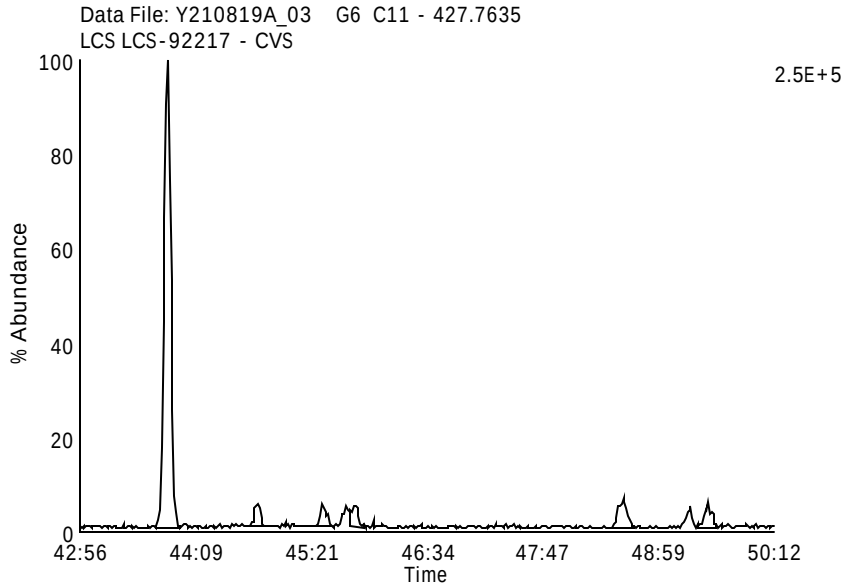


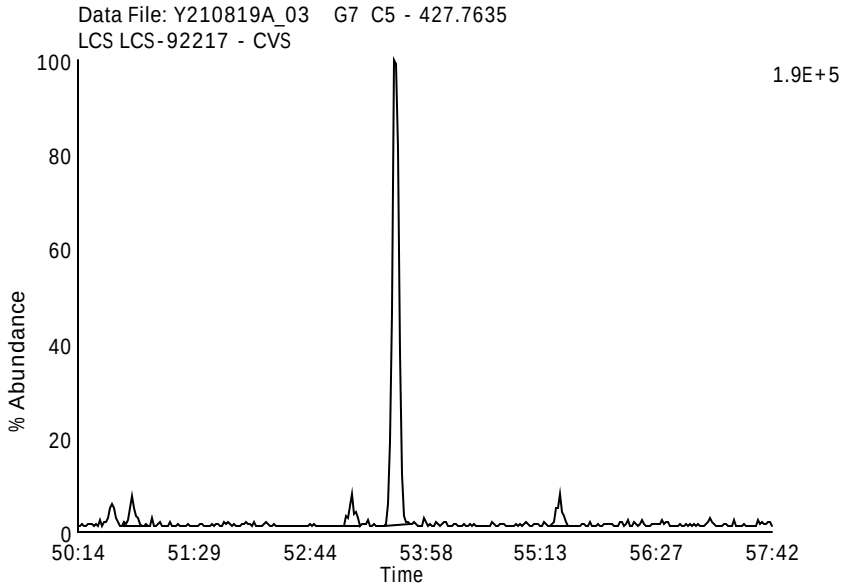


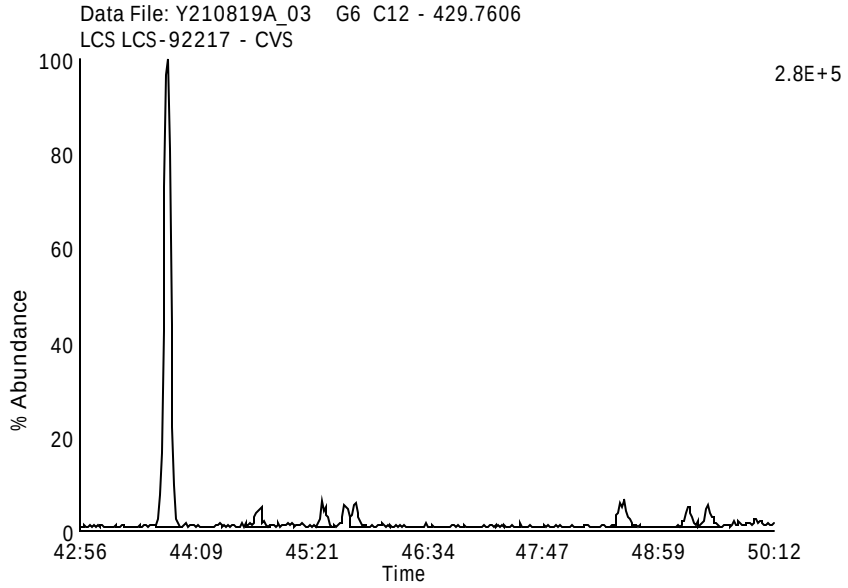
Octa Chlorinated Biphenyls

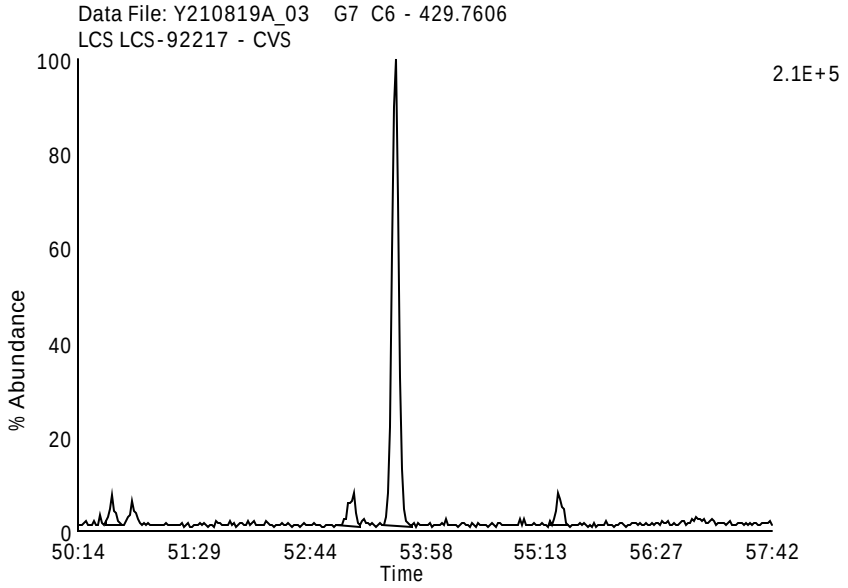
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV



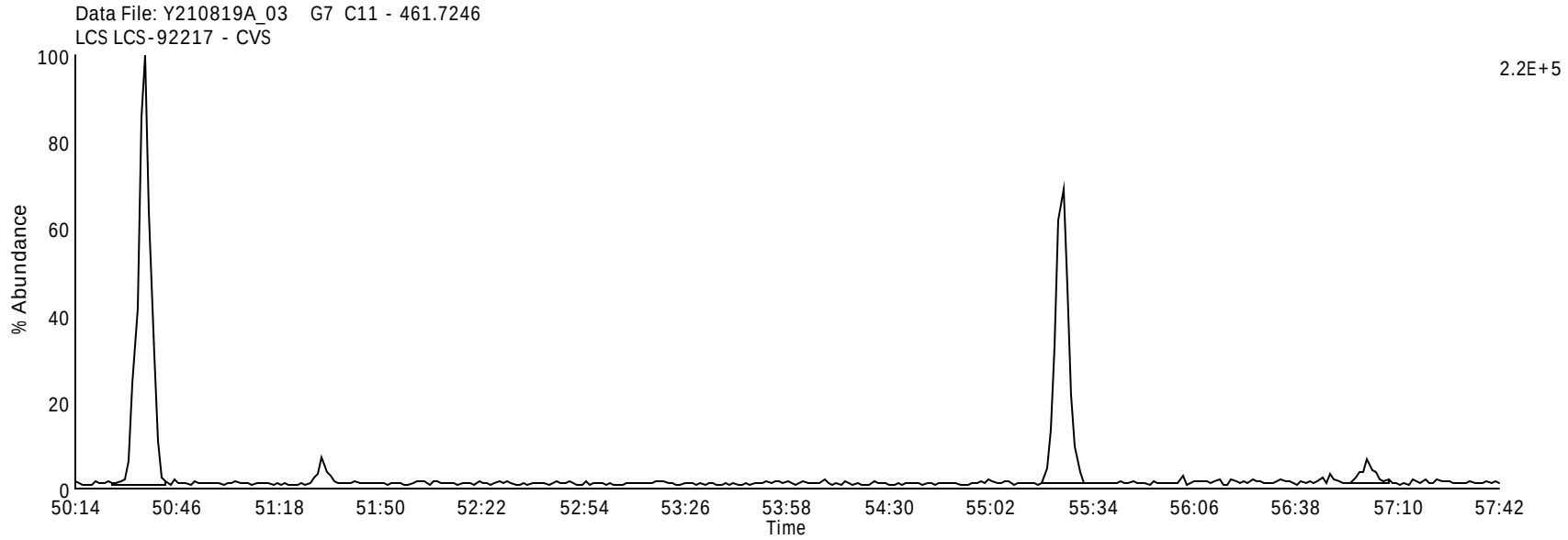


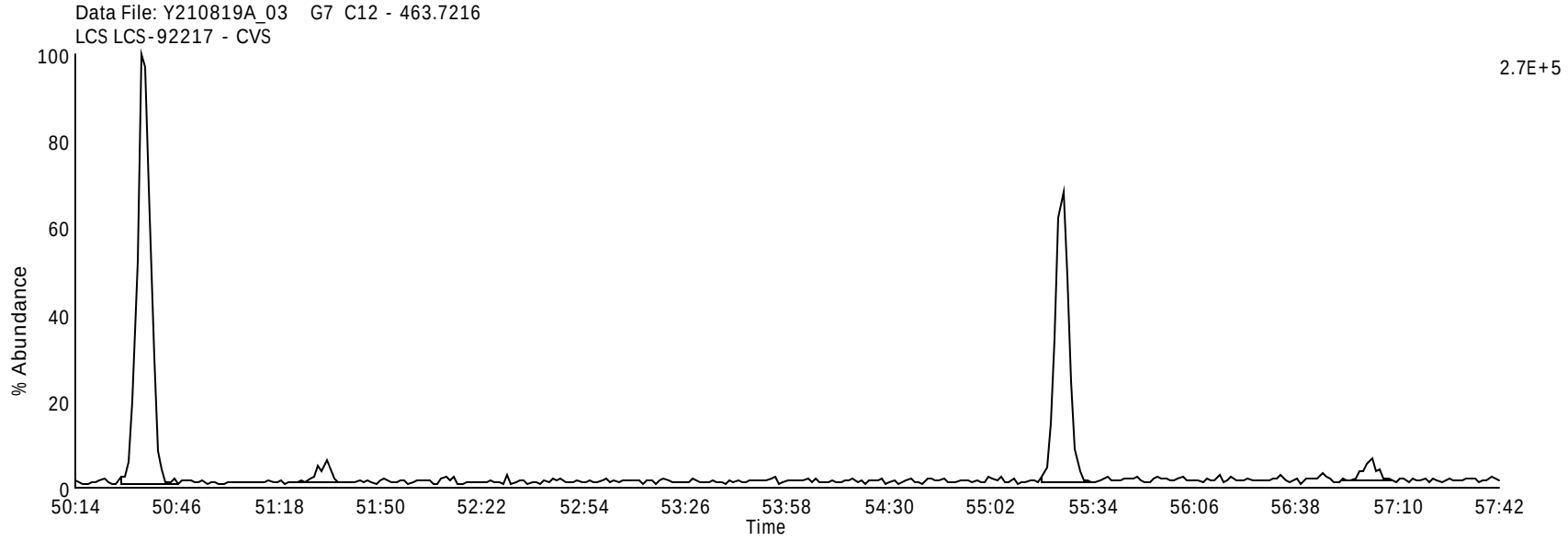




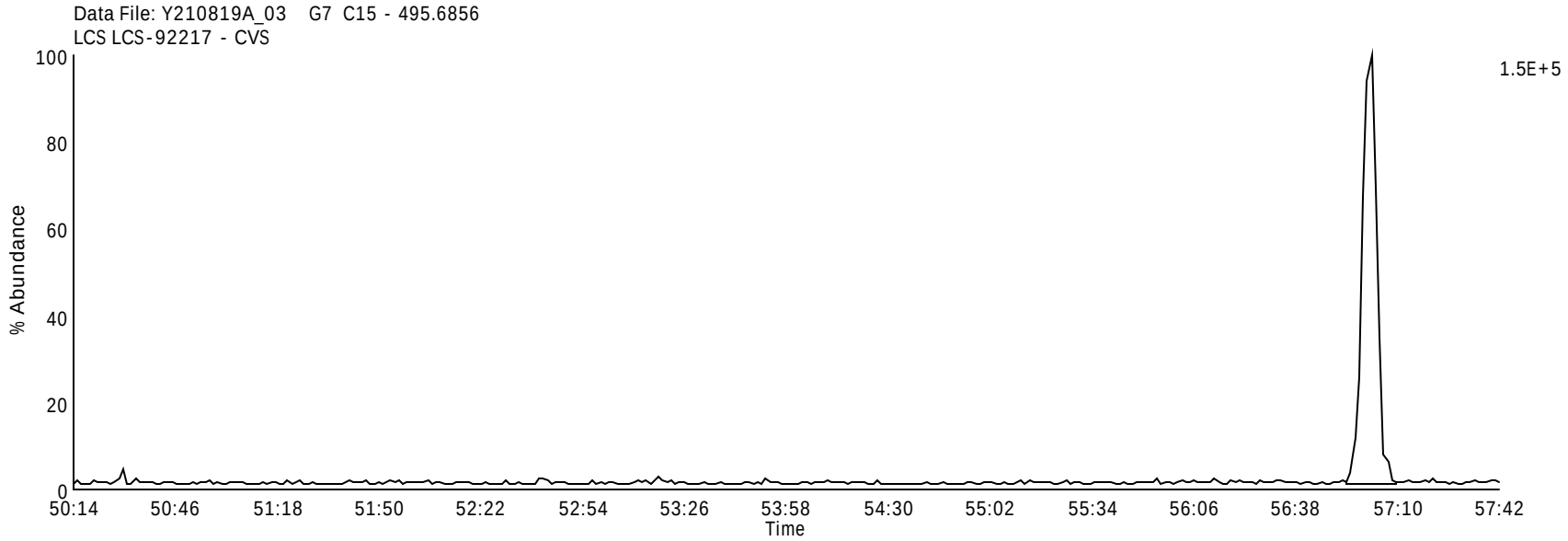
Nona Chlorinated Biphenyls

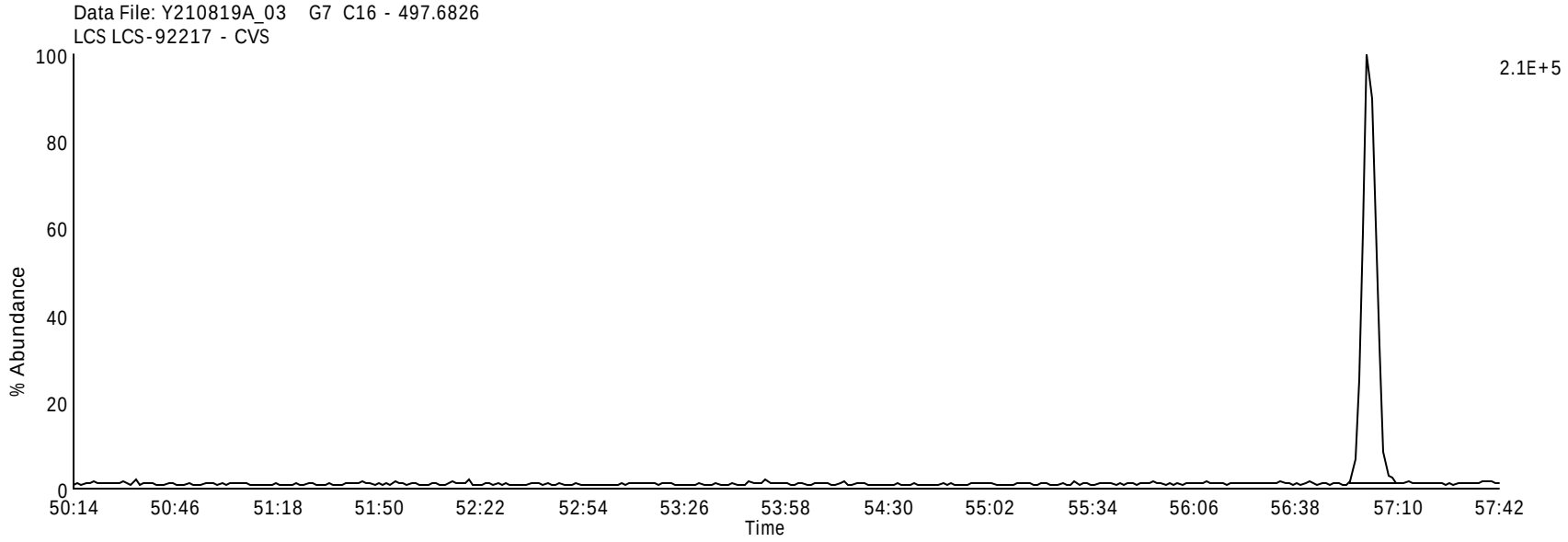
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV





Deca Chlorinated Biphenyl	
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

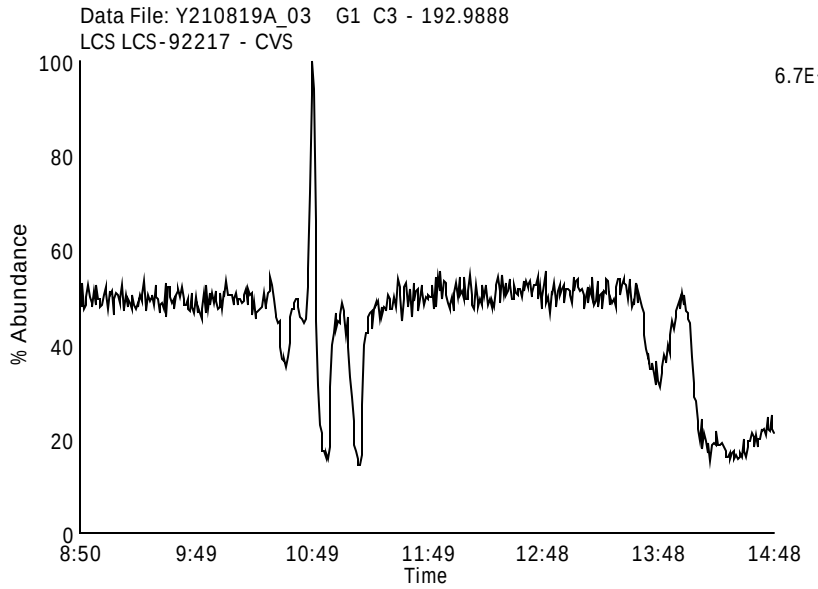


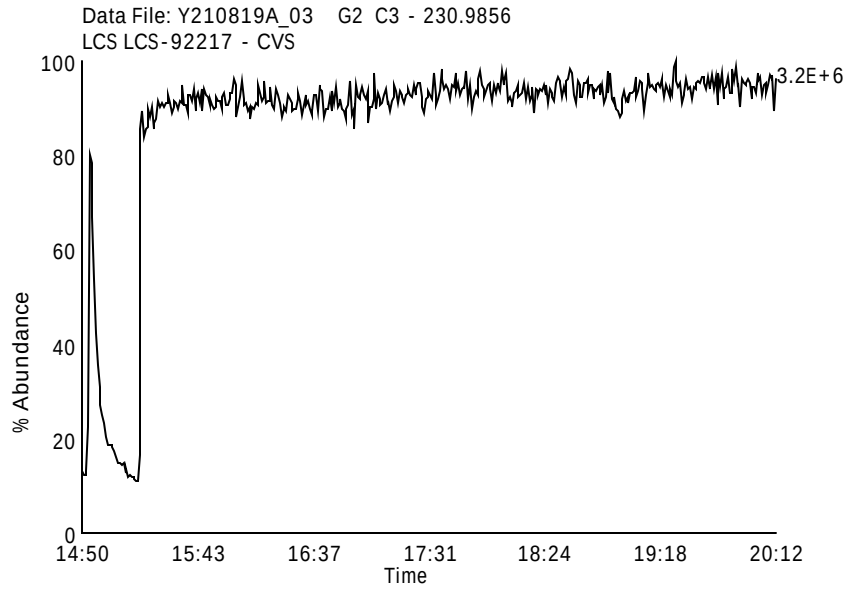


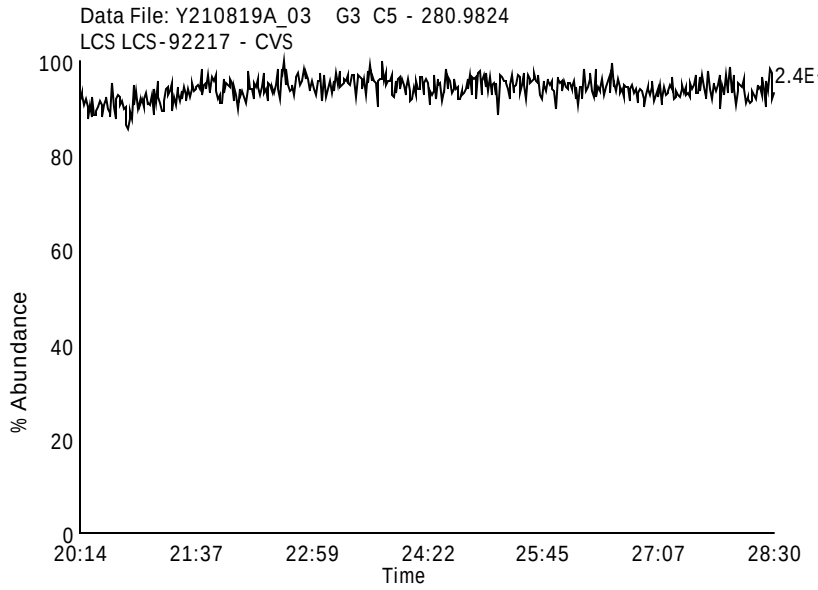
Group 1 - 4 Lock mass

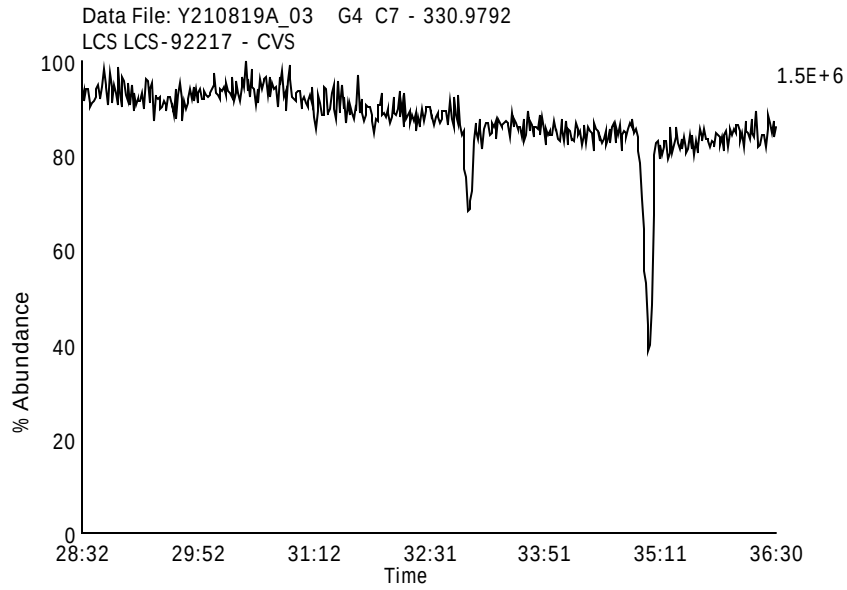
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV





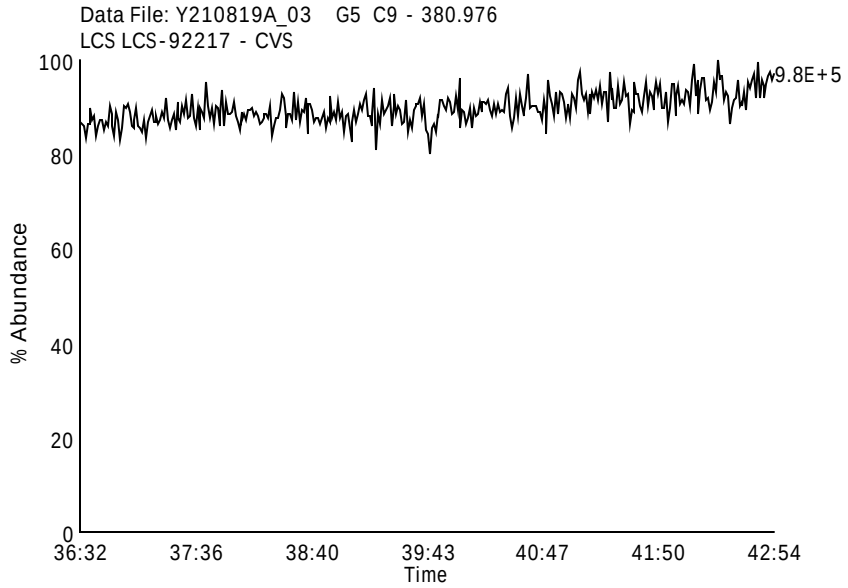


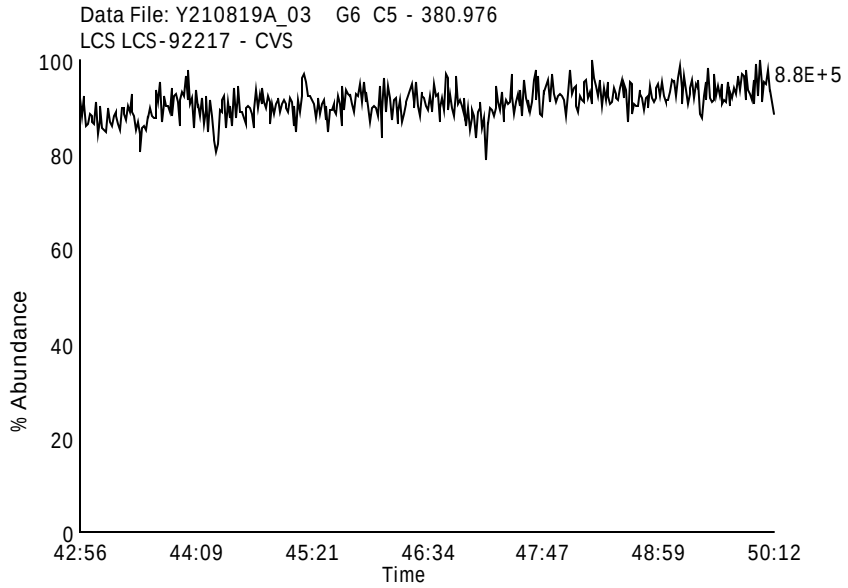


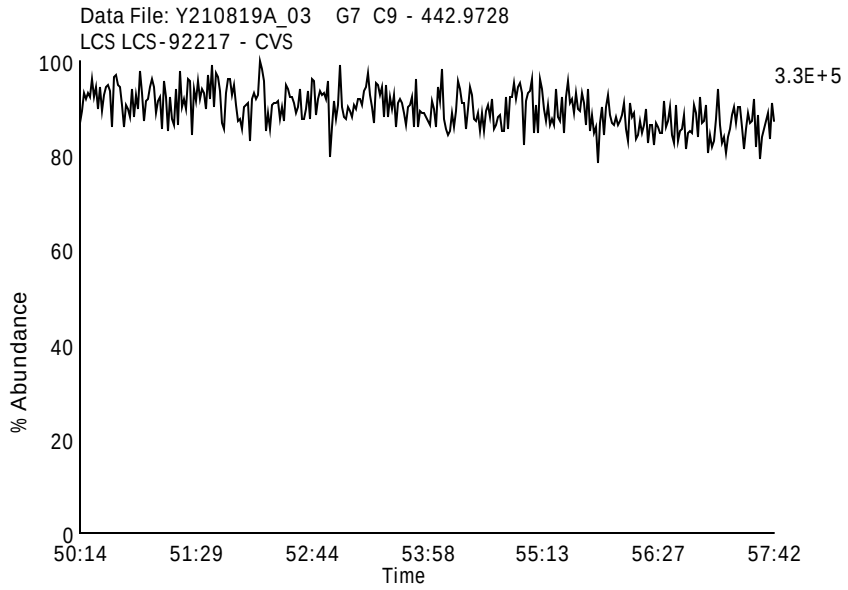
Group 5 - 7 Lock mass

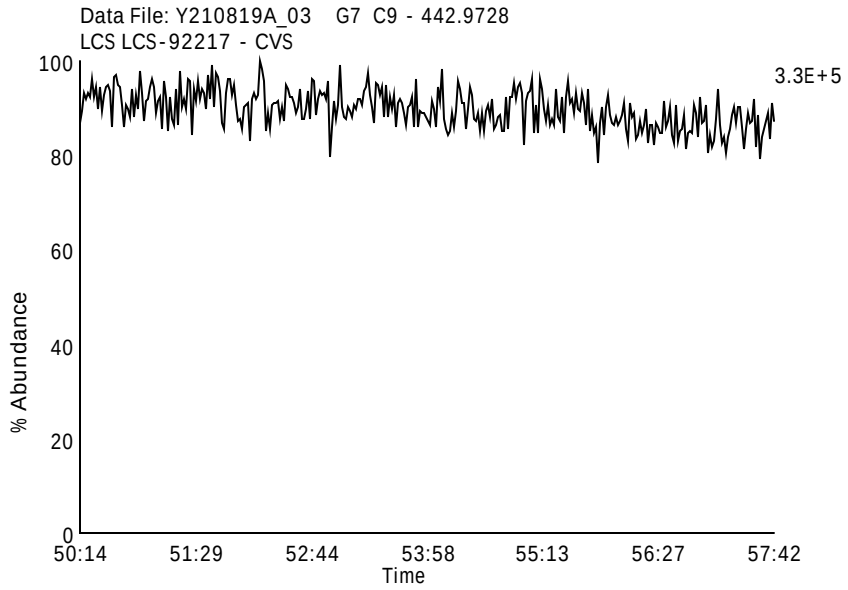
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV









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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CBLKHX	Injected By	CVS
Lab ID	BLANK-92218	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_09	GC Column ID	261111-02
Analyzed	08/19/2021 19:31	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.78	2518360	3210902	
13C-3,3',4,4'-TeCB	77	35.471	0.80	2697212	3391065	
13C-2,3,3',4,4'-PeCB	105	39.048	1.57	2894242	1847111	
13C-2,3,4,4',5-PeCB	114	38.411	1.52	3038823	1995677	
13C-2,3',4,4',5-PeCB	118	37.857	1.54	3060054	1989395	
13C-2,3',4,4',5'-PeCB	123	37.522	1.51	2939992	1945132	
13C-3,3',4,4',5-PeCB	126	42.200	1.53	2647592	1731898	
13C-HxCB(156/157)	156/157	45.274	1.24	4785122	3855351	
13C-2,3',4,4',5,5'-HxCB	167	44.100	1.23	2579704	2095511	
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.22	2182551	1794490	
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.10	2054367	1865289	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.04	7848974	7578425	
13C-2,3,3',5,5'-PeCB	111	35.538	1.61	8487907	5278023	
13C-2,2',3,3',5,5',6-HpCB	178	41.496	1.09	5491313	5018423	
Recovery Standards						
13C-2,5-DiCB	9	15.553	1.51	8593533	5691447	
13C-2,2',5,5'-TeCB	52	25.438	0.80	4575663	5744048	
13C-2,2',4,5,5'-PeCB	101	32.721	1.54	5387801	3503387	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.25	4742652	3796208	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.93	2466975	2651666	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy_____ Date _____

Client ID	CBLKHX	Injected By	CVS
Lab ID	BLANK-92218	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_09	GC Column ID	261111-02
Analyzed	08/19/2021 19:31	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.538	0.79	26909	33876	
81		34.917	1.78	14201	7977	
105		39.065	1.67	47302	28314	
118		37.891	1.62	119063	73586	
123		37.589	1.44	13424	9353	
156	156/157	45.257	1.17	49856	42453	
157	156/157	45.257	1.17	(49856)	(42453)	
167		44.151	0.52	9377	18130	
169		48.527	1.41	3356	2385	
189		51.088	2.08	9414	4534	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CLCSCV	Injected By	CVS
Lab ID	LCS-92217	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_03	GC Column ID	261111-02
Analyzed	08/19/2021 13:33	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.868	0.78	2111435	2708284	
13C-3,3',4,4'-TeCB	77	35.438	0.80	2284176	2841357	
13C-2,3,3',4,4'-PeCB	105	39.032	1.52	2478408	1632856	
13C-2,3,4,4',5-PeCB	114	38.378	1.55	2330025	1504294	
13C-2,3',4,4',5-PeCB	118	37.841	1.54	2460960	1595257	
13C-2,3',4,4',5'-PeCB	123	37.506	1.55	2321195	1497794	
13C-3,3',4,4',5-PeCB	126	42.185	1.54	2254783	1466086	
13C-HxCB(156/157)	156/157	45.258	1.23	3974052	3233763	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.22	2045827	1679232	
13C-3,3',4,4',5,5'-HxCB	169	48.529	1.22	1888640	1554165	
13C-2,3,3',4,4',5,5'-HpCB	189	51.068	1.02	1625922	1589676	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.04	6699982	6439049	
13C-2,3,3',5,5'-PeCB	111	35.505	1.55	6791667	4385104	
13C-2,2',3,3',5,5',6-HpCB	178	41.480	1.12	4351948	3878605	
Recovery Standards						
13C-2,5-DiCB	9	15.577	1.53	6042244	3937903	
13C-2,2',5,5'-TeCB	52	25.422	0.81	3272855	4030592	
13C-2,2',4,5,5'-PeCB	101	32.705	1.58	3736156	2365416	
13C-2,2',3,4,4',5'-HxCB	138	41.011	1.27	3348889	2643728	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.90	1844790	2055772	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CLCSCV	Injected By	CVS
Lab ID	LCS-92217	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_03	GC Column ID	261111-02
Analyzed	08/19/2021 13:33	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
81		34.885	0.79	1061766	1341581	
77		35.472	0.74	1047911	1408437	
105		39.049	1.46	1206307	823895	
114		38.411	1.56	1152202	737592	
118		37.858	1.43	1248369	873894	
123		37.523	1.44	1167558	811223	
126		42.201	1.63	1165474	714297	
156	156/157	45.258	1.24	2032908	1633070	
157	156/157	45.258	1.24	(2032908)	(1633070)	
167		44.101	1.15	1031393	894743	
169		48.545	1.23	970658	787410	
189		51.089	1.00	800418	802641	

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MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSV8

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947372	2947372BLANK	100	100	102
2947373	2947373LCS	99	97	101
60375481039	TB-01	100	101	101
60375481044	TB-02	101	102	103

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-1
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2946897	2946897BLANK	103	103	101
2946898	2946898LCS	102	104	100
60375481029	GB-55/0-2'	104	101	97
60375481030	GB-55/3-5'	104	107	99

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(69-133)
(TOL8) = Toluene-d8 (S)	(78-122)

* Values outside of QC Limits

MSV - FORM II VOA-2
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2946895	2946895BLANK	103	103	101
2946896	2946896LCS	98	99	100
60375481029	GB-55/0-2'	104	101	97
60375481030	GB-55/3-5'	104	107	99

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-3
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947094	2947094BLANK	102	104	100
2947095	2947095LCS	99	95	100
60375481031	GB-55/3-5'D	102	99	101
60375481032	GB-62/0-2'	103	101	99
60375481033	GB-62/3-5'	102	106	101
60375481034	GB-68/1-3'	104	105	99
60375481035	GB-68/3-5'	104	105	98
60375481036	GB-68/3-5'D	105	106	100
60375481037	GB-67/5-6'	105	103	101

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-4
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947096	2947096BLANK	102	104	100
2947097	2947097LCS	100	102	101
60375481031	GB-55/3-5'D	102	99	101
60375481032	GB-62/0-2'	103	101	99
60375481033	GB-62/3-5'	102	106	101
60375481034	GB-68/1-3'	104	105	99
60375481035	GB-68/3-5'	104	105	98
60375481036	GB-68/3-5'D	105	106	100
60375481037	GB-67/5-6'	105	103	101

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(69-133)
(TOL8) = Toluene-d8 (S)	(78-122)

* Values outside of QC Limits

MSV - FORM II VOA-5
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947592	2947592BLANK	102	103	100
2947593	2947593LCS	98	96	100
60375481038	GB-67/8-10'	105	104	101
60375481040	GB-61/3-5'	102	101	99
60375481041	GB-61/5-7'	105	107	100
60375481042	GB-54/0-2'	103	103	98
60375481043	GB-54/2-4'	105	106	99

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-6
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947600	2947600BLANK	102	103	100
2947601	2947601LCS	98	96	100
60375481038	GB-67/8-10'	105	104	101
60375481040	GB-61/3-5'	102	101	99
60375481041	GB-61/5-7'	105	107	100
60375481042	GB-54/0-2'	103	103	98
60375481043	GB-54/2-4'	105	106	99

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(69-133)
(TOL8) = Toluene-d8 (S)	(78-122)

* Values outside of QC Limits

MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2946896LCS

Date Extracted: 07/27/2021 | Date Analyzed (1): 07/27/2021

Instrument: 60MSVC | LCS Lot No:

Lab File ID: 072721A.B\0727A_03.D | SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acetone	500	621	124	50-150
Acrolein	500	525	105	10-180
Acrylonitrile	500	479	96	80-120
Benzene	100	98.3	98	80-120
Bromobenzene	100	96.5	97	80-120
Bromochloromethane	100	98.5	98	75-120
Bromodichloromethane	100	109	109	80-125
Bromoform	100	93.0	93	80-135
Bromomethane	100	91.2	91	35-135
2-Butanone (MEK)	500	621	124	60-135
n-Butylbenzene	100	103	103	80-135
sec-Butylbenzene	100	98.0	98	80-135
tert-Butylbenzene	100	98.6	99	80-125
Carbon disulfide	100	109	109	65-140
Carbon tetrachloride	100	111	111	75-140
Chlorobenzene	100	99.3	99	80-120
Chloroethane	100	106	106	50-135
Chloroform	100	101	101	80-120
Chloromethane	100	99.3	99	15-155
2-Chlorotoluene	100	96.3	96	80-120
4-Chlorotoluene	100	98.8	99	80-120
Cyclohexanone	500	544	109	80-120
1,2-Dibromo-3-chloropropane	100	105	105	75-135
Dibromochloromethane	100	112	112	80-130
1,2-Dibromoethane (EDB)	100	102	102	80-125
Dibromomethane	100	98.3	98	80-120
1,2-Dichlorobenzene	100	94.7	95	80-120
1,3-Dichlorobenzene	100	98.4	98	80-120
1,4-Dichlorobenzene	100	97.8	98	80-120
1,1-Dichloroethane	100	102	102	75-125
1,2-Dichloroethane	100	97.0	97	80-120
1,2-Dichloroethene (Total)	200	204	102	80-120
1,1-Dichloroethene	100	107	107	70-130
cis-1,2-Dichloroethene	100	100	100	80-120
trans-1,2-Dichloroethene	100	104	104	75-125
1,2-Dichloropropane	100	99.8	100	80-120
1,3-Dichloropropane	100	97.2	97	80-120
2,2-Dichloropropane	100	108	108	75-130
1,1-Dichloropropene	100	104	104	60-140
cis-1,3-Dichloropropene	100	111	111	80-125
trans-1,3-Dichloropropene	100	110	110	80-130
Diethyl ether (Ethyl ether)	100	98.4	98	80-120
Ethylbenzene	100	100	100	80-120
n-Heptane	100	111	111	80-120
Hexachloro-1,3-butadiene	100	108	108	80-135
n-Hexane	100	126	126	55-150
2-Hexanone	500	598	120	70-135

MSV - FORM III VOA-2

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2946896LCS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072721A.B\0727A_03.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Iodomethane	100	102	102	65-145
Isopropylbenzene (Cumene)	100	105	105	75-135
p-Isopropyltoluene	100	103	103	65-145
Methyl acetate	500	464	93	80-120
Methylene Chloride	100	89.1	89	65-120
4-Methyl-2-pentanone (MIBK)	500	479	96	75-130
Methyl-tert-butyl ether	100	98.1	98	75-130
Naphthalene	100	102	102	80-120
n-Propylbenzene	100	101	101	80-125
Styrene	100	100	100	85-125
1,1,1,2-Tetrachloroethane	100	104	104	80-130
1,1,2,2-Tetrachloroethane	100	96.2	96	75-120
Tetrachloroethene	100	103	103	80-130
Tetrahydrofuran	500	447	89	80-120
Toluene	100	98.5	99	80-120
1,2,3-Trichlorobenzene	100	101	101	80-125
1,2,4-Trichlorobenzene	100	105	105	80-125
1,1,1-Trichloroethane	100	102	102	75-130
1,1,2-Trichloroethane	100	97.5	97	80-120
Trichloroethene	100	106	106	80-125
Trichlorofluoromethane	100	113	113	65-135
1,2,3-Trichloropropane	100	95.5	95	80-120
1,1,2-Trichlorotrifluoroethane	100	110	110	80-120
1,2,3-Trimethylbenzene	100	97.7	98	80-120
1,2,4-Trimethylbenzene	100	96.3	96	80-125
1,3,5-Trimethylbenzene	100	98.8	99	80-125
Vinyl acetate	100	95.7J	96	80-120
Vinyl chloride	100	105	105	35-145
Xylene (Total)	300	296	99	80-120
m&p-Xylene	200	197	99	80-125
o-Xylene	100	98.2	98	80-125

Spike Recovery: 0 out of 78 outside limits.

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MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2946898LCS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072721AGRO.B\0727A_10.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-GRO	4.0	3.5	86	61-140

Spike Recovery: 0 out of 1 outside limits.

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MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2947095LCS

Date Extracted: 07/27/2021 | Date Analyzed (1): 07/27/2021

Instrument: 60MSVC | LCS Lot No:

Lab File ID: 072721A.B\0727A_36.D | SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acetone	500	606	121	50-150
Acrolein	500	550	110	10-180
Acrylonitrile	500	497	99	80-120
Benzene	100	93.4	93	80-120
Bromobenzene	100	91.4	91	80-120
Bromochloromethane	100	100	100	75-120
Bromodichloromethane	100	106	106	80-125
Bromoform	100	88.3	88	80-135
Bromomethane	100	79.8	80	35-135
2-Butanone (MEK)	500	627	125	60-135
n-Butylbenzene	100	93.2	93	80-135
sec-Butylbenzene	100	90.3	90	80-135
tert-Butylbenzene	100	90.6	91	80-125
Carbon disulfide	100	97.7	98	65-140
Carbon tetrachloride	100	97.2	97	75-140
Chlorobenzene	100	95.3	95	80-120
Chloroethane	100	100	100	50-135
Chloroform	100	97.0	97	80-120
Chloromethane	100	93.3	93	15-155
2-Chlorotoluene	100	90.9	91	80-120
4-Chlorotoluene	100	94.3	94	80-120
Cyclohexanone	500	545	109	80-120
1,2-Dibromo-3-chloropropane	100	109	109	75-135
Dibromochloromethane	100	108	108	80-130
1,2-Dibromoethane (EDB)	100	102	102	80-125
Dibromomethane	100	100	100	80-120
1,2-Dichlorobenzene	100	92.8	93	80-120
1,3-Dichlorobenzene	100	93.7	94	80-120
1,4-Dichlorobenzene	100	95.2	95	80-120
1,1-Dichloroethane	100	97.2	97	75-125
1,2-Dichloroethane	100	96.3	96	80-120
1,2-Dichloroethene (Total)	200	193	96	80-120
1,1-Dichloroethene	100	97.2	97	70-130
cis-1,2-Dichloroethene	100	97.5	97	80-120
trans-1,2-Dichloroethene	100	95.4	95	75-125
1,2-Dichloropropane	100	96.6	97	80-120
1,3-Dichloropropane	100	96.5	97	80-120
2,2-Dichloropropane	100	93.8	94	75-130
1,1-Dichloropropene	100	91.9	92	60-140
cis-1,3-Dichloropropene	100	105	105	80-125
trans-1,3-Dichloropropene	100	107	107	80-130
Diethyl ether (Ethyl ether)	100	101	101	80-120
Ethylbenzene	100	91.9	92	80-120
n-Heptane	100	97.7	98	80-120
Hexachloro-1,3-butadiene	100	96.6	97	80-135
n-Hexane	100	92.8	93	55-150
2-Hexanone	500	580	116	70-135

MSV - FORM III VOA-2

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947095LCS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072721A.B\0727A_36.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Iodomethane	100	78.0	78	65-145
Isopropylbenzene (Cumene)	100	92.5	92	75-135
p-Isopropyltoluene	100	91.8	92	65-145
Methyl acetate	500	486	97	80-120
Methylene Chloride	100	90.2	90	65-120
4-Methyl-2-pentanone (MIBK)	500	487	97	75-130
Methyl-tert-butyl ether	100	98.3	98	75-130
Naphthalene	100	103	103	80-120
n-Propylbenzene	100	89.0	89	80-125
Styrene	100	95.5	96	85-125
1,1,1,2-Tetrachloroethane	100	98.7	99	80-130
1,1,2,2-Tetrachloroethane	100	93.8	94	75-120
Tetrachloroethene	100	92.2	92	80-130
Tetrahydrofuran	500	94.7	19	80-120
Toluene	100	91.1	91	80-120
1,2,3-Trichlorobenzene	100	101	101	80-125
1,2,4-Trichlorobenzene	100	101	101	80-125
1,1,1-Trichloroethane	100	91.7	92	75-130
1,1,2-Trichloroethane	100	98.4	98	80-120
Trichloroethene	100	95.7	96	80-125
Trichlorofluoromethane	100	99.7	100	65-135
1,2,3-Trichloropropane	100	92.9	93	80-120
1,1,2-Trichlorotrifluoroethane	100	97.7	98	80-120
1,2,3-Trimethylbenzene	100	95.0	95	80-120
1,2,4-Trimethylbenzene	100	91.0	91	80-125
1,3,5-Trimethylbenzene	100	91.7	92	80-125
Vinyl acetate	100	93.5J	94	80-120
Vinyl chloride	100	95.3	95	35-145
Xylene (Total)	300	271	90	80-120
m&p-Xylene	200	178	89	80-125
o-Xylene	100	92.6	93	80-125

Spike Recovery: 1 out of 78 outside limits.

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MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947097LCS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072721AGRO.B\0727A_37.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-GRO	4.0	3.9	97	61-140

Spike Recovery: 0 out of 1 outside limits.

09/20/2021 11:48

MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2947593LCS

Date Extracted: 07/28/2021 | Date Analyzed (1): 07/28/2021

Instrument: 60MSVC | LCS Lot No:

Lab File ID: 072821A.B\0728A_03.D | SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acetone	500	591	118	50-150
Acrolein	500	506	101	10-180
Acrylonitrile	500	470	94	80-120
Benzene	100	99.3	99	80-120
Bromobenzene	100	96.3	96	80-120
Bromochloromethane	100	100	100	75-120
Bromodichloromethane	100	109	109	80-125
Bromoform	100	90.9	91	80-135
Bromomethane	100	98.4	98	35-135
2-Butanone (MEK)	500	570	114	60-135
n-Butylbenzene	100	104	104	80-135
sec-Butylbenzene	100	100	100	80-135
tert-Butylbenzene	100	101	101	80-125
Carbon disulfide	100	109	109	65-140
Carbon tetrachloride	100	113	113	75-140
Chlorobenzene	100	99.7	100	80-120
Chloroethane	100	87.7	88	50-135
Chloroform	100	101	101	80-120
Chloromethane	100	97.9	98	15-155
2-Chlorotoluene	100	97.7	98	80-120
4-Chlorotoluene	100	100	100	80-120
Cyclohexanone	500	499	100	80-120
1,2-Dibromo-3-chloropropane	100	103	103	75-135
Dibromochloromethane	100	113	113	80-130
1,2-Dibromoethane (EDB)	100	101	101	80-125
Dibromomethane	100	98.3	98	80-120
1,2-Dichlorobenzene	100	94.6	95	80-120
1,3-Dichlorobenzene	100	99.4	99	80-120
1,4-Dichlorobenzene	100	100	100	80-120
1,1-Dichloroethane	100	103	103	75-125
1,2-Dichloroethane	100	95.3	95	80-120
1,2-Dichloroethene (Total)	200	206	103	80-120
1,1-Dichloroethene	100	109	109	70-130
cis-1,2-Dichloroethene	100	101	101	80-120
trans-1,2-Dichloroethene	100	105	105	75-125
1,2-Dichloropropane	100	99.4	99	80-120
1,3-Dichloropropane	100	96.3	96	80-120
2,2-Dichloropropane	100	109	109	75-130
1,1-Dichloropropene	100	105	105	60-140
cis-1,3-Dichloropropene	100	109	109	80-125
trans-1,3-Dichloropropene	100	109	109	80-130
Diethyl ether (Ethyl ether)	100	99.5	99	80-120
Ethylbenzene	100	100	100	80-120
n-Heptane	100	111	111	80-120
Hexachloro-1,3-butadiene	100	110	110	80-135
n-Hexane	100	107	107	55-150
2-Hexanone	500	555	111	70-135

MSV - FORM III VOA-2

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947593LCS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072821A.B\0728A_03.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Iodomethane	100	108	108	65-145
Isopropylbenzene (Cumene)	100	103	103	75-135
p-Isopropyltoluene	100	103	103	65-145
Methyl acetate	500	449	90	80-120
Methylene Chloride	100	90.4	90	65-120
4-Methyl-2-pentanone (MIBK)	500	460	92	75-130
Methyl-tert-butyl ether	100	96.7	97	75-130
Naphthalene	100	97.8	98	80-120
n-Propylbenzene	100	101	101	80-125
Styrene	100	101	101	85-125
1,1,1,2-Tetrachloroethane	100	104	104	80-130
1,1,2,2-Tetrachloroethane	100	93.5	94	75-120
Tetrachloroethene	100	105	105	80-130
Tetrahydrofuran	500	432	86	80-120
Toluene	100	99.3	99	80-120
1,2,3-Trichlorobenzene	100	101	101	80-125
1,2,4-Trichlorobenzene	100	97.4	97	80-125
1,1,1-Trichloroethane	100	103	103	75-130
1,1,2-Trichloroethane	100	98.3	98	80-120
Trichloroethene	100	105	105	80-125
Trichlorofluoromethane	100	113	113	65-135
1,2,3-Trichloropropane	100	92.8	93	80-120
1,1,2-Trichlorotrifluoroethane	100	112	112	80-120
1,2,3-Trimethylbenzene	100	98.0	98	80-120
1,2,4-Trimethylbenzene	100	98.3	98	80-125
1,3,5-Trimethylbenzene	100	101	101	80-125
Vinyl acetate	100	96.2J	96	80-120
Vinyl chloride	100	79.0	79	35-145
Xylene (Total)	300	300	100	80-120
m&p-Xylene	200	201	101	80-125
o-Xylene	100	98.9	99	80-125

Spike Recovery: 0 out of 78 outside limits.

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MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947601LCS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072821AGRO.B\0728A_05.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-GRO	4.0	3.3	82	61-140

Spike Recovery: 0 out of 1 outside limits.

09/20/2021 11:48

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2947373LCS

Date Extracted: 07/28/2021 | Date Analyzed (1): 07/28/2021

Instrument: 60MSV8 | LCS Lot No: 45079

Lab File ID: 072821A.B\0728A_28LCS.D | SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	100	95.9	96	20-175
Acetonitrile	100	92.1	92	25-180
Acrolein	100	85.4	85	10-200
Acrylonitrile	100	93.2	93	70-135
Benzene	20.0	19.2	96	80-120
Bromobenzene	20.0	18.3	92	80-120
Bromochloromethane	20.0	19.6	98	80-125
Bromodichloromethane	20.0	18.7	94	80-125
Bromoform	20.0	18.4	92	60-135
Bromomethane	20.0	11.9	59	10-165
2-Butanone (MEK)	100	94.4	94	40-150
n-Butylbenzene	20.0	17.8	89	80-125
sec-Butylbenzene	20.0	19.3	97	80-120
tert-Butylbenzene	20.0	19.2	96	80-120
Carbon disulfide	20.0	18.6	93	75-135
Carbon tetrachloride	20.0	18.2	91	80-125
Chlorobenzene	20.0	19.1	96	80-120
Chloroethane	20.0	19.5	97	70-130
2-Chloroethylvinyl ether	100	97.3	97	30-165
Chloroform	20.0	18.8	94	80-120
Chloromethane	20.0	17.8	89	35-155
2-Chlorotoluene	20.0	19.3	96	80-120
4-Chlorotoluene	20.0	19.0	95	80-120
Cyclohexane	20.0	19.1	96	80-130
Cyclohexanone	100	83.6	84	10-180
1,2-Dibromo-3-chloropropane	20.0	16.2	81	70-120
Dibromochloromethane	20.0	18.5	92	70-120
1,2-Dibromoethane (EDB)	20.0	19.1	95	80-120
Dibromomethane	20.0	17.9	90	80-120
1,2-Dichlorobenzene	20.0	17.8	89	80-120
1,3-Dichlorobenzene	20.0	18.5	93	80-120
1,4-Dichlorobenzene	20.0	18.4	92	80-120
Dichlorodifluoromethane	20.0	20.3	101	50-150
1,1-Dichloroethane	20.0	19.2	96	75-125
1,2-Dichloroethane	20.0	17.8	89	75-120
1,2-Dichloroethene (Total)	40.0	38.1	95	80-120
1,1-Dichloroethene	20.0	18.9	95	80-120
cis-1,2-Dichloroethene	20.0	19.0	95	80-120
trans-1,2-Dichloroethene	20.0	19.1	95	80-120
1,2-Dichloropropane	20.0	18.8	94	80-125
1,3-Dichloropropane	20.0	18.5	92	80-120
2,2-Dichloropropane	20.0	15.9	79	60-130
1,1-Dichloropropene	20.0	18.7	94	80-125
cis-1,3-Dichloropropene	20.0	18.2	91	80-125
trans-1,3-Dichloropropene	20.0	18.2	91	75-120
Diethyl ether (Ethyl ether)	20.0	19.0	95	70-140
1,4-Dioxane (p-Dioxane)	100	80.2J	80	10-180

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947373LCS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSV8
LCS Lot No: 45079
Lab File ID: 072821A.B\0728A_28LCS.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Ethylbenzene	20.0	19.4	97	80-120
n-Heptane	20.0	18.9	94	10-180
Hexachloro-1,3-butadiene	20.0	17.1	86	65-135
n-Hexane	20.0	18.4	92	60-135
2-Hexanone	100	97.2	97	45-150
Isopropylbenzene (Cumene)	20.0	19.8	99	80-125
p-Isopropyltoluene	20.0	19.8	99	80-135
Methyl acetate	100	87.4	87	45-140
Methylcyclohexane	20.0	19.4	97	80-125
Methylene Chloride	20.0	18.5	92	75-120
1-Methylnaphthalene	20.0	15.4	77	40-160
2-Methylnaphthalene	20.0	13.4	67	55-150
4-Methyl-2-pentanone (MIBK)	100	88.8	89	65-140
Methyl-tert-butyl ether	20.0	18.4	92	65-130
Naphthalene	20.0	17.1	85	70-120
n-Propylbenzene	20.0	18.8	94	80-120
Styrene	20.0	19.3	96	80-120
1,1,1,2-Tetrachloroethane	20.0	18.6	93	80-120
1,1,2,2-Tetrachloroethane	20.0	16.8	84	75-125
Tetrachloroethene	20.0	19.5	97	80-120
Tetrahydrofuran	100	91.8	92	75-125
Toluene	20.0	19.2	96	80-120
1,2,3-Trichlorobenzene	20.0	17.1	86	75-125
1,2,4-Trichlorobenzene	20.0	17.5	88	75-120
1,1,1-Trichloroethane	20.0	17.6	88	80-120
1,1,2-Trichloroethane	20.0	18.3	92	80-120
Trichloroethene	20.0	19.8	99	80-120
Trichlorofluoromethane	20.0	19.5	98	80-130
1,2,3-Trichloropropane	20.0	18.2	91	80-125
1,2,3-Trimethylbenzene	20.0	19.1	96	80-125
1,2,4-Trimethylbenzene	20.0	19.4	97	80-125
1,3,5-Trimethylbenzene	20.0	19.1	96	80-125
Vinyl chloride	20.0	19.1	96	65-130
Xylene (Total)	60.0	57.4	96	80-120
m&p-Xylene	40.0	38.2	96	75-130
o-Xylene	20.0	19.2	96	75-130

Spike Recovery: 0 out of 83 outside limits.

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MSV - FORM III VOA-1

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas

Matrix Spike - Sample No: 2946899MS

Date Extracted: 07/27/2021

Date Analyzed (1): 07/27/2021

Instrument: 60MSVC

Lab File ID: 072721AGRO.B\0727A_17.D

Parent Sample ID: 60375642003

SDG No.: 60375481

COMPOUND	SPIKE ADDED (mg/kg)	SAMPLE CONCENTRATION (mg/kg)	MS CONCENTRATION (mg/kg)	MS %REC	QC LIMITS REC.
TPH-GRO	4.8	ND	3.3	70	40-160

Spike Recovery: 0 out of 1 outside limits.

09/20/2021 11:48

MSV - FORM III VOA-2

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSVC Matrix Spike Duplicate - Sample No: 2946900MSD

Lab File ID (2): 072721AGRO.B\0727A_18.D Date Analyzed (2): 07/27/2021

COMPOUND	SPIKE ADDED (mg/kg)	MSD CONCENTRATION (mg/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
TPH-GRO	4.8	4.5	94	30	0-35	40-160

RPD: 0 out of 1 outside limits.

Spike Recovery: 0 out of 1 outside limits.

09/20/2021 11:48

MSV - FORM III VOA-1

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947594MS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
Lab File ID: 072821A.B\0728A_18.D
Parent Sample ID: 60375838013
SDG No.: 60375481

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	101	<1.1	57.7	57	25-130
1,1,1-Trichloroethane	101	<0.79	69.8	69	45-120
1,1,2,2-Tetrachloroethane	101	<1.1	1.7J	2	10-145
1,1,2-Trichloroethane	101	<0.67	39.1	39	25-130
1,1,2-Trichlorotrifluoroethane	101	<5.3	70.8	70	35-120
1,1-Dichloroethane	101	<0.41	73.2	72	40-120
1,1-Dichloroethene	101	<0.68	115	114	35-120
1,1-Dichloropropene	101	<0.95	70.4	70	40-125
1,2,3-Trichlorobenzene	101	<0.84	51.2	51	10-125
1,2,3-Trichloropropane	101	<2.3	79.4	79	25-135
1,2,3-Trimethylbenzene	101	<2.1	62.9	62	35-120
1,2,4-Trichlorobenzene	101	<0.84	49.9	49	10-125
1,2,4-Trimethylbenzene	101	<0.71	62.0	61	35-120
1,2-Dibromo-3-chloropropane	101	<1.9	37.0	37	10-145
1,2-Dibromoethane (EDB)	101	<0.57	80.5	80	30-140
1,2-Dichlorobenzene	101	<0.66	59.7	59	10-125
1,2-Dichloroethane	101	<0.42	74.9	74	35-120
1,2-Dichloroethene (Total)	202	<1.2	144	71	40-120
1,2-Dichloropropane	101	<1.0	72.5	72	35-120
1,3,5-Trimethylbenzene	101	<0.66	61.1	60	15-130
1,3-Dichlorobenzene	101	<0.76	59.2	59	10-125
1,3-Dichloropropane	101	<0.73	76.9	76	30-120
1,4-Dichlorobenzene	101	<0.86	59.0	58	10-125
2,2-Dichloropropane	101	<0.50	70.4	70	40-120
2-Butanone (MEK)	506	8.8J	513	100	20-145
2-Chlorotoluene	101	<0.77	62.2	61	15-125
2-Hexanone	506	<2.6	525	104	15-150
4-Chlorotoluene	101	<0.63	60.3	60	10-125
4-Methyl-2-pentanone (MIBK)	506	<3.2	480	95	30-140
Acetone	506	46.6	528	95	10-165
Acrolein	506	<79.9	488	96	10-200
Acrylonitrile	506	<3.4	312	62	10-145
Benzene	101	<0.52	69.6	69	35-120
Bromobenzene	101	<0.99	63.0	62	15-125
Bromochloromethane	101	<0.64	75.8	75	35-120
Bromodichloromethane	101	<0.64	49.1	49	30-130
Bromoform	101	<0.61	46.5	46	15-135
Bromomethane	101	<3.1	29.2	29	10-120
Carbon disulfide	101	5.2J	34.7	29	20-120
Carbon tetrachloride	101	<0.91	54.6	54	40-125
Chlorobenzene	101	<0.66	66.9	66	20-125
Chloroethane	101	<1.6	68.9	68	25-120
Chloroform	101	<0.52	76.8	76	40-125
Chloromethane	101	<0.84	49.2	49	10-120
Cyclohexanone	506	<13.4	458	91	35-120
Dibromochloromethane	101	<0.68	51.2	51	25-135
Dibromomethane	101	<0.63	77.8	77	30-125

MSV - FORM III VOA-2

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947594MS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
Lab File ID: 072821A.B\0728A_18.D
Parent Sample ID: 60375838013
SDG No.: 60375481

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Diethyl ether (Ethyl ether)	101	<0.59	75.6	75	35-120
Ethylbenzene	101	<0.49	67.4	67	35-120
Hexachloro-1,3-butadiene	101	<0.90	50.2	50	10-125
Iodomethane	101	<1.6	27.6	27	30-120
Isopropylbenzene (Cumene)	101	<0.60	67.0	66	20-135
Methyl acetate	506	<1.1	<1.1	0	30-120
Methyl-tert-butyl ether	101	<0.51	78.9	78	35-140
Methylene Chloride	101	<2.9	66.4	65	10-135
Naphthalene	101	13.9	102	87	10-160
Styrene	101	<0.62	64.6	64	15-130
Tetrachloroethene	101	<0.44	82.9	82	30-125
Tetrahydrofuran	506	<0.83	462	91	35-120
Toluene	101	<0.37	68.5	68	35-120
Trichloroethene	101	<0.77	133	132	25-140
Trichlorofluoromethane	101	<0.65	65.5	65	35-120
Vinyl acetate	101	<0.60	31.5J	31	30-120
Vinyl chloride	101	<0.70	61.1	60	10-120
Xylene (Total)	303	<1.2	197	65	35-120
cis-1,2-Dichloroethene	101	<0.46	72.3	72	35-120
cis-1,3-Dichloropropene	101	<0.56	46.1	46	20-130
m&p-Xylene	202	<0.67	131	65	30-145
n-Butylbenzene	101	<0.69	58.0	57	10-130
n-Heptane	101	<4.8	57.6	57	35-120
n-Hexane	101	<0.73	59.0	58	10-150
n-Propylbenzene	101	<0.85	61.8	61	20-125
o-Xylene	101	<0.39	65.7	65	30-145
p-Isopropyltoluene	101	1.4J	62.8	61	10-135
sec-Butylbenzene	101	<0.77	60.3	60	15-135
tert-Butylbenzene	101	<0.93	62.4	62	15-135
trans-1,2-Dichloroethene	101	<0.72	71.7	71	40-120
trans-1,3-Dichloropropene	101	<0.48	50.6	50	20-135

Spike Recovery: 3 out of 78 outside limits.

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MSV - FORM III VOA-3

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSVC Matrix Spike Duplicate - Sample No: 2947595MSD

Lab File ID (2): 072821A.B\0728A_19.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	99.9	71.1	71	21	0-35	25-130
1,1,1-Trichloroethane	99.9	80.8	81	15	0-35	45-120
1,1,2,2-Tetrachloroethane	99.9	<1.0	0		0-35	10-145
1,1,2-Trichloroethane	99.9	47.8	48	20	0-35	25-130
1,1,2-Trichlorotrifluoroethane	99.9	83.0	83	16	0-35	35-120
1,1-Dichloroethane	99.9	82.3	82	12	0-35	40-120
1,1-Dichloroethene	99.9	128	128	11	0-35	35-120
1,1-Dichloropropene	99.9	81.0	81	14	0-35	40-125
1,2,3-Trichlorobenzene	99.9	63.5	64	21	0-50	10-125
1,2,3-Trichloropropane	99.9	91.8	92	15	0-35	25-135
1,2,3-Trimethylbenzene	99.9	72.6	72	14	0-35	35-120
1,2,4-Trichlorobenzene	99.9	60.2	60	19	0-50	10-125
1,2,4-Trimethylbenzene	99.9	70.1	70	12	0-35	35-120
1,2-Dibromo-3-chloropropane	99.9	48.9	49	28	0-35	10-145
1,2-Dibromoethane (EDB)	99.9	94.1	94	15	0-35	30-140
1,2-Dichlorobenzene	99.9	69.6	70	15	0-35	10-125
1,2-Dichloroethane	99.9	85.8	86	14	0-35	35-120
1,2-Dichloroethene (Total)	199	164	82	13	0-35	40-120
1,2-Dichloropropane	99.9	82.4	83	13	0-35	35-120
1,3,5-Trimethylbenzene	99.9	71.3	71	15	0-35	15-130
1,3-Dichlorobenzene	99.9	68.9	69	15	0-37	10-125
1,3-Dichloropropane	99.9	89.7	90	15	0-35	30-120
1,4-Dichlorobenzene	99.9	68.8	69	15	0-35	10-125
2,2-Dichloropropane	99.9	81.3	81	14	0-35	40-120
2-Butanone (MEK)	499	576	114	11	0-35	20-145
2-Chlorotoluene	99.9	72.0	72	15	0-35	15-125
2-Hexanone	499	601	120	13	0-35	15-150
4-Chlorotoluene	99.9	71.5	72	17	0-35	10-125
4-Methyl-2-pentanone (MIBK)	499	550	110	14	0-35	30-140
Acetone	499	549	101	4	0-35	10-165
Acrolein	499	542	109	11	0-60	10-200
Acrylonitrile	499	385	77	21	0-35	10-145
Benzene	99.9	79.2	79	13	0-35	35-120
Bromobenzene	99.9	73.1	73	15	0-35	15-125
Bromochloromethane	99.9	86.8	87	14	0-35	35-120
Bromodichloromethane	99.9	63.2	63	25	0-35	30-130
Bromoform	99.9	62.5	63	29	0-35	15-135
Bromomethane	99.9	36.0	36	21	0-35	10-120
Carbon disulfide	99.9	47.4	42	31	0-35	20-120
Carbon tetrachloride	99.9	71.9	72	27	0-35	40-125
Chlorobenzene	99.9	76.6	77	13	0-35	20-125
Chloroethane	99.9	76.5	77	10	0-35	25-120
Chloroform	99.9	87.2	87	13	0-35	40-125
Chloromethane	99.9	56.1	56	13	0-35	10-120
Cyclohexanone	499	534	107	15	0-35	35-120
Dibromochloromethane	99.9	67.2	67	27	0-35	25-135
Dibromomethane	99.9	92.0	92	17	0-35	30-125
Diethyl ether (Ethyl ether)	99.9	86.2	86	13	0-35	35-120
Ethylbenzene	99.9	76.4	77	13	0-35	35-120

MSV - FORM III VOA-4

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSVC Matrix Spike Duplicate - Sample No: 2947595MSD

Lab File ID (2): 072821A.B\0728A_19.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Hexachloro-1,3-butadiene	99.9	55.4	56	10	0-45	10-125
Iodomethane	99.9	40.2	40	37	0-35	30-120
Isopropylbenzene (Cumene)	99.9	75.8	76	12	0-35	20-135
Methyl acetate	499	<1.1	0		0-35	30-120
Methyl-tert-butyl ether	99.9	90.5	91	14	0-35	35-140
Methylene Chloride	99.9	75.9	76	13	0-35	10-135
Naphthalene	99.9	108	94	6	0-35	10-160
Styrene	99.9	75.3	75	15	0-35	15-130
Tetrachloroethene	99.9	85.6	86	3	0-35	30-125
Tetrahydrofuran	499	518	104	11	0-35	35-120
Toluene	99.9	77.6	78	12	0-35	35-120
Trichloroethene	99.9	153	154	14	0-35	25-140
Trichlorofluoromethane	99.9	78.6	79	18	0-35	35-120
Vinyl acetate	99.9	36.2J	36		0-35	30-120
Vinyl chloride	99.9	67.5	68	10	0-35	10-120
Xylene (Total)	299	228	76	15	0-35	35-120
cis-1,2-Dichloroethene	99.9	82.8	83	13	0-35	35-120
cis-1,3-Dichloropropene	99.9	58.6	59	24	0-35	20-130
m&p-Xylene	199	153	76	15	0-35	30-145
n-Butylbenzene	99.9	64.2	64	10	0-35	10-130
n-Heptane	99.9	62.7	63	8	0-35	35-120
n-Hexane	99.9	65.9	66	11	0-35	10-150
n-Propylbenzene	99.9	71.2	71	14	0-35	20-125
o-Xylene	99.9	75.0	75	13	0-35	30-145
p-Isopropyltoluene	99.9	68.8	68	9	0-35	10-135
sec-Butylbenzene	99.9	66.0	66	9	0-35	15-135
tert-Butylbenzene	99.9	71.9	72	14	0-35	15-135
trans-1,2-Dichloroethene	99.9	81.6	82	13	0-35	40-120
trans-1,3-Dichloropropene	99.9	63.6	64	23	0-35	20-135

RPD: 1 out of 75 outside limits.

Spike Recovery: 4 out of 78 outside limits.

09/20/2021 11:48

SAMPLE NO.

2946897BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2946897

Lab File ID (1): 072721A.B\0727A_12.D Date Analyzed (1): 07/27/2021 Time (1): 10:47

Lab File ID (2): 072721AGRO.B\0727A_12.D Date Analyzed (2): 07/27/2021 Time (2): 10:47

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2946898LCS	2946898	072721A.B\0727A_10.D	07/27/2021 10:16
2946898LCS	2946898	072721AGRO.B\0727A_10.D	07/27/2021 10:16
GB-55/0-2'	60375481029	072721A.B\0727A_19.D	07/27/2021 12:37
GB-55/0-2'	60375481029	072721AGRO.B\0727A_19.D	07/27/2021 12:37
GB-55/3-5'	60375481030	072721A.B\0727A_20.D	07/27/2021 12:52
GB-55/3-5'	60375481030	072721AGRO.B\0727A_20.D	07/27/2021 12:52

SAMPLE NO.

2946895BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2946895

Lab File ID: 072721A.B\0727A_12.D Date Analyzed: 07/27/2021 Time: 10:47

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2946896LCS	2946896	072721A.B\0727A_03.D	07/27/2021 08:26
GB-55/0-2'	60375481029	072721A.B\0727A_19.D	07/27/2021 12:37
GB-55/3-5'	60375481030	072721A.B\0727A_20.D	07/27/2021 12:52

SAMPLE NO.

2947372BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSV8 Matrix: Water Lab Sample ID: 2947372

Lab File ID: 072821A.B\0728A_30BLK.D Date Analyzed: 07/28/2021 Time: 13:35

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947373LCS	2947373	072821A.B\0728A_28LCS.D	07/28/2021 13:06
TB-01	60375481039	072821A.B\0728A_31.D	07/28/2021 13:49
TB-02	60375481044	072821A.B\0728A_32.D	07/28/2021 14:03

SAMPLE NO.

2947094BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2947094

Lab File ID (1): 072721A.B\0727A_39.D Date Analyzed (1): 07/27/2021 Time (1):17:49

Lab File ID (2): 072721AGRO.B\0727A_39.D Date Analyzed (2): 07/27/2021 Time (2):17:49

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947095LCS	2947095	072721A.B\0727A_36.D	07/27/2021 17:03
GB-55/3-5'D	60375481031	072721A.B\0727A_40.D	07/27/2021 18:05
GB-55/3-5'D	60375481031	072721AGRO.B\0727A_40.D	07/27/2021 18:05
GB-62/0-2'	60375481032	072721A.B\0727A_41.D	07/27/2021 18:20
GB-62/0-2'	60375481032	072721AGRO.B\0727A_41.D	07/27/2021 18:20
GB-62/3-5'	60375481033	072721A.B\0727A_42.D	07/27/2021 18:36
GB-62/3-5'	60375481033	072721AGRO.B\0727A_42.D	07/27/2021 18:36
GB-68/1-3'	60375481034	072721A.B\0727A_43.D	07/27/2021 18:52
GB-68/1-3'	60375481034	072721AGRO.B\0727A_43.D	07/27/2021 18:52
GB-68/3-5'	60375481035	072721A.B\0727A_44.D	07/27/2021 19:07
GB-68/3-5'	60375481035	072721AGRO.B\0727A_44.D	07/27/2021 19:07
GB-68/3-5'D	60375481036	072721A.B\0727A_45.D	07/27/2021 19:23
GB-68/3-5'D	60375481036	072721AGRO.B\0727A_45.D	07/27/2021 19:23
GB-67/5-6'	60375481037	072721A.B\0727A_46.D	07/27/2021 19:38
GB-67/5-6'	60375481037	072721AGRO.B\0727A_46.D	07/27/2021 19:38

SAMPLE NO.

2947096BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2947096

Lab File ID (1): 072721A.B\0727A_39.D Date Analyzed (1): 07/27/2021 Time (1):17:49

Lab File ID (2): 072721AGRO.B\0727A_39.D Date Analyzed (2): 07/27/2021 Time (2):17:49

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947097LCS	2947097	072721A.B\0727A_37.D	07/27/2021 17:18
2947097LCS	2947097	072721AGRO.B\0727A_37.D	07/27/2021 17:18
GB-55/3-5'D	60375481031	072721A.B\0727A_40.D	07/27/2021 18:05
GB-55/3-5'D	60375481031	072721AGRO.B\0727A_40.D	07/27/2021 18:05
GB-62/0-2'	60375481032	072721A.B\0727A_41.D	07/27/2021 18:20
GB-62/0-2'	60375481032	072721AGRO.B\0727A_41.D	07/27/2021 18:20
GB-62/3-5'	60375481033	072721A.B\0727A_42.D	07/27/2021 18:36
GB-62/3-5'	60375481033	072721AGRO.B\0727A_42.D	07/27/2021 18:36
GB-68/1-3'	60375481034	072721A.B\0727A_43.D	07/27/2021 18:52
GB-68/1-3'	60375481034	072721AGRO.B\0727A_43.D	07/27/2021 18:52
GB-68/3-5'	60375481035	072721A.B\0727A_44.D	07/27/2021 19:07
GB-68/3-5'	60375481035	072721AGRO.B\0727A_44.D	07/27/2021 19:07
GB-68/3-5'D	60375481036	072721A.B\0727A_45.D	07/27/2021 19:23
GB-68/3-5'D	60375481036	072721AGRO.B\0727A_45.D	07/27/2021 19:23
GB-67/5-6'	60375481037	072721A.B\0727A_46.D	07/27/2021 19:38
GB-67/5-6'	60375481037	072721AGRO.B\0727A_46.D	07/27/2021 19:38

SAMPLE NO.

2947592BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2947592

Lab File ID: 072821A.B\0728A_07.D Date Analyzed: 07/28/2021 Time:09:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947593LCS	2947593	072821A.B\0728A_03.D	07/28/2021 08:06
GB-67/8-10'	60375481038	072821A.B\0728A_09.D	07/28/2021 09:40
GB-61/3-5'	60375481040	072821A.B\0728A_10.D	07/28/2021 09:56
GB-61/5-7'	60375481041	072821A.B\0728A_11.D	07/28/2021 10:11
GB-54/0-2'	60375481042	072821A.B\0728A_12.D	07/28/2021 10:27
GB-54/2-4'	60375481043	072821A.B\0728A_13.D	07/28/2021 10:43

SAMPLE NO.

2947600BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2947600

Lab File ID (1): 072821A.B\0728A_07.D Date Analyzed (1): 07/28/2021 Time (1):09:09

Lab File ID (2): 072821AGRO.B\0728A_07.D Date Analyzed (2): 07/28/2021 Time (2):09:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947601LCS	2947601	072821A.B\0728A_03.D	07/28/2021 08:06
2947601LCS	2947601	072821AGRO.B\0728A_05.D	07/28/2021 08:38
GB-67/8-10'	60375481038	072821A.B\0728A_09.D	07/28/2021 09:40
GB-67/8-10'	60375481038	072821AGRO.B\0728A_09.D	07/28/2021 09:40
GB-61/3-5'	60375481040	072821A.B\0728A_10.D	07/28/2021 09:56
GB-61/3-5'	60375481040	072821AGRO.B\0728A_10.D	07/28/2021 09:56
GB-61/5-7'	60375481041	072821A.B\0728A_11.D	07/28/2021 10:11
GB-61/5-7'	60375481041	072821AGRO.B\0728A_11.D	07/28/2021 10:11
GB-54/0-2'	60375481042	072821A.B\0728A_12.D	07/28/2021 10:27
GB-54/0-2'	60375481042	072821AGRO.B\0728A_12.D	07/28/2021 10:27
GB-54/2-4'	60375481043	072821A.B\0728A_13.D	07/28/2021 10:43
GB-54/2-4'	60375481043	072821AGRO.B\0728A_13.D	07/28/2021 10:43

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Lab File ID: 072721A.B\0727A_05BFB.D BFB Injection Date 07/27/2021

Instrument ID: 60MSV8 BFB Injection Time 07:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	17.47	
75	30.00 - 66.00% of mass 95	40.95	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.38	
173	Less than 2.00% of mass 174	1.10	(0.93)[1]
174	50.00 - 120.00% of mass 95	118.08	
175	4.00 - 9.00% of mass 174	8.62	(7.30)[1]
176	93.00 - 101.00% of mass 174	114.78	(97.21)[1]
177	5.00 - 9.00% of mass 176	7.27	(6.33)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19726932CAL1	19726932CAL1	072721A.B\0727A_07.D	07/27/2021	08:10
19726925CAL2	19726925CAL2	072721A.B\0727A_08.D	07/27/2021	08:24
19726930CAL3	19726930CAL3	072721A.B\0727A_09.D	07/27/2021	08:38
19726931CAL4	19726931CAL4	072721A.B\0727A_10.D	07/27/2021	08:52
19726933CAL5	19726933CAL5	072721A.B\0727A_11.D	07/27/2021	09:06
19726927CAL6	19726927CAL6	072721A.B\0727A_12.D	07/27/2021	09:21
19726926CAL7	19726926CAL7	072721A.B\0727A_13.D	07/27/2021	09:35
19726929CAL8	19726929CAL8	072721A.B\0727A_14.D	07/27/2021	09:49
19726928ICV	19726928ICV	072721A.B\0727A_17.D	07/27/2021	10:32

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Lab File ID: 072821A.B\0728A_01.D BFB Injection Date 07/28/2021

Instrument ID: 60MSV8 BFB Injection Time 06:43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	16.76	
75	30.00 - 66.00% of mass 95	42.20	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	7.06	
173	Less than 2.00% of mass 174	0.87	(0.74)[1]
174	50.00 - 120.00% of mass 95	117.07	
175	4.00 - 9.00% of mass 174	8.54	(7.30)[1]
176	93.00 - 101.00% of mass 174	114.63	(97.91)[1]
177	5.00 - 9.00% of mass 176	7.56	(6.59)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19732452CCV	19732452CCV	072821A.B\0728A_03CCV.D	07/28/2021	07:12
2947373LCS	2947373LCS	072821A.B\0728A_28LCS.D	07/28/2021	13:06
2947372BLANK	2947372BLANK	072821A.B\0728A_30BLK.D	07/28/2021	13:35
TB-01	60375481039	072821A.B\0728A_31.D	07/28/2021	13:49
TB-02	60375481044	072821A.B\0728A_32.D	07/28/2021	14:03

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 071621B.B\0716B_01.D BFB Injection Date 07/16/2021
Instrument ID: 60MSVC BFB Injection Time 10:47

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.55	
75	30.00 - 66.00% of mass 95	44.16	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	7.08	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	102.97	
175	4.00 - 9.00% of mass 174	7.81	(7.58)[1]
176	93.00 - 101.00% of mass 174	100.39	(97.49)[1]
177	5.00 - 9.00% of mass 176	6.53	(6.50)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19684413CAL1	19684413CAL1	071621B.B\0716B_02.D	07/16/2021	11:02
19684462CAL2	19684462CAL2	071621B.B\0716B_03.D	07/16/2021	11:18
19684463CAL3	19684463CAL3	071621B.B\0716B_04.D	07/16/2021	11:33
19684464CAL4	19684464CAL4	071621B.B\0716B_05.D	07/16/2021	11:49
19684465CAL5	19684465CAL5	071621B.B\0716B_06.D	07/16/2021	12:05
19684466CAL6	19684466CAL6	071621B.B\0716B_07.D	07/16/2021	12:20
19684467CAL7	19684467CAL7	071621B.B\0716B_08.D	07/16/2021	12:36
19684415ICV	19684415ICV	071621B.B\0716B_09.D	07/16/2021	12:51

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072721A.B\0727A_01.D BFB Injection Date 07/27/2021
Instrument ID: 60MSVC BFB Injection Time 07:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.32	
75	30.00 - 66.00% of mass 95	43.89	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.89	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	108.19	
175	4.00 - 9.00% of mass 174	8.30	(7.67)[1]
176	93.00 - 101.00% of mass 174	105.44	(97.46)[1]
177	5.00 - 9.00% of mass 176	6.94	(6.58)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19727087CCV	19727087CCV	072721A.B\0727A_02.D	07/27/2021	08:11
2946896LCS	2946896LCS	072721A.B\0727A_03.D	07/27/2021	08:26
2946898LCS	2946898LCS	072721AGRO.B\0727A_10.D	07/27/2021	10:16
19895948ICV	19895948ICV	072721AGRO.B\0727A_10.D	07/27/2021	10:16
2946898LCS	2946898LCS	072721A.B\0727A_10.D	07/27/2021	10:16
2946897BLANK	2946897BLANK	072721AGRO.B\0727A_12.D	07/27/2021	10:47
2946895BLANK	2946895BLANK	072721A.B\0727A_12.D	07/27/2021	10:47
2946897BLANK	2946897BLANK	072721A.B\0727A_12.D	07/27/2021	10:47
GB-55/0-2'	60375481029	072721AGRO.B\0727A_19.D	07/27/2021	12:37
GB-55/0-2'	60375481029	072721A.B\0727A_19.D	07/27/2021	12:37
GB-55/0-2'	60375481029	072721A.B\0727A_19.D	07/27/2021	12:37
GB-55/3-5'	60375481030	072721A.B\0727A_20.D	07/27/2021	12:52
GB-55/3-5'	60375481030	072721AGRO.B\0727A_20.D	07/27/2021	12:52
GB-55/3-5'	60375481030	072721A.B\0727A_20.D	07/27/2021	12:52
2947095LCS	2947095LCS	072721A.B\0727A_36.D	07/27/2021	17:03
2947097LCS	2947097LCS	072721A.B\0727A_37.D	07/27/2021	17:18
2947097LCS	2947097LCS	072721AGRO.B\0727A_37.D	07/27/2021	17:18
2947096BLANK	2947096BLANK	072721AGRO.B\0727A_39.D	07/27/2021	17:49
2947094BLANK	2947094BLANK	072721AGRO.B\0727A_39.D	07/27/2021	17:49
2947094BLANK	2947094BLANK	072721A.B\0727A_39.D	07/27/2021	17:49
2947096BLANK	2947096BLANK	072721A.B\0727A_39.D	07/27/2021	17:49
GB-55/3-5'D	60375481031	072721AGRO.B\0727A_40.D	07/27/2021	18:05
GB-55/3-5'D	60375481031	072721AGRO.B\0727A_40.D	07/27/2021	18:05

MSV - FORM V VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072721A.B\0727A_01.D BFB Injection Date 07/27/2021
Instrument ID: 60MSVC BFB Injection Time 07:55

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
GB-55/3-5'D	60375481031	072721A.B\0727A_40.D	07/27/2021	18:05
GB-55/3-5'D	60375481031	072721A.B\0727A_40.D	07/27/2021	18:05
GB-62/0-2'	60375481032	072721A.B\0727A_41.D	07/27/2021	18:20
GB-62/0-2'	60375481032	072721AGRO.B\0727A_41.D	07/27/2021	18:20
GB-62/0-2'	60375481032	072721AGRO.B\0727A_41.D	07/27/2021	18:20
GB-62/0-2'	60375481032	072721A.B\0727A_41.D	07/27/2021	18:20
GB-62/3-5'	60375481033	072721AGRO.B\0727A_42.D	07/27/2021	18:36
GB-62/3-5'	60375481033	072721A.B\0727A_42.D	07/27/2021	18:36
GB-62/3-5'	60375481033	072721A.B\0727A_42.D	07/27/2021	18:36
GB-62/3-5'	60375481033	072721AGRO.B\0727A_42.D	07/27/2021	18:36
GB-68/1-3'	60375481034	072721AGRO.B\0727A_43.D	07/27/2021	18:52
GB-68/1-3'	60375481034	072721AGRO.B\0727A_43.D	07/27/2021	18:52
GB-68/1-3'	60375481034	072721A.B\0727A_43.D	07/27/2021	18:52
GB-68/1-3'	60375481034	072721A.B\0727A_43.D	07/27/2021	18:52
GB-68/3-5'	60375481035	072721A.B\0727A_44.D	07/27/2021	19:07
GB-68/3-5'	60375481035	072721AGRO.B\0727A_44.D	07/27/2021	19:07
GB-68/3-5'	60375481035	072721AGRO.B\0727A_44.D	07/27/2021	19:07
GB-68/3-5'	60375481035	072721A.B\0727A_44.D	07/27/2021	19:07
GB-68/3-5'D	60375481036	072721AGRO.B\0727A_45.D	07/27/2021	19:23
GB-68/3-5'D	60375481036	072721AGRO.B\0727A_45.D	07/27/2021	19:23
GB-68/3-5'D	60375481036	072721A.B\0727A_45.D	07/27/2021	19:23
GB-68/3-5'D	60375481036	072721A.B\0727A_45.D	07/27/2021	19:23
GB-67/5-6'	60375481037	072721AGRO.B\0727A_46.D	07/27/2021	19:38
GB-67/5-6'	60375481037	072721A.B\0727A_46.D	07/27/2021	19:38
GB-67/5-6'	60375481037	072721A.B\0727A_46.D	07/27/2021	19:38
GB-67/5-6'	60375481037	072721AGRO.B\0727A_46.D	07/27/2021	19:38

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072821A.B\0728A_01.D BFB Injection Date 07/28/2021
Instrument ID: 60MSVC BFB Injection Time 07:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.07	
75	30.00 - 66.00% of mass 95	44.85	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.86	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	107.72	
175	4.00 - 9.00% of mass 174	8.23	(7.64)[1]
176	93.00 - 101.00% of mass 174	104.45	(96.96)[1]
177	5.00 - 9.00% of mass 176	7.10	(6.79)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19752271CCV	19752271CCV	072821A.B\0728A_02.D	07/28/2021	07:51
2947593LCS	2947593LCS	072821A.B\0728A_03.D	07/28/2021	08:06
2947601LCS	2947601LCS	072821A.B\0728A_03.D	07/28/2021	08:06
2947601LCS	2947601LCS	072821AGRO.B\0728A_05.D	07/28/2021	08:38
2947600BLANK	2947600BLANK	072821A.B\0728A_07.D	07/28/2021	09:09
2947600BLANK	2947600BLANK	072821AGRO.B\0728A_07.D	07/28/2021	09:09
2947592BLANK	2947592BLANK	072821A.B\0728A_07.D	07/28/2021	09:09
GB-67/8-10'	60375481038	072821A.B\0728A_09.D	07/28/2021	09:40
GB-67/8-10'	60375481038	072821A.B\0728A_09.D	07/28/2021	09:40
GB-67/8-10'	60375481038	072821AGRO.B\0728A_09.D	07/28/2021	09:40
GB-61/3-5'	60375481040	072821A.B\0728A_10.D	07/28/2021	09:56
GB-61/3-5'	60375481040	072821A.B\0728A_10.D	07/28/2021	09:56
GB-61/3-5'	60375481040	072821AGRO.B\0728A_10.D	07/28/2021	09:56
GB-61/5-7'	60375481041	072821A.B\0728A_11.D	07/28/2021	10:11
GB-61/5-7'	60375481041	072821A.B\0728A_11.D	07/28/2021	10:11
GB-61/5-7'	60375481041	072821AGRO.B\0728A_11.D	07/28/2021	10:11
GB-54/0-2'	60375481042	072821AGRO.B\0728A_12.D	07/28/2021	10:27
GB-54/0-2'	60375481042	072821A.B\0728A_12.D	07/28/2021	10:27
GB-54/0-2'	60375481042	072821A.B\0728A_12.D	07/28/2021	10:27
GB-54/2-4'	60375481043	072821AGRO.B\0728A_13.D	07/28/2021	10:43
GB-54/2-4'	60375481043	072821A.B\0728A_13.D	07/28/2021	10:43
GB-54/2-4'	60375481043	072821A.B\0728A_13.D	07/28/2021	10:43

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19732452CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSV8 GC Column: Col 1 Time Analyzed: 07:12

Lab File ID: 072821A.B\0728A_03CCV.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		362793	6.844	329941	5.281	1078194	3.307
UPPER LIMIT		725586	7.344	659882	5.781	2156388	3.807
LOWER LIMIT		181396.5	6.344	164970.5	4.781	539097	2.807
LAB SAMPLE ID	SAMPLE NO.						
2947372	2947372BLANK	369562	6.844	350169	5.284	1158397	3.31
2947373	2947373LCS	369108	6.844	331403	5.284	1091184	3.31
60375481039	TB-01	366265	6.844	343872	5.284	1151488	3.31
60375481044	TB-02	356784	6.844	337609	5.281	1132143	3.307

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19727087CCV Date Analyzed: 07/27/2021

Instrument ID: 60MSVC GC Column: Col 1 Time Analyzed: 08:11

Lab File ID: 072721A.B\0727A_02.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		172976	7.399	136719	5.821	327075	3.803
UPPER LIMIT		345952	7.899	273438	6.321	654150	4.303
LOWER LIMIT		86488	6.899	68359.5	5.321	163537.5	3.303
LAB SAMPLE ID	SAMPLE NO.						
2946895	2946895BLANK	160632	7.398	135651	5.82	322103	3.802
2946896	2946896LCS	179748	7.399	138277	5.821	328192	3.803
2946897	2946897BLANK	160632	7.398	135651	5.82	322103	3.802
2946898	2946898LCS	164051	7.399	136063	5.821	319025	3.802
2947094	2947094BLANK	160877	7.398	132713	5.82	311386	3.802
2947095	2947095LCS	177164	7.399	138070	5.821	325704	3.803
2947096	2947096BLANK	160877	7.398	132713	5.82	311386	3.802
2947097	2947097LCS	168554	7.398	133618	5.82	321607	3.802
60375481029	GB-55/0-2'	170353	7.399	141076	5.821	327286	3.802
60375481030	GB-55/3-5'	168595	7.398	140925	5.82	327118	3.802
60375481031	GB-55/3-5'D	170954	7.399	136155	5.821	323437	3.803
60375481032	GB-62/0-2'	152338	7.399	124653	5.821	292249	3.803
60375481033	GB-62/3-5'	156590	7.401	130779	5.821	316015	3.802
60375481034	GB-68/1-3'	161024	7.399	134747	5.824	316287	3.803
60375481035	GB-68/3-5'	150304	7.399	126922	5.821	294828	3.803
60375481036	GB-68/3-5'D	159576	7.401	133974	5.82	319539	3.802
60375481037	GB-67/5-6'	148170	7.398	123628	5.821	294536	3.802

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19752271CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSVC GC Column: Col 1 Time Analyzed: 07:51

Lab File ID: 072821A.B\0728A_02.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		172061	7.398	134698	5.82	318405	3.802
UPPER LIMIT		344122	7.898	269396	6.32	636810	4.302
LOWER LIMIT		86030.5	6.898	67349	5.32	159202.5	3.302
LAB SAMPLE ID	SAMPLE NO.						
2947592	2947592BLANK	161112	7.399	137020	5.821	316243	3.803
2947593	2947593LCS	175672	7.399	135870	5.821	325275	3.802
2947600	2947600BLANK	161112	7.399	137020	5.821	316243	3.803
2947601	2947601LCS	175672	7.399	135870	5.821	325275	3.802
60375481038	GB-67/8-10'	152301	7.398	126255	5.821	295675	3.802
60375481040	GB-61/3-5'	158693	7.399	129364	5.821	302407	3.802
60375481041	GB-61/5-7'	153343	7.398	127295	5.82	301805	3.802
60375481042	GB-54/0-2'	165097	7.396	138179	5.82	316982	3.802
60375481043	GB-54/2-4'	162959	7.399	135951	5.821	320554	3.803

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT
* Values outside of QC Limits

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-01

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Water SDG No.: 60375481

Date Extracted: 07/28/2021 13:49 Lab Sample ID: 60375481039

Date Analyzed: 07/28/2021 13:49 Lab File ID: 072821A.B\0728A_31.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	<0.22	U
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-01

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Water SDG No.: 60375481

Date Extracted: 07/28/2021 13:49 Lab Sample ID: 60375481039

Date Analyzed: 07/28/2021 13:49 Lab File ID: 072821A.B\0728A_31.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U

SAMPLE NO.

TB-01

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Water SDG No.: 60375481

Date Extracted: 07/28/2021 13:49 Lab Sample ID: 60375481039

Date Analyzed: 07/28/2021 13:49 Lab File ID: 072821A.B\0728A_31.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	<0.21	U
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	0.23	J
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-02

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Water SDG No.: 60375481

Date Extracted: 07/28/2021 14:03 Lab Sample ID: 60375481044

Date Analyzed: 07/28/2021 14:03 Lab File ID: 072821A.B\0728A_32.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	<0.22	U
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-02

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Water SDG No.: 60375481

Date Extracted: 07/28/2021 14:03 Lab Sample ID: 60375481044

Date Analyzed: 07/28/2021 14:03 Lab File ID: 072821A.B\0728A_32.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U

SAMPLE NO.

TB-02

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Water SDG No.: 60375481

Date Extracted: 07/28/2021 14:03 Lab Sample ID: 60375481044

Date Analyzed: 07/28/2021 14:03 Lab File ID: 072821A.B\0728A_32.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	<0.21	U
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

GB-55/0-2'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 | Lab Sample ID: 60375481029

Date Analyzed: 07/27/2021 12:37 | Lab File ID: 072721A.B\0727A_19.D

Initial wt/vol: 6.52 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 14.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<14.4	U
107-02-8	Acrolein	<67.4	U
107-13-1	Acrylonitrile	<2.8	U
71-43-2	Benzene	<0.44	U
108-86-1	Bromobenzene	<0.84	U
74-97-5	Bromochloromethane	<0.54	U
75-27-4	Bromodichloromethane	<0.54	U
75-25-2	Bromoform	<0.51	U
74-83-9	Bromomethane	<2.6	U
78-93-3	2-Butanone (MEK)	<3.0	U
104-51-8	n-Butylbenzene	<0.58	U
135-98-8	sec-Butylbenzene	<0.65	U
98-06-6	tert-Butylbenzene	<0.79	U
75-15-0	Carbon disulfide	<0.57	U
56-23-5	Carbon tetrachloride	<0.76	U
108-90-7	Chlorobenzene	<0.56	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<0.44	U
74-87-3	Chloromethane	<0.71	U
95-49-8	2-Chlorotoluene	<0.65	U
106-43-4	4-Chlorotoluene	<0.53	U
108-94-1	Cyclohexanone	<11.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.6	U
124-48-1	Dibromochloromethane	<0.58	U
106-93-4	1,2-Dibromoethane (EDB)	<0.48	U
74-95-3	Dibromomethane	<0.53	U
95-50-1	1,2-Dichlorobenzene	<0.56	U
541-73-1	1,3-Dichlorobenzene	<0.64	U
106-46-7	1,4-Dichlorobenzene	<0.72	U
75-34-3	1,1-Dichloroethane	<0.35	U
107-06-2	1,2-Dichloroethane	<0.36	U
540-59-0	1,2-Dichloroethene (Total)	<0.99	U
75-35-4	1,1-Dichloroethene	<0.57	U
156-59-2	cis-1,2-Dichloroethene	<0.38	U
156-60-5	trans-1,2-Dichloroethene	<0.61	U
78-87-5	1,2-Dichloropropane	<0.87	U
142-28-9	1,3-Dichloropropane	<0.62	U

SAMPLE NO.

GB-55/0-2'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 | Lab Sample ID: 60375481029

Date Analyzed: 07/27/2021 12:37 | Lab File ID: 072721A.B\0727A_19.D

Initial wt/vol: 6.52 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 14.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.42	U
563-58-6	1,1-Dichloropropene	<0.80	U
10061-01-5	cis-1,3-Dichloropropene	<0.47	U
10061-02-6	trans-1,3-Dichloropropene	<0.41	U
60-29-7	Diethyl ether (Ethyl ether)	<0.50	U
100-41-4	Ethylbenzene	<0.41	U
142-82-5	n-Heptane	<4.0	U
87-68-3	Hexachloro-1,3-butadiene	<0.76	U
110-54-3	n-Hexane	<0.61	U
591-78-6	2-Hexanone	<2.2	U
74-88-4	Iodomethane	<1.3	U
98-82-8	Isopropylbenzene (Cumene)	<0.51	U
99-87-6	p-Isopropyltoluene	<0.61	U
79-20-9	Methyl acetate	<0.96	U
75-09-2	Methylene Chloride	<2.4	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.7	U
1634-04-4	Methyl-tert-butyl ether	<0.43	U
91-20-3	Naphthalene	<0.73	U
103-65-1	n-Propylbenzene	<0.72	U
100-42-5	Styrene	<0.52	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.91	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.89	U
127-18-4	Tetrachloroethene	<0.37	U
109-99-9	Tetrahydrofuran	<0.70	U
108-88-3	Toluene	<0.31	U
87-61-6	1,2,3-Trichlorobenzene	<0.71	U
120-82-1	1,2,4-Trichlorobenzene	<0.71	U
71-55-6	1,1,1-Trichloroethane	<0.67	U
79-00-5	1,1,2-Trichloroethane	<0.56	U
79-01-6	Trichloroethene	<0.65	U
75-69-4	Trichlorofluoromethane	<0.55	U
96-18-4	1,2,3-Trichloropropane	<1.9	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.5	U
526-73-8	1,2,3-Trimethylbenzene	<1.8	U
95-63-6	1,2,4-Trimethylbenzene	<0.60	U
108-67-8	1,3,5-Trimethylbenzene	<0.56	U
108-05-4	Vinyl acetate	<0.50	U

SAMPLE NO.

GB-55/0-2'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 Lab Sample ID: 60375481029

Date Analyzed: 07/27/2021 12:37 Lab File ID: 072721A.B\0727A_19.D

Initial wt/vol: 6.52 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 14.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.59	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<0.56	U
95-47-6	o-Xylene	<0.33	U

SAMPLE NO.

GB-55/0-2'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 09:23 Lab Sample ID: 60375481029

Date Analyzed: 07/27/2021 12:37 Lab File ID: 072721AGRO.B\0727A_19.D

Initial wt/vol: 6.52 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 14.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.049	U

SAMPLE NO.

GB-55/3-5'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 | Lab Sample ID: 60375481030

Date Analyzed: 07/27/2021 12:52 | Lab File ID: 072721A.B\0727A_20.D

Initial wt/vol: 6.27 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<15.4	U
107-02-8	Acrolein	<71.9	U
107-13-1	Acrylonitrile	<3.0	U
71-43-2	Benzene	<0.47	U
108-86-1	Bromobenzene	<0.89	U
74-97-5	Bromochloromethane	<0.57	U
75-27-4	Bromodichloromethane	<0.57	U
75-25-2	Bromoform	<0.55	U
74-83-9	Bromomethane	<2.8	U
78-93-3	2-Butanone (MEK)	<3.2	U
104-51-8	n-Butylbenzene	<0.62	U
135-98-8	sec-Butylbenzene	<0.70	U
98-06-6	tert-Butylbenzene	<0.84	U
75-15-0	Carbon disulfide	<0.61	U
56-23-5	Carbon tetrachloride	<0.82	U
108-90-7	Chlorobenzene	<0.60	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.47	U
74-87-3	Chloromethane	<0.76	U
95-49-8	2-Chlorotoluene	<0.69	U
106-43-4	4-Chlorotoluene	<0.57	U
108-94-1	Cyclohexanone	<12.1	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.7	U
124-48-1	Dibromochloromethane	<0.61	U
106-93-4	1,2-Dibromoethane (EDB)	<0.51	U
74-95-3	Dibromomethane	<0.57	U
95-50-1	1,2-Dichlorobenzene	<0.59	U
541-73-1	1,3-Dichlorobenzene	<0.68	U
106-46-7	1,4-Dichlorobenzene	<0.77	U
75-34-3	1,1-Dichloroethane	<0.37	U
107-06-2	1,2-Dichloroethane	<0.38	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.61	U
156-59-2	cis-1,2-Dichloroethene	<0.41	U
156-60-5	trans-1,2-Dichloroethene	<0.65	U
78-87-5	1,2-Dichloropropane	<0.93	U
142-28-9	1,3-Dichloropropane	<0.66	U

SAMPLE NO.

GB-55/3-5'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 Lab Sample ID: 60375481030

Date Analyzed: 07/27/2021 12:52 Lab File ID: 072721A.B\0727A_20.D

Initial wt/vol: 6.27 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.45	U
563-58-6	1,1-Dichloropropene	<0.86	U
10061-01-5	cis-1,3-Dichloropropene	<0.51	U
10061-02-6	trans-1,3-Dichloropropene	<0.43	U
60-29-7	Diethyl ether (Ethyl ether)	<0.53	U
100-41-4	Ethylbenzene	<0.44	U
142-82-5	n-Heptane	<4.3	U
87-68-3	Hexachloro-1,3-butadiene	<0.81	U
110-54-3	n-Hexane	<0.66	U
591-78-6	2-Hexanone	<2.4	U
74-88-4	Iodomethane	<1.4	U
98-82-8	Isopropylbenzene (Cumene)	<0.54	U
99-87-6	p-Isopropyltoluene	<0.65	U
79-20-9	Methyl acetate	<1.0	U
75-09-2	Methylene Chloride	<2.6	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.9	U
1634-04-4	Methyl-tert-butyl ether	<0.46	U
91-20-3	Naphthalene	<0.78	U
103-65-1	n-Propylbenzene	<0.76	U
100-42-5	Styrene	<0.56	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.97	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.95	U
127-18-4	Tetrachloroethene	<0.39	U
109-99-9	Tetrahydrofuran	<0.75	U
108-88-3	Toluene	<0.33	U
87-61-6	1,2,3-Trichlorobenzene	<0.76	U
120-82-1	1,2,4-Trichlorobenzene	<0.76	U
71-55-6	1,1,1-Trichloroethane	<0.71	U
79-00-5	1,1,2-Trichloroethane	<0.60	U
79-01-6	Trichloroethene	<0.69	U
75-69-4	Trichlorofluoromethane	<0.58	U
96-18-4	1,2,3-Trichloropropane	<2.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.8	U
526-73-8	1,2,3-Trimethylbenzene	<1.9	U
95-63-6	1,2,4-Trimethylbenzene	<0.64	U
108-67-8	1,3,5-Trimethylbenzene	<0.60	U
108-05-4	Vinyl acetate	<0.54	U

SAMPLE NO.

GB-55/3-5'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 Lab Sample ID: 60375481030

Date Analyzed: 07/27/2021 12:52 Lab File ID: 072721A.B\0727A_20.D

Initial wt/vol: 6.27 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.63	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.60	U
95-47-6	o-Xylene	<0.35	U

SAMPLE NO.

GB-55/3-5'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 09:23 Lab Sample ID: 60375481030

Date Analyzed: 07/27/2021 12:52 Lab File ID: 072721AGRO.B\0727A_20.D

Initial wt/vol: 6.27 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.052	U

SAMPLE NO.

GB-55/3-5'D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 | Lab Sample ID: 60375481031

Date Analyzed: 07/27/2021 18:05 | Lab File ID: 072721A.B\0727A_40.D

Initial wt/vol: 5.89 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 16.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.5	U
107-02-8	Acrolein	<77.1	U
107-13-1	Acrylonitrile	<3.2	U
71-43-2	Benzene	<0.50	U
108-86-1	Bromobenzene	<0.96	U
74-97-5	Bromochloromethane	<0.61	U
75-27-4	Bromodichloromethane	<0.61	U
75-25-2	Bromoform	<0.59	U
74-83-9	Bromomethane	<3.0	U
78-93-3	2-Butanone (MEK)	<3.5	U
104-51-8	n-Butylbenzene	<0.66	U
135-98-8	sec-Butylbenzene	<0.75	U
98-06-6	tert-Butylbenzene	<0.90	U
75-15-0	Carbon disulfide	<0.66	U
56-23-5	Carbon tetrachloride	<0.87	U
108-90-7	Chlorobenzene	<0.64	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<0.81	U
95-49-8	2-Chlorotoluene	<0.74	U
106-43-4	4-Chlorotoluene	<0.61	U
108-94-1	Cyclohexanone	<13.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.9	U
124-48-1	Dibromochloromethane	<0.66	U
106-93-4	1,2-Dibromoethane (EDB)	<0.55	U
74-95-3	Dibromomethane	<0.61	U
95-50-1	1,2-Dichlorobenzene	<0.64	U
541-73-1	1,3-Dichlorobenzene	<0.73	U
106-46-7	1,4-Dichlorobenzene	<0.83	U
75-34-3	1,1-Dichloroethane	<0.40	U
107-06-2	1,2-Dichloroethane	<0.41	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.65	U
156-59-2	cis-1,2-Dichloroethene	<0.44	U
156-60-5	trans-1,2-Dichloroethene	<0.69	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<0.71	U

SAMPLE NO.

GB-55/3-5'D

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481031

Date Analyzed: 07/27/2021 18:05 Lab File ID: 072721A.B\0727A_40.D

Initial wt/vol: 5.89 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 16.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.48	U
563-58-6	1,1-Dichloropropene	<0.92	U
10061-01-5	cis-1,3-Dichloropropene	<0.54	U
10061-02-6	trans-1,3-Dichloropropene	<0.47	U
60-29-7	Diethyl ether (Ethyl ether)	<0.57	U
100-41-4	Ethylbenzene	<0.47	U
142-82-5	n-Heptane	<4.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.87	U
110-54-3	n-Hexane	<0.70	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.58	U
99-87-6	p-Isopropyltoluene	<0.70	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.8	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.1	U
1634-04-4	Methyl-tert-butyl ether	<0.49	U
91-20-3	Naphthalene	<0.84	U
103-65-1	n-Propylbenzene	<0.82	U
100-42-5	Styrene	<0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.42	U
109-99-9	Tetrahydrofuran	<0.80	U
108-88-3	Toluene	<0.36	U
87-61-6	1,2,3-Trichlorobenzene	<0.81	U
120-82-1	1,2,4-Trichlorobenzene	<0.81	U
71-55-6	1,1,1-Trichloroethane	<0.76	U
79-00-5	1,1,2-Trichloroethane	<0.64	U
79-01-6	Trichloroethene	<0.74	U
75-69-4	Trichlorofluoromethane	<0.63	U
96-18-4	1,2,3-Trichloropropane	<2.2	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.1	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.68	U
108-67-8	1,3,5-Trimethylbenzene	<0.64	U
108-05-4	Vinyl acetate	<0.57	U

SAMPLE NO.

GB-55/3-5'D

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481031

Date Analyzed: 07/27/2021 18:05 Lab File ID: 072721A.B\0727A_40.D

Initial wt/vol: 5.89 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 16.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.68	U
1330-20-7	Xylene (Total)	<1.2	U
179601-23-1	m&p-Xylene	<0.64	U
95-47-6	o-Xylene	<0.38	U

SAMPLE NO.

GB-55/3-5'D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 14:02 Lab Sample ID: 60375481031

Date Analyzed: 07/27/2021 18:05 Lab File ID: 072721AGRO.B\0727A_40.D

Initial wt/vol: 5.89 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 16.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.056	U

SAMPLE NO.

GB-62/0-2'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 14:02 Lab Sample ID: 60375481032

Date Analyzed: 07/27/2021 18:20 Lab File ID: 072721AGRO.B\0727A_41.D

Initial wt/vol: 6.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 17.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.051	U

SAMPLE NO.

GB-62/0-2'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481032

Date Analyzed: 07/27/2021 18:20 Lab File ID: 072721A.B\0727A_41.D

Initial wt/vol: 6.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 17.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	74.8	
107-02-8	Acrolein	<70.2	U
107-13-1	Acrylonitrile	<2.9	U
71-43-2	Benzene	<0.46	U
108-86-1	Bromobenzene	<0.87	U
74-97-5	Bromochloromethane	<0.56	U
75-27-4	Bromodichloromethane	<0.56	U
75-25-2	Bromoform	<0.53	U
74-83-9	Bromomethane	<2.7	U
78-93-3	2-Butanone (MEK)	19.7	
104-51-8	n-Butylbenzene	<0.60	U
135-98-8	sec-Butylbenzene	<0.68	U
98-06-6	tert-Butylbenzene	<0.82	U
75-15-0	Carbon disulfide	<0.60	U
56-23-5	Carbon tetrachloride	<0.80	U
108-90-7	Chlorobenzene	<0.58	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.46	U
74-87-3	Chloromethane	<0.74	U
95-49-8	2-Chlorotoluene	<0.68	U
106-43-4	4-Chlorotoluene	<0.56	U
108-94-1	Cyclohexanone	<11.8	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.7	U
124-48-1	Dibromochloromethane	<0.60	U
106-93-4	1,2-Dibromoethane (EDB)	<0.50	U
74-95-3	Dibromomethane	<0.56	U
95-50-1	1,2-Dichlorobenzene	<0.58	U
541-73-1	1,3-Dichlorobenzene	<0.67	U
106-46-7	1,4-Dichlorobenzene	<0.75	U
75-34-3	1,1-Dichloroethane	<0.36	U
107-06-2	1,2-Dichloroethane	<0.37	U
540-59-0	1,2-Dichloroethene (Total)	<1.0	U
75-35-4	1,1-Dichloroethene	<0.59	U
156-59-2	cis-1,2-Dichloroethene	<0.40	U
156-60-5	trans-1,2-Dichloroethene	<0.63	U
78-87-5	1,2-Dichloropropane	<0.91	U
142-28-9	1,3-Dichloropropane	<0.64	U

SAMPLE NO.

GB-62/0-2'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481032

Date Analyzed: 07/27/2021 18:20 Lab File ID: 072721A.B\0727A_41.D

Initial wt/vol: 6.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 17.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.44	U
563-58-6	1,1-Dichloropropene	<0.84	U
10061-01-5	cis-1,3-Dichloropropene	<0.49	U
10061-02-6	trans-1,3-Dichloropropene	<0.42	U
60-29-7	Diethyl ether (Ethyl ether)	<0.52	U
100-41-4	Ethylbenzene	<0.43	U
142-82-5	n-Heptane	<4.2	U
87-68-3	Hexachloro-1,3-butadiene	<0.79	U
110-54-3	n-Hexane	<0.64	U
591-78-6	2-Hexanone	<2.3	U
74-88-4	Iodomethane	<1.4	U
98-82-8	Isopropylbenzene (Cumene)	<0.53	U
99-87-6	p-Isopropyltoluene	<0.64	U
79-20-9	Methyl acetate	<1.0	U
75-09-2	Methylene Chloride	<2.5	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.8	U
1634-04-4	Methyl-tert-butyl ether	<0.45	U
91-20-3	Naphthalene	<0.76	U
103-65-1	n-Propylbenzene	<0.75	U
100-42-5	Styrene	<0.55	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.95	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.93	U
127-18-4	Tetrachloroethene	<0.38	U
109-99-9	Tetrahydrofuran	<0.73	U
108-88-3	Toluene	<0.33	U
87-61-6	1,2,3-Trichlorobenzene	<0.74	U
120-82-1	1,2,4-Trichlorobenzene	<0.74	U
71-55-6	1,1,1-Trichloroethane	<0.69	U
79-00-5	1,1,2-Trichloroethane	<0.59	U
79-01-6	Trichloroethene	<0.67	U
75-69-4	Trichlorofluoromethane	<0.57	U
96-18-4	1,2,3-Trichloropropane	<2.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.6	U
526-73-8	1,2,3-Trimethylbenzene	<1.9	U
95-63-6	1,2,4-Trimethylbenzene	<0.62	U
108-67-8	1,3,5-Trimethylbenzene	<0.58	U
108-05-4	Vinyl acetate	<0.52	U

SAMPLE NO.

GB-62/0-2'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481032

Date Analyzed: 07/27/2021 18:20 Lab File ID: 072721A.B\0727A_41.D

Initial wt/vol: 6.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 17.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.62	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.59	U
95-47-6	o-Xylene	<0.35	U

SAMPLE NO.

GB-62/3-5'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481033

Date Analyzed: 07/27/2021 18:36 Lab File ID: 072721A.B\0727A_42.D

Initial wt/vol: 6.07 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.4	U
107-02-8	Acrolein	<76.5	U
107-13-1	Acrylonitrile	<3.2	U
71-43-2	Benzene	<0.50	U
108-86-1	Bromobenzene	<0.95	U
74-97-5	Bromochloromethane	<0.61	U
75-27-4	Bromodichloromethane	<0.61	U
75-25-2	Bromoform	<0.58	U
74-83-9	Bromomethane	<3.0	U
78-93-3	2-Butanone (MEK)	<3.4	U
104-51-8	n-Butylbenzene	<0.66	U
135-98-8	sec-Butylbenzene	<0.74	U
98-06-6	tert-Butylbenzene	<0.89	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.87	U
108-90-7	Chlorobenzene	<0.63	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<0.81	U
95-49-8	2-Chlorotoluene	<0.74	U
106-43-4	4-Chlorotoluene	<0.61	U
108-94-1	Cyclohexanone	<12.8	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.9	U
124-48-1	Dibromochloromethane	<0.65	U
106-93-4	1,2-Dibromoethane (EDB)	<0.54	U
74-95-3	Dibromomethane	<0.61	U
95-50-1	1,2-Dichlorobenzene	<0.63	U
541-73-1	1,3-Dichlorobenzene	<0.73	U
106-46-7	1,4-Dichlorobenzene	<0.82	U
75-34-3	1,1-Dichloroethane	<0.39	U
107-06-2	1,2-Dichloroethane	<0.40	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.65	U
156-59-2	cis-1,2-Dichloroethene	<0.44	U
156-60-5	trans-1,2-Dichloroethene	<0.69	U
78-87-5	1,2-Dichloropropane	<0.99	U
142-28-9	1,3-Dichloropropane	<0.70	U

SAMPLE NO.

GB-62/3-5'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481033

Date Analyzed: 07/27/2021 18:36 Lab File ID: 072721A.B\0727A_42.D

Initial wt/vol: 6.07 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.48	U
563-58-6	1,1-Dichloropropene	<0.91	U
10061-01-5	cis-1,3-Dichloropropene	<0.54	U
10061-02-6	trans-1,3-Dichloropropene	<0.46	U
60-29-7	Diethyl ether (Ethyl ether)	<0.57	U
100-41-4	Ethylbenzene	<0.47	U
142-82-5	n-Heptane	<4.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.86	U
110-54-3	n-Hexane	<0.70	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.58	U
99-87-6	p-Isopropyltoluene	<0.70	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.8	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.1	U
1634-04-4	Methyl-tert-butyl ether	<0.49	U
91-20-3	Naphthalene	<0.83	U
103-65-1	n-Propylbenzene	<0.81	U
100-42-5	Styrene	<0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.42	U
109-99-9	Tetrahydrofuran	<0.79	U
108-88-3	Toluene	<0.36	U
87-61-6	1,2,3-Trichlorobenzene	<0.81	U
120-82-1	1,2,4-Trichlorobenzene	<0.81	U
71-55-6	1,1,1-Trichloroethane	<0.76	U
79-00-5	1,1,2-Trichloroethane	<0.64	U
79-01-6	Trichloroethene	<0.73	U
75-69-4	Trichlorofluoromethane	<0.62	U
96-18-4	1,2,3-Trichloropropane	<2.2	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.1	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.68	U
108-67-8	1,3,5-Trimethylbenzene	<0.63	U
108-05-4	Vinyl acetate	<0.57	U

SAMPLE NO.

GB-62/3-5'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481033

Date Analyzed: 07/27/2021 18:36 Lab File ID: 072721A.B\0727A_42.D

Initial wt/vol: 6.07 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.67	U
1330-20-7	Xylene (Total)	<1.2	U
179601-23-1	m&p-Xylene	<0.64	U
95-47-6	o-Xylene	<0.38	U

SAMPLE NO.

GB-62/3-5'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 14:02 Lab Sample ID: 60375481033

Date Analyzed: 07/27/2021 18:36 Lab File ID: 072721AGRO.B\0727A_42.D

Initial wt/vol: 6.07 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.055	U

SAMPLE NO.

GB-68/1-3'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 14:02 Lab Sample ID: 60375481034

Date Analyzed: 07/27/2021 18:52 Lab File ID: 072721AGRO.B\0727A_43.D

Initial wt/vol: 6.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 14.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.049	U

SAMPLE NO.

GB-68/1-3'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481034

Date Analyzed: 07/27/2021 18:52 Lab File ID: 072721A.B\0727A_43.D

Initial wt/vol: 6.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 14.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	43.1	
107-02-8	Acrolein	<68.2	U
107-13-1	Acrylonitrile	<2.9	U
71-43-2	Benzene	<0.44	U
108-86-1	Bromobenzene	<0.85	U
74-97-5	Bromochloromethane	<0.54	U
75-27-4	Bromodichloromethane	<0.54	U
75-25-2	Bromoform	<0.52	U
74-83-9	Bromomethane	<2.7	U
78-93-3	2-Butanone (MEK)	5.9	J
104-51-8	n-Butylbenzene	<0.59	U
135-98-8	sec-Butylbenzene	<0.66	U
98-06-6	tert-Butylbenzene	<0.80	U
75-15-0	Carbon disulfide	<0.58	U
56-23-5	Carbon tetrachloride	<0.77	U
108-90-7	Chlorobenzene	<0.57	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.44	U
74-87-3	Chloromethane	<0.72	U
95-49-8	2-Chlorotoluene	<0.66	U
106-43-4	4-Chlorotoluene	<0.54	U
108-94-1	Cyclohexanone	<11.4	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.6	U
124-48-1	Dibromochloromethane	<0.58	U
106-93-4	1,2-Dibromoethane (EDB)	<0.48	U
74-95-3	Dibromomethane	<0.54	U
95-50-1	1,2-Dichlorobenzene	<0.56	U
541-73-1	1,3-Dichlorobenzene	<0.65	U
106-46-7	1,4-Dichlorobenzene	<0.73	U
75-34-3	1,1-Dichloroethane	<0.35	U
107-06-2	1,2-Dichloroethane	<0.36	U
540-59-0	1,2-Dichloroethene (Total)	<1.0	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.39	U
156-60-5	trans-1,2-Dichloroethene	<0.61	U
78-87-5	1,2-Dichloropropane	<0.88	U
142-28-9	1,3-Dichloropropane	<0.62	U

SAMPLE NO.

GB-68/1-3'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481034

Date Analyzed: 07/27/2021 18:52 Lab File ID: 072721A.B\0727A_43.D

Initial wt/vol: 6.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 14.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.43	U
563-58-6	1,1-Dichloropropene	<0.81	U
10061-01-5	cis-1,3-Dichloropropene	<0.48	U
10061-02-6	trans-1,3-Dichloropropene	<0.41	U
60-29-7	Diethyl ether (Ethyl ether)	<0.50	U
100-41-4	Ethylbenzene	<0.42	U
142-82-5	n-Heptane	<4.1	U
87-68-3	Hexachloro-1,3-butadiene	<0.77	U
110-54-3	n-Hexane	<0.62	U
591-78-6	2-Hexanone	<2.2	U
74-88-4	Iodomethane	<1.4	U
98-82-8	Isopropylbenzene (Cumene)	<0.51	U
99-87-6	p-Isopropyltoluene	<0.62	U
79-20-9	Methyl acetate	<0.97	U
75-09-2	Methylene Chloride	<2.5	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.7	U
1634-04-4	Methyl-tert-butyl ether	<0.43	U
91-20-3	Naphthalene	<0.74	U
103-65-1	n-Propylbenzene	<0.72	U
100-42-5	Styrene	<0.53	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.92	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.90	U
127-18-4	Tetrachloroethene	<0.37	U
109-99-9	Tetrahydrofuran	<0.71	U
108-88-3	Toluene	<0.32	U
87-61-6	1,2,3-Trichlorobenzene	<0.72	U
120-82-1	1,2,4-Trichlorobenzene	<0.72	U
71-55-6	1,1,1-Trichloroethane	<0.67	U
79-00-5	1,1,2-Trichloroethane	<0.57	U
79-01-6	Trichloroethene	<0.65	U
75-69-4	Trichlorofluoromethane	<0.55	U
96-18-4	1,2,3-Trichloropropane	<1.9	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.5	U
526-73-8	1,2,3-Trimethylbenzene	<1.8	U
95-63-6	1,2,4-Trimethylbenzene	<0.60	U
108-67-8	1,3,5-Trimethylbenzene	<0.57	U
108-05-4	Vinyl acetate	<0.51	U

SAMPLE NO.

GB-68/1-3'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481034

Date Analyzed: 07/27/2021 18:52 Lab File ID: 072721A.B\0727A_43.D

Initial wt/vol: 6.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 14.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.60	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<0.57	U
95-47-6	o-Xylene	<0.34	U

SAMPLE NO.

GB-68/3-5'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 | Lab Sample ID: 60375481035

Date Analyzed: 07/27/2021 19:07 | Lab File ID: 072721A.B\0727A_44.D

Initial wt/vol: 6.77 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 19.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	23.0	
107-02-8	Acrolein	<69.5	U
107-13-1	Acrylonitrile	<2.9	U
71-43-2	Benzene	<0.45	U
108-86-1	Bromobenzene	<0.86	U
74-97-5	Bromochloromethane	<0.55	U
75-27-4	Bromodichloromethane	<0.55	U
75-25-2	Bromoform	<0.53	U
74-83-9	Bromomethane	<2.7	U
78-93-3	2-Butanone (MEK)	<3.1	U
104-51-8	n-Butylbenzene	<0.60	U
135-98-8	sec-Butylbenzene	<0.67	U
98-06-6	tert-Butylbenzene	<0.81	U
75-15-0	Carbon disulfide	<0.59	U
56-23-5	Carbon tetrachloride	<0.79	U
108-90-7	Chlorobenzene	<0.58	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.45	U
74-87-3	Chloromethane	<0.73	U
95-49-8	2-Chlorotoluene	<0.67	U
106-43-4	4-Chlorotoluene	<0.55	U
108-94-1	Cyclohexanone	<11.7	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.7	U
124-48-1	Dibromochloromethane	<0.59	U
106-93-4	1,2-Dibromoethane (EDB)	<0.49	U
74-95-3	Dibromomethane	<0.55	U
95-50-1	1,2-Dichlorobenzene	<0.57	U
541-73-1	1,3-Dichlorobenzene	<0.66	U
106-46-7	1,4-Dichlorobenzene	<0.74	U
75-34-3	1,1-Dichloroethane	<0.36	U
107-06-2	1,2-Dichloroethane	<0.37	U
540-59-0	1,2-Dichloroethene (Total)	<1.0	U
75-35-4	1,1-Dichloroethene	<0.59	U
156-59-2	cis-1,2-Dichloroethene	<0.40	U
156-60-5	trans-1,2-Dichloroethene	<0.62	U
78-87-5	1,2-Dichloropropane	<0.90	U
142-28-9	1,3-Dichloropropane	<0.64	U

SAMPLE NO.

GB-68/3-5'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481035

Date Analyzed: 07/27/2021 19:07 Lab File ID: 072721A.B\0727A_44.D

Initial wt/vol: 6.77 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.44	U
563-58-6	1,1-Dichloropropene	<0.83	U
10061-01-5	cis-1,3-Dichloropropene	<0.49	U
10061-02-6	trans-1,3-Dichloropropene	<0.42	U
60-29-7	Diethyl ether (Ethyl ether)	<0.51	U
100-41-4	Ethylbenzene	<0.42	U
142-82-5	n-Heptane	<4.2	U
87-68-3	Hexachloro-1,3-butadiene	<0.78	U
110-54-3	n-Hexane	<0.63	U
591-78-6	2-Hexanone	<2.3	U
74-88-4	Iodomethane	<1.4	U
98-82-8	Isopropylbenzene (Cumene)	<0.52	U
99-87-6	p-Isopropyltoluene	<0.63	U
79-20-9	Methyl acetate	<0.99	U
75-09-2	Methylene Chloride	<2.5	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.8	U
1634-04-4	Methyl-tert-butyl ether	<0.44	U
91-20-3	Naphthalene	<0.75	U
103-65-1	n-Propylbenzene	<0.74	U
100-42-5	Styrene	<0.54	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.94	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.92	U
127-18-4	Tetrachloroethene	<0.38	U
109-99-9	Tetrahydrofuran	<0.72	U
108-88-3	Toluene	<0.32	U
87-61-6	1,2,3-Trichlorobenzene	<0.73	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.69	U
79-00-5	1,1,2-Trichloroethane	<0.58	U
79-01-6	Trichloroethene	<0.67	U
75-69-4	Trichlorofluoromethane	<0.56	U
96-18-4	1,2,3-Trichloropropane	<2.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.6	U
526-73-8	1,2,3-Trimethylbenzene	<1.8	U
95-63-6	1,2,4-Trimethylbenzene	<0.62	U
108-67-8	1,3,5-Trimethylbenzene	<0.58	U
108-05-4	Vinyl acetate	<0.52	U

SAMPLE NO.

GB-68/3-5'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481035

Date Analyzed: 07/27/2021 19:07 Lab File ID: 072721A.B\0727A_44.D

Initial wt/vol: 6.77 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.61	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<0.58	U
95-47-6	o-Xylene	<0.34	U

SAMPLE NO.

GB-68/3-5'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 14:02 Lab Sample ID: 60375481035

Date Analyzed: 07/27/2021 19:07 Lab File ID: 072721AGRO.B\0727A_44.D

Initial wt/vol: 6.77 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.050	U

SAMPLE NO.

GB-68/3-5'D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 | Lab Sample ID: 60375481036

Date Analyzed: 07/27/2021 19:23 | Lab File ID: 072721A.B\0727A_45.D

Initial wt/vol: 5.91 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 20.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	22.1	
107-02-8	Acrolein	<80.1	U
107-13-1	Acrylonitrile	<3.4	U
71-43-2	Benzene	<0.52	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<0.64	U
75-27-4	Bromodichloromethane	<0.64	U
75-25-2	Bromoform	<0.61	U
74-83-9	Bromomethane	<3.1	U
78-93-3	2-Butanone (MEK)	<3.6	U
104-51-8	n-Butylbenzene	<0.69	U
135-98-8	sec-Butylbenzene	<0.77	U
98-06-6	tert-Butylbenzene	<0.94	U
75-15-0	Carbon disulfide	<0.68	U
56-23-5	Carbon tetrachloride	<0.91	U
108-90-7	Chlorobenzene	<0.66	U
75-00-3	Chloroethane	<1.6	U
67-66-3	Chloroform	<0.52	U
74-87-3	Chloromethane	<0.85	U
95-49-8	2-Chlorotoluene	<0.77	U
106-43-4	4-Chlorotoluene	<0.64	U
108-94-1	Cyclohexanone	<13.5	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.9	U
124-48-1	Dibromochloromethane	<0.68	U
106-93-4	1,2-Dibromoethane (EDB)	<0.57	U
74-95-3	Dibromomethane	<0.64	U
95-50-1	1,2-Dichlorobenzene	<0.66	U
541-73-1	1,3-Dichlorobenzene	<0.76	U
106-46-7	1,4-Dichlorobenzene	<0.86	U
75-34-3	1,1-Dichloroethane	<0.41	U
107-06-2	1,2-Dichloroethane	<0.42	U
540-59-0	1,2-Dichloroethene (Total)	<1.2	U
75-35-4	1,1-Dichloroethene	<0.68	U
156-59-2	cis-1,2-Dichloroethene	<0.46	U
156-60-5	trans-1,2-Dichloroethene	<0.72	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<0.73	U

SAMPLE NO.

GB-68/3-5'D

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481036

Date Analyzed: 07/27/2021 19:23 Lab File ID: 072721A.B\0727A_45.D

Initial wt/vol: 5.91 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 20.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.50	U
563-58-6	1,1-Dichloropropene	<0.95	U
10061-01-5	cis-1,3-Dichloropropene	<0.56	U
10061-02-6	trans-1,3-Dichloropropene	<0.48	U
60-29-7	Diethyl ether (Ethyl ether)	<0.59	U
100-41-4	Ethylbenzene	<0.49	U
142-82-5	n-Heptane	<4.8	U
87-68-3	Hexachloro-1,3-butadiene	<0.90	U
110-54-3	n-Hexane	<0.73	U
591-78-6	2-Hexanone	<2.6	U
74-88-4	Iodomethane	<1.6	U
98-82-8	Isopropylbenzene (Cumene)	<0.60	U
99-87-6	p-Isopropyltoluene	<0.73	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.9	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.2	U
1634-04-4	Methyl-tert-butyl ether	<0.51	U
91-20-3	Naphthalene	<0.87	U
103-65-1	n-Propylbenzene	<0.85	U
100-42-5	Styrene	<0.62	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.1	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.1	U
127-18-4	Tetrachloroethene	<0.44	U
109-99-9	Tetrahydrofuran	<0.83	U
108-88-3	Toluene	<0.37	U
87-61-6	1,2,3-Trichlorobenzene	<0.84	U
120-82-1	1,2,4-Trichlorobenzene	<0.84	U
71-55-6	1,1,1-Trichloroethane	<0.79	U
79-00-5	1,1,2-Trichloroethane	<0.67	U
79-01-6	Trichloroethene	<0.77	U
75-69-4	Trichlorofluoromethane	<0.65	U
96-18-4	1,2,3-Trichloropropane	<2.3	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.3	U
526-73-8	1,2,3-Trimethylbenzene	<2.1	U
95-63-6	1,2,4-Trimethylbenzene	<0.71	U
108-67-8	1,3,5-Trimethylbenzene	<0.66	U
108-05-4	Vinyl acetate	<0.60	U

SAMPLE NO.

GB-68/3-5'D

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481036

Date Analyzed: 07/27/2021 19:23 Lab File ID: 072721A.B\0727A_45.D

Initial wt/vol: 5.91 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 20.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.71	U
1330-20-7	Xylene (Total)	<1.2	U
179601-23-1	m&p-Xylene	<0.67	U
95-47-6	o-Xylene	<0.40	U

SAMPLE NO.

GB-68/3-5'D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 14:02 Lab Sample ID: 60375481036

Date Analyzed: 07/27/2021 19:23 Lab File ID: 072721AGRO.B\0727A_45.D

Initial wt/vol: 5.91 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 20.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.058	U

SAMPLE NO.

GB-67/5-6'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481037

Date Analyzed: 07/27/2021 19:38 Lab File ID: 072721A.B\0727A_46.D

Initial wt/vol: 6.91 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<14.4	U
107-02-8	Acrolein	<67.1	U
107-13-1	Acrylonitrile	<2.8	U
71-43-2	Benzene	<0.44	U
108-86-1	Bromobenzene	<0.83	U
74-97-5	Bromochloromethane	<0.53	U
75-27-4	Bromodichloromethane	<0.53	U
75-25-2	Bromoform	<0.51	U
74-83-9	Bromomethane	<2.6	U
78-93-3	2-Butanone (MEK)	<3.0	U
104-51-8	n-Butylbenzene	<0.58	U
135-98-8	sec-Butylbenzene	<0.65	U
98-06-6	tert-Butylbenzene	<0.78	U
75-15-0	Carbon disulfide	<0.57	U
56-23-5	Carbon tetrachloride	<0.76	U
108-90-7	Chlorobenzene	<0.56	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<0.44	U
74-87-3	Chloromethane	<0.71	U
95-49-8	2-Chlorotoluene	<0.65	U
106-43-4	4-Chlorotoluene	<0.53	U
108-94-1	Cyclohexanone	<11.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.6	U
124-48-1	Dibromochloromethane	<0.57	U
106-93-4	1,2-Dibromoethane (EDB)	<0.47	U
74-95-3	Dibromomethane	<0.53	U
95-50-1	1,2-Dichlorobenzene	<0.55	U
541-73-1	1,3-Dichlorobenzene	<0.64	U
106-46-7	1,4-Dichlorobenzene	<0.72	U
75-34-3	1,1-Dichloroethane	<0.35	U
107-06-2	1,2-Dichloroethane	<0.35	U
540-59-0	1,2-Dichloroethene (Total)	<0.98	U
75-35-4	1,1-Dichloroethene	<0.57	U
156-59-2	cis-1,2-Dichloroethene	<0.38	U
156-60-5	trans-1,2-Dichloroethene	<0.60	U
78-87-5	1,2-Dichloropropane	<0.87	U
142-28-9	1,3-Dichloropropane	<0.61	U

SAMPLE NO.

GB-67/5-6'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481037

Date Analyzed: 07/27/2021 19:38 Lab File ID: 072721A.B\0727A_46.D

Initial wt/vol: 6.91 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.42	U
563-58-6	1,1-Dichloropropene	<0.80	U
10061-01-5	cis-1,3-Dichloropropene	<0.47	U
10061-02-6	trans-1,3-Dichloropropene	<0.41	U
60-29-7	Diethyl ether (Ethyl ether)	<0.50	U
100-41-4	Ethylbenzene	<0.41	U
142-82-5	n-Heptane	<4.0	U
87-68-3	Hexachloro-1,3-butadiene	<0.76	U
110-54-3	n-Hexane	<0.61	U
591-78-6	2-Hexanone	<2.2	U
74-88-4	Iodomethane	<1.3	U
98-82-8	Isopropylbenzene (Cumene)	<0.51	U
99-87-6	p-Isopropyltoluene	<0.61	U
79-20-9	Methyl acetate	<0.96	U
75-09-2	Methylene Chloride	<2.4	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.7	U
1634-04-4	Methyl-tert-butyl ether	<0.43	U
91-20-3	Naphthalene	<0.73	U
103-65-1	n-Propylbenzene	<0.71	U
100-42-5	Styrene	<0.52	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.91	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.89	U
127-18-4	Tetrachloroethene	<0.37	U
109-99-9	Tetrahydrofuran	<0.69	U
108-88-3	Toluene	<0.31	U
87-61-6	1,2,3-Trichlorobenzene	<0.71	U
120-82-1	1,2,4-Trichlorobenzene	<0.71	U
71-55-6	1,1,1-Trichloroethane	<0.66	U
79-00-5	1,1,2-Trichloroethane	<0.56	U
79-01-6	Trichloroethene	<0.64	U
75-69-4	Trichlorofluoromethane	<0.54	U
96-18-4	1,2,3-Trichloropropane	<1.9	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.4	U
526-73-8	1,2,3-Trimethylbenzene	<1.8	U
95-63-6	1,2,4-Trimethylbenzene	<0.59	U
108-67-8	1,3,5-Trimethylbenzene	<0.56	U
108-05-4	Vinyl acetate	<0.50	U

SAMPLE NO.

GB-67/5-6'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 60375481037

Date Analyzed: 07/27/2021 19:38 Lab File ID: 072721A.B\0727A_46.D

Initial wt/vol: 6.91 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.59	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<0.56	U
95-47-6	o-Xylene	<0.33	U

SAMPLE NO.

GB-67/5-6'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 14:02 Lab Sample ID: 60375481037

Date Analyzed: 07/27/2021 19:38 Lab File ID: 072721AGRO.B\0727A_46.D

Initial wt/vol: 6.91 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.048	U

SAMPLE NO.

GB-67/8-10'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481038

Date Analyzed: 07/28/2021 09:40 Lab File ID: 072821AGRO.B\0728A_09.D

Initial wt/vol: 6.65 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.051	U

SAMPLE NO.

GB-67/8-10'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 60375481038

Date Analyzed: 07/28/2021 09:40 | Lab File ID: 072821A.B\0728A_09.D

Initial wt/vol: 6.65 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 19.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<15.1	U
107-02-8	Acrolein	<70.7	U
107-13-1	Acrylonitrile	<3.0	U
71-43-2	Benzene	<0.46	U
108-86-1	Bromobenzene	<0.88	U
74-97-5	Bromochloromethane	<0.56	U
75-27-4	Bromodichloromethane	<0.56	U
75-25-2	Bromoform	<0.54	U
74-83-9	Bromomethane	<2.7	U
78-93-3	2-Butanone (MEK)	<3.2	U
104-51-8	n-Butylbenzene	<0.61	U
135-98-8	sec-Butylbenzene	<0.68	U
98-06-6	tert-Butylbenzene	<0.83	U
75-15-0	Carbon disulfide	<0.60	U
56-23-5	Carbon tetrachloride	<0.80	U
108-90-7	Chlorobenzene	<0.59	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.46	U
74-87-3	Chloromethane	<0.75	U
95-49-8	2-Chlorotoluene	<0.68	U
106-43-4	4-Chlorotoluene	<0.56	U
108-94-1	Cyclohexanone	<11.9	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.7	U
124-48-1	Dibromochloromethane	<0.60	U
106-93-4	1,2-Dibromoethane (EDB)	<0.50	U
74-95-3	Dibromomethane	<0.56	U
95-50-1	1,2-Dichlorobenzene	<0.58	U
541-73-1	1,3-Dichlorobenzene	<0.67	U
106-46-7	1,4-Dichlorobenzene	<0.76	U
75-34-3	1,1-Dichloroethane	<0.36	U
107-06-2	1,2-Dichloroethane	<0.37	U
540-59-0	1,2-Dichloroethene (Total)	<1.0	U
75-35-4	1,1-Dichloroethene	<0.60	U
156-59-2	cis-1,2-Dichloroethene	<0.40	U
156-60-5	trans-1,2-Dichloroethene	<0.63	U
78-87-5	1,2-Dichloropropane	<0.91	U
142-28-9	1,3-Dichloropropane	<0.65	U

SAMPLE NO.

GB-67/8-10'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481038

Date Analyzed: 07/28/2021 09:40 Lab File ID: 072821A.B\0728A_09.D

Initial wt/vol: 6.65 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.44	U
563-58-6	1,1-Dichloropropene	<0.84	U
10061-01-5	cis-1,3-Dichloropropene	<0.50	U
10061-02-6	trans-1,3-Dichloropropene	<0.43	U
60-29-7	Diethyl ether (Ethyl ether)	<0.52	U
100-41-4	Ethylbenzene	<0.43	U
142-82-5	n-Heptane	<4.2	U
87-68-3	Hexachloro-1,3-butadiene	<0.80	U
110-54-3	n-Hexane	<0.64	U
591-78-6	2-Hexanone	<2.3	U
74-88-4	Iodomethane	<1.4	U
98-82-8	Isopropylbenzene (Cumene)	<0.53	U
99-87-6	p-Isopropyltoluene	<0.64	U
79-20-9	Methyl acetate	<1.0	U
75-09-2	Methylene Chloride	<2.6	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.8	U
1634-04-4	Methyl-tert-butyl ether	<0.45	U
91-20-3	Naphthalene	<0.77	U
103-65-1	n-Propylbenzene	<0.75	U
100-42-5	Styrene	<0.55	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.95	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.93	U
127-18-4	Tetrachloroethene	<0.39	U
109-99-9	Tetrahydrofuran	<0.73	U
108-88-3	Toluene	<0.33	U
87-61-6	1,2,3-Trichlorobenzene	<0.74	U
120-82-1	1,2,4-Trichlorobenzene	<0.74	U
71-55-6	1,1,1-Trichloroethane	<0.70	U
79-00-5	1,1,2-Trichloroethane	<0.59	U
79-01-6	Trichloroethene	<0.68	U
75-69-4	Trichlorofluoromethane	<0.57	U
96-18-4	1,2,3-Trichloropropane	<2.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.7	U
526-73-8	1,2,3-Trimethylbenzene	<1.9	U
95-63-6	1,2,4-Trimethylbenzene	<0.63	U
108-67-8	1,3,5-Trimethylbenzene	<0.59	U
108-05-4	Vinyl acetate	<0.53	U

SAMPLE NO.

GB-67/8-10'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481038

Date Analyzed: 07/28/2021 09:40 Lab File ID: 072821A.B\0728A_09.D

Initial wt/vol: 6.65 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.62	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.59	U
95-47-6	o-Xylene	<0.35	U

SAMPLE NO.

GB-61/3-5'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 60375481040

Date Analyzed: 07/28/2021 09:56 | Lab File ID: 072821A.B\0728A_10.D

Initial wt/vol: 6.44 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 24.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.7	U
107-02-8	Acrolein	<77.8	U
107-13-1	Acrylonitrile	<3.3	U
71-43-2	Benzene	<0.51	U
108-86-1	Bromobenzene	<0.97	U
74-97-5	Bromochloromethane	<0.62	U
75-27-4	Bromodichloromethane	<0.62	U
75-25-2	Bromoform	<0.59	U
74-83-9	Bromomethane	<3.0	U
78-93-3	2-Butanone (MEK)	<3.5	U
104-51-8	n-Butylbenzene	<0.67	U
135-98-8	sec-Butylbenzene	<0.75	U
98-06-6	tert-Butylbenzene	<0.91	U
75-15-0	Carbon disulfide	2.0	J
56-23-5	Carbon tetrachloride	<0.88	U
108-90-7	Chlorobenzene	<0.65	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.51	U
74-87-3	Chloromethane	<0.82	U
95-49-8	2-Chlorotoluene	<0.75	U
106-43-4	4-Chlorotoluene	<0.62	U
108-94-1	Cyclohexanone	<13.1	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.9	U
124-48-1	Dibromochloromethane	<0.66	U
106-93-4	1,2-Dibromoethane (EDB)	<0.55	U
74-95-3	Dibromomethane	<0.62	U
95-50-1	1,2-Dichlorobenzene	<0.64	U
541-73-1	1,3-Dichlorobenzene	<0.74	U
106-46-7	1,4-Dichlorobenzene	<0.83	U
75-34-3	1,1-Dichloroethane	<0.40	U
107-06-2	1,2-Dichloroethane	<0.41	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.66	U
156-59-2	cis-1,2-Dichloroethene	<0.44	U
156-60-5	trans-1,2-Dichloroethene	<0.70	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<0.71	U

SAMPLE NO.

GB-61/3-5'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481040

Date Analyzed: 07/28/2021 09:56 Lab File ID: 072821A.B\0728A_10.D

Initial wt/vol: 6.44 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 24.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.49	U
563-58-6	1,1-Dichloropropene	<0.93	U
10061-01-5	cis-1,3-Dichloropropene	<0.55	U
10061-02-6	trans-1,3-Dichloropropene	<0.47	U
60-29-7	Diethyl ether (Ethyl ether)	<0.58	U
100-41-4	Ethylbenzene	<0.48	U
142-82-5	n-Heptane	<4.7	U
87-68-3	Hexachloro-1,3-butadiene	<0.88	U
110-54-3	n-Hexane	<0.71	U
591-78-6	2-Hexanone	<2.6	U
74-88-4	Iodomethane	<1.6	U
98-82-8	Isopropylbenzene (Cumene)	<0.59	U
99-87-6	p-Isopropyltoluene	<0.71	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.8	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.1	U
1634-04-4	Methyl-tert-butyl ether	<0.49	U
91-20-3	Naphthalene	<0.84	U
103-65-1	n-Propylbenzene	<0.83	U
100-42-5	Styrene	<0.61	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.42	U
109-99-9	Tetrahydrofuran	<0.81	U
108-88-3	Toluene	<0.36	U
87-61-6	1,2,3-Trichlorobenzene	<0.82	U
120-82-1	1,2,4-Trichlorobenzene	<0.82	U
71-55-6	1,1,1-Trichloroethane	<0.77	U
79-00-5	1,1,2-Trichloroethane	<0.65	U
79-01-6	Trichloroethene	<0.75	U
75-69-4	Trichlorofluoromethane	<0.63	U
96-18-4	1,2,3-Trichloropropane	<2.2	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.1	U
526-73-8	1,2,3-Trimethylbenzene	<2.1	U
95-63-6	1,2,4-Trimethylbenzene	<0.69	U
108-67-8	1,3,5-Trimethylbenzene	<0.65	U
108-05-4	Vinyl acetate	<0.58	U

SAMPLE NO.

GB-61/3-5'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481040

Date Analyzed: 07/28/2021 09:56 Lab File ID: 072821A.B\0728A_10.D

Initial wt/vol: 6.44 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 24.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.69	U
1330-20-7	Xylene (Total)	<1.2	U
179601-23-1	m&p-Xylene	<0.65	U
95-47-6	o-Xylene	<0.38	U

SAMPLE NO.

GB-61/3-5'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481040

Date Analyzed: 07/28/2021 09:56 Lab File ID: 072821AGRO.B\0728A_10.D

Initial wt/vol: 6.44 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 24.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.056	U

SAMPLE NO.

GB-61/5-7'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481041

Date Analyzed: 07/28/2021 10:11 Lab File ID: 072821AGRO.B\0728A_11.D

Initial wt/vol: 6.68 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.052	U

SAMPLE NO.

GB-61/5-7'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481041

Date Analyzed: 07/28/2021 10:11 Lab File ID: 072821A.B\0728A_11.D

Initial wt/vol: 6.68 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	30.2	
107-02-8	Acrolein	<72.5	U
107-13-1	Acrylonitrile	<3.0	U
71-43-2	Benzene	<0.47	U
108-86-1	Bromobenzene	<0.90	U
74-97-5	Bromochloromethane	<0.58	U
75-27-4	Bromodichloromethane	<0.58	U
75-25-2	Bromoform	<0.55	U
74-83-9	Bromomethane	<2.8	U
78-93-3	2-Butanone (MEK)	4.6	J
104-51-8	n-Butylbenzene	<0.62	U
135-98-8	sec-Butylbenzene	<0.70	U
98-06-6	tert-Butylbenzene	<0.85	U
75-15-0	Carbon disulfide	<0.62	U
56-23-5	Carbon tetrachloride	<0.82	U
108-90-7	Chlorobenzene	<0.60	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.47	U
74-87-3	Chloromethane	<0.77	U
95-49-8	2-Chlorotoluene	<0.70	U
106-43-4	4-Chlorotoluene	<0.58	U
108-94-1	Cyclohexanone	<12.2	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.62	U
106-93-4	1,2-Dibromoethane (EDB)	<0.51	U
74-95-3	Dibromomethane	<0.58	U
95-50-1	1,2-Dichlorobenzene	<0.60	U
541-73-1	1,3-Dichlorobenzene	<0.69	U
106-46-7	1,4-Dichlorobenzene	<0.78	U
75-34-3	1,1-Dichloroethane	<0.37	U
107-06-2	1,2-Dichloroethane	<0.38	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.61	U
156-59-2	cis-1,2-Dichloroethene	<0.41	U
156-60-5	trans-1,2-Dichloroethene	<0.65	U
78-87-5	1,2-Dichloropropane	<0.94	U
142-28-9	1,3-Dichloropropane	<0.66	U

SAMPLE NO.

GB-61/5-7'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481041

Date Analyzed: 07/28/2021 10:11 Lab File ID: 072821A.B\0728A_11.D

Initial wt/vol: 6.68 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.46	U
563-58-6	1,1-Dichloropropene	<0.86	U
10061-01-5	cis-1,3-Dichloropropene	<0.51	U
10061-02-6	trans-1,3-Dichloropropene	<0.44	U
60-29-7	Diethyl ether (Ethyl ether)	<0.54	U
100-41-4	Ethylbenzene	<0.44	U
142-82-5	n-Heptane	<4.3	U
87-68-3	Hexachloro-1,3-butadiene	<0.82	U
110-54-3	n-Hexane	<0.66	U
591-78-6	2-Hexanone	<2.4	U
74-88-4	Iodomethane	<1.4	U
98-82-8	Isopropylbenzene (Cumene)	<0.55	U
99-87-6	p-Isopropyltoluene	<0.66	U
79-20-9	Methyl acetate	<1.0	U
75-09-2	Methylene Chloride	<2.6	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.9	U
1634-04-4	Methyl-tert-butyl ether	<0.46	U
91-20-3	Naphthalene	<0.79	U
103-65-1	n-Propylbenzene	<0.77	U
100-42-5	Styrene	<0.57	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.98	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.96	U
127-18-4	Tetrachloroethene	<0.40	U
109-99-9	Tetrahydrofuran	<0.75	U
108-88-3	Toluene	<0.34	U
87-61-6	1,2,3-Trichlorobenzene	<0.76	U
120-82-1	1,2,4-Trichlorobenzene	<0.76	U
71-55-6	1,1,1-Trichloroethane	<0.72	U
79-00-5	1,1,2-Trichloroethane	<0.60	U
79-01-6	Trichloroethene	<0.70	U
75-69-4	Trichlorofluoromethane	<0.59	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.8	U
526-73-8	1,2,3-Trimethylbenzene	<1.9	U
95-63-6	1,2,4-Trimethylbenzene	<0.64	U
108-67-8	1,3,5-Trimethylbenzene	<0.60	U
108-05-4	Vinyl acetate	<0.54	U

SAMPLE NO.

GB-61/5-7'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481041

Date Analyzed: 07/28/2021 10:11 Lab File ID: 072821A.B\0728A_11.D

Initial wt/vol: 6.68 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.64	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.61	U
95-47-6	o-Xylene	<0.36	U

SAMPLE NO.

GB-54/0-2'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 60375481042

Date Analyzed: 07/28/2021 10:27 | Lab File ID: 072821A.B\0728A_12.D

Initial wt/vol: 5.98 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 11.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	21.5	
107-02-8	Acrolein	<71.7	U
107-13-1	Acrylonitrile	<3.0	U
71-43-2	Benzene	<0.47	U
108-86-1	Bromobenzene	<0.89	U
74-97-5	Bromochloromethane	<0.57	U
75-27-4	Bromodichloromethane	<0.57	U
75-25-2	Bromoform	<0.54	U
74-83-9	Bromomethane	<2.8	U
78-93-3	2-Butanone (MEK)	5.0	J
104-51-8	n-Butylbenzene	<0.62	U
135-98-8	sec-Butylbenzene	<0.69	U
98-06-6	tert-Butylbenzene	<0.84	U
75-15-0	Carbon disulfide	<0.61	U
56-23-5	Carbon tetrachloride	<0.81	U
108-90-7	Chlorobenzene	<0.59	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.47	U
74-87-3	Chloromethane	<0.76	U
95-49-8	2-Chlorotoluene	<0.69	U
106-43-4	4-Chlorotoluene	<0.57	U
108-94-1	Cyclohexanone	<12.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.7	U
124-48-1	Dibromochloromethane	<0.61	U
106-93-4	1,2-Dibromoethane (EDB)	<0.51	U
74-95-3	Dibromomethane	<0.57	U
95-50-1	1,2-Dichlorobenzene	<0.59	U
541-73-1	1,3-Dichlorobenzene	<0.68	U
106-46-7	1,4-Dichlorobenzene	<0.77	U
75-34-3	1,1-Dichloroethane	<0.37	U
107-06-2	1,2-Dichloroethane	<0.38	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.61	U
156-59-2	cis-1,2-Dichloroethene	<0.41	U
156-60-5	trans-1,2-Dichloroethene	<0.64	U
78-87-5	1,2-Dichloropropane	<0.93	U
142-28-9	1,3-Dichloropropane	<0.66	U

SAMPLE NO.

GB-54/0-2'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 60375481042

Date Analyzed: 07/28/2021 10:27 | Lab File ID: 072821A.B\0728A_12.D

Initial wt/vol: 5.98 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 11.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.45	U
563-58-6	1,1-Dichloropropene	<0.85	U
10061-01-5	cis-1,3-Dichloropropene	<0.50	U
10061-02-6	trans-1,3-Dichloropropene	<0.43	U
60-29-7	Diethyl ether (Ethyl ether)	<0.53	U
100-41-4	Ethylbenzene	<0.44	U
142-82-5	n-Heptane	<4.3	U
87-68-3	Hexachloro-1,3-butadiene	<0.81	U
110-54-3	n-Hexane	<0.65	U
591-78-6	2-Hexanone	<2.4	U
74-88-4	Iodomethane	<1.4	U
98-82-8	Isopropylbenzene (Cumene)	<0.54	U
99-87-6	p-Isopropyltoluene	<0.65	U
79-20-9	Methyl acetate	<1.0	U
75-09-2	Methylene Chloride	<2.6	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.9	U
1634-04-4	Methyl-tert-butyl ether	<0.46	U
91-20-3	Naphthalene	<0.78	U
103-65-1	n-Propylbenzene	<0.76	U
100-42-5	Styrene	<0.56	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.97	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.95	U
127-18-4	Tetrachloroethene	<0.39	U
109-99-9	Tetrahydrofuran	<0.74	U
108-88-3	Toluene	<0.33	U
87-61-6	1,2,3-Trichlorobenzene	<0.76	U
120-82-1	1,2,4-Trichlorobenzene	<0.76	U
71-55-6	1,1,1-Trichloroethane	<0.71	U
79-00-5	1,1,2-Trichloroethane	<0.60	U
79-01-6	Trichloroethene	<0.69	U
75-69-4	Trichlorofluoromethane	<0.58	U
96-18-4	1,2,3-Trichloropropane	<2.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.7	U
526-73-8	1,2,3-Trimethylbenzene	<1.9	U
95-63-6	1,2,4-Trimethylbenzene	<0.64	U
108-67-8	1,3,5-Trimethylbenzene	<0.59	U
108-05-4	Vinyl acetate	<0.53	U

SAMPLE NO.

GB-54/0-2'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481042

Date Analyzed: 07/28/2021 10:27 Lab File ID: 072821A.B\0728A_12.D

Initial wt/vol: 5.98 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 11.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.63	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.60	U
95-47-6	o-Xylene	<0.35	U

SAMPLE NO.

GB-54/0-2'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481042

Date Analyzed: 07/28/2021 10:27 Lab File ID: 072821AGRO.B\0728A_12.D

Initial wt/vol: 5.98 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 11.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.052	U

SAMPLE NO.

GB-54/2-4'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 60375481043

Date Analyzed: 07/28/2021 10:43 | Lab File ID: 072821A.B\0728A_13.D

Initial wt/vol: 5.17 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 16.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	22.5	J
107-02-8	Acrolein	<87.8	U
107-13-1	Acrylonitrile	<3.7	U
71-43-2	Benzene	<0.57	U
108-86-1	Bromobenzene	<1.1	U
74-97-5	Bromochloromethane	<0.70	U
75-27-4	Bromodichloromethane	<0.70	U
75-25-2	Bromoform	<0.67	U
74-83-9	Bromomethane	<3.4	U
78-93-3	2-Butanone (MEK)	4.7	J
104-51-8	n-Butylbenzene	<0.75	U
135-98-8	sec-Butylbenzene	<0.85	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<0.75	U
56-23-5	Carbon tetrachloride	<0.99	U
108-90-7	Chlorobenzene	<0.73	U
75-00-3	Chloroethane	<1.7	U
67-66-3	Chloroform	<0.57	U
74-87-3	Chloromethane	<0.93	U
95-49-8	2-Chlorotoluene	<0.85	U
106-43-4	4-Chlorotoluene	<0.70	U
108-94-1	Cyclohexanone	<14.7	U
96-12-8	1,2-Dibromo-3-chloropropane	<2.1	U
124-48-1	Dibromochloromethane	<0.75	U
106-93-4	1,2-Dibromoethane (EDB)	<0.62	U
74-95-3	Dibromomethane	<0.70	U
95-50-1	1,2-Dichlorobenzene	<0.73	U
541-73-1	1,3-Dichlorobenzene	<0.83	U
106-46-7	1,4-Dichlorobenzene	<0.94	U
75-34-3	1,1-Dichloroethane	<0.45	U
107-06-2	1,2-Dichloroethane	<0.46	U
540-59-0	1,2-Dichloroethene (Total)	<1.3	U
75-35-4	1,1-Dichloroethene	<0.74	U
156-59-2	cis-1,2-Dichloroethene	<0.50	U
156-60-5	trans-1,2-Dichloroethene	<0.79	U
78-87-5	1,2-Dichloropropane	<1.1	U
142-28-9	1,3-Dichloropropane	<0.80	U

SAMPLE NO.

GB-54/2-4'

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 60375481043

Date Analyzed: 07/28/2021 10:43 | Lab File ID: 072821A.B\0728A_13.D

Initial wt/vol: 5.17 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 16.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.55	U
563-58-6	1,1-Dichloropropene	<1.0	U
10061-01-5	cis-1,3-Dichloropropene	<0.62	U
10061-02-6	trans-1,3-Dichloropropene	<0.53	U
60-29-7	Diethyl ether (Ethyl ether)	<0.65	U
100-41-4	Ethylbenzene	<0.54	U
142-82-5	n-Heptane	<5.3	U
87-68-3	Hexachloro-1,3-butadiene	<0.99	U
110-54-3	n-Hexane	<0.80	U
591-78-6	2-Hexanone	<2.9	U
74-88-4	Iodomethane	<1.8	U
98-82-8	Isopropylbenzene (Cumene)	<0.66	U
99-87-6	p-Isopropyltoluene	<0.80	U
79-20-9	Methyl acetate	<1.3	U
75-09-2	Methylene Chloride	<3.2	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.5	U
1634-04-4	Methyl-tert-butyl ether	<0.56	U
91-20-3	Naphthalene	<0.95	U
103-65-1	n-Propylbenzene	<0.93	U
100-42-5	Styrene	<0.68	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.2	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.2	U
127-18-4	Tetrachloroethene	<0.48	U
109-99-9	Tetrahydrofuran	<0.91	U
108-88-3	Toluene	<0.41	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.93	U
71-55-6	1,1,1-Trichloroethane	<0.87	U
79-00-5	1,1,2-Trichloroethane	<0.73	U
79-01-6	Trichloroethene	<0.84	U
75-69-4	Trichlorofluoromethane	<0.71	U
96-18-4	1,2,3-Trichloropropane	<2.5	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.8	U
526-73-8	1,2,3-Trimethylbenzene	<2.3	U
95-63-6	1,2,4-Trimethylbenzene	<0.78	U
108-67-8	1,3,5-Trimethylbenzene	<0.73	U
108-05-4	Vinyl acetate	<0.65	U

SAMPLE NO.

GB-54/2-4'

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481043

Date Analyzed: 07/28/2021 10:43 Lab File ID: 072821A.B\0728A_13.D

Initial wt/vol: 5.17 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 16.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.77	U
1330-20-7	Xylene (Total)	<1.3	U
179601-23-1	m&p-Xylene	<0.73	U
95-47-6	o-Xylene	<0.43	U

SAMPLE NO.

GB-54/2-4'

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375481043

Date Analyzed: 07/28/2021 10:43 Lab File ID: 072821AGRO.B\0728A_13.D

Initial wt/vol: 5.17 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 16.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.063	U

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Wt Linear	0.11433	0.11555	0.08534	0.07545	0.08715	0.08586
Acetonitrile	Averaged	0.15454	0.20681	0.17010	0.15898	0.17265	0.16350
Acrolein	Averaged	0.03408	0.03913	0.02875	0.02849	0.03036	0.03125
Acrylonitrile	Averaged	0.06805	0.07430	0.06324	0.06315	0.06796	0.07100
Benzene	Averaged	1.38630	1.89829	1.57232	1.55484	1.68499	1.61993
Bromobenzene	Averaged	1.52367	1.75978	1.40500	1.38561	1.50972	1.46312
Bromochloromethane	Averaged	0.24723	0.27337	0.25015	0.25273	0.26243	0.23781
Bromodichloromethane	Averaged	0.38965	0.51981	0.45453	0.45010	0.50541	0.49568
Bromoform	Averaged	0.68861	0.49233	0.50804	0.51974	0.60027	0.63493
Bromomethane	Wt Linear	0.36027	0.31897	0.19392	0.17807	0.22723	0.23029
2-Butanone (MEK)	Averaged	0.11206	0.10468	0.10249	0.09648	0.11173	0.11558
n-Butylbenzene	Averaged	3.68783	3.54792	2.86627	2.79693	3.05325	2.85132
sec-Butylbenzene	Averaged	4.27501	5.01108	4.17150	4.06409	4.62868	4.33093
tert-Butylbenzene	Averaged	3.52566	3.65528	3.09159	2.98847	3.38982	3.15574
Carbon disulfide	Averaged	0.99466	1.30416	1.04682	0.98414	1.07975	0.98035
Carbon tetrachloride	Averaged	0.58397	0.79830	0.64918	0.60995	0.70172	0.67533
Chlorobenzene	Averaged	3.71211	4.54122	3.66634	3.53824	3.94990	3.71812
Chloroethane	Wt Linear	0.24512	0.36552	0.27474	0.23709	0.26076	0.24065
2-Chloroethylvinyl ether	Averaged	0.07977	0.08413	0.08450	0.08687	0.09960	0.10462
Chloroform	Averaged	0.71568	0.91280	0.75648	0.72105	0.80197	0.75378
Chloromethane	Averaged	0.30537	0.38181	0.30780	0.30928	0.32865	0.28974
2-Chlorotoluene	Averaged	3.10438	3.15369	2.82147	2.84381	3.04674	2.88160
4-Chlorotoluene	Averaged	1.33093	1.53386	1.23245	1.22655	1.33487	1.28092
Cyclohexane	Averaged	0.59082	0.81832	0.73842	0.69217	0.74907	0.74057
Cyclohexanone	Averaged	0.06878	0.08184	0.06672	0.07073	0.08431	0.08563
1,2-Dibromo-3-chloropropane	Wt Linear	0.08798	0.03942	0.06326	0.05838	0.06522	0.07209
Dibromochloromethane	Averaged	1.21549	1.23099	1.04395	1.03989	1.19941	1.20930
1,2-Dibromoethane (EDB)	Averaged	0.86677	1.02502	0.81998	0.86565	0.95035	0.95454
Dibromomethane	Averaged	0.20441	0.26855	0.22104	0.21465	0.22783	0.23294
1,2-Dichlorobenzene	Averaged	2.54293	2.45906	2.00056	1.99441	2.16702	2.02147
1,3-Dichlorobenzene	Averaged	2.80688	2.72732	2.24002	2.30703	2.44200	2.31884
1,4-Dichlorobenzene	Averaged	2.97987	2.69764	2.23697	2.27139	2.46710	2.30786
Dichlorodifluoromethane	Averaged	0.36948	0.58941	0.45682	0.43647	0.49217	0.45690
1,1-Dichloroethane	Averaged	0.59717	0.91196	0.76299	0.76278	0.81484	0.77740
1,2-Dichloroethane	Averaged	0.41579	0.51743	0.45401	0.43648	0.48670	0.47313

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1-Dichloroethene	Averaged	0.35616	0.51644	0.43047	0.38974	0.43514	0.40494
cis-1,2-Dichloroethene	Averaged	0.44841	0.60138	0.49135	0.48179	0.53578	0.50825
trans-1,2-Dichloroethene	Averaged	0.37658	0.54535	0.46678	0.44497	0.49525	0.47730
1,2-Dichloropropane	Averaged	0.36550	0.47625	0.41227	0.38836	0.43413	0.42577
1,3-Dichloropropane	Averaged	1.36362	1.50204	1.32049	1.32148	1.44613	1.40179
2,2-Dichloropropane	Averaged	0.58123	0.78787	0.64679	0.58049	0.65257	0.60881
1,1-Dichloropropene	Averaged	0.49708	0.62508	0.54974	0.51654	0.59065	0.56669
cis-1,3-Dichloropropene	Averaged	0.55049	0.64609	0.54405	0.54632	0.61450	0.59795
trans-1,3-Dichloropropene	Averaged	1.41887	1.64722	1.38018	1.36633	1.50560	1.52202
Diethyl ether (Ethyl ether)	Averaged	0.14179	0.19662	0.15627	0.15691	0.17448	0.16983
1,4-Dioxane (p-Dioxane)	Wt Linear				0.00100	0.00143	0.00154
Ethylbenzene	Averaged	1.70632	2.00905	1.81112	1.74235	1.97544	1.88105
n-Heptane	Averaged	0.06312	0.10382	0.08779	0.08069	0.09334	0.08785
Hexachloro-1,3-butadiene	Averaged		0.80083	0.59424	0.58961	0.63742	0.59615
n-Hexane	Averaged	0.52422	0.68558	0.57739	0.53056	0.62641	0.60005
2-Hexanone	Averaged	0.47098	0.45267	0.41525	0.37853	0.45129	0.46600
Isopropylbenzene (Cumene)	Averaged	4.85233	6.11952	5.20262	4.84000	5.44377	5.19588
p-Isopropyltoluene	Averaged	3.85970	4.45145	3.64513	3.69079	4.13422	3.80948
Methyl acetate	Averaged	0.15807	0.17945	0.13909	0.13925	0.15099	0.14992
Methylcyclohexane	Averaged	0.50965	0.79994	0.63205	0.57509	0.67390	0.64484
Methylene Chloride	Averaged	0.35106	0.45032	0.33586	0.33949	0.36453	0.34913
1-Methylnaphthalene	Averaged		0.70569	0.56827	0.57270	0.63643	0.66932
2-Methylnaphthalene	Wt Linear	1.32646	0.88418	0.64074	0.68131	0.79886	0.83344
4-Methyl-2-pentanone (MIBK)	Averaged	0.16983	0.19744	0.16501	0.16518	0.18715	0.19362
Methyl-tert-butyl ether	Averaged	0.65593	0.82056	0.73758	0.71479	0.80057	0.80787
Naphthalene	Averaged	1.94606	1.81215	1.49687	1.55739	1.74007	1.76295
n-Propylbenzene	Averaged	1.34174	1.61256	1.29505	1.25302	1.37625	1.32494
Styrene	Averaged	3.15682	3.81692	3.23428	3.24106	3.59540	3.46248
1,1,1,2-Tetrachloroethane	Averaged	1.30597	1.67992	1.32858	1.32942	1.50557	1.46464
1,1,2,2-Tetrachloroethane	Averaged	0.70908	0.69696	0.61028	0.63522	0.69061	0.70405
Tetrachloroethene	Averaged	1.77158	2.34647	1.98881	1.83313	2.02232	1.92238
Tetrahydrofuran	Averaged	0.04745	0.05710	0.04809	0.04960	0.05425	0.05781
Toluene	Averaged	3.14401	3.98938	3.23472	3.09746	3.44084	3.22670
1,2,3-Trichlorobenzene	Averaged	0.92755	0.99358	0.71159	0.74383	0.80504	0.82204
1,2,4-Trichlorobenzene	Averaged	1.27464	1.13017	0.98218	0.91255	1.05769	1.04185

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-3
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1,1-Trichloroethane	Averaged	0.63203	0.82816	0.72667	0.66061	0.75308	0.70405
1,1,2-Trichloroethane	Averaged	0.83114	0.89963	0.72984	0.69404	0.77627	0.76395
Trichloroethene	Averaged	0.46384	0.58439	0.47937	0.44923	0.49882	0.47971
Trichlorofluoromethane	Averaged	0.61074	0.93004	0.76728	0.71635	0.78258	0.71159
1,2,3-Trichloropropane	Averaged	0.25426	0.25414	0.18322	0.19371	0.19795	0.20576
1,2,3-Trimethylbenzene	Averaged	3.65241	3.83756	3.23307	3.18640	3.49794	3.23088
1,2,4-Trimethylbenzene	Averaged	3.53572	4.08879	3.35777	3.38343	3.67746	3.44530
1,3,5-Trimethylbenzene	Averaged	3.67031	4.16094	3.48076	3.38200	3.82410	3.57020
Vinyl chloride	Averaged	0.40782	0.53273	0.45398	0.42143	0.47784	0.44001
m&p-Xylene	Averaged	2.13591	2.60324	2.19995	2.09828	2.38972	2.23455
o-Xylene	Averaged	2.19676	2.51542	2.00259	1.96730	2.20973	2.16036
4-Bromofluorobenzene (S)	Averaged	0.77622	0.77774	0.74845	0.76015	0.77787	0.75365
1,2-Dichlorobenzene-d4 (S)	Averaged	0.85452	0.83377	0.82298	0.83747	0.83975	0.84155
Toluene-d8 (S)	Averaged	2.86470	2.88478	2.91207	2.85698	2.84025	2.85457

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acetone	Wt Linear	0.07683	0.07565
Acetonitrile	Averaged	0.15134	0.13297
Acrolein	Averaged	0.03270	0.03302
Acrylonitrile	Averaged	0.06941	0.06971
Benzene	Averaged	1.59617	1.52881
Bromobenzene	Averaged	1.50469	1.47616
Bromochloromethane	Averaged	0.23104	0.22648
Bromodichloromethane	Averaged	0.50821	0.50528
Bromoform	Averaged	0.62828	0.65931
Bromomethane	Wt Linear	0.25837	0.28122
2-Butanone (MEK)	Averaged	0.10100	0.11337
n-Butylbenzene	Averaged	2.88657	2.91044
sec-Butylbenzene	Averaged	4.21764	3.97899
tert-Butylbenzene	Averaged	3.10629	3.00589
Carbon disulfide	Averaged	0.97569	0.95079
Carbon tetrachloride	Averaged	0.69403	0.69713
Chlorobenzene	Averaged	3.69329	3.67229
Chloroethane	Wt Linear	0.24291	0.24177
2-Chloroethylvinyl ether	Averaged	0.10184	0.10761
Chloroform	Averaged	0.75234	0.74001
Chloromethane	Averaged	0.32757	0.36065
2-Chlorotoluene	Averaged	2.78828	2.81752
4-Chlorotoluene	Averaged	1.33638	1.32327
Cyclohexane	Averaged	0.71510	0.76522
Cyclohexanone	Averaged	0.07874	0.08088
1,2-Dibromo-3-chloropropane	Wt Linear	0.06906	0.07643
Dibromochloromethane	Averaged	1.24870	1.34317
1,2-Dibromoethane (EDB)	Averaged	0.93028	0.96787
Dibromomethane	Averaged	0.22815	0.22832
1,2-Dichlorobenzene	Averaged	2.02552	2.06886
1,3-Dichlorobenzene	Averaged	2.34315	2.32672
1,4-Dichlorobenzene	Averaged	2.31564	2.31392
Dichlorodifluoromethane	Averaged	0.45946	0.44370
1,1-Dichloroethane	Averaged	0.78366	0.78271
1,2-Dichloroethane	Averaged	0.45873	0.45448

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1-Dichloroethene	Averaged	0.39276	0.36246
cis-1,2-Dichloroethene	Averaged	0.52440	0.52362
trans-1,2-Dichloroethene	Averaged	0.49350	0.49212
1,2-Dichloropropane	Averaged	0.42533	0.43319
1,3-Dichloropropane	Averaged	1.36220	1.42034
2,2-Dichloropropane	Averaged	0.63079	0.62334
1,1-Dichloropropene	Averaged	0.57171	0.57578
cis-1,3-Dichloropropene	Averaged	0.60744	0.60173
trans-1,3-Dichloropropene	Averaged	1.47319	1.59351
Diethyl ether (Ethyl ether)	Averaged	0.16895	0.17311
1,4-Dioxane (p-Dioxane)	Wt Linear	0.00140	0.00136
Ethylbenzene	Averaged	1.89619	1.94547
n-Heptane	Averaged	0.09001	0.09310
Hexachloro-1,3-butadiene	Averaged	0.64474	0.75349
n-Hexane	Averaged	0.59635	0.59887
2-Hexanone	Averaged	0.43384	0.43456
Isopropylbenzene (Cumene)	Averaged	4.94301	4.67459
p-Isopropyltoluene	Averaged	3.78986	3.65500
Methyl acetate	Averaged	0.13680	0.12942
Methylcyclohexane	Averaged	0.64642	0.64117
Methylene Chloride	Averaged	0.35073	0.36851
1-Methylnaphthalene	Averaged	0.76009	0.80610
2-Methylnaphthalene	Wt Linear	0.90149	1.00297
4-Methyl-2-pentanone (MIBK)	Averaged	0.18222	0.17116
Methyl-tert-butyl ether	Averaged	0.78567	0.79804
Naphthalene	Averaged	1.85615	2.01492
n-Propylbenzene	Averaged	1.37008	1.35466
Styrene	Averaged	3.38618	3.36382
1,1,1,2-Tetrachloroethane	Averaged	1.47529	1.51651
1,1,2,2-Tetrachloroethane	Averaged	0.70142	0.65932
Tetrachloroethene	Averaged	1.94600	2.06966
Tetrahydrofuran	Averaged	0.05484	0.05448
Toluene	Averaged	3.24715	3.47515
1,2,3-Trichlorobenzene	Averaged	0.86645	0.97634
1,2,4-Trichlorobenzene	Averaged	1.10000	1.21254

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1,1-Trichloroethane	Averaged	0.71454	0.71695
1,1,2-Trichloroethane	Averaged	0.73245	0.78527
Trichloroethene	Averaged	0.48101	0.48458
Trichlorofluoromethane	Averaged	0.67551	0.60475
1,2,3-Trichloropropane	Averaged	0.20383	0.18742
1,2,3-Trimethylbenzene	Averaged	3.21615	3.21287
1,2,4-Trimethylbenzene	Averaged	3.43390	3.35643
1,3,5-Trimethylbenzene	Averaged	3.58556	3.42863
Vinyl chloride	Averaged	0.44466	0.43685
m&p-Xylene	Averaged	2.24098	2.18349
o-Xylene	Averaged	2.13897	2.17457
4-Bromofluorobenzene (S)	Averaged	0.76554	0.73909
1,2-Dichlorobenzene-d4 (S)	Averaged	0.83808	0.85782
Toluene-d8 (S)	Averaged	2.85771	3.04022

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-7
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Wt Linear		0.99730	0.00244870	0.07763	
Acetonitrile	Averaged	13.01359			0.16386	
Acrolein	Averaged	10.64979			0.03222	
Acrylonitrile	Averaged	5.49340			0.06835	
Benzene	Averaged	9.11737			1.60521	
Bromobenzene	Averaged	7.62946			1.50347	
Bromochloromethane	Averaged	6.35306			0.24765	
Bromodichloromethane	Averaged	9.21074			0.47858	
Bromoform	Averaged	12.66784			0.59144	
Bromomethane	Wt Linear		0.99030	-0.0002694	0.26258	
2-Butanone (MEK)	Averaged	6.45022			0.10717	
n-Butylbenzene	Averaged	11.21945			3.07507	
sec-Butylbenzene	Averaged	7.73823			4.33474	
tert-Butylbenzene	Averaged	7.75237			3.23984	
Carbon disulfide	Averaged	11.04200			1.03955	
Carbon tetrachloride	Averaged	9.67190			0.67620	
Chlorobenzene	Averaged	8.29288			3.81144	
Chloroethane	Wt Linear		0.99907	0.00086200	0.24264	
2-Chloroethylvinyl ether	Averaged	11.63448			0.09362	
Chloroform	Averaged	8.28227			0.76926	
Chloromethane	Averaged	9.46207			0.32636	
2-Chlorotoluene	Averaged	4.96436			2.93219	
4-Chlorotoluene	Averaged	7.22200			1.32490	
Cyclohexane	Averaged	9.08889			0.72621	
Cyclohexanone	Averaged	9.56277			0.07721	
1,2-Dibromo-3-chloropropane	Wt Linear		0.99580	-0.0002658	0.07293	
Dibromochloromethane	Averaged	8.60361			1.19136	
1,2-Dibromoethane (EDB)	Averaged	7.24600			0.92256	
Dibromomethane	Averaged	8.19970			0.22824	
1,2-Dichlorobenzene	Averaged	10.12117			2.15998	
1,3-Dichlorobenzene	Averaged	8.65197			2.43900	
1,4-Dichlorobenzene	Averaged	10.65351			2.44880	
Dichlorodifluoromethane	Averaged	13.34774			0.46305	
1,1-Dichloroethane	Averaged	11.17533			0.77419	
1,2-Dichloroethane	Averaged	6.70711			0.46209	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 11:48

MSV - FORM VI VOA-8
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1-Dichloroethene	Averaged	12.42762			0.41101	
cis-1,2-Dichloroethene	Averaged	8.75497			0.51437	
trans-1,2-Dichloroethene	Averaged	10.28892			0.47398	
1,2-Dichloropropane	Averaged	7.85905			0.42010	
1,3-Dichloropropane	Averaged	4.51962			1.39226	
2,2-Dichloropropane	Averaged	10.31165			0.63899	
1,1-Dichloropropene	Averaged	7.22782			0.56166	
cis-1,3-Dichloropropene	Averaged	6.36240			0.58857	
trans-1,3-Dichloropropene	Averaged	6.68881			1.48836	
Diethyl ether (Ethyl ether)	Averaged	9.67885			0.16725	
1,4-Dioxane (p-Dioxane)	Wt Linear		0.99496	-0.0001734	0.00141	
Ethylbenzene	Averaged	5.83787			1.87087	
n-Heptane	Averaged	13.52389			0.08747	
Hexachloro-1,3-butadiene	Averaged	12.78713			0.65950	
n-Hexane	Averaged	8.71369			0.59243	
2-Hexanone	Averaged	6.87653			0.43789	
Isopropylbenzene (Cumene)	Averaged	8.92514			5.15896	
p-Isopropyltoluene	Averaged	7.20093			3.87945	
Methyl acetate	Averaged	10.63073			0.14787	
Methylcyclohexane	Averaged	12.93924			0.64038	
Methylene Chloride	Averaged	10.09057			0.36370	
1-Methylnaphthalene	Averaged	13.37082			0.67408	
2-Methylnaphthalene	Wt Linear		0.99072	-0.0020451	0.93334	
4-Methyl-2-pentanone (MIBK)	Averaged	7.20363			0.17895	
Methyl-tert-butyl ether	Averaged	7.47174			0.76513	
Naphthalene	Averaged	10.01633			1.77332	
n-Propylbenzene	Averaged	7.88023			1.36604	
Styrene	Averaged	6.36169			3.40712	
1,1,1,2-Tetrachloroethane	Averaged	8.68998			1.45074	
1,1,2,2-Tetrachloroethane	Averaged	5.43351			0.67587	
Tetrachloroethene	Averaged	8.78144			1.98754	
Tetrahydrofuran	Averaged	7.60349			0.05295	
Toluene	Averaged	8.55718			3.35692	
1,2,3-Trichlorobenzene	Averaged	12.16121			0.85580	
1,2,4-Trichlorobenzene	Averaged	10.82615			1.08895	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 11:48

MSV - FORM VI VOA-9

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1,1-Trichloroethane	Averaged	8.22157			0.71701	
1,1,2-Trichloroethane	Averaged	8.33080			0.77657	
Trichloroethene	Averaged	8.32847			0.49012	
Trichlorofluoromethane	Averaged	14.50341			0.72486	
1,2,3-Trichloropropane	Averaged	13.46690			0.21004	
1,2,3-Trimethylbenzene	Averaged	7.35491			3.38341	
1,2,4-Trimethylbenzene	Averaged	7.02394			3.53485	
1,3,5-Trimethylbenzene	Averaged	6.97436			3.63781	
Vinyl chloride	Averaged	8.57098			0.45191	
m&p-Xylene	Averaged	7.22305			2.26077	
o-Xylene	Averaged	7.62552			2.17071	
4-Bromofluorobenzene (S)	Averaged	1.91725			0.76234	
1,2-Dichlorobenzene-d4 (S)	Averaged	1.32184			0.84074	
Toluene-d8 (S)	Averaged	2.25001			2.88891	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Averaged	0.15923	0.14293	0.12603	0.13635	0.12235	0.11988
Acrolein	Averaged	0.05049	0.04990	0.05350	0.05490	0.05571	0.05649
Acrylonitrile	Averaged	0.09636	0.09689	0.10184	0.10239	0.10374	0.10225
Benzene	Averaged	1.08325	1.01715	0.99635	1.01610	1.05444	1.05031
Bromobenzene	Averaged	0.87511	0.80229	0.84068	0.81596	0.83768	0.85540
Bromochloromethane	Averaged	0.14232	0.14333	0.15095	0.14744	0.15615	0.15318
Bromodichloromethane	Averaged	0.30798	0.31054	0.32468	0.34262	0.36483	0.37931
Bromoform	Wt Linear	0.35231	0.38302	0.41012	0.44460	0.51032	0.56413
Bromomethane	Averaged		0.22512	0.23496	0.21211	0.20410	0.19757
2-Butanone (MEK)	Averaged	0.16636	0.15804	0.15809	0.16388	0.15910	0.16163
n-Butylbenzene	Averaged	2.32319	2.37338	2.45743	2.42033	2.58194	2.55226
sec-Butylbenzene	Averaged	3.16535	3.13988	3.04574	3.01605	3.13518	3.12433
tert-Butylbenzene	Averaged	2.14291	2.08224	2.00502	1.94892	2.03443	2.02846
Carbon disulfide	Averaged	0.71337	0.73815	0.71642	0.74090	0.80119	0.79916
Carbon tetrachloride	Averaged	0.35068	0.32782	0.33649	0.35145	0.38748	0.39165
Chlorobenzene	Averaged	1.96400	1.94490	1.96022	1.95701	2.05107	2.06169
Chloroethane	Averaged	0.15143	0.16121	0.16527	0.16321	0.17535	0.16595
Chloroform	Averaged	0.50170	0.48403	0.48569	0.48340	0.49980	0.50113
Chloromethane	Averaged	0.49368	0.47456	0.45102	0.43471	0.44797	0.42151
2-Chlorotoluene	Averaged	2.05291	1.91186	1.91326	1.87496	1.91053	1.89647
4-Chlorotoluene	Averaged	0.74633	0.72720	0.73282	0.71300	0.73812	0.74670
Cyclohexanone	Averaged	0.19231	0.20577	0.20295	0.20807	0.19700	0.20028
1,2-Dibromo-3-chloropropane	Averaged		0.07784	0.09498	0.10073	0.11146	0.11813
Dibromochloromethane	Averaged	0.55734	0.58065	0.61209	0.65856	0.73107	0.77400
1,2-Dibromoethane (EDB)	Averaged	0.52588	0.56669	0.61400	0.64343	0.67056	0.68434
Dibromomethane	Averaged	0.16622	0.17244	0.17741	0.18762	0.18942	0.19148
1,2-Dichlorobenzene	Averaged	1.65495	1.58339	1.58626	1.54101	1.56591	1.58910
1,3-Dichlorobenzene	Averaged	1.61507	1.55924	1.54813	1.53485	1.59023	1.59840
1,4-Dichlorobenzene	Averaged	1.60178	1.55364	1.57268	1.56302	1.61434	1.62072
1,1-Dichloroethane	Averaged	0.53306	0.49349	0.48440	0.49470	0.51096	0.51064
1,2-Dichloroethane	Averaged	0.38342	0.37147	0.37850	0.39082	0.40047	0.39489
1,1-Dichloroethene	Averaged	0.22867	0.22066	0.20403	0.21896	0.23696	0.23371
cis-1,2-Dichloroethene	Averaged	0.28850	0.28417	0.29350	0.29697	0.30845	0.31080
trans-1,2-Dichloroethene	Averaged	0.27385	0.25016	0.25023	0.25313	0.26852	0.26782
1,2-Dichloropropane	Averaged	0.32567	0.29733	0.30218	0.31208	0.31920	0.32452

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,3-Dichloropropane	Averaged	0.87527	0.87776	0.89381	0.92931	0.96923	0.97449
2,2-Dichloropropane	Averaged	0.38563	0.34786	0.34105	0.33614	0.36225	0.36747
1,1-Dichloropropene	Averaged	0.35302	0.33085	0.32449	0.33310	0.35183	0.35072
cis-1,3-Dichloropropene	Averaged	0.35468	0.34384	0.38196	0.42266	0.44080	0.46480
trans-1,3-Dichloropropene	Averaged	0.68873	0.71644	0.83309	0.85135	0.94252	0.97404
Diethyl ether (Ethyl ether)	Averaged	0.11330	0.12010	0.12513	0.12985	0.13386	0.13073
Ethylbenzene	Averaged	1.03975	0.96221	0.96300	1.00525	1.02750	1.02593
n-Heptane	Averaged	1.13824	1.13427	1.07511	1.11117	1.18296	1.18495
Hexachloro-1,3-butadiene	Averaged	0.70369	0.71995	0.73697	0.74532	0.81945	0.81229
n-Hexane	Averaged	0.44035	0.44258	0.39152	0.40217	0.42756	0.42712
2-Hexanone	Averaged	0.60977	0.62550	0.58885	0.62001	0.60096	0.60501
Iodomethane	Wt Linear	0.09299	0.12158	0.14590	0.20678	0.29807	0.31374
Isopropylbenzene (Cumene)	Averaged	3.24447	3.20342	3.12427	3.16525	3.34238	3.33538
p-Isopropyltoluene	Averaged	2.81087	2.74400	2.71815	2.72329	2.80552	2.77443
Methyl acetate	Averaged	0.20386	0.19567	0.20536	0.20837	0.20401	0.19908
Methylene Chloride	Averaged		0.35099	0.33064	0.31591	0.30508	0.29952
4-Methyl-2-pentanone (MIBK)	Averaged	0.32467	0.30636	0.31764	0.32279	0.31609	0.31614
Methyl-tert-butyl ether	Averaged	0.67455	0.65641	0.67417	0.69305	0.69729	0.69431
Naphthalene	Wt Linear	0.37414	0.47887	0.95469	1.66405	2.36863	2.51379
n-Propylbenzene	Averaged	0.77237	0.72028	0.74995	0.71132	0.73603	0.76035
Styrene	Averaged	2.04251	2.01818	2.02462	2.07699	2.19775	2.22949
1,1,1,2-Tetrachloroethane	Averaged	0.65629	0.64981	0.67413	0.70266	0.76604	0.78242
1,1,2,2-Tetrachloroethane	Averaged	0.61175	0.65189	0.69676	0.67563	0.68438	0.69844
Tetrachloroethene	Averaged	0.90090	0.87776	0.83105	0.84703	0.90156	0.89463
Tetrahydrofuran	Averaged	0.45154	0.44170	0.47239	0.45137	0.44459	0.43412
Toluene	Averaged	1.71680	1.69394	1.58938	1.62267	1.67118	1.65751
1,2,3-Trichlorobenzene	Wt Linear	0.30463	0.47371	0.76528	1.04612	1.23433	1.25892
1,2,4-Trichlorobenzene	Wt Linear	0.36361	0.53222	0.80658	1.08901	1.31898	1.34283
1,1,1-Trichloroethane	Averaged	0.41562	0.38930	0.38440	0.40395	0.42503	0.43144
1,1,2-Trichloroethane	Averaged	0.46716	0.49061	0.50586	0.51708	0.53297	0.53869
Trichloroethene	Averaged	0.29444	0.27344	0.27878	0.27958	0.29926	0.29988
Trichlorofluoromethane	Averaged	0.37347	0.39139	0.38699	0.41100	0.44913	0.44074
1,2,3-Trichloropropane	Averaged	0.17668	0.16654	0.17686	0.17010	0.17289	0.17750
1,1,2-Trichlorotrifluoroethane	Averaged	0.24954	0.25467	0.24477	0.25581	0.27739	0.27127
1,2,3-Trimethylbenzene	Averaged	2.60345	2.53092	2.53408	2.49963	2.54417	2.51573

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 11:48

MSV - FORM VI VOA-3
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,2,4-Trimethylbenzene	Averaged	2.62920	2.49052	2.46845	2.37006	2.42797	2.47526
1,3,5-Trimethylbenzene	Averaged	2.54778	2.35944	2.37664	2.31198	2.37179	2.39605
Vinyl acetate	Averaged	1.08781	1.02843	1.07423	1.11056	1.10954	1.09981
Vinyl chloride	Averaged	0.33078	0.32760	0.31790	0.31063	0.34036	0.32315
m&p-Xylene	Averaged	1.30122	1.29263	1.23340	1.24768	1.32252	1.32196
o-Xylene	Averaged	1.31128	1.29656	1.25258	1.27944	1.33402	1.33148
4-Bromofluorobenzene (S)	Averaged	0.76768	0.76771	0.77495	0.73807	0.73102	0.73597
1,2-Dichlorobenzene-d4 (S)	Averaged	0.96851	0.94566	0.96152	0.93816	0.93436	0.92085
Toluene-d8 (S)	Averaged	2.35404	2.38810	2.36003	2.41419	2.37744	2.38276

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
Acetone	Averaged	0.11043	12.51767			0.13103	
Acrolein	Averaged	0.05346	4.69471			0.05349	
Acrylonitrile	Averaged	0.09643	3.26151			0.09999	
Benzene	Averaged	0.99199	3.26409			1.02994	
Bromobenzene	Averaged	0.80865	3.16553			0.83368	
Bromochloromethane	Averaged	0.14428	3.59066			0.14823	
Bromodichloromethane	Averaged	0.37152	8.60104			0.34307	
Bromoform	Wt Linear	0.61749		0.99898	-0.0291224	0.62253	
Bromomethane	Averaged	0.17477	10.22701			0.20810	
2-Butanone (MEK)	Averaged	0.15064	3.16513			0.15968	
n-Butylbenzene	Averaged	2.38143	3.91946			2.44142	
sec-Butylbenzene	Averaged	2.85278	3.56602			3.06847	
tert-Butylbenzene	Averaged	1.86876	4.40404			2.01582	
Carbon disulfide	Averaged	0.76833	4.83021			0.75393	
Carbon tetrachloride	Averaged	0.37562	6.94016			0.36017	
Chlorobenzene	Averaged	1.89924	2.96289			1.97688	
Chloroethane	Averaged	0.14801	5.72083			0.16149	
Chloroform	Averaged	0.47030	2.41804			0.48944	
Chloromethane	Averaged	0.38409	8.04271			0.44393	
2-Chlorotoluene	Averaged	1.78818	4.09689			1.90688	
4-Chlorotoluene	Averaged	0.70135	2.33111			0.72936	
Cyclohexanone	Averaged	0.19146	3.21568			0.19969	
1,2-Dibromo-3-chloropropane	Averaged	0.11550	14.77076			0.10311	
Dibromochloromethane	Averaged	0.77169	13.50690			0.66934	
1,2-Dibromoethane (EDB)	Averaged	0.65308	9.28072			0.62257	
Dibromomethane	Averaged	0.18416	5.22847			0.18125	
1,2-Dichlorobenzene	Averaged	1.43675	4.24453			1.56534	
1,3-Dichlorobenzene	Averaged	1.47729	2.98700			1.56046	
1,4-Dichlorobenzene	Averaged	1.49050	2.85233			1.57381	
1,1-Dichloroethane	Averaged	0.49890	3.18416			0.50374	
1,2-Dichloroethane	Averaged	0.36912	3.09015			0.38410	
1,1-Dichloroethene	Averaged	0.23021	4.98811			0.22474	
cis-1,2-Dichloroethene	Averaged	0.29127	3.37329			0.29624	
trans-1,2-Dichloroethene	Averaged	0.25250	3.91502			0.25946	
1,2-Dichloropropane	Averaged	0.31137	3.44252			0.31319	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
1,3-Dichloropropane	Averaged	0.90822	4.46103			0.91830	
2,2-Dichloropropane	Averaged	0.34804	4.86502			0.35549	
1,1-Dichloropropene	Averaged	0.33491	3.44440			0.33985	
cis-1,3-Dichloropropene	Averaged	0.44506	11.64700			0.40769	
trans-1,3-Dichloropropene	Averaged	0.94486	13.33198			0.85015	
Diethyl ether (Ethyl ether)	Averaged	0.12293	5.65115			0.12513	
Ethylbenzene	Averaged	0.98565	3.16518			1.00133	
n-Heptane	Averaged	1.11273	3.49939			1.13421	
Hexachloro-1,3-butadiene	Averaged	0.78120	5.94394			0.75984	
n-Hexane	Averaged	0.40856	4.65364			0.41998	
2-Hexanone	Averaged	0.55784	3.75932			0.60114	
Iodomethane	Wt Linear	0.29728		0.99896	-0.0073354	0.30182	
Isopropylbenzene (Cumene)	Averaged	3.27947	2.56348			3.24209	
p-Isopropyltoluene	Averaged	2.55970	3.11490			2.73371	
Methyl acetate	Averaged	0.17968	4.84374			0.19943	
Methylene Chloride	Averaged	0.28100	7.84016			0.31386	
4-Methyl-2-pentanone (MIBK)	Averaged	0.30150	2.65818			0.31503	
Methyl-tert-butyl ether	Averaged	0.65879	2.49967			0.67837	
Naphthalene	Wt Linear	2.35978		0.99869	-0.0652234	2.40117	
n-Propylbenzene	Averaged	0.71049	3.32523			0.73726	
Styrene	Averaged	2.13660	4.06020			2.10373	
1,1,1,2-Tetrachloroethane	Averaged	0.76859	7.98937			0.71428	
1,1,2,2-Tetrachloroethane	Averaged	0.68288	4.56113			0.67167	
Tetrachloroethene	Averaged	0.82930	3.73208			0.86889	
Tetrahydrofuran	Averaged	0.40860	4.38815			0.44347	
Toluene	Averaged	1.53704	3.81644			1.64122	
1,2,3-Trichlorobenzene	Wt Linear	1.16921		0.99880	-0.0084481	1.18242	
1,2,4-Trichlorobenzene	Wt Linear	1.24128		0.99865	-0.0080417	1.25561	
1,1,1-Trichloroethane	Averaged	0.41073	4.26780			0.40864	
1,1,2-Trichloroethane	Averaged	0.50819	4.82903			0.50865	
Trichloroethene	Averaged	0.28525	3.70828			0.28723	
Trichlorofluoromethane	Averaged	0.41859	6.86711			0.41019	
1,2,3-Trichloropropane	Averaged	0.17088	2.39817			0.17306	
1,1,2-Trichlorotrifluoroethane	Averaged	0.25433	4.54814			0.25825	
1,2,3-Trimethylbenzene	Averaged	2.30306	3.77627			2.50443	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 11:48

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
1,2,4-Trimethylbenzene	Averaged	2.27832	4.44490			2.44854	
1,3,5-Trimethylbenzene	Averaged	2.24133	3.93711			2.37214	
Vinyl acetate	Averaged	1.03396	3.17763			1.07776	
Vinyl chloride	Averaged	0.30428	3.81653			0.32210	
m&p-Xylene	Averaged	1.20812	3.56607			1.27536	
o-Xylene	Averaged	1.25232	2.63509			1.29395	
4-Bromofluorobenzene (S)	Averaged	0.74644	2.39291			0.75169	
1,2-Dichlorobenzene-d4 (S)	Averaged	0.91338	2.13470			0.94035	
Toluene-d8 (S)	Averaged	2.32551	1.19384			2.37172	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19726928ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:32

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721A.B\0727A_17.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	117.8537	0.0500	17.8538	20.0000
Acetonitrile	Averaged	0.16386	0.16851	0.0500	2.8354	20.0000
Acrolein	Averaged	0.03222	0.03329	0.0500	3.3161	20.0000
Acrylonitrile	Averaged	0.06835	0.06930	0.0500	1.3840	20.0000
Benzene	Averaged	1.60521	1.69206	0.3000	5.4108	20.0000
Bromobenzene	Averaged	1.50347	1.50251	0.0500	-0.0639	20.0000
Bromochloromethane	Averaged	0.24765	0.25530	0.0500	3.0880	20.0000
Bromodichloromethane	Averaged	0.47858	0.52110	0.0500	8.8837	20.0000
Bromoform	Averaged	0.59144	0.62580	0.1000	5.8088	20.0000
Bromomethane	Wt Linear	20	22.25395	0.0500	11.2698	20.0000
2-Butanone (MEK)	Averaged	0.10717	0.11685	0.0500	9.0311	20.0000
n-Butylbenzene	Averaged	3.07507	3.04790	0.0500	-0.8836	20.0000
sec-Butylbenzene	Averaged	4.33474	4.49869	0.0500	3.7823	20.0000
tert-Butylbenzene	Averaged	3.23984	3.37951	0.0500	4.3111	20.0000
Carbon disulfide	Averaged	1.03955	1.07879	0.0500	3.7751	20.0000
Carbon tetrachloride	Averaged	0.67620	0.70712	0.1000	4.5721	20.0000
Chlorobenzene	Averaged	3.81144	3.92216	0.3000	2.9050	20.0000
Chloroethane	Wt Linear	20	20.82950	0.0500	4.1475	20.0000
2-Chloroethylvinyl ether	Averaged	0.09362	0.10248	0.0500	9.4648	20.0000
Chloroform	Averaged	0.76926	0.80710	0.0500	4.9178	20.0000
Chloromethane	Averaged	0.32636	0.31020	0.1000	-4.9527	20.0000
2-Chlorotoluene	Averaged	2.93219	3.15036	0.0500	7.4406	20.0000
4-Chlorotoluene	Averaged	1.32490	1.36462	0.0500	2.9976	20.0000
Cyclohexane	Averaged	0.72621	0.75686	0.0500	4.2203	20.0000
Cyclohexanone	Averaged	0.07721	0.07977	0.0500	3.3284	20.0000
1,2-Dibromo-3-chloropropane	Wt Linear	20	20.12894	0.0500	0.6447	20.0000
Dibromochloromethane	Averaged	1.19136	1.25232	0.0500	5.1165	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.92256	0.97698	0.0500	5.8991	20.0000
Dibromomethane	Averaged	0.22824	0.23484	0.0500	2.8945	20.0000
1,2-Dichlorobenzene	Averaged	2.15998	2.14890	0.0500	-0.5131	20.0000
1,3-Dichlorobenzene	Averaged	2.43900	2.51537	0.0500	3.1312	20.0000
1,4-Dichlorobenzene	Averaged	2.44880	2.50372	0.0500	2.2429	20.0000
Dichlorodifluoromethane	Averaged	0.46305	0.49914	0.0500	7.7927	20.0000
1,1-Dichloroethane	Averaged	0.77419	0.82989	0.1000	7.1942	20.0000
1,2-Dichloroethane	Averaged	0.46209	0.48014	0.0500	3.9059	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19726928ICV

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:32

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721A.B\0727A_17.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41101	0.44014	0.1000	7.0858	20.0000
cis-1,2-Dichloroethene	Averaged	0.51437	0.52408	0.1000	1.8869	20.0000
trans-1,2-Dichloroethene	Averaged	0.47398	0.50787	0.1000	7.1495	20.0000
1,2-Dichloropropane	Averaged	0.42010	0.44923	0.0500	6.9332	20.0000
1,3-Dichloropropane	Averaged	1.39226	1.41537	0.0500	1.6598	20.0000
2,2-Dichloropropane	Averaged	0.63899	0.62170	0.0500	-2.7056	20.0000
1,1-Dichloropropene	Averaged	0.56166	0.58944	0.0500	4.9457	20.0000
cis-1,3-Dichloropropene	Averaged	0.58857	0.62415	0.0500	6.0438	20.0000
trans-1,3-Dichloropropene	Averaged	1.48836	1.55547	0.0500	4.5087	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.16725	0.17361	0.0500	3.8067	20.0000
1,4-Dioxane (p-Dioxane)	Wt Linear	100	104.0454	0.0500	4.0455	20.0000
Ethylbenzene	Averaged	1.87087	1.96909	0.3000	5.2496	20.0000
n-Heptane	Averaged	0.08747	0.09499	0.0500	8.6008	20.0000
Hexachloro-1,3-butadiene	Averaged	0.65950	0.67640	0.0500	2.5636	20.0000
n-Hexane	Averaged	0.59243	0.61529	0.0500	3.8589	20.0000
2-Hexanone	Averaged	0.43789	0.49733	0.0500	13.5745	20.0000
Isopropylbenzene (Cumene)	Averaged	5.15896	5.46237	0.0500	5.8812	20.0000
p-Isopropyltoluene	Averaged	3.87945	4.18266	0.0500	7.8157	20.0000
Methyl acetate	Averaged	0.14787	0.14795	0.0500	0.0535	20.0000
Methylcyclohexane	Averaged	0.64038	0.67668	0.0500	5.6685	20.0000
Methylene Chloride	Averaged	0.36370	0.36734	0.0500	1.0011	20.0000
1-Methylnaphthalene	Averaged	0.67408	0.68851	0.0500	2.1403	20.0000
2-Methylnaphthalene	Wt Linear	20	18.33865	0.0500	-8.3067	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.17895	0.18490	0.0500	3.3227	20.0000
Methyl-tert-butyl ether	Averaged	0.76513	0.80980	0.3000	5.8394	20.0000
Naphthalene	Averaged	1.77332	1.76001	0.3000	-0.7506	20.0000
n-Propylbenzene	Averaged	1.36604	1.41864	0.0500	3.8504	20.0000
Styrene	Averaged	3.40712	3.62151	0.0500	6.2925	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.45074	1.46338	0.0500	0.8712	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67587	0.70551	0.3000	4.3852	20.0000
Tetrachloroethene	Averaged	1.98754	2.03892	0.1000	2.5850	20.0000
Tetrahydrofuran	Averaged	0.05295	0.05424	0.0500	2.4398	20.0000
Toluene	Averaged	3.35692	3.39361	0.3000	1.0928	20.0000
1,2,3-Trichlorobenzene	Averaged	0.85580	0.85826	0.0500	0.2870	20.0000
1,2,4-Trichlorobenzene	Averaged	1.08895	1.08136	0.0500	-0.6969	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 11:48

SAMPLE NO.

19726928ICV

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:32

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721A.B\0727A_17.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.71701	0.71107	0.0500	-0.8286	20.0000
1,1,2-Trichloroethane	Averaged	0.77657	0.74628	0.0500	-3.9009	20.0000
Trichloroethene	Averaged	0.49012	0.50166	0.1000	2.3558	20.0000
Trichlorofluoromethane	Averaged	0.72486	0.77333	0.0500	6.6874	20.0000
1,2,3-Trichloropropane	Averaged	0.21004	0.21628	0.0500	2.9715	20.0000
1,2,3-Trimethylbenzene	Averaged	3.38341	3.56780	0.0500	5.4497	20.0000
1,2,4-Trimethylbenzene	Averaged	3.53485	3.71462	0.0500	5.0856	20.0000
1,3,5-Trimethylbenzene	Averaged	3.63781	3.79984	0.0500	4.4541	20.0000
Vinyl chloride	Averaged	0.45191	0.47913	0.0500	6.0216	20.0000
m&p-Xylene	Averaged	2.26077	2.33342	0.3000	3.2137	20.0000
o-Xylene	Averaged	2.17071	2.23268	0.3000	2.8548	20.0000
4-Bromofluorobenzene (S)	Averaged	0.76234	0.77081	0.3000	1.1116	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.84074	0.83365	0.2000	-0.8435	20.0000
Toluene-d8 (S)	Averaged	2.88891	2.85437	0.3000	-1.1954	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 11:48

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19732452CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:12

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072821A.B\0728A_03CCV.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	90.18074	0.0500	-9.8193	20.0000
Acetonitrile	Averaged	0.16386	0.15627	0.0500	-4.6324	20.0000
Acrolein	Averaged	0.03222	0.02899	0.0500	-10.0161	20.0000
Acrylonitrile	Averaged	0.06835	0.06085	0.0500	-10.9821	20.0000
Benzene	Averaged	1.60521	1.61406	0.3000	0.5516	20.0000
Bromobenzene	Averaged	1.50347	1.42497	0.0500	-5.2215	20.0000
Bromochloromethane	Averaged	0.24765	0.24219	0.0500	-2.2055	20.0000
Bromodichloromethane	Averaged	0.47858	0.45775	0.0500	-4.3534	20.0000
Bromoform	Averaged	0.59144	0.52591	0.1000	-11.0794	20.0000
Bromomethane	Wt Linear	20	13.07583	0.0500	-34.6208	20.0000
2-Butanone (MEK)	Averaged	0.10717	0.09225	0.0500	-13.9223	20.0000
n-Butylbenzene	Averaged	3.07507	2.90005	0.0500	-5.6915	20.0000
sec-Butylbenzene	Averaged	4.33474	4.38827	0.0500	1.2350	20.0000
tert-Butylbenzene	Averaged	3.23984	3.22007	0.0500	-0.6104	20.0000
Carbon disulfide	Averaged	1.03955	1.00314	0.0500	-3.5025	20.0000
Carbon tetrachloride	Averaged	0.67620	0.63312	0.1000	-6.3718	20.0000
Chlorobenzene	Averaged	3.81144	3.71640	0.3000	-2.4935	20.0000
Chloroethane	Wt Linear	20	20.20239	0.0500	1.0119	20.0000
2-Chloroethylvinyl ether	Averaged	0.09362	0.07702	0.0500	-17.7311	20.0000
Chloroform	Averaged	0.76926	0.71795	0.0500	-6.6712	20.0000
Chloromethane	Averaged	0.32636	0.30241	0.1000	-7.3372	20.0000
2-Chlorotoluene	Averaged	2.93219	2.90844	0.0500	-0.8101	20.0000
4-Chlorotoluene	Averaged	1.32490	1.29435	0.0500	-2.3058	20.0000
Cyclohexane	Averaged	0.72621	0.70982	0.0500	-2.2577	20.0000
Cyclohexanone	Averaged	0.07721	0.06141	0.0500	-20.4594	20.0000
1,2-Dibromo-3-chloropropane	Wt Linear	20	16.60310	0.0500	-16.9845	20.0000
Dibromochloromethane	Averaged	1.19136	1.07540	0.0500	-9.7332	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.92256	0.86501	0.0500	-6.2380	20.0000
Dibromomethane	Averaged	0.22824	0.20498	0.0500	-10.1882	20.0000
1,2-Dichlorobenzene	Averaged	2.15998	1.97915	0.0500	-8.3721	20.0000
1,3-Dichlorobenzene	Averaged	2.43900	2.34015	0.0500	-4.0528	20.0000
1,4-Dichlorobenzene	Averaged	2.44880	2.32325	0.0500	-5.1271	20.0000
Dichlorodifluoromethane	Averaged	0.46305	0.50429	0.0500	8.9046	20.0000
1,1-Dichloroethane	Averaged	0.77419	0.75185	0.1000	-2.8852	20.0000
1,2-Dichloroethane	Averaged	0.46209	0.41813	0.0500	-9.5142	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19732452CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:12

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072821A.B\0728A_03CCV.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41101	0.41364	0.1000	0.6388	20.0000
cis-1,2-Dichloroethene	Averaged	0.51437	0.50509	0.1000	-1.8056	20.0000
trans-1,2-Dichloroethene	Averaged	0.47398	0.47324	0.1000	-0.1557	20.0000
1,2-Dichloropropane	Averaged	0.42010	0.39823	0.0500	-5.2068	20.0000
1,3-Dichloropropane	Averaged	1.39226	1.31125	0.0500	-5.8188	20.0000
2,2-Dichloropropane	Averaged	0.63899	0.60222	0.0500	-5.7544	20.0000
1,1-Dichloropropene	Averaged	0.56166	0.54968	0.0500	-2.1324	20.0000
cis-1,3-Dichloropropene	Averaged	0.58857	0.54926	0.0500	-6.6800	20.0000
trans-1,3-Dichloropropene	Averaged	1.48836	1.34748	0.0500	-9.4655	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.16725	0.15117	0.0500	-9.6138	20.0000
1,4-Dioxane (p-Dioxane)	Wt Linear	100	79.81040	0.0500	-20.1896	20.0000
Ethylbenzene	Averaged	1.87087	1.87396	0.3000	0.1648	20.0000
n-Heptane	Averaged	0.08747	0.08936	0.0500	2.1637	20.0000
Hexachloro-1,3-butadiene	Averaged	0.65950	0.58807	0.0500	-10.8306	20.0000
n-Hexane	Averaged	0.59243	0.59883	0.0500	1.0802	20.0000
2-Hexanone	Averaged	0.43789	0.38033	0.0500	-13.1463	20.0000
Isopropylbenzene (Cumene)	Averaged	5.15896	5.16570	0.0500	0.1306	20.0000
p-Isopropyltoluene	Averaged	3.87945	3.85074	0.0500	-0.7401	20.0000
Methyl acetate	Averaged	0.14787	0.12602	0.0500	-14.7817	20.0000
Methylcyclohexane	Averaged	0.64038	0.63514	0.0500	-0.8190	20.0000
Methylene Chloride	Averaged	0.36370	0.35193	0.0500	-3.2359	20.0000
1-Methylnaphthalene	Averaged	0.67408	0.48555	0.0500	-27.9686	20.0000
2-Methylnaphthalene	Wt Linear	20	13.40484	0.0500	-32.9758	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.17895	0.15308	0.0500	-14.4592	20.0000
Methyl-tert-butyl ether	Averaged	0.76513	0.67450	0.3000	-11.8442	20.0000
Naphthalene	Averaged	1.77332	1.46543	0.3000	-17.3624	20.0000
n-Propylbenzene	Averaged	1.36604	1.31022	0.0500	-4.0863	20.0000
Styrene	Averaged	3.40712	3.31831	0.0500	-2.6067	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.45074	1.38310	0.0500	-4.6620	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67587	0.61590	0.3000	-8.8733	20.0000
Tetrachloroethene	Averaged	1.98754	1.98279	0.1000	-0.2389	20.0000
Tetrahydrofuran	Averaged	0.05295	0.04629	0.0500	-12.5836	20.0000
Toluene	Averaged	3.35692	3.32199	0.3000	-1.0407	20.0000
1,2,3-Trichlorobenzene	Averaged	0.85580	0.71928	0.0500	-15.9524	20.0000
1,2,4-Trichlorobenzene	Averaged	1.08895	0.92978	0.0500	-14.6171	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19732452CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:12

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072821A.B\0728A_03CCV.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.71701	0.67846	0.0500	-5.3760	20.0000
1,1,2-Trichloroethane	Averaged	0.77657	0.70657	0.0500	-9.0140	20.0000
Trichloroethene	Averaged	0.49012	0.46906	0.1000	-4.2960	20.0000
Trichlorofluoromethane	Averaged	0.72486	0.73273	0.0500	1.0867	20.0000
1,2,3-Trichloropropane	Averaged	0.21004	0.17700	0.0500	-15.7278	20.0000
1,2,3-Trimethylbenzene	Averaged	3.38341	3.26859	0.0500	-3.3938	20.0000
1,2,4-Trimethylbenzene	Averaged	3.53485	3.49808	0.0500	-1.0403	20.0000
1,3,5-Trimethylbenzene	Averaged	3.63781	3.56433	0.0500	-2.0200	20.0000
Vinyl chloride	Averaged	0.45191	0.46461	0.0500	2.8082	20.0000
m&p-Xylene	Averaged	2.26077	2.25033	0.3000	-0.4616	20.0000
o-Xylene	Averaged	2.17071	2.12783	0.3000	-1.9756	20.0000
4-Bromofluorobenzene (S)	Averaged	0.76234	0.75414	0.3000	-1.0760	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.84074	0.82423	0.2000	-1.9641	20.0000
Toluene-d8 (S)	Averaged	2.88891	2.93632	0.3000	1.6413	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19896058ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas
Calibration Date: 06/27/2021 Time: 20:33

Instrument ID: 60MSVC GC Column: Col 2
Init. Calib. Date(s): 06/27/2021 06/27/2021

Lab File ID: 062721AGRO.B\0627A_21ICV.D
Init. Calib. Time(s): 19:01 20:18

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	6246.379	5473.140	0.0100	-12.3790	20.0000
4-Bromofluorobenzene (S)	Averaged	22452.14	20870.56	0.0100	-7.0442	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	31210.60	29519.26	0.0100	-5.4191	20.0000
Toluene-d8 (S)	Averaged	23906.46	23314.02	0.0100	-2.4782	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19684415ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.12485	0.0500	-8.5178	20.0000
Acrolein	Averaged	0.05349	0.05996	0.0500	5.0774	20.0000
Acrylonitrile	Averaged	0.09999	0.10586	0.0500	1.8661	20.0000
Benzene	Averaged	1.02994	1.02173	0.3000	1.9652	20.0000
Bromobenzene	Averaged	0.83368	0.81534	0.0500	2.6050	20.0000
Bromochloromethane	Averaged	0.14823	0.15027	0.0500	3.3236	20.0000
Bromodichloromethane	Averaged	0.34307	0.38351	0.0500	10.5511	20.0000
Bromoform	Wt Linear	100	97.70592	0.1000	-2.2941	20.0000
Bromomethane	Averaged	0.20810	0.20208	0.0500	-11.8058	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.16815	0.0500	1.3869	20.0000
n-Butylbenzene	Averaged	2.44142	2.47154	0.0500	4.4561	20.0000
sec-Butylbenzene	Averaged	3.06847	3.02062	0.0500	1.8277	20.0000
tert-Butylbenzene	Averaged	2.01582	1.95828	0.0500	0.8114	20.0000
Carbon disulfide	Averaged	0.75393	0.83297	0.0500	6.0414	20.0000
Carbon tetrachloride	Averaged	0.36017	0.38992	0.1000	8.7303	20.0000
Chlorobenzene	Averaged	1.97688	2.00433	0.3000	4.3442	20.0000
Chloroethane	Averaged	0.16149	0.17752	0.0500	2.7473	20.0000
Chloroform	Averaged	0.48944	0.50463	0.0500	2.3773	20.0000
Chloromethane	Averaged	0.44393	0.52693	0.1000	-5.0634	20.0000
2-Chlorotoluene	Averaged	1.90688	1.83524	0.0500	-0.5178	20.0000
4-Chlorotoluene	Averaged	0.72936	0.71690	0.0500	2.3799	20.0000
Cyclohexanone	Averaged	0.19969	0.20256	0.0500	0.3432	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.12029	0.0500	31.2020*	20.0000
Dibromochloromethane	Averaged	0.66934	0.79515	0.0500	15.7023	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.69207	0.0500	9.9818	20.0000
Dibromomethane	Averaged	0.18125	0.18977	0.0500	5.6308	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.55132	0.0500	1.4983	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.55360	0.0500	2.4238	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.60568	0.0500	2.9807	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.51805	0.1000	1.3703	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.39385	0.0500	2.8276	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.24483	0.1000	3.6845	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.30226	0.1000	4.9060	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.26726	0.1000	3.2083	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.31865	0.0500	3.6076	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

19684415ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.95571	0.0500	6.1729	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.35538	0.0500	3.3580	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.34512	0.0500	3.1905	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.45777	0.0500	13.8968	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	0.96825	0.0500	14.5672	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.13312	0.0500	4.4620	20.0000
Ethylbenzene	Averaged	1.00133	0.98494	0.3000	2.5055	20.0000
n-Heptane	Averaged	1.13421	1.22772	0.0500	4.4617	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.81386	0.0500	7.0436	20.0000
n-Hexane	Averaged	0.41998	0.43726	0.0500	1.6764	20.0000
2-Hexanone	Averaged	0.60114	0.62360	0.0500	0.7021	20.0000
Iodomethane	Wt Linear	100	109.9506	0.0500	9.9507	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.27448	0.0500	2.9305	20.0000
p-Isopropyltoluene	Averaged	2.73371	2.74222	0.0500	1.4539	20.0000
Methyl acetate	Averaged	0.19943	0.20591	0.0500	-0.1878	20.0000
Methylene Chloride	Averaged	0.31386	0.29665	0.0500	-10.1466	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.32341	0.0500	0.2928	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.70277	0.3000	2.3247	20.0000
Naphthalene	Wt Linear	100	112.3373	0.3000	12.3374	20.0000
n-Propylbenzene	Averaged	0.73726	0.71342	0.0500	3.1340	20.0000
Styrene	Averaged	2.10373	2.17583	0.0500	6.0334	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.75806	0.0500	9.6048	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.69887	0.3000	3.9845	20.0000
Tetrachloroethene	Averaged	0.86889	0.87133	0.1000	3.0156	20.0000
Tetrahydrofuran	Averaged	0.44347	0.44680	0.0001	-1.5163	20.0000
Toluene	Averaged	1.64122	1.61768	0.3000	1.0179	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	108.3593	0.0500	8.3593	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	108.2064	0.0500	8.2064	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.40394	0.0500	5.5658	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.53342	0.0500	5.9615	20.0000
Trichloroethene	Averaged	0.28723	0.29553	0.1000	4.3603	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.46689	0.0500	7.4371	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.17056	0.0500	2.5307	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.28128	0.0500	5.0218	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.51504	0.0500	0.4512	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 11:48

SAMPLE NO.

19684415ICV

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.41767	0.0500	1.0732	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.30971	0.0500	1.0132	20.0000
Vinyl acetate	Averaged	1.07776	1.10424	0.0500	2.6775	20.0000
Vinyl chloride	Averaged	0.32210	0.36660	0.0500	0.3128	20.0000
m&p-Xylene	Averaged	1.27536	1.25417	0.3000	3.7060	20.0000
o-Xylene	Averaged	1.29395	1.28607	0.3000	2.9529	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.72921	0.3000	-2.0917	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.92090	0.0500	-2.0736	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.38714	0.3000	0.5153	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19727087CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/27/2021 Time: 08:11

Instrument ID: 60MSVC GC Column: Col 1
Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072721A.B\0727A_02.D
Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.13271	0.0500	1.2860	20.0000
Acrolein	Averaged	0.05349	0.05241	0.0500	-2.0148	20.0000
Acrylonitrile	Averaged	0.09999	0.08786	0.0500	-12.1274	20.0000
Benzene	Averaged	1.02994	1.11383	0.3000	8.1447	20.0000
Bromobenzene	Averaged	0.83368	0.90702	0.0500	8.7967	20.0000
Bromochloromethane	Averaged	0.14823	0.15605	0.0500	5.2702	20.0000
Bromodichloromethane	Averaged	0.34307	0.39388	0.0500	14.8115	20.0000
Bromoform	Wt Linear	100	98.18541	0.1000	-1.8146	20.0000
Bromomethane	Averaged	0.20810	0.21492	0.0500	3.2735	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.17292	0.0500	8.2907	20.0000
n-Butylbenzene	Averaged	2.44142	2.83873	0.0500	16.2735	20.0000
sec-Butylbenzene	Averaged	3.06847	3.40396	0.0500	10.9334	20.0000
tert-Butylbenzene	Averaged	2.01582	2.28044	0.0500	13.1271	20.0000
Carbon disulfide	Averaged	0.75393	0.87640	0.0500	16.2441	20.0000
Carbon tetrachloride	Averaged	0.36017	0.43603	0.1000	21.0609*	20.0000
Chlorobenzene	Averaged	1.97688	2.14923	0.3000	8.7187	20.0000
Chloroethane	Averaged	0.16149	0.18148	0.0500	12.3757	20.0000
Chloroform	Averaged	0.48944	0.52509	0.0500	7.2843	20.0000
Chloromethane	Averaged	0.44393	0.41188	0.1000	-7.2210	20.0000
2-Chlorotoluene	Averaged	1.90688	2.08032	0.0500	9.0957	20.0000
4-Chlorotoluene	Averaged	0.72936	0.81599	0.0500	11.8776	20.0000
Cyclohexanone	Averaged	0.19969	0.21413	0.0500	7.2308	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.11968	0.0500	16.0684	20.0000
Dibromochloromethane	Averaged	0.66934	0.79069	0.0500	18.1301	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.67737	0.0500	8.8027	20.0000
Dibromomethane	Averaged	0.18125	0.19119	0.0500	5.4859	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.62729	0.0500	3.9577	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.68764	0.0500	8.1503	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.71272	0.0500	8.8264	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.54902	0.1000	8.9889	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.39242	0.0500	2.1656	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.25559	0.1000	13.7273	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.32398	0.1000	9.3663	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.29194	0.1000	12.5181	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.33411	0.0500	6.6778	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19727087CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 08:11

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072721A.B\0727A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.95163	0.0500	3.6298	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.42824	0.0500	20.4655*	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.38882	0.0500	14.4095	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.48110	0.0500	18.0076	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	1.01287	0.0500	19.1410	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.12631	0.0500	0.9429	20.0000
Ethylbenzene	Averaged	1.00133	1.11042	0.3000	10.8946	20.0000
n-Heptane	Averaged	1.13421	1.31275	0.0500	15.7422	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.91187	0.0500	20.0081*	20.0000
n-Hexane	Averaged	0.41998	0.48931	0.0500	16.5088	20.0000
2-Hexanone	Averaged	0.60114	0.68640	0.0500	14.1838	20.0000
Iodomethane	Wt Linear	100	113.7768	0.0500	13.7769	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.74416	0.0500	15.4860	20.0000
p-Isopropyltoluene	Averaged	2.73371	3.11165	0.0500	13.8251	20.0000
Methyl acetate	Averaged	0.19943	0.17906	0.0500	-10.2177	20.0000
Methylene Chloride	Averaged	0.31386	0.29504	0.0500	-5.9962	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.31121	0.0500	-1.2132	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.70389	0.3000	3.7630	20.0000
Naphthalene	Wt Linear	100	109.1489	0.3000	9.1489	20.0000
n-Propylbenzene	Averaged	0.73726	0.84186	0.0500	14.1880	20.0000
Styrene	Averaged	2.10373	2.32720	0.0500	10.6222	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.81651	0.0500	14.3132	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.71232	0.3000	6.0511	20.0000
Tetrachloroethene	Averaged	0.86889	0.98473	0.1000	13.3316	20.0000
Tetrahydrofuran	Averaged	0.44347	0.38428	0.0001	-13.3471	20.0000
Toluene	Averaged	1.64122	1.77433	0.3000	8.1104	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	110.7434	0.0500	10.7434	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	115.9593	0.0500	15.9594	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.47232	0.0500	15.5829	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.53151	0.0500	4.4947	20.0000
Trichloroethene	Averaged	0.28723	0.32665	0.1000	13.7216	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.47877	0.0500	16.7210	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.17530	0.0500	1.2930	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.29364	0.0500	13.7019	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.65851	0.0500	6.1522	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19727087CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 08:11

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072721A.B\0727A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.66801	0.0500	8.9631	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.64586	0.0500	11.5387	20.0000
Vinyl acetate	Averaged	1.07776	1.11161	0.0500	3.1403	20.0000
Vinyl chloride	Averaged	0.32210	0.34020	0.0500	5.6204	20.0000
m&p-Xylene	Averaged	1.27536	1.40697	0.3000	10.3189	20.0000
o-Xylene	Averaged	1.29395	1.39989	0.3000	8.1867	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.74972	0.3000	-0.2627	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.93014	0.0500	-1.0857	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.36087	0.3000	-0.4576	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19895948ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:16

Instrument ID: 60MSVC GC Column: Col 2 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721AGRO.B\0727A_10.D Init. Calib. Time(s): 08:42 10:00

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	4387.215	3784.906	0.0100	-13.7287	20.0000
4-Bromofluorobenzene (S)	Averaged	16972.06	16140.74	0.0100	-4.8982	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	24394.68	22966.40	0.0100	-5.8549	20.0000
Toluene-d8 (S)	Averaged	18238.40	17670.56	0.0100	-3.1135	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 11:48

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19752271CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072821A.B\0728A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.15125	0.0500	15.4361	20.0000
Acrolein	Averaged	0.05349	0.05515	0.0500	3.1004	20.0000
Acrylonitrile	Averaged	0.09999	0.09645	0.0500	-3.5387	20.0000
Benzene	Averaged	1.02994	1.14043	0.3000	10.7275	20.0000
Bromobenzene	Averaged	0.83368	0.88833	0.0500	6.5554	20.0000
Bromochloromethane	Averaged	0.14823	0.15936	0.0500	7.5073	20.0000
Bromodichloromethane	Averaged	0.34307	0.40060	0.0500	16.7706	20.0000
Bromoform	Wt Linear	100	96.78708	0.1000	-3.2129	20.0000
Bromomethane	Averaged	0.20810	0.20693	0.0500	-0.5638	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.17464	0.0500	9.3678	20.0000
n-Butylbenzene	Averaged	2.44142	2.84610	0.0500	16.5754	20.0000
sec-Butylbenzene	Averaged	3.06847	3.46901	0.0500	13.0534	20.0000
tert-Butylbenzene	Averaged	2.01582	2.25723	0.0500	11.9760	20.0000
Carbon disulfide	Averaged	0.75393	0.90713	0.0500	20.3208*	20.0000
Carbon tetrachloride	Averaged	0.36017	0.45156	0.1000	25.3732*	20.0000
Chlorobenzene	Averaged	1.97688	2.15550	0.3000	9.0355	20.0000
Chloroethane	Averaged	0.16149	0.18344	0.0500	13.5920	20.0000
Chloroform	Averaged	0.48944	0.53659	0.0500	9.6339	20.0000
Chloromethane	Averaged	0.44393	0.42828	0.1000	-3.5267	20.0000
2-Chlorotoluene	Averaged	1.90688	2.08667	0.0500	9.4283	20.0000
4-Chlorotoluene	Averaged	0.72936	0.81104	0.0500	11.1984	20.0000
Cyclohexanone	Averaged	0.19969	0.20431	0.0500	2.3150	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.11230	0.0500	8.9182	20.0000
Dibromochloromethane	Averaged	0.66934	0.77318	0.0500	15.5136	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.66034	0.0500	6.0670	20.0000
Dibromomethane	Averaged	0.18125	0.19040	0.0500	5.0452	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.59352	0.0500	1.8005	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.70546	0.0500	9.2923	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.67574	0.0500	6.4763	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.55399	0.1000	9.9752	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.39621	0.0500	3.1519	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.26376	0.1000	17.3606	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.32919	0.1000	11.1251	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.30225	0.1000	16.4922	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.33861	0.0500	8.1165	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 11:48

SAMPLE NO.

19752271CCV

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 07:51

Instrument ID: 60MSVC GC Column: Col 1
Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072821A.B\0728A_02.D
Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.93950	0.0500	2.3090	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.43317	0.0500	21.8524*	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.39780	0.0500	17.0516	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.48210	0.0500	18.2527	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	0.98105	0.0500	15.3983	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.12725	0.0500	1.6961	20.0000
Ethylbenzene	Averaged	1.00133	1.12806	0.3000	12.6563	20.0000
n-Heptane	Averaged	1.13421	1.32347	0.0500	16.6869	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.92046	0.0500	21.1397*	20.0000
n-Hexane	Averaged	0.41998	0.48331	0.0500	15.0785	20.0000
2-Hexanone	Averaged	0.60114	0.64315	0.0500	6.9884	20.0000
Iodomethane	Wt Linear	100	118.8191	0.0500	18.8192	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.74372	0.0500	15.4723	20.0000
p-Isopropyltoluene	Averaged	2.73371	3.12593	0.0500	14.3475	20.0000
Methyl acetate	Averaged	0.19943	0.18488	0.0500	-7.2996	20.0000
Methylene Chloride	Averaged	0.31386	0.30159	0.0500	-3.9089	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.29769	0.0500	-5.5045	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.68627	0.3000	1.1656	20.0000
Naphthalene	Wt Linear	100	102.5109	0.3000	2.5110	20.0000
n-Propylbenzene	Averaged	0.73726	0.85288	0.0500	15.6829	20.0000
Styrene	Averaged	2.10373	2.37217	0.0500	12.7602	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.81487	0.0500	14.0837	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.67310	0.3000	0.2120	20.0000
Tetrachloroethene	Averaged	0.86889	0.99736	0.1000	14.7851	20.0000
Tetrahydrofuran	Averaged	0.08869	0.07956	0.0001	-10.2943	20.0000
Toluene	Averaged	1.64122	1.77760	0.3000	8.3098	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	109.7591	0.0500	9.7591	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	112.8988	0.0500	12.8988	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.48441	0.0500	18.5426	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.52206	0.0500	2.6370	20.0000
Trichloroethene	Averaged	0.28723	0.33164	0.1000	15.4591	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.49222	0.0500	19.9987	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.16710	0.0500	-3.4442	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.30891	0.0500	19.6169	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.67550	0.0500	6.8307	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 11:48

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19752271CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072821A.B\0728A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375481

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.63819	0.0500	7.7453	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.64230	0.0500	11.3885	20.0000
Vinyl acetate	Averaged	1.07776	1.11401	0.0500	3.3628	20.0000
Vinyl chloride	Averaged	0.32210	0.34819	0.0500	8.0986	20.0000
m&p-Xylene	Averaged	1.27536	1.41959	0.3000	11.3090	20.0000
o-Xylene	Averaged	1.29395	1.42233	0.3000	9.9213	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.73776	0.3000	-1.8539	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.91174	0.0500	-3.0425	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.36151	0.3000	-0.4305	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Water | SDG No.: 60375481

Date Extracted: 07/28/2021 13:06 | Lab Sample ID: 2947373

Date Analyzed: 07/28/2021 13:06 | Lab File ID: 072821A.B\0728A_28LCS.D

Initial wt/vol: 10 mL | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60MSV8 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	95.9	
75-05-8	Acetonitrile	92.1	
107-02-8	Acrolein	85.4	
107-13-1	Acrylonitrile	93.2	
71-43-2	Benzene	19.2	
108-86-1	Bromobenzene	18.3	
74-97-5	Bromochloromethane	19.6	
75-27-4	Bromodichloromethane	18.7	
75-25-2	Bromoform	18.4	
74-83-9	Bromomethane	11.9	
78-93-3	2-Butanone (MEK)	94.4	
104-51-8	n-Butylbenzene	17.8	
135-98-8	sec-Butylbenzene	19.3	
98-06-6	tert-Butylbenzene	19.2	
75-15-0	Carbon disulfide	18.6	
56-23-5	Carbon tetrachloride	18.2	
108-90-7	Chlorobenzene	19.1	
75-00-3	Chloroethane	19.5	
110-75-8	2-Chloroethylvinyl ether	97.3	
67-66-3	Chloroform	18.8	
74-87-3	Chloromethane	17.8	
95-49-8	2-Chlorotoluene	19.3	
106-43-4	4-Chlorotoluene	19.0	
110-82-7	Cyclohexane	19.1	
108-94-1	Cyclohexanone	83.6	
96-12-8	1,2-Dibromo-3-chloropropane	16.2	
124-48-1	Dibromochloromethane	18.5	
106-93-4	1,2-Dibromoethane (EDB)	19.1	
74-95-3	Dibromomethane	17.9	
95-50-1	1,2-Dichlorobenzene	17.8	
541-73-1	1,3-Dichlorobenzene	18.5	
106-46-7	1,4-Dichlorobenzene	18.4	
75-71-8	Dichlorodifluoromethane	20.3	
75-34-3	1,1-Dichloroethane	19.2	
107-06-2	1,2-Dichloroethane	17.8	
540-59-0	1,2-Dichloroethene (Total)	38.1	
75-35-4	1,1-Dichloroethene	18.9	

SAMPLE NO.

LCS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Water | SDG No.: 60375481

Date Extracted: 07/28/2021 13:06 | Lab Sample ID: 2947373

Date Analyzed: 07/28/2021 13:06 | Lab File ID: 072821A.B\0728A_28LCS.D

Initial wt/vol: 10 mL | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60MSV8 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	19.0	
156-60-5	trans-1,2-Dichloroethene	19.1	
78-87-5	1,2-Dichloropropane	18.8	
142-28-9	1,3-Dichloropropane	18.5	
594-20-7	2,2-Dichloropropane	15.9	
563-58-6	1,1-Dichloropropene	18.7	
10061-01-5	cis-1,3-Dichloropropene	18.2	
10061-02-6	trans-1,3-Dichloropropene	18.2	
60-29-7	Diethyl ether (Ethyl ether)	19.0	
123-91-1	1,4-Dioxane (p-Dioxane)	80.2	J
100-41-4	Ethylbenzene	19.4	
142-82-5	n-Heptane	18.9	
87-68-3	Hexachloro-1,3-butadiene	17.1	
110-54-3	n-Hexane	18.4	
591-78-6	2-Hexanone	97.2	
98-82-8	Isopropylbenzene (Cumene)	19.8	
99-87-6	p-Isopropyltoluene	19.8	
79-20-9	Methyl acetate	87.4	
108-87-2	Methylcyclohexane	19.4	
75-09-2	Methylene Chloride	18.5	
90-12-0	1-Methylnaphthalene	15.4	
91-57-6	2-Methylnaphthalene	13.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	88.8	
1634-04-4	Methyl-tert-butyl ether	18.4	
91-20-3	Naphthalene	17.1	
103-65-1	n-Propylbenzene	18.8	
100-42-5	Styrene	19.3	
630-20-6	1,1,1,2-Tetrachloroethane	18.6	
79-34-5	1,1,2,2-Tetrachloroethane	16.8	
127-18-4	Tetrachloroethene	19.5	
109-99-9	Tetrahydrofuran	91.8	
108-88-3	Toluene	19.2	
87-61-6	1,2,3-Trichlorobenzene	17.1	
120-82-1	1,2,4-Trichlorobenzene	17.5	
71-55-6	1,1,1-Trichloroethane	17.6	
79-00-5	1,1,2-Trichloroethane	18.3	
79-01-6	Trichloroethene	19.8	

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375481

Date Extracted: 07/28/2021 13:06 Lab Sample ID: 2947373

Date Analyzed: 07/28/2021 13:06 Lab File ID: 072821A.B\0728A_28LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	19.5	
96-18-4	1,2,3-Trichloropropane	18.2	
526-73-8	1,2,3-Trimethylbenzene	19.1	
95-63-6	1,2,4-Trimethylbenzene	19.4	
108-67-8	1,3,5-Trimethylbenzene	19.1	
75-01-4	Vinyl chloride	19.1	
1330-20-7	Xylene (Total)	57.4	
179601-23-1	m&p-Xylene	38.2	
95-47-6	o-Xylene	19.2	

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375481

Date Extracted: 07/28/2021 13:35 Lab Sample ID: 2947372

Date Analyzed: 07/28/2021 13:35 Lab File ID: 072821A.B\0728A_30BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	<0.22	U
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375481

Date Extracted: 07/28/2021 13:35 Lab Sample ID: 2947372

Date Analyzed: 07/28/2021 13:35 Lab File ID: 072821A.B\0728A_30BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U
79-01-6	Trichloroethene	<0.21	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375481

Date Extracted: 07/28/2021 13:35 Lab Sample ID: 2947372

Date Analyzed: 07/28/2021 13:35 Lab File ID: 072821A.B\0728A_30BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 | Lab Sample ID: 2946896

Date Analyzed: 07/27/2021 08:26 | Lab File ID: 072721A.B\0727A_03.D

Initial wt/vol: 5 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	621	
107-02-8	Acrolein	525	
107-13-1	Acrylonitrile	479	
71-43-2	Benzene	98.3	
108-86-1	Bromobenzene	96.5	
74-97-5	Bromochloromethane	98.5	
75-27-4	Bromodichloromethane	109	
75-25-2	Bromoform	93.0	
74-83-9	Bromomethane	91.2	
78-93-3	2-Butanone (MEK)	621	
104-51-8	n-Butylbenzene	103	
135-98-8	sec-Butylbenzene	98.0	
98-06-6	tert-Butylbenzene	98.6	
75-15-0	Carbon disulfide	109	
56-23-5	Carbon tetrachloride	111	
108-90-7	Chlorobenzene	99.3	
75-00-3	Chloroethane	106	
67-66-3	Chloroform	101	
74-87-3	Chloromethane	99.3	
95-49-8	2-Chlorotoluene	96.3	
106-43-4	4-Chlorotoluene	98.8	
108-94-1	Cyclohexanone	544	
96-12-8	1,2-Dibromo-3-chloropropane	105	
124-48-1	Dibromochloromethane	112	
106-93-4	1,2-Dibromoethane (EDB)	102	
74-95-3	Dibromomethane	98.3	
95-50-1	1,2-Dichlorobenzene	94.7	
541-73-1	1,3-Dichlorobenzene	98.4	
106-46-7	1,4-Dichlorobenzene	97.8	
75-34-3	1,1-Dichloroethane	102	
107-06-2	1,2-Dichloroethane	97.0	
540-59-0	1,2-Dichloroethene (Total)	204	
75-35-4	1,1-Dichloroethene	107	
156-59-2	cis-1,2-Dichloroethene	100	
156-60-5	trans-1,2-Dichloroethene	104	
78-87-5	1,2-Dichloropropane	99.8	
142-28-9	1,3-Dichloropropane	97.2	

SAMPLE NO.

LCS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 | Lab Sample ID: 2946896

Date Analyzed: 07/27/2021 08:26 | Lab File ID: 072721A.B\0727A_03.D

Initial wt/vol: 5 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	108	
563-58-6	1,1-Dichloropropene	104	
10061-01-5	cis-1,3-Dichloropropene	111	
10061-02-6	trans-1,3-Dichloropropene	110	
60-29-7	Diethyl ether (Ethyl ether)	98.4	
100-41-4	Ethylbenzene	100	
142-82-5	n-Heptane	111	
87-68-3	Hexachloro-1,3-butadiene	108	
110-54-3	n-Hexane	126	
591-78-6	2-Hexanone	598	
74-88-4	Iodomethane	102	
98-82-8	Isopropylbenzene (Cumene)	105	
99-87-6	p-Isopropyltoluene	103	
79-20-9	Methyl acetate	464	
75-09-2	Methylene Chloride	89.1	
108-10-1	4-Methyl-2-pentanone (MIBK)	479	
1634-04-4	Methyl-tert-butyl ether	98.1	
91-20-3	Naphthalene	102	
103-65-1	n-Propylbenzene	101	
100-42-5	Styrene	100	
630-20-6	1,1,1,2-Tetrachloroethane	104	
79-34-5	1,1,2,2-Tetrachloroethane	96.2	
127-18-4	Tetrachloroethene	103	
109-99-9	Tetrahydrofuran	447	
108-88-3	Toluene	98.5	
87-61-6	1,2,3-Trichlorobenzene	101	
120-82-1	1,2,4-Trichlorobenzene	105	
71-55-6	1,1,1-Trichloroethane	102	
79-00-5	1,1,2-Trichloroethane	97.5	
79-01-6	Trichloroethene	106	
75-69-4	Trichlorofluoromethane	113	
96-18-4	1,2,3-Trichloropropane	95.5	
76-13-1	1,1,2-Trichlorotrifluoroethane	110	
526-73-8	1,2,3-Trimethylbenzene	97.7	
95-63-6	1,2,4-Trimethylbenzene	96.3	
108-67-8	1,3,5-Trimethylbenzene	98.8	
108-05-4	Vinyl acetate	95.7	J

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 Lab Sample ID: 2946896

Date Analyzed: 07/27/2021 08:26 Lab File ID: 072721A.B\0727A_03.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	105	
1330-20-7	Xylene (Total)	296	
179601-23-1	m&p-Xylene	197	
95-47-6	o-Xylene	98.2	

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 09:23 Lab Sample ID: 2946898

Date Analyzed: 07/27/2021 10:16 Lab File ID: 072721AGRO.B\0727A_10.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	3.5	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 09:23 Lab Sample ID: 2946897

Date Analyzed: 07/27/2021 10:47 Lab File ID: 072721AGRO.B\0727A_12.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.055	U

SAMPLE NO.

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MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/27/2021 08:11
Lab Sample ID: 2946895
Date Analyzed: 07/27/2021 10:47
Lab File ID: 072721A.B\0727A_12.D
Initial wt/vol: 5 g
Final wt/vol: 5 mL
Dilution: 1
Instrument: 60MSVC
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.2	U
107-02-8	Acrolein	<75.6	U
107-13-1	Acrylonitrile	<3.2	U
71-43-2	Benzene	<0.49	U
108-86-1	Bromobenzene	<0.94	U
74-97-5	Bromochloromethane	<0.60	U
75-27-4	Bromodichloromethane	<0.60	U
75-25-2	Bromoform	<0.58	U
74-83-9	Bromomethane	<2.9	U
78-93-3	2-Butanone (MEK)	<3.4	U
104-51-8	n-Butylbenzene	<0.65	U
135-98-8	sec-Butylbenzene	<0.73	U
98-06-6	tert-Butylbenzene	<0.88	U
75-15-0	Carbon disulfide	<0.64	U
56-23-5	Carbon tetrachloride	<0.86	U
108-90-7	Chlorobenzene	<0.63	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.49	U
74-87-3	Chloromethane	<0.80	U
95-49-8	2-Chlorotoluene	<0.73	U
106-43-4	4-Chlorotoluene	<0.60	U
108-94-1	Cyclohexanone	<12.7	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.65	U
106-93-4	1,2-Dibromoethane (EDB)	<0.54	U
74-95-3	Dibromomethane	<0.60	U
95-50-1	1,2-Dichlorobenzene	<0.62	U
541-73-1	1,3-Dichlorobenzene	<0.72	U
106-46-7	1,4-Dichlorobenzene	<0.81	U
75-34-3	1,1-Dichloroethane	<0.39	U
107-06-2	1,2-Dichloroethane	<0.40	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.64	U
156-59-2	cis-1,2-Dichloroethene	<0.43	U
156-60-5	trans-1,2-Dichloroethene	<0.68	U
78-87-5	1,2-Dichloropropane	<0.98	U
142-28-9	1,3-Dichloropropane	<0.69	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 | Lab Sample ID: 2946895

Date Analyzed: 07/27/2021 10:47 | Lab File ID: 072721A.B\0727A_12.D

Initial wt/vol: 5 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.48	U
563-58-6	1,1-Dichloropropene	<0.90	U
10061-01-5	cis-1,3-Dichloropropene	<0.53	U
10061-02-6	trans-1,3-Dichloropropene	<0.46	U
60-29-7	Diethyl ether (Ethyl ether)	<0.56	U
100-41-4	Ethylbenzene	<0.46	U
142-82-5	n-Heptane	<4.5	U
87-68-3	Hexachloro-1,3-butadiene	<0.85	U
110-54-3	n-Hexane	<0.69	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.57	U
99-87-6	p-Isopropyltoluene	<0.69	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.0	U
1634-04-4	Methyl-tert-butyl ether	<0.48	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.80	U
100-42-5	Styrene	<0.59	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.41	U
109-99-9	Tetrahydrofuran	<0.78	U
108-88-3	Toluene	<0.35	U
87-61-6	1,2,3-Trichlorobenzene	<0.80	U
120-82-1	1,2,4-Trichlorobenzene	<0.80	U
71-55-6	1,1,1-Trichloroethane	<0.75	U
79-00-5	1,1,2-Trichloroethane	<0.63	U
79-01-6	Trichloroethene	<0.72	U
75-69-4	Trichlorofluoromethane	<0.61	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.0	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.67	U
108-67-8	1,3,5-Trimethylbenzene	<0.63	U
108-05-4	Vinyl acetate	<0.56	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 08:11 Lab Sample ID: 2946895

Date Analyzed: 07/27/2021 10:47 Lab File ID: 072721A.B\0727A_12.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.67	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.63	U
95-47-6	o-Xylene	<0.37	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 | Lab Sample ID: 2947095

Date Analyzed: 07/27/2021 17:03 | Lab File ID: 072721A.B\0727A_36.D

Initial wt/vol: 5 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	606	
107-02-8	Acrolein	550	
107-13-1	Acrylonitrile	497	
71-43-2	Benzene	93.4	
108-86-1	Bromobenzene	91.4	
74-97-5	Bromochloromethane	100	
75-27-4	Bromodichloromethane	106	
75-25-2	Bromoform	88.3	
74-83-9	Bromomethane	79.8	
78-93-3	2-Butanone (MEK)	627	
104-51-8	n-Butylbenzene	93.2	
135-98-8	sec-Butylbenzene	90.3	
98-06-6	tert-Butylbenzene	90.6	
75-15-0	Carbon disulfide	97.7	
56-23-5	Carbon tetrachloride	97.2	
108-90-7	Chlorobenzene	95.3	
75-00-3	Chloroethane	100	
67-66-3	Chloroform	97.0	
74-87-3	Chloromethane	93.3	
95-49-8	2-Chlorotoluene	90.9	
106-43-4	4-Chlorotoluene	94.3	
108-94-1	Cyclohexanone	545	
96-12-8	1,2-Dibromo-3-chloropropane	109	
124-48-1	Dibromochloromethane	108	
106-93-4	1,2-Dibromoethane (EDB)	102	
74-95-3	Dibromomethane	100	
95-50-1	1,2-Dichlorobenzene	92.8	
541-73-1	1,3-Dichlorobenzene	93.7	
106-46-7	1,4-Dichlorobenzene	95.2	
75-34-3	1,1-Dichloroethane	97.2	
107-06-2	1,2-Dichloroethane	96.3	
540-59-0	1,2-Dichloroethene (Total)	193	
75-35-4	1,1-Dichloroethene	97.2	
156-59-2	cis-1,2-Dichloroethene	97.5	
156-60-5	trans-1,2-Dichloroethene	95.4	
78-87-5	1,2-Dichloropropane	96.6	
142-28-9	1,3-Dichloropropane	96.5	

SAMPLE NO.

LCS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 2947095

Date Analyzed: 07/27/2021 17:03 Lab File ID: 072721A.B\0727A_36.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	93.8	
563-58-6	1,1-Dichloropropene	91.9	
10061-01-5	cis-1,3-Dichloropropene	105	
10061-02-6	trans-1,3-Dichloropropene	107	
60-29-7	Diethyl ether (Ethyl ether)	101	
100-41-4	Ethylbenzene	91.9	
142-82-5	n-Heptane	97.7	
87-68-3	Hexachloro-1,3-butadiene	96.6	
110-54-3	n-Hexane	92.8	
591-78-6	2-Hexanone	580	
74-88-4	Iodomethane	78.0	
98-82-8	Isopropylbenzene (Cumene)	92.5	
99-87-6	p-Isopropyltoluene	91.8	
79-20-9	Methyl acetate	486	
75-09-2	Methylene Chloride	90.2	
108-10-1	4-Methyl-2-pentanone (MIBK)	487	
1634-04-4	Methyl-tert-butyl ether	98.3	
91-20-3	Naphthalene	103	
103-65-1	n-Propylbenzene	89.0	
100-42-5	Styrene	95.5	
630-20-6	1,1,1,2-Tetrachloroethane	98.7	
79-34-5	1,1,2,2-Tetrachloroethane	93.8	
127-18-4	Tetrachloroethene	92.2	
109-99-9	Tetrahydrofuran	94.7	
108-88-3	Toluene	91.1	
87-61-6	1,2,3-Trichlorobenzene	101	
120-82-1	1,2,4-Trichlorobenzene	101	
71-55-6	1,1,1-Trichloroethane	91.7	
79-00-5	1,1,2-Trichloroethane	98.4	
79-01-6	Trichloroethene	95.7	
75-69-4	Trichlorofluoromethane	99.7	
96-18-4	1,2,3-Trichloropropane	92.9	
76-13-1	1,1,2-Trichlorotrifluoroethane	97.7	
526-73-8	1,2,3-Trimethylbenzene	95.0	
95-63-6	1,2,4-Trimethylbenzene	91.0	
108-67-8	1,3,5-Trimethylbenzene	91.7	
108-05-4	Vinyl acetate	93.5	J

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 2947095

Date Analyzed: 07/27/2021 17:03 Lab File ID: 072721A.B\0727A_36.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	95.3	
1330-20-7	Xylene (Total)	271	
179601-23-1	m&p-Xylene	178	
95-47-6	o-Xylene	92.6	

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 14:02 Lab Sample ID: 2947097

Date Analyzed: 07/27/2021 17:18 Lab File ID: 072721AGRO.B\0727A_37.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	3.9	

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 14:02 Lab Sample ID: 2947096

Date Analyzed: 07/27/2021 17:49 Lab File ID: 072721AGRO.B\0727A_39.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.055	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 | Lab Sample ID: 2947094

Date Analyzed: 07/27/2021 17:49 | Lab File ID: 072721A.B\0727A_39.D

Initial wt/vol: 5 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.2	U
107-02-8	Acrolein	<75.6	U
107-13-1	Acrylonitrile	<3.2	U
71-43-2	Benzene	<0.49	U
108-86-1	Bromobenzene	<0.94	U
74-97-5	Bromochloromethane	<0.60	U
75-27-4	Bromodichloromethane	<0.60	U
75-25-2	Bromoform	<0.58	U
74-83-9	Bromomethane	<2.9	U
78-93-3	2-Butanone (MEK)	<3.4	U
104-51-8	n-Butylbenzene	<0.65	U
135-98-8	sec-Butylbenzene	<0.73	U
98-06-6	tert-Butylbenzene	<0.88	U
75-15-0	Carbon disulfide	<0.64	U
56-23-5	Carbon tetrachloride	<0.86	U
108-90-7	Chlorobenzene	<0.63	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.49	U
74-87-3	Chloromethane	<0.80	U
95-49-8	2-Chlorotoluene	<0.73	U
106-43-4	4-Chlorotoluene	<0.60	U
108-94-1	Cyclohexanone	<12.7	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.65	U
106-93-4	1,2-Dibromoethane (EDB)	<0.54	U
74-95-3	Dibromomethane	<0.60	U
95-50-1	1,2-Dichlorobenzene	<0.62	U
541-73-1	1,3-Dichlorobenzene	<0.72	U
106-46-7	1,4-Dichlorobenzene	<0.81	U
75-34-3	1,1-Dichloroethane	<0.39	U
107-06-2	1,2-Dichloroethane	<0.40	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.64	U
156-59-2	cis-1,2-Dichloroethene	<0.43	U
156-60-5	trans-1,2-Dichloroethene	<0.68	U
78-87-5	1,2-Dichloropropane	<0.98	U
142-28-9	1,3-Dichloropropane	<0.69	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 | Lab Sample ID: 2947094

Date Analyzed: 07/27/2021 17:49 | Lab File ID: 072721A.B\0727A_39.D

Initial wt/vol: 5 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.48	U
563-58-6	1,1-Dichloropropene	<0.90	U
10061-01-5	cis-1,3-Dichloropropene	<0.53	U
10061-02-6	trans-1,3-Dichloropropene	<0.46	U
60-29-7	Diethyl ether (Ethyl ether)	<0.56	U
100-41-4	Ethylbenzene	<0.46	U
142-82-5	n-Heptane	<4.5	U
87-68-3	Hexachloro-1,3-butadiene	<0.85	U
110-54-3	n-Hexane	<0.69	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.57	U
99-87-6	p-Isopropyltoluene	<0.69	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.0	U
1634-04-4	Methyl-tert-butyl ether	<0.48	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.80	U
100-42-5	Styrene	<0.59	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.41	U
109-99-9	Tetrahydrofuran	<0.78	U
108-88-3	Toluene	<0.35	U
87-61-6	1,2,3-Trichlorobenzene	<0.80	U
120-82-1	1,2,4-Trichlorobenzene	<0.80	U
71-55-6	1,1,1-Trichloroethane	<0.75	U
79-00-5	1,1,2-Trichloroethane	<0.63	U
79-01-6	Trichloroethene	<0.72	U
75-69-4	Trichlorofluoromethane	<0.61	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.0	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.67	U
108-67-8	1,3,5-Trimethylbenzene	<0.63	U
108-05-4	Vinyl acetate	<0.56	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/27/2021 13:59 Lab Sample ID: 2947094

Date Analyzed: 07/27/2021 17:49 Lab File ID: 072721A.B\0727A_39.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.67	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.63	U
95-47-6	o-Xylene	<0.37	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 2947593

Date Analyzed: 07/28/2021 08:06 | Lab File ID: 072821A.B\0728A_03.D

Initial wt/vol: 5 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	591	
107-02-8	Acrolein	506	
107-13-1	Acrylonitrile	470	
71-43-2	Benzene	99.3	
108-86-1	Bromobenzene	96.3	
74-97-5	Bromochloromethane	100	
75-27-4	Bromodichloromethane	109	
75-25-2	Bromoform	90.9	
74-83-9	Bromomethane	98.4	
78-93-3	2-Butanone (MEK)	570	
104-51-8	n-Butylbenzene	104	
135-98-8	sec-Butylbenzene	100	
98-06-6	tert-Butylbenzene	101	
75-15-0	Carbon disulfide	109	
56-23-5	Carbon tetrachloride	113	
108-90-7	Chlorobenzene	99.7	
75-00-3	Chloroethane	87.7	
67-66-3	Chloroform	101	
74-87-3	Chloromethane	97.9	
95-49-8	2-Chlorotoluene	97.7	
106-43-4	4-Chlorotoluene	100	
108-94-1	Cyclohexanone	499	
96-12-8	1,2-Dibromo-3-chloropropane	103	
124-48-1	Dibromochloromethane	113	
106-93-4	1,2-Dibromoethane (EDB)	101	
74-95-3	Dibromomethane	98.3	
95-50-1	1,2-Dichlorobenzene	94.6	
541-73-1	1,3-Dichlorobenzene	99.4	
106-46-7	1,4-Dichlorobenzene	100	
75-34-3	1,1-Dichloroethane	103	
107-06-2	1,2-Dichloroethane	95.3	
540-59-0	1,2-Dichloroethene (Total)	206	
75-35-4	1,1-Dichloroethene	109	
156-59-2	cis-1,2-Dichloroethene	101	
156-60-5	trans-1,2-Dichloroethene	105	
78-87-5	1,2-Dichloropropane	99.4	
142-28-9	1,3-Dichloropropane	96.3	

SAMPLE NO.

LCS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947593

Date Analyzed: 07/28/2021 08:06 Lab File ID: 072821A.B\0728A_03.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	109	
563-58-6	1,1-Dichloropropene	105	
10061-01-5	cis-1,3-Dichloropropene	109	
10061-02-6	trans-1,3-Dichloropropene	109	
60-29-7	Diethyl ether (Ethyl ether)	99.5	
100-41-4	Ethylbenzene	100	
142-82-5	n-Heptane	111	
87-68-3	Hexachloro-1,3-butadiene	110	
110-54-3	n-Hexane	107	
591-78-6	2-Hexanone	555	
74-88-4	Iodomethane	108	
98-82-8	Isopropylbenzene (Cumene)	103	
99-87-6	p-Isopropyltoluene	103	
79-20-9	Methyl acetate	449	
75-09-2	Methylene Chloride	90.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	460	
1634-04-4	Methyl-tert-butyl ether	96.7	
91-20-3	Naphthalene	97.8	
103-65-1	n-Propylbenzene	101	
100-42-5	Styrene	101	
630-20-6	1,1,1,2-Tetrachloroethane	104	
79-34-5	1,1,2,2-Tetrachloroethane	93.5	
127-18-4	Tetrachloroethene	105	
109-99-9	Tetrahydrofuran	432	
108-88-3	Toluene	99.3	
87-61-6	1,2,3-Trichlorobenzene	101	
120-82-1	1,2,4-Trichlorobenzene	97.4	
71-55-6	1,1,1-Trichloroethane	103	
79-00-5	1,1,2-Trichloroethane	98.3	
79-01-6	Trichloroethene	105	
75-69-4	Trichlorofluoromethane	113	
96-18-4	1,2,3-Trichloropropane	92.8	
76-13-1	1,1,2-Trichlorotrifluoroethane	112	
526-73-8	1,2,3-Trimethylbenzene	98.0	
95-63-6	1,2,4-Trimethylbenzene	98.3	
108-67-8	1,3,5-Trimethylbenzene	101	
108-05-4	Vinyl acetate	96.2	J

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947593

Date Analyzed: 07/28/2021 08:06 Lab File ID: 072821A.B\0728A_03.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	79.0	
1330-20-7	Xylene (Total)	300	
179601-23-1	m&p-Xylene	201	
95-47-6	o-Xylene	98.9	

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947601

Date Analyzed: 07/28/2021 08:38 Lab File ID: 072821AGRO.B\0728A_05.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	3.3	

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947600

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821AGRO.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.055	U

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 2947592

Date Analyzed: 07/28/2021 09:09 | Lab File ID: 072821A.B\0728A_07.D

Initial wt/vol: 5 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.2	U
107-02-8	Acrolein	<75.6	U
107-13-1	Acrylonitrile	<3.2	U
71-43-2	Benzene	<0.49	U
108-86-1	Bromobenzene	<0.94	U
74-97-5	Bromochloromethane	<0.60	U
75-27-4	Bromodichloromethane	<0.60	U
75-25-2	Bromoform	<0.58	U
74-83-9	Bromomethane	<2.9	U
78-93-3	2-Butanone (MEK)	<3.4	U
104-51-8	n-Butylbenzene	<0.65	U
135-98-8	sec-Butylbenzene	<0.73	U
98-06-6	tert-Butylbenzene	<0.88	U
75-15-0	Carbon disulfide	<0.64	U
56-23-5	Carbon tetrachloride	<0.86	U
108-90-7	Chlorobenzene	<0.63	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.49	U
74-87-3	Chloromethane	<0.80	U
95-49-8	2-Chlorotoluene	<0.73	U
106-43-4	4-Chlorotoluene	<0.60	U
108-94-1	Cyclohexanone	<12.7	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.65	U
106-93-4	1,2-Dibromoethane (EDB)	<0.54	U
74-95-3	Dibromomethane	<0.60	U
95-50-1	1,2-Dichlorobenzene	<0.62	U
541-73-1	1,3-Dichlorobenzene	<0.72	U
106-46-7	1,4-Dichlorobenzene	<0.81	U
75-34-3	1,1-Dichloroethane	<0.39	U
107-06-2	1,2-Dichloroethane	<0.40	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.64	U
156-59-2	cis-1,2-Dichloroethene	<0.43	U
156-60-5	trans-1,2-Dichloroethene	<0.68	U
78-87-5	1,2-Dichloropropane	<0.98	U
142-28-9	1,3-Dichloropropane	<0.69	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947592

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821A.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.48	U
563-58-6	1,1-Dichloropropene	<0.90	U
10061-01-5	cis-1,3-Dichloropropene	<0.53	U
10061-02-6	trans-1,3-Dichloropropene	<0.46	U
60-29-7	Diethyl ether (Ethyl ether)	<0.56	U
100-41-4	Ethylbenzene	<0.46	U
142-82-5	n-Heptane	<4.5	U
87-68-3	Hexachloro-1,3-butadiene	<0.85	U
110-54-3	n-Hexane	<0.69	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.57	U
99-87-6	p-Isopropyltoluene	<0.69	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.0	U
1634-04-4	Methyl-tert-butyl ether	<0.48	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.80	U
100-42-5	Styrene	<0.59	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.41	U
109-99-9	Tetrahydrofuran	<0.78	U
108-88-3	Toluene	<0.35	U
87-61-6	1,2,3-Trichlorobenzene	<0.80	U
120-82-1	1,2,4-Trichlorobenzene	<0.80	U
71-55-6	1,1,1-Trichloroethane	<0.75	U
79-00-5	1,1,2-Trichloroethane	<0.63	U
79-01-6	Trichloroethene	<0.72	U
75-69-4	Trichlorofluoromethane	<0.61	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.0	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.67	U
108-67-8	1,3,5-Trimethylbenzene	<0.63	U
108-05-4	Vinyl acetate	<0.56	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947592

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821A.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.67	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.63	U
95-47-6	o-Xylene	<0.37	U

MSSV FULL SCAN - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSS9

LAB SAMPLE ID	SAMPLE NAME	2FBP	NIT5	TD14
2944441	2944441BLANK	80	81	76
2944442	2944442LCS	81	92	73
2944443	2944443MS	75	78	67
2944444	2944444MSD	79	84	70
60375481029	GB-55/0-2'	77	76	71
60375481030	GB-55/3-5'	70	69	63
60375481031	GB-55/3-5'D	78	79	72
60375481032	GB-62/0-2'	85	81	82
60375481033	GB-62/3-5'	77	75	81
60375481034	GB-68/1-3'	79	78	82
60375481035	GB-68/3-5'	76	74	77
60375481036	GB-68/3-5'D	67	66	68
60375481037	GB-67/5-6'	73	74	74
60375481038	GB-67/8-10'	74	72	73
60375481040	GB-61/3-5'	78	72	83
60375481041	GB-61/5-7'	77	77	77
60375481042	GB-54/0-2'	73	72	75
60375481043	GB-54/2-4'	71	70	73

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(NIT5) = Nitrobenzene-d5 (S)	(30-120)
(TD14) = Terphenyl-d14 (S)	(45-120)

* Values outside of QC Limits

MSSV FULL SCAN - FORM III SVOA-1
SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2944442LCS
Date Extracted: 07/22/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSS9
LCS Lot No: 44991
Lab File ID: 072821D.B\0728AM23.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-DRO	325	297	91	40-120

Spike Recovery: 0 out of 1 outside limits.

MSSV FULL SCAN - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas

Matrix Spike - Sample No: 2944443MS

Date Extracted: 07/22/2021

Date Analyzed (1): 07/28/2021

Instrument: 60MSS9

Lab File ID: 072821D.B\0728AM25.D

Parent Sample ID: GB-55/0-2'

SDG No.: 60375481

COMPOUND	SPIKE ADDED (mg/kg)	SAMPLE CONCENTRATION (mg/kg)	MS CONCENTRATION (mg/kg)	MS %REC	QC LIMITS REC.
TPH-DRO	368	2.9J	296	80	10-145

Spike Recovery: 0 out of 1 outside limits.

09/16/2021 10:22

MSSV FULL SCAN - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS9 Matrix Spike Duplicate - Sample No: 2944444MSD

Lab File ID (2): 072821D.B\0728AM26.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (mg/kg)	MSD CONCENTRATION (mg/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
TPH-DRO	379	327	86	10	0-38	10-145

RPD: 0 out of 1 outside limits.

Spike Recovery: 0 out of 1 outside limits.

09/16/2021 10:22

SAMPLE NO.

2944441BLANK

MSSV FULL SCAN - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSS9 Matrix: Solid Lab Sample ID: 2944441

Lab File ID (1): 072821D.B\0728AM22.D Date Analyzed (1): 07/28/2021 Time (1):20:48

Lab File ID (2): 072821S.B\0728AM22.D Date Analyzed (2): 07/28/2021 Time (2):20:48

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2944442LCS	2944442	072821D.B\0728AM23.D	07/28/2021 21:08
2944442LCS	2944442	072821S.B\0728AM23.D	07/28/2021 21:08
GB-55/0-2'	60375481029	072821D.B\0728AM24.D	07/28/2021 21:28
GB-55/0-2'	60375481029	072821S.B\0728AM24.D	07/28/2021 21:28
2944443MS	2944443	072821S.B\0728AM25.D	07/28/2021 21:47
2944443MS	2944443	072821D.B\0728AM25.D	07/28/2021 21:47
2944444MSD	2944444	072821D.B\0728AM26.D	07/28/2021 22:07
2944444MSD	2944444	072821S.B\0728AM26.D	07/28/2021 22:07
GB-55/3-5'	60375481030	072821D.B\0728AM27.D	07/28/2021 22:27
GB-55/3-5'	60375481030	072821S.B\0728AM27.D	07/28/2021 22:27
GB-55/3-5'D	60375481031	072821D.B\0728AM28.D	07/28/2021 22:46
GB-55/3-5'D	60375481031	072821S.B\0728AM28.D	07/28/2021 22:46
GB-62/0-2'	60375481032	072921D.B\0729AM22.D	07/29/2021 18:20
GB-62/0-2'	60375481032	072921S.B\0729AM22.D	07/29/2021 18:20
GB-62/3-5'	60375481033	072921S.B\0729AM23.D	07/29/2021 18:40
GB-62/3-5'	60375481033	072921D.B\0729AM23.D	07/29/2021 18:40
GB-68/1-3'	60375481034	072921S.B\0729AM24.D	07/29/2021 19:00
GB-68/1-3'	60375481034	072921D.B\0729AM24.D	07/29/2021 19:00
GB-68/3-5'	60375481035	072921D.B\0729AM25.D	07/29/2021 19:20
GB-68/3-5'	60375481035	072921S.B\0729AM25.D	07/29/2021 19:20
GB-68/3-5'D	60375481036	072921D.B\0729AM26.D	07/29/2021 19:40
GB-68/3-5'D	60375481036	072921S.B\0729AM26.D	07/29/2021 19:40
GB-67/5-6'	60375481037	072921D.B\0729AM27.D	07/29/2021 20:00
GB-67/5-6'	60375481037	072921S.B\0729AM27.D	07/29/2021 20:00
GB-67/8-10'	60375481038	072921D.B\0729AM28.D	07/29/2021 20:20
GB-67/8-10'	60375481038	072921S.B\0729AM28.D	07/29/2021 20:20
GB-61/3-5'	60375481040	072921S.B\0729AM29.D	07/29/2021 20:40
GB-61/3-5'	60375481040	072921D.B\0729AM29.D	07/29/2021 20:40
GB-61/5-7'	60375481041	072921S.B\0729AM30.D	07/29/2021 20:59
GB-61/5-7'	60375481041	072921D.B\0729AM30.D	07/29/2021 20:59
GB-54/0-2'	60375481042	072921S.B\0729AM31.D	07/29/2021 21:19
GB-54/0-2'	60375481042	072921D.B\0729AM31.D	07/29/2021 21:19
GB-54/2-4'	60375481043	072921D.B\0729AM32.D	07/29/2021 21:39
GB-54/2-4'	60375481043	072921S.B\0729AM32.D	07/29/2021 21:39

MSSV Full Scan - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072821S.B\0728ADFT.D DFTPP Injection Date: 07/28/2021
Instrument ID: 60MSS9 DFTPP Injection Time: 10:56

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.00 - 80.00% of mass 198	51.02	
68	Less than 2.00% of mass 69	0.69	(1.55)[1]
69	Mass 69 relative abundance	44.40	
70	Less than 2.00% of mass 69	0.30	(0.67)[1]
127	25.00 - 75.00% of mass 198	52.75	
197	Less than 1.00% of mass 198	0.00	
198	Base Peak, 100.00% relative	100.00	
199	5.00 - 9.00% of mass 198	7.10	
275	10.00 - 30.00% of mass 198	26.64	
365	Greater than 0.75% of mass 198	4.14	
441	Present, but less than mass 443	14.14	
442	40.00 - 110.00% of mass 198	102.74	
443	15.00 - 24.00% of mass 442	19.89	(19.36)[2]

1 - Value is % mass 69 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936171CAL5	19936171CAL5	072821S.B\0728AMI5.D	07/28/2021	11:08
19936220CAL5	19936220CAL5	072821D.B\0728AMI5.D	07/28/2021	11:08
19936172CAL1	19936172CAL1	072821S.B\0728AMI1.D	07/28/2021	11:29
19936223CAL1	19936223CAL1	072821D.B\0728AMI1.D	07/28/2021	11:29
19936173CAL2	19936173CAL2	072821S.B\0728AMI2.D	07/28/2021	11:49
19936225CAL2	19936225CAL2	072821D.B\0728AMI2.D	07/28/2021	11:49
19936221CAL3	19936221CAL3	072821D.B\0728AMI3.D	07/28/2021	12:09
19936174CAL3	19936174CAL3	072821S.B\0728AMI3.D	07/28/2021	12:09
19936175CAL4	19936175CAL4	072821S.B\0728AMI4.D	07/28/2021	12:28
19936224CAL4	19936224CAL4	072821D.B\0728AMI4.D	07/28/2021	12:28
19936226CAL6	19936226CAL6	072821D.B\0728AMI6.D	07/28/2021	12:48
19936176CAL6	19936176CAL6	072821S.B\0728AMI6.D	07/28/2021	12:48
19936177CAL7	19936177CAL7	072821S.B\0728AMI7.D	07/28/2021	13:08
19936227CAL7	19936227CAL7	072821D.B\0728AMI7.D	07/28/2021	13:08
19936222ICV	19936222ICV	072821D.B\0728AMICV.D	07/28/2021	13:28
19936178ICV	19936178ICV	072821S.B\0728AMICV.D	07/28/2021	13:28
2944441BLANK	2944441BLANK	072821S.B\0728AM22.D	07/28/2021	20:48
2944441BLANK	2944441BLANK	072821D.B\0728AM22.D	07/28/2021	20:48
2944442LCS	2944442LCS	072821D.B\0728AM23.D	07/28/2021	21:08

MSSV Full Scan - FORM V SVOA-2
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072821S.B\0728ADFT.D DFTPP Injection Date: 07/28/2021
Instrument ID: 60MSS9 DFTPP Injection Time: 10:56

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
2944442LCS	2944442LCS	072821S.B\0728AM23.D	07/28/2021	21:08
GB-55/0-2'	60375481029	072821S.B\0728AM24.D	07/28/2021	21:28
GB-55/0-2'	60375481029	072821D.B\0728AM24.D	07/28/2021	21:28
2944443MS	2944443MS	072821S.B\0728AM25.D	07/28/2021	21:47
2944443MS	2944443MS	072821D.B\0728AM25.D	07/28/2021	21:47
2944444MSD	2944444MSD	072821D.B\0728AM26.D	07/28/2021	22:07
2944444MSD	2944444MSD	072821S.B\0728AM26.D	07/28/2021	22:07
GB-55/3-5'	60375481030	072821D.B\0728AM27.D	07/28/2021	22:27
GB-55/3-5'	60375481030	072821S.B\0728AM27.D	07/28/2021	22:27
GB-55/3-5'D	60375481031	072821S.B\0728AM28.D	07/28/2021	22:46
GB-55/3-5'D	60375481031	072821D.B\0728AM28.D	07/28/2021	22:46

MSSV Full Scan - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072921S.B\0729ADFT.D DFTPP Injection Date 07/29/2021
Instrument ID: 60MSS9 DFTPP Injection Time 09:48

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.00 - 80.00% of mass 198	50.68	
68	Less than 2.00% of mass 69	0.72	(1.63)[1]
69	Mass 69 relative abundance	43.99	
70	Less than 2.00% of mass 69	0.28	(0.64)[1]
127	25.00 - 75.00% of mass 198	51.06	
197	Less than 1.00% of mass 198	0.00	
198	Base Peak, 100.00% relative	100.00	
199	5.00 - 9.00% of mass 198	6.70	
275	10.00 - 30.00% of mass 198	26.61	
365	Greater than 0.75% of mass 198	3.95	
441	Present, but less than mass 443	15.11	
442	40.00 - 110.00% of mass 198	101.77	
443	15.00 - 24.00% of mass 442	19.04	(18.71)[2]

1 - Value is % mass 69 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19740008CCV	19740008CCV	072921D.B\0729AMI5.D	07/29/2021	10:00
19936526CCV	19936526CCV	072921S.B\0729AMI5.D	07/29/2021	10:00
GB-62/0-2'	60375481032	072921S.B\0729AM22.D	07/29/2021	18:20
GB-62/0-2'	60375481032	072921D.B\0729AM22.D	07/29/2021	18:20
GB-62/3-5'	60375481033	072921D.B\0729AM23.D	07/29/2021	18:40
GB-62/3-5'	60375481033	072921S.B\0729AM23.D	07/29/2021	18:40
GB-68/1-3'	60375481034	072921D.B\0729AM24.D	07/29/2021	19:00
GB-68/1-3'	60375481034	072921S.B\0729AM24.D	07/29/2021	19:00
GB-68/3-5'	60375481035	072921S.B\0729AM25.D	07/29/2021	19:20
GB-68/3-5'	60375481035	072921D.B\0729AM25.D	07/29/2021	19:20
GB-68/3-5'D	60375481036	072921S.B\0729AM26.D	07/29/2021	19:40
GB-68/3-5'D	60375481036	072921D.B\0729AM26.D	07/29/2021	19:40
GB-67/5-6'	60375481037	072921S.B\0729AM27.D	07/29/2021	20:00
GB-67/5-6'	60375481037	072921D.B\0729AM27.D	07/29/2021	20:00
GB-67/8-10'	60375481038	072921S.B\0729AM28.D	07/29/2021	20:20
GB-67/8-10'	60375481038	072921D.B\0729AM28.D	07/29/2021	20:20
GB-61/3-5'	60375481040	072921D.B\0729AM29.D	07/29/2021	20:40
GB-61/3-5'	60375481040	072921S.B\0729AM29.D	07/29/2021	20:40
GB-61/5-7'	60375481041	072921D.B\0729AM30.D	07/29/2021	20:59

MSSV Full Scan - FORM V SVOA-2
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072921S.B\0729ADFT.D DFTPP Injection Date 07/29/2021
Instrument ID: 60MSS9 DFTPP Injection Time 09:48

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
GB-61/5-7'	60375481041	072921S.B\0729AM30.D	07/29/2021	20:59
GB-54/0-2'	60375481042	072921D.B\0729AM31.D	07/29/2021	21:19
GB-54/0-2'	60375481042	072921S.B\0729AM31.D	07/29/2021	21:19
GB-54/2-4'	60375481043	072921S.B\0729AM32.D	07/29/2021	21:39
GB-54/2-4'	60375481043	072921D.B\0729AM32.D	07/29/2021	21:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM22.D
Lab Smp Id: 2944441
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30046,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: MB
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1019388	-0.74
5 Naphthalene-d8 (I	3476200	1738100	6952400	3587908	3.21
8 Acenaphthene-d10	2134361	1067181	4268722	2273851	6.54
9 Phenanthrene-d10	3506702	1753351	7013404	4016865	14.55
12 Chrysene-d12 (IS)	1950999	975500	3901998	2604753	33.51
14 Perylene-d12 (IS)	817263	408632	1634526	1206531	47.63

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.15	0.14
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.13	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM23.D
Lab Smp Id: 2944442
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30046,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: MBLCS
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1039214	1.19
5 Naphthalene-d8 (I	3476200	1738100	6952400	3632320	4.49
8 Acenaphthene-d10	2134361	1067181	4268722	2270750	6.39
9 Phenanthrene-d10	3506702	1753351	7013404	3925446	11.94
12 Chrysene-d12 (IS)	1950999	975500	3901998	2603621	33.45
14 Perylene-d12 (IS)	817263	408632	1634526	1261541	54.36

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.16	0.27
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.06	-0.00
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.00
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	-0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.13	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM25.D
Lab Smp Id: 2944443
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30046,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-55/0-2'MS
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1033453	0.63
5 Naphthalene-d8 (I	3476200	1738100	6952400	3593830	3.38
8 Acenaphthene-d10	2134361	1067181	4268722	2201989	3.17
9 Phenanthrene-d10	3506702	1753351	7013404	3797956	8.31
12 Chrysene-d12 (IS)	1950999	975500	3901998	2562008	31.32
14 Perylene-d12 (IS)	817263	408632	1634526	1201567	47.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.16	0.28
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.14	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM26.D
Lab Smp Id: 2944444
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30046,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-55/0-2'MSD
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1040161	1.28
5 Naphthalene-d8 (I	3476200	1738100	6952400	3599527	3.55
8 Acenaphthene-d10	2134361	1067181	4268722	2256683	5.73
9 Phenanthrene-d10	3506702	1753351	7013404	3944496	12.48
12 Chrysene-d12 (IS)	1950999	975500	3901998	2571360	31.80
14 Perylene-d12 (IS)	817263	408632	1634526	1219692	49.24

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.16	0.28
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.14	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM24.D
Lab Smp Id: 60375481029
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30046,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-55/0-2'
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1022191	-0.47
5 Naphthalene-d8 (I	3476200	1738100	6952400	3594630	3.41
8 Acenaphthene-d10	2134361	1067181	4268722	2224132	4.21
9 Phenanthrene-d10	3506702	1753351	7013404	3916923	11.70
12 Chrysene-d12 (IS)	1950999	975500	3901998	2536198	29.99
14 Perylene-d12 (IS)	817263	408632	1634526	1132061	38.52

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.15	0.14
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	-0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.13	-0.17

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM27.D
Lab Smp Id: 60375481030
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30046,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-55/3-5'
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1087722	5.91
5 Naphthalene-d8 (I	3476200	1738100	6952400	3800937	9.34
8 Acenaphthene-d10	2134361	1067181	4268722	2365464	10.83
9 Phenanthrene-d10	3506702	1753351	7013404	4144859	18.20
12 Chrysene-d12 (IS)	1950999	975500	3901998	2729041	39.88
14 Perylene-d12 (IS)	817263	408632	1634526	1283519	57.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.15	0.14
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.13	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM28.D
Lab Smp Id: 60375481031
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30046,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-55/3-5'D
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1056850	2.91
5 Naphthalene-d8 (I	3476200	1738100	6952400	3718683	6.98
8 Acenaphthene-d10	2134361	1067181	4268722	2326035	8.98
9 Phenanthrene-d10	3506702	1753351	7013404	4082940	16.43
12 Chrysene-d12 (IS)	1950999	975500	3901998	2681709	37.45
14 Perylene-d12 (IS)	817263	408632	1634526	1237425	51.41

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.15	0.14
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.32	-0.15
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.13	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

MSSV FULL SCAN - FORM VIII SVOA-1
MSSV FULL SCAN INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19936526CCV Date Analyzed: 07/29/2021

Instrument ID: 60MSS9 GC Column: Col 1 Time Analyzed: 10:00

Lab File ID: 072921S.B\0729AMI5.D

		AREA 14DDIS	RT	AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD		1005146	4.148	2067775	6.293	2127979	9.183	3351714	5.057
UPPER LIMIT		2010292	4.648	4135550	6.793	4255958	9.683	6703428	5.557
LOWER LIMIT		502573	3.648	1033887.5	5.793	1063989.5	8.683	1675857	4.557
LAB SAMPLE ID	SAMPLE NO.								
60375481032	GB-62/0-2'	996296	4.153	2187100	6.288	2343392	9.189	3505323	5.052
60375481033	GB-62/3-5'	1076962	4.153	2316338	6.288	2410511	9.183	3746116	5.052
60375481034	GB-68/1-3'	1051433	4.153	2335651	6.288	2452372	9.183	3703364	5.052
60375481035	GB-68/3-5'	1050053	4.153	2333838	6.287	2402283	9.183	3717529	5.051
60375481036	GB-68/3-5'D	1054589	4.153	2326263	6.288	2429329	9.183	3699386	5.052
60375481037	GB-67/5-6'	1076715	4.153	2412014	6.287	2498225	9.183	3814143	5.052
60375481038	GB-67/8-10'	1086885	4.153	2380453	6.288	2530646	9.183	3776918	5.052
60375481040	GB-61/3-5'	1063371	4.153	2304710	6.287	2347904	9.183	3684679	5.052
60375481041	GB-61/5-7'	1093781	4.153	2382934	6.288	2405243	9.183	3770935	5.052
60375481042	GB-54/0-2'	1024079	4.153	2282112	6.287	2310110	9.183	3610153	5.051
60375481043	GB-54/2-4'	1100496	4.153	2454444	6.287	2506130	9.183	3848762	5.052

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV FULL SCAN - FORM VIII SVOA-1
MSSV FULL SCAN INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19936526CCV Date Analyzed: 07/29/2021

Instrument ID: 60MSS9 GC Column: Col 1 Time Analyzed: 10:00

Lab File ID: 072921S.B\0729AMI5.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		961477	10.144	3477810	7.329
UPPER LIMIT		1922954	10.644	6955620	7.829
LOWER LIMIT		480738.5	9.644	1738905	6.829
LAB SAMPLE ID	SAMPLE NO.				
60375481032	GB-62/0-2'	983572	10.144	3793997	7.329
60375481033	GB-62/3-5'	1044016	10.138	4061655	7.329
60375481034	GB-68/1-3'	1030397	10.133	4110792	7.329
60375481035	GB-68/3-5'	1025601	10.133	4025164	7.329
60375481036	GB-68/3-5'D	1064282	10.133	4053056	7.329
60375481037	GB-67/5-6'	1075656	10.133	4151658	7.329
60375481038	GB-67/8-10'	1107157	10.133	4163918	7.329
60375481040	GB-61/3-5'	1004721	10.138	4025680	7.329
60375481041	GB-61/5-7'	1049496	10.139	4160683	7.329
60375481042	GB-54/0-2'	1014109	10.138	3982857	7.329
60375481043	GB-54/2-4'	1051400	10.133	4161175	7.329

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

GB-55/0-2'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481029
Date Analyzed: 07/28/2021 21:28
Lab File ID: 072821D.B\0728AM24.D
Initial wt/vol: 31.53 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 14.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	7.8	J
	TPH-DRO	2.9	J

SAMPLE NO.

GB-55/3-5'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481030
Date Analyzed: 07/28/2021 22:27
Lab File ID: 072821D.B\0728AM27.D
Initial wt/vol: 31.47 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	5.9	J
	TPH-DRO	1.8	J

SAMPLE NO.

GB-55/3-5'D

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481031
Date Analyzed: 07/28/2021 22:46
Lab File ID: 072821D.B\0728AM28.D
Initial wt/vol: 31.1 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 16.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	4.6	J
	TPH-DRO	<1.6	U

SAMPLE NO.

GB-62/0-2'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481032
Date Analyzed: 07/29/2021 18:20
Lab File ID: 072921D.B\0729AM22.D
Initial wt/vol: 30.52 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 17.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	66.5	
	TPH-DRO	25.8	

SAMPLE NO.

GB-62/3-5'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481033
Date Analyzed: 07/29/2021 18:40
Lab File ID: 072921D.B\0729AM23.D
Initial wt/vol: 31.42 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 18.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	12.8	J
	TPH-DRO	4.0	J

SAMPLE NO.

GB-68/1-3'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481034
Date Analyzed: 07/29/2021 19:00
Lab File ID: 072921D.B\0729AM24.D
Initial wt/vol: 31.49 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 14.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	7.6	J
	TPH-DRO	2.7	J

SAMPLE NO.

GB-68/3-5'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481035
Date Analyzed: 07/29/2021 19:20
Lab File ID: 072921D.B\0729AM25.D
Initial wt/vol: 30.07 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 19.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	9.0	J
	TPH-DRO	2.4	J

SAMPLE NO.

GB-68/3-5'D

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481036
Date Analyzed: 07/29/2021 19:40
Lab File ID: 072921D.B\0729AM26.D
Initial wt/vol: 31.02 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 20.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	8.9	J
	TPH-DRO	2.0	J

SAMPLE NO.

GB-67/5-6'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481037
Date Analyzed: 07/29/2021 20:00
Lab File ID: 072921D.B\0729AM27.D
Initial wt/vol: 30.36 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 18.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	6.7	J
	TPH-DRO	2.0	J

SAMPLE NO.

GB-67/8-10'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481038
Date Analyzed: 07/29/2021 20:20
Lab File ID: 072921D.B\0729AM28.D
Initial wt/vol: 31.18 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 19.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	8.5	J
	TPH-DRO	2.5	J

SAMPLE NO.

GB-61/3-5'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481040
Date Analyzed: 07/29/2021 20:40
Lab File ID: 072921D.B\0729AM29.D
Initial wt/vol: 30.66 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 24.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	17.4	J
	TPH-DRO	6.8	J

SAMPLE NO.

GB-61/5-7'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481041
Date Analyzed: 07/29/2021 20:59
Lab File ID: 072921D.B\0729AM30.D
Initial wt/vol: 30.2 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 22.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	15.7	J
	TPH-DRO	8.0	J

SAMPLE NO.

GB-54/0-2'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481042
Date Analyzed: 07/29/2021 21:19
Lab File ID: 072921D.B\0729AM31.D
Initial wt/vol: 30.84 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 11.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	9.1	J
	TPH-DRO	2.9	J

SAMPLE NO.

GB-54/2-4'

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481043
Date Analyzed: 07/29/2021 21:39
Lab File ID: 072921D.B\0729AM32.D
Initial wt/vol: 30.09 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 16.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	10.4	J
	TPH-DRO	3.6	J

MSSV FULL SCAN - FORM VI SVOA-1

MSSV FULL SCAN INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS9 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:29 13:08

LAB FILE ID

CAL1 =	072821D.B\0728AMI1.D	CAL1 =	072821S.B\0728AMI1.D	CAL2 =	072821D.B\0728AMI2.D
CAL2 =	072821S.B\0728AMI2.D	CAL3 =	072821D.B\0728AMI3.D	CAL3 =	072821S.B\0728AMI3.D
CAL4 =	072821D.B\0728AMI4.D	CAL4 =	072821S.B\0728AMI4.D	CAL6 =	072821S.B\0728AMI6.D
CAL6 =	072821D.B\0728AMI6.D	CAL7 =	072821S.B\0728AMI7.D	CAL7 =	072821D.B\0728AMI7.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL6	CAL7
TPH-ORO	Averaged	159810.236	160344.058	155585.571	150784.349	141997.343	134153.926
TPH-DRO	Averaged	159810.236	160344.058	155585.571	150784.349	141997.343	134153.926
2-Fluorobiphenyl (S)	Averaged	1.50456	1.48902	1.36570	1.24931	1.02945	1.04977
Nitrobenzene-d5 (S)	Averaged	0.43117	0.43985	0.40416	0.40397	0.37977	0.34582
Terphenyl-d14 (S)	Averaged	1.69629	1.65553	1.50419	1.48658	1.21656	1.14667

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV FULL SCAN - FORM VI SVOA-2

MSSV FULL SCAN INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS9 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:29 13:08

LAB FILE ID

CAL1 =	072821D.B\0728AMI1.D	CAL1 =	072821S.B\0728AMI1.D	CAL2 =	072821D.B\0728AMI2.D
CAL2 =	072821S.B\0728AMI2.D	CAL3 =	072821D.B\0728AMI3.D	CAL3 =	072821S.B\0728AMI3.D
CAL4 =	072821D.B\0728AMI4.D	CAL4 =	072821S.B\0728AMI4.D	CAL6 =	072821S.B\0728AMI6.D
CAL6 =	072821D.B\0728AMI6.D	CAL7 =	072821S.B\0728AMI7.D	CAL7 =	072821D.B\0728AMI7.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
TPH-ORO	Averaged	6.47896		0.00000000	151250.276	
TPH-DRO	Averaged	6.47896		0.00000000	151250.276	
2-Fluorobiphenyl (S)	Averaged	15.55372			1.26337	
Nitrobenzene-d5 (S)	Averaged	7.90731			0.39962	
Terphenyl-d14 (S)	Averaged	14.16596			1.45875	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN INITIAL CALIBRATION DATA

19936222ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 13:28

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821D.B\0728AMICV.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-ORO	Averaged	151250.2	106775.3	0.0100	-29.4048	20.0000
TPH-DRO	Averaged	151250.2	106775.3	0.0100	-29.4048	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN CONTINUING CALIBRATION DATA

19740008CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/29/2021 Time: 10:00

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072921D.B\0729AMI5.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-ORO	Averaged	151250.2	152803.6	0.0100	1.0270	20.0000
TPH-DRO	Averaged	151250.2	152803.6	0.0100	1.0270	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/20/2021 1:59

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN CONTINUING CALIBRATION DATA

19936526CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/29/2021 Time: 10:00

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072921S.B\0729AMI5.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
2-Fluorobiphenyl (S)	Averaged	1.26337	1.16412	0.0100	-7.8560	20.0000
Nitrobenzene-d5 (S)	Averaged	0.39962	0.39287	0.0100	-1.6895	20.0000
Terphenyl-d14 (S)	Averaged	1.45875	1.38634	0.0100	-4.9636	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

BLANK

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 2944441
Date Analyzed: 07/28/2021 20:48
Lab File ID: 072821D.B\0728AM22.D
Initial wt/vol: 30.63 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	2.4	J
	TPH-DRO	<1.4	U

SAMPLE NO.

LCS

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 2944442
Date Analyzed: 07/28/2021 21:08
Lab File ID: 072821D.B\0728AM23.D
Initial wt/vol: 30.75 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	297	

SAMPLE NO.

MS

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 2944443
Date Analyzed: 07/28/2021 21:47
Lab File ID: 072821D.B\0728AM25.D
Initial wt/vol: 31.59 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 14.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	296	

SAMPLE NO.

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

MSD

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 2944444
Date Analyzed: 07/28/2021 22:07
Lab File ID: 072821D.B\0728AM26.D
Initial wt/vol: 30.7 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 14.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	327	

MSSV SIM - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2944445	2944445BLANK	80	81
2944446	2944446LCS	110	122
2944447	2944447MS	94	102
2944448	2944448MSD	95	102
60375481029	GB-55/0-2'	69	70
60375481030	GB-55/3-5'	64	65
60375481031	GB-55/3-5'D	71	76
60375481032	GB-62/0-2'	90	105
60375481033	GB-62/3-5'	71	74
60375481034	GB-68/1-3'	76	82
60375481035	GB-68/3-5'	70	72
60375481036	GB-68/3-5'D	59	62
60375481040	GB-61/3-5'	71	77
60375481041	GB-61/5-7'	69	69
60375481042	GB-54/0-2'	62	64
60375481043	GB-54/2-4'	67	69

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM II SVOA-2
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2944450	2944450BLANK	78	94
2944451	2944451LCS	73	90
2944452	2944452MS	71	95
2944453	2944453MSD	68	91
60375481003	GB-70/3'-5'	75	95
60375481004	GB-70/5'-7'	72	92
60375481005	GB-71/0'-2'	68	89
60375481006	GB-71/3'-5'	78	95
60375481007	GB-65/3'-4'	69	83
60375481008	GB-65/5'-7'	84	97
60375481009	GB-64/3'-4'	64	83
60375481010	GB-64/5'-7'	78	93
60375481011	GB-57/3.5'-5.5'	78	89
60375481012	GB-57/6.0'-8.0'	73	92
60375481013	GB-57/6.0'-8.0' D	74	92
60375481014	GB-56/3-5'	70	88
60375481015	GB-56/5-7'	72	91
60375481016	GB-58/1-3'	81	105
60375481017	GB-58/4-6'	68	84
60375481018	GB-51/1.5-3'	79	97
60375481019	GB-51/3-5'	75	92
60375481020	GB-50/0-2'	80	104
60375481021	GB-50/3-5'	72	90
60375481022	GB-50/3-5'D	70	87

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM II SVOA-3
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2944481	2944481BLANK	93	104
2944482	2944482LCS	83	92
2944483	2944483MS	84	97
2944484	2944484MSD	86	96
60375481027	GB-48/3-5'	83	94
60375481028	GB-48/5-7'	82	94

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2944446LCS
Date Extracted: 07/22/2021
Date Analyzed (1): 07/23/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 072321.B\0723AP18.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	31.4	32.1	102	45-120
Acenaphthylene	31.4	32.6	104	50-120
Anthracene	31.4	34.5	110	50-120
Benzo(a)anthracene	31.4	35.8	114	55-125
Benzo(a)pyrene	31.4	34.9	111	45-120
Benzo(b)fluoranthene	31.4	35.4	113	50-125
Benzo(g,h,i)perylene	31.4	30.9	98	40-120
Benzo(k)fluoranthene	31.4	36.7	117	55-120
Chrysene	31.4	33.8	108	55-120
Dibenz(a,h)anthracene	31.4	34.3	109	40-125
Fluoranthene	31.4	37.6	120	50-125
Fluorene	31.4	33.7	107	50-120
Indeno(1,2,3-cd)pyrene	31.4	32.3	103	44-125
Naphthalene	31.4	31.7	101	45-120
Phenanthrene	31.4	33.9	108	50-125
Pyrene	31.4	35.4	113	50-125

Spike Recovery: 0 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2944451LCS
Date Extracted: 07/22/2021
Date Analyzed (1): 07/26/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 072621B.B\0726CP19.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	31.6	23.6	75	45-120
Acenaphthylene	31.6	23.8	75	50-120
Anthracene	31.6	26.2	83	50-120
Benzo(a)anthracene	31.6	28.2	89	55-125
Benzo(a)pyrene	31.6	26.8	85	45-120
Benzo(b)fluoranthene	31.6	33.7	107	50-125
Benzo(g,h,i)perylene	31.6	13.1	41	40-120
Benzo(k)fluoranthene	31.6	29.9	95	55-120
Chrysene	31.6	26.1	83	55-120
Dibenz(a,h)anthracene	31.6	16.8	53	40-125
Fluoranthene	31.6	29.8	94	50-125
Fluorene	31.6	25.6	81	50-120
Indeno(1,2,3-cd)pyrene	31.6	15.8	50	44-125
Naphthalene	31.6	22.7	72	45-120
Phenanthrene	31.6	26.1	83	50-125
Pyrene	31.6	29.7	94	50-125

Spike Recovery: 0 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2944482LCS
Date Extracted: 07/22/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 072721.B\0727AP12.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	32.3	27.5	85	45-120
Acenaphthylene	32.3	26.8	83	50-120
Anthracene	32.3	30.0	93	50-120
Benzo(a)anthracene	32.3	30.1	93	55-125
Benzo(a)pyrene	32.3	28.7	89	45-120
Benzo(b)fluoranthene	32.3	30.8	95	50-125
Benzo(g,h,i)perylene	32.3	29.4	91	40-120
Benzo(k)fluoranthene	32.3	29.0	90	55-120
Chrysene	32.3	29.6	92	55-120
Dibenz(a,h)anthracene	32.3	29.2	91	40-125
Fluoranthene	32.3	31.7	98	50-125
Fluorene	32.3	28.1	87	50-120
Indeno(1,2,3-cd)pyrene	32.3	29.8	92	44-125
Naphthalene	32.3	27.1	84	45-120
Phenanthrene	32.3	31.6	98	50-125
Pyrene	32.3	31.7	98	50-125

Spike Recovery: 0 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas

Matrix Spike - Sample No: 2944447MS

Date Extracted: 07/22/2021

Date Analyzed (1): 07/23/2021

Instrument: 60MSS5

Lab File ID: 072321.B\0723AP21.D

Parent Sample ID: GB-55/3-5'

SDG No.: 60375481

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	39.4	<2.8	33.2	84	10-150
Acenaphthylene	39.4	<2.8	33.5	85	30-125
Anthracene	39.4	<3.1	35.9	91	10-160
Benzo(a)anthracene	39.4	<3.5	37.1	94	10-160
Benzo(a)pyrene	39.4	<2.7	36.0	92	10-150
Benzo(b)fluoranthene	39.4	<3.6	36.6	93	10-165
Benzo(g,h,i)perylene	39.4	<3.4	31.7	81	10-155
Benzo(k)fluoranthene	39.4	<4.2	39.3	100	10-165
Chrysene	39.4	<3.6	35.5	90	10-150
Dibenz(a,h)anthracene	39.4	<3.2	34.3	87	10-175
Fluoranthene	39.4	<5.6	40.5	103	10-180
Fluorene	39.4	<2.9	34.8	88	20-145
Indeno(1,2,3-cd)pyrene	39.4	<3.2	33.3	85	10-150
Naphthalene	39.4	<3.2	32.7	83	10-165
Phenanthrene	39.4	<6.1	36.7	93	10-170
Pyrene	39.4	<4.0	38.6	98	10-180

Spike Recovery: 0 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2944448MSD

Lab File ID (2): 072321.B\0723AP22.D Date Analyzed (2): 07/23/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	38.4	35.3	92	6	0-42	10-150
Acenaphthylene	38.4	35.6	93	6	0-44	30-125
Anthracene	38.4	37.2	97	3	0-54	10-160
Benzo(a)anthracene	38.4	38.2	99	3	0-62	10-160
Benzo(a)pyrene	38.4	36.7	96	2	0-66	10-150
Benzo(b)fluoranthene	38.4	38.8	101	6	0-61	10-165
Benzo(g,h,i)perylene	38.4	32.4	84	2	0-58	10-155
Benzo(k)fluoranthene	38.4	38.2	99	3	0-53	10-165
Chrysene	38.4	36.0	94	2	0-57	10-150
Dibenz(a,h)anthracene	38.4	34.9	91	2	0-48	10-175
Fluoranthene	38.4	40.6	106	0	0-54	10-180
Fluorene	38.4	36.7	95	5	0-39	20-145
Indeno(1,2,3-cd)pyrene	38.4	33.5	87	0	0-59	10-150
Naphthalene	38.4	34.7	90	6	0-54	10-165
Phenanthrene	38.4	37.5	98	2	0-51	10-170
Pyrene	38.4	39.0	101	1	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2944452MS
Date Extracted: 07/22/2021
Date Analyzed (1): 07/26/2021
Instrument: 60MSS5
Lab File ID: 072621B.B\0726CP35.D
Parent Sample ID: GB-58/4-6'
SDG No.: 60375481

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	41.3	<1.5	31.4	76	10-150
Acenaphthylene	41.3	<1.5	30.5	74	30-125
Anthracene	41.3	9.8	44.5	84	10-160
Benzo(a)anthracene	41.3	50.4	99.3	118	10-160
Benzo(a)pyrene	41.3	38.8	84.4	110	10-150
Benzo(b)fluoranthene	41.3	92.4	153	147	10-165
Benzo(g,h,i)perylene	41.3	15.8	37.8	53	10-155
Benzo(k)fluoranthene	41.3	22.3	70.1	115	10-165
Chrysene	41.3	57.9	99.1	100	10-150
Dibenz(a,h)anthracene	41.3	<1.8	26.1	63	10-175
Fluoranthene	41.3	160	216	136	10-180
Fluorene	41.3	2.5J	36.3	82	20-145
Indeno(1,2,3-cd)pyrene	41.3	16.1	41.2	61	10-150
Naphthalene	41.3	<1.8	29.1	71	10-165
Phenanthrene	41.3	64.0	111	114	10-170
Pyrene	41.3	125	191	158	10-180

Spike Recovery: 0 out of 16 outside limits.

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2944453MSD

Lab File ID (2): 072621B.B\0726CP36.D Date Analyzed (2): 07/26/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	40.8	29.3	72	7	0-42	10-150
Acenaphthylene	40.8	28.8	71	6	0-44	30-125
Anthracene	40.8	42.0	79	6	0-54	10-160
Benzo(a)anthracene	40.8	90.3	98	9	0-62	10-160
Benzo(a)pyrene	40.8	73.8	86	13	0-66	10-150
Benzo(b)fluoranthene	40.8	134	101	14	0-61	10-165
Benzo(g,h,i)perylene	40.8	32.0	40	17	0-58	10-155
Benzo(k)fluoranthene	40.8	68.8	114	2	0-53	10-165
Chrysene	40.8	88.9	76	11	0-57	10-150
Dibenz(a,h)anthracene	40.8	23.7	58	10	0-48	10-175
Fluoranthene	40.8	200	99	8	0-54	10-180
Fluorene	40.8	33.6	76	8	0-39	20-145
Indeno(1,2,3-cd)pyrene	40.8	35.6	48	15	0-59	10-150
Naphthalene	40.8	27.0	66	8	0-54	10-165
Phenanthrene	40.8	98.6	85	12	0-51	10-170
Pyrene	40.8	174	121	9	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2944483MS
Date Extracted: 07/22/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSS5
Lab File ID: 072721.B\0727AP13.D
Parent Sample ID: GB-48/3-5'
SDG No.: 60375481

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	41.1	<1.5	34.9	85	10-150
Acenaphthylene	41.1	<1.5	34.5	84	30-125
Anthracene	41.1	<1.6	39.7	96	10-160
Benzo(a)anthracene	41.1	<1.8	40.5	99	10-160
Benzo(a)pyrene	41.1	<1.4	38.2	93	10-150
Benzo(b)fluoranthene	41.1	<1.9	42.0	102	10-165
Benzo(g,h,i)perylene	41.1	<1.8	36.9	90	10-155
Benzo(k)fluoranthene	41.1	<2.2	40.4	98	10-165
Chrysene	41.1	<1.9	40.1	97	10-150
Dibenz(a,h)anthracene	41.1	<1.7	36.5	89	10-175
Fluoranthene	41.1	4.4	44.4	97	10-180
Fluorene	41.1	<1.5	36.4	88	20-145
Indeno(1,2,3-cd)pyrene	41.1	<1.7	37.3	91	10-150
Naphthalene	41.1	<1.7	35.9	87	10-165
Phenanthrene	41.1	4.1	41.6	91	10-170
Pyrene	41.1	3.7J	43.5	97	10-180

Spike Recovery: 0 out of 16 outside limits.

09/20/2021 2:19

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2944484MSD

Lab File ID (2): 072721.B\0727AP14.D Date Analyzed (2): 07/27/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	39.6	35.3	89	1	0-42	10-150
Acenaphthylene	39.6	35.1	89	2	0-44	30-125
Anthracene	39.6	39.5	100	0	0-54	10-160
Benzo(a)anthracene	39.6	40.0	101	1	0-62	10-160
Benzo(a)pyrene	39.6	37.8	95	1	0-66	10-150
Benzo(b)fluoranthene	39.6	38.6	97	9	0-61	10-165
Benzo(g,h,i)perylene	39.6	37.1	94	1	0-58	10-155
Benzo(k)fluoranthene	39.6	41.3	104	2	0-53	10-165
Chrysene	39.6	39.4	100	2	0-57	10-150
Dibenz(a,h)anthracene	39.6	37.0	93	1	0-48	10-175
Fluoranthene	39.6	45.1	103	1	0-54	10-180
Fluorene	39.6	37.1	94	2	0-39	20-145
Indeno(1,2,3-cd)pyrene	39.6	36.6	92	2	0-59	10-150
Naphthalene	39.6	34.7	88	3	0-54	10-165
Phenanthrene	39.6	43.1	98	3	0-51	10-170
Pyrene	39.6	43.4	100	0	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

09/20/2021 2:19

SAMPLE NO.

2944445BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2944445

Lab File ID: 072321.B\0723AP17.D Date Analyzed: 07/23/2021 Time:16:11

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2944446LCS	2944446	072321.B\0723AP18.D	07/23/2021 16:28
GB-55/0-2'	60375481029	072321.B\0723AP19.D	07/23/2021 16:45
GB-55/3-5'	60375481030	072321.B\0723AP20.D	07/23/2021 17:02
2944447MS	2944447	072321.B\0723AP21.D	07/23/2021 17:19
2944448MSD	2944448	072321.B\0723AP22.D	07/23/2021 17:36
GB-55/3-5'D	60375481031	072321.B\0723AP23.D	07/23/2021 17:54
GB-62/0-2'	60375481032	072321.B\0723AP24.D	07/23/2021 18:11
GB-62/3-5'	60375481033	072321.B\0723AP25.D	07/23/2021 18:28
GB-68/1-3'	60375481034	072321.B\0723AP26.D	07/23/2021 18:45
GB-68/3-5'	60375481035	072321.B\0723AP27.D	07/23/2021 19:02
GB-68/3-5'D	60375481036	072321.B\0723AP28.D	07/23/2021 19:19
GB-61/3-5'	60375481040	072321.B\0723AP29.D	07/23/2021 19:37
GB-61/5-7'	60375481041	072321.B\0723AP30.D	07/23/2021 19:54
GB-54/0-2'	60375481042	072321.B\0723AP31.D	07/23/2021 20:11
GB-54/2-4'	60375481043	072321.B\0723AP32.D	07/23/2021 20:28

SAMPLE NO.

2944450BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2944450

Lab File ID: 072621B.B\0726CP18.D Date Analyzed: 07/26/2021 Time:18:08

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2944451LCS	2944451	072621B.B\0726CP19.D	07/26/2021 18:25
GB-70/3'-5'	60375481003	072621B.B\0726CP20.D	07/26/2021 18:42
GB-70/5'-7'	60375481004	072621B.B\0726CP21.D	07/26/2021 18:59
GB-71/0'-2'	60375481005	072621B.B\0726CP22.D	07/26/2021 19:16
GB-71/3'-5'	60375481006	072621B.B\0726CP23.D	07/26/2021 19:34
GB-65/3'-4'	60375481007	072621B.B\0726CP24.D	07/26/2021 19:51
GB-65/5'-7'	60375481008	072621B.B\0726CP25.D	07/26/2021 20:08
GB-64/3'-4'	60375481009	072621B.B\0726CP26.D	07/26/2021 20:25
GB-64/5'-7'	60375481010	072621B.B\0726CP27.D	07/26/2021 20:42
GB-57/3.5'-5.5'	60375481011	072621B.B\0726CP28.D	07/26/2021 20:59
GB-57/6.0'-8.0'	60375481012	072621B.B\0726CP29.D	07/26/2021 21:16
GB-57/6.0'-8.0' D	60375481013	072621B.B\0726CP30.D	07/26/2021 21:33
GB-56/3-5'	60375481014	072621B.B\0726CP31.D	07/26/2021 21:50
GB-56/5-7'	60375481015	072621B.B\0726CP32.D	07/26/2021 22:08
GB-58/1-3'	60375481016	072621B.B\0726CP33.D	07/26/2021 22:25
GB-58/4-6'	60375481017	072621B.B\0726CP34.D	07/26/2021 22:42
2944452MS	2944452	072621B.B\0726CP35.D	07/26/2021 22:59
2944453MSD	2944453	072621B.B\0726CP36.D	07/26/2021 23:16
GB-51/1.5-3'	60375481018	072621B.B\0726CP37.D	07/26/2021 23:33
GB-51/3-5'	60375481019	072621B.B\0726CP38.D	07/26/2021 23:50
GB-50/0-2'	60375481020	072621B.B\0726CP39.D	07/27/2021 00:07
GB-50/3-5'	60375481021	072621B.B\0726CP40.D	07/27/2021 00:24
GB-50/3-5'D	60375481022	072621B.B\0726CP41.D	07/27/2021 00:41
GB-50/0-2'	60375481020	072721.B\0727AP05.D	07/27/2021 12:24

SAMPLE NO.

2944481BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2944481

Lab File ID: 072721.B\0727AP11.D Date Analyzed: 07/27/2021 Time:14:11

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2944482LCS	2944482	072721.B\0727AP12.D	07/27/2021 14:29
2944483MS	2944483	072721.B\0727AP13.D	07/27/2021 14:46
2944484MSD	2944484	072721.B\0727AP14.D	07/27/2021 15:03
GB-48/3-5'	60375481027	072721.B\0727AP15.D	07/27/2021 15:20
GB-48/5-7'	60375481028	072721.B\0727AP16.D	07/27/2021 15:37

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 071921.B\0719ADFT.D DFTPP Injection Date 07/19/2021
Instrument ID: 60MSS5 DFTPP Injection Time 09:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	28.75	(28.47)[1]
68	Less than 2.00% of mass 69	0.35	(1.12)[2]
69	Mass 69 relative abundance	30.92	(30.62)[2]
70	Less than 2.00% of mass 69	0.17	(0.56)[2]
127	10.00 - 80.00% of mass 442	43.86	(43.43)[2]
197	Less than 2.00% of mass 198	0.16	
198	Greater than 50.00% of mass 442	100.00	(99.03)[2]
199	5.00 - 9.00% of mass 198	6.97	
275	10.00 - 60.00% of mass 442	24.48	(24.25)[2]
365	Greater than 1.00% of mass 442	3.39	(3.36)[2]
441	Present, but less than mass 443	15.51	
442	Greater than 50.00% of mass 198	100.98	
443	15.00 - 24.00% of mass 442	20.36	(20.16)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936745CAL6	19936745CAL6	071921.B\0719API6.D	07/19/2021	09:35
19936746CAL1	19936746CAL1	071921.B\0719API1.D	07/19/2021	09:59
19936740CAL2	19936740CAL2	071921.B\0719API2.D	07/19/2021	10:16
19936738CAL3	19936738CAL3	071921.B\0719API3.D	07/19/2021	10:33
19936743CAL4	19936743CAL4	071921.B\0719API4.D	07/19/2021	10:50
19936747CAL5	19936747CAL5	071921.B\0719API5.D	07/19/2021	11:08
19936739CAL7	19936739CAL7	071921.B\0719API7.D	07/19/2021	11:25
19936748CAL8	19936748CAL8	071921.B\0719API8.D	07/19/2021	11:42
19936744ICV	19936744ICV	071921.B\0719APICV.D	07/19/2021	11:59

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072321.B\0723ADFT.D DFTPP Injection Date 07/23/2021
Instrument ID: 60MSS5 DFTPP Injection Time 10:30

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.85	(19.05)[1]
68	Less than 2.00% of mass 69	0.41	(1.42)[2]
69	Mass 69 relative abundance	28.55	(23.80)[2]
70	Less than 2.00% of mass 69	0.15	(0.51)[2]
127	10.00 - 80.00% of mass 442	43.51	(36.27)[2]
197	Less than 2.00% of mass 198	0.34	
198	Greater than 50.00% of mass 442	100.00	(83.36)[2]
199	5.00 - 9.00% of mass 198	6.87	
275	10.00 - 60.00% of mass 442	26.18	(21.82)[2]
365	Greater than 1.00% of mass 442	3.69	(3.07)[2]
441	Present, but less than mass 443	18.37	
442	Greater than 50.00% of mass 198	119.96	
443	15.00 - 24.00% of mass 442	23.58	(19.66)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936741CCV	19936741CCV	072321.B\0723API6.D	07/23/2021	10:41
2944445BLANK	2944445BLANK	072321.B\0723AP17.D	07/23/2021	16:11
2944446LCS	2944446LCS	072321.B\0723AP18.D	07/23/2021	16:28
GB-55/0-2'	60375481029	072321.B\0723AP19.D	07/23/2021	16:45
GB-55/3-5'	60375481030	072321.B\0723AP20.D	07/23/2021	17:02
2944447MS	2944447MS	072321.B\0723AP21.D	07/23/2021	17:19
2944448MSD	2944448MSD	072321.B\0723AP22.D	07/23/2021	17:36
GB-55/3-5'D	60375481031	072321.B\0723AP23.D	07/23/2021	17:54
GB-62/0-2'	60375481032	072321.B\0723AP24.D	07/23/2021	18:11
GB-62/3-5'	60375481033	072321.B\0723AP25.D	07/23/2021	18:28
GB-68/1-3'	60375481034	072321.B\0723AP26.D	07/23/2021	18:45
GB-68/3-5'	60375481035	072321.B\0723AP27.D	07/23/2021	19:02
GB-68/3-5'D	60375481036	072321.B\0723AP28.D	07/23/2021	19:19
GB-61/3-5'	60375481040	072321.B\0723AP29.D	07/23/2021	19:37
GB-61/5-7'	60375481041	072321.B\0723AP30.D	07/23/2021	19:54
GB-54/0-2'	60375481042	072321.B\0723AP31.D	07/23/2021	20:11
GB-54/2-4'	60375481043	072321.B\0723AP32.D	07/23/2021	20:28

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072621.B\0726BDFT.D DFTPP Injection Date 07/26/2021
Instrument ID: 60MSS5 DFTPP Injection Time 10:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.48	(16.80)[1]
68	Less than 2.00% of mass 69	0.39	(1.40)[2]
69	Mass 69 relative abundance	27.70	(20.71)[2]
70	Less than 2.00% of mass 69	0.14	(0.52)[2]
127	10.00 - 80.00% of mass 442	42.13	(31.49)[2]
197	Less than 2.00% of mass 198	0.43	
198	Greater than 50.00% of mass 442	100.00	(74.74)[2]
199	5.00 - 9.00% of mass 198	6.64	
275	10.00 - 60.00% of mass 442	26.57	(19.86)[2]
365	Greater than 1.00% of mass 442	3.96	(2.96)[2]
441	Present, but less than mass 443	20.80	
442	Greater than 50.00% of mass 198	133.80	
443	15.00 - 24.00% of mass 442	26.50	(19.81)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936860CAL6	19936860CAL6	072621.B\0726BPI6.D	07/26/2021	10:14
19936858CAL1	19936858CAL1	072621.B\0726BPI1.D	07/26/2021	10:31
19936863CAL2	19936863CAL2	072621.B\0726BPI2.D	07/26/2021	10:48
19936861CAL3	19936861CAL3	072621.B\0726BPI3.D	07/26/2021	11:05
19936856CAL4	19936856CAL4	072621.B\0726BPI4.D	07/26/2021	11:22
19936857CAL5	19936857CAL5	072621.B\0726BPI5.D	07/26/2021	11:40
19936864CAL7	19936864CAL7	072621.B\0726BPI7.D	07/26/2021	11:57
19936862CAL8	19936862CAL8	072621.B\0726BPI8.D	07/26/2021	12:14
19936859ICV	19936859ICV	072621.B\0726BPICV.D	07/26/2021	12:31

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072621B.B\0726CDFT.D DFTPP Injection Date: 07/26/2021
Instrument ID: 60MSS5 DFTPP Injection Time: 12:49

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	21.75	(14.93)[1]
68	Less than 2.00% of mass 69	0.40	(1.46)[2]
69	Mass 69 relative abundance	27.17	(18.65)[2]
70	Less than 2.00% of mass 69	0.14	(0.51)[2]
127	10.00 - 80.00% of mass 442	41.84	(28.72)[2]
197	Less than 2.00% of mass 198	0.00	
198	Greater than 50.00% of mass 442	100.00	(68.65)[2]
199	5.00 - 9.00% of mass 198	6.71	
275	10.00 - 60.00% of mass 442	28.09	(19.28)[2]
365	Greater than 1.00% of mass 442	4.17	(2.86)[2]
441	Present, but less than mass 443	22.79	
442	Greater than 50.00% of mass 198	145.67	
443	15.00 - 24.00% of mass 442	28.98	(19.89)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19725538CCV	19725538CCV	072621B.B\0726CPI6.D	07/26/2021	13:00
2944450BLANK	2944450BLANK	072621B.B\0726CP18.D	07/26/2021	18:08
2944451LCS	2944451LCS	072621B.B\0726CP19.D	07/26/2021	18:25
GB-70/3'-5'	60375481003	072621B.B\0726CP20.D	07/26/2021	18:42
GB-70/5'-7'	60375481004	072621B.B\0726CP21.D	07/26/2021	18:59
GB-71/0'-2'	60375481005	072621B.B\0726CP22.D	07/26/2021	19:16
GB-71/3'-5'	60375481006	072621B.B\0726CP23.D	07/26/2021	19:34
GB-65/3'-4'	60375481007	072621B.B\0726CP24.D	07/26/2021	19:51
GB-65/5'-7'	60375481008	072621B.B\0726CP25.D	07/26/2021	20:08
GB-64/3'-4'	60375481009	072621B.B\0726CP26.D	07/26/2021	20:25
GB-64/5'-7'	60375481010	072621B.B\0726CP27.D	07/26/2021	20:42
GB-57/3.5'-5.5'	60375481011	072621B.B\0726CP28.D	07/26/2021	20:59
GB-57/6.0'-8.0'	60375481012	072621B.B\0726CP29.D	07/26/2021	21:16
GB-57/6.0'-8.0' D	60375481013	072621B.B\0726CP30.D	07/26/2021	21:33
GB-56/3-5'	60375481014	072621B.B\0726CP31.D	07/26/2021	21:50
GB-56/5-7'	60375481015	072621B.B\0726CP32.D	07/26/2021	22:08
GB-58/1-3'	60375481016	072621B.B\0726CP33.D	07/26/2021	22:25
GB-58/4-6'	60375481017	072621B.B\0726CP34.D	07/26/2021	22:42
2944452MS	2944452MS	072621B.B\0726CP35.D	07/26/2021	22:59

MSSV SIM - FORM V SVOA-2
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072621B.B\0726CDFT.D DFTPP Injection Date: 07/26/2021
Instrument ID: 60MSS5 DFTPP Injection Time: 12:49

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
2944453MSD	2944453MSD	072621B.B\0726CP36.D	07/26/2021	23:16
GB-51/1.5-3'	60375481018	072621B.B\0726CP37.D	07/26/2021	23:33
GB-51/3-5'	60375481019	072621B.B\0726CP38.D	07/26/2021	23:50
GB-50/0-2'	60375481020	072621B.B\0726CP39.D	07/27/2021	00:07
GB-50/3-5'	60375481021	072621B.B\0726CP40.D	07/27/2021	00:24
GB-50/3-5'D	60375481022	072621B.B\0726CP41.D	07/27/2021	00:41

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW
Lab File ID: 072721.B\0727ADFT.D DFTPP Injection Date 07/27/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.22	(16.76)[1]
68	Less than 2.00% of mass 69	0.37	(1.34)[2]
69	Mass 69 relative abundance	27.19	(20.51)[2]
70	Less than 2.00% of mass 69	0.15	(0.57)[2]
127	10.00 - 80.00% of mass 442	42.09	(31.74)[2]
197	Less than 2.00% of mass 198	0.00	
198	Greater than 50.00% of mass 442	100.00	(75.42)[2]
199	5.00 - 9.00% of mass 198	6.80	
275	10.00 - 60.00% of mass 442	26.56	(20.03)[2]
365	Greater than 1.00% of mass 442	3.84	(2.90)[2]
441	Present, but less than mass 443	20.27	
442	Greater than 50.00% of mass 198	132.60	
443	15.00 - 24.00% of mass 442	26.31	(19.84)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936278CAL6	19936278CAL6	072721.B\0727API6.D	07/27/2021	08:37
19936283CAL1	19936283CAL1	072721.B\0727API1.D	07/27/2021	08:57
19936285CAL2	19936285CAL2	072721.B\0727API2.D	07/27/2021	09:14
19936279CAL3	19936279CAL3	072721.B\0727API3.D	07/27/2021	09:31
19936284CAL4	19936284CAL4	072721.B\0727API4.D	07/27/2021	09:48
19936286CAL5	19936286CAL5	072721.B\0727API5.D	07/27/2021	10:05
19936280CAL7	19936280CAL7	072721.B\0727API7.D	07/27/2021	10:22
19936276CAL8	19936276CAL8	072721.B\0727API8.D	07/27/2021	10:40
19936277ICV	19936277ICV	072721.B\0727APICV.D	07/27/2021	10:57
GB-50/0-2'	60375481020	072721.B\0727AP05.D	07/27/2021	12:24
2944481BLANK	2944481BLANK	072721.B\0727AP11.D	07/27/2021	14:11
2944482LCS	2944482LCS	072721.B\0727AP12.D	07/27/2021	14:29
2944483MS	2944483MS	072721.B\0727AP13.D	07/27/2021	14:46
2944484MSD	2944484MSD	072721.B\0727AP14.D	07/27/2021	15:03
GB-48/3-5'	60375481027	072721.B\0727AP15.D	07/27/2021	15:20
GB-48/5-7'	60375481028	072721.B\0727AP16.D	07/27/2021	15:37

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19714981CCV Date Analyzed: 07/23/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 10:41

Lab File ID: 072321.B\0723API6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				160719	6.434	206893	9.928	286121	4.368
UPPER LIMIT				321438	6.934	413786	10.428	572242	4.868
LOWER LIMIT				80359.5	5.934	103446.5	9.428	143060.5	3.868
LAB SAMPLE ID	SAMPLE NO.								
2944445	2944445BLANK			155411	6.434	233729	9.928	253982	4.361
2944446	2944446LCS			191074	6.434	269083	9.927	314146	4.363
2944447	2944447MS			200909	6.433	271768	9.921	336326	4.359
2944448	2944448MSD			187972	6.433	256654	9.915	316085	4.36
60375481029	GB-55/0-2'			191317	6.433	281480	9.921	315912	4.363
60375481030	GB-55/3-5'			198533	6.433	287622	9.919	324124	4.361
60375481031	GB-55/3-5'D			199651	6.433	274630	9.915	325306	4.361
60375481032	GB-62/0-2'			207733	6.433	282137	9.915	345045	4.365
60375481033	GB-62/3-5'			201720	6.434	289076	9.919	331337	4.363
60375481034	GB-68/1-3'			203898	6.433	279780	9.918	331889	4.361
60375481035	GB-68/3-5'			208878	6.433	291545	9.915	342925	4.361
60375481036	GB-68/3-5'D			214654	6.433	301616	9.914	355898	4.36
60375481040	GB-61/3-5'			206291	6.433	286866	9.917	336158	4.363
60375481041	GB-61/5-7'			210936	6.433	300539	9.917	342258	4.361
60375481042	GB-54/0-2'			213417	6.434	302638	9.915	343323	4.363
60375481043	GB-54/2-4'			197136	6.433	279048	9.916	323979	4.361

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19714981CCV Date Analyzed: 07/23/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 10:41

Lab File ID: 072321.B\0723API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		169759	11.319	278414	7.783
UPPER LIMIT		339518	11.819	556828	8.283
LOWER LIMIT		84879.5	10.819	139207	7.283
LAB SAMPLE ID	SAMPLE NO.				
2944445	2944445BLANK	205540	11.325	272264	7.784
2944446	2944446LCS	236417	11.322	326513	7.783
2944447	2944447MS	237475	11.316	338964	7.783
2944448	2944448MSD	221914	11.306	320868	7.782
60375481029	GB-55/0-2'	242599	11.314	333934	7.783
60375481030	GB-55/3-5'	244200	11.311	339625	7.782
60375481031	GB-55/3-5'D	228582	11.306	333832	7.782
60375481032	GB-62/0-2'	245507	11.306	350267	7.782
60375481033	GB-62/3-5'	240492	11.309	346689	7.783
60375481034	GB-68/1-3'	232850	11.308	337415	7.782
60375481035	GB-68/3-5'	240441	11.308	352185	7.782
60375481036	GB-68/3-5'D	252290	11.305	364815	7.782
60375481040	GB-61/3-5'	243882	11.312	348217	7.782
60375481041	GB-61/5-7'	252375	11.308	356287	7.782
60375481042	GB-54/0-2'	252688	11.306	361190	7.782
60375481043	GB-54/2-4'	233649	11.306	337544	7.782

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19725538CCV Date Analyzed: 07/26/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 13:00

Lab File ID: 072621B.B\0726CPI6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				123137	6.408	168175	9.881	215936	4.358
UPPER LIMIT				246274	6.908	336350	10.381	431872	4.858
LOWER LIMIT				61568.5	5.908	84087.5	9.381	107968	3.858
LAB SAMPLE ID	SAMPLE NO.								
2944450	2944450BLANK			126389	6.409	198447	9.865	210486	4.359
2944451	2944451LCS			131902	6.409	193444	9.868	221710	4.361
2944452	2944452MS			136891	6.409	177024	9.87	225567	4.358
2944453	2944453MSD			142766	6.409	187421	9.869	236335	4.359
60375481003	GB-70/3'-5'			133502	6.409	201119	9.867	218963	4.359
60375481004	GB-70/5'-7'			138700	6.409	200411	9.867	226443	4.358
60375481005	GB-71/0'-2'			135155	6.409	176376	9.867	223919	4.359
60375481006	GB-71/3'-5'			139945	6.409	202871	9.869	226241	4.358
60375481007	GB-65/3'-4'			144037	6.409	211967	9.869	234193	4.36
60375481008	GB-65/5'-7'			140710	6.409	205889	9.866	230756	4.358
60375481009	GB-64/3'-4'			144329	6.409	208950	9.868	235465	4.359
60375481010	GB-64/5'-7'			124516	6.409	183143	9.869	208445	4.358
60375481011	GB-57/3.5'-5.5'			135611	6.409	203740	9.871	224265	4.358
60375481012	GB-57/6.0'-8.0'			137800	6.409	200654	9.873	226779	4.36
60375481013	GB-57/6.0'-8.0' D			132395	6.41	190278	9.876	217936	4.359
60375481014	GB-56/3-5'			139922	6.409	204931	9.87	230805	4.358
60375481015	GB-56/5-7'			134125	6.409	201291	9.865	223991	4.357
60375481016	GB-58/1-3'			138830	6.409	173903	9.872	229873	4.357
60375481017	GB-58/4-6'			149204	6.409	209976	9.869	245046	4.356
60375481018	GB-51/1.5-3'			145468	6.409	203603	9.869	234240	4.359
60375481019	GB-51/3-5'			149714	6.409	214722	9.868	245884	4.358
60375481020	GB-50/0-2'			150415	6.409	218192	9.874	243757	4.36
60375481021	GB-50/3-5'			147396	6.409	214851	9.87	239637	4.358
60375481022	GB-50/3-5'D			139754	6.409	209784	9.87	232058	4.358

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19725538CCV Date Analyzed: 07/26/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 13:00

Lab File ID: 072621B.B\0726CPI6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		183082	11.219	204344	7.754
UPPER LIMIT		366164	11.719	408688	8.254
LOWER LIMIT		91541	10.719	102172	7.254
LAB SAMPLE ID	SAMPLE NO.				
2944450	2944450BLANK	148019	11.198	223371	7.754
2944451	2944451LCS	137532	11.201	232601	7.754
2944452	2944452MS	128305	11.205	242011	7.754
2944453	2944453MSD	130669	11.204	254083	7.754
60375481003	GB-70/3'-5'	146948	11.202	236041	7.753
60375481004	GB-70/5'-7'	144464	11.202	239981	7.754
60375481005	GB-71/0'-2'	129422	11.202	232853	7.754
60375481006	GB-71/3'-5'	152463	11.204	240353	7.754
60375481007	GB-65/3'-4'	152993	11.203	254601	7.754
60375481008	GB-65/5'-7'	152683	11.2	244673	7.753
60375481009	GB-64/3'-4'	148056	11.203	252143	7.754
60375481010	GB-64/5'-7'	135584	11.204	212872	7.754
60375481011	GB-57/3.5'-5.5'	145138	11.207	238086	7.754
60375481012	GB-57/6.0'-8.0'	140475	11.209	238618	7.754
60375481013	GB-57/6.0'-8.0' D	135445	11.213	231558	7.754
60375481014	GB-56/3-5'	146760	11.206	242320	7.753
60375481015	GB-56/5-7'	146448	11.199	233204	7.753
60375481016	GB-58/1-3'	132424	11.207	240431	7.754
60375481017	GB-58/4-6'	152707	11.202	260558	7.754
60375481018	GB-51/1.5-3'	143827	11.203	252150	7.754
60375481019	GB-51/3-5'	157070	11.203	257108	7.753
60375481020	GB-50/0-2'	164890	11.208	256180	7.755
60375481021	GB-50/3-5'	149932	11.205	259707	7.753
60375481022	GB-50/3-5'D	145566	11.204	244552	7.754

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19896110CAL6 Date Analyzed: 07/27/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:37

Lab File ID: 072721.B\0727API6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				102423	6.409	153208	9.885	202817	4.363
UPPER LIMIT				204846	6.909	306416	10.385	405634	4.863
LOWER LIMIT				51211.5	5.909	76604	9.385	101408.5	3.863
LAB SAMPLE ID	SAMPLE NO.								
2944481	2944481BLANK			130129	6.408	189364	9.882	215040	4.358
2944482	2944482LCS			136659	6.408	195146	9.878	228326	4.358
2944483	2944483MS			131518	6.408	189282	9.877	220058	4.357
2944484	2944484MSD			134745	6.408	196836	9.871	221567	4.36
60375481020	GB-50/0-2'			143009	6.409	212992	9.875	230704	4.362
60375481027	GB-48/3-5'			144998	6.408	210322	9.867	235633	4.355
60375481028	GB-48/5-7'			138005	6.408	201818	9.867	225240	4.358

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Sample ID : 19896110CAL6 Date Analyzed: 07/27/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:37

Lab File ID: 072721.B\0727API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		113939	11.224	185448	7.755
UPPER LIMIT		227878	11.724	370896	8.255
LOWER LIMIT		56969.5	10.724	92724	7.255
LAB SAMPLE ID	SAMPLE NO.				
2944481	2944481BLANK	127690	11.22	227608	7.754
2944482	2944482LCS	132881	11.215	238829	7.753
2944483	2944483MS	128287	11.214	228124	7.753
2944484	2944484MSD	133582	11.206	236862	7.753
60375481020	GB-50/0-2'	145364	11.212	247486	7.753
60375481027	GB-48/3-5'	155400	11.201	250229	7.753
60375481028	GB-48/5-7'	137300	11.201	240879	7.753

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

GB-55/0-2'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481029
Date Analyzed: 07/23/2021 16:45
Lab File ID: 072321.B\0723AP19.D
Initial wt/vol: 31.53 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 14.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.7	U
208-96-8	Acenaphthylene	<2.7	U
120-12-7	Anthracene	<3.0	U
56-55-3	Benzo(a)anthracene	<3.4	U
50-32-8	Benzo(a)pyrene	<2.7	U
205-99-2	Benzo(b)fluoranthene	5.2	J
191-24-2	Benzo(g,h,i)perylene	<3.3	U
207-08-9	Benzo(k)fluoranthene	<4.1	U
218-01-9	Chrysene	<3.5	U
53-70-3	Dibenz(a,h)anthracene	<3.1	U
206-44-0	Fluoranthene	5.7	J
86-73-7	Fluorene	<2.9	U
193-39-5	Indeno(1,2,3-cd)pyrene	<3.1	U
91-20-3	Naphthalene	<3.1	U
85-01-8	Phenanthrene	<6.0	U
129-00-0	Pyrene	4.2	J

SAMPLE NO.

GB-55/3-5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481030
Date Analyzed: 07/23/2021 17:02
Lab File ID: 072321.B\0723AP20.D
Initial wt/vol: 31.47 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.8	U
208-96-8	Acenaphthylene	<2.8	U
120-12-7	Anthracene	<3.1	U
56-55-3	Benzo(a)anthracene	<3.5	U
50-32-8	Benzo(a)pyrene	<2.7	U
205-99-2	Benzo(b)fluoranthene	<3.6	U
191-24-2	Benzo(g,h,i)perylene	<3.4	U
207-08-9	Benzo(k)fluoranthene	<4.2	U
218-01-9	Chrysene	<3.6	U
53-70-3	Dibenz(a,h)anthracene	<3.2	U
206-44-0	Fluoranthene	<5.6	U
86-73-7	Fluorene	<2.9	U
193-39-5	Indeno(1,2,3-cd)pyrene	<3.2	U
91-20-3	Naphthalene	<3.2	U
85-01-8	Phenanthrene	<6.1	U
129-00-0	Pyrene	<4.0	U

SAMPLE NO.

GB-55/3-5'D

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481031
Date Analyzed: 07/23/2021 17:54
Lab File ID: 072321.B\0723AP23.D
Initial wt/vol: 31.1 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 16.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.9	U
208-96-8	Acenaphthylene	<2.9	U
120-12-7	Anthracene	<3.2	U
56-55-3	Benzo(a)anthracene	<3.6	U
50-32-8	Benzo(a)pyrene	<2.8	U
205-99-2	Benzo(b)fluoranthene	<3.7	U
191-24-2	Benzo(g,h,i)perylene	<3.4	U
207-08-9	Benzo(k)fluoranthene	<4.3	U
218-01-9	Chrysene	<3.6	U
53-70-3	Dibenz(a,h)anthracene	<3.3	U
206-44-0	Fluoranthene	<5.8	U
86-73-7	Fluorene	<3.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	<3.3	U
91-20-3	Naphthalene	<3.3	U
85-01-8	Phenanthrene	<6.3	U
129-00-0	Pyrene	<4.1	U

SAMPLE NO.

GB-62/0-2'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481032
Date Analyzed: 07/23/2021 18:11
Lab File ID: 072321.B\0723AP24.D
Initial wt/vol: 30.52 g
Final wt/vol: 2 mL
Dilution: 10
Instrument: 60MSS5
Percent Moisture: 17.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	48.2	J
208-96-8	Acenaphthylene	<29.2	U
120-12-7	Anthracene	184	
56-55-3	Benzo(a)anthracene	653	
50-32-8	Benzo(a)pyrene	575	
205-99-2	Benzo(b)fluoranthene	928	
191-24-2	Benzo(g,h,i)perylene	370	
207-08-9	Benzo(k)fluoranthene	446	
218-01-9	Chrysene	642	
53-70-3	Dibenz(a,h)anthracene	116	
206-44-0	Fluoranthene	1460	
86-73-7	Fluorene	45.6	J
193-39-5	Indeno(1,2,3-cd)pyrene	335	
91-20-3	Naphthalene	<33.5	U
85-01-8	Phenanthrene	838	
129-00-0	Pyrene	1210	

SAMPLE NO.

GB-62/3-5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481033
Date Analyzed: 07/23/2021 18:28
Lab File ID: 072321.B\0723AP25.D
Initial wt/vol: 31.42 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.9	U
208-96-8	Acenaphthylene	<2.9	U
120-12-7	Anthracene	<3.2	U
56-55-3	Benzo(a)anthracene	<3.6	U
50-32-8	Benzo(a)pyrene	<2.8	U
205-99-2	Benzo(b)fluoranthene	<3.8	U
191-24-2	Benzo(g,h,i)perylene	<3.5	U
207-08-9	Benzo(k)fluoranthene	<4.3	U
218-01-9	Chrysene	<3.7	U
53-70-3	Dibenz(a,h)anthracene	<3.3	U
206-44-0	Fluoranthene	<5.8	U
86-73-7	Fluorene	<3.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	<3.3	U
91-20-3	Naphthalene	<3.3	U
85-01-8	Phenanthrene	<6.3	U
129-00-0	Pyrene	<4.2	U

SAMPLE NO.

GB-68/1-3'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481034
Date Analyzed: 07/23/2021 18:45
Lab File ID: 072321.B\0723AP26.D
Initial wt/vol: 31.49 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 14.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.7	U
208-96-8	Acenaphthylene	<2.7	U
120-12-7	Anthracene	<3.1	U
56-55-3	Benzo(a)anthracene	<3.5	U
50-32-8	Benzo(a)pyrene	<2.7	U
205-99-2	Benzo(b)fluoranthene	<3.6	U
191-24-2	Benzo(g,h,i)perylene	<3.3	U
207-08-9	Benzo(k)fluoranthene	<4.1	U
218-01-9	Chrysene	<3.5	U
53-70-3	Dibenz(a,h)anthracene	<3.2	U
206-44-0	Fluoranthene	<5.5	U
86-73-7	Fluorene	<2.9	U
193-39-5	Indeno(1,2,3-cd)pyrene	<3.2	U
91-20-3	Naphthalene	<3.1	U
85-01-8	Phenanthrene	<6.0	U
129-00-0	Pyrene	<4.0	U

SAMPLE NO.

GB-68/3-5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481035
Date Analyzed: 07/23/2021 19:02
Lab File ID: 072321.B\0723AP27.D
Initial wt/vol: 30.07 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<3.1	U
208-96-8	Acenaphthylene	<3.1	U
120-12-7	Anthracene	<3.4	U
56-55-3	Benzo(a)anthracene	<3.9	U
50-32-8	Benzo(a)pyrene	<3.0	U
205-99-2	Benzo(b)fluoranthene	<4.0	U
191-24-2	Benzo(g,h,i)perylene	<3.7	U
207-08-9	Benzo(k)fluoranthene	<4.6	U
218-01-9	Chrysene	<3.9	U
53-70-3	Dibenz(a,h)anthracene	<3.5	U
206-44-0	Fluoranthene	<6.2	U
86-73-7	Fluorene	<3.2	U
193-39-5	Indeno(1,2,3-cd)pyrene	<3.5	U
91-20-3	Naphthalene	<3.5	U
85-01-8	Phenanthrene	<6.7	U
129-00-0	Pyrene	<4.4	U

SAMPLE NO.

GB-68/3-5'D

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481036
Date Analyzed: 07/23/2021 19:19
Lab File ID: 072321.B\0723AP28.D
Initial wt/vol: 31.02 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<3.0	U
208-96-8	Acenaphthylene	<3.0	U
120-12-7	Anthracene	<3.3	U
56-55-3	Benzo(a)anthracene	<3.8	U
50-32-8	Benzo(a)pyrene	<2.9	U
205-99-2	Benzo(b)fluoranthene	<3.9	U
191-24-2	Benzo(g,h,i)perylene	<3.6	U
207-08-9	Benzo(k)fluoranthene	<4.5	U
218-01-9	Chrysene	<3.8	U
53-70-3	Dibenz(a,h)anthracene	<3.4	U
206-44-0	Fluoranthene	<6.0	U
86-73-7	Fluorene	<3.1	U
193-39-5	Indeno(1,2,3-cd)pyrene	<3.4	U
91-20-3	Naphthalene	<3.4	U
85-01-8	Phenanthrene	<6.5	U
129-00-0	Pyrene	<4.3	U

SAMPLE NO.

GB-61/3-5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481040
Date Analyzed: 07/23/2021 19:37
Lab File ID: 072321.B\0723AP29.D
Initial wt/vol: 30.66 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 24.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<3.2	U
208-96-8	Acenaphthylene	<3.2	U
120-12-7	Anthracene	6.0	J
56-55-3	Benzo(a)anthracene	27.5	
50-32-8	Benzo(a)pyrene	23.5	
205-99-2	Benzo(b)fluoranthene	42.8	
191-24-2	Benzo(g,h,i)perylene	16.6	
207-08-9	Benzo(k)fluoranthene	25.9	
218-01-9	Chrysene	37.0	
53-70-3	Dibenz(a,h)anthracene	<3.7	U
206-44-0	Fluoranthene	95.7	
86-73-7	Fluorene	<3.3	U
193-39-5	Indeno(1,2,3-cd)pyrene	14.6	
91-20-3	Naphthalene	<3.7	U
85-01-8	Phenanthrene	33.9	
129-00-0	Pyrene	75.8	

SAMPLE NO.

GB-61/5-7'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481041
Date Analyzed: 07/23/2021 19:54
Lab File ID: 072321.B\0723AP30.D
Initial wt/vol: 30.2 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 22.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<3.1	U
208-96-8	Acenaphthylene	<3.1	U
120-12-7	Anthracene	<3.5	U
56-55-3	Benzo(a)anthracene	<3.9	U
50-32-8	Benzo(a)pyrene	<3.1	U
205-99-2	Benzo(b)fluoranthene	<4.1	U
191-24-2	Benzo(g,h,i)perylene	<3.8	U
207-08-9	Benzo(k)fluoranthene	<4.7	U
218-01-9	Chrysene	<4.0	U
53-70-3	Dibenz(a,h)anthracene	<3.6	U
206-44-0	Fluoranthene	<6.3	U
86-73-7	Fluorene	<3.3	U
193-39-5	Indeno(1,2,3-cd)pyrene	<3.6	U
91-20-3	Naphthalene	<3.6	U
85-01-8	Phenanthrene	<6.9	U
129-00-0	Pyrene	<4.5	U

SAMPLE NO.

GB-54/0-2'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481042
Date Analyzed: 07/23/2021 20:11
Lab File ID: 072321.B\0723AP31.D
Initial wt/vol: 30.84 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 11.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.7	U
208-96-8	Acenaphthylene	<2.7	U
120-12-7	Anthracene	<3.0	U
56-55-3	Benzo(a)anthracene	12.7	
50-32-8	Benzo(a)pyrene	12.5	
205-99-2	Benzo(b)fluoranthene	21.4	
191-24-2	Benzo(g,h,i)perylene	9.7	
207-08-9	Benzo(k)fluoranthene	13.8	
218-01-9	Chrysene	14.9	
53-70-3	Dibenz(a,h)anthracene	<3.1	U
206-44-0	Fluoranthene	31.7	
86-73-7	Fluorene	<2.8	U
193-39-5	Indeno(1,2,3-cd)pyrene	8.0	
91-20-3	Naphthalene	<3.1	U
85-01-8	Phenanthrene	12.8	
129-00-0	Pyrene	23.7	

SAMPLE NO.

GB-54/2-4'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 60375481043
Date Analyzed: 07/23/2021 20:28
Lab File ID: 072321.B\0723AP32.D
Initial wt/vol: 30.09 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 16.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.9	U
208-96-8	Acenaphthylene	<2.9	U
120-12-7	Anthracene	<3.3	U
56-55-3	Benzo(a)anthracene	<3.7	U
50-32-8	Benzo(a)pyrene	<2.9	U
205-99-2	Benzo(b)fluoranthene	<3.8	U
191-24-2	Benzo(g,h,i)perylene	<3.5	U
207-08-9	Benzo(k)fluoranthene	<4.4	U
218-01-9	Chrysene	<3.8	U
53-70-3	Dibenz(a,h)anthracene	<3.4	U
206-44-0	Fluoranthene	<5.9	U
86-73-7	Fluorene	<3.1	U
193-39-5	Indeno(1,2,3-cd)pyrene	<3.4	U
91-20-3	Naphthalene	<3.4	U
85-01-8	Phenanthrene	<6.5	U
129-00-0	Pyrene	<4.3	U

SAMPLE NO.

GB-70/3'-5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481003
Date Analyzed: 07/26/2021 18:42
Lab File ID: 072621B.B\0726CP20.D
Initial wt/vol: 30.39 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	2.3	J
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	<3.0	U
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.3	U
129-00-0	Pyrene	<2.2	U

SAMPLE NO.

GB-70/5'-7'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481004
Date Analyzed: 07/26/2021 18:59
Lab File ID: 072621B.B\0726CP21.D
Initial wt/vol: 30.57 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 16.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.4	U
208-96-8	Acenaphthylene	<1.4	U
120-12-7	Anthracene	<1.6	U
56-55-3	Benzo(a)anthracene	<1.8	U
50-32-8	Benzo(a)pyrene	<1.4	U
205-99-2	Benzo(b)fluoranthene	2.3	J
191-24-2	Benzo(g,h,i)perylene	<1.7	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.8	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	3.1	J
86-73-7	Fluorene	<1.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.2	U
129-00-0	Pyrene	2.4	J

SAMPLE NO.

GB-71/0'-2'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481005
Date Analyzed: 07/26/2021 19:16
Lab File ID: 072621B.B\0726CP22.D
Initial wt/vol: 20.21 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	3.9	J
208-96-8	Acenaphthylene	6.1	
120-12-7	Anthracene	21.3	
56-55-3	Benzo(a)anthracene	90.3	
50-32-8	Benzo(a)pyrene	80.9	
205-99-2	Benzo(b)fluoranthene	216	
191-24-2	Benzo(g,h,i)perylene	41.8	
207-08-9	Benzo(k)fluoranthene	63.2	
218-01-9	Chrysene	154	
53-70-3	Dibenz(a,h)anthracene	12.3	
206-44-0	Fluoranthene	218	
86-73-7	Fluorene	16.6	
193-39-5	Indeno(1,2,3-cd)pyrene	39.4	
91-20-3	Naphthalene	13.4	
85-01-8	Phenanthrene	210	
129-00-0	Pyrene	208	

SAMPLE NO.

GB-71/3'-5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481006
Date Analyzed: 07/26/2021 19:34
Lab File ID: 072621B.B\0726CP23.D
Initial wt/vol: 30.28 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	3.3	J
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	6.1	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	<3.0	U
86-73-7	Fluorene	2.2	J
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	13.9	
129-00-0	Pyrene	2.2	J

SAMPLE NO.

GB-65/3'-4'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481007
Date Analyzed: 07/26/2021 19:51
Lab File ID: 072621B.B\0726CP24.D
Initial wt/vol: 30.09 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	3.9	J
56-55-3	Benzo(a)anthracene	19.5	
50-32-8	Benzo(a)pyrene	14.9	
205-99-2	Benzo(b)fluoranthene	37.2	
191-24-2	Benzo(g,h,i)perylene	6.7	
207-08-9	Benzo(k)fluoranthene	8.8	
218-01-9	Chrysene	24.7	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	87.4	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.7	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	22.7	
129-00-0	Pyrene	66.0	

SAMPLE NO.

GB-65/5'-7'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481008
Date Analyzed: 07/26/2021 20:08
Lab File ID: 072621B.B\0726CP25.D
Initial wt/vol: 30.88 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	4.4	
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	3.0	J
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	10.4	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	4.2	
129-00-0	Pyrene	7.9	

SAMPLE NO.

GB-64/3'-4'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481009
Date Analyzed: 07/26/2021 20:25
Lab File ID: 072621B.B\0726CP26.D
Initial wt/vol: 30.79 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	5.4	
50-32-8	Benzo(a)pyrene	4.3	
205-99-2	Benzo(b)fluoranthene	10.7	
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	2.9	J
218-01-9	Chrysene	6.7	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	19.5	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	7.5	
129-00-0	Pyrene	15.2	

SAMPLE NO.

GB-64/5'-7'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481010
Date Analyzed: 07/26/2021 20:42
Lab File ID: 072621B.B\0726CP27.D
Initial wt/vol: 30.66 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 27.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.7	U
208-96-8	Acenaphthylene	<1.7	U
120-12-7	Anthracene	2.6	J
56-55-3	Benzo(a)anthracene	8.2	
50-32-8	Benzo(a)pyrene	6.2	
205-99-2	Benzo(b)fluoranthene	14.7	
191-24-2	Benzo(g,h,i)perylene	2.9	J
207-08-9	Benzo(k)fluoranthene	4.1	J
218-01-9	Chrysene	9.4	
53-70-3	Dibenz(a,h)anthracene	<1.9	U
206-44-0	Fluoranthene	28.6	
86-73-7	Fluorene	<1.7	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.9	J
91-20-3	Naphthalene	<1.9	U
85-01-8	Phenanthrene	12.1	
129-00-0	Pyrene	21.4	

SAMPLE NO.

GB-57/3.5'-5.5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481
Date Extracted: 07/22/2021 16:57 | Lab Sample ID: 60375481011
Date Analyzed: 07/26/2021 20:59 | Lab File ID: 072621B.B\0726CP28.D
Initial wt/vol: 31.38 g | Final wt/vol: 1 mL | Dilution: 1 | Instrument: 60MSS5 | Percent Moisture: 15.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.4	U
208-96-8	Acenaphthylene	<1.4	U
120-12-7	Anthracene	3.4	J
56-55-3	Benzo(a)anthracene	8.3	
50-32-8	Benzo(a)pyrene	6.8	
205-99-2	Benzo(b)fluoranthene	16.0	
191-24-2	Benzo(g,h,i)perylene	2.6	J
207-08-9	Benzo(k)fluoranthene	2.4	J
218-01-9	Chrysene	8.9	
53-70-3	Dibenz(a,h)anthracene	<1.6	U
206-44-0	Fluoranthene	27.6	
86-73-7	Fluorene	<1.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.5	J
91-20-3	Naphthalene	<1.6	U
85-01-8	Phenanthrene	44.1	
129-00-0	Pyrene	21.5	

SAMPLE NO.

GB-57/6.0'-8.0'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481
Date Extracted: 07/22/2021 16:57 | Lab Sample ID: 60375481012
Date Analyzed: 07/26/2021 21:16 | Lab File ID: 072621B.B\0726CP29.D
Initial wt/vol: 30.28 g | Final wt/vol: 1 mL | Dilution: 1 | Instrument: 60MSS5 | Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	4.3	
50-32-8	Benzo(a)pyrene	3.8	J
205-99-2	Benzo(b)fluoranthene	8.1	
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	2.8	J
218-01-9	Chrysene	4.6	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	12.3	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	6.8	
129-00-0	Pyrene	10.2	

SAMPLE NO.

GB-57/6.0'-8.0' D

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481
Date Extracted: 07/22/2021 16:57 | Lab Sample ID: 60375481013
Date Analyzed: 07/26/2021 21:33 | Lab File ID: 072621B.B\0726CP30.D
Initial wt/vol: 31.04 g | Final wt/vol: 1 mL | Dilution: 1 | Instrument: 60MSS5 | Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	3.2	J
56-55-3	Benzo(a)anthracene	14.4	
50-32-8	Benzo(a)pyrene	12.3	
205-99-2	Benzo(b)fluoranthene	25.5	
191-24-2	Benzo(g,h,i)perylene	4.4	
207-08-9	Benzo(k)fluoranthene	11.1	
218-01-9	Chrysene	15.7	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	40.4	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.3	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	18.9	
129-00-0	Pyrene	33.2	

SAMPLE NO.

GB-56/3-5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481014
Date Analyzed: 07/26/2021 21:50
Lab File ID: 072621B.B\0726CP31.D
Initial wt/vol: 31.06 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.4	U
205-99-2	Benzo(b)fluoranthene	2.7	J
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	4.7	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.3	U
129-00-0	Pyrene	3.6	J

SAMPLE NO.

GB-56/5-7'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481015
Date Analyzed: 07/26/2021 22:08
Lab File ID: 072621B.B\0726CP32.D
Initial wt/vol: 31.46 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.6	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.4	U
205-99-2	Benzo(b)fluoranthene	<1.9	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	3.1	J
86-73-7	Fluorene	<1.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.2	U
129-00-0	Pyrene	2.3	J

SAMPLE NO.

GB-58/1-3'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481016
Date Analyzed: 07/26/2021 22:25
Lab File ID: 072621B.B\0726CP33.D
Initial wt/vol: 30.48 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	3.5	J
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	23.0	
56-55-3	Benzo(a)anthracene	206	
50-32-8	Benzo(a)pyrene	203	
205-99-2	Benzo(b)fluoranthene	492	
191-24-2	Benzo(g,h,i)perylene	91.0	
207-08-9	Benzo(k)fluoranthene	73.8	
218-01-9	Chrysene	260	
53-70-3	Dibenz(a,h)anthracene	22.7	
206-44-0	Fluoranthene	504	
86-73-7	Fluorene	5.6	
193-39-5	Indeno(1,2,3-cd)pyrene	91.1	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	163	
129-00-0	Pyrene	469	

SAMPLE NO.

GB-58/4-6'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481017
Date Analyzed: 07/26/2021 22:42
Lab File ID: 072621B.B\0726CP34.D
Initial wt/vol: 30.36 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	9.8	
56-55-3	Benzo(a)anthracene	50.4	
50-32-8	Benzo(a)pyrene	38.8	
205-99-2	Benzo(b)fluoranthene	92.4	
191-24-2	Benzo(g,h,i)perylene	15.8	
207-08-9	Benzo(k)fluoranthene	22.3	
218-01-9	Chrysene	57.9	
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	160	
86-73-7	Fluorene	2.5	J
193-39-5	Indeno(1,2,3-cd)pyrene	16.1	
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	64.0	
129-00-0	Pyrene	125	

SAMPLE NO.

GB-51/1.5-3'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481018
Date Analyzed: 07/26/2021 23:33
Lab File ID: 072621B.B\0726CP37.D
Initial wt/vol: 30.64 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<3.0	U
208-96-8	Acenaphthylene	<3.0	U
120-12-7	Anthracene	11.9	
56-55-3	Benzo(a)anthracene	89.1	
50-32-8	Benzo(a)pyrene	95.2	
205-99-2	Benzo(b)fluoranthene	217	
191-24-2	Benzo(g,h,i)perylene	41.1	
207-08-9	Benzo(k)fluoranthene	55.0	
218-01-9	Chrysene	114	
53-70-3	Dibenz(a,h)anthracene	<3.4	U
206-44-0	Fluoranthene	236	
86-73-7	Fluorene	<3.1	U
193-39-5	Indeno(1,2,3-cd)pyrene	41.1	
91-20-3	Naphthalene	<3.4	U
85-01-8	Phenanthrene	64.8	
129-00-0	Pyrene	191	

SAMPLE NO.

GB-51/3-5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481019
Date Analyzed: 07/26/2021 23:50
Lab File ID: 072621B.B\0726CP38.D
Initial wt/vol: 30.9 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	2.2	J
56-55-3	Benzo(a)anthracene	12.6	
50-32-8	Benzo(a)pyrene	11.6	
205-99-2	Benzo(b)fluoranthene	27.0	
191-24-2	Benzo(g,h,i)perylene	5.3	
207-08-9	Benzo(k)fluoranthene	6.3	
218-01-9	Chrysene	15.3	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	37.2	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	14.4	
129-00-0	Pyrene	29.4	

SAMPLE NO.

GB-50/0-2'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481020
Date Analyzed: 07/27/2021 00:07
Lab File ID: 072621B.B\0726CP39.D
Initial wt/vol: 31.53 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	59.8	
208-96-8	Acenaphthylene	18.2	
120-12-7	Anthracene	193	
56-55-3	Benzo(a)anthracene	954	
50-32-8	Benzo(a)pyrene	808	
191-24-2	Benzo(g,h,i)perylene	308	
207-08-9	Benzo(k)fluoranthene	423	
218-01-9	Chrysene	1110	
53-70-3	Dibenz(a,h)anthracene	86.2	
86-73-7	Fluorene	53.6	
193-39-5	Indeno(1,2,3-cd)pyrene	311	
91-20-3	Naphthalene	6.9	J
85-01-8	Phenanthrene	983	

SAMPLE NO.

GB-50/3-5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481021
Date Analyzed: 07/27/2021 00:24
Lab File ID: 072621B.B\0726CP40.D
Initial wt/vol: 30.56 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	5.4	
50-32-8	Benzo(a)pyrene	5.3	
205-99-2	Benzo(b)fluoranthene	11.2	
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	3.2	J
218-01-9	Chrysene	5.9	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	15.5	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	6.5	
129-00-0	Pyrene	12.2	

SAMPLE NO.

GB-50/3-5'D

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481022
Date Analyzed: 07/27/2021 00:41
Lab File ID: 072621B.B\0726CP41.D
Initial wt/vol: 30.48 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	3.5	J
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	4.5	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.3	U
129-00-0	Pyrene	3.5	J

SAMPLE NO.

GB-50/0-2'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 60375481020
Date Analyzed: 07/27/2021 12:24
Lab File ID: 072721.B\0727AP05.D
Initial wt/vol: 31.53 g
Final wt/vol: 2 mL
Dilution: 10
Instrument: 60MSS5
Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
205-99-2	Benzo(b)fluoranthene	1710	
206-44-0	Fluoranthene	2550	
129-00-0	Pyrene	1980	

SAMPLE NO.

GB-48/3-5'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 19:44
Lab Sample ID: 60375481027
Date Analyzed: 07/27/2021 15:20
Lab File ID: 072721.B\0727AP15.D
Initial wt/vol: 31.04 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.6	U
56-55-3	Benzo(a)anthracene	<1.8	U
50-32-8	Benzo(a)pyrene	<1.4	U
205-99-2	Benzo(b)fluoranthene	<1.9	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	4.4	
86-73-7	Fluorene	<1.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	4.1	
129-00-0	Pyrene	3.7	J

SAMPLE NO.

GB-48/5-7'

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 19:44
Lab Sample ID: 60375481028
Date Analyzed: 07/27/2021 15:37
Lab File ID: 072721.B\0727AP16.D
Initial wt/vol: 31.22 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	<1.9	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	<3.0	U
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.3	U
129-00-0	Pyrene	<2.2	U

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 09:35 11:42

LAB FILE ID

CAL1 = 071921.B\0719API1.D CAL2 = 071921.B\0719API2.D CAL3 = 071921.B\0719API3.D

CAL4 = 071921.B\0719API4.D CAL5 = 071921.B\0719API5.D CAL6 = 071921.B\0719API6.D

CAL7 = 071921.B\0719API7.D CAL8 = 071921.B\0719API8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.12778	1.09536	1.08815	1.10782	1.05332	1.09680
Acenaphthylene	Averaged	1.79818	1.74540	1.73608	1.77628	1.73789	1.82201
Anthracene	Averaged	0.95997	0.99427	0.98785	1.04312	0.97869	0.95349
Benzo(a)anthracene	Averaged	1.24141	1.26352	1.19988	1.24197	1.18134	1.21370
Benzo(a)pyrene	Averaged	1.11522	1.11345	1.06462	1.14590	1.06823	1.08665
Benzo(b)fluoranthene	Averaged	1.18404	1.20863	1.09795	1.24032	1.16037	1.16776
Benzo(g,h,i)perylene	Averaged	0.73530	0.72879	0.70705	0.73924	0.68545	0.71773
Benzo(k)fluoranthene	Averaged	1.27537	1.20542	1.16947	1.19219	1.06522	1.05113
Chrysene	Averaged	1.11997	1.15565	1.09508	1.15697	1.08918	1.08278
Dibenz(a,h)anthracene	Averaged	0.78650	0.78464	0.77685	0.82660	0.77099	0.82051
Fluoranthene	Averaged	1.08152	1.12118	1.10159	1.15904	1.08613	1.06532
Fluorene	Averaged	1.25156	1.22737	1.21957	1.25153	1.20894	1.25065
Indeno(1,2,3-cd)pyrene	Averaged	0.90945	0.90674	0.88906	0.94431	0.89005	0.94321
Naphthalene	Averaged	1.02826	0.98624	0.96615	0.97811	0.96025	0.94550
Phenanthrene	Averaged	0.97533	0.99539	0.96831	1.01946	0.95760	0.93670
Pyrene	Averaged	1.46311	1.50330	1.43775	1.49016	1.40229	1.39320
2-Fluorobiphenyl (S)	Averaged	1.43517	1.40807	1.36913	1.37751	1.30267	1.30458
Terphenyl-d14 (S)	Averaged	1.35827	1.09774	1.02756	1.05643	0.99010	0.97770

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 09:35 11:42

LAB FILE ID

CAL1 = 071921.B\0719API1.D CAL2 = 071921.B\0719API2.D CAL3 = 071921.B\0719API3.D

CAL4 = 071921.B\0719API4.D CAL5 = 071921.B\0719API5.D CAL6 = 071921.B\0719API6.D

CAL7 = 071921.B\0719API7.D CAL8 = 071921.B\0719API8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.05448	0.99122
Acenaphthylene	Averaged	1.75541	1.62639
Anthracene	Averaged	0.94004	0.90401
Benzo(a)anthracene	Averaged	1.15220	1.07801
Benzo(a)pyrene	Averaged	1.04675	0.98173
Benzo(b)fluoranthene	Averaged	1.08903	0.95984
Benzo(g,h,i)perylene	Averaged	0.67434	0.60278
Benzo(k)fluoranthene	Averaged	1.02707	1.01878
Chrysene	Averaged	1.06771	1.02789
Dibenz(a,h)anthracene	Averaged	0.76860	0.72652
Fluoranthene	Averaged	1.03295	0.96995
Fluorene	Averaged	1.20162	1.13428
Indeno(1,2,3-cd)pyrene	Averaged	0.87827	0.82077
Naphthalene	Averaged	0.95276	0.93397
Phenanthrene	Averaged	0.91409	0.86001
Pyrene	Averaged	1.33930	1.24813
2-Fluorobiphenyl (S)	Averaged	1.27111	1.20845
Terphenyl-d14 (S)	Averaged	0.94420	0.89654

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 09:35 11:42

LAB FILE ID

CAL1 = 071921.B\0719API1.D CAL2 = 071921.B\0719API2.D CAL3 = 071921.B\0719API3.D

CAL4 = 071921.B\0719API4.D CAL5 = 071921.B\0719API5.D CAL6 = 071921.B\0719API6.D

CAL7 = 071921.B\0719API7.D CAL8 = 071921.B\0719API8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	3.97220			1.07687	
Acenaphthylene	Averaged	3.33720			1.74970	
Anthracene	Averaged	4.25976			0.97018	
Benzo(a)anthracene	Averaged	5.00628			1.19650	
Benzo(a)pyrene	Averaged	4.68460			1.07782	
Benzo(b)fluoranthene	Averaged	7.76494			1.13849	
Benzo(g,h,i)perylene	Averaged	6.46539			0.69883	
Benzo(k)fluoranthene	Averaged	8.59209			1.12558	
Chrysene	Averaged	3.98251			1.09941	
Dibenz(a,h)anthracene	Averaged	4.01188			0.78265	
Fluoranthene	Averaged	5.31277			1.07721	
Fluorene	Averaged	3.21947			1.21819	
Indeno(1,2,3-cd)pyrene	Averaged	4.39372			0.89773	
Naphthalene	Averaged	3.02674			0.96890	
Phenanthrene	Averaged	5.22891			0.95336	
Pyrene	Averaged	6.01117			1.40965	
2-Fluorobiphenyl (S)	Averaged	5.69315			1.33459	
Terphenyl-d14 (S)	Averaged	13.60399			1.04357	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/26/2021 07/26/2021 Calibration Time(s): 10:14 12:14

LAB FILE ID

CAL1 = 072621.B\0726BPI1.D CAL2 = 072621.B\0726BPI2.D CAL3 = 072621.B\0726BPI3.D

CAL4 = 072621.B\0726BPI4.D CAL5 = 072621.B\0726BPI5.D CAL6 = 072621.B\0726BPI6.D

CAL7 = 072621.B\0726BPI7.D CAL8 = 072621.B\0726BPI8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.14292	1.10615	1.08592	1.09553	1.07707	1.09915
Acenaphthylene	Averaged	1.80616	1.74242	1.71773	1.76475	1.73724	1.80768
Anthracene	Averaged	0.89871	0.97970	0.96485	1.01698	0.95855	0.93464
Benzo(a)anthracene	Averaged	1.24386	1.23286	1.15051	1.21243	1.14472	1.16937
Benzo(a)pyrene	Averaged	1.12366	1.11664	1.06728	1.13744	1.06585	1.06596
Benzo(b)fluoranthene	Averaged	1.08529	1.13379	1.02298	1.09997	1.01092	1.04468
Benzo(g,h,i)perylene	Averaged	1.21575	1.16793	1.10150	1.16197	1.08603	1.06765
Benzo(k)fluoranthene	Averaged	1.19731	1.13246	1.12139	1.13706	1.11204	1.05716
Chrysene	Averaged	1.13674	1.14605	1.09994	1.15304	1.07800	1.08667
Dibenz(a,h)anthracene	Averaged	1.23778	1.21077	1.14127	1.17800	1.10025	1.06384
Fluoranthene	Averaged	1.03671	1.07968	1.05598	1.11499	1.05029	1.04672
Fluorene	Averaged	1.22986	1.20849	1.18687	1.22969	1.19703	1.23281
Indeno(1,2,3-cd)pyrene	Averaged	1.35489	1.38469	1.30365	1.35161	1.26473	1.24297
Naphthalene	Averaged	1.04540	0.99502	0.97070	0.98100	0.96283	0.96017
Phenanthrene	Averaged	0.98572	0.99757	0.97154	1.01707	0.95528	0.94177
Pyrene	Averaged	1.30401	1.32781	1.26749	1.35208	1.26084	1.29186
2-Fluorobiphenyl (S)	Averaged	1.46732	1.40789	1.39226	1.39433	1.34485	1.34097
Terphenyl-d14 (S)	Averaged	1.26697	1.02428	0.95358	1.01055	0.93171	0.94178

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/26/2021 07/26/2021 Calibration Time(s): 10:14 12:14

LAB FILE ID

CAL1 = 072621.B\0726BPI1.D CAL2 = 072621.B\0726BPI2.D CAL3 = 072621.B\0726BPI3.D

CAL4 = 072621.B\0726BPI4.D CAL5 = 072621.B\0726BPI5.D CAL6 = 072621.B\0726BPI6.D

CAL7 = 072621.B\0726BPI7.D CAL8 = 072621.B\0726BPI8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.06106	0.99557
Acenaphthylene	Averaged	1.74982	1.63894
Anthracene	Averaged	0.92259	0.89247
Benzo(a)anthracene	Averaged	1.12397	1.04843
Benzo(a)pyrene	Averaged	1.02459	0.94544
Benzo(b)fluoranthene	Averaged	1.00199	0.89703
Benzo(g,h,i)perylene	Averaged	1.02862	0.96376
Benzo(k)fluoranthene	Averaged	0.96729	0.93512
Chrysene	Averaged	1.07323	1.01844
Dibenz(a,h)anthracene	Averaged	1.04519	0.99394
Fluoranthene	Averaged	1.01970	0.96924
Fluorene	Averaged	1.19118	1.12043
Indeno(1,2,3-cd)pyrene	Averaged	1.21718	1.12381
Naphthalene	Averaged	0.95313	0.93391
Phenanthrene	Averaged	0.90930	0.86196
Pyrene	Averaged	1.24143	1.14388
2-Fluorobiphenyl (S)	Averaged	1.30608	1.23685
Terphenyl-d14 (S)	Averaged	0.91130	0.85718

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/26/2021 07/26/2021 Calibration Time(s): 10:14 12:14

LAB FILE ID

CAL1 = 072621.B\0726BPI1.D CAL2 = 072621.B\0726BPI2.D CAL3 = 072621.B\0726BPI3.D

CAL4 = 072621.B\0726BPI4.D CAL5 = 072621.B\0726BPI5.D CAL6 = 072621.B\0726BPI6.D

CAL7 = 072621.B\0726BPI7.D CAL8 = 072621.B\0726BPI8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	3.93522			1.08292	
Acenaphthylene	Averaged	3.07269			1.74559	
Anthracene	Averaged	4.46064			0.94606	
Benzo(a)anthracene	Averaged	5.51943			1.16577	
Benzo(a)pyrene	Averaged	5.83467			1.06836	
Benzo(b)fluoranthene	Averaged	7.04984			1.03708	
Benzo(g,h,i)perylene	Averaged	7.43491			1.09915	
Benzo(k)fluoranthene	Averaged	8.31241			1.08248	
Chrysene	Averaged	4.11348			1.09901	
Dibenz(a,h)anthracene	Averaged	7.60766			1.12138	
Fluoranthene	Averaged	4.06618			1.04666	
Fluorene	Averaged	3.07290			1.19954	
Indeno(1,2,3-cd)pyrene	Averaged	6.74402			1.28044	
Naphthalene	Averaged	3.45439			0.97527	
Phenanthrene	Averaged	5.28059			0.95503	
Pyrene	Averaged	5.00246			1.27367	
2-Fluorobiphenyl (S)	Averaged	5.17068			1.36132	
Terphenyl-d14 (S)	Averaged	12.64821			0.98717	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.11894	1.09422	1.06549	1.09074	1.06233	1.07547
Acenaphthylene	Averaged	1.79964	1.76321	1.71369	1.75430	1.72876	1.79109
Anthracene	Averaged	0.95480	0.98971	0.96996	1.02024	0.95352	0.91919
Benzo(a)anthracene	Averaged	1.27227	1.27235	1.22018	1.25033	1.17391	1.19779
Benzo(a)pyrene	Averaged	1.16001	1.16178	1.11150	1.18053	1.10095	1.09725
Benzo(b)fluoranthene	Averaged	1.36990	1.36367	1.29770	1.32666	1.29133	1.28286
Benzo(g,h,i)perylene	Averaged	0.56259	0.56634	0.51596	0.56411	0.50102	0.54197
Benzo(k)fluoranthene	Averaged	1.36448	1.32831	1.25870	1.40703	1.23369	1.19632
Chrysene	Averaged	1.10282	1.12963	1.07868	1.12828	1.06358	1.06173
Dibenz(a,h)anthracene	Averaged	0.74399	0.74879	0.70296	0.75423	0.68003	0.70465
Fluoranthene	Averaged	1.14036	1.17220	1.14496	1.19523	1.12899	1.08856
Fluorene	Averaged	1.28712	1.25285	1.22613	1.25270	1.22477	1.24394
Indeno(1,2,3-cd)pyrene	Averaged	0.78877	0.80206	0.74322	0.79324	0.72210	0.77636
Naphthalene	Averaged	1.01672	0.97880	0.95885	0.97000	0.94927	0.92788
Phenanthrene	Averaged	0.96149	0.98305	0.95421	1.00263	0.93523	0.92065
Pyrene	Averaged	1.39709	1.43920	1.38165	1.44039	1.35084	1.32652
2-Fluorobiphenyl (S)	Averaged	1.43833	1.39109	1.34963	1.37522	1.30411	1.31850
Terphenyl-d14 (S)	Averaged	1.37860	1.11909	1.05333	1.07924	1.01676	0.97814

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.04529	0.97405
Acenaphthylene	Averaged	1.74049	1.61912
Anthracene	Averaged	0.89655	0.84396
Benzo(a)anthracene	Averaged	1.17451	1.07257
Benzo(a)pyrene	Averaged	1.07722	0.99775
Benzo(b)fluoranthene	Averaged	1.20236	1.15863
Benzo(g,h,i)perylene	Averaged	0.56424	0.45218
Benzo(k)fluoranthene	Averaged	1.13691	1.10135
Chrysene	Averaged	1.05875	1.00538
Dibenz(a,h)anthracene	Averaged	0.69301	0.59322
Fluoranthene	Averaged	1.03891	0.96136
Fluorene	Averaged	1.21855	1.12528
Indeno(1,2,3-cd)pyrene	Averaged	0.78171	0.64710
Naphthalene	Averaged	0.93595	0.88423
Phenanthrene	Averaged	0.88955	0.82761
Pyrene	Averaged	1.31974	1.20996
2-Fluorobiphenyl (S)	Averaged	1.28345	1.17304
Terphenyl-d14 (S)	Averaged	0.97497	0.91027

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375481

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	4.07400			1.06582	
Acenaphthylene	Averaged	3.24813			1.73879	
Anthracene	Averaged	5.89516			0.94349	
Benzo(a)anthracene	Averaged	5.51081			1.20424	
Benzo(a)pyrene	Averaged	5.27878			1.11087	
Benzo(b)fluoranthene	Averaged	5.73520			1.28664	
Benzo(g,h,i)perylene	Averaged	7.71237			0.53355	
Benzo(k)fluoranthene	Averaged	8.63097			1.25335	
Chrysene	Averaged	3.82632			1.07860	
Dibenz(a,h)anthracene	Averaged	7.43095			0.70261	
Fluoranthene	Averaged	6.92175			1.10882	
Fluorene	Averaged	3.84432			1.22892	
Indeno(1,2,3-cd)pyrene	Averaged	6.85201			0.75682	
Naphthalene	Averaged	4.10623			0.95271	
Phenanthrene	Averaged	5.96680			0.93430	
Pyrene	Averaged	5.55817			1.35818	
2-Fluorobiphenyl (S)	Averaged	6.06551			1.32917	
Terphenyl-d14 (S)	Averaged	13.46000			1.06380	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19936744ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/19/2021 Time: 11:59

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921.B\0719APICV.D Init. Calib. Time(s): 09:35 11:42

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.07687	0.22695	0.0500	1.8507	20.0000
Acenaphthylene	Averaged	1.74970	0.36077	0.0500	4.1323	20.0000
Anthracene	Averaged	0.97018	0.18697	0.0500	-1.7202	20.0000
Benzo(a)anthracene	Averaged	1.19650	0.22483	0.0500	1.4375	20.0000
Benzo(a)pyrene	Averaged	1.07782	0.20076	0.0500	0.8198	20.0000
Benzo(b)fluoranthene	Averaged	1.13849	0.22838	0.0500	2.5709	20.0000
Benzo(g,h,i)perylene	Averaged	0.69883	0.13468	0.0500	2.7037	20.0000
Benzo(k)fluoranthene	Averaged	1.12558	0.23553	0.0500	-6.6142	20.0000
Chrysene	Averaged	1.09941	0.21114	0.0500	-1.5119	20.0000
Dibenz(a,h)anthracene	Averaged	0.78265	0.14166	0.0500	4.8371	20.0000
Fluoranthene	Averaged	1.07721	0.21240	0.0500	-1.1039	20.0000
Fluorene	Averaged	1.21819	0.24683	0.0500	2.6649	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.89773	0.17447	0.0500	5.0654	20.0000
Naphthalene	Averaged	0.96890	0.19104	0.0500	-2.4161	20.0000
Phenanthrene	Averaged	0.95336	0.18655	0.0500	-1.7476	20.0000
Pyrene	Averaged	1.40965	0.28502	0.0500	-1.1676	20.0000
2-Fluorobiphenyl (S)	Averaged	1.33459	0.00000	0.0500	-2.2482	20.0000
Terphenyl-d14 (S)	Averaged	1.04357	0.00000	0.0500	-6.3117	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19936741CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/23/2021 Time: 10:41

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072321.B\0723API6.D Init. Calib. Time(s): 09:35 11:42

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.07687	1.07466	0.0500	-0.2049	20.0000
Acenaphthylene	Averaged	1.74970	1.79676	0.0500	2.6893	20.0000
Anthracene	Averaged	0.97018	0.92687	0.0500	-4.4640	20.0000
Benzo(a)anthracene	Averaged	1.19650	1.19678	0.0500	0.0229	20.0000
Benzo(a)pyrene	Averaged	1.07782	1.07228	0.0500	-0.5133	20.0000
Benzo(b)fluoranthene	Averaged	1.13849	1.18693	0.0500	4.2548	20.0000
Benzo(g,h,i)perylene	Averaged	0.69883	0.58461	0.0500	-16.3452	20.0000
Benzo(k)fluoranthene	Averaged	1.12558	1.11524	0.0500	-0.9184	20.0000
Chrysene	Averaged	1.09941	1.06775	0.0500	-2.8797	20.0000
Dibenz(a,h)anthracene	Averaged	0.78265	0.66737	0.0500	-14.7299	20.0000
Fluoranthene	Averaged	1.07721	1.05690	0.0500	-1.8856	20.0000
Fluorene	Averaged	1.21819	1.24066	0.0500	1.8448	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.89773	0.77486	0.0500	-13.6866	20.0000
Naphthalene	Averaged	0.96890	0.92260	0.0500	-4.7792	20.0000
Phenanthrene	Averaged	0.95336	0.91968	0.0500	-3.5332	20.0000
Pyrene	Averaged	1.40965	1.43295	0.0500	1.6528	20.0000
2-Fluorobiphenyl (S)	Averaged	1.33459	1.30411	0.0500	-2.2839	20.0000
Terphenyl-d14 (S)	Averaged	1.04357	1.01219	0.0500	-3.0067	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19936859ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/26/2021 Time: 12:31

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 07/26/2021 07/26/2021

Lab File ID: 072621.B\0726BPICV.D Init. Calib. Time(s): 10:14 12:14

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.08292	0.22323	0.0500	1.4985	20.0000
Acenaphthylene	Averaged	1.74559	0.35185	0.0500	3.5565	20.0000
Anthracene	Averaged	0.94606	0.18087	0.0500	-1.2069	20.0000
Benzo(a)anthracene	Averaged	1.16577	0.21982	0.0500	0.3093	20.0000
Benzo(a)pyrene	Averaged	1.06836	0.20275	0.0500	-0.2242	20.0000
Benzo(b)fluoranthene	Averaged	1.03708	0.21620	0.0500	0.7326	20.0000
Benzo(g,h,i)perylene	Averaged	1.09915	0.21716	0.0500	-2.8662	20.0000
Benzo(k)fluoranthene	Averaged	1.08248	0.21865	0.0500	-2.3392	20.0000
Chrysene	Averaged	1.09901	0.20916	0.0500	-1.1234	20.0000
Dibenz(a,h)anthracene	Averaged	1.12138	0.21115	0.0500	-5.1310	20.0000
Fluoranthene	Averaged	1.04666	0.20392	0.0500	0.0054	20.0000
Fluorene	Averaged	1.19954	0.24098	0.0500	2.7728	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	1.28044	0.26319	0.0500	-2.9265	20.0000
Naphthalene	Averaged	0.97527	0.19167	0.0500	-1.5487	20.0000
Phenanthrene	Averaged	0.95503	0.18535	0.0500	-1.3884	20.0000
Pyrene	Averaged	1.27367	0.25910	0.0500	1.4277	20.0000
2-Fluorobiphenyl (S)	Averaged	1.36132	0.00000	0.0500	-1.4945	20.0000
Terphenyl-d14 (S)	Averaged	0.98717	0.00000	0.0500	-4.5983	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19725538CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/26/2021 Time: 13:00

Instrument ID: 60MSS5 GC Column: Col 1
Init. Calib. Date(s): 07/26/2021 07/26/2021

Lab File ID: 072621B.B\0726CPI6.D
Init. Calib. Time(s): 10:14 12:14

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.08292	1.09801	0.0500	1.3935	20.0000
Acenaphthylene	Averaged	1.74559	1.78199	0.0500	2.0852	20.0000
Anthracene	Averaged	0.94606	0.95617	0.0500	1.0686	20.0000
Benzo(a)anthracene	Averaged	1.16577	1.14570	0.0500	-1.7218	20.0000
Benzo(a)pyrene	Averaged	1.06836	1.06502	0.0500	-0.3119	20.0000
Benzo(b)fluoranthene	Averaged	1.03708	1.04327	0.0500	0.5970	20.0000
Benzo(g,h,i)perylene	Averaged	1.09915	1.07359	0.0500	-2.3253	20.0000
Benzo(k)fluoranthene	Averaged	1.08248	0.99247	0.0500	-8.3153	20.0000
Chrysene	Averaged	1.09901	1.08505	0.0500	-1.2701	20.0000
Dibenz(a,h)anthracene	Averaged	1.12138	1.06867	0.0500	-4.7000	20.0000
Fluoranthene	Averaged	1.04666	1.03818	0.0500	-0.8105	20.0000
Fluorene	Averaged	1.19954	1.23032	0.0500	2.5657	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	1.28044	1.25755	0.0500	-1.7877	20.0000
Naphthalene	Averaged	0.97527	0.98235	0.0500	0.7259	20.0000
Phenanthrene	Averaged	0.95503	0.95364	0.0500	-0.1451	20.0000
Pyrene	Averaged	1.27367	1.28647	0.0500	1.0050	20.0000
2-Fluorobiphenyl (S)	Averaged	1.36132	1.34510	0.0500	-1.1911	20.0000
Terphenyl-d14 (S)	Averaged	0.98717	0.95305	0.0500	-3.4564	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19936277ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:57

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721.B\0727APICV.D Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375481

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	0.22095	0.0500	0.9060	20.0000
Acenaphthylene	Averaged	1.73879	0.35133	0.0500	3.0080	20.0000
Anthracene	Averaged	0.94349	0.18059	0.0500	-2.5757	20.0000
Benzo(a)anthracene	Averaged	1.20424	0.22518	0.0500	-0.5352	20.0000
Benzo(a)pyrene	Averaged	1.11087	0.19714	0.0500	-1.2261	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	0.25506	0.0500	-0.2937	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.11115	0.0500	1.5775	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	0.25020	0.0500	-4.5498	20.0000
Chrysene	Averaged	1.07860	0.20717	0.0500	-1.5645	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.13678	0.0500	0.2906	20.0000
Fluoranthene	Averaged	1.10882	0.22009	0.0500	-1.8274	20.0000
Fluorene	Averaged	1.22892	0.24519	0.0500	1.2220	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.15867	0.0500	2.5815	20.0000
Naphthalene	Averaged	0.95271	0.18683	0.0500	-2.6064	20.0000
Phenanthrene	Averaged	0.93430	0.18236	0.0500	-1.4614	20.0000
Pyrene	Averaged	1.35818	0.26889	0.0500	-2.3305	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	0.00000	0.0500	-0.8029	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	0.00000	0.0500	-8.0523	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

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MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 2944445
Date Analyzed: 07/23/2021 16:11
Lab File ID: 072321.B\0723AP17.D
Initial wt/vol: 30.63 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.4	U
208-96-8	Acenaphthylene	<2.4	U
120-12-7	Anthracene	<2.7	U
56-55-3	Benzo(a)anthracene	<3.0	U
50-32-8	Benzo(a)pyrene	<2.4	U
205-99-2	Benzo(b)fluoranthene	<3.1	U
191-24-2	Benzo(g,h,i)perylene	<2.9	U
207-08-9	Benzo(k)fluoranthene	<3.6	U
218-01-9	Chrysene	<3.1	U
53-70-3	Dibenz(a,h)anthracene	<2.8	U
206-44-0	Fluoranthene	<4.9	U
86-73-7	Fluorene	<2.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	<2.8	U
91-20-3	Naphthalene	<2.8	U
85-01-8	Phenanthrene	<5.3	U
129-00-0	Pyrene	<3.5	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 2944446
Date Analyzed: 07/23/2021 16:28
Lab File ID: 072321.B\0723AP18.D
Initial wt/vol: 31.81 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	32.1	
208-96-8	Acenaphthylene	32.6	
120-12-7	Anthracene	34.5	
56-55-3	Benzo(a)anthracene	35.8	
50-32-8	Benzo(a)pyrene	34.9	
205-99-2	Benzo(b)fluoranthene	35.4	
191-24-2	Benzo(g,h,i)perylene	30.9	
207-08-9	Benzo(k)fluoranthene	36.7	
218-01-9	Chrysene	33.8	
53-70-3	Dibenz(a,h)anthracene	34.3	
206-44-0	Fluoranthene	37.6	
86-73-7	Fluorene	33.7	
193-39-5	Indeno(1,2,3-cd)pyrene	32.3	
91-20-3	Naphthalene	31.7	
85-01-8	Phenanthrene	33.9	
129-00-0	Pyrene	35.4	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 2944447
Date Analyzed: 07/23/2021 17:19
Lab File ID: 072321.B\0723AP21.D
Initial wt/vol: 30.33 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	33.2	
208-96-8	Acenaphthylene	33.5	
120-12-7	Anthracene	35.9	
56-55-3	Benzo(a)anthracene	37.1	
50-32-8	Benzo(a)pyrene	36.0	
205-99-2	Benzo(b)fluoranthene	36.6	
191-24-2	Benzo(g,h,i)perylene	31.7	
207-08-9	Benzo(k)fluoranthene	39.3	
218-01-9	Chrysene	35.5	
53-70-3	Dibenz(a,h)anthracene	34.3	
206-44-0	Fluoranthene	40.5	
86-73-7	Fluorene	34.8	
193-39-5	Indeno(1,2,3-cd)pyrene	33.3	
91-20-3	Naphthalene	32.7	
85-01-8	Phenanthrene	36.7	
129-00-0	Pyrene	38.6	

SAMPLE NO.

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 20:05
Lab Sample ID: 2944448
Date Analyzed: 07/23/2021 17:36
Lab File ID: 072321.B\0723AP22.D
Initial wt/vol: 31.04 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	35.3	
208-96-8	Acenaphthylene	35.6	
120-12-7	Anthracene	37.2	
56-55-3	Benzo(a)anthracene	38.2	
50-32-8	Benzo(a)pyrene	36.7	
205-99-2	Benzo(b)fluoranthene	38.8	
191-24-2	Benzo(g,h,i)perylene	32.4	
207-08-9	Benzo(k)fluoranthene	38.2	
218-01-9	Chrysene	36.0	
53-70-3	Dibenz(a,h)anthracene	34.9	
206-44-0	Fluoranthene	40.6	
86-73-7	Fluorene	36.7	
193-39-5	Indeno(1,2,3-cd)pyrene	33.5	
91-20-3	Naphthalene	34.7	
85-01-8	Phenanthrene	37.5	
129-00-0	Pyrene	39.0	

SAMPLE NO.

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MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 2944450
Date Analyzed: 07/26/2021 18:08
Lab File ID: 072621B.B\0726CP18.D
Initial wt/vol: 30.62 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.2	U
208-96-8	Acenaphthylene	<1.2	U
120-12-7	Anthracene	<1.3	U
56-55-3	Benzo(a)anthracene	<1.5	U
50-32-8	Benzo(a)pyrene	<1.2	U
205-99-2	Benzo(b)fluoranthene	<1.6	U
191-24-2	Benzo(g,h,i)perylene	<1.5	U
207-08-9	Benzo(k)fluoranthene	<1.8	U
218-01-9	Chrysene	<1.5	U
53-70-3	Dibenz(a,h)anthracene	<1.4	U
206-44-0	Fluoranthene	<2.4	U
86-73-7	Fluorene	<1.3	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.4	U
91-20-3	Naphthalene	<1.4	U
85-01-8	Phenanthrene	<2.6	U
129-00-0	Pyrene	<1.7	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 2944451
Date Analyzed: 07/26/2021 18:25
Lab File ID: 072621B.B\0726CP19.D
Initial wt/vol: 31.66 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	23.6	
208-96-8	Acenaphthylene	23.8	
120-12-7	Anthracene	26.2	
56-55-3	Benzo(a)anthracene	28.2	
50-32-8	Benzo(a)pyrene	26.8	
205-99-2	Benzo(b)fluoranthene	33.7	
191-24-2	Benzo(g,h,i)perylene	13.1	
207-08-9	Benzo(k)fluoranthene	29.9	
218-01-9	Chrysene	26.1	
53-70-3	Dibenz(a,h)anthracene	16.8	
206-44-0	Fluoranthene	29.8	
86-73-7	Fluorene	25.6	
193-39-5	Indeno(1,2,3-cd)pyrene	15.8	
91-20-3	Naphthalene	22.7	
85-01-8	Phenanthrene	26.1	
129-00-0	Pyrene	29.7	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 2944452
Date Analyzed: 07/26/2021 22:59
Lab File ID: 072621B.B\0726CP35.D
Initial wt/vol: 30.49 g Final wt/vol: 1 mL Dilution: 1
Instrument: 60MSS5 Percent Moisture: 20.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	31.4	
208-96-8	Acenaphthylene	30.5	
120-12-7	Anthracene	44.5	
56-55-3	Benzo(a)anthracene	99.3	
50-32-8	Benzo(a)pyrene	84.4	
205-99-2	Benzo(b)fluoranthene	153	
191-24-2	Benzo(g,h,i)perylene	37.8	
207-08-9	Benzo(k)fluoranthene	70.1	
218-01-9	Chrysene	99.1	
53-70-3	Dibenz(a,h)anthracene	26.1	
206-44-0	Fluoranthene	216	
86-73-7	Fluorene	36.3	
193-39-5	Indeno(1,2,3-cd)pyrene	41.2	
91-20-3	Naphthalene	29.1	
85-01-8	Phenanthrene	111	
129-00-0	Pyrene	191	

SAMPLE NO.

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

MSD

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid SDG No.: 60375481
Date Extracted: 07/22/2021 16:57
Lab Sample ID: 2944453
Date Analyzed: 07/26/2021 23:16
Lab File ID: 072621B.B\0726CP36.D
Initial wt/vol: 30.91 g Final wt/vol: 1 mL Dilution: 1
Instrument: 60MSS5 Percent Moisture: 20.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	29.3	
208-96-8	Acenaphthylene	28.8	
120-12-7	Anthracene	42.0	
56-55-3	Benzo(a)anthracene	90.3	
50-32-8	Benzo(a)pyrene	73.8	
205-99-2	Benzo(b)fluoranthene	134	
191-24-2	Benzo(g,h,i)perylene	32.0	
207-08-9	Benzo(k)fluoranthene	68.8	
218-01-9	Chrysene	88.9	
53-70-3	Dibenz(a,h)anthracene	23.7	
206-44-0	Fluoranthene	200	
86-73-7	Fluorene	33.6	
193-39-5	Indeno(1,2,3-cd)pyrene	35.6	
91-20-3	Naphthalene	27.0	
85-01-8	Phenanthrene	98.6	
129-00-0	Pyrene	174	

SAMPLE NO.

BLANK

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 19:44
Lab Sample ID: 2944481
Date Analyzed: 07/27/2021 14:11
Lab File ID: 072721.B\0727AP11.D
Initial wt/vol: 31.3 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.2	U
208-96-8	Acenaphthylene	<1.2	U
120-12-7	Anthracene	<1.3	U
56-55-3	Benzo(a)anthracene	<1.5	U
50-32-8	Benzo(a)pyrene	<1.2	U
205-99-2	Benzo(b)fluoranthene	<1.5	U
191-24-2	Benzo(g,h,i)perylene	<1.4	U
207-08-9	Benzo(k)fluoranthene	<1.8	U
218-01-9	Chrysene	<1.5	U
53-70-3	Dibenz(a,h)anthracene	<1.4	U
206-44-0	Fluoranthene	<2.4	U
86-73-7	Fluorene	<1.2	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.4	U
91-20-3	Naphthalene	<1.4	U
85-01-8	Phenanthrene	<2.6	U
129-00-0	Pyrene	<1.7	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 19:44
Lab Sample ID: 2944482
Date Analyzed: 07/27/2021 14:29
Lab File ID: 072721.B\0727AP12.D
Initial wt/vol: 31 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	27.5	
208-96-8	Acenaphthylene	26.8	
120-12-7	Anthracene	30.0	
56-55-3	Benzo(a)anthracene	30.1	
50-32-8	Benzo(a)pyrene	28.7	
205-99-2	Benzo(b)fluoranthene	30.8	
191-24-2	Benzo(g,h,i)perylene	29.4	
207-08-9	Benzo(k)fluoranthene	29.0	
218-01-9	Chrysene	29.6	
53-70-3	Dibenz(a,h)anthracene	29.2	
206-44-0	Fluoranthene	31.7	
86-73-7	Fluorene	28.1	
193-39-5	Indeno(1,2,3-cd)pyrene	29.8	
91-20-3	Naphthalene	27.1	
85-01-8	Phenanthrene	31.6	
129-00-0	Pyrene	31.7	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 19:44
Lab Sample ID: 2944483
Date Analyzed: 07/27/2021 14:46
Lab File ID: 072721.B\0727AP13.D
Initial wt/vol: 30 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	34.9	
208-96-8	Acenaphthylene	34.5	
120-12-7	Anthracene	39.7	
56-55-3	Benzo(a)anthracene	40.5	
50-32-8	Benzo(a)pyrene	38.2	
205-99-2	Benzo(b)fluoranthene	42.0	
191-24-2	Benzo(g,h,i)perylene	36.9	
207-08-9	Benzo(k)fluoranthene	40.4	
218-01-9	Chrysene	40.1	
53-70-3	Dibenz(a,h)anthracene	36.5	
206-44-0	Fluoranthene	44.4	
86-73-7	Fluorene	36.4	
193-39-5	Indeno(1,2,3-cd)pyrene	37.3	
91-20-3	Naphthalene	35.9	
85-01-8	Phenanthrene	41.6	
129-00-0	Pyrene	43.5	

SAMPLE NO.

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 19:44
Lab Sample ID: 2944484
Date Analyzed: 07/27/2021 15:03
Lab File ID: 072721.B\0727AP14.D
Initial wt/vol: 31.15 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	35.3	
208-96-8	Acenaphthylene	35.1	
120-12-7	Anthracene	39.5	
56-55-3	Benzo(a)anthracene	40.0	
50-32-8	Benzo(a)pyrene	37.8	
205-99-2	Benzo(b)fluoranthene	38.6	
191-24-2	Benzo(g,h,i)perylene	37.1	
207-08-9	Benzo(k)fluoranthene	41.3	
218-01-9	Chrysene	39.4	
53-70-3	Dibenz(a,h)anthracene	37.0	
206-44-0	Fluoranthene	45.1	
86-73-7	Fluorene	37.1	
193-39-5	Indeno(1,2,3-cd)pyrene	36.6	
91-20-3	Naphthalene	34.7	
85-01-8	Phenanthrene	43.1	
129-00-0	Pyrene	43.4	

PCB - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8

LAB SAMPLE ID	SAMPLE NAME	DCBP
2944193	2944193BLANK	98
2944194	2944194LCS	99
2944195	2944195MS	86
2944196	2944196MSD	89
60375481021	GB-50/3-5'	92
60375481022	GB-50/3-5'D	100
60375481023	GB-49/3.5-4.5'	99
60375481024	GB-49/5-6'	96
60375481027	GB-48/3-5'	91
60375481028	GB-48/5-7'	103
60375481029	GB-55/0-2'	89
60375481030	GB-55/3-5'	95
60375481031	GB-55/3-5'D	98
60375481034	GB-68/1-3'	85
60375481035	GB-68/3-5'	101
60375481036	GB-68/3-5'D	103
60375481037	GB-67/5-6'	99
60375481038	GB-67/8-10'	102
60375481042	GB-54/0-2'	96
60375481043	GB-54/2-4'	99

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(35-120)

* Values outside of QC Limits

PCB - FORM II SVOA-2
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8

LAB SAMPLE ID	SAMPLE NAME	DCBP
2944188	2944188BLANK	83
2944189	2944189LCS	93
2944190	2944190MS	101
2944191	2944191MSD	94
60375481001	GB-69/2'-3'	90
60375481002	GB-69/3'-5'	91
60375481003	GB-70/3'-5'	86
60375481004	GB-70/5'-7'	86
60375481005	GB-71/0'-2'	97
60375481006	GB-71/3'-5'	92
60375481007	GB-65/3'-4'	89
60375481008	GB-65/5'-7'	86
60375481009	GB-64/3'-4'	89
60375481010	GB-64/5'-7'	94
60375481011	GB-57/3.5'-5.5'	87
60375481012	GB-57/6.0'-8.0'	96
60375481013	GB-57/6.0'-8.0' D	83
60375481014	GB-56/3-5'	98
60375481015	GB-56/5-7'	101
60375481016	GB-58/1-3'	94
60375481017	GB-58/4-6'	83
60375481018	GB-51/1.5-3'	88
60375481019	GB-51/3-5'	98
60375481020	GB-50/0-2'	100

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(35-120)

* Values outside of QC Limits

PCB - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2944194LCS
Date Extracted: 07/22/2021
Date Analyzed (1): 07/23/2021
Instrument: 60GCS8
LCS Lot No: 42472
Lab File ID: 072321-1.B\0723210008.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	166	165	99	65-120
PCB-1260 (Aroclor 1260)	166	167	101	65-120

Spike Recovery: 0 out of 2 outside limits.

09/10/2021 10:43

PCB - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2944189LCS
Date Extracted: 07/22/2021
Date Analyzed (1): 07/26/2021
Instrument: 60GCS8
LCS Lot No: 42472
Lab File ID: 072621-1.B\0726210021.D
SDG No.: 60375481

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	162	155	96	65-120
PCB-1260 (Aroclor 1260)	162	156	96	65-120

Spike Recovery: 0 out of 2 outside limits.

09/10/2021 10:43

PCB - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2944195MS
Date Extracted: 07/22/2021
Date Analyzed (1): 07/23/2021
Instrument: 60GCS8
Lab File ID: 072321-1.B\0723210016.D
Parent Sample ID: GB-48/3-5'
SDG No.: 60375481

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	206	<10.0	182	88	30-130
PCB-1260 (Aroclor 1260)	206	<8.0	185	90	15-155

Spike Recovery: 0 out of 2 outside limits.

09/10/2021 10:43

PCB - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60GCS8 Matrix Spike Duplicate - Sample No: 2944196MSD

Lab File ID (2): 072321-1.B\0723210017.D Date Analyzed (2): 07/23/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
PCB-1016 (Aroclor 1016)	194	169	87	7	0-40	30-130
PCB-1260 (Aroclor 1260)	194	177	91	5	0-40	15-155

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

09/10/2021 10:43

PCB - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2944190MS
Date Extracted: 07/22/2021
Date Analyzed (1): 07/26/2021
Instrument: 60GCS8
Lab File ID: 072621-1.B\0726210053.D
Parent Sample ID: GB-58/4-6'
SDG No.: 60375481

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	210	<10.2	232	110	30-130
PCB-1260 (Aroclor 1260)	210	<8.1	231	110	15-155

Spike Recovery: 0 out of 2 outside limits.

09/10/2021 10:43

PCB - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60GCS8 Matrix Spike Duplicate - Sample No: 2944191MSD

Lab File ID (2): 072621-1.B\0726210054.D Date Analyzed (2): 07/27/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
PCB-1016 (Aroclor 1016)	208	204	98	13	0-40	30-130
PCB-1260 (Aroclor 1260)	208	211	101	9	0-40	15-155

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

09/10/2021 10:43

SAMPLE NO.

2944193BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8 Matrix: Solid Lab Sample ID: 2944193

Lab File ID (1): 072321-1.B\0723210007.D Date Analyzed (1): 07/23/2021 Time (1):07:52

Lab File ID (2): 072321-2.B\0723210007.D Date Analyzed (2): 07/23/2021 Time (2):07:52

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2944194LCS	2944194	072321-1.B\0723210008.D	07/23/2021 08:10
2944194LCS	2944194	072321-2.B\0723210008.D	07/23/2021 08:10
GB-50/3-5'	60375481021	072321-1.B\0723210011.D	07/23/2021 09:03
GB-50/3-5'D	60375481022	072321-1.B\0723210012.D	07/23/2021 09:21
GB-49/3.5-4.5'	60375481023	072321-1.B\0723210013.D	07/23/2021 09:39
GB-49/5-6'	60375481024	072321-1.B\0723210014.D	07/23/2021 09:57
GB-48/3-5'	60375481027	072321-1.B\0723210015.D	07/23/2021 10:15
2944195MS	2944195	072321-1.B\0723210016.D	07/23/2021 10:33
2944195MS	2944195	072321-2.B\0723210016.D	07/23/2021 10:33
2944196MSD	2944196	072321-1.B\0723210017.D	07/23/2021 10:51
2944196MSD	2944196	072321-2.B\0723210017.D	07/23/2021 10:51
GB-48/5-7'	60375481028	072321-1.B\0723210018.D	07/23/2021 11:08
GB-55/0-2'	60375481029	072321-1.B\0723210019.D	07/23/2021 11:26
GB-55/3-5'	60375481030	072321-1.B\0723210020.D	07/23/2021 11:44
GB-55/3-5'D	60375481031	072321-1.B\0723210023.D	07/23/2021 12:38
GB-68/1-3'	60375481034	072321-1.B\0723210024.D	07/23/2021 12:56
GB-68/3-5'	60375481035	072321-1.B\0723210025.D	07/23/2021 13:13
GB-68/3-5'D	60375481036	072321-1.B\0723210026.D	07/23/2021 13:31
GB-67/5-6'	60375481037	072321-1.B\0723210027.D	07/23/2021 13:49
GB-67/8-10'	60375481038	072321-1.B\0723210028.D	07/23/2021 14:07
GB-54/0-2'	60375481042	072321-1.B\0723210029.D	07/23/2021 14:25
GB-54/2-4'	60375481043	072321-1.B\0723210030.D	07/23/2021 14:43

SAMPLE NO.

2944188BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8 Matrix: Solid Lab Sample ID: 2944188

Lab File ID (1): 072621-1.B\0726210020.D Date Analyzed (1): 07/26/2021 Time (1): 13:57

Lab File ID (2): 072621-2.B\0726210020.D Date Analyzed (2): 07/26/2021 Time (2): 13:57

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2944189LCS	2944189	072621-1.B\0726210021.D	07/26/2021 14:15
2944189LCS	2944189	072621-2.B\0726210021.D	07/26/2021 14:15
GB-69/2'-3'	60375481001	072621-1.B\0726210034.D	07/26/2021 18:08
GB-69/3'-5'	60375481002	072621-1.B\0726210035.D	07/26/2021 18:25
GB-70/3'-5'	60375481003	072621-1.B\0726210036.D	07/26/2021 18:43
GB-70/5'-7'	60375481004	072621-1.B\0726210037.D	07/26/2021 19:01
GB-71/0'-2'	60375481005	072621-1.B\0726210038.D	07/26/2021 19:19
GB-71/3'-5'	60375481006	072621-1.B\0726210039.D	07/26/2021 19:37
GB-65/3'-4'	60375481007	072621-1.B\0726210040.D	07/26/2021 19:55
GB-65/5'-7'	60375481008	072621-1.B\0726210041.D	07/26/2021 20:13
GB-64/3'-4'	60375481009	072621-1.B\0726210042.D	07/26/2021 20:31
GB-64/5'-7'	60375481010	072621-1.B\0726210043.D	07/26/2021 20:49
GB-57/3.5'-5.5'	60375481011	072621-1.B\0726210044.D	07/26/2021 21:06
GB-57/6.0'-8.0'	60375481012	072621-1.B\0726210047.D	07/26/2021 22:00
GB-57/6.0'-8.0' D	60375481013	072621-1.B\0726210048.D	07/26/2021 22:18
GB-56/3-5'	60375481014	072621-1.B\0726210049.D	07/26/2021 22:36
GB-56/5-7'	60375481015	072621-1.B\0726210050.D	07/26/2021 22:54
GB-58/1-3'	60375481016	072621-1.B\0726210051.D	07/26/2021 23:12
GB-58/4-6'	60375481017	072621-1.B\0726210052.D	07/26/2021 23:29
2944190MS	2944190	072621-1.B\0726210053.D	07/26/2021 23:47
2944190MS	2944190	072621-2.B\0726210053.D	07/26/2021 23:47
2944191MSD	2944191	072621-1.B\0726210054.D	07/27/2021 00:05
2944191MSD	2944191	072621-2.B\0726210054.D	07/27/2021 00:05
GB-51/1.5-3'	60375481018	072621-1.B\0726210055.D	07/27/2021 00:23
GB-51/3-5'	60375481019	072621-1.B\0726210056.D	07/27/2021 00:41
GB-50/0-2'	60375481020	072621-1.B\0726210057.D	07/27/2021 00:59

SAMPLE NO.

GB-50/3-5'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481021

Date Analyzed: 07/23/2021 09:03 Lab File ID: 072321-1.B\0723210011.D

Initial wt/vol: 31.79 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.6	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.2	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.3	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.6	U

SAMPLE NO.

GB-50/3-5'D

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481022

Date Analyzed: 07/23/2021 09:21 Lab File ID: 072321-1.B\0723210012.D

Initial wt/vol: 30.14 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-49/3.5-4.5'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481023

Date Analyzed: 07/23/2021 09:39 Lab File ID: 072321-1.B\0723210013.D

Initial wt/vol: 30.58 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-49/5-6'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481024

Date Analyzed: 07/23/2021 09:57 Lab File ID: 072321-1.B\0723210014.D

Initial wt/vol: 30.4 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-48/3-5'

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 18:03
Lab Sample ID: 60375481027
Date Analyzed: 07/23/2021 10:15
Lab File ID: 072321-1.B\0723210015.D
Initial wt/vol: 30.26 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 19.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-48/5-7'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481028

Date Analyzed: 07/23/2021 11:08 Lab File ID: 072321-1.B\0723210018.D

Initial wt/vol: 30.99 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-55/0-2'

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 18:03
Lab Sample ID: 60375481029
Date Analyzed: 07/23/2021 11:26
Lab File ID: 072321-1.B\0723210019.D
Initial wt/vol: 30.27 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 14.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.4	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.1	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.1	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.2	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.5	U

SAMPLE NO.

GB-55/3-5'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481030

Date Analyzed: 07/23/2021 11:44 Lab File ID: 072321-1.B\0723210020.D

Initial wt/vol: 30.66 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.6	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.2	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.3	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.6	U

SAMPLE NO.

GB-55/3-5'D

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481031

Date Analyzed: 07/23/2021 12:38 Lab File ID: 072321-1.B\0723210023.D

Initial wt/vol: 30.86 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 16.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.6	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.2	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.3	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.6	U

SAMPLE NO.

GB-68/1-3'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481034

Date Analyzed: 07/23/2021 12:56 Lab File ID: 072321-1.B\0723210024.D

Initial wt/vol: 31.21 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 14.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<8.9	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.1	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.0	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.5	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.3	U

SAMPLE NO.

GB-68/3-5'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481035

Date Analyzed: 07/23/2021 13:13 Lab File ID: 072321-1.B\0723210025.D

Initial wt/vol: 31.39 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.7	U

SAMPLE NO.

GB-68/3-5'D

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481036

Date Analyzed: 07/23/2021 13:31 Lab File ID: 072321-1.B\0723210026.D

Initial wt/vol: 30.33 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-67/5-6'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 60375481037

Date Analyzed: 07/23/2021 13:49 Lab File ID: 072321-1.B\0723210027.D

Initial wt/vol: 30.09 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-67/8-10'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 | Lab Sample ID: 60375481038

Date Analyzed: 07/23/2021 14:07 | Lab File ID: 072321-1.B\0723210028.D

Initial wt/vol: 31.65 g | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60GCS8 | Percent Moisture: 19.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.7	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.3	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.4	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.7	U

SAMPLE NO.

GB-54/0-2'

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 18:03
Lab Sample ID: 60375481042
Date Analyzed: 07/23/2021 14:25
Lab File ID: 072321-1.B\0723210029.D
Initial wt/vol: 30.66 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 11.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<8.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.0	U
53469-21-9	PCB-1242 (Aroclor 1242)	<8.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.4	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.4	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.2	U

SAMPLE NO.

GB-54/2-4'

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 18:03
Lab Sample ID: 60375481043
Date Analyzed: 07/23/2021 14:43
Lab File ID: 072321-1.B\0723210030.D
Initial wt/vol: 30.58 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 16.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.7	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.3	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.4	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.7	U

SAMPLE NO.

GB-69/2'-3'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481001

Date Analyzed: 07/26/2021 18:08 Lab File ID: 072621-1.B\0726210034.D

Initial wt/vol: 30.29 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	19.9	J

SAMPLE NO.

GB-69/3'-5'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481002

Date Analyzed: 07/26/2021 18:25 Lab File ID: 072621-1.B\0726210035.D

Initial wt/vol: 30.28 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-70/3'-5'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481003

Date Analyzed: 07/26/2021 18:43 Lab File ID: 072621-1.B\0726210036.D

Initial wt/vol: 31.11 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-70/5'-7'

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 12:56
Lab Sample ID: 60375481004
Date Analyzed: 07/26/2021 19:01
Lab File ID: 072621-1.B\0726210037.D
Initial wt/vol: 30.05 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 16.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.7	U

SAMPLE NO.

GB-71/0'-2'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481005

Date Analyzed: 07/26/2021 19:19 Lab File ID: 072621-1.B\0726210038.D

Initial wt/vol: 30.06 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-71/3'-5'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481006

Date Analyzed: 07/26/2021 19:37 Lab File ID: 072621-1.B\0726210039.D

Initial wt/vol: 30.07 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-65/3'-4'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481007

Date Analyzed: 07/26/2021 19:55 Lab File ID: 072621-1.B\0726210040.D

Initial wt/vol: 30.01 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-65/5'-7'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481008

Date Analyzed: 07/26/2021 20:13 Lab File ID: 072621-1.B\0726210041.D

Initial wt/vol: 30.39 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-64/3'-4'

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 12:56
Lab Sample ID: 60375481009
Date Analyzed: 07/26/2021 20:31
Lab File ID: 072621-1.B\0726210042.D
Initial wt/vol: 30.26 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 20.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-64/5'-7'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481010

Date Analyzed: 07/26/2021 20:49 Lab File ID: 072621-1.B\0726210043.D

Initial wt/vol: 30.03 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 27.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<11.3	U
11104-28-2	PCB-1221 (Aroclor 1221)	<10.9	U
11141-16-5	PCB-1232 (Aroclor 1232)	<5.0	U
53469-21-9	PCB-1242 (Aroclor 1242)	<11.0	U
12672-29-6	PCB-1248 (Aroclor 1248)	<3.0	U
11097-69-1	PCB-1254 (Aroclor 1254)	<4.3	U
11096-82-5	PCB-1260 (Aroclor 1260)	<9.0	U

SAMPLE NO.

GB-57/3.5'-5.5'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481011

Date Analyzed: 07/26/2021 21:06 Lab File ID: 072621-1.B\0726210044.D

Initial wt/vol: 30.57 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 15.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.6	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.2	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.3	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.6	U

SAMPLE NO.

GB-57/6.0'-8.0'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481012

Date Analyzed: 07/26/2021 22:00 Lab File ID: 072621-1.B\0726210047.D

Initial wt/vol: 30.13 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-57/6.0'-8.0' D

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481013

Date Analyzed: 07/26/2021 22:18 Lab File ID: 072621-1.B\0726210048.D

Initial wt/vol: 30.28 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-56/3-5'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481014

Date Analyzed: 07/26/2021 22:36 Lab File ID: 072621-1.B\0726210049.D

Initial wt/vol: 30.37 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-56/5-7'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 | Lab Sample ID: 60375481015

Date Analyzed: 07/26/2021 22:54 | Lab File ID: 072621-1.B\0726210050.D

Initial wt/vol: 30.5 g | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60GCS8 | Percent Moisture: 20.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-58/1-3'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 | Lab Sample ID: 60375481016

Date Analyzed: 07/26/2021 23:12 | Lab File ID: 072621-1.B\0726210051.D

Initial wt/vol: 30.42 g | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60GCS8 | Percent Moisture: 20.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-58/4-6'

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 12:56
Lab Sample ID: 60375481017
Date Analyzed: 07/26/2021 23:29
Lab File ID: 072621-1.B\0726210052.D
Initial wt/vol: 30.51 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 20.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-51/1.5-3'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 60375481018

Date Analyzed: 07/27/2021 00:23 Lab File ID: 072621-1.B\0726210055.D

Initial wt/vol: 30.33 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-51/3-5'

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 | Matrix: Solid | SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 | Lab Sample ID: 60375481019

Date Analyzed: 07/27/2021 00:41 | Lab File ID: 072621-1.B\0726210056.D

Initial wt/vol: 30.34 g | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60GCS8 | Percent Moisture: 19.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-50/0-2'

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/21/2021 04:30
Matrix: Solid
SDG No.: 60375481
Date Extracted: 07/22/2021 12:56
Lab Sample ID: 60375481020
Date Analyzed: 07/27/2021 00:59
Lab File ID: 072621-1.B\0726210057.D
Initial wt/vol: 30.9 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 16.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.5	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.1	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.2	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	8.3	J

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Calibration File Names:

Level 01: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210011.D
Level 02: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210012.D
Level 03: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210013.D
Level 04: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210014.D
Level 05: 1268ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210028.D
1262ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210027.D
1248ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210026.D
1242ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210025.D
1232ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210024.D
122154ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210023.D
1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210015.D
Level 06: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210016.D
Level 07: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210017.D
Level 08: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210018.D
Level 09: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210019.D

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
1 PCB-1221 (Aroclor 1221)(1)	+++++	+++++	+++++	+++++	294310	+++++					
	+++++	+++++	+++++				AVRG		294310		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	231048	+++++					
	+++++	+++++	+++++				AVRG		231048		0.000e+000
(3)	+++++	+++++	+++++	+++++	706613	+++++					
	+++++	+++++	+++++				AVRG		706613		0.000e+000
2 PCB-1016 (Aroclor 1016) (1)	701000	617470	623735	472270	556160	536698					
	551539	577039	426185				AVRG		562455		14.56844
(2)	1474020	1256300	1258035	980363	1159898	1121734					
	1150250	1219050	908607				AVRG		1169806		14.08357
(3)	717320	632120	633300	513313	603913	575502					
	590478	627801	467426				AVRG		595686		12.20793
(4)	531720	460970	475440	360343	429565	418728					
	435786	464843	338758				AVRG		435128		13.51976
(5)	437060	387660	408455	306180	375728	369180					
	391961	422341	314984				AVRG		379283		11.74202

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
3 PCB-1232 (Aroclor 1232)(1)	+++++	+++++	+++++	+++++	253720	+++++					
	+++++	+++++	+++++				AVRG		253720		0.000e+000
(2)	+++++	+++++	+++++	+++++	203418	+++++					
	+++++	+++++	+++++				AVRG		203418		0.000e+000
(3)	+++++	+++++	+++++	+++++	122595	+++++					
	+++++	+++++	+++++				AVRG		122595		0.000e+000
(4)	+++++	+++++	+++++	+++++	184538	+++++					
	+++++	+++++	+++++				AVRG		184538		0.000e+000
(5)	+++++	+++++	+++++	+++++	253583	+++++					
	+++++	+++++	+++++				AVRG		253583		0.000e+000
4 PCB-1242 (Aroclor 1242)(1)	+++++	+++++	+++++	+++++	1330733	+++++					
	+++++	+++++	+++++				AVRG		1330733		0.000e+000
(2)	+++++	+++++	+++++	+++++	682248	+++++					
	+++++	+++++	+++++				AVRG		682248		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(3)	+++++	+++++	+++++	+++++	386738	+++++					
	+++++	+++++	+++++				AVRG		386738		0.000e+000
(4)	+++++	+++++	+++++	+++++	619705	+++++					
	+++++	+++++	+++++				AVRG		619705		0.000e+000
(5)	+++++	+++++	+++++	+++++	525020	+++++					
	+++++	+++++	+++++				AVRG		525020		0.000e+000
5 PCB-1248 (Aroclor 1248)(1)	+++++	+++++	+++++	+++++	830558	+++++					
	+++++	+++++	+++++				AVRG		830558		0.000e+000
(2)	+++++	+++++	+++++	+++++	493200	+++++					
	+++++	+++++	+++++				AVRG		493200		0.000e+000
(3)	+++++	+++++	+++++	+++++	1191863	+++++					
	+++++	+++++	+++++				AVRG		1191863		0.000e+000
(4)	+++++	+++++	+++++	+++++	908805	+++++					
	+++++	+++++	+++++				AVRG		908805		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(5)	+++++	+++++	+++++	+++++	590705	+++++					
	+++++	+++++	+++++				AVRG		590705		0.000e+000
6 PCB-1254 (Aroclor 1254) (1)	+++++	+++++	+++++	+++++	996328	+++++					
	+++++	+++++	+++++				AVRG		996328		0.000e+000
(2)	+++++	+++++	+++++	+++++	545155	+++++					
	+++++	+++++	+++++				AVRG		545155		0.000e+000
(3)	+++++	+++++	+++++	+++++	1411958	+++++					
	+++++	+++++	+++++				AVRG		1411958		0.000e+000
(4)	+++++	+++++	+++++	+++++	1253878	+++++					
	+++++	+++++	+++++				AVRG		1253878		0.000e+000
(5)	+++++	+++++	+++++	+++++	1144150	+++++					
	+++++	+++++	+++++				AVRG		1144150		0.000e+000
7 PCB-1262 (Aroclor 1262) (1)	+++++	+++++	+++++	+++++	458313	+++++					
	+++++	+++++	+++++				AVRG		458313		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	788948	+++++					
	+++++	+++++	+++++				AVRG		788948		0.000e+000
(3)	+++++	+++++	+++++	+++++	426080	+++++					
	+++++	+++++	+++++				AVRG		426080		0.000e+000
(4)	+++++	+++++	+++++	+++++	1502183	+++++					
	+++++	+++++	+++++				AVRG		1502183		0.000e+000
(5)	+++++	+++++	+++++	+++++	726623	+++++					
	+++++	+++++	+++++				AVRG		726623		0.000e+000
8 PCB-1260 (Aroclor 1260) (1)	1078320	883840	903145	655493	771805	759566					
	790933	823628	600052				AVRG		807420		17.43656
(2)	1212460	1021120	1028500	739067	888230	870096					
	916671	956915	701937				AVRG		926111		16.74346
(3)	1116260	929960	962675	694600	847133	828108					
	916614	957911	723401				AVRG		886296		14.65006

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(4)	803880	702580	719520	524140	611455	615932					
	664773	699337	516835				AVRG		650939		14.38471
(5)	753860	653040	673655	496677	600428	588808					
	652154	683348	506383				AVRG		623150		13.46461
9 PCB-1268 (Aroclor 1268) (1)	+++++	+++++	+++++	+++++	528918	+++++					
	+++++	+++++	+++++				AVRG		528918		0.000e+000
(2)	+++++	+++++	+++++	+++++	1775430	+++++					
	+++++	+++++	+++++				AVRG		1775430		0.000e+000
(3)	+++++	+++++	+++++	+++++	1601693	+++++					
	+++++	+++++	+++++				AVRG		1601693		0.000e+000
(4)	+++++	+++++	+++++	+++++	1440105	+++++					
	+++++	+++++	+++++				AVRG		1440105		0.000e+000
(5)	+++++	+++++	+++++	+++++	615580	+++++					
	+++++	+++++	+++++				AVRG		615580		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
$ 10 Decachlorobiphenyl (S)	+++++	14101100	13899150	9711800	11997950	11973880					
	12475350	13201590	9881410				AVRG		12155279		13.63325

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Average %RSD Results.
Calculated Average %RSD = 14.22131
Maximun Average %RSD = 0.000e+000
* Failed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Calibration File Names:

Level 01: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210011.D
Level 02: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210012.D
Level 03: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210013.D
Level 04: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210014.D
Level 05: 1268ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210028.D
1262ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210027.D
1248ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210026.D
1242ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210025.D
1232ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210024.D
122154ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210023.D
1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210015.D
Level 06: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210016.D
Level 07: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210017.D
Level 08: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210018.D
Level 09: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210019.D

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
1 PCB-1221 (Aroclor 1221)(1)	+++++	+++++	+++++	+++++	380045	+++++					
	+++++	+++++	+++++				AVRG		380045		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	263670	+++++					
	+++++	+++++	+++++				AVRG		263670		0.000e+000
(3)	+++++	+++++	+++++	+++++	851690	+++++					
	+++++	+++++	+++++				AVRG		851690		0.000e+000
2 PCB-1016 (Aroclor 1016) (1)	996700	893740	951545	755627	901883	888710					
	914789	984287	738401				AVRG		891742		10.17367
(2)	2006820	1757760	1855205	1438297	1723153	1684282					
	1743626	1871209	1388984				AVRG		1718815		11.55558
(3)	744880	664970	714820	568070	689230	673498					
	710759	761491	575439				AVRG		678128		10.00046
(4)	720720	651250	704805	544383	661495	650810					
	676705	723377	532481				AVRG		651781		10.73622
(5)	732360	644920	694625	520613	647358	641362					
	679450	729886	545340				AVRG		648435		11.41152

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
3 PCB-1232 (Aroclor 1232) (1)	+++++	+++++	+++++	+++++	191013	+++++					
	+++++	+++++	+++++				AVRG		191013		0.000e+000
(2)	+++++	+++++	+++++	+++++	266690	+++++					
	+++++	+++++	+++++				AVRG		266690		0.000e+000
(3)	+++++	+++++	+++++	+++++	233038	+++++					
	+++++	+++++	+++++				AVRG		233038		0.000e+000
(4)	+++++	+++++	+++++	+++++	195433	+++++					
	+++++	+++++	+++++				AVRG		195433		0.000e+000
(5)	+++++	+++++	+++++	+++++	367300	+++++					
	+++++	+++++	+++++				AVRG		367300		0.000e+000
4 PCB-1242 (Aroclor 1242) (1)	+++++	+++++	+++++	+++++	806165	+++++					
	+++++	+++++	+++++				AVRG		806165		0.000e+000
(2)	+++++	+++++	+++++	+++++	600760	+++++					
	+++++	+++++	+++++				AVRG		600760		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(3)	+++++	+++++	+++++	+++++	436298	+++++					
	+++++	+++++	+++++				AVRG		436298		0.000e+000
(4)	+++++	+++++	+++++	+++++	846415	+++++					
	+++++	+++++	+++++				AVRG		846415		0.000e+000
(5)	+++++	+++++	+++++	+++++	891180	+++++					
	+++++	+++++	+++++				AVRG		891180		0.000e+000
5 PCB-1248 (Aroclor 1248) (1)	+++++	+++++	+++++	+++++	1006063	+++++					
	+++++	+++++	+++++				AVRG		1006063		0.000e+000
(2)	+++++	+++++	+++++	+++++	1690328	+++++					
	+++++	+++++	+++++				AVRG		1690328		0.000e+000
(3)	+++++	+++++	+++++	+++++	1500160	+++++					
	+++++	+++++	+++++				AVRG		1500160		0.000e+000
(4)	+++++	+++++	+++++	+++++	1641465	+++++					
	+++++	+++++	+++++				AVRG		1641465		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(5)	+++++	+++++	+++++	+++++	899370	+++++					
	+++++	+++++	+++++				AVRG		899370		0.000e+000
6 PCB-1254 (Aroclor 1254) (1)	+++++	+++++	+++++	+++++	1357715	+++++					
	+++++	+++++	+++++				AVRG		1357715		0.000e+000
(2)	+++++	+++++	+++++	+++++	1695888	+++++					
	+++++	+++++	+++++				AVRG		1695888		0.000e+000
(3)	+++++	+++++	+++++	+++++	2147213	+++++					
	+++++	+++++	+++++				AVRG		2147213		0.000e+000
(4)	+++++	+++++	+++++	+++++	2336995	+++++					
	+++++	+++++	+++++				AVRG		2336995		0.000e+000
(5)	+++++	+++++	+++++	+++++	1710738	+++++					
	+++++	+++++	+++++				AVRG		1710738		0.000e+000
7 PCB-1262 (Aroclor 1262) (1)	+++++	+++++	+++++	+++++	912865	+++++					
	+++++	+++++	+++++				AVRG		912865		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	597670	+++++					
	+++++	+++++	+++++				AVRG		597670		0.000e+000
(3)	+++++	+++++	+++++	+++++	785118	+++++					
	+++++	+++++	+++++				AVRG		785118		0.000e+000
(4)	+++++	+++++	+++++	+++++	3122595	+++++					
	+++++	+++++	+++++				AVRG		3122595		0.000e+000
(5)	+++++	+++++	+++++	+++++	1451733	+++++					
	+++++	+++++	+++++				AVRG		1451733		0.000e+000
8 PCB-1260 (Aroclor 1260)(1)	1495060	1324320	1383265	1012713	1245415	1212336					
	1290330	1341149	998356				AVRG		1255883		13.02396
(2)	1934740	1666190	1759590	1270663	1591978	1557984					
	1663399	1733074	1288095				AVRG		1607301		13.39320
(3)	1294640	1150380	1238865	908323	1124700	1131828					
	1222590	1284839	983375				AVRG		1148838		11.49014

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(4)	1515380	1294120	1392920	1001863	1255763	1249818					
	1346569	1426633	1063935				AVRG		1283000		12.91787
(5)	1355060	1166700	1232845	911380	1142930	1130968					
	1233821	1301609	979691				AVRG		1161667		12.33781
9 PCB-1268 (Aroclor 1268) (1)	+++++	+++++	+++++	+++++	1038453	+++++					
	+++++	+++++	+++++				AVRG		1038453		0.000e+000
(2)	+++++	+++++	+++++	+++++	3722930	+++++					
	+++++	+++++	+++++				AVRG		3722930		0.000e+000
(3)	+++++	+++++	+++++	+++++	2862560	+++++					
	+++++	+++++	+++++				AVRG		2862560		0.000e+000
(4)	+++++	+++++	+++++	+++++	2809675	+++++					
	+++++	+++++	+++++				AVRG		2809675		0.000e+000
(5)	+++++	+++++	+++++	+++++	1143225	+++++					
	+++++	+++++	+++++				AVRG		1143225		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
$ 10 Decachlorobiphenyl (S)	30461200	23346800	23726300	16360700	20462550	20659520					
	21689325	22715900	16890525				AVRG		21812536		19.09245

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Average %RSD Results.
Calculated Average %RSD = 12.37572
Maximun Average %RSD = 0.000e+000
* Failed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1660icv.spk
Quant Type: ESTD
Sublist File: 1660icv.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1660icv

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 PCB-1016 (Aroclor	0.4000	0.3532	88.30	75-125
8 PCB-1260 (Aroclor	0.4000	0.3529	88.22	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1660icv.spk
Quant Type: ESTD
Sublist File: 1660icv.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1660icv

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 PCB-1016 (Aroclor	0.4000	0.3501	87.53	75-125
8 PCB-1260 (Aroclor	0.4000	0.3537	88.43	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-1
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 122154icv.spk
Quant Type: ESTD
Sublist File: 122154.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,122154

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 PCB-1221 (Aroclor	0.4000	0.3248	81.20	75-125
6 PCB-1254 (Aroclor	0.4000	0.3187	79.67	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 122154icv.spk
Quant Type: ESTD
Sublist File: 122154.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,122154

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 PCB-1221 (Aroclor	0.4000	0.3175	79.38	75-125
6 PCB-1254 (Aroclor	0.4000	0.3343	83.57	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Sample Matrix: Liquid
Lab Smp Id: ICV
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: 1232icv.spk
Sublist File: 1232.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1232

Client SDG: 60GCS8-071921-1
Fraction: 8082
Client Smp ID: ICV
Operator: AJA1
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3 PCB-1232 (Aroclor	0.4000	0.3378	84.45	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1232icv.spk
Quant Type: ESTD
Sublist File: 1232.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1232

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3 PCB-1232 (Aroclor	0.4000	0.3633	90.82	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Sample Matrix: Liquid
Lab Smp Id: ICV
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: 1242icv.spk
Sublist File: 1242.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1242

Client SDG: 60GCS8-071921-1
Fraction: 8082
Client Smp ID: ICV
Operator: AJA1
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
4 PCB-1242 (Aroclor	0.4000	0.3911	97.77	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1242icv.spk
Quant Type: ESTD
Sublist File: 1242.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1242

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
4 PCB-1242 (Aroclor	0.4000	0.3820	95.50	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-1
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1248icv.spk
Quant Type: ESTD
Sublist File: 1248.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1248

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 PCB-1248 (Aroclor	0.4000	0.3239	80.97	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1248icv.spk
Quant Type: ESTD
Sublist File: 1248.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1248

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 PCB-1248 (Aroclor	0.4000	0.2736	68.40*	75-125

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 07:16
Lab File ID: 0723210005.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	556253	0.010	-1.10276	15.00000	Aver	
(2)	1169806	1108298	0.010	-5.25803	15.00000	Aver	
(3)	595686	567183	0.010	-4.78495	15.00000	Aver	
(4)	435128	419400	0.010	-3.61461	15.00000	Aver	
(5)	379283	366128	0.010	-3.46855	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	777950	0.010	-3.64992	15.00000	Aver	
(2)	926111	882100	0.010	-4.75220	15.00000	Aver	
(3)	886296	855663	0.010	-3.45632	15.00000	Aver	
(4)	650939	640550	0.010	-1.59601	15.00000	Aver	
(5)	623150	608415	0.010	-2.36463	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	11621550	0.010	-4.39092	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 0.76547
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 07:16
Lab File ID: 0723210005.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	913213	0.010	2.40767	15.00000	Aver	
(2)	1718815	1704740	0.010	-0.81888	15.00000	Aver	
(3)	678128	687785	0.010	1.42400	15.00000	Aver	
(4)	651781	671565	0.010	3.03543	15.00000	Aver	
(5)	648435	664105	0.010	2.41661	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1304398	0.010	3.86300	15.00000	Aver	
(2)	1607301	1646650	0.010	2.44812	15.00000	Aver	
(3)	1148838	1171798	0.010	1.99852	15.00000	Aver	
(4)	1283000	1304635	0.010	1.68628	15.00000	Aver	
(5)	1161667	1168843	0.010	0.61768	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	20348800	0.010	-6.71052	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 2.25213
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i
Lab File ID: 0723210009.D
Analysis Type: WATER
Lab Sample ID: CCV
Method: \\192.168.60.5\chem\60GCS8.i\072321-1.b\8082-1.m

Injection Date: 23-JUL-2021 08:28
Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Init. Cal. Times: 17:09 22:14
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	537438	0.010	-4.44792	15.00000	Aver	
(2)	1169806	1067655	0.010	-8.73233	15.00000	Aver	
(3)	595686	554100	0.010	-6.98116	15.00000	Aver	
(4)	435128	406763	0.010	-6.51892	15.00000	Aver	
(5)	379283	355673	0.010	-6.22507	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	753088	0.010	-6.72917	15.00000	Aver	
(2)	926111	867838	0.010	-6.29225	15.00000	Aver	
(3)	886296	831255	0.010	-6.21020	15.00000	Aver	
(4)	650939	629300	0.010	-3.32428	15.00000	Aver	
(5)	623150	592560	0.010	-4.90896	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	11437800	0.010	-5.90261	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 0.76547
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 08:28
Lab File ID: 0723210009.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	862900	0.010	-3.23438	15.00000	Aver	
(2)	1718815	1616360	0.010	-5.96079	15.00000	Aver	
(3)	678128	654388	0.010	-3.50095	15.00000	Aver	
(4)	651781	639828	0.010	-1.83392	15.00000	Aver	
(5)	648435	632063	0.010	-2.52491	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1219415	0.010	-2.90375	15.00000	Aver	
(2)	1607301	1554313	0.010	-3.29676	15.00000	Aver	
(3)	1148838	1107673	0.010	-3.58321	15.00000	Aver	
(4)	1283000	1235663	0.010	-3.68960	15.00000	Aver	
(5)	1161667	1142033	0.010	-1.69021	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	19678775	0.010	-9.78227	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 2.25213
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 12:02
Lab File ID: 0723210021.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	581318	0.010	3.35360	15.00000	Aver	
(2)	1169806	1187100	0.010	1.47834	15.00000	Aver	
(3)	595686	607338	0.010	1.95602	15.00000	Aver	
(4)	435128	443765	0.010	1.98489	15.00000	Aver	
(5)	379283	388375	0.010	2.39712	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	817753	0.010	1.27967	15.00000	Aver	
(2)	926111	933308	0.010	0.77710	15.00000	Aver	
(3)	886296	901298	0.010	1.69264	15.00000	Aver	
(4)	650939	671905	0.010	3.22088	15.00000	Aver	
(5)	623150	639433	0.010	2.61290	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12393575	0.010	1.96043	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 0.76547
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 12:02
Lab File ID: 0723210021.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	924770	0.010	3.70372	15.00000	Aver	
(2)	1718815	1752355	0.010	1.95134	15.00000	Aver	
(3)	678128	707930	0.010	4.39467	15.00000	Aver	
(4)	651781	680540	0.010	4.41243	15.00000	Aver	
(5)	648435	667810	0.010	2.98798	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1290235	0.010	2.73531	15.00000	Aver	
(2)	1607301	1651070	0.010	2.72311	15.00000	Aver	
(3)	1148838	1179343	0.010	2.65527	15.00000	Aver	
(4)	1283000	1310843	0.010	2.17010	15.00000	Aver	
(5)	1161667	1172720	0.010	0.95147	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	21576775	0.010	-1.08085	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 2.25213
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 15:36
Lab File ID: 0723210033.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	564088	0.010	0.29024	15.00000	Aver	
(2)	1169806	1155765	0.010	-1.20031	15.00000	Aver	
(3)	595686	590610	0.010	-0.85209	15.00000	Aver	
(4)	435128	431733	0.010	-0.78039	15.00000	Aver	
(5)	379283	377453	0.010	-0.48266	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	792728	0.010	-1.81971	15.00000	Aver	
(2)	926111	913818	0.010	-1.32740	15.00000	Aver	
(3)	886296	877930	0.010	-0.94389	15.00000	Aver	
(4)	650939	652515	0.010	0.24210	15.00000	Aver	
(5)	623150	621240	0.010	-0.30654	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12134025	0.010	-0.17485	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 0.76547
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 15:36
Lab File ID: 0723210033.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	886350	0.010	-0.60470	15.00000	Aver	
(2)	1718815	1682518	0.010	-2.11177	15.00000	Aver	
(3)	678128	677145	0.010	-0.14503	15.00000	Aver	
(4)	651781	645143	0.010	-1.01846	15.00000	Aver	
(5)	648435	640448	0.010	-1.23179	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1230500	0.010	-2.02110	15.00000	Aver	
(2)	1607301	1563898	0.010	-2.70042	15.00000	Aver	
(3)	1148838	1126545	0.010	-1.94046	15.00000	Aver	
(4)	1283000	1228175	0.010	-4.27319	15.00000	Aver	
(5)	1161667	1121633	0.010	-3.44631	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	20660800	0.010	-5.28015	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 2.25213
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 13:22
Lab File ID: 0726210018.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	547255	0.010	-2.70244	15.00000	Aver	
(2)	1169806	1078555	0.010	-7.80055	15.00000	Aver	
(3)	595686	564850	0.010	-5.17651	15.00000	Aver	
(4)	435128	405930	0.010	-6.71025	15.00000	Aver	
(5)	379283	350248	0.010	-7.65540	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	727493	0.010	-9.89915	15.00000	Aver	
(2)	926111	837835	0.010	-9.53187	15.00000	Aver	
(3)	886296	803185	0.010	-9.37731	15.00000	Aver	
(4)	650939	612650	0.010	-5.88213	15.00000	Aver	
(5)	623150	577573	0.010	-7.31408	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	11224700	0.010	-7.65576	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 13:22
Lab File ID: 0726210018.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016)(1)	891742	951160	0.010	6.66310	15.00000	Aver	
(2)	1718815	1729855	0.010	0.64230	15.00000	Aver	
(3)	678128	703583	0.010	3.75357	15.00000	Aver	
(4)	651781	691285	0.010	6.06099	15.00000	Aver	
(5)	648435	669295	0.010	3.21700	15.00000	Aver	
8 PCB-1260 (Aroclor 1260)(1)	1255883	1312205	0.010	4.48468	15.00000	Aver	
(2)	1607301	1641095	0.010	2.10251	15.00000	Aver	
(3)	1148838	1206688	0.010	5.03550	15.00000	Aver	
(4)	1283000	1334163	0.010	3.98772	15.00000	Aver	
(5)	1161667	1236365	0.010	6.43023	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	21745125	0.010	-0.30905	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 16:20
Lab File ID: 0726210028.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	618973	0.010	10.04835	15.00000	Aver	
(2)	1169806	1235135	0.010	5.58457	15.00000	Aver	
(3)	595686	639790	0.010	7.40394	15.00000	Aver	
(4)	435128	465668	0.010	7.01847	15.00000	Aver	
(5)	379283	405245	0.010	6.84498	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	843895	0.010	4.51745	15.00000	Aver	
(2)	926111	948665	0.010	2.43538	15.00000	Aver	
(3)	886296	931813	0.010	5.13562	15.00000	Aver	
(4)	650939	693320	0.010	6.51074	15.00000	Aver	
(5)	623150	669513	0.010	7.43999	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12919750	0.010	6.28921	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 16:20
Lab File ID: 0726210028.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	891742	1061615	0.010	19.04952	15.00000	Aver		<-
(2)	1718815	1926363	0.010	12.07503	15.00000	Aver		
(3)	678128	782068	0.010	15.32734	15.00000	Aver		<-
(4)	651781	771653	0.010	18.39144	15.00000	Aver		<-
(5)	648435	749328	0.010	15.55941	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	1255883	1434600	0.010	14.23041	15.00000	Aver		
(2)	1607301	1830000	0.010	13.85544	15.00000	Aver		
(3)	1148838	1316070	0.010	14.55665	15.00000	Aver		
(4)	1283000	1472463	0.010	14.76714	15.00000	Aver		
(5)	1161667	1354098	0.010	16.56502	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	21812536	24597950	0.010	12.76979	15.00000	Aver		

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 17:32
Lab File ID: 0726210032.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	623485	0.010	10.85064	15.00000	Aver	
(2)	1169806	1249155	0.010	6.78306	15.00000	Aver	
(3)	595686	645588	0.010	8.37719	15.00000	Aver	
(4)	435128	473370	0.010	8.78863	15.00000	Aver	
(5)	379283	410035	0.010	8.10789	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	847880	0.010	5.01100	15.00000	Aver	
(2)	926111	955610	0.010	3.18529	15.00000	Aver	
(3)	886296	911938	0.010	2.89314	15.00000	Aver	
(4)	650939	676448	0.010	3.91871	15.00000	Aver	
(5)	623150	640910	0.010	2.85000	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12520275	0.010	3.00278	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i
Lab File ID: 0726210032.D
Analysis Type: WATER
Lab Sample ID: CCV
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

Injection Date: 26-JUL-2021 17:32
Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Init. Cal. Times: 17:09 22:14
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	891742	1032215	0.010	15.75261	15.00000	Aver		<-
(2)	1718815	1911060	0.010	11.18474	15.00000	Aver		
(3)	678128	775593	0.010	14.37250	15.00000	Aver		
(4)	651781	754043	0.010	15.68961	15.00000	Aver		<-
(5)	648435	726530	0.010	12.04364	15.00000	Aver		
8 PCB-1260 (Aroclor 1260) (1)	1255883	1394063	0.010	11.00260	15.00000	Aver		
(2)	1607301	1764140	0.010	9.75788	15.00000	Aver		
(3)	1148838	1257245	0.010	9.43625	15.00000	Aver		
(4)	1283000	1399973	0.010	9.11710	15.00000	Aver		
(5)	1161667	1268725	0.010	9.21588	15.00000	Aver		
$ 10 Decachlorobiphenyl (S)	21812536	23096000	0.010	5.88407	15.00000	Aver		

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 21:24
Lab File ID: 0726210045.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	586510	0.010	4.27678	15.00000	Aver	
(2)	1169806	1187820	0.010	1.53989	15.00000	Aver	
(3)	595686	614625	0.010	3.17940	15.00000	Aver	
(4)	435128	450148	0.010	3.45170	15.00000	Aver	
(5)	379283	393618	0.010	3.77933	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	808908	0.010	0.18420	15.00000	Aver	
(2)	926111	918988	0.010	-0.76915	15.00000	Aver	
(3)	886296	891455	0.010	0.58212	15.00000	Aver	
(4)	650939	649158	0.010	-0.27369	15.00000	Aver	
(5)	623150	628333	0.010	0.83163	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12542275	0.010	3.18377	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 21:24
Lab File ID: 0726210045.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	969873	0.010	8.76152	15.00000	Aver	
(2)	1718815	1787775	0.010	4.01207	15.00000	Aver	
(3)	678128	722758	0.010	6.58121	15.00000	Aver	
(4)	651781	711480	0.010	9.15942	15.00000	Aver	
(5)	648435	698688	0.010	7.74983	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1344183	0.010	7.03090	15.00000	Aver	
(2)	1607301	1709248	0.010	6.34269	15.00000	Aver	
(3)	1148838	1223030	0.010	6.45803	15.00000	Aver	
(4)	1283000	1369413	0.010	6.73519	15.00000	Aver	
(5)	1161667	1268770	0.010	9.21975	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	23129100	0.010	6.03582	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 01:17
Lab File ID: 0726210058.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	577258	0.010	2.63176	15.00000	Aver	
(2)	1169806	1165058	0.010	-0.40595	15.00000	Aver	
(3)	595686	607005	0.010	1.90020	15.00000	Aver	
(4)	435128	442685	0.010	1.73669	15.00000	Aver	
(5)	379283	384080	0.010	1.26472	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	805743	0.010	-0.20779	15.00000	Aver	
(2)	926111	920718	0.010	-0.58234	15.00000	Aver	
(3)	886296	892520	0.010	0.70228	15.00000	Aver	
(4)	650939	664433	0.010	2.07292	15.00000	Aver	
(5)	623150	636130	0.010	2.08293	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12398925	0.010	2.00445	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 01:17
Lab File ID: 0726210058.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	951583	0.010	6.71048	15.00000	Aver	
(2)	1718815	1761643	0.010	2.49169	15.00000	Aver	
(3)	678128	711033	0.010	4.85218	15.00000	Aver	
(4)	651781	693273	0.010	6.36592	15.00000	Aver	
(5)	648435	682303	0.010	5.22298	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1315863	0.010	4.77591	15.00000	Aver	
(2)	1607301	1678998	0.010	4.46065	15.00000	Aver	
(3)	1148838	1216453	0.010	5.88549	15.00000	Aver	
(4)	1283000	1349695	0.010	5.19836	15.00000	Aver	
(5)	1161667	1238310	0.010	6.59766	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	22930125	0.010	5.12361	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 2944193

Date Analyzed: 07/23/2021 07:52 Lab File ID: 072321-1.B\0723210007.D

Initial wt/vol: 30.75 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<8.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<7.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<3.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<7.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.1	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.0	U
11096-82-5	PCB-1260 (Aroclor 1260)	<6.3	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 2944194

Date Analyzed: 07/23/2021 08:10 Lab File ID: 072321-1.B\0723210008.D

Initial wt/vol: 30.16 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	165	
11096-82-5	PCB-1260 (Aroclor 1260)	167	

SAMPLE NO.

MS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 2944195

Date Analyzed: 07/23/2021 10:33 Lab File ID: 072321-1.B\0723210016.D

Initial wt/vol: 30.02 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	182	
11096-82-5	PCB-1260 (Aroclor 1260)	185	

SAMPLE NO.

MSD

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 18:03 Lab Sample ID: 2944196

Date Analyzed: 07/23/2021 10:51 Lab File ID: 072321-1.B\0723210017.D

Initial wt/vol: 31.81 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	169	
11096-82-5	PCB-1260 (Aroclor 1260)	177	

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 2944188

Date Analyzed: 07/26/2021 13:57 Lab File ID: 072621-1.B\0726210020.D

Initial wt/vol: 31.9 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<7.7	U
11104-28-2	PCB-1221 (Aroclor 1221)	<7.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<3.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<7.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.1	U
11097-69-1	PCB-1254 (Aroclor 1254)	<2.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<6.1	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 2944189

Date Analyzed: 07/26/2021 14:15 Lab File ID: 072621-1.B\0726210021.D

Initial wt/vol: 30.94 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	155	
11096-82-5	PCB-1260 (Aroclor 1260)	156	

SAMPLE NO.

MS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 2944190

Date Analyzed: 07/26/2021 23:47 Lab File ID: 072621-1.B\0726210053.D

Initial wt/vol: 30 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	232	
11096-82-5	PCB-1260 (Aroclor 1260)	231	

SAMPLE NO.

MSD

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/21/2021 04:30 Matrix: Solid SDG No.: 60375481

Date Extracted: 07/22/2021 12:56 Lab Sample ID: 2944191

Date Analyzed: 07/27/2021 00:05 Lab File ID: 072621-1.B\0726210054.D

Initial wt/vol: 30.24 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	204	
11096-82-5	PCB-1260 (Aroclor 1260)	211	

SAMPLE NO.

GB-69/2'-3'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481001 Percent Moisture: 19.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.46	U	mg/kg	10	08/05/2021 10:03
7440-38-2	Arsenic	11.6		mg/kg	10	08/05/2021 10:03
7440-50-8	Copper	29.9		mg/kg	10	08/05/2021 10:03
7439-92-1	Lead	47.7		mg/kg	10	08/05/2021 10:03
7440-66-6	Zinc	78.2		mg/kg	10	08/05/2021 10:03

SAMPLE NO.

GB-69/3'-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481002 Percent Moisture: 18.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.54	U	mg/kg	10	08/05/2021 10:08
7440-38-2	Arsenic	6.5		mg/kg	10	08/05/2021 10:08
7440-50-8	Copper	13.1		mg/kg	10	08/05/2021 10:08
7439-92-1	Lead	10.4		mg/kg	10	08/05/2021 10:08
7440-66-6	Zinc	41.6		mg/kg	10	08/05/2021 10:08

SAMPLE NO.

GB-70/3'-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481003 Percent Moisture: 19.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/05/2021 10:09
7440-38-2	Arsenic	11.4		mg/kg	10	08/05/2021 10:09
7440-50-8	Copper	21.8		mg/kg	10	08/05/2021 10:09
7439-92-1	Lead	13.5		mg/kg	10	08/05/2021 10:09
7440-66-6	Zinc	69.9		mg/kg	10	08/05/2021 10:09

SAMPLE NO.

GB-70/5'-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481004 Percent Moisture: 16.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.56	U	mg/kg	10	08/05/2021 10:11
7440-38-2	Arsenic	10.6		mg/kg	10	08/05/2021 10:11
7440-50-8	Copper	19.2		mg/kg	10	08/05/2021 10:11
7439-92-1	Lead	13.4		mg/kg	10	08/05/2021 10:11
7440-66-6	Zinc	57.5		mg/kg	10	08/05/2021 10:11

SAMPLE NO.

GB-71/0'-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481005 Percent Moisture: 18.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/05/2021 10:17
7440-38-2	Arsenic	10		mg/kg	10	08/05/2021 10:17
7440-50-8	Copper	12.8		mg/kg	10	08/05/2021 10:17
7439-92-1	Lead	35.5		mg/kg	10	08/05/2021 10:17
7440-66-6	Zinc	173		mg/kg	10	08/05/2021 10:17

SAMPLE NO.

GB-71/3'-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481006 Percent Moisture: 18.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/05/2021 10:19
7440-38-2	Arsenic	6.6		mg/kg	10	08/05/2021 10:19
7440-50-8	Copper	11.2		mg/kg	10	08/05/2021 10:19
7439-92-1	Lead	11.3		mg/kg	10	08/05/2021 10:19
7440-66-6	Zinc	39.1		mg/kg	10	08/05/2021 10:19

SAMPLE NO.

GB-65/3'-4'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481007 Percent Moisture: 18.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.59	U	mg/kg	10	08/05/2021 10:20
7440-38-2	Arsenic	10		mg/kg	10	08/05/2021 10:20
7440-50-8	Copper	19.1		mg/kg	10	08/05/2021 10:20
7439-92-1	Lead	10.3		mg/kg	10	08/05/2021 10:20
7440-66-6	Zinc	59.3		mg/kg	10	08/05/2021 10:20

SAMPLE NO.

GB-65/5'-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481008 Percent Moisture: 20.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.53	U	mg/kg	10	08/05/2021 10:22
7440-38-2	Arsenic	6.1		mg/kg	10	08/05/2021 10:22
7440-50-8	Copper	13.9		mg/kg	10	08/05/2021 10:22
7439-92-1	Lead	7.9		mg/kg	10	08/05/2021 10:22
7440-66-6	Zinc	49.6		mg/kg	10	08/05/2021 10:22

SAMPLE NO.

GB-64/3'-4'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481009 Percent Moisture: 20.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.59	U	mg/kg	10	08/05/2021 10:24
7440-38-2	Arsenic	12.1		mg/kg	10	08/05/2021 10:24
7440-50-8	Copper	19.9		mg/kg	10	08/05/2021 10:24
7439-92-1	Lead	14.8		mg/kg	10	08/05/2021 10:24
7440-66-6	Zinc	68.1		mg/kg	10	08/05/2021 10:24

SAMPLE NO.

GB-64/5'-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481010 Percent Moisture: 27.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	1.8		mg/kg	10	08/05/2021 10:25
7440-38-2	Arsenic	80.3		mg/kg	10	08/05/2021 10:25
7440-50-8	Copper	85.6		mg/kg	10	08/05/2021 10:25
7439-92-1	Lead	14.7		mg/kg	10	08/05/2021 10:25
7440-66-6	Zinc	104		mg/kg	10	08/05/2021 10:25

SAMPLE NO.

GB-57/3.5'-5.5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481011 Percent Moisture: 15.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.58	U	mg/kg	10	08/05/2021 10:27
7440-38-2	Arsenic	4.6		mg/kg	10	08/05/2021 10:27
7440-50-8	Copper	13.7		mg/kg	10	08/05/2021 10:27
7439-92-1	Lead	9.8		mg/kg	10	08/05/2021 10:27
7440-66-6	Zinc	40.1		mg/kg	10	08/05/2021 10:27

SAMPLE NO.

GB-57/6.0'-8.0'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481012 Percent Moisture: 18.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.46	U	mg/kg	10	08/05/2021 10:28
7440-38-2	Arsenic	4.3		mg/kg	10	08/05/2021 10:28
7440-50-8	Copper	13.2		mg/kg	10	08/05/2021 10:28
7439-92-1	Lead	7.9		mg/kg	10	08/05/2021 10:28
7440-66-6	Zinc	38.7		mg/kg	10	08/05/2021 10:28

SAMPLE NO.

GB-57/6.0'-8.0' D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481013 Percent Moisture: 19.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.60	U	mg/kg	10	08/05/2021 12:34
7440-38-2	Arsenic	4.3		mg/kg	10	08/05/2021 12:34
7440-50-8	Copper	12.2		mg/kg	10	08/05/2021 12:34
7439-92-1	Lead	7.8		mg/kg	10	08/05/2021 12:34
7440-66-6	Zinc	38.5		mg/kg	10	08/05/2021 12:34

SAMPLE NO.

GB-56/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481014 Percent Moisture: 20.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.61	U	mg/kg	10	08/05/2021 12:36
7440-38-2	Arsenic	6.2		mg/kg	10	08/05/2021 12:36
7440-50-8	Copper	13.0		mg/kg	10	08/05/2021 12:36
7439-92-1	Lead	8.9		mg/kg	10	08/05/2021 12:36
7440-66-6	Zinc	43.1		mg/kg	10	08/05/2021 12:36

SAMPLE NO.

GB-56/5-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481015 Percent Moisture: 20.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.49	U	mg/kg	10	08/05/2021 12:37
7440-38-2	Arsenic	5.5		mg/kg	10	08/05/2021 12:37
7440-50-8	Copper	12.6		mg/kg	10	08/05/2021 12:37
7439-92-1	Lead	7.8		mg/kg	10	08/05/2021 12:37
7440-66-6	Zinc	39.1		mg/kg	10	08/05/2021 12:37

SAMPLE NO.

GB-58/1-3'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481016 Percent Moisture: 20.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.57	U	mg/kg	10	08/05/2021 12:39
7440-38-2	Arsenic	7.0		mg/kg	10	08/05/2021 12:39
7440-50-8	Copper	20.6		mg/kg	10	08/05/2021 12:39
7439-92-1	Lead	9.8		mg/kg	10	08/05/2021 12:39
7440-66-6	Zinc	75.1		mg/kg	10	08/05/2021 12:39

SAMPLE NO.

GB-58/4-6'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481017 Percent Moisture: 20.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.59	U	mg/kg	10	08/05/2021 12:41
7440-38-2	Arsenic	10.8		mg/kg	10	08/05/2021 12:41
7440-50-8	Copper	19.6		mg/kg	10	08/05/2021 12:41
7439-92-1	Lead	11.0		mg/kg	10	08/05/2021 12:41
7440-66-6	Zinc	65.6		mg/kg	10	08/05/2021 12:41

SAMPLE NO.

GB-51/1.5-3'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481018 Percent Moisture: 18.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.49	U	mg/kg	10	08/05/2021 12:50
7440-38-2	Arsenic	6.3		mg/kg	10	08/05/2021 12:50
7440-50-8	Copper	15.3		mg/kg	10	08/05/2021 12:50
7439-92-1	Lead	11.1		mg/kg	10	08/05/2021 12:50
7440-66-6	Zinc	47.3		mg/kg	10	08/05/2021 12:50

SAMPLE NO.

GB-51/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481019 Percent Moisture: 19.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.58	U	mg/kg	10	08/05/2021 12:52
7440-38-2	Arsenic	3.6		mg/kg	10	08/05/2021 12:52
7440-50-8	Copper	13.1		mg/kg	10	08/05/2021 12:52
7439-92-1	Lead	11.0		mg/kg	10	08/05/2021 12:52
7440-66-6	Zinc	38.6		mg/kg	10	08/05/2021 12:52

SAMPLE NO.

GB-50/0-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481020 Percent Moisture: 16.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.58	U	mg/kg	10	08/05/2021 12:53
7440-38-2	Arsenic	6.3		mg/kg	10	08/05/2021 12:53
7440-50-8	Copper	14.3		mg/kg	10	08/05/2021 12:53
7439-92-1	Lead	11.6		mg/kg	10	08/05/2021 12:53
7440-66-6	Zinc	47.6		mg/kg	10	08/05/2021 12:53

SAMPLE NO.

GB-50/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481021 Percent Moisture: 19.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.66	U	mg/kg	10	08/05/2021 12:55
7440-38-2	Arsenic	5.6		mg/kg	10	08/05/2021 12:55
7440-50-8	Copper	12.6		mg/kg	10	08/05/2021 12:55
7439-92-1	Lead	8.2		mg/kg	10	08/05/2021 12:55
7440-66-6	Zinc	42.7		mg/kg	10	08/05/2021 12:55

SAMPLE NO.

GB-50/3-5'D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481022 Percent Moisture: 19.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.53	U	mg/kg	10	08/05/2021 12:57
7440-38-2	Arsenic	5.4		mg/kg	10	08/05/2021 12:57
7440-50-8	Copper	11.6		mg/kg	10	08/05/2021 12:57
7439-92-1	Lead	7.7		mg/kg	10	08/05/2021 12:57
7440-66-6	Zinc	41.5		mg/kg	10	08/05/2021 12:57

SAMPLE NO.

GB-49/3.5-4.5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481023 Percent Moisture: 20.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.55	U	mg/kg	10	08/05/2021 12:58
7440-38-2	Arsenic	4.5		mg/kg	10	08/05/2021 12:58
7440-50-8	Copper	12.6		mg/kg	10	08/05/2021 12:58
7439-92-1	Lead	10.7		mg/kg	10	08/05/2021 12:58
7440-66-6	Zinc	35.6		mg/kg	10	08/05/2021 12:58

SAMPLE NO.

GB-49/5-6'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481024 Percent Moisture: 18.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/05/2021 13:00
7440-38-2	Arsenic	4.6		mg/kg	10	08/05/2021 13:00
7440-50-8	Copper	12.2		mg/kg	10	08/05/2021 13:00
7439-92-1	Lead	10.4		mg/kg	10	08/05/2021 13:00
7440-66-6	Zinc	30.4		mg/kg	10	08/05/2021 13:00

SAMPLE NO.

GB-63/0-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481025 Percent Moisture: 14.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/05/2021 13:01
7440-38-2	Arsenic	10.8		mg/kg	10	08/05/2021 13:01
7440-50-8	Copper	21.2		mg/kg	10	08/05/2021 13:01
7439-92-1	Lead	13.6		mg/kg	10	08/05/2021 13:01
7440-66-6	Zinc	69.9		mg/kg	10	08/05/2021 13:01

SAMPLE NO.

GB-63/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481026 Percent Moisture: 19.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.56	U	mg/kg	10	08/05/2021 13:03
7440-38-2	Arsenic	4.1		mg/kg	10	08/05/2021 13:03
7440-50-8	Copper	14.2		mg/kg	10	08/05/2021 13:03
7439-92-1	Lead	9.1		mg/kg	10	08/05/2021 13:03
7440-66-6	Zinc	49.0		mg/kg	10	08/05/2021 13:03

SAMPLE NO.

GB-48/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481027 Percent Moisture: 19.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.58	U	mg/kg	10	08/05/2021 13:09
7440-38-2	Arsenic	7.9		mg/kg	10	08/05/2021 13:09
7440-50-8	Copper	14.8		mg/kg	10	08/05/2021 13:09
7439-92-1	Lead	33.8		mg/kg	10	08/05/2021 13:09
7440-66-6	Zinc	30.8		mg/kg	10	08/05/2021 13:09

SAMPLE NO.

GB-48/5-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481028 Percent Moisture: 20.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.51	U	mg/kg	10	08/05/2021 13:14
7440-38-2	Arsenic	5.8		mg/kg	10	08/05/2021 13:14
7440-50-8	Copper	13.5		mg/kg	10	08/05/2021 13:14
7439-92-1	Lead	20.8		mg/kg	10	08/05/2021 13:14
7440-66-6	Zinc	31.2		mg/kg	10	08/05/2021 13:14

SAMPLE NO.

GB-55/0-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481029 Percent Moisture: 14.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.51	U	mg/kg	10	08/05/2021 13:16
7440-38-2	Arsenic	12.1		mg/kg	10	08/05/2021 13:16
7440-50-8	Copper	17.1		mg/kg	10	08/05/2021 13:16
7439-92-1	Lead	9.9		mg/kg	10	08/05/2021 13:16
7440-66-6	Zinc	43.8		mg/kg	10	08/05/2021 13:16

SAMPLE NO.

GB-55/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481030 Percent Moisture: 16.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.56	U	mg/kg	10	08/05/2021 13:17
7440-38-2	Arsenic	5.2		mg/kg	10	08/05/2021 13:17
7440-50-8	Copper	12.8		mg/kg	10	08/05/2021 13:17
7439-92-1	Lead	8.8		mg/kg	10	08/05/2021 13:17
7440-66-6	Zinc	38.2		mg/kg	10	08/05/2021 13:17

SAMPLE NO.

GB-55/3-5'D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481031 Percent Moisture: 16.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.59	U	mg/kg	10	08/05/2021 13:32
7440-38-2	Arsenic	5.0		mg/kg	10	08/05/2021 13:32
7440-50-8	Copper	12.5		mg/kg	10	08/05/2021 13:32
7439-92-1	Lead	8.7		mg/kg	10	08/05/2021 13:32
7440-66-6	Zinc	39.2		mg/kg	10	08/05/2021 13:32

SAMPLE NO.

GB-62/0-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481032 Percent Moisture: 17.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.65	U	mg/kg	10	08/05/2021 13:37
7440-38-2	Arsenic	6.7		mg/kg	10	08/05/2021 13:37
7440-50-8	Copper	15.1		mg/kg	10	08/05/2021 13:37
7439-92-1	Lead	36.0		mg/kg	10	08/05/2021 13:37
7440-66-6	Zinc	68.6		mg/kg	10	08/05/2021 13:37

SAMPLE NO.

GB-62/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481033 Percent Moisture: 18.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.51	U	mg/kg	10	08/05/2021 13:38
7440-38-2	Arsenic	3.8		mg/kg	10	08/05/2021 13:38
7440-50-8	Copper	12.9		mg/kg	10	08/05/2021 13:38
7439-92-1	Lead	8.2		mg/kg	10	08/05/2021 13:38
7440-66-6	Zinc	41.8		mg/kg	10	08/05/2021 13:38

SAMPLE NO.

GB-68/1-3'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481034 Percent Moisture: 14.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.55	U	mg/kg	10	08/05/2021 13:40
7440-38-2	Arsenic	3.5		mg/kg	10	08/05/2021 13:40
7440-50-8	Copper	8.6		mg/kg	10	08/05/2021 13:40
7439-92-1	Lead	15.1		mg/kg	10	08/05/2021 13:40
7440-66-6	Zinc	41.8		mg/kg	10	08/05/2021 13:40

SAMPLE NO.

GB-68/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481035 Percent Moisture: 19.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.54	U	mg/kg	10	08/05/2021 13:46
7440-38-2	Arsenic	9.3		mg/kg	10	08/05/2021 13:46
7440-50-8	Copper	17.7		mg/kg	10	08/05/2021 13:46
7439-92-1	Lead	13.2		mg/kg	10	08/05/2021 13:46
7440-66-6	Zinc	69.5		mg/kg	10	08/05/2021 13:46

SAMPLE NO.

GB-68/3-5'D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481036 Percent Moisture: 20.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.64	U	mg/kg	10	08/05/2021 13:48
7440-38-2	Arsenic	8.5		mg/kg	10	08/05/2021 13:48
7440-50-8	Copper	19.6		mg/kg	10	08/05/2021 13:48
7439-92-1	Lead	10.3		mg/kg	10	08/05/2021 13:48
7440-66-6	Zinc	74.9		mg/kg	10	08/05/2021 13:48

SAMPLE NO.

GB-67/5-6'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481037 Percent Moisture: 18.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.47	U	mg/kg	10	08/05/2021 13:49
7440-38-2	Arsenic	2.9		mg/kg	10	08/05/2021 13:49
7440-50-8	Copper	10.1		mg/kg	10	08/05/2021 13:49
7439-92-1	Lead	8.3		mg/kg	10	08/05/2021 13:49
7440-66-6	Zinc	30.9		mg/kg	10	08/05/2021 13:49

SAMPLE NO.

GB-67/8-10'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481038 Percent Moisture: 19.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.45	U	mg/kg	10	08/05/2021 13:51
7440-38-2	Arsenic	4.3		mg/kg	10	08/05/2021 13:51
7440-50-8	Copper	12.2		mg/kg	10	08/05/2021 13:51
7439-92-1	Lead	10.2		mg/kg	10	08/05/2021 13:51
7440-66-6	Zinc	29.4		mg/kg	10	08/05/2021 13:51

SAMPLE NO.

GB-54/0-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481042 Percent Moisture: 11.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.58	U	mg/kg	10	08/05/2021 13:53
7440-38-2	Arsenic	9.9		mg/kg	10	08/05/2021 13:53
7440-50-8	Copper	20.7		mg/kg	10	08/05/2021 13:53
7439-92-1	Lead	13.8		mg/kg	10	08/05/2021 13:53
7440-66-6	Zinc	63.0		mg/kg	10	08/05/2021 13:53

SAMPLE NO.

GB-54/2-4'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481043 Percent Moisture: 16.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.47	U	mg/kg	10	08/05/2021 13:54
7440-38-2	Arsenic	6.7		mg/kg	10	08/05/2021 13:54
7440-50-8	Copper	16.1		mg/kg	10	08/05/2021 13:54
7439-92-1	Lead	8.9		mg/kg	10	08/05/2021 13:54
7440-66-6	Zinc	50.0		mg/kg	10	08/05/2021 13:54

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Initial Calibration Verification				Continuing Calibration Verification						
	08/05/2021 09:48				08/05/2021 09:56			08/05/2021 10:14			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Antimony	50	49.1	98.3	90-110	40	40.4	101.0	40	40.3	100.7	90-110
Arsenic	50	49.8	99.5	90-110	40	40.1	100.3	40	40.1	100.2	90-110
Copper	50	50.7	101.5	90-110	40	40.4	101.0	40	40.1	100.3	90-110
Lead	50	49.0	97.9	90-110	40	38.6	96.5	40	38.6	96.6	90-110
Zinc	50	49.6	99.1	90-110	400	39.9	10.0	400	39.7	9.9	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification						
	08/05/2021 10:32			08/05/2021 10:36			Control Limit
Analyte	True	Found	%R	True	Found	%R	
Antimony	40	40.8	102.0	40	41.2	103.0	90-110
Arsenic	40	41.0	102.5	40	41.1	102.7	90-110
Copper	40	40.9	102.3	40	41.1	102.8	90-110
Lead	40	38.8	96.9	40	39.2	98.0	90-110
Zinc	400	39.8	10.0	400	40.5	10.1	90-110

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Initial Calibration Verification				Continuing Calibration Verification						
	08/05/2021 12:20				08/05/2021 12:28			08/05/2021 12:47			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Antimony	50	49.1	98.2	90-110	40	39.6	99.1	40	39.3	98.3	90-110
Arsenic	50	49.2	98.4	90-110	40	38.9	97.2	40	39.1	97.8	90-110
Copper	50	50.2	100.5	90-110	40	39.8	99.4	40	40.0	100.0	90-110
Lead	50	48.5	97.0	90-110	40	38.4	96.1	40	38.5	96.2	90-110
Zinc	50	49.3	98.6	90-110	400	39.2	9.8	400	39.0	9.7	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification									
	08/05/2021 13:06			08/05/2021 13:21			08/05/2021 13:25			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Antimony	40	39.3	98.2	40	39.1	97.7	40	39.9	99.8	90-110
Arsenic	40	39.4	98.5	40	39.0	97.5	40	39.8	99.6	90-110
Copper	40	40.6	101.4	40	40.3	100.9	40	40.6	101.6	90-110
Lead	40	38.6	96.5	40	38.5	96.2	40	38.9	97.2	90-110
Zinc	400	39.2	9.8	400	39.0	9.7	400	39.4	9.9	90-110

FORM II INORGANIC-3

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification						
	08/05/2021 13:43			08/05/2021 14:01			Control Limit
Analyte	True	Found	%R	True	Found	%R	
Antimony	40	39.9	99.9	40	40.0	100.1	90-110
Arsenic	40	39.2	97.9	40	39.7	99.3	90-110
Copper	40	40.0	100.1	40	40.8	102.0	90-110
Lead	40	38.7	96.8	40	38.9	97.2	90-110
Zinc	400	39.2	9.8	400	39.6	9.9	90-110

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/05/2021 09:52

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	101.4	50-150
Arsenic	1.0	1.1	105.0	50-150
Copper	1.0	1.1	109.4	50-150
Lead	1.0	0.94	93.9	50-150
Zinc	10.0	10.1	101.0	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/05/2021 10:35

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.1	109.1	50-150
Arsenic	1.0	1.1	108.9	50-150
Copper	1.0	1.1	110.3	50-150
Lead	1.0	0.95	94.8	50-150
Zinc	10.0	10.3	102.6	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/05/2021 12:23

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	103.6	50-150
Arsenic	1.0	1.0	101.2	50-150
Copper	1.0	1.1	108.9	50-150
Lead	1.0	0.94	94.2	50-150
Zinc	10.0	10.0	100.3	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/05/2021 13:24

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	105.0	50-150
Arsenic	1.0	1.1	106.1	50-150
Copper	1.0	1.1	110.3	50-150
Lead	1.0	0.95	95.3	50-150
Zinc	10.0	10.2	102.4	50-150

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/05/2021 09:50	C	08/05/2021 09:58	C	08/05/2021 10:16	C	08/05/2021 10:33	C	2951947	C
Antimony	0.0096	U	0.0096	U	0.0096	U	0.0096	U	<0.54	U
Arsenic	0.011	J	0.0090	U	0.0090	U	0.010	J	<0.11	U
Copper	0.014	U	0.014	U	0.014	U	0.014	U	<0.31	U
Lead	0.017	J	0.014	J	0.017	J	0.014	J	<0.13	U
Zinc	0.11	U	0.11	U	0.11	U	0.11	U	<0.84	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract : GSA GOODFELLOW

Method Blank Matrix: Instrument ID: 60ICM3

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	08/05/2021 10:38	C		C		C
Antimony			0.0096	U				
Arsenic			0.0093	J				
Copper			0.014	U				
Lead			0.013	J				
Zinc			0.11	U				

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/05/2021 12:21	C	08/05/2021 12:29	C	08/05/2021 12:49	C	08/05/2021 13:08	C	2952103	C
Antimony	0.0096	U	0.0096	U	0.0096	U	0.0096	U	<0.54	U
Arsenic	0.0090	U	0.0090	U	0.0090	U	0.0090	U	<0.11	U
Copper	0.014	U	0.014	U	0.014	U	0.014	U	<0.31	U
Lead	0.021	J	0.014	J	0.018	J	0.014	J	<0.13	U
Zinc	0.11	U	0.11	U	0.11	U	0.11	U	<0.84	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)						Method Blank	
		C	08/05/2021 13:22	C	08/05/2021 13:27	C	08/05/2021 13:45	C	2952112	C
Antimony			0.0096	U	0.0096	U	0.0096	U	<0.54	U
Arsenic			0.0090	U	0.0090	U	0.0090	U	<0.11	U
Copper			0.014	U	0.014	U	0.014	U	<0.31	U
Lead			0.017	J	0.014	J	0.017	J	<0.13	U
Zinc			0.11	U	0.11	U	0.11	U	<0.84	U

FORM III INORGANIC-3

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract : GSA GOODFELLOW

Method Blank Matrix: Instrument ID: 60ICM3

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	08/05/2021 14:02	C		C		C
Antimony			0.0096	U				
Arsenic			0.0090	U				
Copper			0.014	U				
Lead			0.016	J				
Zinc			0.11	U				

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Solution A Run Date: 08/05/2021 09:53

ICS Source: 46286,46287 Solution AB Run Date: 08/05/2021 09:55

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.00462		51.89599	103.8	80-120
Arsenic	0	50	0.05899		52.44042	104.9	80-120
Copper	0	50	0.0934		46.6209	93.2	80-120
Lead	0	50	0.02151		50.87452	101.7	80-120
Zinc	0	500	0.36956		468.6161	93.7	80-120

FORM IV INORGANIC-1

INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Solution A Run Date: 08/05/2021 12:25

ICS Source: 46286,46287 Solution AB Run Date: 08/05/2021 12:26

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.0129		51.3302	102.7	80-120
Arsenic	0	50	0.05114		52.02991	104.1	80-120
Copper	0	50	0.09318		46.6553	93.3	80-120
Lead	0	50	0.02132		50.79994	101.6	80-120
Zinc	0	500	0.36169		471.10763	94.2	80-120

SAMPLE NO.

2951949MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-69/2'-3'

Percent Moisture: 19.4

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	58.3	<0.46	122	48*
Arsenic	mg/kg	75-125	127	11.6	122	95
Copper	mg/kg	75-125	145	29.9	122	95
Lead	mg/kg	75-125	175	47.7	122	105
Zinc	mg/kg	75-125	178	78.2	122	82

* Spike Recovery outside QC Limits

SAMPLE NO.

2951950MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-69/2'-3'

Percent Moisture: 19.4

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	47.3	<0.46	102	46*
Arsenic	mg/kg	75-125	107	11.6	102	93
Copper	mg/kg	75-125	126	29.9	102	95
Lead	mg/kg	75-125	151	47.7	102	102
Zinc	mg/kg	75-125	162	78.2	102	82

* Spike Recovery outside QC Limits

SAMPLE NO.

2952105MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-58/4-6'

Percent Moisture: 20.7

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	32.6	<0.59	90.0	36*
Arsenic	mg/kg	75-125	91.5	10.8	90.0	90
Copper	mg/kg	75-125	105	19.6	90.0	95
Lead	mg/kg	75-125	98.8	11.0	90.0	98
Zinc	mg/kg	75-125	148	65.6	90.0	91

* Spike Recovery outside QC Limits

SAMPLE NO.

2952106MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-58/4-6'

Percent Moisture: 20.7

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	38.3	<0.59	96.9	39*
Arsenic	mg/kg	75-125	100	10.8	96.9	92
Copper	mg/kg	75-125	115	19.6	96.9	98
Lead	mg/kg	75-125	109	11.0	96.9	101
Zinc	mg/kg	75-125	157	65.6	96.9	94

* Spike Recovery outside QC Limits

SAMPLE NO.

2952107MS

FORM V INORGANIC-3

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-48/3-5'

Percent Moisture: 19.0

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	52.3	<0.58	101	52*
Arsenic	mg/kg	75-125	98.6	7.9	101	90
Copper	mg/kg	75-125	111	14.8	101	95
Lead	mg/kg	75-125	122	33.8	101	87
Zinc	mg/kg	75-125	124	30.8	101	92

* Spike Recovery outside QC Limits

SAMPLE NO.

2952108MSD

FORM V INORGANIC-4

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-48/3-5'

Percent Moisture: 19.0

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	48.5	<0.58	108	45*
Arsenic	mg/kg	75-125	105	7.9	108	90
Copper	mg/kg	75-125	118	14.8	108	96
Lead	mg/kg	75-125	129	33.8	108	88
Zinc	mg/kg	75-125	131	30.8	108	92

* Spike Recovery outside QC Limits

SAMPLE NO.

2952114MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-55/3-5'D

Percent Moisture: 16.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	34.3	<0.59	98.5	35*
Arsenic	mg/kg	75-125	93.4	5.0	98.5	90
Copper	mg/kg	75-125	106	12.5	98.5	94
Lead	mg/kg	75-125	102	8.7	98.5	95
Zinc	mg/kg	75-125	130	39.2	98.5	92

* Spike Recovery outside QC Limits

SAMPLE NO.

2952115MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-55/3-5'D

Percent Moisture: 16.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	44.6	<0.59	113	39*
Arsenic	mg/kg	75-125	110	5.0	113	92
Copper	mg/kg	75-125	122	12.5	113	96
Lead	mg/kg	75-125	119	8.7	113	97
Zinc	mg/kg	75-125	145	39.2	113	93

* Spike Recovery outside QC Limits

SAMPLE NO.

2951950MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 19.4 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	58.3	47.3	21*
Arsenic	20	127	107	17
Copper	20	145	126	14
Lead	20	175	151	14
Zinc	20	178	162	10

* RPD outside QC Limits

SAMPLE NO.

2952106MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 20.7 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	32.6	38.3	16
Arsenic	20	91.5	100	9
Copper	20	105	115	9
Lead	20	98.8	109	10
Zinc	20	148	157	6

SAMPLE NO.

2952108MSD

FORM VI INORGANIC-2
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 19.0 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	52.3	48.5	8
Arsenic	20	98.6	105	7
Copper	20	111	118	6
Lead	20	122	129	6
Zinc	20	124	131	5

SAMPLE NO.

2952115MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 16.8 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	34.3	44.6	26*
Arsenic	20	93.4	110	16
Copper	20	106	122	14
Lead	20	102	119	15
Zinc	20	130	145	11

* RPD outside QC Limits

SAMPLE NO.

2951948LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	96.3	96	80	120
Arsenic	mg/kg	100	95.4	95	80	120
Copper	mg/kg	100	102	102	80	120
Lead	mg/kg	100	96.2	96	80	120
Zinc	mg/kg	100	94.8	95	80	120

SAMPLE NO.

2952104LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	95.3	95	80	120
Arsenic	mg/kg	100	94.6	95	80	120
Copper	mg/kg	100	102	102	80	120
Lead	mg/kg	100	95.9	96	80	120
Zinc	mg/kg	100	94.6	95	80	120

SAMPLE NO.

2952113LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	95.1	95	80	120
Arsenic	mg/kg	100	95.7	96	80	120
Copper	mg/kg	100	102	102	80	120
Lead	mg/kg	100	96.0	96	80	120
Zinc	mg/kg	100	95.3	95	80	120

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Preparation Method: None Instrument ID: 60ICM3

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Antimony	1.0	0.0096	01/10/2020
Arsenic	1.0	0.0090	01/10/2020
Copper	1.0	0.014	01/10/2020
Lead	1.0	0.0052	01/10/2020
Zinc	10.0	0.11	01/10/2020

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Instrument ID: 60ICM3

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Antimony	0.10	0.054	01/22/2021
Arsenic	0.10	0.011	01/22/2021
Copper	0.10	0.031	01/22/2021
Lead	0.050	0.013	01/22/2021
Zinc	0.50	0.084	01/22/2021

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract : GSA GOODFELLOW

Instrument ID: 60ICM3 Effective Date:05/07/2019

Analyte	Concentration (ug/L)
Antimony	5000
Arsenic	5000
Copper	5000
Lead	5000
Zinc	50000

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65365

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2951947	2951947	08/04/2021	0.5	50
2951948	2951948	08/04/2021	0.5	50
2951949	2951949	08/04/2021	0.51	50
2951950	2951950	08/04/2021	0.61	50
60375481001	GB-69/2'-3'	08/04/2021	0.72	50
60375481002	GB-69/3'-5'	08/04/2021	0.61	50
60375481003	GB-70/3'-5'	08/04/2021	0.54	50
60375481004	GB-70/5'-7'	08/04/2021	0.57	50
60375481005	GB-71/0'-2'	08/04/2021	0.53	50
60375481006	GB-71/3'-5'	08/04/2021	0.53	50
60375481007	GB-65/3'-4'	08/04/2021	0.56	50
60375481008	GB-65/5'-7'	08/04/2021	0.64	50
60375481009	GB-64/3'-4'	08/04/2021	0.58	50
60375481010	GB-64/5'-7'	08/04/2021	0.7	50
60375481011	GB-57/3.5'-5.5'	08/04/2021	0.55	50
60375481012	GB-57/6.0'-8.0'	08/04/2021	0.72	50

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65369

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2952103	2952103	08/04/2021	0.5	50
2952104	2952104	08/04/2021	0.5	50
2952105	2952105	08/04/2021	0.7	50
2952106	2952106	08/04/2021	0.65	50
2952107	2952107	08/04/2021	0.61	50
2952108	2952108	08/04/2021	0.57	50
60375481013	GB-57/6.0'-8.0' D	08/04/2021	0.56	50
60375481014	GB-56/3-5'	08/04/2021	0.55	50
60375481015	GB-56/5-7'	08/04/2021	0.69	50
60375481016	GB-58/1-3'	08/04/2021	0.59	50
60375481017	GB-58/4-6'	08/04/2021	0.58	50
60375481018	GB-51/1.5-3'	08/04/2021	0.67	50
60375481019	GB-51/3-5'	08/04/2021	0.58	50
60375481020	GB-50/0-2'	08/04/2021	0.55	50
60375481021	GB-50/3-5'	08/04/2021	0.51	50
60375481022	GB-50/3-5'D	08/04/2021	0.63	50
60375481023	GB-49/3.5-4.5'	08/04/2021	0.62	50
60375481024	GB-49/5-6'	08/04/2021	0.53	50
60375481025	GB-63/0-2'	08/04/2021	0.51	50
60375481026	GB-63/3-5'	08/04/2021	0.59	50
60375481027	GB-48/3-5'	08/04/2021	0.57	50
60375481028	GB-48/5-7'	08/04/2021	0.67	50
60375481029	GB-55/0-2'	08/04/2021	0.62	50
60375481030	GB-55/3-5'	08/04/2021	0.57	50

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65370

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2952112	2952112	08/04/2021	0.5	50
2952113	2952113	08/04/2021	0.5	50
2952114	2952114	08/04/2021	0.61	50
2952115	2952115	08/04/2021	0.53	50
60375481031	GB-55/3-5'D	08/04/2021	0.55	50
60375481032	GB-62/0-2'	08/04/2021	0.5	50
60375481033	GB-62/3-5'	08/04/2021	0.65	50
60375481034	GB-68/1-3'	08/04/2021	0.57	50
60375481035	GB-68/3-5'	08/04/2021	0.62	50
60375481036	GB-68/3-5'D	08/04/2021	0.53	50
60375481037	GB-67/5-6'	08/04/2021	0.7	50
60375481038	GB-67/8-10'	08/04/2021	0.74	50
60375481042	GB-54/0-2'	08/04/2021	0.53	50
60375481043	GB-54/2-4'	08/04/2021	0.69	50

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/05/2021 09:40 End Date: 08/05/2021 10:38

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19774634CAL0	19774634CAL0	1	08/05/2021	09:40	X	X	X	X	X
19774635CAL1	19774635CAL1	1	08/05/2021	09:42	X	X	X	X	X
19774636CAL2	19774636CAL2	1	08/05/2021	09:44	X	X	X	X	X
19774637CAL3	19774637CAL3	1	08/05/2021	09:45	X	X	X	X	X
19774638CAL4	19774638CAL4	1	08/05/2021	09:47	X	X	X	X	X
19774639ICV	19774639ICV	1	08/05/2021	09:48	X	X	X	X	X
19774640ICB	19774640ICB	1	08/05/2021	09:50	X	X	X	X	X
19774641CRDL	19774641CRDL	1	08/05/2021	09:52	X	X	X	X	X
19774642ICSA	19774642ICSA	1	08/05/2021	09:53	X	X	X	X	X
19774643ICSAB	19774643ICSAB	1	08/05/2021	09:55	X	X	X	X	X
19774644CCV	19774644CCV	1	08/05/2021	09:56	X	X	X	X	X
19774645CCB	19774645CCB	1	08/05/2021	09:58	X	X	X	X	X
2951947BLANK	2951947	10	08/05/2021	10:00	X	X	X	X	X
2951948LCS	2951948	10	08/05/2021	10:01	X	X	X	X	X
GB-69/2'-3'	60375481001	10	08/05/2021	10:03	X	X	X	X	X
2951949MS	2951949	10	08/05/2021	10:04	X	X	X	X	X
2951950MSD	2951950	10	08/05/2021	10:06	X	X	X	X	X
GB-69/3'-5'	60375481002	10	08/05/2021	10:08	X	X	X	X	X
GB-70/3'-5'	60375481003	10	08/05/2021	10:09	X	X	X	X	X
GB-70/5'-7'	60375481004	10	08/05/2021	10:11	X	X	X	X	X
19774646CCV	19774646CCV	1	08/05/2021	10:14	X	X	X	X	X
19774647CCB	19774647CCB	1	08/05/2021	10:16	X	X	X	X	X
GB-71/0'-2'	60375481005	10	08/05/2021	10:17	X	X	X	X	X
GB-71/3'-5'	60375481006	10	08/05/2021	10:19	X	X	X	X	X
GB-65/3'-4'	60375481007	10	08/05/2021	10:20	X	X	X	X	X
GB-65/5'-7'	60375481008	10	08/05/2021	10:22	X	X	X	X	X
GB-64/3'-4'	60375481009	10	08/05/2021	10:24	X	X	X	X	X
GB-64/5'-7'	60375481010	10	08/05/2021	10:25	X	X	X	X	X
GB-57/3.5'-5.5'	60375481011	10	08/05/2021	10:27	X	X	X	X	X
GB-57/6.0'-8.0'	60375481012	10	08/05/2021	10:28	X	X	X	X	X
19774649CCV	19774649CCV	1	08/05/2021	10:32	X	X	X	X	X
19774650CCB	19774650CCB	1	08/05/2021	10:33	X	X	X	X	X
19774651CRDL	19774651CRDL	1	08/05/2021	10:35	X	X	X	X	X
19774652CCV	19774652CCV	1	08/05/2021	10:36	X	X	X	X	X
19774653CCB	19774653CCB	1	08/05/2021	10:38	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/05/2021 12:12 End Date: 08/05/2021 14:02

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19775400CAL0	19775400CAL0	1	08/05/2021	12:12	X	X	X	X	X
19775401CAL1	19775401CAL1	1	08/05/2021	12:13	X	X	X	X	X
19775402CAL2	19775402CAL2	1	08/05/2021	12:15	X	X	X	X	X
19775403CAL3	19775403CAL3	1	08/05/2021	12:17	X	X	X	X	X
19775404CAL4	19775404CAL4	1	08/05/2021	12:18	X	X	X	X	X
19775405ICV	19775405ICV	1	08/05/2021	12:20	X	X	X	X	X
19775406ICB	19775406ICB	1	08/05/2021	12:21	X	X	X	X	X
19775407CRDL	19775407CRDL	1	08/05/2021	12:23	X	X	X	X	X
19775408ICSA	19775408ICSA	1	08/05/2021	12:25	X	X	X	X	X
19775409ICSAB	19775409ICSAB	1	08/05/2021	12:26	X	X	X	X	X
19775410CCV	19775410CCV	1	08/05/2021	12:28	X	X	X	X	X
19775411CCB	19775411CCB	1	08/05/2021	12:29	X	X	X	X	X
2952103BLANK	2952103	10	08/05/2021	12:31	X	X	X	X	X
2952104LCS	2952104	10	08/05/2021	12:33	X	X	X	X	X
GB-57/6.0'-8.0' D	60375481013	10	08/05/2021	12:34	X	X	X	X	X
GB-56/3-5'	60375481014	10	08/05/2021	12:36	X	X	X	X	X
GB-56/5-7'	60375481015	10	08/05/2021	12:37	X	X	X	X	X
GB-58/1-3'	60375481016	10	08/05/2021	12:39	X	X	X	X	X
GB-58/4-6'	60375481017	10	08/05/2021	12:41	X	X	X	X	X
2952105MS	2952105	10	08/05/2021	12:42	X	X	X	X	X
2952106MSD	2952106	10	08/05/2021	12:44	X	X	X	X	X
19775412CCV	19775412CCV	1	08/05/2021	12:47	X	X	X	X	X
19775413CCB	19775413CCB	1	08/05/2021	12:49	X	X	X	X	X
GB-51/1.5-3'	60375481018	10	08/05/2021	12:50	X	X	X	X	X
GB-51/3-5'	60375481019	10	08/05/2021	12:52	X	X	X	X	X
GB-50/0-2'	60375481020	10	08/05/2021	12:53	X	X	X	X	X
GB-50/3-5'	60375481021	10	08/05/2021	12:55	X	X	X	X	X
GB-50/3-5'D	60375481022	10	08/05/2021	12:57	X	X	X	X	X
GB-49/3.5-4.5'	60375481023	10	08/05/2021	12:58	X	X	X	X	X
GB-49/5-6'	60375481024	10	08/05/2021	13:00	X	X	X	X	X
GB-63/0-2'	60375481025	10	08/05/2021	13:01	X	X	X	X	X
GB-63/3-5'	60375481026	10	08/05/2021	13:03	X	X	X	X	X
19775414CCV	19775414CCV	1	08/05/2021	13:06	X	X	X	X	X
19775415CCB	19775415CCB	1	08/05/2021	13:08	X	X	X	X	X
GB-48/3-5'	60375481027	10	08/05/2021	13:09	X	X	X	X	X
2952107MS	2952107	10	08/05/2021	13:11	X	X	X	X	X
2952108MSD	2952108	10	08/05/2021	13:13	X	X	X	X	X
GB-48/5-7'	60375481028	10	08/05/2021	13:14	X	X	X	X	X
GB-55/0-2'	60375481029	10	08/05/2021	13:16	X	X	X	X	X
GB-55/3-5'	60375481030	10	08/05/2021	13:17	X	X	X	X	X
19775417CCV	19775417CCV	1	08/05/2021	13:21	X	X	X	X	X
19775418CCB	19775418CCB	1	08/05/2021	13:22	X	X	X	X	X
19775419CRDL	19775419CRDL	1	08/05/2021	13:24	X	X	X	X	X
19775420CCV	19775420CCV	1	08/05/2021	13:25	X	X	X	X	X
19775421CCB	19775421CCB	1	08/05/2021	13:27	X	X	X	X	X

FORM XIII INORGANIC-2
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/05/2021 12:12 End Date: 08/05/2021 14:02

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
2952112BLANK	2952112	10	08/05/2021	13:29	X	X	X	X	X
2952113LCS	2952113	10	08/05/2021	13:30	X	X	X	X	X
GB-55/3-5'D	60375481031	10	08/05/2021	13:32	X	X	X	X	X
2952114MS	2952114	10	08/05/2021	13:33	X	X	X	X	X
2952115MSD	2952115	10	08/05/2021	13:35	X	X	X	X	X
GB-62/0-2'	60375481032	10	08/05/2021	13:37	X	X	X	X	X
GB-62/3-5'	60375481033	10	08/05/2021	13:38	X	X	X	X	X
GB-68/1-3'	60375481034	10	08/05/2021	13:40	X	X	X	X	X
19775422CCV	19775422CCV	1	08/05/2021	13:43	X	X	X	X	X
19775423CCB	19775423CCB	1	08/05/2021	13:45	X	X	X	X	X
GB-68/3-5'	60375481035	10	08/05/2021	13:46	X	X	X	X	X
GB-68/3-5'D	60375481036	10	08/05/2021	13:48	X	X	X	X	X
GB-67/5-6'	60375481037	10	08/05/2021	13:49	X	X	X	X	X
GB-67/8-10'	60375481038	10	08/05/2021	13:51	X	X	X	X	X
GB-54/0-2'	60375481042	10	08/05/2021	13:53	X	X	X	X	X
GB-54/2-4'	60375481043	10	08/05/2021	13:54	X	X	X	X	X
19775424CCV	19775424CCV	1	08/05/2021	14:01	X	X	X	X	X
19775425CCB	19775425CCB	1	08/05/2021	14:02	X	X	X	X	X

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 09:40 End Date: 08/05/2021 10:38

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19774634CAL0	09:40	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19774635CAL1	09:42	98.8	99.6	99.8	99.5	98.9	98.7	98.7
19774636CAL2	09:44	94.6	96.2	98.8	97.3	97.1	97.3	94.8
19774637CAL3	09:45	92.9	95.1	97.7	94.7	96.2	97.6	92.0
19774638CAL4	09:47	90.7	93.1	96.5	93.7	94.7	98.3	90.2
19774639ICV	09:48	93.4	95.3	97.6	96.3	95.9	97.4	93.1
19774640ICB	09:50	99.3	98.5	99.7	99.7	99.4	99.3	98.4
19774641CRDL	09:52	100.2	100.3	100.4	100.4	100.4	100.6	99.2
19774642ICSA	09:53	77.3	82.5	83.9	84.0	84.1	81.4	72.1
19774643ICSAB	09:55	77.8	85.2	84.6	84.5	84.7	80.9	70.5
19774644CCV	09:56	93.2	92.8	96.3	94.2	94.9	91.2	90.7
19774645CCB	09:58	98.9	95.6	99.0	97.3	99.3	93.0	96.0
2951947	10:00	98.3	91.9	97.9	95.3	96.5	81.3	92.9
2951948	10:01	97.3	94.2	97.5	97.1	95.5	88.0	92.9
GB-69/2'-3'	10:03	94.5	100.6	100.7	100.1	96.4	87.2	94.9
2951949	10:04	94.2	99.6	99.1	98.4	95.2	92.0	93.6
2951950	10:06	94.2	99.4	98.3	98.9	94.4	93.8	93.4
GB-69/3'-5'	10:08	96.5	103.0	102.1	101.1	97.3	90.7	97.0
GB-70/3'-5'	10:09	95.9	104.9	101.5	102.4	96.0	92.5	98.3
GB-70/5'-7'	10:11	95.4	103.7	101.1	102.5	96.2	90.8	97.5
19774646CCV	10:14	96.9	102.3	101.3	100.1	99.6	107.0	98.4
19774647CCB	10:16	102.6	104.0	102.5	102.3	102.4	105.0	102.1
GB-71/0'-2'	10:17	97.2	100.8	100.0	101.7	96.9	88.9	97.2
GB-71/3'-5'	10:19	96.9	103.6	100.9	101.8	97.3	91.4	97.2
GB-65/3'-4'	10:20	96.2	104.1	101.2	103.1	96.2	92.1	98.2
GB-65/5'-7'	10:22	96.4	104.0	100.9	102.2	95.9	92.5	97.4
GB-64/3'-4'	10:24	95.0	105.2	100.3	102.6	95.3	91.7	96.9
GB-64/5'-7'	10:25	88.8	102.1	99.6	100.4	87.5	84.4	90.7
GB-57/3.5'-5.5'	10:27	92.9	99.4	97.1	96.9	93.0	88.1	92.7
GB-57/6.0'-8.0'	10:28	93.7	101.6	99.9	99.1	94.8	91.3	95.2
19774649CCV	10:32	95.0	100.9	98.8	99.2	96.6	107.0	96.4
19774650CCB	10:33	100.2	103.5	99.7	102.0	99.6	105.2	101.3
19774651CRDL	10:35	99.7	104.1	101.2	102.9	100.3	104.3	102.2
19774652CCV	10:36	93.6	96.6	96.3	95.8	95.1	100.0	92.6
19774653CCB	10:38	98.8	100.1	98.7	99.2	98.3	100.2	98.0

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19774634CAL0	09:40	100.0	100.0	100.0
19774635CAL1	09:42	97.6	99.5	99.1

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 09:40 End Date: 08/05/2021 10:38

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19774636CAL2	09:44	95.3	98.6	97.0
19774637CAL3	09:45	93.4	97.1	95.1
19774638CAL4	09:47	92.7	95.6	93.9
19774639ICV	09:48	93.3	97.3	95.2
19774640ICB	09:50	96.9	99.2	98.3
19774641CRDL	09:52	98.5	100.9	99.5
19774642ICSA	09:53	83.0	84.4	82.3
19774643ICSAB	09:55	83.1	84.5	83.1
19774644CCV	09:56	90.0	95.7	93.4
19774645CCB	09:58	92.6	98.1	95.4
2951947	10:00	84.9	96.8	92.3
2951948	10:01	88.0	96.8	94.1
GB-69/2'-3'	10:03	95.1	100.6	184.5
2951949	10:04	94.2	99.2	151.6
2951950	10:06	95.3	98.5	159.3
GB-69/3'-5'	10:08	98.6	101.1	188.3
GB-70/3'-5'	10:09	100.4	101.9	196.3
GB-70/5'-7'	10:11	100.5	101.6	186.6
19774646CCV	10:14	102.0	101.1	102.1
19774647CCB	10:16	102.7	102.1	103.2
GB-71/0'-2'	10:17	95.0	99.5	150.2
GB-71/3'-5'	10:19	98.6	100.9	144.5
GB-65/3'-4'	10:20	99.5	101.7	191.1
GB-65/5'-7'	10:22	100.3	101.3	178.0
GB-64/3'-4'	10:24	99.9	99.9	191.7
GB-64/5'-7'	10:25	97.1	99.4	333.9
GB-57/3.5'-5.5'	10:27	95.9	96.7	174.7
GB-57/6.0'-8.0'	10:28	98.2	99.9	197.7
19774649CCV	10:32	102.6	98.9	100.7
19774650CCB	10:33	104.0	99.7	103.1
19774651CRDL	10:35	104.3	100.7	103.4
19774652CCV	10:36	95.9	95.8	96.7
19774653CCB	10:38	99.0	98.1	99.5

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 12:12 End Date: 08/05/2021 14:02

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19775400CAL0	12:12	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19775401CAL1	12:13	97.2	98.6	98.2	98.0	96.4	100.7	97.4
19775402CAL2	12:15	94.0	93.8	96.3	94.2	94.9	96.4	91.4
19775403CAL3	12:17	91.7	89.8	94.6	90.7	93.9	92.0	88.2
19775404CAL4	12:18	88.4	87.3	91.9	88.9	91.3	90.0	84.9
19775405ICV	12:20	91.4	90.3	94.6	92.1	93.4	91.7	88.9
19775406ICB	12:21	97.6	95.0	96.4	95.4	96.9	94.7	94.8
19775407CRDL	12:23	98.6	96.2	97.1	96.9	98.3	96.9	95.6
19775408ICSA	12:25	75.7	76.3	81.5	79.0	82.3	74.9	66.3
19775409ICSAB	12:26	76.8	78.3	82.3	80.1	83.1	75.6	67.5
19775410CCV	12:28	93.1	88.5	94.9	90.4	94.2	87.2	87.5
19775411CCB	12:29	96.9	90.5	95.7	92.5	97.4	86.8	90.9
2952103	12:31	94.5	86.8	93.2	90.7	92.4	75.1	87.2
2952104	12:33	95.1	88.8	95.1	92.9	94.0	80.7	88.5
GB-57/6.0'-8.0' D	12:34	94.9	97.5	99.2	97.4	94.5	83.2	93.7
GB-56/3-5'	12:36	93.9	97.9	98.7	97.2	94.5	84.7	93.6
GB-56/5-7'	12:37	94.3	100.2	99.2	98.5	95.1	85.5	94.1
GB-58/1-3'	12:39	94.1	100.1	99.7	98.4	94.8	87.9	94.0
GB-58/4-6'	12:41	95.2	99.7	99.0	97.9	94.7	88.1	94.6
2952105	12:42	91.5	97.1	96.6	95.1	93.1	90.4	90.2
2952106	12:44	90.9	95.6	96.1	93.5	92.0	89.4	88.9
19775412CCV	12:47	95.6	97.7	99.1	97.3	97.9	103.4	94.7
19775413CCB	12:49	100.0	99.5	100.8	99.2	101.8	102.3	98.6
GB-51/1.5-3'	12:50	91.1	91.0	95.3	92.1	91.8	79.0	87.1
GB-51/3-5'	12:52	93.6	95.1	97.3	95.5	93.2	84.2	90.8
GB-50/0-2'	12:53	94.2	98.4	98.0	97.6	94.7	86.1	92.9
GB-50/3-5'	12:55	95.1	99.2	99.2	98.5	94.8	88.7	94.7
GB-50/3-5'D	12:57	94.3	99.3	98.7	97.5	95.4	89.2	93.6
GB-49/3.5-4.5'	12:58	92.6	98.7	97.0	96.7	93.6	89.1	92.5
GB-49/5-6'	13:00	94.7	101.2	98.7	99.1	95.5	90.6	95.4
GB-63/0-2'	13:01	95.0	100.5	99.2	99.3	95.0	88.1	94.9
GB-63/3-5'	13:03	95.7	99.3	99.4	98.2	95.5	88.1	94.1
19775414CCV	13:06	97.2	100.9	100.6	99.0	99.3	107.9	97.3
19775415CCB	13:08	101.5	103.6	101.7	102.5	101.7	107.3	102.3
GB-48/3-5'	13:09	93.7	100.5	98.4	98.9	94.4	87.1	94.3
2952107	13:11	92.3	98.5	96.0	96.1	93.3	91.6	91.0
2952108	13:13	90.7	97.1	94.8	95.4	91.9	90.5	89.9
GB-48/5-7'	13:14	93.0	100.9	97.0	98.0	93.8	88.6	93.1
GB-55/0-2'	13:16	93.7	100.6	99.0	98.5	93.6	87.2	93.9
GB-55/3-5'	13:17	95.0	100.9	99.3	99.4	95.1	89.7	95.0

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 12:12 End Date: 08/05/2021 14:02

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19775417CCV	13:21	97.2	102.1	101.3	100.5	99.5	112.1	99.0
19775418CCB	13:22	101.0	104.9	101.3	102.1	101.8	109.3	102.5
19775419CRDL	13:24	101.9	105.9	103.7	103.5	102.3	111.7	104.4
19775420CCV	13:25	95.2	97.1	98.3	96.4	96.5	104.4	94.9
19775421CCB	13:27	100.7	101.7	100.8	100.7	101.0	104.9	100.3
2952112	13:29	98.0	94.2	94.9	95.6	94.8	83.0	93.6
2952113	13:30	95.5	92.8	96.0	95.7	94.2	87.1	92.1
GB-55/3-5'D	13:32	93.4	96.8	97.2	95.6	92.8	84.6	91.9
2952114	13:33	91.3	96.5	96.2	94.1	92.5	90.3	89.5
2952115	13:35	91.7	96.0	96.4	94.7	92.7	91.2	89.5
GB-62/0-2'	13:37	83.8	79.3	87.1	83.7	86.5	69.5	73.4
GB-62/3-5'	13:38	93.8	98.6	97.9	97.3	94.2	81.7	92.4
GB-68/1-3'	13:40	94.9	94.6	96.9	95.1	93.7	81.8	90.9
19775422CCV	13:43	93.2	91.7	96.2	92.1	95.4	92.1	89.7
19775423CCB	13:45	97.2	92.5	96.2	94.2	97.4	92.1	92.7
GB-68/3-5'	13:46	91.7	97.9	96.1	95.4	92.7	83.6	91.4
GB-68/3-5'D	13:48	92.5	98.1	96.9	96.6	93.2	85.5	92.7
GB-67/5-6'	13:49	84.9	80.2	87.6	83.4	85.5	70.3	77.6
GB-67/8-10'	13:51	92.4	97.2	97.0	96.2	92.9	83.0	91.5
GB-54/0-2'	13:53	93.4	98.0	97.4	96.6	93.4	85.5	92.4
GB-54/2-4'	13:54	92.2	97.9	97.0	95.7	92.3	85.7	91.8
19775424CCV	14:01	95.0	97.2	98.2	96.4	96.8	104.2	94.3
19775425CCB	14:02	97.8	97.1	97.5	96.7	98.5	98.9	96.2

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19775400CAL0	12:12	100.0	100.0	100.0
19775401CAL1	12:13	98.8	98.8	98.5
19775402CAL2	12:15	92.5	96.1	93.4
19775403CAL3	12:17	89.1	93.9	91.3
19775404CAL4	12:18	86.0	91.9	88.9
19775405ICV	12:20	88.5	95.0	91.6
19775406ICB	12:21	93.1	96.1	94.9
19775407CRDL	12:23	94.0	97.3	95.3
19775408ICSA	12:25	75.8	81.6	77.1
19775409ICSAB	12:26	76.6	82.2	78.4
19775410CCV	12:28	85.3	94.5	89.1
19775411CCB	12:29	86.7	95.2	91.0
2952103	12:31	78.9	92.4	86.8
2952104	12:33	82.2	94.4	90.3

FORM XV INORGANIC-3

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 12:12 End Date: 08/05/2021 14:02

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
GB-57/6.0'-8.0' D	12:34	91.6	99.5	163.6
GB-56/3-5'	12:36	92.8	98.8	177.3
GB-56/5-7'	12:37	94.7	99.0	189.3
GB-58/1-3'	12:39	95.0	100.2	198.8
GB-58/4-6'	12:41	94.4	99.6	184.9
2952105	12:42	91.9	96.6	192.8
2952106	12:44	90.7	95.8	188.2
19775412CCV	12:47	97.5	98.8	97.8
19775413CCB	12:49	97.3	100.2	98.4
GB-51/1.5-3'	12:50	85.6	95.6	176.3
GB-51/3-5'	12:52	90.4	97.1	166.8
GB-50/0-2'	12:53	93.9	98.0	175.9
GB-50/3-5'	12:55	95.3	99.5	167.8
GB-50/3-5'D	12:57	95.5	99.3	177.4
GB-49/3.5-4.5'	12:58	94.3	97.3	150.4
GB-49/5-6'	13:00	97.6	99.6	151.0
GB-63/0-2'	13:01	95.5	99.6	171.0
GB-63/3-5'	13:03	94.6	99.8	168.9
19775414CCV	13:06	101.7	100.5	100.7
19775415CCB	13:08	102.9	102.1	102.7
GB-48/3-5'	13:09	95.8	98.3	159.8
2952107	13:11	93.2	96.8	152.8
2952108	13:13	92.3	95.1	151.9
GB-48/5-7'	13:14	96.1	97.7	153.1
GB-55/0-2'	13:16	96.4	98.6	230.9
GB-55/3-5'	13:17	97.0	99.3	178.9
19775417CCV	13:21	103.9	101.9	101.9
19775418CCB	13:22	105.5	101.5	103.1
19775419CRDL	13:24	107.3	103.7	105.1
19775420CCV	13:25	97.4	98.3	97.7
19775421CCB	13:27	101.8	101.6	100.6
2952112	13:29	88.2	95.2	93.9
2952113	13:30	87.6	95.9	93.6
GB-55/3-5'D	13:32	92.4	96.6	167.2
2952114	13:33	91.4	96.5	174.0
2952115	13:35	91.3	96.8	164.0
GB-62/0-2'	13:37	75.7	86.7	129.4
GB-62/3-5'	13:38	92.1	97.9	177.9
GB-68/1-3'	13:40	88.8	97.2	150.0
19775422CCV	13:43	89.8	95.5	92.1

FORM XV INORGANIC-4

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 12:12 End Date: 08/05/2021 14:02

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19775423CCB	13:45	89.7	96.2	92.8
GB-68/3-5'	13:46	91.8	96.1	158.3
GB-68/3-5'D	13:48	93.9	97.1	179.6
GB-67/5-6'	13:49	75.5	87.3	140.1
GB-67/8-10'	13:51	91.9	97.5	188.7
GB-54/0-2'	13:53	93.2	97.6	175.4
GB-54/2-4'	13:54	93.8	97.1	194.0
19775424CCV	14:01	98.8	98.2	97.7
19775425CCB	14:02	95.6	97.5	96.0

SAMPLE NO.

GB-69/2'-3'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.4		%	1	07/22/2021 11:10

SAMPLE NO.

GB-69/3'-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.5		%	1	07/22/2021 11:10

SAMPLE NO.

GB-70/3'-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.2		%	1	07/22/2021 11:10

SAMPLE NO.

GB-70/5'-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	16.3		%	1	07/22/2021 11:10

SAMPLE NO.

GB-71/0'-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.6		%	1	07/22/2021 11:11

SAMPLE NO.

GB-71/3'-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.1		%	1	07/22/2021 11:11

SAMPLE NO.

GB-65/3'-4'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.7		%	1	07/22/2021 11:11

SAMPLE NO.

GB-65/5'-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.5		%	1	07/22/2021 11:11

SAMPLE NO.

GB-64/3'-4'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.6		%	1	07/22/2021 11:11

SAMPLE NO.

GB-64/5'-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	27.7		%	1	07/22/2021 11:11

SAMPLE NO.

GB-57/3.5'-5.5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	15.9		%	1	07/22/2021 11:11

SAMPLE NO.

GB-57/6.0'-8.0'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481012 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.7		%	1	07/22/2021 11:11

SAMPLE NO.

GB-57/6.0'-8.0' D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481013 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.8		%	1	07/22/2021 11:11

SAMPLE NO.

GB-56/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.0		%	1	07/22/2021 11:11

SAMPLE NO.

GB-56/5-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.3		%	1	07/22/2021 11:11

SAMPLE NO.

GB-58/1-3'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.3		%	1	07/22/2021 11:11

SAMPLE NO.

GB-58/4-6'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.7		%	1	07/22/2021 11:11

SAMPLE NO.

GB-51/1.5-3'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.5		%	1	07/22/2021 11:11

SAMPLE NO.

GB-51/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.3		%	1	07/22/2021 11:11

SAMPLE NO.

GB-50/0-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	16.2		%	1	07/22/2021 11:11

SAMPLE NO.

GB-50/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481021 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.5		%	1	07/22/2021 11:38

SAMPLE NO.

GB-50/3-5'D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481022 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.8		%	1	07/22/2021 11:38

SAMPLE NO.

GB-49/3.5-4.5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481023 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.9		%	1	07/22/2021 11:38

SAMPLE NO.

GB-49/5-6'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481024 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.6		%	1	07/22/2021 11:38

SAMPLE NO.

GB-63/0-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481025 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	14.1		%	1	07/22/2021 11:38

SAMPLE NO.

GB-63/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481026 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.1		%	1	07/22/2021 11:38

SAMPLE NO.

GB-48/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481027 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.0		%	1	07/22/2021 11:39

SAMPLE NO.

GB-48/5-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481028 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.6		%	1	07/22/2021 11:39

SAMPLE NO.

GB-55/0-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481029 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	14.0		%	1	07/22/2021 11:39

SAMPLE NO.

GB-55/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481030 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	16.2		%	1	07/22/2021 11:39

SAMPLE NO.

GB-55/3-5'D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481031 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	16.8		%	1	07/22/2021 11:39

SAMPLE NO.

GB-62/0-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481032 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	17.2		%	1	07/22/2021 11:39

SAMPLE NO.

GB-62/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481033 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.6		%	1	07/22/2021 11:39

SAMPLE NO.

GB-68/1-3'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481034 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	14.7		%	1	07/22/2021 11:39

SAMPLE NO.

GB-68/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481035 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.7		%	1	07/22/2021 11:39

SAMPLE NO.

GB-68/3-5'D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481036 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.2		%	1	07/22/2021 11:39

SAMPLE NO.

GB-67/5-6'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481037 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.5		%	1	07/22/2021 11:39

SAMPLE NO.

GB-67/8-10'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481038 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.6		%	1	07/22/2021 11:39

SAMPLE NO.

GB-61/3-5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481040 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	24.6		%	1	07/22/2021 11:39

SAMPLE NO.

GB-61/5-7'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481041 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	22.0		%	1	07/22/2021 11:39

SAMPLE NO.

GB-54/0-2'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481042 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	11.8		%	1	07/23/2021 14:27

SAMPLE NO.

GB-54/2-4'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Lab Sample ID: 60375481043 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	16.7		%	1	07/23/2021 14:27

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2944162	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									<0.50	U
Wet weight w/dish weight										

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2944168	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									<0.50	U
Wet weight w/dish weight										

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2945488	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									<0.50	U
Wet weight w/dish weight										

SAMPLE NO.

2944163DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	20.7	20.8	1

SAMPLE NO.

2944169DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	19.0	19.1	1

SAMPLE NO.

2945489DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	15.3	13.6	11

FORM IX INORGANIC-1
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Preparation Method: ASTM D2974 Instrument ID: 60BAL2

Concentration Units: %

Analyte	PQL	MDL	MDL Date
Percent Moisture	0.10	0.10	01/01/2021

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18370

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2944162	2944162	07/22/2021	1	1
2944163	2944163	07/22/2021	1	1
60375481001	GB-69/2'-3'	07/22/2021	1	1
60375481002	GB-69/3'-5'	07/22/2021	1	1
60375481003	GB-70/3'-5'	07/22/2021	1	1
60375481004	GB-70/5'-7'	07/22/2021	1	1
60375481005	GB-71/0'-2'	07/22/2021	1	1
60375481006	GB-71/3'-5'	07/22/2021	1	1
60375481007	GB-65/3'-4'	07/22/2021	1	1
60375481008	GB-65/5'-7'	07/22/2021	1	1
60375481009	GB-64/3'-4'	07/22/2021	1	1
60375481010	GB-64/5'-7'	07/22/2021	1	1
60375481011	GB-57/3.5'-5.5'	07/22/2021	1	1
60375481012	GB-57/6.0'-8.0'	07/22/2021	1	1
60375481013	GB-57/6.0'-8.0' D	07/22/2021	1	1
60375481014	GB-56/3-5'	07/22/2021	1	1
60375481015	GB-56/5-7'	07/22/2021	1	1
60375481016	GB-58/1-3'	07/22/2021	1	1
60375481017	GB-58/4-6'	07/22/2021	1	1
60375481018	GB-51/1.5-3'	07/22/2021	1	1
60375481019	GB-51/3-5'	07/22/2021	1	1
60375481020	GB-50/0-2'	07/22/2021	1	1

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18371

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2944168	2944168	07/22/2021	1	1
2944169	2944169	07/22/2021	1	1
60375481021	GB-50/3-5'	07/22/2021	1	1
60375481022	GB-50/3-5'D	07/22/2021	1	1
60375481023	GB-49/3.5-4.5'	07/22/2021	1	1
60375481024	GB-49/5-6'	07/22/2021	1	1
60375481025	GB-63/0-2'	07/22/2021	1	1
60375481026	GB-63/3-5'	07/22/2021	1	1
60375481027	GB-48/3-5'	07/22/2021	1	1
60375481028	GB-48/5-7'	07/22/2021	1	1
60375481029	GB-55/0-2'	07/22/2021	1	1
60375481030	GB-55/3-5'	07/22/2021	1	1
60375481031	GB-55/3-5'D	07/22/2021	1	1
60375481032	GB-62/0-2'	07/22/2021	1	1
60375481033	GB-62/3-5'	07/22/2021	1	1
60375481034	GB-68/1-3'	07/22/2021	1	1
60375481035	GB-68/3-5'	07/22/2021	1	1
60375481036	GB-68/3-5'D	07/22/2021	1	1
60375481037	GB-67/5-6'	07/22/2021	1	1
60375481038	GB-67/8-10'	07/22/2021	1	1
60375481040	GB-61/3-5'	07/22/2021	1	1
60375481041	GB-61/5-7'	07/22/2021	1	1

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18379

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2945488	2945488	07/23/2021	1	1
2945489	2945489	07/23/2021	1	1
60375481042	GB-54/0-2'	07/23/2021	1	1
60375481043	GB-54/2-4'	07/23/2021	1	1

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60BAL2 Analysis Method: ASTM D2974

Start Date: 07/22/2021 11:10 End Date: 07/23/2021 14:27

Sample Name	Lab Sample ID	D/F	Date	Time	MOIST
2944162BLANK	2944162	1	07/22/2021	11:10	X
GB-69/2'-3'	60375481001	1	07/22/2021	11:10	X
2944163DUP	2944163	1	07/22/2021	11:10	X
GB-69/3'-5'	60375481002	1	07/22/2021	11:10	X
GB-70/3'-5'	60375481003	1	07/22/2021	11:10	X
GB-70/5'-7'	60375481004	1	07/22/2021	11:10	X
GB-71/0'-2'	60375481005	1	07/22/2021	11:11	X
GB-71/3'-5'	60375481006	1	07/22/2021	11:11	X
GB-65/3'-4'	60375481007	1	07/22/2021	11:11	X
GB-65/5'-7'	60375481008	1	07/22/2021	11:11	X
GB-64/3'-4'	60375481009	1	07/22/2021	11:11	X
GB-64/5'-7'	60375481010	1	07/22/2021	11:11	X
GB-57/3.5'-5.5'	60375481011	1	07/22/2021	11:11	X
GB-57/6.0'-8.0'	60375481012	1	07/22/2021	11:11	X
GB-57/6.0'-8.0' D	60375481013	1	07/22/2021	11:11	X
GB-56/3-5'	60375481014	1	07/22/2021	11:11	X
GB-56/5-7'	60375481015	1	07/22/2021	11:11	X
GB-58/1-3'	60375481016	1	07/22/2021	11:11	X
GB-58/4-6'	60375481017	1	07/22/2021	11:11	X
GB-51/1.5-3'	60375481018	1	07/22/2021	11:11	X
GB-51/3-5'	60375481019	1	07/22/2021	11:11	X
GB-50/0-2'	60375481020	1	07/22/2021	11:11	X
2944168BLANK	2944168	1	07/22/2021	11:38	X
GB-50/3-5'	60375481021	1	07/22/2021	11:38	X
2944169DUP	2944169	1	07/22/2021	11:38	X
GB-50/3-5'D	60375481022	1	07/22/2021	11:38	X
GB-49/3.5-4.5'	60375481023	1	07/22/2021	11:38	X
GB-49/5-6'	60375481024	1	07/22/2021	11:38	X
GB-63/0-2'	60375481025	1	07/22/2021	11:38	X
GB-63/3-5'	60375481026	1	07/22/2021	11:38	X
GB-48/3-5'	60375481027	1	07/22/2021	11:39	X
GB-48/5-7'	60375481028	1	07/22/2021	11:39	X
GB-55/0-2'	60375481029	1	07/22/2021	11:39	X
GB-55/3-5'	60375481030	1	07/22/2021	11:39	X
GB-55/3-5'D	60375481031	1	07/22/2021	11:39	X
GB-62/0-2'	60375481032	1	07/22/2021	11:39	X
GB-62/3-5'	60375481033	1	07/22/2021	11:39	X
GB-68/1-3'	60375481034	1	07/22/2021	11:39	X
GB-68/3-5'	60375481035	1	07/22/2021	11:39	X
GB-68/3-5'D	60375481036	1	07/22/2021	11:39	X
GB-67/5-6'	60375481037	1	07/22/2021	11:39	X
GB-67/8-10'	60375481038	1	07/22/2021	11:39	X
GB-61/3-5'	60375481040	1	07/22/2021	11:39	X
GB-61/5-7'	60375481041	1	07/22/2021	11:39	X
2945488BLANK	2945488	1	07/23/2021	14:27	X

FORM XIII INORGANIC-2
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375481 Contract: GSA GOODFELLOW

Instrument ID: 60BAL2 Analysis Method: ASTM D2974

Start Date: 07/22/2021 11:10 End Date: 07/23/2021 14:27

Sample Name	Lab Sample ID	D/F	Date	Time	MOIST
60375461001	60375461001	1	07/23/2021	14:27	X
2945489DUP	2945489	1	07/23/2021	14:27	X
GB-54/0-2'	60375481042	1	07/23/2021	14:27	X
GB-54/2-4'	60375481043	1	07/23/2021	14:27	X

ANALYTICAL REPORT

August 19, 2021

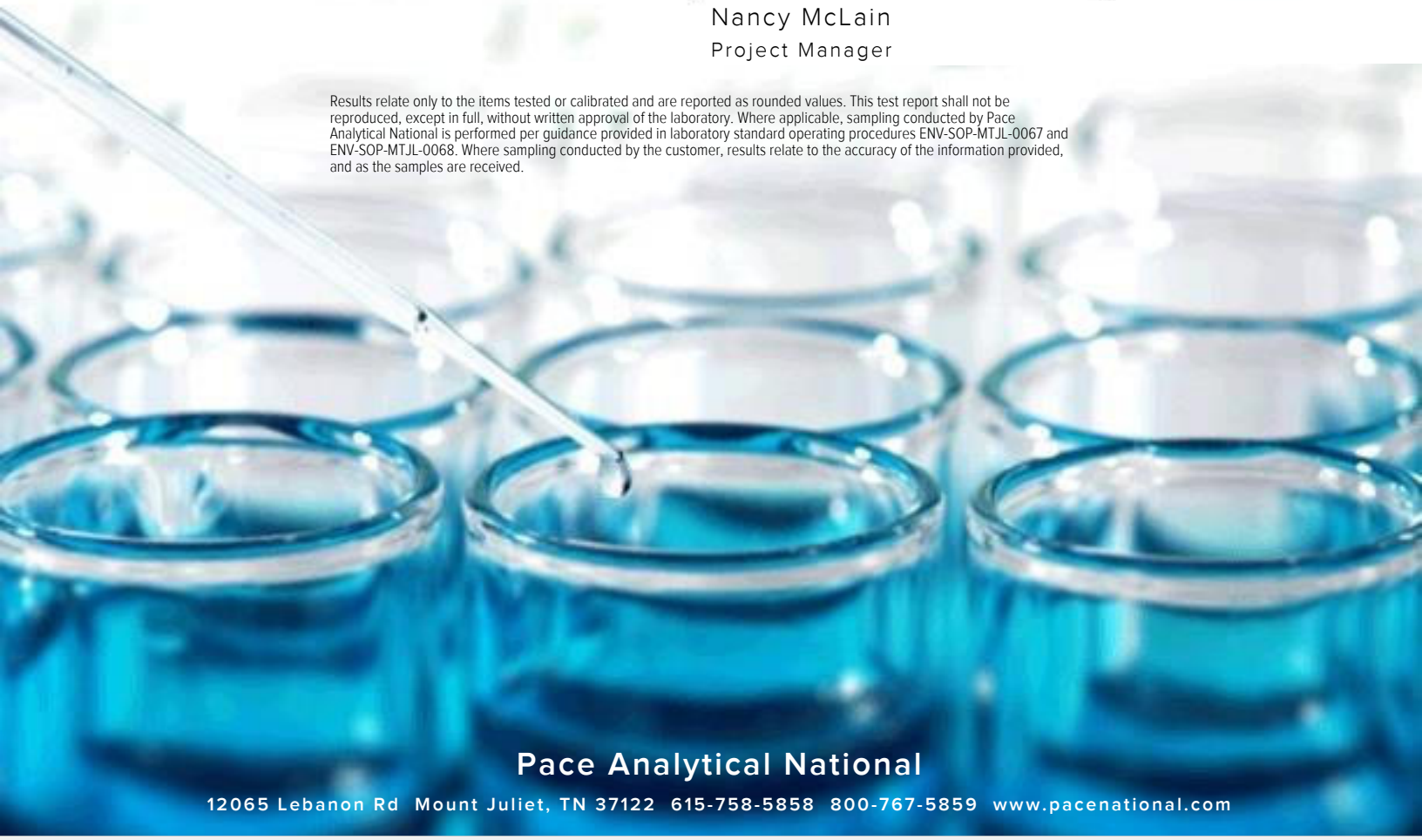
Pace Analytical - Lenexa, KS

Sample Delivery Group:	L1381569
Samples Received:	07/22/2021
Project Number:	60375481
Description:	GSA Goodfellow
Site:	020
Report To:	Jeff Shopper 9608 Loiret Boulevard Lenexa, KS 66219

Entire Report Reviewed By: (b) (6)

Nancy McLain
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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L1381569-02 07/30/21 18:20 10BALP 8

L1381569-03 07/30/21 18:20 10BALP 9

L1381569-04 07/28/21 13:59 LOGBAL4 10

L1381569-05 07/28/21 13:59 LOGBAL4 11

BLANK(R3685338-1) WG1713014 07/28/21 13:59 LOGBAL4 12

BLANK(R3686215-1) WG1713011 07/30/21 18:20 10BALP 13

DUP(R3685338-3) WG1713014 07/28/21 13:59 LOGBAL4 14

LCS(R3685338-2) WG1713014 07/28/21 13:59 LOGBAL4 15

LCS(R3686215-2) WG1713011 07/30/21 18:20 10BALP 16

DUP(R3686215-3) WG1713011 07/30/21 18:20 10BALP 17

Blank 18

LOGBAL4 WG1713014 18

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GB-50/0-2 L1381569-01 Solid

Collected by	Collected date/time	Received date/time
	07/19/21 14:30	07/22/21 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1713011	1	07/30/21 18:15	07/30/21 18:20	CMK	Minneapolis, MN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1710286	1	07/26/21 17:15	07/28/21 15:49	GKM	Mt. Juliet, TN

GB-50/3-5 L1381569-02 Solid

Collected by	Collected date/time	Received date/time
	07/19/21 14:35	07/22/21 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1713011	1	07/30/21 18:15	07/30/21 18:20	CMK	Minneapolis, MN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1710286	1	07/26/21 17:15	07/28/21 16:17	GKM	Mt. Juliet, TN

GB-50/3-5D L1381569-03 Solid

Collected by	Collected date/time	Received date/time
	07/19/21 14:35	07/22/21 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1713011	1	07/30/21 18:15	07/30/21 18:20	CMK	Minneapolis, MN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1710286	1	07/26/21 17:15	07/28/21 16:45	GKM	Mt. Juliet, TN

GB-48/3-5 L1381569-04 Solid

Collected by	Collected date/time	Received date/time
	07/20/21 08:25	07/22/21 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1713014	1	07/28/21 13:52	07/28/21 13:59	JAV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1710286	1	07/26/21 17:15	07/28/21 17:12	GKM	Mt. Juliet, TN

GB-48/5-7 L1381569-05 Solid

Collected by	Collected date/time	Received date/time
	07/20/21 08:28	07/22/21 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1713014	1	07/28/21 13:52	07/28/21 13:59	JAV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1710286	1	07/26/21 17:15	07/28/21 17:40	GKM	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

(b) (6)

Nancy McLain
Project Manager

Report Revision History

Level II Report - Version 1: 08/02/21 09:36

2540 G-2011 Total Solids

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1381569-01	**SDG:**	L1381569
Client Sample ID:	GB-50/0-2	**Collected Date/Time:**	07/19/21 14:30
Lab File ID:	11	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	10BALP	**Preparation Date/Time:**	07/30/21 18:15
Analytical Batch:	WG1713011	**Analysis Date/Time:**	07/30/21 18:20
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	11.373 g
Total Solids (%):	82.8	**Final Wt/Vol:**	9.639 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	82.8	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
GB-50/3-5

Lab Sample ID:	L1381569-02	**SDG:**	L1381569
Client Sample ID:	GB-50/3-5	**Collected Date/Time:**	07/19/21 14:35
Lab File ID:	12	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	10BALP	**Preparation Date/Time:**	07/30/21 18:15
Analytical Batch:	WG1713011	**Analysis Date/Time:**	07/30/21 18:20
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	7.953 g
Total Solids (%):	80.3	**Final Wt/Vol:**	6.64 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	80.3	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1381569-03	**SDG:**	L1381569
Client Sample ID:	GB-50/3-5D	**Collected Date/Time:**	07/19/21 14:35
Lab File ID:	13	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	10BALP	**Preparation Date/Time:**	07/30/21 18:15
Analytical Batch:	WG1713011	**Analysis Date/Time:**	07/30/21 18:20
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	10.189 g
Total Solids (%):	80.6	**Final Wt/Vol:**	8.468 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	80.6	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1381569-04	**SDG:**	L1381569
Client Sample ID:	GB-48/3-5	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	04	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	LOGBAL4	**Preparation Date/Time:**	07/28/21 13:52
Analytical Batch:	WG1713014	**Analysis Date/Time:**	07/28/21 13:59
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	9.871 g
Total Solids (%):	81.9	**Final Wt/Vol:**	8.318 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	81.9	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1381569-05	**SDG:**	L1381569
Client Sample ID:	GB-48/5-7	**Collected Date/Time:**	07/20/21 08:28
Lab File ID:	05	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	LOGBAL4	**Preparation Date/Time:**	07/28/21 13:52
Analytical Batch:	WG1713014	**Analysis Date/Time:**	07/28/21 13:59
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	10.846 g
Total Solids (%):	80.1	**Final Wt/Vol:**	8.941 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	80.1	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685338-1	**SDG:**	L1381569
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	01	**Received Date/Time:**	
Instrument ID:	LOGBAL4	**Preparation Date/Time:**	07/28/21 13:51
Analytical Batch:	WG1713014	**Analysis Date/Time:**	07/28/21 13:59
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	1.278 g
Total Solids (%):		**Final Wt/Vol:**	1.275 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	0.00300	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3686215-1	**SDG:**	L1381569
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	01	**Received Date/Time:**	
Instrument ID:	10BALP	**Preparation Date/Time:**	07/30/21 18:14
Analytical Batch:	WG1713011	**Analysis Date/Time:**	07/30/21 18:20
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	1.286 g
Total Solids (%):		**Final Wt/Vol:**	1.284 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	0.00200	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685338-3	**SDG:**	L1381569
Client Sample ID:	DUP	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	02	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	LOGBAL4	**Preparation Date/Time:**	07/28/21 13:52
Analytical Batch:	WG1713014	**Analysis Date/Time:**	07/28/21 13:59
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	11.413 g
Total Solids (%):	81.9	**Final Wt/Vol:**	9.502 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	81.2	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685338-2	**SDG:**	L1381569
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	03	**Received Date/Time:**	
Instrument ID:	LOGBAL4	**Preparation Date/Time:**	07/28/21 13:51
Analytical Batch:	WG1713014	**Analysis Date/Time:**	07/28/21 13:59
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	11.278 g
Total Solids (%):		**Final Wt/Vol:**	6.285 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	50.1	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3686215-2	**SDG:**	L1381569
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	03	**Received Date/Time:**	
Instrument ID:	10BALP	**Preparation Date/Time:**	07/30/21 18:14
Analytical Batch:	WG1713011	**Analysis Date/Time:**	07/30/21 18:20
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	11.265 g
Total Solids (%):		**Final Wt/Vol:**	6.261 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	50.0	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3686215-3	**SDG:**	L1381569
Client Sample ID:	DUP	**Collected Date/Time:**	07/20/21 10:01
Lab File ID:	02	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	10BALP	**Preparation Date/Time:**	07/30/21 18:15
Analytical Batch:	WG1713011	**Analysis Date/Time:**	07/30/21 18:20
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.475 g
Total Solids (%):	81.7	**Final Wt/Vol:**	4.681 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	81.1	

SDG:	L1381569	**Calibration (begin) date/time:**	_____
Instrument ID:	LOGBAL4	**Calibration (end) date/time:**	_____
Analytical Method:	2540 G-2011	**Analytical Run:**	WG1713014

Sample ID:	**BLANK Result**	**BLANK Qual**
File ID:	01	
Analyte	%	
TOTAL SOLIDS	0.00300	

SDG:	L1381569	**Calibration (begin) date/time:**	_____
Instrument ID:	10BALP	**Calibration (end) date/time:**	_____
Analytical Method:	2540 G-2011	**Analytical Run:**	WG1713011

Sample ID:	**BLANK Result**	**BLANK Qual**
File ID:	01	
Analyte	%	
TOTAL SOLIDS	0.00200	

DUP Sample / File ID:	R3685338-3 / 02	**SDG:**	L1381569
OS Sample / File ID:	L1381569-04 / 04	**Analytical Batch:**	WG1713014
Instrument ID:	LOGBAL4	**Dilution Factor:**	1
Analytical Method:	2540 G-2011	**Matrix:**	Solid

Analyte	OS Result	DUP Result	RPD	RPD Limits
	%	%	%	%
Total Solids	81.9	81.2	0.955	10

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3686215-3 / 02	**SDG:**	L1381569
OS Sample / File ID:	L1381530-06 / 04	**Analytical Batch:**	WG1713011
Instrument ID:	10BALP	**Dilution Factor:**	1
Analytical Method:	2540 G-2011	**Matrix:**	Solid

Analyte	OS Result	DUP Result	RPD	RPD Limits
	%	%	%	%
Total Solids	81.7	81.1	0.775	10

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY
L1381569-04,05

SAMPLE NO.:
R3685338-2

LCS Sample / File ID:	R3685338-2 / 03	**SDG:**	L1381569
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1713014
Instrument ID:	LOGBAL4	**Dilution Factor:**	1
Analytical Method:	2540 G-2011	**Matrix:**	Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.1		100		85.0 - 115		

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY
L1381569-01,02,03

SAMPLE NO.:
R3686215-2

LCS Sample / File ID:	R3686215-2 / 03	**SDG:**	L1381569
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1713011
Instrument ID:	10BALP	**Dilution Factor:**	1
Analytical Method:	2540 G-2011	**Matrix:**	Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.0		99.9		85.0 - 115		

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs:	L1381569-01,02,03,04,05	**Analytical Method:**	2540 G-2011
Matrix:	Solid	**Prep Method:**	SM 2540 G

Analyte	CAS	Wavelength	Mass	MDL	RDL
				%	%
Total Solids	TSOLIDS				

ANALYSIS LOG

SDG:	L1381569	**Analytical Method:**	2540 G-2011
Instrument ID:	LOGBAL4	**Calibration Start Date:**	_____
Analytical Run:	WG1713014	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3685338-1	01	07/28/21 13:59	1	WG1713014
DUP	R3685338-3	02	07/28/21 13:59	1	WG1713014
LCS	R3685338-2	03	07/28/21 13:59	1	WG1713014
GB-48/3-5	L1381569-04	04	07/28/21 13:59	1	WG1713014
GB-48/5-7	L1381569-05	05	07/28/21 13:59	1	WG1713014

ANALYSIS LOG

SDG:	L1381569	**Analytical Method:**	2540 G-2011
Instrument ID:	10BALP	**Calibration Start Date:**	
Analytical Run:	WG1713011	**Calibration End Date:**	

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3686215-1	01	07/30/21 18:20	1	WG1713011
DUP	R3686215-3	02	07/30/21 18:20	1	WG1713011
LCS	R3686215-2	03	07/30/21 18:20	1	WG1713011
OS	L1381530-06	04	07/30/21 18:20		
GB-50/0-2	L1381569-01	11	07/30/21 18:20	1	WG1713011
GB-50/3-5D	L1381569-03	13	07/30/21 18:20	1	WG1713011
GB-50/3-5	L1381569-02	12	07/30/21 18:20	1	WG1713011

8330B Semi-Volatile Organic Compounds (HPLC)

Analytical Method: 8330B **SDG:** L1381569
Matrix: Solid

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
GB-50/0-2	L1381569-01	HPLC4	0728000006	95.0	0
GB-50/3-5	L1381569-02	HPLC4	0728000007	97.6	0
GB-50/3-5D	L1381569-03	HPLC4	0728000008	96.2	0
GB-48/3-5	L1381569-04	HPLC4	0728000009	100	0
GB-48/5-7	L1381569-05	HPLC4	0728000010	98.2	0
MS	R3685137-3	HPLC4	0728000004	98.1	0
MSD	R3685137-4	HPLC4	0728000005	101	0
BLANK	R3685137-1	HPLC4	0728000002	103	0
LCS	R3685137-2	HPLC4	0728000003	95.3	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	1,3-Dimethyl-2-NB	80.0 - 128

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

MS Sample / File ID: R3685137-3 / 0728000004
MSD Sample / File ID: R3685137-4 / 0728000005
OS Sample / File ID: L1381569-04 / 0728000009
Instrument ID: HPLC4
Analytical Method: 8330B

SDG: L1381569
Analytical Batch: WG1710286
Matrix: Solid

Analyte	Spike Amount (dry)	OS Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	mg/kg	*mg/kg*	*mg/kg*	*mg/kg*	*%*	*%*		*%*	*%*	*%*
Tetryl	9.71	U	10.2	10.5	105	108	1	46.0 - 158	2.60	20
2,4-Dinitrotoluene	9.71	U	9.40	9.58	96.7	98.6	1	78.0 - 138	1.93	20
4-Nitrotoluene (4-NT)	9.71	U	9.32	9.47	96.0	97.5	1	80.0 - 129	1.56	20
RDX	9.71	U	8.57	8.87	88.2	91.3	1	57.0 - 126	3.50	20
Nitrobenzene	9.71	U	9.48	9.71	97.6	100	1	80.0 - 126	2.42	20
2,6-Dinitrotoluene	9.71	U	9.29	9.59	95.6	98.7	1	80.0 - 125	3.23	20
2-Nitrotoluene	9.71	U	9.30	9.59	95.7	98.7	1	80.0 - 125	3.10	20
3-Nitrotoluene	9.71	U	9.46	9.73	97.4	100	1	80.0 - 120	2.80	20
1,3,5-Trinitrobenzene	9.71	U	9.53	9.81	98.1	101	1	80.0 - 133	2.90	20
1,3-Dinitrobenzene	9.71	U	9.29	9.60	95.6	98.9	1	80.0 - 138	3.36	20
2,4,6-Trinitrotoluene	9.71	U	9.31	9.51	95.9	97.9	1	80.0 - 127	2.08	20
4-Amino-2,6-Dinitrotoluene	9.71	U	9.23	9.48	95.0	97.6	1	80.0 - 127	2.74	20
2-Amino-4,6-Dinitrotoluene	9.71	U	9.10	9.37	93.7	96.5	1	80.0 - 135	2.91	20
HMX	9.71	U	9.49	9.73	97.7	100	1	79.0 - 125	2.41	20
PETN	9.71	U	10.3	9.82	106	101	1	77.0 - 145	4.85	20
Nitroglycerine	9.71	U	9.26	9.40	95.4	96.7	1	66.0 - 137	1.44	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

L1381569-01,02,03,04,05

SAMPLE NO.: R3685137-2

LCS Sample / File ID:	R3685137-2 / 0728000003	**SDG:**	L1381569
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1710286
Instrument ID:	HPLC4	**Dilution Factor:**	1
Analytical Method:	8330B	**Matrix:**	Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	mg/kg	*mg/kg*		*%*	*%*	*%*	*%*	*%*
Tetryl	8.00	7.60		95.0		80.0 - 122		
2,4-Dinitrotoluene	8.00	7.55		94.4		80.0 - 120		
4-Nitrotoluene (4-NT)	8.00	7.39		92.4		80.0 - 121		
RDX	8.00	7.47		93.4		80.0 - 120		
Nitrobenzene	8.00	7.54		94.3		80.0 - 120		
2,6-Dinitrotoluene	8.00	7.45		93.1		80.0 - 120		
2-Nitrotoluene	8.00	7.49		93.6		80.0 - 120		
3-Nitrotoluene	8.00	7.56		94.5		80.0 - 120		
1,3,5-Trinitrobenzene	8.00	7.49		93.6		80.0 - 124		
1,3-Dinitrobenzene	8.00	7.49		93.6		80.0 - 122		
2,4,6-Trinitrotoluene	8.00	7.31		91.4		80.0 - 120		
4-Amino-2,6-Dinitrotoluene	8.00	7.43		92.9		80.0 - 120		
2-Amino-4,6-Dinitrotoluene	8.00	7.25		90.6		80.0 - 123		
HMX	8.00	7.53		94.1		80.0 - 120		
PETN	8.00	7.70		96.3		80.0 - 137		
Nitroglycerine	8.00	7.32		91.5		78.0 - 120		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Lab Sample ID:	R3685137-1	**SDG:**	L1381569
Lab File ID:	0728000002	**Preparation Date/Time:**	07/26/21 17:15
Instrument ID:	HPLC4	**Analysis Date/Time:**	07/28/21 13:57
Analytical Batch:	WG1710286	**Dilution Factor:**	1
Analytical Method:	8330B	**Matrix:**	Solid

Sample ID	Lab Sample ID	Instrument	File ID	Analysis *date/time*
LCS	R3685137-2	HPLC4	0728000003	07/28/21 14:25
MS	R3685137-3	HPLC4	0728000004	07/28/21 14:53
MSD	R3685137-4	HPLC4	0728000005	07/28/21 15:21
GB-50/0-2	L1381569-01	HPLC4	0728000006	07/28/21 15:49
GB-50/3-5	L1381569-02	HPLC4	0728000007	07/28/21 16:17
GB-50/3-5D	L1381569-03	HPLC4	0728000008	07/28/21 16:45
GB-48/3-5	L1381569-04	HPLC4	0728000009	07/28/21 17:12
GB-48/5-7	L1381569-05	HPLC4	0728000010	07/28/21 17:40

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1381569-01	**SDG:**	L1381569
Client Sample ID:	GB-50/0-2	**Collected Date/Time:**	07/19/21 14:30
Lab File ID:	0728000006	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 15:49
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.04 g
Total Solids (%):	82.8	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.20	1	U		0.106	0.604
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0946	0.604
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.167	0.604
RDX	121-82-4	4.847742	1	U		0.132	0.604
Nitrobenzene	98-95-3	8.63	1	U		0.104	0.604
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.104	0.604
2-Nitrotoluene	88-72-2	13.77	1	U		0.110	0.604
3-Nitrotoluene	99-08-1	15.83	1	U		0.136	0.604
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0473	0.604
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0622	0.604
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0762	0.604
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0692	0.604
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0770	0.604
HMX	2691-41-0	3.12	1	U		0.0940	0.604
PETN	78-11-5	17	1	U		0.256	0.604
Nitroglycerine	55-63-0	9.50	1	U		0.186	2.41

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1381569-02	**SDG:**	L1381569
Client Sample ID:	GB-50/3-5	**Collected Date/Time:**	07/19/21 14:35
Lab File ID:	0728000007	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 16:17
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	4.99 g
Total Solids (%):	80.3	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.20	1	U		0.109	0.623
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0976	0.623
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.172	0.623
RDX	121-82-4	4.847742	1	U		0.136	0.623
Nitrobenzene	98-95-3	8.63	1	U		0.107	0.623
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.108	0.623
2-Nitrotoluene	88-72-2	13.77	1	U		0.114	0.623
3-Nitrotoluene	99-08-1	15.83	1	U		0.141	0.623
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0488	0.623
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0641	0.623
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0786	0.623
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0714	0.623
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0795	0.623
HMX	2691-41-0	3.12	1	U		0.0970	0.623
PETN	78-11-5	17	1	U		0.264	0.623
Nitroglycerine	55-63-0	9.50	1	U		0.192	2.49

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1381569-03	**SDG:**	L1381569
Client Sample ID:	GB-50/3-5D	**Collected Date/Time:**	07/19/21 14:35
Lab File ID:	0728000008	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 16:45
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.06 g
Total Solids (%):	80.6	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.20	1	U		0.109	0.620
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0972	0.620
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.171	0.620
RDX	121-82-4	4.847742	1	U		0.135	0.620
Nitrobenzene	98-95-3	8.63	1	U		0.107	0.620
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.107	0.620
2-Nitrotoluene	88-72-2	13.77	1	U		0.113	0.620
3-Nitrotoluene	99-08-1	15.83	1	U		0.140	0.620
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0486	0.620
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0639	0.620
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0782	0.620
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0710	0.620
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0791	0.620
HMX	2691-41-0	3.12	1	U		0.0966	0.620
PETN	78-11-5	17	1	U		0.263	0.620
Nitroglycerine	55-63-0	9.50	1	U		0.191	2.48

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1381569-04	**SDG:**	L1381569
Client Sample ID:	GB-48/3-5	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000009	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 17:12
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.02 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.20	1	U		0.107	0.610
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0957	0.610
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.168	0.610
RDX	121-82-4	4.847742	1	U		0.133	0.610
Nitrobenzene	98-95-3	8.63	1	U		0.105	0.610
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.105	0.610
2-Nitrotoluene	88-72-2	13.77	1	U		0.112	0.610
3-Nitrotoluene	99-08-1	15.83	1	U		0.138	0.610
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0478	0.610
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0628	0.610
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0770	0.610
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0699	0.610
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0779	0.610
HMX	2691-41-0	3.12	1	U		0.0951	0.610
PETN	78-11-5	17	1	U		0.259	0.610
Nitroglycerine	55-63-0	9.50	1	U		0.188	2.44

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1381569-05	**SDG:**	L1381569
Client Sample ID:	GB-48/5-7	**Collected Date/Time:**	07/20/21 08:28
Lab File ID:	0728000010	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 17:40
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.04 g
Total Solids (%):	80.1	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.20	1	U		0.109	0.624
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0979	0.624
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.172	0.624
RDX	121-82-4	4.847742	1	U		0.136	0.624
Nitrobenzene	98-95-3	8.63	1	U		0.108	0.624
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.108	0.624
2-Nitrotoluene	88-72-2	13.77	1	U		0.114	0.624
3-Nitrotoluene	99-08-1	15.83	1	U		0.141	0.624
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0489	0.624
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0643	0.624
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0788	0.624
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0715	0.624
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0797	0.624
HMX	2691-41-0	3.12	1	U		0.0973	0.624
PETN	78-11-5	17	1	U		0.265	0.624
Nitroglycerine	55-63-0	9.50	1	U		0.192	2.50

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1381569	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	1

Analyte	**CS: 50**	**CS: 100**	**CS: 500**	**CS: 5000**	**CS: 10000**	**CS: 25000**
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	3.171385	3.173083	3.173223	3.169369	3.163009	3.170319
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	4.847742	4.855105	4.852368	4.842887	4.823464	4.841376
1,3,5-TRINITROBENZENE	6.519834	6.525268	6.522585	6.511855	6.487756	6.513189
M-DINITROBENZENE	7.715923	7.726374	7.722607	7.706491	7.671502	7.707696
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	8.157695	8.171274	8.167254	8.144935	8.098422	8.145638
NITROBENZENE	8.537642	8.545776	8.541567	8.528630	8.494763	8.532535
NITROGLYCERINE	9.539104	9.550113	9.542587	9.526826	9.481855	9.526034
2,4,6-TRINITROTOLUENE	9.897795	9.909935	9.903618	9.884956	9.836236	9.890092
4-AMINO-2,6-DINITROTOLUENE	10.227270	10.245760	10.240690	10.204140	10.125880	10.199470
2-AMINO-4,6-DINITROTOLUENE	10.813790	10.833760	10.8278	10.784020	10.695990	10.774710
2,6-DINITROTOLUENE	11.122860	11.134870	11.128170	11.105790	11.044940	11.110350
2,4-DINITROTOLUENE	11.5565	11.566070	11.558870	11.532060	11.463630	11.534850
2-NITROTOLUENE	13.220310	13.231650	13.219310	13.198350	13.129760	13.206620
4-NITROTOLUENE (4-NT)	14.237450	14.244390	14.2294	14.200370	14.119980	14.208990
3-NITROTOLUENE	15.175170	15.189170	15.171220	15.144040	15.061150	15.156730
PETN	16.359830	16.390830	16.365830	16.343550	16.257310	16.355280
1,3-DIMETHYL-2-NB	22.3265	22.348930	22.287570	22.243860	22.1301	22.290630
File ID:	0305000001	0305000002	0305000003	0305000004	0305000005	0305000006

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1381569	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	2

Analyte	**CS: 50**	**CS: 100**	**CS: 500**	**CS: 5000**	**CS: 10000**	**CS: 25000**
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	3.171145	3.173019	3.173167	3.169886	3.163031	3.170523
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	4.847465	4.856752	4.852536	4.843367	4.823978	4.841408
1,3,5-TRINITROBENZENE	6.513167	6.524614	6.521931	6.511817	6.487702	6.513190
M-DINITROBENZENE	7.7190	7.725886	7.723182	7.706508	7.671550	7.707723
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	8.152849	8.169066	8.168149	8.144856	8.098416	8.145687
NITROBENZENE	8.5465	8.550094	8.541797	8.528927	8.494675	8.532819
NITROGLYCERINE	9.551976	9.546318	9.542693	9.526806	9.481840	9.526051
2,4,6-TRINITROTOLUENE	9.883112	9.914920	9.904042	9.884872	9.836247	9.890079
4-AMINO-2,6-DINITROTOLUENE	10.211050	10.2422	10.242930	10.204310	10.125880	10.199490
2-AMINO-4,6-DINITROTOLUENE	10.824160	10.839240	10.828920	10.784230	10.695980	10.774750
2,6-DINITROTOLUENE	11.128790	11.137640	11.128480	11.106350	11.045280	11.110870
2,4-DINITROTOLUENE	11.530060	11.5644	11.558820	11.532230	11.463750	11.534790
2-NITROTOLUENE	13.2364	13.2275	13.218980	13.198430	13.129690	13.206460
4-NITROTOLUENE (4-NT)	14.215070	14.241030	14.231020	14.200490	14.119990	14.208870
3-NITROTOLUENE	15.170940	15.176590	15.171680	15.144170	15.061160	15.156680
PETN	16.342550	16.383050	16.354550	16.3433	16.257190	16.3553
1,3-DIMETHYL-2-NB	22.295470	22.338270	22.294570	22.243620	22.130170	22.290530
File ID:	0305000001	0305000002	0305000003	0305000004	0305000005	0305000006

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1381569	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	1

Analyte	RRF: 50	RRF: 100	RRF: 500	RRF: 5000	RRF: 10000	RRF: 25000
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.589540	5.664562	5.504399	5.697655	5.685221	5.769493
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	6.627079	6.641713	6.623152	6.800339	6.805037	6.885991
1,3,5-TRINITROBENZENE	3.389747	3.286280	3.265957	3.355976	3.345051	3.388134
M-DINITROBENZENE	5.606183	5.518289	5.589282	5.727194	5.726504	5.783947
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5.527175	5.228809	5.021992	4.606275	4.608745	4.710337
NITROBENZENE	7.420898	6.855742	7.049081	7.242441	7.227420	7.328022
NITROGLYCERINE	14.089440	15.680740	16.1890	17.247460	17.337280	17.527350
2,4,6-TRINITROTOLUENE	4.740914	4.912546	4.829156	4.746596	4.779355	4.836989
4-AMINO-2,6-DINITROTOLUENE	3.582543	3.858474	4.014325	4.325980	4.304340	4.368022
2-AMINO-4,6-DINITROTOLUENE	3.984769	4.452910	4.390662	4.559380	4.541370	4.622739
2,6-DINITROTOLUENE	4.998904	5.610472	5.671211	5.828244	5.876681	5.912287
2,4-DINITROTOLUENE	5.674341	6.289419	6.269518	6.414562	6.442437	6.536476
2-NITROTOLUENE	6.070773	6.471888	6.304039	6.554028	6.560824	6.659736
4-NITROTOLUENE (4-NT)	6.480818	6.397298	6.695450	6.950418	6.953605	7.047652
3-NITROTOLUENE	5.487788	5.173790	5.259140	5.332740	5.333148	5.408663
PETN	15.930950	16.917870	15.0885	15.588690	15.788370	15.991050
1,3-DIMETHYL-2-NB	6.182741	5.262676	5.641273	5.728670	5.751137	5.819782
File ID:	0305000001	0305000002	0305000003	0305000004	0305000005	0305000006

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1381569	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	1

Analyte	RRF. Avg	%RSD	COD
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.651812	1.495026	
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	6.730552	1.543016	
1,3,5-TRINITROBENZENE	3.338524	1.416993	
M-DINITROBENZENE	5.658566	1.649432	
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	4.950555	6.939268	
NITROBENZENE	7.187267	2.590901	
NITROGLYCERINE	16.34521	7.388243	
2,4,6-TRINITROTOLUENE	4.807593	1.239571	
4-AMINO-2,6-DINITROTOLUENE	4.075614	7.044108	
2-AMINO-4,6-DINITROTOLUENE	4.425305	4.762099	
2,6-DINITROTOLUENE	5.649633	5.493203	
2,4-DINITROTOLUENE	6.271125	4.495281	
2-NITROTOLUENE	6.436882	3.052613	
4-NITROTOLUENE (4-NT)	6.754207	3.676371	
3-NITROTOLUENE	5.332545	1.88286	
PETN	15.88424	3.459426	
1,3-DIMETHYL-2-NB	5.731047	4.723774	

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1381569	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	2

Analyte	RRF: 50	RRF: 100	RRF: 500	RRF: 5000	RRF: 10000	RRF: 25000
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.633768	5.647253	5.557384	5.673482	5.683707	5.833914
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5.907260	6.393801	5.962084	5.937918	5.985322	6.088652
1,3,5-TRINITROBENZENE	4.499539	4.331379	4.539626	4.616323	4.617117	4.720823
M-DINITROBENZENE	7.731681	6.886612	6.820469	7.052621	7.066782	7.146976
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5.901636	5.381108	5.249331	4.984086	4.985893	5.108619
NITROBENZENE	5.720191	4.362965	4.152251	4.689836	4.699152	4.778218
NITROGLYCERINE	8.371273	7.324890	7.949999	8.590228	8.657243	8.800561
2,4,6-TRINITROTOLUENE	5.554246	4.969740	5.155667	5.202672	5.248625	5.314285
4-AMINO-2,6-DINITROTOLUENE	3.831814	3.739945	4.112138	4.427781	4.405773	4.482646
2-AMINO-4,6-DINITROTOLUENE	4.388566	5.591607	5.409325	5.509248	5.472934	5.574760
2,6-DINITROTOLUENE	3.808333	4.389862	4.540375	4.561373	4.609254	4.646561
2,4-DINITROTOLUENE	6.435006	5.405881	5.680658	5.710578	5.734331	5.829613
2-NITROTOLUENE	3.683744	4.404376	4.070291	4.188663	4.187062	4.275749
4-NITROTOLUENE (4-NT)	3.900589	4.757668	4.602370	5.011945	4.980028	5.105704
3-NITROTOLUENE	3.380048	3.879897	3.747826	3.709057	3.695131	3.782742
PETN	8.824475	10.900370	8.594565	8.389874	8.371798	8.618650
1,3-DIMETHYL-2-NB	4.653997	3.636982	4.297176	4.294903	4.267369	4.332942
File ID:	0305000001	0305000002	0305000003	0305000004	0305000005	0305000006

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1381569	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	2

Analyte	RRF. Avg	%RSD	COD
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.671585	1.467524	
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	6.045839	2.73823	
1,3,5-TRINITROBENZENE	4.554134	2.66575	
M-DINITROBENZENE	7.117524	4.161555	
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5.268445	6.003444	
NITROBENZENE	4.733769	10.39844	
NITROGLYCERINE	8.282366	6.11484	
2,4,6-TRINITROTOLUENE	5.240872	3.358477	
4-AMINO-2,6-DINITROTOLUENE	4.166683	7.081576	
2-AMINO-4,6-DINITROTOLUENE	5.324407	7.943564	
2,6-DINITROTOLUENE	4.42596	6.499156	
2,4-DINITROTOLUENE	5.799345	5.388772	
2-NITROTOLUENE	4.134981	5.45956	
4-NITROTOLUENE (4-NT)	4.726384	8.585922	
3-NITROTOLUENE	3.699117	4.187526	
PETN	8.949955	9.893087	
1,3-DIMETHYL-2-NB	4.247228	7.131004	

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1381569	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0305000007	**Analysis date/time:**	03/05/21 17:19
Analytical Method:	8330B	**Sample ID:**	SSCV
Column:	1		

Analyte	True Value	Result	Result	Limits
	mg/l	*mg/l*	*% Rec.*	*%*
1,3,5-TRINITROBENZENE	5	4.867509	97.40	80 - 120
2,4,6-TRINITROTOLUENE	5	4.955375	99.10	80 - 120
2,4-DINITROTOLUENE	5	4.735329	94.70	80 - 120
2,6-DINITROTOLUENE	5	4.723269	94.50	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.729271	94.60	80 - 120
2-NITROTOLUENE	5	4.798087	96	80 - 120
3-NITROTOLUENE	5	4.902088	98	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	4.577782	91.60	80 - 120
4-NITROTOLUENE (4-NT)	5	4.74974	95	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	4.857015	97.10	80 - 120
M-DINITROBENZENE	5	4.827776	96.60	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	5.241039	105	80 - 120
NITROBENZENE	5	4.857778	97.20	80 - 120
NITROGLYCERINE	5	4.594164	91.90	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	4.861824	97.20	80 - 120
PETN	5	4.941242	98.80	80 - 120
1,3-DIMETHYL-2-NB	5	4.863212	97.30	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1381569	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0305000007	**Analysis date/time:**	03/05/21 17:19
Analytical Method:	8330B	**Sample ID:**	SSCV
Column:	2		

Analyte	True Value	Result	Result	Limits
	mg/l	*mg/l*	*% Rec.*	*%*
1,3,5-TRINITROBENZENE	5	4.793229	95.90	80 - 120
2,4,6-TRINITROTOLUENE	5	4.906389	98.10	80 - 120
2,4-DINITROTOLUENE	5	4.881352	97.60	80 - 120
2,6-DINITROTOLUENE	5	4.714614	94.30	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.666031	93.30	80 - 120
2-NITROTOLUENE	5	4.846888	96.90	80 - 120
3-NITROTOLUENE	5	4.922045	98.40	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	4.561782	91.20	80 - 120
4-NITROTOLUENE (4-NT)	5	4.6244	92.50	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	4.963759	99.30	80 - 120
M-DINITROBENZENE	5	4.922615	98.50	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	5.162863	103	80 - 120
NITROBENZENE	5	4.975368	99.50	80 - 120
NITROGLYCERINE	5	4.674431	93.50	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	4.902349	98	80 - 120
PETN	5	5.212081	104	80 - 120
1,3-DIMETHYL-2-NB	5	4.885958	97.70	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1381569	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0728000001	**Analysis date/time:**	07/28/21 13:29
Analytical Method:	8330B	**Sample ID:**	CCV
Column:	1		

Analyte	True Value	Result	Result	Limits
	mg/l	*mg/l*	*% Rec.*	*%*
1,3,5-TRINITROBENZENE	5	5.119346	102	80 - 120
2,4,6-TRINITROTOLUENE	5	4.709817	94.20	80 - 120
2,4-DINITROTOLUENE	5	4.945993	98.90	80 - 120
2,6-DINITROTOLUENE	5	4.974489	99.50	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.863713	97.30	80 - 120
2-NITROTOLUENE	5	4.981042	99.60	80 - 120
3-NITROTOLUENE	5	5.073547	101	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	5.024354	100	80 - 120
4-NITROTOLUENE (4-NT)	5	4.928126	98.60	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	5.070966	101	80 - 120
M-DINITROBENZENE	5	5.014136	100	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	4.887751	97.80	80 - 120
NITROBENZENE	5	5.013699	100	80 - 120
NITROGLYCERINE	5	4.773796	95.50	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	5.05694	101	80 - 120
PETN	5	5.094374	102	80 - 120
1,3-DIMETHYL-2-NB	5	5.095556	102	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1381569	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0728000016	**Analysis date/time:**	07/28/21 20:28
Analytical Method:	8330B	**Sample ID:**	CCV
Column:	1		

Analyte	**True Value** *mg/l*	**Result** *mg/l*	**Result** *% Rec.*	**Limits** *%*
1,3,5-TRINITROBENZENE	5	5.175539	104	80 - 120
2,4,6-TRINITROTOLUENE	5	4.993383	99.90	80 - 120
2,4-DINITROTOLUENE	5	5.085055	102	80 - 120
2,6-DINITROTOLUENE	5	5.109926	102	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.898995	98	80 - 120
2-NITROTOLUENE	5	5.072796	101	80 - 120
3-NITROTOLUENE	5	5.17971	104	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	4.993322	99.90	80 - 120
4-NITROTOLUENE (4-NT)	5	4.995618	99.90	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	5.137012	103	80 - 120
M-DINITROBENZENE	5	5.100545	102	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	5.276231	106	80 - 120
NITROBENZENE	5	5.158101	103	80 - 120
NITROGLYCERINE	5	4.919075	98.40	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	5.135967	103	80 - 120
PETN	5	5.391189	108	80 - 120
1,3-DIMETHYL-2-NB	5	5.144538	103	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ANALYTICAL SEQUENCE

SDG:	L1381569	**Analytical Method:**	8330B
Instrument ID:	HPLC4	**Calibration Start Date:**	03/05/21 14:31
		Calibration End Date:	03/05/21 16:51

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	50	0305000001	03/05/21 14:31		
CAL	100	0305000002	03/05/21 14:59		
CAL	500	0305000003	03/05/21 15:27		
CAL	5000	0305000004	03/05/21 15:55		
CAL	10000	0305000005	03/05/21 16:22		
CAL	25000	0305000006	03/05/21 16:51		
SSCV	HPLC4030521A03050000007527056	0305000007	03/05/21 17:19		
CCV	HPLC4072821A0728000001527056	0728000001	07/28/21 13:29		
BLANK	R3685137-1	0728000002	07/28/21 13:57	1	WG1710286
LCS	R3685137-2	0728000003	07/28/21 14:25	1	WG1710286
MS	R3685137-3	0728000004	07/28/21 14:53	1	WG1710286
MSD	R3685137-4	0728000005	07/28/21 15:21	1	WG1710286
GB-50/0-2	L1381569-01	0728000006	07/28/21 15:49	1	WG1710286
GB-50/3-5	L1381569-02	0728000007	07/28/21 16:17	1	WG1710286
GB-50/3-5D	L1381569-03	0728000008	07/28/21 16:45	1	WG1710286
GB-48/3-5	L1381569-04	0728000009	07/28/21 17:12	1	WG1710286
GB-48/5-7	L1381569-05	0728000010	07/28/21 17:40	1	WG1710286
L1381684-41	L1381684-41	0728000011	07/28/21 18:08	1	WG1710286
L1381684-42	L1381684-42	0728000012	07/28/21 18:36	1	WG1710286
L1381684-43	L1381684-43	0728000013	07/28/21 19:04	1	WG1710286
L1381684-44	L1381684-44	0728000014	07/28/21 19:32	1.01	WG1710286
L1381684-45	L1381684-45	0728000015	07/28/21 20:00	1	WG1710286
CCV	HPLC4072821A0728000016527056	0728000016	07/28/21 20:28		

Lab Sample ID:	R3685137-1	**SDG:**	L1381569
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0728000002	**Received Date/Time:**	_____
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 13:57
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration *mg/kg*	% Diff.
Tetryl	1	8.20	U	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	12	U	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.83	U	0
	2	14.215070	U	
RDX	1	4.847742	U	0
	2	4.847465	U	
Nitrobenzene	1	8.63	U	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.30	U	0
	2	11.128790	U	
2-Nitrotoluene	1	13.77	U	0
	2	13.2364	U	
3-Nitrotoluene	1	15.83	U	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.50	U	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.70	U	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10	U	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.35	U	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	11	U	0
	2	10.824160	U	
HMX	1	3.12	U	0
	2	3.171145	U	
PETN	1	17	U	0
	2	16.342550	U	
Nitroglycerine	1	9.50	U	0
	2	9.50	U	

Lab Sample ID:	R3685137-2	**SDG:**	L1381569
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0728000003	**Received Date/Time:**	_____
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:25
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration *mg/kg*	% Diff.
Tetryl	1	8.227209	7.60	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	11.709370	7.55	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.475090	7.39	0
	2	14.215070	U	
RDX	1	4.836536	7.47	0
	2	4.847465	U	
Nitrobenzene	1	8.635283	7.54	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.265990	7.45	0
	2	11.128790	U	
2-Nitrotoluene	1	13.440190	7.49	0
	2	13.2364	U	
3-Nitrotoluene	1	15.448640	7.56	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.560483	7.49	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.779504	7.49	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10.016720	7.31	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.323070	7.43	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	10.9197	7.25	0
	2	10.824160	U	
HMX	1	3.136364	7.53	0
	2	3.171145	U	
PETN	1	16.613330	7.70	0
	2	16.342550	U	
Nitroglycerine	1	9.605394	7.32	0
	2	9.50	U	

Lab Sample ID:	R3685137-3	**SDG:**	L1381569
Client Sample ID:	MS	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000004	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:53
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.02 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration (dry) *mg/kg*	% Diff.
Tetryl	1	8.232952	10.2	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	11.719510	9.40	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.488650	9.32	0
	2	14.215070	U	
RDX	1	4.841878	8.57	0
	2	4.847465	U	
Nitrobenzene	1	8.642230	9.48	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.276240	9.29	0
	2	11.128790	U	
2-Nitrotoluene	1	13.452940	9.30	0
	2	13.2364	U	
3-Nitrotoluene	1	15.462660	9.46	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.565703	9.53	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.785204	9.29	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10.023870	9.31	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.331630	9.23	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	10.929730	9.10	0
	2	10.824160	U	
HMX	1	3.139785	9.49	0
	2	3.171145	U	
PETN	1	16.630880	10.3	0
	2	16.342550	U	
Nitroglycerine	1	9.613220	9.26	0
	2	9.50	U	

Lab Sample ID:	R3685137-4	**SDG:**	L1381569
Client Sample ID:	MSD	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000005	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 15:21
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5.03 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration (dry) *mg/kg*	% Diff.
Tetryl	1	8.242246	10.5	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	11.728130	9.58	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.499050	9.47	0
	2	14.215070	U	
RDX	1	4.845890	8.87	0
	2	4.847465	U	
Nitrobenzene	1	8.649515	9.71	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.285310	9.59	0
	2	11.128790	U	
2-Nitrotoluene	1	13.462390	9.59	0
	2	13.2364	U	
3-Nitrotoluene	1	15.4749	9.73	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.570660	9.81	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.792174	9.60	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10.032260	9.51	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.341980	9.48	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	10.939870	9.37	0
	2	10.824160	U	
HMX	1	3.141450	9.73	0
	2	3.171145	U	
PETN	1	16.6464	9.82	0
	2	16.342550	U	
Nitroglycerine	1	9.621762	9.40	0
	2	9.50	U	

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1381569-01,02,03,04,05 **Analytical Method:** 8330B
Matrix: Solid **Prep Method:** 8330

Analyte	CAS	MDL	RDL
		mg/kg	*mg/kg*
1,3,5-Trinitrobenzene	99-35-4	0.0392	0.50
1,3-Dinitrobenzene	99-65-0	0.0515	0.50
2,4,6-Trinitrotoluene	118-96-7	0.0631	0.50
4-Amino-2,6-Dinitrotoluene	19406-51-0	0.0573	0.50
2-Amino-4,6-Dinitrotoluene	35572-78-2	0.0638	0.50
HMX	2691-41-0	0.0779	0.50
PETN	78-11-5	0.2120	0.50
Nitroglycerine	55-63-0	0.1540	2
Tetryl	479-45-8	0.0876	0.50
2,4-Dinitrotoluene	121-14-2	0.0784	0.50
4-Nitrotoluene (4-NT)	99-99-0	0.1380	0.50
RDX	121-82-4	0.1090	0.50
Nitrobenzene	98-95-3	0.0862	0.50
2,6-Dinitrotoluene	606-20-2	0.0864	0.50
2-Nitrotoluene	88-72-2	0.0915	0.50
3-Nitrotoluene	99-08-1	0.1130	0.50

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-1	**SDG:**	L1381569
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	0728000002	**Received Date/Time:**	
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 13:57
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):		**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result	Qualifier	MDL	RDL
				mg/kg		*mg/kg*	*mg/kg*
Tetryl	479-45-8	8.20	1	U		0.0876	0.500
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0784	0.500
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.138	0.500
RDX	121-82-4	4.847742	1	U		0.109	0.500
Nitrobenzene	98-95-3	8.63	1	U		0.0862	0.500
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.0864	0.500
2-Nitrotoluene	88-72-2	13.77	1	U		0.0915	0.500
3-Nitrotoluene	99-08-1	15.83	1	U		0.113	0.500
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0392	0.500
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0515	0.500
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0631	0.500
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0573	0.500
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0638	0.500
HMX	2691-41-0	3.12	1	U		0.0779	0.500
PETN	78-11-5	17	1	U		0.212	0.500
Nitroglycerine	55-63-0	9.50	1	U		0.154	2.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-2	**SDG:**	L1381569
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0728000003	**Received Date/Time:**	_____
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:25
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result *mg/kg*	Qualifier	MDL *mg/kg*	RDL *mg/kg*
Tetryl	479-45-8	8.227209	1	7.60		0.0876	0.500
2,4-Dinitrotoluene	121-14-2	11.709370	1	7.55		0.0784	0.500
4-Nitrotoluene (4-NT)	99-99-0	14.475090	1	7.39		0.138	0.500
RDX	121-82-4	4.836536	1	7.47		0.109	0.500
Nitrobenzene	98-95-3	8.635283	1	7.54		0.0862	0.500
2,6-Dinitrotoluene	606-20-2	11.265990	1	7.45		0.0864	0.500
2-Nitrotoluene	88-72-2	13.440190	1	7.49		0.0915	0.500
3-Nitrotoluene	99-08-1	15.448640	1	7.56		0.113	0.500
1,3,5-Trinitrobenzene	99-35-4	6.560483	1	7.49		0.0392	0.500
1,3-Dinitrobenzene	99-65-0	7.779504	1	7.49		0.0515	0.500
2,4,6-Trinitrotoluene	118-96-7	10.016720	1	7.31		0.0631	0.500
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.323070	1	7.43		0.0573	0.500
2-Amino-4,6-Dinitrotoluene	35572-78-2	10.9197	1	7.25		0.0638	0.500
HMX	2691-41-0	3.136364	1	7.53		0.0779	0.500
PETN	78-11-5	16.613330	1	7.70		0.212	0.500
Nitroglycerine	55-63-0	9.605394	1	7.32		0.154	2.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-3	**SDG:**	L1381569
Client Sample ID:	MS	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000004	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:53
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.02 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.232952	1	10.2		0.107	0.610
2,4-Dinitrotoluene	121-14-2	11.719510	1	9.40		0.0957	0.610
4-Nitrotoluene (4-NT)	99-99-0	14.488650	1	9.32		0.168	0.610
RDX	121-82-4	4.841878	1	8.57		0.133	0.610
Nitrobenzene	98-95-3	8.642230	1	9.48		0.105	0.610
2,6-Dinitrotoluene	606-20-2	11.276240	1	9.29		0.105	0.610
2-Nitrotoluene	88-72-2	13.452940	1	9.30		0.112	0.610
3-Nitrotoluene	99-08-1	15.462660	1	9.46		0.138	0.610
1,3,5-Trinitrobenzene	99-35-4	6.565703	1	9.53		0.0478	0.610
1,3-Dinitrobenzene	99-65-0	7.785204	1	9.29		0.0628	0.610
2,4,6-Trinitrotoluene	118-96-7	10.023870	1	9.31		0.0770	0.610
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.331630	1	9.23		0.0699	0.610
2-Amino-4,6-Dinitrotoluene	35572-78-2	10.929730	1	9.10		0.0779	0.610
HMX	2691-41-0	3.139785	1	9.49		0.0951	0.610
PETN	78-11-5	16.630880	1	10.3		0.259	0.610
Nitroglycerine	55-63-0	9.613220	1	9.26		0.188	2.44

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-4	**SDG:**	L1381569
Client Sample ID:	MSD	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000005	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 15:21
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5.03 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.242246	1	10.5		0.107	0.610
2,4-Dinitrotoluene	121-14-2	11.728130	1	9.58		0.0957	0.610
4-Nitrotoluene (4-NT)	99-99-0	14.499050	1	9.47		0.168	0.610
RDX	121-82-4	4.845890	1	8.87		0.133	0.610
Nitrobenzene	98-95-3	8.649515	1	9.71		0.105	0.610
2,6-Dinitrotoluene	606-20-2	11.285310	1	9.59		0.105	0.610
2-Nitrotoluene	88-72-2	13.462390	1	9.59		0.112	0.610
3-Nitrotoluene	99-08-1	15.4749	1	9.73		0.138	0.610
1,3,5-Trinitrobenzene	99-35-4	6.570660	1	9.81		0.0478	0.610
1,3-Dinitrobenzene	99-65-0	7.792174	1	9.60		0.0628	0.610
2,4,6-Trinitrotoluene	118-96-7	10.032260	1	9.51		0.0770	0.610
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.341980	1	9.48		0.0699	0.610
2-Amino-4,6-Dinitrotoluene	35572-78-2	10.939870	1	9.37		0.0779	0.610
HMX	2691-41-0	3.141450	1	9.73		0.0951	0.610
PETN	78-11-5	16.6464	1	9.82		0.259	0.610
Nitroglycerine	55-63-0	9.621762	1	9.40		0.188	2.44

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

COD	Coefficient of Determination.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Mass	Mass of parameter.
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RT	Retention Time.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

C032

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: MO
Cert. Needed: ☐ Yes ☒ No
Owner Received Date: 7/21/2021 Results Requested By: 8/4/2021

Workorder: 60375481 Workorder Name: GSA GOODFELLOW

Report To	Subcontract To
Jeffrey Shopper Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 1(913)563-1408	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

L1381569

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: 8330 Explosives (Nitroaromatics)	LAB USE ONLY
1	GB-50/0-2	PS	7/19/2021 14:30	60375481020	Solid	1	X	-01
2	GB-50/3-5	PS	7/19/2021 14:35	60375481021	Solid	1	X	-02
3	GB-50/3-5D	PS	7/19/2021 14:35	60375481022	Solid	1	X	-03
4	GB-48/3-5	RQS	7/20/2021 08:25	60375481027	Solid	3	X	-04
5	GB-48/5-7	PS	7/20/2021 08:28	60375481028	Solid	1	X	-05

Transfers	Released By	Date/Time	Received By	Date/Time
1	(b) (6)	7/21/21 1500		
2				
3			(b) (6)	7/22 0840

Comments: OK

Cooler Temperature on Receipt _____ °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

1.9-.1=1.8
ASOT

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres.Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RAD Screen <0.5 mR/hr:	Y N		

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 60375626

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ICPMS

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Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

August 31, 2021

Justin Carter
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: GSA GOODFELLOW
Pace Project No.: 60375626

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on July 22, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

Revised report_rev1

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

(b) (6)

Jeffrey Shopper
jeff.shopper@pacelabs.com
1(913)563-1408
Project Manager

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL
Jacquelin Lee, Burns & McDonnell

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 20-020-0
Arkansas Drinking Water
Illinois Certification #: 2000302021-3
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212020-2
Oklahoma Certification #: 9205/9935
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-19-12
Utah Certification #: KS000212019-9
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Services National
12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375
North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Certification #: T 104704245-17-14
Texas Mold Certification #: LAB0152
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: VT2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

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SAMPLE SUMMARY

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60375626001	GB-47/3-5	Solid	07/20/21 13:25	07/22/21 04:20
60375626002	GB-47/5-7	Solid	07/20/21 13:30	07/22/21 04:20
60375626003	GB-41/4-6	Solid	07/20/21 14:00	07/22/21 04:20
60375626004	GB-41/6-8	Solid	07/20/21 14:05	07/22/21 04:20
60375626005	GB-34/1-3	Solid	07/20/21 14:25	07/22/21 04:20
60375626006	GB-34/3-5	Solid	07/20/21 14:30	07/22/21 04:20
60375626007	GB-33/2-4	Solid	07/20/21 14:55	07/22/21 04:20
60375626008	GB-33/4-6	Solid	07/20/21 15:00	07/22/21 04:20
60375626009	GB-40/1.5-3.5	Solid	07/20/21 15:45	07/22/21 04:20
60375626010	GB-40/11-13	Solid	07/20/21 16:00	07/22/21 04:20
60375626011	GB-39/5-6	Solid	07/21/21 07:50	07/22/21 04:20
60375626012	GB-39/6-7	Solid	07/21/21 07:55	07/22/21 04:20
60375626013	GB-46/2-4	Solid	07/21/21 08:47	07/22/21 04:20
60375626014	GB-46/2-4D	Solid	07/21/21 08:47	07/22/21 04:20
60375626015	GB-46/4-6	Solid	07/21/21 08:52	07/22/21 04:20
60375626016	GB-32/0-2	Solid	07/21/21 08:21	07/22/21 04:20
60375626017	GB-32/2-4	Solid	07/21/21 08:25	07/22/21 04:20
60375626018	GB-53/0-2	Solid	07/21/21 09:10	07/22/21 04:20
60375626019	GB-53/3-5	Solid	07/21/21 09:15	07/22/21 04:20
60375626020	GB-60/2-4	Solid	07/21/21 10:00	07/22/21 04:20
60375626021	GB-60/5-7	Solid	07/21/21 10:10	07/22/21 04:20
60375626022	GB-66/3-5	Solid	07/21/21 10:30	07/22/21 04:20
60375626023	GB-66/3-5D	Solid	07/21/21 10:30	07/22/21 04:20
60375626024	GB-66/5-7	Solid	07/21/21 10:35	07/22/21 04:20
60375626025	GB-59/2-4	Solid	07/21/21 10:52	07/22/21 04:20
60375626026	GB-59/8-10	Solid	07/21/21 11:05	07/22/21 04:20
60375626027	GB-52/2-3	Solid	07/21/21 11:24	07/22/21 04:20
60375626028	GB-52/3-5	Solid	07/21/21 11:28	07/22/21 04:20
60375626029	GB-45/0-2	Solid	07/21/21 12:55	07/22/21 04:20
60375626030	GB-45/2-4	Solid	07/21/21 13:00	07/22/21 04:20
60375626031	GB-38/0-2	Solid	07/21/21 13:40	07/22/21 04:20
60375626032	GB-38/3-5	Solid	07/21/21 13:45	07/22/21 04:20

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60375626001	**GB-47/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626002	**GB-47/5-7**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626003	**GB-41/4-6**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626004	**GB-41/6-8**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626005	**GB-34/1-3**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626006	**GB-34/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626007	**GB-33/2-4**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626008	**GB-33/4-6**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626009	**GB-40/1.5-3.5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626010	**GB-40/11-13**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	DWC	1	PASI-K
60375626011	GB-39/5-6	EPA 8082	AJA1	8	PASI-K
		EPA 8330	GKM	17	PAN
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN
60375626012	GB-39/6-7	EPA 8082	AJA1	8	PASI-K
		EPA 8330	GKM	17	PAN
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN
60375626013	GB-46/2-4	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626014	GB-46/2-4D	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626015	GB-46/4-6	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626016	GB-32/0-2	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626017	GB-32/2-4	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626018	GB-53/0-2	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626019	GB-53/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626020	GB-60/2-4	EPA 8082	AJA1	8	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626021	**GB-60/5-7**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626022	**GB-66/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626023	**GB-66/3-5D**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626024	**GB-66/5-7**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626025	**GB-59/2-4**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626026	**GB-59/8-10**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626027	**GB-52/2-3**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626028	**GB-52/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626029	**GB-45/0-2**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626030	**GB-45/2-4**	EPA 8082	AJA1	8	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626031	**GB-38/0-2**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375626032	**GB-38/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K

PAN = Pace National - Mt. Juliet
PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Date: August 31, 2021

Fix WO number.

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: August 31, 2021

General Information:
32 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 733927

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- GB-38/0-2 (Lab ID: 60375626031)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-38/3-5 (Lab ID: 60375626032)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-45/0-2 (Lab ID: 60375626029)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-45/2-4 (Lab ID: 60375626030)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-52/2-3 (Lab ID: 60375626027)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-52/3-5 (Lab ID: 60375626028)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-59/2-4 (Lab ID: 60375626025)
  - Decachlorobiphenyl (S)

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: August 31, 2021

QC Batch: 733927

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- PCB-1016 (Aroclor 1016)
- PCB-1260 (Aroclor 1260)

- GB-59/8-10 (Lab ID: 60375626026)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-60/5-7 (Lab ID: 60375626021)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-66/3-5 (Lab ID: 60375626022)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-66/3-5D (Lab ID: 60375626023)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-66/5-7 (Lab ID: 60375626024)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- MS (Lab ID: 2945145)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- MSD (Lab ID: 2945146)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 733926

S3: Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.
- GB-33/2-4 (Lab ID: 60375626007)
  - Decachlorobiphenyl (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: August 31, 2021

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Method: **EPA 8330**
Description: SVOA (HPLC) 8330B
Client: BURNS & MCDONNELL
Date: August 31, 2021

General Information:
2 samples were analyzed for EPA 8330 by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BURNS & MCDONNELL
Date: August 31, 2021

General Information:
32 samples were analyzed for EPA 6020 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 736069

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375481031

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2952114)
  - Antimony
- MSD (Lab ID: 2952115)
  - Antimony

R1: RPD value was outside control limits.

- MSD (Lab ID: 2952115)
  - Antimony

QC Batch: 736153

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375626017

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2952415)

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BURNS & MCDONNELL
Date: August 31, 2021

QC Batch: 736153

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375626017

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Antimony
- MSD (Lab ID: 2952416)
  - Antimony

QC Batch: 736159

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375626032

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2952437)
  - Antimony
- MSD (Lab ID: 2952438)
  - Antimony

R1: RPD value was outside control limits.

- MSD (Lab ID: 2952438)
  - Antimony
  - Arsenic
  - Copper
  - Lead

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 31, 2021

General Information:
22 samples were analyzed for EPA 8270 by SIM by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

QC Batch: 733929

P3: Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
- GB-40/1.5-3.5 (Lab ID: 60375626009)
- GB-45/0-2 (Lab ID: 60375626029)
- GB-60/2-4 (Lab ID: 60375626020)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 733929

S0: Surrogate recovery outside laboratory control limits.
- GB-45/0-2 (Lab ID: 60375626029)
  - Terphenyl-d14 (S)

S4: Surrogate recovery not evaluated against control limits due to sample dilution.
- GB-40/1.5-3.5 (Lab ID: 60375626009)
  - 2-Fluorobiphenyl (S)
  - Terphenyl-d14 (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 31, 2021

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 733929

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- GB-40/1.5-3.5 (Lab ID: 60375626009)
  - 2-Fluorobiphenyl (S)

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Method: **SM 2540G**
Description: Total Solids 2540 G-2011
Client: BURNS & MCDONNELL
Date: August 31, 2021

General Information:
2 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-47/3-5 **Lab ID: 60375626001** Collected: 07/20/21 13:25 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.8	10.1	1	07/25/21 20:04	07/27/21 01:52	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.8	9.7	1	07/25/21 20:04	07/27/21 01:52	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	40.8	4.5	1	07/25/21 20:04	07/27/21 01:52	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.8	9.8	1	07/25/21 20:04	07/27/21 01:52	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.8	2.7	1	07/25/21 20:04	07/27/21 01:52	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.8	3.8	1	07/25/21 20:04	07/27/21 01:52	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.8	8.0	1	07/25/21 20:04	07/27/21 01:52	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	101	%	35-120		1	07/25/21 20:04	07/27/21 01:52	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.53**	mg/kg	0.99	0.53	10	08/04/21 11:31	08/05/21 13:56	7440-36-0	
Arsenic	**6.0**	mg/kg	0.99	0.11	10	08/04/21 11:31	08/05/21 13:56	7440-38-2	
Copper	**12.0**	mg/kg	0.99	0.31	10	08/04/21 11:31	08/05/21 13:56	7440-50-8	
Lead	**10.1**	mg/kg	0.50	0.13	10	08/04/21 11:31	08/05/21 13:56	7439-92-1	
Zinc	**32.7**	mg/kg	5.0	0.84	10	08/04/21 11:31	08/05/21 13:56	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 16:29	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 16:29	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 16:29	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 16:29	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 16:29	50-32-8	
Benzo(b)fluoranthene	**<2.0**	ug/kg	4.0	2.0	1	07/25/21 20:56	07/27/21 16:29	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/25/21 20:56	07/27/21 16:29	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/27/21 16:29	207-08-9	
Chrysene	**<1.9**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 16:29	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 16:29	53-70-3	
Fluoranthene	**<3.0**	ug/kg	4.0	3.0	1	07/25/21 20:56	07/27/21 16:29	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/25/21 20:56	07/27/21 16:29	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 16:29	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 16:29	91-20-3	
Phenanthrene	**<3.3**	ug/kg	4.0	3.3	1	07/25/21 20:56	07/27/21 16:29	85-01-8	
Pyrene	**<2.2**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/27/21 16:29	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	65	%	40-120		1	07/25/21 20:56	07/27/21 16:29	321-60-8	
Terphenyl-d14 (S)	81	%	45-130		1	07/25/21 20:56	07/27/21 16:29	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.9**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-47/5-7 **Lab ID: 60375626002** Collected: 07/20/21 13:30 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.2**	ug/kg	41.1	10.2	1	07/25/21 20:04	07/27/21 02:10	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.8**	ug/kg	41.1	9.8	1	07/25/21 20:04	07/27/21 02:10	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.1	4.5	1	07/25/21 20:04	07/27/21 02:10	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.9**	ug/kg	41.1	9.9	1	07/25/21 20:04	07/27/21 02:10	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.1	2.7	1	07/25/21 20:04	07/27/21 02:10	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	41.1	3.8	1	07/25/21 20:04	07/27/21 02:10	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	41.1	8.1	1	07/25/21 20:04	07/27/21 02:10	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	91	%	35-120		1	07/25/21 20:04	07/27/21 02:10	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.47**	mg/kg	0.88	0.47	10	08/04/21 11:31	08/05/21 13:57	7440-36-0	
Arsenic	**7.4**	mg/kg	0.88	0.093	10	08/04/21 11:31	08/05/21 13:57	7440-38-2	
Copper	**14.6**	mg/kg	0.88	0.27	10	08/04/21 11:31	08/05/21 13:57	7440-50-8	
Lead	**15.7**	mg/kg	0.44	0.11	10	08/04/21 11:31	08/05/21 13:57	7439-92-1	
Zinc	**34.9**	mg/kg	4.4	0.74	10	08/04/21 11:31	08/05/21 13:57	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.6**	ug/kg	4.3	1.6	1	07/25/21 20:56	07/27/21 16:46	83-32-9	
Acenaphthylene	**<1.6**	ug/kg	4.3	1.6	1	07/25/21 20:56	07/27/21 16:46	208-96-8	
Anthracene	**<1.8**	ug/kg	4.3	1.8	1	07/25/21 20:56	07/27/21 16:46	120-12-7	
Benzo(a)anthracene	**<2.0**	ug/kg	4.3	2.0	1	07/25/21 20:56	07/27/21 16:46	56-55-3	
Benzo(a)pyrene	**<1.6**	ug/kg	4.3	1.6	1	07/25/21 20:56	07/27/21 16:46	50-32-8	
Benzo(b)fluoranthene	**<2.1**	ug/kg	4.3	2.1	1	07/25/21 20:56	07/27/21 16:46	205-99-2	
Benzo(g,h,i)perylene	**<1.9**	ug/kg	4.3	1.9	1	07/25/21 20:56	07/27/21 16:46	191-24-2	
Benzo(k)fluoranthene	**<2.4**	ug/kg	4.3	2.4	1	07/25/21 20:56	07/27/21 16:46	207-08-9	
Chrysene	**<2.0**	ug/kg	4.3	2.0	1	07/25/21 20:56	07/27/21 16:46	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.3	1.8	1	07/25/21 20:56	07/27/21 16:46	53-70-3	
Fluoranthene	**<3.2**	ug/kg	4.3	3.2	1	07/25/21 20:56	07/27/21 16:46	206-44-0	
Fluorene	**<1.7**	ug/kg	4.3	1.7	1	07/25/21 20:56	07/27/21 16:46	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/kg	4.3	1.8	1	07/25/21 20:56	07/27/21 16:46	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.3	1.8	1	07/25/21 20:56	07/27/21 16:46	91-20-3	
Phenanthrene	**<3.5**	ug/kg	4.3	3.5	1	07/25/21 20:56	07/27/21 16:46	85-01-8	
Pyrene	**<2.3**	ug/kg	4.3	2.3	1	07/25/21 20:56	07/27/21 16:46	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	63	%	40-120		1	07/25/21 20:56	07/27/21 16:46	321-60-8	
Terphenyl-d14 (S)	89	%	45-130		1	07/25/21 20:56	07/27/21 16:46	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**23.3**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-41/4-6 **Lab ID: 60375626003** Collected: 07/20/21 14:00 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	40.0	9.9	1	07/25/21 20:04	07/27/21 02:28	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	40.0	9.5	1	07/25/21 20:04	07/27/21 02:28	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.0	4.4	1	07/25/21 20:04	07/27/21 02:28	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	40.0	9.6	1	07/25/21 20:04	07/27/21 02:28	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	40.0	2.6	1	07/25/21 20:04	07/27/21 02:28	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	40.0	3.7	1	07/25/21 20:04	07/27/21 02:28	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.0	7.9	1	07/25/21 20:04	07/27/21 02:28	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	97	%	35-120		1	07/25/21 20:04	07/27/21 02:28	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.45**	mg/kg	0.84	0.45	10	08/04/21 11:31	08/05/21 14:04	7440-36-0	
Arsenic	**4.8**	mg/kg	0.84	0.089	10	08/04/21 11:31	08/05/21 14:04	7440-38-2	
Copper	**12.1**	mg/kg	0.84	0.26	10	08/04/21 11:31	08/05/21 14:04	7440-50-8	
Lead	**8.2**	mg/kg	0.42	0.11	10	08/04/21 11:31	08/05/21 14:04	7439-92-1	
Zinc	**33.0**	mg/kg	4.2	0.71	10	08/04/21 11:31	08/05/21 14:04	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 17:03	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 17:03	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 17:03	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 17:03	56-55-3	
Benzo(a)pyrene	**2.2J**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 17:03	50-32-8	
Benzo(b)fluoranthene	**4.3**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 17:03	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/25/21 20:56	07/27/21 17:03	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/27/21 17:03	207-08-9	
Chrysene	**3.4J**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 17:03	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 17:03	53-70-3	
Fluoranthene	**10.8**	ug/kg	4.0	3.0	1	07/25/21 20:56	07/27/21 17:03	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/25/21 20:56	07/27/21 17:03	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 17:03	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 17:03	91-20-3	
Phenanthrene	**5.3**	ug/kg	4.0	3.3	1	07/25/21 20:56	07/27/21 17:03	85-01-8	
Pyrene	**8.0**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/27/21 17:03	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	58	%	40-120		1	07/25/21 20:56	07/27/21 17:03	321-60-8	
Terphenyl-d14 (S)	83	%	45-130		1	07/25/21 20:56	07/27/21 17:03	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.4**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-41/6-8 **Lab ID: 60375626004** Collected: 07/20/21 14:05 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.0**	ug/kg	40.4	10.0	1	07/25/21 20:04	07/27/21 02:46	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.4	9.6	1	07/25/21 20:04	07/27/21 02:46	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.4	4.4	1	07/25/21 20:04	07/27/21 02:46	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.4	9.7	1	07/25/21 20:04	07/27/21 02:46	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.4	2.7	1	07/25/21 20:04	07/27/21 02:46	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.4	3.8	1	07/25/21 20:04	07/27/21 02:46	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.4	8.0	1	07/25/21 20:04	07/27/21 02:46	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	97	%	35-120		1	07/25/21 20:04	07/27/21 02:46	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.53**	mg/kg	0.99	0.53	10	08/04/21 11:31	08/05/21 14:06	7440-36-0	
Arsenic	**4.8**	mg/kg	0.99	0.11	10	08/04/21 11:31	08/05/21 14:06	7440-38-2	
Copper	**11.6**	mg/kg	0.99	0.31	10	08/04/21 11:31	08/05/21 14:06	7440-50-8	
Lead	**8.1**	mg/kg	0.50	0.13	10	08/04/21 11:31	08/05/21 14:06	7439-92-1	
Zinc	**27.7**	mg/kg	5.0	0.84	10	08/04/21 11:31	08/05/21 14:06	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 17:20	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 17:20	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 17:20	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 17:20	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 17:20	50-32-8	
Benzo(b)fluoranthene	**<1.9**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 17:20	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/25/21 20:56	07/27/21 17:20	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/27/21 17:20	207-08-9	
Chrysene	**<1.9**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 17:20	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 17:20	53-70-3	
Fluoranthene	**4.5**	ug/kg	4.0	3.0	1	07/25/21 20:56	07/27/21 17:20	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/25/21 20:56	07/27/21 17:20	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 17:20	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 17:20	91-20-3	
Phenanthrene	**<3.3**	ug/kg	4.0	3.3	1	07/25/21 20:56	07/27/21 17:20	85-01-8	
Pyrene	**3.3J**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/27/21 17:20	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%	40-120		1	07/25/21 20:56	07/27/21 17:20	321-60-8	
Terphenyl-d14 (S)	85	%	45-130		1	07/25/21 20:56	07/27/21 17:20	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.0**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-34/1-3 **Lab ID: 60375626005** Collected: 07/20/21 14:25 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.5	9.8	1	07/25/21 20:04	07/27/21 03:04	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.5	9.4	1	07/25/21 20:04	07/27/21 03:04	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.5	4.3	1	07/25/21 20:04	07/27/21 03:04	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.5	9.5	1	07/25/21 20:04	07/27/21 03:04	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.5	2.6	1	07/25/21 20:04	07/27/21 03:04	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.5	3.7	1	07/25/21 20:04	07/27/21 03:04	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.5	7.8	1	07/25/21 20:04	07/27/21 03:04	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	90	%	35-120		1	07/25/21 20:04	07/27/21 03:04	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.64**	mg/kg	1.2	0.64	10	08/04/21 11:31	08/05/21 14:07	7440-36-0	
Arsenic	**12.2**	mg/kg	1.2	0.13	10	08/04/21 11:31	08/05/21 14:07	7440-38-2	
Copper	**26.0**	mg/kg	1.2	0.37	10	08/04/21 11:31	08/05/21 14:07	7440-50-8	
Lead	**13.0**	mg/kg	0.59	0.15	10	08/04/21 11:31	08/05/21 14:07	7439-92-1	
Zinc	**56.3**	mg/kg	5.9	1.0	10	08/04/21 11:31	08/05/21 14:07	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	3.9	1.5	1	07/25/21 20:56	07/27/21 17:37	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	3.9	1.5	1	07/25/21 20:56	07/27/21 17:37	208-96-8	
Anthracene	**3.6J**	ug/kg	3.9	1.6	1	07/25/21 20:56	07/27/21 17:37	120-12-7	
Benzo(a)anthracene	**10.2**	ug/kg	3.9	1.9	1	07/25/21 20:56	07/27/21 17:37	56-55-3	
Benzo(a)pyrene	**8.2**	ug/kg	3.9	1.4	1	07/25/21 20:56	07/27/21 17:37	50-32-8	
Benzo(b)fluoranthene	**14.1**	ug/kg	3.9	1.9	1	07/25/21 20:56	07/27/21 17:37	205-99-2	
Benzo(g,h,i)perylene	**7.7**	ug/kg	3.9	1.8	1	07/25/21 20:56	07/27/21 17:37	191-24-2	
Benzo(k)fluoranthene	**7.8**	ug/kg	3.9	2.2	1	07/25/21 20:56	07/27/21 17:37	207-08-9	
Chrysene	**10.7**	ug/kg	3.9	1.9	1	07/25/21 20:56	07/27/21 17:37	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	3.9	1.7	1	07/25/21 20:56	07/27/21 17:37	53-70-3	
Fluoranthene	**28.6**	ug/kg	3.9	3.0	1	07/25/21 20:56	07/27/21 17:37	206-44-0	
Fluorene	**<1.5**	ug/kg	3.9	1.5	1	07/25/21 20:56	07/27/21 17:37	86-73-7	
Indeno(1,2,3-cd)pyrene	**5.9**	ug/kg	3.9	1.7	1	07/25/21 20:56	07/27/21 17:37	193-39-5	
Naphthalene	**<1.7**	ug/kg	3.9	1.7	1	07/25/21 20:56	07/27/21 17:37	91-20-3	
Phenanthrene	**18.2**	ug/kg	3.9	3.2	1	07/25/21 20:56	07/27/21 17:37	85-01-8	
Pyrene	**21.9**	ug/kg	3.9	2.1	1	07/25/21 20:56	07/27/21 17:37	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	72	%	40-120		1	07/25/21 20:56	07/27/21 17:37	321-60-8	
Terphenyl-d14 (S)	82	%	45-130		1	07/25/21 20:56	07/27/21 17:37	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**17.6**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-34/3-5 **Lab ID: 60375626006** Collected: 07/20/21 14:30 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.5**	ug/kg	42.4	10.5	1	07/25/21 20:04	07/27/21 03:22	12674-11-2	
PCB-1221 (Aroclor 1221)	**<10.1**	ug/kg	42.4	10.1	1	07/25/21 20:04	07/27/21 03:22	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	42.4	4.6	1	07/25/21 20:04	07/27/21 03:22	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.2**	ug/kg	42.4	10.2	1	07/25/21 20:04	07/27/21 03:22	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	42.4	2.8	1	07/25/21 20:04	07/27/21 03:22	12672-29-6	
PCB-1254 (Aroclor 1254)	**<4.0**	ug/kg	42.4	4.0	1	07/25/21 20:04	07/27/21 03:22	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.4**	ug/kg	42.4	8.4	1	07/25/21 20:04	07/27/21 03:22	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	94	%	35-120		1	07/25/21 20:04	07/27/21 03:22	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.50**	mg/kg	0.92	0.50	10	08/04/21 11:31	08/05/21 14:09	7440-36-0	
Arsenic	**6.0**	mg/kg	0.92	0.098	10	08/04/21 11:31	08/05/21 14:09	7440-38-2	
Copper	**16.4**	mg/kg	0.92	0.29	10	08/04/21 11:31	08/05/21 14:09	7440-50-8	
Lead	**8.8**	mg/kg	0.46	0.12	10	08/04/21 11:31	08/05/21 14:09	7439-92-1	
Zinc	**43.7**	mg/kg	4.6	0.78	10	08/04/21 11:31	08/05/21 14:09	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/27/21 17:54	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/27/21 17:54	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1.7	1	07/25/21 20:56	07/27/21 17:54	120-12-7	
Benzo(a)anthracene	**5.6**	ug/kg	4.1	1.9	1	07/25/21 20:56	07/27/21 17:54	56-55-3	
Benzo(a)pyrene	**6.4**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/27/21 17:54	50-32-8	
Benzo(b)fluoranthene	**12.5**	ug/kg	4.1	2.0	1	07/25/21 20:56	07/27/21 17:54	205-99-2	
Benzo(g,h,i)perylene	**6.0**	ug/kg	4.1	1.9	1	07/25/21 20:56	07/27/21 17:54	191-24-2	
Benzo(k)fluoranthene	**6.7**	ug/kg	4.1	2.3	1	07/25/21 20:56	07/27/21 17:54	207-08-9	
Chrysene	**9.9**	ug/kg	4.1	2.0	1	07/25/21 20:56	07/27/21 17:54	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/27/21 17:54	53-70-3	
Fluoranthene	**22.9**	ug/kg	4.1	3.1	1	07/25/21 20:56	07/27/21 17:54	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1.6	1	07/25/21 20:56	07/27/21 17:54	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.8**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/27/21 17:54	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/27/21 17:54	91-20-3	
Phenanthrene	**6.6**	ug/kg	4.1	3.4	1	07/25/21 20:56	07/27/21 17:54	85-01-8	
Pyrene	**17.6**	ug/kg	4.1	2.2	1	07/25/21 20:56	07/27/21 17:54	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%	40-120		1	07/25/21 20:56	07/27/21 17:54	321-60-8	
Terphenyl-d14 (S)	83	%	45-130		1	07/25/21 20:56	07/27/21 17:54	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**23.5**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-33/2-4 **Lab ID: 60375626007** Collected: 07/20/21 14:55 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10**	ug/kg	40.2	10	1	07/25/21 20:04	07/27/21 03:40	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.2	9.6	1	07/25/21 20:04	07/27/21 03:40	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.2	4.4	1	07/25/21 20:04	07/27/21 03:40	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.2	9.7	1	07/25/21 20:04	07/27/21 03:40	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.2	2.7	1	07/25/21 20:04	07/27/21 03:40	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.2	3.8	1	07/25/21 20:04	07/27/21 03:40	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.2	7.9	1	07/25/21 20:04	07/27/21 03:40	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	130	%	35-120		1	07/25/21 20:04	07/27/21 03:40	2051-24-3	S3
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.53**	mg/kg	0.98	0.53	10	08/04/21 11:31	08/05/21 14:10	7440-36-0	
Arsenic	**6.2**	mg/kg	0.98	0.10	10	08/04/21 11:31	08/05/21 14:10	7440-38-2	
Copper	**13.3**	mg/kg	0.98	0.30	10	08/04/21 11:31	08/05/21 14:10	7440-50-8	
Lead	**8.7**	mg/kg	0.49	0.13	10	08/04/21 11:31	08/05/21 14:10	7439-92-1	
Zinc	**41.4**	mg/kg	4.9	0.83	10	08/04/21 11:31	08/05/21 14:10	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**21.4**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-33/4-6 **Lab ID: 60375626008** Collected: 07/20/21 15:00 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.5**	ug/kg	42.1	10.5	1	07/25/21 20:04	07/27/21 03:57	12674-11-2	
PCB-1221 (Aroclor 1221)	**<10.0**	ug/kg	42.1	10.0	1	07/25/21 20:04	07/27/21 03:57	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	42.1	4.6	1	07/25/21 20:04	07/27/21 03:57	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.1**	ug/kg	42.1	10.1	1	07/25/21 20:04	07/27/21 03:57	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	42.1	2.8	1	07/25/21 20:04	07/27/21 03:57	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	42.1	3.9	1	07/25/21 20:04	07/27/21 03:57	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.3**	ug/kg	42.1	8.3	1	07/25/21 20:04	07/27/21 03:57	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	107	%	35-120		1	07/25/21 20:04	07/27/21 03:57	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.48**	mg/kg	0.89	0.48	10	08/04/21 11:31	08/05/21 14:12	7440-36-0	
Arsenic	**8.5**	mg/kg	0.89	0.095	10	08/04/21 11:31	08/05/21 14:12	7440-38-2	
Copper	**11.9**	mg/kg	0.89	0.28	10	08/04/21 11:31	08/05/21 14:12	7440-50-8	
Lead	**10**	mg/kg	0.45	0.12	10	08/04/21 11:31	08/05/21 14:12	7439-92-1	
Zinc	**39.8**	mg/kg	4.5	0.76	10	08/04/21 11:31	08/05/21 14:12	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**23.3**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-40/1.5-3.5 **Lab ID: 60375626009** Collected: 07/20/21 15:45 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.8	10.1	1	07/25/21 20:04	07/27/21 04:15	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.8	9.7	1	07/25/21 20:04	07/27/21 04:15	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.8	4.4	1	07/25/21 20:04	07/27/21 04:15	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.8	9.8	1	07/25/21 20:04	07/27/21 04:15	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.8	2.7	1	07/25/21 20:04	07/27/21 04:15	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.8	3.8	1	07/25/21 20:04	07/27/21 04:15	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.8	8.0	1	07/25/21 20:04	07/27/21 04:15	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	104	%	35-120		1	07/25/21 20:04	07/27/21 04:15	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.49**	mg/kg	0.92	0.49	10	08/04/21 11:31	08/05/21 14:14	7440-36-0	
Arsenic	**4.8**	mg/kg	0.92	0.097	10	08/04/21 11:31	08/05/21 14:14	7440-38-2	
Copper	**11.4**	mg/kg	0.92	0.28	10	08/04/21 11:31	08/05/21 14:14	7440-50-8	
Lead	**10.5**	mg/kg	0.46	0.12	10	08/04/21 11:31	08/05/21 14:14	7439-92-1	
Zinc	**32.4**	mg/kg	4.6	0.78	10	08/04/21 11:31	08/05/21 14:14	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**147J**	ug/kg	199	74.3	10	07/25/21 20:56	07/27/21 18:12	83-32-9	
Acenaphthylene	**<74.3**	ug/kg	199	74.3	10	07/25/21 20:56	07/27/21 18:12	208-96-8	
Anthracene	**546**	ug/kg	199	82.8	10	07/25/21 20:56	07/27/21 18:12	120-12-7	
Benzo(a)anthracene	**978**	ug/kg	199	93.7	10	07/25/21 20:56	07/27/21 18:12	56-55-3	
Benzo(a)pyrene	**666**	ug/kg	199	72.5	10	07/25/21 20:56	07/27/21 18:12	50-32-8	
Benzo(b)fluoranthene	**1010**	ug/kg	199	96.7	10	07/25/21 20:56	07/27/21 18:12	205-99-2	
Benzo(g,h,i)perylene	**470**	ug/kg	199	89.5	10	07/25/21 20:56	07/27/21 18:12	191-24-2	
Benzo(k)fluoranthene	**579**	ug/kg	199	111	10	07/25/21 20:56	07/27/21 18:12	207-08-9	
Chrysene	**908**	ug/kg	199	94.9	10	07/25/21 20:56	07/27/21 18:12	218-01-9	
Dibenz(a,h)anthracene	**<85.8**	ug/kg	199	85.8	10	07/25/21 20:56	07/27/21 18:12	53-70-3	
Fluoranthene	**2500**	ug/kg	199	150	10	07/25/21 20:56	07/27/21 18:12	206-44-0	
Fluorene	**210**	ug/kg	199	78.0	10	07/25/21 20:56	07/27/21 18:12	86-73-7	
Indeno(1,2,3-cd)pyrene	**395**	ug/kg	199	85.8	10	07/25/21 20:56	07/27/21 18:12	193-39-5	
Naphthalene	**<85.2**	ug/kg	199	85.2	10	07/25/21 20:56	07/27/21 18:12	91-20-3	
Phenanthrene	**2060**	ug/kg	199	163	10	07/25/21 20:56	07/27/21 18:12	85-01-8	
Pyrene	**1820**	ug/kg	199	108	10	07/25/21 20:56	07/27/21 18:12	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	0	%	40-120		10	07/25/21 20:56	07/27/21 18:12	321-60-8	D3,P3, S4
Terphenyl-d14 (S)	0	%	45-130		10	07/25/21 20:56	07/27/21 18:12	1718-51-0	S4
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.9**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-40/11-13 **Lab ID: 60375626010** Collected: 07/20/21 16:00 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.5**	ug/kg	42.1	10.5	1	07/25/21 20:04	07/27/21 04:33	12674-11-2	
PCB-1221 (Aroclor 1221)	**<10.0**	ug/kg	42.1	10.0	1	07/25/21 20:04	07/27/21 04:33	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	42.1	4.6	1	07/25/21 20:04	07/27/21 04:33	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.1**	ug/kg	42.1	10.1	1	07/25/21 20:04	07/27/21 04:33	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	42.1	2.8	1	07/25/21 20:04	07/27/21 04:33	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	42.1	3.9	1	07/25/21 20:04	07/27/21 04:33	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.3**	ug/kg	42.1	8.3	1	07/25/21 20:04	07/27/21 04:33	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	99	%	35-120		1	07/25/21 20:04	07/27/21 04:33	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.50**	mg/kg	0.93	0.50	10	08/04/21 11:31	08/05/21 14:15	7440-36-0	
Arsenic	**4.8**	mg/kg	0.93	0.099	10	08/04/21 11:31	08/05/21 14:15	7440-38-2	
Copper	**13.9**	mg/kg	0.93	0.29	10	08/04/21 11:31	08/05/21 14:15	7440-50-8	
Lead	**8.1**	mg/kg	0.47	0.12	10	08/04/21 11:31	08/05/21 14:15	7439-92-1	
Zinc	**39.4**	mg/kg	4.7	0.79	10	08/04/21 11:31	08/05/21 14:15	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**44.0**	ug/kg	4.2	1.6	1	07/25/21 20:56	07/27/21 18:29	83-32-9	
Acenaphthylene	**<1.6**	ug/kg	4.2	1.6	1	07/25/21 20:56	07/27/21 18:29	208-96-8	
Anthracene	**78.4**	ug/kg	4.2	1.7	1	07/25/21 20:56	07/27/21 18:29	120-12-7	
Benzo(a)anthracene	**272**	ug/kg	4.2	2.0	1	07/25/21 20:56	07/27/21 18:29	56-55-3	
Benzo(a)pyrene	**233**	ug/kg	4.2	1.5	1	07/25/21 20:56	07/27/21 18:29	50-32-8	
Benzo(b)fluoranthene	**401**	ug/kg	4.2	2.0	1	07/25/21 20:56	07/27/21 18:29	205-99-2	
Benzo(g,h,i)perylene	**189**	ug/kg	4.2	1.9	1	07/25/21 20:56	07/27/21 18:29	191-24-2	
Benzo(k)fluoranthene	**194**	ug/kg	4.2	2.3	1	07/25/21 20:56	07/27/21 18:29	207-08-9	
Chrysene	**302**	ug/kg	4.2	2.0	1	07/25/21 20:56	07/27/21 18:29	218-01-9	
Dibenz(a,h)anthracene	**41.6**	ug/kg	4.2	1.8	1	07/25/21 20:56	07/27/21 18:29	53-70-3	
Fluoranthene	**618**	ug/kg	4.2	3.1	1	07/25/21 20:56	07/27/21 18:29	206-44-0	
Fluorene	**39.5**	ug/kg	4.2	1.6	1	07/25/21 20:56	07/27/21 18:29	86-73-7	
Indeno(1,2,3-cd)pyrene	**157**	ug/kg	4.2	1.8	1	07/25/21 20:56	07/27/21 18:29	193-39-5	
Naphthalene	**3.0J**	ug/kg	4.2	1.8	1	07/25/21 20:56	07/27/21 18:29	91-20-3	
Phenanthrene	**452**	ug/kg	4.2	3.4	1	07/25/21 20:56	07/27/21 18:29	85-01-8	
Pyrene	**548**	ug/kg	4.2	2.3	1	07/25/21 20:56	07/27/21 18:29	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	72	%	40-120		1	07/25/21 20:56	07/27/21 18:29	321-60-8	
Terphenyl-d14 (S)	91	%	45-130		1	07/25/21 20:56	07/27/21 18:29	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**24.5**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-39/5-6 **Lab ID: 60375626011** Collected: 07/21/21 07:50 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.6	9.8	1	07/25/21 20:04	07/27/21 04:51	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.6	9.4	1	07/25/21 20:04	07/27/21 04:51	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.6	4.3	1	07/25/21 20:04	07/27/21 04:51	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.6	9.5	1	07/25/21 20:04	07/27/21 04:51	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.6	2.6	1	07/25/21 20:04	07/27/21 04:51	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.6	3.7	1	07/25/21 20:04	07/27/21 04:51	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.6	7.8	1	07/25/21 20:04	07/27/21 04:51	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	102	%	35-120		1	07/25/21 20:04	07/27/21 04:51	2051-24-3	
SVOA (HPLC) 8330B	Analytical Method: EPA 8330 Preparation Method: 8330 Pace National - Mt. Juliet								
Tetryl	**<0.109**	mg/kg	0.620	0.109	1	07/26/21 17:15	07/28/21 23:44	479-45-8	
2,4-Dinitrotoluene	**<0.0972**	mg/kg	0.620	0.0972	1	07/26/21 17:15	07/28/21 23:44	121-14-2	
4-Nitrotoluene	**<0.171**	mg/kg	0.620	0.171	1	07/26/21 17:15	07/28/21 23:44	99-99-0	
RDX (Hexahydro-1,3,5-Trinitro-	**<0.135**	mg/kg	0.620	0.135	1	07/26/21 17:15	07/28/21 23:44	121-82-4	
Nitrobenzene	**<0.107**	mg/kg	0.620	0.107	1	07/26/21 17:15	07/28/21 23:44	98-95-3	
2,6-Dinitrotoluene	**<0.107**	mg/kg	0.620	0.107	1	07/26/21 17:15	07/28/21 23:44	606-20-2	
2-Nitrotoluene	**<0.113**	mg/kg	0.620	0.113	1	07/26/21 17:15	07/28/21 23:44	88-72-2	
3-Nitrotoluene	**<0.140**	mg/kg	0.620	0.140	1	07/26/21 17:15	07/28/21 23:44	99-08-1	
1,3,5-Trinitrobenzene	**<0.0486**	mg/kg	0.620	0.0486	1	07/26/21 17:15	07/28/21 23:44	99-35-4	
1,3-Dinitrobenzene	**<0.0639**	mg/kg	0.620	0.0639	1	07/26/21 17:15	07/28/21 23:44	99-65-0	
2,4,6-Trinitrotoluene	**<0.0782**	mg/kg	0.620	0.0782	1	07/26/21 17:15	07/28/21 23:44	118-96-7	
4-Amino-2,6-dinitrotoluene	**<0.0710**	mg/kg	0.620	0.0710	1	07/26/21 17:15	07/28/21 23:44	19406-51-0	
2-Amino-4,6-dinitrotoluene	**<0.0791**	mg/kg	0.620	0.0791	1	07/26/21 17:15	07/28/21 23:44	35572-78-2	
HMX (Octahydro-1,3,5,7-Tetrani	**<0.0966**	mg/kg	0.620	0.0966	1	07/26/21 17:15	07/28/21 23:44	2691-41-0	
PETN	**<0.263**	mg/kg	0.620	0.263	1	07/26/21 17:15	07/28/21 23:44	78-11-5	
Nitroglycerin	**<0.191**	mg/kg	2.48	0.191	1	07/26/21 17:15	07/28/21 23:44	55-63-0	
Surrogates									
1,3-Dimethyl-2-nitrobenzene	94.0	%	80.0-128		1	07/26/21 17:15	07/28/21 23:44	81-20-9	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.55**	mg/kg	1.0	0.55	10	08/05/21 08:34	08/06/21 13:26	7440-36-0	
Arsenic	**7.2**	mg/kg	1.0	0.11	10	08/05/21 08:34	08/06/21 13:26	7440-38-2	
Copper	**13.8**	mg/kg	1.0	0.32	10	08/05/21 08:34	08/06/21 13:26	7440-50-8	
Lead	**11.0**	mg/kg	0.51	0.13	10	08/05/21 08:34	08/06/21 13:26	7439-92-1	
Zinc	**35.5**	mg/kg	5.1	0.86	10	08/05/21 08:34	08/06/21 13:26	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 18:46	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 18:46	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 18:46	120-12-7	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-39/5-6 **Lab ID: 60375626011** Collected: 07/21/21 07:50 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 18:46	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 18:46	50-32-8	
Benzo(b)fluoranthene	**3.3J**	ug/kg	4.0	2.0	1	07/25/21 20:56	07/27/21 18:46	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/25/21 20:56	07/27/21 18:46	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.0	2.3	1	07/25/21 20:56	07/27/21 18:46	207-08-9	
Chrysene	**2.2J**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 18:46	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 18:46	53-70-3	
Fluoranthene	**7.0**	ug/kg	4.0	3.0	1	07/25/21 20:56	07/27/21 18:46	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/25/21 20:56	07/27/21 18:46	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 18:46	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 18:46	91-20-3	
Phenanthrene	**5.7**	ug/kg	4.0	3.3	1	07/25/21 20:56	07/27/21 18:46	85-01-8	
Pyrene	**5.0**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/27/21 18:46	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	80	%	40-120		1	07/25/21 20:56	07/27/21 18:46	321-60-8	
Terphenyl-d14 (S)	85	%	45-130		1	07/25/21 20:56	07/27/21 18:46	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.5**	%	0.50	0.50	1		07/22/21 16:24		
Total Solids 2540 G-2011	Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet								
Total Solids	**80.7**	%			1	07/29/21 14:07	07/29/21 14:14		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-39/6-7 **Lab ID: 60375626012** Collected: 07/21/21 07:55 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.9	9.9	1	07/25/21 20:04	07/27/21 05:45	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.9	9.5	1	07/25/21 20:04	07/27/21 05:45	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.9	4.3	1	07/25/21 20:04	07/27/21 05:45	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.9	9.6	1	07/25/21 20:04	07/27/21 05:45	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.9	2.6	1	07/25/21 20:04	07/27/21 05:45	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.9	3.7	1	07/25/21 20:04	07/27/21 05:45	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.9	7.8	1	07/25/21 20:04	07/27/21 05:45	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	107	%	35-120		1	07/25/21 20:04	07/27/21 05:45	2051-24-3	
SVOA (HPLC) 8330B	Analytical Method: EPA 8330 Preparation Method: 8330 Pace National - Mt. Juliet								
Tetryl	**<0.107**	mg/kg	0.611	0.107	1	07/26/21 17:15	07/29/21 00:12	479-45-8	
2,4-Dinitrotoluene	**<0.0958**	mg/kg	0.611	0.0958	1	07/26/21 17:15	07/29/21 00:12	121-14-2	
4-Nitrotoluene	**<0.169**	mg/kg	0.611	0.169	1	07/26/21 17:15	07/29/21 00:12	99-99-0	
RDX (Hexahydro-1,3,5-Trinitro-	**<0.133**	mg/kg	0.611	0.133	1	07/26/21 17:15	07/29/21 00:12	121-82-4	
Nitrobenzene	**<0.105**	mg/kg	0.611	0.105	1	07/26/21 17:15	07/29/21 00:12	98-95-3	
2,6-Dinitrotoluene	**<0.106**	mg/kg	0.611	0.106	1	07/26/21 17:15	07/29/21 00:12	606-20-2	
2-Nitrotoluene	**<0.112**	mg/kg	0.611	0.112	1	07/26/21 17:15	07/29/21 00:12	88-72-2	
3-Nitrotoluene	**<0.138**	mg/kg	0.611	0.138	1	07/26/21 17:15	07/29/21 00:12	99-08-1	
1,3,5-Trinitrobenzene	**<0.0479**	mg/kg	0.611	0.0479	1	07/26/21 17:15	07/29/21 00:12	99-35-4	
1,3-Dinitrobenzene	**<0.0630**	mg/kg	0.611	0.0630	1	07/26/21 17:15	07/29/21 00:12	99-65-0	
2,4,6-Trinitrotoluene	**<0.0771**	mg/kg	0.611	0.0771	1	07/26/21 17:15	07/29/21 00:12	118-96-7	
4-Amino-2,6-dinitrotoluene	**<0.0700**	mg/kg	0.611	0.0700	1	07/26/21 17:15	07/29/21 00:12	19406-51-0	
2-Amino-4,6-dinitrotoluene	**<0.0780**	mg/kg	0.611	0.0780	1	07/26/21 17:15	07/29/21 00:12	35572-78-2	
HMX (Octahydro-1,3,5,7-Tetrani	**<0.0952**	mg/kg	0.611	0.0952	1	07/26/21 17:15	07/29/21 00:12	2691-41-0	
PETN	**<0.259**	mg/kg	0.611	0.259	1	07/26/21 17:15	07/29/21 00:12	78-11-5	
Nitroglycerin	**<0.188**	mg/kg	2.44	0.188	1	07/26/21 17:15	07/29/21 00:12	55-63-0	
Surrogates									
1,3-Dimethyl-2-nitrobenzene	95.6	%	80.0-128		1	07/26/21 17:15	07/29/21 00:12	81-20-9	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.53**	mg/kg	0.98	0.53	10	08/05/21 08:34	08/06/21 13:28	7440-36-0	
Arsenic	**8.0**	mg/kg	0.98	0.10	10	08/05/21 08:34	08/06/21 13:28	7440-38-2	
Copper	**13.7**	mg/kg	0.98	0.30	10	08/05/21 08:34	08/06/21 13:28	7440-50-8	
Lead	**7.4**	mg/kg	0.49	0.13	10	08/05/21 08:34	08/06/21 13:28	7439-92-1	
Zinc	**36.3**	mg/kg	4.9	0.83	10	08/05/21 08:34	08/06/21 13:28	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 19:03	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 19:03	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 19:03	120-12-7	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-39/6-7 **Lab ID: 60375626012** Collected: 07/21/21 07:55 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 19:03	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/27/21 19:03	50-32-8	
Benzo(b)fluoranthene	**<1.9**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 19:03	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1.8	1	07/25/21 20:56	07/27/21 19:03	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/27/21 19:03	207-08-9	
Chrysene	**<1.9**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/27/21 19:03	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 19:03	53-70-3	
Fluoranthene	**<3.0**	ug/kg	4.0	3.0	1	07/25/21 20:56	07/27/21 19:03	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/25/21 20:56	07/27/21 19:03	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 19:03	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/27/21 19:03	91-20-3	
Phenanthrene	**<3.3**	ug/kg	4.0	3.3	1	07/25/21 20:56	07/27/21 19:03	85-01-8	
Pyrene	**<2.2**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/27/21 19:03	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	65	%	40-120		1	07/25/21 20:56	07/27/21 19:03	321-60-8	
Terphenyl-d14 (S)	86	%	45-130		1	07/25/21 20:56	07/27/21 19:03	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.1**	%	0.50	0.50	1		07/22/21 16:24		
Total Solids 2540 G-2011	Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet								
Total Solids	**81.8**	%			1	07/29/21 14:07	07/29/21 14:14		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-46/2-4 **Lab ID: 60375626013** Collected: 07/21/21 08:47 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	40.0	9.9	1	07/25/21 20:04	07/27/21 06:02	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	40.0	9.5	1	07/25/21 20:04	07/27/21 06:02	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.0	4.4	1	07/25/21 20:04	07/27/21 06:02	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	40.0	9.6	1	07/25/21 20:04	07/27/21 06:02	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	40.0	2.6	1	07/25/21 20:04	07/27/21 06:02	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.0	3.8	1	07/25/21 20:04	07/27/21 06:02	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.0	7.9	1	07/25/21 20:04	07/27/21 06:02	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	91	%	35-120		1	07/25/21 20:04	07/27/21 06:02	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.50**	mg/kg	0.93	0.50	10	08/05/21 08:34	08/06/21 13:30	7440-36-0	
Arsenic	**9.8**	mg/kg	0.93	0.098	10	08/05/21 08:34	08/06/21 13:30	7440-38-2	
Copper	**17.9**	mg/kg	0.93	0.29	10	08/05/21 08:34	08/06/21 13:30	7440-50-8	
Lead	**10.8**	mg/kg	0.46	0.12	10	08/05/21 08:34	08/06/21 13:30	7439-92-1	
Zinc	**52.6**	mg/kg	4.6	0.78	10	08/05/21 08:34	08/06/21 13:30	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.5**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-46/2-4D **Lab ID: 60375626014** Collected: 07/21/21 08:47 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.5	10.1	1	07/25/21 20:04	07/27/21 06:20	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.5	9.7	1	07/25/21 20:04	07/27/21 06:20	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.5	4.4	1	07/25/21 20:04	07/27/21 06:20	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.5	9.8	1	07/25/21 20:04	07/27/21 06:20	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.5	2.7	1	07/25/21 20:04	07/27/21 06:20	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.5	3.8	1	07/25/21 20:04	07/27/21 06:20	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.5	8.0	1	07/25/21 20:04	07/27/21 06:20	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	107	%	35-120		1	07/25/21 20:04	07/27/21 06:20	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.49**	mg/kg	0.90	0.49	10	08/05/21 08:34	08/06/21 13:32	7440-36-0	
Arsenic	**9.1**	mg/kg	0.90	0.096	10	08/05/21 08:34	08/06/21 13:32	7440-38-2	
Copper	**16.9**	mg/kg	0.90	0.28	10	08/05/21 08:34	08/06/21 13:32	7440-50-8	
Lead	**11.2**	mg/kg	0.45	0.12	10	08/05/21 08:34	08/06/21 13:32	7439-92-1	
Zinc	**56.8**	mg/kg	4.5	0.76	10	08/05/21 08:34	08/06/21 13:32	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.7**	%	0.50	0.50	1		07/22/21 16:24		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-46/4-6 **Lab ID: 60375626015** Collected: 07/21/21 08:52 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.4**	ug/kg	41.9	10.4	1	07/25/21 20:04	07/27/21 06:38	12674-11-2	
PCB-1221 (Aroclor 1221)	**<10**	ug/kg	41.9	10	1	07/25/21 20:04	07/27/21 06:38	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	41.9	4.6	1	07/25/21 20:04	07/27/21 06:38	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.1**	ug/kg	41.9	10.1	1	07/25/21 20:04	07/27/21 06:38	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	41.9	2.8	1	07/25/21 20:04	07/27/21 06:38	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.9	3.9	1	07/25/21 20:04	07/27/21 06:38	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.2**	ug/kg	41.9	8.2	1	07/25/21 20:04	07/27/21 06:38	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	102	%	35-120		1	07/25/21 20:04	07/27/21 06:38	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.66**	mg/kg	1.2	0.66	10	08/05/21 08:34	08/06/21 13:34	7440-36-0	
Arsenic	**9.2**	mg/kg	1.2	0.13	10	08/05/21 08:34	08/06/21 13:34	7440-38-2	
Copper	**15.3**	mg/kg	1.2	0.38	10	08/05/21 08:34	08/06/21 13:34	7440-50-8	
Lead	**10.2**	mg/kg	0.62	0.16	10	08/05/21 08:34	08/06/21 13:34	7439-92-1	
Zinc	**48.3**	mg/kg	6.2	1.0	10	08/05/21 08:34	08/06/21 13:34	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**21.9**	%	0.50	0.50	1		07/22/21 16:25		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-32/0-2 **Lab ID: 60375626016** Collected: 07/21/21 08:21 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	40.0	9.9	1	07/25/21 20:04	07/27/21 06:56	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	40.0	9.5	1	07/25/21 20:04	07/27/21 06:56	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.0	4.4	1	07/25/21 20:04	07/27/21 06:56	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	40.0	9.6	1	07/25/21 20:04	07/27/21 06:56	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	40.0	2.6	1	07/25/21 20:04	07/27/21 06:56	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.0	3.8	1	07/25/21 20:04	07/27/21 06:56	11097-69-1	
PCB-1260 (Aroclor 1260)	**14.6J**	ug/kg	40.0	7.9	1	07/25/21 20:04	07/27/21 06:56	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	99	%	35-120		1	07/25/21 20:04	07/27/21 06:56	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.49**	mg/kg	0.91	0.49	10	08/05/21 08:34	08/06/21 13:36	7440-36-0	
Arsenic	**9.8**	mg/kg	0.91	0.097	10	08/05/21 08:34	08/06/21 13:36	7440-38-2	
Copper	**15.2**	mg/kg	0.91	0.28	10	08/05/21 08:34	08/06/21 13:36	7440-50-8	
Lead	**21.8**	mg/kg	0.46	0.12	10	08/05/21 08:34	08/06/21 13:36	7439-92-1	
Zinc	**38.9**	mg/kg	4.6	0.77	10	08/05/21 08:34	08/06/21 13:36	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**44.5**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/27/21 19:20	83-32-9	
Acenaphthylene	**2.9J**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/27/21 19:20	208-96-8	
Anthracene	**95.5**	ug/kg	4.1	1.7	1	07/25/21 20:56	07/27/21 19:20	120-12-7	
Benzo(a)anthracene	**474**	ug/kg	4.1	1.9	1	07/25/21 20:56	07/27/21 19:20	56-55-3	
Benzo(a)pyrene	**419**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/27/21 19:20	50-32-8	
Benzo(b)fluoranthene	**661**	ug/kg	4.1	2.0	1	07/25/21 20:56	07/27/21 19:20	205-99-2	
Benzo(g,h,i)perylene	**332**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/27/21 19:20	191-24-2	
Benzo(k)fluoranthene	**217**	ug/kg	4.1	2.3	1	07/25/21 20:56	07/27/21 19:20	207-08-9	
Chrysene	**519**	ug/kg	4.1	1.9	1	07/25/21 20:56	07/27/21 19:20	218-01-9	
Dibenz(a,h)anthracene	**68.9**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/27/21 19:20	53-70-3	
Fluoranthene	**1090**	ug/kg	40.7	30.6	10	07/25/21 20:56	07/28/21 11:34	206-44-0	
Fluorene	**33.5**	ug/kg	4.1	1.6	1	07/25/21 20:56	07/27/21 19:20	86-73-7	
Indeno(1,2,3-cd)pyrene	**272**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/27/21 19:20	193-39-5	
Naphthalene	**3.6J**	ug/kg	4.1	1.7	1	07/25/21 20:56	07/27/21 19:20	91-20-3	
Phenanthrene	**498**	ug/kg	4.1	3.3	1	07/25/21 20:56	07/27/21 19:20	85-01-8	
Pyrene	**866**	ug/kg	40.7	21.9	10	07/25/21 20:56	07/28/21 11:34	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	72	%	40-120		1	07/25/21 20:56	07/27/21 19:20	321-60-8	
Terphenyl-d14 (S)	93	%	45-130		1	07/25/21 20:56	07/27/21 19:20	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.4**	%	0.50	0.50	1		07/22/21 17:00		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-32/2-4 **Lab ID: 60375626017** Collected: 07/21/21 08:25 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.4**	ug/kg	41.8	10.4	1	07/25/21 20:04	07/27/21 07:14	12674-11-2	
PCB-1221 (Aroclor 1221)	**<10**	ug/kg	41.8	10	1	07/25/21 20:04	07/27/21 07:14	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	41.8	4.6	1	07/25/21 20:04	07/27/21 07:14	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.1**	ug/kg	41.8	10.1	1	07/25/21 20:04	07/27/21 07:14	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	41.8	2.8	1	07/25/21 20:04	07/27/21 07:14	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.8	3.9	1	07/25/21 20:04	07/27/21 07:14	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.2**	ug/kg	41.8	8.2	1	07/25/21 20:04	07/27/21 07:14	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	115	%	35-120		1	07/25/21 20:04	07/27/21 07:14	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.62**	mg/kg	1.2	0.62	10	08/05/21 08:34	08/06/21 13:45	7440-36-0	M1
Arsenic	**6.6**	mg/kg	1.2	0.12	10	08/05/21 08:34	08/06/21 13:45	7440-38-2	
Copper	**16.5**	mg/kg	1.2	0.36	10	08/05/21 08:34	08/06/21 13:45	7440-50-8	
Lead	**12.4**	mg/kg	0.58	0.15	10	08/05/21 08:34	08/06/21 13:45	7439-92-1	
Zinc	**36.1**	mg/kg	5.8	0.98	10	08/05/21 08:34	08/06/21 13:45	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.2	1.5	1	07/25/21 20:56	07/27/21 19:37	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.2	1.5	1	07/25/21 20:56	07/27/21 19:37	208-96-8	
Anthracene	**<1.7**	ug/kg	4.2	1.7	1	07/25/21 20:56	07/27/21 19:37	120-12-7	
Benzo(a)anthracene	**<2.0**	ug/kg	4.2	2.0	1	07/25/21 20:56	07/27/21 19:37	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.2	1.5	1	07/25/21 20:56	07/27/21 19:37	50-32-8	
Benzo(b)fluoranthene	**3.3J**	ug/kg	4.2	2.0	1	07/25/21 20:56	07/27/21 19:37	205-99-2	
Benzo(g,h,i)perylene	**<1.9**	ug/kg	4.2	1.9	1	07/25/21 20:56	07/27/21 19:37	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.2	2.3	1	07/25/21 20:56	07/27/21 19:37	207-08-9	
Chrysene	**2.5J**	ug/kg	4.2	2.0	1	07/25/21 20:56	07/27/21 19:37	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.2	1.8	1	07/25/21 20:56	07/27/21 19:37	53-70-3	
Fluoranthene	**6.9**	ug/kg	4.2	3.1	1	07/25/21 20:56	07/27/21 19:37	206-44-0	
Fluorene	**<1.6**	ug/kg	4.2	1.6	1	07/25/21 20:56	07/27/21 19:37	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/kg	4.2	1.8	1	07/25/21 20:56	07/27/21 19:37	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.2	1.8	1	07/25/21 20:56	07/27/21 19:37	91-20-3	
Phenanthrene	**4.7**	ug/kg	4.2	3.4	1	07/25/21 20:56	07/27/21 19:37	85-01-8	
Pyrene	**5.2**	ug/kg	4.2	2.2	1	07/25/21 20:56	07/27/21 19:37	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	66	%	40-120		1	07/25/21 20:56	07/27/21 19:37	321-60-8	
Terphenyl-d14 (S)	90	%	45-130		1	07/25/21 20:56	07/27/21 19:37	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**21.4**	%	0.50	0.50	1		07/22/21 17:00		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-53/0-2 **Lab ID: 60375626018** Collected: 07/21/21 09:10 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10**	ug/kg	40.1	10	1	07/25/21 20:04	07/27/21 08:08	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.1	9.6	1	07/25/21 20:04	07/27/21 08:08	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.1	4.4	1	07/25/21 20:04	07/27/21 08:08	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.1	9.7	1	07/25/21 20:04	07/27/21 08:08	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.1	2.7	1	07/25/21 20:04	07/27/21 08:08	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.1	3.8	1	07/25/21 20:04	07/27/21 08:08	11097-69-1	
PCB-1260 (Aroclor 1260)	**10.4J**	ug/kg	40.1	7.9	1	07/25/21 20:04	07/27/21 08:08	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	118	%	35-120		1	07/25/21 20:04	07/27/21 08:08	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**0.62J**	mg/kg	1.1	0.58	10	08/05/21 08:34	08/06/21 13:52	7440-36-0	
Arsenic	**22.7**	mg/kg	1.1	0.11	10	08/05/21 08:34	08/06/21 13:52	7440-38-2	
Copper	**25.2**	mg/kg	1.1	0.33	10	08/05/21 08:34	08/06/21 13:52	7440-50-8	
Lead	**52.2**	mg/kg	0.54	0.14	10	08/05/21 08:34	08/06/21 13:52	7439-92-1	
Zinc	**77.6**	mg/kg	5.4	0.91	10	08/05/21 08:34	08/06/21 13:52	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**18.3**	%	0.50	0.50	1		07/22/21 17:00		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-53/3-5 **Lab ID: 60375626019** Collected: 07/21/21 09:15 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.7**	ug/kg	39.2	9.7	1	07/25/21 20:04	07/27/21 08:25	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.2	9.4	1	07/25/21 20:04	07/27/21 08:25	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.2	4.3	1	07/25/21 20:04	07/27/21 08:25	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.4**	ug/kg	39.2	9.4	1	07/25/21 20:04	07/27/21 08:25	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.2	2.6	1	07/25/21 20:04	07/27/21 08:25	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.2	3.7	1	07/25/21 20:04	07/27/21 08:25	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.7**	ug/kg	39.2	7.7	1	07/25/21 20:04	07/27/21 08:25	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	107	%	35-120		1	07/25/21 20:04	07/27/21 08:25	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.57**	mg/kg	1.1	0.57	10	08/05/21 08:34	08/06/21 13:54	7440-36-0	
Arsenic	**6.1**	mg/kg	1.1	0.11	10	08/05/21 08:34	08/06/21 13:54	7440-38-2	
Copper	**12.7**	mg/kg	1.1	0.33	10	08/05/21 08:34	08/06/21 13:54	7440-50-8	
Lead	**12.0**	mg/kg	0.53	0.14	10	08/05/21 08:34	08/06/21 13:54	7439-92-1	
Zinc	**39.4**	mg/kg	5.3	0.89	10	08/05/21 08:34	08/06/21 13:54	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**16.9**	%	0.50	0.50	1		07/22/21 17:00		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-60/2-4 **Lab ID: 60375626020** Collected: 07/21/21 10:00 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.6	10.1	1	07/25/21 20:04	07/27/21 08:43	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.6	9.7	1	07/25/21 20:04	07/27/21 08:43	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.6	4.4	1	07/25/21 20:04	07/27/21 08:43	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.6	9.8	1	07/25/21 20:04	07/27/21 08:43	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.6	2.7	1	07/25/21 20:04	07/27/21 08:43	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.6	3.8	1	07/25/21 20:04	07/27/21 08:43	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.6	8.0	1	07/25/21 20:04	07/27/21 08:43	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	93	%	35-120		1	07/25/21 20:04	07/27/21 08:43	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.51**	mg/kg	0.94	0.51	10	08/05/21 08:34	08/06/21 13:56	7440-36-0	
Arsenic	**9.8**	mg/kg	0.94	0.10	10	08/05/21 08:34	08/06/21 13:56	7440-38-2	
Copper	**17.8**	mg/kg	0.94	0.29	10	08/05/21 08:34	08/06/21 13:56	7440-50-8	
Lead	**19.2**	mg/kg	0.47	0.12	10	08/05/21 08:34	08/06/21 13:56	7439-92-1	
Zinc	**58.1**	mg/kg	4.7	0.80	10	08/05/21 08:34	08/06/21 13:56	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**18.1J**	ug/kg	20.1	7.5	1	07/25/21 20:56	07/28/21 09:17	83-32-9	
Acenaphthylene	**<7.5**	ug/kg	20.1	7.5	1	07/25/21 20:56	07/28/21 09:17	208-96-8	
Anthracene	**26.1**	ug/kg	20.1	8.4	1	07/25/21 20:56	07/28/21 09:17	120-12-7	
Benzo(a)anthracene	**54.3**	ug/kg	20.1	9.5	1	07/25/21 20:56	07/28/21 09:17	56-55-3	
Benzo(a)pyrene	**47.9**	ug/kg	20.1	7.3	1	07/25/21 20:56	07/28/21 09:17	50-32-8	
Benzo(b)fluoranthene	**75.2**	ug/kg	20.1	9.8	1	07/25/21 20:56	07/28/21 09:17	205-99-2	
Benzo(g,h,i)perylene	**39.3**	ug/kg	20.1	9.0	1	07/25/21 20:56	07/28/21 09:17	191-24-2	
Benzo(k)fluoranthene	**37.2**	ug/kg	20.1	11.2	1	07/25/21 20:56	07/28/21 09:17	207-08-9	
Chrysene	**73.0**	ug/kg	20.1	9.6	1	07/25/21 20:56	07/28/21 09:17	218-01-9	
Dibenz(a,h)anthracene	**<8.7**	ug/kg	20.1	8.7	1	07/25/21 20:56	07/28/21 09:17	53-70-3	
Fluoranthene	**193**	ug/kg	20.1	15.1	1	07/25/21 20:56	07/28/21 09:17	206-44-0	
Fluorene	**12.9J**	ug/kg	20.1	7.9	1	07/25/21 20:56	07/28/21 09:17	86-73-7	
Indeno(1,2,3-cd)pyrene	**26.8**	ug/kg	20.1	8.7	1	07/25/21 20:56	07/28/21 09:17	193-39-5	
Naphthalene	**<8.6**	ug/kg	20.1	8.6	1	07/25/21 20:56	07/28/21 09:17	91-20-3	
Phenanthrene	**111**	ug/kg	20.1	16.5	1	07/25/21 20:56	07/28/21 09:17	85-01-8	
Pyrene	**171**	ug/kg	20.1	10.9	1	07/25/21 20:56	07/28/21 09:17	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	116	%	40-120		1	07/25/21 20:56	07/28/21 09:17	321-60-8	P3
Terphenyl-d14 (S)	122	%	45-130		1	07/25/21 20:56	07/28/21 09:17	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.8**	%	0.50	0.50	1		07/22/21 17:00		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-60/5-7 **Lab ID: 60375626021** Collected: 07/21/21 10:10 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.5	10.1	1	07/23/21 16:45	07/27/21 09:37	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.5	9.6	1	07/23/21 16:45	07/27/21 09:37	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.5	4.4	1	07/23/21 16:45	07/27/21 09:37	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.5	9.7	1	07/23/21 16:45	07/27/21 09:37	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.5	2.7	1	07/23/21 16:45	07/27/21 09:37	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.5	3.8	1	07/23/21 16:45	07/27/21 09:37	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.5	8.0	1	07/23/21 16:45	07/27/21 09:37	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	90	%	35-120		1	07/23/21 16:45	07/27/21 09:37	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.57**	mg/kg	1.1	0.57	10	08/05/21 08:34	08/06/21 13:58	7440-36-0	
Arsenic	**15.2**	mg/kg	1.1	0.11	10	08/05/21 08:34	08/06/21 13:58	7440-38-2	
Copper	**13.5**	mg/kg	1.1	0.33	10	08/05/21 08:34	08/06/21 13:58	7440-50-8	
Lead	**11.6**	mg/kg	0.53	0.14	10	08/05/21 08:34	08/06/21 13:58	7439-92-1	
Zinc	**46.0**	mg/kg	5.3	0.89	10	08/05/21 08:34	08/06/21 13:58	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/28/21 09:34	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/28/21 09:34	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1.7	1	07/25/21 20:56	07/28/21 09:34	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.1	1.9	1	07/25/21 20:56	07/28/21 09:34	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/28/21 09:34	50-32-8	
Benzo(b)fluoranthene	**<2.0**	ug/kg	4.1	2.0	1	07/25/21 20:56	07/28/21 09:34	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/28/21 09:34	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.1	2.3	1	07/25/21 20:56	07/28/21 09:34	207-08-9	
Chrysene	**<1.9**	ug/kg	4.1	1.9	1	07/25/21 20:56	07/28/21 09:34	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/28/21 09:34	53-70-3	
Fluoranthene	**<3.1**	ug/kg	4.1	3.1	1	07/25/21 20:56	07/28/21 09:34	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1.6	1	07/25/21 20:56	07/28/21 09:34	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/28/21 09:34	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.1	1.7	1	07/25/21 20:56	07/28/21 09:34	91-20-3	
Phenanthrene	**<3.3**	ug/kg	4.1	3.3	1	07/25/21 20:56	07/28/21 09:34	85-01-8	
Pyrene	**<2.2**	ug/kg	4.1	2.2	1	07/25/21 20:56	07/28/21 09:34	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	78	%	40-120		1	07/25/21 20:56	07/28/21 09:34	321-60-8	
Terphenyl-d14 (S)	92	%	45-130		1	07/25/21 20:56	07/28/21 09:34	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.3**	%	0.50	0.50	1		07/22/21 17:00		

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-66/3-5 **Lab ID: 60375626022** Collected: 07/21/21 10:30 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.9	9.9	1	07/23/21 16:45	07/27/21 09:55	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.9	9.5	1	07/23/21 16:45	07/27/21 09:55	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.9	4.3	1	07/23/21 16:45	07/27/21 09:55	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.9	9.6	1	07/23/21 16:45	07/27/21 09:55	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.9	2.6	1	07/23/21 16:45	07/27/21 09:55	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.9	3.7	1	07/23/21 16:45	07/27/21 09:55	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.9	7.8	1	07/23/21 16:45	07/27/21 09:55	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	98	%	35-120		1	07/23/21 16:45	07/27/21 09:55	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.52**	mg/kg	0.97	0.52	10	08/05/21 08:34	08/06/21 14:00	7440-36-0	
Arsenic	**5.2**	mg/kg	0.97	0.10	10	08/05/21 08:34	08/06/21 14:00	7440-38-2	
Copper	**11.0**	mg/kg	0.97	0.30	10	08/05/21 08:34	08/06/21 14:00	7440-50-8	
Lead	**19.4**	mg/kg	0.48	0.13	10	08/05/21 08:34	08/06/21 14:00	7439-92-1	
Zinc	**50.8**	mg/kg	4.8	0.82	10	08/05/21 08:34	08/06/21 14:00	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.3**	%	0.50	0.50	1		07/22/21 17:00		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-66/3-5D **Lab ID: 60375626023** Collected: 07/21/21 10:30 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.6	9.8	1	07/23/21 16:45	07/27/21 10:13	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.6	9.4	1	07/23/21 16:45	07/27/21 10:13	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.6	4.3	1	07/23/21 16:45	07/27/21 10:13	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.6	9.5	1	07/23/21 16:45	07/27/21 10:13	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.6	2.6	1	07/23/21 16:45	07/27/21 10:13	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.6	3.7	1	07/23/21 16:45	07/27/21 10:13	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.6	7.8	1	07/23/21 16:45	07/27/21 10:13	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	95	%	35-120		1	07/23/21 16:45	07/27/21 10:13	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.60**	mg/kg	1.1	0.60	10	08/05/21 08:34	08/06/21 14:03	7440-36-0	
Arsenic	**6.6**	mg/kg	1.1	0.12	10	08/05/21 08:34	08/06/21 14:03	7440-38-2	
Copper	**11.3**	mg/kg	1.1	0.35	10	08/05/21 08:34	08/06/21 14:03	7440-50-8	
Lead	**14.5**	mg/kg	0.56	0.14	10	08/05/21 08:34	08/06/21 14:03	7439-92-1	
Zinc	**48.9**	mg/kg	5.6	0.94	10	08/05/21 08:34	08/06/21 14:03	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.8**	%	0.50	0.50	1		07/22/21 17:00		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-66/5-7 **Lab ID: 60375626024** Collected: 07/21/21 10:35 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.4**	ug/kg	41.7	10.4	1	07/23/21 16:45	07/27/21 10:31	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.9**	ug/kg	41.7	9.9	1	07/23/21 16:45	07/27/21 10:31	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	41.7	4.6	1	07/23/21 16:45	07/27/21 10:31	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.0**	ug/kg	41.7	10.0	1	07/23/21 16:45	07/27/21 10:31	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	41.7	2.8	1	07/23/21 16:45	07/27/21 10:31	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.7	3.9	1	07/23/21 16:45	07/27/21 10:31	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.2**	ug/kg	41.7	8.2	1	07/23/21 16:45	07/27/21 10:31	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	95	%	35-120		1	07/23/21 16:45	07/27/21 10:31	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.51**	mg/kg	0.95	0.51	10	08/05/21 08:34	08/06/21 14:11	7440-36-0	
Arsenic	**28.7**	mg/kg	0.95	0.10	10	08/05/21 08:34	08/06/21 14:11	7440-38-2	
Copper	**17.0**	mg/kg	0.95	0.29	10	08/05/21 08:34	08/06/21 14:11	7440-50-8	
Lead	**15.8**	mg/kg	0.47	0.12	10	08/05/21 08:34	08/06/21 14:11	7439-92-1	
Zinc	**53.5**	mg/kg	4.7	0.80	10	08/05/21 08:34	08/06/21 14:11	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**22.3**	%	0.50	0.50	1		07/22/21 17:00		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-59/2-4 **Lab ID: 60375626025** Collected: 07/21/21 10:52 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.0**	ug/kg	40.3	10.0	1	07/23/21 16:45	07/27/21 10:48	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.3	9.6	1	07/23/21 16:45	07/27/21 10:48	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.3	4.4	1	07/23/21 16:45	07/27/21 10:48	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.3	9.7	1	07/23/21 16:45	07/27/21 10:48	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.3	2.7	1	07/23/21 16:45	07/27/21 10:48	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.3	3.8	1	07/23/21 16:45	07/27/21 10:48	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.3	7.9	1	07/23/21 16:45	07/27/21 10:48	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	100	%	35-120		1	07/23/21 16:45	07/27/21 10:48	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.56**	mg/kg	1.0	0.56	10	08/05/21 08:34	08/06/21 14:14	7440-36-0	
Arsenic	**7.7**	mg/kg	1.0	0.11	10	08/05/21 08:34	08/06/21 14:14	7440-38-2	
Copper	**19.0**	mg/kg	1.0	0.32	10	08/05/21 08:34	08/06/21 14:14	7440-50-8	
Lead	**115**	mg/kg	0.52	0.13	10	08/05/21 08:34	08/06/21 14:14	7439-92-1	
Zinc	**80.1**	mg/kg	5.2	0.87	10	08/05/21 08:34	08/06/21 14:14	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**2.2J**	ug/kg	3.9	1.5	1	07/25/21 20:56	07/28/21 09:51	83-32-9	
Acenaphthylene	**8.2**	ug/kg	3.9	1.5	1	07/25/21 20:56	07/28/21 09:51	208-96-8	
Anthracene	**14.8**	ug/kg	3.9	1.6	1	07/25/21 20:56	07/28/21 09:51	120-12-7	
Benzo(a)anthracene	**64.2**	ug/kg	3.9	1.9	1	07/25/21 20:56	07/28/21 09:51	56-55-3	
Benzo(a)pyrene	**56.9**	ug/kg	3.9	1.4	1	07/25/21 20:56	07/28/21 09:51	50-32-8	
Benzo(b)fluoranthene	**101**	ug/kg	3.9	1.9	1	07/25/21 20:56	07/28/21 09:51	205-99-2	
Benzo(g,h,i)perylene	**44.2**	ug/kg	3.9	1.8	1	07/25/21 20:56	07/28/21 09:51	191-24-2	
Benzo(k)fluoranthene	**37.5**	ug/kg	3.9	2.2	1	07/25/21 20:56	07/28/21 09:51	207-08-9	
Chrysene	**73.5**	ug/kg	3.9	1.9	1	07/25/21 20:56	07/28/21 09:51	218-01-9	
Dibenz(a,h)anthracene	**8.6**	ug/kg	3.9	1.7	1	07/25/21 20:56	07/28/21 09:51	53-70-3	
Fluoranthene	**137**	ug/kg	3.9	3.0	1	07/25/21 20:56	07/28/21 09:51	206-44-0	
Fluorene	**4.3**	ug/kg	3.9	1.5	1	07/25/21 20:56	07/28/21 09:51	86-73-7	
Indeno(1,2,3-cd)pyrene	**34.9**	ug/kg	3.9	1.7	1	07/25/21 20:56	07/28/21 09:51	193-39-5	
Naphthalene	**3.9J**	ug/kg	3.9	1.7	1	07/25/21 20:56	07/28/21 09:51	91-20-3	
Phenanthrene	**74.7**	ug/kg	3.9	3.2	1	07/25/21 20:56	07/28/21 09:51	85-01-8	
Pyrene	**145**	ug/kg	3.9	2.1	1	07/25/21 20:56	07/28/21 09:51	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%	40-120		1	07/25/21 20:56	07/28/21 09:51	321-60-8	
Terphenyl-d14 (S)	90	%	45-130		1	07/25/21 20:56	07/28/21 09:51	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.1**	%	0.50	0.50	1		07/22/21 17:00		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-59/8-10 **Lab ID: 60375626026** Collected: 07/21/21 11:05 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.5	9.8	1	07/23/21 16:45	07/27/21 11:06	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.5	9.4	1	07/23/21 16:45	07/27/21 11:06	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.5	4.3	1	07/23/21 16:45	07/27/21 11:06	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.5	9.5	1	07/23/21 16:45	07/27/21 11:06	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.5	2.6	1	07/23/21 16:45	07/27/21 11:06	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.5	3.7	1	07/23/21 16:45	07/27/21 11:06	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.5	7.8	1	07/23/21 16:45	07/27/21 11:06	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	99	%	35-120		1	07/23/21 16:45	07/27/21 11:06	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.49**	mg/kg	0.91	0.49	10	08/05/21 08:34	08/06/21 14:16	7440-36-0	
Arsenic	**10.7**	mg/kg	0.91	0.097	10	08/05/21 08:34	08/06/21 14:16	7440-38-2	
Copper	**22.2**	mg/kg	0.91	0.28	10	08/05/21 08:34	08/06/21 14:16	7440-50-8	
Lead	**10.3**	mg/kg	0.46	0.12	10	08/05/21 08:34	08/06/21 14:16	7439-92-1	
Zinc	**66.7**	mg/kg	4.6	0.77	10	08/05/21 08:34	08/06/21 14:16	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/28/21 10:08	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/28/21 10:08	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1.7	1	07/25/21 20:56	07/28/21 10:08	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.1	1.9	1	07/25/21 20:56	07/28/21 10:08	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.1	1.5	1	07/25/21 20:56	07/28/21 10:08	50-32-8	
Benzo(b)fluoranthene	**<2.0**	ug/kg	4.1	2.0	1	07/25/21 20:56	07/28/21 10:08	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/28/21 10:08	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.1	2.3	1	07/25/21 20:56	07/28/21 10:08	207-08-9	
Chrysene	**<2.0**	ug/kg	4.1	2.0	1	07/25/21 20:56	07/28/21 10:08	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/28/21 10:08	53-70-3	
Fluoranthene	**<3.1**	ug/kg	4.1	3.1	1	07/25/21 20:56	07/28/21 10:08	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1.6	1	07/25/21 20:56	07/28/21 10:08	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/28/21 10:08	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.1	1.8	1	07/25/21 20:56	07/28/21 10:08	91-20-3	
Phenanthrene	**<3.4**	ug/kg	4.1	3.4	1	07/25/21 20:56	07/28/21 10:08	85-01-8	
Pyrene	**<2.2**	ug/kg	4.1	2.2	1	07/25/21 20:56	07/28/21 10:08	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%	40-120		1	07/25/21 20:56	07/28/21 10:08	321-60-8	
Terphenyl-d14 (S)	89	%	45-130		1	07/25/21 20:56	07/28/21 10:08	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.4**	%	0.50	0.50	1		07/22/21 17:01		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-52/2-3 **Lab ID: 60375626027** Collected: 07/21/21 11:24 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.7	9.9	1	07/23/21 16:45	07/27/21 11:24	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.7	9.5	1	07/23/21 16:45	07/27/21 11:24	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.7	4.3	1	07/23/21 16:45	07/27/21 11:24	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.7	9.6	1	07/23/21 16:45	07/27/21 11:24	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.7	2.6	1	07/23/21 16:45	07/27/21 11:24	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.7	3.7	1	07/23/21 16:45	07/27/21 11:24	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.7	7.8	1	07/23/21 16:45	07/27/21 11:24	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	90	%	35-120		1	07/23/21 16:45	07/27/21 11:24	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.55**	mg/kg	1.0	0.55	10	08/05/21 08:34	08/06/21 14:18	7440-36-0	
Arsenic	**7.4**	mg/kg	1.0	0.11	10	08/05/21 08:34	08/06/21 14:18	7440-38-2	
Copper	**16.1**	mg/kg	1.0	0.31	10	08/05/21 08:34	08/06/21 14:18	7440-50-8	
Lead	**12.8**	mg/kg	0.51	0.13	10	08/05/21 08:34	08/06/21 14:18	7439-92-1	
Zinc	**54.9**	mg/kg	5.1	0.86	10	08/05/21 08:34	08/06/21 14:18	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	3.9	1.5	1	07/25/21 20:56	07/28/21 10:25	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	3.9	1.5	1	07/25/21 20:56	07/28/21 10:25	208-96-8	
Anthracene	**<1.6**	ug/kg	3.9	1.6	1	07/25/21 20:56	07/28/21 10:25	120-12-7	
Benzo(a)anthracene	**11.1**	ug/kg	3.9	1.8	1	07/25/21 20:56	07/28/21 10:25	56-55-3	
Benzo(a)pyrene	**<1.4**	ug/kg	3.9	1.4	1	07/25/21 20:56	07/28/21 10:25	50-32-8	
Benzo(b)fluoranthene	**28.5**	ug/kg	3.9	1.9	1	07/25/21 20:56	07/28/21 10:25	205-99-2	
Benzo(g,h,i)perylene	**15.4**	ug/kg	3.9	1.8	1	07/25/21 20:56	07/28/21 10:25	191-24-2	
Benzo(k)fluoranthene	**10.9**	ug/kg	3.9	2.2	1	07/25/21 20:56	07/28/21 10:25	207-08-9	
Chrysene	**17.3**	ug/kg	3.9	1.9	1	07/25/21 20:56	07/28/21 10:25	218-01-9	
Dibenz(a,h)anthracene	**2.6J**	ug/kg	3.9	1.7	1	07/25/21 20:56	07/28/21 10:25	53-70-3	
Fluoranthene	**27.3**	ug/kg	3.9	3.0	1	07/25/21 20:56	07/28/21 10:25	206-44-0	
Fluorene	**<1.5**	ug/kg	3.9	1.5	1	07/25/21 20:56	07/28/21 10:25	86-73-7	
Indeno(1,2,3-cd)pyrene	**11.3**	ug/kg	3.9	1.7	1	07/25/21 20:56	07/28/21 10:25	193-39-5	
Naphthalene	**<1.7**	ug/kg	3.9	1.7	1	07/25/21 20:56	07/28/21 10:25	91-20-3	
Phenanthrene	**10.9**	ug/kg	3.9	3.2	1	07/25/21 20:56	07/28/21 10:25	85-01-8	
Pyrene	**24.6**	ug/kg	3.9	2.1	1	07/25/21 20:56	07/28/21 10:25	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	67	%	40-120		1	07/25/21 20:56	07/28/21 10:25	321-60-8	
Terphenyl-d14 (S)	86	%	45-130		1	07/25/21 20:56	07/28/21 10:25	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.1**	%	0.50	0.50	1		07/22/21 17:01		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-52/3-5 **Lab ID: 60375626028** Collected: 07/21/21 11:28 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.4**	ug/kg	41.8	10.4	1	07/23/21 16:45	07/27/21 11:42	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<10**	ug/kg	41.8	10	1	07/23/21 16:45	07/27/21 11:42	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	41.8	4.6	1	07/23/21 16:45	07/27/21 11:42	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.1**	ug/kg	41.8	10.1	1	07/23/21 16:45	07/27/21 11:42	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	41.8	2.8	1	07/23/21 16:45	07/27/21 11:42	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.8	3.9	1	07/23/21 16:45	07/27/21 11:42	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.2**	ug/kg	41.8	8.2	1	07/23/21 16:45	07/27/21 11:42	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	98	%	35-120		1	07/23/21 16:45	07/27/21 11:42	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.60**	mg/kg	1.1	0.60	10	08/05/21 08:34	08/06/21 14:20	7440-36-0	
Arsenic	**13.7**	mg/kg	1.1	0.12	10	08/05/21 08:34	08/06/21 14:20	7440-38-2	
Copper	**21.5**	mg/kg	1.1	0.35	10	08/05/21 08:34	08/06/21 14:20	7440-50-8	
Lead	**13.6**	mg/kg	0.56	0.15	10	08/05/21 08:34	08/06/21 14:20	7439-92-1	
Zinc	**65.0**	mg/kg	5.6	0.95	10	08/05/21 08:34	08/06/21 14:20	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.6**	ug/kg	4.2	1.6	1	07/25/21 20:56	07/28/21 10:42	83-32-9	
Acenaphthylene	**<1.6**	ug/kg	4.2	1.6	1	07/25/21 20:56	07/28/21 10:42	208-96-8	
Anthracene	**<1.7**	ug/kg	4.2	1.7	1	07/25/21 20:56	07/28/21 10:42	120-12-7	
Benzo(a)anthracene	**4.6**	ug/kg	4.2	2.0	1	07/25/21 20:56	07/28/21 10:42	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.2	1.5	1	07/25/21 20:56	07/28/21 10:42	50-32-8	
Benzo(b)fluoranthene	**9.5**	ug/kg	4.2	2.0	1	07/25/21 20:56	07/28/21 10:42	205-99-2	
Benzo(g,h,i)perylene	**5.1**	ug/kg	4.2	1.9	1	07/25/21 20:56	07/28/21 10:42	191-24-2	
Benzo(k)fluoranthene	**5.1**	ug/kg	4.2	2.3	1	07/25/21 20:56	07/28/21 10:42	207-08-9	
Chrysene	**7.0**	ug/kg	4.2	2.0	1	07/25/21 20:56	07/28/21 10:42	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.2	1.8	1	07/25/21 20:56	07/28/21 10:42	53-70-3	
Fluoranthene	**14.6**	ug/kg	4.2	3.1	1	07/25/21 20:56	07/28/21 10:42	206-44-0	
Fluorene	**<1.6**	ug/kg	4.2	1.6	1	07/25/21 20:56	07/28/21 10:42	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.0J**	ug/kg	4.2	1.8	1	07/25/21 20:56	07/28/21 10:42	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.2	1.8	1	07/25/21 20:56	07/28/21 10:42	91-20-3	
Phenanthrene	**6.3**	ug/kg	4.2	3.4	1	07/25/21 20:56	07/28/21 10:42	85-01-8	
Pyrene	**12.1**	ug/kg	4.2	2.2	1	07/25/21 20:56	07/28/21 10:42	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	74	%	40-120		1	07/25/21 20:56	07/28/21 10:42	321-60-8	
Terphenyl-d14 (S)	90	%	45-130		1	07/25/21 20:56	07/28/21 10:42	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**21.7**	%	0.50	0.50	1		07/22/21 17:01		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-45/0-2 **Lab ID: 60375626029** Collected: 07/21/21 12:55 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.8	10.1	1	07/23/21 16:45	07/27/21 12:00	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.8	9.7	1	07/23/21 16:45	07/27/21 12:00	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	40.8	4.5	1	07/23/21 16:45	07/27/21 12:00	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.8	9.8	1	07/23/21 16:45	07/27/21 12:00	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.8	2.7	1	07/23/21 16:45	07/27/21 12:00	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.8	3.8	1	07/23/21 16:45	07/27/21 12:00	11097-69-1	
PCB-1260 (Aroclor 1260)	**9.9J**	ug/kg	40.8	8.0	1	07/23/21 16:45	07/27/21 12:00	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	97	%	35-120		1	07/23/21 16:45	07/27/21 12:00	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.59**	mg/kg	1.1	0.59	10	08/05/21 08:34	08/06/21 14:22	7440-36-0	
Arsenic	**10.5**	mg/kg	1.1	0.12	10	08/05/21 08:34	08/06/21 14:22	7440-38-2	
Copper	**19.3**	mg/kg	1.1	0.34	10	08/05/21 08:34	08/06/21 14:22	7440-50-8	
Lead	**13.9**	mg/kg	0.55	0.14	10	08/05/21 08:34	08/06/21 14:22	7439-92-1	
Zinc	**66.6**	mg/kg	5.5	0.93	10	08/05/21 08:34	08/06/21 14:22	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**1230**	ug/kg	19.8	7.4	1	07/25/21 20:56	07/28/21 10:59	83-32-9	
Acenaphthylene	**68.4**	ug/kg	19.8	7.4	1	07/25/21 20:56	07/28/21 10:59	208-96-8	
Anthracene	**2880**	ug/kg	19.8	8.2	1	07/25/21 20:56	07/28/21 10:59	120-12-7	
Benzo(a)anthracene	**7600**	ug/kg	198	93.0	10	07/25/21 20:56	07/28/21 12:25	56-55-3	
Benzo(a)pyrene	**6310**	ug/kg	198	72.0	10	07/25/21 20:56	07/28/21 12:25	50-32-8	
Benzo(b)fluoranthene	**10100**	ug/kg	198	96.0	10	07/25/21 20:56	07/28/21 12:25	205-99-2	
Benzo(g,h,i)perylene	**3630**	ug/kg	19.8	8.9	1	07/25/21 20:56	07/28/21 10:59	191-24-2	
Benzo(k)fluoranthene	**3580**	ug/kg	19.8	11.0	1	07/25/21 20:56	07/28/21 10:59	207-08-9	
Chrysene	**7590**	ug/kg	198	94.2	10	07/25/21 20:56	07/28/21 12:25	218-01-9	
Dibenz(a,h)anthracene	**729**	ug/kg	19.8	8.5	1	07/25/21 20:56	07/28/21 10:59	53-70-3	
Fluoranthene	**17800**	ug/kg	198	149	10	07/25/21 20:56	07/28/21 12:25	206-44-0	
Fluorene	**1280**	ug/kg	19.8	7.7	1	07/25/21 20:56	07/28/21 10:59	86-73-7	
Indeno(1,2,3-cd)pyrene	**2880**	ug/kg	19.8	8.5	1	07/25/21 20:56	07/28/21 10:59	193-39-5	
Naphthalene	**254**	ug/kg	19.8	8.5	1	07/25/21 20:56	07/28/21 10:59	91-20-3	
Phenanthrene	**17200**	ug/kg	198	162	10	07/25/21 20:56	07/28/21 12:25	85-01-8	
Pyrene	**15200**	ug/kg	198	107	10	07/25/21 20:56	07/28/21 12:25	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	100	%	40-120		1	07/25/21 20:56	07/28/21 10:59	321-60-8	P3
Terphenyl-d14 (S)	136	%	45-130		1	07/25/21 20:56	07/28/21 10:59	1718-51-0	S0
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.0**	%	0.50	0.50	1		07/22/21 17:01		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-45/2-4 **Lab ID: 60375626030** Collected: 07/21/21 13:00 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.8	10.1	1	07/23/21 16:45	07/27/21 12:18	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.8	9.7	1	07/23/21 16:45	07/27/21 12:18	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	40.8	4.5	1	07/23/21 16:45	07/27/21 12:18	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.8	9.8	1	07/23/21 16:45	07/27/21 12:18	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.8	2.7	1	07/23/21 16:45	07/27/21 12:18	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.8	3.8	1	07/23/21 16:45	07/27/21 12:18	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.8	8.0	1	07/23/21 16:45	07/27/21 12:18	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	97	%	35-120		1	07/23/21 16:45	07/27/21 12:18	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.59**	mg/kg	1.1	0.59	10	08/05/21 08:34	08/06/21 14:24	7440-36-0	
Arsenic	**10.1**	mg/kg	1.1	0.12	10	08/05/21 08:34	08/06/21 14:24	7440-38-2	
Copper	**18.5**	mg/kg	1.1	0.34	10	08/05/21 08:34	08/06/21 14:24	7440-50-8	
Lead	**9.8**	mg/kg	0.55	0.14	10	08/05/21 08:34	08/06/21 14:24	7439-92-1	
Zinc	**53.4**	mg/kg	5.5	0.93	10	08/05/21 08:34	08/06/21 14:24	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/28/21 11:16	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/28/21 11:16	208-96-8	
Anthracene	**3.5J**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/28/21 11:16	120-12-7	
Benzo(a)anthracene	**8.3**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/28/21 11:16	56-55-3	
Benzo(a)pyrene	**6.8**	ug/kg	4.0	1.5	1	07/25/21 20:56	07/28/21 11:16	50-32-8	
Benzo(b)fluoranthene	**12.1**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/28/21 11:16	205-99-2	
Benzo(g,h,i)perylene	**5.6**	ug/kg	4.0	1.8	1	07/25/21 20:56	07/28/21 11:16	191-24-2	
Benzo(k)fluoranthene	**5.8**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/28/21 11:16	207-08-9	
Chrysene	**8.8**	ug/kg	4.0	1.9	1	07/25/21 20:56	07/28/21 11:16	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/28/21 11:16	53-70-3	
Fluoranthene	**25.5**	ug/kg	4.0	3.0	1	07/25/21 20:56	07/28/21 11:16	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1.6	1	07/25/21 20:56	07/28/21 11:16	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.5**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/28/21 11:16	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1.7	1	07/25/21 20:56	07/28/21 11:16	91-20-3	
Phenanthrene	**20.2**	ug/kg	4.0	3.3	1	07/25/21 20:56	07/28/21 11:16	85-01-8	
Pyrene	**18.6**	ug/kg	4.0	2.2	1	07/25/21 20:56	07/28/21 11:16	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	61	%	40-120		1	07/25/21 20:56	07/28/21 11:16	321-60-8	
Terphenyl-d14 (S)	81	%	45-130		1	07/25/21 20:56	07/28/21 11:16	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**20.2**	%	0.50	0.50	1		07/22/21 17:01		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-38/0-2 **Lab ID: 60375626031** Collected: 07/21/21 13:40 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<9.4**	ug/kg	38.0	9.4	1	07/23/21 16:45	07/27/21 13:12	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.1**	ug/kg	38.0	9.1	1	07/23/21 16:45	07/27/21 13:12	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.1**	ug/kg	38.0	4.1	1	07/23/21 16:45	07/27/21 13:12	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.1**	ug/kg	38.0	9.1	1	07/23/21 16:45	07/27/21 13:12	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	38.0	2.5	1	07/23/21 16:45	07/27/21 13:12	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.0	3.6	1	07/23/21 16:45	07/27/21 13:12	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.5**	ug/kg	38.0	7.5	1	07/23/21 16:45	07/27/21 13:12	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	100	%	35-120		1	07/23/21 16:45	07/27/21 13:12	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.53**	mg/kg	0.99	0.53	10	08/05/21 08:34	08/06/21 13:44	7440-36-0	
Arsenic	**8.1**	mg/kg	0.99	0.11	10	08/05/21 08:34	08/06/21 13:44	7440-38-2	
Copper	**17.9**	mg/kg	0.99	0.31	10	08/05/21 08:34	08/06/21 13:44	7440-50-8	
Lead	**57.3**	mg/kg	0.50	0.13	10	08/05/21 08:34	08/06/21 13:44	7439-92-1	
Zinc	**73.7**	mg/kg	5.0	0.84	10	08/05/21 08:34	08/06/21 13:44	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**3.0J**	ug/kg	3.8	1.4	1	07/23/21 15:09	07/28/21 13:17	83-32-9	
Acenaphthylene	**2.7J**	ug/kg	3.8	1.4	1	07/23/21 15:09	07/28/21 13:17	208-96-8	
Anthracene	**7.8**	ug/kg	3.8	1.6	1	07/23/21 15:09	07/28/21 13:17	120-12-7	
Benzo(a)anthracene	**38.2**	ug/kg	3.8	1.8	1	07/23/21 15:09	07/28/21 13:17	56-55-3	
Benzo(a)pyrene	**33.8**	ug/kg	3.8	1.4	1	07/23/21 15:09	07/28/21 13:17	50-32-8	
Benzo(b)fluoranthene	**56.7**	ug/kg	3.8	1.9	1	07/23/21 15:09	07/28/21 13:17	205-99-2	
Benzo(g,h,i)perylene	**27.8**	ug/kg	3.8	1.7	1	07/23/21 15:09	07/28/21 13:17	191-24-2	
Benzo(k)fluoranthene	**26.9**	ug/kg	3.8	2.1	1	07/23/21 15:09	07/28/21 13:17	207-08-9	
Chrysene	**41.7**	ug/kg	3.8	1.8	1	07/23/21 15:09	07/28/21 13:17	218-01-9	
Dibenz(a,h)anthracene	**5.6**	ug/kg	3.8	1.6	1	07/23/21 15:09	07/28/21 13:17	53-70-3	
Fluoranthene	**74.1**	ug/kg	3.8	2.9	1	07/23/21 15:09	07/28/21 13:17	206-44-0	
Fluorene	**2.4J**	ug/kg	3.8	1.5	1	07/23/21 15:09	07/28/21 13:17	86-73-7	
Indeno(1,2,3-cd)pyrene	**22.2**	ug/kg	3.8	1.6	1	07/23/21 15:09	07/28/21 13:17	193-39-5	
Naphthalene	**<1.6**	ug/kg	3.8	1.6	1	07/23/21 15:09	07/28/21 13:17	91-20-3	
Phenanthrene	**43.6**	ug/kg	3.8	3.1	1	07/23/21 15:09	07/28/21 13:17	85-01-8	
Pyrene	**67.8**	ug/kg	3.8	2.1	1	07/23/21 15:09	07/28/21 13:17	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	85	%	40-120		1	07/23/21 15:09	07/28/21 13:17	321-60-8	
Terphenyl-d14 (S)	99	%	45-130		1	07/23/21 15:09	07/28/21 13:17	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**14.6**	%	0.50	0.50	1		07/22/21 17:01		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Sample: GB-38/3-5 **Lab ID: 60375626032** Collected: 07/21/21 13:45 Received: 07/22/21 04:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.6	10.1	1	07/23/21 16:45	07/27/21 13:29	12674-11-2	CH
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.6	9.7	1	07/23/21 16:45	07/27/21 13:29	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.6	4.4	1	07/23/21 16:45	07/27/21 13:29	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.6	9.8	1	07/23/21 16:45	07/27/21 13:29	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.6	2.7	1	07/23/21 16:45	07/27/21 13:29	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.6	3.8	1	07/23/21 16:45	07/27/21 13:29	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.6	8.0	1	07/23/21 16:45	07/27/21 13:29	11096-82-5	CH
Surrogates									
Decachlorobiphenyl (S)	102	%	35-120		1	07/23/21 16:45	07/27/21 13:29	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City								
Antimony	**<0.60**	mg/kg	1.1	0.60	10	08/05/21 08:34	08/06/21 13:45	7440-36-0	M1,R1
Arsenic	**9.5**	mg/kg	1.1	0.12	10	08/05/21 08:34	08/06/21 13:45	7440-38-2	R1
Copper	**19.3**	mg/kg	1.1	0.35	10	08/05/21 08:34	08/06/21 13:45	7440-50-8	R1
Lead	**12.3**	mg/kg	0.56	0.14	10	08/05/21 08:34	08/06/21 13:45	7439-92-1	R1
Zinc	**59.5**	mg/kg	5.6	0.94	10	08/05/21 08:34	08/06/21 13:45	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City								
Acenaphthene	**<1.5**	ug/kg	4.1	1.5	1	07/23/21 15:09	07/28/21 13:34	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1.5	1	07/23/21 15:09	07/28/21 13:34	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1.7	1	07/23/21 15:09	07/28/21 13:34	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.1	1.9	1	07/23/21 15:09	07/28/21 13:34	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.1	1.5	1	07/23/21 15:09	07/28/21 13:34	50-32-8	
Benzo(b)fluoranthene	**<2.0**	ug/kg	4.1	2.0	1	07/23/21 15:09	07/28/21 13:34	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.1	1.8	1	07/23/21 15:09	07/28/21 13:34	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.1	2.3	1	07/23/21 15:09	07/28/21 13:34	207-08-9	
Chrysene	**<2.0**	ug/kg	4.1	2.0	1	07/23/21 15:09	07/28/21 13:34	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.1	1.8	1	07/23/21 15:09	07/28/21 13:34	53-70-3	
Fluoranthene	**<3.1**	ug/kg	4.1	3.1	1	07/23/21 15:09	07/28/21 13:34	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1.6	1	07/23/21 15:09	07/28/21 13:34	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/kg	4.1	1.8	1	07/23/21 15:09	07/28/21 13:34	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.1	1.8	1	07/23/21 15:09	07/28/21 13:34	91-20-3	
Phenanthrene	**<3.4**	ug/kg	4.1	3.4	1	07/23/21 15:09	07/28/21 13:34	85-01-8	
Pyrene	**<2.2**	ug/kg	4.1	2.2	1	07/23/21 15:09	07/28/21 13:34	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	82	%	40-120		1	07/23/21 15:09	07/28/21 13:34	321-60-8	
Terphenyl-d14 (S)	93	%	45-130		1	07/23/21 15:09	07/28/21 13:34	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City								
Percent Moisture	**19.8**	%	0.50	0.50	1		07/22/21 16:32		

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 1710286
QC Batch Method: 8330
Analysis Method: EPA 8330
Analysis Description: SVOA (HPLC) 8330B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 60375626011, 60375626012

METHOD BLANK: R3685137-1 Matrix: Solid
Associated Lab Samples: 60375626011, 60375626012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetryl	mg/kg	<0.0876	0.500	0.0876	07/28/21 13:57	
2,4-Dinitrotoluene	mg/kg	<0.0784	0.500	0.0784	07/28/21 13:57	
4-Nitrotoluene	mg/kg	<0.138	0.500	0.138	07/28/21 13:57	
RDX (Hexahydro-1,3,5-Trinitro-	mg/kg	<0.109	0.500	0.109	07/28/21 13:57	
Nitrobenzene	mg/kg	<0.0862	0.500	0.0862	07/28/21 13:57	
2,6-Dinitrotoluene	mg/kg	<0.0864	0.500	0.0864	07/28/21 13:57	
2-Nitrotoluene	mg/kg	<0.0915	0.500	0.0915	07/28/21 13:57	
3-Nitrotoluene	mg/kg	<0.113	0.500	0.113	07/28/21 13:57	
1,3,5-Trinitrobenzene	mg/kg	<0.0392	0.500	0.0392	07/28/21 13:57	
1,3-Dinitrobenzene	mg/kg	<0.0515	0.500	0.0515	07/28/21 13:57	
2,4,6-Trinitrotoluene	mg/kg	<0.0631	0.500	0.0631	07/28/21 13:57	
4-Amino-2,6-dinitrotoluene	mg/kg	<0.0573	0.500	0.0573	07/28/21 13:57	
2-Amino-4,6-dinitrotoluene	mg/kg	<0.0638	0.500	0.0638	07/28/21 13:57	
HMX (Octahydro-1,3,5,7-Tetrani	mg/kg	<0.0779	0.500	0.0779	07/28/21 13:57	
PETN	mg/kg	<0.212	0.500	0.212	07/28/21 13:57	
Nitroglycerin	mg/kg	<0.154	2.00	0.154	07/28/21 13:57	
1,3-Dimethyl-2-nitrobenzene	%	103	80.0-128		07/28/21 13:57	

LABORATORY CONTROL SAMPLE: R3685137-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetryl	mg/kg	8.00	7.60	95.0	80.0-122	
2,4-Dinitrotoluene	mg/kg	8.00	7.55	94.4	80.0-120	
4-Nitrotoluene	mg/kg	8.00	7.39	92.4	80.0-121	
RDX (Hexahydro-1,3,5-Trinitro-	mg/kg	8.00	7.47	93.4	80.0-120	
Nitrobenzene	mg/kg	8.00	7.54	94.3	80.0-120	
2,6-Dinitrotoluene	mg/kg	8.00	7.45	93.1	80.0-120	
2-Nitrotoluene	mg/kg	8.00	7.49	93.6	80.0-120	
3-Nitrotoluene	mg/kg	8.00	7.56	94.5	80.0-120	
1,3,5-Trinitrobenzene	mg/kg	8.00	7.49	93.6	80.0-124	
1,3-Dinitrobenzene	mg/kg	8.00	7.49	93.6	80.0-122	
2,4,6-Trinitrotoluene	mg/kg	8.00	7.31	91.4	80.0-120	
4-Amino-2,6-dinitrotoluene	mg/kg	8.00	7.43	92.9	80.0-120	
2-Amino-4,6-dinitrotoluene	mg/kg	8.00	7.25	90.6	80.0-123	
HMX (Octahydro-1,3,5,7-Tetrani	mg/kg	8.00	7.53	94.1	80.0-120	
PETN	mg/kg	8.00	7.70	96.3	80.0-137	
Nitroglycerin	mg/kg	8.00	7.32	91.5	78.0-120	
1,3-Dimethyl-2-nitrobenzene	%			95.3	80.0-128	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3685137-3 R3685137-4

Parameter	Units	L1381569-04 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Tetryl	mg/kg	ND	7.96	7.96	10.2	10.5	105	108	46.0-158	2.60	20	
2,4-Dinitrotoluene	mg/kg	ND	7.96	7.96	9.40	9.58	96.7	98.6	78.0-138	1.93	20	
4-Nitrotoluene	mg/kg	ND	7.96	7.96	9.32	9.47	96.0	97.5	80.0-129	1.56	20	
RDX (Hexahydro-1,3,5-Trinitro-	mg/kg	ND	7.96	7.96	8.57	8.87	88.2	91.3	57.0-126	3.50	20	
Nitrobenzene	mg/kg	ND	7.96	7.96	9.48	9.71	97.6	100	80.0-126	2.42	20	
2,6-Dinitrotoluene	mg/kg	ND	7.96	7.96	9.29	9.59	95.6	98.7	80.0-125	3.23	20	
2-Nitrotoluene	mg/kg	ND	7.96	7.96	9.30	9.59	95.7	98.7	80.0-125	3.10	20	
3-Nitrotoluene	mg/kg	ND	7.96	7.96	9.46	9.73	97.4	100	80.0-120	2.80	20	
1,3,5-Trinitrobenzene	mg/kg	ND	7.96	7.96	9.53	9.81	98.1	101	80.0-133	2.90	20	
1,3-Dinitrobenzene	mg/kg	ND	7.96	7.96	9.29	9.60	95.6	98.9	80.0-138	3.36	20	
2,4,6-Trinitrotoluene	mg/kg	ND	7.96	7.96	9.31	9.51	95.9	97.9	80.0-127	2.08	20	
4-Amino-2,6-dinitrotoluene	mg/kg	ND	7.96	7.96	9.23	9.48	95.0	97.6	80.0-127	2.74	20	
2-Amino-4,6-dinitrotoluene	mg/kg	ND	7.96	7.96	9.10	9.37	93.7	96.5	80.0-135	2.91	20	
HMX (Octahydro-1,3,5,7-Tetrani	mg/kg	ND	7.96	7.96	9.49	9.73	97.7	100	79.0-125	2.41	20	
PETN	mg/kg	ND	7.96	7.96	10.3	9.82	106	101	77.0-145	4.85	20	
Nitroglycerin	mg/kg	ND	7.96	7.96	9.26	9.40	95.4	96.7	66.0-137	1.44	20	
1,3-Dimethyl-2-nitrobenzene	%						98.1	101	80.0-128			

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 736069
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375626001, 60375626002, 60375626003, 60375626004, 60375626005, 60375626006, 60375626007, 60375626008, 60375626009, 60375626010

METHOD BLANK: 2952112 Matrix: Solid
Associated Lab Samples: 60375626001, 60375626002, 60375626003, 60375626004, 60375626005, 60375626006, 60375626007, 60375626008, 60375626009, 60375626010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	0.54	08/05/21 13:29	
Arsenic	mg/kg	<0.11	1.0	0.11	08/05/21 13:29	
Copper	mg/kg	<0.31	1.0	0.31	08/05/21 13:29	
Lead	mg/kg	<0.13	0.50	0.13	08/05/21 13:29	
Zinc	mg/kg	<0.84	5.0	0.84	08/05/21 13:29	

LABORATORY CONTROL SAMPLE: 2952113

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	95.1	95	80-120	
Arsenic	mg/kg	100	95.7	96	80-120	
Copper	mg/kg	100	102	102	80-120	
Lead	mg/kg	100	96.0	96	80-120	
Zinc	mg/kg	100	95.3	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952114 2952115

Parameter	Units	60375481031 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.59	98.5	113	34.3	44.6	35	39	75-125	26	20	M1,R1
Arsenic	mg/kg	5.0	98.5	113	93.4	110	90	92	75-125	16	20	
Copper	mg/kg	12.5	98.5	113	106	122	94	96	75-125	14	20	
Lead	mg/kg	8.7	98.5	113	102	119	95	97	75-125	15	20	
Zinc	mg/kg	39.2	98.5	113	130	145	92	93	75-125	11	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 736153
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375626011, 60375626012, 60375626013, 60375626014, 60375626015, 60375626016, 60375626017, 60375626018, 60375626019, 60375626020, 60375626021, 60375626022, 60375626023, 60375626024, 60375626025, 60375626026, 60375626027, 60375626028, 60375626029, 60375626030

METHOD BLANK: 2952413 Matrix: Solid
Associated Lab Samples: 60375626011, 60375626012, 60375626013, 60375626014, 60375626015, 60375626016, 60375626017, 60375626018, 60375626019, 60375626020, 60375626021, 60375626022, 60375626023, 60375626024, 60375626025, 60375626026, 60375626027, 60375626028, 60375626029, 60375626030

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	0.54	08/06/21 13:21	
Arsenic	mg/kg	<0.11	1.0	0.11	08/06/21 13:21	
Copper	mg/kg	<0.31	1.0	0.31	08/06/21 13:21	
Lead	mg/kg	<0.13	0.50	0.13	08/06/21 13:21	
Zinc	mg/kg	<0.84	5.0	0.84	08/06/21 13:21	

LABORATORY CONTROL SAMPLE: 2952414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	98.3	98	80-120	
Arsenic	mg/kg	100	99.3	99	80-120	
Copper	mg/kg	100	106	106	80-120	
Lead	mg/kg	100	101	101	80-120	
Zinc	mg/kg	100	97.6	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952415 2952416

Parameter	Units	60375626017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.62	108	108	46.7	56.3	43	52	75-125	19	20	M1
Arsenic	mg/kg	6.6	108	108	105	108	91	94	75-125	3	20	
Copper	mg/kg	16.5	108	108	119	123	95	98	75-125	3	20	
Lead	mg/kg	12.4	108	108	120	127	100	107	75-125	6	20	
Zinc	mg/kg	36.1	108	108	142	143	99	99	75-125	0	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 736159
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375626031, 60375626032

METHOD BLANK: 2952435 Matrix: Solid
Associated Lab Samples: 60375626031, 60375626032

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	0.54	08/06/21 13:40	
Arsenic	mg/kg	<0.11	1.0	0.11	08/06/21 13:40	
Copper	mg/kg	<0.31	1.0	0.31	08/06/21 13:40	
Lead	mg/kg	<0.13	0.50	0.13	08/06/21 13:40	
Zinc	mg/kg	<0.84	5.0	0.84	08/06/21 13:40	

LABORATORY CONTROL SAMPLE: 2952436

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	95.1	95	80-120	
Arsenic	mg/kg	100	95.5	95	80-120	
Copper	mg/kg	100	103	103	80-120	
Lead	mg/kg	100	97.8	98	80-120	
Zinc	mg/kg	100	95.1	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952437 2952438

Parameter	Units	60375626032 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.60	120	93.1	47.4	32.4	39	35	75-125	38	20	M1,R1
Arsenic	mg/kg	9.5	120	93.1	121	96.9	93	94	75-125	22	20	R1
Copper	mg/kg	19.3	120	93.1	135	109	96	96	75-125	21	20	R1
Lead	mg/kg	12.3	120	93.1	129	105	97	99	75-125	21	20	R1
Zinc	mg/kg	59.5	120	93.1	172	146	93	92	75-125	16	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 733926
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375626001, 60375626002, 60375626003, 60375626004, 60375626005, 60375626006, 60375626007, 60375626008, 60375626009, 60375626010, 60375626011, 60375626012, 60375626013, 60375626014, 60375626015, 60375626016, 60375626017, 60375626018, 60375626019, 60375626020

METHOD BLANK: 2945138 Matrix: Solid
Associated Lab Samples: 60375626001, 60375626002, 60375626003, 60375626004, 60375626005, 60375626006, 60375626007, 60375626008, 60375626009, 60375626010, 60375626011, 60375626012, 60375626013, 60375626014, 60375626015, 60375626016, 60375626017, 60375626018, 60375626019, 60375626020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<7.9	31.8	7.9	07/26/21 14:33	
PCB-1221 (Aroclor 1221)	ug/kg	<7.6	31.8	7.6	07/26/21 14:33	
PCB-1232 (Aroclor 1232)	ug/kg	<3.5	31.8	3.5	07/26/21 14:33	
PCB-1242 (Aroclor 1242)	ug/kg	<7.7	31.8	7.7	07/26/21 14:33	
PCB-1248 (Aroclor 1248)	ug/kg	<2.1	31.8	2.1	07/26/21 14:33	
PCB-1254 (Aroclor 1254)	ug/kg	<3.0	31.8	3.0	07/26/21 14:33	
PCB-1260 (Aroclor 1260)	ug/kg	<6.3	31.8	6.3	07/26/21 14:33	
Decachlorobiphenyl (S)	%	90	35-120		07/26/21 14:33	

LABORATORY CONTROL SAMPLE: 2945139

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	165	153	93	65-120	
PCB-1260 (Aroclor 1260)	ug/kg	165	156	95	65-120	
Decachlorobiphenyl (S)	%			92	35-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2945140 2945141

Parameter	Units	60375626017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<10.4	206	202	216	210	104	104	30-130	3	40	
PCB-1260 (Aroclor 1260)	ug/kg	<8.2	206	202	222	217	107	107	15-155	2	40	
Decachlorobiphenyl (S)	%						100	102	35-120		50	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 733927
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375626021, 60375626022, 60375626023, 60375626024, 60375626025, 60375626026, 60375626027, 60375626028, 60375626029, 60375626030, 60375626031, 60375626032

METHOD BLANK: 2945143 Matrix: Solid
Associated Lab Samples: 60375626021, 60375626022, 60375626023, 60375626024, 60375626025, 60375626026, 60375626027, 60375626028, 60375626029, 60375626030, 60375626031, 60375626032

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<8.1	32.6	8.1	07/26/21 15:09	
PCB-1221 (Aroclor 1221)	ug/kg	<7.8	32.6	7.8	07/26/21 15:09	
PCB-1232 (Aroclor 1232)	ug/kg	<3.6	32.6	3.6	07/26/21 15:09	
PCB-1242 (Aroclor 1242)	ug/kg	<7.8	32.6	7.8	07/26/21 15:09	
PCB-1248 (Aroclor 1248)	ug/kg	<2.2	32.6	2.2	07/26/21 15:09	
PCB-1254 (Aroclor 1254)	ug/kg	<3.1	32.6	3.1	07/26/21 15:09	
PCB-1260 (Aroclor 1260)	ug/kg	<6.4	32.6	6.4	07/26/21 15:09	
Decachlorobiphenyl (S)	%	91	35-120		07/26/21 15:09	

LABORATORY CONTROL SAMPLE: 2945144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	160	157	98	65-120	
PCB-1260 (Aroclor 1260)	ug/kg	160	158	99	65-120	
Decachlorobiphenyl (S)	%			98	35-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2945145 2945146

Parameter	Units	60375626032 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<10.1	205	207	232	250	114	121	30-130	7	40	CH
PCB-1260 (Aroclor 1260)	ug/kg	<8.0	205	207	237	235	116	113	15-155	1	40	CH
Decachlorobiphenyl (S)	%						108	103	35-120		50	CH

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 733929
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375626001, 60375626002, 60375626003, 60375626004, 60375626005, 60375626006, 60375626009, 60375626010, 60375626011, 60375626012, 60375626016, 60375626017, 60375626020, 60375626021, 60375626025, 60375626026, 60375626027, 60375626028, 60375626029, 60375626030

METHOD BLANK: 2945154
Matrix: Solid
Associated Lab Samples: 60375626001, 60375626002, 60375626003, 60375626004, 60375626005, 60375626006, 60375626009, 60375626010, 60375626011, 60375626012, 60375626016, 60375626017, 60375626020, 60375626021, 60375626025, 60375626026, 60375626027, 60375626028, 60375626029, 60375626030

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	<1.2	3.3	1.2	07/27/21 15:54	
Acenaphthylene	ug/kg	<1.2	3.3	1.2	07/27/21 15:54	
Anthracene	ug/kg	<1.4	3.3	1.4	07/27/21 15:54	
Benzo(a)anthracene	ug/kg	<1.5	3.3	1.5	07/27/21 15:54	
Benzo(a)pyrene	ug/kg	<1.2	3.3	1.2	07/27/21 15:54	
Benzo(b)fluoranthene	ug/kg	<1.6	3.3	1.6	07/27/21 15:54	
Benzo(g,h,i)perylene	ug/kg	<1.5	3.3	1.5	07/27/21 15:54	
Benzo(k)fluoranthene	ug/kg	<1.8	3.3	1.8	07/27/21 15:54	
Chrysene	ug/kg	<1.6	3.3	1.6	07/27/21 15:54	
Dibenz(a,h)anthracene	ug/kg	<1.4	3.3	1.4	07/27/21 15:54	
Fluoranthene	ug/kg	<2.5	3.3	2.5	07/27/21 15:54	
Fluorene	ug/kg	<1.3	3.3	1.3	07/27/21 15:54	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.4	3.3	1.4	07/27/21 15:54	
Naphthalene	ug/kg	<1.4	3.3	1.4	07/27/21 15:54	
Phenanthrene	ug/kg	<2.7	3.3	2.7	07/27/21 15:54	
Pyrene	ug/kg	<1.8	3.3	1.8	07/27/21 15:54	
2-Fluorobiphenyl (S)	%	84	40-120		07/27/21 15:54	
Terphenyl-d14 (S)	%	91	45-130		07/27/21 15:54	

LABORATORY CONTROL SAMPLE: 2945155

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	32.8	23.0	70	45-120	
Acenaphthylene	ug/kg	32.8	22.6	69	50-120	
Anthracene	ug/kg	32.8	26.1	79	50-120	
Benzo(a)anthracene	ug/kg	32.8	26.8	82	55-125	
Benzo(a)pyrene	ug/kg	32.8	26.3	80	45-120	
Benzo(b)fluoranthene	ug/kg	32.8	26.4	80	50-125	
Benzo(g,h,i)perylene	ug/kg	32.8	26.9	82	40-120	
Benzo(k)fluoranthene	ug/kg	32.8	27.8	85	55-120	
Chrysene	ug/kg	32.8	26.8	82	55-120	
Dibenz(a,h)anthracene	ug/kg	32.8	27.3	83	40-125	
Fluoranthene	ug/kg	32.8	28.0	85	50-125	
Fluorene	ug/kg	32.8	23.9	73	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	32.8	26.9	82	44-125	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

LABORATORY CONTROL SAMPLE: 2945155

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	32.8	22.6	69	45-120	
Phenanthrene	ug/kg	32.8	26.3	80	50-125	
Pyrene	ug/kg	32.8	27.8	85	50-125	
2-Fluorobiphenyl (S)	%			71	40-120	
Terphenyl-d14 (S)	%			84	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2945156 2945157

Parameter	Units	60375626017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<1.5	41.6	41.7	32.4	27.0	78	65	10-150	18	42	
Acenaphthylene	ug/kg	<1.5	41.6	41.7	31.1	26.4	75	63	30-125	16	44	
Anthracene	ug/kg	<1.7	41.6	41.7	35.4	32.5	85	78	10-160	8	54	
Benzo(a)anthracene	ug/kg	<2.0	41.6	41.7	37.8	34.4	91	82	10-160	10	62	
Benzo(a)pyrene	ug/kg	<1.5	41.6	41.7	36.0	32.4	86	78	10-150	10	66	
Benzo(b)fluoranthene	ug/kg	3.3J	41.6	41.7	39.3	34.5	86	75	10-165	13	61	
Benzo(g,h,i)perylene	ug/kg	<1.9	41.6	41.7	37.3	34.4	90	82	10-155	8	58	
Benzo(k)fluoranthene	ug/kg	<2.3	41.6	41.7	38.8	34.7	93	83	10-165	11	53	
Chrysene	ug/kg	2.5J	41.6	41.7	37.9	33.9	85	75	10-150	11	57	
Dibenz(a,h)anthracene	ug/kg	<1.8	41.6	41.7	35.8	33.2	86	80	10-175	7	48	
Fluoranthene	ug/kg	6.9	41.6	41.7	40.8	37.3	81	73	10-180	9	54	
Fluorene	ug/kg	<1.6	41.6	41.7	33.4	29.2	80	70	20-145	13	39	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.8	41.6	41.7	36.1	33.4	87	80	10-150	8	59	
Naphthalene	ug/kg	<1.8	41.6	41.7	32.3	26.1	78	62	10-165	21	54	
Phenanthrene	ug/kg	4.7	41.6	41.7	36.9	33.6	77	69	10-170	9	51	
Pyrene	ug/kg	5.2	41.6	41.7	40.8	37.2	86	77	10-180	9	61	
2-Fluorobiphenyl (S)	%						80	62	40-120			
Terphenyl-d14 (S)	%						90	83	45-130			

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 733930
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375626031, 60375626032

METHOD BLANK: 2945158 Matrix: Solid
Associated Lab Samples: 60375626031, 60375626032

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	<1.2	3.2	1.2	07/28/21 12:42	
Acenaphthylene	ug/kg	<1.2	3.2	1.2	07/28/21 12:42	
Anthracene	ug/kg	<1.3	3.2	1.3	07/28/21 12:42	
Benzo(a)anthracene	ug/kg	<1.5	3.2	1.5	07/28/21 12:42	
Benzo(a)pyrene	ug/kg	<1.2	3.2	1.2	07/28/21 12:42	
Benzo(b)fluoranthene	ug/kg	<1.6	3.2	1.6	07/28/21 12:42	
Benzo(g,h,i)perylene	ug/kg	<1.4	3.2	1.4	07/28/21 12:42	
Benzo(k)fluoranthene	ug/kg	<1.8	3.2	1.8	07/28/21 12:42	
Chrysene	ug/kg	<1.5	3.2	1.5	07/28/21 12:42	
Dibenz(a,h)anthracene	ug/kg	<1.4	3.2	1.4	07/28/21 12:42	
Fluoranthene	ug/kg	<2.4	3.2	2.4	07/28/21 12:42	
Fluorene	ug/kg	<1.3	3.2	1.3	07/28/21 12:42	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.4	3.2	1.4	07/28/21 12:42	
Naphthalene	ug/kg	<1.4	3.2	1.4	07/28/21 12:42	
Phenanthrene	ug/kg	<2.6	3.2	2.6	07/28/21 12:42	
Pyrene	ug/kg	<1.7	3.2	1.7	07/28/21 12:42	
2-Fluorobiphenyl (S)	%	92	40-120		07/28/21 12:42	
Terphenyl-d14 (S)	%	107	45-130		07/28/21 12:42	

LABORATORY CONTROL SAMPLE: 2945159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	31.9	26.5	83	45-120	
Acenaphthylene	ug/kg	31.9	25.6	80	50-120	
Anthracene	ug/kg	31.9	28.4	89	50-120	
Benzo(a)anthracene	ug/kg	31.9	28.8	90	55-125	
Benzo(a)pyrene	ug/kg	31.9	27.4	86	45-120	
Benzo(b)fluoranthene	ug/kg	31.9	28.5	89	50-125	
Benzo(g,h,i)perylene	ug/kg	31.9	30.2	95	40-120	
Benzo(k)fluoranthene	ug/kg	31.9	29.0	91	55-120	
Chrysene	ug/kg	31.9	28.6	90	55-120	
Dibenz(a,h)anthracene	ug/kg	31.9	29.8	93	40-125	
Fluoranthene	ug/kg	31.9	30.3	95	50-125	
Fluorene	ug/kg	31.9	27.2	85	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	31.9	29.2	92	44-125	
Naphthalene	ug/kg	31.9	26.0	82	45-120	
Phenanthrene	ug/kg	31.9	28.8	90	50-125	
Pyrene	ug/kg	31.9	30.3	95	50-125	
2-Fluorobiphenyl (S)	%			85	40-120	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

LABORATORY CONTROL SAMPLE: 2945159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			94	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2945160 2945161

Parameter	Units	60375626032 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<1.5	41.4	41.5	34.5	34.6	83	83	10-150	0	42	
Acenaphthylene	ug/kg	<1.5	41.4	41.5	33.6	34.0	81	82	30-125	1	44	
Anthracene	ug/kg	<1.7	41.4	41.5	37.4	37.5	91	90	10-160	0	54	
Benzo(a)anthracene	ug/kg	<1.9	41.4	41.5	37.3	38.4	90	92	10-160	3	62	
Benzo(a)pyrene	ug/kg	<1.5	41.4	41.5	36.4	37.2	88	90	10-150	2	66	
Benzo(b)fluoranthene	ug/kg	<2.0	41.4	41.5	36.4	40.3	88	97	10-165	10	61	
Benzo(g,h,i)perylene	ug/kg	<1.8	41.4	41.5	36.0	39.3	87	94	10-155	9	58	
Benzo(k)fluoranthene	ug/kg	<2.3	41.4	41.5	38.3	36.5	93	88	10-165	5	53	
Chrysene	ug/kg	<2.0	41.4	41.5	36.7	37.5	89	90	10-150	2	57	
Dibenz(a,h)anthracene	ug/kg	<1.8	41.4	41.5	35.7	39.0	86	94	10-175	9	48	
Fluoranthene	ug/kg	<3.1	41.4	41.5	40.2	40.4	97	97	10-180	1	54	
Fluorene	ug/kg	<1.6	41.4	41.5	36.0	36.6	87	88	20-145	2	39	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.8	41.4	41.5	34.7	37.1	84	89	10-150	7	59	
Naphthalene	ug/kg	<1.8	41.4	41.5	34.6	35.0	84	84	10-165	1	54	
Phenanthrene	ug/kg	<3.4	41.4	41.5	38.6	38.3	93	92	10-170	1	51	
Pyrene	ug/kg	<2.2	41.4	41.5	39.9	40.3	96	97	10-180	1	61	
2-Fluorobiphenyl (S)	%						85	85	40-120			
Terphenyl-d14 (S)	%						97	98	45-130			

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 733797
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375626001, 60375626002, 60375626003, 60375626004, 60375626005, 60375626006, 60375626007, 60375626008, 60375626009, 60375626010, 60375626011, 60375626012, 60375626013, 60375626014, 60375626015, 60375626032

METHOD BLANK: 2944575
Matrix: Solid
Associated Lab Samples: 60375626001, 60375626002, 60375626003, 60375626004, 60375626005, 60375626006, 60375626007, 60375626008, 60375626009, 60375626010, 60375626011, 60375626012, 60375626013, 60375626014, 60375626015, 60375626032

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	0.50	07/22/21 16:23	

SAMPLE DUPLICATE: 2944576

Parameter	Units	60375626032 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.8	19.8	0	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 733799
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375626016, 60375626017, 60375626018, 60375626019, 60375626020, 60375626021, 60375626022, 60375626023, 60375626024, 60375626025, 60375626026, 60375626027, 60375626028, 60375626029, 60375626030, 60375626031

METHOD BLANK: 2944578
Matrix: Solid
Associated Lab Samples: 60375626016, 60375626017, 60375626018, 60375626019, 60375626020, 60375626021, 60375626022, 60375626023, 60375626024, 60375626025, 60375626026, 60375626027, 60375626028, 60375626029, 60375626030, 60375626031

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	0.50	07/22/21 16:59	

SAMPLE DUPLICATE: 2944579

Parameter	Units	60375626017 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	21.4	21.3	0	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375626

QC Batch: 1713519
QC Batch Method: SM 2540 G
Analysis Method: SM 2540G
Analysis Description: Total Solids 2540 G-2011
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 60375626011, 60375626012

METHOD BLANK: R3685904-1 Matrix: Solid
Associated Lab Samples: 60375626011, 60375626012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00200			07/29/21 14:14	

LABORATORY CONTROL SAMPLE: R3685904-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3685904-3

Parameter	Units	L1382160-12 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	78.9	79.2	0.349	10	

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QUALIFIERS

Project: GSA GOODFELLOW
Pace Project No.: 60375626

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

WORKORDER QUALIFIERS

WO: 60375626

[1]	Fix WO number.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
P3	Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375626001	GB-47/3-5	EPA 3546	733926	EPA 8082	734210
60375626002	GB-47/5-7	EPA 3546	733926	EPA 8082	734210
60375626003	GB-41/4-6	EPA 3546	733926	EPA 8082	734210
60375626004	GB-41/6-8	EPA 3546	733926	EPA 8082	734210
60375626005	GB-34/1-3	EPA 3546	733926	EPA 8082	734210
60375626006	GB-34/3-5	EPA 3546	733926	EPA 8082	734210
60375626007	GB-33/2-4	EPA 3546	733926	EPA 8082	734210
60375626008	GB-33/4-6	EPA 3546	733926	EPA 8082	734210
60375626009	GB-40/1.5-3.5	EPA 3546	733926	EPA 8082	734210
60375626010	GB-40/11-13	EPA 3546	733926	EPA 8082	734210
60375626011	GB-39/5-6	EPA 3546	733926	EPA 8082	734210
60375626012	GB-39/6-7	EPA 3546	733926	EPA 8082	734210
60375626013	GB-46/2-4	EPA 3546	733926	EPA 8082	734210
60375626014	GB-46/2-4D	EPA 3546	733926	EPA 8082	734210
60375626015	GB-46/4-6	EPA 3546	733926	EPA 8082	734210
60375626016	GB-32/0-2	EPA 3546	733926	EPA 8082	734210
60375626017	GB-32/2-4	EPA 3546	733926	EPA 8082	734210
60375626018	GB-53/0-2	EPA 3546	733926	EPA 8082	734210
60375626019	GB-53/3-5	EPA 3546	733926	EPA 8082	734210
60375626020	GB-60/2-4	EPA 3546	733926	EPA 8082	734210
60375626021	GB-60/5-7	EPA 3546	733927	EPA 8082	734212
60375626022	GB-66/3-5	EPA 3546	733927	EPA 8082	734212
60375626023	GB-66/3-5D	EPA 3546	733927	EPA 8082	734212
60375626024	GB-66/5-7	EPA 3546	733927	EPA 8082	734212
60375626025	GB-59/2-4	EPA 3546	733927	EPA 8082	734212
60375626026	GB-59/8-10	EPA 3546	733927	EPA 8082	734212
60375626027	GB-52/2-3	EPA 3546	733927	EPA 8082	734212
60375626028	GB-52/3-5	EPA 3546	733927	EPA 8082	734212
60375626029	GB-45/0-2	EPA 3546	733927	EPA 8082	734212
60375626030	GB-45/2-4	EPA 3546	733927	EPA 8082	734212
60375626031	GB-38/0-2	EPA 3546	733927	EPA 8082	734212
60375626032	GB-38/3-5	EPA 3546	733927	EPA 8082	734212
60375626011	GB-39/5-6	8330	1710286	EPA 8330	1710286
60375626012	GB-39/6-7	8330	1710286	EPA 8330	1710286
60375626001	GB-47/3-5	EPA 3050	736069	EPA 6020	736275
60375626002	GB-47/5-7	EPA 3050	736069	EPA 6020	736275
60375626003	GB-41/4-6	EPA 3050	736069	EPA 6020	736275
60375626004	GB-41/6-8	EPA 3050	736069	EPA 6020	736275
60375626005	GB-34/1-3	EPA 3050	736069	EPA 6020	736275
60375626006	GB-34/3-5	EPA 3050	736069	EPA 6020	736275
60375626007	GB-33/2-4	EPA 3050	736069	EPA 6020	736275
60375626008	GB-33/4-6	EPA 3050	736069	EPA 6020	736275
60375626009	GB-40/1.5-3.5	EPA 3050	736069	EPA 6020	736275
60375626010	GB-40/11-13	EPA 3050	736069	EPA 6020	736275
60375626011	GB-39/5-6	EPA 3050	736153	EPA 6020	736384
60375626012	GB-39/6-7	EPA 3050	736153	EPA 6020	736384
60375626013	GB-46/2-4	EPA 3050	736153	EPA 6020	736384

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375626014	GB-46/2-4D	EPA 3050	736153	EPA 6020	736384
60375626015	GB-46/4-6	EPA 3050	736153	EPA 6020	736384
60375626016	GB-32/0-2	EPA 3050	736153	EPA 6020	736384
60375626017	GB-32/2-4	EPA 3050	736153	EPA 6020	736384
60375626018	GB-53/0-2	EPA 3050	736153	EPA 6020	736384
60375626019	GB-53/3-5	EPA 3050	736153	EPA 6020	736384
60375626020	GB-60/2-4	EPA 3050	736153	EPA 6020	736384
60375626021	GB-60/5-7	EPA 3050	736153	EPA 6020	736384
60375626022	GB-66/3-5	EPA 3050	736153	EPA 6020	736384
60375626023	GB-66/3-5D	EPA 3050	736153	EPA 6020	736384
60375626024	GB-66/5-7	EPA 3050	736153	EPA 6020	736384
60375626025	GB-59/2-4	EPA 3050	736153	EPA 6020	736384
60375626026	GB-59/8-10	EPA 3050	736153	EPA 6020	736384
60375626027	GB-52/2-3	EPA 3050	736153	EPA 6020	736384
60375626028	GB-52/3-5	EPA 3050	736153	EPA 6020	736384
60375626029	GB-45/0-2	EPA 3050	736153	EPA 6020	736384
60375626030	GB-45/2-4	EPA 3050	736153	EPA 6020	736384
60375626031	GB-38/0-2	EPA 3050	736159	EPA 6020	736382
60375626032	GB-38/3-5	EPA 3050	736159	EPA 6020	736382
60375626001	GB-47/3-5	EPA 3546	733929	EPA 8270 by SIM	734454
60375626002	GB-47/5-7	EPA 3546	733929	EPA 8270 by SIM	734454
60375626003	GB-41/4-6	EPA 3546	733929	EPA 8270 by SIM	734454
60375626004	GB-41/6-8	EPA 3546	733929	EPA 8270 by SIM	734454
60375626005	GB-34/1-3	EPA 3546	733929	EPA 8270 by SIM	734454
60375626006	GB-34/3-5	EPA 3546	733929	EPA 8270 by SIM	734454
60375626009	GB-40/1.5-3.5	EPA 3546	733929	EPA 8270 by SIM	734454
60375626010	GB-40/11-13	EPA 3546	733929	EPA 8270 by SIM	734454
60375626011	GB-39/5-6	EPA 3546	733929	EPA 8270 by SIM	734454
60375626012	GB-39/6-7	EPA 3546	733929	EPA 8270 by SIM	734454
60375626016	GB-32/0-2	EPA 3546	733929	EPA 8270 by SIM	734454
60375626017	GB-32/2-4	EPA 3546	733929	EPA 8270 by SIM	734454
60375626020	GB-60/2-4	EPA 3546	733929	EPA 8270 by SIM	734454
60375626021	GB-60/5-7	EPA 3546	733929	EPA 8270 by SIM	734454
60375626025	GB-59/2-4	EPA 3546	733929	EPA 8270 by SIM	734454
60375626026	GB-59/8-10	EPA 3546	733929	EPA 8270 by SIM	734454
60375626027	GB-52/2-3	EPA 3546	733929	EPA 8270 by SIM	734454
60375626028	GB-52/3-5	EPA 3546	733929	EPA 8270 by SIM	734454
60375626029	GB-45/0-2	EPA 3546	733929	EPA 8270 by SIM	734454
60375626030	GB-45/2-4	EPA 3546	733929	EPA 8270 by SIM	734454
60375626031	GB-38/0-2	EPA 3546	733930	EPA 8270 by SIM	734714
60375626032	GB-38/3-5	EPA 3546	733930	EPA 8270 by SIM	734714
60375626001	GB-47/3-5	ASTM D2974	733797		
60375626002	GB-47/5-7	ASTM D2974	733797		
60375626003	GB-41/4-6	ASTM D2974	733797		
60375626004	GB-41/6-8	ASTM D2974	733797		
60375626005	GB-34/1-3	ASTM D2974	733797		
60375626006	GB-34/3-5	ASTM D2974	733797		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375626

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375626007	**GB-33/2-4**	ASTM D2974	733797		
60375626008	**GB-33/4-6**	ASTM D2974	733797		
60375626009	**GB-40/1.5-3.5**	ASTM D2974	733797		
60375626010	**GB-40/11-13**	ASTM D2974	733797		
60375626011	**GB-39/5-6**	ASTM D2974	733797		
60375626012	**GB-39/6-7**	ASTM D2974	733797		
60375626013	**GB-46/2-4**	ASTM D2974	733797		
60375626014	**GB-46/2-4D**	ASTM D2974	733797		
60375626015	**GB-46/4-6**	ASTM D2974	733797		
60375626016	**GB-32/0-2**	ASTM D2974	733799		
60375626017	**GB-32/2-4**	ASTM D2974	733799		
60375626018	**GB-53/0-2**	ASTM D2974	733799		
60375626019	**GB-53/3-5**	ASTM D2974	733799		
60375626020	**GB-60/2-4**	ASTM D2974	733799		
60375626021	**GB-60/5-7**	ASTM D2974	733799		
60375626022	**GB-66/3-5**	ASTM D2974	733799		
60375626023	**GB-66/3-5D**	ASTM D2974	733799		
60375626024	**GB-66/5-7**	ASTM D2974	733799		
60375626025	**GB-59/2-4**	ASTM D2974	733799		
60375626026	**GB-59/8-10**	ASTM D2974	733799		
60375626027	**GB-52/2-3**	ASTM D2974	733799		
60375626028	**GB-52/3-5**	ASTM D2974	733799		
60375626029	**GB-45/0-2**	ASTM D2974	733799		
60375626030	**GB-45/2-4**	ASTM D2974	733799		
60375626031	**GB-38/0-2**	ASTM D2974	733799		
60375626032	**GB-38/3-5**	ASTM D2974	733797		
60375626011	**GB-39/5-6**	SM 2540 G	1713519	SM 2540G	1713519
60375626012	**GB-39/6-7**	SM 2540 G	1713519	SM 2540G	1713519

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Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO#: 60375626

60375626

Client Name: Burns & McDonnell

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☒ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☐ No ☒ Seals intact: Yes ☐ No ☒

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other ☒ Zplc

Thermometer Used: T294 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 2.0 **Corr. Factor** -0.3 **Corrected** 1.7 2.3

Date and initials of person examining contents: 1/22/21 (b) (6)

Temperature should be above freezing to 6°C 2.4

Chain of Custody present:	☒Yes ☐No ☐N/A	
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	
Samples arrived within holding time:	☒Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	
Sufficient volume:	☒Yes ☐No ☐N/A	
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	
Containers intact:	☒Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☒N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	
Sample labels match COC: Date / time / ID / analyses	☒Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: SL	☐Yes ☒No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#	☐Yes ☐No ☒N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only) Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No ☐Yes ☐No	
Trip Blank present:	☐Yes ☒No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☒N/A	
Samples from USDA Regulated Area: State: MO	☐Yes ☒No ☐N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☒N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

F-KS-C-003-Rev.11, February 28, 2018

BURNS McDONNELL

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600

Attention: JCARTER@BURNSMCD.COM

Laboratory: PACE ANALYTICAL
Address: 9608 CORIET BLVD
City/State/Zip: LENEXA, KS
Telephone: 913-563-1408

Document Control No: 133835-005
Lab. Reference No. or Episode No.:

Project Number: 133835
Client Name: GSA - GOODFELLOW

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Sample Type			Number of Containers	Analysis									Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		PAH	METALS	PCBs	VOCs	GRO	DRO	DRO/ORO	Explosives	PCB Congeners	
GB-47	3-5				3.0	5.0	7/20/21	1325		X		2	X	X	X							2-JGFU
GB-47	5-7				5.0	7.0		1330		X		2	X	X	X							
GB-41	4-6				4.0	6.0		1400		X		2	X	X	X							
GB-41	6-8				6.0	8.0		1405		X		2	X	X	X							
GB-34	1-3				1.0	3.0		1425		X		2	X	X	X							
GB-34	3-5				3.0	5.0		1430		X		2	X	X	X							
GB-33	2-4				2.0	4.0		1455		X		1		X	X							1-JGFU
GB-33	4-6				4.0	6.0		1500		X		1		X	X							
GB-40	1.5-3.5				1.5	3.5		1545		X		2	X	X	X							2-JGFU
GB-40	11-13				11.0	13.0		1600		X		2	X	X	X							
GB-39	5-6				5.0	6.0	7/21/21	750		X		3	X	X	X				X			3-JGFU
GB-39	6-7				6.0	7.0		755		X		3	X	X	X				X			
GB-46	2-4				7.0	4.0		847		X		2		X	X					X		2-JGFU
GB-46	2-4D				2.0	4.0		847		X		2		X	X					X		
GB-46	4-6				4.0	6.0		852		X		18		X	X					X		1-JGFU

Relinquished By (signature): [redacted] (6) (a)
Date/Time: 7/21/21 1405
Received By (signature): [redacted] (6) (a)
Date/Time: 7/21/21 1405

Relinquished By (signature): [redacted] (6) (a)
Date/Time:
Received By (signature): [redacted] (6) (a)
Date/Time: 7/22/21 0420

Special Instructions: SEE WORK ORDER

Ice Present in Container: Yes [X] No [ ]

Temperature Upon Receipt: 1.7, 2.3

Laboratory Comments:

BURNS McDONNELL

621618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: 913-563-1408

Document Control No: 133835-006
Lab. Reference No. or Episode No.: 60375626

Project Number: 133835
Client Name: GSA - Goodfellow

Sample Type: Matrix

Sample Number: Group or SWMU Name	Sample Point	Sample Designator	Sample Event: Round	Year	Sample Depth (in feet): From	To	Sample Collected: Date	Time	Liquid	Solid	Gas	Number of Containers	Analysis: PAHs	Metals	PCBs			Remarks
GB-32/0-2					0	2.0	7/21/21	821		X		2	X	X	X			2-JGFU
GB-32/2-4					2.0	4.0		825		X		2	X	X	X			↓
GB-32/2-4MS					2.0	4.0		825		X		2	X	X	X			↓
GB-32/2-4MSD					2.0	4.0		825		X		2	X	X	X			↓
GB-53/0-2					0	2.0		910		X		1		X	X			1-JGFU
GB-53/3-5					3.0	5.0		915		X		1		X	X			↓
GB-60/2-4					2.0	4.0		1000		X		2	X	X	X			2-JGFU
GB-60/5-7					5.0	7.0		1010		X		2	X	X	X			↓
GB-66/3-5					3.0	5.0		1030		X		1		X	X			1-JGFU
GB-66/3-5D					3.0	5.0		1030		X		1		X	X			↓
GB-66/5-7					5.0	7.0		1035		X		1		X	X			↓
GB-59/2-4					2.0	4.0		1052		X		2	X	X	X			2-JGFU
GB-59/8-10					8.0	10.0		1105		X		2	X	X	X			↓
GB-52/2-3					2.0	3.0		1124		X		2	X	X	X			↓
GB-52/3-5					3.0	5.0	↓	1128		X		2	X	X	X			↓

Sampler (printed): (b) (6)
Sampler (signature):

Special Instructions: SEE WORK ORDER

Relinquished By (signature): (b) (6) — Date/Time: 7/21/21 1405
Received By: (b) (6) — Date/Time: 1405 7/21
Relinquished By (signature): 2. — Date/Time:
(b) (6) — Date/Time: 7/22/21 0420

Ice Present in Container: Yes [X] No [ ]
Temperature Upon Receipt: 1.7, 2.3
Laboratory Comments:

BURNS McDONNELL

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600

Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: 913-563-1408

Document Control No: 133535-008
Lab. Reference No. or Episode No.:

Project Number: 133535

Client Name: GSA - Good Fellow

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Sample Type / Matrix			Number of Containers	Analysis: PAHs	Metals	PCBs	PCB Congeners		60375626 Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas							
GB-45	0-2				0	2.0	7/9/21	1255		X		2	X	X	X			2-JGFU
GB-45	2-4				2.0	4.0		1300		X		2	X	X	X			↓
GB-38	0-2				0	2.0		1340		X		2	X	X	X			
GB-38	3-5				3.0	5.0		1345		X		3	X	X	X	X		3 JGFU
GB-38	3-5MS				3.0	5.0		1345		X		3	X	X	X	X		
GB-38	3-5MSD				3.0	5.0		1345		X		3	X	X	X	X		↓

Sampler (signature): [redacted] (6) (b)

Relinquished By (signature): [redacted] (6) (b)

Date/Time: 7/21/21 1405

Relinquished By (signature): 2.

Date/Time

Sampler (signature):

[redacted] (6) (b)

Date/Time: 14:05 7/21

Date/Time: 7/22/21

Special Instructions: SEE WORK ORDER

Ice Present in Container: Yes [X] No [ ]

Temperature Upon Receipt: 1.7, 2.3

Laboratory Comments:

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600

Attention: JCARTER@BURNSMCD.COM

Laboratory: PACE ANALYTICAL
Address: 9608 CORIET BLVD
City/State/Zip: LEXENA, KS
Telephone: 913-563-1408

Document Control No: 133835-005
Lab. Reference No. or Episode No.:

Project Number: 133835

Client Name: GSA - GOODFELLOW

Sample Type

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Matrix			Number of Containers	Analysis									
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		PAH	METALS	PCBs	VOCs	GRO	MD	DRO/ORO	Explosives	PCB Congeners	Remarks
GB-47	3-5				3.0	5.0	7/20/21	1325		X		2	X	X	X							
GB-47	5-7				5.0	7.0		1330		X		2	X	X	X							
GB-41	4-6				4.0	6.0		1400		X		2	X	X	X							
GB-41	6-8				6.0	8.0		1405		X		2	X	X	X							
GB-34	1-3				1.0	3.0		1425		X		2	X	X	X							
GB-34	3-5				3.0	5.0		1430		X		2	X	X	X							
GB-33	2-4				2.0	4.0		1455		X		1		X	X							
GB-33	4-6				4.0	6.0		1500		X		1		X	X							
GB-40	1.5-3.5				1.5	3.5		1545		X		2	X	X	X							
GB-40	11-13				11.0	13.0		1600		X		2	X	X	X							
GB-39	5-6				5.0	6.0	7/21/21	750		X		3	X	X	X			X				
GB-39	6-7				6.0	7.0		755		X		3	X	X	X			X				
GB-46	2-4				2.0	4.0		847		X		2		X	X					X		
GB-46	2-4D				2.0	4.0		847		X		2		X	X					X		
GB-46	4-6				4.0	6.0		852		X		1		X	X							

Sampler (signature): [redacted] (6) (6)

Relinquished By (signature): [redacted] (6) (6)

Date/Time: 7/21/21 1700

Relinquished By (signature): 2.

Date/Time

Received By (signature): [redacted] (6) (6)

Date/Time: 7/21/21 1705

Received By (signature):

Date/Time

Special Instructions:
SEE WORK ORDER

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt:

Laboratory Comments:

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: 913-563-1408

Document Control No: 133835-0006
Lab. Reference No. or Episode No.:

Project Number: 133835

Client Name: GSA - Goodfellow

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Matrix			Number of Containers	Analysis: PAHs	Metals	PCBs				Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas								
GB-32	0-2				0	2.0	7/21/21	821		X		2	X	X	X				
GB-32	2-4				2.0	4.0		825		X		2	X	X	X				
GB-32	2-4MS				2.0	4.0		825		X		2	X	X	X				
GB-32	2-4MSD				2.0	4.0		825		X		2	X	X	X				
GB-53	0-2				0	2.0		910		X		1		X	X				
GB-53	3-5				3.0	5.0		915		X		1		X	X				
GB-60	2-4				2.0	4.0		1000		X		2	X	X	X				
GB-60	5-7				5.0	7.0		1010		X		2	X	X	X				
GB-66	3-5				3.0	5.0		1030		X		1		X	X				
GB-66	3-5D				3.0	5.0		1030		X		1		X	X				
GB-66	5-7				5.0	7.0		1035		X		1		X	X				
GB-59	2-4				2.0	4.0		1052		X		2	X	X	X				
GB-59	8-10				8.0	10.0		1105		X		2	X	X	X				
GB-52	2-3				2.0	3.0		1124		X		2	X	X	X				
GB-52	3-5				3.0	5.0		1128		X		2	X	X	X				

[redacted] (9) (a)

Sampler (signature):

Special Instructions:
SEE WORK ORDER

Relinquished By (signature): [redacted] (9) (b)
Date/Time: 7/21/21 1445

Relinquished By (signature):
2.
Date/Time

[redacted] (9) (b)
Received By (signature):

Date/Time: 14:05 7/21

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt:

Laboratory Comments:

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: 913-563-1408

Document Control No: 133835-008
Lab. Reference No. or Episode No.:

Project Number: 133835

Client Name: GSA - Good Fellow

Sample Type

Matrix

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Matrix			Number of Containers	Analysis							
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		PAHs	Metals	PCBs	PCB Congeners				Remarks
GB-45	0-2				0	2.0	7/2/21	1255		X		2	X	X	X					
GB-45	2-4				2.0	4.0		1300		X		2	X	X	X					
GB-38	0-2				0	2.0		1340		X		2	X	X	X					
GB-38	3-5				3.0	5.0		1345		X		3	X	X	X	X				
GB-38	3-5MS				3.0	5.0		1345		X		3	X	X	X	X				
GB-38	3-5MSD				3.0	5.0		1345		X		3	X	X	X	X				

[redacted] (6) (b)

Sampler (signature):

Special Instructions:
SEE WORK ORDER

Relinquished By (signature): [redacted] (6) (b)
Date/Time 7/2/21 1405

Relinquished By (signature):
2.
Date/Time

Received By (signature): [redacted] (6) (b)
Date/Time 14:05 7/2/21

Ice Present in Container:
Yes ☐ No ☐

Temperature Upon Receipt:

Laboratory Comments:

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

www.pacelabs.com

Report Prepared for:

Jeffrey Shopper
PACE Kansas
9608 Loriet Blvd
Lenexa KS 66219

REPORT OF LABORATORY ANALYSIS FOR PCBs

Report Information:

Pace Project #: 10571414
Sample Receipt Date: 07/23/2021
Client Project #: 60375626
Client Sub PO #: N/A
State Cert #: N/A

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 4 PCB Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

(b) (6) [redacted]

August 31, 2021

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
August 25, 2021

Report of Laboratory Analysis

This report should not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

The results relate only to the samples included in this report.

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

This report presents the results from the analyses performed on three samples submitted by a representative of Pace Analytical Services, Kansas. The samples were analyzed for the presence or absence of the twelve dioxin-like polychlorinated biphenyl (PCB) congeners using USEPA Method 1668A. Reporting limits were set to signal-to-noised based estimated detection limits based on the amount of dry sample weight extracted. This report was revised to reduce the analyte list to include only the dioxin-like PCB congeners and to report to the EDLs.

The dilution levels noted on the data tables is being adjusted to allow the correct data flags to populate the electronic deliverables as well as the data tables. Samples and MDL extracts were analyzed at elevated volumes. That volume is being treated as a 1x dilution for calculation purposes, with larger dilutions being factored from that volume.

The recoveries of the isotopically-labeled PCB internal standards in the sample extracts ranged from 50-93%. All of the laboratory spike results tables, the isotopically-labeled PCB internal standards in the extracts were recovered within the target ranges for this method. Since the quantification of the native PCB congeners was based on internal standard and isotope dilution methodology, the data were automatically corrected for variation in recovery and accurate values were obtained.

It should be noted that the extracts from this project were double spiked with cleanup standards. The additional standard was taken into account with the calculation of cleanup recoveries. Cleanup standards are used to troubleshoot recovery issues with the internal standards. Their use is not associated with quantitation, and does not impact the PCB content determinations.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to produce signal at the retention time of congeners 156/157 and to contain trace levels of several other PCB congeners. Congeners present in the sample extracts at levels similar to the method blank were flagged "B" and may have originated in the laboratory.

Laboratory and matrix spike samples were also prepared with the sample batch using reference and sample material that had been fortified with native standards. The results show that the spiked native compounds were recovered at 100-118%, with relative percent differences between one designated spike and its duplicate of 0.1-5.8%. These results were within the target ranges for this method.

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
		Missouri	10100
A2LA	2926.01	Montana	CERT0092
Alabama	40770	Nebraska	NE-OS-18-06
Alaska-DW	MN00064	Nevada	MN00064
Alaska-UST	17-009	New Hampshire	2081
Arizona	AZ0014	New Jersey	MN002
Arkansas - WW	88-0680	New York	11647
Arkansas-DW	MN00064	North Carolina-	27700
California	2929	North Carolina-	530
Colorado	MN00064	North Dakota	R-036
Connecticut	PH-0256	Ohio-DW	41244
Florida	E87605	Ohio-VAP (170	CL101
Georgia	959	Ohio-VAP (180	CL110
Hawaii	MN00064	Oklahoma	9507
Idaho	MN00064	Oregon- rimary	MN300001
Illinois	200011	Oregon-Second	MN200001
Indiana	C-MN-01	Pennsylvania	68-00563
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003
Kentucky-DW	90062	Tennessee	TN02818
Kentucky-WW	90062	Texas	T104704192
Louisiana-DEQ	AI-84596	Utah	MN00064
Louisiana-DW	MN00064	Vermont	VT-027053137
Maine	MN00064	Virginia	460163
Maryland	322	Washington	C486
Michigan	9909	West Virginia-D	382
Minnesota	027-053-137	West Virginia-D	9952C
Minnesota-Ag	via MN 027-053	Wisconsin	999407970
Minnesota-Petr	1240	Wyoming-UST	via A2LA 2926.
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise (EDL)

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Appendix A

Sample Management

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Sample ID Cross Reference

Client Sample ID	Pace Sample ID	Date Received	Sample Type
GB-46/2-4	60375626013-R	07/23/2021	Solid
GB-46/2-4D	60375626014-R	07/23/2021	Solid
GB-38/3-5-MS	60375626032-MS-R	07/23/2021	Solid
GB-38/3-5-MSD	60375626032-MSD-R	07/23/2021	Solid
GB-38/3-5	60375626032-R	07/23/2021	Solid

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

[X] Samples Pre-Logged into eCOC.

State Of Origin: MO
Cert. Needed: [ ] Yes [X] No

Workorder: 60375626 **Workorder Name:** GSA GOODFELLOW

Owner Received Date: 7/22/2021 **Results Requested By:** 8/19/2021

Report To	Subcontract To
Jeffrey Shopper Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 1(913)563-1408	Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

Requested Analysis

WO#: 10571414

10571414

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	1668A PCB Congeners	LAB USE ONLY
1	GB-46/2-4	PS	7/21/2021 08:47	60375626013	Solid	1	X	1
2	GB-46/2-4D	PS	7/21/2021 08:47	60375626014	Solid	1	X	2
3	GB-38/3-5	RQS	7/21/2021 13:45	60375626032	Solid	3	X	3
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[redacted] (b)(6)	7/22/21 1800	[redacted] (b)(6)	7/23/21 850
2				
3				

Comments

Cooler Temperature on Receipt	Custody Seal	Received on Ice	Samples Intact
4.6 °C	(Y) or N	(Y) or N	(Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) - MN**	Document Revised: 14Apr2021 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0150 Rev.02**	Pace Analytical Services - **Minneapolis**

Sample Condition Upon Receipt

Client Name: Pace Kansas **Project #:** WO#: 10571414

PM: RK1 Due Date: 08/20/21

CLIENT: PASI-KANS

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 5002 0651 3246 See Exceptions ☐ ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No **Seals Intact?** ☒ Yes ☐ No **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: _____ **Temp Blank?** ☐ Yes ☒ No

Thermometer: ☐ T1(0461) ☐ T2(1336) ☒ T3(0459) ☐ OS418-LS ☐ T4(0254) ☐ T5(0489) ☐ 160285052 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Dry ☐ Melted

Did Samples Originate in West Virginia? ☐ Yes ☒ No **Were All Container Temps Taken?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** _____ °C

Correction Factor: TVC **Cooler Temp Corrected w/temp blank:** _____ °C

Average Corrected Temp (no temp blank only): 4.6 °C ☒ See Exceptions ENV-FRM-MIN4-0142 ☐ 1 Container

USDA Regulated Soil: (☒ N/A, water sample/Other: SL) **Date/Initials of Person Examining Contents:** (b) (6) 7.23.21

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒ Yes	☐ No		1.
Chain of Custody Relinquished?	☒ Yes	☐ No		2.
Sampler Name and/or Signature on COC?	☐ Yes	☐ No	☒ N/A	3.
Samples Arrived within Hold Time?	☒ Yes	☐ No		4.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		5. ☐ Fecal Coliform ☐ HPC ☐ Total Coliform/E coli ☐ BOD/cBOD ☐ Hex Chrome ☐ Turbidity ☐ Nitrate ☐ Nitrite ☐ Orthophos ☐ Other
Rush Turn Around Time Requested?	☐ Yes	☒ No		6.
Sufficient Volume?	☒ Yes	☐ No		7.
Correct Containers Used?	☒ Yes	☐ No		8.
-Pace Containers Used?	☒ Yes	☐ No		
Containers Intact?	☒ Yes	☐ No		9.
Field Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	10. Is sediment visible in the dissolved container? ☐ Yes ☐ No
Is sufficient information available to reconcile the samples to the COC?	☒ Yes	☐ No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐ ENV-FRM-MIN4-0142
Matrix: ☐ Water ☒ Soil ☐ Oil ☐ Other				
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☐ Yes	☐ No	☒ N/A	☐ NaOH ☐ HNO_3 ☐ H_2SO_4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐ Yes	☐ No	☒ N/A	Positive for Res. Chlorine? ☐ Yes ☐ No **pH Paper Lot#** **See Exception** ☐ ENV-FRM-MIN4-0142
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐ Yes	☐ No	☒ N/A	13. **See Exception** ☐ ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)?	☐ Yes	☐ No	☒ N/A	
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	Pace Trip Blank Lot # (if purchased):

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: (b) (6) **Date:** 07/27/21

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: (b) (6)

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) Exception Form**	Document Revised: 04Jun2020 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0142 Rev.01**	Pace Analytical Services - **Minneapolis**

SCUR Exceptions:

Workorder #:

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank		
Read Temp	Corrected Temp	Average Temp
5.4		4.6
3.8	TNTC	
4.1		
5.1		

Tracking Number/Temperature	

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Comments:

1668A - 209 | Solid | Soxhlet | EB-31098

Extract Solvents:

Extraction On (Date/Time): 08/10/21 14:15

QC Matrix Lot #: Silica 596 | **Toluene Lot #** 206135

Time of Spiking: 08/10/21 14:03 | **Hexane Lot #**

Extraction Off (Date/Time): 08/11/21 07:15

Balance: 10BALY | **MeCl Lot #**

Standards	Name/ID	Amount	Initial	Witness	Expiration Date	Dispenser
Internal Std.	209-I-20170-172	100	AH	SJ	07/20/22	Q763
Native	209-N-20170-144	100	AH	SJ	01/13/22	Q763
Cl37 Std.	209-CL-20170-174	100			07/29/22	Q678
Recovery	209R-20170-164	10	MCH		06/25/22	Q763
Tridecane	A0416109	10	MCH			Q763
Others						

#	Sample ID	Internal Standards	Native Standards	Extracted mL or g	Glassware Set	Location	Comments
1	BLANK-92218	x		10.7			
2	LCS-92217	x	x	10.5			
3	60375626032-MS-R	x	x	12.9		10-C16-049	
4	60375626032-MSD-R	x	x	12.6		10-C16-049	
5	60375481005-R	x		12.6		10-C16-046	
6	60375481009-R	x		12.9		10-C16-046	
7	60375481043-R	x		12.3		10-C16-046	
8	60375626013-R	x		13.1		10-C16-049	
9	60375626014-R	x		12.7		10-C16-049	
10	60375626032-R	x		12.6		10-C16-049	
11	60375692004-R	x		13.2		10-C16-053	
12	60375692012-R	x		13.6		10-C16-053	
13	60375692020-R	x		12.1		10-C16-053	
14	60375838006-R	x		12.9		10-C16-062	
15	60375838015-R	x		13.2		10-C16-062	

Relinquished By: M | Received By: | Date:

Batch Notes:

Silica		Alumina		Carbon		Florisil	
Initials	CW1/PED	Initials		Initials		Initials	
Date	8/11/2021	Date		Date		Date	
Neutral Batch	599	Alumina Lot #		Hexane Lot #		Florisil Lot #	
Basic Batch	750	Hexane Lot #		Dispenser		Hexane Lot #	
Acid Batch	876	Dispenser		50% Batch		Dispenser	
Hexane Lot #	213846	60% Batch		Dispenser		6% Batch	
Dispenser	Q758	Dispenser		75% Batch		Dispenser	
				Dispenser			
				Toluene Lot #			
				Dispenser			
				Methanol Lot #			
				Dispenser			

Acid Base

Sulphuric Acid Lot #
Base Batch

1 maybe double spiked with 209/cl. 8/13/21

Pace Analytical™

Solid Sample Moisture Log

Sample ID	Client Sample ID		% Moisture	% Solids	Amount Extracted	Assayed
60375626013	GB-46/2-4		20.5381	79.4619	13.1	7/23/2021
60375626014	GB-46/2-4D		19.7309	80.2691	12.71	7/23/2021
60375626032	GB-38/3-5		19.8308	80.1692	12.62	7/23/2021

Note:
Total weight is the amount of wet sample required to give 10g dry weight

Page 1 of 1

Client names have been blacked out on notebook pages in order to preserve client confidentiality

Analysis Key Code List

- = Not used

✔ = Worked up

= See comment # below

Li = Liner, replace or clean

Ba = Baseplate, change

SyB = Syringe, replace – bent

SyP = Syringe, replace – plugged

SyO = Syringe, replace – other

IS = Injector Septum, replace

BS = Batch Septum, replace

Fi = Filament, replace

Co = Contacts, adjust

Ca = re-Calibrate

Tu = Tune

TC = Tune and Calibrate

CC () = Cut Column (length cut)

CO = Carry-Over possible

RRM = ReRun - Matrix

RRLM = ReRun – Lock Mass

RRBI = ReRun – Bad Injection

RRRT = ReRun – Retention Time shift

RR>S = Rerun – need better Sensitivity

Re = Re-extract

AS = Adjust Slits

LC = Leak Check

RB = Re-Boot system

CiS = Cleaned inner Source

CoS = Cleaned outer Source

AiS = Alternate inner Source

AoS = Alternate outer Source

<Y = Adjust Y focus down

>Y = Adjust Y focus up

Di () = Dilution needed (amount needed)

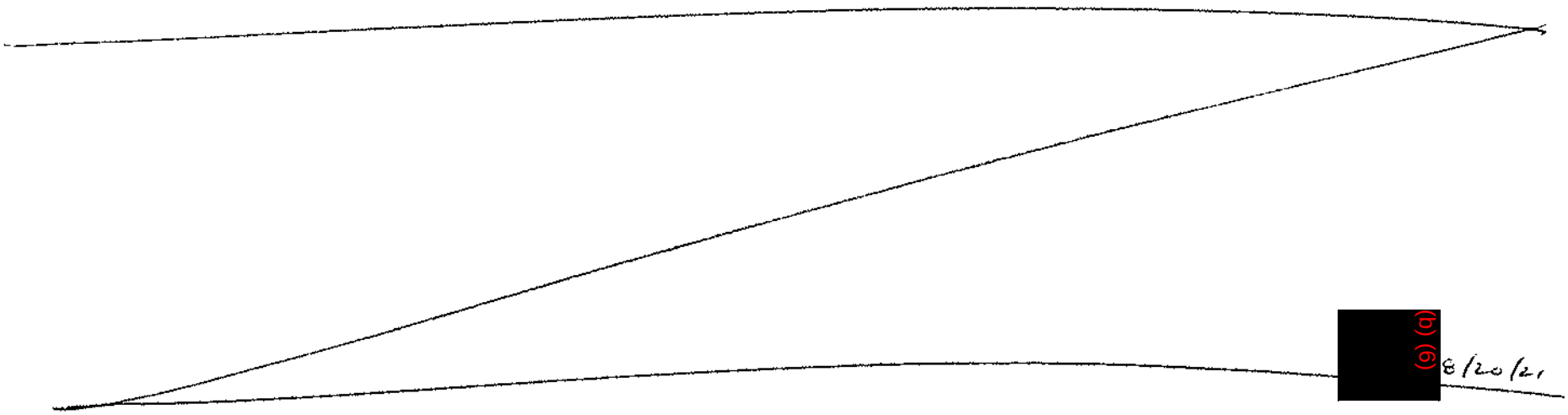
FE = Front End – liner, baseplate and septum

Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210818B.SPL
Last Modified: Wednesday, August 18, 2021 19:39:42 Central Daylight Time
Printed: Thursday, August 19, 2021 09:36:01 Central Daylight Time

10MSHR12 8/18/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210818B_01	CAL CS3/CPM-20-123-058 - CVS liner, TC	220717	8290/1613B	dioxfurY	DioxFur_Y	Tray1:1	1.000000	---
2	Y210818B_02	Blank Nonane - CVS	---	8290/1613B	dioxfurY	DioxFur_Y	Tray1:3	1.000000	---
3	Y210818B_03	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
4	Y210818B_04	CAL CS3-20-123-060 - CVS windows	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
5	Y210818B_05	CAL CS3-20-123-060 - CVS TC	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
6	Y210818B_06	CAL CS2-20-123-053 - CVS TC	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:15	1.000000	---
7	Y210818B_07	CAL CS1-20-123-041 - CVS bad inj	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
8	Y210818B_08	CAL CS1-20-123-041 - CVS	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
9	Y210818B_09	CAL CS5-20-123-044 - CVS	220331	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:17	1.000000	---
10	Y210818B_10	CAL CS4-20-123-055 - CVS	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:18	1.000000	---
11	Y210818B_11	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
12	Y210818B_12	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
13	Y210818B_13	LCS LCS-92213 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:19	1.000000	---
14	Y210818B_14	LCS LCSD-92214 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:20	1.000000	---
15	Y210818B_15	Samp 60375626032-MS-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:21	1.000000	---
16	Y210818B_16	Samp 60375626032-MSD-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:22	1.000000	---
17	Y210818B_17	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
18	Y210818B_18	Samp 60375626032-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:23	1.000000	---
19	Y210818B_19	Samp 60375626013-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:24	1.000000	---
20	Y210818B_20	Samp 60375626014-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:25	1.000000	---
21	Y210818B_21	Samp 60375838006-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:26	1.000000	---
22	Y210818B_22	Samp 60375838015-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:27	1.000000	---
23	Y210818B_23	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---



Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210819A.SPL
Last Modified: Thursday, August 19, 2021 14:21:07 Central Daylight Time
Printed: Thursday, August 19, 2021 14:21:10 Central Daylight Time

10MSHR12 8/19/21

Page Position (1, 1)

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210819A_01	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
2	Y210819A_02	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
3	Y210819A_03	LCS LCS-92217 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
4	Y210819A_04	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
5	Y210819A_05	Samp 10573340001 - CVS [redacted] 2x	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:28	1.000000	---
6	Y210819A_06	Samp 10574009001 - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:29	1.000000	---
7	Y210819A_07	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
8	Y210819A_08	Samp 60375481005-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:30	1.000000	---
9	Y210819A_09	Blank Blank-92218 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:31	1.000000	---
10	Y210819A_10	Samp 60375481009-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:32	1.000000	---
11	Y210819A_11	Samp 60375481043-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:33	1.000000	---
12	Y210819A_12	Samp 60375692004-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:34	1.000000	---
13	Y210819A_13	Samp 60375692012-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:35	1.000000	---
14	Y210819A_14	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

(b) (6) 8/20/21

Appendix B

Sample Analysis Summary

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-46/2-4		
Lab Sample ID	60375626013-R		
Filename	Y210818B_19		
Injected By	CVS		
Total Amount Extracted	13.1 g	Matrix	Solid
% Moisture	20.5	Dilution	NA
Dry Weight Extracted	10.4 g	Collected	07/21/2021 08:47
ICAL ID	Y210818B12	Received	07/23/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 05:44

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.78	2.0	1.52	76
13C-3,3',4,4'-TeCB	77	35.454	0.80	2.0	1.58	79
13C-2,3,3',4,4'-PeCB	105	39.048	1.54	2.0	1.44	72
13C-2,3,4,4',5-PeCB	114	38.394	1.56	2.0	1.47	73
13C-2,3',4,4',5-PeCB	118	37.857	1.53	2.0	1.40	70
13C-2,3',4,4',5'-PeCB	123	37.505	1.60	2.0	1.44	72
13C-3,3',4,4',5-PeCB	126	42.200	1.50	2.0	1.56	78
13C-HxCB(156/157)	156/157	45.257	1.23	4.0	2.67	67
13C-2,3',4,4',5,5'-HxCB	167	44.100	1.20	2.0	1.35	68
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.27	2.0	1.42	71
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.05	2.0	1.46	73
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.439	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.721	1.57	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.26	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.200	0.93	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID GB-46/2-4
Lab Sample ID 60375626013-R
Filename Y210818B_19

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg		EMPC ng/Kg	EML ng/Kg
77		35.454	0.73	4.26	BJ	---	2.46
81		---	---	ND		---	2.62
105		39.081	1.59	7.41	BJ	---	2.00
114		---	---	ND		---	2.24
118		37.891	1.63	14.9	BJ	---	2.17
123		---	---	ND		---	2.17
126		---	---	ND		---	2.09
156	156/157	45.240	0.80	---	IJ	3.01	1.48
157	156/157	45.240	0.80	---	IJ	(3.01)	1.48
167		44.117	1.13	1.25	J	---	1.00
169		---	---	ND		---	1.21
189		---	---	ND		---	1.20

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-46/2-4		
Lab Sample ID	60375626013-R		
Filename	Y210818B_19		
Injected By	CVS		
Total Amount Extracted	13.1 g	Matrix	Solid
% Moisture	20.5	Dilution	NA
Dry Weight Extracted	10.4 g	Collected	07/21/2021 08:47
ICAL ID	Y210818B12	Received	07/23/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 05:44

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	4.3	2.5	0.00010	0.0004	0.0004	0.0004
81	ND	2.6	0.00030	0.0000	0.0004	0.0008
105	7.4	2.0	0.00003	0.0002	0.0002	0.0002
114	ND	2.2	0.00003	0.0000	0.0000	0.0001
118	15	2.2	0.00003	0.0004	0.0004	0.0004
123	ND	2.2	0.00003	0.0000	0.0000	0.0001
126	ND	2.1	0.10000	0.0000	0.1044	0.2088
156/157	ND	1.5	0.00003	0.0001	0.0001	0.0001
167	1.2	1.0	0.00003	0.0000	0.0000	0.0000
169	ND	1.2	0.03000	0.0000	0.0182	0.0363
189	ND	1.2	0.00003	0.0000	0.0000	0.0000
				0.0012 ng TEQ/Kg	**0.12 ng TEQ/Kg**	**0.25 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-46/2-4D		
Lab Sample ID	60375626014-R		
Filename	Y210818B_20		
Injected By	CVS		
Total Amount Extracted	12.7 g	Matrix	Solid
% Moisture	19.7	Dilution	NA
Dry Weight Extracted	10.2 g	Collected	07/21/2021 08:47
ICAL ID	Y210818B12	Received	07/23/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 06:43

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.883	0.77	2.0	1.80	90
13C-3,3',4,4'-TeCB	77	35.453	0.82	2.0	1.86	93
13C-2,3,3',4,4'-PeCB	105	39.064	1.58	2.0	1.71	85
13C-2,3,4,4',5-PeCB	114	38.410	1.54	2.0	1.75	88
13C-2,3',4,4',5-PeCB	118	37.856	1.51	2.0	1.69	85
13C-2,3',4,4',5'-PeCB	123	37.521	1.56	2.0	1.76	88
13C-3,3',4,4',5-PeCB	126	42.216	1.53	2.0	1.81	90
13C-HxCB(156/157)	156/157	45.273	1.26	4.0	3.18	79
13C-2,3',4,4',5,5'-HxCB	167	44.099	1.21	2.0	1.57	78
13C-3,3',4,4',5,5'-HxCB	169	48.542	1.22	2.0	1.65	83
13C-2,3,3',4,4',5,5'-HpCB	189	51.086	1.04	2.0	1.75	88
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.82	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.720	1.57	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.042	1.25	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.198	0.91	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID GB-46/2-4D
Lab Sample ID 60375626014-R
Filename Y210818B_20

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		35.504	0.69	2.55 BJ	---	1.94
81		---	---	ND	---	1.57
105		39.064	1.70	5.30 BJ	---	2.84
114		---	---	ND	---	2.31
118		37.907	1.73	10.9 BJ	---	2.29
123		---	---	ND	---	2.22
126		---	---	ND	---	3.25
156	156/157	45.273	1.25	4.08 BJ	---	3.07
157	156/157	45.273	1.25	(4.08) BJ	---	3.07
167		---	---	ND	---	2.67
169		---	---	ND	---	2.59
189		---	---	ND	---	1.05

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-46/2-4D		
Lab Sample ID	60375626014-R		
Filename	Y210818B_20		
Injected By	CVS		
Total Amount Extracted	12.7 g	Matrix	Solid
% Moisture	19.7	Dilution	NA
Dry Weight Extracted	10.2 g	Collected	07/21/2021 08:47
ICAL ID	Y210818B12	Received	07/23/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 06:43

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.6	1.9	0.00010	0.0003	0.0003	0.0003
81	ND	1.6	0.00030	0.0000	0.0002	0.0005
105	5.3	2.8	0.00003	0.0002	0.0002	0.0002
114	ND	2.3	0.00003	0.0000	0.0000	0.0001
118	11	2.3	0.00003	0.0003	0.0003	0.0003
123	ND	2.2	0.00003	0.0000	0.0000	0.0001
126	ND	3.2	0.10000	0.0000	0.1625	0.3249
156/157	4.1	3.1	0.00003	0.0001	0.0001	0.0001
167	ND	2.7	0.00003	0.0000	0.0000	0.0001
169	ND	2.6	0.03000	0.0000	0.0388	0.0776
189	ND	1.1	0.00003	0.0000	0.0000	0.0000
				0.00086 ng TEQ/Kg	**0.20 ng TEQ/Kg**	**0.40 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-38/3-5		
Lab Sample ID	60375626032-R		
Filename	Y210818B_18		
Injected By	CVS		
Total Amount Extracted	12.6 g	Matrix	Solid
% Moisture	19.8	Dilution	NA
Dry Weight Extracted	10.1 g	Collected	07/21/2021 13:45
ICAL ID	Y210818B12	Received	07/23/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 04:44

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.882	0.79	2.0	1.70	85
13C-3,3',4,4'-TeCB	77	35.452	0.78	2.0	1.77	88
13C-2,3,3',4,4'-PeCB	105	39.046	1.58	2.0	1.67	83
13C-2,3,4,4',5-PeCB	114	38.408	1.51	2.0	1.68	84
13C-2,3',4,4',5-PeCB	118	37.855	1.54	2.0	1.64	82
13C-2,3',4,4',5'-PeCB	123	37.520	1.51	2.0	1.66	83
13C-3,3',4,4',5-PeCB	126	42.197	1.53	2.0	1.76	88
13C-HxCB(156/157)	156/157	45.271	1.21	4.0	3.07	77
13C-2,3',4,4',5,5'-HxCB	167	44.097	1.26	2.0	1.56	78
13C-3,3',4,4',5,5'-HxCB	169	48.540	1.24	2.0	1.58	79
13C-2,3,3',4,4',5,5'-HpCB	189	51.063	1.08	2.0	1.69	84
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.81	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.720	1.59	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.024	1.24	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.196	0.92	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

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Tel: 612-607-1700
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Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-38/3-5
Lab Sample ID	60375626032-R
Filename	Y210818B_18

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		35.469	0.86	3.28 BJ	---	2.13
81		---	---	ND	---	2.27
105		39.062	1.33	3.71 BJ	---	1.81
114		---	---	ND	---	1.72
118		37.889	1.42	6.92 BJ	---	1.87
123		---	---	ND	---	2.17
126		---	---	ND	---	1.73
156	156/157	45.237	1.06	2.24 BJ	---	0.888
157	156/157	45.237	1.06	(2.24) BJ	---	0.888
167		---	---	ND	---	0.722
169		---	---	ND	---	0.662
189		---	---	ND	---	0.736

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
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ng's = Nanograms

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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-38/3-5		
Lab Sample ID	60375626032-R		
Filename	Y210818B_18		
Injected By	CVS		
Total Amount Extracted	12.6 g	Matrix	Solid
% Moisture	19.8	Dilution	NA
Dry Weight Extracted	10.1 g	Collected	07/21/2021 13:45
ICAL ID	Y210818B12	Received	07/23/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 04:44

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	3.3	2.1	0.00010	0.0003	0.0003	0.0003
81	ND	2.3	0.00030	0.0000	0.0003	0.0007
105	3.7	1.8	0.00003	0.0001	0.0001	0.0001
114	ND	1.7	0.00003	0.0000	0.0000	0.0001
118	6.9	1.9	0.00003	0.0002	0.0002	0.0002
123	ND	2.2	0.00003	0.0000	0.0000	0.0001
126	ND	1.7	0.10000	0.0000	0.0866	0.1732
156/157	2.2	0.89	0.00003	0.0001	0.0001	0.0001
167	ND	0.72	0.00003	0.0000	0.0000	0.0000
169	ND	0.66	0.03000	0.0000	0.0099	0.0199
189	ND	0.74	0.00003	0.0000	0.0000	0.0000
				0.00071 ng TEQ/Kg	**0.098 ng TEQ/Kg**	**0.19 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Appendix C

QC and Calibration Results Summary

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Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID	BLANK-92218		
Filename	Y210819A_09		
Injected By	CVS	Matrix	Solid
Total Amount Extracted	10.7 g	Extracted	08/10/2021 14:15
ICAL ID	Y210819A02	Analyzed	08/19/2021 19:31
CCal Filename(s)	Y210819A_01	Dilution	NA

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.78	2.0	1.35	68
13C-3,3',4,4'-TeCB	77	35.471	0.80	2.0	1.42	71
13C-2,3,3',4,4'-PeCB	105	39.048	1.57	2.0	1.29	64
13C-2,3,4,4',5-PeCB	114	38.411	1.52	2.0	1.34	67
13C-2,3',4,4',5-PeCB	118	37.857	1.54	2.0	1.28	64
13C-2,3',4,4',5'-PeCB	123	37.522	1.51	2.0	1.29	64
13C-3,3',4,4',5-PeCB	126	42.200	1.53	2.0	1.35	68
13C-HxCB (156/157)	156/157	45.274	1.24	4.0	2.46	61
13C-2,3',4,4',5,5'-HxCB	167	44.100	1.23	2.0	1.26	63
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.22	2.0	1.27	64
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.10	2.0	1.45	72
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.721	1.54	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.25	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.93	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a total weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-92218
Filename Y210819A_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		35.538	0.79	2.07	---	1.69
81		---	---	ND	---	1.17
105		39.065	1.67	3.33	---	1.29
114		---	---	ND	---	1.14
118		37.891	1.62	7.71	---	0.966
123		---	---	ND	---	1.32
126		---	---	ND	---	1.19
156	156/157	45.257	1.17	4.24	---	1.00
157	156/157	45.257	1.17	(4.24)	---	1.00
167		44.151	0.52	---	0.728	0.694
169		---	---	ND	---	0.884
189		---	---	ND	---	0.735

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

Results reported on a total weight basis

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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	CBLKHX		
Lab Sample ID	BLANK-92218		
Filename	Y210819A_09		
Injected By	CVS		
Total Amount Extracted	10.7 g	Matrix	Solid
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	08/10/2021 07:27
ICAL ID	Y210819A02	Received	08/10/2021 07:27
CCal Filename(s)	Y210819A_01	Extracted	08/10/2021 14:15
Method Blank ID		Analyzed	08/19/2021 19:31

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.1	1.7	0.00010	0.0002	0.0002	0.0002
81	ND	1.2	0.00030	0.0000	0.0002	0.0004
105	3.3	1.3	0.00003	0.0001	0.0001	0.0001
114	ND	1.1	0.00003	0.0000	0.0000	0.0000
118	7.7	0.97	0.00003	0.0002	0.0002	0.0002
123	ND	1.3	0.00003	0.0000	0.0000	0.0000
126	ND	1.2	0.10000	0.0000	0.0595	0.1191
156/157	4.2	1.0	0.00003	0.0001	0.0001	0.0001
167	ND	0.69	0.00003	0.0000	0.0000	0.0000
169	ND	0.88	0.03000	0.0000	0.0133	0.0265
189	ND	0.73	0.00003	0.0000	0.0000	0.0000
			0.00069 ng TEQ/Kg	**0.074 ng TEQ/Kg**		**0.15 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Method 1668A Polychlorobiphenyls
Laboratory Control Spike Analysis Results

Lab Sample ID	LCS-92217		
Filename	Y210819A_03	Matrix	Solid
Total Amount Extracted	10.5 g	Dilution	NA
ICAL ID	Y210819A02	Extracted	08/10/2021 14:15
CCal Filename(s)	Y210819A_01	Analyzed	08/19/2021 13:33
Method Blank ID	BLANK-92218	Injected By	CVS

	Native Analytes			Labeled Analytes		
PCB Isomer	**Spiked (ng)**	**Found (ng)**	**% Recovery**	**Spiked (ng)**	**Found (ng)**	**% Recovery**
81	1.0	1.07	107	2.0	1.61	80
77	1.0	1.06	106	2.0	1.69	85
105	1.0	1.10	110	2.0	1.62	81
114	1.0	1.06	106	2.0	1.49	74
118	1.0	1.13	113	2.0	1.50	75
123	1.0	1.12	112	2.0	1.46	73
126	1.0	1.13	113	2.0	1.67	84
156/157	2.0	2.16	108	4.0	2.92	73
167	1.0	1.11	111	2.0	1.43	71
169	1.0	1.09	109	2.0	1.57	78
189	1.0	1.12	112	2.0	1.56	78

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

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Method 1668A Polychlorobiphenyls
Matrix Spike Analysis Results

Client - PACE Kansas

Lab Sample ID	60375626032-MS-R		
Filename	Y210818B_15	Matrix	Solid
Total Amount Extracted	12.9 g	Dilution	NA
ICAL ID	Y210818B12	Extracted	08/10/2021 14:15
CCal Filename(s)	Y210818B_11	Analyzed	08/19/2021 01:45
Method Blank ID	BLANK-92218	Injected By	CVS

	Native Analytes			Labeled Analytes		
PCB Isomer	**Spiked (ng)**	**Found (ng)**	**% Recovery**	**Spiked (ng)**	**Found (ng)**	**% Recovery**
81	1.0	1.06	106	2.0	1.83	92
77	1.0	1.14	114	2.0	1.89	94
105	1.0	1.17	117	2.0	1.67	84
114	1.0	1.07	107	2.0	1.67	83
118	1.0	1.16	116	2.0	1.62	81
123	1.0	1.09	109	2.0	1.63	82
126	1.0	1.11	111	2.0	1.75	87
156/157	2.0	2.20	110	4.0	3.03	76
167	1.0	1.11	111	2.0	1.56	78
169	1.0	1.07	107	2.0	1.63	81
189	1.0	1.07	107	2.0	1.75	88

R = Recovery outside of method
1668A control limits
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms

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Method 1668A Polychlorobiphenyls
Matrix Spike Analysis Results

Client - PACE Kansas

Lab Sample ID	60375626032-MSD-R		
Filename	Y210818B_16	Matrix	Solid
Total Amount Extracted	12.6 g	Dilution	NA
ICAL ID	Y210818B12	Extracted	08/10/2021 14:15
CCal Filename(s)	Y210818B_11	Analyzed	08/19/2021 02:45
Method Blank ID	BLANK-92218	Injected By	CVS

	Native Analytes			Labeled Analytes		
PCB Isomer	**Spiked (ng)**	**Found (ng)**	**% Recovery**	**Spiked (ng)**	**Found (ng)**	**% Recovery**
81	1.0	1.12	112	2.0	1.75	87
77	1.0	1.08	108	2.0	1.85	92
105	1.0	1.15	115	2.0	1.73	87
114	1.0	1.04	104	2.0	1.71	85
118	1.0	1.16	116	2.0	1.62	81
123	1.0	1.10	110	2.0	1.64	82
126	1.0	1.15	115	2.0	1.78	89
156/157	2.0	2.25	112	4.0	3.13	78
167	1.0	1.09	109	2.0	1.57	79
169	1.0	1.10	110	2.0	1.67	84
189	1.0	1.07	107	2.0	1.78	89

R = Recovery outside of method
1668A control limits
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414

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Method PCB1668-209 Spike Sample Results

Client Sample ID	GB-38/3-5	Client - PACE Kansas		Dry Weights	
Lab Sample ID	60375626032-R	Sample Filename	Y210818B_18	Sample Amount	10.1 g
MS ID	60375626032-MS-R	MS Filename	Y210818B_15	MS Amount	10.4 g
MSD ID	60375626032-MSD-R	MSD Filename	Y210818B_16	MSD Amount	10.1 g

Analyte	Sample Qm (ng)	MS/MSD Qs (ng)	MS Qm (ng)	MSD Qm (ng)	RPD	Background Subtracted MS % Rec.	Background Subtracted MSD % Rec.	Background Subtracted RPD
3,3',4,4'-TeCB	0.03	1.00	1.14	1.08	5.7	114	108	5.7
3,4,4',5-TeCB	0.01	1.00	1.06	1.12	4.8	106	112	4.8
2,3,3',4,4'-PeCB	0.04	1.00	1.17	1.15	1.4	117	115	1.4
2,3,4,4',5-PeCB	0.00	1.00	1.07	1.04	3.0	107	104	3.0
2,3',4,4',5-PeCB	0.07	1.00	1.16	1.16	0.2	116	116	0.2
2,3',4,4',5'-PeCB	0.00	1.00	1.09	1.10	0.5	109	110	0.5
3,3',4,4',5-PeCB	0.01	1.00	1.11	1.15	3.9	111	115	3.9
(156/157)	0.02	2.00	2.20	2.25	2.1	110	112	2.1
2,3',4,4',5,5'-HxCB	0.00	1.00	1.11	1.09	2.1	111	109	2.1
3,3',4,4',5,5'-HxCB	0.00	1.00	1.07	1.10	2.6	107	110	2.6
2,3,3',4,4',5,5'-HpCB	0.00	1.00	1.07	1.07	0.2	107	107	0.2

Definitions

MS = Matrix Spike Qm = Quantity Measured % Rec. = Percent Recovery
MSD = Matrix Spike Duplicate Qs = Quantity Spiked RPD = Relative Percent Difference NA = Not Applicable

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1668A Polychlorobiphenyl Initial Calibration Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Labeled Analytes								
13C-2-MoCB	1	1.1281	1.1371	1.1947	1.1760	1.1630	1.1598	2.37
13C-4-MoCB	3	1.0640	1.0801	1.1344	1.0704	1.0791	1.0856	2.59
13C-2,2'-DiCB	4	0.5838	0.5905	0.6159	0.6016	0.6160	0.6016	2.42
13C-4,4'-DiCB	15	0.8671	0.8674	0.9026	0.8890	0.8838	0.8820	1.71
13C-2,2',6-TrCB	19	0.6518	0.6583	0.6793	0.6781	0.6675	0.6670	1.81
13C-3,4,4'-TrCB	37	0.9136	0.9078	0.9320	0.9281	0.9441	0.9251	1.57
13C-2,2',6,6'-TeCB	54	1.2015	1.1982	1.2367	1.2062	1.1969	1.2079	1.37
13C-3,4,4',5-TeCB	81	0.8105	0.8243	0.7935	0.8226	0.8519	0.8206	2.61
13C-3,3',4,4'-TeCB	77	0.8084	0.8297	0.8099	0.8409	0.8536	0.8285	2.36
13C-2,2',4,6,6'-PeCB	104	0.8928	0.8966	0.9380	0.9285	0.9345	0.9181	2.36
13C-2,3',4,4',5-PeCB	118	0.8808	0.8918	0.8447	0.9031	0.9144	0.8870	3.02
13C-2,3,4,4',5-PeCB	114	0.8430	0.8396	0.7988	0.8641	0.8732	0.8437	3.42
13C-2,3,3',4,4'-PeCB	105	0.8233	0.8438	0.7770	0.8313	0.8727	0.8296	4.21
13C-3,3',4,4',5-PeCB	126	0.7093	0.7406	0.6920	0.7434	0.7610	0.7293	3.83
13C-2,2',4,4',6,6'-HxCB	155	1.0410	1.0674	1.1567	1.0944	1.1268	1.0973	4.19
13C-2,3',4,4',5,5'-HxCB	167	0.8607	0.8709	0.8428	0.8727	0.9011	0.8696	2.44
13C-HxCB (156/157)	156/157	0.8084	0.8217	0.7685	0.8390	0.8785	0.8232	4.90
13C-3,3',4,4',5,5'-HxCB	169	0.7050	0.7431	0.6956	0.7356	0.7809	0.7320	4.63
13C-2,2',3,4',5,6,6'-HpCB	188	1.8461	1.8051	2.0332	1.9010	1.9439	1.9059	4.65
13C-2,3,3',4,4',5,5'-HpCB	189	1.0396	1.0625	1.0342	1.0628	1.0998	1.0598	2.44
13C-2,2',3,3',5,5',6,6'-OcCB	202	1.8555	1.8001	1.9524	1.8751	1.8944	1.8755	2.96
13C-2,3,3',4,4',5,5',6-OcCB	205	1.2295	1.2273	1.2103	1.2660	1.3073	1.2481	3.11
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	1.4825	1.4561	1.5068	1.4918	1.5154	1.4905	1.55
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.9735	0.9677	0.9782	0.9890	1.0198	0.9856	2.09
13C-DeCB	209	0.9807	0.9725	0.9894	1.0166	1.0325	0.9983	2.54
Cleanup Standards								
13C-2,4,4'-TrCB	28	1.1279	1.1236	1.1438	1.1543	1.0942	1.1287	2.03
13C-2,3,3',5,5'-PeCB	111	1.2662	1.2655	1.2546	1.2941	1.3028	1.2766	1.62
13C-2,2',3,3',5,5',6-HpCB	178	0.9144	0.9189	0.9469	0.9290	0.9363	0.9291	1.41
Recovery Standards								
13C-2,5-DiCB	9	1.9945	2.0083	2.1584	1.9996	1.9991	2.0320	3.49
13C-2,2',5,5'-TeCB	52	1.3756	1.3814	1.4507	1.3625	1.3655	1.3872	2.62
13C-2,2',4,5,5'-PeCB	101	1.1775	1.1790	1.2057	1.1624	1.1699	1.1789	1.39
13C-2,2',3,4,4',5'-HxCB	138	1.0936	1.0882	1.0560	1.0765	1.0680	1.0765	1.41
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.7592	0.7796	0.7083	0.7500	0.7570	0.7508	3.49

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Native Analytes								
3,3',4,4'-TeCB	77	0.9461	0.9096	0.8769	0.8801	0.8880	0.9002	3.19
3,4,4',5-TeCB	81	0.9288	0.9668	0.9297	0.9336	0.9225	0.9363	1.87
2,3,3',4,4'-PeCB	105	0.8988	0.9291	0.8993	0.8788	0.8741	0.8960	2.43
2,3,4,4',5-PeCB	114	0.9491	0.9449	0.9221	0.9123	0.9181	0.9293	1.79
2,3',4,4',5-PeCB	118	0.9601	0.9450	0.9247	0.8931	0.9014	0.9249	3.06
2,3',4,4',5'-PeCB	123	0.9836	0.9286	0.9173	0.8958	0.9153	0.9281	3.58
3,3',4,4',5-PeCB	126	0.9251	0.9019	0.8951	0.8795	0.8782	0.8959	2.14
(156/157)	156/157	0.9991	0.9562	0.9359	0.9116	0.9040	0.9413	4.07
2,3',4,4',5,5'-HxCB	167	0.9772	0.9597	0.9103	0.9081	0.8965	0.9304	3.84
3,3',4,4',5,5'-HxCB	169	0.9875	0.9950	0.9320	0.9014	0.8811	0.9394	5.40
2,3,3',4,4',5,5'-HpCB	189	0.9406	0.9065	0.8652	0.8759	0.8749	0.8926	3.47

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

		Data Files:		Time	Injected
ICAL ID	Y210818	CS-1	Y210818B_08	18:49	CVS
Calibration Date	08/18/2021	CS-2	Y210818B_06	16:45	CVS
Instrument	10MSHR12 (Y)	CS-3	Y210818B_11	21:47	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-4	Y210818B_10	20:47	CVS
Column ID No.	261111-02	CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Labeled Analytes							
13C-2-MoCB	1	3.14	3.09	3.16	3.11	3.19	2.66-3.60
13C-4-MoCB	3	3.15	3.11	3.02	3.15	3.11	2.66-3.60
13C-2,2'-DiCB	4	1.71	1.68	1.66	1.70	1.74	1.33-1.81
13C-4,4'-DiCB	15	1.53	1.54	1.55	1.54	1.53	1.33-1.81
13C-2,2',6-TrCB	19	1.03	1.05	1.03	1.04	1.04	0.88-1.20
13C-3,4,4'-TrCB	37	1.04	1.02	1.05	1.04	1.02	0.88-1.20
13C-2,2',6,6'-TeCB	54	0.80	0.79	0.80	0.80	0.81	0.65-0.89
13C-3,4,4',5-TeCB	81	0.77	0.76	0.76	0.77	0.77	0.65-0.89
13C-3,3',4,4'-TeCB	77	0.78	0.77	0.80	0.79	0.79	0.65-0.89
13C-2,2',4,6,6'-PeCB	104	1.58	1.57	1.60	1.59	1.58	1.32-1.78
13C-2,3',4,4',5-PeCB	118	1.53	1.55	1.52	1.55	1.55	1.32-1.78
13C-2,3,4,4',5-PeCB	114	1.53	1.53	1.51	1.55	1.56	1.32-1.78
13C-2,3,3',4,4'-PeCB	105	1.54	1.54	1.50	1.51	1.54	1.32-1.78
13C-3,3',4,4',5-PeCB	126	1.57	1.53	1.54	1.53	1.55	1.32-1.78
13C-2,2',4,4',6,6'-HxCB	155	1.26	1.26	1.26	1.27	1.26	1.05-1.43
13C-2,3',4,4',5,5'-HxCB	167	1.23	1.21	1.21	1.25	1.24	1.05-1.43
13C-HxCB (156/157)	156/157	1.22	1.22	1.23	1.23	1.25	1.05-1.43
13C-3,3',4,4',5,5'-HxCB	169	1.23	1.24	1.22	1.24	1.23	1.05-1.43
13C-2,2',3,4',5,6,6'-HpCB	188	1.09	1.08	1.09	1.10	1.10	0.88-1.20
13C-2,3,3',4,4',5,5'-HpCB	189	1.02	1.02	1.03	1.03	1.04	0.88-1.20
13C-2,2',3,3',5,5',6,6'-OcCB	202	0.90	0.90	0.91	0.89	0.88	0.76-1.02
13C-2,3,3',4,4',5,5',6-OcCB	205	0.89	0.90	0.90	0.90	0.88	0.76-1.02
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	0.80	0.79	0.80	0.80	0.80	0.66-0.90
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.79	0.79	0.80	0.81	0.81	0.66-0.90
13C-DeCB	209	0.74	0.74	0.73	0.74	0.73	0.59-0.79
Cleanup Standards							
13C-2,4,4'-TrCB	28	1.03	1.01	1.03	1.02	1.02	0.88-1.20
13C-2,3,3',5,5'-PeCB	111	1.60	1.60	1.61	1.60	1.60	1.32-1.78
13C-2,2',3,3',5,5',6-HpCB	178	1.08	1.09	1.07	1.07	1.08	0.88-1.20
Recovery Standards							
13C-2,5-DiCB	9	1.54	1.53	1.55	1.53	1.52	1.33-1.81
13C-2,2',5,5'-TeCB	52	0.80	0.80	0.82	0.80	0.80	0.65-0.89
13C-2,2',4,5,5'-PeCB	101	1.61	1.59	1.59	1.62	1.61	1.32-1.78
13C-2,2',3,4,4',5'-HxCB	138	1.27	1.26	1.25	1.25	1.27	1.05-1.43
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.92	0.91	0.90	0.90	0.92	0.76-1.02

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Native Analytes							
3,3',4,4'-TeCB	77	0.83	0.74	0.75	0.77	0.76	0.65-0.89
3,4,4',5-TeCB	81	0.72	0.74	0.76	0.75	0.76	0.65-0.89
2,3,3',4,4'-PeCB	105	1.61	1.54	1.53	1.52	1.54	1.32-1.78
2,3,4,4',5-PeCB	114	1.53	1.41	1.50	1.51	1.52	1.32-1.78
2,3',4,4',5-PeCB	118	1.59	1.47	1.52	1.52	1.53	1.32-1.78
2,3',4,4',5'-PeCB	123	1.42	1.47	1.49	1.51	1.52	1.32-1.78
3,3',4,4',5-PeCB	126	1.49	1.47	1.53	1.50	1.52	1.32-1.78
(156/157)	156/157	1.25	1.19	1.22	1.23	1.22	1.05-1.43
2,3',4,4',5,5'-HxCB	167	1.25	1.18	1.25	1.22	1.22	1.05-1.43
3,3',4,4',5,5'-HxCB	169	1.14	1.21	1.21	1.21	1.22	1.05-1.43
2,3,3',4,4',5,5'-HpCB	189	1.10	1.00	0.99	1.01	1.01	0.88-1.20

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210818B12	Data File	Y210818B_12
Calibration Date	08/18/2021	Injected By	CVS
Initial Calibration	Y210818B12	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

PCB Isomer	IUPAC	RT	Ratio	209 RF	Ical RF	%RSD	RFc
Internal Standards							
13C-3,4,4',5-TeCB	81	34.847	0.77	0.7931	0.8206	-3.35	0.8206
13C-3,3',4,4'-TeCB	77	35.417	0.78	0.7906	0.8285	-4.58	0.8285
13C-2,3,3',4,4'-PeCB	105	39.027	1.54	0.7806	0.8296	-5.91	0.8296
13C-2,3,4,4',5-PeCB	114	38.373	1.55	0.8250	0.8437	-2.22	0.8437
13C-2,3',4,4',5-PeCB	118	37.820	1.55	0.7373	0.8870	-16.87	0.8870
13C-2,3',4,4',5'-PeCB	123	37.485	1.53	0.8140	0.8549	-4.78	0.8549
13C-3,3',4,4',5-PeCB	126	42.162	1.54	0.6852	0.7293	-6.05	0.7293
13C-HxCB (156/157)	156/157	45.236	1.22	0.7069	0.8232	-14.14	0.8232
13C-2,3',4,4',5,5'-HxCB	167	44.079	1.22	0.7853	0.8696	-9.70	0.8696
13C-3,3',4,4',5,5'-HxCB	169	48.505	1.24	0.6655	0.7320	-9.09	0.7320
13C-2,3,3',4,4',5,5'-HpCB	189	51.056	1.04	1.0180	1.0598	-3.94	1.0598
Cleanup Standards							
13C-2,4,4'-TrCB	28	23.408	1.02	1.1049	1.1287	-2.11	1.1287
13C-2,3,3',5,5'-PeCB	111	35.485	1.58	1.1736	1.2766	-8.07	1.2766
13C-2,2',3,3',5,5',6-HpCB	178	41.475	1.10	0.8926	0.9291	-3.93	0.9291
RecoveryStandards							
13C-2,5-DiCB	9	15.361	1.54	1.9617	2.0320	-3.46	2.0320
13C-2,2',5,5'-TeCB	52	25.403	0.80	1.4222	1.3872	2.53	1.3872
13C-2,2',4,5,5'-PeCB	101	32.701	1.60	1.1926	1.1789	1.16	1.1789
13C-2,2',3,4,4',5'-HxCB	138	41.006	1.24	1.1203	1.0765	4.07	1.0765
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.167	0.90	0.7386	0.7508	-1.63	0.7508

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210818B12	Data File	Y210818B_12
Calibration Date	08/18/2021	Injected By	CVS
Initial Calibration	Y210818B12	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

IUPAC	Co-elutions	RT	Ratio	209 RF	Ical RF	%RSD	RFc
81		34.864	0.76	1.0383	0.9363	10.89	0.9363
77		35.451	0.77	0.9454	0.9002	5.03	0.9002
104		26.476	1.66	1.5336	1.4564	5.30	1.4564
105		39.044	1.52	1.0245	0.8960	14.33	0.8960
114		38.407	1.51	1.0197	0.9293	9.73	0.9293
118		37.854	1.53	0.9939	0.9249	7.46	0.9249
123		37.518	1.53	1.0133	0.9281	9.18	0.9281
126		42.196	1.53	0.9945	0.8959	11.00	0.8959
155		32.517	1.33	1.4219	1.3520	5.17	1.3520
156	156/157	45.252	1.21	1.0527	0.9413	11.83	0.9413
167		44.096	1.22	1.0667	0.9304	14.65	0.9304
169		48.521	1.22	1.0264	0.9394	9.26	0.9394
188		38.407	1.02	1.1449	1.0887	5.16	1.0887
189		51.077	1.01	0.9523	0.8926	6.68	0.8926

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210819A02	Data File	Y210819A_02
Calibration Date	08/19/2021	Injected By	CVS
Initial Calibration	Y210819A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

PCB Isomer	IUPAC	RT	Ratio	209 RF	Ical RF	%RSD	RFc
Internal Standards							
13C-3,4,4',5-TeCB	81	34.867	0.78	0.8448	0.8206	2.95	0.8206
13C-3,3',4,4'-TeCB	77	35.437	0.78	0.8608	0.8285	3.89	0.8285
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	0.8090	0.8296	-2.49	0.8296
13C-2,3,4,4',5-PeCB	114	38.377	1.55	0.8482	0.8437	0.53	0.8437
13C-2,3',4,4',5-PeCB	118	37.824	1.56	0.6820	0.8870	-23.11	0.8870
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	0.8363	0.8549	-2.17	0.8549
13C-3,3',4,4',5-PeCB	126	42.183	1.54	0.7383	0.7293	1.24	0.7293
13C-HxCB (156/157)	156/157	45.240	1.24	0.6886	0.8232	-16.36	0.8232
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.23	0.8160	0.8696	-6.17	0.8696
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.22	0.6994	0.7320	-4.46	0.7320
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.04	1.0815	1.0598	2.05	1.0598
Cleanup Standards							
13C-2,4,4'-TrCB	28	23.426	1.02	1.1300	1.1287	0.11	1.1287
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	1.1864	1.2766	-7.07	1.2766
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	0.8726	0.9291	-6.08	0.9291
RecoveryStandards							
13C-2,5-DiCB	9	15.362	1.54	1.9596	2.0320	-3.56	2.0320
13C-2,2',5,5'-TeCB	52	25.422	0.80	1.4399	1.3872	3.80	1.3872
13C-2,2',4,5,5'-PeCB	101	32.704	1.59	1.2334	1.1789	4.63	1.1789
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.26	1.1460	1.0765	6.46	1.0765
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.178	0.91	0.6972	0.7508	-7.14	0.7508

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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Tel: 612-607-1700
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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210819A02	Data File	Y210819A_02
Calibration Date	08/19/2021	Injected By	CVS
Initial Calibration	Y210819A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

IUPAC	Co-elutions	RT	Ratio	209 RF	Ical RF	%RSD	RFc
81		34.884	0.76	1.0428	0.9363	11.38	0.9363
77		35.454	0.76	0.9466	0.9002	5.16	0.9002
104		26.478	1.65	1.5830	1.4564	8.69	1.4564
105		39.048	1.53	1.0200	0.8960	13.84	0.8960
114		38.410	1.51	1.0136	0.9293	9.07	0.9293
118		37.874	1.54	1.0427	0.9249	12.75	0.9249
123		37.522	1.51	0.9961	0.9281	7.33	0.9281
126		42.200	1.51	0.9891	0.8959	10.40	0.8959
155		32.520	1.32	1.4099	1.3520	4.28	1.3520
156	156/157	45.257	1.21	1.0562	0.9413	12.20	0.9413
167		44.100	1.22	1.0739	0.9304	15.43	0.9304
169		48.527	1.22	1.0120	0.9394	7.72	0.9394
188		38.410	1.02	1.1577	1.0887	6.34	1.0887
189		51.088	1.01	0.9446	0.8926	5.82	0.8926

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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Tel: 612-607-1700
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Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210819A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
Labeled Analytes						
13C-2,2',6-TrCB	19	16:44	1.04	0.6793	0.6670	1.85
13C-3,4,4'-TrCB	37	27:47	1.02	0.9504	0.9251	2.73
13C-2,2',6,6'-TeCB	54	20:20	0.81	1.2111	1.2079	0.27
13C-3,4,4',5-TeCB	81	34:52	0.78	0.8286	0.8206	0.97
13C-3,3',4,4'-TeCB	77	35:27	0.78	0.8561	0.8285	3.32
13C-2,3,3',4,4'-PeCB	105	39:02	1.56	0.8425	0.8296	1.55
13C-2,3,4,4',5-PeCB	114	38:23	1.53	0.8568	0.8437	1.55
13C-2,3',4,4',5-PeCB	118	37:51	1.53	0.8883	0.8870	0.15
13C-2,3',4,4',5'-PeCB	123	37:30	1.52	0.8515	0.8549	-0.39
13C-3,3',4,4',5-PeCB	126	42:11	1.56	0.7652	0.7293	4.93
13C-HxCB (156/157)	156/157	45:15	1.22	0.8223	0.8232	-0.12
13C-2,3',4,4',5,5'-HxCB	167	44:05	1.24	0.8653	0.8696	-0.50
13C-3,3',4,4',5,5'-HxCB	169	48:31	1.25	0.7477	0.7320	2.15
13C-2,3,3',4,4',5,5'-HpCB	189	51:04	1.03	1.0923	1.0598	3.07
Cleanup Standards						
13C-2,4,4'-TrCB	28	23:26	1.02	1.1151	1.1287	-1.20
13C-2,3,3',5,5'-PeCB	111	35:30	1.57	1.3002	1.2766	1.85
13C-2,2',3,3',5,5',6-HpCB	178	41:28	1.09	0.9051	0.9291	-2.58
Recovery Standards						
13C-2,5-DiCB	9	15:23	1.54	2.0088	2.0320	-1.14
13C-2,2',5,5'-TeCB	52	25:26	0.80	1.3979	1.3872	0.77
13C-2,2',4,5,5'-PeCB	101	32:43	1.59	1.1890	1.1789	0.86
13C-2,2',3,4,4',5'-HxCB	138	41:01	1.26	1.1048	1.0765	2.63
13C-2,2',3,3',4,4',5,5'-OcCB	194	53:10	0.90	0.7301	0.7508	-2.76

X = Outside Quality Control limits

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
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Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210819A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
3,3',4,4'-TeCB	77	35:28	0.76	0.8761	0.9002	-2.67
3,4,4',5-TeCB	81	34:54	0.76	0.9341	0.9363	-0.24
2,2',4,6,6'-PeCB	104	26:29	1.66	1.4276	1.4564	-1.97
2,3,3',4,4'-PeCB	105	39:03	1.51	0.8516	0.8960	-4.96
2,3,4,4',5-PeCB	114	38:25	1.49	0.8784	0.9293	-5.48
2,3',4,4',5-PeCB	118	37:52	1.54	0.8900	0.9249	-3.77
2,3',4,4',5'-PeCB	123	37:32	1.52	0.8969	0.9281	-3.36
3,3',4,4',5-PeCB	126	42:13	1.51	0.8668	0.8959	-3.26
2,2',4,4',6,6'-HxCB	155	32:32	1.33	1.3238	1.3520	-2.08
HxCB (156/157)	156/157	45:16	1.21	0.8995	0.9413	-4.44
2,3',4,4',5,5'-HxCB	167	44:07	1.21	0.8966	0.9304	-3.63
3,3',4,4',5,5'-HxCB	169	48:32	1.22	0.8949	0.9394	-4.73
2,2',3,4',5,6,6'-HpCB	188	38:25	1.02	1.0496	1.0887	-3.59
2,3,3',4,4',5,5'-HpCB	189	51:05	1.01	0.8759	0.8926	-1.87

X = Outside Quality Control limits

REPORT OF LABORATORY ANALYSIS

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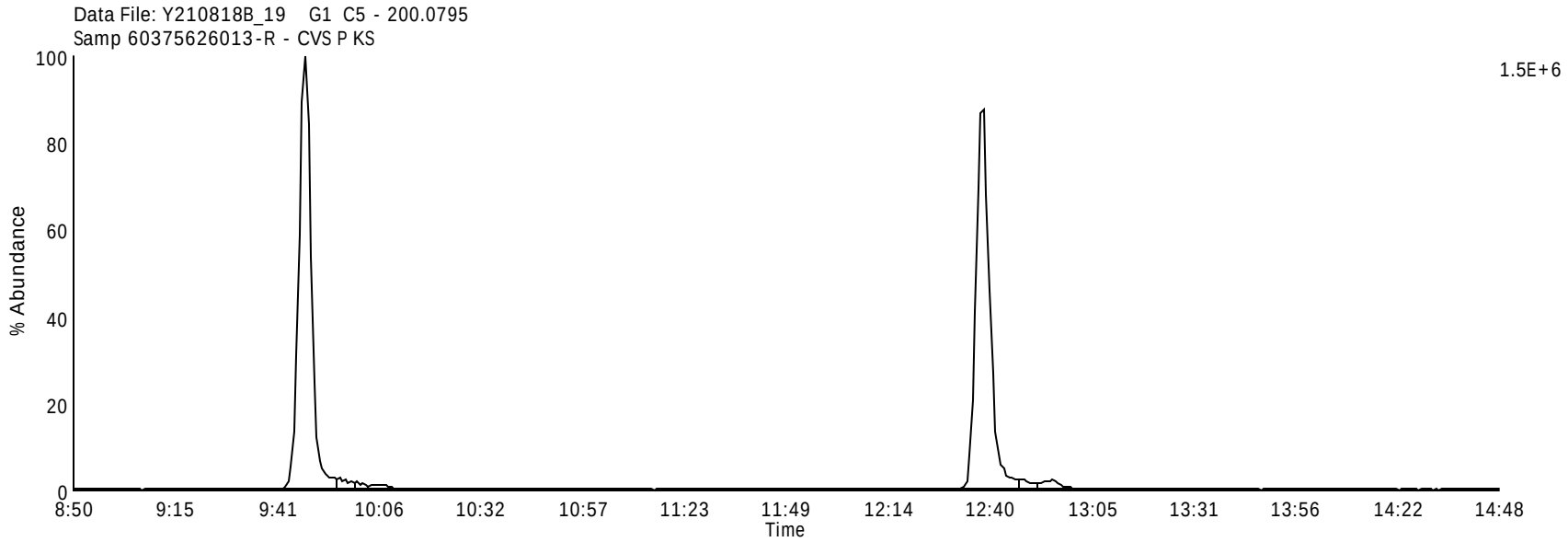
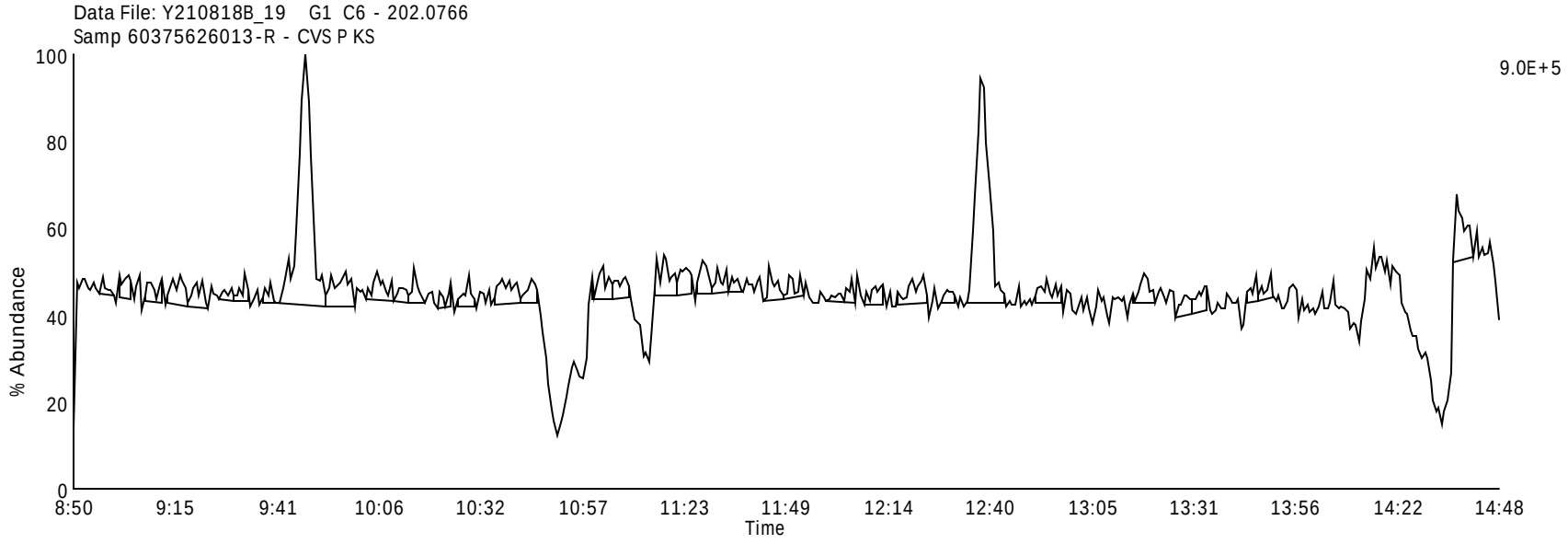
Appendix D

Sample Raw Data

Labeled Mono Chlorinated Biphenyls

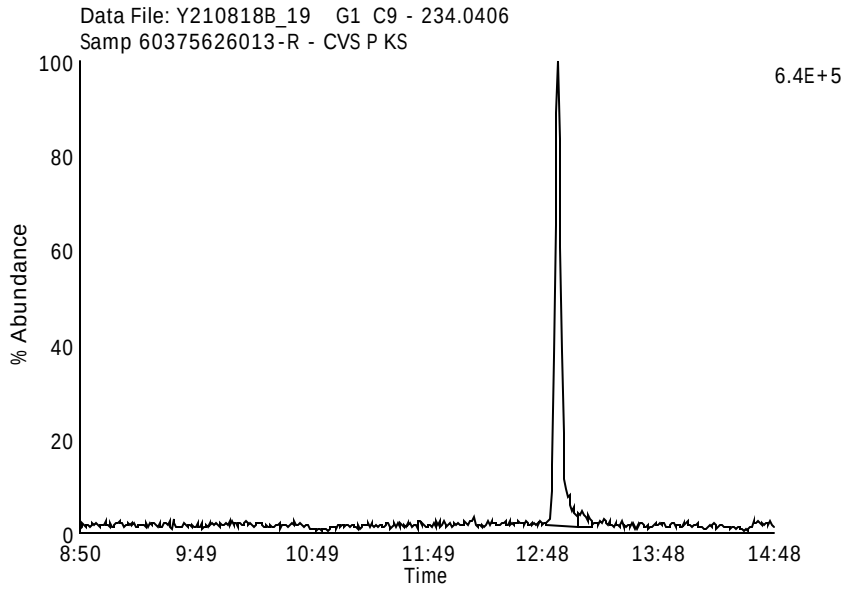
Data File Name: Y210818B_19	Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS	Client Sample ID: GB-46/2-4

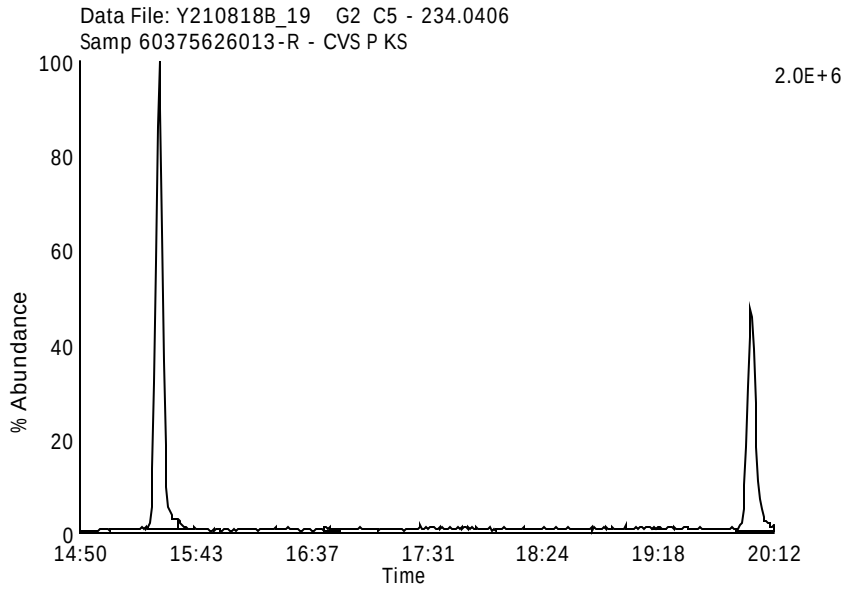


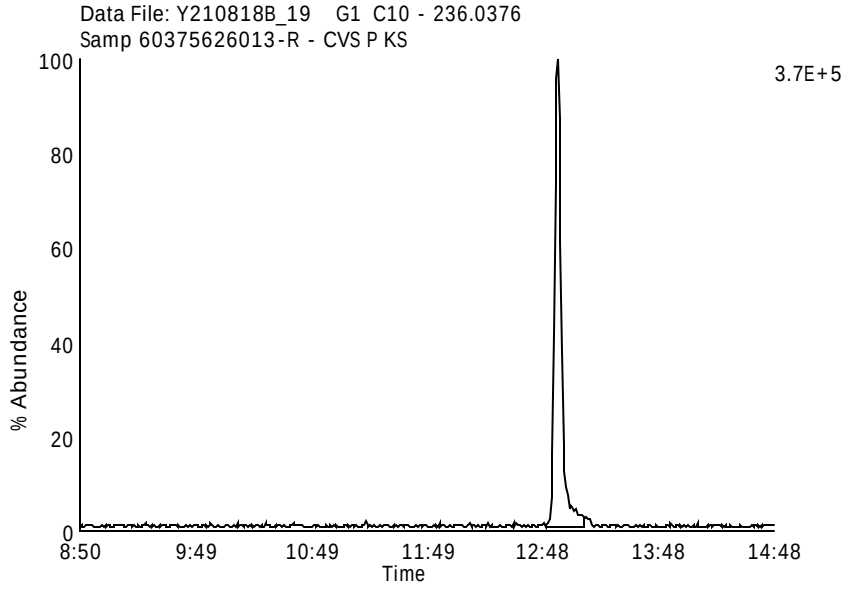


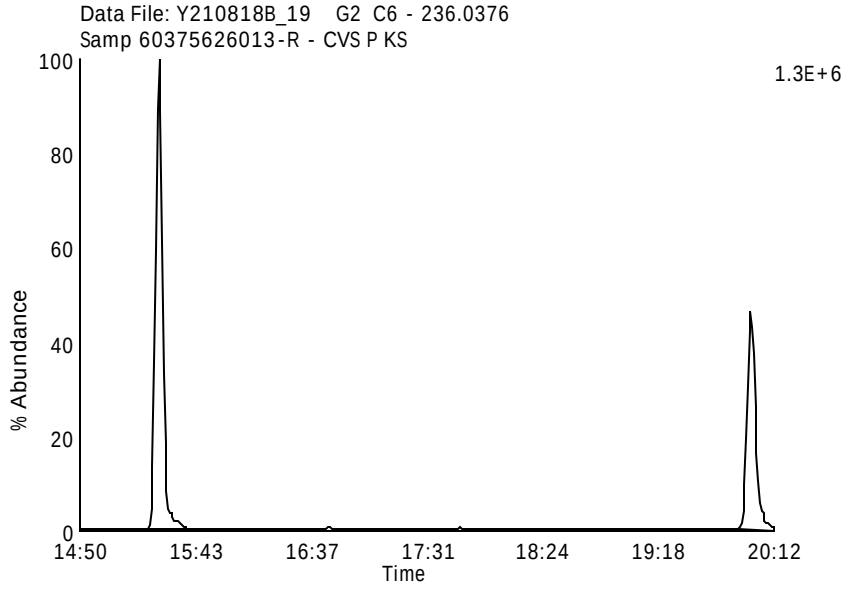
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4



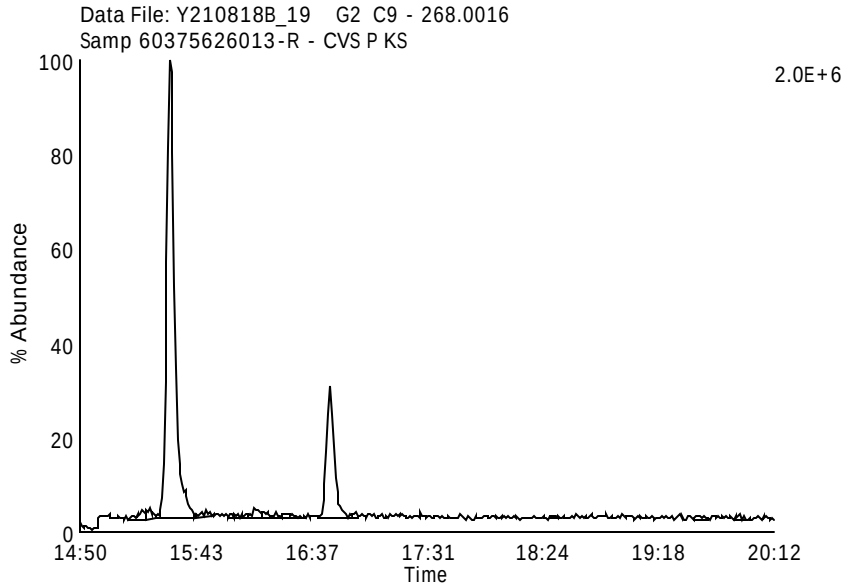


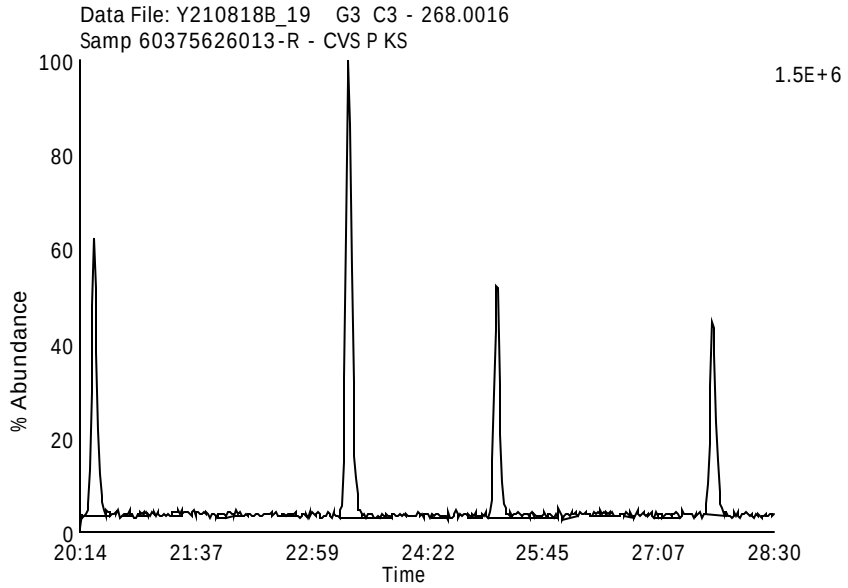


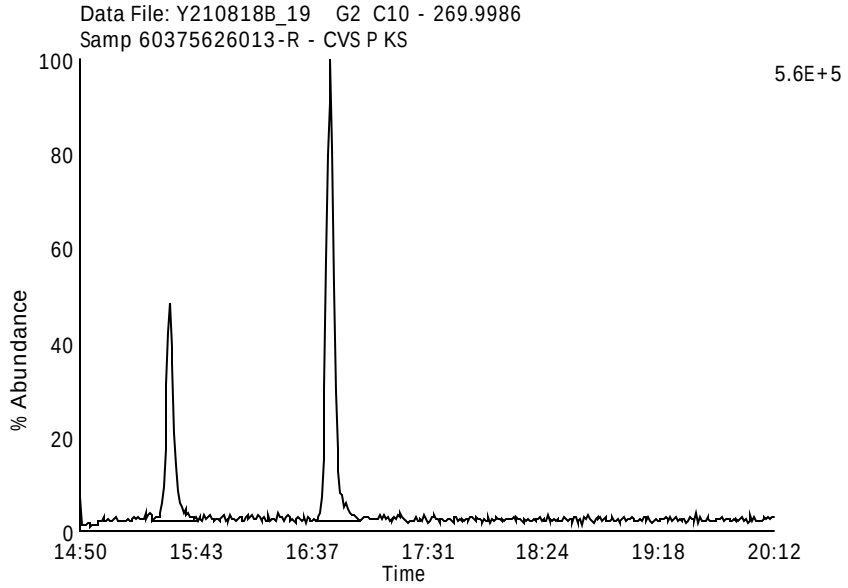


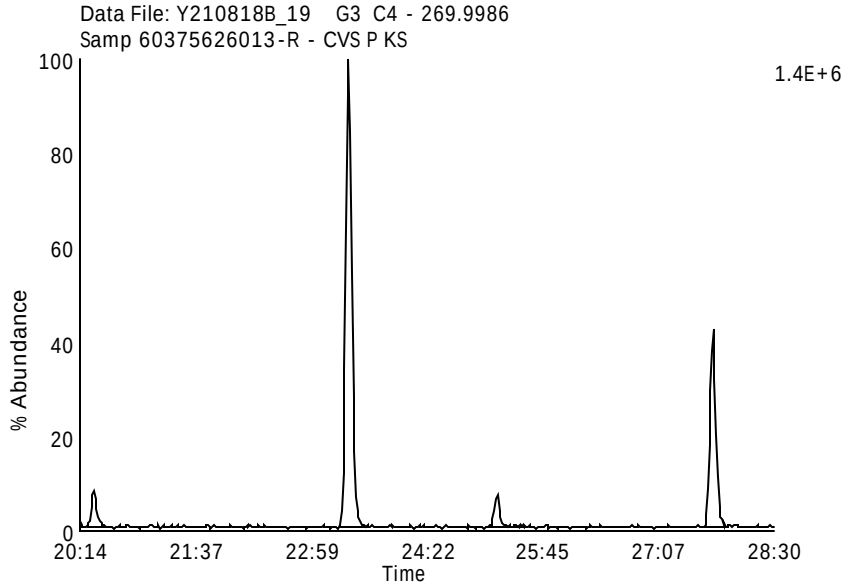
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4





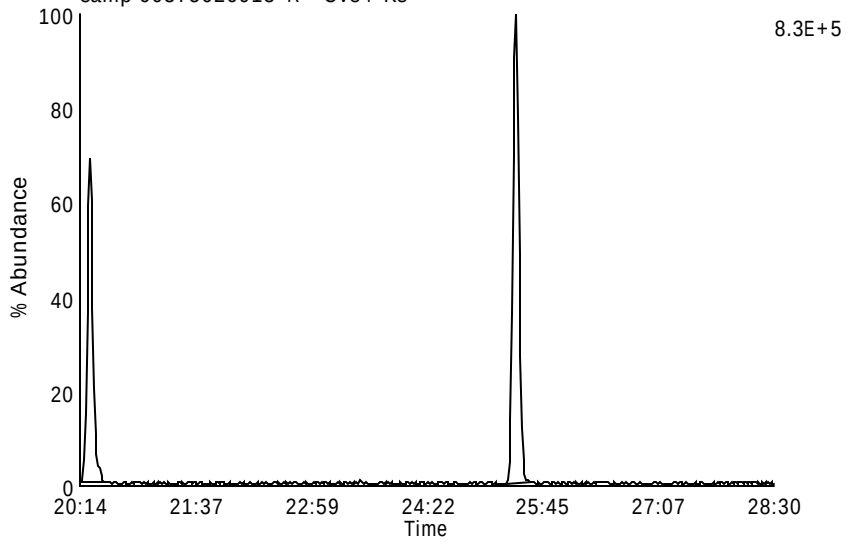




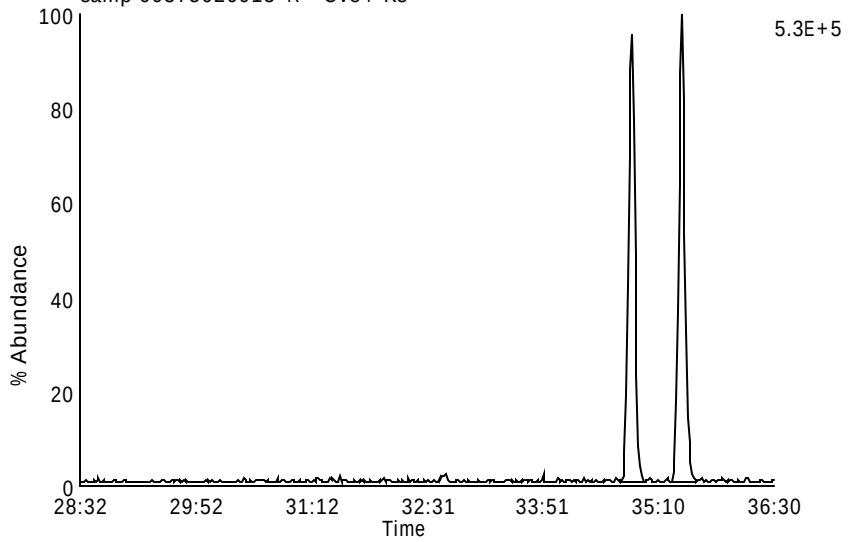
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_19 | Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS | Client Sample ID: GB-46/2-4

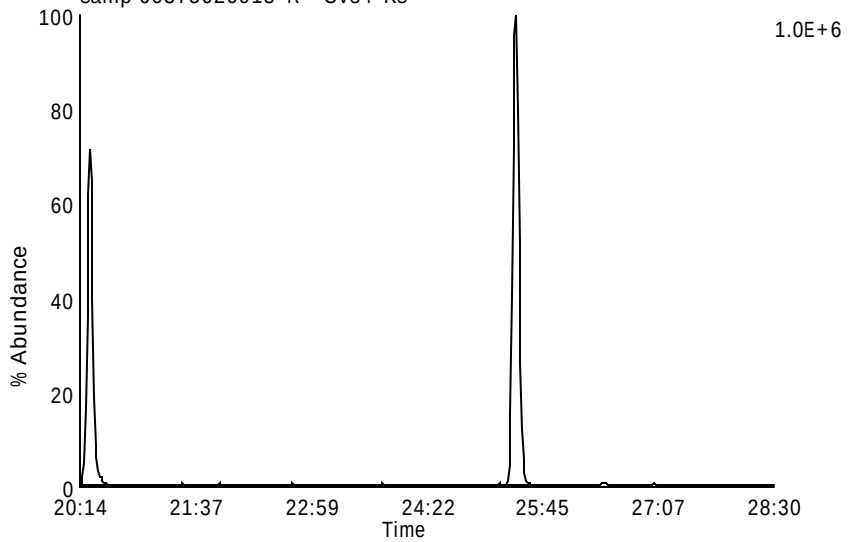
Data File: Y210818B_19 G3 C9 - 301.9626
Samp 60375626013-R - CVS P KS



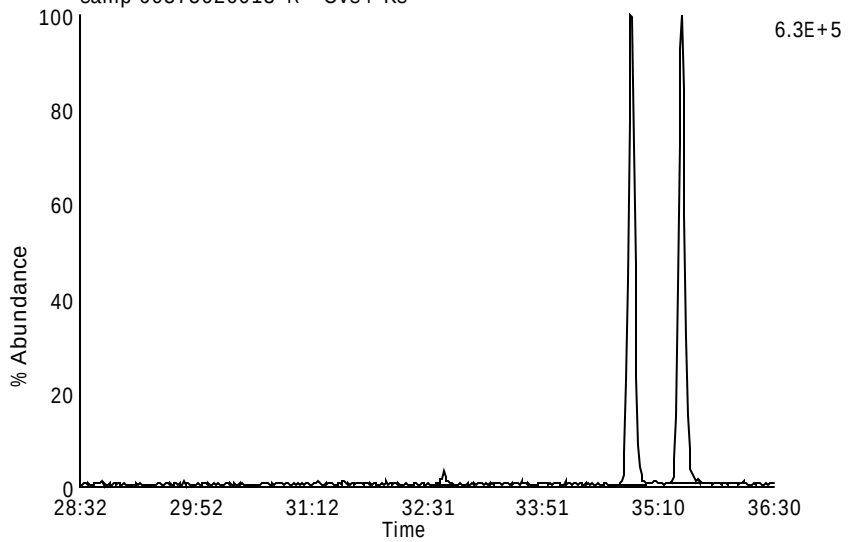
Data File: Y210818B_19 G4 C3 - 301.9626
Samp 60375626013-R - CVS P KS



Data File: Y210818B_19 G3 C10 - 303.9597
Samp 60375626013-R - CVS P KS

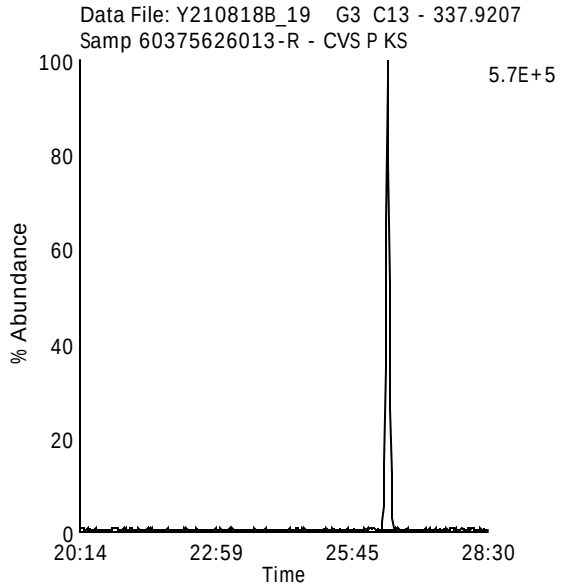


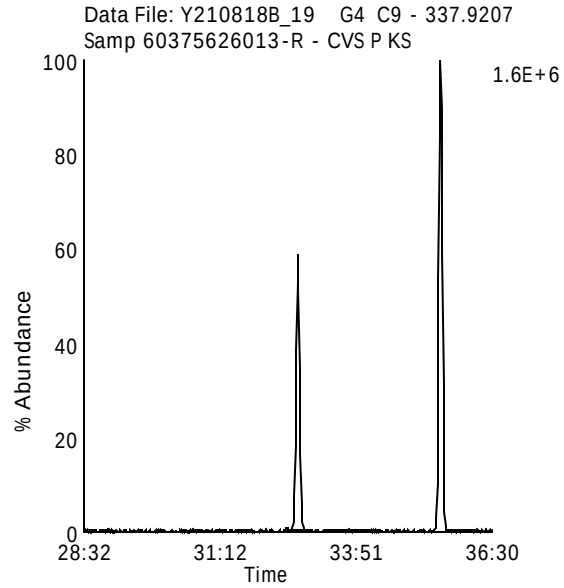
Data File: Y210818B_19 G4 C4 - 303.9597
Samp 60375626013-R - CVS P KS

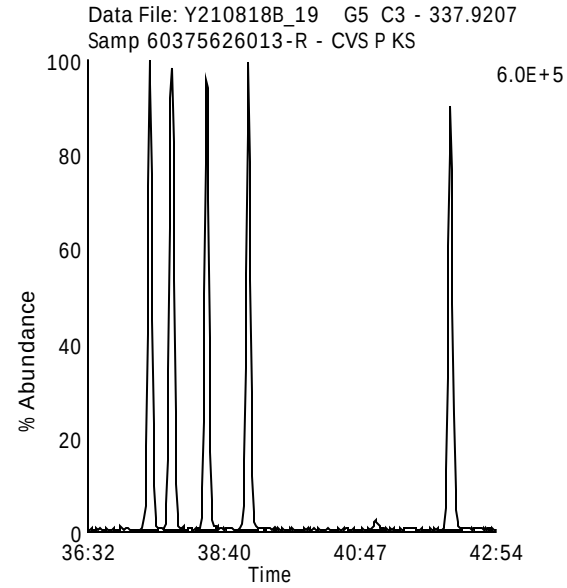


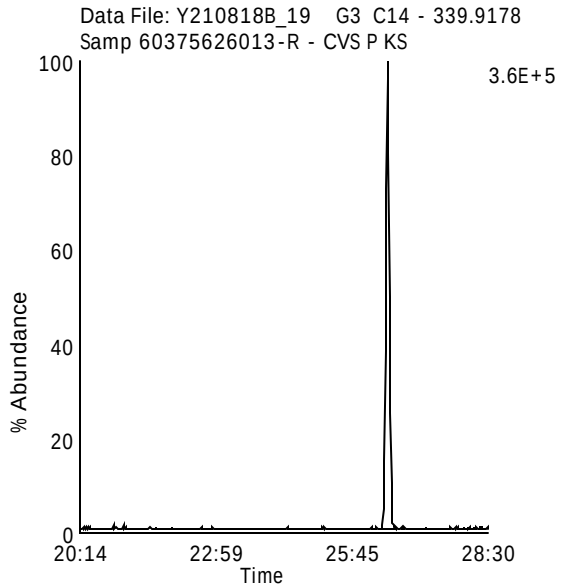
Labeled Penta Chlorinated Biphenyls

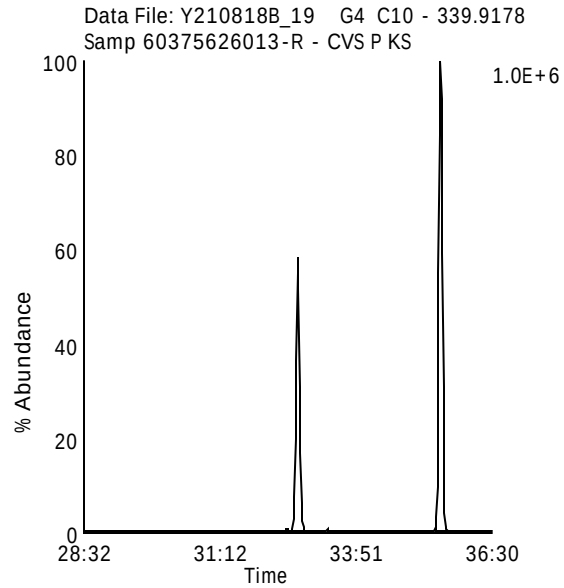
Data File Name: Y210818B_19 | Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS | Client Sample ID: GB-46/2-4

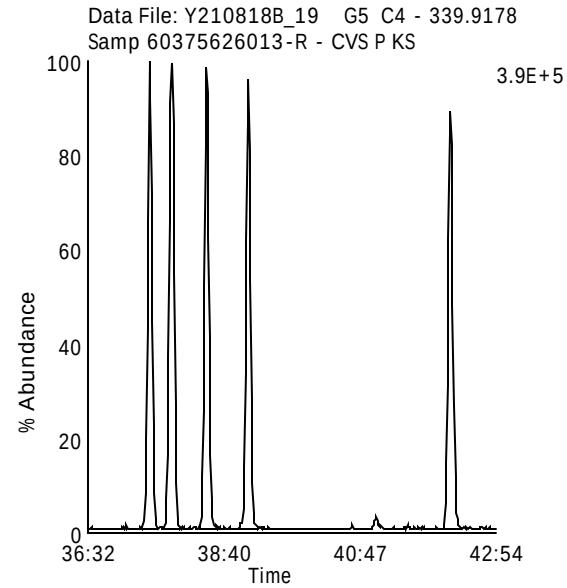






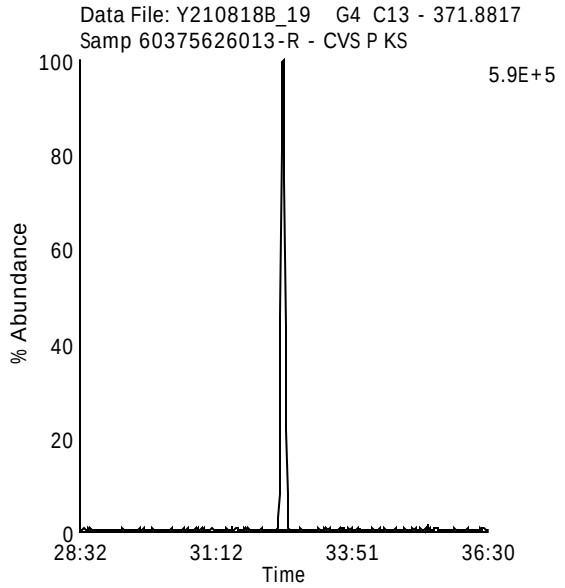


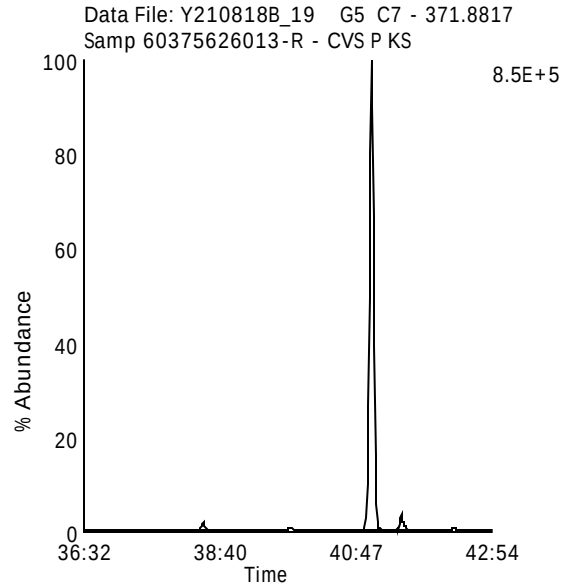


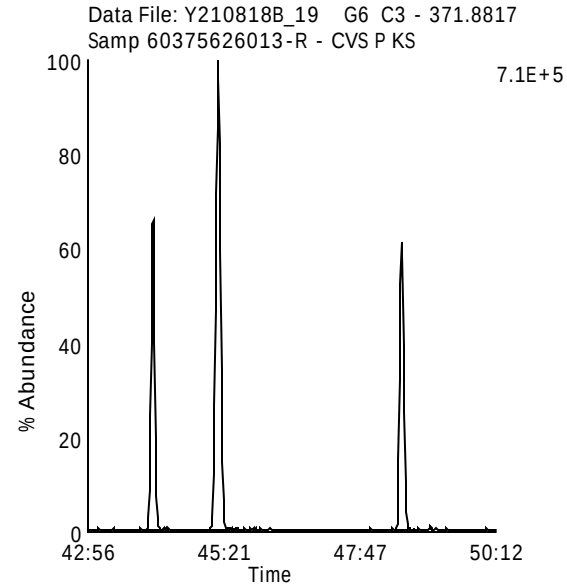


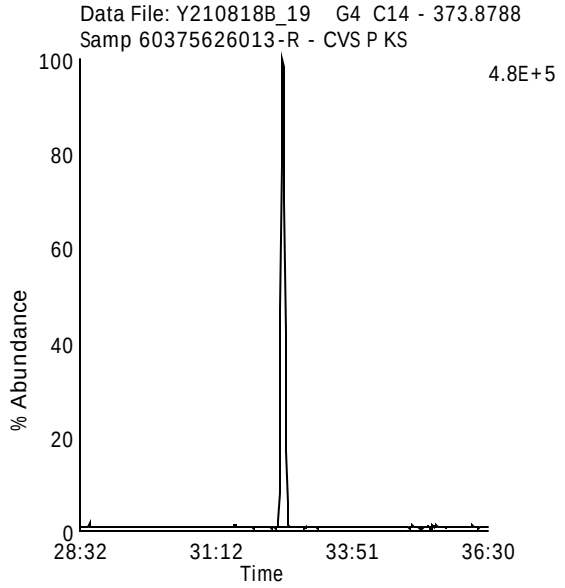
Labeled Hexa Chlorinated Biphenyls

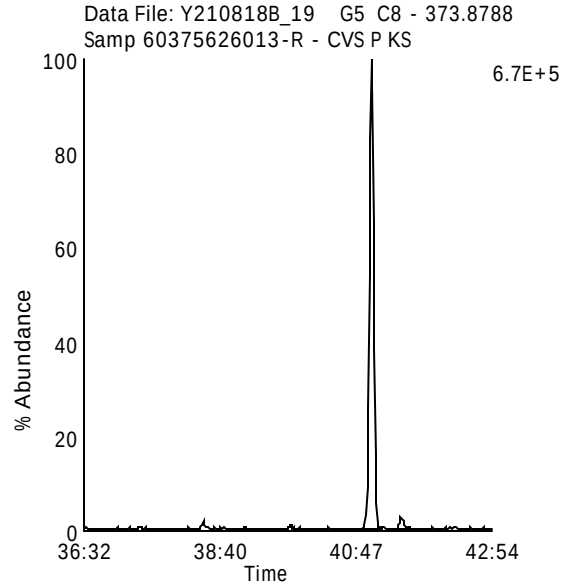
Data File Name: Y210818B_19 | Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS | Client Sample ID: GB-46/2-4

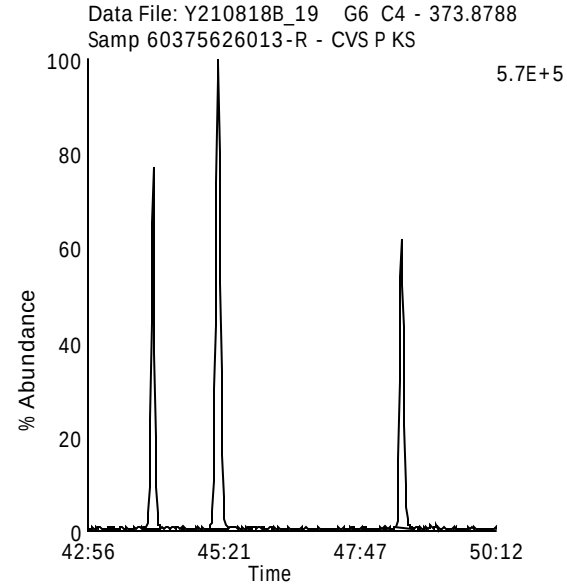






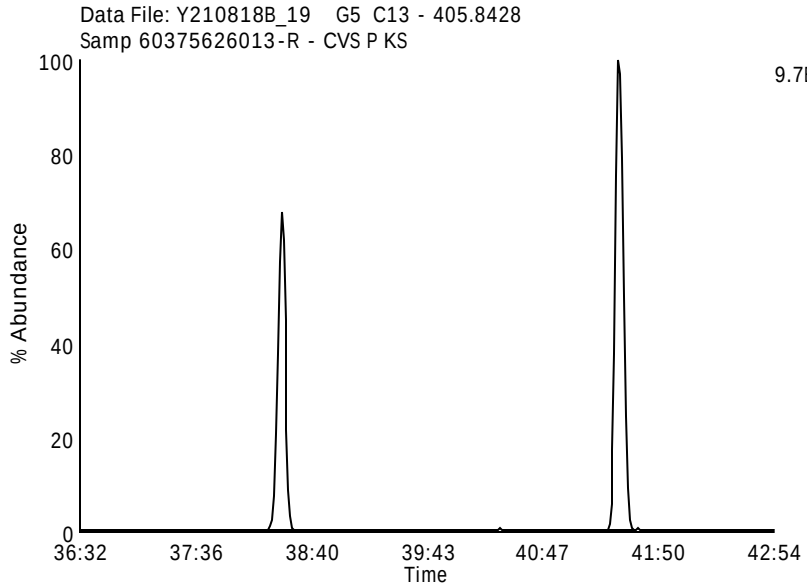


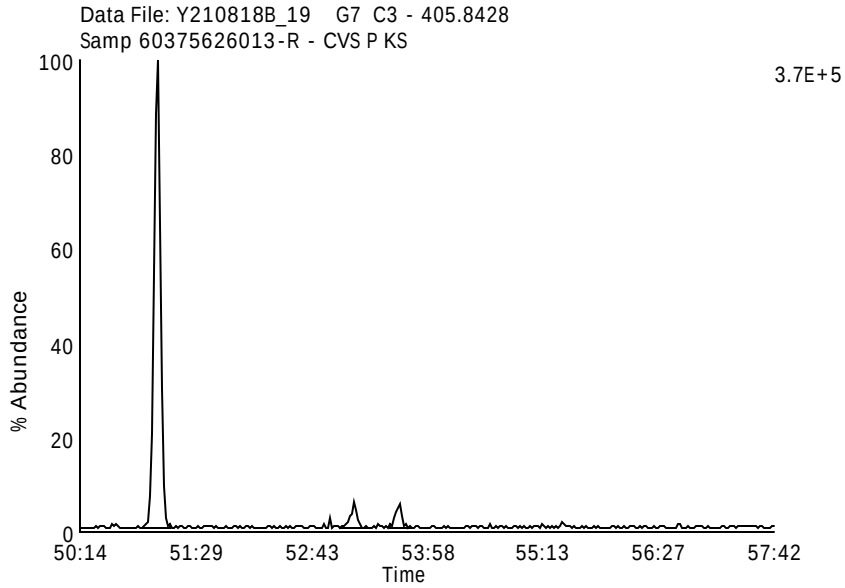


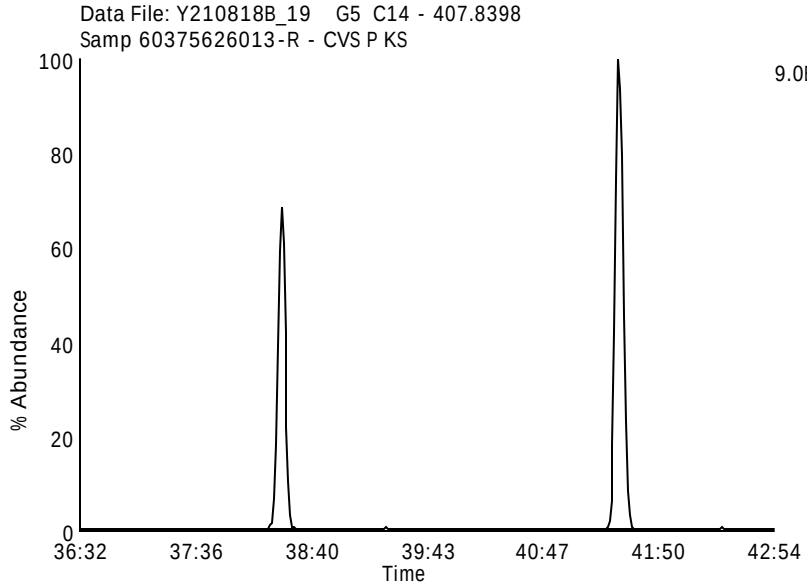


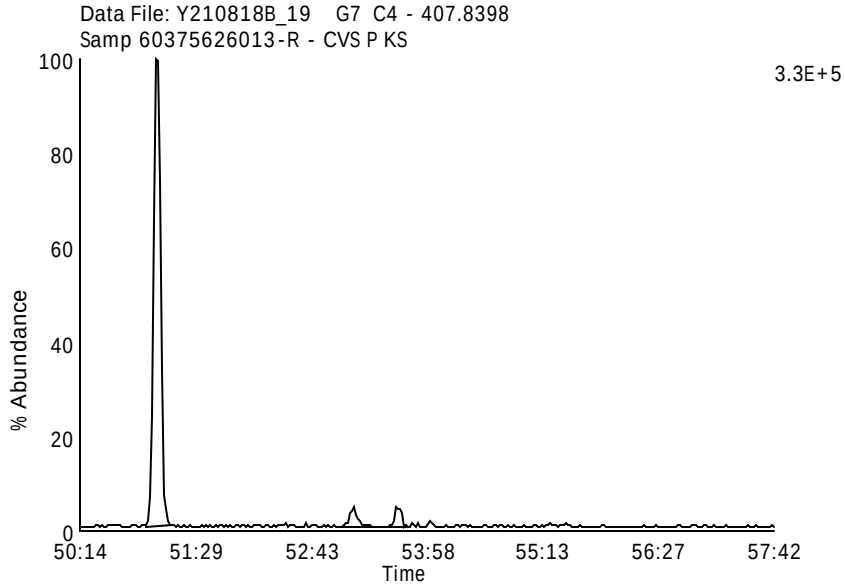
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4



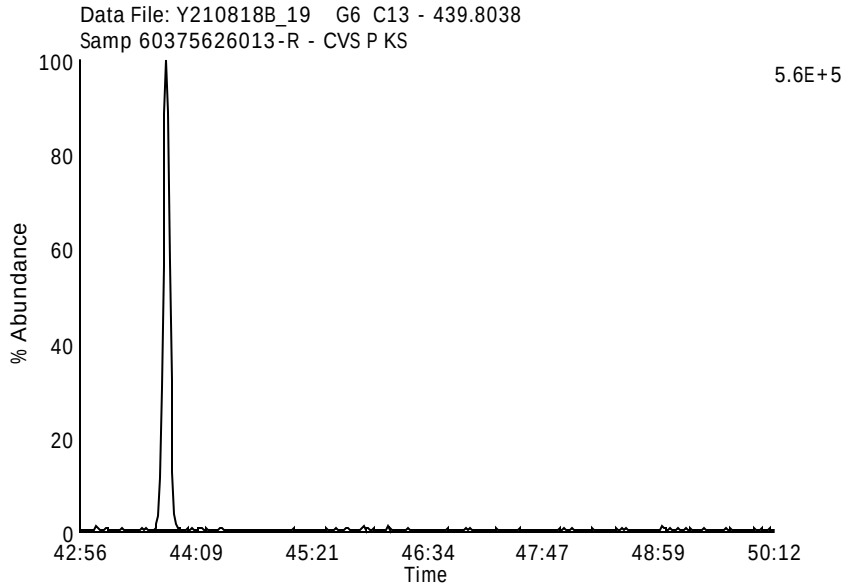


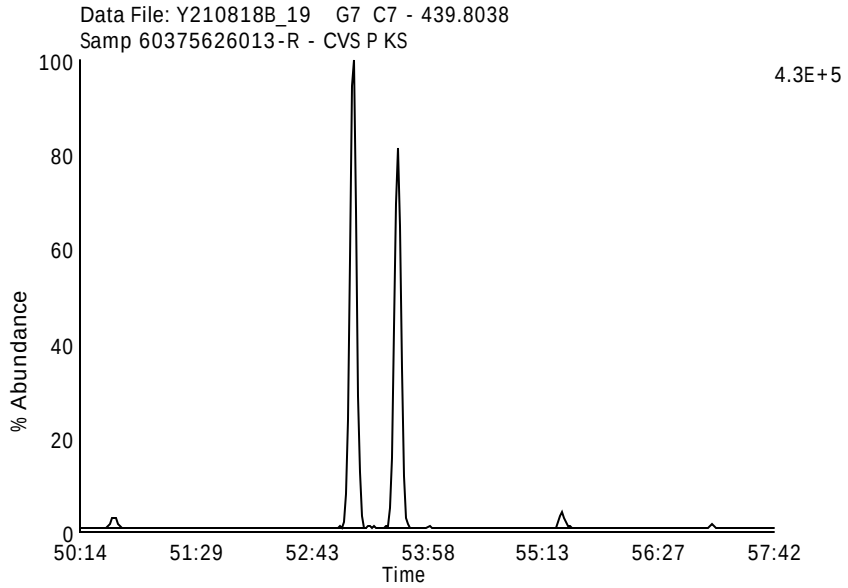


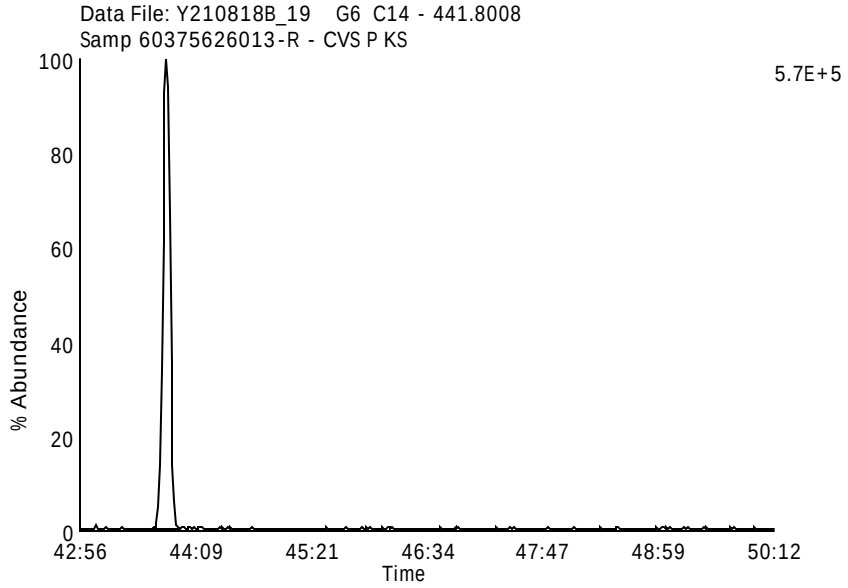


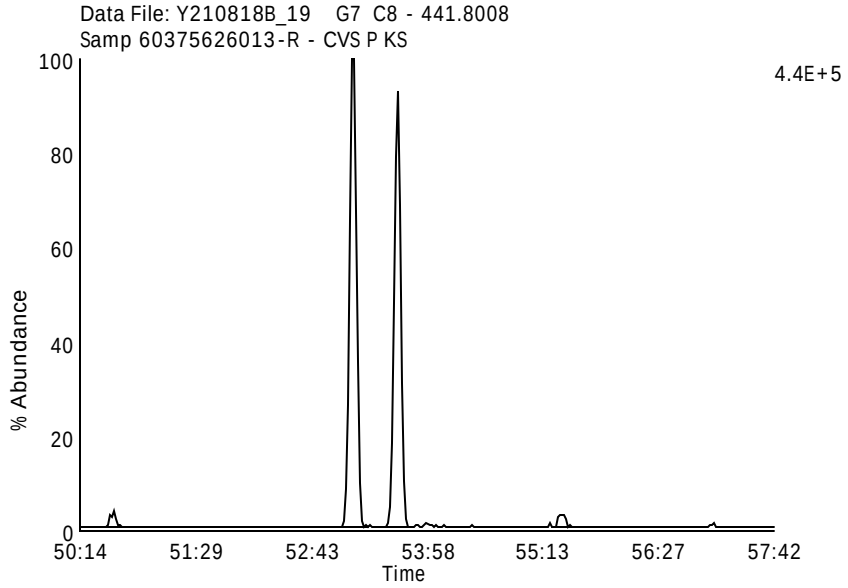
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4



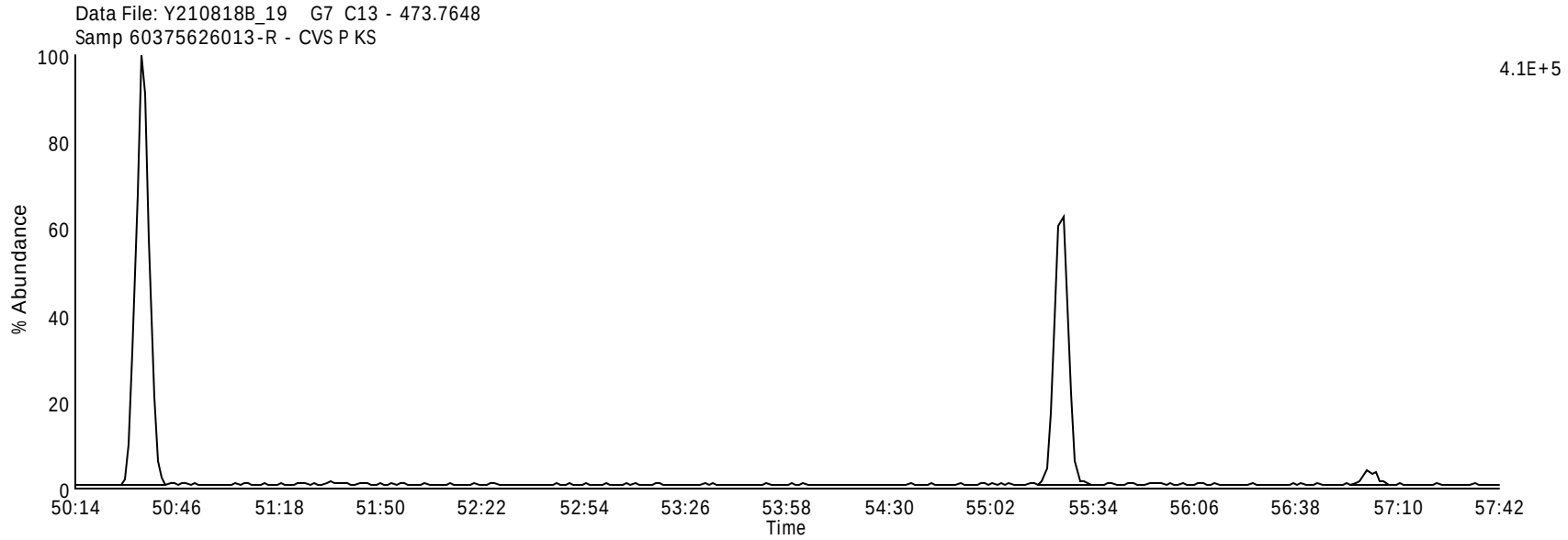


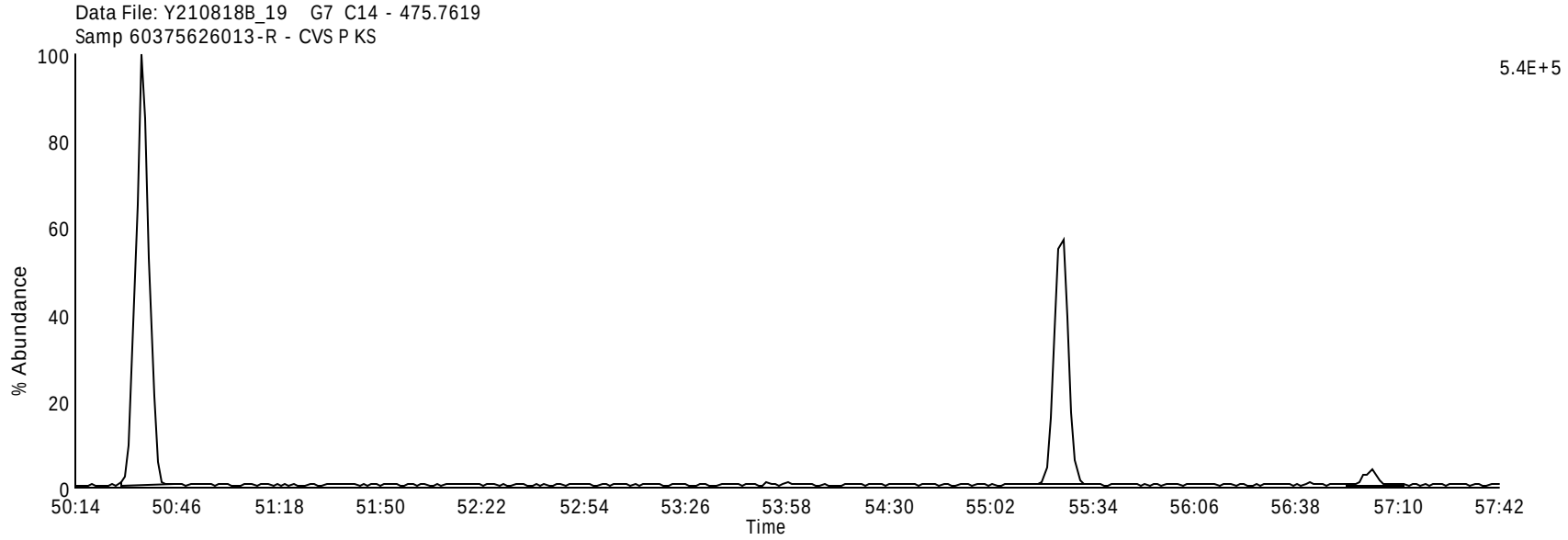




Labeled Nona Chlorinated Biphenyls

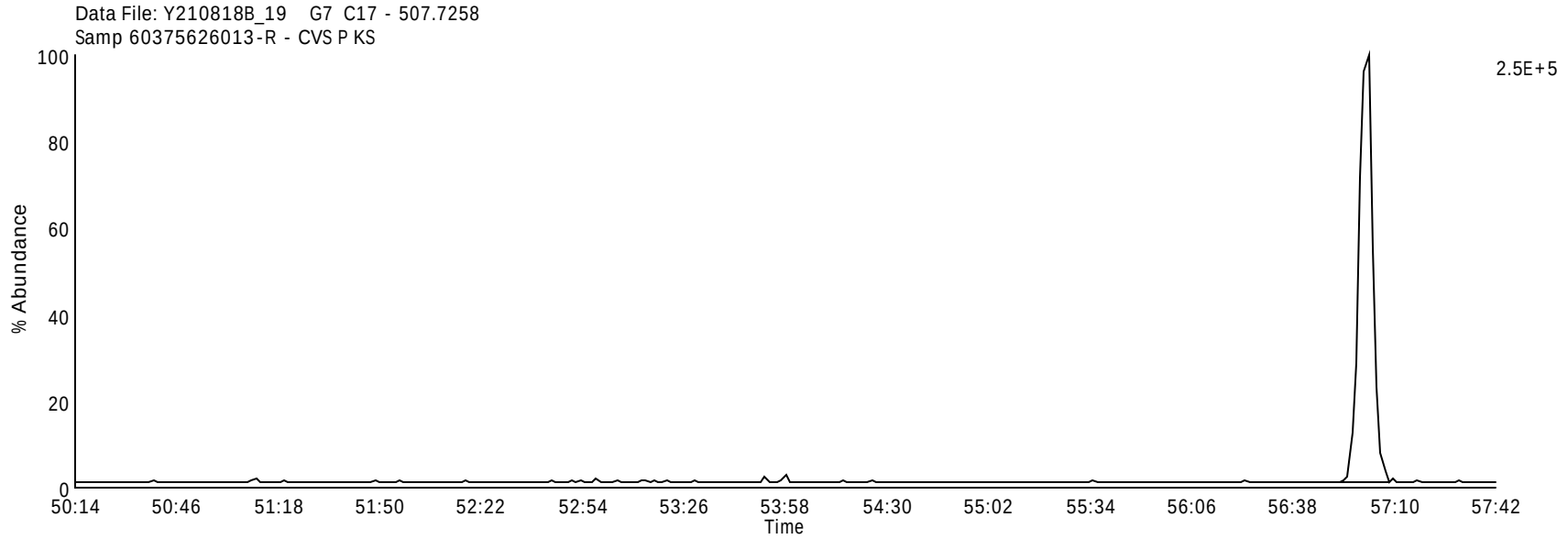
Data File Name: Y210818B_19	Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS	Client Sample ID: GB-46/2-4

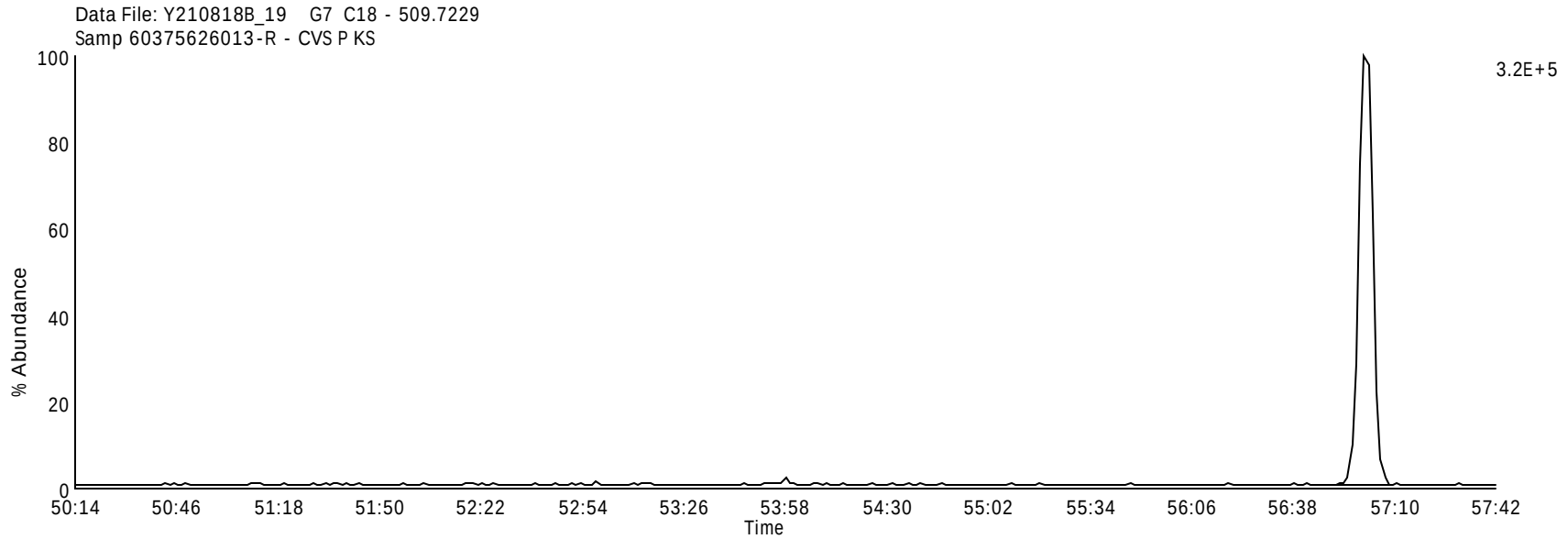




Labeled Deca Chlorinated Biphenyl

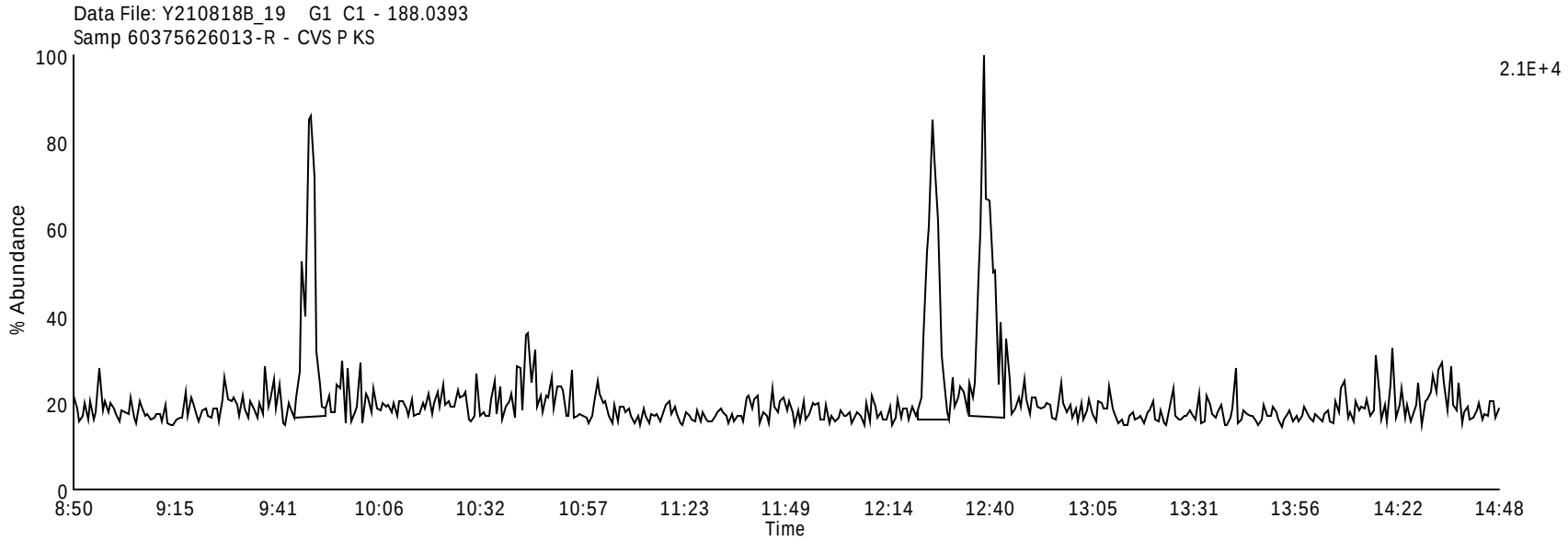
Data File Name: Y210818B_19	Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS	Client Sample ID: GB-46/2-4

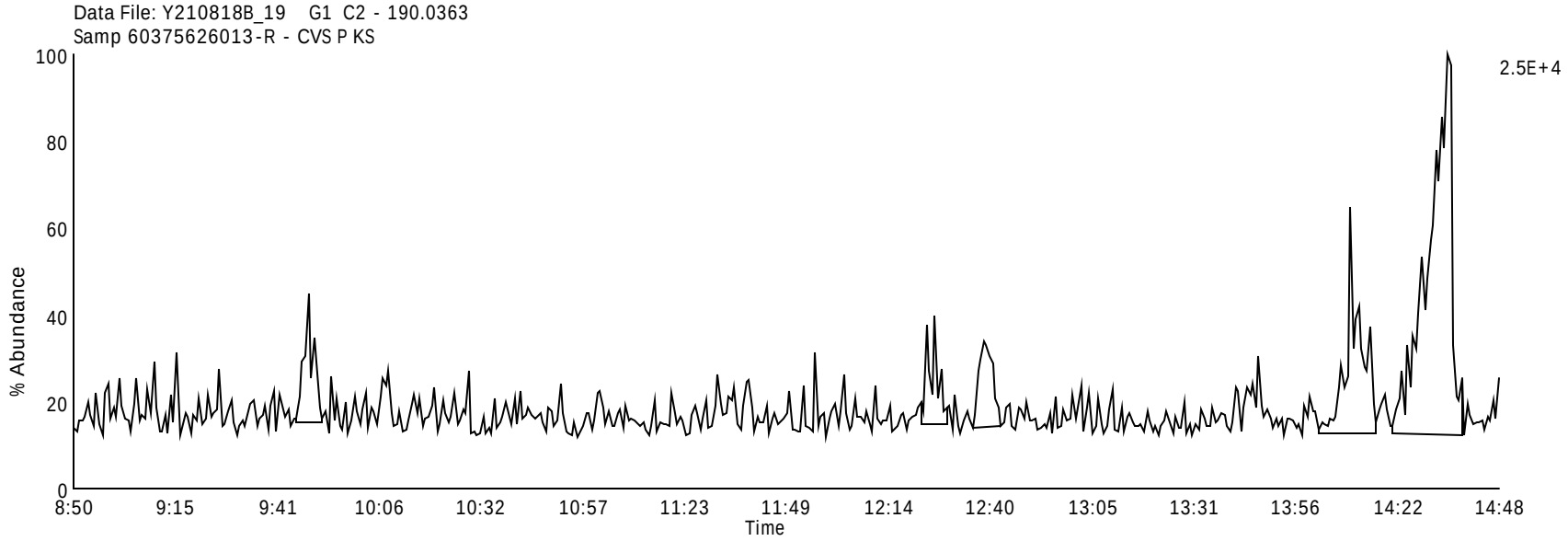




Mono Chlorinated Biphenyls

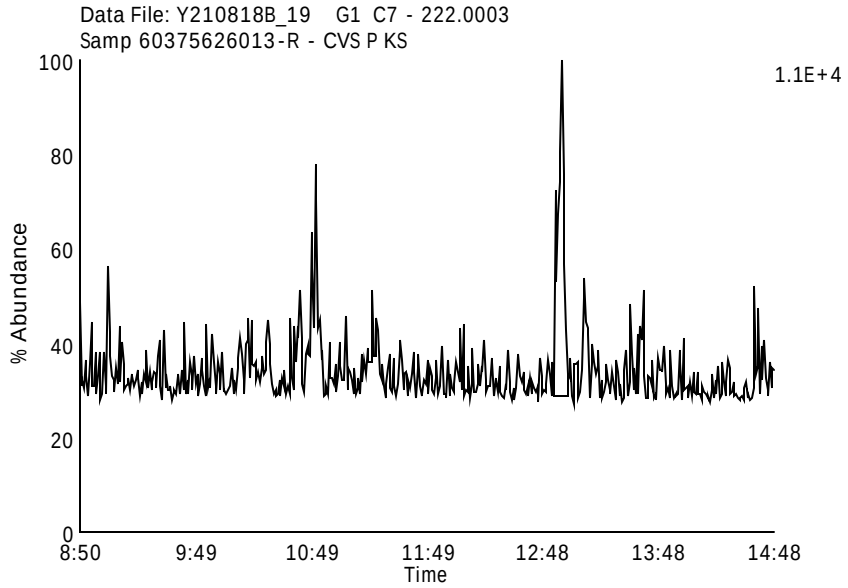
Data File Name: Y210818B_19	Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS	Client Sample ID: GB-46/2-4

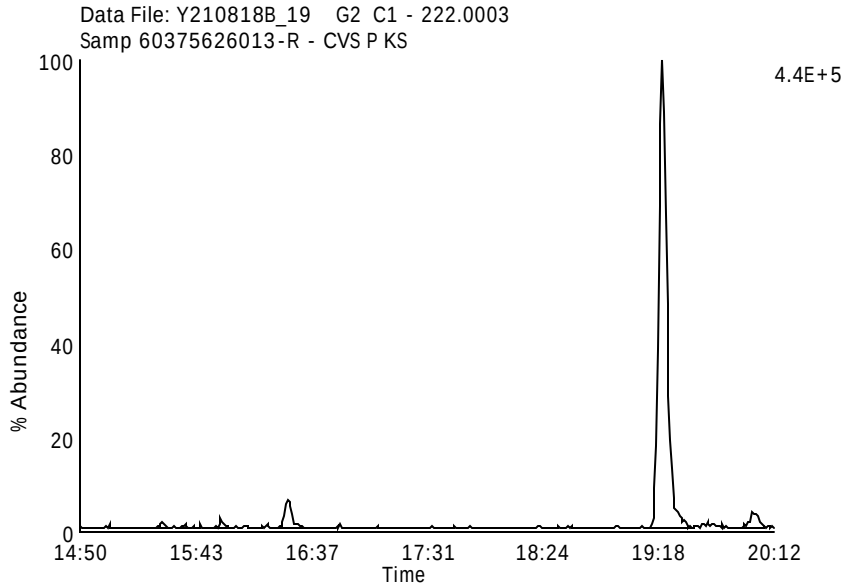


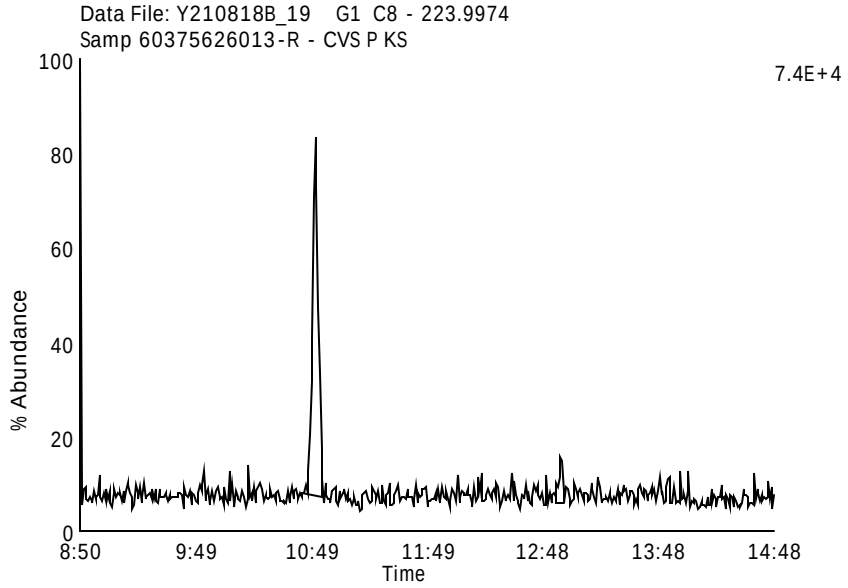


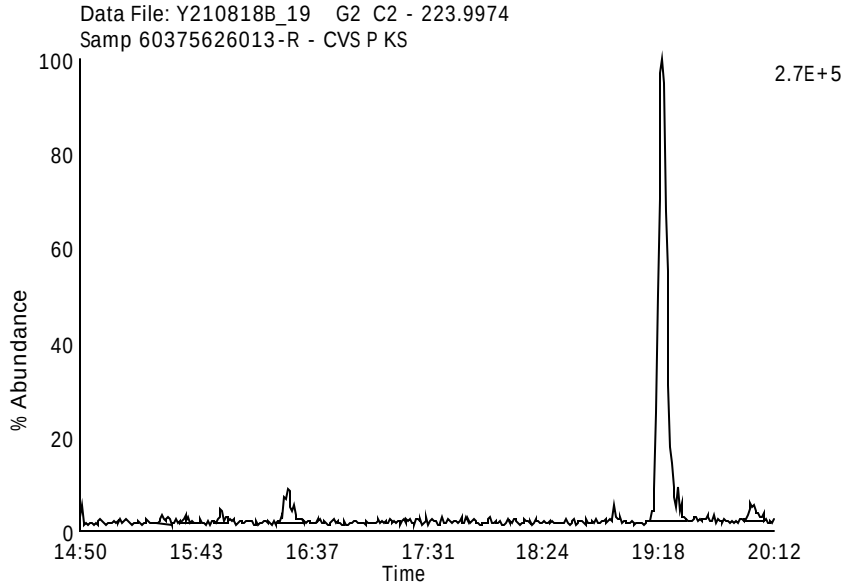
Di Chlorinated Biphenyls

Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4



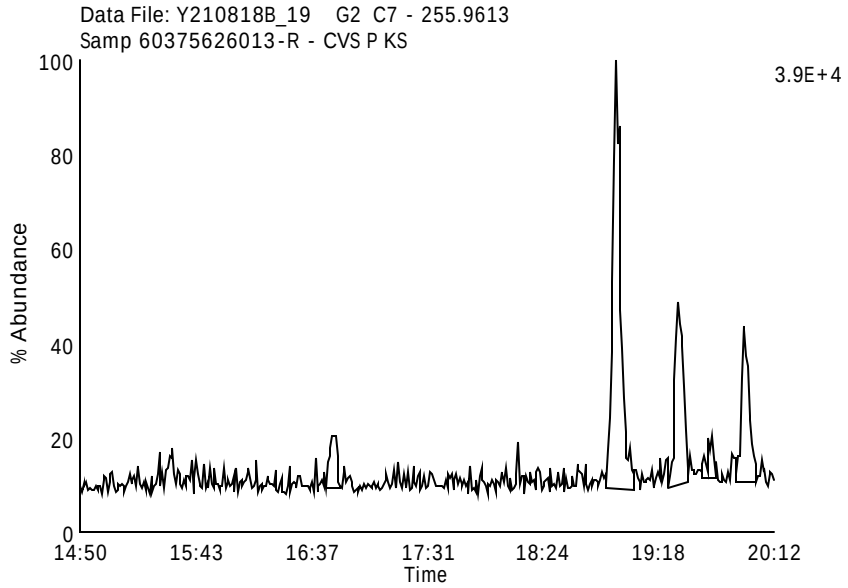


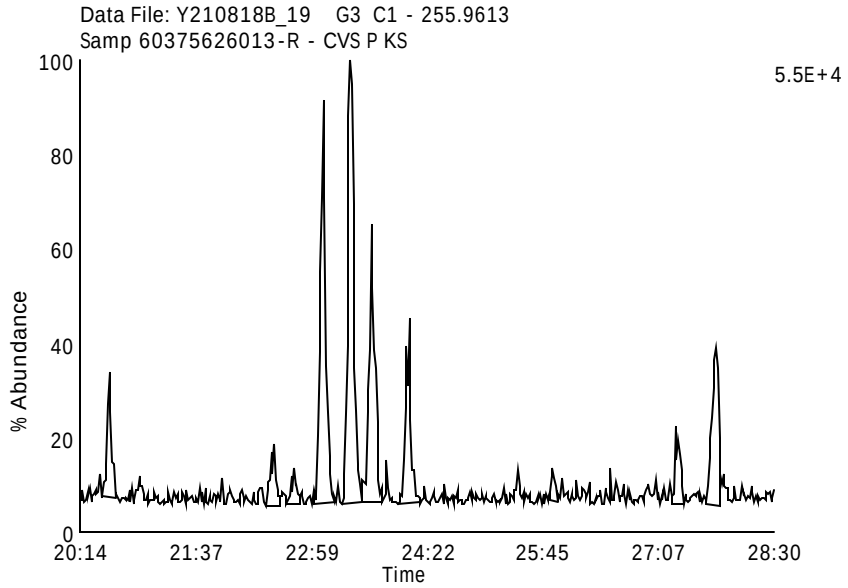


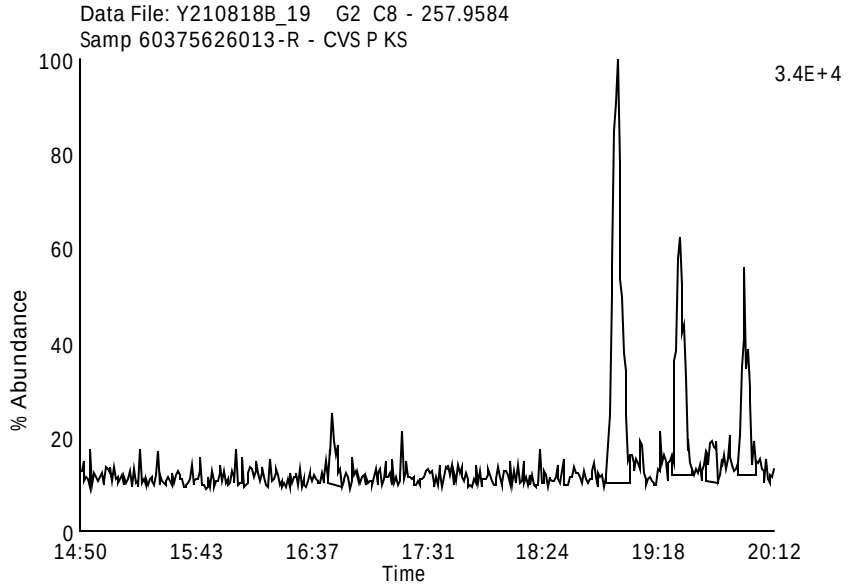


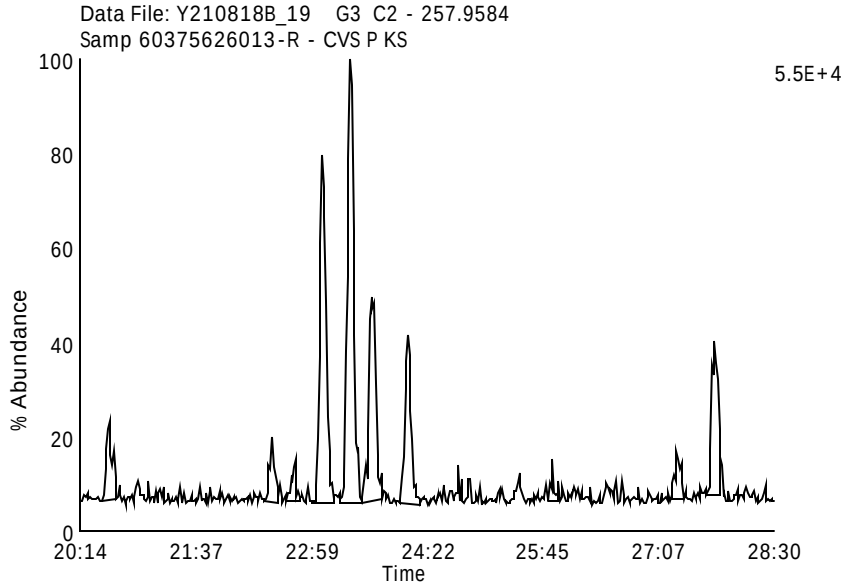
Tri Chlorinated Biphenyls

Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4



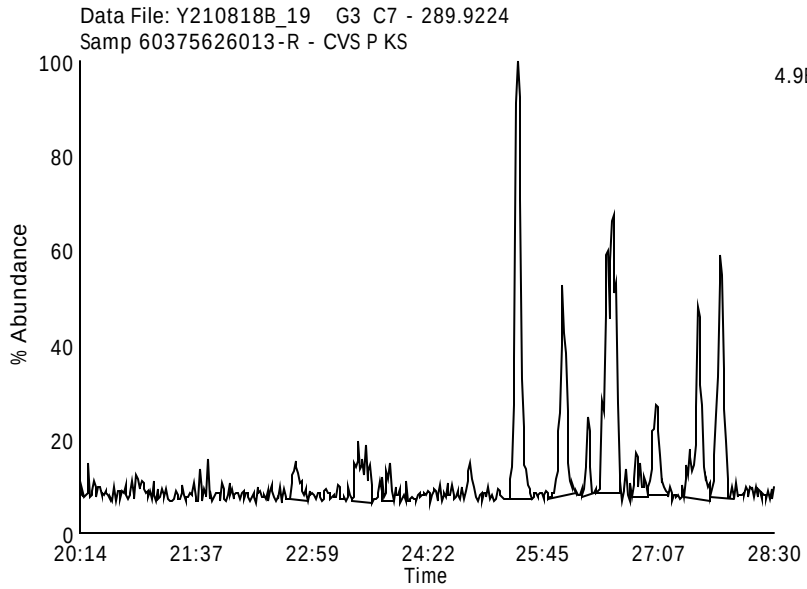


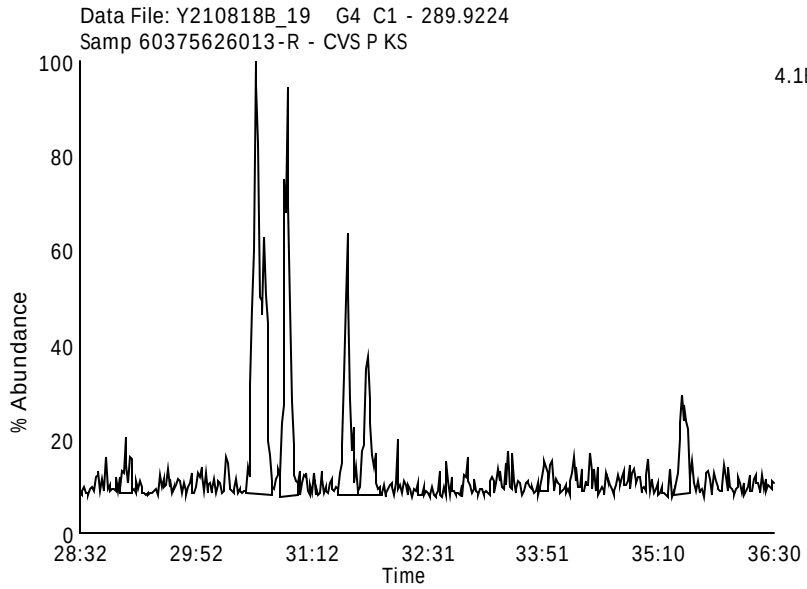


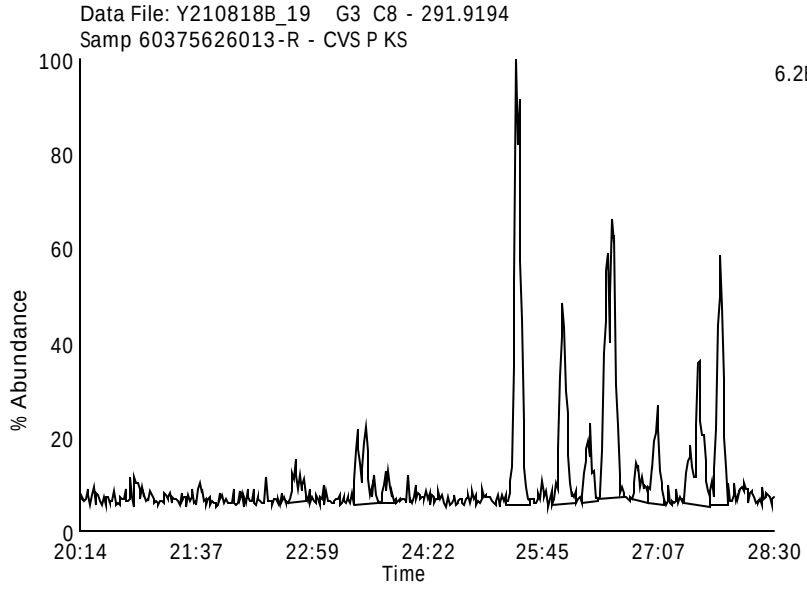


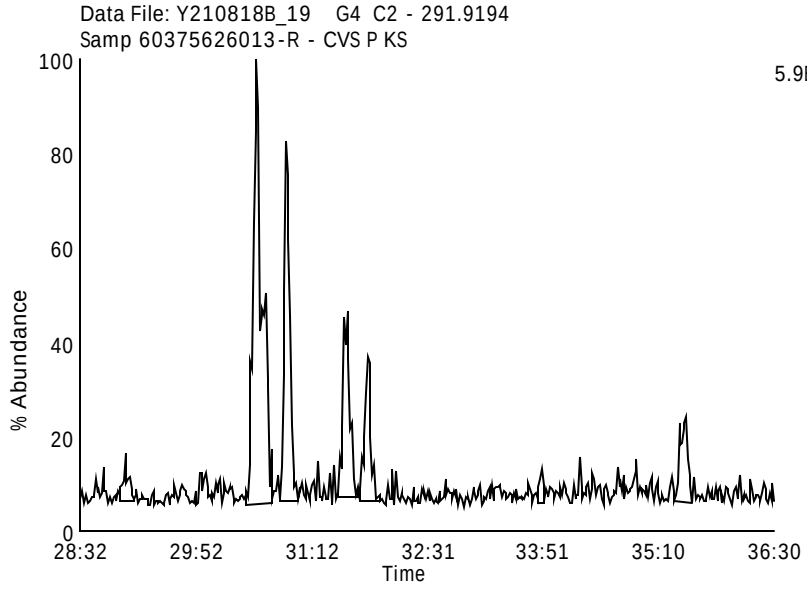
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4



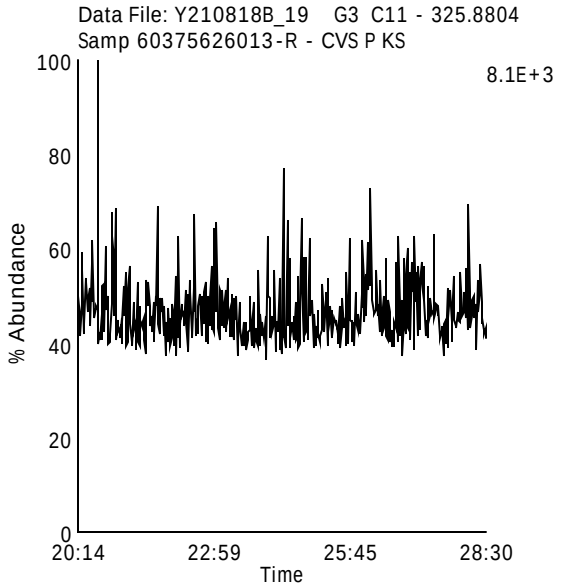


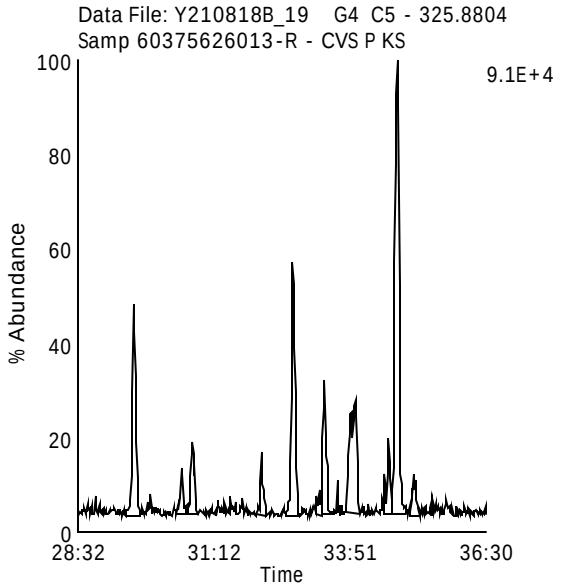


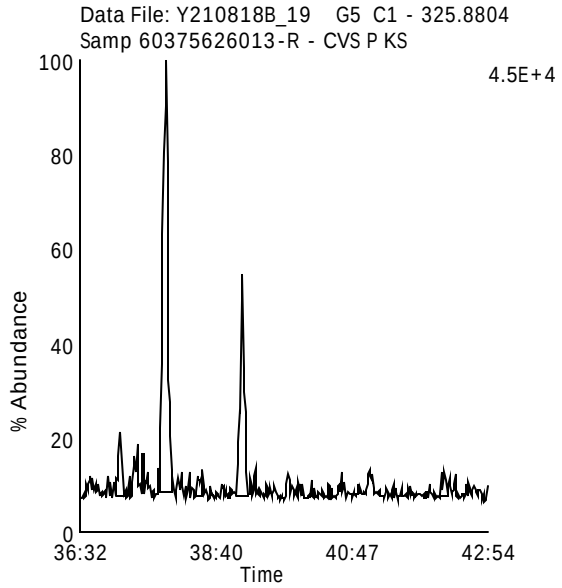


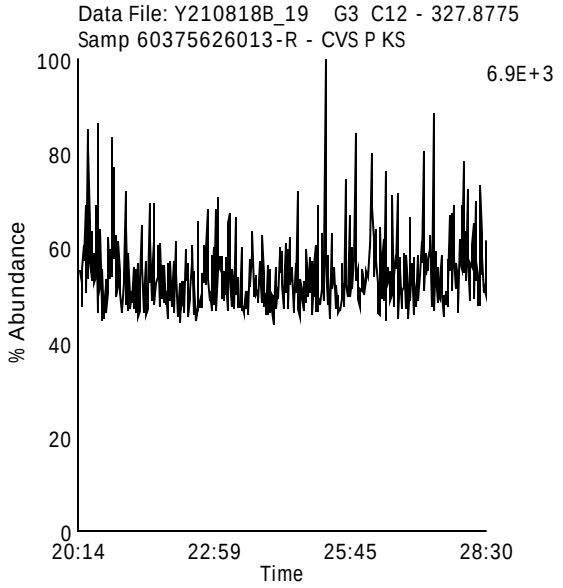
Penta Chlorinated Biphenyls

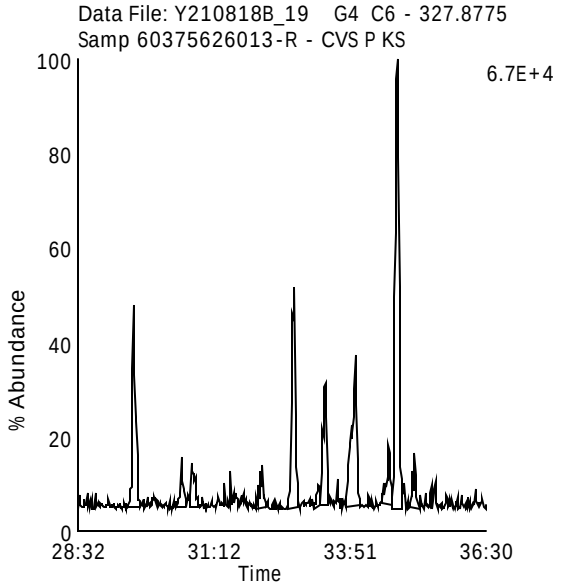
Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4

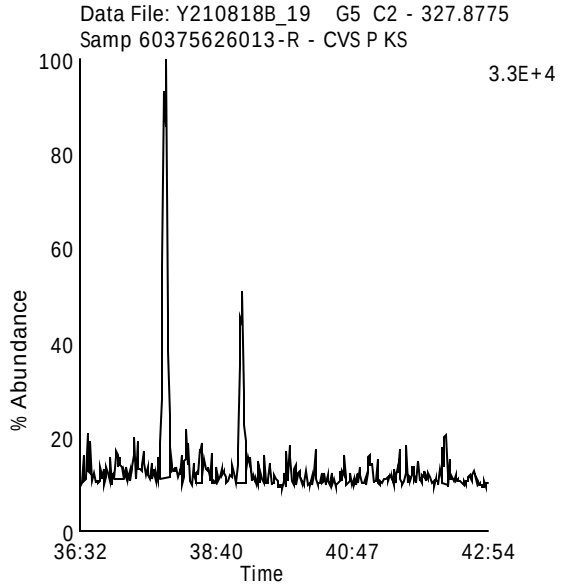






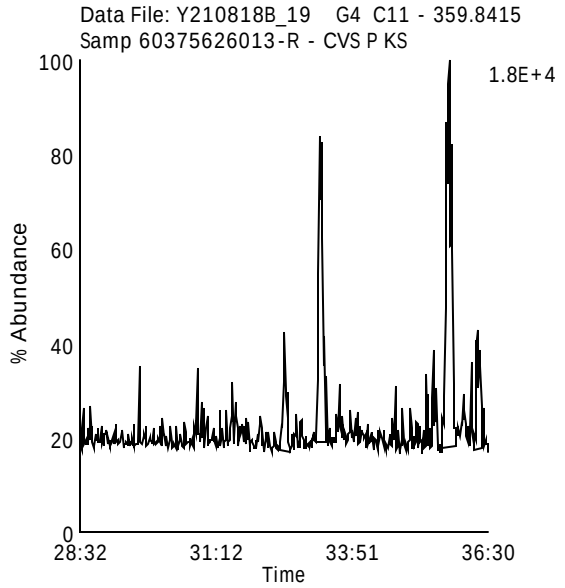


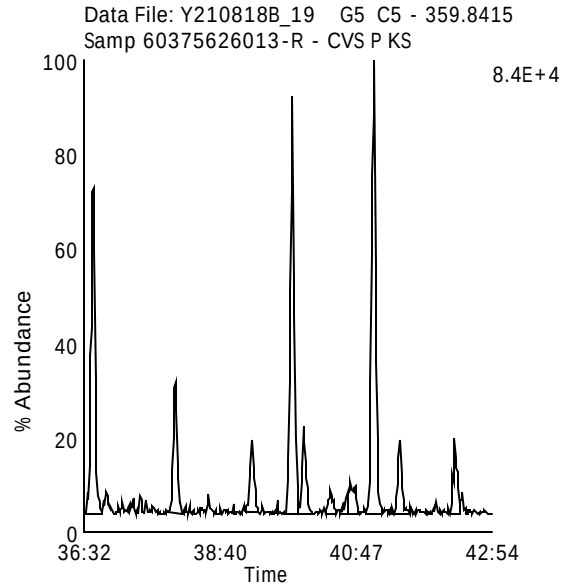


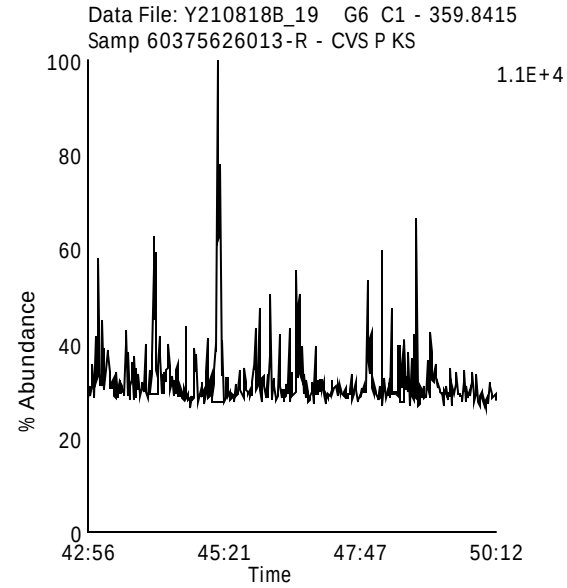


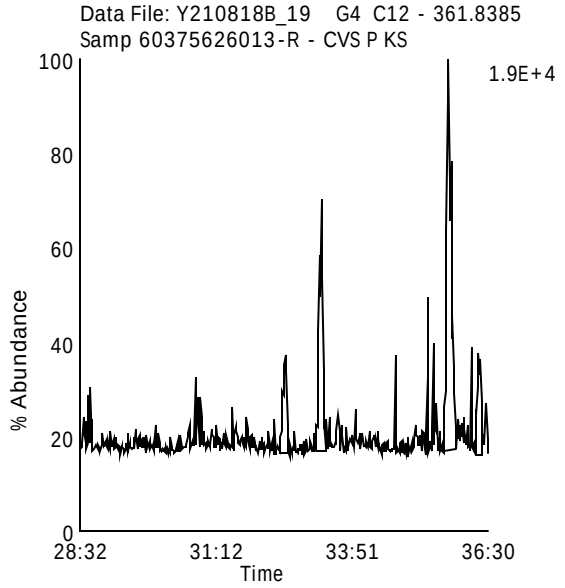
Hexa Chlorinated Biphenyls

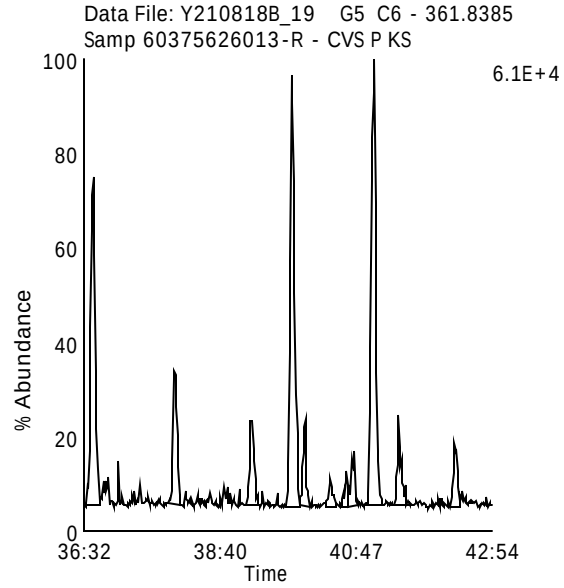
Data File Name: Y210818B_19 | Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS | Client Sample ID: GB-46/2-4

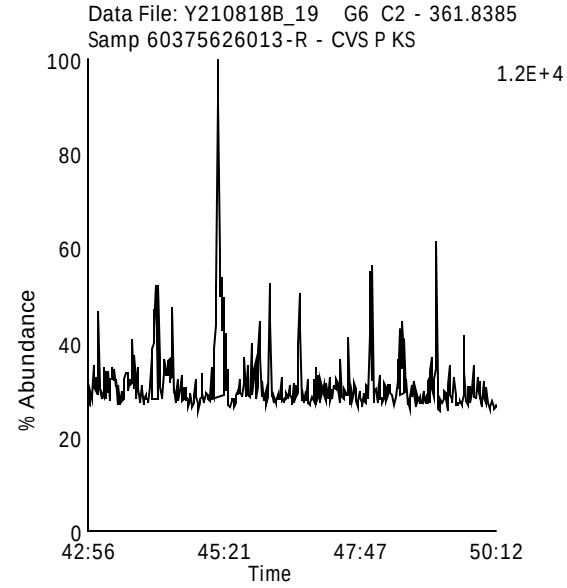






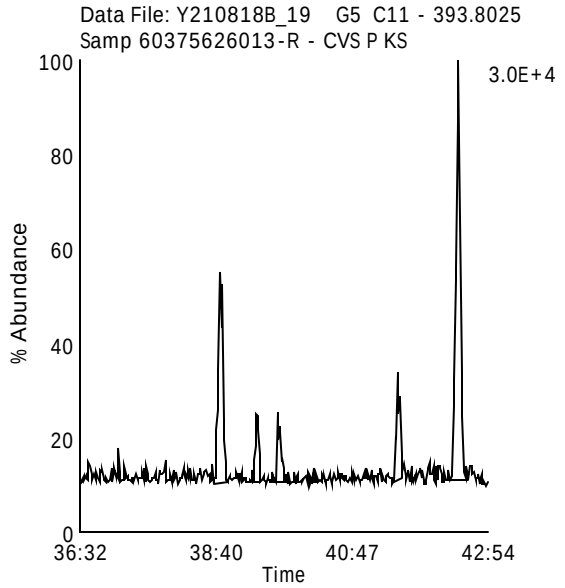


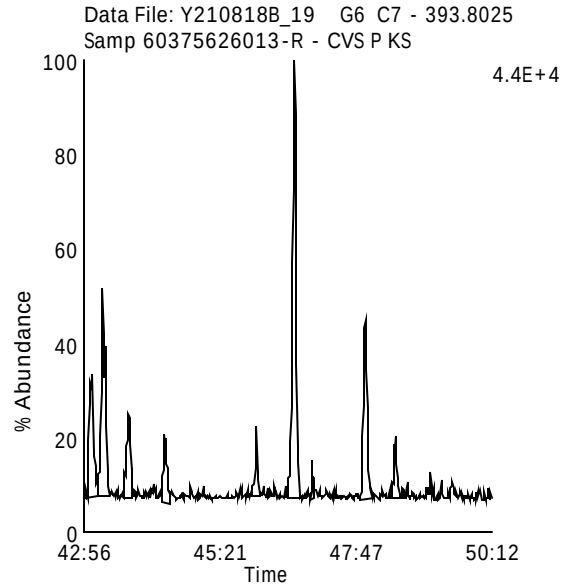


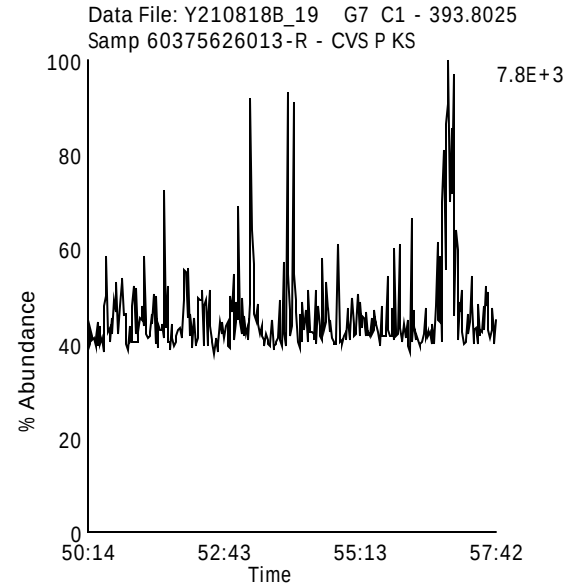


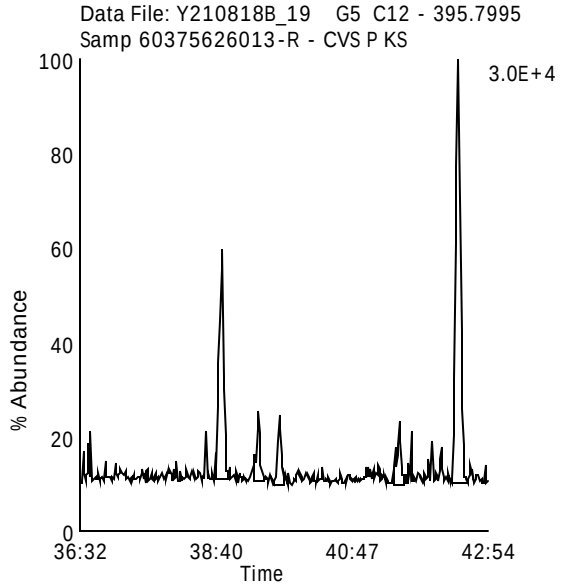
Hepta Chlorinated Biphenyls

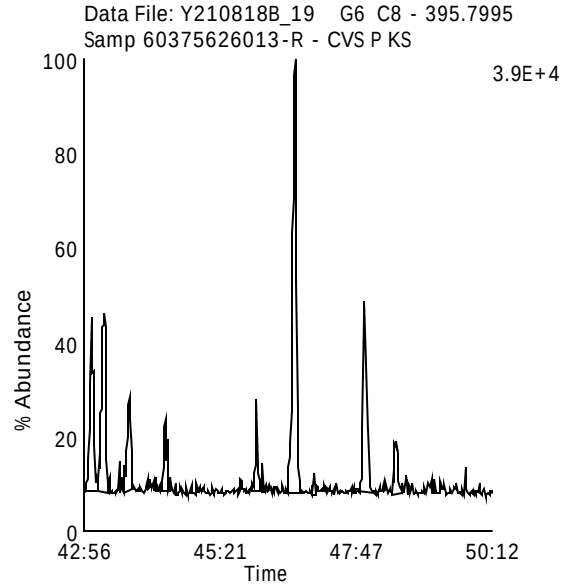
Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4

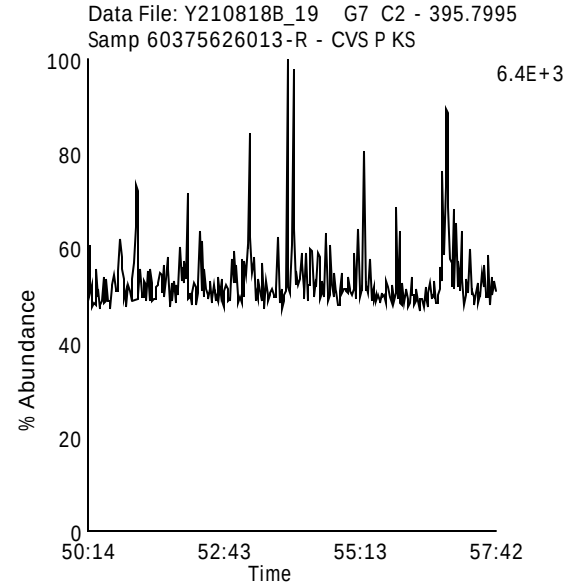






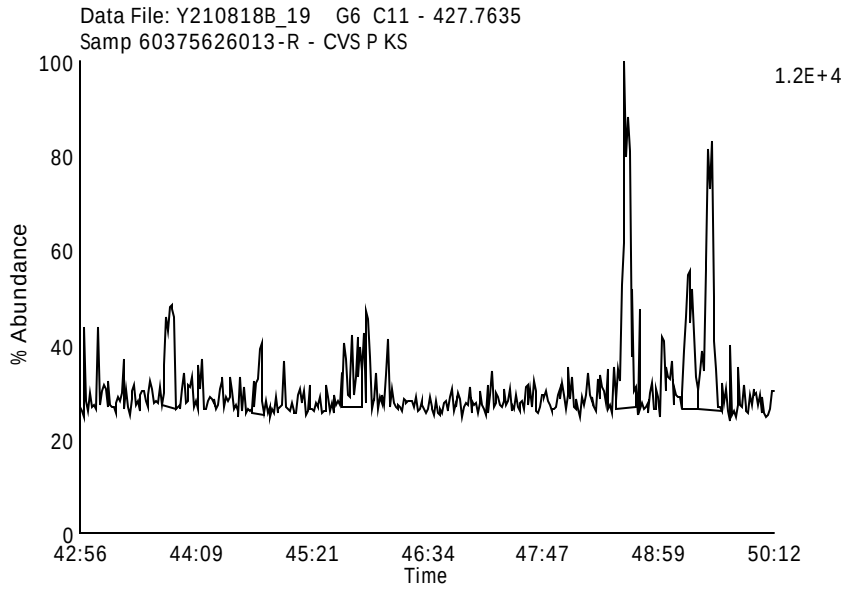


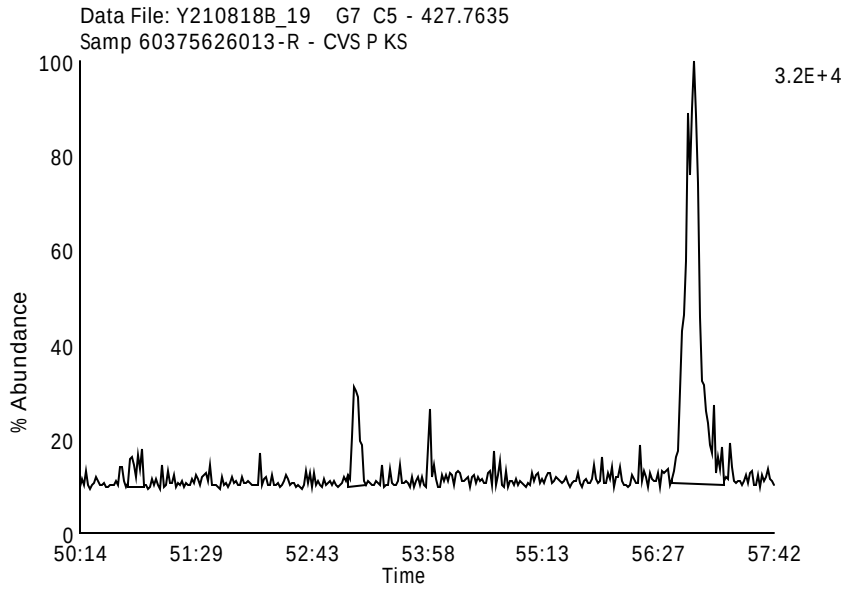


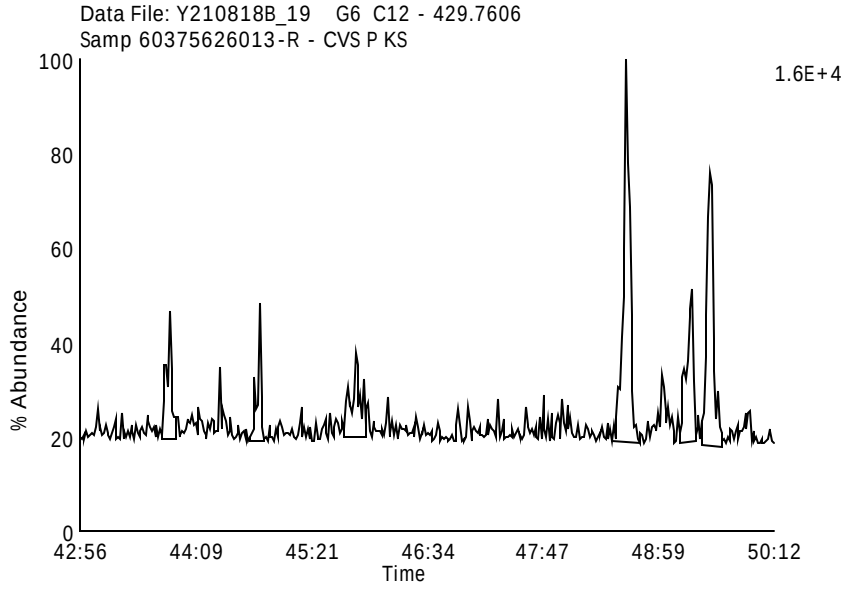


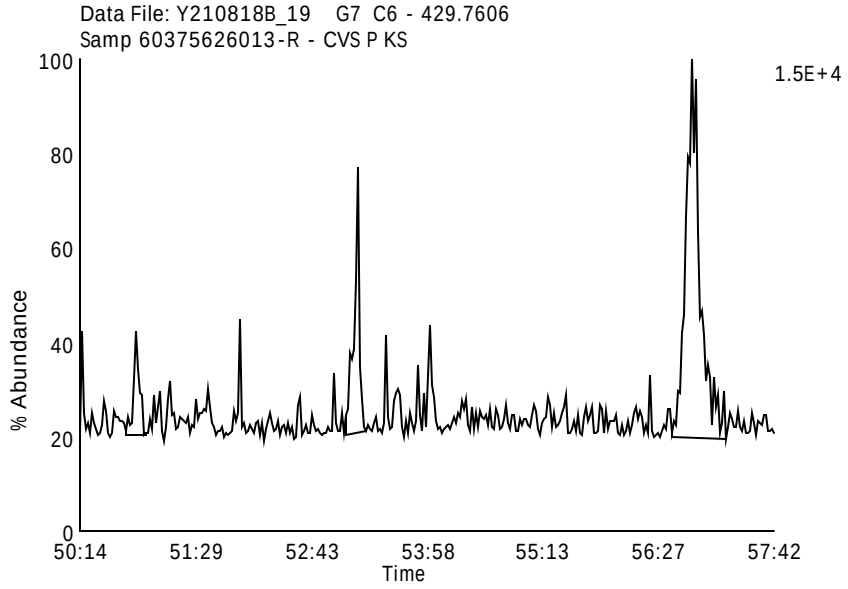
Octa Chlorinated Biphenyls

Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4



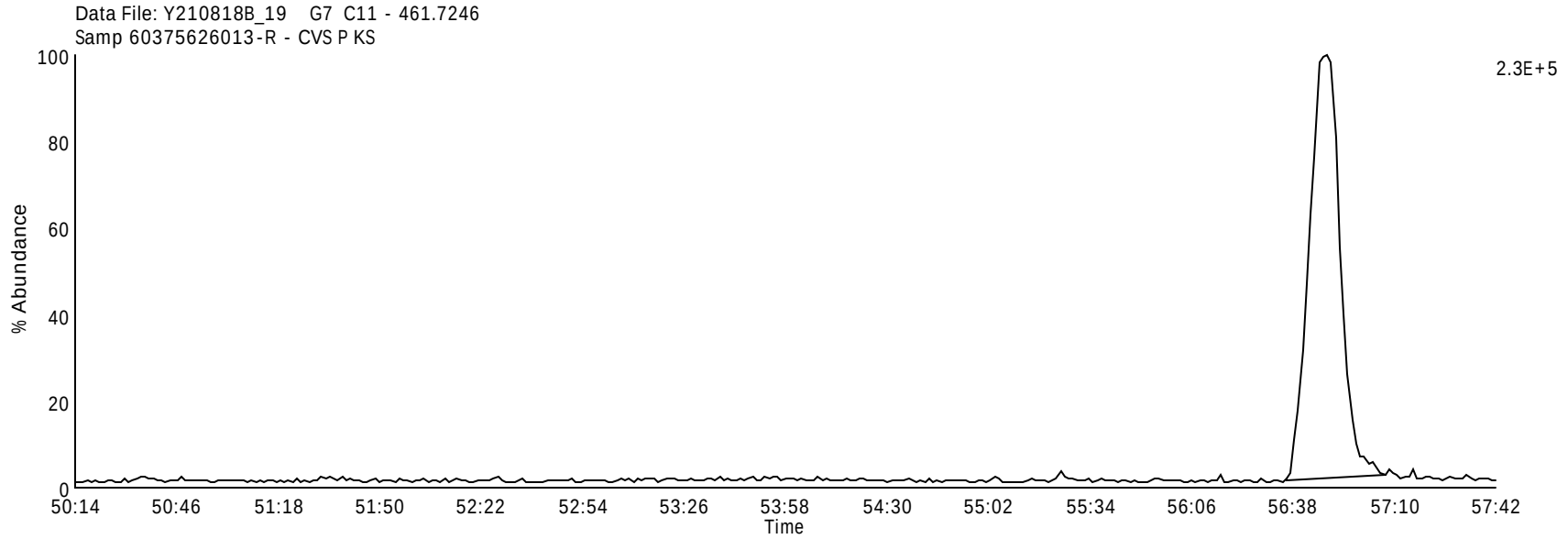


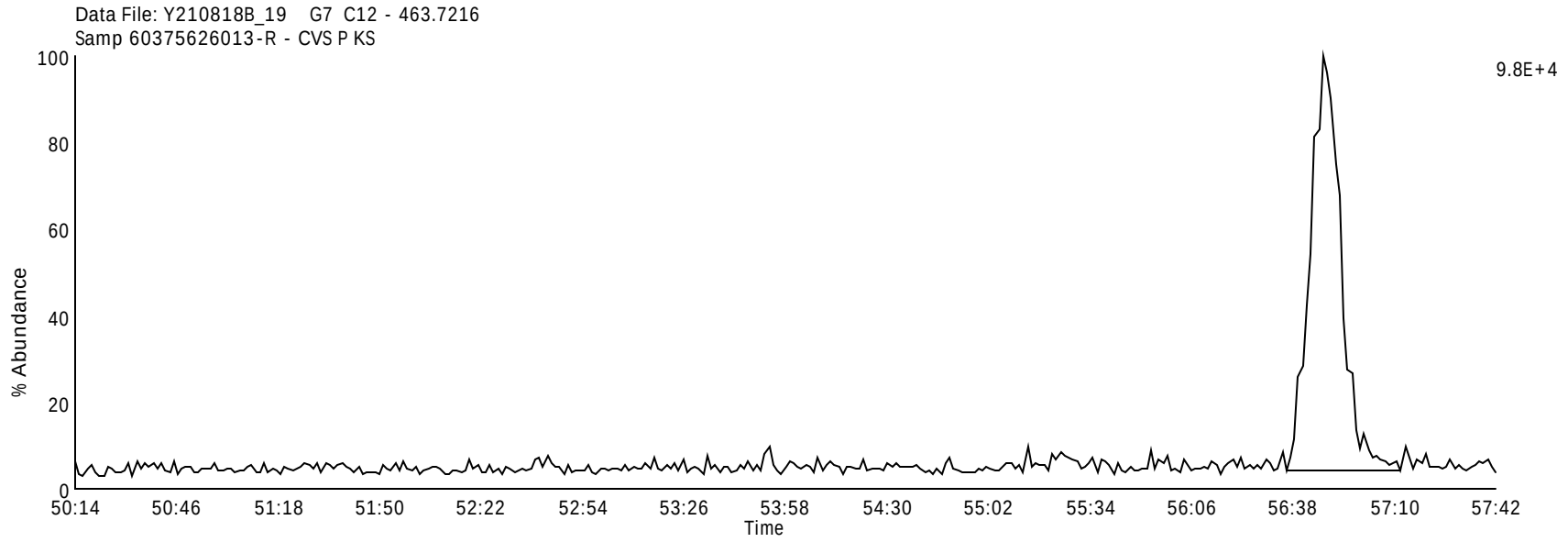




Nona Chlorinated Biphenyls

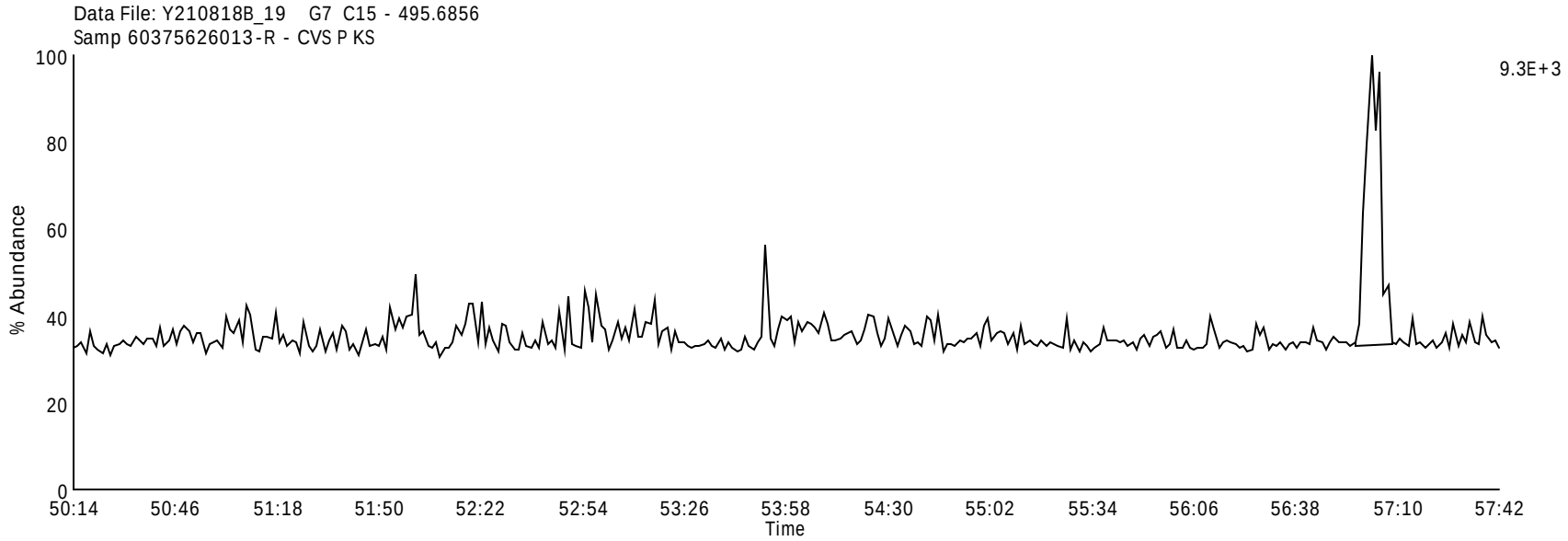
Data File Name: Y210818B_19	Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS	Client Sample ID: GB-46/2-4

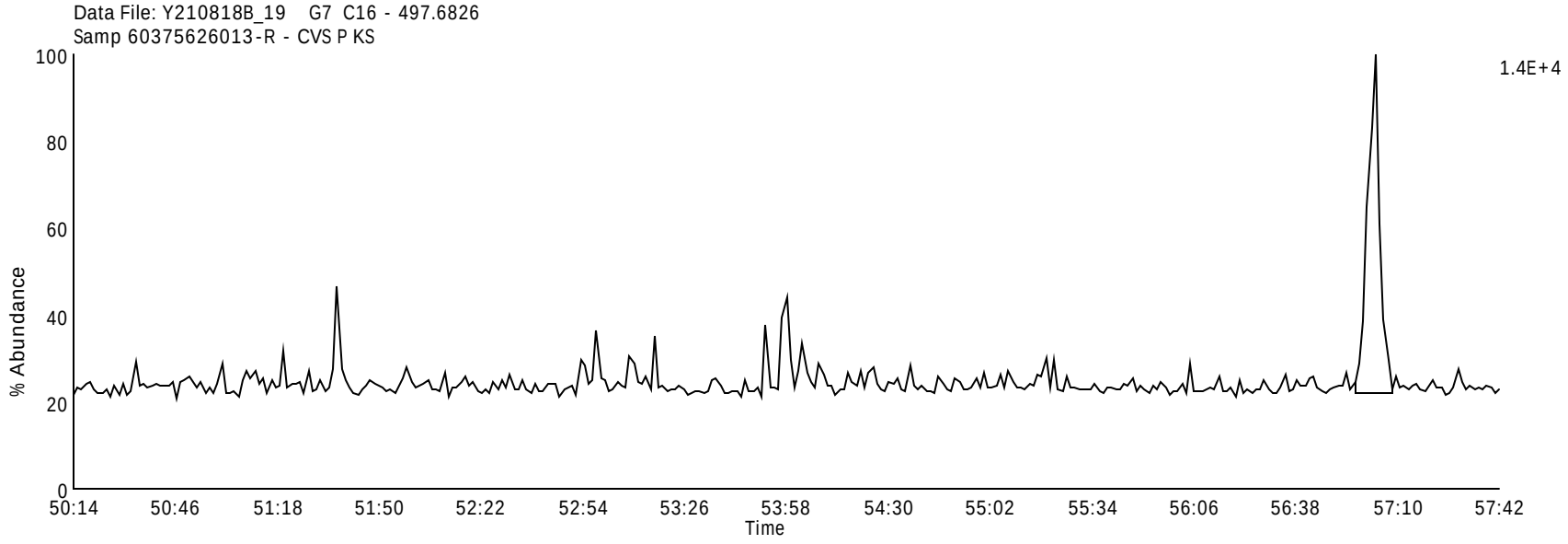




Deca Chlorinated Biphenyl

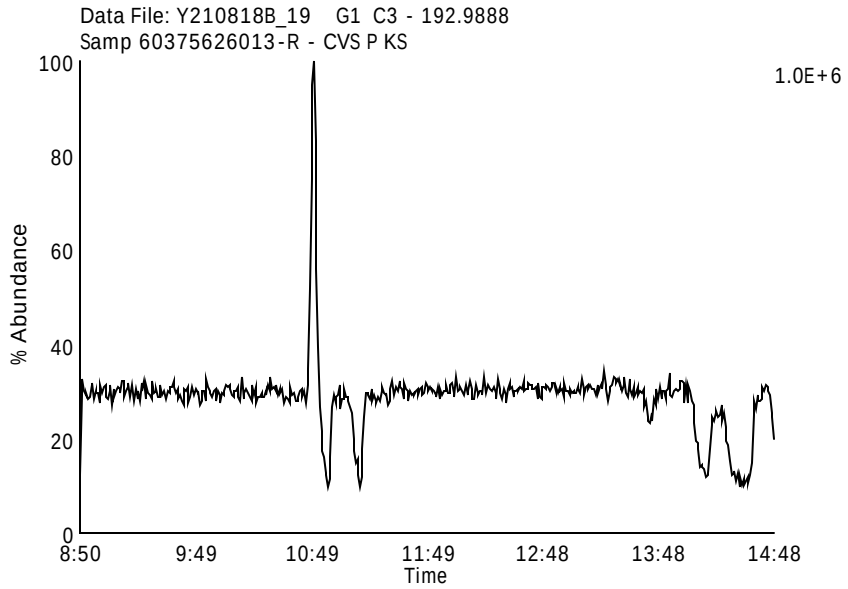
Data File Name: Y210818B_19	Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS	Client Sample ID: GB-46/2-4

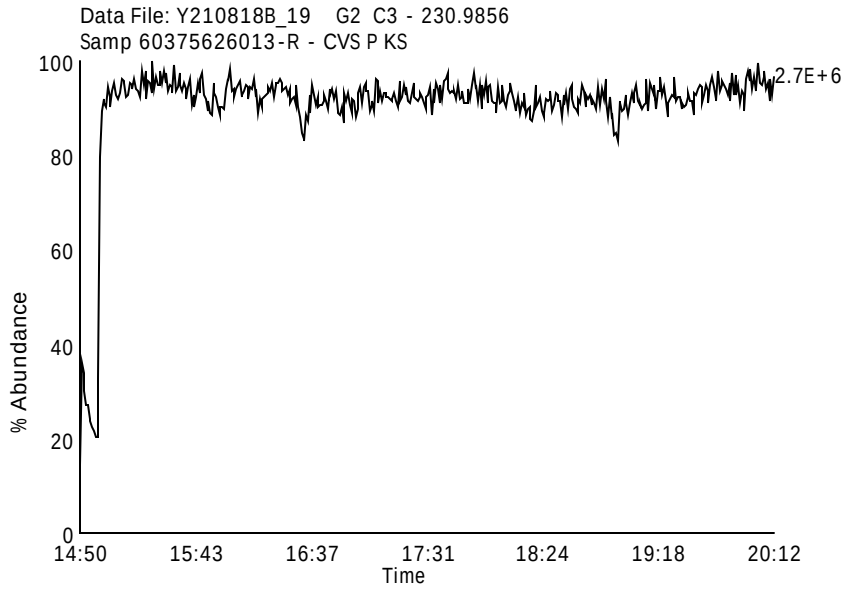


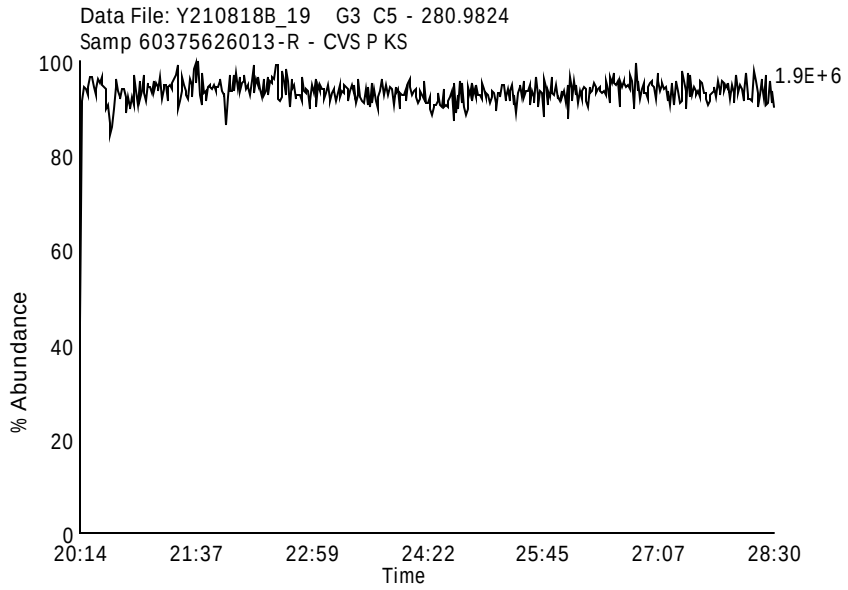


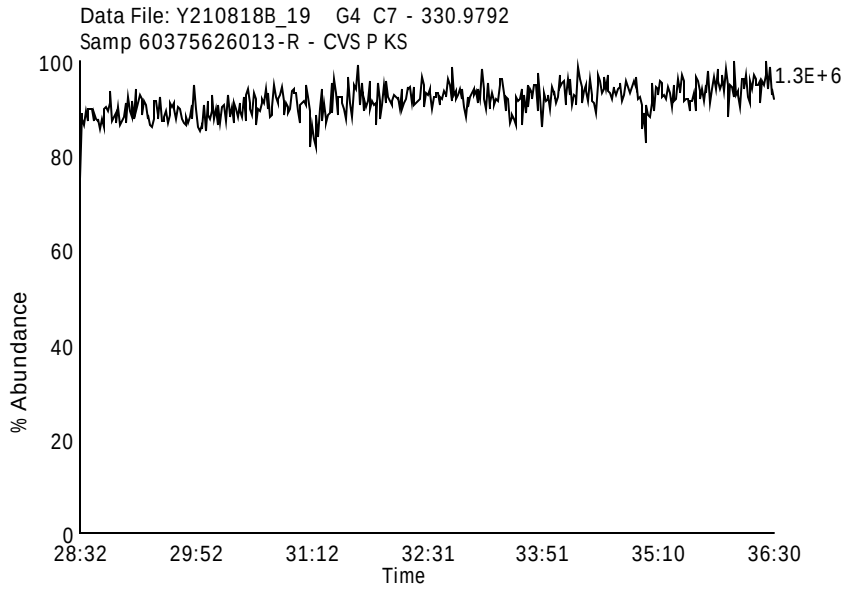
Group 1 - 4 Lock mass

Data File Name: Y210818B_19
Lab Sample ID: 60375626013-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626013-R - CVS P KS
Client Sample ID: GB-46/2-4





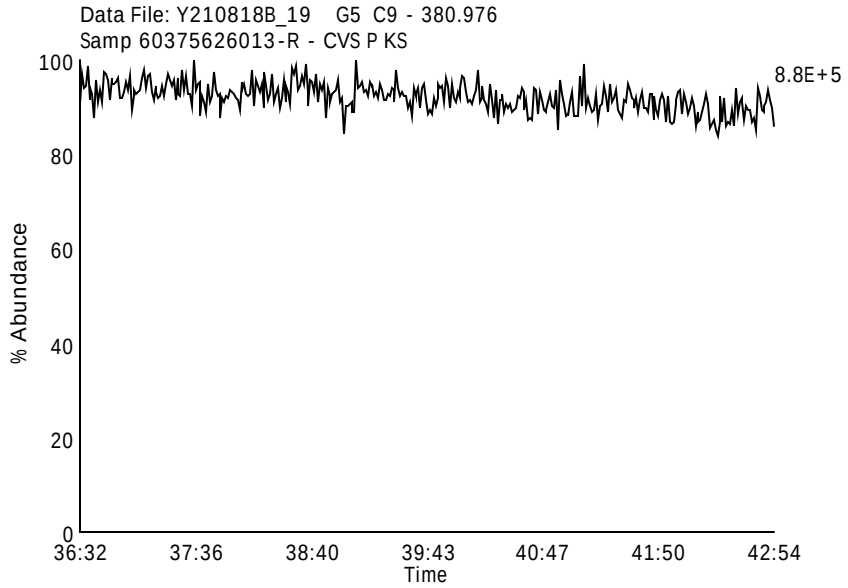


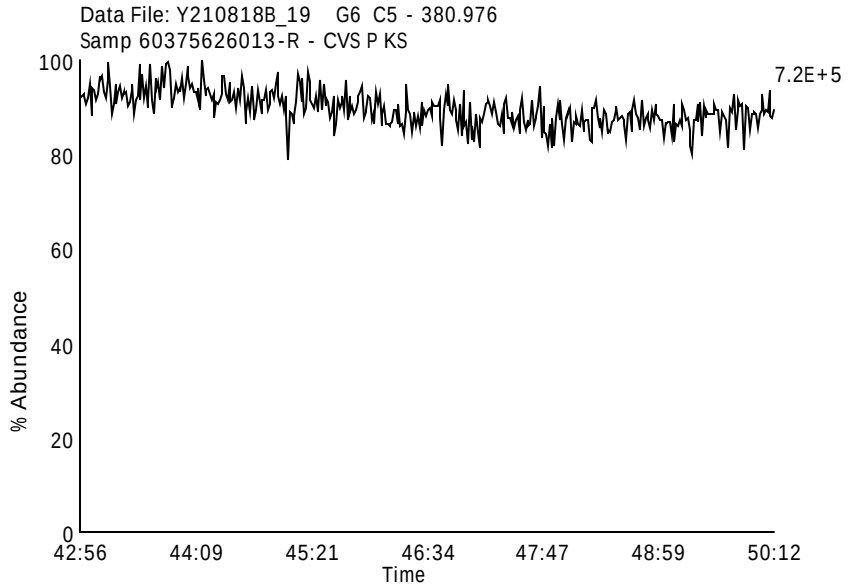


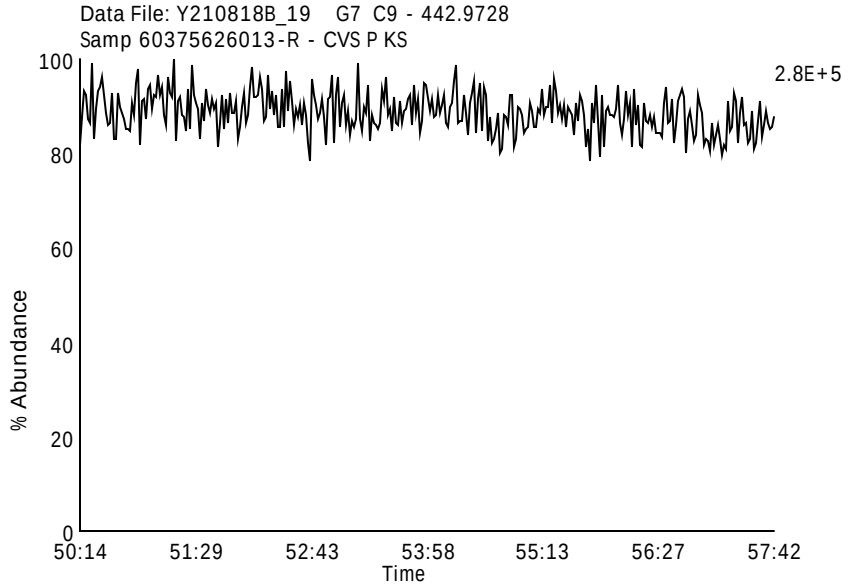
Group 5 - 7 Lock mass

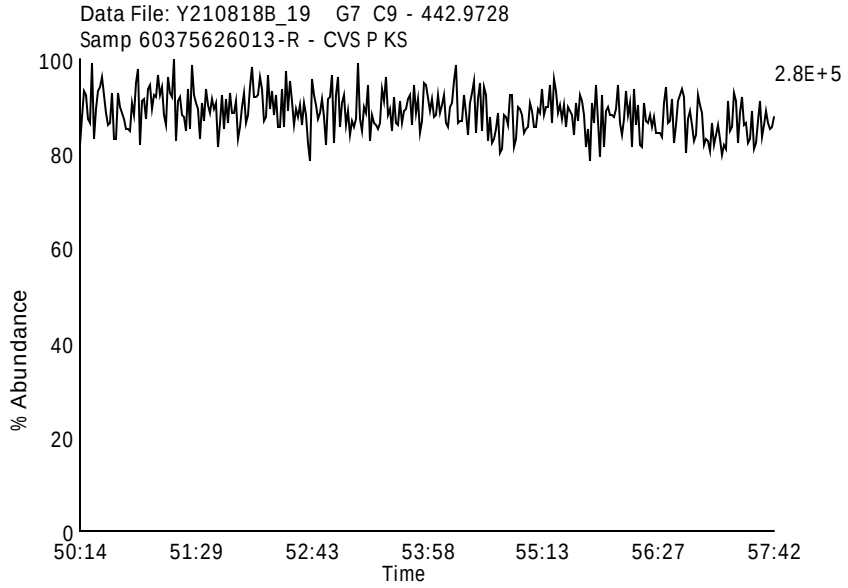
Data File Name: Y210818B_19
Date Acquired: 8/19/2021
Sample Description: Samp 60375626013-R - CVS P KS

Lab Sample ID: 60375626013-R
Instrument: 10MSHR12 (Y)
Client Sample ID: GB-46/2-4



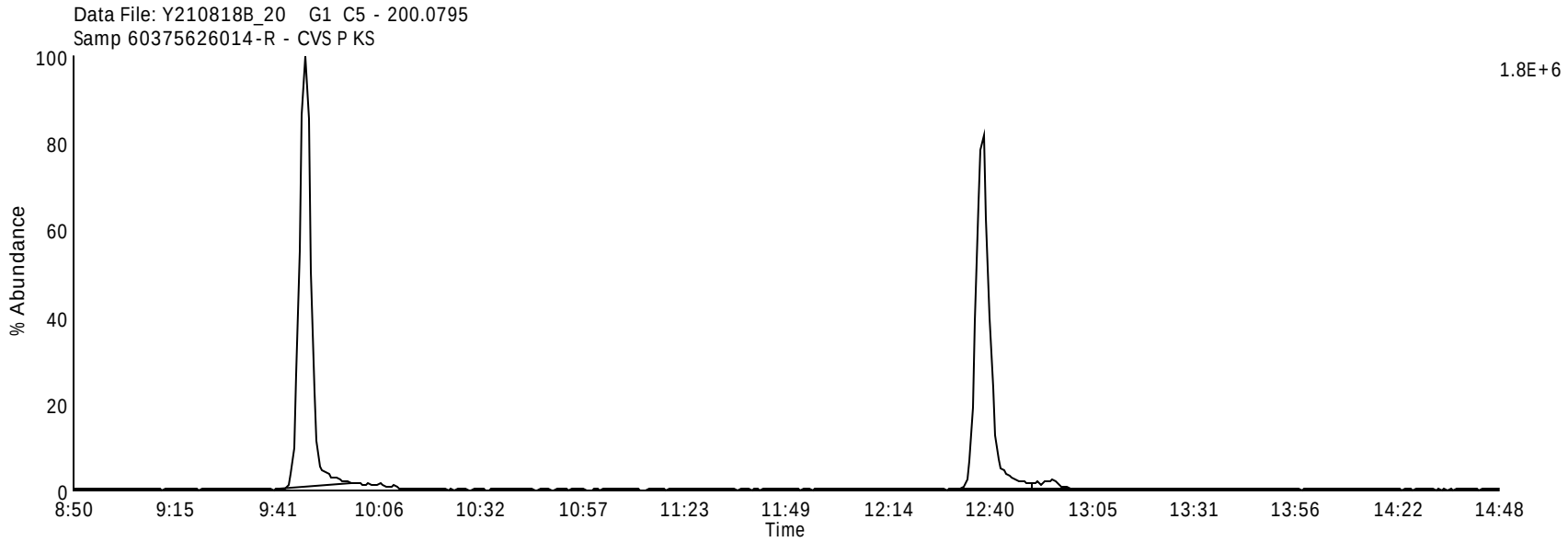


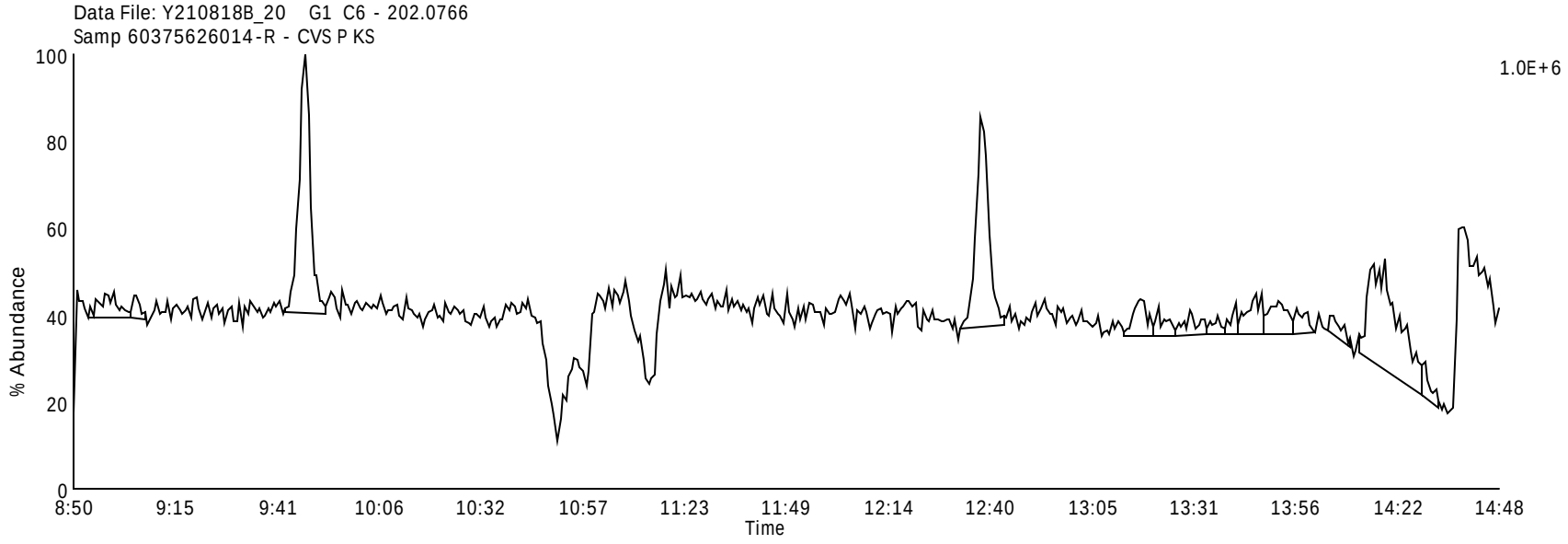




Labeled Mono Chlorinated Biphenyls

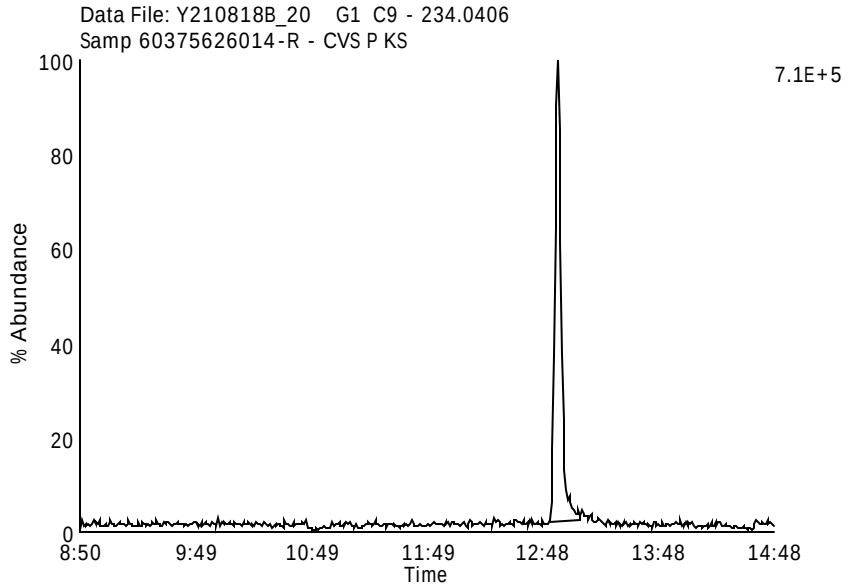
Data File Name: Y210818B_20	Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS	Client Sample ID: GB-46/2-4D

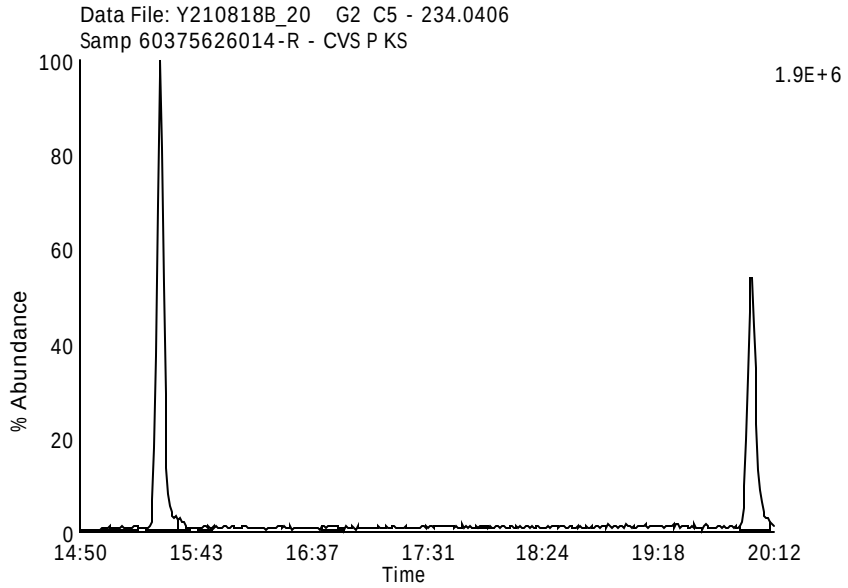


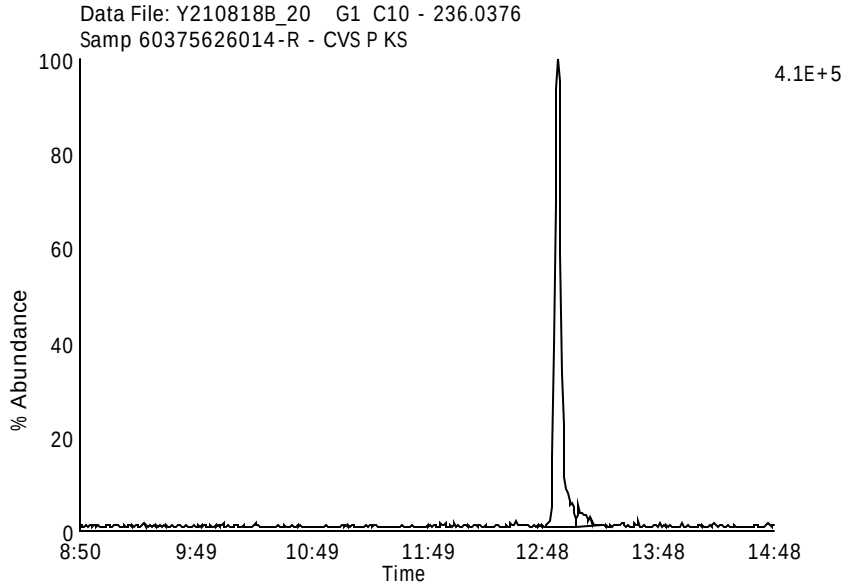


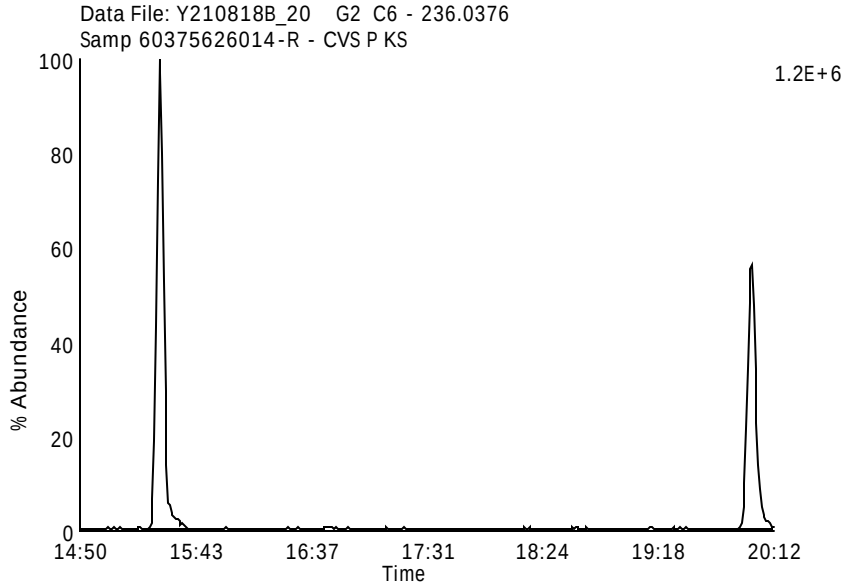
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D



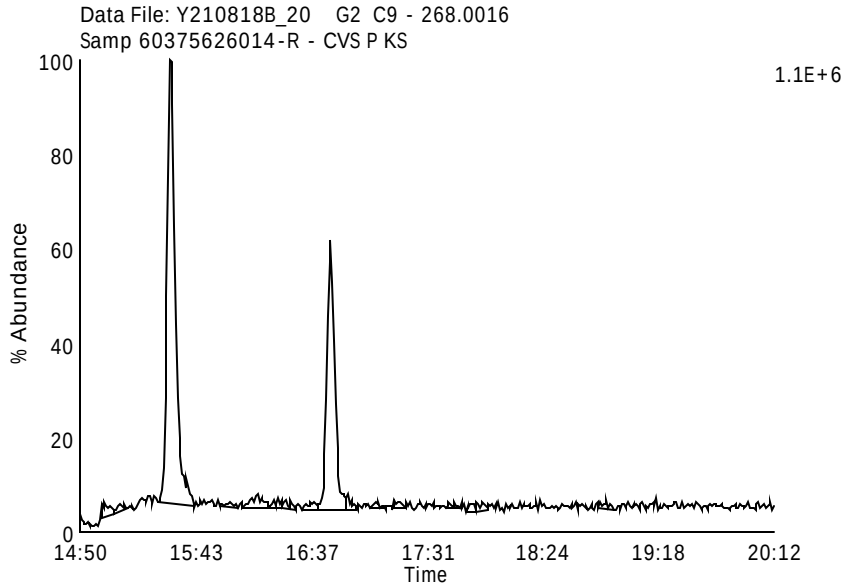


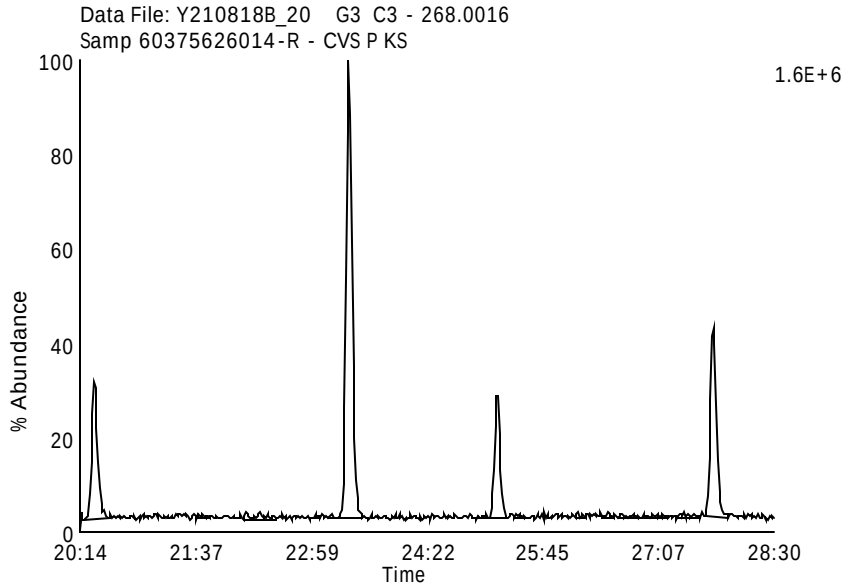


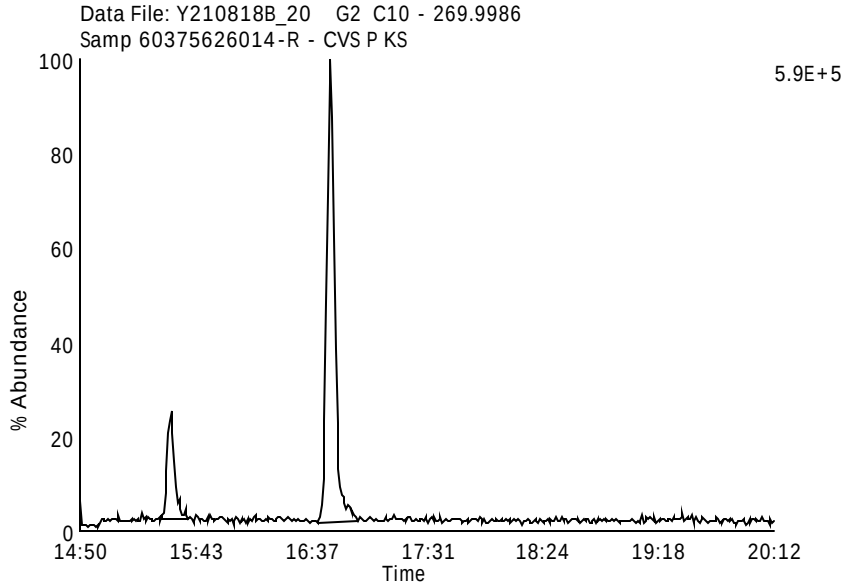


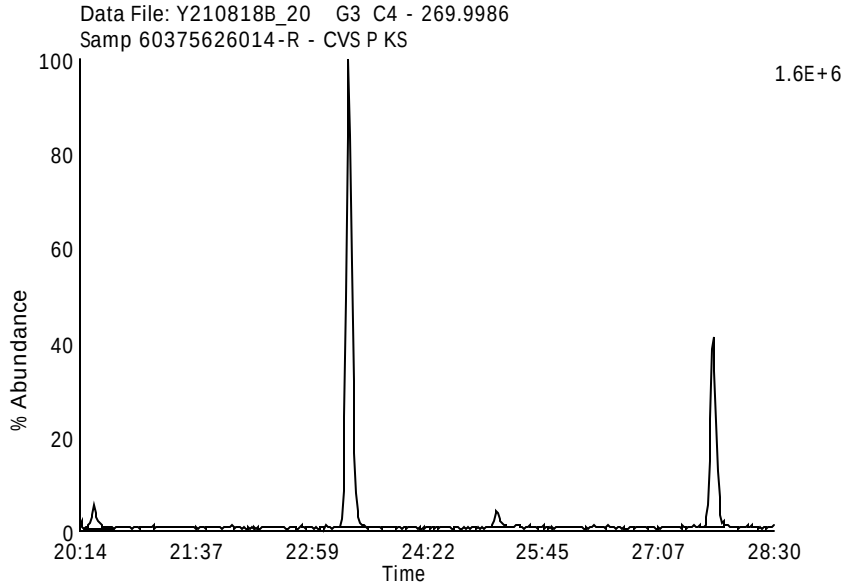
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D



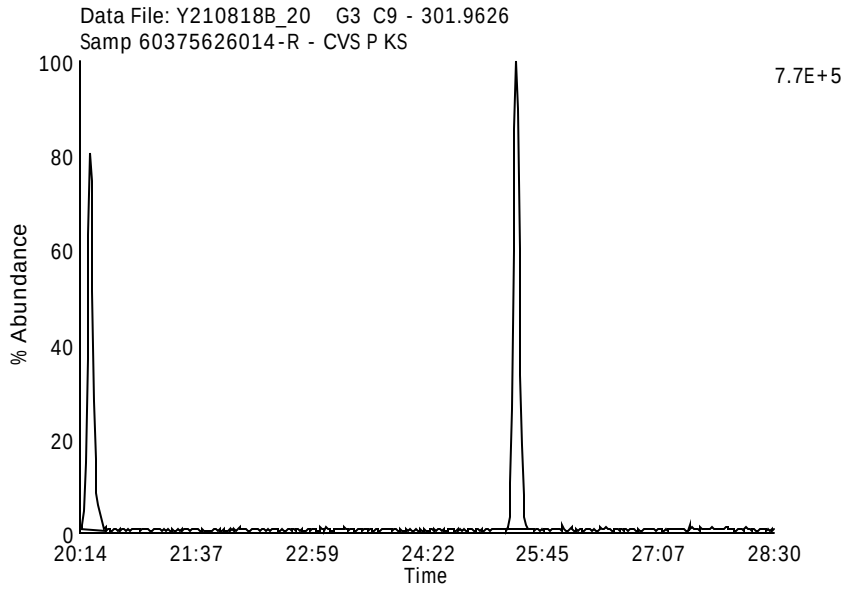


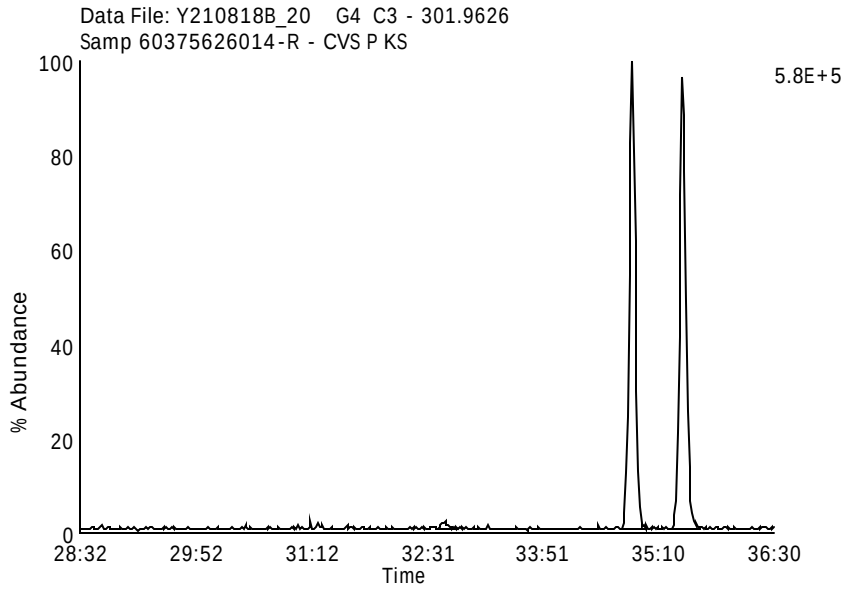


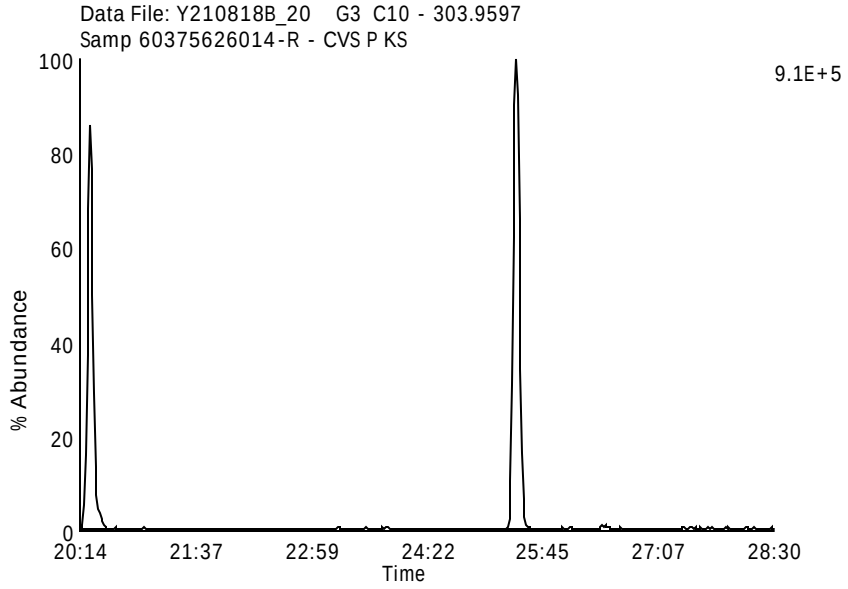


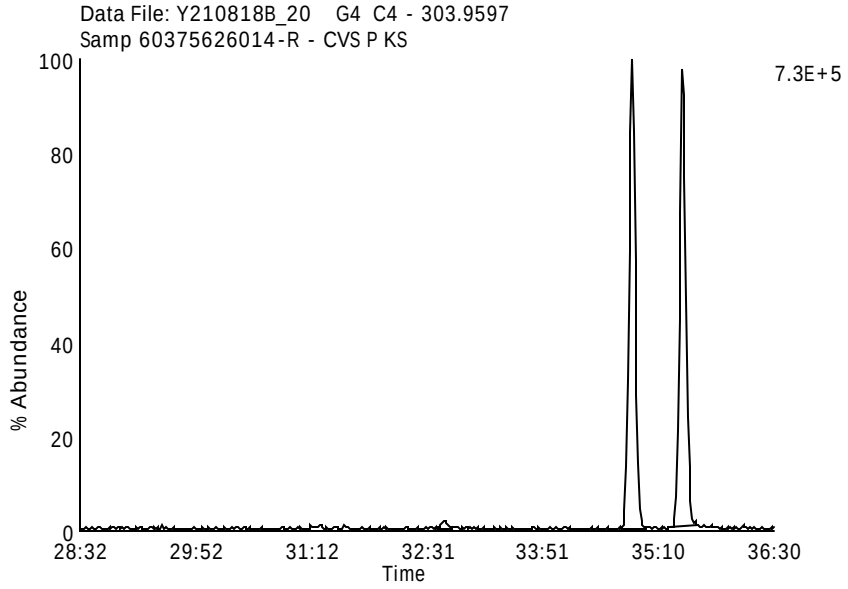
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D





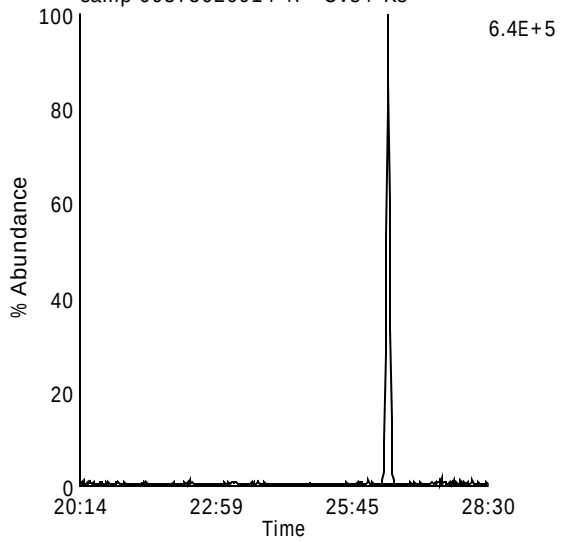




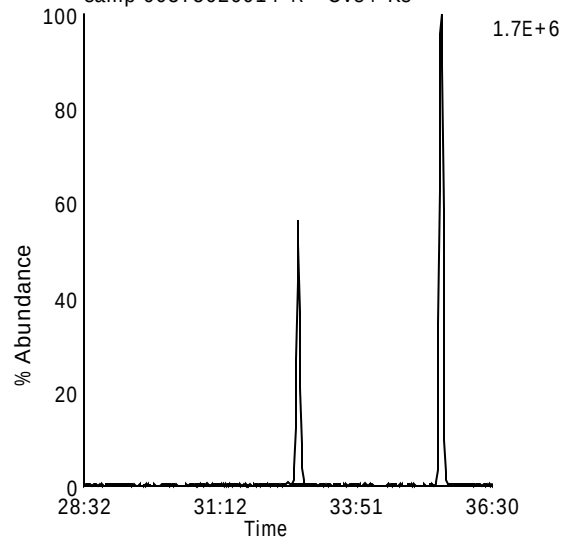
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_20 | Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS | Client Sample ID: GB-46/2-4D

Data File: Y210818B_20 G3 C13 - 337.9207
Samp 60375626014-R - CVS P KS



Data File: Y210818B_20 G4 C9 - 337.9207
Samp 60375626014-R - CVS P KS



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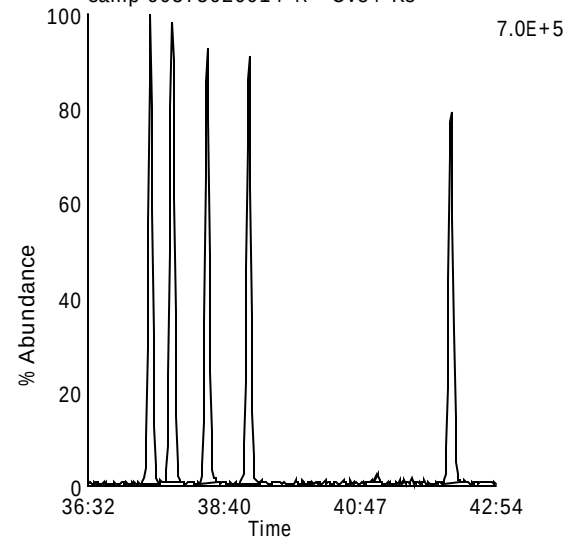
Samp 60375626014-R - CVS P KS



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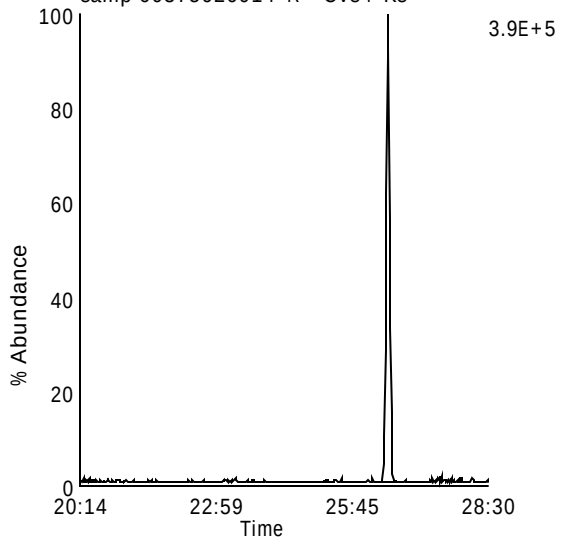
Samp 60375626014-R - CVS P KS



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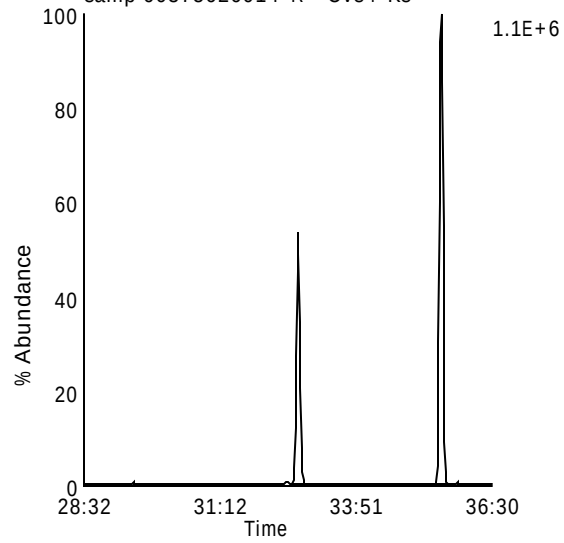
Samp 60375626014-R - CVS P KS



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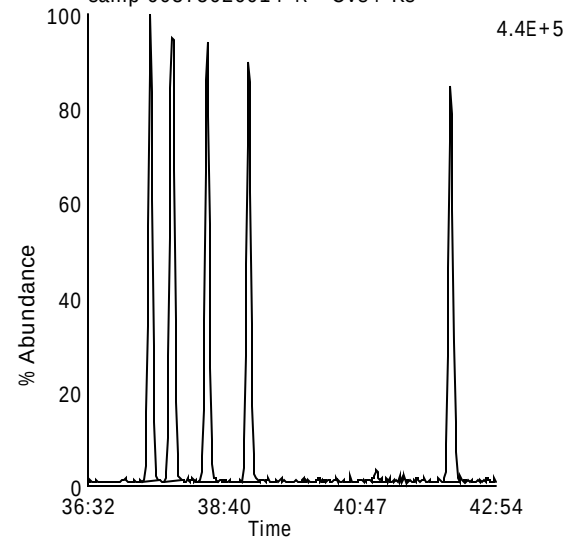
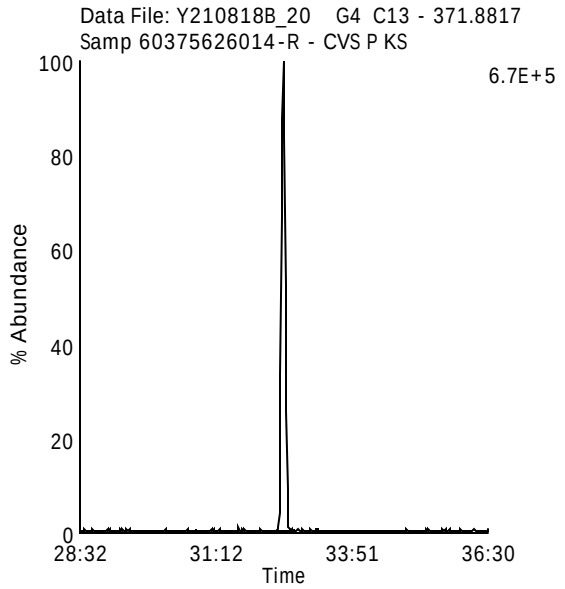
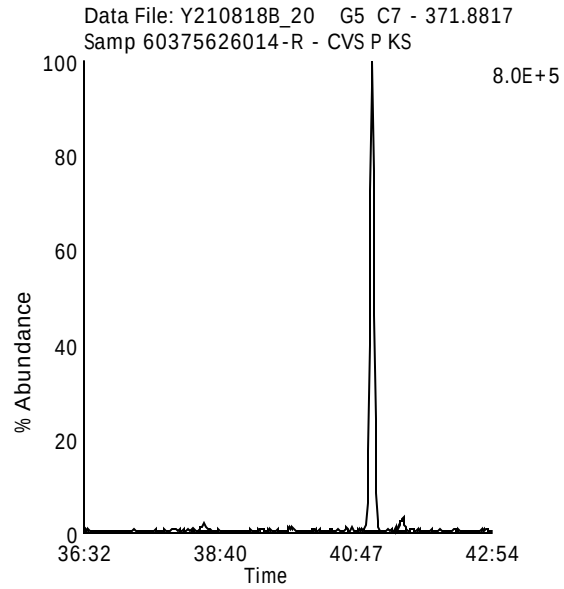
Samp 60375626014-R - CVS P KS

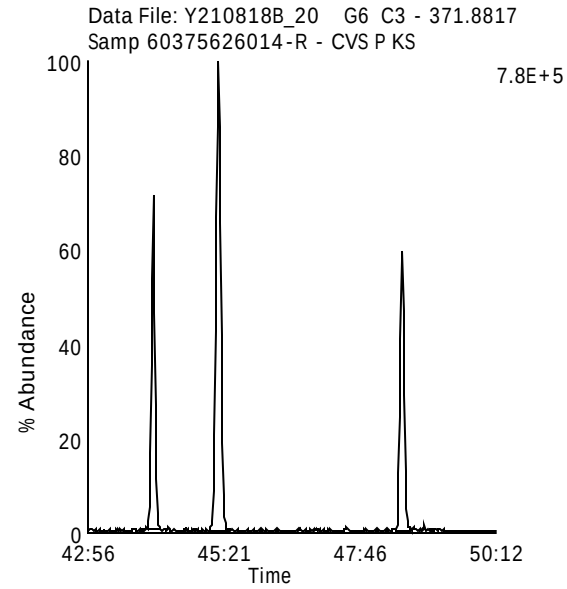


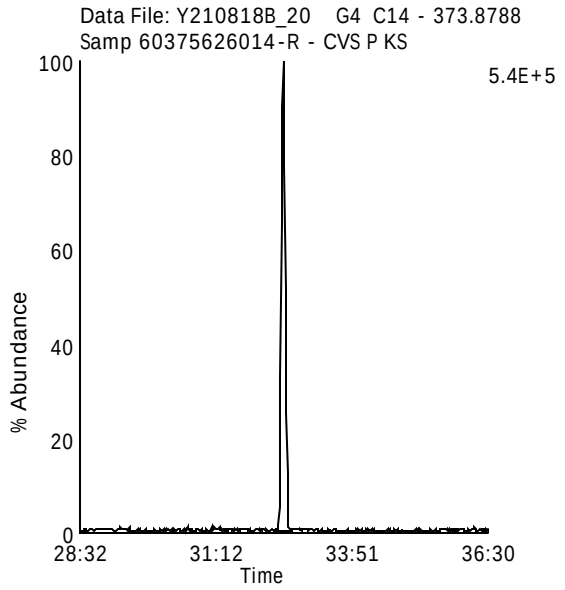
Labeled Hexa Chlorinated Biphenyls

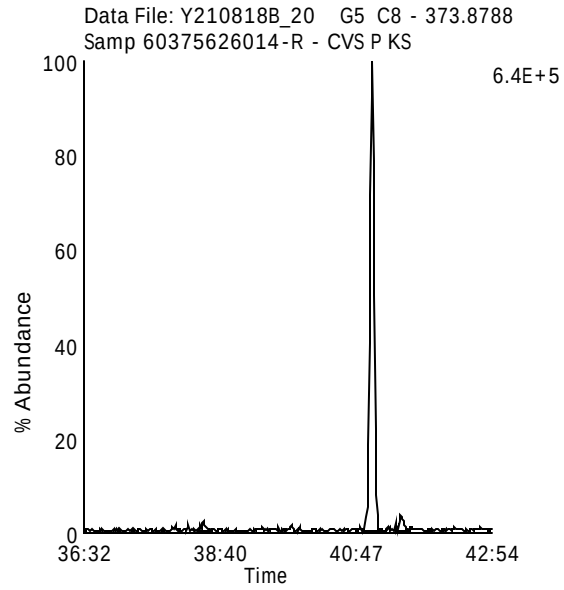
Data File Name: Y210818B_20 | Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS | Client Sample ID: GB-46/2-4D

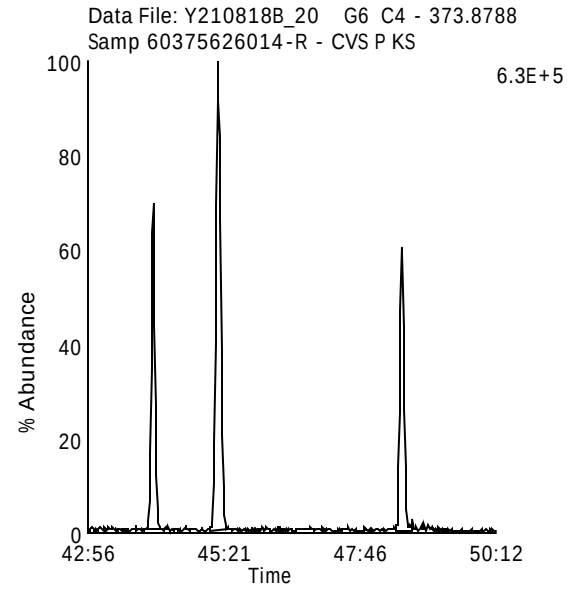






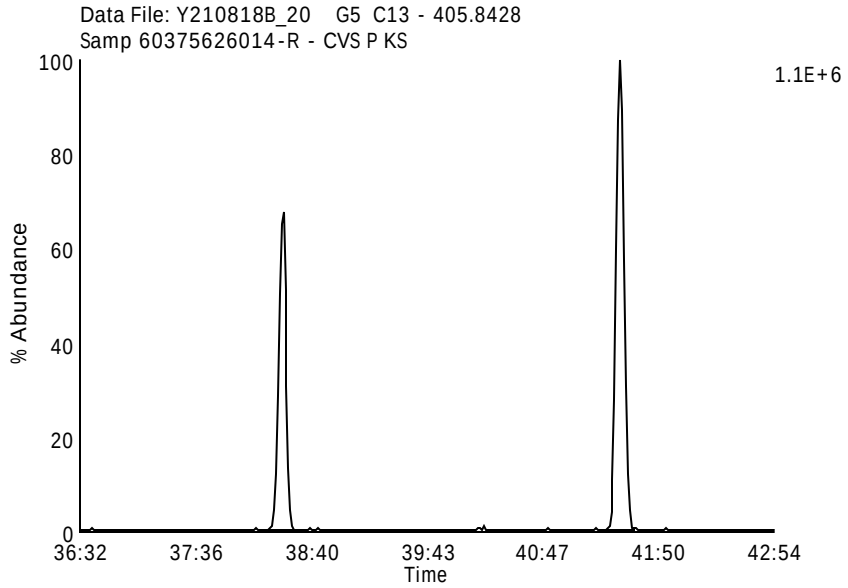


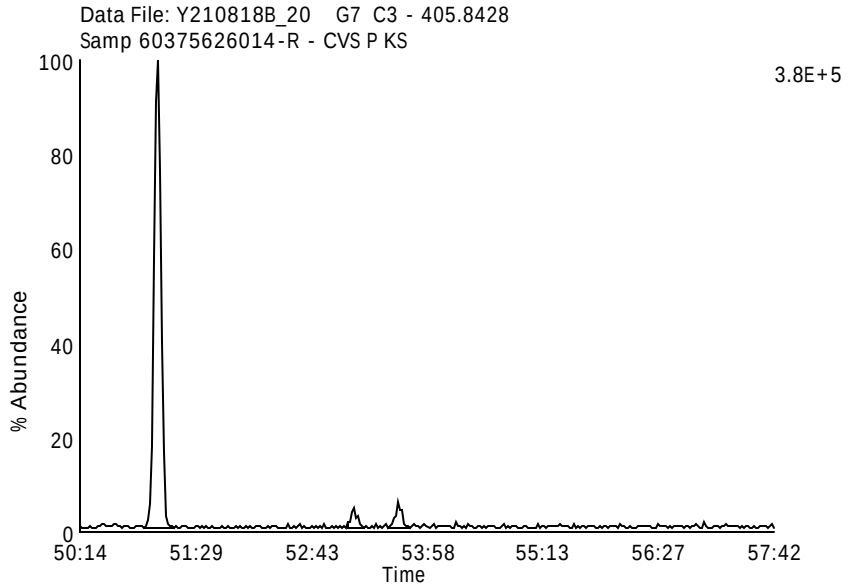


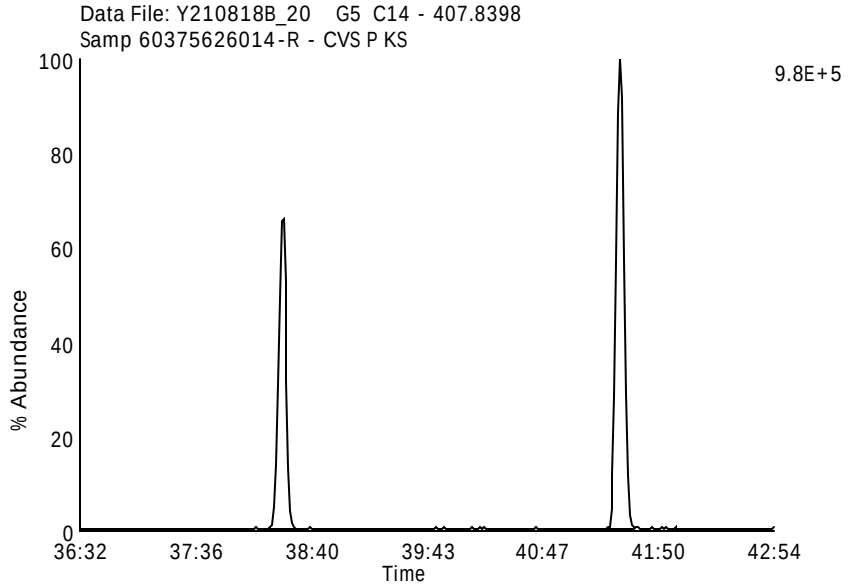


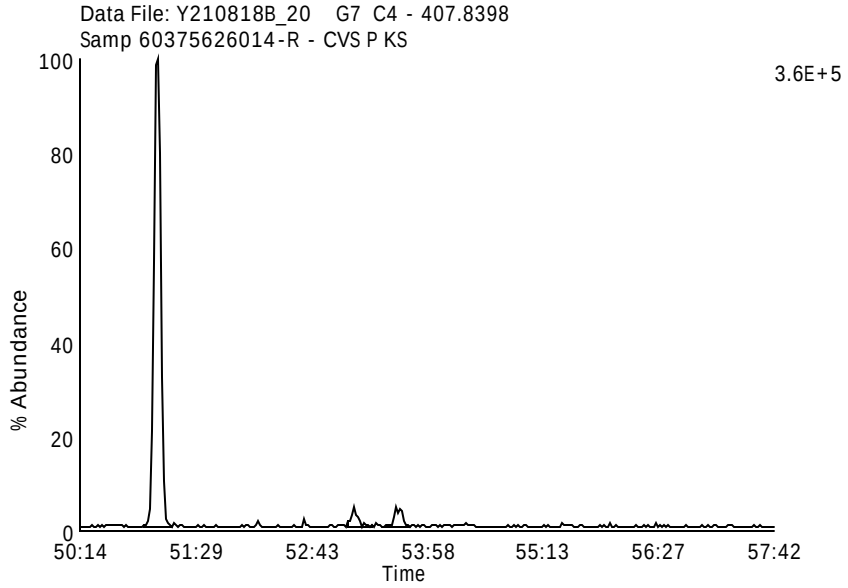
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D



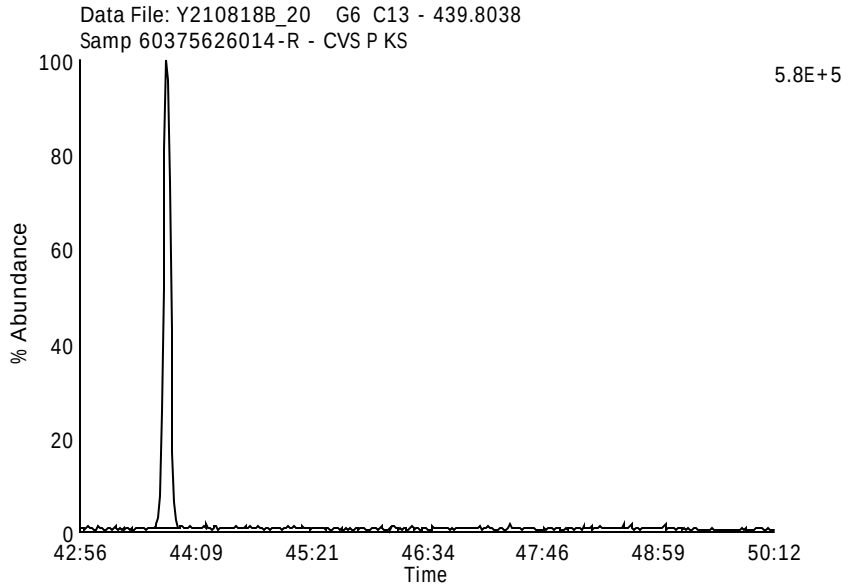


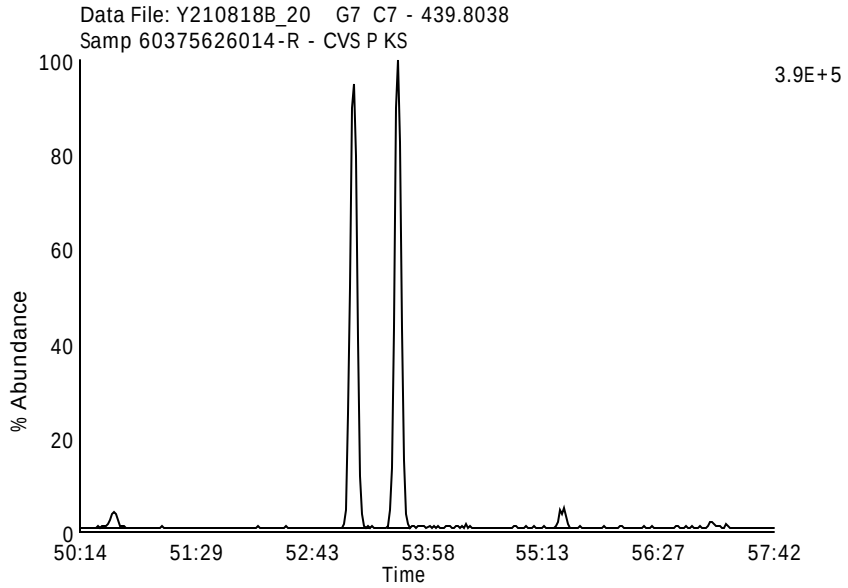


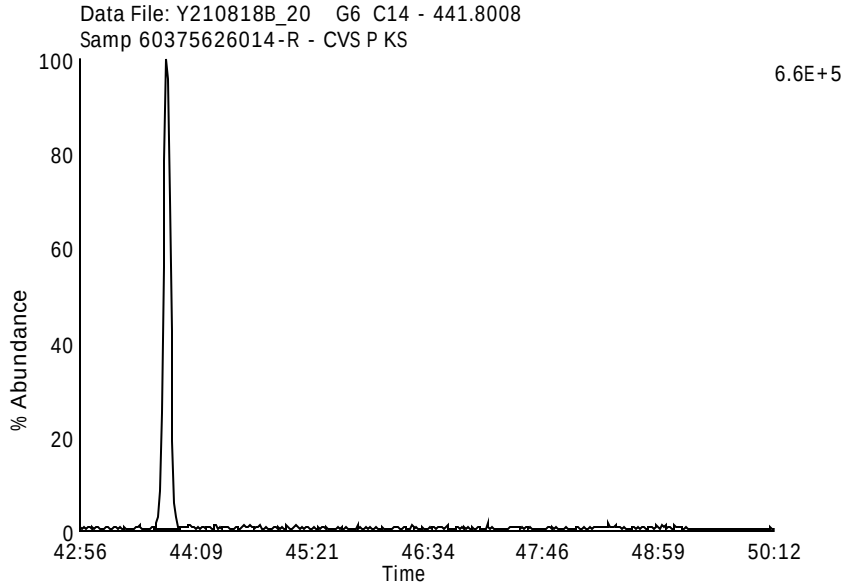


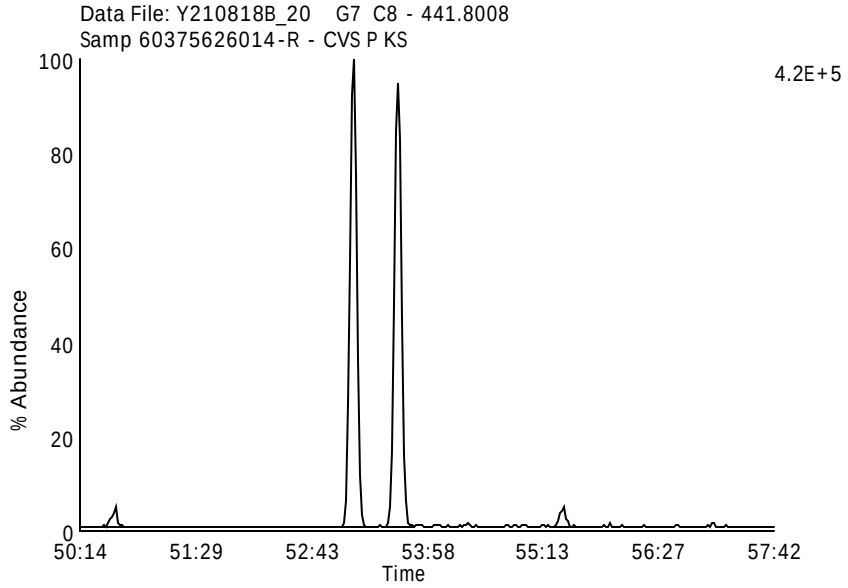
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D



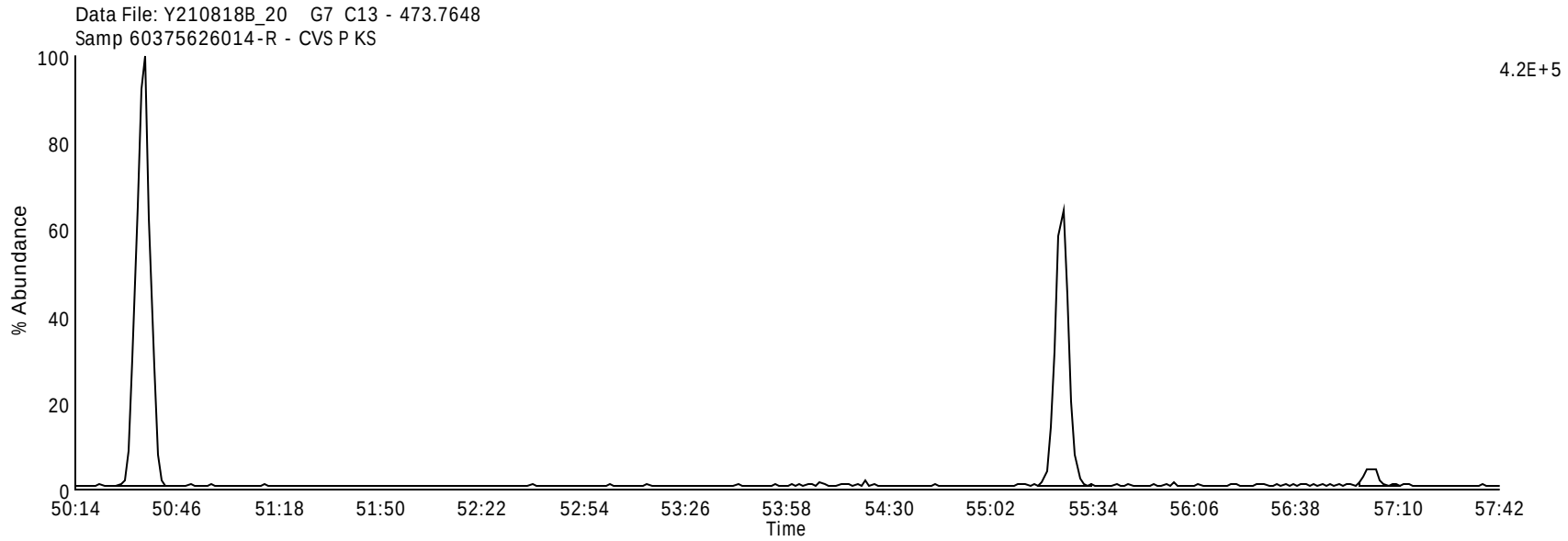


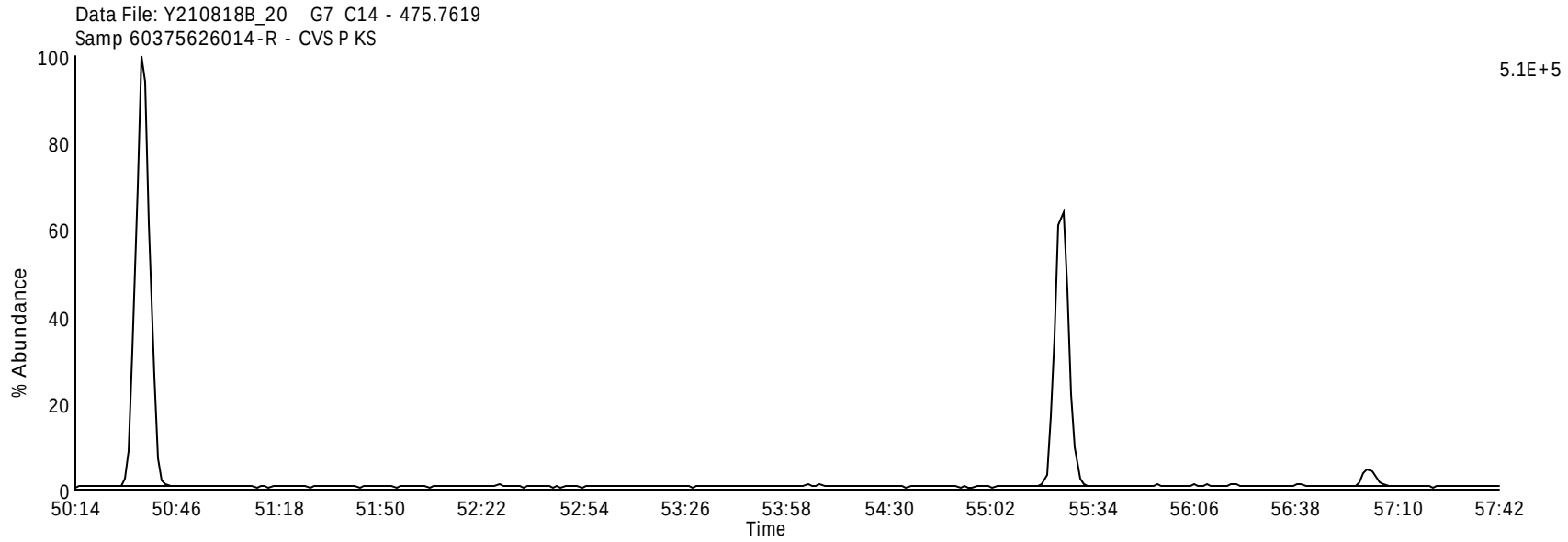




Labeled Nona Chlorinated Biphenyls

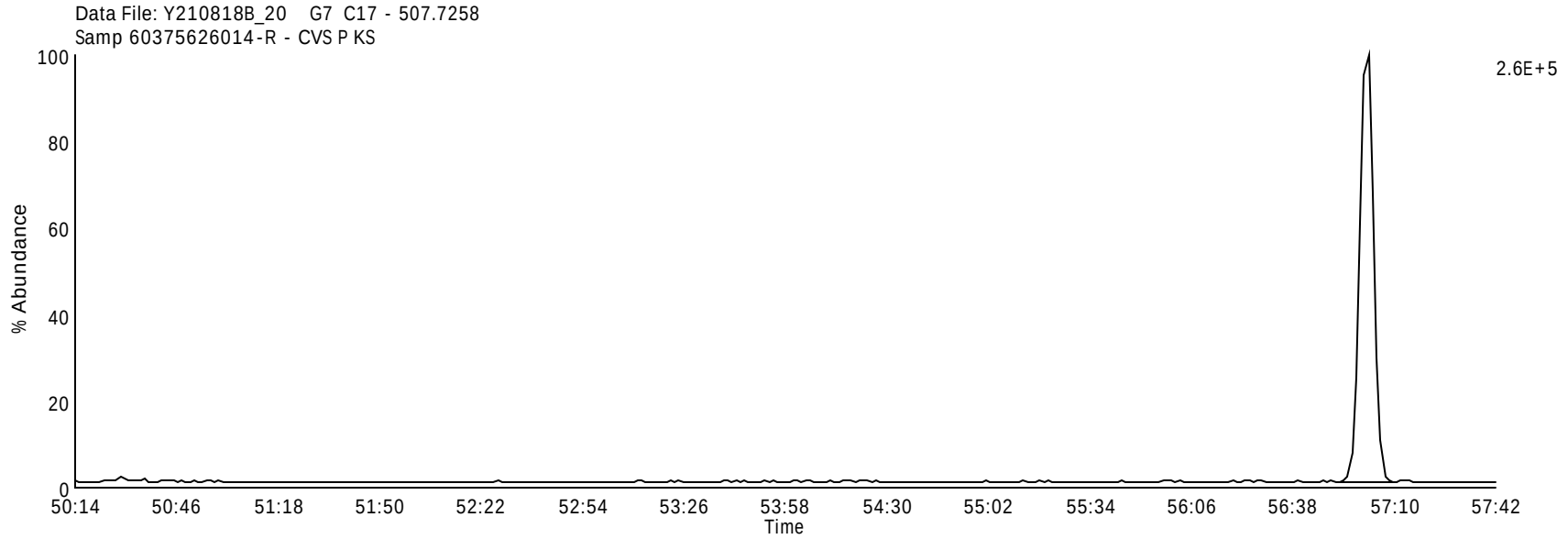
Data File Name: Y210818B_20	Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS	Client Sample ID: GB-46/2-4D

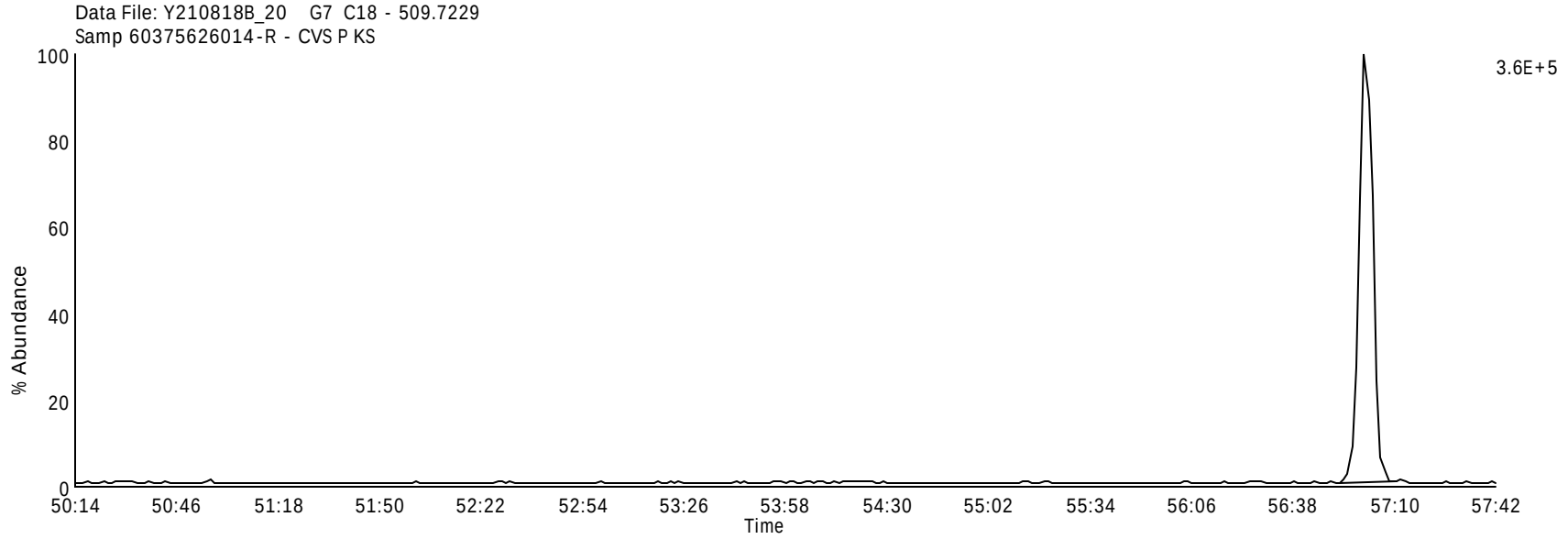




Labeled Deca Chlorinated Biphenyl

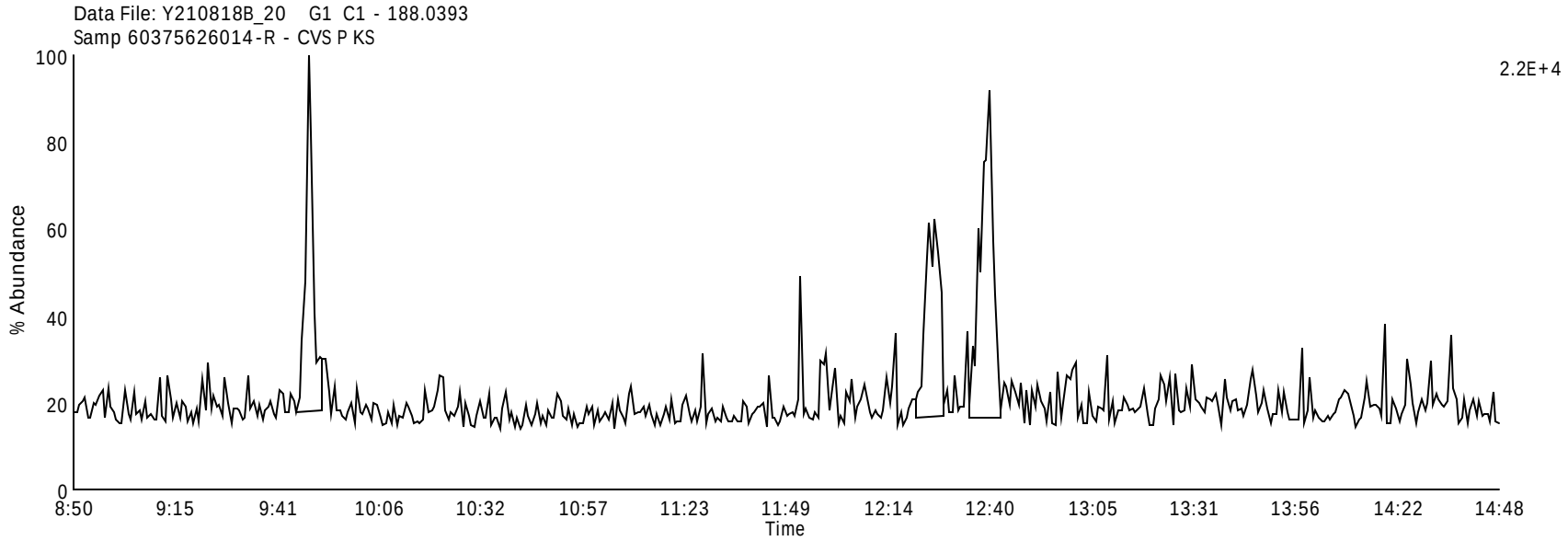
Data File Name: Y210818B_20	Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS	Client Sample ID: GB-46/2-4D

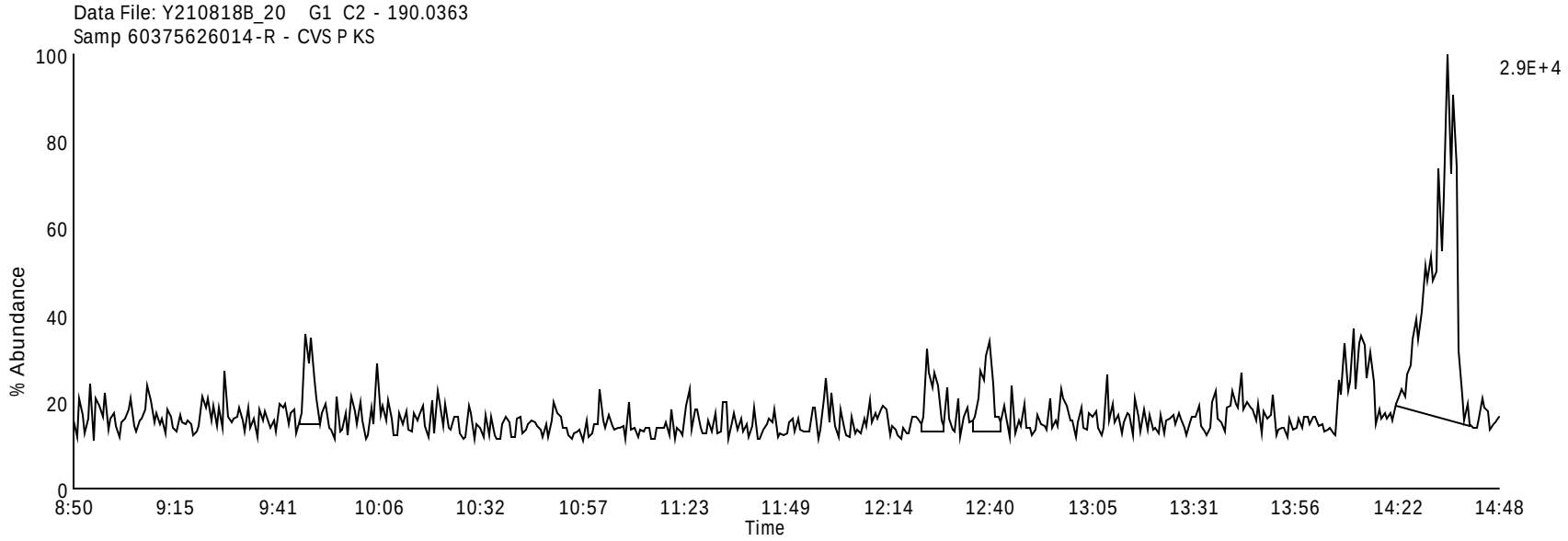




Mono Chlorinated Biphenyls

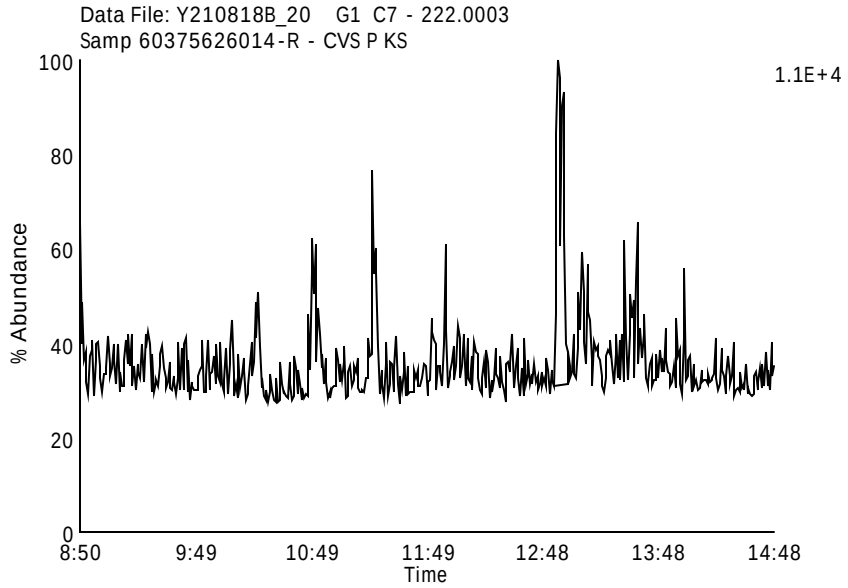
Data File Name: Y210818B_20	Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS	Client Sample ID: GB-46/2-4D

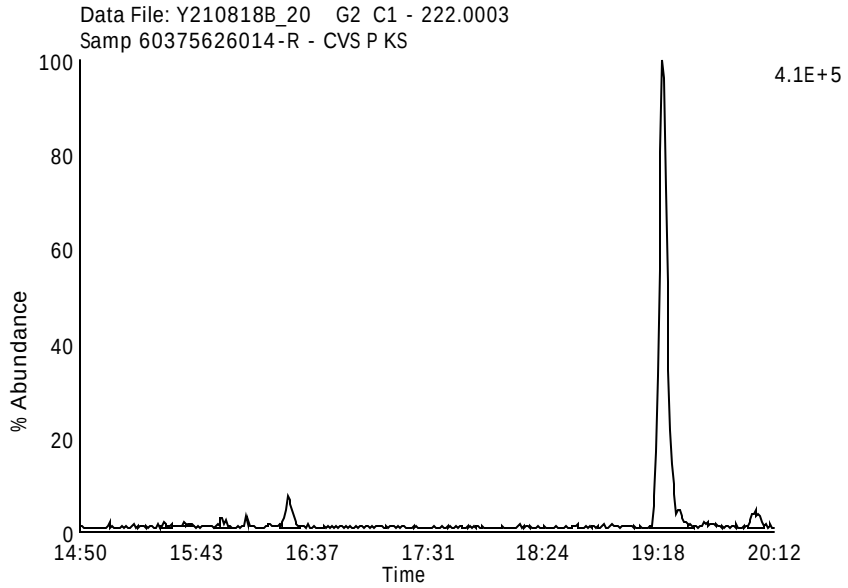


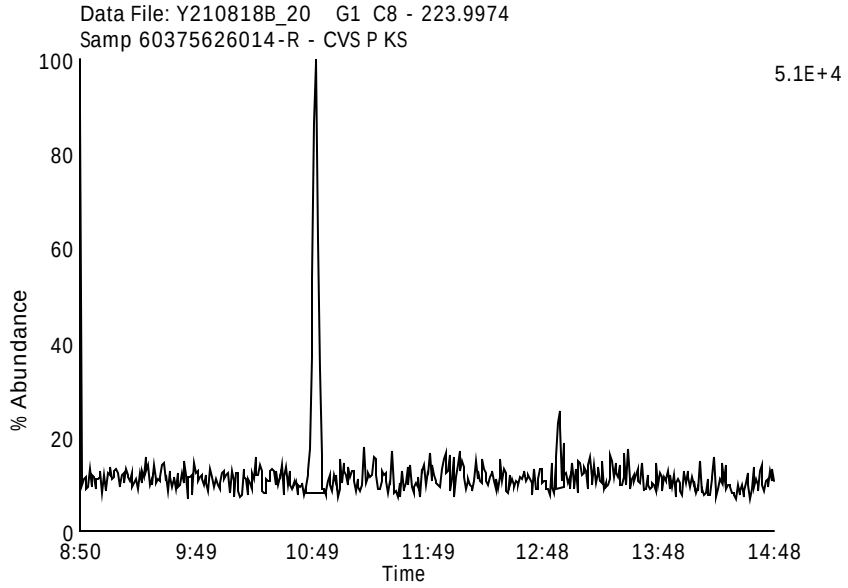


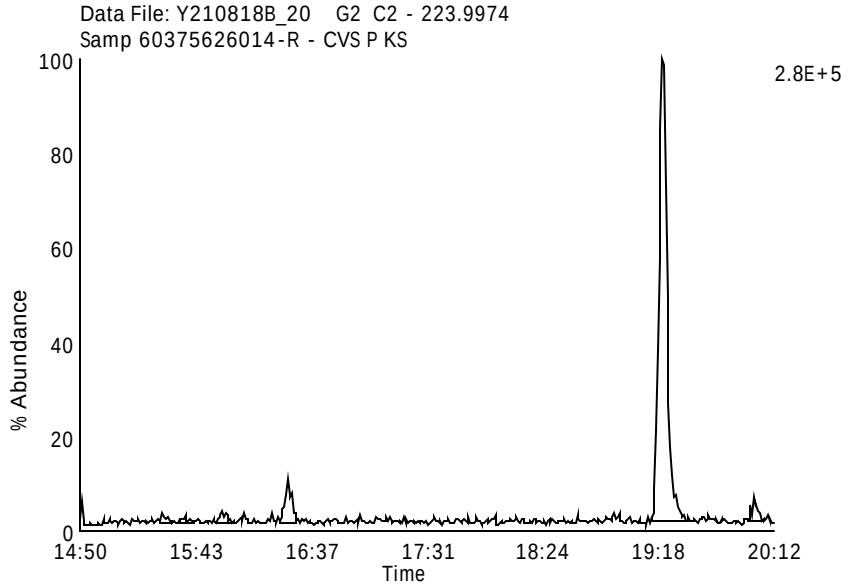
Di Chlorinated Biphenyls

Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D



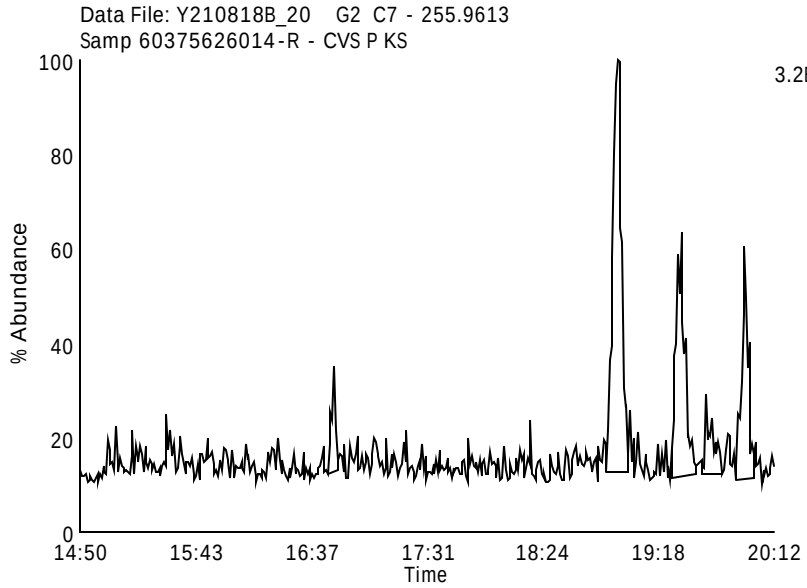


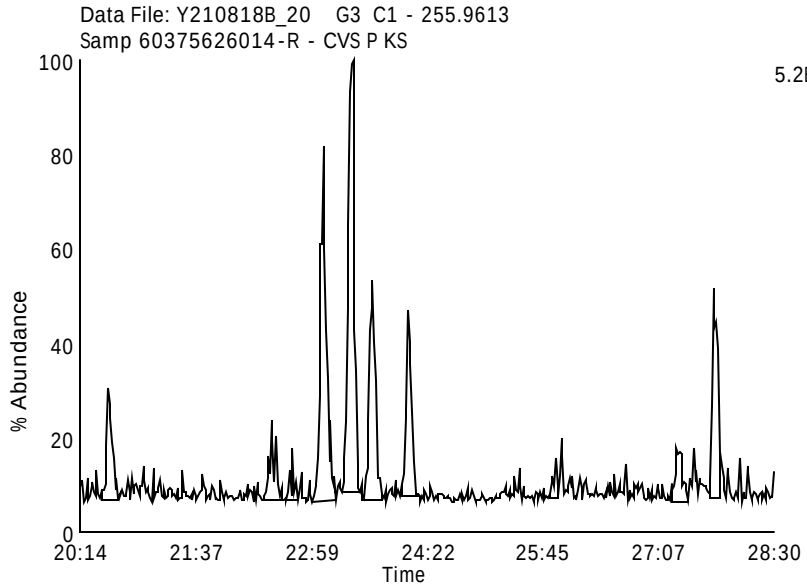


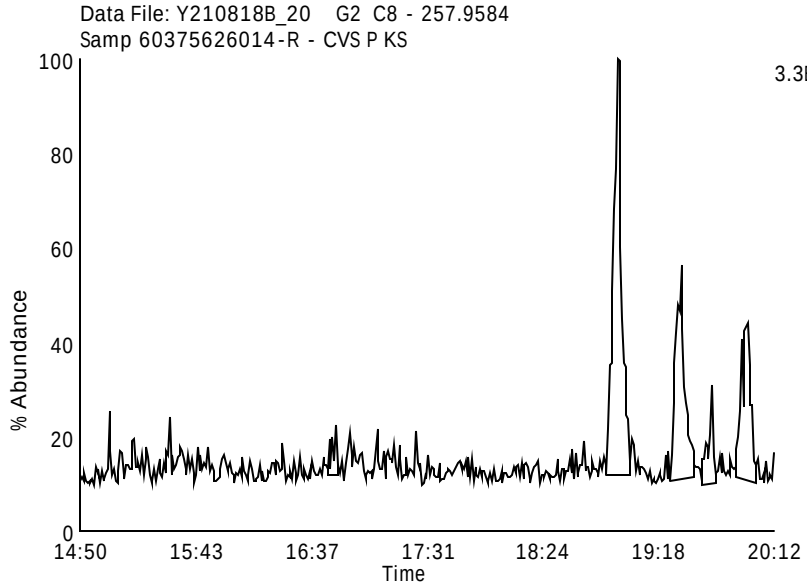


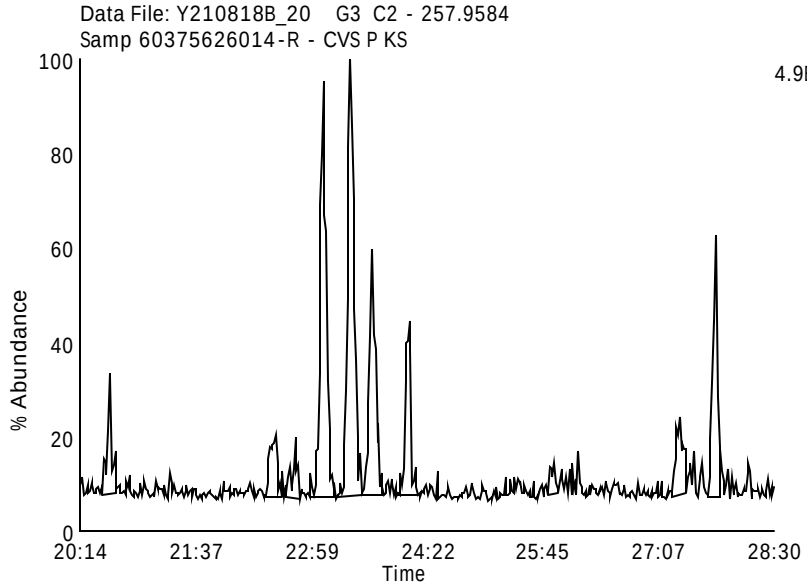
Tri Chlorinated Biphenyls

Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D



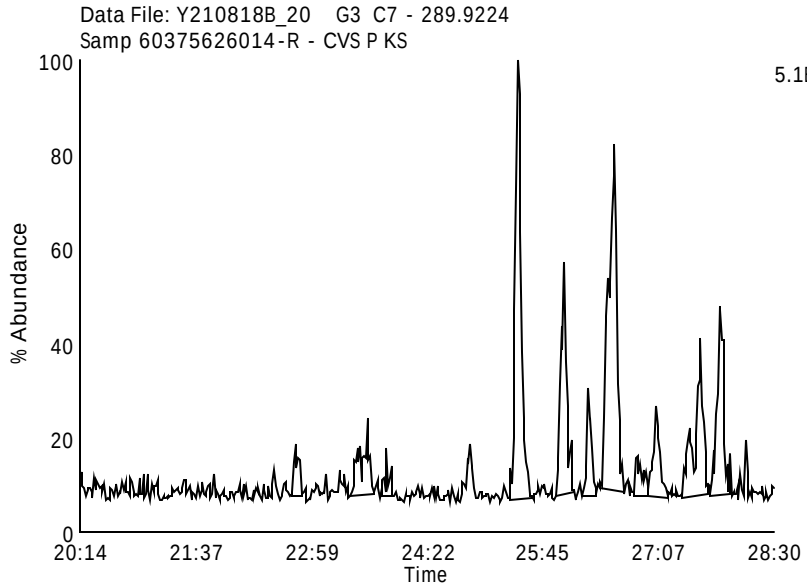


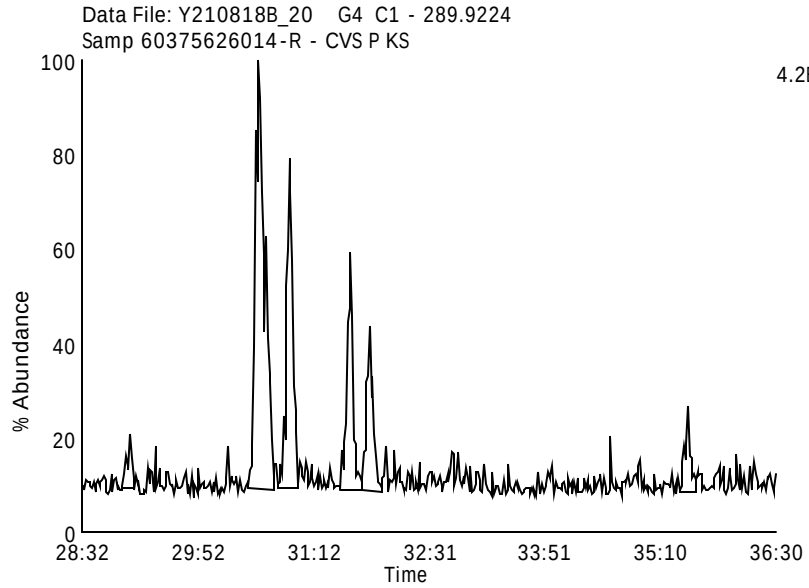


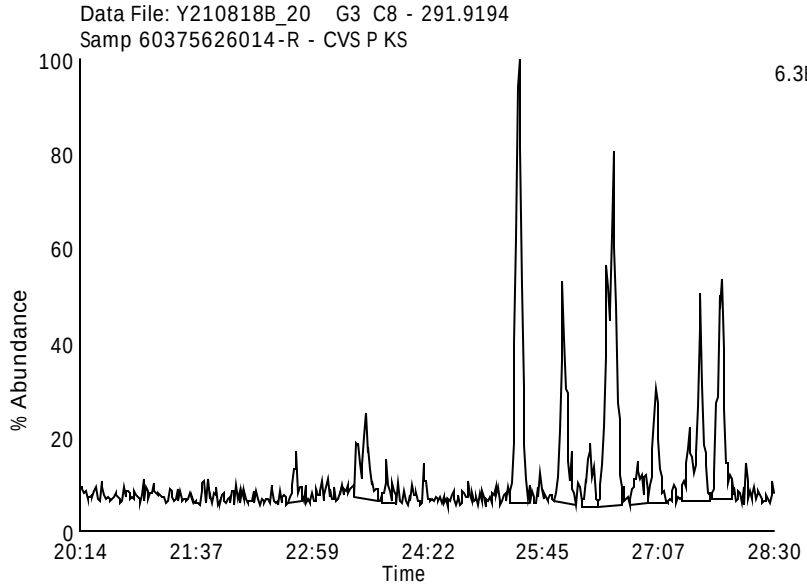


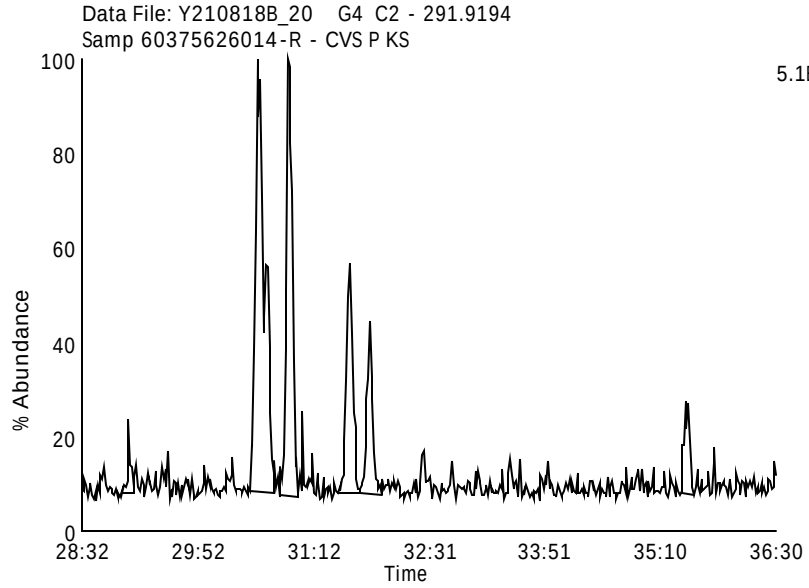
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D



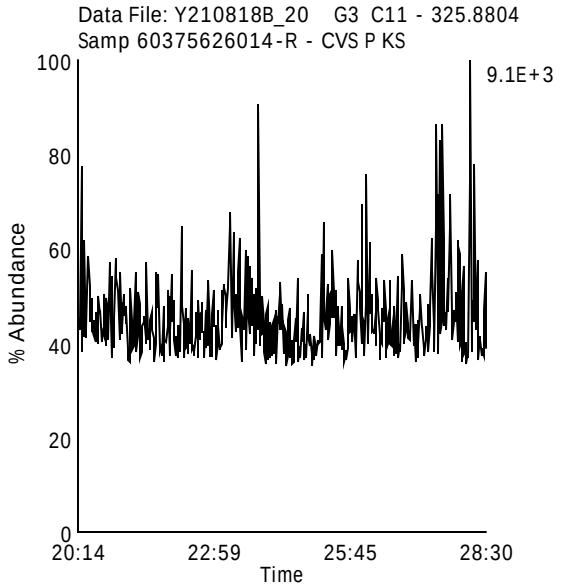


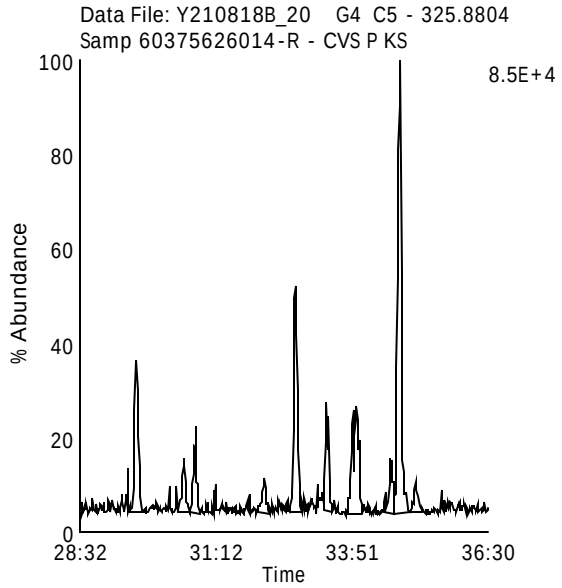


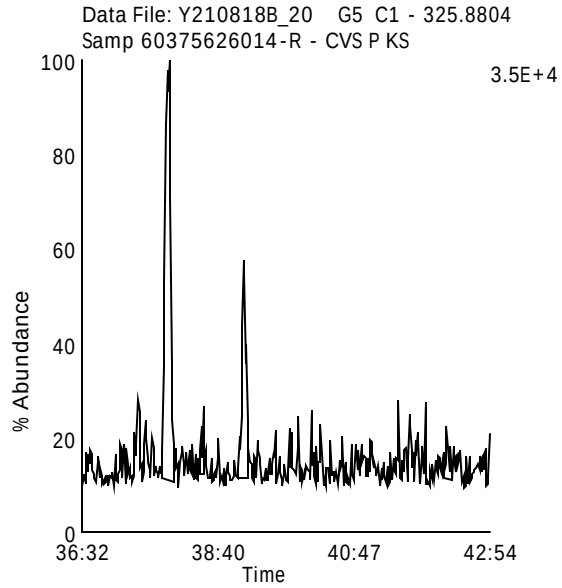


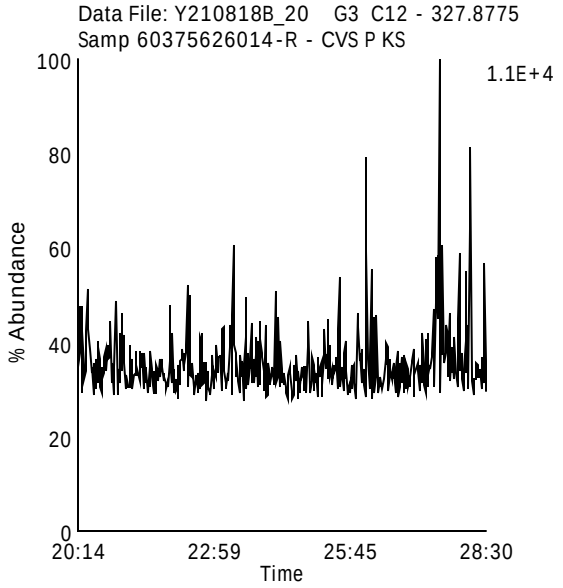
Penta Chlorinated Biphenyls

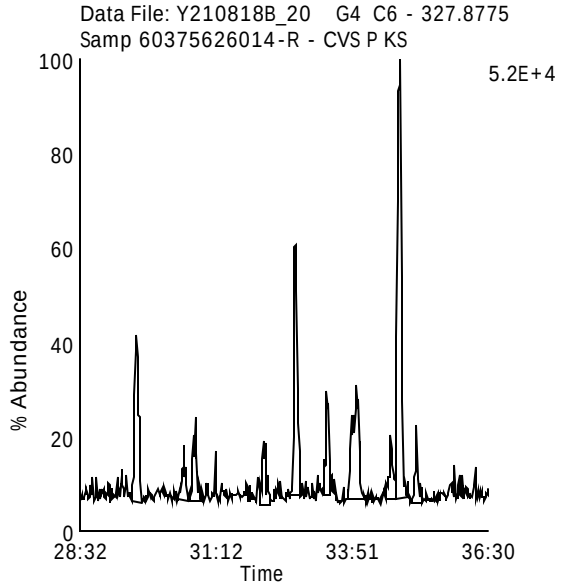
Data File Name: Y210818B_20 | Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS | Client Sample ID: GB-46/2-4D

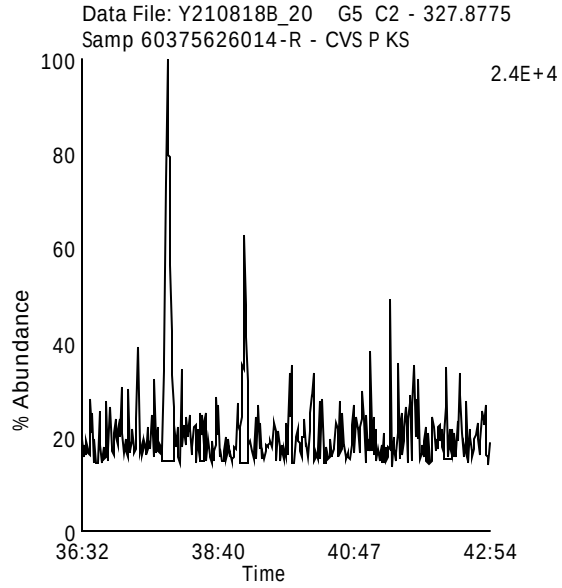






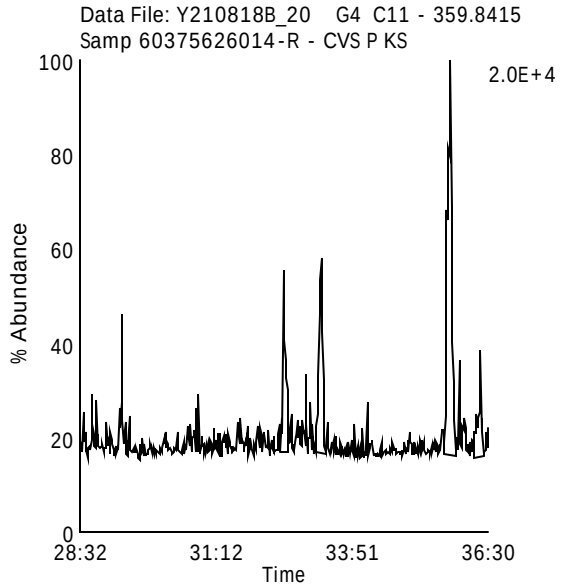


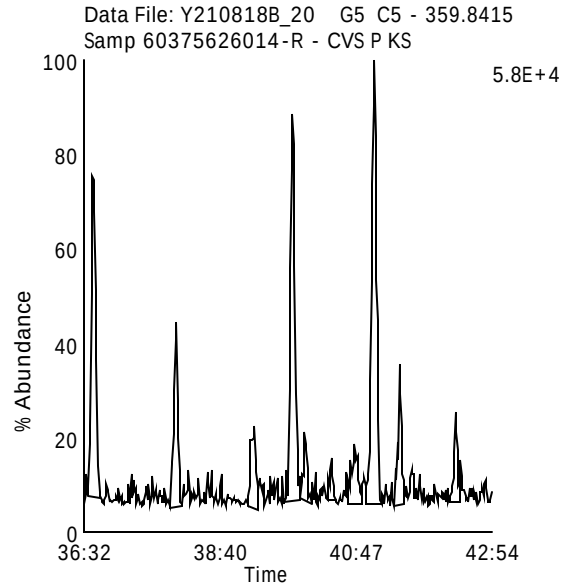


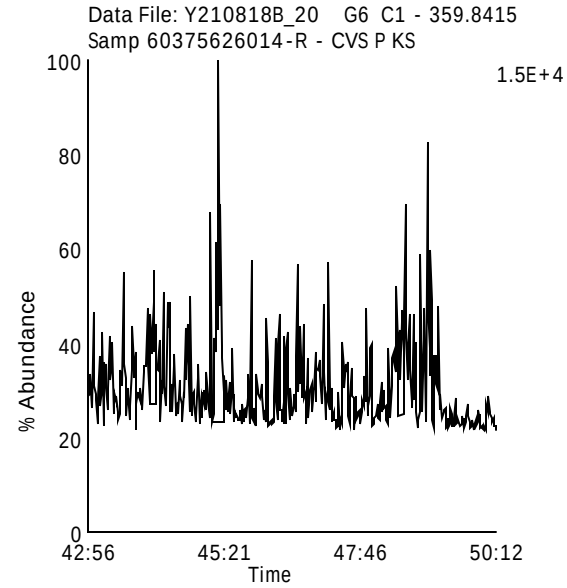


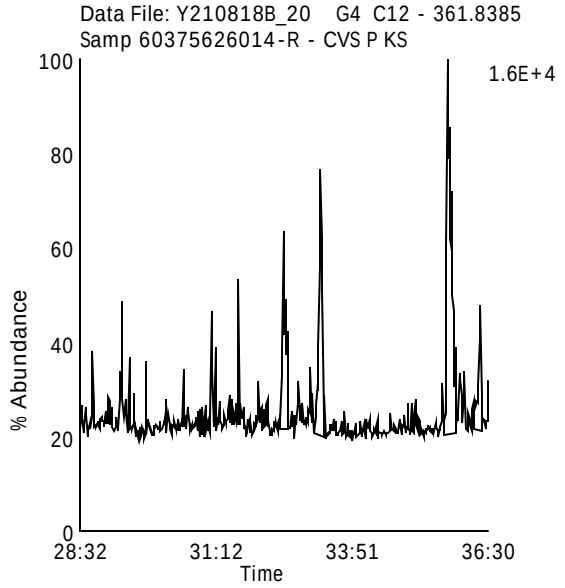
Hexa Chlorinated Biphenyls

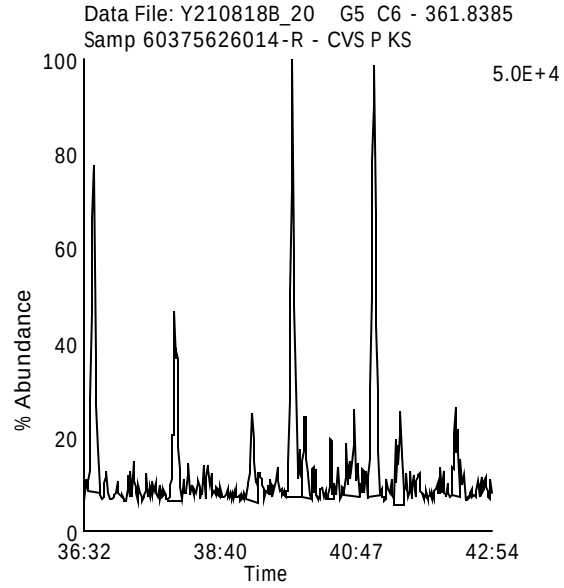
Data File Name: Y210818B_20 | Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS | Client Sample ID: GB-46/2-4D

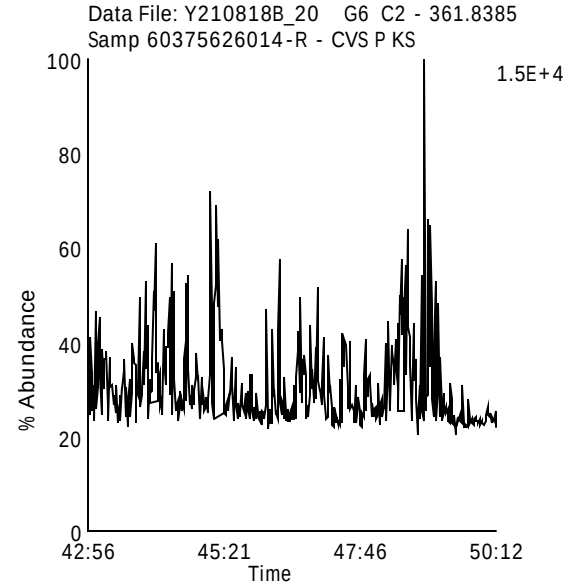






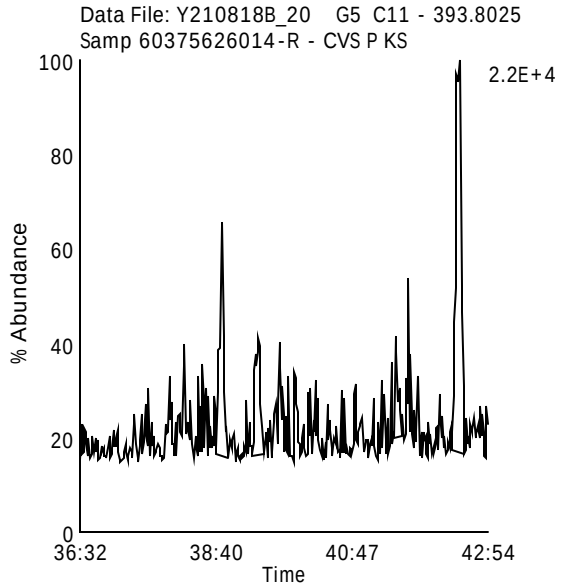


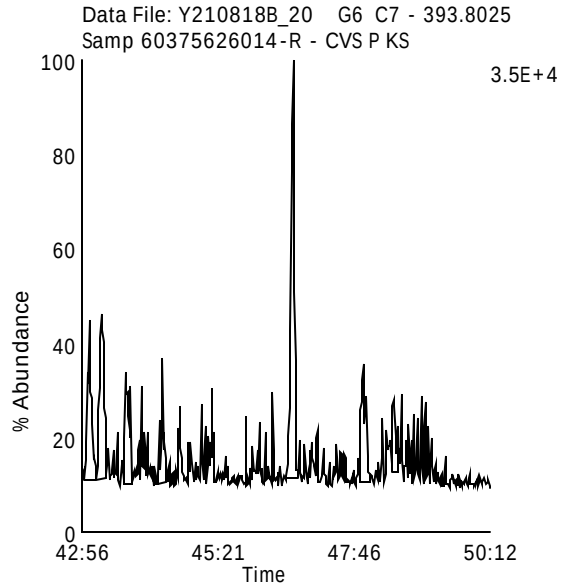


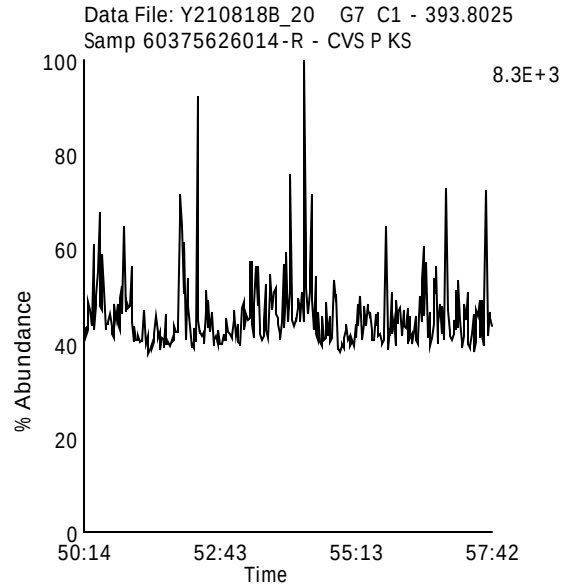


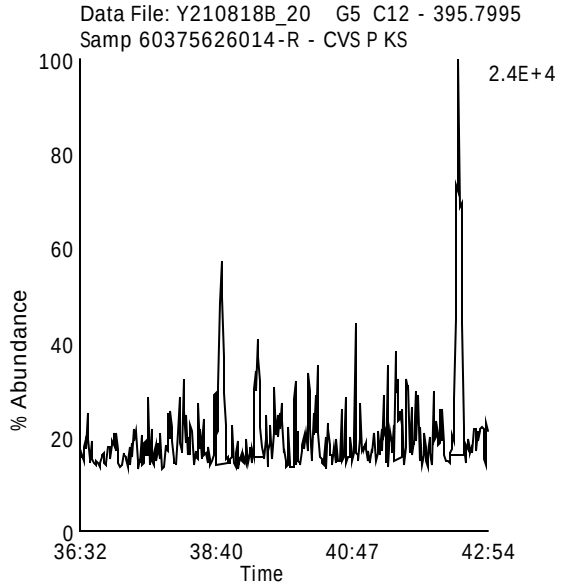
Hepta Chlorinated Biphenyls

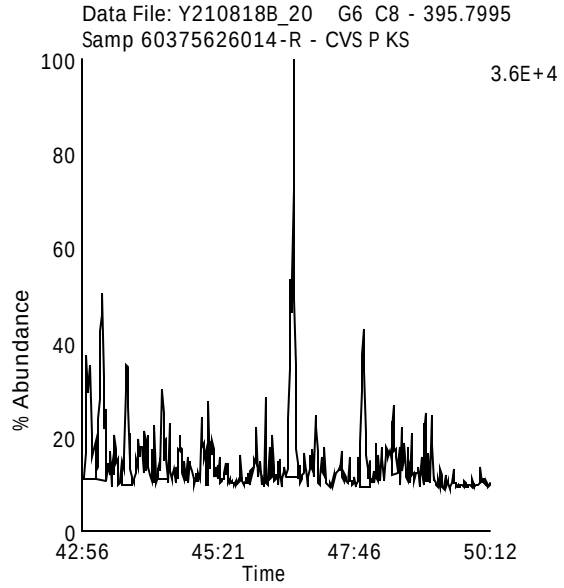
Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D

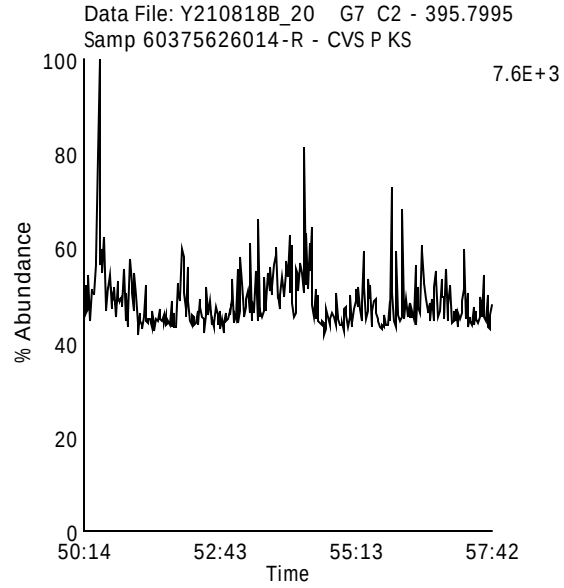








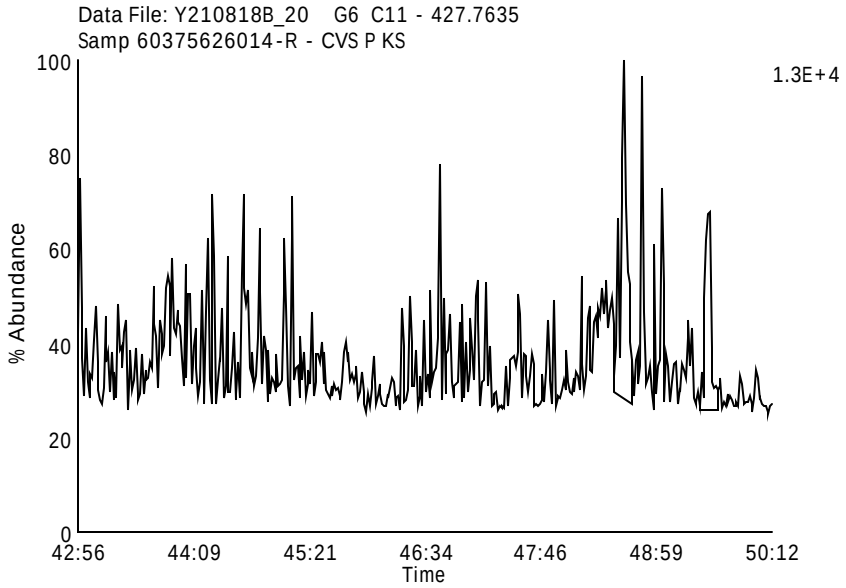


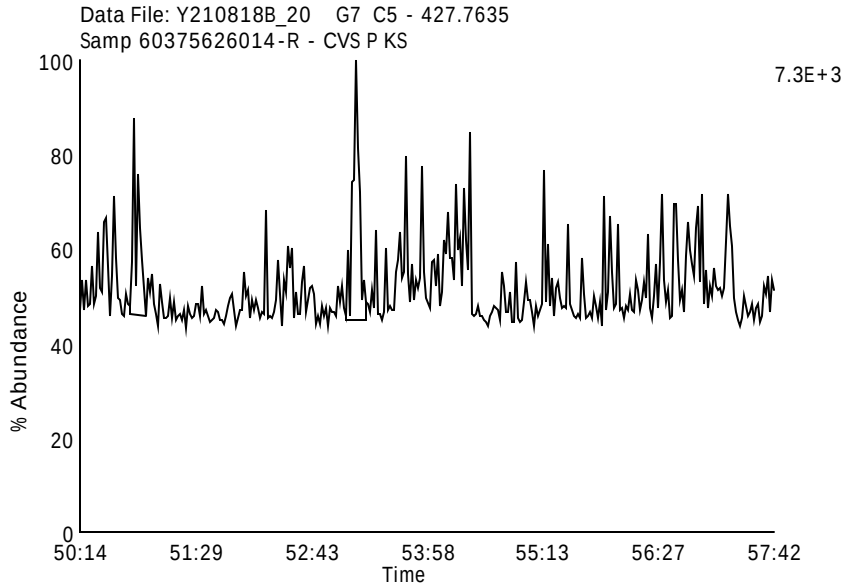


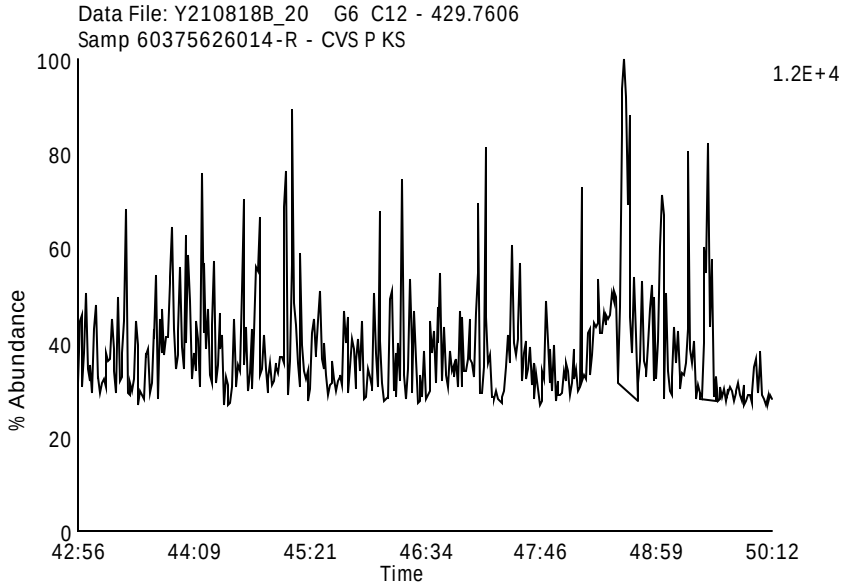
Octa Chlorinated Biphenyls

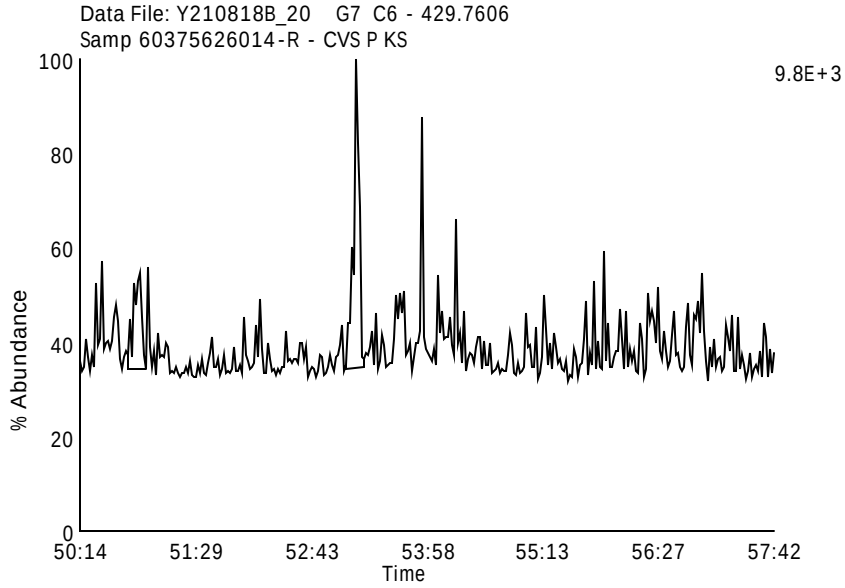
Data File Name: Y210818B_20
Date Acquired: 8/19/2021
Sample Description: Samp 60375626014-R - CVS P KS

Lab Sample ID: 60375626014-R
Instrument: 10MSHR12 (Y)
Client Sample ID: GB-46/2-4D



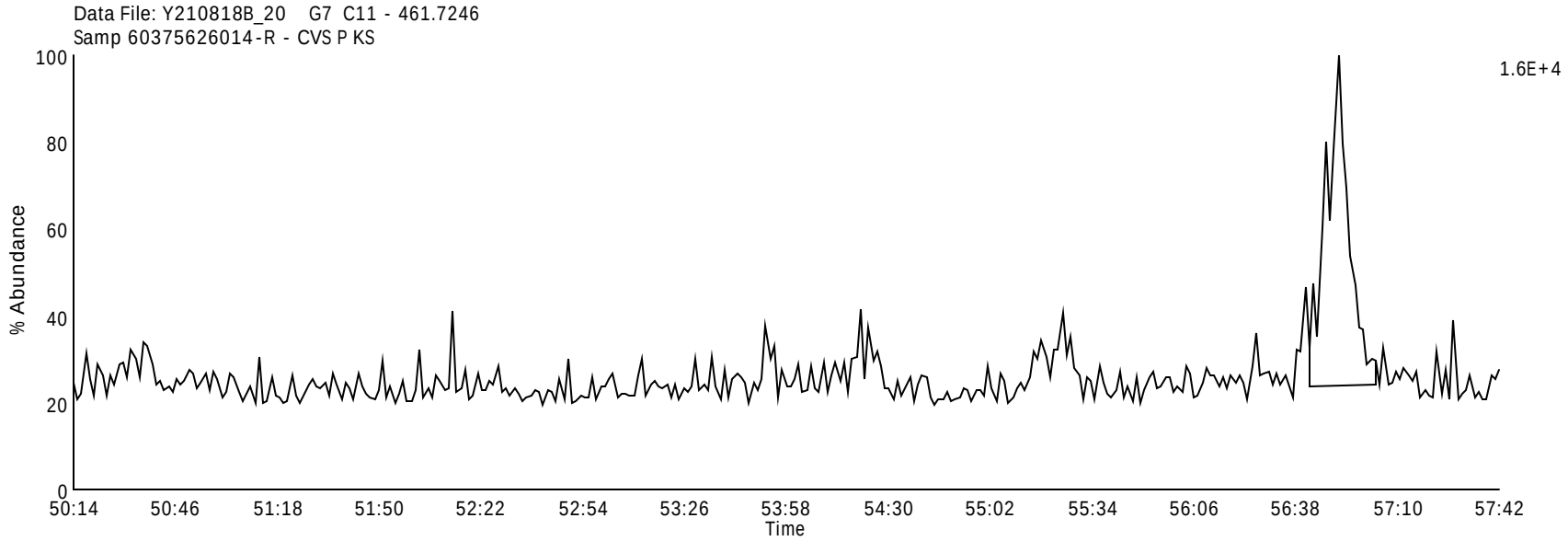


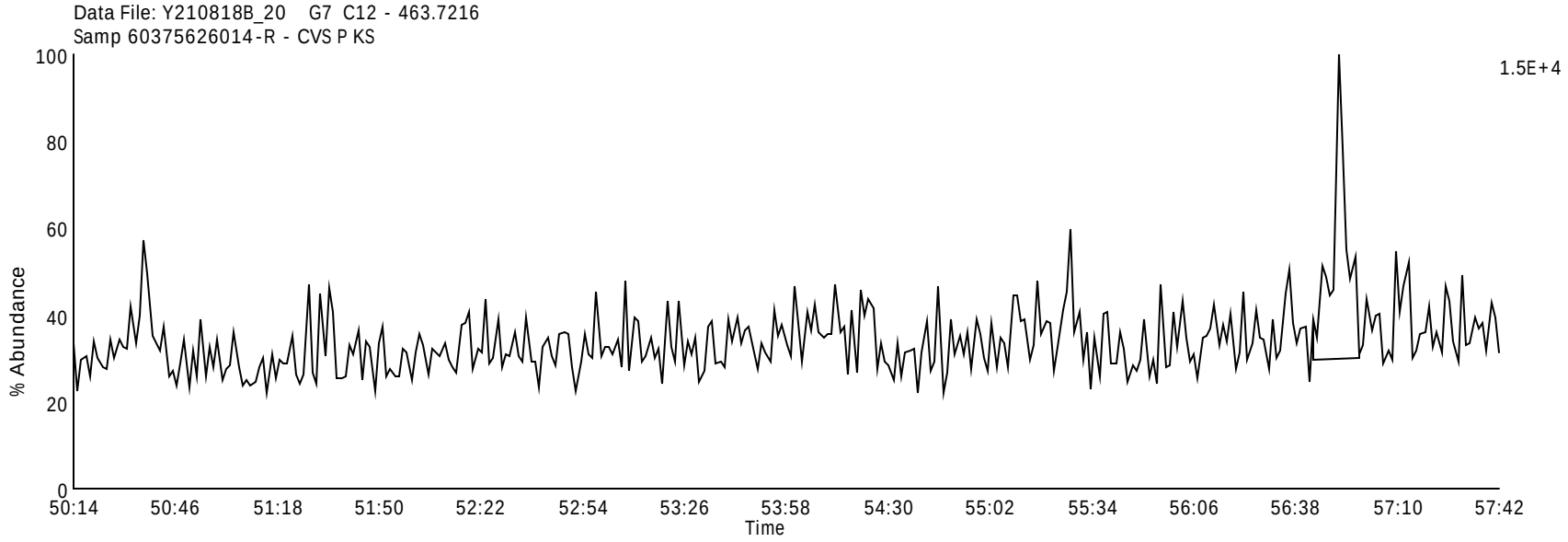




Nona Chlorinated Biphenyls

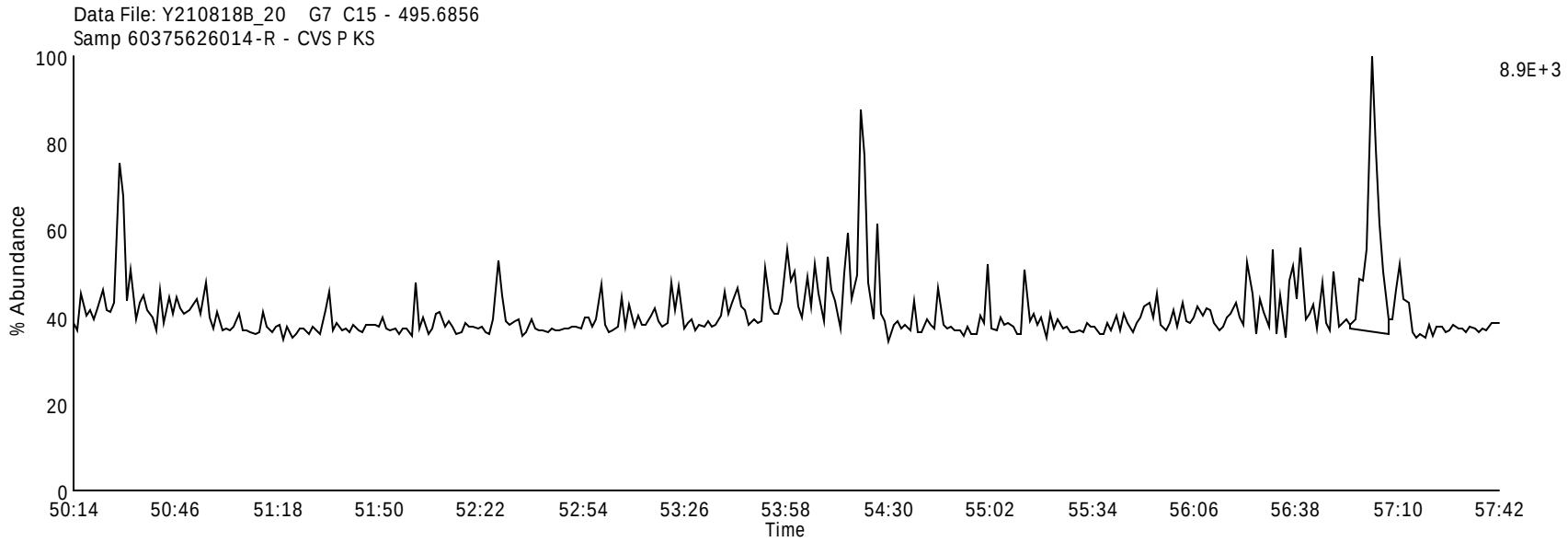
Data File Name: Y210818B_20	Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS	Client Sample ID: GB-46/2-4D

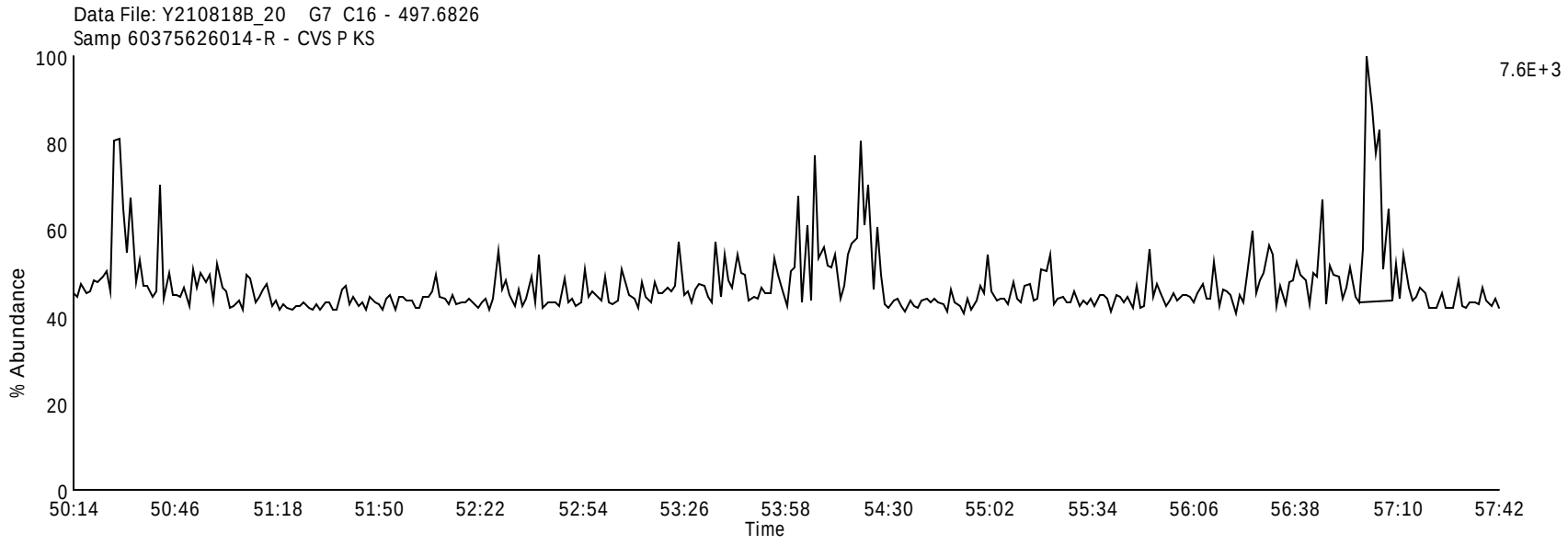




Deca Chlorinated Biphenyl

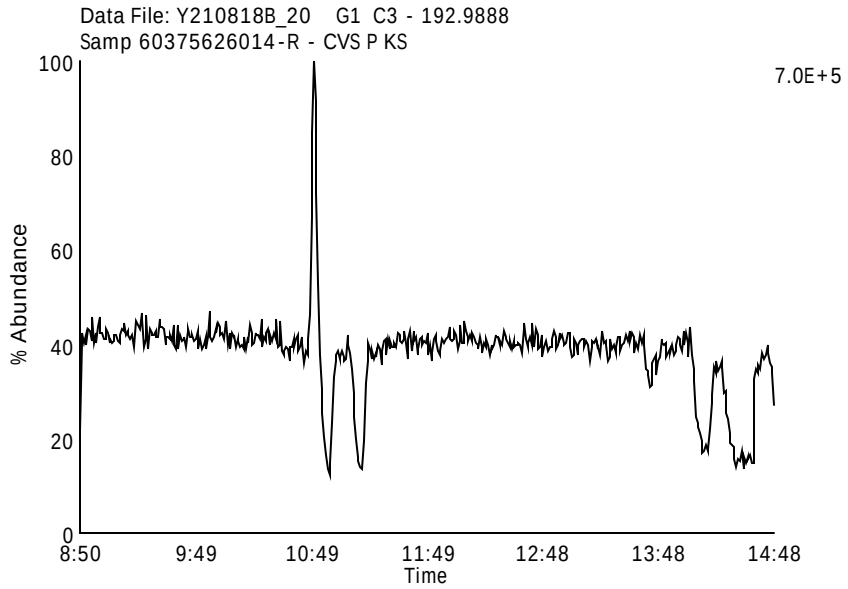
Data File Name: Y210818B_20	Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS	Client Sample ID: GB-46/2-4D

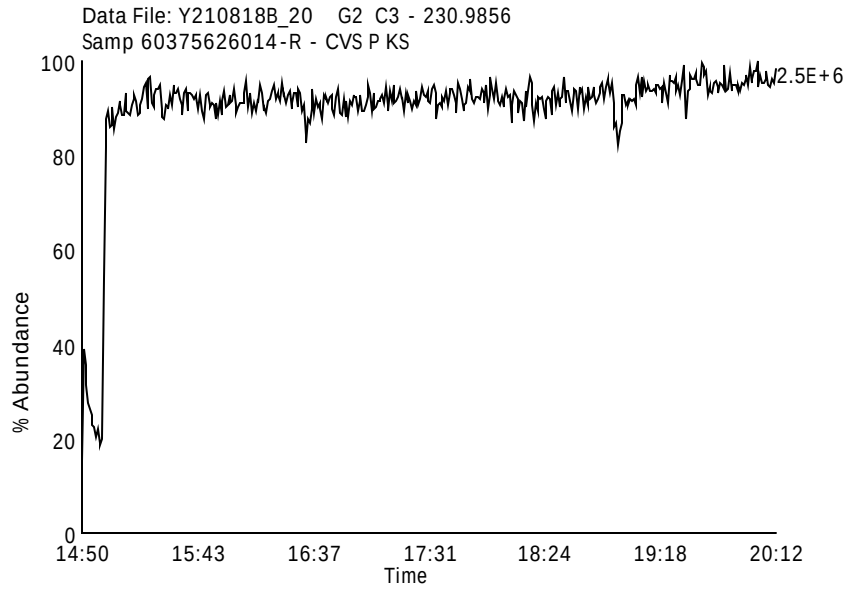


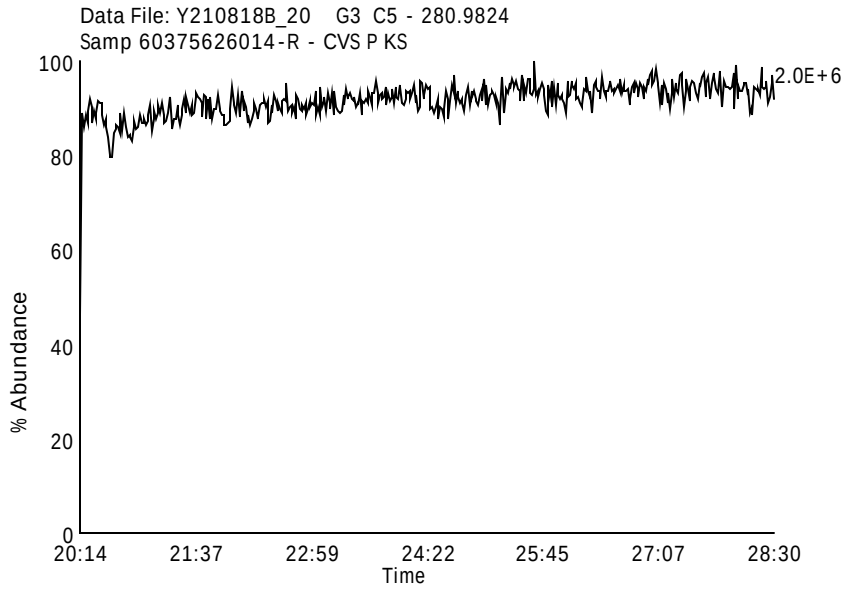


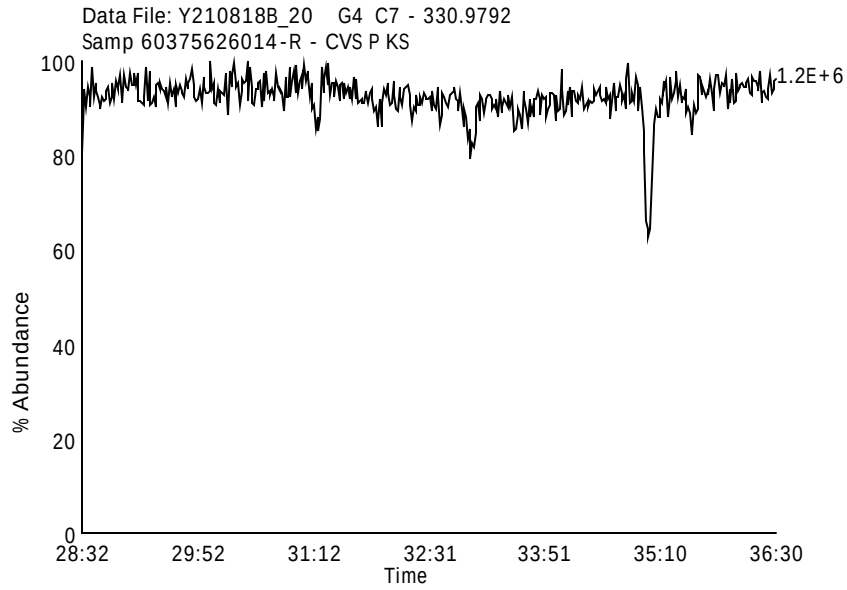
Group 1 - 4 Lock mass

Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D



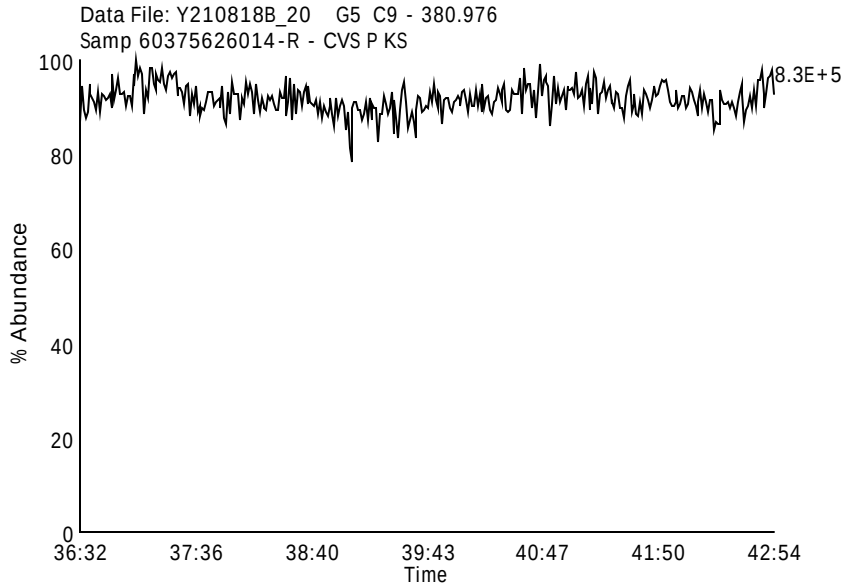


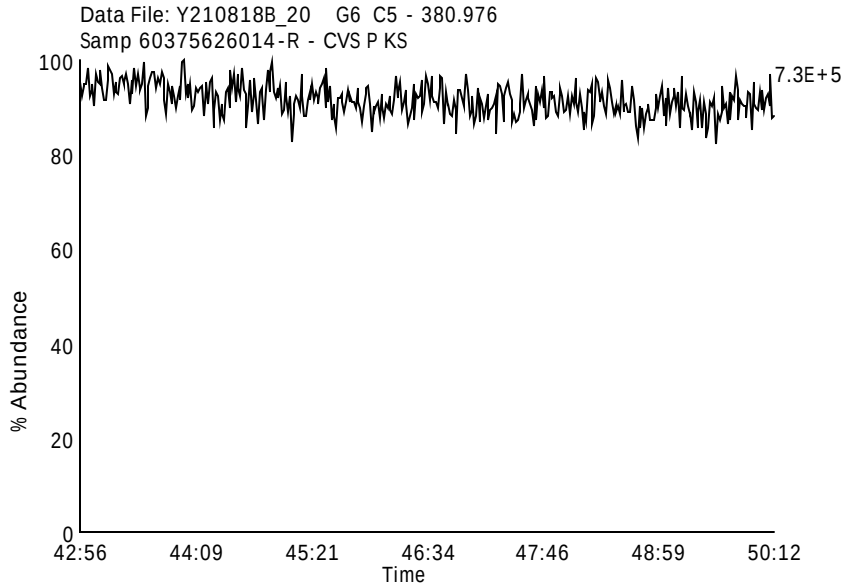


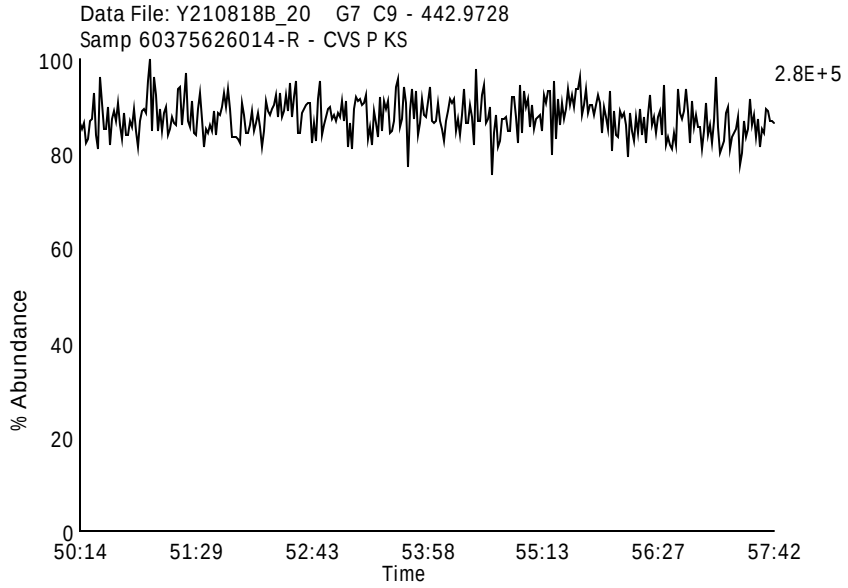


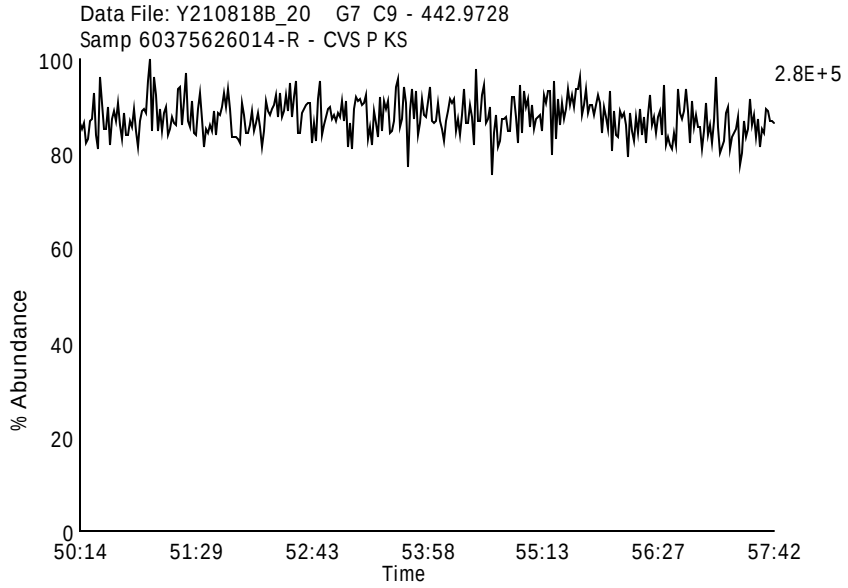
Group 5 - 7 Lock mass

Data File Name: Y210818B_20
Lab Sample ID: 60375626014-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626014-R - CVS P KS
Client Sample ID: GB-46/2-4D



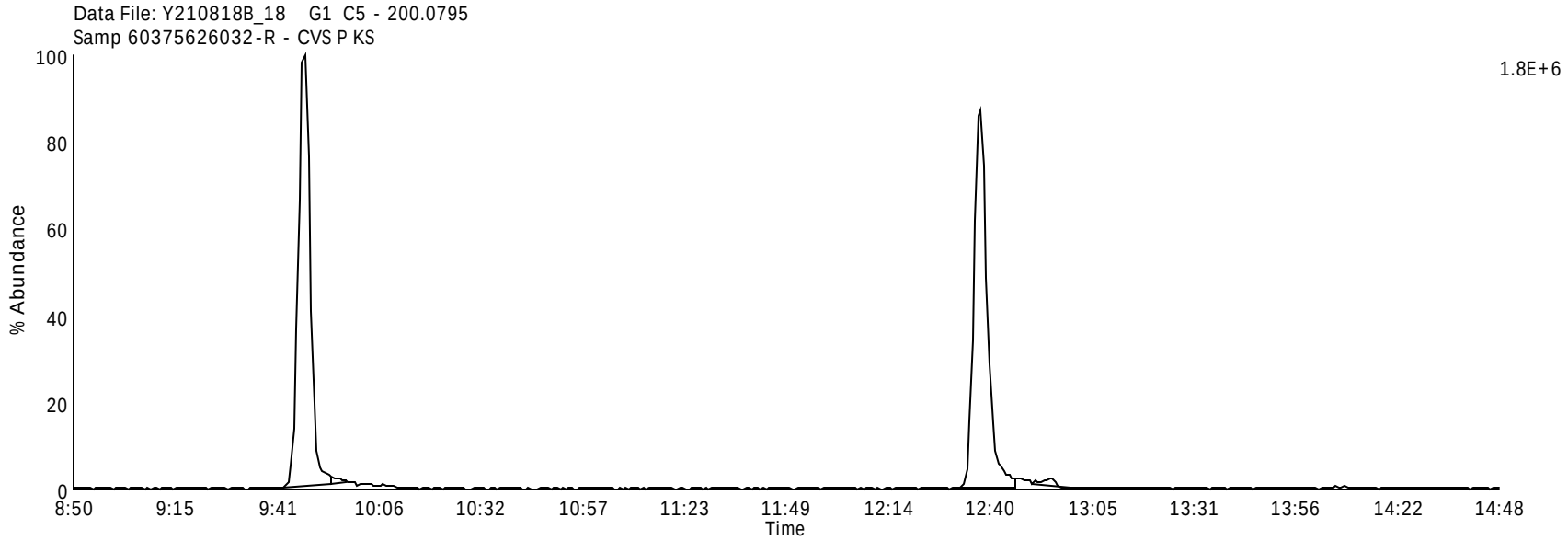


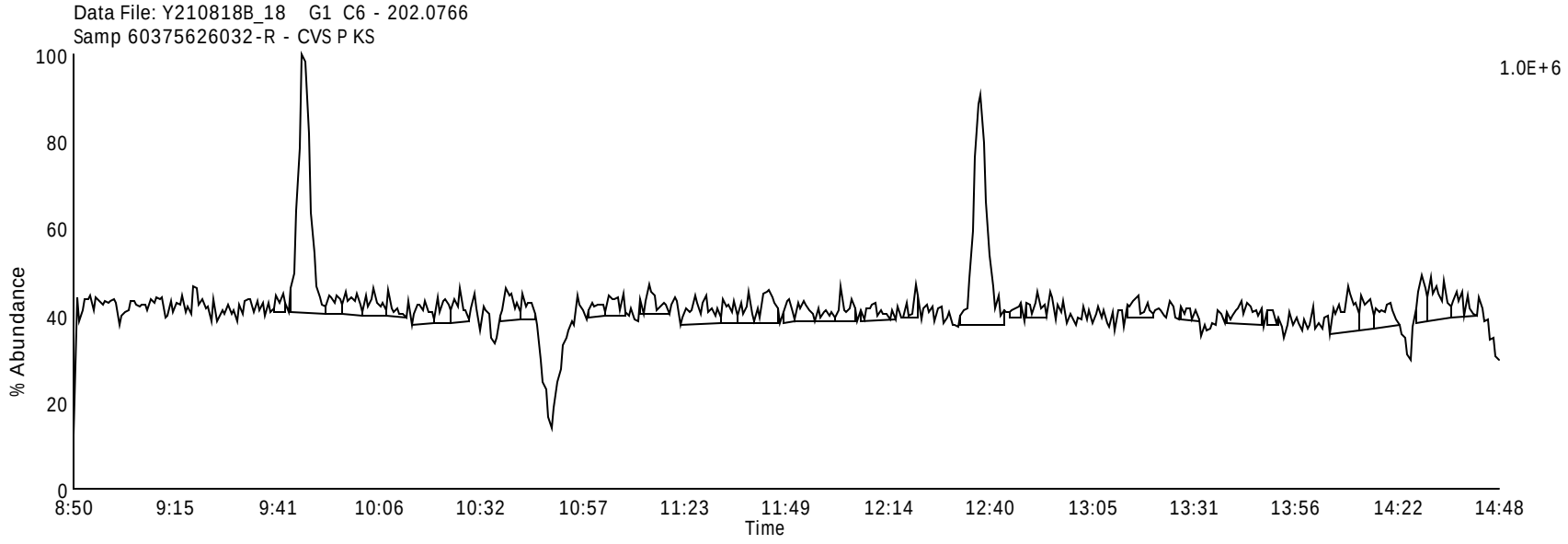




Labeled Mono Chlorinated Biphenyls

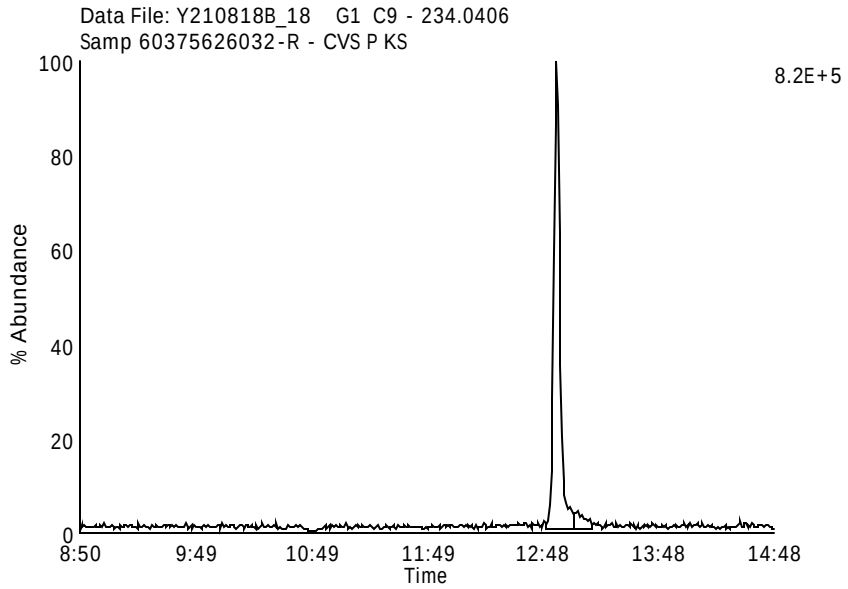
Data File Name: Y210818B_18	Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS	Client Sample ID: GB-38/3-5

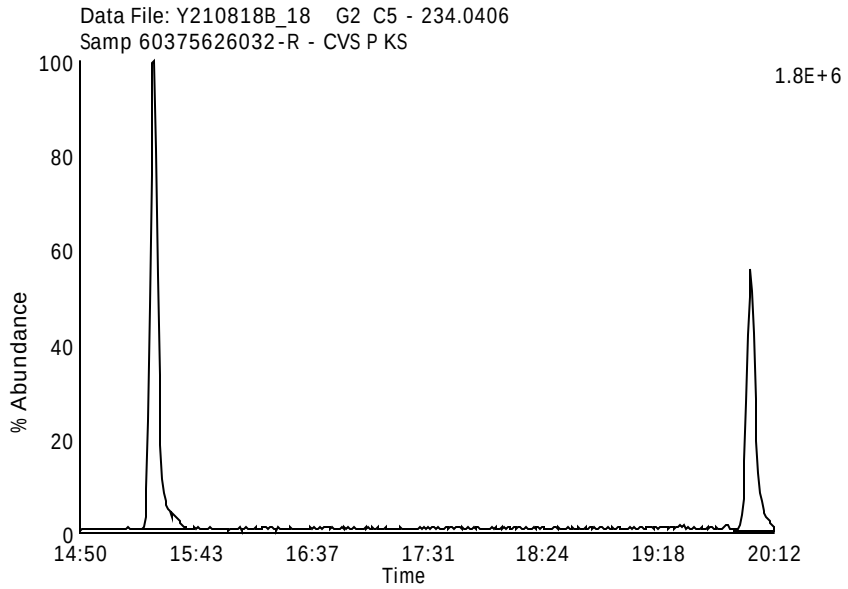


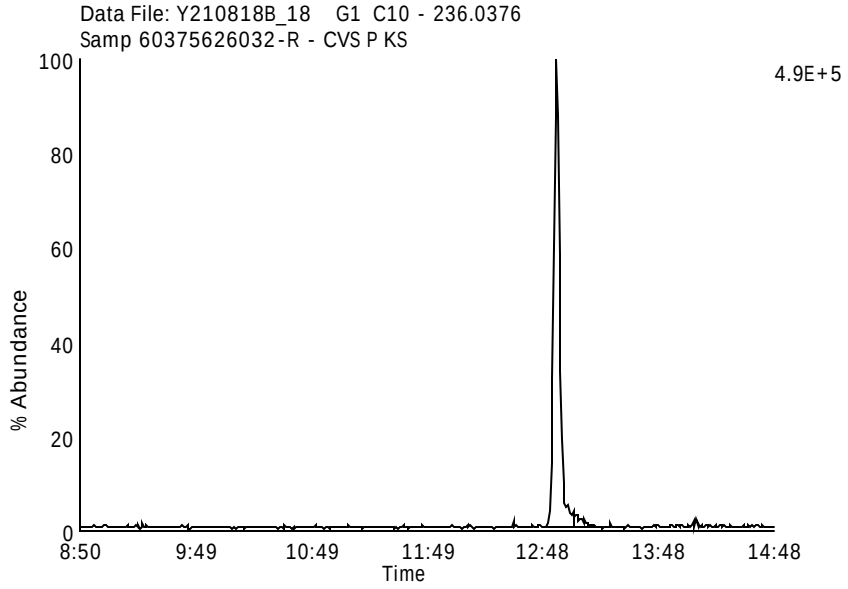


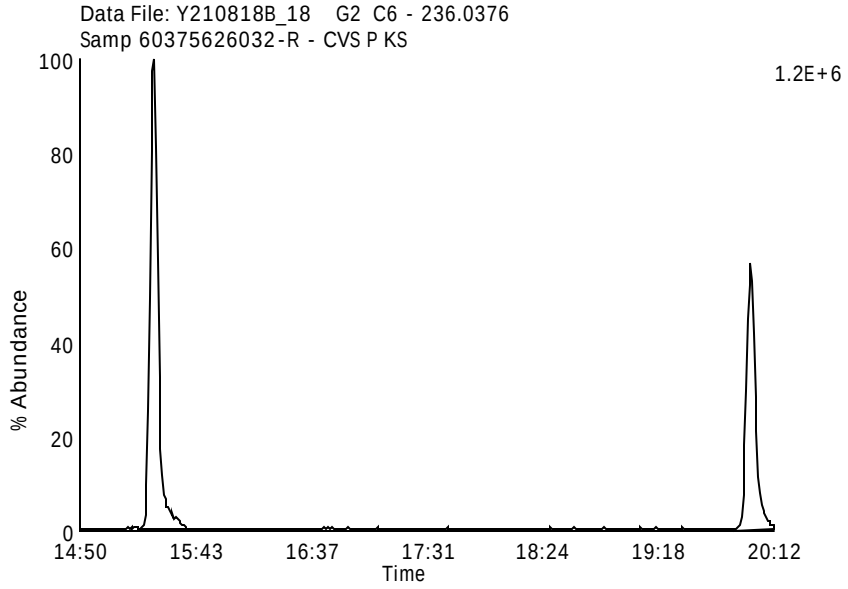
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_18
Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS
Client Sample ID: GB-38/3-5



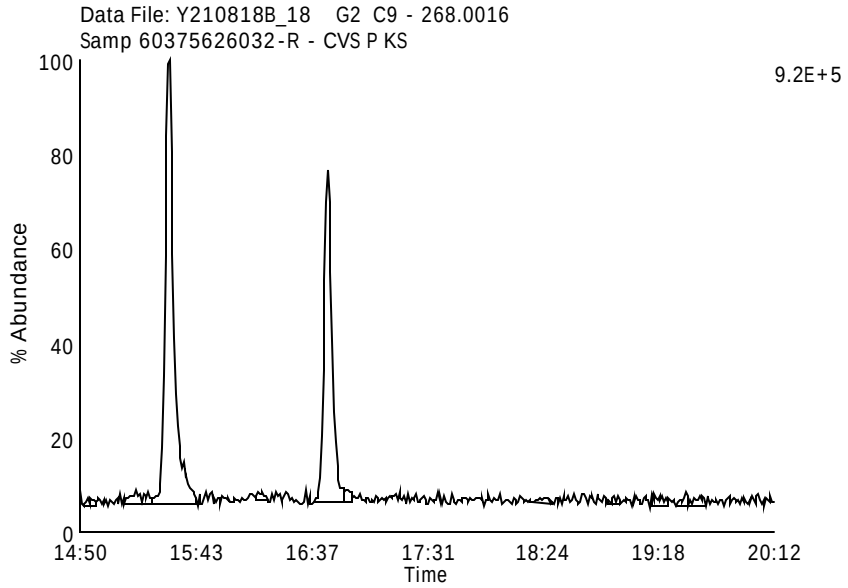


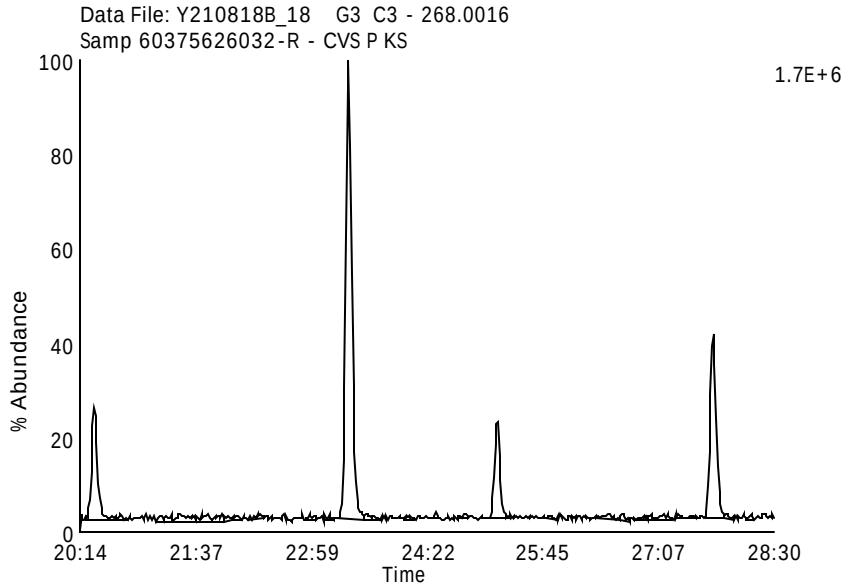


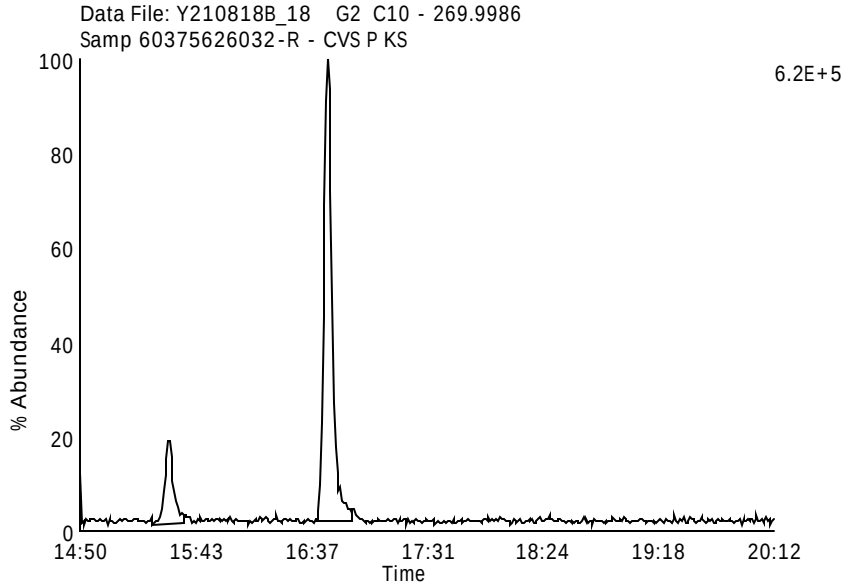


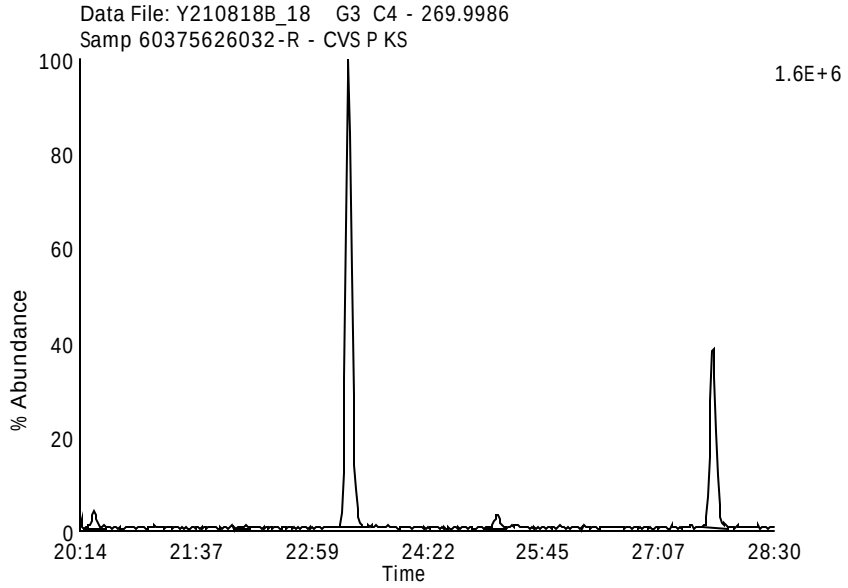
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_18
Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS
Client Sample ID: GB-38/3-5



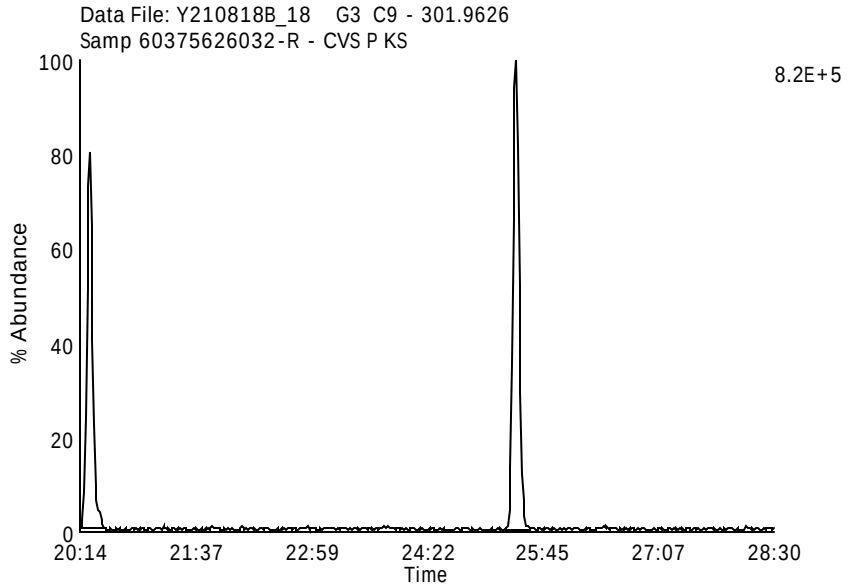


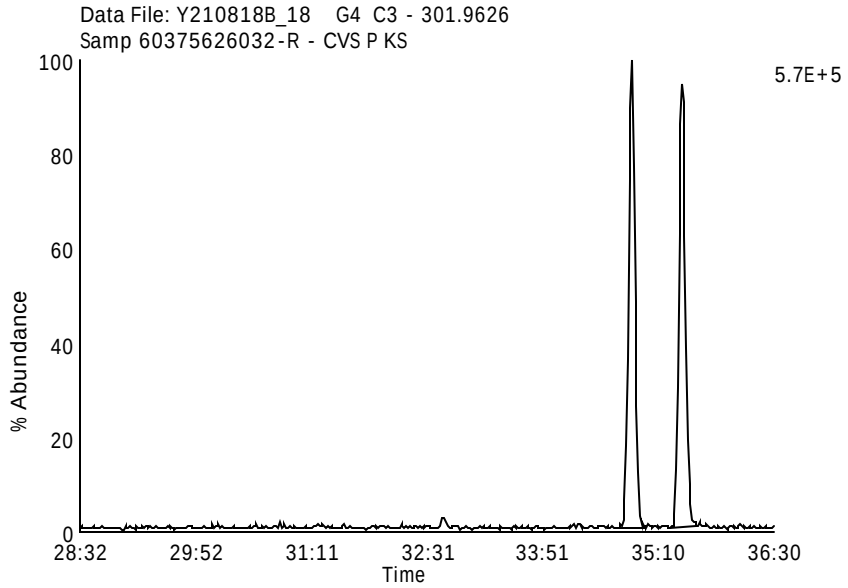


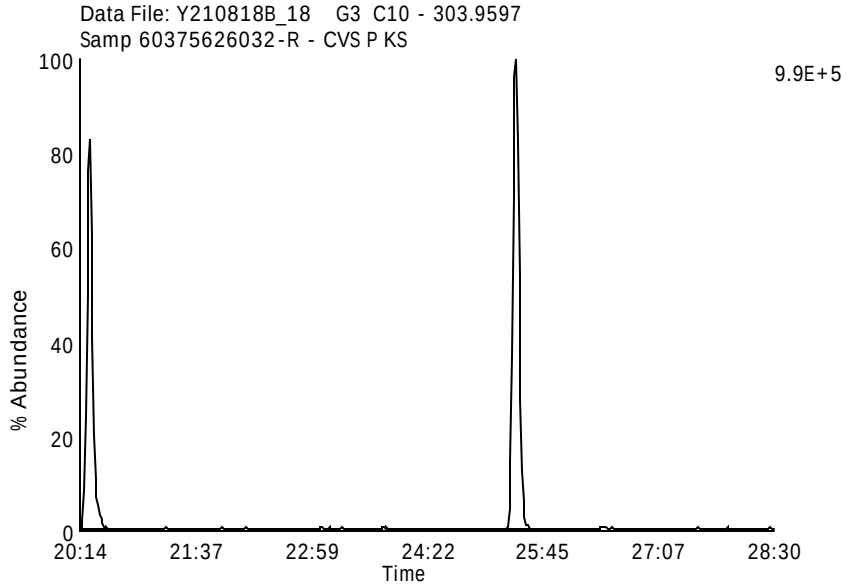


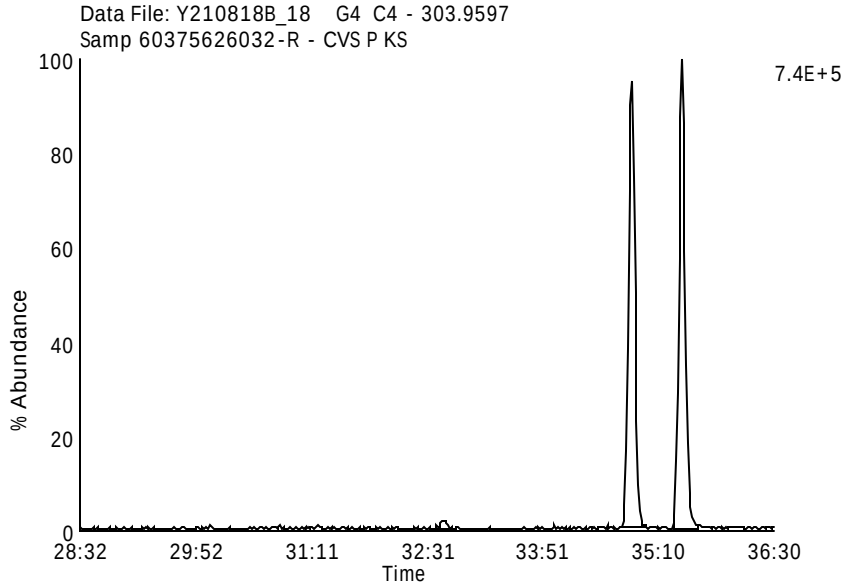
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_18 | Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS | Client Sample ID: GB-38/3-5



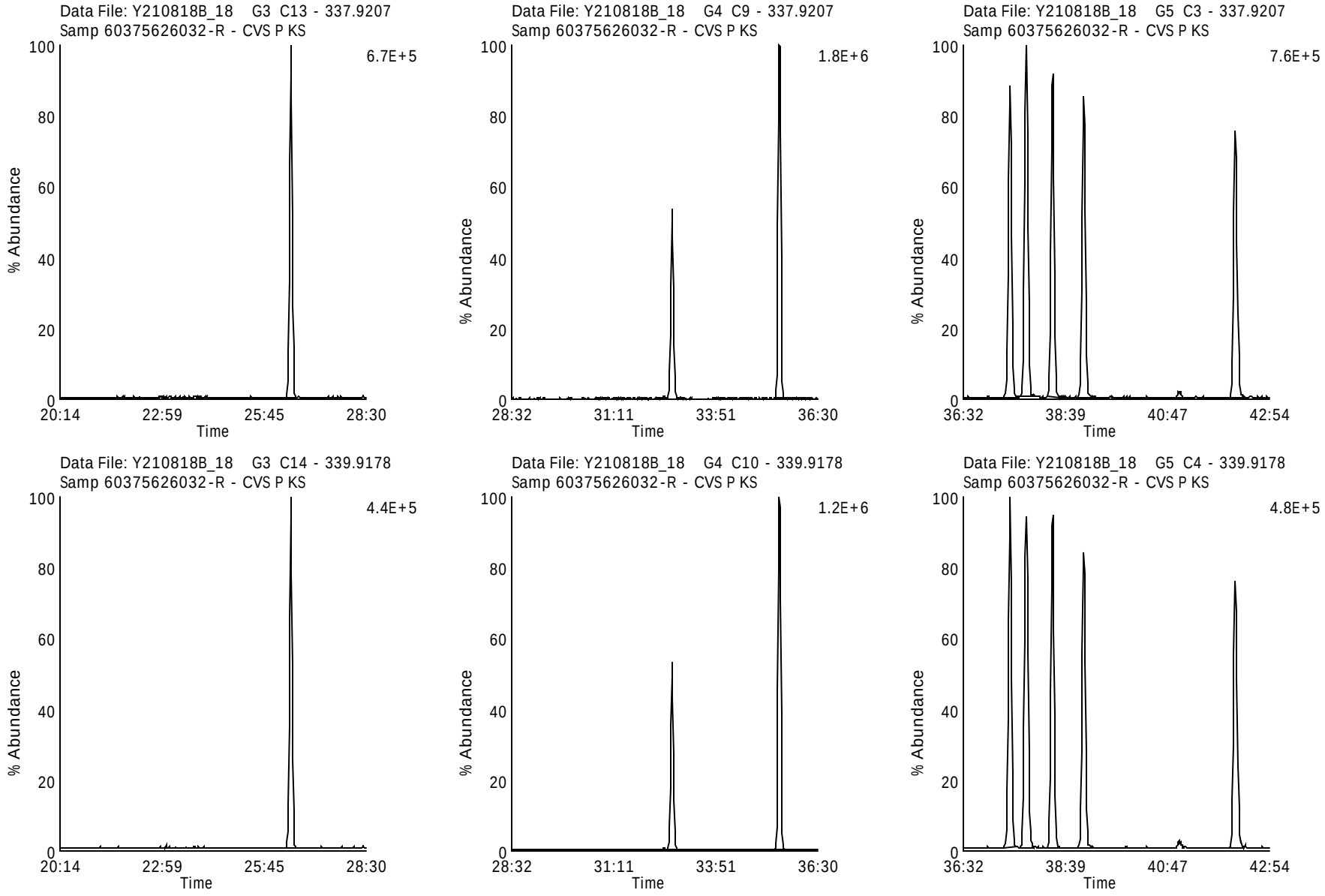






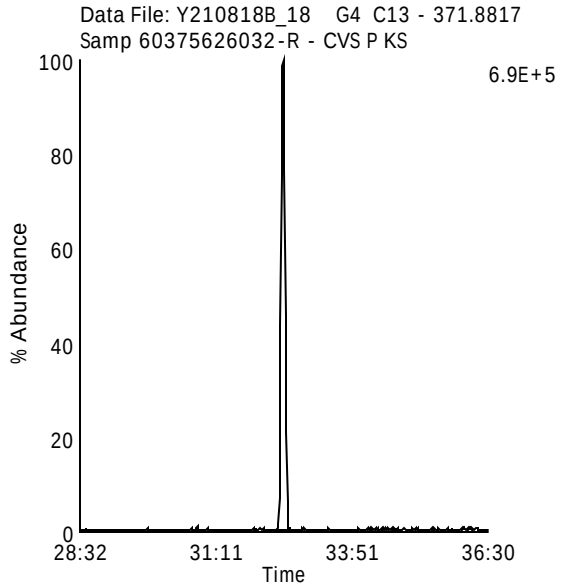
Labeled Penta Chlorinated Biphenyls

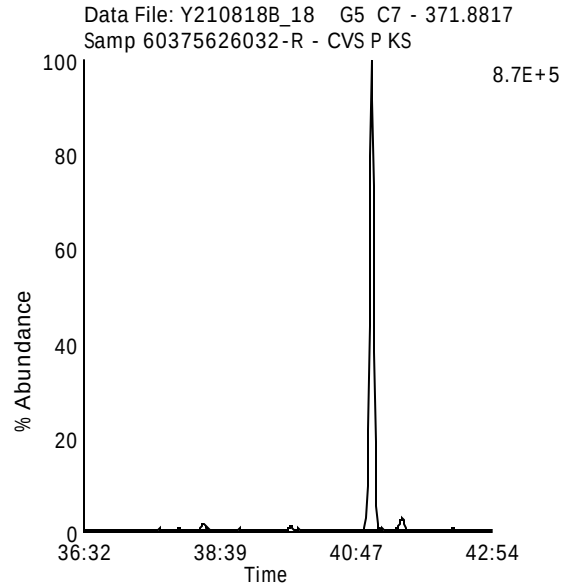
Data File Name: Y210818B_18 | Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS | Client Sample ID: GB-38/3-5

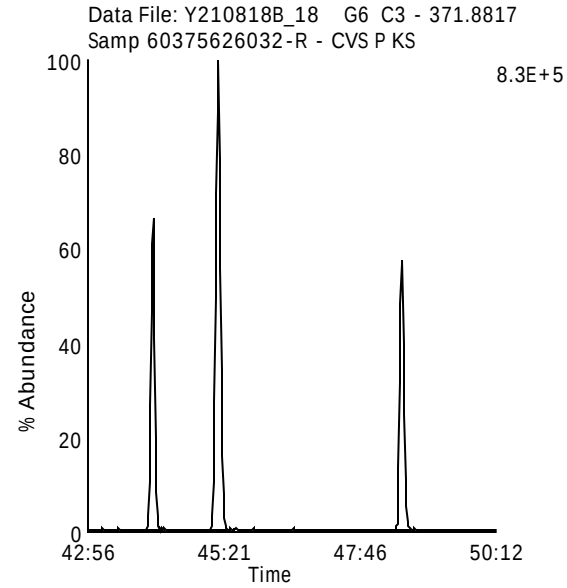


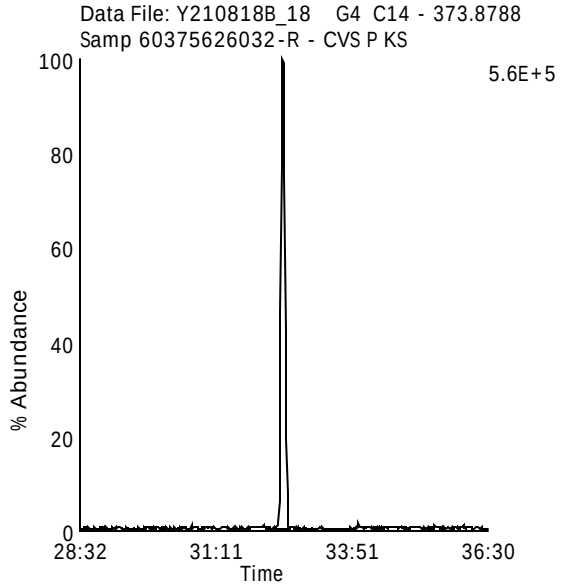
Labeled Hexa Chlorinated Biphenyls

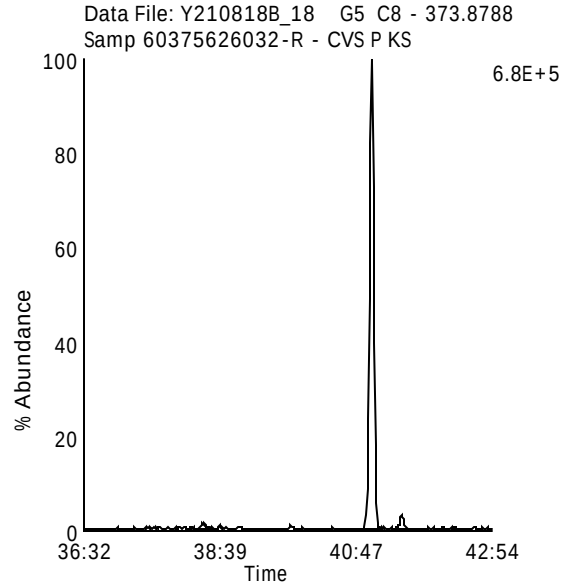
Data File Name: Y210818B_18
Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS
Client Sample ID: GB-38/3-5

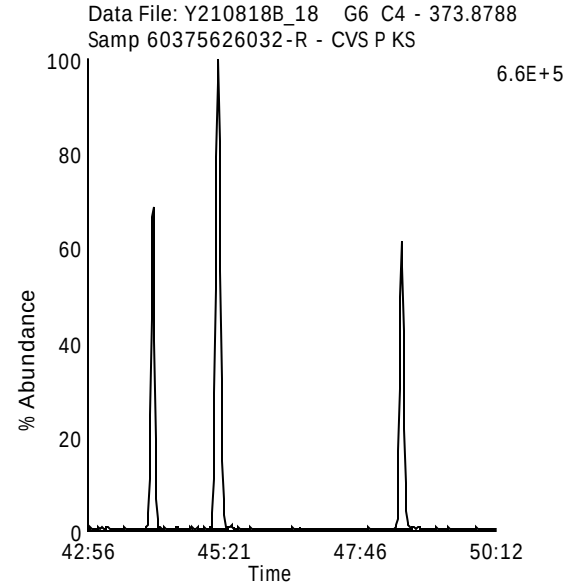






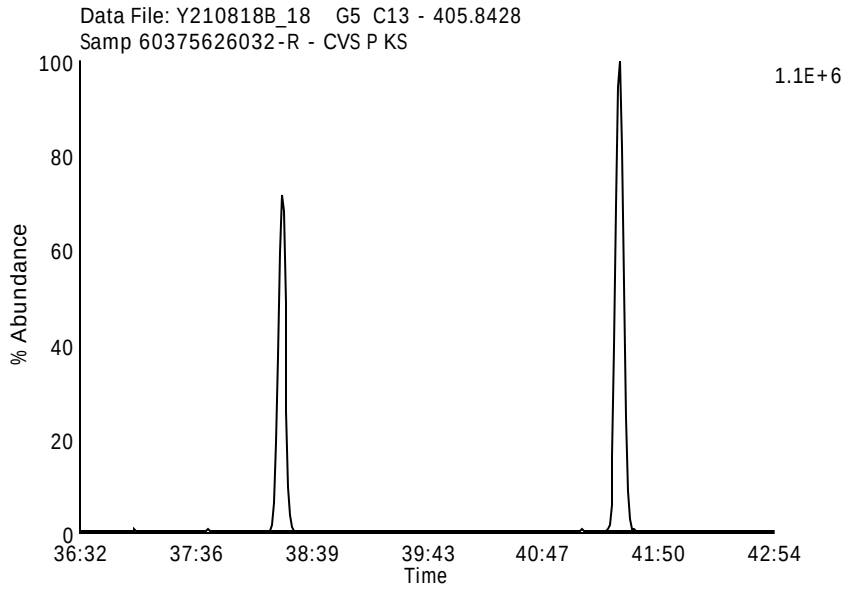


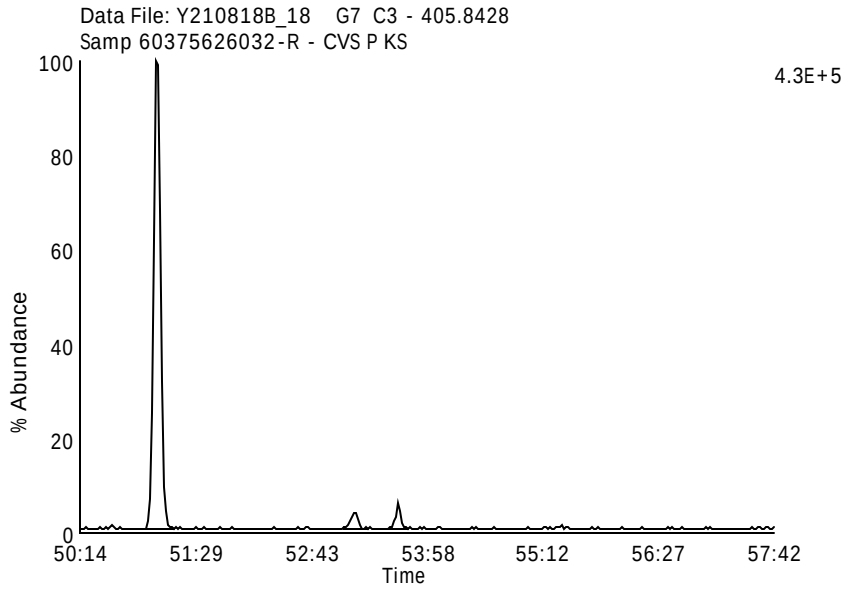


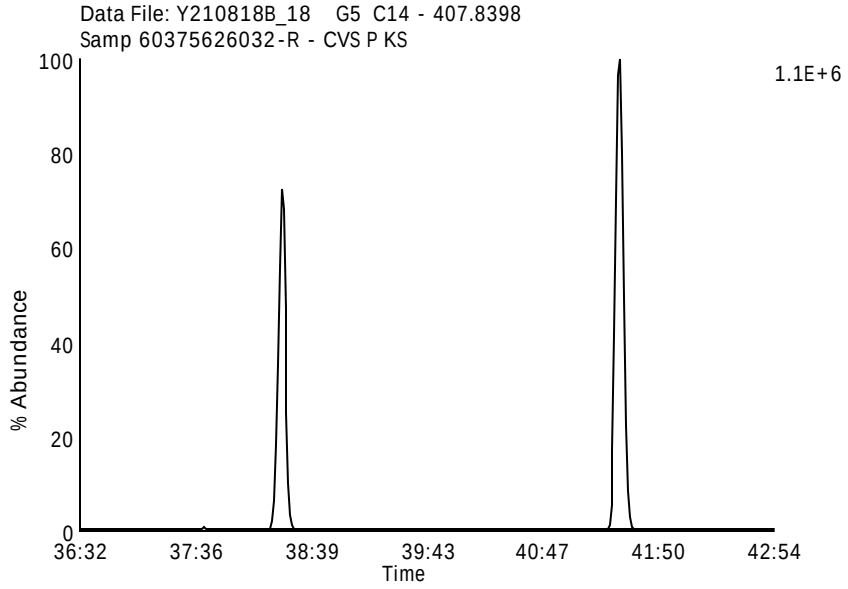


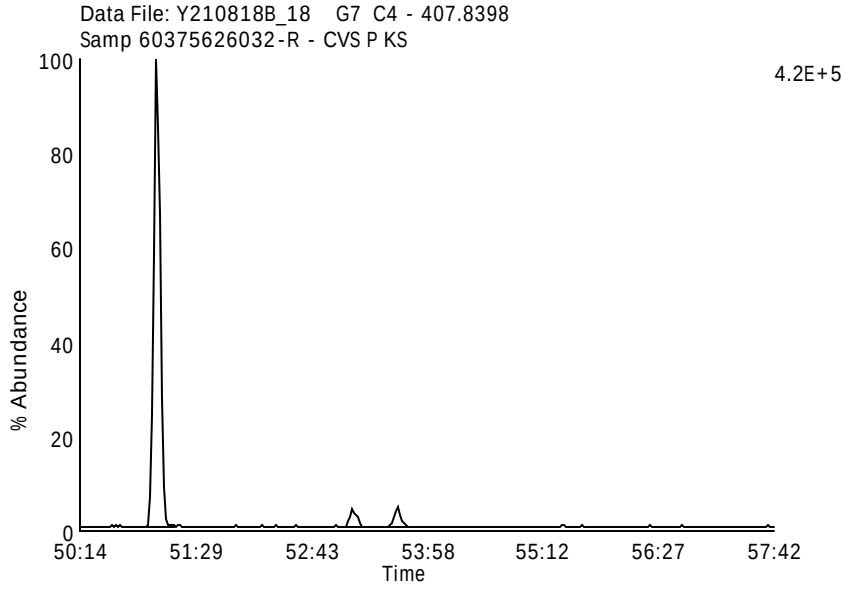
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_18
Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS
Client Sample ID: GB-38/3-5



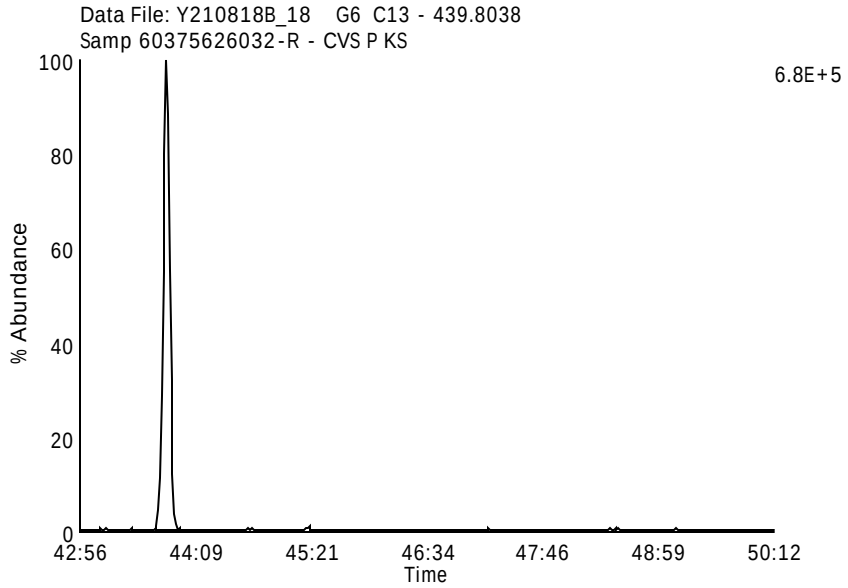


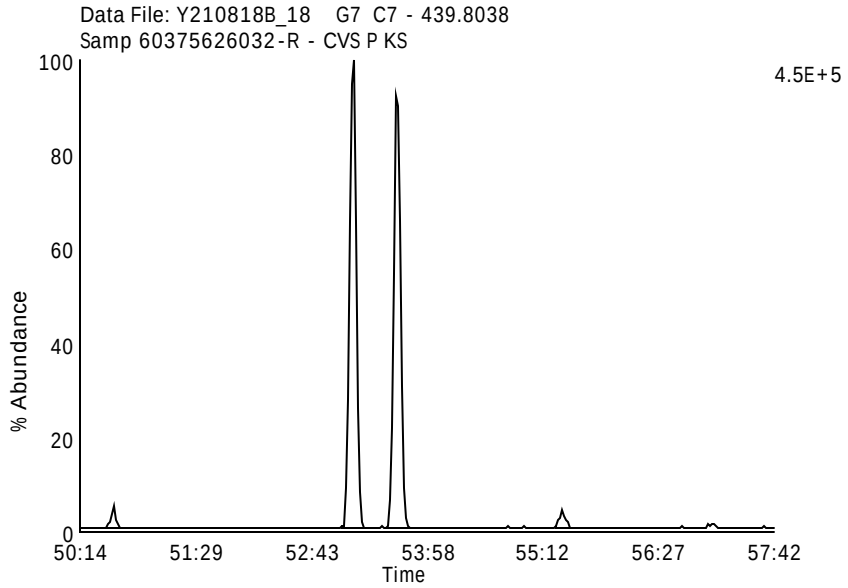


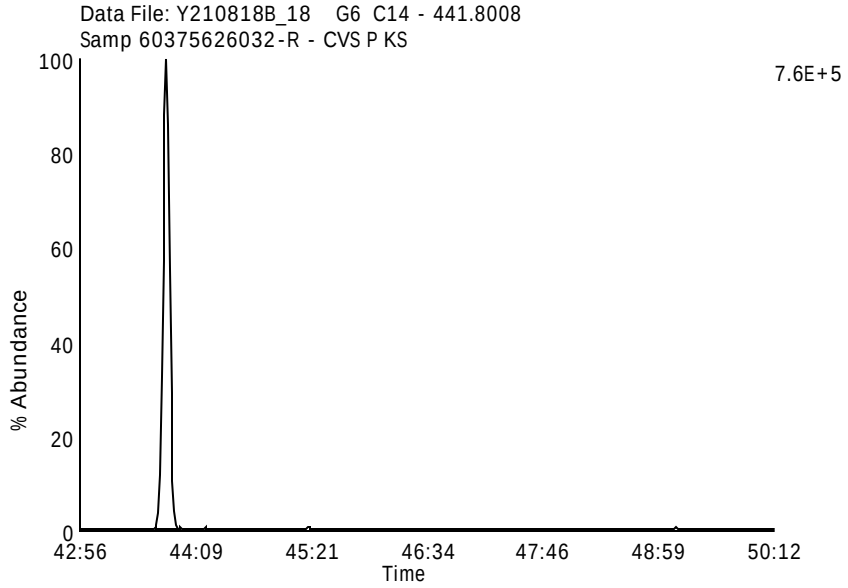


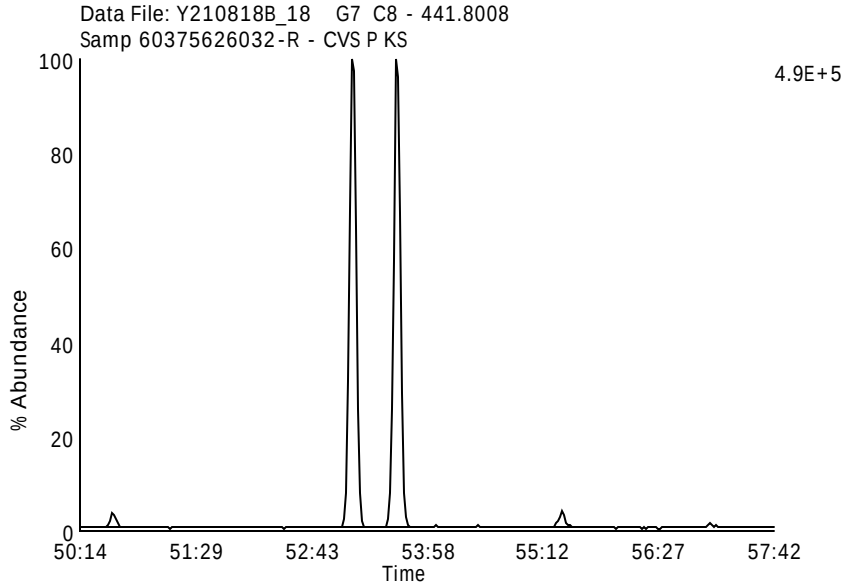
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_18 | Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS | Client Sample ID: GB-38/3-5



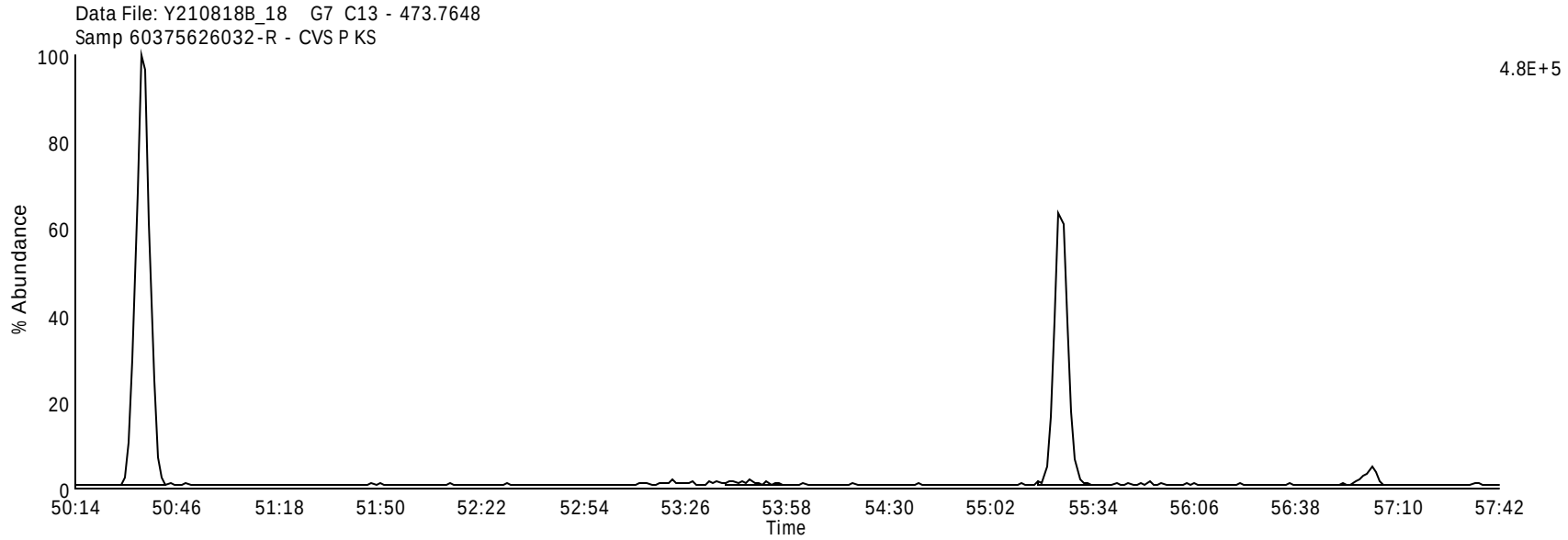


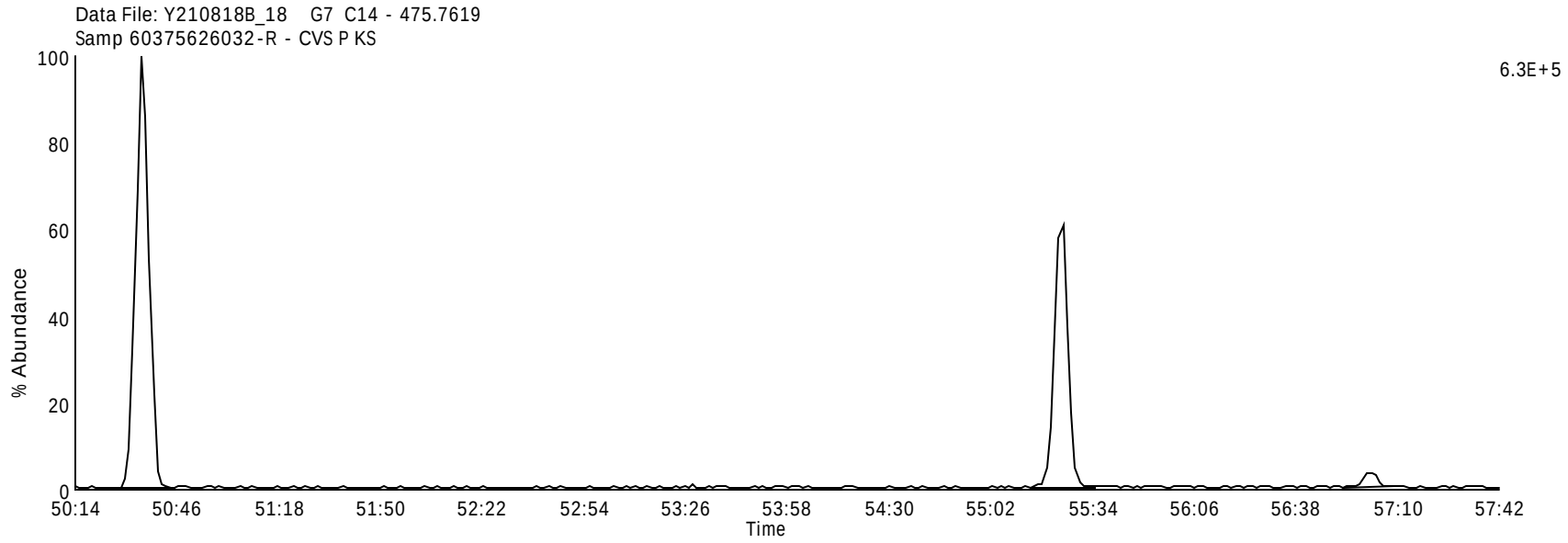




Labeled Nona Chlorinated Biphenyls

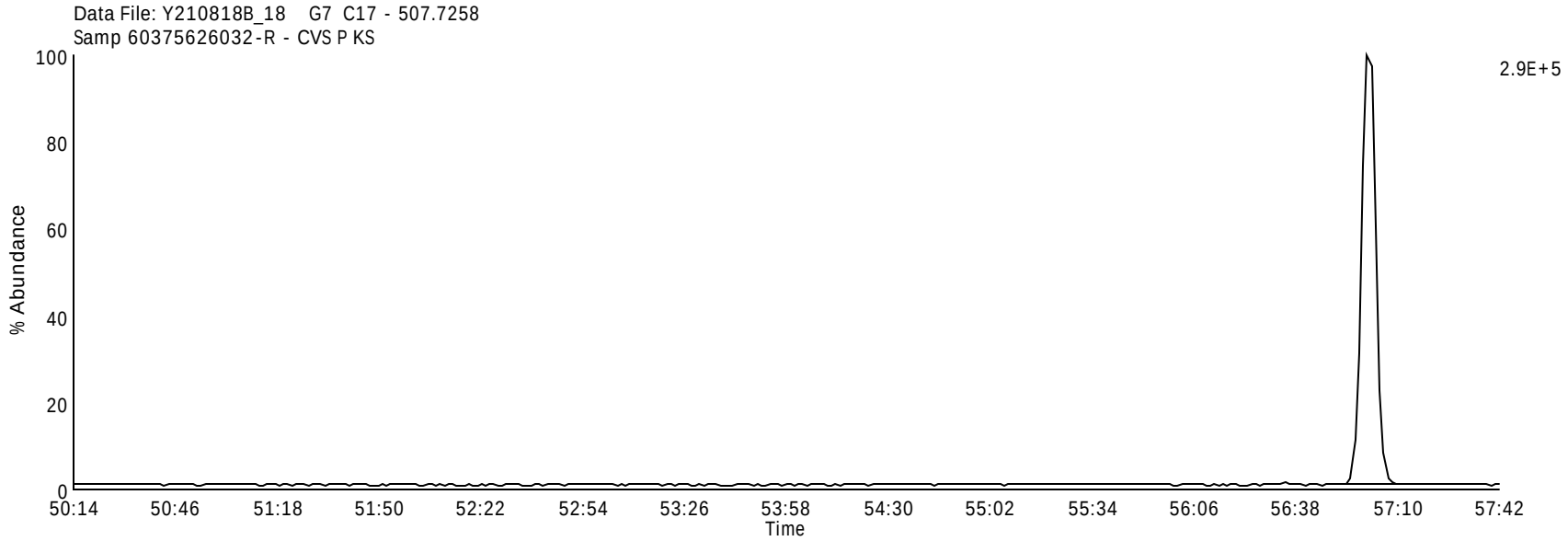
Data File Name: Y210818B_18	Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS	Client Sample ID: GB-38/3-5

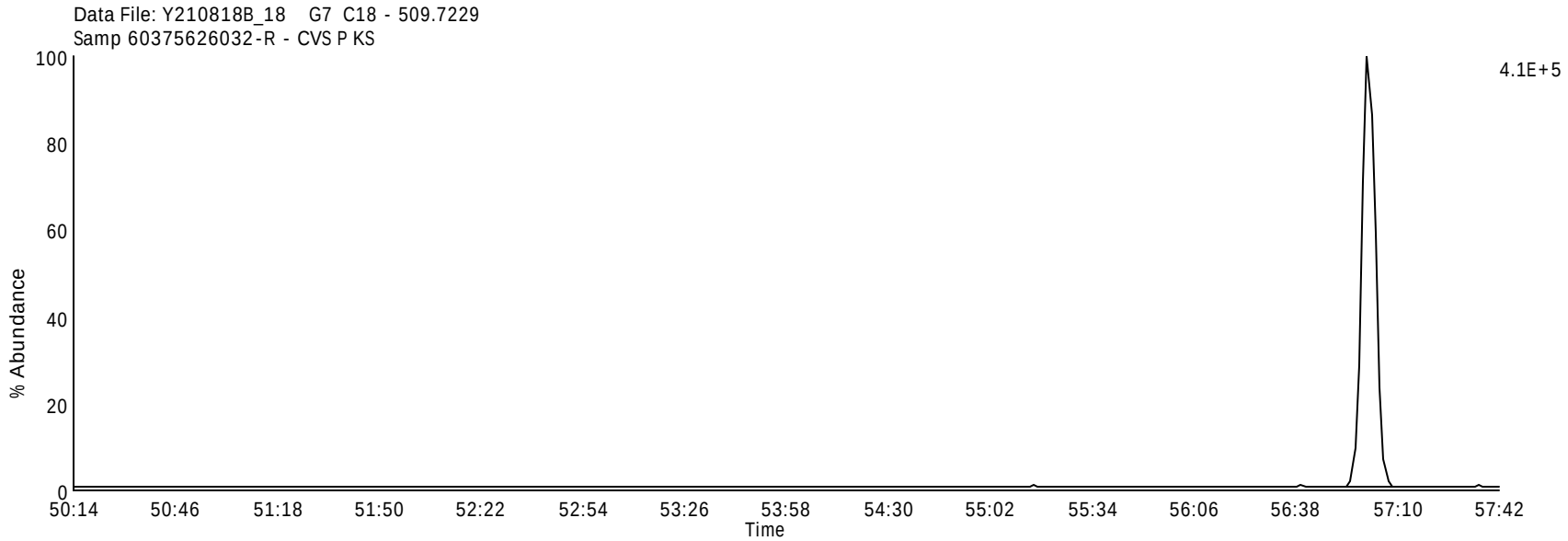




Labeled Deca Chlorinated Biphenyl

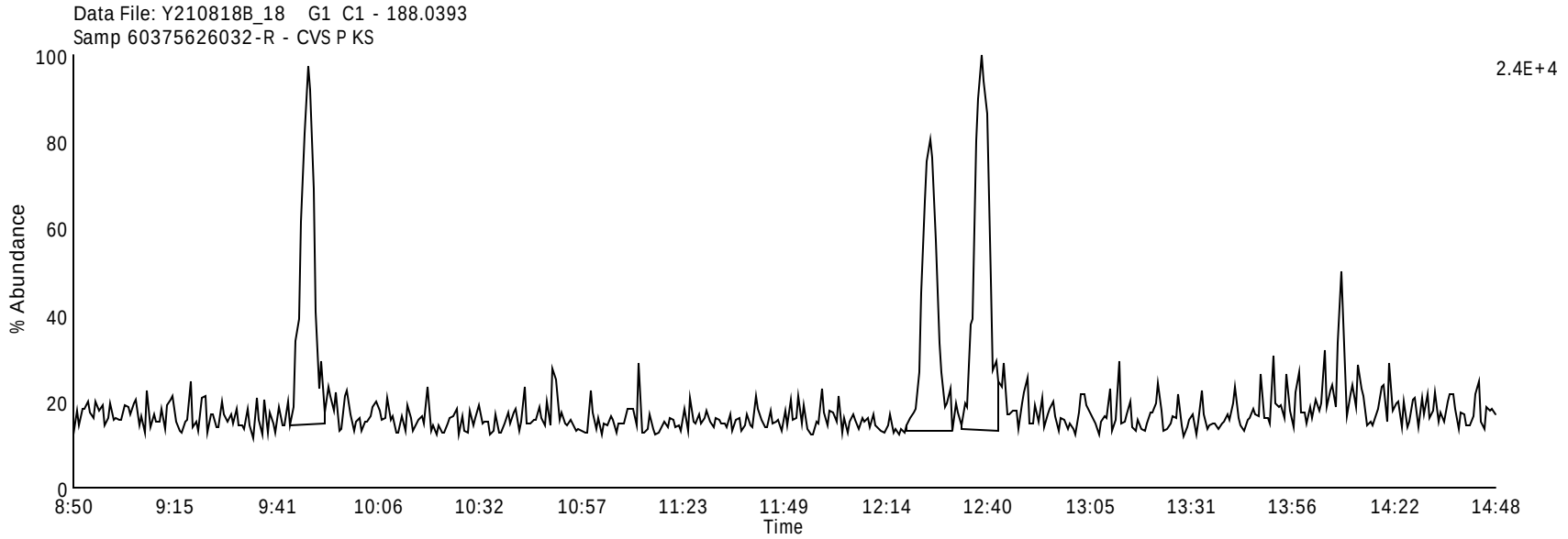
Data File Name: Y210818B_18	Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS	Client Sample ID: GB-38/3-5

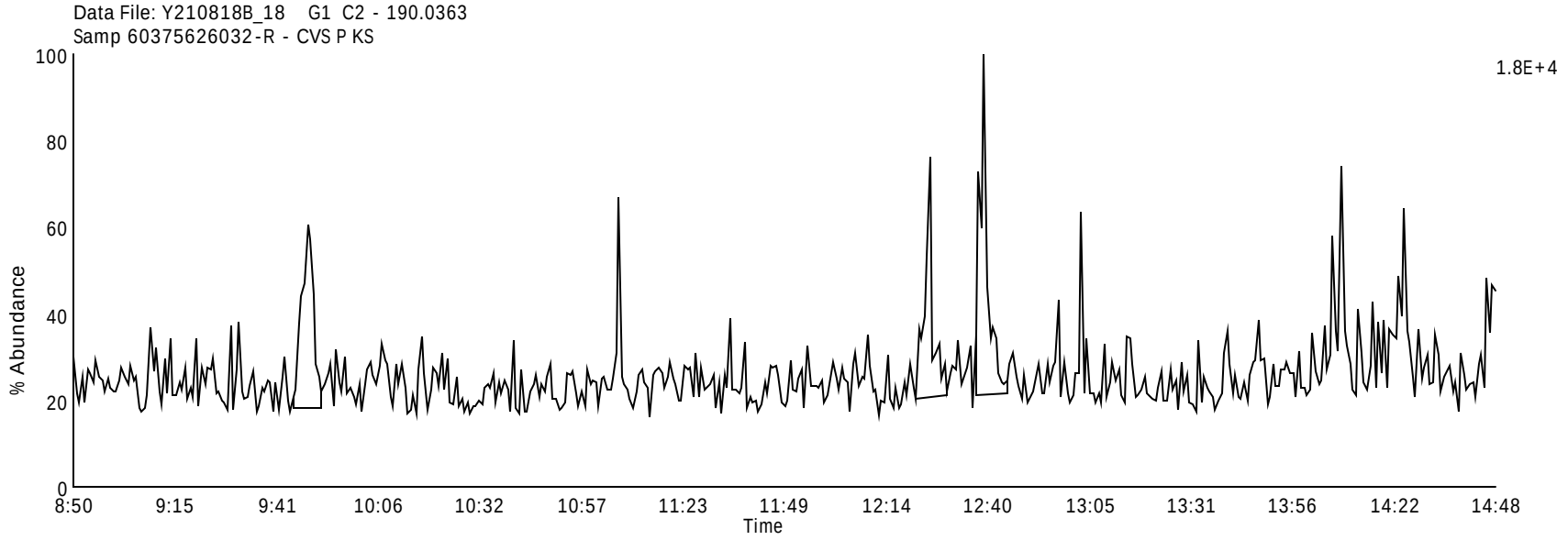




Mono Chlorinated Biphenyls

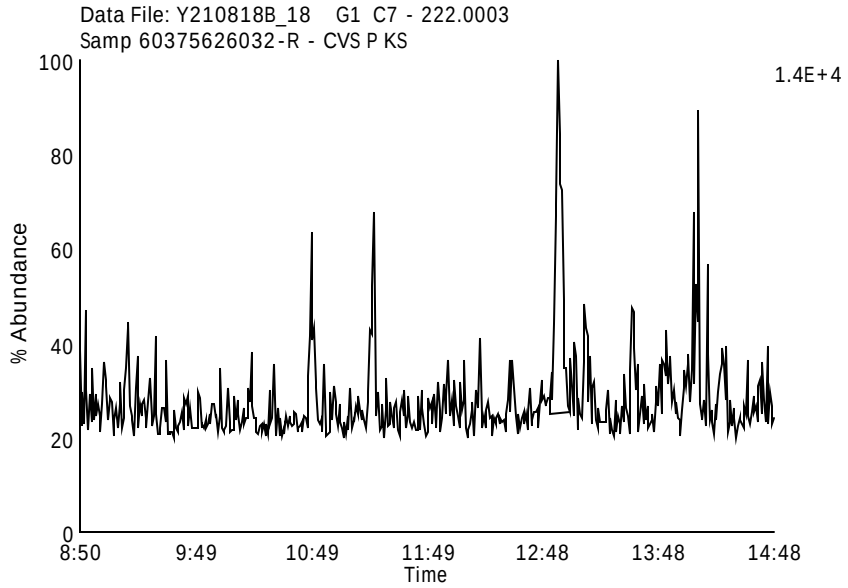
Data File Name: Y210818B_18	Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS	Client Sample ID: GB-38/3-5

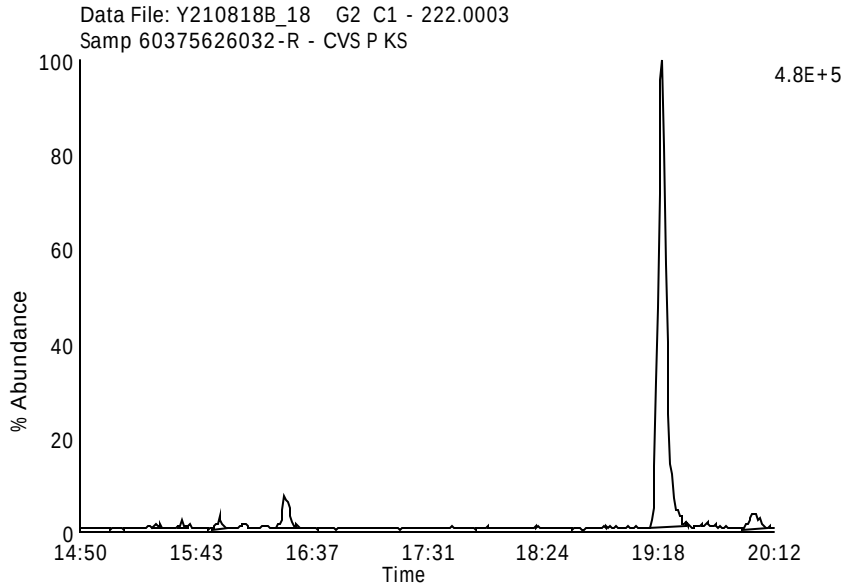


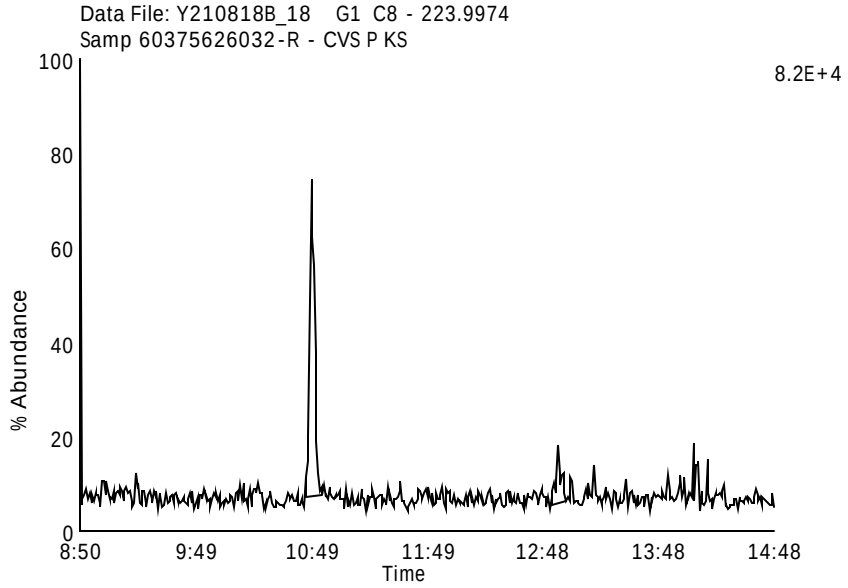


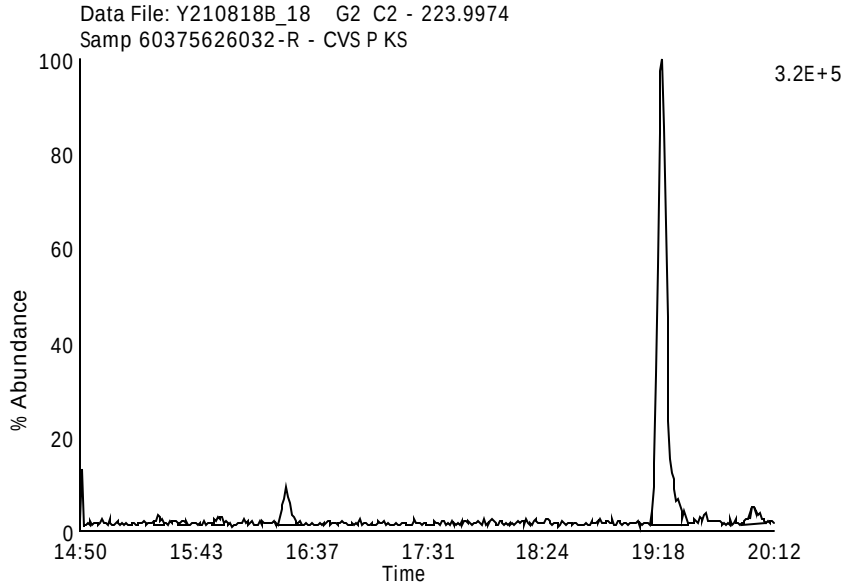
Di Chlorinated Biphenyls

Data File Name: Y210818B_18
Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS
Client Sample ID: GB-38/3-5



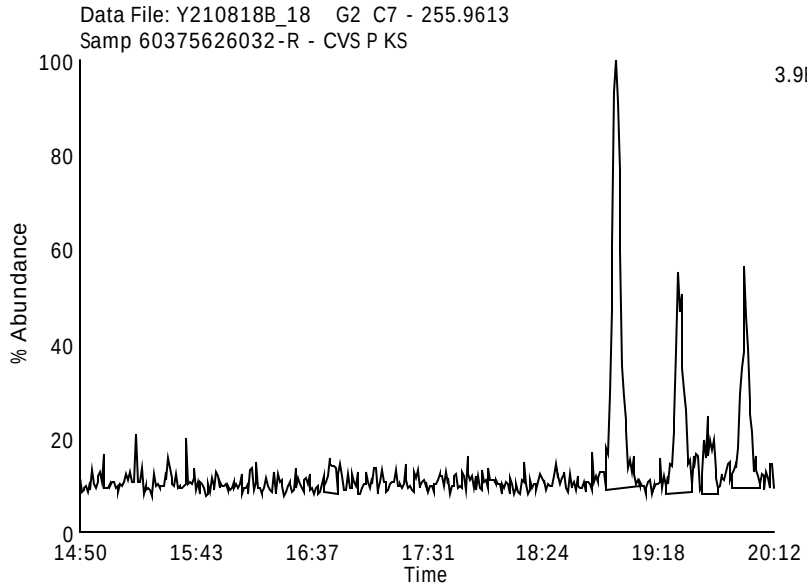


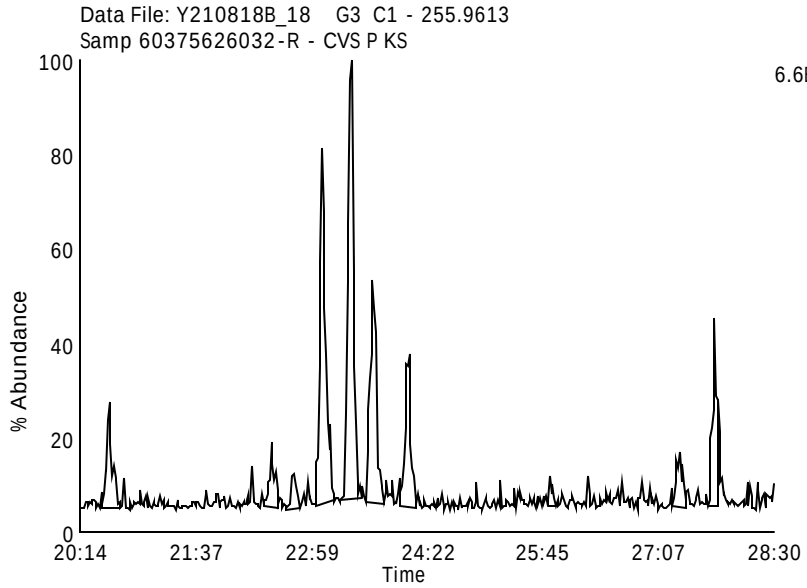


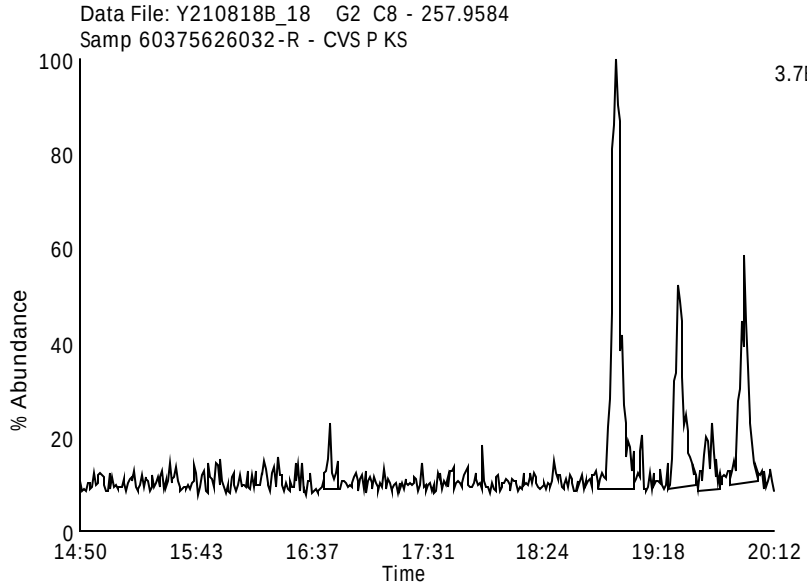


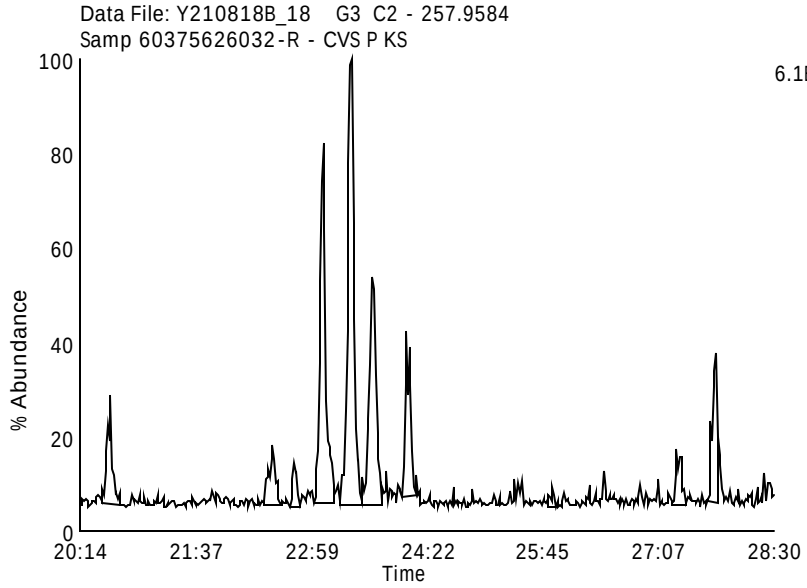
Tri Chlorinated Biphenyls

Data File Name: Y210818B_18
Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS
Client Sample ID: GB-38/3-5



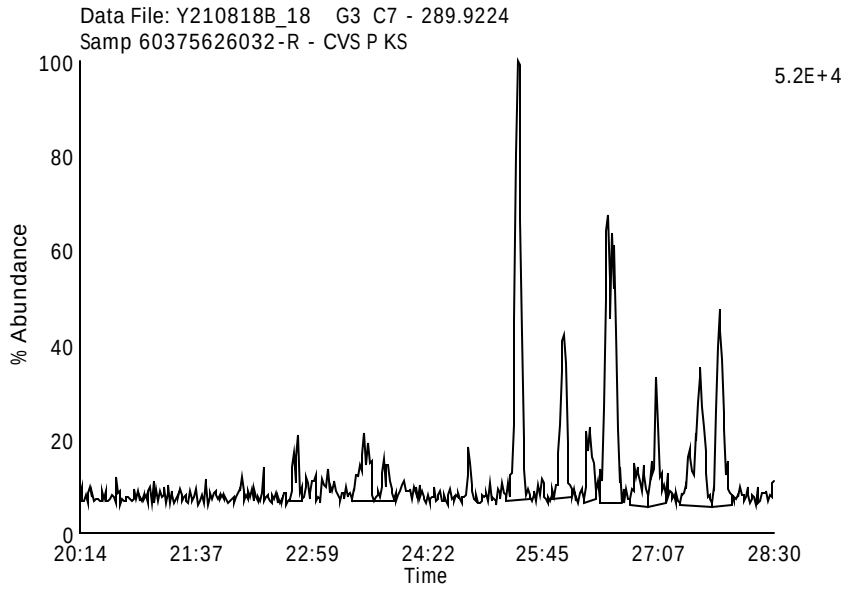


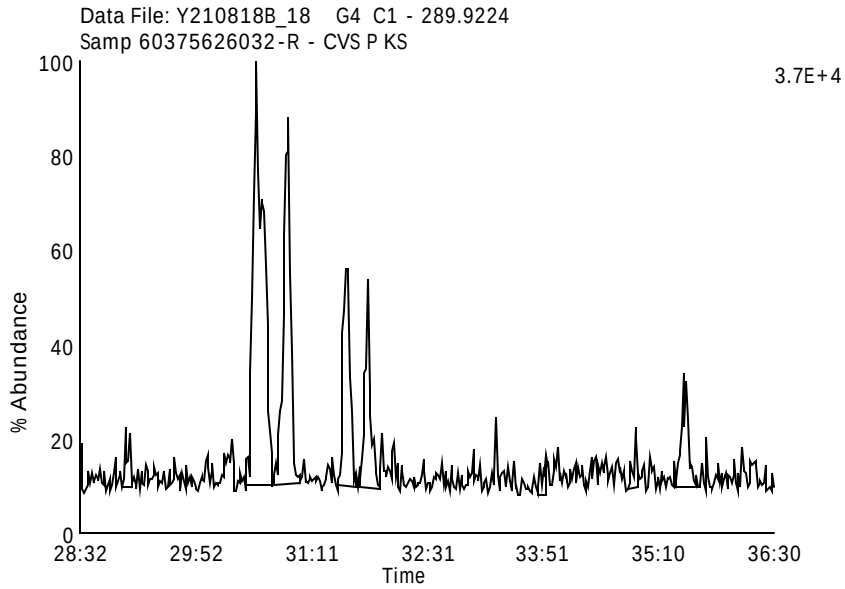


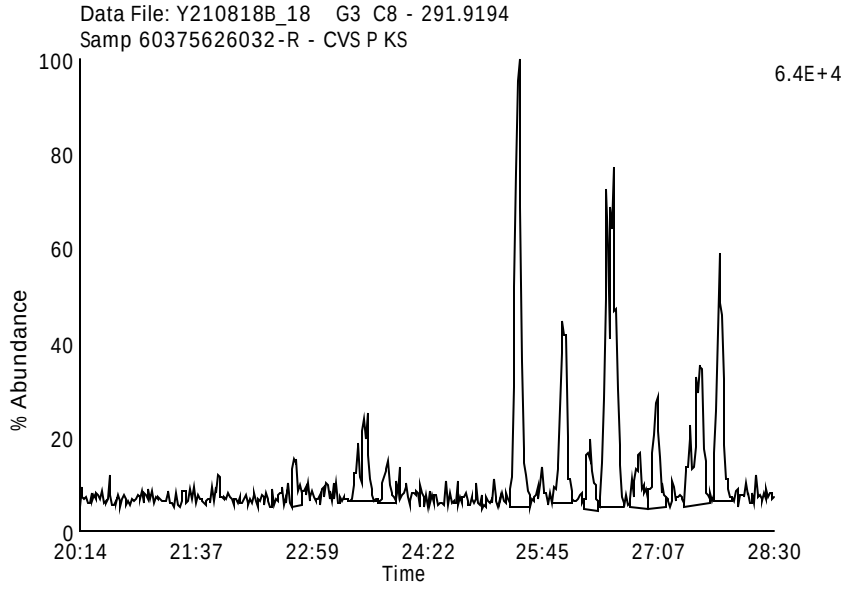


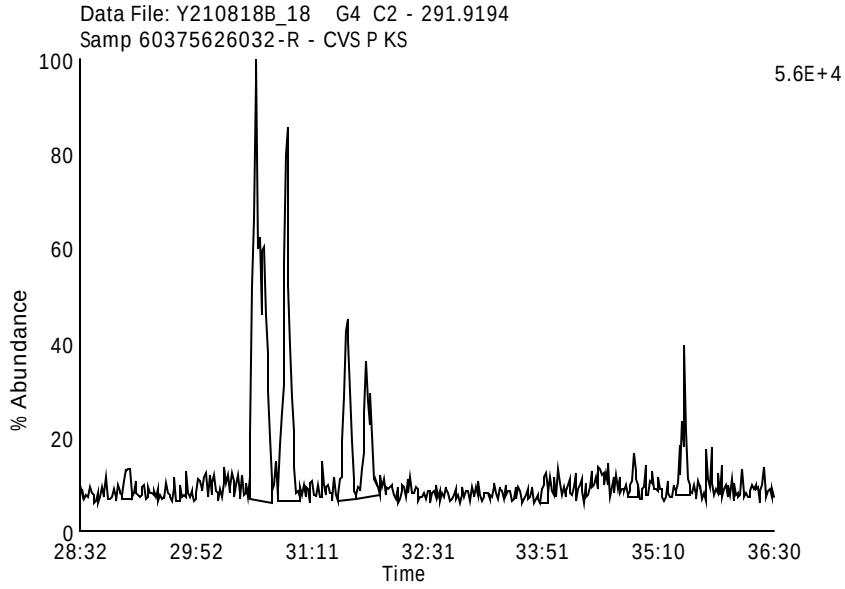
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_18
Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS
Client Sample ID: GB-38/3-5



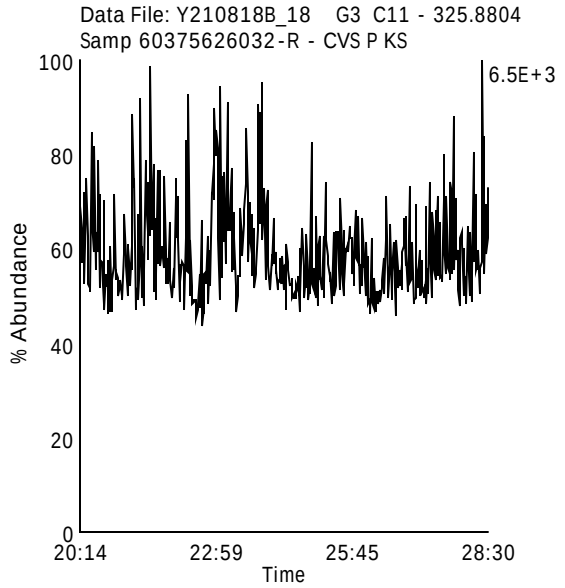


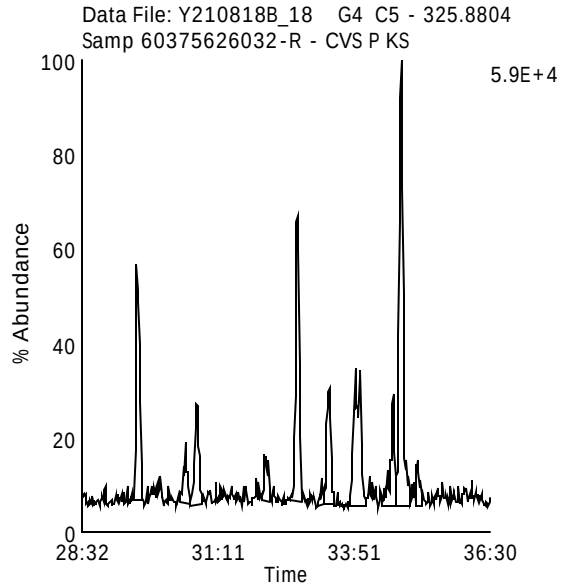


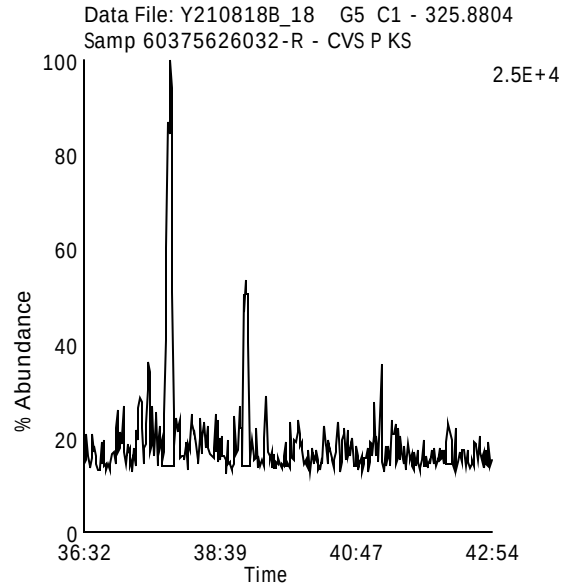


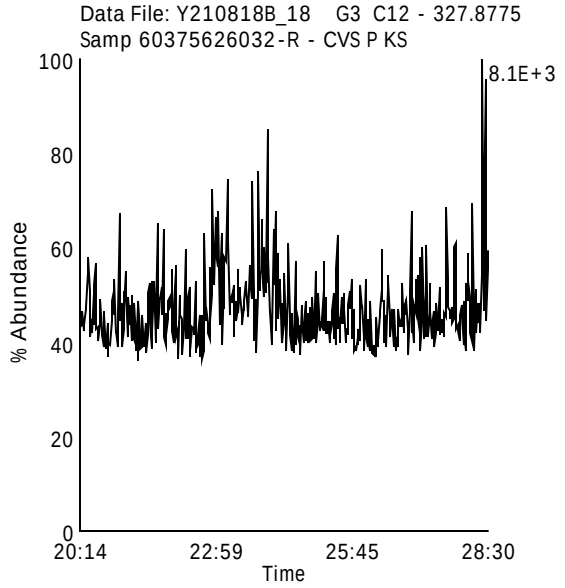
Penta Chlorinated Biphenyls

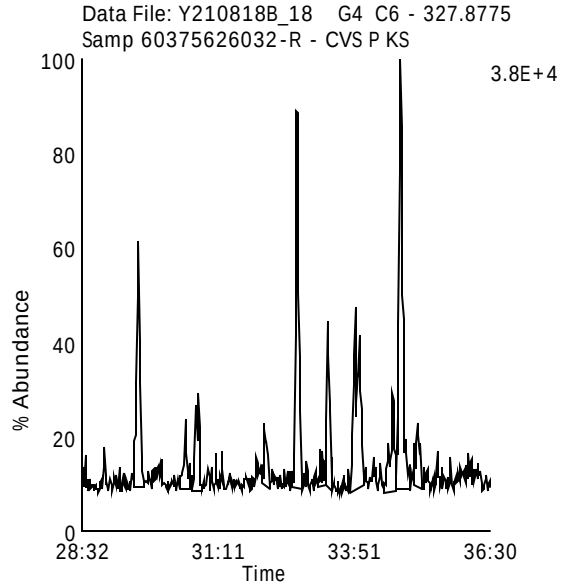
Data File Name: Y210818B_18
Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS
Client Sample ID: GB-38/3-5

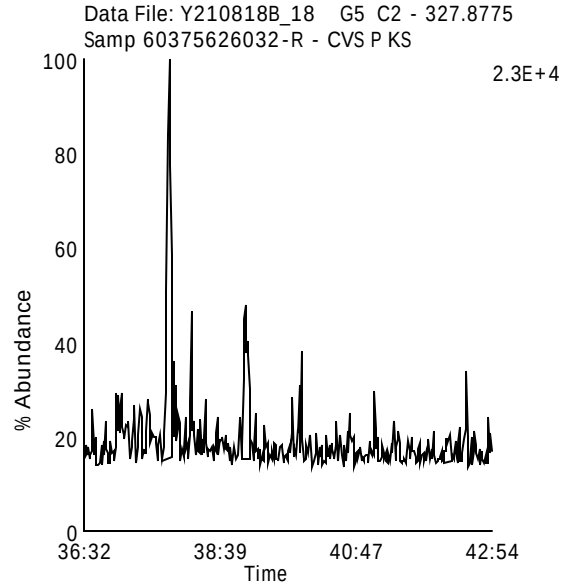






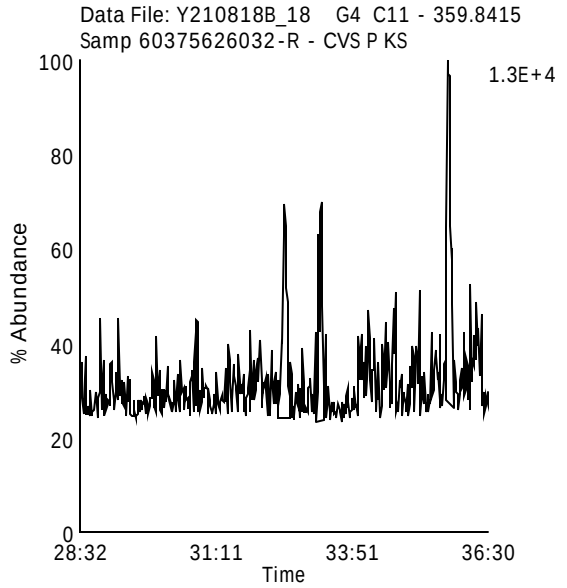


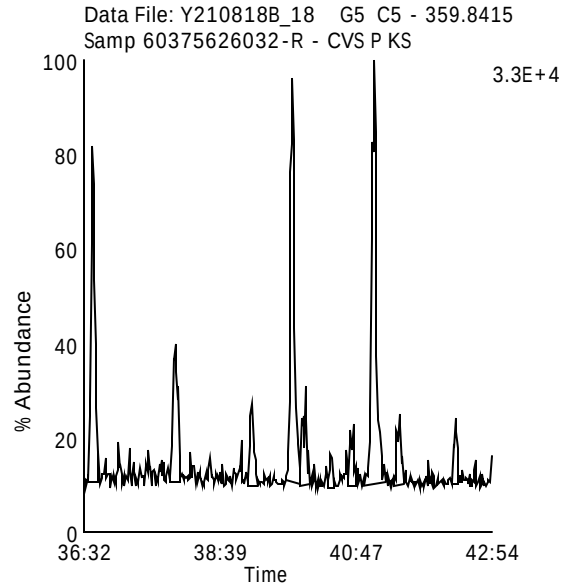


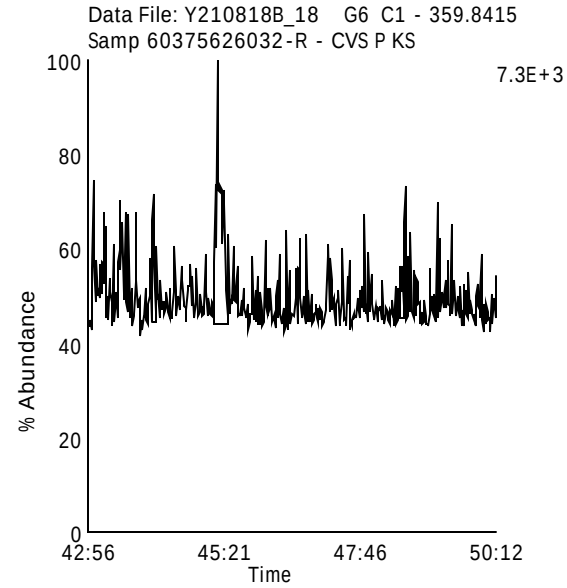


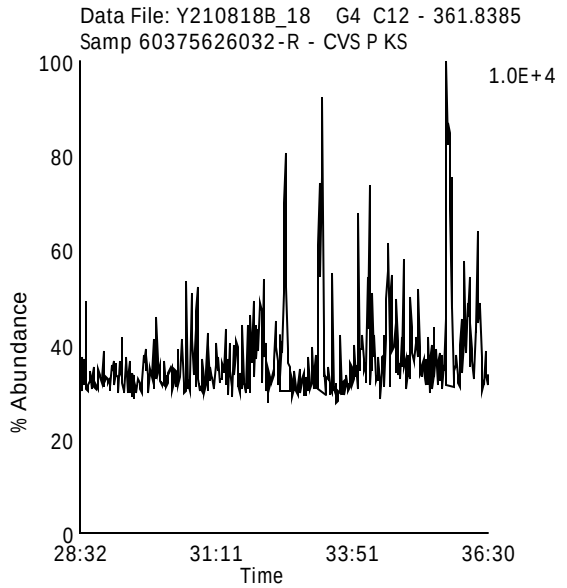
Hexa Chlorinated Biphenyls

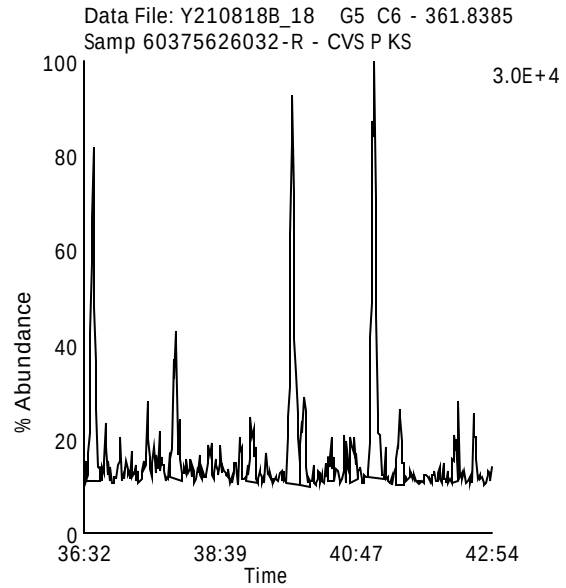
Data File Name: Y210818B_18 | Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS | Client Sample ID: GB-38/3-5

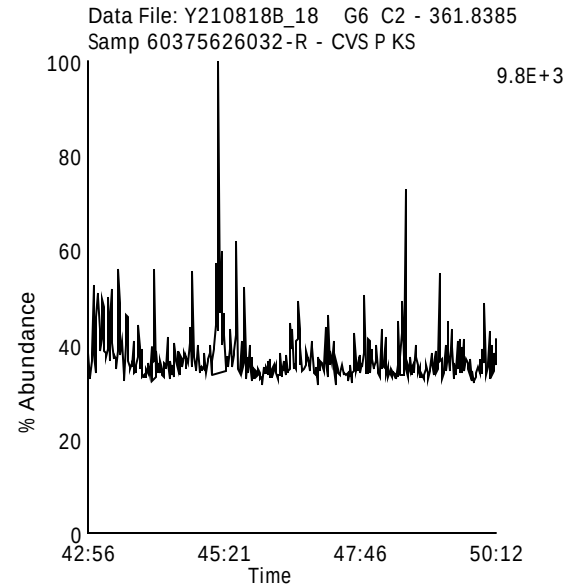






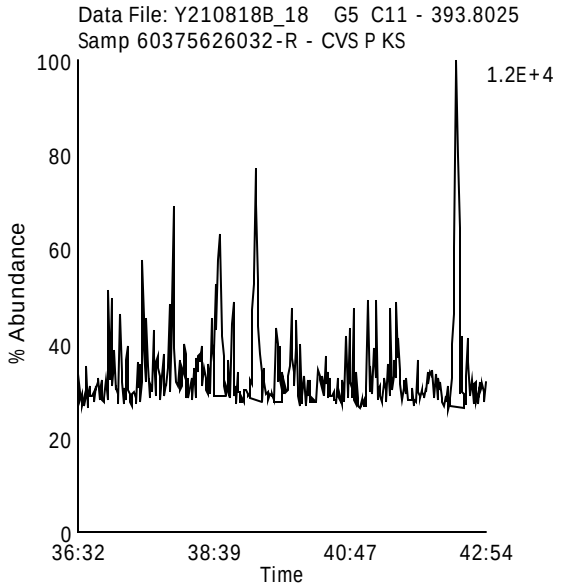


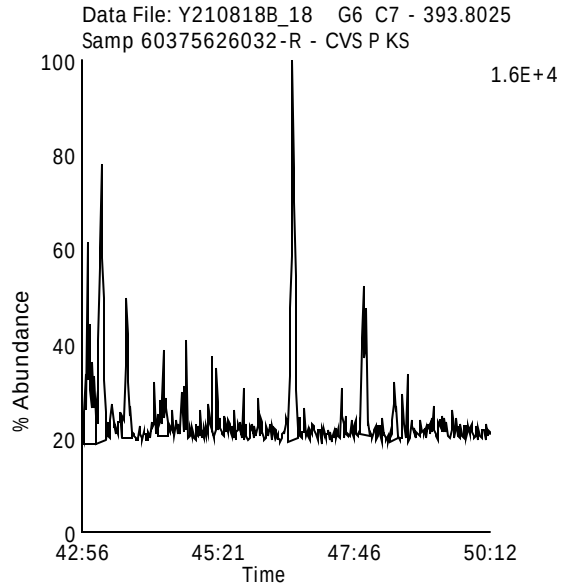


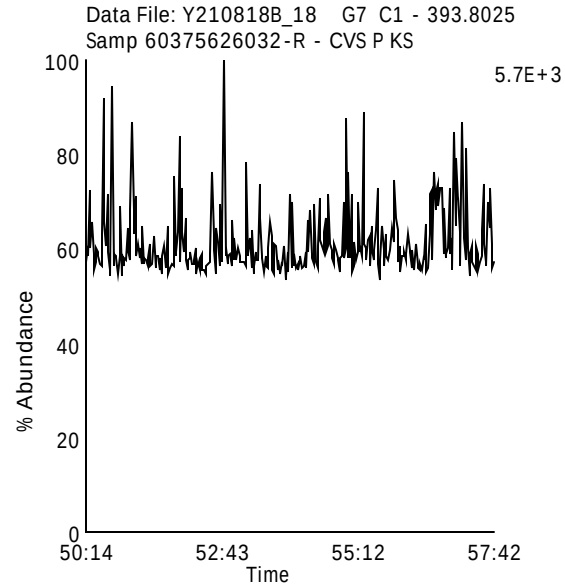


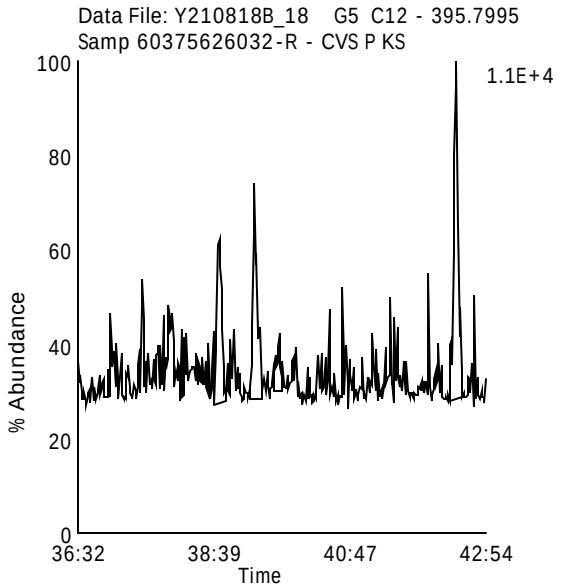
Hepta Chlorinated Biphenyls

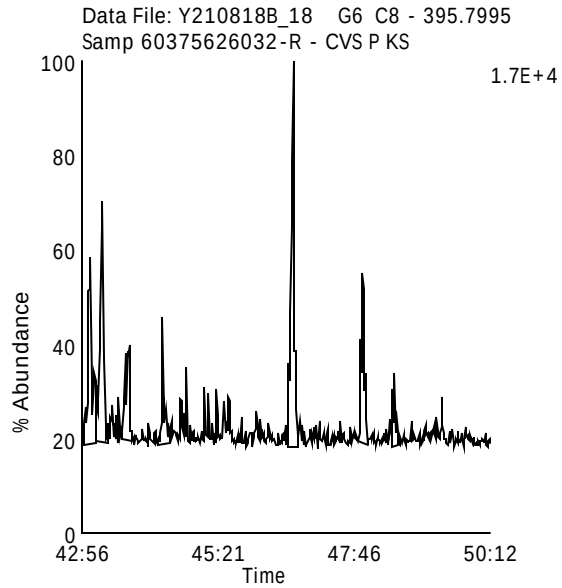
Data File Name: Y210818B_18 | Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS | Client Sample ID: GB-38/3-5

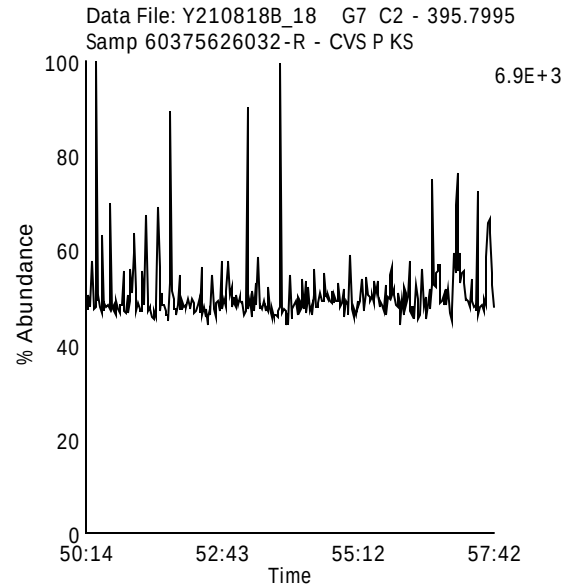






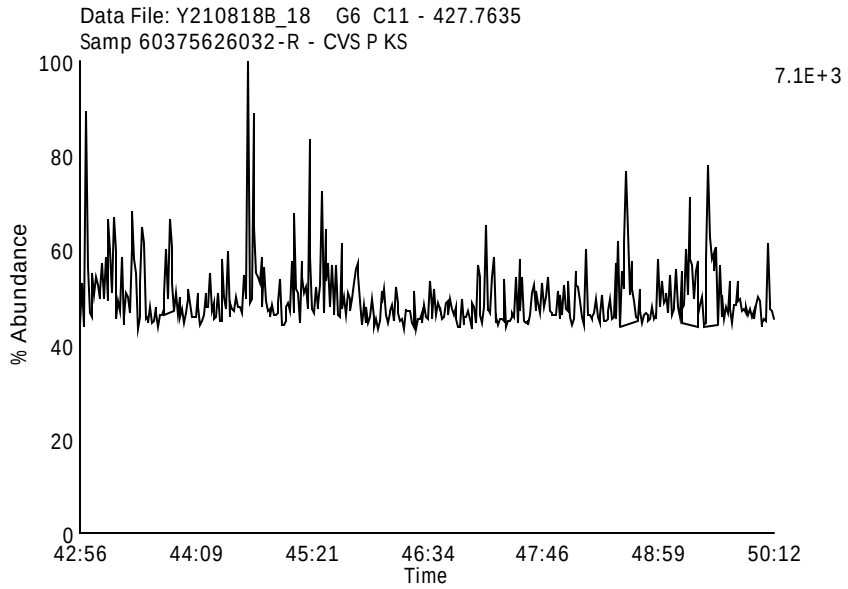


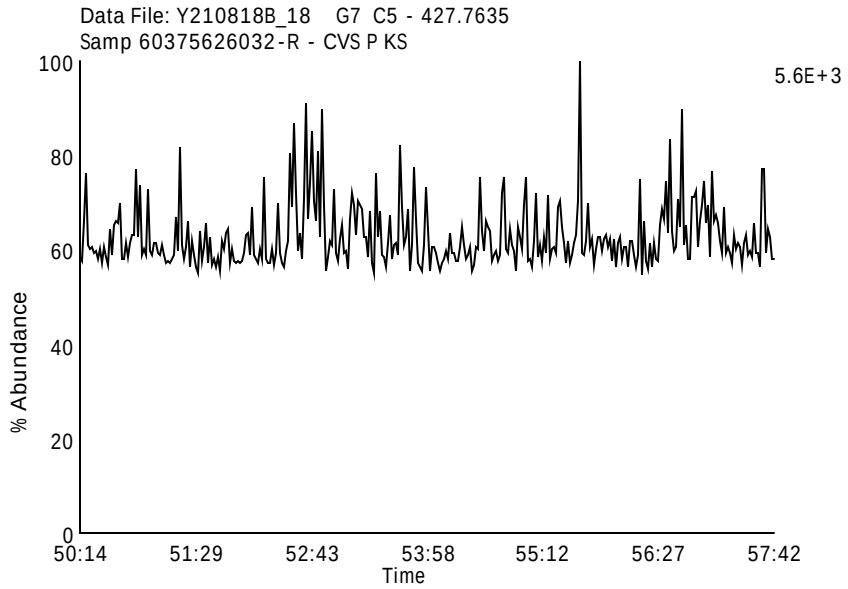


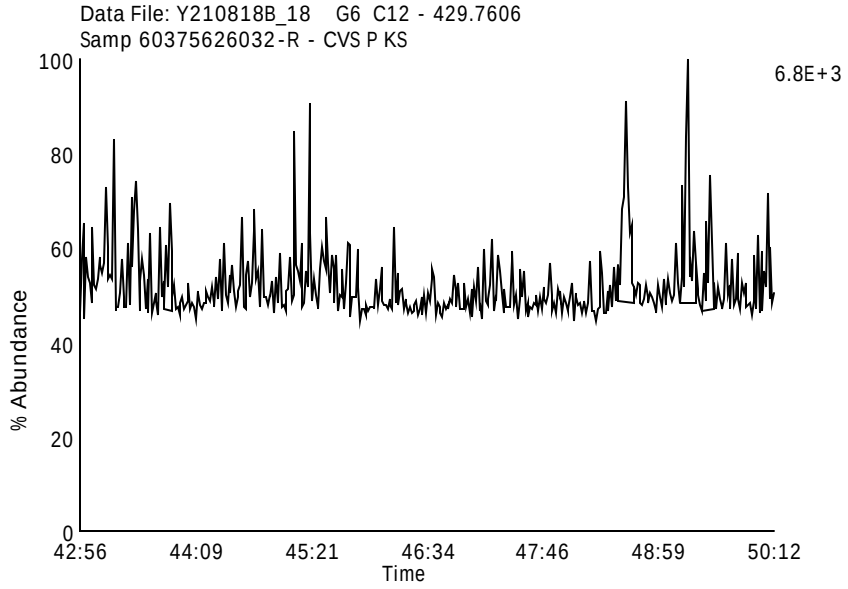


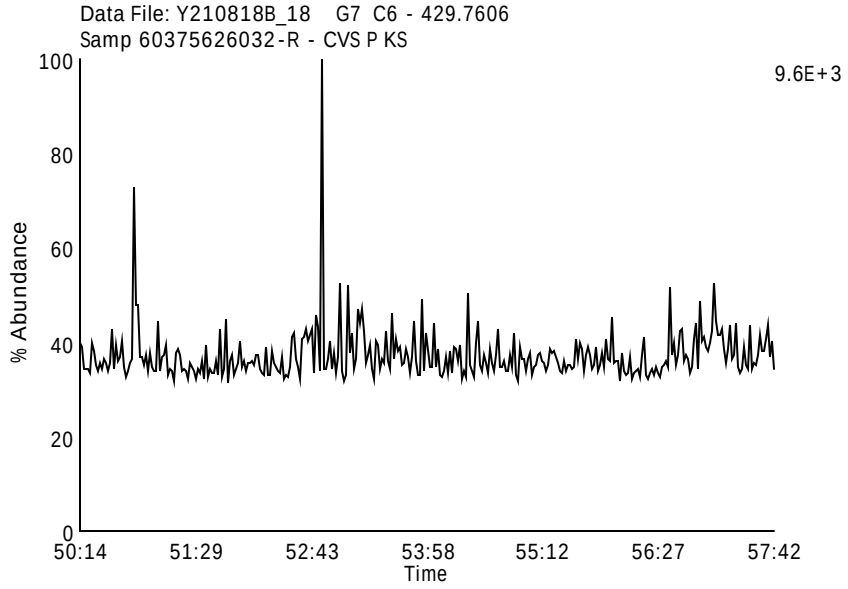
Octa Chlorinated Biphenyls

Data File Name: Y210818B_18
Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS
Client Sample ID: GB-38/3-5



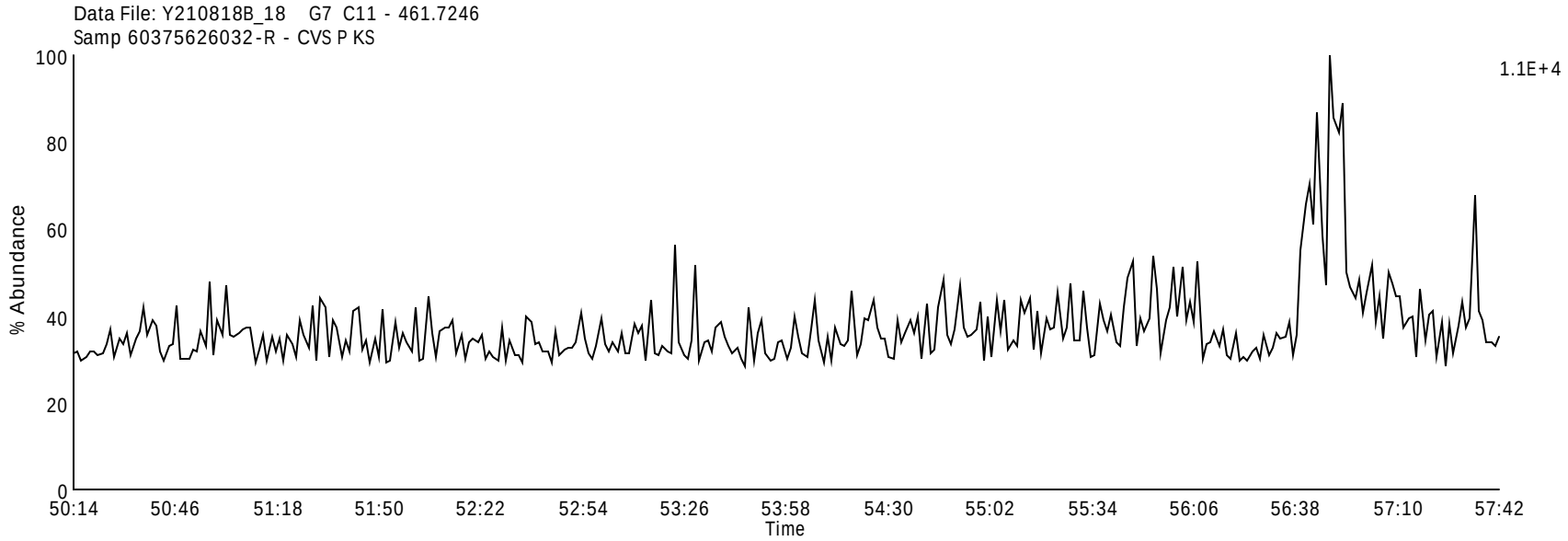


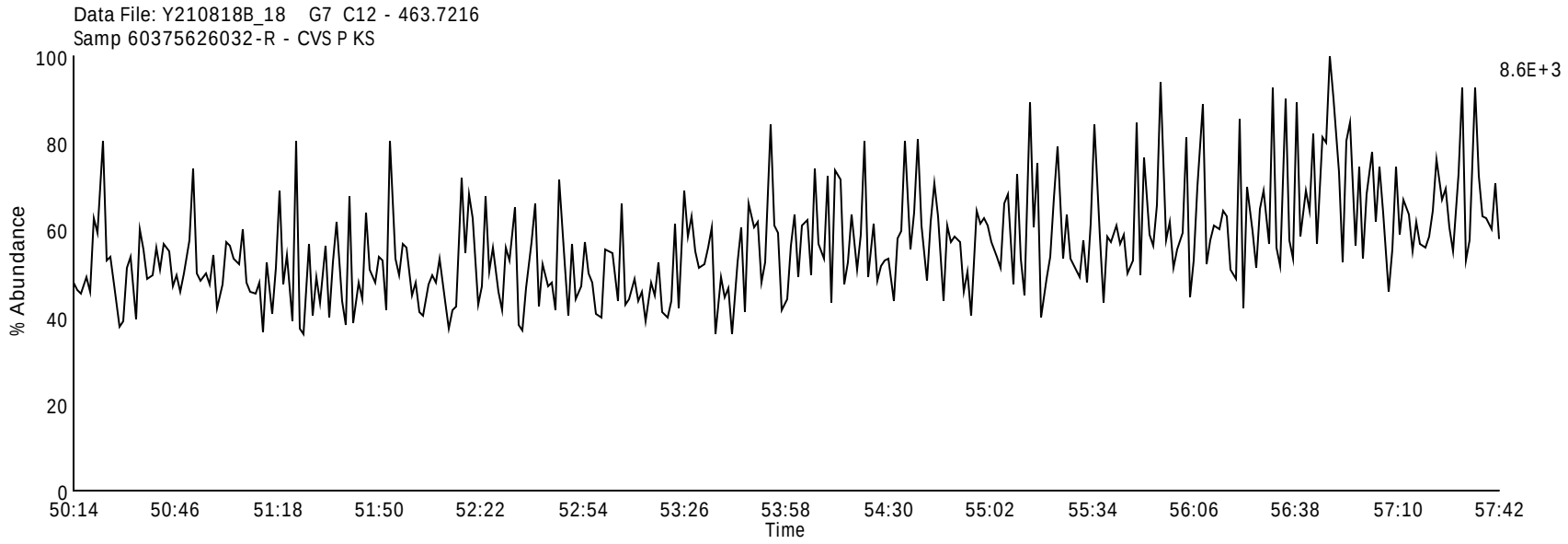




Nona Chlorinated Biphenyls

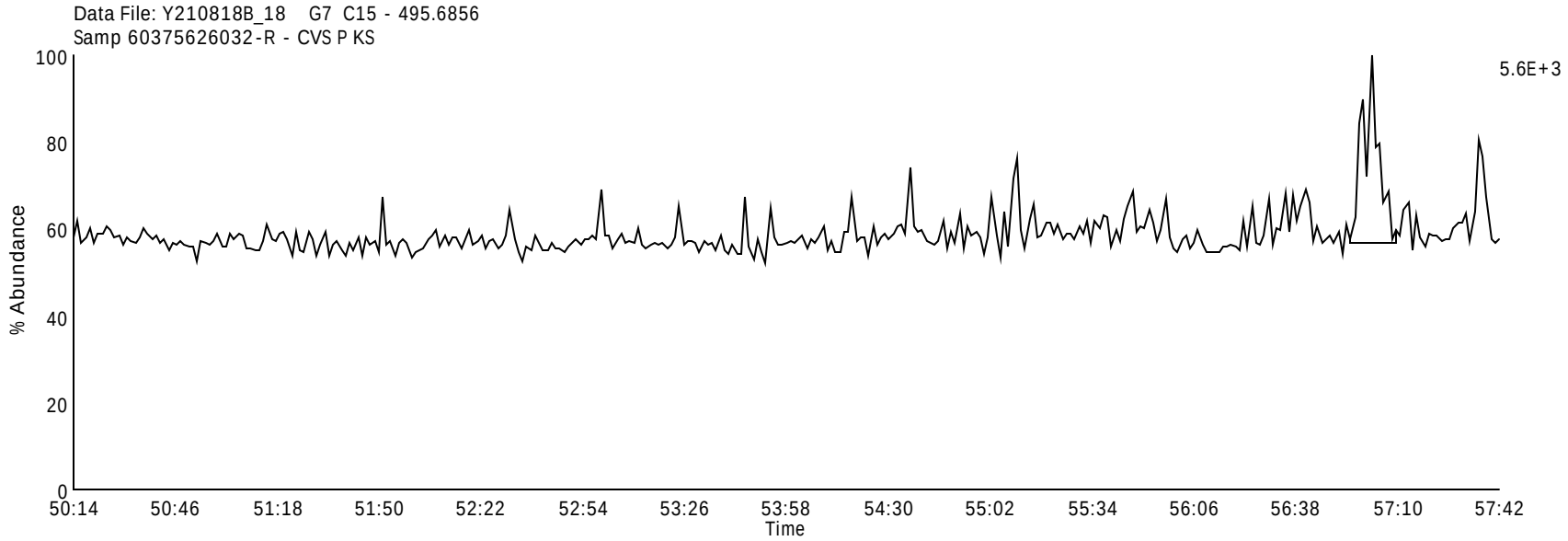
Data File Name: Y210818B_18	Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS	Client Sample ID: GB-38/3-5

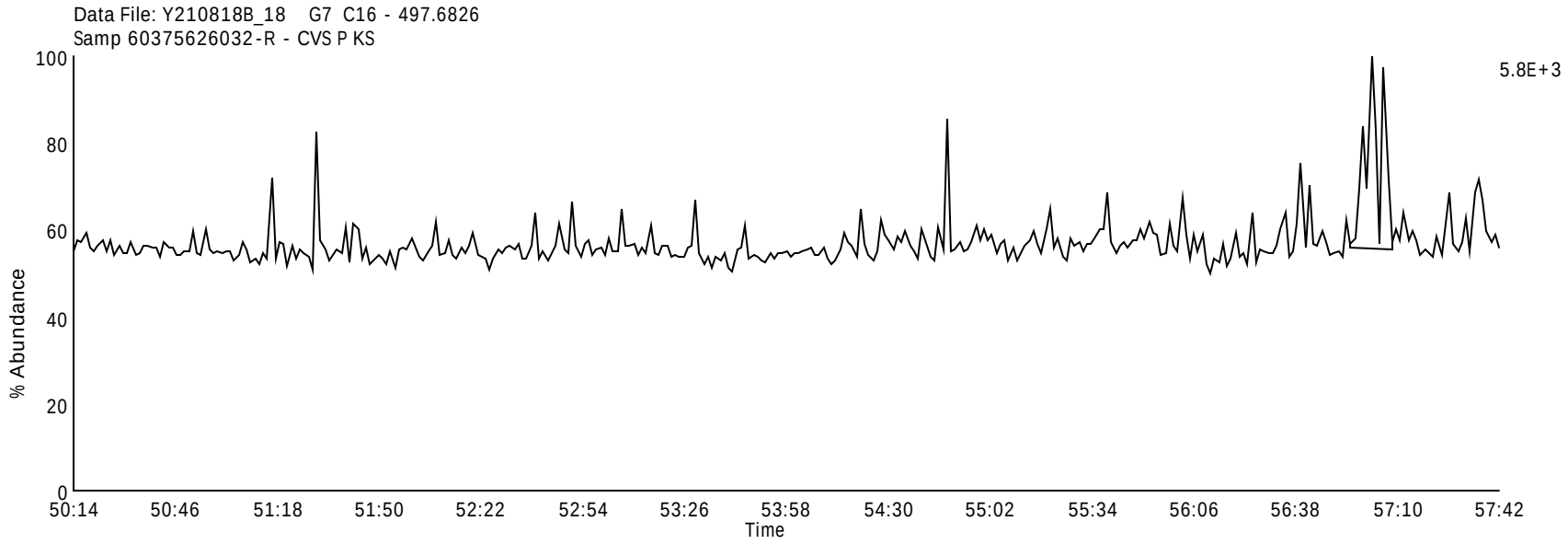




Deca Chlorinated Biphenyl

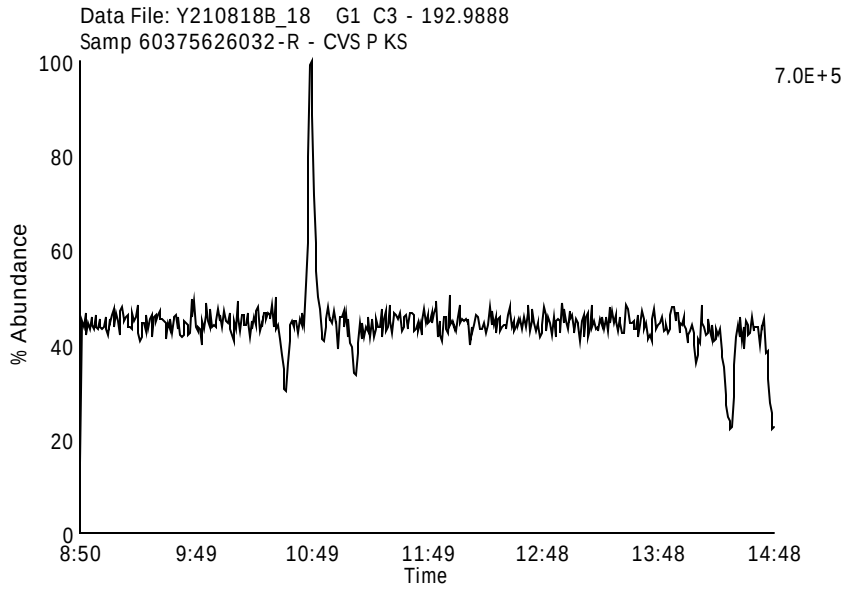
Data File Name: Y210818B_18	Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS	Client Sample ID: GB-38/3-5

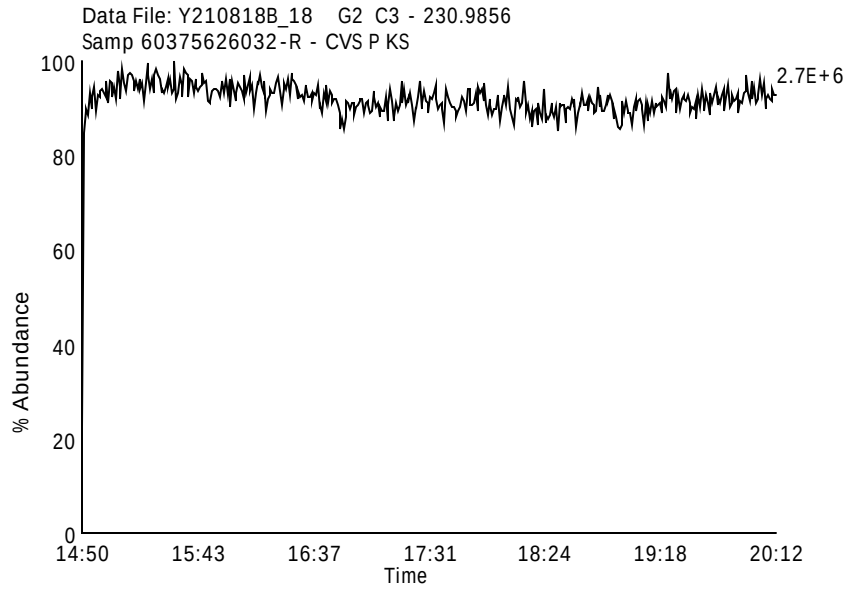


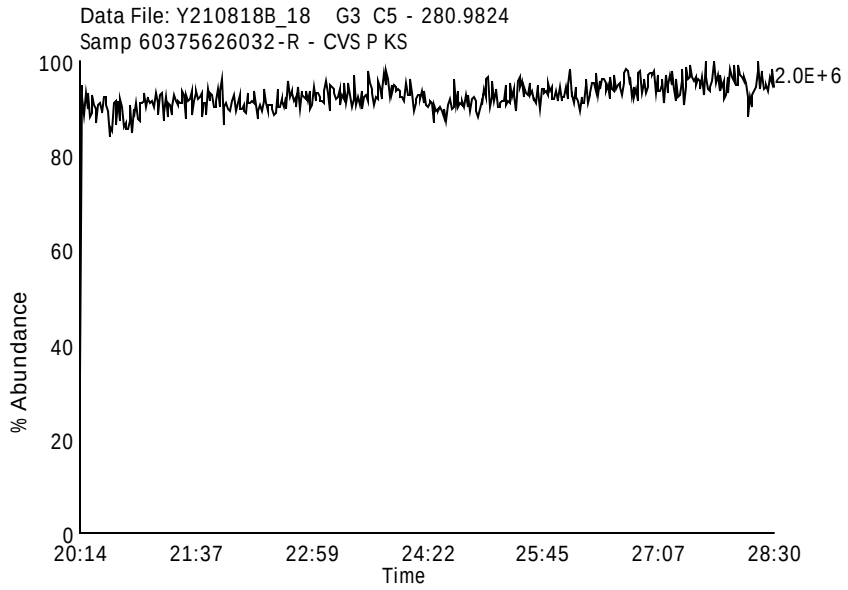


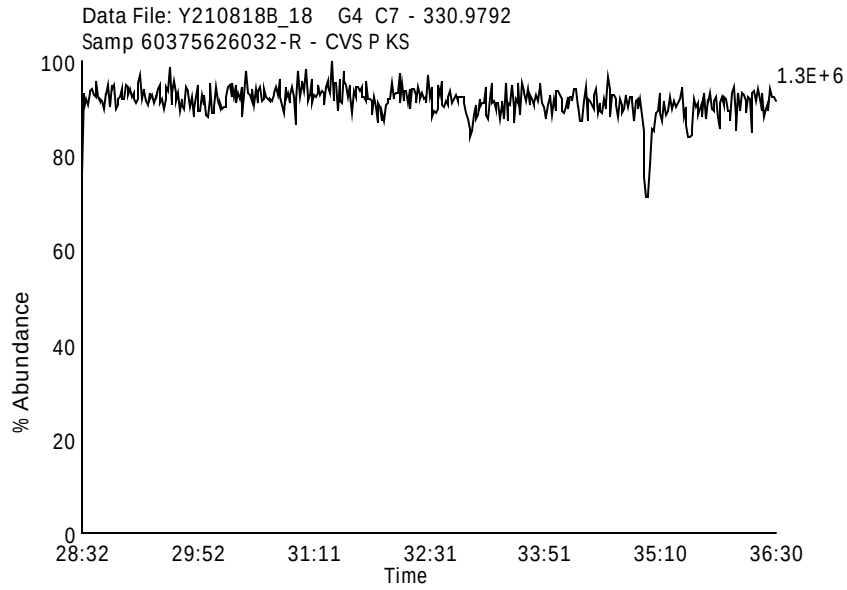
Group 1 - 4 Lock mass

Data File Name: Y210818B_18
Lab Sample ID: 60375626032-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-R - CVS P KS
Client Sample ID: GB-38/3-5





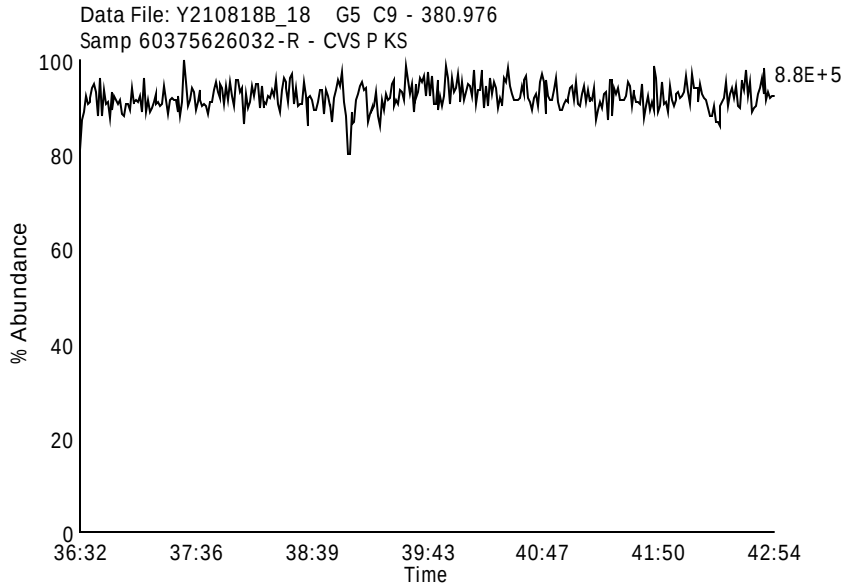


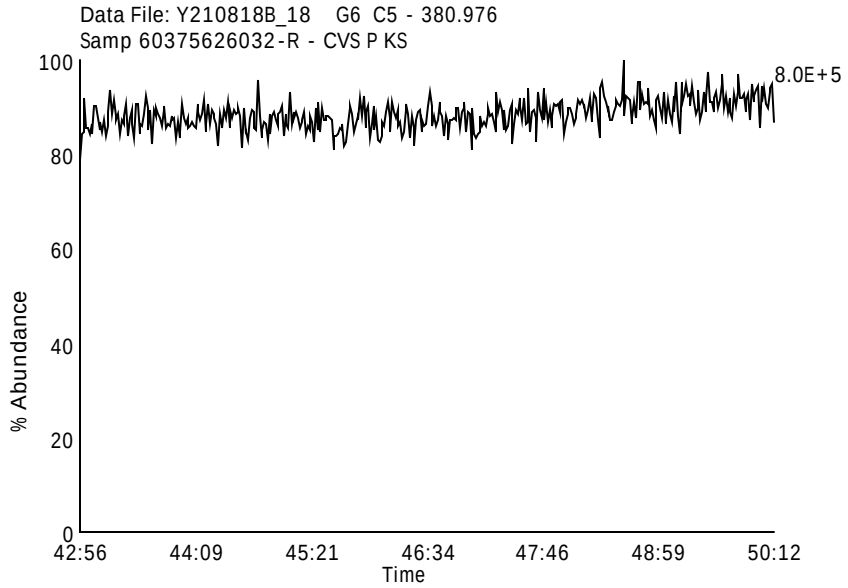


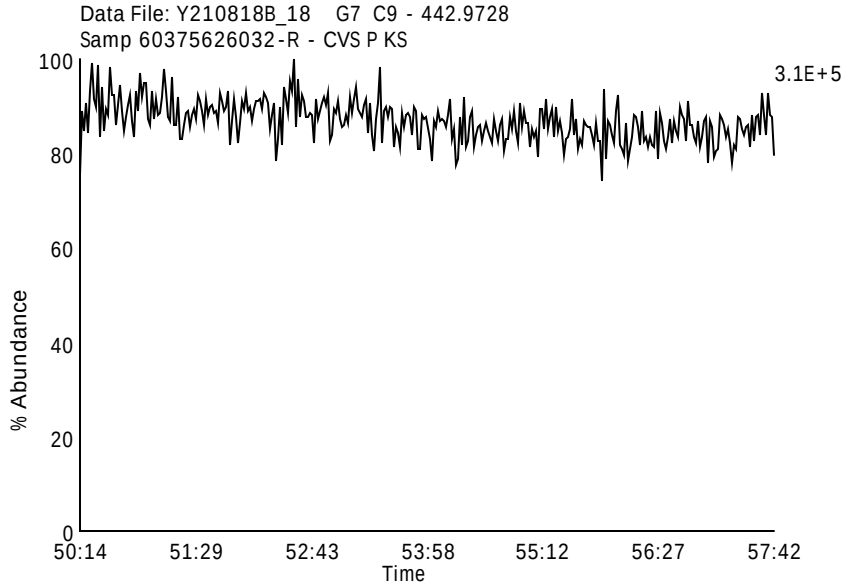
Group 5 - 7 Lock mass

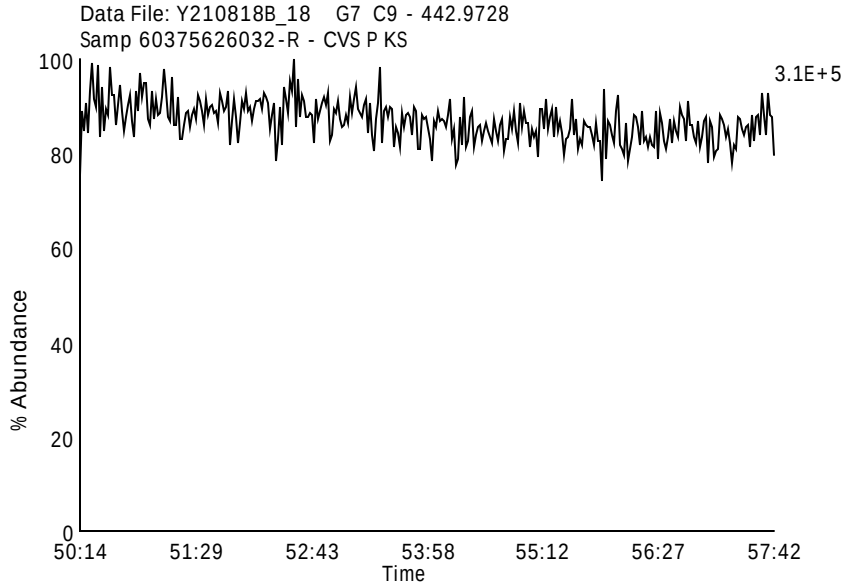
Data File Name: Y210818B_18
Date Acquired: 8/19/2021
Sample Description: Samp 60375626032-R - CVS P KS

Lab Sample ID: 60375626032-R
Instrument: 10MSHR12 (Y)
Client Sample ID: GB-38/3-5









Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-46/2-4	Injected By	CVS
Lab ID	60375626013-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_19	GC Column ID	261111-02
Analyzed	08/19/2021 05:44	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.78	2515883	3222094	
13C-3,3',4,4'-TeCB	77	35.454	0.80	2658465	3331067	
13C-2,3,3',4,4'-PeCB	105	39.048	1.54	2816318	1824762	
13C-2,3,4,4',5-PeCB	114	38.394	1.56	2942180	1889668	
13C-2,3',4,4',5-PeCB	118	37.857	1.53	2918623	1905079	
13C-2,3',4,4',5'-PeCB	123	37.505	1.60	2951777	1850486	
13C-3,3',4,4',5-PeCB	126	42.200	1.50	2662938	1773116	
13C-HxCB(156/157)	156/157	45.257	1.23	4557805	3698097	
13C-2,3',4,4',5,5'-HxCB	167	44.100	1.20	2412422	2008788	
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.27	2181446	1722621	
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.05	1815555	1735837	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.01	7215616	7139568	
13C-2,3,3',5,5'-PeCB	111	35.504	1.57	7827176	4984285	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	4897925	4465647	
Recovery Standards						
13C-2,5-DiCB	9	15.445	1.48	7583465	5127029	
13C-2,2',5,5'-TeCB	52	25.439	0.80	4085891	5090840	
13C-2,2',4,5,5'-PeCB	101	32.721	1.57	4760262	3036192	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.26	4187573	3335517	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.200	0.93	2209098	2378006	

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414

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Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-46/2-4	Injected By	CVS
Lab ID	60375626013-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_19	GC Column ID	261111-02
Analyzed	08/19/2021 05:44	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.454	0.73	50457	69030	
105		39.081	1.59	98568	61840	
114		38.411	1.16	10319	8922	
118		37.891	1.63	214337	131574	
126		42.217	0.80	8753	10965	
156	156/157	45.240	0.80	33722	42147	
157	156/157	45.240	0.80	(33722)	(42147)	
167		44.117	1.13	14156	12510	
169		48.544	0.80	4701	5901	
189		51.110	0.55	3419	6263	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-46/2-4D	Injected By	CVS
Lab ID	60375626014-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_20	GC Column ID	261111-02
Analyzed	08/19/2021 06:43	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.883	0.77	2727296	3545719	
13C-3,3',4,4'-TeCB	77	35.453	0.82	2952497	3605551	
13C-2,3,3',4,4'-PeCB	105	39.064	1.58	3124552	1974593	
13C-2,3,4,4',5-PeCB	114	38.410	1.54	3231074	2099763	
13C-2,3',4,4',5-PeCB	118	37.856	1.51	3247868	2153721	
13C-2,3',4,4',5'-PeCB	123	37.521	1.56	3299848	2120243	
13C-3,3',4,4',5-PeCB	126	42.216	1.53	2872543	1871942	
13C-HxCB(156/157)	156/157	45.273	1.26	5105863	4064825	
13C-2,3',4,4',5,5'-HxCB	167	44.099	1.21	2624197	2159971	
13C-3,3',4,4',5,5'-HxCB	169	48.542	1.22	2337835	1911768	
13C-2,3,3',4,4',5,5'-HpCB	189	51.086	1.04	1965056	1892412	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.01	7636002	7575452	
13C-2,3,3',5,5'-PeCB	111	35.521	1.60	8342184	5224433	
13C-2,2',3,3',5,5',6-HpCB	178	41.495	1.11	5233682	4721426	
Recovery Standards						
13C-2,5-DiCB	9	15.457	1.53	7050480	4597614	
13C-2,2',5,5'-TeCB	52	25.438	0.82	3823656	4688139	
13C-2,2',4,5,5'-PeCB	101	32.720	1.57	4400687	2804111	
13C-2,2',3,4,4',5'-HxCB	138	41.042	1.25	3894557	3121578	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.198	0.91	1980662	2176017	

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-46/2-4D	Injected By	CVS
Lab ID	60375626014-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_20	GC Column ID	261111-02
Analyzed	08/19/2021 06:43	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.504	0.69	31520	45407	
105		39.064	1.70	77833	45732	
114		38.426	1.53	11865	7751	
118		37.907	1.73	176124	101658	
126		42.233	1.02	10718	10458	
156	156/157	45.273	1.25	49964	39942	
157	156/157	45.273	1.25	(49964)	(39942)	
167		44.116	1.03	18970	18507	
169		48.526	0.77	15296	19859	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-38/3-5	Injected By	CVS
Lab ID	60375626032-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_18	GC Column ID	261111-02
Analyzed	08/19/2021 04:44	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.882	0.79	2832731	3590419	
13C-3,3',4,4'-TeCB	77	35.452	0.78	2938612	3784320	
13C-2,3,3',4,4'-PeCB	105	39.046	1.58	3314163	2099194	
13C-2,3,4,4',5-PeCB	114	38.408	1.51	3330197	2205338	
13C-2,3',4,4',5-PeCB	118	37.855	1.54	3440345	2240266	
13C-2,3',4,4',5'-PeCB	123	37.520	1.51	3343241	2216740	
13C-3,3',4,4',5-PeCB	126	42.197	1.53	3029892	1985296	
13C-HxCB(156/157)	156/157	45.271	1.21	5331261	4411853	
13C-2,3',4,4',5,5'-HxCB	167	44.097	1.26	2917303	2306390	
13C-3,3',4,4',5,5'-HxCB	169	48.540	1.24	2461109	1983363	
13C-2,3,3',4,4',5,5'-HpCB	189	51.063	1.08	2244131	2072466	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.02	8348077	8149074	
13C-2,3,3',5,5'-PeCB	111	35.503	1.58	8990935	5693763	
13C-2,2',3,3',5,5',6-HpCB	178	41.493	1.07	5602253	5241778	
Recovery Standards						
13C-2,5-DiCB	9	15.410	1.54	7841550	5076281	
13C-2,2',5,5'-TeCB	52	25.438	0.81	4100095	5085265	
13C-2,2',4,5,5'-PeCB	101	32.720	1.59	4808757	3019855	
13C-2,2',3,4,4',5'-HxCB	138	41.024	1.24	4266346	3436941	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.196	0.92	2311487	2516099	

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Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-38/3-5	Injected By	CVS
Lab ID	60375626032-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_18	GC Column ID	261111-02
Analyzed	08/19/2021 04:44	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.469	0.86	46571	53844	
81		34.899	0.86	14126	16377	
105		39.062	1.33	51971	39016	
118		37.889	1.42	108133	75905	
126		42.231	1.57	8505	5424	
156	156/157	45.237	1.06	26724	25229	
157	156/157	45.237	1.06	(26724)	(25229)	
167		44.097	1.34	5731	4264	
169		48.523	0.68	2179	3209	

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Appendix E

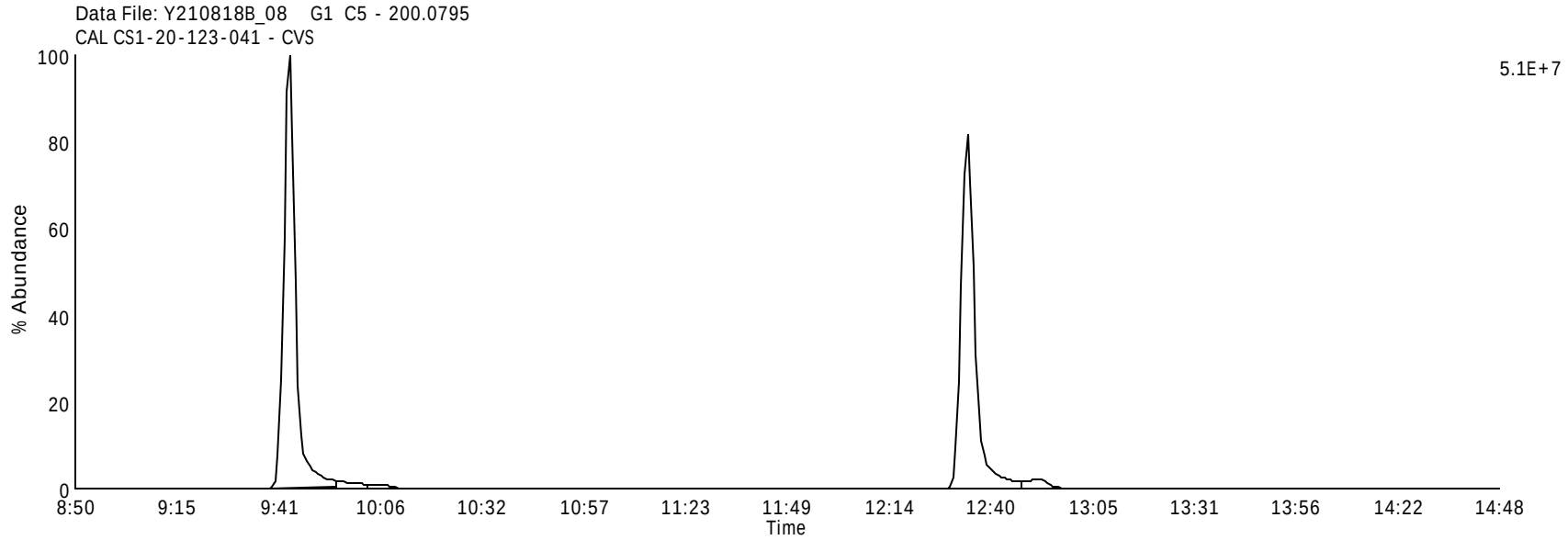
Calibration Raw Data

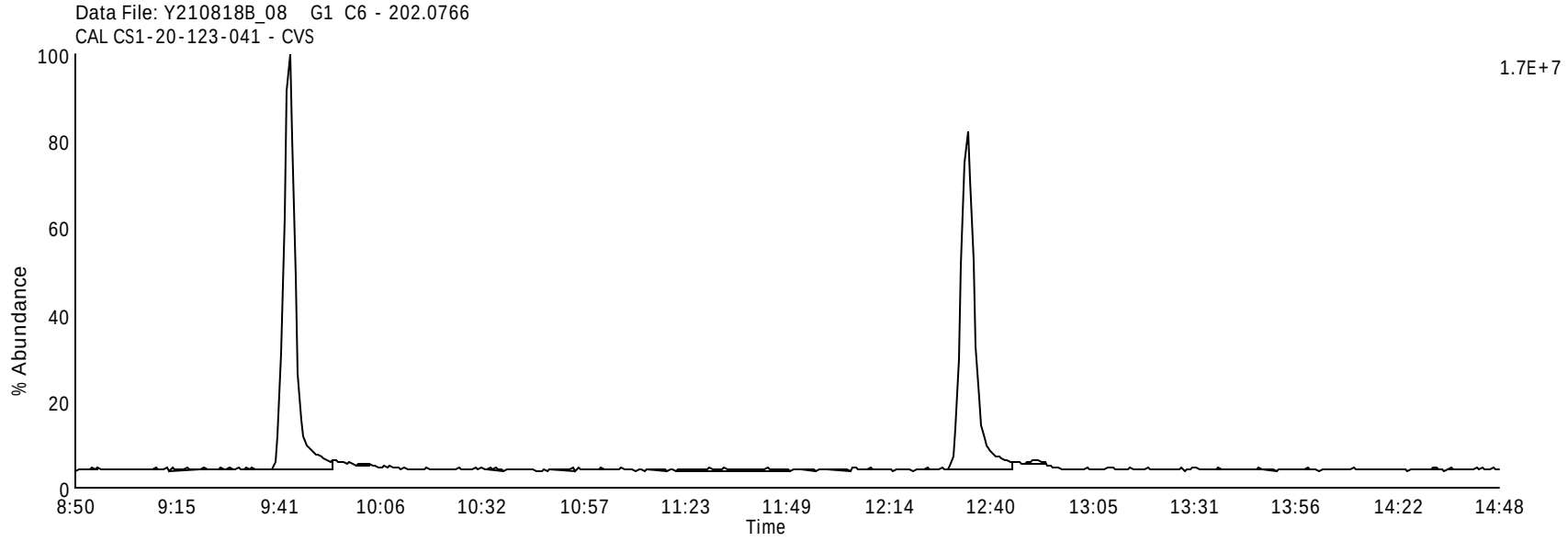
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

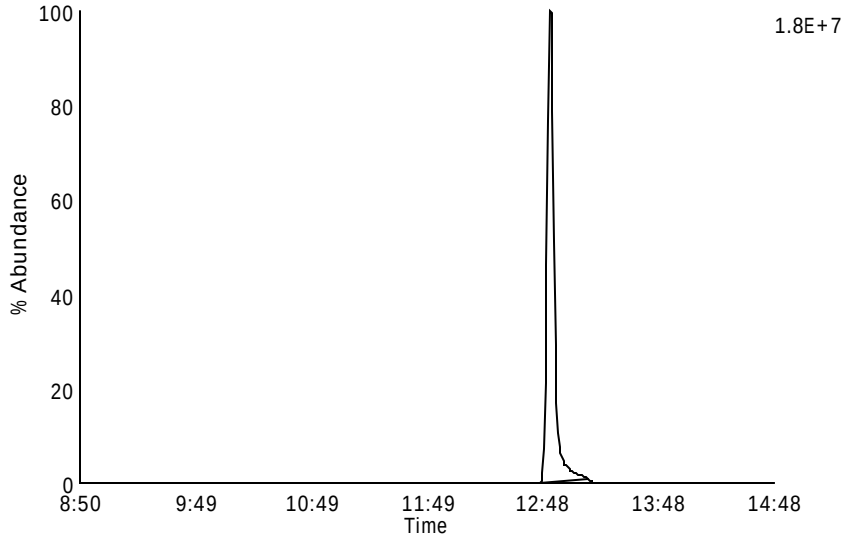




Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

Data File: Y210818B_08 G1 C9 - 234.0406
CAL CS1-20-123-041 - CVS



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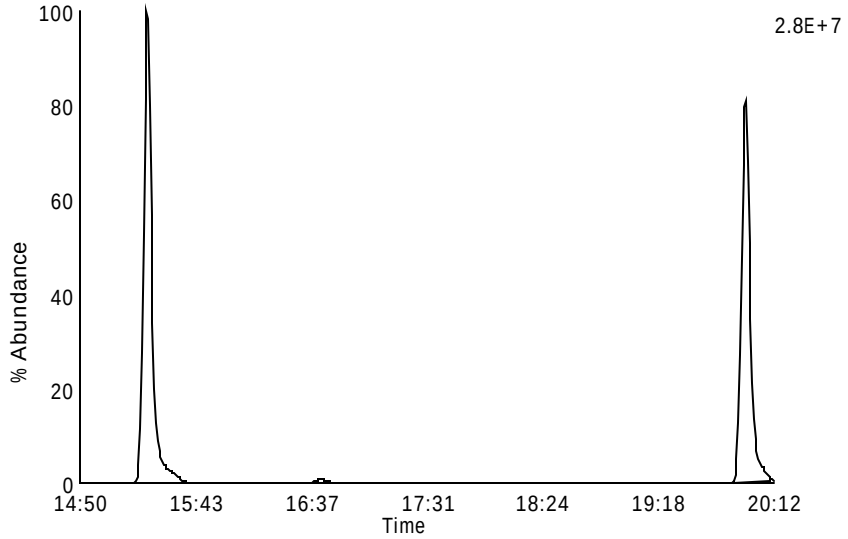
CAL CS1-20-123-041 - CVS



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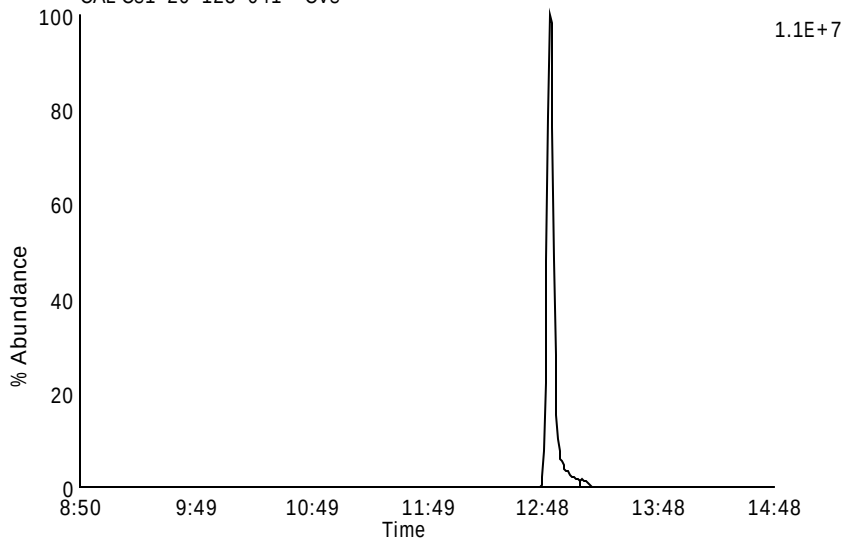
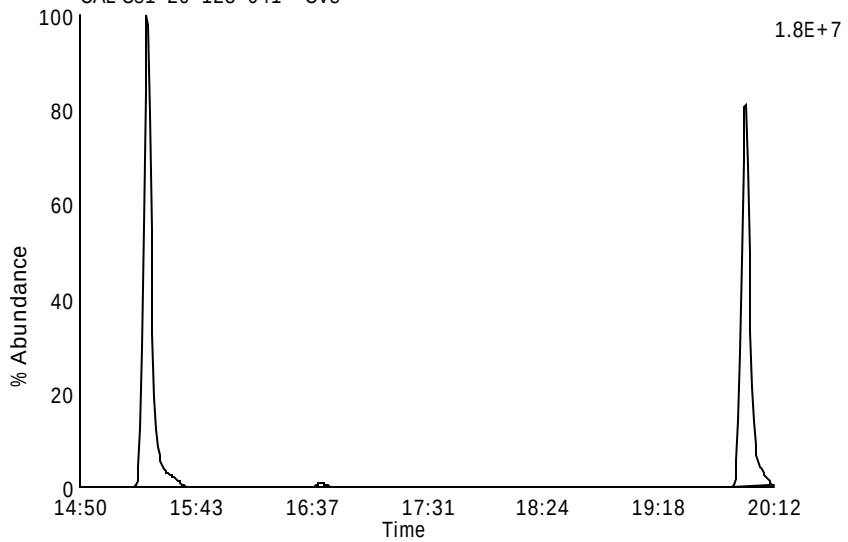
CAL CS1-20-123-041 - CVS

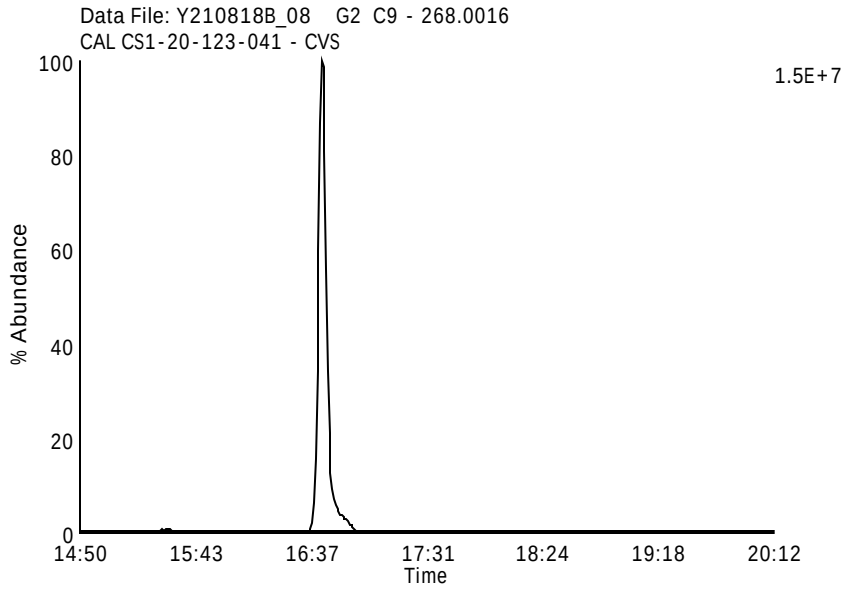


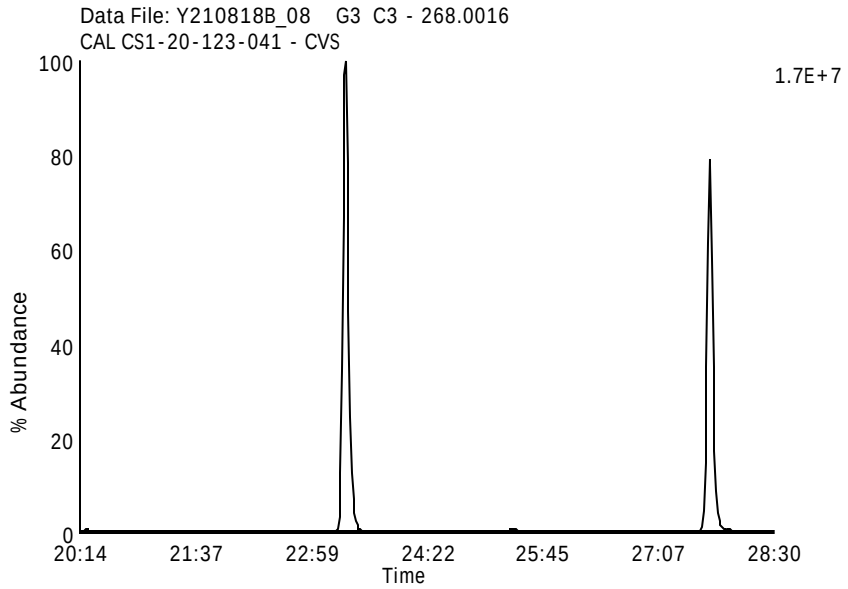
Data File: Y210818B_08 G2 C6 - 236.0376
CAL CS1-20-123-041 - CVS

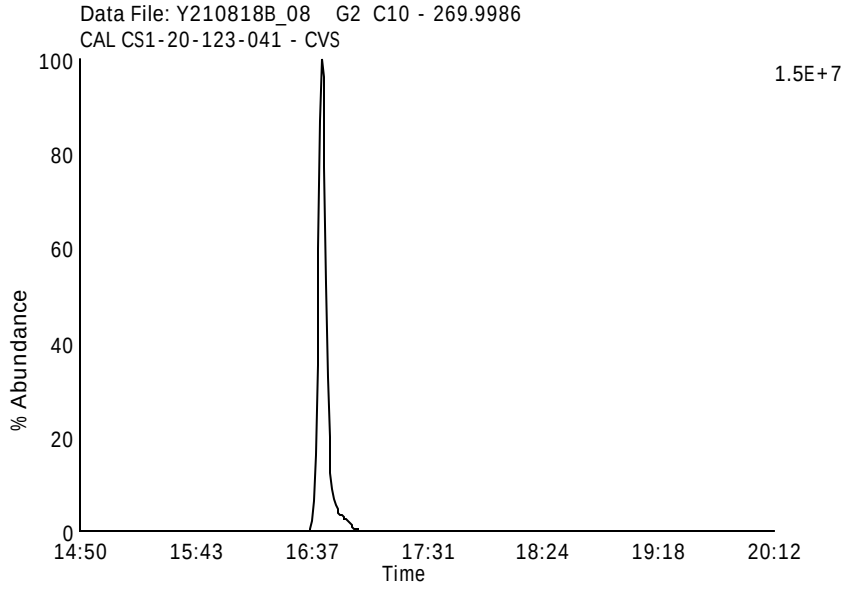


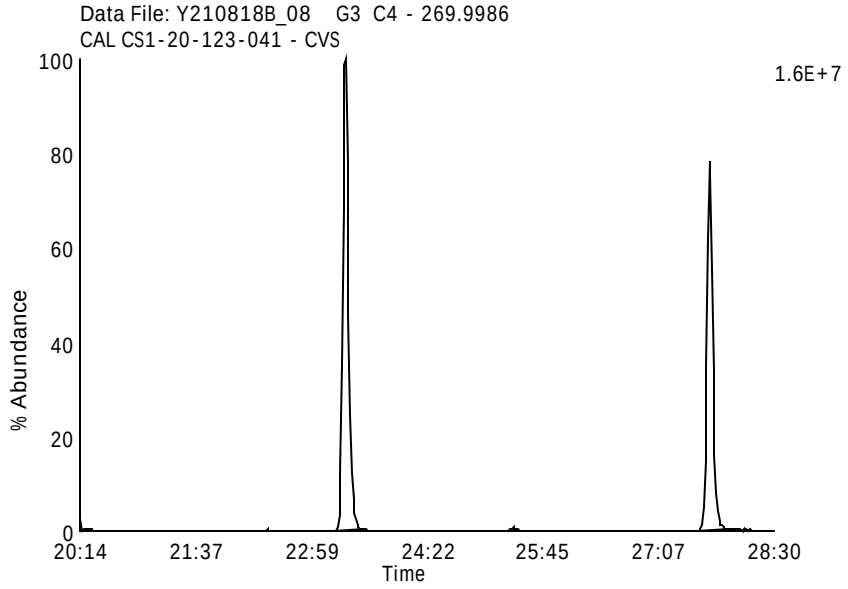
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



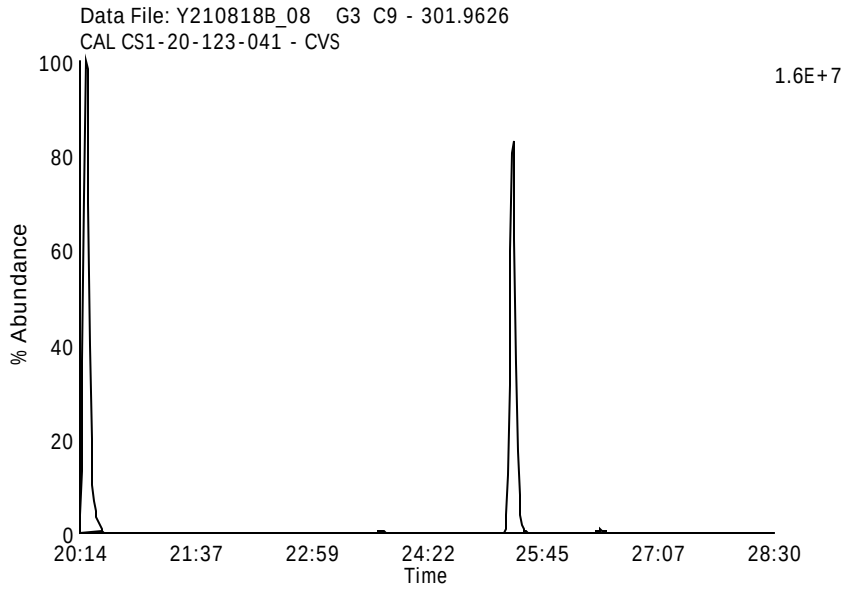


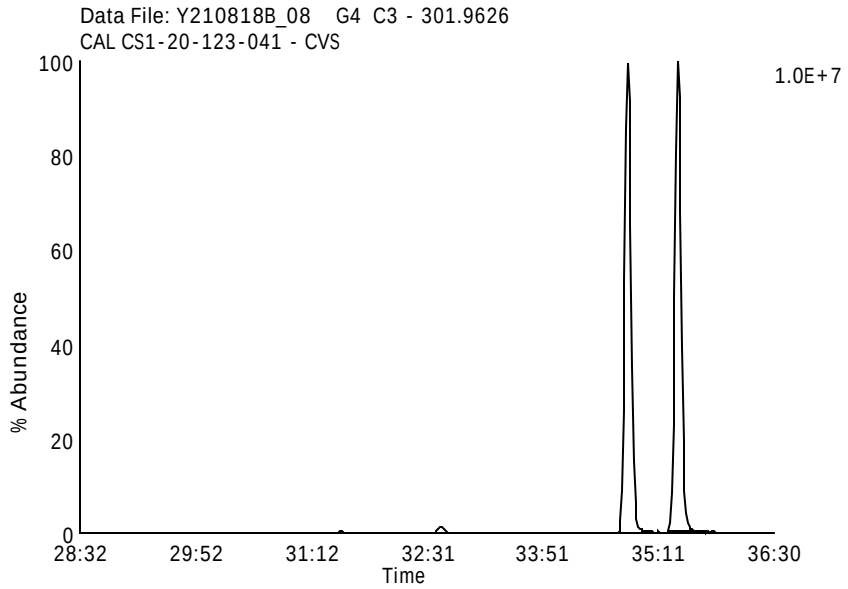


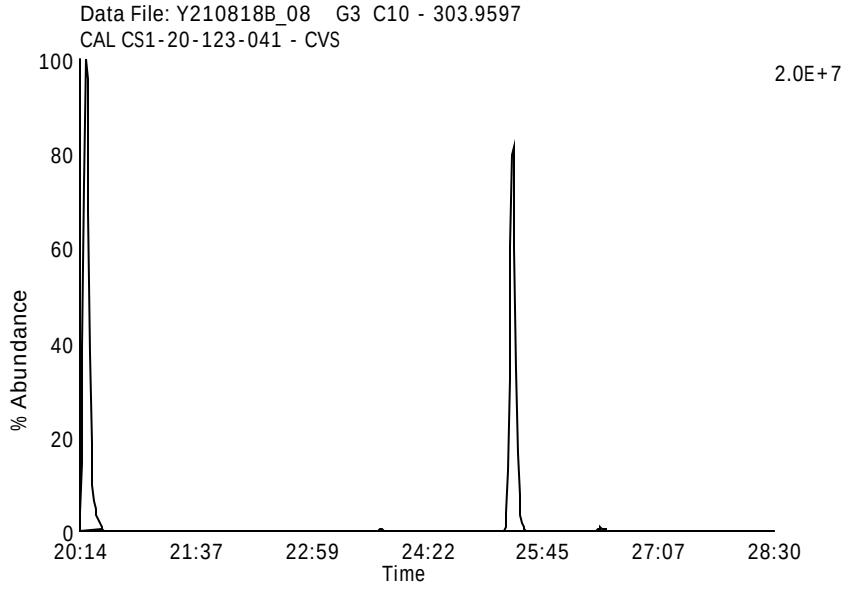


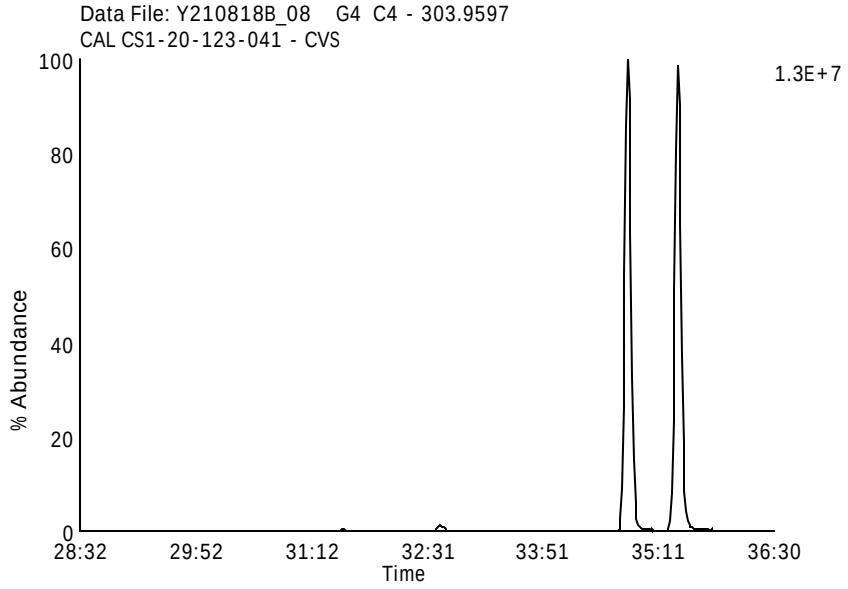
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS









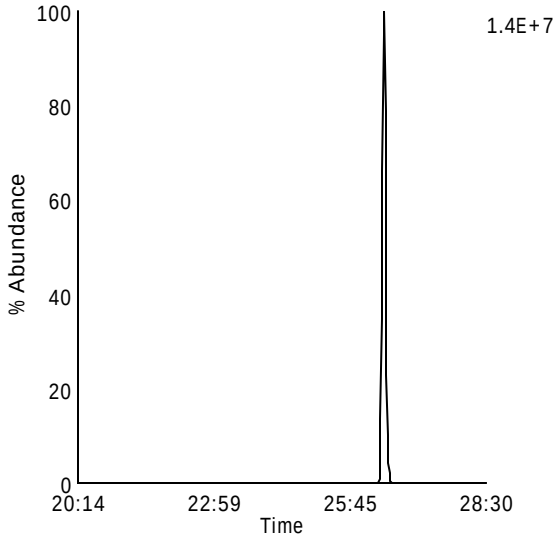
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

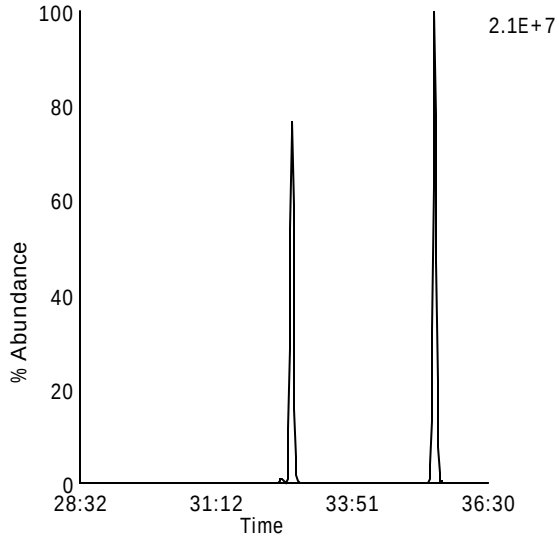
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

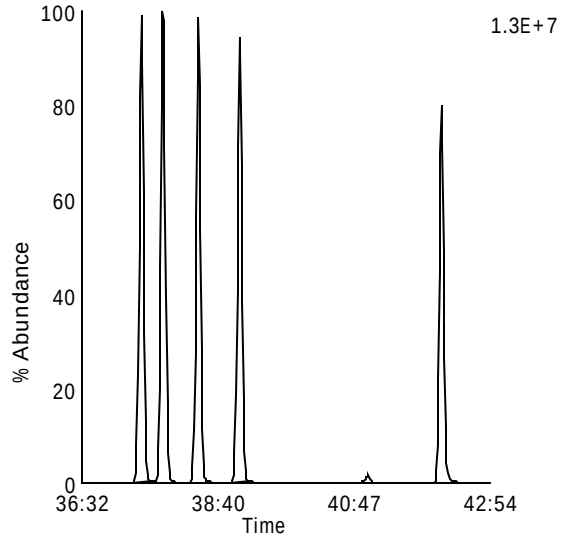
Data File: Y210818B_08 G3 C13 - 337.9207
CAL CS1-20-123-041 - CVS



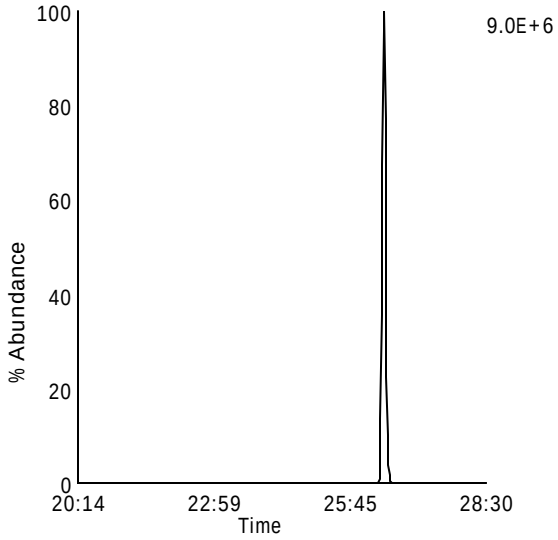
Data File: Y210818B_08 G4 C9 - 337.9207
CAL CS1-20-123-041 - CVS



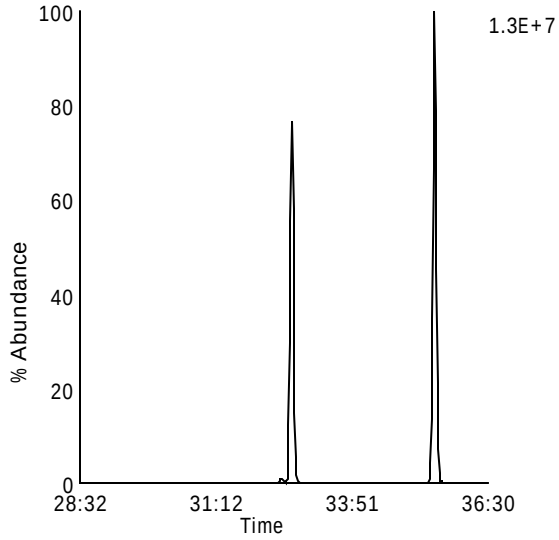
Data File: Y210818B_08 G5 C3 - 337.9207
CAL CS1-20-123-041 - CVS



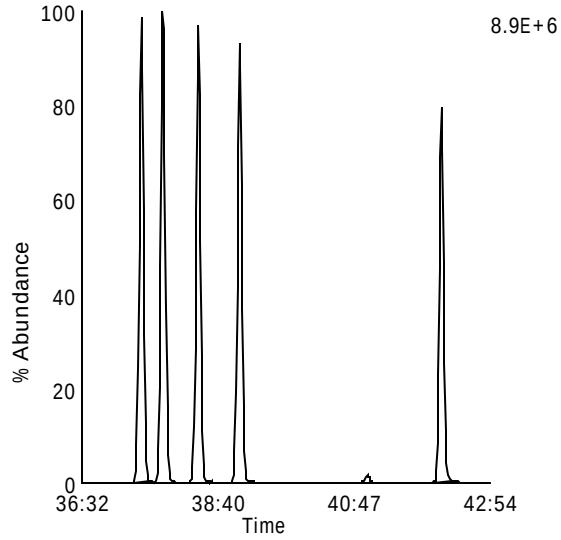
Data File: Y210818B_08 G3 C14 - 339.9178
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C10 - 339.9178
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C4 - 339.9178
CAL CS1-20-123-041 - CVS

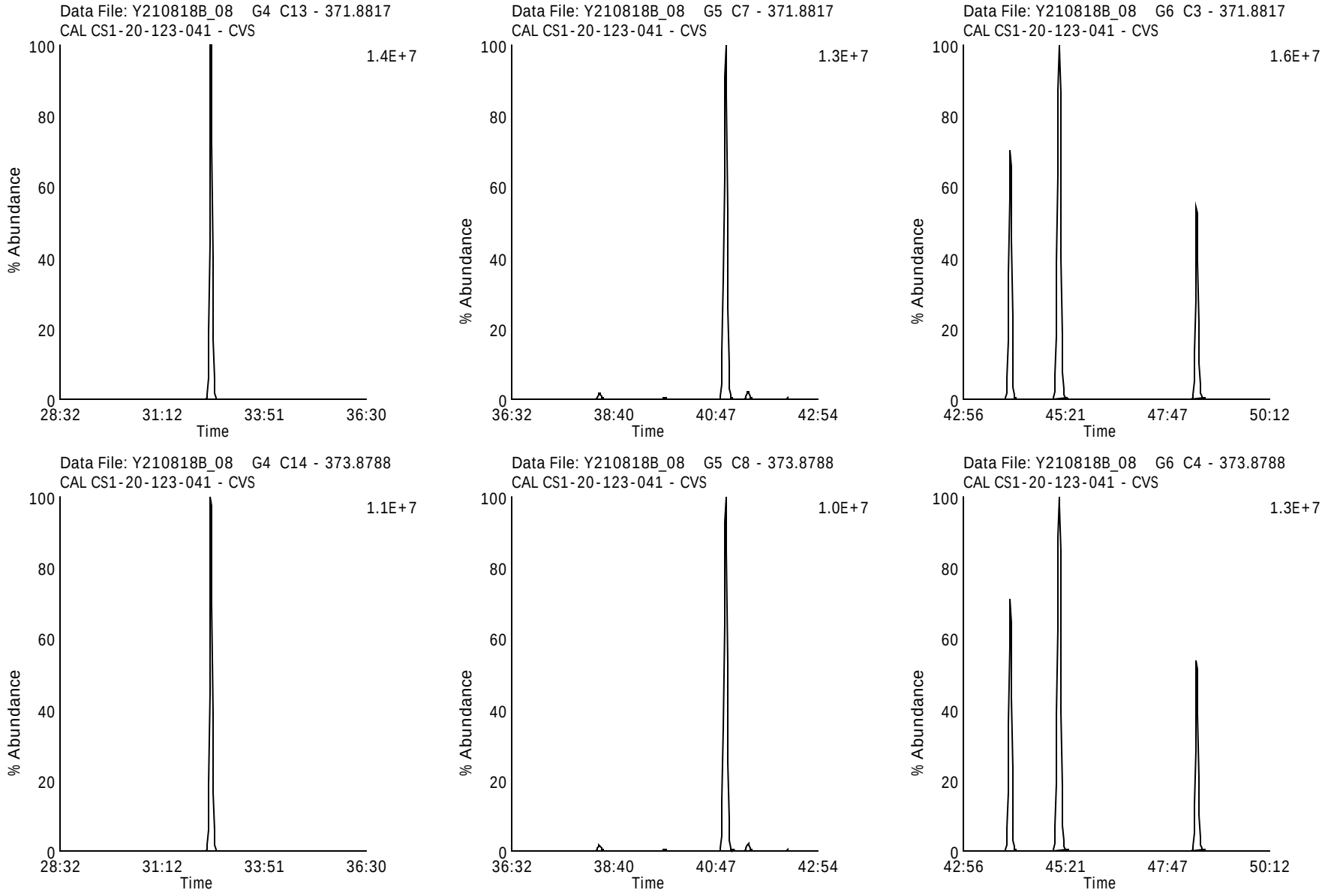


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

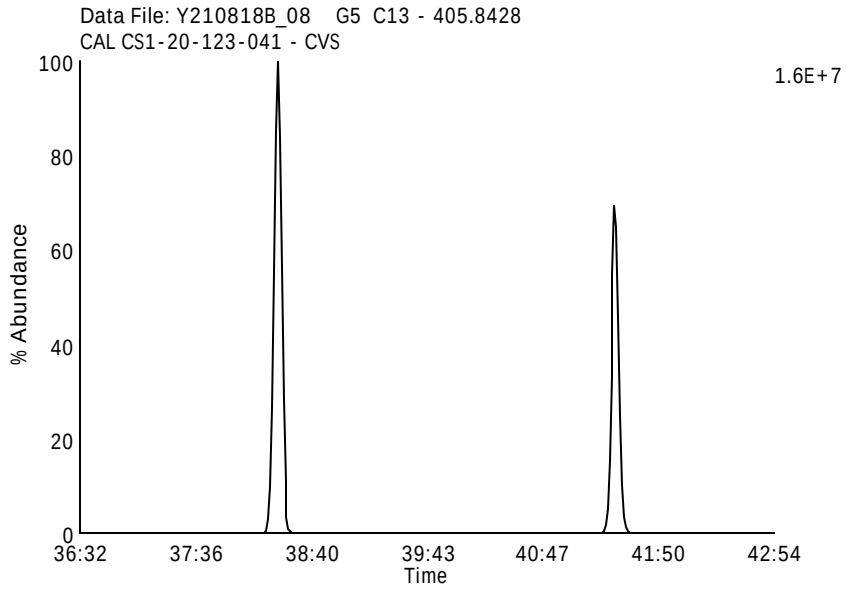
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

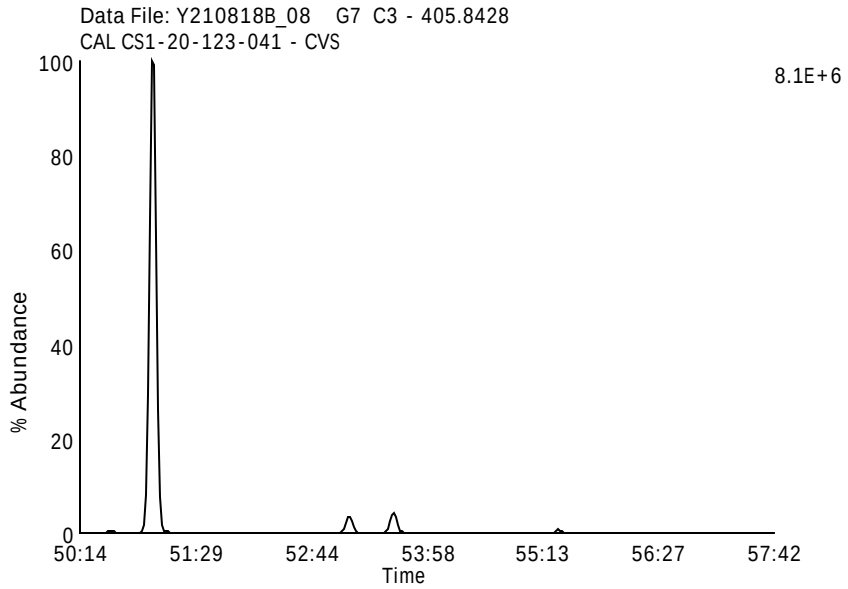
Sample Description: CAL CS1-20-123-041 - CVS

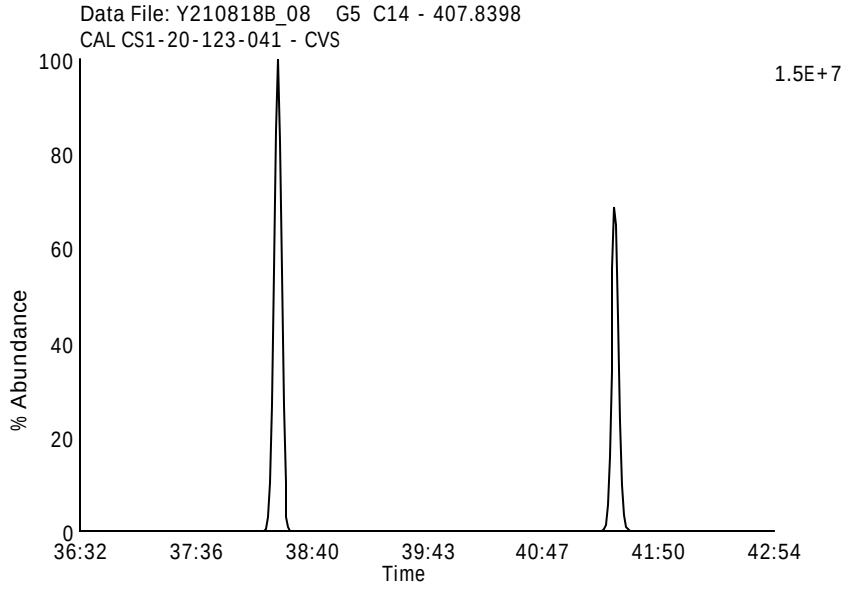


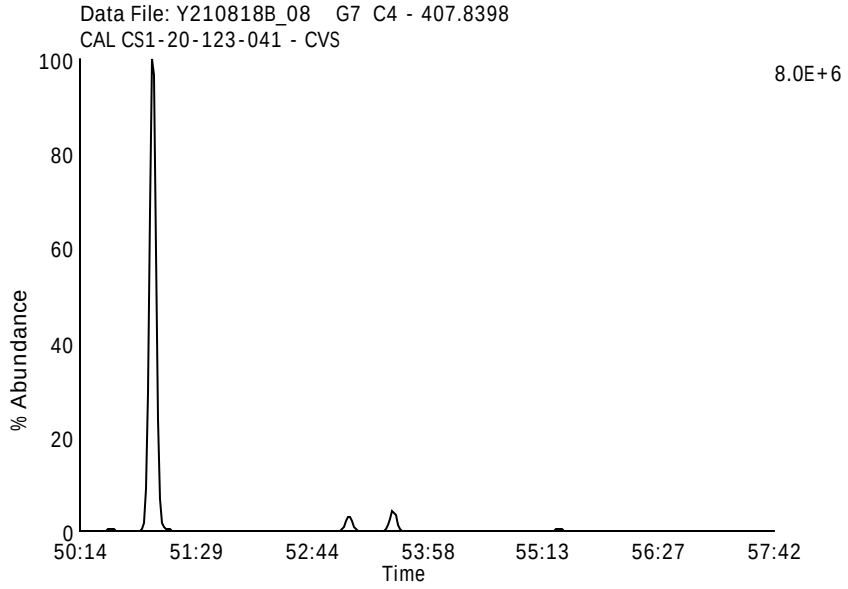
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS





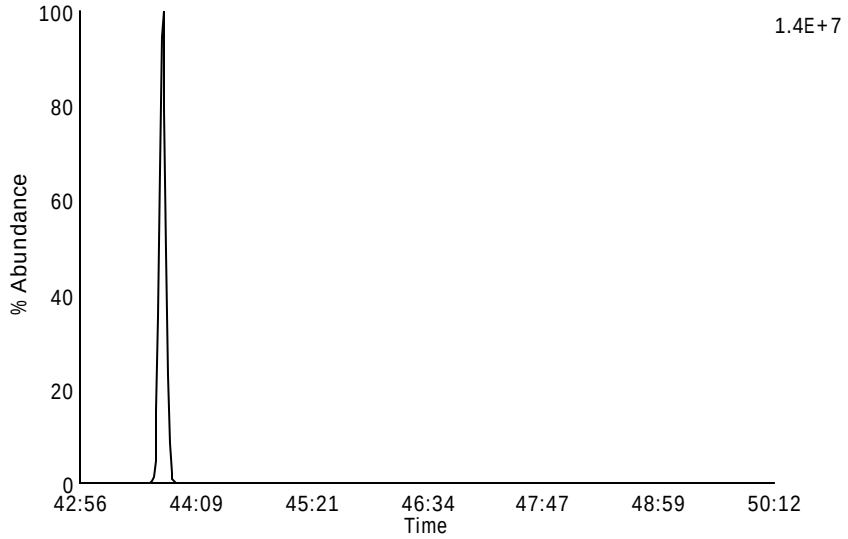




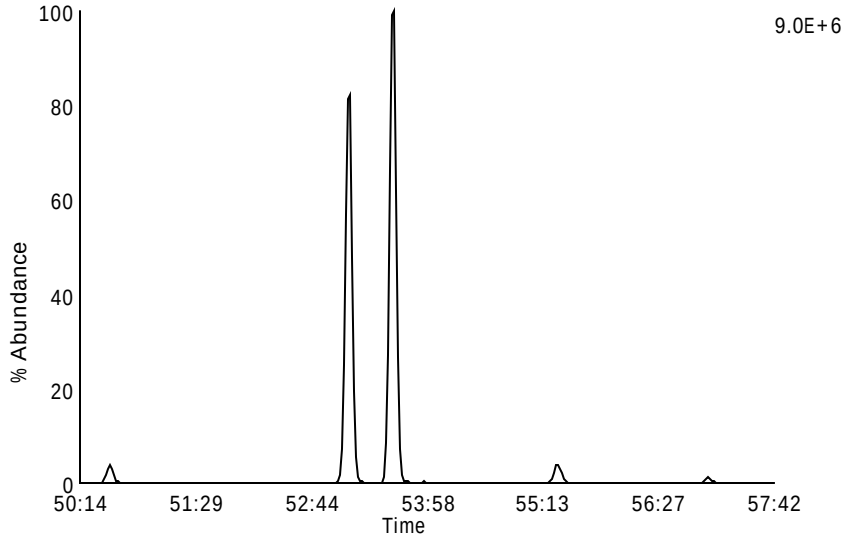
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

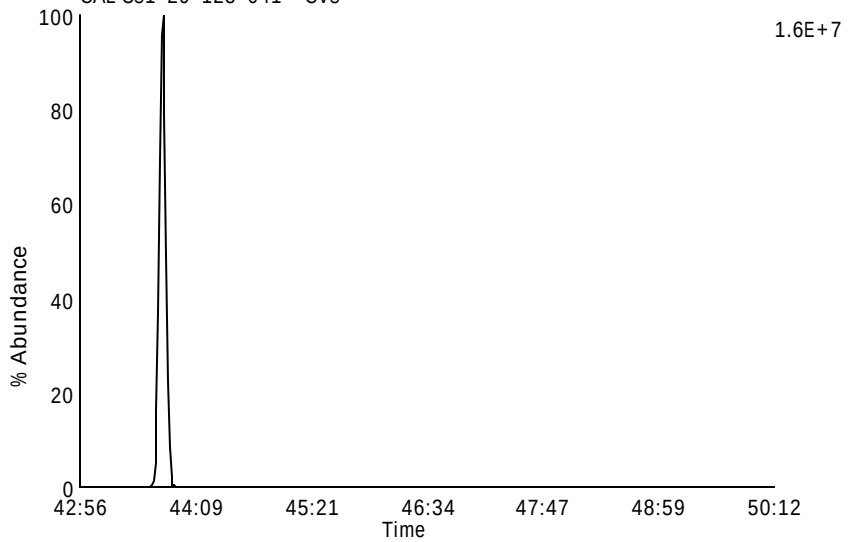
Data File: Y210818B_08 G6 C13 - 439.8038
CAL CS1-20-123-041 - CVS



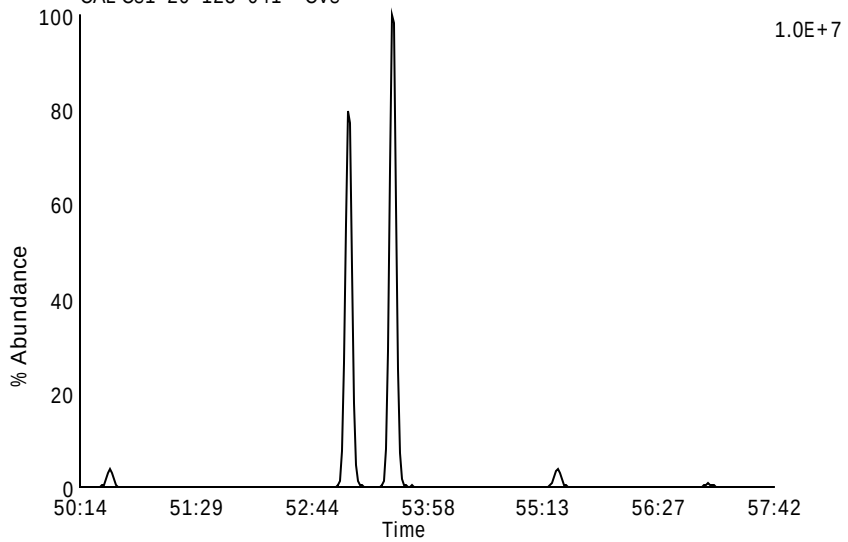
Data File: Y210818B_08 G7 C7 - 439.8038
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G6 C14 - 441.8008
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G7 C8 - 441.8008
CAL CS1-20-123-041 - CVS

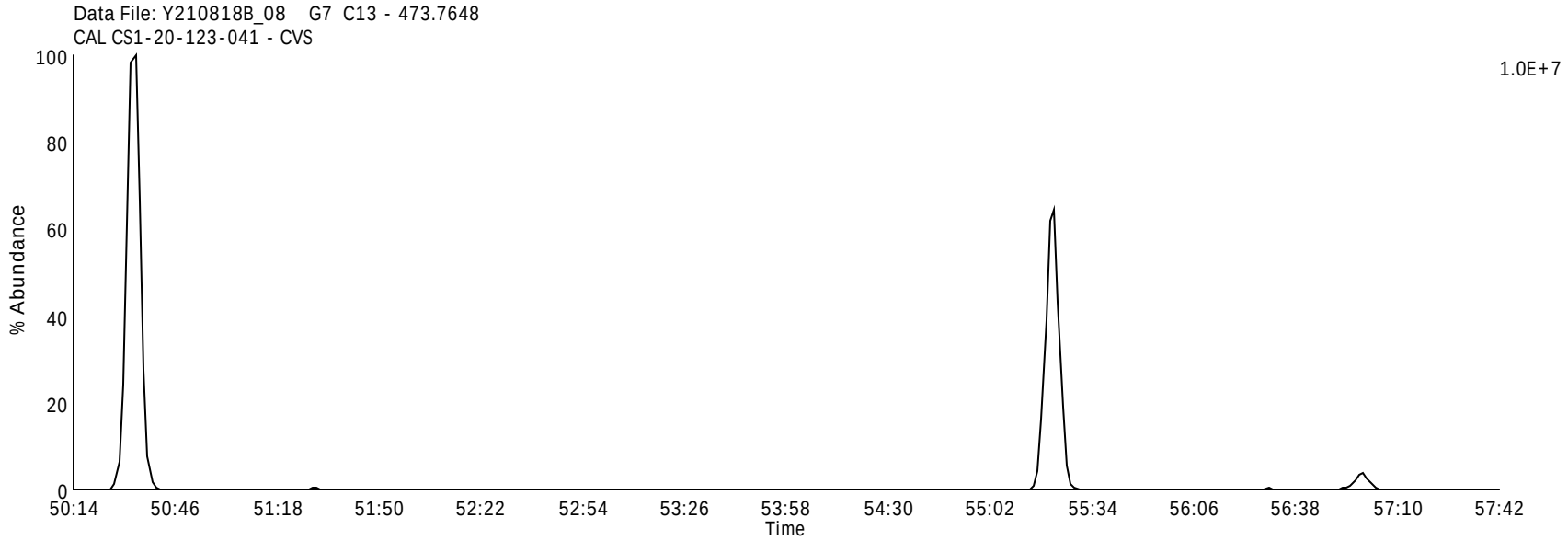


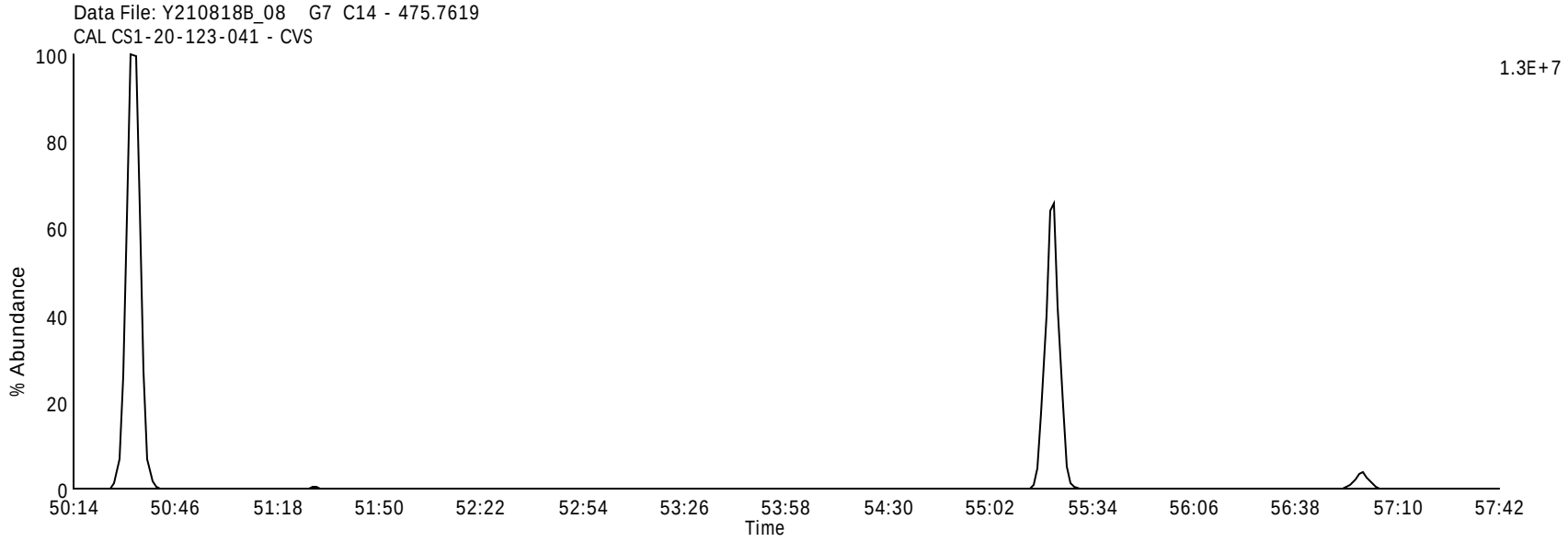
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



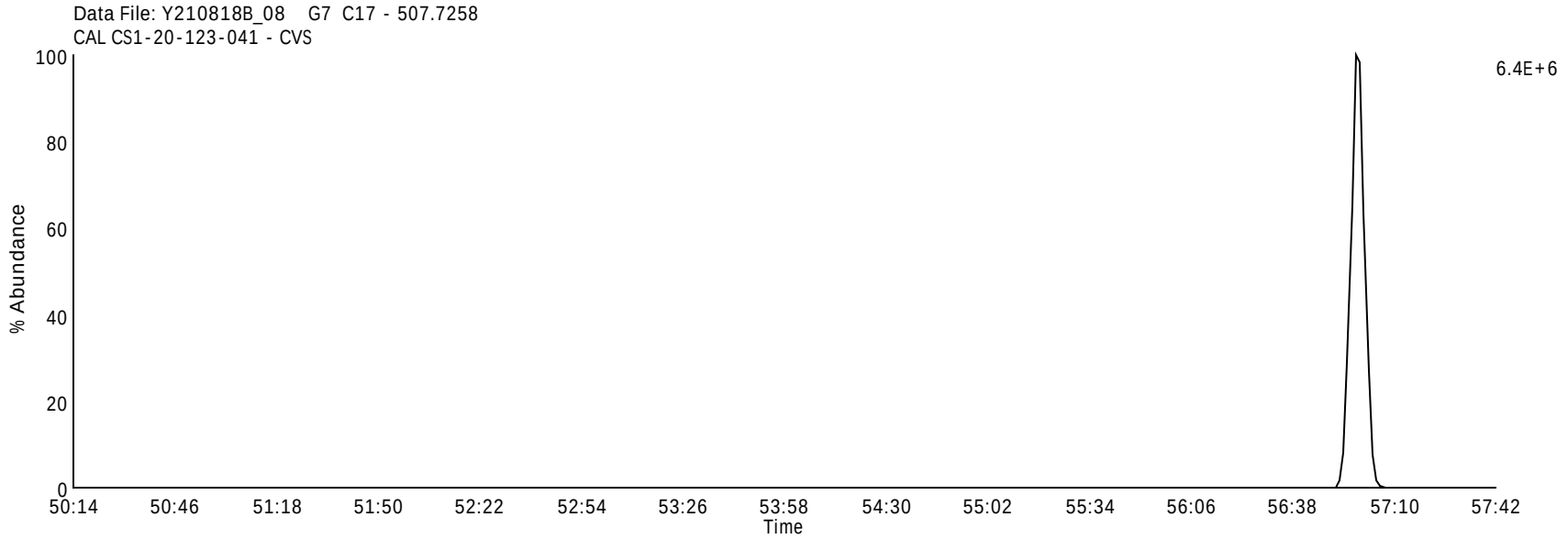


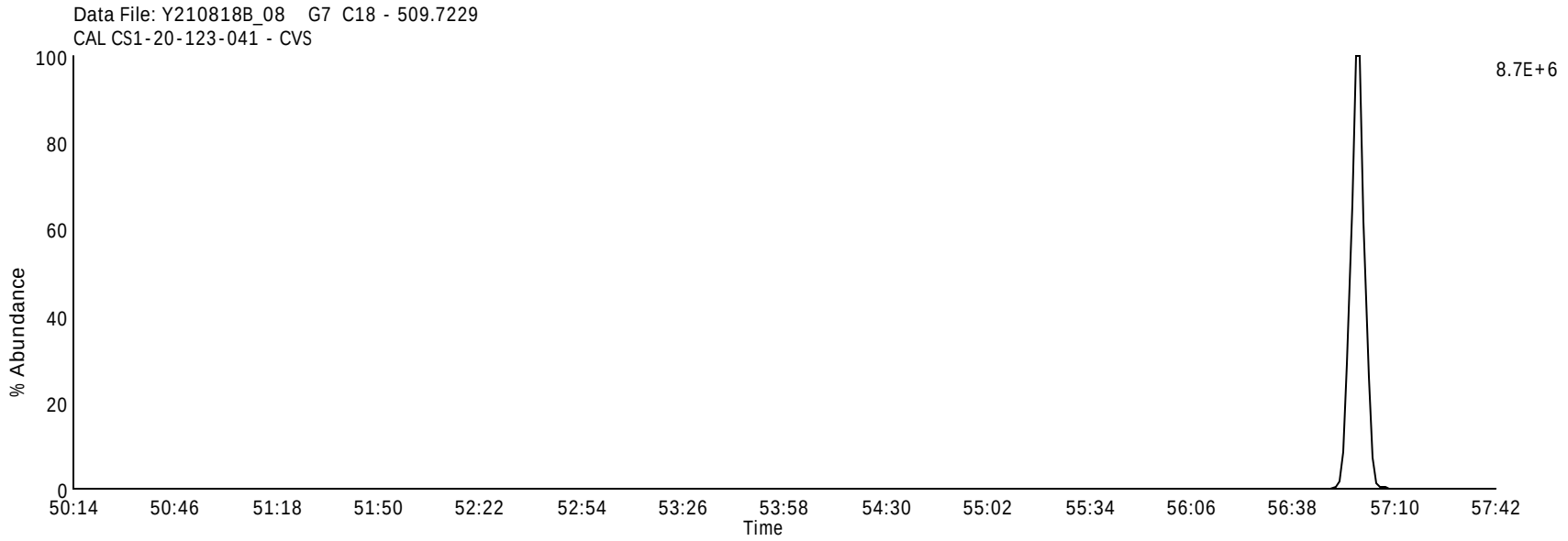
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



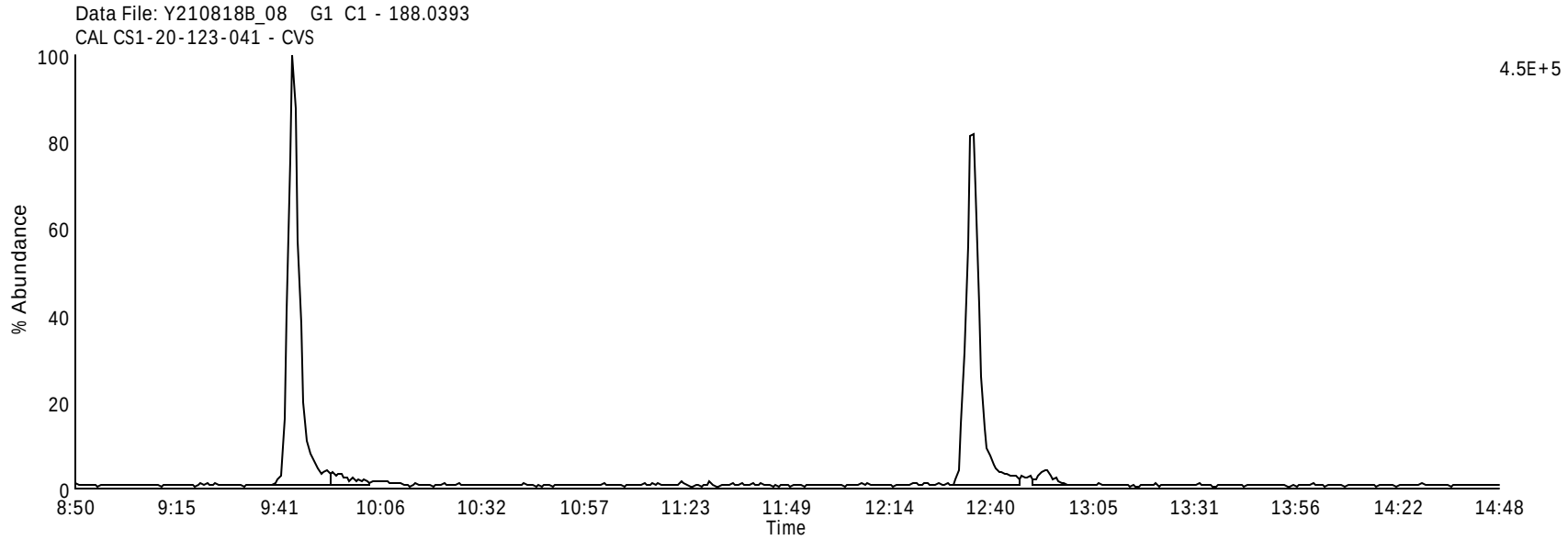


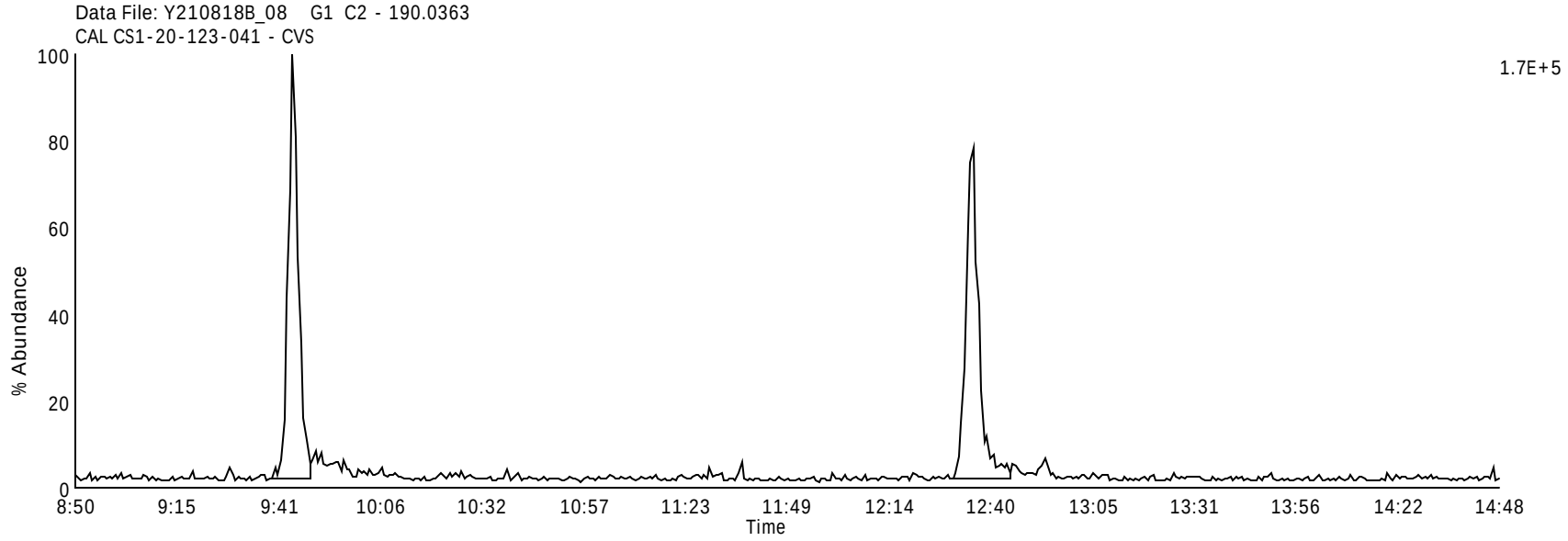
Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

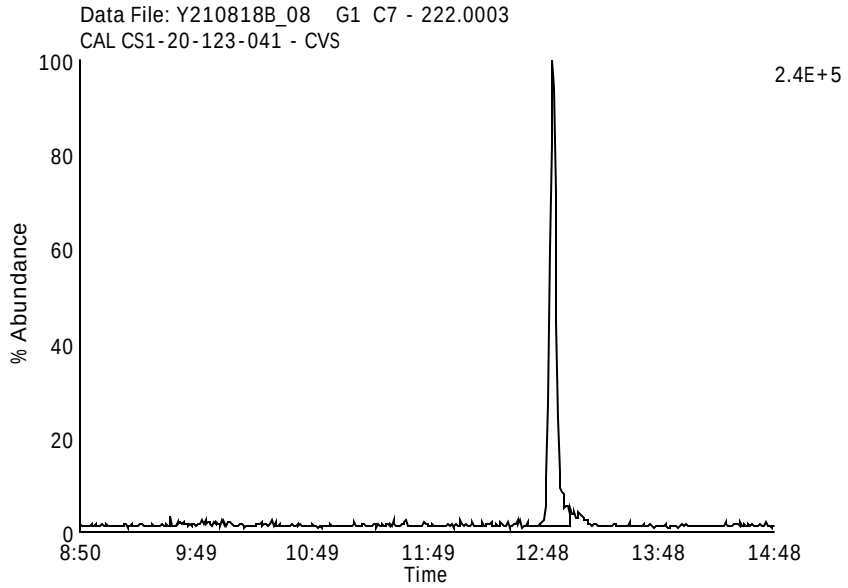
Sample Description: CAL CS1-20-123-041 - CVS

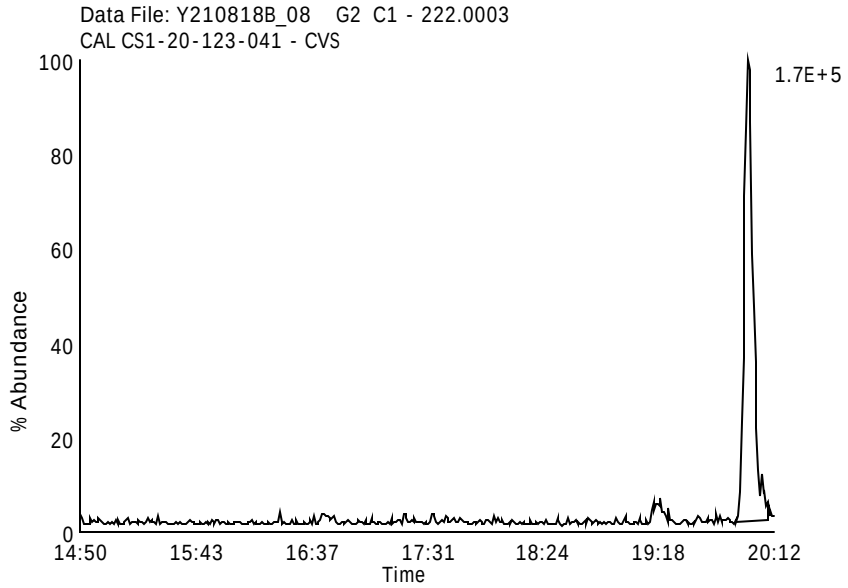


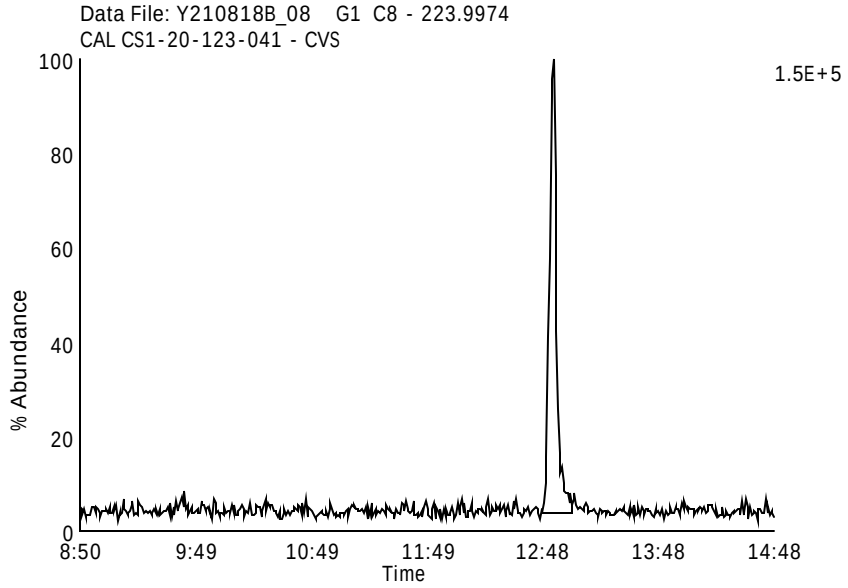


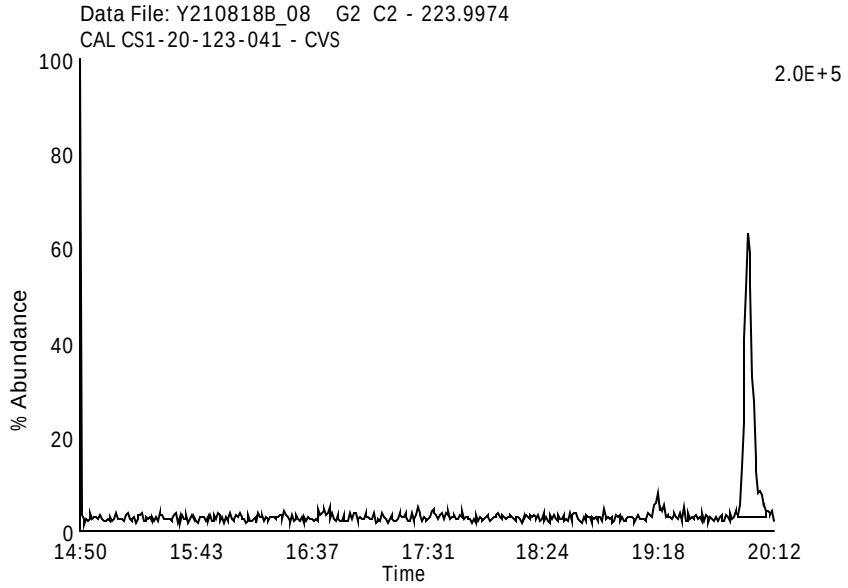
Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



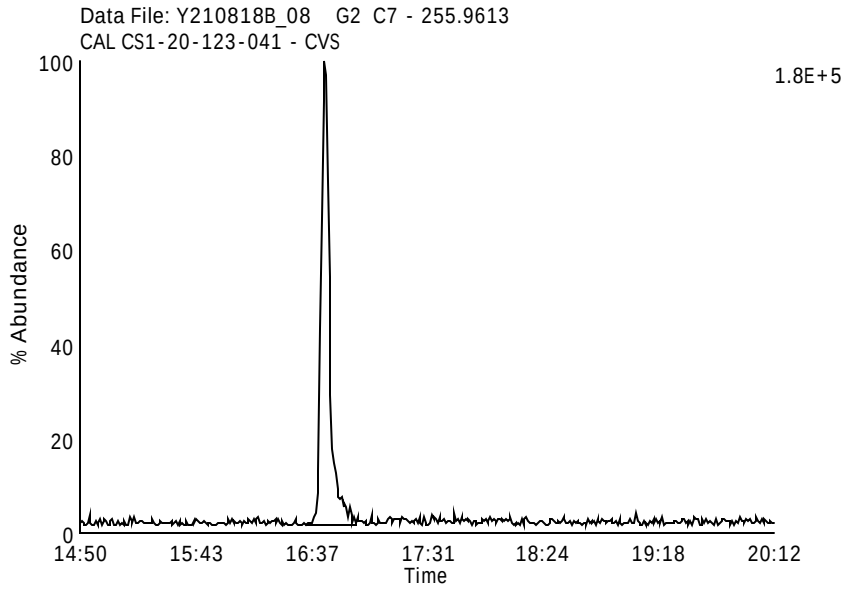


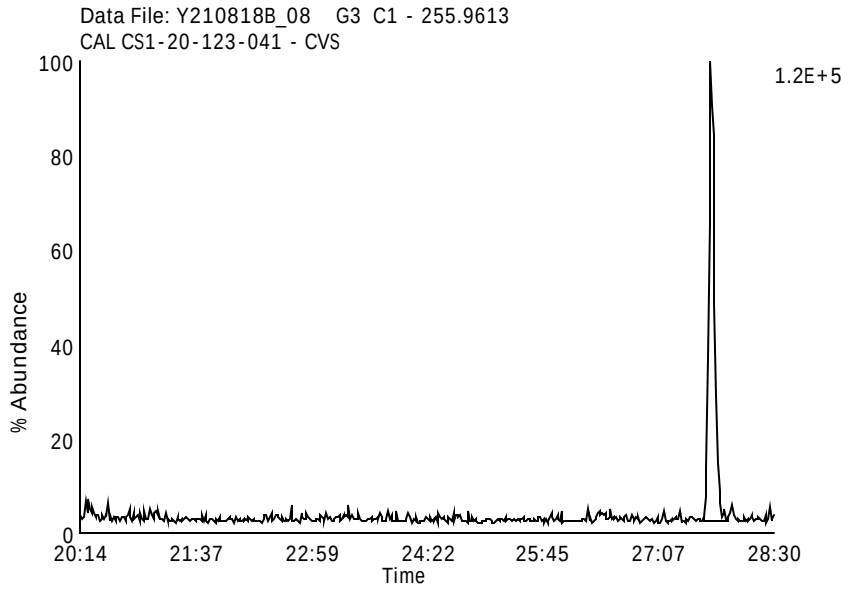


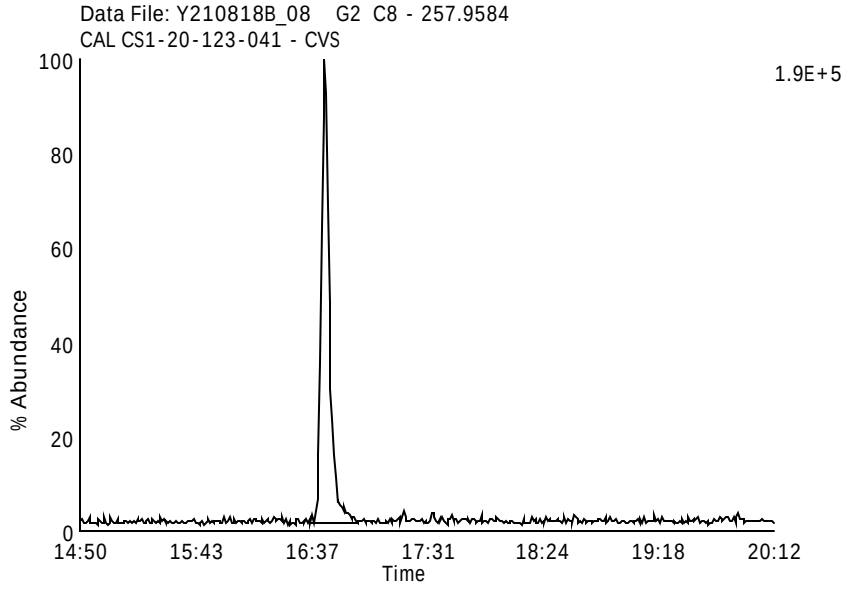


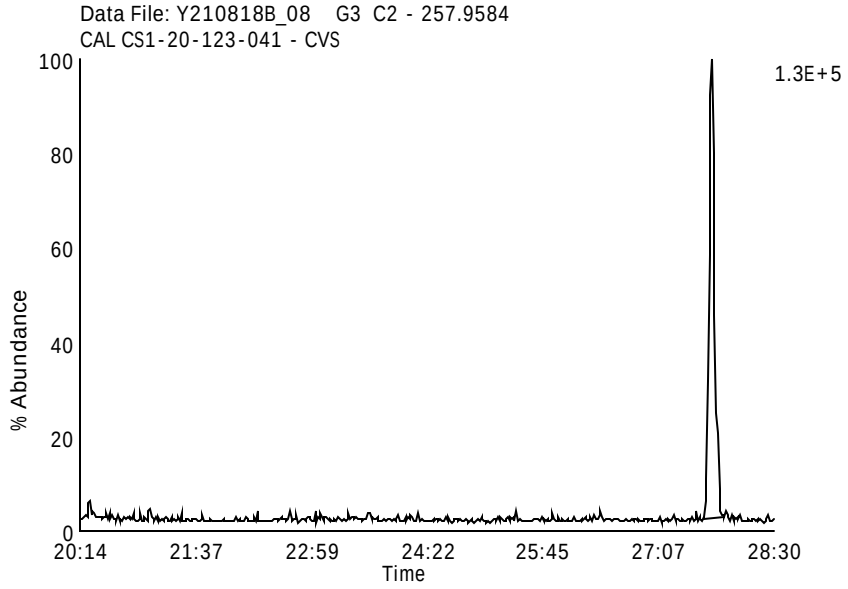
Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



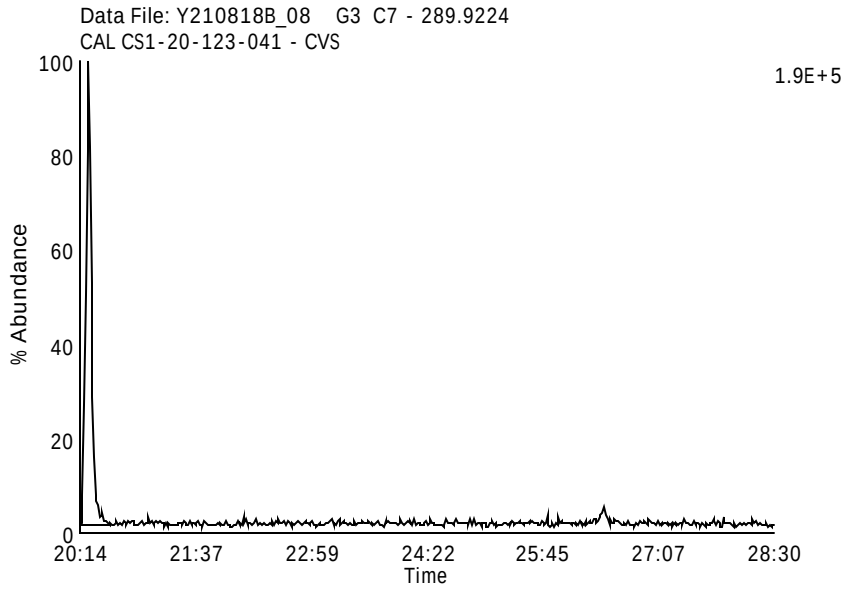


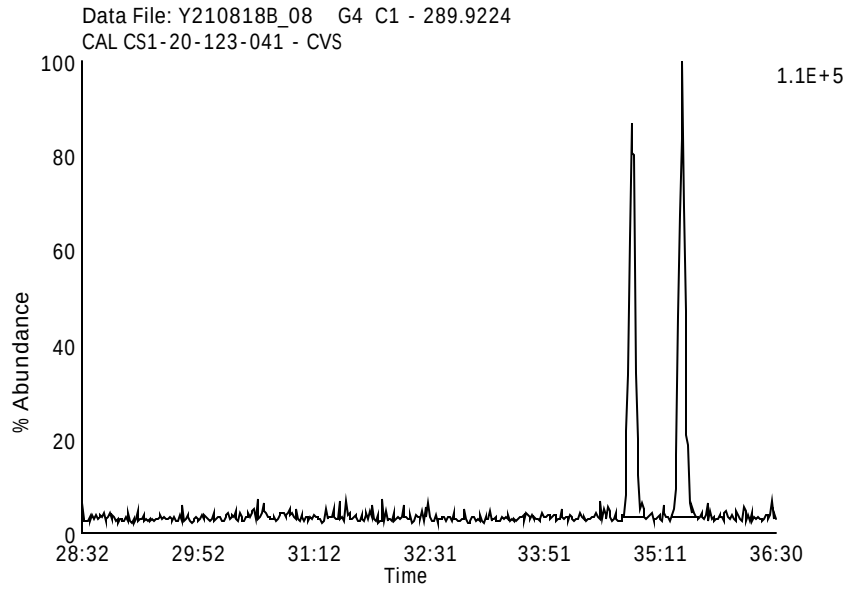


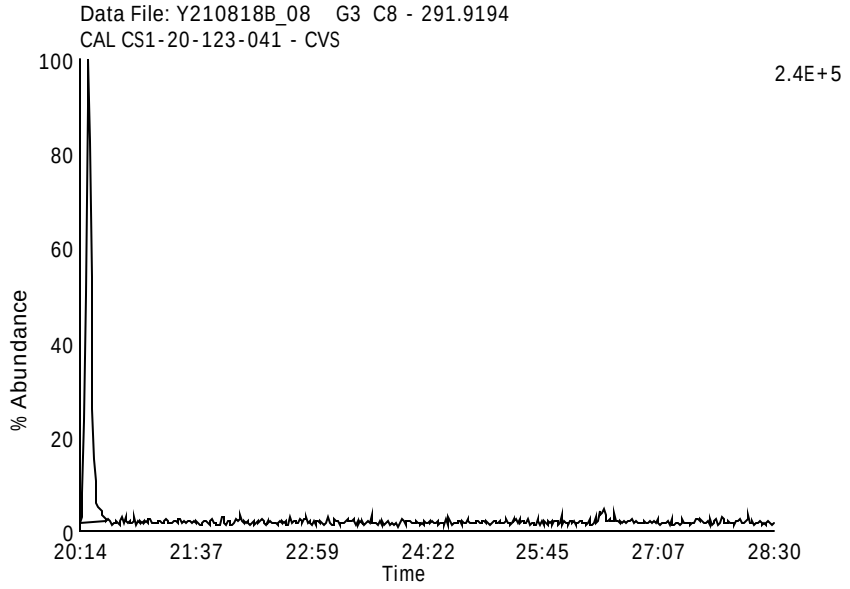


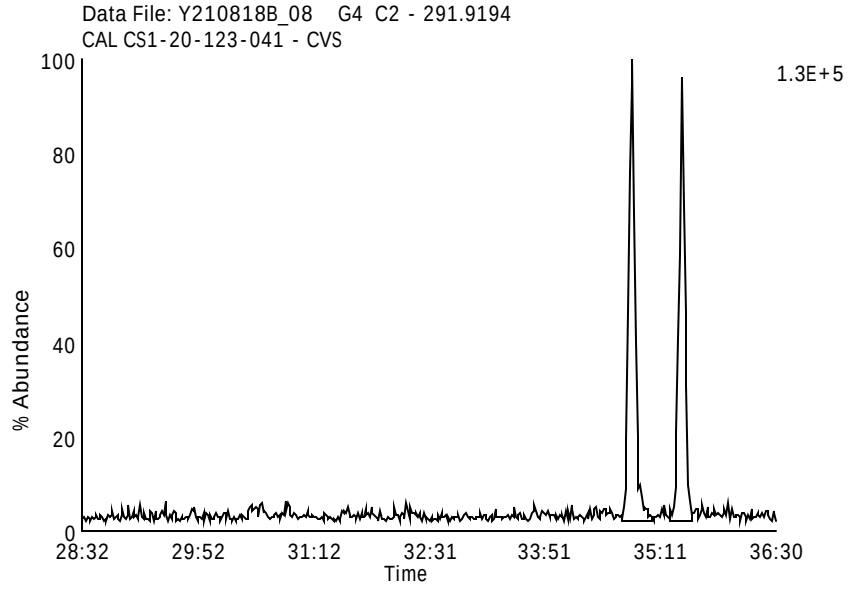
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







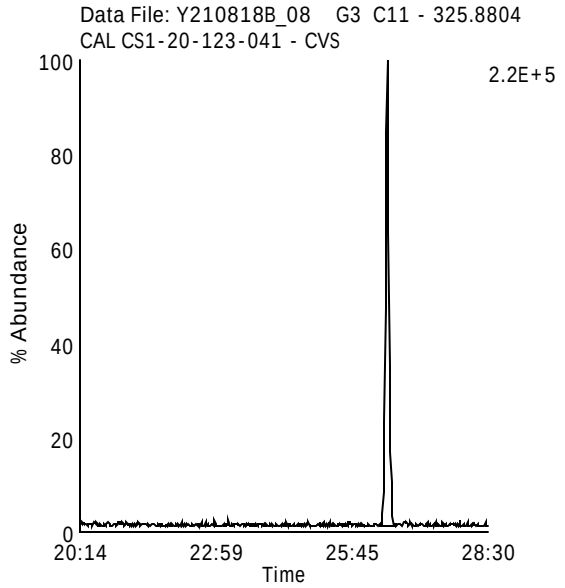


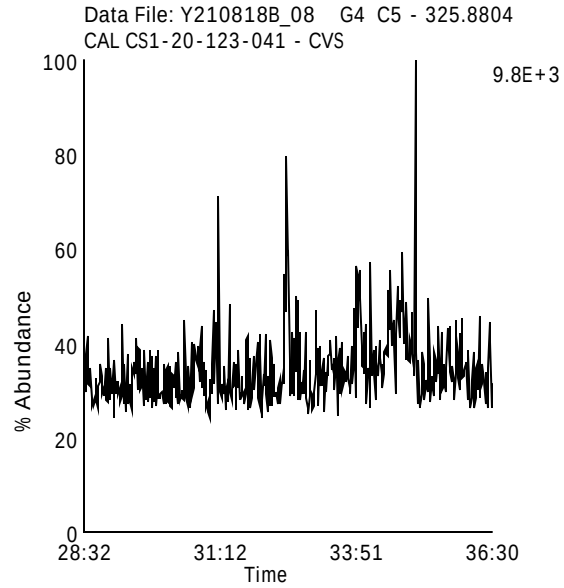
Penta Chlorinated Biphenyls

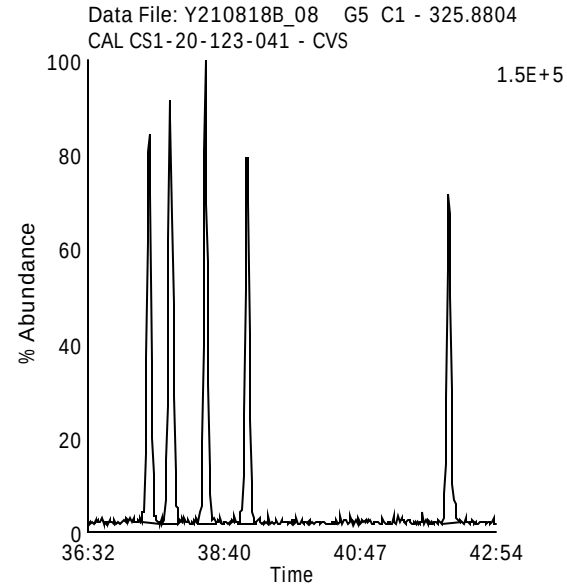
Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

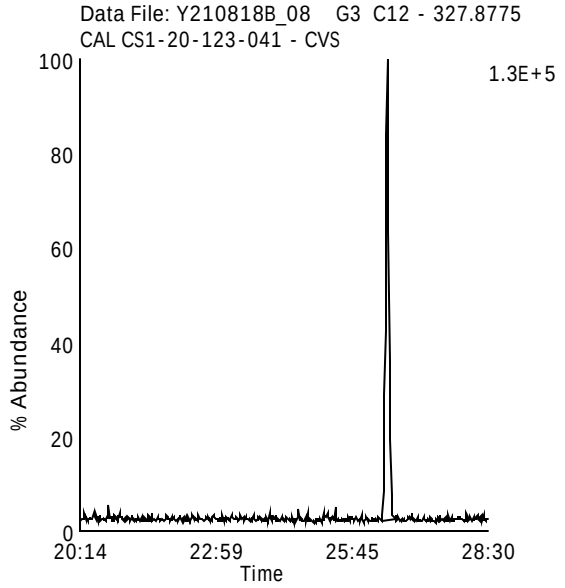
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

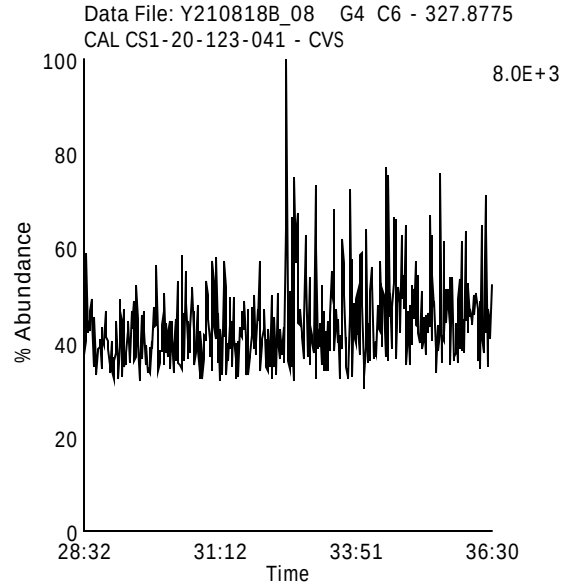
Sample Description: CAL CS1-20-123-041 - CVS

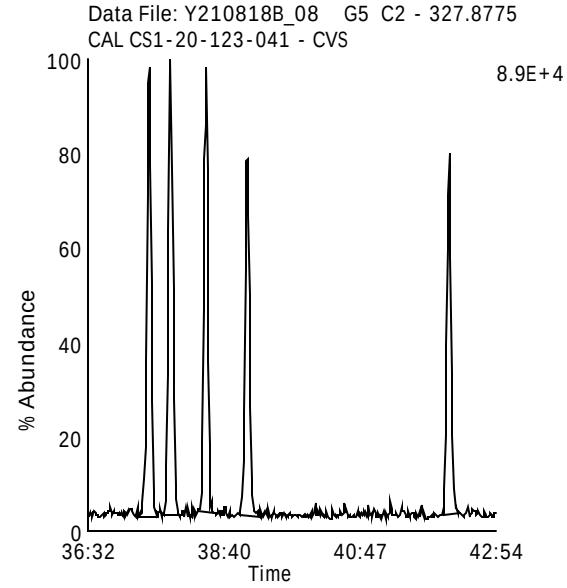










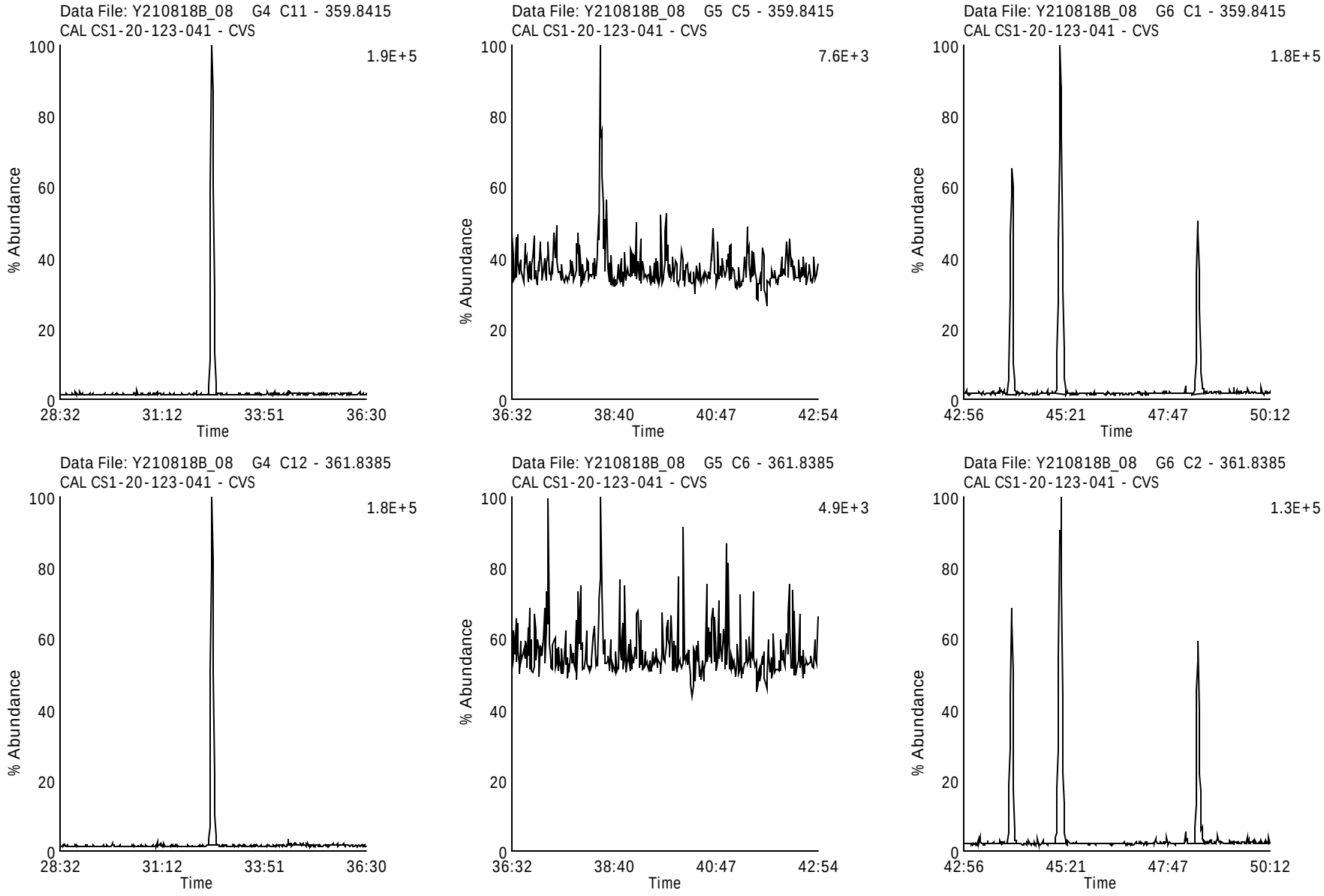


Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

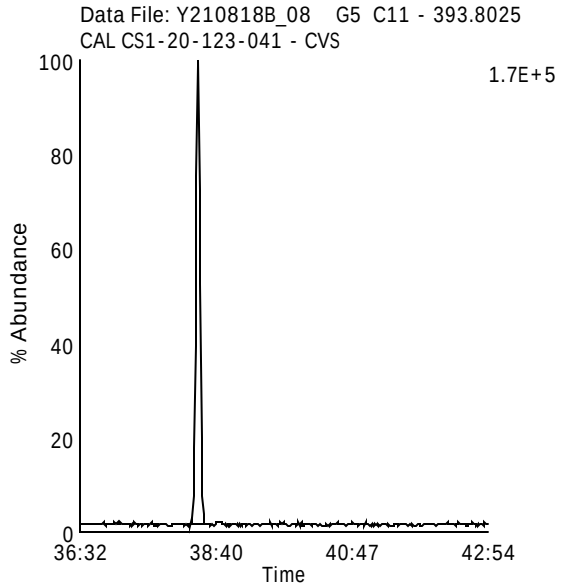
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

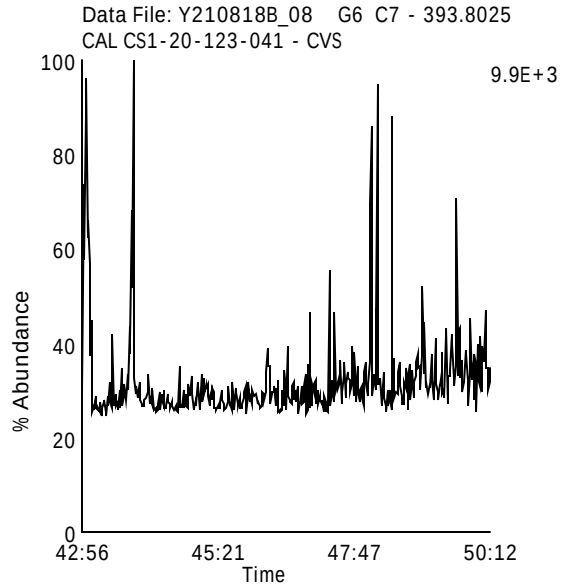
Sample Description: CAL CS1-20-123-041 - CVS

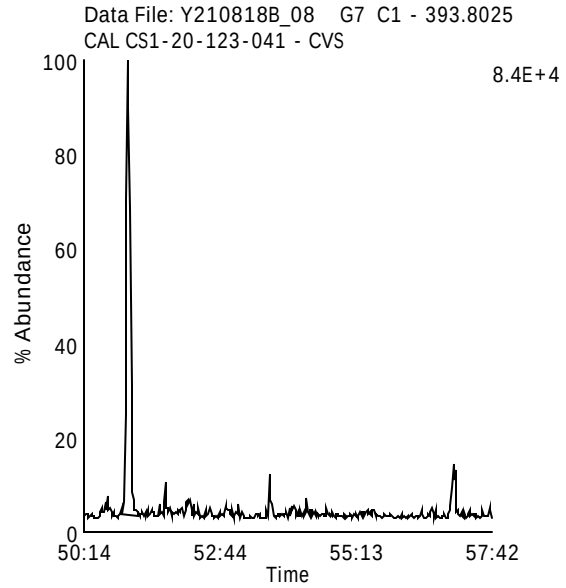


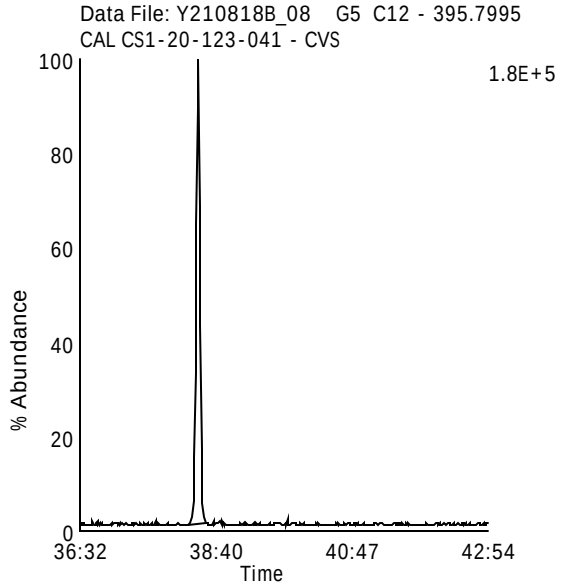
Hepta Chlorinated Biphenyls

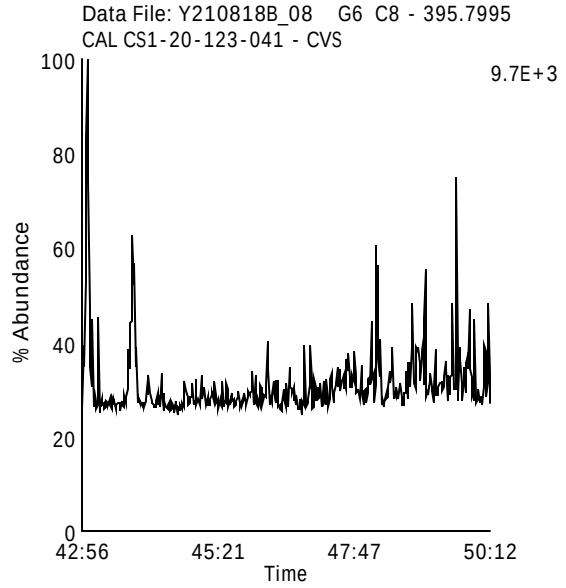
Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

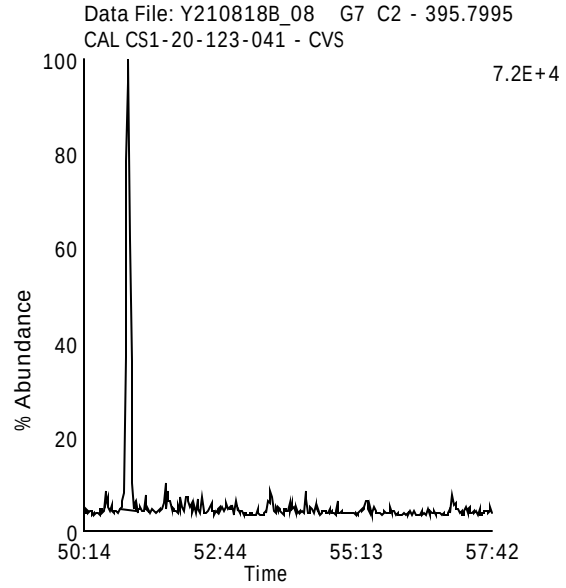








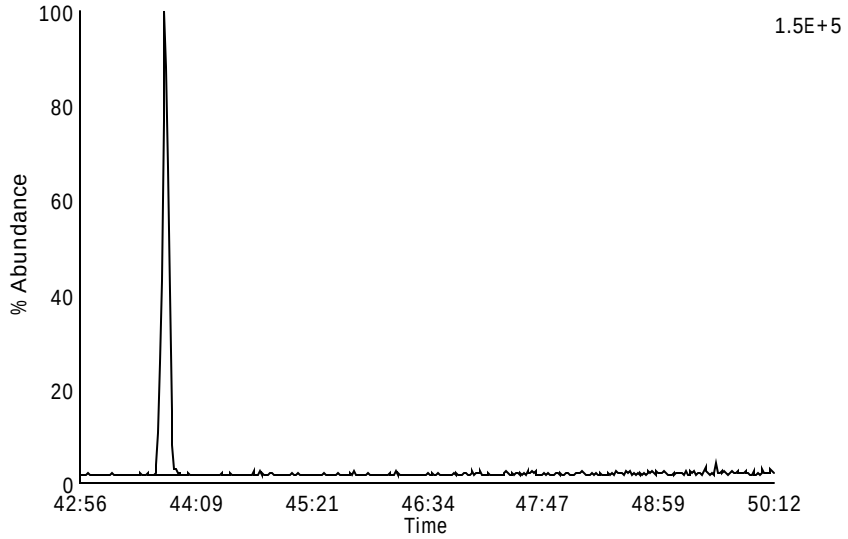




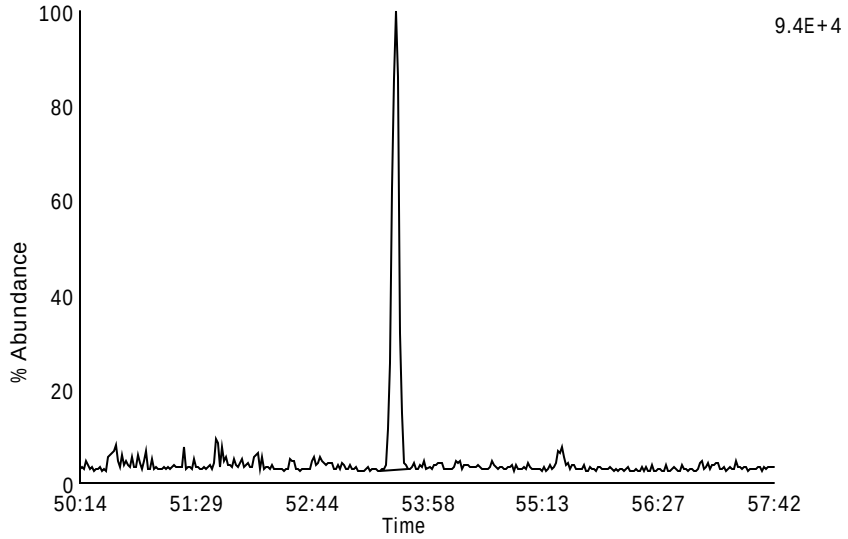
Octa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

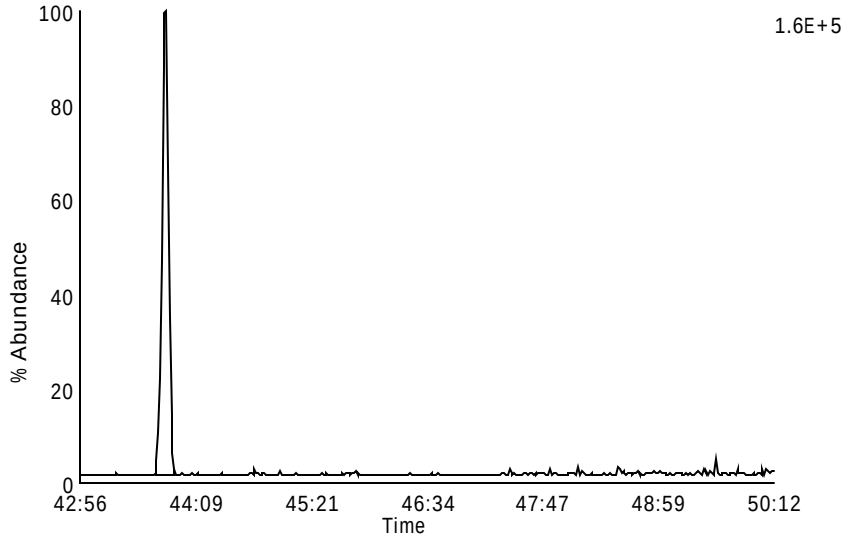
Data File: Y210818B_08 G6 C11 - 427.7635
CAL CS1-20-123-041 - CVS



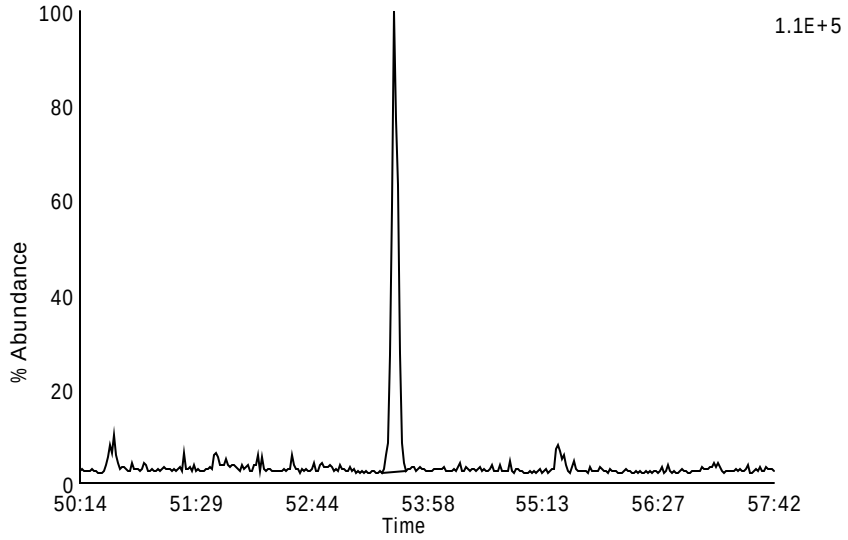
Data File: Y210818B_08 G7 C5 - 427.7635
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G6 C12 - 429.7606
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G7 C6 - 429.7606
CAL CS1-20-123-041 - CVS

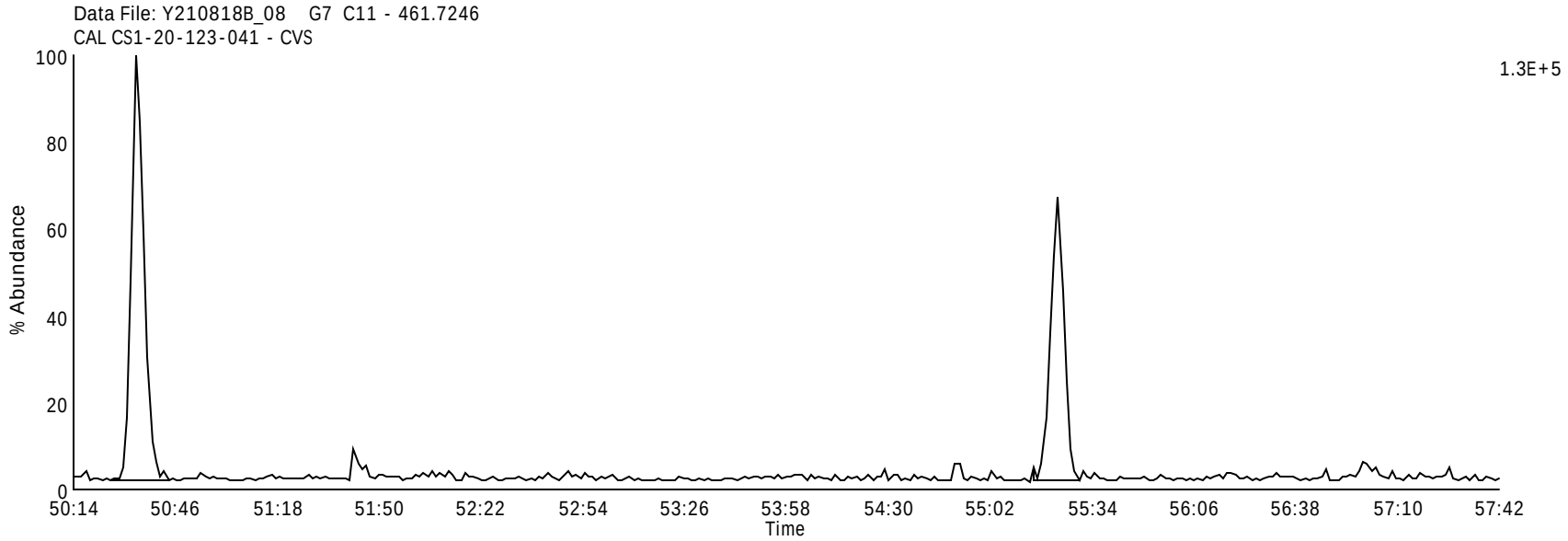


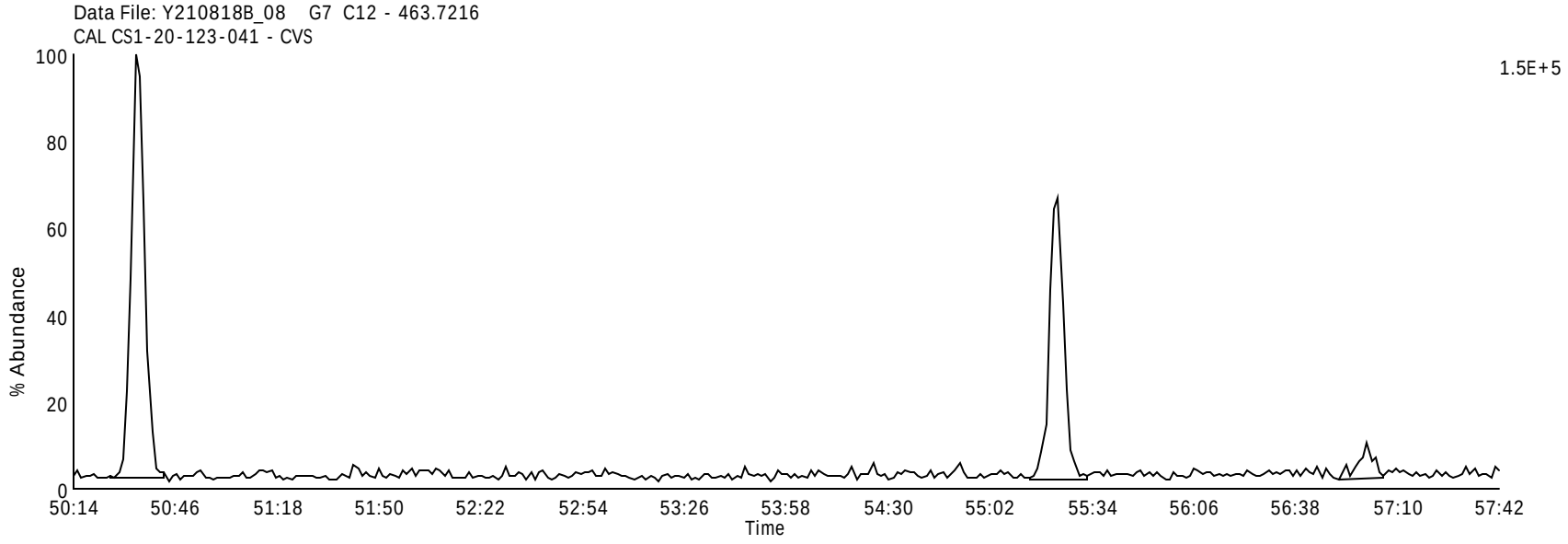
Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



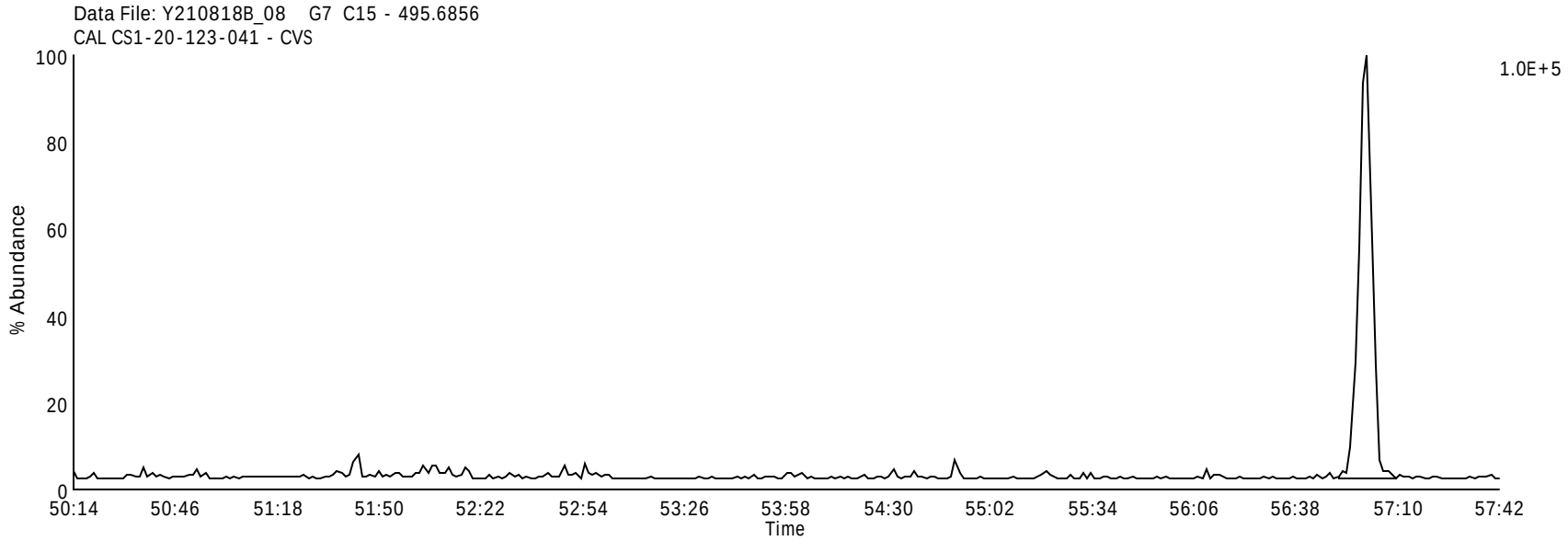


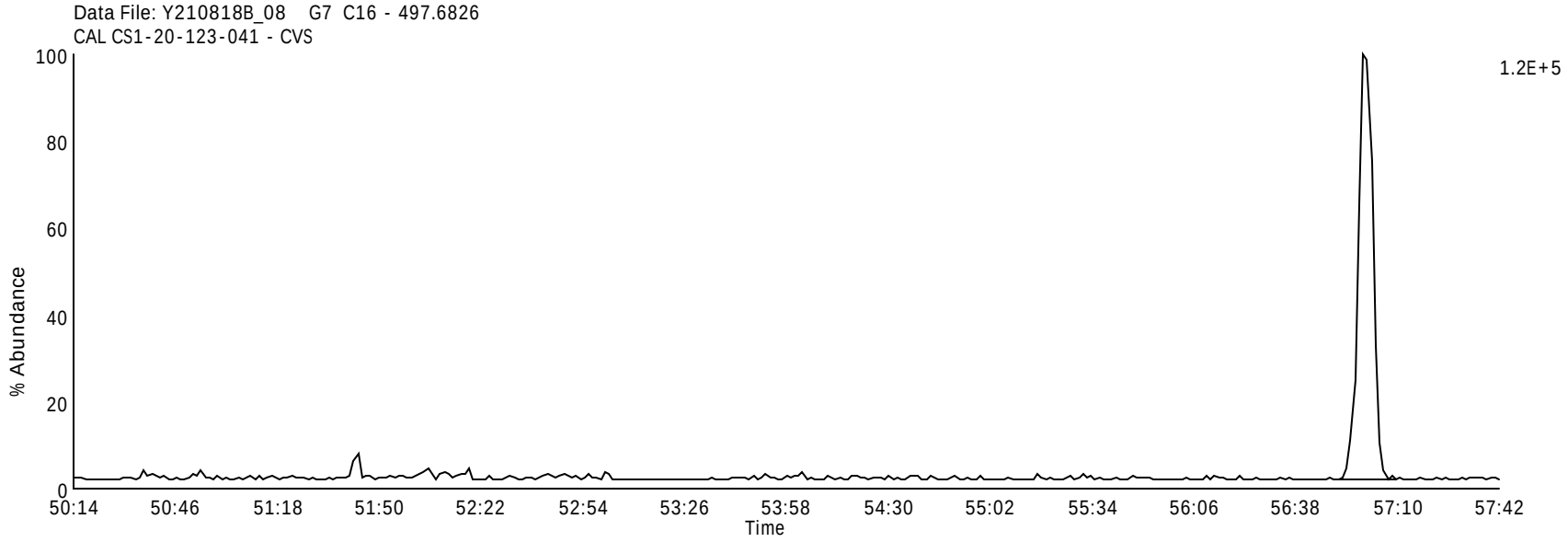
Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

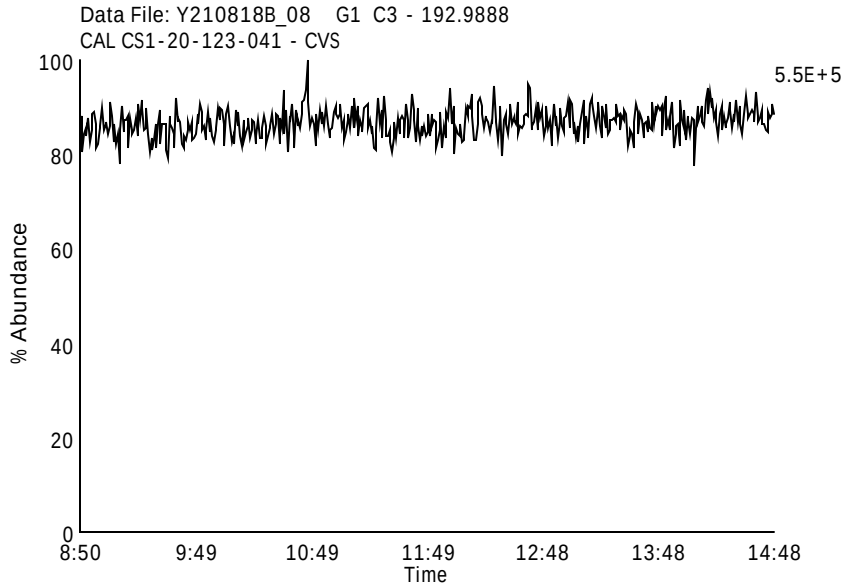


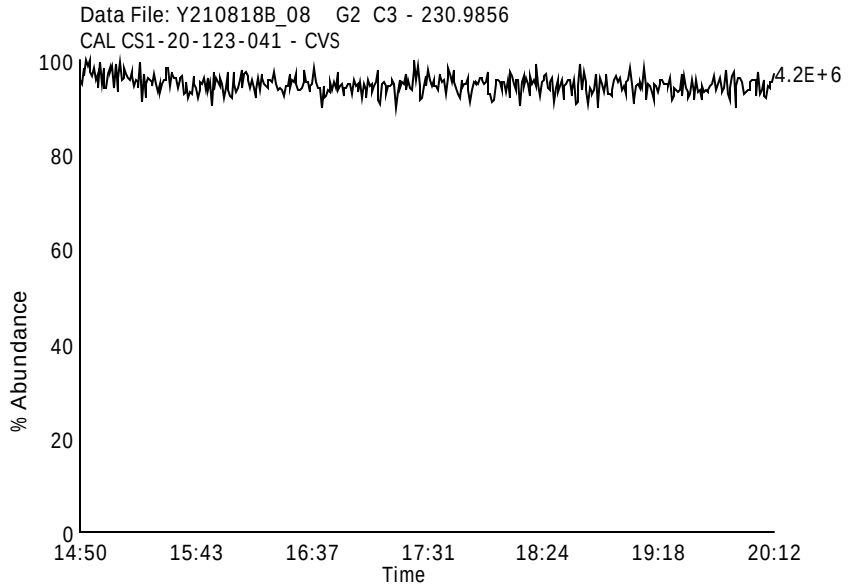


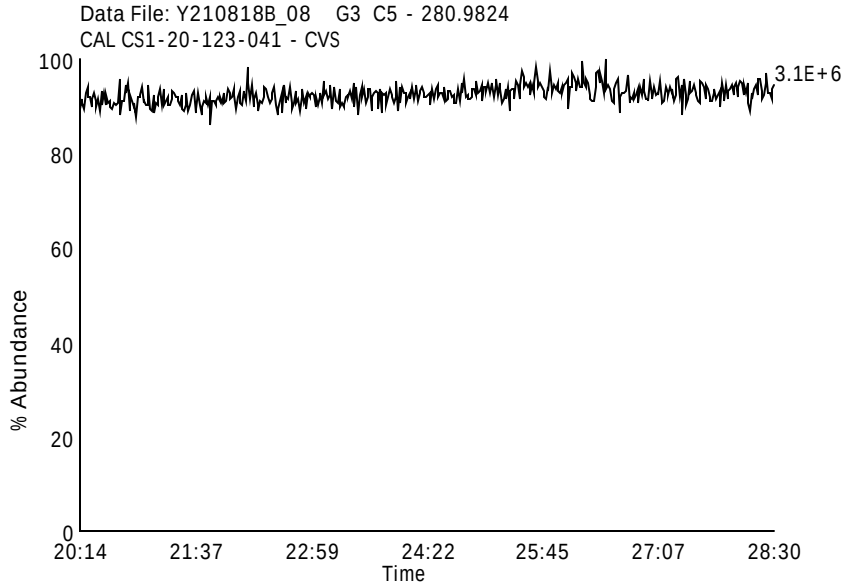
Group 1 - 4 Lock mass

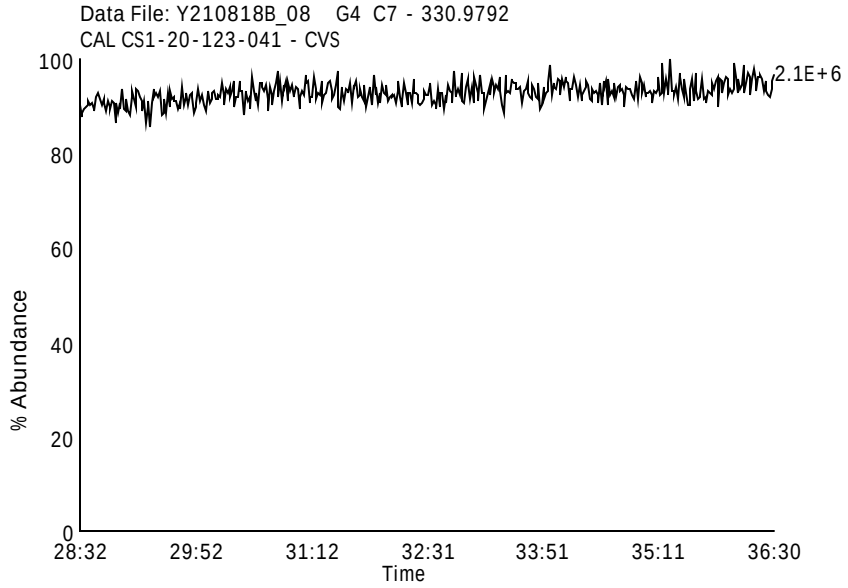
Data File Name: Y210818B_08
Date Acquired: 8/18/2021
Sample Description: CAL CS1-20-123-041 - CVS

Lab Sample ID: CS1-20-123-041
Instrument: 10MSHR12 (Y)





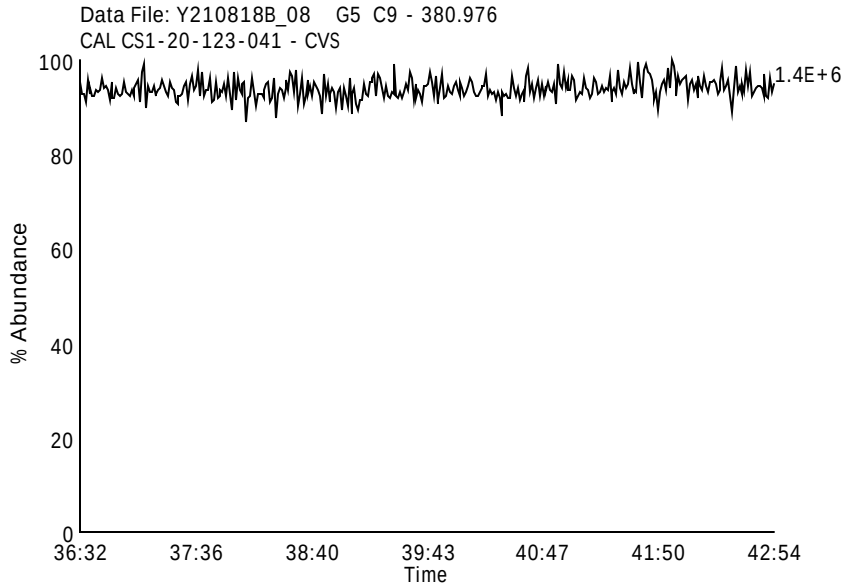


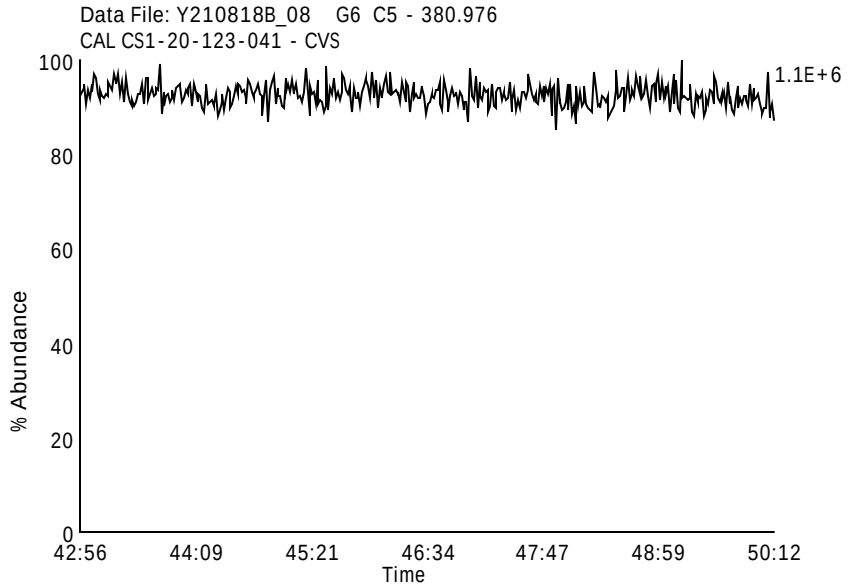


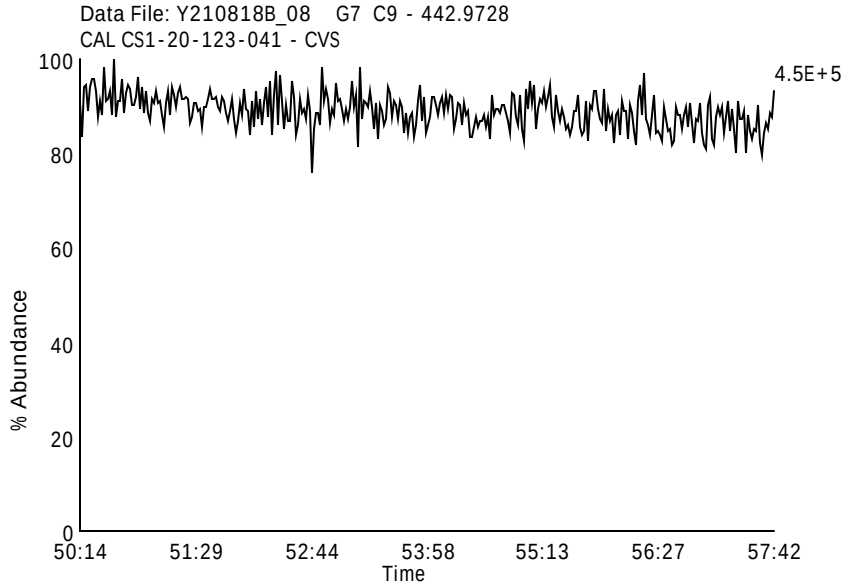
Group 5 - 7 Lock mass

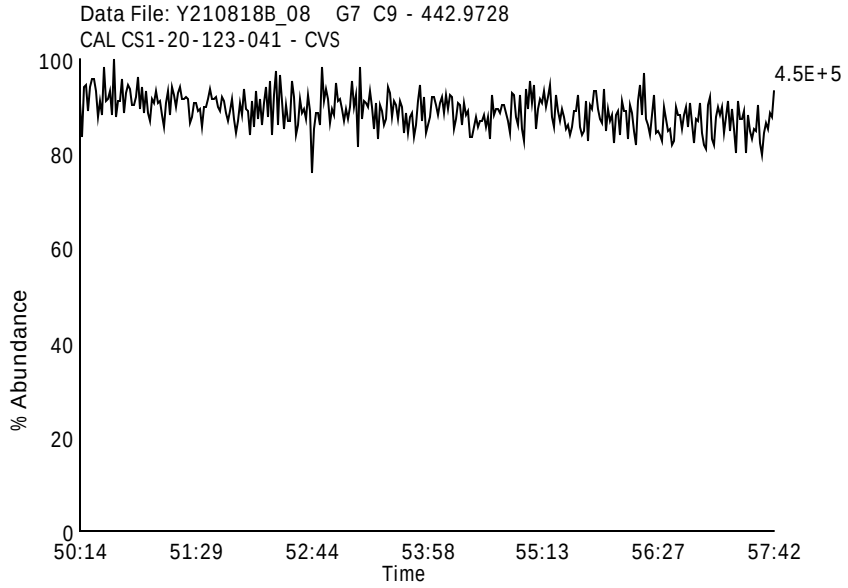
Data File Name: Y210818B_08
Date Acquired: 8/18/2021
Sample Description: CAL CS1-20-123-041 - CVS

Lab Sample ID: CS1-20-123-041
Instrument: 10MSHR12 (Y)







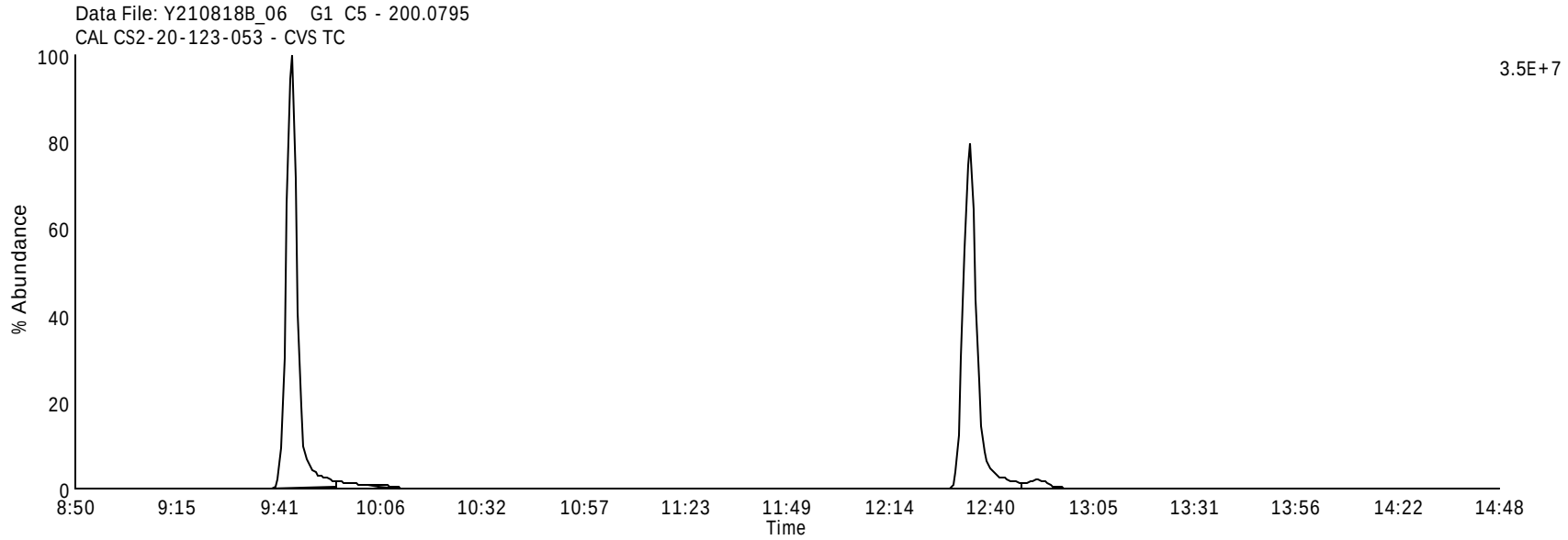


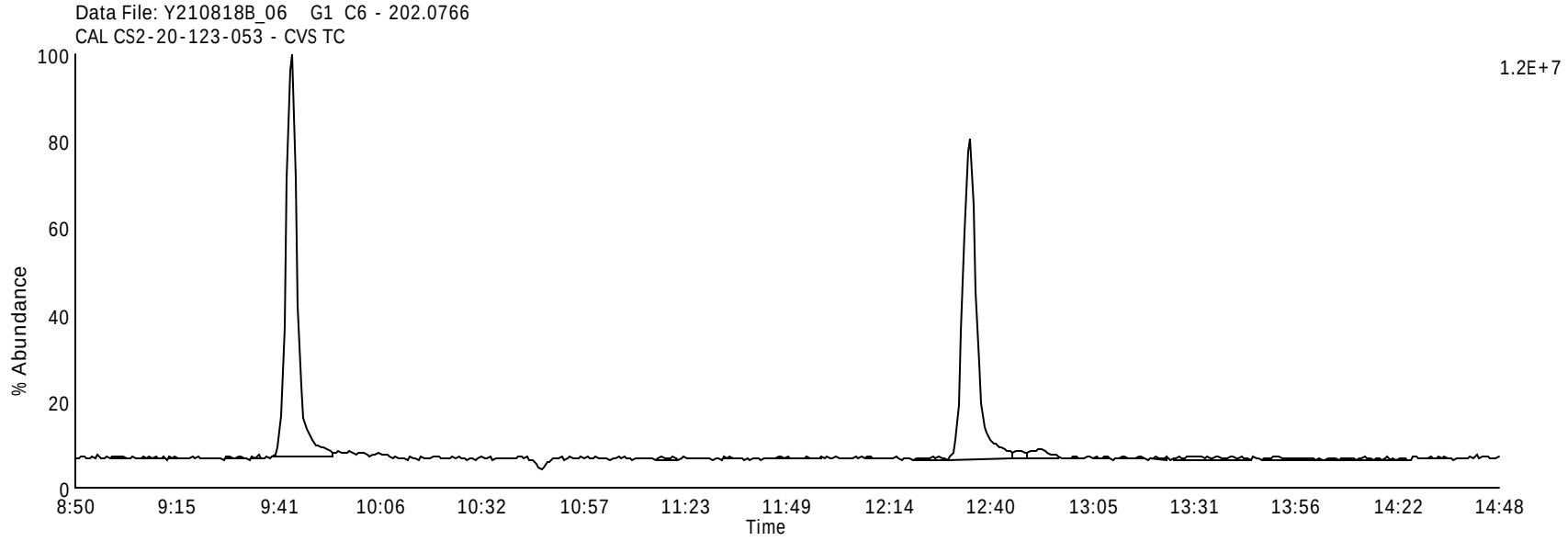
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

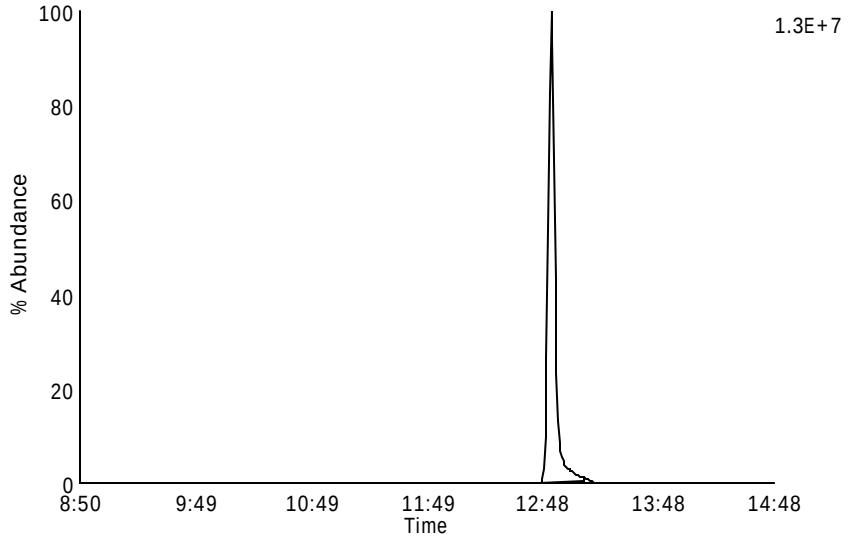




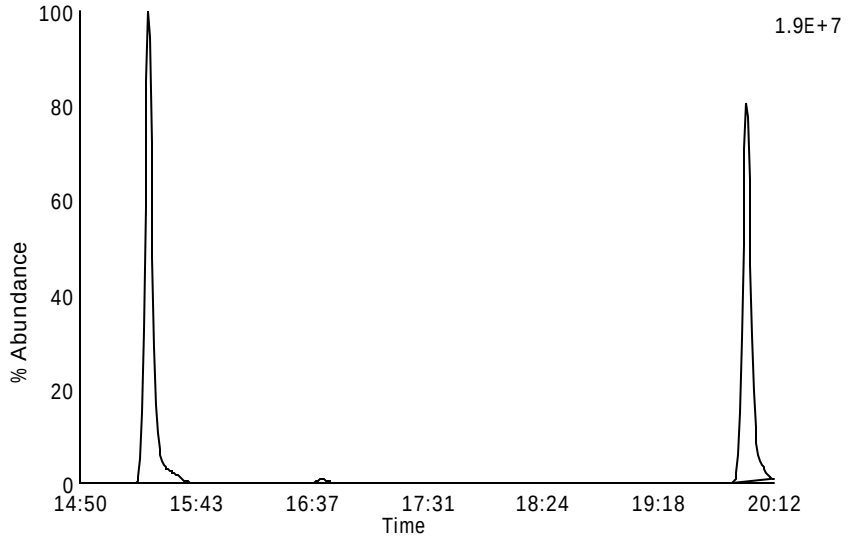
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC

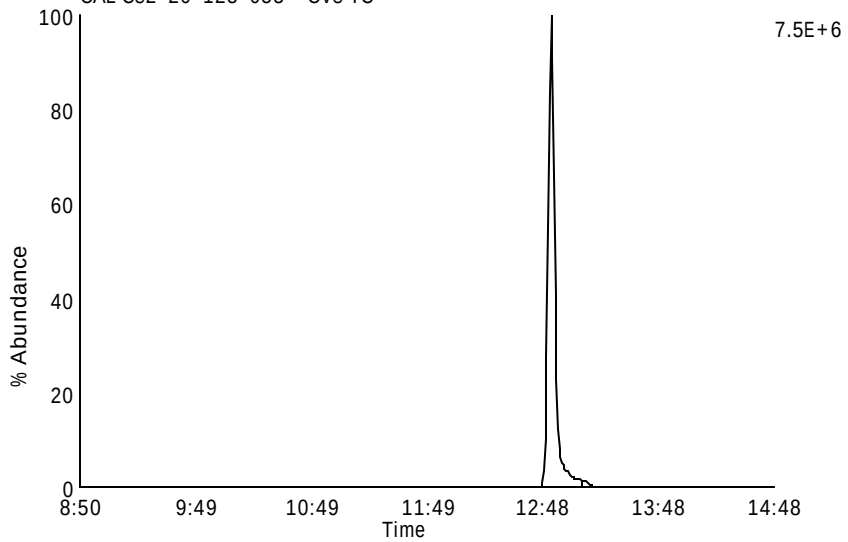
Data File: Y210818B_06 G1 C9 - 234.0406
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G2 C5 - 234.0406
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G1 C10 - 236.0376
CAL CS2-20-123-053 - CVS TC



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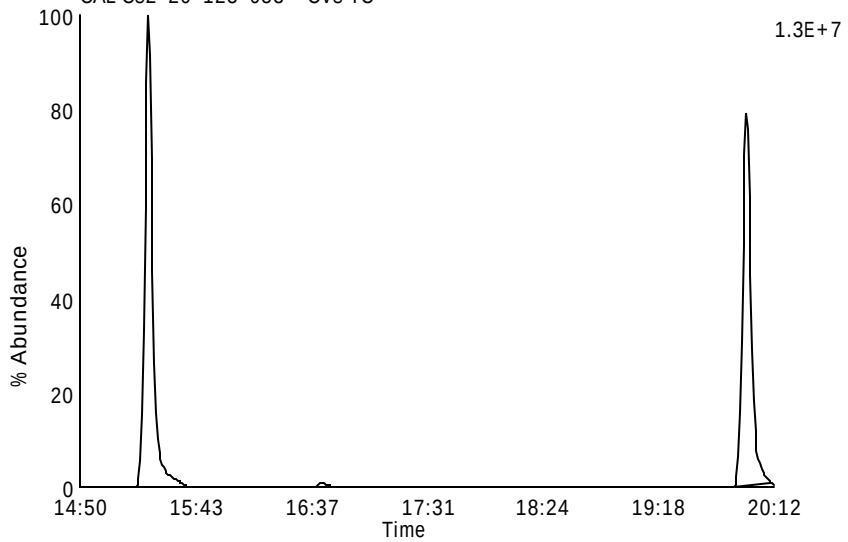
CAL CS2-20-123-053 - CVS TC

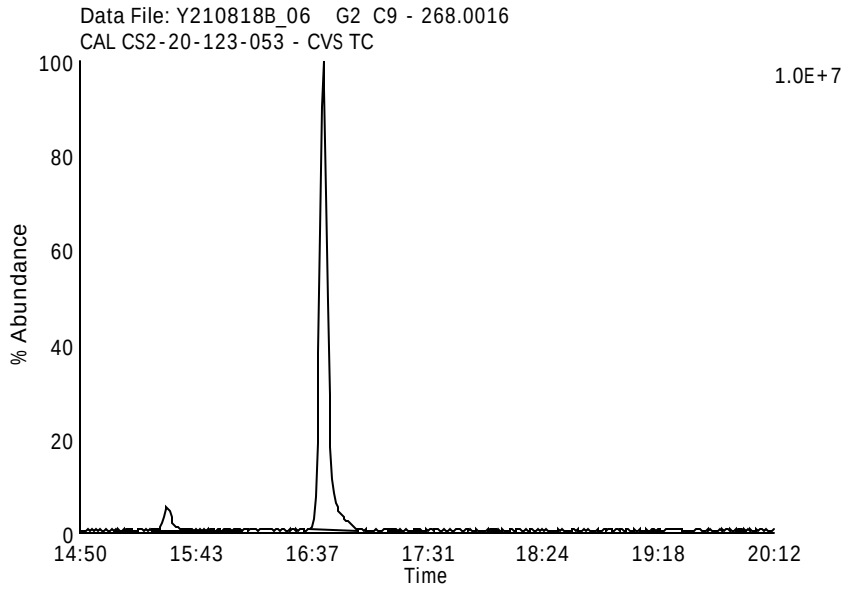


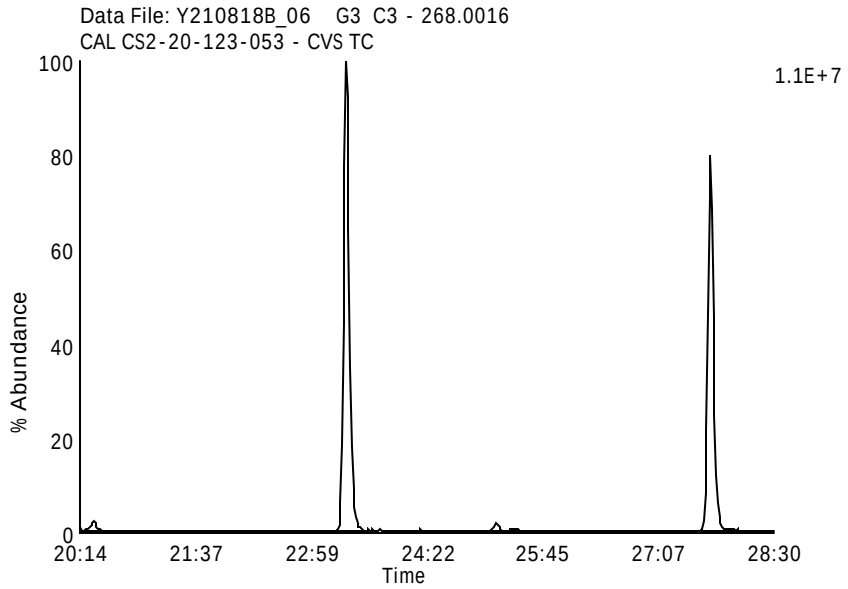
Labeled Tri Chlorinated Biphenyls

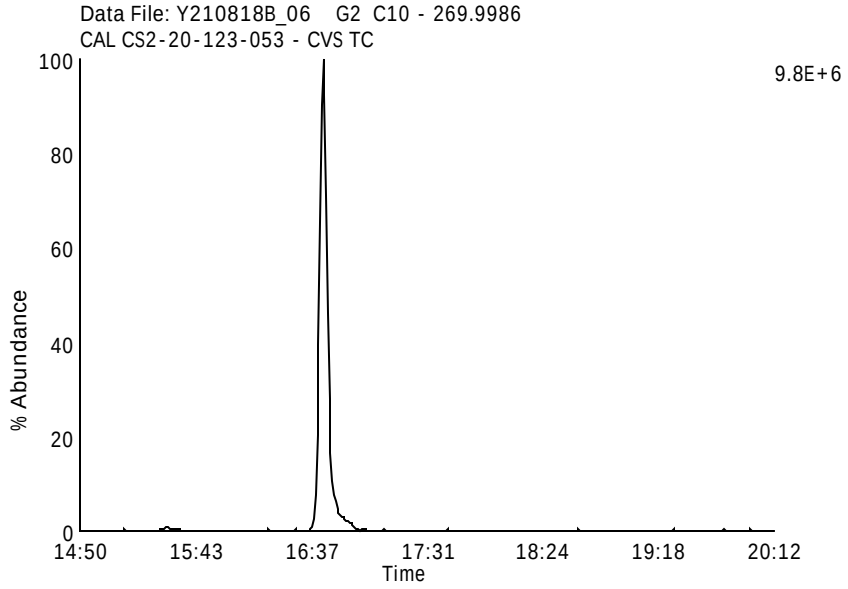
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

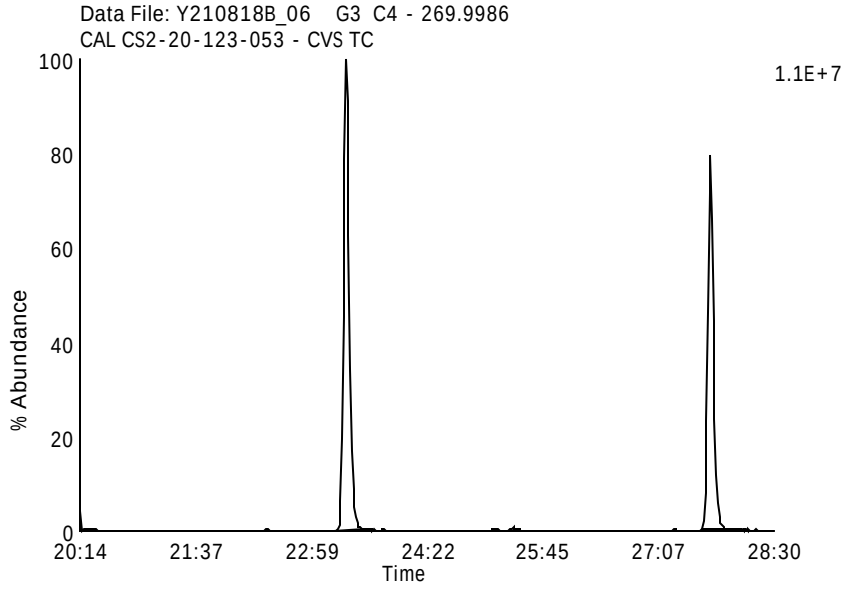
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC







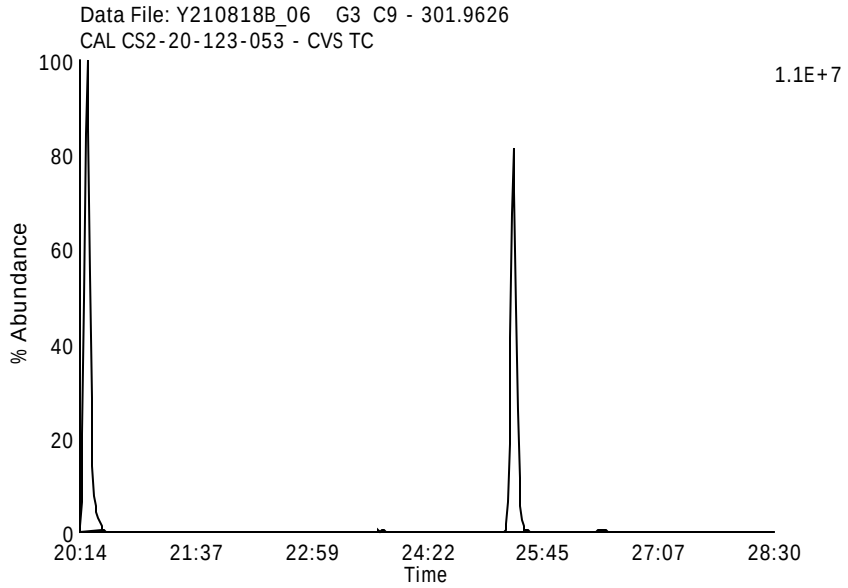


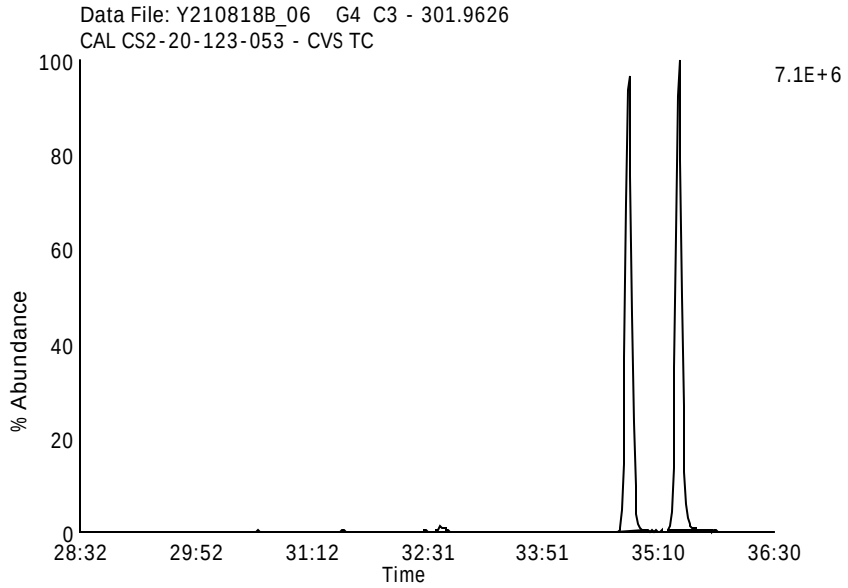
Labeled Tetra Chlorinated Biphenyls

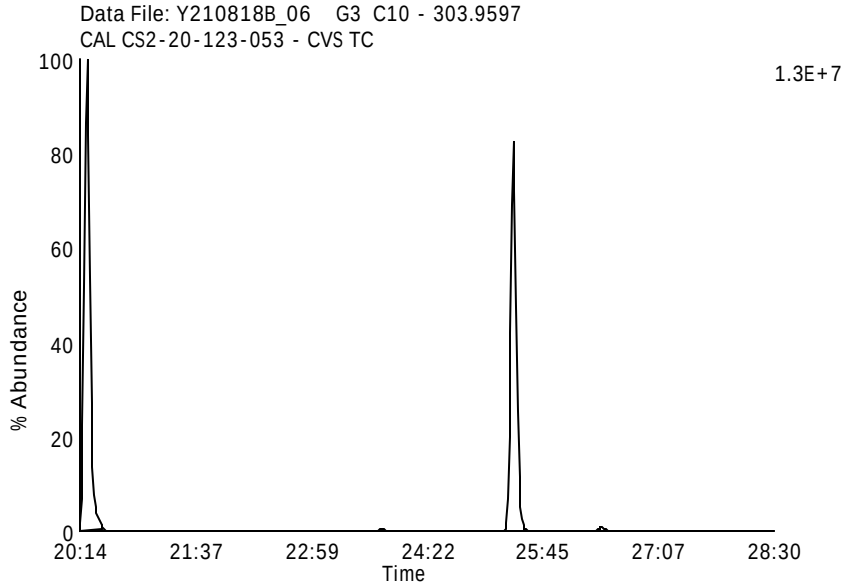
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

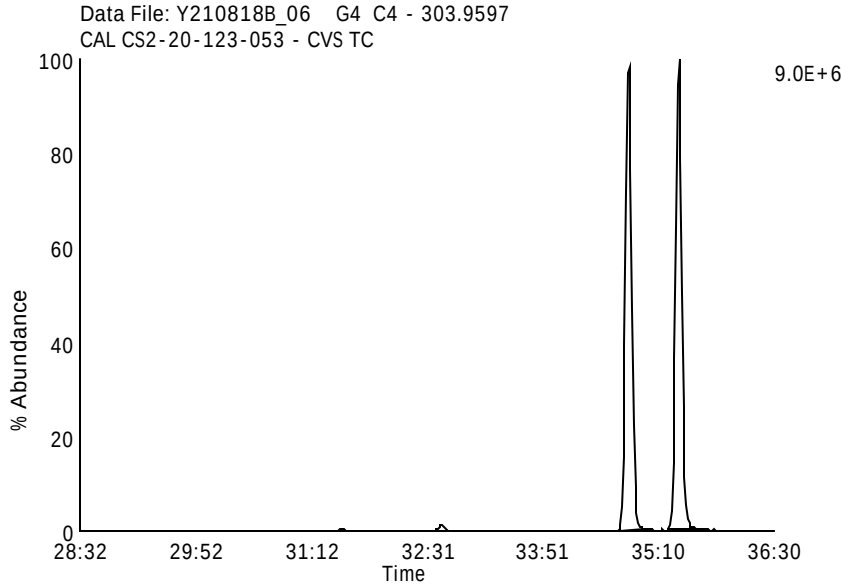
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC







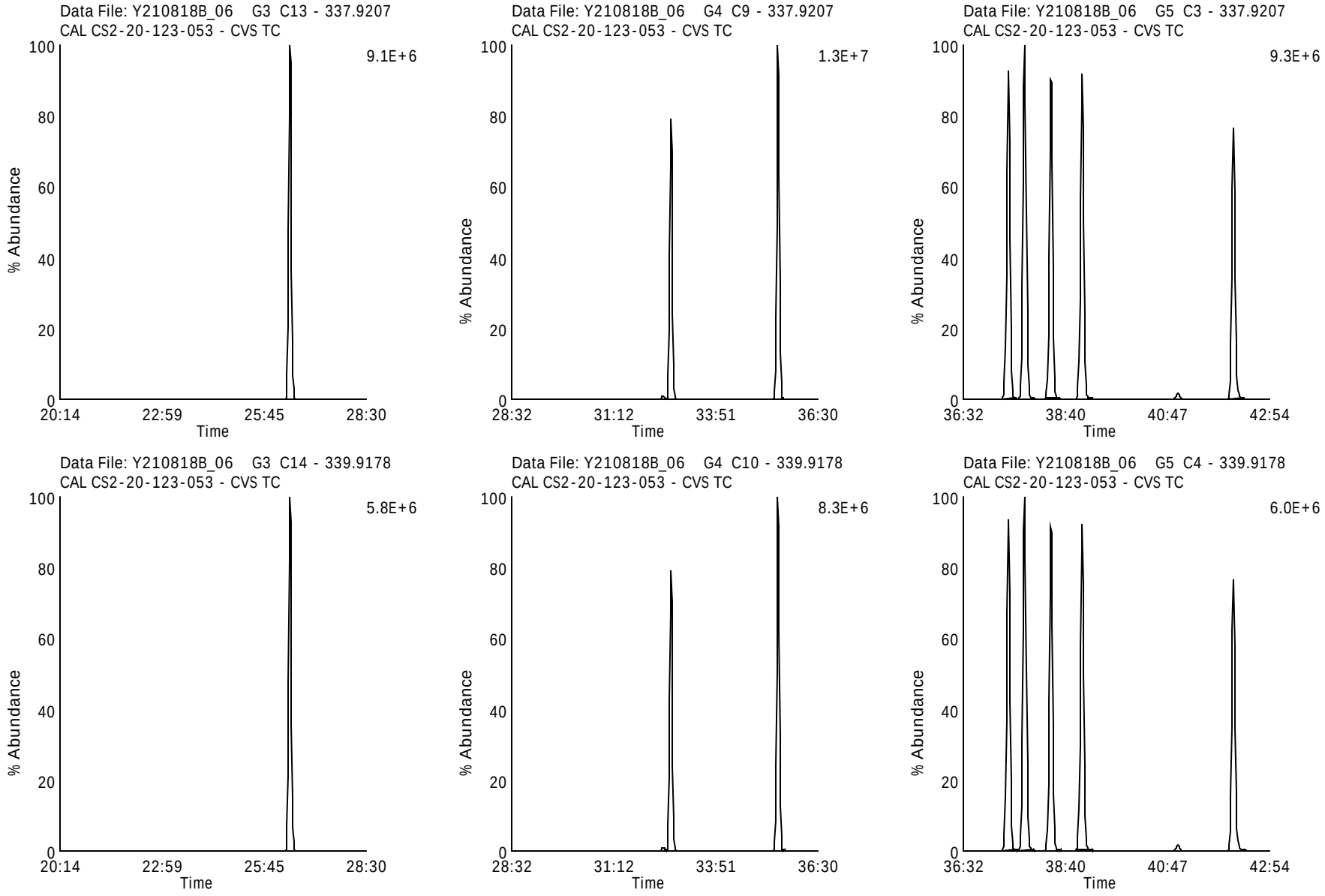


Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

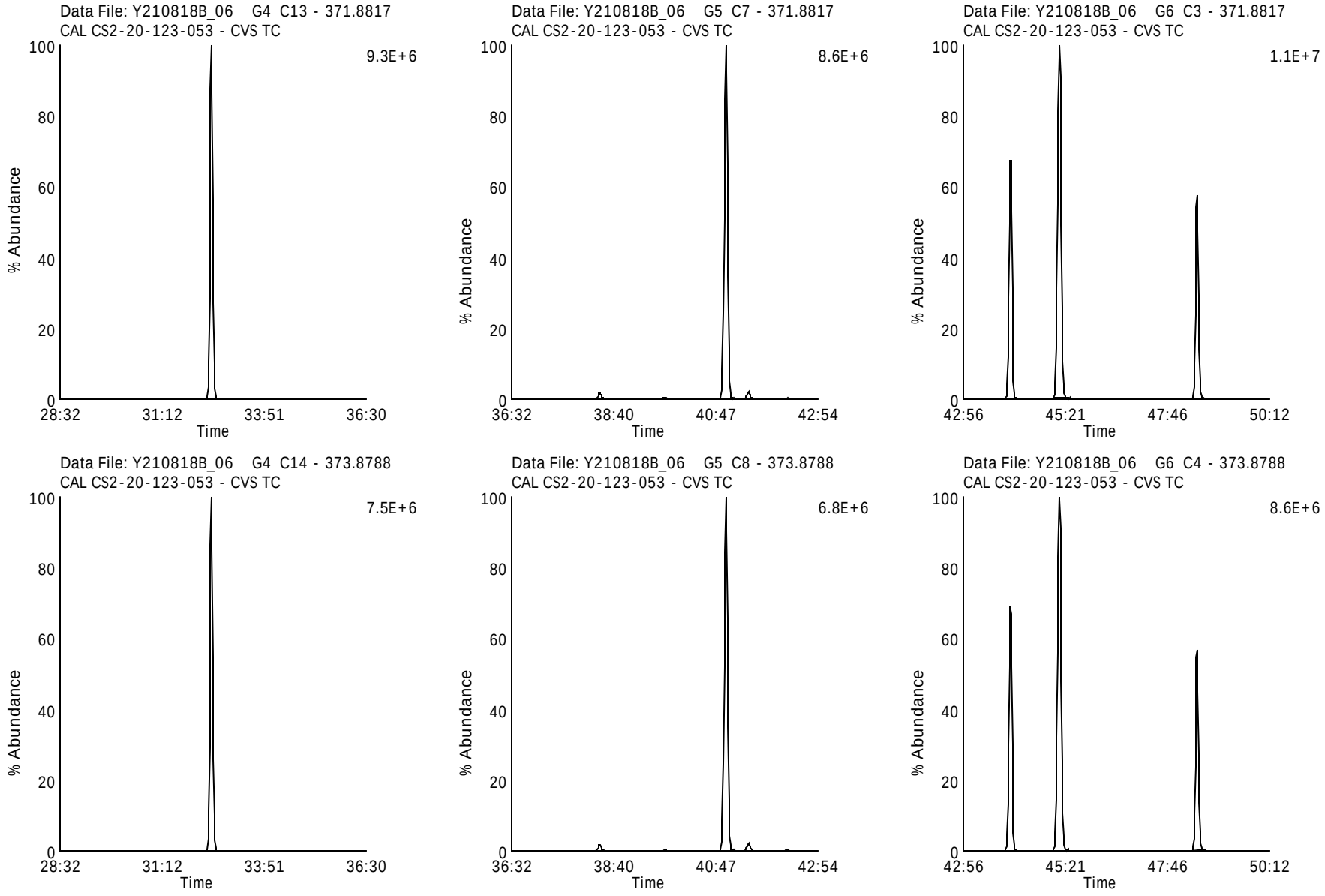


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

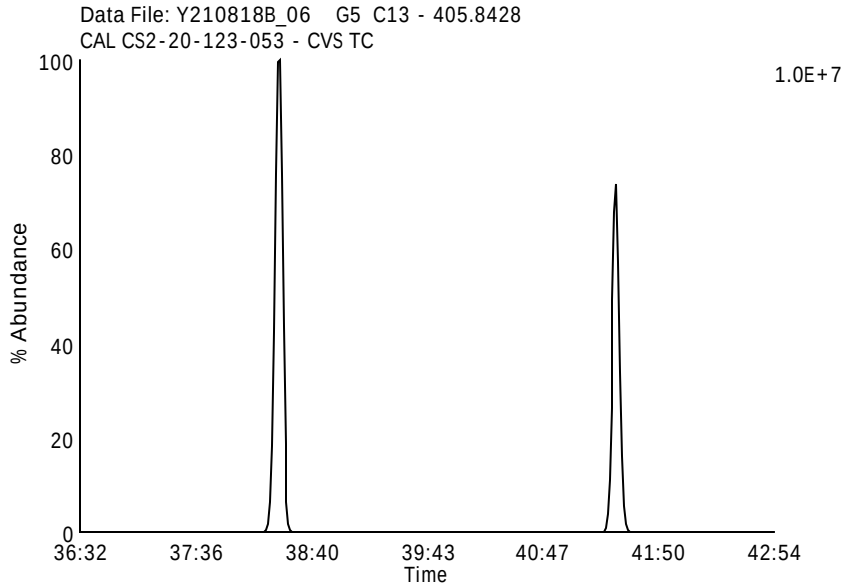


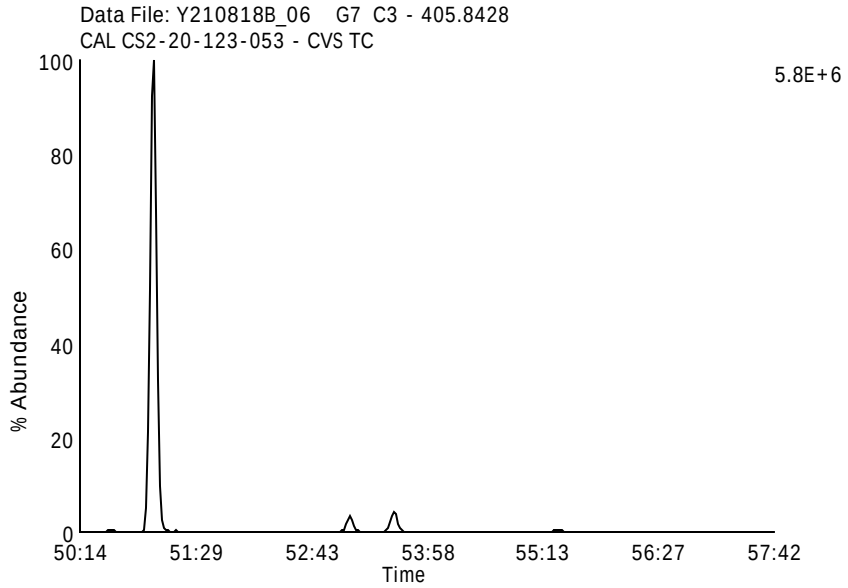
Labeled Hepta Chlorinated Biphenyls

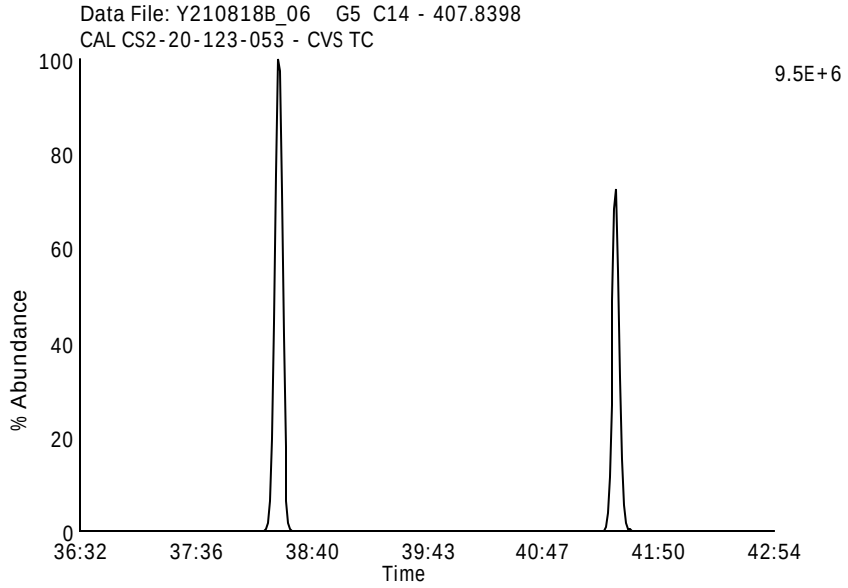
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

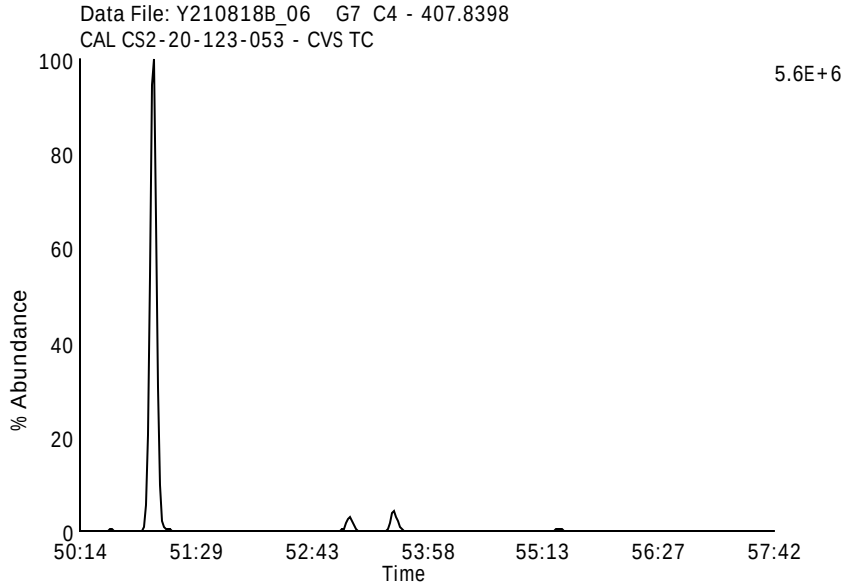
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC









Labeled Octa Chlorinated Biphenyls

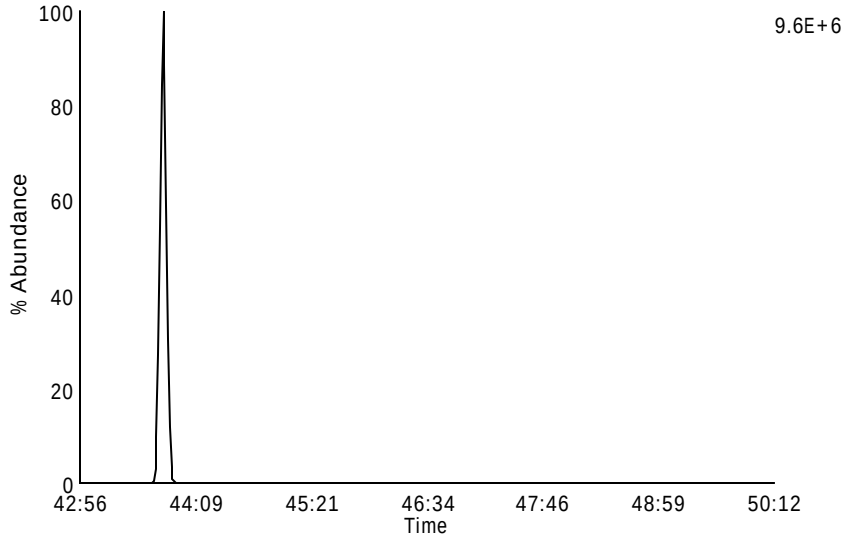
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

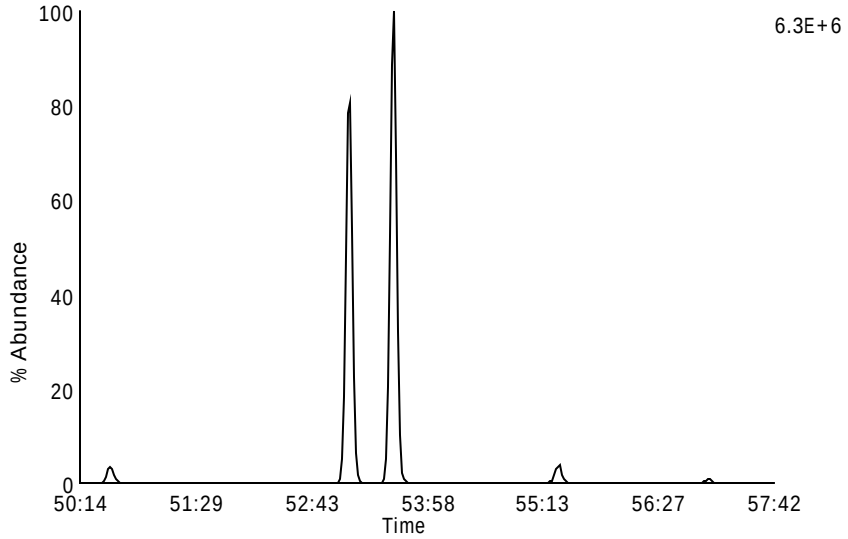
Data File: Y210818B_06 G6 C13 - 439.8038

CAL CS2-20-123-053 - CVS TC



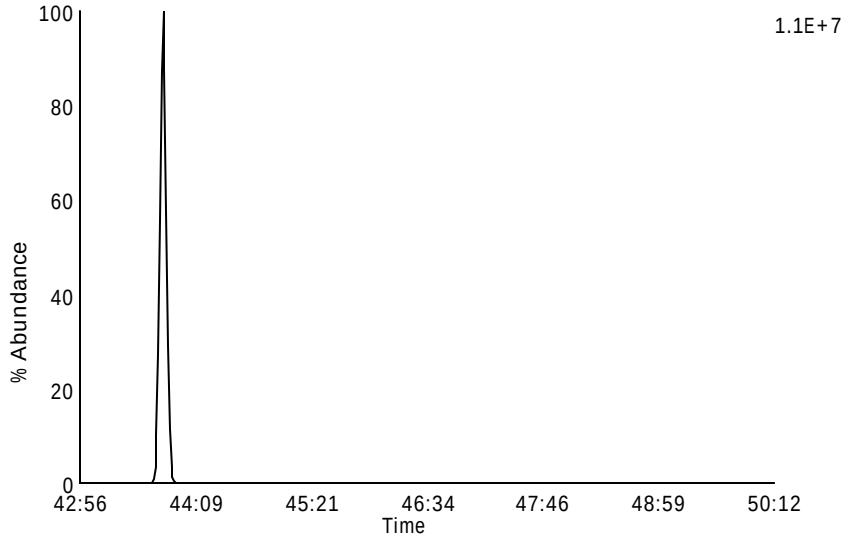
Data File: Y210818B_06 G7 C7 - 439.8038

CAL CS2-20-123-053 - CVS TC



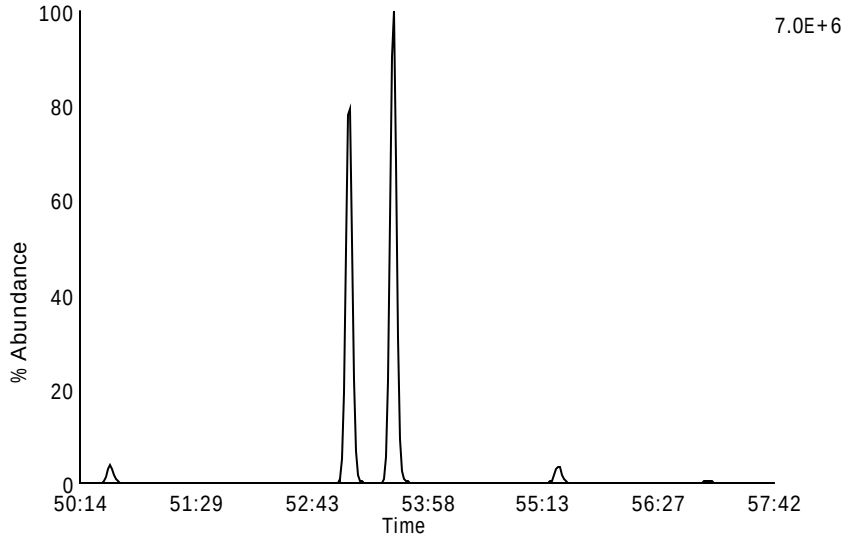
Data File: Y210818B_06 G6 C14 - 441.8008

CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G7 C8 - 441.8008

CAL CS2-20-123-053 - CVS TC

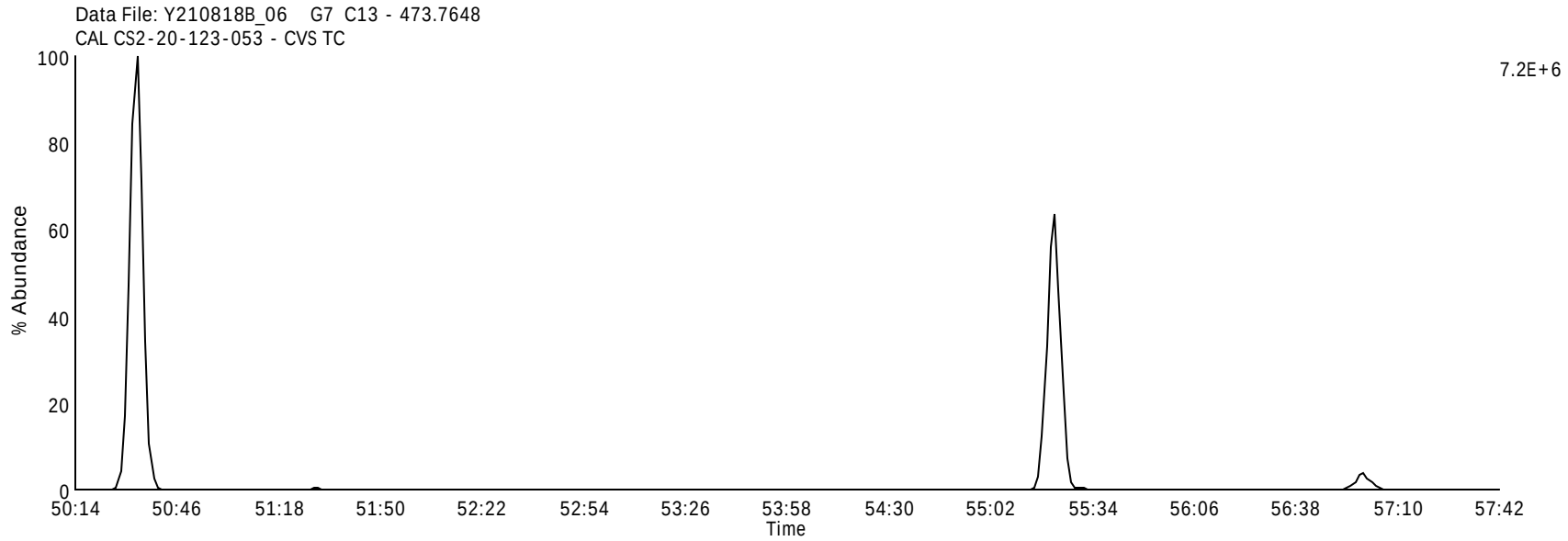


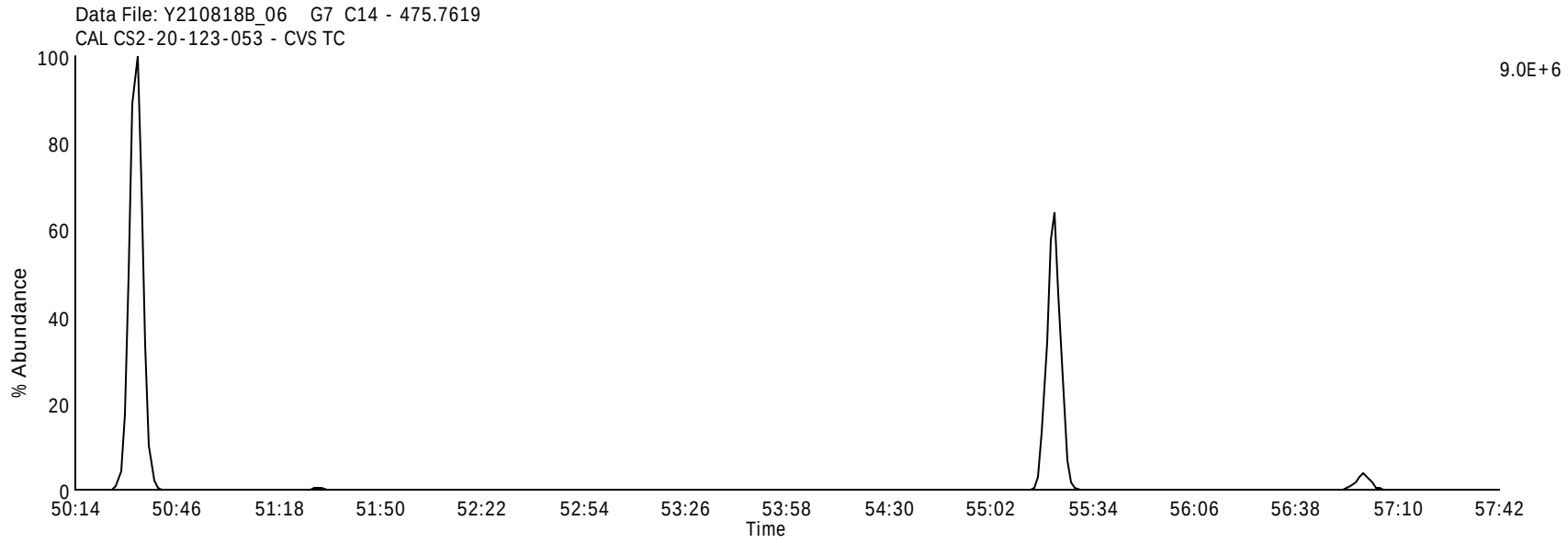
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



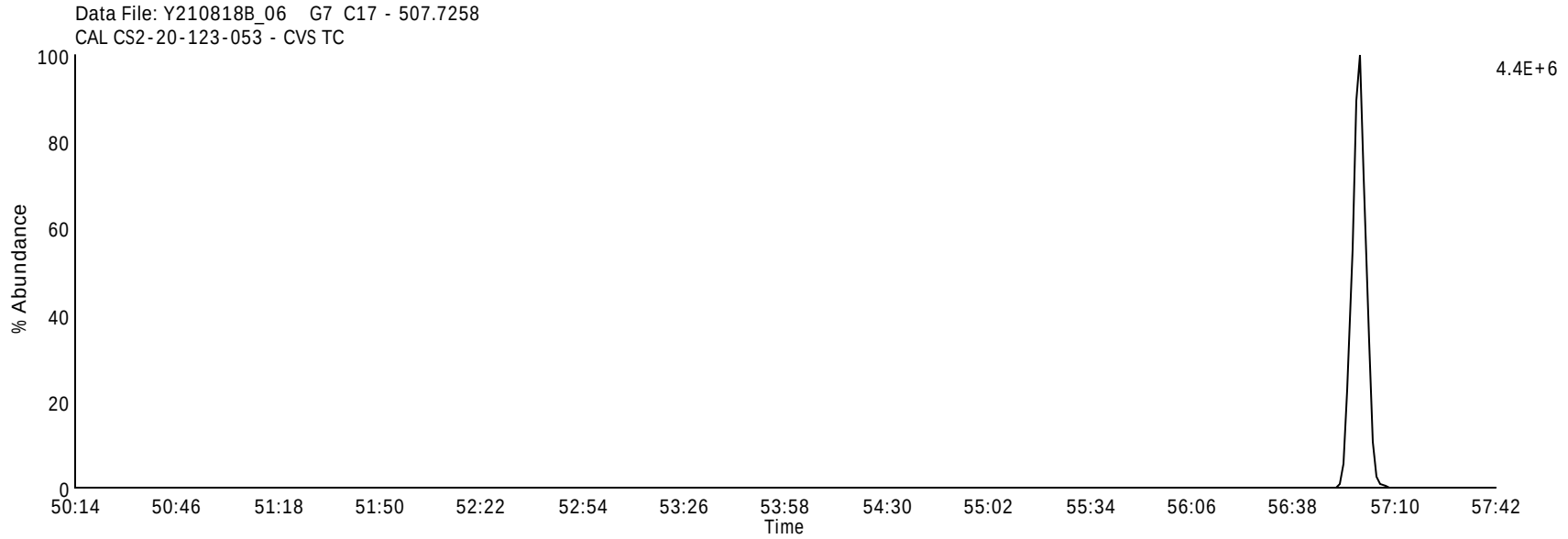


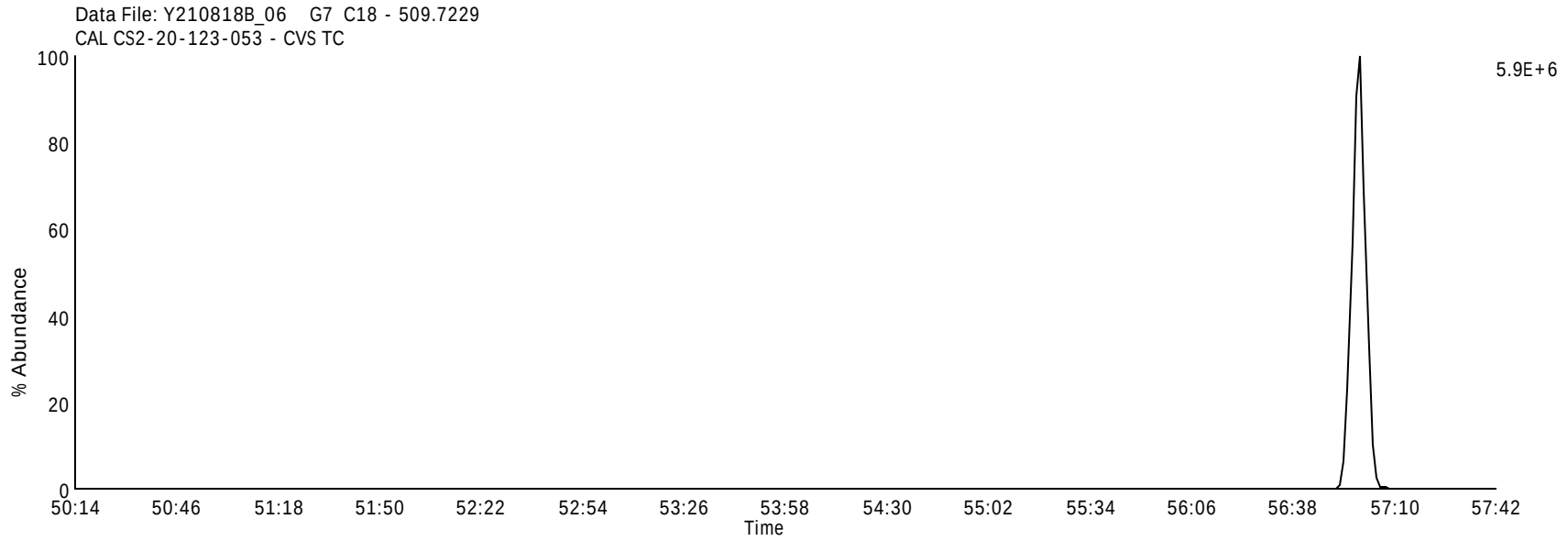
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



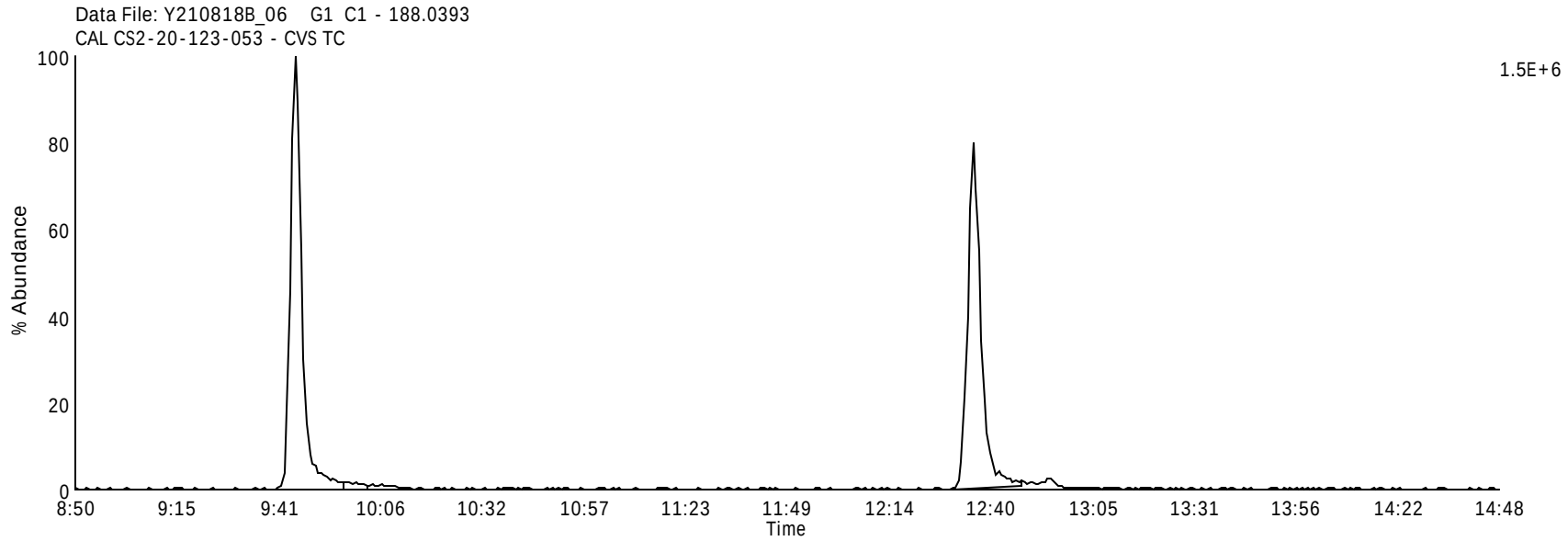


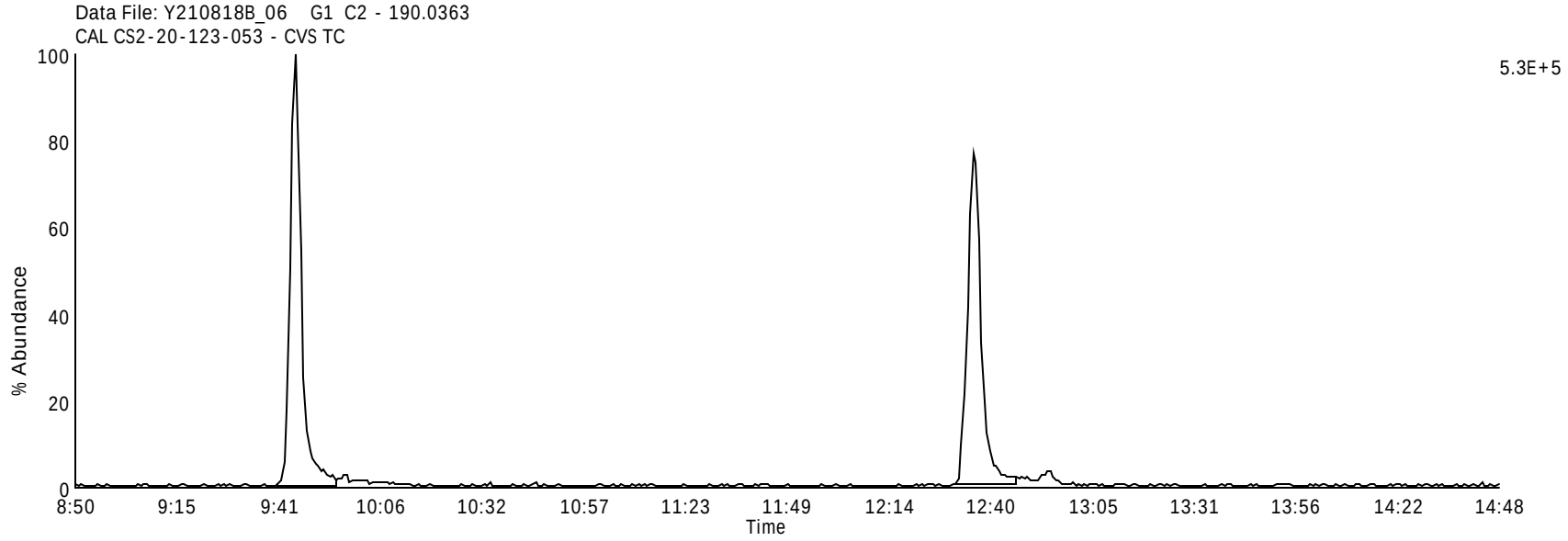
Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

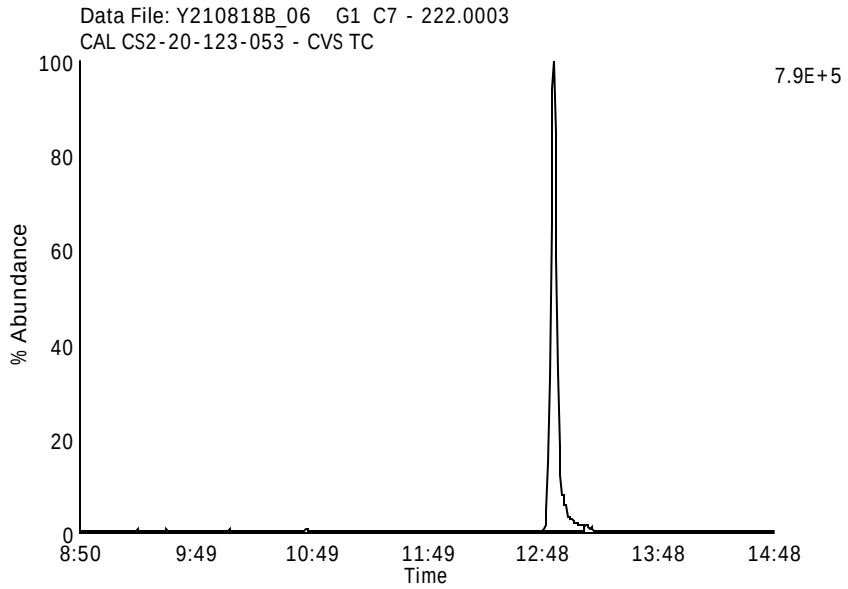
Sample Description: CAL CS2-20-123-053 - CVS TC

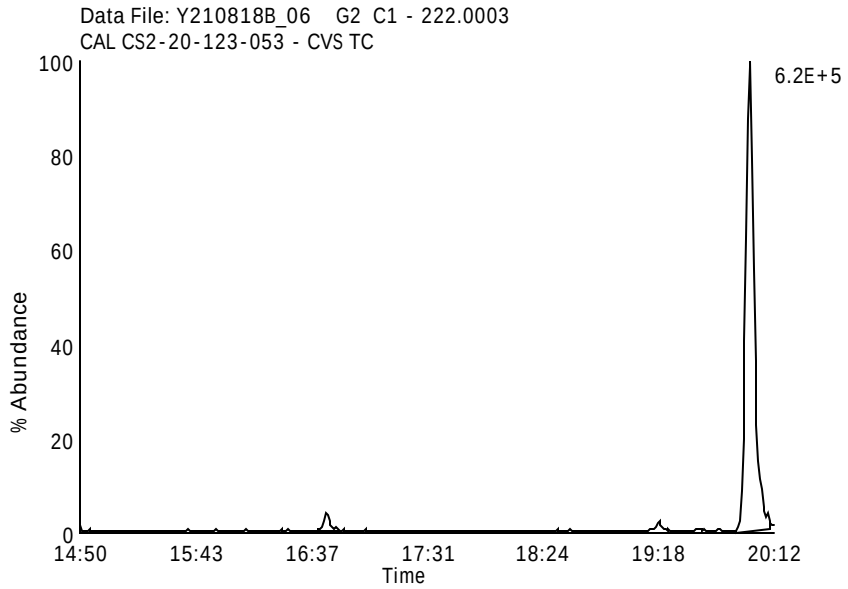


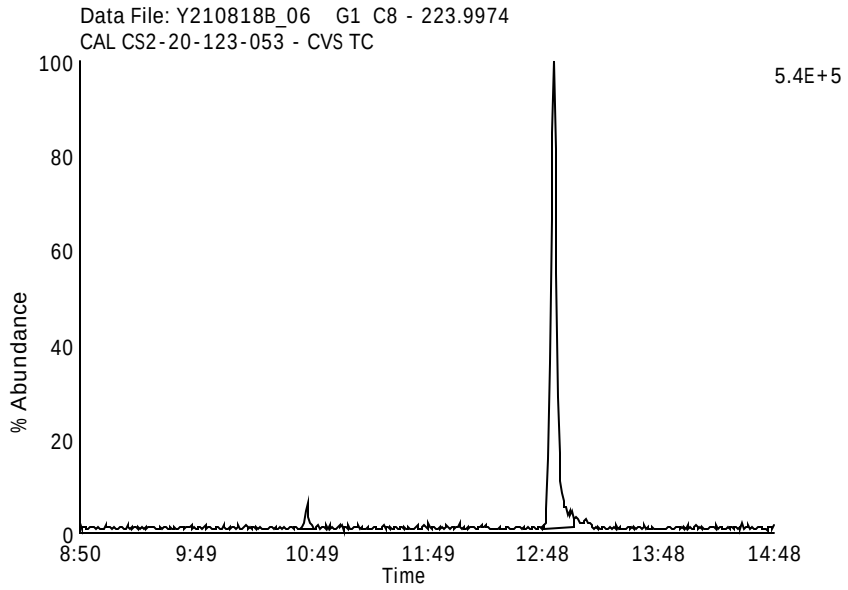


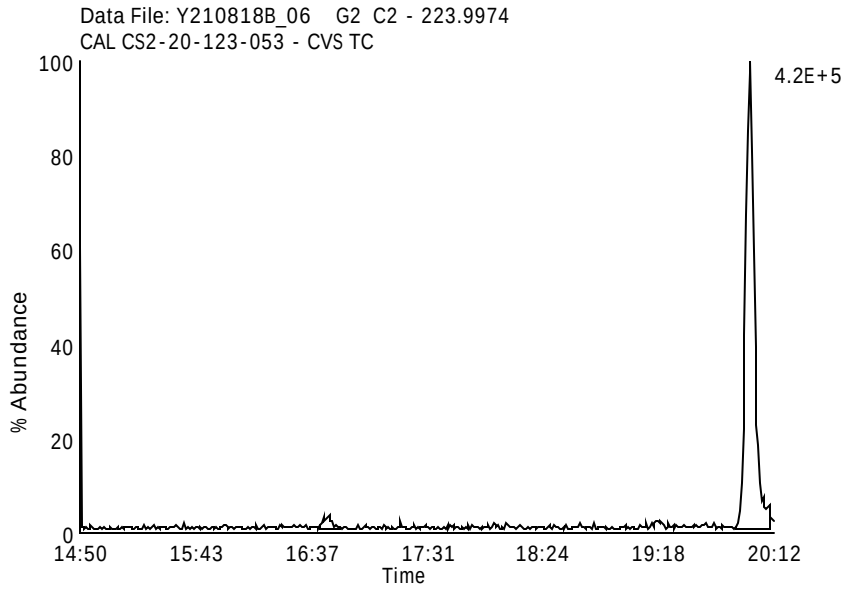
Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



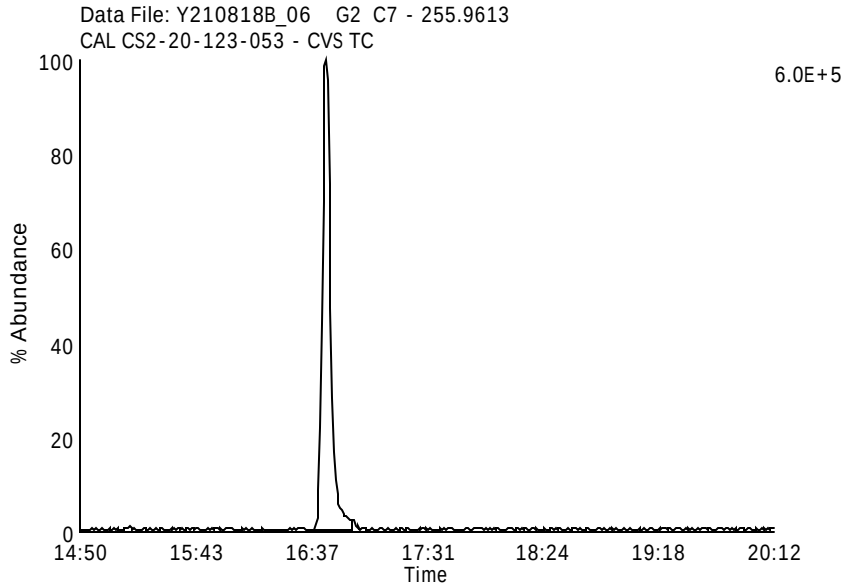


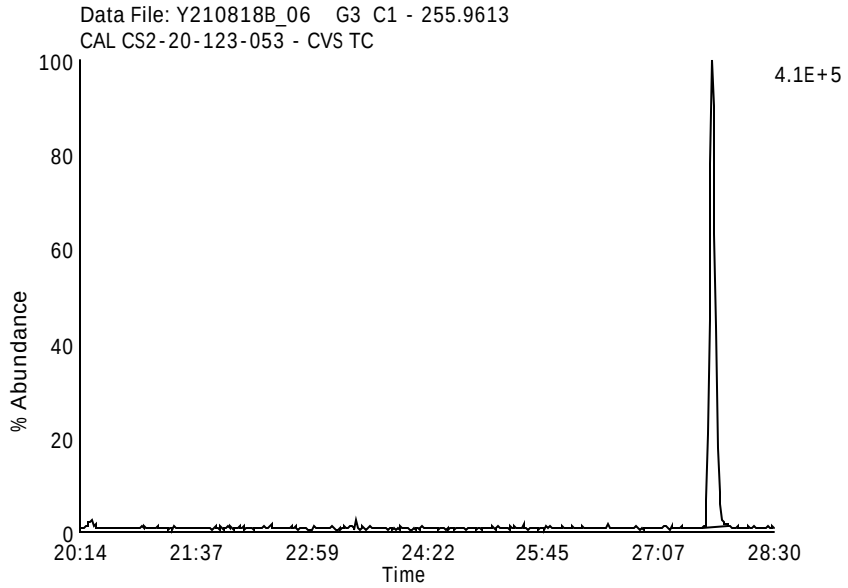


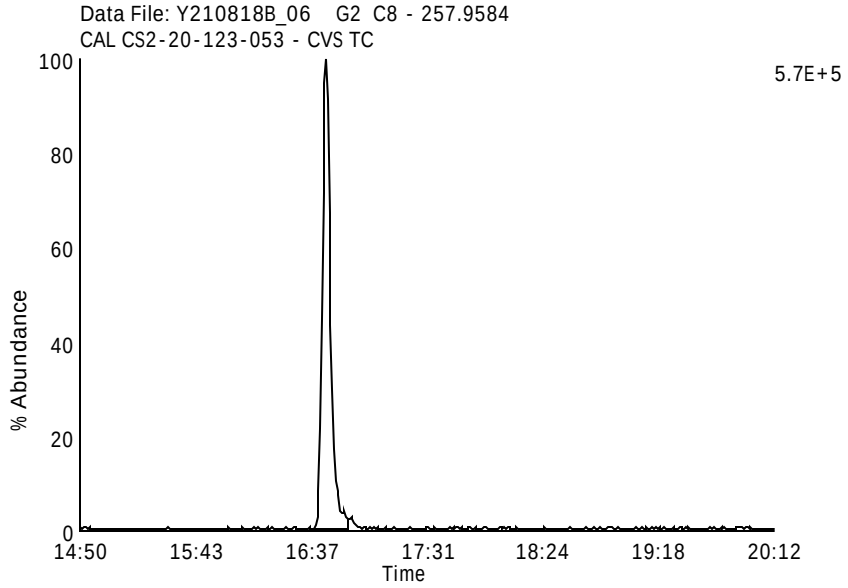


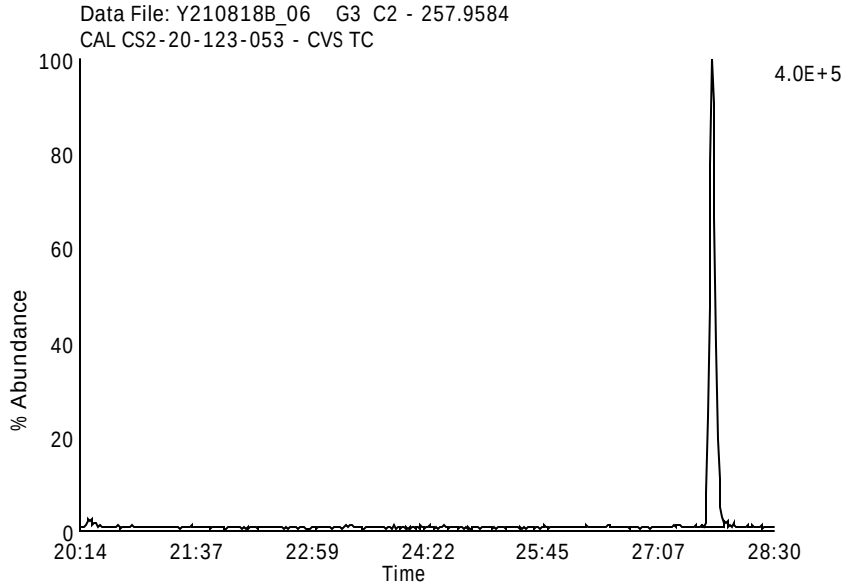
Tri Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







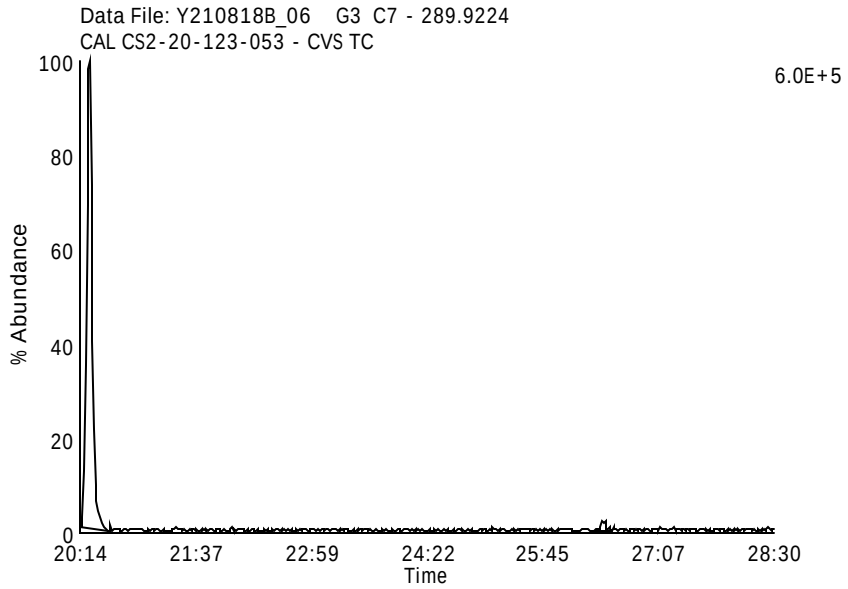


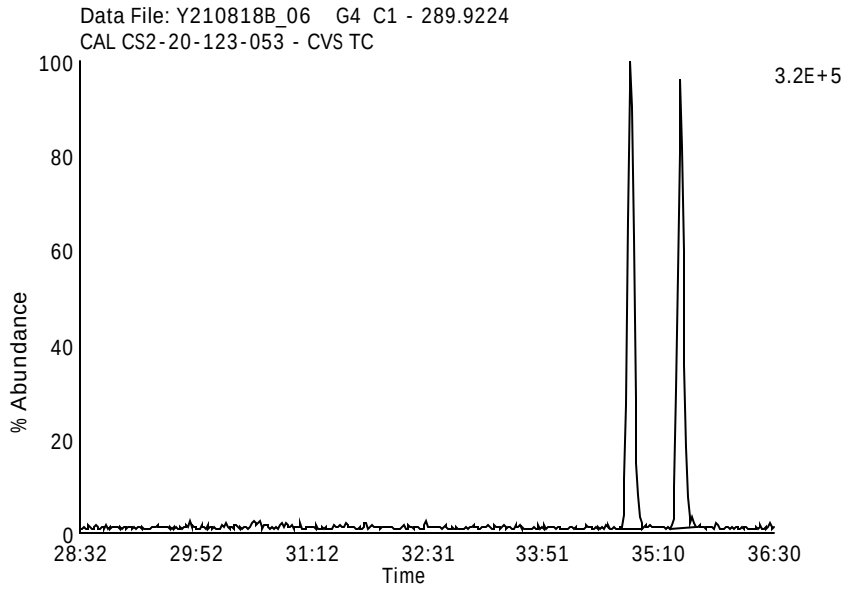
Tetra Chlorinated Biphenyls

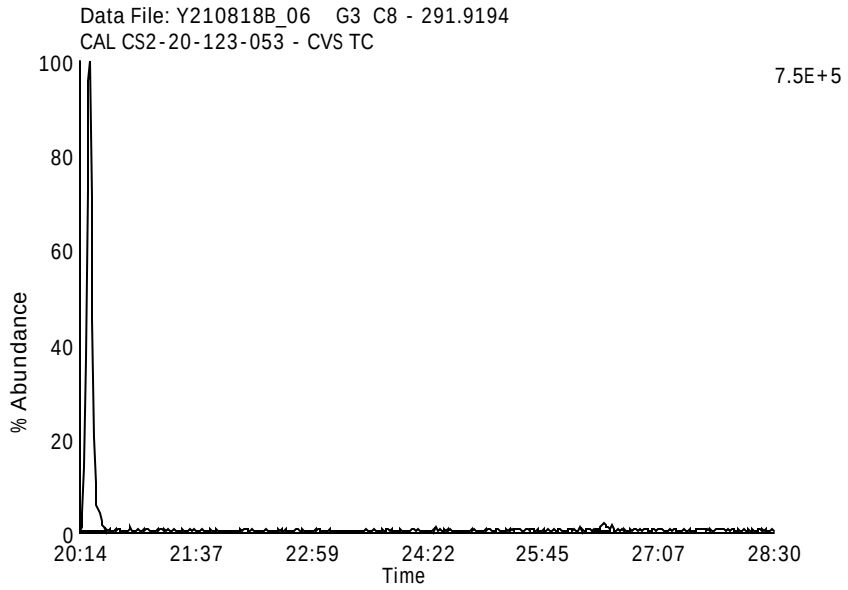
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

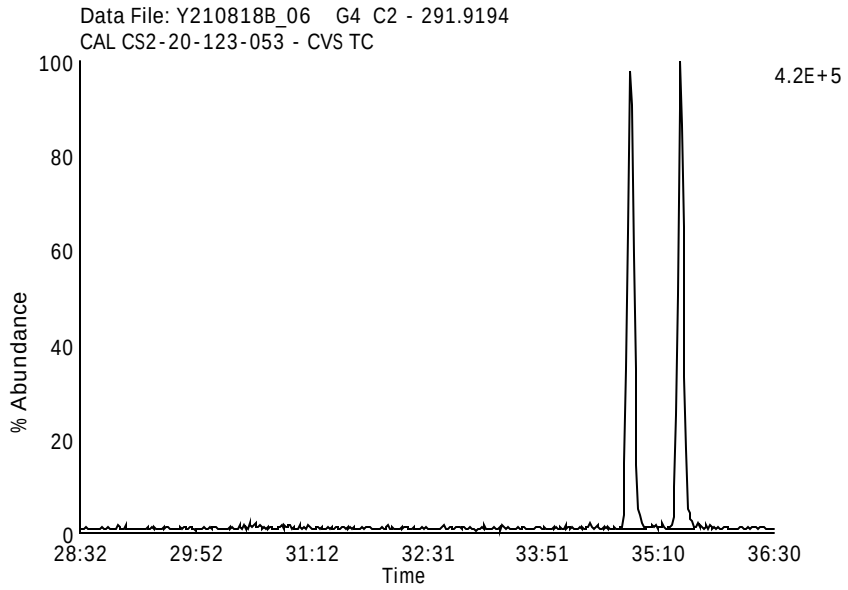
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC









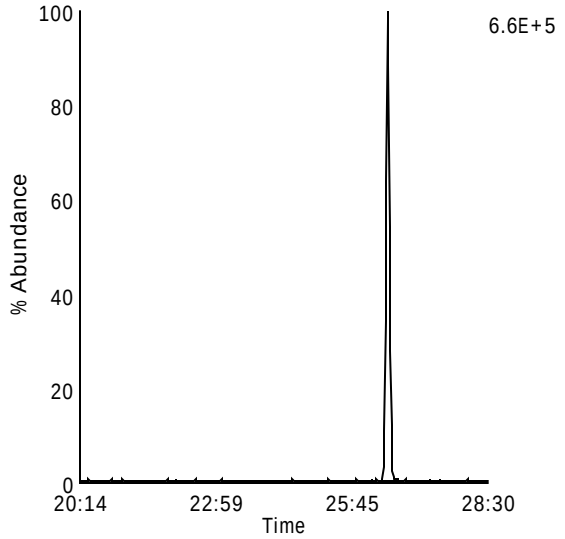
Penta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

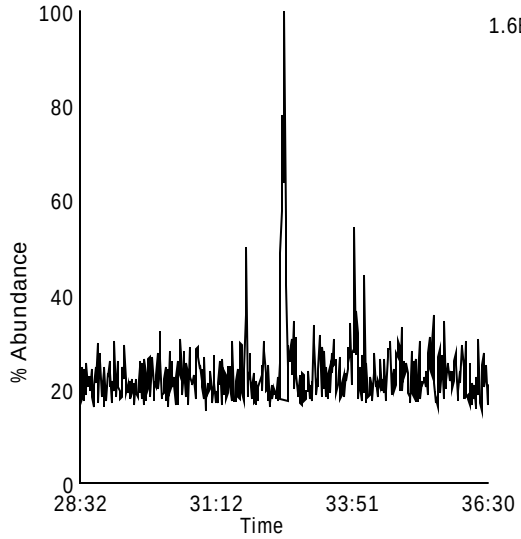
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

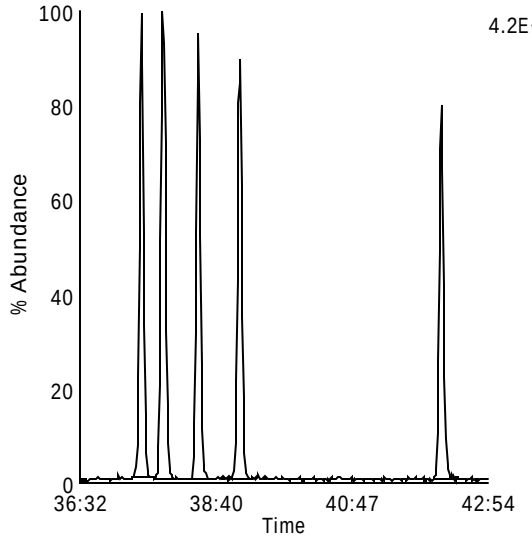
Data File: Y210818B_06 G3 C11 - 325.8804
CAL CS2-20-123-053 - CVS TC



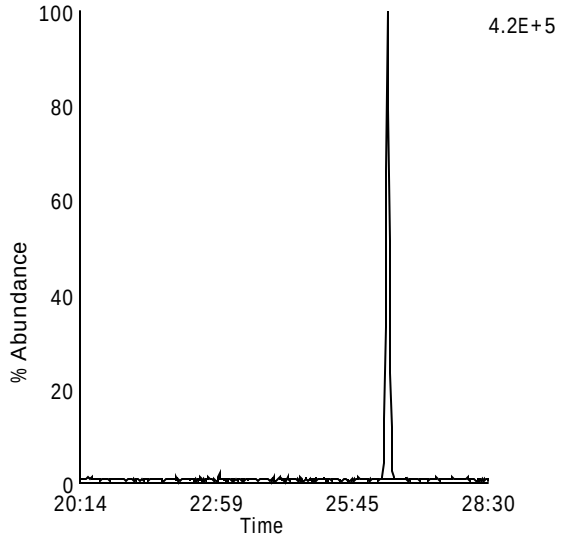
Data File: Y210818B_06 G4 C5 - 325.8804
CAL CS2-20-123-053 - CVS TC



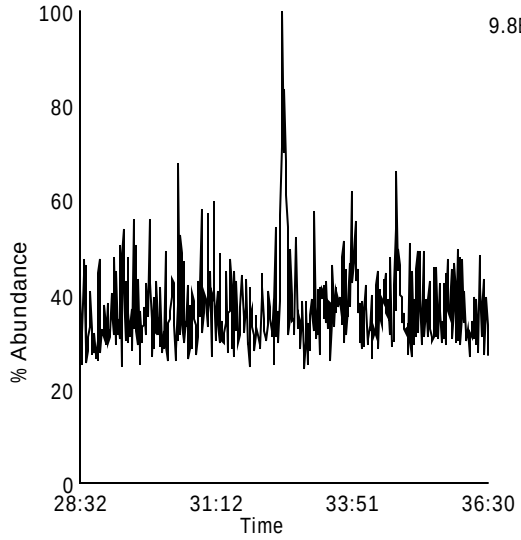
Data File: Y210818B_06 G5 C1 - 325.8804
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G3 C12 - 327.8775
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C6 - 327.8775
CAL CS2-20-123-053 - CVS TC



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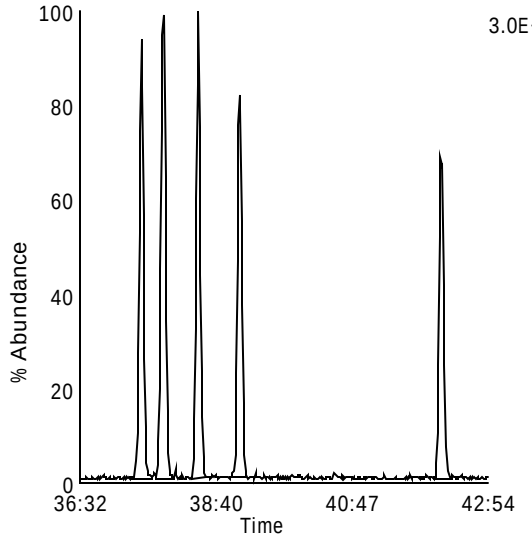
CAL CS2-20-123-053 - CVS TC



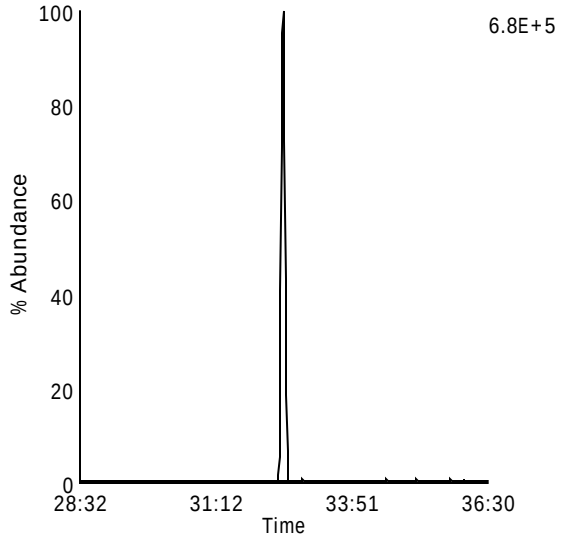
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

Data File: Y210818B_06 G4 C11 - 359.8415
CAL CS2-20-123-053 - CVS TC



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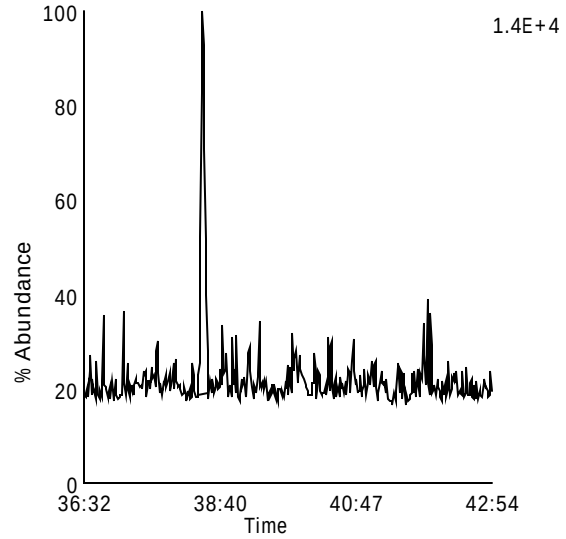
CAL CS2-20-123-053 - CVS TC



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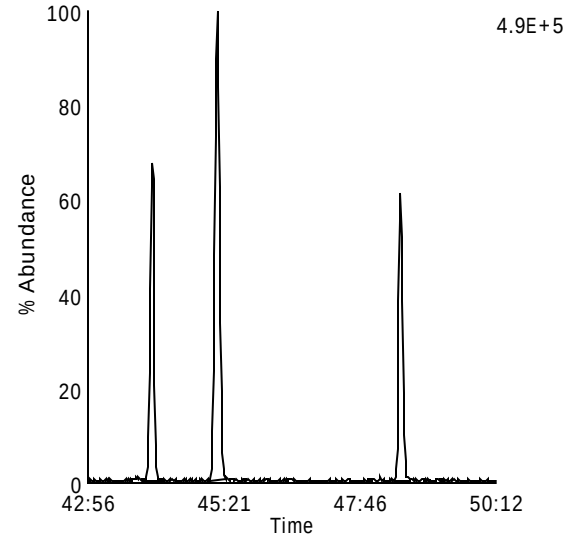
CAL CS2-20-123-053 - CVS TC



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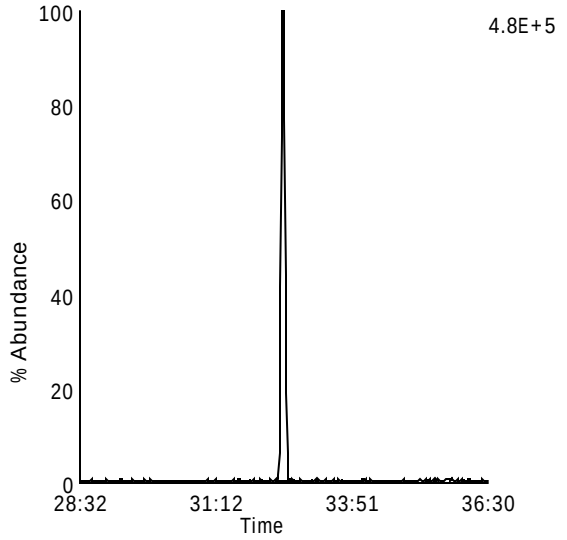
CAL CS2-20-123-053 - CVS TC



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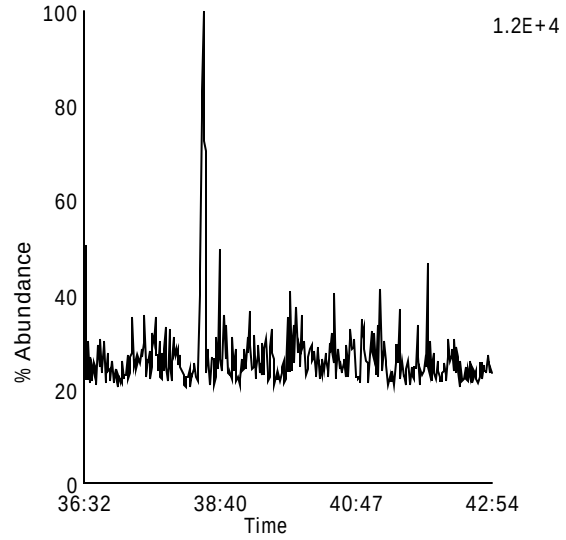
CAL CS2-20-123-053 - CVS TC



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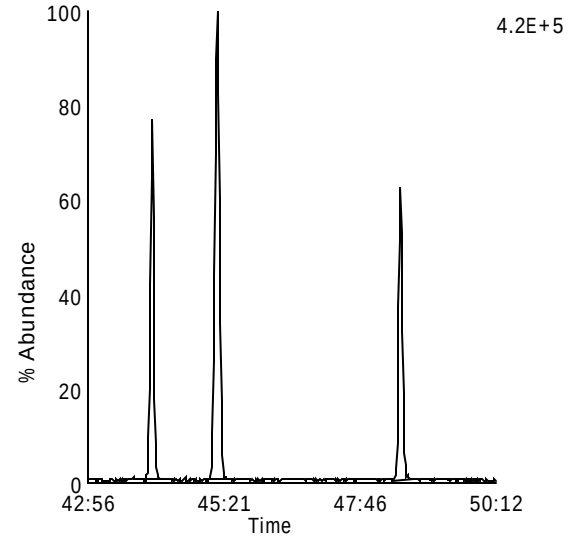
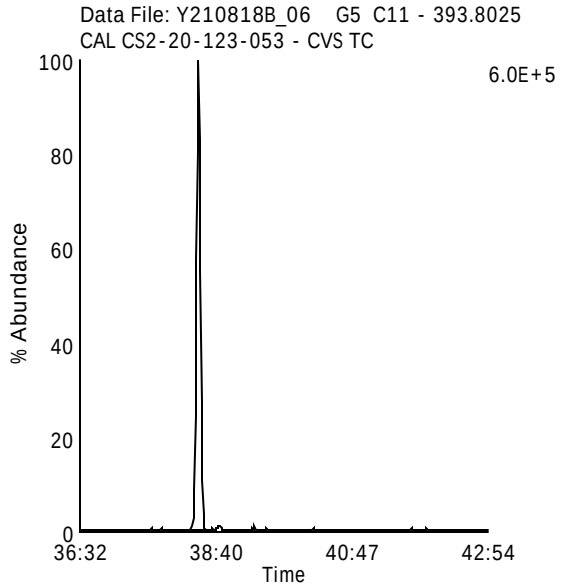
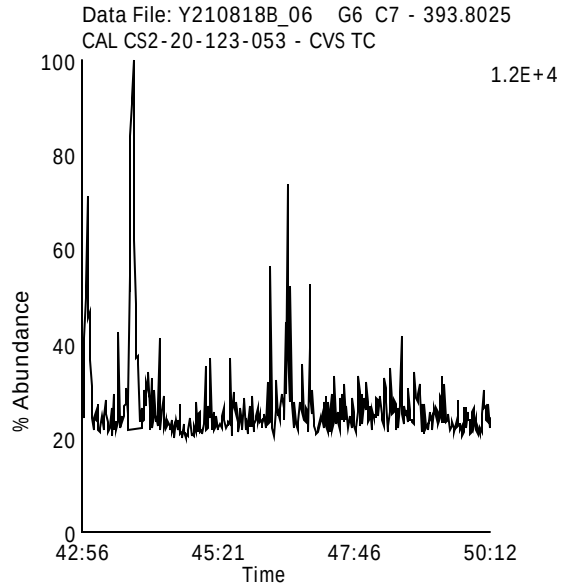
CAL CS2-20-123-053 - CVS TC

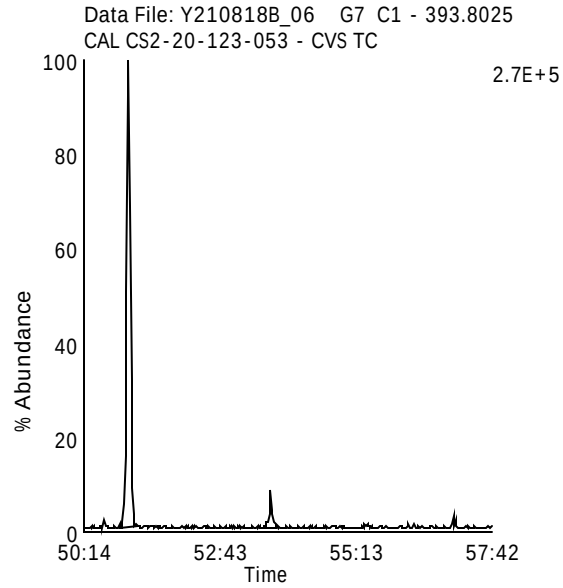


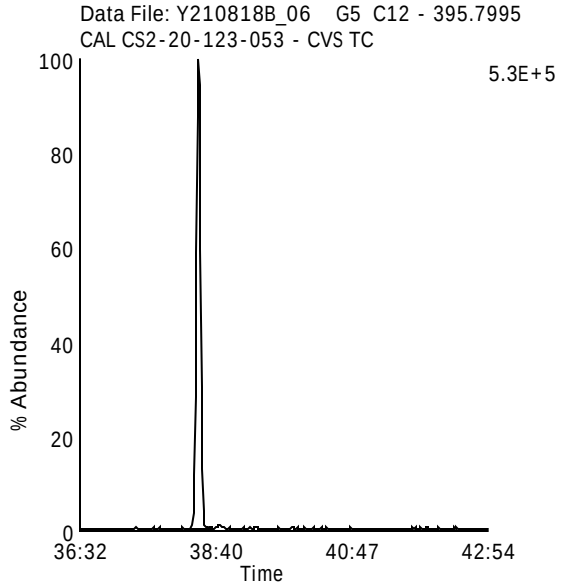
Hepta Chlorinated Biphenyls

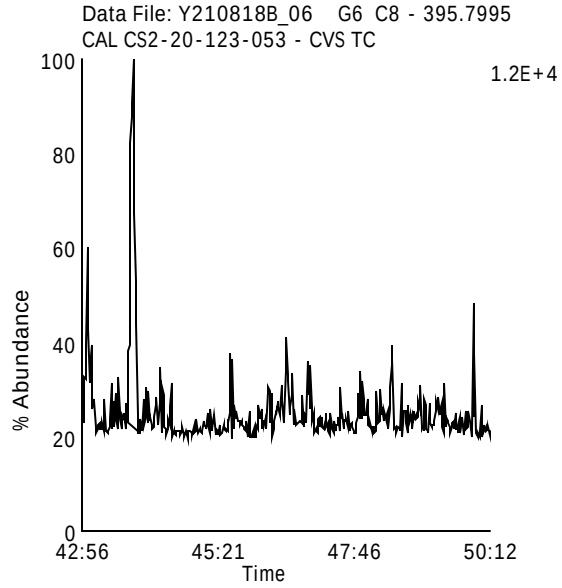
Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC

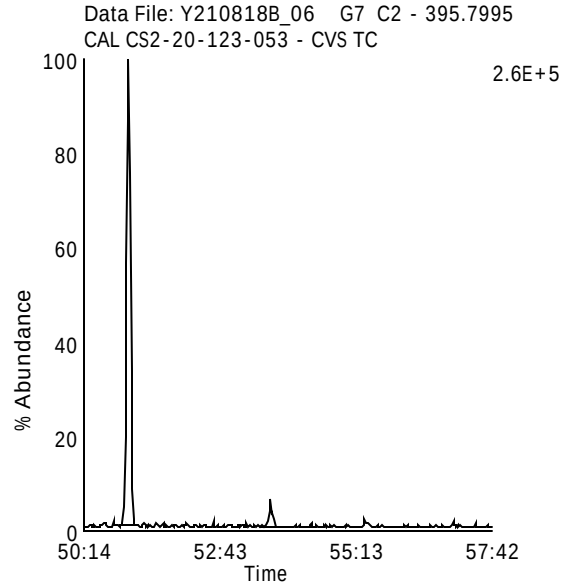






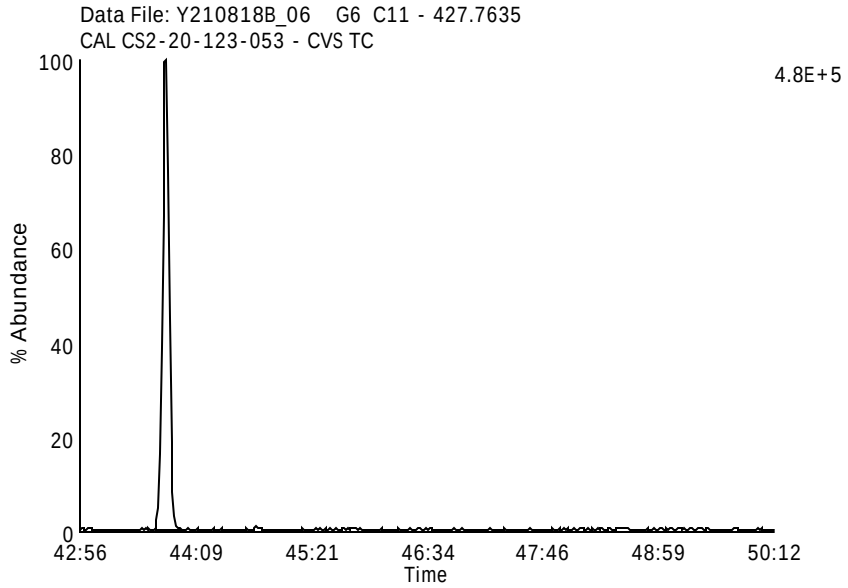


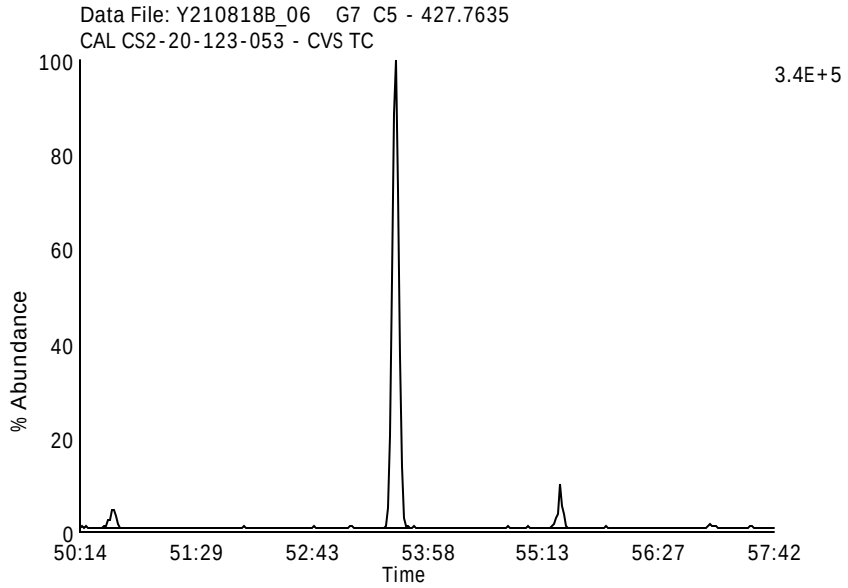


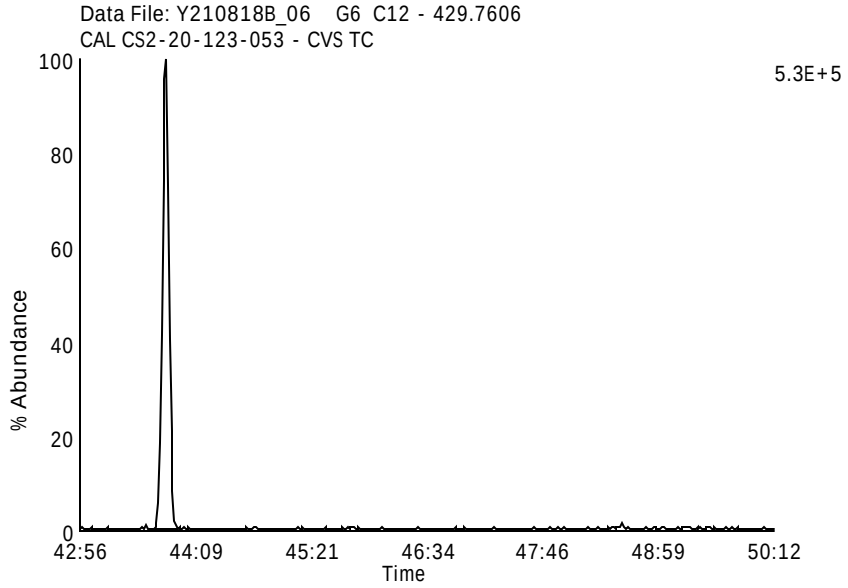


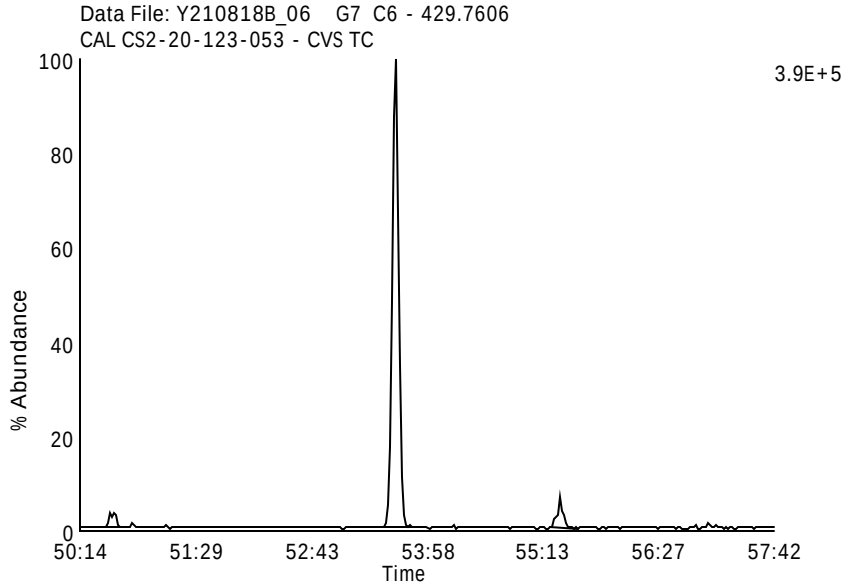
Octa Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







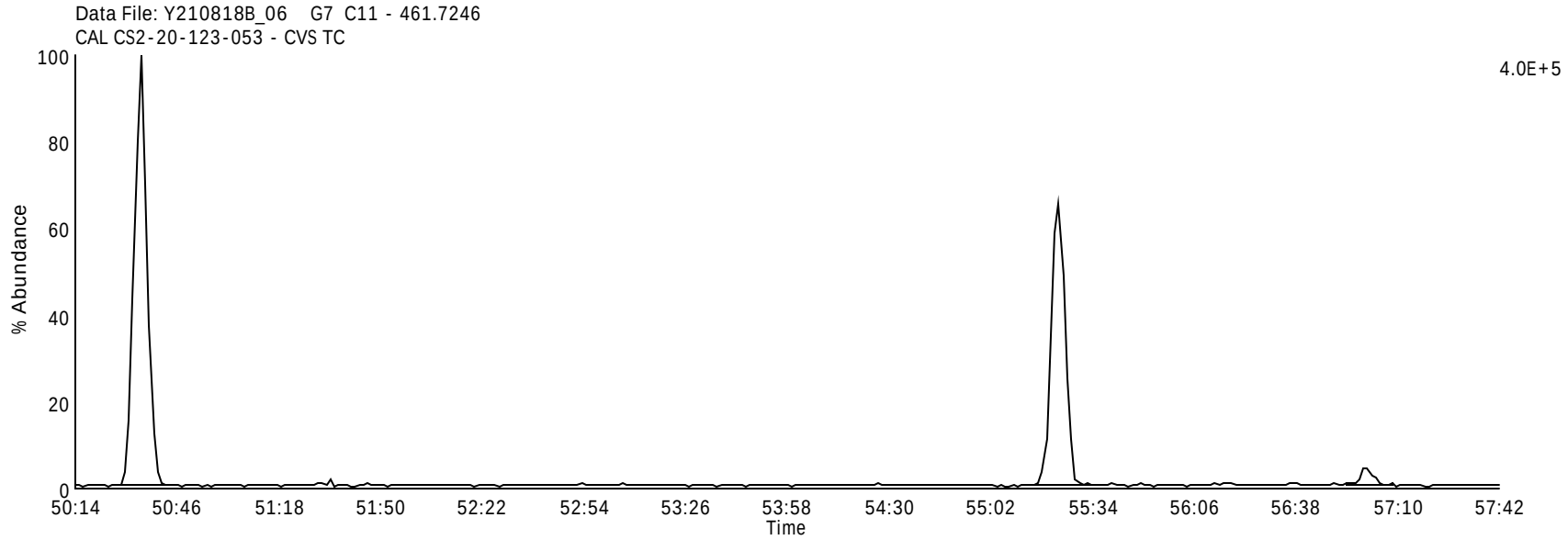


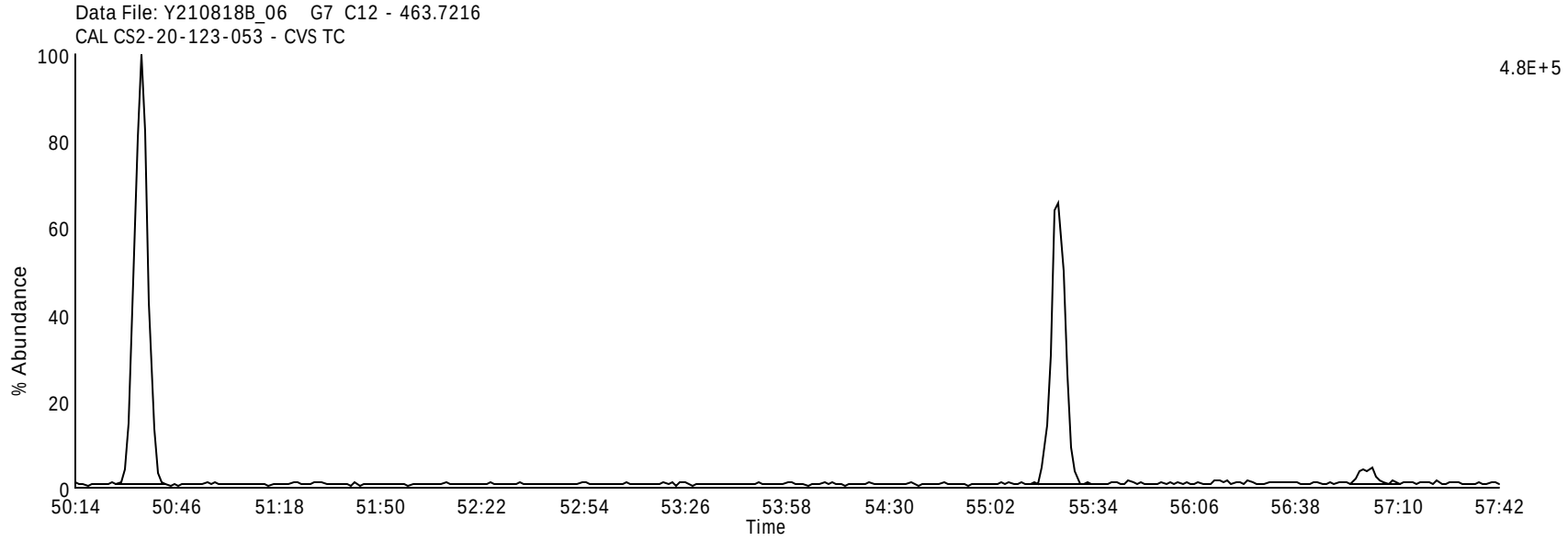
Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



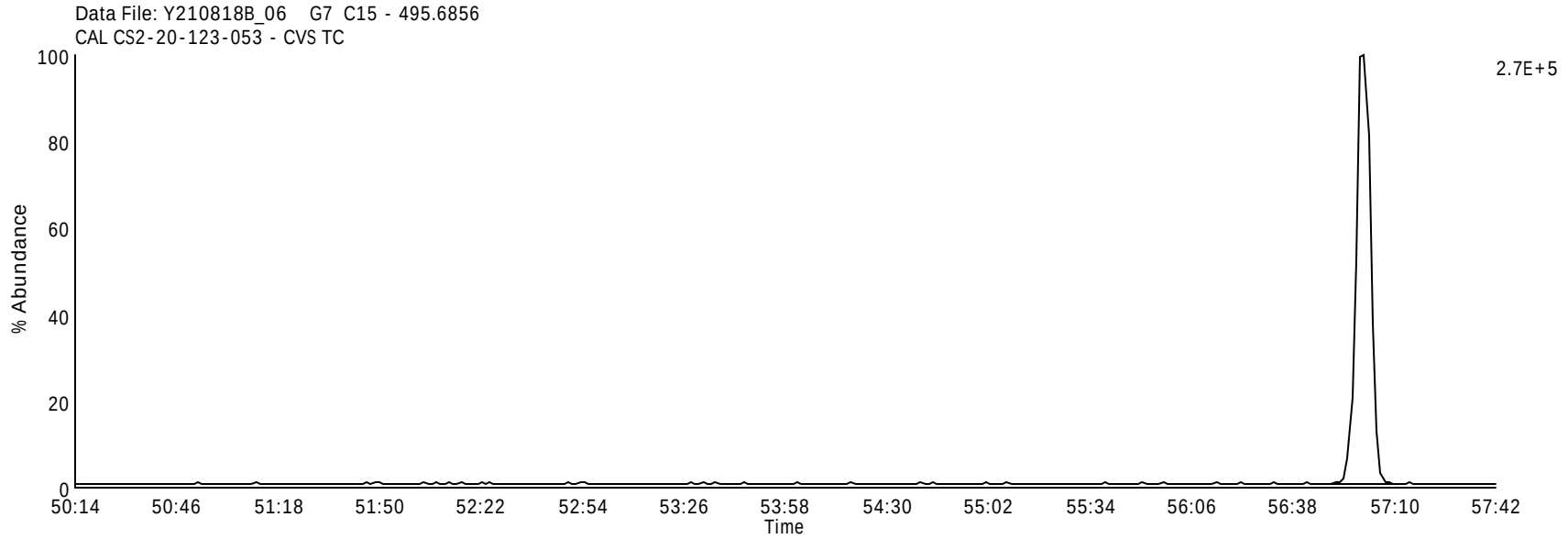


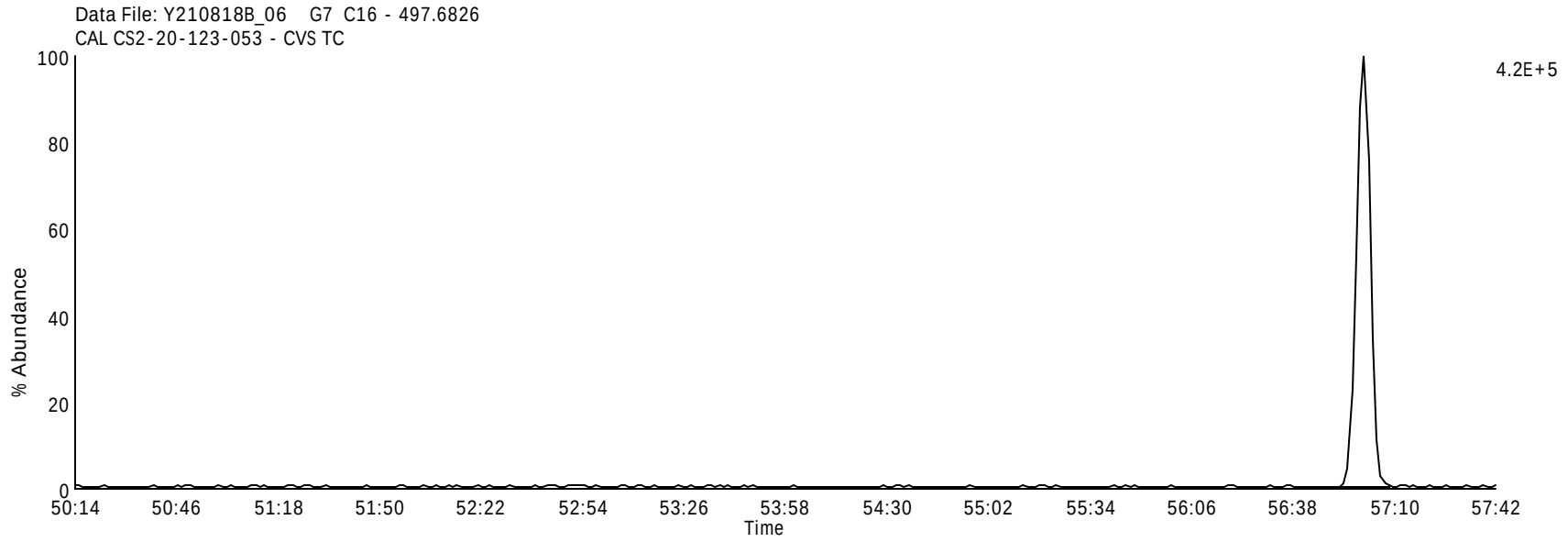
Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

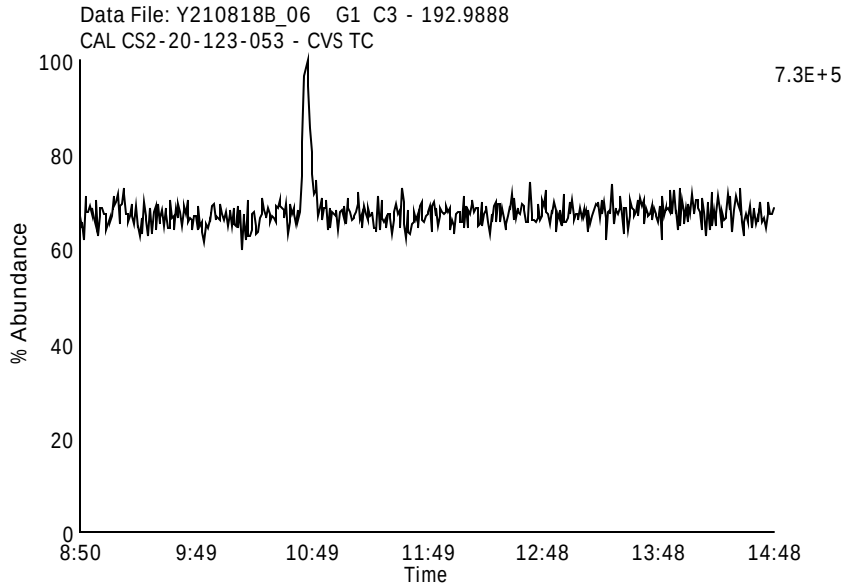
Sample Description: CAL CS2-20-123-053 - CVS TC

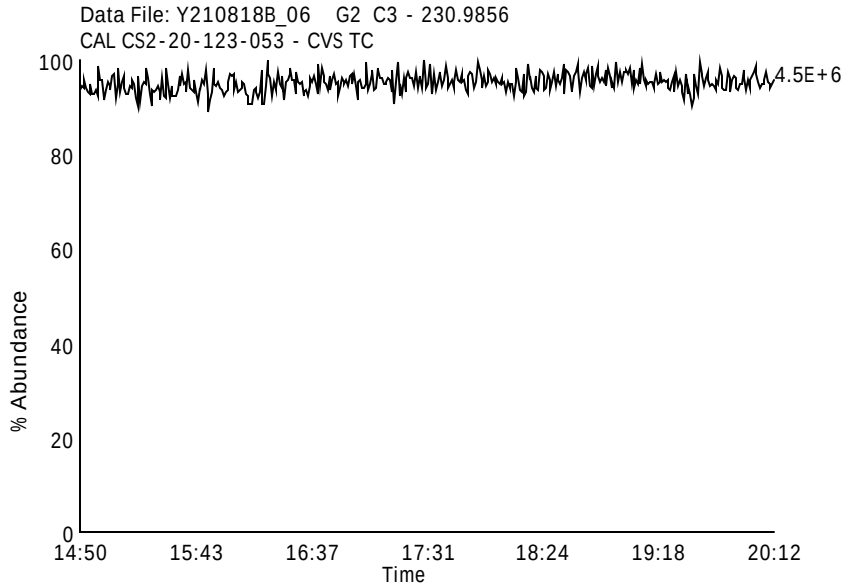


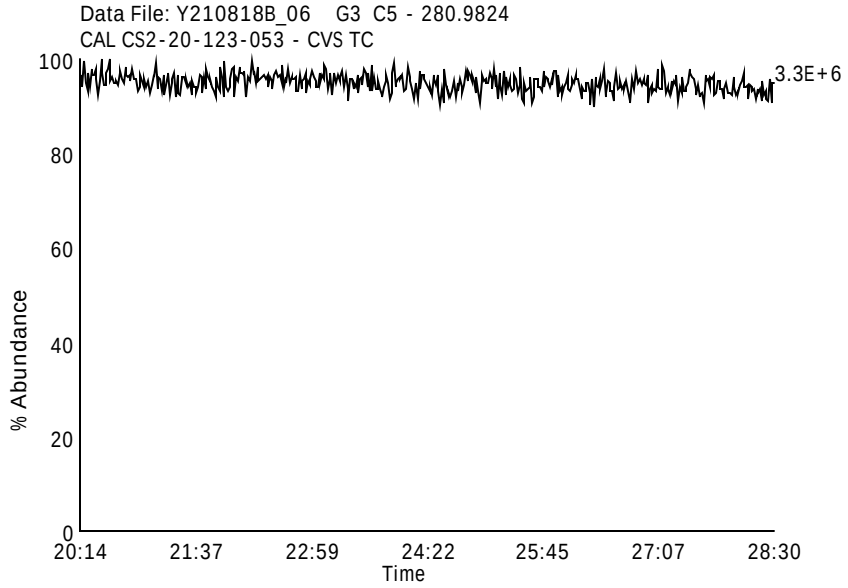


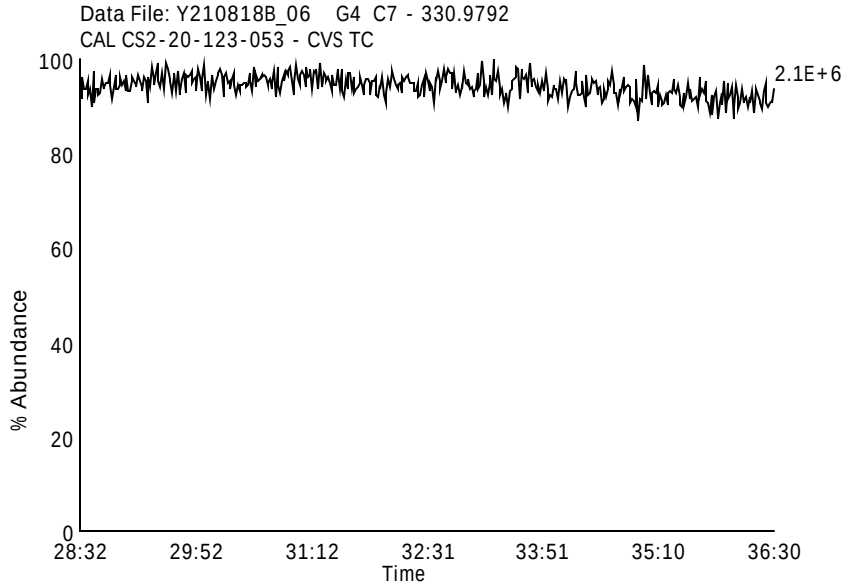
Group 1 - 4 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC





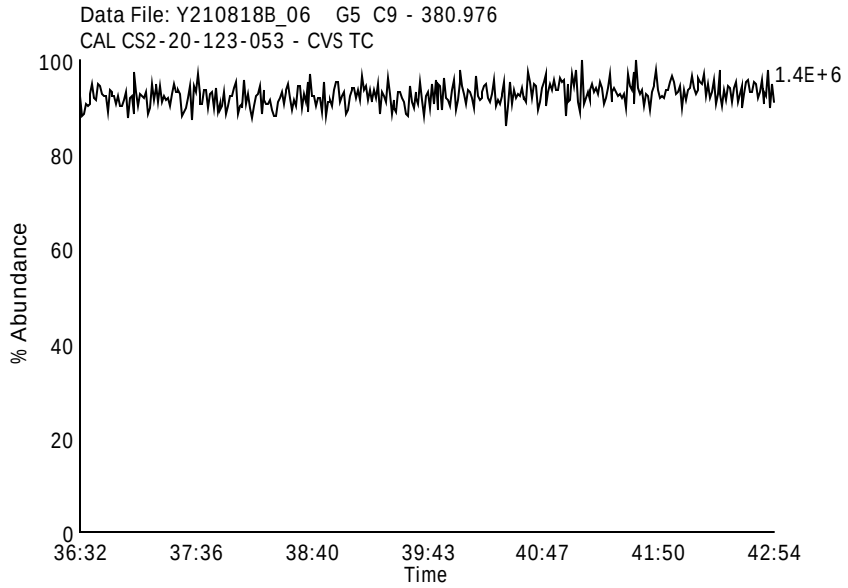


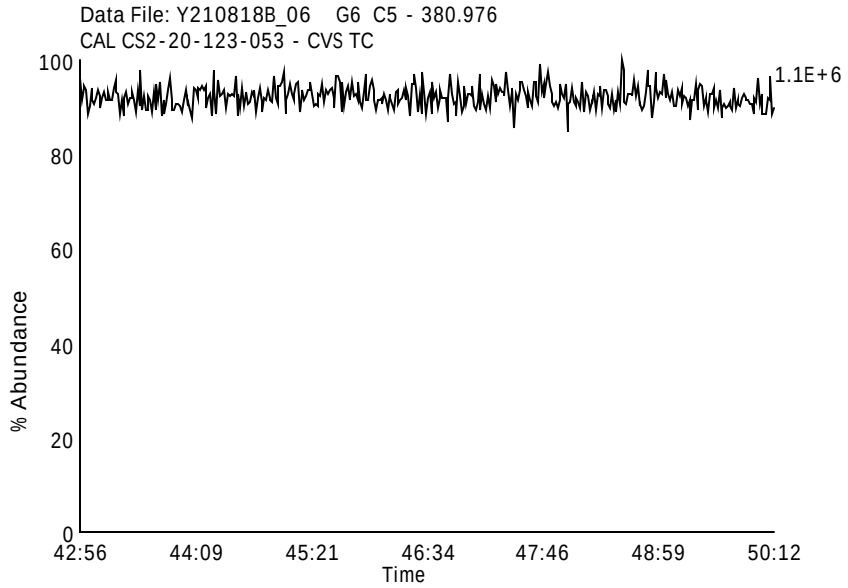


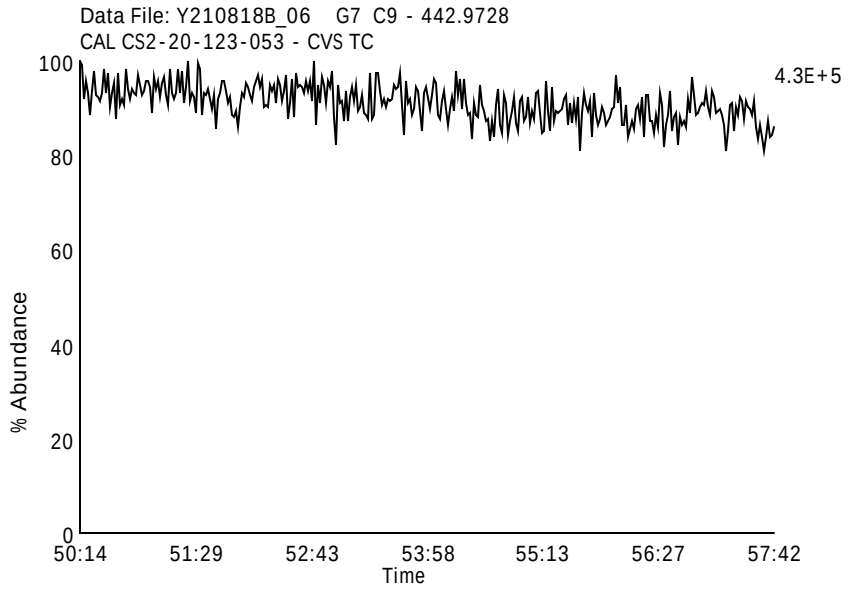
Group 5 - 7 Lock mass

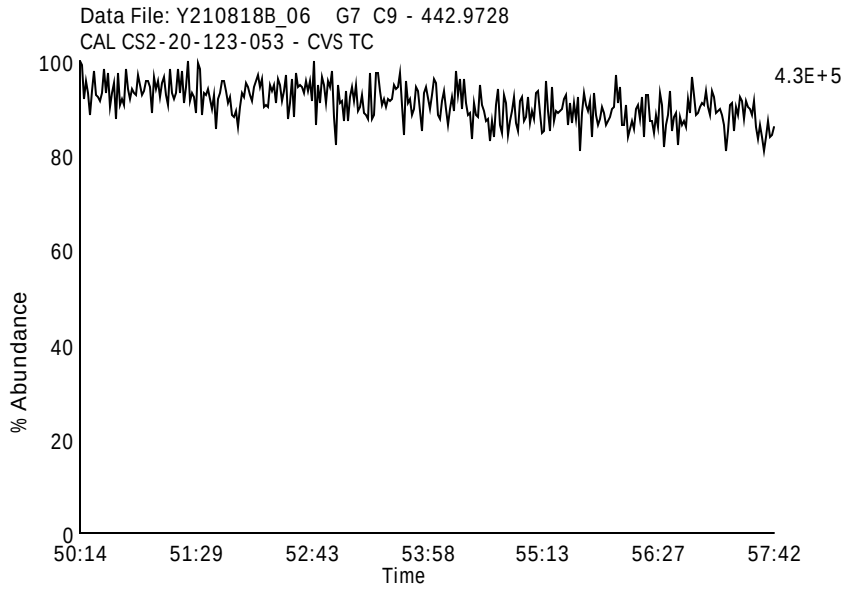
Data File Name: Y210818B_06
Date Acquired: 8/18/2021
Sample Description: CAL CS2-20-123-053 - CVS TC

Lab Sample ID: CS2-20-123-053
Instrument: 10MSHR12 (Y)







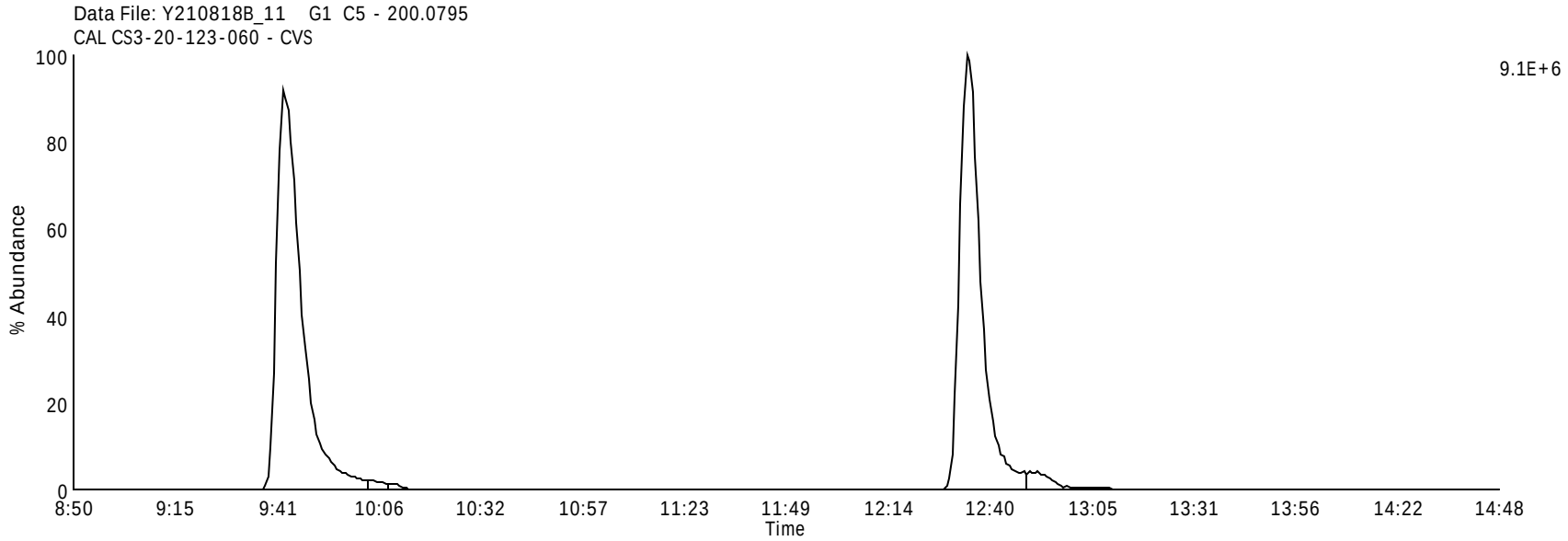


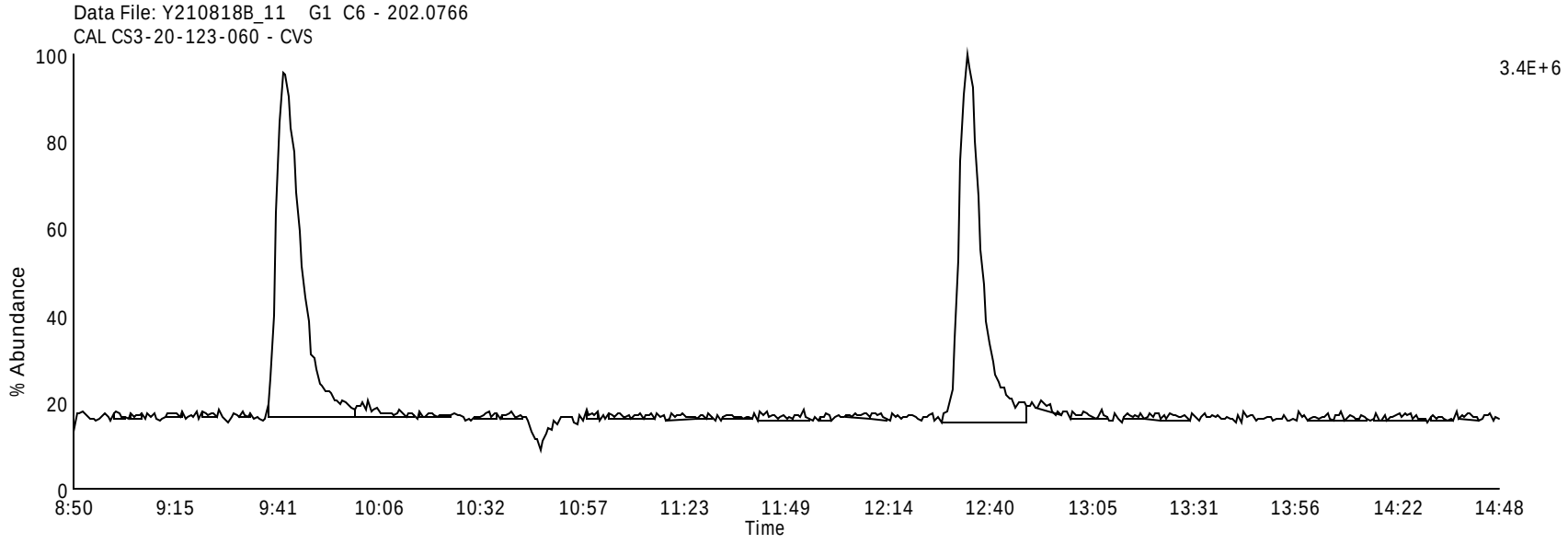
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS

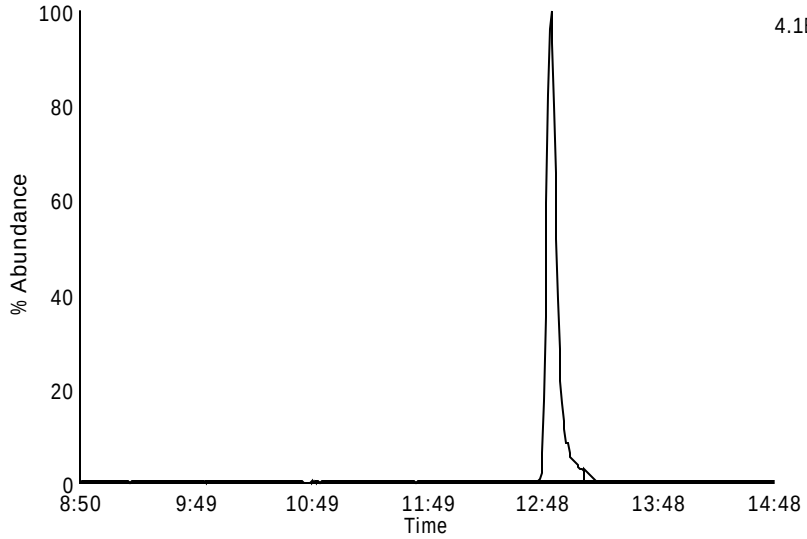




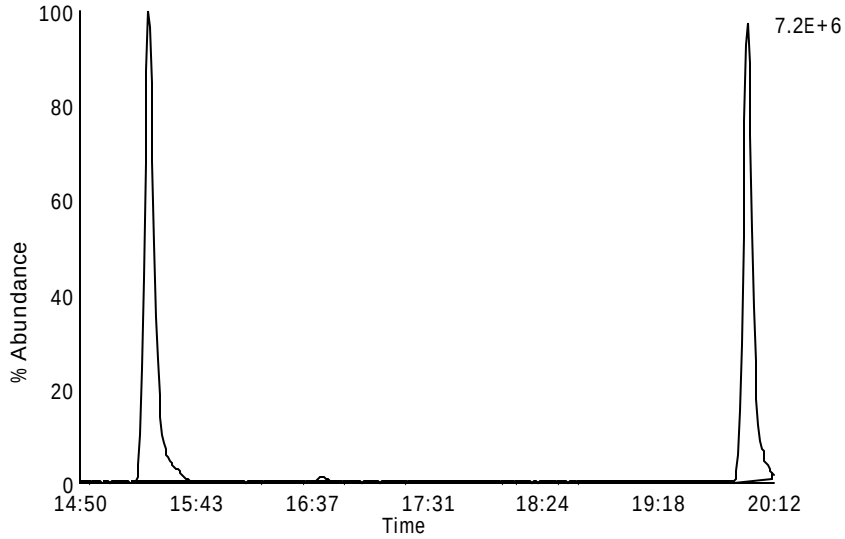
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

Data File: Y210818B_11 G1 C9 - 234.0406
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G2 C5 - 234.0406
CAL CS3-20-123-060 - CVS



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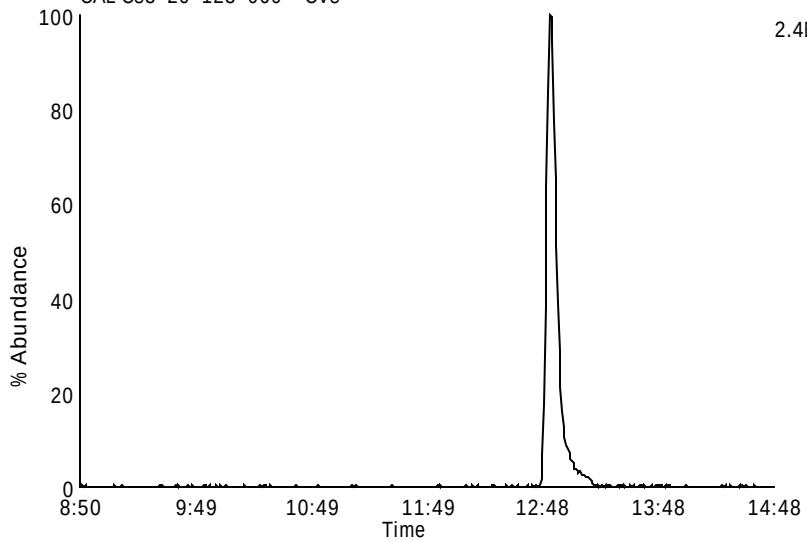
CAL CS3-20-123-060 - CVS



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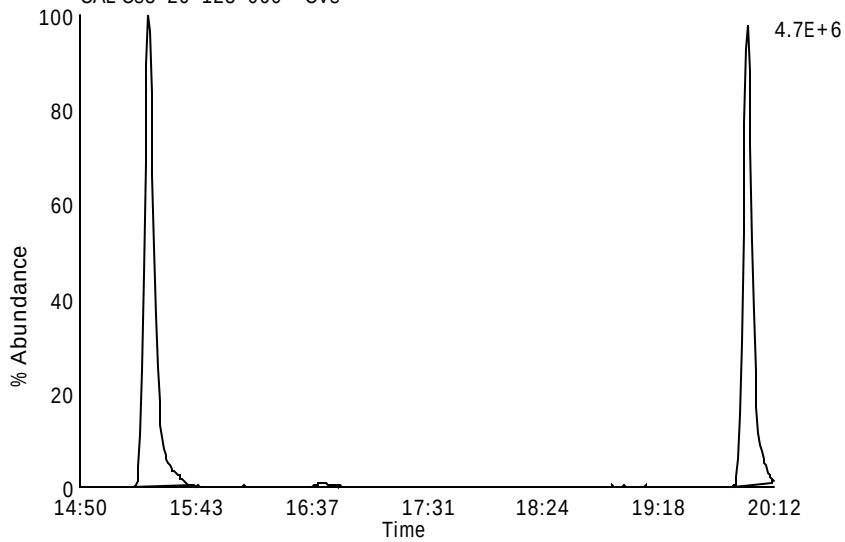
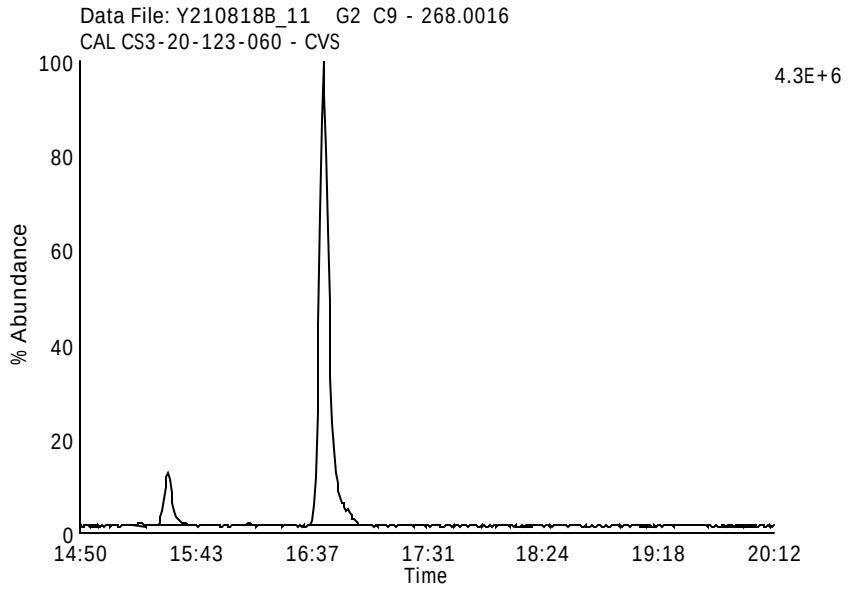
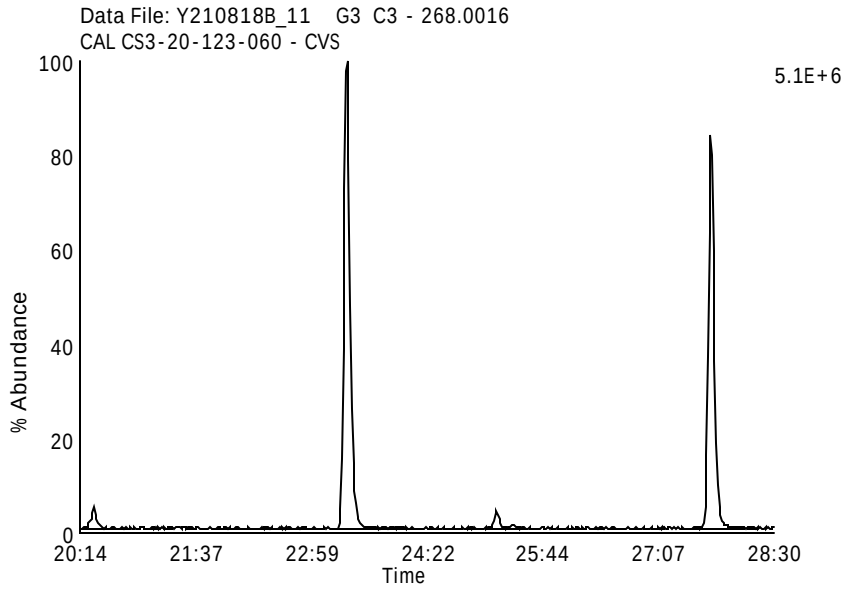
CAL CS3-20-123-060 - CVS

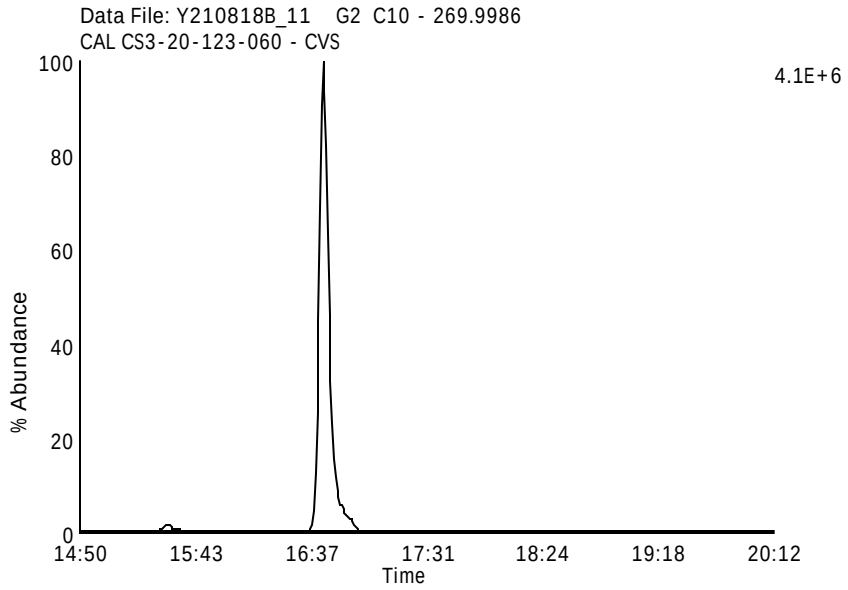


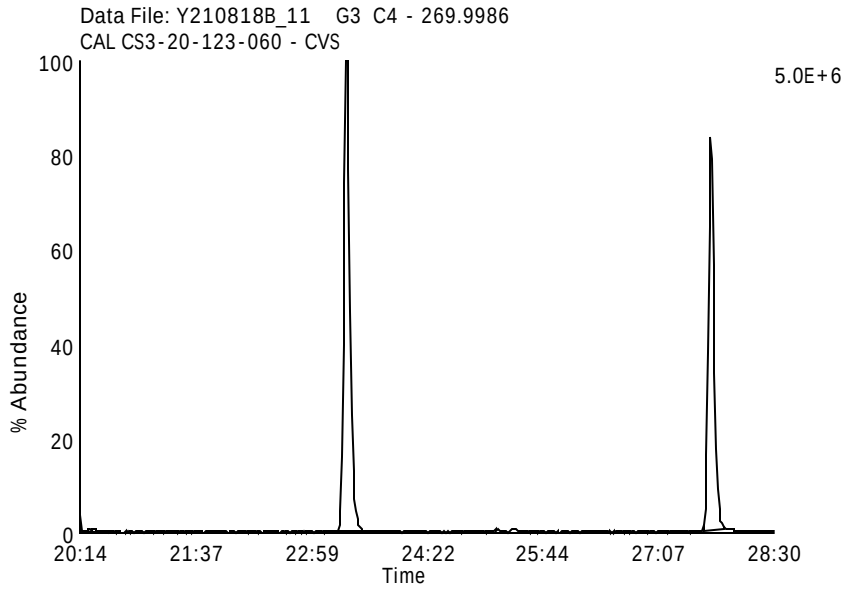
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



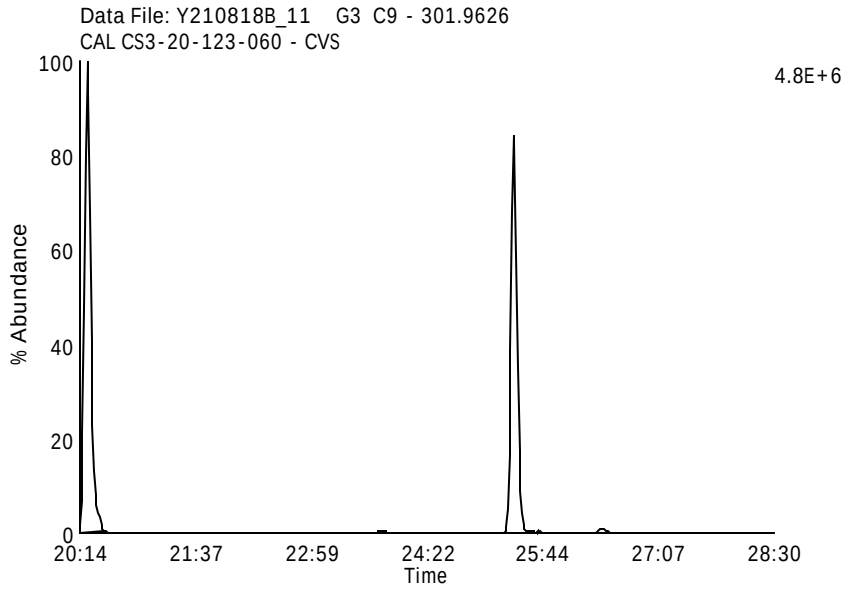


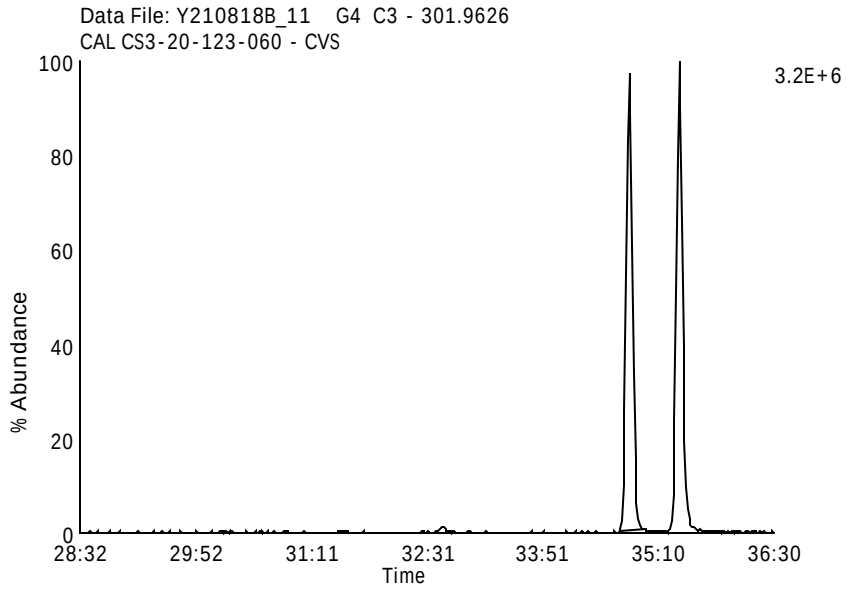


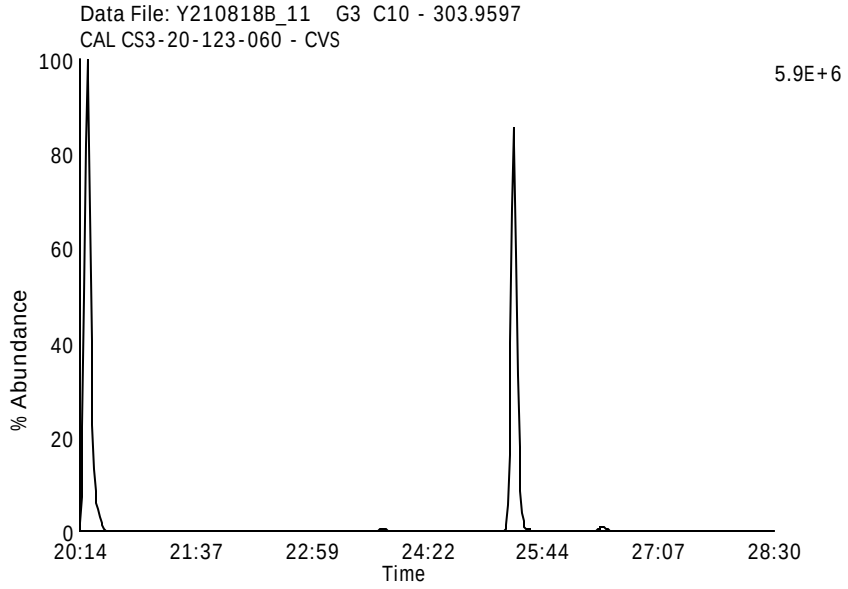


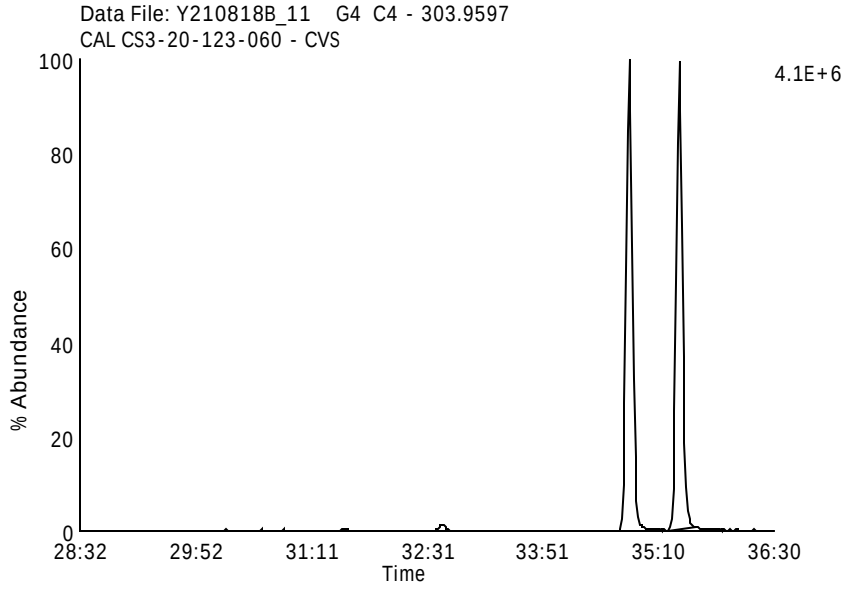
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







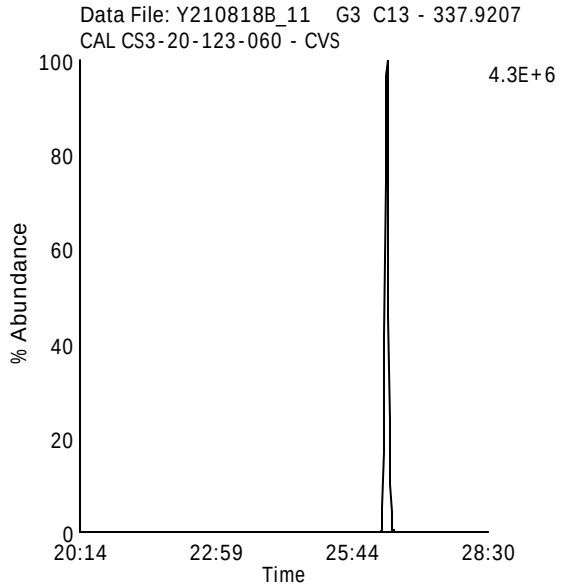


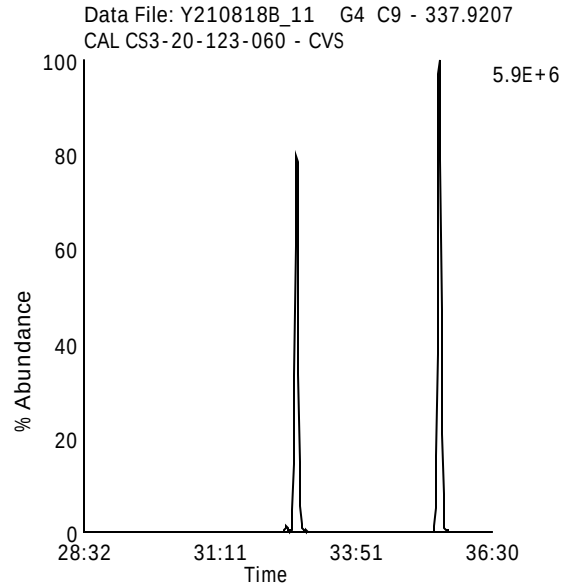
Labeled Penta Chlorinated Biphenyls

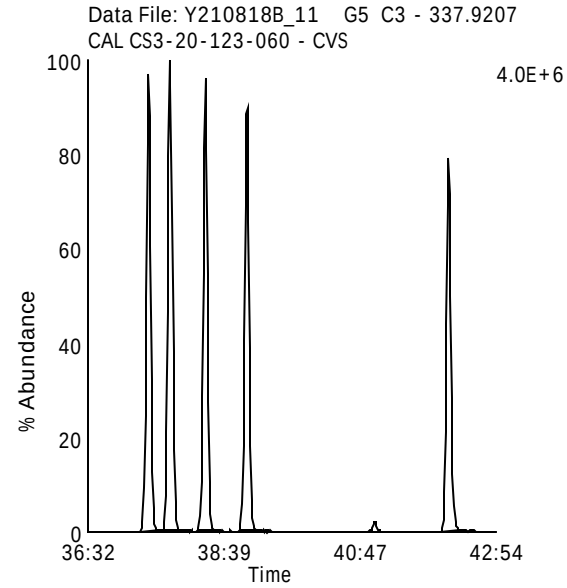
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

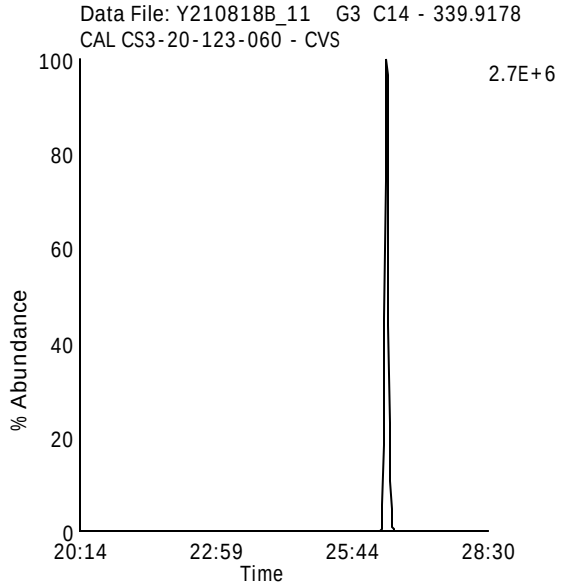
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

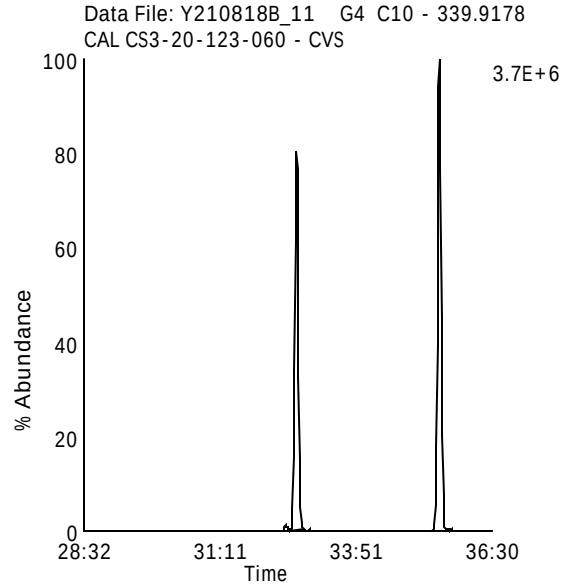
Sample Description: CAL CS3-20-123-060 - CVS

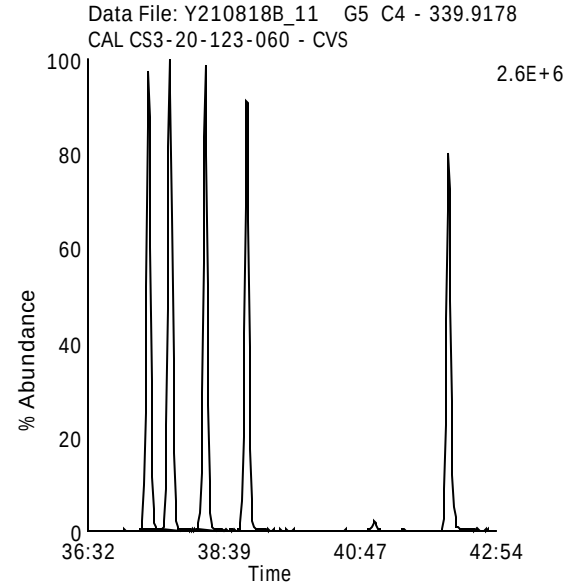










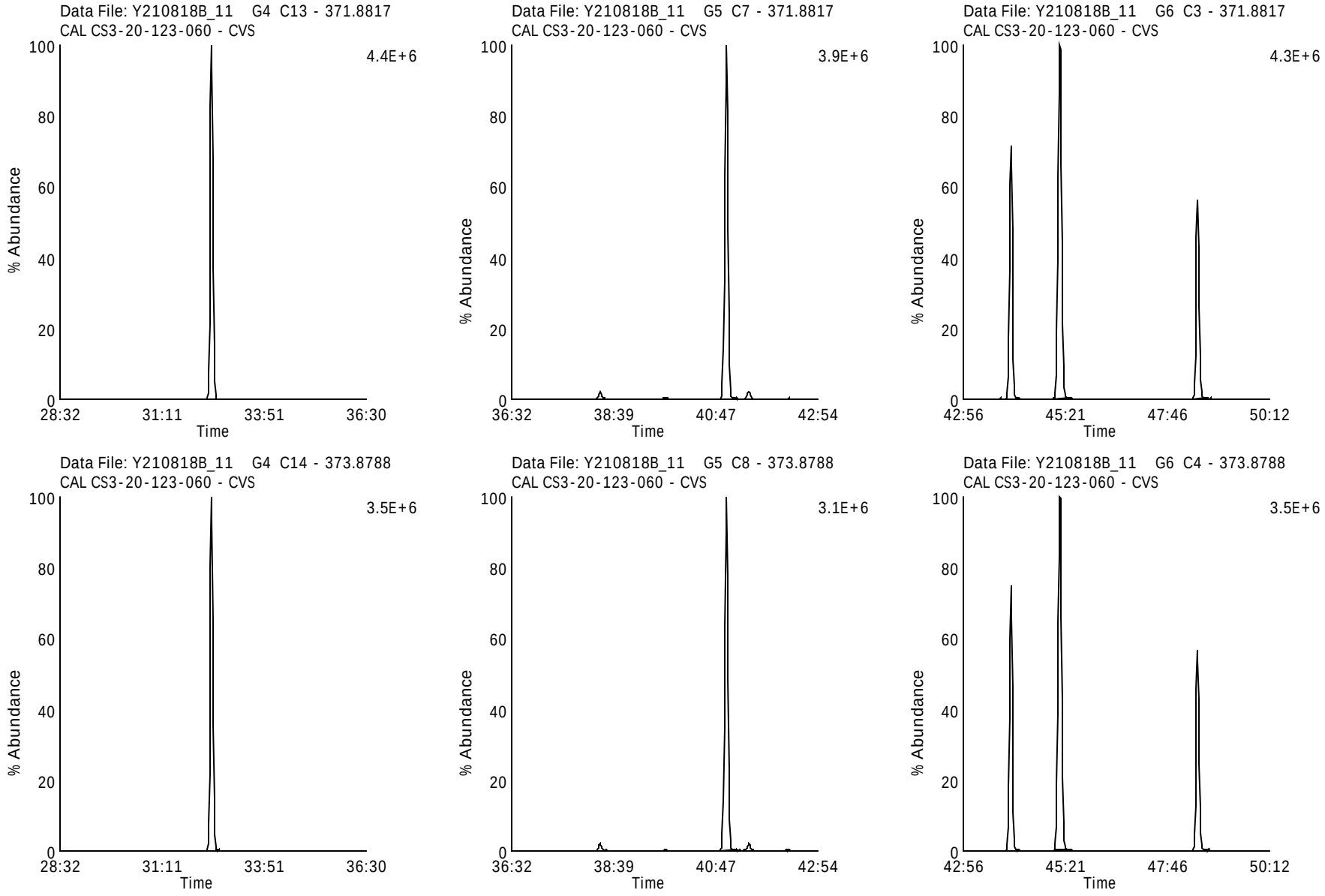


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

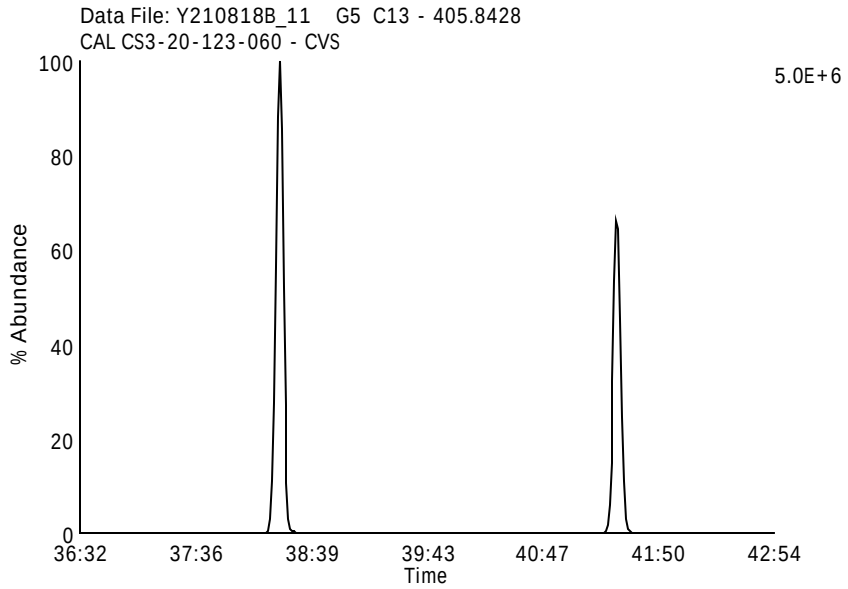
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

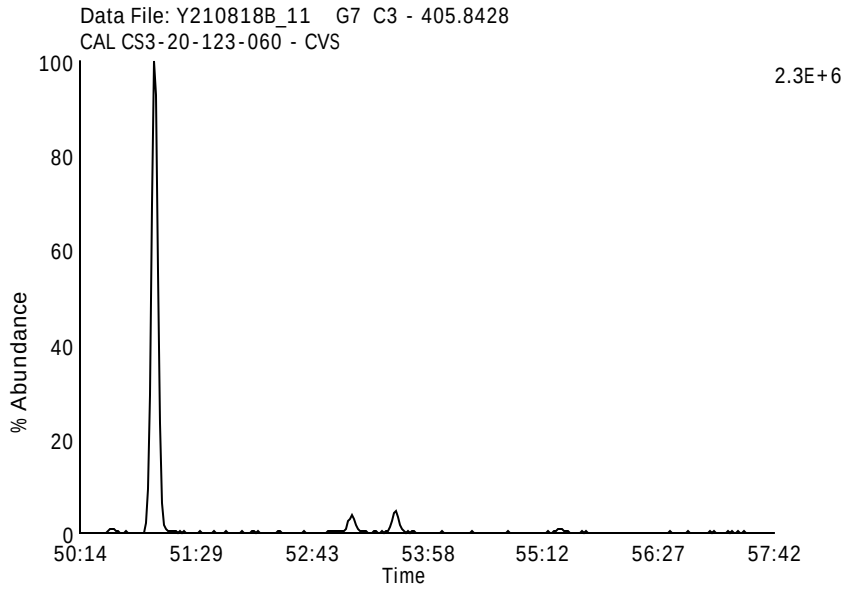
Sample Description: CAL CS3-20-123-060 - CVS

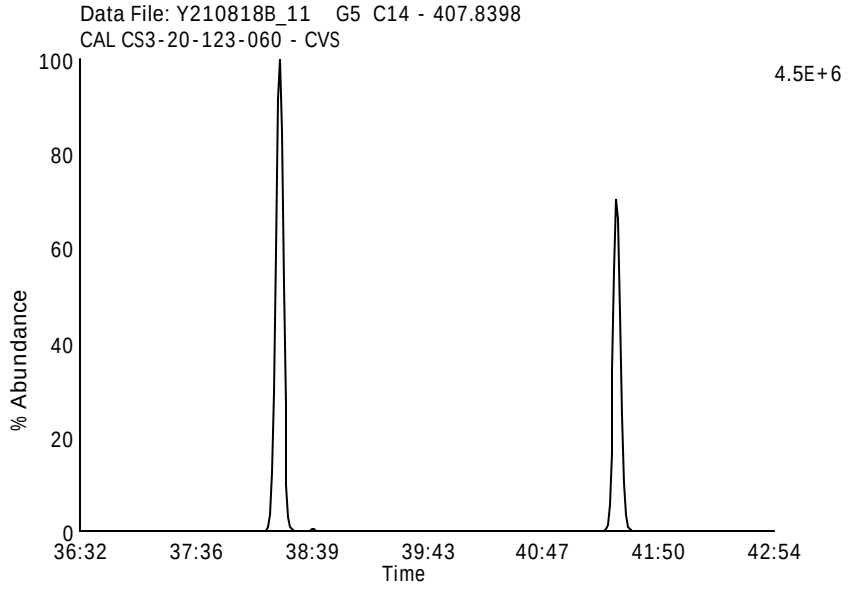


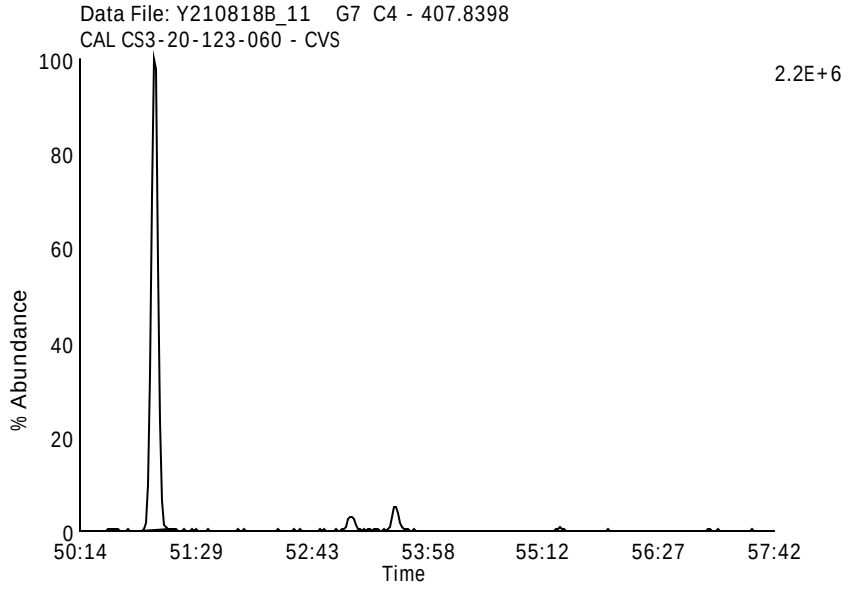
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





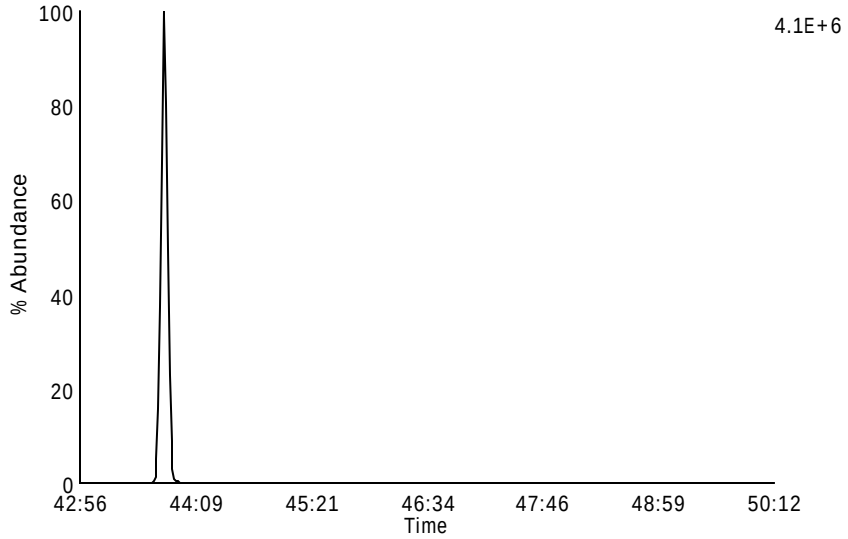




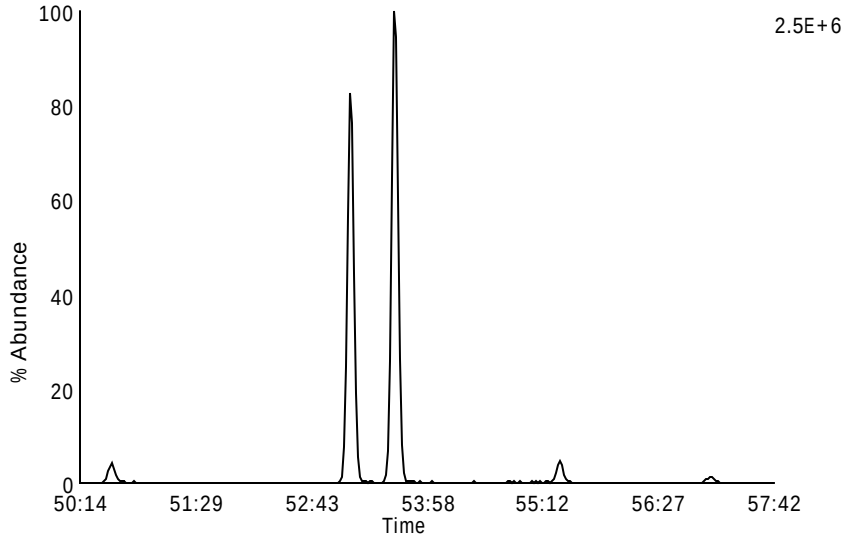
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

Data File: Y210818B_11 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



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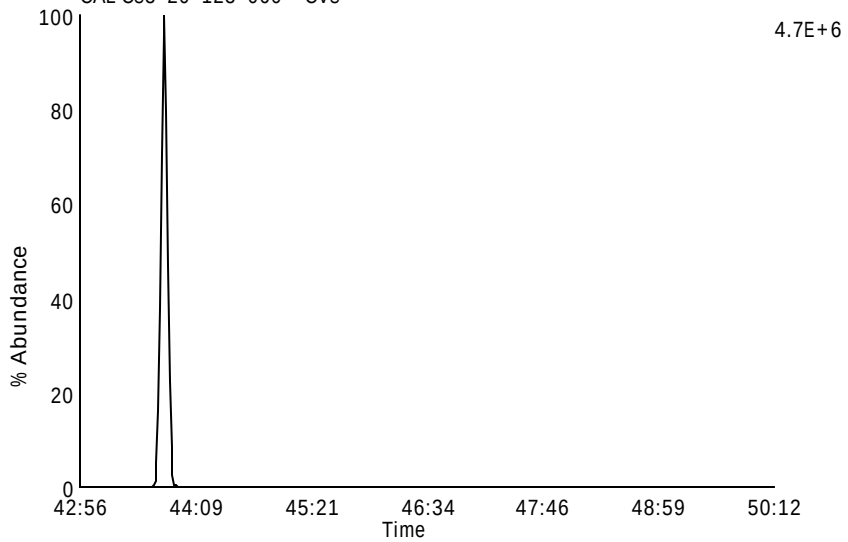
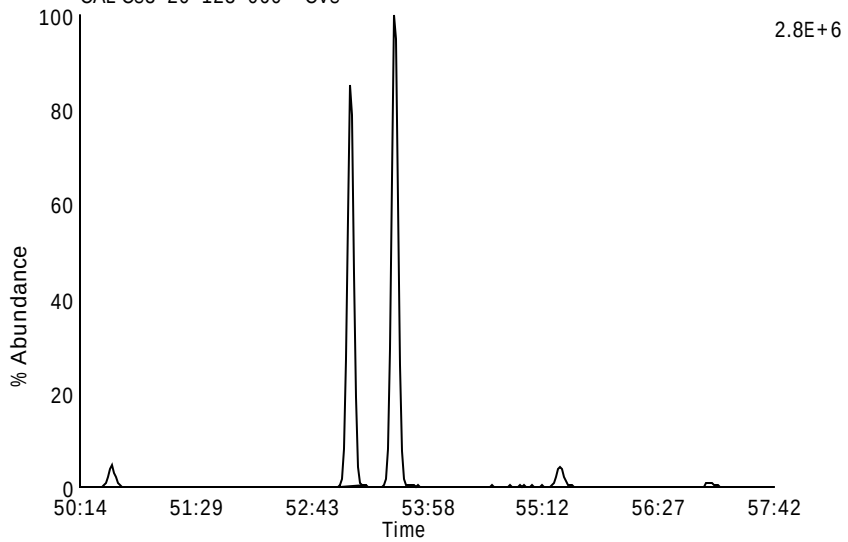
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

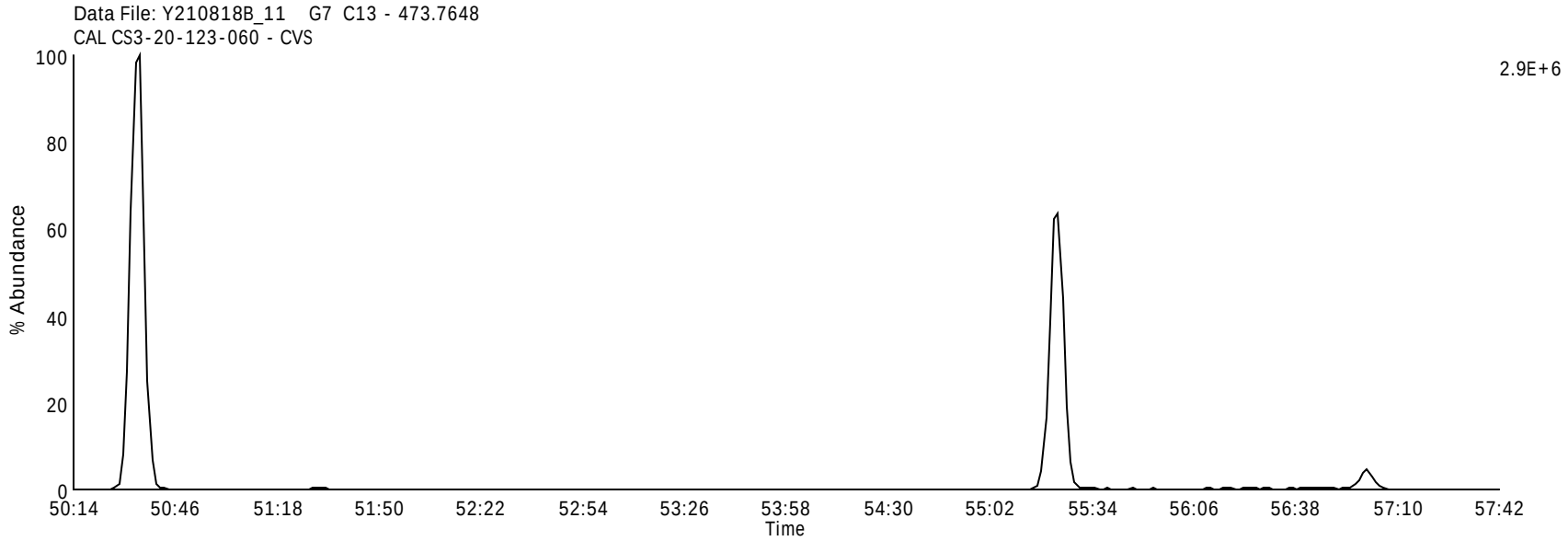


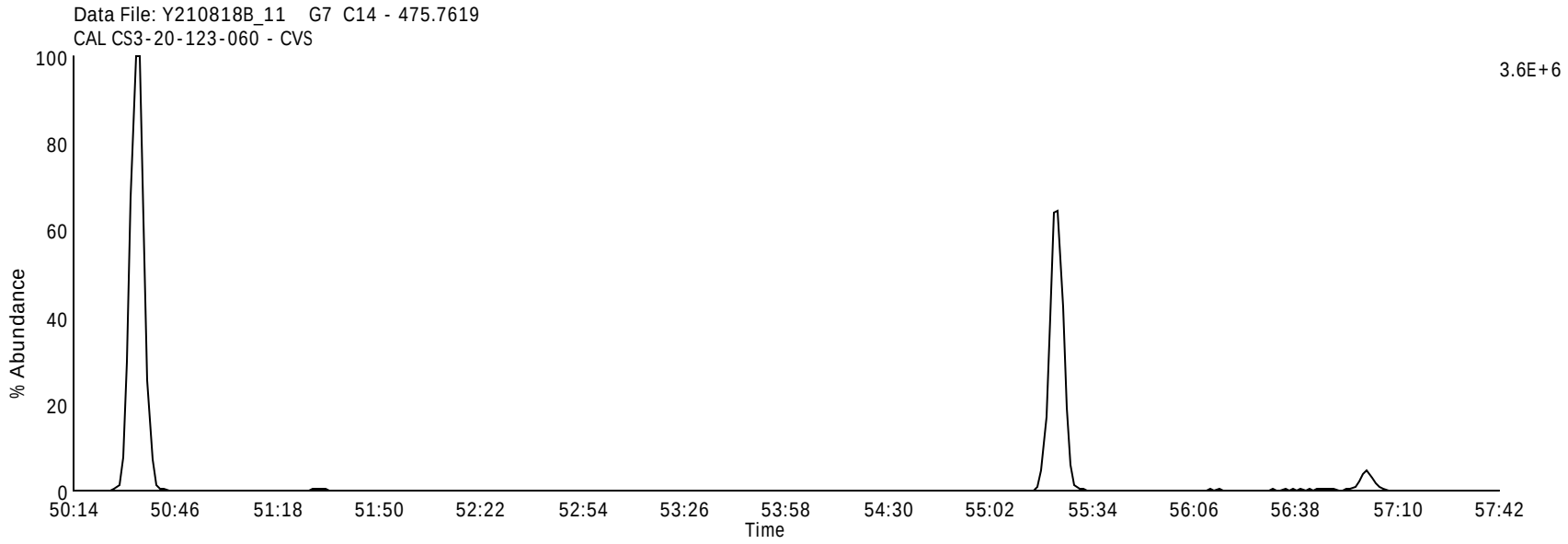
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



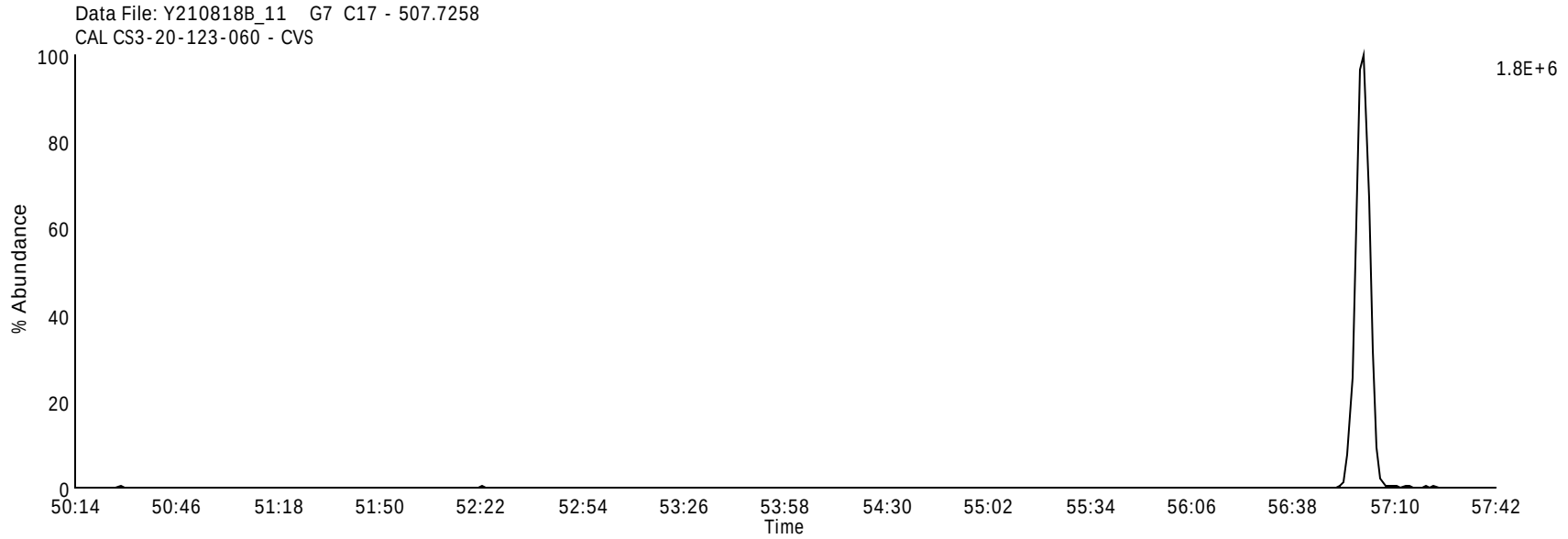


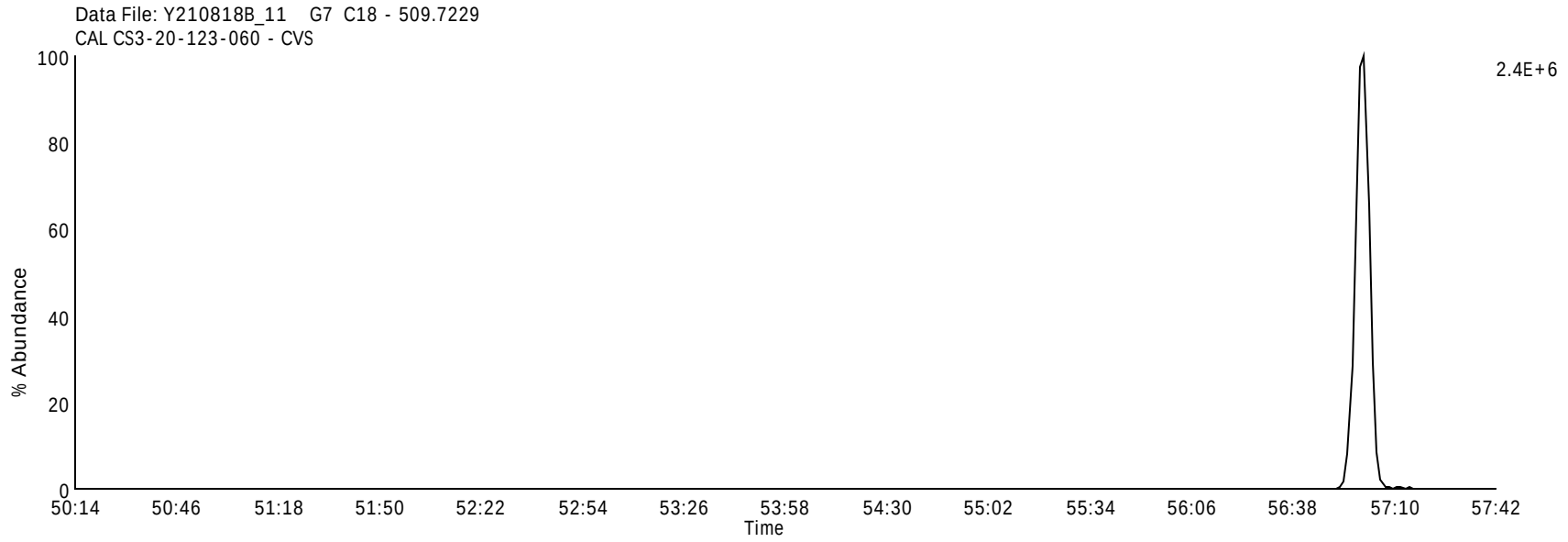
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



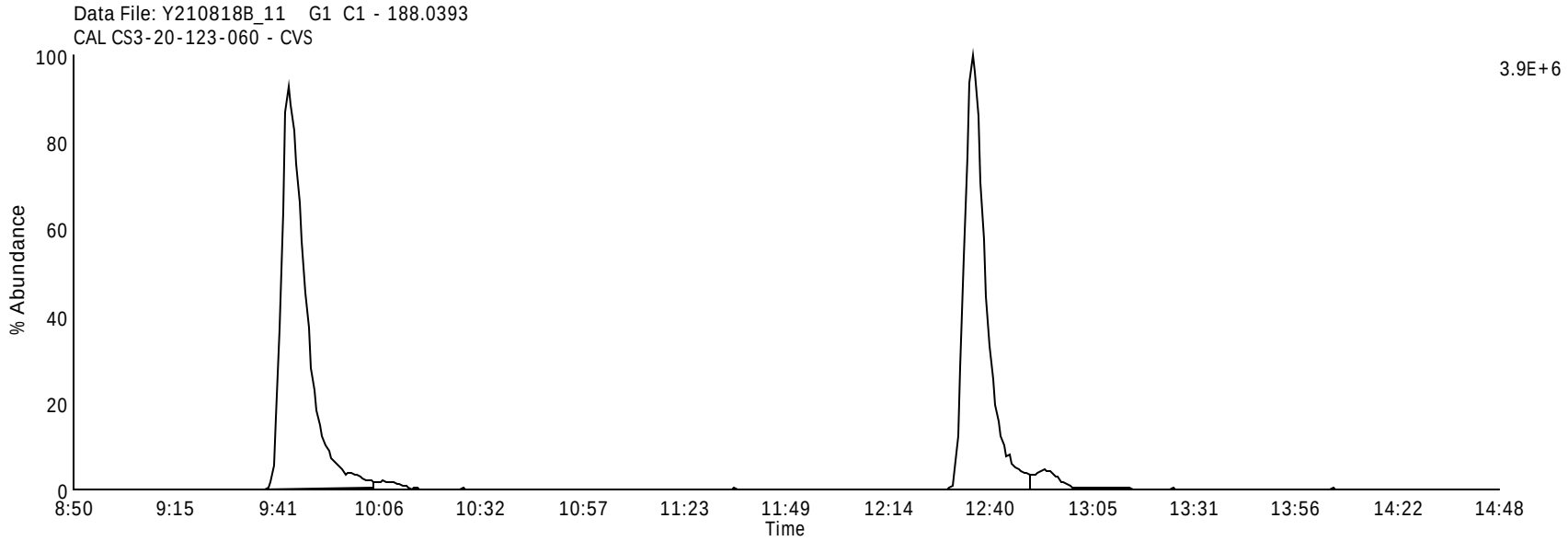


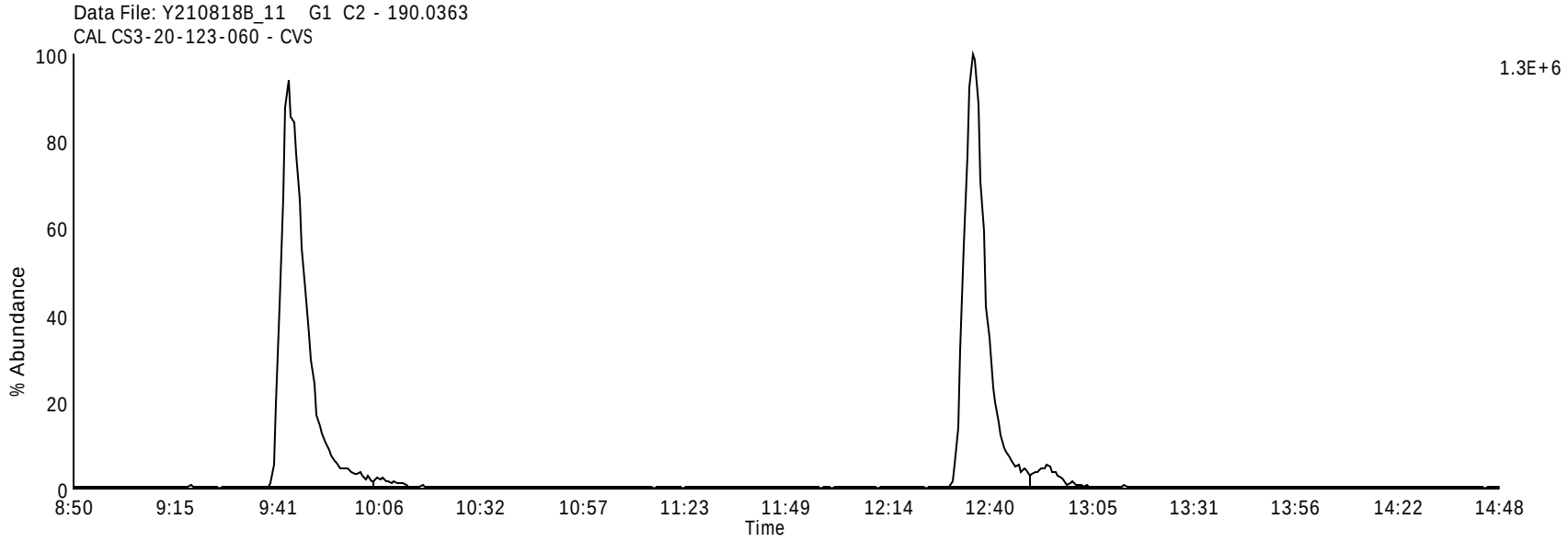
Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

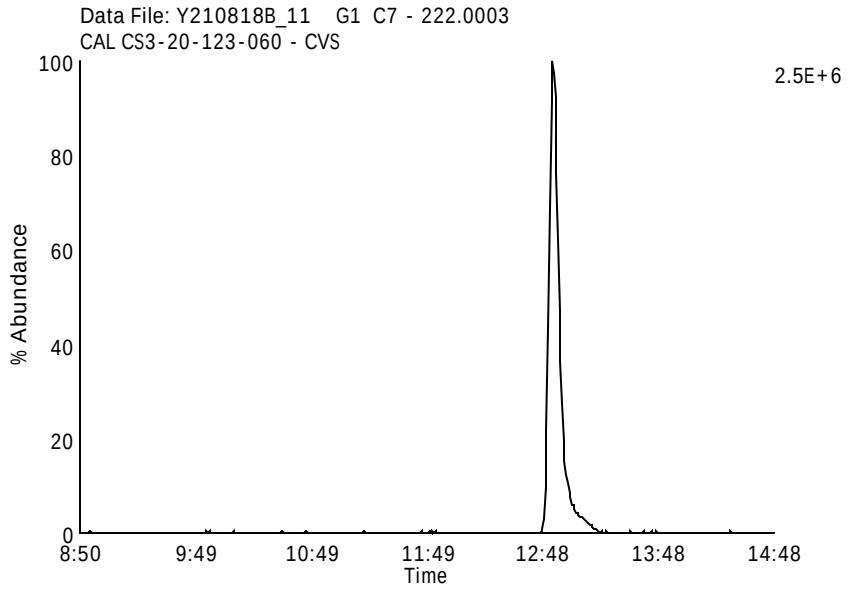
Sample Description: CAL CS3-20-123-060 - CVS

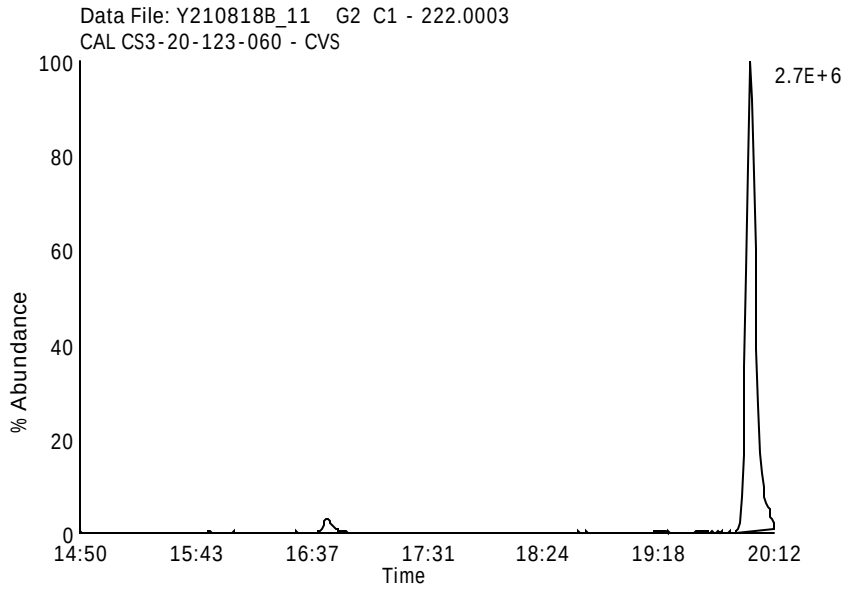


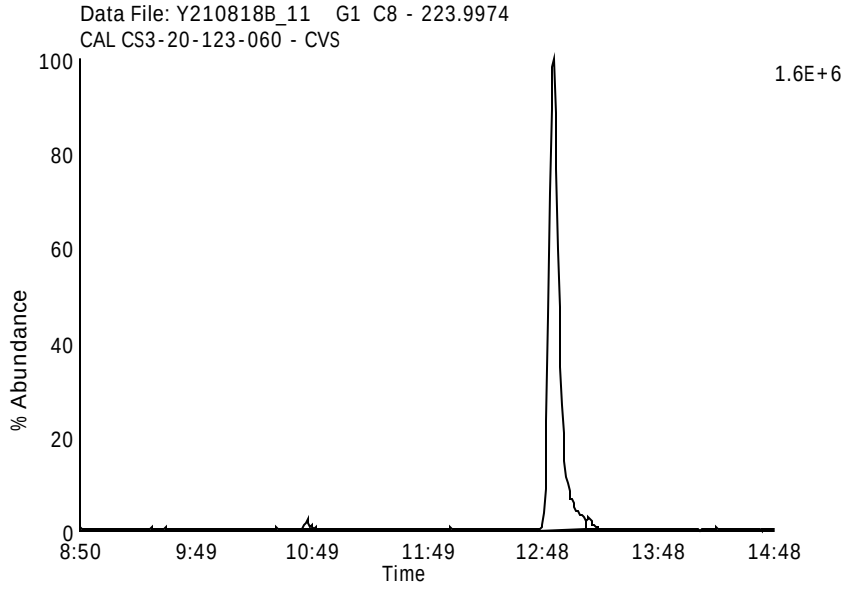


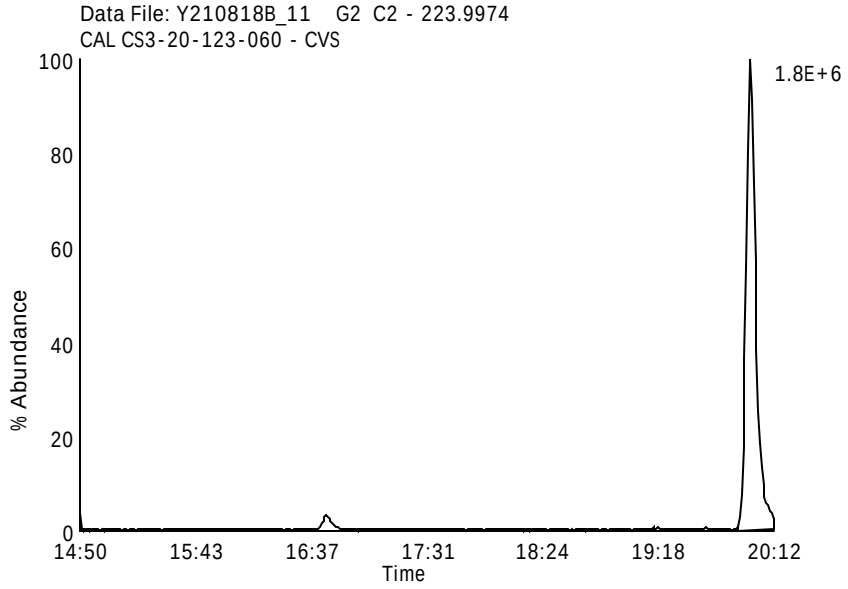
Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



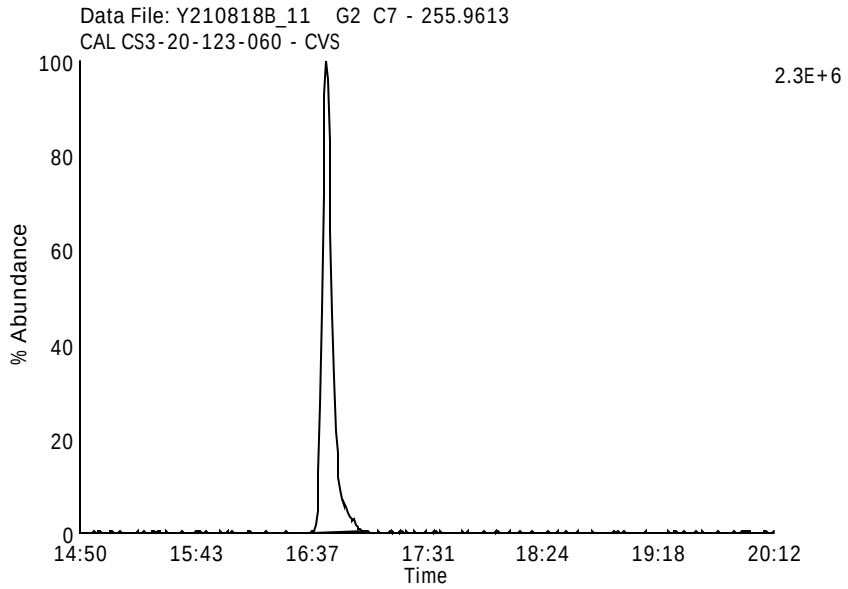


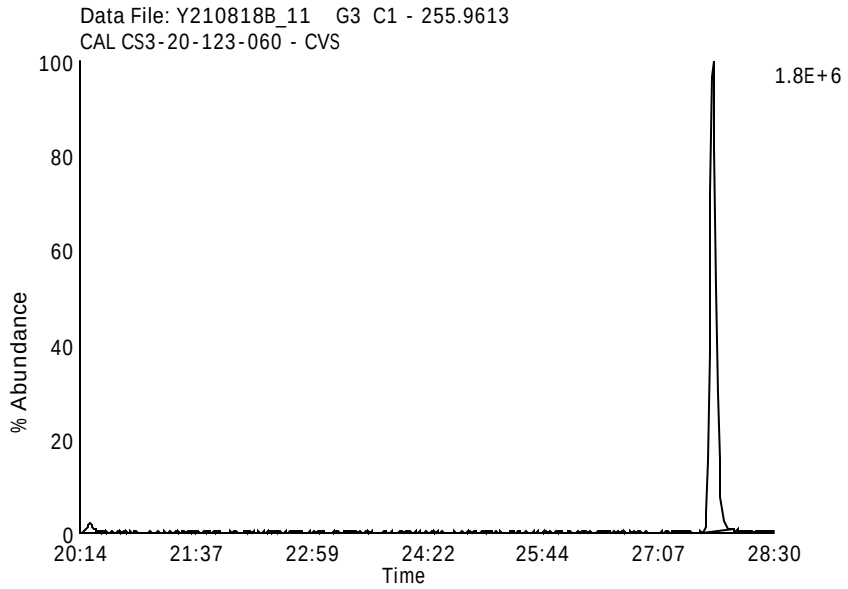


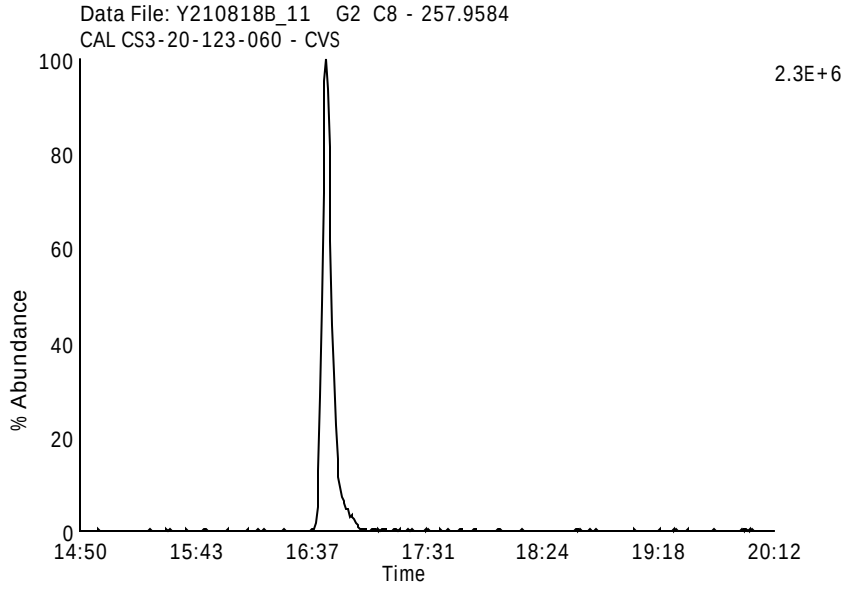


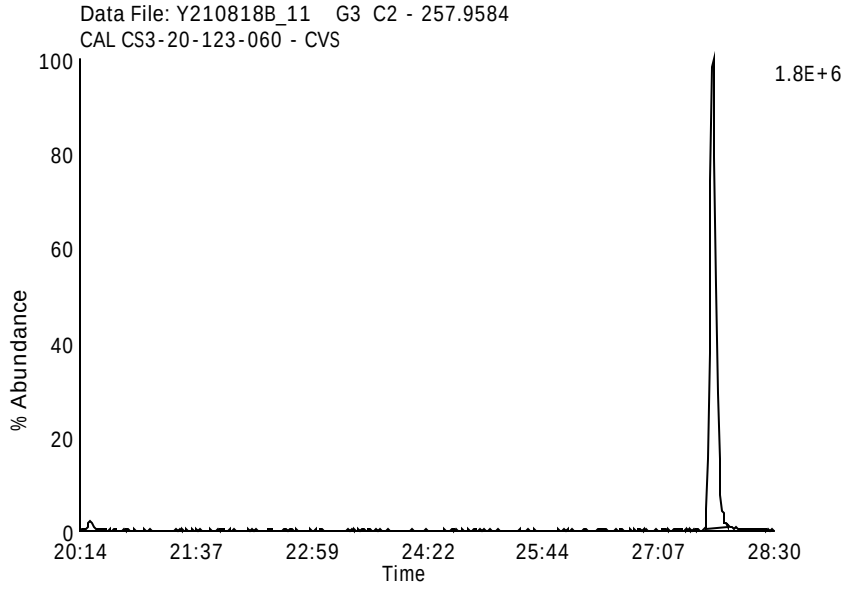
Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



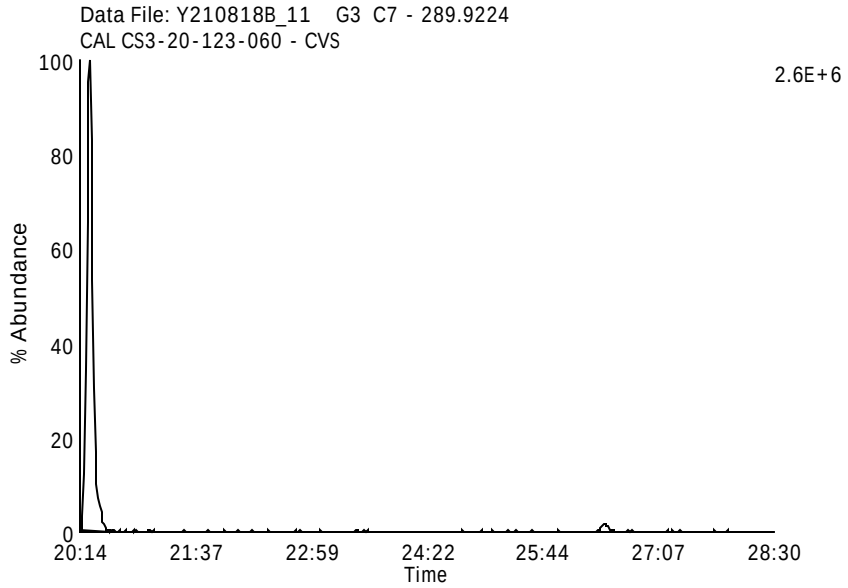


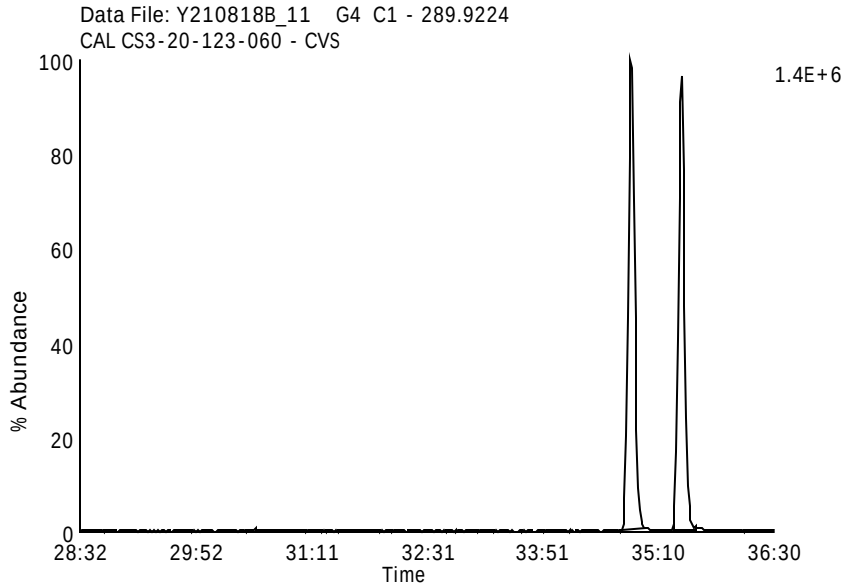


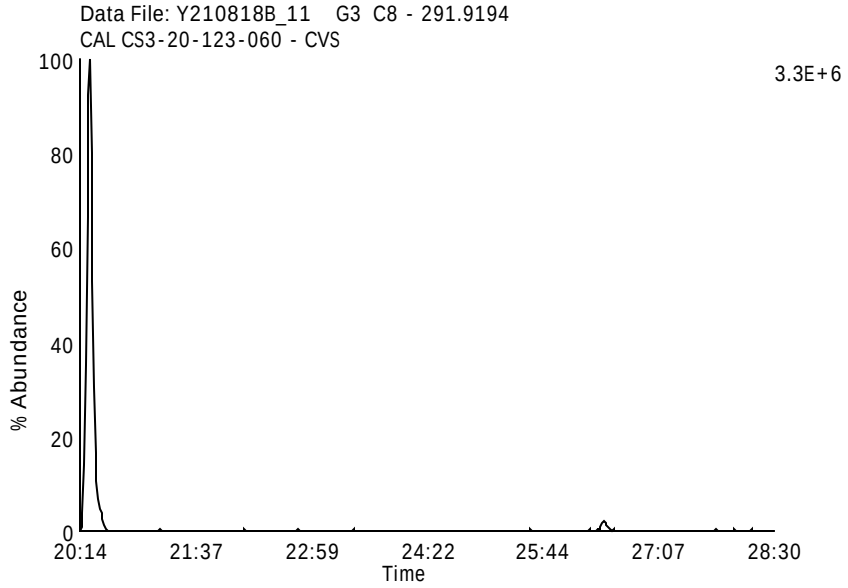


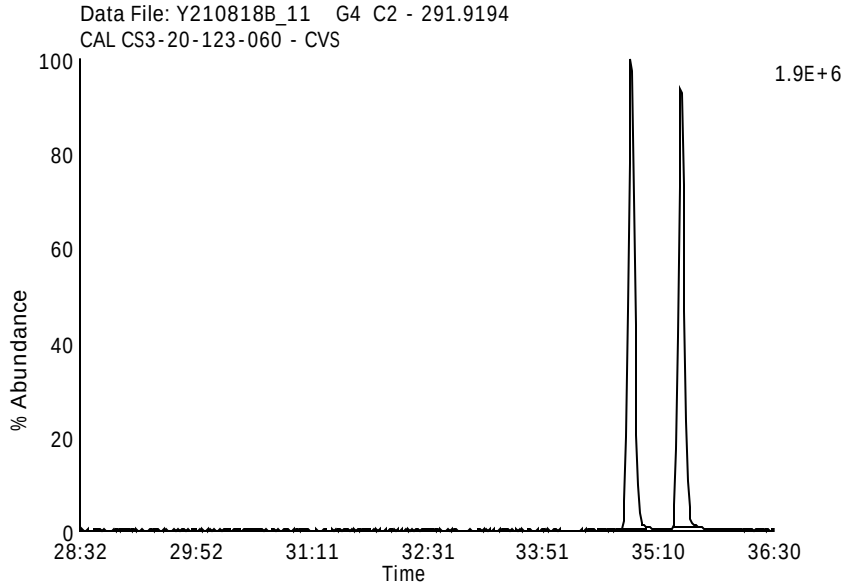
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







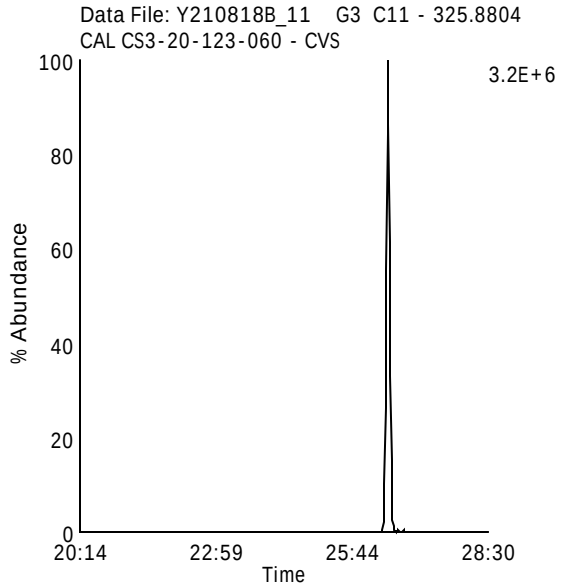


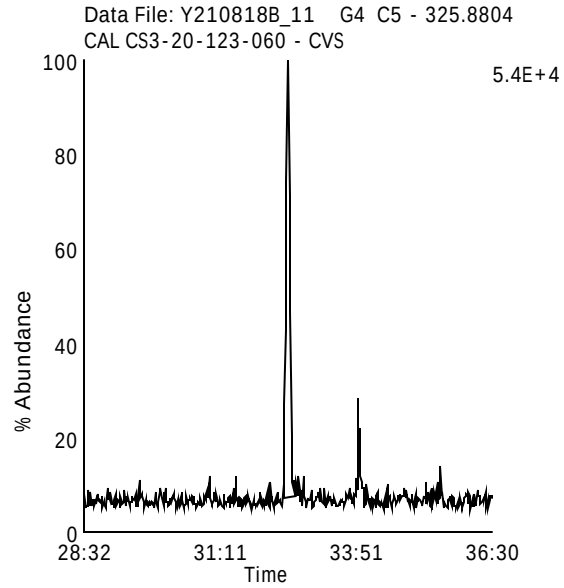
Penta Chlorinated Biphenyls

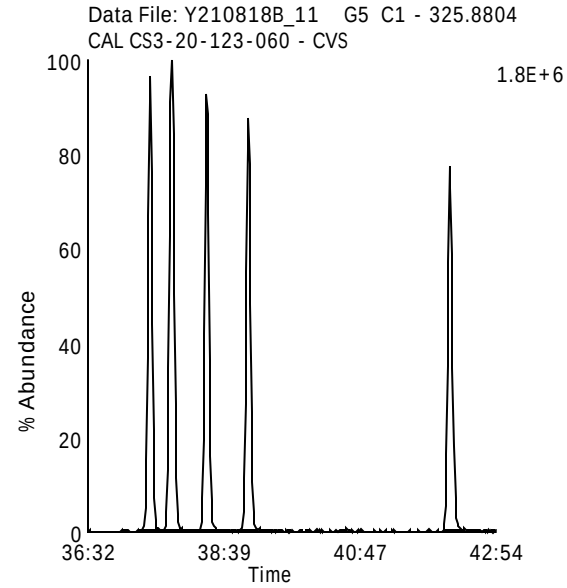
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

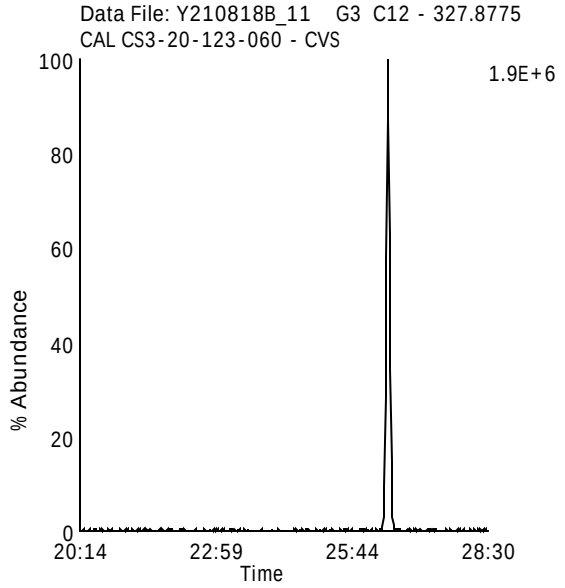
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

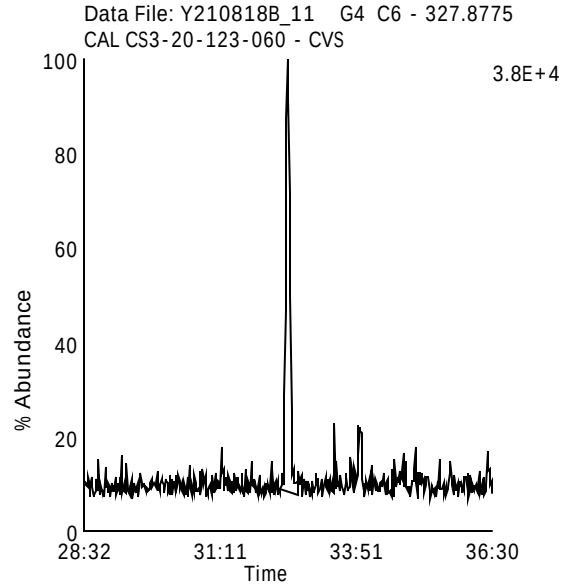
Sample Description: CAL CS3-20-123-060 - CVS

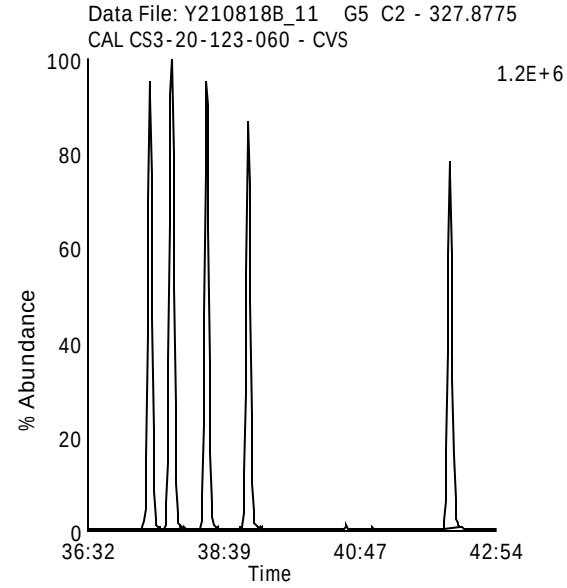








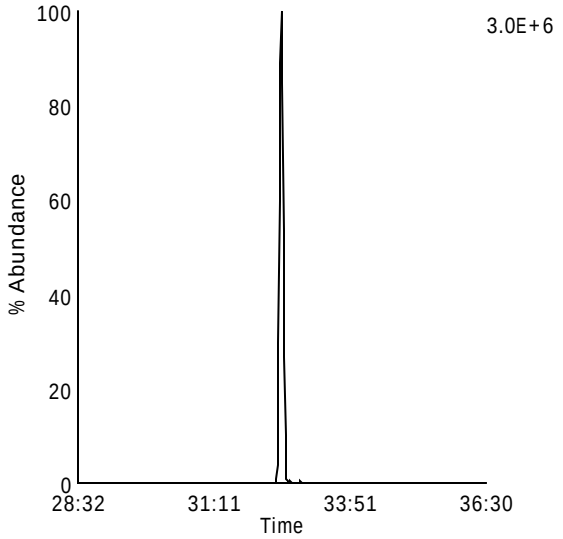




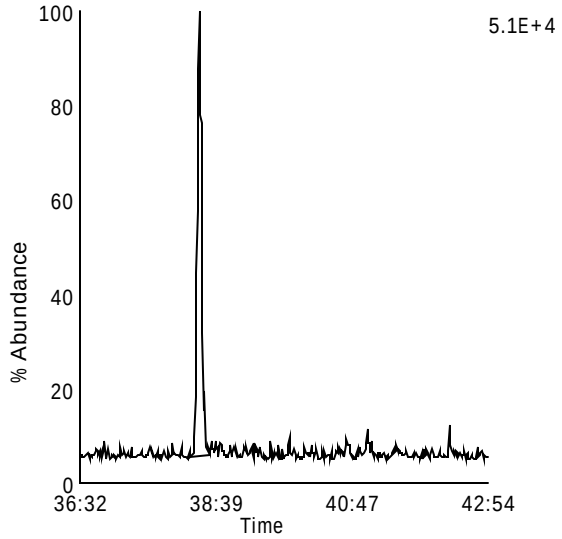
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

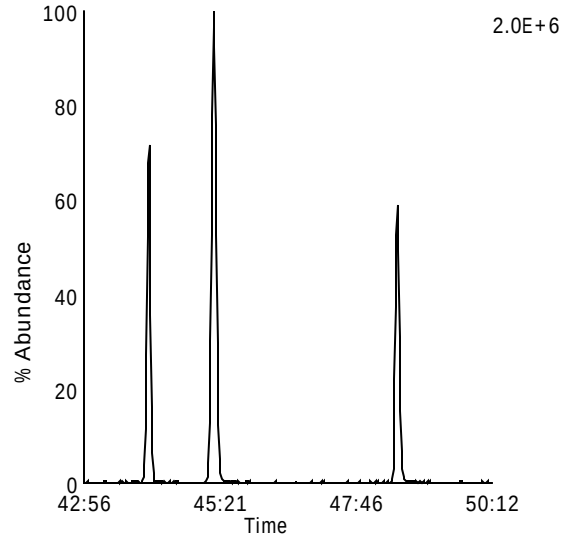
Data File: Y210818B_11 G4 C11 - 359.8415
CAL CS3-20-123-060 - CVS



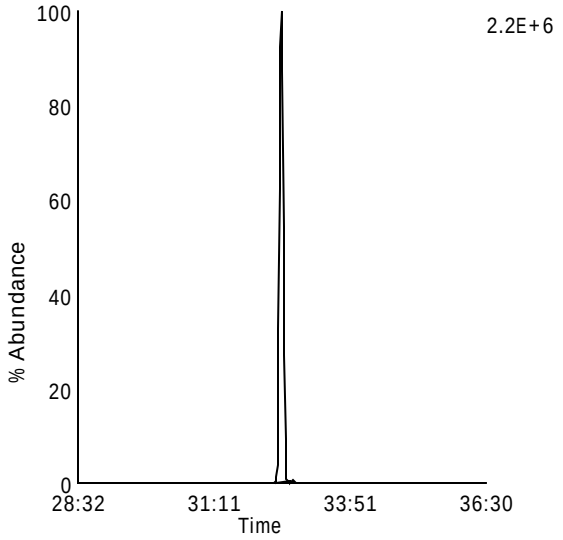
Data File: Y210818B_11 G5 C5 - 359.8415
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G6 C1 - 359.8415
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G4 C12 - 361.8385
CAL CS3-20-123-060 - CVS



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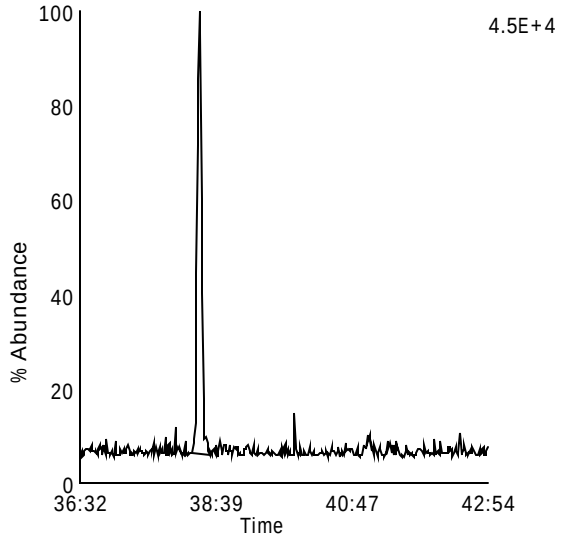
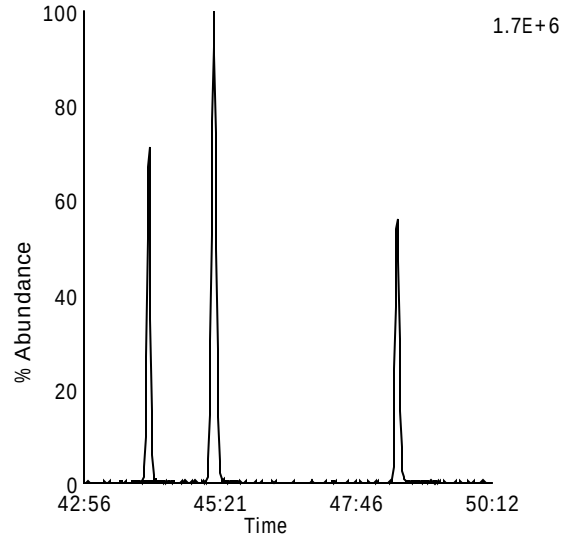
CAL CS3-20-123-060 - CVS



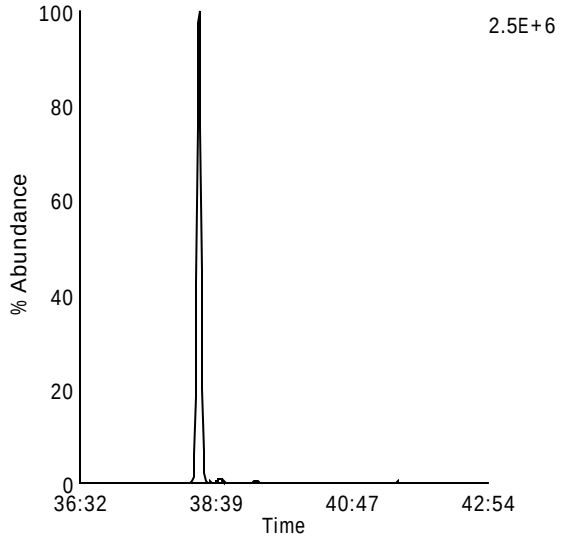
Data File: Y210818B_11 G6 C2 - 361.8385
CAL CS3-20-123-060 - CVS



Hepta Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

Data File: Y210818B_11 G5 C11 - 393.8025
CAL CS3-20-123-060 - CVS



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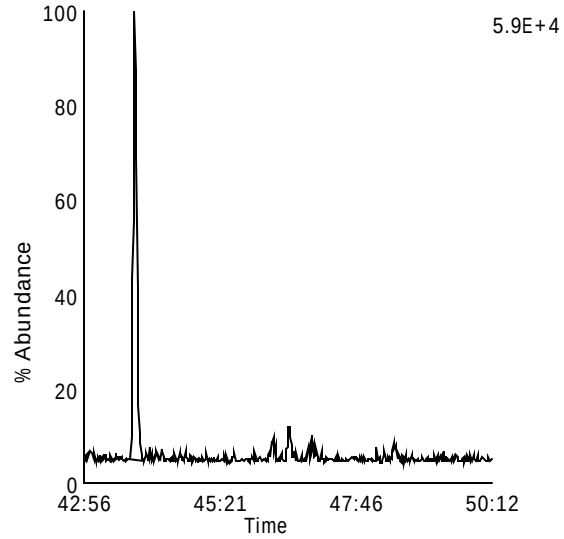
CAL CS3-20-123-060 - CVS



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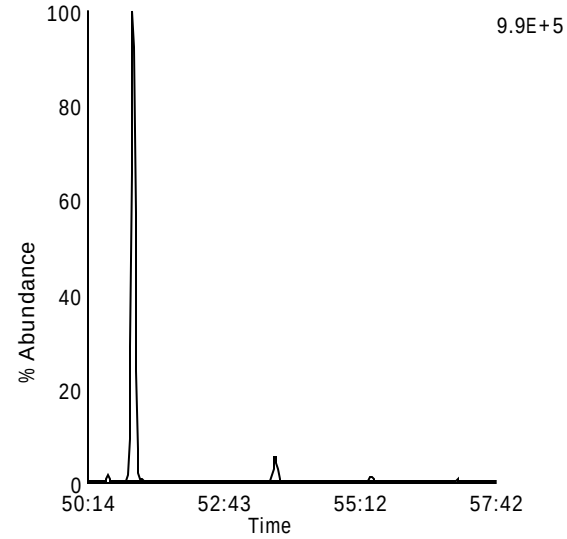
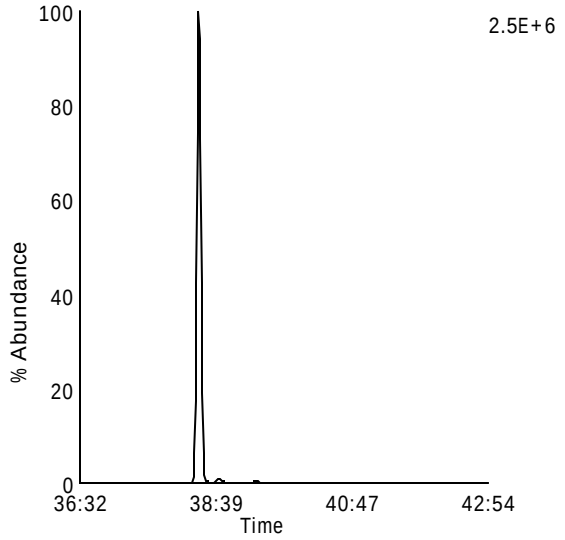
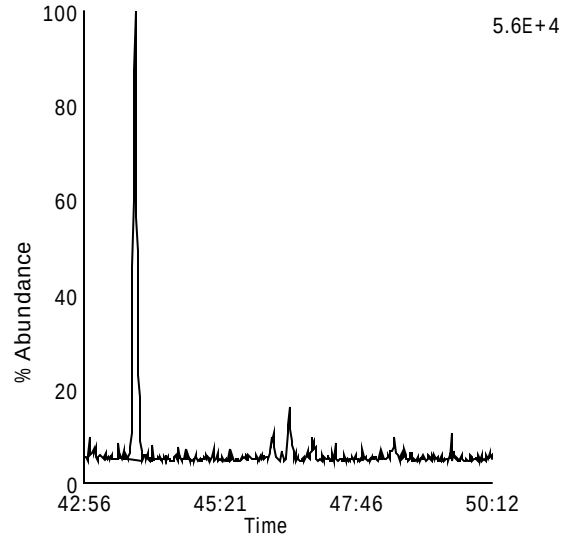
CAL CS3-20-123-060 - CVS



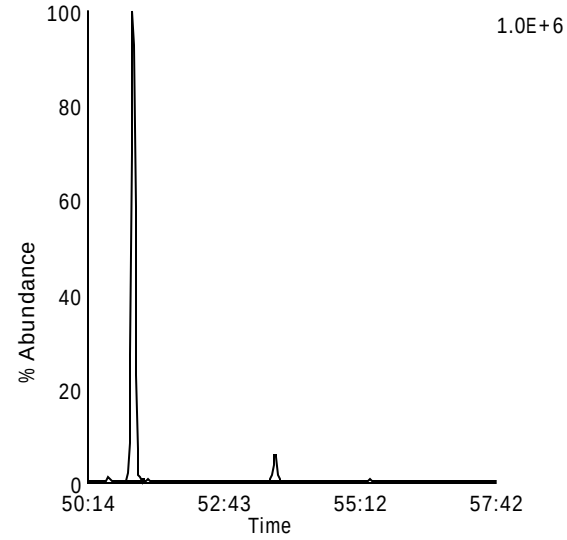
Data File: Y210818B_11 G5 C12 - 395.7995
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G6 C8 - 395.7995
CAL CS3-20-123-060 - CVS

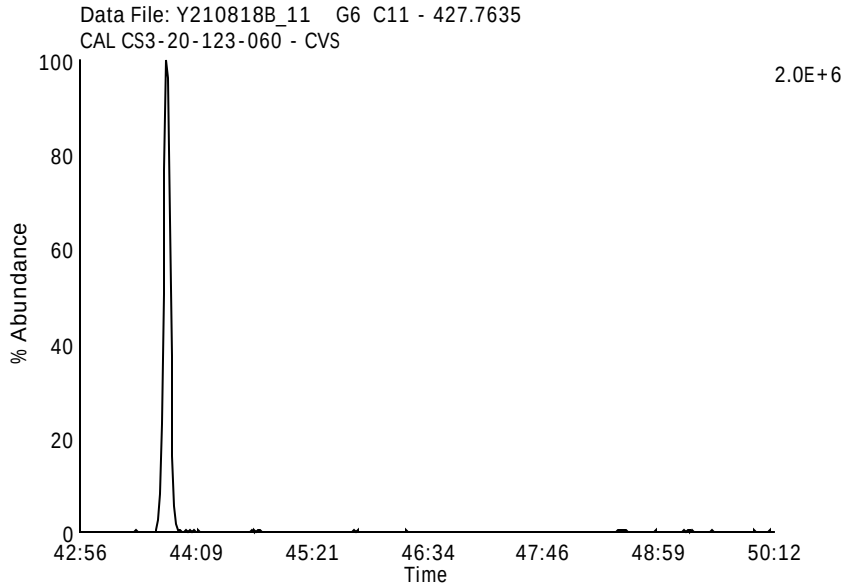


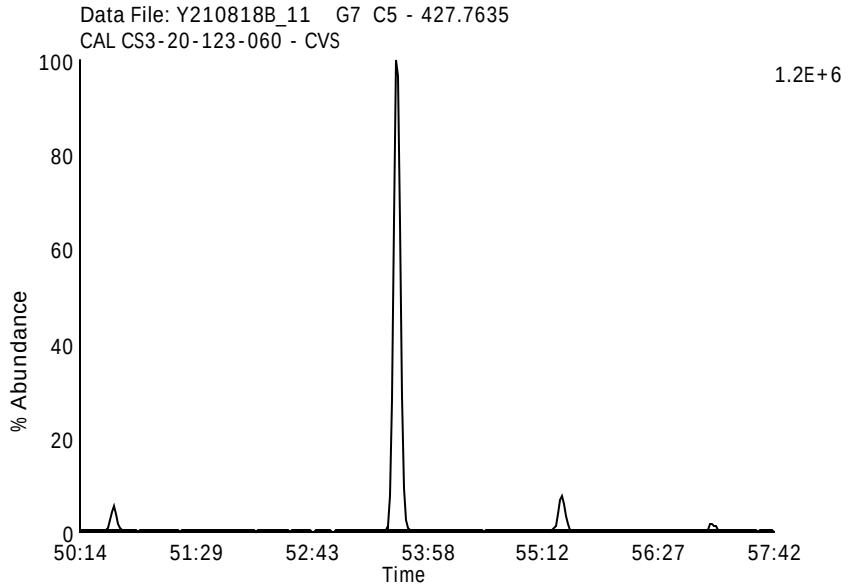
Data File: Y210818B_11 G7 C2 - 395.7995
CAL CS3-20-123-060 - CVS

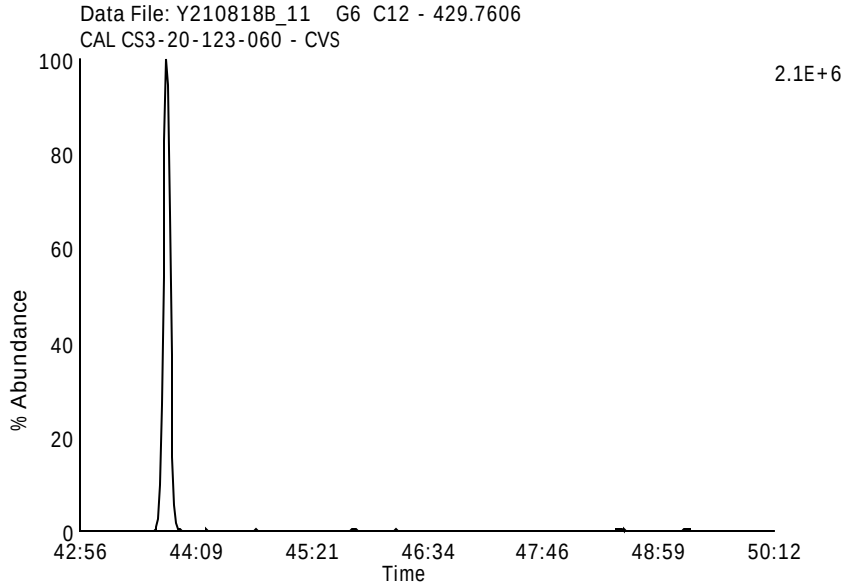


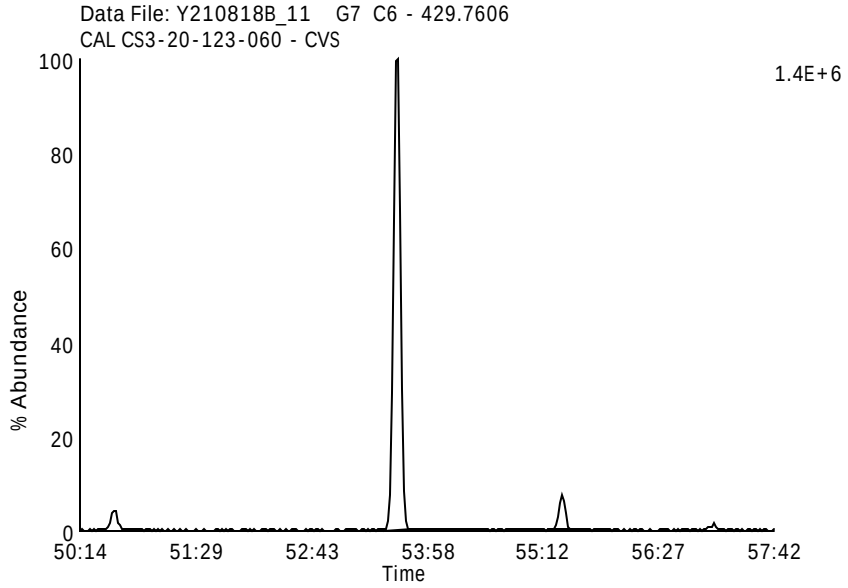
Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







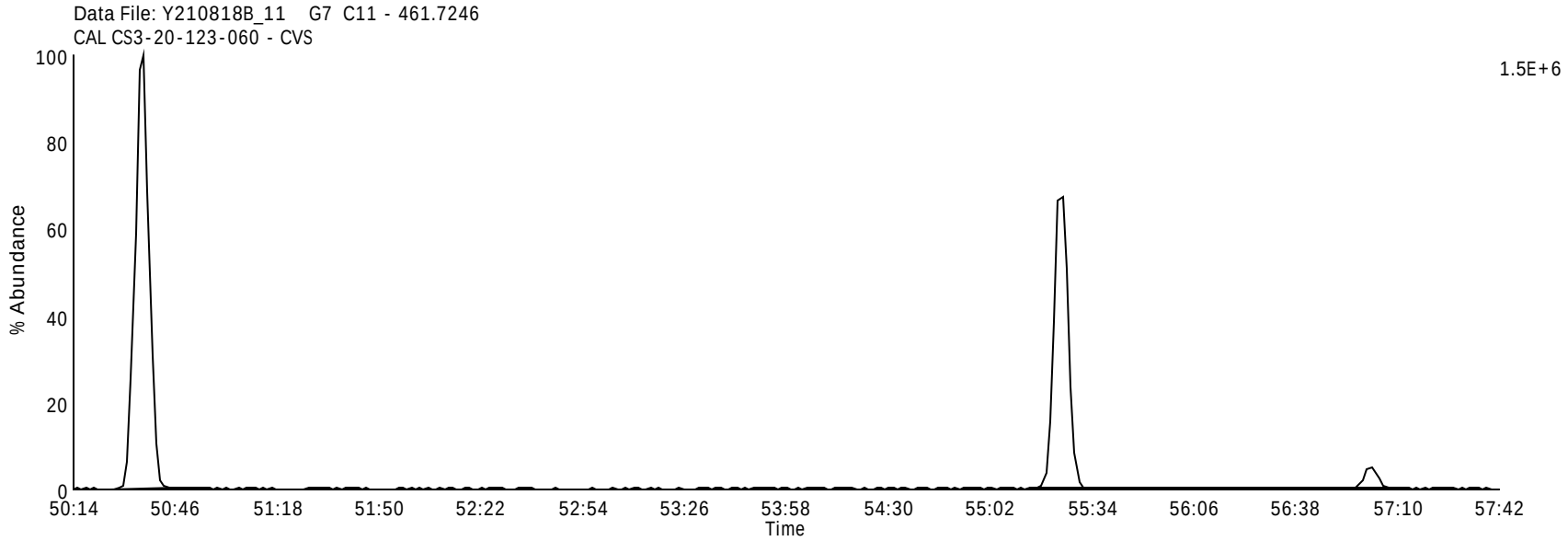


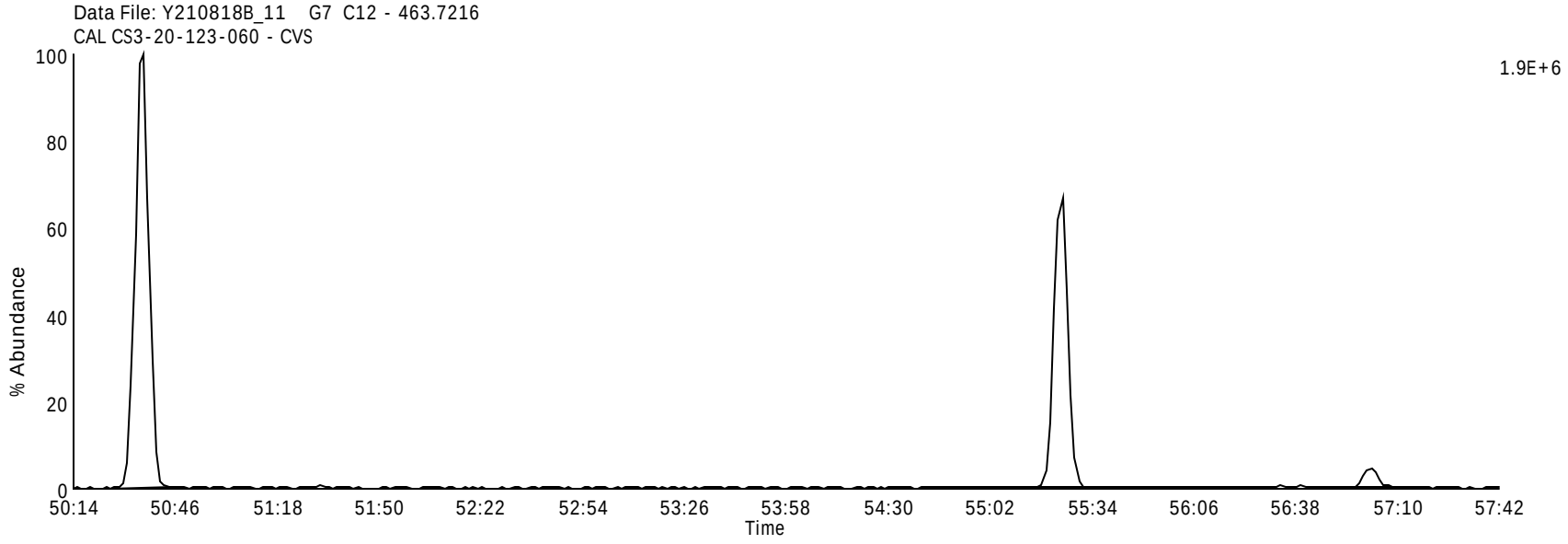
Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



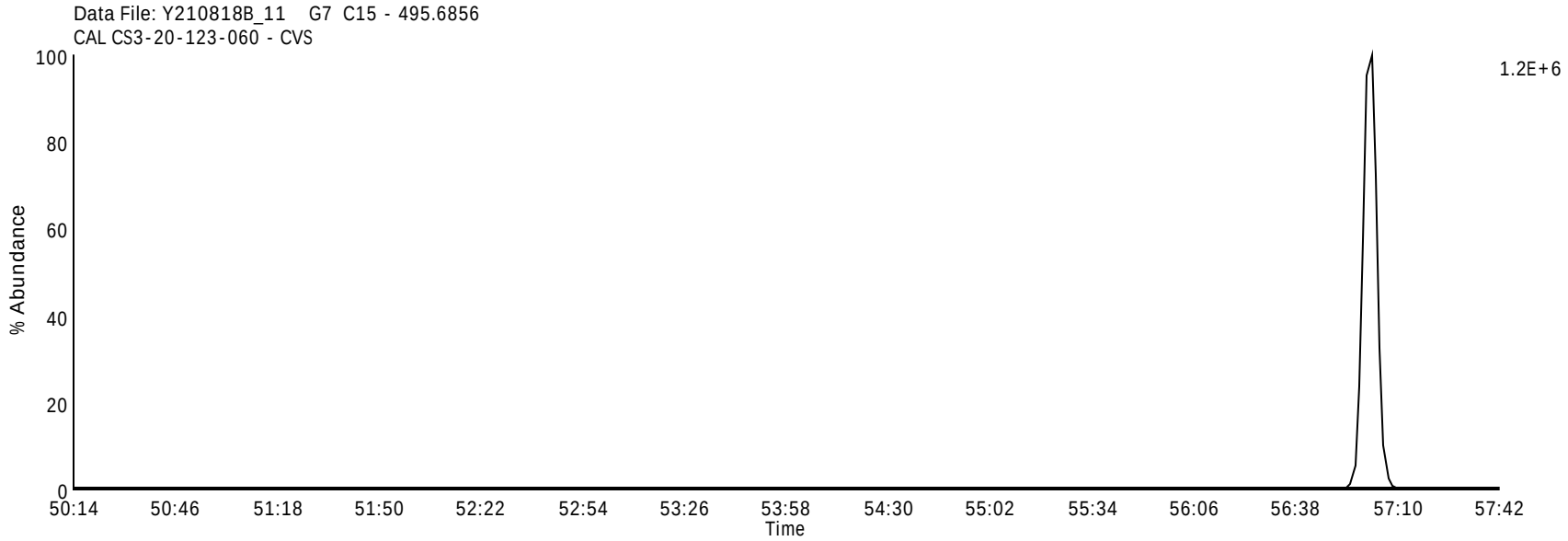


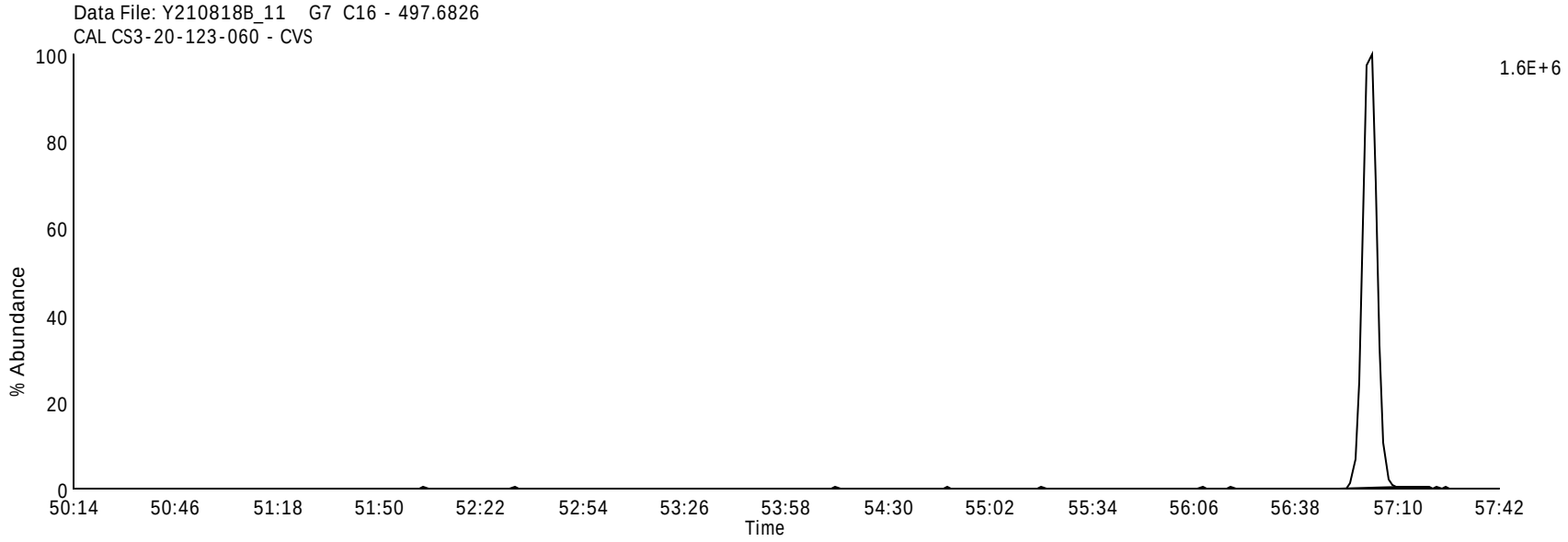
Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

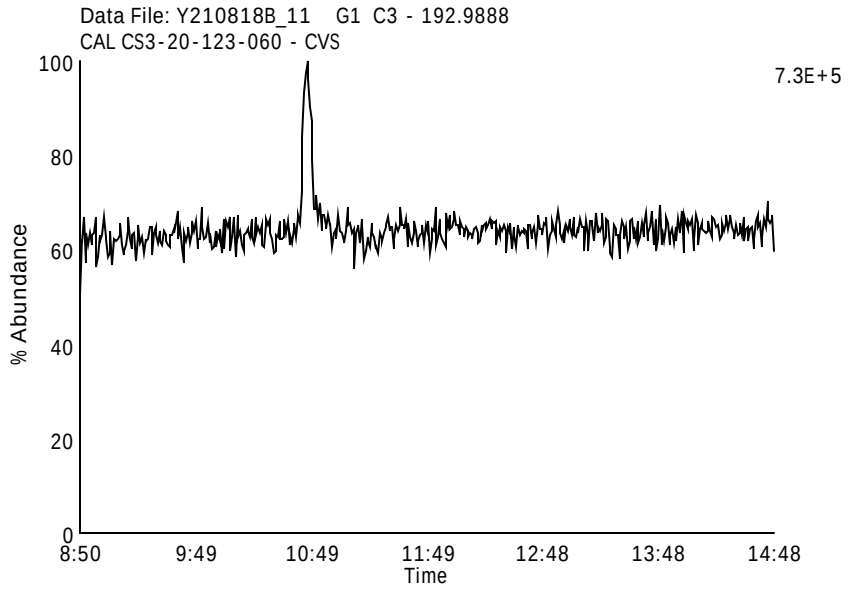
Sample Description: CAL CS3-20-123-060 - CVS

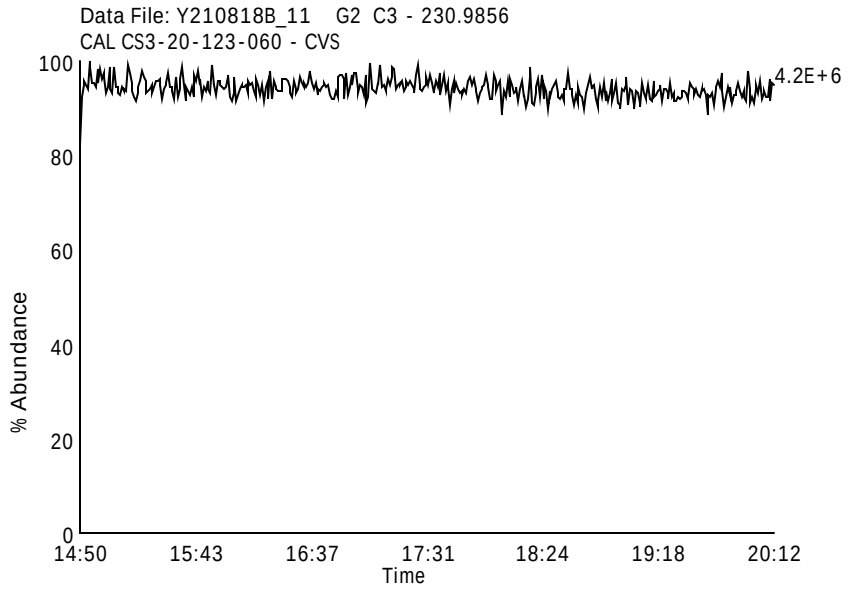


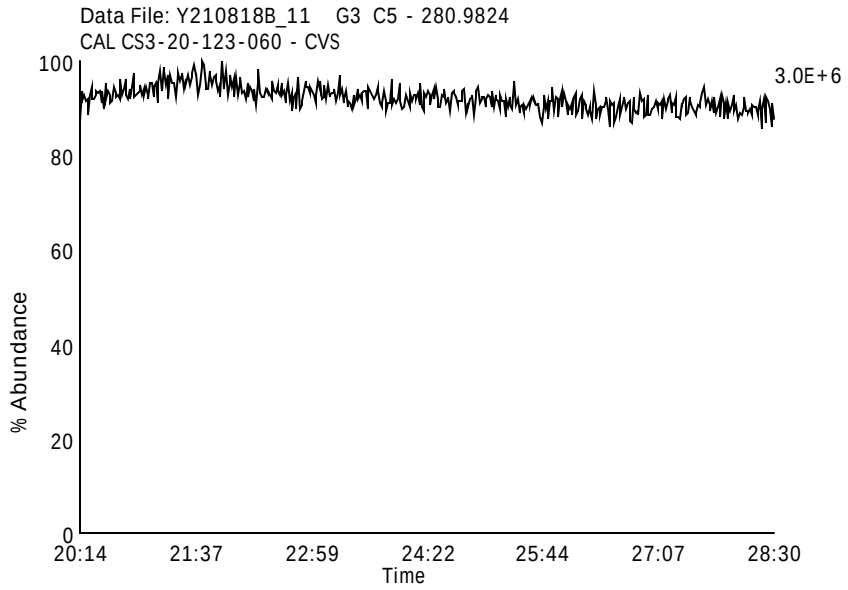


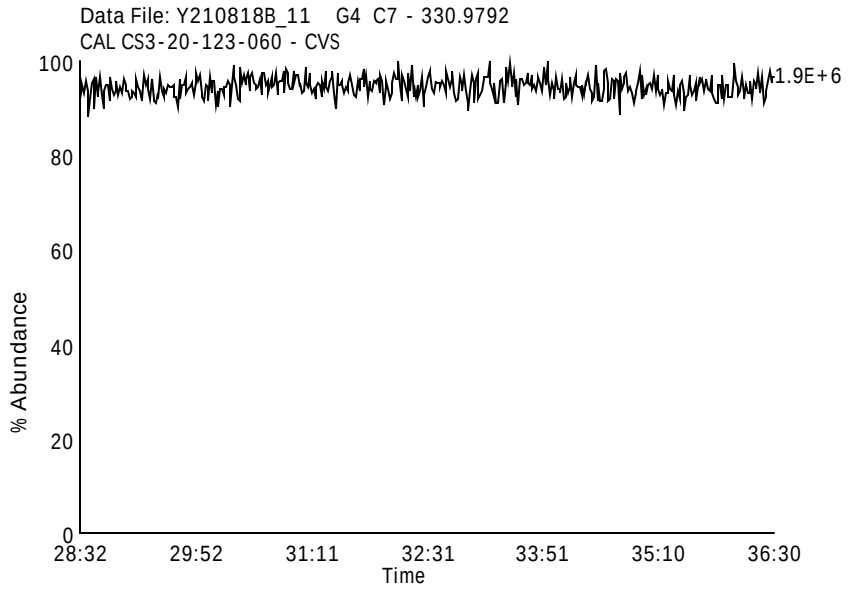
Group 1 - 4 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



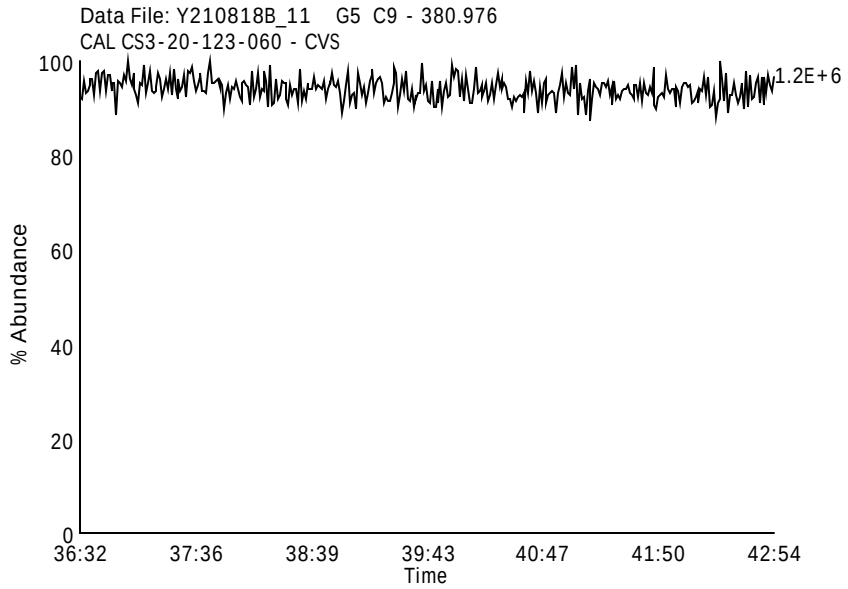


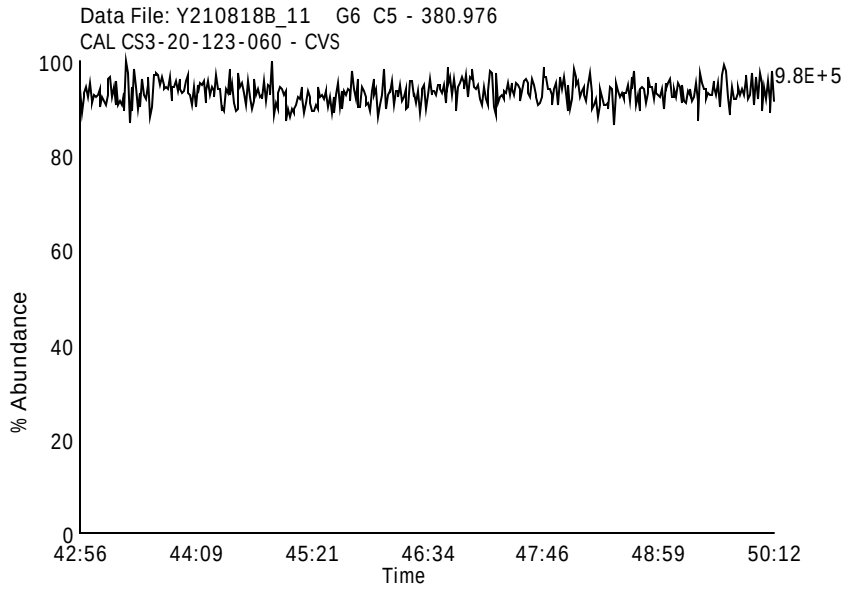


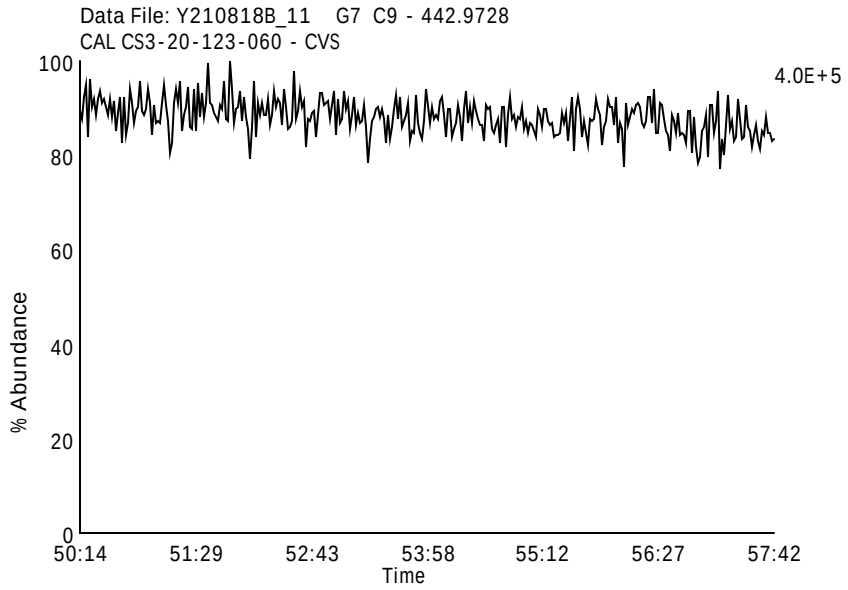


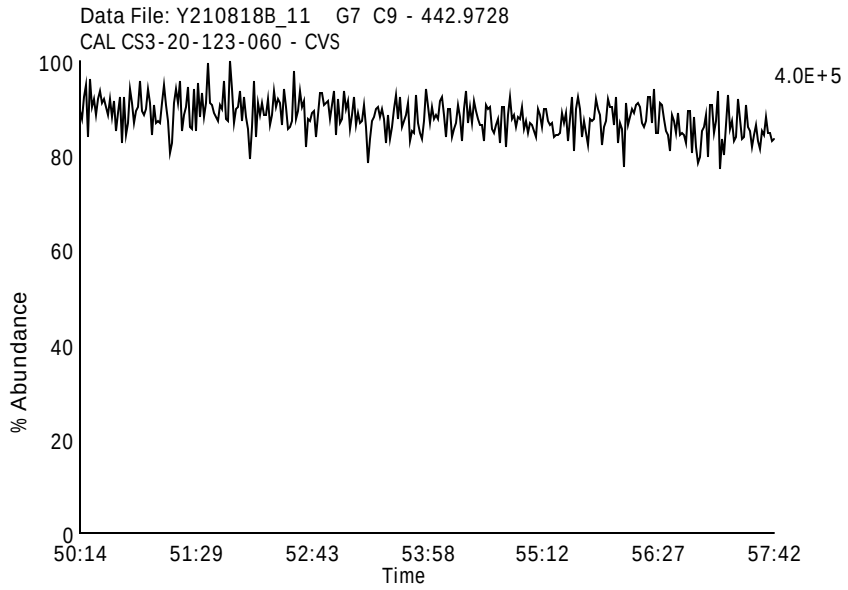
Group 5 - 7 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







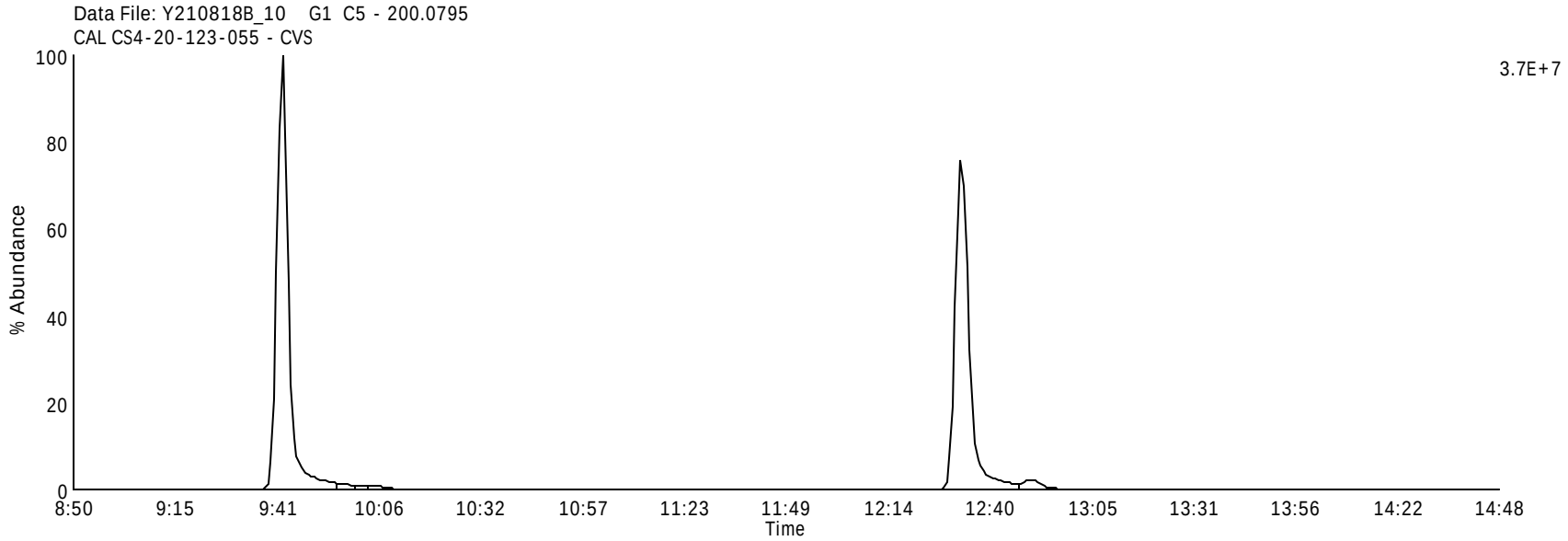


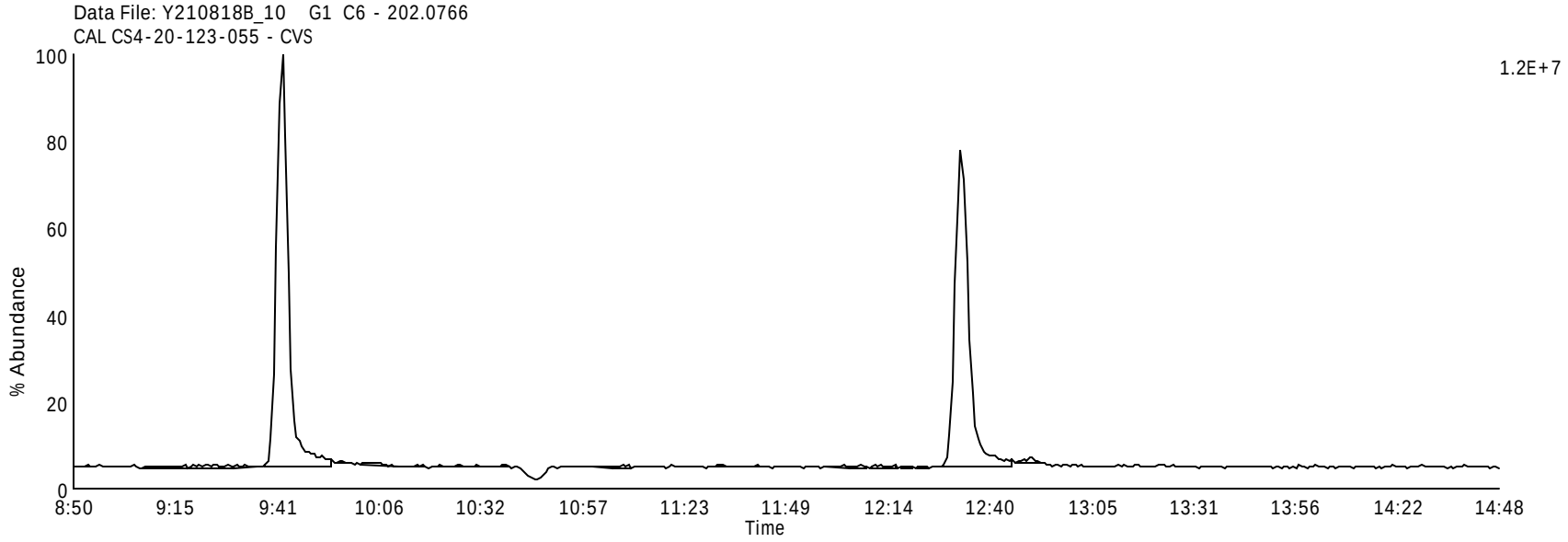
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

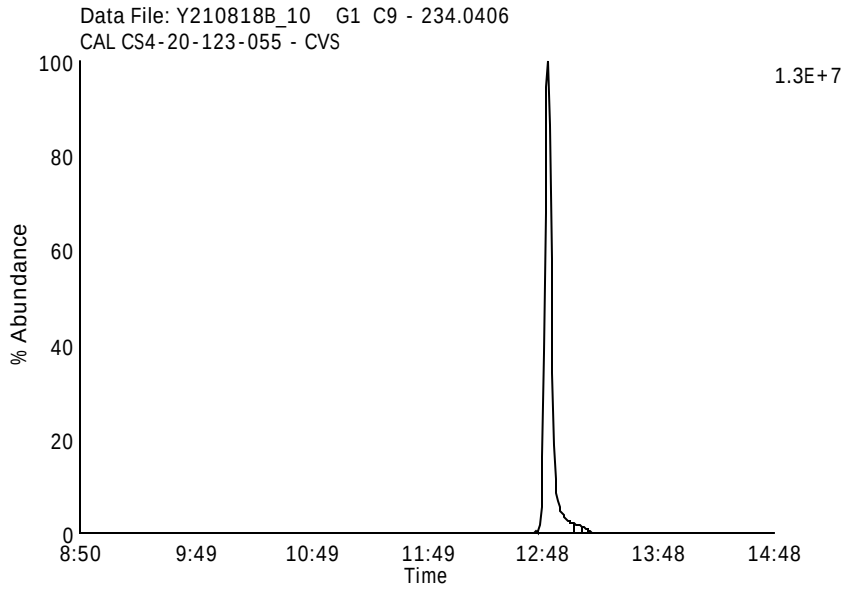
Sample Description: CAL CS4-20-123-055 - CVS

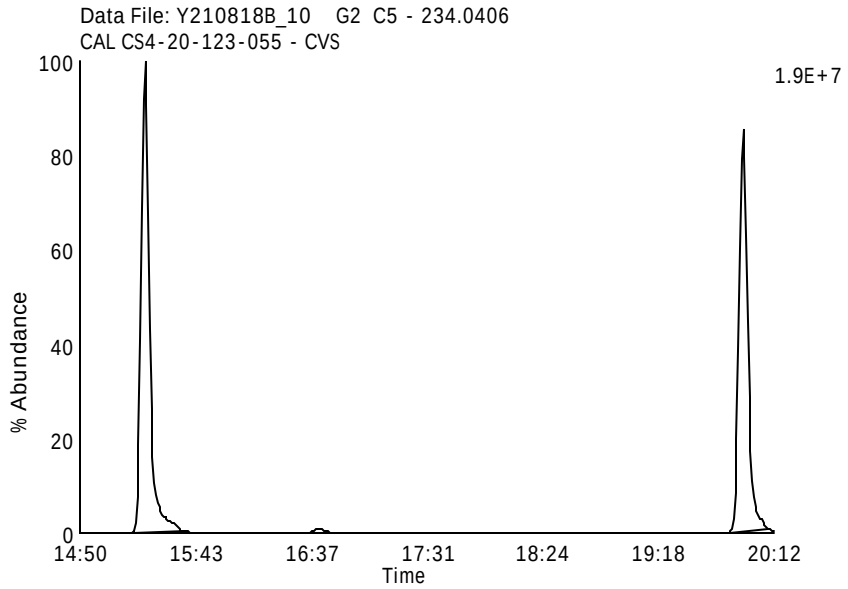


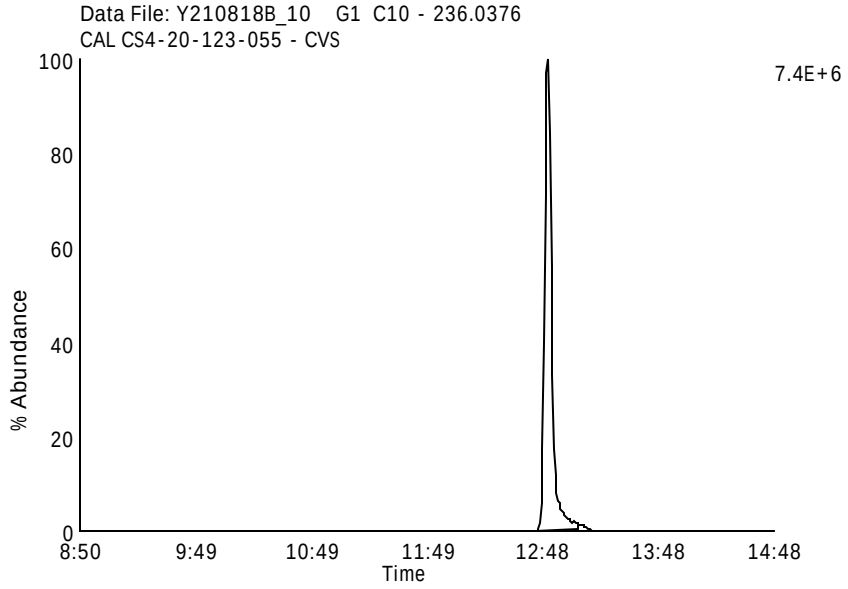


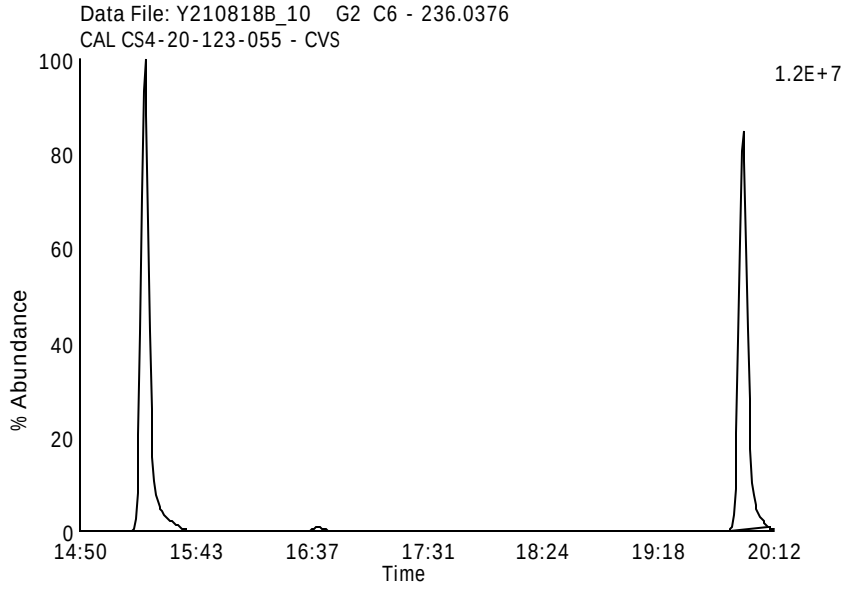
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS







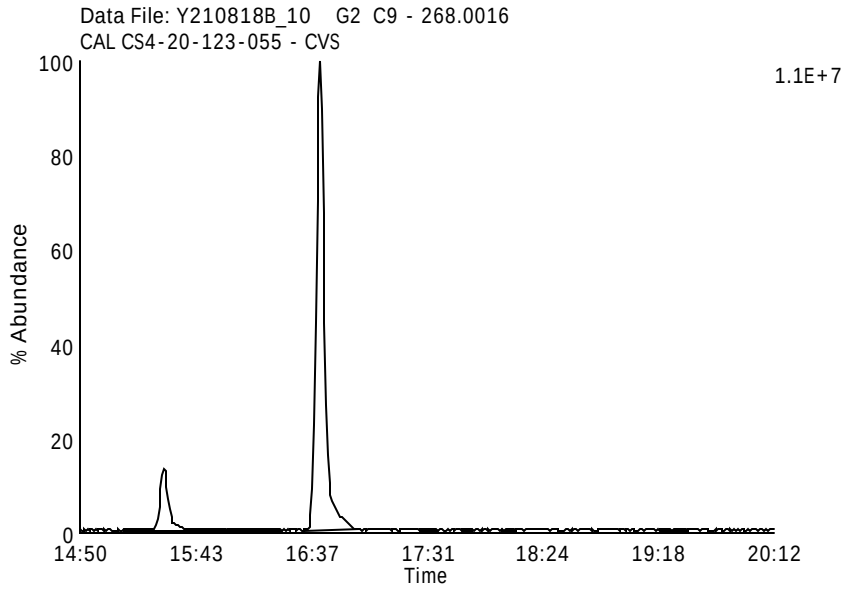


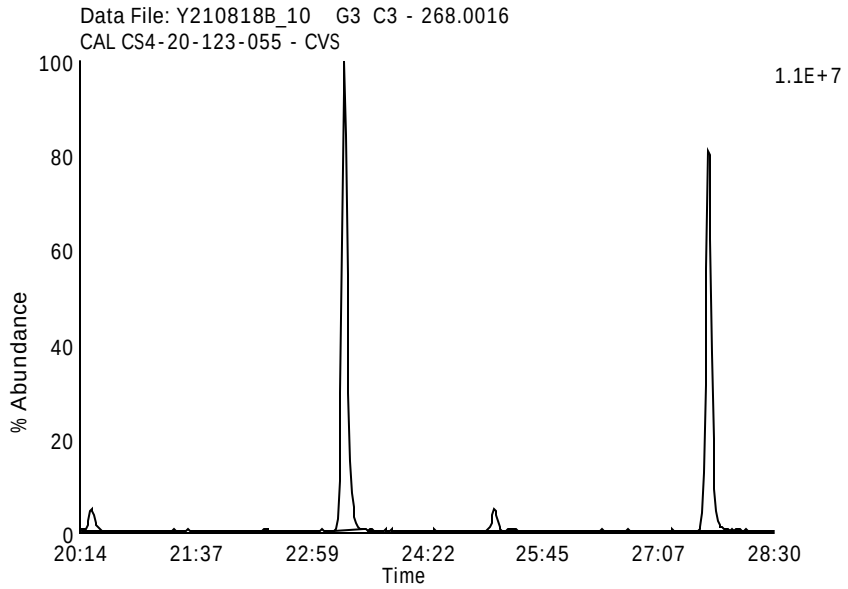
Labeled Tri Chlorinated Biphenyls

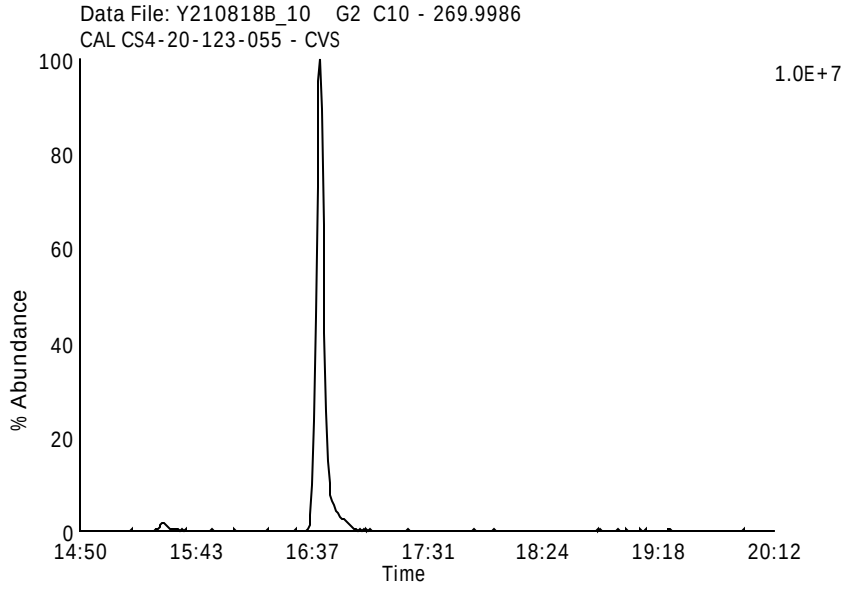
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

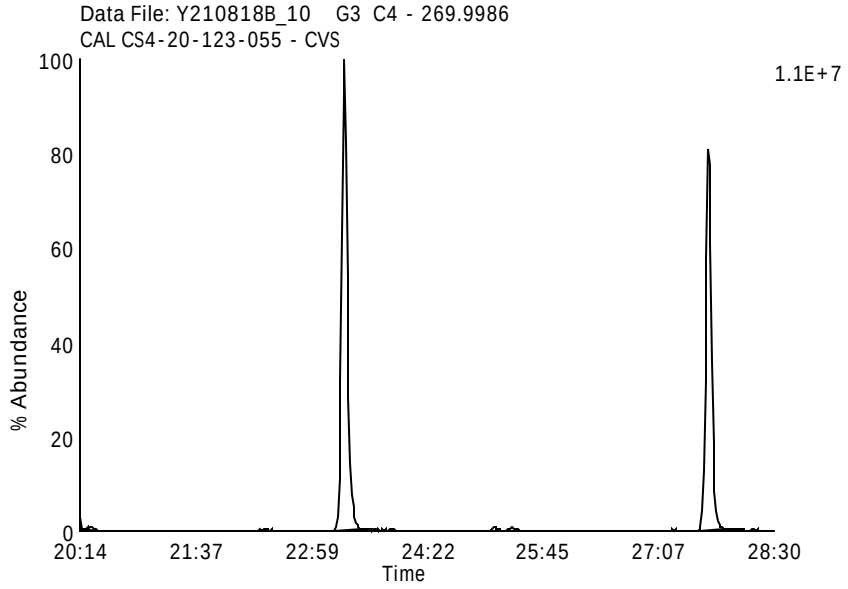
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



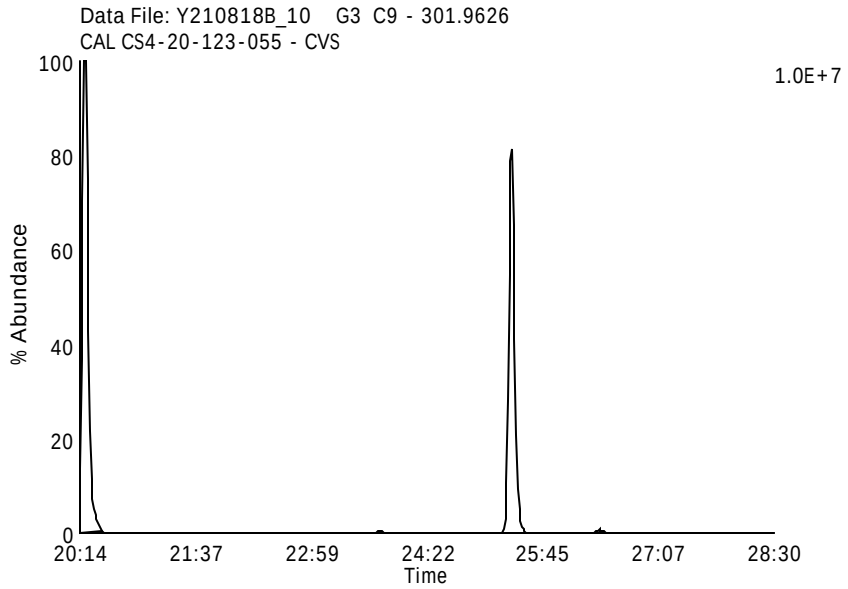


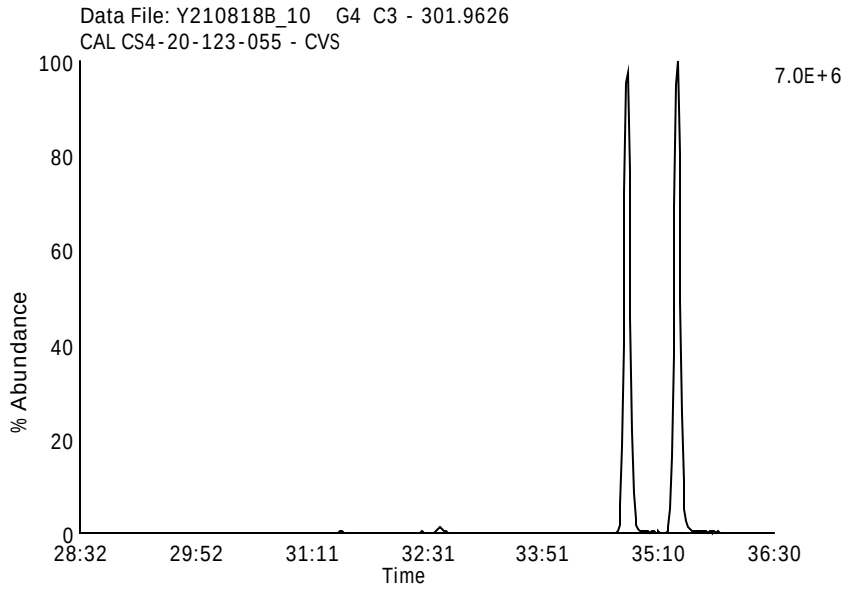


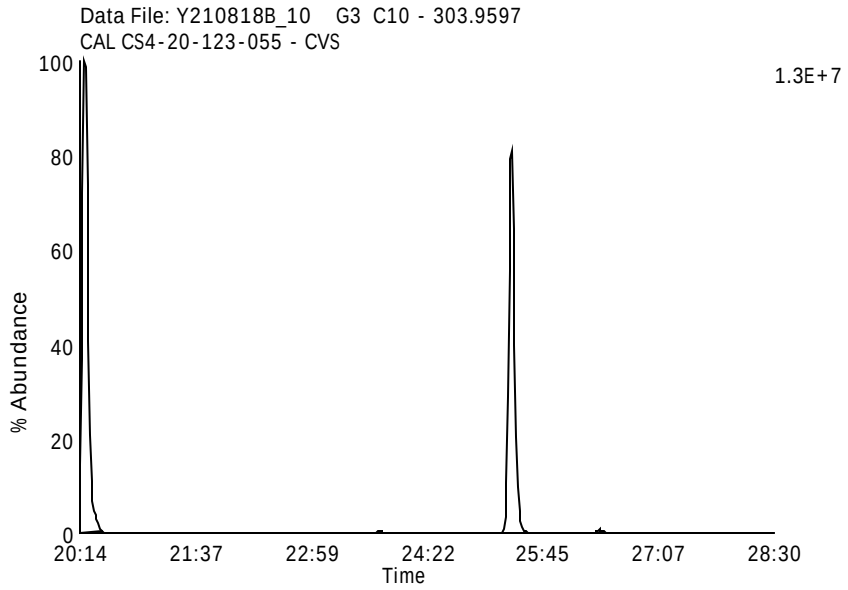


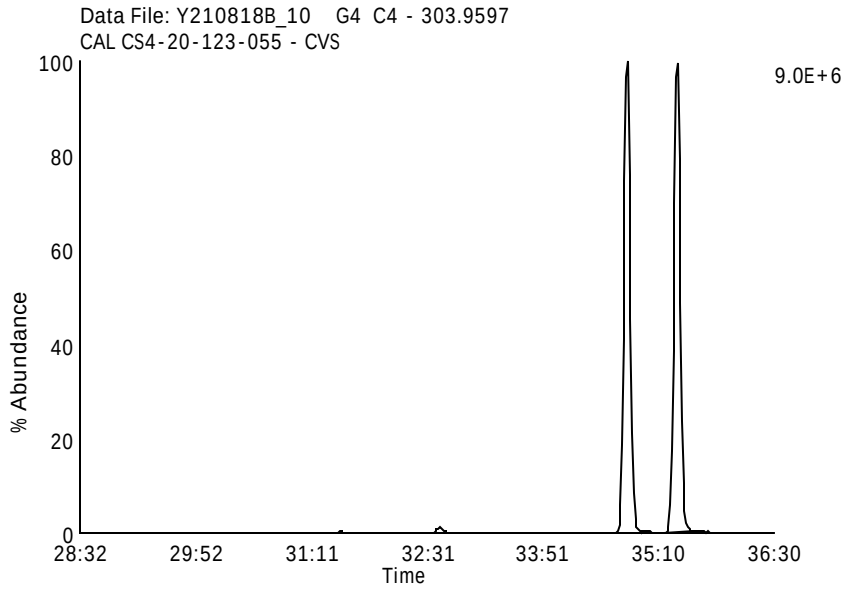
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS









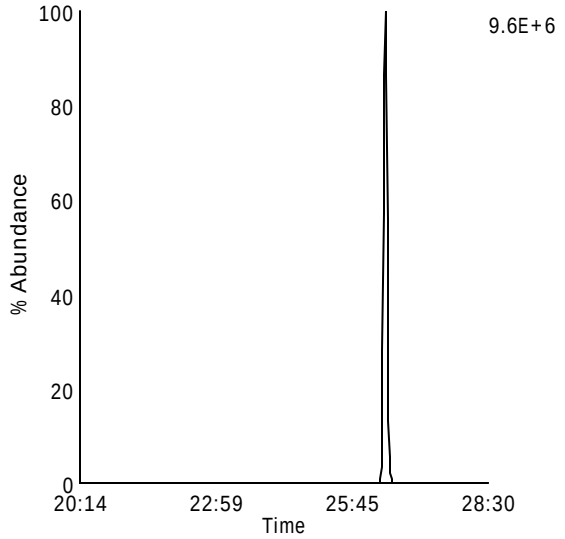
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

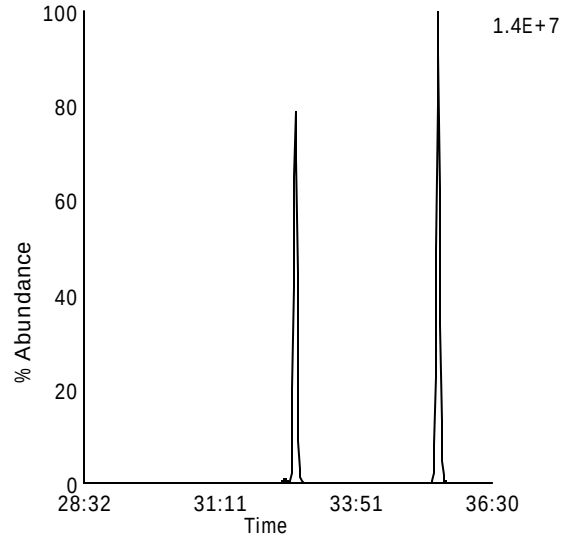
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

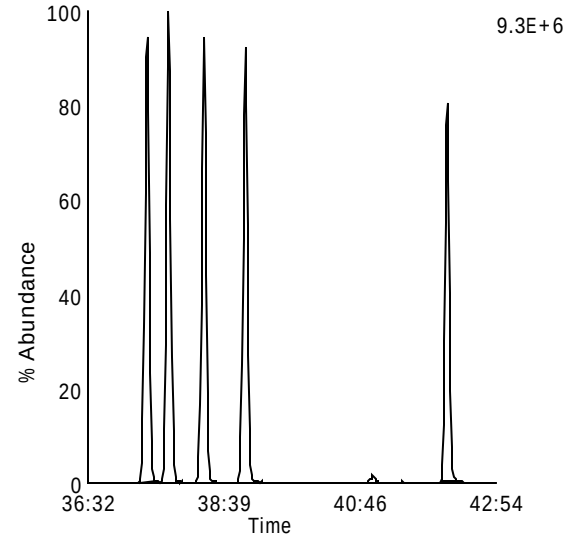
Data File: Y210818B_10 G3 C13 - 337.9207
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G4 C9 - 337.9207
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G5 C3 - 337.9207
CAL CS4-20-123-055 - CVS



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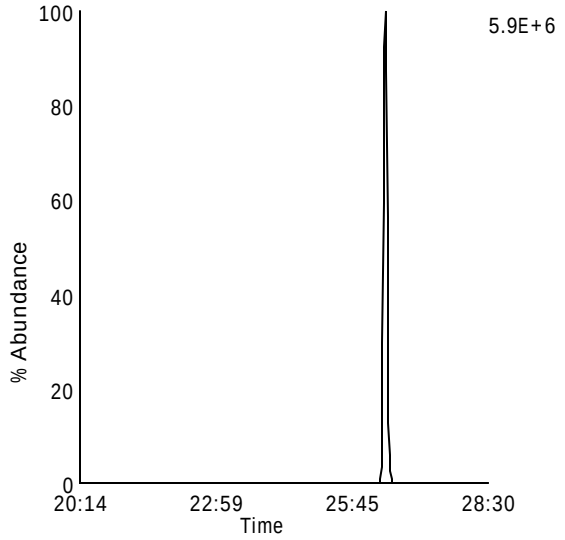
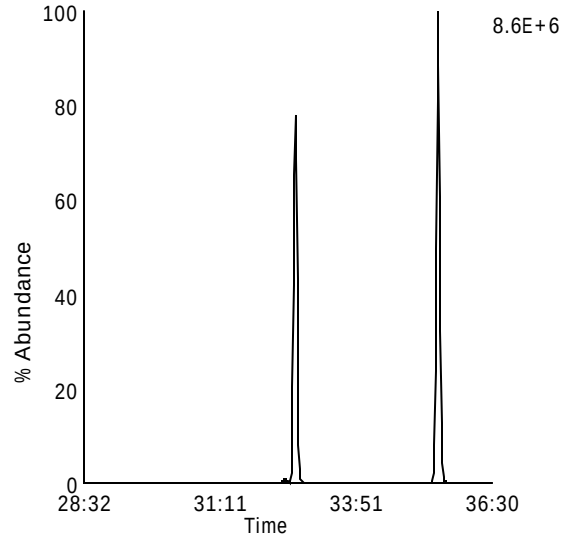
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G4 C10 - 339.9178
CAL CS4-20-123-055 - CVS



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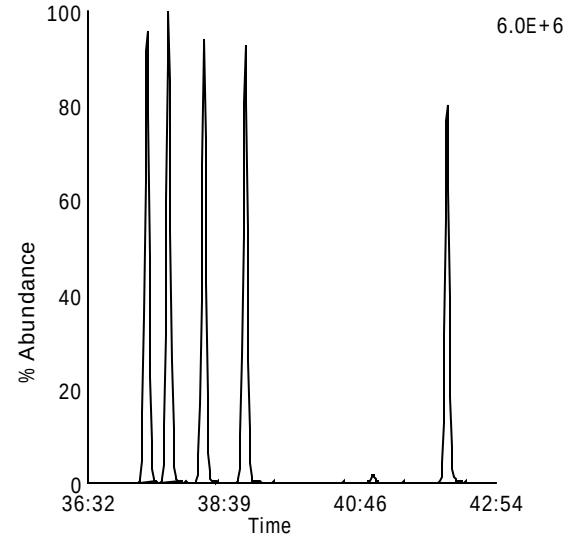
CAL CS4-20-123-055 - CVS



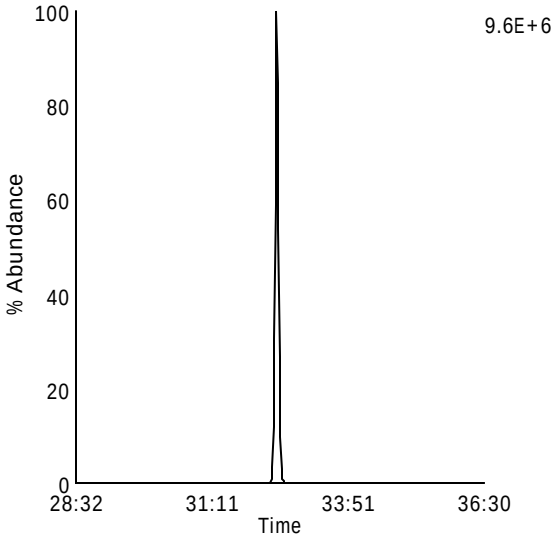
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

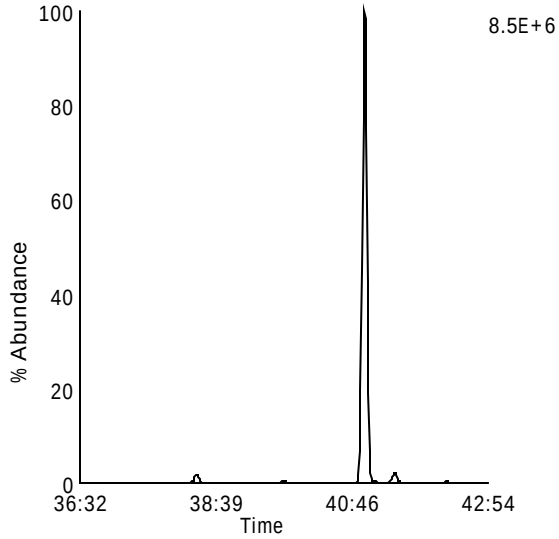
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

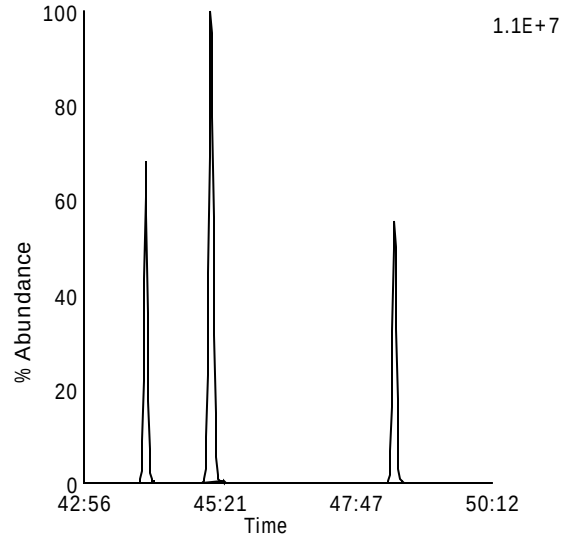
Data File: Y210818B_10 G4 C13 - 371.8817
CAL CS4-20-123-055 - CVS



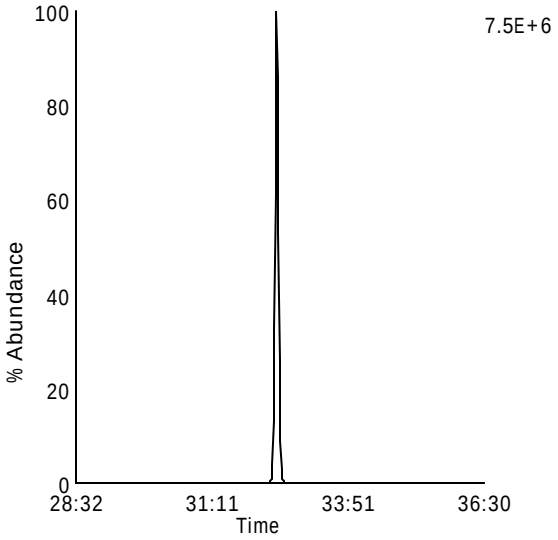
Data File: Y210818B_10 G5 C7 - 371.8817
CAL CS4-20-123-055 - CVS



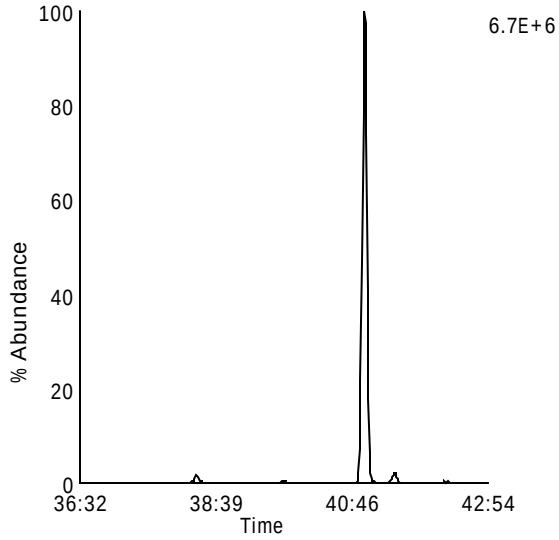
Data File: Y210818B_10 G6 C3 - 371.8817
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G4 C14 - 373.8788
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G5 C8 - 373.8788
CAL CS4-20-123-055 - CVS



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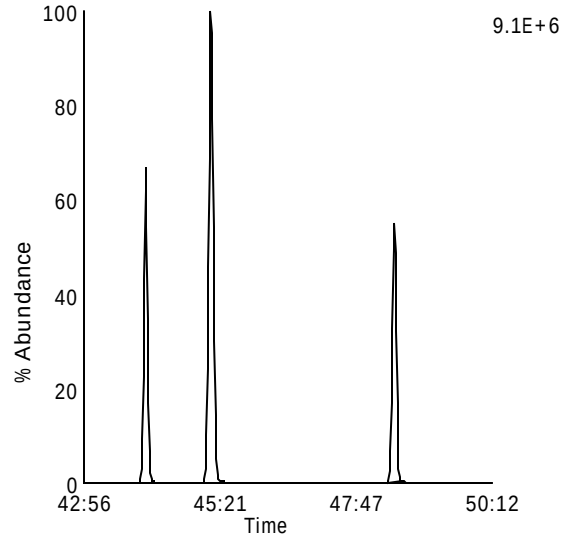
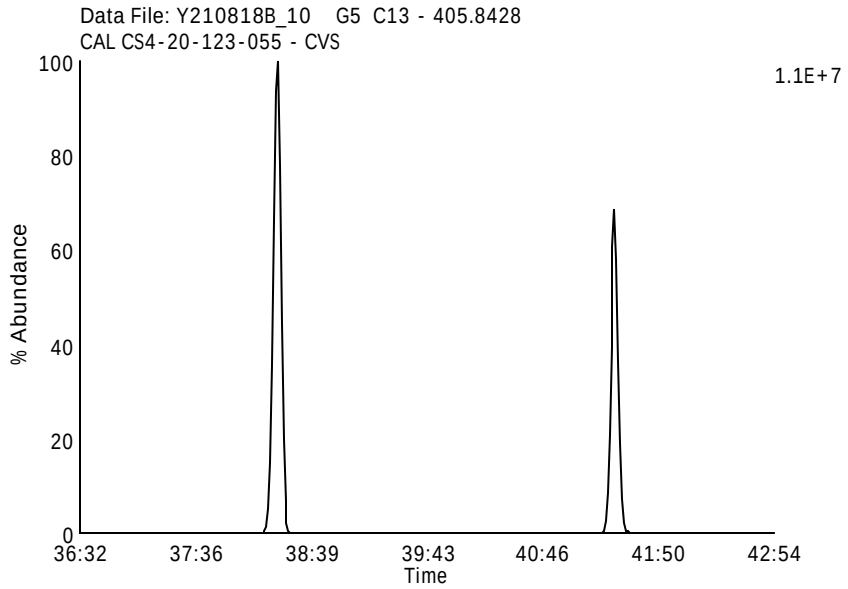
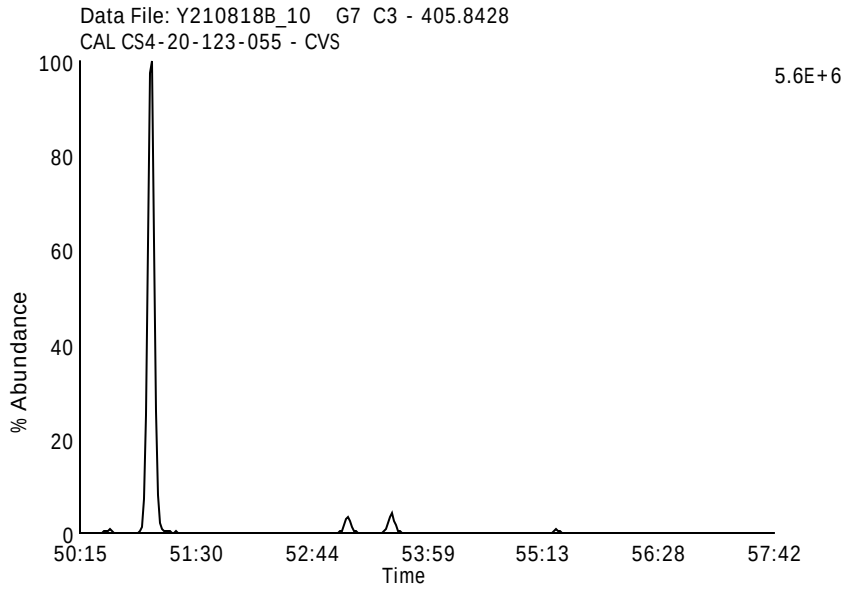
CAL CS4-20-123-055 - CVS

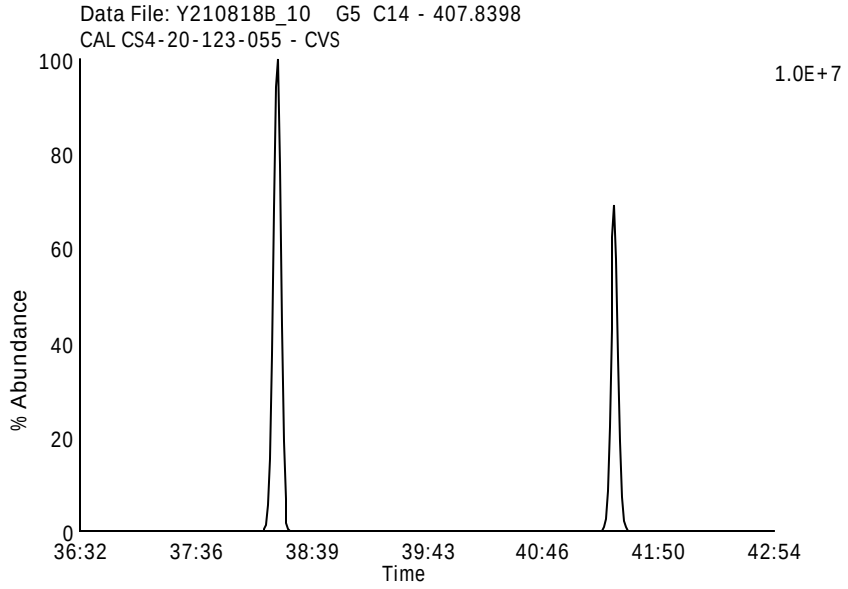


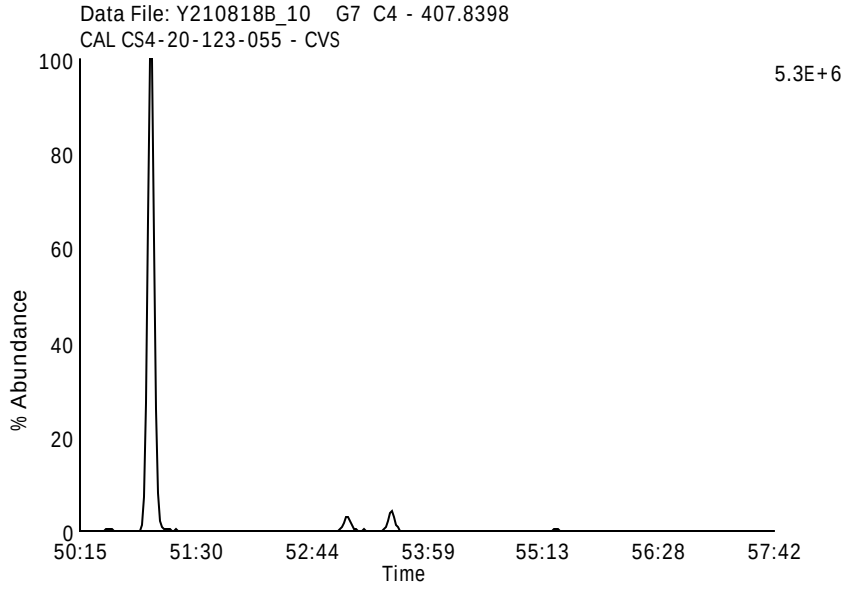
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS









Labeled Octa Chlorinated Biphenyls

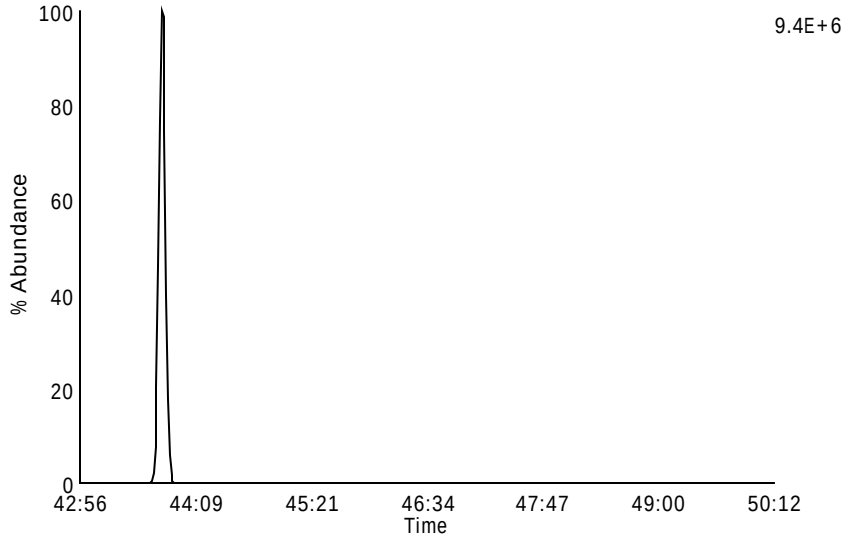
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

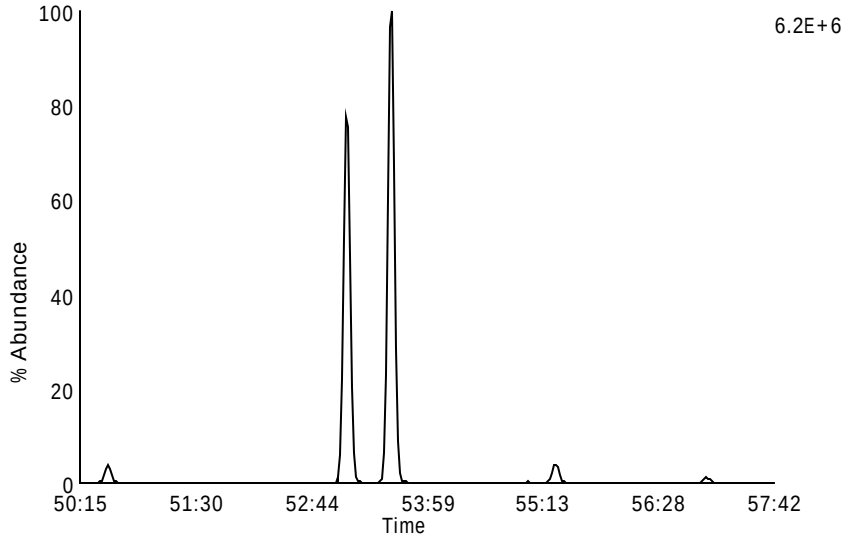
Data File: Y210818B_10 G6 C13 - 439.8038

CAL CS4-20-123-055 - CVS



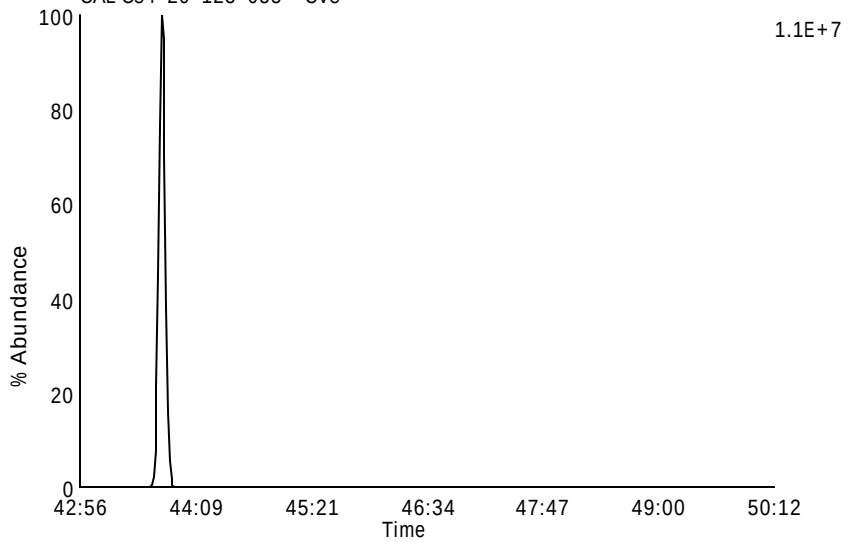
Data File: Y210818B_10 G7 C7 - 439.8038

CAL CS4-20-123-055 - CVS



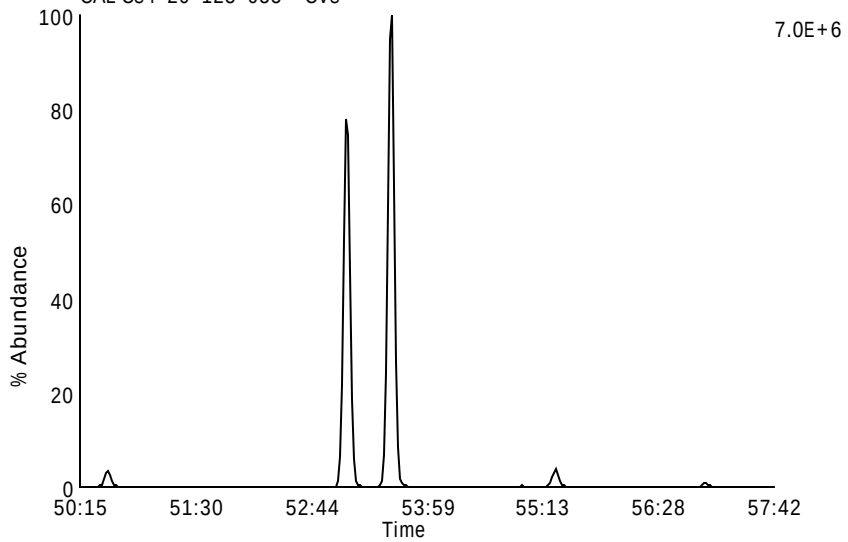
Data File: Y210818B_10 G6 C14 - 441.8008

CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G7 C8 - 441.8008

CAL CS4-20-123-055 - CVS

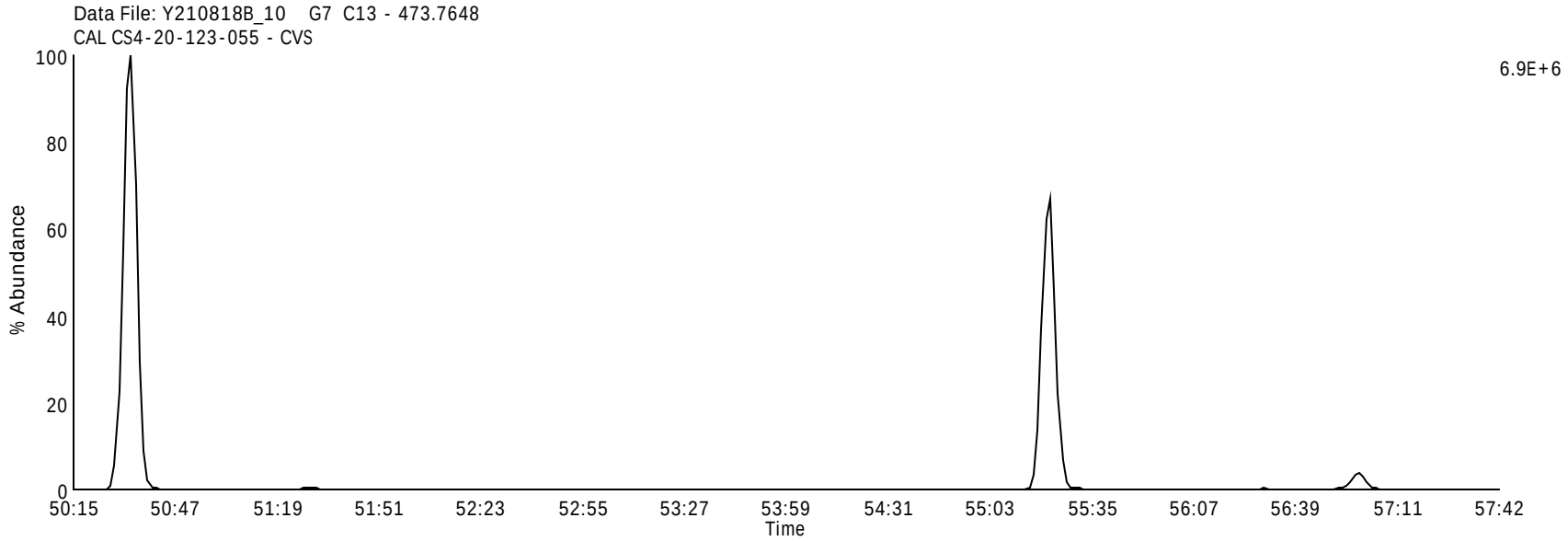


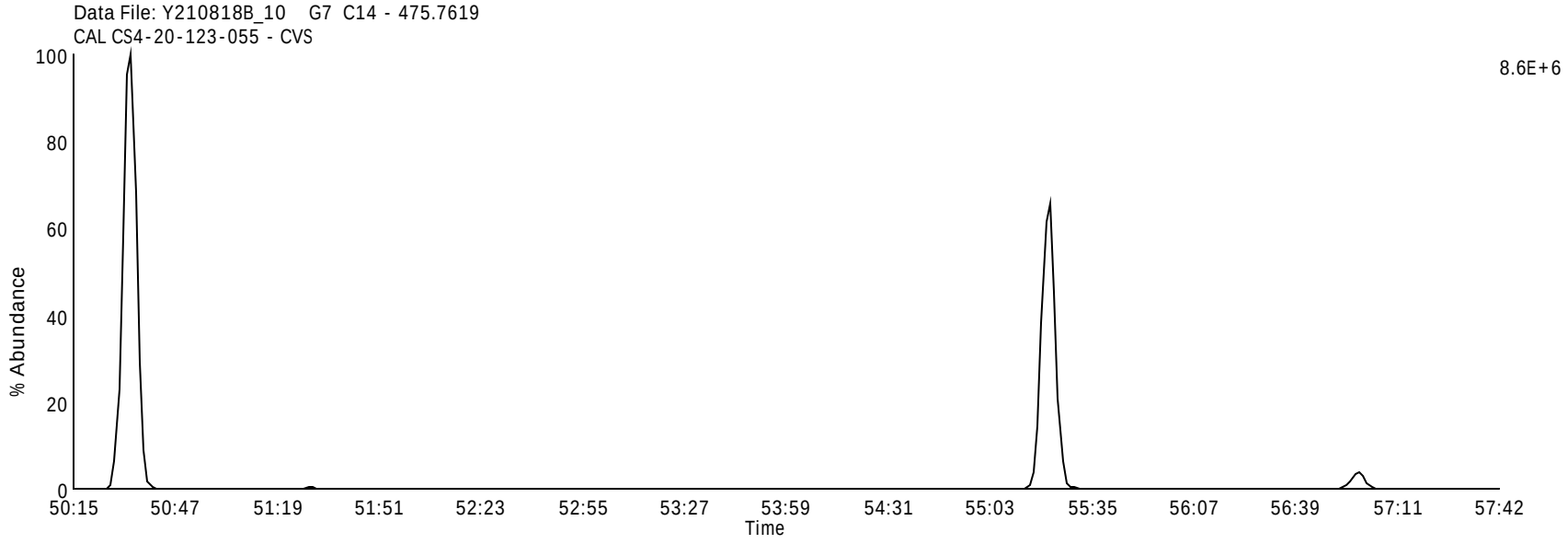
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



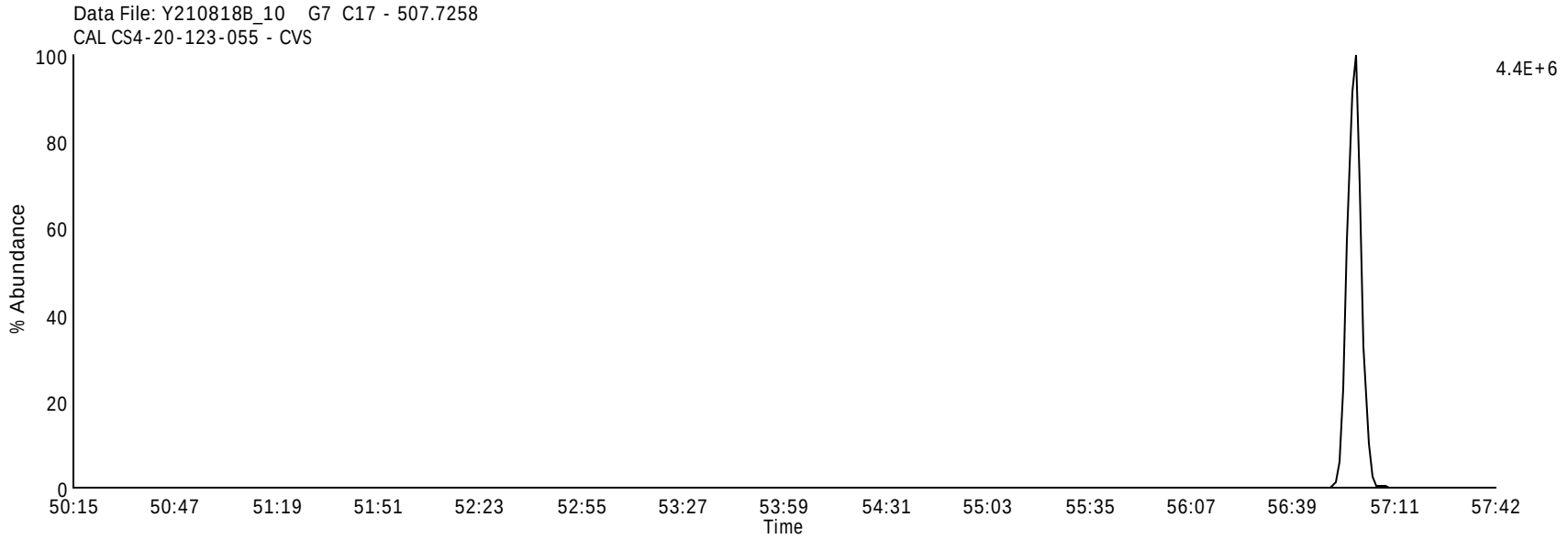


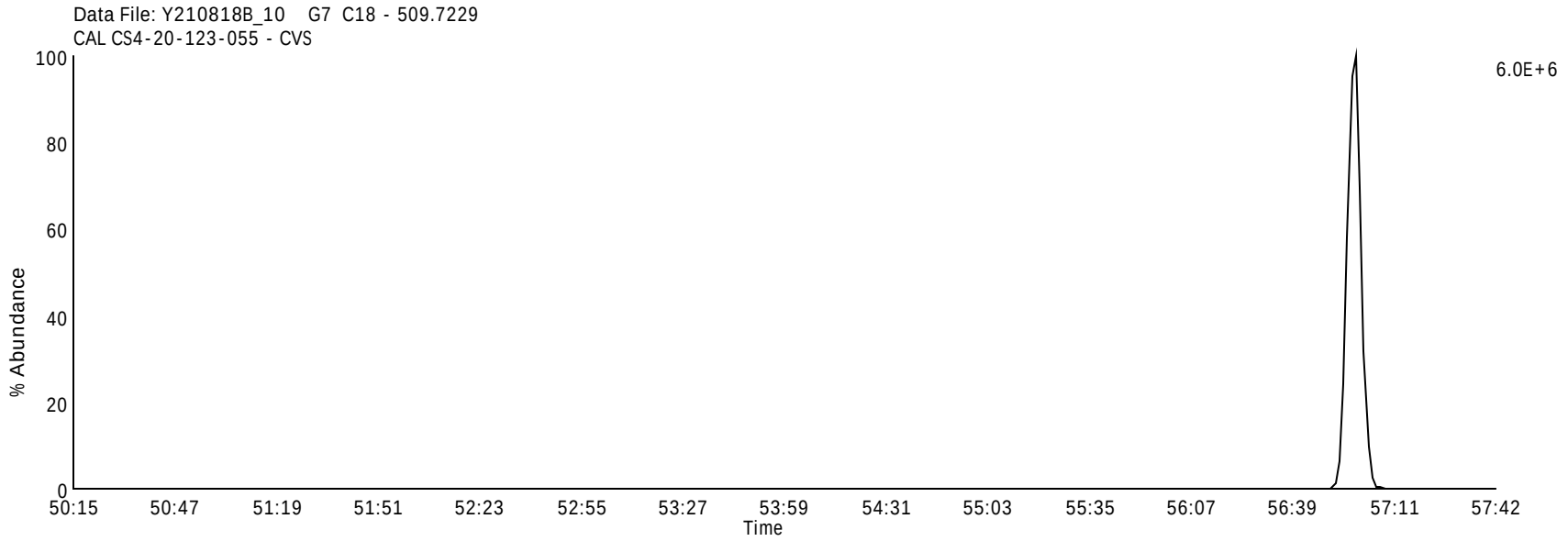
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



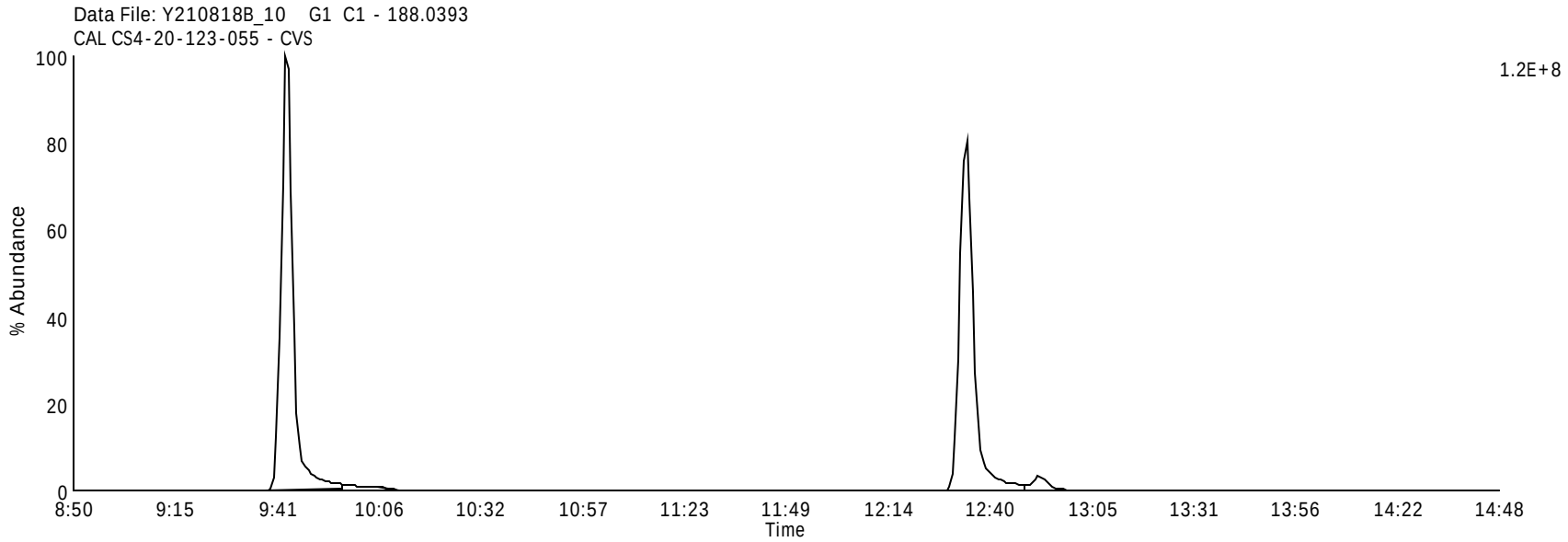


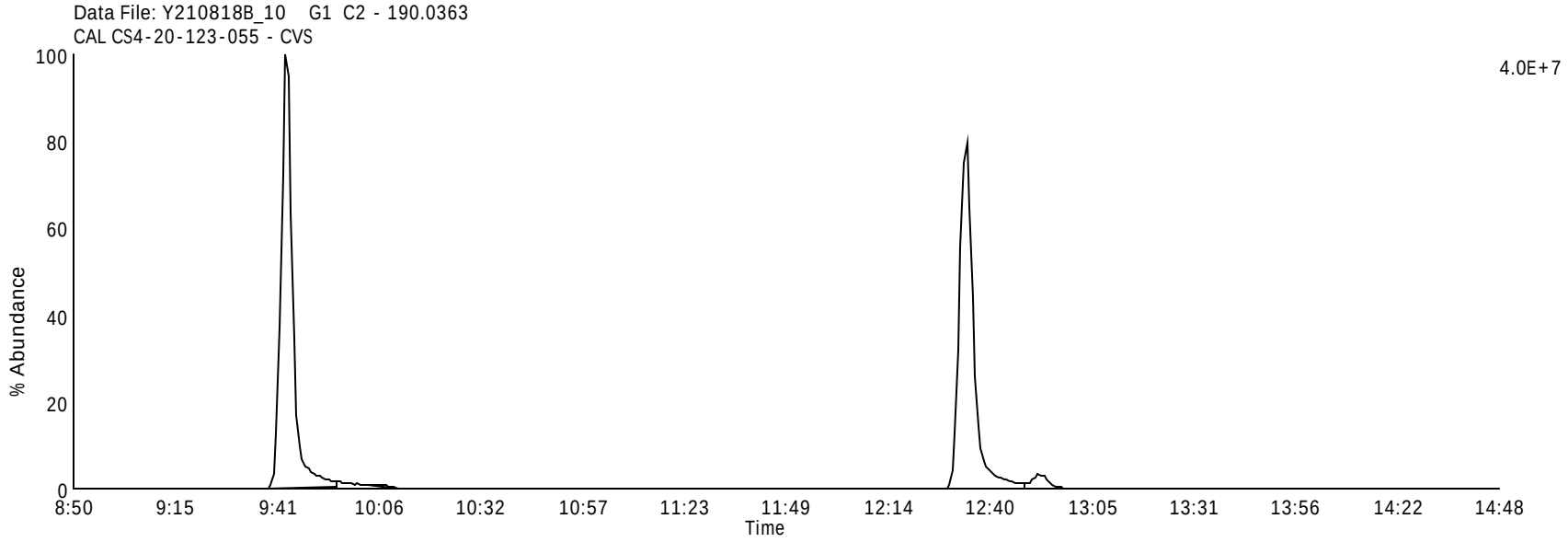
Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

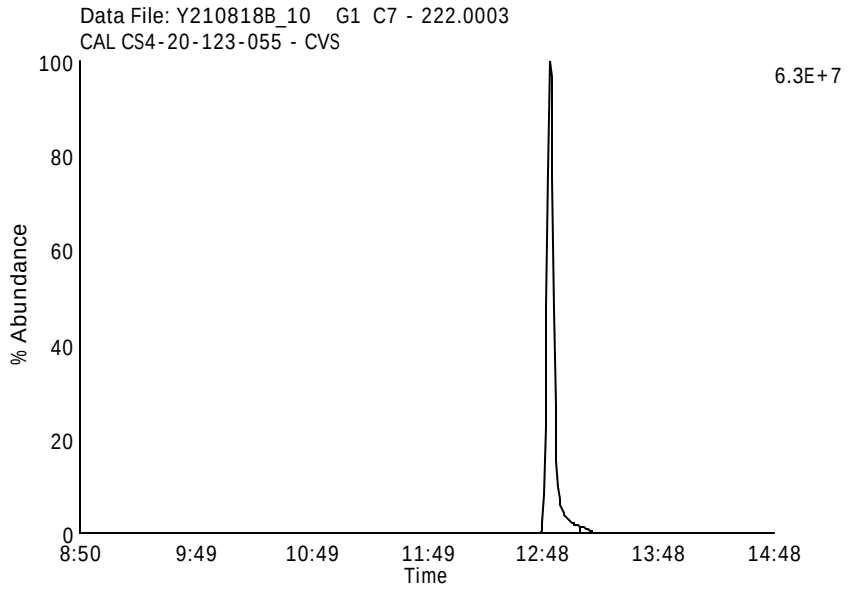
Sample Description: CAL CS4-20-123-055 - CVS

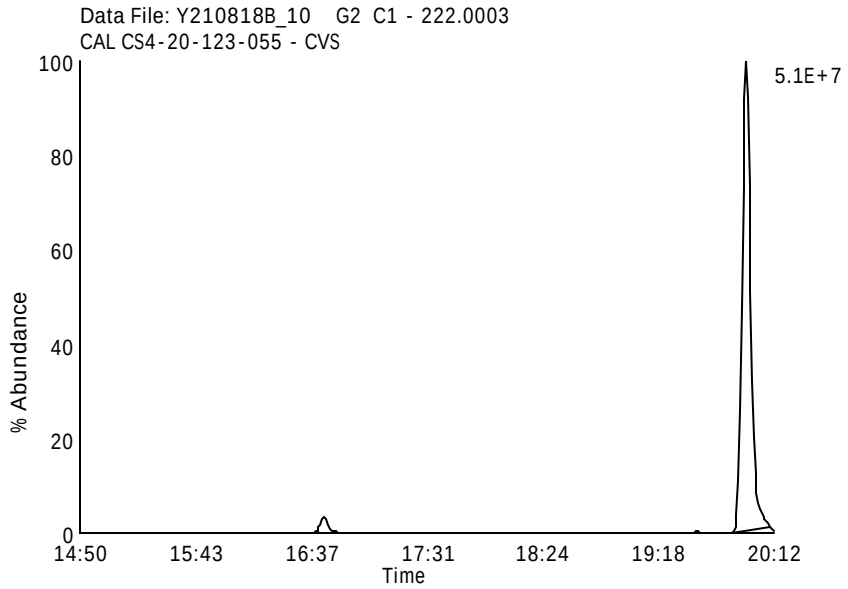


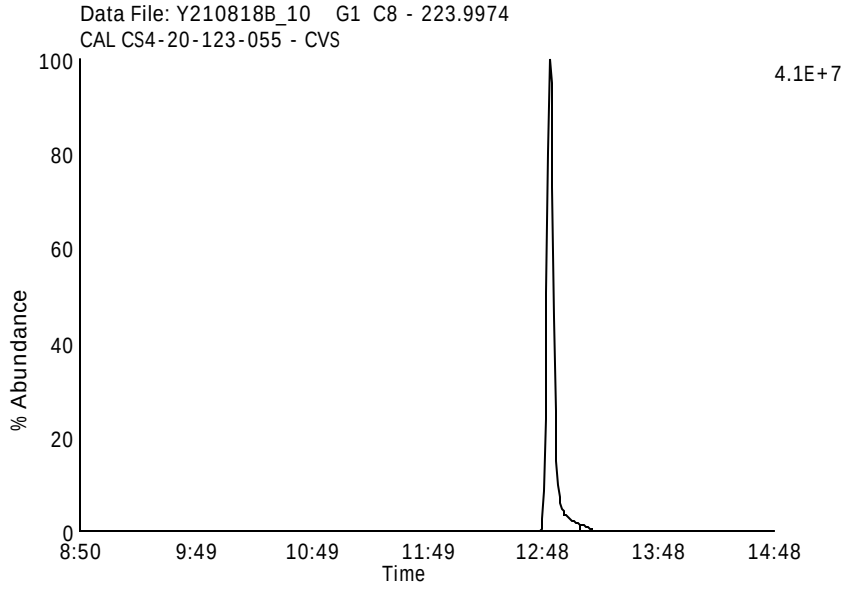


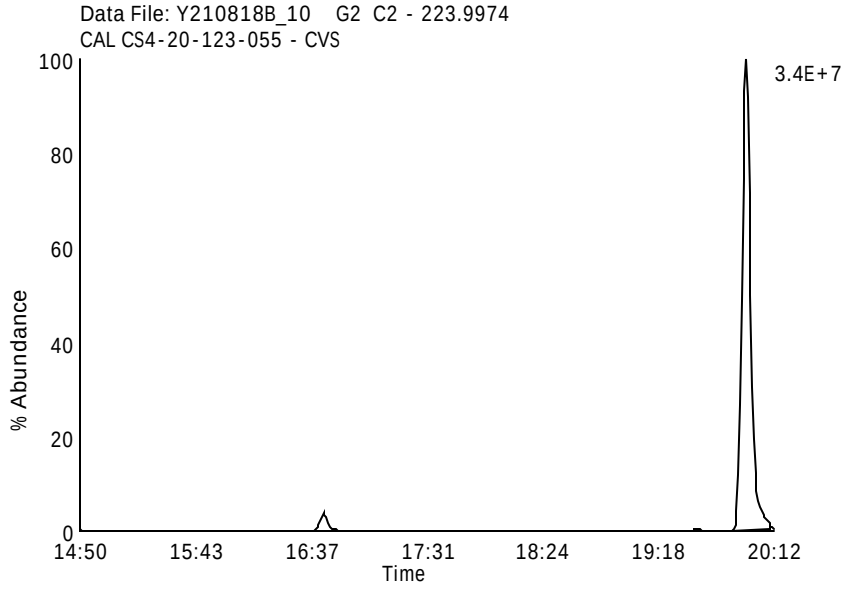
Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



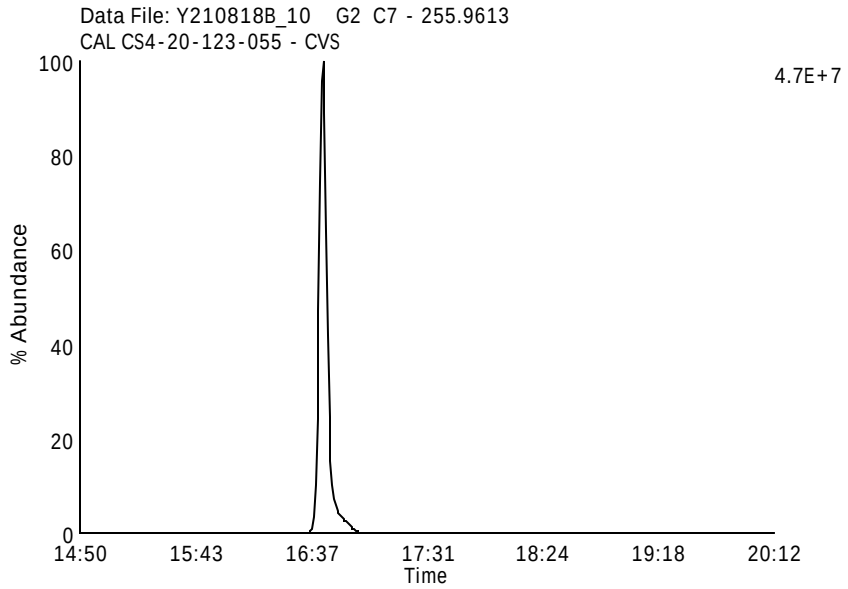


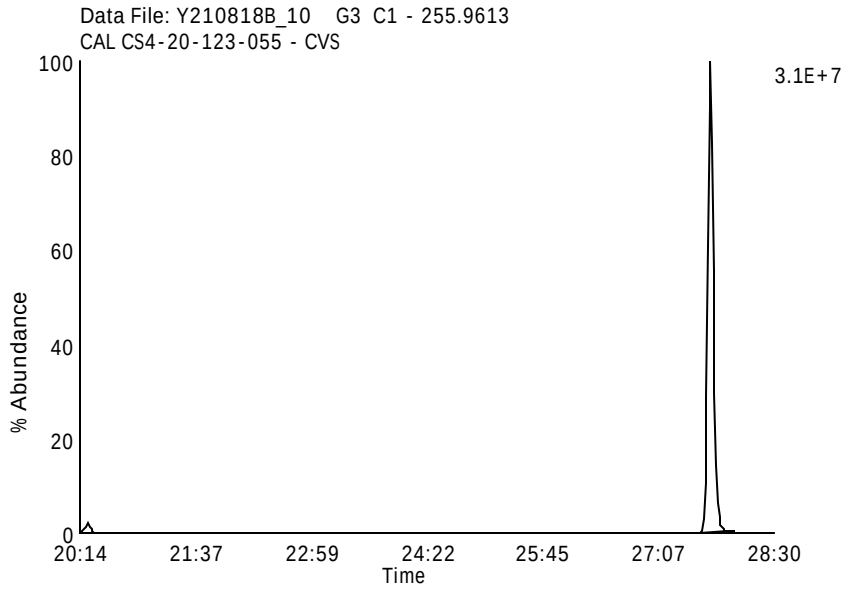


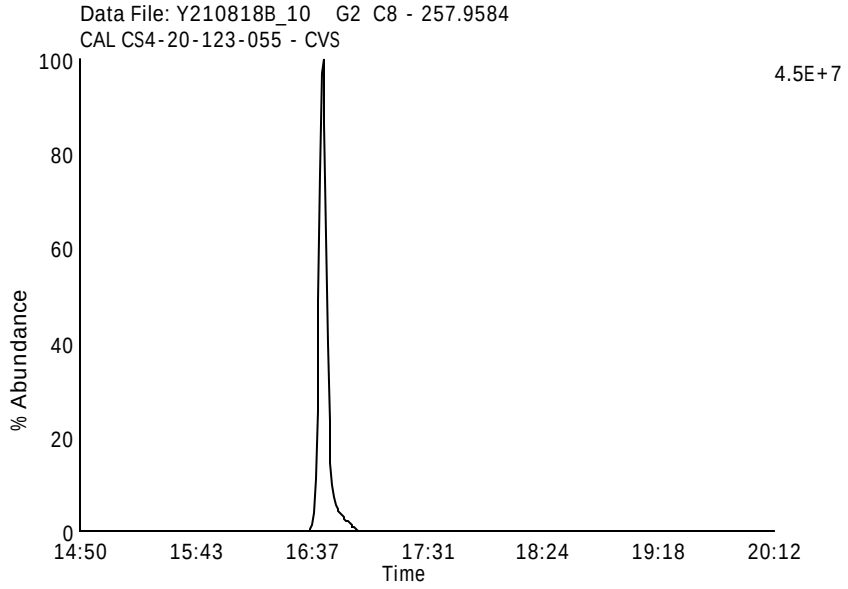


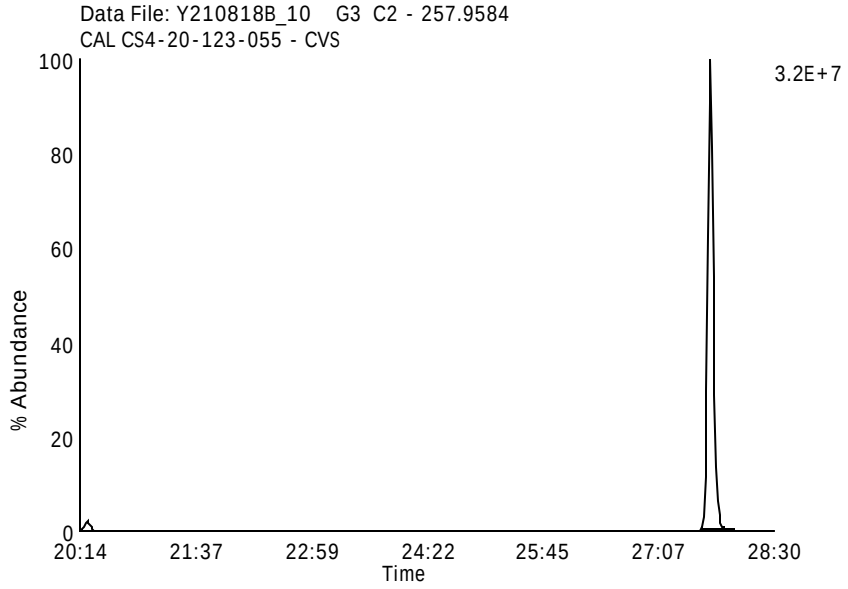
Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



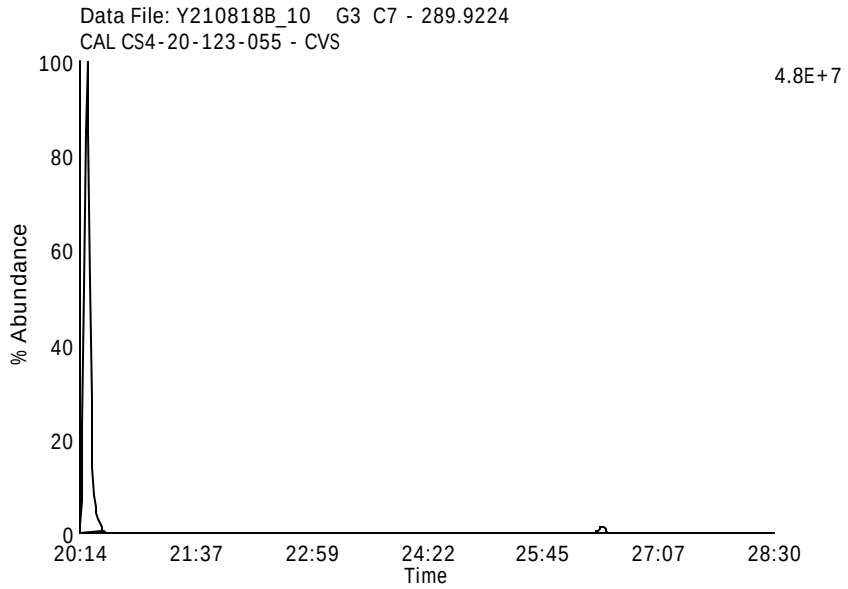


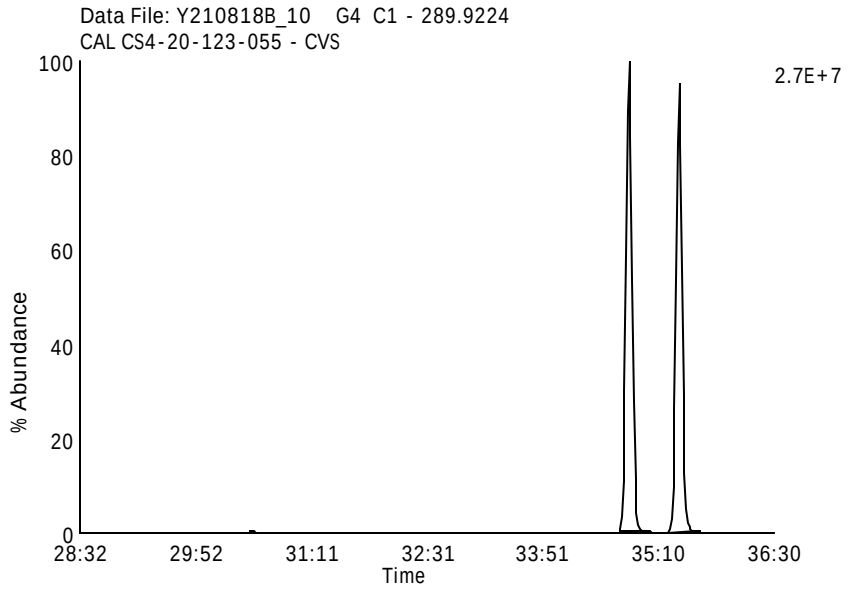


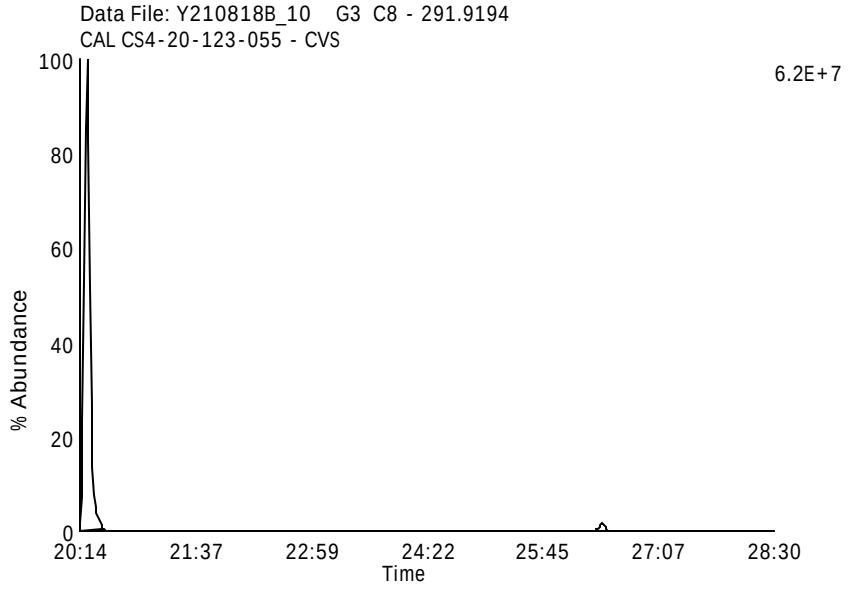


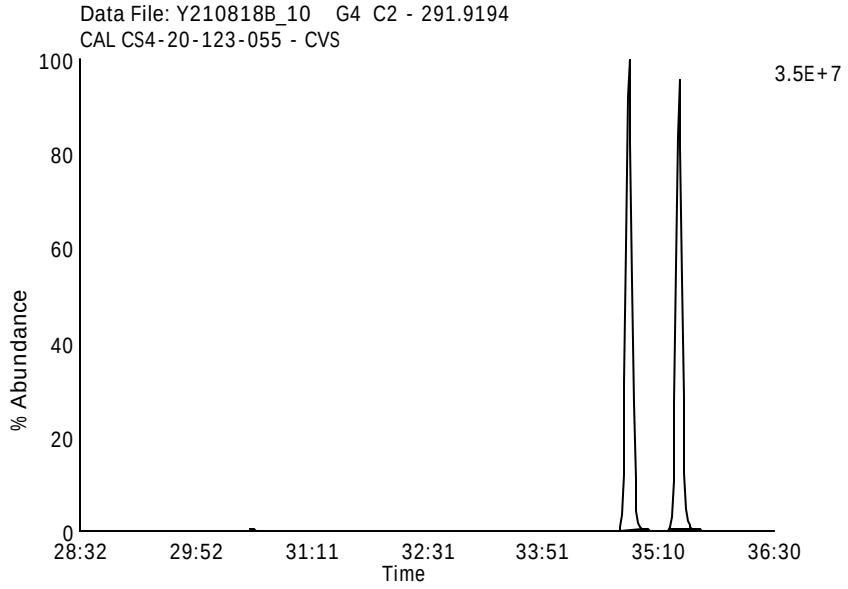
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



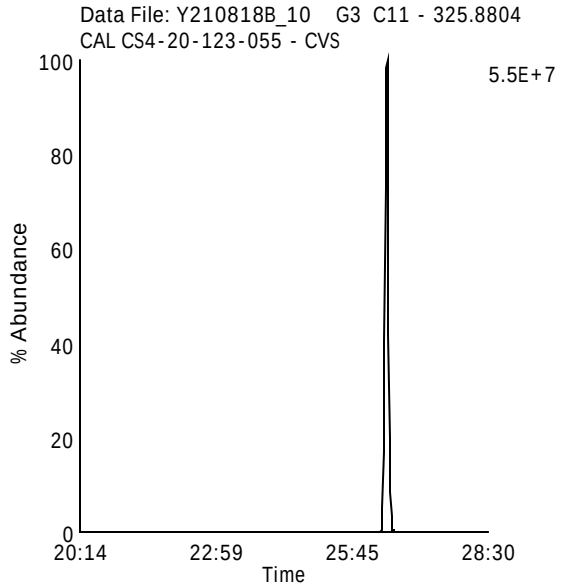


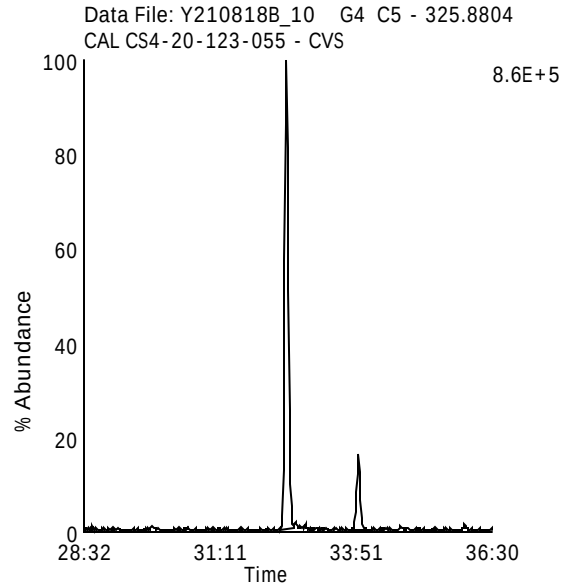


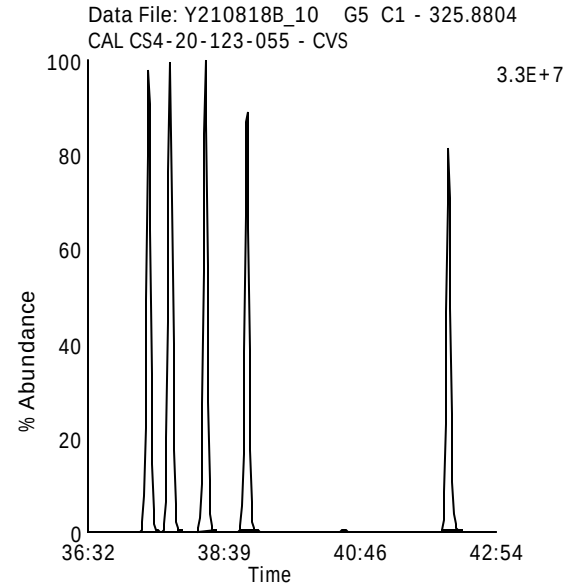


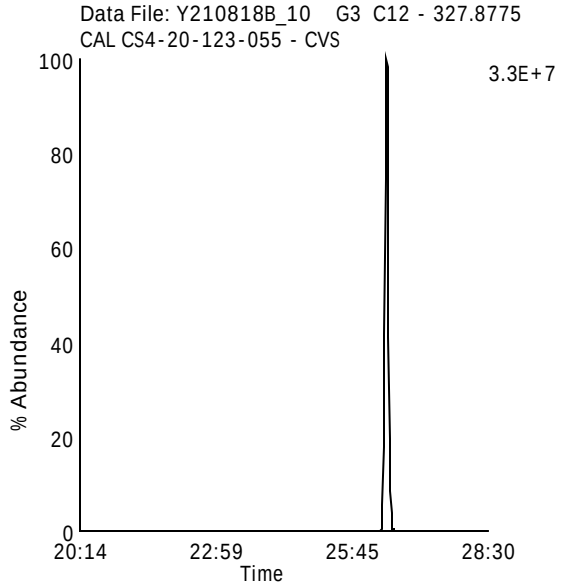
Penta Chlorinated Biphenyls

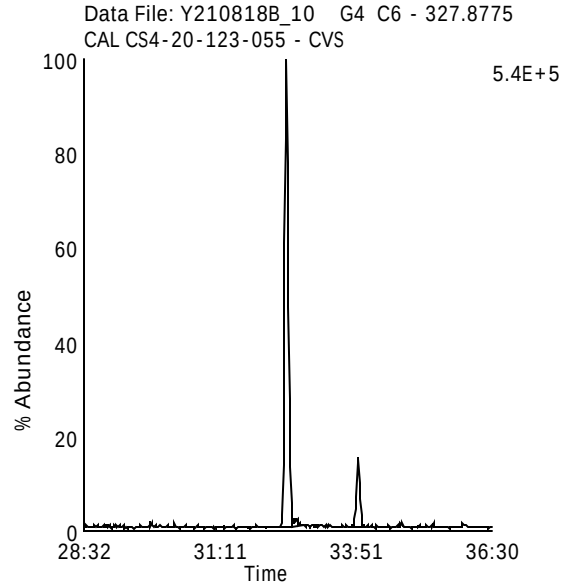
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

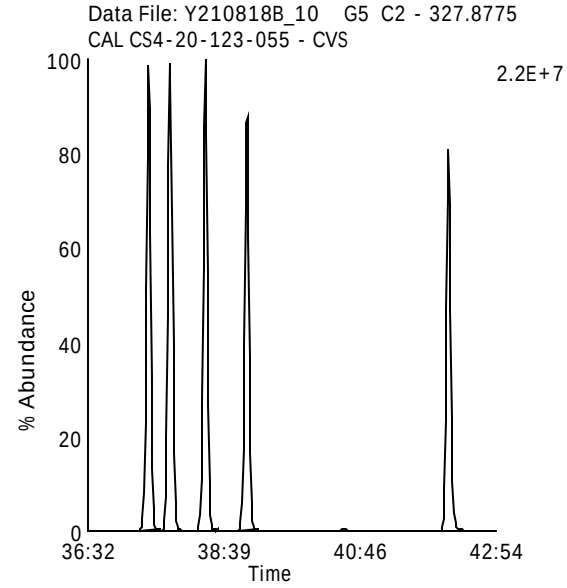






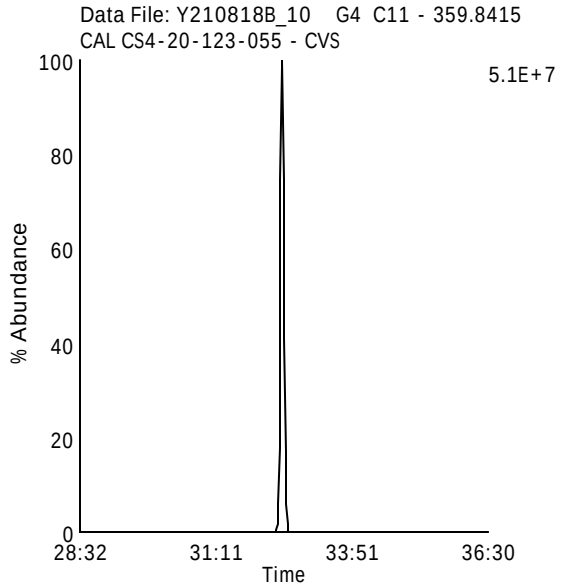


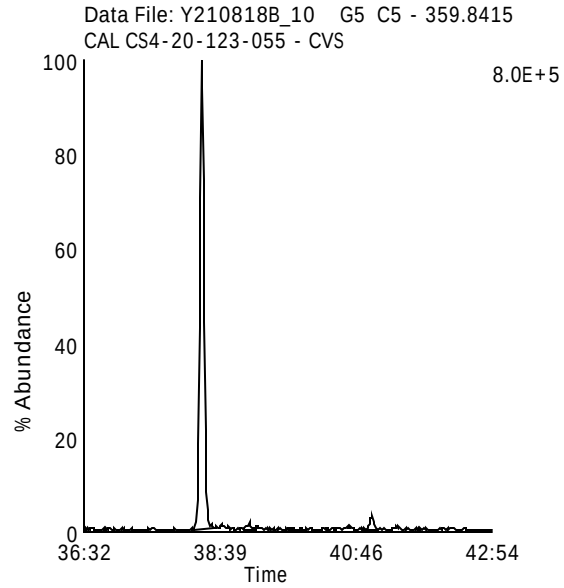


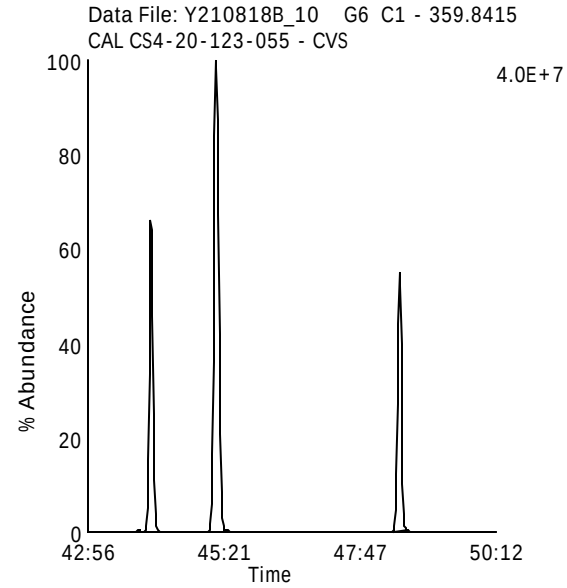


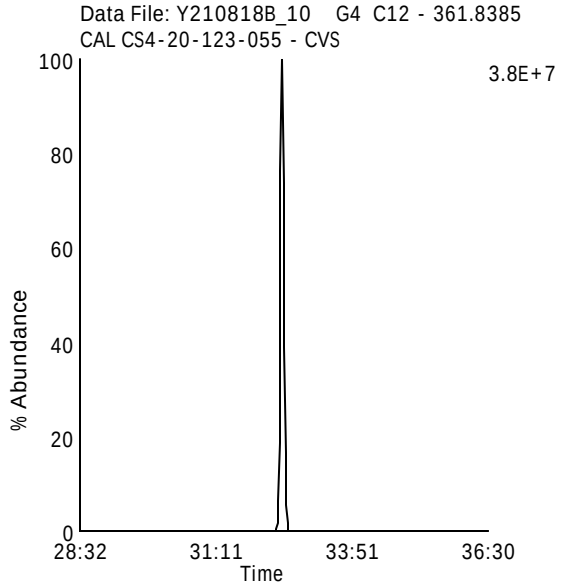
Hexa Chlorinated Biphenyls

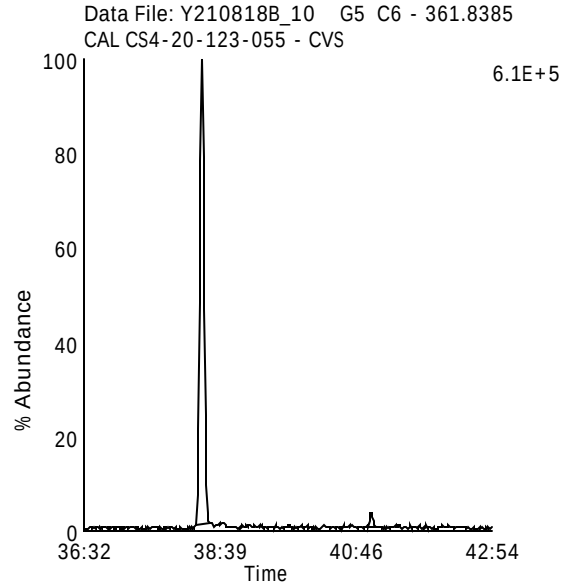
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

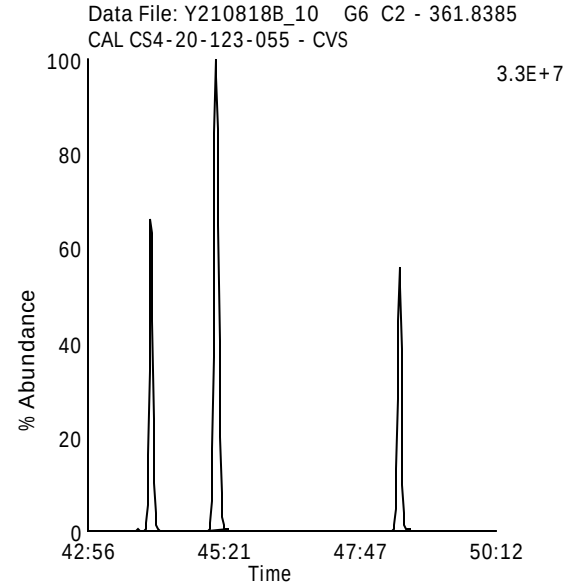






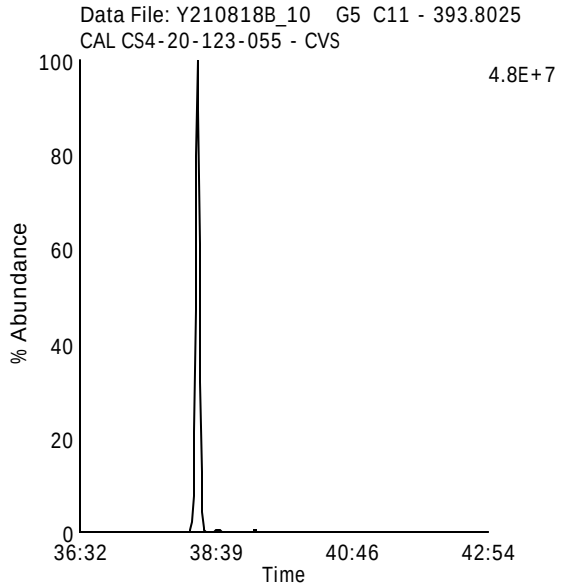


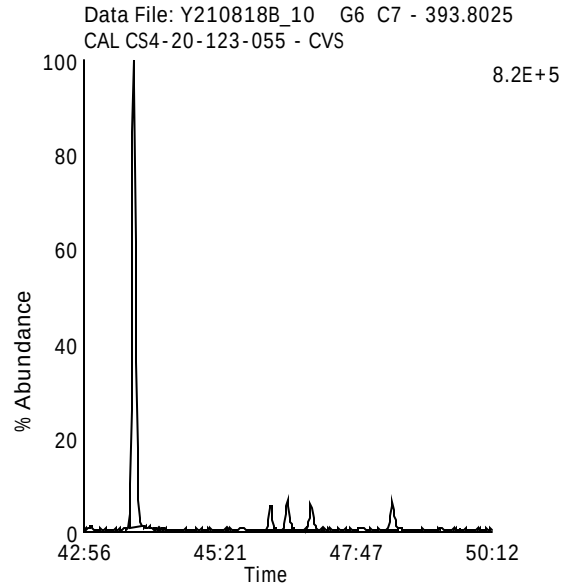


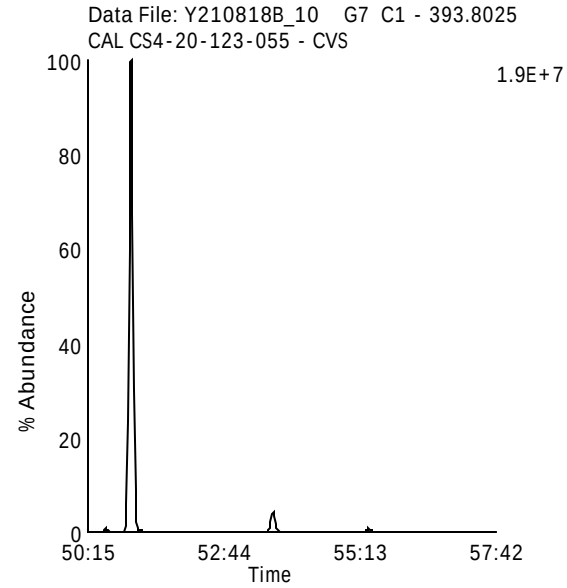


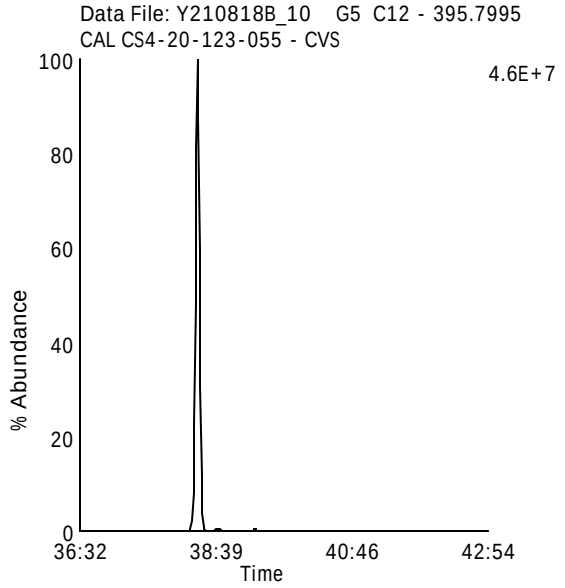
Hepta Chlorinated Biphenyls

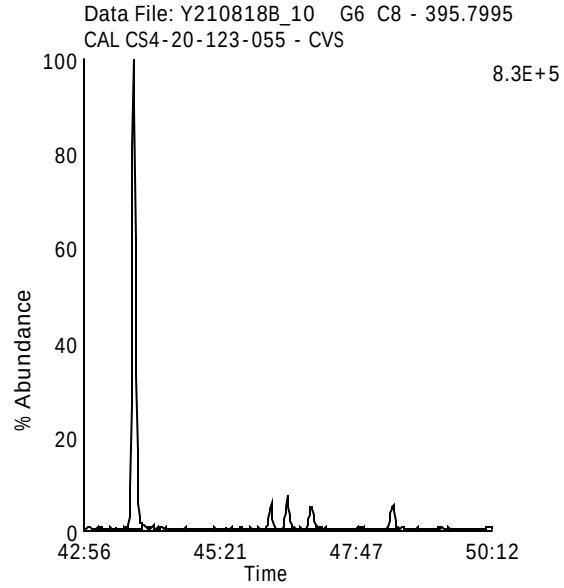
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

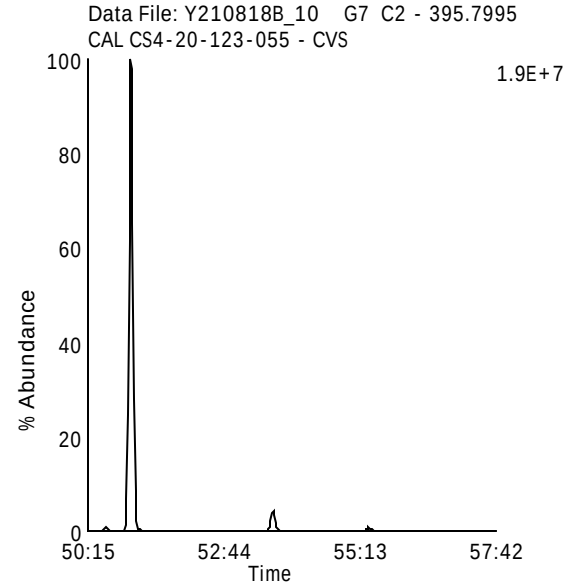






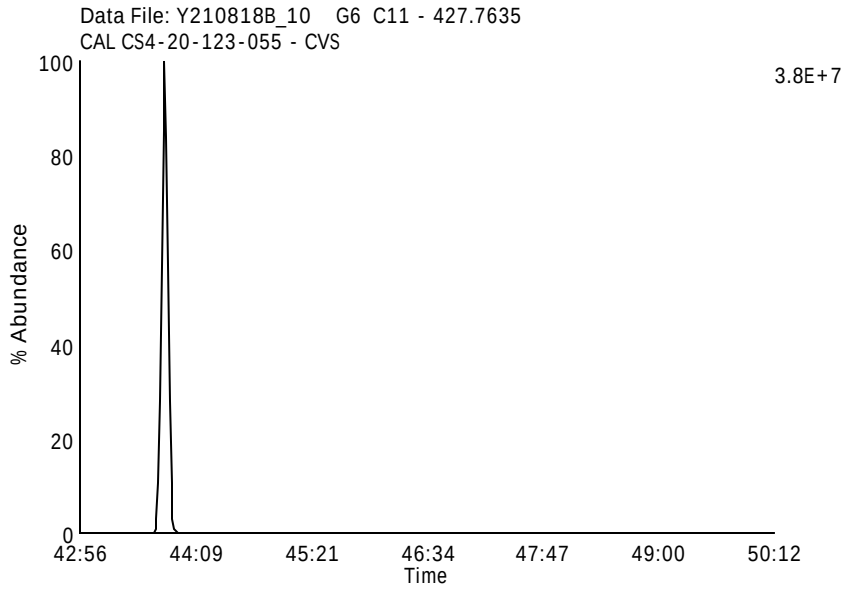


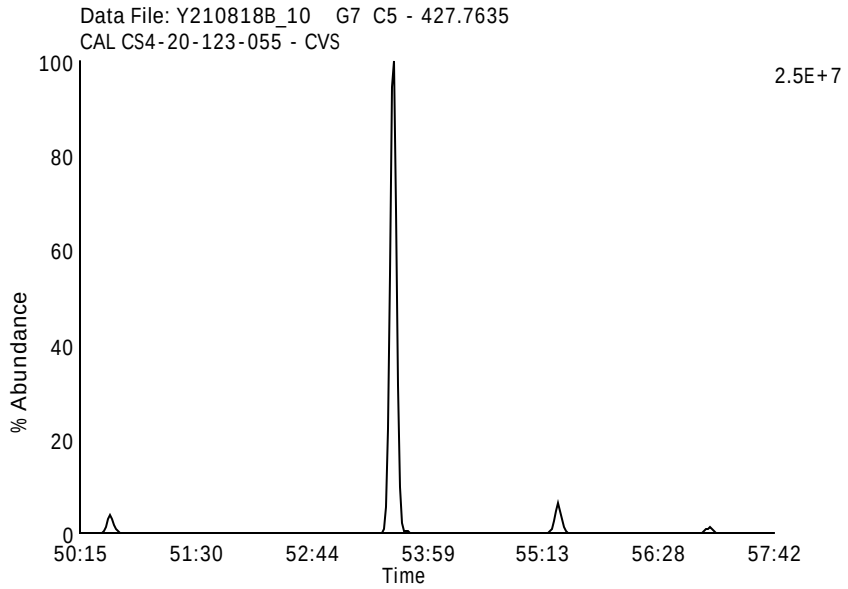


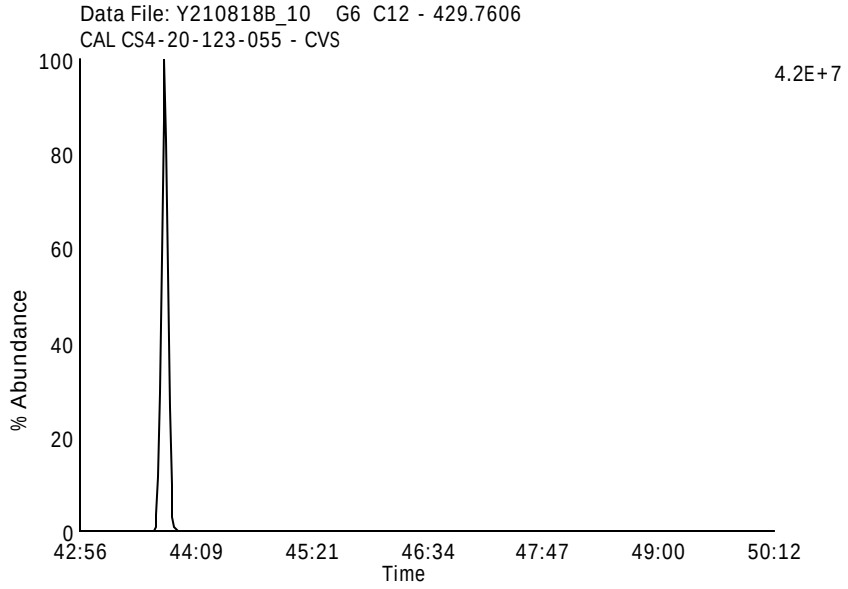


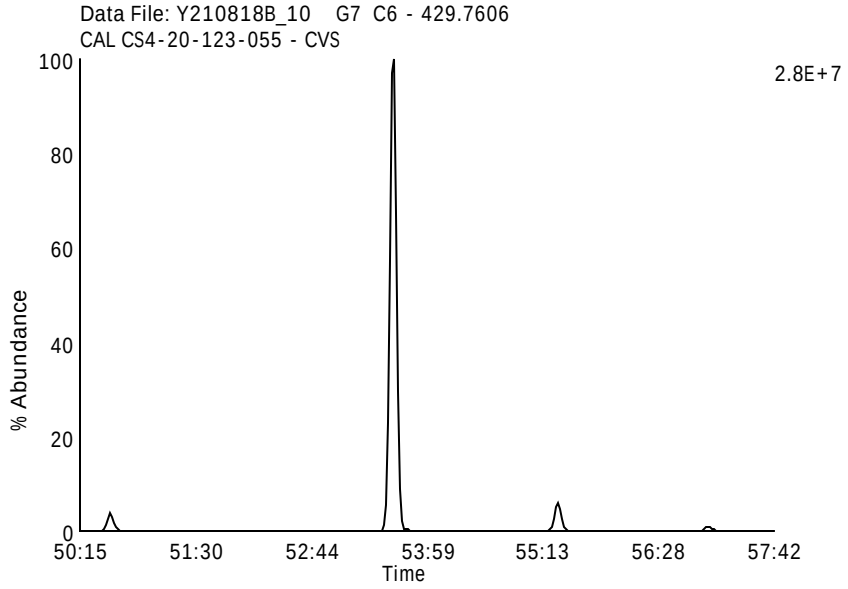
Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS







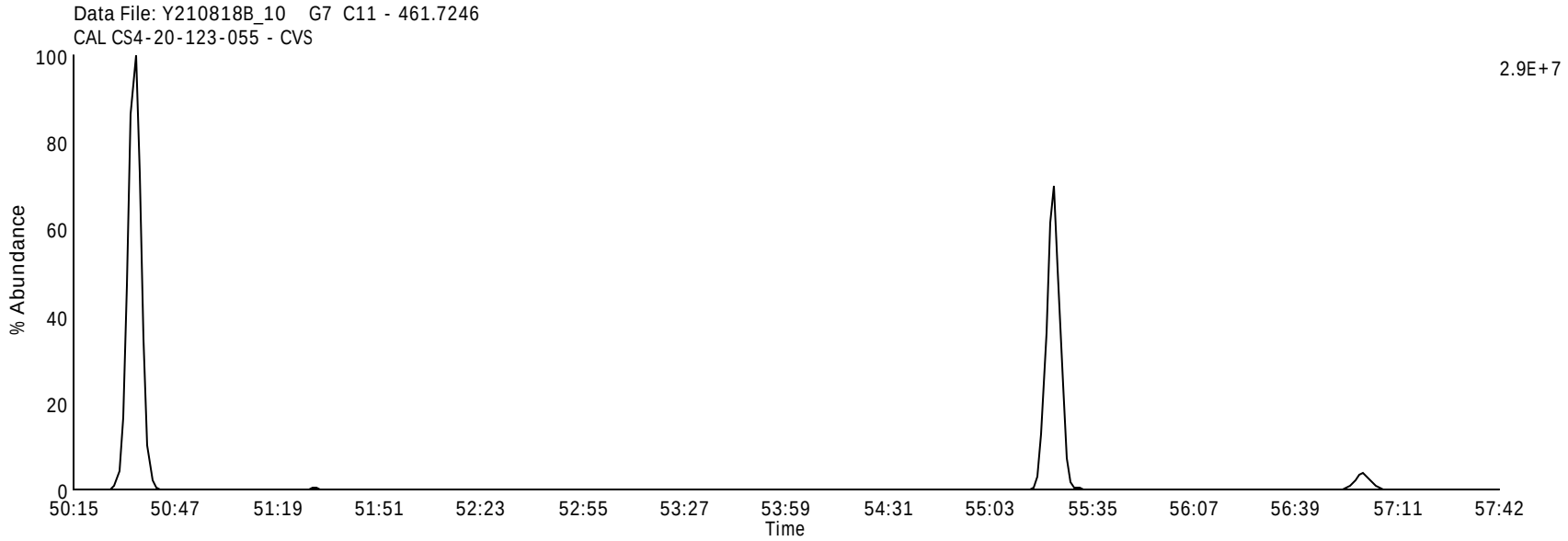


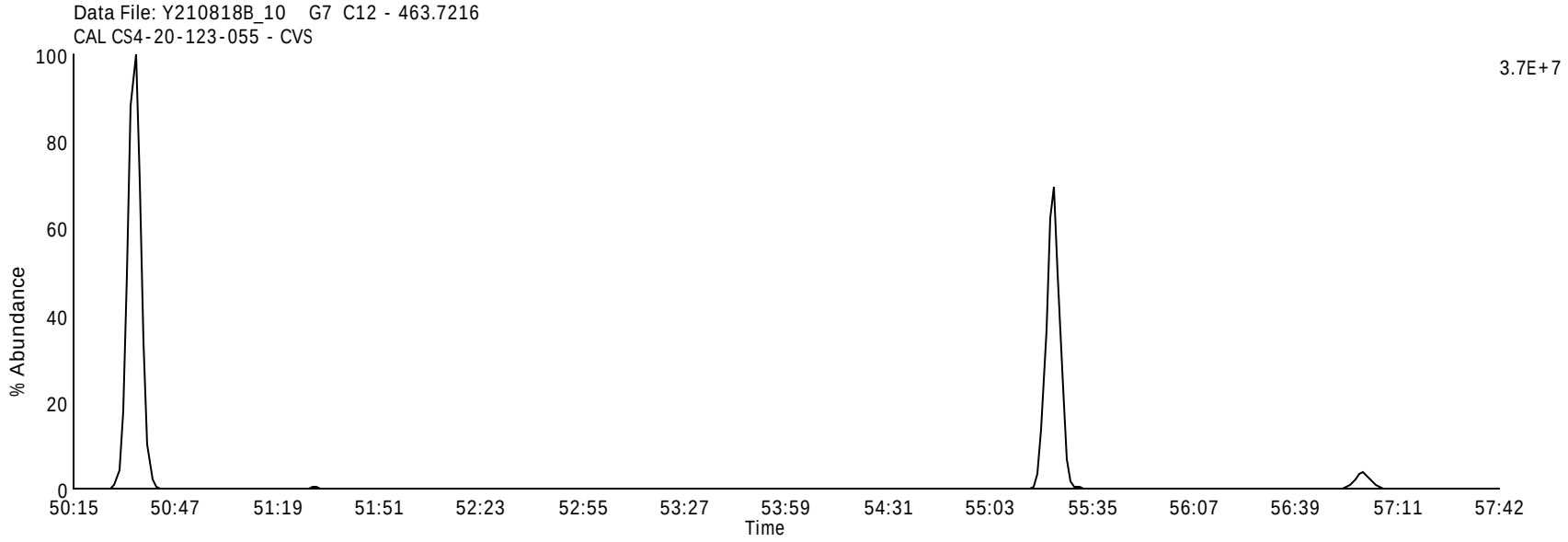
Nona Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



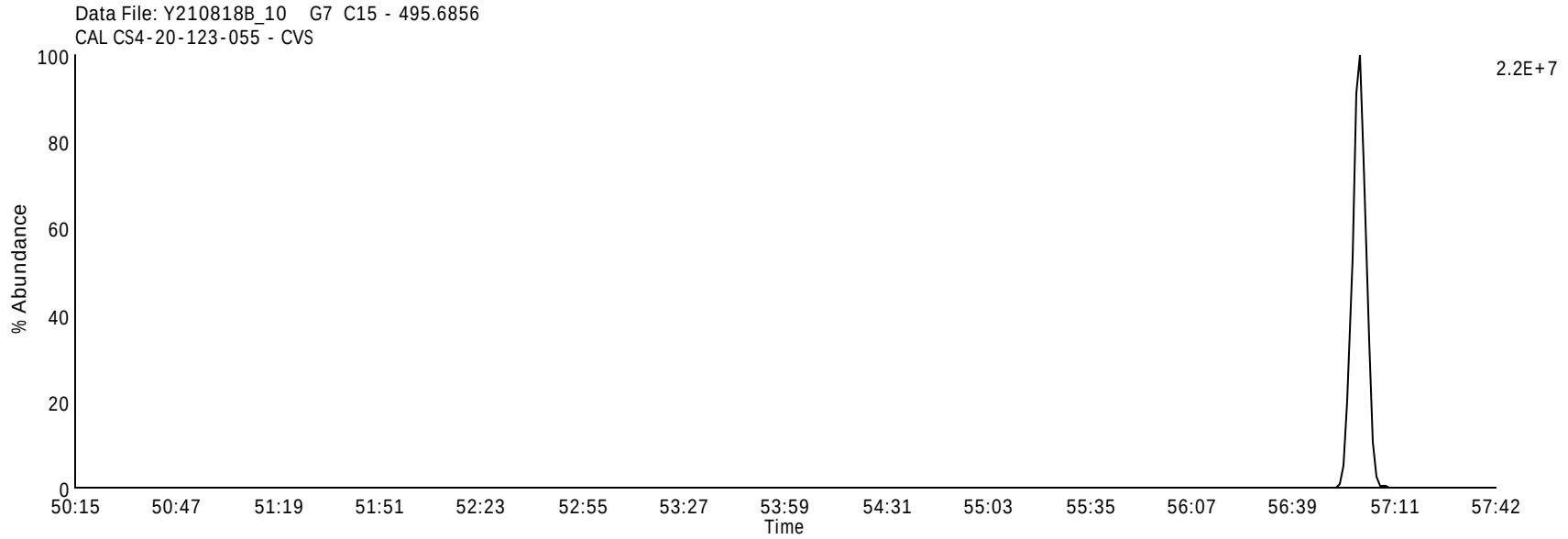


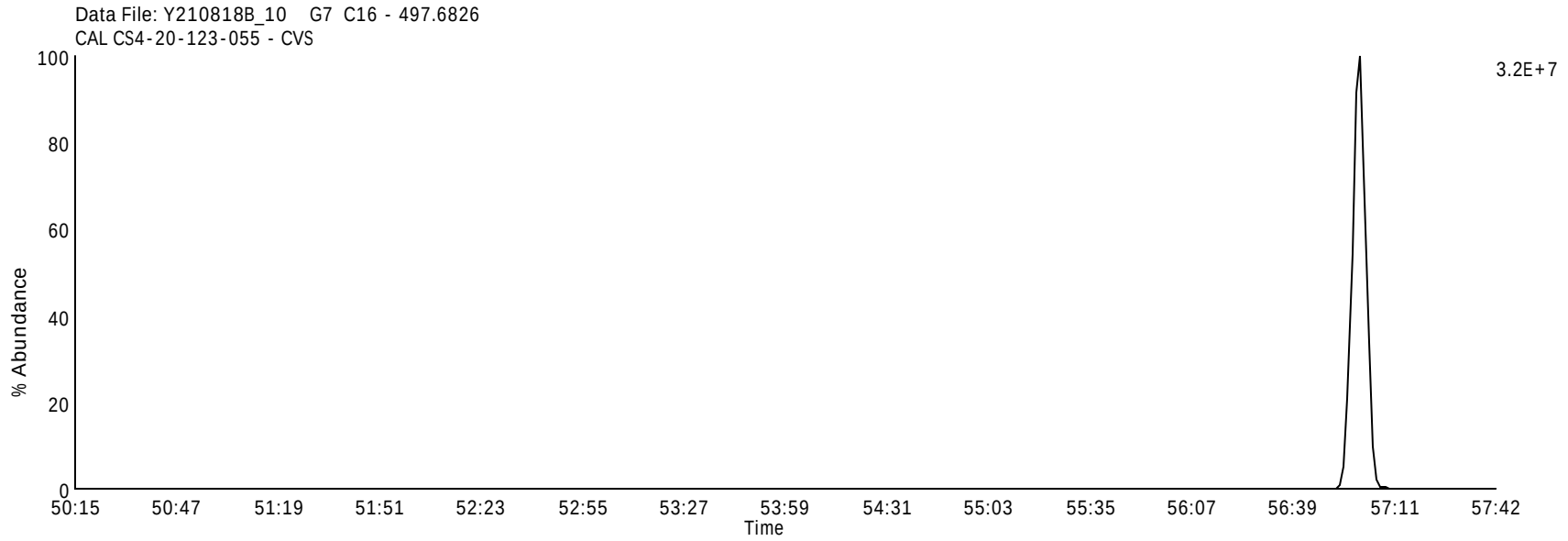
Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

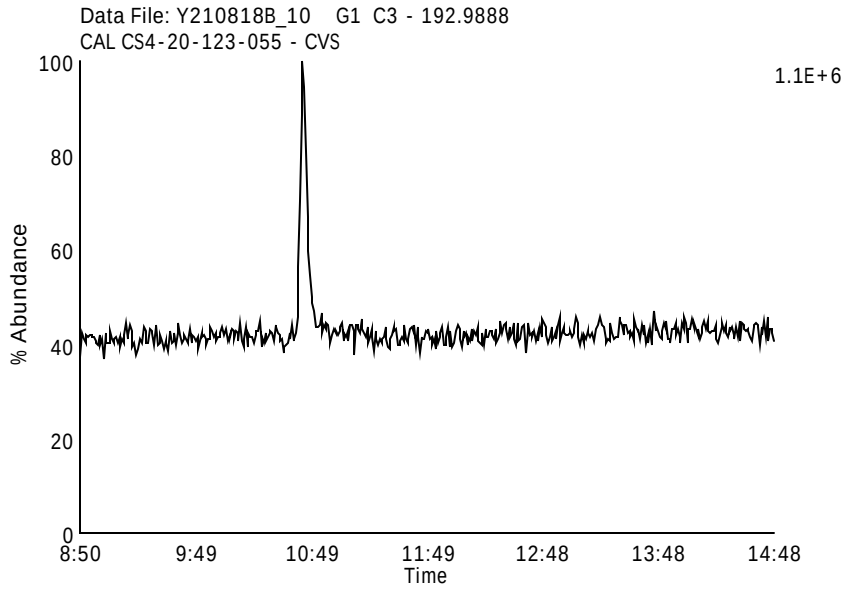
Sample Description: CAL CS4-20-123-055 - CVS

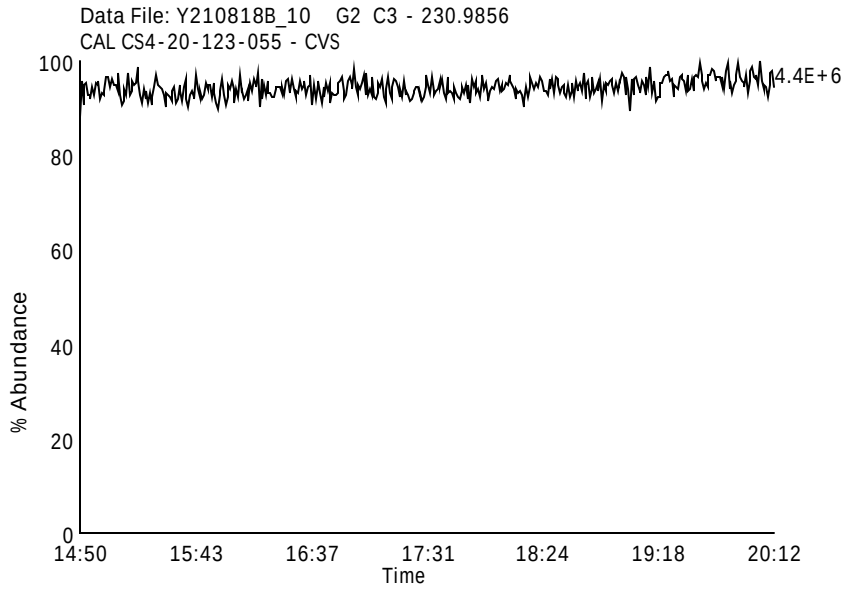


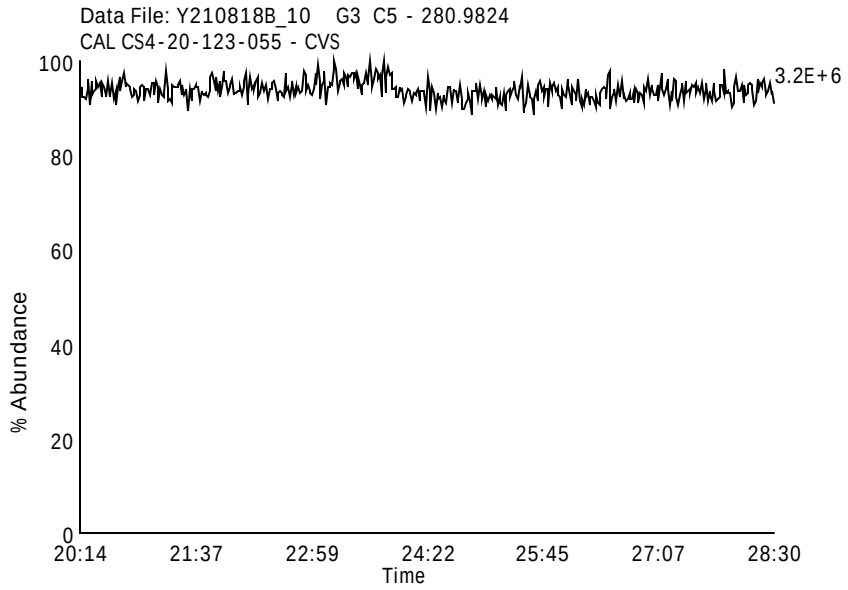


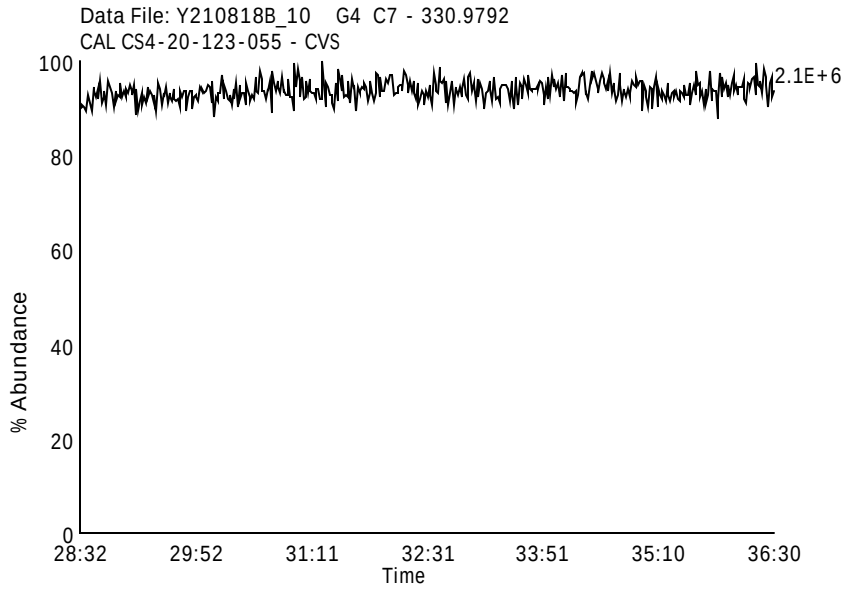
Group 1 - 4 Lock mass

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS





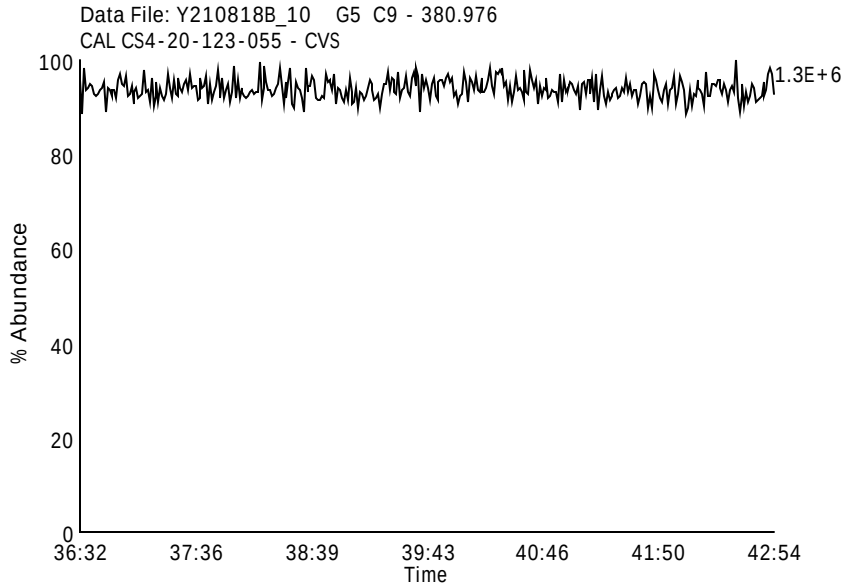


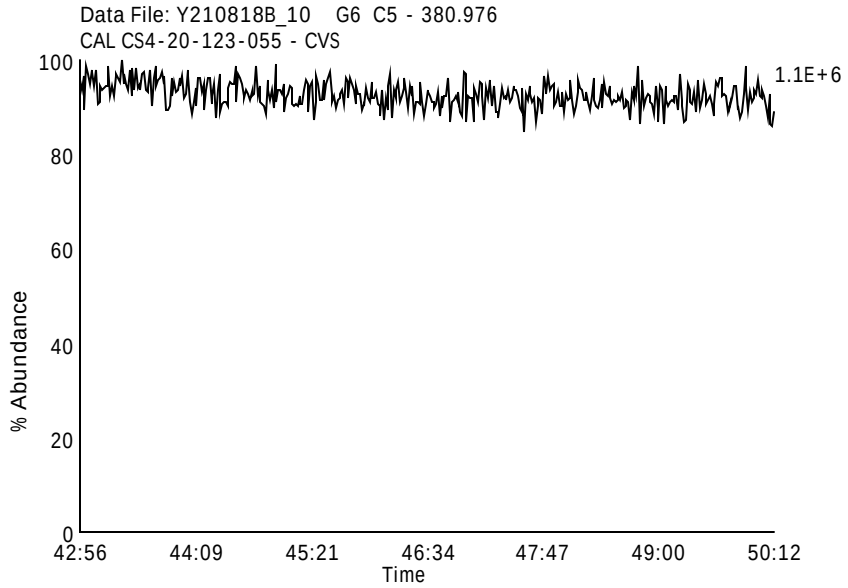


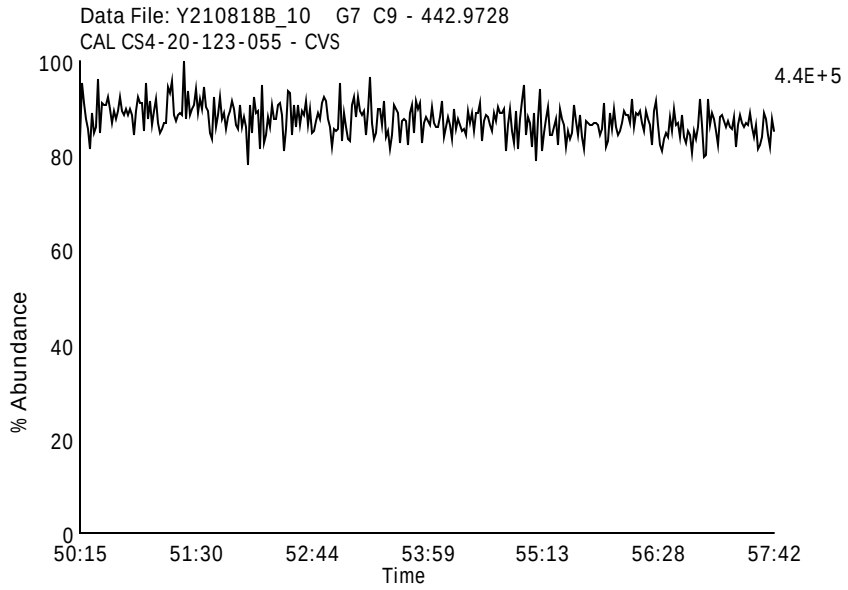
Group 5 - 7 Lock mass

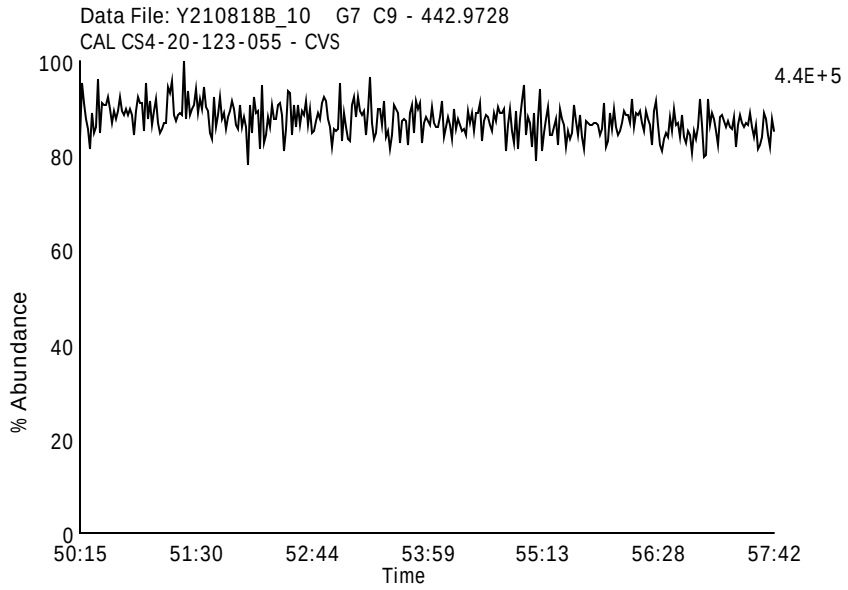
Data File Name: Y210818B_10
Date Acquired: 8/18/2021
Sample Description: CAL CS4-20-123-055 - CVS

Lab Sample ID: CS4-20-123-055
Instrument: 10MSHR12 (Y)







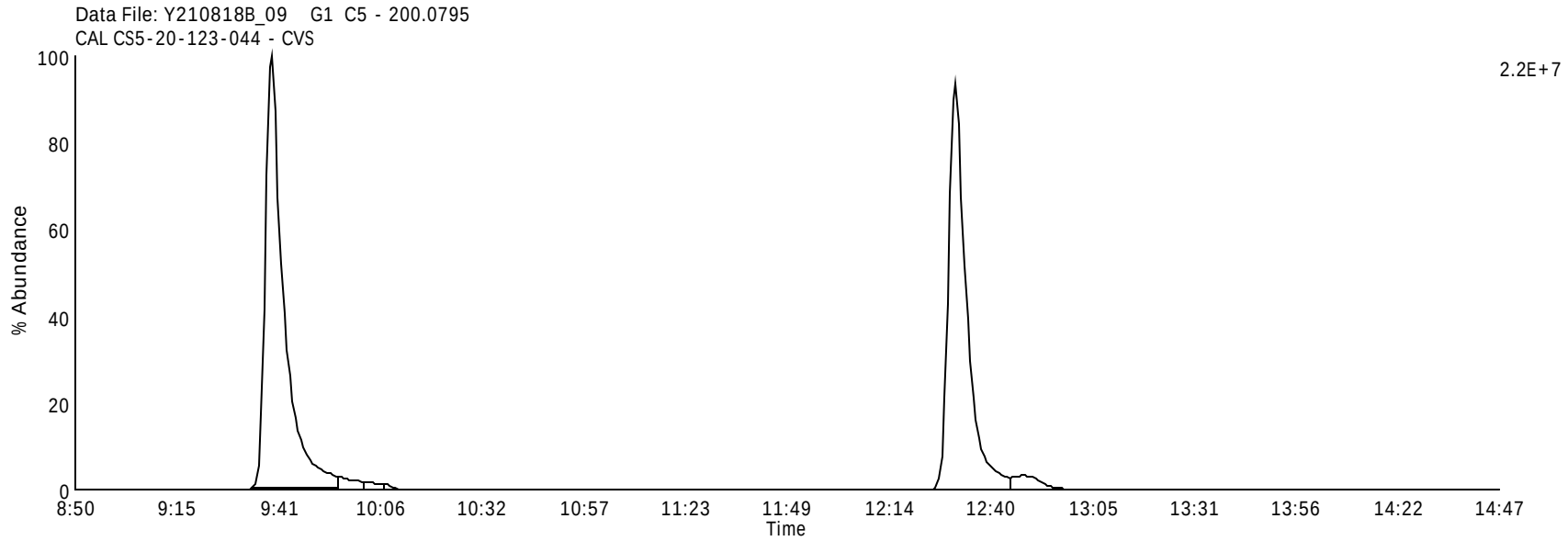


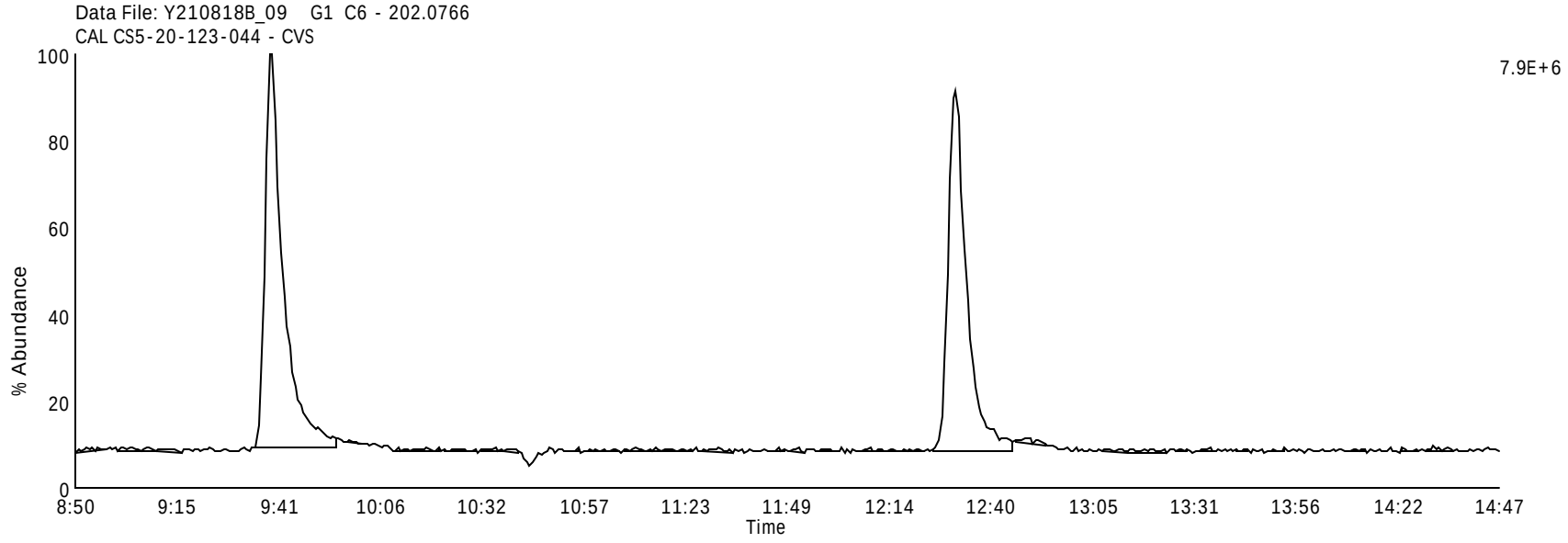
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

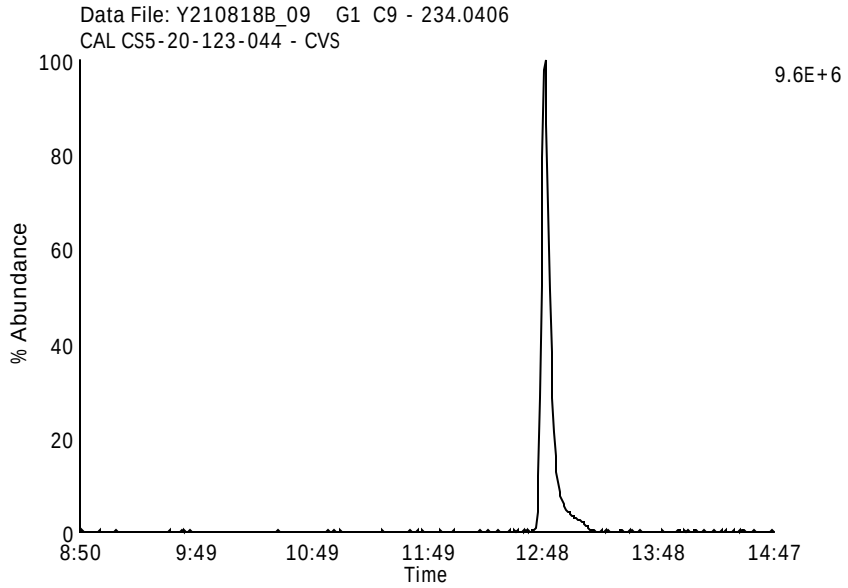
Sample Description: CAL CS5-20-123-044 - CVS

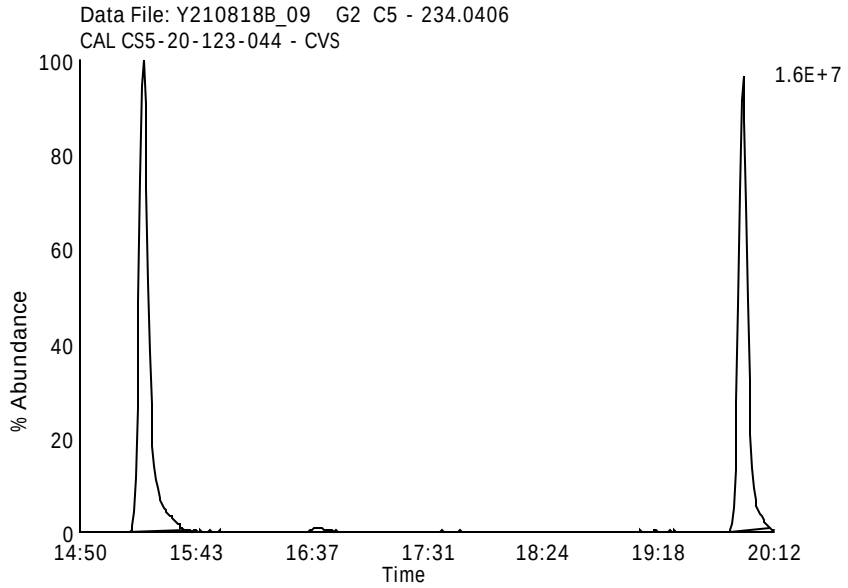


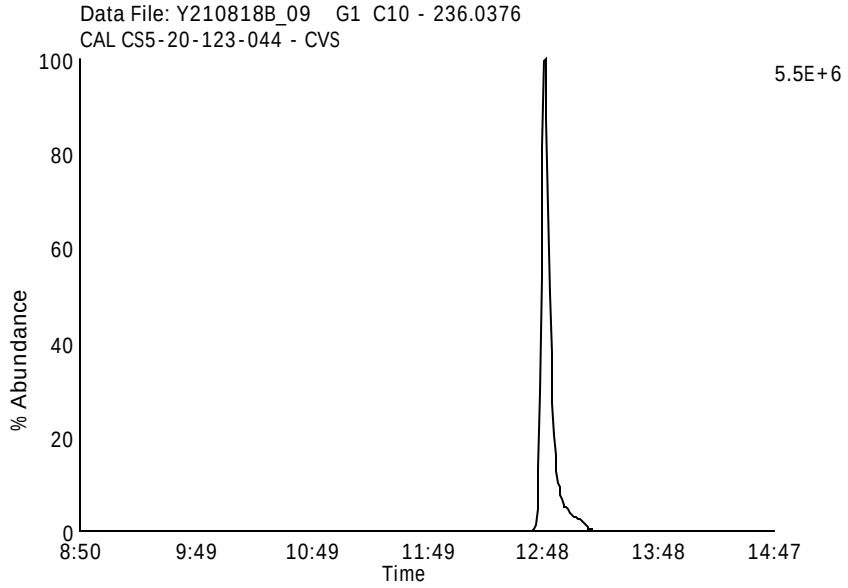


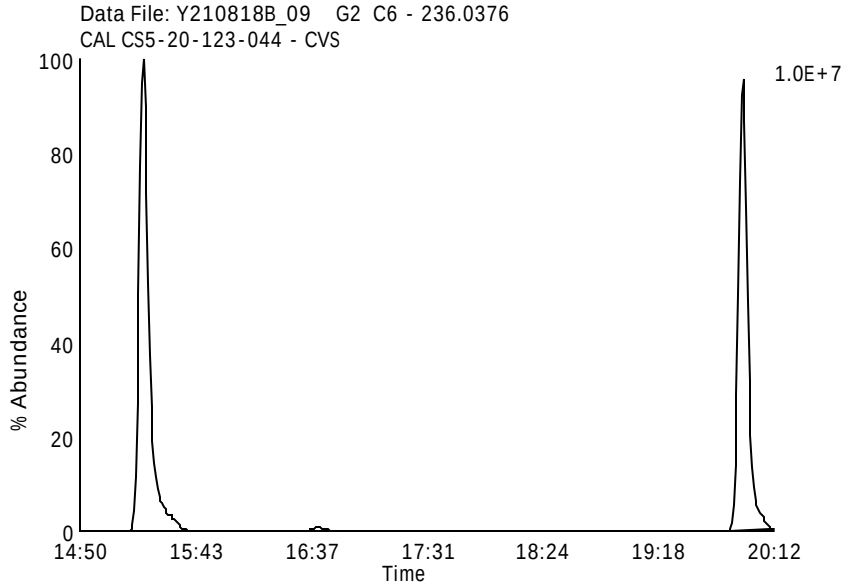
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS







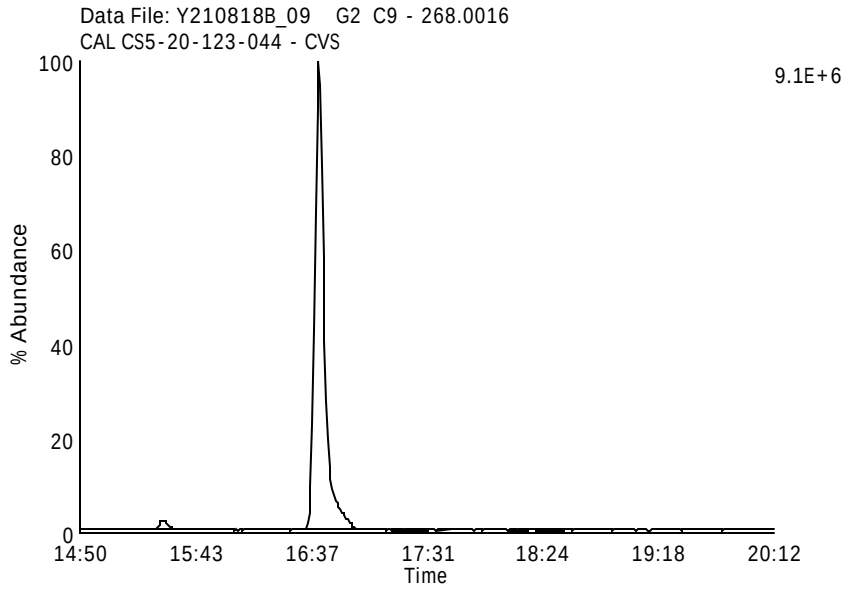


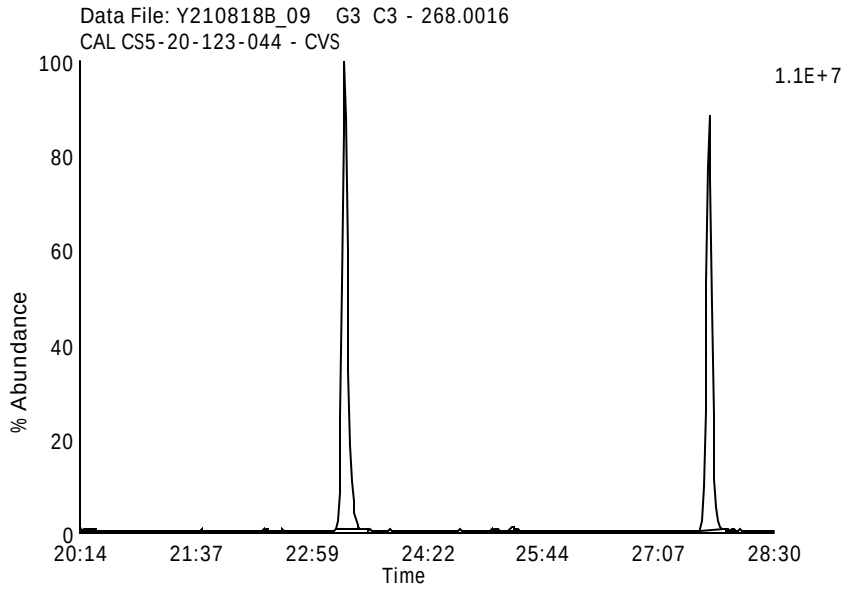
Labeled Tri Chlorinated Biphenyls

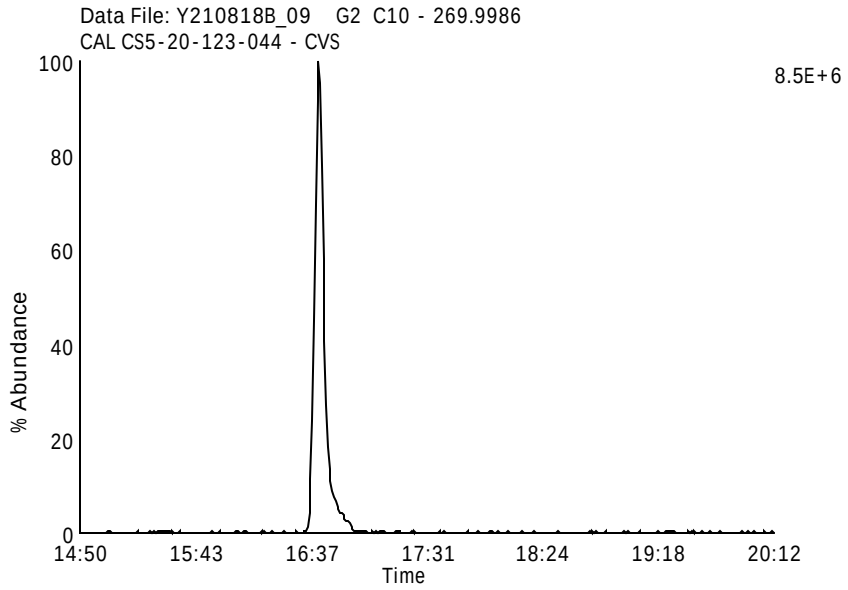
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

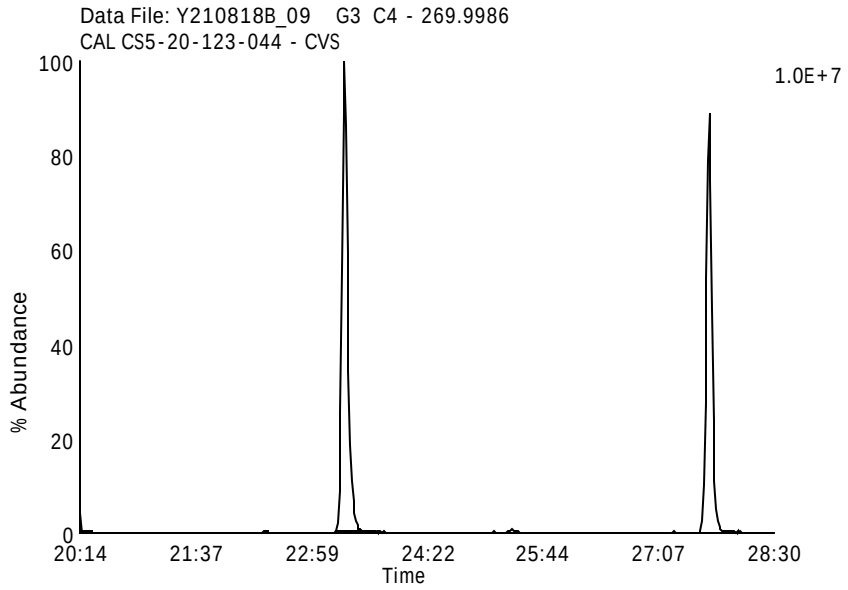
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS







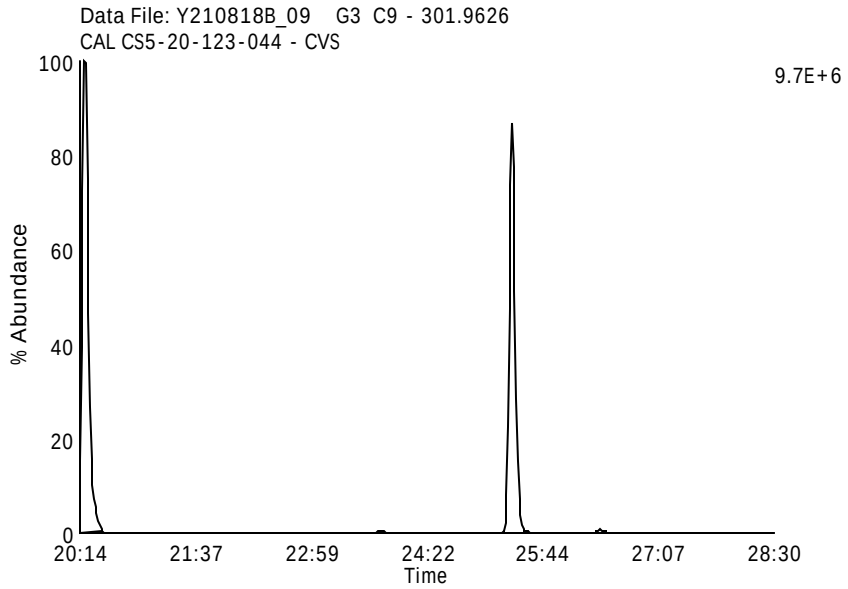


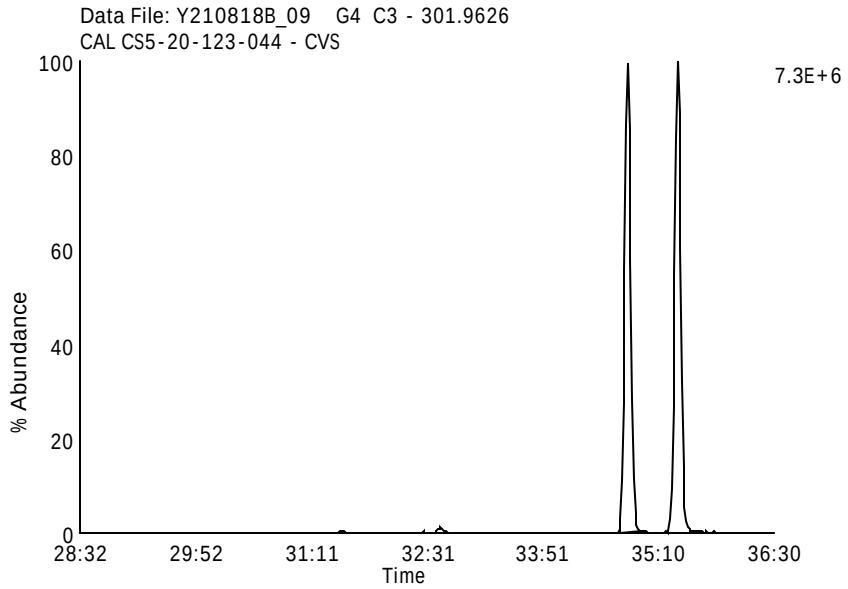
Labeled Tetra Chlorinated Biphenyls

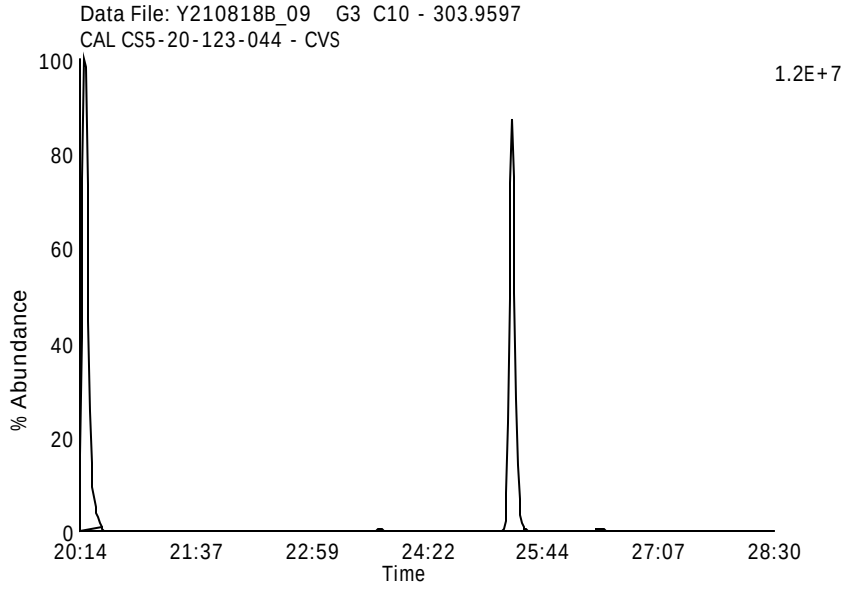
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

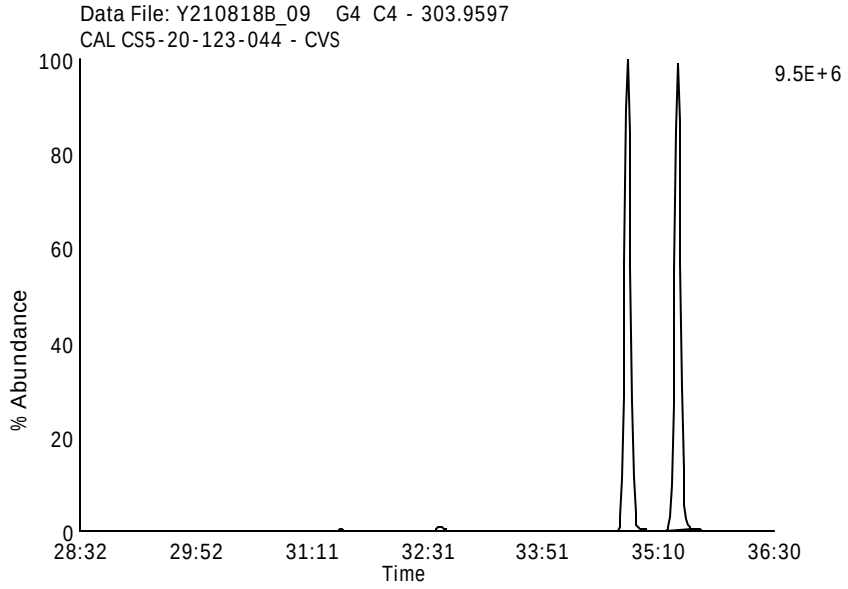
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS







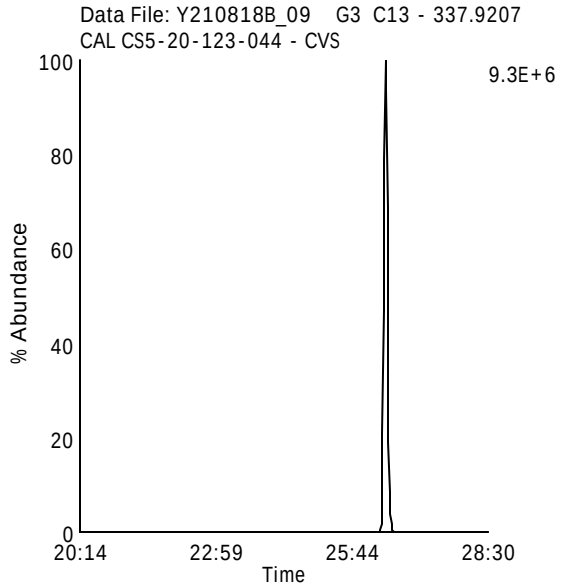


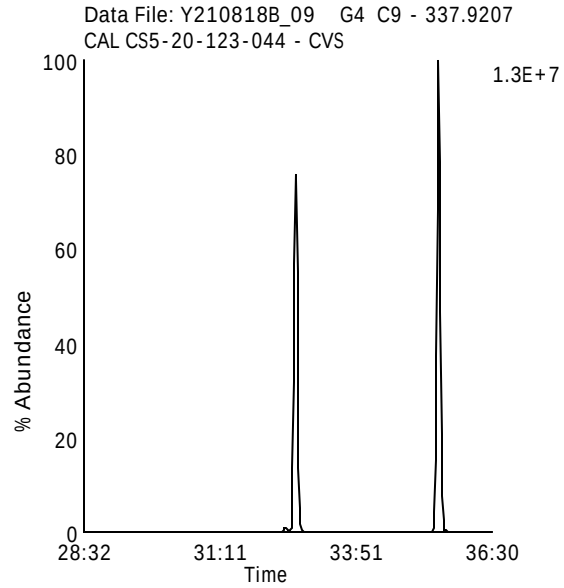
Labeled Penta Chlorinated Biphenyls

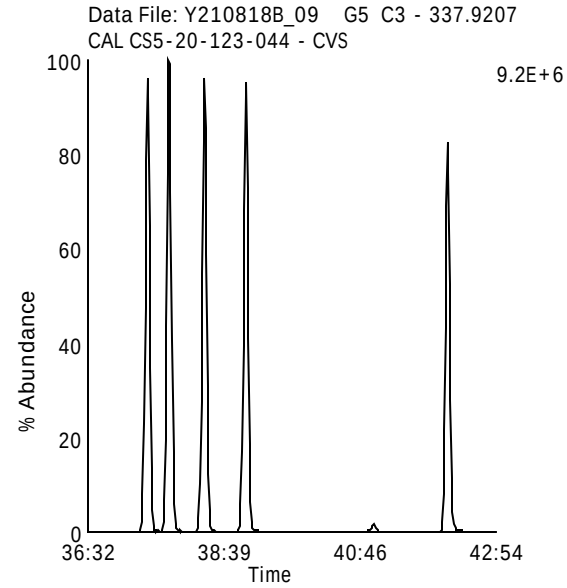
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

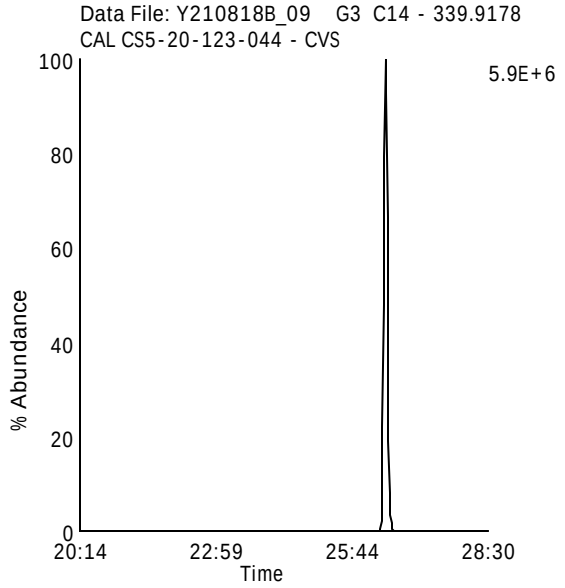
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

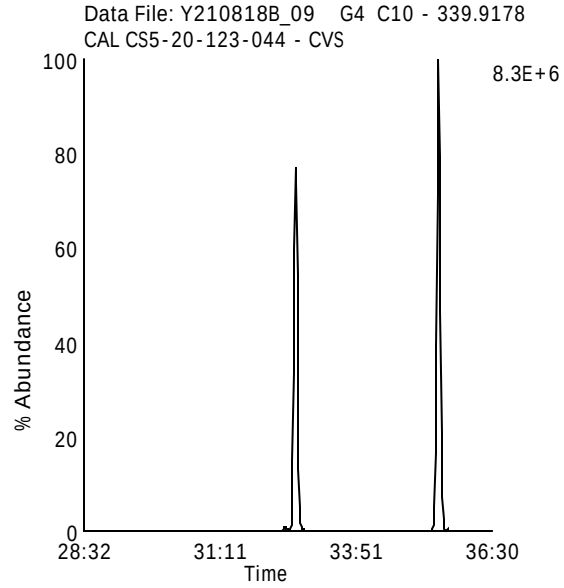
Sample Description: CAL CS5-20-123-044 - CVS

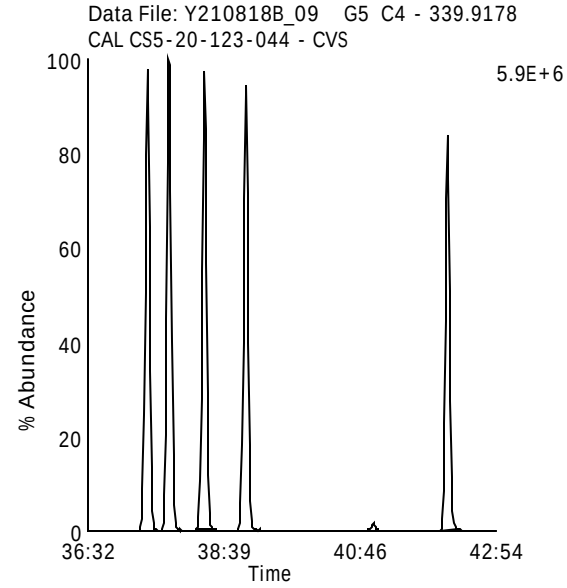












Labeled Hexa Chlorinated Biphenyls

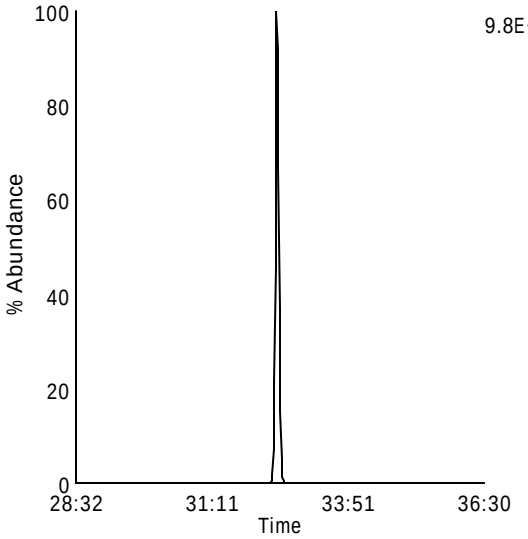
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

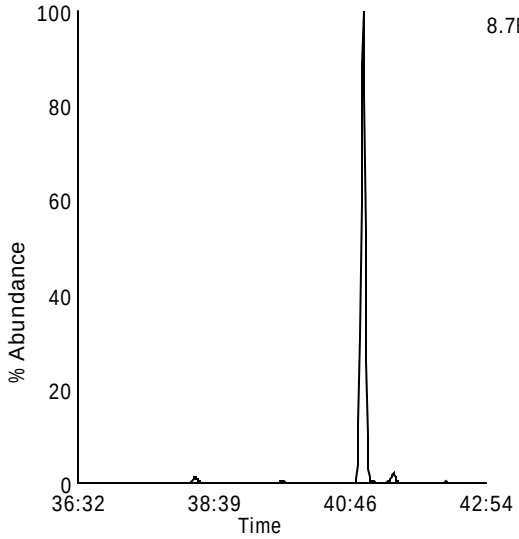
Data File: Y210818B_09 G4 C13 - 371.8817

CAL CS5-20-123-044 - CVS



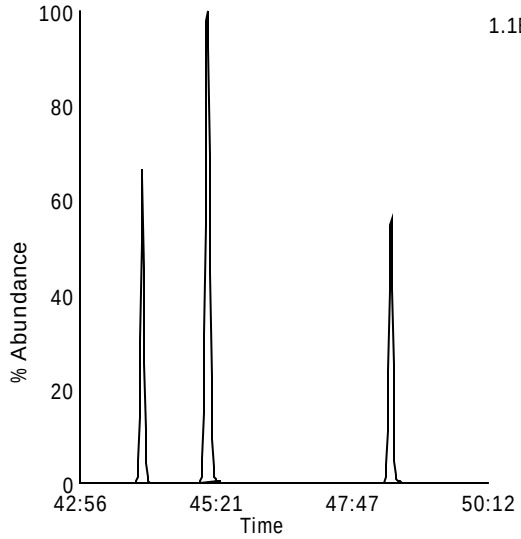
Data File: Y210818B_09 G5 C7 - 371.8817

CAL CS5-20-123-044 - CVS



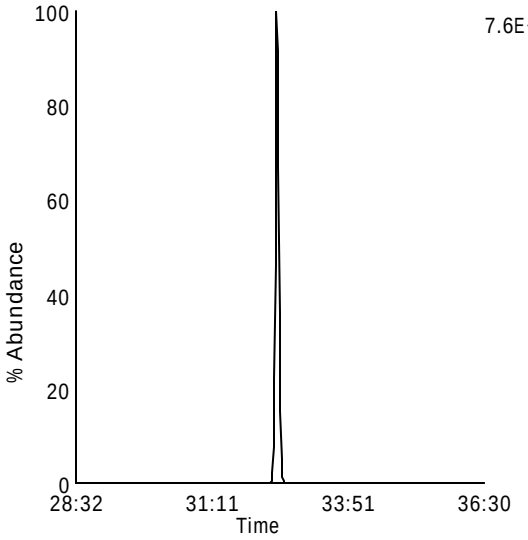
Data File: Y210818B_09 G6 C3 - 371.8817

CAL CS5-20-123-044 - CVS



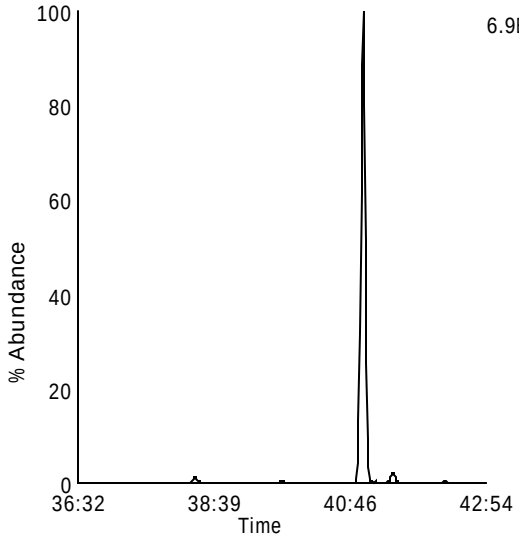
Data File: Y210818B_09 G4 C14 - 373.8788

CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G5 C8 - 373.8788

CAL CS5-20-123-044 - CVS



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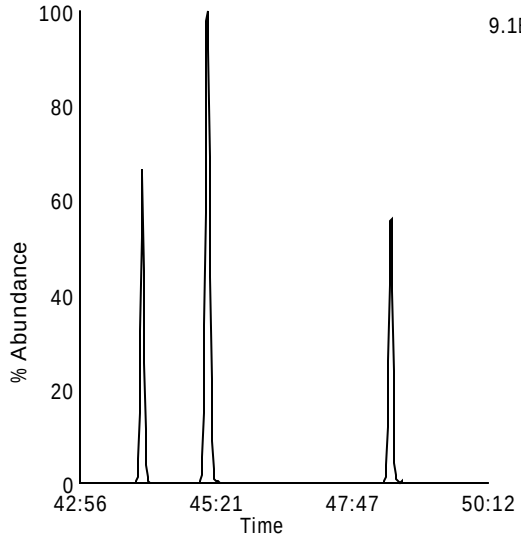
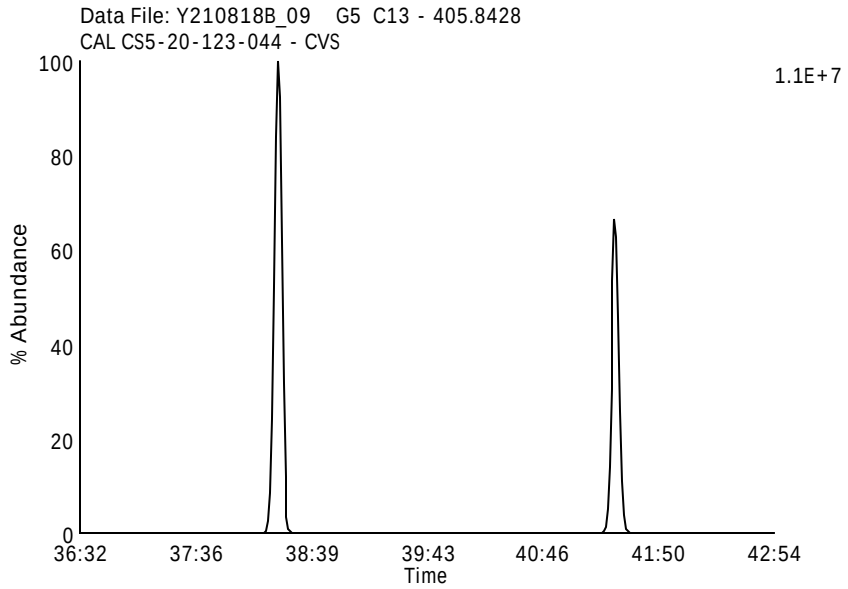
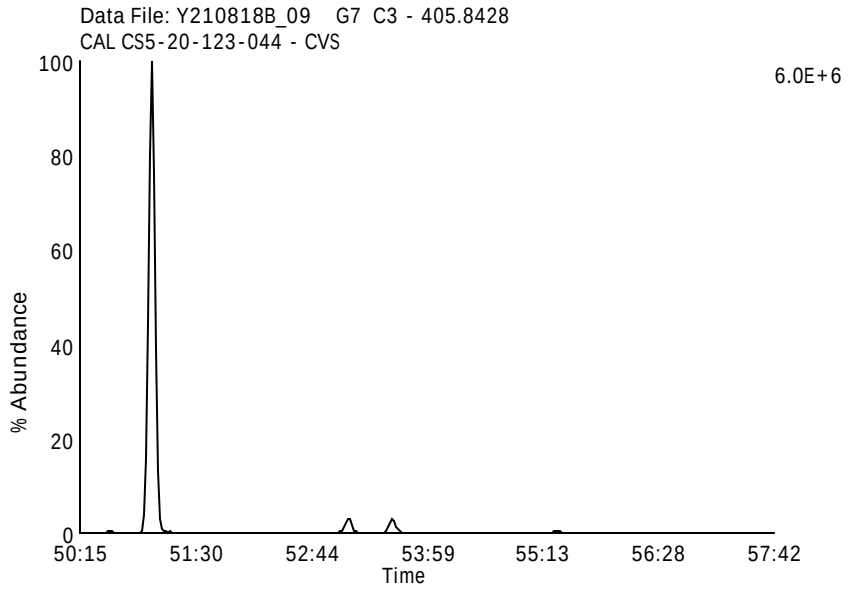
CAL CS5-20-123-044 - CVS

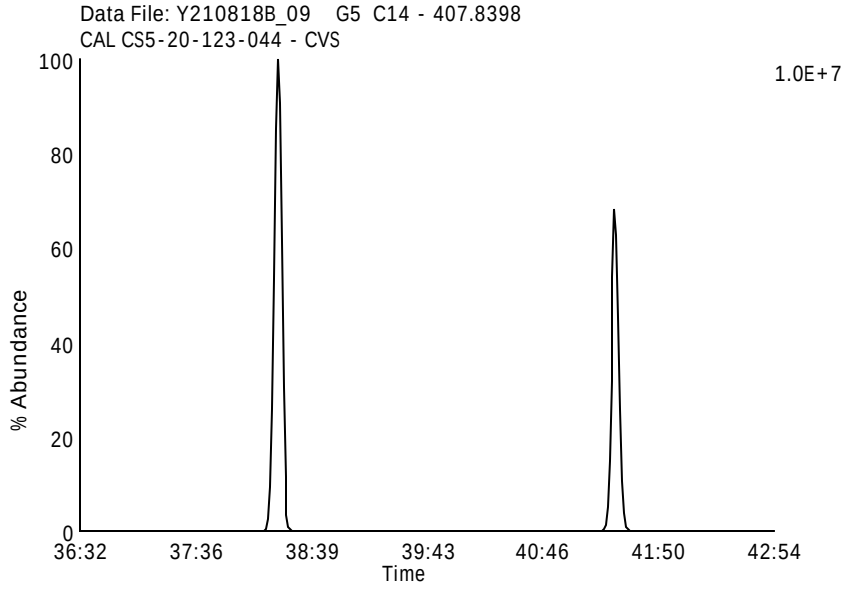


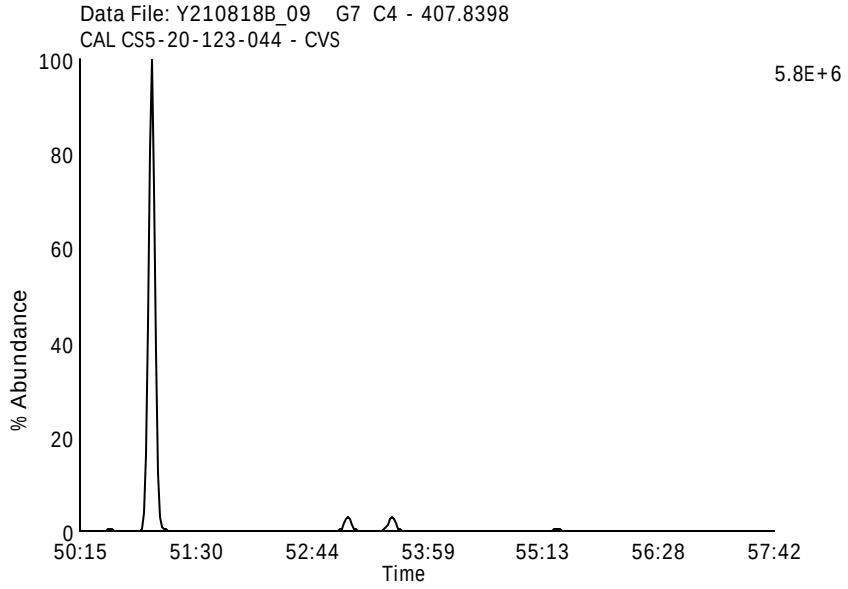
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS









Labeled Octa Chlorinated Biphenyls

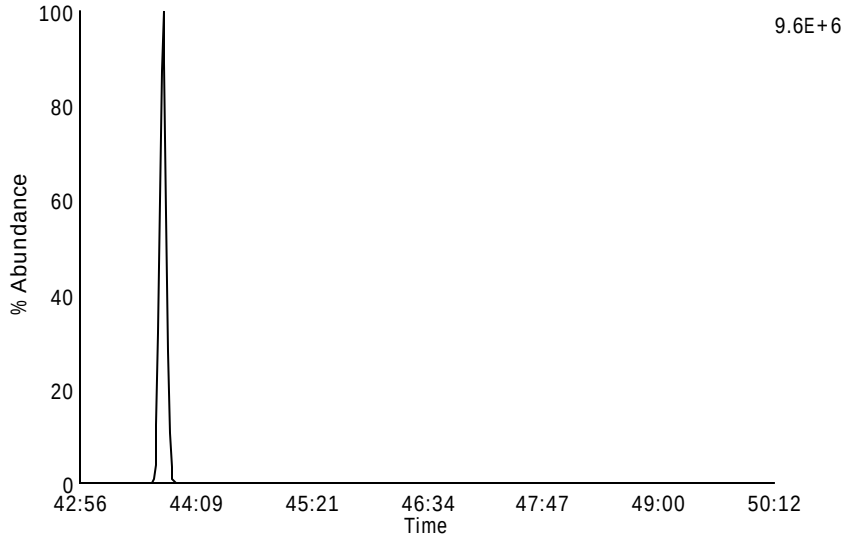
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

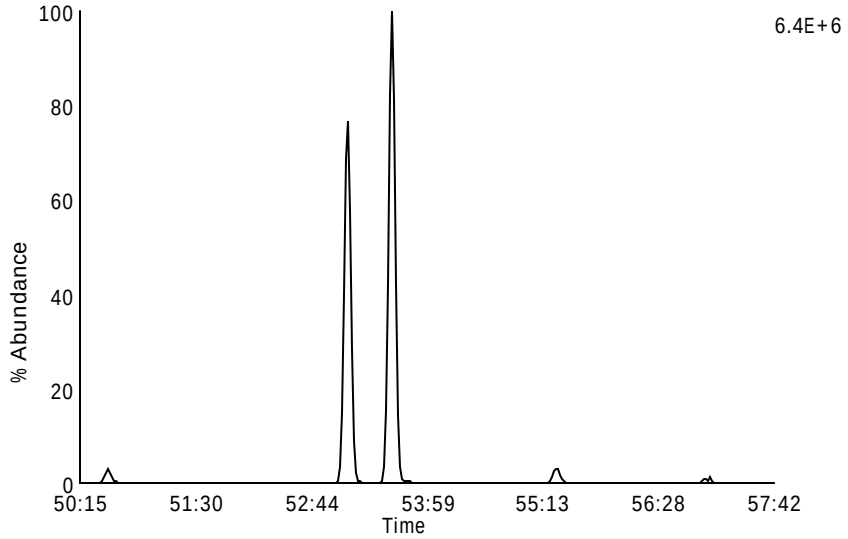
Data File: Y210818B_09 G6 C13 - 439.8038

CAL CS5-20-123-044 - CVS



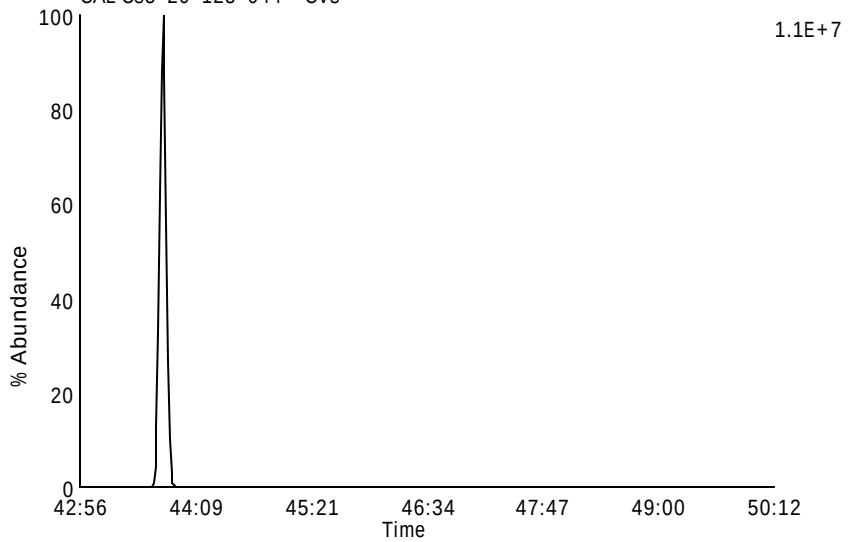
Data File: Y210818B_09 G7 C7 - 439.8038

CAL CS5-20-123-044 - CVS



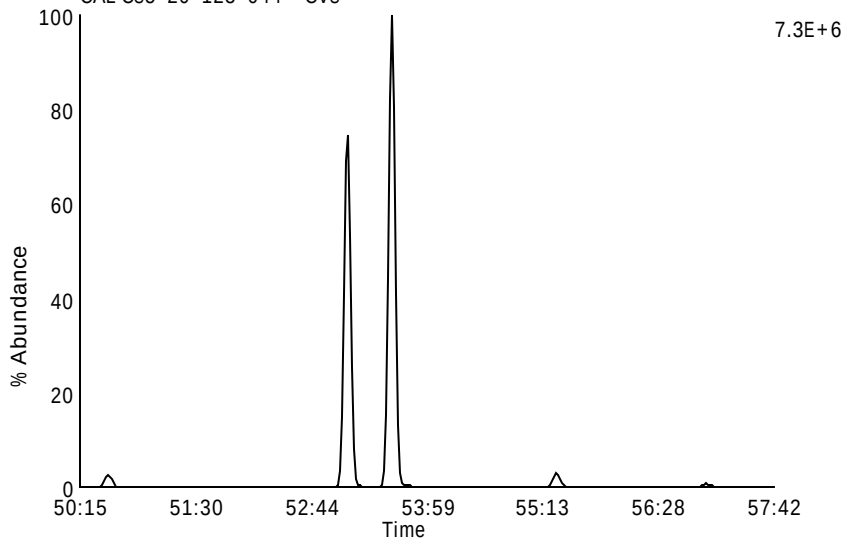
Data File: Y210818B_09 G6 C14 - 441.8008

CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G7 C8 - 441.8008

CAL CS5-20-123-044 - CVS

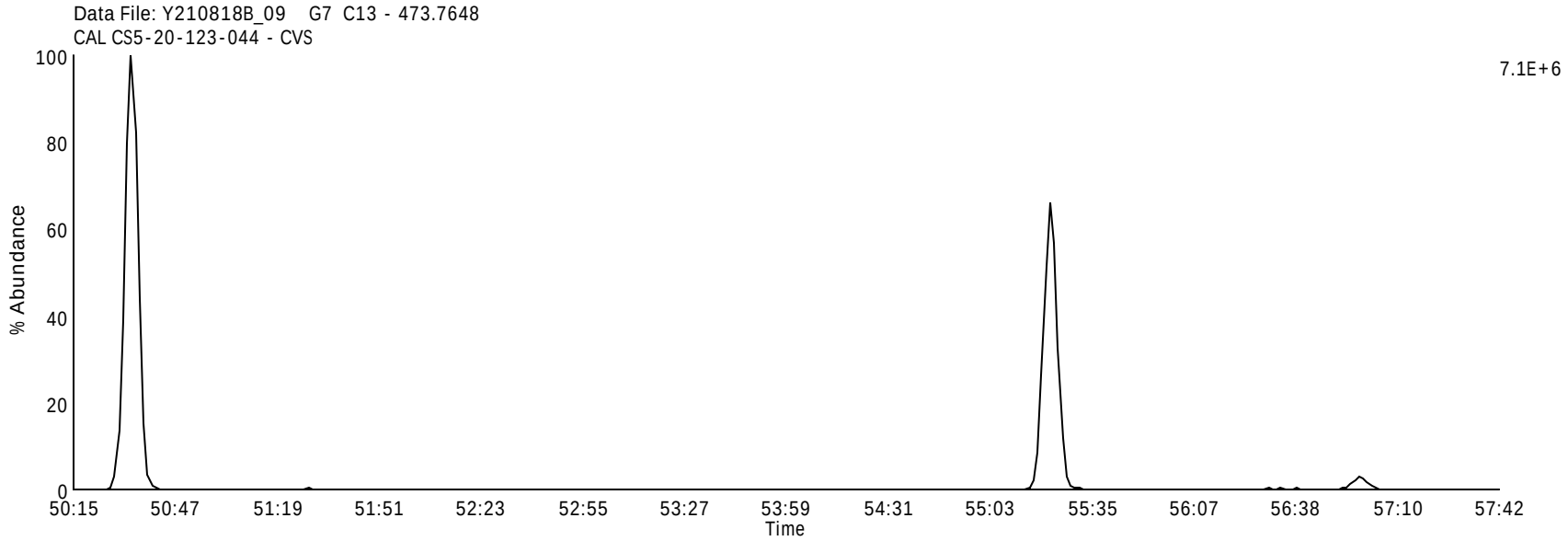


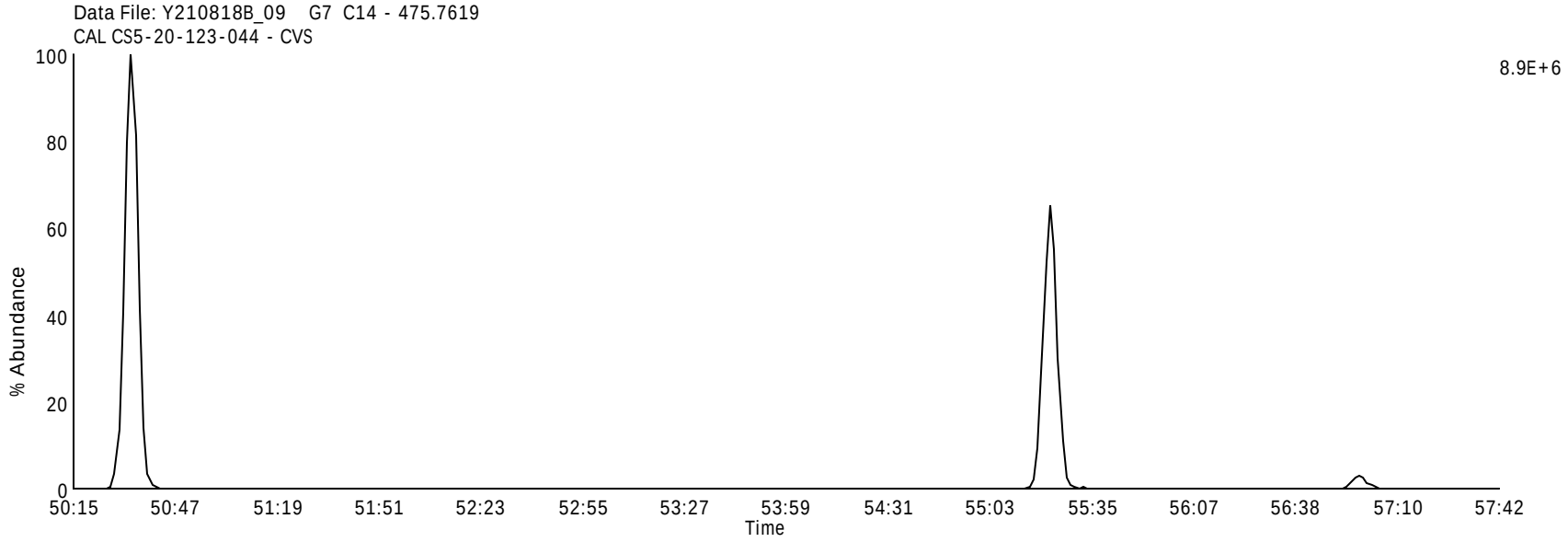
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



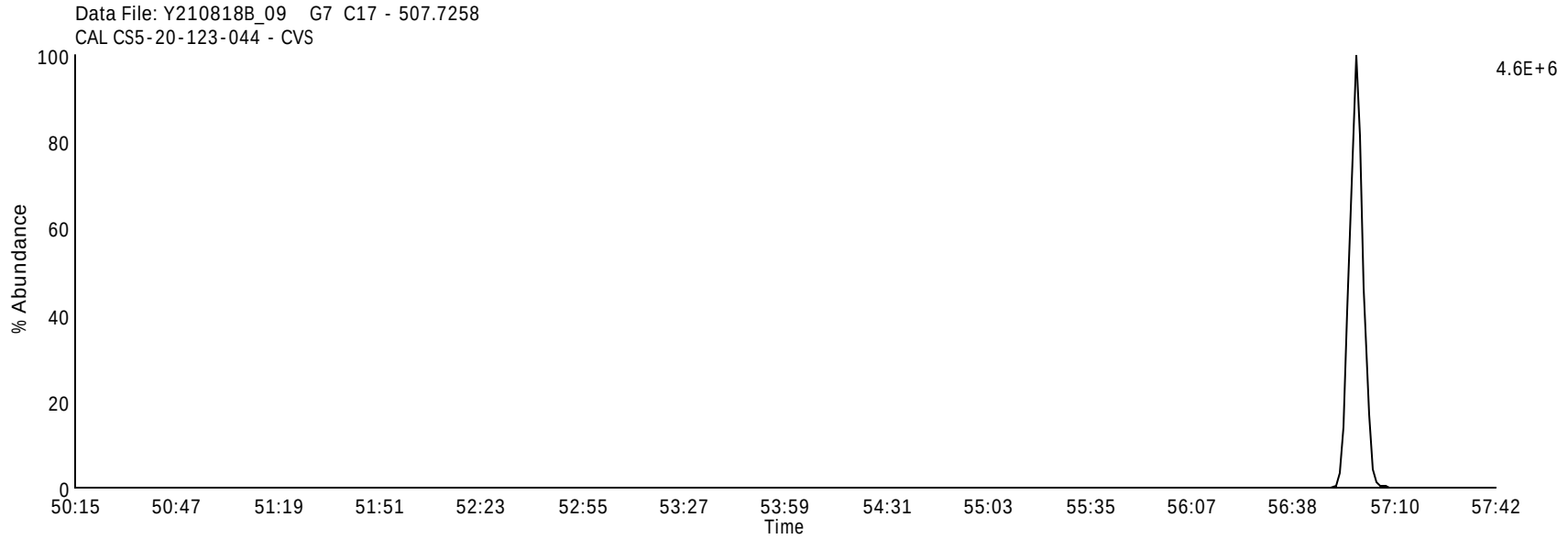


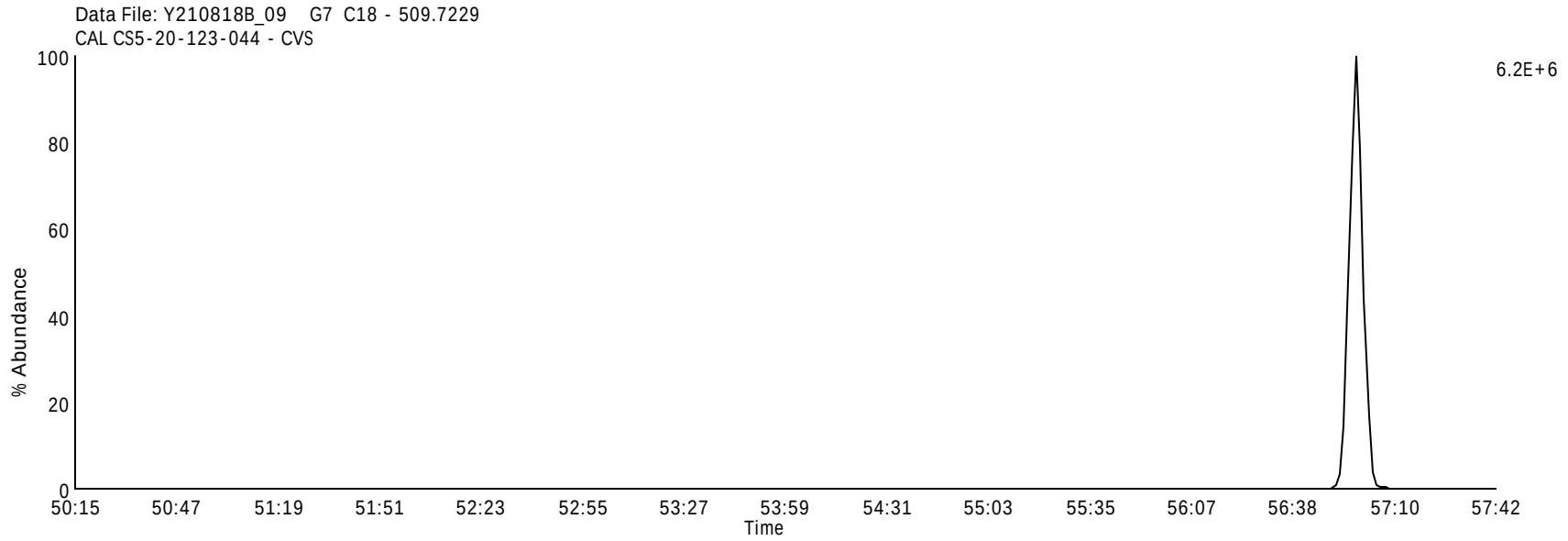
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

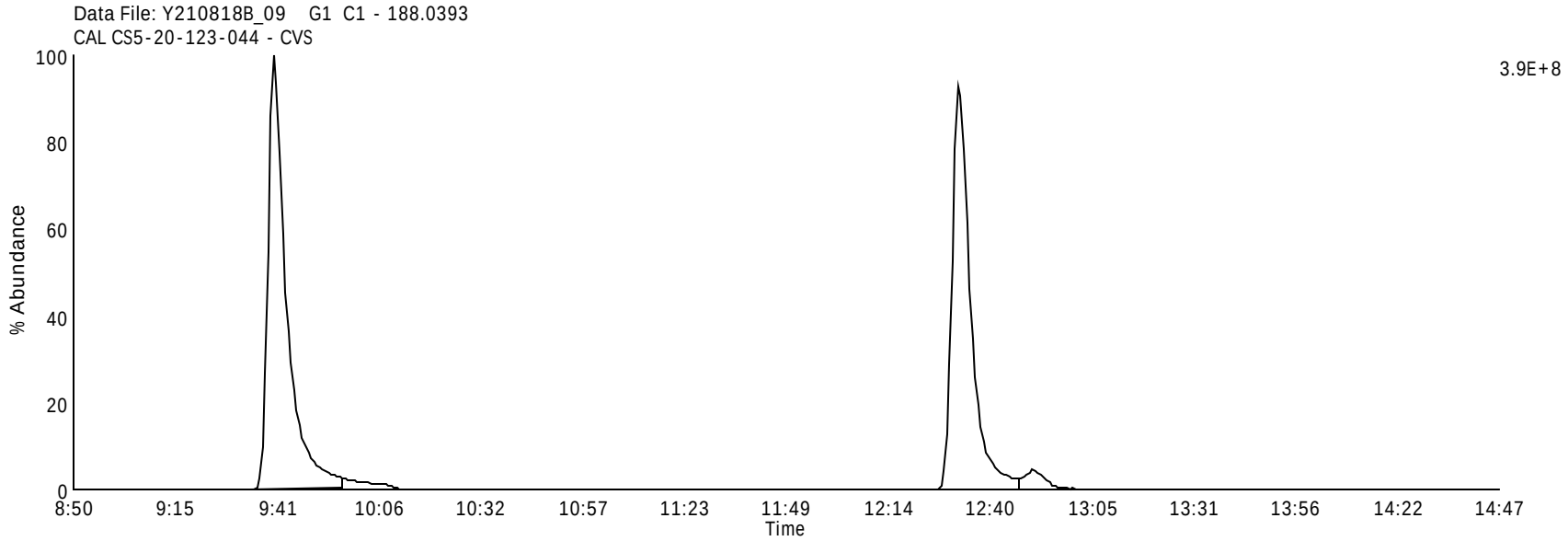
Sample Description: CAL CS5-20-123-044 - CVS

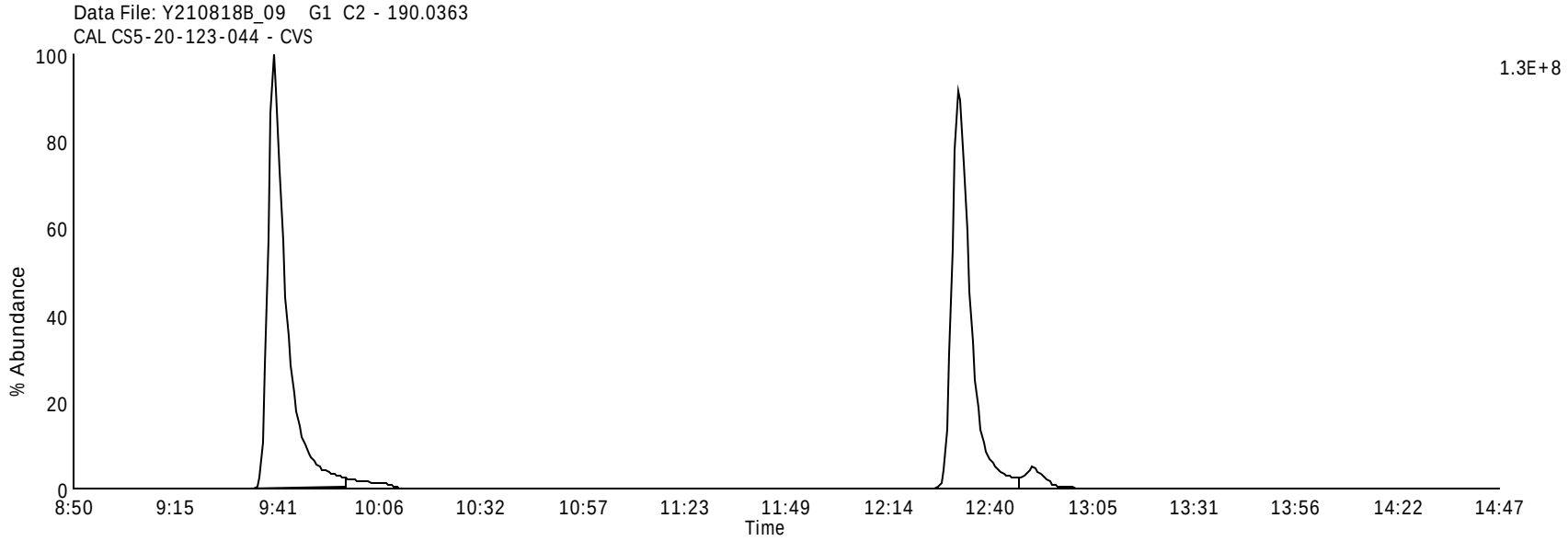




Mono Chlorinated Biphenyls

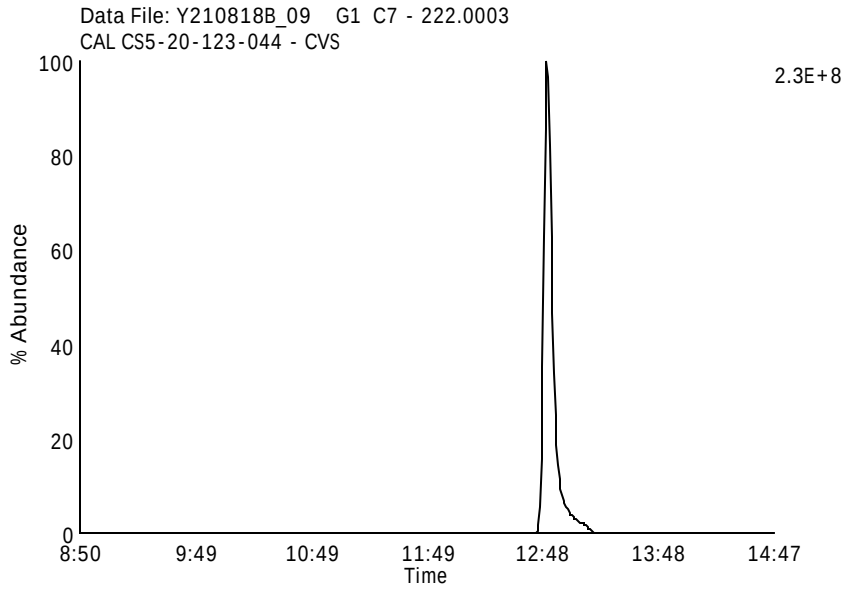
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

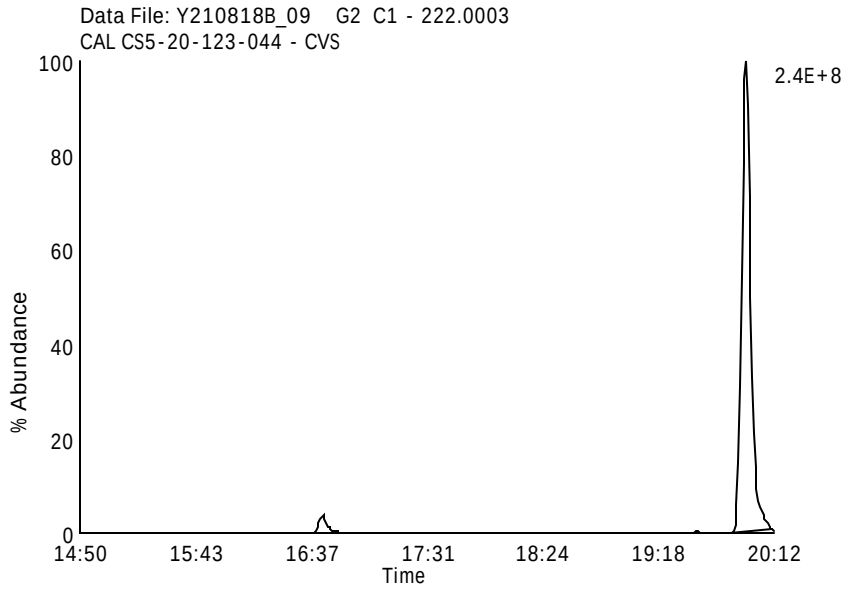


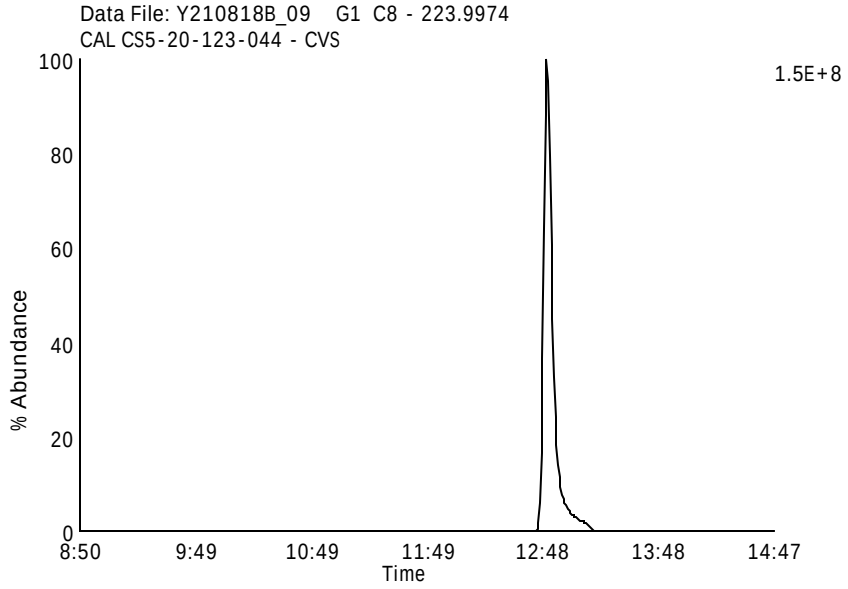


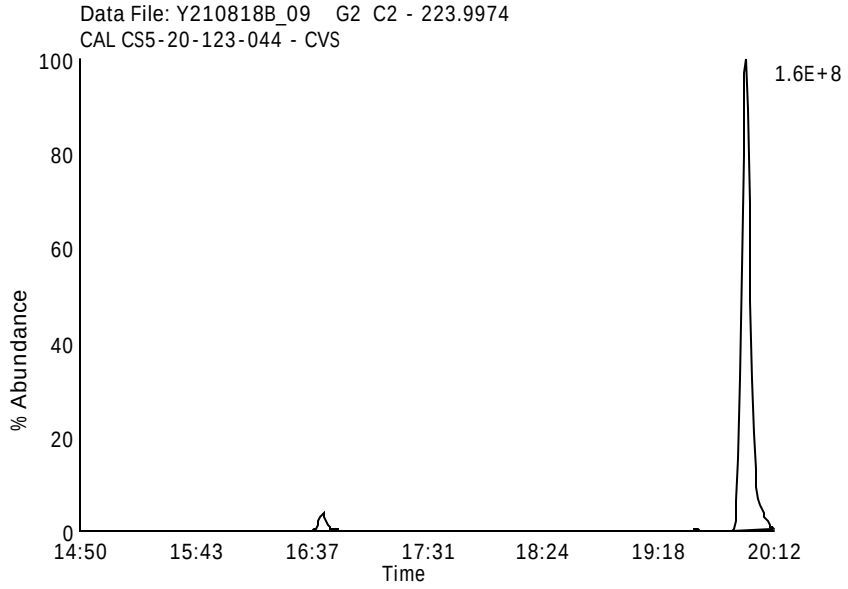
Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



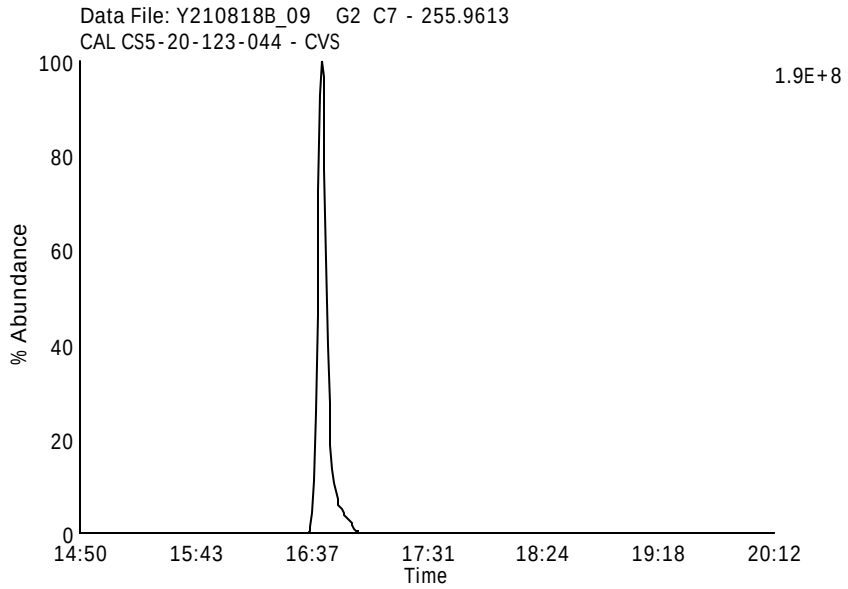


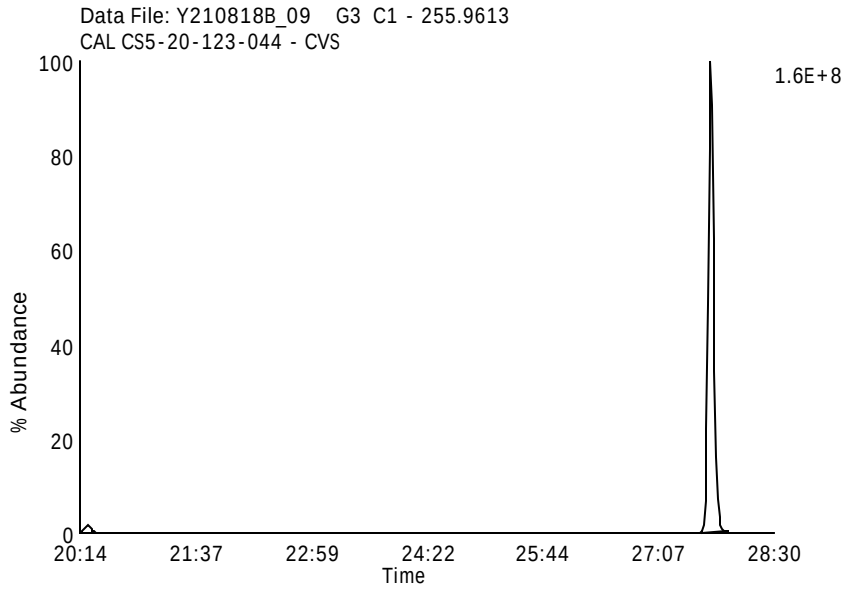


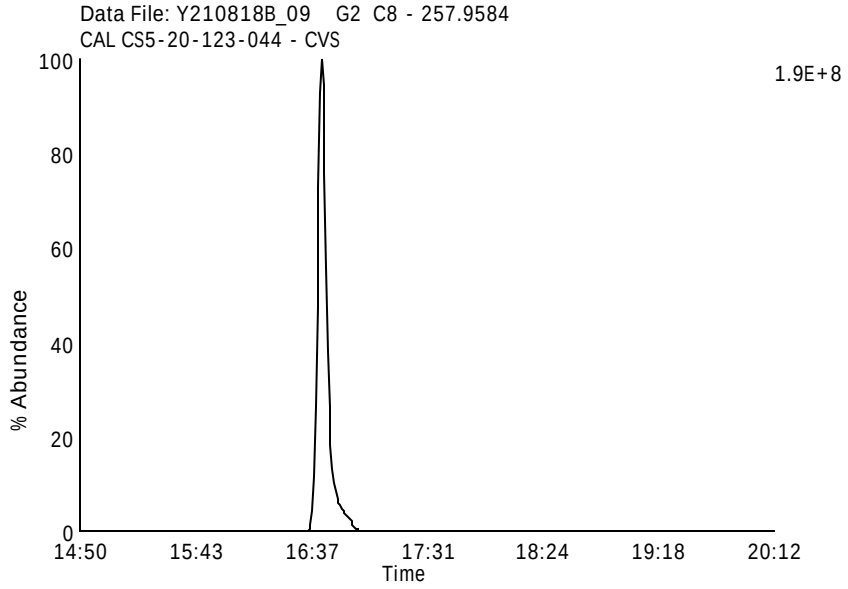


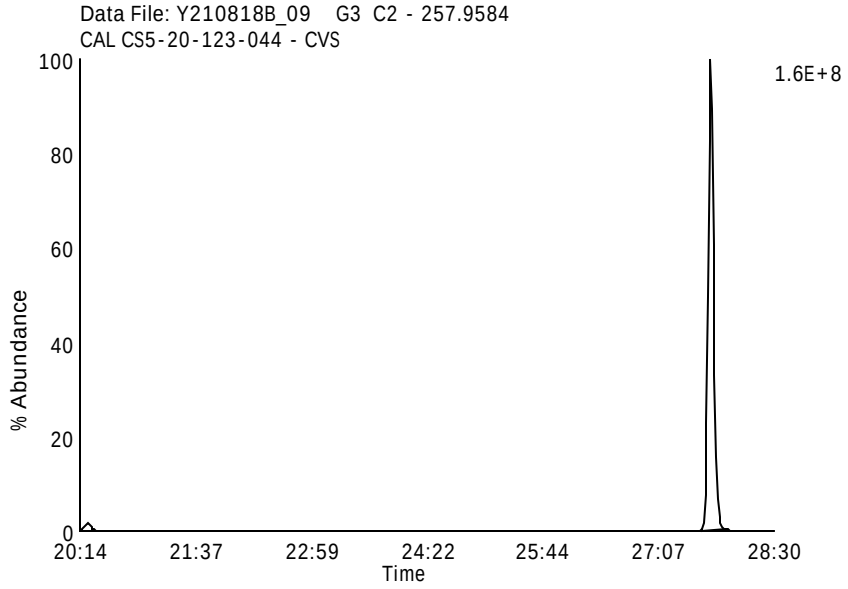
Tri Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



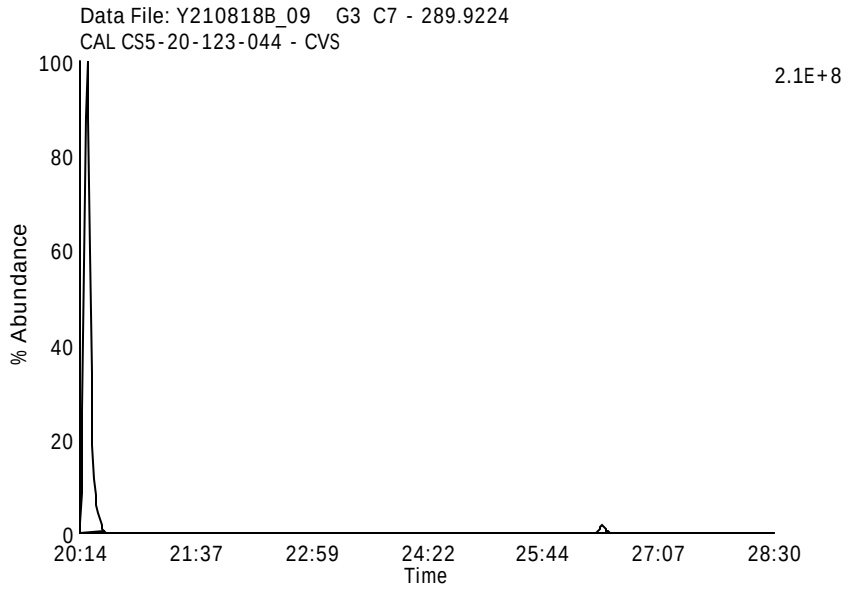


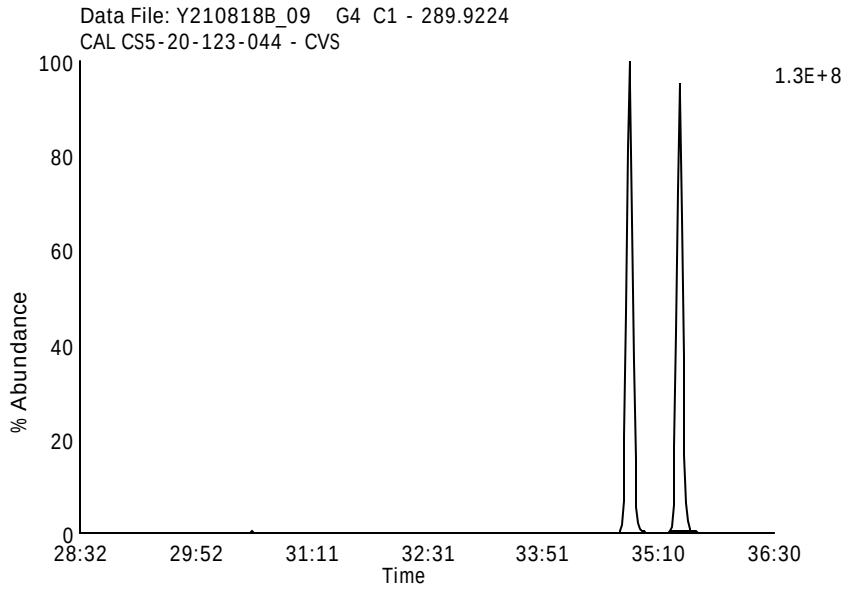


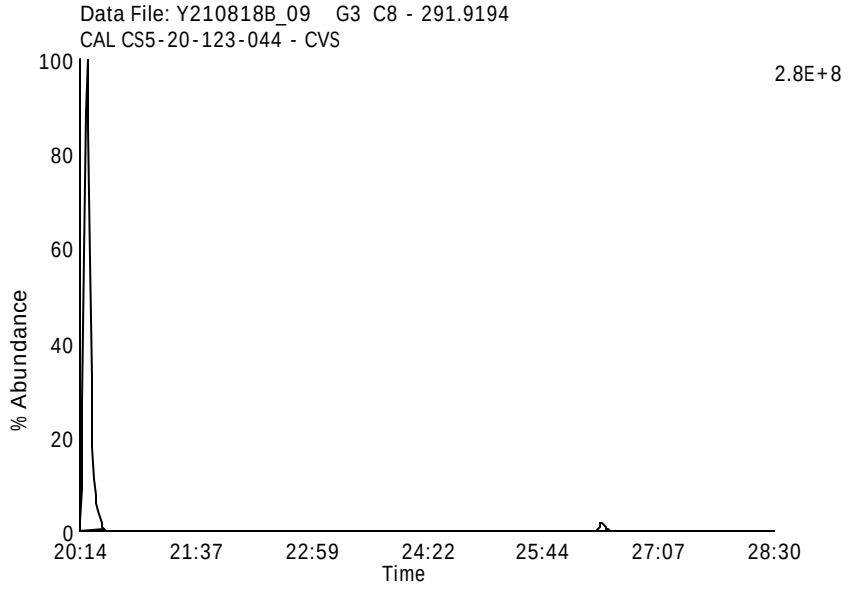


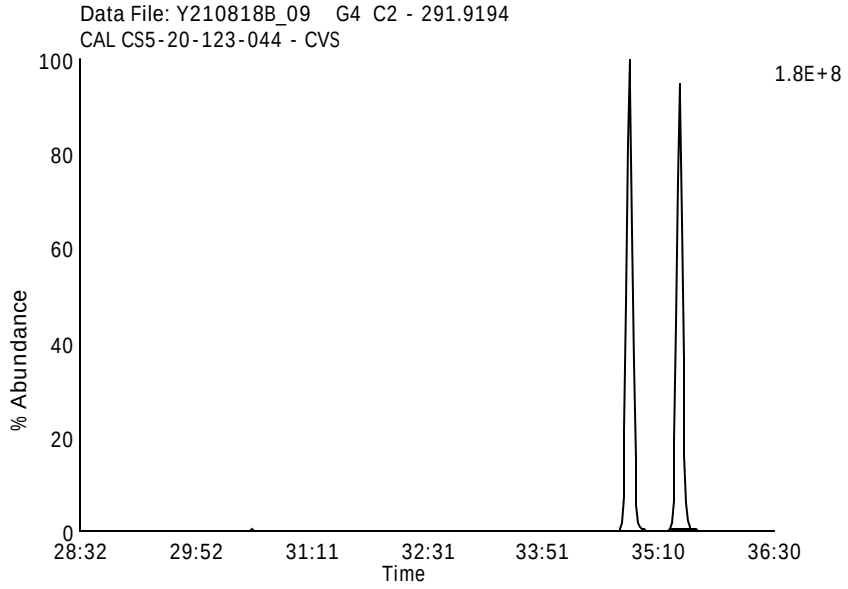
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



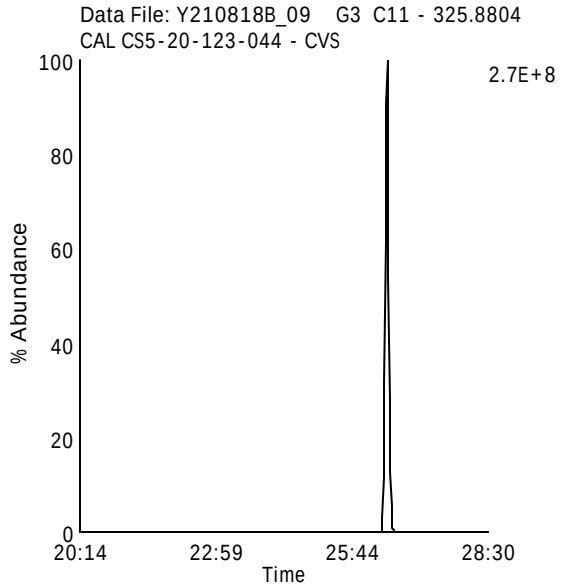


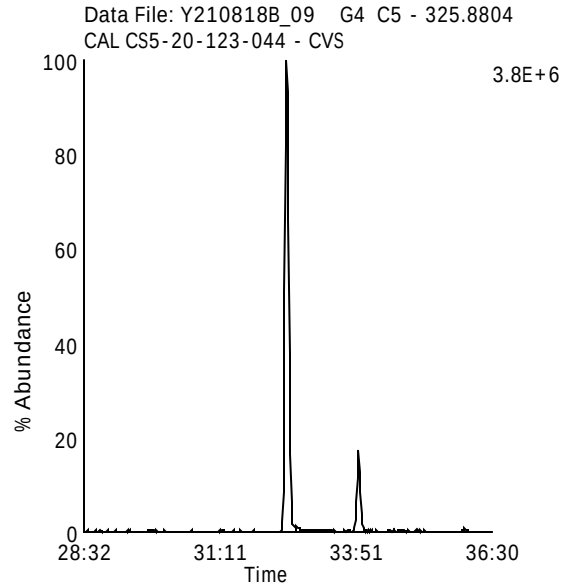


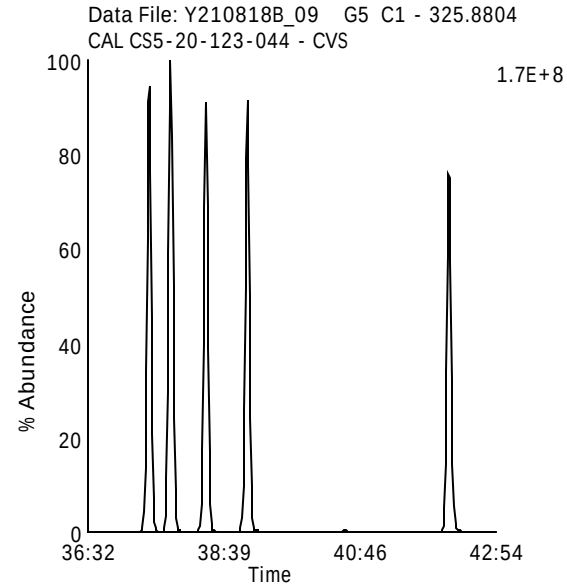


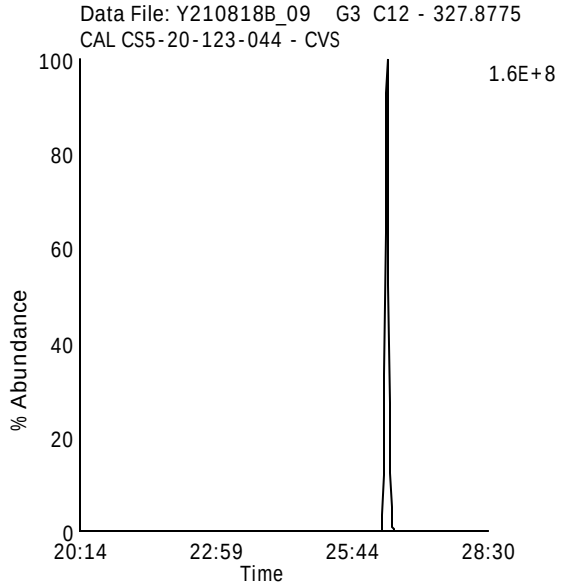
Penta Chlorinated Biphenyls

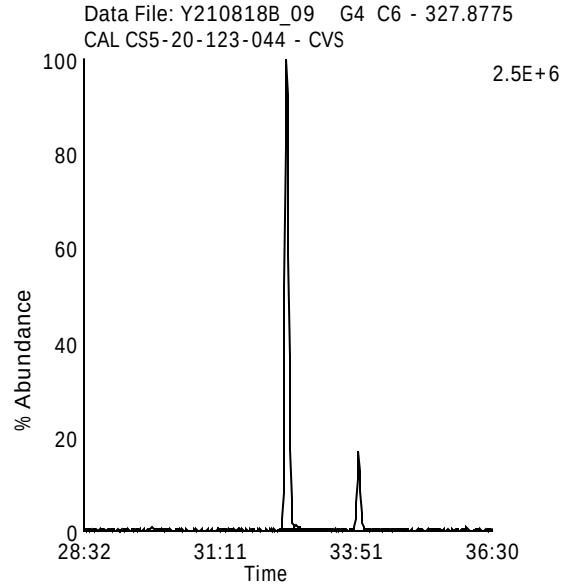
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

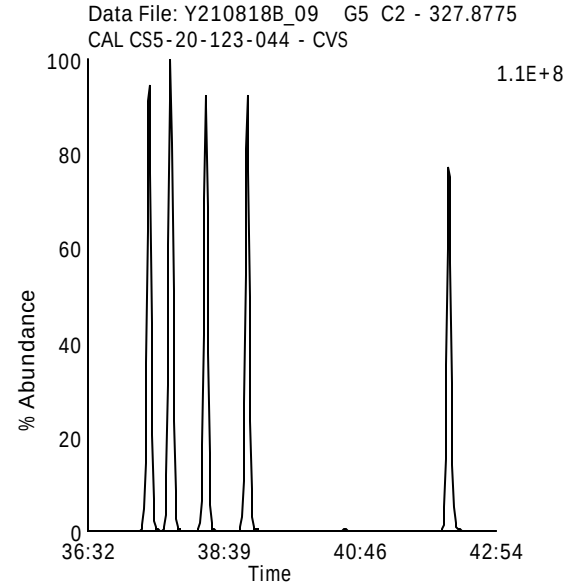






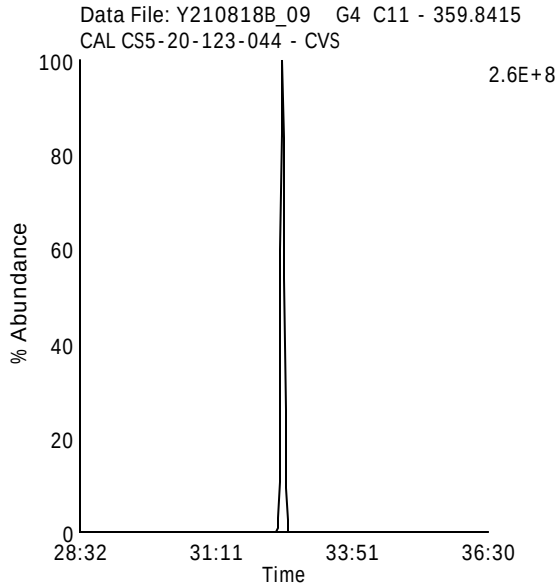


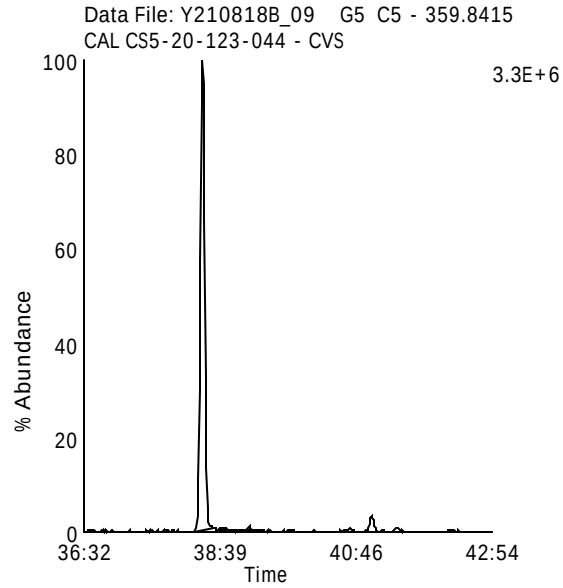


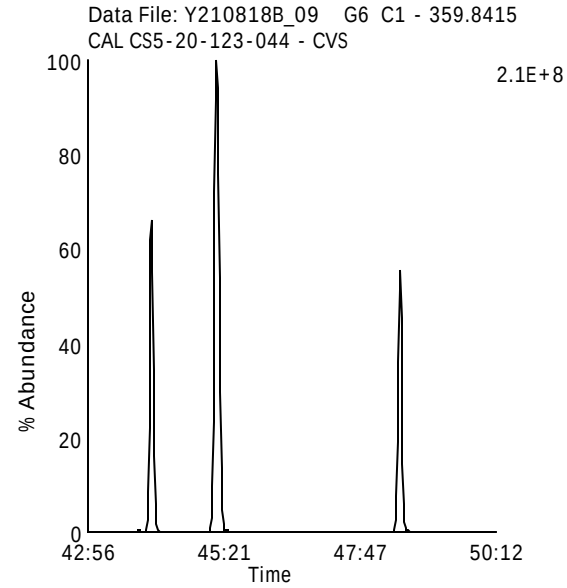


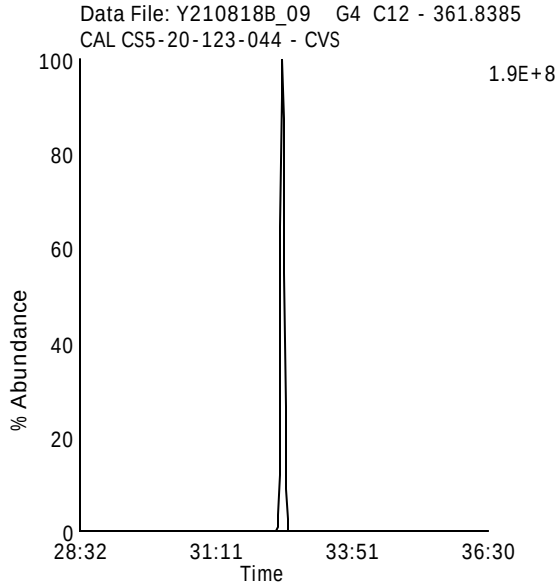
Hexa Chlorinated Biphenyls

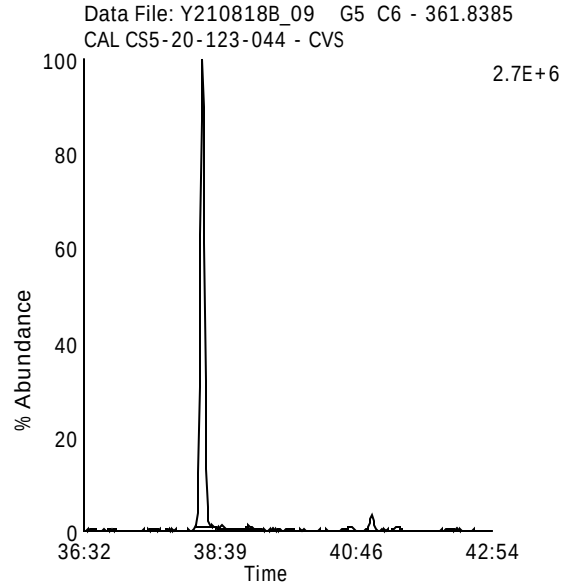
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

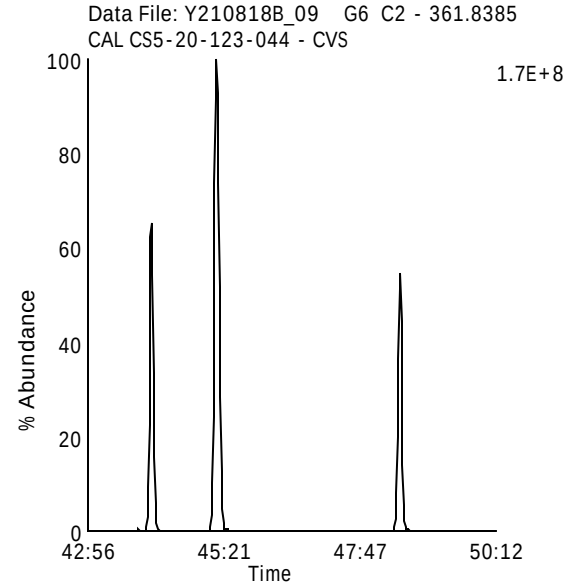






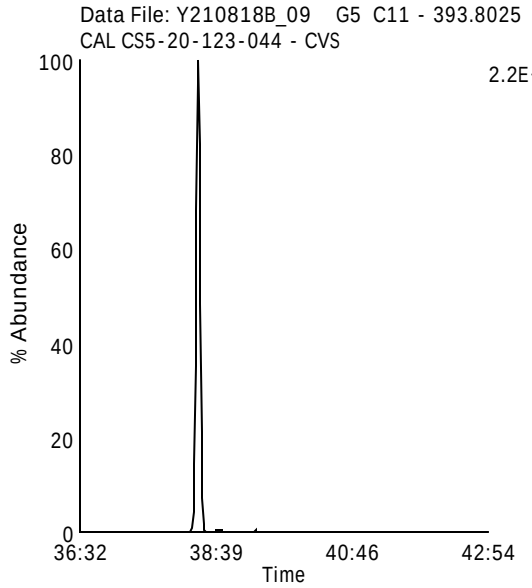


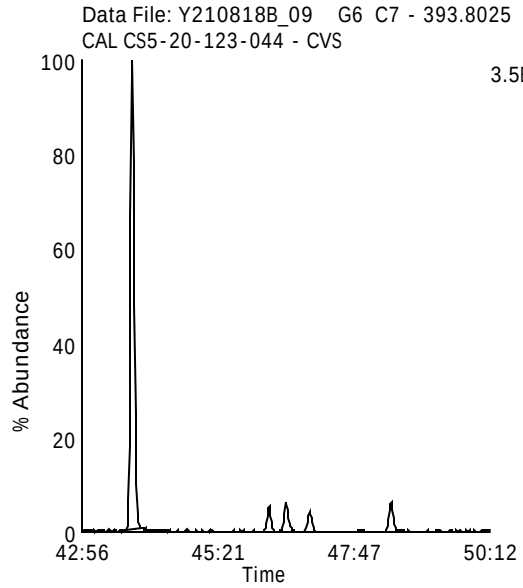


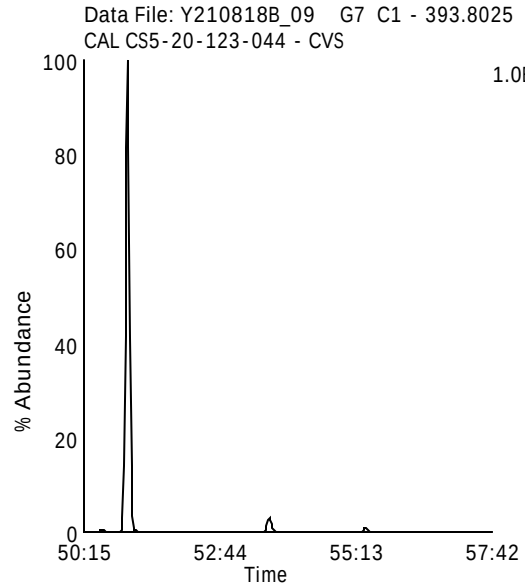


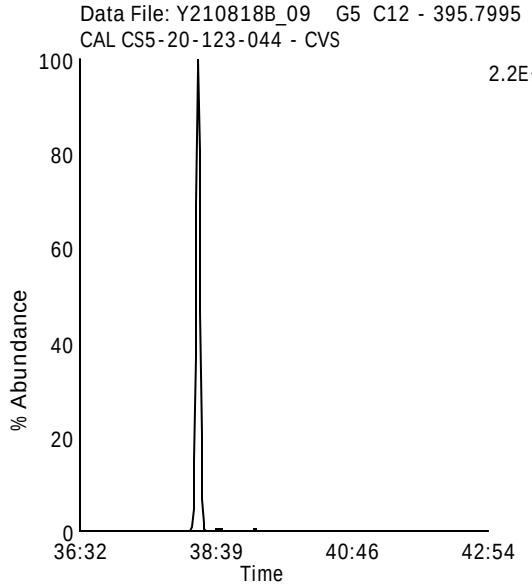
Hepta Chlorinated Biphenyls

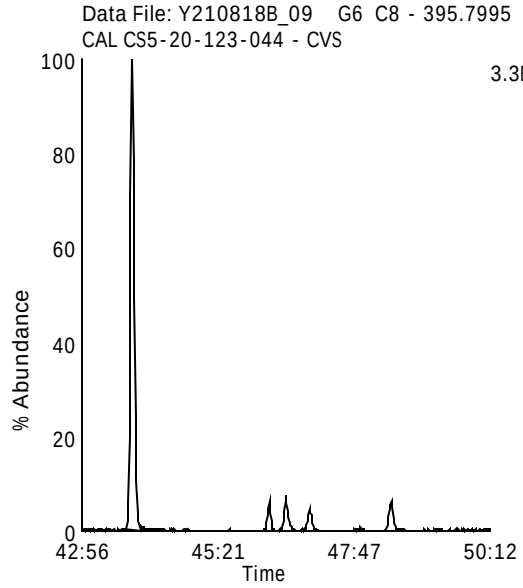
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

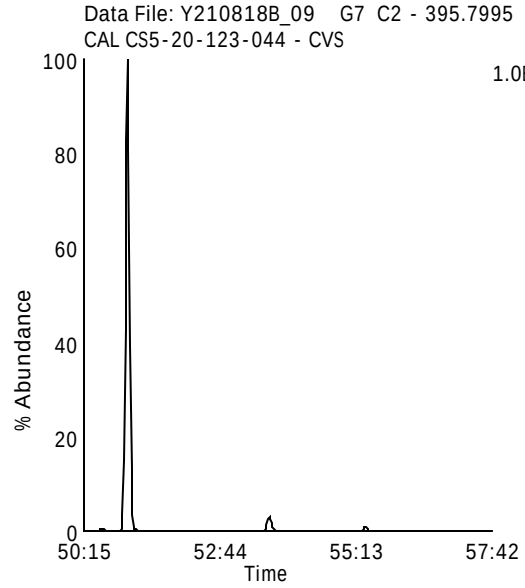






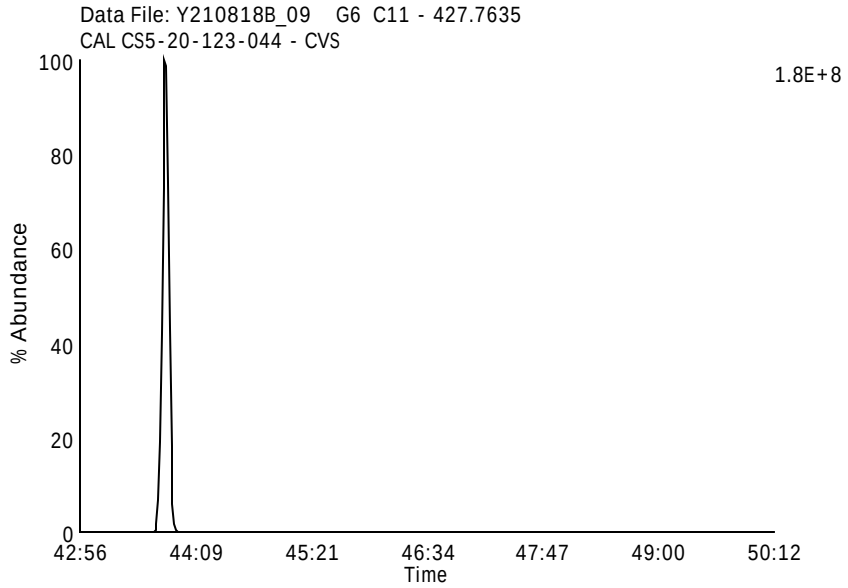


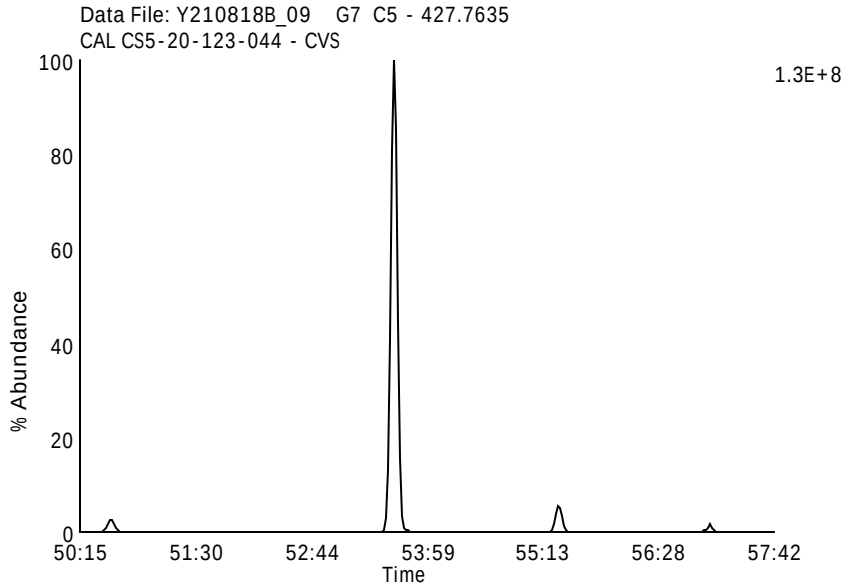


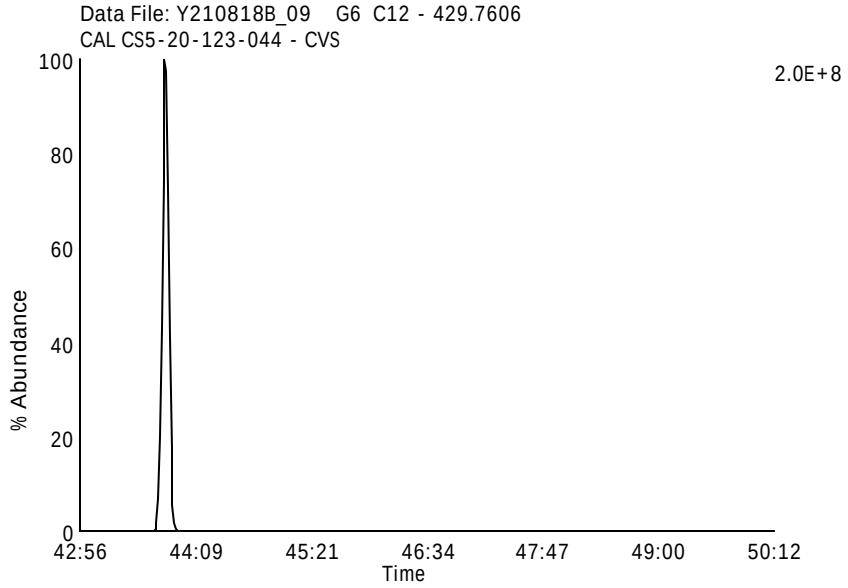


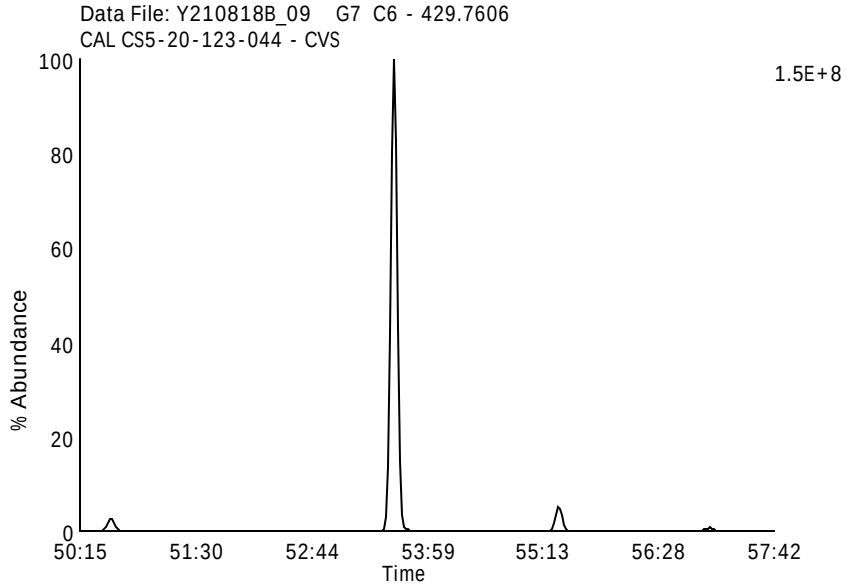
Octa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS







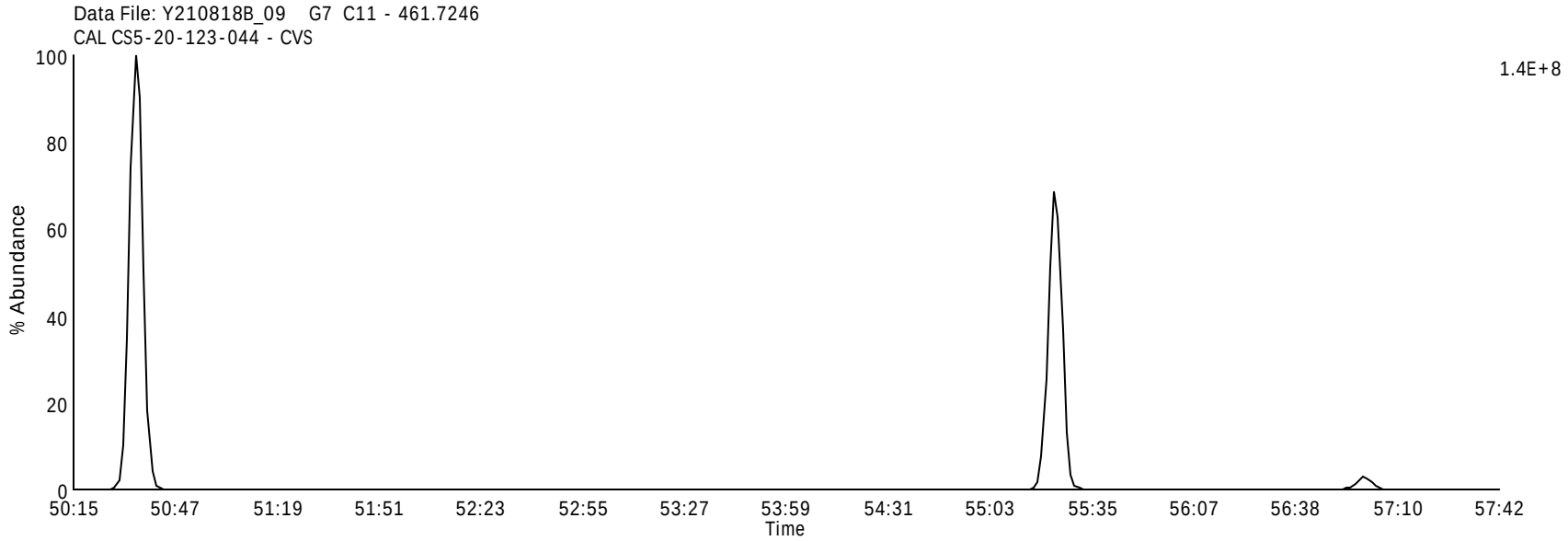


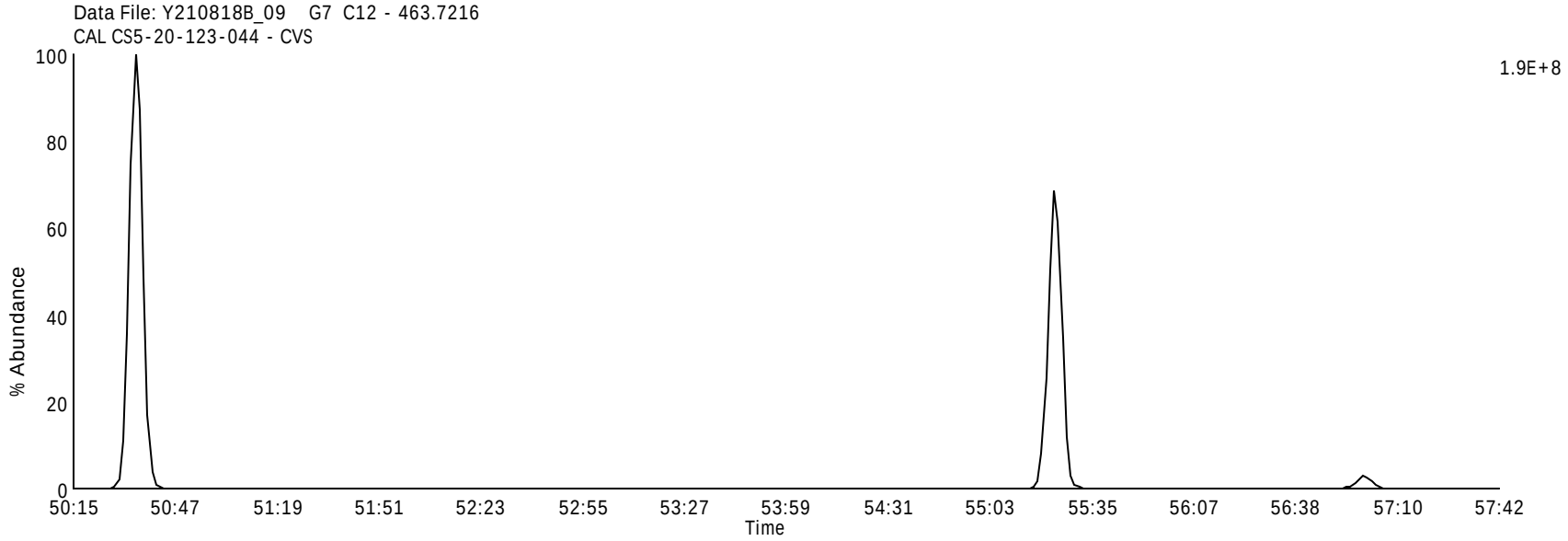
Nona Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



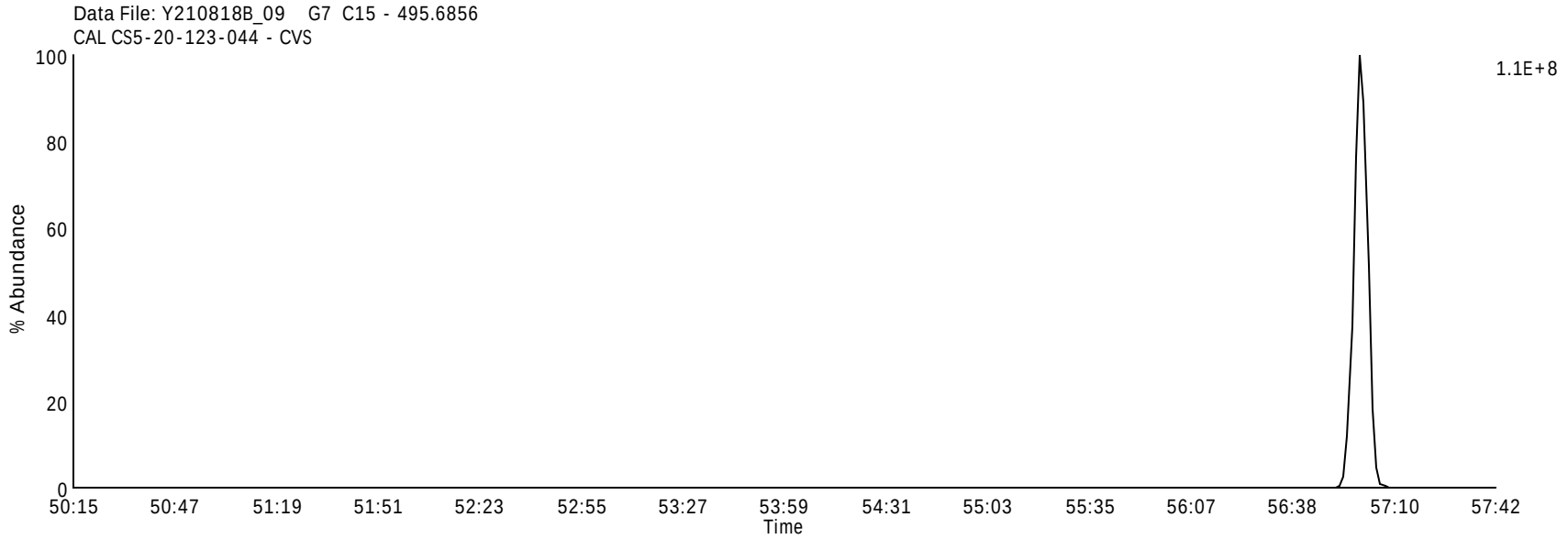


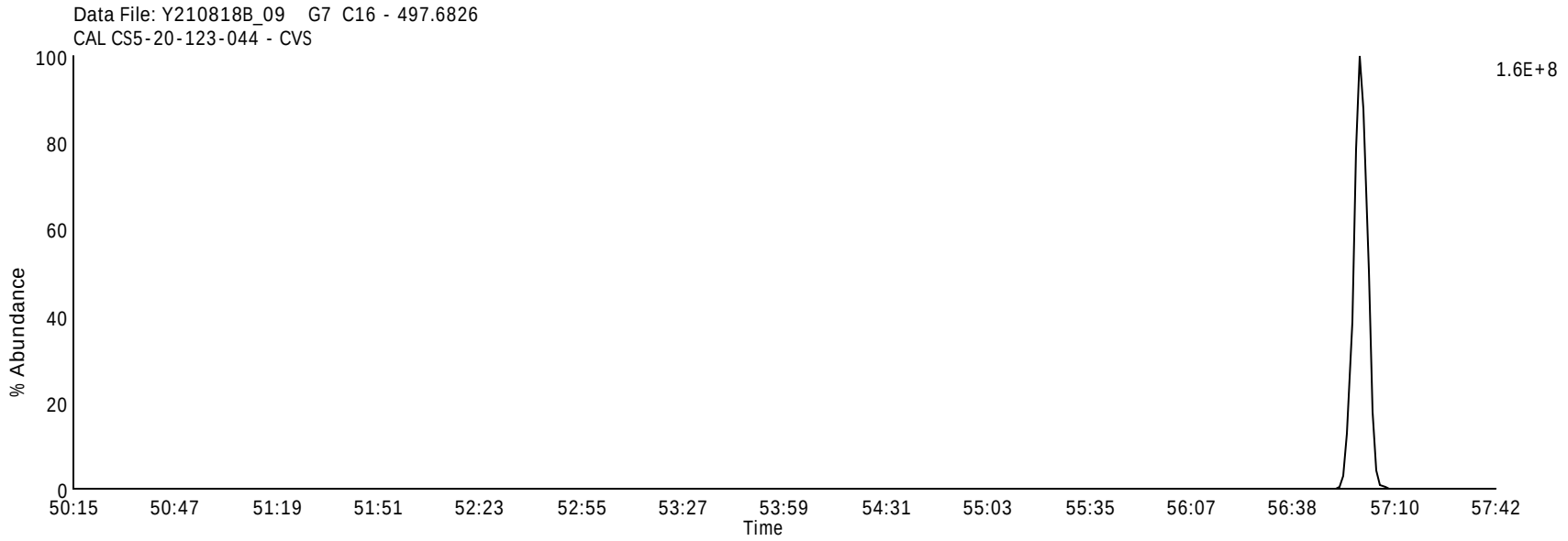
Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

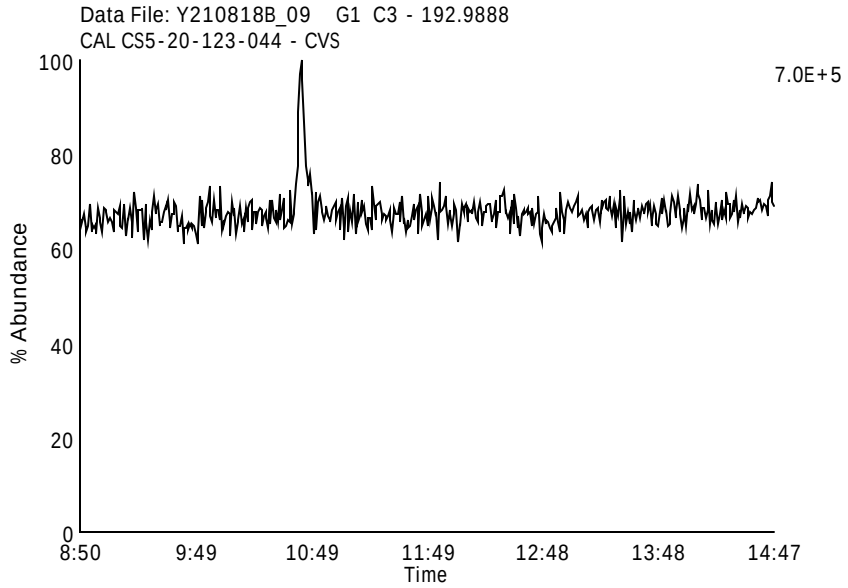


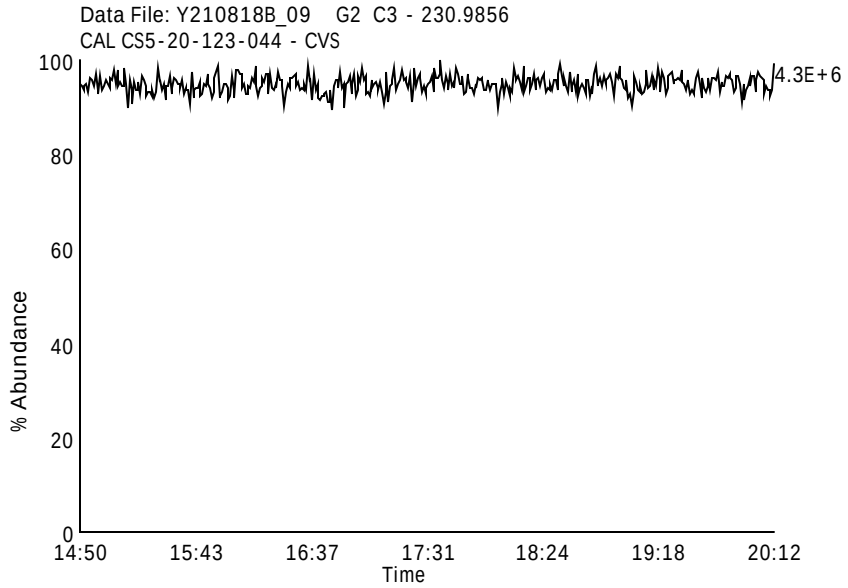


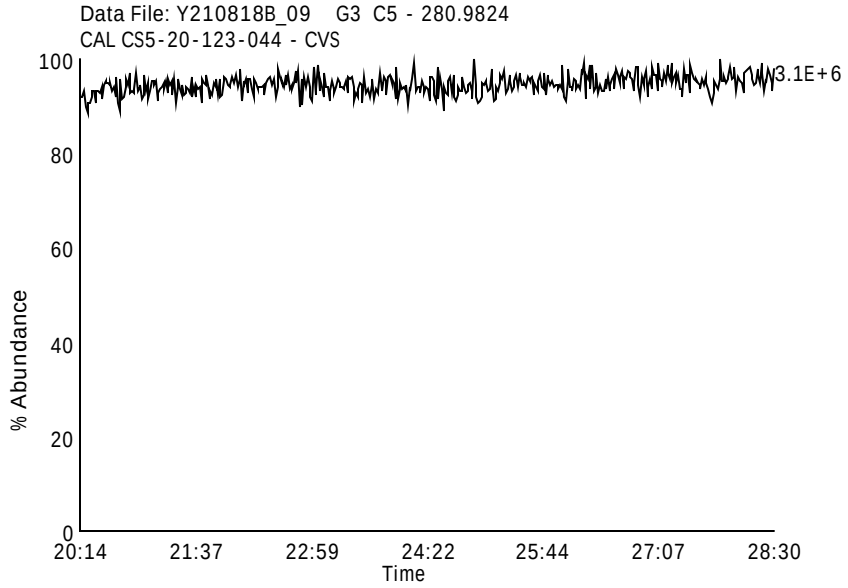
Group 1 - 4 Lock mass

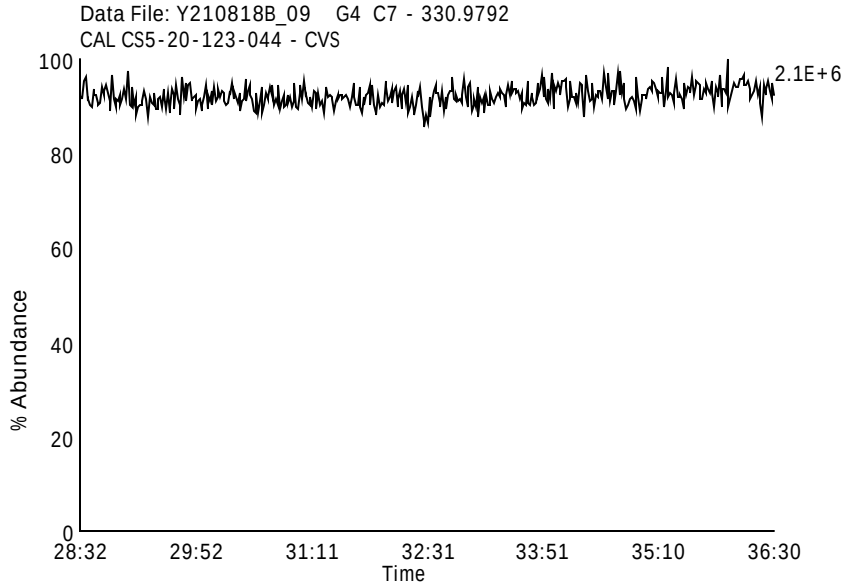
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)





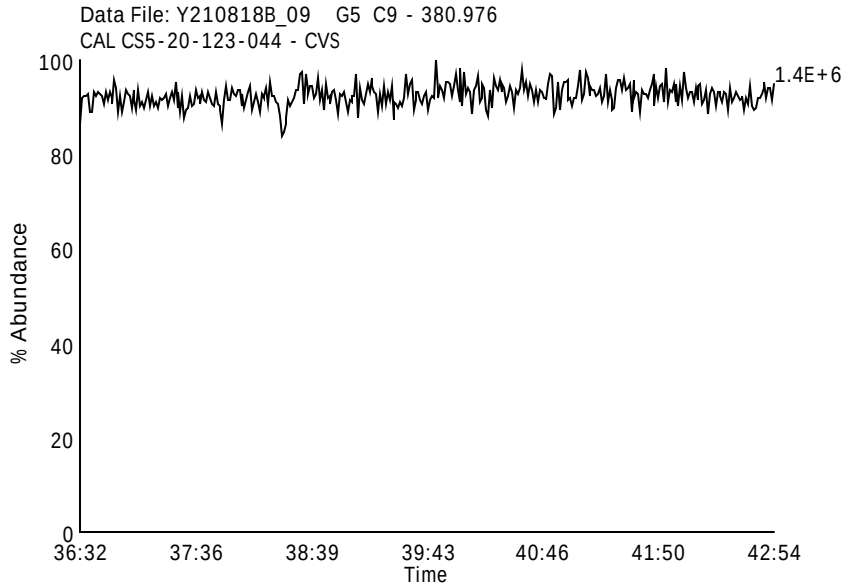


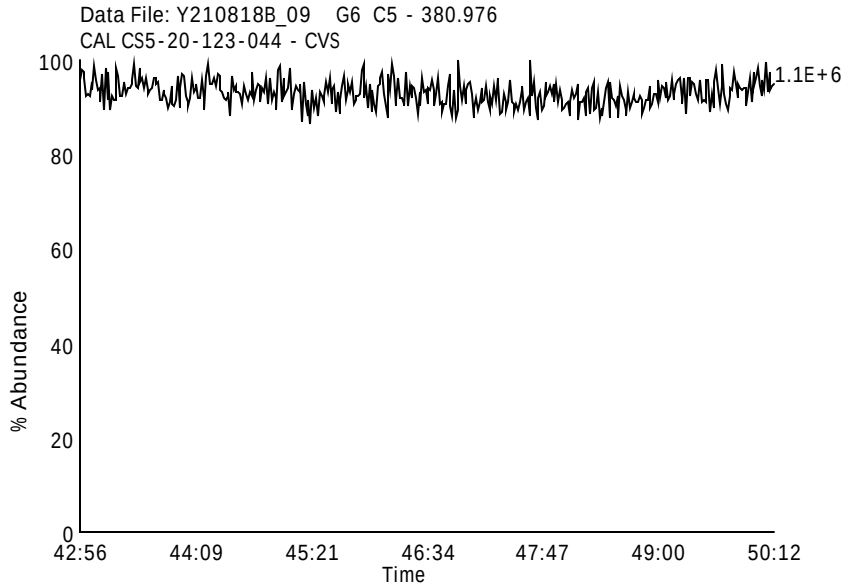


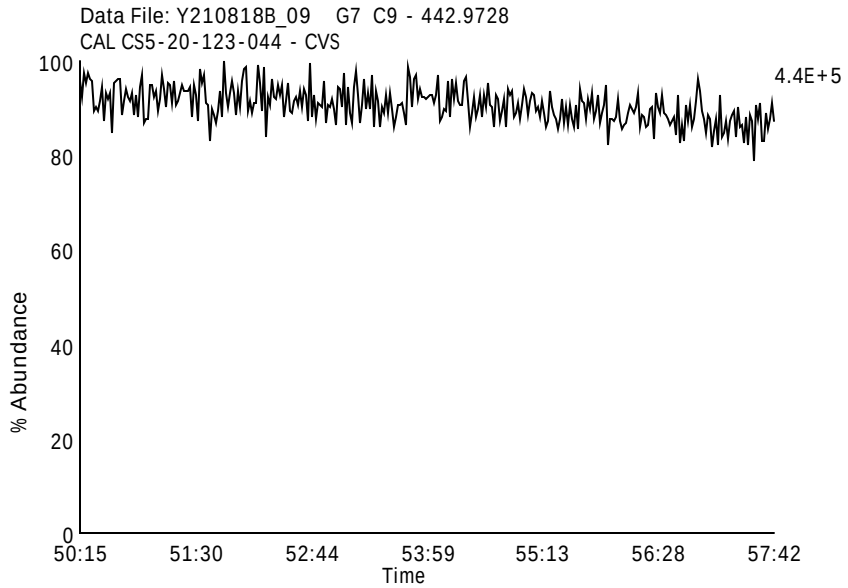
Group 5 - 7 Lock mass

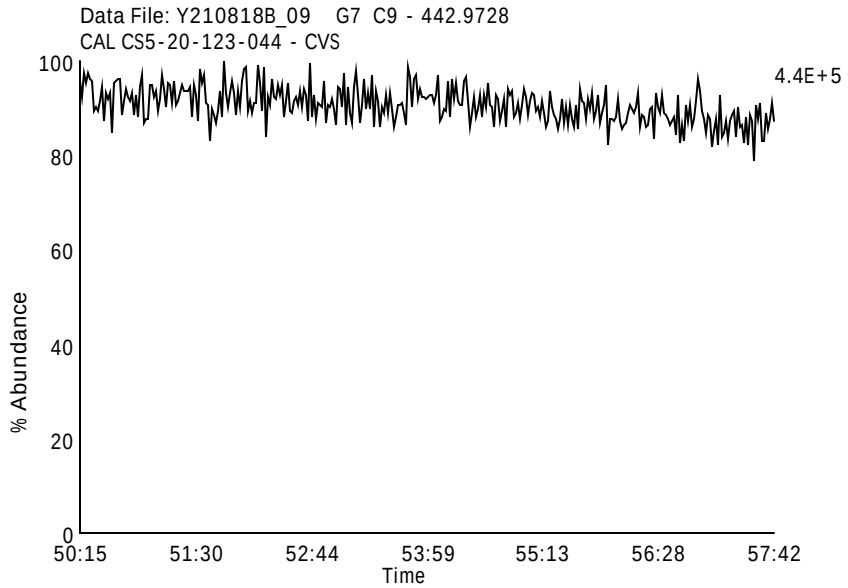
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)







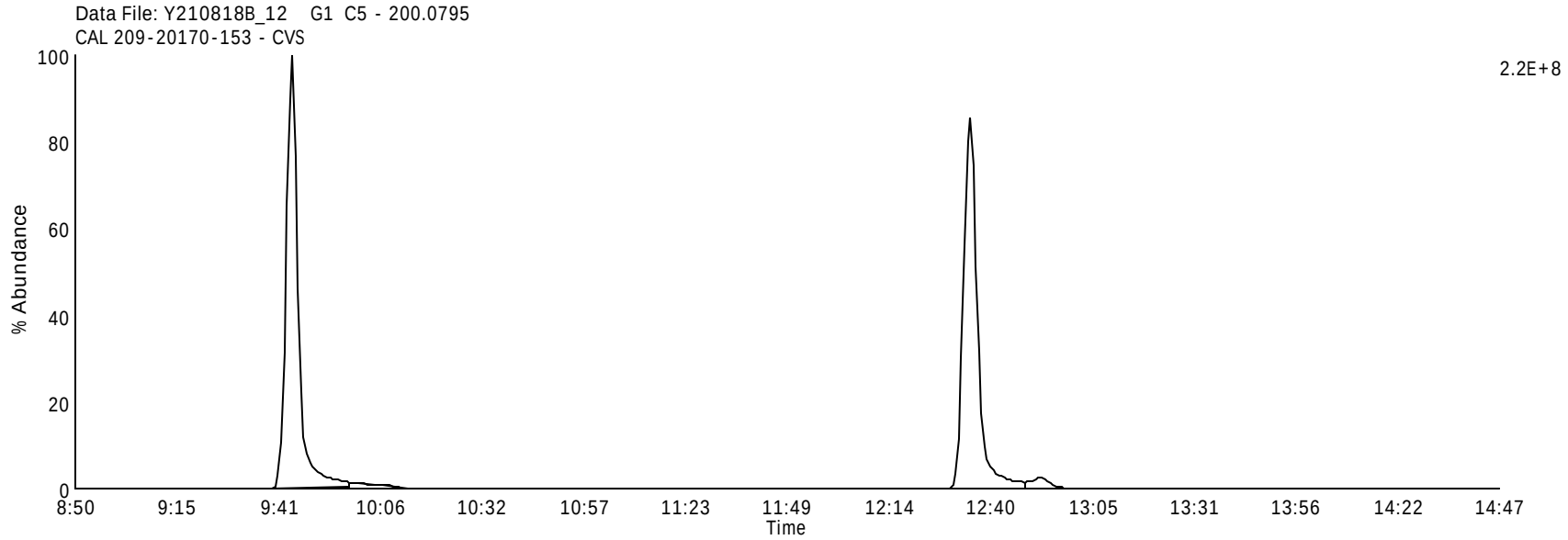


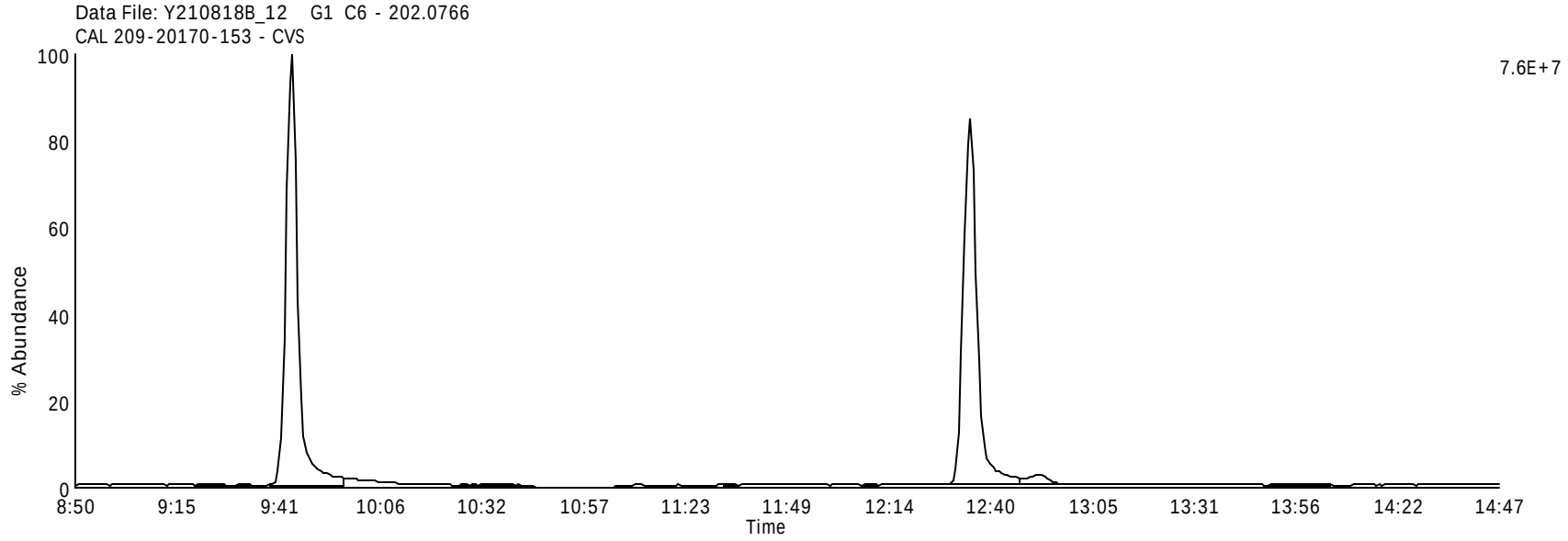
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_12 | Lab Sample ID: 209-20170-153

Date Acquired: 8/18/2021 | Instrument: 10MSHR12 (Y)

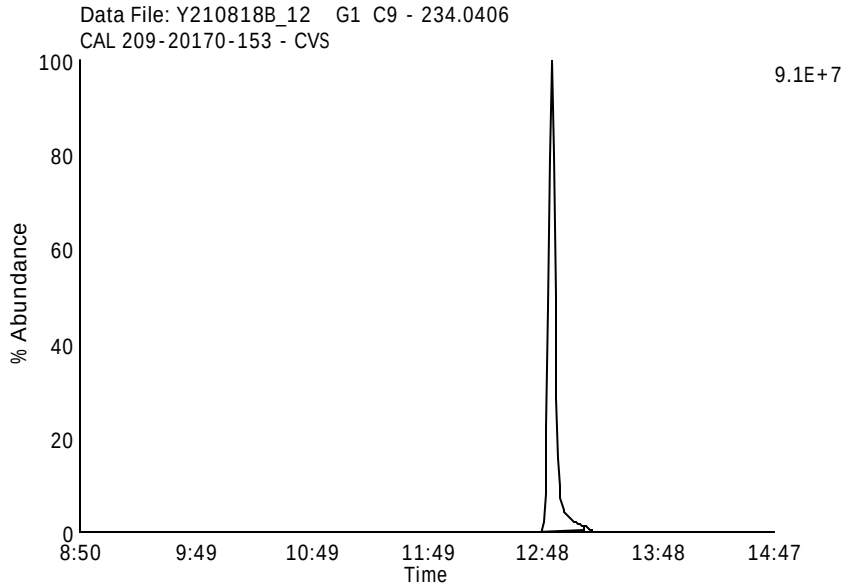
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

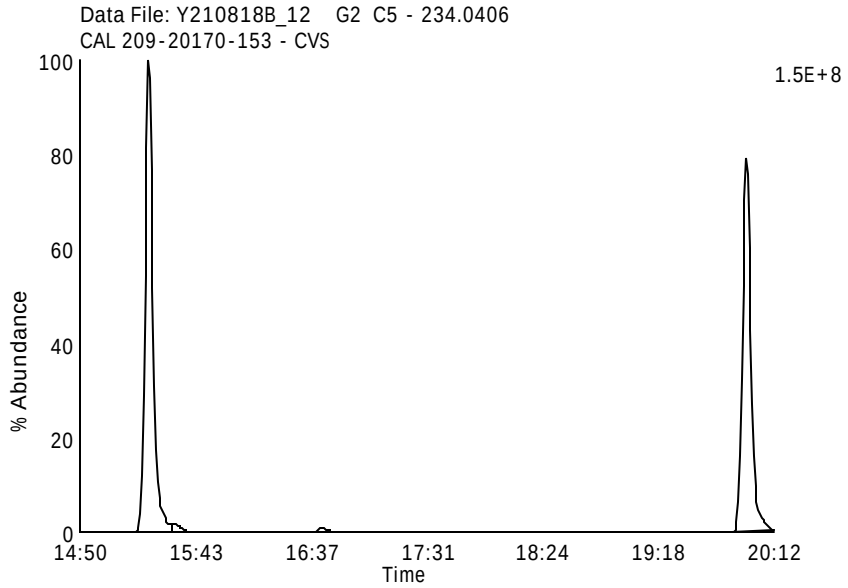


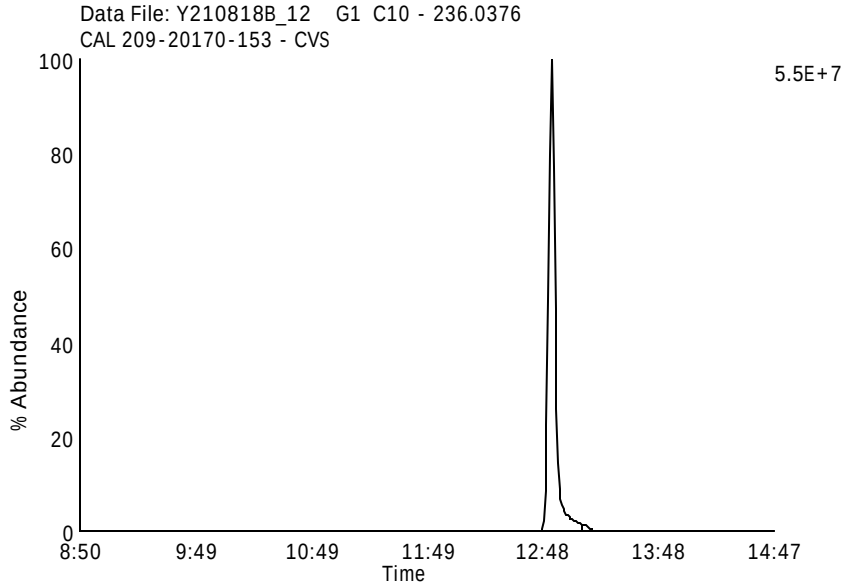


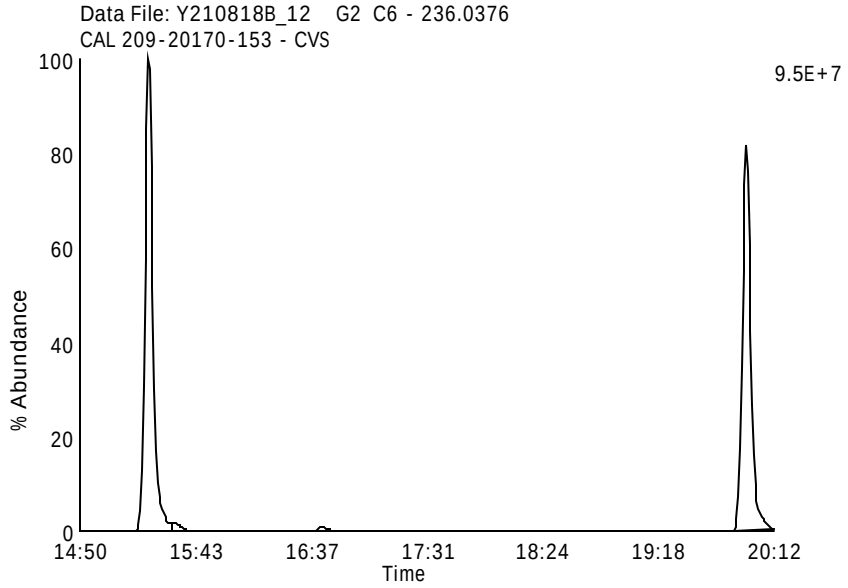
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



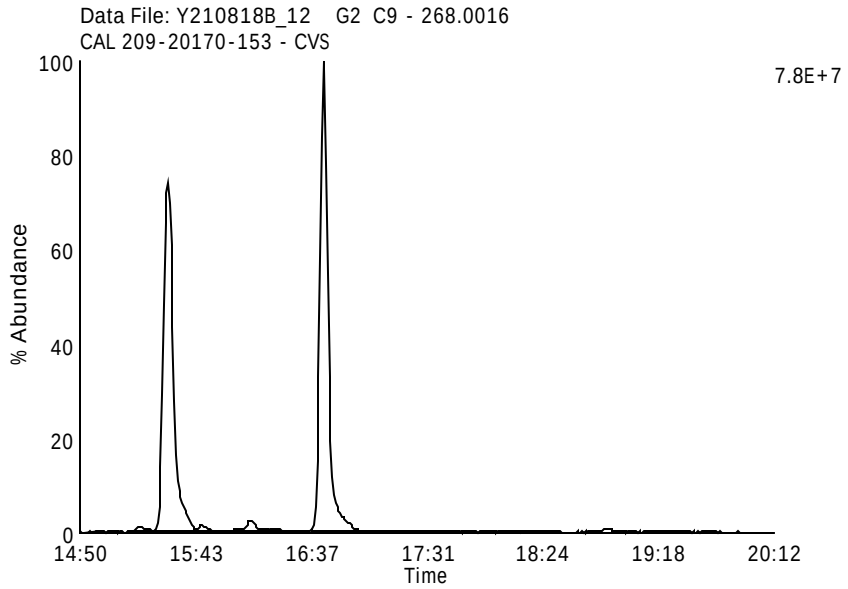


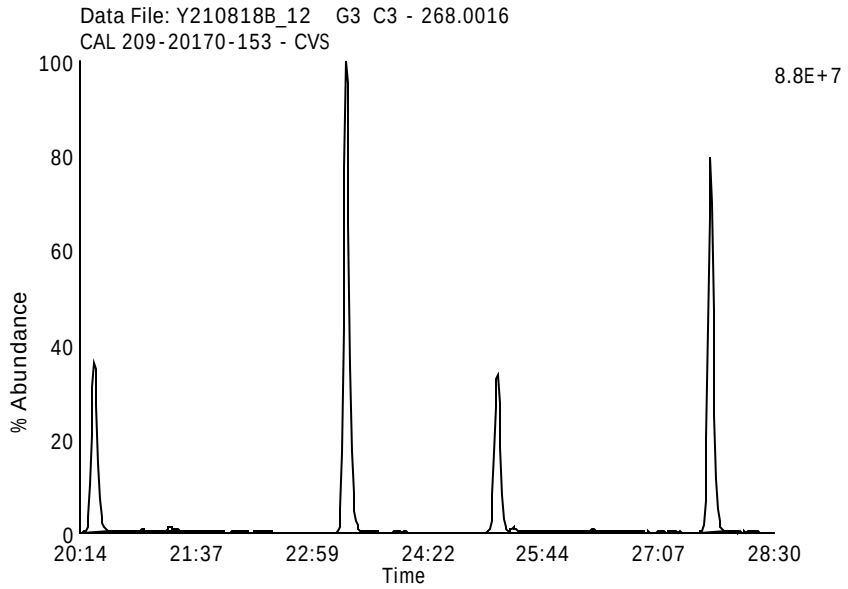


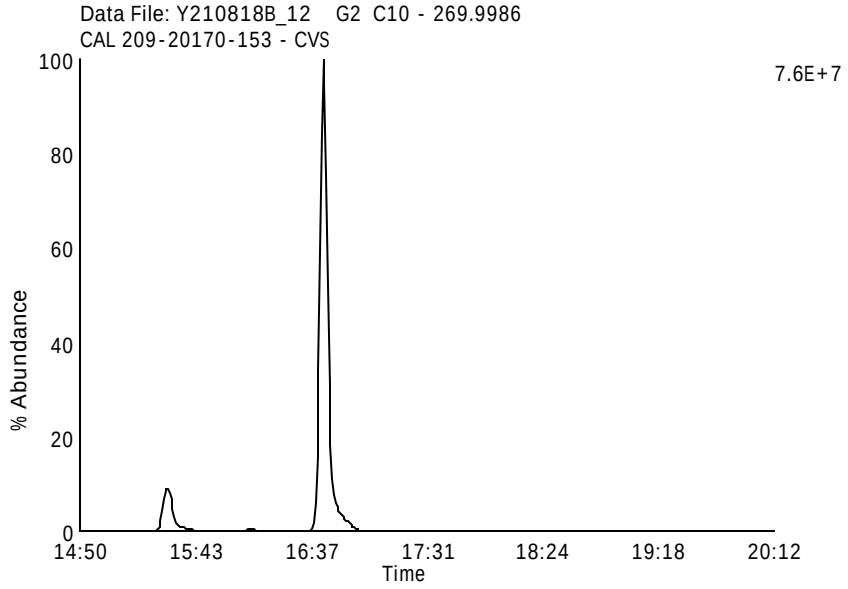


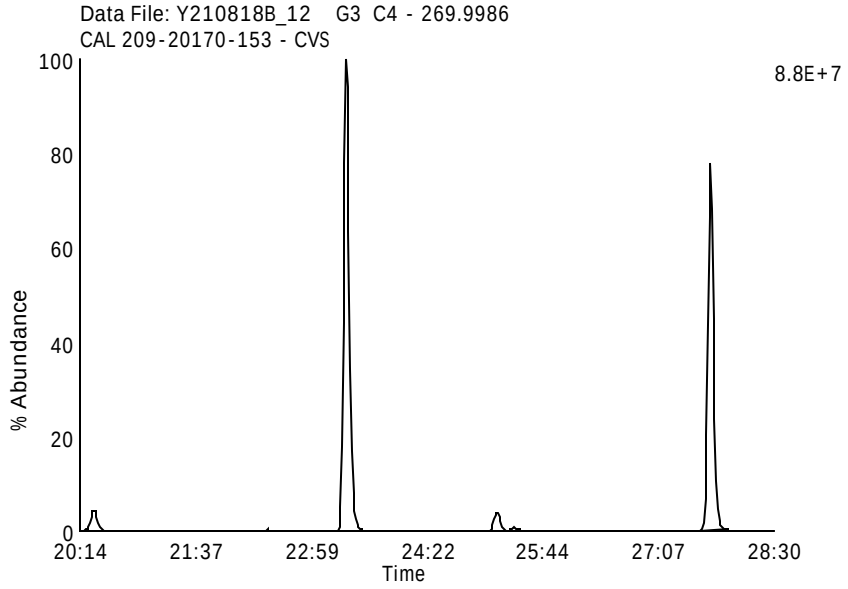
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



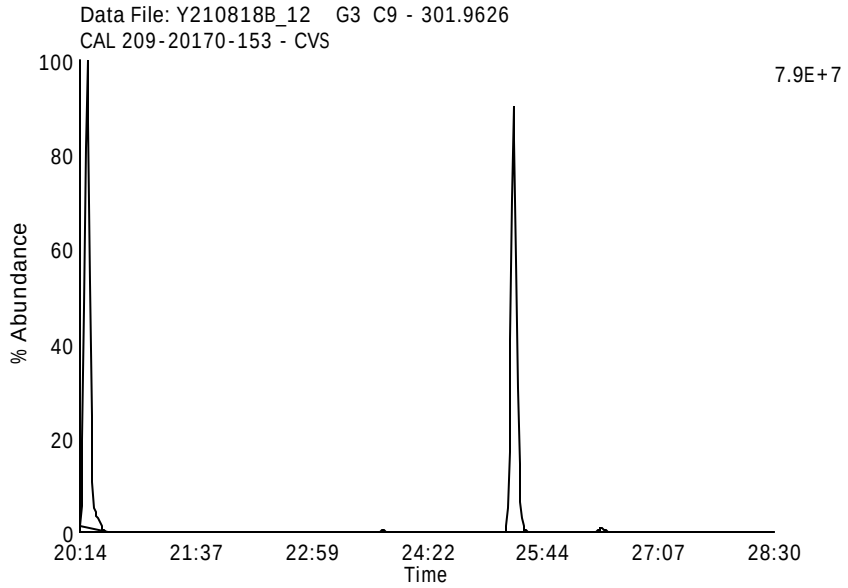


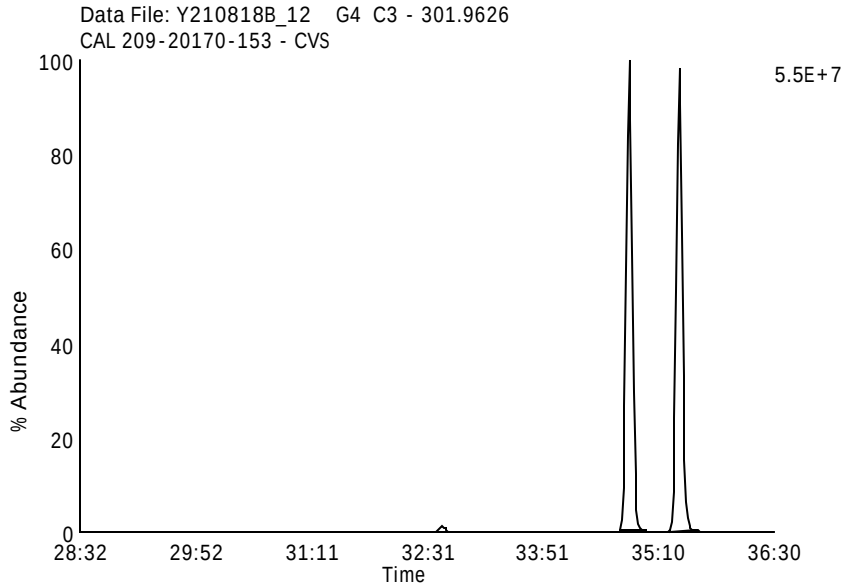


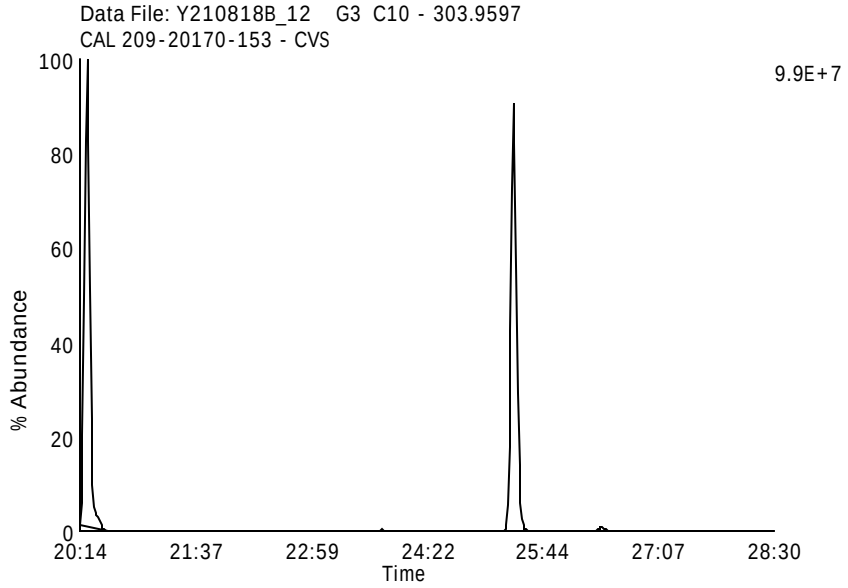


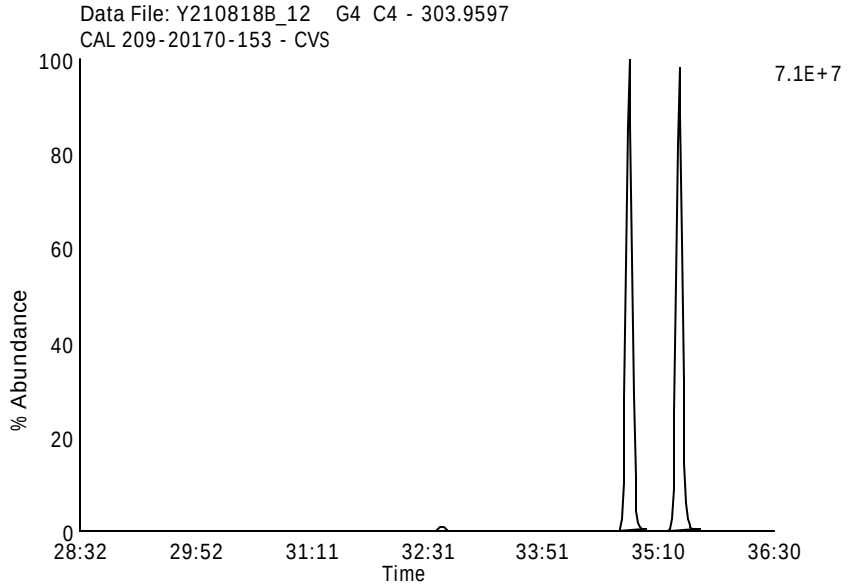
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



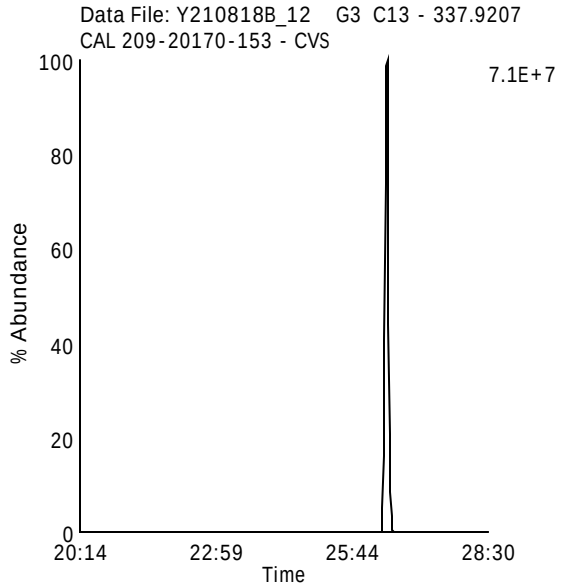


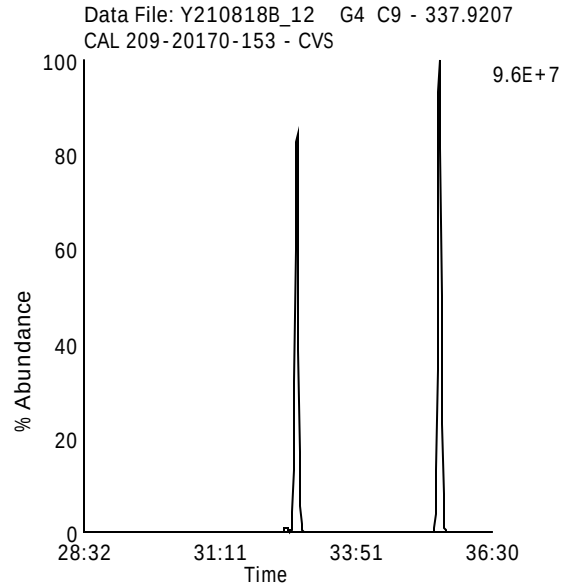


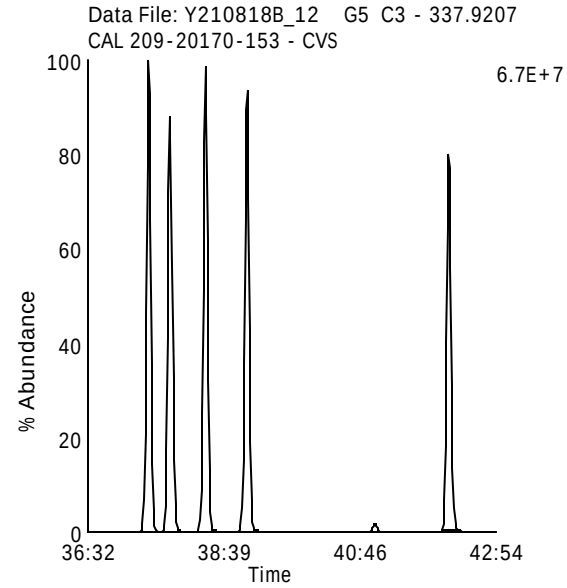


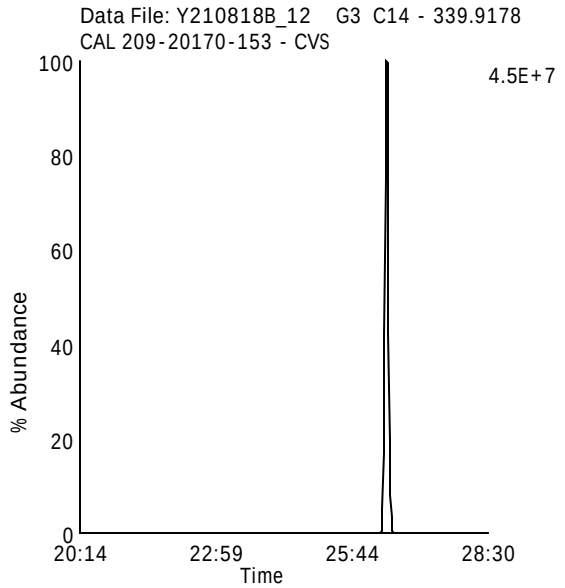
Labeled Penta Chlorinated Biphenyls

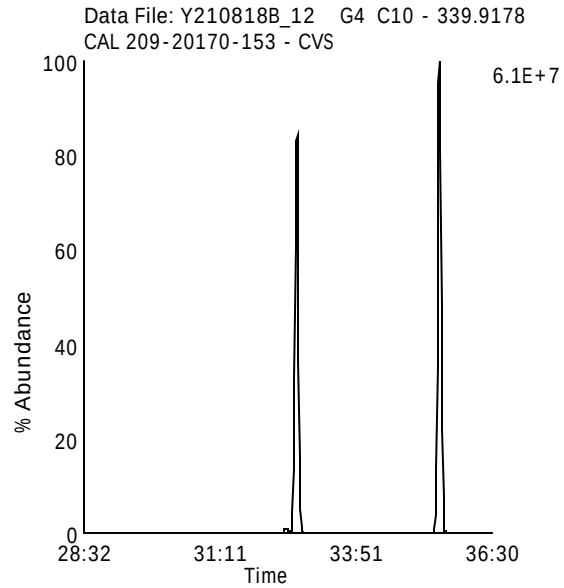
Data File Name: Y210818B_12 | Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021 | Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

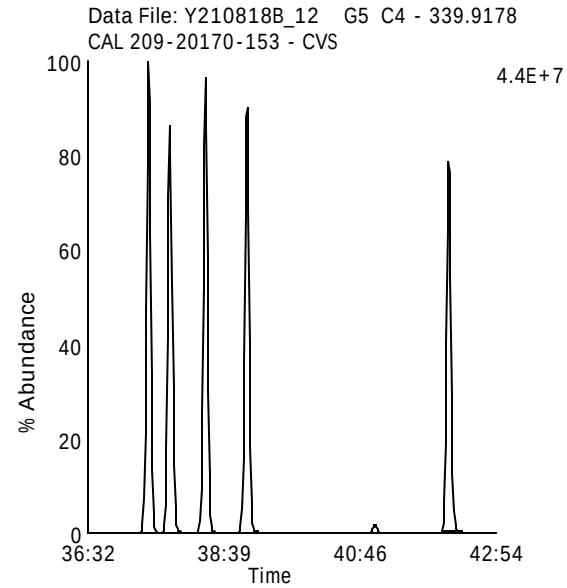






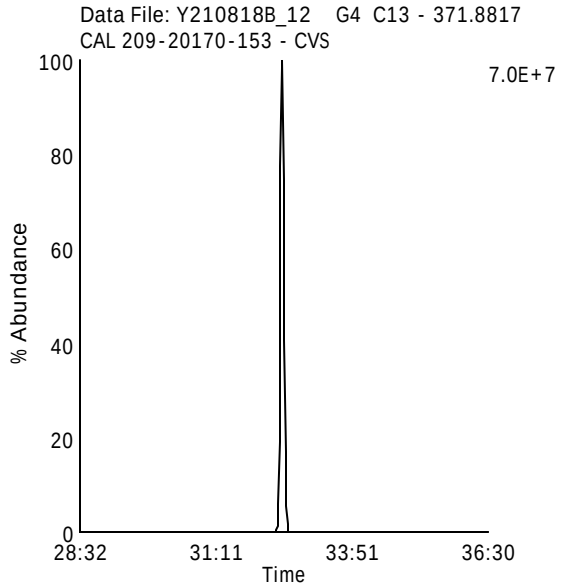


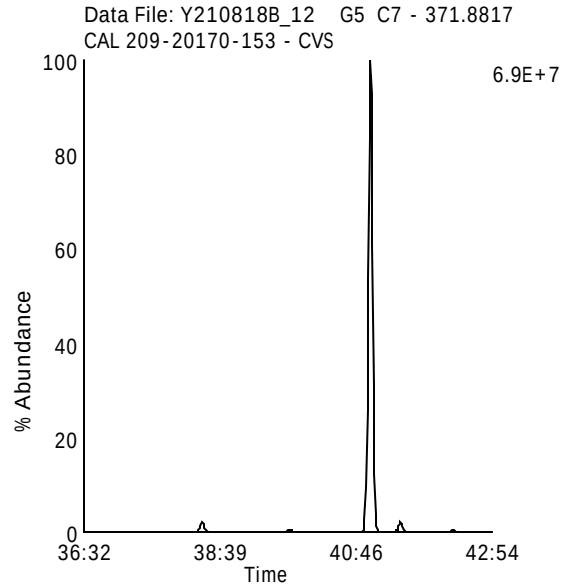


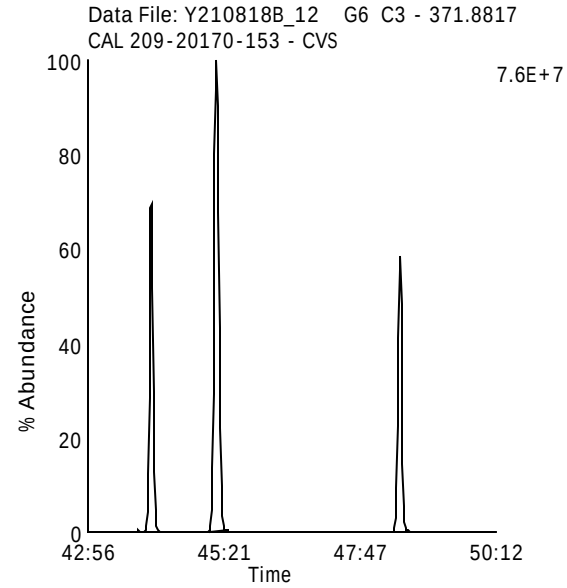


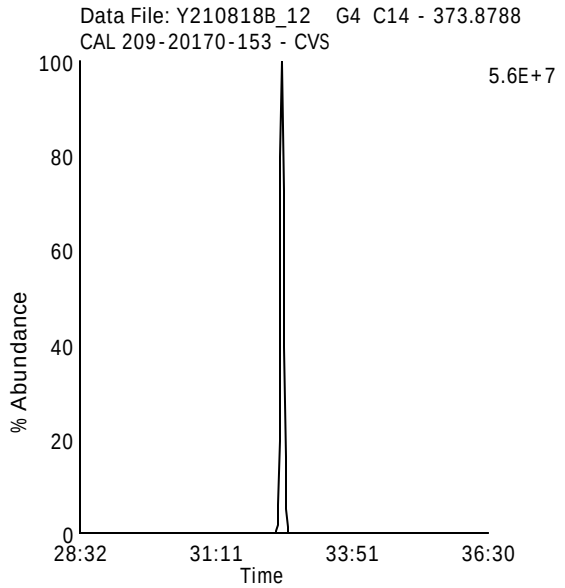
Labeled Hexa Chlorinated Biphenyls

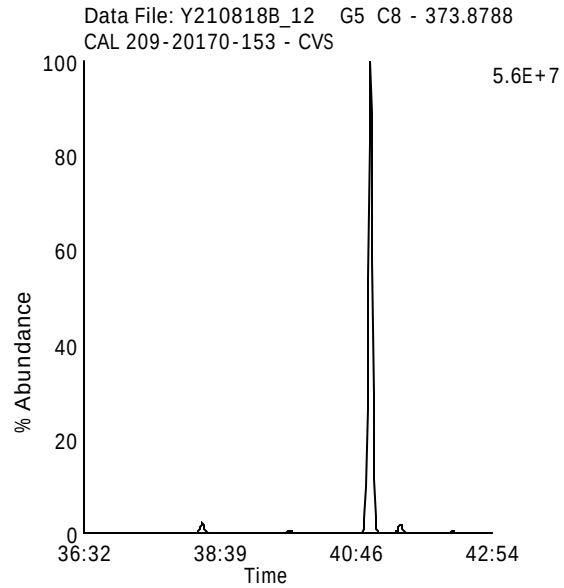
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

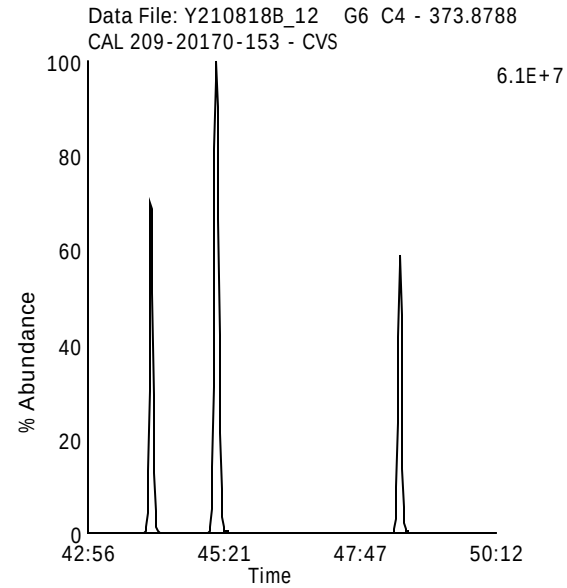






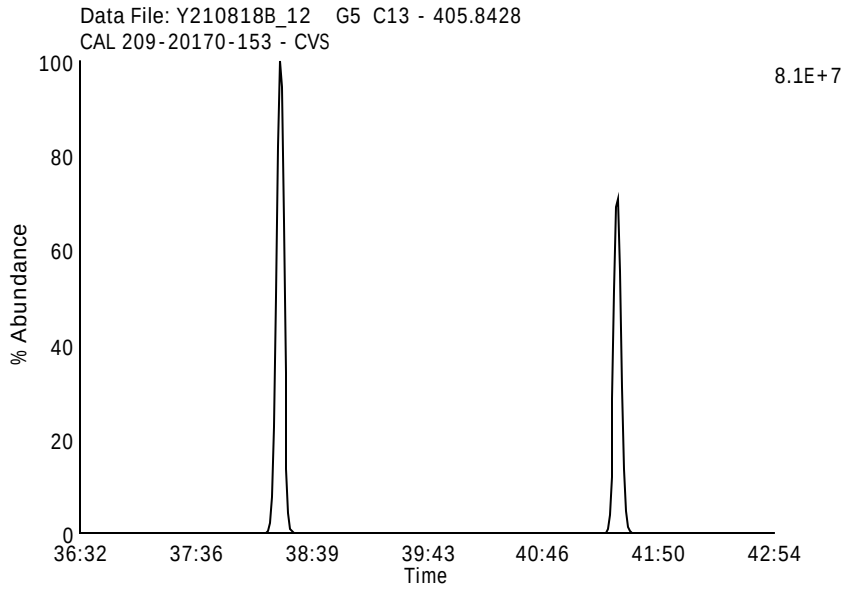


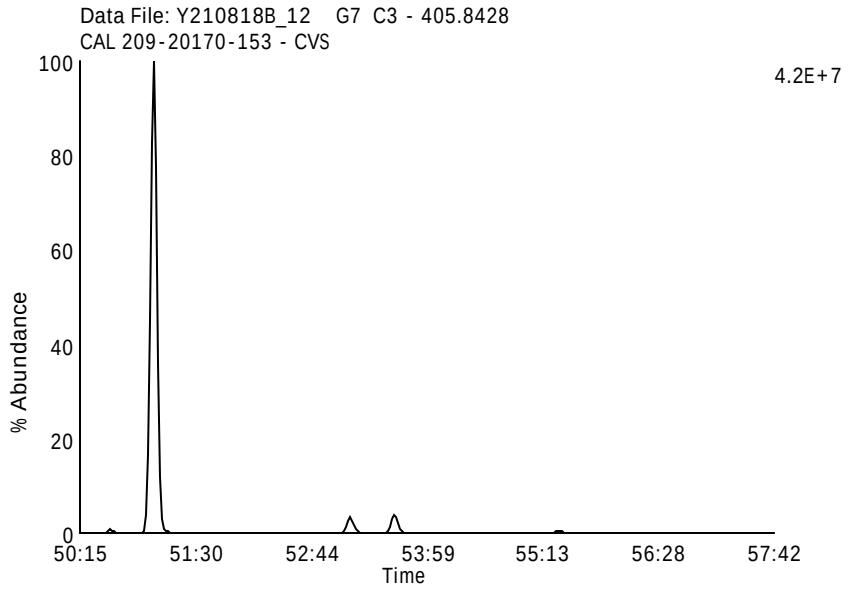


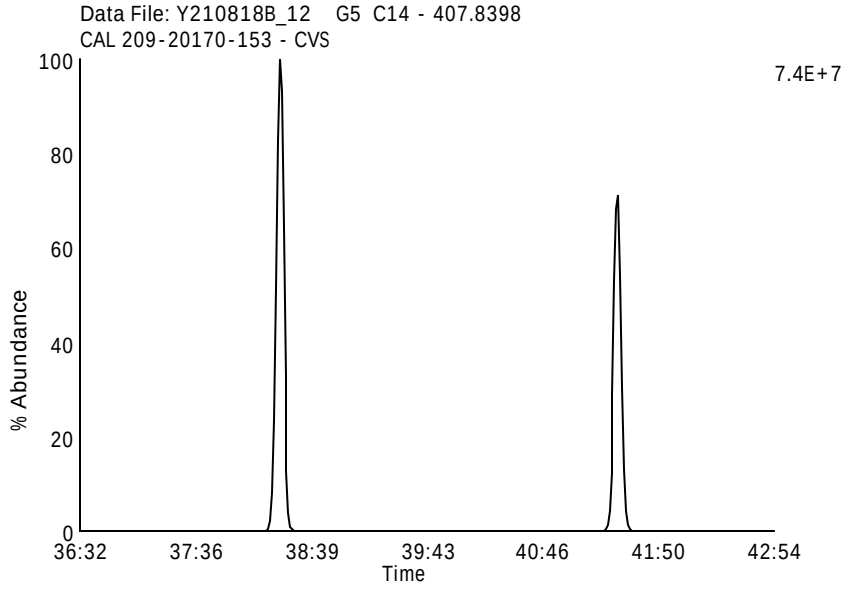


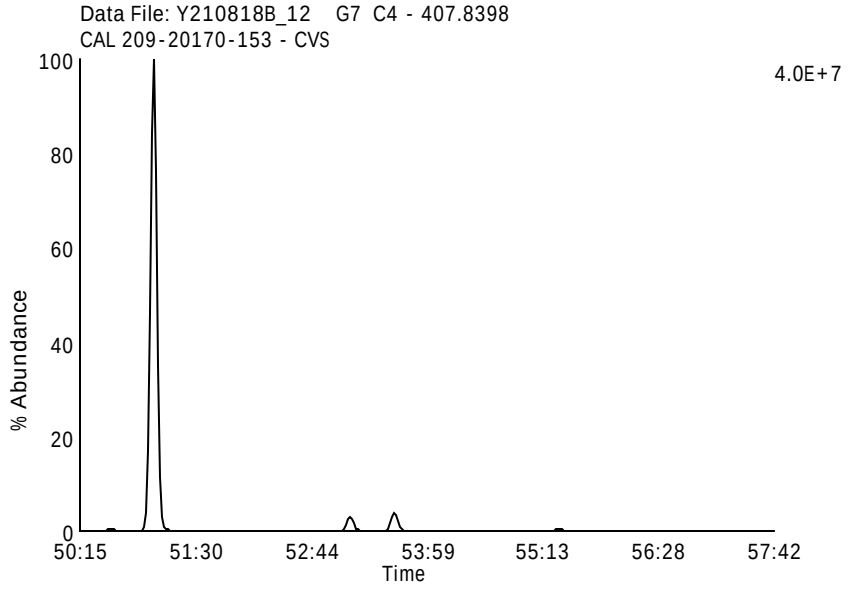
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



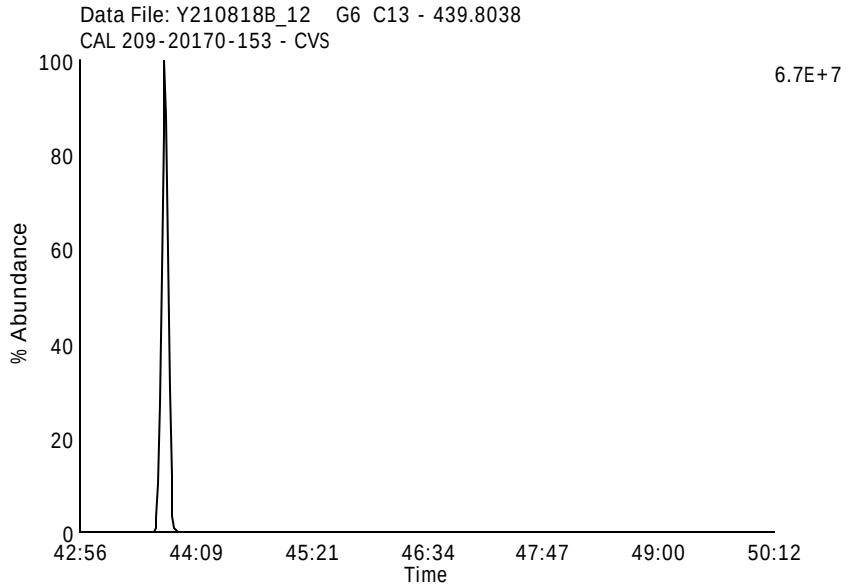


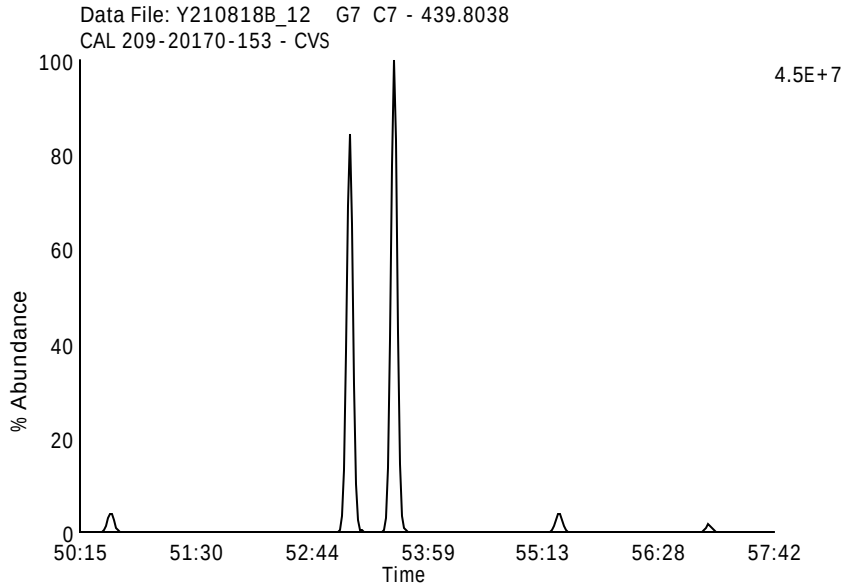


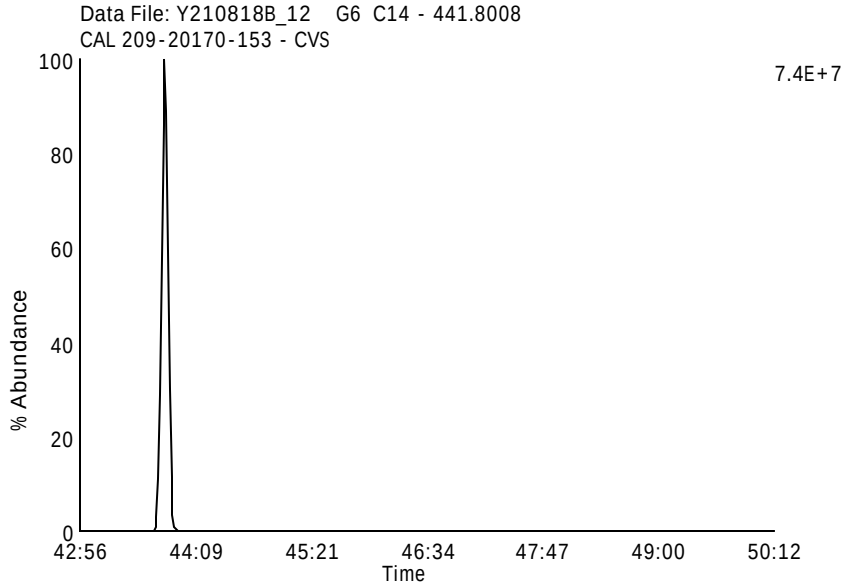


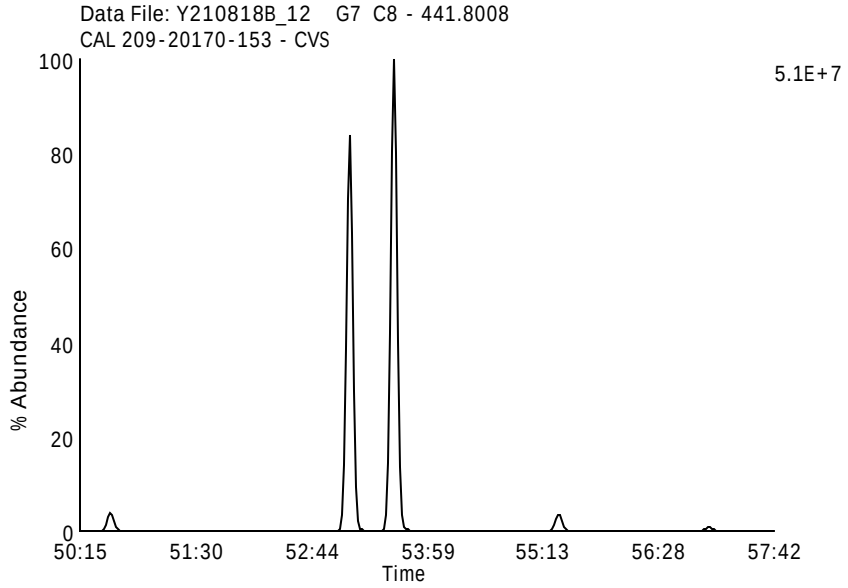
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



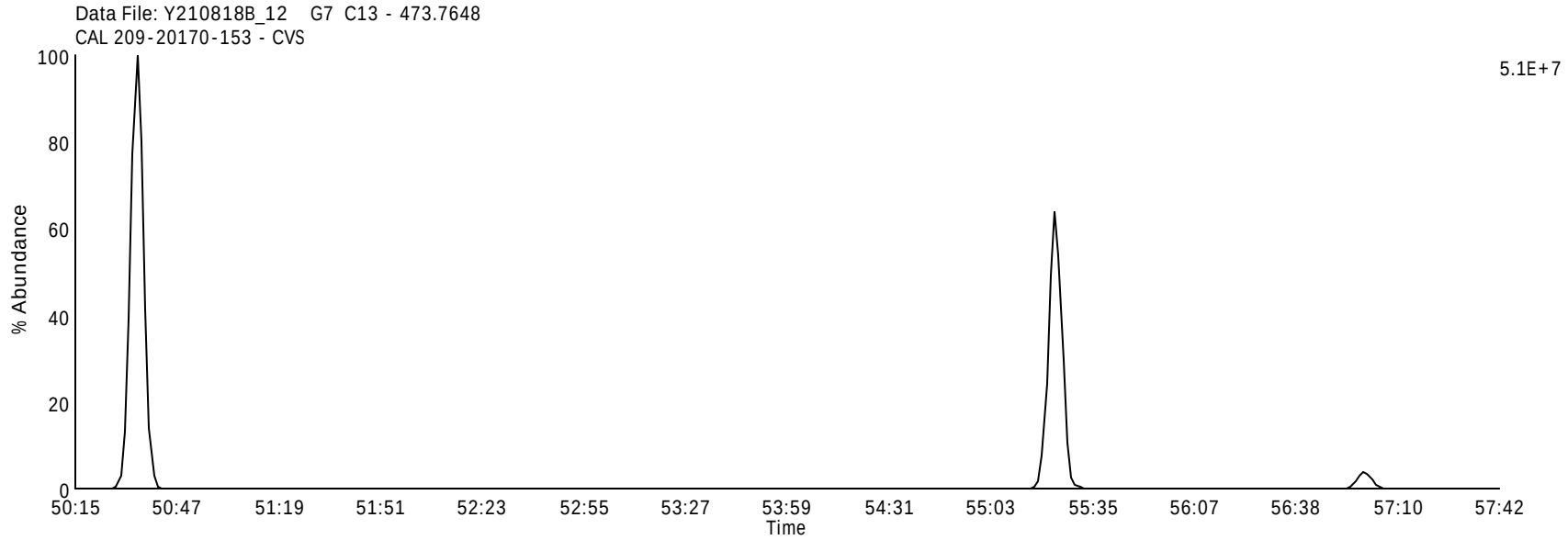


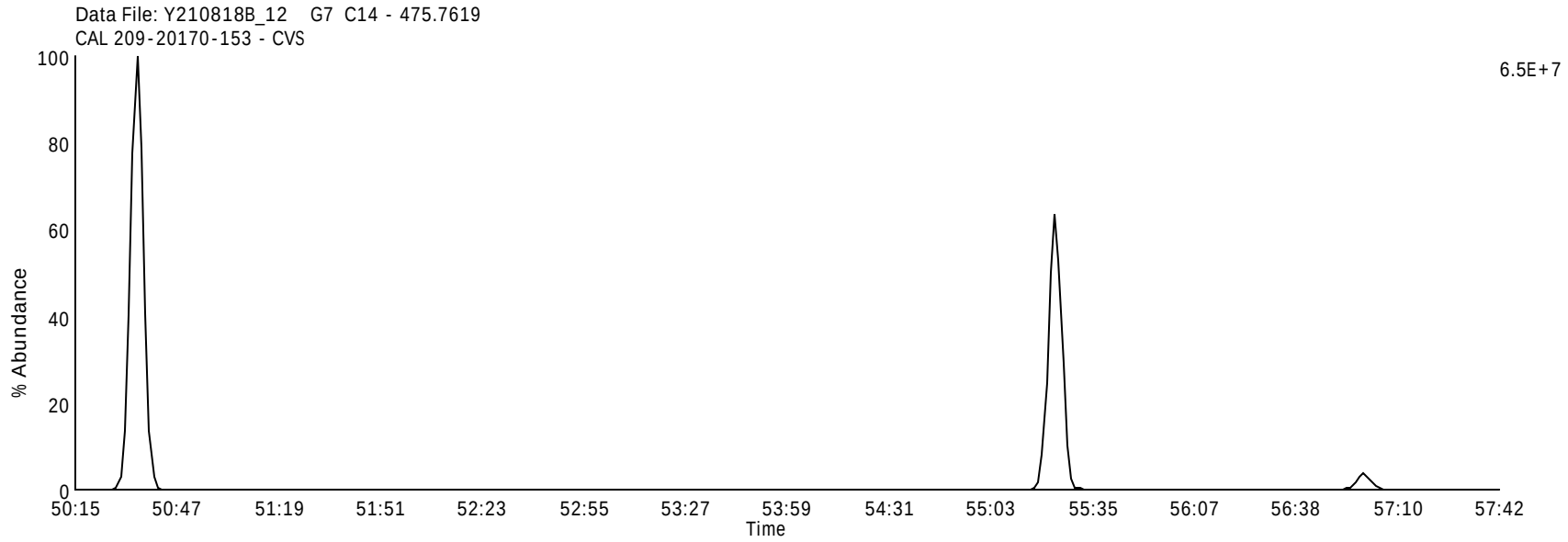




Labeled Nona Chlorinated Biphenyls

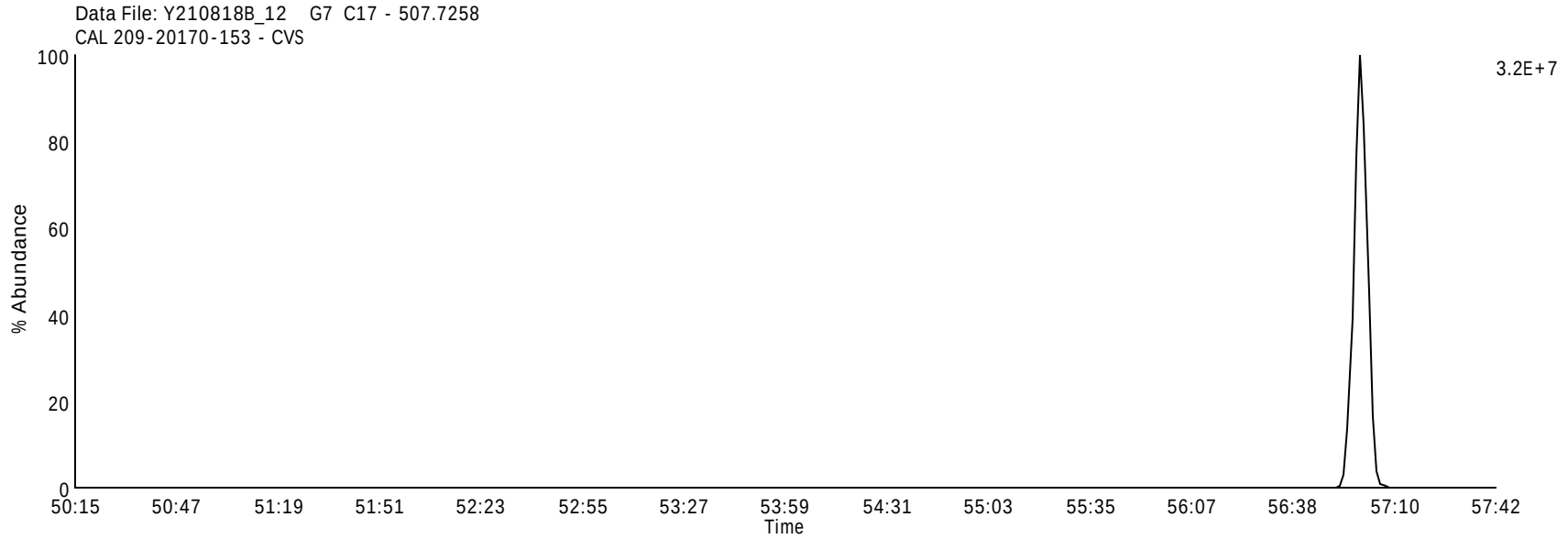
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

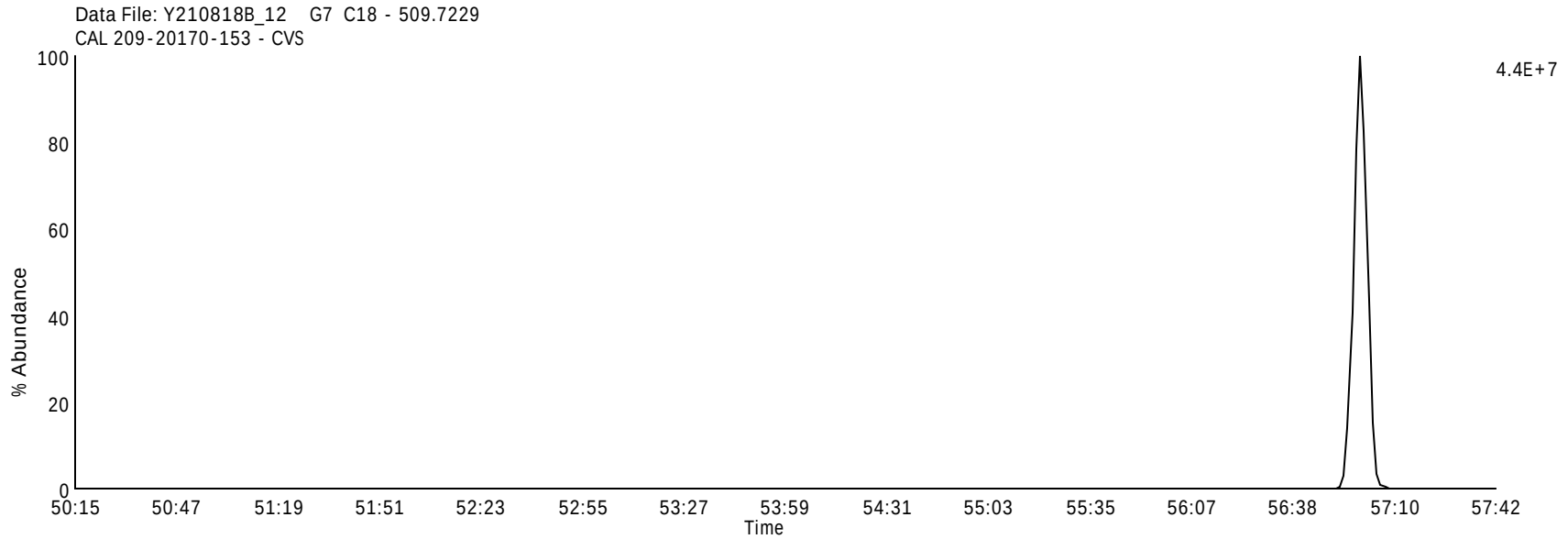




Labeled Deca Chlorinated Biphenyl

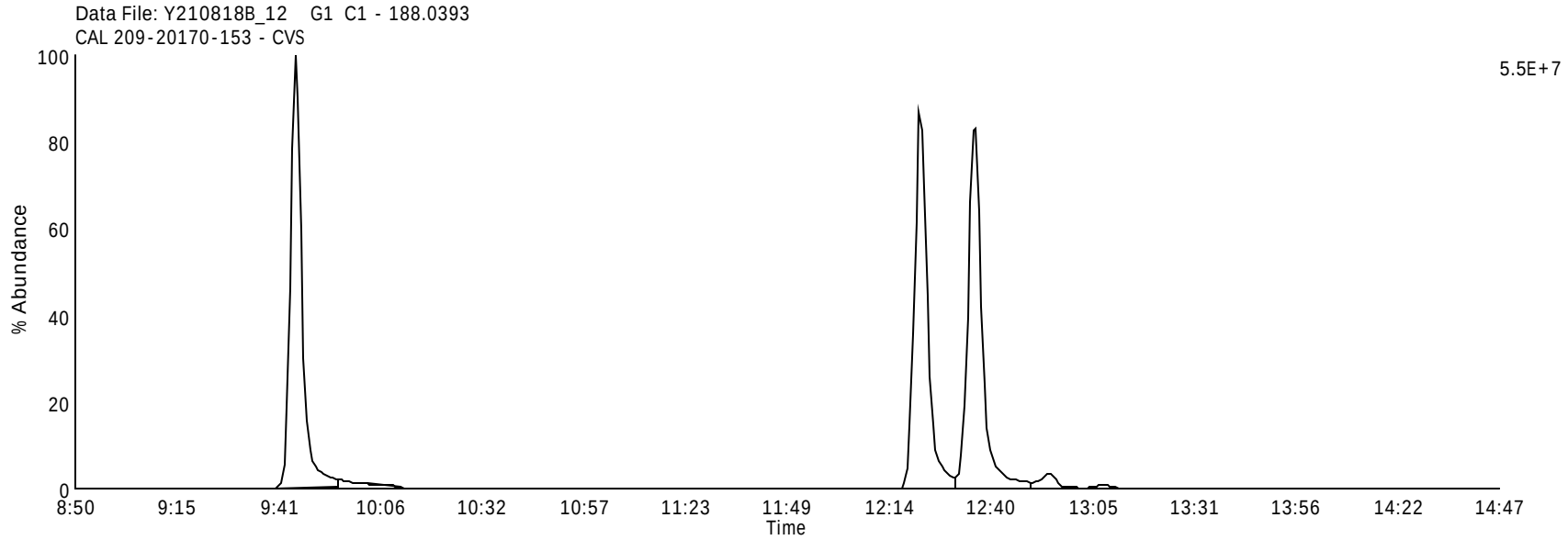
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

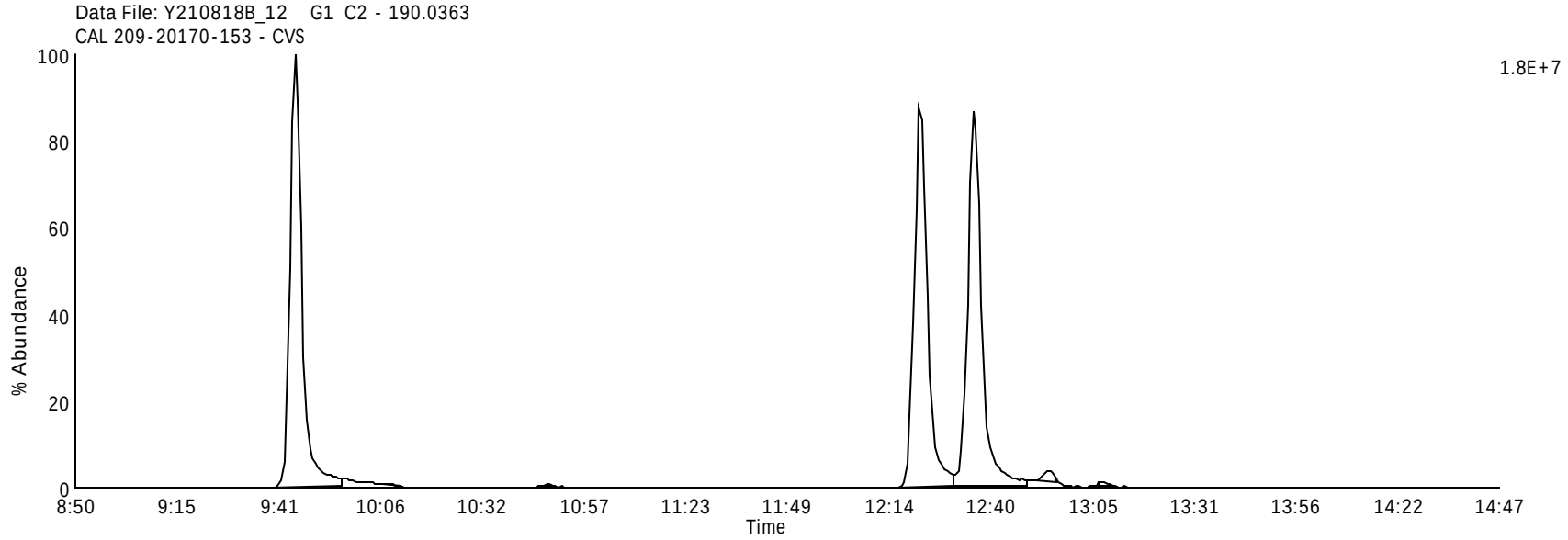




Mono Chlorinated Biphenyls

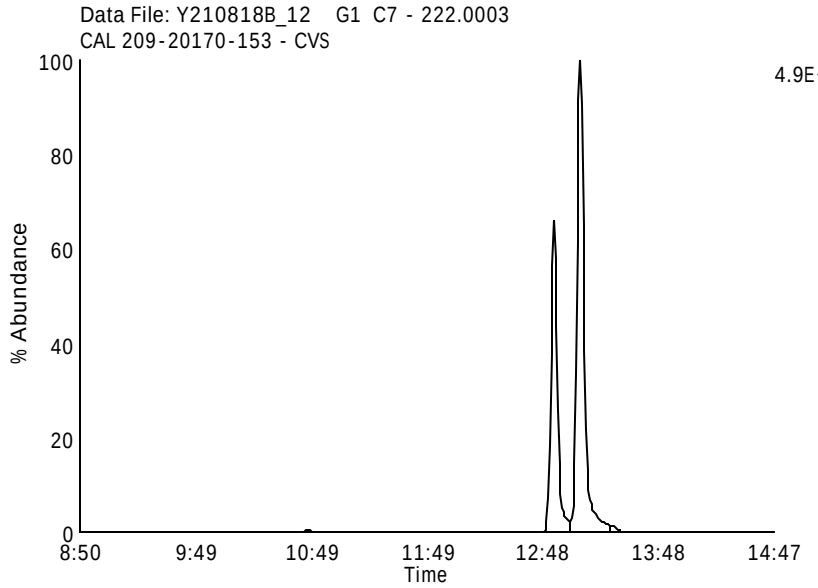
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

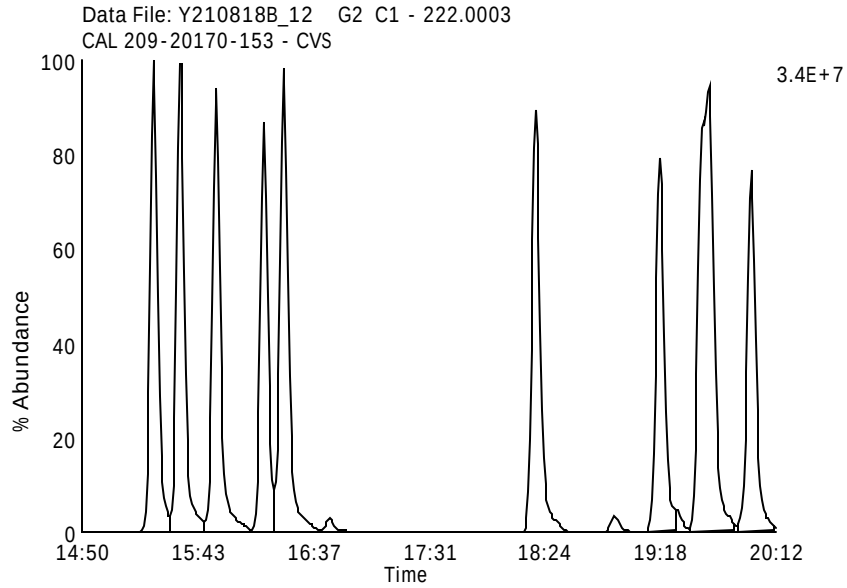


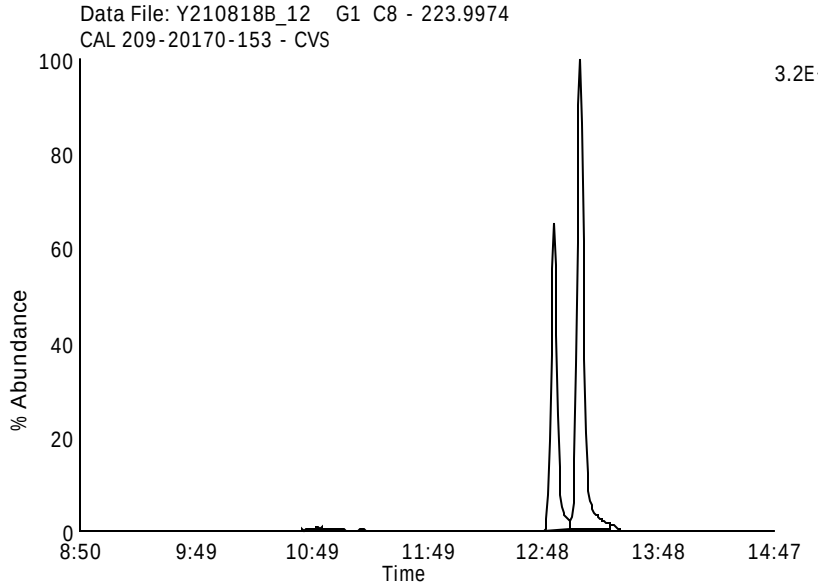


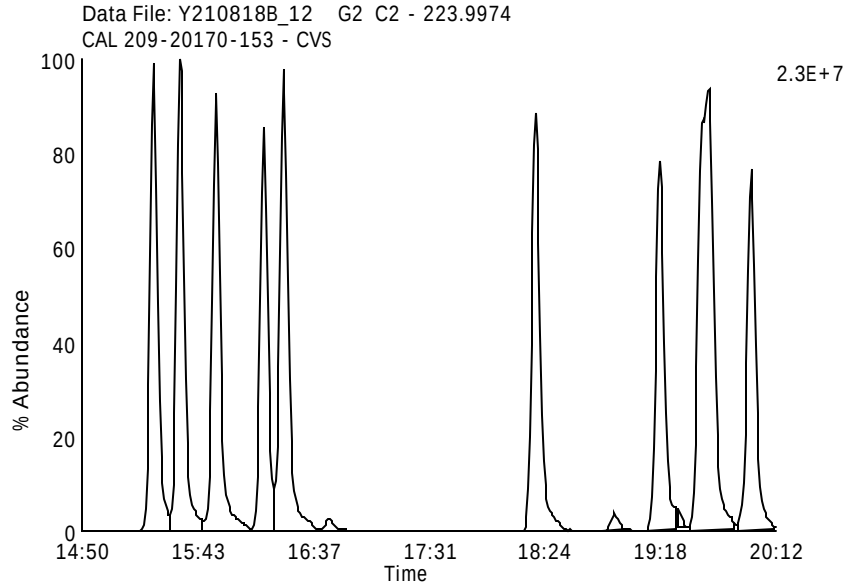
Di Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



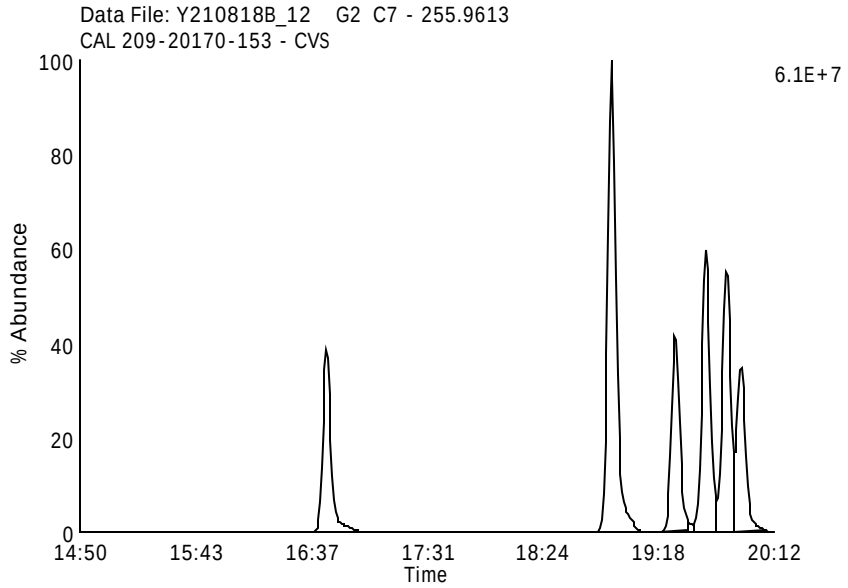


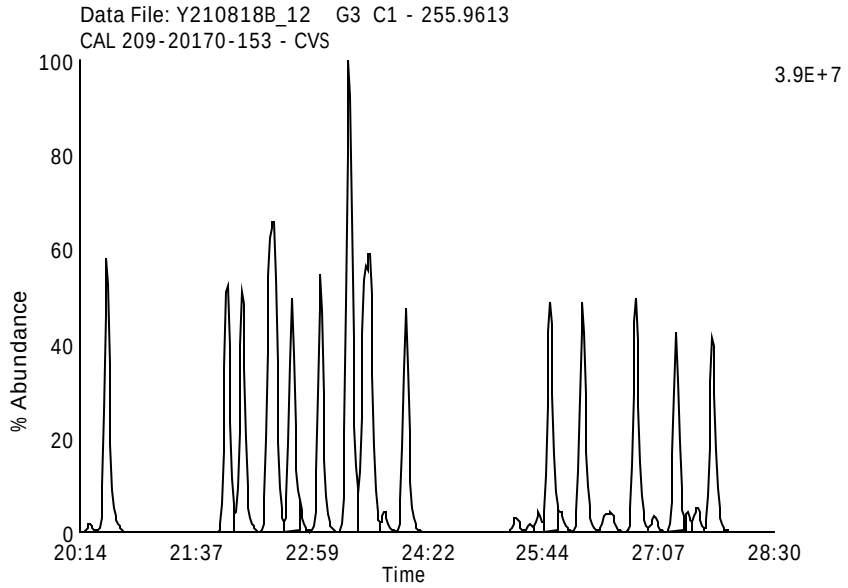


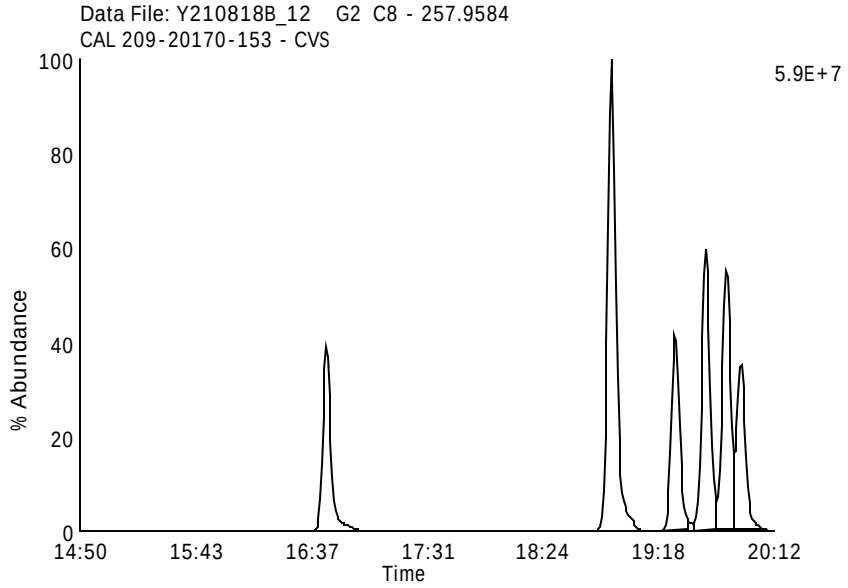


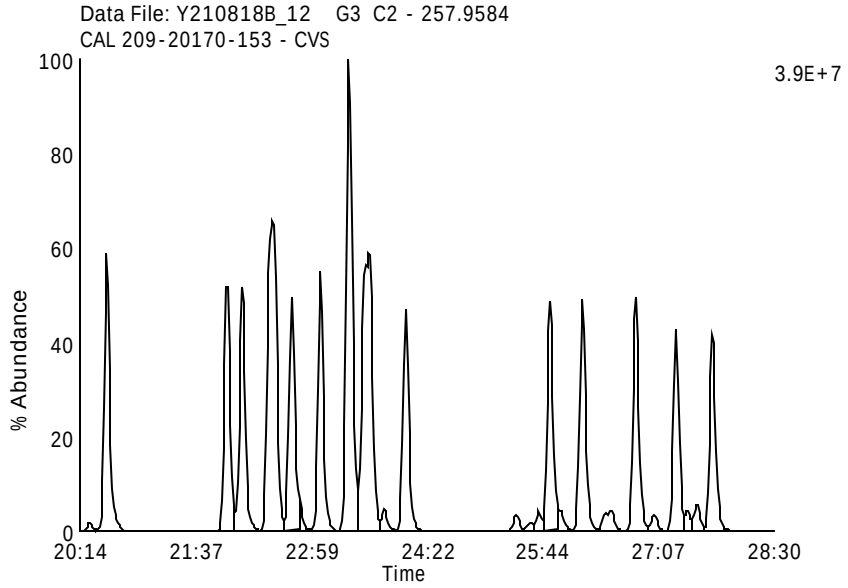
Tri Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



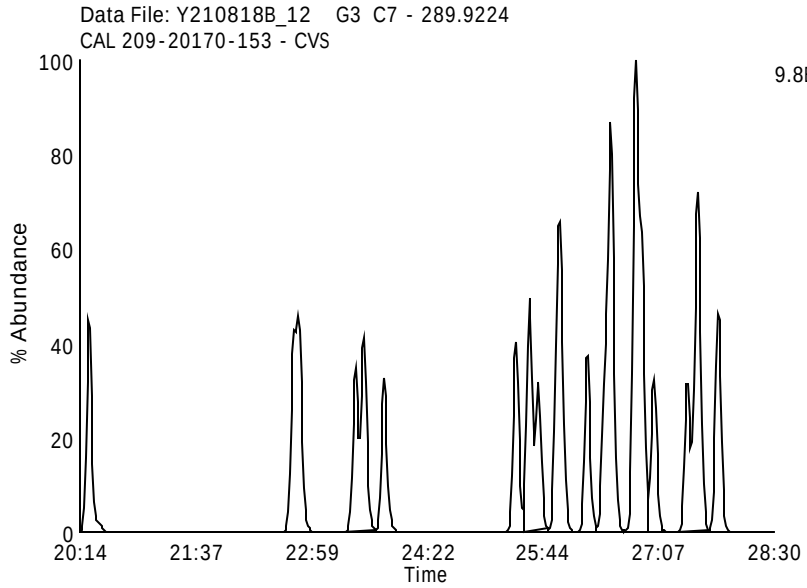


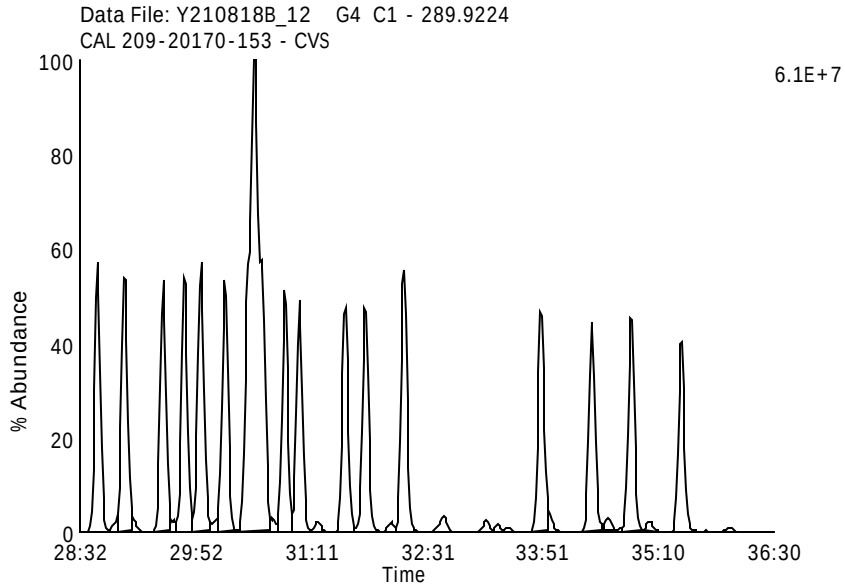


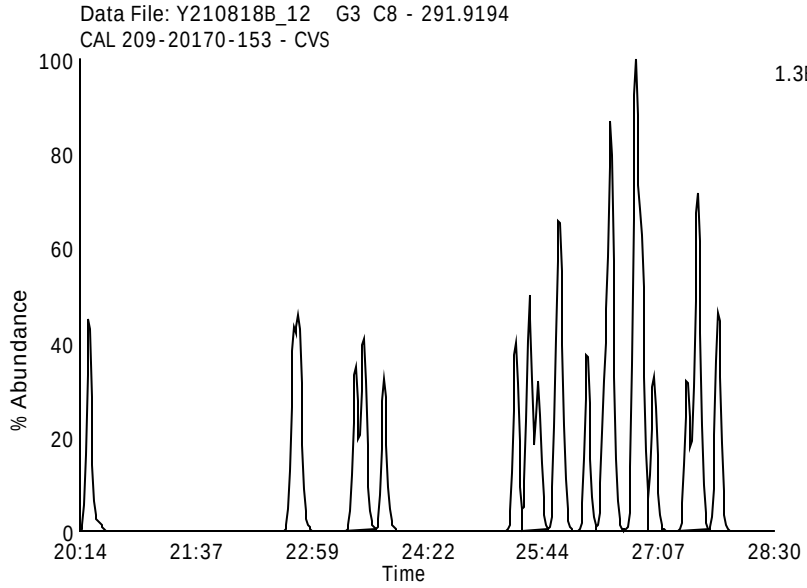


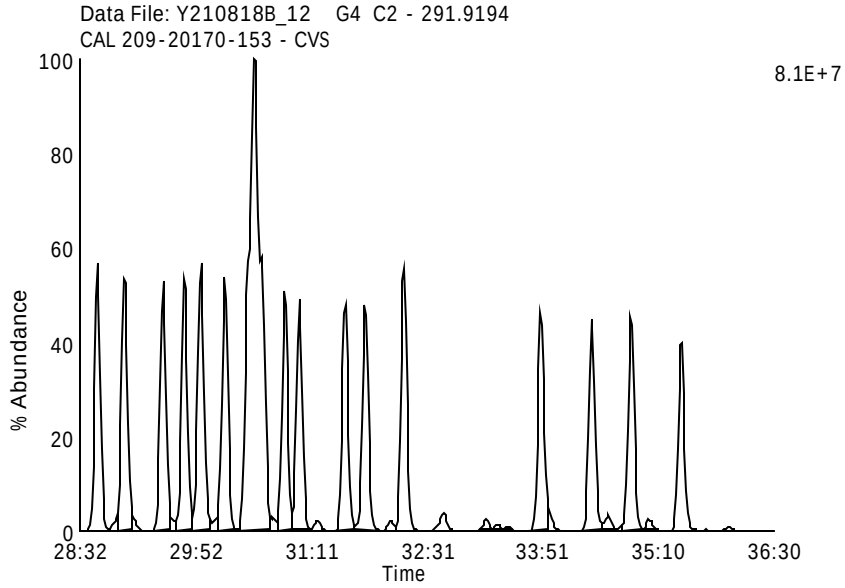
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



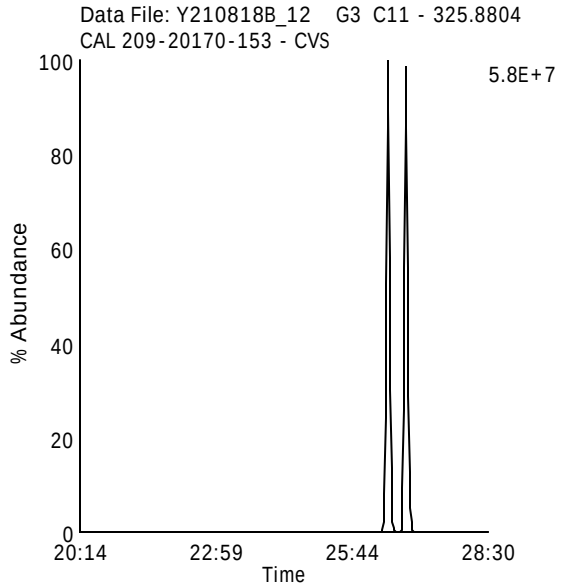


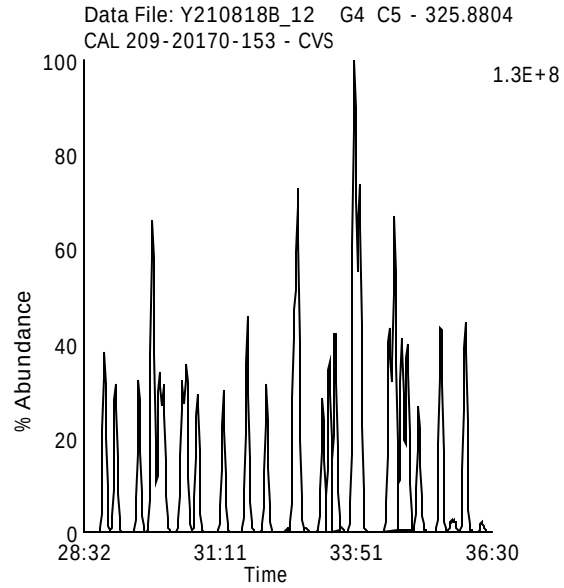


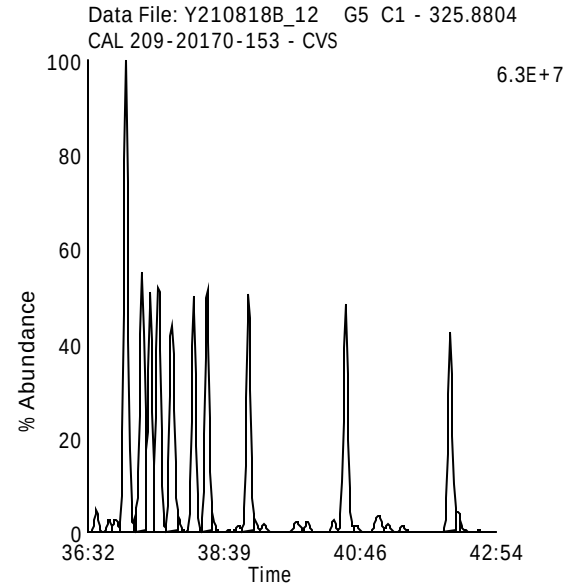


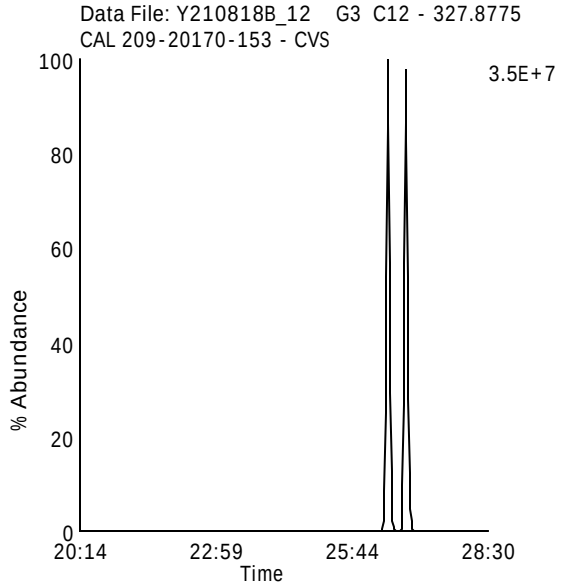
Penta Chlorinated Biphenyls

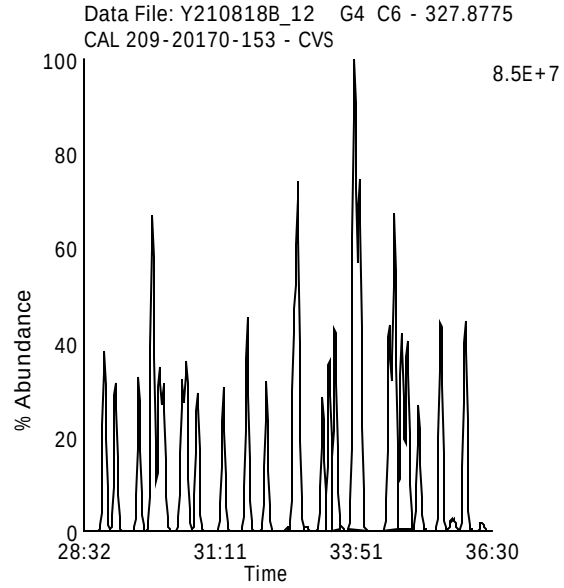
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

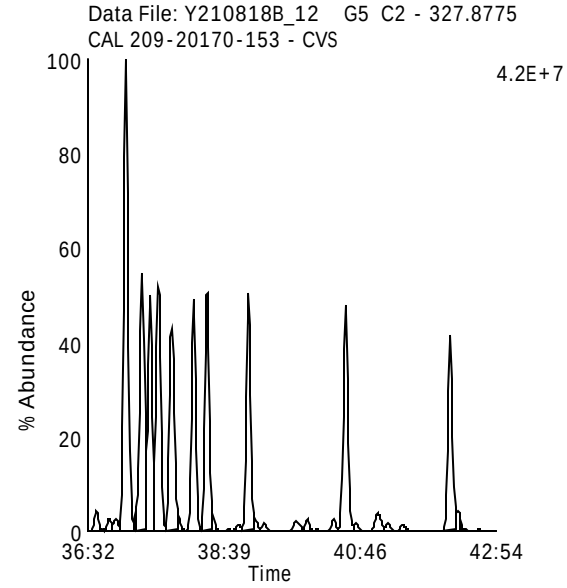






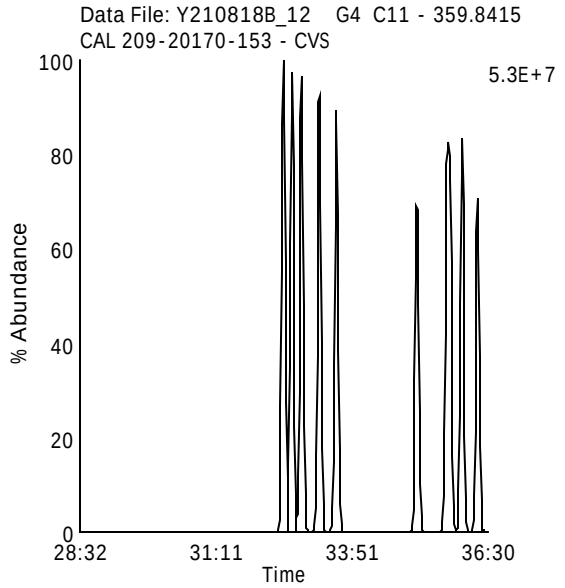


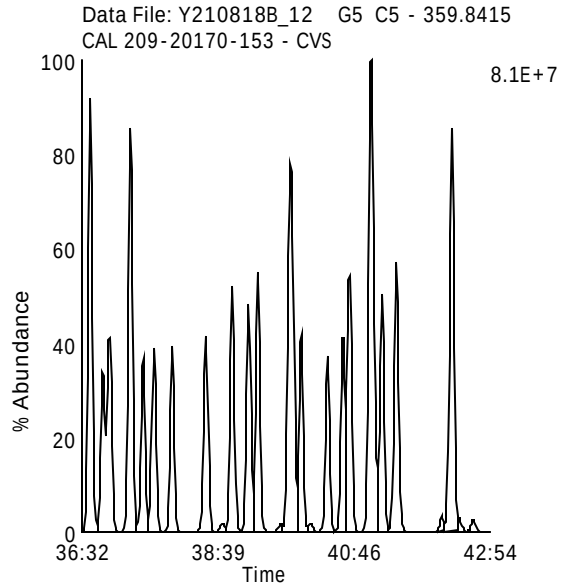


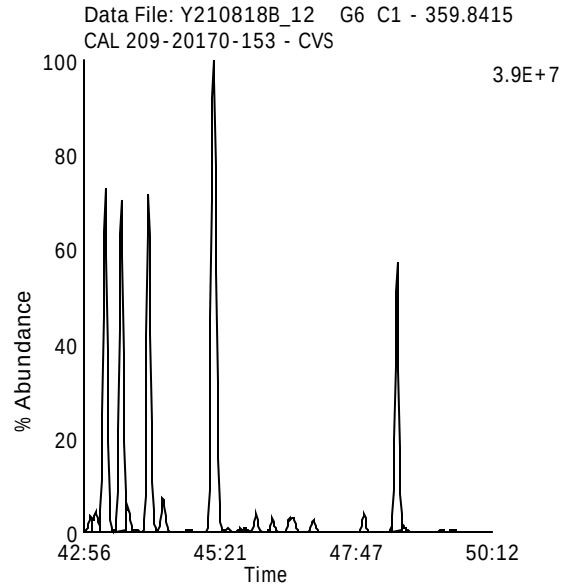


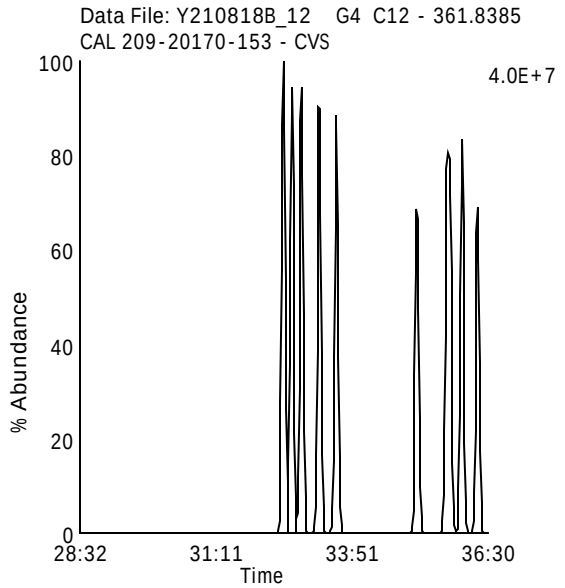
Hexa Chlorinated Biphenyls

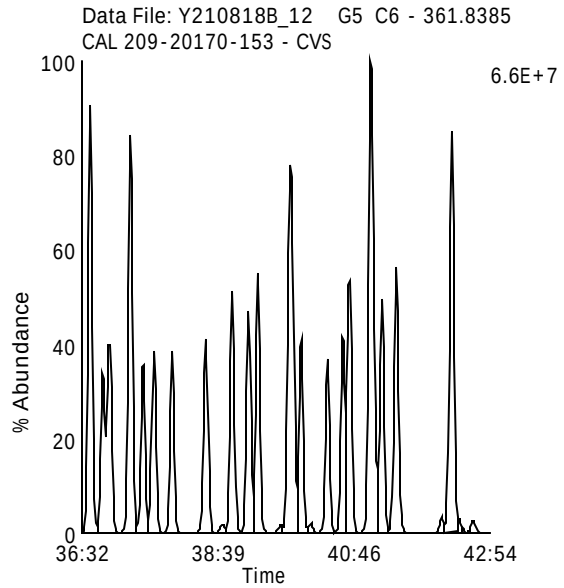
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

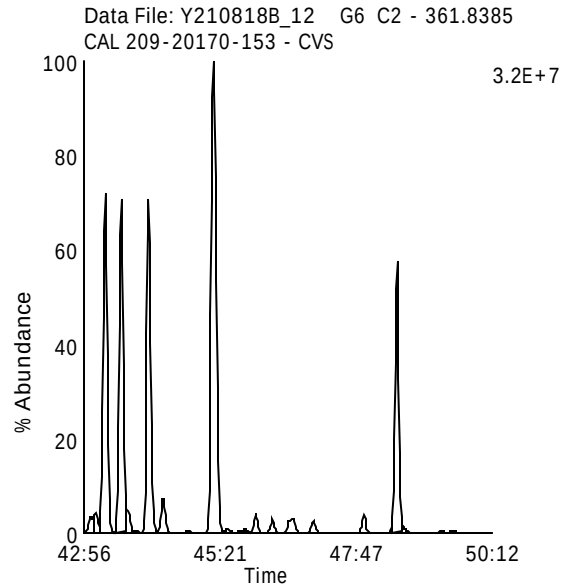






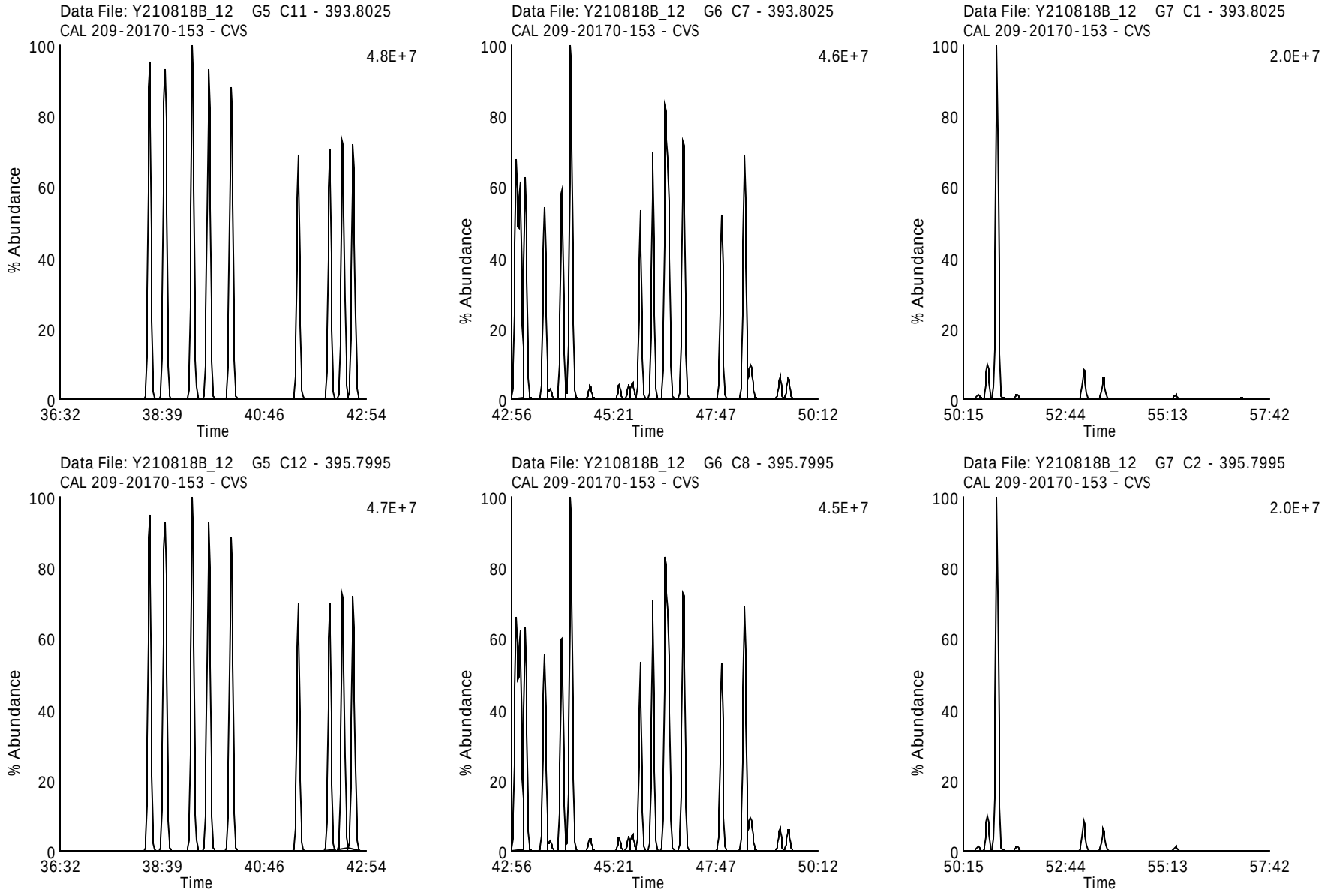






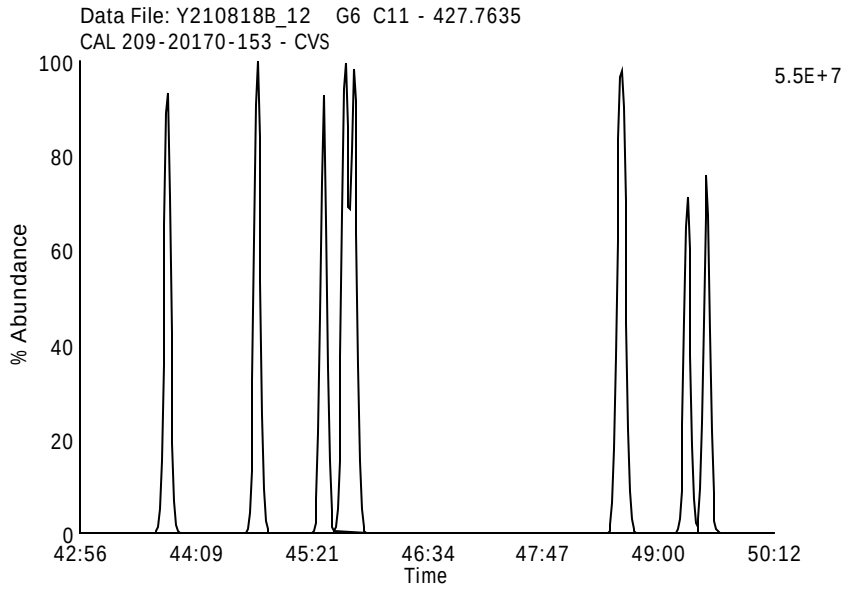
Hepta Chlorinated Biphenyls

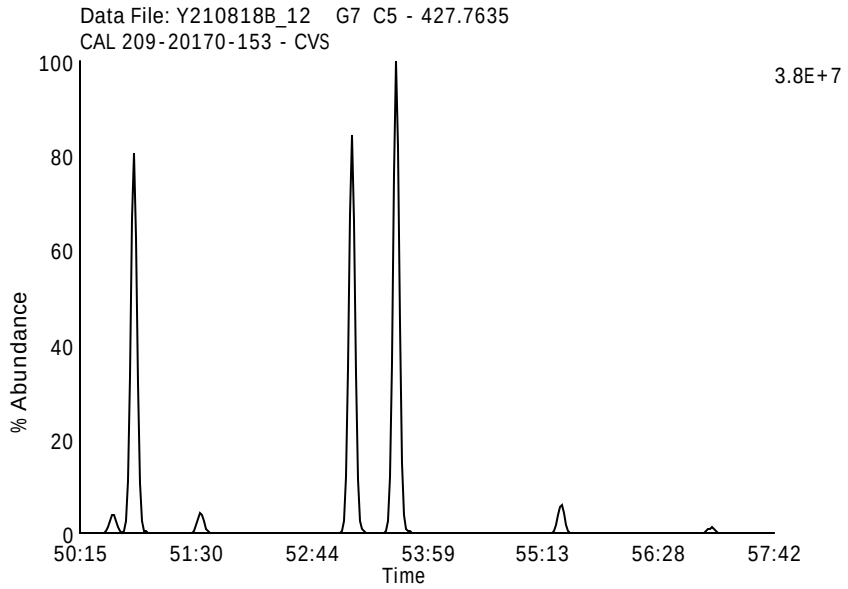
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

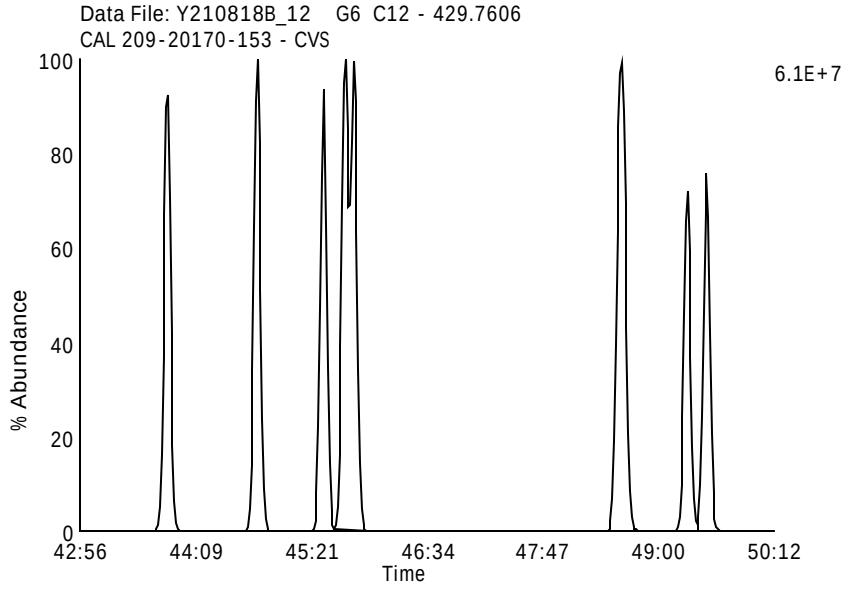


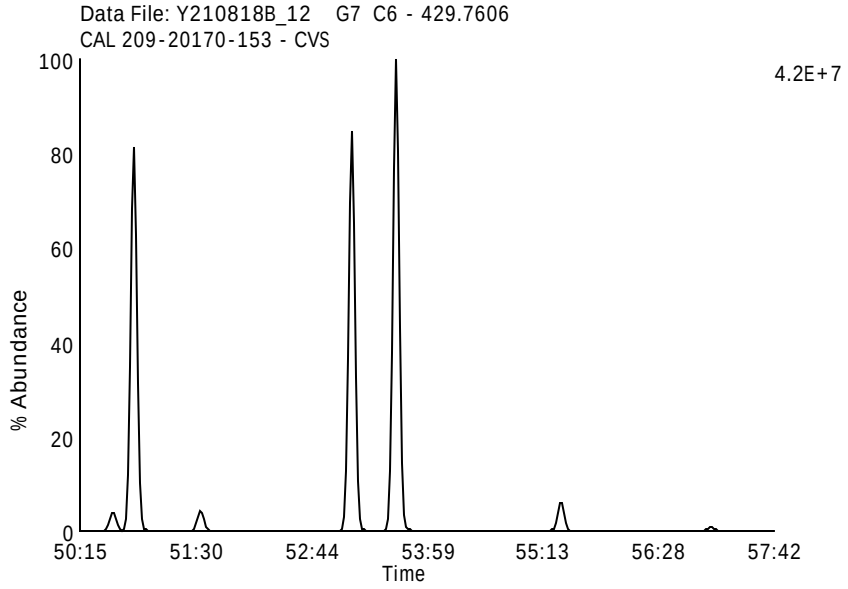
Octa Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



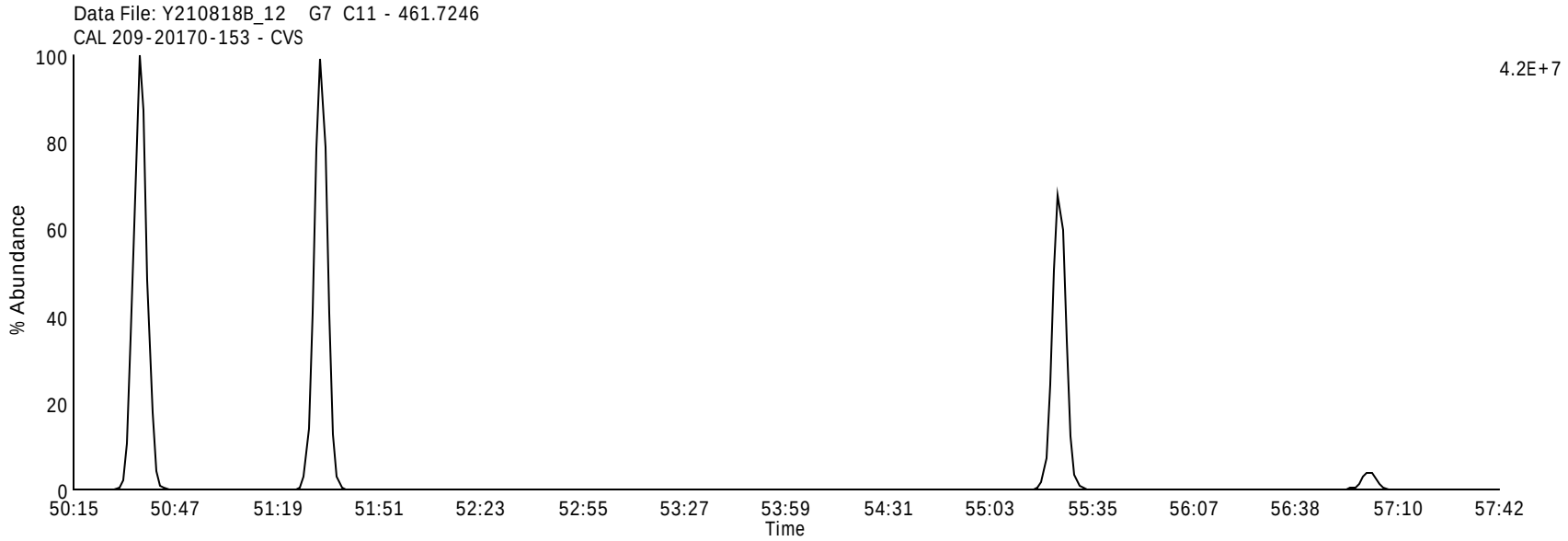


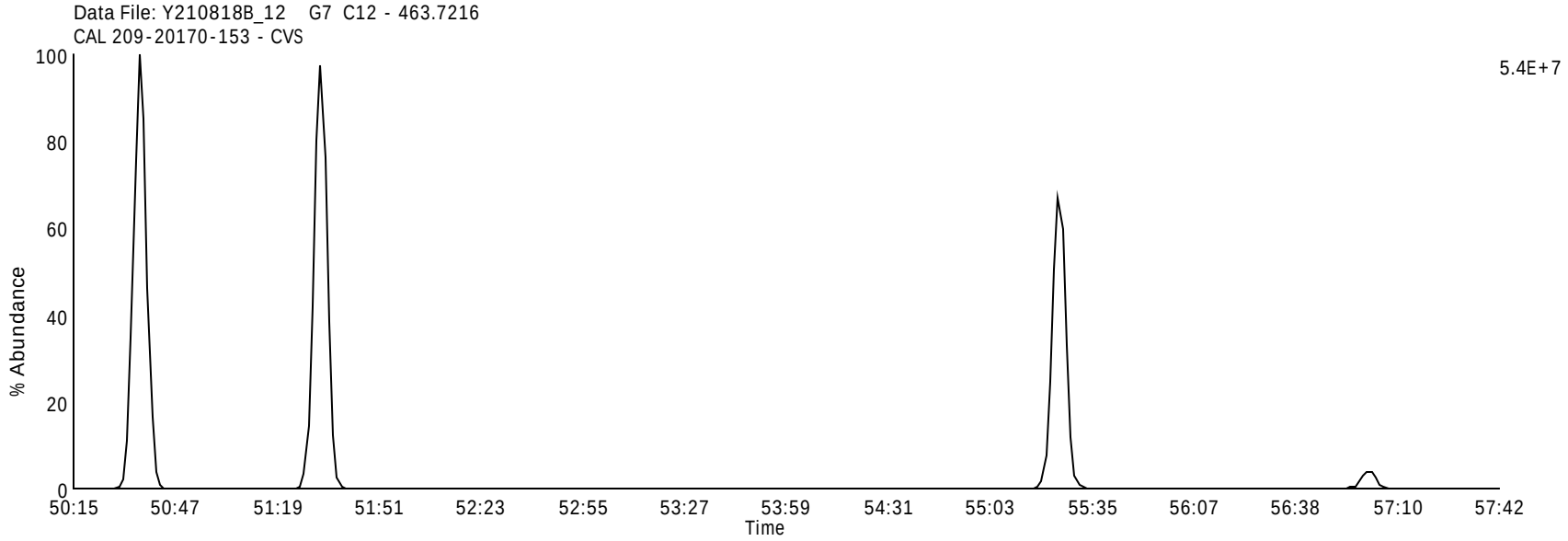




Nona Chlorinated Biphenyls

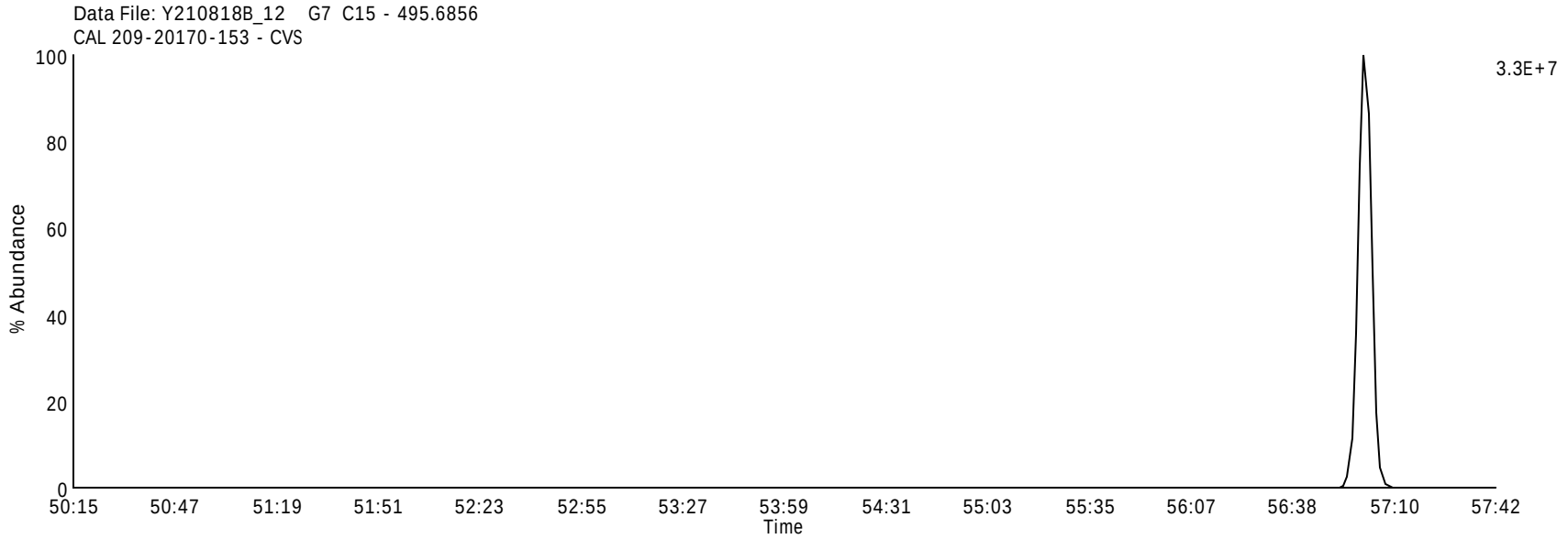
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

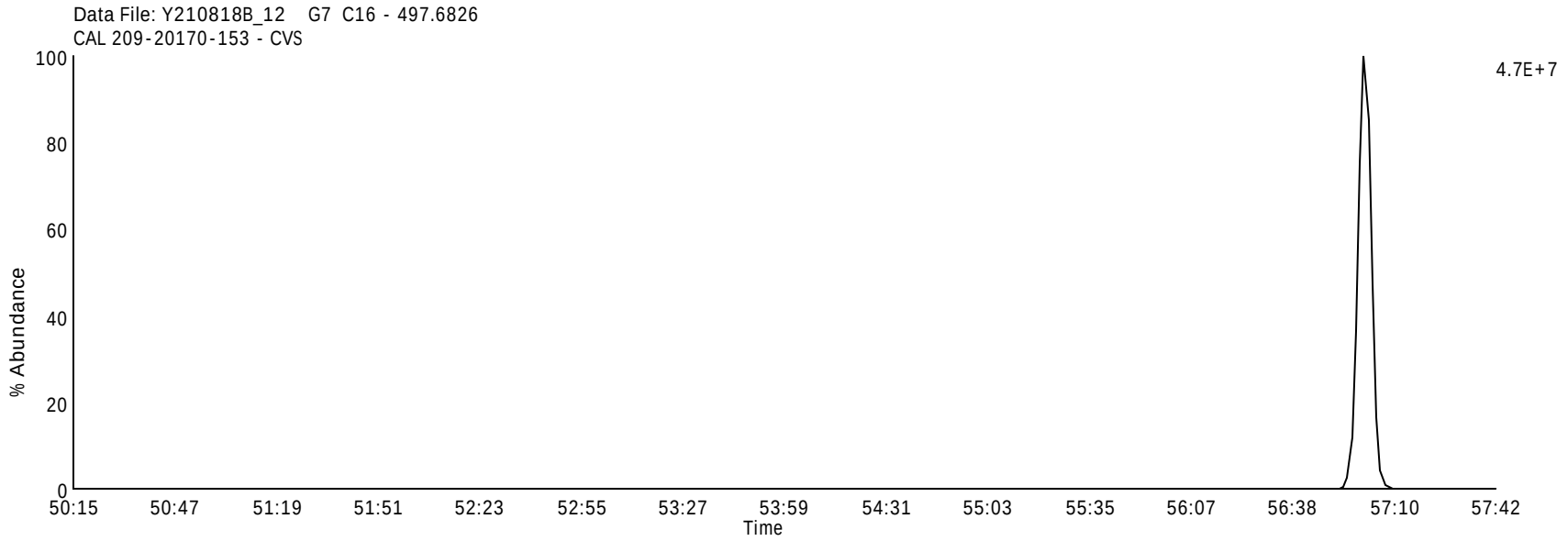




Deca Chlorinated Biphenyl

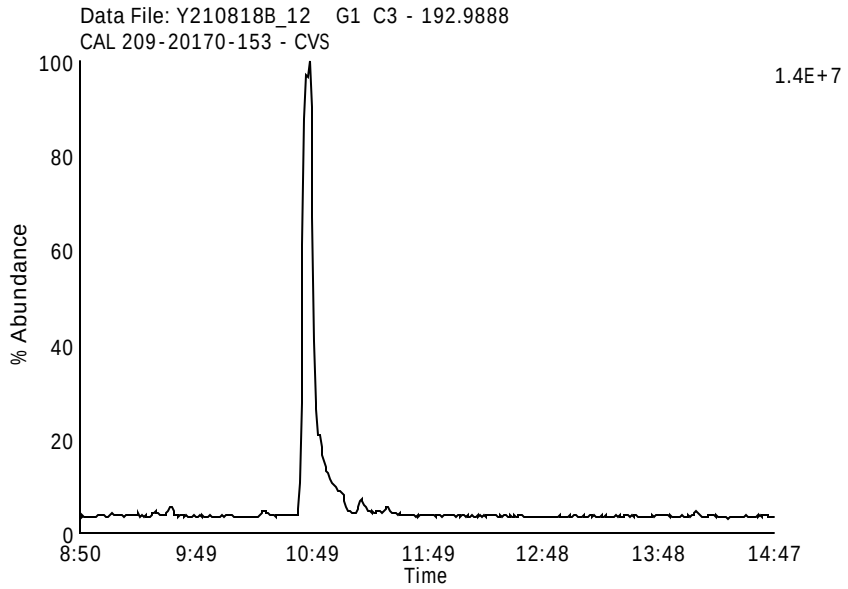
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

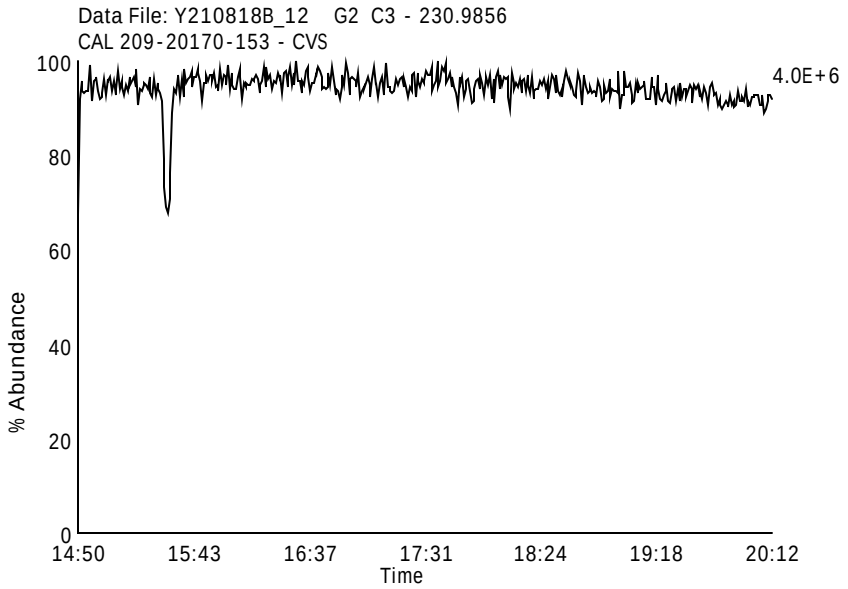


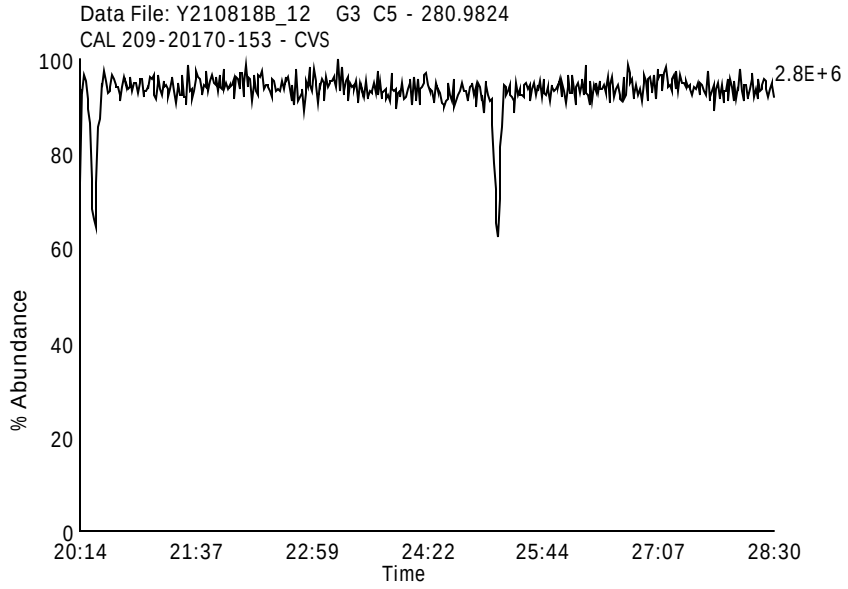


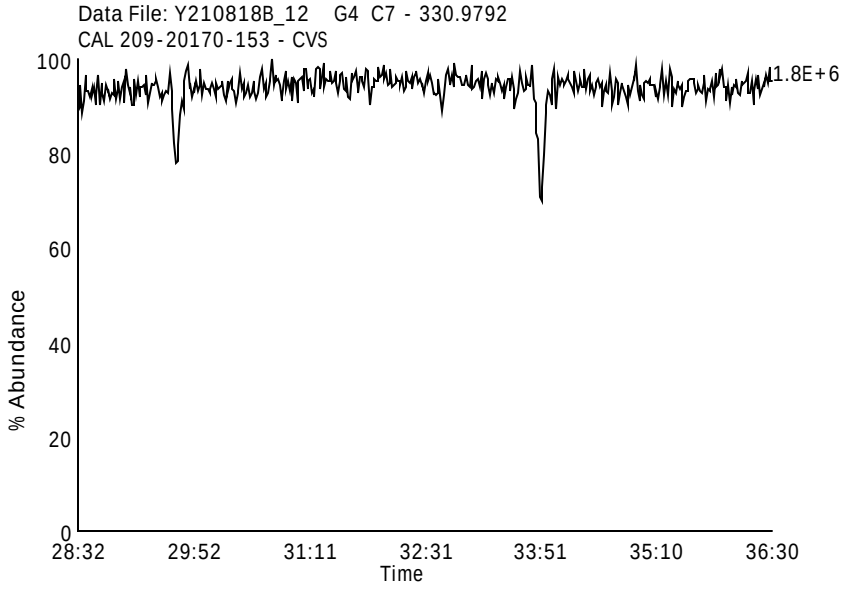
Group 1 - 4 Lock mass

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





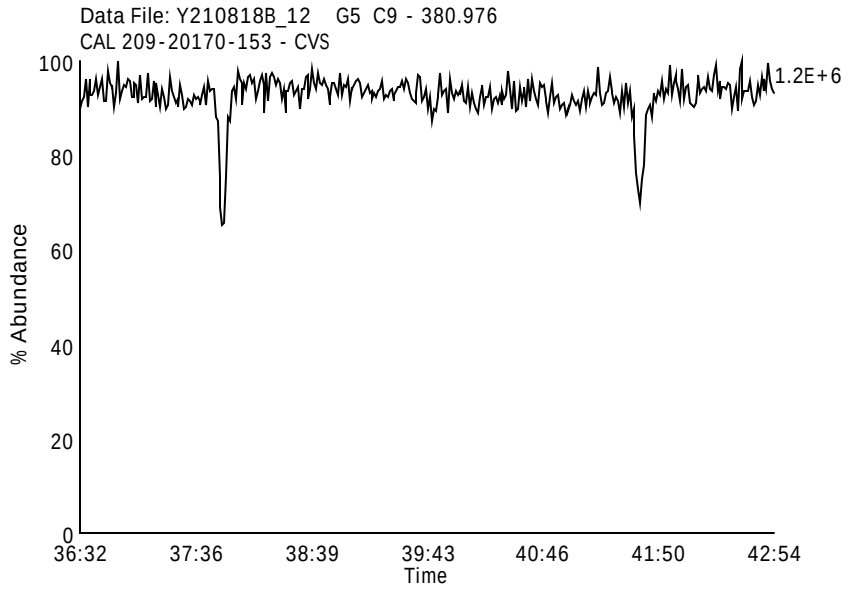


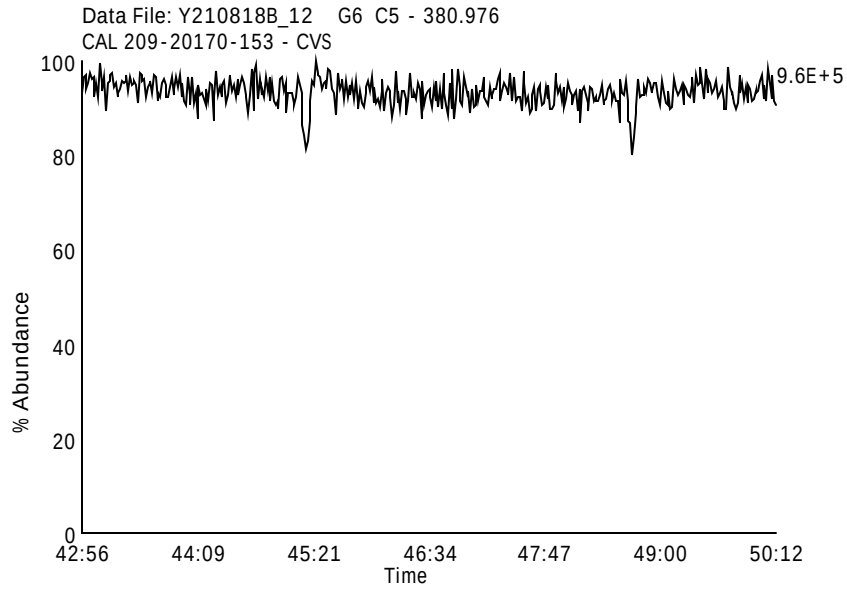


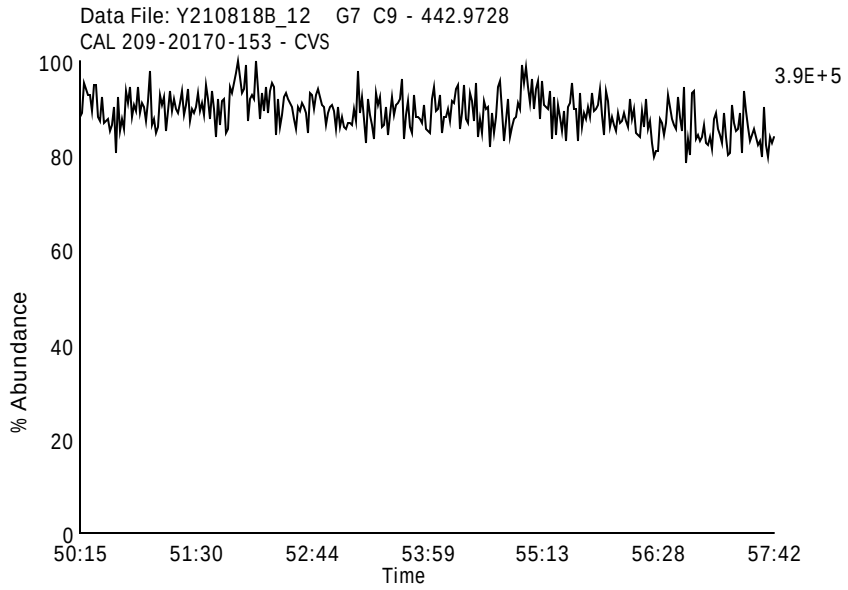
Group 5 - 7 Lock mass

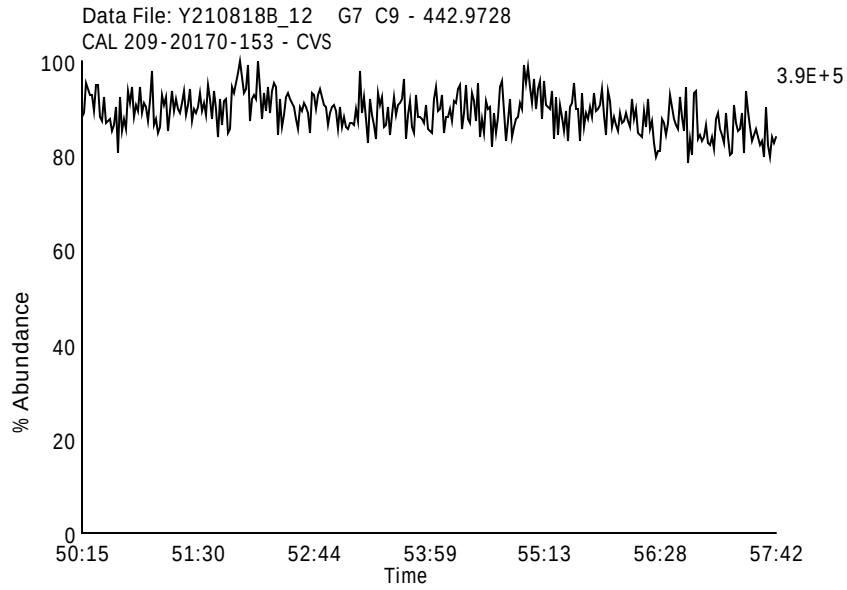
Data File Name: Y210818B_12
Date Acquired: 8/18/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix



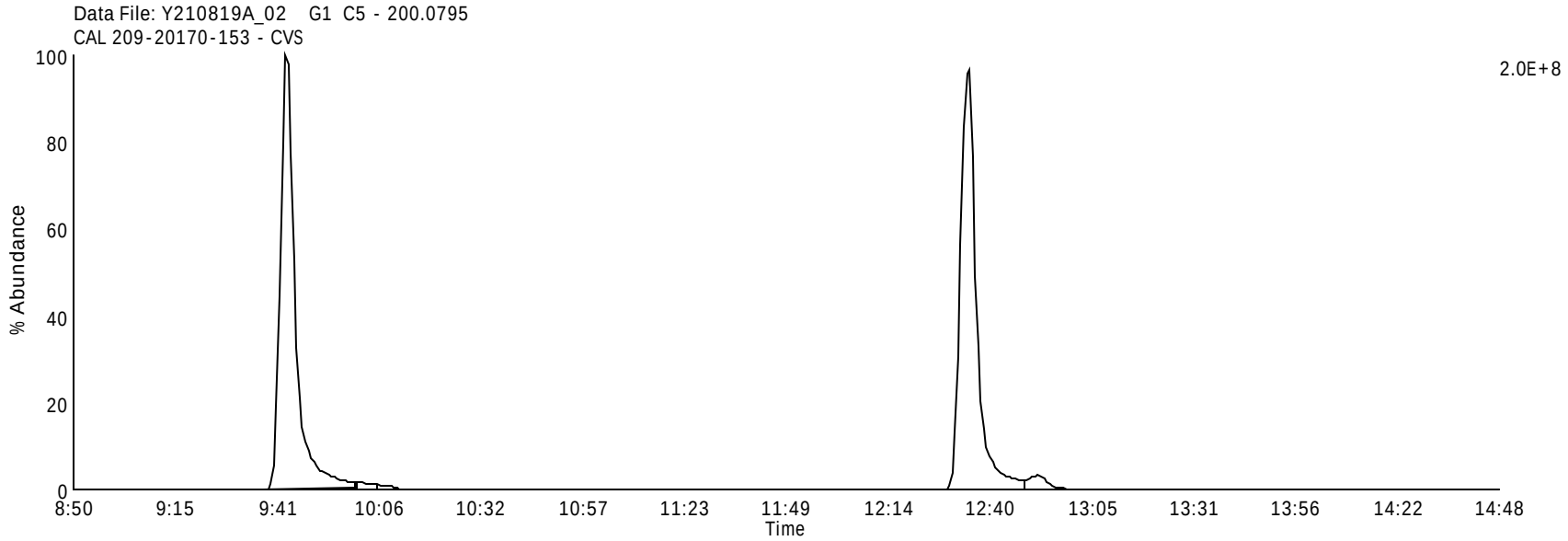


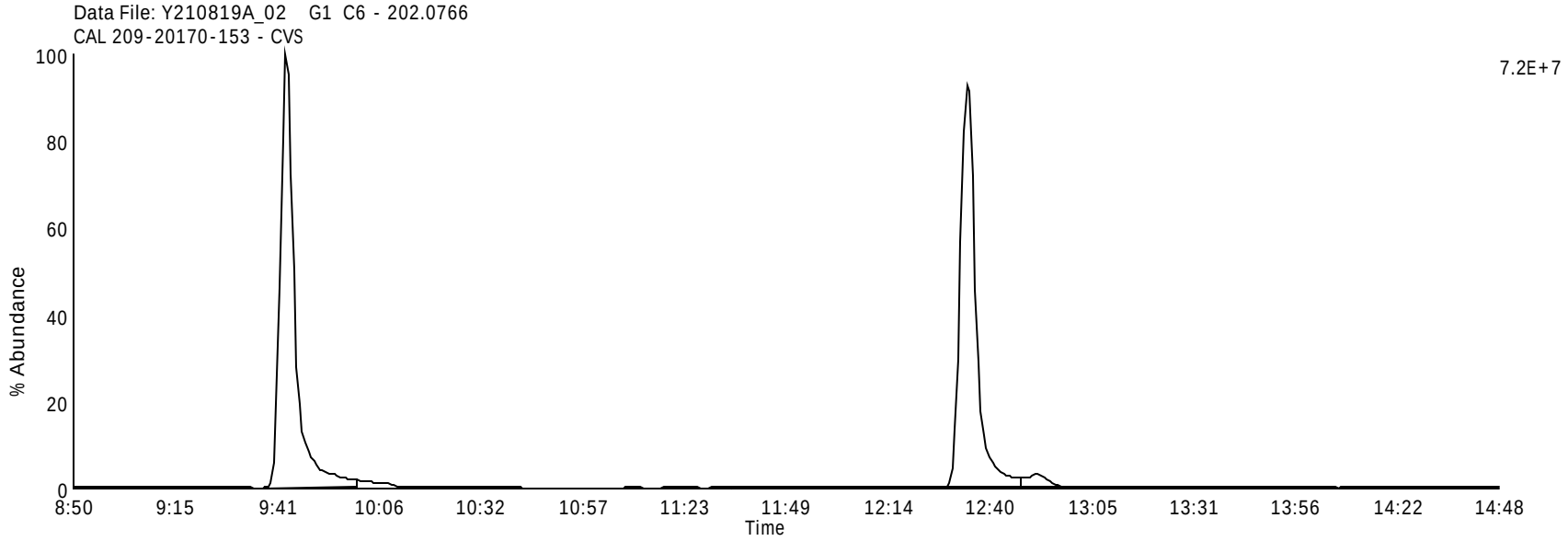




Labeled Mono Chlorinated Biphenyls

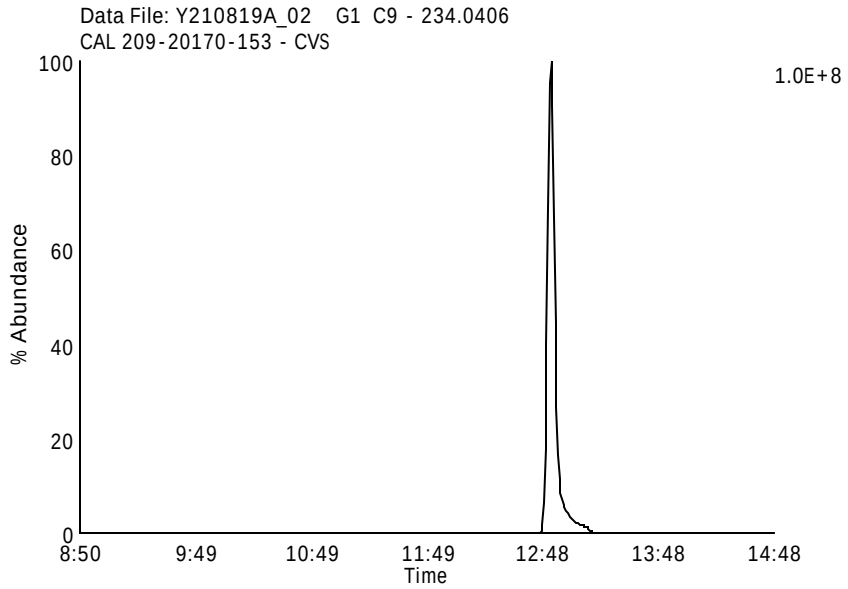
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

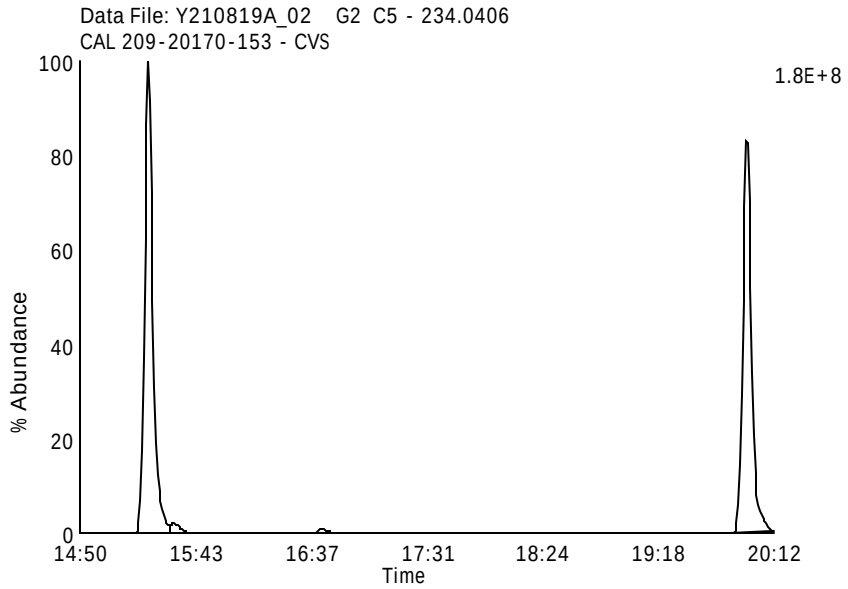


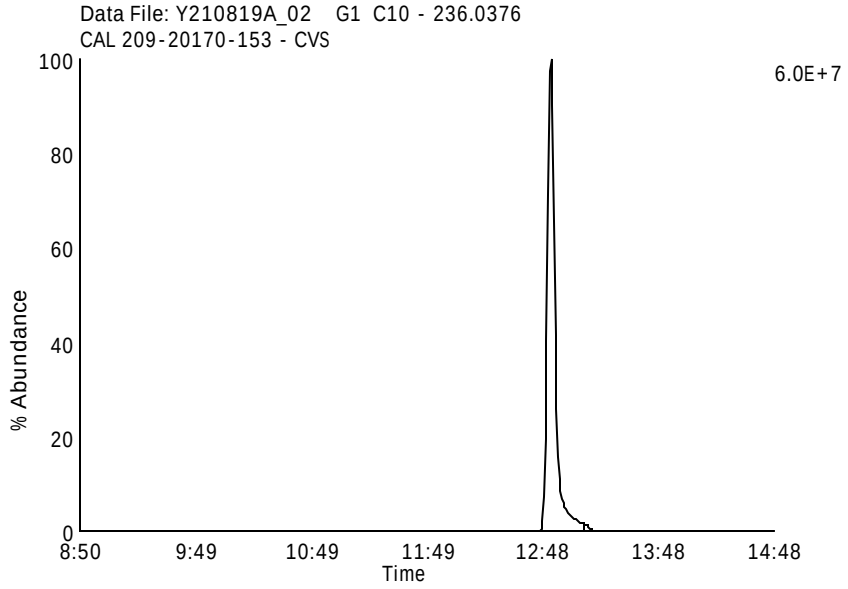


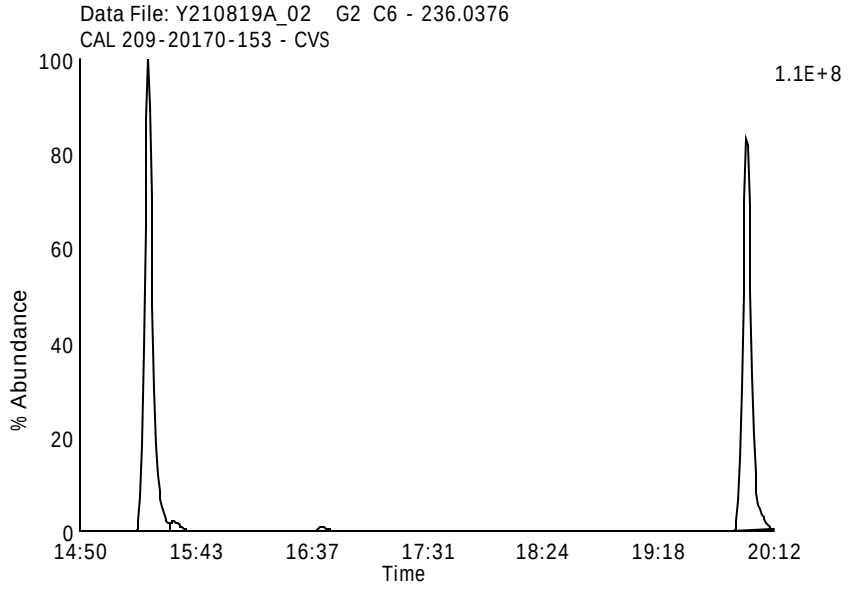
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



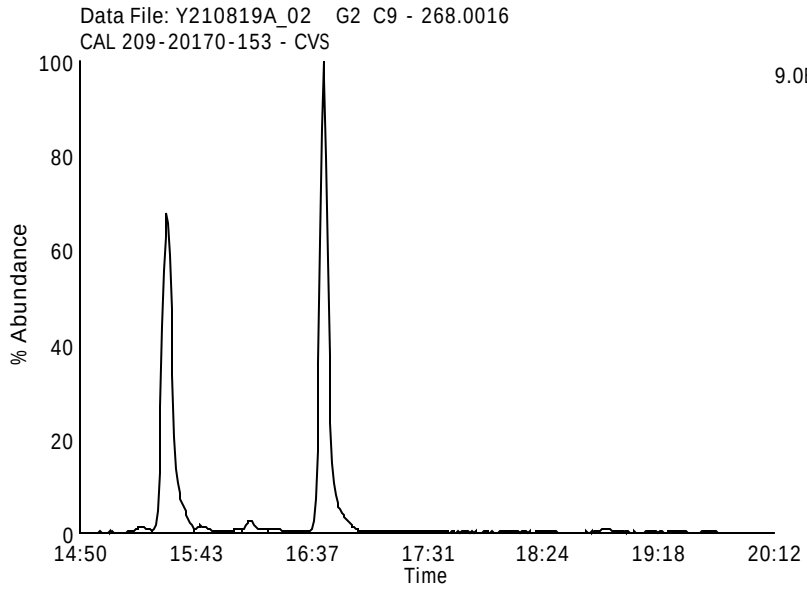


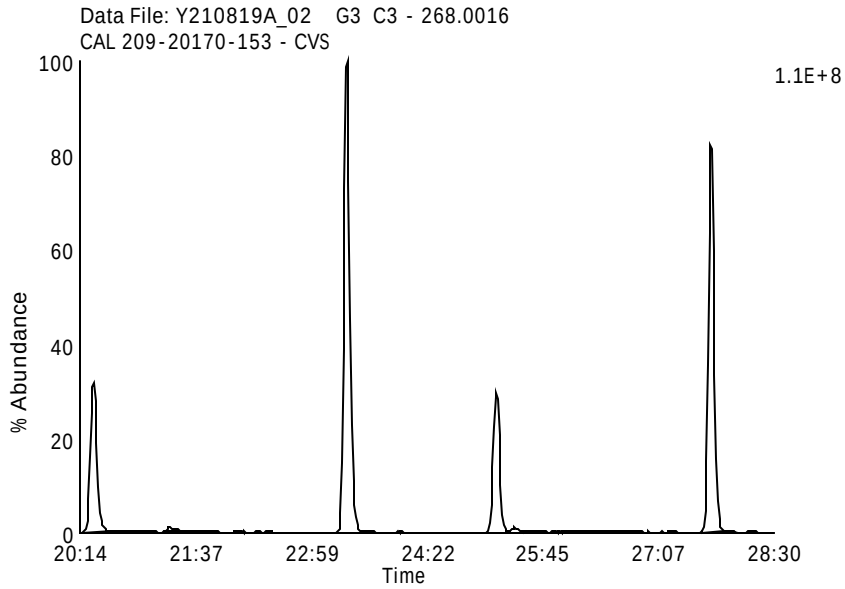


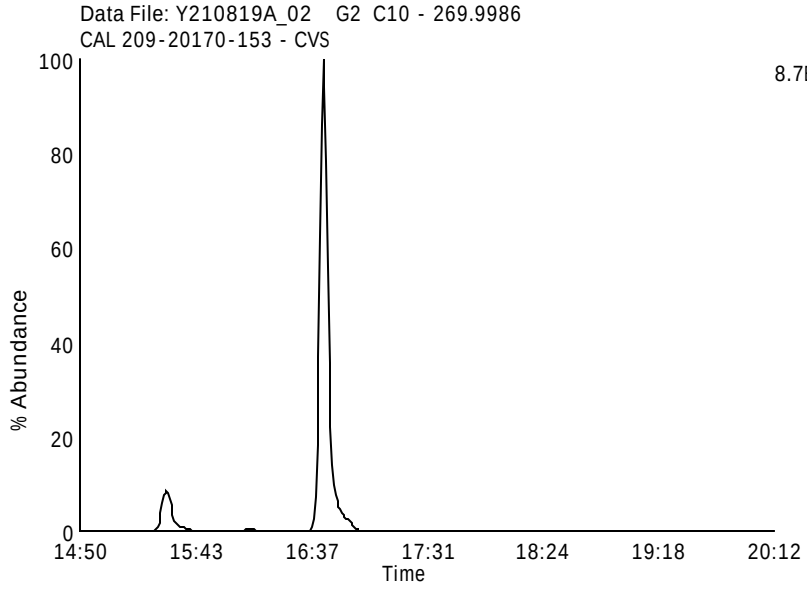


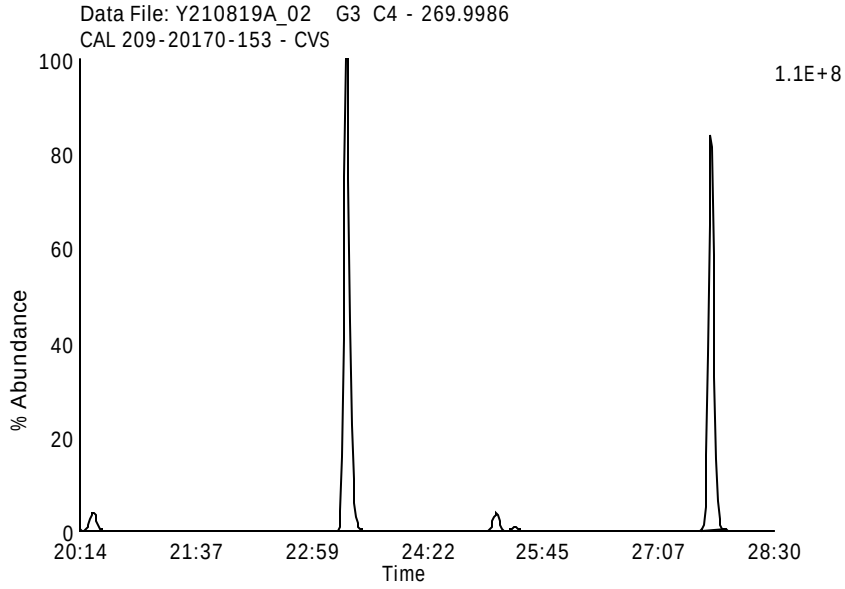
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





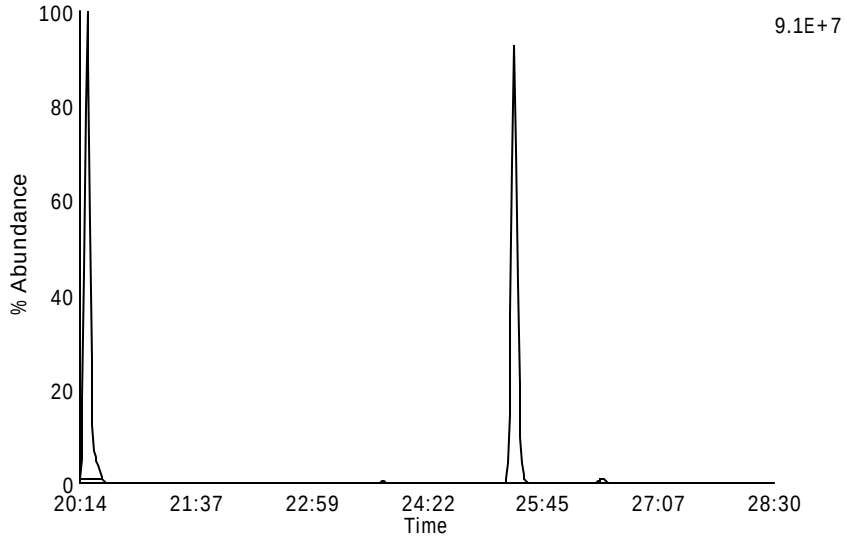




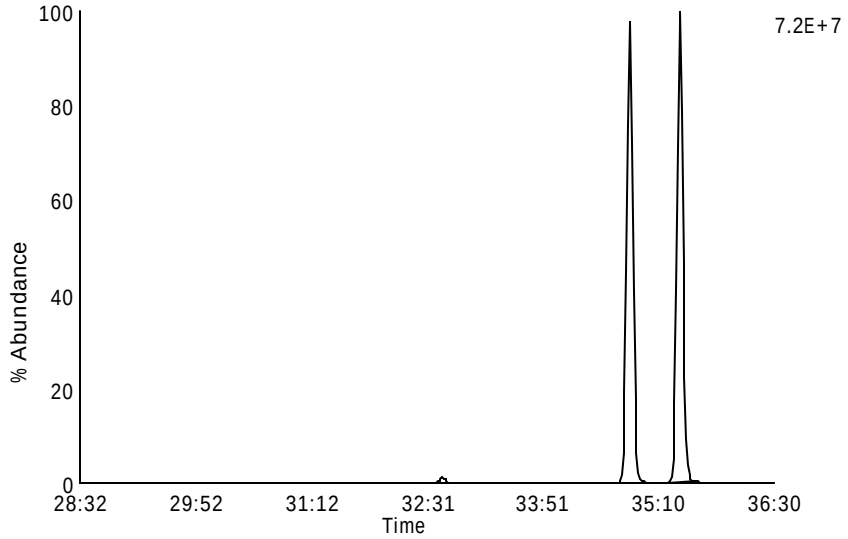
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

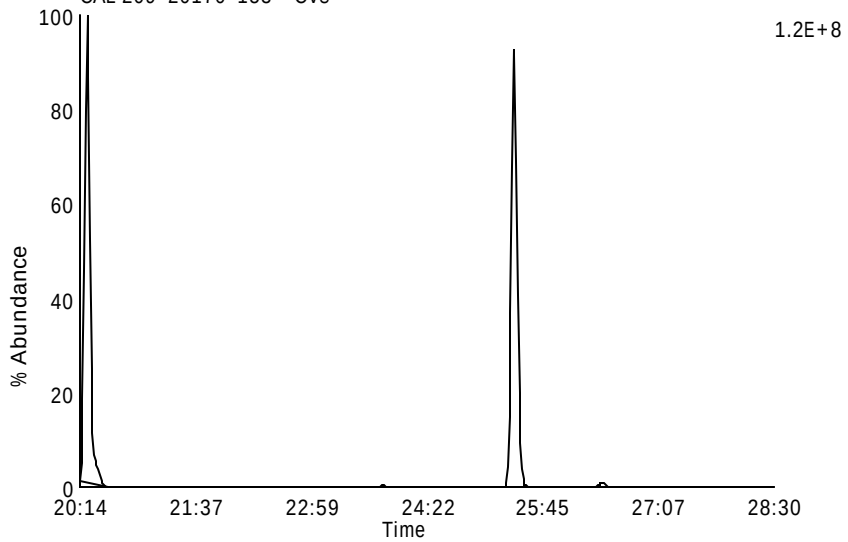
Data File: Y210819A_02 G3 C9 - 301.9626
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G4 C3 - 301.9626
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G3 C10 - 303.9597
CAL 209-20170-153 - CVS



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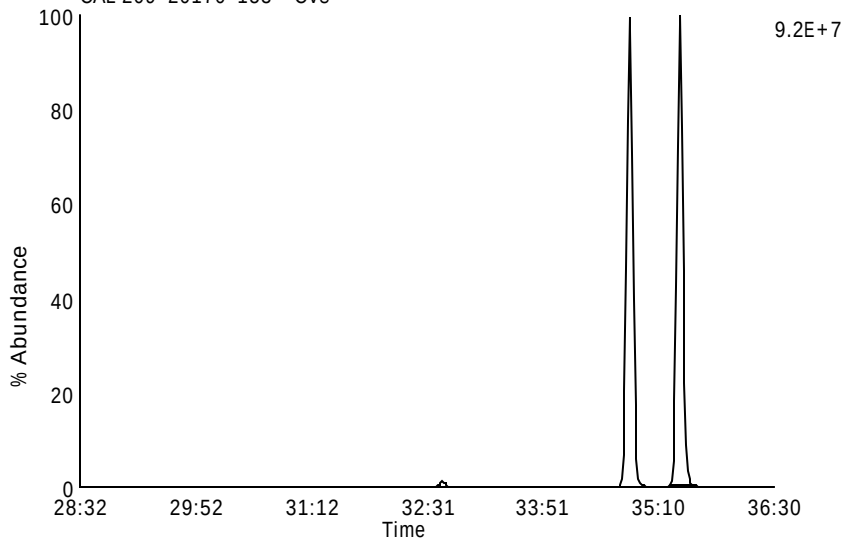
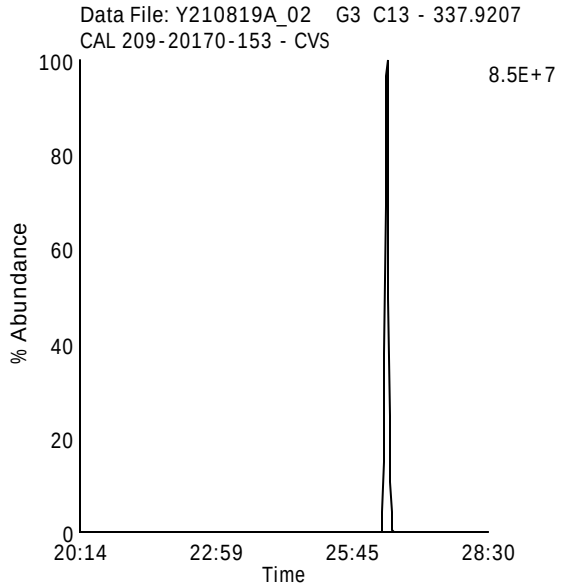
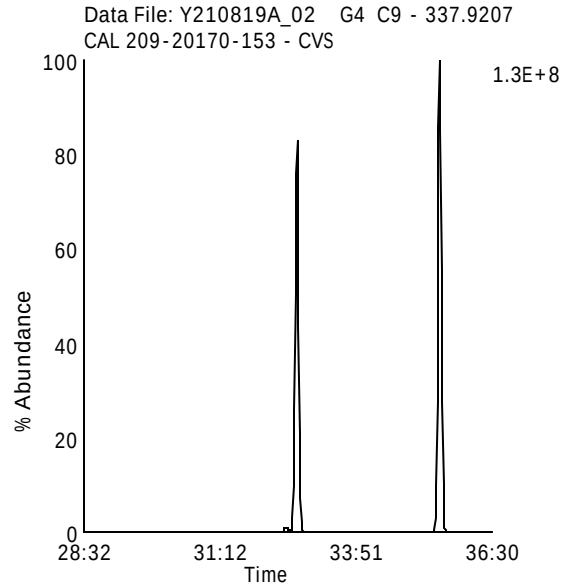
CAL 209-20170-153 - CVS

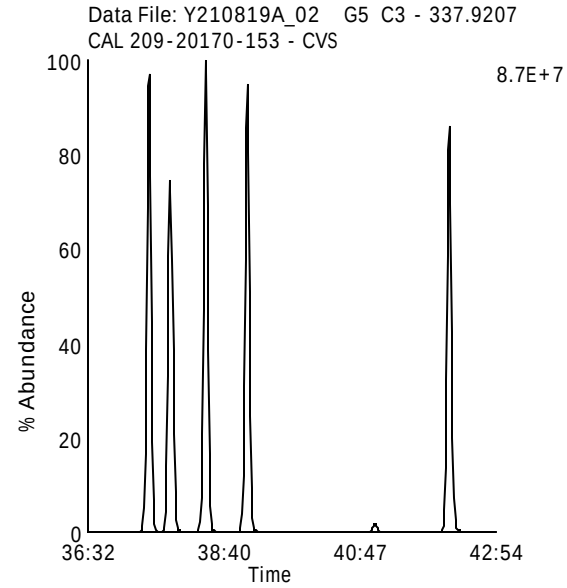


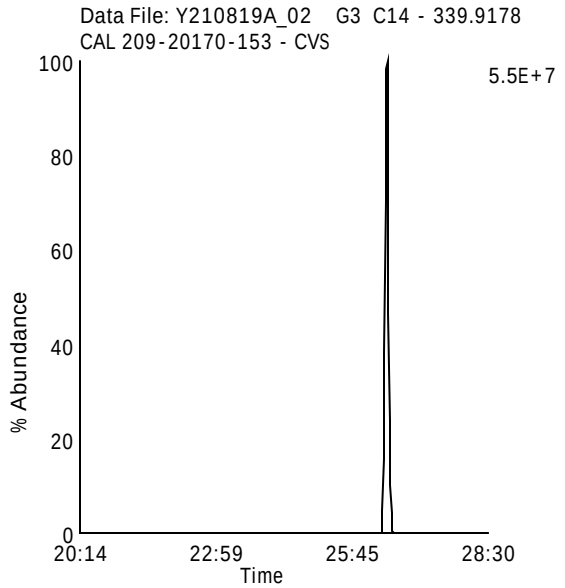
Labeled Penta Chlorinated Biphenyls

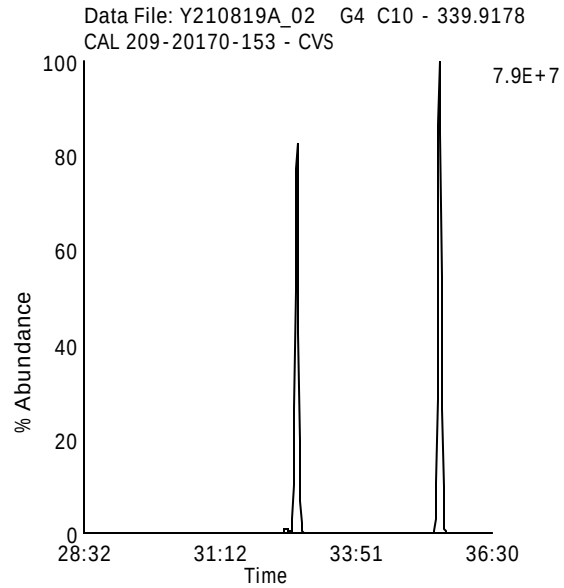
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

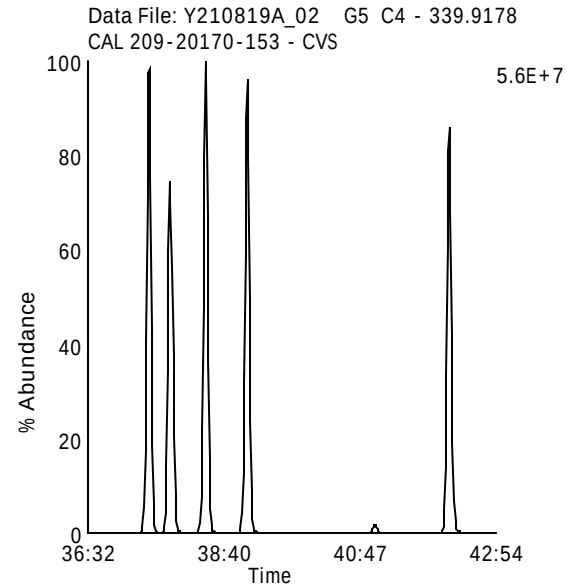








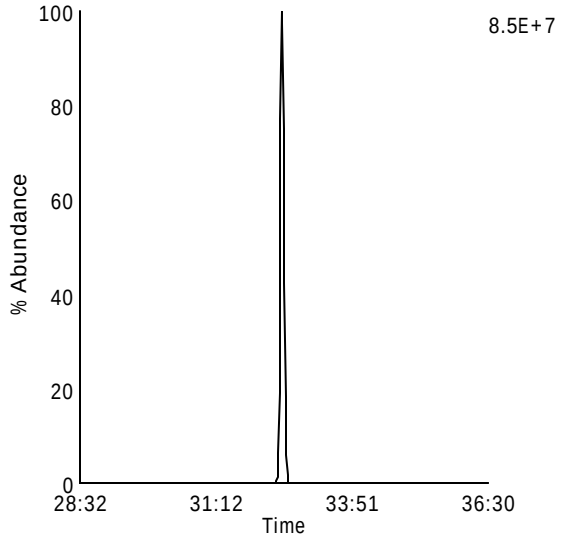




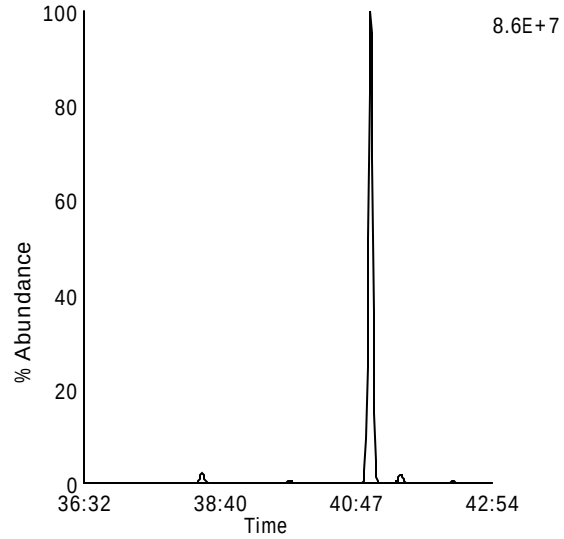
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

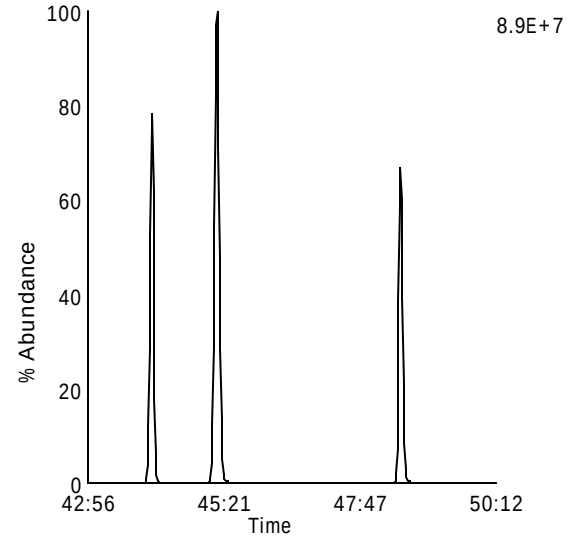
Data File: Y210819A_02 G4 C13 - 371.8817
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G5 C7 - 371.8817
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G6 C3 - 371.8817
CAL 209-20170-153 - CVS



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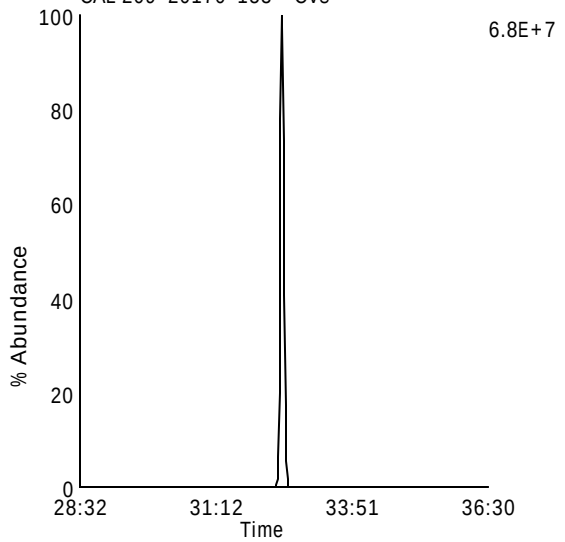
CAL 209-20170-153 - CVS



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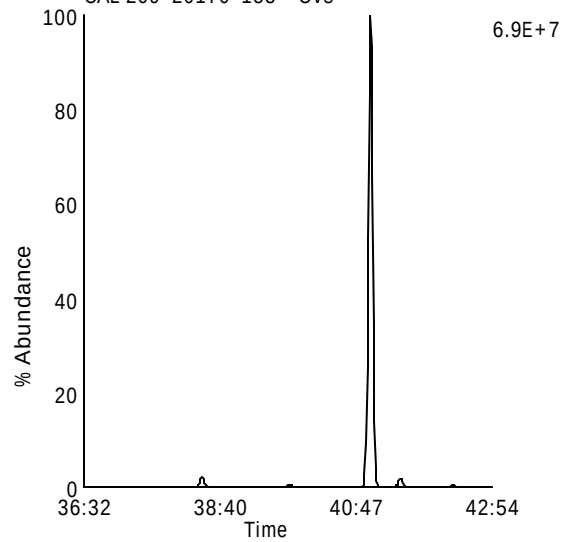
CAL 209-20170-153 - CVS



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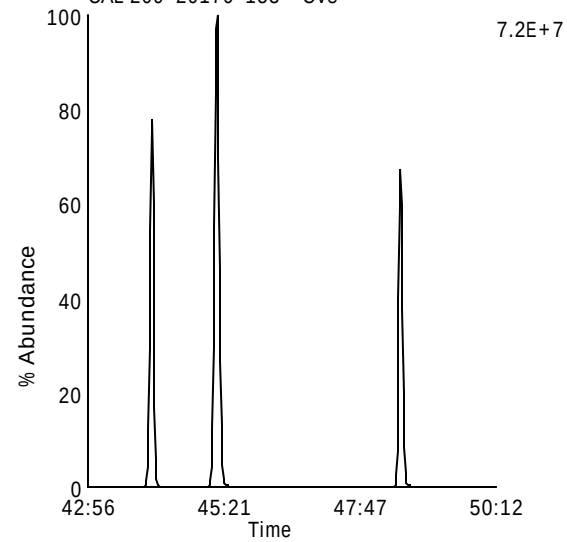
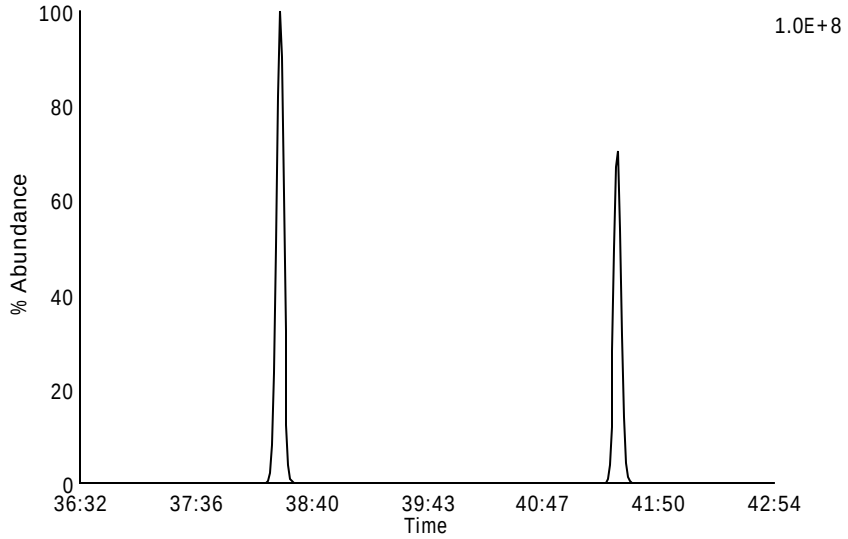
CAL 209-20170-153 - CVS



Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

Data File: Y210819A_02 G5 C13 - 405.8428
CAL 209-20170-153 - CVS



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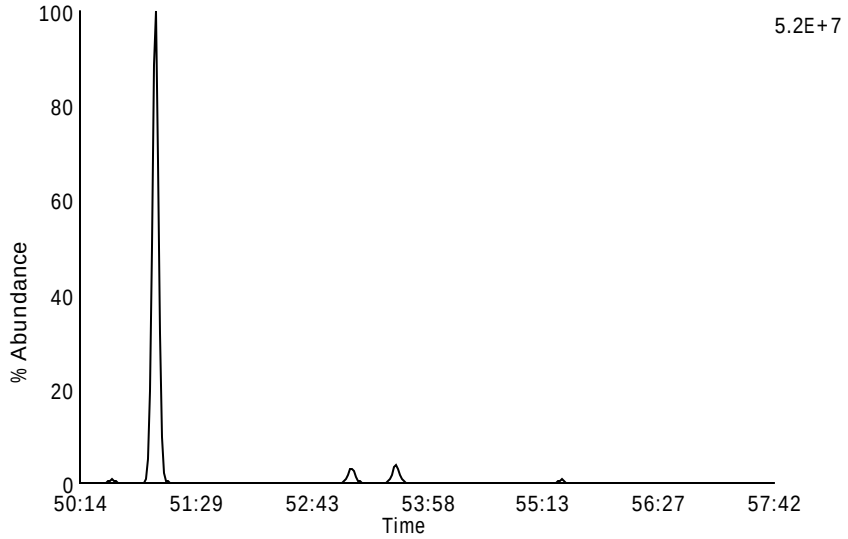
CAL 209-20170-153 - CVS



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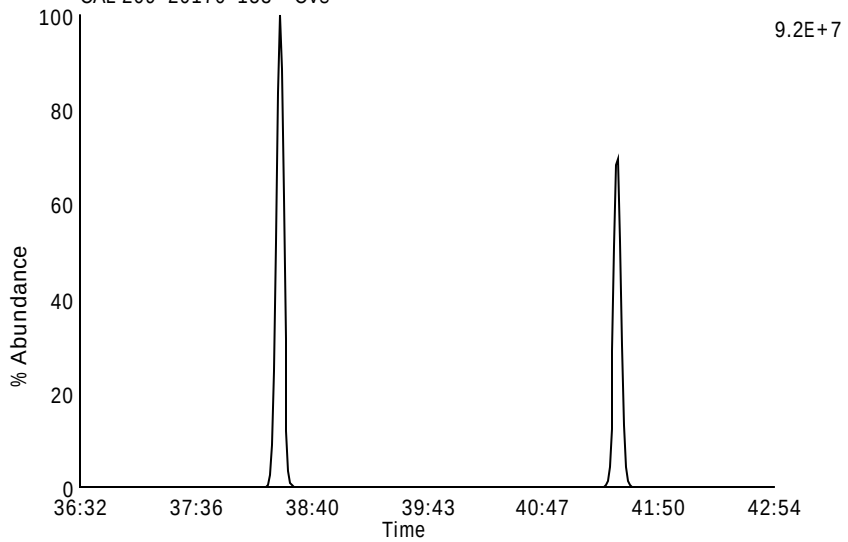
CAL 209-20170-153 - CVS



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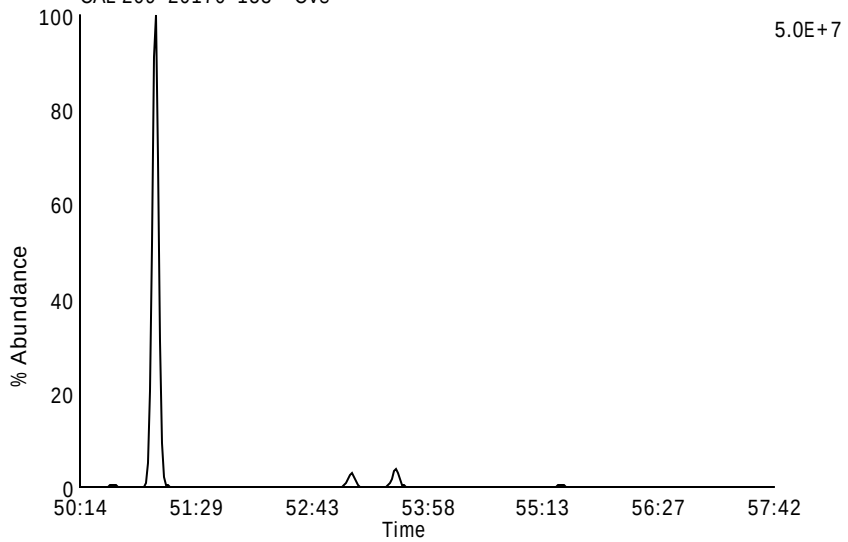
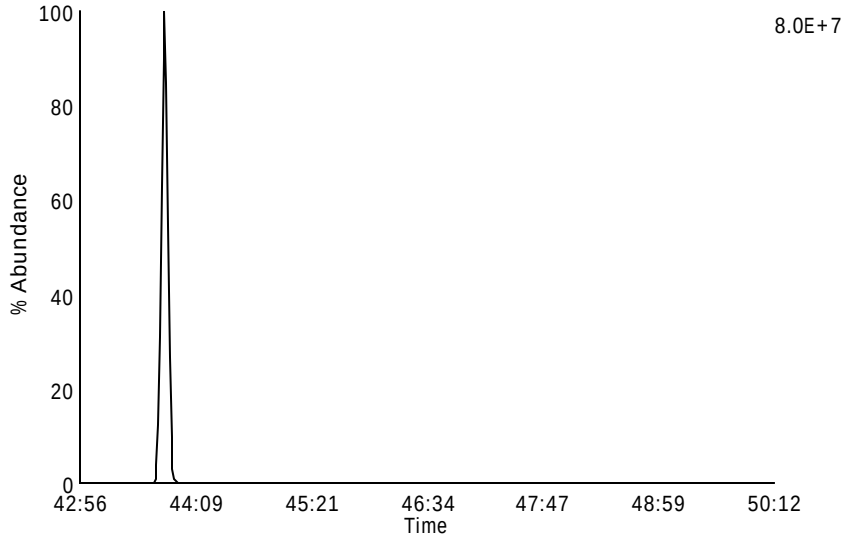
CAL 209-20170-153 - CVS



Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

Data File: Y210819A_02 G6 C13 - 439.8038
CAL 209-20170-153 - CVS



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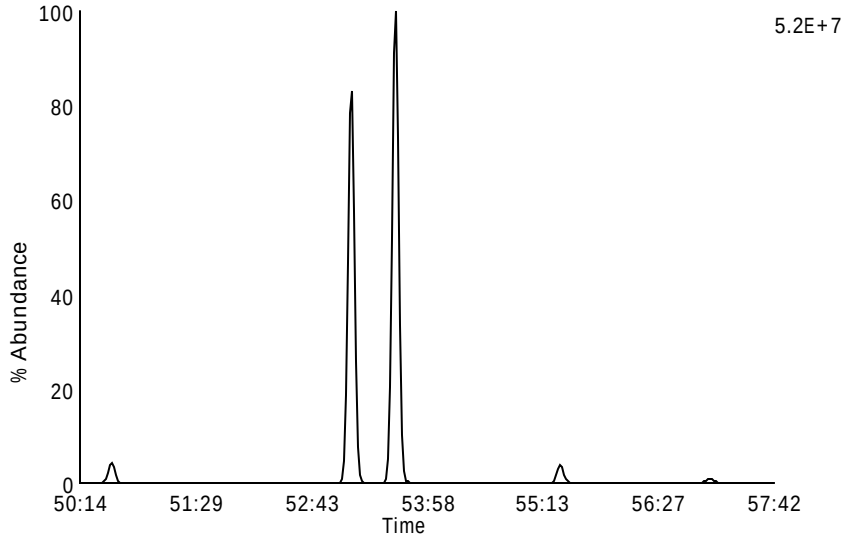
CAL 209-20170-153 - CVS



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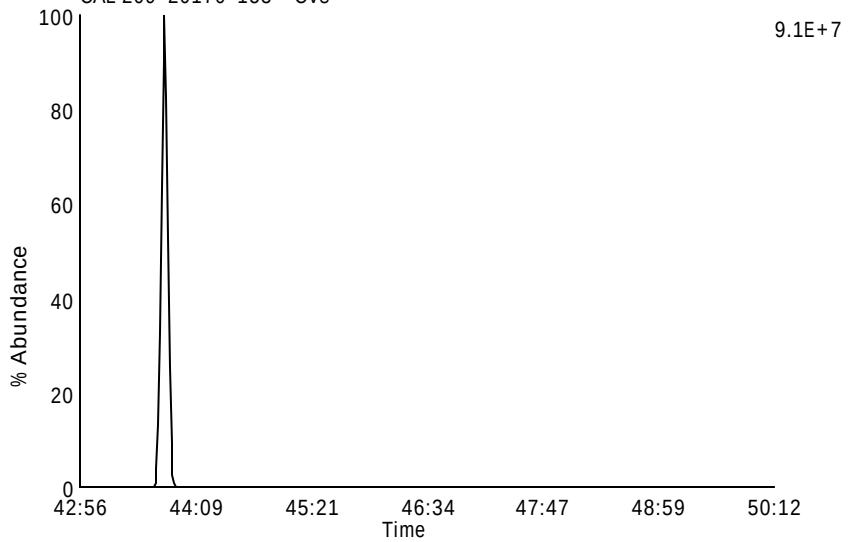
CAL 209-20170-153 - CVS



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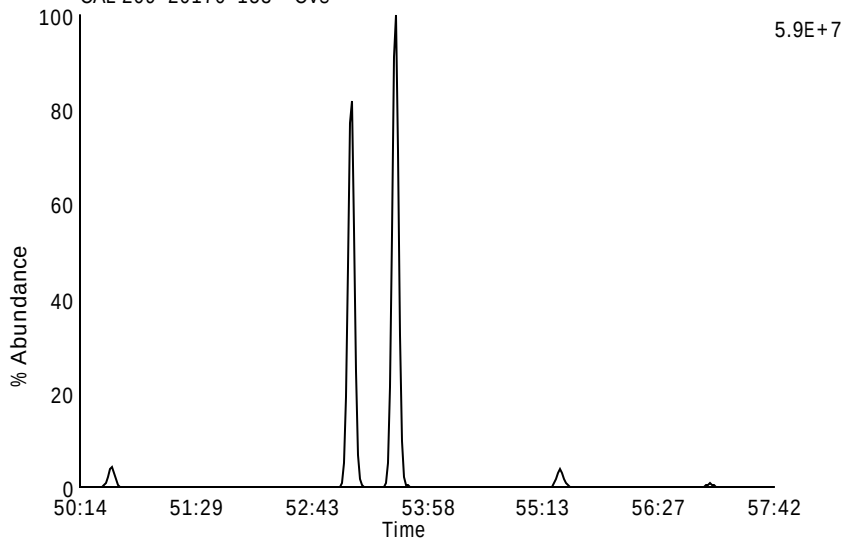
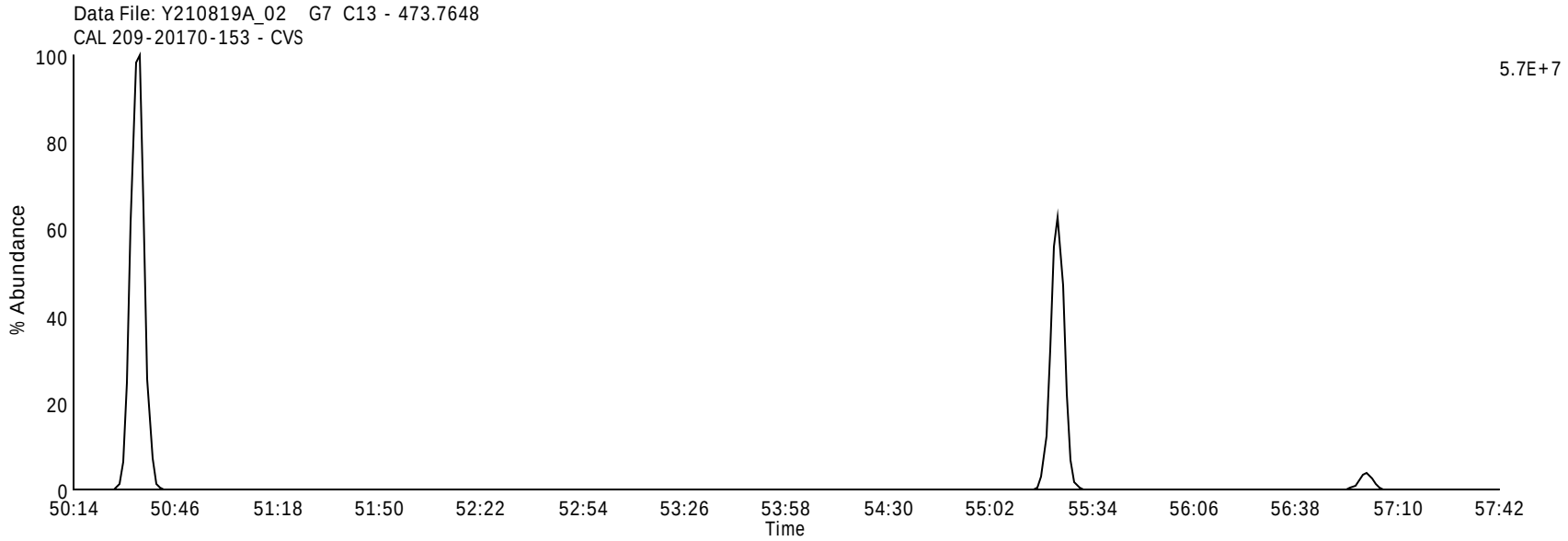
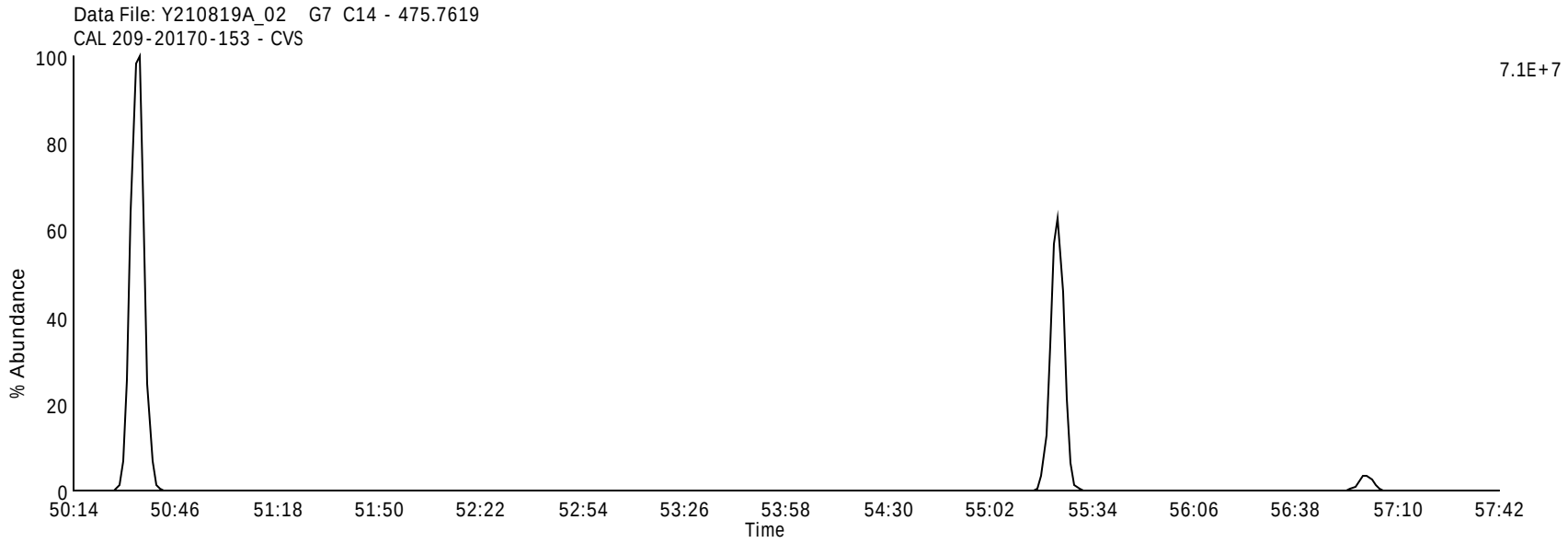
CAL 209-20170-153 - CVS



Labeled Nona Chlorinated Biphenyls

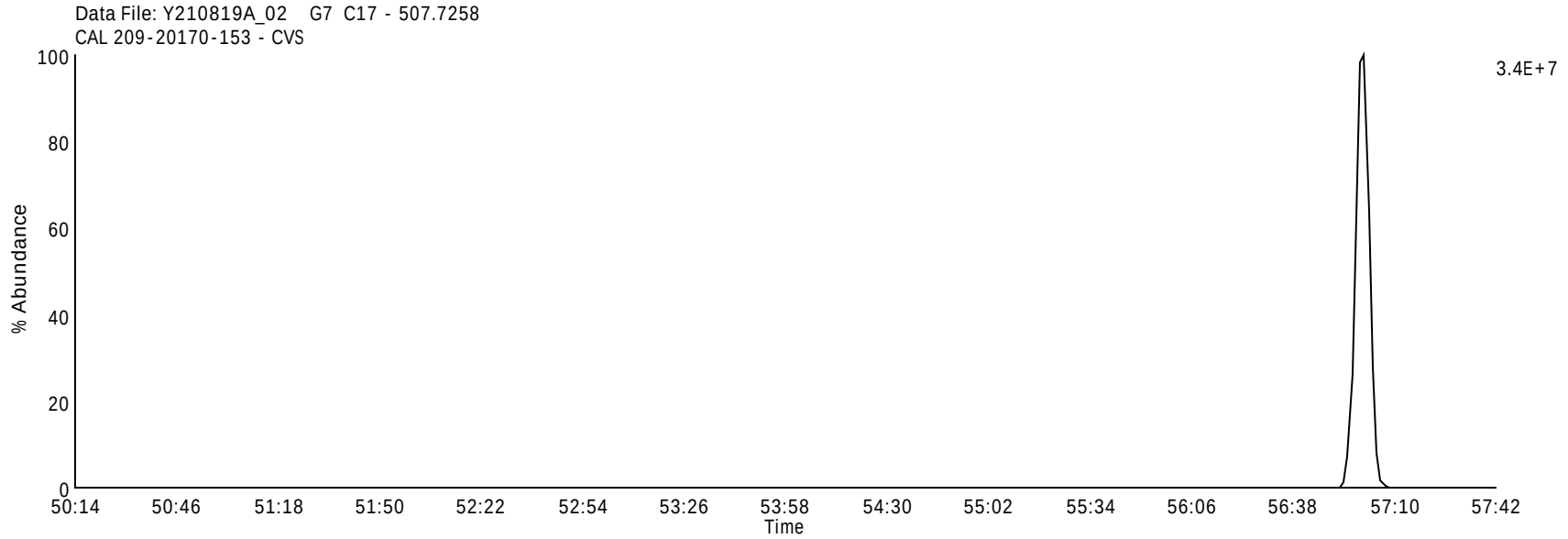
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

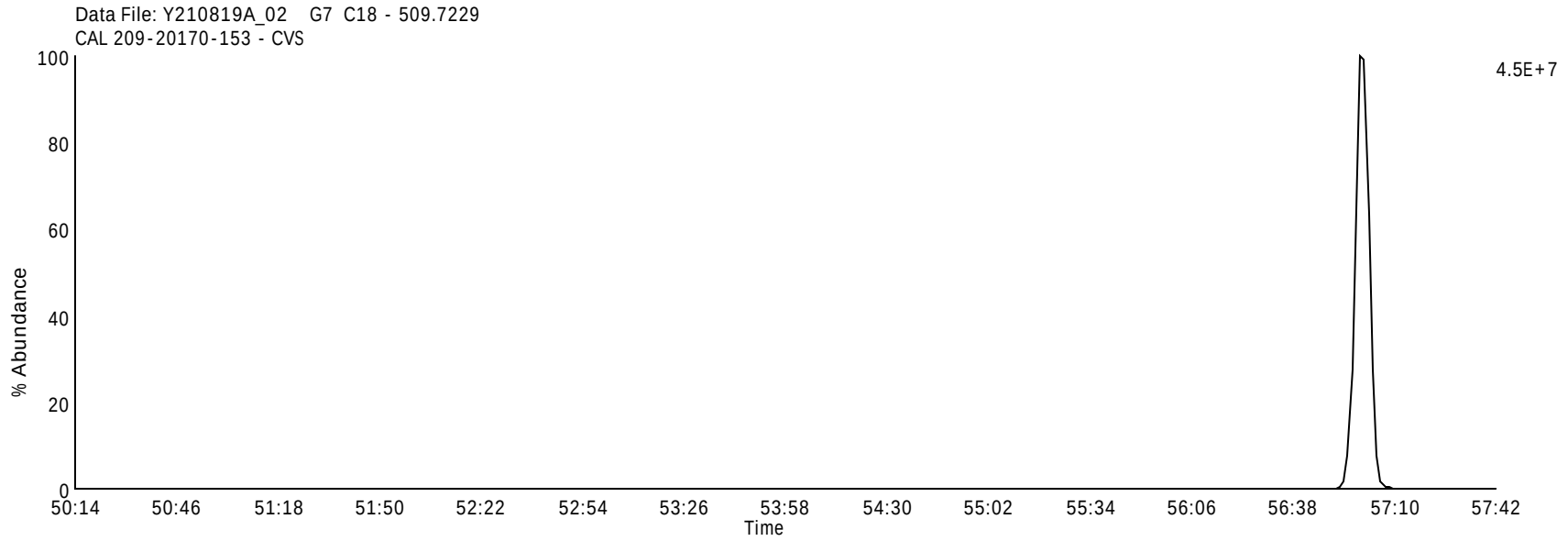




Labeled Deca Chlorinated Biphenyl

Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix



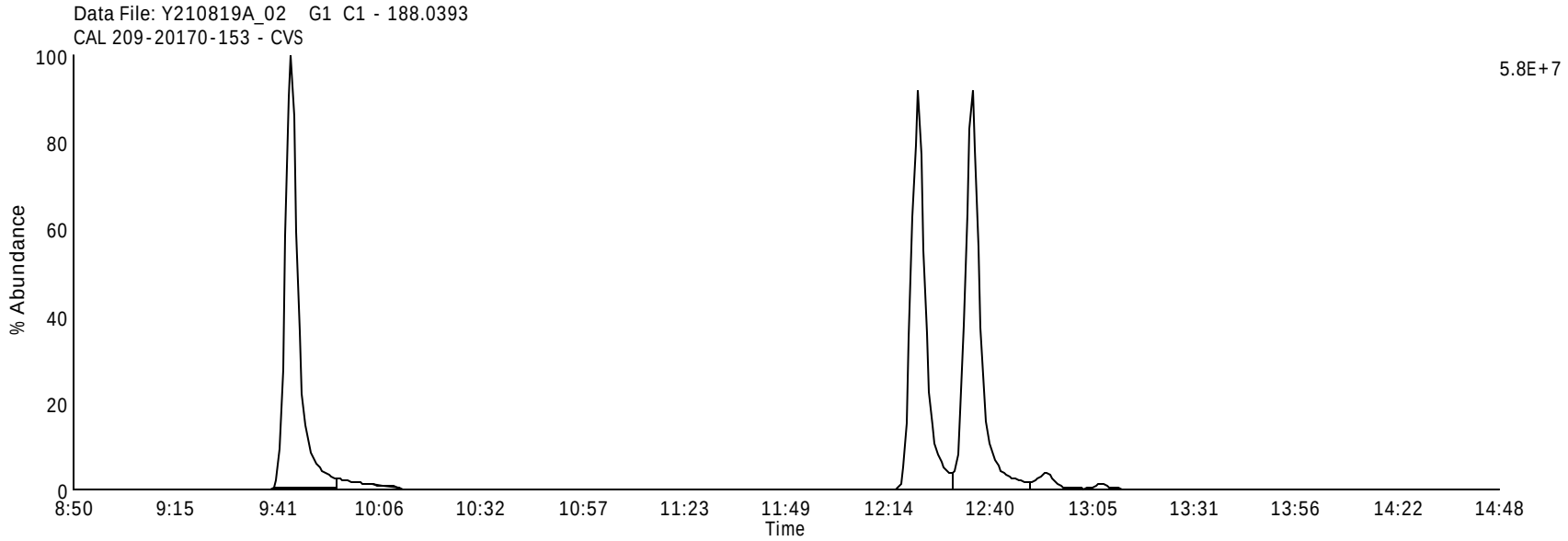


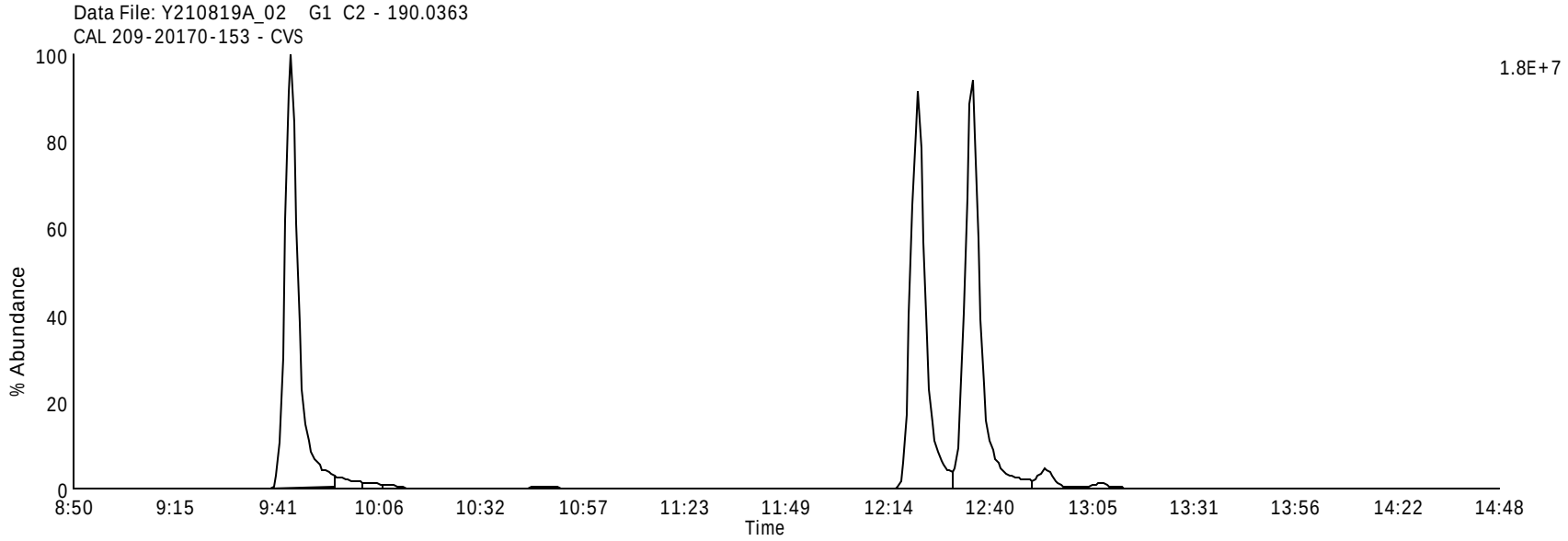
Mono Chlorinated Biphenyls

Data File Name: Y210819A_02 | Lab Sample ID: 209-20170-153

Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

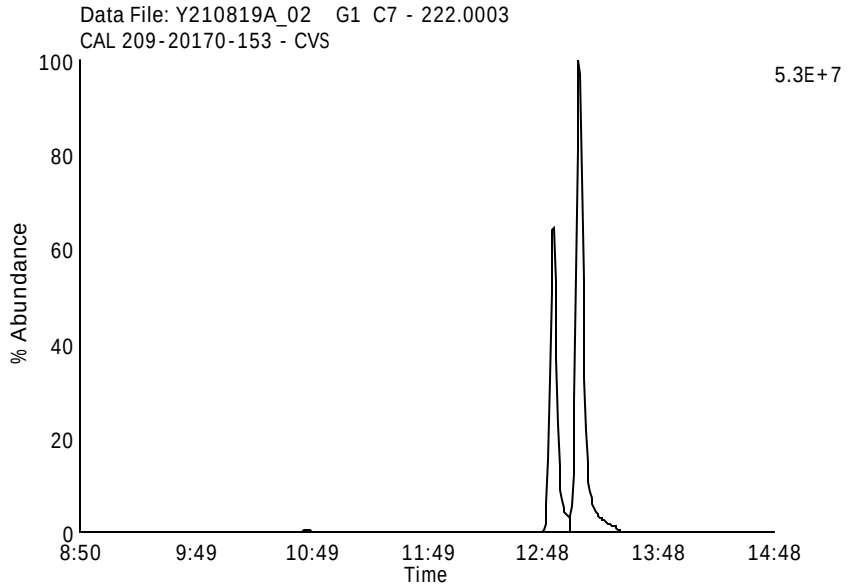
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

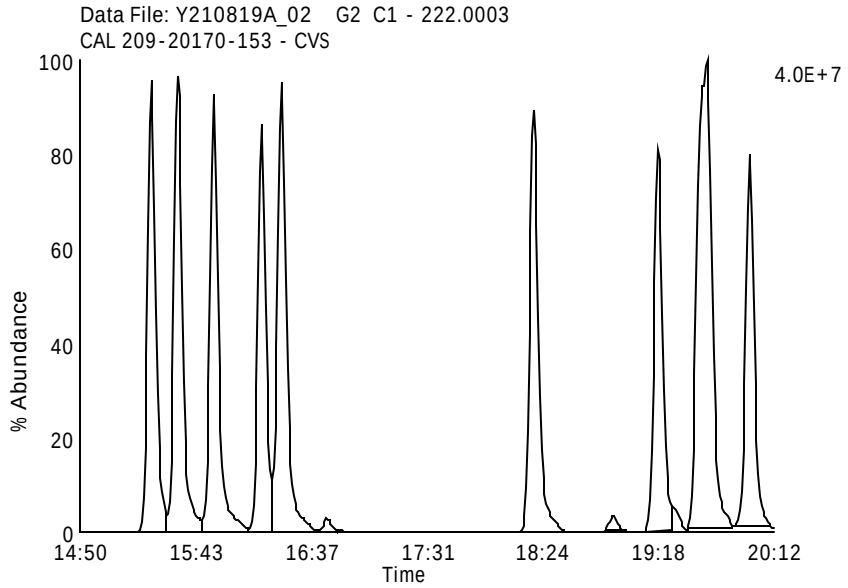


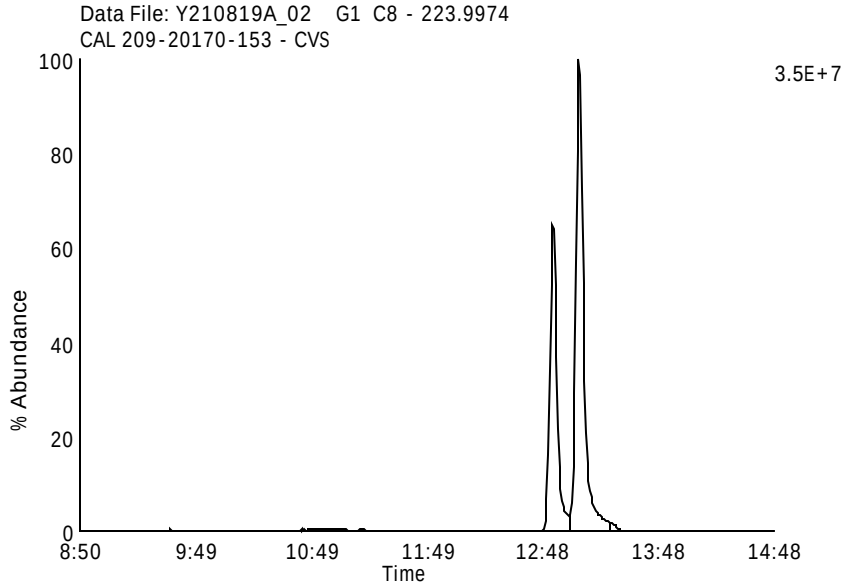


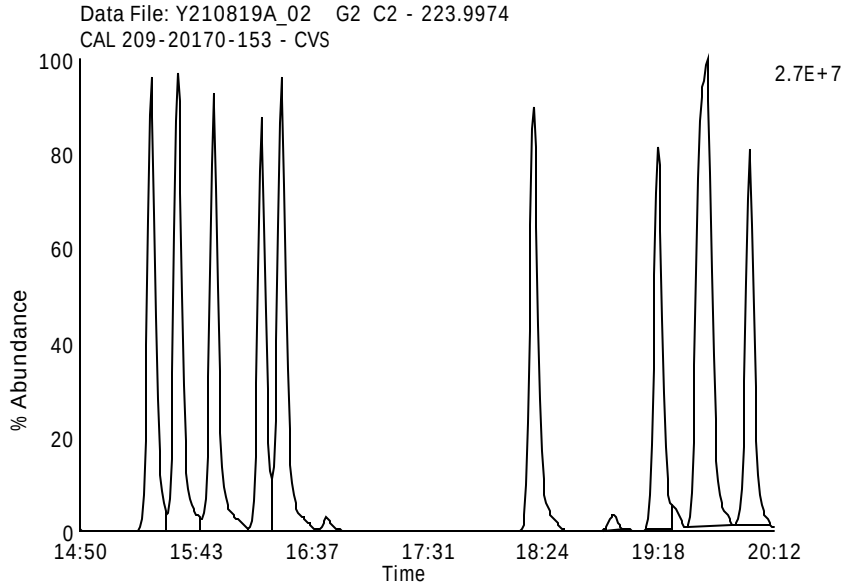
Di Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



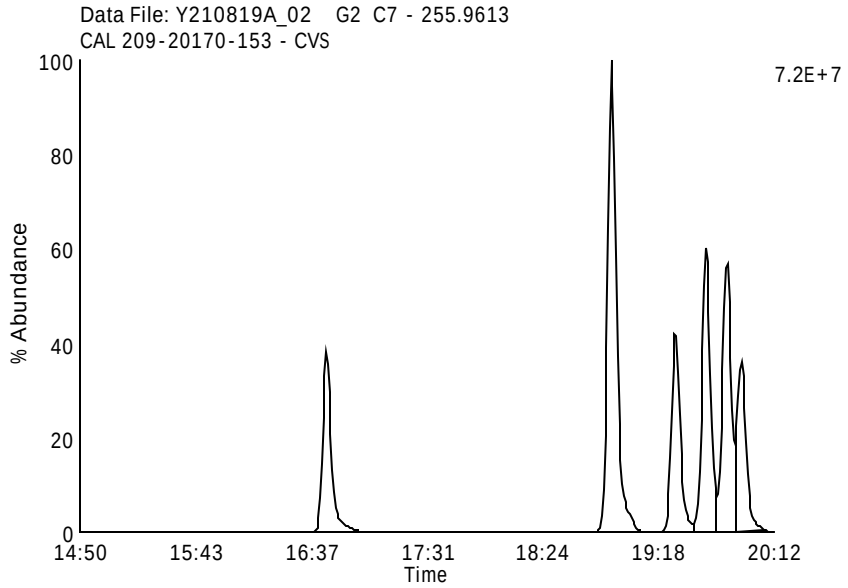


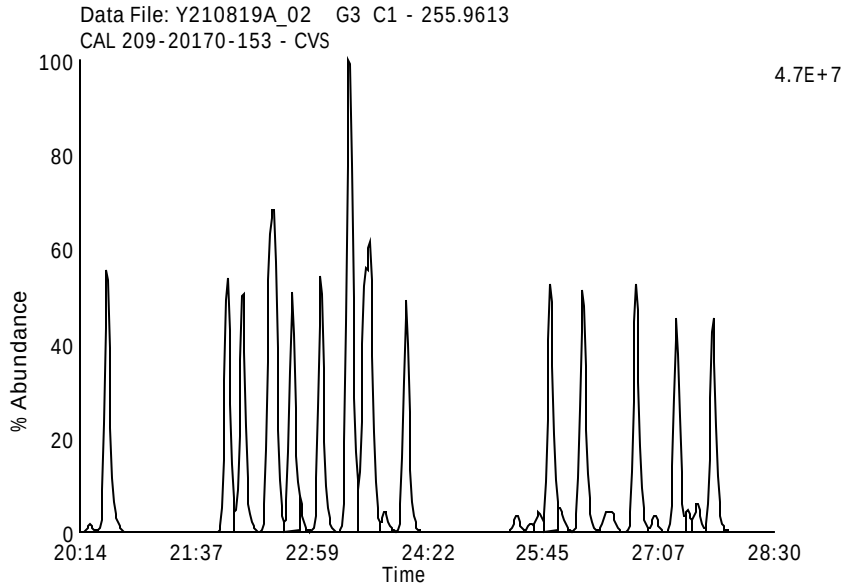


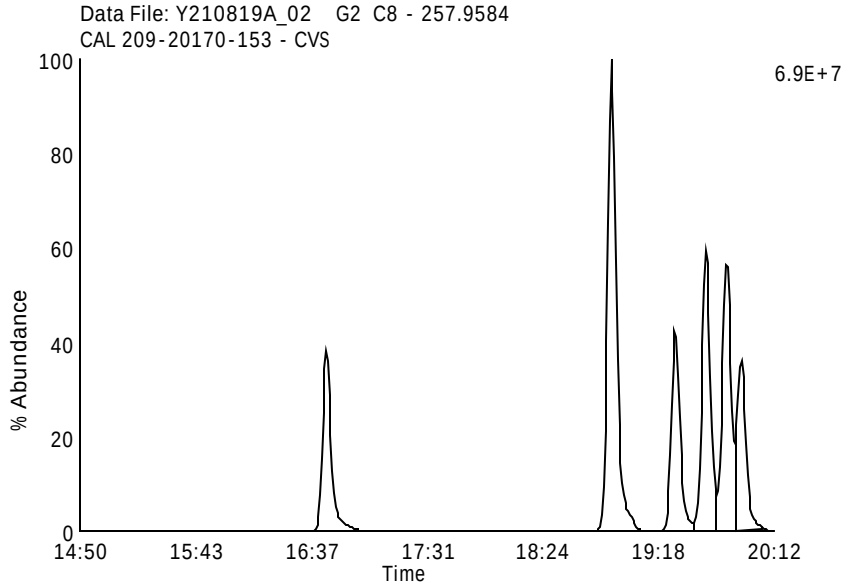


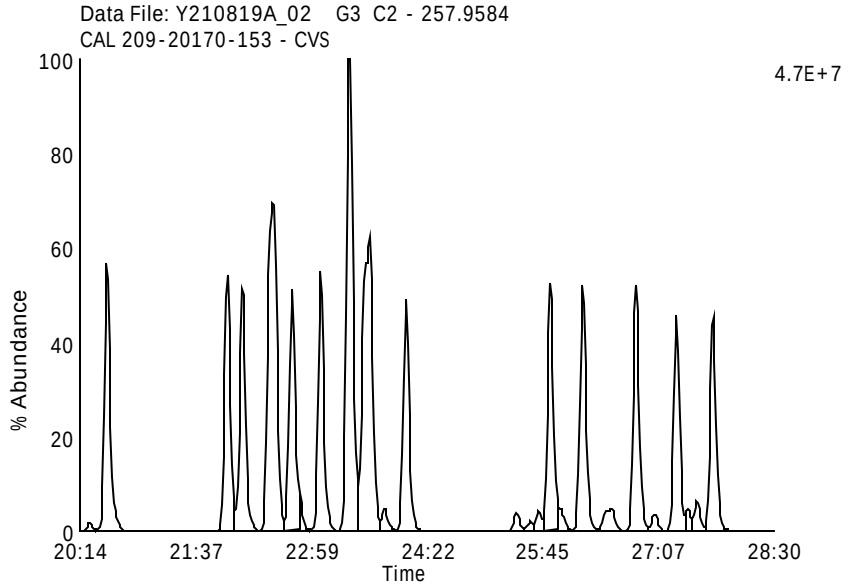
Tri Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



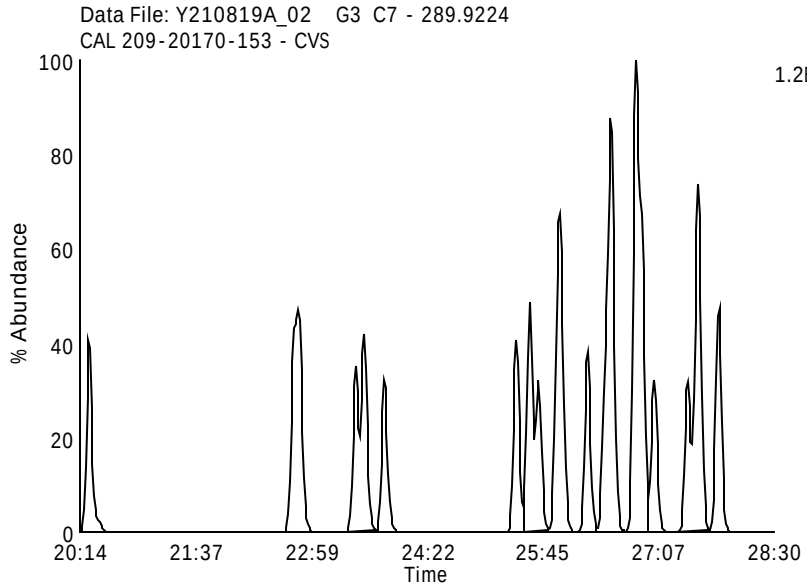


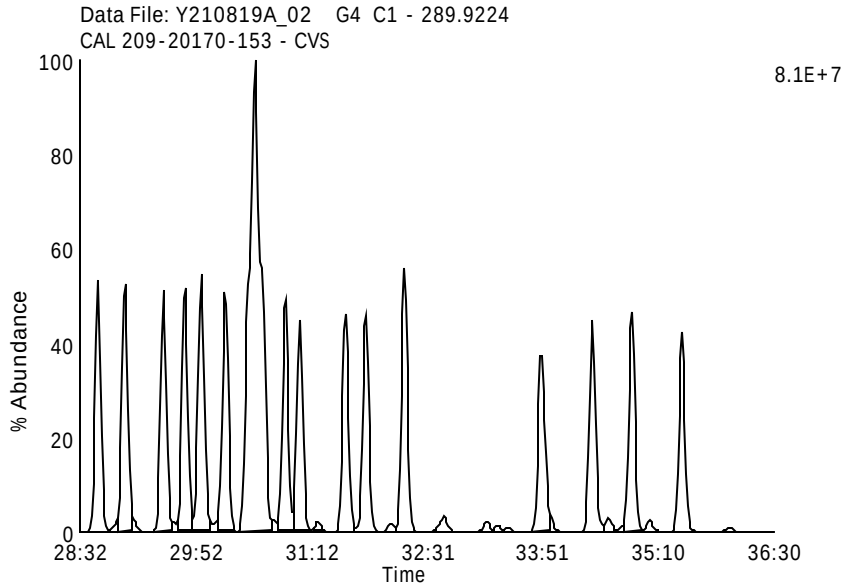


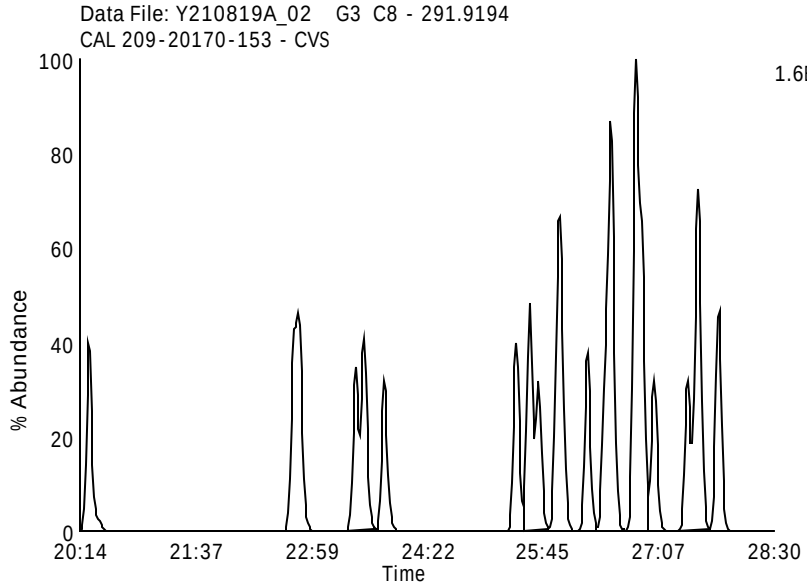


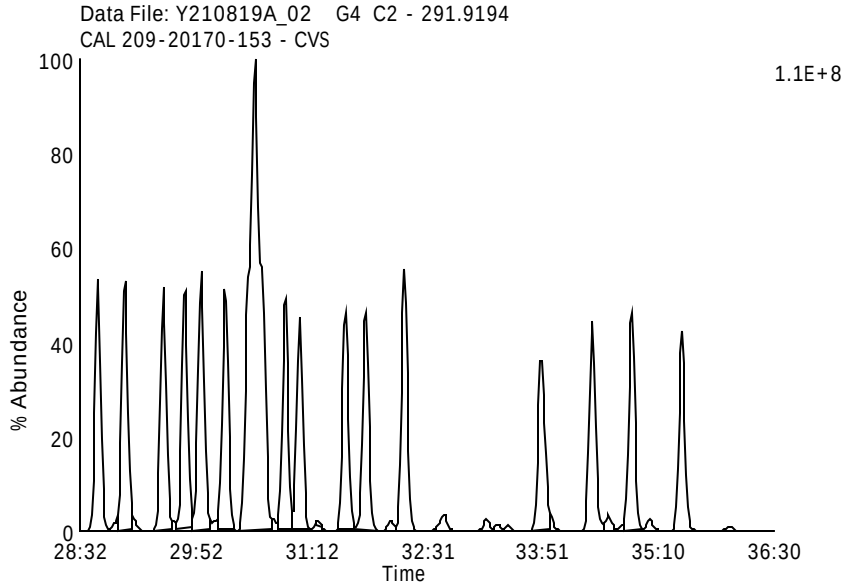
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



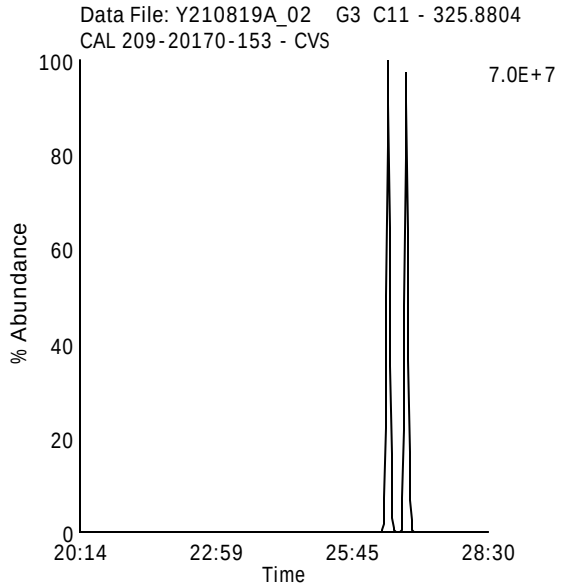


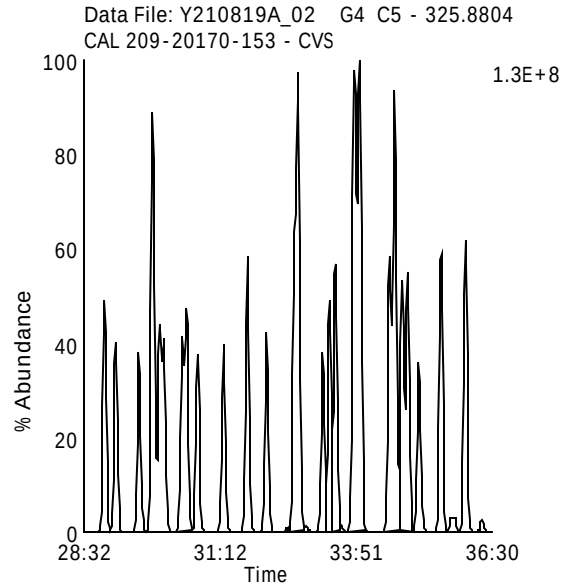


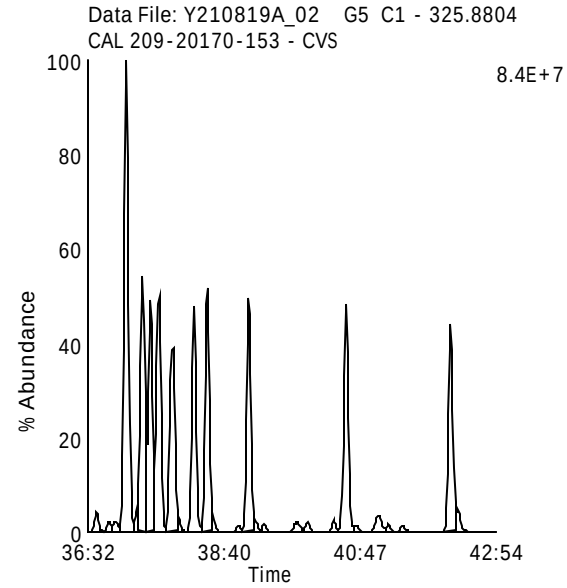


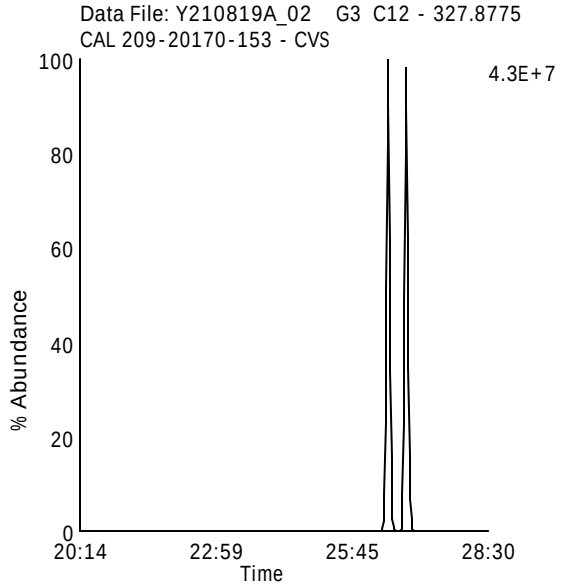
Penta Chlorinated Biphenyls

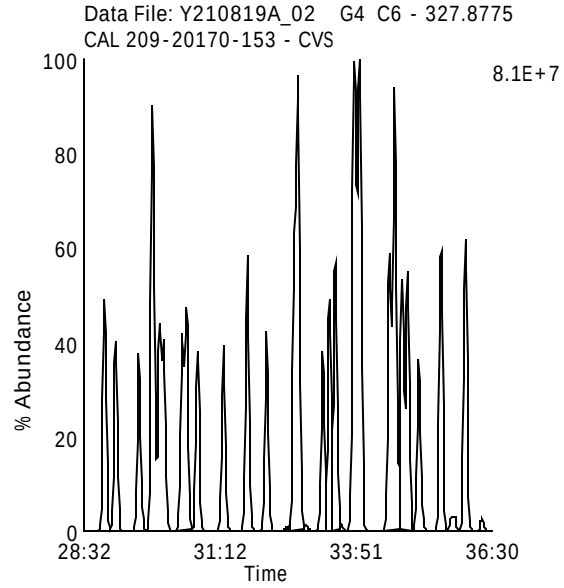
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

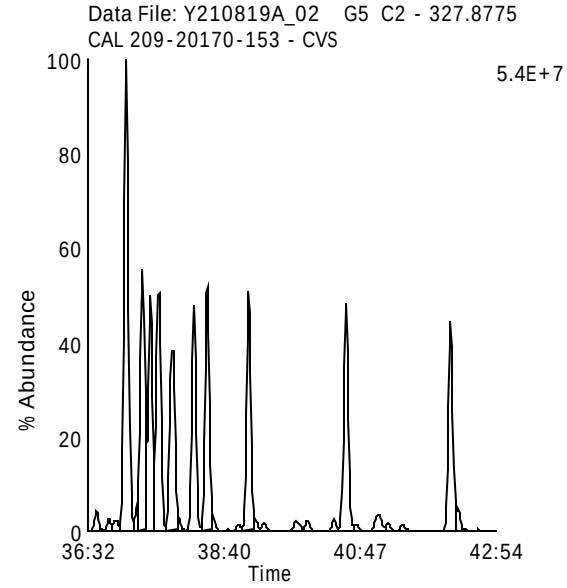








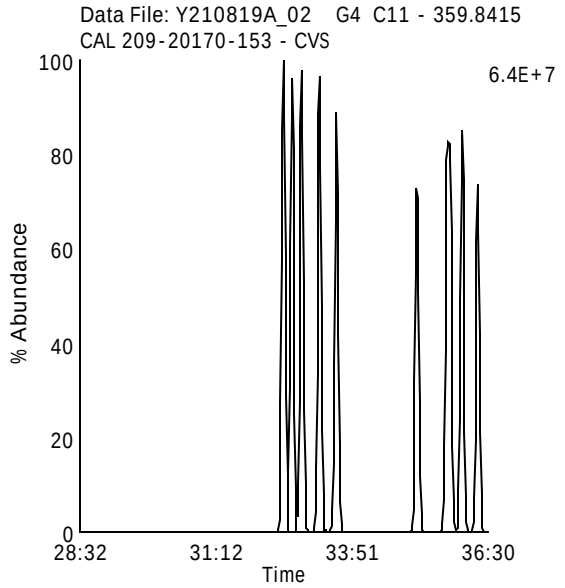


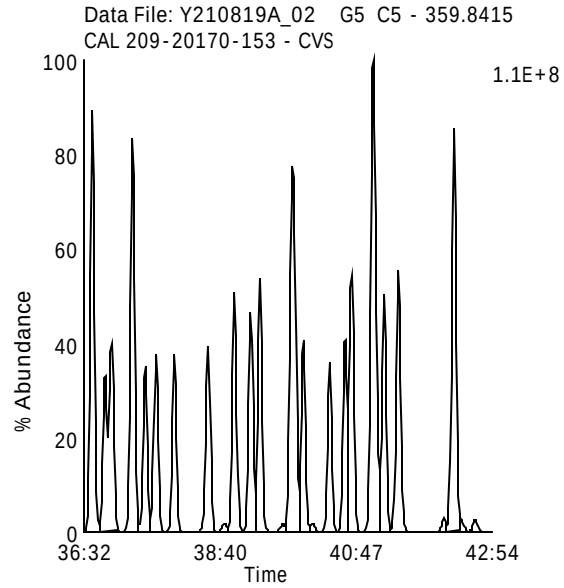


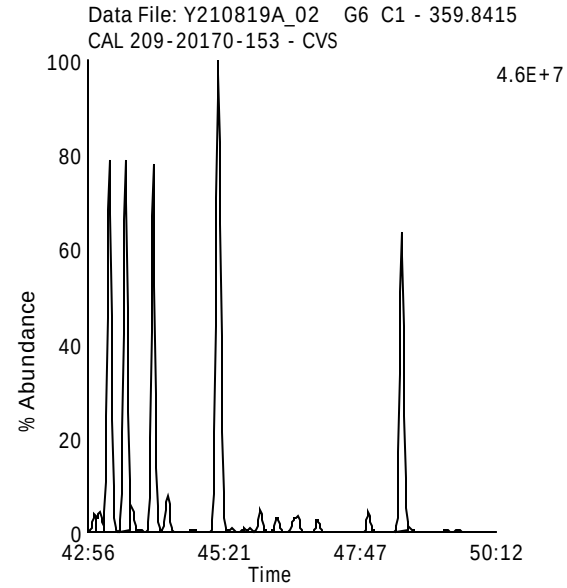
Hexa Chlorinated Biphenyls

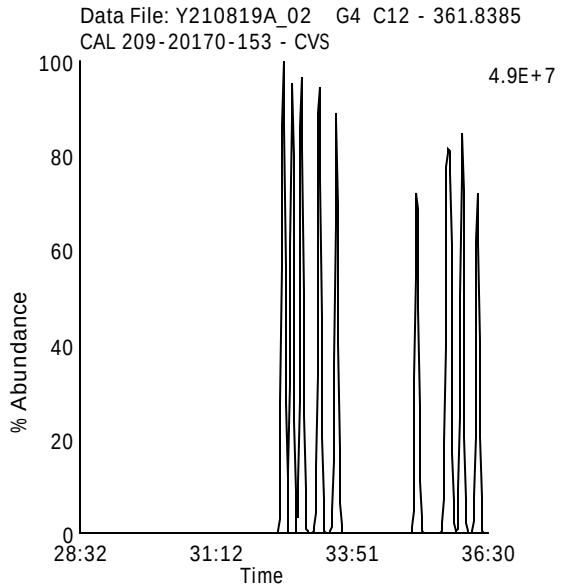
Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

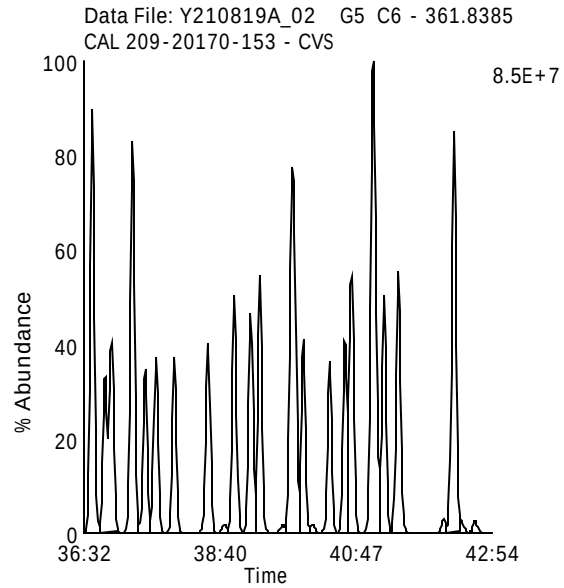
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

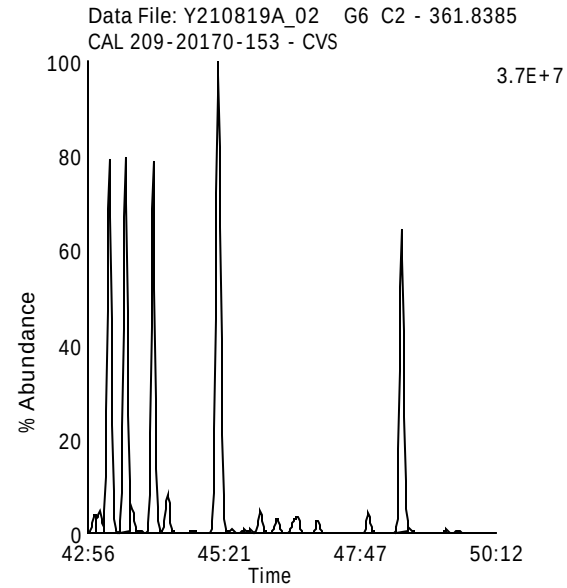








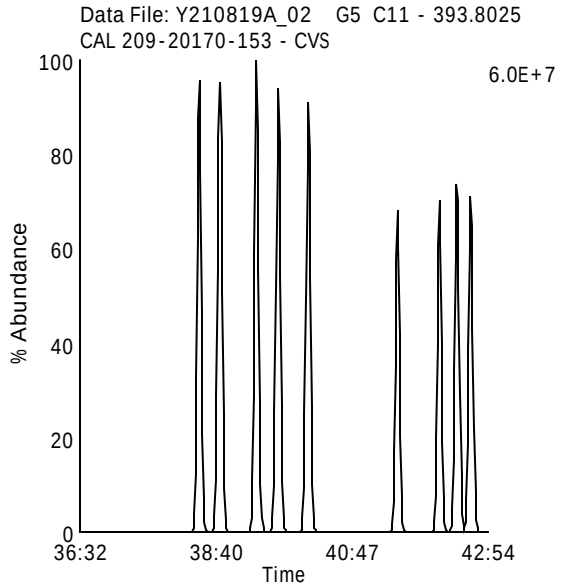


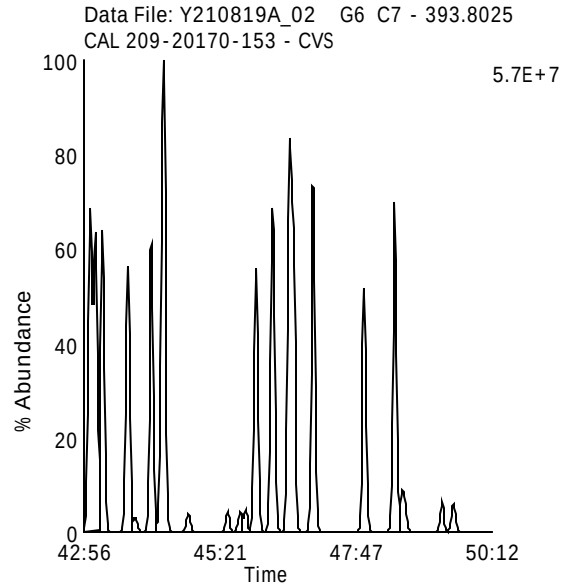


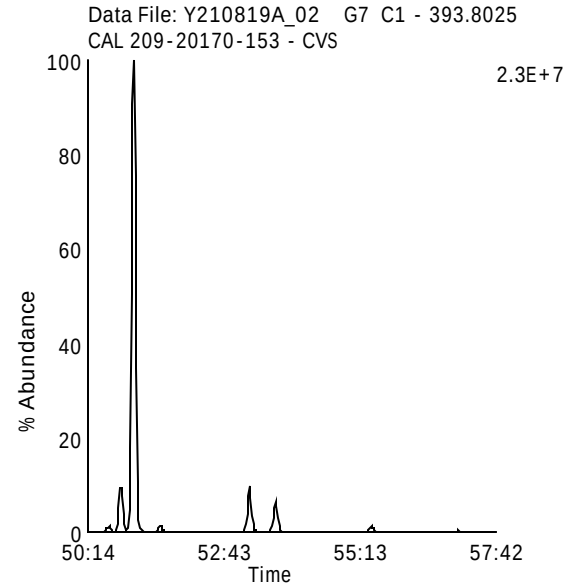
Hepta Chlorinated Biphenyls

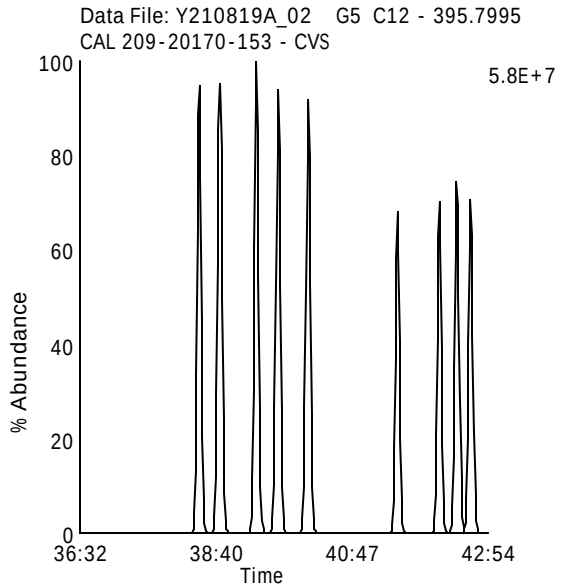
Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

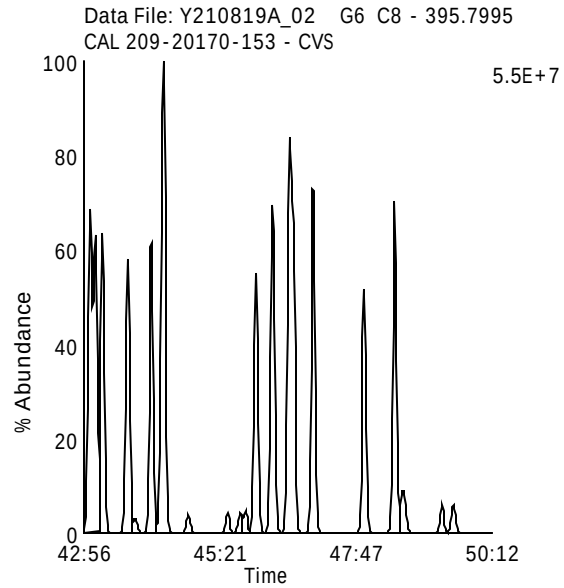
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

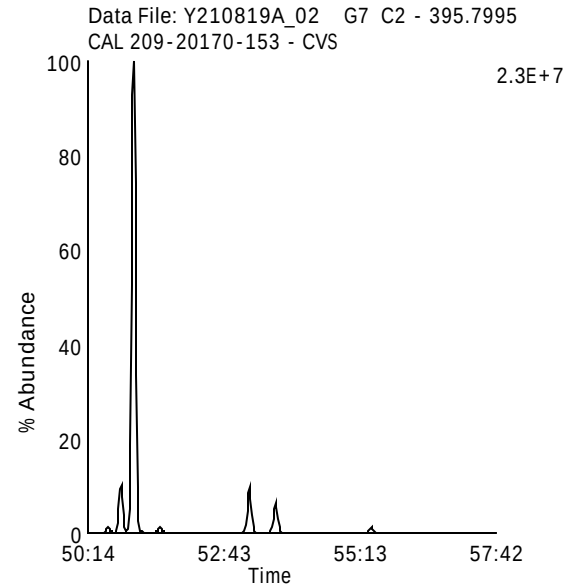






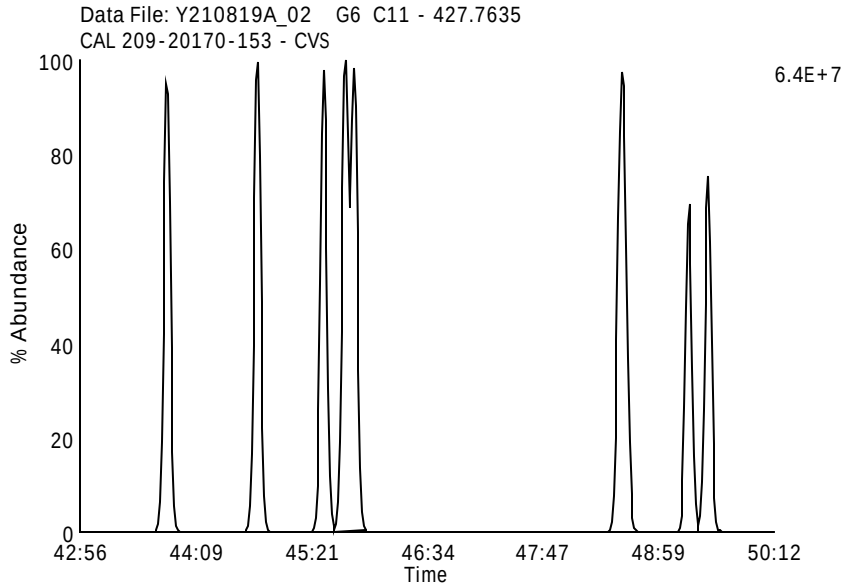


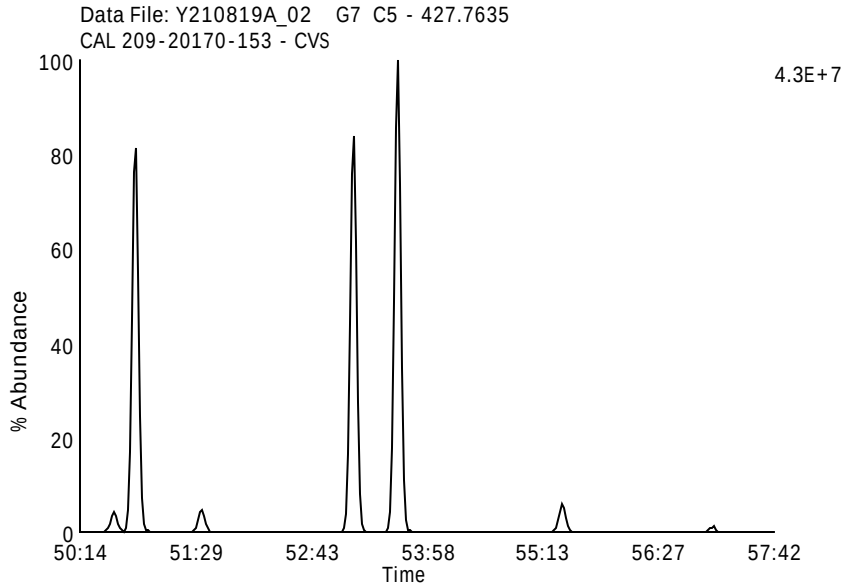


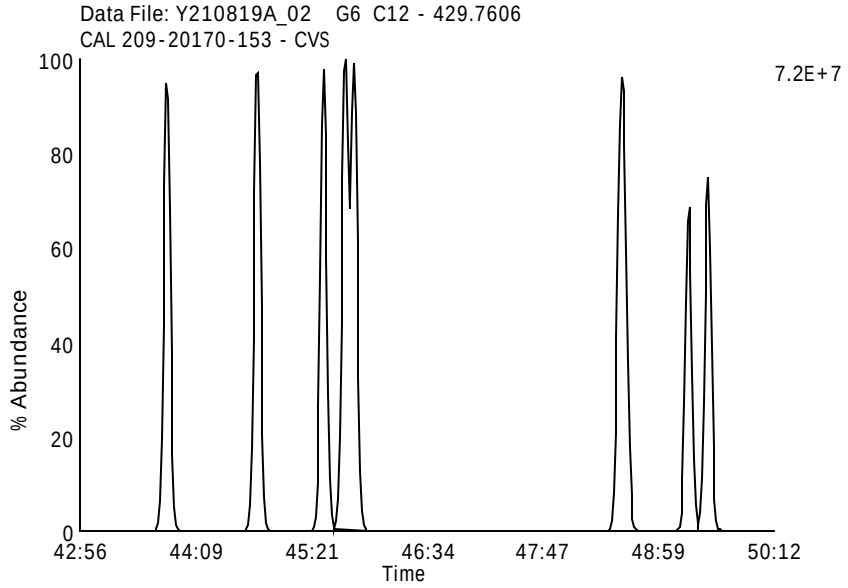


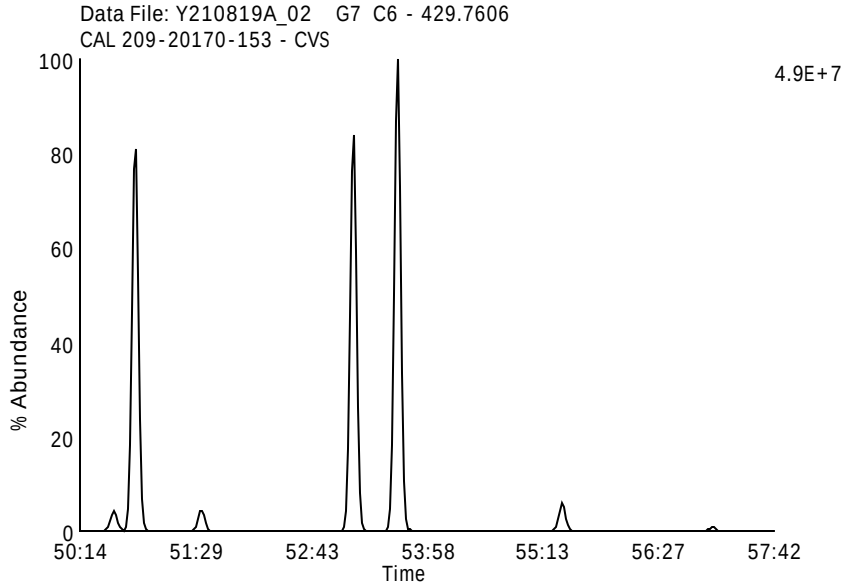
Octa Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



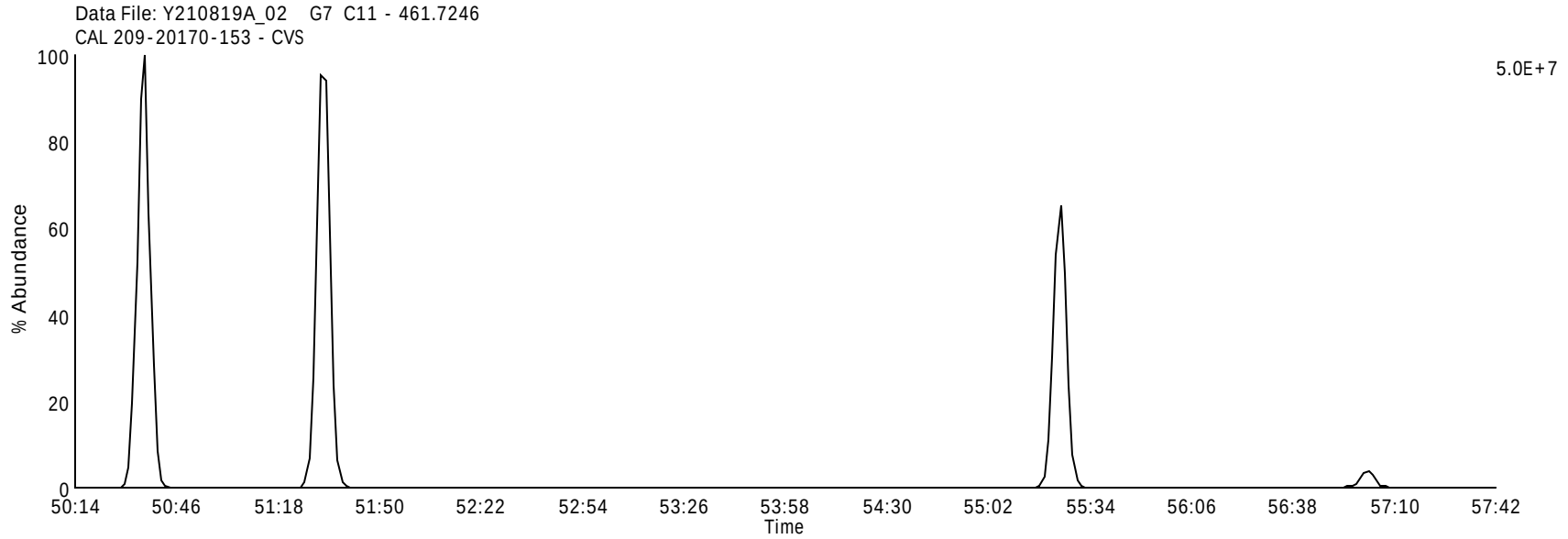


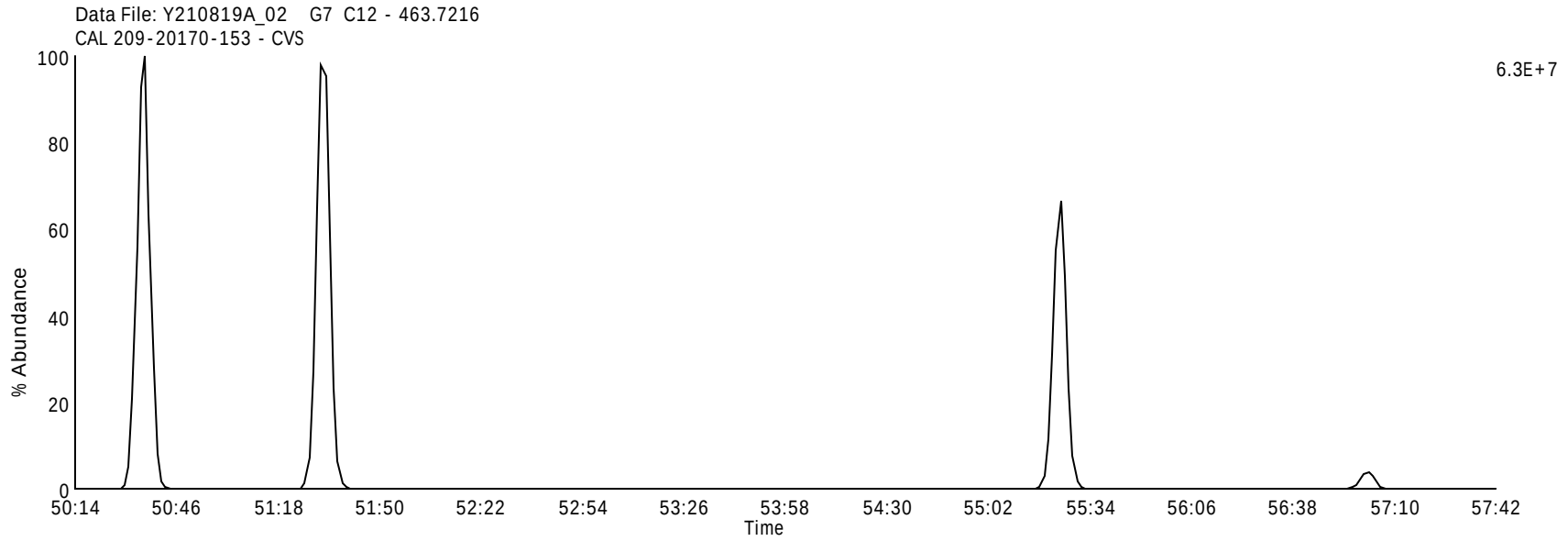




Nona Chlorinated Biphenyls

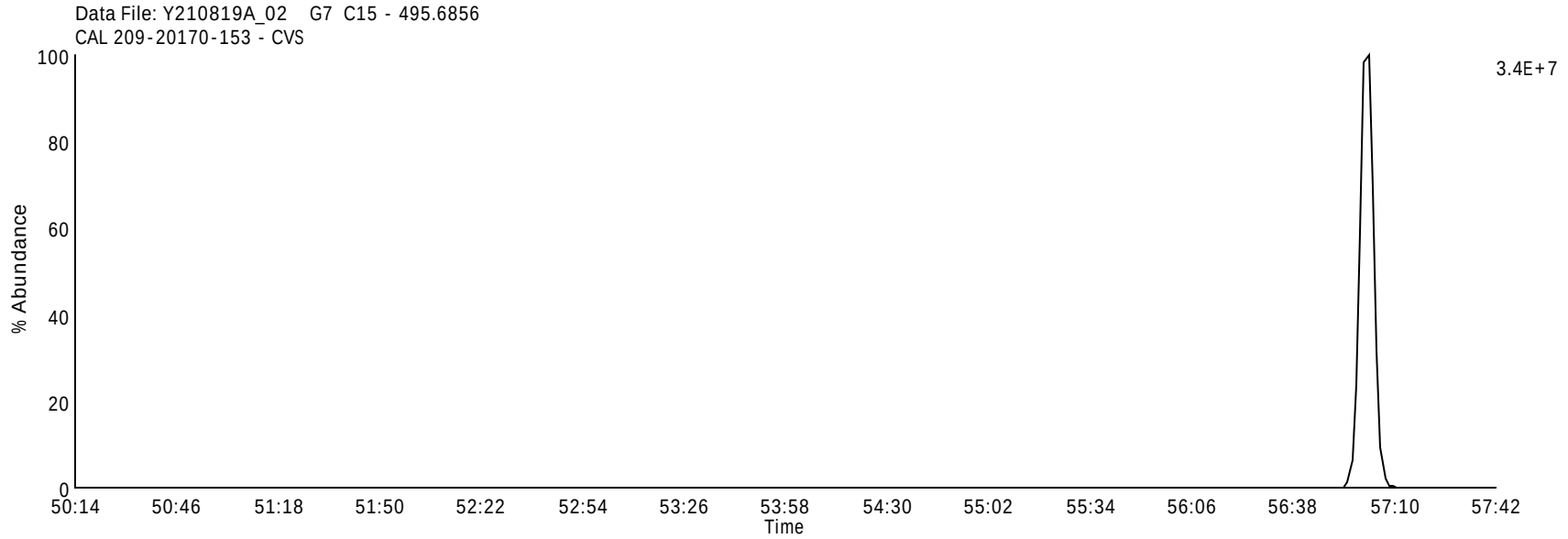
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

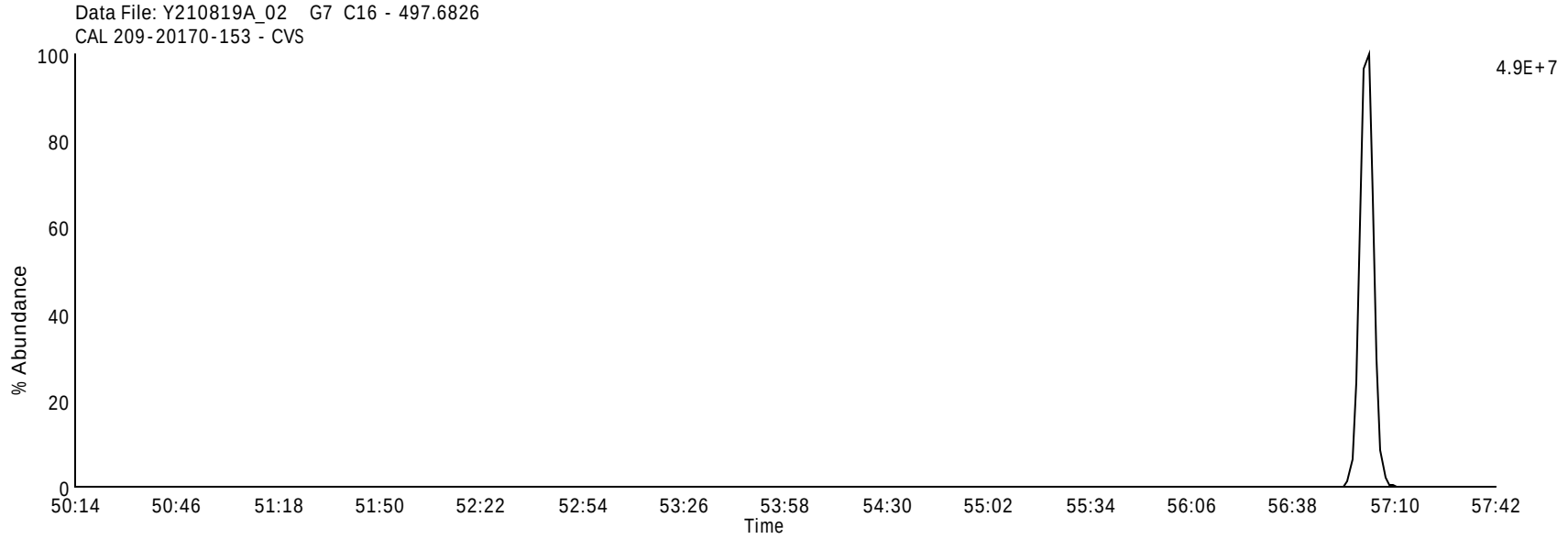




Deca Chlorinated Biphenyl

Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

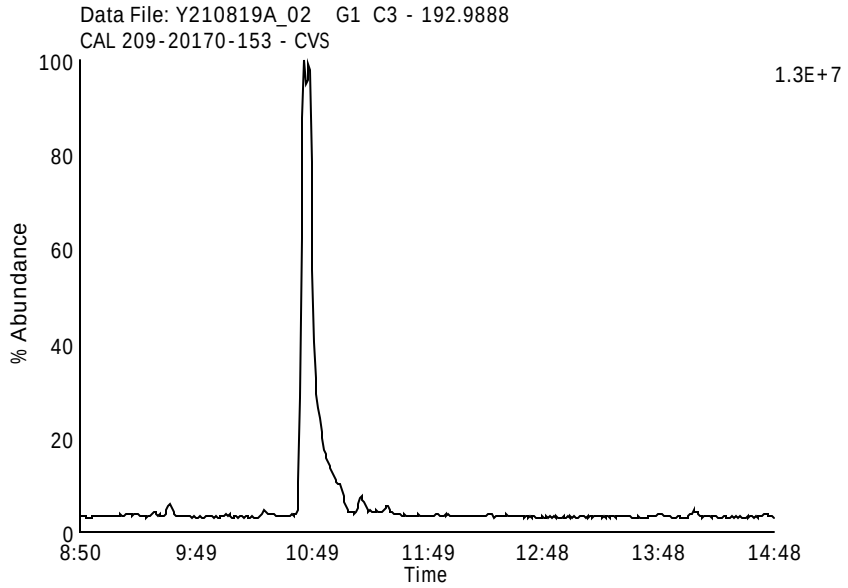


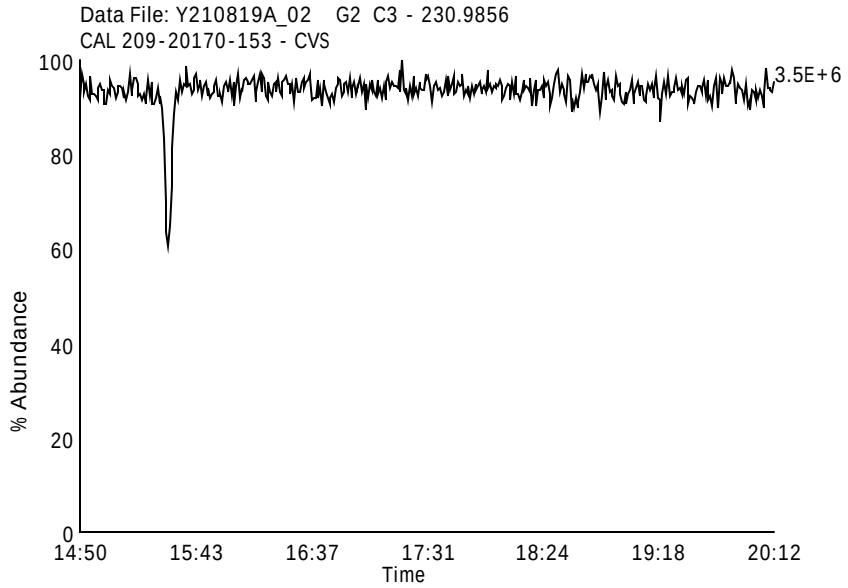


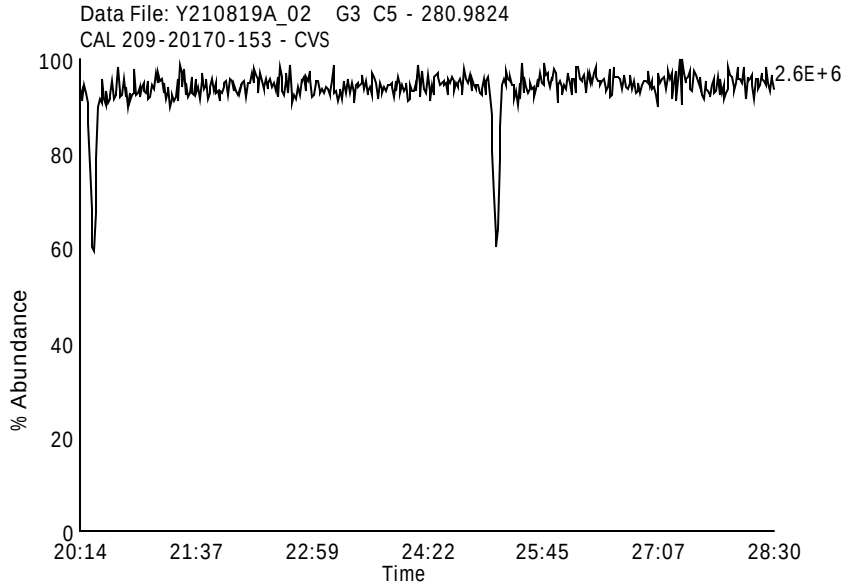
Group 1 - 4 Lock mass

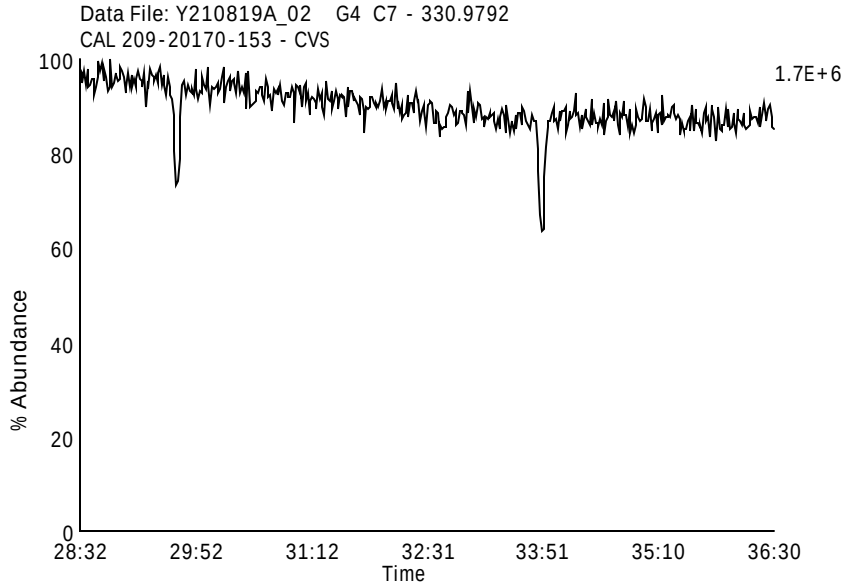
Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix





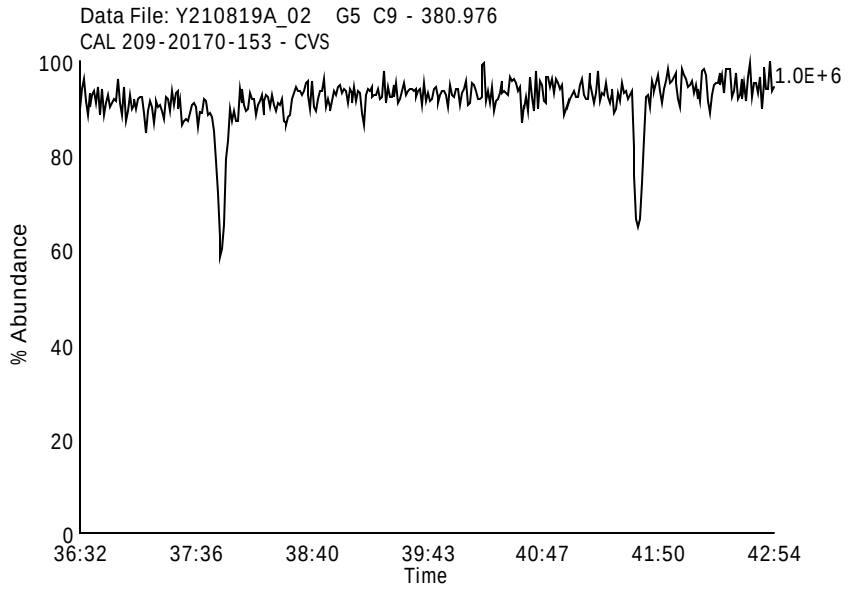


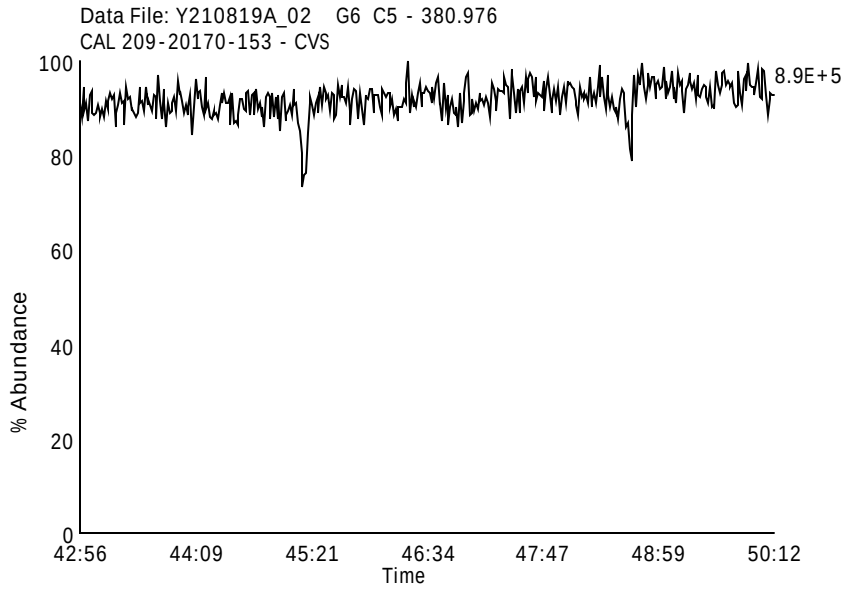


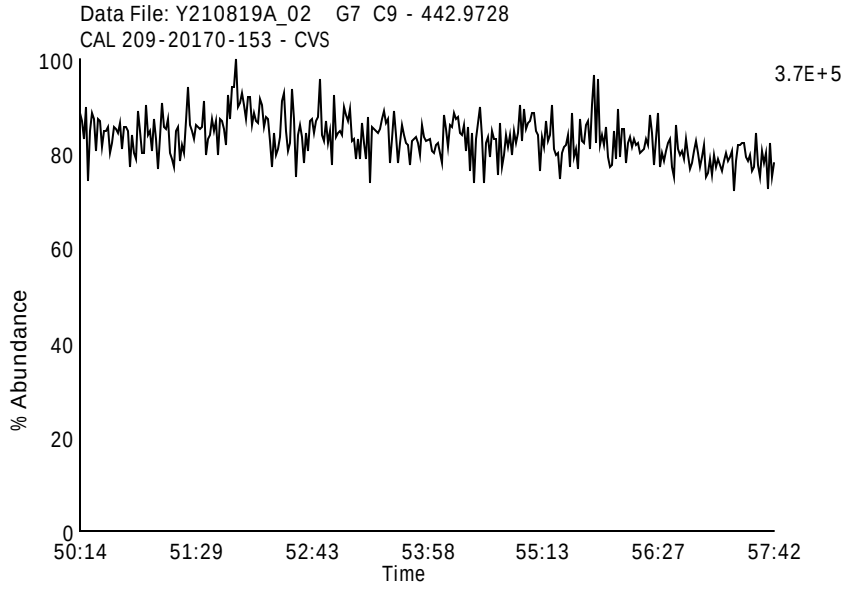
Group 5 - 7 Lock mass

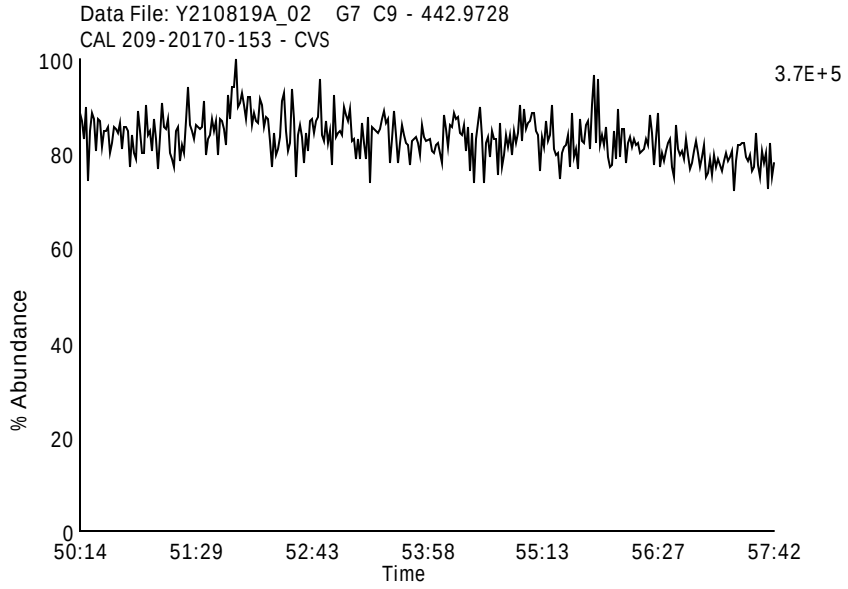
Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix







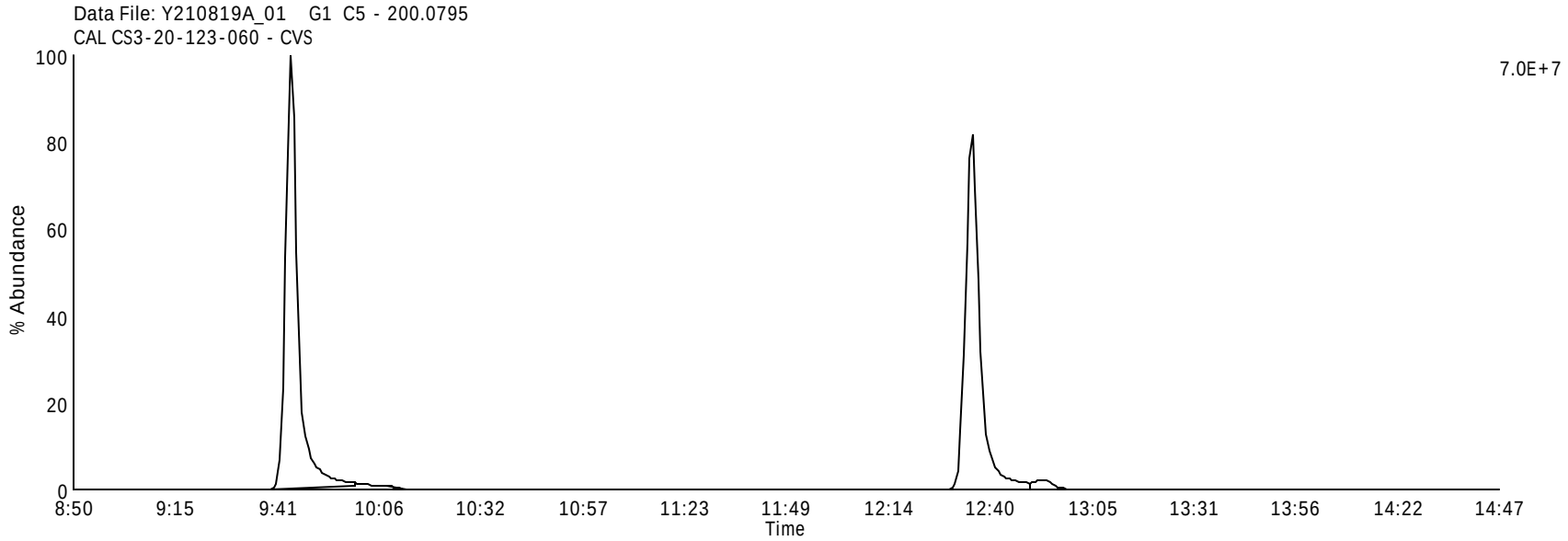


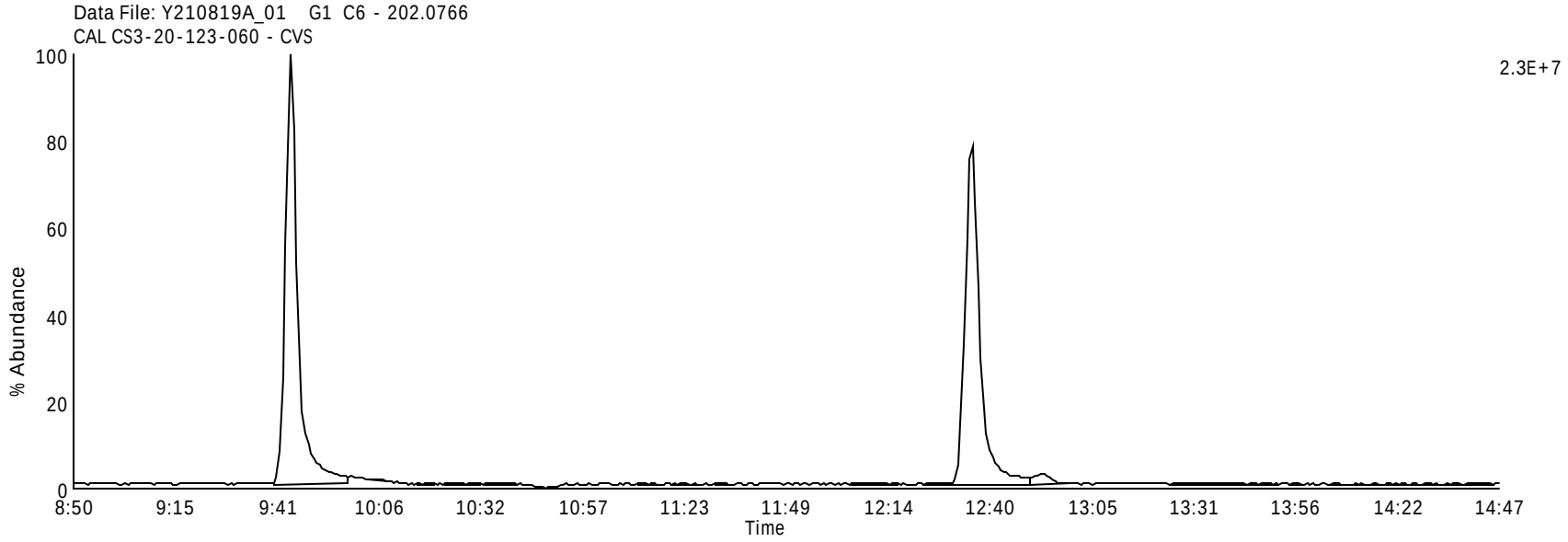
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

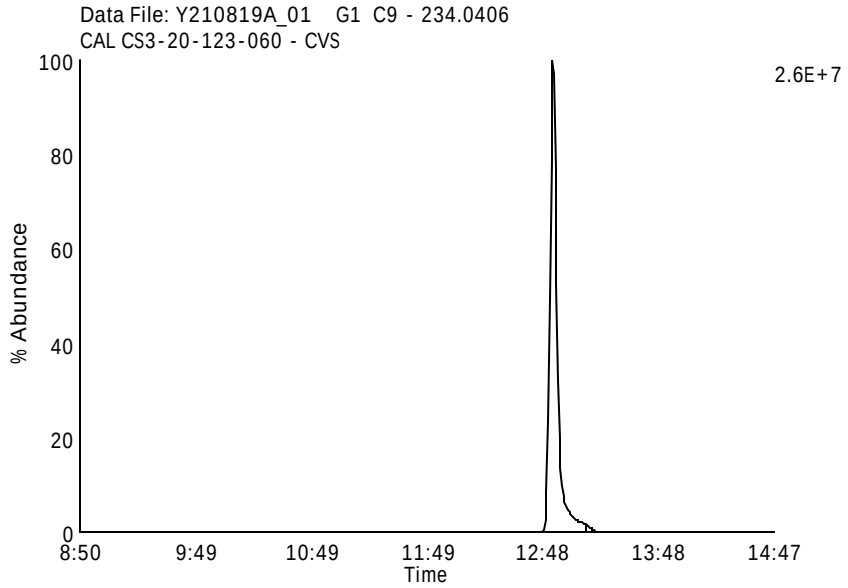
Sample Description: CAL CS3-20-123-060 - CVS

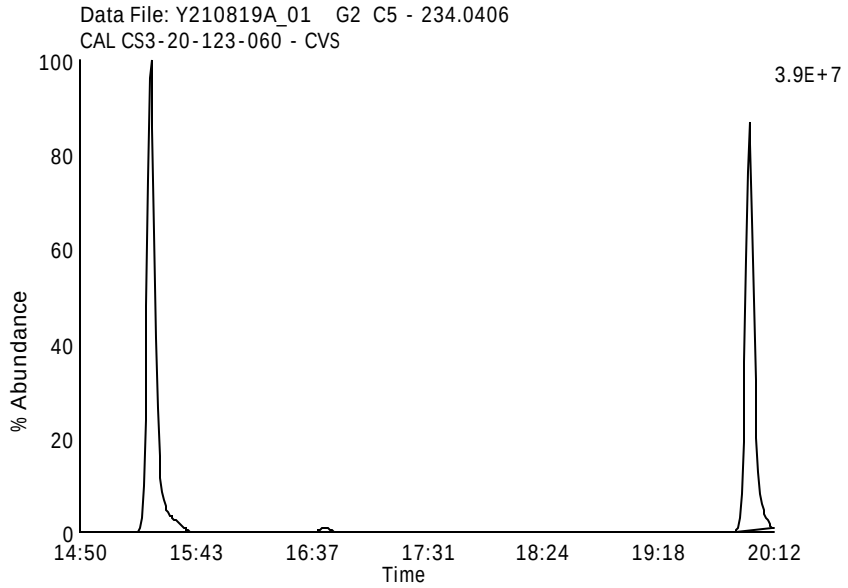


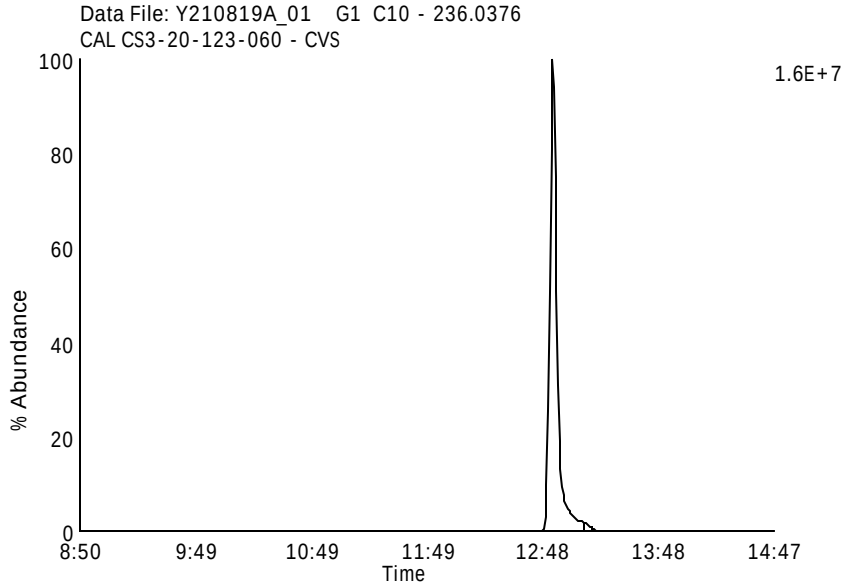


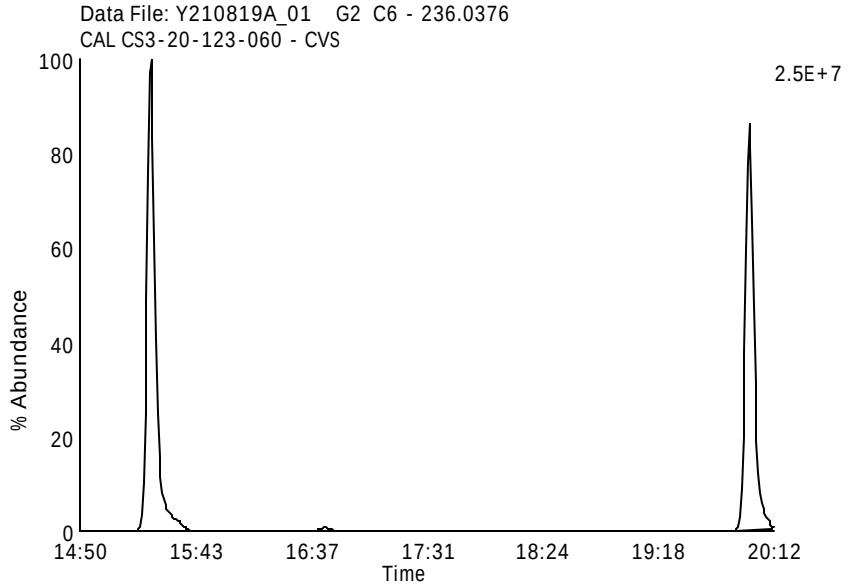
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





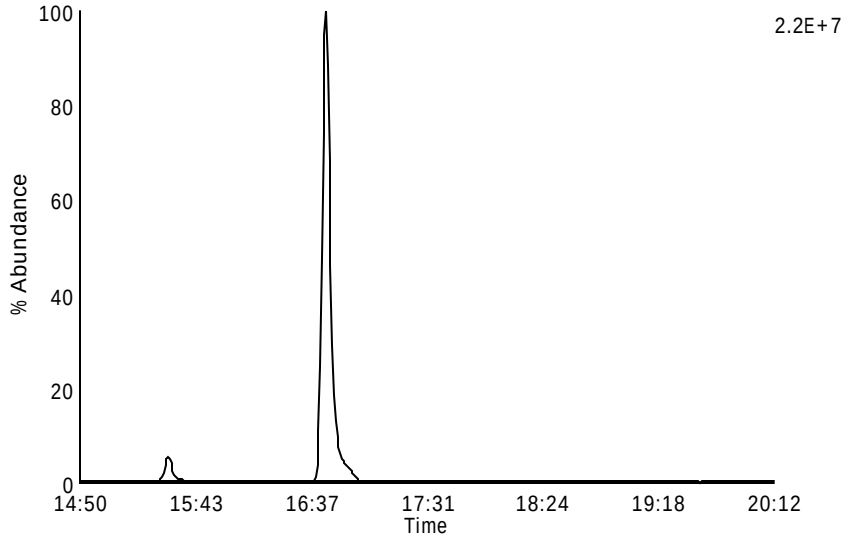




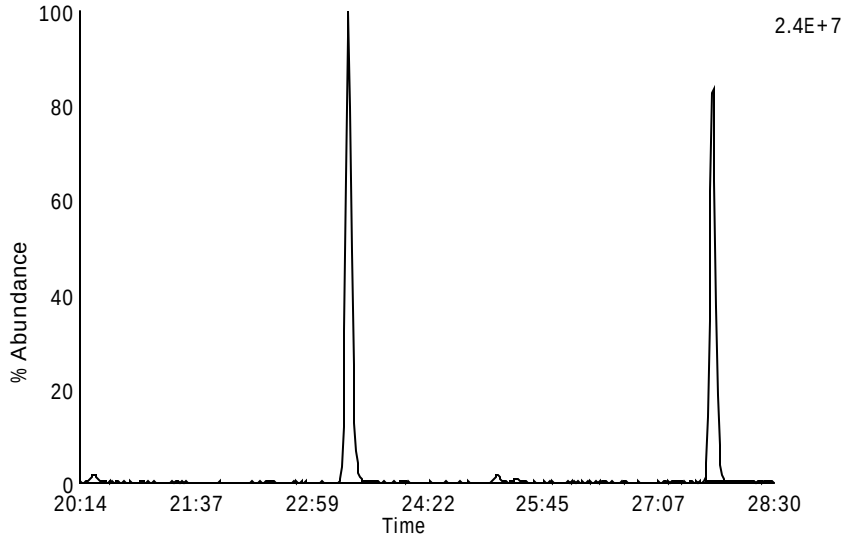
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

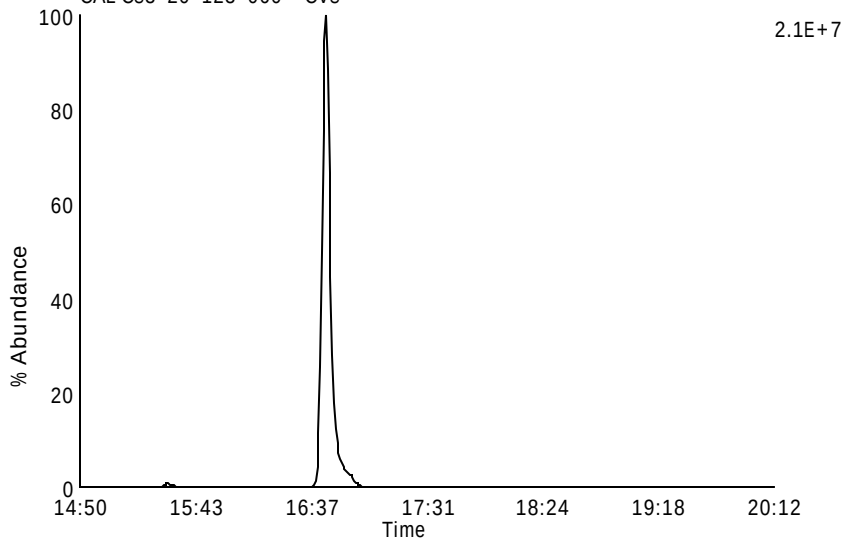
Data File: Y210819A_01 G2 C9 - 268.0016
CAL CS3-20-123-060 - CVS



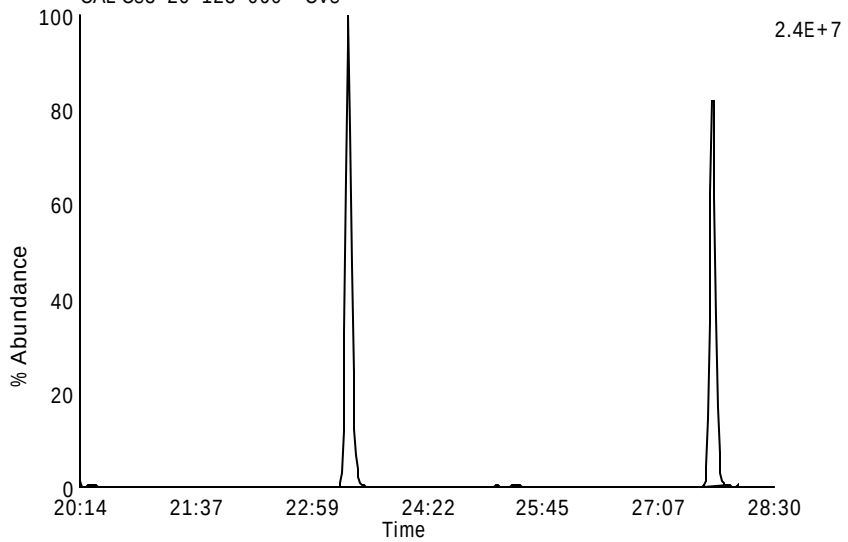
Data File: Y210819A_01 G3 C3 - 268.0016
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G2 C10 - 269.9986
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G3 C4 - 269.9986
CAL CS3-20-123-060 - CVS

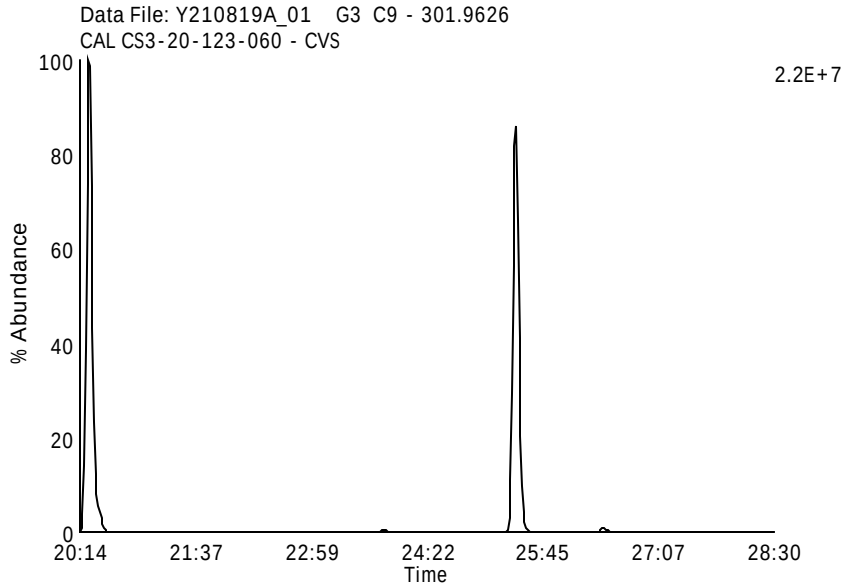


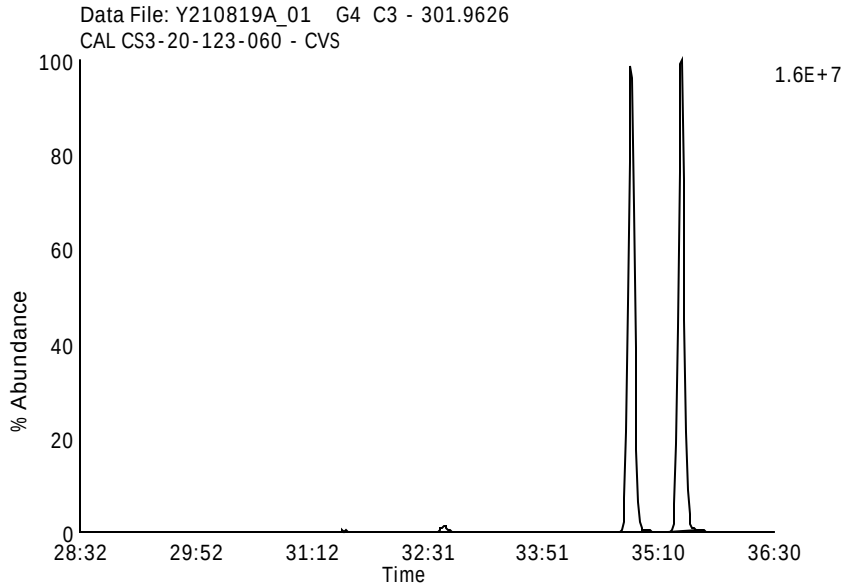
Labeled Tetra Chlorinated Biphenyls

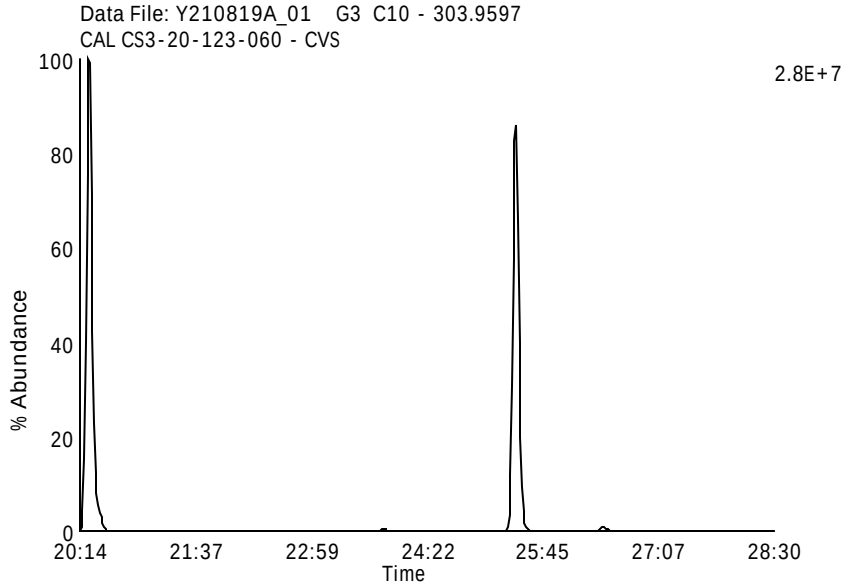
Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

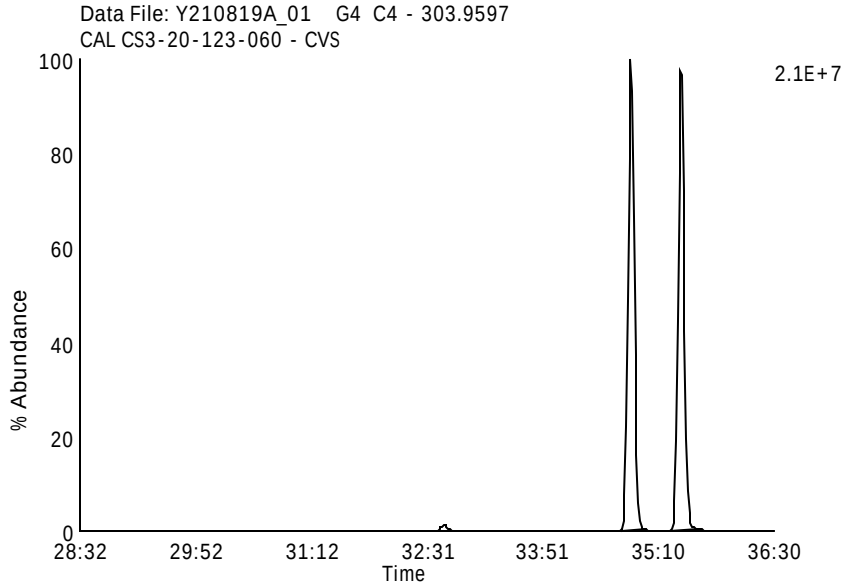
Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS







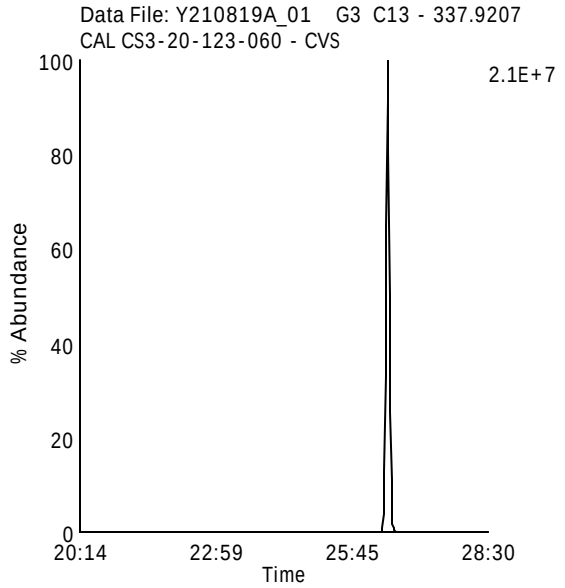


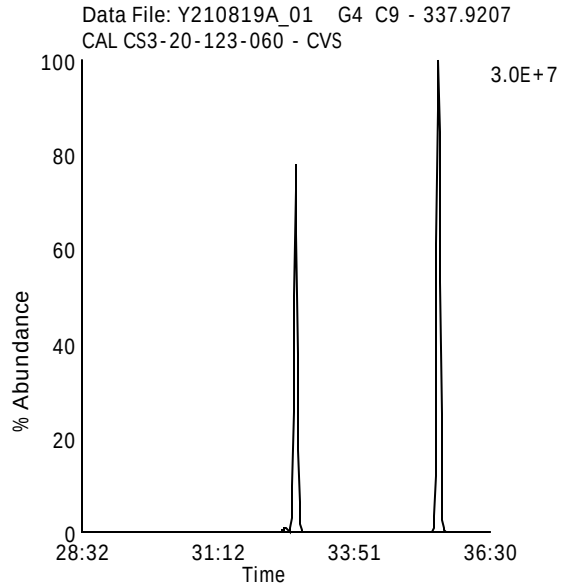
Labeled Penta Chlorinated Biphenyls

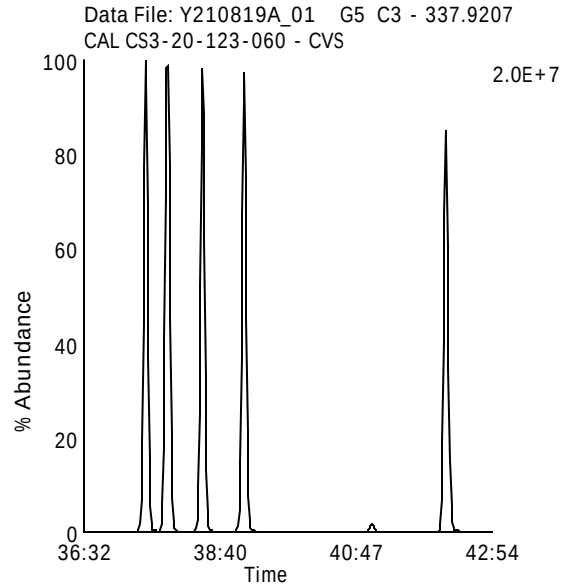
Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

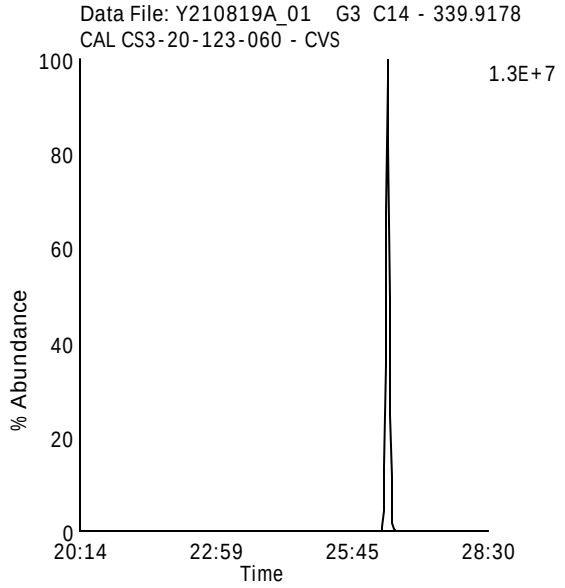
Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

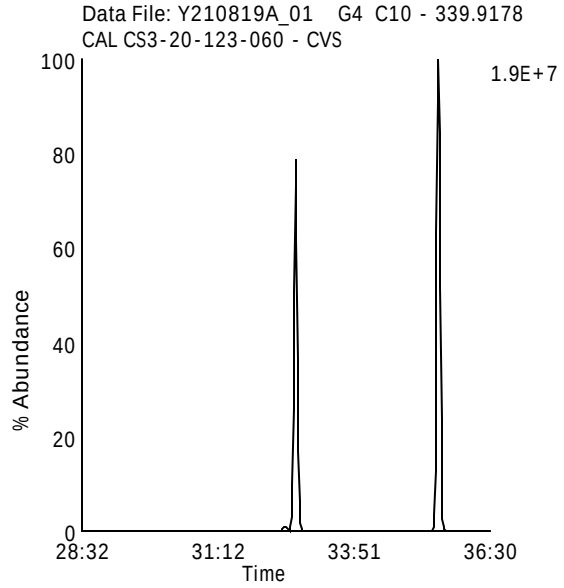
Sample Description: CAL CS3-20-123-060 - CVS

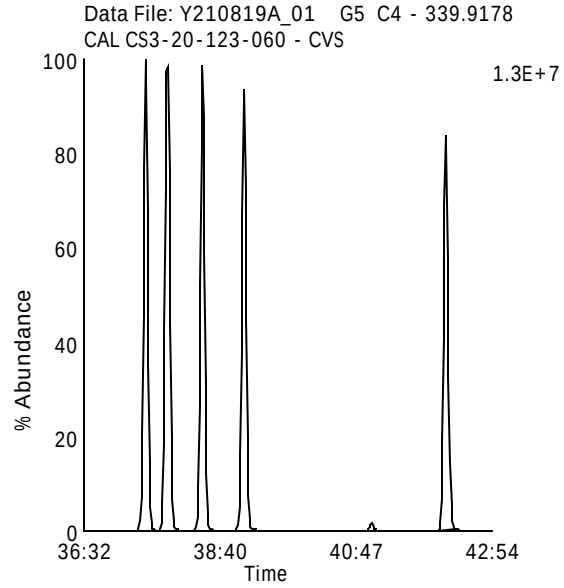










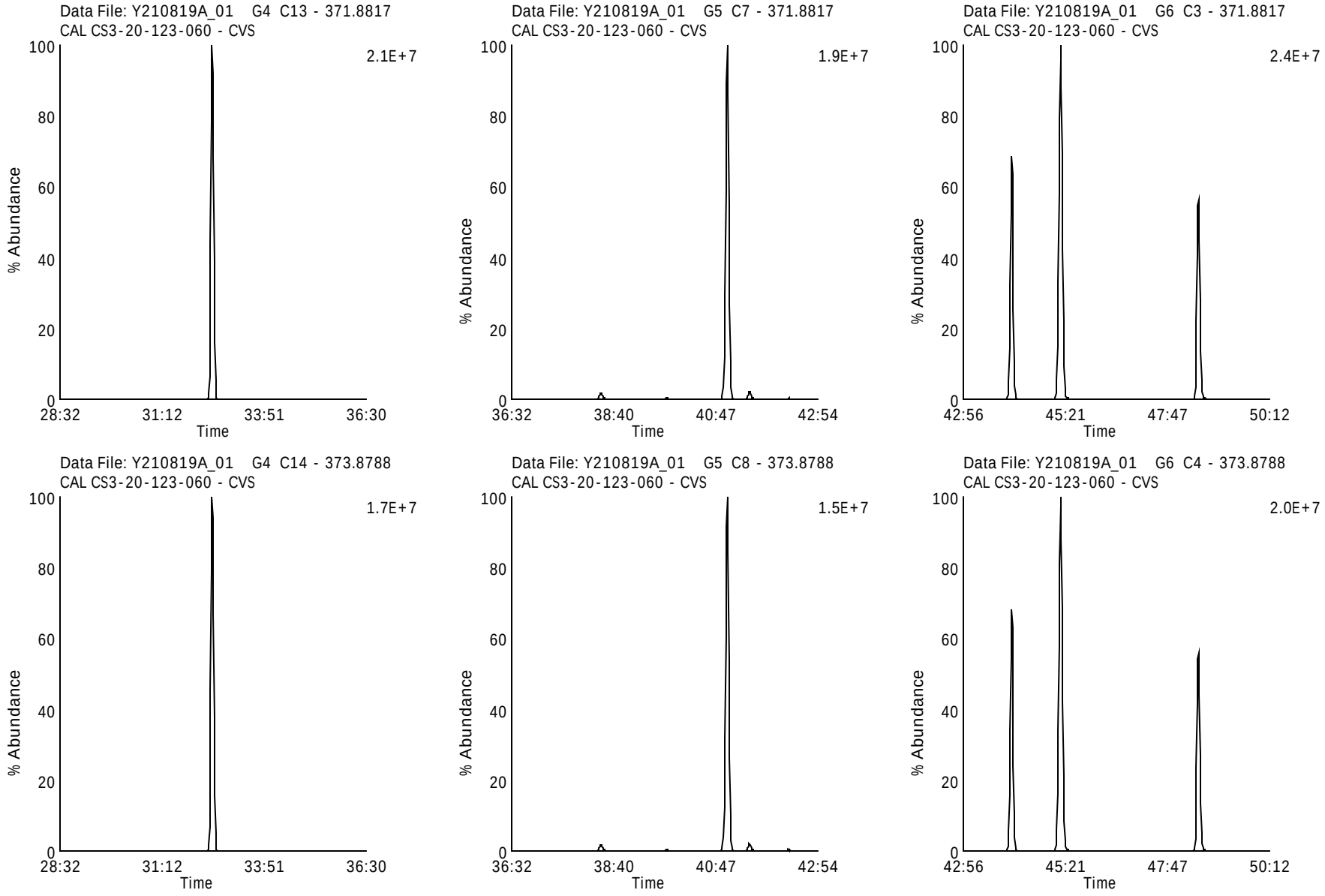


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

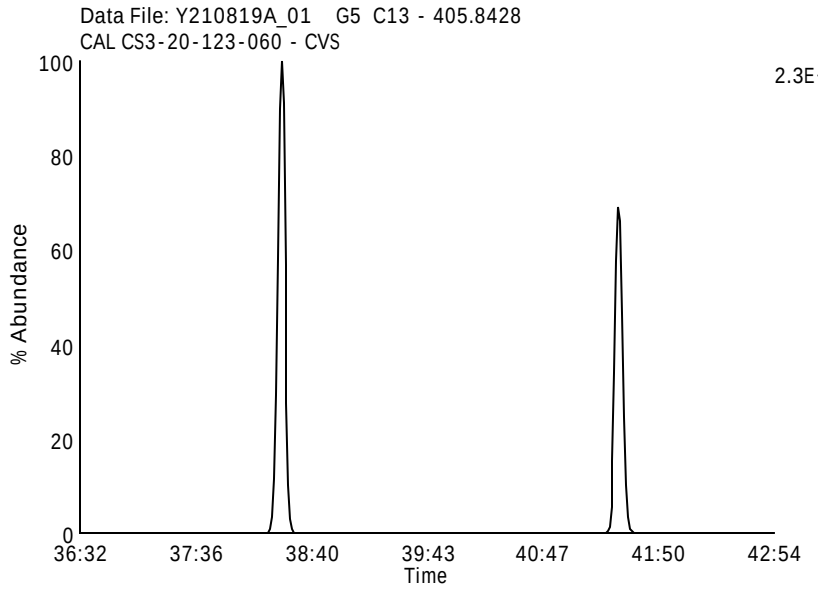
Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

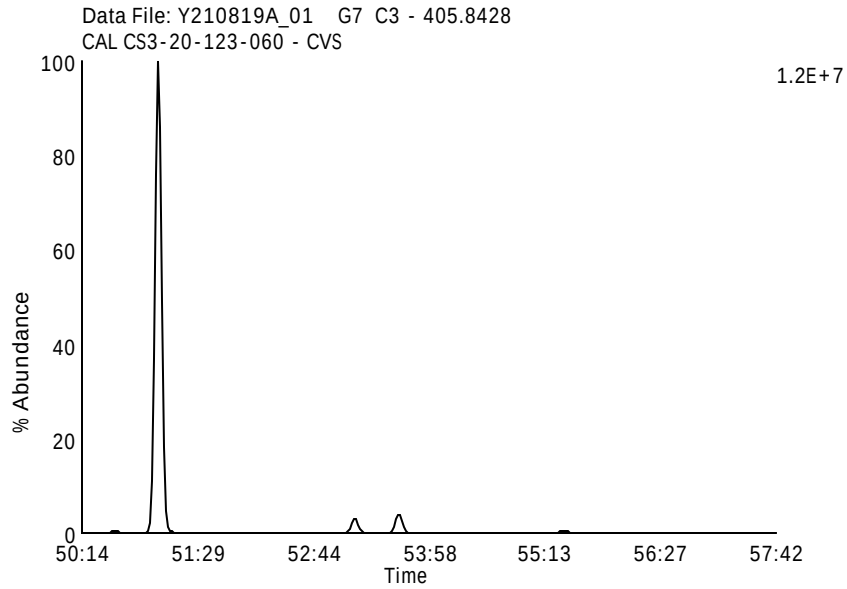
Sample Description: CAL CS3-20-123-060 - CVS

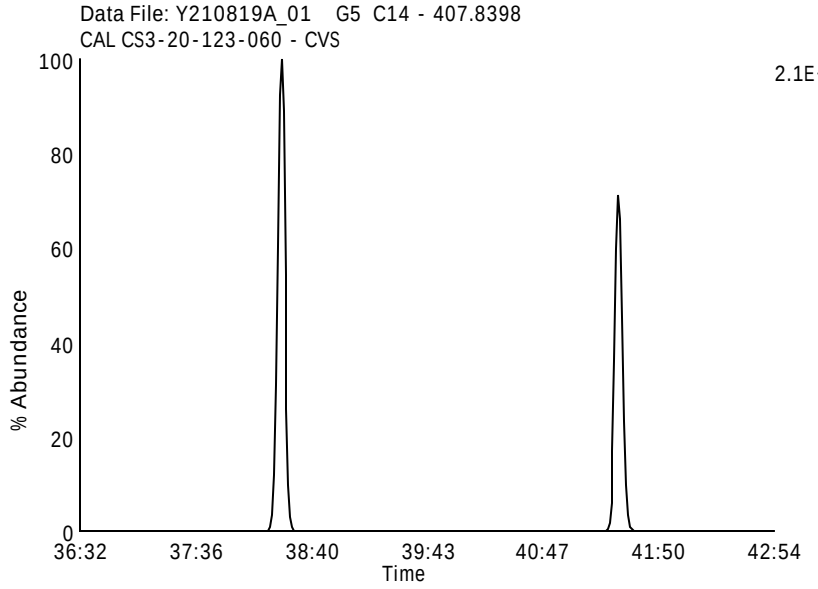


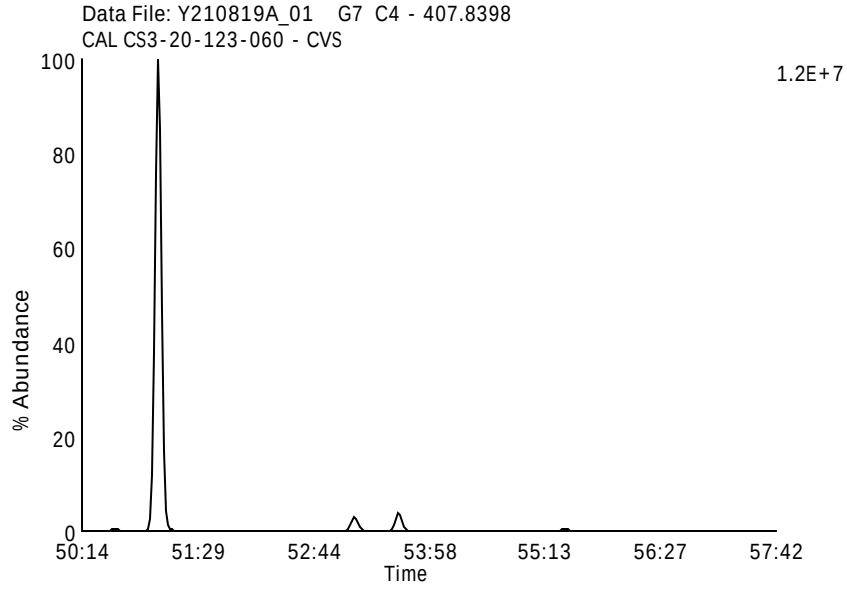
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





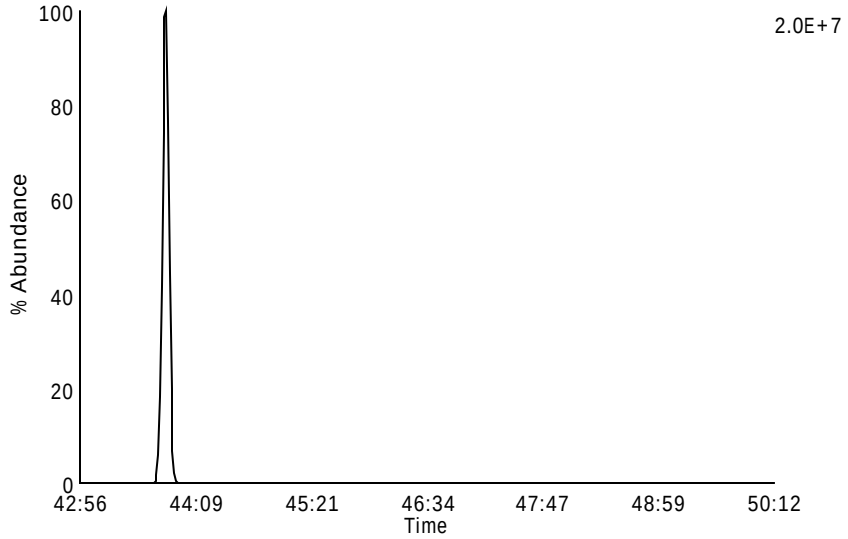




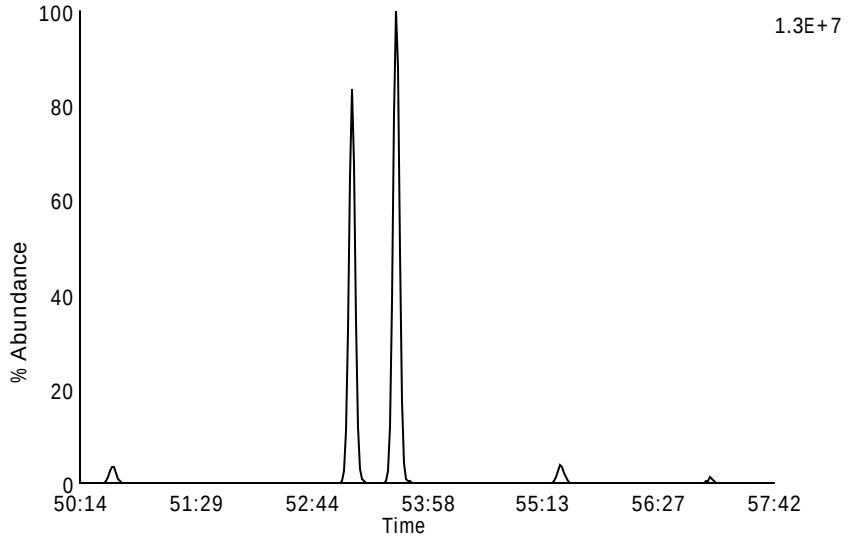
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

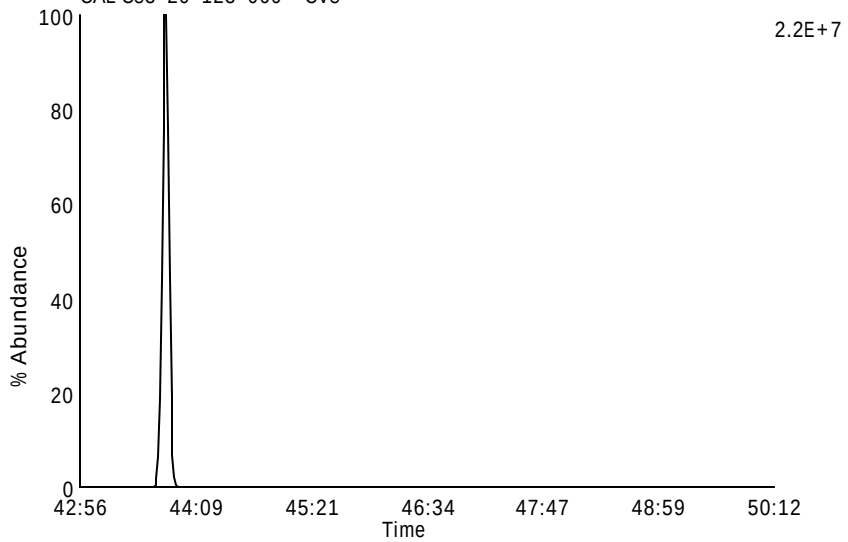
Data File: Y210819A_01 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



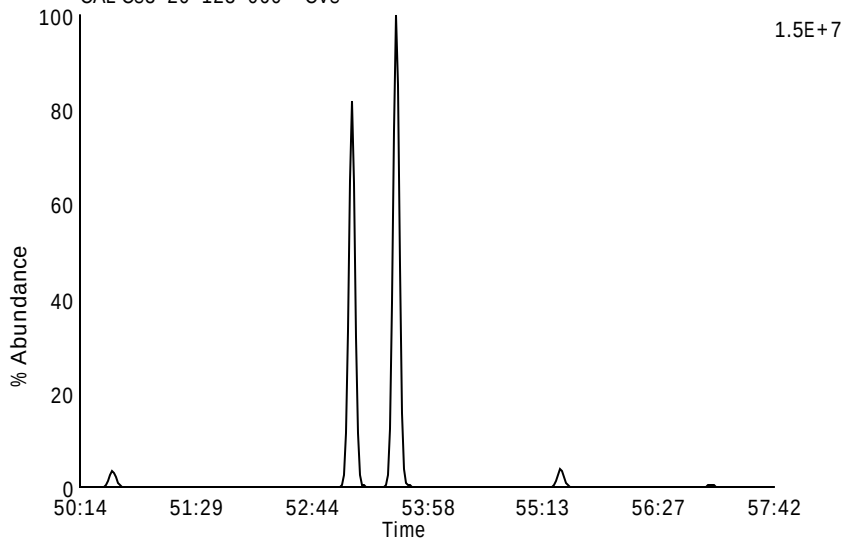
Data File: Y210819A_01 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G6 C14 - 441.8008
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

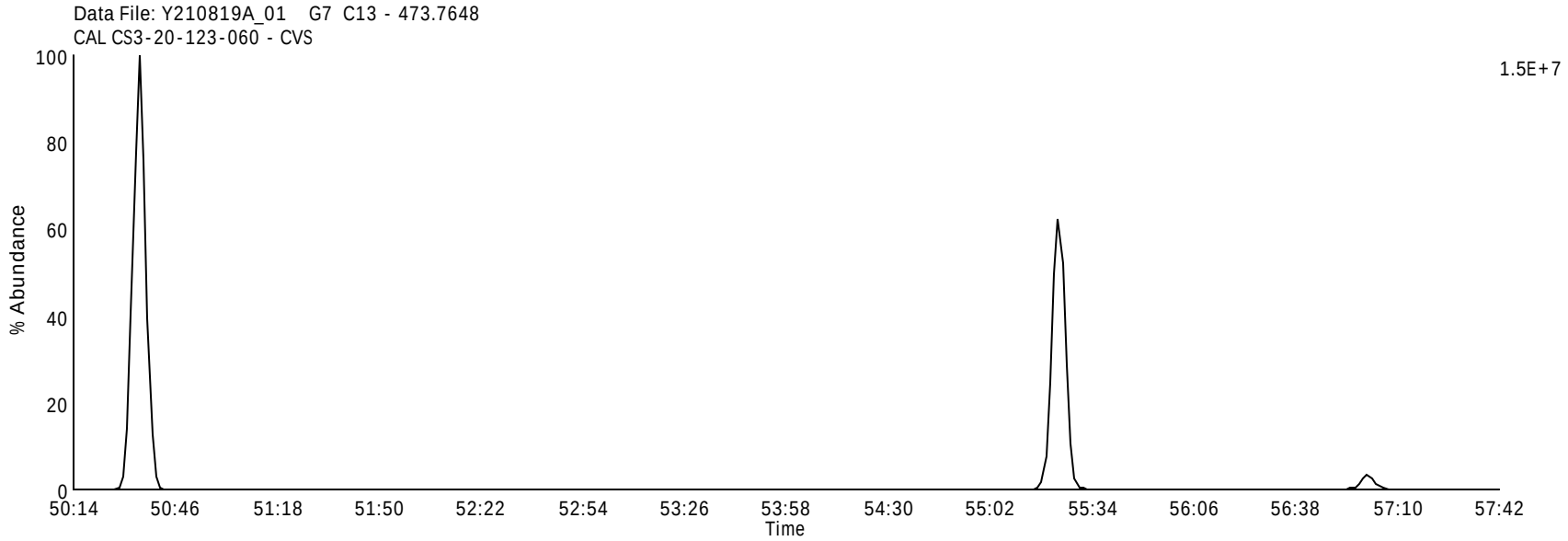


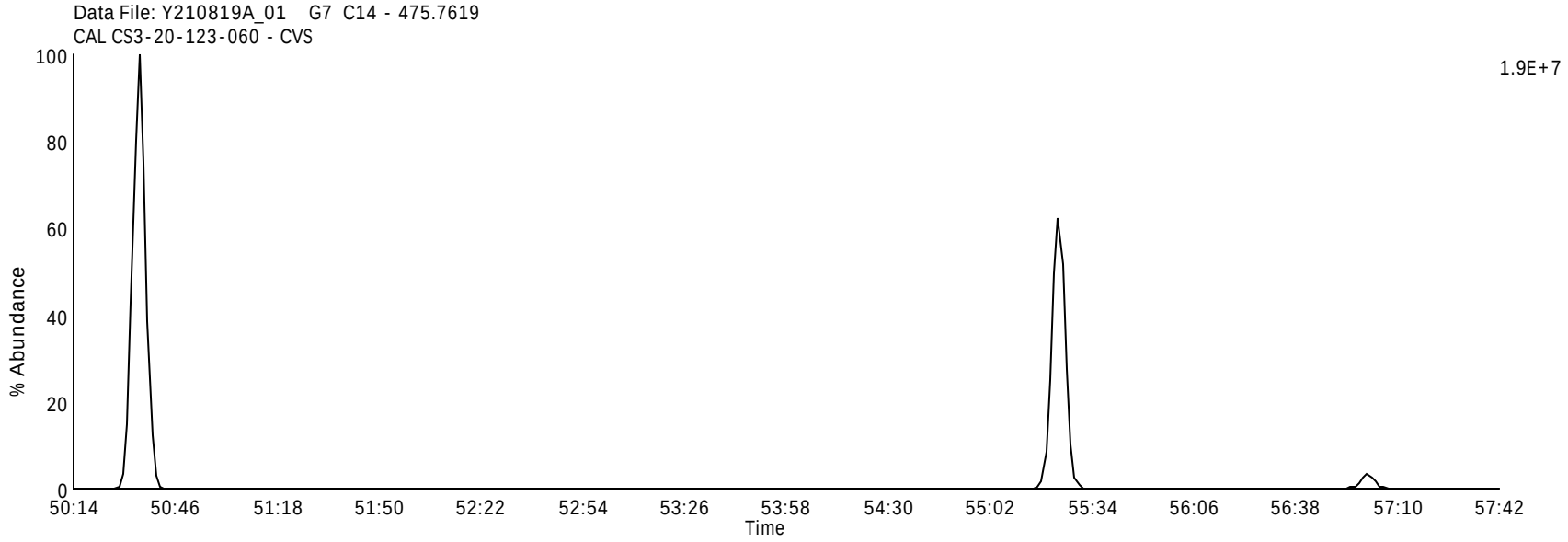
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



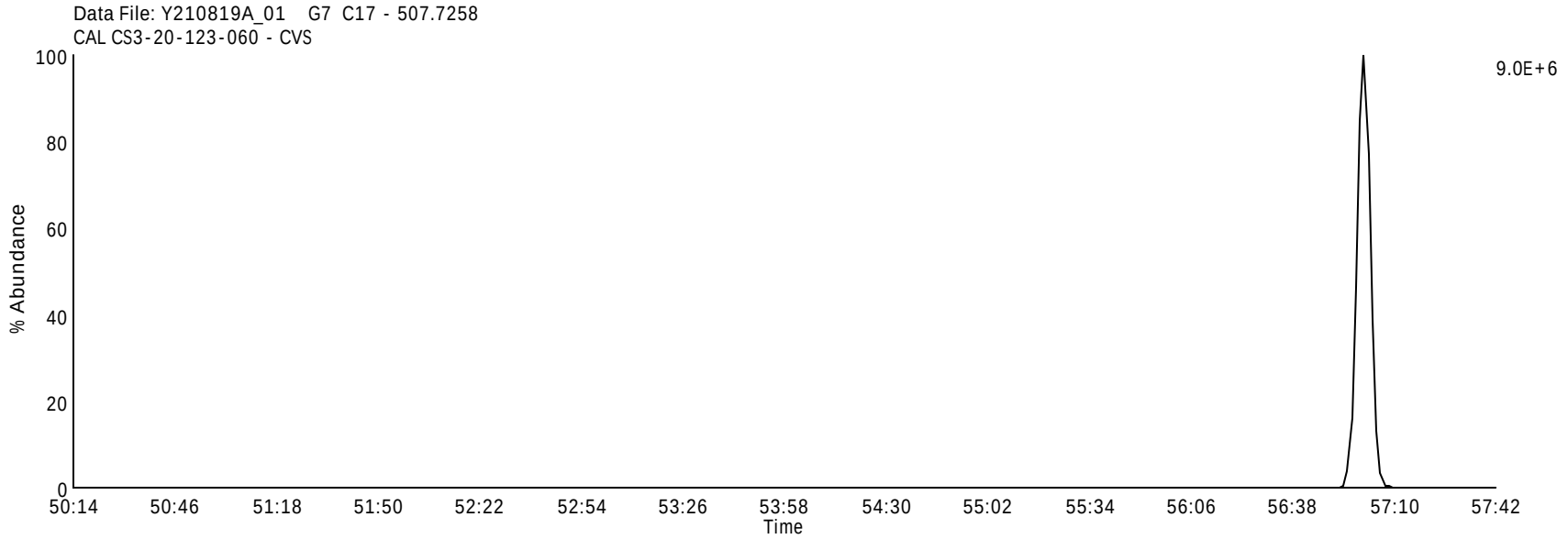


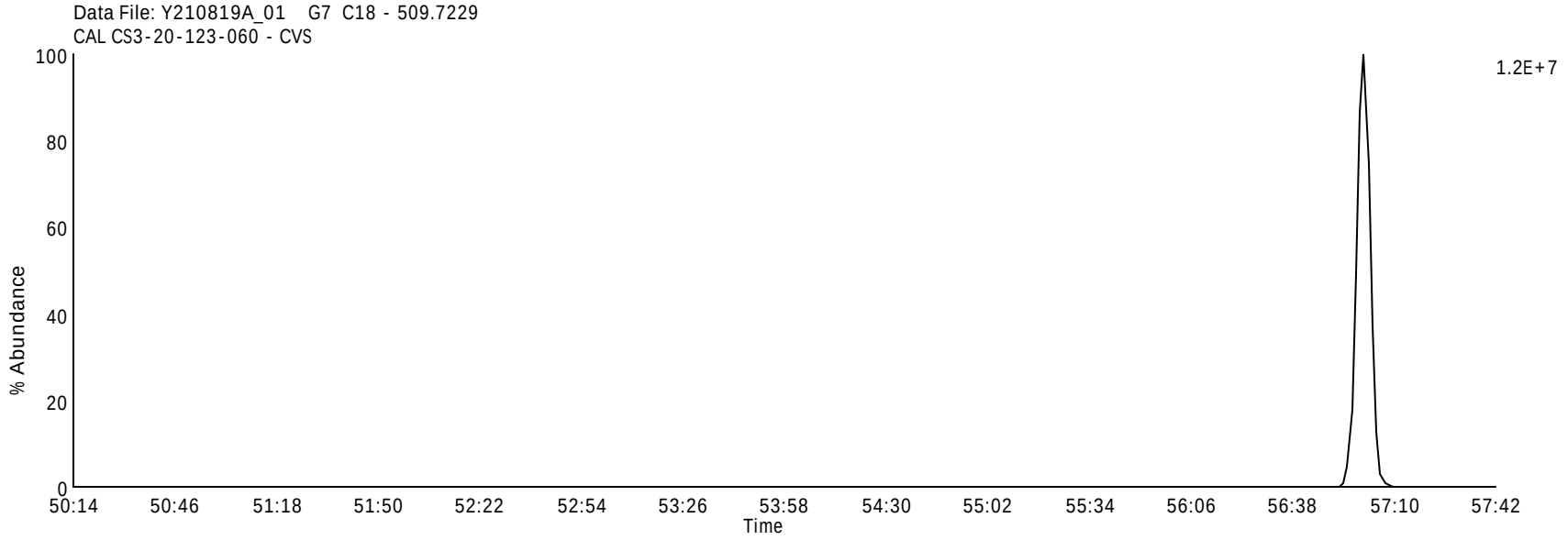
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



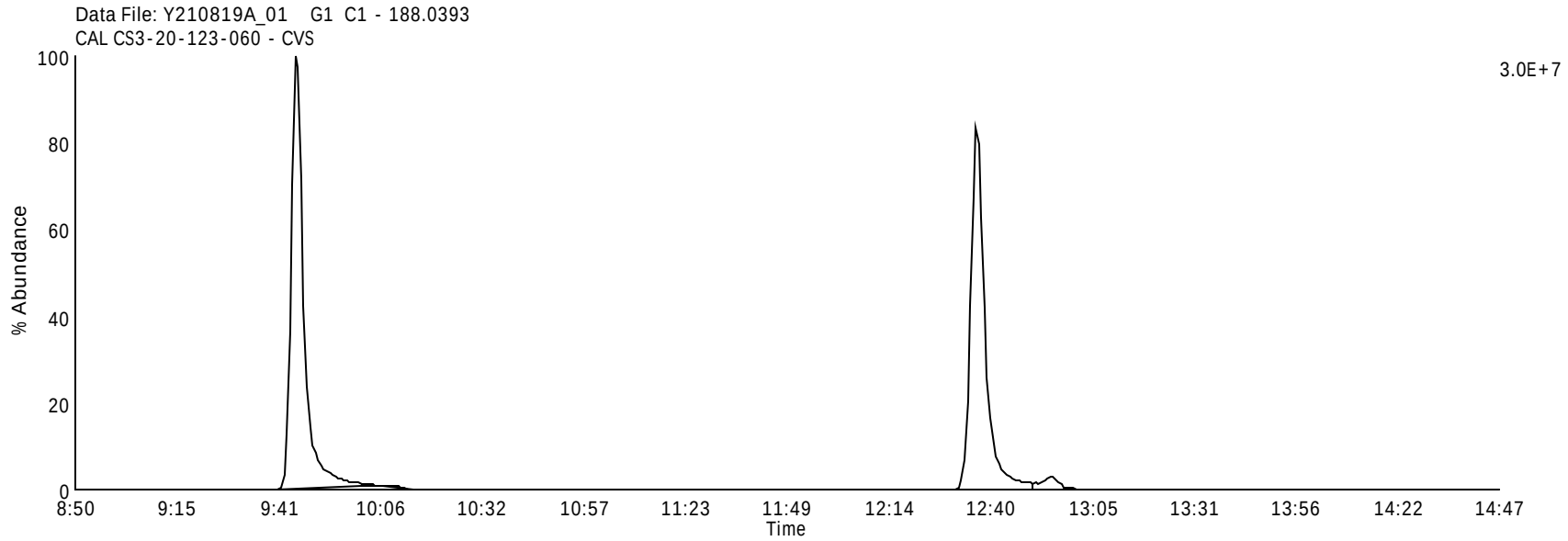


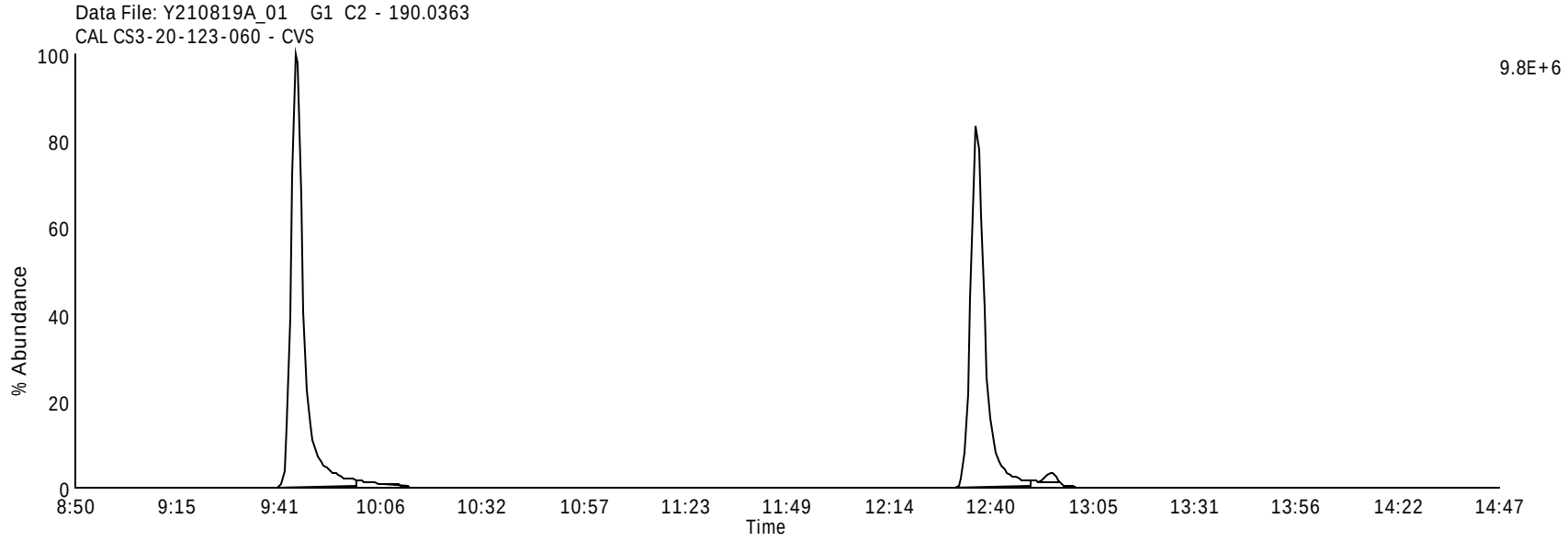
Mono Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

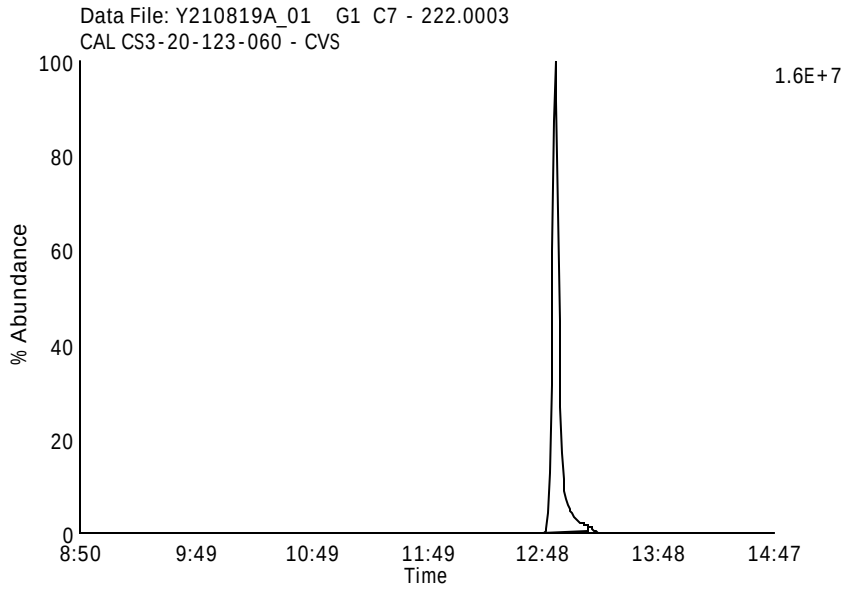
Sample Description: CAL CS3-20-123-060 - CVS

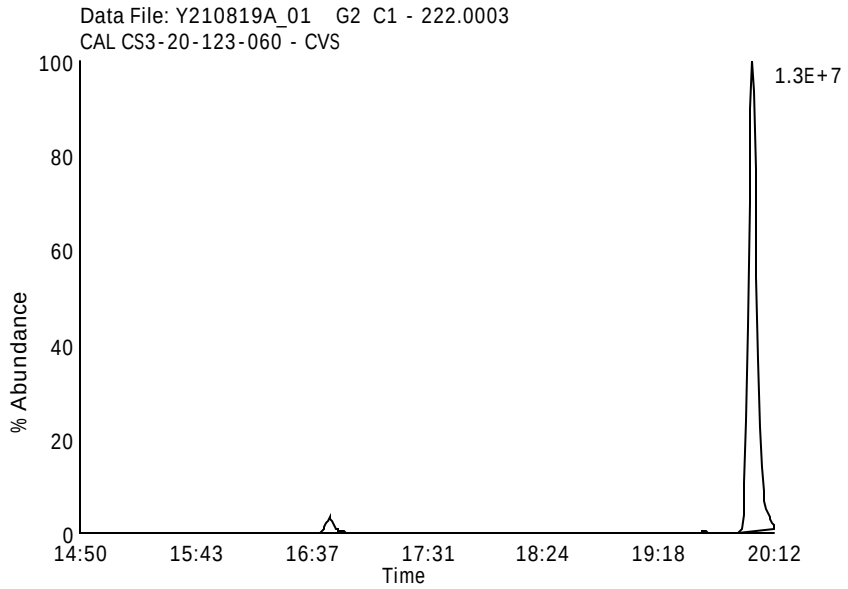


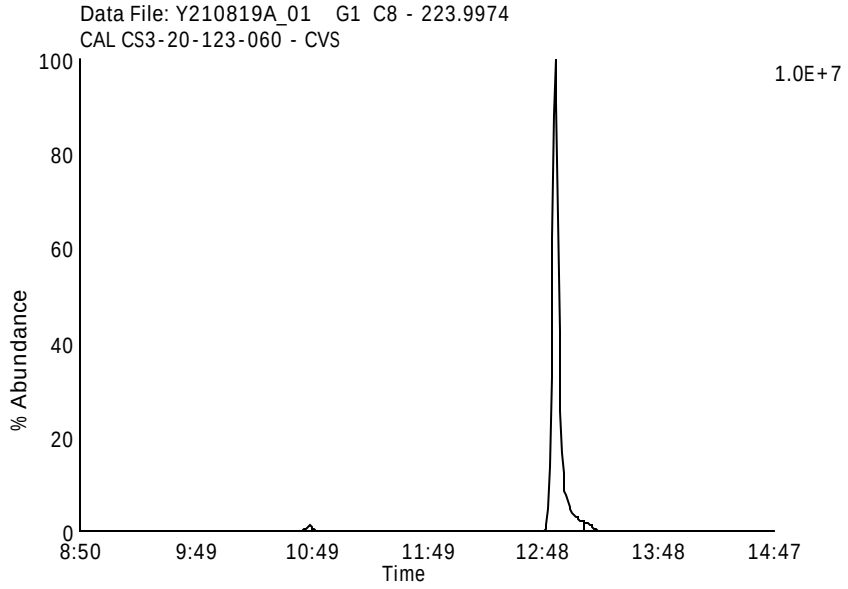


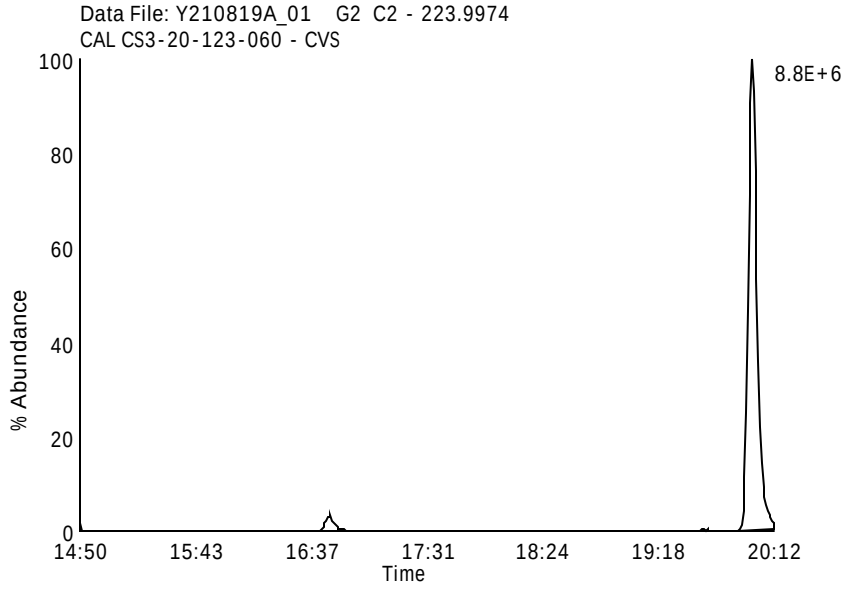
Di Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



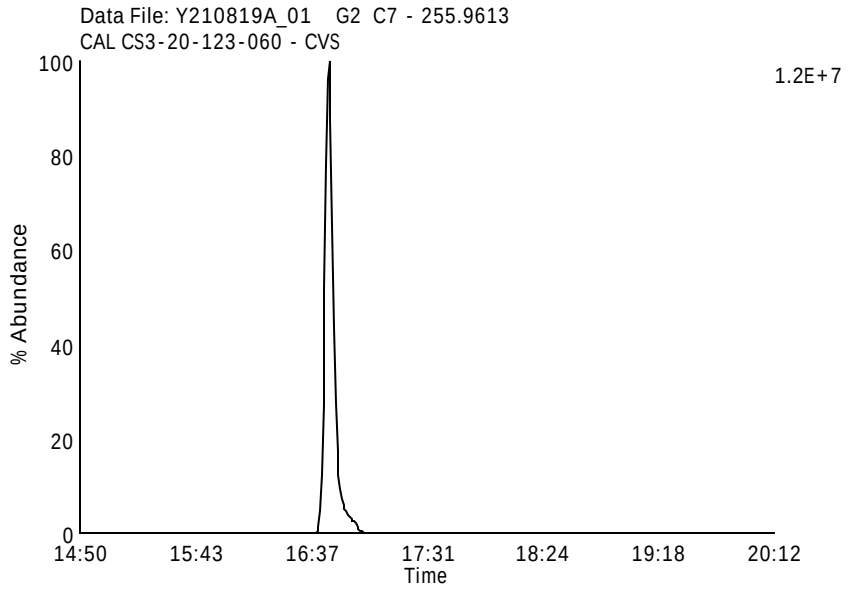


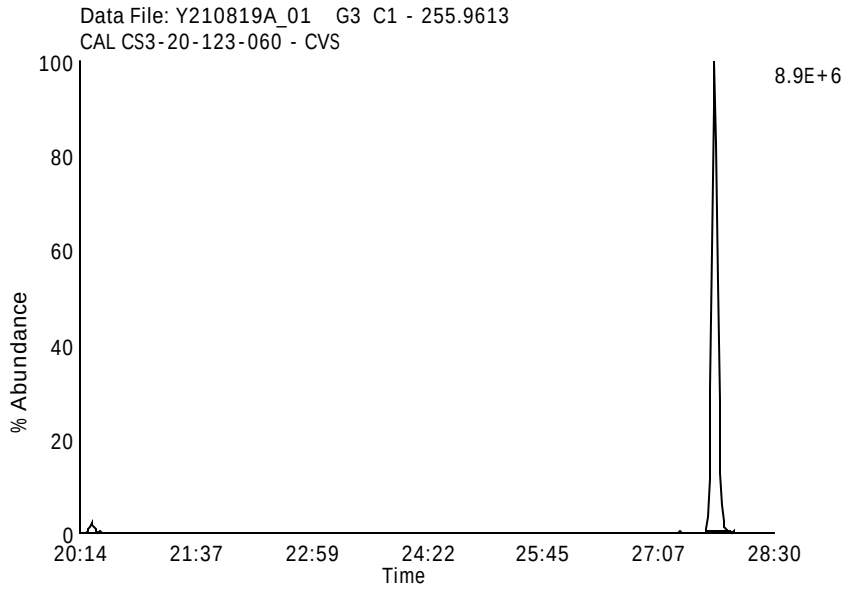


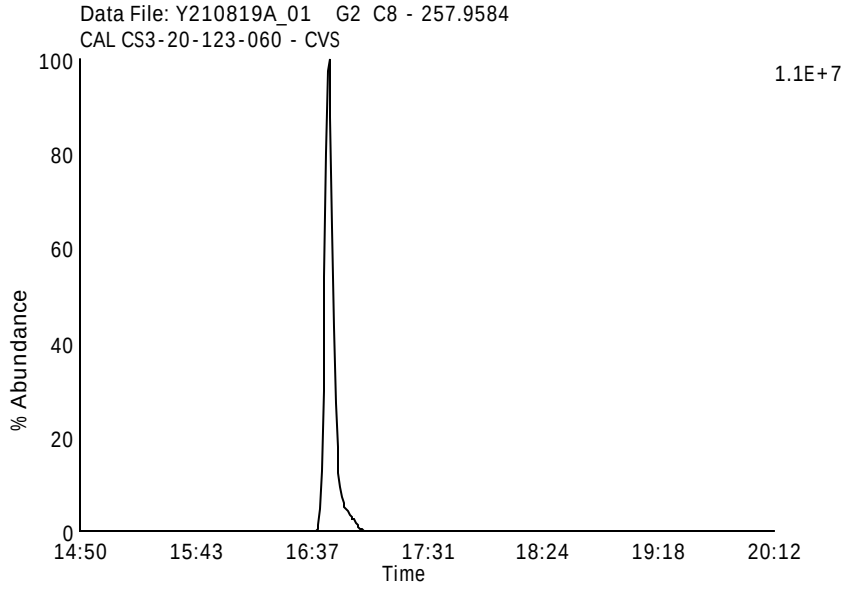


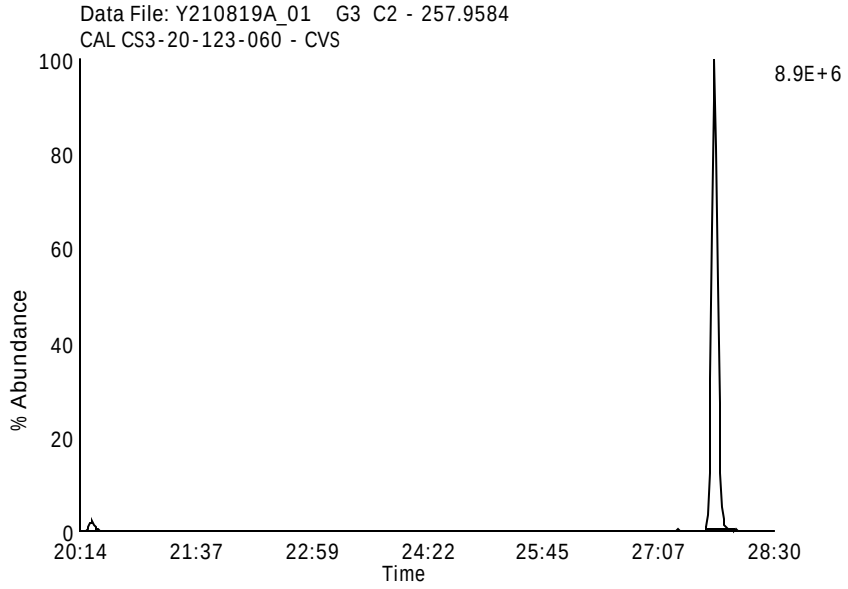
Tri Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



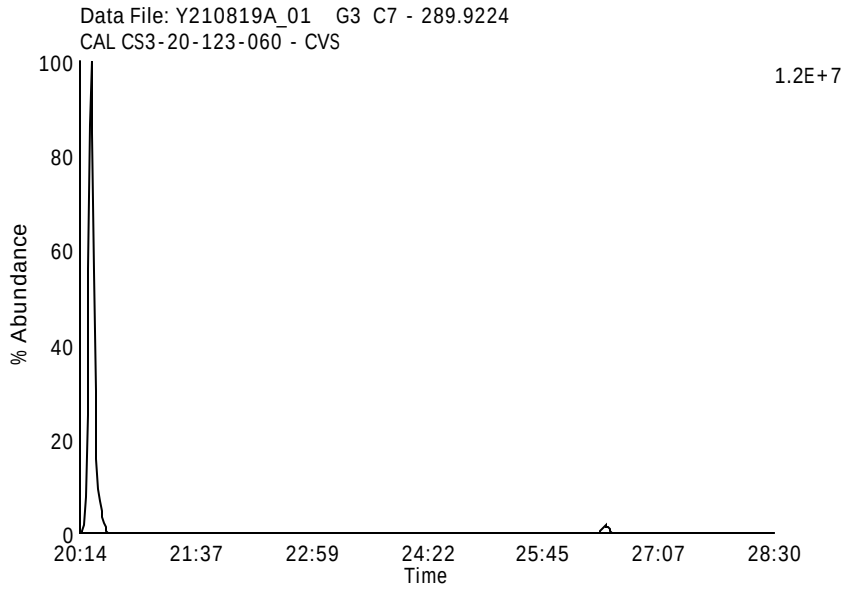


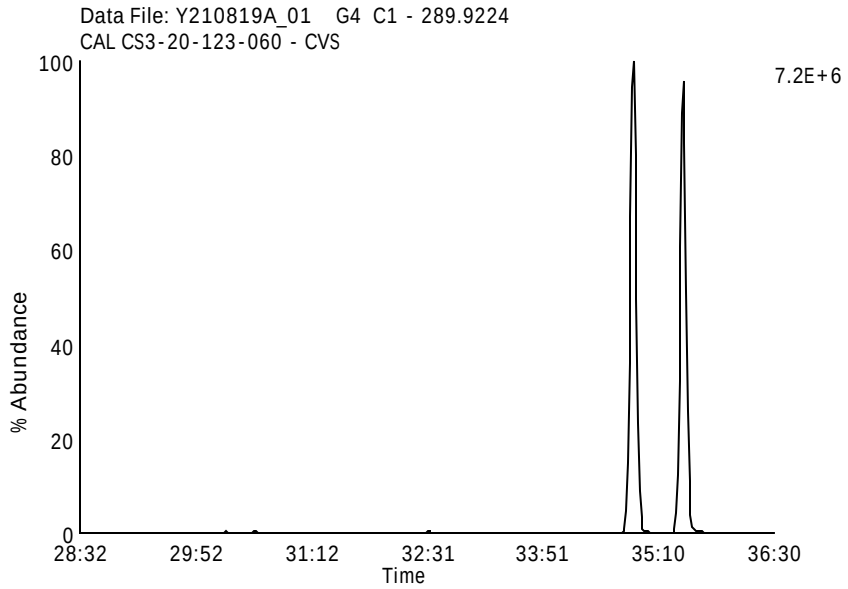


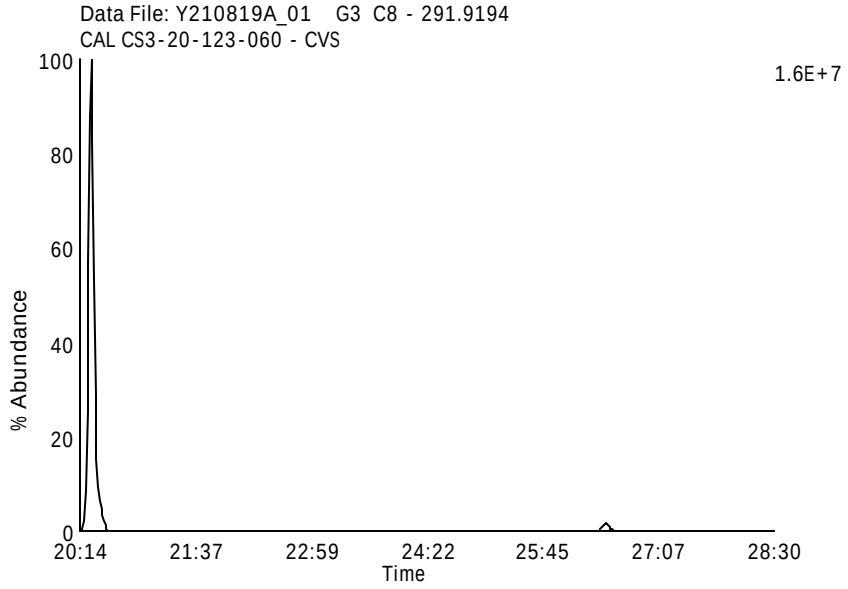


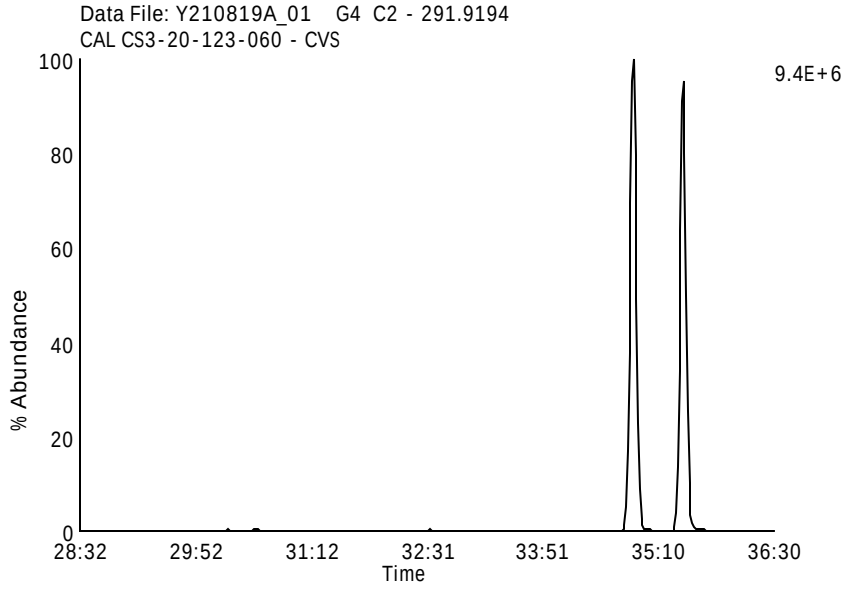
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



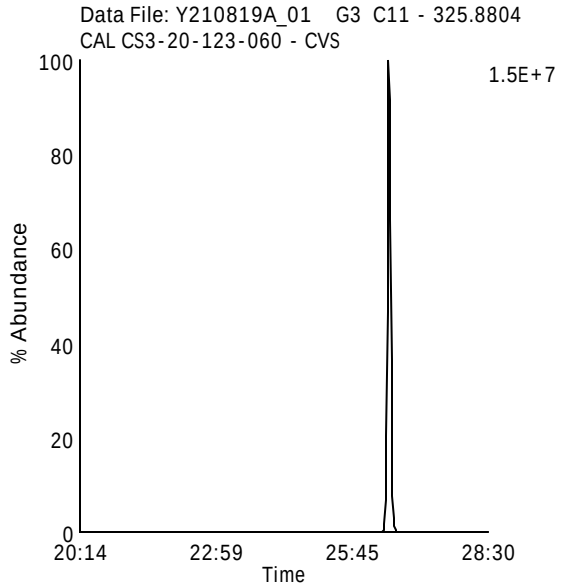


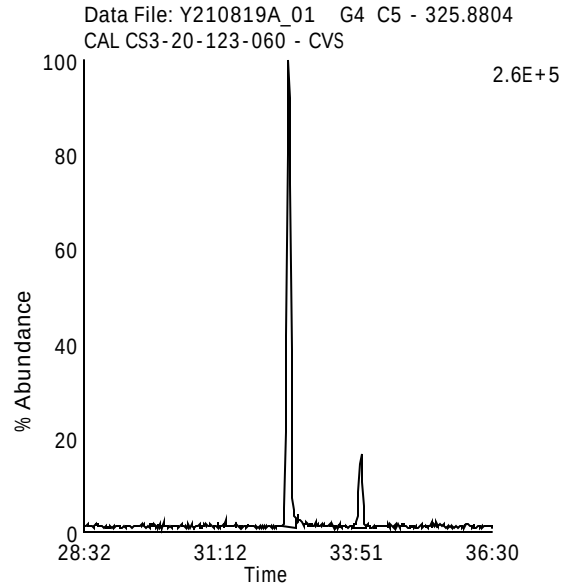


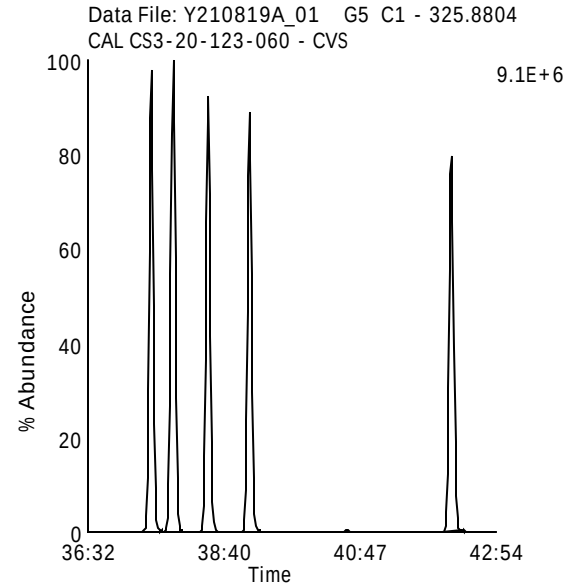


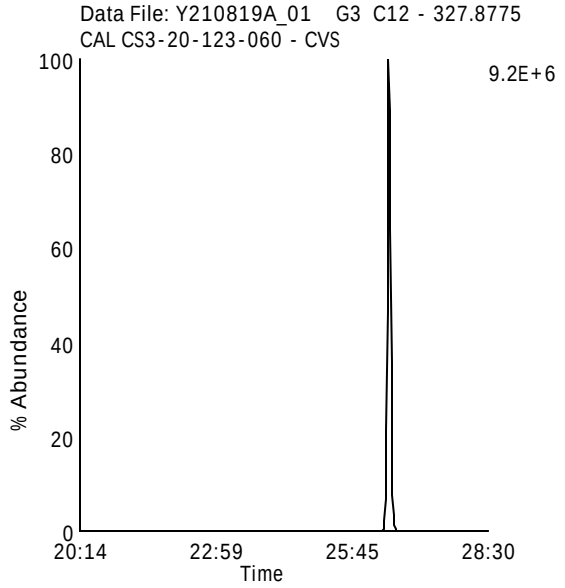
Penta Chlorinated Biphenyls

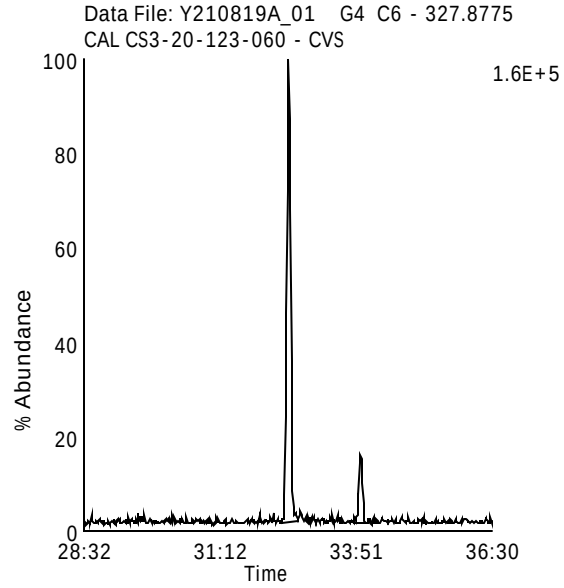
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

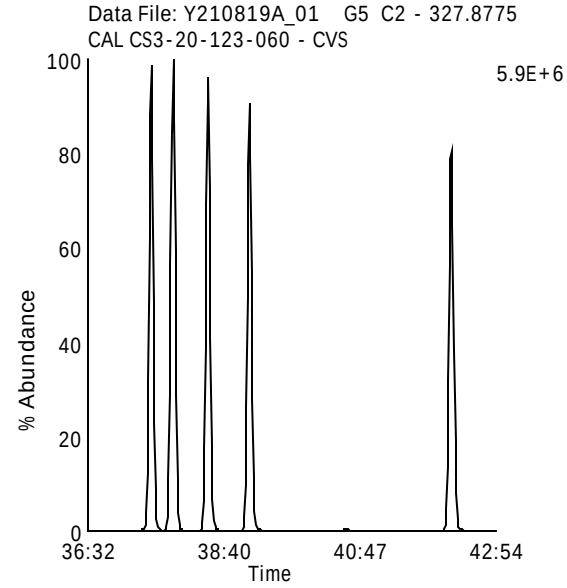






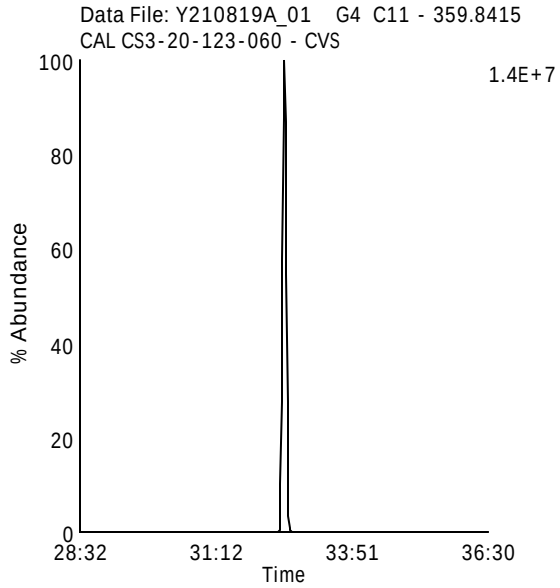


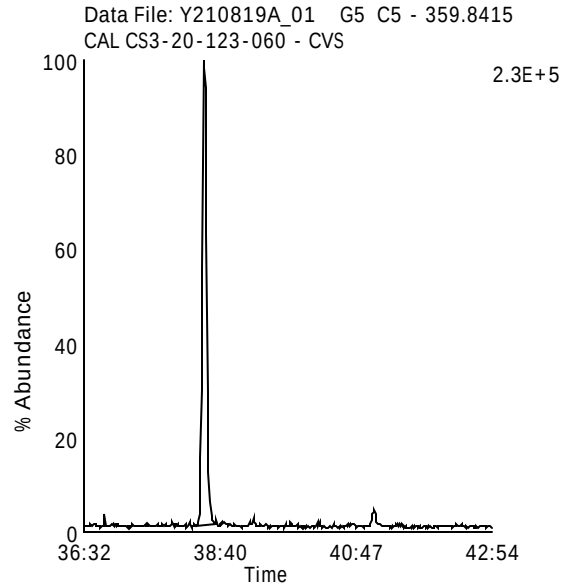


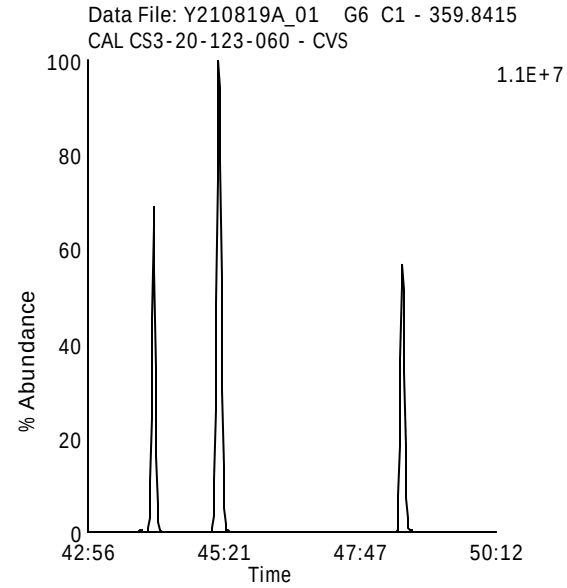


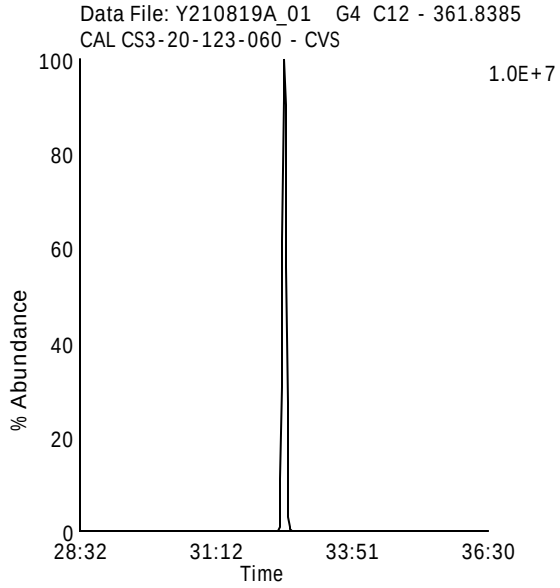
Hexa Chlorinated Biphenyls

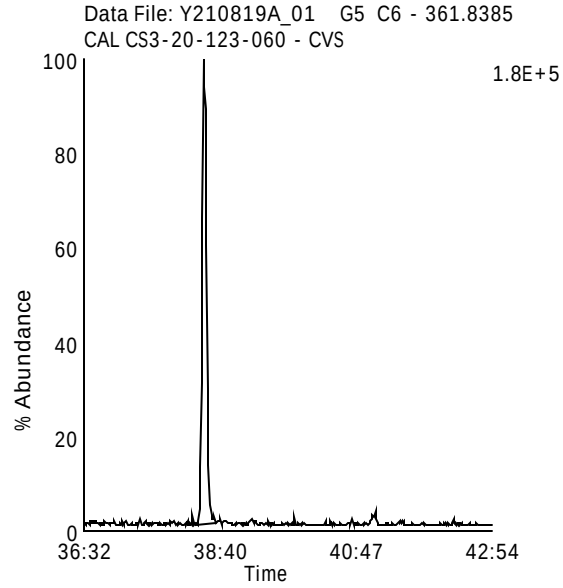
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

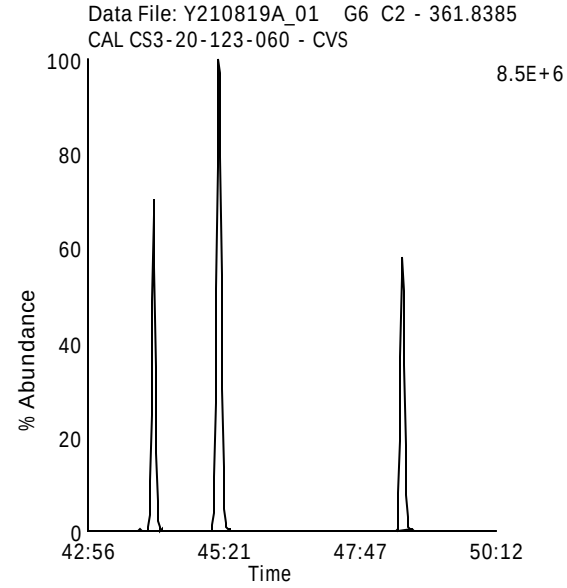






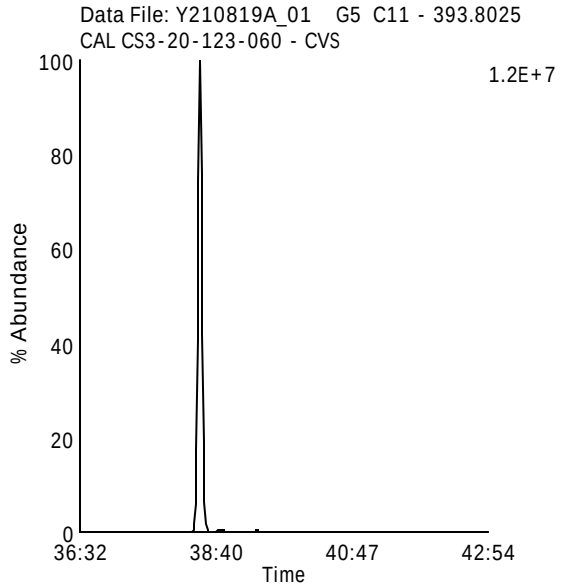


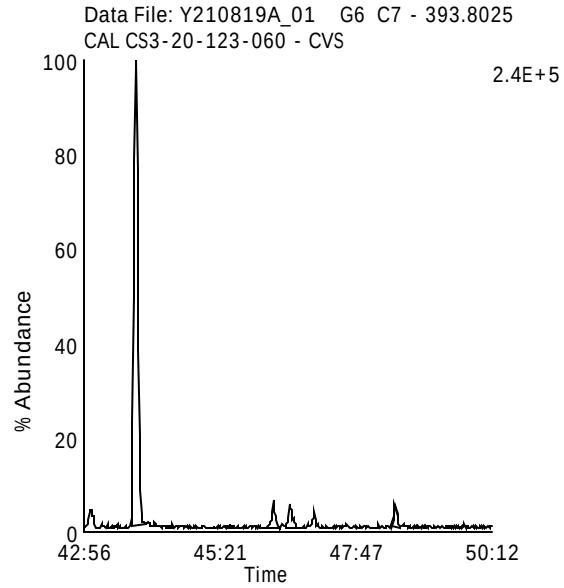


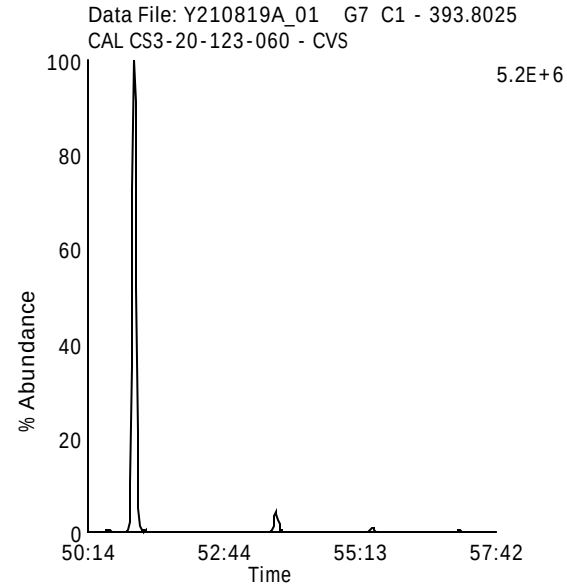


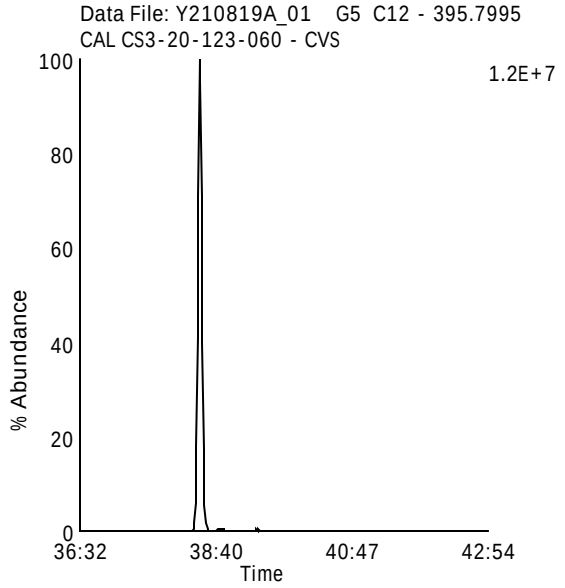
Hepta Chlorinated Biphenyls

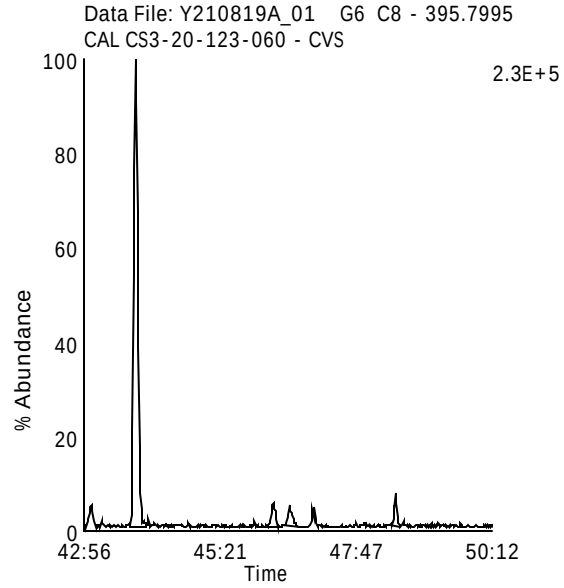
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

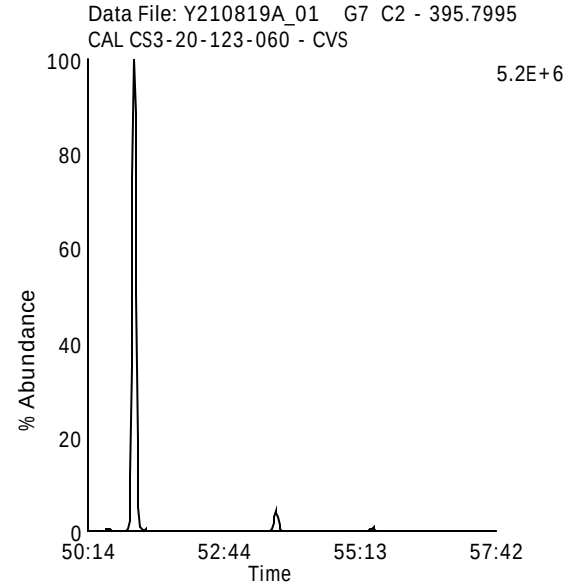






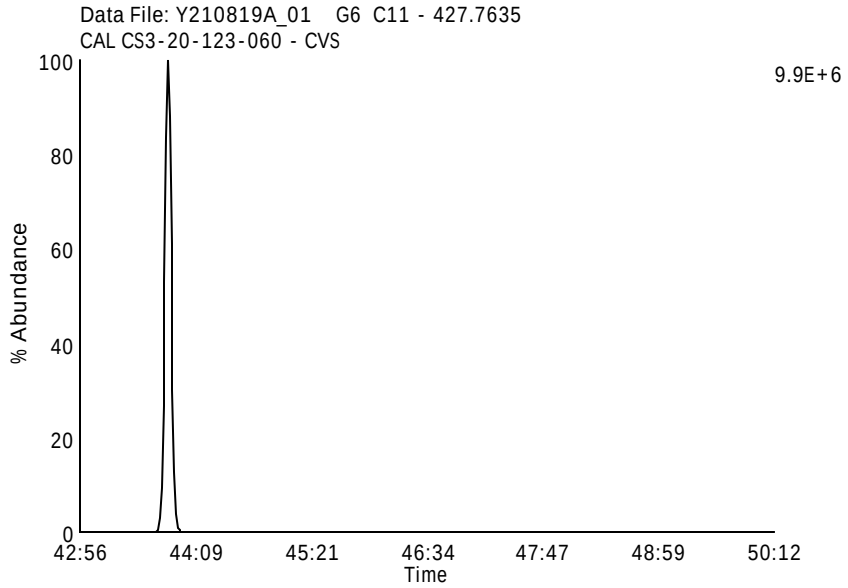


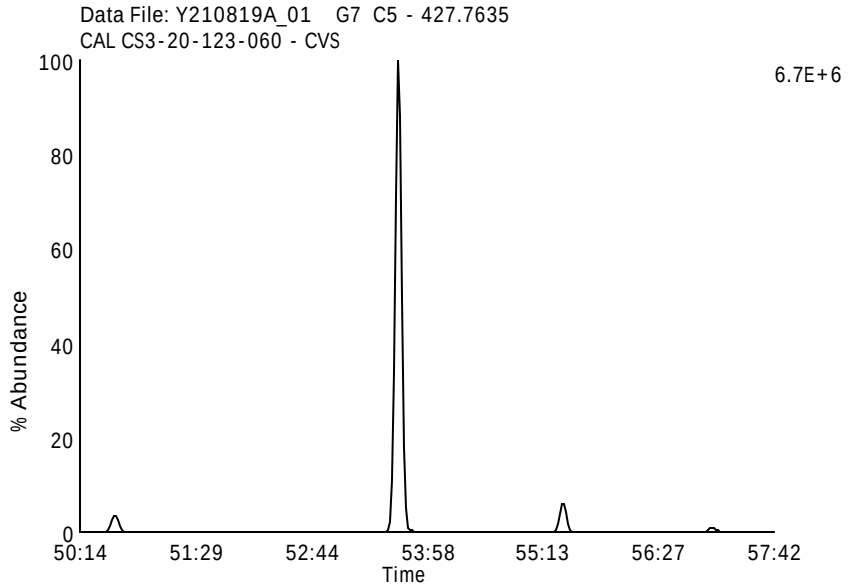


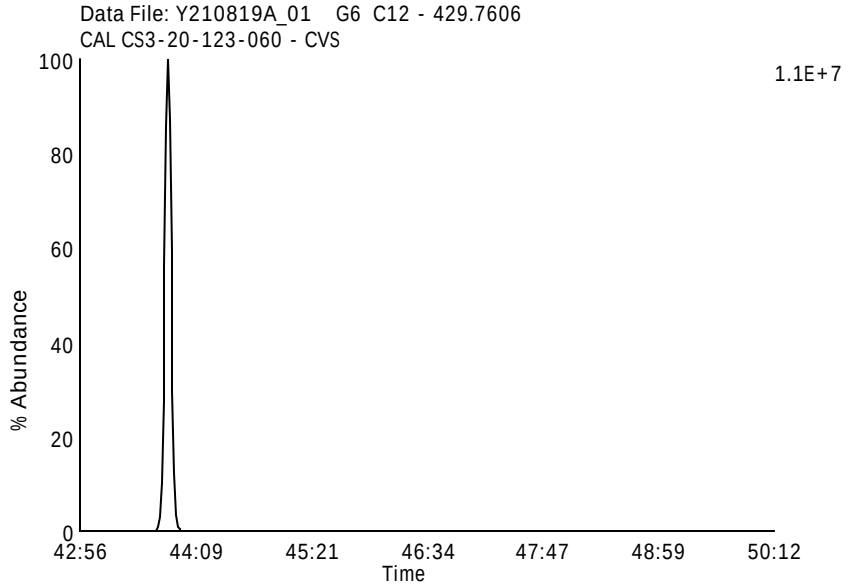


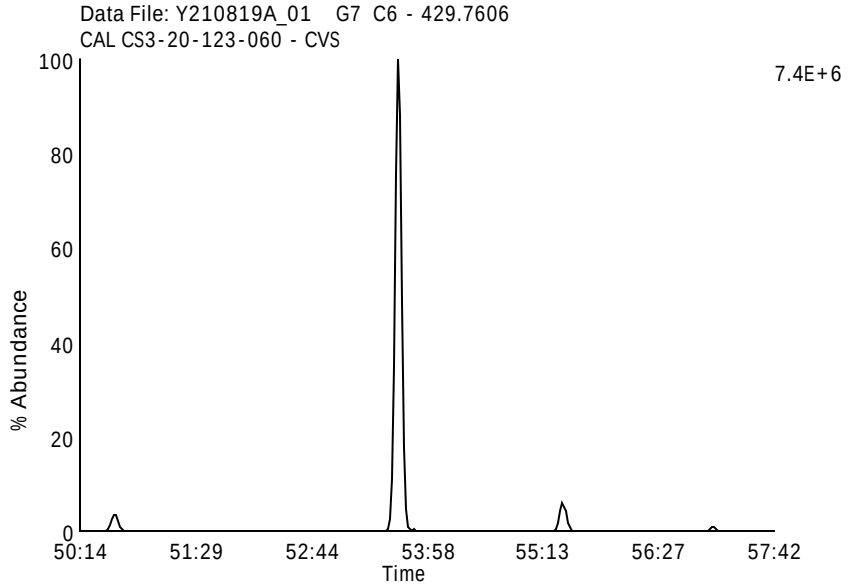
Octa Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







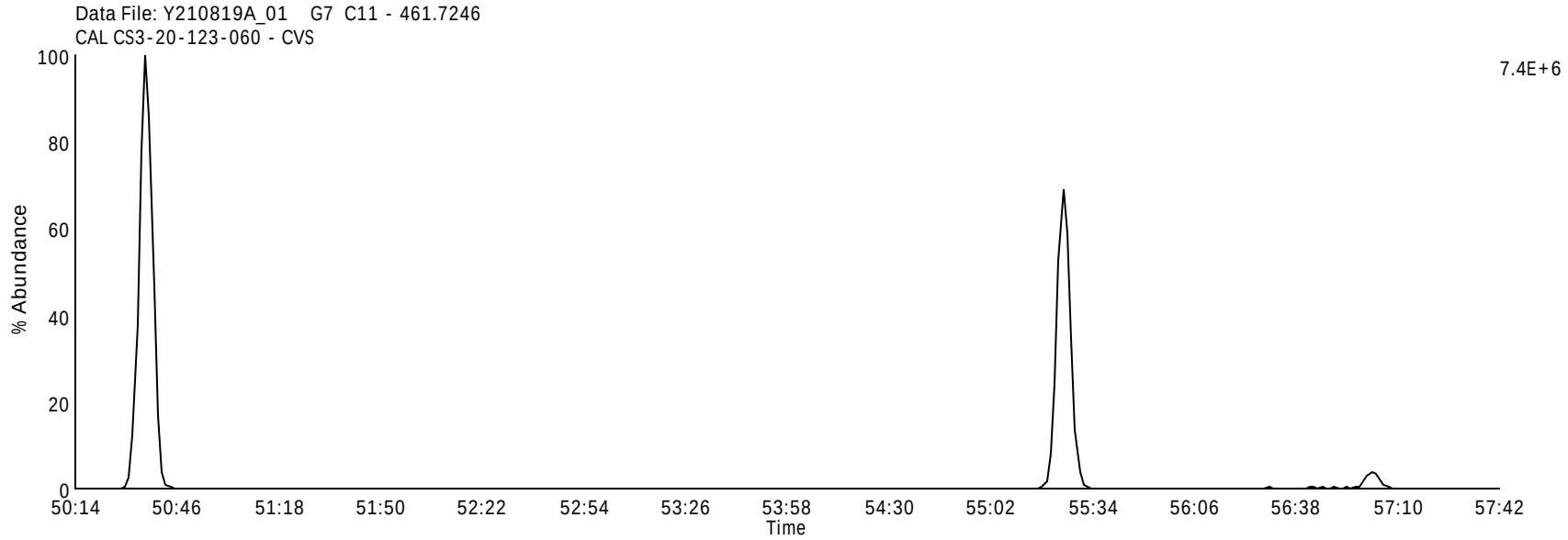


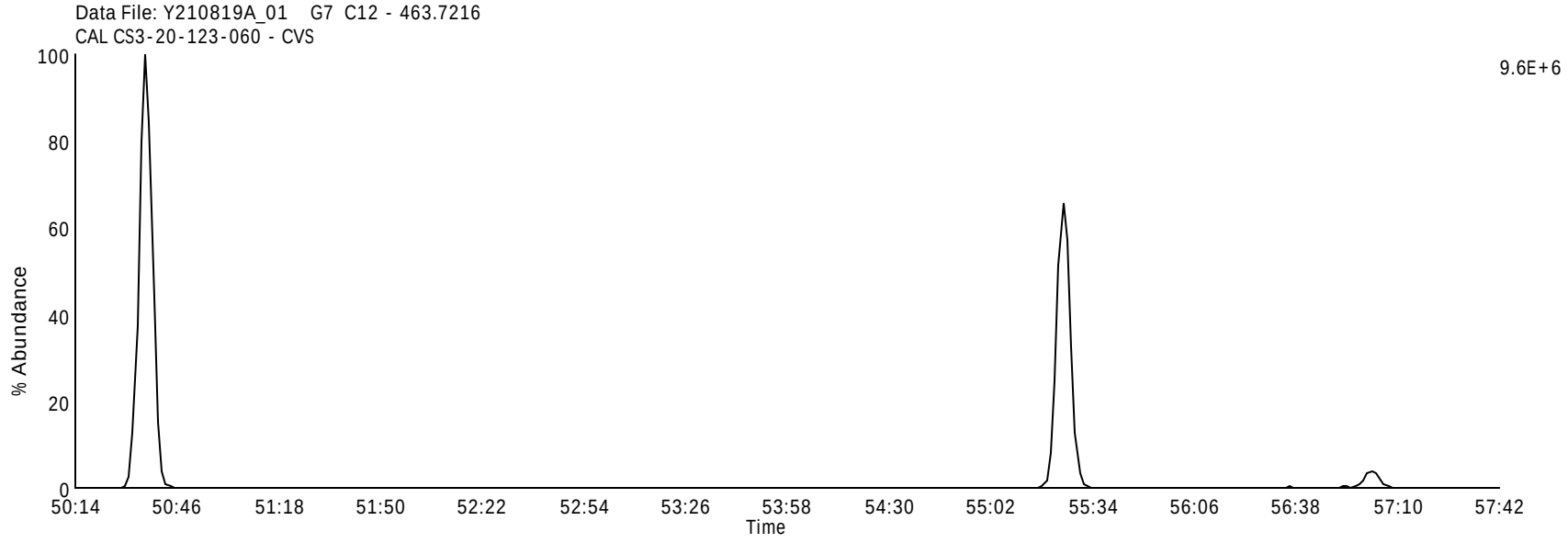
Nona Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



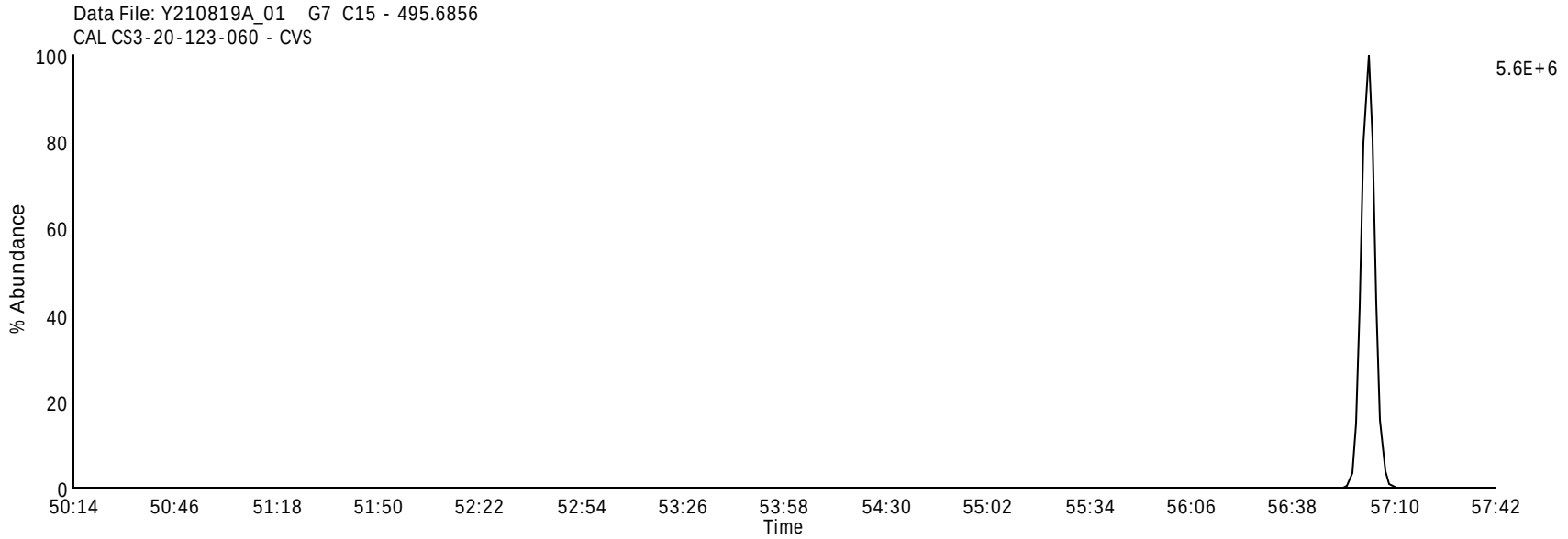


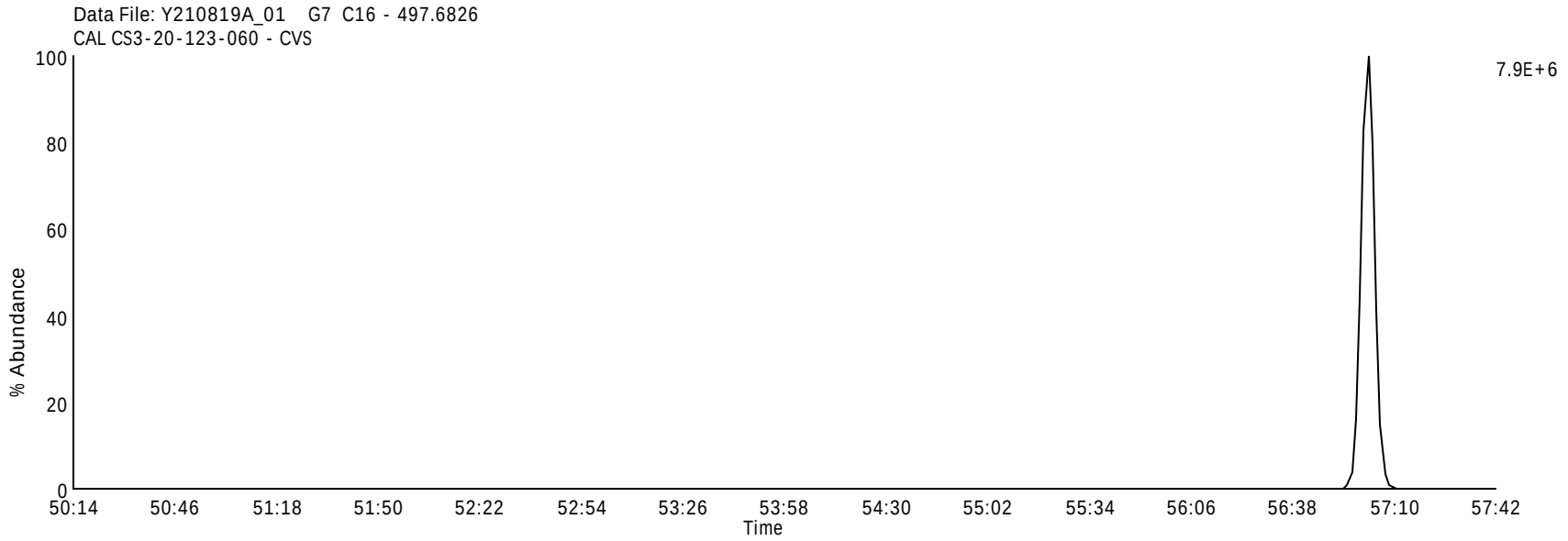
Deca Chlorinated Biphenyl

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

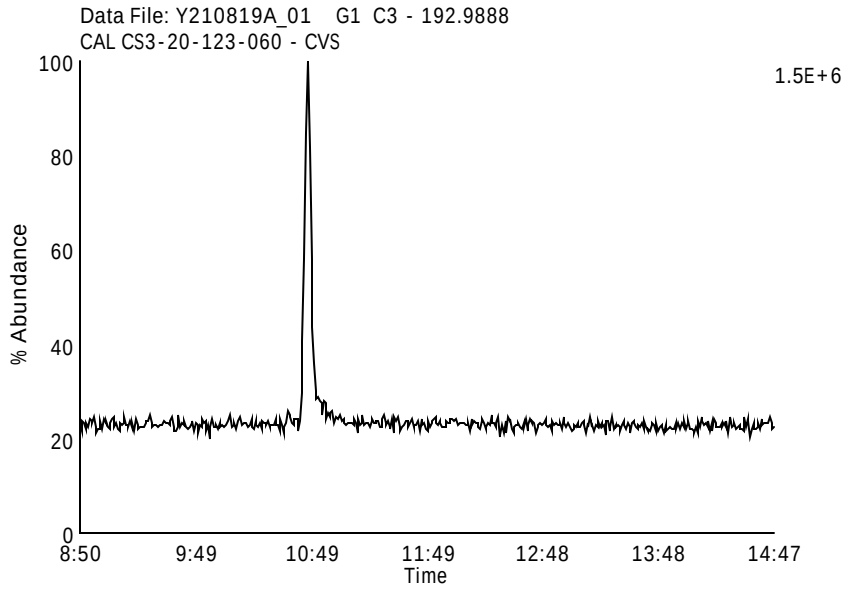
Sample Description: CAL CS3-20-123-060 - CVS

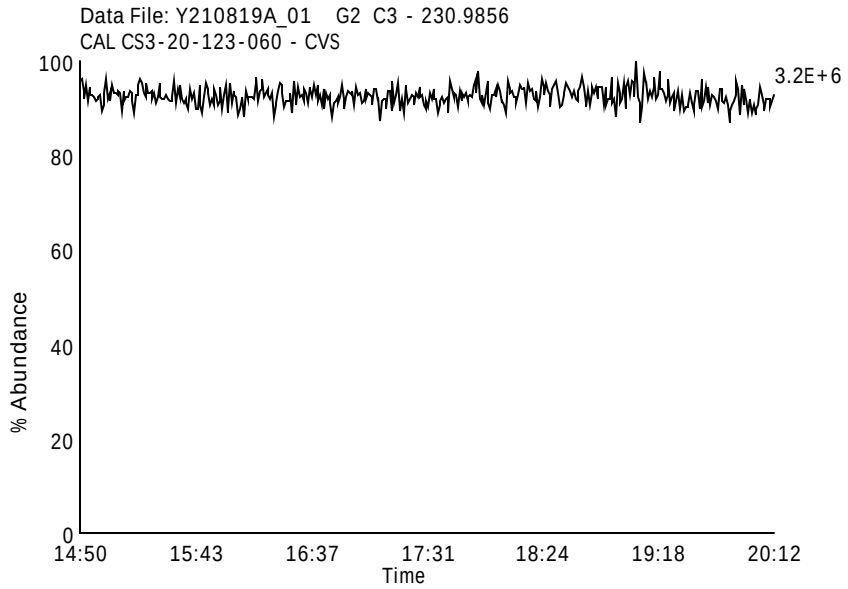


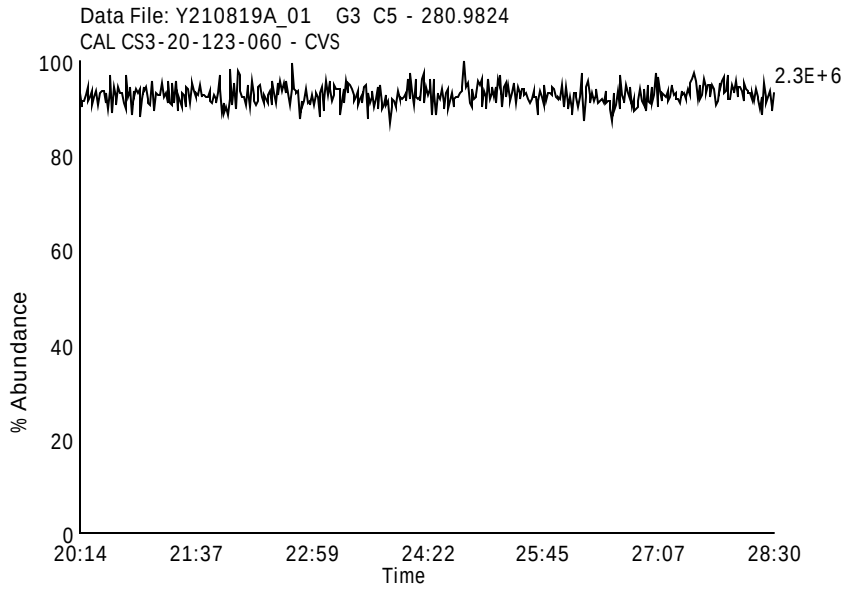


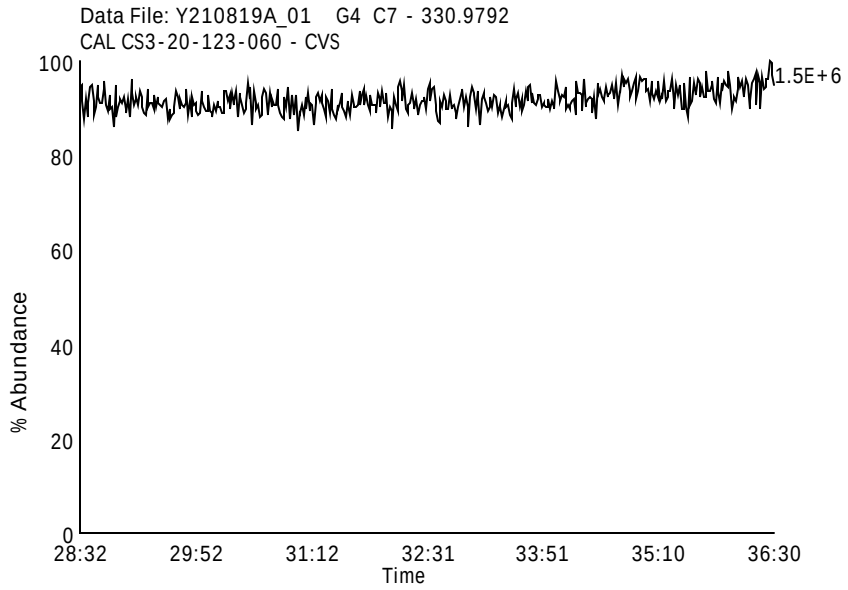
Group 1 - 4 Lock mass

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





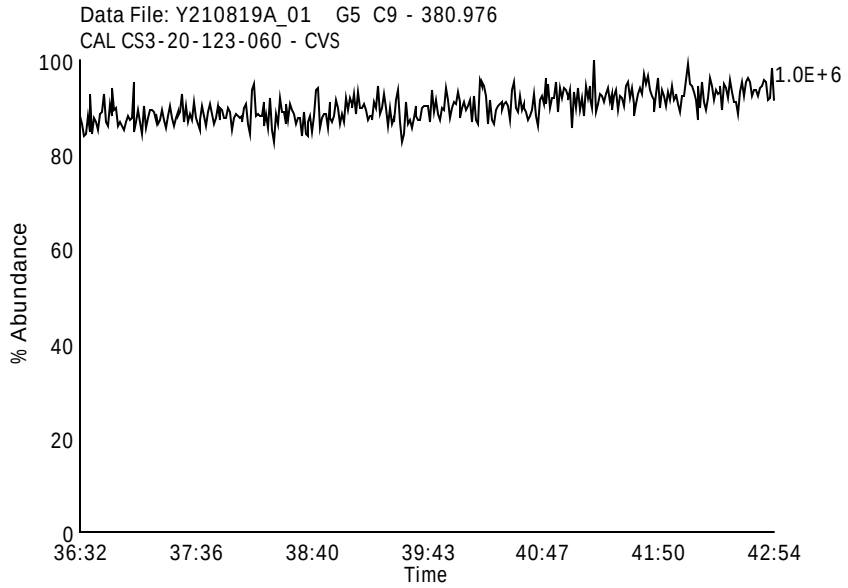


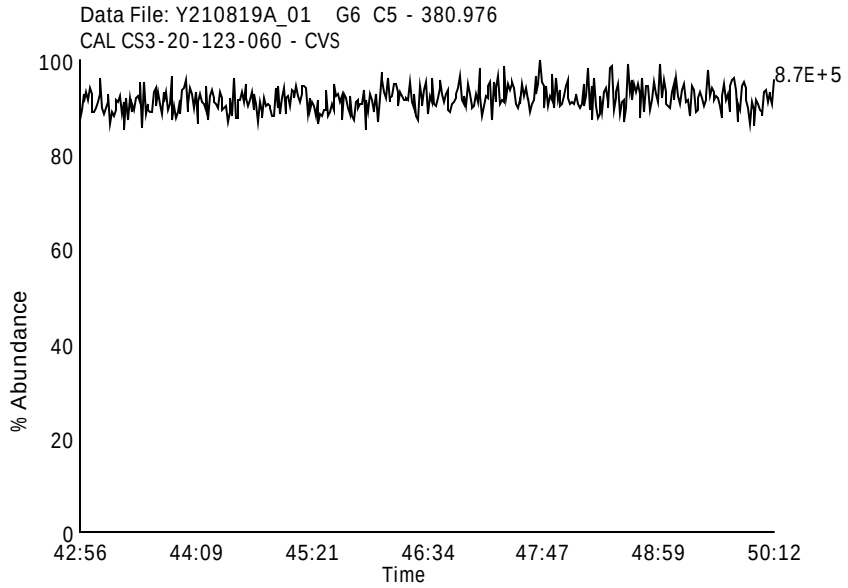


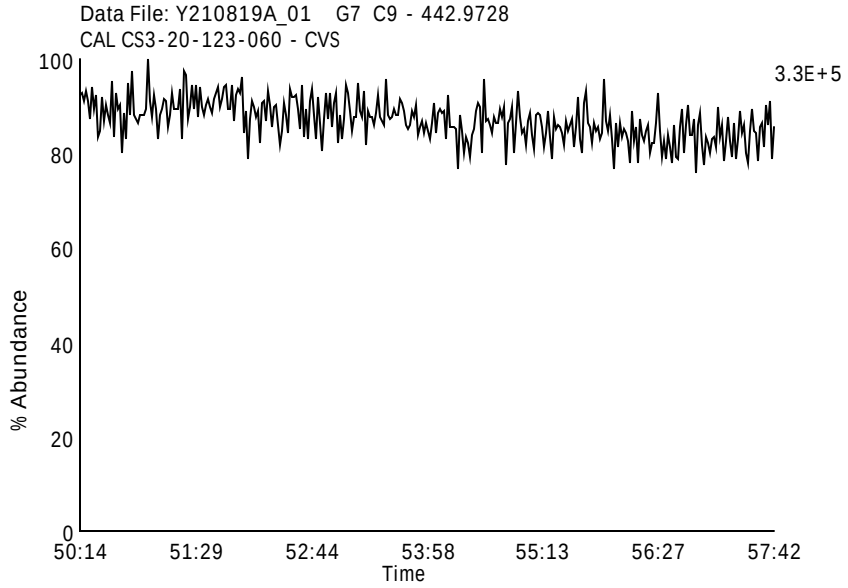
Group 5 - 7 Lock mass

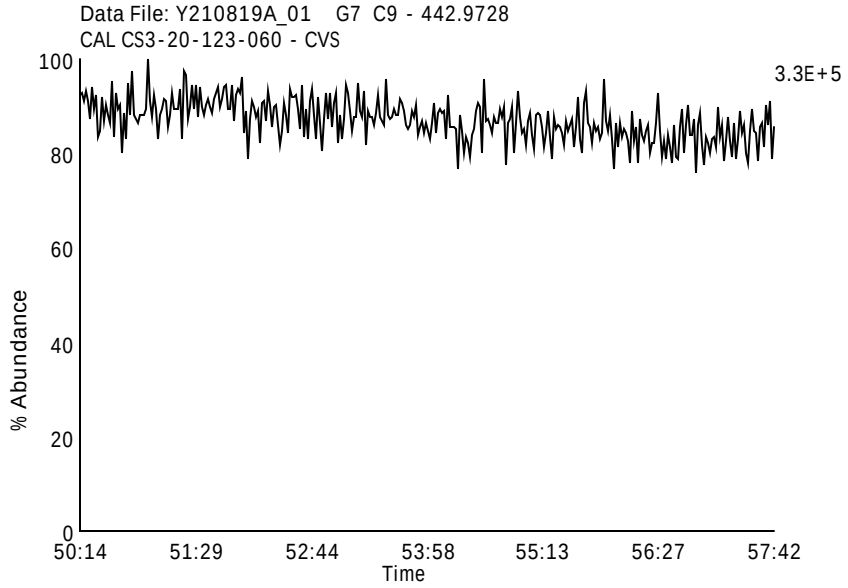
Data File Name: Y210819A_01
Date Acquired: 8/19/2021
Sample Description: CAL CS3-20-123-060 - CVS

Lab Sample ID: CS3-20-123-060
Instrument: 10MSHR12 (Y)









Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.834	0.77	51208204	66385842	
13C-3,3',4,4'-TeCB	77	35.404	0.78	51510819	65778826	
13C-2,3,3',4,4'-PeCB	105	38.998	1.54	62053684	40199072	
13C-2,3,4,4',5-PeCB	114	38.361	1.53	63364259	41331947	
13C-2,3',4,4',5-PeCB	118	37.808	1.53	66222064	43162719	
13C-2,3',4,4',5'-PeCB	123	37.472	1.53	63261741	41245986	
13C-3,3',4,4',5-PeCB	126	42.151	1.57	53825037	34264684	
13C-HxCB(156/157)	156/157	45.208	1.22	102568128	83923047	
13C-2,3',4,4',5,5'-HxCB	167	44.051	1.23	54766966	44508663	
13C-3,3',4,4',5,5'-HxCB	169	48.479	1.23	44916129	36397189	
13C-2,3,3',4,4',5,5'-HpCB	189	51.026	1.02	42127094	41118145	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.03	82906534	80731238	
13C-2,3,3',5,5'-PeCB	111	35.471	1.60	96770041	60487785	
13C-2,2',3,3',5,5',6-HpCB	178	41.447	1.08	54880980	50588888	
Recovery Standards						
13C-2,5-DiCB	9	15.349	1.54	127392779	82964986	
13C-2,2',5,5'-TeCB	52	25.405	0.80	64362200	80721712	
13C-2,2',4,5,5'-PeCB	101	32.687	1.61	76585881	47607767	
13C-2,2',3,4,4',5'-HxCB	138	40.994	1.27	64490799	50853483	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.160	0.92	38348105	41726961	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.438	0.83	501814	607875	
81		34.851	0.72	456320	635945	
105		39.032	1.61	566945	352117	
114		38.378	1.53	600972	392715	
118		37.825	1.59	644411	405832	
123		37.506	1.42	603428	424525	
126		42.168	1.49	487021	327868	
156	156/157	45.225	1.25	1035842	827301	
157	156/157	45.225	1.25	(1035842)	(827301)	
167		44.084	1.25	538218	431899	
169		48.495	1.14	427965	374978	
189		51.047	1.10	410825	372156	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.850	0.76	33891332	44310376	
13C-3,3',4,4'-TeCB	77	35.420	0.77	34260374	44451965	
13C-2,3,3',4,4'-PeCB	105	39.014	1.54	41448453	26867484	
13C-2,3,4,4',5-PeCB	114	38.360	1.53	41156130	26821258	
13C-2,3',4,4',5-PeCB	118	37.823	1.55	43913917	28293186	
13C-2,3',4,4',5'-PeCB	123	37.488	1.53	42068498	27527636	
13C-3,3',4,4',5-PeCB	126	42.166	1.53	36221472	23742934	
13C-HxCB(156/157)	156/157	45.223	1.22	67390123	55431577	
13C-2,3',4,4',5,5'-HxCB	167	44.066	1.21	35666666	29418827	
13C-3,3',4,4',5,5'-HxCB	169	48.493	1.24	30688196	24842885	
13C-2,3,3',4,4',5,5'-HpCB	189	51.044	1.02	28764321	28122685	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.01	53600329	52989259	
13C-2,3,3',5,5'-PeCB	111	35.470	1.60	63084152	39378340	
13C-2,2',3,3',5,5',6-HpCB	178	41.462	1.09	35842158	32832358	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.53	83452779	54466090	
13C-2,2',5,5'-TeCB	52	25.404	0.80	42121385	52745355	
13C-2,2',4,5,5'-PeCB	101	32.687	1.59	49762849	31201326	
13C-2,2',3,4,4',5'-HxCB	138	40.992	1.26	41685419	33048264	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.156	0.91	25528617	28012392	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.437	0.74	1519692	2060098	
81		34.867	0.74	1604994	2175256	
105		39.047	1.54	1922768	1250991	
114		38.393	1.41	1876437	1335265	
118		37.840	1.47	2033118	1378641	
123		37.505	1.47	1924699	1306566	
126		42.183	1.47	1609066	1094892	
156	156/157	45.240	1.19	3194335	2677855	
157	156/157	45.240	1.19	(3194335)	(2677855)	
167		44.083	1.18	1689220	1433831	
169		48.510	1.21	1514546	1248104	
189		51.066	1.00	1288821	1289718	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.848	0.76	15482827	20415180	
13C-3,3',4,4'-TeCB	77	35.419	0.80	16235531	20406222	
13C-2,3,3',4,4'-PeCB	105	39.029	1.50	17530979	11682823	
13C-2,3,4,4',5-PeCB	114	38.375	1.51	18054772	11978158	
13C-2,3',4,4',5-PeCB	118	37.822	1.52	19150985	12610753	
13C-2,3',4,4',5'-PeCB	123	37.486	1.55	18627896	12055363	
13C-3,3',4,4',5-PeCB	126	42.165	1.54	15761201	10258884	
13C-HxCB(156/157)	156/157	45.222	1.23	27885801	22733884	
13C-2,3',4,4',5,5'-HxCB	167	44.065	1.21	15205904	12550764	
13C-3,3',4,4',5,5'-HxCB	169	48.508	1.22	12578703	10327607	
13C-2,3,3',4,4',5,5'-HpCB	189	51.043	1.03	11578654	11263039	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.425	1.03	26265414	25481217	
13C-2,3,3',5,5'-PeCB	111	35.486	1.61	29126575	18044938	
13C-2,2',3,3',5,5',6-HpCB	178	41.460	1.07	16153584	15031324	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.55	40918082	26392839	
13C-2,2',5,5'-TeCB	52	25.403	0.82	20417393	24823362	
13C-2,2',4,5,5'-PeCB	101	32.685	1.59	23106412	14493249	
13C-2,2',3,4,4',5'-HxCB	138	41.008	1.25	18284670	14647807	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.155	0.90	10479666	11607480	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.452	0.75	6908630	9157518	
81		34.865	0.76	7186537	9501154	
105		39.046	1.53	7946966	5189522	
114		38.392	1.50	8298330	5548139	
118		37.855	1.52	8853400	5831352	
123		37.520	1.49	8417688	5655194	
126		42.181	1.53	7036829	4607937	
156	156/157	45.255	1.22	13016131	10671543	
157	156/157	45.255	1.22	(13016131)	(10671543)	
167		44.098	1.25	7020713	5612988	
169		48.525	1.21	5836654	4837214	
189		51.064	0.99	4922715	4958579	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.832	0.77	34210797	44266996	
13C-3,3',4,4'-TeCB	77	35.402	0.79	35395450	44823730	
13C-2,3,3',4,4'-PeCB	105	38.995	1.51	40728648	26923537	
13C-2,3,4,4',5-PeCB	114	38.357	1.55	42745928	27575415	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44657518	28840602	
13C-2,3',4,4',5'-PeCB	123	37.469	1.53	43022555	28210031	
13C-3,3',4,4',5-PeCB	126	42.147	1.53	36577625	23922117	
13C-HxCB(156/157)	156/157	45.203	1.23	69653134	56819445	
13C-2,3',4,4',5,5'-HxCB	167	44.046	1.25	36559258	29211015	
13C-3,3',4,4',5,5'-HxCB	169	48.472	1.24	30651857	24792300	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.03	28316147	27496668	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	55689198	54423067	
13C-2,3,3',5,5'-PeCB	111	35.452	1.60	64883754	40430467	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.07	36247946	33766626	
Recovery Standards						
13C-2,5-DiCB	9	15.337	1.53	84686939	55315081	
13C-2,2',5,5'-TeCB	52	25.387	0.80	42416046	52980659	
13C-2,2',4,5,5'-PeCB	101	32.668	1.62	50281923	31100077	
13C-2,2',3,4,4',5'-HxCB	138	40.973	1.25	41920878	33447291	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.126	0.90	24833766	27679627	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.418	0.77	122699703	159707089	
81		34.848	0.75	125942207	167138424	
105		39.028	1.52	143263175	94554749	
114		38.374	1.51	154363717	102247755	
118		37.821	1.52	158518382	104050458	
123		37.486	1.51	153580769	101647751	
126		42.163	1.50	127752628	85082410	
156	156/157	45.220	1.23	254098813	207052129	
157	156/157	45.220	1.23	(254098813)	(207052129)	
167		44.063	1.22	131084207	107816581	
169		48.489	1.21	109583957	90325860	
189		51.057	1.01	98180269	97375448	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.831	0.77	34784792	45413028	
13C-3,3',4,4'-TeCB	77	35.401	0.79	35556353	44802460	
13C-2,3,3',4,4'-PeCB	105	39.011	1.54	42719780	27666457	
13C-2,3,4,4',5-PeCB	114	38.357	1.56	42911393	27511946	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44868121	28881141	
13C-2,3',4,4',5'-PeCB	123	37.468	1.51	42837264	28287898	
13C-3,3',4,4',5-PeCB	126	42.146	1.55	37305170	24073584	
13C-HxCB(156/157)	156/157	45.219	1.25	71784489	57574094	
13C-2,3',4,4',5,5'-HxCB	167	44.045	1.24	36763440	29578303	
13C-3,3',4,4',5,5'-HxCB	169	48.488	1.23	31756784	25737966	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.04	29222728	28169942	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	51908930	51091675	
13C-2,3,3',5,5'-PeCB	111	35.468	1.60	64649598	40423708	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.08	35851672	33086489	
Recovery Standards						
13C-2,5-DiCB	9	15.325	1.52	83143628	54673112	
13C-2,2',5,5'-TeCB	52	25.386	0.80	41733434	52403278	
13C-2,2',4,5,5'-PeCB	101	32.668	1.61	49712591	30937614	
13C-2,2',3,4,4',5'-HxCB	138	40.989	1.27	41161616	32464857	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.146	0.92	24949098	27236268	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.417	0.76	616806932	810414208	
81		34.847	0.76	639607623	840095356	
105		39.027	1.54	745301804	485163987	
114		38.374	1.52	780283922	512899091	
118		37.837	1.53	803499802	526013471	
123		37.502	1.52	785601740	516404877	
126		42.162	1.52	649914791	428105060	
156	156/157	45.236	1.22	1286847987	1051857892	
157	156/157	45.236	1.22	(1286847987)	(1051857892)	
167		44.079	1.22	653652175	535863549	
169		48.505	1.22	557599158	455624388	
189		51.056	1.01	503772747	500470805	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	209 Mix	Injected By	CVS
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_12	GC Column ID	261111-02
Analyzed	08/18/2021 22:46	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.847	0.77	261939892	340717538	
13C-3,3',4,4'-TeCB	77	35.417	0.78	263079957	337687425	
13C-2,3,3',4,4'-PeCB	105	39.027	1.54	301762200	195654754	
13C-2,3,4,4',5-PeCB	114	38.373	1.55	319273384	206446336	
13C-2,3',4,4',5-PeCB	118	37.820	1.55	285920586	183937225	
13C-2,3',4,4',5'-PeCB	123	37.485	1.53	313436211	205254716	
13C-3,3',4,4',5-PeCB	126	42.162	1.54	264403772	172198516	
13C-HxCB(156/157)	156/157	45.236	1.22	465580970	380670626	
13C-2,3',4,4',5,5'-HxCB	167	44.079	1.22	258717686	211356442	
13C-3,3',4,4',5,5'-HxCB	169	48.505	1.24	220535522	177818152	
13C-2,3,3',4,4',5,5'-HpCB	189	51.056	1.04	204725613	197053053	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.408	1.02	422954227	416691418	
13C-2,3,3',5,5'-PeCB	111	35.485	1.58	458291424	289581214	
13C-2,2',3,3',5,5',6-HpCB	178	41.475	1.10	279951616	254366604	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.54	635712772	412478384	
13C-2,2',5,5'-TeCB	52	25.403	0.80	336937561	422961206	
13C-2,2',4,5,5'-PeCB	101	32.701	1.60	391761849	245471967	
13C-2,2',3,4,4',5'-HxCB	138	41.006	1.24	331269487	267326199	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.167	0.90	186641000	208016820	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

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Client ID	209 Mix	Injected By	CVS
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_12	GC Column ID	261111-02
Analyzed	08/18/2021 22:46	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.451	0.77	123538736	160442709	
81		34.864	0.76	134870249	177996834	
105		39.044	1.52	153616365	101179020	
114		38.407	1.51	161398999	106639926	
118		37.854	1.53	141072744	92413810	
123		37.518	1.53	158852111	103945553	
126		42.196	1.53	131270293	85832237	
156	156/157	45.252	1.21	244127137	201294827	
157	156/157	45.252	1.21	(244127137)	(201294827)	
167		44.096	1.22	137613478	113097201	
169		48.521	1.22	112215927	92218459	
189		51.077	1.01	96188981	95113403	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	209 Mix	Injected By	BAL
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_02	GC Column ID	261111-02
Analyzed	08/19/2021 12:34	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.78	350345770	451311493	
13C-3,3',4,4'-TeCB	77	35.437	0.78	358586273	458242779	
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	398629988	258944921	
13C-2,3,4,4',5-PeCB	114	38.377	1.55	419130683	270353368	
13C-2,3',4,4',5-PeCB	118	37.824	1.56	337445748	216941583	
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	410374649	269449681	
13C-3,3',4,4',5-PeCB	126	42.183	1.54	364322549	235855149	
13C-HxCB(156/157)	156/157	45.240	1.24	575112371	464923773	
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.23	339862330	276398261	
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.22	290428710	237778570	
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.04	253341233	243605827	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.02	541390962	530905480	
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	591983650	372433434	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	345763984	313264751	
Recovery Standards						
13C-2,5-DiCB	9	15.362	1.54	782172916	509269814	
13C-2,2',5,5'-TeCB	52	25.422	0.80	421169308	527768351	
13C-2,2',4,5,5'-PeCB	101	32.704	1.59	499361743	313509468	
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.26	421031924	334204391	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.178	0.91	218688168	240803952	

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	209 Mix	Injected By	BAL
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_02	GC Column ID	261111-02
Analyzed	08/19/2021 12:34	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.454	0.76	166566667	220048410	
81		34.884	0.76	181047236	236944635	
105		39.048	1.53	203070371	132300918	
114		38.410	1.51	210237379	139196253	
118		37.874	1.54	175160210	113880571	
123		37.522	1.51	203626798	134960104	
126		42.200	1.51	178649325	118163826	
156	156/157	45.257	1.21	301198333	248040417	
157	156/157	45.257	1.21	(301198333)	(248040417)	
167		44.100	1.22	181932165	148977128	
169		48.527	1.22	146914658	120346982	
189		51.088	1.01	117996108	116718149	

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Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_01	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.78	76295120	98381686	
13C-3,3',4,4'-TeCB	77	35.454	0.78	78929962	101541891	
13C-2,3,3',4,4'-PeCB	105	39.048	1.56	92088980	58982498	
13C-2,3,4,4',5-PeCB	114	38.394	1.53	93027165	60623043	
13C-2,3',4,4',5-PeCB	118	37.857	1.53	96292104	62994671	
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	92167858	60532760	
13C-3,3',4,4',5-PeCB	126	42.184	1.56	83517503	53704511	
13C-HxCB(156/157)	156/157	45.257	1.22	150827777	123193956	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.24	79681101	64499936	
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.25	69189892	55401415	
13C-2,3,3',4,4',5,5'-HpCB	189	51.067	1.03	60877189	59391133	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.442	1.02	118547740	116543315	
13C-2,3,3',5,5'-PeCB	111	35.504	1.57	142505463	90652009	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.09	78675916	72137599	
Recovery Standards						
13C-2,5-DiCB	9	15.385	1.54	183687824	119270059	
13C-2,2',5,5'-TeCB	52	25.438	0.80	93852330	116963618	
13C-2,2',4,5,5'-PeCB	101	32.721	1.59	110190624	69130827	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.26	92932325	73691738	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.90	52289833	57816048	

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_01	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.471	0.76	34209870	44847202	
81		34.900	0.76	35137052	46445203	
105		39.064	1.51	38743046	25583524	
114		38.427	1.49	40374102	27105487	
118		37.874	1.54	43020795	27862576	
123		37.538	1.52	41321952	27158569	
126		42.217	1.51	35736156	23732630	
156	156/157	45.274	1.21	67597404	55647357	
157	156/157	45.274	1.21	(67597404)	(55647357)	
167		44.117	1.21	35422374	29210651	
169		48.544	1.22	30673526	25077221	
189		51.089	1.01	26406961	26266614	

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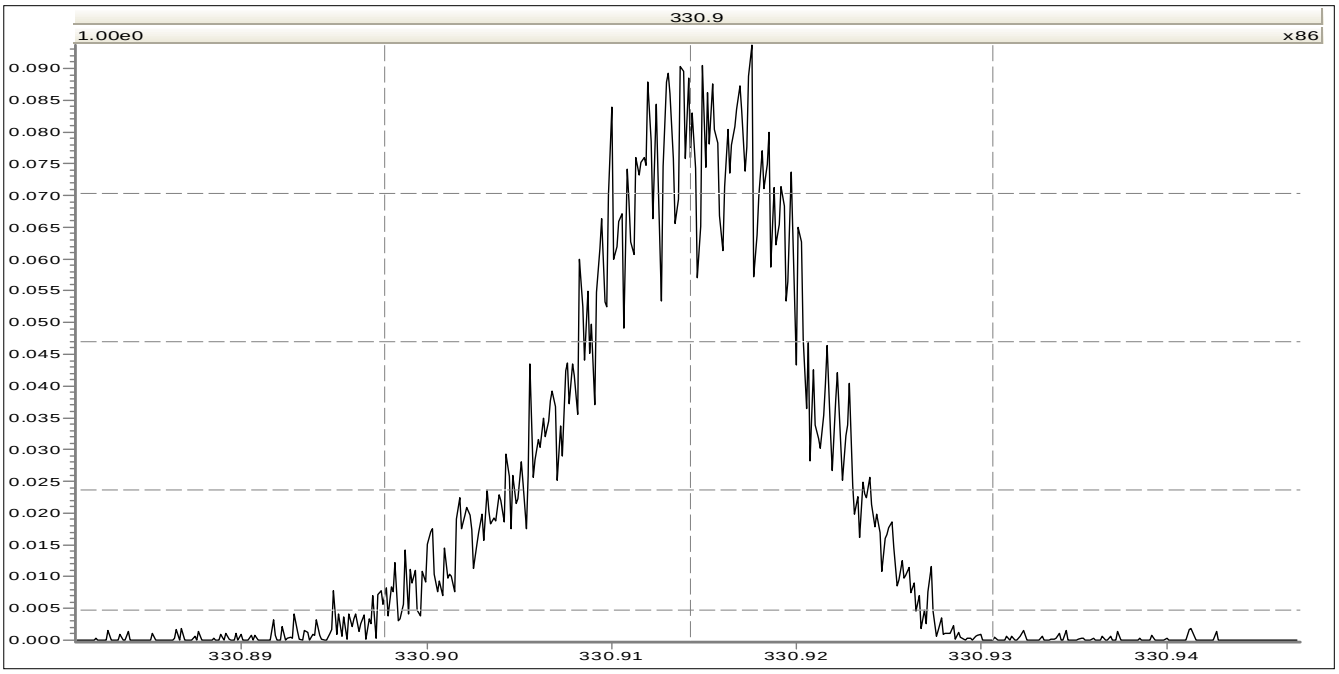

Source (EI+)

Ion Repeller (V)	-9.96
Focus 1	843
Beam Centre	37.3
Focus 2	4272
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-101.7
Z Deflect 1	-12.9
Z Deflect 2	-3.9
Z Focus 2	2338
Z Focus 3	0
Z Deflect 3	23.4
Y Focus	3492
Rotate 2	5.0
Curve 2	-4.1
Curve 3	0.8
Rotate 3	-40.5
Rotate 4	1.2
V Acc (V)	6495.96
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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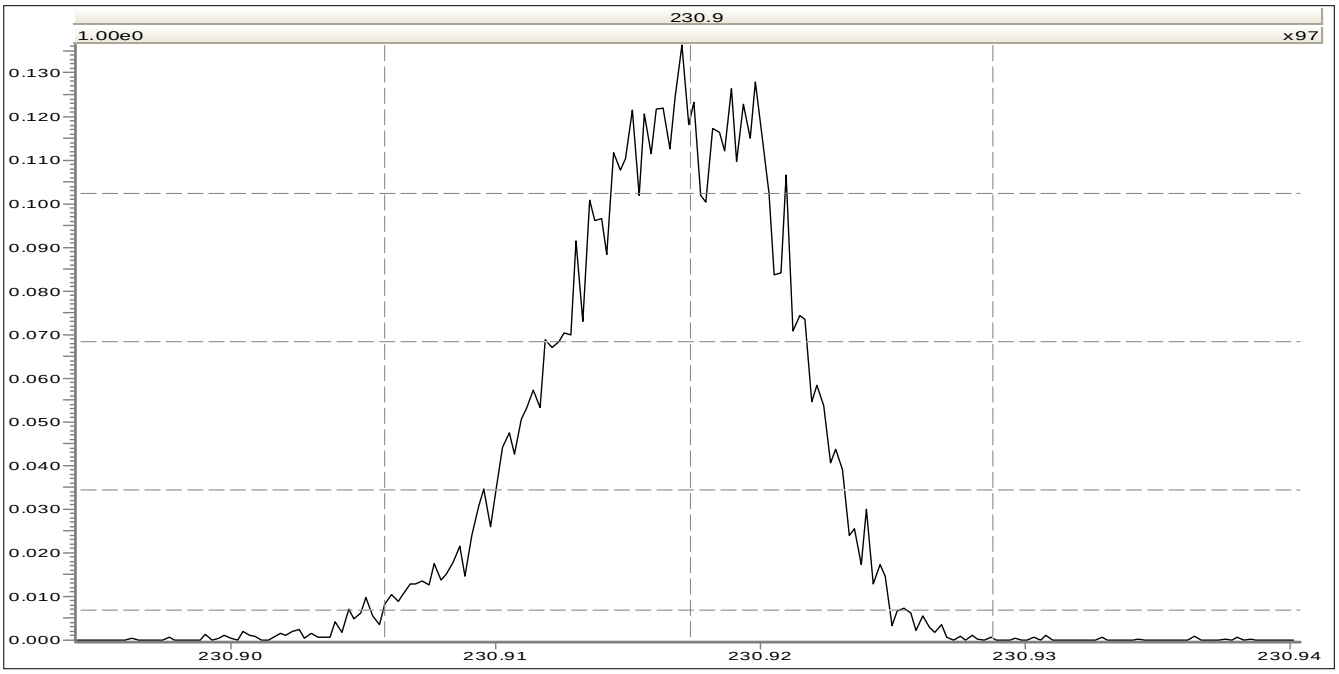

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.74
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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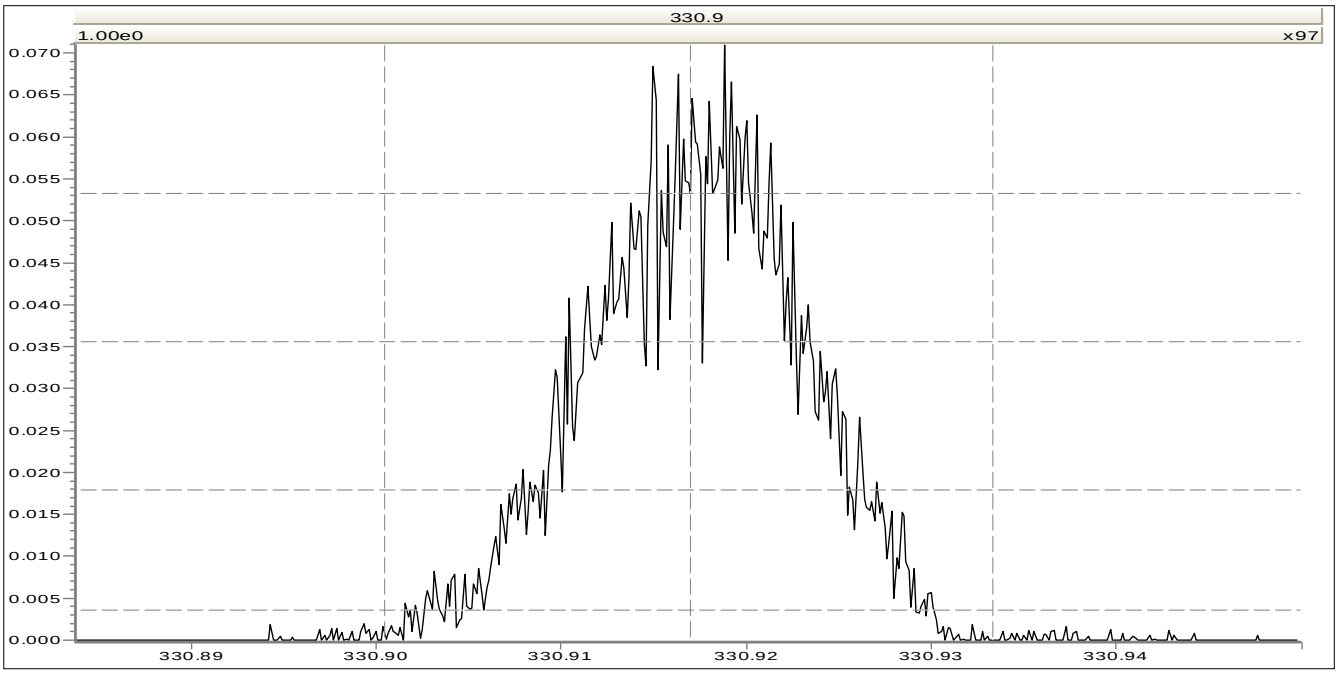

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.92
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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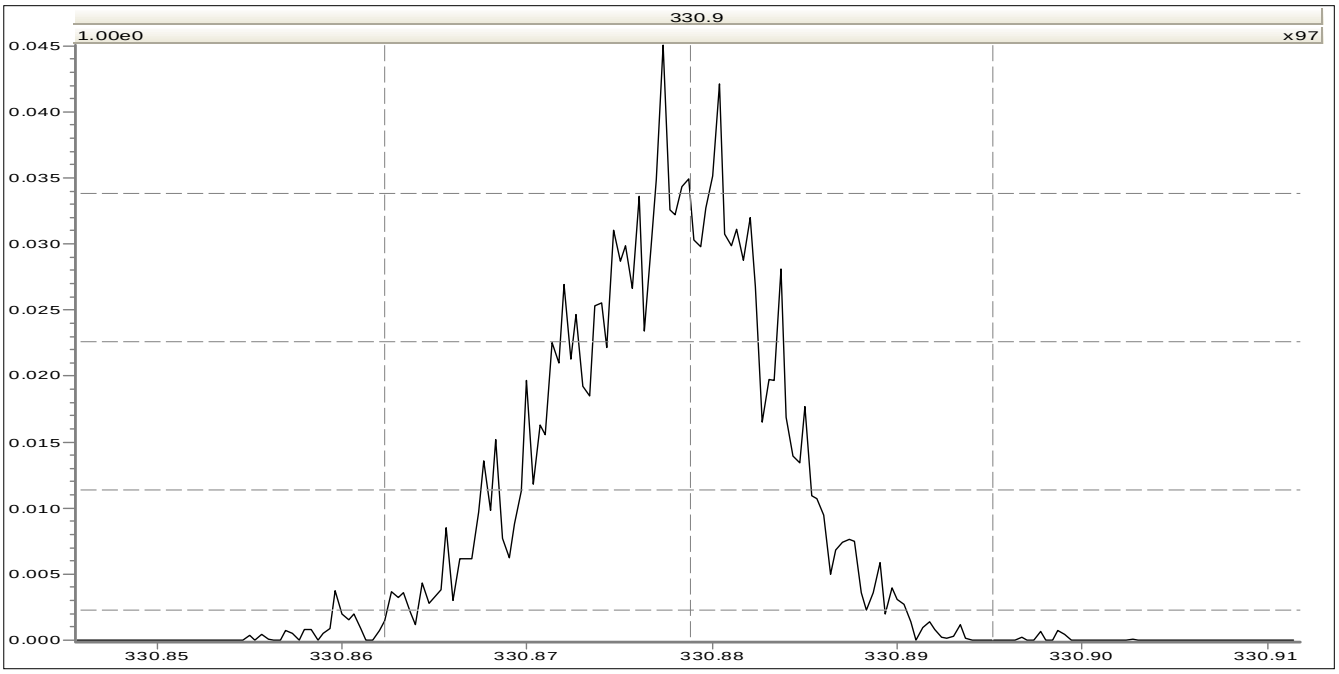


Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.92
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

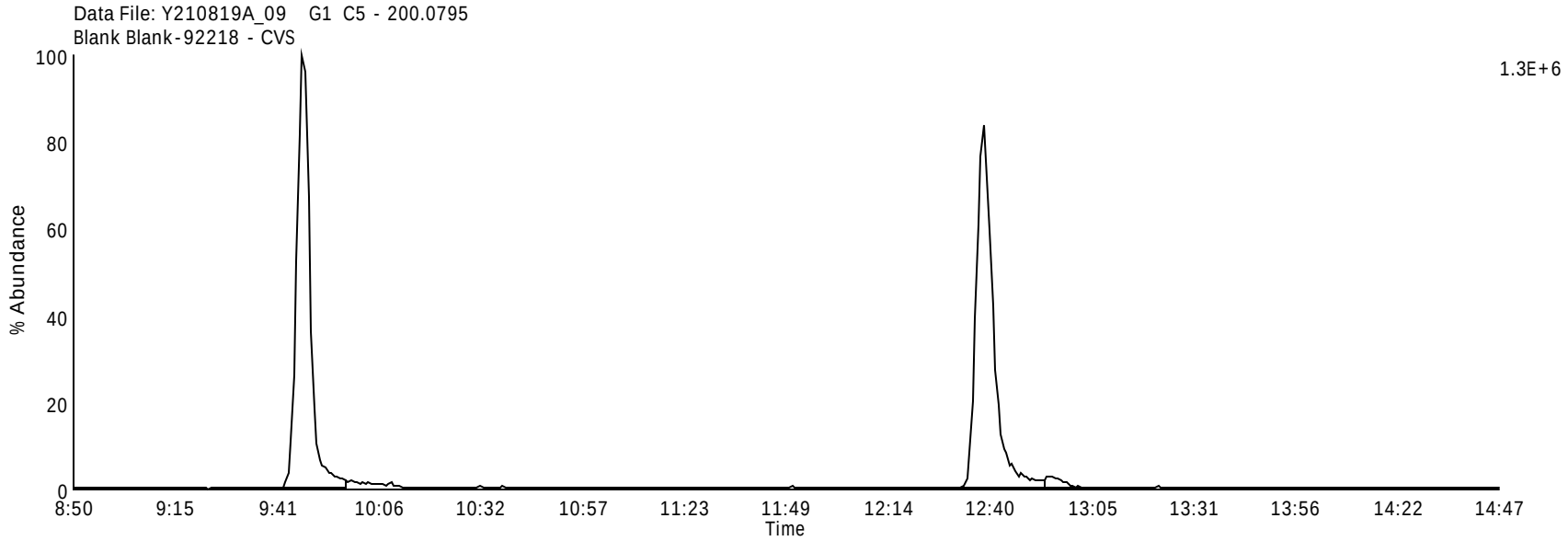
No information

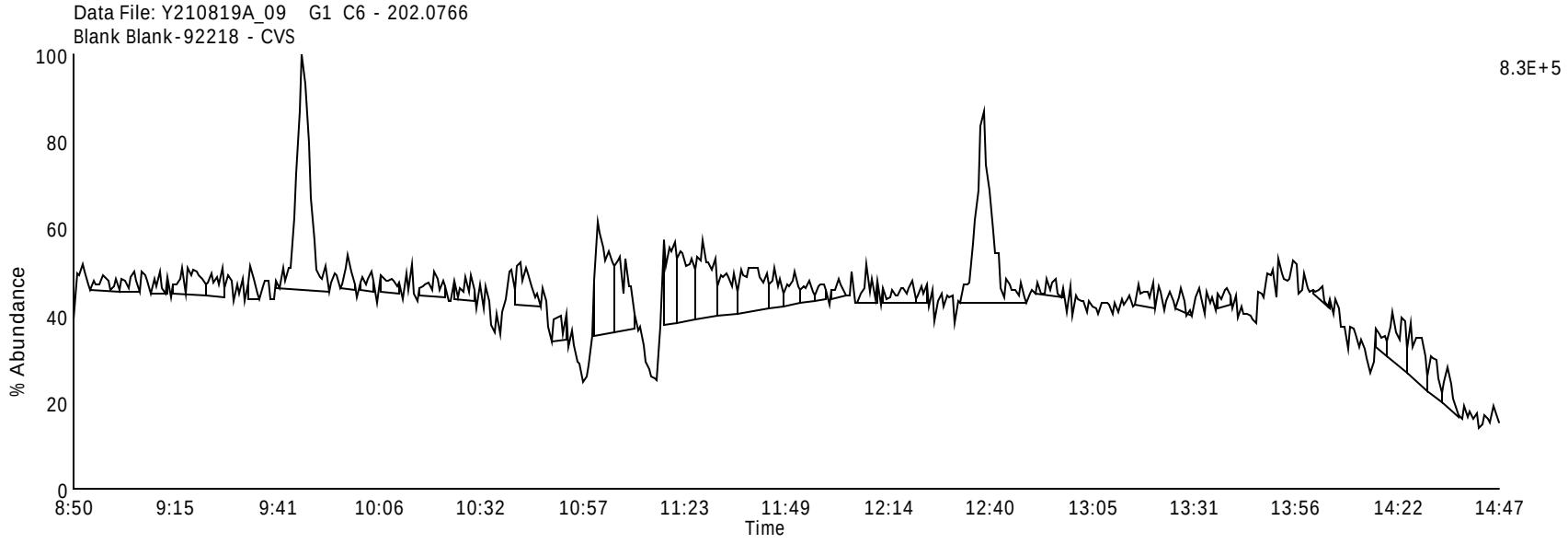
Appendix F

QC Raw Data

Labeled Mono Chlorinated Biphenyls

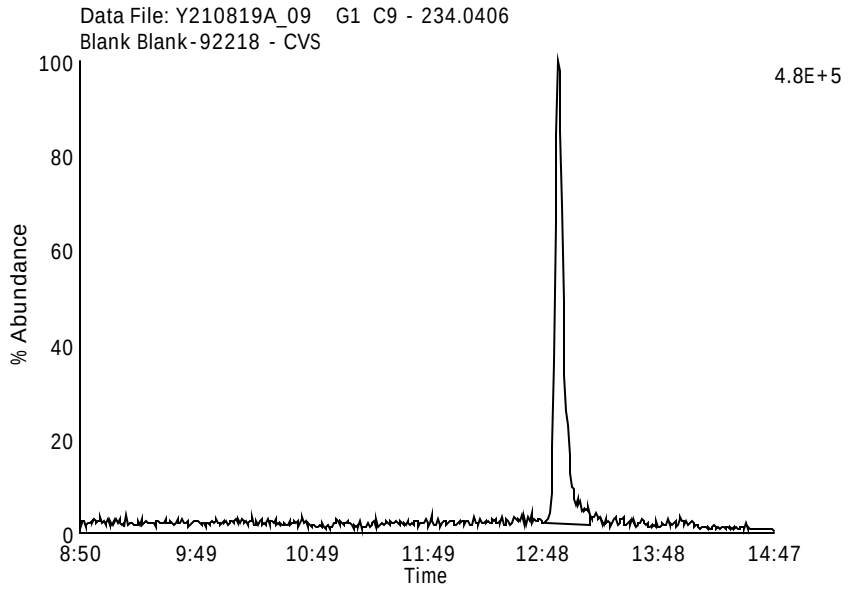
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

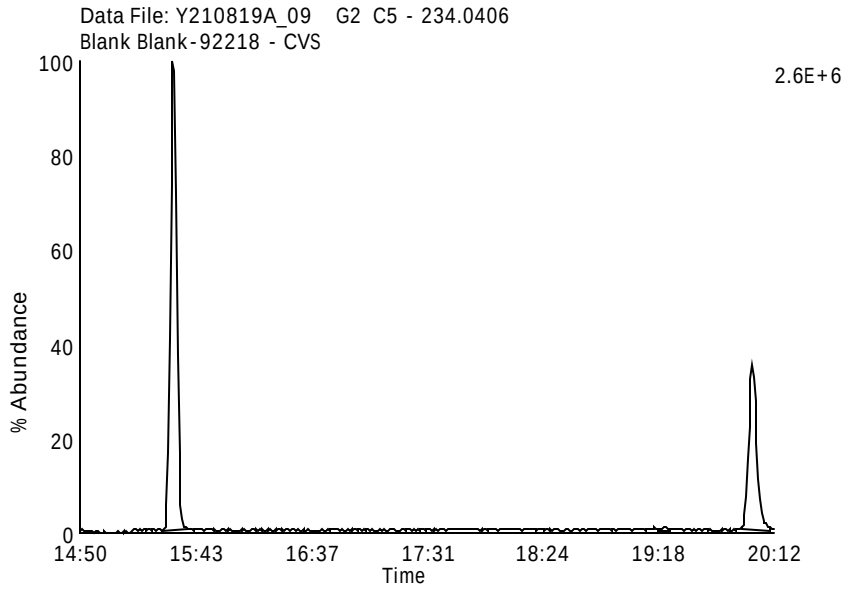


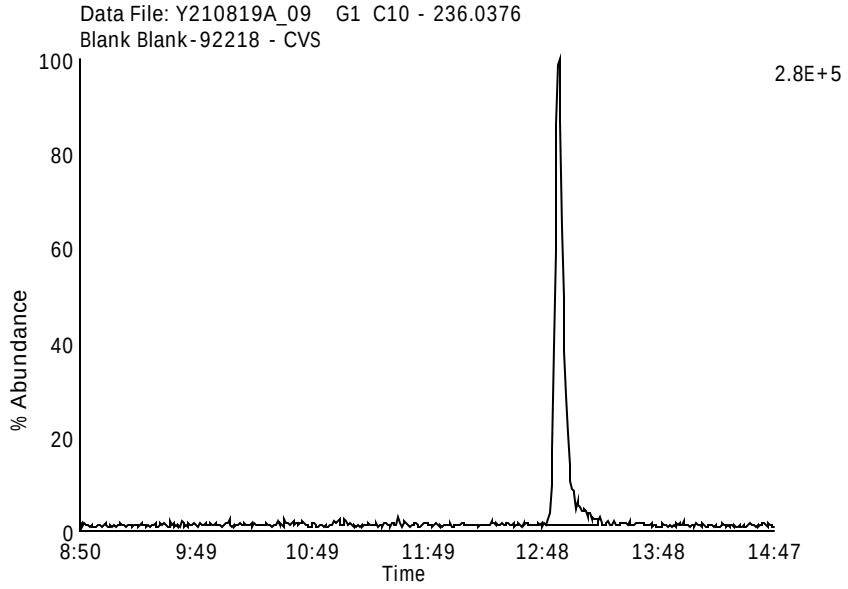


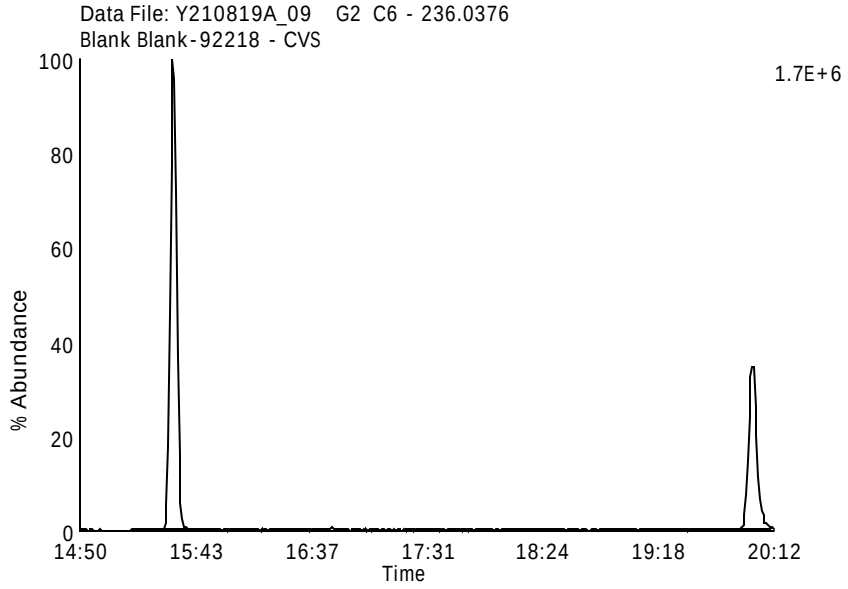
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



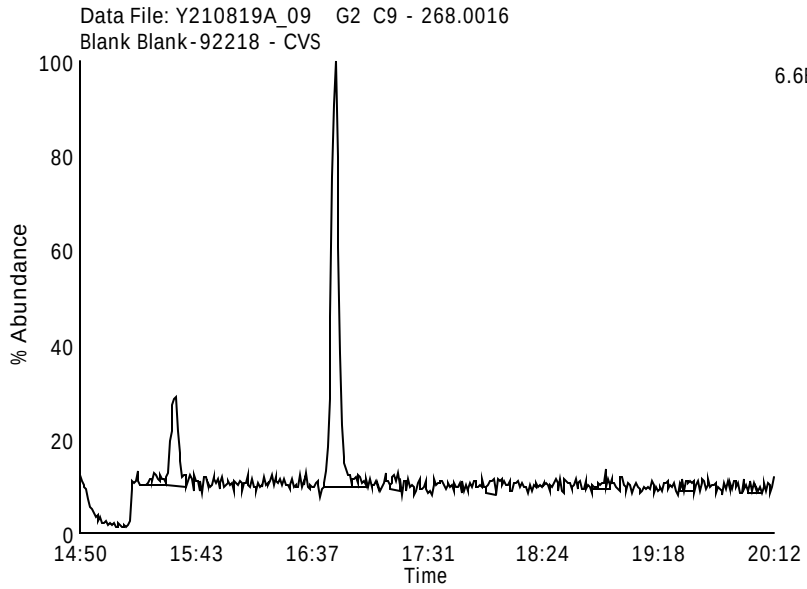


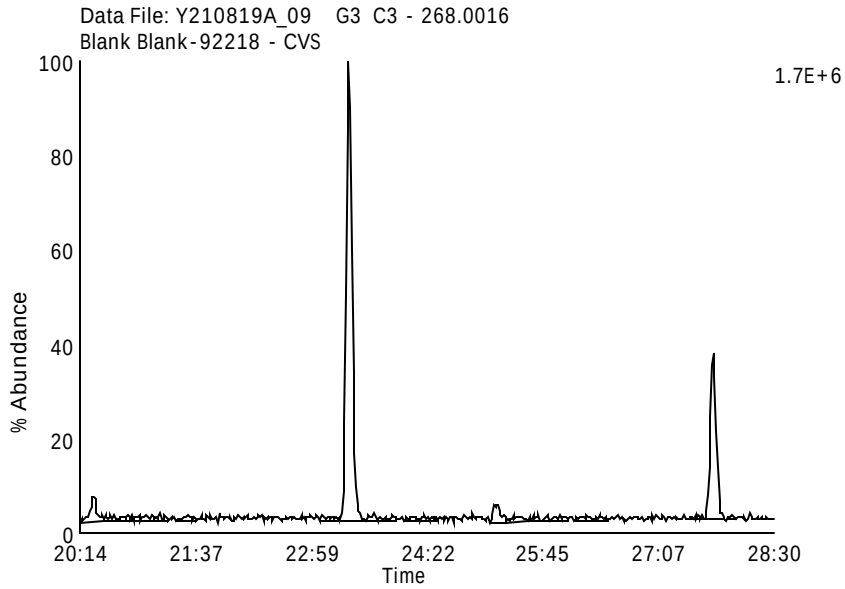


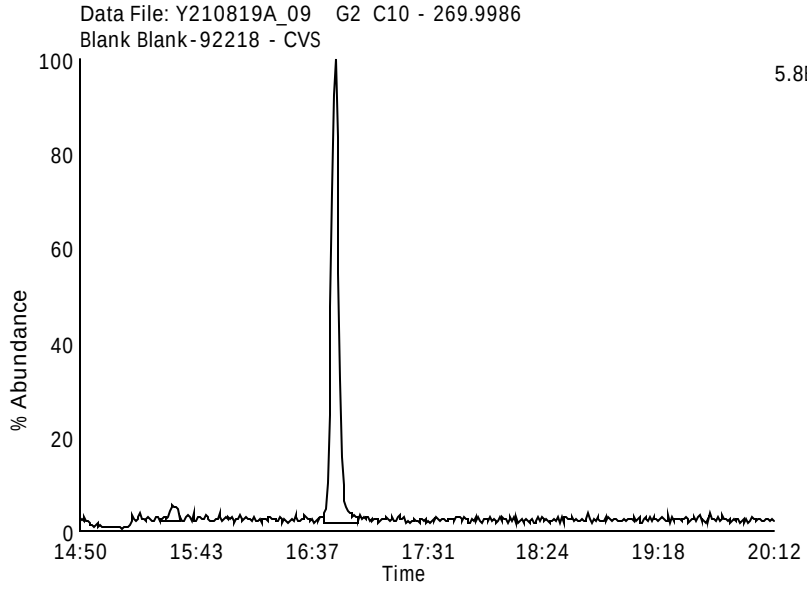


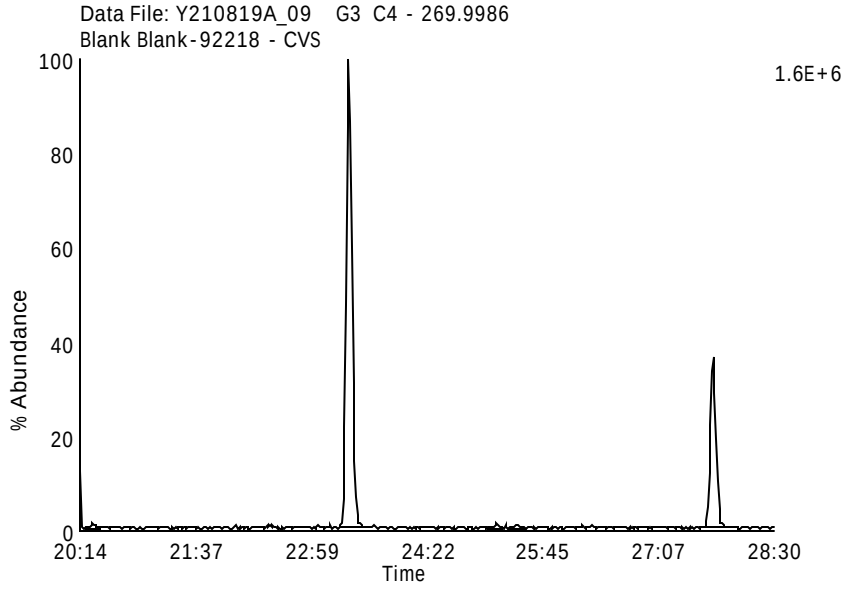
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX





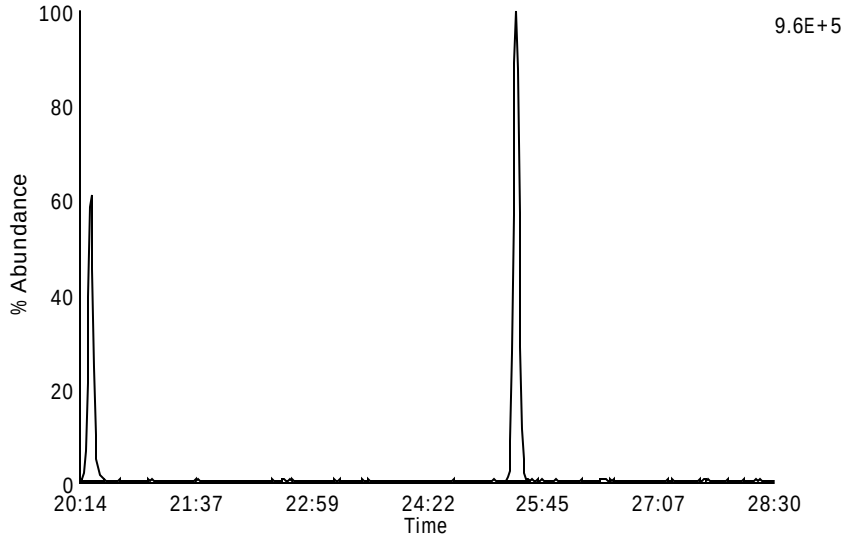




Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

Data File: Y210819A_09 G3 C9 - 301.9626
Blank Blank-92218 - CVS



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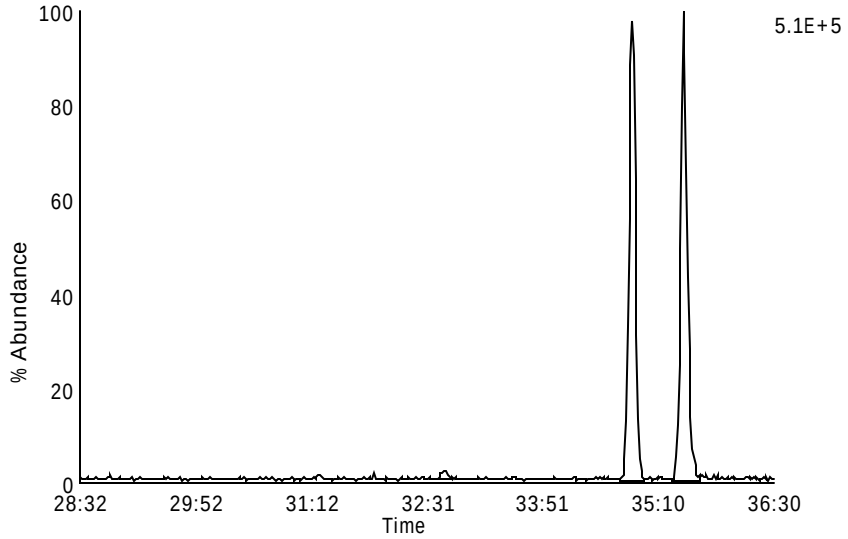

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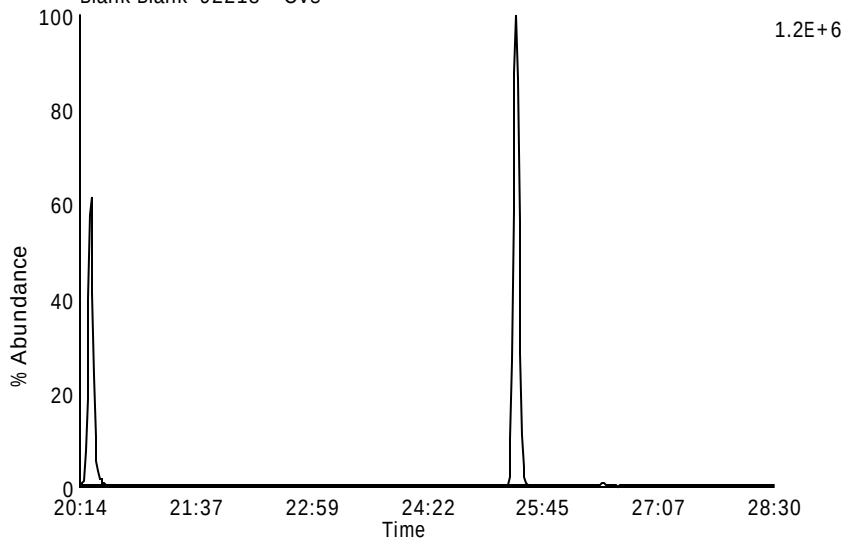

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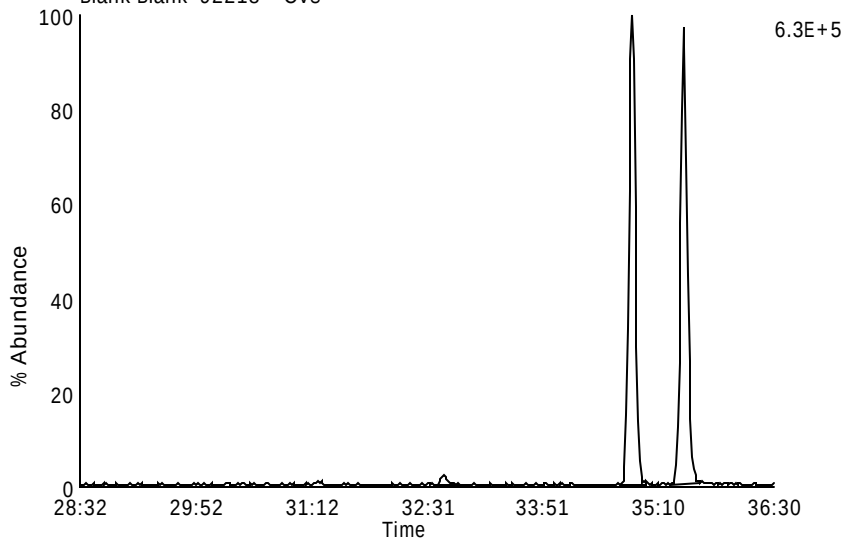
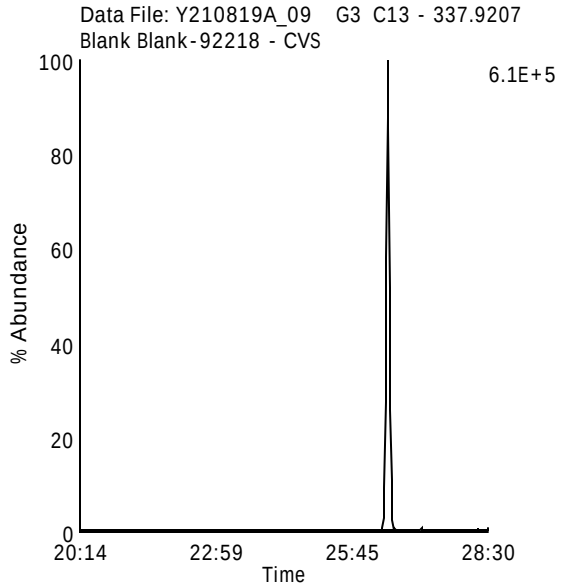
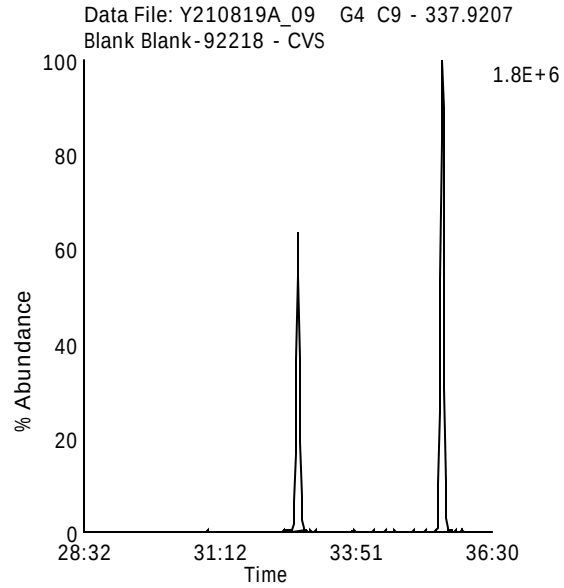
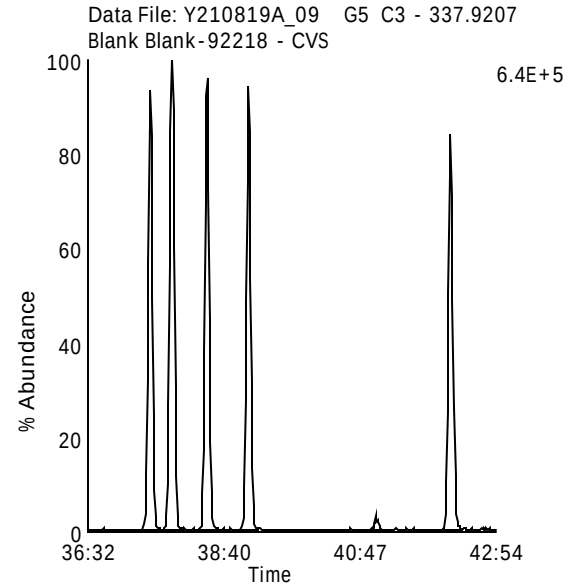


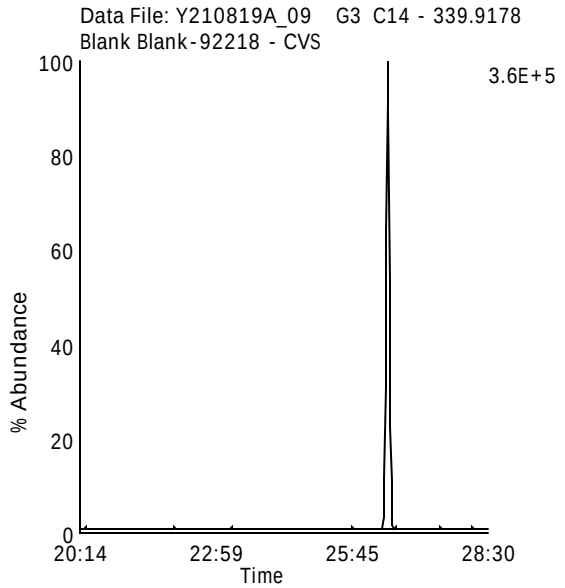
Labeled Penta Chlorinated Biphenyls

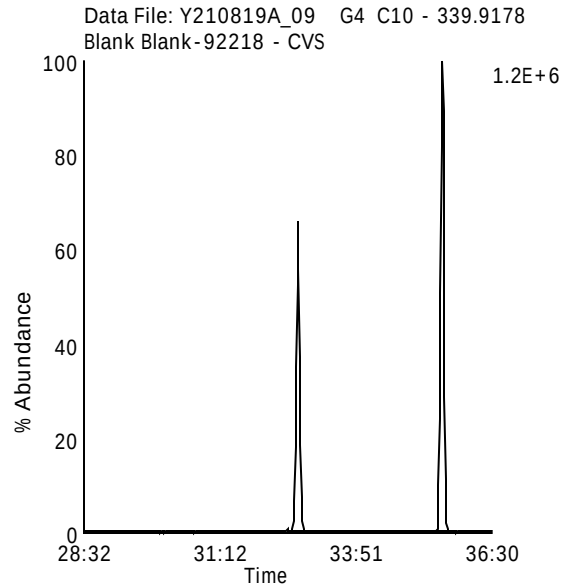
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

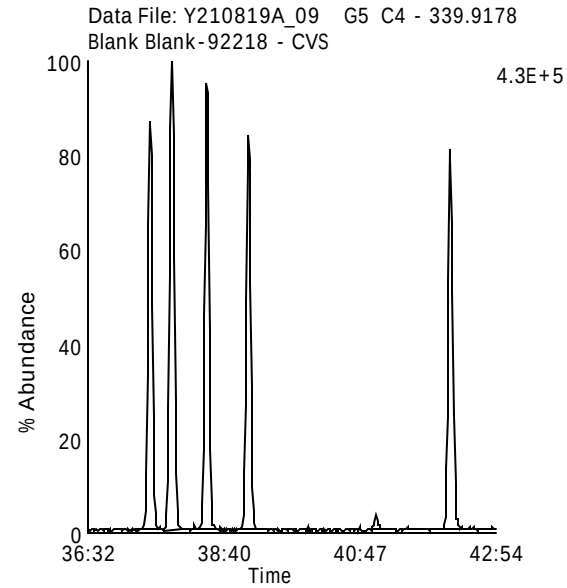






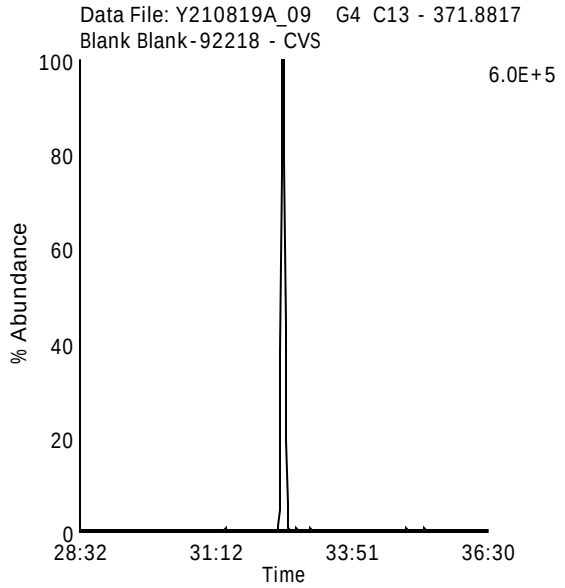


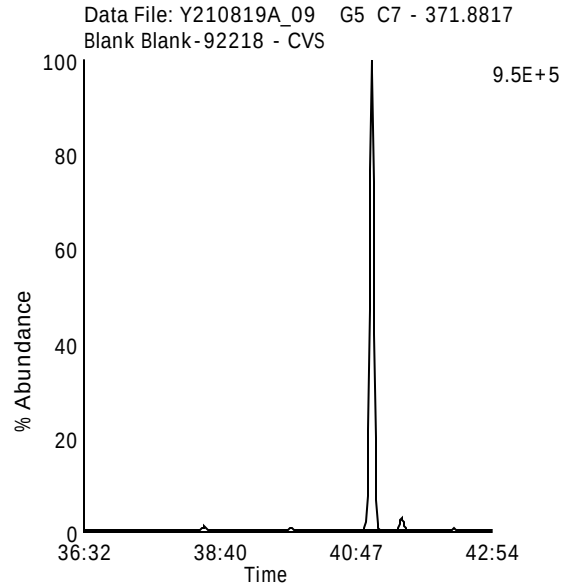


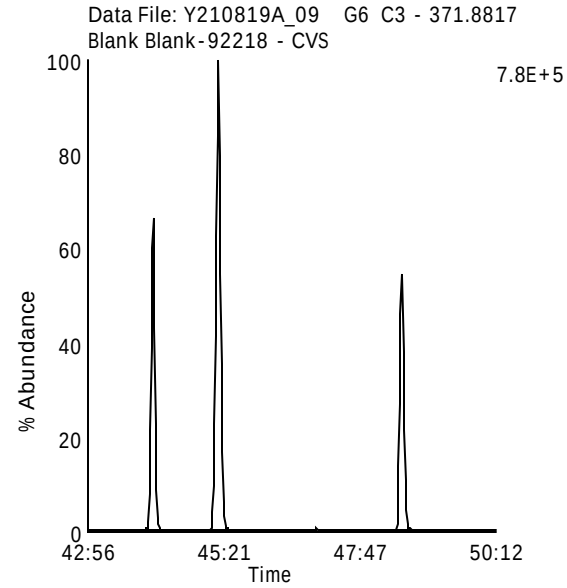


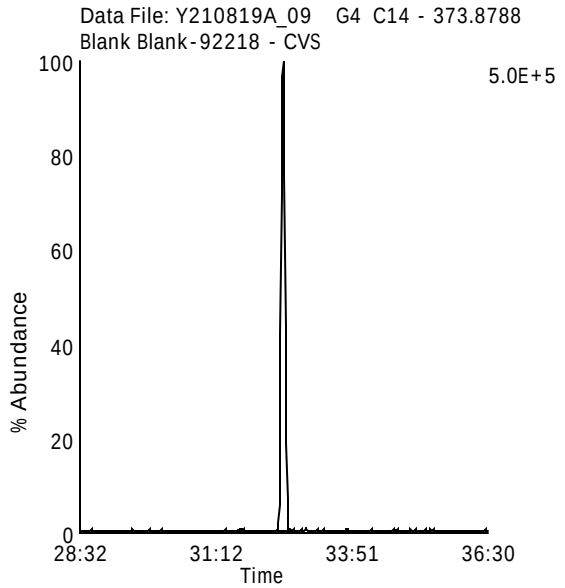
Labeled Hexa Chlorinated Biphenyls

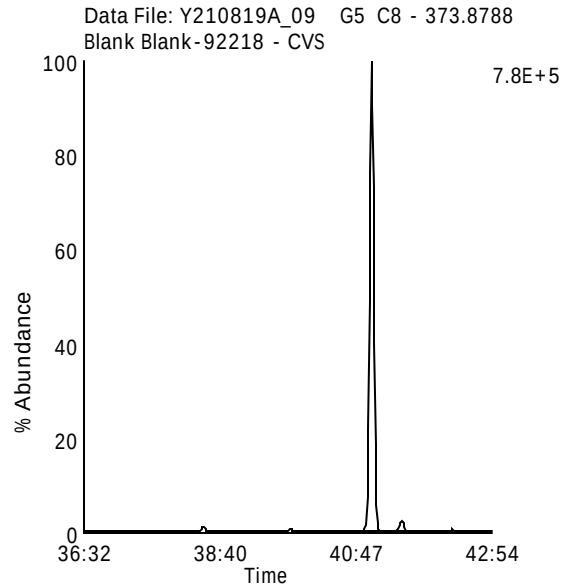
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

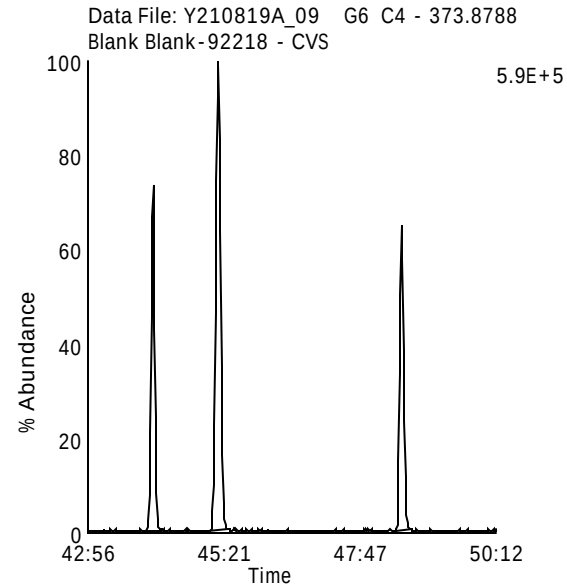






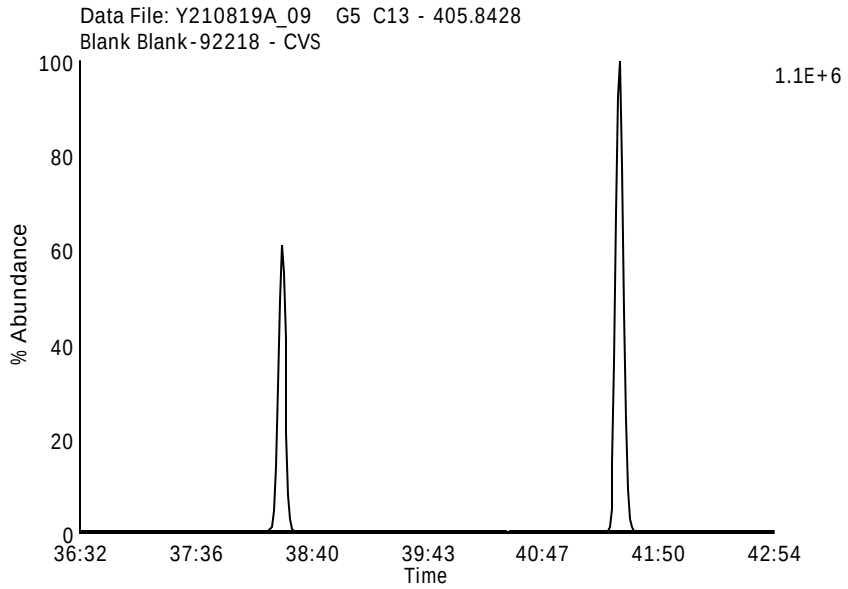


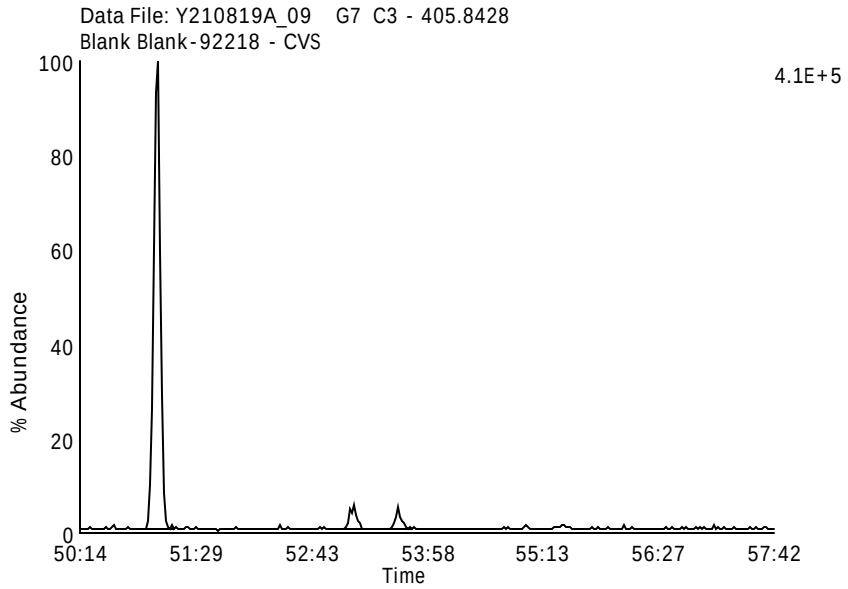


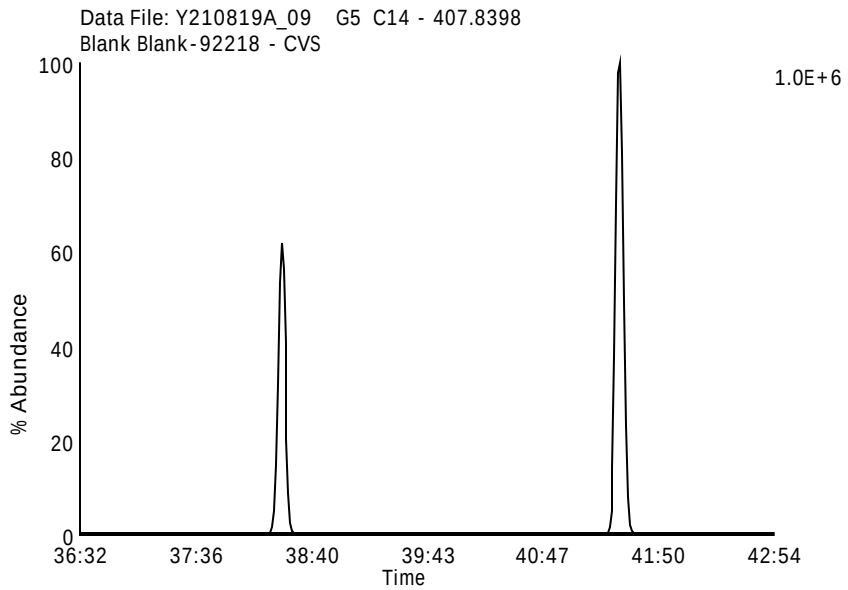


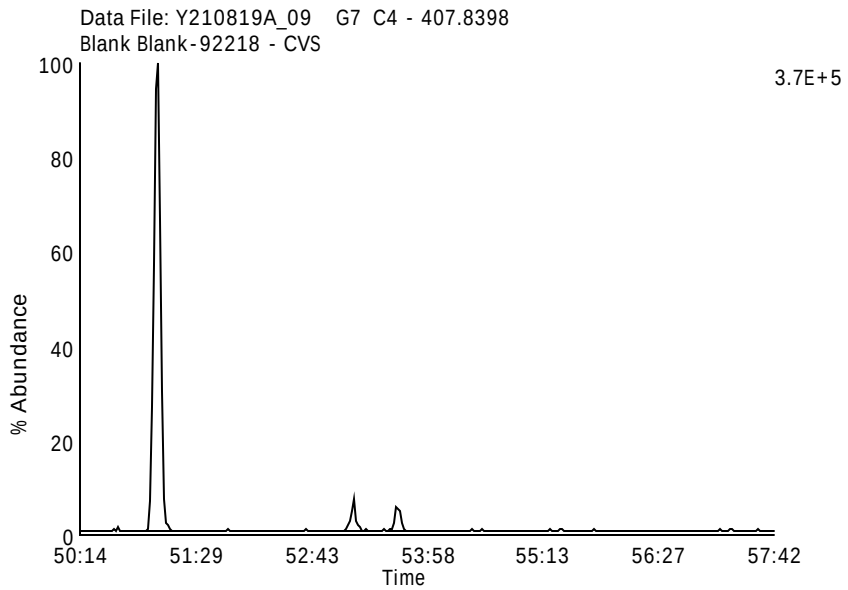
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



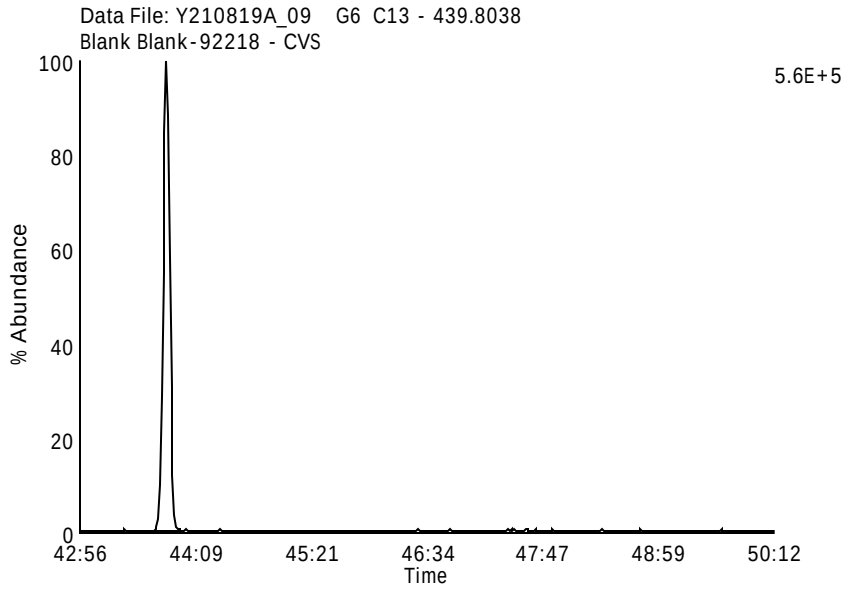


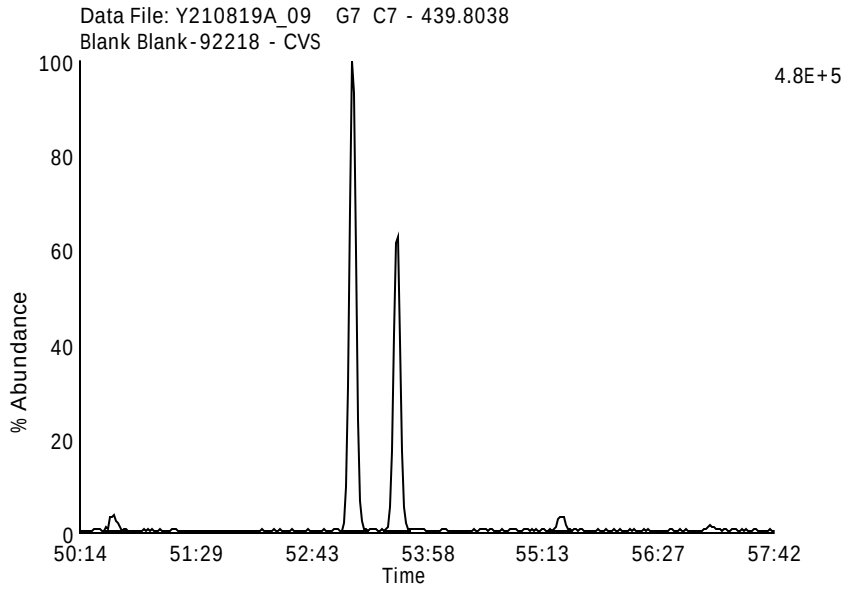


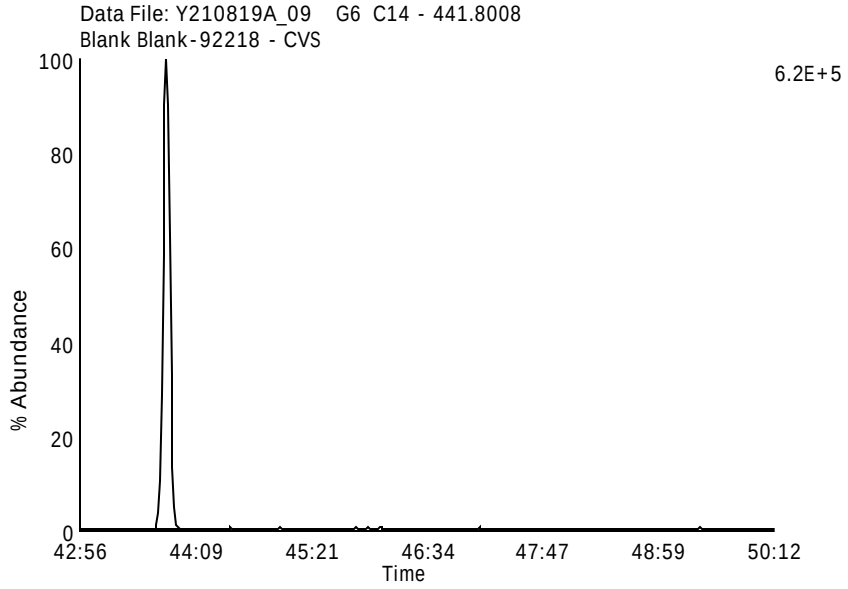


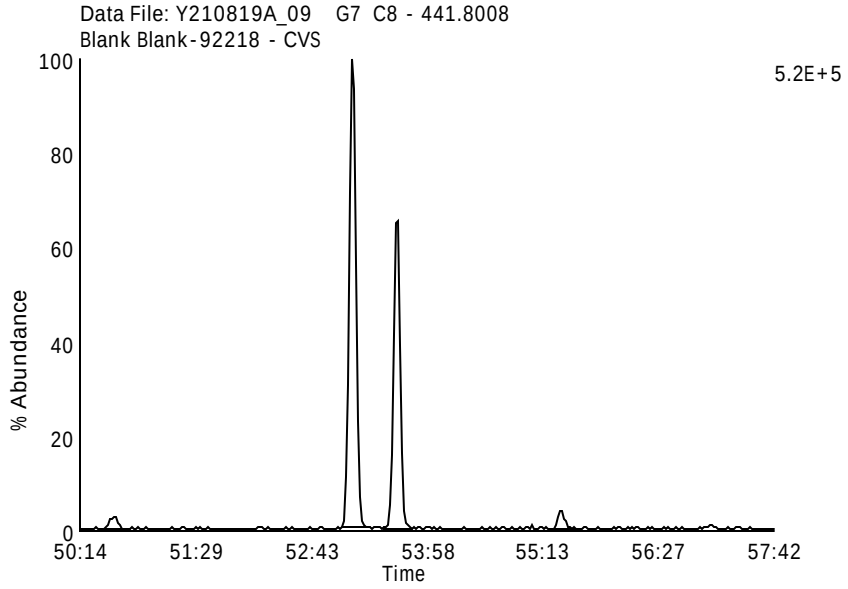
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



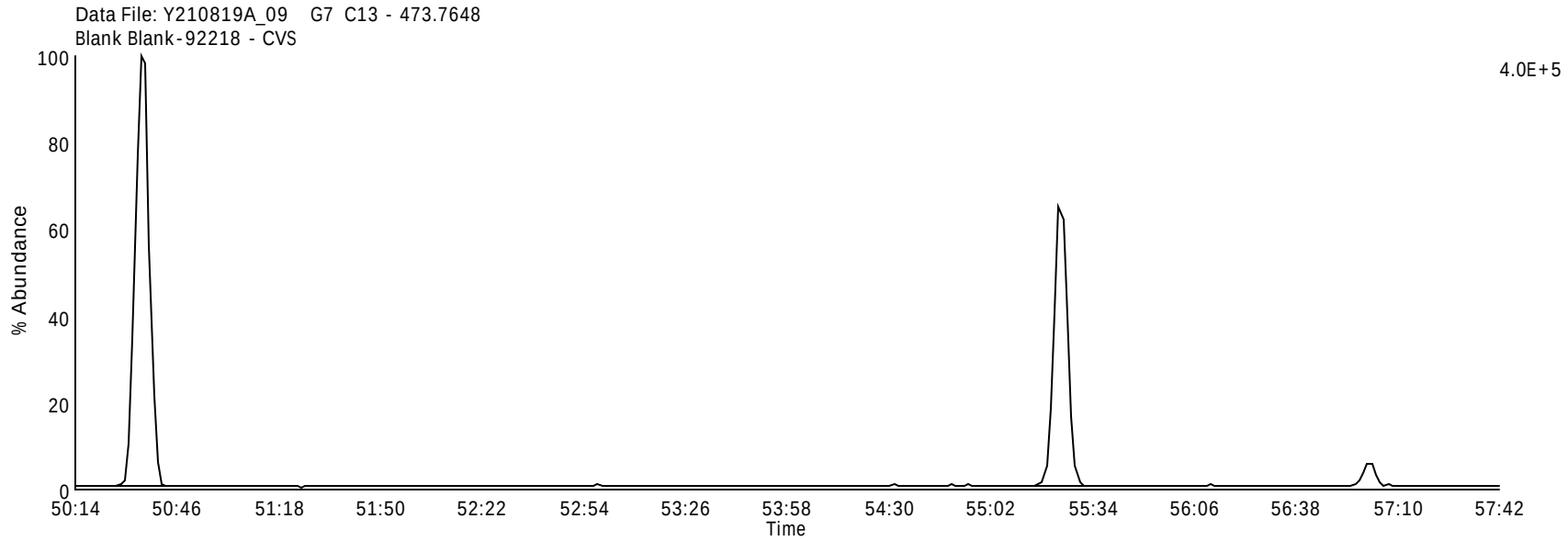


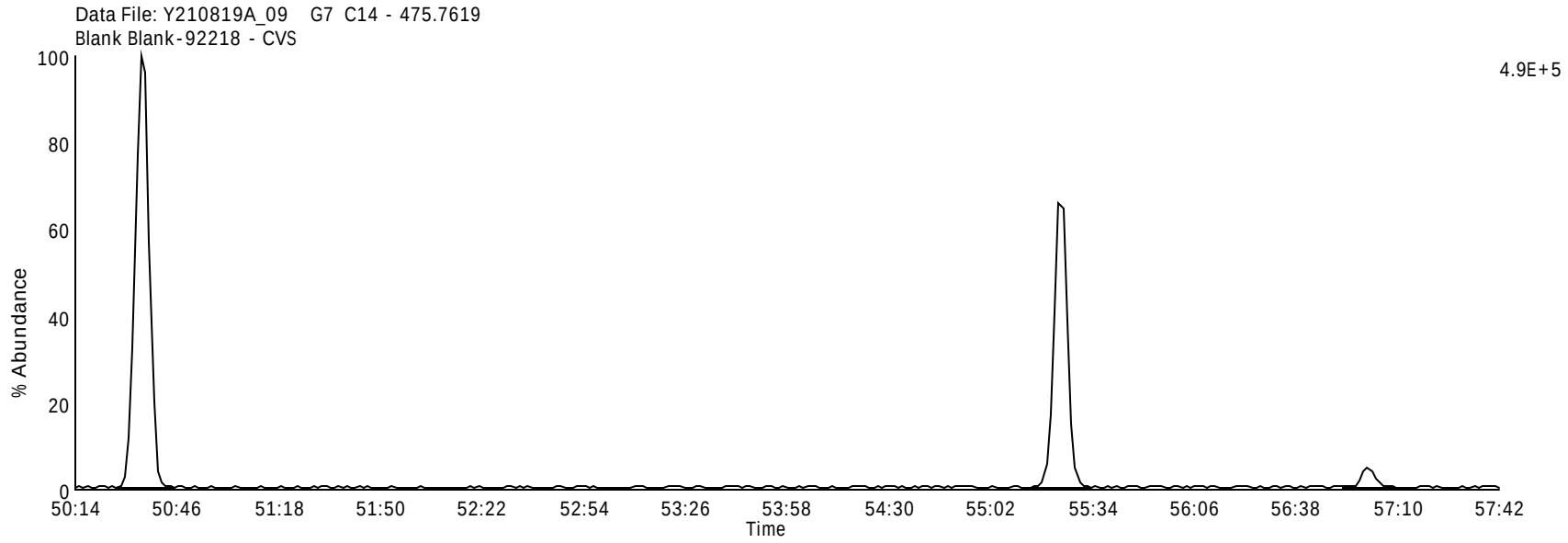




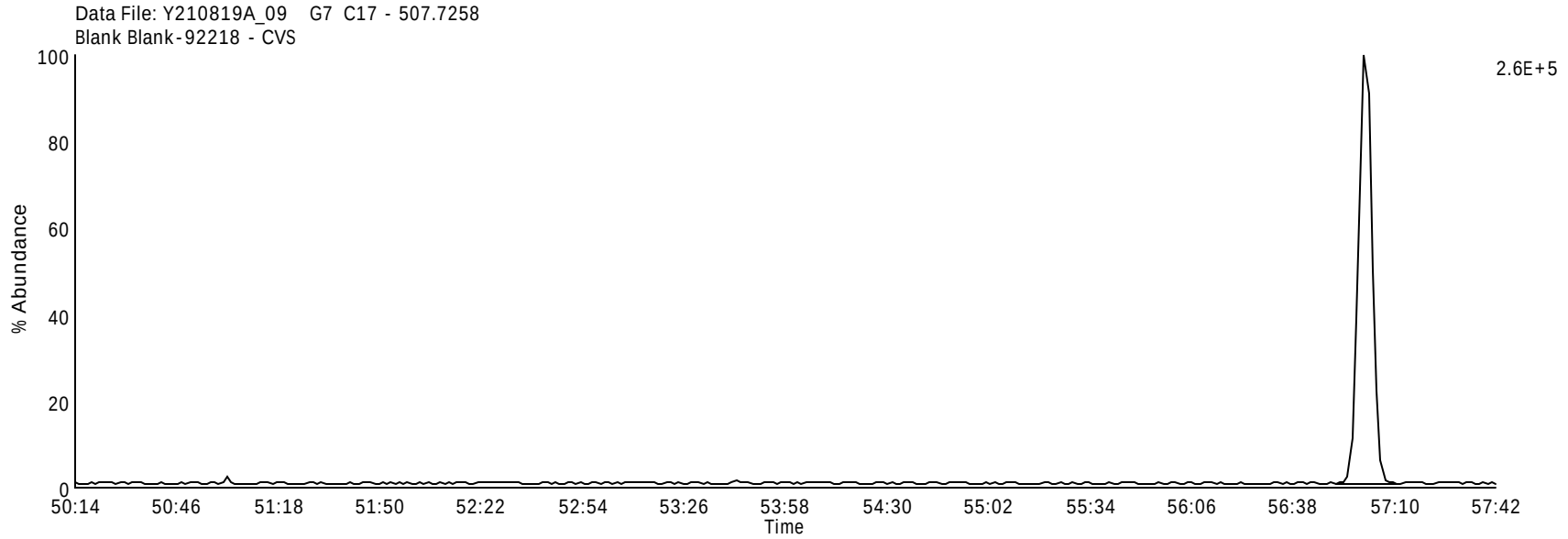
Labeled Nona Chlorinated Biphenyls

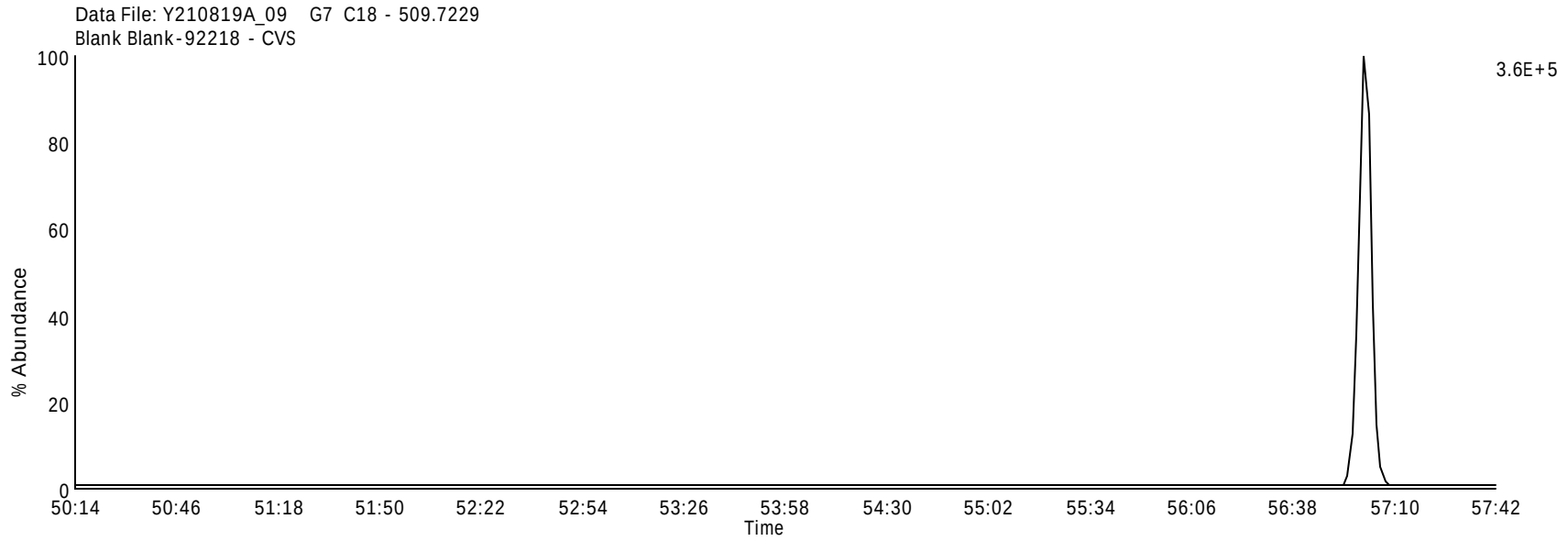
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX





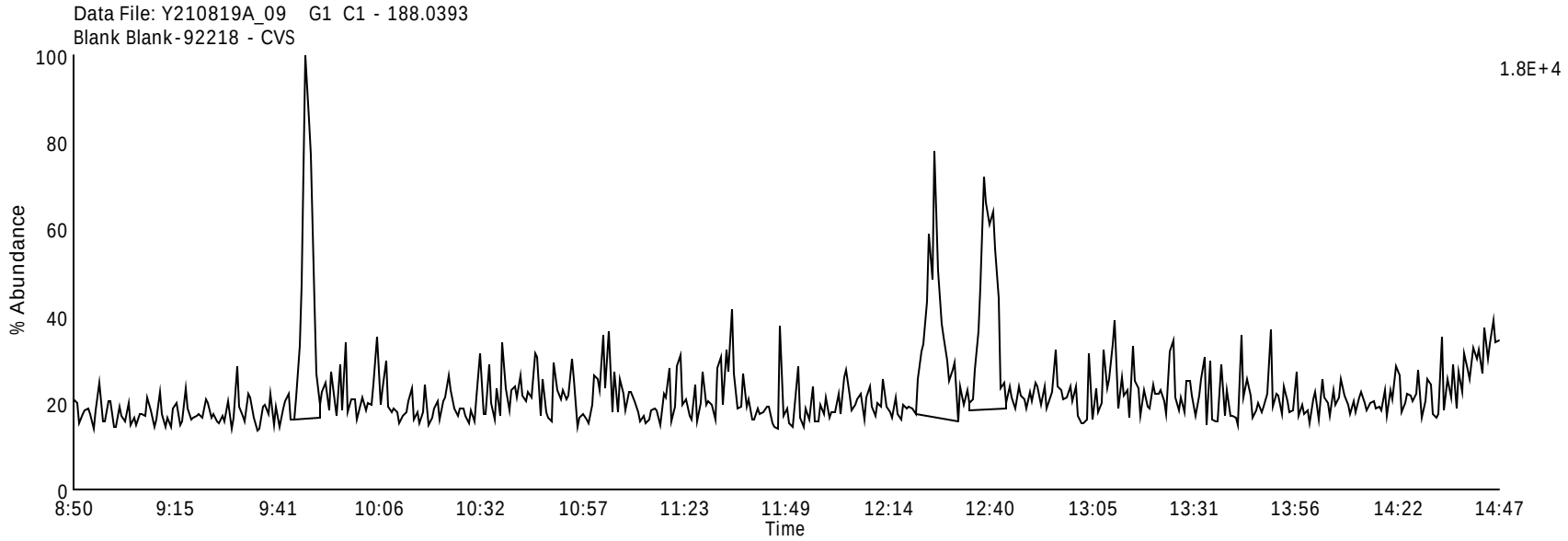
Labeled Deca Chlorinated Biphenyl	
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

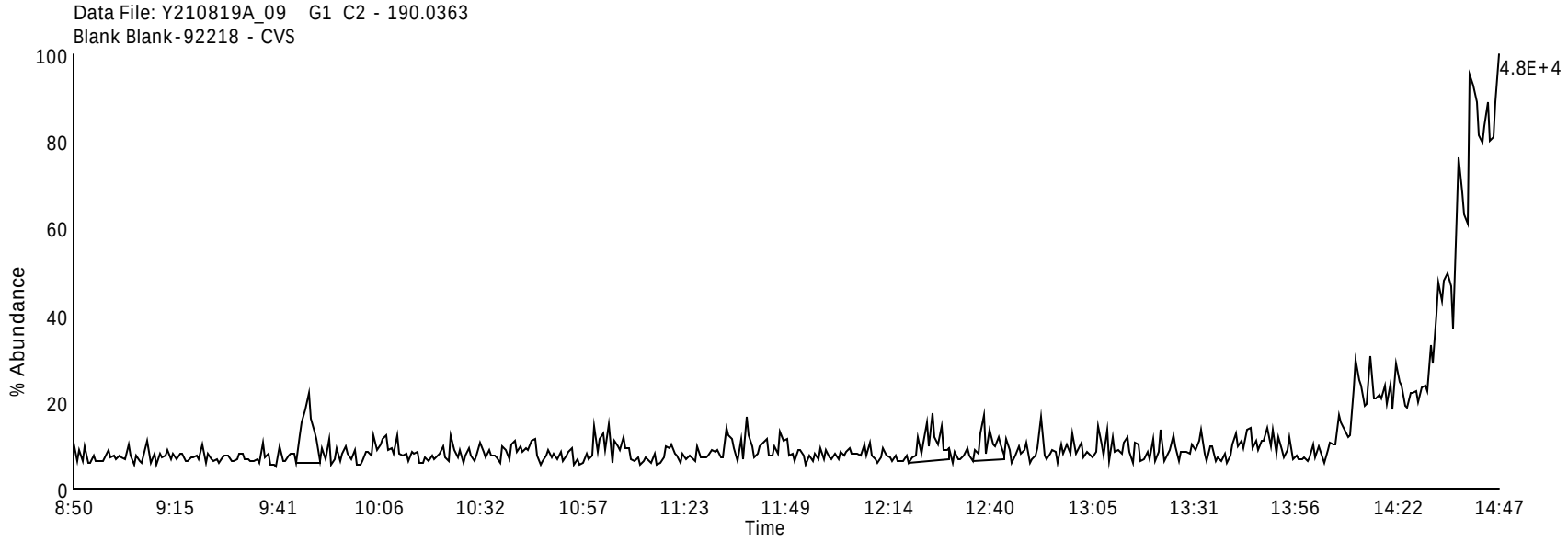




Mono Chlorinated Biphenyls

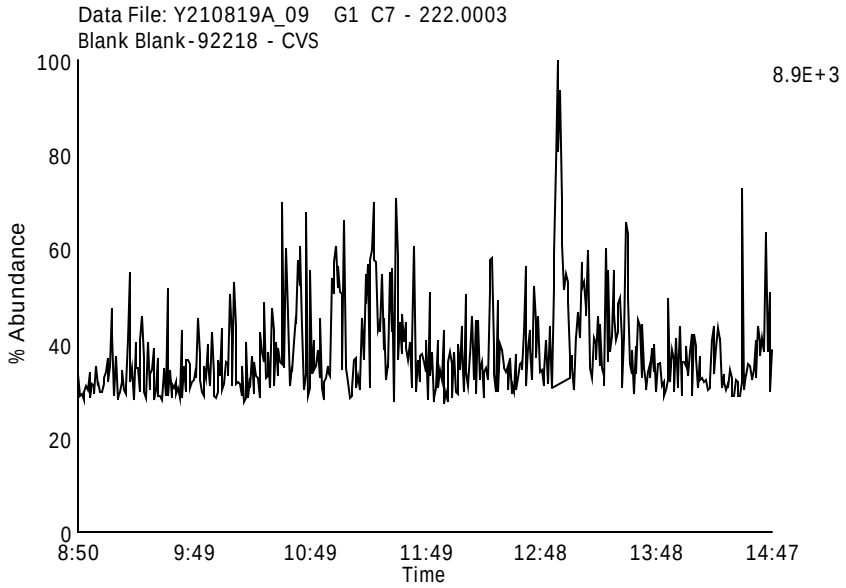
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

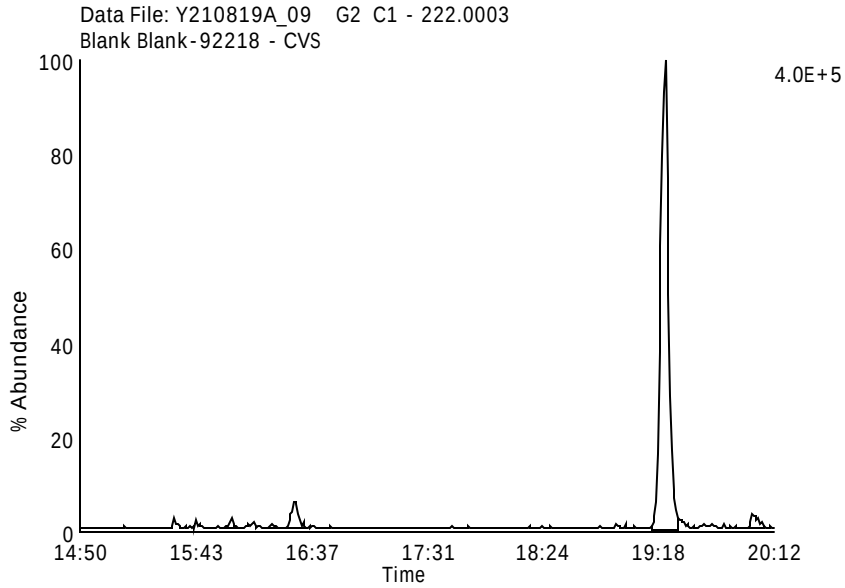


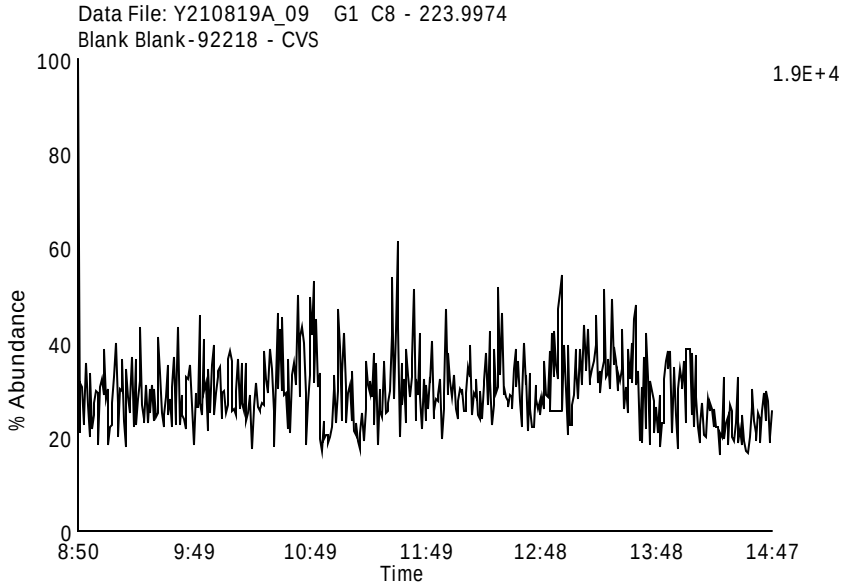


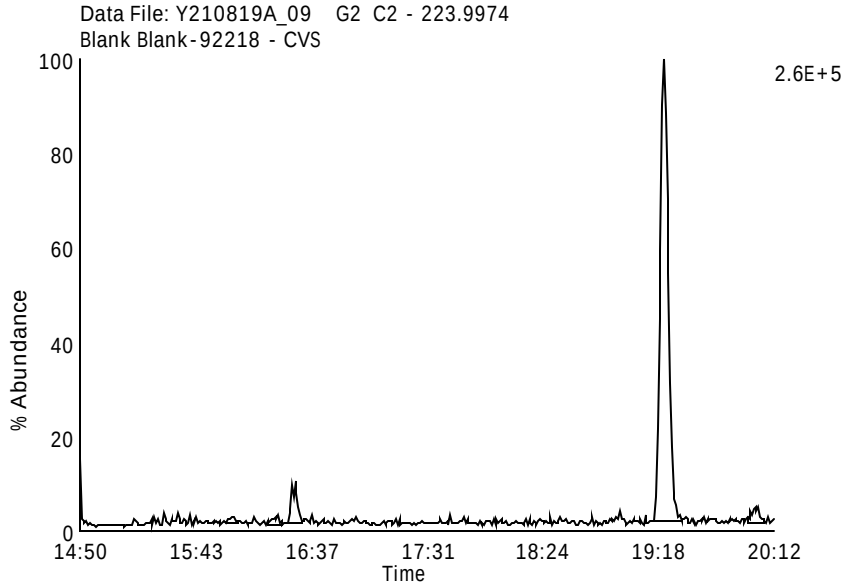
Di Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



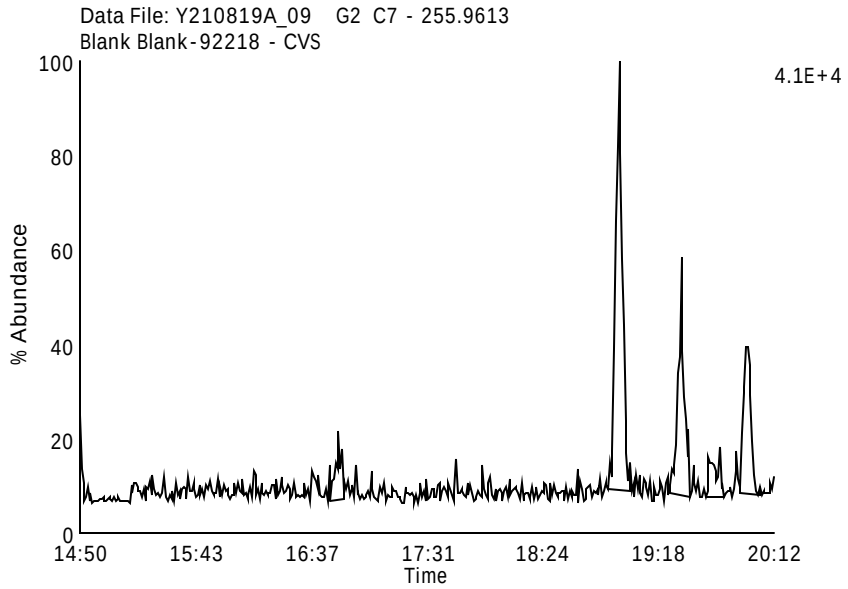


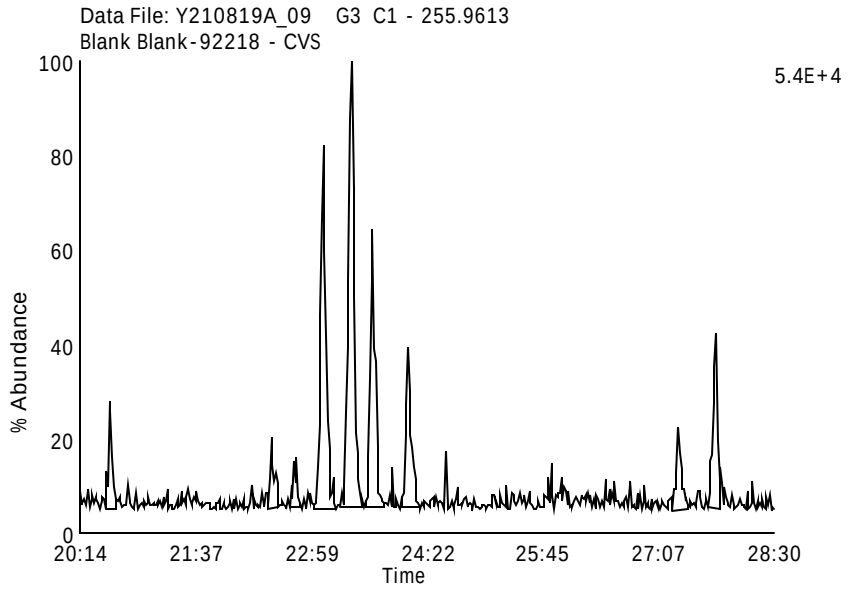


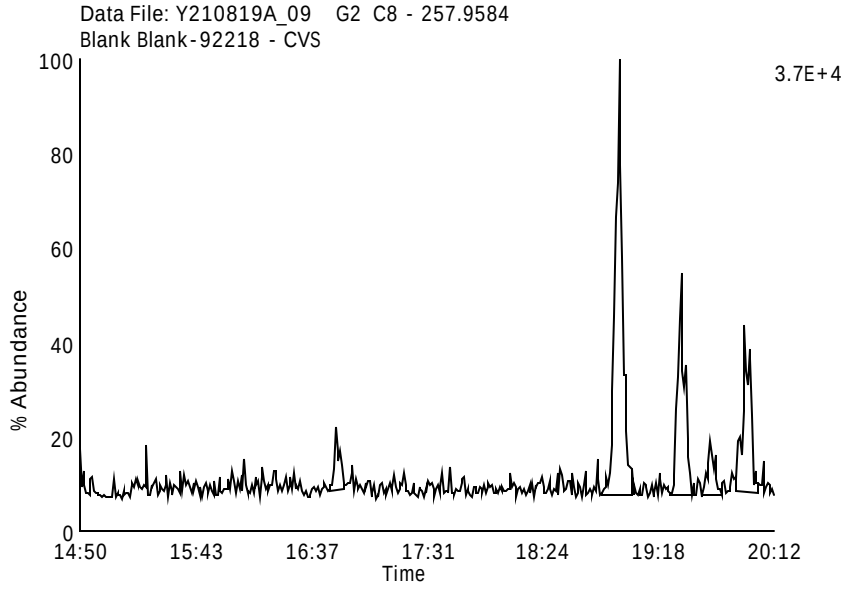


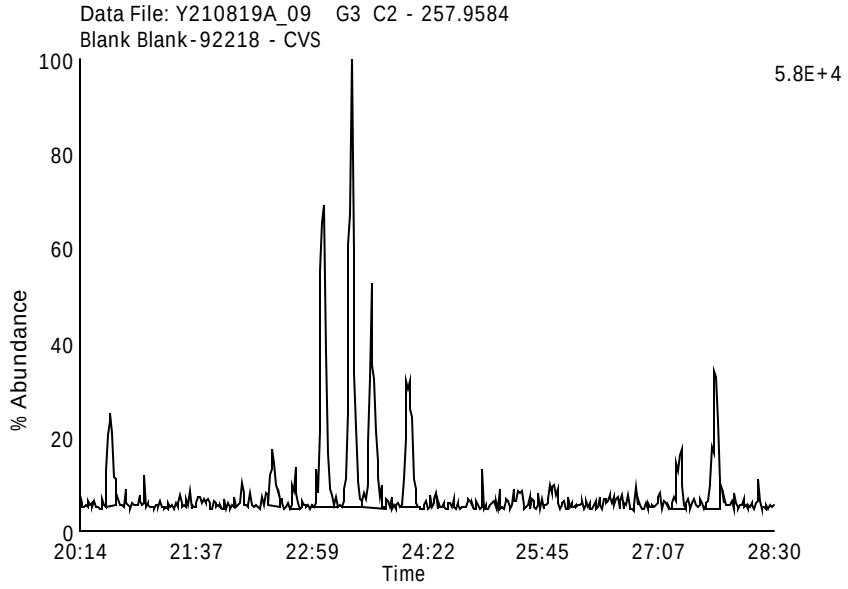
Tri Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



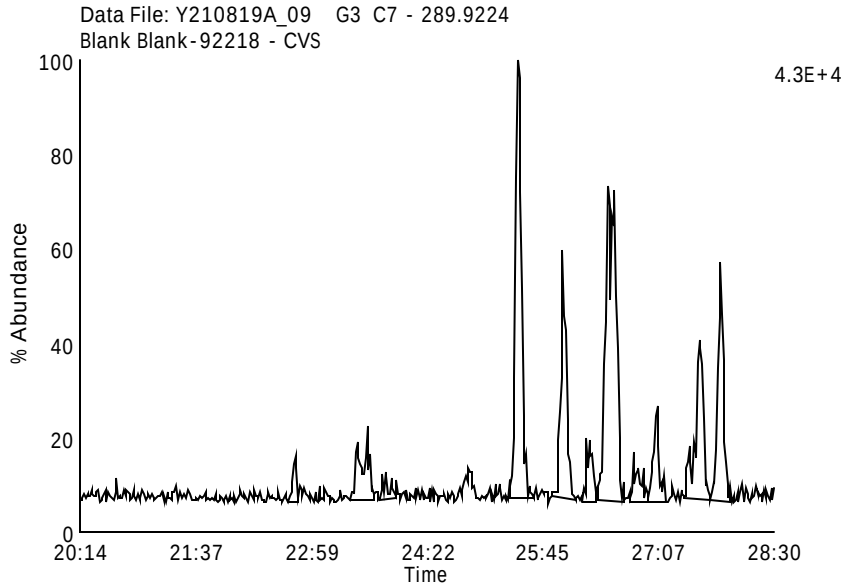


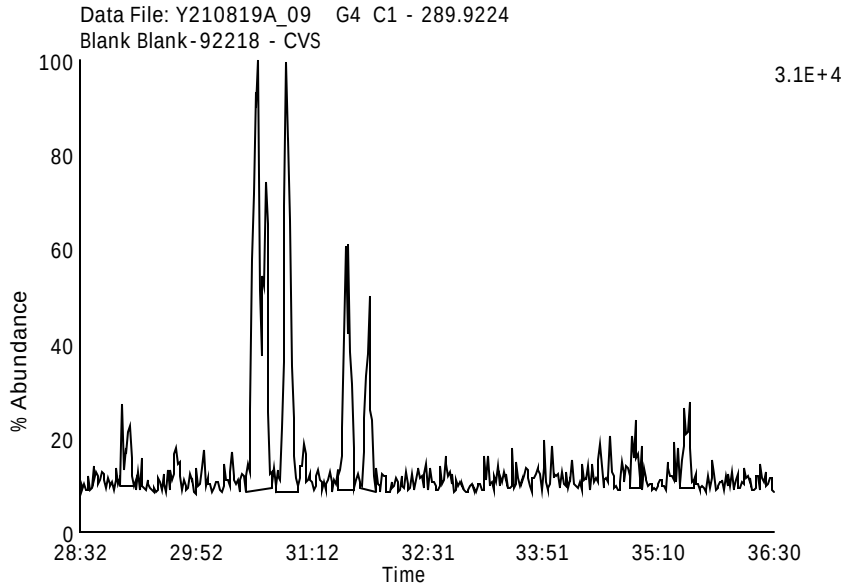


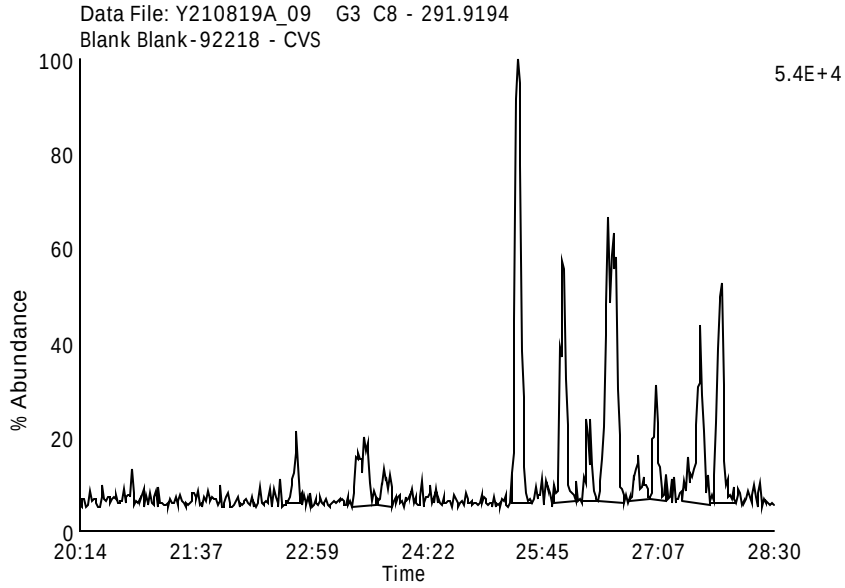


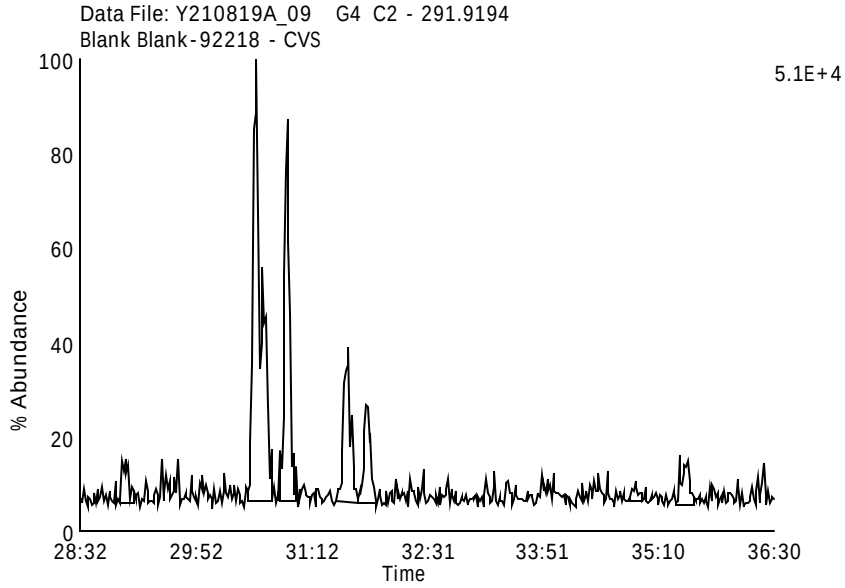
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



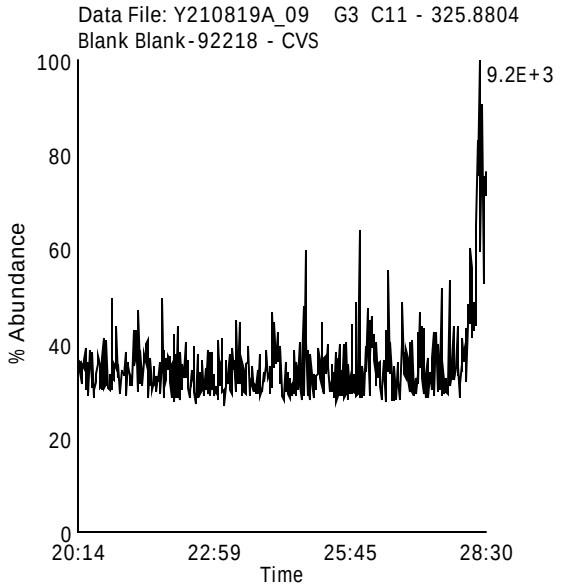


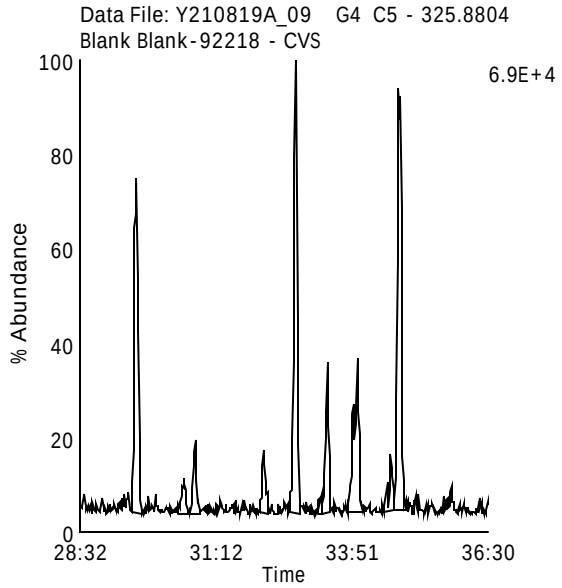


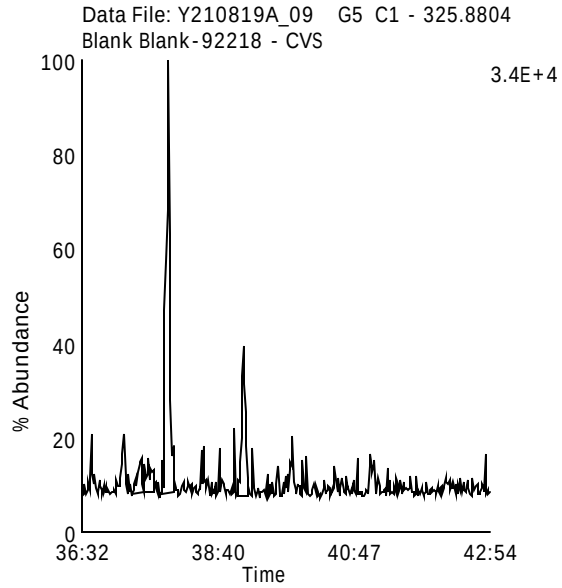


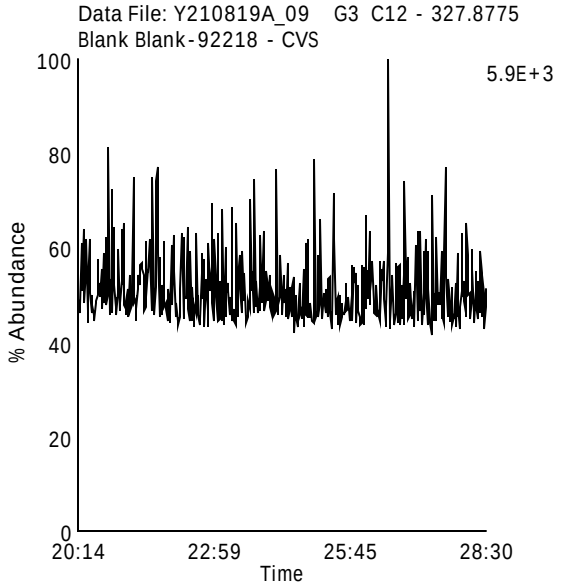
Penta Chlorinated Biphenyls

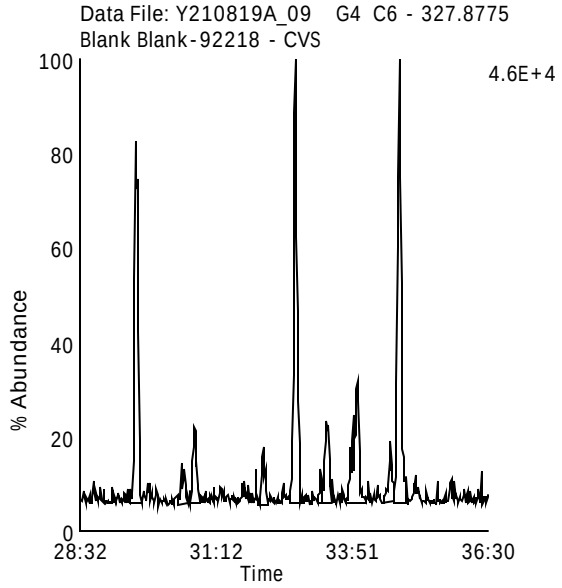
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

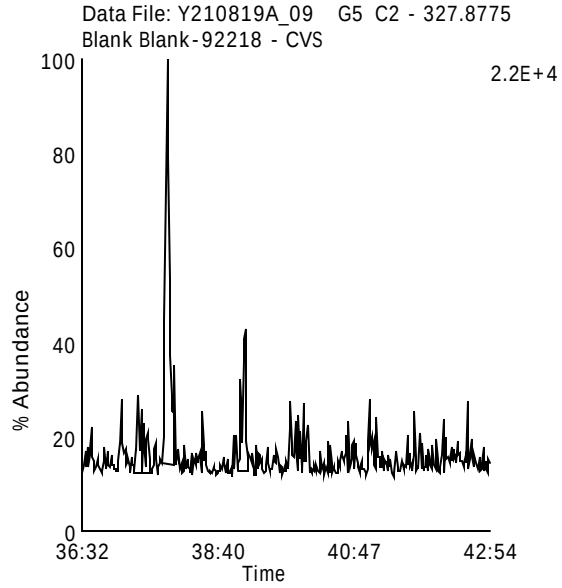






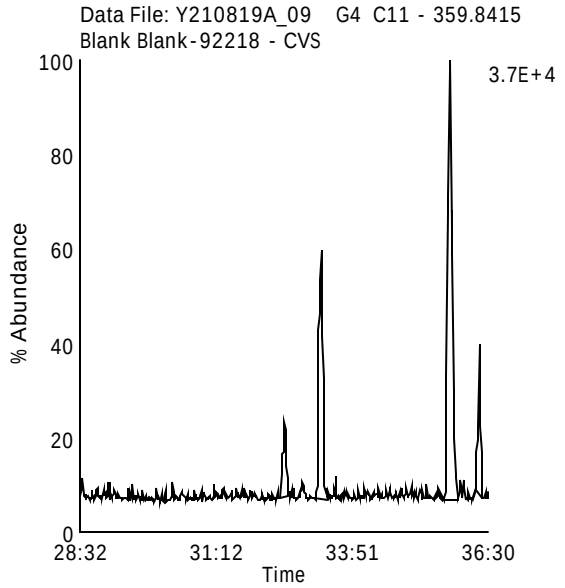


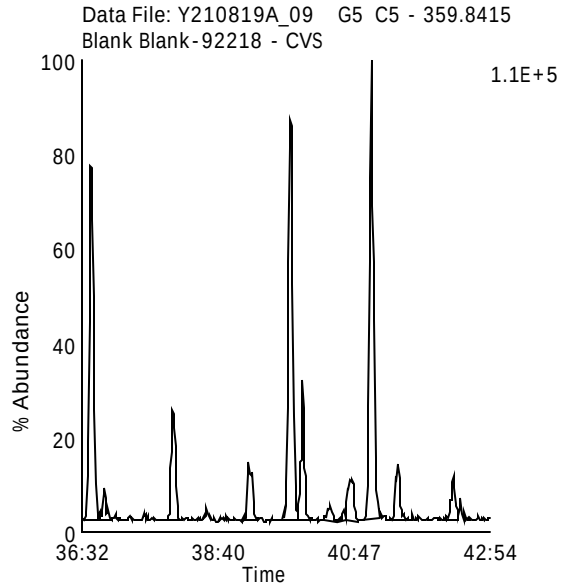


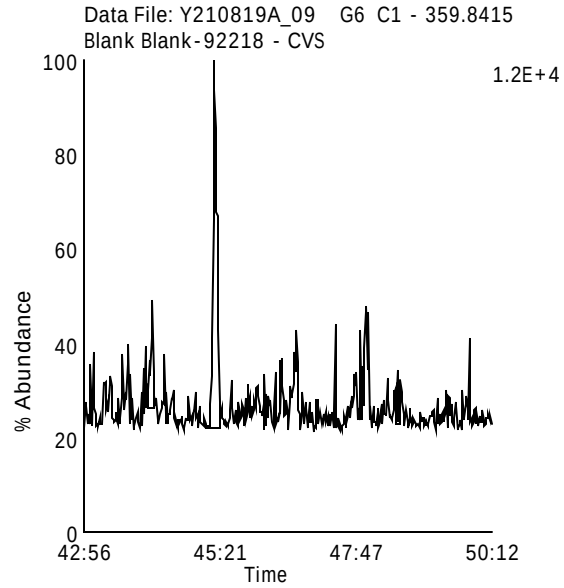


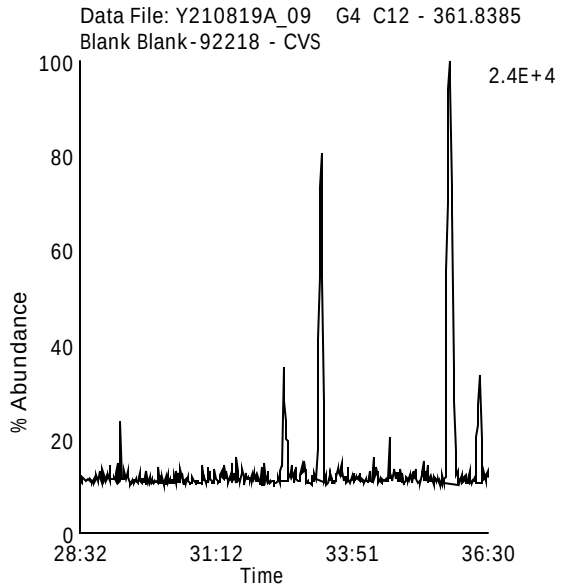
Hexa Chlorinated Biphenyls

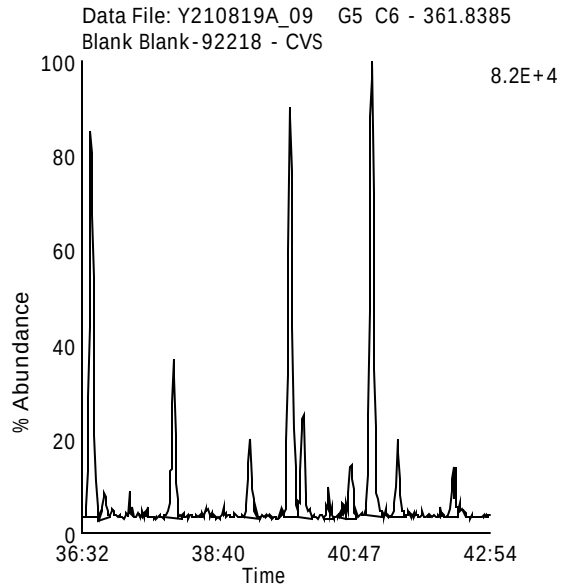
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

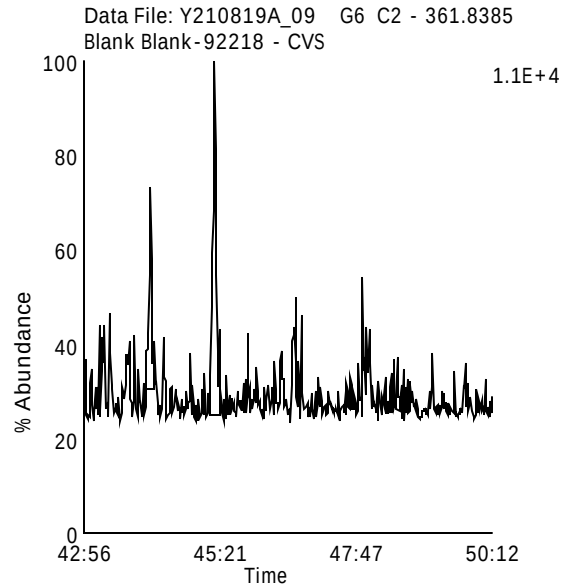








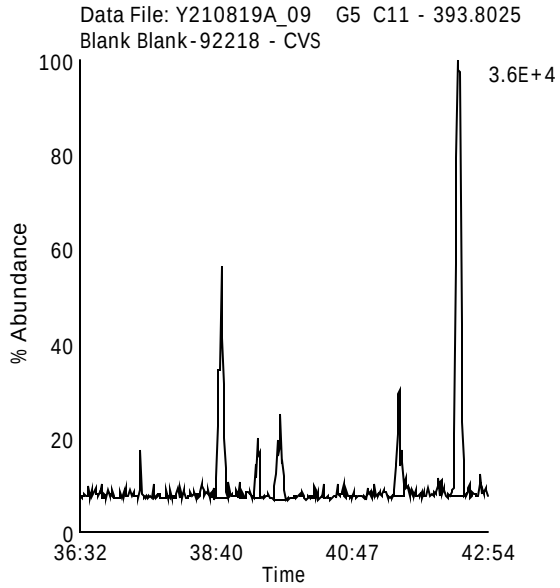


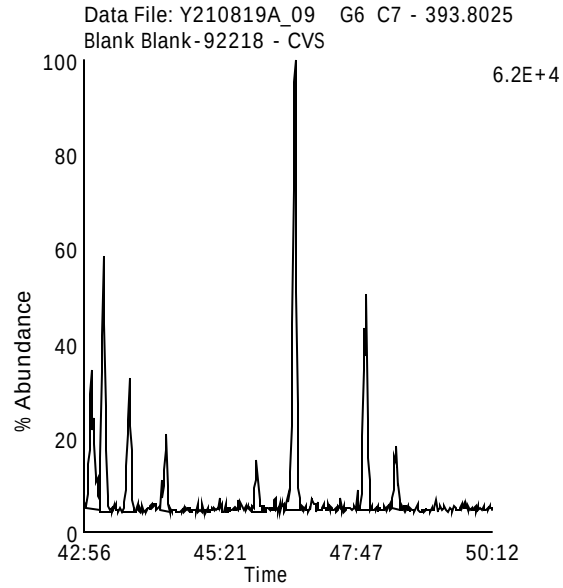


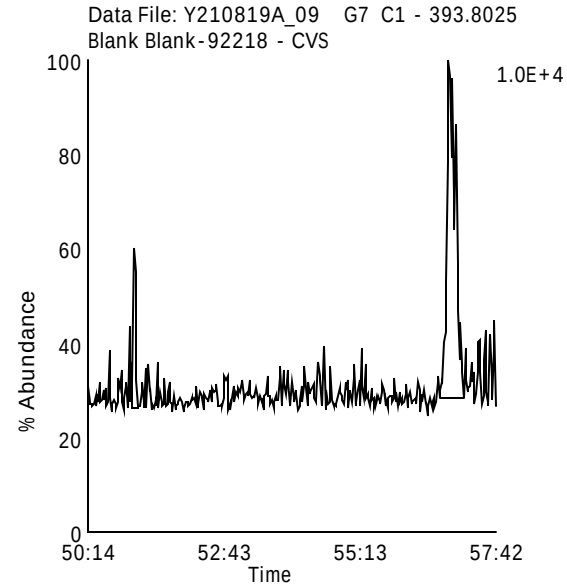
Hepta Chlorinated Biphenyls

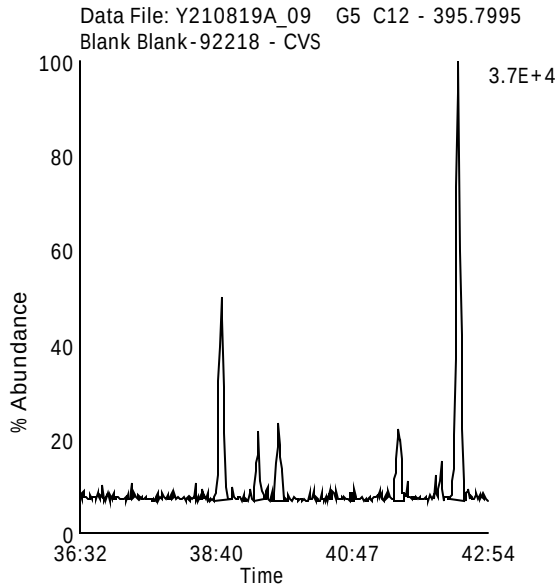
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

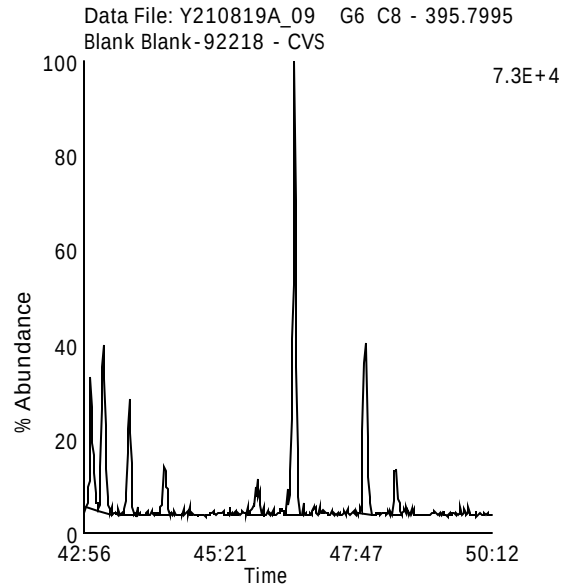
Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX

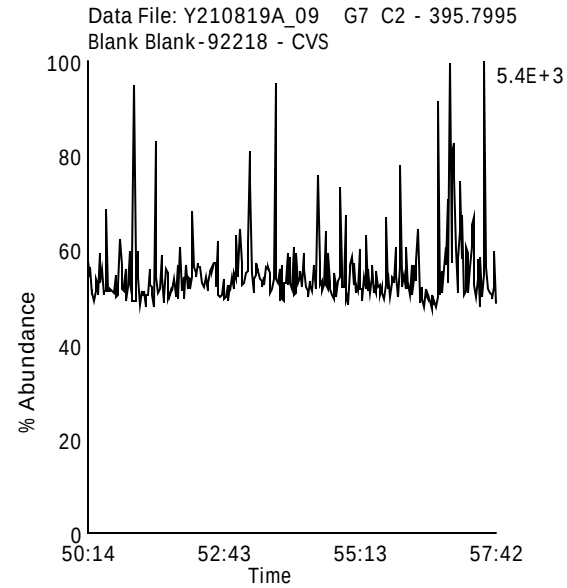






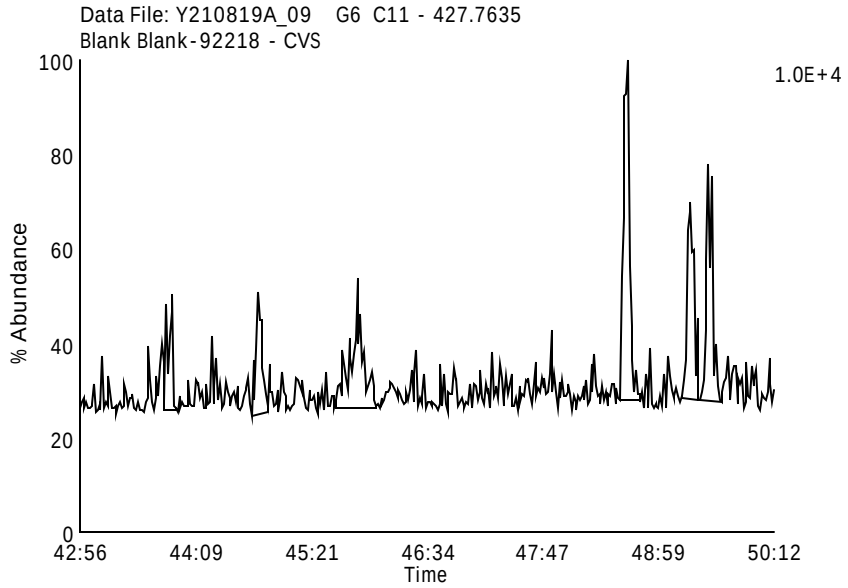


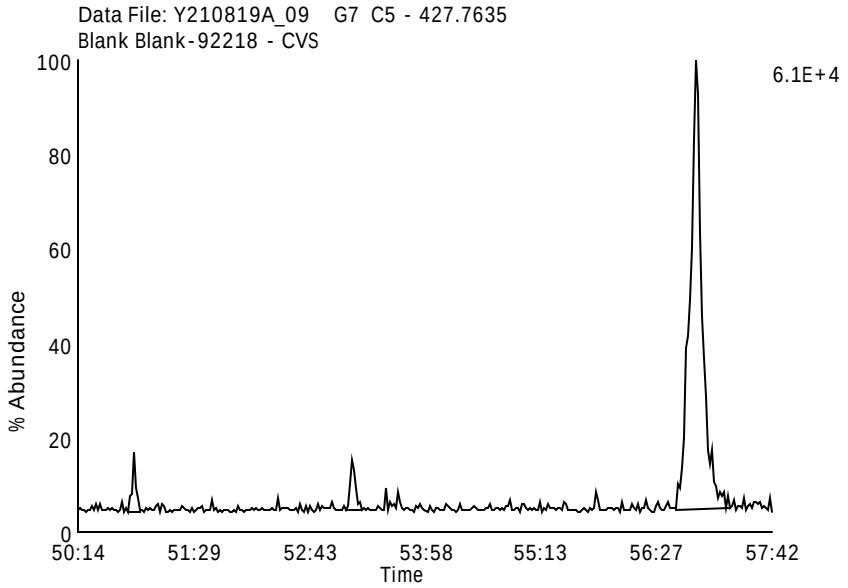


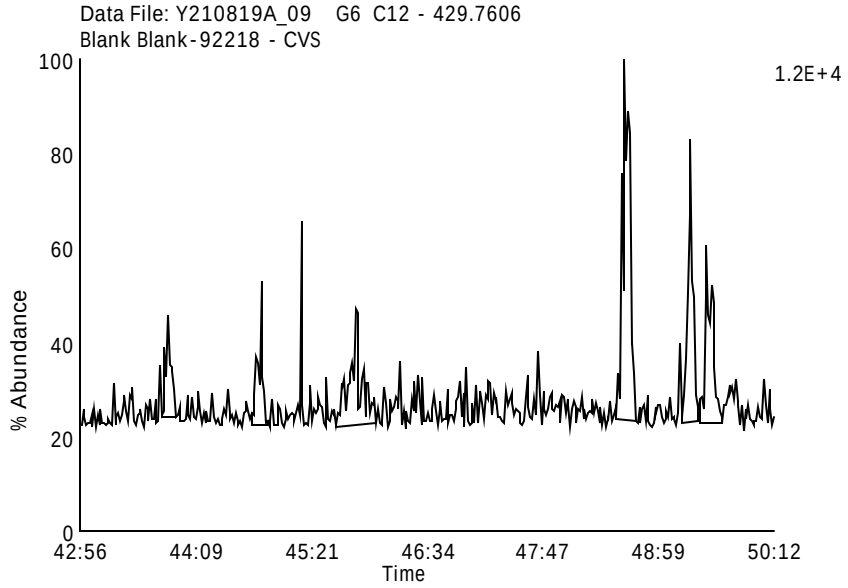


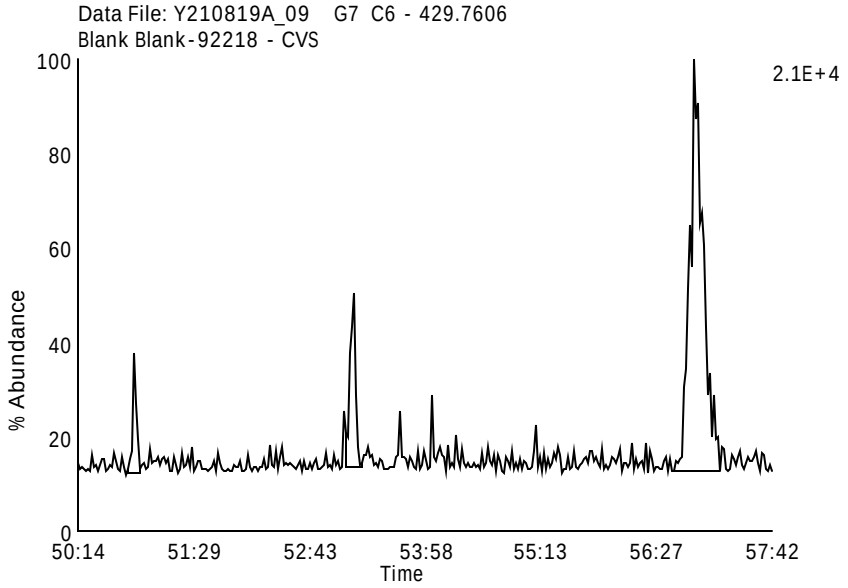
Octa Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



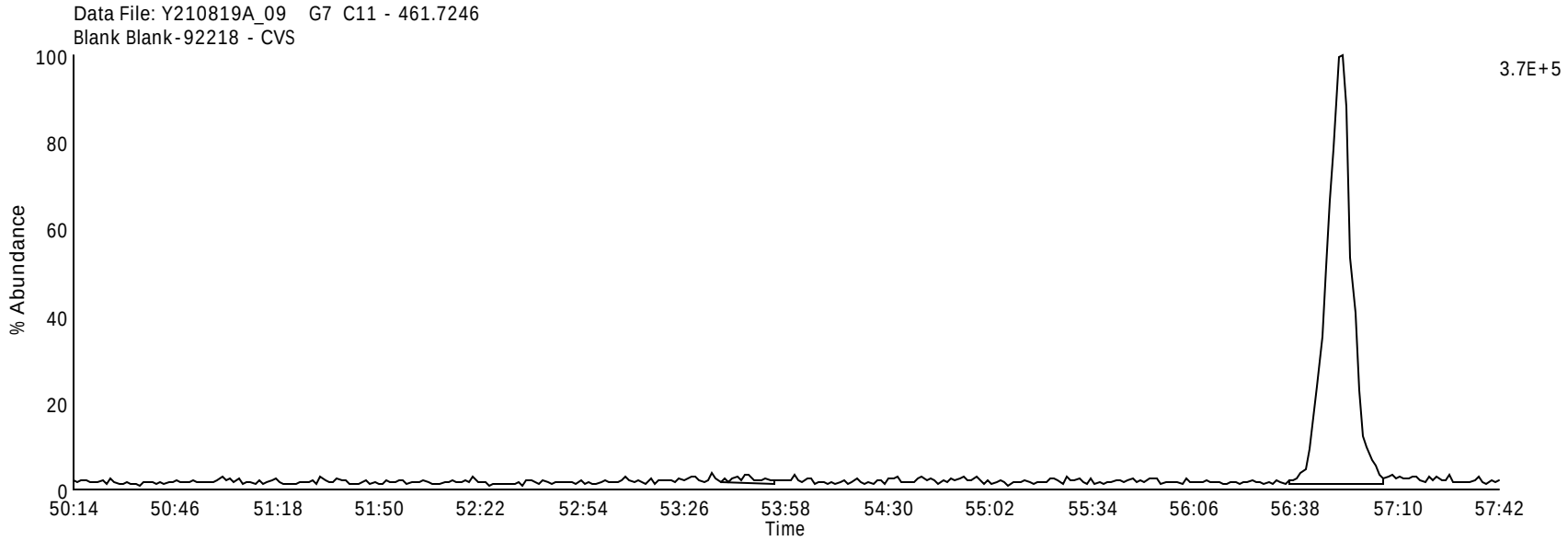


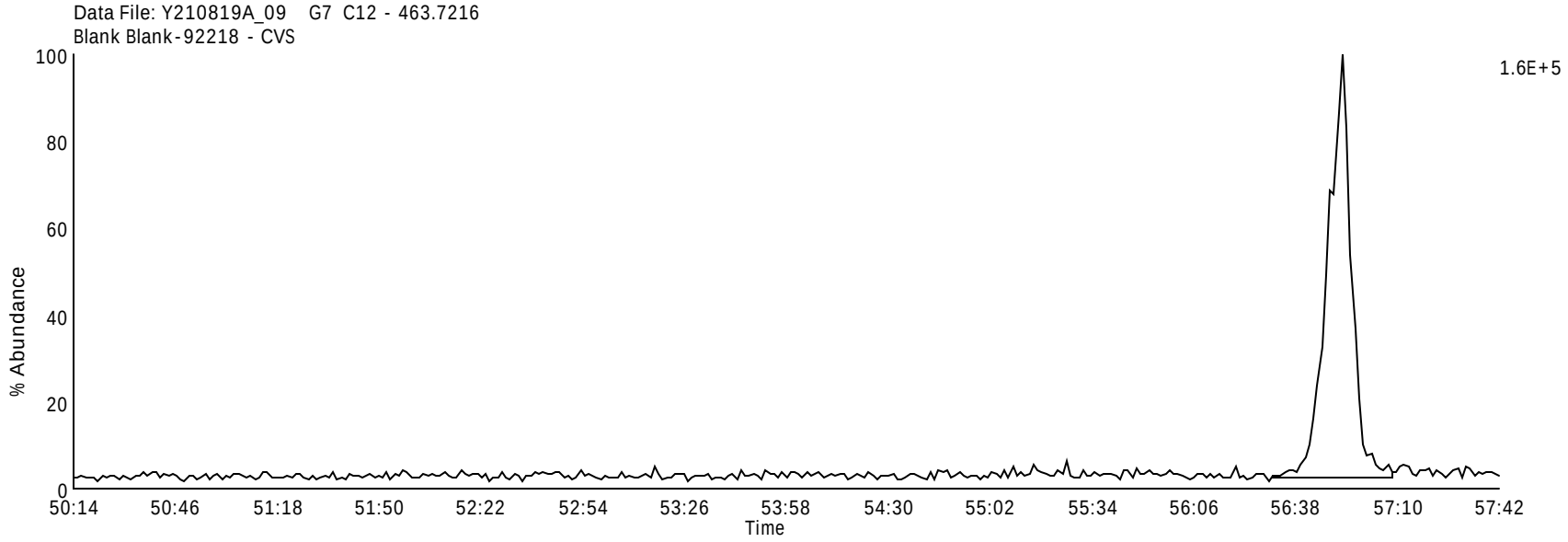




Nona Chlorinated Biphenyls

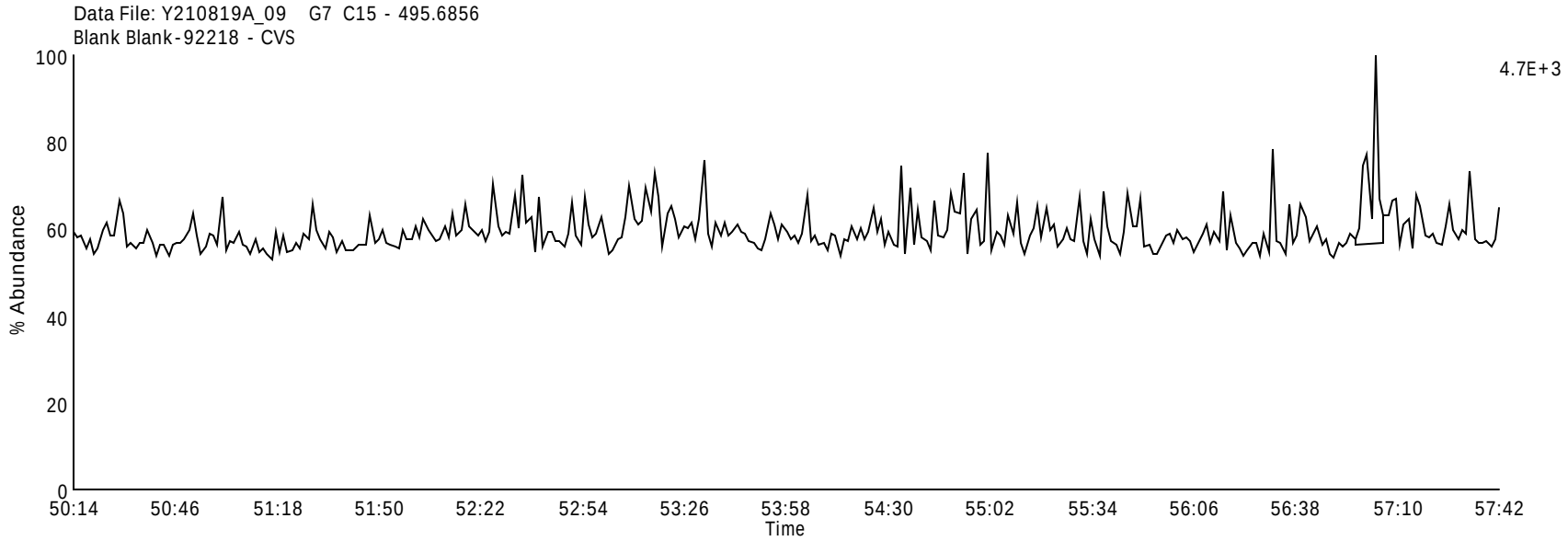
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

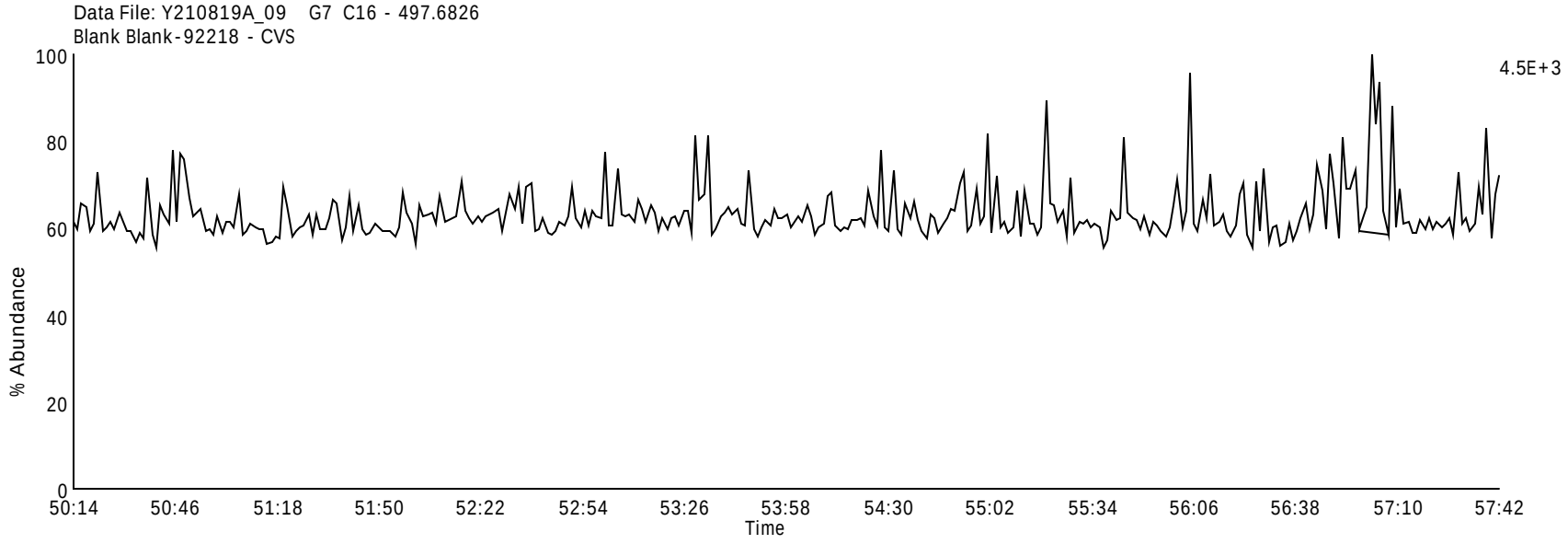




Deca Chlorinated Biphenyl

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

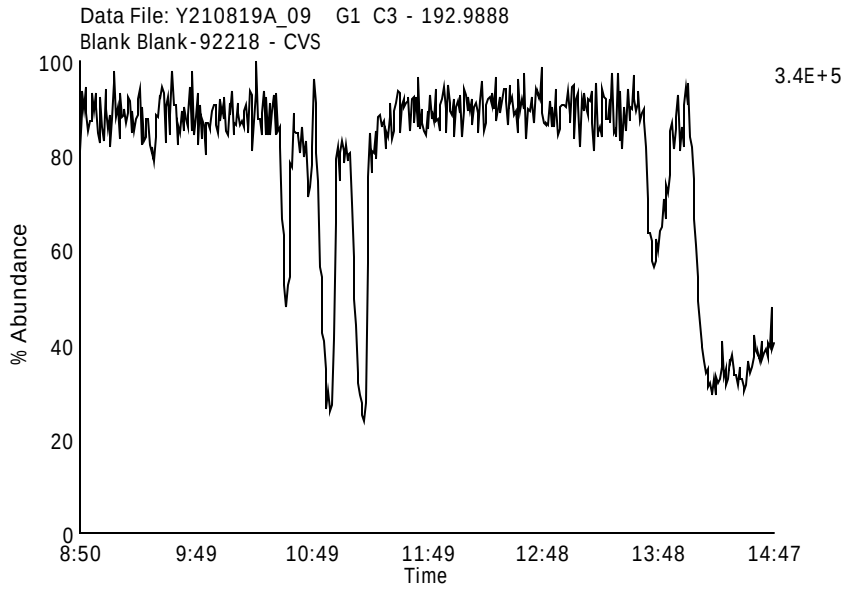


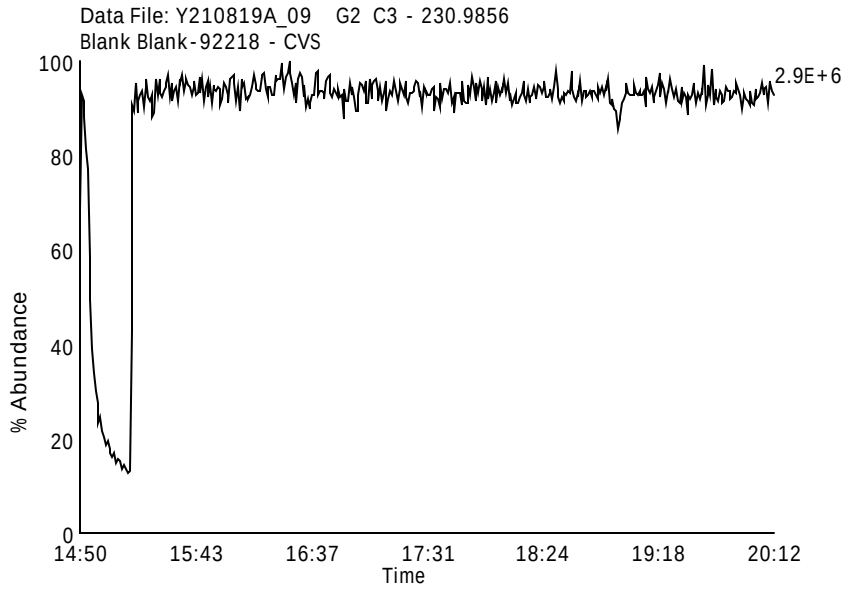


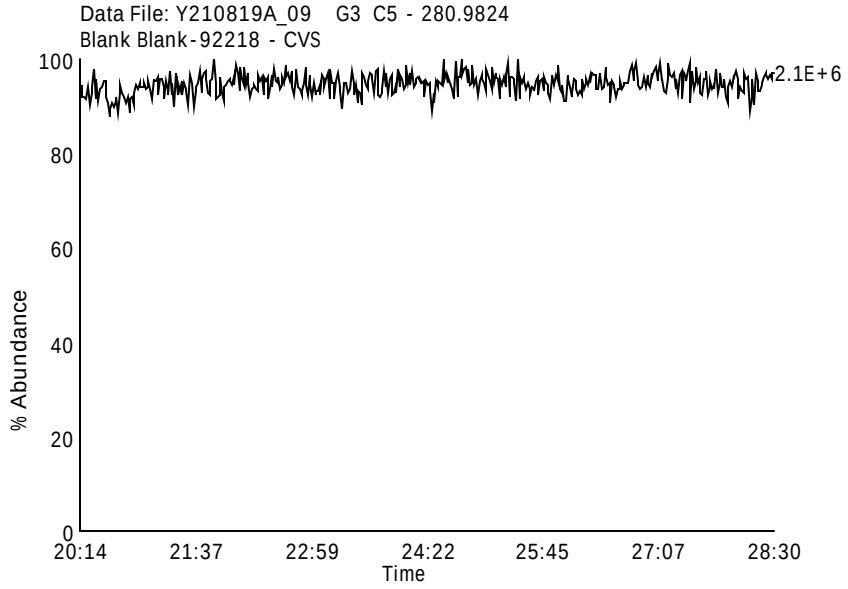
Group 1 - 4 Lock mass

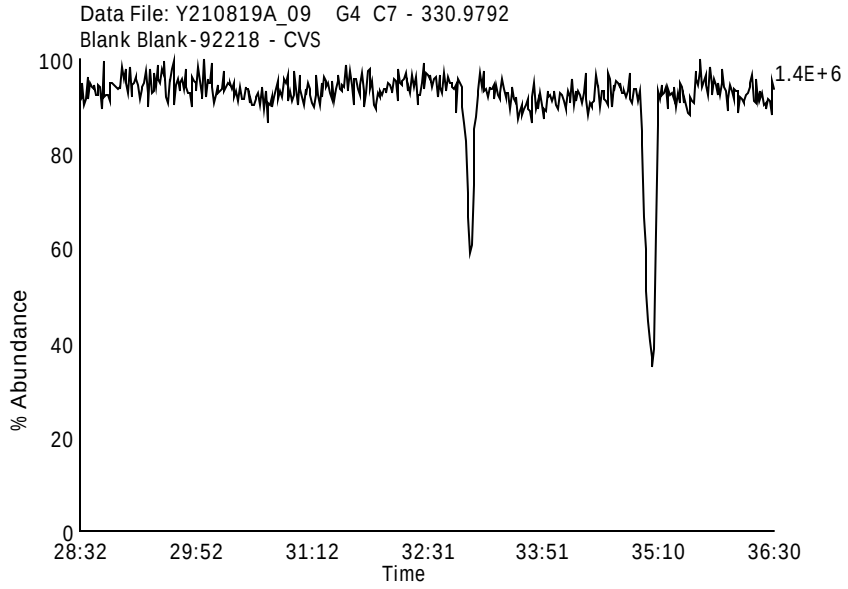
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX





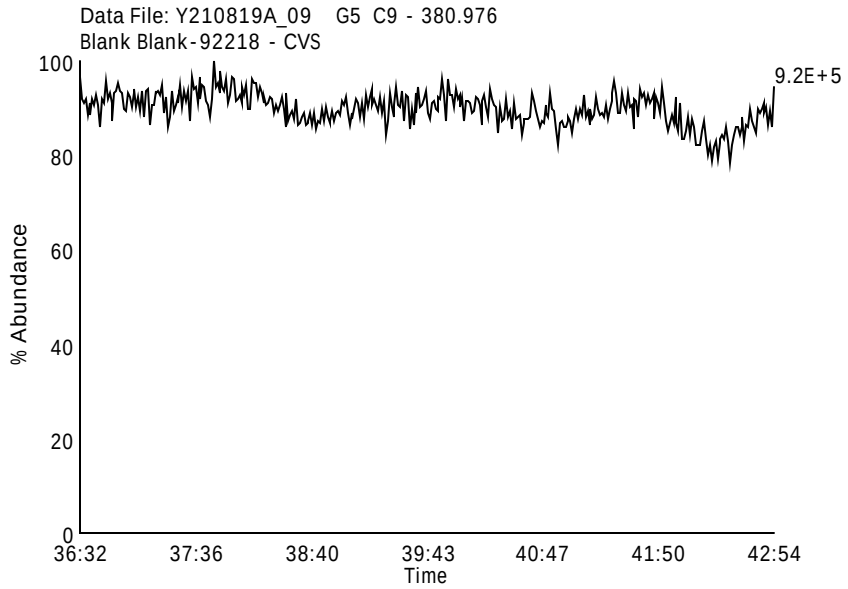


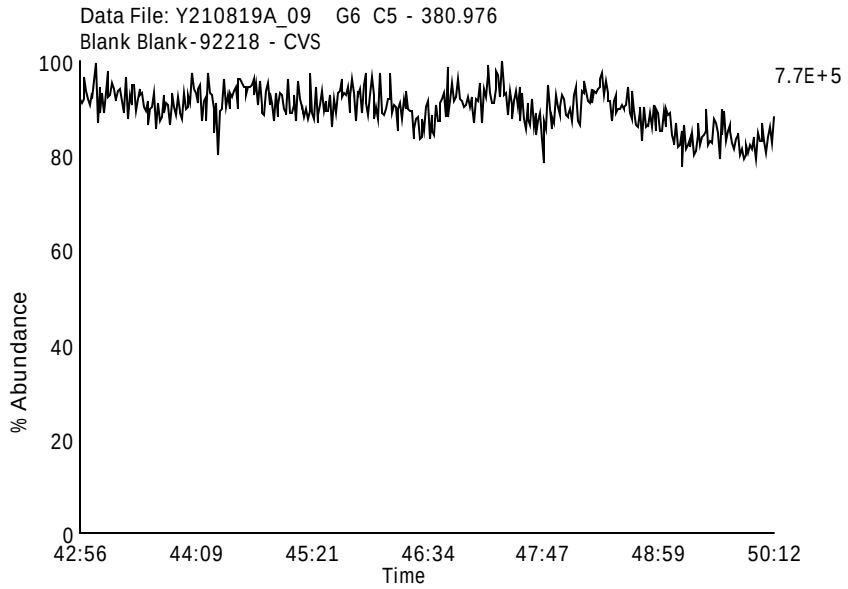


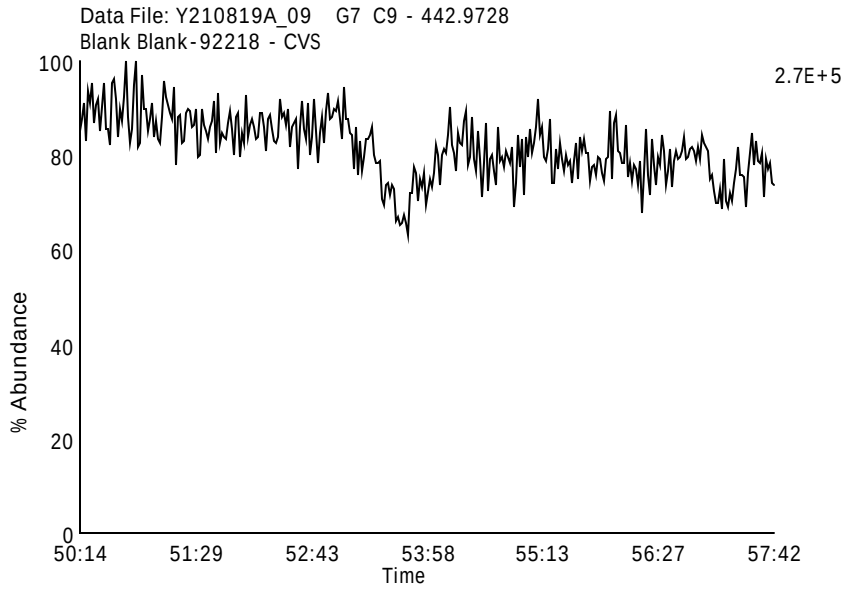
Group 5 - 7 Lock mass

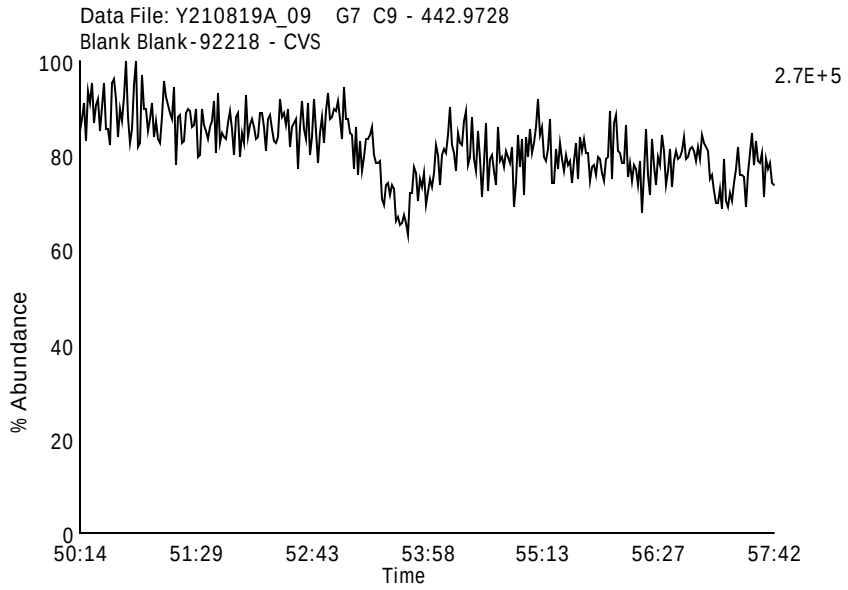
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX



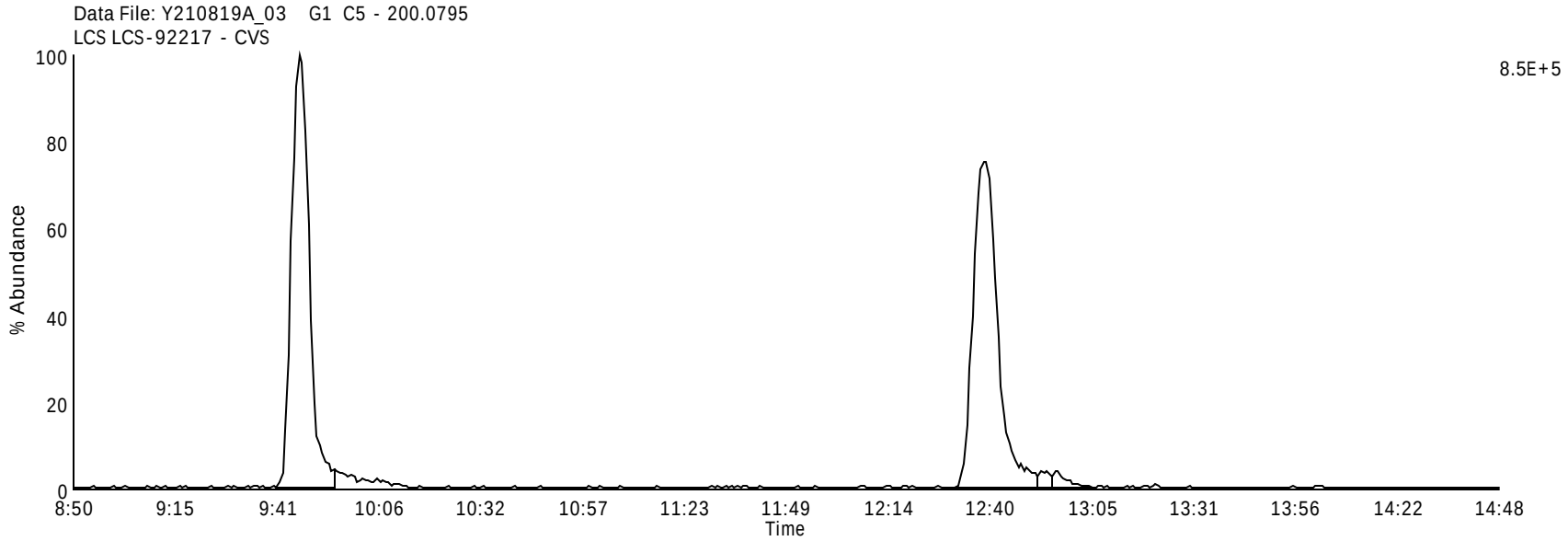


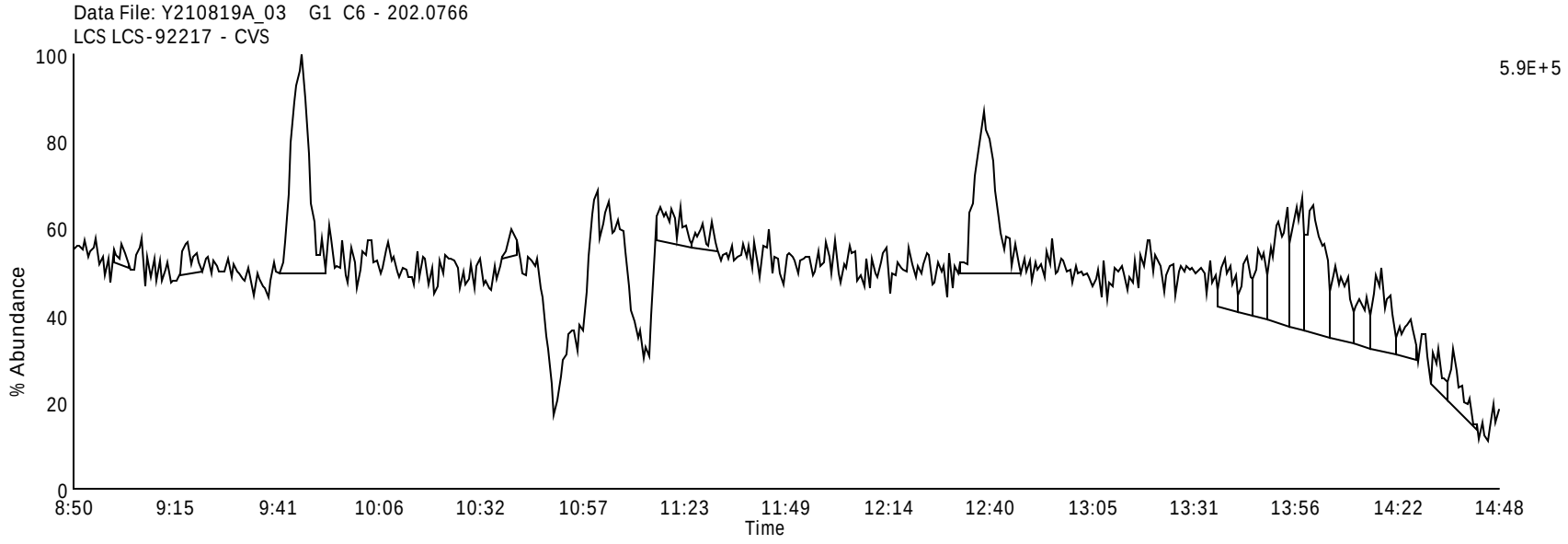




Labeled Mono Chlorinated Biphenyls

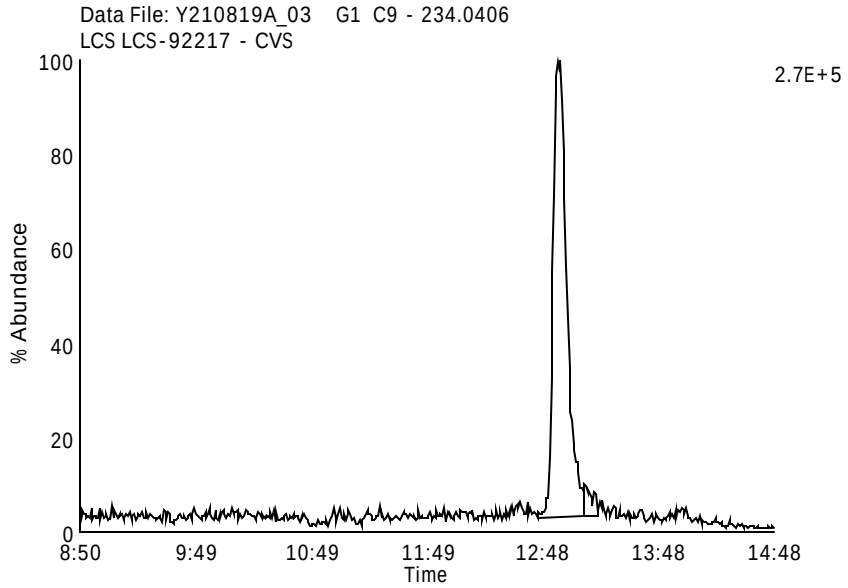
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

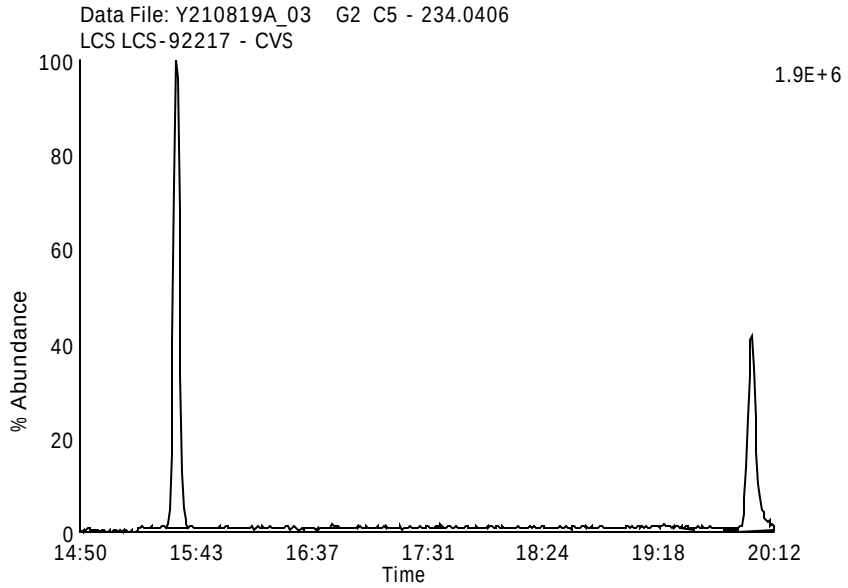


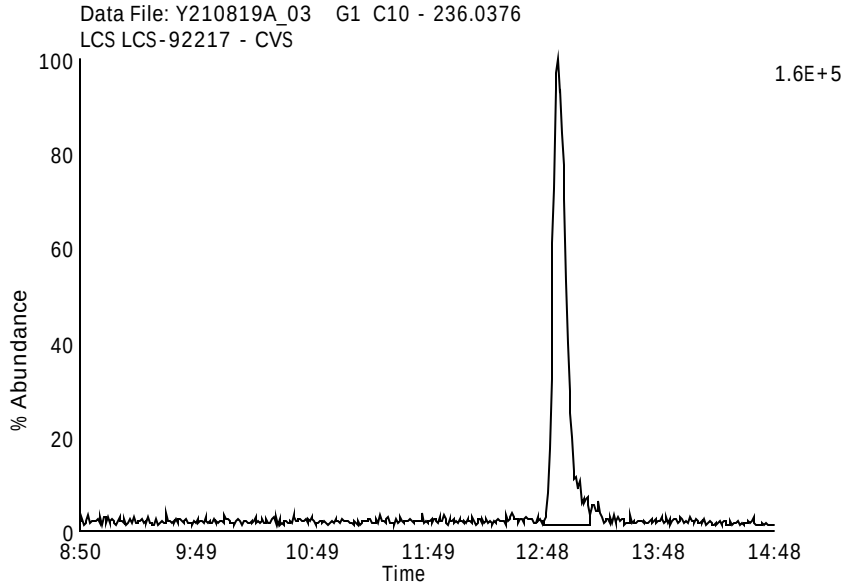


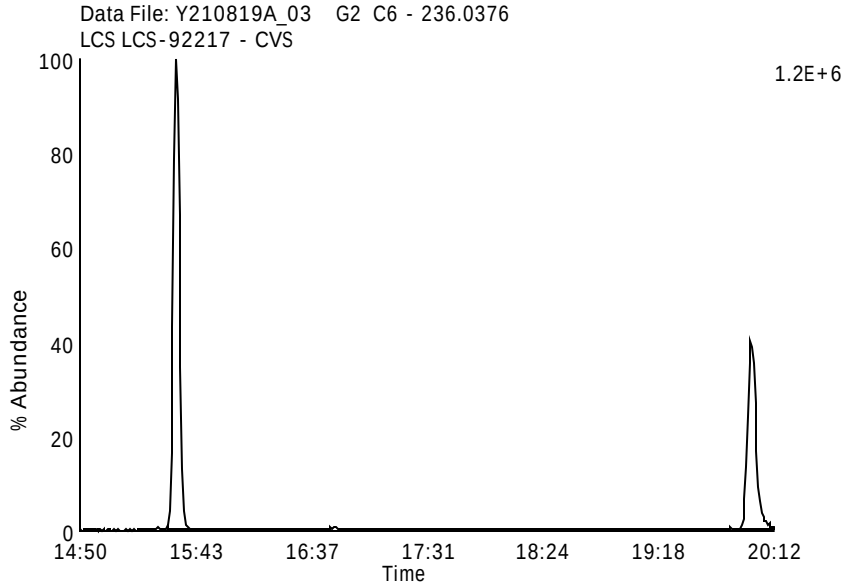
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



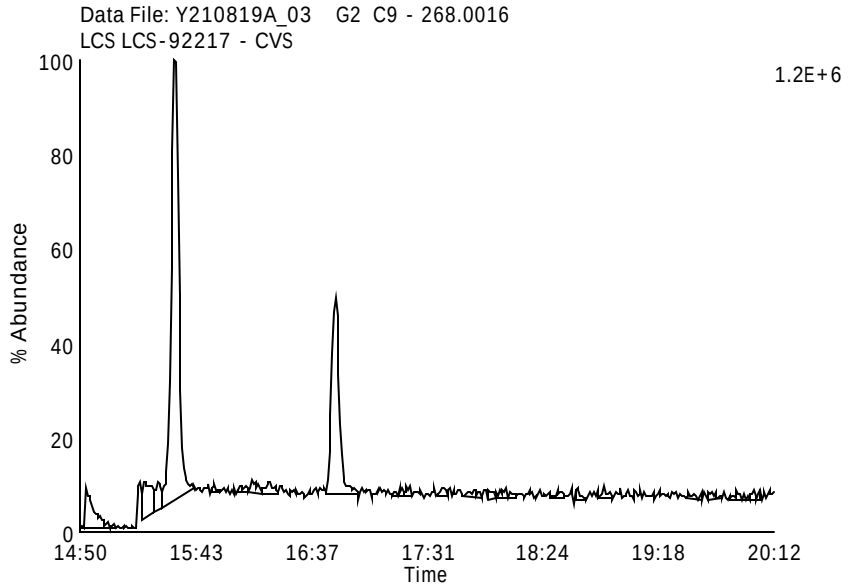


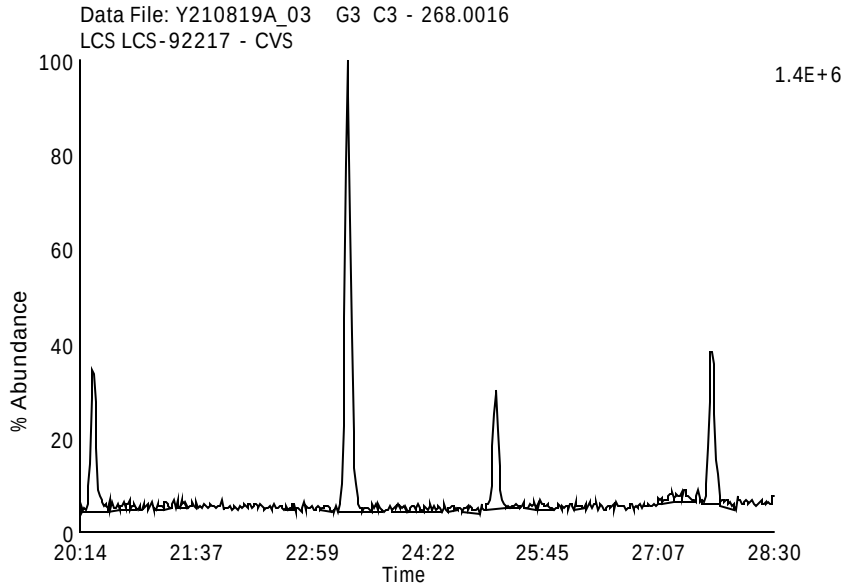


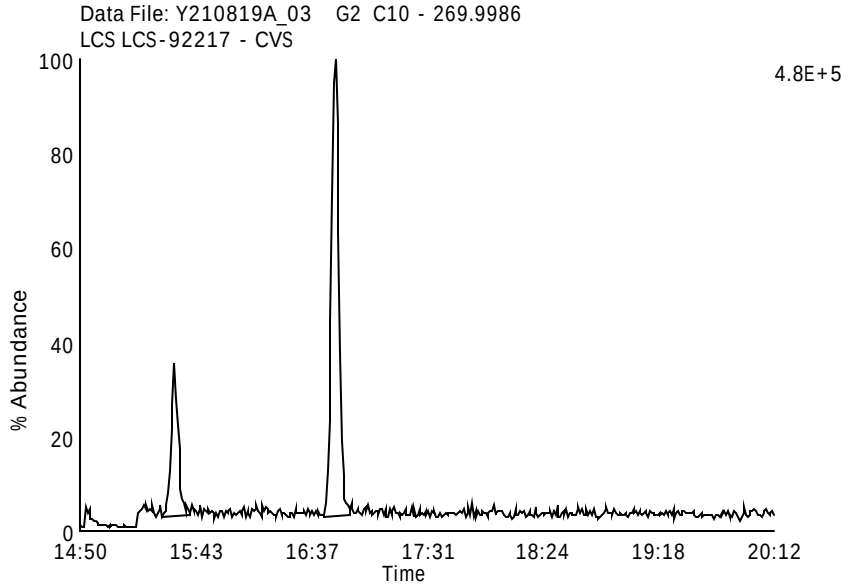


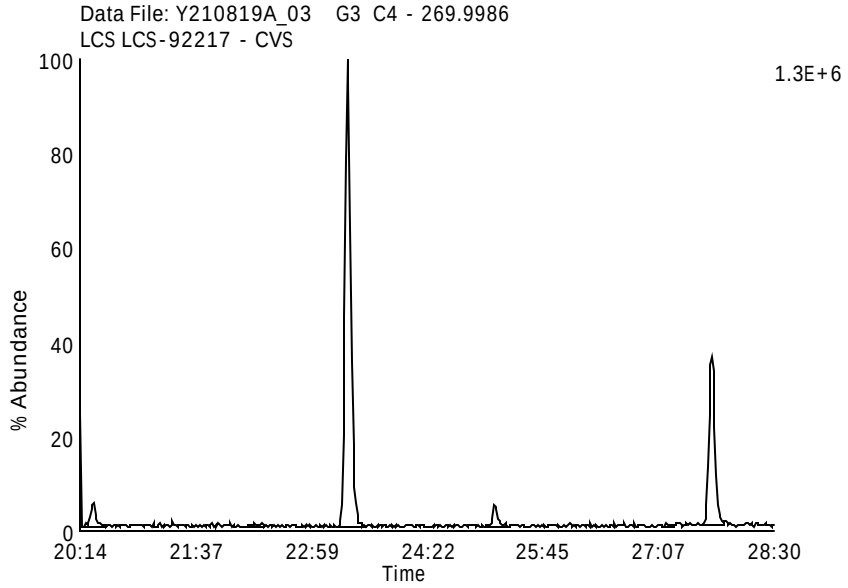
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



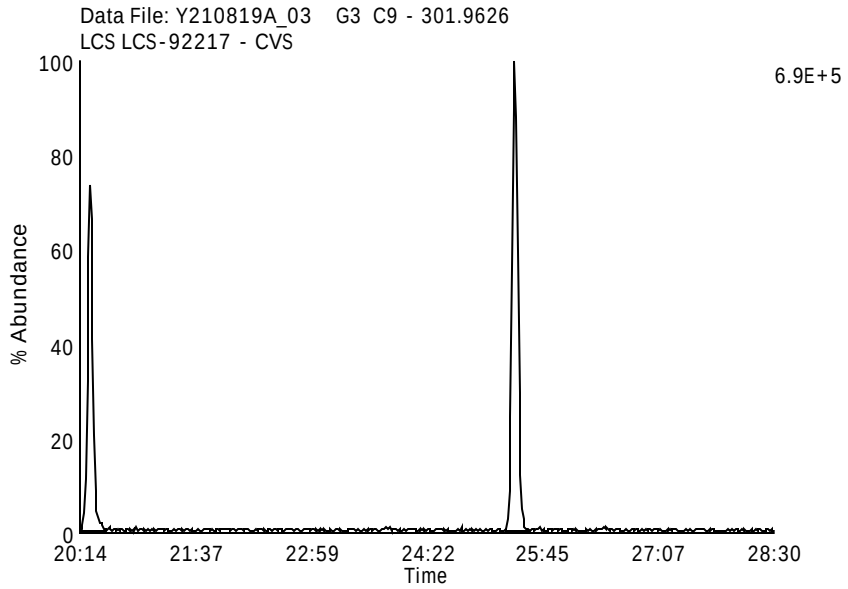


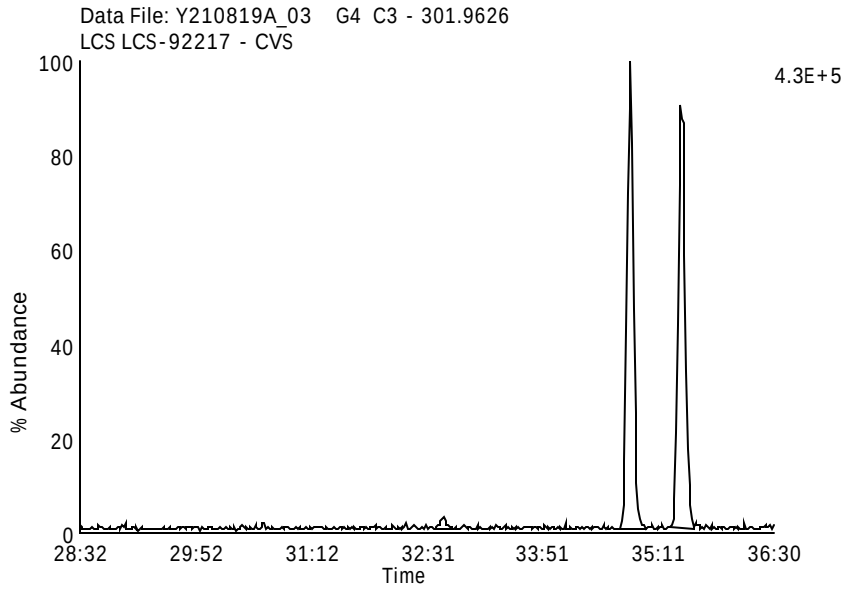


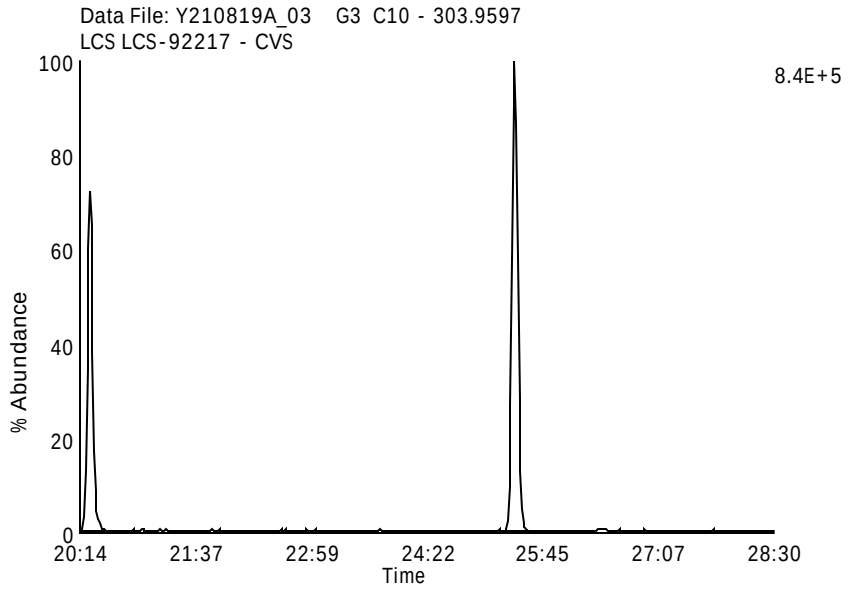


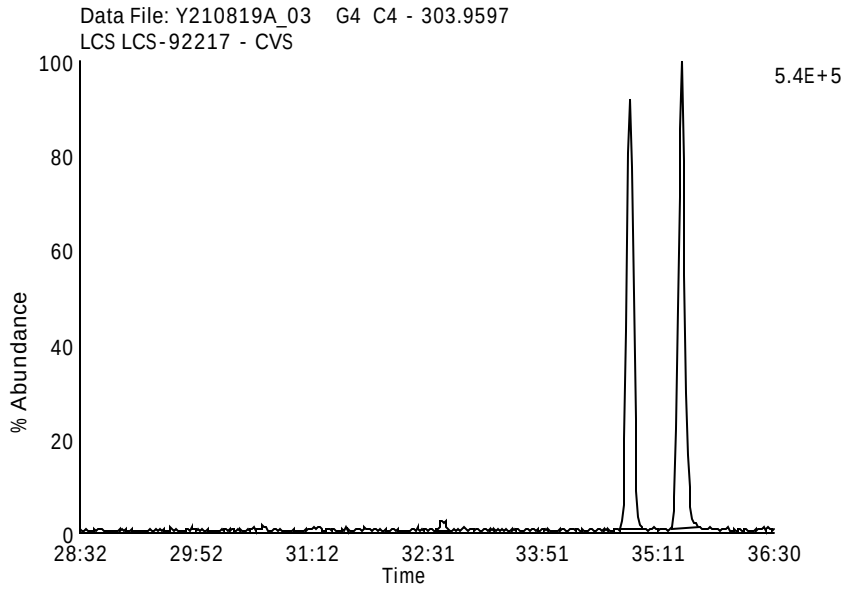
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



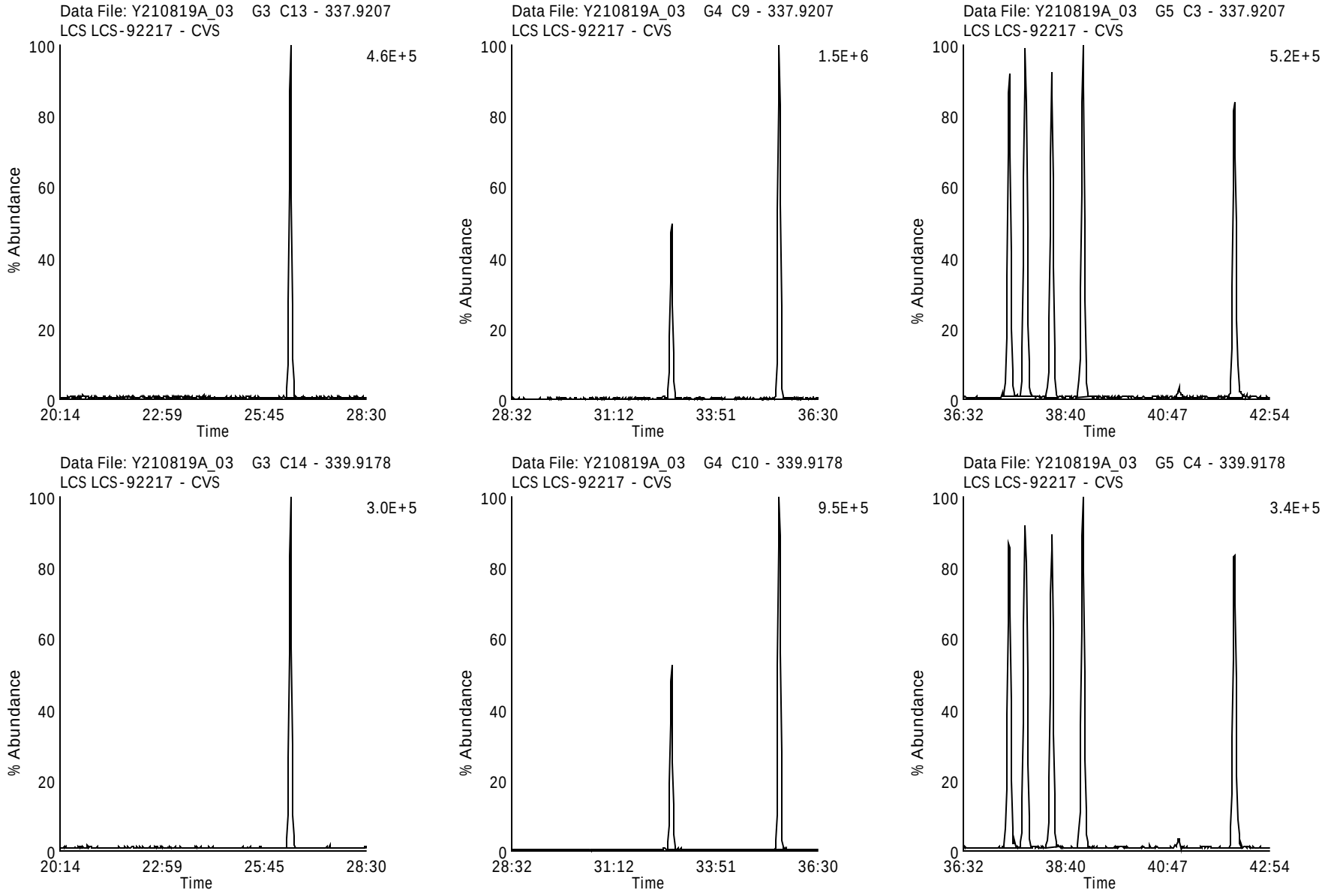






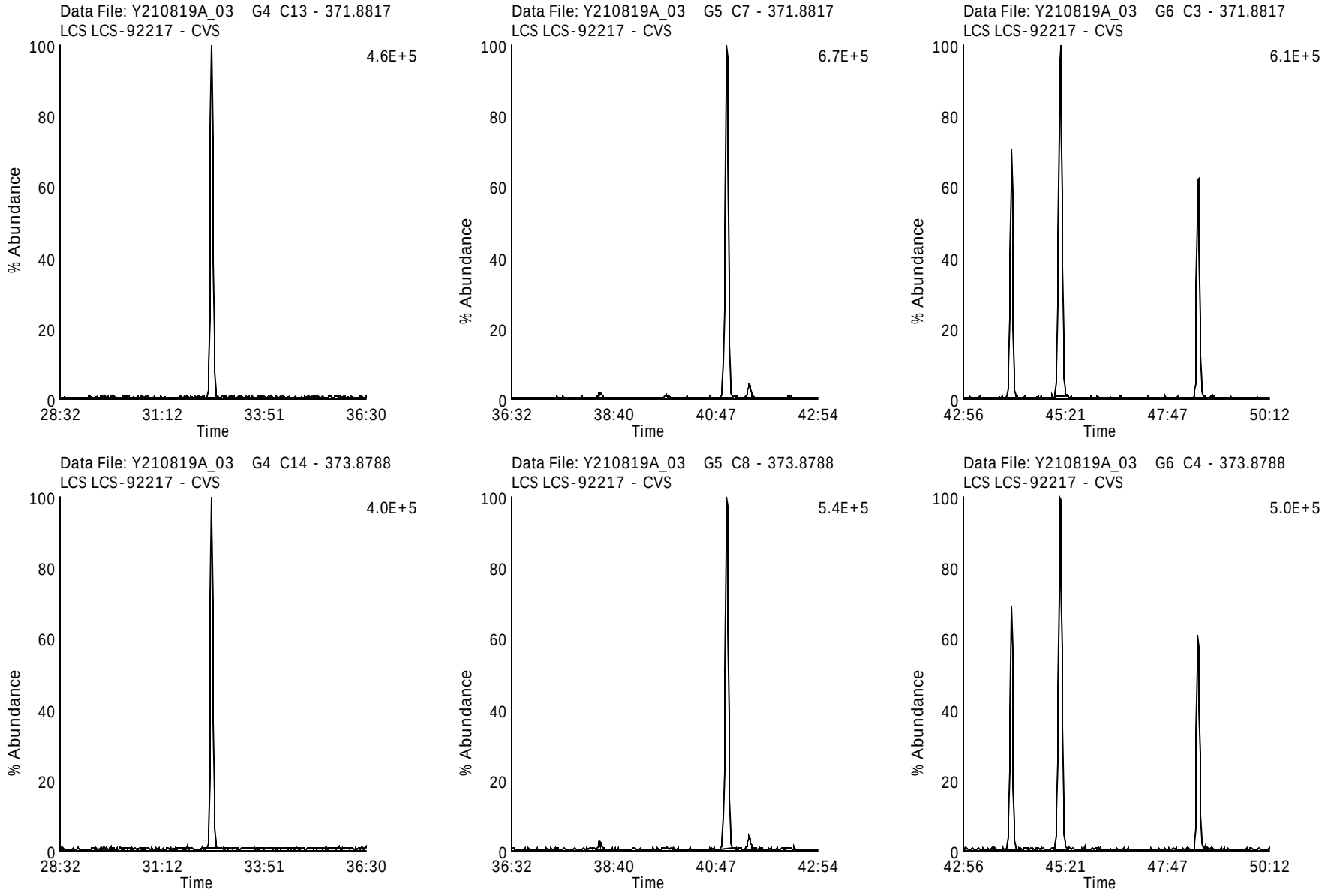
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



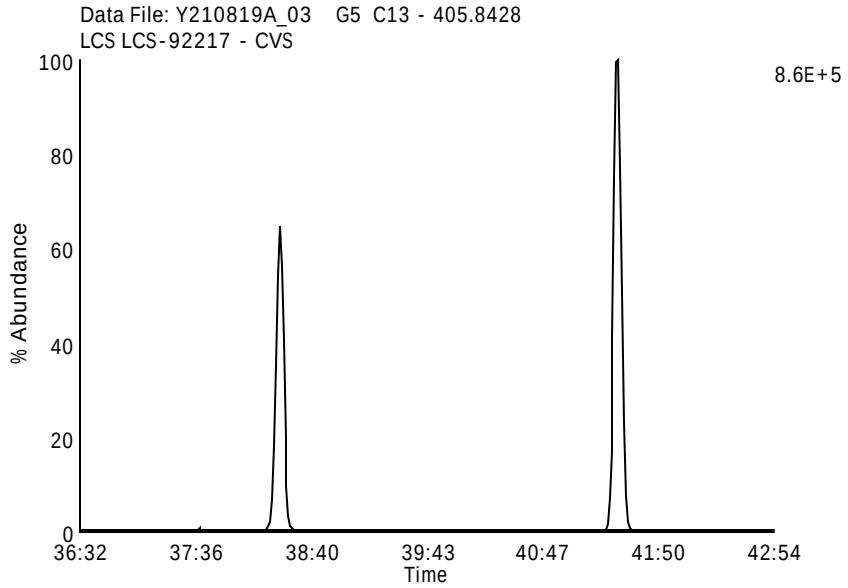
Labeled Hexa Chlorinated Biphenyls

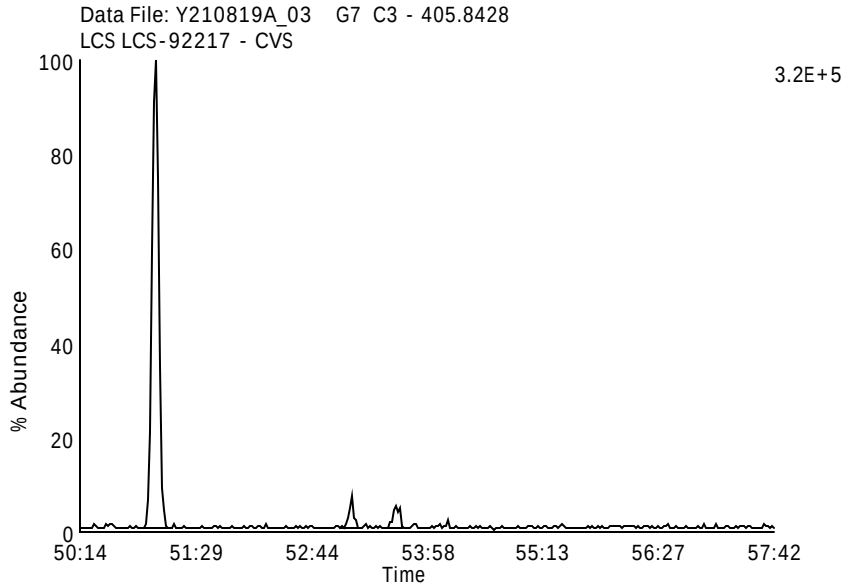
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

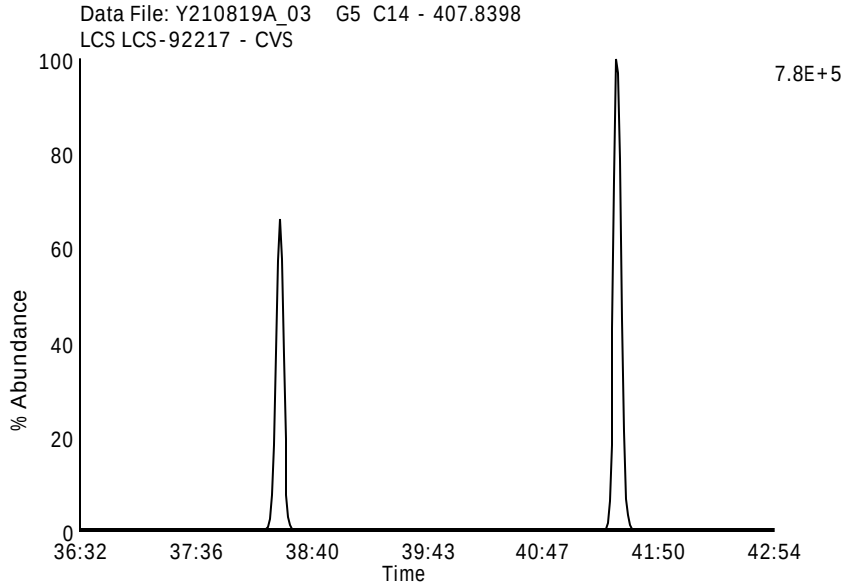


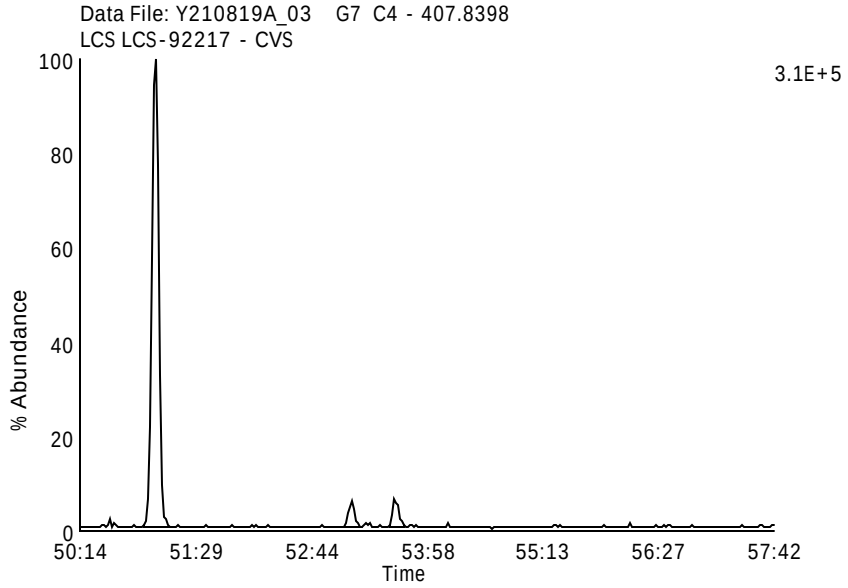
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



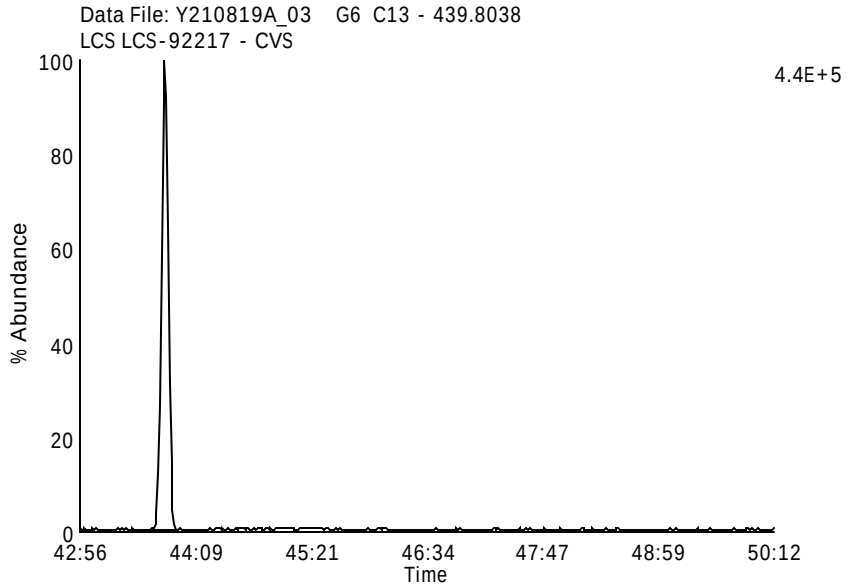


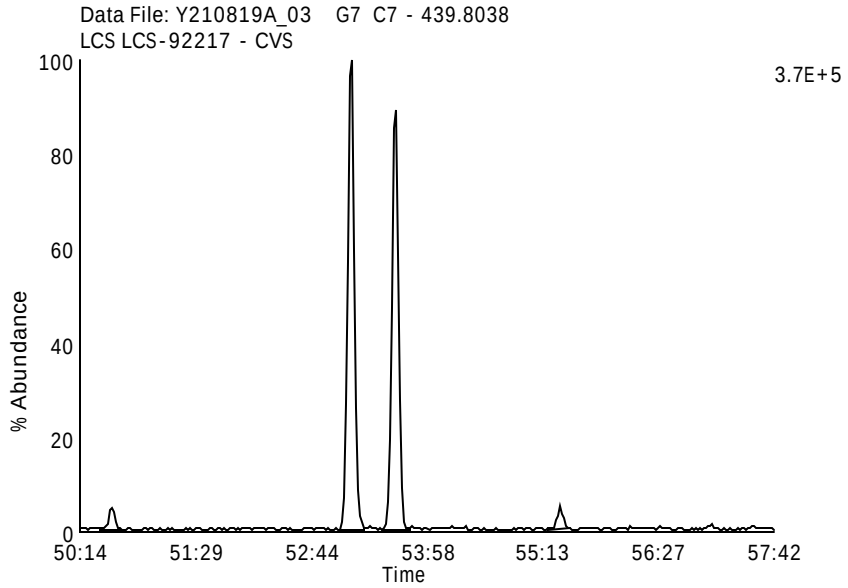


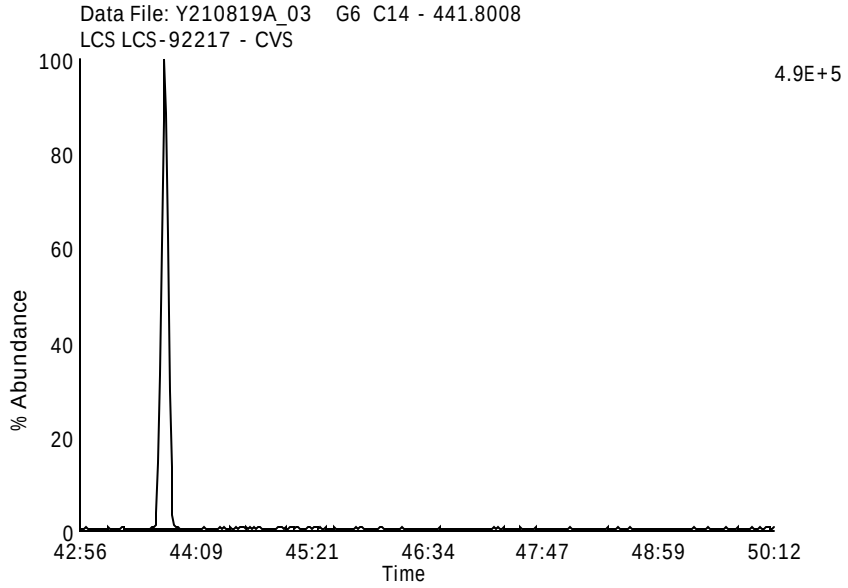


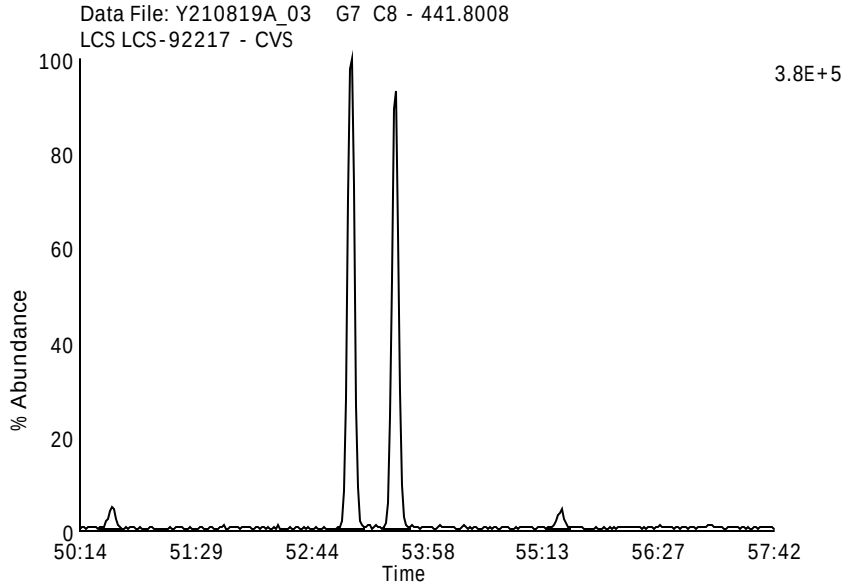
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



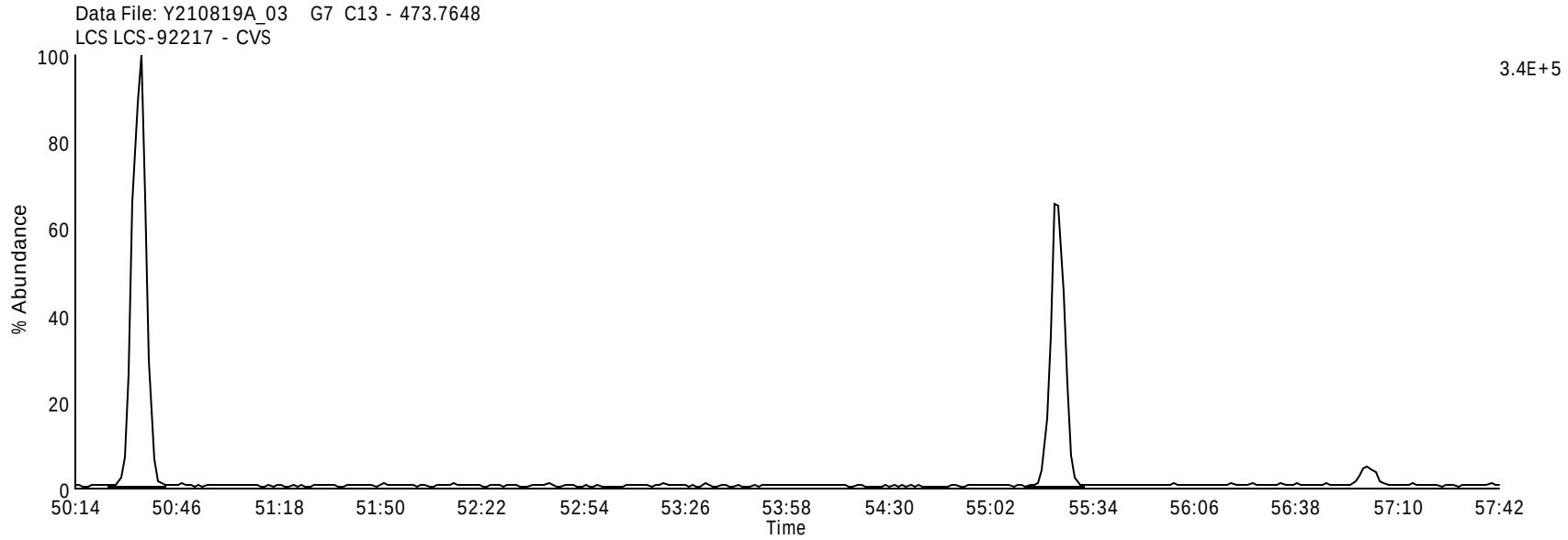


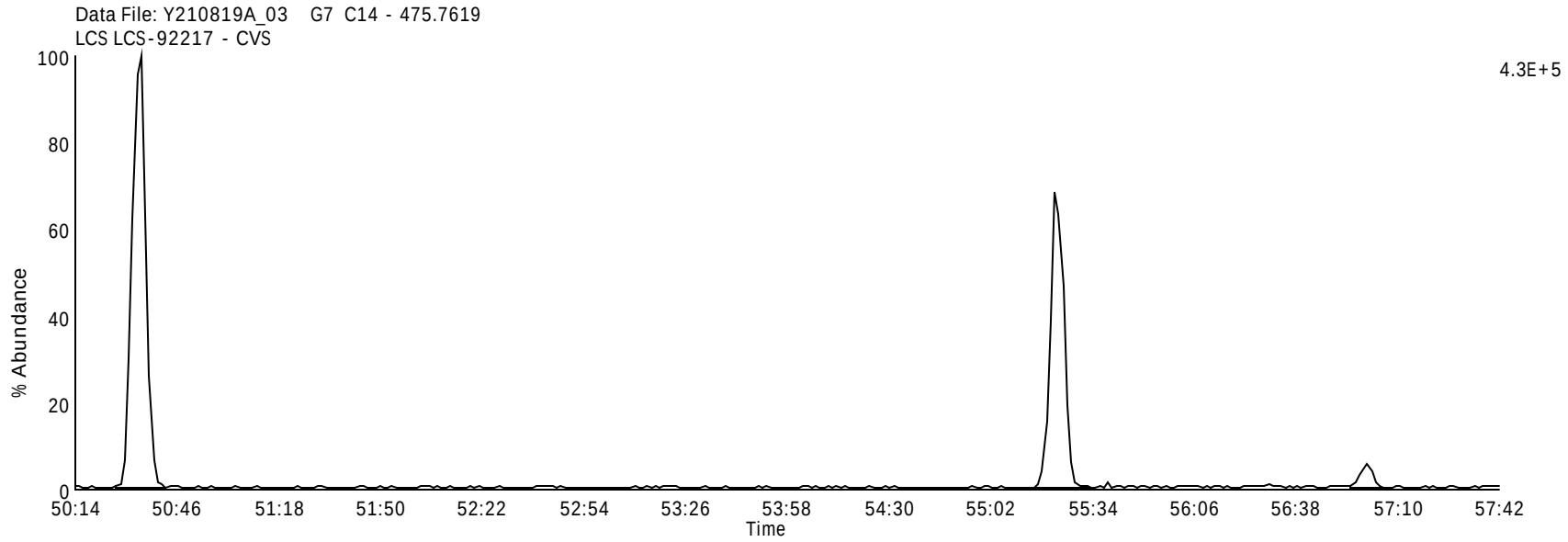




Labeled Nona Chlorinated Biphenyls

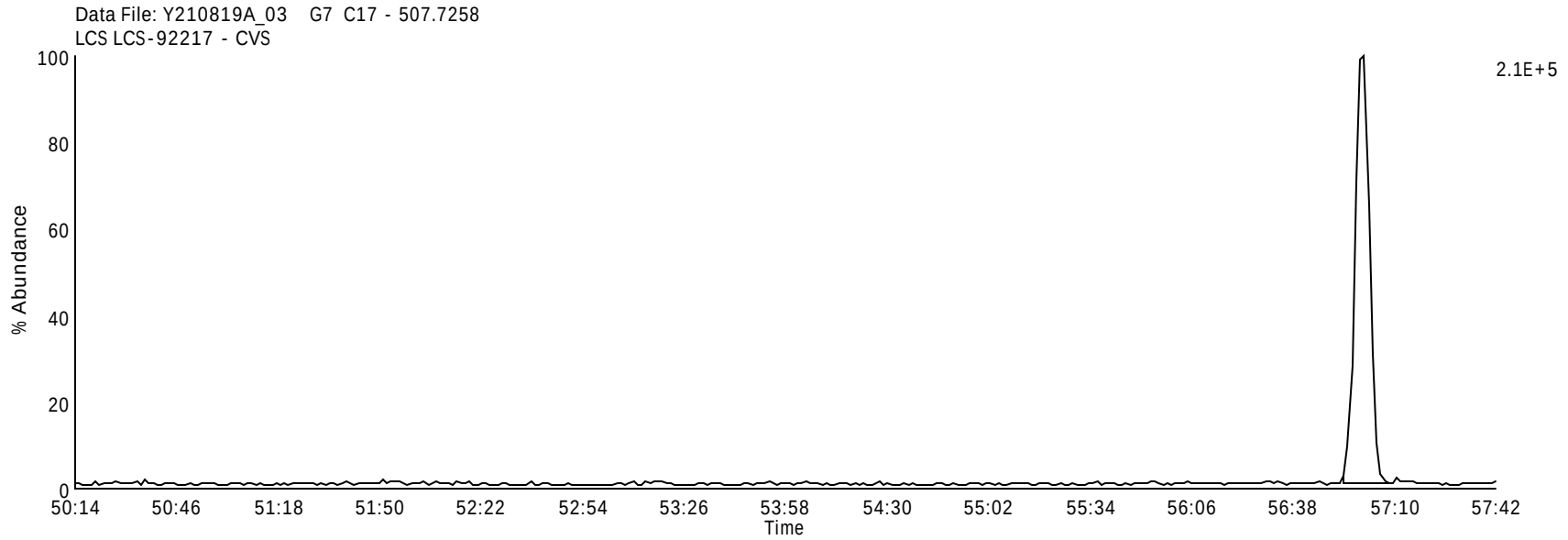
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

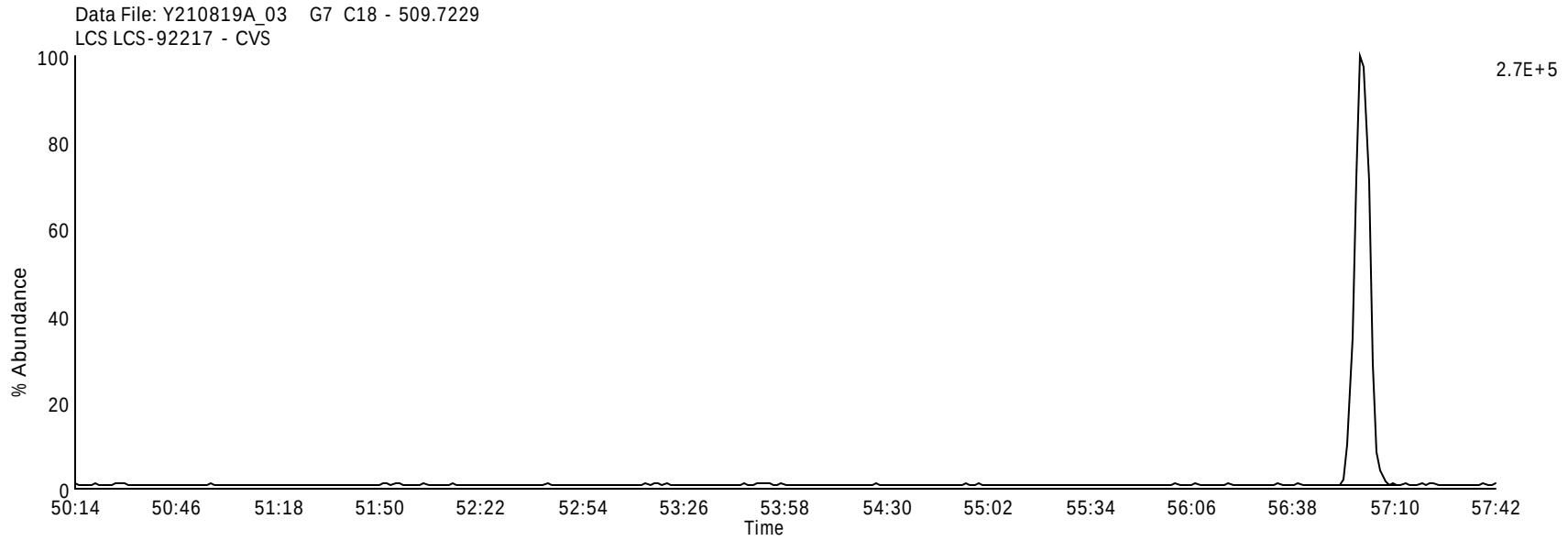




Labeled Deca Chlorinated Biphenyl

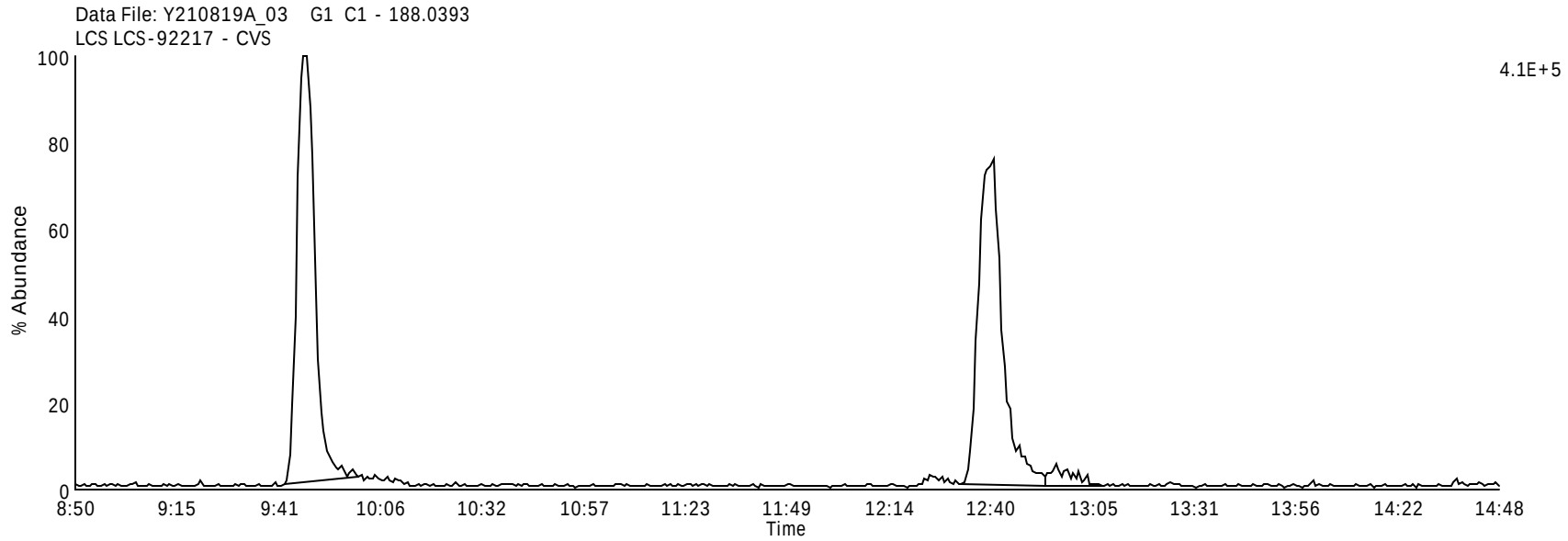
Data File Name: Y210819A_03 | Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS | Client Sample ID: CLCSCV

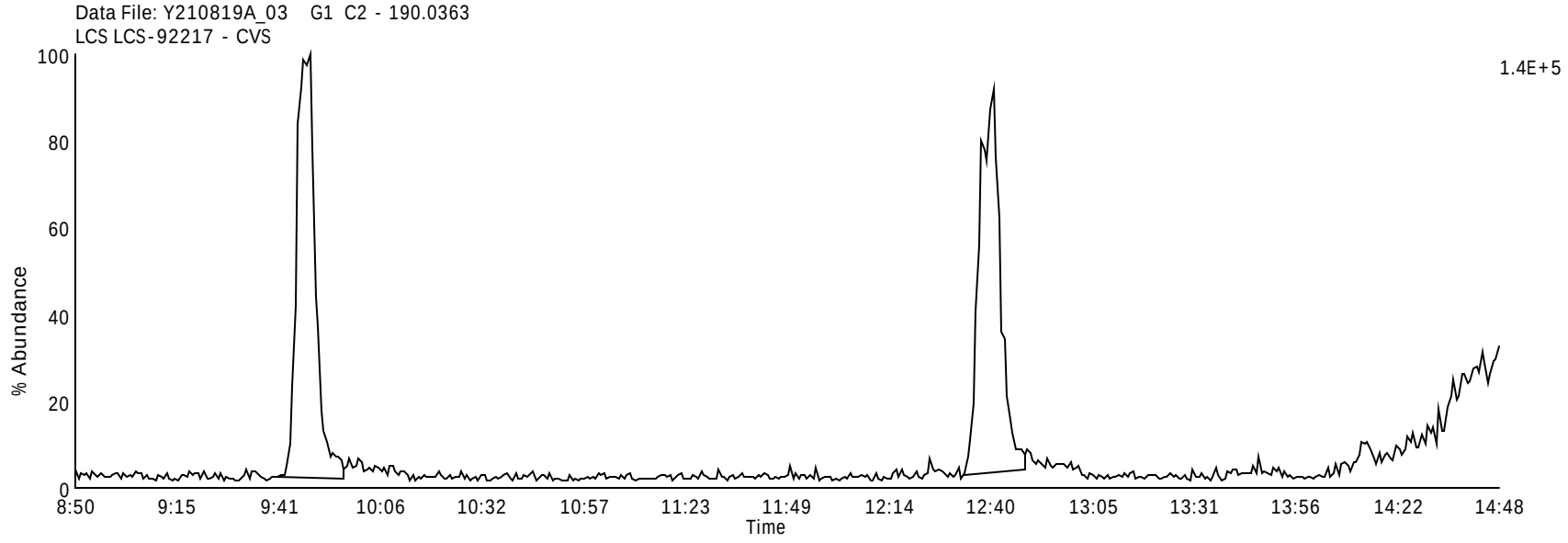




Mono Chlorinated Biphenyls

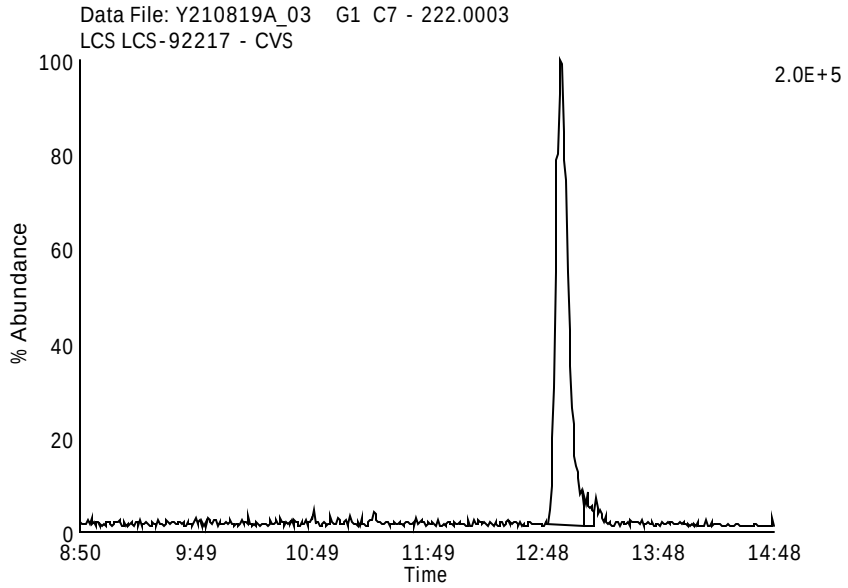
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

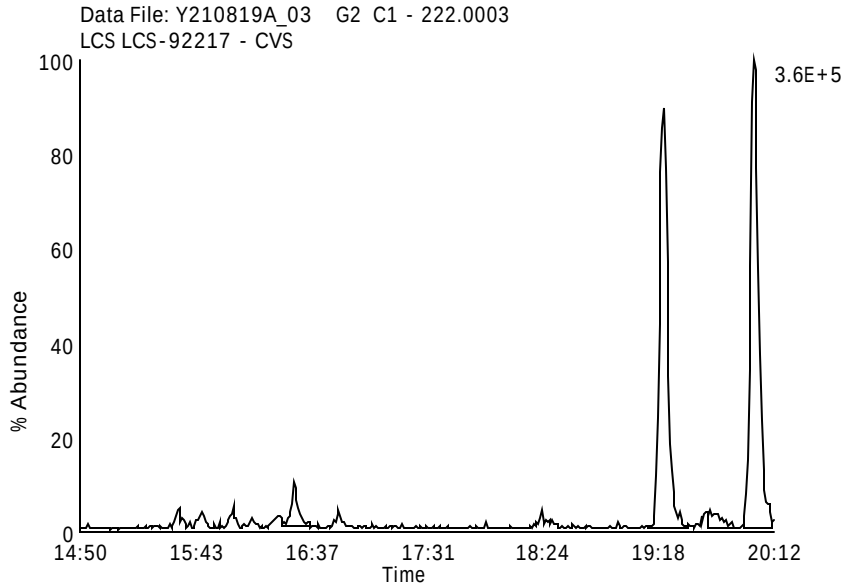


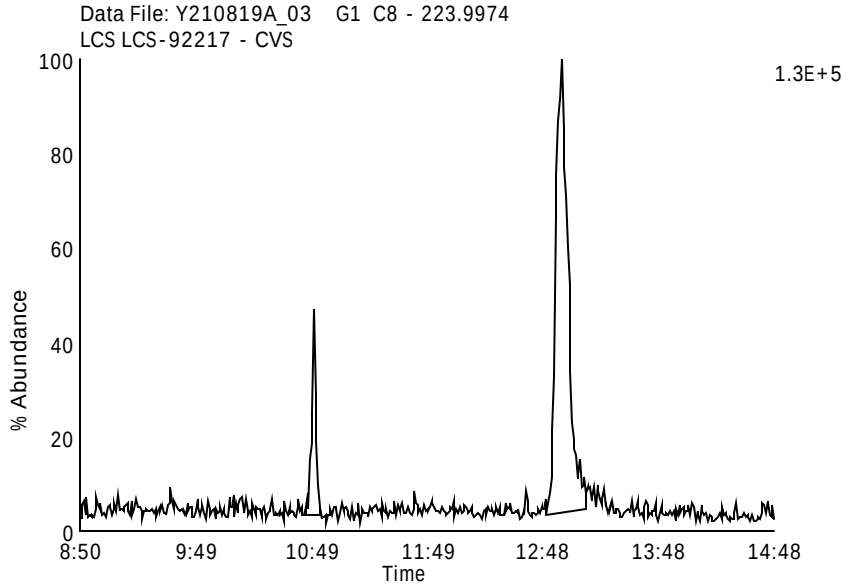


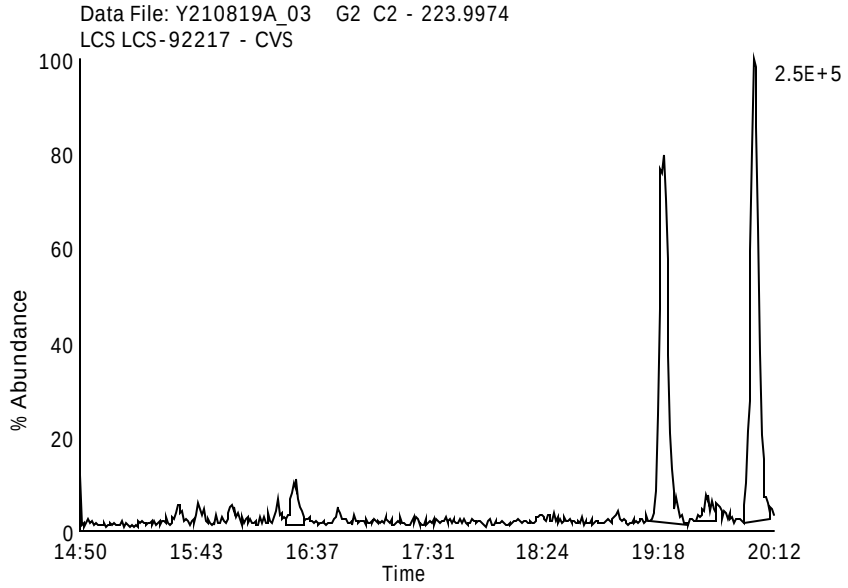
Di Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



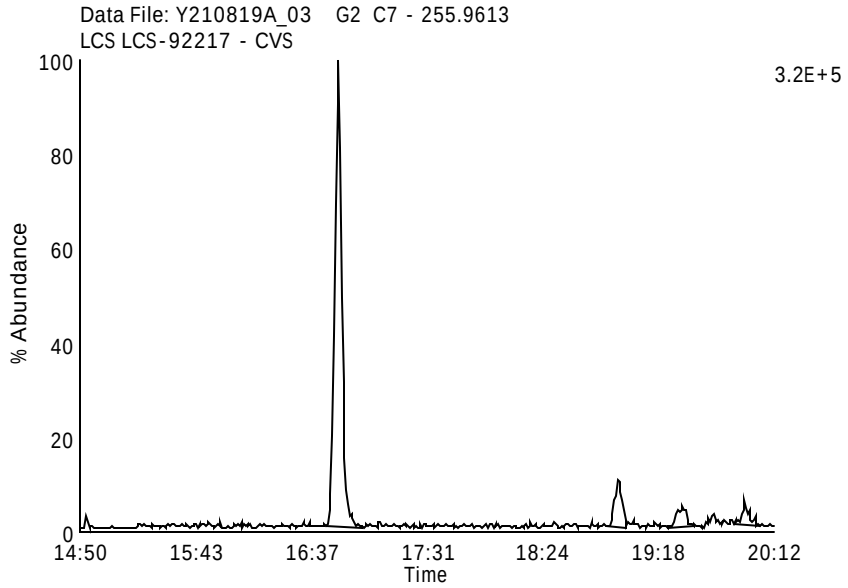


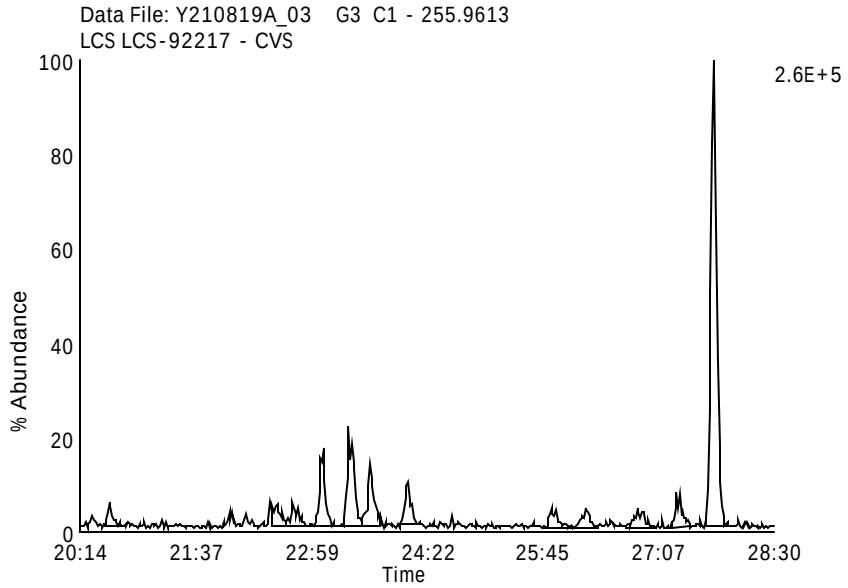


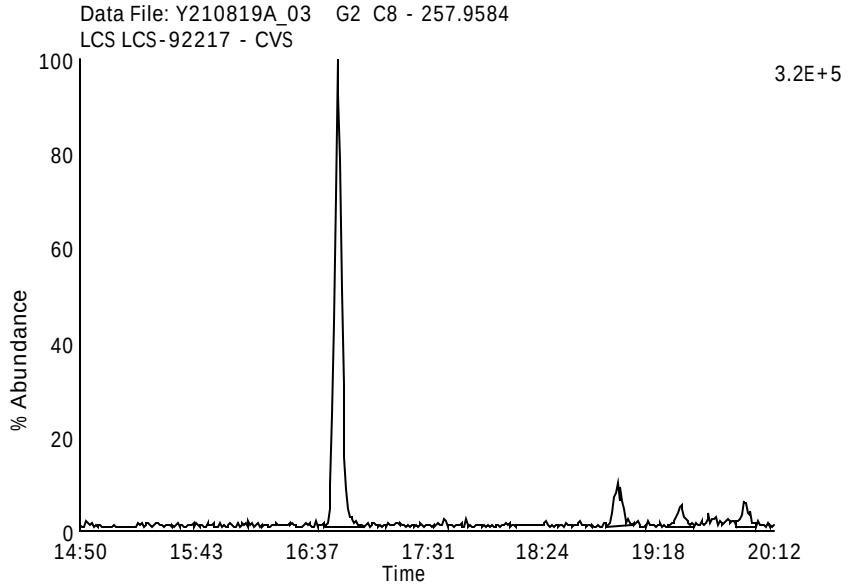


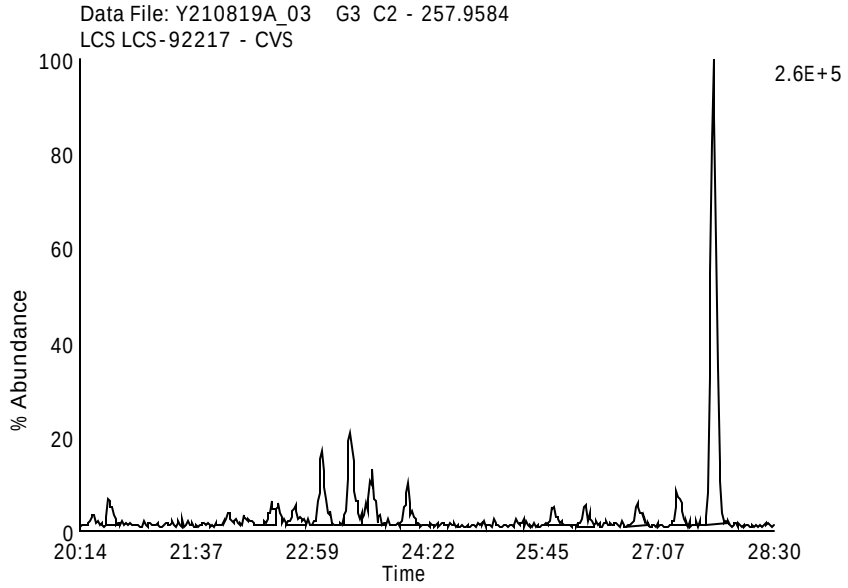
Tri Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



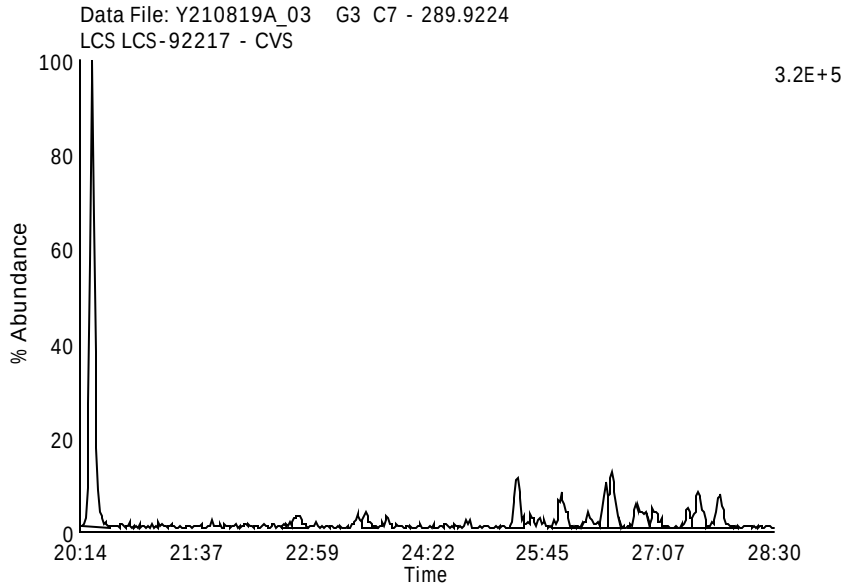


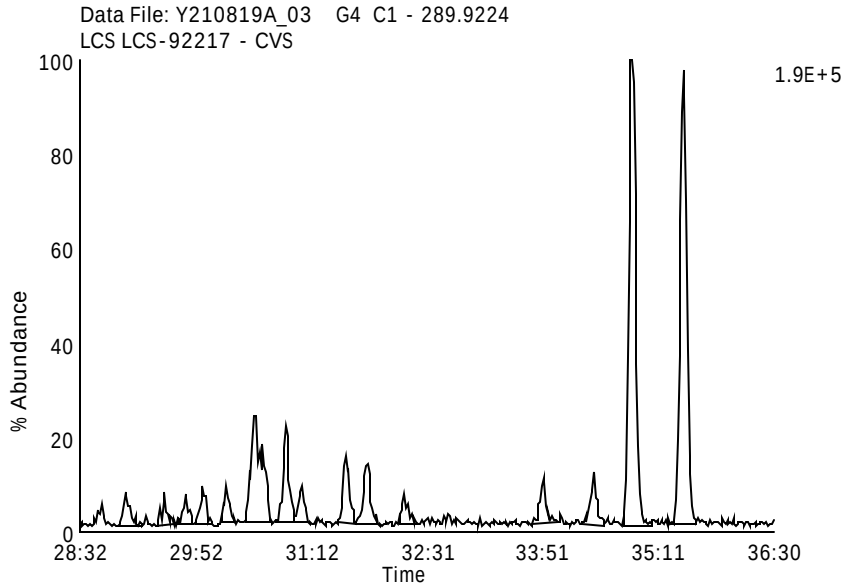


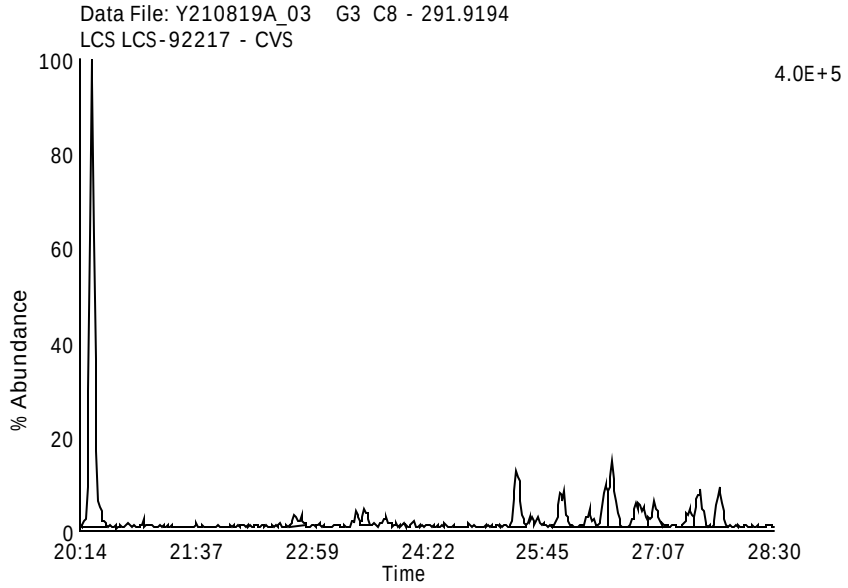


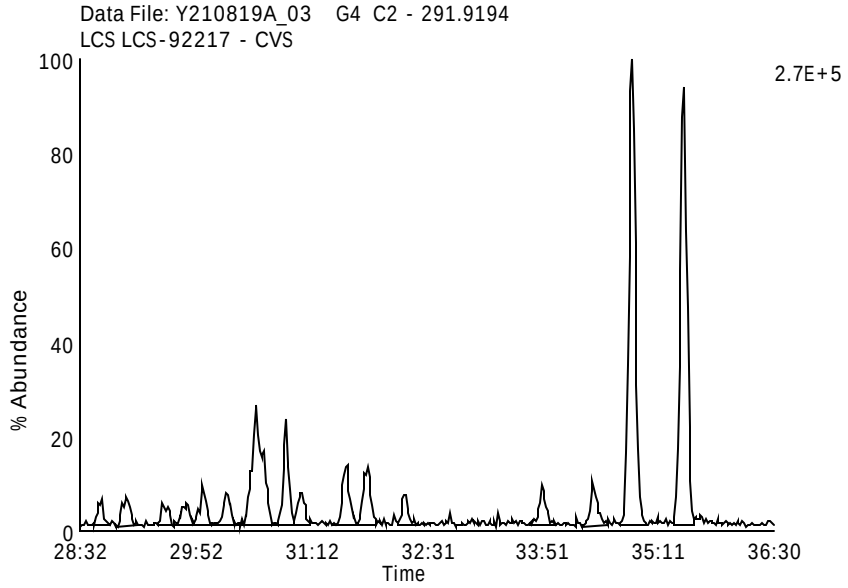
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



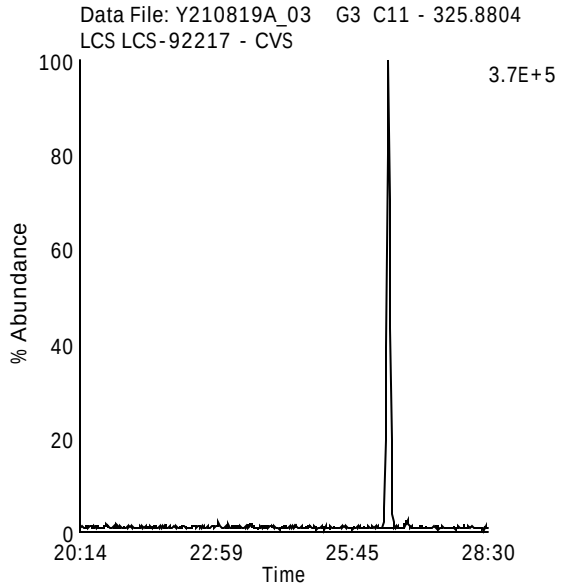


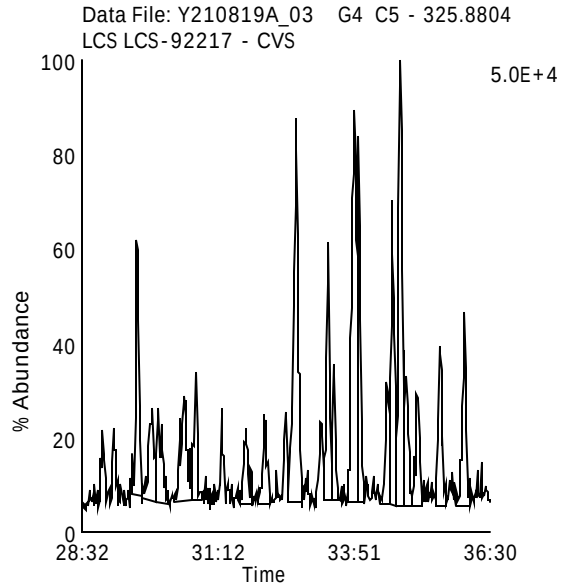


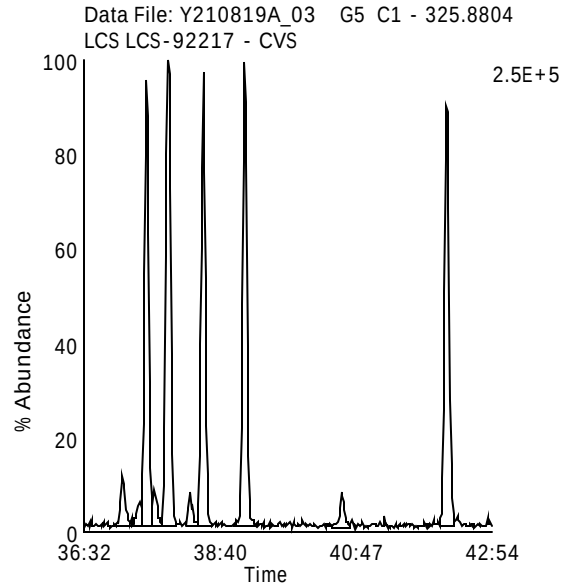


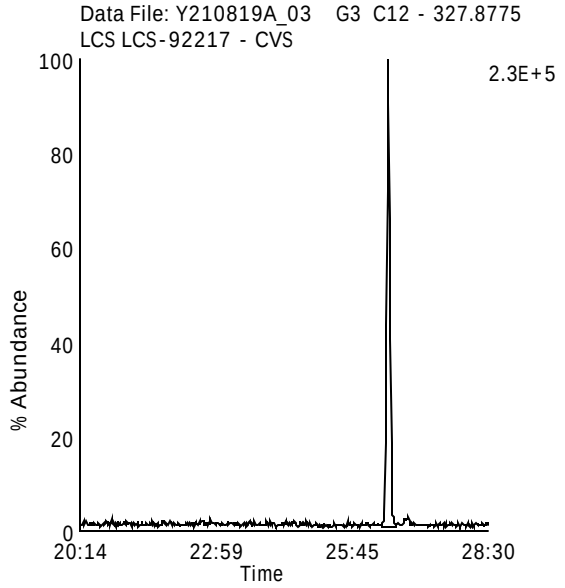
Penta Chlorinated Biphenyls

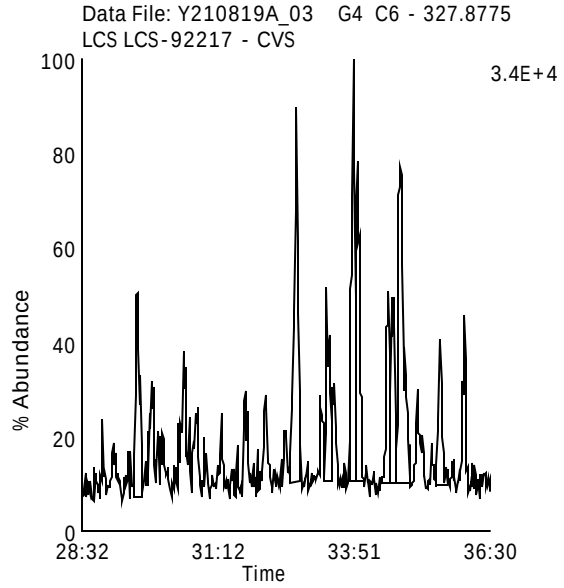
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

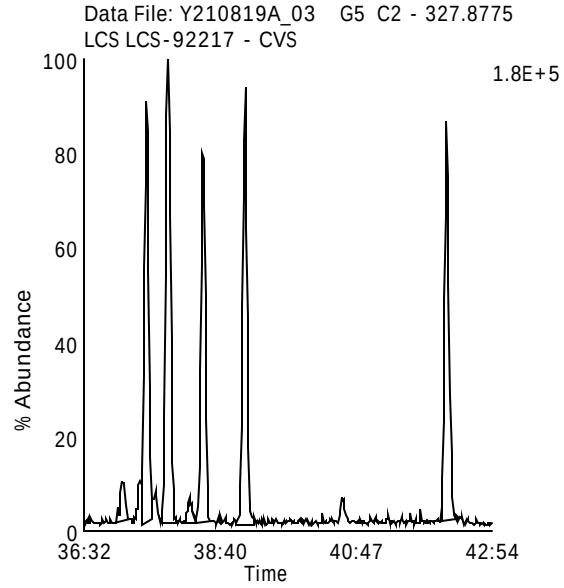






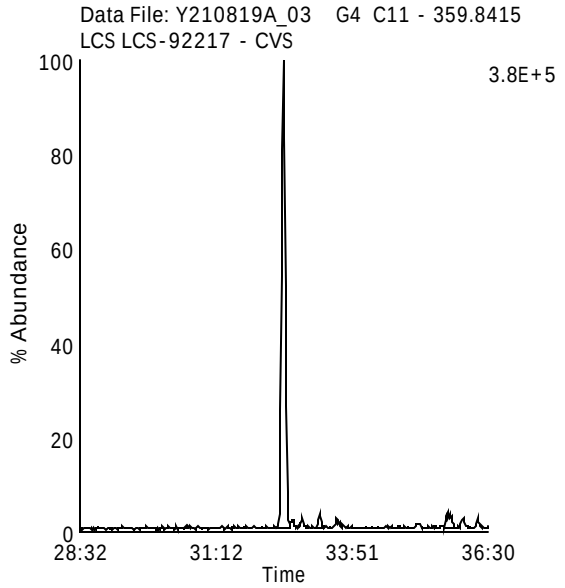


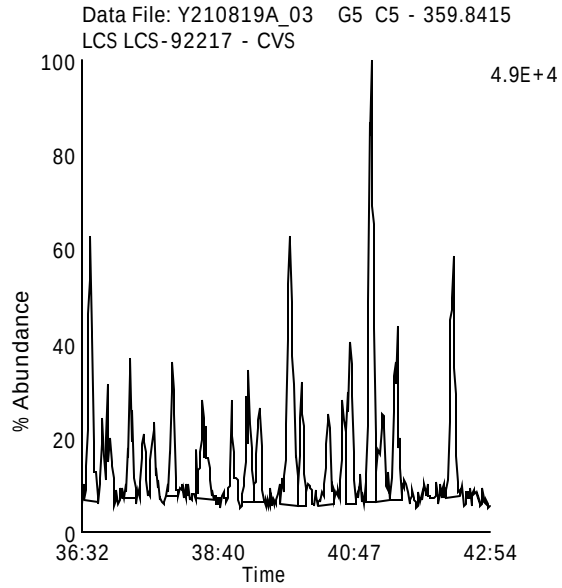


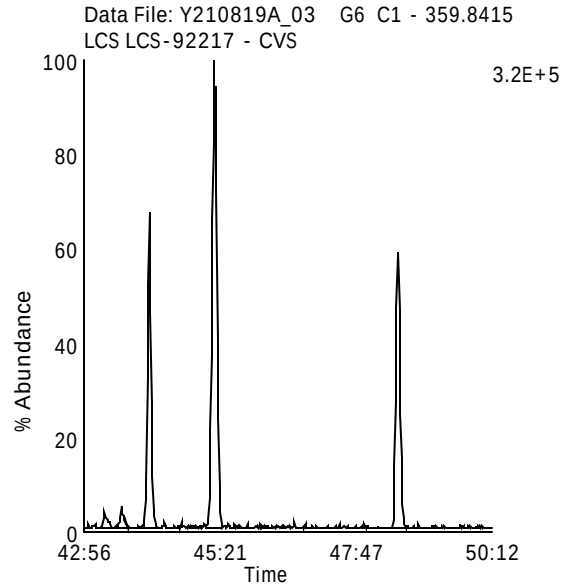


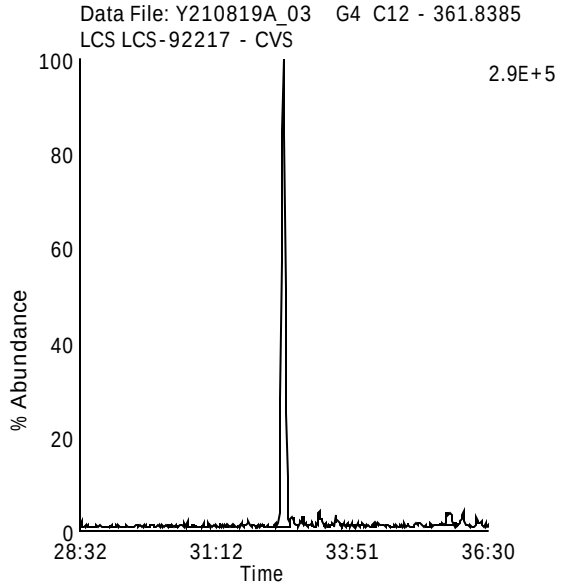
Hexa Chlorinated Biphenyls

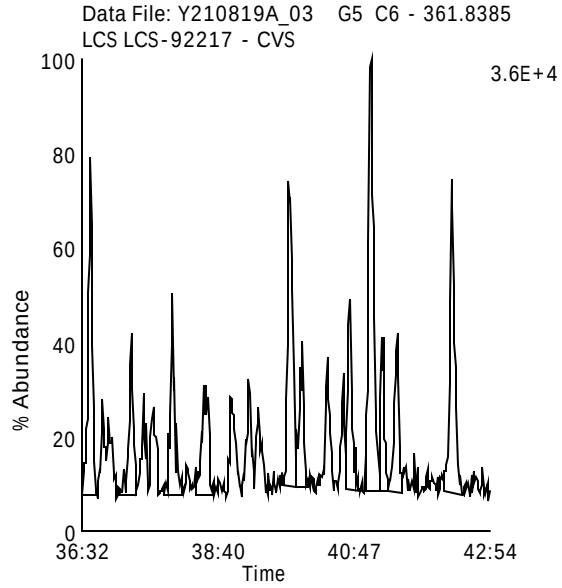
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

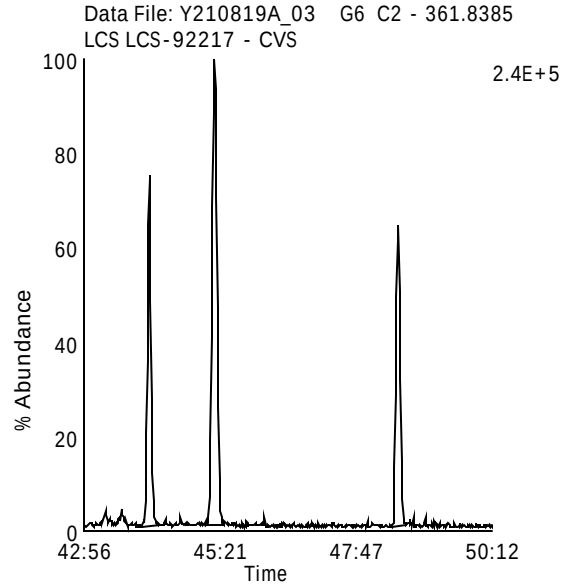






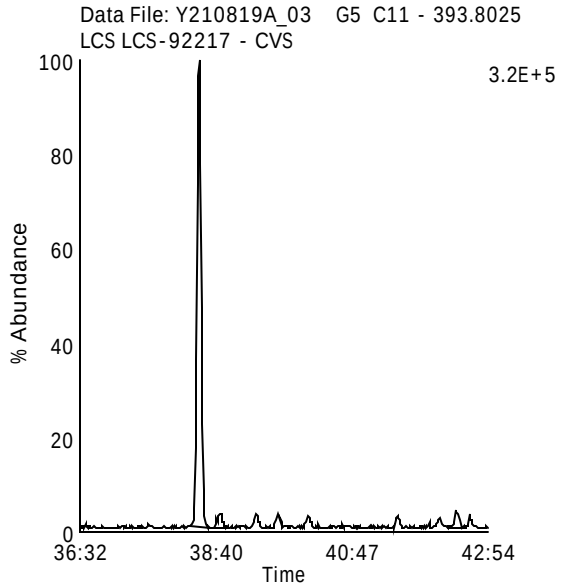


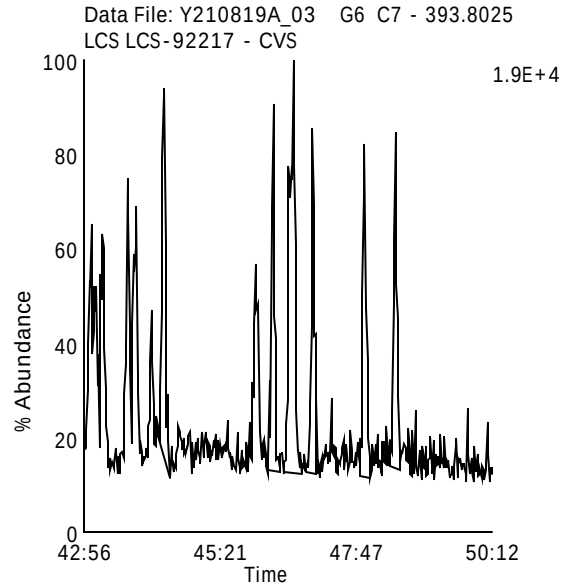


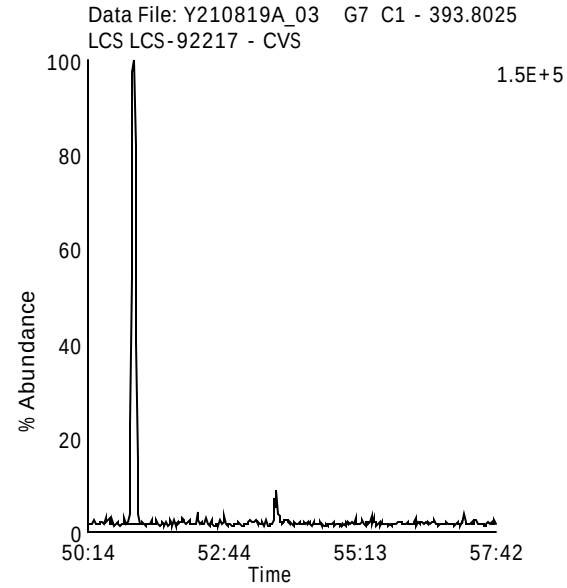


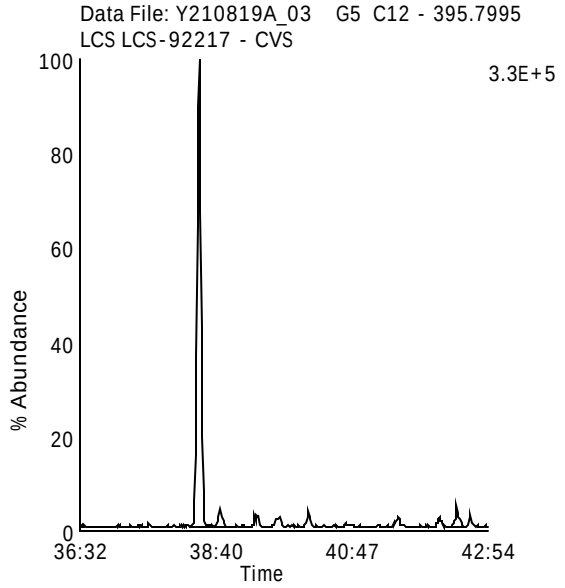
Hepta Chlorinated Biphenyls

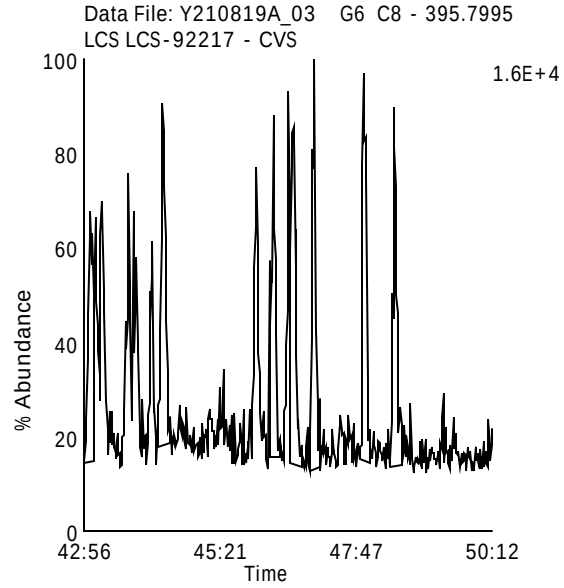
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

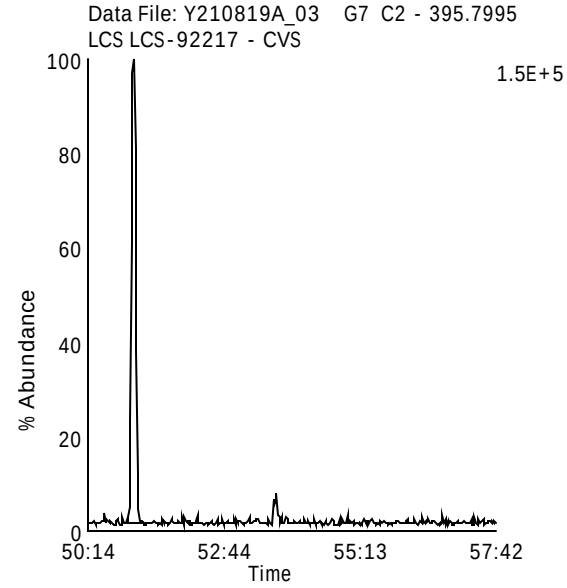






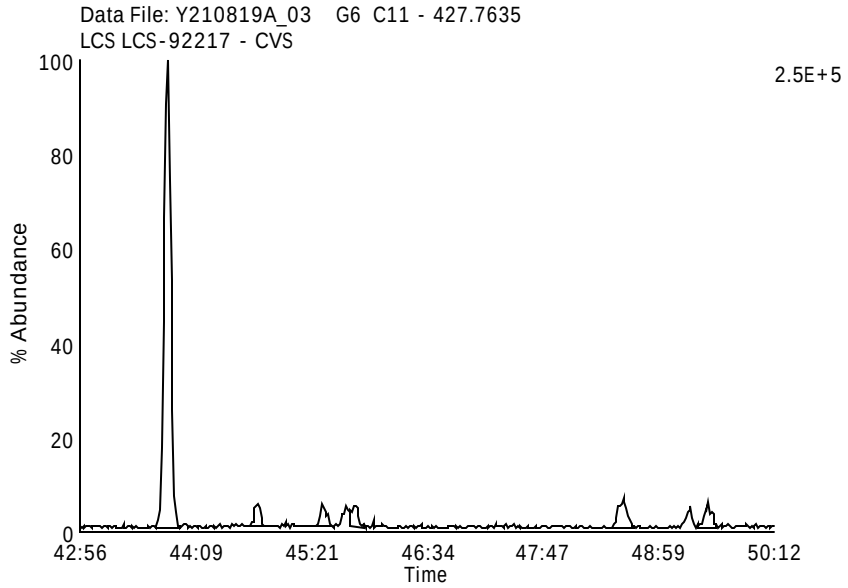


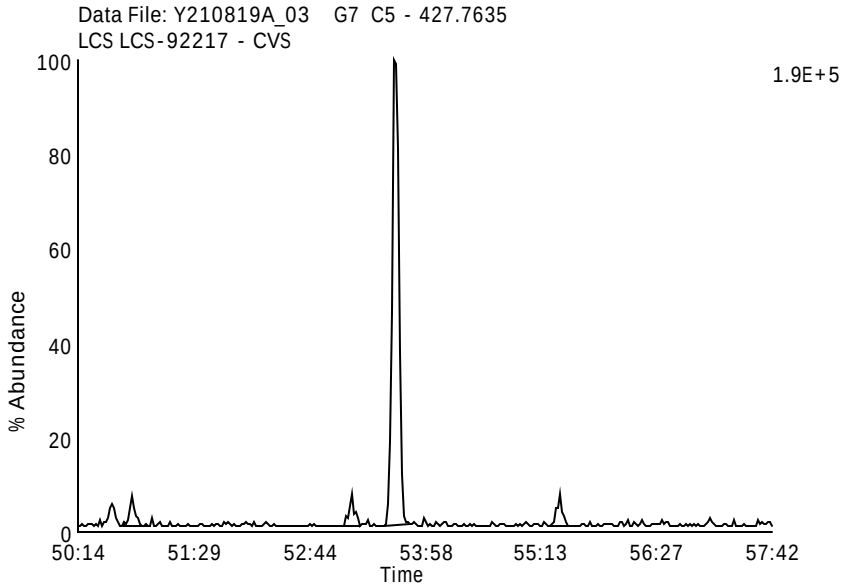


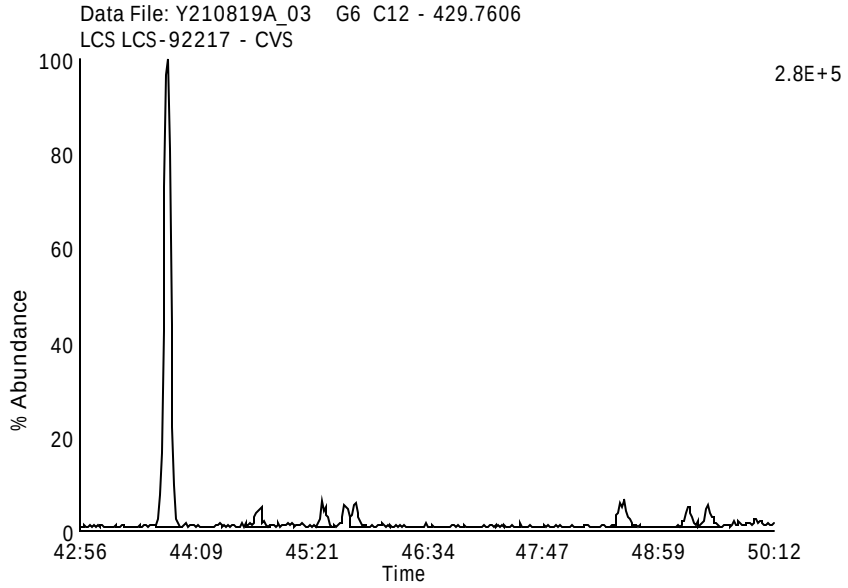


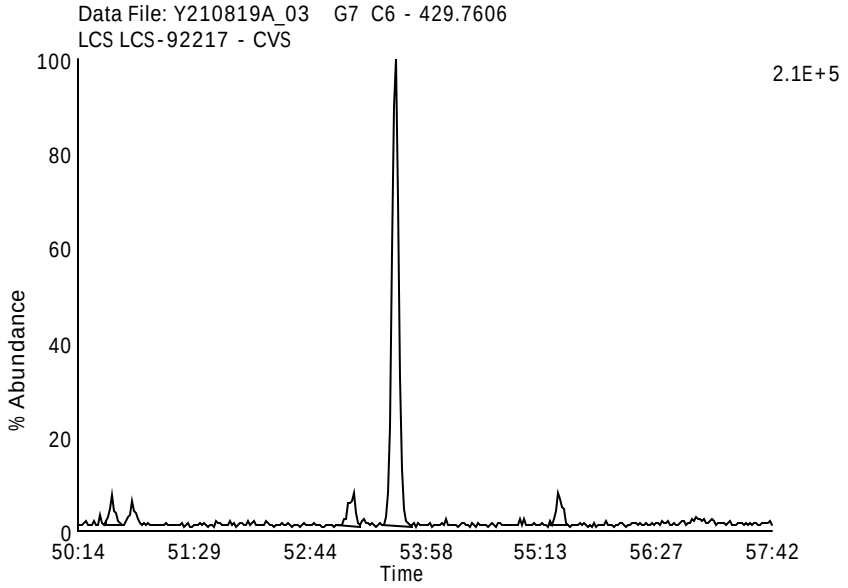
Octa Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



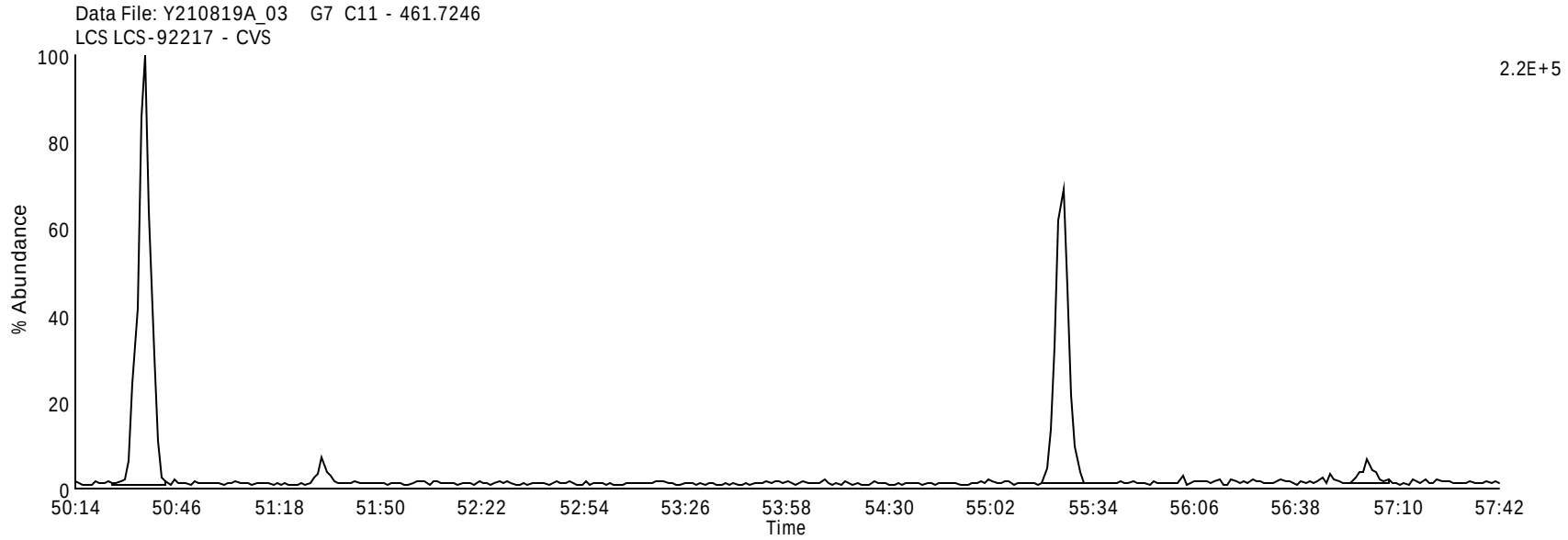


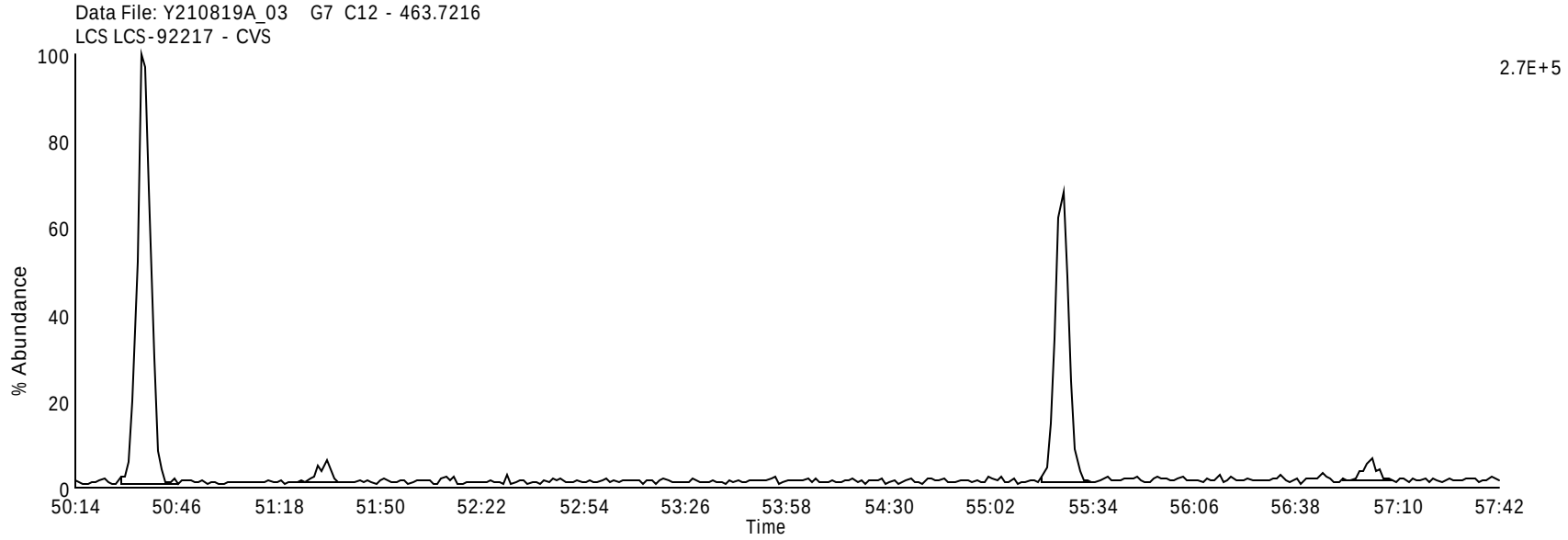




Nona Chlorinated Biphenyls

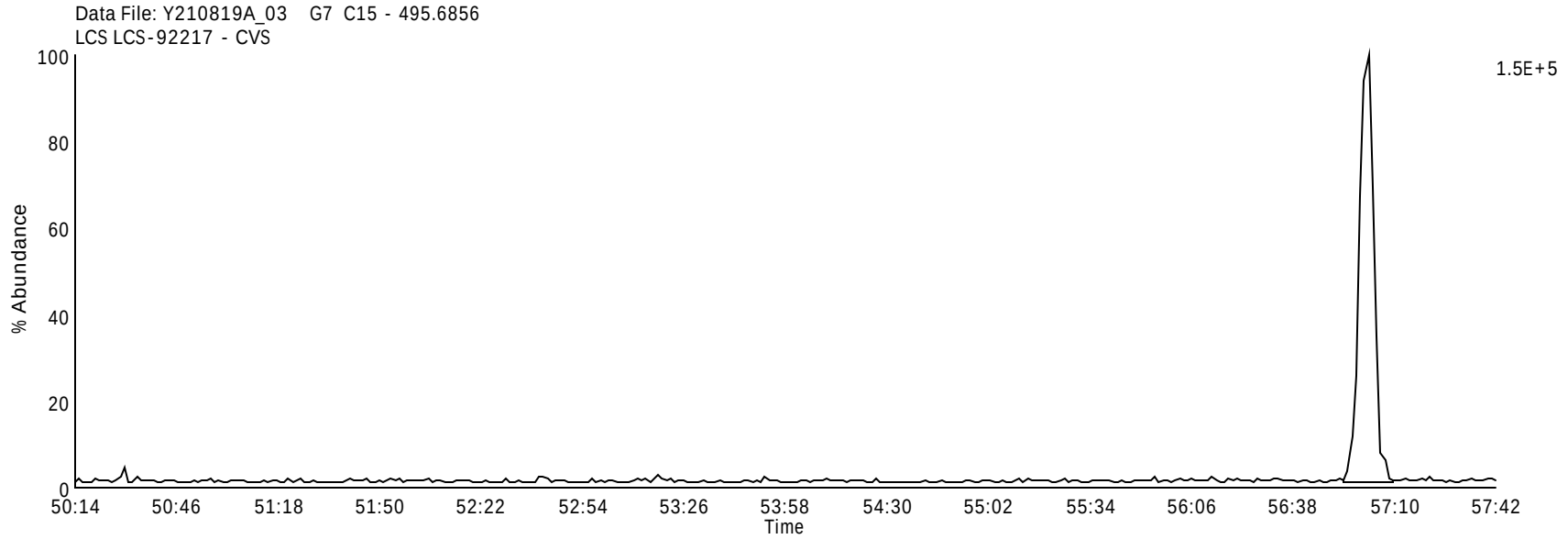
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

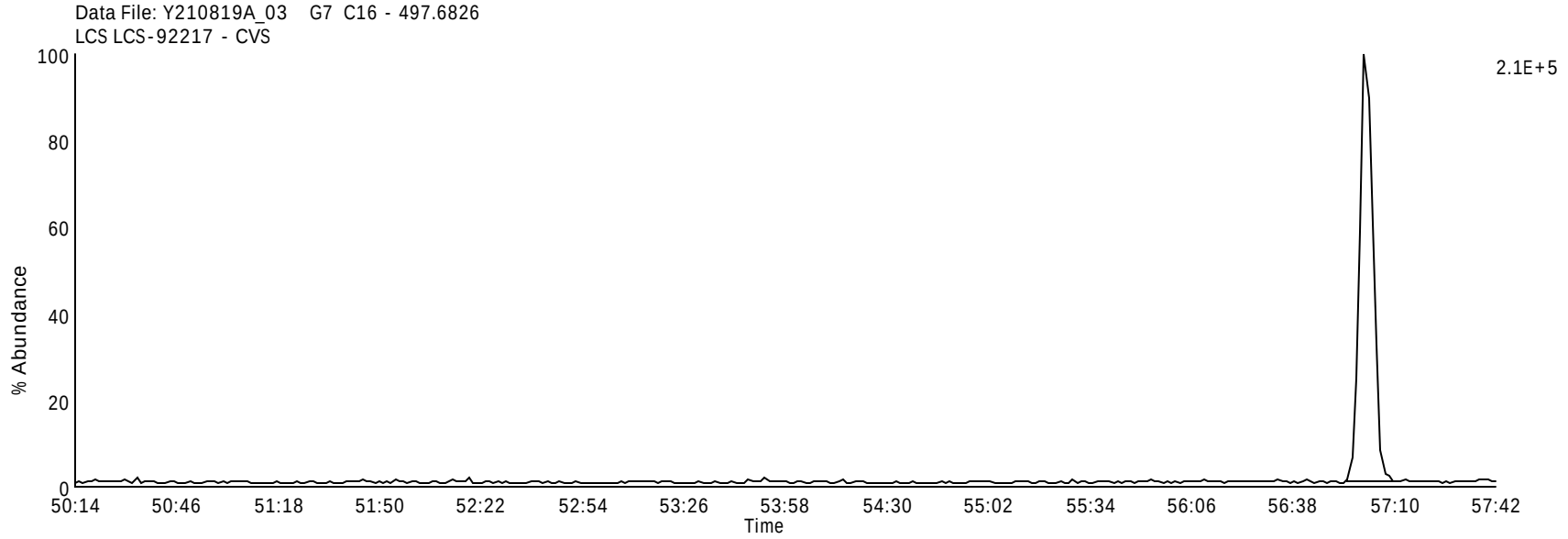




Deca Chlorinated Biphenyl

Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

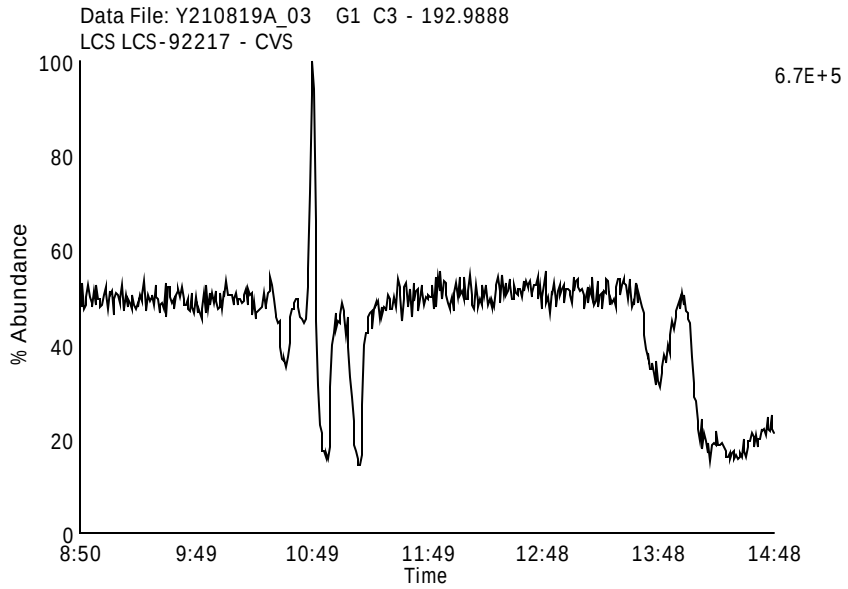


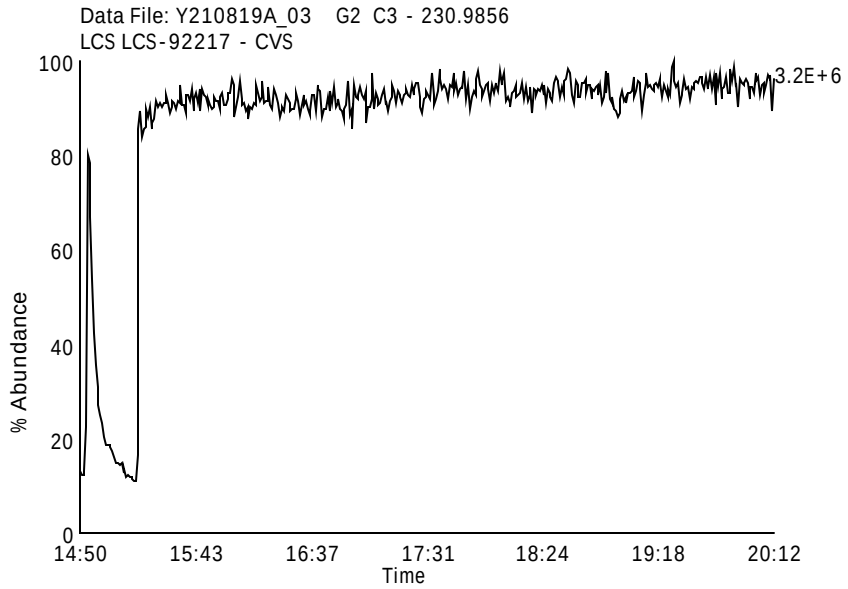


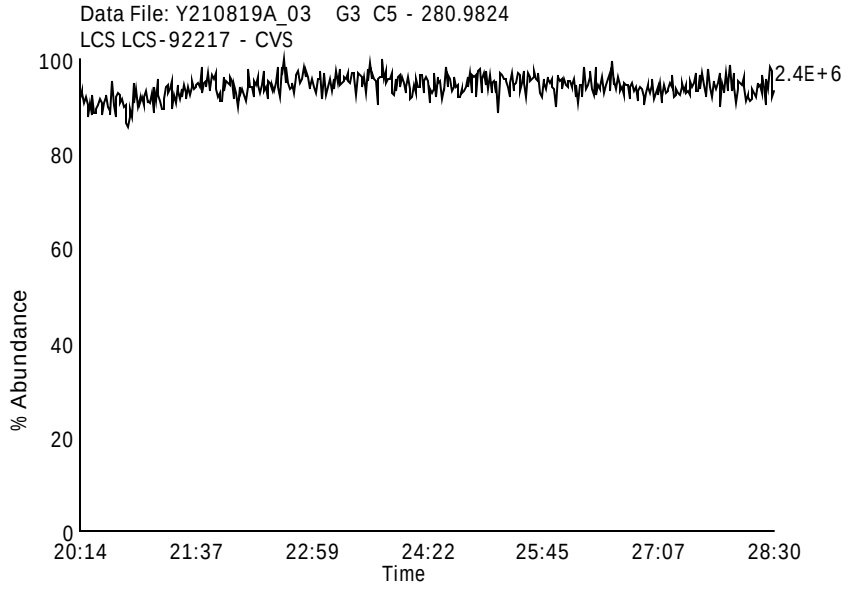
Group 1 - 4 Lock mass

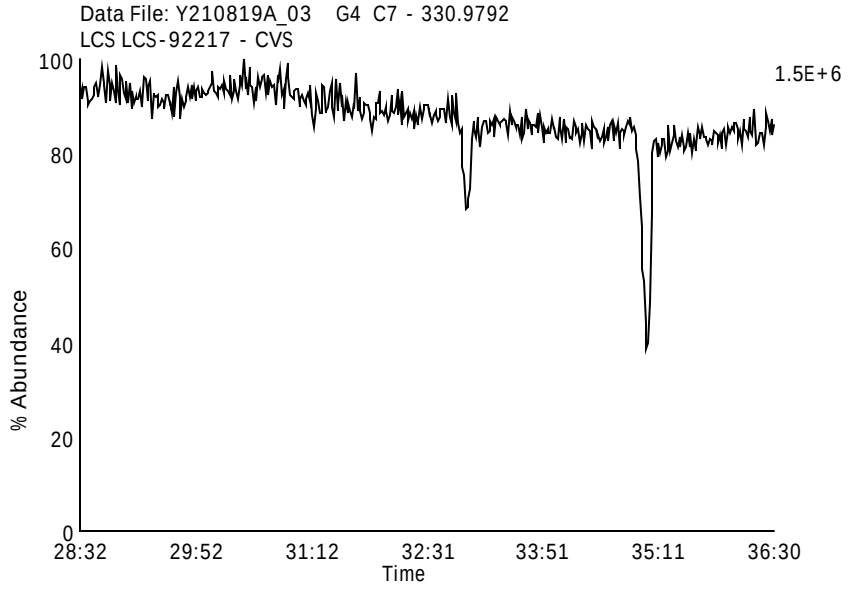
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV





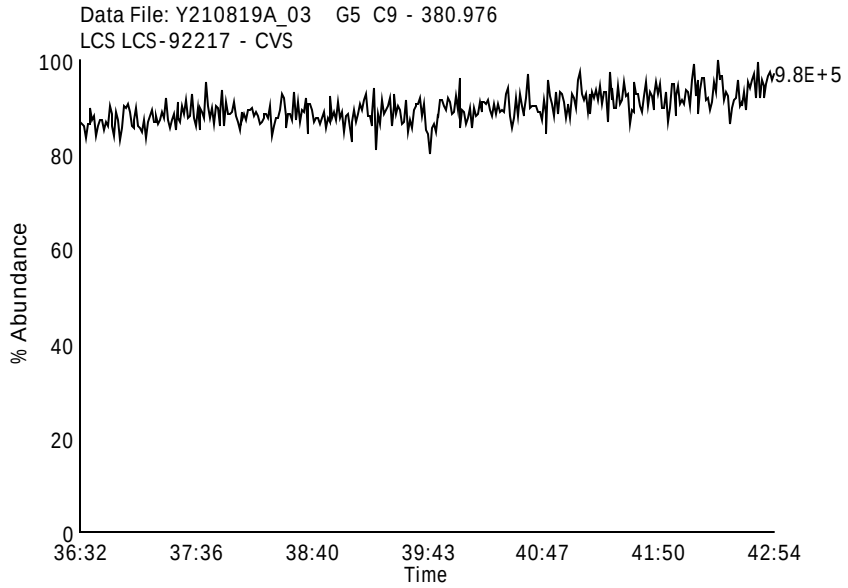


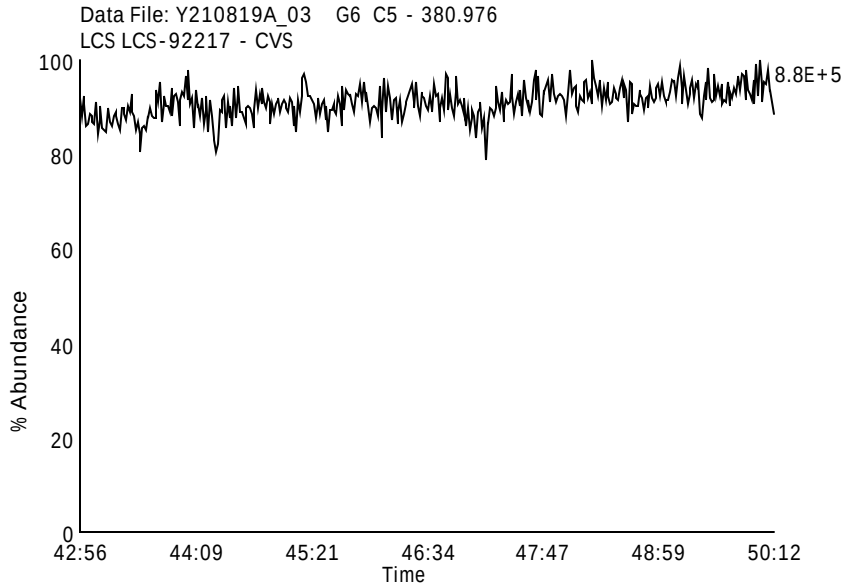


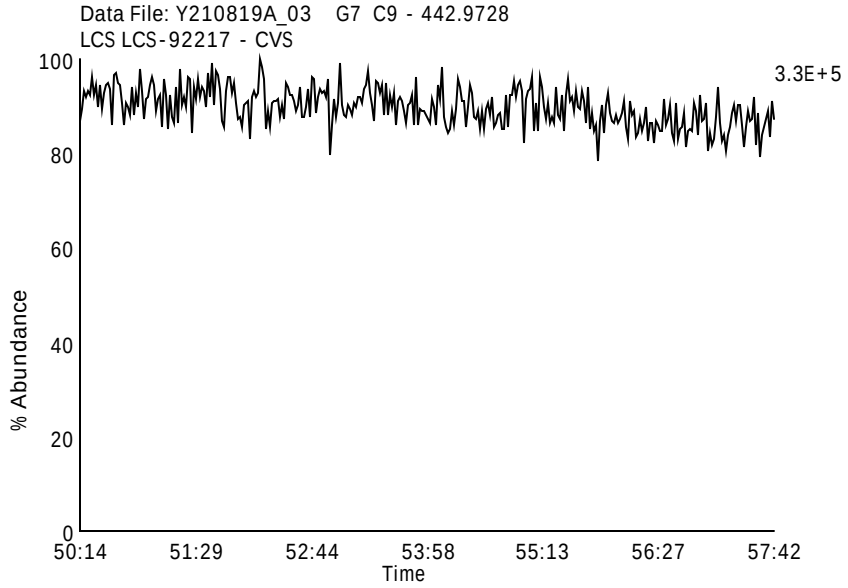
Group 5 - 7 Lock mass

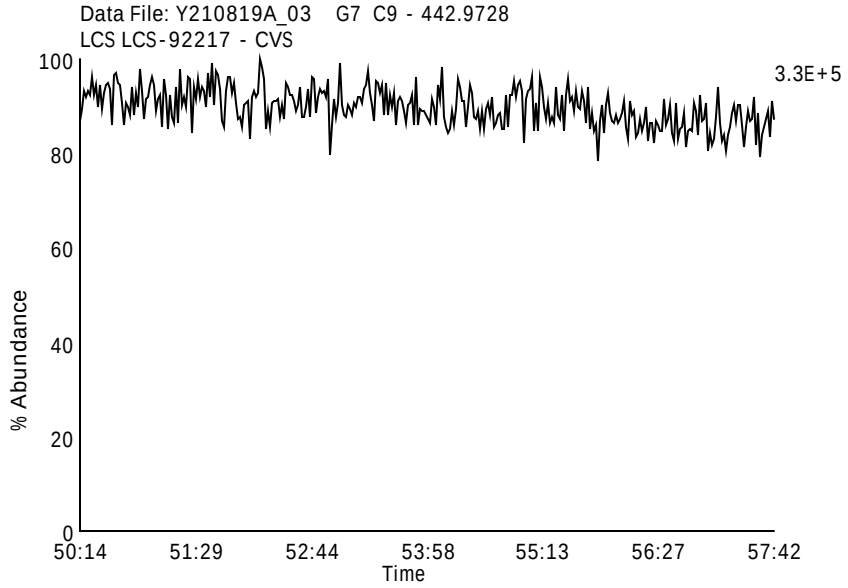
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV



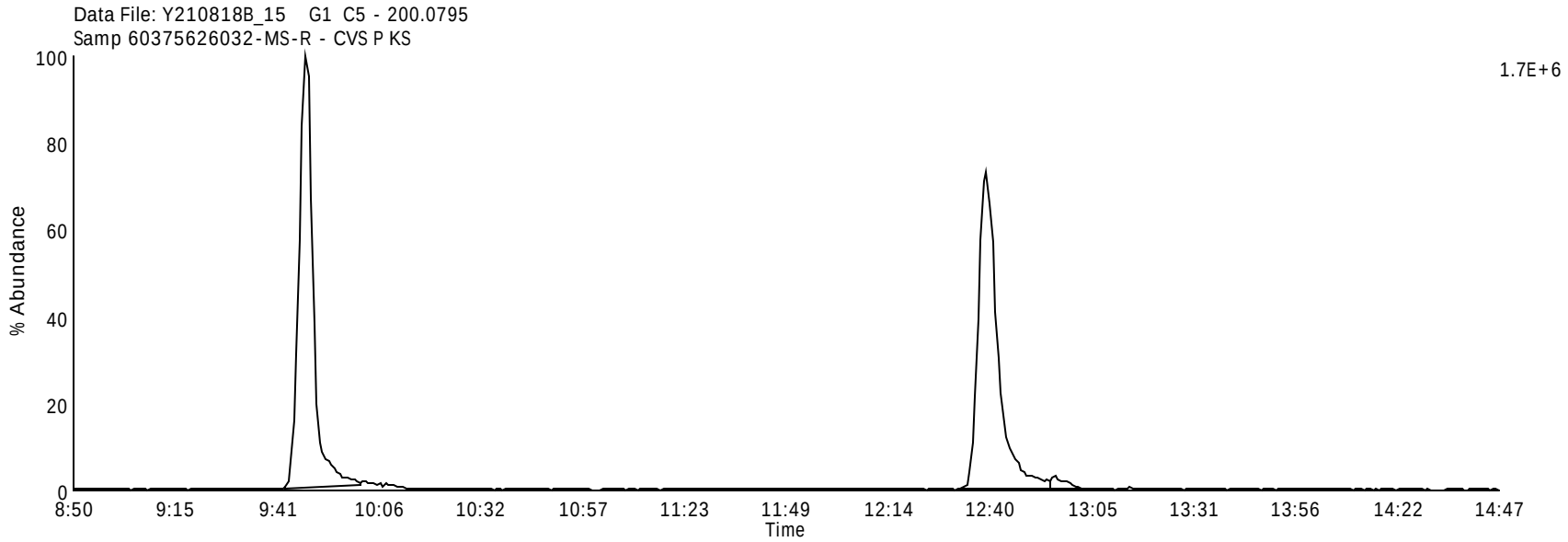


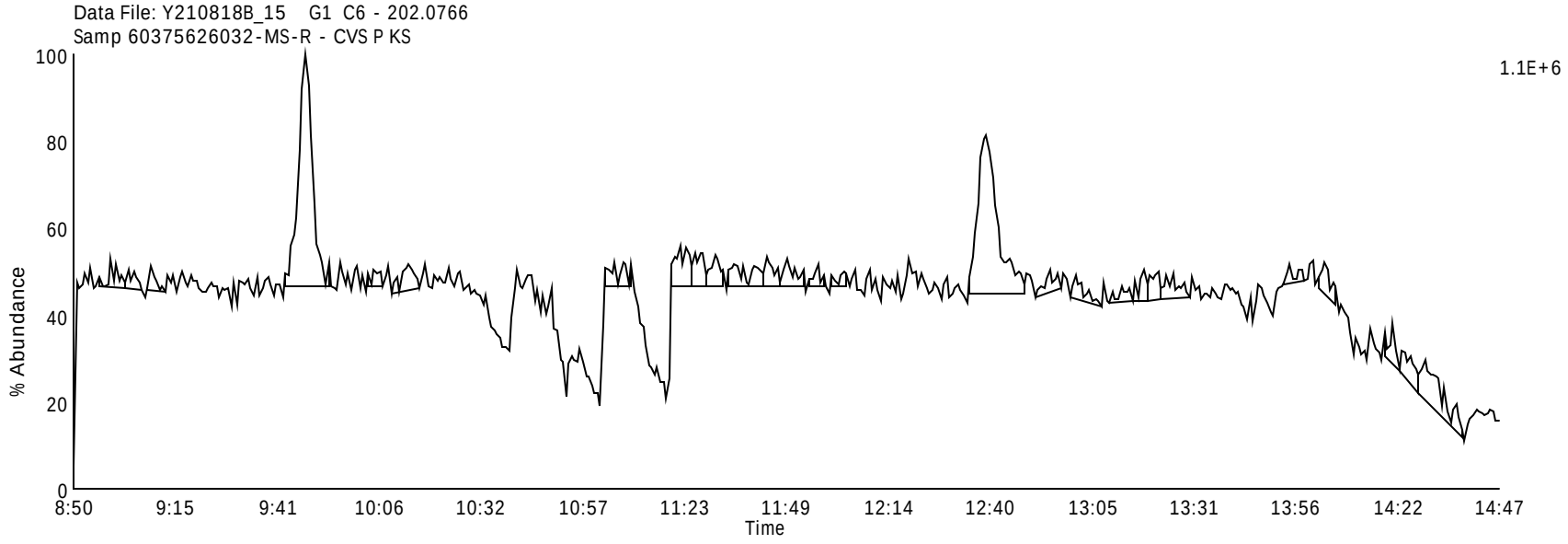




Labeled Mono Chlorinated Biphenyls

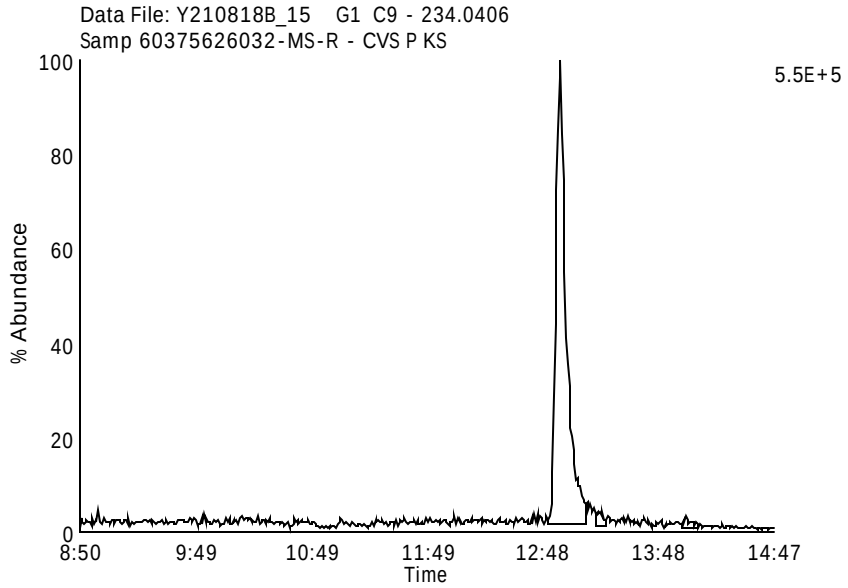
Data File Name: Y210818B_15	Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS	Client Sample ID: GB-38/3-5-MS

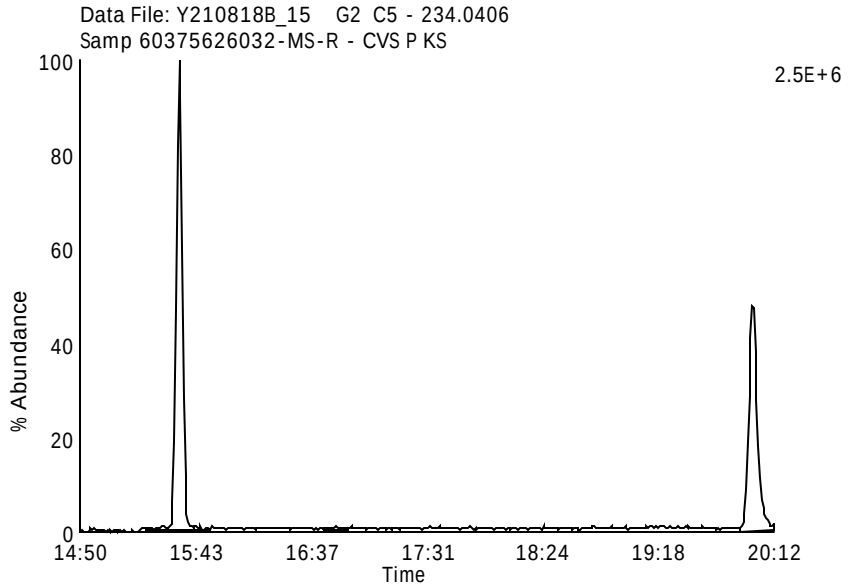


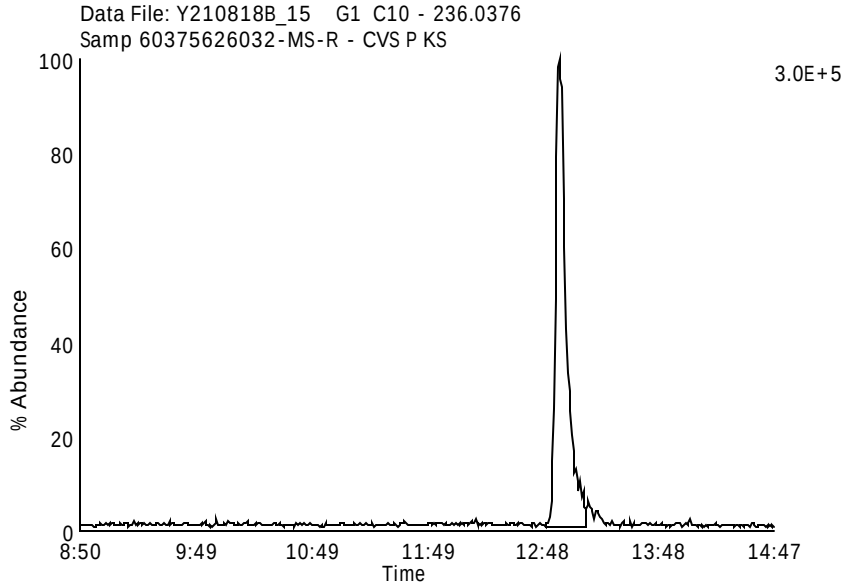


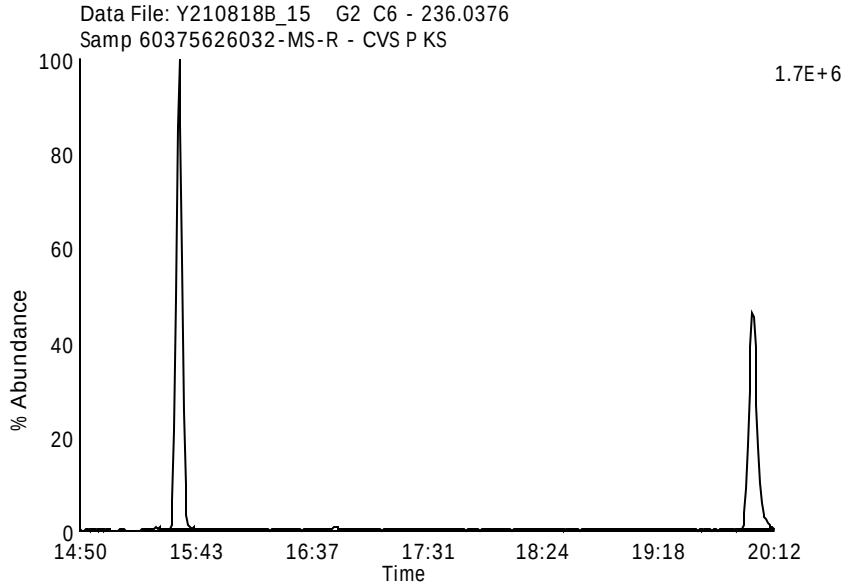
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS





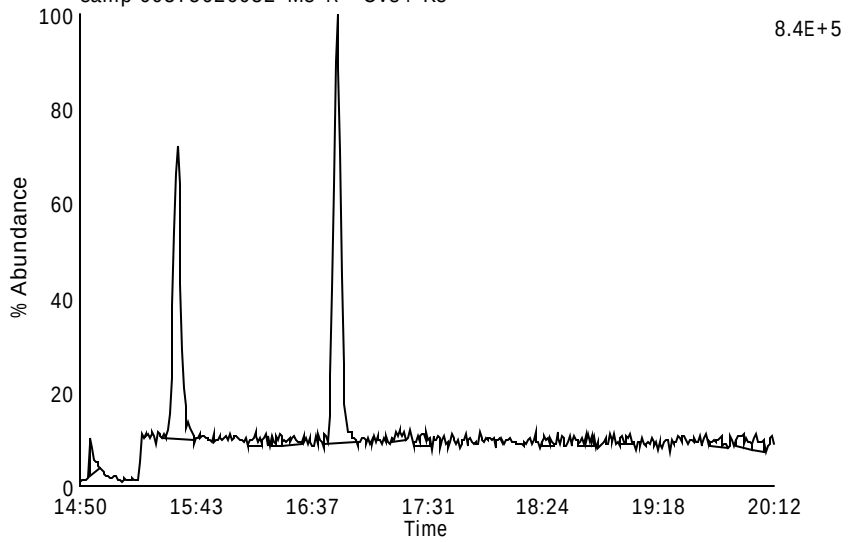




Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS

Data File: Y210818B_15 G2 C9 - 268.0016
Samp 60375626032-MS-R - CVS P KS



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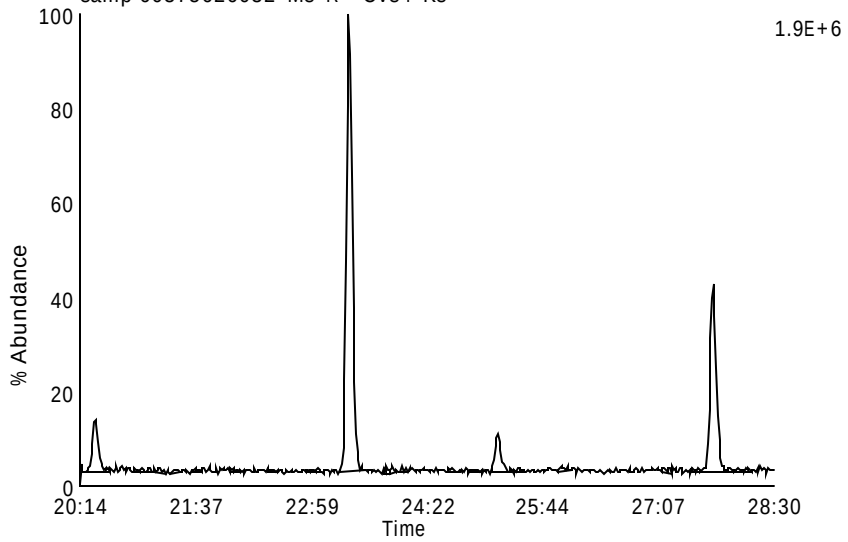
Samp 60375626032-MS-R - CVS P KS



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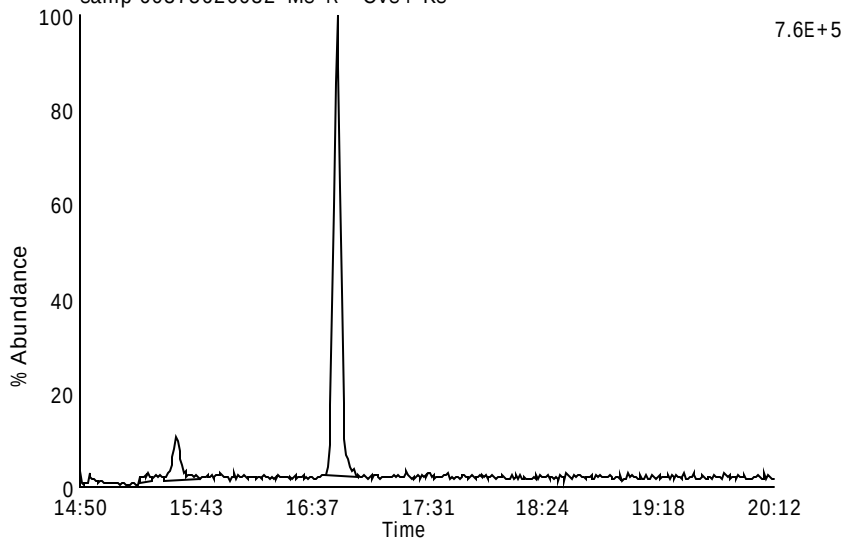

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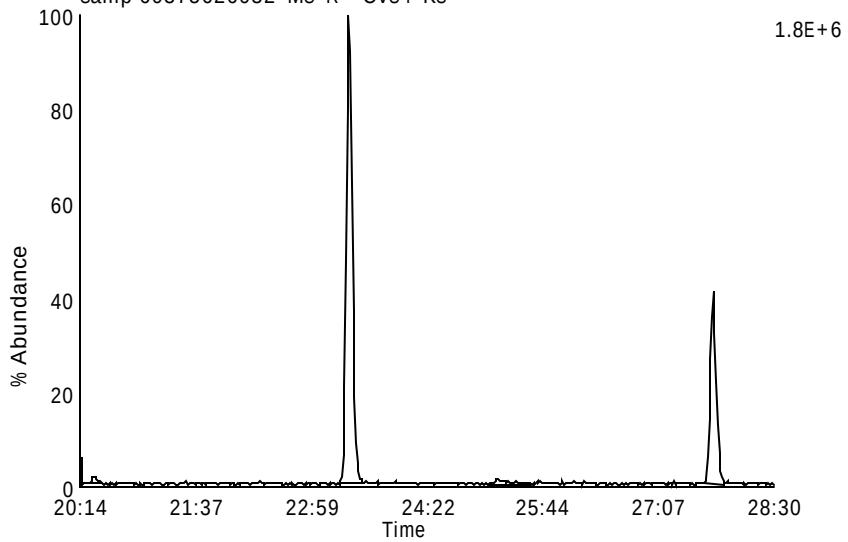
Samp 60375626032-MS-R - CVS P KS

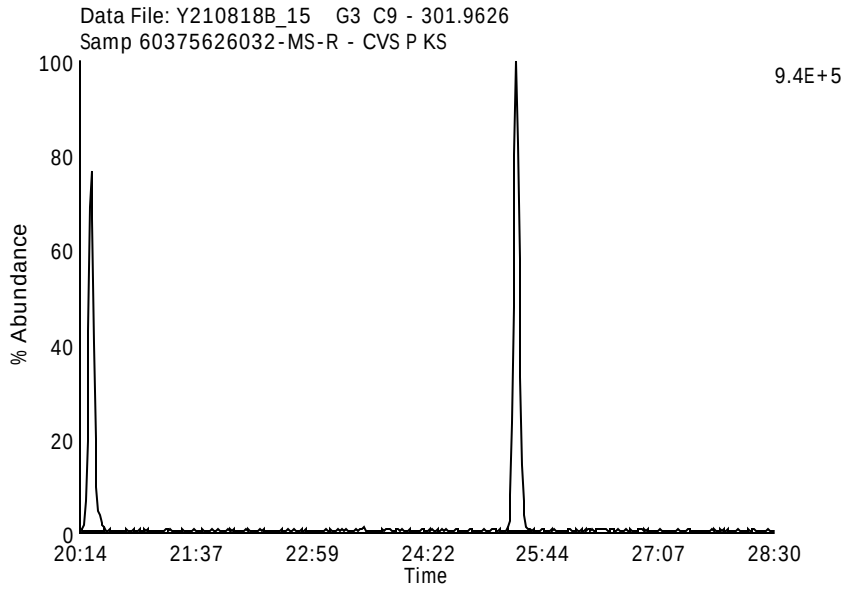


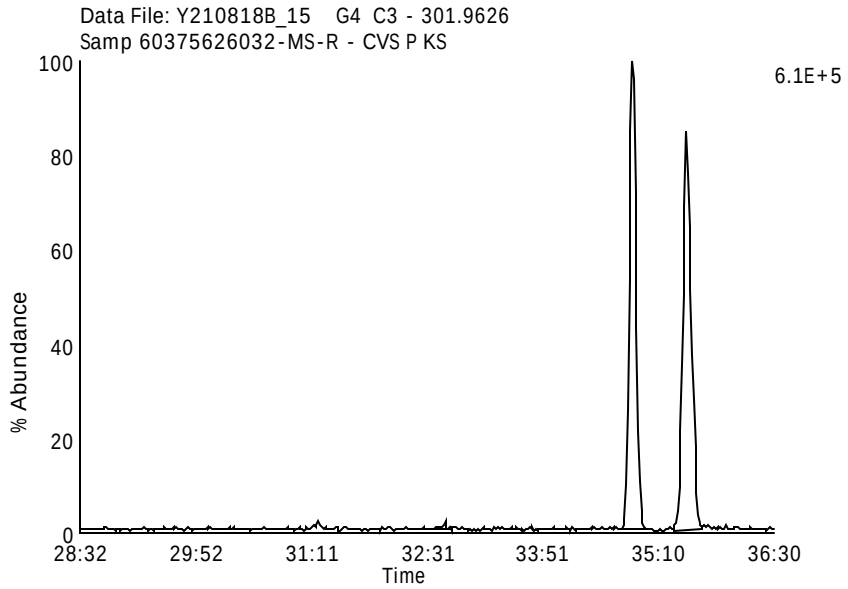
Labeled Tetra Chlorinated Biphenyls

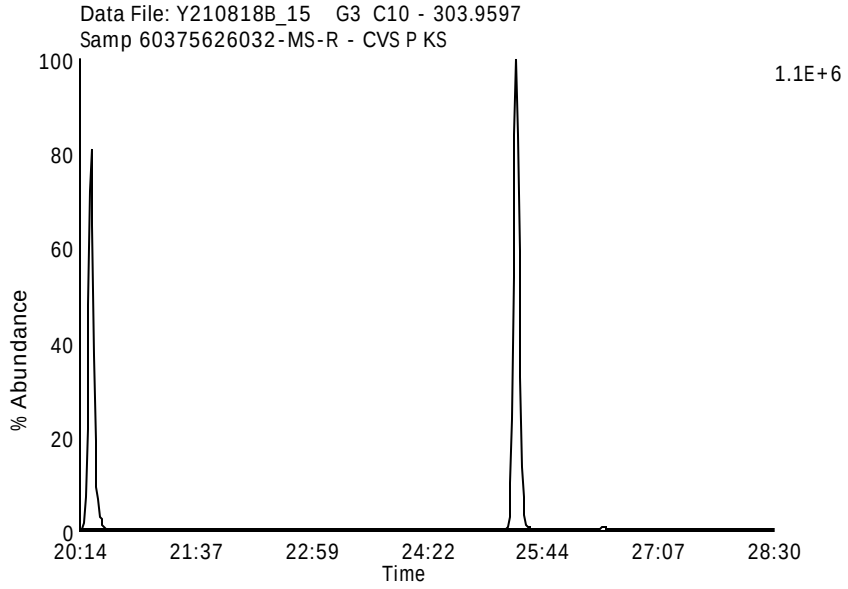
Data File Name: Y210818B_15 | Lab Sample ID: 60375626032-MS-R

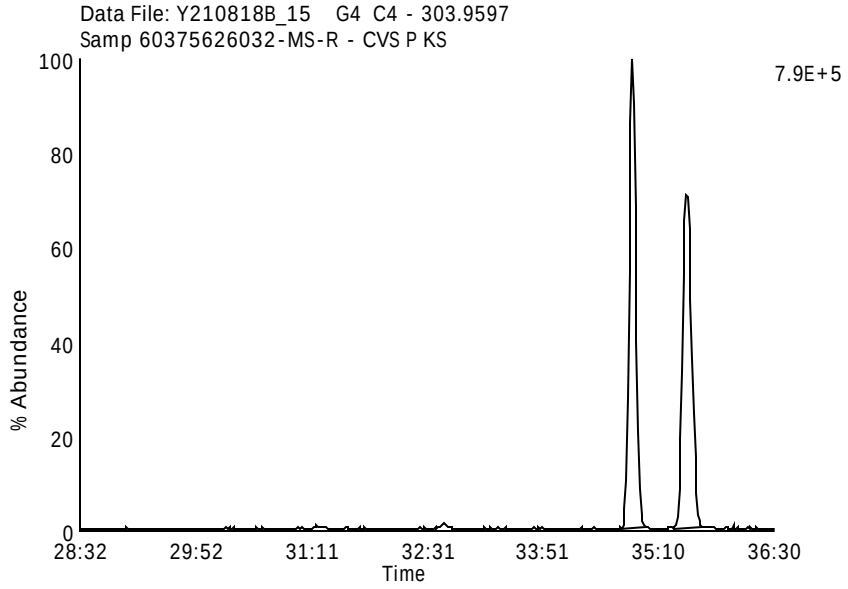
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

Sample Description: Samp 60375626032-MS-R - CVS P KS | Client Sample ID: GB-38/3-5-MS



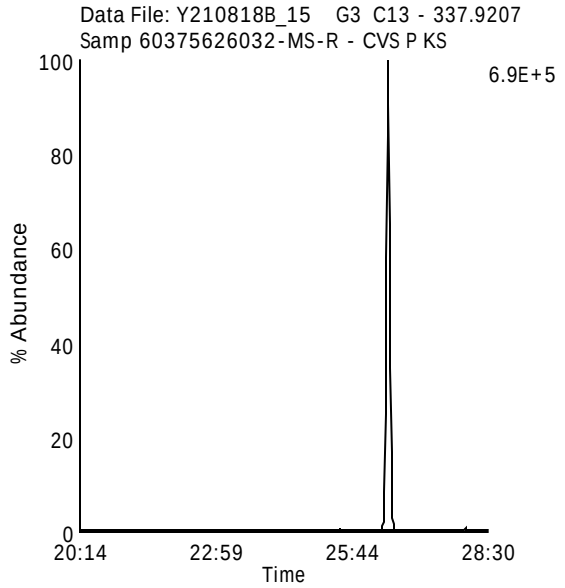


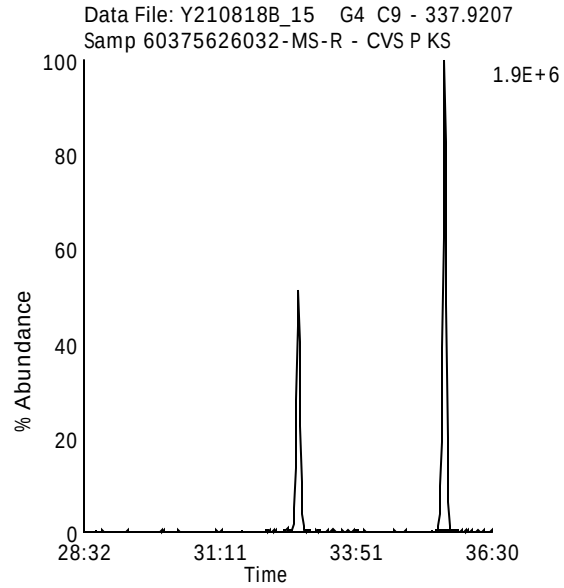


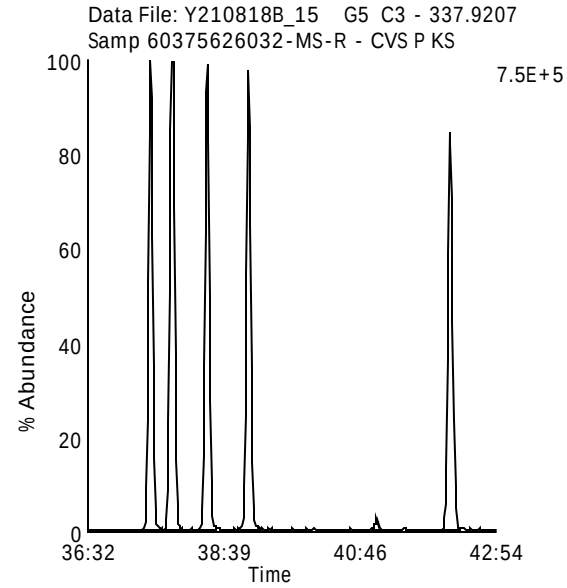


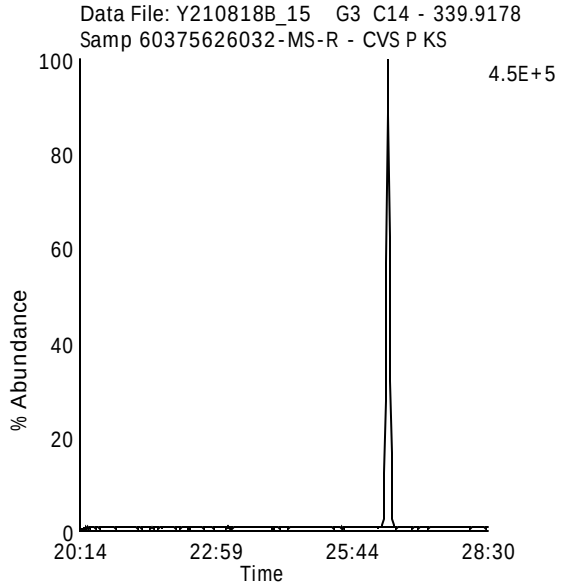
Labeled Penta Chlorinated Biphenyls

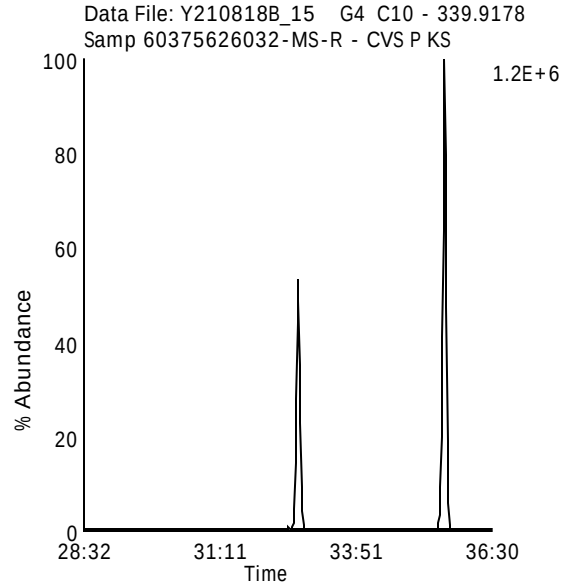
Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS

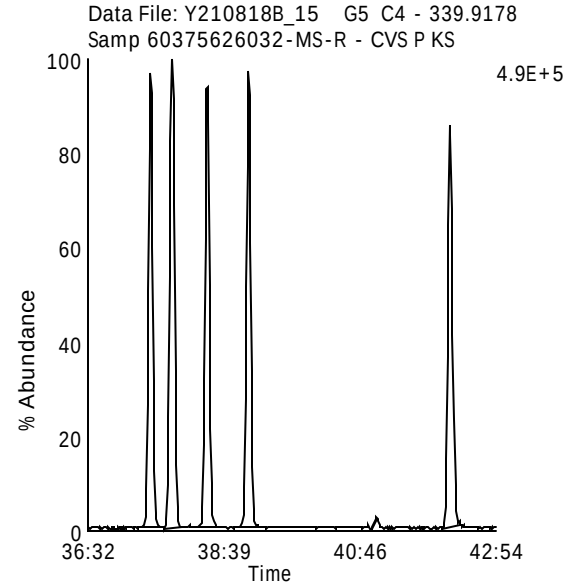






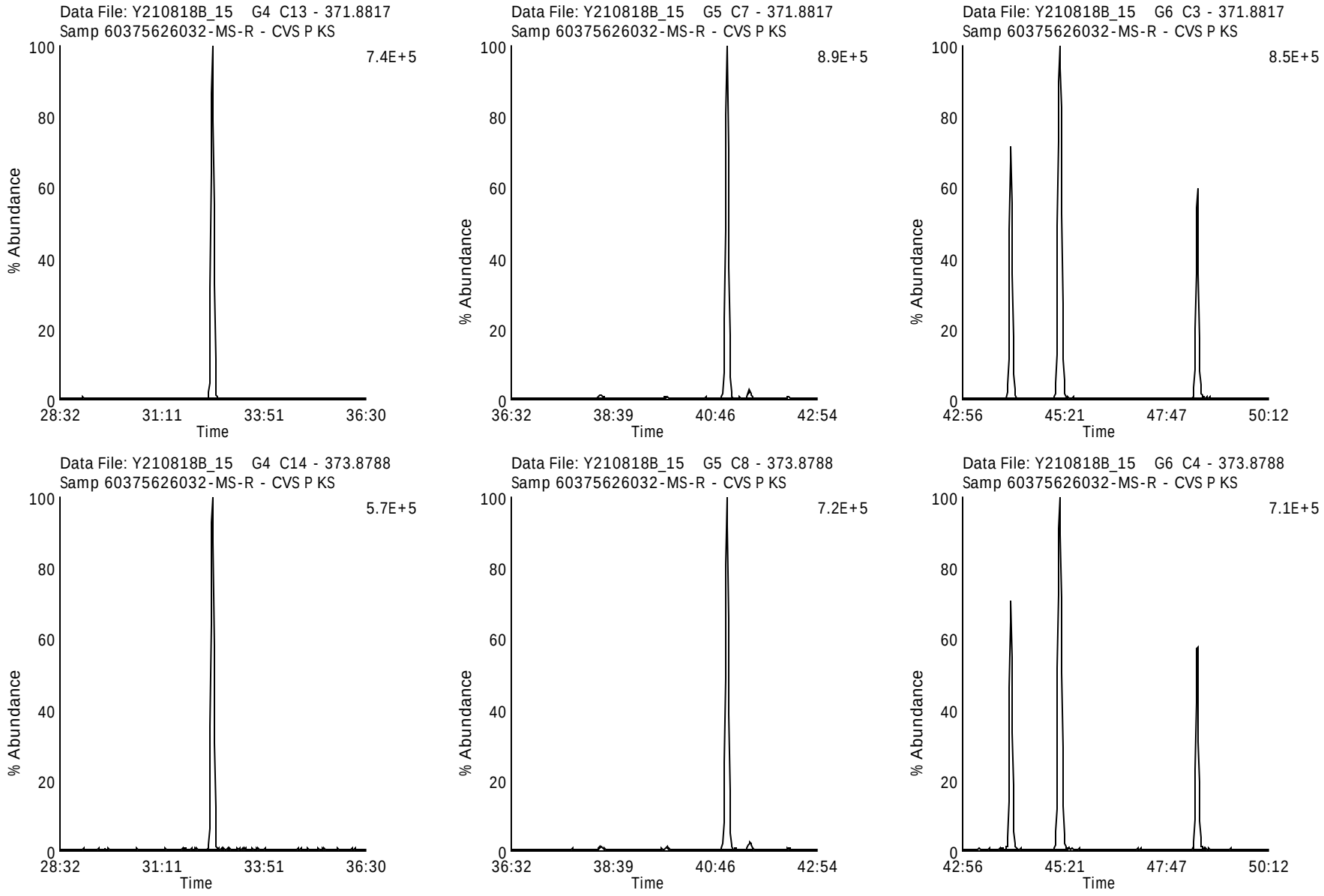






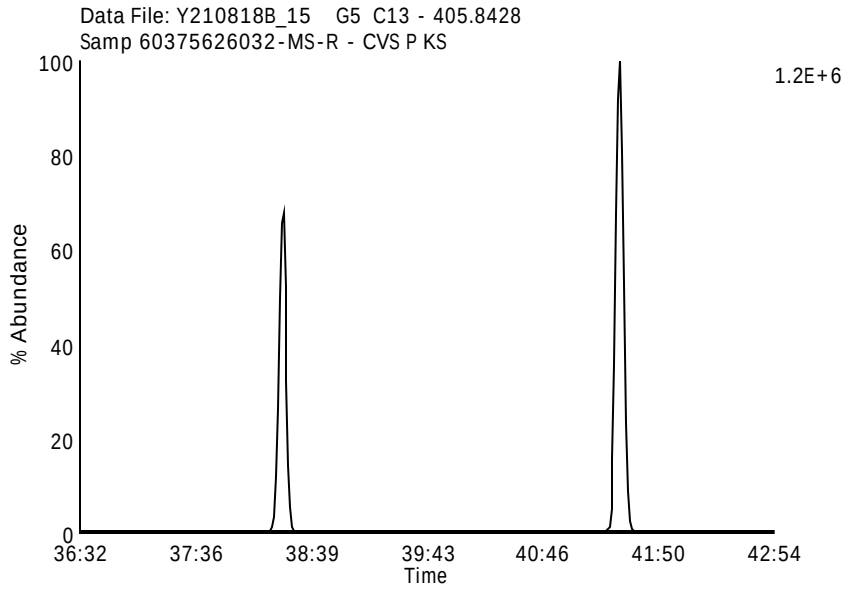
Labeled Hexa Chlorinated Biphenyls

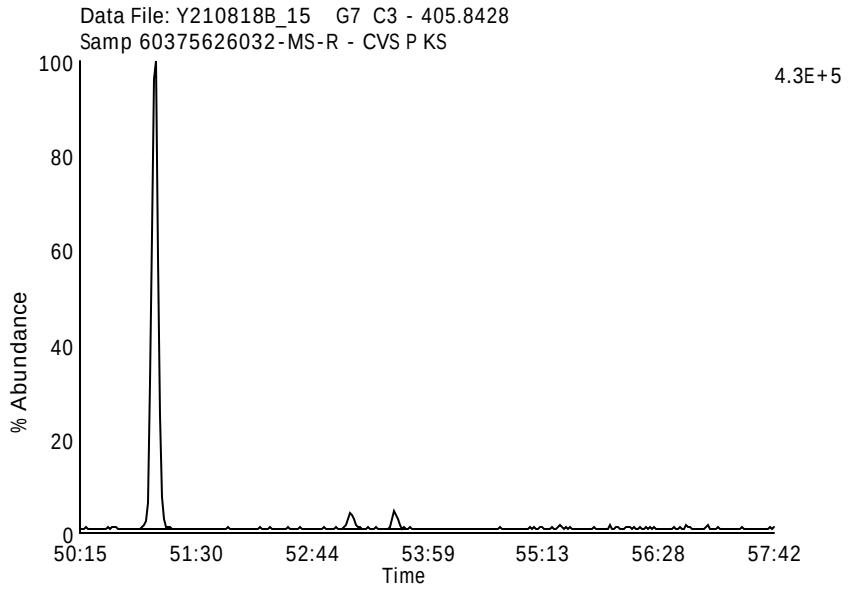
Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS

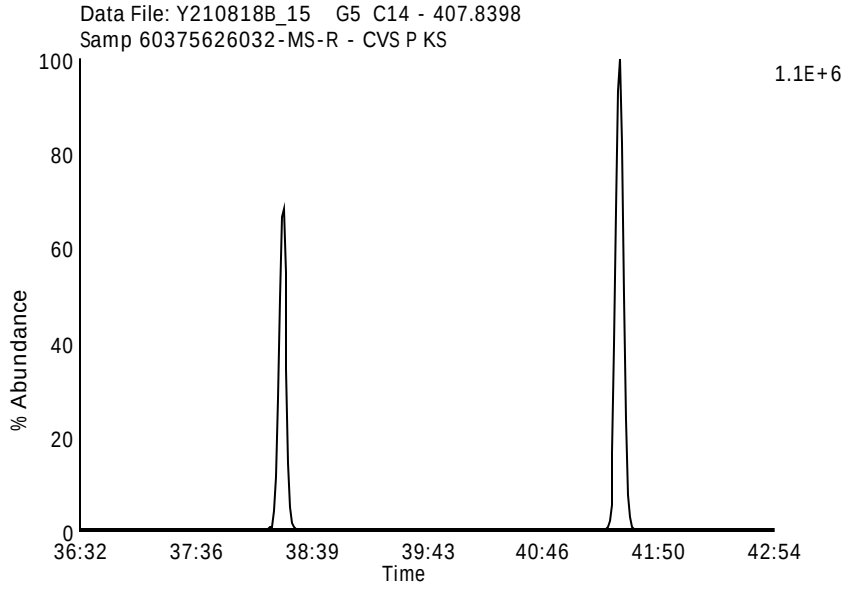


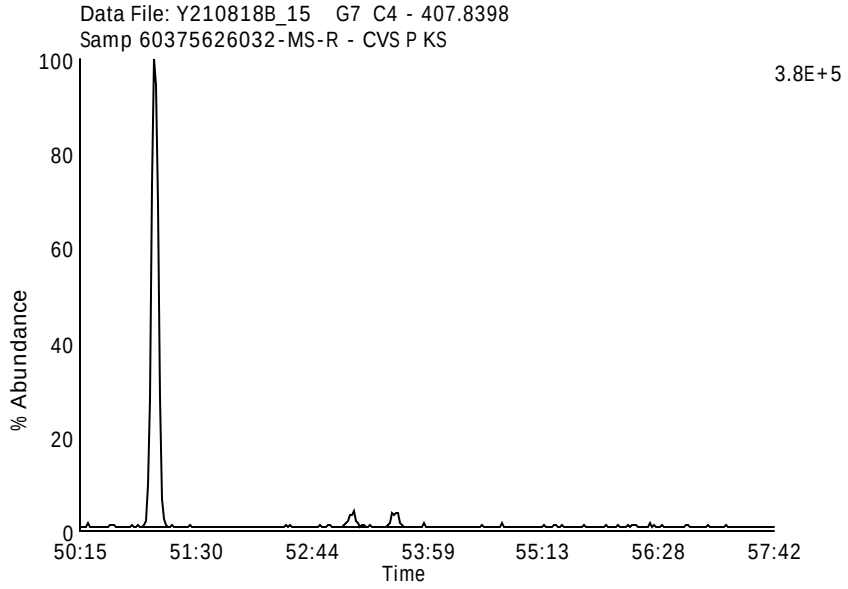
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS



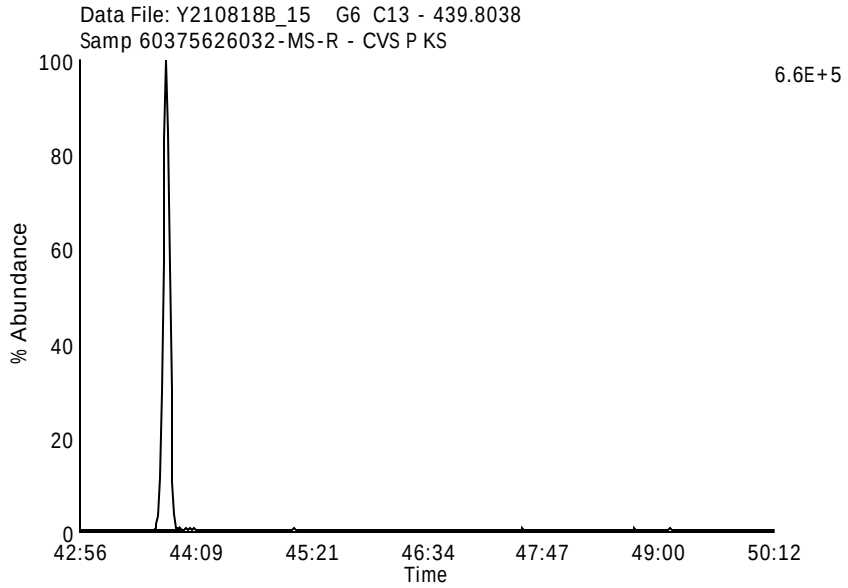


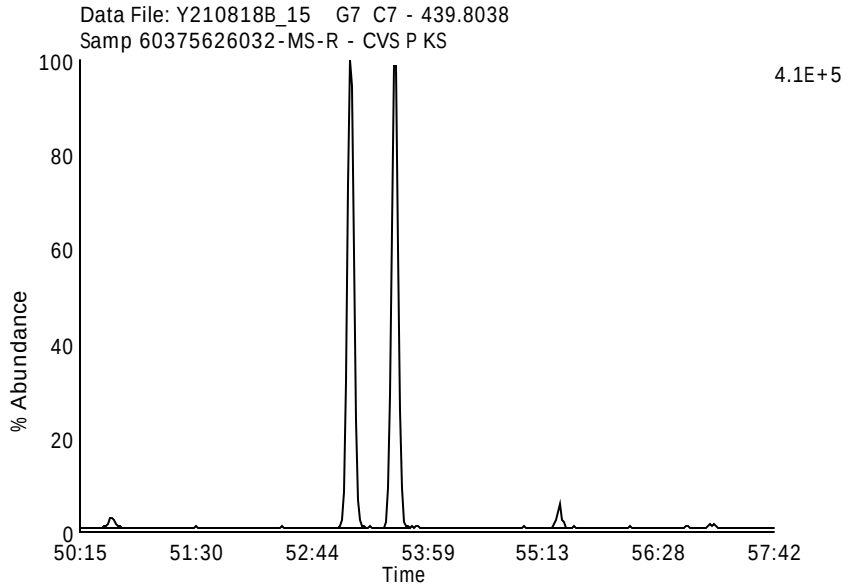


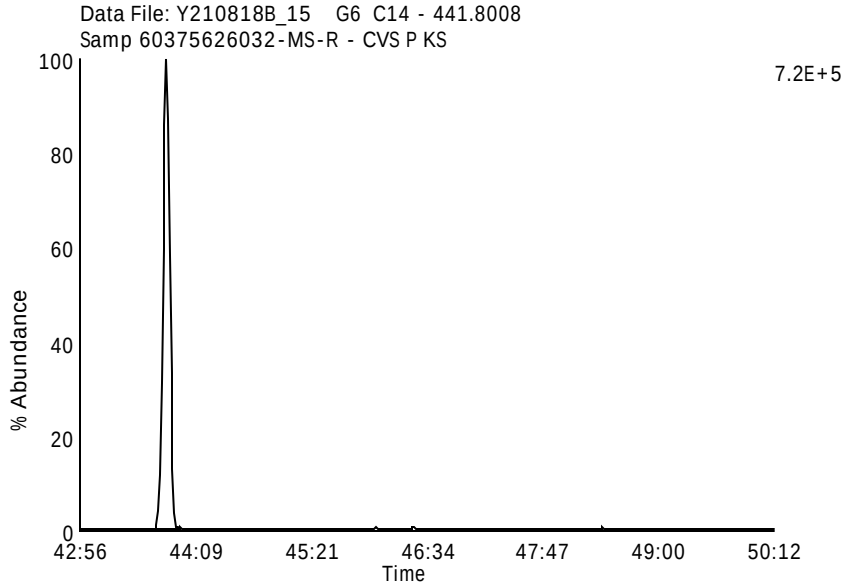


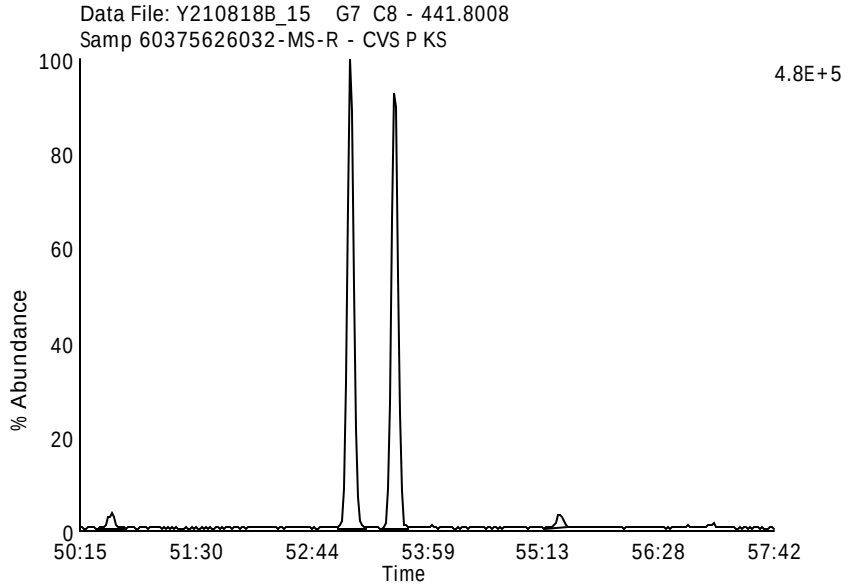
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS



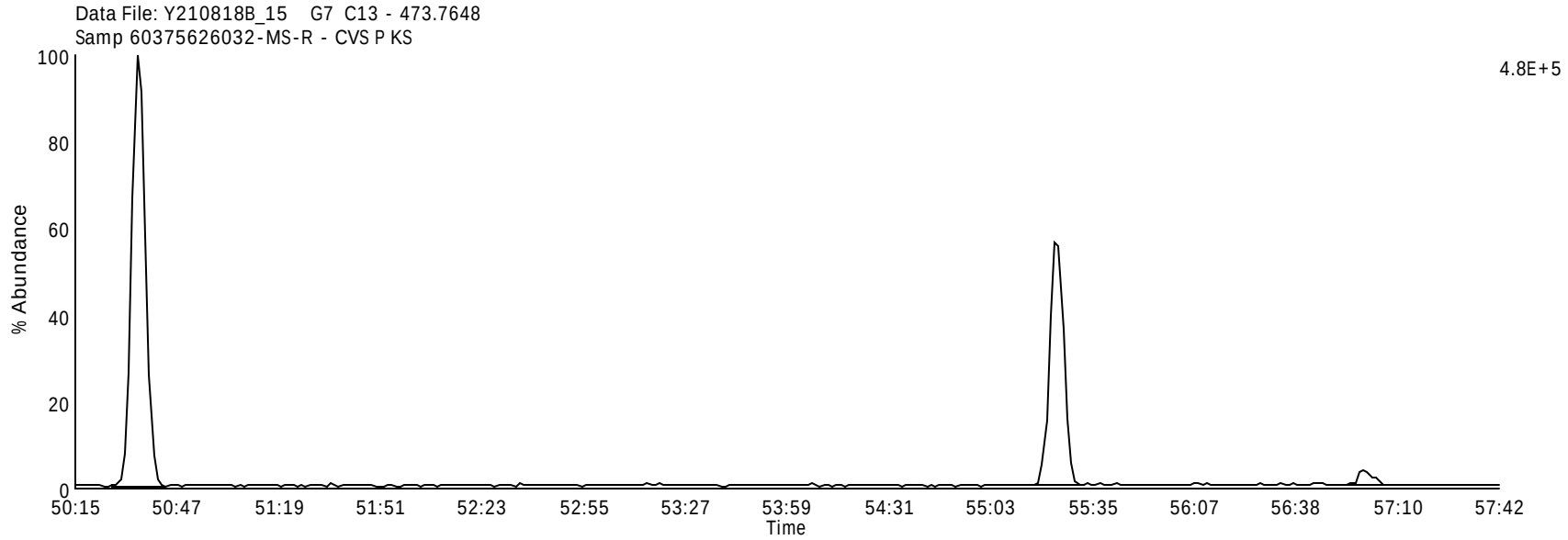


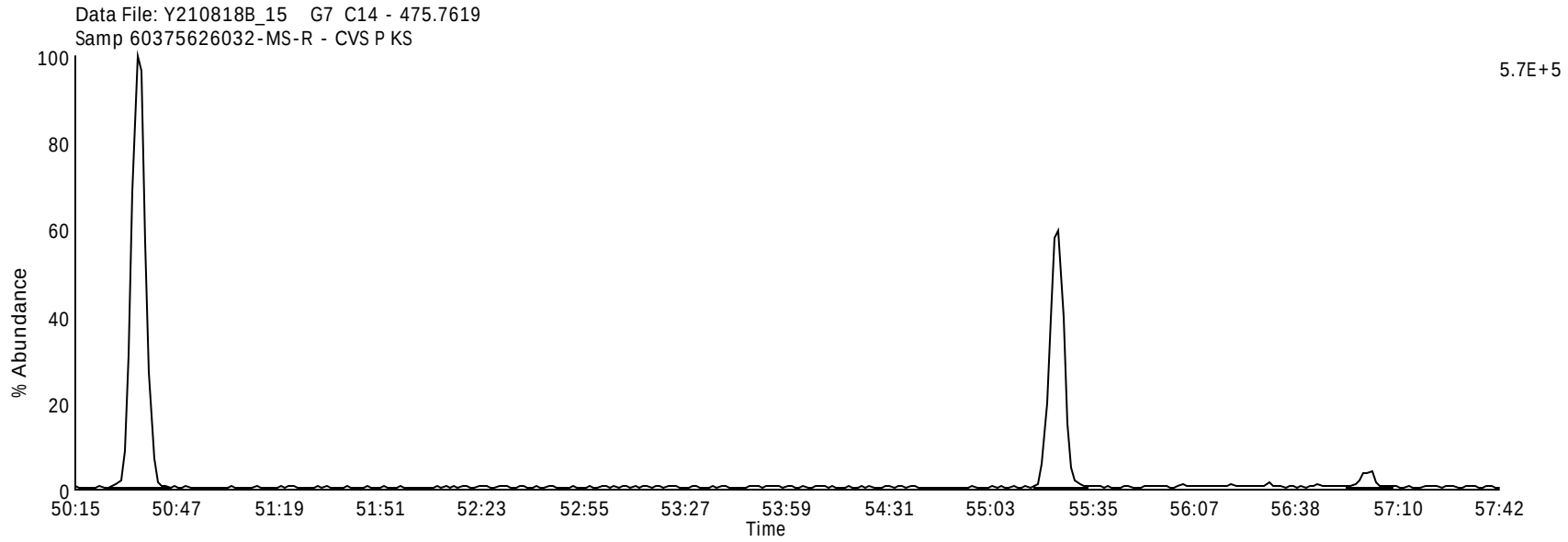




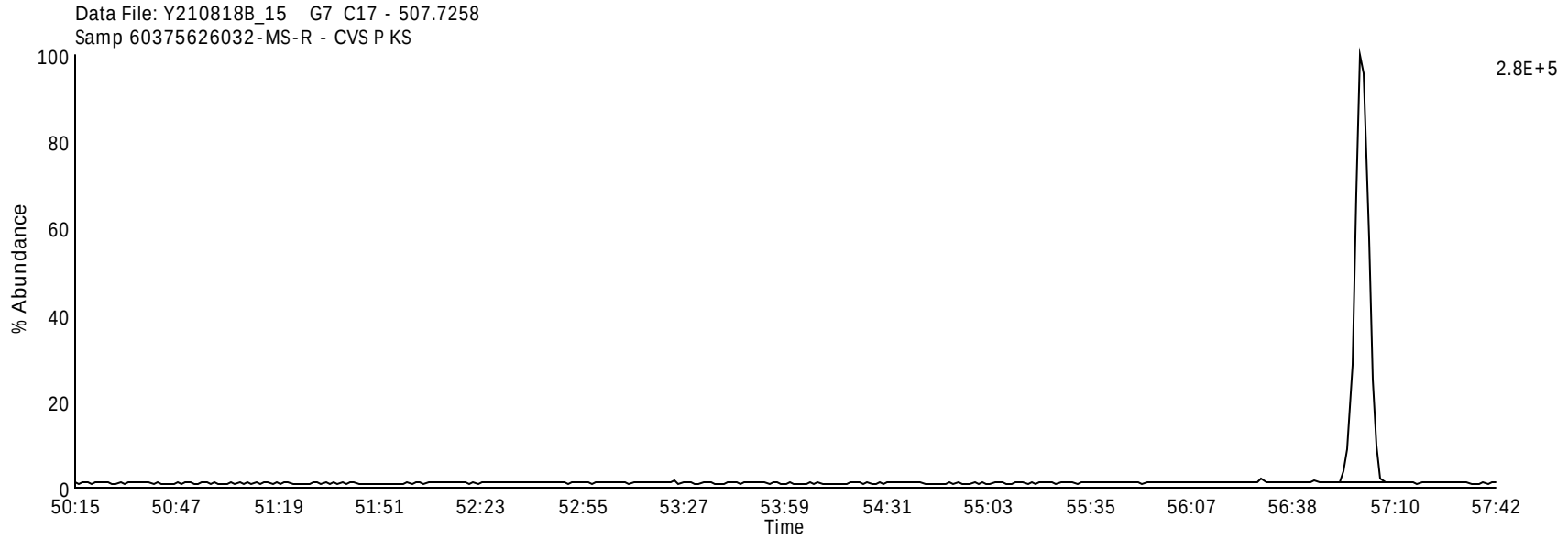
Labeled Nona Chlorinated Biphenyls

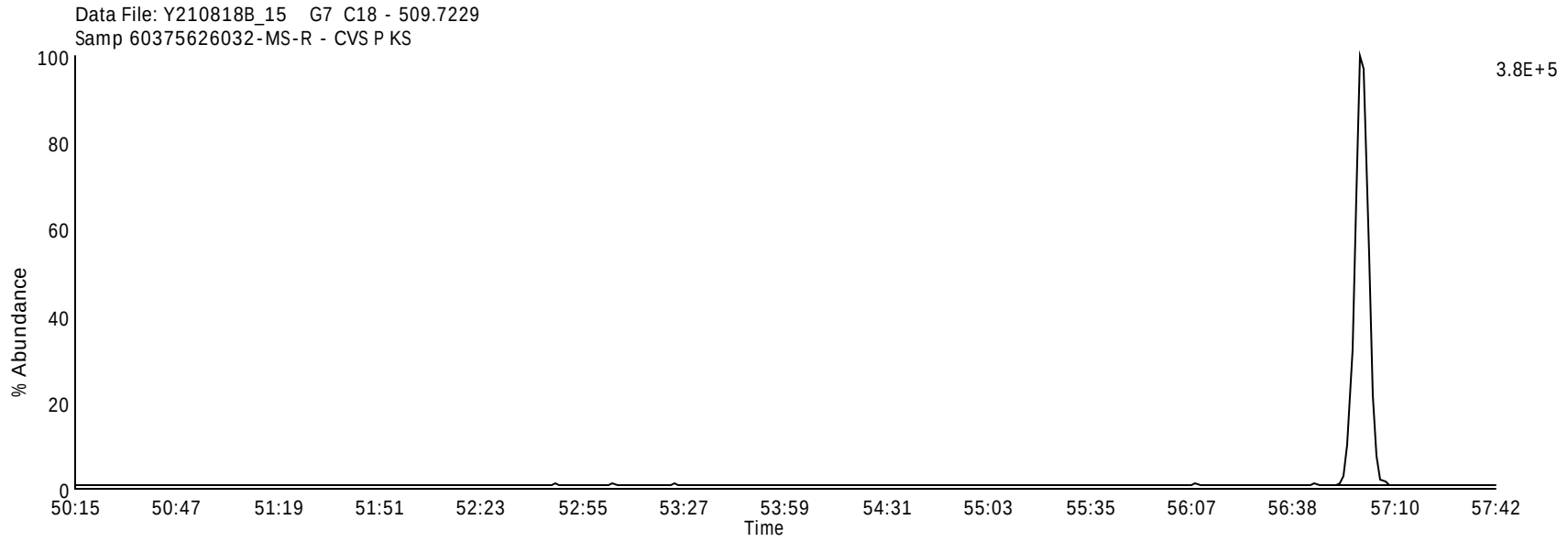
Data File Name: Y210818B_15	Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS	Client Sample ID: GB-38/3-5-MS





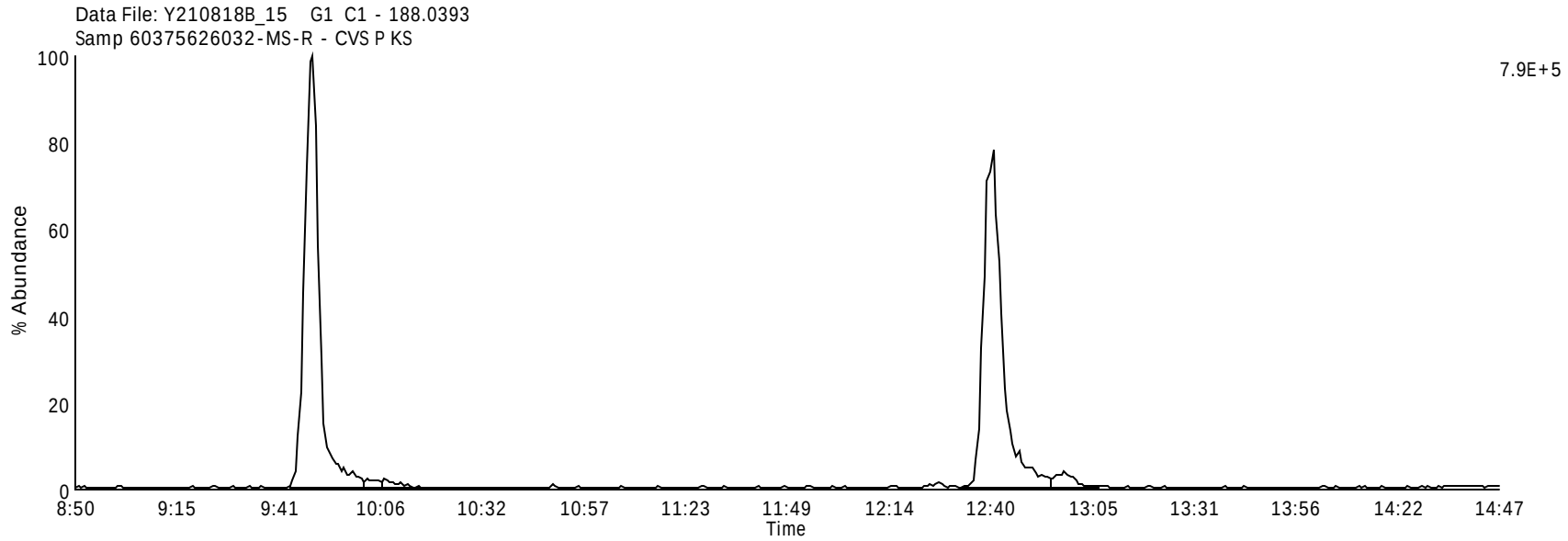
Labeled Deca Chlorinated Biphenyl	
Data File Name: Y210818B_15	Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS	Client Sample ID: GB-38/3-5-MS

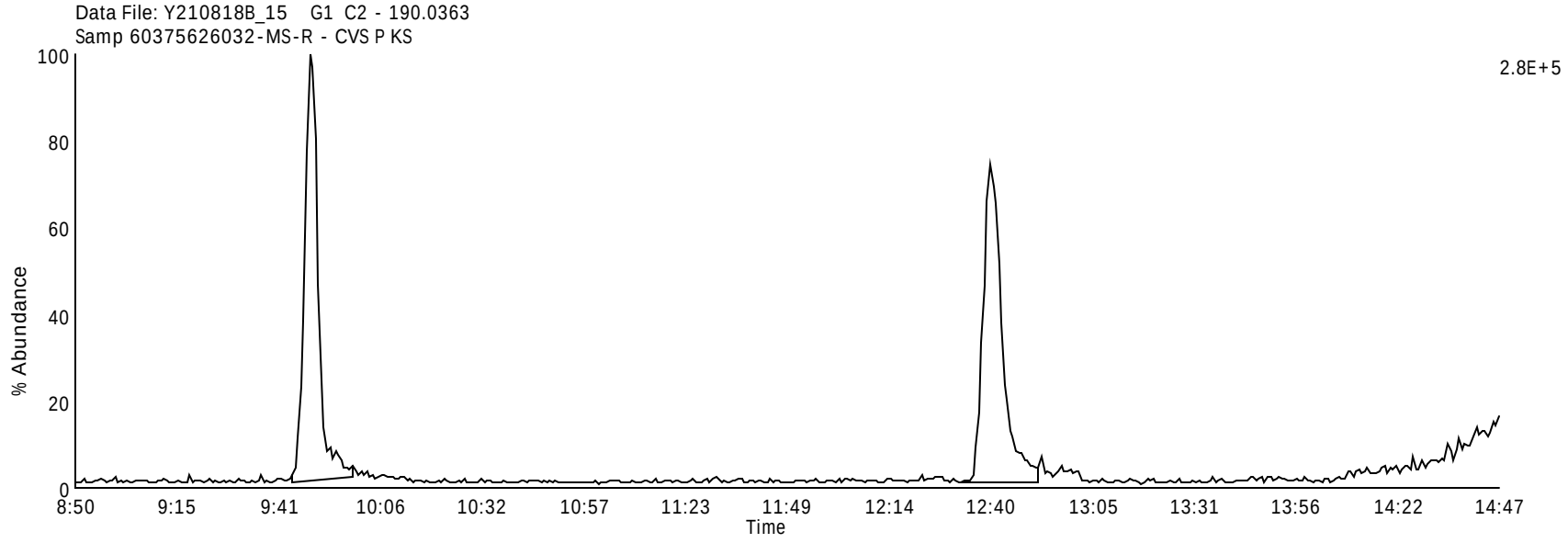




Mono Chlorinated Biphenyls

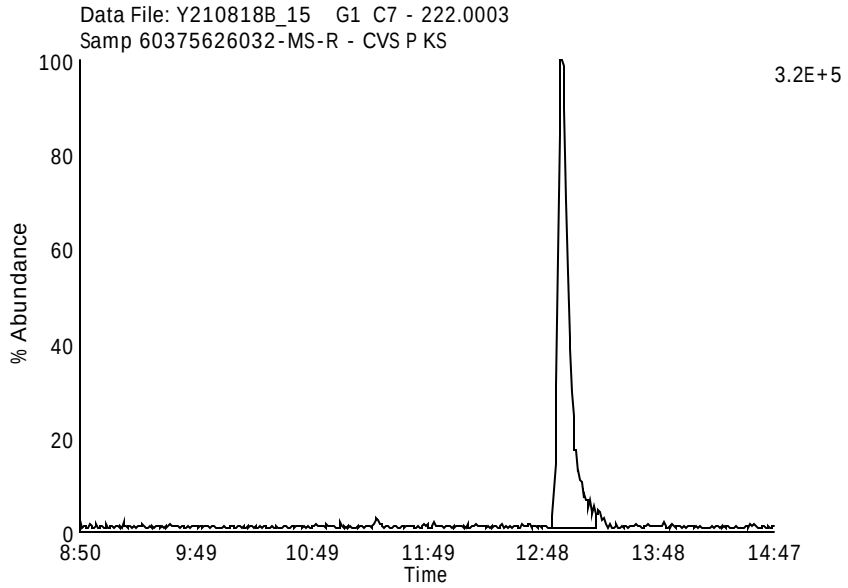
Data File Name: Y210818B_15	Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS	Client Sample ID: GB-38/3-5-MS

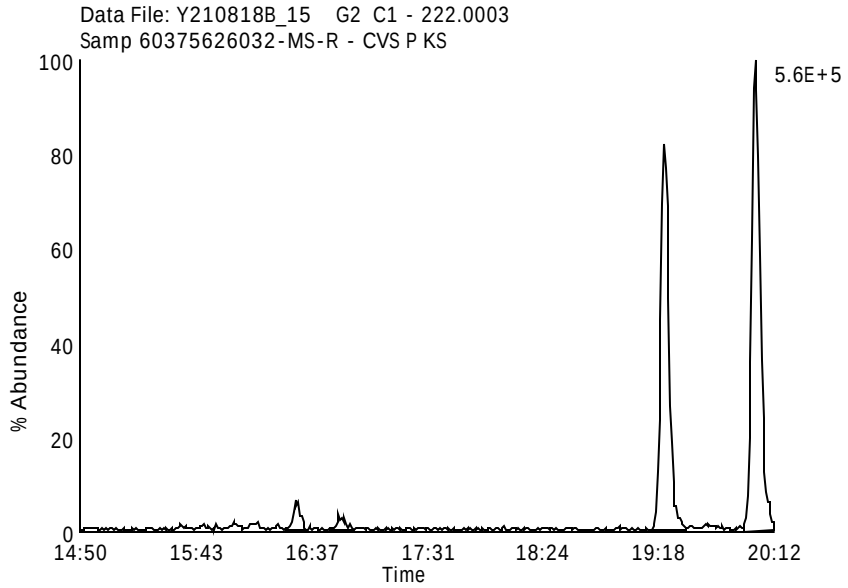


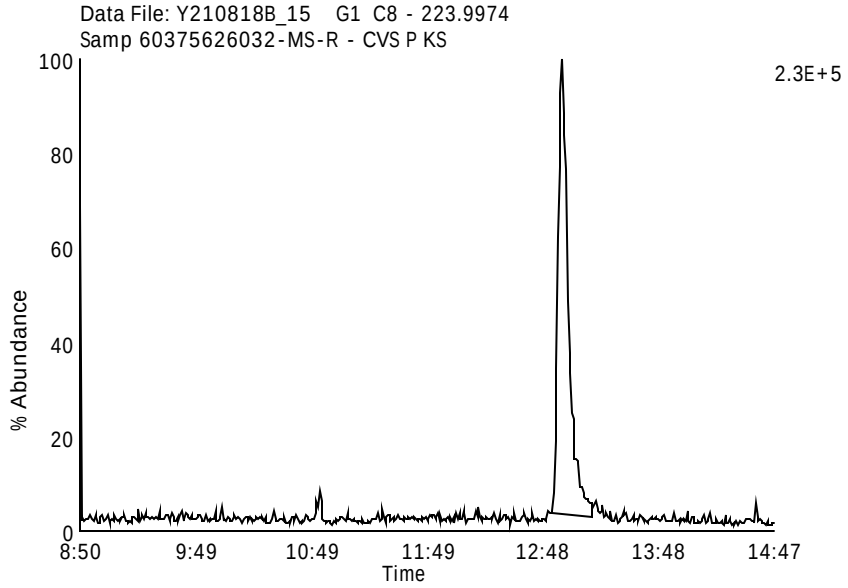


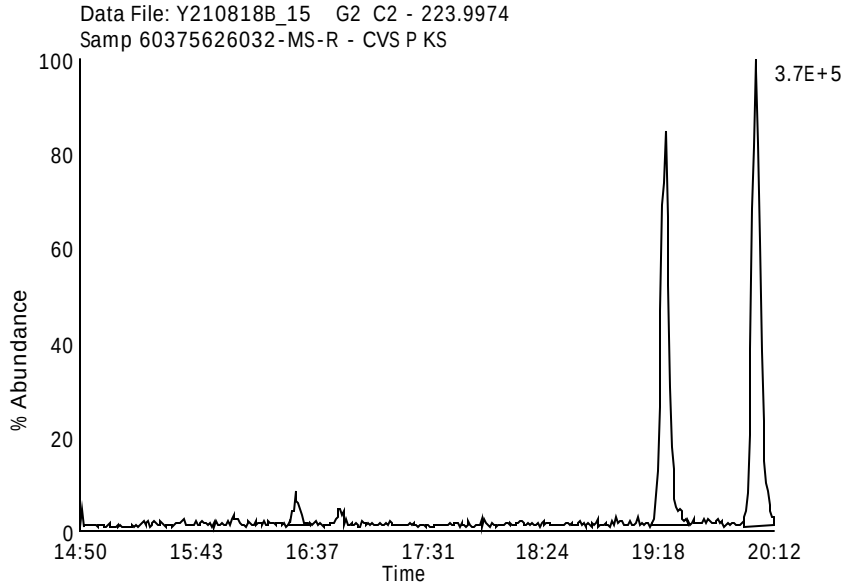
Di Chlorinated Biphenyls

Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS



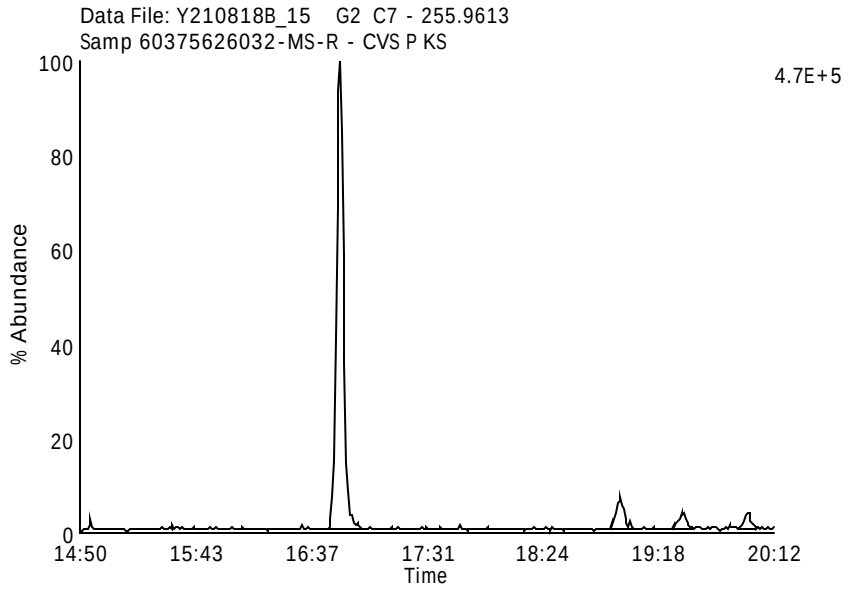


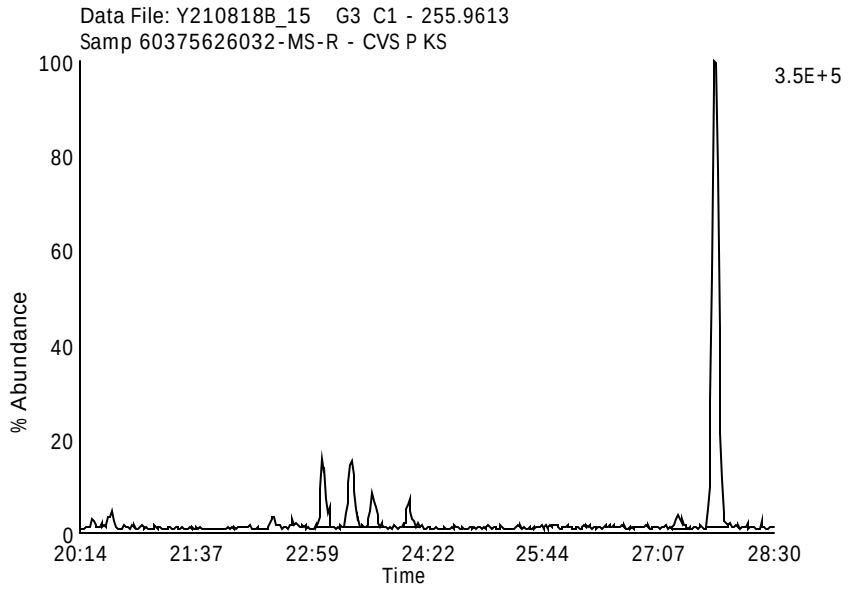


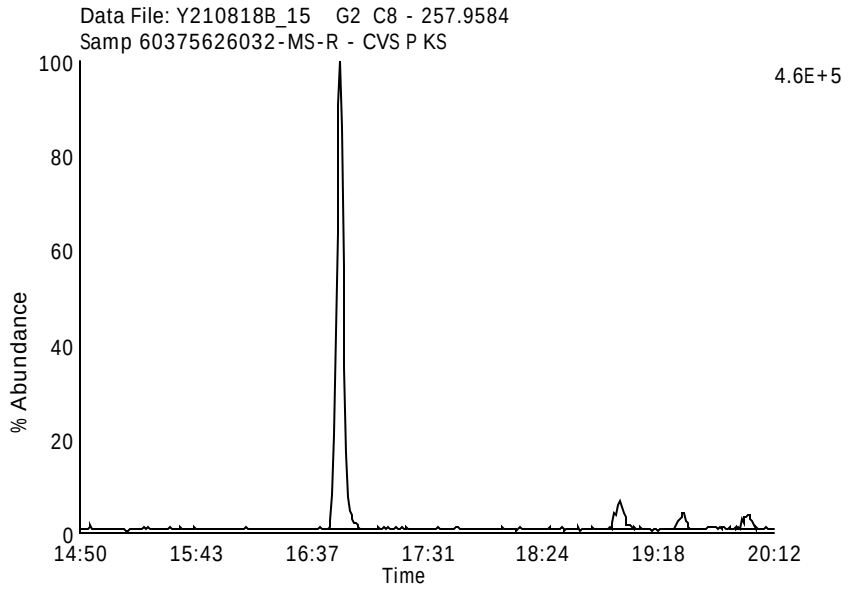


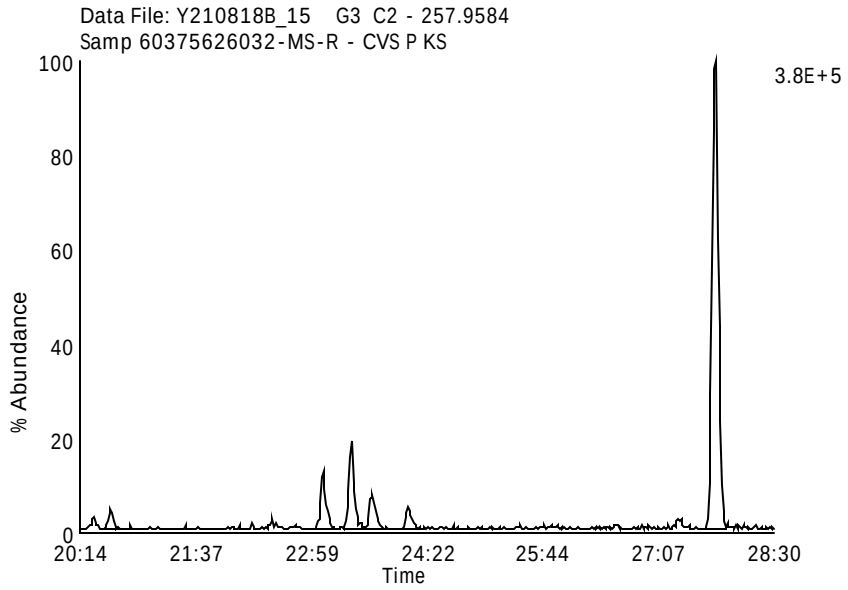
Tri Chlorinated Biphenyls

Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS



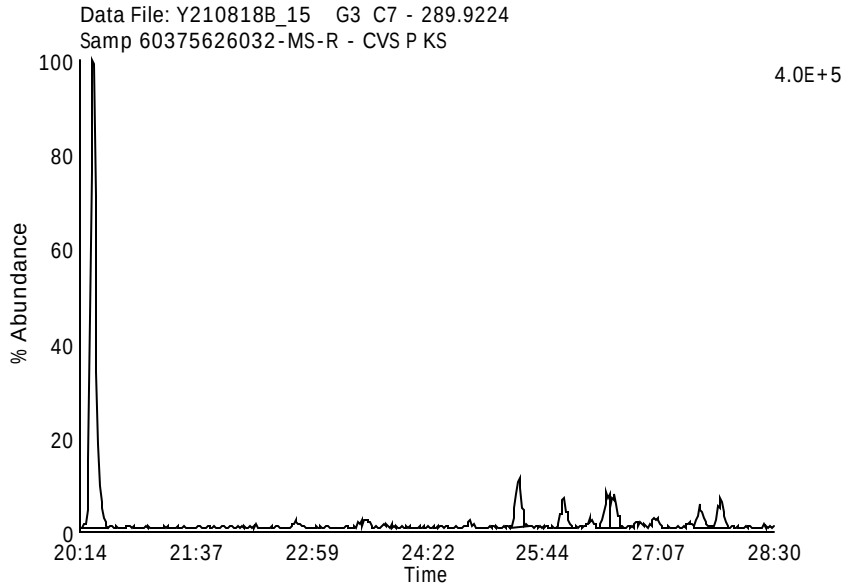


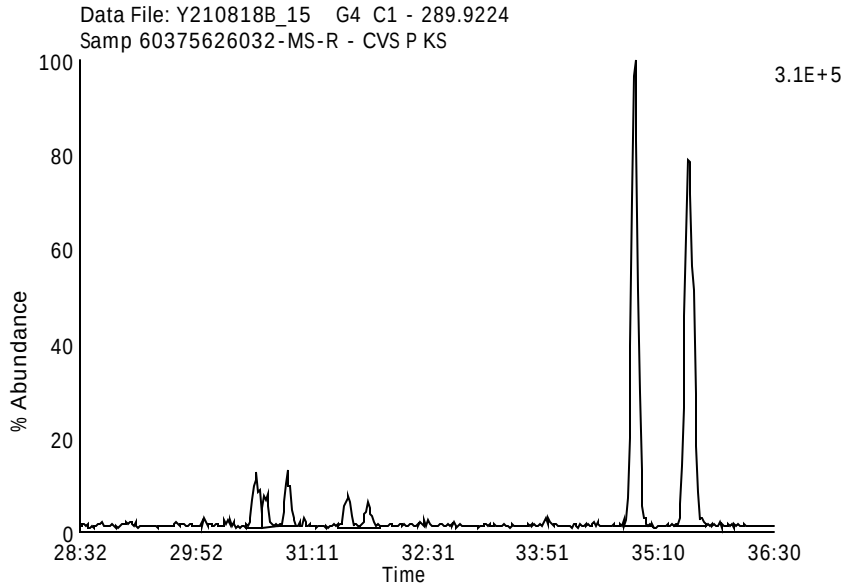


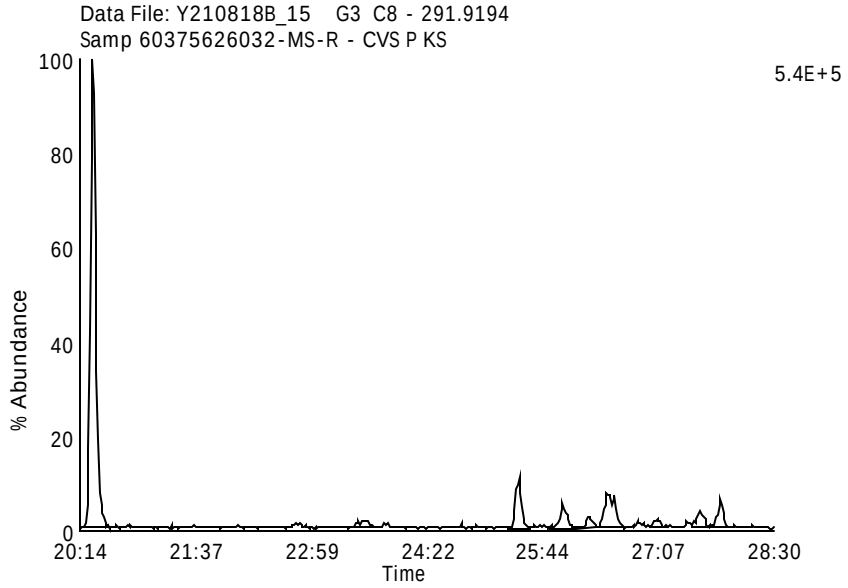


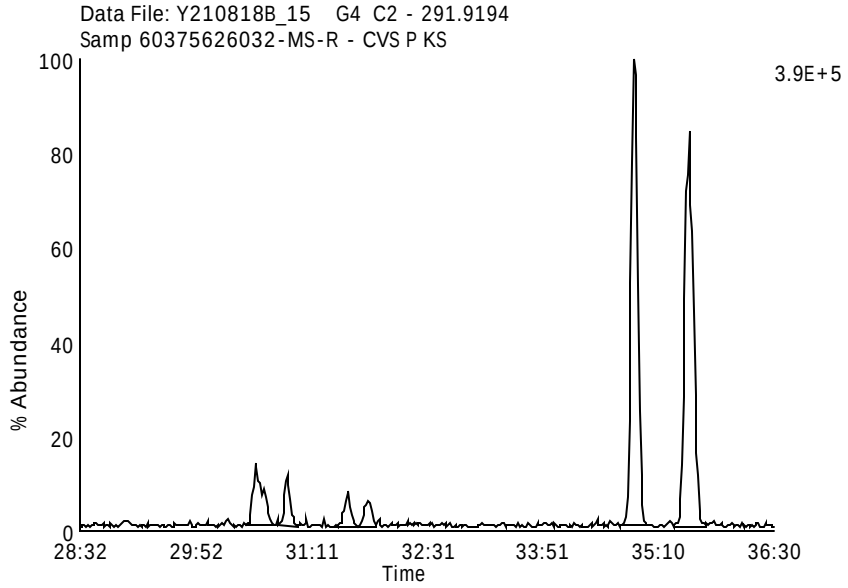
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS



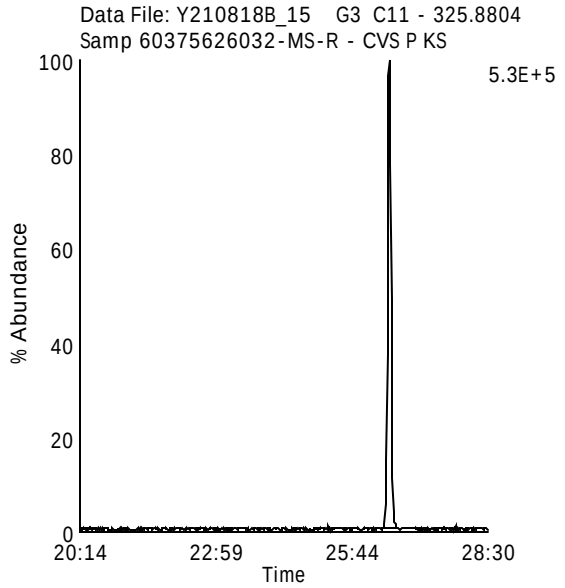


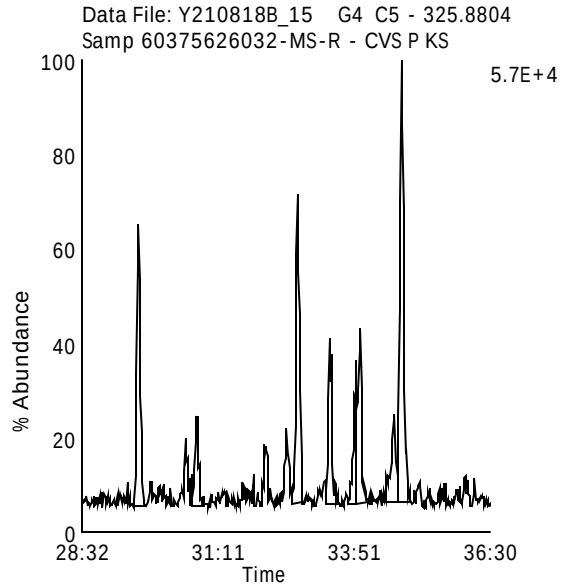


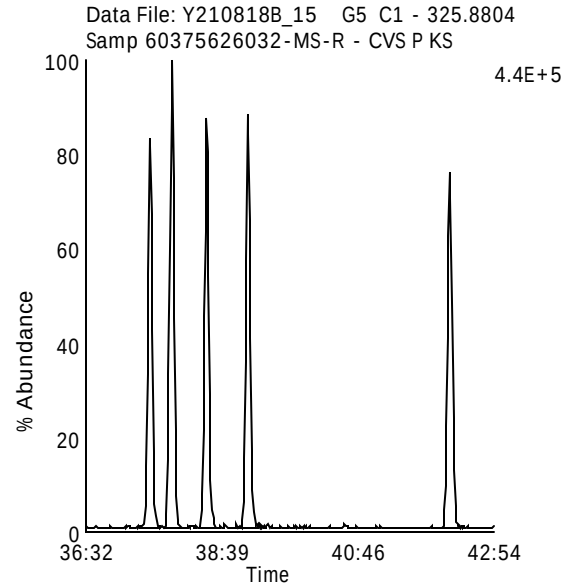


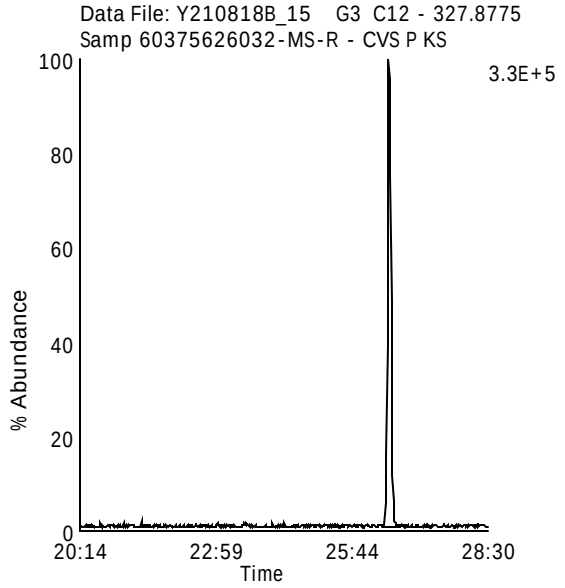
Penta Chlorinated Biphenyls

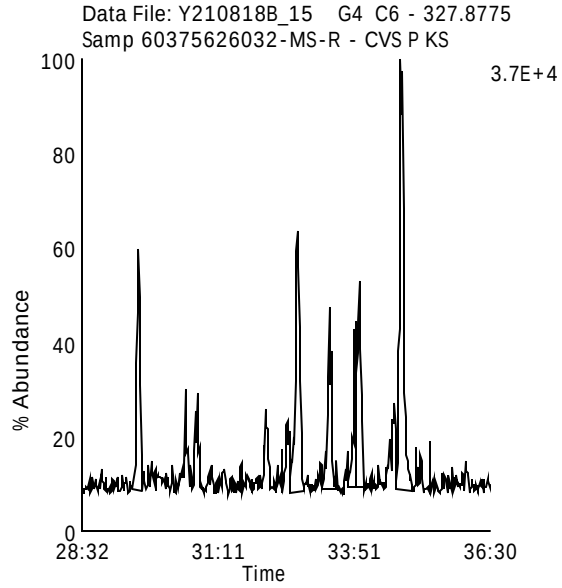
Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS

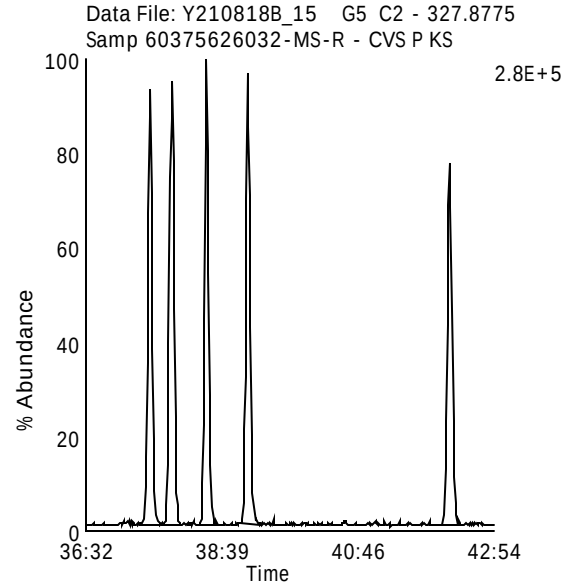






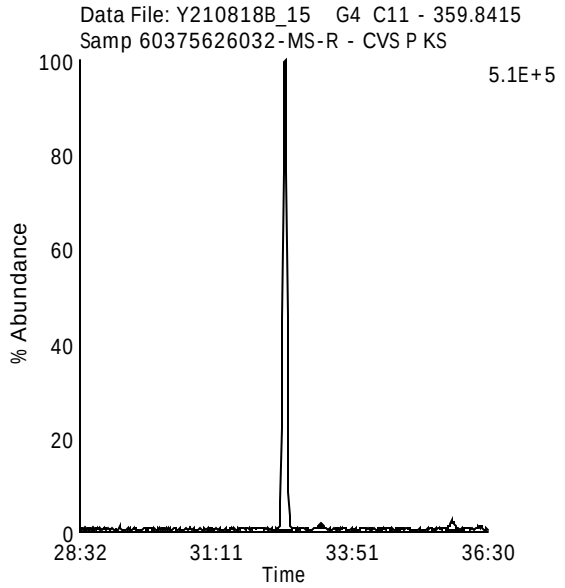


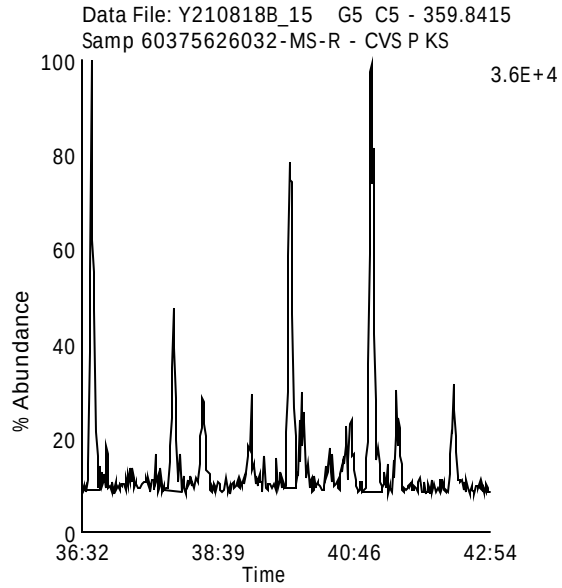


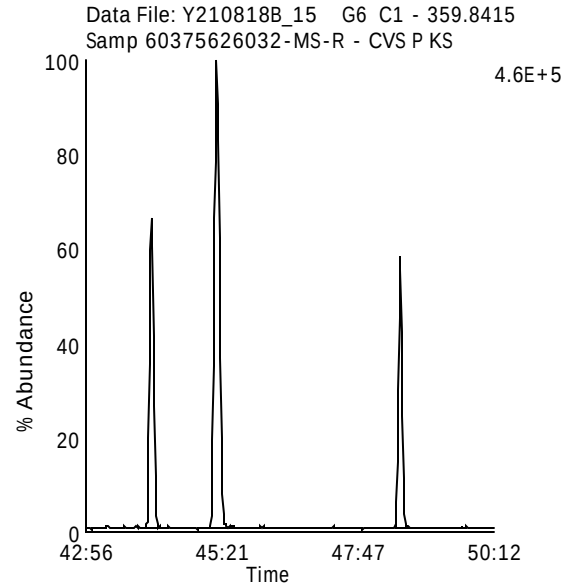


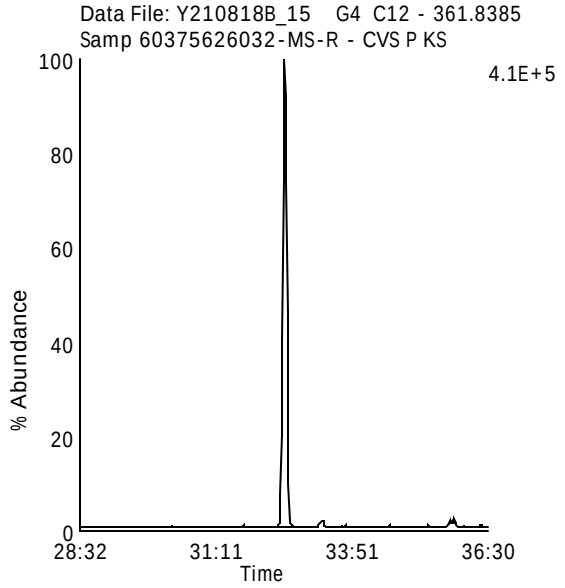
Hexa Chlorinated Biphenyls

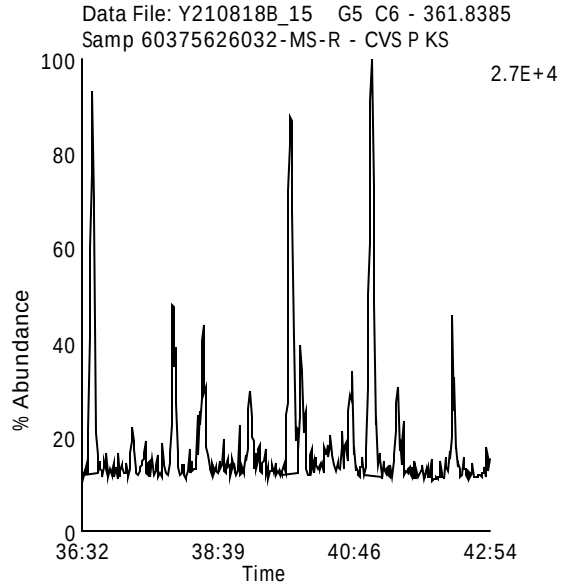
Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS

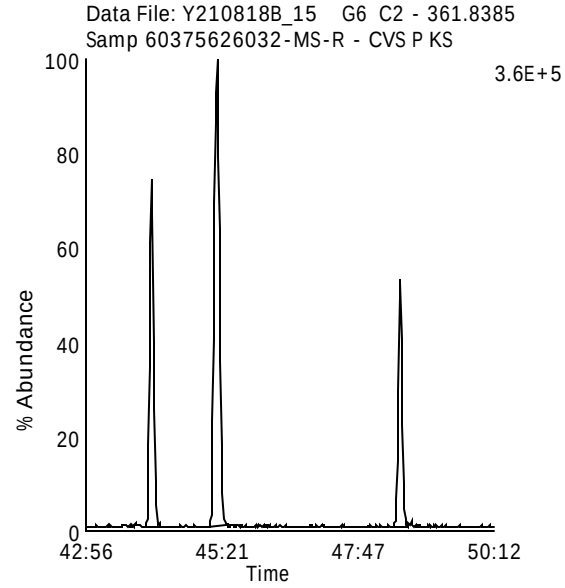






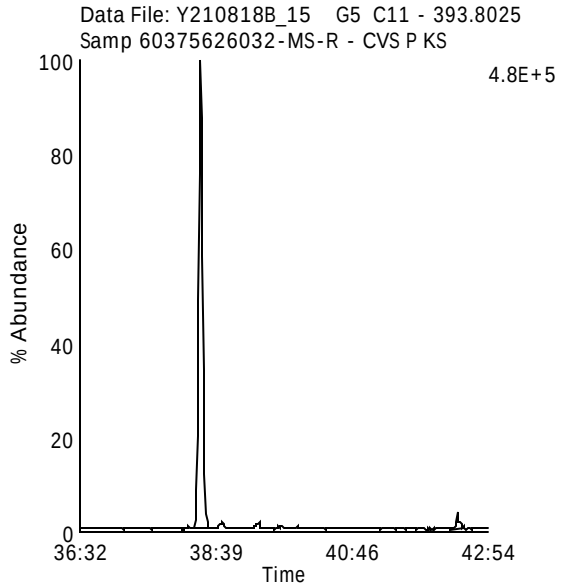


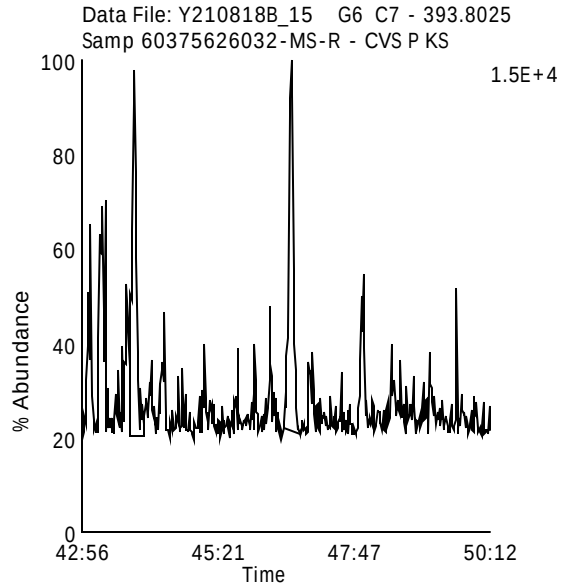


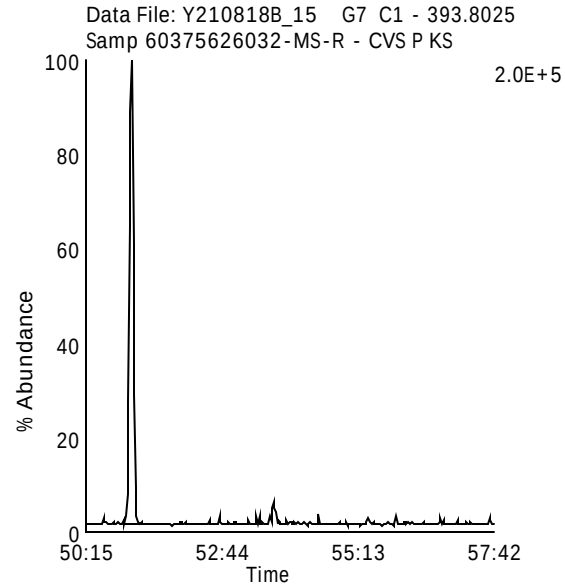


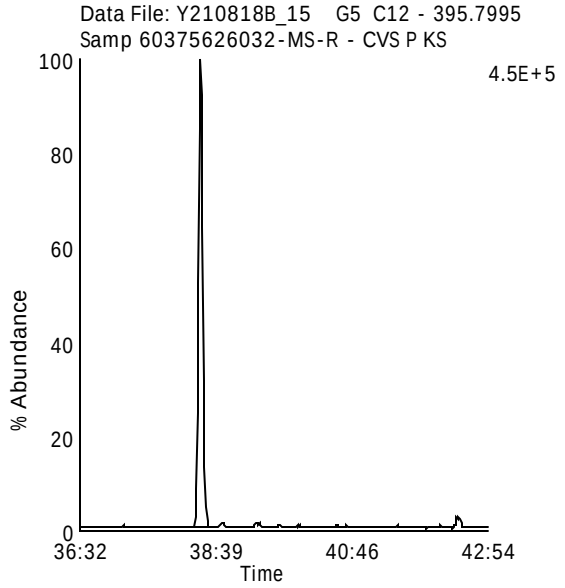
Hepta Chlorinated Biphenyls

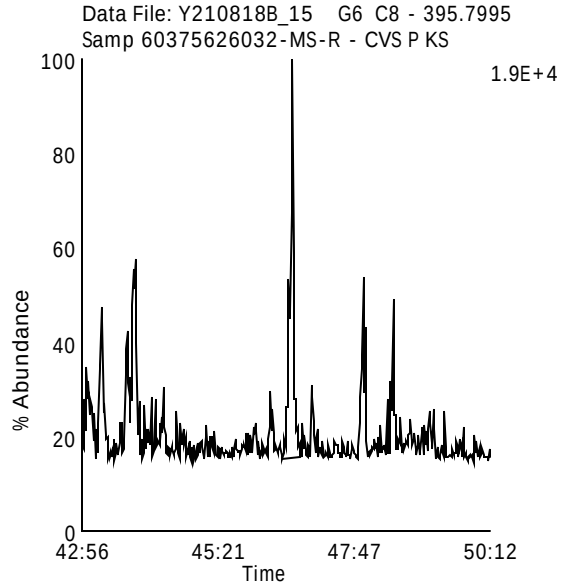
Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS

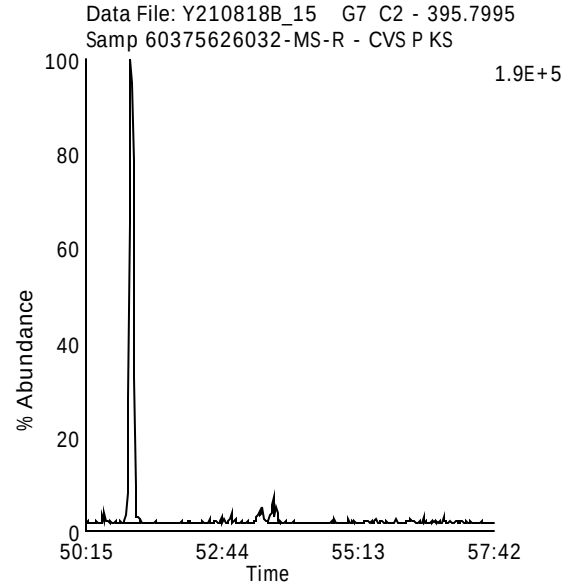






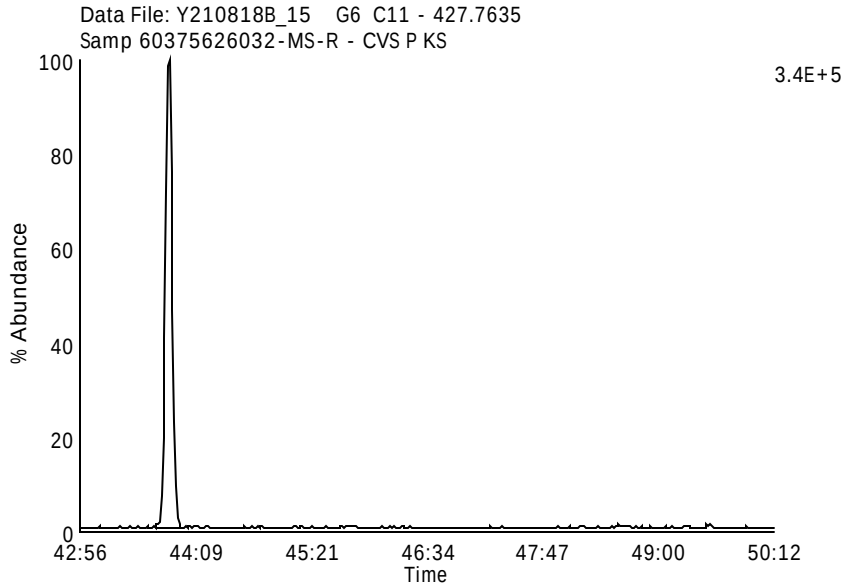


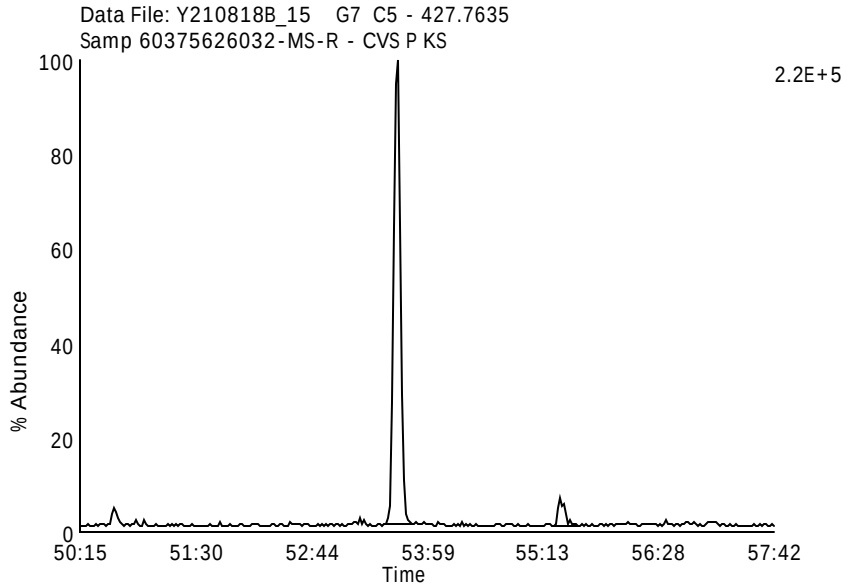


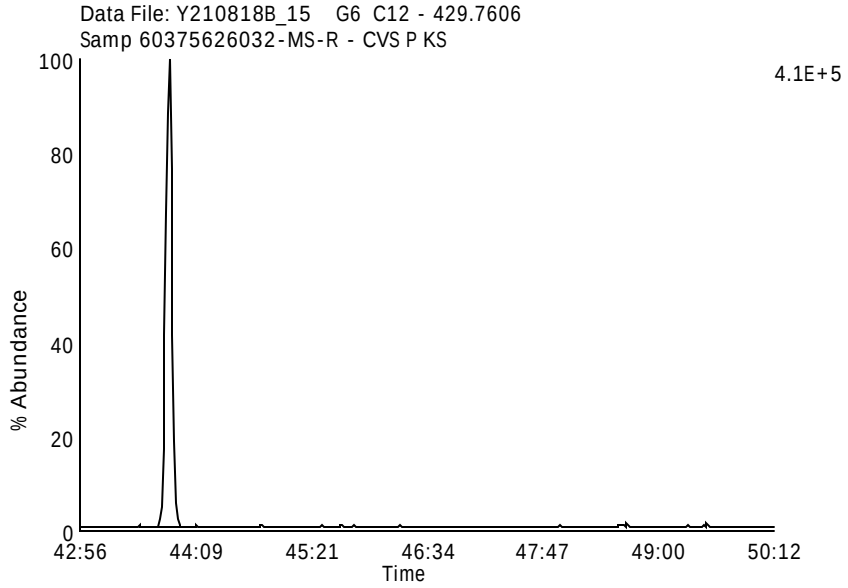


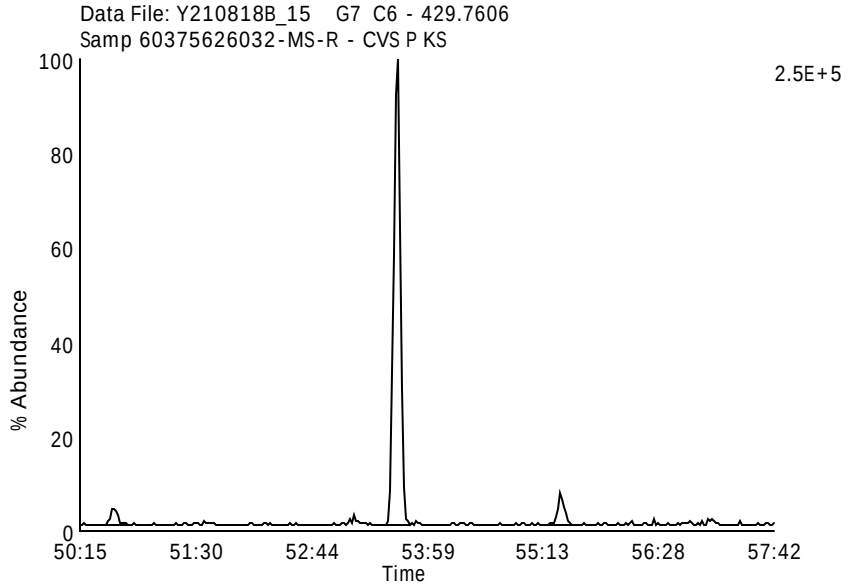
Octa Chlorinated Biphenyls

Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS



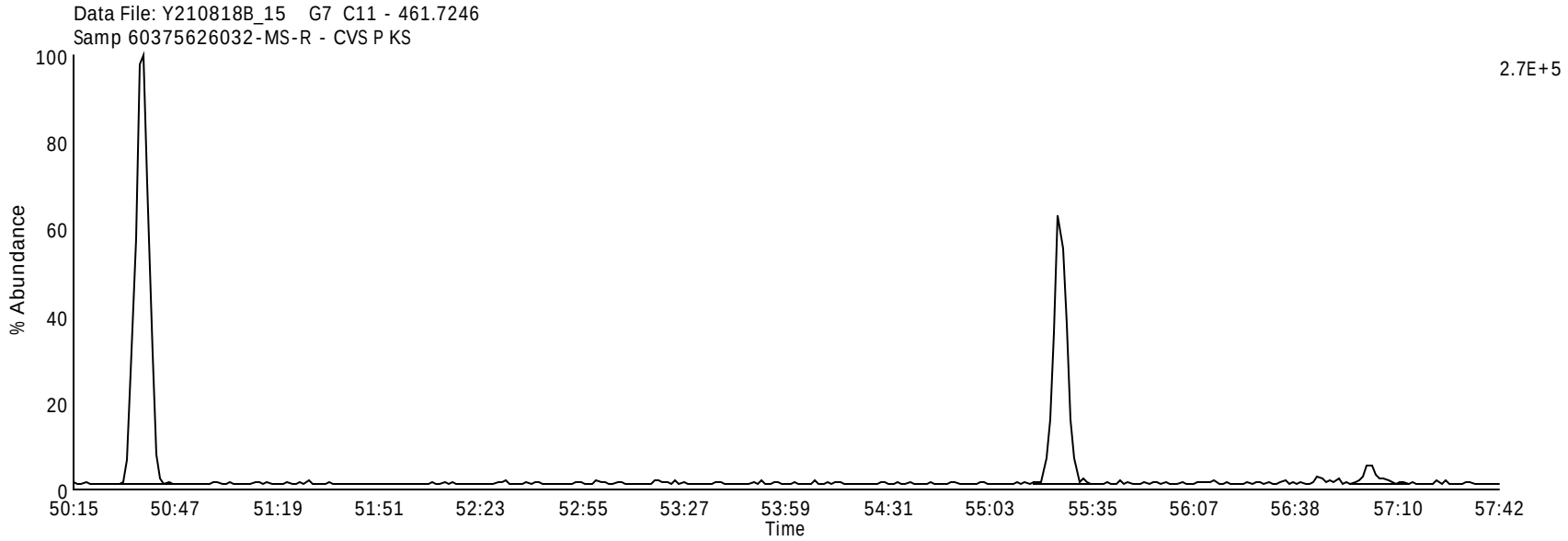


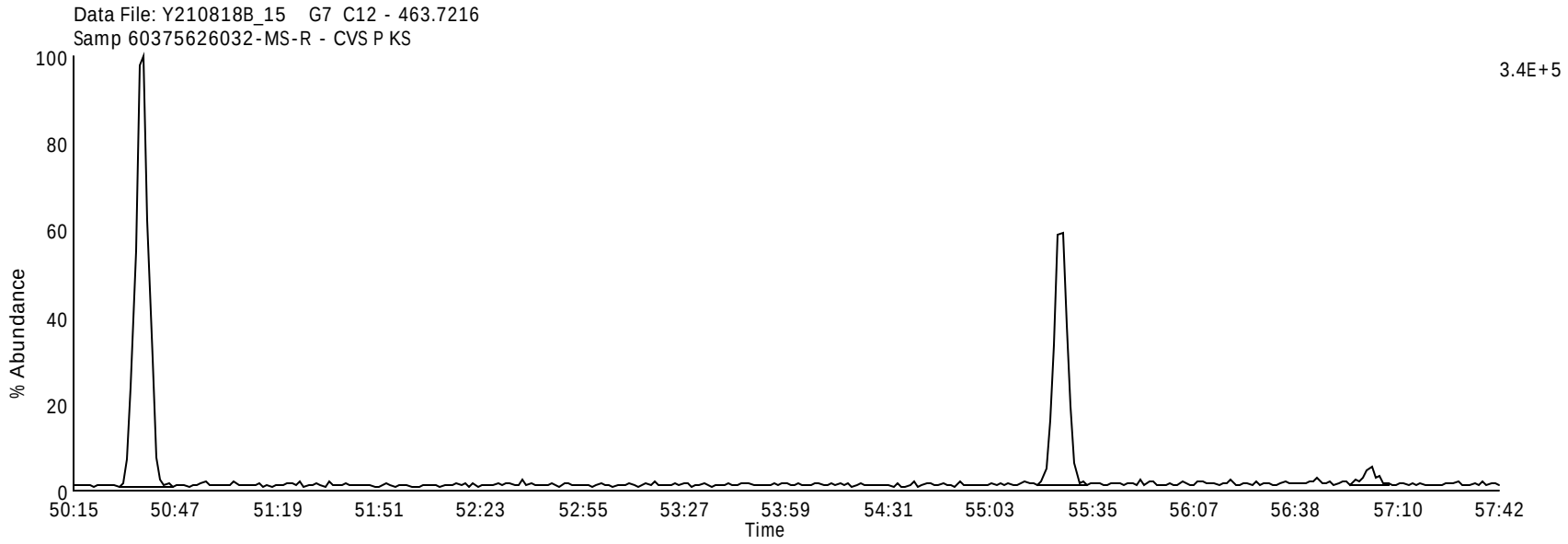




Nona Chlorinated Biphenyls

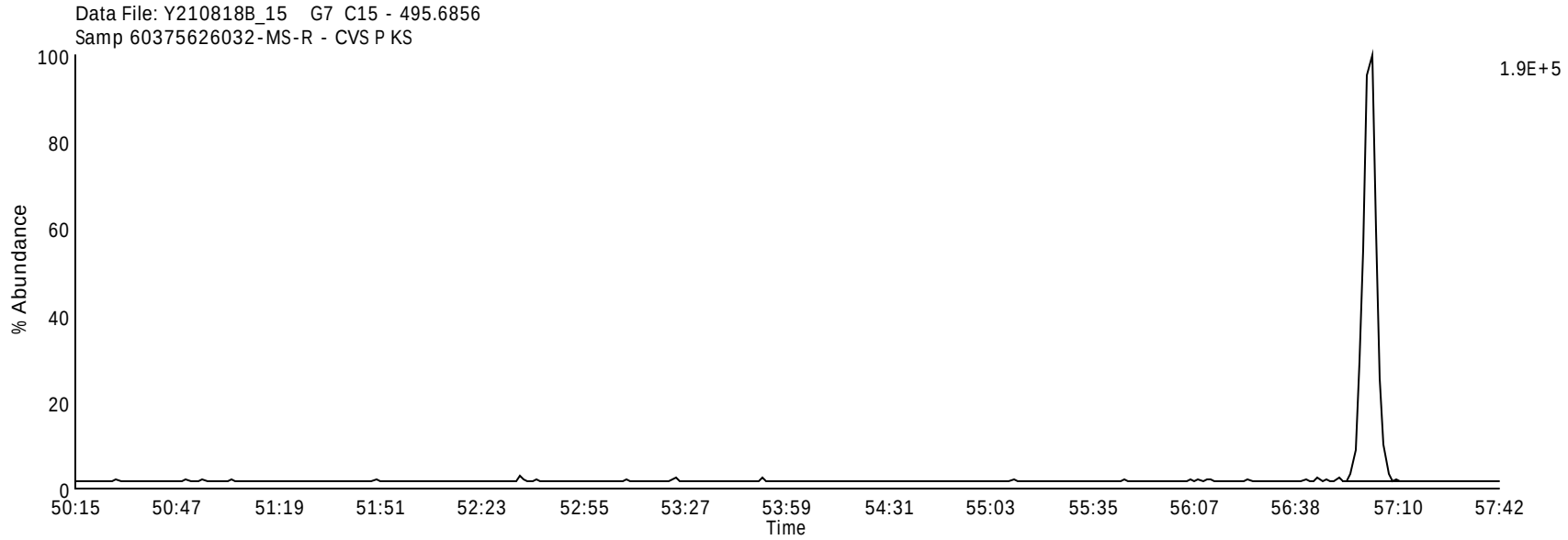
Data File Name: Y210818B_15	Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS	Client Sample ID: GB-38/3-5-MS

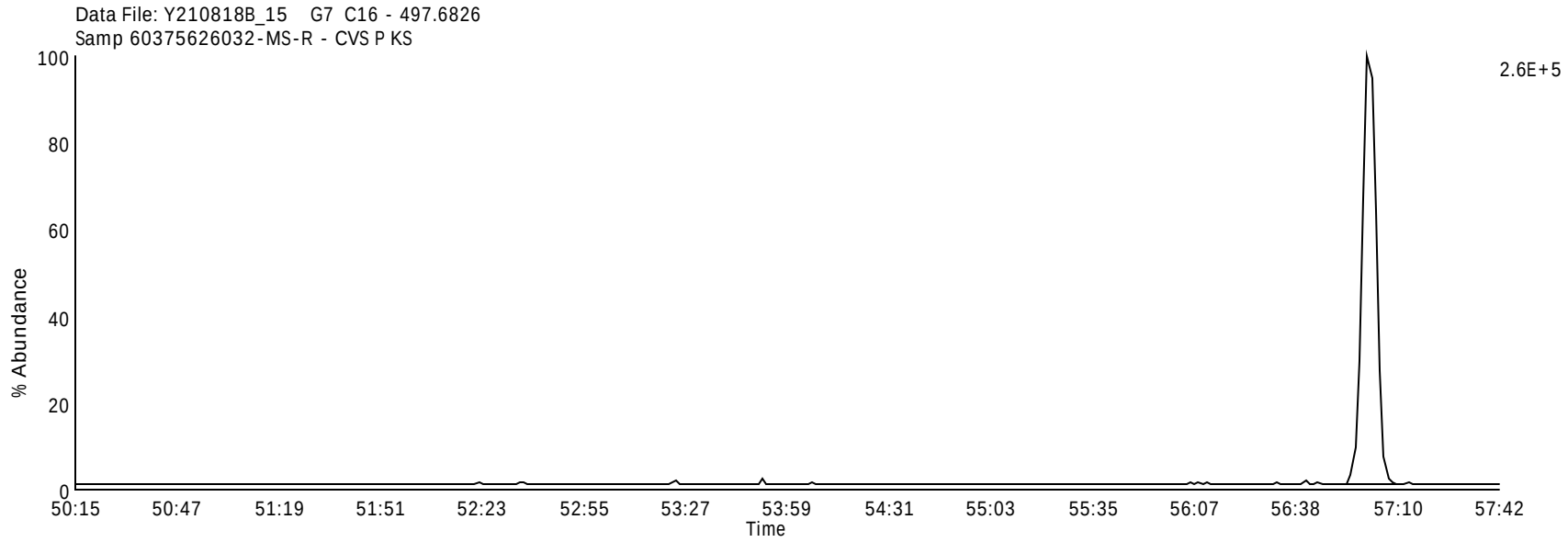




Deca Chlorinated Biphenyl

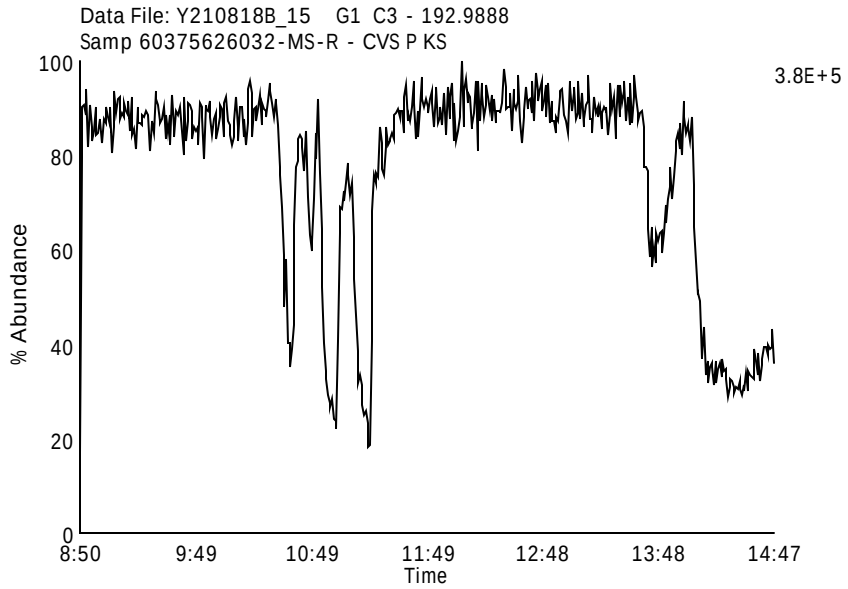
Data File Name: Y210818B_15	Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS	Client Sample ID: GB-38/3-5-MS

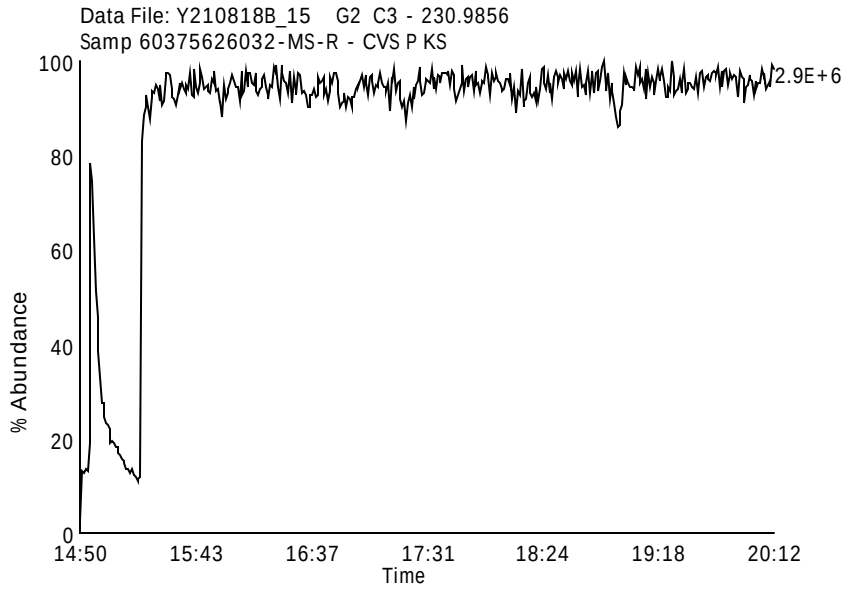


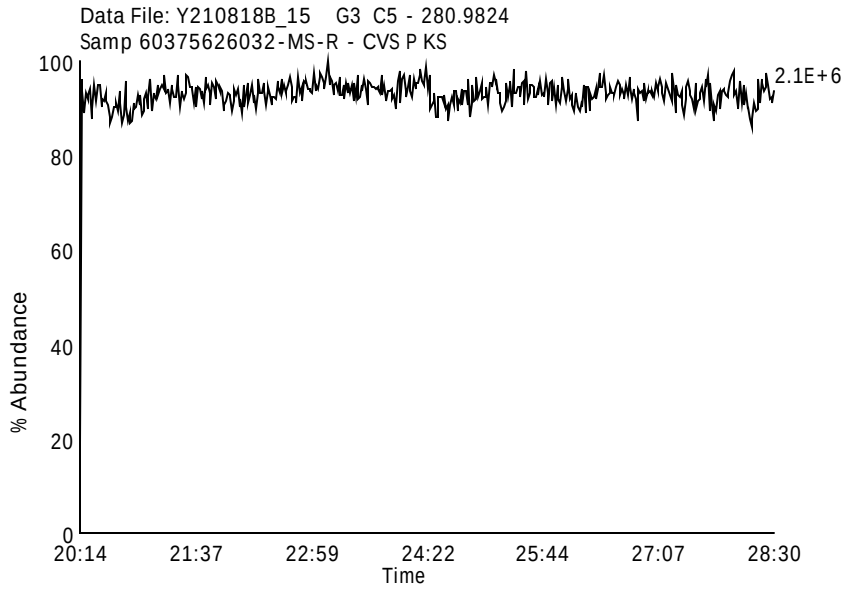


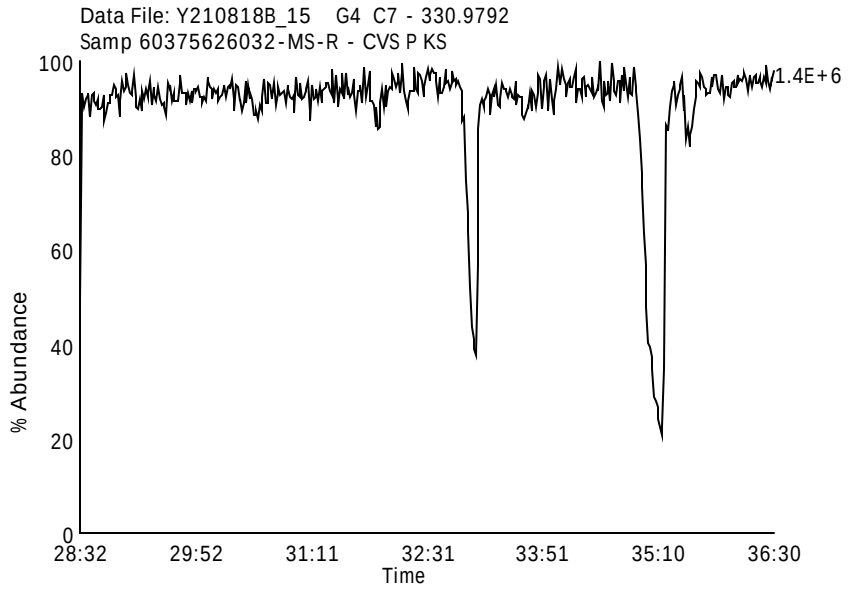
Group 1 - 4 Lock mass

Data File Name: Y210818B_15
Lab Sample ID: 60375626032-MS-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MS-R - CVS P KS
Client Sample ID: GB-38/3-5-MS





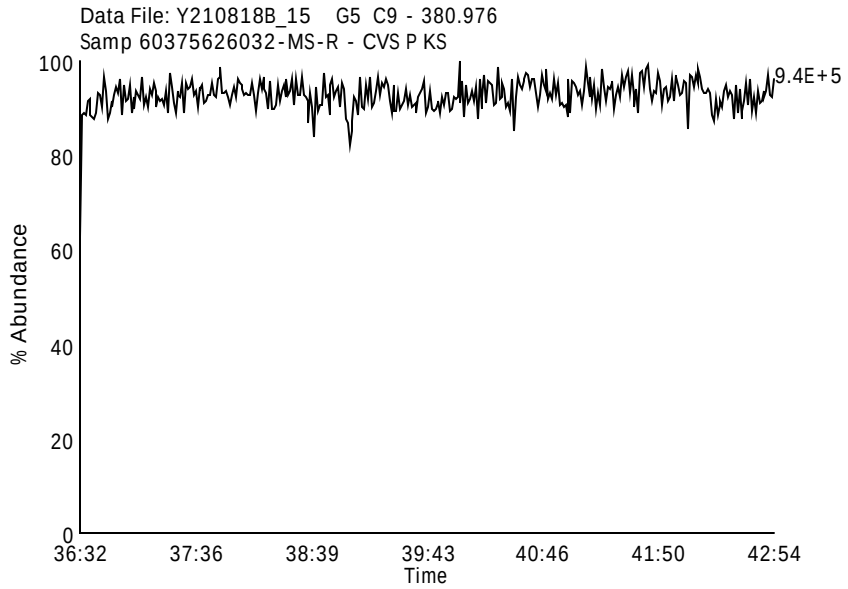


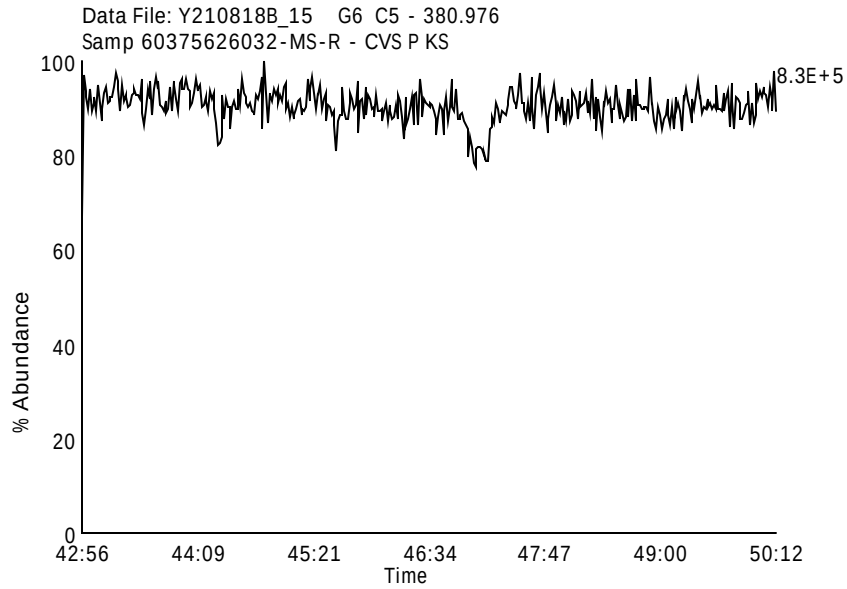


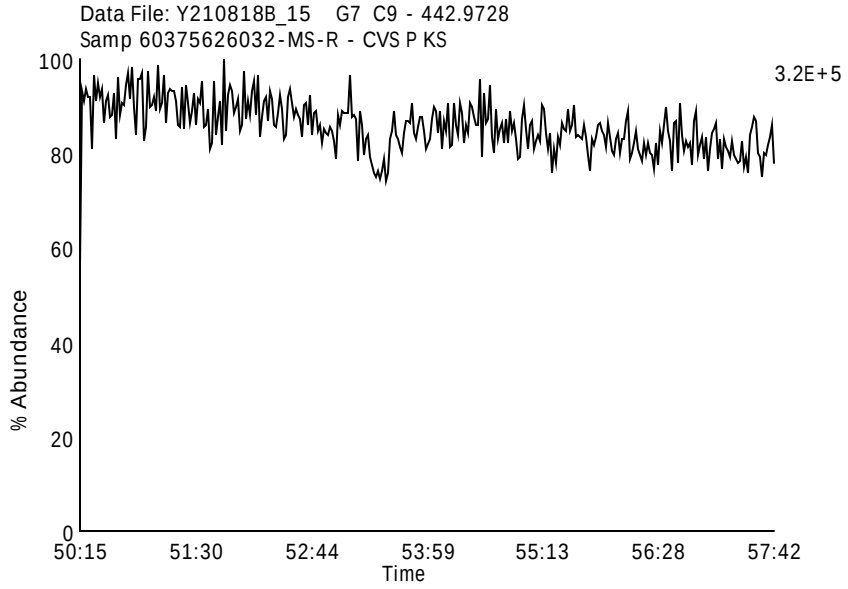
Group 5 - 7 Lock mass

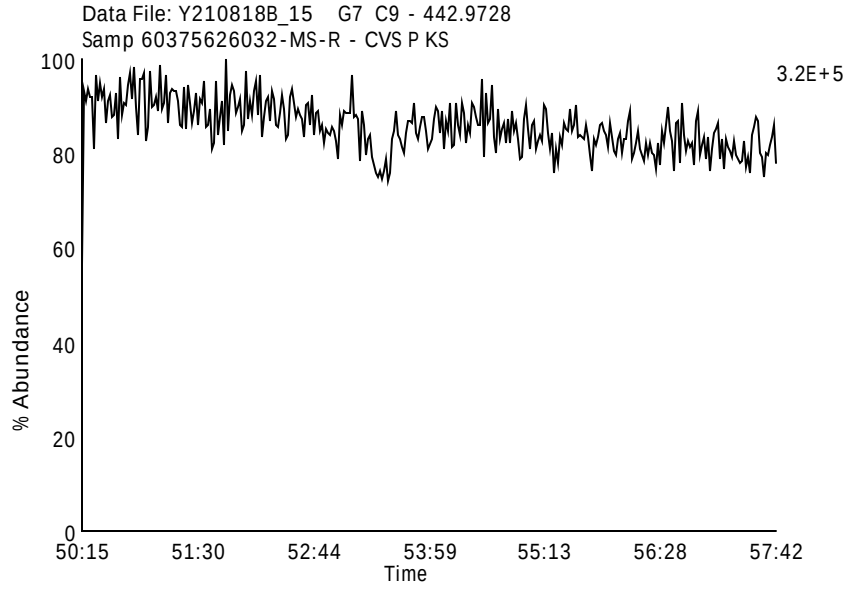
Data File Name: Y210818B_15
Date Acquired: 8/19/2021
Sample Description: Samp 60375626032-MS-R - CVS P KS

Lab Sample ID: 60375626032-MS-R
Instrument: 10MSHR12 (Y)
Client Sample ID: GB-38/3-5-MS



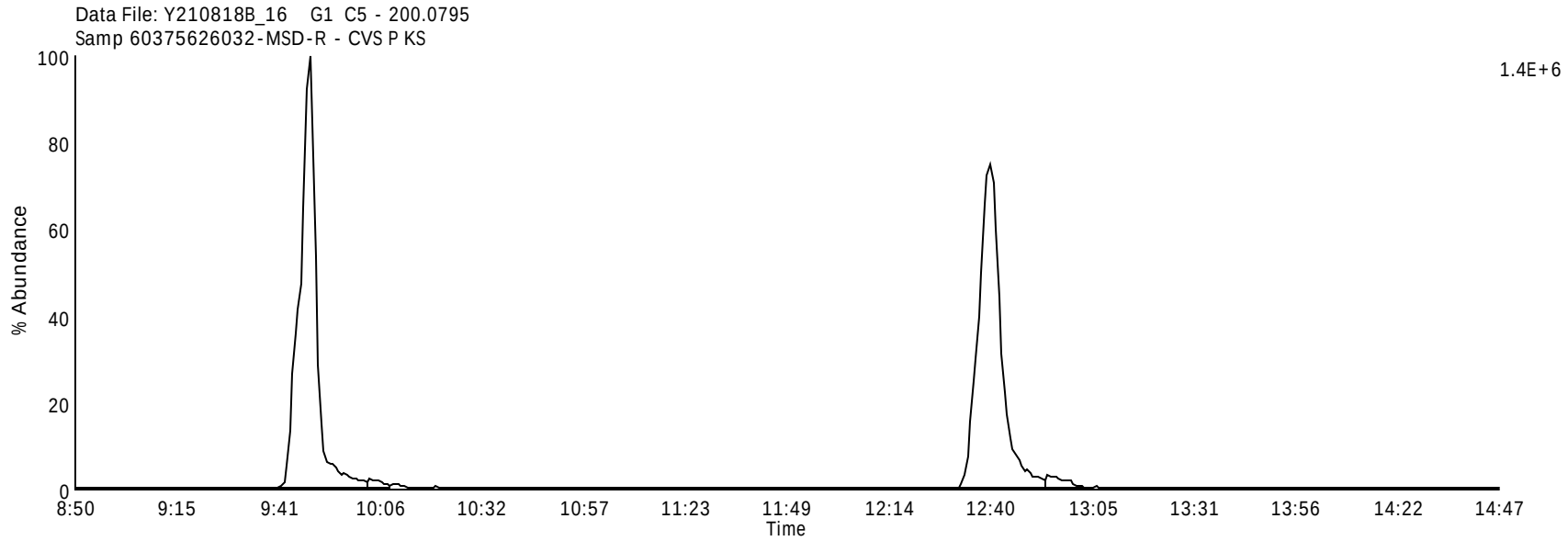


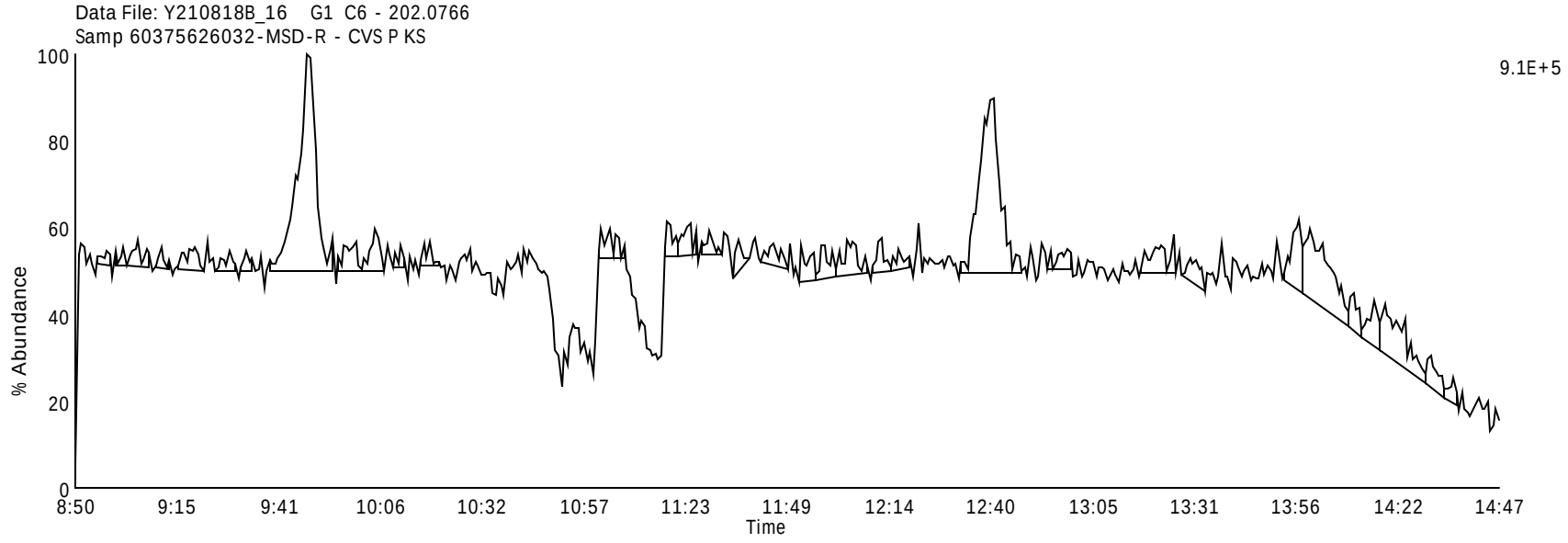




Labeled Mono Chlorinated Biphenyls

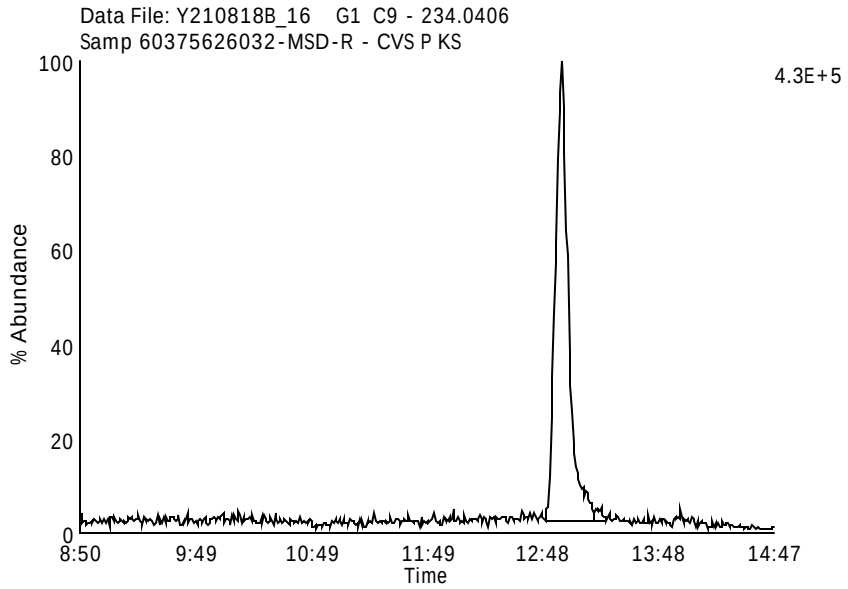
Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD

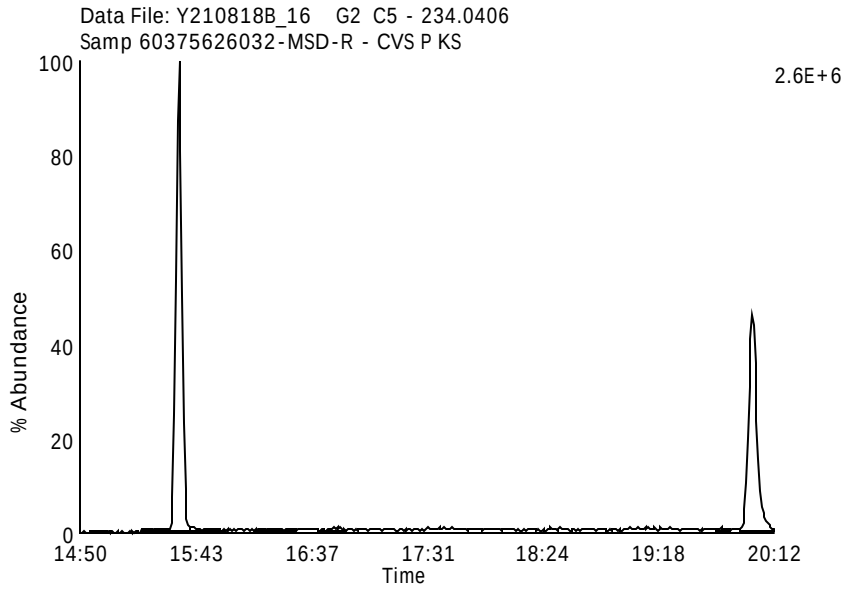


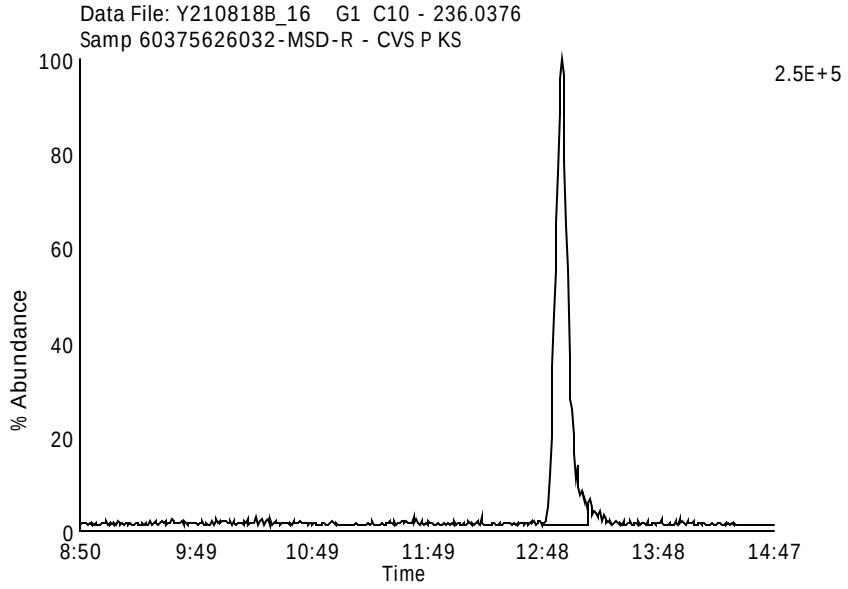


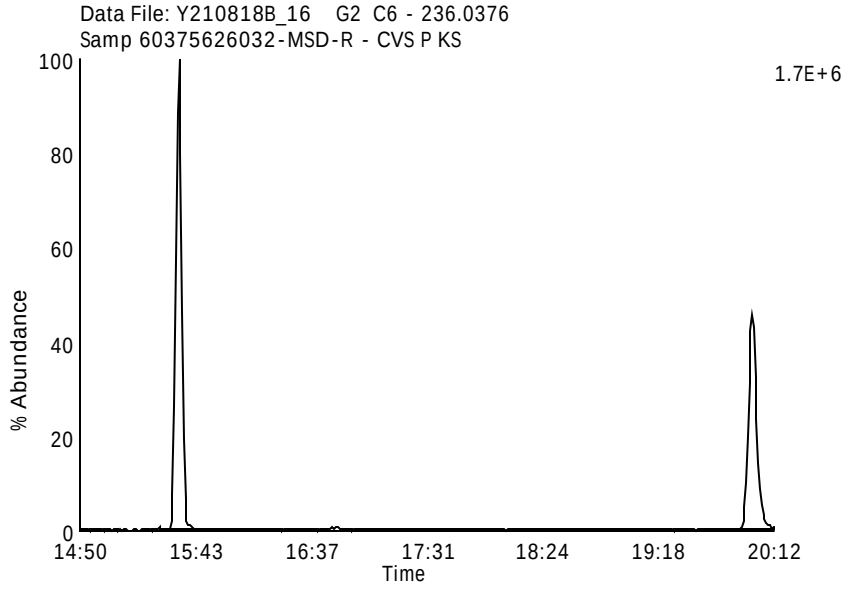
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD



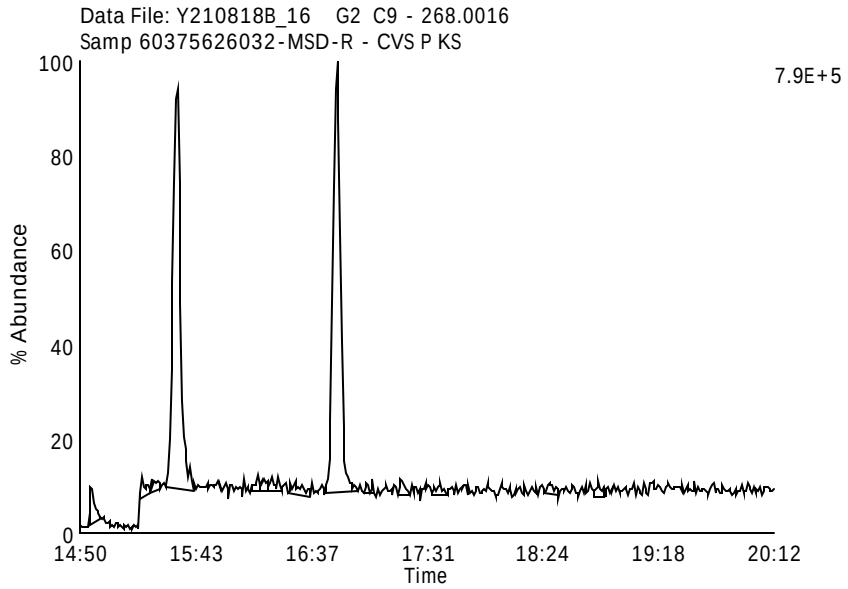


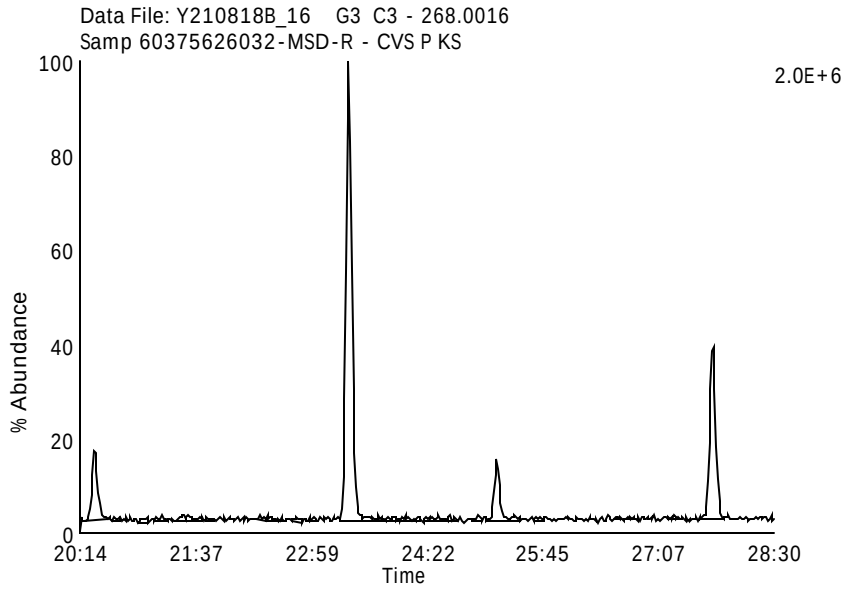


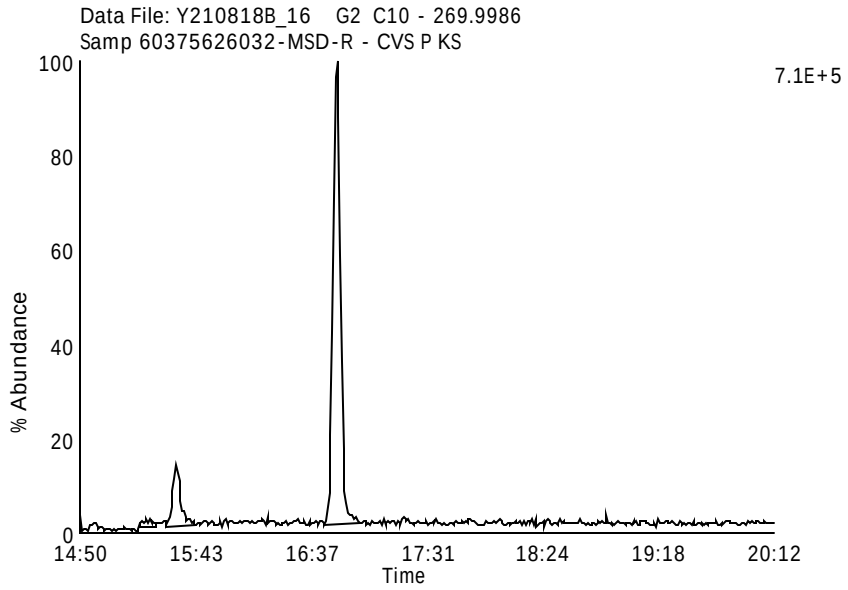


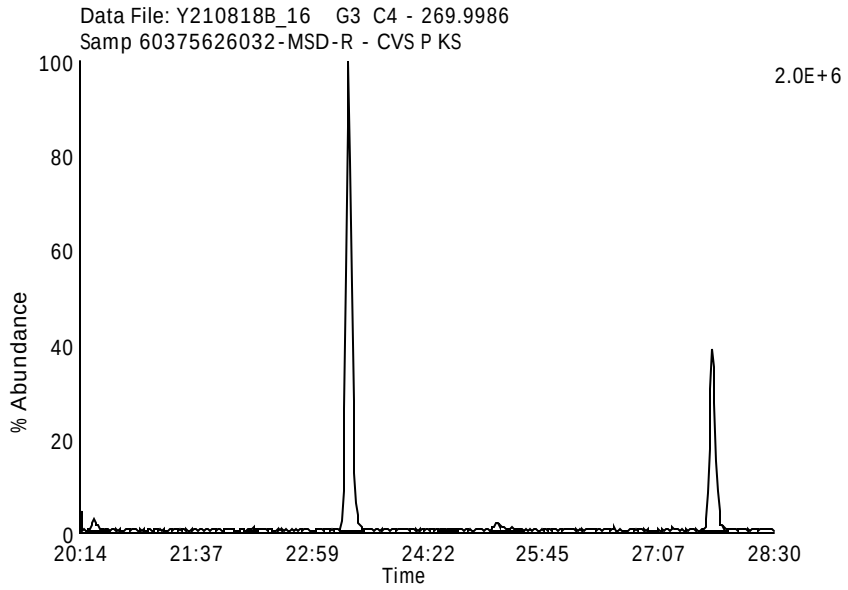
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD



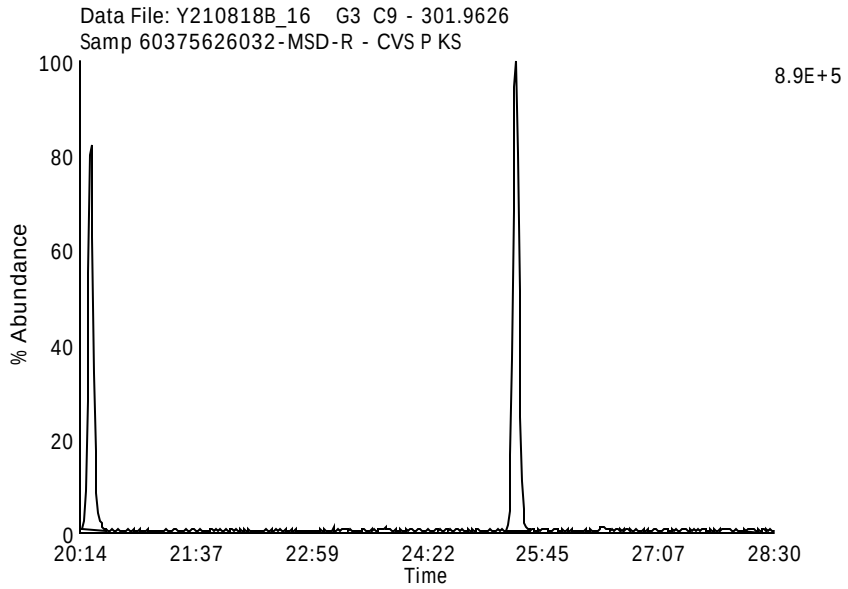


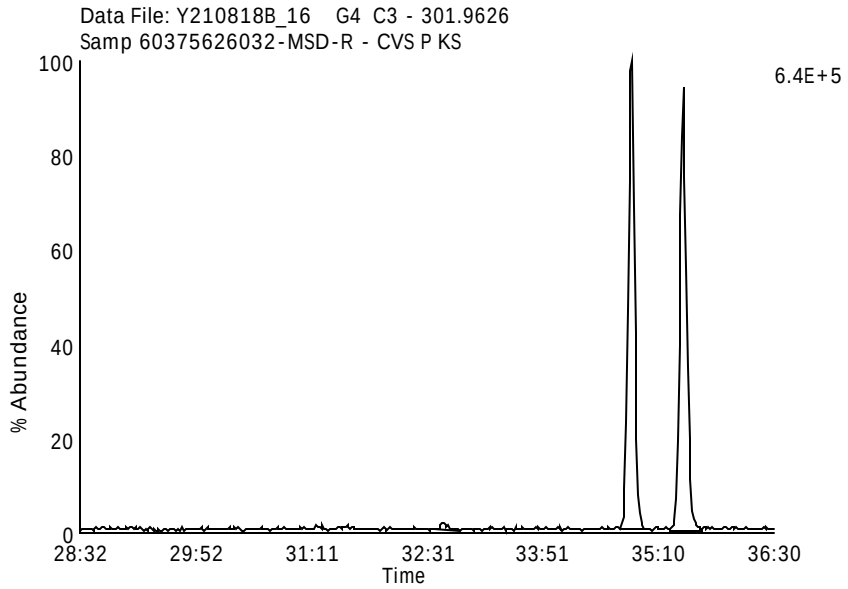


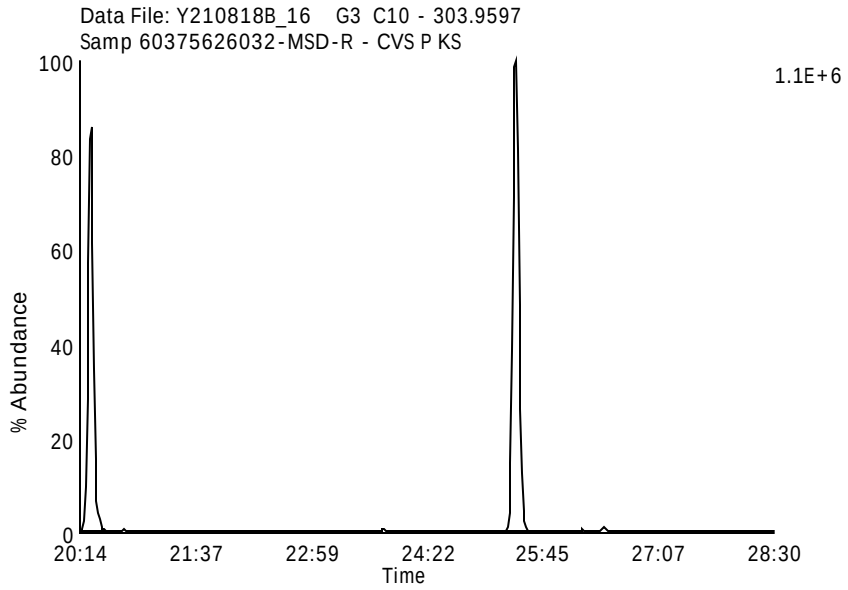


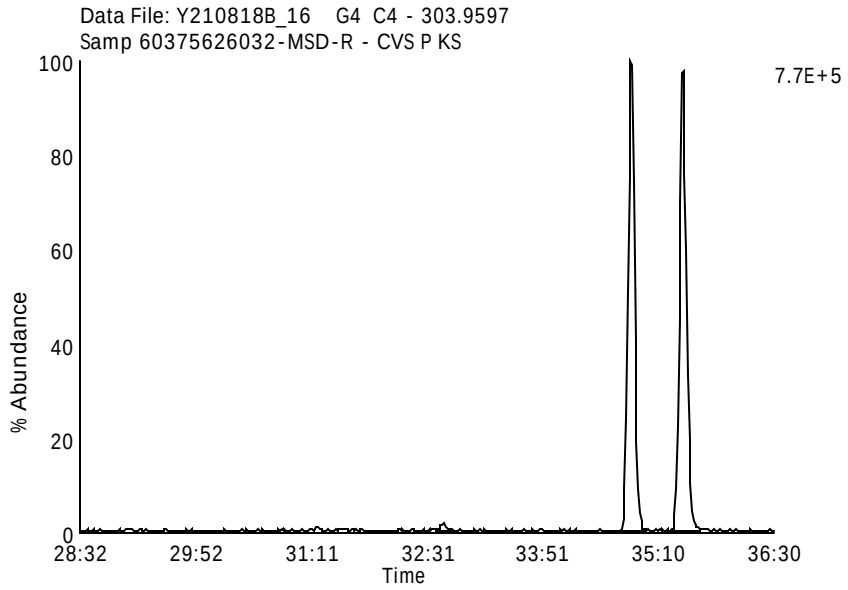
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD



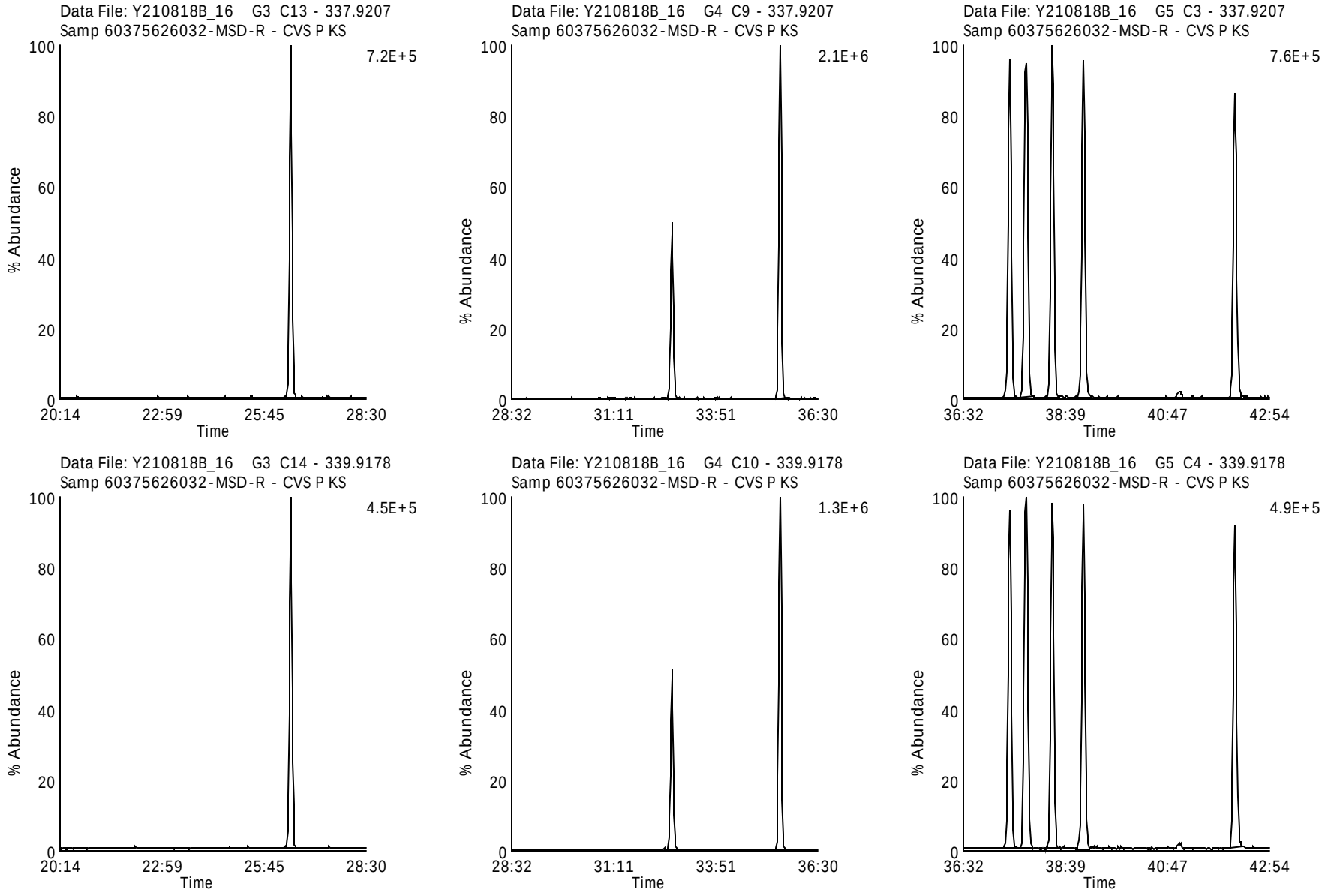






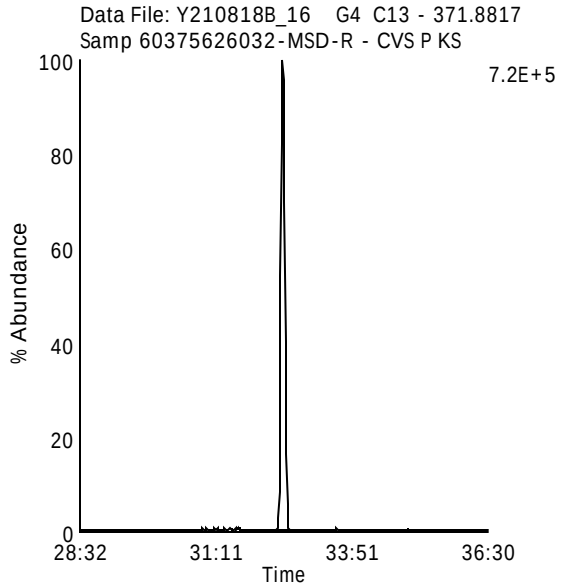
Labeled Penta Chlorinated Biphenyls

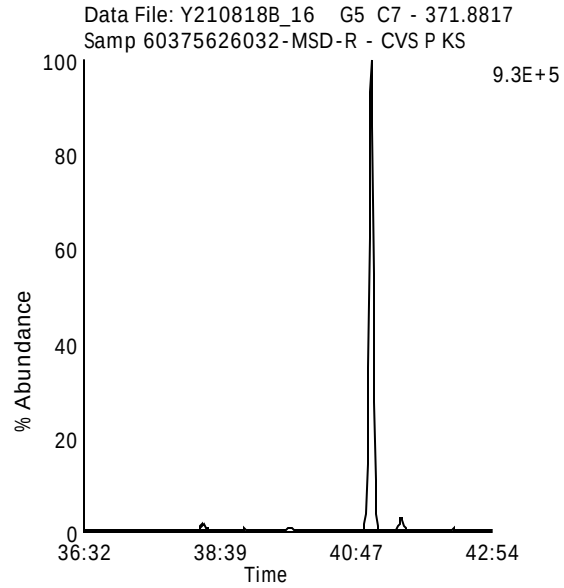
Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD

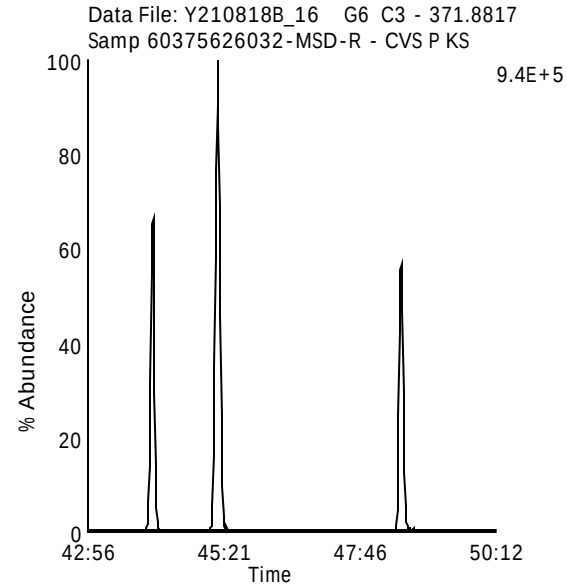


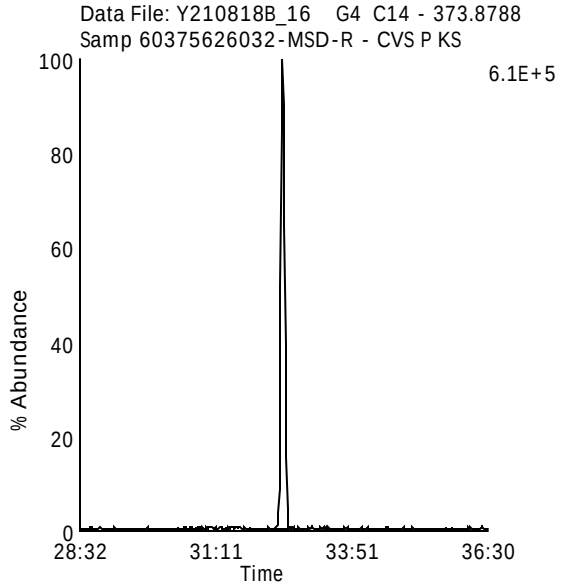
Labeled Hexa Chlorinated Biphenyls

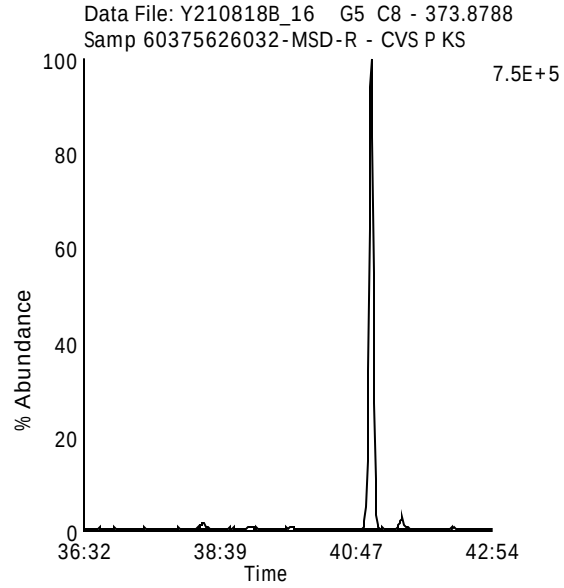
Data File Name: Y210818B_16 | Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS | Client Sample ID: GB-38/3-5-MSD

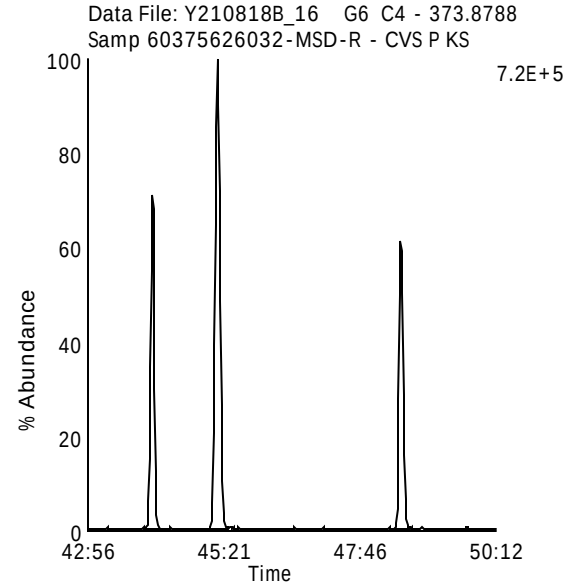






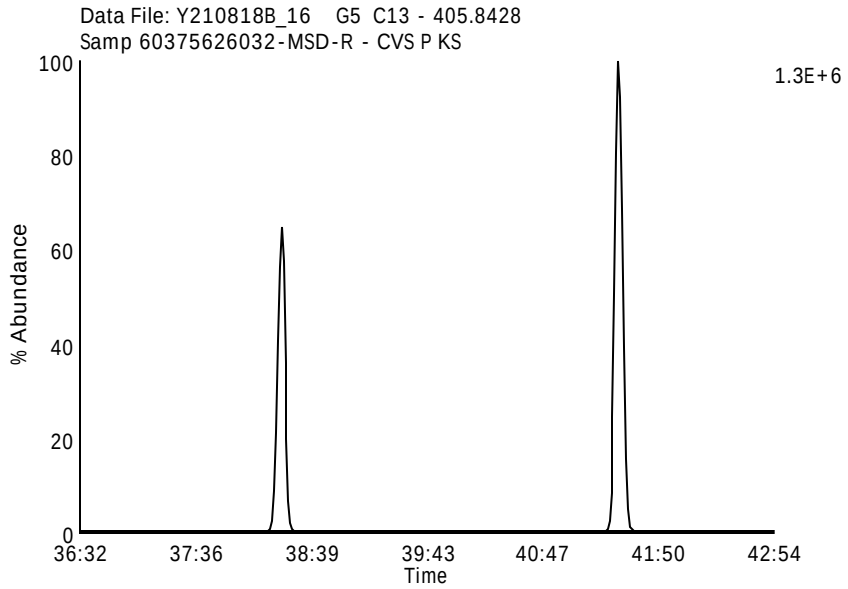


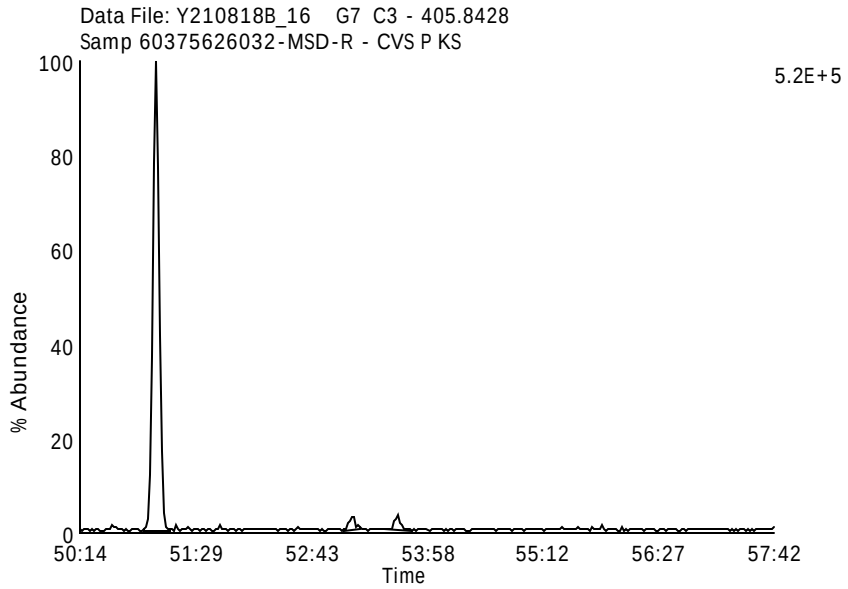


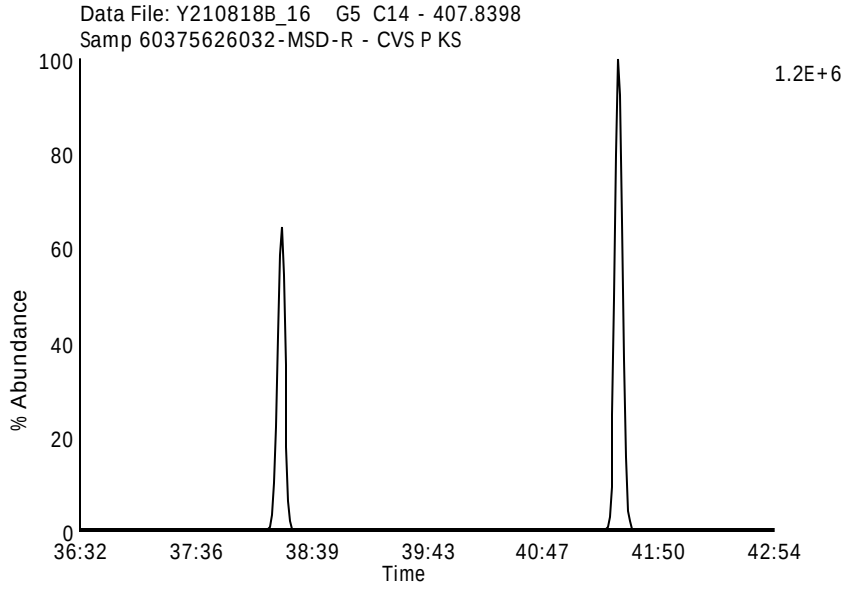


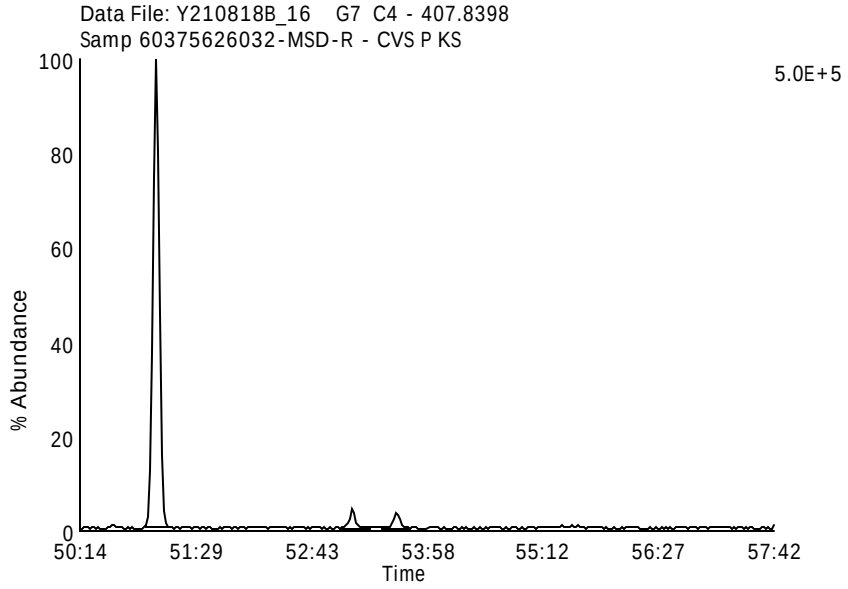
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD



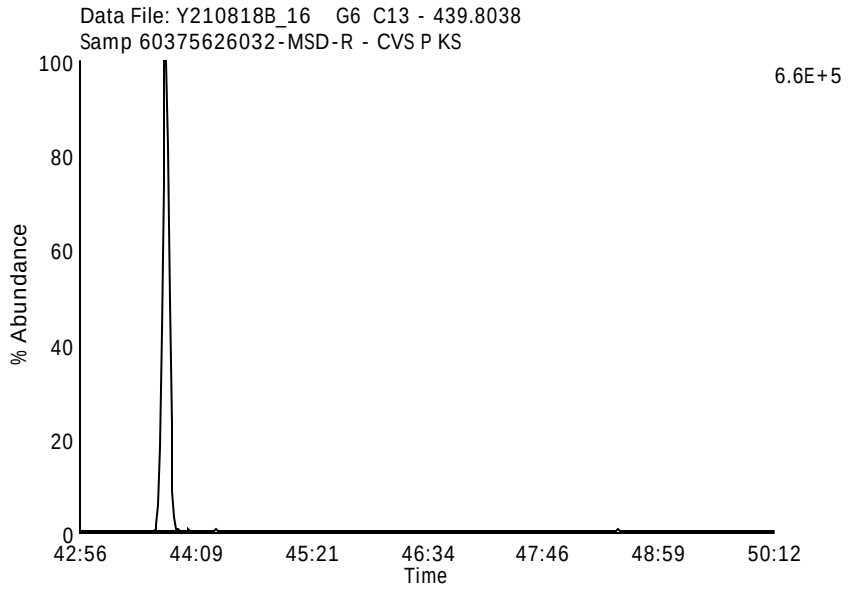


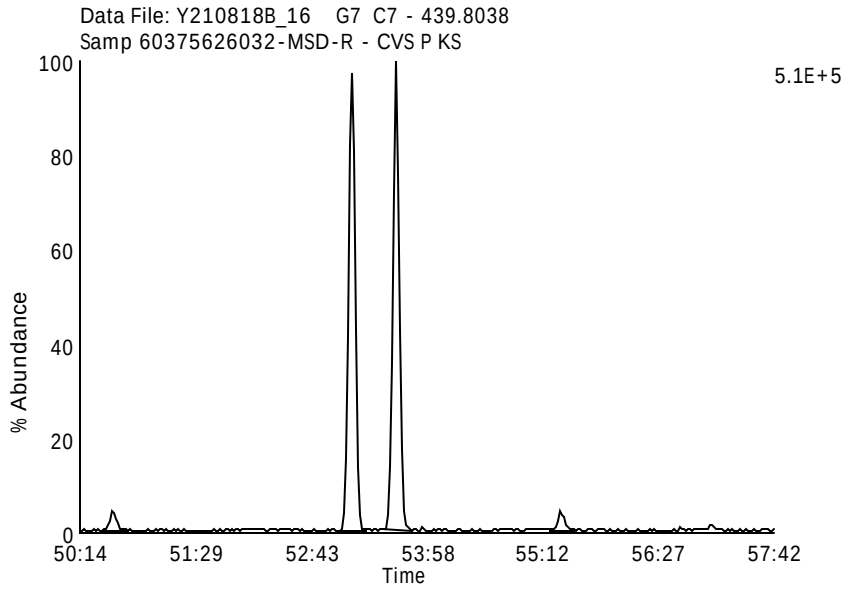


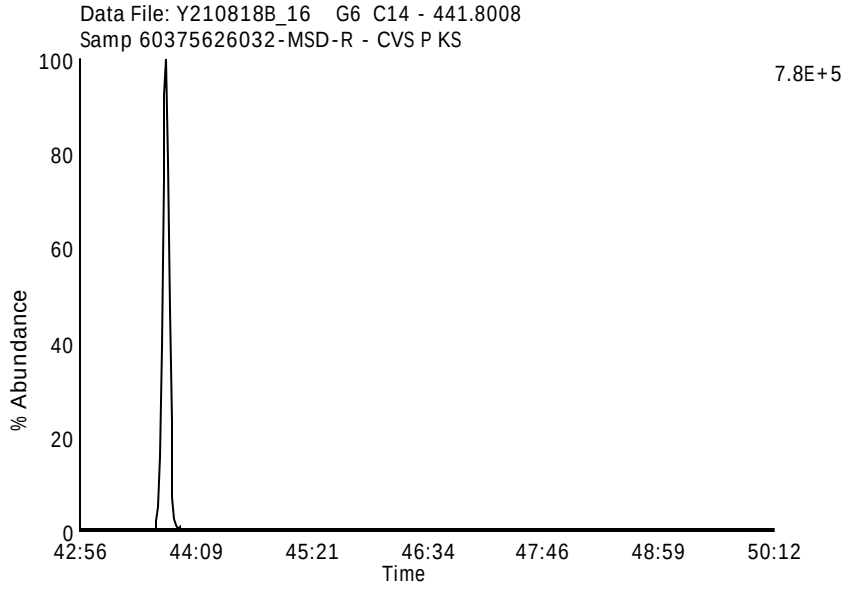


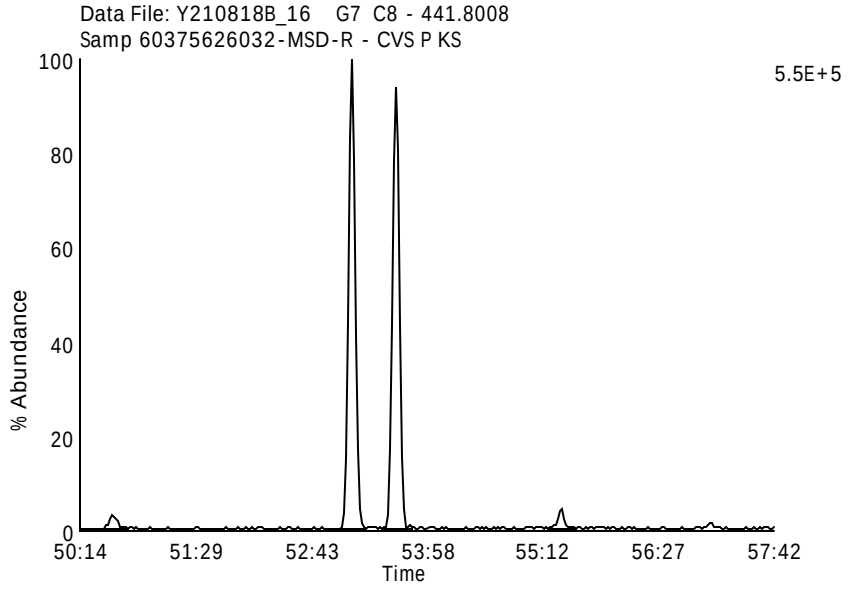
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD



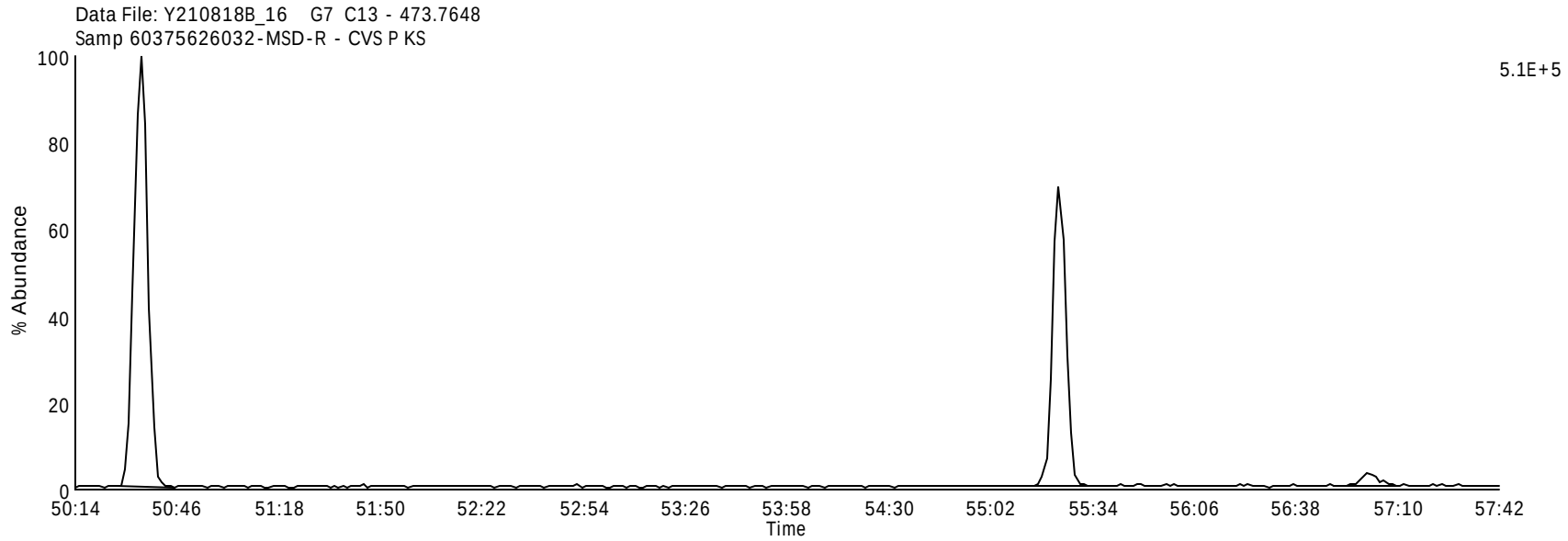


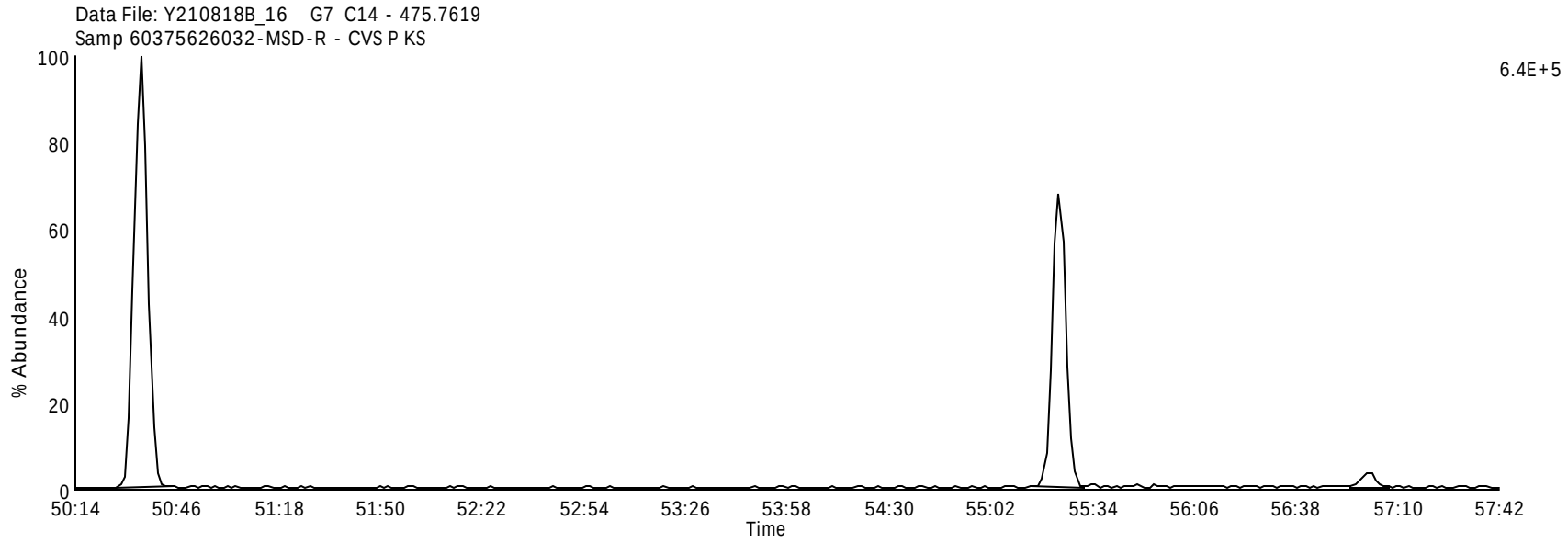




Labeled Nona Chlorinated Biphenyls

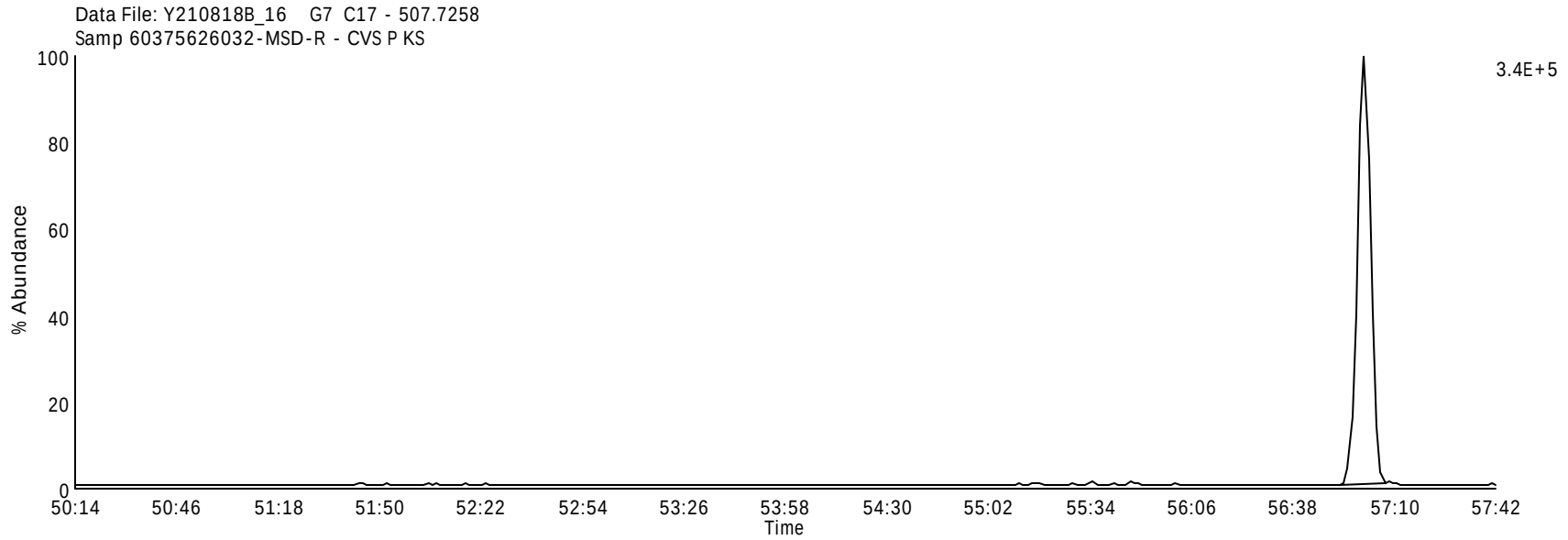
Data File Name: Y210818B_16	Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS	Client Sample ID: GB-38/3-5-MSD

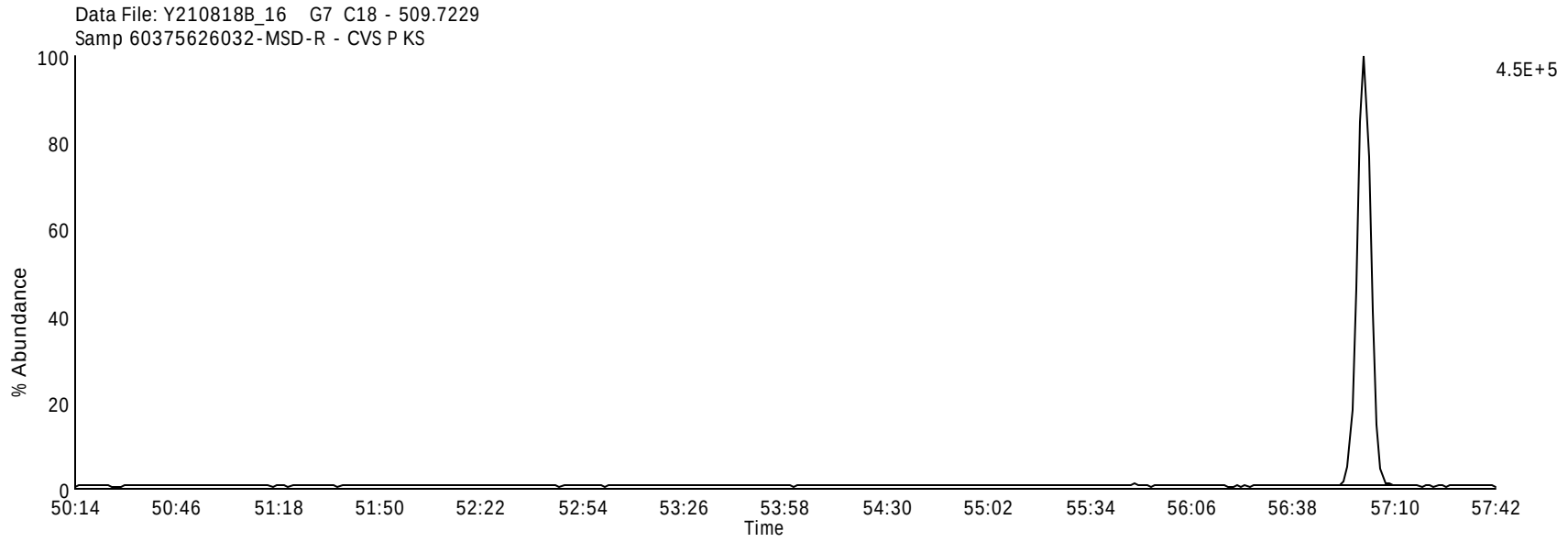




Labeled Deca Chlorinated Biphenyl

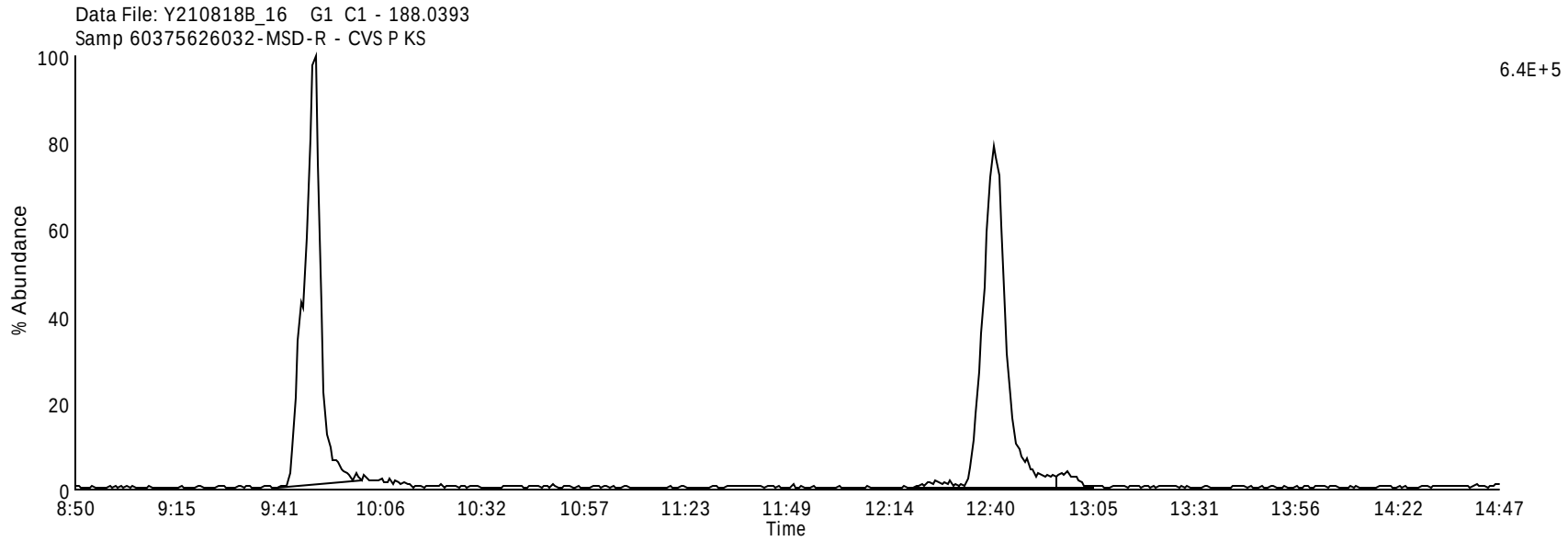
Data File Name: Y210818B_16	Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS	Client Sample ID: GB-38/3-5-MSD

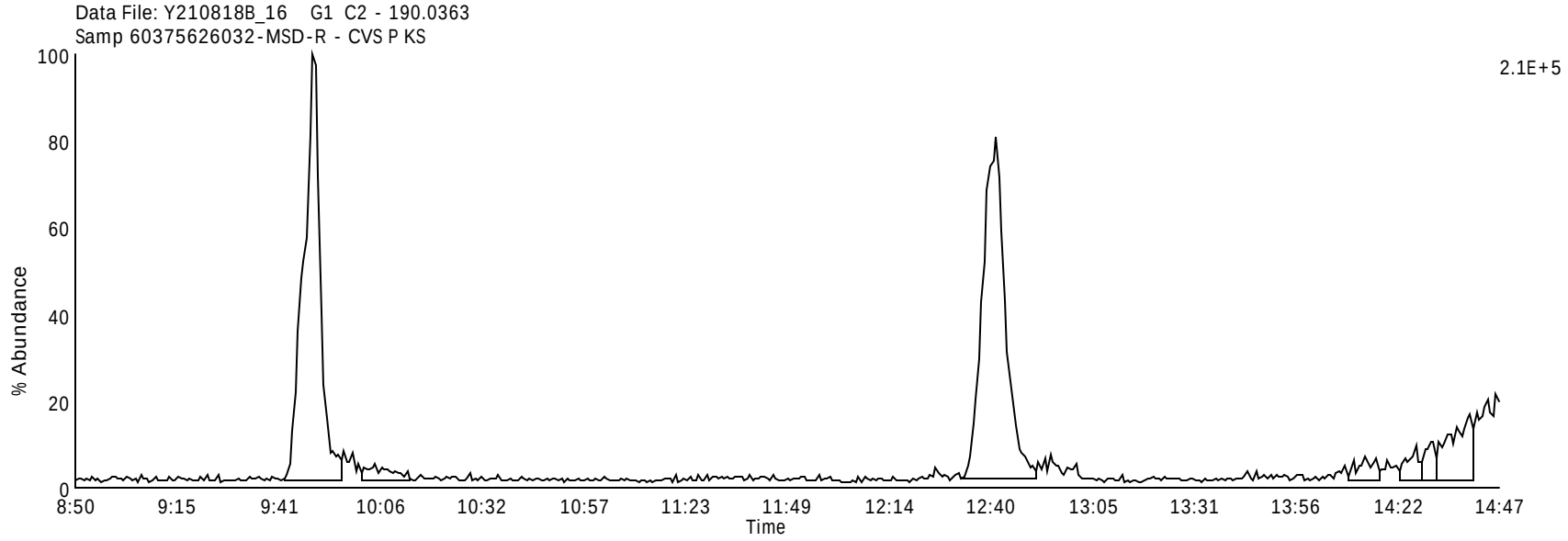




Mono Chlorinated Biphenyls

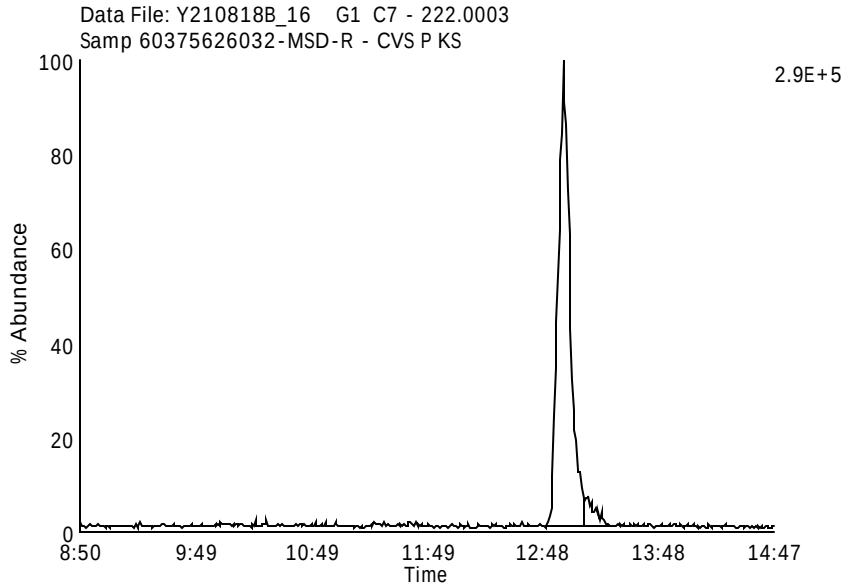
Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD

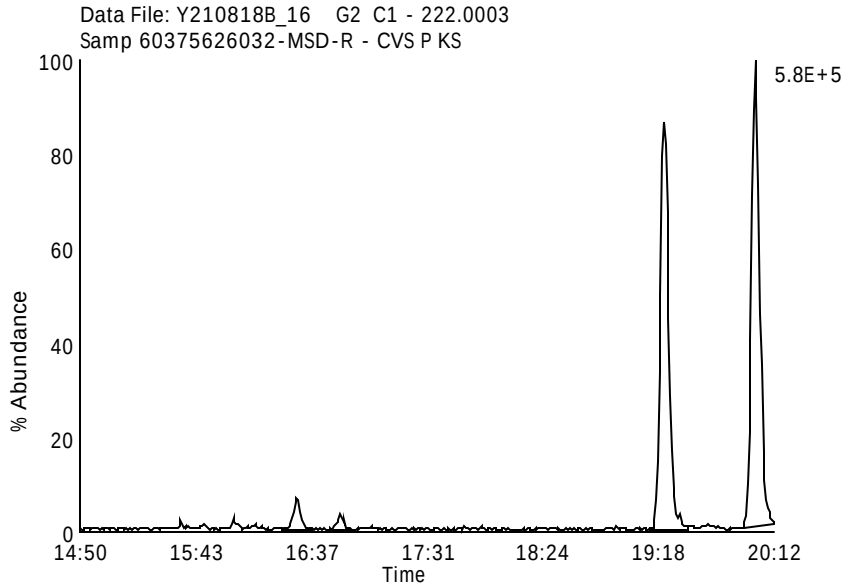


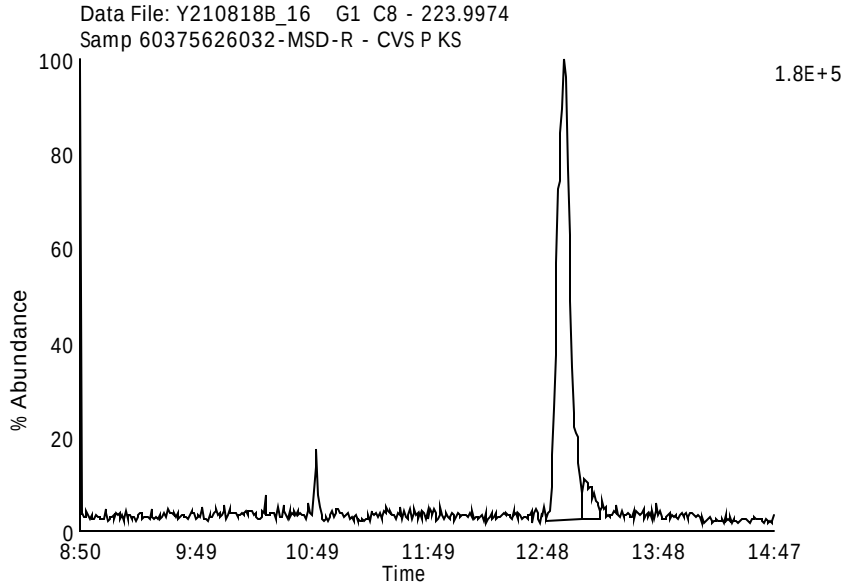


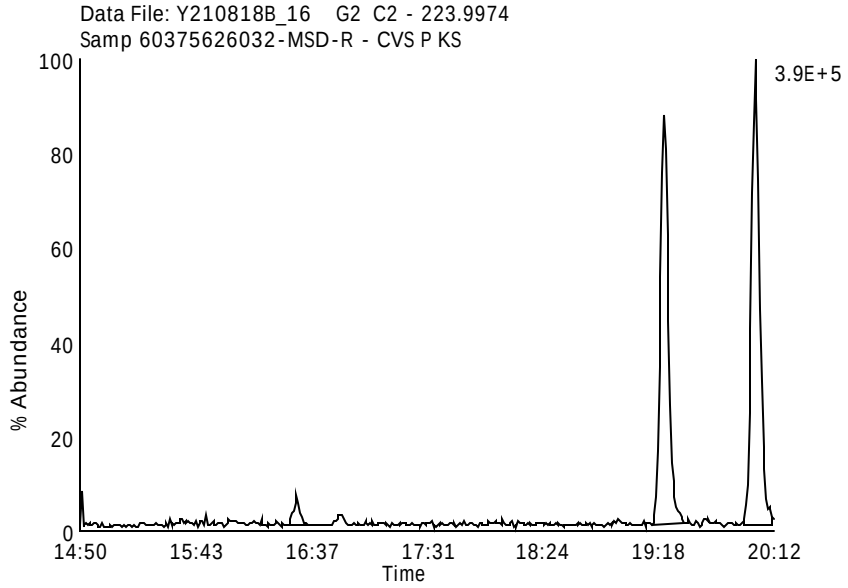
Di Chlorinated Biphenyls

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD



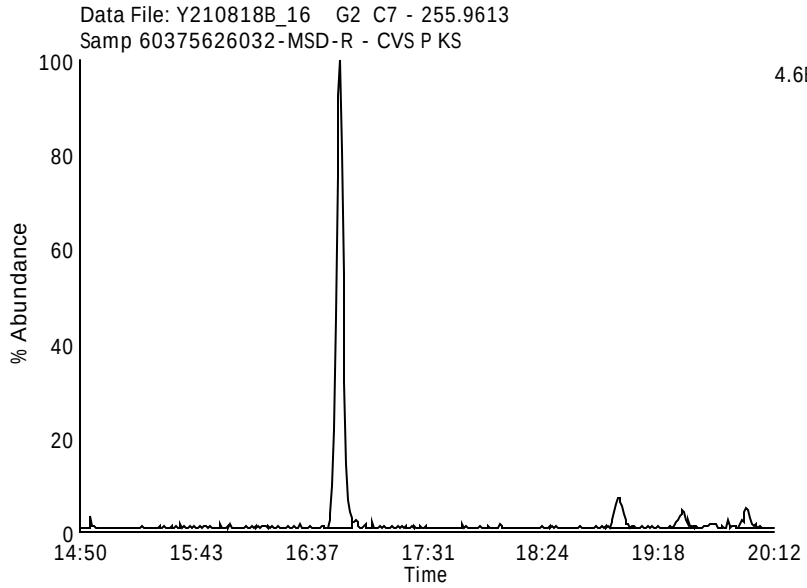


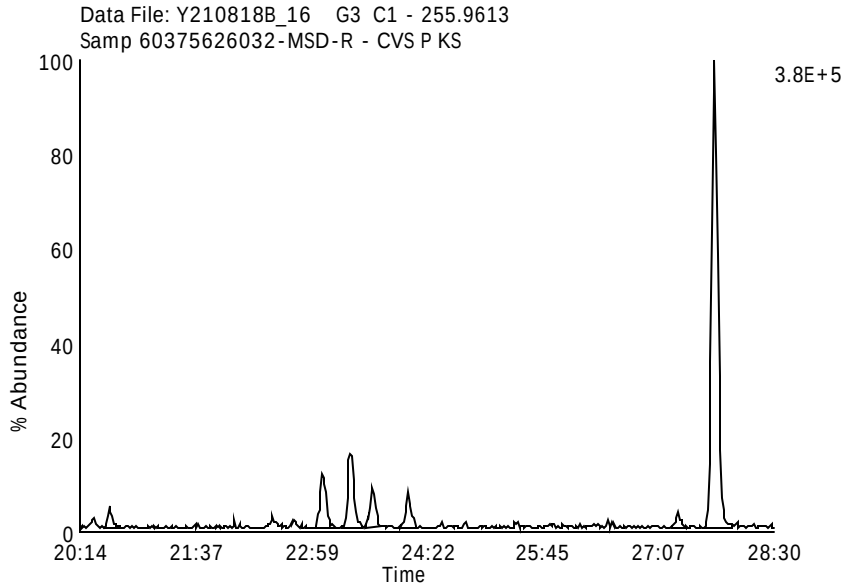


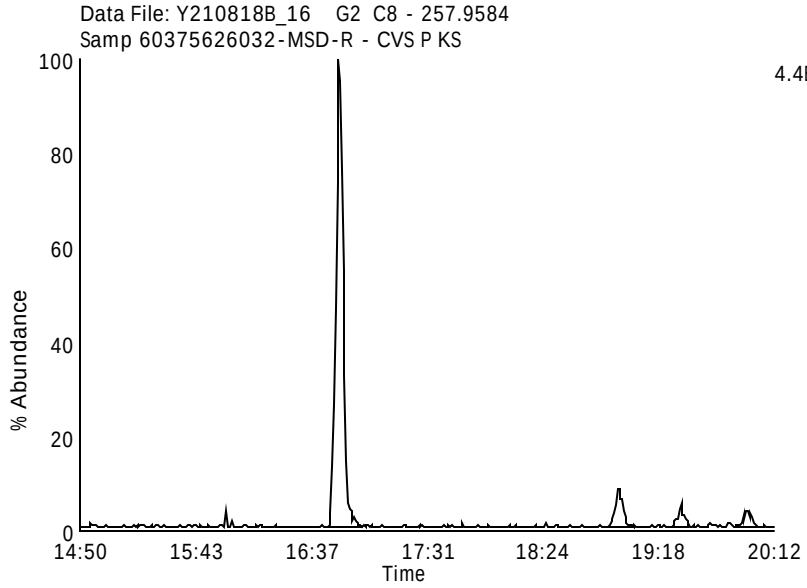


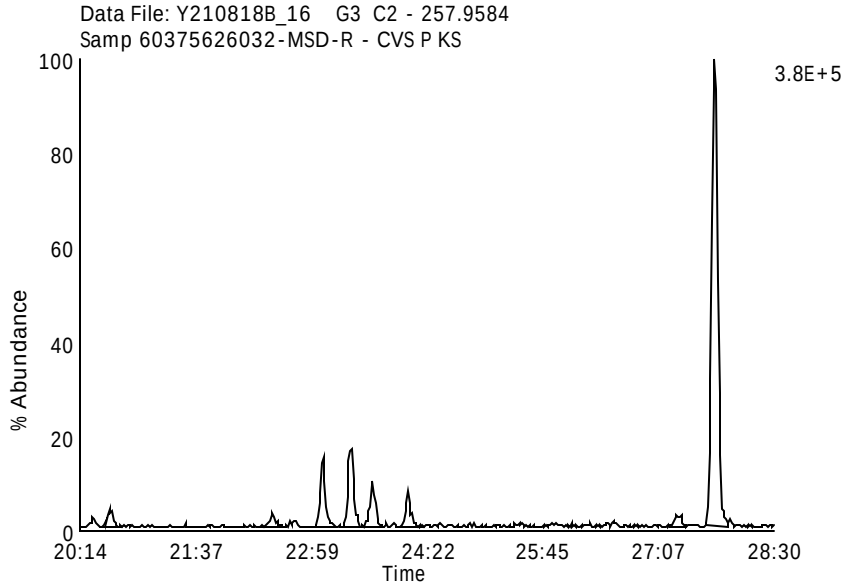
Tri Chlorinated Biphenyls

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD





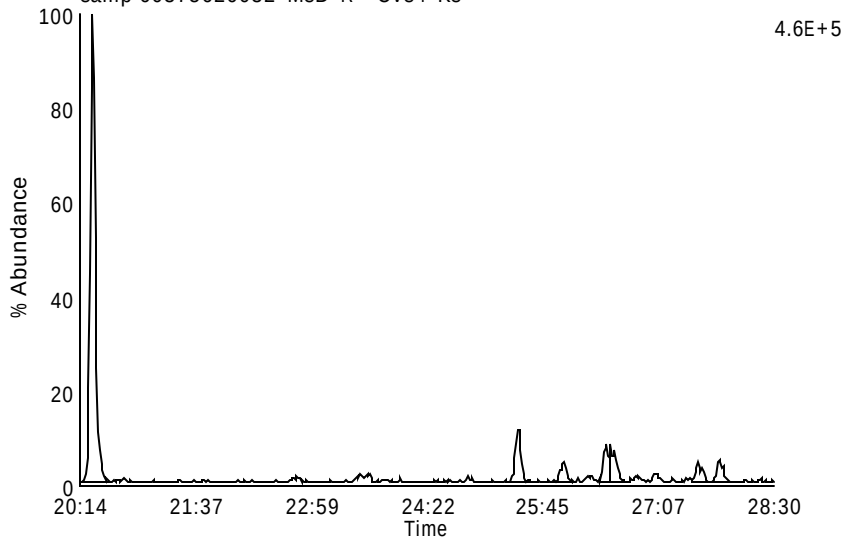




Tetra Chlorinated Biphenyls

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD

Data File: Y210818B_16 G3 C7 - 289.9224
Samp 60375626032-MSD-R - CVS P KS



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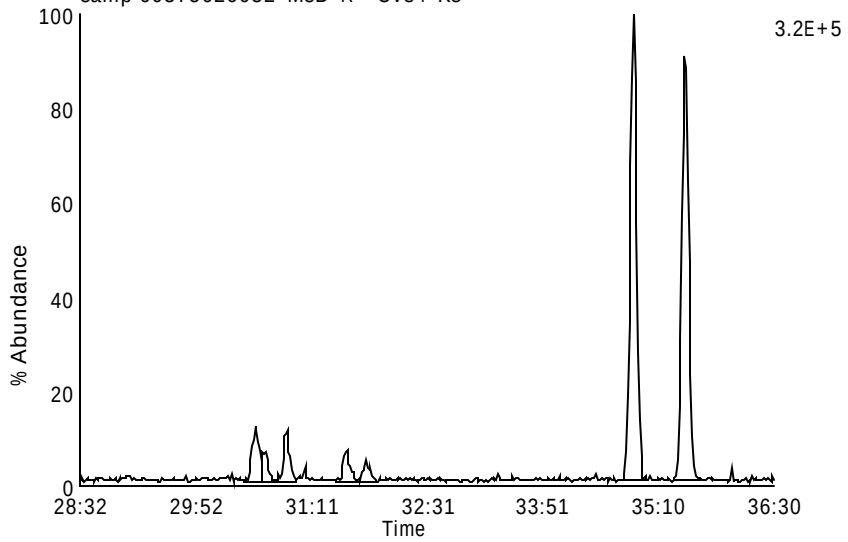
Samp 60375626032-MSD-R - CVS P KS



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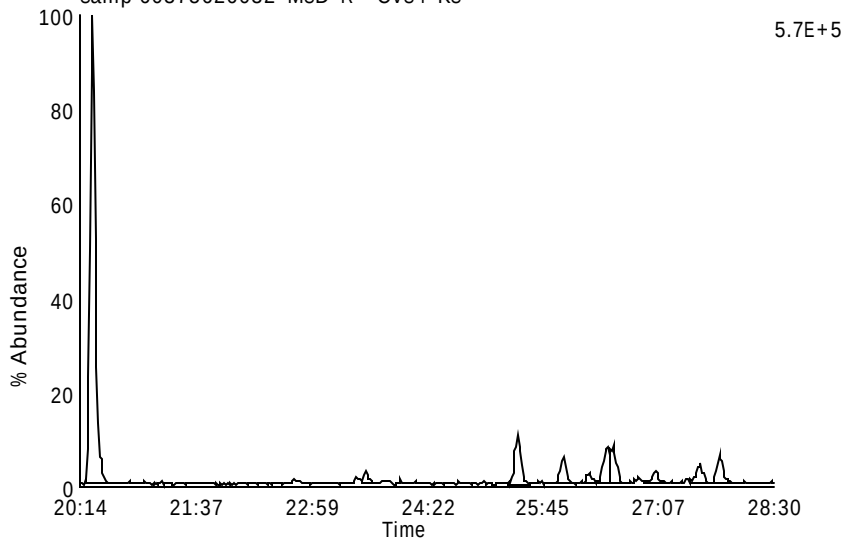
Samp 60375626032-MSD-R - CVS P KS



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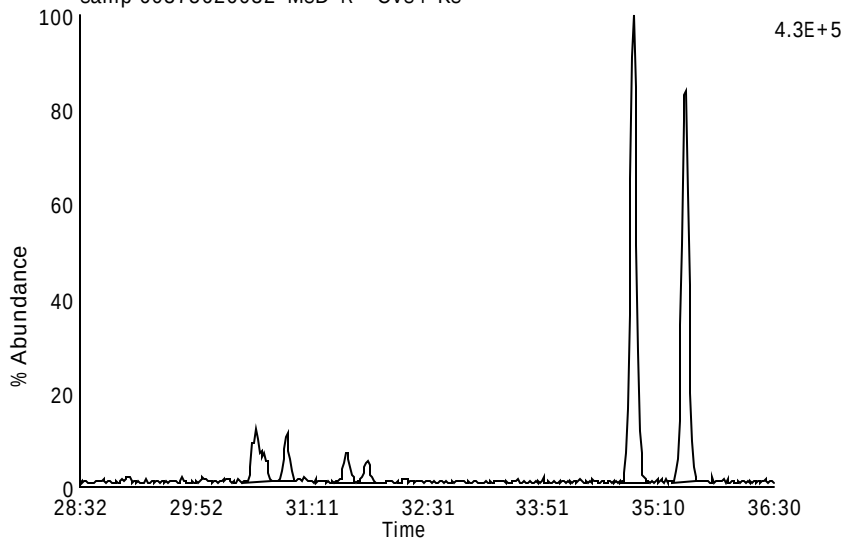
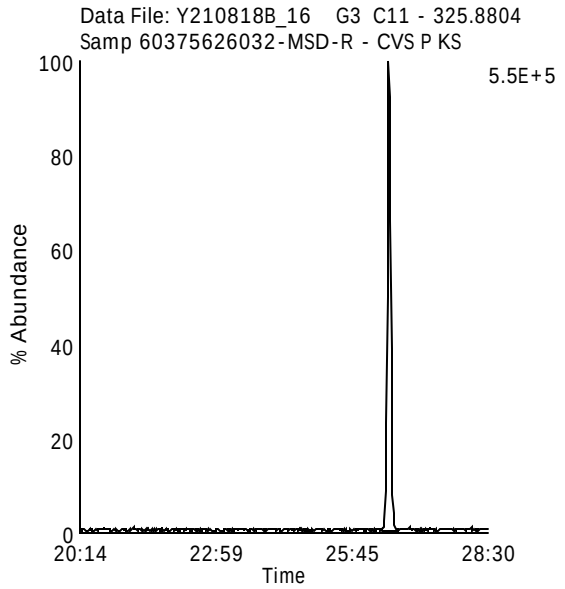
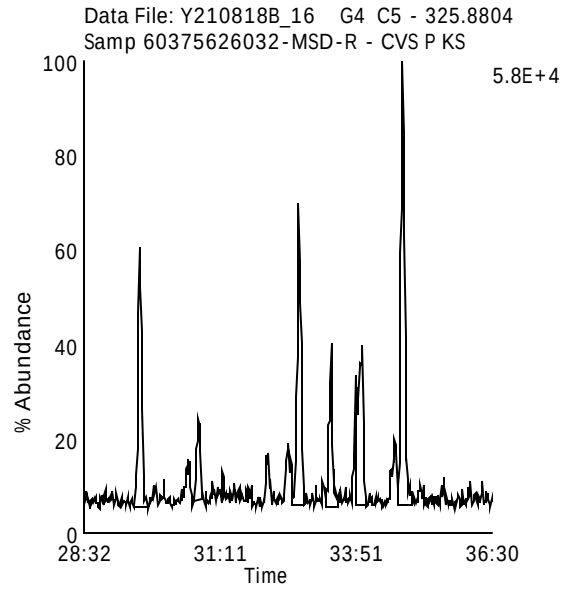
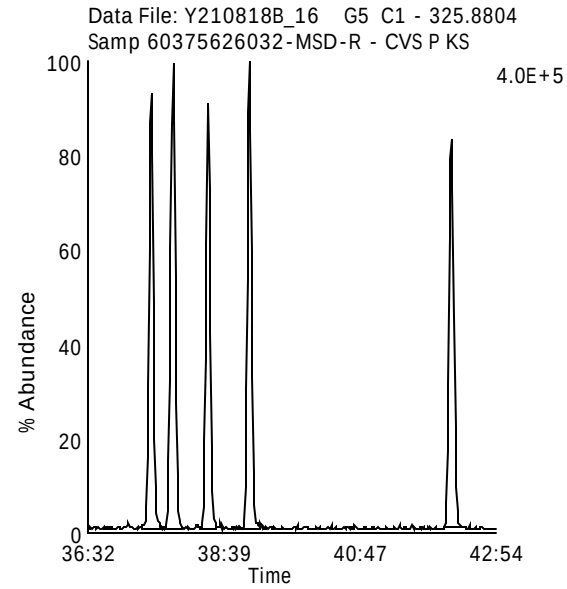


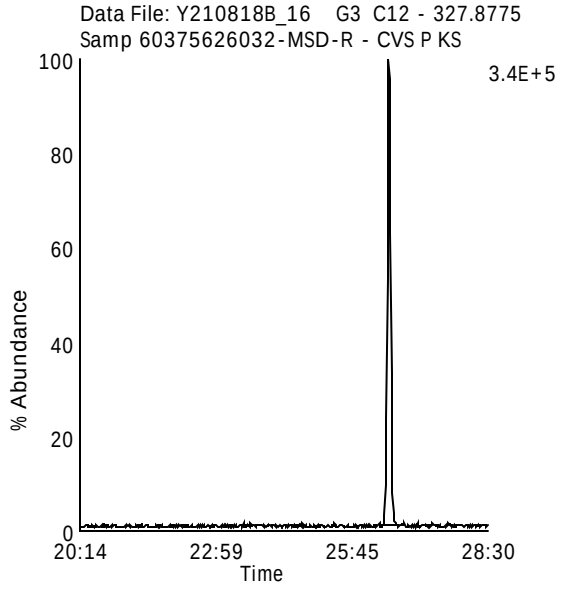
Penta Chlorinated Biphenyls

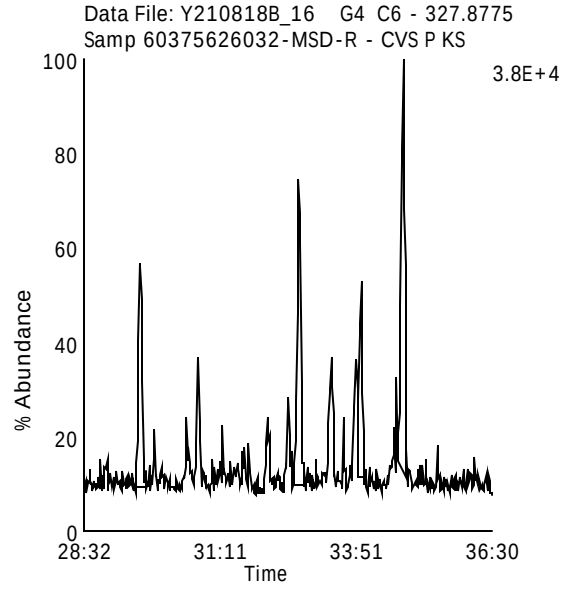
Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD

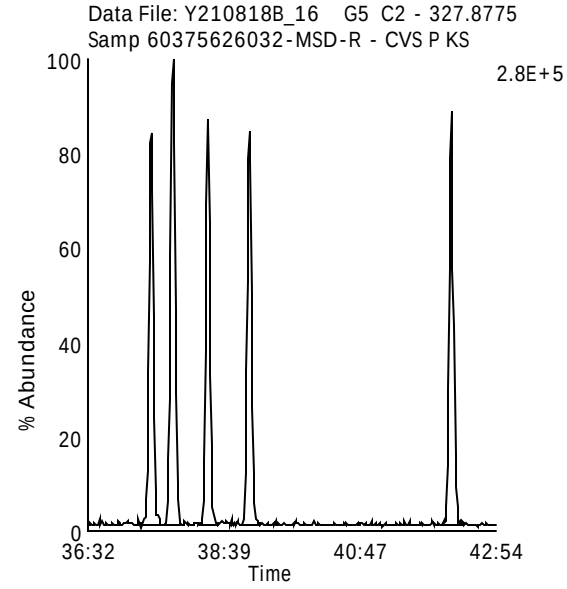






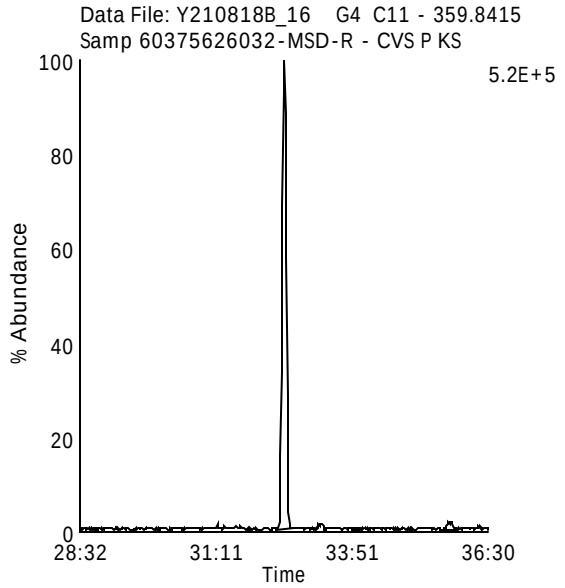


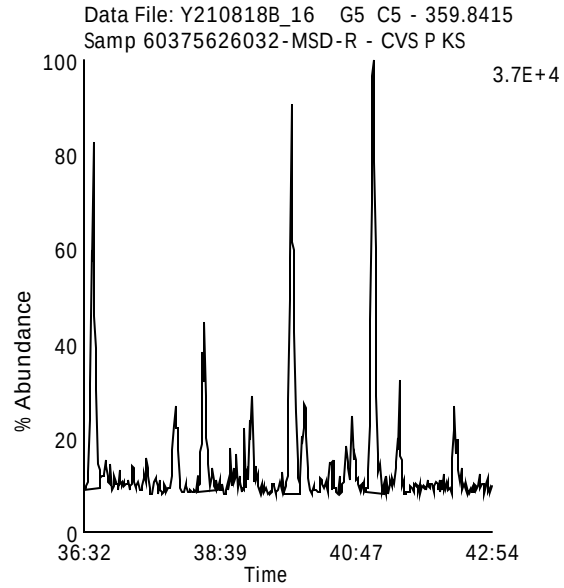


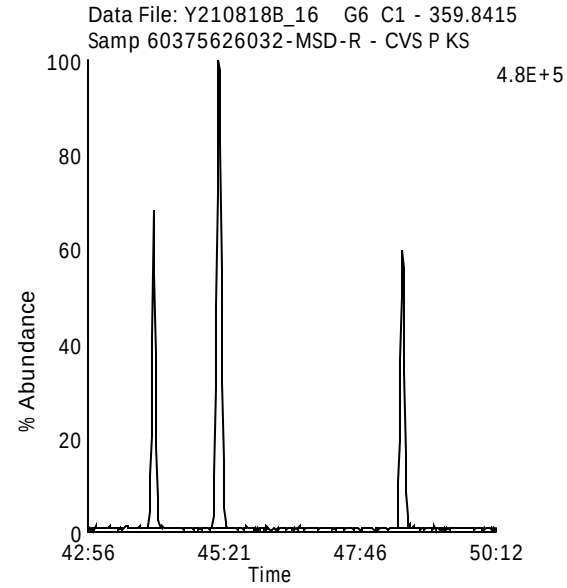


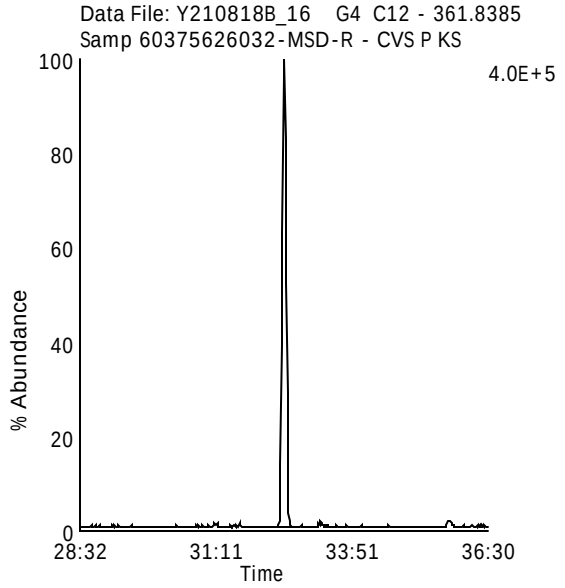
Hexa Chlorinated Biphenyls

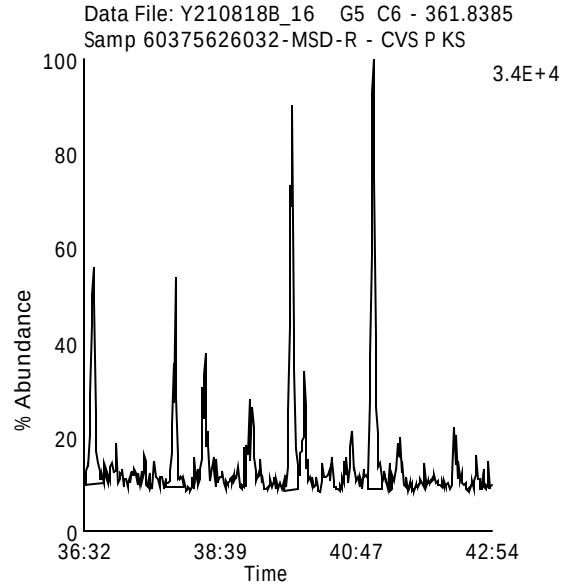
Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD

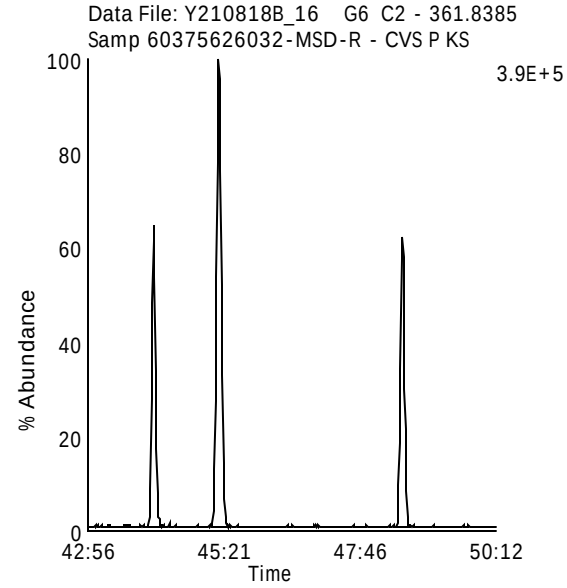






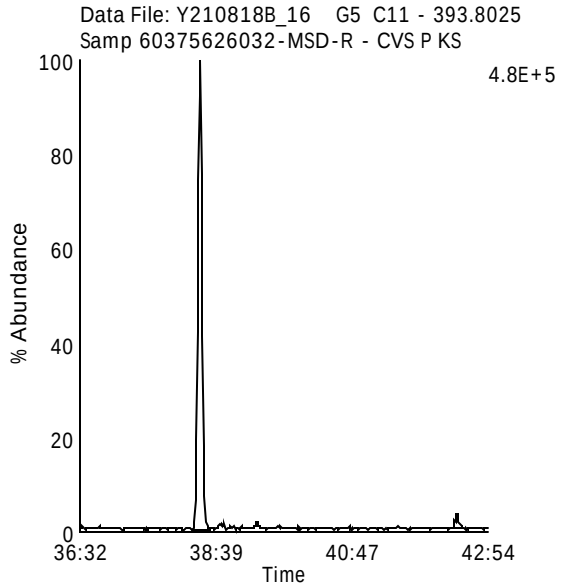


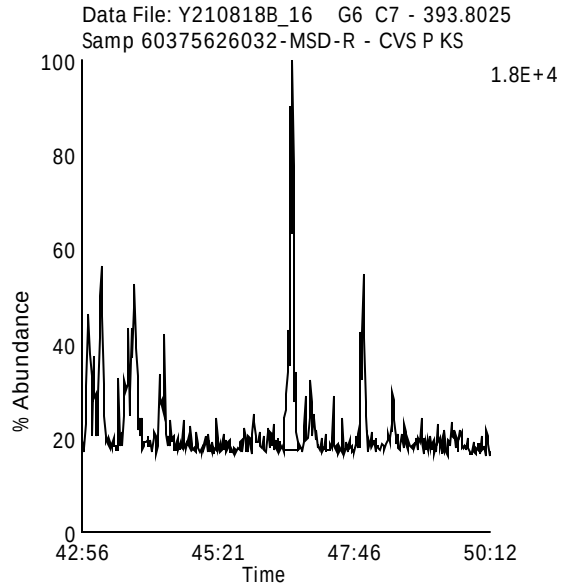


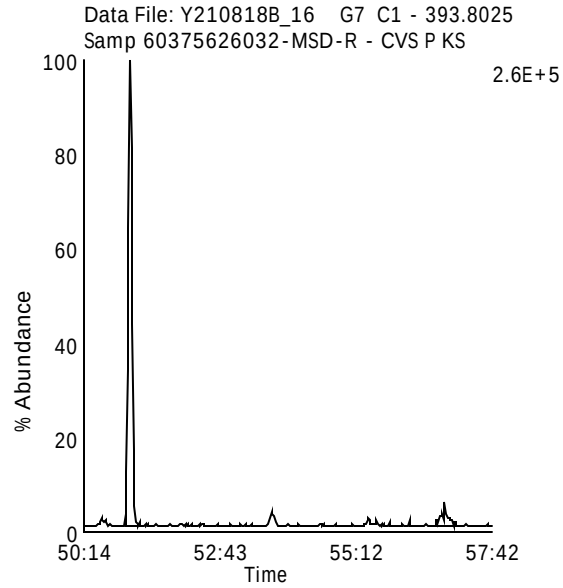


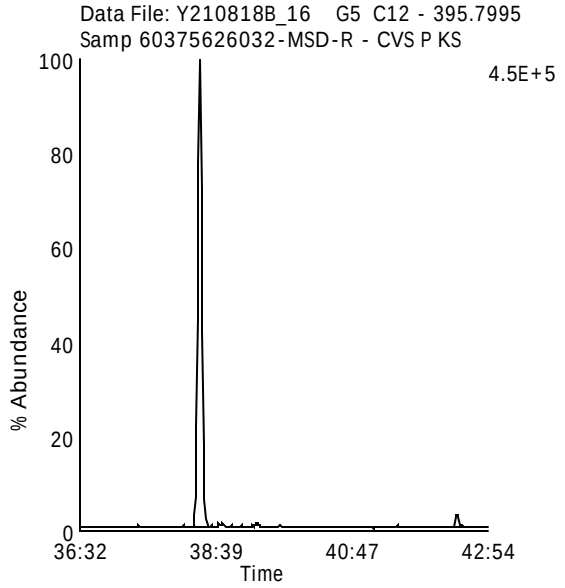
Hepta Chlorinated Biphenyls

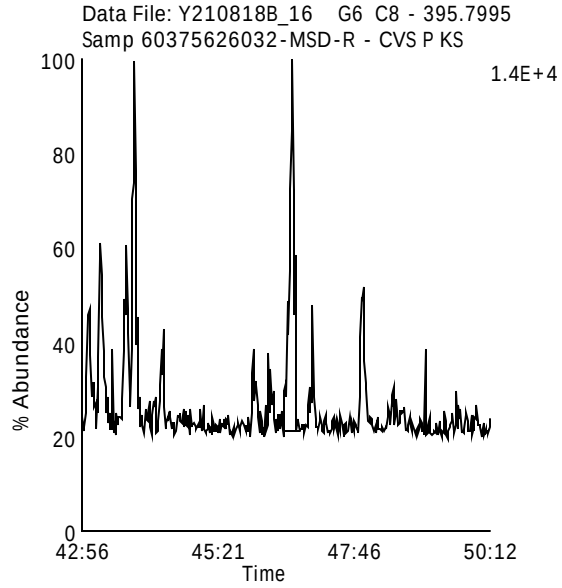
Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD

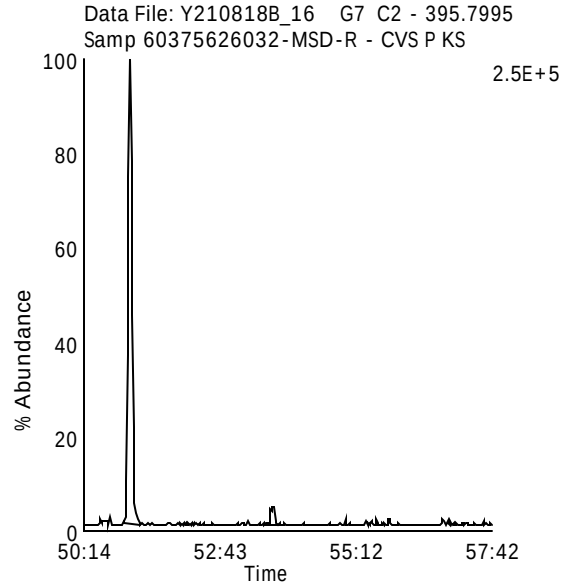








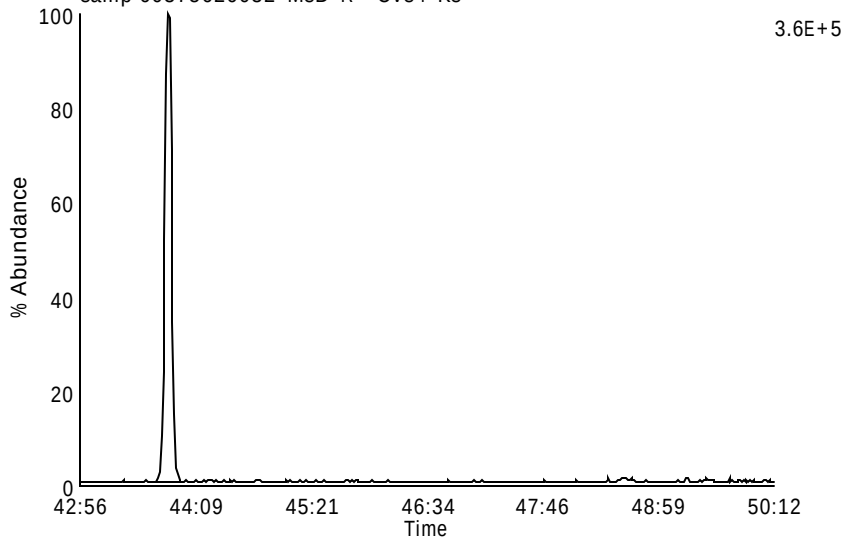




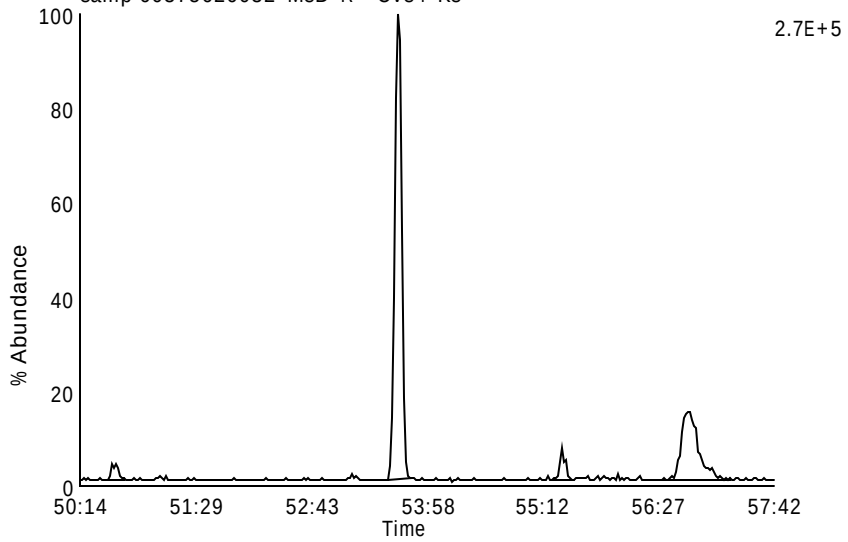
Octa Chlorinated Biphenyls

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD

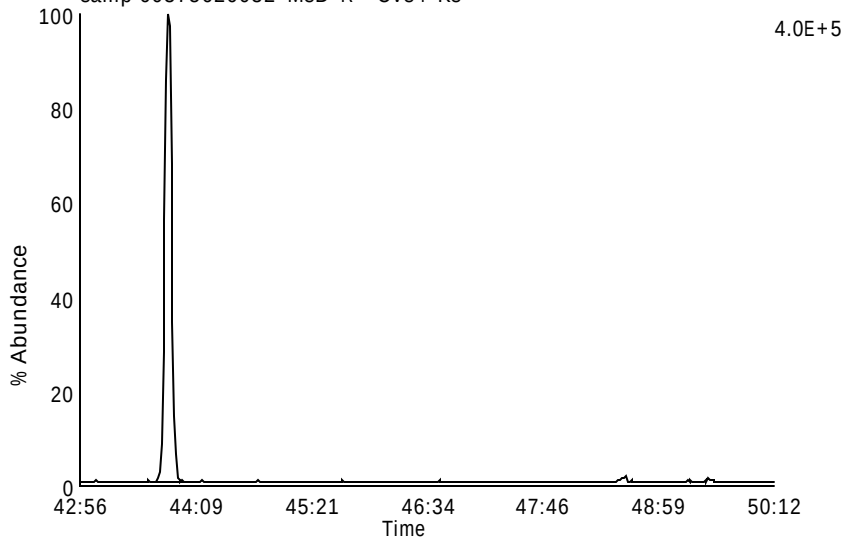
Data File: Y210818B_16 G6 C11 - 427.7635
Samp 60375626032-MSD-R - CVS P KS



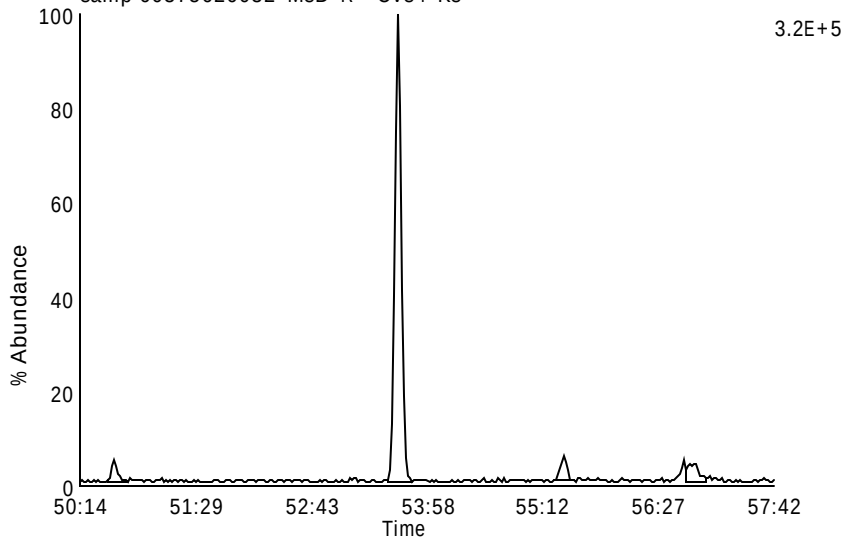
Data File: Y210818B_16 G7 C5 - 427.7635
Samp 60375626032-MSD-R - CVS P KS



Data File: Y210818B_16 G6 C12 - 429.7606
Samp 60375626032-MSD-R - CVS P KS

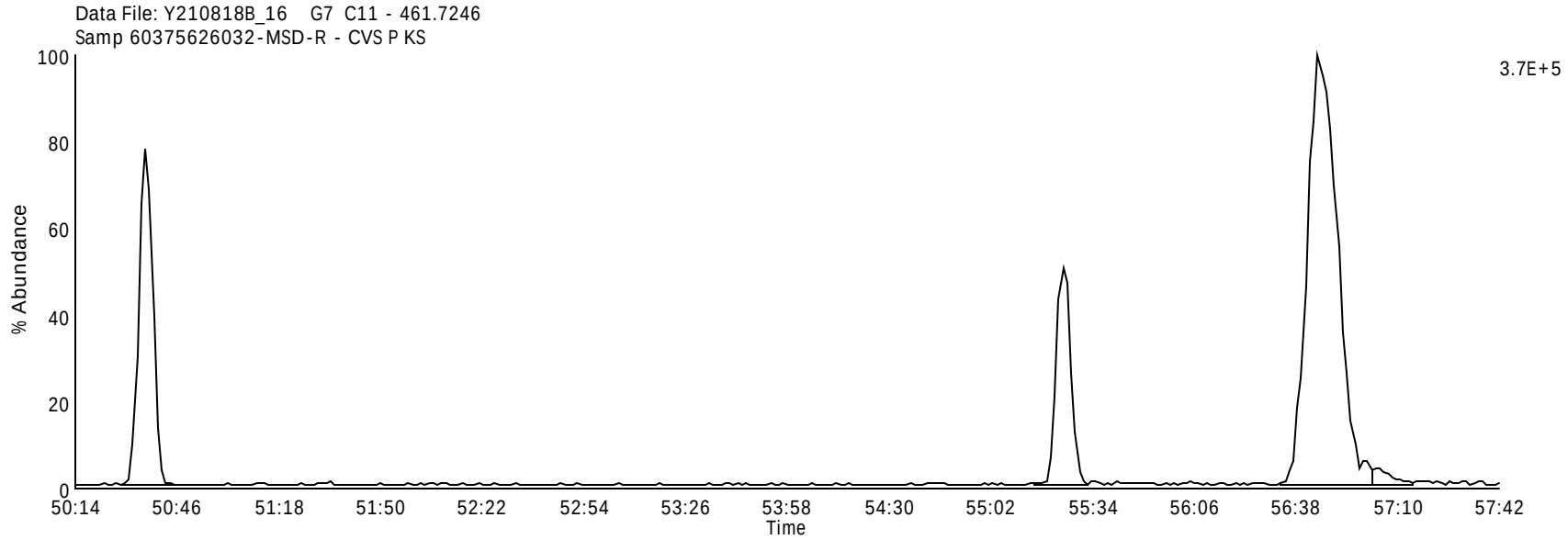


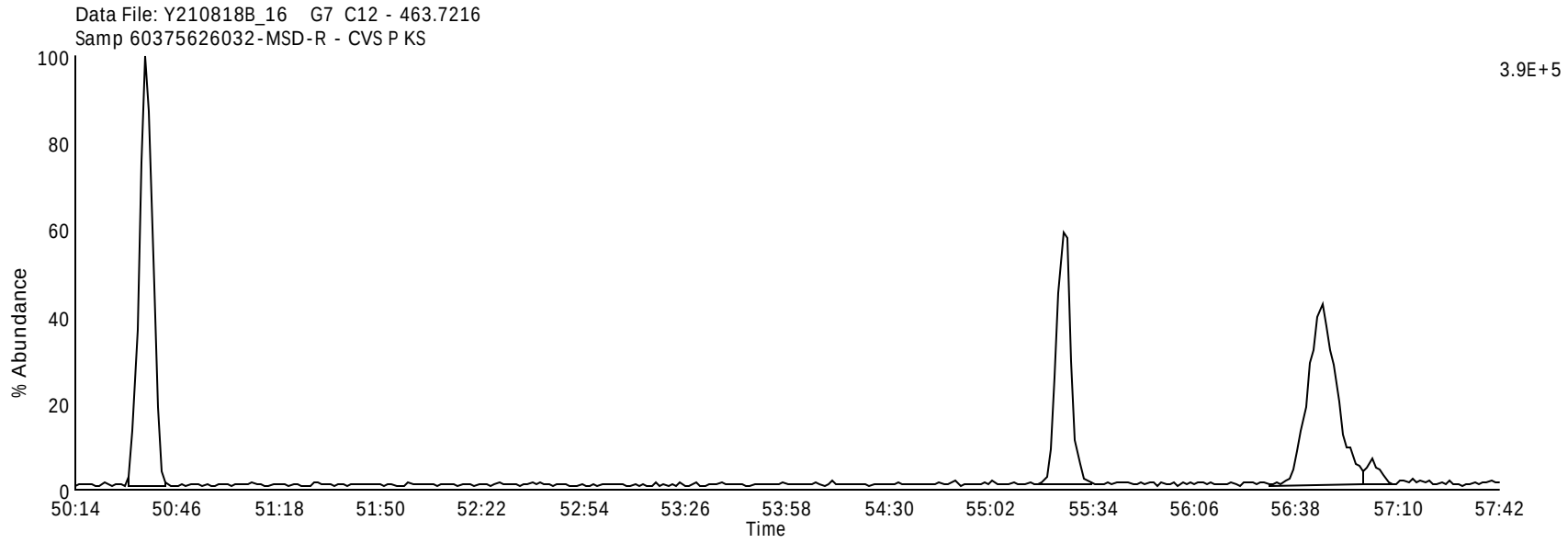
Data File: Y210818B_16 G7 C6 - 429.7606
Samp 60375626032-MSD-R - CVS P KS



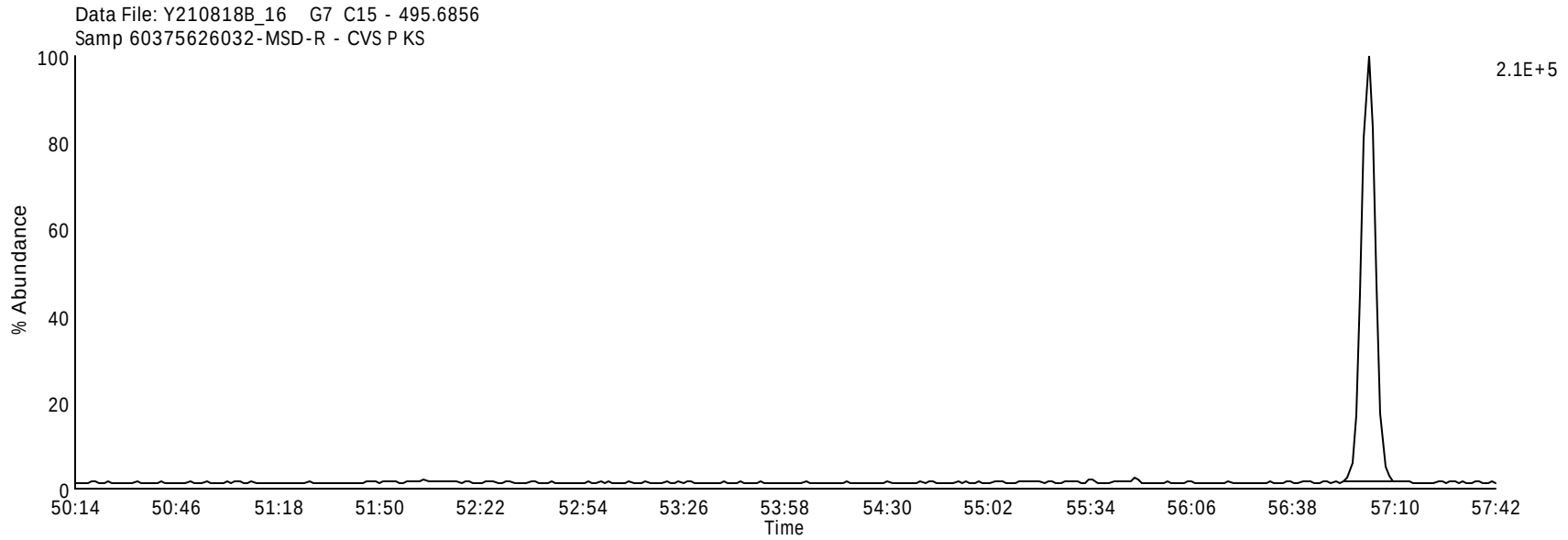
Nona Chlorinated Biphenyls

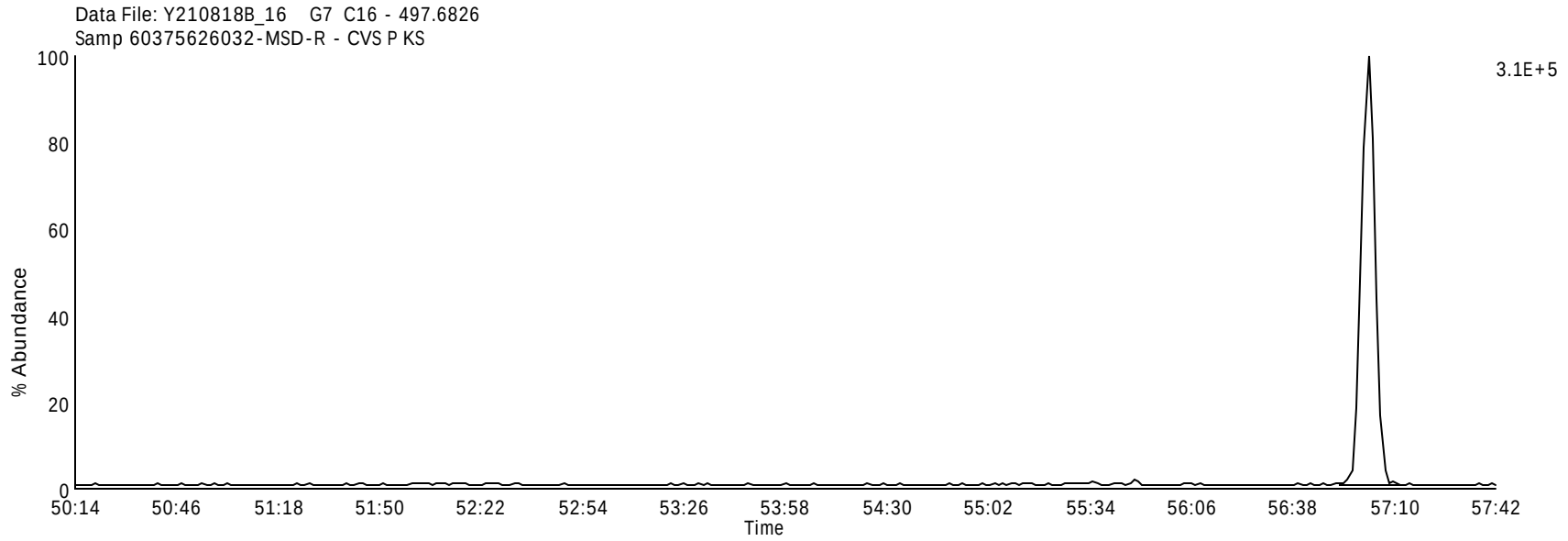
Data File Name: Y210818B_16	Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS	Client Sample ID: GB-38/3-5-MSD





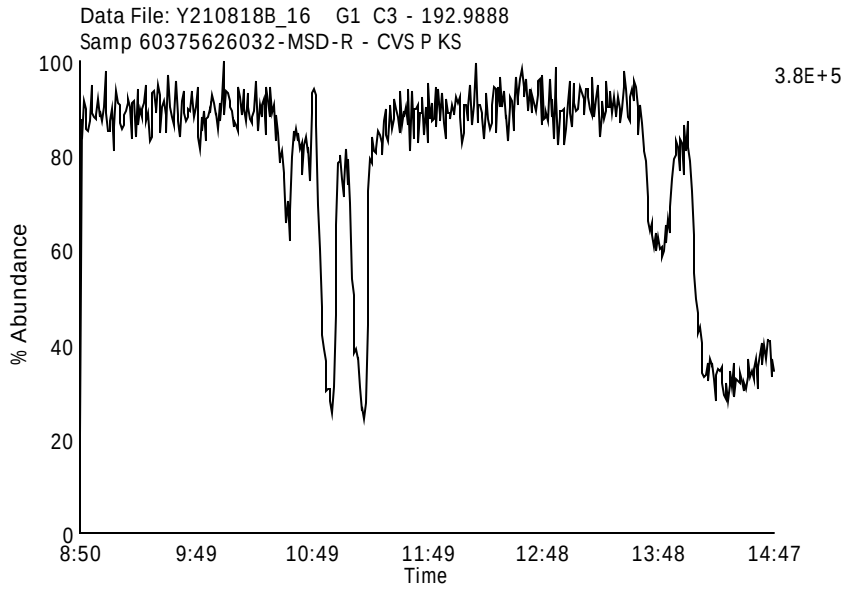
Deca Chlorinated Biphenyl	
Data File Name: Y210818B_16	Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS	Client Sample ID: GB-38/3-5-MSD

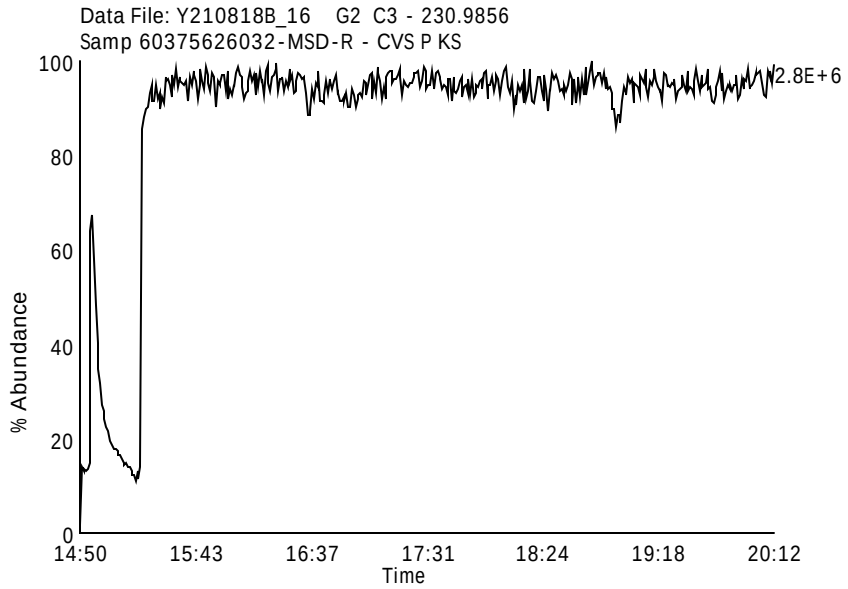


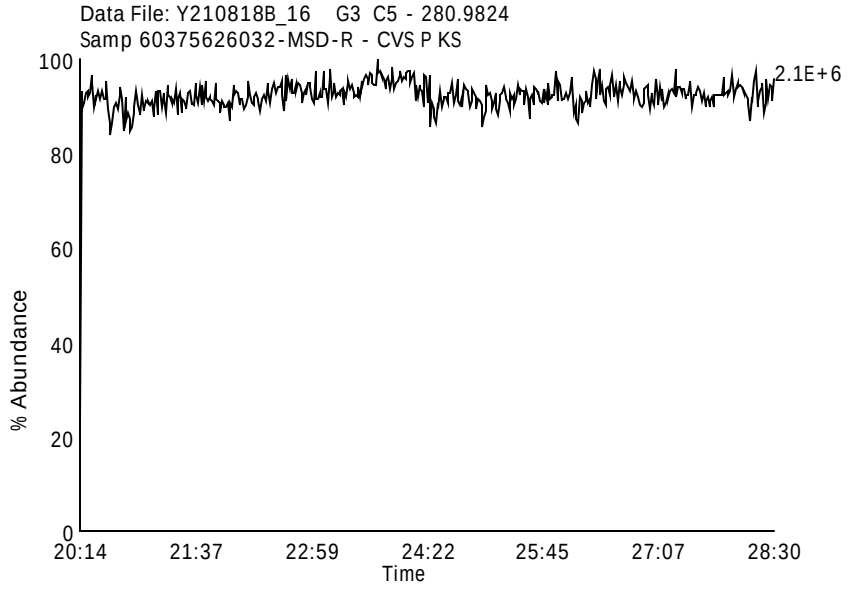


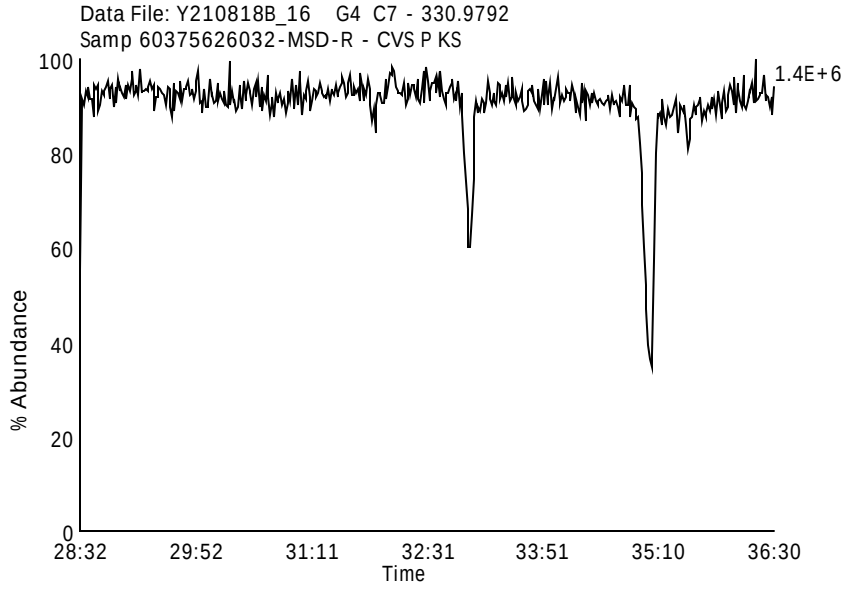
Group 1 - 4 Lock mass

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD



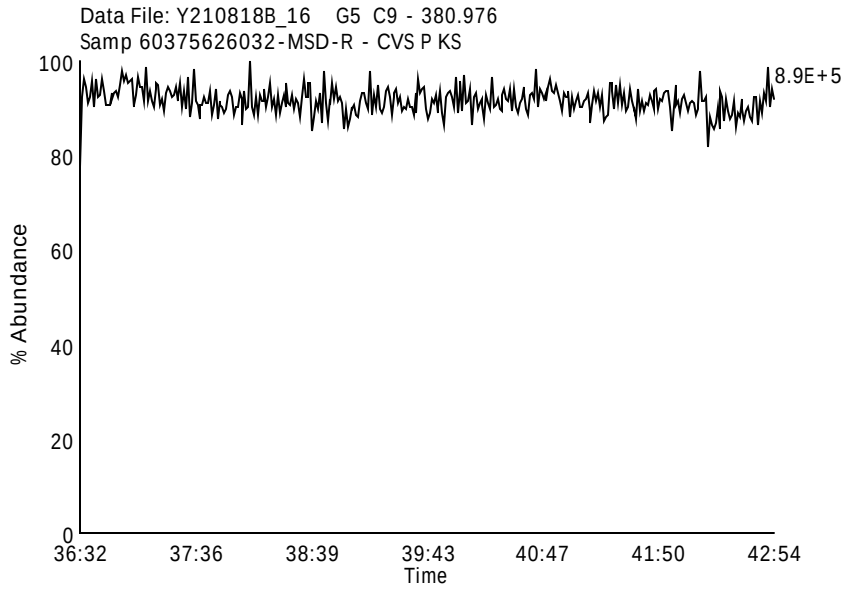


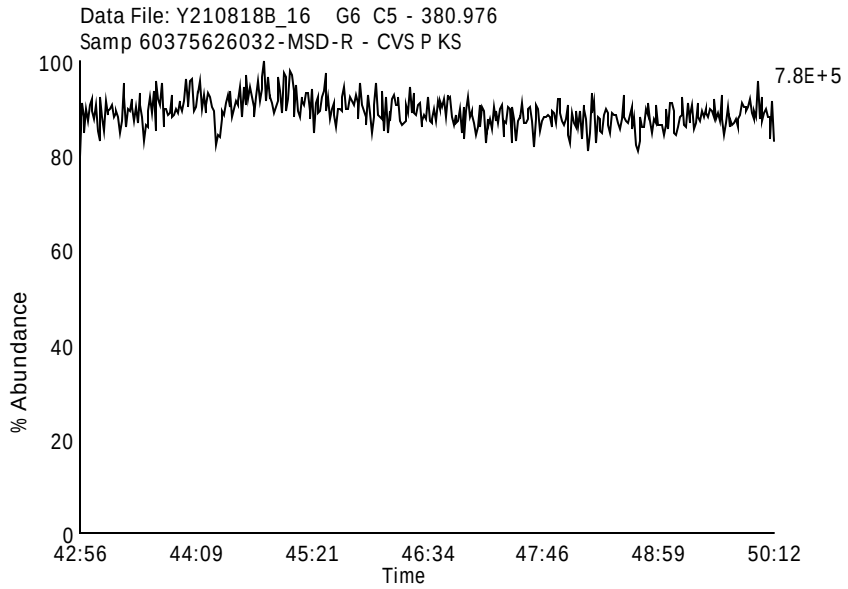


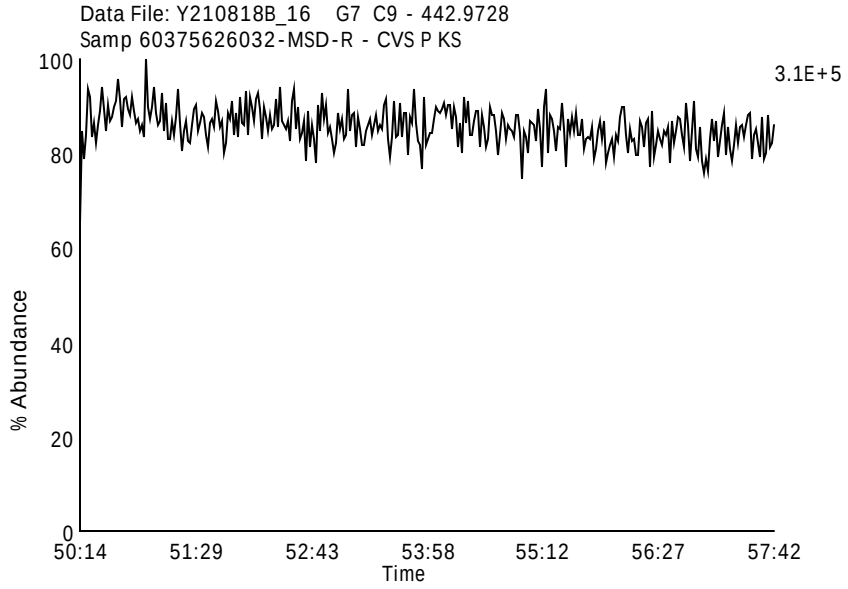


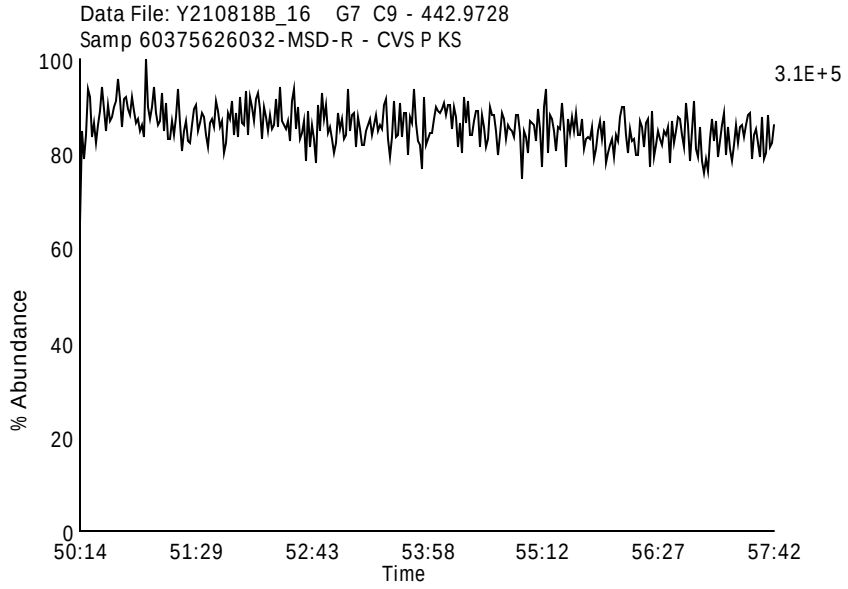
Group 5 - 7 Lock mass

Data File Name: Y210818B_16
Lab Sample ID: 60375626032-MSD-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375626032-MSD-R - CVS P KS
Client Sample ID: GB-38/3-5-MSD









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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CBLKHX	Injected By	CVS
Lab ID	BLANK-92218	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_09	GC Column ID	261111-02
Analyzed	08/19/2021 19:31	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.78	2518360	3210902	
13C-3,3',4,4'-TeCB	77	35.471	0.80	2697212	3391065	
13C-2,3,3',4,4'-PeCB	105	39.048	1.57	2894242	1847111	
13C-2,3,4,4',5-PeCB	114	38.411	1.52	3038823	1995677	
13C-2,3',4,4',5-PeCB	118	37.857	1.54	3060054	1989395	
13C-2,3',4,4',5'-PeCB	123	37.522	1.51	2939992	1945132	
13C-3,3',4,4',5-PeCB	126	42.200	1.53	2647592	1731898	
13C-HxCB(156/157)	156/157	45.274	1.24	4785122	3855351	
13C-2,3',4,4',5,5'-HxCB	167	44.100	1.23	2579704	2095511	
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.22	2182551	1794490	
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.10	2054367	1865289	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.04	7848974	7578425	
13C-2,3,3',5,5'-PeCB	111	35.538	1.61	8487907	5278023	
13C-2,2',3,3',5,5',6-HpCB	178	41.496	1.09	5491313	5018423	
Recovery Standards						
13C-2,5-DiCB	9	15.553	1.51	8593533	5691447	
13C-2,2',5,5'-TeCB	52	25.438	0.80	4575663	5744048	
13C-2,2',4,5,5'-PeCB	101	32.721	1.54	5387801	3503387	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.25	4742652	3796208	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.93	2466975	2651666	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy_____ Date _____

Client ID	CBLKHX	Injected By	CVS
Lab ID	BLANK-92218	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_09	GC Column ID	261111-02
Analyzed	08/19/2021 19:31	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.538	0.79	26909	33876	
81		34.917	1.78	14201	7977	
105		39.065	1.67	47302	28314	
118		37.891	1.62	119063	73586	
123		37.589	1.44	13424	9353	
156	156/157	45.257	1.17	49856	42453	
157	156/157	45.257	1.17	(49856)	(42453)	
167		44.151	0.52	9377	18130	
169		48.527	1.41	3356	2385	
189		51.088	2.08	9414	4534	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CLCSCV	Injected By	CVS
Lab ID	LCS-92217	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_03	GC Column ID	261111-02
Analyzed	08/19/2021 13:33	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.868	0.78	2111435	2708284	
13C-3,3',4,4'-TeCB	77	35.438	0.80	2284176	2841357	
13C-2,3,3',4,4'-PeCB	105	39.032	1.52	2478408	1632856	
13C-2,3,4,4',5-PeCB	114	38.378	1.55	2330025	1504294	
13C-2,3',4,4',5-PeCB	118	37.841	1.54	2460960	1595257	
13C-2,3',4,4',5'-PeCB	123	37.506	1.55	2321195	1497794	
13C-3,3',4,4',5-PeCB	126	42.185	1.54	2254783	1466086	
13C-HxCB(156/157)	156/157	45.258	1.23	3974052	3233763	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.22	2045827	1679232	
13C-3,3',4,4',5,5'-HxCB	169	48.529	1.22	1888640	1554165	
13C-2,3,3',4,4',5,5'-HpCB	189	51.068	1.02	1625922	1589676	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.04	6699982	6439049	
13C-2,3,3',5,5'-PeCB	111	35.505	1.55	6791667	4385104	
13C-2,2',3,3',5,5',6-HpCB	178	41.480	1.12	4351948	3878605	
Recovery Standards						
13C-2,5-DiCB	9	15.577	1.53	6042244	3937903	
13C-2,2',5,5'-TeCB	52	25.422	0.81	3272855	4030592	
13C-2,2',4,5,5'-PeCB	101	32.705	1.58	3736156	2365416	
13C-2,2',3,4,4',5'-HxCB	138	41.011	1.27	3348889	2643728	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.90	1844790	2055772	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CLCSCV	Injected By	CVS
Lab ID	LCS-92217	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_03	GC Column ID	261111-02
Analyzed	08/19/2021 13:33	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
81		34.885	0.79	1061766	1341581	
77		35.472	0.74	1047911	1408437	
105		39.049	1.46	1206307	823895	
114		38.411	1.56	1152202	737592	
118		37.858	1.43	1248369	873894	
123		37.523	1.44	1167558	811223	
126		42.201	1.63	1165474	714297	
156	156/157	45.258	1.24	2032908	1633070	
157	156/157	45.258	1.24	(2032908)	(1633070)	
167		44.101	1.15	1031393	894743	
169		48.545	1.23	970658	787410	
189		51.089	1.00	800418	802641	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-38/3-5-MS	Injected By	CVS
Lab ID	60375626032-MS-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_15	GC Column ID	261111-02
Analyzed	08/19/2021 01:45	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.881	0.78	3191793	4106023	
13C-3,3',4,4'-TeCB	77	35.501	0.82	3429987	4169482	
13C-2,3,3',4,4'-PeCB	105	39.044	1.55	3592147	2319684	
13C-2,3,4,4',5-PeCB	114	38.407	1.55	3653992	2350719	
13C-2,3',4,4',5-PeCB	118	37.870	1.59	3759750	2365867	
13C-2,3',4,4',5'-PeCB	123	37.518	1.58	3648230	2304305	
13C-3,3',4,4',5-PeCB	126	42.179	1.53	3284212	2151270	
13C-HxCB(156/157)	156/157	45.252	1.23	5404100	4390776	
13C-2,3',4,4',5,5'-HxCB	167	44.096	1.23	2939987	2395314	
13C-3,3',4,4',5,5'-HxCB	169	48.522	1.23	2584145	2105752	
13C-2,3,3',4,4',5,5'-HpCB	189	51.077	1.09	2175266	1989043	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.442	1.02	9147700	8992330	
13C-2,3,3',5,5'-PeCB	111	35.585	1.56	9291030	5944503	
13C-2,2',3,3',5,5',6-HpCB	178	41.492	1.10	5798015	5288813	
Recovery Standards						
13C-2,5-DiCB	9	15.601	1.55	8144553	5268875	
13C-2,2',5,5'-TeCB	52	25.437	0.80	4323779	5383316	
13C-2,2',4,5,5'-PeCB	101	32.735	1.59	5234161	3289135	
13C-2,2',3,4,4',5'-HxCB	138	41.022	1.26	4375615	3486273	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.168	0.90	2126128	2354736	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-38/3-5-MS	Injected By	CVS
Lab ID	60375626032-MS-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_15	GC Column ID	261111-02
Analyzed	08/19/2021 01:45	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
81		34.915	0.78	1592712	2042901	
77		35.518	0.76	1683105	2218816	
105		39.061	1.50	1855632	1237812	
114		38.424	1.51	1797568	1194130	
118		37.887	1.52	1981604	1303581	
123		37.535	1.45	1786904	1232002	
126		42.213	1.59	1651666	1040963	
156	156/157	45.269	1.25	2818137	2252342	
157	156/157	45.269	1.25	(2818137)	(2252342)	
167		44.112	1.24	1526788	1228909	
169		48.539	1.28	1321544	1030729	
189		51.099	1.00	991344	993707	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-38/3-5-MSD	Injected By	CVS
Lab ID	60375626032-MSD-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_16	GC Column ID	261111-02
Analyzed	08/19/2021 02:45	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.882	0.80	3159497	3932949	
13C-3,3',4,4'-TeCB	77	35.469	0.78	3314470	4256638	
13C-2,3,3',4,4'-PeCB	105	39.028	1.53	3694687	2414243	
13C-2,3,4,4',5-PeCB	114	38.391	1.59	3760947	2368031	
13C-2,3',4,4',5-PeCB	118	37.855	1.52	3678648	2415591	
13C-2,3',4,4',5'-PeCB	123	37.503	1.51	3588623	2382198	
13C-3,3',4,4',5-PeCB	126	42.181	1.54	3338712	2172687	
13C-HxCB(156/157)	156/157	45.254	1.21	5812646	4819693	
13C-2,3',4,4',5,5'-HxCB	167	44.097	1.29	3187071	2462463	
13C-3,3',4,4',5,5'-HxCB	169	48.523	1.19	2749122	2313142	
13C-2,3,3',4,4',5,5'-HpCB	189	51.063	1.05	2507317	2394504	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.442	1.02	9397999	9229325	
13C-2,3,3',5,5'-PeCB	111	35.519	1.57	9914807	6315203	
13C-2,2',3,3',5,5',6-HpCB	178	41.476	1.10	6241670	5674497	
Recovery Standards						
13C-2,5-DiCB	9	15.601	1.56	8302535	5310091	
13C-2,2',5,5'-TeCB	52	25.437	0.80	4395410	5508890	
13C-2,2',4,5,5'-PeCB	101	32.719	1.56	5181045	3315557	
13C-2,2',3,4,4',5'-HxCB	138	41.024	1.24	4563541	3694052	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.175	0.91	2476797	2713979	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-38/3-5-MSD	Injected By	CVS
Lab ID	60375626032-MSD-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_16	GC Column ID	261111-02
Analyzed	08/19/2021 02:45	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
81		34.899	0.75	1591512	2116159	
77		35.486	0.79	1625389	2048289	
105		39.062	1.57	1926212	1226599	
114		38.425	1.51	1784461	1177948	
118		37.872	1.44	1933473	1341240	
123		37.536	1.50	1825524	1218433	
126		42.214	1.52	1711006	1126651	
156	156/157	45.271	1.22	3091444	2528341	
157	156/157	45.271	1.22	(3091444)	(2528341)	
167		44.097	1.23	1573954	1284595	
169		48.540	1.19	1418716	1187917	
189		51.084	0.99	1163015	1169525	

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MSSV SIM - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2945154	2945154BLANK	84	91
2945155	2945155LCS	71	84
2945156	2945156MS	80	90
2945157	2945157MSD	62	83
60375626001	GB-47/3-5	65	81
60375626002	GB-47/5-7	63	89
60375626003	GB-41/4-6	58	83
60375626004	GB-41/6-8	59	85
60375626005	GB-34/1-3	72	82
60375626006	GB-34/3-5	70	83
60375626009	GB-40/1.5-3.5	0*	0*
60375626010	GB-40/11-13	72	91
60375626011	GB-39/5-6	80	85
60375626012	GB-39/6-7	65	86
60375626016	GB-32/0-2	72	93
60375626017	GB-32/2-4	66	90
60375626020	GB-60/2-4	116	122
60375626021	GB-60/5-7	78	92
60375626025	GB-59/2-4	70	90
60375626026	GB-59/8-10	70	89
60375626027	GB-52/2-3	67	86
60375626028	GB-52/3-5	74	90
60375626029	GB-45/0-2	100	136*
60375626030	GB-45/2-4	61	81

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM II SVOA-2
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2945158	2945158BLANK	92	107
2945159	2945159LCS	85	94
2945160	2945160MS	85	97
2945161	2945161MSD	85	98
60375626031	GB-38/0-2	85	99
60375626032	GB-38/3-5	82	93

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2945155LCS
Date Extracted: 07/25/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 072721.B\0727AP18.D
SDG No.: 60375626

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	32.8	23.0	70	45-120
Acenaphthylene	32.8	22.6	69	50-120
Anthracene	32.8	26.1	79	50-120
Benzo(a)anthracene	32.8	26.8	82	55-125
Benzo(a)pyrene	32.8	26.3	80	45-120
Benzo(b)fluoranthene	32.8	26.4	80	50-125
Benzo(g,h,i)perylene	32.8	26.9	82	40-120
Benzo(k)fluoranthene	32.8	27.8	85	55-120
Chrysene	32.8	26.8	82	55-120
Dibenz(a,h)anthracene	32.8	27.3	83	40-125
Fluoranthene	32.8	28.0	85	50-125
Fluorene	32.8	23.9	73	50-120
Indeno(1,2,3-cd)pyrene	32.8	26.9	82	44-125
Naphthalene	32.8	22.6	69	45-120
Phenanthrene	32.8	26.3	80	50-125
Pyrene	32.8	27.8	85	50-125

Spike Recovery: 0 out of 16 outside limits.

08/27/2021 1:49

MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2945159LCS
Date Extracted: 07/23/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 072821.B\0728AP14.D
SDG No.: 60375626

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	31.9	26.5	83	45-120
Acenaphthylene	31.9	25.6	80	50-120
Anthracene	31.9	28.4	89	50-120
Benzo(a)anthracene	31.9	28.8	90	55-125
Benzo(a)pyrene	31.9	27.4	86	45-120
Benzo(b)fluoranthene	31.9	28.5	89	50-125
Benzo(g,h,i)perylene	31.9	30.2	95	40-120
Benzo(k)fluoranthene	31.9	29.0	91	55-120
Chrysene	31.9	28.6	90	55-120
Dibenz(a,h)anthracene	31.9	29.8	93	40-125
Fluoranthene	31.9	30.3	95	50-125
Fluorene	31.9	27.2	85	50-120
Indeno(1,2,3-cd)pyrene	31.9	29.2	92	44-125
Naphthalene	31.9	26.0	82	45-120
Phenanthrene	31.9	28.8	90	50-125
Pyrene	31.9	30.3	95	50-125

Spike Recovery: 0 out of 16 outside limits.

MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2945156MS
Date Extracted: 07/25/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSS5
Lab File ID: 072721.B\0727AP31.D
Parent Sample ID: GB-32/2-4
SDG No.: 60375626

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	41.6	<1.5	32.4	78	10-150
Acenaphthylene	41.6	<1.5	31.1	75	30-125
Anthracene	41.6	<1.7	35.4	85	10-160
Benzo(a)anthracene	41.6	<2.0	37.8	91	10-160
Benzo(a)pyrene	41.6	<1.5	36.0	86	10-150
Benzo(b)fluoranthene	41.6	3.3J	39.3	86	10-165
Benzo(g,h,i)perylene	41.6	<1.9	37.3	90	10-155
Benzo(k)fluoranthene	41.6	<2.3	38.8	93	10-165
Chrysene	41.6	2.5J	37.9	85	10-150
Dibenz(a,h)anthracene	41.6	<1.8	35.8	86	10-175
Fluoranthene	41.6	6.9	40.8	81	10-180
Fluorene	41.6	<1.6	33.4	80	20-145
Indeno(1,2,3-cd)pyrene	41.6	<1.8	36.1	87	10-150
Naphthalene	41.6	<1.8	32.3	78	10-165
Phenanthrene	41.6	4.7	36.9	77	10-170
Pyrene	41.6	5.2	40.8	86	10-180

Spike Recovery: 0 out of 16 outside limits.

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2945157MSD

Lab File ID (2): 072721.B\0727AP32.D Date Analyzed (2): 07/27/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	41.7	27.0	65	18	0-42	10-150
Acenaphthylene	41.7	26.4	63	16	0-44	30-125
Anthracene	41.7	32.5	78	8	0-54	10-160
Benzo(a)anthracene	41.7	34.4	82	10	0-62	10-160
Benzo(a)pyrene	41.7	32.4	78	10	0-66	10-150
Benzo(b)fluoranthene	41.7	34.5	75	13	0-61	10-165
Benzo(g,h,i)perylene	41.7	34.4	82	8	0-58	10-155
Benzo(k)fluoranthene	41.7	34.7	83	11	0-53	10-165
Chrysene	41.7	33.9	75	11	0-57	10-150
Dibenz(a,h)anthracene	41.7	33.2	80	7	0-48	10-175
Fluoranthene	41.7	37.3	73	9	0-54	10-180
Fluorene	41.7	29.2	70	13	0-39	20-145
Indeno(1,2,3-cd)pyrene	41.7	33.4	80	8	0-59	10-150
Naphthalene	41.7	26.1	62	21	0-54	10-165
Phenanthrene	41.7	33.6	69	9	0-51	10-170
Pyrene	41.7	37.2	77	9	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2945160MS
Date Extracted: 07/23/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSS5
Lab File ID: 072821.B\0728AP17.D
Parent Sample ID: GB-38/3-5
SDG No.: 60375626

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	41.4	<1.5	34.5	83	10-150
Acenaphthylene	41.4	<1.5	33.6	81	30-125
Anthracene	41.4	<1.7	37.4	91	10-160
Benzo(a)anthracene	41.4	<1.9	37.3	90	10-160
Benzo(a)pyrene	41.4	<1.5	36.4	88	10-150
Benzo(b)fluoranthene	41.4	<2.0	36.4	88	10-165
Benzo(g,h,i)perylene	41.4	<1.8	36.0	87	10-155
Benzo(k)fluoranthene	41.4	<2.3	38.3	93	10-165
Chrysene	41.4	<2.0	36.7	89	10-150
Dibenz(a,h)anthracene	41.4	<1.8	35.7	86	10-175
Fluoranthene	41.4	<3.1	40.2	97	10-180
Fluorene	41.4	<1.6	36.0	87	20-145
Indeno(1,2,3-cd)pyrene	41.4	<1.8	34.7	84	10-150
Naphthalene	41.4	<1.8	34.6	84	10-165
Phenanthrene	41.4	<3.4	38.6	93	10-170
Pyrene	41.4	<2.2	39.9	96	10-180

Spike Recovery: 0 out of 16 outside limits.

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2945161MSD

Lab File ID (2): 072821.B\0728AP18.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	41.5	34.6	83	0	0-42	10-150
Acenaphthylene	41.5	34.0	82	1	0-44	30-125
Anthracene	41.5	37.5	90	0	0-54	10-160
Benzo(a)anthracene	41.5	38.4	92	3	0-62	10-160
Benzo(a)pyrene	41.5	37.2	90	2	0-66	10-150
Benzo(b)fluoranthene	41.5	40.3	97	10	0-61	10-165
Benzo(g,h,i)perylene	41.5	39.3	94	9	0-58	10-155
Benzo(k)fluoranthene	41.5	36.5	88	5	0-53	10-165
Chrysene	41.5	37.5	90	2	0-57	10-150
Dibenz(a,h)anthracene	41.5	39.0	94	9	0-48	10-175
Fluoranthene	41.5	40.4	97	1	0-54	10-180
Fluorene	41.5	36.6	88	2	0-39	20-145
Indeno(1,2,3-cd)pyrene	41.5	37.1	89	7	0-59	10-150
Naphthalene	41.5	35.0	84	1	0-54	10-165
Phenanthrene	41.5	38.3	92	1	0-51	10-170
Pyrene	41.5	40.3	97	1	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

08/27/2021 1:49

SAMPLE NO.

2945154BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2945154

Lab File ID: 072721.B\0727AP17.D Date Analyzed: 07/27/2021 Time:15:54

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2945155LCS	2945155	072721.B\0727AP18.D	07/27/2021 16:12
GB-47/3-5	60375626001	072721.B\0727AP19.D	07/27/2021 16:29
GB-47/5-7	60375626002	072721.B\0727AP20.D	07/27/2021 16:46
GB-41/4-6	60375626003	072721.B\0727AP21.D	07/27/2021 17:03
GB-41/6-8	60375626004	072721.B\0727AP22.D	07/27/2021 17:20
GB-34/1-3	60375626005	072721.B\0727AP23.D	07/27/2021 17:37
GB-34/3-5	60375626006	072721.B\0727AP24.D	07/27/2021 17:54
GB-40/1.5-3.5	60375626009	072721.B\0727AP25.D	07/27/2021 18:12
GB-40/11-13	60375626010	072721.B\0727AP26.D	07/27/2021 18:29
GB-39/5-6	60375626011	072721.B\0727AP27.D	07/27/2021 18:46
GB-39/6-7	60375626012	072721.B\0727AP28.D	07/27/2021 19:03
GB-32/0-2	60375626016	072721.B\0727AP29.D	07/27/2021 19:20
GB-32/2-4	60375626017	072721.B\0727AP30.D	07/27/2021 19:37
2945156MS	2945156	072721.B\0727AP31.D	07/27/2021 19:54
2945157MSD	2945157	072721.B\0727AP32.D	07/27/2021 20:11
GB-60/2-4	60375626020	072821.B\0728AP01.D	07/28/2021 09:17
GB-60/5-7	60375626021	072821.B\0728AP02.D	07/28/2021 09:34
GB-59/2-4	60375626025	072821.B\0728AP03.D	07/28/2021 09:51
GB-59/8-10	60375626026	072821.B\0728AP04.D	07/28/2021 10:08
GB-52/2-3	60375626027	072821.B\0728AP05.D	07/28/2021 10:25
GB-52/3-5	60375626028	072821.B\0728AP06.D	07/28/2021 10:42
GB-45/0-2	60375626029	072821.B\0728AP07.D	07/28/2021 10:59
GB-45/2-4	60375626030	072821.B\0728AP08.D	07/28/2021 11:16
GB-32/0-2	60375626016	072821.B\0728AP09.D	07/28/2021 11:34
GB-45/0-2	60375626029	072821.B\0728AP12.D	07/28/2021 12:25

SAMPLE NO.

2945158BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2945158

Lab File ID: 072821.B\0728AP13.D Date Analyzed: 07/28/2021 Time: 12:42

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2945159LCS	2945159	072821.B\0728AP14.D	07/28/2021 12:59
GB-38/0-2	60375626031	072821.B\0728AP15.D	07/28/2021 13:17
GB-38/3-5	60375626032	072821.B\0728AP16.D	07/28/2021 13:34
2945160MS	2945160	072821.B\0728AP17.D	07/28/2021 13:51
2945161MSD	2945161	072821.B\0728AP18.D	07/28/2021 14:08

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW
Lab File ID: 072721.B\0727ADFT.D DFTPP Injection Date 07/27/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.22	(16.76)[1]
68	Less than 2.00% of mass 69	0.37	(1.34)[2]
69	Mass 69 relative abundance	27.19	(20.51)[2]
70	Less than 2.00% of mass 69	0.15	(0.57)[2]
127	10.00 - 80.00% of mass 442	42.09	(31.74)[2]
197	Less than 2.00% of mass 198	0.00	
198	Greater than 50.00% of mass 442	100.00	(75.42)[2]
199	5.00 - 9.00% of mass 198	6.80	
275	10.00 - 60.00% of mass 442	26.56	(20.03)[2]
365	Greater than 1.00% of mass 442	3.84	(2.90)[2]
441	Present, but less than mass 443	20.27	
442	Greater than 50.00% of mass 198	132.60	
443	15.00 - 24.00% of mass 442	26.31	(19.84)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19727350CAL6	19727350CAL6	072721.B\0727API6.D	07/27/2021	08:37
19727351CAL1	19727351CAL1	072721.B\0727API1.D	07/27/2021	08:57
19727352CAL2	19727352CAL2	072721.B\0727API2.D	07/27/2021	09:14
19727353CAL3	19727353CAL3	072721.B\0727API3.D	07/27/2021	09:31
19727354CAL4	19727354CAL4	072721.B\0727API4.D	07/27/2021	09:48
19727355CAL5	19727355CAL5	072721.B\0727API5.D	07/27/2021	10:05
19727356CAL7	19727356CAL7	072721.B\0727API7.D	07/27/2021	10:22
19727357CAL8	19727357CAL8	072721.B\0727API8.D	07/27/2021	10:40
19727358ICV	19727358ICV	072721.B\0727APICV.D	07/27/2021	10:57
2945154BLANK	2945154BLANK	072721.B\0727AP17.D	07/27/2021	15:54
2945155LCS	2945155LCS	072721.B\0727AP18.D	07/27/2021	16:12
GB-47/3-5	60375626001	072721.B\0727AP19.D	07/27/2021	16:29
GB-47/5-7	60375626002	072721.B\0727AP20.D	07/27/2021	16:46
GB-41/4-6	60375626003	072721.B\0727AP21.D	07/27/2021	17:03
GB-41/6-8	60375626004	072721.B\0727AP22.D	07/27/2021	17:20
GB-34/1-3	60375626005	072721.B\0727AP23.D	07/27/2021	17:37
GB-34/3-5	60375626006	072721.B\0727AP24.D	07/27/2021	17:54
GB-40/1.5-3.5	60375626009	072721.B\0727AP25.D	07/27/2021	18:12
GB-40/11-13	60375626010	072721.B\0727AP26.D	07/27/2021	18:29

MSSV SIM - FORM V SVOA-2
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW
Lab File ID: 072721.B\0727ADFT.D DFTPP Injection Date 07/27/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:26

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
GB-39/5-6	60375626011	072721.B\0727AP27.D	07/27/2021	18:46
GB-39/6-7	60375626012	072721.B\0727AP28.D	07/27/2021	19:03
GB-32/0-2	60375626016	072721.B\0727AP29.D	07/27/2021	19:20
GB-32/2-4	60375626017	072721.B\0727AP30.D	07/27/2021	19:37
2945156MS	2945156MS	072721.B\0727AP31.D	07/27/2021	19:54
2945157MSD	2945157MSD	072721.B\0727AP32.D	07/27/2021	20:11

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW
Lab File ID: 072821.B\0728ADFT.D DFTPP Injection Date 07/28/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	21.45	(15.55)[1]
68	Less than 2.00% of mass 69	0.37	(1.37)[2]
69	Mass 69 relative abundance	26.65	(19.32)[2]
70	Less than 2.00% of mass 69	0.14	(0.54)[2]
127	10.00 - 80.00% of mass 442	41.60	(30.15)[2]
197	Less than 2.00% of mass 198	0.46	
198	Greater than 50.00% of mass 442	100.00	(72.49)[2]
199	5.00 - 9.00% of mass 198	6.76	
275	10.00 - 60.00% of mass 442	27.03	(19.59)[2]
365	Greater than 1.00% of mass 442	3.94	(2.86)[2]
441	Present, but less than mass 443	21.39	
442	Greater than 50.00% of mass 198	137.96	
443	15.00 - 24.00% of mass 442	27.35	(19.83)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19736764CCV	19736764CCV	072821.B\0728API6.D	07/28/2021	08:58
GB-60/2-4	60375626020	072821.B\0728AP01.D	07/28/2021	09:17
GB-60/5-7	60375626021	072821.B\0728AP02.D	07/28/2021	09:34
GB-59/2-4	60375626025	072821.B\0728AP03.D	07/28/2021	09:51
GB-59/8-10	60375626026	072821.B\0728AP04.D	07/28/2021	10:08
GB-52/2-3	60375626027	072821.B\0728AP05.D	07/28/2021	10:25
GB-52/3-5	60375626028	072821.B\0728AP06.D	07/28/2021	10:42
GB-45/0-2	60375626029	072821.B\0728AP07.D	07/28/2021	10:59
GB-45/2-4	60375626030	072821.B\0728AP08.D	07/28/2021	11:16
GB-32/0-2	60375626016	072821.B\0728AP09.D	07/28/2021	11:34
GB-45/0-2	60375626029	072821.B\0728AP12.D	07/28/2021	12:25
2945158BLANK	2945158BLANK	072821.B\0728AP13.D	07/28/2021	12:42
2945159LCS	2945159LCS	072821.B\0728AP14.D	07/28/2021	12:59
GB-38/0-2	60375626031	072821.B\0728AP15.D	07/28/2021	13:17
GB-38/3-5	60375626032	072821.B\0728AP16.D	07/28/2021	13:34
2945160MS	2945160MS	072821.B\0728AP17.D	07/28/2021	13:51
2945161MSD	2945161MSD	072821.B\0728AP18.D	07/28/2021	14:08

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Sample ID : 19727350CAL6 Date Analyzed: 07/27/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:37

Lab File ID: 072721.B\0727API6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				102423	6.409	153208	9.885	202817	4.363
UPPER LIMIT				204846	6.909	306416	10.385	405634	4.863
LOWER LIMIT				51211.5	5.909	76604	9.385	101408.5	3.863
LAB SAMPLE ID	SAMPLE NO.								
2945154	2945154BLANK			141086	6.408	212164	9.868	229139	4.357
2945155	2945155LCS			144584	6.408	210660	9.869	237304	4.358
2945156	2945156MS			135635	6.408	190926	9.863	224231	4.356
2945157	2945157MSD			147598	6.408	210139	9.868	241873	4.359
60375626001	GB-47/3-5			143811	6.408	208337	9.869	235734	4.358
60375626002	GB-47/5-7			143540	6.408	207631	9.871	236741	4.358
60375626003	GB-41/4-6			143049	6.409	206571	9.867	233356	4.36
60375626004	GB-41/6-8			142654	6.408	205601	9.868	234533	4.358
60375626005	GB-34/1-3			149867	6.408	217080	9.866	241377	4.357
60375626006	GB-34/3-5			146592	6.408	213424	9.867	235897	4.359
60375626009	GB-40/1.5-3.5			162394	6.409	233656	9.867	262164	4.361
60375626010	GB-40/11-13			148229	6.408	184088	9.867	240282	4.358
60375626011	GB-39/5-6			143037	6.408	214587	9.862	234864	4.355
60375626012	GB-39/6-7			140554	6.408	204306	9.866	231095	4.358
60375626016	GB-32/0-2			141442	6.408	175518	9.869	230011	4.358
60375626017	GB-32/2-4			148190	6.408	215205	9.864	237735	4.358

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Sample ID : 19727350CAL6 Date Analyzed: 07/27/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:37

Lab File ID: 072721.B\0727API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		113939	11.224	185448	7.755
UPPER LIMIT		227878	11.724	370896	8.255
LOWER LIMIT		56969.5	10.724	92724	7.255
LAB SAMPLE ID	SAMPLE NO.				
2945154	2945154BLANK	153666	11.202	248906	7.753
2945155	2945155LCS	139585	11.203	253802	7.753
2945156	2945156MS	126778	11.194	237938	7.752
2945157	2945157MSD	141139	11.2	258579	7.753
60375626001	GB-47/3-5	139751	11.202	250190	7.753
60375626002	GB-47/5-7	148556	11.207	248571	7.753
60375626003	GB-41/4-6	136545	11.201	248401	7.753
60375626004	GB-41/6-8	138060	11.201	245895	7.753
60375626005	GB-34/1-3	149935	11.199	262108	7.753
60375626006	GB-34/3-5	142926	11.199	255807	7.753
60375626009	GB-40/1.5-3.5	162246	11.2	281668	7.753
60375626010	GB-40/11-13	124791	11.199	258146	7.753
60375626011	GB-39/5-6	148390	11.193	252195	7.752
60375626012	GB-39/6-7	136825	11.198	247831	7.753
60375626016	GB-32/0-2	129085	11.201	247517	7.753
60375626017	GB-32/2-4	146705	11.195	258700	7.753

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Sample ID : 19736764CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:58

Lab File ID: 072821.B\0728API6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				120000	6.408	165213	9.875	212728	4.362
UPPER LIMIT				240000	6.908	330426	10.375	425456	4.862
LOWER LIMIT				60000	5.908	82606.5	9.375	106364	3.862
LAB SAMPLE ID	SAMPLE NO.								
2945158	2945158BLANK			136416	6.407	200956	9.869	221595	4.355
2945159	2945159LCS			137885	6.407	197960	9.873	229315	4.355
2945160	2945160MS			129448	6.408	187787	9.87	210715	4.357
2945161	2945161MSD			134875	6.408	197095	9.872	219396	4.358
60375626016	GB-32/0-2			141487	6.408	205231	9.869	227602	4.362
60375626020	GB-60/2-4			114529	6.41	167458	9.904	191990	4.36
60375626021	GB-60/5-7			135148	6.408	194644	9.879	222071	4.357
60375626025	GB-59/2-4			133689	6.408	177441	9.883	217696	4.36
60375626026	GB-59/8-10			130083	6.408	195349	9.873	210325	4.358
60375626027	GB-52/2-3			138393	6.408	193253	9.879	217970	4.36
60375626028	GB-52/3-5			142103	6.408	203101	9.876	230887	4.356
60375626029	GB-45/0-2			140550	6.408	207720	9.887	227561	4.359
60375626029 DL 10	GB-45/0-2			120800	6.408	159914	9.872	199784	4.362
60375626030	GB-45/2-4			142859	6.408	209642	9.871	230770	4.357
60375626031	GB-38/0-2			143226	6.408	196325	9.876	232910	4.357
60375626032	GB-38/3-5			138821	6.408	202789	9.871	222287	4.356

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Sample ID : 19736764CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:58

Lab File ID: 072821.B\0728API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		103173	11.209	215277	7.752
UPPER LIMIT		206346	11.709	430554	8.252
LOWER LIMIT		51586.5	10.709	107638.5	7.252
LAB SAMPLE ID	SAMPLE NO.				
2945158	2945158BLANK	135990	11.204	240965	7.753
2945159	2945159LCS	135470	11.209	240542	7.753
2945160	2945160MS	122015	11.205	229353	7.753
2945161	2945161MSD	131047	11.206	240726	7.753
60375626016	GB-32/0-2	129345	11.204	245850	7.753
60375626020	GB-60/2-4	112905	11.251	191335	7.757
60375626021	GB-60/5-7	133714	11.218	234196	7.753
60375626025	GB-59/2-4	116672	11.223	233499	7.754
60375626026	GB-59/8-10	128945	11.208	230859	7.753
60375626027	GB-52/2-3	128809	11.217	240067	7.753
60375626028	GB-52/3-5	137061	11.213	246625	7.753
60375626029	GB-45/0-2	161584	11.223	224931	7.757
60375626029 DL 10	GB-45/0-2	103348	11.205	216456	7.753
60375626030	GB-45/2-4	137881	11.207	253248	7.753
60375626031	GB-38/0-2	132716	11.212	248822	7.753
60375626032	GB-38/3-5	133400	11.206	242676	7.753

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

GB-47/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626001
Date Analyzed: 07/27/2021 16:29
Lab File ID: 072721.B\0727AP19.D
Initial wt/vol: 30.69 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	<2.0	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	<3.0	U
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.3	U
129-00-0	Pyrene	<2.2	U

SAMPLE NO.

GB-47/5-7

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626002
Date Analyzed: 07/27/2021 16:46
Lab File ID: 072721.B\0727AP20.D
Initial wt/vol: 30.03 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 23.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.6	U
208-96-8	Acenaphthylene	<1.6	U
120-12-7	Anthracene	<1.8	U
56-55-3	Benzo(a)anthracene	<2.0	U
50-32-8	Benzo(a)pyrene	<1.6	U
205-99-2	Benzo(b)fluoranthene	<2.1	U
191-24-2	Benzo(g,h,i)perylene	<1.9	U
207-08-9	Benzo(k)fluoranthene	<2.4	U
218-01-9	Chrysene	<2.0	U
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	<3.2	U
86-73-7	Fluorene	<1.7	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.8	U
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	<3.5	U
129-00-0	Pyrene	<2.3	U

SAMPLE NO.

GB-41/4-6

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626003
Date Analyzed: 07/27/2021 17:03
Lab File ID: 072721.B\0727AP21.D
Initial wt/vol: 31.16 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	2.2	J
205-99-2	Benzo(b)fluoranthene	4.3	
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	3.4	J
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	10.8	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	5.3	
129-00-0	Pyrene	8.0	

SAMPLE NO.

GB-41/6-8

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626004
Date Analyzed: 07/27/2021 17:20
Lab File ID: 072721.B\0727AP22.D
Initial wt/vol: 30.84 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	<1.9	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	4.5	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.3	U
129-00-0	Pyrene	3.3	J

SAMPLE NO.

GB-34/1-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626005
Date Analyzed: 07/27/2021 17:37
Lab File ID: 072721.B\0727AP23.D
Initial wt/vol: 30.49 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 17.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	3.6	J
56-55-3	Benzo(a)anthracene	10.2	
50-32-8	Benzo(a)pyrene	8.2	
205-99-2	Benzo(b)fluoranthene	14.1	
191-24-2	Benzo(g,h,i)perylene	7.7	
207-08-9	Benzo(k)fluoranthene	7.8	
218-01-9	Chrysene	10.7	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	28.6	
86-73-7	Fluorene	<1.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.9	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	18.2	
129-00-0	Pyrene	21.9	

SAMPLE NO.

GB-34/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626006
Date Analyzed: 07/27/2021 17:54
Lab File ID: 072721.B\0727AP24.D
Initial wt/vol: 31.29 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 23.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	5.6	
50-32-8	Benzo(a)pyrene	6.4	
205-99-2	Benzo(b)fluoranthene	12.5	
191-24-2	Benzo(g,h,i)perylene	6.0	
207-08-9	Benzo(k)fluoranthene	6.7	
218-01-9	Chrysene	9.9	
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	22.9	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.8	
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	6.6	
129-00-0	Pyrene	17.6	

SAMPLE NO.

GB-40/1.5-3.5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626009
Date Analyzed: 07/27/2021 18:12
Lab File ID: 072721.B\0727AP25.D
Initial wt/vol: 30.97 g
Final wt/vol: 5 mL
Dilution: 10
Instrument: 60MSS5
Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	147	J
208-96-8	Acenaphthylene	<74.3	U
120-12-7	Anthracene	546	
56-55-3	Benzo(a)anthracene	978	
50-32-8	Benzo(a)pyrene	666	
205-99-2	Benzo(b)fluoranthene	1010	
191-24-2	Benzo(g,h,i)perylene	470	
207-08-9	Benzo(k)fluoranthene	579	
218-01-9	Chrysene	908	
53-70-3	Dibenz(a,h)anthracene	<85.8	U
206-44-0	Fluoranthene	2500	
86-73-7	Fluorene	210	
193-39-5	Indeno(1,2,3-cd)pyrene	395	
91-20-3	Naphthalene	<85.2	U
85-01-8	Phenanthrene	2060	
129-00-0	Pyrene	1820	

SAMPLE NO.

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

GB-40/11-13

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626
Date Extracted: 07/25/2021 20:56 Lab Sample ID: 60375626010
Date Analyzed: 07/27/2021 18:29 Lab File ID: 072721.B\0727AP26.D
Initial wt/vol: 31.32 g Final wt/vol: 1 mL Dilution: 1 Instrument: 60MSS5 Percent Moisture: 24.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	44.0	
208-96-8	Acenaphthylene	<1.6	U
120-12-7	Anthracene	78.4	
56-55-3	Benzo(a)anthracene	272	
50-32-8	Benzo(a)pyrene	233	
205-99-2	Benzo(b)fluoranthene	401	
191-24-2	Benzo(g,h,i)perylene	189	
207-08-9	Benzo(k)fluoranthene	194	
218-01-9	Chrysene	302	
53-70-3	Dibenz(a,h)anthracene	41.6	
206-44-0	Fluoranthene	618	
86-73-7	Fluorene	39.5	
193-39-5	Indeno(1,2,3-cd)pyrene	157	
91-20-3	Naphthalene	3.0	J
85-01-8	Phenanthrene	452	
129-00-0	Pyrene	548	

SAMPLE NO.

GB-39/5-6

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626011
Date Analyzed: 07/27/2021 18:46
Lab File ID: 072721.B\0727AP27.D
Initial wt/vol: 30.39 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	3.3	J
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	2.2	J
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	7.0	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	5.7	
129-00-0	Pyrene	5.0	

SAMPLE NO.

GB-39/6-7

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626012
Date Analyzed: 07/27/2021 19:03
Lab File ID: 072721.B\0727AP28.D
Initial wt/vol: 30.49 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	<1.9	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	<3.0	U
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.3	U
129-00-0	Pyrene	<2.2	U

SAMPLE NO.

GB-32/0-2

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626016
Date Analyzed: 07/27/2021 19:20
Lab File ID: 072721.B\0727AP29.D
Initial wt/vol: 30.2 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	44.5	
208-96-8	Acenaphthylene	2.9	J
120-12-7	Anthracene	95.5	
56-55-3	Benzo(a)anthracene	474	
50-32-8	Benzo(a)pyrene	419	
205-99-2	Benzo(b)fluoranthene	661	
191-24-2	Benzo(g,h,i)perylene	332	
207-08-9	Benzo(k)fluoranthene	217	
218-01-9	Chrysene	519	
53-70-3	Dibenz(a,h)anthracene	68.9	
86-73-7	Fluorene	33.5	
193-39-5	Indeno(1,2,3-cd)pyrene	272	
91-20-3	Naphthalene	3.6	J
85-01-8	Phenanthrene	498	

SAMPLE NO.

GB-32/2-4

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626017
Date Analyzed: 07/27/2021 19:37
Lab File ID: 072721.B\0727AP30.D
Initial wt/vol: 30.32 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<2.0	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	3.3	J
191-24-2	Benzo(g,h,i)perylene	<1.9	U
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	2.5	J
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	6.9	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.8	U
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	4.7	
129-00-0	Pyrene	5.2	

SAMPLE NO.

GB-60/2-4

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626020
Date Analyzed: 07/28/2021 09:17
Lab File ID: 072821.B\0728AP01.D
Initial wt/vol: 30.67 g
Final wt/vol: 5 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	18.1	J
208-96-8	Acenaphthylene	<7.5	U
120-12-7	Anthracene	26.1	
56-55-3	Benzo(a)anthracene	54.3	
50-32-8	Benzo(a)pyrene	47.9	
205-99-2	Benzo(b)fluoranthene	75.2	
191-24-2	Benzo(g,h,i)perylene	39.3	
207-08-9	Benzo(k)fluoranthene	37.2	
218-01-9	Chrysene	73.0	
53-70-3	Dibenz(a,h)anthracene	<8.7	U
206-44-0	Fluoranthene	193	
86-73-7	Fluorene	12.9	J
193-39-5	Indeno(1,2,3-cd)pyrene	26.8	
91-20-3	Naphthalene	<8.6	U
85-01-8	Phenanthrene	111	
129-00-0	Pyrene	171	

SAMPLE NO.

GB-60/5-7

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626021
Date Analyzed: 07/28/2021 09:34
Lab File ID: 072821.B\0728AP02.D
Initial wt/vol: 30.02 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	<2.0	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	<3.1	U
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.8	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.3	U
129-00-0	Pyrene	<2.2	U

SAMPLE NO.

GB-59/2-4

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626025
Date Analyzed: 07/28/2021 09:51
Lab File ID: 072821.B\0728AP03.D
Initial wt/vol: 31.01 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	2.2	J
208-96-8	Acenaphthylene	8.2	
120-12-7	Anthracene	14.8	
56-55-3	Benzo(a)anthracene	64.2	
50-32-8	Benzo(a)pyrene	56.9	
205-99-2	Benzo(b)fluoranthene	101	
191-24-2	Benzo(g,h,i)perylene	44.2	
207-08-9	Benzo(k)fluoranthene	37.5	
218-01-9	Chrysene	73.5	
53-70-3	Dibenz(a,h)anthracene	8.6	
206-44-0	Fluoranthene	137	
86-73-7	Fluorene	4.3	
193-39-5	Indeno(1,2,3-cd)pyrene	34.9	
91-20-3	Naphthalene	3.9	J
85-01-8	Phenanthrene	74.7	
129-00-0	Pyrene	145	

SAMPLE NO.

GB-59/8-10

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626026
Date Analyzed: 07/28/2021 10:08
Lab File ID: 072821.B\0728AP04.D
Initial wt/vol: 30.17 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	<2.0	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	<2.0	U
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	<3.1	U
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.8	U
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	<3.4	U
129-00-0	Pyrene	<2.2	U

SAMPLE NO.

GB-52/2-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626027
Date Analyzed: 07/28/2021 10:25
Lab File ID: 072821.B\0728AP05.D
Initial wt/vol: 31.1 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.6	U
56-55-3	Benzo(a)anthracene	11.1	
50-32-8	Benzo(a)pyrene	<1.4	U
205-99-2	Benzo(b)fluoranthene	28.5	
191-24-2	Benzo(g,h,i)perylene	15.4	
207-08-9	Benzo(k)fluoranthene	10.9	
218-01-9	Chrysene	17.3	
53-70-3	Dibenz(a,h)anthracene	2.6	J
206-44-0	Fluoranthene	27.3	
86-73-7	Fluorene	<1.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	11.3	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	10.9	
129-00-0	Pyrene	24.6	

SAMPLE NO.

GB-52/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626028
Date Analyzed: 07/28/2021 10:42
Lab File ID: 072821.B\0728AP06.D
Initial wt/vol: 30.37 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.6	U
208-96-8	Acenaphthylene	<1.6	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	4.6	
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	9.5	
191-24-2	Benzo(g,h,i)perylene	5.1	
207-08-9	Benzo(k)fluoranthene	5.1	
218-01-9	Chrysene	7.0	
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	14.6	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.0	J
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	6.3	
129-00-0	Pyrene	12.1	

SAMPLE NO.

GB-45/0-2

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626029
Date Analyzed: 07/28/2021 10:59
Lab File ID: 072821.B\0728AP07.D
Initial wt/vol: 31.25 g
Final wt/vol: 5 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	1230	
208-96-8	Acenaphthylene	68.4	
120-12-7	Anthracene	2880	
191-24-2	Benzo(g,h,i)perylene	3630	
207-08-9	Benzo(k)fluoranthene	3580	
53-70-3	Dibenz(a,h)anthracene	729	
86-73-7	Fluorene	1280	
193-39-5	Indeno(1,2,3-cd)pyrene	2880	
91-20-3	Naphthalene	254	

SAMPLE NO.

GB-45/2-4

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626030
Date Analyzed: 07/28/2021 11:16
Lab File ID: 072821.B\0728AP08.D
Initial wt/vol: 30.92 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	3.5	J
56-55-3	Benzo(a)anthracene	8.3	
50-32-8	Benzo(a)pyrene	6.8	
205-99-2	Benzo(b)fluoranthene	12.1	
191-24-2	Benzo(g,h,i)perylene	5.6	
207-08-9	Benzo(k)fluoranthene	5.8	
218-01-9	Chrysene	8.8	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	25.5	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.5	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	20.2	
129-00-0	Pyrene	18.6	

SAMPLE NO.

GB-32/0-2

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626016
Date Analyzed: 07/28/2021 11:34
Lab File ID: 072821.B\0728AP09.D
Initial wt/vol: 30.2 g
Final wt/vol: 1 mL
Dilution: 10
Instrument: 60MSS5
Percent Moisture: 19.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
206-44-0	Fluoranthene	1090	
129-00-0	Pyrene	866	

SAMPLE NO.

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

GB-45/0-2

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 60375626029
Date Analyzed: 07/28/2021 12:25
Lab File ID: 072821.B\0728AP12.D
Initial wt/vol: 31.25 g Final wt/vol: 5 mL Dilution: 10
Instrument: 60MSS5 Percent Moisture: 20.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
56-55-3	Benzo(a)anthracene	7600	
50-32-8	Benzo(a)pyrene	6310	
205-99-2	Benzo(b)fluoranthene	10100	
218-01-9	Chrysene	7590	
206-44-0	Fluoranthene	17800	
85-01-8	Phenanthrene	17200	
129-00-0	Pyrene	15200	

SAMPLE NO.

GB-38/0-2

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375626031
Date Analyzed: 07/28/2021 13:17
Lab File ID: 072821.B\0728AP15.D
Initial wt/vol: 30.3 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 14.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	3.0	J
208-96-8	Acenaphthylene	2.7	J
120-12-7	Anthracene	7.8	
56-55-3	Benzo(a)anthracene	38.2	
50-32-8	Benzo(a)pyrene	33.8	
205-99-2	Benzo(b)fluoranthene	56.7	
191-24-2	Benzo(g,h,i)perylene	27.8	
207-08-9	Benzo(k)fluoranthene	26.9	
218-01-9	Chrysene	41.7	
53-70-3	Dibenz(a,h)anthracene	5.6	
206-44-0	Fluoranthene	74.1	
86-73-7	Fluorene	2.4	J
193-39-5	Indeno(1,2,3-cd)pyrene	22.2	
91-20-3	Naphthalene	<1.6	U
85-01-8	Phenanthrene	43.6	
129-00-0	Pyrene	67.8	

SAMPLE NO.

GB-38/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375626032
Date Analyzed: 07/28/2021 13:34
Lab File ID: 072821.B\0728AP16.D
Initial wt/vol: 30.02 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	<2.0	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	<2.0	U
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	<3.1	U
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.8	U
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	<3.4	U
129-00-0	Pyrene	<2.2	U

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375626

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.11894	1.09422	1.06549	1.09074	1.06233	1.07547
Acenaphthylene	Averaged	1.79964	1.76321	1.71369	1.75430	1.72876	1.79109
Anthracene	Averaged	0.95480	0.98971	0.96996	1.02024	0.95352	0.91919
Benzo(a)anthracene	Averaged	1.27227	1.27235	1.22018	1.25033	1.17391	1.19779
Benzo(a)pyrene	Averaged	1.16001	1.16178	1.11150	1.18053	1.10095	1.09725
Benzo(b)fluoranthene	Averaged	1.36990	1.36367	1.29770	1.32666	1.29133	1.28286
Benzo(g,h,i)perylene	Averaged	0.56259	0.56634	0.51596	0.56411	0.50102	0.54197
Benzo(k)fluoranthene	Averaged	1.36448	1.32831	1.25870	1.40703	1.23369	1.19632
Chrysene	Averaged	1.10282	1.12963	1.07868	1.12828	1.06358	1.06173
Dibenz(a,h)anthracene	Averaged	0.74399	0.74879	0.70296	0.75423	0.68003	0.70465
Fluoranthene	Averaged	1.14036	1.17220	1.14496	1.19523	1.12899	1.08856
Fluorene	Averaged	1.28712	1.25285	1.22613	1.25270	1.22477	1.24394
Indeno(1,2,3-cd)pyrene	Averaged	0.78877	0.80206	0.74322	0.79324	0.72210	0.77636
Naphthalene	Averaged	1.01672	0.97880	0.95885	0.97000	0.94927	0.92788
Phenanthrene	Averaged	0.96149	0.98305	0.95421	1.00263	0.93523	0.92065
Pyrene	Averaged	1.39709	1.43920	1.38165	1.44039	1.35084	1.32652
2-Fluorobiphenyl (S)	Averaged	1.43833	1.39109	1.34963	1.37522	1.30411	1.31850
Terphenyl-d14 (S)	Averaged	1.37860	1.11909	1.05333	1.07924	1.01676	0.97814

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375626

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.04529	0.97405
Acenaphthylene	Averaged	1.74049	1.61912
Anthracene	Averaged	0.89655	0.84396
Benzo(a)anthracene	Averaged	1.17451	1.07257
Benzo(a)pyrene	Averaged	1.07722	0.99775
Benzo(b)fluoranthene	Averaged	1.20236	1.15863
Benzo(g,h,i)perylene	Averaged	0.56424	0.45218
Benzo(k)fluoranthene	Averaged	1.13691	1.10135
Chrysene	Averaged	1.05875	1.00538
Dibenz(a,h)anthracene	Averaged	0.69301	0.59322
Fluoranthene	Averaged	1.03891	0.96136
Fluorene	Averaged	1.21855	1.12528
Indeno(1,2,3-cd)pyrene	Averaged	0.78171	0.64710
Naphthalene	Averaged	0.93595	0.88423
Phenanthrene	Averaged	0.88955	0.82761
Pyrene	Averaged	1.31974	1.20996
2-Fluorobiphenyl (S)	Averaged	1.28345	1.17304
Terphenyl-d14 (S)	Averaged	0.97497	0.91027

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375626

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	4.07400			1.06582	
Acenaphthylene	Averaged	3.24813			1.73879	
Anthracene	Averaged	5.89516			0.94349	
Benzo(a)anthracene	Averaged	5.51081			1.20424	
Benzo(a)pyrene	Averaged	5.27878			1.11087	
Benzo(b)fluoranthene	Averaged	5.73520			1.28664	
Benzo(g,h,i)perylene	Averaged	7.71237			0.53355	
Benzo(k)fluoranthene	Averaged	8.63097			1.25335	
Chrysene	Averaged	3.82632			1.07860	
Dibenz(a,h)anthracene	Averaged	7.43095			0.70261	
Fluoranthene	Averaged	6.92175			1.10882	
Fluorene	Averaged	3.84432			1.22892	
Indeno(1,2,3-cd)pyrene	Averaged	6.85201			0.75682	
Naphthalene	Averaged	4.10623			0.95271	
Phenanthrene	Averaged	5.96680			0.93430	
Pyrene	Averaged	5.55817			1.35818	
2-Fluorobiphenyl (S)	Averaged	6.06551			1.32917	
Terphenyl-d14 (S)	Averaged	13.46000			1.06380	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19896118ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:57

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721.B\0727APICV.D Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375626

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	0.22095	0.0500	0.9060	20.0000
Acenaphthylene	Averaged	1.73879	0.35133	0.0500	3.0080	20.0000
Anthracene	Averaged	0.94349	0.18059	0.0500	-2.5757	20.0000
Benzo(a)anthracene	Averaged	1.20424	0.22518	0.0500	-0.5352	20.0000
Benzo(a)pyrene	Averaged	1.11087	0.19714	0.0500	-1.2261	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	0.25506	0.0500	-0.2937	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.11115	0.0500	1.5775	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	0.25020	0.0500	-4.5498	20.0000
Chrysene	Averaged	1.07860	0.20717	0.0500	-1.5645	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.13678	0.0500	0.2906	20.0000
Fluoranthene	Averaged	1.10882	0.22009	0.0500	-1.8274	20.0000
Fluorene	Averaged	1.22892	0.24519	0.0500	1.2220	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.15867	0.0500	2.5815	20.0000
Naphthalene	Averaged	0.95271	0.18683	0.0500	-2.6064	20.0000
Phenanthrene	Averaged	0.93430	0.18236	0.0500	-1.4614	20.0000
Pyrene	Averaged	1.35818	0.26889	0.0500	-2.3305	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	0.00000	0.0500	-0.8029	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	0.00000	0.0500	-8.0523	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19736764CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 08:58

Instrument ID: 60MSS5 GC Column: Col 1
Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072821.B\0728API6.D
Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375626

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	1.06391	0.0500	-0.1793	20.0000
Acenaphthylene	Averaged	1.73879	1.77380	0.0500	2.0138	20.0000
Anthracene	Averaged	0.94349	0.91912	0.0500	-2.5832	20.0000
Benzo(a)anthracene	Averaged	1.20424	1.17702	0.0500	-2.2604	20.0000
Benzo(a)pyrene	Averaged	1.11087	1.07600	0.0500	-3.1391	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	1.32038	0.0500	2.6220	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.49315	0.0500	-7.5723	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	1.18442	0.0500	-5.4998	20.0000
Chrysene	Averaged	1.07860	1.06280	0.0500	-1.4653	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.66045	0.0500	-6.0001	20.0000
Fluoranthene	Averaged	1.10882	1.07122	0.0500	-3.3909	20.0000
Fluorene	Averaged	1.22892	1.23598	0.0500	0.5749	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.70906	0.0500	-6.3103	20.0000
Naphthalene	Averaged	0.95271	0.95405	0.0500	0.1402	20.0000
Phenanthrene	Averaged	0.93430	0.91713	0.0500	-1.8385	20.0000
Pyrene	Averaged	1.35818	1.40736	0.0500	3.6215	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	1.31314	0.0500	-1.2062	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	1.06237	0.0500	-0.1345	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

BLANK

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 2945154
Date Analyzed: 07/27/2021 15:54
Lab File ID: 072721.B\0727AP17.D
Initial wt/vol: 30.36 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.2	U
208-96-8	Acenaphthylene	<1.2	U
120-12-7	Anthracene	<1.4	U
56-55-3	Benzo(a)anthracene	<1.5	U
50-32-8	Benzo(a)pyrene	<1.2	U
205-99-2	Benzo(b)fluoranthene	<1.6	U
191-24-2	Benzo(g,h,i)perylene	<1.5	U
207-08-9	Benzo(k)fluoranthene	<1.8	U
218-01-9	Chrysene	<1.6	U
53-70-3	Dibenz(a,h)anthracene	<1.4	U
206-44-0	Fluoranthene	<2.5	U
86-73-7	Fluorene	<1.3	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.4	U
91-20-3	Naphthalene	<1.4	U
85-01-8	Phenanthrene	<2.7	U
129-00-0	Pyrene	<1.8	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 2945155
Date Analyzed: 07/27/2021 16:12
Lab File ID: 072721.B\0727AP18.D
Initial wt/vol: 30.45 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	23.0	
208-96-8	Acenaphthylene	22.6	
120-12-7	Anthracene	26.1	
56-55-3	Benzo(a)anthracene	26.8	
50-32-8	Benzo(a)pyrene	26.3	
205-99-2	Benzo(b)fluoranthene	26.4	
191-24-2	Benzo(g,h,i)perylene	26.9	
207-08-9	Benzo(k)fluoranthene	27.8	
218-01-9	Chrysene	26.8	
53-70-3	Dibenz(a,h)anthracene	27.3	
206-44-0	Fluoranthene	28.0	
86-73-7	Fluorene	23.9	
193-39-5	Indeno(1,2,3-cd)pyrene	26.9	
91-20-3	Naphthalene	22.6	
85-01-8	Phenanthrene	26.3	
129-00-0	Pyrene	27.8	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 2945156
Date Analyzed: 07/27/2021 19:54
Lab File ID: 072721.B\0727AP31.D
Initial wt/vol: 30.54 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	32.4	
208-96-8	Acenaphthylene	31.1	
120-12-7	Anthracene	35.4	
56-55-3	Benzo(a)anthracene	37.8	
50-32-8	Benzo(a)pyrene	36.0	
205-99-2	Benzo(b)fluoranthene	39.3	
191-24-2	Benzo(g,h,i)perylene	37.3	
207-08-9	Benzo(k)fluoranthene	38.8	
218-01-9	Chrysene	37.9	
53-70-3	Dibenz(a,h)anthracene	35.8	
206-44-0	Fluoranthene	40.8	
86-73-7	Fluorene	33.4	
193-39-5	Indeno(1,2,3-cd)pyrene	36.1	
91-20-3	Naphthalene	32.3	
85-01-8	Phenanthrene	36.9	
129-00-0	Pyrene	40.8	

SAMPLE NO.

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:56
Lab Sample ID: 2945157
Date Analyzed: 07/27/2021 20:11
Lab File ID: 072721.B\0727AP32.D
Initial wt/vol: 30.45 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	27.0	
208-96-8	Acenaphthylene	26.4	
120-12-7	Anthracene	32.5	
56-55-3	Benzo(a)anthracene	34.4	
50-32-8	Benzo(a)pyrene	32.4	
205-99-2	Benzo(b)fluoranthene	34.5	
191-24-2	Benzo(g,h,i)perylene	34.4	
207-08-9	Benzo(k)fluoranthene	34.7	
218-01-9	Chrysene	33.9	
53-70-3	Dibenz(a,h)anthracene	33.2	
206-44-0	Fluoranthene	37.3	
86-73-7	Fluorene	29.2	
193-39-5	Indeno(1,2,3-cd)pyrene	33.4	
91-20-3	Naphthalene	26.1	
85-01-8	Phenanthrene	33.6	
129-00-0	Pyrene	37.2	

SAMPLE NO.

BLANK

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 2945158
Date Analyzed: 07/28/2021 12:42
Lab File ID: 072821.B\0728AP13.D
Initial wt/vol: 30.66 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.2	U
208-96-8	Acenaphthylene	<1.2	U
120-12-7	Anthracene	<1.3	U
56-55-3	Benzo(a)anthracene	<1.5	U
50-32-8	Benzo(a)pyrene	<1.2	U
205-99-2	Benzo(b)fluoranthene	<1.6	U
191-24-2	Benzo(g,h,i)perylene	<1.4	U
207-08-9	Benzo(k)fluoranthene	<1.8	U
218-01-9	Chrysene	<1.5	U
53-70-3	Dibenz(a,h)anthracene	<1.4	U
206-44-0	Fluoranthene	<2.4	U
86-73-7	Fluorene	<1.3	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.4	U
91-20-3	Naphthalene	<1.4	U
85-01-8	Phenanthrene	<2.6	U
129-00-0	Pyrene	<1.7	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 2945159
Date Analyzed: 07/28/2021 12:59
Lab File ID: 072821.B\0728AP14.D
Initial wt/vol: 31.38 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	26.5	
208-96-8	Acenaphthylene	25.6	
120-12-7	Anthracene	28.4	
56-55-3	Benzo(a)anthracene	28.8	
50-32-8	Benzo(a)pyrene	27.4	
205-99-2	Benzo(b)fluoranthene	28.5	
191-24-2	Benzo(g,h,i)perylene	30.2	
207-08-9	Benzo(k)fluoranthene	29.0	
218-01-9	Chrysene	28.6	
53-70-3	Dibenz(a,h)anthracene	29.8	
206-44-0	Fluoranthene	30.3	
86-73-7	Fluorene	27.2	
193-39-5	Indeno(1,2,3-cd)pyrene	29.2	
91-20-3	Naphthalene	26.0	
85-01-8	Phenanthrene	28.8	
129-00-0	Pyrene	30.3	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid SDG No.: 60375626
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 2945160
Date Analyzed: 07/28/2021 13:51
Lab File ID: 072821.B\0728AP17.D
Initial wt/vol: 30.15 g Final wt/vol: 1 mL Dilution: 1
Instrument: 60MSS5 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	34.5	
208-96-8	Acenaphthylene	33.6	
120-12-7	Anthracene	37.4	
56-55-3	Benzo(a)anthracene	37.3	
50-32-8	Benzo(a)pyrene	36.4	
205-99-2	Benzo(b)fluoranthene	36.4	
191-24-2	Benzo(g,h,i)perylene	36.0	
207-08-9	Benzo(k)fluoranthene	38.3	
218-01-9	Chrysene	36.7	
53-70-3	Dibenz(a,h)anthracene	35.7	
206-44-0	Fluoranthene	40.2	
86-73-7	Fluorene	36.0	
193-39-5	Indeno(1,2,3-cd)pyrene	34.7	
91-20-3	Naphthalene	34.6	
85-01-8	Phenanthrene	38.6	
129-00-0	Pyrene	39.9	

SAMPLE NO.

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid SDG No.: 60375626
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 2945161
Date Analyzed: 07/28/2021 14:08
Lab File ID: 072821.B\0728AP18.D
Initial wt/vol: 30.01 g Final wt/vol: 1 mL Dilution: 1
Instrument: 60MSS5 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	34.6	
208-96-8	Acenaphthylene	34.0	
120-12-7	Anthracene	37.5	
56-55-3	Benzo(a)anthracene	38.4	
50-32-8	Benzo(a)pyrene	37.2	
205-99-2	Benzo(b)fluoranthene	40.3	
191-24-2	Benzo(g,h,i)perylene	39.3	
207-08-9	Benzo(k)fluoranthene	36.5	
218-01-9	Chrysene	37.5	
53-70-3	Dibenz(a,h)anthracene	39.0	
206-44-0	Fluoranthene	40.4	
86-73-7	Fluorene	36.6	
193-39-5	Indeno(1,2,3-cd)pyrene	37.1	
91-20-3	Naphthalene	35.0	
85-01-8	Phenanthrene	38.3	
129-00-0	Pyrene	40.3	

PCB - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8

LAB SAMPLE ID	SAMPLE NAME	DCBP
2945138	2945138BLANK	90
2945139	2945139LCS	92
2945140	2945140MS	100
2945141	2945141MSD	102
60375626001	GB-47/3-5	101
60375626002	GB-47/5-7	91
60375626003	GB-41/4-6	97
60375626004	GB-41/6-8	97
60375626005	GB-34/1-3	90
60375626006	GB-34/3-5	94
60375626007	GB-33/2-4	130*
60375626008	GB-33/4-6	107
60375626009	GB-40/1.5-3.5	104
60375626010	GB-40/11-13	99
60375626011	GB-39/5-6	102
60375626012	GB-39/6-7	107
60375626013	GB-46/2-4	91
60375626014	GB-46/2-4D	107
60375626015	GB-46/4-6	102
60375626016	GB-32/0-2	99
60375626017	GB-32/2-4	115
60375626018	GB-53/0-2	118
60375626019	GB-53/3-5	107
60375626020	GB-60/2-4	93

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(35-120)

* Values outside of QC Limits

PCB - FORM II SVOA-2
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8

LAB SAMPLE ID	SAMPLE NAME	DCBP
2945143	2945143BLANK	91
2945144	2945144LCS	98
2945145	2945145MS	108
2945146	2945146MSD	103
60375626021	GB-60/5-7	90
60375626022	GB-66/3-5	98
60375626023	GB-66/3-5D	95
60375626024	GB-66/5-7	95
60375626025	GB-59/2-4	100
60375626026	GB-59/8-10	99
60375626027	GB-52/2-3	90
60375626028	GB-52/3-5	98
60375626029	GB-45/0-2	97
60375626030	GB-45/2-4	97
60375626031	GB-38/0-2	100
60375626032	GB-38/3-5	102

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(35-120)

* Values outside of QC Limits

PCB - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2945139LCS
Date Extracted: 07/25/2021
Date Analyzed (1): 07/26/2021
Instrument: 60GCS8
LCS Lot No: 42472
Lab File ID: 072621-1.B\0726210023.D
SDG No.: 60375626

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	165	153	93	65-120
PCB-1260 (Aroclor 1260)	165	156	95	65-120

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2945144LCS
Date Extracted: 07/23/2021
Date Analyzed (1): 07/26/2021
Instrument: 60GCS8
LCS Lot No: 42472
Lab File ID: 072621-1.B\0726210025.D
SDG No.: 60375626

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	160	157	98	65-120
PCB-1260 (Aroclor 1260)	160	158	99	65-120

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2945140MS
Date Extracted: 07/25/2021
Date Analyzed (1): 07/27/2021
Instrument: 60GCS8
Lab File ID: 072621-1.B\0726210079.D
Parent Sample ID: GB-32/2-4
SDG No.: 60375626

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	206	<10.4	216	104	30-130
PCB-1260 (Aroclor 1260)	206	<8.2	222	107	15-155

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60GCS8 Matrix Spike Duplicate - Sample No: 2945141MSD

Lab File ID (2): 072621-1.B\0726210080.D Date Analyzed (2): 07/27/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
PCB-1016 (Aroclor 1016)	202	210	104	3	0-40	30-130
PCB-1260 (Aroclor 1260)	202	217	107	2	0-40	15-155

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

08/27/2021 1:49

PCB - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2945145MS
Date Extracted: 07/23/2021
Date Analyzed (1): 07/27/2021
Instrument: 60GCS8
Lab File ID: 072621-1.B\0726210100.D
Parent Sample ID: GB-38/3-5
SDG No.: 60375626

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	205	<10.1	232	114	30-130
PCB-1260 (Aroclor 1260)	205	<8.0	237	116	15-155

Spike Recovery: 0 out of 2 outside limits.

08/27/2021 1:49

PCB - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60GCS8 Matrix Spike Duplicate - Sample No: 2945146MSD

Lab File ID (2): 072621-1.B\0726210101.D Date Analyzed (2): 07/27/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
PCB-1016 (Aroclor 1016)	207	250	121	7	0-40	30-130
PCB-1260 (Aroclor 1260)	207	235	113	1	0-40	15-155

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

SAMPLE NO.

2945138BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8 Matrix: Solid Lab Sample ID: 2945138

Lab File ID (1): 072621-1.B\0726210022.D Date Analyzed (1): 07/26/2021 Time (1):14:33

Lab File ID (2): 072621-2.B\0726210022.D Date Analyzed (2): 07/26/2021 Time (2):14:33

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2945139LCS	2945139	072621-1.B\0726210023.D	07/26/2021 14:51
2945139LCS	2945139	072621-2.B\0726210023.D	07/26/2021 14:51
GB-47/3-5	60375626001	072621-1.B\0726210060.D	07/27/2021 01:52
GB-47/5-7	60375626002	072621-1.B\0726210061.D	07/27/2021 02:10
GB-41/4-6	60375626003	072621-1.B\0726210062.D	07/27/2021 02:28
GB-41/6-8	60375626004	072621-1.B\0726210063.D	07/27/2021 02:46
GB-34/1-3	60375626005	072621-1.B\0726210064.D	07/27/2021 03:04
GB-34/3-5	60375626006	072621-1.B\0726210065.D	07/27/2021 03:22
GB-33/2-4	60375626007	072621-1.B\0726210066.D	07/27/2021 03:40
GB-33/4-6	60375626008	072621-1.B\0726210067.D	07/27/2021 03:57
GB-40/1.5-3.5	60375626009	072621-1.B\0726210068.D	07/27/2021 04:15
GB-40/11-13	60375626010	072621-1.B\0726210069.D	07/27/2021 04:33
GB-39/5-6	60375626011	072621-1.B\0726210070.D	07/27/2021 04:51
GB-39/6-7	60375626012	072621-1.B\0726210073.D	07/27/2021 05:45
GB-46/2-4	60375626013	072621-1.B\0726210074.D	07/27/2021 06:02
GB-46/2-4D	60375626014	072621-1.B\0726210075.D	07/27/2021 06:20
GB-46/4-6	60375626015	072621-1.B\0726210076.D	07/27/2021 06:38
GB-32/0-2	60375626016	072621-1.B\0726210077.D	07/27/2021 06:56
GB-32/2-4	60375626017	072621-1.B\0726210078.D	07/27/2021 07:14
2945140MS	2945140	072621-1.B\0726210079.D	07/27/2021 07:32
2945140MS	2945140	072621-2.B\0726210079.D	07/27/2021 07:32
2945141MSD	2945141	072621-1.B\0726210080.D	07/27/2021 07:50
2945141MSD	2945141	072621-2.B\0726210080.D	07/27/2021 07:50
GB-53/0-2	60375626018	072621-1.B\0726210081.D	07/27/2021 08:08
GB-53/3-5	60375626019	072621-1.B\0726210082.D	07/27/2021 08:25
GB-60/2-4	60375626020	072621-1.B\0726210083.D	07/27/2021 08:43

SAMPLE NO.

2945143BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8 Matrix: Solid Lab Sample ID: 2945143

Lab File ID (1): 072621-1.B\0726210024.D Date Analyzed (1): 07/26/2021 Time (1): 15:09

Lab File ID (2): 072621-2.B\0726210024.D Date Analyzed (2): 07/26/2021 Time (2): 15:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2945144LCS	2945144	072621-1.B\0726210025.D	07/26/2021 15:27
2945144LCS	2945144	072621-2.B\0726210025.D	07/26/2021 15:27
GB-60/5-7	60375626021	072621-1.B\0726210086.D	07/27/2021 09:37
GB-66/3-5	60375626022	072621-1.B\0726210087.D	07/27/2021 09:55
GB-66/3-5D	60375626023	072621-1.B\0726210088.D	07/27/2021 10:13
GB-66/5-7	60375626024	072621-1.B\0726210089.D	07/27/2021 10:31
GB-59/2-4	60375626025	072621-1.B\0726210090.D	07/27/2021 10:48
GB-59/8-10	60375626026	072621-1.B\0726210091.D	07/27/2021 11:06
GB-52/2-3	60375626027	072621-1.B\0726210092.D	07/27/2021 11:24
GB-52/3-5	60375626028	072621-1.B\0726210093.D	07/27/2021 11:42
GB-45/0-2	60375626029	072621-1.B\0726210094.D	07/27/2021 12:00
GB-45/2-4	60375626030	072621-1.B\0726210095.D	07/27/2021 12:18
GB-38/0-2	60375626031	072621-1.B\0726210098.D	07/27/2021 13:12
GB-38/3-5	60375626032	072621-1.B\0726210099.D	07/27/2021 13:29
2945145MS	2945145	072621-1.B\0726210100.D	07/27/2021 13:47
2945145MS	2945145	072621-2.B\0726210100.D	07/27/2021 13:47
2945146MSD	2945146	072621-1.B\0726210101.D	07/27/2021 14:05
2945146MSD	2945146	072621-2.B\0726210101.D	07/27/2021 14:05

SAMPLE NO.

GB-47/3-5

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:04
Lab Sample ID: 60375626001
Date Analyzed: 07/27/2021 01:52
Lab File ID: 072621-1.B\0726210060.D
Initial wt/vol: 30.27 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-47/5-7

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:04
Lab Sample ID: 60375626002
Date Analyzed: 07/27/2021 02:10
Lab File ID: 072621-1.B\0726210061.D
Initial wt/vol: 31.43 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 23.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-41/4-6

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626003

Date Analyzed: 07/27/2021 02:28 Lab File ID: 072621-1.B\0726210062.D

Initial wt/vol: 31.09 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-41/6-8

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626004

Date Analyzed: 07/27/2021 02:46 Lab File ID: 072621-1.B\0726210063.D

Initial wt/vol: 30.63 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-34/1-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626005

Date Analyzed: 07/27/2021 03:04 Lab File ID: 072621-1.B\0726210064.D

Initial wt/vol: 30.43 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 17.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-34/3-5

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:04
Lab Sample ID: 60375626006
Date Analyzed: 07/27/2021 03:22
Lab File ID: 072621-1.B\0726210065.D
Initial wt/vol: 30.51 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 23.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.5	U
11104-28-2	PCB-1221 (Aroclor 1221)	<10.1	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.2	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<4.0	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.4	U

SAMPLE NO.

GB-33/2-4

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626007

Date Analyzed: 07/27/2021 03:40 Lab File ID: 072621-1.B\0726210066.D

Initial wt/vol: 31.35 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-33/4-6

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626008

Date Analyzed: 07/27/2021 03:57 Lab File ID: 072621-1.B\0726210067.D

Initial wt/vol: 30.69 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 23.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.5	U
11104-28-2	PCB-1221 (Aroclor 1221)	<10.0	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.1	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.3	U

SAMPLE NO.

GB-40/1.5-3.5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626009

Date Analyzed: 07/27/2021 04:15 Lab File ID: 072621-1.B\0726210068.D

Initial wt/vol: 30.31 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-40/11-13

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:04
Lab Sample ID: 60375626010
Date Analyzed: 07/27/2021 04:33
Lab File ID: 072621-1.B\0726210069.D
Initial wt/vol: 31.18 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 24.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.5	U
11104-28-2	PCB-1221 (Aroclor 1221)	<10.0	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.1	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.3	U

SAMPLE NO.

GB-39/5-6

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626011

Date Analyzed: 07/27/2021 04:51 Lab File ID: 072621-1.B\0726210070.D

Initial wt/vol: 31.06 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-39/6-7

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626012

Date Analyzed: 07/27/2021 05:45 Lab File ID: 072621-1.B\0726210073.D

Initial wt/vol: 30.71 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-46/2-4

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:04
Lab Sample ID: 60375626013
Date Analyzed: 07/27/2021 06:02
Lab File ID: 072621-1.B\0726210074.D
Initial wt/vol: 31.13 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 20.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-46/2-4D

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:04
Lab Sample ID: 60375626014
Date Analyzed: 07/27/2021 06:20
Lab File ID: 072621-1.B\0726210075.D
Initial wt/vol: 30.43 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 19.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-46/4-6

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626015

Date Analyzed: 07/27/2021 06:38 Lab File ID: 072621-1.B\0726210076.D

Initial wt/vol: 30.28 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.4	U
11104-28-2	PCB-1221 (Aroclor 1221)	<10	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.1	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.2	U

SAMPLE NO.

GB-32/0-2

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/25/2021 20:04
Lab Sample ID: 60375626016
Date Analyzed: 07/27/2021 06:56
Lab File ID: 072621-1.B\0726210077.D
Initial wt/vol: 30.69 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 19.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	14.6	J

SAMPLE NO.

GB-32/2-4

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626017

Date Analyzed: 07/27/2021 07:14 Lab File ID: 072621-1.B\0726210078.D

Initial wt/vol: 30.14 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.4	U
11104-28-2	PCB-1221 (Aroclor 1221)	<10	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.1	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.2	U

SAMPLE NO.

GB-53/0-2

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626018

Date Analyzed: 07/27/2021 08:08 Lab File ID: 072621-1.B\0726210081.D

Initial wt/vol: 30.17 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	10.4	J

SAMPLE NO.

GB-53/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626019

Date Analyzed: 07/27/2021 08:25 Lab File ID: 072621-1.B\0726210082.D

Initial wt/vol: 30.35 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 16.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.7	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.4	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.7	U

SAMPLE NO.

GB-60/2-4

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 60375626020

Date Analyzed: 07/27/2021 08:43 Lab File ID: 072621-1.B\0726210083.D

Initial wt/vol: 30.43 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-60/5-7

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375626021

Date Analyzed: 07/27/2021 09:37 Lab File ID: 072621-1.B\0726210086.D

Initial wt/vol: 30.32 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-66/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375626022

Date Analyzed: 07/27/2021 09:55 Lab File ID: 072621-1.B\0726210087.D

Initial wt/vol: 30.78 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-66/3-5D

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375626023

Date Analyzed: 07/27/2021 10:13 Lab File ID: 072621-1.B\0726210088.D

Initial wt/vol: 31.21 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-66/5-7

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375626024

Date Analyzed: 07/27/2021 10:31 Lab File ID: 072621-1.B\0726210089.D

Initial wt/vol: 30.53 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 22.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.4	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.9	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.0	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.2	U

SAMPLE NO.

GB-59/2-4

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/23/2021 16:45
Lab Sample ID: 60375626025
Date Analyzed: 07/27/2021 10:48
Lab File ID: 072621-1.B\0726210090.D
Initial wt/vol: 30.35 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 19.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-59/8-10

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375626026

Date Analyzed: 07/27/2021 11:06 Lab File ID: 072621-1.B\0726210091.D

Initial wt/vol: 31.5 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-52/2-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375626027

Date Analyzed: 07/27/2021 11:24 Lab File ID: 072621-1.B\0726210092.D

Initial wt/vol: 30.78 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-52/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375626028

Date Analyzed: 07/27/2021 11:42 Lab File ID: 072621-1.B\0726210093.D

Initial wt/vol: 30.24 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.4	U
11104-28-2	PCB-1221 (Aroclor 1221)	<10	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.1	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.2	U

SAMPLE NO.

GB-45/0-2

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375626029

Date Analyzed: 07/27/2021 12:00 Lab File ID: 072621-1.B\0726210094.D

Initial wt/vol: 30.31 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	9.9	J

SAMPLE NO.

GB-45/2-4

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/23/2021 16:45
Lab Sample ID: 60375626030
Date Analyzed: 07/27/2021 12:18
Lab File ID: 072621-1.B\0726210095.D
Initial wt/vol: 30.38 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 20.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-38/0-2

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375626031

Date Analyzed: 07/27/2021 13:12 Lab File ID: 072621-1.B\0726210098.D

Initial wt/vol: 30.52 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 14.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.4	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.1	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.1	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.1	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.5	U

SAMPLE NO.

GB-38/3-5

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 04:20
Matrix: Solid
SDG No.: 60375626
Date Extracted: 07/23/2021 16:45
Lab Sample ID: 60375626032
Date Analyzed: 07/27/2021 13:29
Lab File ID: 072621-1.B\0726210099.D
Initial wt/vol: 30.42 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Calibration File Names:

Level 01: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210011.D
Level 02: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210012.D
Level 03: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210013.D
Level 04: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210014.D
Level 05: 1268ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210028.D
1262ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210027.D
1248ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210026.D
1242ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210025.D
1232ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210024.D
122154ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210023.D
1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210015.D
Level 06: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210016.D
Level 07: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210017.D
Level 08: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210018.D
Level 09: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210019.D

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
1 PCB-1221 (Aroclor 1221)(1)	+++++	+++++	+++++	+++++	294310	+++++					
	+++++	+++++	+++++				AVRG		294310		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	231048	+++++					
	+++++	+++++	+++++				AVRG		231048		0.000e+000
(3)	+++++	+++++	+++++	+++++	706613	+++++					
	+++++	+++++	+++++				AVRG		706613		0.000e+000
2 PCB-1016 (Aroclor 1016) (1)	701000	617470	623735	472270	556160	536698					
	551539	577039	426185				AVRG		562455		14.56844
(2)	1474020	1256300	1258035	980363	1159898	1121734					
	1150250	1219050	908607				AVRG		1169806		14.08357
(3)	717320	632120	633300	513313	603913	575502					
	590478	627801	467426				AVRG		595686		12.20793
(4)	531720	460970	475440	360343	429565	418728					
	435786	464843	338758				AVRG		435128		13.51976
(5)	437060	387660	408455	306180	375728	369180					
	391961	422341	314984				AVRG		379283		11.74202

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
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Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1 / 0.8000000 Level 7	0.1000000 Level 2 / 1.0000 Level 8	0.2000000 Level 3 / 2.0000 Level 9	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
3 PCB-1232 (Aroclor 1232)	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	253720	+++++	AVRG		253720		0.000e+000
(2)	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	203418	+++++	AVRG		203418		0.000e+000
(3)	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	122595	+++++	AVRG		122595		0.000e+000
(4)	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	184538	+++++	AVRG		184538		0.000e+000
(5)	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	253583	+++++	AVRG		253583		0.000e+000
4 PCB-1242 (Aroclor 1242)	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	1330733	+++++	AVRG		1330733		0.000e+000
(2)	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	682248	+++++	AVRG		682248		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(3)	+++++	+++++	+++++	+++++	386738	+++++					
	+++++	+++++	+++++				AVRG		386738		0.000e+000
(4)	+++++	+++++	+++++	+++++	619705	+++++					
	+++++	+++++	+++++				AVRG		619705		0.000e+000
(5)	+++++	+++++	+++++	+++++	525020	+++++					
	+++++	+++++	+++++				AVRG		525020		0.000e+000
5 PCB-1248 (Aroclor 1248)(1)	+++++	+++++	+++++	+++++	830558	+++++					
	+++++	+++++	+++++				AVRG		830558		0.000e+000
(2)	+++++	+++++	+++++	+++++	493200	+++++					
	+++++	+++++	+++++				AVRG		493200		0.000e+000
(3)	+++++	+++++	+++++	+++++	1191863	+++++					
	+++++	+++++	+++++				AVRG		1191863		0.000e+000
(4)	+++++	+++++	+++++	+++++	908805	+++++					
	+++++	+++++	+++++				AVRG		908805		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(5)	+++++	+++++	+++++	+++++	590705	+++++					
	+++++	+++++	+++++				AVRG		590705		0.000e+000
6 PCB-1254 (Aroclor 1254) (1)	+++++	+++++	+++++	+++++	996328	+++++					
	+++++	+++++	+++++				AVRG		996328		0.000e+000
(2)	+++++	+++++	+++++	+++++	545155	+++++					
	+++++	+++++	+++++				AVRG		545155		0.000e+000
(3)	+++++	+++++	+++++	+++++	1411958	+++++					
	+++++	+++++	+++++				AVRG		1411958		0.000e+000
(4)	+++++	+++++	+++++	+++++	1253878	+++++					
	+++++	+++++	+++++				AVRG		1253878		0.000e+000
(5)	+++++	+++++	+++++	+++++	1144150	+++++					
	+++++	+++++	+++++				AVRG		1144150		0.000e+000
7 PCB-1262 (Aroclor 1262) (1)	+++++	+++++	+++++	+++++	458313	+++++					
	+++++	+++++	+++++				AVRG		458313		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	788948	+++++					
	+++++	+++++	+++++				AVRG		788948		0.000e+000
(3)	+++++	+++++	+++++	+++++	426080	+++++					
	+++++	+++++	+++++				AVRG		426080		0.000e+000
(4)	+++++	+++++	+++++	+++++	1502183	+++++					
	+++++	+++++	+++++				AVRG		1502183		0.000e+000
(5)	+++++	+++++	+++++	+++++	726623	+++++					
	+++++	+++++	+++++				AVRG		726623		0.000e+000
8 PCB-1260 (Aroclor 1260) (1)	1078320	883840	903145	655493	771805	759566					
	790933	823628	600052				AVRG		807420		17.43656
(2)	1212460	1021120	1028500	739067	888230	870096					
	916671	956915	701937				AVRG		926111		16.74346
(3)	1116260	929960	962675	694600	847133	828108					
	916614	957911	723401				AVRG		886296		14.65006

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(4)	803880	702580	719520	524140	611455	615932					
	664773	699337	516835				AVRG		650939		14.38471
(5)	753860	653040	673655	496677	600428	588808					
	652154	683348	506383				AVRG		623150		13.46461
9 PCB-1268 (Aroclor 1268) (1)	+++++	+++++	+++++	+++++	528918	+++++					
	+++++	+++++	+++++				AVRG		528918		0.000e+000
(2)	+++++	+++++	+++++	+++++	1775430	+++++					
	+++++	+++++	+++++				AVRG		1775430		0.000e+000
(3)	+++++	+++++	+++++	+++++	1601693	+++++					
	+++++	+++++	+++++				AVRG		1601693		0.000e+000
(4)	+++++	+++++	+++++	+++++	1440105	+++++					
	+++++	+++++	+++++				AVRG		1440105		0.000e+000
(5)	+++++	+++++	+++++	+++++	615580	+++++					
	+++++	+++++	+++++				AVRG		615580		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
$ 10 Decachlorobiphenyl (S)	+++++	14101100	13899150	9711800	11997950	11973880					
	12475350	13201590	9881410				AVRG		12155279		13.63325

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Average %RSD Results.
Calculated Average %RSD = 14.22131
Maximun Average %RSD = 0.000e+000
* Failed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Calibration File Names:

Level 01: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210011.D
Level 02: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210012.D
Level 03: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210013.D
Level 04: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210014.D
Level 05: 1268ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210028.D
1262ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210027.D
1248ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210026.D
1242ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210025.D
1232ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210024.D
122154ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210023.D
1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210015.D
Level 06: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210016.D
Level 07: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210017.D
Level 08: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210018.D
Level 09: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210019.D

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
1 PCB-1221 (Aroclor 1221)(1)	+++++	+++++	+++++	+++++	380045	+++++					
	+++++	+++++	+++++				AVRG		380045		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	263670	+++++					
	+++++	+++++	+++++				AVRG		263670		0.000e+000
(3)	+++++	+++++	+++++	+++++	851690	+++++					
	+++++	+++++	+++++				AVRG		851690		0.000e+000
2 PCB-1016 (Aroclor 1016) (1)	996700	893740	951545	755627	901883	888710					
	914789	984287	738401				AVRG		891742		10.17367
(2)	2006820	1757760	1855205	1438297	1723153	1684282					
	1743626	1871209	1388984				AVRG		1718815		11.55558
(3)	744880	664970	714820	568070	689230	673498					
	710759	761491	575439				AVRG		678128		10.00046
(4)	720720	651250	704805	544383	661495	650810					
	676705	723377	532481				AVRG		651781		10.73622
(5)	732360	644920	694625	520613	647358	641362					
	679450	729886	545340				AVRG		648435		11.41152

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 19-JUL-2021 22:14
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Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
3 PCB-1232 (Aroclor 1232) (1)	+++++	+++++	+++++	+++++	191013	+++++					
	+++++	+++++	+++++				AVRG		191013		0.000e+000
(2)	+++++	+++++	+++++	+++++	266690	+++++					
	+++++	+++++	+++++				AVRG		266690		0.000e+000
(3)	+++++	+++++	+++++	+++++	233038	+++++					
	+++++	+++++	+++++				AVRG		233038		0.000e+000
(4)	+++++	+++++	+++++	+++++	195433	+++++					
	+++++	+++++	+++++				AVRG		195433		0.000e+000
(5)	+++++	+++++	+++++	+++++	367300	+++++					
	+++++	+++++	+++++				AVRG		367300		0.000e+000
4 PCB-1242 (Aroclor 1242) (1)	+++++	+++++	+++++	+++++	806165	+++++					
	+++++	+++++	+++++				AVRG		806165		0.000e+000
(2)	+++++	+++++	+++++	+++++	600760	+++++					
	+++++	+++++	+++++				AVRG		600760		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(3)	+++++	+++++	+++++	+++++	436298	+++++					
	+++++	+++++	+++++				AVRG		436298		0.000e+000
(4)	+++++	+++++	+++++	+++++	846415	+++++					
	+++++	+++++	+++++				AVRG		846415		0.000e+000
(5)	+++++	+++++	+++++	+++++	891180	+++++					
	+++++	+++++	+++++				AVRG		891180		0.000e+000
5 PCB-1248 (Aroclor 1248) (1)	+++++	+++++	+++++	+++++	1006063	+++++					
	+++++	+++++	+++++				AVRG		1006063		0.000e+000
(2)	+++++	+++++	+++++	+++++	1690328	+++++					
	+++++	+++++	+++++				AVRG		1690328		0.000e+000
(3)	+++++	+++++	+++++	+++++	1500160	+++++					
	+++++	+++++	+++++				AVRG		1500160		0.000e+000
(4)	+++++	+++++	+++++	+++++	1641465	+++++					
	+++++	+++++	+++++				AVRG		1641465		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(5)	+++++	+++++	+++++	+++++	899370	+++++					
	+++++	+++++	+++++				AVRG		899370		0.000e+000
6 PCB-1254 (Aroclor 1254) (1)	+++++	+++++	+++++	+++++	1357715	+++++					
	+++++	+++++	+++++				AVRG		1357715		0.000e+000
(2)	+++++	+++++	+++++	+++++	1695888	+++++					
	+++++	+++++	+++++				AVRG		1695888		0.000e+000
(3)	+++++	+++++	+++++	+++++	2147213	+++++					
	+++++	+++++	+++++				AVRG		2147213		0.000e+000
(4)	+++++	+++++	+++++	+++++	2336995	+++++					
	+++++	+++++	+++++				AVRG		2336995		0.000e+000
(5)	+++++	+++++	+++++	+++++	1710738	+++++					
	+++++	+++++	+++++				AVRG		1710738		0.000e+000
7 PCB-1262 (Aroclor 1262) (1)	+++++	+++++	+++++	+++++	912865	+++++					
	+++++	+++++	+++++				AVRG		912865		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	597670	+++++					
	+++++	+++++	+++++				AVRG		597670		0.000e+000
(3)	+++++	+++++	+++++	+++++	785118	+++++					
	+++++	+++++	+++++				AVRG		785118		0.000e+000
(4)	+++++	+++++	+++++	+++++	3122595	+++++					
	+++++	+++++	+++++				AVRG		3122595		0.000e+000
(5)	+++++	+++++	+++++	+++++	1451733	+++++					
	+++++	+++++	+++++				AVRG		1451733		0.000e+000
8 PCB-1260 (Aroclor 1260)(1)	1495060	1324320	1383265	1012713	1245415	1212336					
	1290330	1341149	998356				AVRG		1255883		13.02396
(2)	1934740	1666190	1759590	1270663	1591978	1557984					
	1663399	1733074	1288095				AVRG		1607301		13.39320
(3)	1294640	1150380	1238865	908323	1124700	1131828					
	1222590	1284839	983375				AVRG		1148838		11.49014

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(4)	1515380	1294120	1392920	1001863	1255763	1249818					
	1346569	1426633	1063935				AVRG		1283000		12.91787
(5)	1355060	1166700	1232845	911380	1142930	1130968					
	1233821	1301609	979691				AVRG		1161667		12.33781
9 PCB-1268 (Aroclor 1268) (1)	+++++	+++++	+++++	+++++	1038453	+++++					
	+++++	+++++	+++++				AVRG		1038453		0.000e+000
(2)	+++++	+++++	+++++	+++++	3722930	+++++					
	+++++	+++++	+++++				AVRG		3722930		0.000e+000
(3)	+++++	+++++	+++++	+++++	2862560	+++++					
	+++++	+++++	+++++				AVRG		2862560		0.000e+000
(4)	+++++	+++++	+++++	+++++	2809675	+++++					
	+++++	+++++	+++++				AVRG		2809675		0.000e+000
(5)	+++++	+++++	+++++	+++++	1143225	+++++					
	+++++	+++++	+++++				AVRG		1143225		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
$ 10 Decachlorobiphenyl (S)	30461200	23346800	23726300	16360700	20462550	20659520					
	21689325	22715900	16890525				AVRG		21812536		19.09245

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Average %RSD Results.
Calculated Average %RSD = 12.37572
Maximun Average %RSD = 0.000e+000
* Failed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1660icv.spk
Quant Type: ESTD
Sublist File: 1660icv.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1660icv

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 PCB-1016 (Aroclor	0.4000	0.3532	88.30	75-125
8 PCB-1260 (Aroclor	0.4000	0.3529	88.22	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1660icv.spk
Quant Type: ESTD
Sublist File: 1660icv.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1660icv

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 PCB-1016 (Aroclor	0.4000	0.3501	87.53	75-125
8 PCB-1260 (Aroclor	0.4000	0.3537	88.43	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-1
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 122154icv.spk
Quant Type: ESTD
Sublist File: 122154.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,122154

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 PCB-1221 (Aroclor	0.4000	0.3248	81.20	75-125
6 PCB-1254 (Aroclor	0.4000	0.3187	79.67	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 122154icv.spk
Quant Type: ESTD
Sublist File: 122154.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,122154

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 PCB-1221 (Aroclor	0.4000	0.3175	79.38	75-125
6 PCB-1254 (Aroclor	0.4000	0.3343	83.57	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Sample Matrix: Liquid
Lab Smp Id: ICV
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: 1232icv.spk
Sublist File: 1232.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1232

Client SDG: 60GCS8-071921-1
Fraction: 8082
Client Smp ID: ICV
Operator: AJA1
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3 PCB-1232 (Aroclor	0.4000	0.3378	84.45	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1232icv.spk
Quant Type: ESTD
Sublist File: 1232.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1232

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3 PCB-1232 (Aroclor	0.4000	0.3633	90.82	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Sample Matrix: Liquid
Lab Smp Id: ICV
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: 1242icv.spk
Sublist File: 1242.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1242

Client SDG: 60GCS8-071921-1
Fraction: 8082
Client Smp ID: ICV
Operator: AJA1
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
4 PCB-1242 (Aroclor	0.4000	0.3911	97.77	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1242icv.spk
Quant Type: ESTD
Sublist File: 1242.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1242

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
4 PCB-1242 (Aroclor	0.4000	0.3820	95.50	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-1
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1248icv.spk
Quant Type: ESTD
Sublist File: 1248.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1248

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 PCB-1248 (Aroclor	0.4000	0.3239	80.97	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1248icv.spk
Quant Type: ESTD
Sublist File: 1248.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1248

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 PCB-1248 (Aroclor	0.4000	0.2736	68.40*	75-125

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 07:16
Lab File ID: 0723210005.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	556253	0.010	-1.10276	15.00000	Aver	
(2)	1169806	1108298	0.010	-5.25803	15.00000	Aver	
(3)	595686	567183	0.010	-4.78495	15.00000	Aver	
(4)	435128	419400	0.010	-3.61461	15.00000	Aver	
(5)	379283	366128	0.010	-3.46855	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	777950	0.010	-3.64992	15.00000	Aver	
(2)	926111	882100	0.010	-4.75220	15.00000	Aver	
(3)	886296	855663	0.010	-3.45632	15.00000	Aver	
(4)	650939	640550	0.010	-1.59601	15.00000	Aver	
(5)	623150	608415	0.010	-2.36463	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	11621550	0.010	-4.39092	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 0.76547
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 07:16
Lab File ID: 0723210005.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	913213	0.010	2.40767	15.00000	Aver	
(2)	1718815	1704740	0.010	-0.81888	15.00000	Aver	
(3)	678128	687785	0.010	1.42400	15.00000	Aver	
(4)	651781	671565	0.010	3.03543	15.00000	Aver	
(5)	648435	664105	0.010	2.41661	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1304398	0.010	3.86300	15.00000	Aver	
(2)	1607301	1646650	0.010	2.44812	15.00000	Aver	
(3)	1148838	1171798	0.010	1.99852	15.00000	Aver	
(4)	1283000	1304635	0.010	1.68628	15.00000	Aver	
(5)	1161667	1168843	0.010	0.61768	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	20348800	0.010	-6.71052	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 2.25213
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i
Lab File ID: 0723210009.D
Analysis Type: WATER
Lab Sample ID: CCV
Method: \\192.168.60.5\chem\60GCS8.i\072321-1.b\8082-1.m

Injection Date: 23-JUL-2021 08:28
Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Init. Cal. Times: 17:09 22:14
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	537438	0.010	-4.44792	15.00000	Aver	
(2)	1169806	1067655	0.010	-8.73233	15.00000	Aver	
(3)	595686	554100	0.010	-6.98116	15.00000	Aver	
(4)	435128	406763	0.010	-6.51892	15.00000	Aver	
(5)	379283	355673	0.010	-6.22507	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	753088	0.010	-6.72917	15.00000	Aver	
(2)	926111	867838	0.010	-6.29225	15.00000	Aver	
(3)	886296	831255	0.010	-6.21020	15.00000	Aver	
(4)	650939	629300	0.010	-3.32428	15.00000	Aver	
(5)	623150	592560	0.010	-4.90896	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	11437800	0.010	-5.90261	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 0.76547
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 08:28
Lab File ID: 0723210009.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	862900	0.010	-3.23438	15.00000	Aver	
(2)	1718815	1616360	0.010	-5.96079	15.00000	Aver	
(3)	678128	654388	0.010	-3.50095	15.00000	Aver	
(4)	651781	639828	0.010	-1.83392	15.00000	Aver	
(5)	648435	632063	0.010	-2.52491	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1219415	0.010	-2.90375	15.00000	Aver	
(2)	1607301	1554313	0.010	-3.29676	15.00000	Aver	
(3)	1148838	1107673	0.010	-3.58321	15.00000	Aver	
(4)	1283000	1235663	0.010	-3.68960	15.00000	Aver	
(5)	1161667	1142033	0.010	-1.69021	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	19678775	0.010	-9.78227	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 2.25213
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 12:02
Lab File ID: 0723210021.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	581318	0.010	3.35360	15.00000	Aver	
(2)	1169806	1187100	0.010	1.47834	15.00000	Aver	
(3)	595686	607338	0.010	1.95602	15.00000	Aver	
(4)	435128	443765	0.010	1.98489	15.00000	Aver	
(5)	379283	388375	0.010	2.39712	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	817753	0.010	1.27967	15.00000	Aver	
(2)	926111	933308	0.010	0.77710	15.00000	Aver	
(3)	886296	901298	0.010	1.69264	15.00000	Aver	
(4)	650939	671905	0.010	3.22088	15.00000	Aver	
(5)	623150	639433	0.010	2.61290	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12393575	0.010	1.96043	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 0.76547
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 12:02
Lab File ID: 0723210021.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	924770	0.010	3.70372	15.00000	Aver	
(2)	1718815	1752355	0.010	1.95134	15.00000	Aver	
(3)	678128	707930	0.010	4.39467	15.00000	Aver	
(4)	651781	680540	0.010	4.41243	15.00000	Aver	
(5)	648435	667810	0.010	2.98798	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1290235	0.010	2.73531	15.00000	Aver	
(2)	1607301	1651070	0.010	2.72311	15.00000	Aver	
(3)	1148838	1179343	0.010	2.65527	15.00000	Aver	
(4)	1283000	1310843	0.010	2.17010	15.00000	Aver	
(5)	1161667	1172720	0.010	0.95147	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	21576775	0.010	-1.08085	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 2.25213
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 15:36
Lab File ID: 0723210033.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	564088	0.010	0.29024	15.00000	Aver	
(2)	1169806	1155765	0.010	-1.20031	15.00000	Aver	
(3)	595686	590610	0.010	-0.85209	15.00000	Aver	
(4)	435128	431733	0.010	-0.78039	15.00000	Aver	
(5)	379283	377453	0.010	-0.48266	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	792728	0.010	-1.81971	15.00000	Aver	
(2)	926111	913818	0.010	-1.32740	15.00000	Aver	
(3)	886296	877930	0.010	-0.94389	15.00000	Aver	
(4)	650939	652515	0.010	0.24210	15.00000	Aver	
(5)	623150	621240	0.010	-0.30654	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12134025	0.010	-0.17485	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 0.76547
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 23-JUL-2021 15:36
Lab File ID: 0723210033.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072321-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	886350	0.010	-0.60470	15.00000	Aver	
(2)	1718815	1682518	0.010	-2.11177	15.00000	Aver	
(3)	678128	677145	0.010	-0.14503	15.00000	Aver	
(4)	651781	645143	0.010	-1.01846	15.00000	Aver	
(5)	648435	640448	0.010	-1.23179	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1230500	0.010	-2.02110	15.00000	Aver	
(2)	1607301	1563898	0.010	-2.70042	15.00000	Aver	
(3)	1148838	1126545	0.010	-1.94046	15.00000	Aver	
(4)	1283000	1228175	0.010	-4.27319	15.00000	Aver	
(5)	1161667	1121633	0.010	-3.44631	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	20660800	0.010	-5.28015	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 2.25213
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 13:22
Lab File ID: 0726210018.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	547255	0.010	-2.70244	15.00000	Aver	
(2)	1169806	1078555	0.010	-7.80055	15.00000	Aver	
(3)	595686	564850	0.010	-5.17651	15.00000	Aver	
(4)	435128	405930	0.010	-6.71025	15.00000	Aver	
(5)	379283	350248	0.010	-7.65540	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	727493	0.010	-9.89915	15.00000	Aver	
(2)	926111	837835	0.010	-9.53187	15.00000	Aver	
(3)	886296	803185	0.010	-9.37731	15.00000	Aver	
(4)	650939	612650	0.010	-5.88213	15.00000	Aver	
(5)	623150	577573	0.010	-7.31408	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	11224700	0.010	-7.65576	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 13:22
Lab File ID: 0726210018.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016)(1)	891742	951160	0.010	6.66310	15.00000	Aver	
(2)	1718815	1729855	0.010	0.64230	15.00000	Aver	
(3)	678128	703583	0.010	3.75357	15.00000	Aver	
(4)	651781	691285	0.010	6.06099	15.00000	Aver	
(5)	648435	669295	0.010	3.21700	15.00000	Aver	
8 PCB-1260 (Aroclor 1260)(1)	1255883	1312205	0.010	4.48468	15.00000	Aver	
(2)	1607301	1641095	0.010	2.10251	15.00000	Aver	
(3)	1148838	1206688	0.010	5.03550	15.00000	Aver	
(4)	1283000	1334163	0.010	3.98772	15.00000	Aver	
(5)	1161667	1236365	0.010	6.43023	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	21745125	0.010	-0.30905	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 16:20
Lab File ID: 0726210028.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	618973	0.010	10.04835	15.00000	Aver	
(2)	1169806	1235135	0.010	5.58457	15.00000	Aver	
(3)	595686	639790	0.010	7.40394	15.00000	Aver	
(4)	435128	465668	0.010	7.01847	15.00000	Aver	
(5)	379283	405245	0.010	6.84498	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	843895	0.010	4.51745	15.00000	Aver	
(2)	926111	948665	0.010	2.43538	15.00000	Aver	
(3)	886296	931813	0.010	5.13562	15.00000	Aver	
(4)	650939	693320	0.010	6.51074	15.00000	Aver	
(5)	623150	669513	0.010	7.43999	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12919750	0.010	6.28921	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 16:20
Lab File ID: 0726210028.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	891742	1061615	0.010	19.04952	15.00000	Aver		<-
(2)	1718815	1926363	0.010	12.07503	15.00000	Aver		
(3)	678128	782068	0.010	15.32734	15.00000	Aver		<-
(4)	651781	771653	0.010	18.39144	15.00000	Aver		<-
(5)	648435	749328	0.010	15.55941	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	1255883	1434600	0.010	14.23041	15.00000	Aver		
(2)	1607301	1830000	0.010	13.85544	15.00000	Aver		
(3)	1148838	1316070	0.010	14.55665	15.00000	Aver		
(4)	1283000	1472463	0.010	14.76714	15.00000	Aver		
(5)	1161667	1354098	0.010	16.56502	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	21812536	24597950	0.010	12.76979	15.00000	Aver		

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 17:32
Lab File ID: 0726210032.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	623485	0.010	10.85064	15.00000	Aver	
(2)	1169806	1249155	0.010	6.78306	15.00000	Aver	
(3)	595686	645588	0.010	8.37719	15.00000	Aver	
(4)	435128	473370	0.010	8.78863	15.00000	Aver	
(5)	379283	410035	0.010	8.10789	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	847880	0.010	5.01100	15.00000	Aver	
(2)	926111	955610	0.010	3.18529	15.00000	Aver	
(3)	886296	911938	0.010	2.89314	15.00000	Aver	
(4)	650939	676448	0.010	3.91871	15.00000	Aver	
(5)	623150	640910	0.010	2.85000	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12520275	0.010	3.00278	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i
Lab File ID: 0726210032.D
Analysis Type: WATER
Lab Sample ID: CCV
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

Injection Date: 26-JUL-2021 17:32
Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Init. Cal. Times: 17:09 22:14
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	891742	1032215	0.010	15.75261	15.00000	Aver		<-
(2)	1718815	1911060	0.010	11.18474	15.00000	Aver		
(3)	678128	775593	0.010	14.37250	15.00000	Aver		
(4)	651781	754043	0.010	15.68961	15.00000	Aver		<-
(5)	648435	726530	0.010	12.04364	15.00000	Aver		
8 PCB-1260 (Aroclor 1260) (1)	1255883	1394063	0.010	11.00260	15.00000	Aver		
(2)	1607301	1764140	0.010	9.75788	15.00000	Aver		
(3)	1148838	1257245	0.010	9.43625	15.00000	Aver		
(4)	1283000	1399973	0.010	9.11710	15.00000	Aver		
(5)	1161667	1268725	0.010	9.21588	15.00000	Aver		
$ 10 Decachlorobiphenyl (S)	21812536	23096000	0.010	5.88407	15.00000	Aver		

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 21:24
Lab File ID: 0726210045.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	586510	0.010	4.27678	15.00000	Aver	
(2)	1169806	1187820	0.010	1.53989	15.00000	Aver	
(3)	595686	614625	0.010	3.17940	15.00000	Aver	
(4)	435128	450148	0.010	3.45170	15.00000	Aver	
(5)	379283	393618	0.010	3.77933	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	808908	0.010	0.18420	15.00000	Aver	
(2)	926111	918988	0.010	-0.76915	15.00000	Aver	
(3)	886296	891455	0.010	0.58212	15.00000	Aver	
(4)	650939	649158	0.010	-0.27369	15.00000	Aver	
(5)	623150	628333	0.010	0.83163	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12542275	0.010	3.18377	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 21:24
Lab File ID: 0726210045.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	969873	0.010	8.76152	15.00000	Aver	
(2)	1718815	1787775	0.010	4.01207	15.00000	Aver	
(3)	678128	722758	0.010	6.58121	15.00000	Aver	
(4)	651781	711480	0.010	9.15942	15.00000	Aver	
(5)	648435	698688	0.010	7.74983	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1344183	0.010	7.03090	15.00000	Aver	
(2)	1607301	1709248	0.010	6.34269	15.00000	Aver	
(3)	1148838	1223030	0.010	6.45803	15.00000	Aver	
(4)	1283000	1369413	0.010	6.73519	15.00000	Aver	
(5)	1161667	1268770	0.010	9.21975	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	23129100	0.010	6.03582	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 01:17
Lab File ID: 0726210058.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	577258	0.010	2.63176	15.00000	Aver	
(2)	1169806	1165058	0.010	-0.40595	15.00000	Aver	
(3)	595686	607005	0.010	1.90020	15.00000	Aver	
(4)	435128	442685	0.010	1.73669	15.00000	Aver	
(5)	379283	384080	0.010	1.26472	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	805743	0.010	-0.20779	15.00000	Aver	
(2)	926111	920718	0.010	-0.58234	15.00000	Aver	
(3)	886296	892520	0.010	0.70228	15.00000	Aver	
(4)	650939	664433	0.010	2.07292	15.00000	Aver	
(5)	623150	636130	0.010	2.08293	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12398925	0.010	2.00445	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 01:17
Lab File ID: 0726210058.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	951583	0.010	6.71048	15.00000	Aver	
(2)	1718815	1761643	0.010	2.49169	15.00000	Aver	
(3)	678128	711033	0.010	4.85218	15.00000	Aver	
(4)	651781	693273	0.010	6.36592	15.00000	Aver	
(5)	648435	682303	0.010	5.22298	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1315863	0.010	4.77591	15.00000	Aver	
(2)	1607301	1678998	0.010	4.46065	15.00000	Aver	
(3)	1148838	1216453	0.010	5.88549	15.00000	Aver	
(4)	1283000	1349695	0.010	5.19836	15.00000	Aver	
(5)	1161667	1238310	0.010	6.59766	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	22930125	0.010	5.12361	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 05:09
Lab File ID: 0726210071.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	614330	0.010	9.22295	15.00000	Aver	
(2)	1169806	1258875	0.010	7.61397	15.00000	Aver	
(3)	595686	647525	0.010	8.70245	15.00000	Aver	
(4)	435128	474580	0.010	9.06671	15.00000	Aver	
(5)	379283	412225	0.010	8.68530	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	872030	0.010	8.00200	15.00000	Aver	
(2)	926111	1001348	0.010	8.12396	15.00000	Aver	
(3)	886296	956175	0.010	7.88442	15.00000	Aver	
(4)	650939	724908	0.010	11.36334	15.00000	Aver	
(5)	623150	684115	0.010	9.78332	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	13454700	0.010	10.69018	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 11.46589
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 05:09
Lab File ID: 0726210071.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	1008015	0.010	13.03882	15.00000	Aver	
(2)	1718815	1874033	0.010	9.03050	15.00000	Aver	
(3)	678128	761350	0.010	12.27224	15.00000	Aver	
(4)	651781	740210	0.010	13.56735	15.00000	Aver	
(5)	648435	724415	0.010	11.71747	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1389840	0.010	10.66639	15.00000	Aver	
(2)	1607301	1778443	0.010	10.64773	15.00000	Aver	
(3)	1148838	1280305	0.010	11.44350	15.00000	Aver	
(4)	1283000	1436548	0.010	11.96784	15.00000	Aver	
(5)	1161667	1310478	0.010	12.81007	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	24081275	0.010	10.40108	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 13.13853
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 09:01
Lab File ID: 0726210084.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	626133	0.010	11.32134	15.00000	Aver	
(2)	1169806	1278363	0.010	9.27984	15.00000	Aver	
(3)	595686	649783	0.010	9.08142	15.00000	Aver	
(4)	435128	481920	0.010	10.75357	15.00000	Aver	
(5)	379283	422640	0.010	11.43127	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	886003	0.010	9.73252	15.00000	Aver	
(2)	926111	1026023	0.010	10.78833	15.00000	Aver	
(3)	886296	988278	0.010	11.50652	15.00000	Aver	
(4)	650939	742300	0.010	14.03525	15.00000	Aver	
(5)	623150	711183	0.010	14.12698	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	13865250	0.010	14.06773	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 30.07007
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 09:01
Lab File ID: 0726210084.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	891742	1003925	0.010	12.58017	15.00000	Aver		
(2)	1718815	1900915	0.010	10.59451	15.00000	Aver		
(3)	678128	757085	0.010	11.64330	15.00000	Aver		
(4)	651781	744525	0.010	14.22938	15.00000	Aver		
(5)	648435	730723	0.010	12.69019	15.00000	Aver		
8 PCB-1260 (Aroclor 1260) (1)	1255883	1421378	0.010	13.17757	15.00000	Aver		
(2)	1607301	1822340	0.010	13.37886	15.00000	Aver		
(3)	1148838	1290850	0.010	12.36138	15.00000	Aver		
(4)	1283000	1467030	0.010	14.34372	15.00000	Aver		
(5)	1161667	1352413	0.010	16.41997	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	21812536	24671025	0.010	13.10480	15.00000	Aver		

Average %D / Drift Results.

Calculated Average %D/Drift = 33.63478
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 12:36
Lab File ID: 0726210096.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	562455	701753	0.010	24.76598	15.00000	Aver		<-
(2)	1169806	1437705	0.010	22.90111	15.00000	Aver		<-
(3)	595686	737880	0.010	23.87068	15.00000	Aver		<-
(4)	435128	550495	0.010	26.51330	15.00000	Aver		<-
(5)	379283	482353	0.010	27.17478	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	807420	990248	0.010	22.64339	15.00000	Aver		<-
(2)	926111	1141513	0.010	23.25876	15.00000	Aver		<-
(3)	886296	1105800	0.010	24.76649	15.00000	Aver		<-
(4)	650939	823260	0.010	26.47267	15.00000	Aver		<-
(5)	623150	794945	0.010	27.56876	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	12155279	15416250	0.010	26.82761	15.00000	Aver		<-

Average %D / Drift Results.

Calculated Average %D/Drift = 30.07007
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 12:36
Lab File ID: 0726210096.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	891742	1141303	0.010	27.98568	15.00000	Aver		<-
(2)	1718815	2148318	0.010	24.98829	15.00000	Aver		<-
(3)	678128	867638	0.010	27.94589	15.00000	Aver		<-
(4)	651781	844005	0.010	29.49218	15.00000	Aver		<-
(5)	648435	824483	0.010	27.14962	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	1255883	1567965	0.010	24.84964	15.00000	Aver		<-
(2)	1607301	2032555	0.010	26.45761	15.00000	Aver		<-
(3)	1148838	1446968	0.010	25.95055	15.00000	Aver		<-
(4)	1283000	1632068	0.010	27.20713	15.00000	Aver		<-
(5)	1161667	1488335	0.010	28.12061	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	21812536	27498675	0.010	26.06822	15.00000	Aver		<-

Average %D / Drift Results.

Calculated Average %D/Drift = 33.63478
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 16:29
Lab File ID: 0726210109.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	562455	697355	0.010	23.98413	15.00000	Aver		<-
(2)	1169806	1444595	0.010	23.49010	15.00000	Aver		<-
(3)	595686	740225	0.010	24.26434	15.00000	Aver		<-
(4)	435128	541508	0.010	24.44781	15.00000	Aver		<-
(5)	379283	476170	0.010	25.54473	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	807420	965708	0.010	19.60408	15.00000	Aver		<-
(2)	926111	1115958	0.010	20.49937	15.00000	Aver		<-
(3)	886296	1096380	0.010	23.70364	15.00000	Aver		<-
(4)	650939	797615	0.010	22.53298	15.00000	Aver		<-
(5)	623150	768490	0.010	23.32340	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	12155279	15127475	0.010	24.45190	15.00000	Aver		<-

Average %D / Drift Results.

Calculated Average %D/Drift = 30.07007
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 16:29
Lab File ID: 0726210109.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	891742	1137045	0.010	27.50825	15.00000	Aver		<-
(2)	1718815	2138718	0.010	24.42977	15.00000	Aver		<-
(3)	678128	855250	0.010	26.11917	15.00000	Aver		<-
(4)	651781	829805	0.010	27.31354	15.00000	Aver		<-
(5)	648435	816540	0.010	25.92475	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	1255883	1548478	0.010	23.29794	15.00000	Aver		<-
(2)	1607301	1995078	0.010	24.12591	15.00000	Aver		<-
(3)	1148838	1443865	0.010	25.68050	15.00000	Aver		<-
(4)	1283000	1621650	0.010	26.39516	15.00000	Aver		<-
(5)	1161667	1459628	0.010	25.64938	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	21812536	26449950	0.010	21.26032	15.00000	Aver		<-

Average %D / Drift Results.

Calculated Average %D/Drift = 33.63478
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 | Lab Sample ID: 2945138

Date Analyzed: 07/26/2021 14:33 | Lab File ID: 072621-1.B\0726210022.D

Initial wt/vol: 31.09 g | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60GCS8 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<7.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<7.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<3.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<7.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.1	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.0	U
11096-82-5	PCB-1260 (Aroclor 1260)	<6.3	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 2945139

Date Analyzed: 07/26/2021 14:51 Lab File ID: 072621-1.B\0726210023.D

Initial wt/vol: 30.39 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	153	
11096-82-5	PCB-1260 (Aroclor 1260)	156	

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 2945143

Date Analyzed: 07/26/2021 15:09 Lab File ID: 072621-1.B\0726210024.D

Initial wt/vol: 30.41 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<8.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<7.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<3.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<7.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.2	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.1	U
11096-82-5	PCB-1260 (Aroclor 1260)	<6.4	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 2945144

Date Analyzed: 07/26/2021 15:27 Lab File ID: 072621-1.B\0726210025.D

Initial wt/vol: 31.24 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	157	
11096-82-5	PCB-1260 (Aroclor 1260)	158	

SAMPLE NO.

MS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 2945140

Date Analyzed: 07/27/2021 07:32 Lab File ID: 072621-1.B\0726210079.D

Initial wt/vol: 30.77 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	216	
11096-82-5	PCB-1260 (Aroclor 1260)	222	

SAMPLE NO.

MSD

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/25/2021 20:04 Lab Sample ID: 2945141

Date Analyzed: 07/27/2021 07:50 Lab File ID: 072621-1.B\0726210080.D

Initial wt/vol: 31.4 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	210	
11096-82-5	PCB-1260 (Aroclor 1260)	217	

SAMPLE NO.

MS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 2945145

Date Analyzed: 07/27/2021 13:47 Lab File ID: 072621-1.B\0726210100.D

Initial wt/vol: 30.55 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	232	
11096-82-5	PCB-1260 (Aroclor 1260)	237	

SAMPLE NO.

MSD

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 04:20 Matrix: Solid SDG No.: 60375626

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 2945146

Date Analyzed: 07/27/2021 14:05 Lab File ID: 072621-1.B\0726210101.D

Initial wt/vol: 30.12 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	250	
11096-82-5	PCB-1260 (Aroclor 1260)	235	

SAMPLE NO.

GB-47/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626001 Percent Moisture: 19.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.53	U	mg/kg	10	08/05/2021 13:56
7440-38-2	Arsenic	6.0		mg/kg	10	08/05/2021 13:56
7440-50-8	Copper	12.0		mg/kg	10	08/05/2021 13:56
7439-92-1	Lead	10.1		mg/kg	10	08/05/2021 13:56
7440-66-6	Zinc	32.7		mg/kg	10	08/05/2021 13:56

SAMPLE NO.

GB-47/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626002 Percent Moisture: 23.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.47	U	mg/kg	10	08/05/2021 13:57
7440-38-2	Arsenic	7.4		mg/kg	10	08/05/2021 13:57
7440-50-8	Copper	14.6		mg/kg	10	08/05/2021 13:57
7439-92-1	Lead	15.7		mg/kg	10	08/05/2021 13:57
7440-66-6	Zinc	34.9		mg/kg	10	08/05/2021 13:57

SAMPLE NO.

GB-41/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626003 Percent Moisture: 20.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.45	U	mg/kg	10	08/05/2021 14:04
7440-38-2	Arsenic	4.8		mg/kg	10	08/05/2021 14:04
7440-50-8	Copper	12.1		mg/kg	10	08/05/2021 14:04
7439-92-1	Lead	8.2		mg/kg	10	08/05/2021 14:04
7440-66-6	Zinc	33.0		mg/kg	10	08/05/2021 14:04

SAMPLE NO.

GB-41/6-8

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626004 Percent Moisture: 20.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.53	U	mg/kg	10	08/05/2021 14:06
7440-38-2	Arsenic	4.8		mg/kg	10	08/05/2021 14:06
7440-50-8	Copper	11.6		mg/kg	10	08/05/2021 14:06
7439-92-1	Lead	8.1		mg/kg	10	08/05/2021 14:06
7440-66-6	Zinc	27.7		mg/kg	10	08/05/2021 14:06

SAMPLE NO.

GB-34/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626005 Percent Moisture: 17.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.64	U	mg/kg	10	08/05/2021 14:07
7440-38-2	Arsenic	12.2		mg/kg	10	08/05/2021 14:07
7440-50-8	Copper	26.0		mg/kg	10	08/05/2021 14:07
7439-92-1	Lead	13.0		mg/kg	10	08/05/2021 14:07
7440-66-6	Zinc	56.3		mg/kg	10	08/05/2021 14:07

SAMPLE NO.

GB-34/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626006 Percent Moisture: 23.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.50	U	mg/kg	10	08/05/2021 14:09
7440-38-2	Arsenic	6.0		mg/kg	10	08/05/2021 14:09
7440-50-8	Copper	16.4		mg/kg	10	08/05/2021 14:09
7439-92-1	Lead	8.8		mg/kg	10	08/05/2021 14:09
7440-66-6	Zinc	43.7		mg/kg	10	08/05/2021 14:09

SAMPLE NO.

GB-33/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626007 Percent Moisture: 21.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.53	U	mg/kg	10	08/05/2021 14:10
7440-38-2	Arsenic	6.2		mg/kg	10	08/05/2021 14:10
7440-50-8	Copper	13.3		mg/kg	10	08/05/2021 14:10
7439-92-1	Lead	8.7		mg/kg	10	08/05/2021 14:10
7440-66-6	Zinc	41.4		mg/kg	10	08/05/2021 14:10

SAMPLE NO.

GB-33/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626008 Percent Moisture: 23.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.48	U	mg/kg	10	08/05/2021 14:12
7440-38-2	Arsenic	8.5		mg/kg	10	08/05/2021 14:12
7440-50-8	Copper	11.9		mg/kg	10	08/05/2021 14:12
7439-92-1	Lead	10		mg/kg	10	08/05/2021 14:12
7440-66-6	Zinc	39.8		mg/kg	10	08/05/2021 14:12

SAMPLE NO.

GB-40/1.5-3.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626009 Percent Moisture: 19.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.49	U	mg/kg	10	08/05/2021 14:14
7440-38-2	Arsenic	4.8		mg/kg	10	08/05/2021 14:14
7440-50-8	Copper	11.4		mg/kg	10	08/05/2021 14:14
7439-92-1	Lead	10.5		mg/kg	10	08/05/2021 14:14
7440-66-6	Zinc	32.4		mg/kg	10	08/05/2021 14:14

SAMPLE NO.

GB-40/11-13

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626010 Percent Moisture: 24.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.50	U	mg/kg	10	08/05/2021 14:15
7440-38-2	Arsenic	4.8		mg/kg	10	08/05/2021 14:15
7440-50-8	Copper	13.9		mg/kg	10	08/05/2021 14:15
7439-92-1	Lead	8.1		mg/kg	10	08/05/2021 14:15
7440-66-6	Zinc	39.4		mg/kg	10	08/05/2021 14:15

SAMPLE NO.

GB-39/5-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626011 Percent Moisture: 19.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.55	U	mg/kg	10	08/06/2021 13:26
7440-38-2	Arsenic	7.2		mg/kg	10	08/06/2021 13:26
7440-50-8	Copper	13.8		mg/kg	10	08/06/2021 13:26
7439-92-1	Lead	11.0		mg/kg	10	08/06/2021 13:26
7440-66-6	Zinc	35.5		mg/kg	10	08/06/2021 13:26

SAMPLE NO.

GB-39/6-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626012 Percent Moisture: 19.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.53	U	mg/kg	10	08/06/2021 13:28
7440-38-2	Arsenic	8.0		mg/kg	10	08/06/2021 13:28
7440-50-8	Copper	13.7		mg/kg	10	08/06/2021 13:28
7439-92-1	Lead	7.4		mg/kg	10	08/06/2021 13:28
7440-66-6	Zinc	36.3		mg/kg	10	08/06/2021 13:28

SAMPLE NO.

GB-46/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626013 Percent Moisture: 20.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.50	U	mg/kg	10	08/06/2021 13:30
7440-38-2	Arsenic	9.8		mg/kg	10	08/06/2021 13:30
7440-50-8	Copper	17.9		mg/kg	10	08/06/2021 13:30
7439-92-1	Lead	10.8		mg/kg	10	08/06/2021 13:30
7440-66-6	Zinc	52.6		mg/kg	10	08/06/2021 13:30

SAMPLE NO.

GB-46/2-4D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626014 Percent Moisture: 19.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.49	U	mg/kg	10	08/06/2021 13:32
7440-38-2	Arsenic	9.1		mg/kg	10	08/06/2021 13:32
7440-50-8	Copper	16.9		mg/kg	10	08/06/2021 13:32
7439-92-1	Lead	11.2		mg/kg	10	08/06/2021 13:32
7440-66-6	Zinc	56.8		mg/kg	10	08/06/2021 13:32

SAMPLE NO.

GB-46/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626015 Percent Moisture: 21.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.66	U	mg/kg	10	08/06/2021 13:34
7440-38-2	Arsenic	9.2		mg/kg	10	08/06/2021 13:34
7440-50-8	Copper	15.3		mg/kg	10	08/06/2021 13:34
7439-92-1	Lead	10.2		mg/kg	10	08/06/2021 13:34
7440-66-6	Zinc	48.3		mg/kg	10	08/06/2021 13:34

SAMPLE NO.

GB-32/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626016 Percent Moisture: 19.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.49	U	mg/kg	10	08/06/2021 13:36
7440-38-2	Arsenic	9.8		mg/kg	10	08/06/2021 13:36
7440-50-8	Copper	15.2		mg/kg	10	08/06/2021 13:36
7439-92-1	Lead	21.8		mg/kg	10	08/06/2021 13:36
7440-66-6	Zinc	38.9		mg/kg	10	08/06/2021 13:36

SAMPLE NO.

GB-32/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626017 Percent Moisture: 21.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/06/2021 13:45
7440-38-2	Arsenic	6.6		mg/kg	10	08/06/2021 13:45
7440-50-8	Copper	16.5		mg/kg	10	08/06/2021 13:45
7439-92-1	Lead	12.4		mg/kg	10	08/06/2021 13:45
7440-66-6	Zinc	36.1		mg/kg	10	08/06/2021 13:45

SAMPLE NO.

GB-53/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626018 Percent Moisture: 18.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	0.62	J	mg/kg	10	08/06/2021 13:52
7440-38-2	Arsenic	22.7		mg/kg	10	08/06/2021 13:52
7440-50-8	Copper	25.2		mg/kg	10	08/06/2021 13:52
7439-92-1	Lead	52.2		mg/kg	10	08/06/2021 13:52
7440-66-6	Zinc	77.6		mg/kg	10	08/06/2021 13:52

SAMPLE NO.

GB-53/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626019 Percent Moisture: 16.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.57	U	mg/kg	10	08/06/2021 13:54
7440-38-2	Arsenic	6.1		mg/kg	10	08/06/2021 13:54
7440-50-8	Copper	12.7		mg/kg	10	08/06/2021 13:54
7439-92-1	Lead	12.0		mg/kg	10	08/06/2021 13:54
7440-66-6	Zinc	39.4		mg/kg	10	08/06/2021 13:54

SAMPLE NO.

GB-60/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626020 Percent Moisture: 19.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.51	U	mg/kg	10	08/06/2021 13:56
7440-38-2	Arsenic	9.8		mg/kg	10	08/06/2021 13:56
7440-50-8	Copper	17.8		mg/kg	10	08/06/2021 13:56
7439-92-1	Lead	19.2		mg/kg	10	08/06/2021 13:56
7440-66-6	Zinc	58.1		mg/kg	10	08/06/2021 13:56

SAMPLE NO.

GB-60/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626021 Percent Moisture: 19.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.57	U	mg/kg	10	08/06/2021 13:58
7440-38-2	Arsenic	15.2		mg/kg	10	08/06/2021 13:58
7440-50-8	Copper	13.5		mg/kg	10	08/06/2021 13:58
7439-92-1	Lead	11.6		mg/kg	10	08/06/2021 13:58
7440-66-6	Zinc	46.0		mg/kg	10	08/06/2021 13:58

SAMPLE NO.

GB-66/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626022 Percent Moisture: 19.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.52	U	mg/kg	10	08/06/2021 14:00
7440-38-2	Arsenic	5.2		mg/kg	10	08/06/2021 14:00
7440-50-8	Copper	11.0		mg/kg	10	08/06/2021 14:00
7439-92-1	Lead	19.4		mg/kg	10	08/06/2021 14:00
7440-66-6	Zinc	50.8		mg/kg	10	08/06/2021 14:00

SAMPLE NO.

GB-66/3-5D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626023 Percent Moisture: 19.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.60	U	mg/kg	10	08/06/2021 14:03
7440-38-2	Arsenic	6.6		mg/kg	10	08/06/2021 14:03
7440-50-8	Copper	11.3		mg/kg	10	08/06/2021 14:03
7439-92-1	Lead	14.5		mg/kg	10	08/06/2021 14:03
7440-66-6	Zinc	48.9		mg/kg	10	08/06/2021 14:03

SAMPLE NO.

GB-66/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626024 Percent Moisture: 22.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.51	U	mg/kg	10	08/06/2021 14:11
7440-38-2	Arsenic	28.7		mg/kg	10	08/06/2021 14:11
7440-50-8	Copper	17.0		mg/kg	10	08/06/2021 14:11
7439-92-1	Lead	15.8		mg/kg	10	08/06/2021 14:11
7440-66-6	Zinc	53.5		mg/kg	10	08/06/2021 14:11

SAMPLE NO.

GB-59/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626025 Percent Moisture: 19.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.56	U	mg/kg	10	08/06/2021 14:14
7440-38-2	Arsenic	7.7		mg/kg	10	08/06/2021 14:14
7440-50-8	Copper	19.0		mg/kg	10	08/06/2021 14:14
7439-92-1	Lead	115		mg/kg	10	08/06/2021 14:14
7440-66-6	Zinc	80.1		mg/kg	10	08/06/2021 14:14

SAMPLE NO.

GB-59/8-10

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626026 Percent Moisture: 20.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.49	U	mg/kg	10	08/06/2021 14:16
7440-38-2	Arsenic	10.7		mg/kg	10	08/06/2021 14:16
7440-50-8	Copper	22.2		mg/kg	10	08/06/2021 14:16
7439-92-1	Lead	10.3		mg/kg	10	08/06/2021 14:16
7440-66-6	Zinc	66.7		mg/kg	10	08/06/2021 14:16

SAMPLE NO.

GB-52/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626027 Percent Moisture: 19.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.55	U	mg/kg	10	08/06/2021 14:18
7440-38-2	Arsenic	7.4		mg/kg	10	08/06/2021 14:18
7440-50-8	Copper	16.1		mg/kg	10	08/06/2021 14:18
7439-92-1	Lead	12.8		mg/kg	10	08/06/2021 14:18
7440-66-6	Zinc	54.9		mg/kg	10	08/06/2021 14:18

SAMPLE NO.

GB-52/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626028 Percent Moisture: 21.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.60	U	mg/kg	10	08/06/2021 14:20
7440-38-2	Arsenic	13.7		mg/kg	10	08/06/2021 14:20
7440-50-8	Copper	21.5		mg/kg	10	08/06/2021 14:20
7439-92-1	Lead	13.6		mg/kg	10	08/06/2021 14:20
7440-66-6	Zinc	65.0		mg/kg	10	08/06/2021 14:20

SAMPLE NO.

GB-45/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626029 Percent Moisture: 20.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.59	U	mg/kg	10	08/06/2021 14:22
7440-38-2	Arsenic	10.5		mg/kg	10	08/06/2021 14:22
7440-50-8	Copper	19.3		mg/kg	10	08/06/2021 14:22
7439-92-1	Lead	13.9		mg/kg	10	08/06/2021 14:22
7440-66-6	Zinc	66.6		mg/kg	10	08/06/2021 14:22

SAMPLE NO.

GB-45/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626030 Percent Moisture: 20.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.59	U	mg/kg	10	08/06/2021 14:24
7440-38-2	Arsenic	10.1		mg/kg	10	08/06/2021 14:24
7440-50-8	Copper	18.5		mg/kg	10	08/06/2021 14:24
7439-92-1	Lead	9.8		mg/kg	10	08/06/2021 14:24
7440-66-6	Zinc	53.4		mg/kg	10	08/06/2021 14:24

SAMPLE NO.

GB-38/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626031 Percent Moisture: 14.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.53	U	mg/kg	10	08/06/2021 13:44
7440-38-2	Arsenic	8.1		mg/kg	10	08/06/2021 13:44
7440-50-8	Copper	17.9		mg/kg	10	08/06/2021 13:44
7439-92-1	Lead	57.3		mg/kg	10	08/06/2021 13:44
7440-66-6	Zinc	73.7		mg/kg	10	08/06/2021 13:44

SAMPLE NO.

GB-38/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626032 Percent Moisture: 19.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.60	U	mg/kg	10	08/06/2021 13:45
7440-38-2	Arsenic	9.5		mg/kg	10	08/06/2021 13:45
7440-50-8	Copper	19.3		mg/kg	10	08/06/2021 13:45
7439-92-1	Lead	12.3		mg/kg	10	08/06/2021 13:45
7440-66-6	Zinc	59.5		mg/kg	10	08/06/2021 13:45

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM2

	Initial Calibration Verification				Continuing Calibration Verification						
	08/06/2021 13:06				08/06/2021 13:17			08/06/2021 13:41			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Antimony	50	48.7	97.5	90-110	40	39.6	99.0	40	39.0	97.6	90-110
Arsenic	50	49.5	98.9	90-110	40	40.3	100.8	40	39.9	99.8	90-110
Copper	50	50.5	100.9	90-110	40	40.8	102.1	40	40.9	102.2	90-110
Lead	50	47.6	95.2	90-110	40	37.1	92.7	40	36.4	91.0	90-110
Zinc	50	49.6	99.2	90-110	400	40.0	10.0	400	39.7	9.9	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM2

	Continuing Calibration Verification									
	08/06/2021 14:07			08/06/2021 14:29			08/06/2021 14:35			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Antimony	40	40.1	100.3	40	40.2	100.5	40	38.7	96.9	90-110
Arsenic	40	40.8	102.1	40	40.9	102.2	40	39.3	98.2	90-110
Copper	40	41.8	104.6	40	41.6	104.1	40	40.2	100.5	90-110
Lead	40	36.9	92.3	40	36.9	92.3	40	35.5	88.7	90-110
Zinc	400	40.8	10.2	400	40.9	10.2	400	39.2	9.8	90-110

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Initial Calibration Verification				Continuing Calibration Verification						
	08/05/2021 12:20				08/05/2021 12:28			08/05/2021 13:25			
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	Control Limit
Antimony	50	49.1	98.2	90-110	40	39.6	99.1	40	39.9	99.8	90-110
Arsenic	50	49.2	98.4	90-110	40	38.9	97.2	40	39.8	99.6	90-110
Copper	50	50.2	100.5	90-110	40	39.8	99.4	40	40.6	101.6	90-110
Lead	50	48.5	97.0	90-110	40	38.4	96.1	40	38.9	97.2	90-110
Zinc	50	49.3	98.6	90-110	400	39.2	9.8	400	39.4	9.9	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification									
	08/05/2021 13:43			08/05/2021 14:01			08/05/2021 14:18			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Antimony	40	39.9	99.9	40	40.0	100.1	40	39.8	99.5	90-110
Arsenic	40	39.2	97.9	40	39.7	99.3	40	39.4	98.5	90-110
Copper	40	40.0	100.1	40	40.8	102.0	40	40.8	101.9	90-110
Lead	40	38.7	96.8	40	38.9	97.2	40	38.8	97.1	90-110
Zinc	400	39.2	9.8	400	39.6	9.9	400	39.3	9.8	90-110

FORM II INORGANIC-3

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification			
	08/05/2021 14:23			Control Limit
Analyte	True	Found	%R	
Antimony	40	39.9	99.8	90-110
Arsenic	40	39.9	99.7	90-110
Copper	40	40.6	101.5	90-110
Lead	40	39.1	97.8	90-110
Zinc	400	39.6	9.9	90-110

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Initial Calibration Verification				Continuing Calibration Verification						
	08/06/2021 13:29				08/06/2021 13:37			08/06/2021 13:57			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Antimony	50	49.7	99.4	90-110	40	39.7	99.1	40	39.5	98.7	90-110
Arsenic	50	49.2	98.4	90-110	40	39.5	98.7	40	39.6	99.0	90-110
Copper	50	50.2	100.4	90-110	40	39.9	99.8	40	40.3	100.7	90-110
Lead	50	48.3	96.5	90-110	40	38.6	96.5	40	38.2	95.5	90-110
Zinc	50	49.4	98.8	90-110	400	39.3	9.8	400	39.1	9.8	90-110

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/06/2021 13:10

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	100.5	50-150
Arsenic	1.0	1.0	101.5	50-150
Copper	1.0	1.1	105.1	50-150
Lead	1.0	0.79	78.5	50-150
Zinc	10.0	10.2	102.0	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/06/2021 14:33

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	0.18	17.9	50-150
Arsenic	1.0	1.1	108.7	50-150
Copper	1.0	1.1	114.2	50-150
Lead	1.0	0.83	82.8	50-150
Zinc	10.0	11.1	111.2	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/05/2021 12:23

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	103.6	50-150
Arsenic	1.0	1.0	101.2	50-150
Copper	1.0	1.1	108.9	50-150
Lead	1.0	0.94	94.2	50-150
Zinc	10.0	10.0	100.3	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/05/2021 14:22

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.1	107.2	50-150
Arsenic	1.0	1.0	104.5	50-150
Copper	1.0	1.1	111.3	50-150
Lead	1.0	0.96	96.2	50-150
Zinc	10.0	10.2	102.2	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/06/2021 13:32

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	104.9	50-150
Arsenic	1.0	1.1	106.6	50-150
Copper	1.0	1.1	110.1	50-150
Lead	1.0	0.95	94.7	50-150
Zinc	10.0	10.7	107.4	50-150

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM2

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/06/2021 13:08	C	08/06/2021 13:19	C	08/06/2021 13:43	C	08/06/2021 14:09	C	2952413	C
Antimony	0.014	U	-0.26	J	0.014	U	0.014	U	<0.54	U
Arsenic	0.024	J	0.020	J	0.027	J	0.026	J	<0.11	U
Copper	0.10	U	0.10	U	0.10	U	0.10	U	<0.31	U
Lead	0.0088	J	0.0069	J	0.0081	J	0.0096	J	<0.13	U
Zinc	0.10	U	0.10	U	0.10	U	0.10	U	<0.84	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract : GSA GOODFELLOW

Method Blank Matrix: Instrument ID: 60ICM2

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	08/06/2021 14:31	C	08/06/2021 14:40	C		C
Antimony			0.014	U	0.014	U		
Arsenic			0.021	J	0.027	J		
Copper			0.10	U	0.10	U		
Lead			0.0096	J	0.0093	J		
Zinc			0.10	U	0.10	U		

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/05/2021 12:21	C	08/05/2021 12:29	C	08/05/2021 13:27	C	08/05/2021 13:45	C	2952112	C
Antimony	0.0096	U	0.0096	U	0.0096	U	0.0096	U	<0.54	U
Arsenic	0.0090	U	0.0090	U	0.0090	U	0.0090	U	<0.11	U
Copper	0.014	U	0.014	U	0.014	U	0.014	U	<0.31	U
Lead	0.021	J	0.014	J	0.014	J	0.017	J	<0.13	U
Zinc	0.11	U	0.11	U	0.11	U	0.11	U	<0.84	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract : GSA GOODFELLOW

Method Blank Matrix: Instrument ID: 60ICM3

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	08/05/2021 14:02	C	08/05/2021 14:20	C	08/05/2021 14:25	C
Antimony			0.0096	U	0.0096	U	0.0096	U
Arsenic			0.0090	U	0.0090	U	0.0090	U
Copper			0.014	U	0.014	U	0.014	U
Lead			0.016	J	0.015	J	0.014	J
Zinc			0.11	U	0.11	U	0.11	U

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/06/2021 13:30	C	08/06/2021 13:39	C	08/06/2021 13:58	C		C	2952435	C
Antimony	0.0096	U	0.0096	U	0.0096	U			<0.54	U
Arsenic	0.022	J	0.0090	U	0.0094	J			<0.11	U
Copper	0.014	U	0.014	U	0.014	U			<0.31	U
Lead	0.019	J	0.013	J	0.014	J			<0.13	U
Zinc	0.11	U	0.11	U	0.11	U			<0.84	U

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM2 Solution A Run Date: 08/06/2021 13:13

ICS Source: 46286,46287 Solution AB Run Date: 08/06/2021 13:15

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.00514		49.72633	99.5	80-120
Arsenic	0	50	0.10015		51.47238	102.9	80-120
Copper	0	50	0.07794		46.31326	92.6	80-120
Lead	0	50	0.01862		49.17087	98.3	80-120
Zinc	0	500	0.25965		463.91674	92.8	80-120

FORM IV INORGANIC-1

INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Solution A Run Date: 08/05/2021 12:25

ICS Source: 46286,46287 Solution AB Run Date: 08/05/2021 12:26

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.0129		51.3302	102.7	80-120
Arsenic	0	50	0.05114		52.02991	104.1	80-120
Copper	0	50	0.09318		46.6553	93.3	80-120
Lead	0	50	0.02132		50.79994	101.6	80-120
Zinc	0	500	0.36169		471.10763	94.2	80-120

FORM IV INORGANIC-1

INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Solution A Run Date: 08/06/2021 13:34

ICS Source: 46286,46287 Solution AB Run Date: 08/06/2021 13:35

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.0111		52.66651	105.3	80-120
Arsenic	0	50	0.05947		52.00913	104	80-120
Copper	0	50	0.08433		46.47826	93	80-120
Lead	0	50	0.02249		50.78644	101.6	80-120
Zinc	0	500	0.29135		465.60618	93.1	80-120

SAMPLE NO.

2952415MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-32/2-4

Percent Moisture: 21.4

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	46.7	<0.62	108	43*
Arsenic	mg/kg	75-125	105	6.6	108	91
Copper	mg/kg	75-125	119	16.5	108	95
Lead	mg/kg	75-125	120	12.4	108	100
Zinc	mg/kg	75-125	142	36.1	108	99

* Spike Recovery outside QC Limits

SAMPLE NO.

2952416MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-32/2-4

Percent Moisture: 21.4

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	56.3	<0.62	108	52*
Arsenic	mg/kg	75-125	108	6.6	108	94
Copper	mg/kg	75-125	123	16.5	108	98
Lead	mg/kg	75-125	127	12.4	108	107
Zinc	mg/kg	75-125	143	36.1	108	99

* Spike Recovery outside QC Limits

SAMPLE NO.

2952114MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: 60375481031

Percent Moisture: 16.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	34.3	<0.59	98.5	35*
Arsenic	mg/kg	75-125	93.4	5.0	98.5	90
Copper	mg/kg	75-125	106	12.5	98.5	94
Lead	mg/kg	75-125	102	8.7	98.5	95
Zinc	mg/kg	75-125	130	39.2	98.5	92

* Spike Recovery outside QC Limits

SAMPLE NO.

2952115MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: 60375481031

Percent Moisture: 16.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	44.6	<0.59	113	39*
Arsenic	mg/kg	75-125	110	5.0	113	92
Copper	mg/kg	75-125	122	12.5	113	96
Lead	mg/kg	75-125	119	8.7	113	97
Zinc	mg/kg	75-125	145	39.2	113	93

* Spike Recovery outside QC Limits

SAMPLE NO.

2952437MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-38/3-5

Percent Moisture: 19.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	47.4	<0.60	120	39*
Arsenic	mg/kg	75-125	121	9.5	120	93
Copper	mg/kg	75-125	135	19.3	120	96
Lead	mg/kg	75-125	129	12.3	120	97
Zinc	mg/kg	75-125	172	59.5	120	93

* Spike Recovery outside QC Limits

SAMPLE NO.

2952438MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-38/3-5

Percent Moisture: 19.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	32.4	<0.60	93.1	35*
Arsenic	mg/kg	75-125	96.9	9.5	93.1	94
Copper	mg/kg	75-125	109	19.3	93.1	96
Lead	mg/kg	75-125	105	12.3	93.1	99
Zinc	mg/kg	75-125	146	59.5	93.1	92

* Spike Recovery outside QC Limits

SAMPLE NO.

2952416MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 21.4 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	46.7	56.3	19
Arsenic	20	105	108	3
Copper	20	119	123	3
Lead	20	120	127	6
Zinc	20	142	143	0

SAMPLE NO.

2952115MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 16.8 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	34.3	44.6	26*
Arsenic	20	93.4	110	16
Copper	20	106	122	14
Lead	20	102	119	15
Zinc	20	130	145	11

* RPD outside QC Limits

SAMPLE NO.

2952438MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 19.8 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	47.4	32.4	38*
Arsenic	20	121	96.9	22*
Copper	20	135	109	21*
Lead	20	129	105	21*
Zinc	20	172	146	16

* RPD outside QC Limits

SAMPLE NO.

2952414LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	98.3	98	80	120
Arsenic	mg/kg	100	99.3	99	80	120
Copper	mg/kg	100	106	106	80	120
Lead	mg/kg	100	101	101	80	120
Zinc	mg/kg	100	97.6	98	80	120

SAMPLE NO.

2952113LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	95.1	95	80	120
Arsenic	mg/kg	100	95.7	96	80	120
Copper	mg/kg	100	102	102	80	120
Lead	mg/kg	100	96.0	96	80	120
Zinc	mg/kg	100	95.3	95	80	120

SAMPLE NO.

2952436LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	95.1	95	80	120
Arsenic	mg/kg	100	95.5	95	80	120
Copper	mg/kg	100	103	103	80	120
Lead	mg/kg	100	97.8	98	80	120
Zinc	mg/kg	100	95.1	95	80	120

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Preparation Method: None Instrument ID: 60ICM2

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Antimony	1.0	0.014	01/10/2020
Arsenic	1.0	0.011	01/10/2020
Copper	1.0	0.10	01/10/2020
Lead	1.0	0.0053	01/10/2020
Zinc	10.0	0.10	01/10/2020

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Instrument ID: 60ICM2

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Antimony	0.10	0.054	01/22/2021
Arsenic	0.10	0.011	01/22/2021
Copper	0.10	0.031	01/22/2021
Lead	0.050	0.013	01/22/2021
Zinc	0.50	0.084	01/22/2021

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Preparation Method: None Instrument ID: 60ICM3

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Antimony	1.0	0.0096	01/10/2020
Arsenic	1.0	0.0090	01/10/2020
Copper	1.0	0.014	01/10/2020
Lead	1.0	0.0052	01/10/2020
Zinc	10.0	0.11	01/10/2020

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Instrument ID: 60ICM3

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Antimony	0.10	0.054	01/22/2021
Arsenic	0.10	0.011	01/22/2021
Copper	0.10	0.031	01/22/2021
Lead	0.050	0.013	01/22/2021
Zinc	0.50	0.084	01/22/2021

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract : GSA GOODFELLOW

Instrument ID: 60ICM2 Effective Date:05/07/2019

Analyte	Concentration (ug/L)
Antimony	5000
Arsenic	5000
Copper	5000
Lead	5000
Zinc	50000

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract : GSA GOODFELLOW

Instrument ID: 60ICM3 Effective Date:05/07/2019

Analyte	Concentration (ug/L)
Antimony	5000
Arsenic	5000
Copper	5000
Lead	5000
Zinc	50000

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65379

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2952413	2952413	08/05/2021	0.5	50
2952414	2952414	08/05/2021	0.5	50
2952415	2952415	08/05/2021	0.59	50
2952416	2952416	08/05/2021	0.59	50
60375626011	GB-39/5-6	08/05/2021	0.61	50
60375626012	GB-39/6-7	08/05/2021	0.63	50
60375626013	GB-46/2-4	08/05/2021	0.68	50
60375626014	GB-46/2-4D	08/05/2021	0.69	50
60375626015	GB-46/4-6	08/05/2021	0.52	50
60375626016	GB-32/0-2	08/05/2021	0.68	50
60375626017	GB-32/2-4	08/05/2021	0.55	50
60375626018	GB-53/0-2	08/05/2021	0.57	50
60375626019	GB-53/3-5	08/05/2021	0.57	50
60375626020	GB-60/2-4	08/05/2021	0.66	50
60375626021	GB-60/5-7	08/05/2021	0.59	50
60375626022	GB-66/3-5	08/05/2021	0.64	50
60375626023	GB-66/3-5D	08/05/2021	0.56	50
60375626024	GB-66/5-7	08/05/2021	0.68	50
60375626025	GB-59/2-4	08/05/2021	0.6	50
60375626026	GB-59/8-10	08/05/2021	0.69	50
60375626027	GB-52/2-3	08/05/2021	0.61	50
60375626028	GB-52/3-5	08/05/2021	0.57	50
60375626029	GB-45/0-2	08/05/2021	0.57	50
60375626030	GB-45/2-4	08/05/2021	0.57	50

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65370

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2952112	2952112	08/04/2021	0.5	50
2952113	2952113	08/04/2021	0.5	50
2952114	2952114	08/04/2021	0.61	50
2952115	2952115	08/04/2021	0.53	50
60375626001	GB-47/3-5	08/04/2021	0.63	50
60375626002	GB-47/5-7	08/04/2021	0.74	50
60375626003	GB-41/4-6	08/04/2021	0.75	50
60375626004	GB-41/6-8	08/04/2021	0.63	50
60375626005	GB-34/1-3	08/04/2021	0.51	50
60375626006	GB-34/3-5	08/04/2021	0.71	50
60375626007	GB-33/2-4	08/04/2021	0.65	50
60375626008	GB-33/4-6	08/04/2021	0.73	50
60375626009	GB-40/1.5-3.5	08/04/2021	0.68	50
60375626010	GB-40/11-13	08/04/2021	0.71	50

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65381

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2952435	2952435	08/05/2021	0.5	50
2952436	2952436	08/05/2021	0.5	50
2952437	2952437	08/05/2021	0.52	50
2952438	2952438	08/05/2021	0.67	50
60375626031	GB-38/0-2	08/05/2021	0.59	50
60375626032	GB-38/3-5	08/05/2021	0.56	50

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM2 Analysis Method: EPA 6020

Start Date: 08/06/2021 12:55 End Date: 08/06/2021 14:40

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19784871CAL0	19784871CAL0	1	08/06/2021	12:55	X	X	X	X	X
19784872CAL1	19784872CAL1	1	08/06/2021	12:57	X	X	X	X	X
19784873CAL2	19784873CAL2	1	08/06/2021	13:00	X	X	X	X	X
19784874CAL3	19784874CAL3	1	08/06/2021	13:02	X	X	X	X	X
19784875CAL4	19784875CAL4	1	08/06/2021	13:04	X	X	X	X	X
19784876ICV	19784876ICV	1	08/06/2021	13:06	X	X	X	X	X
19784877ICB	19784877ICB	1	08/06/2021	13:08	X	X	X	X	X
19784878CRDL	19784878CRDL	1	08/06/2021	13:10	X	X	X	X	X
19784879ICSA	19784879ICSA	1	08/06/2021	13:13	X	X	X	X	X
19784904ICSAB	19784904ICSAB	1	08/06/2021	13:15	X	X	X	X	X
19784880CCV	19784880CCV	1	08/06/2021	13:17	X	X	X	X	X
19784881CCB	19784881CCB	1	08/06/2021	13:19	X	X	X	X	X
2952413BLANK	2952413	10	08/06/2021	13:21	X	X	X	X	X
2952414LCS	2952414	10	08/06/2021	13:23	X	X	X	X	X
GB-39/5-6	60375626011	10	08/06/2021	13:26	X	X	X	X	X
GB-39/6-7	60375626012	10	08/06/2021	13:28	X	X	X	X	X
GB-46/2-4	60375626013	10	08/06/2021	13:30	X	X	X	X	X
GB-46/2-4D	60375626014	10	08/06/2021	13:32	X	X	X	X	X
GB-46/4-6	60375626015	10	08/06/2021	13:34	X	X	X	X	X
GB-32/0-2	60375626016	10	08/06/2021	13:36	X	X	X	X	X
19784882CCV	19784882CCV	1	08/06/2021	13:41	X	X	X	X	X
19784883CCB	19784883CCB	1	08/06/2021	13:43	X	X	X	X	X
GB-32/2-4	60375626017	10	08/06/2021	13:45	X	X	X	X	X
2952415MS	2952415	10	08/06/2021	13:47	X	X	X	X	X
2952416MSD	2952416	10	08/06/2021	13:50	X	X	X	X	X
GB-53/0-2	60375626018	10	08/06/2021	13:52	X	X	X	X	X
GB-53/3-5	60375626019	10	08/06/2021	13:54	X	X	X	X	X
GB-60/2-4	60375626020	10	08/06/2021	13:56	X	X	X	X	X
GB-60/5-7	60375626021	10	08/06/2021	13:58	X	X	X	X	X
GB-66/3-5	60375626022	10	08/06/2021	14:00	X	X	X	X	X
GB-66/3-5D	60375626023	10	08/06/2021	14:03	X	X	X	X	X
19784884CCV	19784884CCV	1	08/06/2021	14:07	X	X	X	X	X
19784885CCB	19784885CCB	1	08/06/2021	14:09	X	X	X	X	X
GB-66/5-7	60375626024	10	08/06/2021	14:11	X	X	X	X	X
GB-59/2-4	60375626025	10	08/06/2021	14:14	X	X	X	X	X
GB-59/8-10	60375626026	10	08/06/2021	14:16	X	X	X	X	X
GB-52/2-3	60375626027	10	08/06/2021	14:18	X	X	X	X	X
GB-52/3-5	60375626028	10	08/06/2021	14:20	X	X	X	X	X
GB-45/0-2	60375626029	10	08/06/2021	14:22	X	X	X	X	X
GB-45/2-4	60375626030	10	08/06/2021	14:24	X	X	X	X	X
19784889CCV	19784889CCV	1	08/06/2021	14:29	X	X	X	X	X
19784890CCB	19784890CCB	1	08/06/2021	14:31	X	X	X	X	X
19784891CRDL	19784891CRDL	1	08/06/2021	14:33	X	X	X	X	X
19784892CCV	19784892CCV	1	08/06/2021	14:35	X	X	X	X	X
19784894CCB	19784894CCB	1	08/06/2021	14:40	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/05/2021 12:12 End Date: 08/05/2021 14:25

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19775400CAL0	19775400CAL0	1	08/05/2021	12:12	X	X	X	X	X
19775401CAL1	19775401CAL1	1	08/05/2021	12:13	X	X	X	X	X
19775402CAL2	19775402CAL2	1	08/05/2021	12:15	X	X	X	X	X
19775403CAL3	19775403CAL3	1	08/05/2021	12:17	X	X	X	X	X
19775404CAL4	19775404CAL4	1	08/05/2021	12:18	X	X	X	X	X
19775405ICV	19775405ICV	1	08/05/2021	12:20	X	X	X	X	X
19775406ICB	19775406ICB	1	08/05/2021	12:21	X	X	X	X	X
19775407CRDL	19775407CRDL	1	08/05/2021	12:23	X	X	X	X	X
19775408ICSA	19775408ICSA	1	08/05/2021	12:25	X	X	X	X	X
19775409ICSAB	19775409ICSAB	1	08/05/2021	12:26	X	X	X	X	X
19775410CCV	19775410CCV	1	08/05/2021	12:28	X	X	X	X	X
19775411CCB	19775411CCB	1	08/05/2021	12:29	X	X	X	X	X
19775420CCV	19775420CCV	1	08/05/2021	13:25	X	X	X	X	X
19775421CCB	19775421CCB	1	08/05/2021	13:27	X	X	X	X	X
2952112BLANK	2952112	10	08/05/2021	13:29	X	X	X	X	X
2952113LCS	2952113	10	08/05/2021	13:30	X	X	X	X	X
60375481031	60375481031	10	08/05/2021	13:32	X	X	X	X	X
2952114MS	2952114	10	08/05/2021	13:33	X	X	X	X	X
2952115MSD	2952115	10	08/05/2021	13:35	X	X	X	X	X
19775422CCV	19775422CCV	1	08/05/2021	13:43	X	X	X	X	X
19775423CCB	19775423CCB	1	08/05/2021	13:45	X	X	X	X	X
GB-47/3-5	60375626001	10	08/05/2021	13:56	X	X	X	X	X
GB-47/5-7	60375626002	10	08/05/2021	13:57	X	X	X	X	X
19775424CCV	19775424CCV	1	08/05/2021	14:01	X	X	X	X	X
19775425CCB	19775425CCB	1	08/05/2021	14:02	X	X	X	X	X
GB-41/4-6	60375626003	10	08/05/2021	14:04	X	X	X	X	X
GB-41/6-8	60375626004	10	08/05/2021	14:06	X	X	X	X	X
GB-34/1-3	60375626005	10	08/05/2021	14:07	X	X	X	X	X
GB-34/3-5	60375626006	10	08/05/2021	14:09	X	X	X	X	X
GB-33/2-4	60375626007	10	08/05/2021	14:10	X	X	X	X	X
GB-33/4-6	60375626008	10	08/05/2021	14:12	X	X	X	X	X
GB-40/1.5-3.5	60375626009	10	08/05/2021	14:14	X	X	X	X	X
GB-40/11-13	60375626010	10	08/05/2021	14:15	X	X	X	X	X
19775427CCV	19775427CCV	1	08/05/2021	14:18	X	X	X	X	X
19775428CCB	19775428CCB	1	08/05/2021	14:20	X	X	X	X	X
19775429CRDL	19775429CRDL	1	08/05/2021	14:22	X	X	X	X	X
19775430CCV	19775430CCV	1	08/05/2021	14:23	X	X	X	X	X
19775431CCB	19775431CCB	1	08/05/2021	14:25	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/06/2021 13:20 End Date: 08/06/2021 13:58

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19784824CAL0	19784824CAL0	1	08/06/2021	13:20	X	X	X	X	X
19784825CAL1	19784825CAL1	1	08/06/2021	13:22	X	X	X	X	X
19784826CAL2	19784826CAL2	1	08/06/2021	13:24	X	X	X	X	X
19784827CAL3	19784827CAL3	1	08/06/2021	13:25	X	X	X	X	X
19784828CAL4	19784828CAL4	1	08/06/2021	13:27	X	X	X	X	X
19784829ICV	19784829ICV	1	08/06/2021	13:29	X	X	X	X	X
19784830ICB	19784830ICB	1	08/06/2021	13:30	X	X	X	X	X
19784831CRDL	19784831CRDL	1	08/06/2021	13:32	X	X	X	X	X
19784832ICSA	19784832ICSA	1	08/06/2021	13:34	X	X	X	X	X
19784833ICSAB	19784833ICSAB	1	08/06/2021	13:35	X	X	X	X	X
19784834CCV	19784834CCV	1	08/06/2021	13:37	X	X	X	X	X
19784835CCB	19784835CCB	1	08/06/2021	13:39	X	X	X	X	X
2952435BLANK	2952435	10	08/06/2021	13:40	X	X	X	X	X
2952436LCS	2952436	10	08/06/2021	13:42	X	X	X	X	X
GB-38/0-2	60375626031	10	08/06/2021	13:44	X	X	X	X	X
GB-38/3-5	60375626032	10	08/06/2021	13:45	X	X	X	X	X
2952437MS	2952437	10	08/06/2021	13:47	X	X	X	X	X
2952438MSD	2952438	10	08/06/2021	13:49	X	X	X	X	X
19784836CCV	19784836CCV	1	08/06/2021	13:57	X	X	X	X	X
19784837CCB	19784837CCB	1	08/06/2021	13:58	X	X	X	X	X

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM2 Start Date: 08/06/2021 12:55 End Date: 08/06/2021 14:40

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19784871CAL0	12:55	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19784872CAL1	12:57	98.3	98.0	98.1	97.8	97.8	97.5	97.1
19784873CAL2	13:00	96.7	96.4	98.0	96.5	97.9	99.1	94.4
19784874CAL3	13:02	95.5	97.0	99.0	96.4	98.3	101.0	94.7
19784875CAL4	13:04	95.4	99.9	100.9	98.7	100.4	111.6	96.9
19784876ICV	13:06	100.6	105.7	105.4	103.7	104.7	114.1	102.7
19784877ICB	13:08	106.1	110.1	107.4	107.6	106.7	114.8	108.4
19784878CRDL	13:10	108.5	113.3	109.7	110.4	108.3	117.7	110.7
19784879ICSA	13:13	85.3	98.1	93.0	95.4	95.3	104.7	89.3
19784904ICSAB	13:15	87.4	102.5	96.3	99.0	98.1	111.0	92.4
19784880CCV	13:17	107.4	112.4	111.9	110.4	111.0	126.0	109.7
19784881CCB	13:19	113.0	117.2	114.4	114.1	114.0	125.7	115.5
2952413	13:21	112.1	111.9	112.3	112.4	111.3	103.8	110.4
2952414	13:23	109.5	110.2	111.4	111.1	109.3	110.0	108.2
GB-39/5-6	13:26	107.6	120.2	114.2	114.9	110.2	113.4	110.3
GB-39/6-7	13:28	106.7	119.9	113.4	114.1	109.4	114.2	109.5
GB-46/2-4	13:30	107.0	118.8	114.6	114.3	109.2	113.0	109.2
GB-46/2-4D	13:32	106.0	117.6	113.0	112.4	107.9	111.4	107.4
GB-46/4-6	13:34	107.2	115.5	112.4	112.6	108.3	110.5	108.9
GB-32/0-2	13:36	103.9	117.8	109.6	112.5	106.2	112.0	107.5
19784882CCV	13:41	106.9	116.8	111.1	112.8	109.6	135.2	113.2
19784883CCB	13:43	113.3	121.9	114.5	117.8	113.8	134.4	119.7
GB-32/2-4	13:45	104.2	117.2	108.0	112.4	106.7	110.9	108.2
2952415	13:47	103.5	122.4	107.4	114.8	106.9	123.6	110.3
2952416	13:50	102.3	121.0	107.5	113.7	105.3	122.4	109.0
GB-53/0-2	13:52	104.5	119.2	111.3	114.2	105.2	111.4	109.4
GB-53/3-5	13:54	106.9	119.0	111.4	114.6	106.7	112.7	111.4
GB-60/2-4	13:56	102.1	116.2	109.3	111.8	104.5	110.1	107.5
GB-60/5-7	13:58	105.1	120.7	110.7	114.4	105.6	112.9	110.2
GB-66/3-5	14:00	107.6	120.9	112.4	115.4	107.2	114.4	112.1
GB-66/3-5D	14:03	107.8	121.2	112.5	115.8	107.1	115.1	112.7
19784884CCV	14:07	106.8	121.0	111.5	115.0	109.2	141.1	115.9
19784885CCB	14:09	110.4	124.6	112.7	117.8	111.1	136.9	120.4
GB-66/5-7	14:11	103.9	119.4	110.3	114.9	104.8	111.1	109.5
GB-59/2-4	14:14	95.2	97.4	98.5	98.7	96.3	89.7	92.3
GB-59/8-10	14:16	102.5	117.4	108.9	112.0	103.8	108.3	107.2
GB-52/2-3	14:18	105.2	120.5	110.3	115.0	105.8	114.2	111.3
GB-52/3-5	14:20	103.8	120.4	109.4	114.5	104.6	114.2	111.0
GB-45/0-2	14:22	103.6	119.3	109.5	113.7	104.6	113.5	110.4
GB-45/2-4	14:24	105.5	120.6	110.6	115.0	106.0	113.7	112.2

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM2 Start Date: 08/06/2021 12:55 End Date: 08/06/2021 14:40

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19784889CCV	14:29	105.8	118.4	110.0	113.7	108.2	138.1	114.2
19784890CCB	14:31	109.7	120.8	110.9	115.7	110.3	134.7	118.0
19784891CRDL	14:33	110.7	121.6	111.1	116.9	110.7	135.8	119.5
19784892CCV	14:35	107.1	116.7	110.6	113.1	109.2	133.8	113.4
19784894CCB	14:40	109.2	117.8	109.3	114.5	109.3	131.5	117.0

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19784871CAL0	12:55	100.0	100.0	100.0
19784872CAL1	12:57	98.0	98.1	98.1
19784873CAL2	13:00	97.0	98.2	97.5
19784874CAL3	13:02	98.6	98.7	98.1
19784875CAL4	13:04	104.0	101.1	101.4
19784876ICV	13:06	108.5	105.3	106.4
19784877ICB	13:08	113.1	107.6	110.7
19784878CRDL	13:10	116.2	109.9	114.0
19784879ICSA	13:13	102.7	94.2	96.0
19784904ICSAB	13:15	109.6	97.3	99.8
19784880CCV	13:17	117.8	111.8	114.6
19784881CCB	13:19	121.5	114.4	118.2
2952413	13:21	107.5	112.0	113.0
2952414	13:23	107.9	111.3	112.5
GB-39/5-6	13:26	118.6	114.4	246.5
GB-39/6-7	13:28	117.9	114.3	275.4
GB-46/2-4	13:30	117.3	115.1	253.9
GB-46/2-4D	13:32	115.8	113.1	244.3
GB-46/4-6	13:34	114.1	112.8	199.1
GB-32/0-2	13:36	116.9	109.9	209.6
19784882CCV	13:41	125.1	111.5	119.0
19784883CCB	13:43	129.1	115.6	123.1
GB-32/2-4	13:45	116.1	108.8	175.4
2952415	13:47	122.2	108.3	178.3
2952416	13:50	121.9	108.2	182.8
GB-53/0-2	13:52	119.4	111.4	241.5
GB-53/3-5	13:54	119.6	111.9	196.2
GB-60/2-4	13:56	117.1	109.7	227.1
GB-60/5-7	13:58	120.5	111.4	209.8
GB-66/3-5	14:00	121.0	112.9	206.9
GB-66/3-5D	14:03	121.8	113.0	204.3
19784884CCV	14:07	132.5	111.7	122.2

FORM XV INORGANIC-3

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM2 Start Date: 08/06/2021 12:55 End Date: 08/06/2021 14:40

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19784885CCB	14:09	133.5	113.6	124.9
GB-66/5-7	14:11	120.7	109.8	236.4
GB-59/2-4	14:14	96.6	98.8	172.0
GB-59/8-10	14:16	118.1	109.9	287.6
GB-52/2-3	14:18	121.6	110.7	200.9
GB-52/3-5	14:20	122.0	110.3	218.0
GB-45/0-2	14:22	120.7	110.0	219.0
GB-45/2-4	14:24	121.9	112.2	219.8
19784889CCV	14:29	128.9	110.0	120.6
19784890CCB	14:31	129.2	111.7	122.3
19784891CRDL	14:33	131.2	112.2	123.1
19784892CCV	14:35	127.1	110.7	120.0
19784894CCB	14:40	126.8	110.5	120.0

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 12:12 End Date: 08/05/2021 14:25

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19775400CAL0	12:12	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19775401CAL1	12:13	97.2	98.6	98.2	98.0	96.4	100.7	97.4
19775402CAL2	12:15	94.0	93.8	96.3	94.2	94.9	96.4	91.4
19775403CAL3	12:17	91.7	89.8	94.6	90.7	93.9	92.0	88.2
19775404CAL4	12:18	88.4	87.3	91.9	88.9	91.3	90.0	84.9
19775405ICV	12:20	91.4	90.3	94.6	92.1	93.4	91.7	88.9
19775406ICB	12:21	97.6	95.0	96.4	95.4	96.9	94.7	94.8
19775407CRDL	12:23	98.6	96.2	97.1	96.9	98.3	96.9	95.6
19775408ICSA	12:25	75.7	76.3	81.5	79.0	82.3	74.9	66.3
19775409ICSAB	12:26	76.8	78.3	82.3	80.1	83.1	75.6	67.5
19775410CCV	12:28	93.1	88.5	94.9	90.4	94.2	87.2	87.5
19775411CCB	12:29	96.9	90.5	95.7	92.5	97.4	86.8	90.9
19775420CCV	13:25	95.2	97.1	98.3	96.4	96.5	104.4	94.9
19775421CCB	13:27	100.7	101.7	100.8	100.7	101.0	104.9	100.3
2952112	13:29	98.0	94.2	94.9	95.6	94.8	83.0	93.6
2952113	13:30	95.5	92.8	96.0	95.7	94.2	87.1	92.1
60375481031	13:32	93.4	96.8	97.2	95.6	92.8	84.6	91.9
2952114	13:33	91.3	96.5	96.2	94.1	92.5	90.3	89.5
2952115	13:35	91.7	96.0	96.4	94.7	92.7	91.2	89.5
19775422CCV	13:43	93.2	91.7	96.2	92.1	95.4	92.1	89.7
19775423CCB	13:45	97.2	92.5	96.2	94.2	97.4	92.1	92.7
GB-47/3-5	13:56	93.6	100.4	97.8	97.9	93.6	87.7	93.7
GB-47/5-7	13:57	92.2	101.1	95.9	97.9	92.5	89.4	93.1
19775424CCV	14:01	95.0	97.2	98.2	96.4	96.8	104.2	94.3
19775425CCB	14:02	97.8	97.1	97.5	96.7	98.5	98.9	96.2
GB-41/4-6	14:04	91.8	96.6	96.5	94.7	92.1	84.2	91.4
GB-41/6-8	14:06	93.8	98.4	97.4	96.6	94.4	87.0	93.5
GB-34/1-3	14:07	93.2	98.5	97.7	97.9	93.1	86.3	92.8
GB-34/3-5	14:09	92.5	97.7	97.6	95.9	92.7	86.7	92.0
GB-33/2-4	14:10	92.1	97.0	97.0	95.9	93.1	86.4	91.9
GB-33/4-6	14:12	91.9	97.2	96.1	95.3	92.7	88.7	91.2
GB-40/1.5-3.5	14:14	91.1	96.1	95.0	94.6	91.7	87.6	90.6
GB-40/11-13	14:15	91.0	95.2	95.5	94.2	92.2	85.9	89.5
19775427CCV	14:18	95.4	99.0	99.5	97.5	98.4	106.1	95.7
19775428CCB	14:20	98.9	99.3	98.5	98.8	99.6	104.1	98.2
19775429CRDL	14:22	101.3	102.9	101.9	101.5	101.5	106.8	102.3
19775430CCV	14:23	94.6	94.8	97.6	95.1	97.2	99.6	92.9
19775431CCB	14:25	99.1	99.0	99.3	98.6	100.7	101.1	98.4

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 12:12 End Date: 08/05/2021 14:25

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19775400CAL0	12:12	100.0	100.0	100.0
19775401CAL1	12:13	98.8	98.8	98.5
19775402CAL2	12:15	92.5	96.1	93.4
19775403CAL3	12:17	89.1	93.9	91.3
19775404CAL4	12:18	86.0	91.9	88.9
19775405ICV	12:20	88.5	95.0	91.6
19775406ICB	12:21	93.1	96.1	94.9
19775407CRDL	12:23	94.0	97.3	95.3
19775408ICSA	12:25	75.8	81.6	77.1
19775409ICSAB	12:26	76.6	82.2	78.4
19775410CCV	12:28	85.3	94.5	89.1
19775411CCB	12:29	86.7	95.2	91.0
19775420CCV	13:25	97.4	98.3	97.7
19775421CCB	13:27	101.8	101.6	100.6
2952112	13:29	88.2	95.2	93.9
2952113	13:30	87.6	95.9	93.6
60375481031	13:32	92.4	96.6	167.2
2952114	13:33	91.4	96.5	174.0
2952115	13:35	91.3	96.8	164.0
19775422CCV	13:43	89.8	95.5	92.1
19775423CCB	13:45	89.7	96.2	92.8
GB-47/3-5	13:56	95.2	98.0	168.9
GB-47/5-7	13:57	96.5	96.6	163.3
19775424CCV	14:01	98.8	98.2	97.7
19775425CCB	14:02	95.6	97.5	96.0
GB-41/4-6	14:04	91.3	96.4	177.0
GB-41/6-8	14:06	94.1	98.1	158.0
GB-34/1-3	14:07	93.4	98.1	195.8
GB-34/3-5	14:09	94.3	97.7	192.1
GB-33/2-4	14:10	93.5	97.0	186.9
GB-33/4-6	14:12	93.2	96.3	184.8
GB-40/1.5-3.5	14:14	91.9	95.2	150.4
GB-40/11-13	14:15	91.2	95.1	189.4
19775427CCV	14:18	100.1	99.6	98.4
19775428CCB	14:20	99.4	99.3	98.3
19775429CRDL	14:22	103.0	101.8	102.1
19775430CCV	14:23	94.3	97.7	95.4
19775431CCB	14:25	97.6	99.9	98.0

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/06/2021 13:20 End Date: 08/06/2021 13:58

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19784824CAL0	13:20	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19784825CAL1	13:22	99.7	100.6	100.4	100.0	99.7	99.4	100.0
19784826CAL2	13:24	96.7	98.5	99.9	98.4	98.5	98.3	97.3
19784827CAL3	13:25	95.9	98.6	99.3	98.4	98.3	98.6	96.5
19784828CAL4	13:27	92.3	96.3	98.8	96.6	96.4	99.7	93.9
19784829ICV	13:29	96.1	99.9	101.3	97.8	99.2	101.0	96.8
19784830ICB	13:30	101.7	102.4	102.6	101.8	102.4	100.9	101.4
19784831CRDL	13:32	101.4	102.3	101.5	102.7	101.5	100.4	105.5
19784832ICSA	13:34	80.6	90.9	88.5	85.7	89.2	88.5	83.1
19784833ICSAB	13:35	81.3	92.1	88.2	86.6	88.6	89.1	84.2
19784834CCV	13:37	98.3	101.7	102.5	101.1	100.4	100.6	99.1
19784835CCB	13:39	103.0	102.5	102.1	102.8	102.8	98.7	102.9
2952435	13:40	101.4	100.4	100.5	101.4	99.5	88.3	102.3
2952436	13:42	99.7	101.3	102.1	103.3	99.3	94.3	103.2
GB-38/0-2	13:44	99.7	109.2	105.4	106.9	100.4	94.9	103.3
GB-38/3-5	13:45	99.9	112.7	106.8	108.6	100.8	97.6	104.9
2952437	13:47	98.0	109.3	105.6	105.8	100.0	102.9	105.2
2952438	13:49	96.5	109.7	105.1	105.2	99.1	103.4	101.2
19784836CCV	13:57	102.6	112.5	107.6	109.2	105.0	117.9	112.0
19784837CCB	13:58	106.4	111.8	107.0	109.8	106.6	112.3	121.4

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19784824CAL0	13:20	100.0	100.0	100.0
19784825CAL1	13:22	100.6	100.5	100.5
19784826CAL2	13:24	98.7	99.8	99.4
19784827CAL3	13:25	99.1	99.8	99.7
19784828CAL4	13:27	97.5	98.5	97.6
19784829ICV	13:29	100.2	100.5	99.5
19784830ICB	13:30	102.1	101.9	101.6
19784831CRDL	13:32	102.2	101.8	102.1
19784832ICSA	13:34	91.3	88.4	88.7
19784833ICSAB	13:35	92.5	89.1	89.3
19784834CCV	13:37	100.4	103.1	102.2
19784835CCB	13:39	101.9	102.9	103.1
2952435	13:40	95.5	100.4	99.2
2952436	13:42	97.0	101.8	101.4
GB-38/0-2	13:44	106.2	105.9	183.1
GB-38/3-5	13:45	109.2	107.6	225.1
2952437	13:47	107.5	105.8	212.3

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/06/2021 13:20 End Date: 08/06/2021 13:58

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
2952438	13:49	107.5	105.3	236.2
19784836CCV	13:57	115.8	108.2	111.6
19784837CCB	13:58	114.0	106.8	111.0

SAMPLE NO.

GB-47/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.9		%	1	07/22/2021 16:24

SAMPLE NO.

GB-47/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	23.3		%	1	07/22/2021 16:24

SAMPLE NO.

GB-41/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.4		%	1	07/22/2021 16:24

SAMPLE NO.

GB-41/6-8

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.0		%	1	07/22/2021 16:24

SAMPLE NO.

GB-34/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	17.6		%	1	07/22/2021 16:24

SAMPLE NO.

GB-34/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	23.5		%	1	07/22/2021 16:24

SAMPLE NO.

GB-33/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.4		%	1	07/22/2021 16:24

SAMPLE NO.

GB-33/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	23.3		%	1	07/22/2021 16:24

SAMPLE NO.

GB-40/1.5-3.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.9		%	1	07/22/2021 16:24

SAMPLE NO.

GB-40/11-13

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	24.5		%	1	07/22/2021 16:24

SAMPLE NO.

GB-39/5-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.5		%	1	07/22/2021 16:24

SAMPLE NO.

GB-39/6-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626012 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.1		%	1	07/22/2021 16:24

SAMPLE NO.

GB-46/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626013 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.5		%	1	07/22/2021 16:24

SAMPLE NO.

GB-46/2-4D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.7		%	1	07/22/2021 16:24

SAMPLE NO.

GB-46/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.9		%	1	07/22/2021 16:25

SAMPLE NO.

GB-32/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.4		%	1	07/22/2021 17:00

SAMPLE NO.

GB-32/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.4		%	1	07/22/2021 17:00

SAMPLE NO.

GB-53/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.3		%	1	07/22/2021 17:00

SAMPLE NO.

GB-53/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	16.9		%	1	07/22/2021 17:00

SAMPLE NO.

GB-60/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.8		%	1	07/22/2021 17:00

SAMPLE NO.

GB-60/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626021 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.3		%	1	07/22/2021 17:00

SAMPLE NO.

GB-66/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626022 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.3		%	1	07/22/2021 17:00

SAMPLE NO.

GB-66/3-5D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626023 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.8		%	1	07/22/2021 17:00

SAMPLE NO.

GB-66/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626024 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	22.3		%	1	07/22/2021 17:00

SAMPLE NO.

GB-59/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626025 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.1		%	1	07/22/2021 17:00

SAMPLE NO.

GB-59/8-10

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626026 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.4		%	1	07/22/2021 17:01

SAMPLE NO.

GB-52/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626027 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.1		%	1	07/22/2021 17:01

SAMPLE NO.

GB-52/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626028 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.7		%	1	07/22/2021 17:01

SAMPLE NO.

GB-45/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626029 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.0		%	1	07/22/2021 17:01

SAMPLE NO.

GB-45/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626030 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.2		%	1	07/22/2021 17:01

SAMPLE NO.

GB-38/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626031 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	14.6		%	1	07/22/2021 17:01

SAMPLE NO.

GB-38/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Lab Sample ID: 60375626032 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.8		%	1	07/22/2021 16:32

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2944575	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									<0.50	U
Wet weight w/dish weight										

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2944578	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									<0.50	U
Wet weight w/dish weight										

SAMPLE NO.

2944576DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	19.8	19.8	0

SAMPLE NO.

2944579DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	21.4	21.3	0

FORM IX INORGANIC-1
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Preparation Method: ASTM D2974 Instrument ID: 60BAL2

Concentration Units: %

Analyte	PQL	MDL	MDL Date
Percent Moisture	0.10	0.10	01/01/2021

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18373

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2944575	2944575	07/22/2021	1	1
2944576	2944576	07/22/2021	1	1
60375626001	GB-47/3-5	07/22/2021	1	1
60375626002	GB-47/5-7	07/22/2021	1	1
60375626003	GB-41/4-6	07/22/2021	1	1
60375626004	GB-41/6-8	07/22/2021	1	1
60375626005	GB-34/1-3	07/22/2021	1	1
60375626006	GB-34/3-5	07/22/2021	1	1
60375626007	GB-33/2-4	07/22/2021	1	1
60375626008	GB-33/4-6	07/22/2021	1	1
60375626009	GB-40/1.5-3.5	07/22/2021	1	1
60375626010	GB-40/11-13	07/22/2021	1	1
60375626011	GB-39/5-6	07/22/2021	1	1
60375626012	GB-39/6-7	07/22/2021	1	1
60375626013	GB-46/2-4	07/22/2021	1	1
60375626014	GB-46/2-4D	07/22/2021	1	1
60375626015	GB-46/4-6	07/22/2021	1	1
60375626032	GB-38/3-5	07/22/2021	1	1

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18374

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2944578	2944578	07/22/2021	1	1
2944579	2944579	07/22/2021	1	1
60375626016	GB-32/0-2	07/22/2021	1	1
60375626017	GB-32/2-4	07/22/2021	1	1
60375626018	GB-53/0-2	07/22/2021	1	1
60375626019	GB-53/3-5	07/22/2021	1	1
60375626020	GB-60/2-4	07/22/2021	1	1
60375626021	GB-60/5-7	07/22/2021	1	1
60375626022	GB-66/3-5	07/22/2021	1	1
60375626023	GB-66/3-5D	07/22/2021	1	1
60375626024	GB-66/5-7	07/22/2021	1	1
60375626025	GB-59/2-4	07/22/2021	1	1
60375626026	GB-59/8-10	07/22/2021	1	1
60375626027	GB-52/2-3	07/22/2021	1	1
60375626028	GB-52/3-5	07/22/2021	1	1
60375626029	GB-45/0-2	07/22/2021	1	1
60375626030	GB-45/2-4	07/22/2021	1	1
60375626031	GB-38/0-2	07/22/2021	1	1

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375626 Contract: GSA GOODFELLOW

Instrument ID: 60BAL2 Analysis Method: ASTM D2974

Start Date: 07/22/2021 16:23 End Date: 07/22/2021 17:01

Sample Name	Lab Sample ID	D/F	Date	Time	MOIST
2944575BLANK	2944575	1	07/22/2021	16:23	X
2944576DUP	2944576	1	07/22/2021	16:23	X
GB-47/3-5	60375626001	1	07/22/2021	16:24	X
GB-47/5-7	60375626002	1	07/22/2021	16:24	X
GB-41/4-6	60375626003	1	07/22/2021	16:24	X
GB-41/6-8	60375626004	1	07/22/2021	16:24	X
GB-34/1-3	60375626005	1	07/22/2021	16:24	X
GB-34/3-5	60375626006	1	07/22/2021	16:24	X
GB-33/2-4	60375626007	1	07/22/2021	16:24	X
GB-33/4-6	60375626008	1	07/22/2021	16:24	X
GB-40/1.5-3.5	60375626009	1	07/22/2021	16:24	X
GB-40/11-13	60375626010	1	07/22/2021	16:24	X
GB-39/5-6	60375626011	1	07/22/2021	16:24	X
GB-39/6-7	60375626012	1	07/22/2021	16:24	X
GB-46/2-4	60375626013	1	07/22/2021	16:24	X
GB-46/2-4D	60375626014	1	07/22/2021	16:24	X
GB-46/4-6	60375626015	1	07/22/2021	16:25	X
GB-38/3-5	60375626032	1	07/22/2021	16:32	X
2944578BLANK	2944578	1	07/22/2021	16:59	X
2944579DUP	2944579	1	07/22/2021	17:00	X
GB-32/0-2	60375626016	1	07/22/2021	17:00	X
GB-32/2-4	60375626017	1	07/22/2021	17:00	X
GB-53/0-2	60375626018	1	07/22/2021	17:00	X
GB-53/3-5	60375626019	1	07/22/2021	17:00	X
GB-60/2-4	60375626020	1	07/22/2021	17:00	X
GB-60/5-7	60375626021	1	07/22/2021	17:00	X
GB-66/3-5	60375626022	1	07/22/2021	17:00	X
GB-66/3-5D	60375626023	1	07/22/2021	17:00	X
GB-66/5-7	60375626024	1	07/22/2021	17:00	X
GB-59/2-4	60375626025	1	07/22/2021	17:00	X
GB-59/8-10	60375626026	1	07/22/2021	17:01	X
GB-52/2-3	60375626027	1	07/22/2021	17:01	X
GB-52/3-5	60375626028	1	07/22/2021	17:01	X
GB-45/0-2	60375626029	1	07/22/2021	17:01	X
GB-45/2-4	60375626030	1	07/22/2021	17:01	X
GB-38/0-2	60375626031	1	07/22/2021	17:01	X

ANALYTICAL REPORT

August 19, 2021

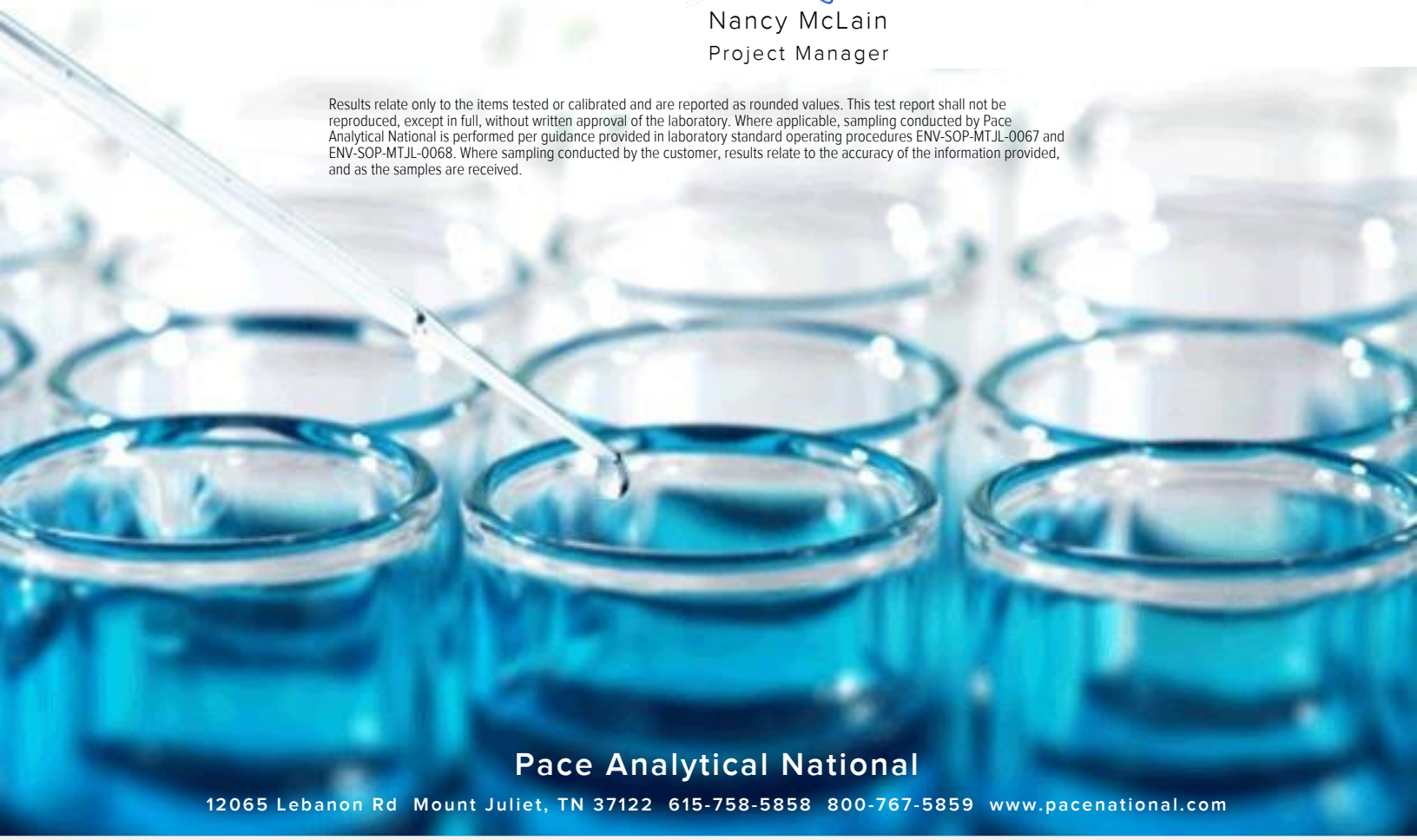
Pace Analytical - Lenexa, KS

Sample Delivery Group:	L1382161
Samples Received:	07/23/2021
Project Number:	60375626
Description:	GSA GOODFELLOW
Site:	011
Report To:	Jeff Shopper
	9608 Loiret Boulevard
	Lenexa, KS 66219

Entire Report Reviewed By: (b) (6)

Nancy McLain
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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GB-39/5-6 L1382161-01 Solid

Collected by	Collected date/time	Received date/time
	07/21/21 07:50	07/23/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1713519	1	07/29/21 14:07	07/29/21 14:14	CMK	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1710286	1	07/26/21 17:15	07/28/21 23:44	GKM	Mt. Juliet, TN

GB-39/6-7 L1382161-02 Solid

Collected by	Collected date/time	Received date/time
	07/21/21 07:55	07/23/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1713519	1	07/29/21 14:07	07/29/21 14:14	CMK	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1710286	1	07/26/21 17:15	07/29/21 00:12	GKM	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

(b) (6)

Nancy McLain
Project Manager

Report Revision History

Level II Report - Version 1: 07/30/21 15:47
Level II Report - Version 2: 07/30/21 16:12

Project Narrative

Fix WO number.

2540 G-2011 Total Solids

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1382161-01	**SDG:**	L1382161
Client Sample ID:	GB-39/5-6	**Collected Date/Time:**	07/21/21 07:50
Lab File ID:	11	**Received Date/Time:**	07/23/21 08:30
Instrument ID:	LOGBAL4	**Preparation Date/Time:**	07/29/21 14:07
Analytical Batch:	WG1713519	**Analysis Date/Time:**	07/29/21 14:14
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	8.662 g
Total Solids (%):	80.7	**Final Wt/Vol:**	7.235 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	80.7	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1382161-02	**SDG:**	L1382161
Client Sample ID:	GB-39/6-7	**Collected Date/Time:**	07/21/21 07:55
Lab File ID:	12	**Received Date/Time:**	07/23/21 08:30
Instrument ID:	LOGBAL4	**Preparation Date/Time:**	07/29/21 14:07
Analytical Batch:	WG1713519	**Analysis Date/Time:**	07/29/21 14:14
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	13.273 g
Total Solids (%):	81.8	**Final Wt/Vol:**	11.09 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	81.8	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685904-1	**SDG:**	L1382161
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	01	**Received Date/Time:**	
Instrument ID:	LOGBAL4	**Preparation Date/Time:**	07/29/21 14:05
Analytical Batch:	WG1713519	**Analysis Date/Time:**	07/29/21 14:14
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	1.283 g
Total Solids (%):		**Final Wt/Vol:**	1.281 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	0.00200	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685904-3	**SDG:**	L1382161
Client Sample ID:	DUP	**Collected Date/Time:**	07/20/21 16:10
Lab File ID:	02	**Received Date/Time:**	07/23/21 08:30
Instrument ID:	LOGBAL4	**Preparation Date/Time:**	07/29/21 14:07
Analytical Batch:	WG1713519	**Analysis Date/Time:**	07/29/21 14:14
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	15.733 g
Total Solids (%):	78.9	**Final Wt/Vol:**	12.723 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	79.2	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685904-2	**SDG:**	L1382161
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	03	**Received Date/Time:**	
Instrument ID:	LOGBAL4	**Preparation Date/Time:**	07/29/21 14:05
Analytical Batch:	WG1713519	**Analysis Date/Time:**	07/29/21 14:14
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	11.302 g
Total Solids (%):		**Final Wt/Vol:**	6.291 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	50.0	

SDG:	L1382161	**Calibration (begin) date/time:**	_____
Instrument ID:	LOGBAL4	**Calibration (end) date/time:**	_____
Analytical Method:	2540 G-2011	**Analytical Run:**	WG1713519

	Sample ID:	**BLANK Result**	**BLANK Qual**
	File ID:	01	
Analyte		%	
TOTAL SOLIDS		0.00200	

DUP Sample / File ID:	R3685904-3 / 02	**SDG:**	L1382161
OS Sample / File ID:	L1382160-12 / 07	**Analytical Batch:**	WG1713519
Instrument ID:	LOGBAL4	**Dilution Factor:**	1
Analytical Method:	2540 G-2011	**Matrix:**	Solid

Analyte	OS Result	DUP Result	RPD	RPD Limits
	%	%	%	%
Total Solids	78.9	79.2	0.349	10

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

L1382161-01,02

SAMPLE NO.:
R3685904-2

LCS Sample / File ID:	R3685904-2 / 03	**SDG:**	L1382161
LCSD Sample / File ID:		**Analytical Batch:**	WG1713519
Instrument ID:	LOGBAL4	**Dilution Factor:**	1
Analytical Method:	2540 G-2011	**Matrix:**	Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.0		100		85.0 - 115		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1382161-01,02 **Analytical Method:** 2540 G-2011

Matrix: Solid **Prep Method:** SM 2540 G

Analyte	CAS	Wavelength	Mass	MDL	RDL
				%	%
Total Solids	TSOLIDS				

ANALYSIS LOG

SDG:	L1382161	**Analytical Method:**	2540 G-2011
Instrument ID:	LOGBAL4	**Calibration Start Date:**	
Analytical Run:	WG1713519	**Calibration End Date:**	

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3685904-1	01	07/29/21 14:14	1	WG1713519
DUP	R3685904-3	02	07/29/21 14:14	1	WG1713519
LCS	R3685904-2	03	07/29/21 14:14	1	WG1713519
OS	L1382160-12	07	07/29/21 14:14		
GB-39/6-7	L1382161-02	12	07/29/21 14:14	1	WG1713519
GB-39/5-6	L1382161-01	11	07/29/21 14:14	1	WG1713519

8330B Semi-Volatile Organic Compounds (HPLC)

Analytical Method: 8330B **SDG:** L1382161
Matrix: Solid

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
GB-39/5-6	L1382161-01	HPLC4	0728000023	94.0	0
GB-39/6-7	L1382161-02	HPLC4	0728000024	95.6	0
OS	L1381569-04	HPLC4	0728000009	100	0
MS	R3685137-3	HPLC4	0728000004	98.1	0
MSD	R3685137-4	HPLC4	0728000005	101	0
BLANK	R3685137-1	HPLC4	0728000002	103	0
LCS	R3685137-2	HPLC4	0728000003	95.3	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	1,3-Dimethyl-2-NB	80.0 - 128

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1382161-01,02

SAMPLE NO.:
R3685137-3
R3685137-4

MS Sample / File ID: R3685137-3 / 0728000004
MSD Sample / File ID: R3685137-4 / 0728000005
OS Sample / File ID: L1381569-04 / 0728000009
Instrument ID: HPLC4
Analytical Method: 8330B

SDG: L1382161
Analytical Batch: WG1710286
Matrix: Solid

Analyte	Spike Amount (dry)	OS Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	mg/kg	*mg/kg*	*mg/kg*	*mg/kg*	*%*	*%*		*%*	*%*	*%*
Tetryl	9.71	U	10.2	10.5	105	108	1	46.0 - 158	2.60	20
2,4-Dinitrotoluene	9.71	U	9.40	9.58	96.7	98.6	1	78.0 - 138	1.93	20
4-Nitrotoluene (4-NT)	9.71	U	9.32	9.47	96.0	97.5	1	80.0 - 129	1.56	20
RDX	9.71	U	8.57	8.87	88.2	91.3	1	57.0 - 126	3.50	20
Nitrobenzene	9.71	U	9.48	9.71	97.6	100	1	80.0 - 126	2.42	20
2,6-Dinitrotoluene	9.71	U	9.29	9.59	95.6	98.7	1	80.0 - 125	3.23	20
2-Nitrotoluene	9.71	U	9.30	9.59	95.7	98.7	1	80.0 - 125	3.10	20
3-Nitrotoluene	9.71	U	9.46	9.73	97.4	100	1	80.0 - 120	2.80	20
1,3,5-Trinitrobenzene	9.71	U	9.53	9.81	98.1	101	1	80.0 - 133	2.90	20
1,3-Dinitrobenzene	9.71	U	9.29	9.60	95.6	98.9	1	80.0 - 138	3.36	20
2,4,6-Trinitrotoluene	9.71	U	9.31	9.51	95.9	97.9	1	80.0 - 127	2.08	20
4-Amino-2,6-Dinitrotoluene	9.71	U	9.23	9.48	95.0	97.6	1	80.0 - 127	2.74	20
2-Amino-4,6-Dinitrotoluene	9.71	U	9.10	9.37	93.7	96.5	1	80.0 - 135	2.91	20
HMX	9.71	U	9.49	9.73	97.7	100	1	79.0 - 125	2.41	20
PETN	9.71	U	10.3	9.82	106	101	1	77.0 - 145	4.85	20
Nitroglycerine	9.71	U	9.26	9.40	95.4	96.7	1	66.0 - 137	1.44	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY
L1382161-01,02

SAMPLE NO.:
R3685137-2

LCS Sample / File ID:	R3685137-2 / 0728000003	**SDG:**	L1382161
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1710286
Instrument ID:	HPLC4	**Dilution Factor:**	1
Analytical Method:	8330B	**Matrix:**	Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	mg/kg	*mg/kg*		*%*	*%*	*%*	*%*	*%*
Tetryl	8.00	7.60		95.0		80.0 - 122		
2,4-Dinitrotoluene	8.00	7.55		94.4		80.0 - 120		
4-Nitrotoluene (4-NT)	8.00	7.39		92.4		80.0 - 121		
RDX	8.00	7.47		93.4		80.0 - 120		
Nitrobenzene	8.00	7.54		94.3		80.0 - 120		
2,6-Dinitrotoluene	8.00	7.45		93.1		80.0 - 120		
2-Nitrotoluene	8.00	7.49		93.6		80.0 - 120		
3-Nitrotoluene	8.00	7.56		94.5		80.0 - 120		
1,3,5-Trinitrobenzene	8.00	7.49		93.6		80.0 - 124		
1,3-Dinitrobenzene	8.00	7.49		93.6		80.0 - 122		
2,4,6-Trinitrotoluene	8.00	7.31		91.4		80.0 - 120		
4-Amino-2,6-Dinitrotoluene	8.00	7.43		92.9		80.0 - 120		
2-Amino-4,6-Dinitrotoluene	8.00	7.25		90.6		80.0 - 123		
HMX	8.00	7.53		94.1		80.0 - 120		
PETN	8.00	7.70		96.3		80.0 - 137		
Nitroglycerine	8.00	7.32		91.5		78.0 - 120		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Lab Sample ID:	R3685137-1	**SDG:**	L1382161
Lab File ID:	0728000002	**Preparation Date/Time:**	07/26/21 17:15
Instrument ID:	HPLC4	**Analysis Date/Time:**	07/28/21 13:57
Analytical Batch:	WG1710286	**Dilution Factor:**	1
Analytical Method:	8330B	**Matrix:**	Solid

Sample ID	Lab Sample ID	Instrument	File ID	Analysis *date/time*
LCS	R3685137-2	HPLC4	0728000003	07/28/21 14:25
MS	R3685137-3	HPLC4	0728000004	07/28/21 14:53
MSD	R3685137-4	HPLC4	0728000005	07/28/21 15:21
OS	L1381569-04	HPLC4	0728000009	07/28/21 17:12
GB-39/5-6	L1382161-01	HPLC4	0728000023	07/28/21 23:44
GB-39/6-7	L1382161-02	HPLC4	0728000024	07/29/21 00:12

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1382161-01	**SDG:**	L1382161
Client Sample ID:	GB-39/5-6	**Collected Date/Time:**	07/21/21 07:50
Lab File ID:	0728000023	**Received Date/Time:**	07/23/21 08:30
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 23:44
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5.00 g
Total Solids (%):	80.7	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.20	1	U		0.109	0.620
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0972	0.620
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.171	0.620
RDX	121-82-4	4.847742	1	U		0.135	0.620
Nitrobenzene	98-95-3	8.63	1	U		0.107	0.620
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.107	0.620
2-Nitrotoluene	88-72-2	13.77	1	U		0.113	0.620
3-Nitrotoluene	99-08-1	15.83	1	U		0.140	0.620
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0486	0.620
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0639	0.620
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0782	0.620
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0710	0.620
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0791	0.620
HMX	2691-41-0	3.12	1	U		0.0966	0.620
PETN	78-11-5	17	1	U		0.263	0.620
Nitroglycerine	55-63-0	9.50	1	U		0.191	2.48

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1382161-02	**SDG:**	L1382161
Client Sample ID:	GB-39/6-7	**Collected Date/Time:**	07/21/21 07:55
Lab File ID:	0728000024	**Received Date/Time:**	07/23/21 08:30
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/29/21 00:12
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.04 g
Total Solids (%):	81.8	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.20	1	U		0.107	0.611
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0958	0.611
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.169	0.611
RDX	121-82-4	4.847742	1	U		0.133	0.611
Nitrobenzene	98-95-3	8.63	1	U		0.105	0.611
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.106	0.611
2-Nitrotoluene	88-72-2	13.77	1	U		0.112	0.611
3-Nitrotoluene	99-08-1	15.83	1	U		0.138	0.611
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0479	0.611
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0630	0.611
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0771	0.611
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0700	0.611
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0780	0.611
HMX	2691-41-0	3.12	1	U		0.0952	0.611
PETN	78-11-5	17	1	U		0.259	0.611
Nitroglycerine	55-63-0	9.50	1	U		0.188	2.44

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	1

Analyte	CS: 50	CS: 100	CS: 500	CS: 5000	CS: 10000	CS: 25000
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	3.171385	3.173083	3.173223	3.169369	3.163009	3.170319
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	4.847742	4.855105	4.852368	4.842887	4.823464	4.841376
1,3,5-TRINITROBENZENE	6.519834	6.525268	6.522585	6.511855	6.487756	6.513189
M-DINITROBENZENE	7.715923	7.726374	7.722607	7.706491	7.671502	7.707696
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	8.157695	8.171274	8.167254	8.144935	8.098422	8.145638
NITROBENZENE	8.537642	8.545776	8.541567	8.528630	8.494763	8.532535
NITROGLYCERINE	9.539104	9.550113	9.542587	9.526826	9.481855	9.526034
2,4,6-TRINITROTOLUENE	9.897795	9.909935	9.903618	9.884956	9.836236	9.890092
4-AMINO-2,6-DINITROTOLUENE	10.227270	10.245760	10.240690	10.204140	10.125880	10.199470
2-AMINO-4,6-DINITROTOLUENE	10.813790	10.833760	10.8278	10.784020	10.695990	10.774710
2,6-DINITROTOLUENE	11.122860	11.134870	11.128170	11.105790	11.044940	11.110350
2,4-DINITROTOLUENE	11.5565	11.566070	11.558870	11.532060	11.463630	11.534850
2-NITROTOLUENE	13.220310	13.231650	13.219310	13.198350	13.129760	13.206620
4-NITROTOLUENE (4-NT)	14.237450	14.244390	14.2294	14.200370	14.119980	14.208990
3-NITROTOLUENE	15.175170	15.189170	15.171220	15.144040	15.061150	15.156730
PETN	16.359830	16.390830	16.365830	16.343550	16.257310	16.355280
1,3-DIMETHYL-2-NB	22.3265	22.348930	22.287570	22.243860	22.1301	22.290630
File ID:	03050000 01	03050000 02	03050000 03	03050000 04	03050000 05	03050000 06

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	2

Analyte	CS: 50	CS: 100	CS: 500	CS: 5000	CS: 10000	CS: 25000
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	3.171145	3.173019	3.173167	3.169886	3.163031	3.170523
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	4.847465	4.856752	4.852536	4.843367	4.823978	4.841408
1,3,5-TRINITROBENZENE	6.513167	6.524614	6.521931	6.511817	6.487702	6.513190
M-DINITROBENZENE	7.7190	7.725886	7.723182	7.706508	7.671550	7.707723
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	8.152849	8.169066	8.168149	8.144856	8.098416	8.145687
NITROBENZENE	8.5465	8.550094	8.541797	8.528927	8.494675	8.532819
NITROGLYCERINE	9.551976	9.546318	9.542693	9.526806	9.481840	9.526051
2,4,6-TRINITROTOLUENE	9.883112	9.914920	9.904042	9.884872	9.836247	9.890079
4-AMINO-2,6-DINITROTOLUENE	10.211050	10.2422	10.242930	10.204310	10.125880	10.199490
2-AMINO-4,6-DINITROTOLUENE	10.824160	10.839240	10.828920	10.784230	10.695980	10.774750
2,6-DINITROTOLUENE	11.128790	11.137640	11.128480	11.106350	11.045280	11.110870
2,4-DINITROTOLUENE	11.530060	11.5644	11.558820	11.532230	11.463750	11.534790
2-NITROTOLUENE	13.2364	13.2275	13.218980	13.198430	13.129690	13.206460
4-NITROTOLUENE (4-NT)	14.215070	14.241030	14.231020	14.200490	14.119990	14.208870
3-NITROTOLUENE	15.170940	15.176590	15.171680	15.144170	15.061160	15.156680
PETN	16.342550	16.383050	16.354550	16.3433	16.257190	16.3553
1,3-DIMETHYL-2-NB	22.295470	22.338270	22.294570	22.243620	22.130170	22.290530
File ID:	0305000001	0305000002	0305000003	0305000004	0305000005	0305000006

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	1

Analyte	RRF: 50	RRF: 100	RRF: 500	RRF: 5000	RRF: 10000	RRF: 25000
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.589540	5.664562	5.504399	5.697655	5.685221	5.769493
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	6.627079	6.641713	6.623152	6.800339	6.805037	6.885991
1,3,5-TRINITROBENZENE	3.389747	3.286280	3.265957	3.355976	3.345051	3.388134
M-DINITROBENZENE	5.606183	5.518289	5.589282	5.727194	5.726504	5.783947
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5.527175	5.228809	5.021992	4.606275	4.608745	4.710337
NITROBENZENE	7.420898	6.855742	7.049081	7.242441	7.227420	7.328022
NITROGLYCERINE	14.089440	15.680740	16.1890	17.247460	17.337280	17.527350
2,4,6-TRINITROTOLUENE	4.740914	4.912546	4.829156	4.746596	4.779355	4.836989
4-AMINO-2,6-DINITROTOLUENE	3.582543	3.858474	4.014325	4.325980	4.304340	4.368022
2-AMINO-4,6-DINITROTOLUENE	3.984769	4.452910	4.390662	4.559380	4.541370	4.622739
2,6-DINITROTOLUENE	4.998904	5.610472	5.671211	5.828244	5.876681	5.912287
2,4-DINITROTOLUENE	5.674341	6.289419	6.269518	6.414562	6.442437	6.536476
2-NITROTOLUENE	6.070773	6.471888	6.304039	6.554028	6.560824	6.659736
4-NITROTOLUENE (4-NT)	6.480818	6.397298	6.695450	6.950418	6.953605	7.047652
3-NITROTOLUENE	5.487788	5.173790	5.259140	5.332740	5.333148	5.408663
PETN	15.930950	16.917870	15.0885	15.588690	15.788370	15.991050
1,3-DIMETHYL-2-NB	6.182741	5.262676	5.641273	5.728670	5.751137	5.819782
File ID:	0305000001	0305000002	0305000003	0305000004	0305000005	0305000006

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	1

Analyte	RRF. Avg	%RSD	COD
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.651812	1.495026	
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	6.730552	1.543016	
1,3,5-TRINITROBENZENE	3.338524	1.416993	
M-DINITROBENZENE	5.658566	1.649432	
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	4.950555	6.939268	
NITROBENZENE	7.187267	2.590901	
NITROGLYCERINE	16.34521	7.388243	
2,4,6-TRINITROTOLUENE	4.807593	1.239571	
4-AMINO-2,6-DINITROTOLUENE	4.075614	7.044108	
2-AMINO-4,6-DINITROTOLUENE	4.425305	4.762099	
2,6-DINITROTOLUENE	5.649633	5.493203	
2,4-DINITROTOLUENE	6.271125	4.495281	
2-NITROTOLUENE	6.436882	3.052613	
4-NITROTOLUENE (4-NT)	6.754207	3.676371	
3-NITROTOLUENE	5.332545	1.88286	
PETN	15.88424	3.459426	
1,3-DIMETHYL-2-NB	5.731047	4.723774	

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	2

Analyte	RRF: 50	RRF: 100	RRF: 500	RRF: 5000	RRF: 10000	RRF: 25000
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.633768	5.647253	5.557384	5.673482	5.683707	5.833914
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5.907260	6.393801	5.962084	5.937918	5.985322	6.088652
1,3,5-TRINITROBENZENE	4.499539	4.331379	4.539626	4.616323	4.617117	4.720823
M-DINITROBENZENE	7.731681	6.886612	6.820469	7.052621	7.066782	7.146976
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5.901636	5.381108	5.249331	4.984086	4.985893	5.108619
NITROBENZENE	5.720191	4.362965	4.152251	4.689836	4.699152	4.778218
NITROGLYCERINE	8.371273	7.324890	7.949999	8.590228	8.657243	8.800561
2,4,6-TRINITROTOLUENE	5.554246	4.969740	5.155667	5.202672	5.248625	5.314285
4-AMINO-2,6-DINITROTOLUENE	3.831814	3.739945	4.112138	4.427781	4.405773	4.482646
2-AMINO-4,6-DINITROTOLUENE	4.388566	5.591607	5.409325	5.509248	5.472934	5.574760
2,6-DINITROTOLUENE	3.808333	4.389862	4.540375	4.561373	4.609254	4.646561
2,4-DINITROTOLUENE	6.435006	5.405881	5.680658	5.710578	5.734331	5.829613
2-NITROTOLUENE	3.683744	4.404376	4.070291	4.188663	4.187062	4.275749
4-NITROTOLUENE (4-NT)	3.900589	4.757668	4.602370	5.011945	4.980028	5.105704
3-NITROTOLUENE	3.380048	3.879897	3.747826	3.709057	3.695131	3.782742
PETN	8.824475	10.900370	8.594565	8.389874	8.371798	8.618650
1,3-DIMETHYL-2-NB	4.653997	3.636982	4.297176	4.294903	4.267369	4.332942
File ID:	0305000001	0305000002	0305000003	0305000004	0305000005	0305000006

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	2

Analyte	RRF. Avg	%RSD	COD
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.671585	1.467524	
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	6.045839	2.73823	
1,3,5-TRINITROBENZENE	4.554134	2.66575	
M-DINITROBENZENE	7.117524	4.161555	
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5.268445	6.003444	
NITROBENZENE	4.733769	10.39844	
NITROGLYCERINE	8.282366	6.11484	
2,4,6-TRINITROTOLUENE	5.240872	3.358477	
4-AMINO-2,6-DINITROTOLUENE	4.166683	7.081576	
2-AMINO-4,6-DINITROTOLUENE	5.324407	7.943564	
2,6-DINITROTOLUENE	4.42596	6.499156	
2,4-DINITROTOLUENE	5.799345	5.388772	
2-NITROTOLUENE	4.134981	5.45956	
4-NITROTOLUENE (4-NT)	4.726384	8.585922	
3-NITROTOLUENE	3.699117	4.187526	
PETN	8.949955	9.893087	
1,3-DIMETHYL-2-NB	4.247228	7.131004	

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0305000007	**Analysis date/time:**	03/05/21 17:19
Analytical Method:	8330B	**Sample ID:**	SSCV
Column:	1		

Analyte	True Value	Result	Result	Limits
	mg/l	*mg/l*	*% Rec.*	*%*
1,3,5-TRINITROBENZENE	5	4.867509	97.40	80 - 120
2,4,6-TRINITROTOLUENE	5	4.955375	99.10	80 - 120
2,4-DINITROTOLUENE	5	4.735329	94.70	80 - 120
2,6-DINITROTOLUENE	5	4.723269	94.50	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.729271	94.60	80 - 120
2-NITROTOLUENE	5	4.798087	96	80 - 120
3-NITROTOLUENE	5	4.902088	98	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	4.577782	91.60	80 - 120
4-NITROTOLUENE (4-NT)	5	4.74974	95	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	4.857015	97.10	80 - 120
M-DINITROBENZENE	5	4.827776	96.60	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	5.241039	105	80 - 120
NITROBENZENE	5	4.857778	97.20	80 - 120
NITROGLYCERINE	5	4.594164	91.90	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	4.861824	97.20	80 - 120
PETN	5	4.941242	98.80	80 - 120
1,3-DIMETHYL-2-NB	5	4.863212	97.30	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0305000007	**Analysis date/time:**	03/05/21 17:19
Analytical Method:	8330B	**Sample ID:**	SSCV
Column:	2		

Analyte	True Value	Result	Result	Limits
	mg/l	*mg/l*	*% Rec.*	*%*
1,3,5-TRINITROBENZENE	5	4.793229	95.90	80 - 120
2,4,6-TRINITROTOLUENE	5	4.906389	98.10	80 - 120
2,4-DINITROTOLUENE	5	4.881352	97.60	80 - 120
2,6-DINITROTOLUENE	5	4.714614	94.30	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.666031	93.30	80 - 120
2-NITROTOLUENE	5	4.846888	96.90	80 - 120
3-NITROTOLUENE	5	4.922045	98.40	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	4.561782	91.20	80 - 120
4-NITROTOLUENE (4-NT)	5	4.6244	92.50	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	4.963759	99.30	80 - 120
M-DINITROBENZENE	5	4.922615	98.50	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	5.162863	103	80 - 120
NITROBENZENE	5	4.975368	99.50	80 - 120
NITROGLYCERINE	5	4.674431	93.50	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	4.902349	98	80 - 120
PETN	5	5.212081	104	80 - 120
1,3-DIMETHYL-2-NB	5	4.885958	97.70	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0728000001	**Analysis date/time:**	07/28/21 13:29
Analytical Method:	8330B	**Sample ID:**	CCV
Column:	1		

Analyte	True Value	Result	Result	Limits
	mg/l	*mg/l*	*% Rec.*	*%*
1,3,5-TRINITROBENZENE	5	5.119346	102	80 - 120
2,4,6-TRINITROTOLUENE	5	4.709817	94.20	80 - 120
2,4-DINITROTOLUENE	5	4.945993	98.90	80 - 120
2,6-DINITROTOLUENE	5	4.974489	99.50	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.863713	97.30	80 - 120
2-NITROTOLUENE	5	4.981042	99.60	80 - 120
3-NITROTOLUENE	5	5.073547	101	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	5.024354	100	80 - 120
4-NITROTOLUENE (4-NT)	5	4.928126	98.60	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	5.070966	101	80 - 120
M-DINITROBENZENE	5	5.014136	100	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	4.887751	97.80	80 - 120
NITROBENZENE	5	5.013699	100	80 - 120
NITROGLYCERINE	5	4.773796	95.50	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	5.05694	101	80 - 120
PETN	5	5.094374	102	80 - 120
1,3-DIMETHYL-2-NB	5	5.095556	102	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0728000016	**Analysis date/time:**	07/28/21 20:28
Analytical Method:	8330B	**Sample ID:**	CCV
Column:	1		

Analyte	**True Value** *mg/l*	**Result** *mg/l*	**Result** *% Rec.*	**Limits** *%*
1,3,5-TRINITROBENZENE	5	5.175539	104	80 - 120
2,4,6-TRINITROTOLUENE	5	4.993383	99.90	80 - 120
2,4-DINITROTOLUENE	5	5.085055	102	80 - 120
2,6-DINITROTOLUENE	5	5.109926	102	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.898995	98	80 - 120
2-NITROTOLUENE	5	5.072796	101	80 - 120
3-NITROTOLUENE	5	5.17971	104	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	4.993322	99.90	80 - 120
4-NITROTOLUENE (4-NT)	5	4.995618	99.90	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	5.137012	103	80 - 120
M-DINITROBENZENE	5	5.100545	102	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	5.276231	106	80 - 120
NITROBENZENE	5	5.158101	103	80 - 120
NITROGLYCERINE	5	4.919075	98.40	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	5.135967	103	80 - 120
PETN	5	5.391189	108	80 - 120
1,3-DIMETHYL-2-NB	5	5.144538	103	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1382161	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0728000027	**Analysis date/time:**	07/29/21 01:36
Analytical Method:	8330B	**Sample ID:**	CCV
Column:	1		

Analyte	**True Value** *mg/l*	**Result** *mg/l*	**Result** *% Rec.*	**Limits** *%*
1,3,5-TRINITROBENZENE	5	5.191061	104	80 - 120
2,4,6-TRINITROTOLUENE	5	4.792349	95.80	80 - 120
2,4-DINITROTOLUENE	5	5.088613	102	80 - 120
2,6-DINITROTOLUENE	5	5.130922	103	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.877768	97.60	80 - 120
2-NITROTOLUENE	5	5.041395	101	80 - 120
3-NITROTOLUENE	5	5.166539	103	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	5.106036	102	80 - 120
4-NITROTOLUENE (4-NT)	5	5.015634	100	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	5.119006	102	80 - 120
M-DINITROBENZENE	5	5.100635	102	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	4.857193	97.10	80 - 120
NITROBENZENE	5	5.135334	103	80 - 120
NITROGLYCERINE	5	4.883173	97.70	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	5.128294	103	80 - 120
PETN	5	5.328069	107	80 - 120
1,3-DIMETHYL-2-NB	5	5.140124	103	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ANALYTICAL SEQUENCE

SDG:	L1382161	**Analytical Method:**	8330B
Instrument ID:	HPLC4	**Calibration Start Date:**	03/05/21 14:31
		Calibration End Date:	03/05/21 16:51

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	50	0305000001	03/05/21 14:31		
CAL	100	0305000002	03/05/21 14:59		
CAL	500	0305000003	03/05/21 15:27		
CAL	5000	0305000004	03/05/21 15:55		
CAL	10000	0305000005	03/05/21 16:22		
CAL	25000	0305000006	03/05/21 16:51		
SSCV	HPLC4030521A03050000007527056	0305000007	03/05/21 17:19		
CCV	HPLC4072821A0728000001527056	0728000001	07/28/21 13:29		
BLANK	R3685137-1	0728000002	07/28/21 13:57	1	WG1710286
LCS	R3685137-2	0728000003	07/28/21 14:25	1	WG1710286
MS	R3685137-3	0728000004	07/28/21 14:53	1	WG1710286
MSD	R3685137-4	0728000005	07/28/21 15:21	1	WG1710286
L1381569-01	L1381569-01	0728000006	07/28/21 15:49	1	WG1710286
L1381569-02	L1381569-02	0728000007	07/28/21 16:17	1	WG1710286
L1381569-03	L1381569-03	0728000008	07/28/21 16:45	1	WG1710286
OS	L1381569-04	0728000009	07/28/21 17:12		
L1381569-04	L1381569-04	0728000009	07/28/21 17:12	1	WG1710286
L1381569-05	L1381569-05	0728000010	07/28/21 17:40	1	WG1710286
L1381684-41	L1381684-41	0728000011	07/28/21 18:08	1	WG1710286
L1381684-42	L1381684-42	0728000012	07/28/21 18:36	1	WG1710286
L1381684-43	L1381684-43	0728000013	07/28/21 19:04	1	WG1710286
L1381684-44	L1381684-44	0728000014	07/28/21 19:32	1.01	WG1710286
L1381684-45	L1381684-45	0728000015	07/28/21 20:00	1	WG1710286
CCV	HPLC4072821A0728000016527056	0728000016	07/28/21 20:28		
L1381684-46	L1381684-46	0728000017	07/28/21 20:56	1	WG1710286
L1381684-47	L1381684-47	0728000018	07/28/21 21:24	1.01	WG1710286
L1381684-48	L1381684-48	0728000019	07/28/21 21:52	1	WG1710286
L1381684-49	L1381684-49	0728000020	07/28/21 22:20	1	WG1710286
L1381684-50	L1381684-50	0728000021	07/28/21 22:48	1.01	WG1710286
L1381684-51	L1381684-51	0728000022	07/28/21 23:16	1	WG1710286
GB-39/5-6	L1382161-01	0728000023	07/28/21 23:44	1	WG1710286
GB-39/6-7	L1382161-02	0728000024	07/29/21 00:12	1	WG1710286
L1382497-01	L1382497-01	0728000025	07/29/21 00:40	1	WG1710286
L1382497-02	L1382497-02	0728000026	07/29/21 01:08	1	WG1710286
CCV	HPLC4072821A0728000027527056	0728000027	07/29/21 01:36		

Lab Sample ID:	R3685137-1	**SDG:**	L1382161
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	0728000002	**Received Date/Time:**	
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 13:57
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):		**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration *mg/kg*	% Diff.
Tetryl	1	8.20	U	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	12	U	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.83	U	0
	2	14.215070	U	
RDX	1	4.847742	U	0
	2	4.847465	U	
Nitrobenzene	1	8.63	U	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.30	U	0
	2	11.128790	U	
2-Nitrotoluene	1	13.77	U	0
	2	13.2364	U	
3-Nitrotoluene	1	15.83	U	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.50	U	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.70	U	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10	U	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.35	U	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	11	U	0
	2	10.824160	U	
HMX	1	3.12	U	0
	2	3.171145	U	
PETN	1	17	U	0
	2	16.342550	U	
Nitroglycerine	1	9.50	U	0
	2	9.50	U	

Lab Sample ID:	R3685137-2	**SDG:**	L1382161
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0728000003	**Received Date/Time:**	_____
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:25
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration *mg/kg*	% Diff.
Tetryl	1	8.227209	7.60	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	11.709370	7.55	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.475090	7.39	0
	2	14.215070	U	
RDX	1	4.836536	7.47	0
	2	4.847465	U	
Nitrobenzene	1	8.635283	7.54	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.265990	7.45	0
	2	11.128790	U	
2-Nitrotoluene	1	13.440190	7.49	0
	2	13.2364	U	
3-Nitrotoluene	1	15.448640	7.56	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.560483	7.49	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.779504	7.49	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10.016720	7.31	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.323070	7.43	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	10.9197	7.25	0
	2	10.824160	U	
HMX	1	3.136364	7.53	0
	2	3.171145	U	
PETN	1	16.613330	7.70	0
	2	16.342550	U	
Nitroglycerine	1	9.605394	7.32	0
	2	9.50	U	

Lab Sample ID:	R3685137-3	**SDG:**	L1382161
Client Sample ID:	MS	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000004	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:53
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5.02 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration (dry) *mg/kg*	% Diff.
Tetryl	1	8.232952	10.2	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	11.719510	9.40	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.488650	9.32	0
	2	14.215070	U	
RDX	1	4.841878	8.57	0
	2	4.847465	U	
Nitrobenzene	1	8.642230	9.48	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.276240	9.29	0
	2	11.128790	U	
2-Nitrotoluene	1	13.452940	9.30	0
	2	13.2364	U	
3-Nitrotoluene	1	15.462660	9.46	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.565703	9.53	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.785204	9.29	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10.023870	9.31	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.331630	9.23	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	10.929730	9.10	0
	2	10.824160	U	
HMX	1	3.139785	9.49	0
	2	3.171145	U	
PETN	1	16.630880	10.3	0
	2	16.342550	U	
Nitroglycerine	1	9.613220	9.26	0
	2	9.50	U	

Lab Sample ID:	R3685137-4	**SDG:**	L1382161
Client Sample ID:	MSD	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000005	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 15:21
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5.03 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration (dry) *mg/kg*	% Diff.
Tetryl	1	8.242246	10.5	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	11.728130	9.58	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.499050	9.47	0
	2	14.215070	U	
RDX	1	4.845890	8.87	0
	2	4.847465	U	
Nitrobenzene	1	8.649515	9.71	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.285310	9.59	0
	2	11.128790	U	
2-Nitrotoluene	1	13.462390	9.59	0
	2	13.2364	U	
3-Nitrotoluene	1	15.4749	9.73	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.570660	9.81	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.792174	9.60	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10.032260	9.51	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.341980	9.48	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	10.939870	9.37	0
	2	10.824160	U	
HMX	1	3.141450	9.73	0
	2	3.171145	U	
PETN	1	16.6464	9.82	0
	2	16.342550	U	
Nitroglycerine	1	9.621762	9.40	0
	2	9.50	U	

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1382161-01,02 **Analytical Method:** 8330B
Matrix: Solid **Prep Method:** 8330

Analyte	CAS	MDL	RDL
		mg/kg	*mg/kg*
1,3,5-Trinitrobenzene	99-35-4	0.0392	0.50
1,3-Dinitrobenzene	99-65-0	0.0515	0.50
2,4,6-Trinitrotoluene	118-96-7	0.0631	0.50
4-Amino-2,6-Dinitrotoluene	19406-51-0	0.0573	0.50
2-Amino-4,6-Dinitrotoluene	35572-78-2	0.0638	0.50
HMX	2691-41-0	0.0779	0.50
PETN	78-11-5	0.2120	0.50
Nitroglycerine	55-63-0	0.1540	2
Tetryl	479-45-8	0.0876	0.50
2,4-Dinitrotoluene	121-14-2	0.0784	0.50
4-Nitrotoluene (4-NT)	99-99-0	0.1380	0.50
RDX	121-82-4	0.1090	0.50
Nitrobenzene	98-95-3	0.0862	0.50
2,6-Dinitrotoluene	606-20-2	0.0864	0.50
2-Nitrotoluene	88-72-2	0.0915	0.50
3-Nitrotoluene	99-08-1	0.1130	0.50

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-1	**SDG:**	L1382161
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	0728000002	**Received Date/Time:**	
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 13:57
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):		**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result	Qualifier	MDL	RDL
				mg/kg		*mg/kg*	*mg/kg*
Tetryl	479-45-8	8.20	1	U		0.0876	0.500
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0784	0.500
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.138	0.500
RDX	121-82-4	4.847742	1	U		0.109	0.500
Nitrobenzene	98-95-3	8.63	1	U		0.0862	0.500
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.0864	0.500
2-Nitrotoluene	88-72-2	13.77	1	U		0.0915	0.500
3-Nitrotoluene	99-08-1	15.83	1	U		0.113	0.500
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0392	0.500
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0515	0.500
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0631	0.500
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0573	0.500
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0638	0.500
HMX	2691-41-0	3.12	1	U		0.0779	0.500
PETN	78-11-5	17	1	U		0.212	0.500
Nitroglycerine	55-63-0	9.50	1	U		0.154	2.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-2	**SDG:**	L1382161
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	0728000003	**Received Date/Time:**	
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:25
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):		**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result *mg/kg*	Qualifier	MDL *mg/kg*	RDL *mg/kg*
Tetryl	479-45-8	8.227209	1	7.60		0.0876	0.500
2,4-Dinitrotoluene	121-14-2	11.709370	1	7.55		0.0784	0.500
4-Nitrotoluene (4-NT)	99-99-0	14.475090	1	7.39		0.138	0.500
RDX	121-82-4	4.836536	1	7.47		0.109	0.500
Nitrobenzene	98-95-3	8.635283	1	7.54		0.0862	0.500
2,6-Dinitrotoluene	606-20-2	11.265990	1	7.45		0.0864	0.500
2-Nitrotoluene	88-72-2	13.440190	1	7.49		0.0915	0.500
3-Nitrotoluene	99-08-1	15.448640	1	7.56		0.113	0.500
1,3,5-Trinitrobenzene	99-35-4	6.560483	1	7.49		0.0392	0.500
1,3-Dinitrobenzene	99-65-0	7.779504	1	7.49		0.0515	0.500
2,4,6-Trinitrotoluene	118-96-7	10.016720	1	7.31		0.0631	0.500
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.323070	1	7.43		0.0573	0.500
2-Amino-4,6-Dinitrotoluene	35572-78-2	10.9197	1	7.25		0.0638	0.500
HMX	2691-41-0	3.136364	1	7.53		0.0779	0.500
PETN	78-11-5	16.613330	1	7.70		0.212	0.500
Nitroglycerine	55-63-0	9.605394	1	7.32		0.154	2.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-3	**SDG:**	L1382161
Client Sample ID:	MS	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000004	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:53
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.02 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.232952	1	10.2		0.107	0.610
2,4-Dinitrotoluene	121-14-2	11.719510	1	9.40		0.0957	0.610
4-Nitrotoluene (4-NT)	99-99-0	14.488650	1	9.32		0.168	0.610
RDX	121-82-4	4.841878	1	8.57		0.133	0.610
Nitrobenzene	98-95-3	8.642230	1	9.48		0.105	0.610
2,6-Dinitrotoluene	606-20-2	11.276240	1	9.29		0.105	0.610
2-Nitrotoluene	88-72-2	13.452940	1	9.30		0.112	0.610
3-Nitrotoluene	99-08-1	15.462660	1	9.46		0.138	0.610
1,3,5-Trinitrobenzene	99-35-4	6.565703	1	9.53		0.0478	0.610
1,3-Dinitrobenzene	99-65-0	7.785204	1	9.29		0.0628	0.610
2,4,6-Trinitrotoluene	118-96-7	10.023870	1	9.31		0.0770	0.610
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.331630	1	9.23		0.0699	0.610
2-Amino-4,6-Dinitrotoluene	35572-78-2	10.929730	1	9.10		0.0779	0.610
HMX	2691-41-0	3.139785	1	9.49		0.0951	0.610
PETN	78-11-5	16.630880	1	10.3		0.259	0.610
Nitroglycerine	55-63-0	9.613220	1	9.26		0.188	2.44

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-4	**SDG:**	L1382161
Client Sample ID:	MSD	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000005	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 15:21
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.03 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.242246	1	10.5		0.107	0.610
2,4-Dinitrotoluene	121-14-2	11.728130	1	9.58		0.0957	0.610
4-Nitrotoluene (4-NT)	99-99-0	14.499050	1	9.47		0.168	0.610
RDX	121-82-4	4.845890	1	8.87		0.133	0.610
Nitrobenzene	98-95-3	8.649515	1	9.71		0.105	0.610
2,6-Dinitrotoluene	606-20-2	11.285310	1	9.59		0.105	0.610
2-Nitrotoluene	88-72-2	13.462390	1	9.59		0.112	0.610
3-Nitrotoluene	99-08-1	15.4749	1	9.73		0.138	0.610
1,3,5-Trinitrobenzene	99-35-4	6.570660	1	9.81		0.0478	0.610
1,3-Dinitrobenzene	99-65-0	7.792174	1	9.60		0.0628	0.610
2,4,6-Trinitrotoluene	118-96-7	10.032260	1	9.51		0.0770	0.610
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.341980	1	9.48		0.0699	0.610
2-Amino-4,6-Dinitrotoluene	35572-78-2	10.939870	1	9.37		0.0779	0.610
HMX	2691-41-0	3.141450	1	9.73		0.0951	0.610
PETN	78-11-5	16.6464	1	9.82		0.259	0.610
Nitroglycerine	55-63-0	9.621762	1	9.40		0.188	2.44

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

COD	Coefficient of Determination.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Mass	Mass of parameter.
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RT	Retention Time.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

C075

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: MO
Cert. Needed: ☐ Yes ☒ No
Owner Received Date: 7/22/2021 Results Requested By: 8/5/2021

Workorder: 60375626 **Workorder Name:** GSA GOODFELLOW

Report To	Subcontract To
Jeffrey Shopper Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 1(913)563-1408	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

L1382161

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: 8330 Explosives (Nitroaromatics)	LAB USE ONLY
1	GB-39/5-6	PS	7/21/2021 07:50	60375626011	Solid	1	X	-01
2	GB-39/6-7	PS	7/21/2021 07:55	60375626012	Solid	1	X	-02
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	(b) (6)	7/22/21 1800		
2				
3			(b) (6)	7/23 0830

Comments

Cooler Temperature on Receipt 1.3 +.0 =1.3 °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.

This chain of custody is considered complete as is since this information is available in the owner laboratory.

1760

5002 0651 3229

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres.Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RAD Screen <0.5 mR/hr:	Y N		

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 60375692

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(913)599-5665

August 30, 2021

Justin Carter
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: GSA GOODFELLOW
Pace Project No.: 60375692

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on July 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

(b) (6)

Jeffrey Shopper
jeff.shopper@pacelabs.com
1(913)563-1408
Project Manager

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL
Jacquelin Lee, Burns & McDonnell

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 20-020-0
Arkansas Drinking Water
Illinois Certification #: 2000302021-3
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212020-2
Oklahoma Certification #: 9205/9935
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-19-12
Utah Certification #: KS000212019-9
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Services National
12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375
North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Certification #: T 104704245-17-14
Texas Mold Certification #: LAB0152
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: VT2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

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SAMPLE SUMMARY

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60375692001	GB-31/3-5	Solid	07/21/21 14:18	07/23/21 04:13
60375692002	GB-31/5-7	Solid	07/21/21 14:22	07/23/21 04:13
60375692003	GB-24/1-3	Solid	07/21/21 14:40	07/23/21 04:13
60375692004	GB-24/3-5	Solid	07/21/21 14:45	07/23/21 04:13
60375692005	GB-17/1-3	Solid	07/21/21 15:22	07/23/21 04:13
60375692006	GB-17/3-5	Solid	07/21/21 15:30	07/23/21 04:13
60375692007	GB-25/0-2	Solid	07/22/21 08:10	07/23/21 04:13
60375692008	GB-25/2-4	Solid	07/22/21 08:18	07/23/21 04:13
60375692009	GB-18/3-5	Solid	07/22/21 08:50	07/23/21 04:13
60375692010	GB-18/5-7	Solid	07/22/21 08:55	07/23/21 04:13
60375692011	GB-11/1-3	Solid	07/22/21 09:23	07/23/21 04:13
60375692012	GB-11/3-5	Solid	07/22/21 09:30	07/23/21 04:13
60375692013	GB-04/2-3	Solid	07/22/21 10:10	07/23/21 04:13
60375692014	GB-04/3-5	Solid	07/22/21 10:15	07/23/21 04:13
60375692015	GB-04/3-5D	Solid	07/22/21 10:15	07/23/21 04:13
60375692016	GB-05/3-5	Solid	07/22/21 10:37	07/23/21 04:13
60375692017	GB-05/5-7	Solid	07/22/21 10:42	07/23/21 04:13
60375692018	GB-12/2.5-3.5	Solid	07/22/21 11:05	07/23/21 04:13
60375692019	GB-12/4-6	Solid	07/22/21 11:10	07/23/21 04:13
60375692020	GB-19/0-2	Solid	07/22/21 11:35	07/23/21 04:13
60375692021	GB-19/3-5	Solid	07/22/21 11:41	07/23/21 04:13
60375692022	GB-26/3-4	Solid	07/22/21 13:00	07/23/21 04:13
60375692023	GB-26/4-5	Solid	07/22/21 13:05	07/23/21 04:13
60375692024	GB-41/4-6	Solid	07/22/21 13:30	07/23/21 04:13
60375692025	GB-41/6-8	Solid	07/22/21 13:32	07/23/21 04:13

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60375692001	GB-31/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692002	GB-31/5-7	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692003	GB-24/1-3	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692004	GB-24/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692005	GB-17/1-3	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692006	GB-17/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692007	GB-25/0-2	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692008	GB-25/2-4	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692009	GB-18/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692010	GB-18/5-7	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	DWC	1	PASI-K
60375692011	GB-11/1-3	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692012	GB-11/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692013	GB-04/2-3	EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692014	GB-04/3-5	EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692015	GB-04/3-5D	EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692016	GB-05/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692017	GB-05/5-7	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692018	GB-12/2.5-3.5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692019	GB-12/4-6	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692020	GB-19/0-2	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692021	GB-19/3-5	EPA 8082	AJA1	8	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692022	**GB-26/3-4**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692023	**GB-26/4-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375692024	**GB-41/4-6**	EPA 8330	GKM	17	PAN
		SM 2540G	CMK	1	PAN
60375692025	**GB-41/6-8**	EPA 8330	GKM	17	PAN
		SM 2540G	CMK	1	PAN

PAN = Pace National - Mt. Juliet
PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
20 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 733927

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- GB-17/1-3 (Lab ID: 60375692005)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-17/3-5 (Lab ID: 60375692006)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-24/1-3 (Lab ID: 60375692003)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-24/3-5 (Lab ID: 60375692004)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-25/0-2 (Lab ID: 60375692007)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-31/3-5 (Lab ID: 60375692001)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-31/5-7 (Lab ID: 60375692002)
  - Decachlorobiphenyl (S)

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: August 30, 2021

QC Batch: 733927

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- PCB-1016 (Aroclor 1016)
- PCB-1260 (Aroclor 1260)

- MS (Lab ID: 2945145)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- MSD (Lab ID: 2945146)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)

QC Batch: 733928

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- GB-05/3-5 (Lab ID: 60375692016)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-05/5-7 (Lab ID: 60375692017)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-11/1-3 (Lab ID: 60375692011)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-11/3-5 (Lab ID: 60375692012)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-12/2.5-3.5 (Lab ID: 60375692018)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-12/4-6 (Lab ID: 60375692019)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-18/3-5 (Lab ID: 60375692009)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-18/5-7 (Lab ID: 60375692010)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: August 30, 2021

QC Batch: 733928

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- PCB-1260 (Aroclor 1260)

- GB-19/0-2 (Lab ID: 60375692020)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-19/3-5 (Lab ID: 60375692021)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-25/2-4 (Lab ID: 60375692008)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-26/3-4 (Lab ID: 60375692022)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- GB-26/4-5 (Lab ID: 60375692023)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- MS (Lab ID: 2945150)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- MSD (Lab ID: 2945151)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 733927

S3: Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.
- GB-17/3-5 (Lab ID: 60375692006)
  - Decachlorobiphenyl (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: August 30, 2021

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Method: **EPA 8330**
Description: SVOA (HPLC) 8330B
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
2 samples were analyzed for EPA 8330 by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
23 samples were analyzed for EPA 6020 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 736298

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375692008,60375838013

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2952918)
  - Antimony
- MS (Lab ID: 2952920)
  - Antimony
- MSD (Lab ID: 2952919)
  - Antimony
- MSD (Lab ID: 2952921)
  - Antimony

R1: RPD value was outside control limits.

- MSD (Lab ID: 2952921)
  - Antimony

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BURNS & MCDONNELL
Date: August 30, 2021

QC Batch: 736299

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375692011

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2952932)
  - Antimony
- MSD (Lab ID: 2952933)
  - Antimony

R1: RPD value was outside control limits.

- MSD (Lab ID: 2952933)
  - Antimony

QC Batch: 736513

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60376093012

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2953703)
  - Antimony
- MSD (Lab ID: 2953704)
  - Antimony

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
17 samples were analyzed for EPA 8270 by SIM by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 733930

D4: Sample was diluted due to the presence of high levels of target analytes.

- GB-19/0-2 (Lab ID: 60375692020)
  - 2-Fluorobiphenyl (S)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Method: **SM 2540G**
Description: Total Solids 2540 G-2011
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
2 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-31/3-5 **Lab ID: 60375692001** Collected: 07/21/21 14:18 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	39.7	1	07/23/21 16:45	07/27/21 14:23	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	39.7	1	07/23/21 16:45	07/27/21 14:23	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	39.7	1	07/23/21 16:45	07/27/21 14:23	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	39.7	1	07/23/21 16:45	07/27/21 14:23	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	39.7	1	07/23/21 16:45	07/27/21 14:23	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	39.7	1	07/23/21 16:45	07/27/21 14:23	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	39.7	1	07/23/21 16:45	07/27/21 14:23	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	93	%	35-120	1	07/23/21 16:45	07/27/21 14:23	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.0	10	08/05/21 11:25	08/06/21 14:50	7440-36-0	
Arsenic	**10.7**	mg/kg	1.0	10	08/05/21 11:25	08/06/21 14:50	7440-38-2	
Copper	**20.2**	mg/kg	1.0	10	08/05/21 11:25	08/06/21 14:50	7440-50-8	
Lead	**13.3**	mg/kg	0.52	10	08/05/21 11:25	08/06/21 14:50	7439-92-1	
Zinc	**62.3**	mg/kg	5.2	10	08/05/21 11:25	08/06/21 14:50	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	83-32-9	
Acenaphthylene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	208-96-8	
Anthracene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	207-08-9	
Chrysene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	53-70-3	
Fluoranthene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	206-44-0	
Fluorene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	193-39-5	
Naphthalene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	91-20-3	
Phenanthrene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	85-01-8	
Pyrene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 14:25	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	87	%	40-120	1	07/23/21 15:09	07/28/21 14:25	321-60-8	
Terphenyl-d14 (S)	101	%	45-130	1	07/23/21 15:09	07/28/21 14:25	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**18.1**	%	0.50	1		07/23/21 13:37		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-31/5-7 **Lab ID: 60375692002** Collected: 07/21/21 14:22 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	40.5	1	07/23/21 16:45	07/27/21 14:41	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	40.5	1	07/23/21 16:45	07/27/21 14:41	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	40.5	1	07/23/21 16:45	07/27/21 14:41	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	40.5	1	07/23/21 16:45	07/27/21 14:41	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	40.5	1	07/23/21 16:45	07/27/21 14:41	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	40.5	1	07/23/21 16:45	07/27/21 14:41	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	40.5	1	07/23/21 16:45	07/27/21 14:41	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	97	%	35-120	1	07/23/21 16:45	07/27/21 14:41	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	0.84	10	08/05/21 11:25	08/06/21 14:51	7440-36-0	
Arsenic	**7.9**	mg/kg	0.84	10	08/05/21 11:25	08/06/21 14:51	7440-38-2	
Copper	**16.1**	mg/kg	0.84	10	08/05/21 11:25	08/06/21 14:51	7440-50-8	
Lead	**10.2**	mg/kg	0.42	10	08/05/21 11:25	08/06/21 14:51	7439-92-1	
Zinc	**46.9**	mg/kg	4.2	10	08/05/21 11:25	08/06/21 14:51	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	208-96-8	
Anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	207-08-9	
Chrysene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	53-70-3	
Fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	193-39-5	
Naphthalene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	91-20-3	
Phenanthrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	85-01-8	
Pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 14:42	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	40-120	1	07/23/21 15:09	07/28/21 14:42	321-60-8	
Terphenyl-d14 (S)	96	%	45-130	1	07/23/21 15:09	07/28/21 14:42	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.7**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-24/1-3 **Lab ID: 60375692003** Collected: 07/21/21 14:40 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	39.0	1	07/23/21 16:45	07/27/21 14:59	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	39.0	1	07/23/21 16:45	07/27/21 14:59	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	39.0	1	07/23/21 16:45	07/27/21 14:59	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	39.0	1	07/23/21 16:45	07/27/21 14:59	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	39.0	1	07/23/21 16:45	07/27/21 14:59	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	39.0	1	07/23/21 16:45	07/27/21 14:59	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	39.0	1	07/23/21 16:45	07/27/21 14:59	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	103	%	35-120	1	07/23/21 16:45	07/27/21 14:59	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	0.98	10	08/05/21 11:25	08/06/21 14:53	7440-36-0	
Arsenic	**6.5**	mg/kg	0.98	10	08/05/21 11:25	08/06/21 14:53	7440-38-2	
Copper	**16.0**	mg/kg	0.98	10	08/05/21 11:25	08/06/21 14:53	7440-50-8	
Lead	**14.2**	mg/kg	0.49	10	08/05/21 11:25	08/06/21 14:53	7439-92-1	
Zinc	**68.2**	mg/kg	4.9	10	08/05/21 11:25	08/06/21 14:53	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	83-32-9	
Acenaphthylene	ND	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	208-96-8	
Anthracene	ND	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	120-12-7	
Benzo(a)anthracene	**6.2**	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	56-55-3	
Benzo(a)pyrene	**5.1**	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	50-32-8	
Benzo(b)fluoranthene	**11.2**	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	205-99-2	
Benzo(g,h,i)perylene	**7.0**	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	191-24-2	
Benzo(k)fluoranthene	**4.5**	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	207-08-9	
Chrysene	**8.8**	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	53-70-3	
Fluoranthene	**14.6**	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	206-44-0	
Fluorene	ND	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.4**	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	193-39-5	
Naphthalene	ND	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	91-20-3	
Phenanthrene	**6.0**	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	85-01-8	
Pyrene	**15.2**	ug/kg	3.9	1	07/23/21 15:09	07/28/21 15:00	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	88	%	40-120	1	07/23/21 15:09	07/28/21 15:00	321-60-8	
Terphenyl-d14 (S)	101	%	45-130	1	07/23/21 15:09	07/28/21 15:00	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**17.7**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-24/3-5 **Lab ID: 60375692004** Collected: 07/21/21 14:45 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	40.0	1	07/23/21 16:45	07/27/21 15:17	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	40.0	1	07/23/21 16:45	07/27/21 15:17	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	40.0	1	07/23/21 16:45	07/27/21 15:17	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	40.0	1	07/23/21 16:45	07/27/21 15:17	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	40.0	1	07/23/21 16:45	07/27/21 15:17	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	40.0	1	07/23/21 16:45	07/27/21 15:17	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	40.0	1	07/23/21 16:45	07/27/21 15:17	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	95	%	35-120	1	07/23/21 16:45	07/27/21 15:17	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.0	10	08/05/21 11:25	08/06/21 14:55	7440-36-0	
Arsenic	**7.6**	mg/kg	1.0	10	08/05/21 11:25	08/06/21 14:55	7440-38-2	
Copper	**15.9**	mg/kg	1.0	10	08/05/21 11:25	08/06/21 14:55	7440-50-8	
Lead	**9.9**	mg/kg	0.52	10	08/05/21 11:25	08/06/21 14:55	7439-92-1	
Zinc	**42.9**	mg/kg	5.2	10	08/05/21 11:25	08/06/21 14:55	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	208-96-8	
Anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	207-08-9	
Chrysene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	53-70-3	
Fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	193-39-5	
Naphthalene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	91-20-3	
Phenanthrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	85-01-8	
Pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:17	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	82	%	40-120	1	07/23/21 15:09	07/28/21 15:17	321-60-8	
Terphenyl-d14 (S)	96	%	45-130	1	07/23/21 15:09	07/28/21 15:17	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.4**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-17/1-3 **Lab ID: 60375692005** Collected: 07/21/21 15:22 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	41.2	1	07/23/21 16:45	07/27/21 15:35	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	41.2	1	07/23/21 16:45	07/27/21 15:35	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	41.2	1	07/23/21 16:45	07/27/21 15:35	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	41.2	1	07/23/21 16:45	07/27/21 15:35	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	41.2	1	07/23/21 16:45	07/27/21 15:35	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	41.2	1	07/23/21 16:45	07/27/21 15:35	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	41.2	1	07/23/21 16:45	07/27/21 15:35	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	108	%	35-120	1	07/23/21 16:45	07/27/21 15:35	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.1	10	08/05/21 11:25	08/06/21 15:01	7440-36-0	
Arsenic	**5.0**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 15:01	7440-38-2	
Copper	**12.4**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 15:01	7440-50-8	
Lead	**7.6**	mg/kg	0.55	10	08/05/21 11:25	08/06/21 15:01	7439-92-1	
Zinc	**40.7**	mg/kg	5.5	10	08/05/21 11:25	08/06/21 15:01	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	208-96-8	
Anthracene	**9.1**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	120-12-7	
Benzo(a)anthracene	**91.0**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	56-55-3	
Benzo(a)pyrene	**97.7**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	50-32-8	
Benzo(b)fluoranthene	**204**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	205-99-2	
Benzo(g,h,i)perylene	**109**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	191-24-2	
Benzo(k)fluoranthene	**49.0**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	207-08-9	
Chrysene	**136**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	218-01-9	
Dibenz(a,h)anthracene	**19.6**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	53-70-3	
Fluoranthene	**240**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	86-73-7	
Indeno(1,2,3-cd)pyrene	**86.6**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	193-39-5	
Naphthalene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	91-20-3	
Phenanthrene	**59.5**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	85-01-8	
Pyrene	**210**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:34	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%	40-120	1	07/23/21 15:09	07/28/21 15:34	321-60-8	
Terphenyl-d14 (S)	100	%	45-130	1	07/23/21 15:09	07/28/21 15:34	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.5**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-17/3-5 **Lab ID: 60375692006** Collected: 07/21/21 15:30 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	41.3	1	07/23/21 16:45	07/27/21 15:53	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	41.3	1	07/23/21 16:45	07/27/21 15:53	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	41.3	1	07/23/21 16:45	07/27/21 15:53	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	41.3	1	07/23/21 16:45	07/27/21 15:53	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	41.3	1	07/23/21 16:45	07/27/21 15:53	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	41.3	1	07/23/21 16:45	07/27/21 15:53	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	41.3	1	07/23/21 16:45	07/27/21 15:53	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	122	%	35-120	1	07/23/21 16:45	07/27/21 15:53	2051-24-3	CH,S3
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.1	10	08/05/21 11:25	08/06/21 15:03	7440-36-0	
Arsenic	**5.6**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 15:03	7440-38-2	
Copper	**13.1**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 15:03	7440-50-8	
Lead	**9.4**	mg/kg	0.54	10	08/05/21 11:25	08/06/21 15:03	7439-92-1	
Zinc	**42.6**	mg/kg	5.4	10	08/05/21 11:25	08/06/21 15:03	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	208-96-8	
Anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	120-12-7	
Benzo(a)anthracene	**6.1**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	56-55-3	
Benzo(a)pyrene	**6.3**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	50-32-8	
Benzo(b)fluoranthene	**12.6**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	205-99-2	
Benzo(g,h,i)perylene	**6.3**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	191-24-2	
Benzo(k)fluoranthene	**6.3**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	207-08-9	
Chrysene	**8.6**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	53-70-3	
Fluoranthene	**19.4**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.8**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	193-39-5	
Naphthalene	**5.4**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	91-20-3	
Phenanthrene	**6.3**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	85-01-8	
Pyrene	**15.0**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 15:51	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	84	%	40-120	1	07/23/21 15:09	07/28/21 15:51	321-60-8	
Terphenyl-d14 (S)	97	%	45-130	1	07/23/21 15:09	07/28/21 15:51	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.4**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-25/0-2 **Lab ID: 60375692007** Collected: 07/22/21 08:10 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	39.3	1	07/23/21 16:45	07/27/21 16:11	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	39.3	1	07/23/21 16:45	07/27/21 16:11	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	39.3	1	07/23/21 16:45	07/27/21 16:11	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	39.3	1	07/23/21 16:45	07/27/21 16:11	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	39.3	1	07/23/21 16:45	07/27/21 16:11	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	39.3	1	07/23/21 16:45	07/27/21 16:11	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	39.3	1	07/23/21 16:45	07/27/21 16:11	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	100	%	35-120	1	07/23/21 16:45	07/27/21 16:11	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.2	10	08/05/21 11:25	08/06/21 15:05	7440-36-0	
Arsenic	**8.2**	mg/kg	1.2	10	08/05/21 11:25	08/06/21 15:05	7440-38-2	
Copper	**24.6**	mg/kg	1.2	10	08/05/21 11:25	08/06/21 15:05	7440-50-8	
Lead	**88.3**	mg/kg	0.59	10	08/05/21 11:25	08/06/21 15:05	7439-92-1	
Zinc	**82.3**	mg/kg	5.9	10	08/05/21 11:25	08/06/21 15:05	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**18.3**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-25/2-4 **Lab ID: 60375692008** Collected: 07/22/21 08:18 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	39.5	1	07/23/21 16:34	07/27/21 17:04	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	39.5	1	07/23/21 16:34	07/27/21 17:04	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	39.5	1	07/23/21 16:34	07/27/21 17:04	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	39.5	1	07/23/21 16:34	07/27/21 17:04	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	39.5	1	07/23/21 16:34	07/27/21 17:04	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	39.5	1	07/23/21 16:34	07/27/21 17:04	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	39.5	1	07/23/21 16:34	07/27/21 17:04	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	102	%	35-120	1	07/23/21 16:34	07/27/21 17:04	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.1	10	08/05/21 11:25	08/06/21 15:06	7440-36-0	M1,R1
Arsenic	**6.8**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 15:06	7440-38-2	
Copper	**15.6**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 15:06	7440-50-8	
Lead	**11.7**	mg/kg	0.56	10	08/05/21 11:25	08/06/21 15:06	7439-92-1	
Zinc	**42.5**	mg/kg	5.6	10	08/05/21 11:25	08/06/21 15:06	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**18.8**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-18/3-5 **Lab ID: 60375692009** Collected: 07/22/21 08:50 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	42.7	1	07/23/21 16:34	07/27/21 17:58	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	42.7	1	07/23/21 16:34	07/27/21 17:58	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	42.7	1	07/23/21 16:34	07/27/21 17:58	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	42.7	1	07/23/21 16:34	07/27/21 17:58	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	42.7	1	07/23/21 16:34	07/27/21 17:58	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	42.7	1	07/23/21 16:34	07/27/21 17:58	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	42.7	1	07/23/21 16:34	07/27/21 17:58	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	109	%	35-120	1	07/23/21 16:34	07/27/21 17:58	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	0.93	10	08/05/21 11:25	08/06/21 15:11	7440-36-0	
Arsenic	**6.6**	mg/kg	0.93	10	08/05/21 11:25	08/06/21 15:11	7440-38-2	
Copper	**17.3**	mg/kg	0.93	10	08/05/21 11:25	08/06/21 15:11	7440-50-8	
Lead	**13.7**	mg/kg	0.47	10	08/05/21 11:25	08/06/21 15:11	7439-92-1	
Zinc	**34.1**	mg/kg	4.7	10	08/05/21 11:25	08/06/21 15:11	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**31.0**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	83-32-9	
Acenaphthylene	**18.0**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	208-96-8	
Anthracene	**124**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	120-12-7	
Benzo(a)anthracene	**237**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	56-55-3	
Benzo(a)pyrene	**183**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	50-32-8	
Benzo(b)fluoranthene	**229**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	205-99-2	
Benzo(g,h,i)perylene	**118**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	191-24-2	
Benzo(k)fluoranthene	**136**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	207-08-9	
Chrysene	**236**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	218-01-9	
Dibenz(a,h)anthracene	**22.6**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	53-70-3	
Fluoranthene	**470**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	206-44-0	
Fluorene	**40.2**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	86-73-7	
Indeno(1,2,3-cd)pyrene	**91.5**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	193-39-5	
Naphthalene	**8.3**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	91-20-3	
Phenanthrene	**328**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	85-01-8	
Pyrene	**586**	ug/kg	4.2	1	07/23/21 15:09	07/28/21 16:09	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	82	%	40-120	1	07/23/21 15:09	07/28/21 16:09	321-60-8	
Terphenyl-d14 (S)	104	%	45-130	1	07/23/21 15:09	07/28/21 16:09	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**23.4**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-18/5-7 **Lab ID: 60375692010** Collected: 07/22/21 08:55 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	36.7	1	07/23/21 16:34	07/27/21 18:16	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	36.7	1	07/23/21 16:34	07/27/21 18:16	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	36.7	1	07/23/21 16:34	07/27/21 18:16	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	36.7	1	07/23/21 16:34	07/27/21 18:16	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	36.7	1	07/23/21 16:34	07/27/21 18:16	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	36.7	1	07/23/21 16:34	07/27/21 18:16	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	36.7	1	07/23/21 16:34	07/27/21 18:16	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	104	%	35-120	1	07/23/21 16:34	07/27/21 18:16	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	0.94	10	08/05/21 11:25	08/06/21 15:13	7440-36-0	
Arsenic	**6.3**	mg/kg	0.94	10	08/05/21 11:25	08/06/21 15:13	7440-38-2	
Copper	**40.4**	mg/kg	0.94	10	08/05/21 11:25	08/06/21 15:13	7440-50-8	
Lead	**10**	mg/kg	0.47	10	08/05/21 11:25	08/06/21 15:13	7439-92-1	
Zinc	ND	mg/kg	4.7	10	08/05/21 11:25	08/06/21 15:13	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	83-32-9	
Acenaphthylene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	208-96-8	
Anthracene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	120-12-7	
Benzo(a)anthracene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	56-55-3	
Benzo(a)pyrene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	207-08-9	
Chrysene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	53-70-3	
Fluoranthene	**7.1**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	206-44-0	
Fluorene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	193-39-5	
Naphthalene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	91-20-3	
Phenanthrene	**4.7**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	85-01-8	
Pyrene	**6.2**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 16:26	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	82	%	40-120	1	07/23/21 15:09	07/28/21 16:26	321-60-8	
Terphenyl-d14 (S)	97	%	45-130	1	07/23/21 15:09	07/28/21 16:26	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**12.6**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-11/1-3 **Lab ID: 60375692011** Collected: 07/22/21 09:23 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	39.8	1	07/23/21 16:34	07/27/21 18:34	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	39.8	1	07/23/21 16:34	07/27/21 18:34	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	39.8	1	07/23/21 16:34	07/27/21 18:34	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	39.8	1	07/23/21 16:34	07/27/21 18:34	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	39.8	1	07/23/21 16:34	07/27/21 18:34	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	39.8	1	07/23/21 16:34	07/27/21 18:34	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	39.8	1	07/23/21 16:34	07/27/21 18:34	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	104	%	35-120	1	07/23/21 16:34	07/27/21 18:34	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:22	7440-36-0	M1,R1
Arsenic	**8.6**	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:22	7440-38-2	
Copper	**22.1**	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:22	7440-50-8	
Lead	**16.9**	mg/kg	0.56	10	08/05/21 11:25	08/09/21 14:22	7439-92-1	
Zinc	**52.5**	mg/kg	5.6	10	08/05/21 11:25	08/09/21 14:22	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**17.1**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-11/3-5 **Lab ID: 60375692012** Collected: 07/22/21 09:30 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	44.7	1	07/23/21 16:34	07/27/21 18:52	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	44.7	1	07/23/21 16:34	07/27/21 18:52	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	44.7	1	07/23/21 16:34	07/27/21 18:52	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	44.7	1	07/23/21 16:34	07/27/21 18:52	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	44.7	1	07/23/21 16:34	07/27/21 18:52	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	44.7	1	07/23/21 16:34	07/27/21 18:52	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	44.7	1	07/23/21 16:34	07/27/21 18:52	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	97	%	35-120	1	07/23/21 16:34	07/27/21 18:52	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.3	10	08/05/21 11:25	08/09/21 14:27	7440-36-0	
Arsenic	**8.7**	mg/kg	1.3	10	08/05/21 11:25	08/09/21 14:27	7440-38-2	
Copper	**24.2**	mg/kg	1.3	10	08/05/21 11:25	08/09/21 14:27	7440-50-8	
Lead	**14.5**	mg/kg	0.65	10	08/05/21 11:25	08/09/21 14:27	7439-92-1	
Zinc	**48.2**	mg/kg	6.5	10	08/05/21 11:25	08/09/21 14:27	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**26.5**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-04/2-3 **Lab ID: 60375692013** Collected: 07/22/21 10:10 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050							
	Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.0	10	08/05/21 11:25	08/09/21 14:28	7440-36-0	
Arsenic	**7.9**	mg/kg	1.0	10	08/05/21 11:25	08/09/21 14:28	7440-38-2	
Copper	**17.0**	mg/kg	1.0	10	08/05/21 11:25	08/09/21 14:28	7440-50-8	
Lead	**10.9**	mg/kg	0.52	10	08/05/21 11:25	08/09/21 14:28	7439-92-1	
Zinc	**43.5**	mg/kg	5.2	10	08/05/21 11:25	08/09/21 14:28	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
	Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	208-96-8	
Anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	120-12-7	
Benzo(a)anthracene	**16.2**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	56-55-3	
Benzo(a)pyrene	**12.0**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	50-32-8	
Benzo(b)fluoranthene	**27.5**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	205-99-2	
Benzo(g,h,i)perylene	**11.1**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	191-24-2	
Benzo(k)fluoranthene	**14.8**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	207-08-9	
Chrysene	**25.1**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	53-70-3	
Fluoranthene	**62.1**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	86-73-7	
Indeno(1,2,3-cd)pyrene	**9.1**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	193-39-5	
Naphthalene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	91-20-3	
Phenanthrene	**19.2**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	85-01-8	
Pyrene	**50.7**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 16:43	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	82	%	40-120	1	07/23/21 15:09	07/28/21 16:43	321-60-8	
Terphenyl-d14 (S)	93	%	45-130	1	07/23/21 15:09	07/28/21 16:43	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974							
	Pace Analytical Services - Kansas City							
Percent Moisture	**21.9**	%	0.50	1		07/23/21 13:38		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-04/3-5 **Lab ID: 60375692014** Collected: 07/22/21 10:15 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050							
	Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:30	7440-36-0	
Arsenic	**7.9**	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:30	7440-38-2	
Copper	**14.8**	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:30	7440-50-8	
Lead	**10.2**	mg/kg	0.54	10	08/05/21 11:25	08/09/21 14:30	7439-92-1	
Zinc	**45.1**	mg/kg	5.4	10	08/05/21 11:25	08/09/21 14:30	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
	Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	208-96-8	
Anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	50-32-8	
Benzo(b)fluoranthene	**4.7**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	207-08-9	
Chrysene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	53-70-3	
Fluoranthene	**6.7**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	193-39-5	
Naphthalene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	91-20-3	
Phenanthrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	85-01-8	
Pyrene	**5.1**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:00	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%	40-120	1	07/23/21 15:09	07/28/21 17:00	321-60-8	
Terphenyl-d14 (S)	93	%	45-130	1	07/23/21 15:09	07/28/21 17:00	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974							
	Pace Analytical Services - Kansas City							
Percent Moisture	**21.8**	%	0.50	1		07/23/21 13:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-04/3-5D **Lab ID: 60375692015** Collected: 07/22/21 10:15 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050							
	Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	0.86	10	08/05/21 11:25	08/09/21 14:36	7440-36-0	
Arsenic	**7.4**	mg/kg	0.86	10	08/05/21 11:25	08/09/21 14:36	7440-38-2	
Copper	**15.1**	mg/kg	0.86	10	08/05/21 11:25	08/09/21 14:36	7440-50-8	
Lead	**9.8**	mg/kg	0.43	10	08/05/21 11:25	08/09/21 14:36	7439-92-1	
Zinc	**46.0**	mg/kg	4.3	10	08/05/21 11:25	08/09/21 14:36	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
	Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	83-32-9	
Acenaphthylene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	208-96-8	
Anthracene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	207-08-9	
Chrysene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	53-70-3	
Fluoranthene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	206-44-0	
Fluorene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	193-39-5	
Naphthalene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	91-20-3	
Phenanthrene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	85-01-8	
Pyrene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 17:18	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%	40-120	1	07/23/21 15:09	07/28/21 17:18	321-60-8	
Terphenyl-d14 (S)	94	%	45-130	1	07/23/21 15:09	07/28/21 17:18	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974							
	Pace Analytical Services - Kansas City							
Percent Moisture	**21.6**	%	0.50	1		07/23/21 13:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-05/3-5 **Lab ID: 60375692016** Collected: 07/22/21 10:37 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	41.5	1	07/23/21 16:34	07/27/21 19:10	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	41.5	1	07/23/21 16:34	07/27/21 19:10	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	41.5	1	07/23/21 16:34	07/27/21 19:10	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	41.5	1	07/23/21 16:34	07/27/21 19:10	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	41.5	1	07/23/21 16:34	07/27/21 19:10	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	41.5	1	07/23/21 16:34	07/27/21 19:10	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	41.5	1	07/23/21 16:34	07/27/21 19:10	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	94	%	35-120	1	07/23/21 16:34	07/27/21 19:10	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	0.86	10	08/05/21 11:25	08/09/21 14:38	7440-36-0	
Arsenic	**5.7**	mg/kg	0.86	10	08/05/21 11:25	08/09/21 14:38	7440-38-2	
Copper	**15.5**	mg/kg	0.86	10	08/05/21 11:25	08/09/21 14:38	7440-50-8	
Lead	**8.3**	mg/kg	0.43	10	08/05/21 11:25	08/09/21 14:38	7439-92-1	
Zinc	**45.4**	mg/kg	4.3	10	08/05/21 11:25	08/09/21 14:38	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	208-96-8	
Anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	207-08-9	
Chrysene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	53-70-3	
Fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	193-39-5	
Naphthalene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	91-20-3	
Phenanthrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	85-01-8	
Pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:35	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	81	%	40-120	1	07/23/21 15:09	07/28/21 17:35	321-60-8	
Terphenyl-d14 (S)	92	%	45-130	1	07/23/21 15:09	07/28/21 17:35	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**21.7**	%	0.50	1		07/23/21 13:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-05/5-7 **Lab ID: 60375692017** Collected: 07/22/21 10:42 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	42.0	1	07/23/21 16:34	07/27/21 19:28	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	42.0	1	07/23/21 16:34	07/27/21 19:28	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	42.0	1	07/23/21 16:34	07/27/21 19:28	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	42.0	1	07/23/21 16:34	07/27/21 19:28	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	42.0	1	07/23/21 16:34	07/27/21 19:28	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	42.0	1	07/23/21 16:34	07/27/21 19:28	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	42.0	1	07/23/21 16:34	07/27/21 19:28	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	110	%	35-120	1	07/23/21 16:34	07/27/21 19:28	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.2	10	08/05/21 11:25	08/09/21 14:39	7440-36-0	
Arsenic	**6.1**	mg/kg	1.2	10	08/05/21 11:25	08/09/21 14:39	7440-38-2	
Copper	**16.2**	mg/kg	1.2	10	08/05/21 11:25	08/09/21 14:39	7440-50-8	
Lead	**9.7**	mg/kg	0.60	10	08/05/21 11:25	08/09/21 14:39	7439-92-1	
Zinc	**48.2**	mg/kg	6.0	10	08/05/21 11:25	08/09/21 14:39	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	208-96-8	
Anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	120-12-7	
Benzo(a)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	56-55-3	
Benzo(a)pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	207-08-9	
Chrysene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	53-70-3	
Fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	193-39-5	
Naphthalene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	91-20-3	
Phenanthrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	85-01-8	
Pyrene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 17:52	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%	40-120	1	07/23/21 15:09	07/28/21 17:52	321-60-8	
Terphenyl-d14 (S)	94	%	45-130	1	07/23/21 15:09	07/28/21 17:52	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**21.5**	%	0.50	1		07/23/21 13:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-12/2.5-3.5 **Lab ID: 60375692018** Collected: 07/22/21 11:05 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	40.3	1	07/23/21 16:34	07/27/21 19:45	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	40.3	1	07/23/21 16:34	07/27/21 19:45	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	40.3	1	07/23/21 16:34	07/27/21 19:45	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	40.3	1	07/23/21 16:34	07/27/21 19:45	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	40.3	1	07/23/21 16:34	07/27/21 19:45	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	40.3	1	07/23/21 16:34	07/27/21 19:45	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	40.3	1	07/23/21 16:34	07/27/21 19:45	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	115	%	35-120	1	07/23/21 16:34	07/27/21 19:45	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:41	7440-36-0	
Arsenic	**9.4**	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:41	7440-38-2	
Copper	**19.1**	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:41	7440-50-8	
Lead	**12.3**	mg/kg	0.55	10	08/05/21 11:25	08/09/21 14:41	7439-92-1	
Zinc	**56.2**	mg/kg	5.5	10	08/05/21 11:25	08/09/21 14:41	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	83-32-9	
Acenaphthylene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	208-96-8	
Anthracene	**6.3**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	120-12-7	
Benzo(a)anthracene	**52.5**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	56-55-3	
Benzo(a)pyrene	**41.1**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	50-32-8	
Benzo(b)fluoranthene	**81.3**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	205-99-2	
Benzo(g,h,i)perylene	**32.2**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	191-24-2	
Benzo(k)fluoranthene	**39.5**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	207-08-9	
Chrysene	**62.2**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	53-70-3	
Fluoranthene	**143**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	206-44-0	
Fluorene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	86-73-7	
Indeno(1,2,3-cd)pyrene	**25.7**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	193-39-5	
Naphthalene	ND	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	91-20-3	
Phenanthrene	**30.6**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	85-01-8	
Pyrene	**119**	ug/kg	4.0	1	07/23/21 15:09	07/28/21 18:09	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	79	%	40-120	1	07/23/21 15:09	07/28/21 18:09	321-60-8	
Terphenyl-d14 (S)	97	%	45-130	1	07/23/21 15:09	07/28/21 18:09	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.5**	%	0.50	1		07/23/21 13:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-12/4-6 **Lab ID: 60375692019** Collected: 07/22/21 11:10 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	40.5	1	07/23/21 16:34	07/27/21 20:03	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	40.5	1	07/23/21 16:34	07/27/21 20:03	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	40.5	1	07/23/21 16:34	07/27/21 20:03	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	40.5	1	07/23/21 16:34	07/27/21 20:03	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	40.5	1	07/23/21 16:34	07/27/21 20:03	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	40.5	1	07/23/21 16:34	07/27/21 20:03	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	40.5	1	07/23/21 16:34	07/27/21 20:03	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	112	%	35-120	1	07/23/21 16:34	07/27/21 20:03	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:43	7440-36-0	
Arsenic	**6.4**	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:43	7440-38-2	
Copper	**30.0**	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:43	7440-50-8	
Lead	**8.7**	mg/kg	0.56	10	08/05/21 11:25	08/09/21 14:43	7439-92-1	
Zinc	**34.4**	mg/kg	5.6	10	08/05/21 11:25	08/09/21 14:43	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	83-32-9	
Acenaphthylene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	208-96-8	
Anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	120-12-7	
Benzo(a)anthracene	**9.4**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	56-55-3	
Benzo(a)pyrene	**7.2**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	50-32-8	
Benzo(b)fluoranthene	**15.5**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	205-99-2	
Benzo(g,h,i)perylene	**6.1**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	207-08-9	
Chrysene	**11.2**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	53-70-3	
Fluoranthene	**26.8**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	206-44-0	
Fluorene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	86-73-7	
Indeno(1,2,3-cd)pyrene	**5.0**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	193-39-5	
Naphthalene	ND	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	91-20-3	
Phenanthrene	**5.7**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	85-01-8	
Pyrene	**21.2**	ug/kg	4.1	1	07/23/21 15:09	07/28/21 18:26	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	82	%	40-120	1	07/23/21 15:09	07/28/21 18:26	321-60-8	
Terphenyl-d14 (S)	94	%	45-130	1	07/23/21 15:09	07/28/21 18:26	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.9**	%	0.50	1		07/23/21 13:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-19/0-2 **Lab ID: 60375692020** Collected: 07/22/21 11:35 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	37.6	1	07/23/21 16:34	07/27/21 20:21	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	37.6	1	07/23/21 16:34	07/27/21 20:21	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	37.6	1	07/23/21 16:34	07/27/21 20:21	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	37.6	1	07/23/21 16:34	07/27/21 20:21	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	37.6	1	07/23/21 16:34	07/27/21 20:21	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	37.6	1	07/23/21 16:34	07/27/21 20:21	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	37.6	1	07/23/21 16:34	07/27/21 20:21	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	101	%	35-120	1	07/23/21 16:34	07/27/21 20:21	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:44	7440-36-0	
Arsenic	**5.4**	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:44	7440-38-2	
Copper	**17.0**	mg/kg	1.1	10	08/05/21 11:25	08/09/21 14:44	7440-50-8	
Lead	**81.5**	mg/kg	0.53	10	08/05/21 11:25	08/09/21 14:44	7439-92-1	
Zinc	**66.7**	mg/kg	5.3	10	08/05/21 11:25	08/09/21 14:44	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**686**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	83-32-9	
Acenaphthylene	ND	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	208-96-8	
Anthracene	**1160**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	120-12-7	
Benzo(a)anthracene	**2240**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	56-55-3	
Benzo(a)pyrene	**1640**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	50-32-8	
Benzo(b)fluoranthene	**2870**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	205-99-2	
Benzo(g,h,i)perylene	**1210**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	191-24-2	
Benzo(k)fluoranthene	**1060**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	207-08-9	
Chrysene	**2170**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	218-01-9	
Dibenz(a,h)anthracene	**271**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	53-70-3	
Fluoranthene	**4890**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	206-44-0	
Fluorene	**568**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	86-73-7	
Indeno(1,2,3-cd)pyrene	**1060**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	193-39-5	
Naphthalene	**49.2**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	91-20-3	
Phenanthrene	**4380**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	85-01-8	
Pyrene	**4120**	ug/kg	37.7	10	07/23/21 15:09	07/28/21 18:43	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	82	%	40-120	10	07/23/21 15:09	07/28/21 18:43	321-60-8	D4
Terphenyl-d14 (S)	105	%	45-130	10	07/23/21 15:09	07/28/21 18:43	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**12.9**	%	0.50	1		07/23/21 13:39		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-19/3-5 **Lab ID: 60375692021** Collected: 07/22/21 11:41 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	38.1	1	07/23/21 16:34	07/27/21 20:39	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	38.1	1	07/23/21 16:34	07/27/21 20:39	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	38.1	1	07/23/21 16:34	07/27/21 20:39	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	38.1	1	07/23/21 16:34	07/27/21 20:39	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	38.1	1	07/23/21 16:34	07/27/21 20:39	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	38.1	1	07/23/21 16:34	07/27/21 20:39	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	38.1	1	07/23/21 16:34	07/27/21 20:39	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	100	%	35-120	1	07/23/21 16:34	07/27/21 20:39	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	0.97	10	08/05/21 11:25	08/09/21 14:46	7440-36-0	
Arsenic	**7.0**	mg/kg	0.97	10	08/05/21 11:25	08/09/21 14:46	7440-38-2	
Copper	**14.8**	mg/kg	0.97	10	08/05/21 11:25	08/09/21 14:46	7440-50-8	
Lead	**12.4**	mg/kg	0.49	10	08/05/21 11:25	08/09/21 14:46	7439-92-1	
Zinc	**34.5**	mg/kg	4.9	10	08/05/21 11:25	08/09/21 14:46	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	83-32-9	
Acenaphthylene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	208-96-8	
Anthracene	**5.3**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	120-12-7	
Benzo(a)anthracene	**11.2**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	56-55-3	
Benzo(a)pyrene	**8.8**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	50-32-8	
Benzo(b)fluoranthene	**16.9**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	205-99-2	
Benzo(g,h,i)perylene	**6.0**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	191-24-2	
Benzo(k)fluoranthene	**4.2**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	207-08-9	
Chrysene	**11.1**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	53-70-3	
Fluoranthene	**29.9**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	206-44-0	
Fluorene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	86-73-7	
Indeno(1,2,3-cd)pyrene	**5.2**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	193-39-5	
Naphthalene	ND	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	91-20-3	
Phenanthrene	**22.0**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	85-01-8	
Pyrene	**22.8**	ug/kg	3.8	1	07/23/21 15:09	07/28/21 19:01	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	77	%	40-120	1	07/23/21 15:09	07/28/21 19:01	321-60-8	
Terphenyl-d14 (S)	93	%	45-130	1	07/23/21 15:09	07/28/21 19:01	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**15.9**	%	0.50	1		07/23/21 14:28		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-26/3-4 **Lab ID: 60375692022** Collected: 07/22/21 13:00 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	38.7	1	07/23/21 16:34	07/27/21 20:57	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	38.7	1	07/23/21 16:34	07/27/21 20:57	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	38.7	1	07/23/21 16:34	07/27/21 20:57	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	38.7	1	07/23/21 16:34	07/27/21 20:57	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	38.7	1	07/23/21 16:34	07/27/21 20:57	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	38.7	1	07/23/21 16:34	07/27/21 20:57	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	38.7	1	07/23/21 16:34	07/27/21 20:57	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	100	%	35-120	1	07/23/21 16:34	07/27/21 20:57	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	1.0	10	08/05/21 11:25	08/09/21 14:47	7440-36-0	
Arsenic	**6.1**	mg/kg	1.0	10	08/05/21 11:25	08/09/21 14:47	7440-38-2	
Copper	**13.6**	mg/kg	1.0	10	08/05/21 11:25	08/09/21 14:47	7440-50-8	
Lead	**14.4**	mg/kg	0.50	10	08/05/21 11:25	08/09/21 14:47	7439-92-1	
Zinc	**44.9**	mg/kg	5.0	10	08/05/21 11:25	08/09/21 14:47	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**17.7**	%	0.50	1		07/23/21 14:28		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-26/4-5 **Lab ID: 60375692023** Collected: 07/22/21 13:05 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/kg	40.1	1	07/23/21 16:34	07/27/21 21:15	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/kg	40.1	1	07/23/21 16:34	07/27/21 21:15	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	40.1	1	07/23/21 16:34	07/27/21 21:15	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	40.1	1	07/23/21 16:34	07/27/21 21:15	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	40.1	1	07/23/21 16:34	07/27/21 21:15	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	40.1	1	07/23/21 16:34	07/27/21 21:15	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	40.1	1	07/23/21 16:34	07/27/21 21:15	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	103	%	35-120	1	07/23/21 16:34	07/27/21 21:15	2051-24-3	CH
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	ND	mg/kg	0.90	10	08/06/21 09:55	08/09/21 15:02	7440-36-0	
Arsenic	**7.6**	mg/kg	0.90	10	08/06/21 09:55	08/09/21 15:02	7440-38-2	
Copper	**12.6**	mg/kg	0.90	10	08/06/21 09:55	08/09/21 15:02	7440-50-8	
Lead	**11.7**	mg/kg	0.45	10	08/06/21 09:55	08/09/21 15:02	7439-92-1	
Zinc	**37.5**	mg/kg	4.5	10	08/06/21 09:55	08/09/21 15:02	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.4**	%	0.50	1		07/23/21 14:28		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-41/4-6 **Lab ID: 60375692024** Collected: 07/22/21 13:30 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
SVOA (HPLC) 8330B	Analytical Method: EPA 8330 Preparation Method: 8330 Pace National - Mt. Juliet							
Tetryl	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	479-45-8	
2,4-Dinitrotoluene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	121-14-2	
4-Nitrotoluene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	99-99-0	
RDX (Hexahydro-1,3,5-Trinitro-	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	121-82-4	
Nitrobenzene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	98-95-3	
2,6-Dinitrotoluene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	606-20-2	
2-Nitrotoluene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	88-72-2	
3-Nitrotoluene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	99-08-1	
1,3,5-Trinitrobenzene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	99-35-4	
1,3-Dinitrobenzene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	99-65-0	
2,4,6-Trinitrotoluene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	118-96-7	
4-Amino-2,6-dinitrotoluene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	19406-51-0	
2-Amino-4,6-dinitrotoluene	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	35572-78-2	
HMX (Octahydro-1,3,5,7-Tetrani	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	2691-41-0	
PETN	ND	mg/kg	0.617	1	07/26/21 17:15	07/29/21 00:40	78-11-5	
Nitroglycerin	ND	mg/kg	2.47	1	07/26/21 17:15	07/29/21 00:40	55-63-0	
Surrogates								
1,3-Dimethyl-2-nitrobenzene	97.0	%	80.0-128	1	07/26/21 17:15	07/29/21 00:40	81-20-9	
Total Solids 2540 G-2011	Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet							
Total Solids	**81.0**	%		1	07/31/21 07:43	07/31/21 07:49		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Sample: GB-41/6-8 **Lab ID: 60375692025** Collected: 07/22/21 13:32 Received: 07/23/21 04:13 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
SVOA (HPLC) 8330B	Analytical Method: EPA 8330 Preparation Method: 8330 Pace National - Mt. Juliet							
Tetryl	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	479-45-8	
2,4-Dinitrotoluene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	121-14-2	
4-Nitrotoluene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	99-99-0	
RDX (Hexahydro-1,3,5-Trinitro-	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	121-82-4	
Nitrobenzene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	98-95-3	
2,6-Dinitrotoluene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	606-20-2	
2-Nitrotoluene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	88-72-2	
3-Nitrotoluene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	99-08-1	
1,3,5-Trinitrobenzene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	99-35-4	
1,3-Dinitrobenzene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	99-65-0	
2,4,6-Trinitrotoluene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	118-96-7	
4-Amino-2,6-dinitrotoluene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	19406-51-0	
2-Amino-4,6-dinitrotoluene	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	35572-78-2	
HMX (Octahydro-1,3,5,7-Tetrani	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	2691-41-0	
PETN	ND	mg/kg	0.620	1	07/26/21 17:15	07/29/21 01:08	78-11-5	
Nitroglycerin	ND	mg/kg	2.48	1	07/26/21 17:15	07/29/21 01:08	55-63-0	
Surrogates								
1,3-Dimethyl-2-nitrobenzene	96.9	%	80.0-128	1	07/26/21 17:15	07/29/21 01:08	81-20-9	
Total Solids 2540 G-2011	Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet							
Total Solids	**80.6**	%		1	07/31/21 07:43	07/31/21 07:49		

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

QC Batch: 1710286
QC Batch Method: 8330
Analysis Method: EPA 8330
Analysis Description: SVOA (HPLC) 8330B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 60375692024, 60375692025

METHOD BLANK: R3685137-1 Matrix: Solid
Associated Lab Samples: 60375692024, 60375692025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Tetryl	mg/kg	ND	0.500	07/28/21 13:57	
2,4-Dinitrotoluene	mg/kg	ND	0.500	07/28/21 13:57	
4-Nitrotoluene	mg/kg	ND	0.500	07/28/21 13:57	
RDX (Hexahydro-1,3,5-Trinitro-	mg/kg	ND	0.500	07/28/21 13:57	
Nitrobenzene	mg/kg	ND	0.500	07/28/21 13:57	
2,6-Dinitrotoluene	mg/kg	ND	0.500	07/28/21 13:57	
2-Nitrotoluene	mg/kg	ND	0.500	07/28/21 13:57	
3-Nitrotoluene	mg/kg	ND	0.500	07/28/21 13:57	
1,3,5-Trinitrobenzene	mg/kg	ND	0.500	07/28/21 13:57	
1,3-Dinitrobenzene	mg/kg	ND	0.500	07/28/21 13:57	
2,4,6-Trinitrotoluene	mg/kg	ND	0.500	07/28/21 13:57	
4-Amino-2,6-dinitrotoluene	mg/kg	ND	0.500	07/28/21 13:57	
2-Amino-4,6-dinitrotoluene	mg/kg	ND	0.500	07/28/21 13:57	
HMX (Octahydro-1,3,5,7-Tetrani	mg/kg	ND	0.500	07/28/21 13:57	
PETN	mg/kg	ND	0.500	07/28/21 13:57	
Nitroglycerin	mg/kg	ND	2.00	07/28/21 13:57	
1,3-Dimethyl-2-nitrobenzene	%	103	80.0-128	07/28/21 13:57	

LABORATORY CONTROL SAMPLE: R3685137-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetryl	mg/kg	8.00	7.60	95.0	80.0-122	
2,4-Dinitrotoluene	mg/kg	8.00	7.55	94.4	80.0-120	
4-Nitrotoluene	mg/kg	8.00	7.39	92.4	80.0-121	
RDX (Hexahydro-1,3,5-Trinitro-	mg/kg	8.00	7.47	93.4	80.0-120	
Nitrobenzene	mg/kg	8.00	7.54	94.3	80.0-120	
2,6-Dinitrotoluene	mg/kg	8.00	7.45	93.1	80.0-120	
2-Nitrotoluene	mg/kg	8.00	7.49	93.6	80.0-120	
3-Nitrotoluene	mg/kg	8.00	7.56	94.5	80.0-120	
1,3,5-Trinitrobenzene	mg/kg	8.00	7.49	93.6	80.0-124	
1,3-Dinitrobenzene	mg/kg	8.00	7.49	93.6	80.0-122	
2,4,6-Trinitrotoluene	mg/kg	8.00	7.31	91.4	80.0-120	
4-Amino-2,6-dinitrotoluene	mg/kg	8.00	7.43	92.9	80.0-120	
2-Amino-4,6-dinitrotoluene	mg/kg	8.00	7.25	90.6	80.0-123	
HMX (Octahydro-1,3,5,7-Tetrani	mg/kg	8.00	7.53	94.1	80.0-120	
PETN	mg/kg	8.00	7.70	96.3	80.0-137	
Nitroglycerin	mg/kg	8.00	7.32	91.5	78.0-120	
1,3-Dimethyl-2-nitrobenzene	%			95.3	80.0-128	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3685137-3 R3685137-4

Parameter	Units	L1381569-04 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Tetryl	mg/kg	ND	9.71	9.71	10.2	10.5	105	108	46.0-158	2.60	20	
2,4-Dinitrotoluene	mg/kg	ND	9.71	9.71	9.40	9.58	96.7	98.6	78.0-138	1.93	20	
4-Nitrotoluene	mg/kg	ND	9.71	9.71	9.32	9.47	96.0	97.5	80.0-129	1.56	20	
RDX (Hexahydro-1,3,5-Trinitro-	mg/kg	ND	9.71	9.71	8.57	8.87	88.2	91.3	57.0-126	3.50	20	
Nitrobenzene	mg/kg	ND	9.71	9.71	9.48	9.71	97.6	100	80.0-126	2.42	20	
2,6-Dinitrotoluene	mg/kg	ND	9.71	9.71	9.29	9.59	95.6	98.7	80.0-125	3.23	20	
2-Nitrotoluene	mg/kg	ND	9.71	9.71	9.30	9.59	95.7	98.7	80.0-125	3.10	20	
3-Nitrotoluene	mg/kg	ND	9.71	9.71	9.46	9.73	97.4	100	80.0-120	2.80	20	
1,3,5-Trinitrobenzene	mg/kg	ND	9.71	9.71	9.53	9.81	98.1	101	80.0-133	2.90	20	
1,3-Dinitrobenzene	mg/kg	ND	9.71	9.71	9.29	9.60	95.6	98.9	80.0-138	3.36	20	
2,4,6-Trinitrotoluene	mg/kg	ND	9.71	9.71	9.31	9.51	95.9	97.9	80.0-127	2.08	20	
4-Amino-2,6-dinitrotoluene	mg/kg	ND	9.71	9.71	9.23	9.48	95.0	97.6	80.0-127	2.74	20	
2-Amino-4,6-dinitrotoluene	mg/kg	ND	9.71	9.71	9.10	9.37	93.7	96.5	80.0-135	2.91	20	
HMX (Octahydro-1,3,5,7-Tetrani	mg/kg	ND	9.71	9.71	9.49	9.73	97.7	100	79.0-125	2.41	20	
PETN	mg/kg	ND	9.71	9.71	10.3	9.82	106	101	77.0-145	4.85	20	
Nitroglycerin	mg/kg	ND	9.71	9.71	9.26	9.40	95.4	96.7	66.0-137	1.44	20	
1,3-Dimethyl-2-nitrobenzene	%						98.1	101	80.0-128			

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

QC Batch: 736298
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375692001, 60375692002, 60375692003, 60375692004, 60375692005, 60375692006, 60375692007, 60375692008, 60375692009, 60375692010

METHOD BLANK: 2952916 Matrix: Solid
Associated Lab Samples: 60375692001, 60375692002, 60375692003, 60375692004, 60375692005, 60375692006, 60375692007, 60375692008, 60375692009, 60375692010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	ND	1.0	08/06/21 14:25	
Arsenic	mg/kg	ND	1.0	08/06/21 14:25	
Copper	mg/kg	ND	1.0	08/06/21 14:25	
Lead	mg/kg	ND	0.50	08/06/21 14:25	
Zinc	mg/kg	ND	5.0	08/06/21 14:25	

LABORATORY CONTROL SAMPLE: 2952917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	93.8	94	80-120	
Arsenic	mg/kg	100	95.0	95	80-120	
Copper	mg/kg	100	101	101	80-120	
Lead	mg/kg	100	96.7	97	80-120	
Zinc	mg/kg	100	93.8	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952918 2952919

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.52	92.4	103	32.7	34.6	35	34	75-125	6	20	M1
Arsenic	mg/kg	9.8	92.4	103	97.2	105	95	93	75-125	8	20	
Copper	mg/kg	17.4	92.4	103	108	115	97	95	75-125	7	20	
Lead	mg/kg	14.3	92.4	103	108	115	102	98	75-125	6	20	
Zinc	mg/kg	55.1	92.4	103	143	148	95	91	75-125	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952920 2952921

Parameter	Units	60375692008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	ND	114	97.8	43.3	35.1	38	36	75-125	21	20	M1,R1
Arsenic	mg/kg	6.8	114	97.8	113	95.4	93	91	75-125	17	20	
Copper	mg/kg	15.6	114	97.8	129	110	99	96	75-125	16	20	
Lead	mg/kg	11.7	114	97.8	125	105	99	95	75-125	17	20	
Zinc	mg/kg	42.5	114	97.8	152	134	96	94	75-125	13	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

QC Batch: 736299
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375692011, 60375692012, 60375692013, 60375692014, 60375692015, 60375692016, 60375692017, 60375692018, 60375692019, 60375692020, 60375692021, 60375692022

METHOD BLANK: 2952930 Matrix: Solid
Associated Lab Samples: 60375692011, 60375692012, 60375692013, 60375692014, 60375692015, 60375692016, 60375692017, 60375692018, 60375692019, 60375692020, 60375692021, 60375692022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	ND	1.0	08/09/21 14:19	
Arsenic	mg/kg	ND	1.0	08/09/21 14:19	
Copper	mg/kg	ND	1.0	08/09/21 14:19	
Lead	mg/kg	ND	0.50	08/09/21 14:19	
Zinc	mg/kg	ND	5.0	08/09/21 14:19	

LABORATORY CONTROL SAMPLE: 2952931

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	96.3	96	80-120	
Arsenic	mg/kg	100	98.6	99	80-120	
Copper	mg/kg	100	105	105	80-120	
Lead	mg/kg	100	99.8	100	80-120	
Zinc	mg/kg	100	97.9	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952932 2952933

Parameter	Units	60375692011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	ND	116	100	39.5	31.3	34	31	75-125	23	20	M1,R1
Arsenic	mg/kg	8.6	116	100	117	101	93	92	75-125	15	20	
Copper	mg/kg	22.1	116	100	134	121	97	98	75-125	10	20	
Lead	mg/kg	16.9	116	100	137	122	103	104	75-125	12	20	
Zinc	mg/kg	52.5	116	100	155	144	89	91	75-125	8	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

QC Batch: 736513
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375692023

METHOD BLANK: 2953701 Matrix: Solid
Associated Lab Samples: 60375692023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	ND	1.0	08/09/21 14:59	
Arsenic	mg/kg	ND	1.0	08/09/21 14:59	
Copper	mg/kg	ND	1.0	08/09/21 14:59	
Lead	mg/kg	ND	0.50	08/09/21 14:59	
Zinc	mg/kg	ND	5.0	08/09/21 14:59	

LABORATORY CONTROL SAMPLE: 2953702

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	95.6	96	80-120	
Arsenic	mg/kg	100	98.4	98	80-120	
Copper	mg/kg	100	105	105	80-120	
Lead	mg/kg	100	99.0	99	80-120	
Zinc	mg/kg	100	96.4	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2953703 2953704

Parameter	Units	60376093012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.63	101	95.1	34.9	34.5	34	36	75-125	1	20	M1
Arsenic	mg/kg	10.9	101	95.1	109	102	97	96	75-125	7	20	
Copper	mg/kg	19.4	101	95.1	120	113	99	98	75-125	6	20	
Lead	mg/kg	15.2	101	95.1	124	113	107	103	75-125	9	20	
Zinc	mg/kg	61.5	101	95.1	160	153	98	96	75-125	5	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

QC Batch: 733927
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375692001, 60375692002, 60375692003, 60375692004, 60375692005, 60375692006, 60375692007

METHOD BLANK: 2945143 Matrix: Solid
Associated Lab Samples: 60375692001, 60375692002, 60375692003, 60375692004, 60375692005, 60375692006, 60375692007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	32.6	07/26/21 15:09	
PCB-1221 (Aroclor 1221)	ug/kg	ND	32.6	07/26/21 15:09	
PCB-1232 (Aroclor 1232)	ug/kg	ND	32.6	07/26/21 15:09	
PCB-1242 (Aroclor 1242)	ug/kg	ND	32.6	07/26/21 15:09	
PCB-1248 (Aroclor 1248)	ug/kg	ND	32.6	07/26/21 15:09	
PCB-1254 (Aroclor 1254)	ug/kg	ND	32.6	07/26/21 15:09	
PCB-1260 (Aroclor 1260)	ug/kg	ND	32.6	07/26/21 15:09	
Decachlorobiphenyl (S)	%	91	35-120	07/26/21 15:09	

LABORATORY CONTROL SAMPLE: 2945144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	160	157	98	65-120	
PCB-1260 (Aroclor 1260)	ug/kg	160	158	99	65-120	
Decachlorobiphenyl (S)	%			98	35-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2945145 2945146

Parameter	Units	60375626032 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<10.1	205	207	232	250	114	121	30-130	7	40	CH
PCB-1260 (Aroclor 1260)	ug/kg	<8.0	205	207	237	235	116	113	15-155	1	40	CH
Decachlorobiphenyl (S)	%						108	103	35-120		50	CH

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

QC Batch: 733928
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375692008, 60375692009, 60375692010, 60375692011, 60375692012, 60375692016, 60375692017, 60375692018, 60375692019, 60375692020, 60375692021, 60375692022, 60375692023

METHOD BLANK: 2945148 Matrix: Solid
Associated Lab Samples: 60375692008, 60375692009, 60375692010, 60375692011, 60375692012, 60375692016, 60375692017, 60375692018, 60375692019, 60375692020, 60375692021, 60375692022, 60375692023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	33.0	07/26/21 15:45	
PCB-1221 (Aroclor 1221)	ug/kg	ND	33.0	07/26/21 15:45	
PCB-1232 (Aroclor 1232)	ug/kg	ND	33.0	07/26/21 15:45	
PCB-1242 (Aroclor 1242)	ug/kg	ND	33.0	07/26/21 15:45	
PCB-1248 (Aroclor 1248)	ug/kg	ND	33.0	07/26/21 15:45	
PCB-1254 (Aroclor 1254)	ug/kg	ND	33.0	07/26/21 15:45	
PCB-1260 (Aroclor 1260)	ug/kg	ND	33.0	07/26/21 15:45	
Decachlorobiphenyl (S)	%	97	35-120	07/26/21 15:45	

LABORATORY CONTROL SAMPLE: 2945149

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	163	174	107	65-120	
PCB-1260 (Aroclor 1260)	ug/kg	163	171	105	65-120	
Decachlorobiphenyl (S)	%			100	35-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2945150 2945151

Parameter	Units	60375692008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	204	202	258	212	126	105	30-130	19	40	CH
PCB-1260 (Aroclor 1260)	ug/kg	ND	204	202	260	218	127	108	15-155	17	40	CH
Decachlorobiphenyl (S)	%						111	99	35-120		50	CH

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

QC Batch: 733930
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375692001, 60375692002, 60375692003, 60375692004, 60375692005, 60375692006, 60375692009, 60375692010, 60375692013, 60375692014, 60375692015, 60375692016, 60375692017, 60375692018, 60375692019, 60375692020, 60375692021

METHOD BLANK: 2945158
Matrix: Solid
Associated Lab Samples: 60375692001, 60375692002, 60375692003, 60375692004, 60375692005, 60375692006, 60375692009, 60375692010, 60375692013, 60375692014, 60375692015, 60375692016, 60375692017, 60375692018, 60375692019, 60375692020, 60375692021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	ND	3.2	07/28/21 12:42	
Acenaphthylene	ug/kg	ND	3.2	07/28/21 12:42	
Anthracene	ug/kg	ND	3.2	07/28/21 12:42	
Benzo(a)anthracene	ug/kg	ND	3.2	07/28/21 12:42	
Benzo(a)pyrene	ug/kg	ND	3.2	07/28/21 12:42	
Benzo(b)fluoranthene	ug/kg	ND	3.2	07/28/21 12:42	
Benzo(g,h,i)perylene	ug/kg	ND	3.2	07/28/21 12:42	
Benzo(k)fluoranthene	ug/kg	ND	3.2	07/28/21 12:42	
Chrysene	ug/kg	ND	3.2	07/28/21 12:42	
Dibenz(a,h)anthracene	ug/kg	ND	3.2	07/28/21 12:42	
Fluoranthene	ug/kg	ND	3.2	07/28/21 12:42	
Fluorene	ug/kg	ND	3.2	07/28/21 12:42	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	3.2	07/28/21 12:42	
Naphthalene	ug/kg	ND	3.2	07/28/21 12:42	
Phenanthrene	ug/kg	ND	3.2	07/28/21 12:42	
Pyrene	ug/kg	ND	3.2	07/28/21 12:42	
2-Fluorobiphenyl (S)	%	92	40-120	07/28/21 12:42	
Terphenyl-d14 (S)	%	107	45-130	07/28/21 12:42	

LABORATORY CONTROL SAMPLE: 2945159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	31.9	26.5	83	45-120	
Acenaphthylene	ug/kg	31.9	25.6	80	50-120	
Anthracene	ug/kg	31.9	28.4	89	50-120	
Benzo(a)anthracene	ug/kg	31.9	28.8	90	55-125	
Benzo(a)pyrene	ug/kg	31.9	27.4	86	45-120	
Benzo(b)fluoranthene	ug/kg	31.9	28.5	89	50-125	
Benzo(g,h,i)perylene	ug/kg	31.9	30.2	95	40-120	
Benzo(k)fluoranthene	ug/kg	31.9	29.0	91	55-120	
Chrysene	ug/kg	31.9	28.6	90	55-120	
Dibenz(a,h)anthracene	ug/kg	31.9	29.8	93	40-125	
Fluoranthene	ug/kg	31.9	30.3	95	50-125	
Fluorene	ug/kg	31.9	27.2	85	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	31.9	29.2	92	44-125	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

LABORATORY CONTROL SAMPLE: 2945159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	31.9	26.0	82	45-120	
Phenanthrene	ug/kg	31.9	28.8	90	50-125	
Pyrene	ug/kg	31.9	30.3	95	50-125	
2-Fluorobiphenyl (S)	%			85	40-120	
Terphenyl-d14 (S)	%			94	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2945160 2945161

Parameter	Units	60375626032 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<1.5	41.4	41.5	34.5	34.6	83	83	10-150	0	42	
Acenaphthylene	ug/kg	<1.5	41.4	41.5	33.6	34.0	81	82	30-125	1	44	
Anthracene	ug/kg	<1.7	41.4	41.5	37.4	37.5	91	90	10-160	0	54	
Benzo(a)anthracene	ug/kg	<1.9	41.4	41.5	37.3	38.4	90	92	10-160	3	62	
Benzo(a)pyrene	ug/kg	<1.5	41.4	41.5	36.4	37.2	88	90	10-150	2	66	
Benzo(b)fluoranthene	ug/kg	<2.0	41.4	41.5	36.4	40.3	88	97	10-165	10	61	
Benzo(g,h,i)perylene	ug/kg	<1.8	41.4	41.5	36.0	39.3	87	94	10-155	9	58	
Benzo(k)fluoranthene	ug/kg	<2.3	41.4	41.5	38.3	36.5	93	88	10-165	5	53	
Chrysene	ug/kg	<2.0	41.4	41.5	36.7	37.5	89	90	10-150	2	57	
Dibenz(a,h)anthracene	ug/kg	<1.8	41.4	41.5	35.7	39.0	86	94	10-175	9	48	
Fluoranthene	ug/kg	<3.1	41.4	41.5	40.2	40.4	97	97	10-180	1	54	
Fluorene	ug/kg	<1.6	41.4	41.5	36.0	36.6	87	88	20-145	2	39	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.8	41.4	41.5	34.7	37.1	84	89	10-150	7	59	
Naphthalene	ug/kg	<1.8	41.4	41.5	34.6	35.0	84	84	10-165	1	54	
Phenanthrene	ug/kg	<3.4	41.4	41.5	38.6	38.3	93	92	10-170	1	51	
Pyrene	ug/kg	<2.2	41.4	41.5	39.9	40.3	96	97	10-180	1	61	
2-Fluorobiphenyl (S)	%						85	85	40-120			
Terphenyl-d14 (S)	%						97	98	45-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

QC Batch: 733920
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375692001, 60375692002, 60375692003, 60375692004, 60375692005, 60375692006, 60375692007, 60375692008, 60375692009, 60375692010, 60375692011, 60375692012, 60375692013, 60375692014, 60375692015, 60375692016, 60375692017, 60375692018, 60375692019, 60375692020

METHOD BLANK: 2945126
Matrix: Solid
Associated Lab Samples: 60375692001, 60375692002, 60375692003, 60375692004, 60375692005, 60375692006, 60375692007, 60375692008, 60375692009, 60375692010, 60375692011, 60375692012, 60375692013, 60375692014, 60375692015, 60375692016, 60375692017, 60375692018, 60375692019, 60375692020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	07/23/21 13:37	

SAMPLE DUPLICATE: 2945127

Parameter	Units	60375692008 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	18.8	18.8	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

QC Batch: 734005
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375692021, 60375692022, 60375692023

METHOD BLANK: 2945488 Matrix: Solid
Associated Lab Samples: 60375692021, 60375692022, 60375692023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	07/23/21 14:27	

SAMPLE DUPLICATE: 2945489

Parameter	Units	60375461001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.3	13.6	11	20	

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REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375692

QC Batch: 1714895
QC Batch Method: SM 2540 G
Analysis Method: SM 2540G
Analysis Description: Total Solids 2540 G-2011
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 60375692024, 60375692025

METHOD BLANK: R3686462-1 Matrix: Solid
Associated Lab Samples: 60375692024, 60375692025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Solids	%	ND		07/31/21 07:49	

LABORATORY CONTROL SAMPLE: R3686462-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3686462-3

Parameter	Units	L1382481-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	89.8	90.3	0.563	10	

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REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: GSA GOODFELLOW
Pace Project No.: 60375692

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D4	Sample was diluted due to the presence of high levels of target analytes.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375692001	GB-31/3-5	EPA 3546	733927	EPA 8082	734212
60375692002	GB-31/5-7	EPA 3546	733927	EPA 8082	734212
60375692003	GB-24/1-3	EPA 3546	733927	EPA 8082	734212
60375692004	GB-24/3-5	EPA 3546	733927	EPA 8082	734212
60375692005	GB-17/1-3	EPA 3546	733927	EPA 8082	734212
60375692006	GB-17/3-5	EPA 3546	733927	EPA 8082	734212
60375692007	GB-25/0-2	EPA 3546	733927	EPA 8082	734212
60375692008	GB-25/2-4	EPA 3546	733928	EPA 8082	734220
60375692009	GB-18/3-5	EPA 3546	733928	EPA 8082	734220
60375692010	GB-18/5-7	EPA 3546	733928	EPA 8082	734220
60375692011	GB-11/1-3	EPA 3546	733928	EPA 8082	734220
60375692012	GB-11/3-5	EPA 3546	733928	EPA 8082	734220
60375692016	GB-05/3-5	EPA 3546	733928	EPA 8082	734220
60375692017	GB-05/5-7	EPA 3546	733928	EPA 8082	734220
60375692018	GB-12/2.5-3.5	EPA 3546	733928	EPA 8082	734220
60375692019	GB-12/4-6	EPA 3546	733928	EPA 8082	734220
60375692020	GB-19/0-2	EPA 3546	733928	EPA 8082	734220
60375692021	GB-19/3-5	EPA 3546	733928	EPA 8082	734220
60375692022	GB-26/3-4	EPA 3546	733928	EPA 8082	734220
60375692023	GB-26/4-5	EPA 3546	733928	EPA 8082	734220
60375692024	GB-41/4-6	8330	1710286	EPA 8330	1710286
60375692025	GB-41/6-8	8330	1710286	EPA 8330	1710286
60375692001	GB-31/3-5	EPA 3050	736298	EPA 6020	736506
60375692002	GB-31/5-7	EPA 3050	736298	EPA 6020	736506
60375692003	GB-24/1-3	EPA 3050	736298	EPA 6020	736506
60375692004	GB-24/3-5	EPA 3050	736298	EPA 6020	736506
60375692005	GB-17/1-3	EPA 3050	736298	EPA 6020	736506
60375692006	GB-17/3-5	EPA 3050	736298	EPA 6020	736506
60375692007	GB-25/0-2	EPA 3050	736298	EPA 6020	736506
60375692008	GB-25/2-4	EPA 3050	736298	EPA 6020	736506
60375692009	GB-18/3-5	EPA 3050	736298	EPA 6020	736506
60375692010	GB-18/5-7	EPA 3050	736298	EPA 6020	736506
60375692011	GB-11/1-3	EPA 3050	736299	EPA 6020	736508
60375692012	GB-11/3-5	EPA 3050	736299	EPA 6020	736508
60375692013	GB-04/2-3	EPA 3050	736299	EPA 6020	736508
60375692014	GB-04/3-5	EPA 3050	736299	EPA 6020	736508
60375692015	GB-04/3-5D	EPA 3050	736299	EPA 6020	736508
60375692016	GB-05/3-5	EPA 3050	736299	EPA 6020	736508
60375692017	GB-05/5-7	EPA 3050	736299	EPA 6020	736508
60375692018	GB-12/2.5-3.5	EPA 3050	736299	EPA 6020	736508
60375692019	GB-12/4-6	EPA 3050	736299	EPA 6020	736508
60375692020	GB-19/0-2	EPA 3050	736299	EPA 6020	736508
60375692021	GB-19/3-5	EPA 3050	736299	EPA 6020	736508
60375692022	GB-26/3-4	EPA 3050	736299	EPA 6020	736508
60375692023	GB-26/4-5	EPA 3050	736513	EPA 6020	736679
60375692001	GB-31/3-5	EPA 3546	733930	EPA 8270 by SIM	734714

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375692

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375692002	GB-31/5-7	EPA 3546	733930	EPA 8270 by SIM	734714
60375692003	GB-24/1-3	EPA 3546	733930	EPA 8270 by SIM	734714
60375692004	GB-24/3-5	EPA 3546	733930	EPA 8270 by SIM	734714
60375692005	GB-17/1-3	EPA 3546	733930	EPA 8270 by SIM	734714
60375692006	GB-17/3-5	EPA 3546	733930	EPA 8270 by SIM	734714
60375692009	GB-18/3-5	EPA 3546	733930	EPA 8270 by SIM	734714
60375692010	GB-18/5-7	EPA 3546	733930	EPA 8270 by SIM	734714
60375692013	GB-04/2-3	EPA 3546	733930	EPA 8270 by SIM	734714
60375692014	GB-04/3-5	EPA 3546	733930	EPA 8270 by SIM	734714
60375692015	GB-04/3-5D	EPA 3546	733930	EPA 8270 by SIM	734714
60375692016	GB-05/3-5	EPA 3546	733930	EPA 8270 by SIM	734714
60375692017	GB-05/5-7	EPA 3546	733930	EPA 8270 by SIM	734714
60375692018	GB-12/2.5-3.5	EPA 3546	733930	EPA 8270 by SIM	734714
60375692019	GB-12/4-6	EPA 3546	733930	EPA 8270 by SIM	734714
60375692020	GB-19/0-2	EPA 3546	733930	EPA 8270 by SIM	734714
60375692021	GB-19/3-5	EPA 3546	733930	EPA 8270 by SIM	734714
60375692001	GB-31/3-5	ASTM D2974	733920		
60375692002	GB-31/5-7	ASTM D2974	733920		
60375692003	GB-24/1-3	ASTM D2974	733920		
60375692004	GB-24/3-5	ASTM D2974	733920		
60375692005	GB-17/1-3	ASTM D2974	733920		
60375692006	GB-17/3-5	ASTM D2974	733920		
60375692007	GB-25/0-2	ASTM D2974	733920		
60375692008	GB-25/2-4	ASTM D2974	733920		
60375692009	GB-18/3-5	ASTM D2974	733920		
60375692010	GB-18/5-7	ASTM D2974	733920		
60375692011	GB-11/1-3	ASTM D2974	733920		
60375692012	GB-11/3-5	ASTM D2974	733920		
60375692013	GB-04/2-3	ASTM D2974	733920		
60375692014	GB-04/3-5	ASTM D2974	733920		
60375692015	GB-04/3-5D	ASTM D2974	733920		
60375692016	GB-05/3-5	ASTM D2974	733920		
60375692017	GB-05/5-7	ASTM D2974	733920		
60375692018	GB-12/2.5-3.5	ASTM D2974	733920		
60375692019	GB-12/4-6	ASTM D2974	733920		
60375692020	GB-19/0-2	ASTM D2974	733920		
60375692021	GB-19/3-5	ASTM D2974	734005		
60375692022	GB-26/3-4	ASTM D2974	734005		
60375692023	GB-26/4-5	ASTM D2974	734005		
60375692024	GB-41/4-6	SM 2540 G	1714895	SM 2540G	1714895
60375692025	GB-41/6-8	SM 2540 G	1714895	SM 2540G	1714895

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Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60375692

60375692

Client Name: Burns McDonnell

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☑ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☑ Zplc

Thermometer Used: T29le **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 2.4 **Corr. Factor** -0.3 **Corrected** 2.1

Temperature should be above freezing to 6°C 1.7 1.4

Date and initials of person examining contents: 1/23/2 (b) (6)

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: SL	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#	☐Yes ☐No ☑N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State: MO	☐Yes ☑No ☐N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Jeffrey Shopper Date: _____

F-KS-C-003-Rev.11, February 28, 2018

BURNS McDONNELL

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 ~~Loiret BLVD~~ Loiret BLVD
City/State/Zip: Lenexa, KS 66219
Telephone: 913-563-1408

Document Control No: 133835-009
Lab. Reference No. or Episode No.:

Project Number: 133835
Client Name: GSA - Goodfellow

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Matrix			Number of Containers	Analysis							Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		PAHs	Metals	PCBs	PCB congeners	PCB congeners (2)		60375692	
GB-31	3-5				3.0	5.0	7/21/21	1418		X		2	X	X	X					2 JGFU
GB-31	5-7				5.0	7.0		1422		X		2	X	X	X					↓
GB-24	1-3				1.0	3.0		1440		X		2	X	X	X					
GB-24	3-5				3.0	5.0		1445		X		3	X	X	X	X				3 JGFU
GB-17	1-3				1.0	3.0		1522		X		2	X	X	X					2 JGFU
GB-17	3-5				3.0	5.0	↓	1530		X		2	X	X	X					2 JGFU
GB-25	0-2				0	2.0	7/22/21	810		X		1		X	X					1 JGFU
GB-25	2-4				2.0	4.0		818		X		1		X	X					↓
GB-25	2-4 MS				2.0	4.0		818		X		1		X	X					
GB-25	2-4 MSD				2.0	4.0		818		X		1		X	X					↓
GB-18	3-5				3.0	5.0		850		X		2	X	X	X					2 JGFU
GB-18	5-7				5.0	7.0		855		X		2	X	X	X					↓
GB-11	1-3				1.0	3.0		923		X		1		X	X					1 JGFU
GB-11	3-5				3.0	5.0	↓	930		X		2		X	X	X				2 JGFU

[redacted] (g) (g)

Sampler (signature):

Special Instructions:
SEE WORKORDER

Relinquished By (signature): [redacted] (g) (g) — Date/Time 7/22/21 14:05

[redacted] (g) (g) — Date/Time 7/23/21 14:05

Ice Present in Container: Yes ☒ No ☐

Temperature Upon Receipt: 2.1, 1.4

Relinquished By (signature): [redacted] (g) (g) — Date/Time 7/22 1415

Received By (signature): [redacted] (g) (g) — Date/Time 7/23/21 0413

Laboratory Comments:

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 ~~Loiret BLVD~~ Loiret BLVD
City/State/Zip: Lenexa, KS 66219
Telephone: 913-563-1408

Document Control No: 133835-010
Lab. Reference No. or Episode No.:

Project Number: 133835

Client Name: GSA-Goodfellow

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Matrix			Number of Containers	Analysis							
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		PAHs	Metals	PCBs	PCB Congeners	Explosives			Remarks
GB-04/2-3					2.0	3.0	7/22/21	1010		X		1	X	X						1-JGFU
GB-04/3-5					3.0	5.0		1015		X		1	X	X						↓
GB-04/3-5D					3.0	5.0		1015		X		1	X	X						↓
GB-05/3-5					3.0	5.0		1037		X		2	X	X	X					2-JGFU
GB-05/5-7					3.0	5.0		1042		X		2	X	X	X					↓
GB-12/2.5-3.5					2.5	3.5		1105		X		2	X	X	X					↓
GB-12/4-6					4.0	6.0		1110		X		2	X	X	X					↓
GB-19/0-2					0	2.0		1135		X		3	X	X	X	X				3-JGFU
GB-19/3-5					3.0	5.0		1141		X		2	X	X	X					2-JGFU
GB-26/3-4					3.0	4.0		1300		X		1		X	X					1-JGFU
GB-26/4-5					4.0	5.0		1305		X		1		X	X					↓
GB-41/4-6					4.0	6.0		1330		X		1					X			↓
GB-41/6-8					6.0	8.0	↓	1332		X		1					X			↓

60375692

[redacted] (b) (6)

Sampler (signature):

Special Instructions:
SEE WORK ORDER

Relinquished By (signature): [redacted] (b) (6)
Date/Time 7/22/21 14:05

[redacted] (b) (6)
Date/Time 7/22/21 14:05

Ice Present in Container: Yes [X] No [ ]

Temperature Upon Receipt: 2.1, 1.4

Relinquished By (signature): [redacted] (b) (6)
Date/Time 7/22/21

Received By (signature): [redacted] (b) (6)
Date/Time 7/23/21 0413

Laboratory Comments:

Pace Analytical™
www.pacelabs.com

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Report Prepared for:

Jeffrey Shopper
PACE Kansas
9608 Loriet Blvd
Lenexa KS 66219

REPORT OF LABORATORY ANALYSIS FOR PCBs

Report Information:

Pace Project #: 10571721
Sample Receipt Date: 07/27/2021
Client Project #: 60375838 Burns & McDonnell
Client Sub PO #: N/A
State Cert #: N/A

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 4 PCB Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

(b) (6) [redacted]

August 30, 2021

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
August 25, 2021

Report of Laboratory Analysis

This report should not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

The results relate only to the samples included in this report.

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

This report presents the results from the analyses performed on two samples submitted by a representative of Pace Analytical Services, Kansas. The samples were analyzed for the presence or absence of the twelve dioxin-like polychlorinated biphenyl (PCB) congeners using USEPA Method 1668A. Reporting limits were set to signal-to-noised based estimated detection limits based on the amount of dry sample weight extracted.

The dilution levels noted on the data tables is being adjusted to allow the correct data flags to populate the electronic deliverables as well as the data tables. Samples and MDL extracts were analyzed at elevated volumes. That volume is being treated as a 1x dilution for calculation purposes, with larger dilutions being factored from that volume.

The recoveries of the isotopically-labeled PCB internal standards in the sample extracts ranged from 54-92%. All of the laboratory spike results tables, the isotopically-labeled PCB internal standards in the extracts were recovered within the target ranges for this method. Since the quantification of the native PCB congeners was based on internal standard and isotope dilution methodology, the data were automatically corrected for variation in recovery and accurate values were obtained.

It should be noted that the extracts from this project were double spiked with cleanup standards. The additional standard was taken into account with the calculation of cleanup recoveries. Cleanup standards are used to troubleshoot recovery issues with the internal standards. Their use is not associated with quantitation, and does not impact the PCB content determinations.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to produce signal at the retention time of congeners 156/157 and to contain trace levels of several other PCB congeners. Congeners present in the sample extracts at levels similar to the method blank were flagged "B" and may have originated in the laboratory.

Laboratory spike samples were also prepared using reference matrix that had been fortified with native standard materials. The results show that the spiked native compounds were recovered at 105-115%. These results were within the target ranges for the method. Matrix spikes were prepared with this sample set and were reported with project 10571414.

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
		Missouri	10100
A2LA	2926.01	Montana	CERT0092
Alabama	40770	Nebraska	NE-OS-18-06
Alaska-DW	MN00064	Nevada	MN00064
Alaska-UST	17-009	New Hampshire	2081
Arizona	AZ0014	New Jersey	MN002
Arkansas - WW	88-0680	New York	11647
Arkansas-DW	MN00064	North Carolina-	27700
California	2929	North Carolina-	530
Colorado	MN00064	North Dakota	R-036
Connecticut	PH-0256	Ohio-DW	41244
Florida	E87605	Ohio-VAP (170	CL101
Georgia	959	Ohio-VAP (180	CL110
Hawaii	MN00064	Oklahoma	9507
Idaho	MN00064	Oregon- rimary	MN300001
Illinois	200011	Oregon-Second	MN200001
Indiana	C-MN-01	Pennsylvania	68-00563
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003
Kentucky-DW	90062	Tennessee	TN02818
Kentucky-WW	90062	Texas	T104704192
Louisiana-DEQ	AI-84596	Utah	MN00064
Louisiana-DW	MN00064	Vermont	VT-027053137
Maine	MN00064	Virginia	460163
Maryland	322	Washington	C486
Michigan	9909	West Virginia-D	382
Minnesota	027-053-137	West Virginia-D	9952C
Minnesota-Ag	via MN 027-053	Wisconsin	999407970
Minnesota-Petr	1240	Wyoming-UST	via A2LA 2926.
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise (EDL)

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

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Appendix A

Sample Management

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Sample ID Cross Reference

Client Sample ID	Pace Sample ID	Date Received	Sample Type
GB-28/1.5-2.5	60375838006-R	07/27/2021	Solid
GB-06/3-5	60375838015-R	07/27/2021	Solid

REPORT OF LABORATORY ANALYSIS

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Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

[X] Samples Pre-Logged into eCOC.

State Of Origin: MO
Cert. Needed: [ ] Yes [X] No
Owner Received Date: 7/24/2021 **Results Requested By:** 8/23/2021

Workorder: 60375838 **Workorder Name:** GSA-GOODFELLOW

Report To	Subcontract To
Jeffrey Shopper Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 1(913)563-1408	Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

Requested Analysis

WO# : 10571721

10571721

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	1668A PCB Congeners	LAB USE ONLY
1	GB-28/1.5-2.5	PS	7/22/2021 15:27	60375838006	Solid	1	X	
2	GB-06/3-5	PS	7/23/2021 10:10	60375838015	Solid	1	X	
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	(6) (b) IPace	7-26-21 1300	(6) (b) / PACE	7/27/21 8:50
2				
3				

Comments

Cooler Temperature on Receipt 5.8 °C | **Custody Seal** Y or (N) | **Received on Ice** (Y) or N | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) - MN**	Document Revised: 14Apr2021 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0150 Rev.02**	Pace Analytical Services - **Minneapolis**

Sample Condition Upon Receipt

Client Name: PACE Kansas

Project #:

WO#: 10571721

PM: RK1 **Due Date: 08/24/21**

CLIENT: PASI-KANS

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 500206514800 See Exceptions ☐ ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: _____ **Temp Blank?** ☒ Yes ☐ No

Thermometer: ☐ T1(0461) ☐ T2(1336) ☒ T3(0459) ☐ OS418-LS ☐ T4(0254) ☐ T5(0489) ☐ 160285052 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Dry ☐ Melted

Did Samples Originate in West Virginia? ☐ Yes ☒ No **Were All Container Temps Taken?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** 5.8 °C **Average Corrected Temp (no temp blank only):** _____ °C ☐ See Exceptions ENV-FRM-MIN4-0142 ☐ 1 Container

Correction Factor: TNE **Cooler Temp Corrected w/temp blank:** 5.8 °C

USDA Regulated Soil: (☐ N/A, water sample/Other: _____)
Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☒ No

Date/Initials of Person Examining Contents: (b) (6) 7/27/21
Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒ Yes	☐ No		1.
Chain of Custody Relinquished?	☒ Yes	☐ No		2.
Sampler Name and/or Signature on COC?	☐ Yes	☐ No	☒ N/A	3.
Samples Arrived within Hold Time?	☒ Yes	☐ No		4.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		5. ☐ Fecal Coliform ☐ HPC ☐ Total Coliform/E coli ☐ BOD/cBOD ☐ Hex Chrome ☐ Turbidity ☐ Nitrate ☐ Nitrite ☐ Orthophos ☐ Other
Rush Turn Around Time Requested?	☐ Yes	☒ No		6.
Sufficient Volume?	☒ Yes	☐ No		7.
Correct Containers Used?	☒ Yes	☐ No		8.
-Pace Containers Used?	☒ Yes	☐ No		
Containers Intact?	☒ Yes	☐ No		9.
Field Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	10. Is sediment visible in the dissolved container? ☐ Yes ☐ No
Is sufficient information available to reconcile the samples to the COC?	☒ Yes	☐ No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐ ENV-FRM-MIN4-0142
Matrix: ☐ Water ☒ Soil ☐ Oil ☐ Other				
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☐ Yes	☐ No	☒ N/A	☐ NaOH ☐ HNO_3 ☐ H_2SO_4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐ Yes	☐ No	☒ N/A	Positive for Res. Chlorine? ☐ Yes ☐ No **pH Paper Lot#** **See Exception** ☐ ENV-FRM-MIN4-0142
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐ Yes	☐ No	☒ N/A	13. **See Exception** ☐ ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)?	☐ Yes	☐ No	☒ N/A	
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	Pace Trip Blank Lot # (if purchased): _____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: (b) (6) **Date:** 07/27/21

Note: Whenever there is a discrepancy affecting North Carolina compliance samples a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: (b) (6)

1668A - 209 | Solid | Soxhlet | EB-31098

Extract Solvents:

Extraction On (Date/Time): 08/10/21 14:15

QC Matrix Lot #: Silica 596 | **Toluene Lot #** 206135

Time of Spiking: 08/10/21 14:03 | **Hexane Lot #**

Extraction Off (Date/Time): 08/11/21 07:15

Balance: 10BALY | **MeCl Lot #**

Standards	Name/ID	Amount	Initial	Witness	Expiration Date	Dispenser
Internal Std.	209-I-20170-172	100	AH	SJ	07/20/22	Q763
Native	209-N-20170-144	100	AH	SJ	01/13/22	Q763
Cl37 Std.	209-CL-20170-174	100			07/29/22	Q678
Recovery	209R-20170-164	10	MCH		06/25/22	Q763
Tridecane	A0416109	10	MCH			Q763
Others						

#	Sample ID	Internal Standards	Native Standards	Extracted mL or g	Glassware Set	Location	Comments
1	BLANK-92218	x		10.7			
2	LCS-92217	x	x	10.5			
3	60375626032-MS-R	x	x	12.9		10-C16-049	
4	60375626032-MSD-R	x	x	12.6		10-C16-049	
5	60375481005-R	x		12.6		10-C16-046	
6	60375481009-R	x		12.9		10-C16-046	
7	60375481043-R	x		12.3		10-C16-046	
8	60375626013-R	x		13.1		10-C16-049	
9	60375626014-R	x		12.7		10-C16-049	
10	60375626032-R	x		12.6		10-C16-049	
11	60375692004-R	x		13.2		10-C16-053	
12	60375692012-R	x		13.6		10-C16-053	
13	60375692020-R	x		12.1		10-C16-053	
14	60375838006-R	x		12.9		10-C16-062	
15	60375838015-R	x		13.2		10-C16-062	

Relinquished By: M | Received By: | Date:

Batch Notes:

Silica		Alumina		Carbon		Florisil	
Initials	CW1/PED	Initials		Initials		Initials	
Date	8/11/2021	Date		Date		Date	
Neutral Batch	599	Alumina Lot #		Hexane Lot #		Florisil Lot #	
Basic Batch	750	Hexane Lot #		Dispenser		Hexane Lot #	
Acid Batch	876	Dispenser		50% Batch		Dispenser	
Hexane Lot #	213846	60% Batch		Dispenser		6% Batch	
Dispenser	Q758	Dispenser		75% Batch		Dispenser	
				Dispenser			
				Toluene Lot #			
				Dispenser			
				Methanol Lot #			
				Dispenser			

Acid Base

Sulphuric Acid Lot #	
Base Batch	

1 maybe double spiked with 209/cl. 8/13/21

Pace Analytical™

Solid Sample Moisture Log

Sample ID	Client Sample ID		% Moisture	% Solids	Amount Extracted	Assayed
60375838006	GB-28/1.5-2.5		20.0187	79.9813	12.93	7/27/2021
60375838015	GB-06/3-5		20.7939	79.2061	13.2	7/27/2021

Note:
Total weight is the amount of wet sample required to give 10g dry weight

Client names have been blacked out on notebook pages in order to preserve client confidentiality

Analysis Key Code List

- = Not used

✔ = Worked up

= See comment # below

Li = Liner, replace or clean

Ba = Baseplate, change

SyB = Syringe, replace – bent

SyP = Syringe, replace – plugged

SyO = Syringe, replace – other

IS = Injector Septum, replace

BS = Batch Septum, replace

Fi = Filament, replace

Co = Contacts, adjust

Ca = re-Calibrate

Tu = Tune

TC = Tune and Calibrate

CC () = Cut Column (length cut)

CO = Carry-Over possible

RRM = ReRun - Matrix

RRLM = ReRun – Lock Mass

RRBI = ReRun – Bad Injection

RRRT = ReRun – Retention Time shift

RR>S = Rerun – need better Sensitivity

Re = Re-extract

AS = Adjust Slits

LC = Leak Check

RB = Re-Boot system

CiS = Cleaned inner Source

CoS = Cleaned outer Source

AiS = Alternate inner Source

AoS = Alternate outer Source

<Y = Adjust Y focus down

>Y = Adjust Y focus up

Di () = Dilution needed (amount needed)

FE = Front End – liner, baseplate and septum

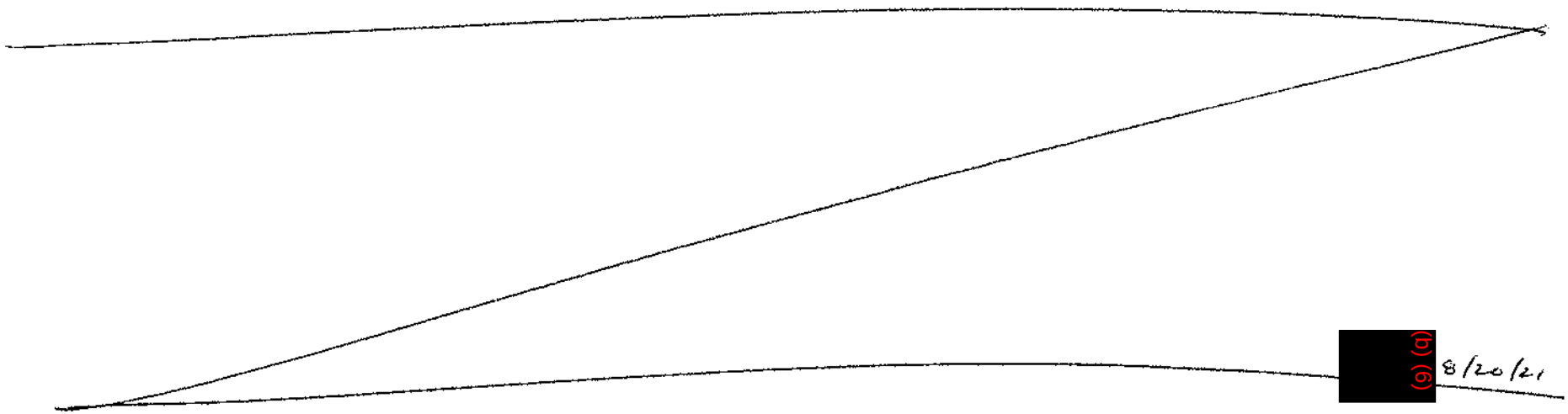
Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210818B.SPL
Last Modified: Wednesday, August 18, 2021 19:39:42 Central Daylight Time
Printed: Thursday, August 19, 2021 09:36:01 Central Daylight Time

10MSHR12 8/18/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210818B_01	CAL CS3/CPM-20-123-058 - CVS liner, TC	220717	8290/1613B	dioxfurY	DioxFur_Y	Tray1:1	1.000000	---
2	Y210818B_02	Blank Nonane - CVS	---	8290/1613B	dioxfurY	DioxFur_Y	Tray1:3	1.000000	---
3	Y210818B_03	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
4	Y210818B_04	CAL CS3-20-123-060 - CVS windows	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
5	Y210818B_05	CAL CS3-20-123-060 - CVS TC	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
6	Y210818B_06	CAL CS2-20-123-053 - CVS TC	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:15	1.000000	---
7	Y210818B_07	CAL CS1-20-123-041 - CVS bad inj	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
8	Y210818B_08	CAL CS1-20-123-041 - CVS	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
9	Y210818B_09	CAL CS5-20-123-044 - CVS	220331	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:17	1.000000	---
10	Y210818B_10	CAL CS4-20-123-055 - CVS	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:18	1.000000	---
11	Y210818B_11	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
12	Y210818B_12	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
13	Y210818B_13	LCS LCS-92213 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:19	1.000000	---
14	Y210818B_14	LCS LCSD-92214 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:20	1.000000	---
15	Y210818B_15	Samp 60375626032-MS-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:21	1.000000	---
16	Y210818B_16	Samp 60375626032-MSD-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:22	1.000000	---
17	Y210818B_17	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
18	Y210818B_18	Samp 60375626032-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:23	1.000000	---
19	Y210818B_19	Samp 60375626013-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:24	1.000000	---
20	Y210818B_20	Samp 60375626014-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:25	1.000000	---
21	Y210818B_21	Samp 60375838006-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:26	1.000000	---
22	Y210818B_22	Samp 60375838015-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:27	1.000000	---
23	Y210818B_23	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

ver 8/20/21 (b) (6)



(b) (6) 8/20/21

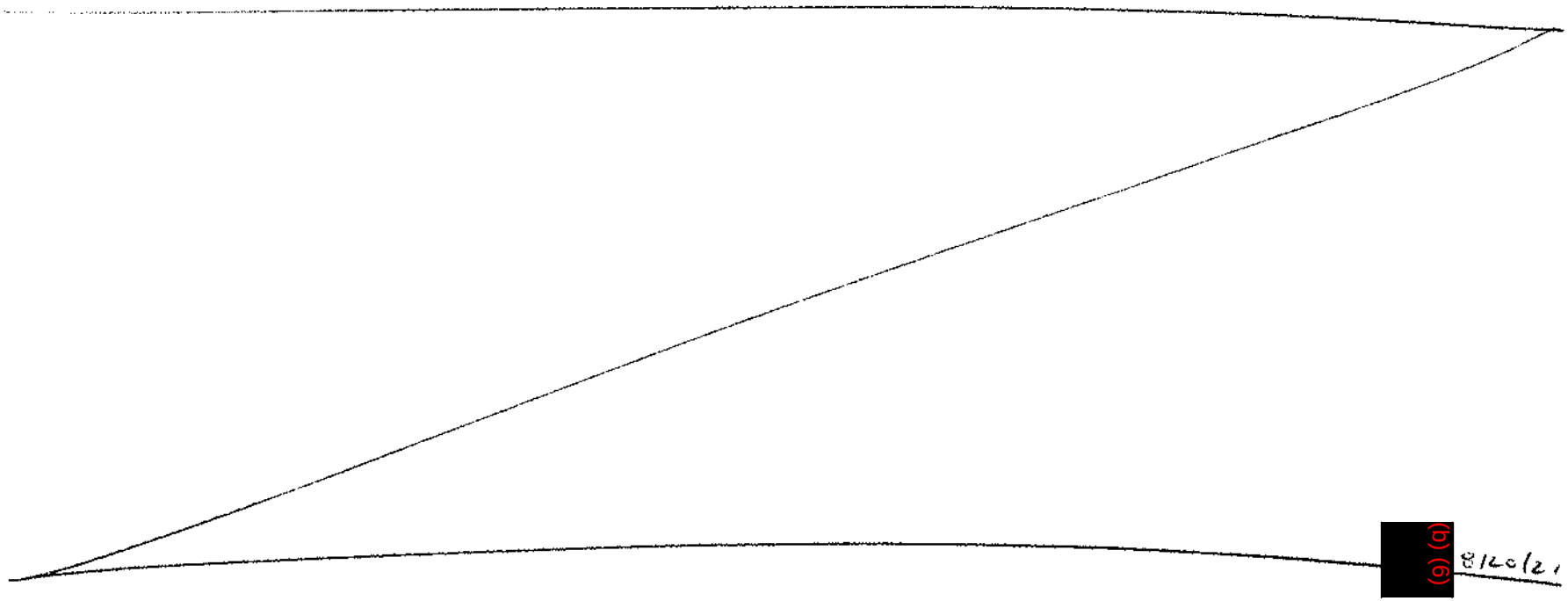
Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210819A.SPL
Last Modified: Thursday, August 19, 2021 14:21:07 Central Daylight Time
Printed: Thursday, August 19, 2021 14:21:10 Central Daylight Time

10MSHR13 8/19/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210819A_01	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
2	Y210819A_02	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
3	Y210819A_03	LCS LCS-92217 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
4	Y210819A_04	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
5	Y210819A_05	Samp 10573340001 - CVS [redacted] 2x	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:28	1.000000	---
6	Y210819A_06	Samp 10574009001 - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:29	1.000000	---
7	Y210819A_07	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
8	Y210819A_08	Samp 60375481005-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:30	1.000000	---
9	Y210819A_09	Blank Blank-92218 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:31	1.000000	---
10	Y210819A_10	Samp 60375481009-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:32	1.000000	---
11	Y210819A_11	Samp 60375481043-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:33	1.000000	---
12	Y210819A_12	Samp 60375692004-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:34	1.000000	---
13	Y210819A_13	Samp 60375692012-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:35	1.000000	---
14	Y210819A_14	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

ver 8/22/2 (b) (6)



(b) (6) 8/20/21

Appendix B

Sample Analysis Summary

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-28/1.5-2.5		
Lab Sample ID	60375838006-R		
Filename	Y210818B_21		
Injected By	CVS		
Total Amount Extracted	12.9 g	Matrix	Solid
% Moisture	20.0	Dilution	NA
Dry Weight Extracted	10.3 g	Collected	07/22/2021 15:27
ICAL ID	Y210818B12	Received	07/27/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 07:43

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.883	0.76	2.0	1.77	88
13C-3,3',4,4'-TeCB	77	35.453	0.78	2.0	1.85	92
13C-2,3,3',4,4'-PeCB	105	39.046	1.61	2.0	1.70	85
13C-2,3,4,4',5-PeCB	114	38.409	1.51	2.0	1.73	86
13C-2,3',4,4',5-PeCB	118	37.856	1.53	2.0	1.68	84
13C-2,3',4,4',5'-PeCB	123	37.521	1.59	2.0	1.66	83
13C-3,3',4,4',5-PeCB	126	42.199	1.53	2.0	1.74	87
13C-HxCB(156/157)	156/157	45.255	1.26	4.0	3.17	79
13C-2,3',4,4',5,5'-HxCB	167	44.098	1.19	2.0	1.62	81
13C-3,3',4,4',5,5'-HxCB	169	48.525	1.23	2.0	1.65	83
13C-2,3,3',4,4',5,5'-HpCB	189	51.086	1.00	2.0	1.74	87
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.79	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.720	1.57	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.042	1.25	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.176	0.88	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-28/1.5-2.5
Lab Sample ID	60375838006-R
Filename	Y210818B_21

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg		EMPC ng/Kg	EML ng/Kg
77		35.486	0.73	2.74	BJ	---	1.70
81		---	---	ND		---	1.74
105		39.063	1.41	4.18	BJ	---	2.15
114		---	---	ND		---	1.63
118		37.906	1.35	7.02	BJ	---	1.76
123		---	---	ND		---	1.89
126		---	---	ND		---	1.52
156	156/157	45.289	1.52	---	IJ	1.49	1.20
157	156/157	45.289	1.52	---	IJ	(1.49)	1.20
167		---	---	ND		---	0.757
169		---	---	ND		---	0.706
189		---	---	ND		---	0.829

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
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Minneapolis, MN 55414

Tel: 612-607-1700
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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-28/1.5-2.5		
Lab Sample ID	60375838006-R		
Filename	Y210818B_21		
Injected By	CVS		
Total Amount Extracted	12.9 g	Matrix	Solid
% Moisture	20.0	Dilution	NA
Dry Weight Extracted	10.3 g	Collected	07/22/2021 15:27
ICAL ID	Y210818B12	Received	07/27/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 07:43

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.7	1.7	0.00010	0.0003	0.0003	0.0003
81	ND	1.7	0.00030	0.0000	0.0003	0.0005
105	4.2	2.2	0.00003	0.0001	0.0001	0.0001
114	ND	1.6	0.00003	0.0000	0.0000	0.0000
118	7.0	1.8	0.00003	0.0002	0.0002	0.0002
123	ND	1.9	0.00003	0.0000	0.0000	0.0001
126	ND	1.5	0.10000	0.0000	0.0758	0.1516
156/157	ND	1.2	0.00003	0.0000	0.0000	0.0000
167	ND	0.76	0.00003	0.0000	0.0000	0.0000
169	ND	0.71	0.03000	0.0000	0.0106	0.0212
189	ND	0.83	0.00003	0.0000	0.0000	0.0000
				0.00065 ng TEQ/Kg	**0.087 ng TEQ/Kg**	**0.17 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-06/3-5		
Lab Sample ID	60375838015-R		
Filename	Y210818B_22		
Injected By	CVS		
Total Amount Extracted	13.2 g	Matrix	Solid
% Moisture	20.8	Dilution	NA
Dry Weight Extracted	10.5 g	Collected	07/23/2021 10:10
ICAL ID	Y210818B12	Received	07/27/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 08:42

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.866	0.75	2.0	1.62	81
13C-3,3',4,4'-TeCB	77	35.453	0.80	2.0	1.71	85
13C-2,3,3',4,4'-PeCB	105	39.046	1.54	2.0	1.58	79
13C-2,3,4,4',5-PeCB	114	38.393	1.53	2.0	1.59	79
13C-2,3',4,4',5-PeCB	118	37.839	1.55	2.0	1.58	79
13C-2,3',4,4',5'-PeCB	123	37.504	1.51	2.0	1.55	78
13C-3,3',4,4',5-PeCB	126	42.198	1.55	2.0	1.66	83
13C-HxCB(156/157)	156/157	45.255	1.22	4.0	2.89	72
13C-2,3',4,4',5,5'-HxCB	167	44.098	1.24	2.0	1.45	73
13C-3,3',4,4',5,5'-HxCB	169	48.524	1.25	2.0	1.56	78
13C-2,3,3',4,4',5,5'-HpCB	189	51.063	0.99	2.0	1.64	82
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.720	1.59	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.025	1.27	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.175	0.90	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-06/3-5
Lab Sample ID	60375838015-R
Filename	Y210818B_22

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		---	---	ND	---	1.76
81		---	---	ND	---	2.40
105		39.046	1.37	2.45 BJ	---	1.21
114		---	---	ND	---	1.15
118		37.839	1.36	4.25 BJ	---	1.15
123		---	---	ND	---	1.53
126		---	---	ND	---	1.29
156	156/157	45.289	1.39	1.83 BJ	---	0.902
157	156/157	45.289	1.39	(1.83) BJ	---	0.902
167		---	---	ND	---	0.831
169		---	---	ND	---	0.947
189		---	---	ND	---	0.759

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-06/3-5		
Lab Sample ID	60375838015-R		
Filename	Y210818B_22		
Injected By	CVS		
Total Amount Extracted	13.2 g	Matrix	Solid
% Moisture	20.8	Dilution	NA
Dry Weight Extracted	10.5 g	Collected	07/23/2021 10:10
ICAL ID	Y210818B12	Received	07/27/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 08:42

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	ND	1.8	0.00010	0.0000	0.0001	0.0002
81	ND	2.4	0.00030	0.0000	0.0004	0.0007
105	2.5	1.2	0.00003	0.0001	0.0001	0.0001
114	ND	1.1	0.00003	0.0000	0.0000	0.0000
118	4.3	1.2	0.00003	0.0001	0.0001	0.0001
123	ND	1.5	0.00003	0.0000	0.0000	0.0000
126	ND	1.3	0.10000	0.0000	0.0643	0.1287
156/157	1.8	0.90	0.00003	0.0001	0.0001	0.0001
167	ND	0.83	0.00003	0.0000	0.0000	0.0000
169	ND	0.95	0.03000	0.0000	0.0142	0.0284
189	ND	0.76	0.00003	0.0000	0.0000	0.0000
				0.00026 ng TEQ/Kg	**0.079 ng TEQ/Kg**	**0.16 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

REPORT OF LABORATORY ANALYSIS

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Appendix C

QC and Calibration Results Summary

Pace Analytical Services, LLC
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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID	BLANK-92218		
Filename	Y210819A_09		
Injected By	CVS	Matrix	Solid
Total Amount Extracted	10.7 g	Extracted	08/10/2021 14:15
ICAL ID	Y210819A02	Analyzed	08/19/2021 19:31
CCal Filename(s)	Y210819A_01	Dilution	NA

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.78	2.0	1.35	68
13C-3,3',4,4'-TeCB	77	35.471	0.80	2.0	1.42	71
13C-2,3,3',4,4'-PeCB	105	39.048	1.57	2.0	1.29	64
13C-2,3,4,4',5-PeCB	114	38.411	1.52	2.0	1.34	67
13C-2,3',4,4',5-PeCB	118	37.857	1.54	2.0	1.28	64
13C-2,3',4,4',5'-PeCB	123	37.522	1.51	2.0	1.29	64
13C-3,3',4,4',5-PeCB	126	42.200	1.53	2.0	1.35	68
13C-HxCB (156/157)	156/157	45.274	1.24	4.0	2.46	61
13C-2,3',4,4',5,5'-HxCB	167	44.100	1.23	2.0	1.26	63
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.22	2.0	1.27	64
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.10	2.0	1.45	72
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.721	1.54	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.25	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.93	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a total weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-92218
Filename Y210819A_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		35.538	0.79	2.07	---	1.69
81		---	---	ND	---	1.17
105		39.065	1.67	3.33	---	1.29
114		---	---	ND	---	1.14
118		37.891	1.62	7.71	---	0.966
123		---	---	ND	---	1.32
126		---	---	ND	---	1.19
156	156/157	45.257	1.17	4.24	---	1.00
157	156/157	45.257	1.17	(4.24)	---	1.00
167		44.151	0.52	---	0.728	0.694
169		---	---	ND	---	0.884
189		---	---	ND	---	0.735

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

Results reported on a total weight basis

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1700 Elm Street - Suite 200
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Tel: 612-607-1700
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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	CBLKHX		
Lab Sample ID	BLANK-92218		
Filename	Y210819A_09		
Injected By	CVS		
Total Amount Extracted	10.7 g	Matrix	Solid
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	08/10/2021 07:27
ICAL ID	Y210819A02	Received	08/10/2021 07:27
CCal Filename(s)	Y210819A_01	Extracted	08/10/2021 14:15
Method Blank ID		Analyzed	08/19/2021 19:31

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.1	1.7	0.00010	0.0002	0.0002	0.0002
81	ND	1.2	0.00030	0.0000	0.0002	0.0004
105	3.3	1.3	0.00003	0.0001	0.0001	0.0001
114	ND	1.1	0.00003	0.0000	0.0000	0.0000
118	7.7	0.97	0.00003	0.0002	0.0002	0.0002
123	ND	1.3	0.00003	0.0000	0.0000	0.0000
126	ND	1.2	0.10000	0.0000	0.0595	0.1191
156/157	4.2	1.0	0.00003	0.0001	0.0001	0.0001
167	ND	0.69	0.00003	0.0000	0.0000	0.0000
169	ND	0.88	0.03000	0.0000	0.0133	0.0265
189	ND	0.73	0.00003	0.0000	0.0000	0.0000
				0.00069 ng TEQ/Kg	**0.074 ng TEQ/Kg**	**0.15 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyls
Laboratory Control Spike Analysis Results

Lab Sample ID	LCS-92217		
Filename	Y210819A_03	Matrix	Solid
Total Amount Extracted	10.5 g	Dilution	NA
ICAL ID	Y210819A02	Extracted	08/10/2021 14:15
CCal Filename(s)	Y210819A_01	Analyzed	08/19/2021 13:33
Method Blank ID	BLANK-92218	Injected By	CVS

	Native Analytes			Labeled Analytes		
PCB Isomer	**Spiked (ng)**	**Found (ng)**	**% Recovery**	**Spiked (ng)**	**Found (ng)**	**% Recovery**
81	1.0	1.07	107	2.0	1.61	80
77	1.0	1.06	106	2.0	1.69	85
105	1.0	1.10	110	2.0	1.62	81
114	1.0	1.06	106	2.0	1.49	74
118	1.0	1.13	113	2.0	1.50	75
123	1.0	1.12	112	2.0	1.46	73
126	1.0	1.13	113	2.0	1.67	84
156/157	2.0	2.16	108	4.0	2.92	73
167	1.0	1.11	111	2.0	1.43	71
169	1.0	1.09	109	2.0	1.57	78
189	1.0	1.12	112	2.0	1.56	78

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

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1668A Polychlorobiphenyl Initial Calibration
Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Labeled Analytes								
13C-2-MoCB	1	1.1281	1.1371	1.1947	1.1760	1.1630	1.1598	2.37
13C-4-MoCB	3	1.0640	1.0801	1.1344	1.0704	1.0791	1.0856	2.59
13C-2,2'-DiCB	4	0.5838	0.5905	0.6159	0.6016	0.6160	0.6016	2.42
13C-4,4'-DiCB	15	0.8671	0.8674	0.9026	0.8890	0.8838	0.8820	1.71
13C-2,2',6-TrCB	19	0.6518	0.6583	0.6793	0.6781	0.6675	0.6670	1.81
13C-3,4,4'-TrCB	37	0.9136	0.9078	0.9320	0.9281	0.9441	0.9251	1.57
13C-2,2',6,6'-TeCB	54	1.2015	1.1982	1.2367	1.2062	1.1969	1.2079	1.37
13C-3,4,4',5-TeCB	81	0.8105	0.8243	0.7935	0.8226	0.8519	0.8206	2.61
13C-3,3',4,4'-TeCB	77	0.8084	0.8297	0.8099	0.8409	0.8536	0.8285	2.36
13C-2,2',4,6,6'-PeCB	104	0.8928	0.8966	0.9380	0.9285	0.9345	0.9181	2.36
13C-2,3',4,4',5-PeCB	118	0.8808	0.8918	0.8447	0.9031	0.9144	0.8870	3.02
13C-2,3,4,4',5-PeCB	114	0.8430	0.8396	0.7988	0.8641	0.8732	0.8437	3.42
13C-2,3,3',4,4'-PeCB	105	0.8233	0.8438	0.7770	0.8313	0.8727	0.8296	4.21
13C-3,3',4,4',5-PeCB	126	0.7093	0.7406	0.6920	0.7434	0.7610	0.7293	3.83
13C-2,2',4,4',6,6'-HxCB	155	1.0410	1.0674	1.1567	1.0944	1.1268	1.0973	4.19
13C-2,3',4,4',5,5'-HxCB	167	0.8607	0.8709	0.8428	0.8727	0.9011	0.8696	2.44
13C-HxCB (156/157)	156/157	0.8084	0.8217	0.7685	0.8390	0.8785	0.8232	4.90
13C-3,3',4,4',5,5'-HxCB	169	0.7050	0.7431	0.6956	0.7356	0.7809	0.7320	4.63
13C-2,2',3,4',5,6,6'-HpCB	188	1.8461	1.8051	2.0332	1.9010	1.9439	1.9059	4.65
13C-2,3,3',4,4',5,5'-HpCB	189	1.0396	1.0625	1.0342	1.0628	1.0998	1.0598	2.44
13C-2,2',3,3',5,5',6,6'-OcCB	202	1.8555	1.8001	1.9524	1.8751	1.8944	1.8755	2.96
13C-2,3,3',4,4',5,5',6-OcCB	205	1.2295	1.2273	1.2103	1.2660	1.3073	1.2481	3.11
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	1.4825	1.4561	1.5068	1.4918	1.5154	1.4905	1.55
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.9735	0.9677	0.9782	0.9890	1.0198	0.9856	2.09
13C-DeCB	209	0.9807	0.9725	0.9894	1.0166	1.0325	0.9983	2.54
Cleanup Standards								
13C-2,4,4'-TrCB	28	1.1279	1.1236	1.1438	1.1543	1.0942	1.1287	2.03
13C-2,3,3',5,5'-PeCB	111	1.2662	1.2655	1.2546	1.2941	1.3028	1.2766	1.62
13C-2,2',3,3',5,5',6-HpCB	178	0.9144	0.9189	0.9469	0.9290	0.9363	0.9291	1.41
Recovery Standards								
13C-2,5-DiCB	9	1.9945	2.0083	2.1584	1.9996	1.9991	2.0320	3.49
13C-2,2',5,5'-TeCB	52	1.3756	1.3814	1.4507	1.3625	1.3655	1.3872	2.62
13C-2,2',4,5,5'-PeCB	101	1.1775	1.1790	1.2057	1.1624	1.1699	1.1789	1.39
13C-2,2',3,4,4',5'-HxCB	138	1.0936	1.0882	1.0560	1.0765	1.0680	1.0765	1.41
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.7592	0.7796	0.7083	0.7500	0.7570	0.7508	3.49

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Native Analytes								
3,3',4,4'-TeCB	77	0.9461	0.9096	0.8769	0.8801	0.8880	0.9002	3.19
3,4,4',5-TeCB	81	0.9288	0.9668	0.9297	0.9336	0.9225	0.9363	1.87
2,3,3',4,4'-PeCB	105	0.8988	0.9291	0.8993	0.8788	0.8741	0.8960	2.43
2,3,4,4',5-PeCB	114	0.9491	0.9449	0.9221	0.9123	0.9181	0.9293	1.79
2,3',4,4',5-PeCB	118	0.9601	0.9450	0.9247	0.8931	0.9014	0.9249	3.06
2,3',4,4',5'-PeCB	123	0.9836	0.9286	0.9173	0.8958	0.9153	0.9281	3.58
3,3',4,4',5-PeCB	126	0.9251	0.9019	0.8951	0.8795	0.8782	0.8959	2.14
(156/157)	156/157	0.9991	0.9562	0.9359	0.9116	0.9040	0.9413	4.07
2,3',4,4',5,5'-HxCB	167	0.9772	0.9597	0.9103	0.9081	0.8965	0.9304	3.84
3,3',4,4',5,5'-HxCB	169	0.9875	0.9950	0.9320	0.9014	0.8811	0.9394	5.40
2,3,3',4,4',5,5'-HpCB	189	0.9406	0.9065	0.8652	0.8759	0.8749	0.8926	3.47

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

		Data Files:		Time	Injected
ICAL ID	Y210818	CS-1	Y210818B_08	18:49	CVS
Calibration Date	08/18/2021	CS-2	Y210818B_06	16:45	CVS
Instrument	10MSHR12 (Y)	CS-3	Y210818B_11	21:47	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-4	Y210818B_10	20:47	CVS
Column ID No.	261111-02	CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Labeled Analytes							
13C-2-MoCB	1	3.14	3.09	3.16	3.11	3.19	2.66-3.60
13C-4-MoCB	3	3.15	3.11	3.02	3.15	3.11	2.66-3.60
13C-2,2'-DiCB	4	1.71	1.68	1.66	1.70	1.74	1.33-1.81
13C-4,4'-DiCB	15	1.53	1.54	1.55	1.54	1.53	1.33-1.81
13C-2,2',6-TrCB	19	1.03	1.05	1.03	1.04	1.04	0.88-1.20
13C-3,4,4'-TrCB	37	1.04	1.02	1.05	1.04	1.02	0.88-1.20
13C-2,2',6,6'-TeCB	54	0.80	0.79	0.80	0.80	0.81	0.65-0.89
13C-3,4,4',5-TeCB	81	0.77	0.76	0.76	0.77	0.77	0.65-0.89
13C-3,3',4,4'-TeCB	77	0.78	0.77	0.80	0.79	0.79	0.65-0.89
13C-2,2',4,6,6'-PeCB	104	1.58	1.57	1.60	1.59	1.58	1.32-1.78
13C-2,3',4,4',5-PeCB	118	1.53	1.55	1.52	1.55	1.55	1.32-1.78
13C-2,3,4,4',5-PeCB	114	1.53	1.53	1.51	1.55	1.56	1.32-1.78
13C-2,3,3',4,4'-PeCB	105	1.54	1.54	1.50	1.51	1.54	1.32-1.78
13C-3,3',4,4',5-PeCB	126	1.57	1.53	1.54	1.53	1.55	1.32-1.78
13C-2,2',4,4',6,6'-HxCB	155	1.26	1.26	1.26	1.27	1.26	1.05-1.43
13C-2,3',4,4',5,5'-HxCB	167	1.23	1.21	1.21	1.25	1.24	1.05-1.43
13C-HxCB (156/157)	156/157	1.22	1.22	1.23	1.23	1.25	1.05-1.43
13C-3,3',4,4',5,5'-HxCB	169	1.23	1.24	1.22	1.24	1.23	1.05-1.43
13C-2,2',3,4',5,6,6'-HpCB	188	1.09	1.08	1.09	1.10	1.10	0.88-1.20
13C-2,3,3',4,4',5,5'-HpCB	189	1.02	1.02	1.03	1.03	1.04	0.88-1.20
13C-2,2',3,3',5,5',6,6'-OcCB	202	0.90	0.90	0.91	0.89	0.88	0.76-1.02
13C-2,3,3',4,4',5,5',6-OcCB	205	0.89	0.90	0.90	0.90	0.88	0.76-1.02
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	0.80	0.79	0.80	0.80	0.80	0.66-0.90
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.79	0.79	0.80	0.81	0.81	0.66-0.90
13C-DeCB	209	0.74	0.74	0.73	0.74	0.73	0.59-0.79
Cleanup Standards							
13C-2,4,4'-TrCB	28	1.03	1.01	1.03	1.02	1.02	0.88-1.20
13C-2,3,3',5,5'-PeCB	111	1.60	1.60	1.61	1.60	1.60	1.32-1.78
13C-2,2',3,3',5,5',6-HpCB	178	1.08	1.09	1.07	1.07	1.08	0.88-1.20
Recovery Standards							
13C-2,5-DiCB	9	1.54	1.53	1.55	1.53	1.52	1.33-1.81
13C-2,2',5,5'-TeCB	52	0.80	0.80	0.82	0.80	0.80	0.65-0.89
13C-2,2',4,5,5'-PeCB	101	1.61	1.59	1.59	1.62	1.61	1.32-1.78
13C-2,2',3,4,4',5'-HxCB	138	1.27	1.26	1.25	1.25	1.27	1.05-1.43
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.92	0.91	0.90	0.90	0.92	0.76-1.02

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Native Analytes							
3,3',4,4'-TeCB	77	0.83	0.74	0.75	0.77	0.76	0.65-0.89
3,4,4',5-TeCB	81	0.72	0.74	0.76	0.75	0.76	0.65-0.89
2,3,3',4,4'-PeCB	105	1.61	1.54	1.53	1.52	1.54	1.32-1.78
2,3,4,4',5-PeCB	114	1.53	1.41	1.50	1.51	1.52	1.32-1.78
2,3',4,4',5-PeCB	118	1.59	1.47	1.52	1.52	1.53	1.32-1.78
2,3',4,4',5'-PeCB	123	1.42	1.47	1.49	1.51	1.52	1.32-1.78
3,3',4,4',5-PeCB	126	1.49	1.47	1.53	1.50	1.52	1.32-1.78
(156/157)	156/157	1.25	1.19	1.22	1.23	1.22	1.05-1.43
2,3',4,4',5,5'-HxCB	167	1.25	1.18	1.25	1.22	1.22	1.05-1.43
3,3',4,4',5,5'-HxCB	169	1.14	1.21	1.21	1.21	1.22	1.05-1.43
2,3,3',4,4',5,5'-HpCB	189	1.10	1.00	0.99	1.01	1.01	0.88-1.20

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210818B12	Data File	Y210818B_12
Calibration Date	08/18/2021	Injected By	CVS
Initial Calibration	Y210818B12	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

PCB Isomer	IUPAC	RT	Ratio	209 RF	Ical RF	%RSD	RFc
Internal Standards							
13C-3,4,4',5-TeCB	81	34.847	0.77	0.7931	0.8206	-3.35	0.8206
13C-3,3',4,4'-TeCB	77	35.417	0.78	0.7906	0.8285	-4.58	0.8285
13C-2,3,3',4,4'-PeCB	105	39.027	1.54	0.7806	0.8296	-5.91	0.8296
13C-2,3,4,4',5-PeCB	114	38.373	1.55	0.8250	0.8437	-2.22	0.8437
13C-2,3',4,4',5-PeCB	118	37.820	1.55	0.7373	0.8870	-16.87	0.8870
13C-2,3',4,4',5'-PeCB	123	37.485	1.53	0.8140	0.8549	-4.78	0.8549
13C-3,3',4,4',5-PeCB	126	42.162	1.54	0.6852	0.7293	-6.05	0.7293
13C-HxCB (156/157)	156/157	45.236	1.22	0.7069	0.8232	-14.14	0.8232
13C-2,3',4,4',5,5'-HxCB	167	44.079	1.22	0.7853	0.8696	-9.70	0.8696
13C-3,3',4,4',5,5'-HxCB	169	48.505	1.24	0.6655	0.7320	-9.09	0.7320
13C-2,3,3',4,4',5,5'-HpCB	189	51.056	1.04	1.0180	1.0598	-3.94	1.0598
Cleanup Standards							
13C-2,4,4'-TrCB	28	23.408	1.02	1.1049	1.1287	-2.11	1.1287
13C-2,3,3',5,5'-PeCB	111	35.485	1.58	1.1736	1.2766	-8.07	1.2766
13C-2,2',3,3',5,5',6-HpCB	178	41.475	1.10	0.8926	0.9291	-3.93	0.9291
RecoveryStandards							
13C-2,5-DiCB	9	15.361	1.54	1.9617	2.0320	-3.46	2.0320
13C-2,2',5,5'-TeCB	52	25.403	0.80	1.4222	1.3872	2.53	1.3872
13C-2,2',4,5,5'-PeCB	101	32.701	1.60	1.1926	1.1789	1.16	1.1789
13C-2,2',3,4,4',5'-HxCB	138	41.006	1.24	1.1203	1.0765	4.07	1.0765
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.167	0.90	0.7386	0.7508	-1.63	0.7508

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210818B12	Data File	Y210818B_12
Calibration Date	08/18/2021	Injected By	CVS
Initial Calibration	Y210818B12	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

IUPAC	Co-elutions	RT	Ratio	209 RF	Ical RF	%RSD	RFc
81		34.864	0.76	1.0383	0.9363	10.89	0.9363
77		35.451	0.77	0.9454	0.9002	5.03	0.9002
104		26.476	1.66	1.5336	1.4564	5.30	1.4564
105		39.044	1.52	1.0245	0.8960	14.33	0.8960
114		38.407	1.51	1.0197	0.9293	9.73	0.9293
118		37.854	1.53	0.9939	0.9249	7.46	0.9249
123		37.518	1.53	1.0133	0.9281	9.18	0.9281
126		42.196	1.53	0.9945	0.8959	11.00	0.8959
155		32.517	1.33	1.4219	1.3520	5.17	1.3520
156	156/157	45.252	1.21	1.0527	0.9413	11.83	0.9413
167		44.096	1.22	1.0667	0.9304	14.65	0.9304
169		48.521	1.22	1.0264	0.9394	9.26	0.9394
188		38.407	1.02	1.1449	1.0887	5.16	1.0887
189		51.077	1.01	0.9523	0.8926	6.68	0.8926

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210819A02	Data File	Y210819A_02
Calibration Date	08/19/2021	Injected By	CVS
Initial Calibration	Y210819A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

PCB Isomer	IUPAC	RT	Ratio	209 RF	Ical RF	%RSD	RFc
Internal Standards							
13C-3,4,4',5-TeCB	81	34.867	0.78	0.8448	0.8206	2.95	0.8206
13C-3,3',4,4'-TeCB	77	35.437	0.78	0.8608	0.8285	3.89	0.8285
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	0.8090	0.8296	-2.49	0.8296
13C-2,3,4,4',5-PeCB	114	38.377	1.55	0.8482	0.8437	0.53	0.8437
13C-2,3',4,4',5-PeCB	118	37.824	1.56	0.6820	0.8870	-23.11	0.8870
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	0.8363	0.8549	-2.17	0.8549
13C-3,3',4,4',5-PeCB	126	42.183	1.54	0.7383	0.7293	1.24	0.7293
13C-HxCB (156/157)	156/157	45.240	1.24	0.6886	0.8232	-16.36	0.8232
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.23	0.8160	0.8696	-6.17	0.8696
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.22	0.6994	0.7320	-4.46	0.7320
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.04	1.0815	1.0598	2.05	1.0598
Cleanup Standards							
13C-2,4,4'-TrCB	28	23.426	1.02	1.1300	1.1287	0.11	1.1287
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	1.1864	1.2766	-7.07	1.2766
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	0.8726	0.9291	-6.08	0.9291
RecoveryStandards							
13C-2,5-DiCB	9	15.362	1.54	1.9596	2.0320	-3.56	2.0320
13C-2,2',5,5'-TeCB	52	25.422	0.80	1.4399	1.3872	3.80	1.3872
13C-2,2',4,5,5'-PeCB	101	32.704	1.59	1.2334	1.1789	4.63	1.1789
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.26	1.1460	1.0765	6.46	1.0765
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.178	0.91	0.6972	0.7508	-7.14	0.7508

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210819A02	Data File	Y210819A_02
Calibration Date	08/19/2021	Injected By	CVS
Initial Calibration	Y210819A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

IUPAC	Co-elutions	RT	Ratio	209 RF	Ical RF	%RSD	RFc
81		34.884	0.76	1.0428	0.9363	11.38	0.9363
77		35.454	0.76	0.9466	0.9002	5.16	0.9002
104		26.478	1.65	1.5830	1.4564	8.69	1.4564
105		39.048	1.53	1.0200	0.8960	13.84	0.8960
114		38.410	1.51	1.0136	0.9293	9.07	0.9293
118		37.874	1.54	1.0427	0.9249	12.75	0.9249
123		37.522	1.51	0.9961	0.9281	7.33	0.9281
126		42.200	1.51	0.9891	0.8959	10.40	0.8959
155		32.520	1.32	1.4099	1.3520	4.28	1.3520
156	156/157	45.257	1.21	1.0562	0.9413	12.20	0.9413
167		44.100	1.22	1.0739	0.9304	15.43	0.9304
169		48.527	1.22	1.0120	0.9394	7.72	0.9394
188		38.410	1.02	1.1577	1.0887	6.34	1.0887
189		51.088	1.01	0.9446	0.8926	5.82	0.8926

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210819A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
Labeled Analytes						
13C-2,2',6-TrCB	19	16:44	1.04	0.6793	0.6670	1.85
13C-3,4,4'-TrCB	37	27:47	1.02	0.9504	0.9251	2.73
13C-2,2',6,6'-TeCB	54	20:20	0.81	1.2111	1.2079	0.27
13C-3,4,4',5-TeCB	81	34:52	0.78	0.8286	0.8206	0.97
13C-3,3',4,4'-TeCB	77	35:27	0.78	0.8561	0.8285	3.32
13C-2,3,3',4,4'-PeCB	105	39:02	1.56	0.8425	0.8296	1.55
13C-2,3,4,4',5-PeCB	114	38:23	1.53	0.8568	0.8437	1.55
13C-2,3',4,4',5-PeCB	118	37:51	1.53	0.8883	0.8870	0.15
13C-2,3',4,4',5'-PeCB	123	37:30	1.52	0.8515	0.8549	-0.39
13C-3,3',4,4',5-PeCB	126	42:11	1.56	0.7652	0.7293	4.93
13C-HxCB (156/157)	156/157	45:15	1.22	0.8223	0.8232	-0.12
13C-2,3',4,4',5,5'-HxCB	167	44:05	1.24	0.8653	0.8696	-0.50
13C-3,3',4,4',5,5'-HxCB	169	48:31	1.25	0.7477	0.7320	2.15
13C-2,3,3',4,4',5,5'-HpCB	189	51:04	1.03	1.0923	1.0598	3.07
Cleanup Standards						
13C-2,4,4'-TrCB	28	23:26	1.02	1.1151	1.1287	-1.20
13C-2,3,3',5,5'-PeCB	111	35:30	1.57	1.3002	1.2766	1.85
13C-2,2',3,3',5,5',6-HpCB	178	41:28	1.09	0.9051	0.9291	-2.58
Recovery Standards						
13C-2,5-DiCB	9	15:23	1.54	2.0088	2.0320	-1.14
13C-2,2',5,5'-TeCB	52	25:26	0.80	1.3979	1.3872	0.77
13C-2,2',4,5,5'-PeCB	101	32:43	1.59	1.1890	1.1789	0.86
13C-2,2',3,4,4',5'-HxCB	138	41:01	1.26	1.1048	1.0765	2.63
13C-2,2',3,3',4,4',5,5'-OcCB	194	53:10	0.90	0.7301	0.7508	-2.76

X = Outside Quality Control limits

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210819A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
3,3',4,4'-TeCB	77	35:28	0.76	0.8761	0.9002	-2.67
3,4,4',5-TeCB	81	34:54	0.76	0.9341	0.9363	-0.24
2,2',4,6,6'-PeCB	104	26:29	1.66	1.4276	1.4564	-1.97
2,3,3',4,4'-PeCB	105	39:03	1.51	0.8516	0.8960	-4.96
2,3,4,4',5-PeCB	114	38:25	1.49	0.8784	0.9293	-5.48
2,3',4,4',5-PeCB	118	37:52	1.54	0.8900	0.9249	-3.77
2,3',4,4',5'-PeCB	123	37:32	1.52	0.8969	0.9281	-3.36
3,3',4,4',5-PeCB	126	42:13	1.51	0.8668	0.8959	-3.26
2,2',4,4',6,6'-HxCB	155	32:32	1.33	1.3238	1.3520	-2.08
HxCB (156/157)	156/157	45:16	1.21	0.8995	0.9413	-4.44
2,3',4,4',5,5'-HxCB	167	44:07	1.21	0.8966	0.9304	-3.63
3,3',4,4',5,5'-HxCB	169	48:32	1.22	0.8949	0.9394	-4.73
2,2',3,4',5,6,6'-HpCB	188	38:25	1.02	1.0496	1.0887	-3.59
2,3,3',4,4',5,5'-HpCB	189	51:05	1.01	0.8759	0.8926	-1.87

X = Outside Quality Control limits

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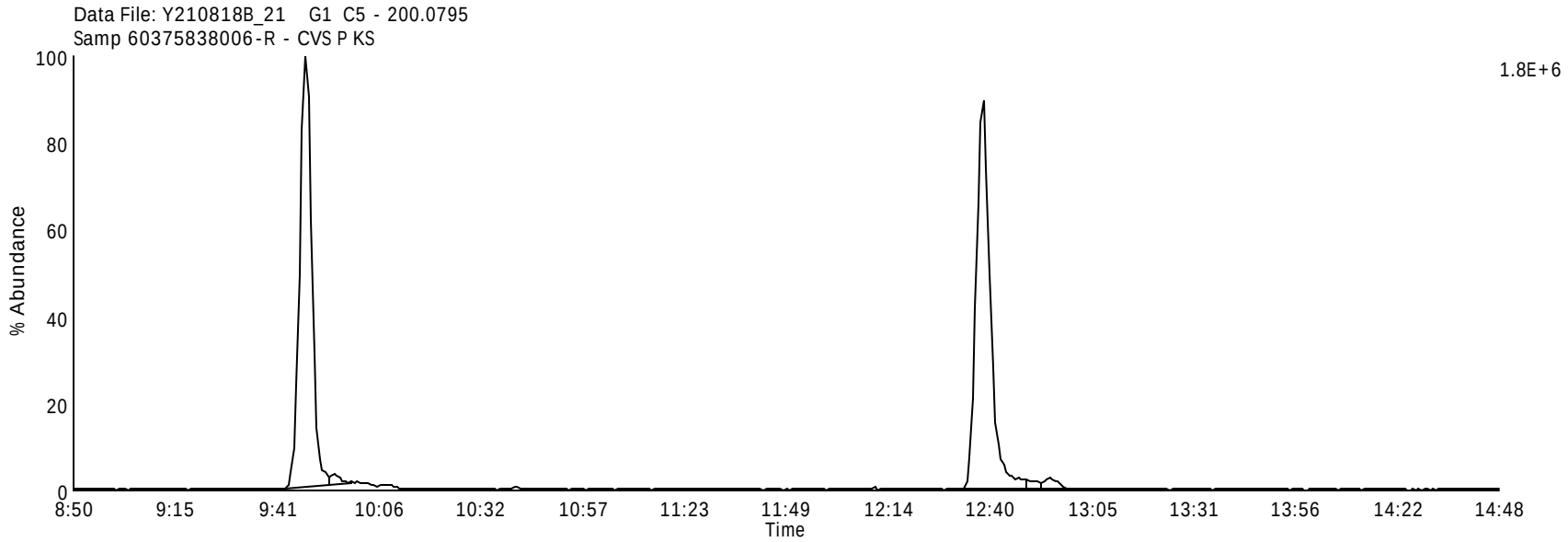
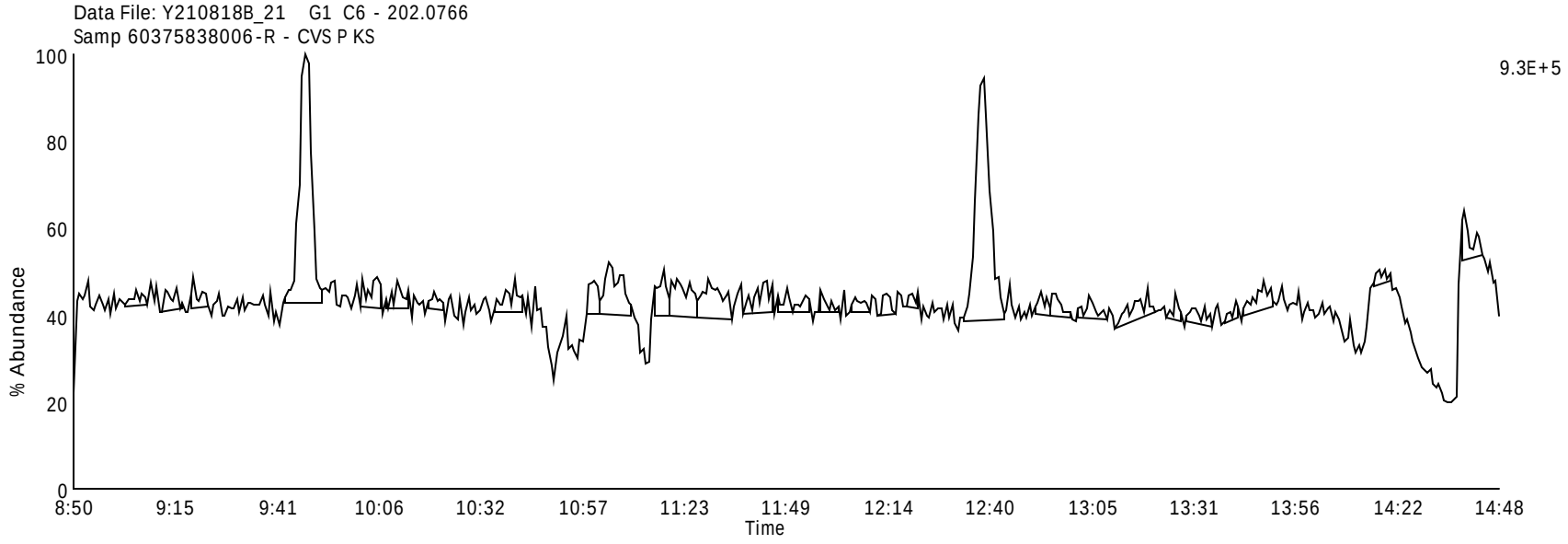
Appendix D

Sample Raw Data

Labeled Mono Chlorinated Biphenyls

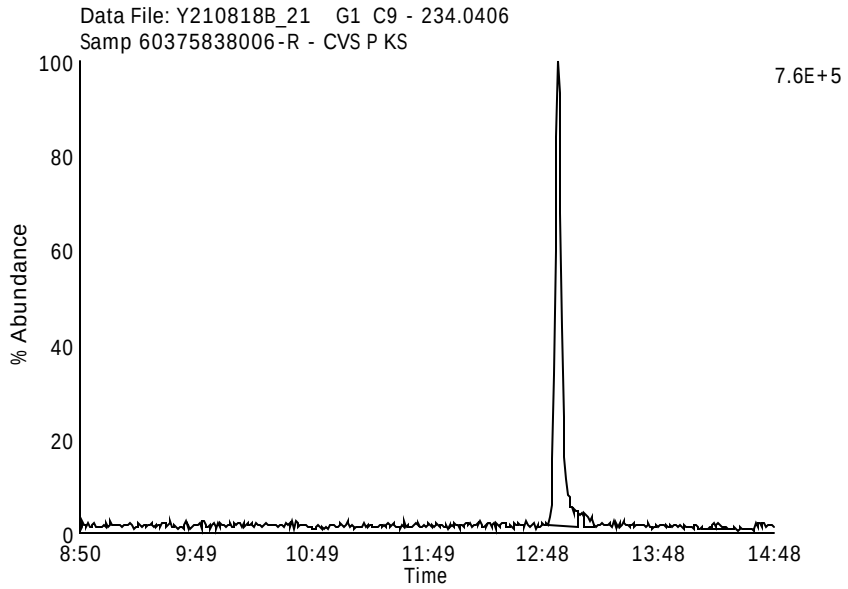
Data File Name: Y210818B_21 | Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS | Client Sample ID: GB-28/1.5-2.5

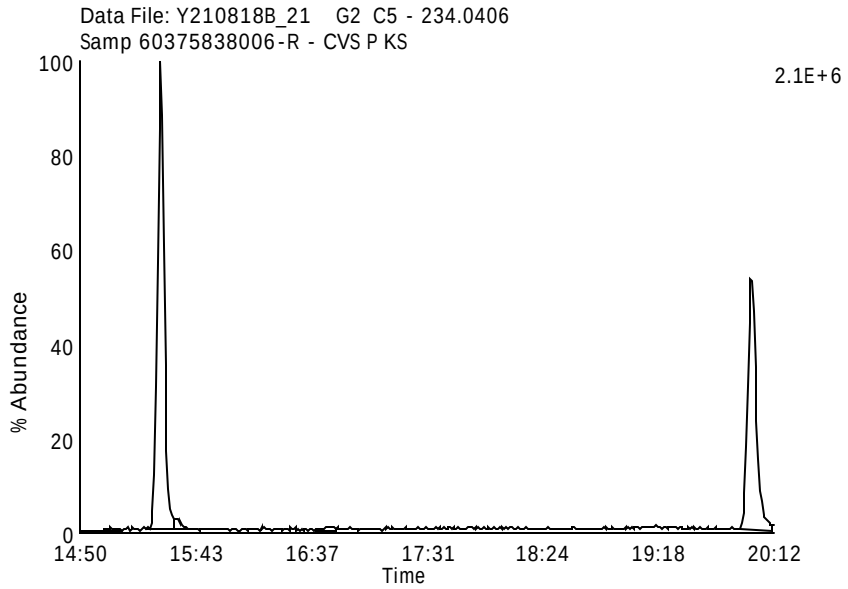


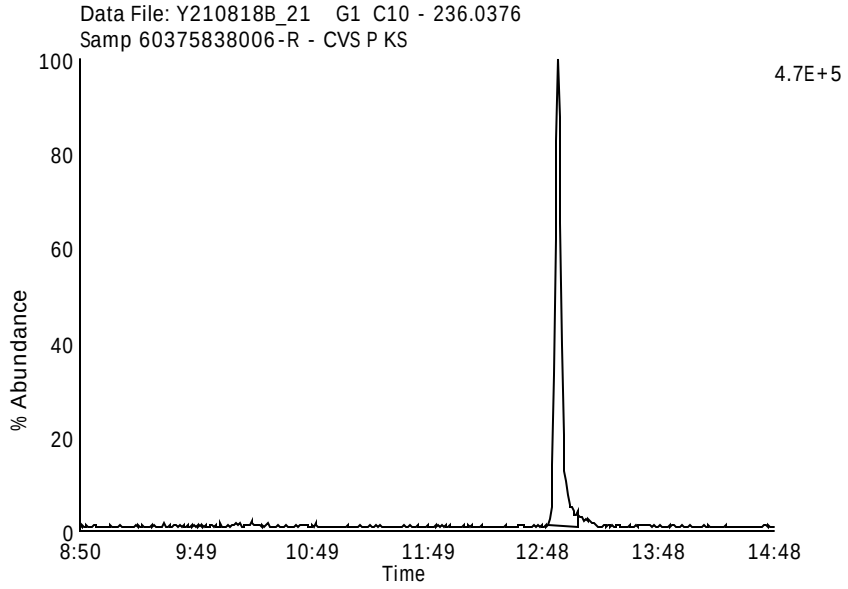


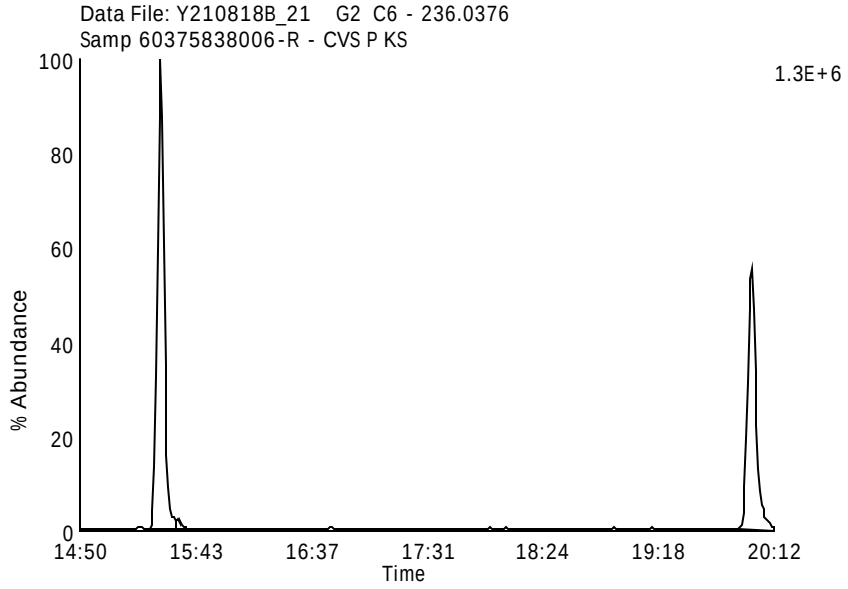
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



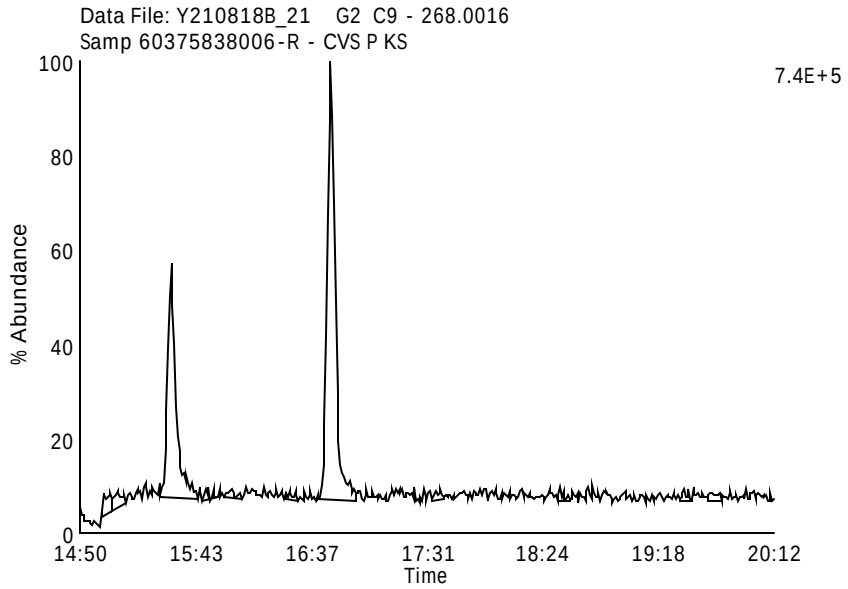


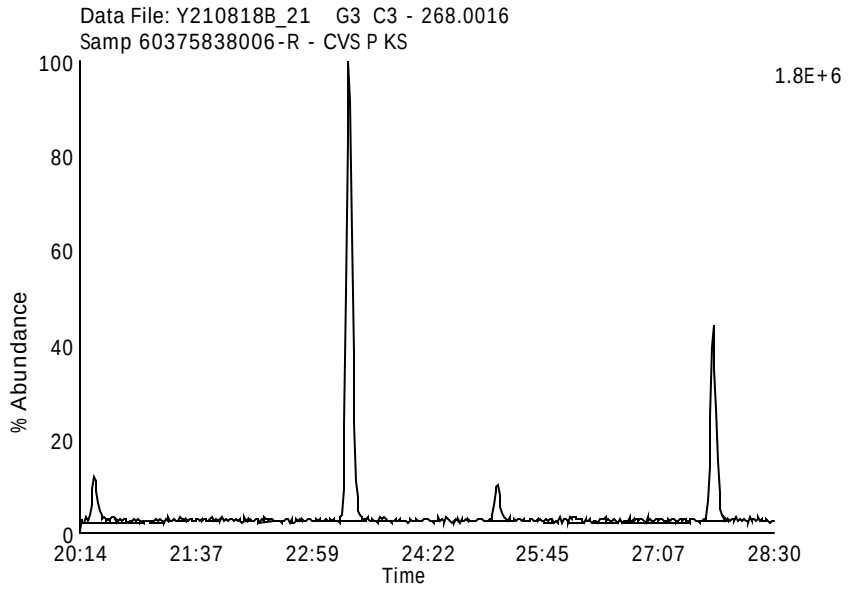


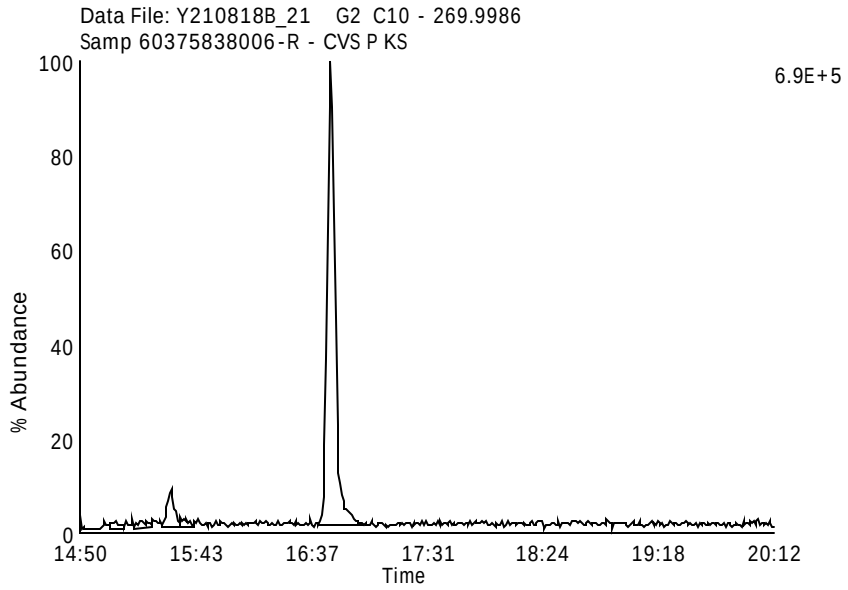


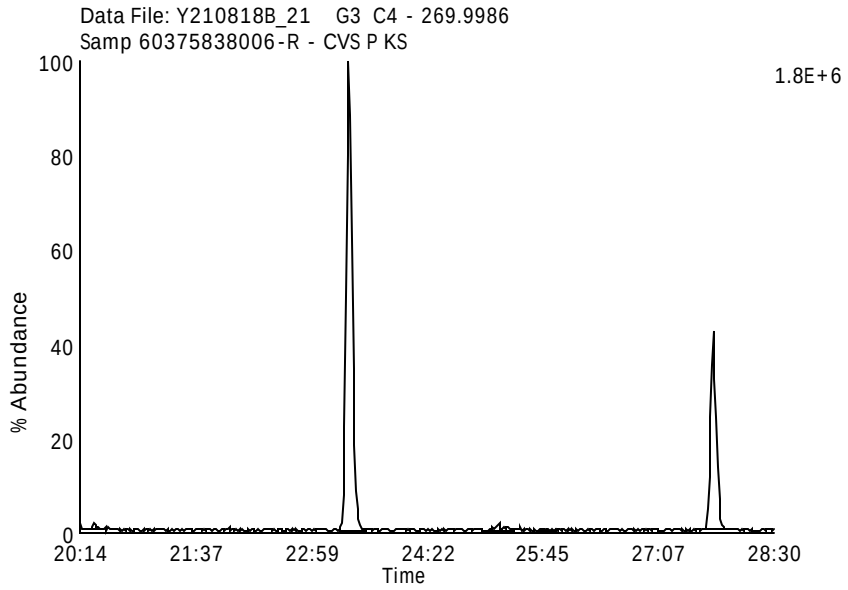
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



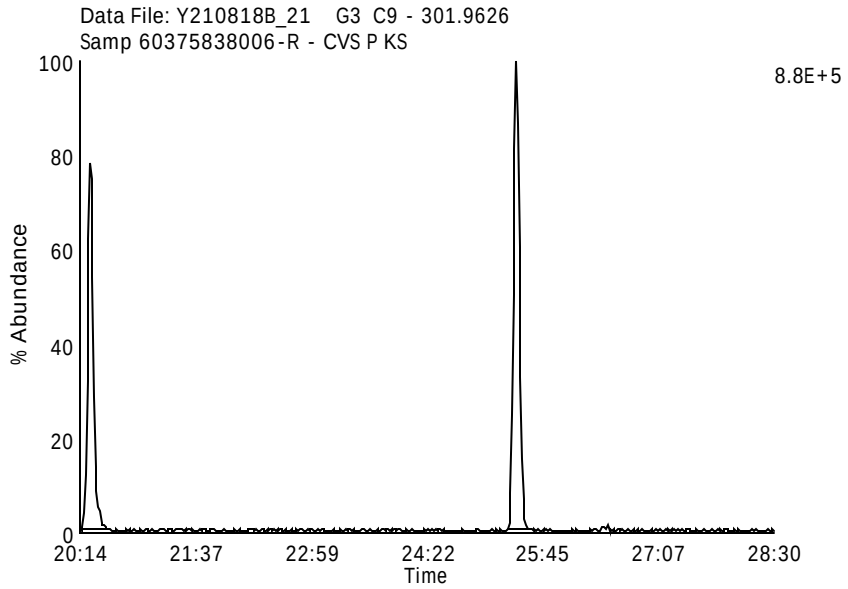


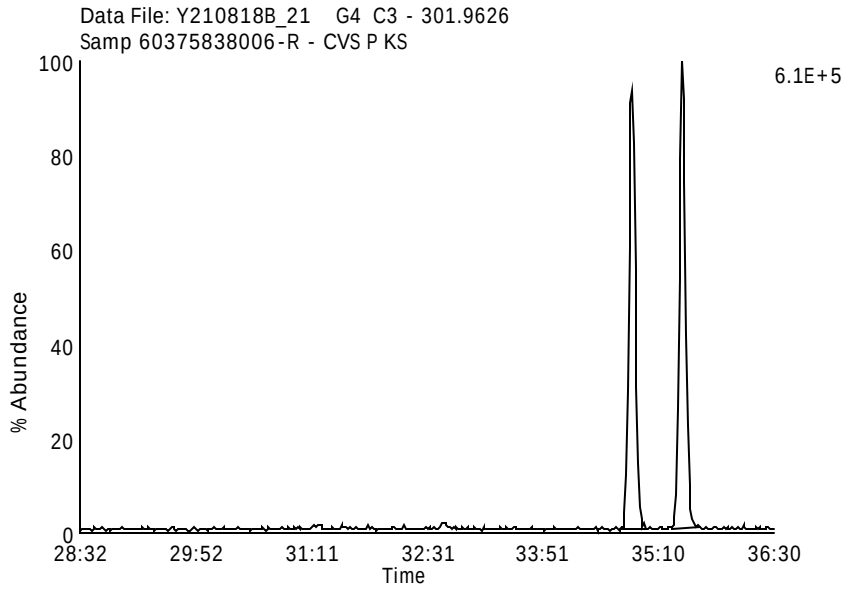


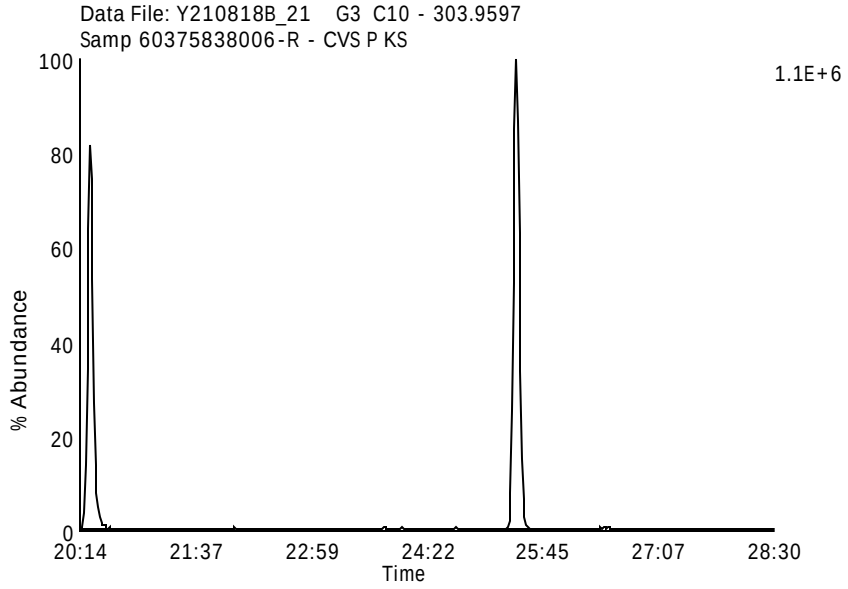


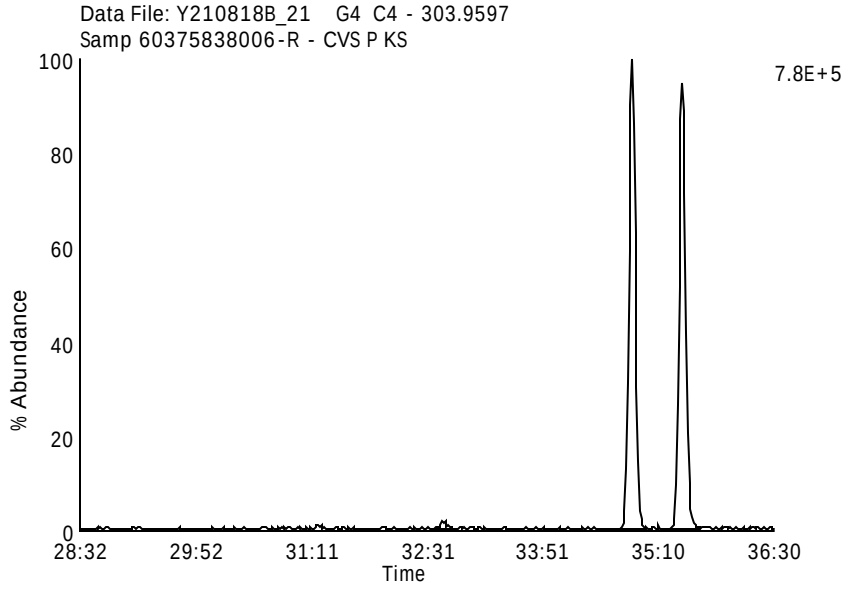
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



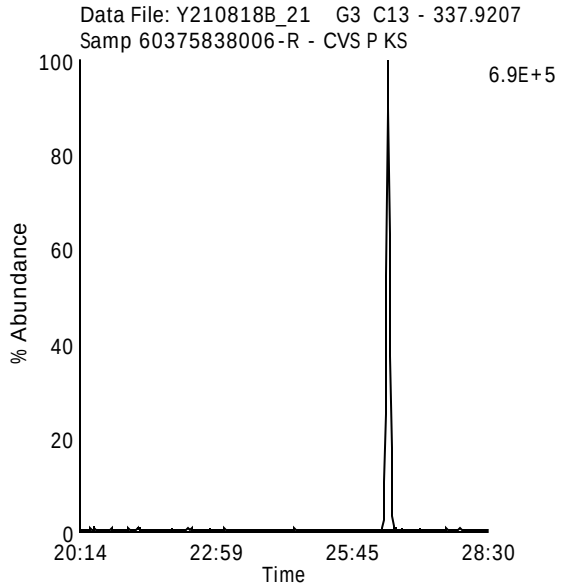


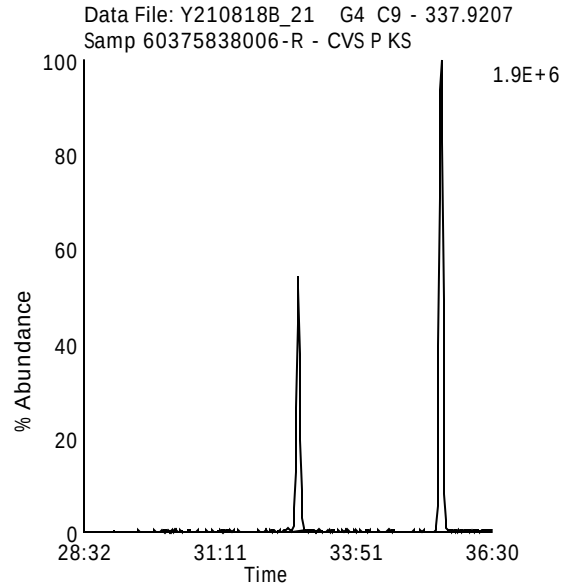


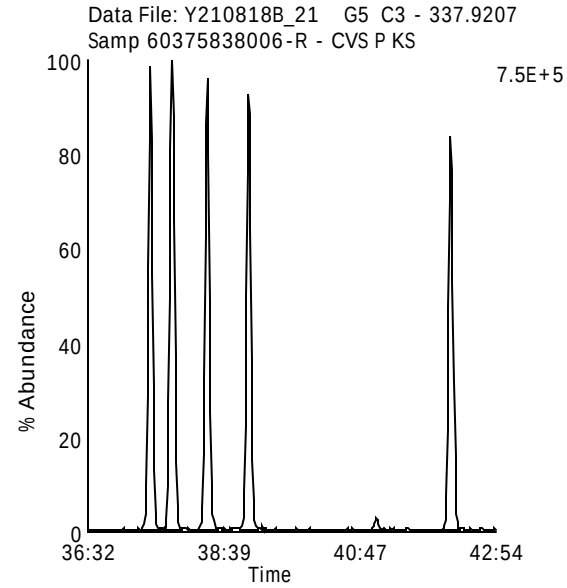


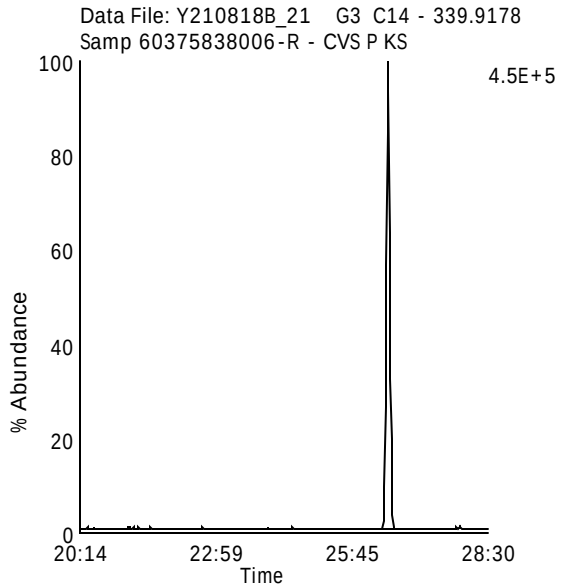
Labeled Penta Chlorinated Biphenyls

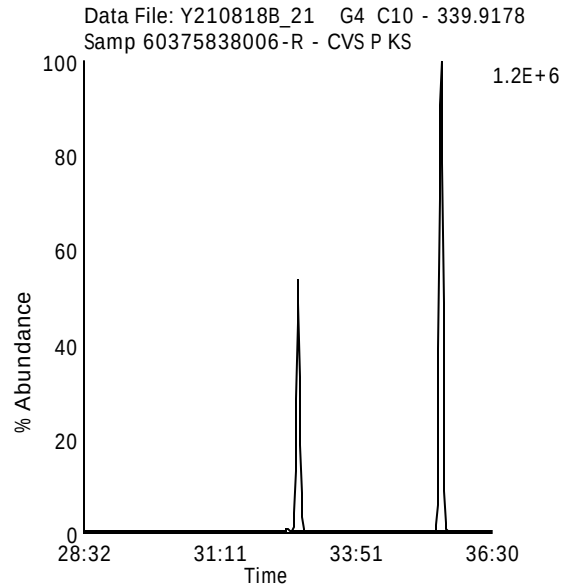
Data File Name: Y210818B_21 | Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS | Client Sample ID: GB-28/1.5-2.5

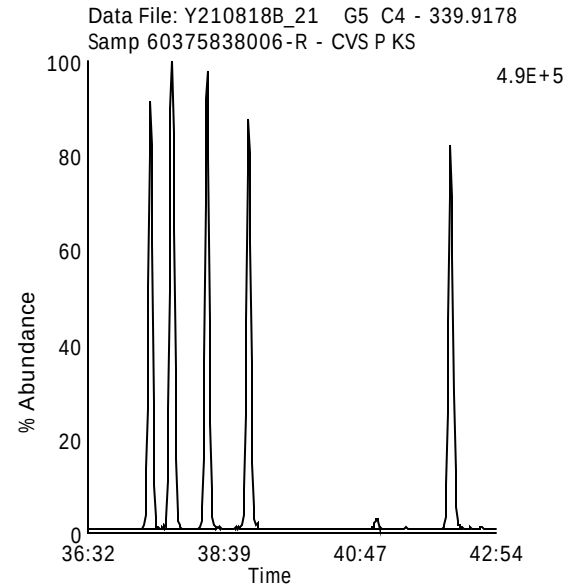






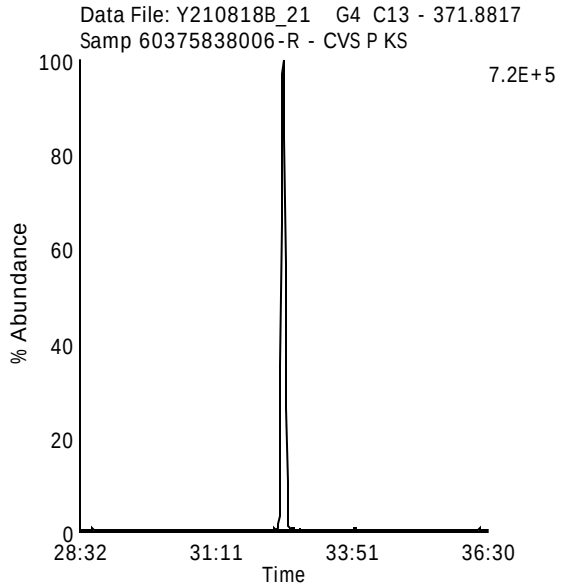


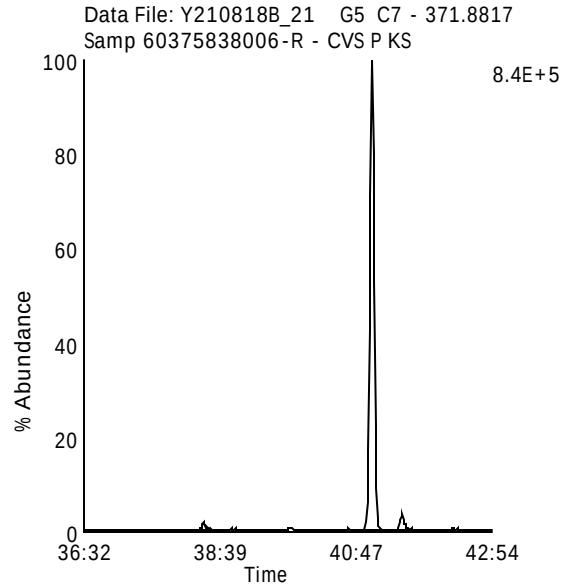


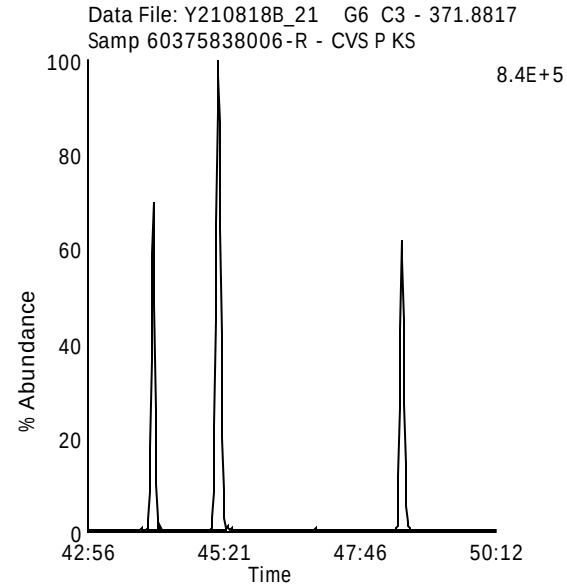


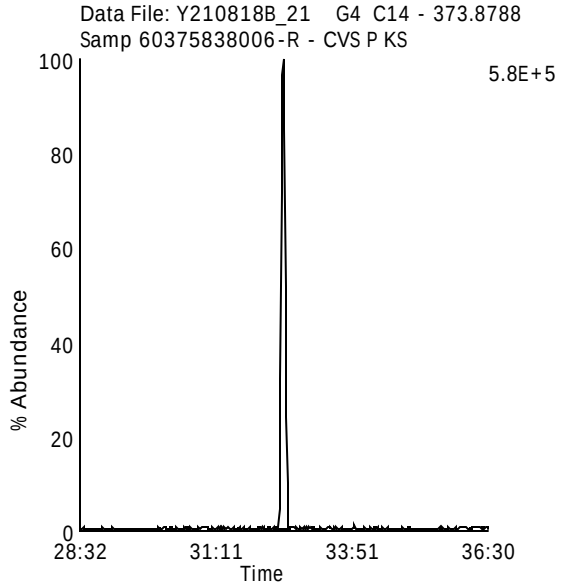
Labeled Hexa Chlorinated Biphenyls

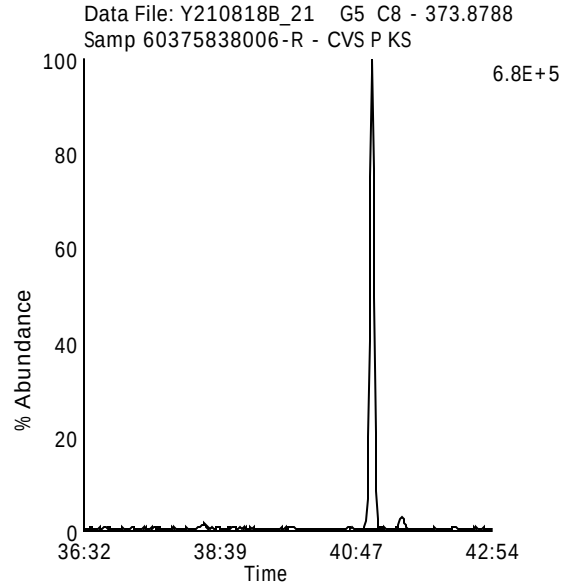
Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5

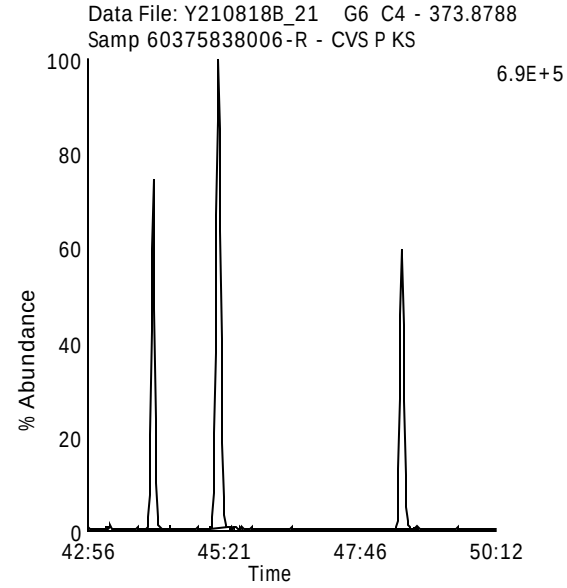






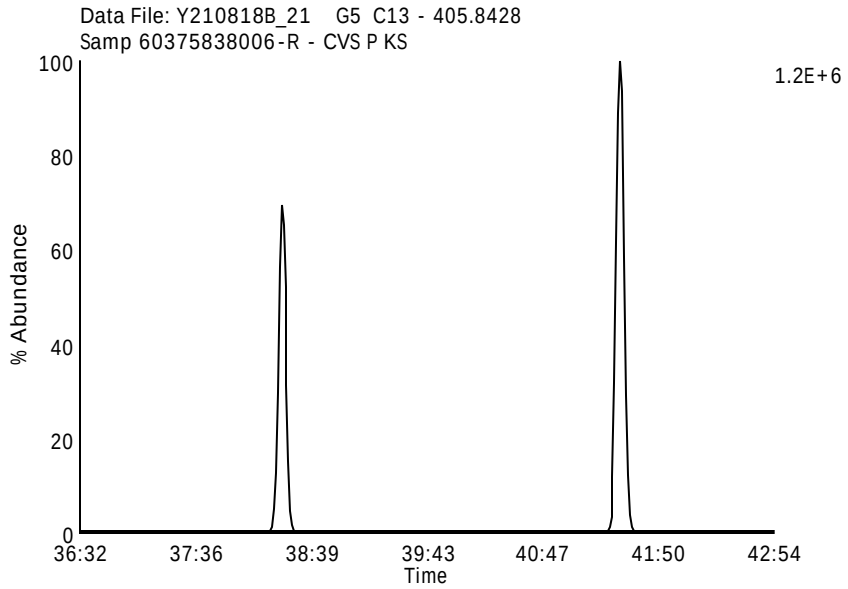


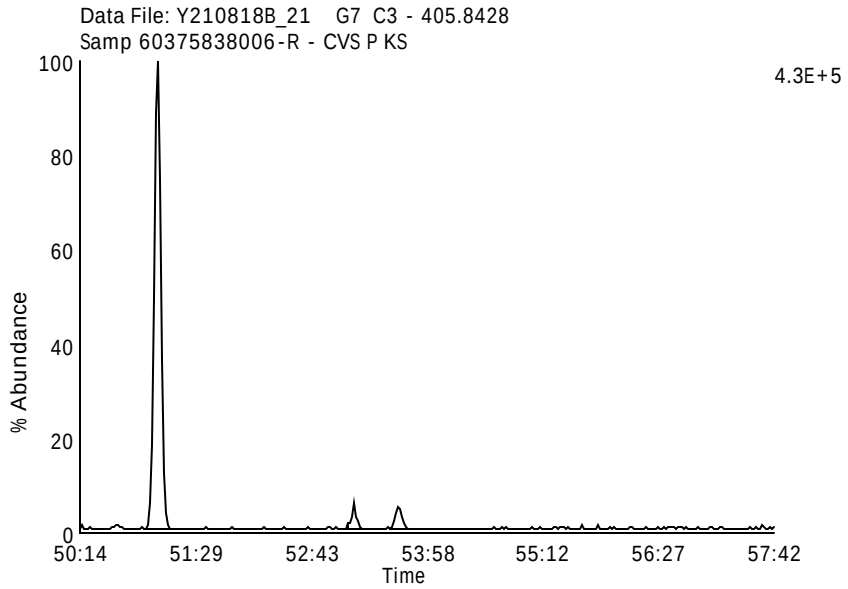


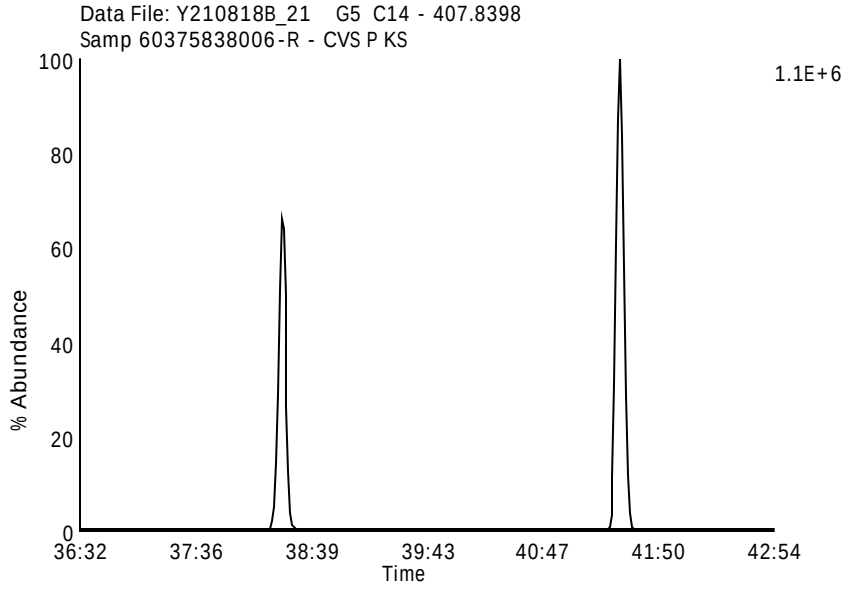


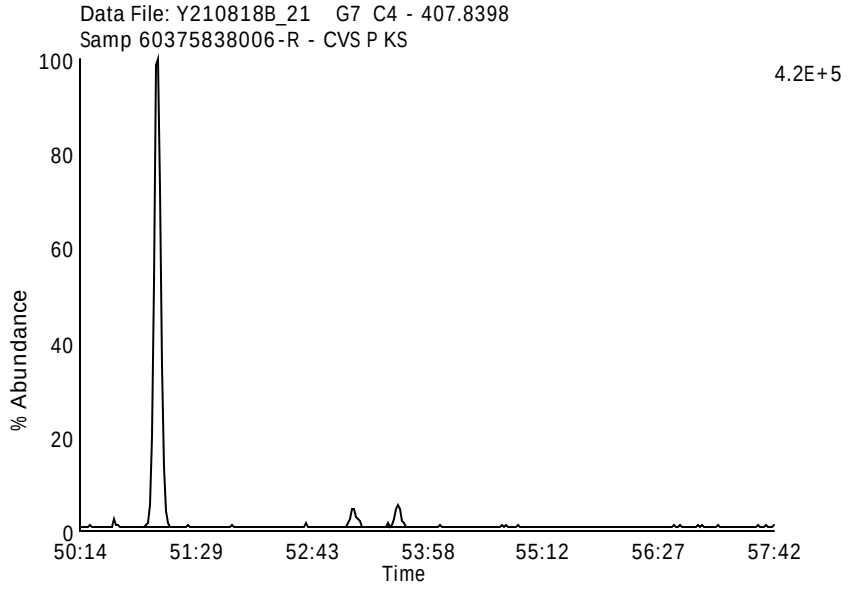
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



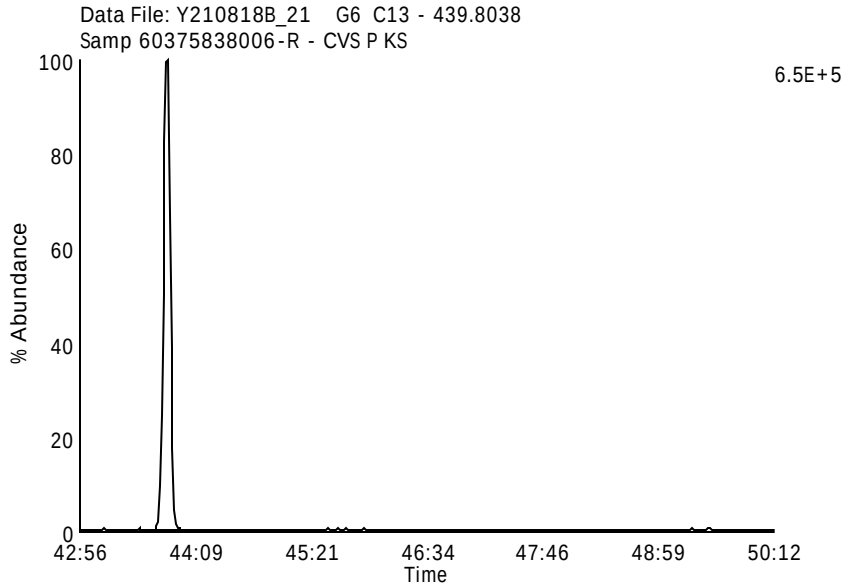


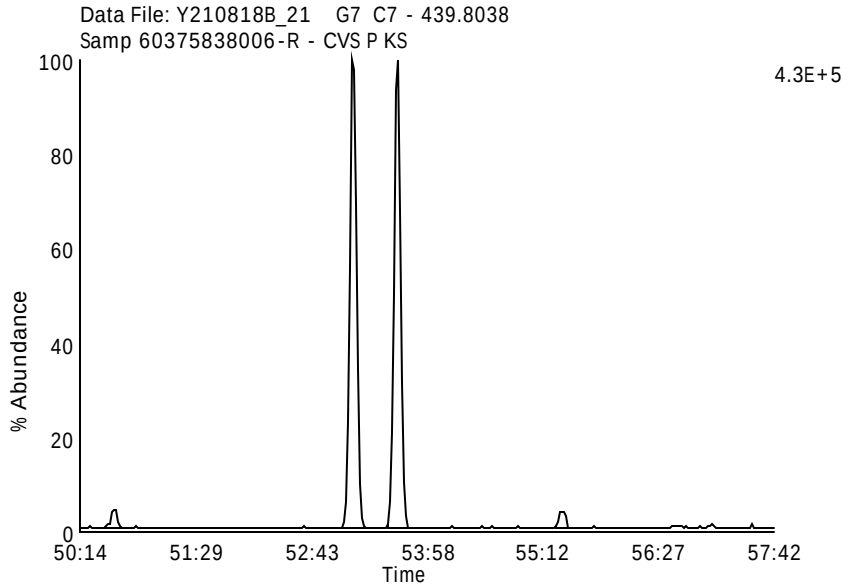


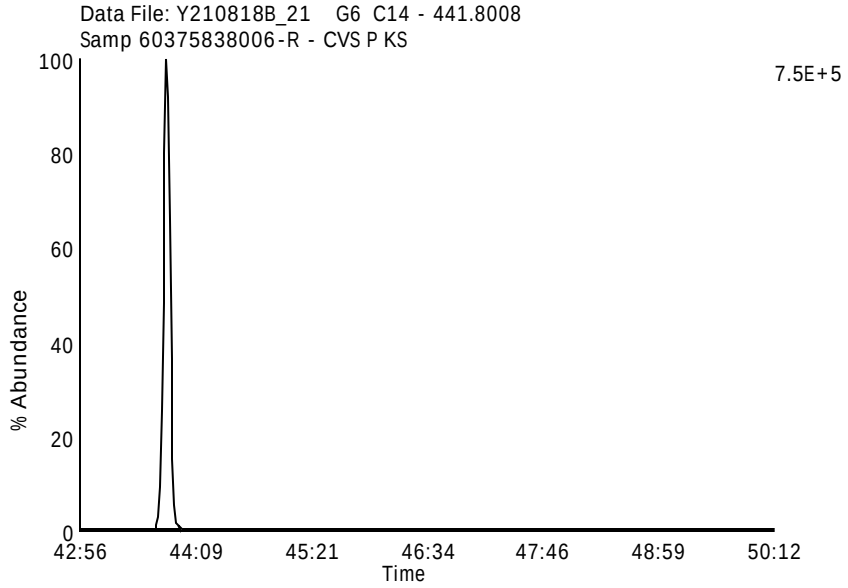


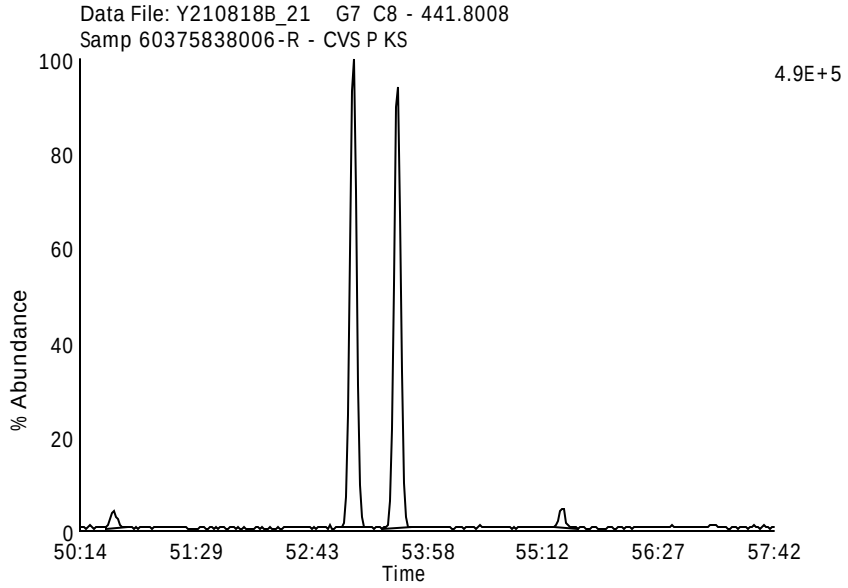
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



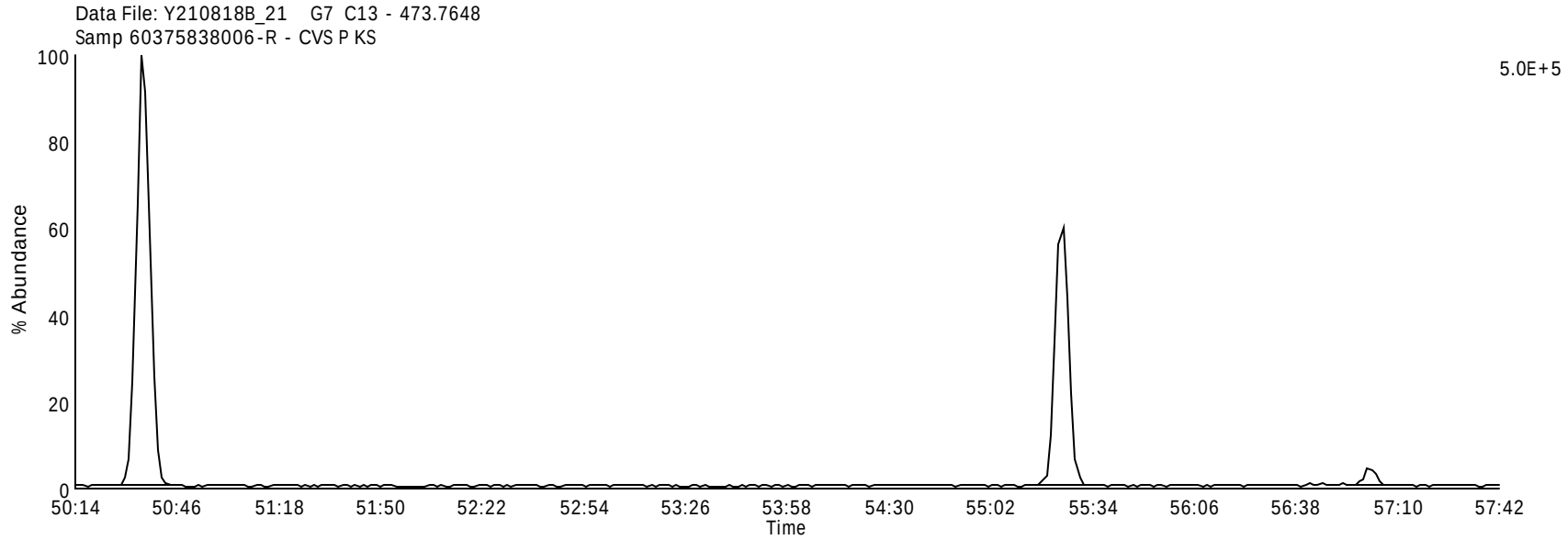


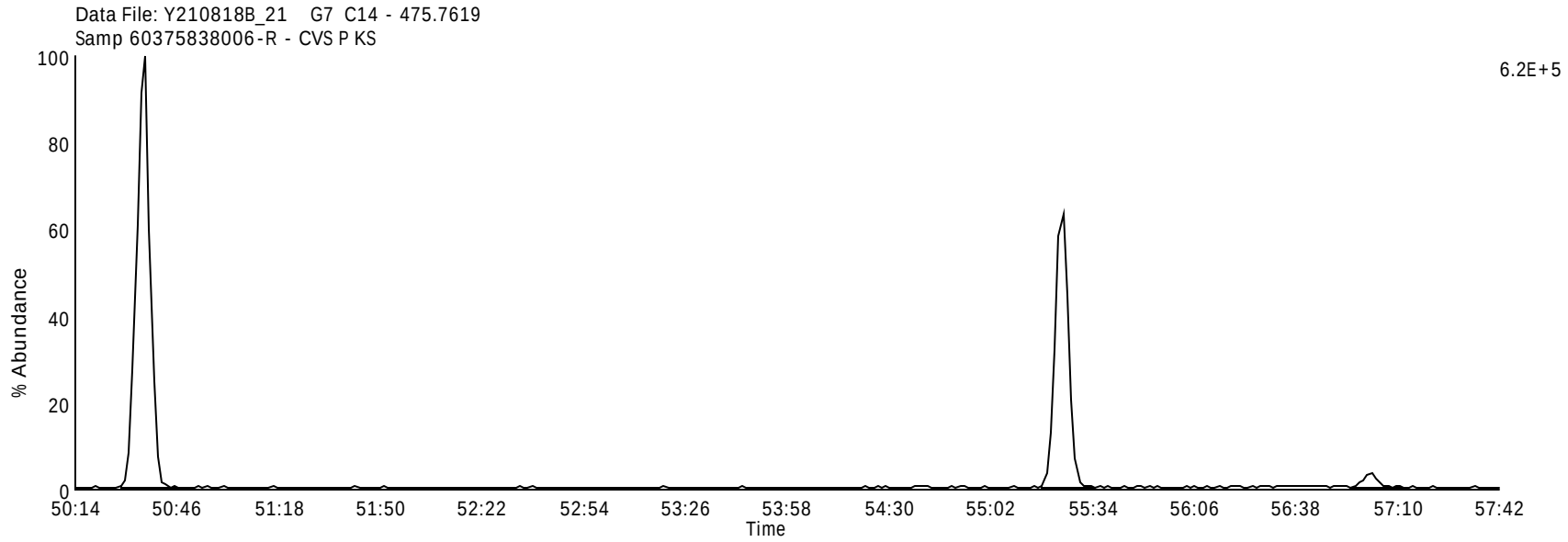




Labeled Nona Chlorinated Biphenyls

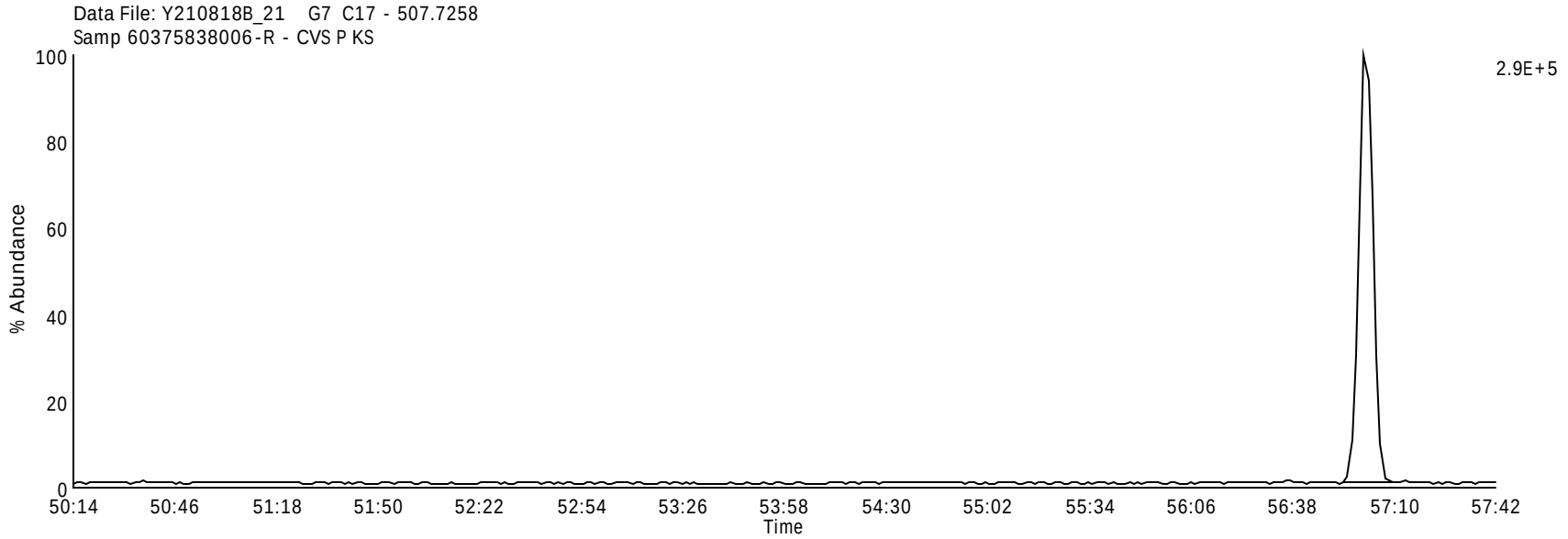
Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5

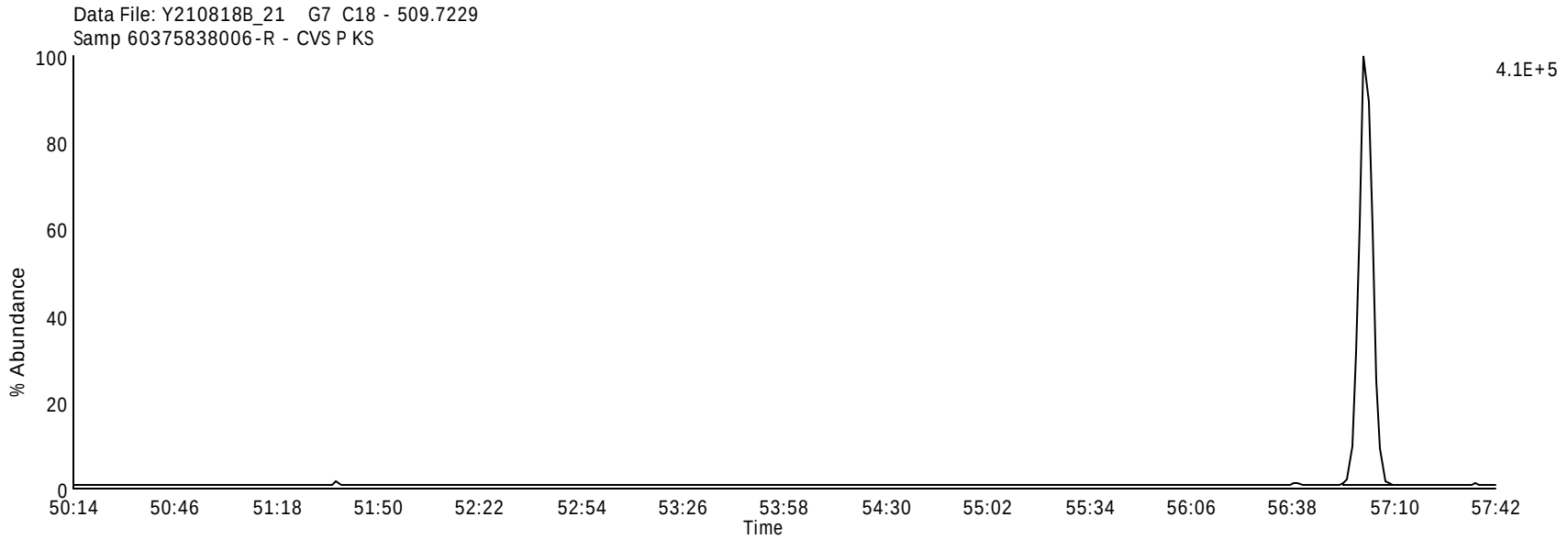




Labeled Deca Chlorinated Biphenyl

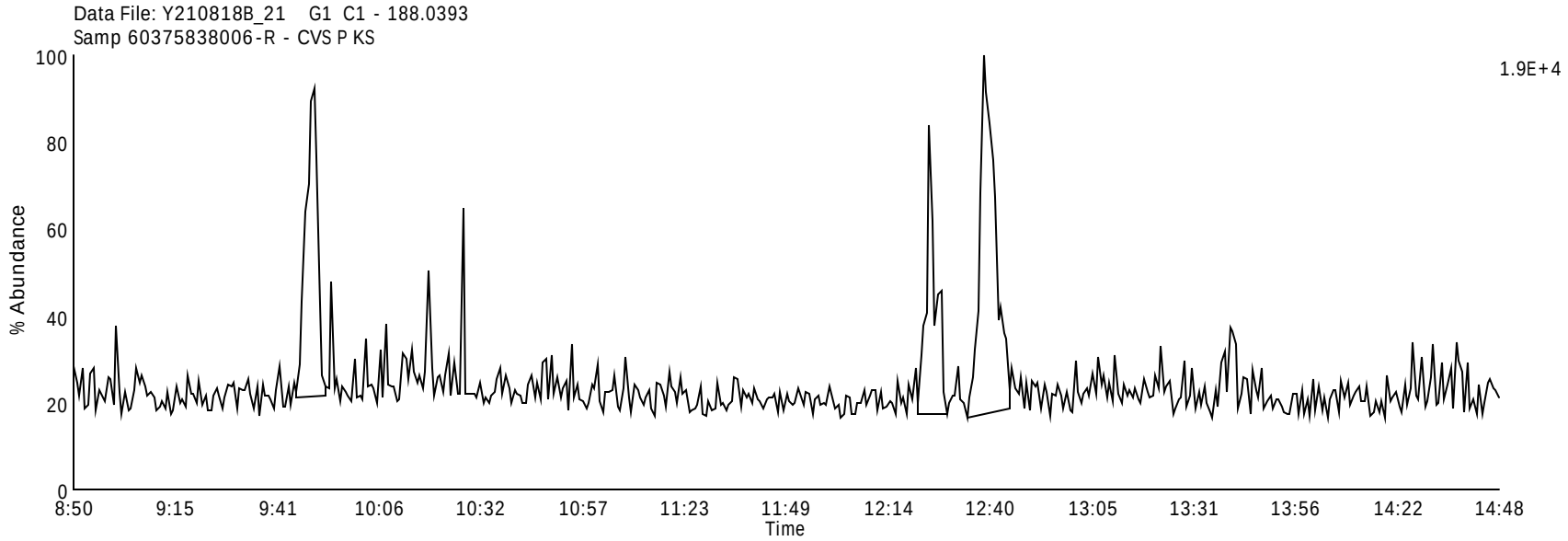
Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5

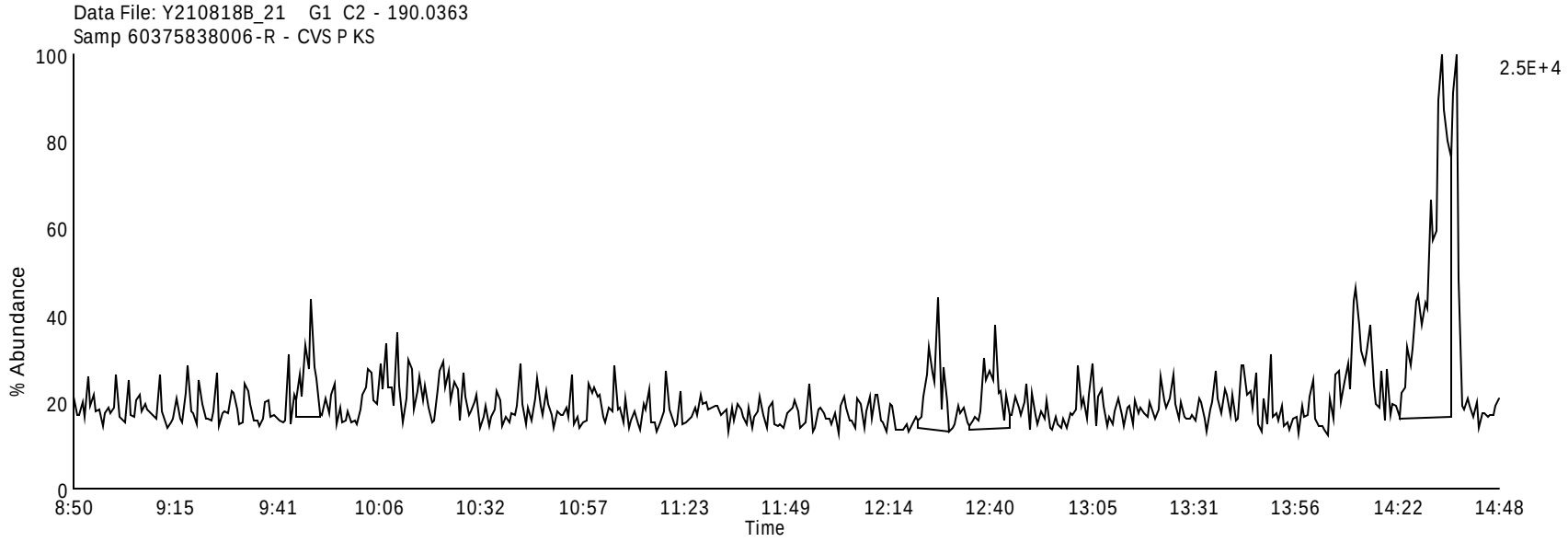




Mono Chlorinated Biphenyls

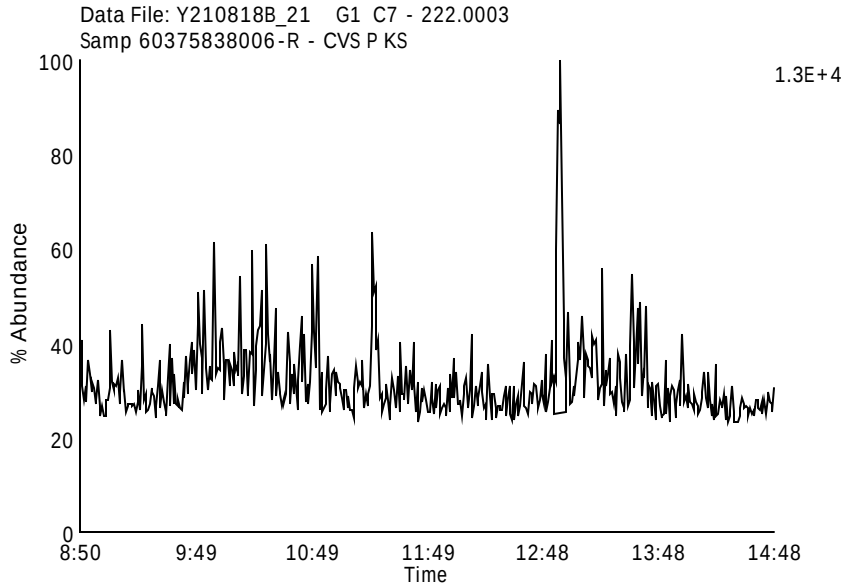
Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5

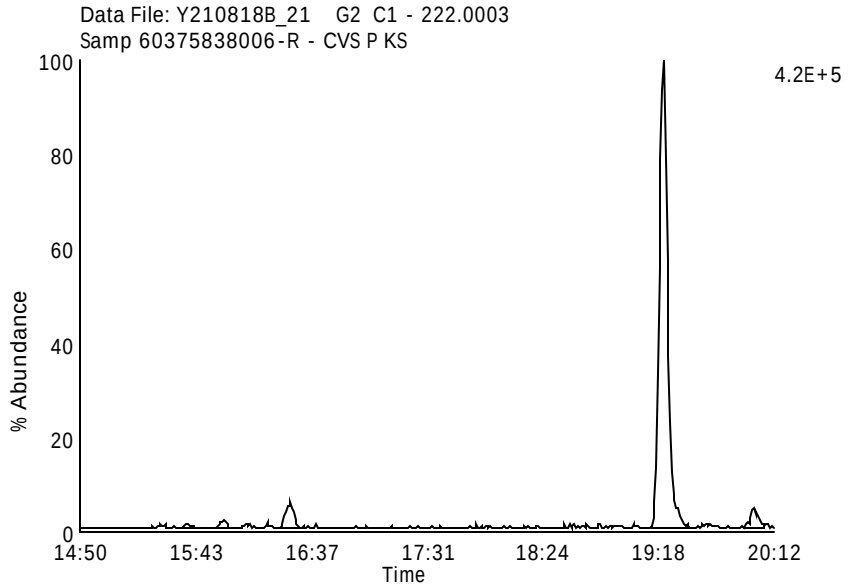


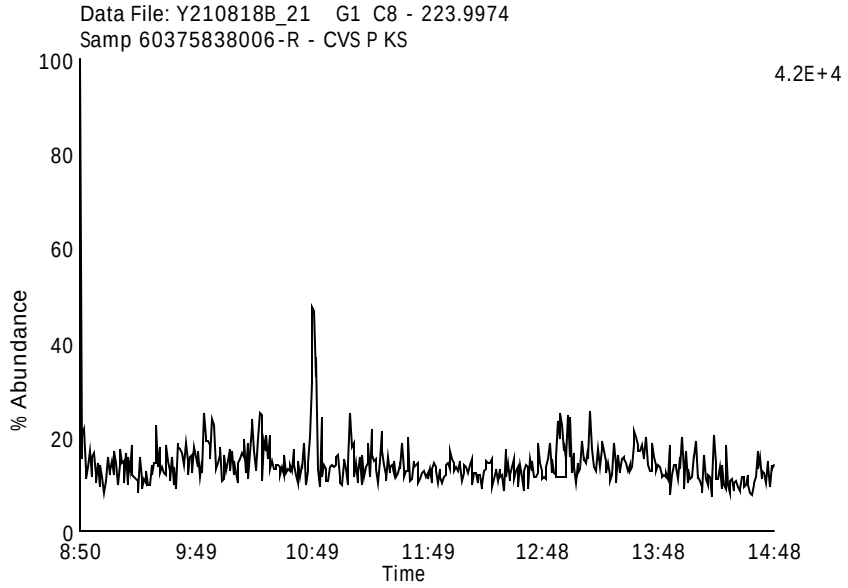


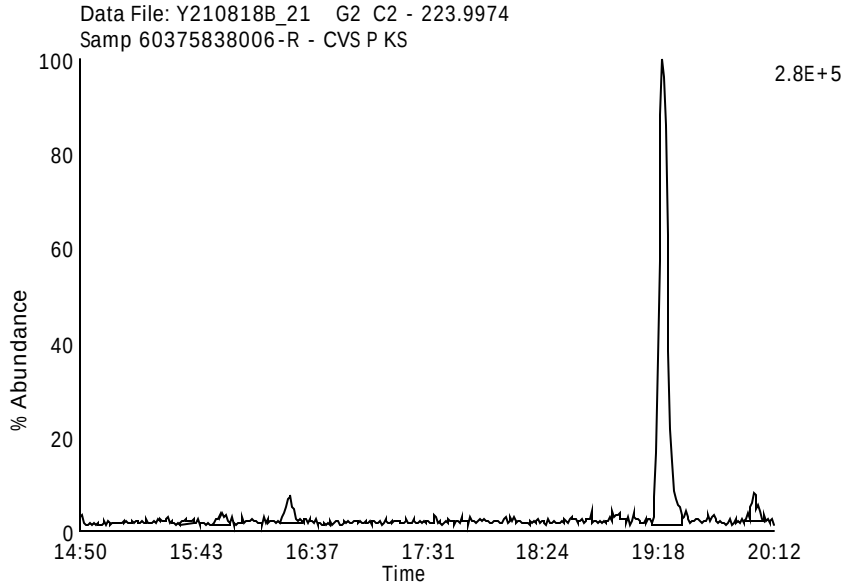
Di Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



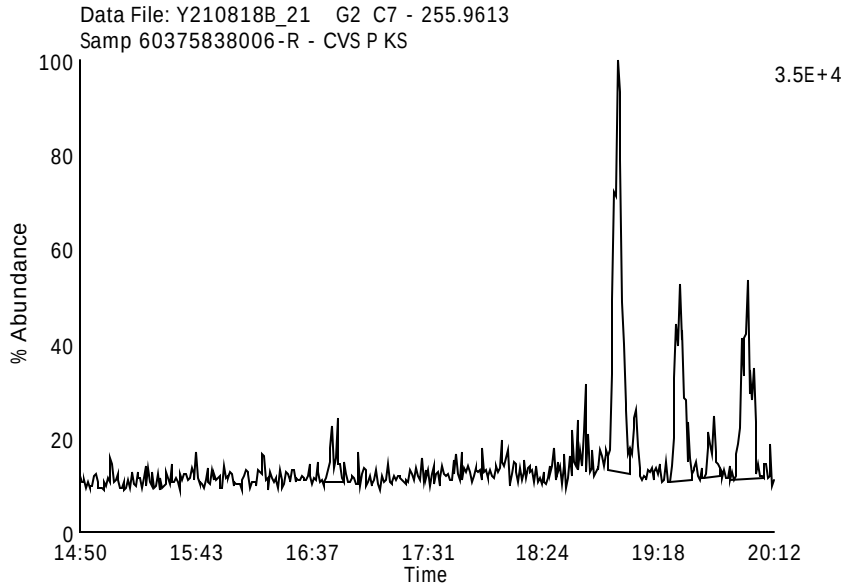


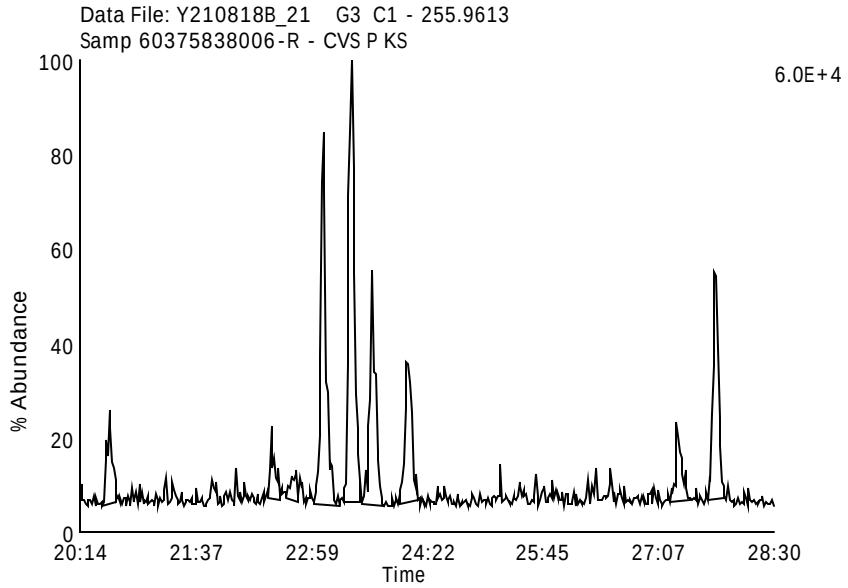


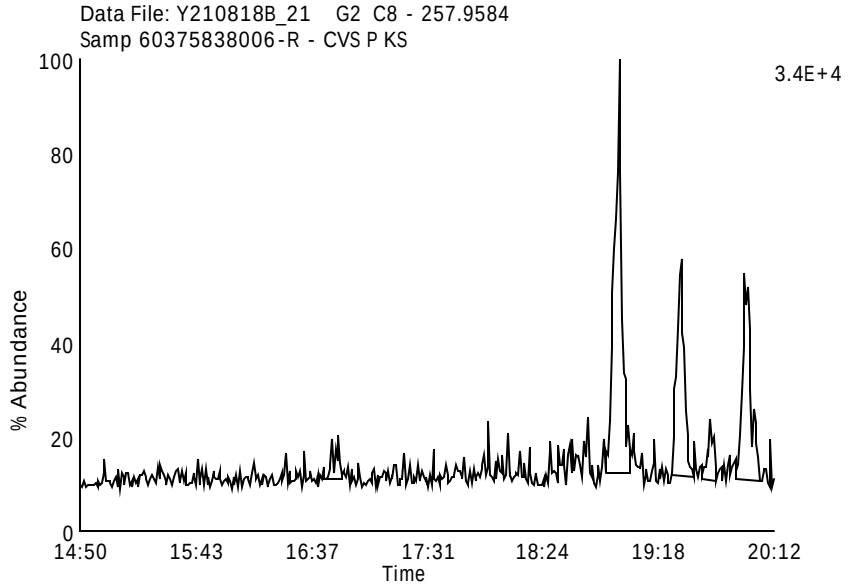


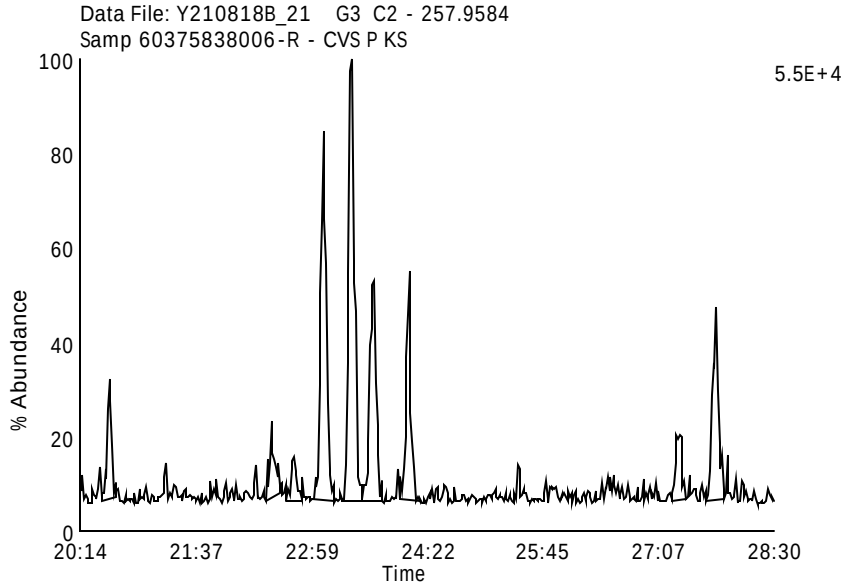
Tri Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



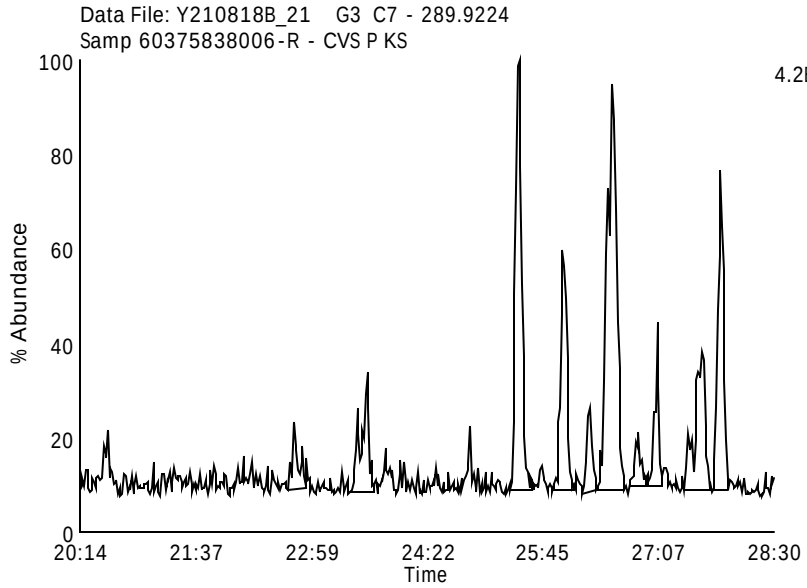


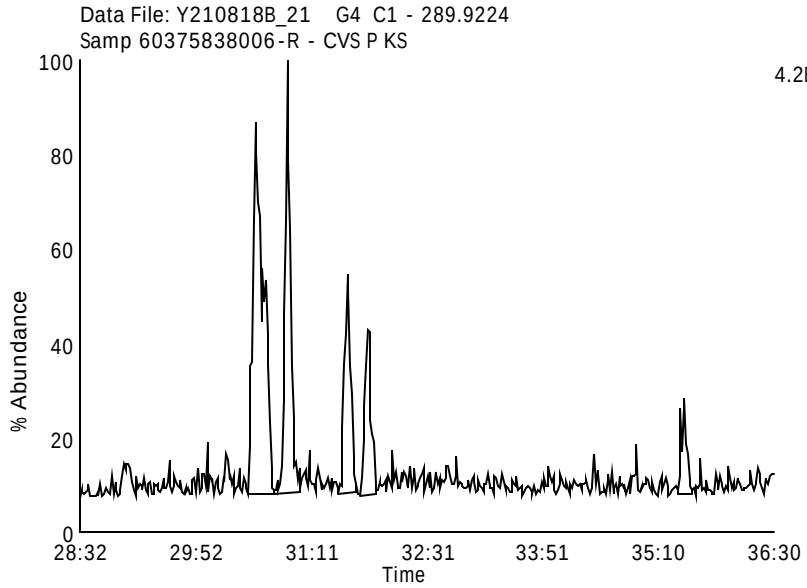


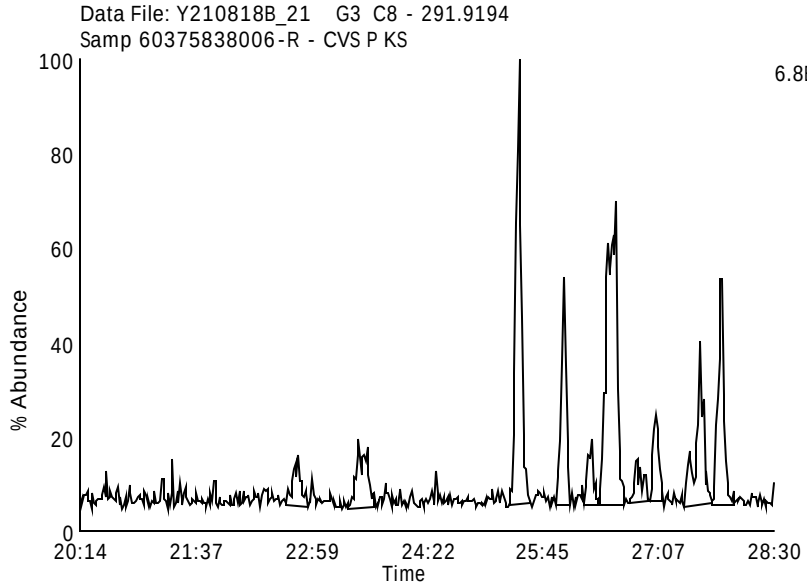


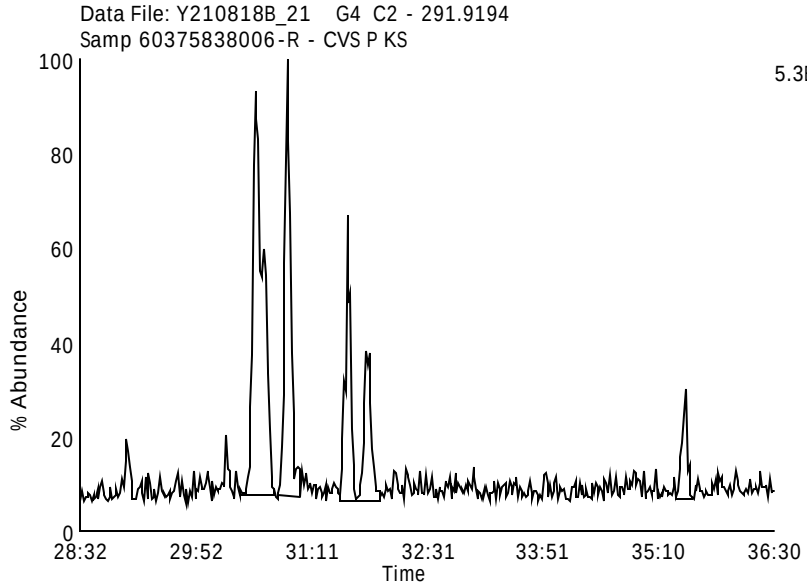
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5





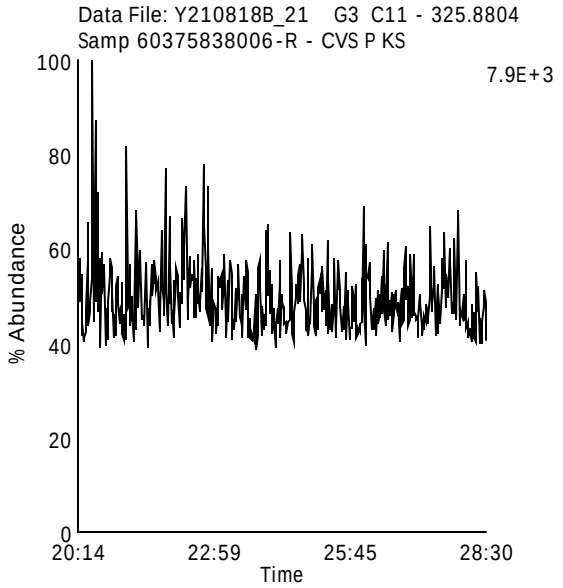


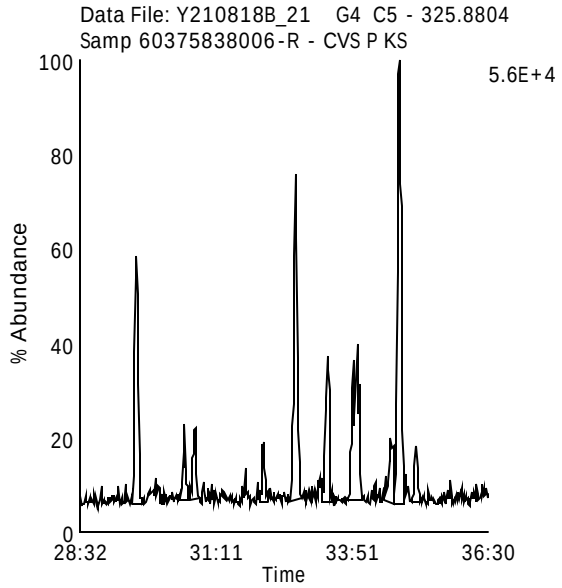


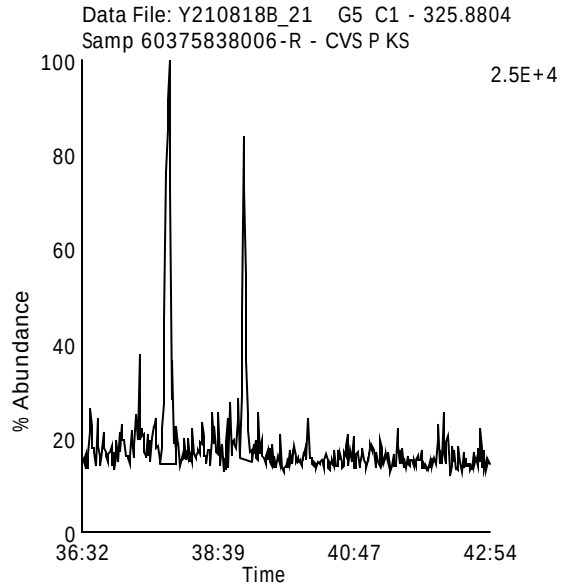
Penta Chlorinated Biphenyls

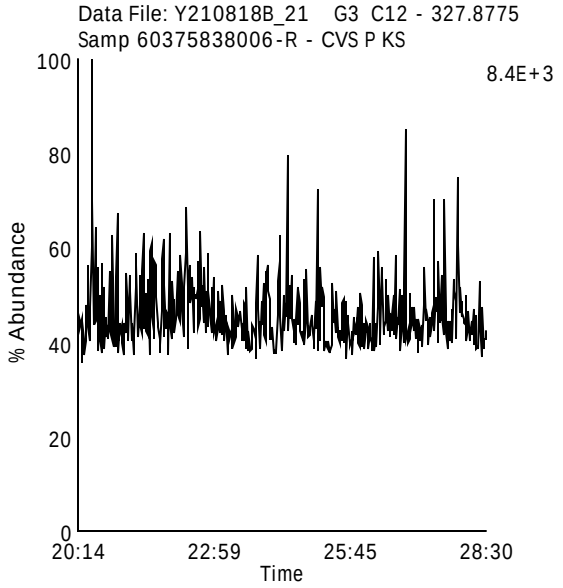
Data File Name: Y210818B_21
Date Acquired: 8/19/2021
Sample Description: Samp 60375838006-R - CVS P KS

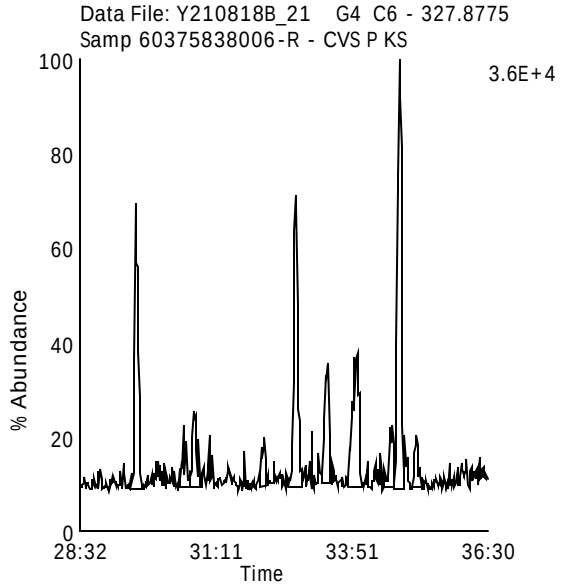
Lab Sample ID: 60375838006-R
Instrument: 10MSHR12 (Y)
Client Sample ID: GB-28/1.5-2.5

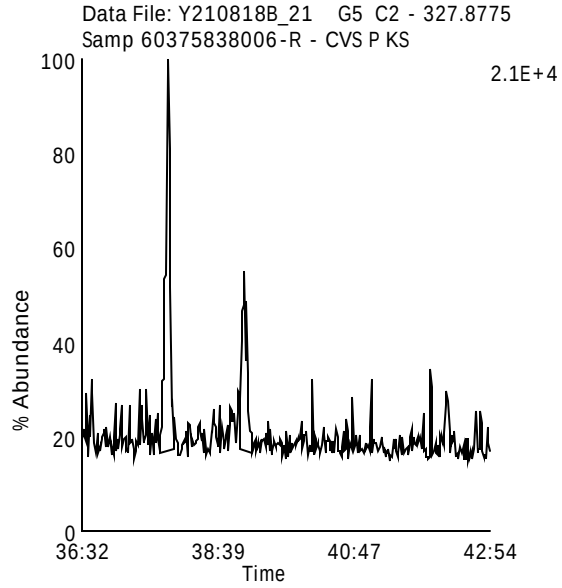






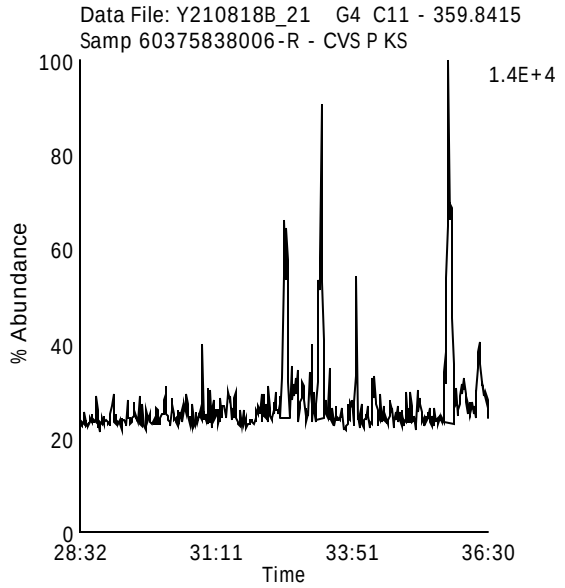


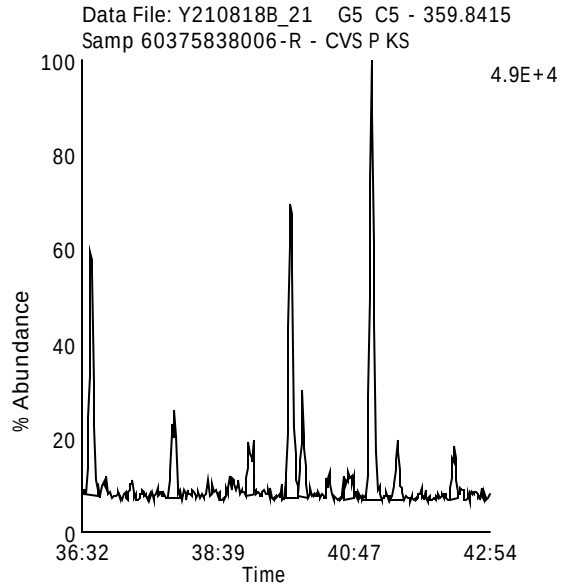


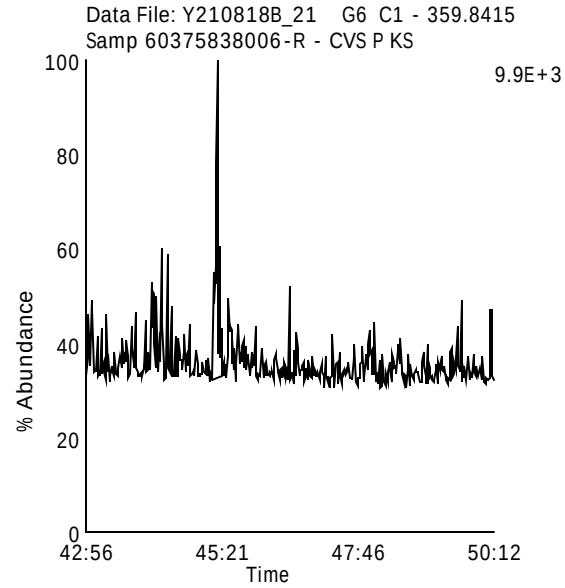


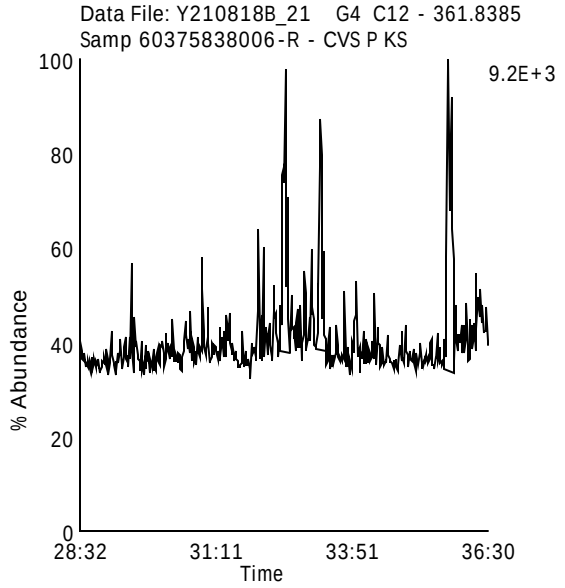
Hexa Chlorinated Biphenyls

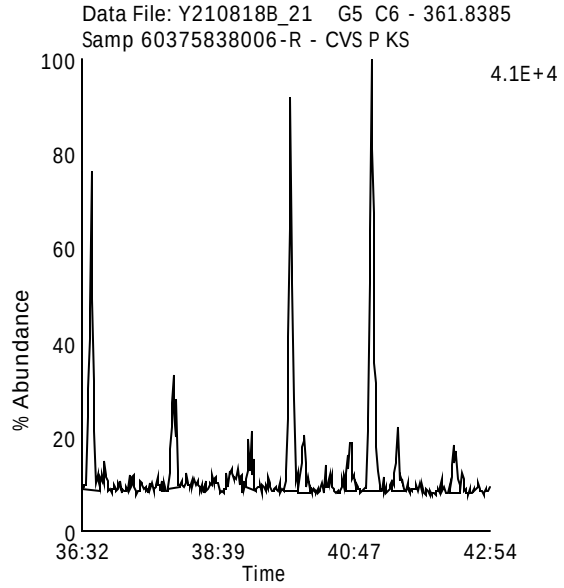
Data File Name: Y210818B_21 | Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS | Client Sample ID: GB-28/1.5-2.5

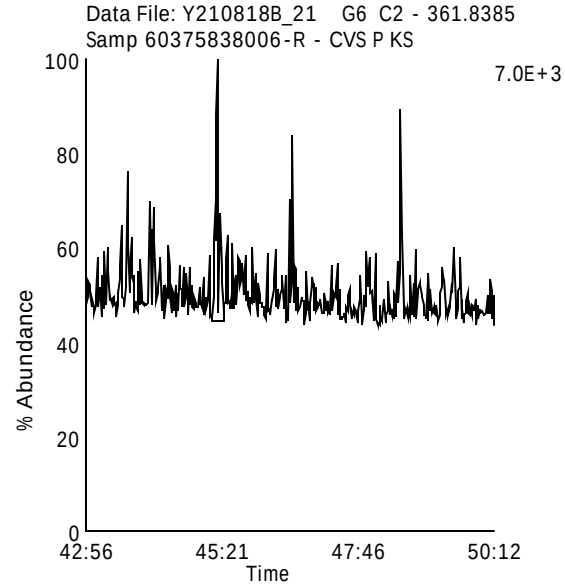






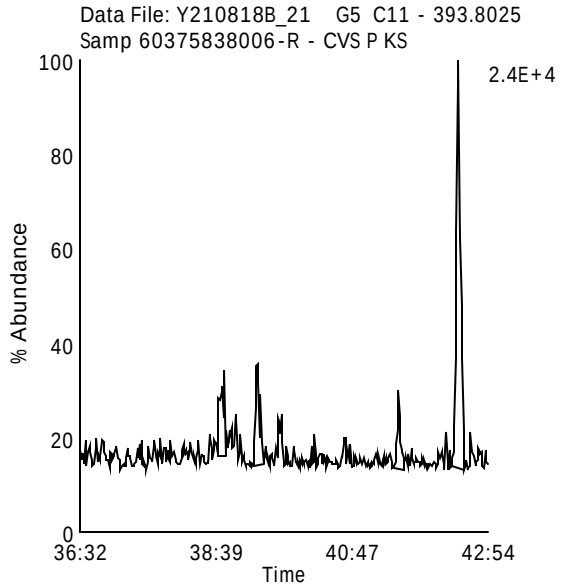


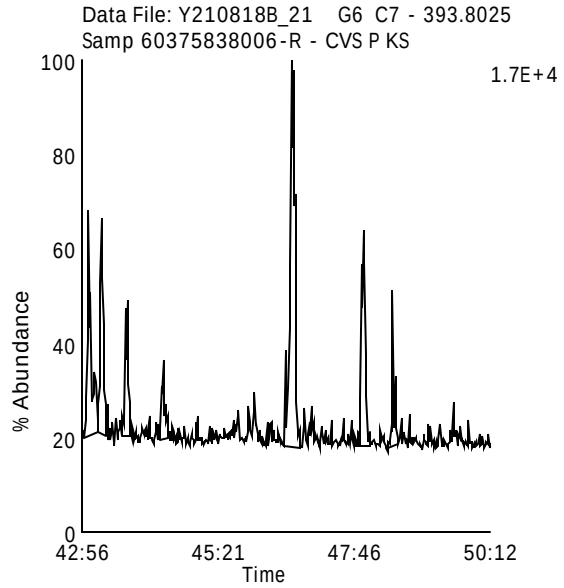


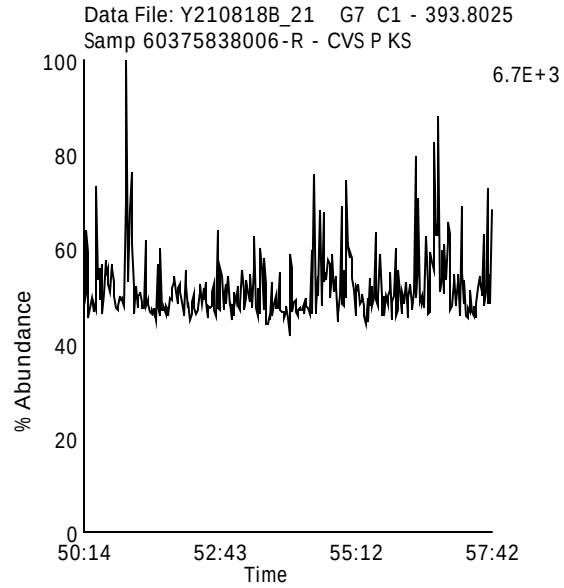


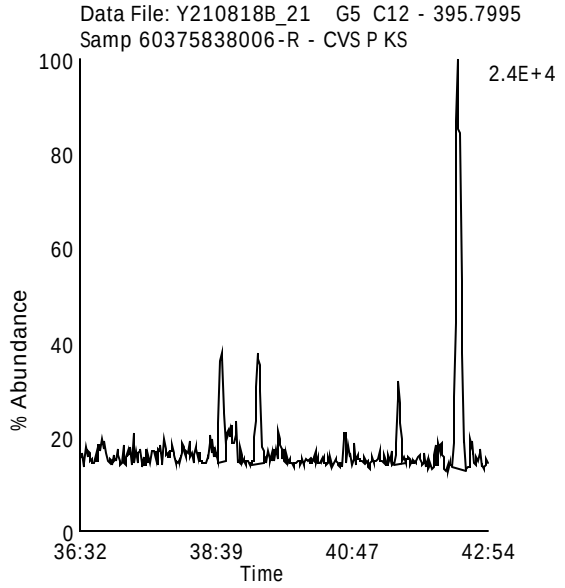
Hepta Chlorinated Biphenyls

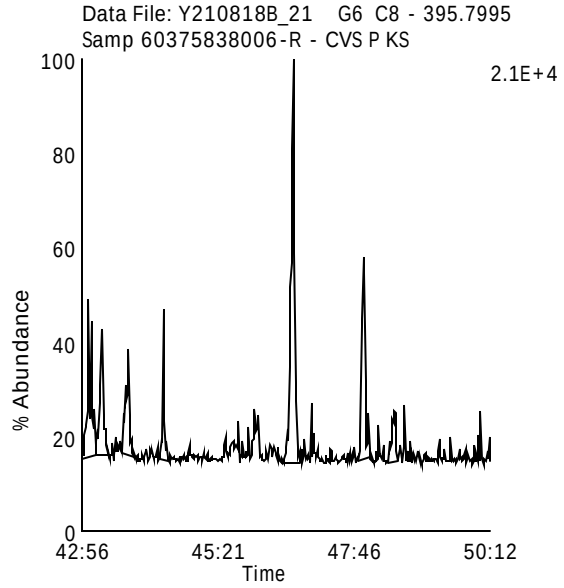
Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5

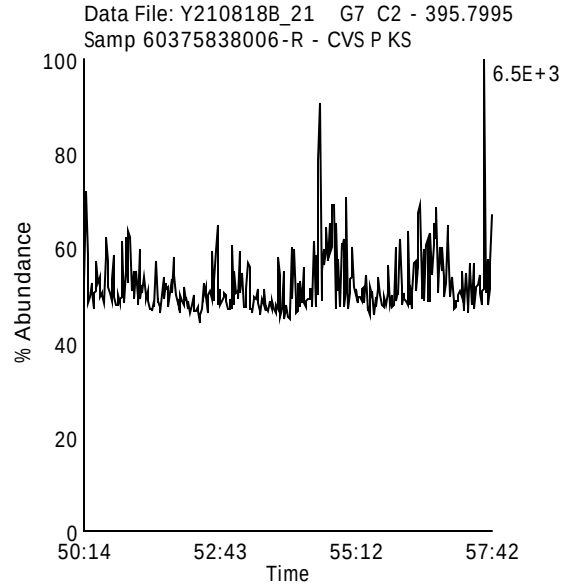






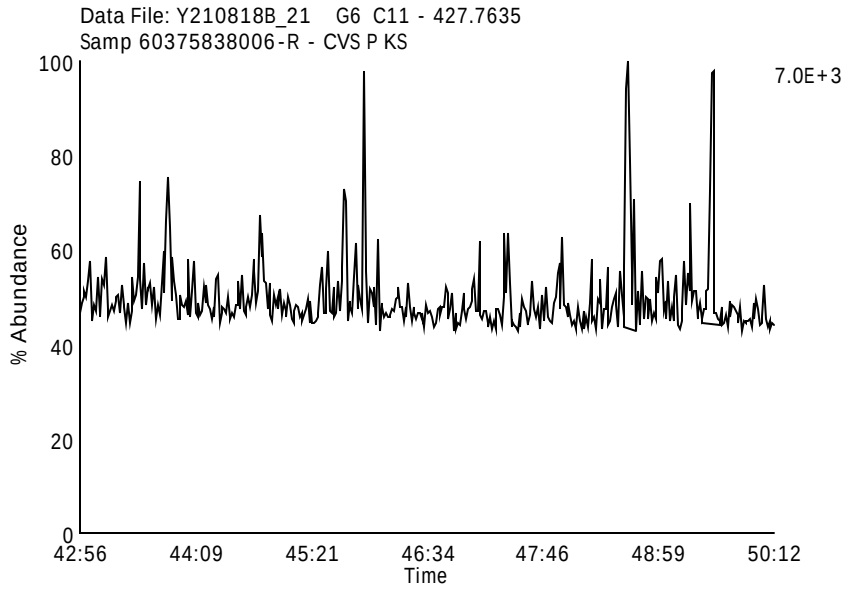


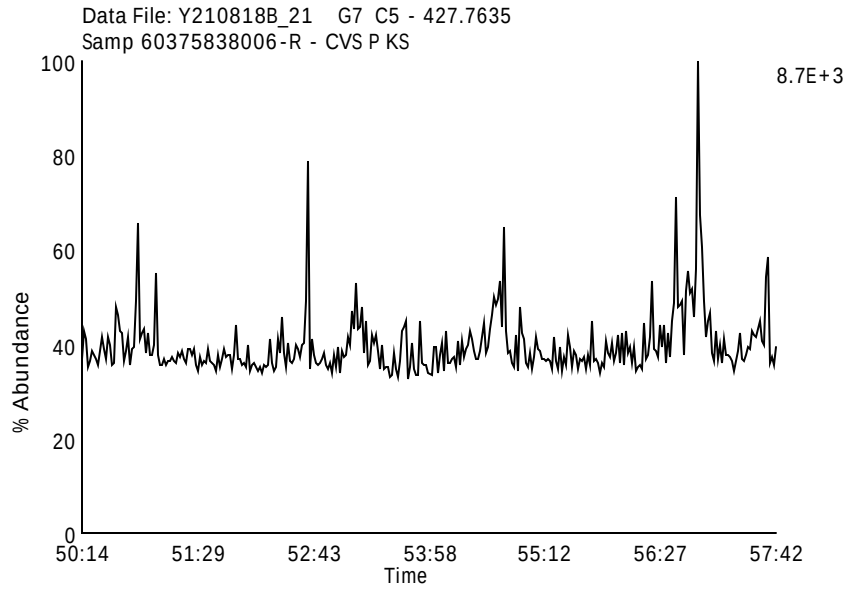


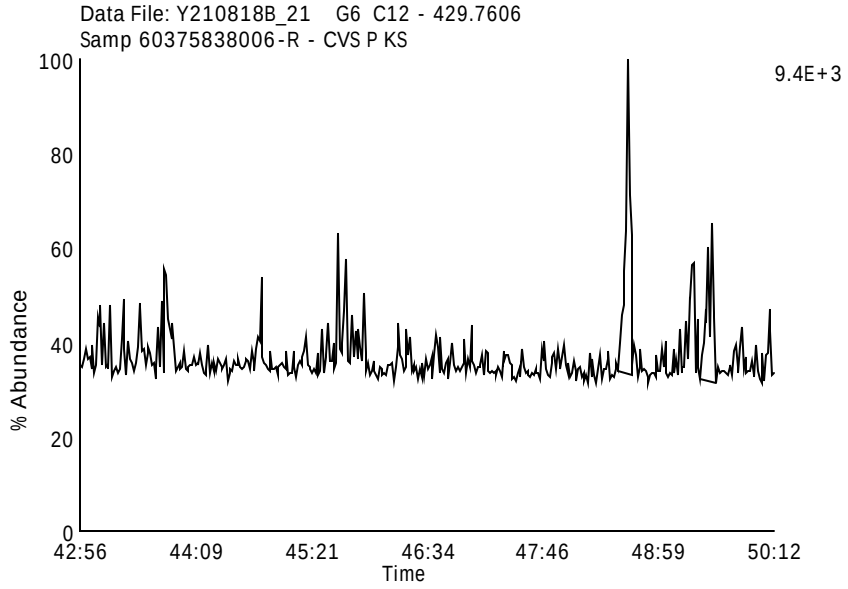


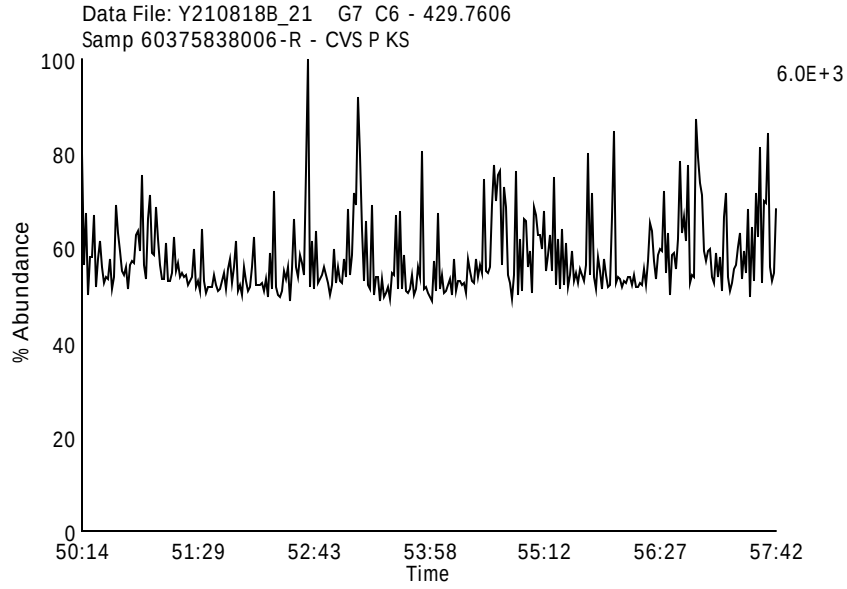
Octa Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



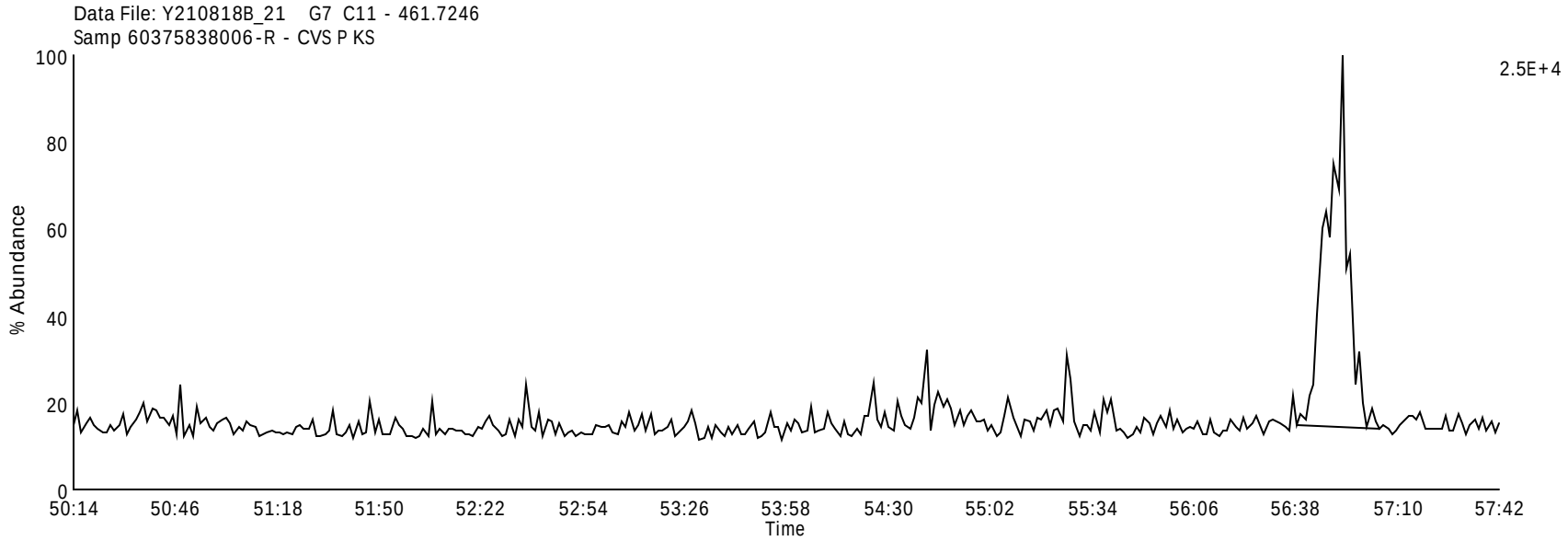


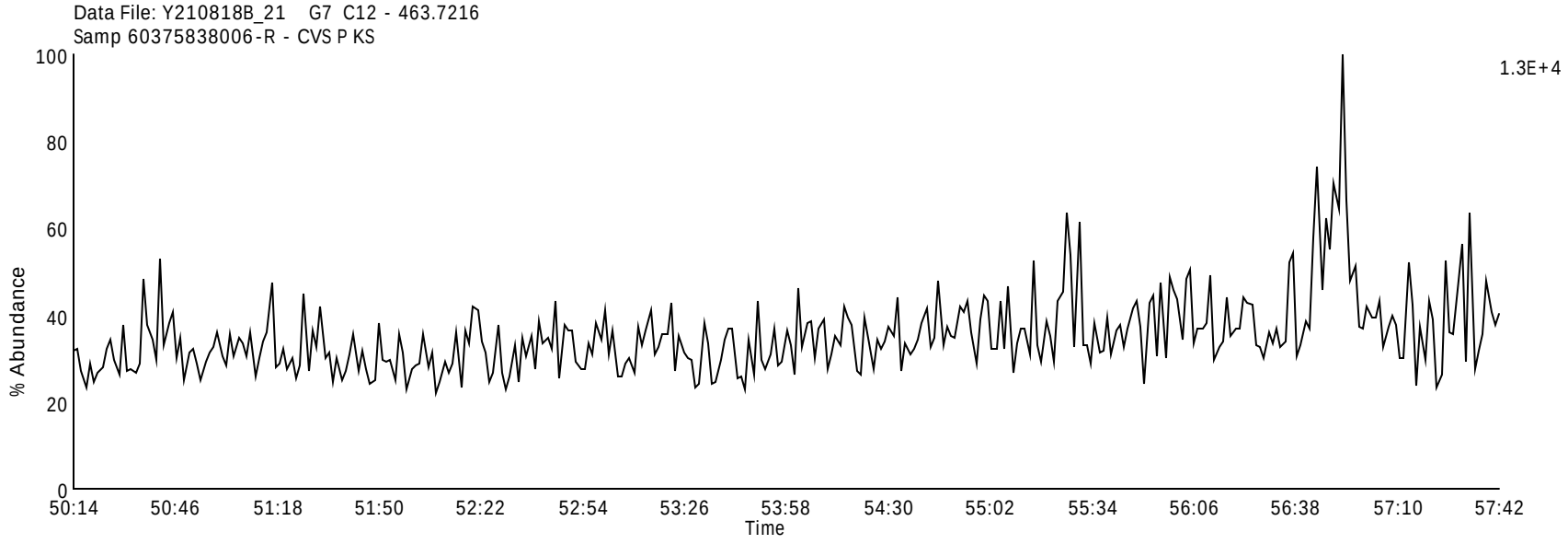




Nona Chlorinated Biphenyls

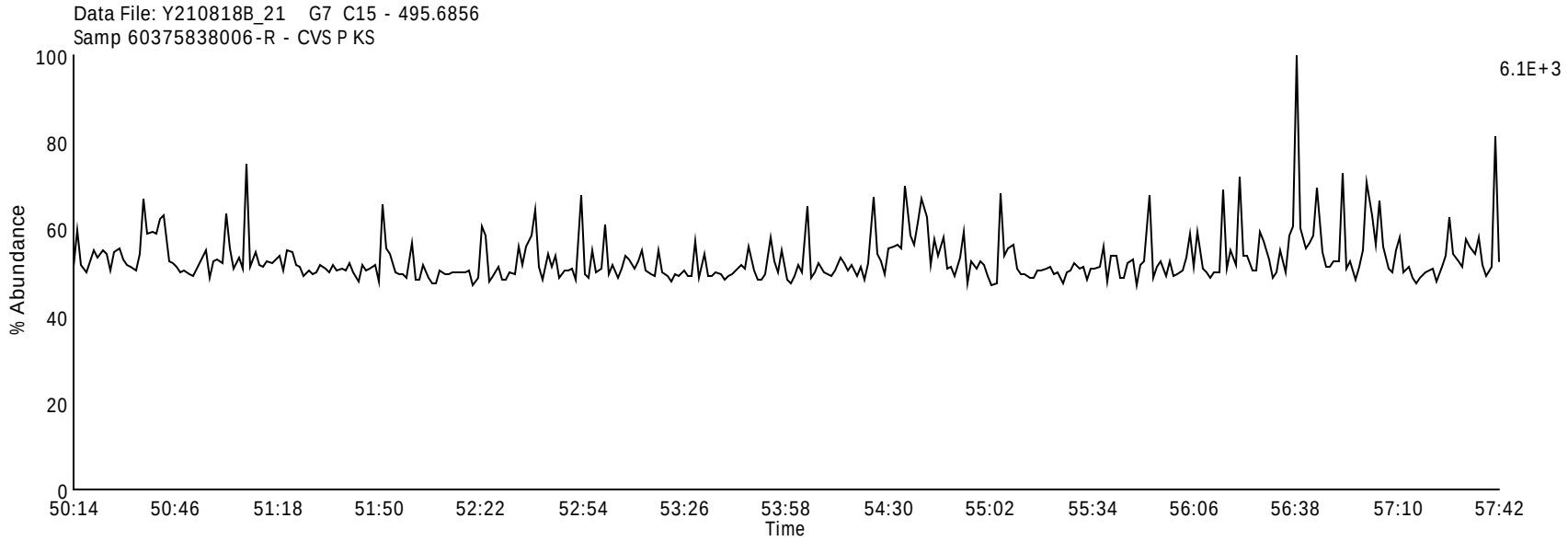
Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5

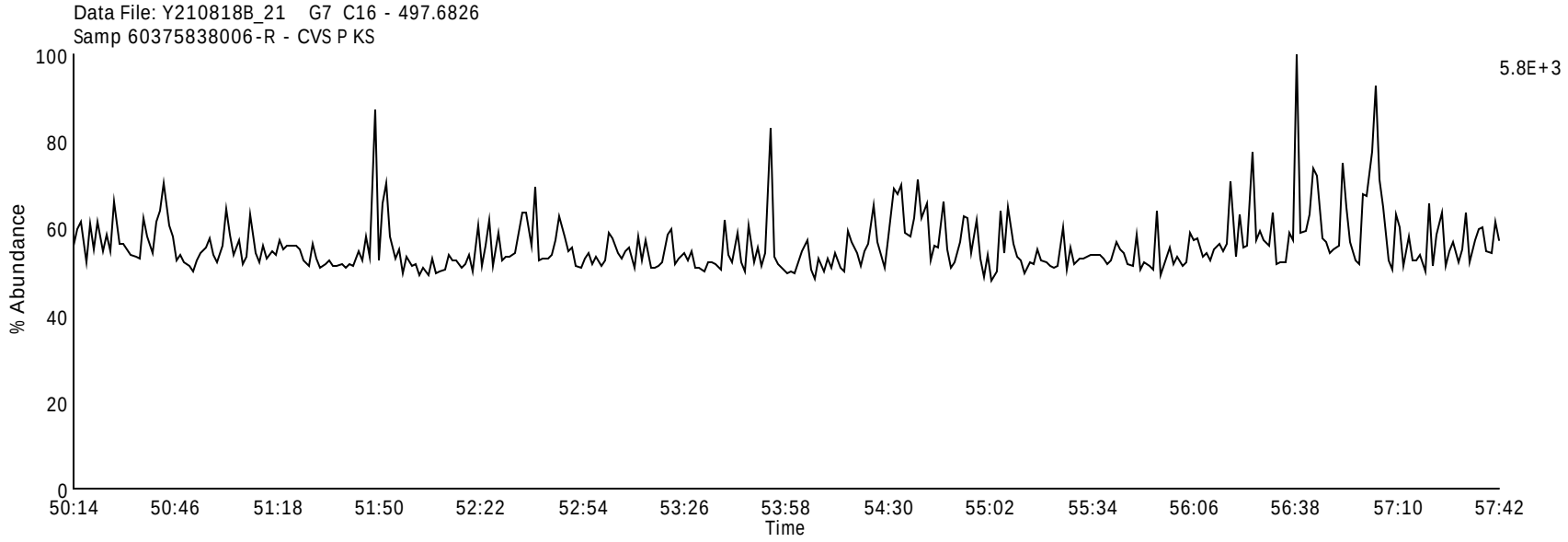




Deca Chlorinated Biphenyl

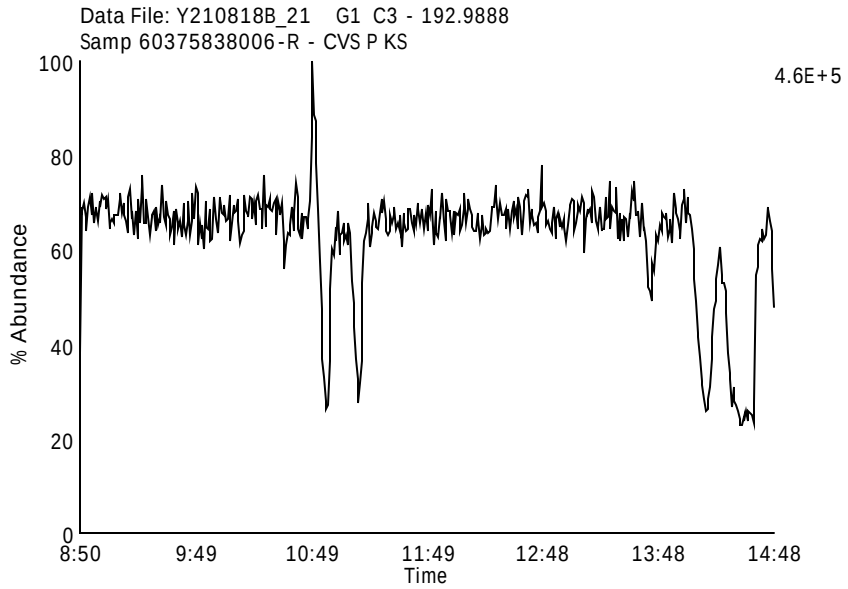
Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5

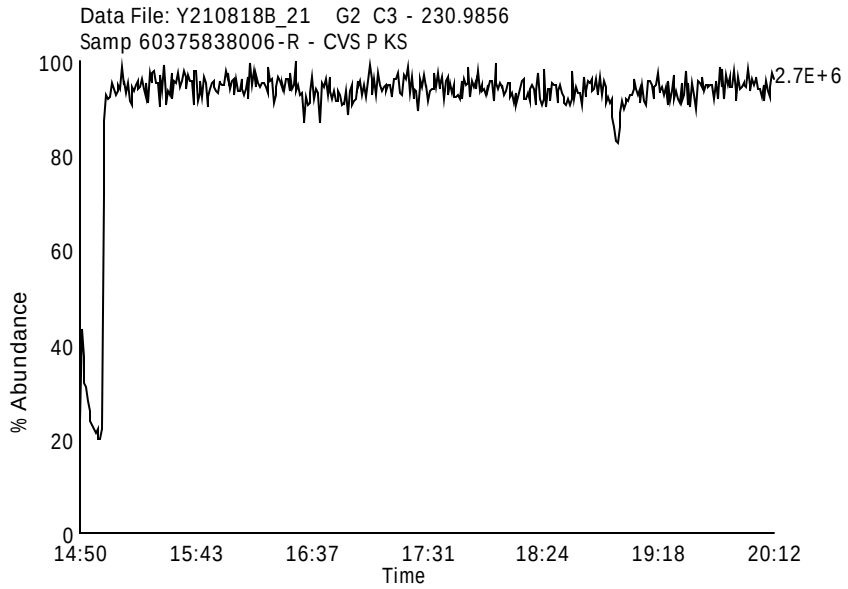


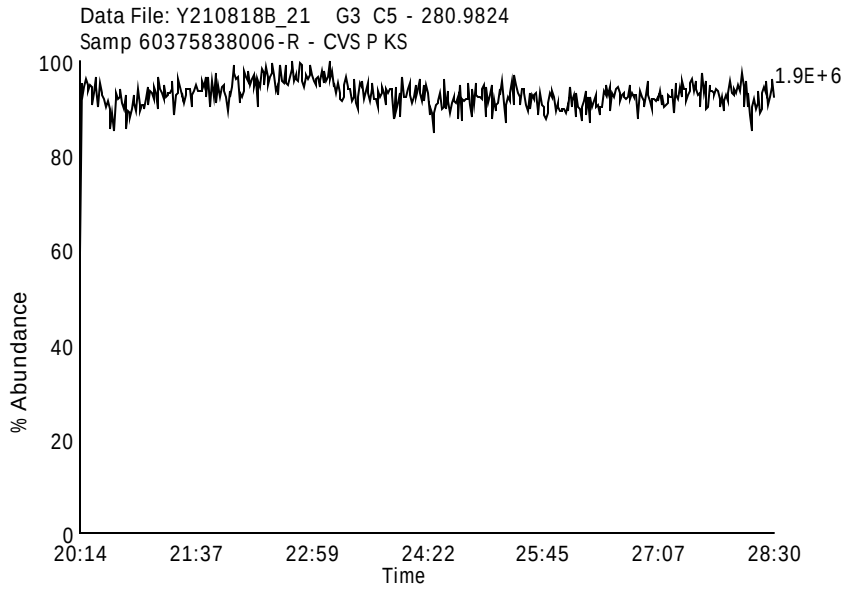


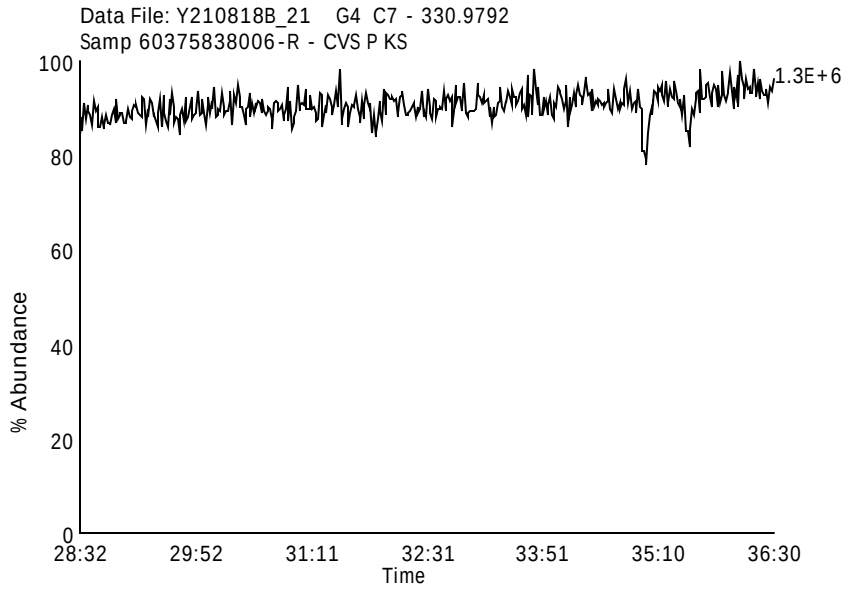
Group 1 - 4 Lock mass

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



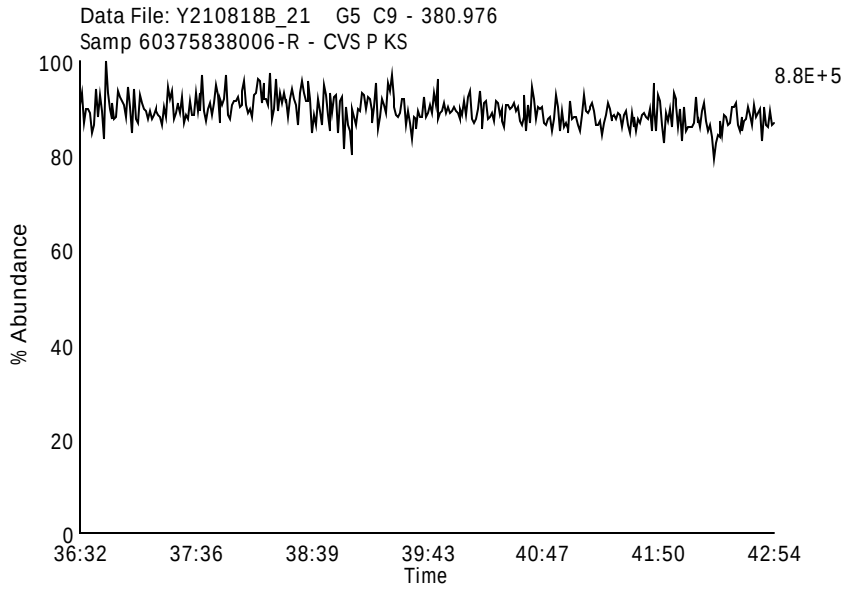


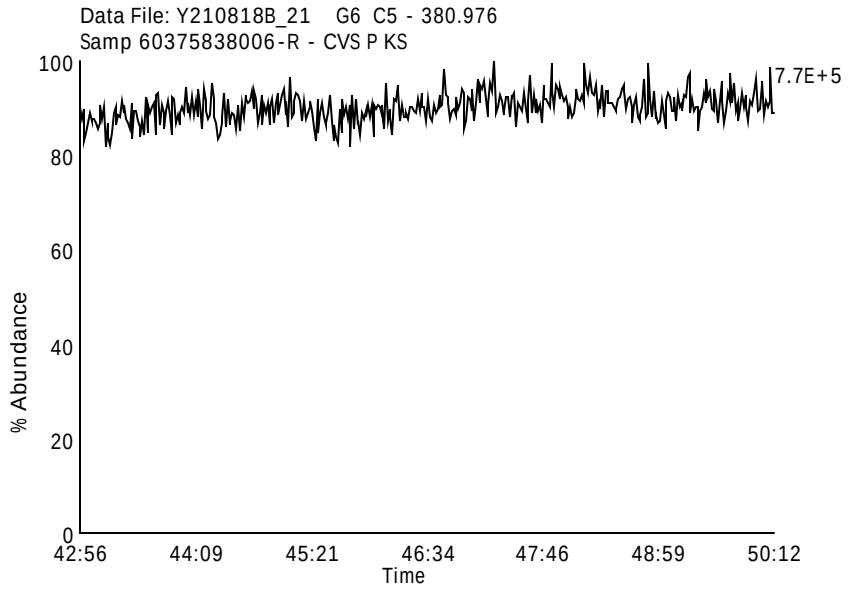


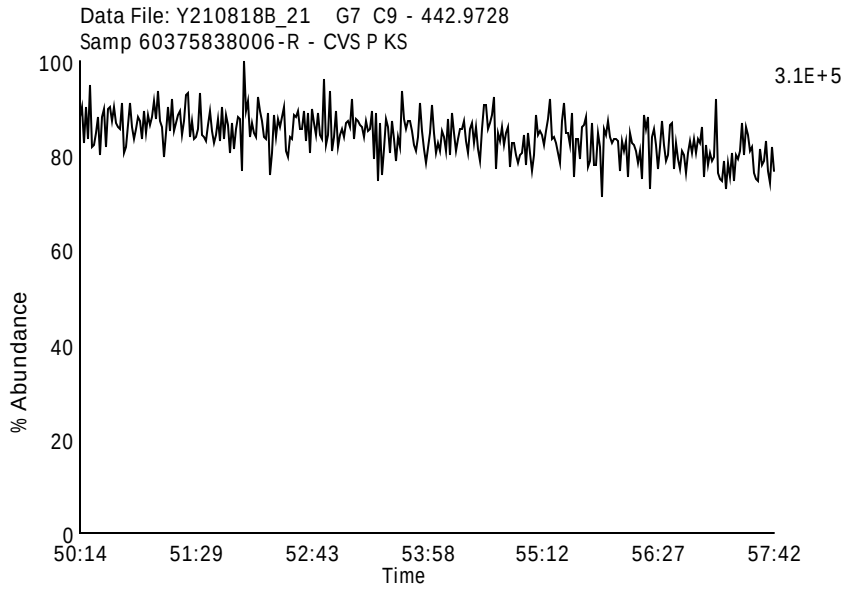


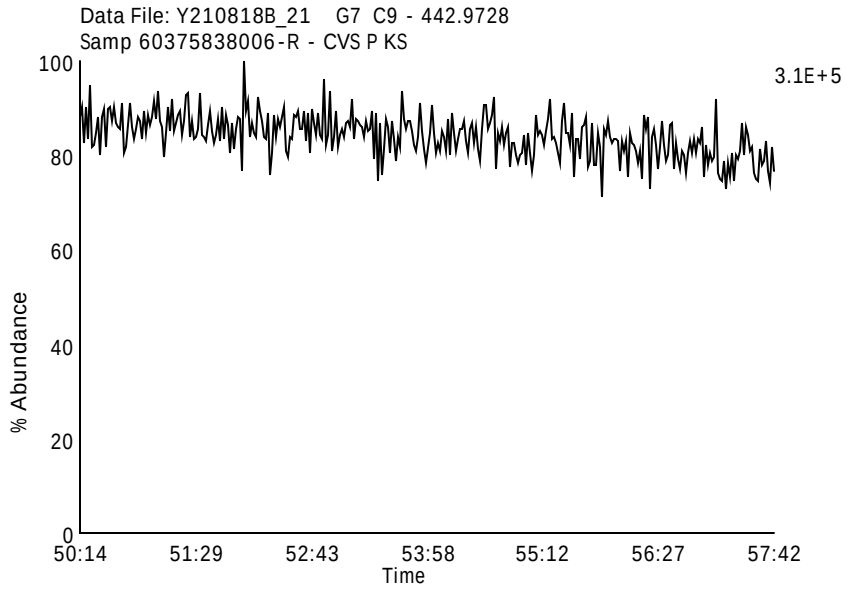
Group 5 - 7 Lock mass

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5







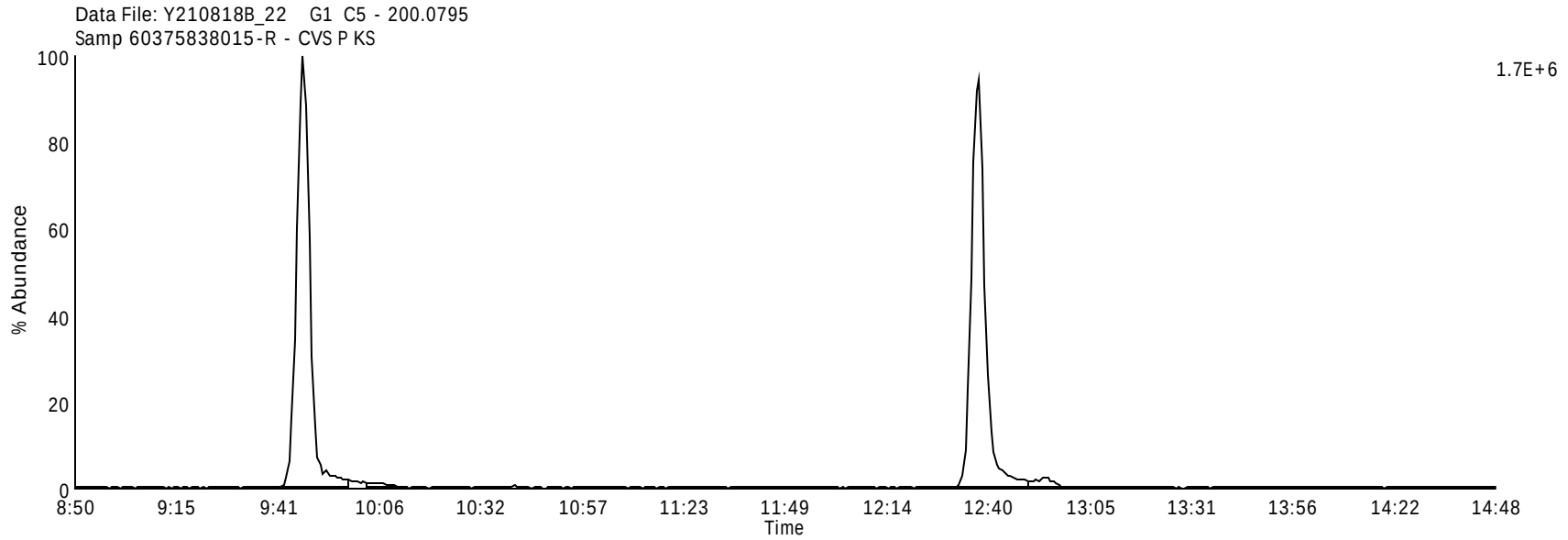


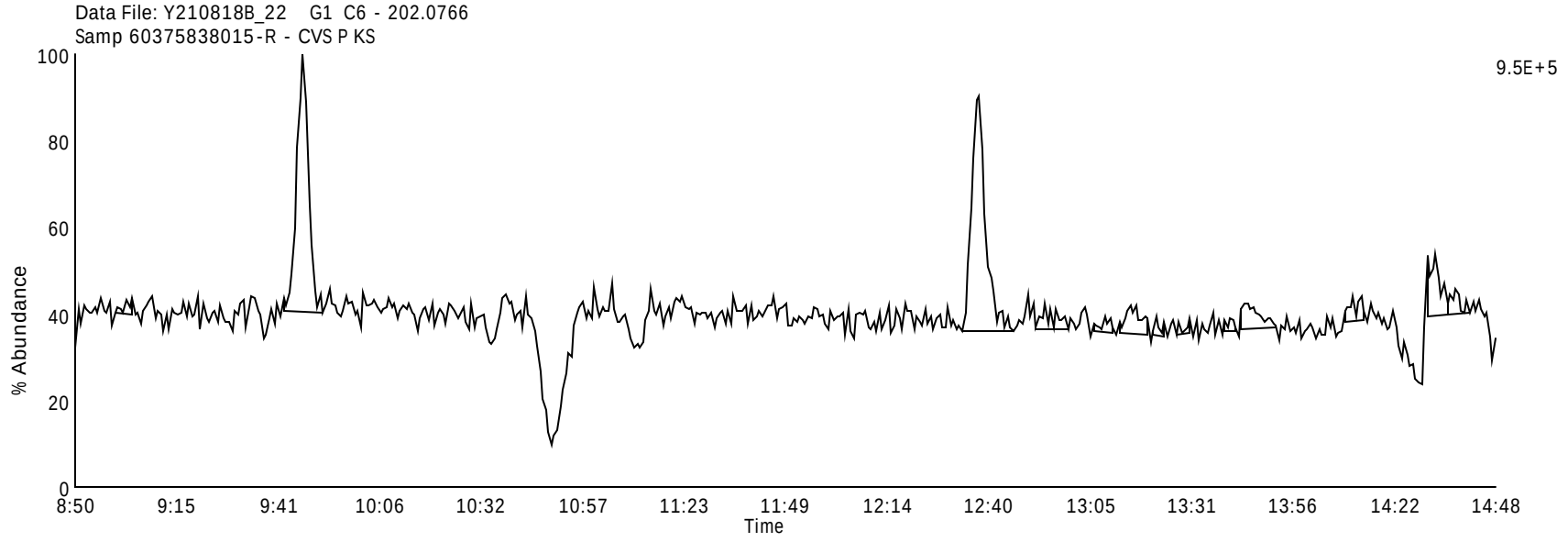
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R

Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

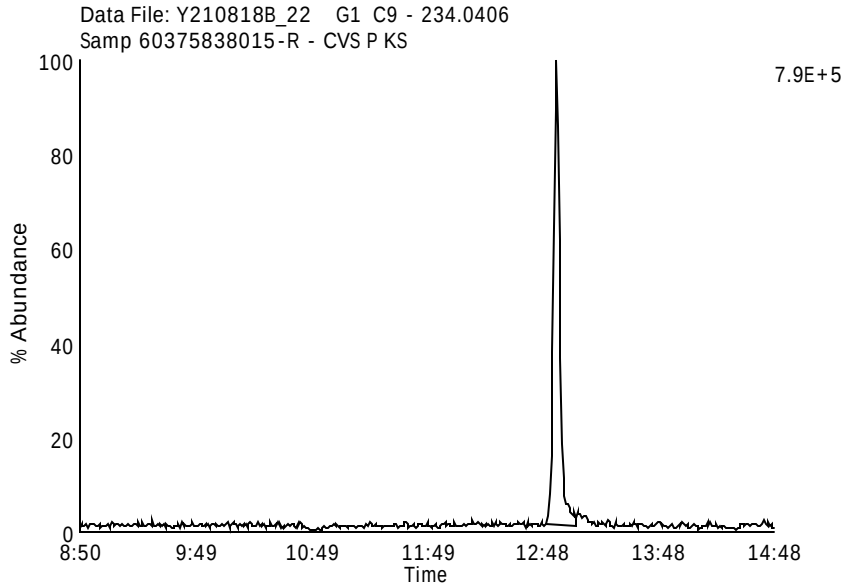
Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5

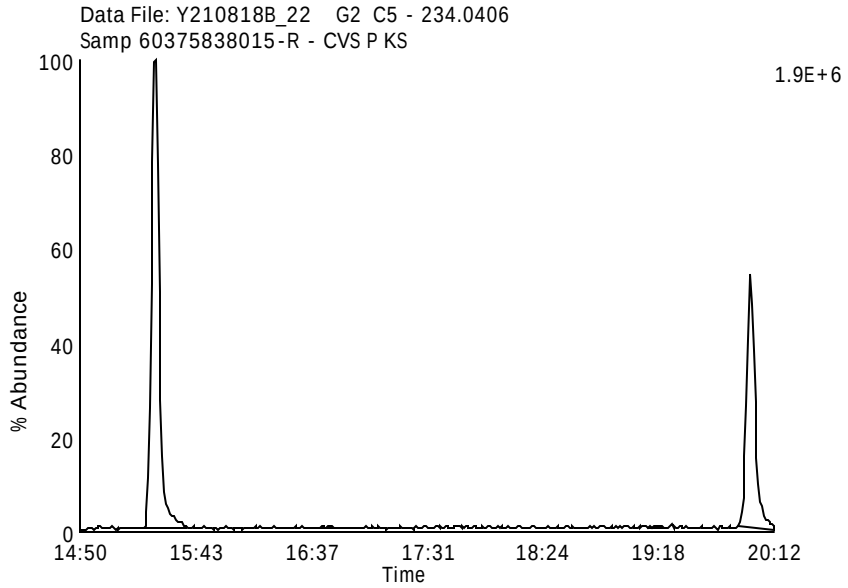


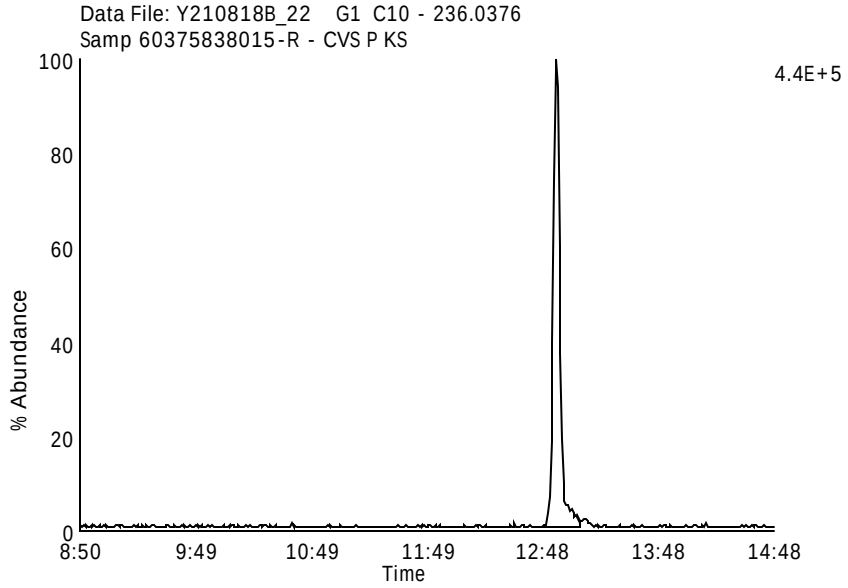


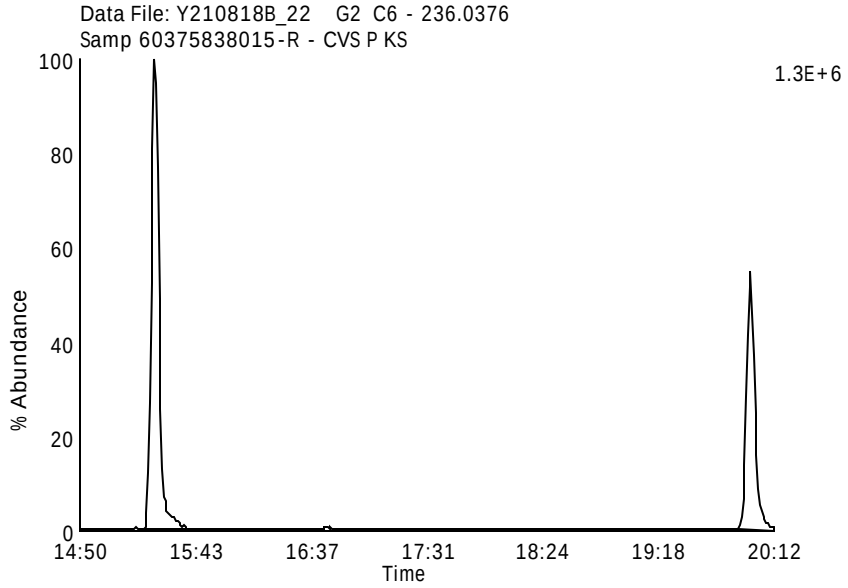
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



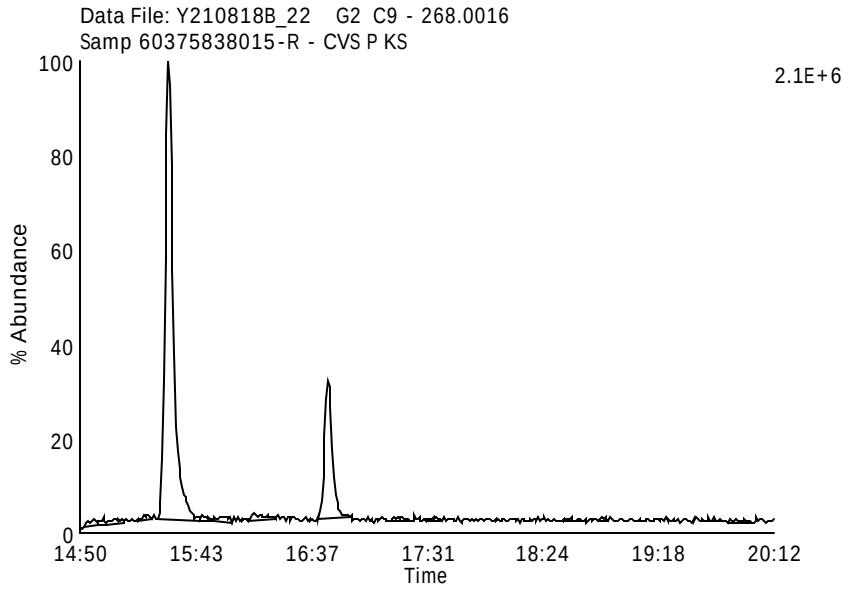


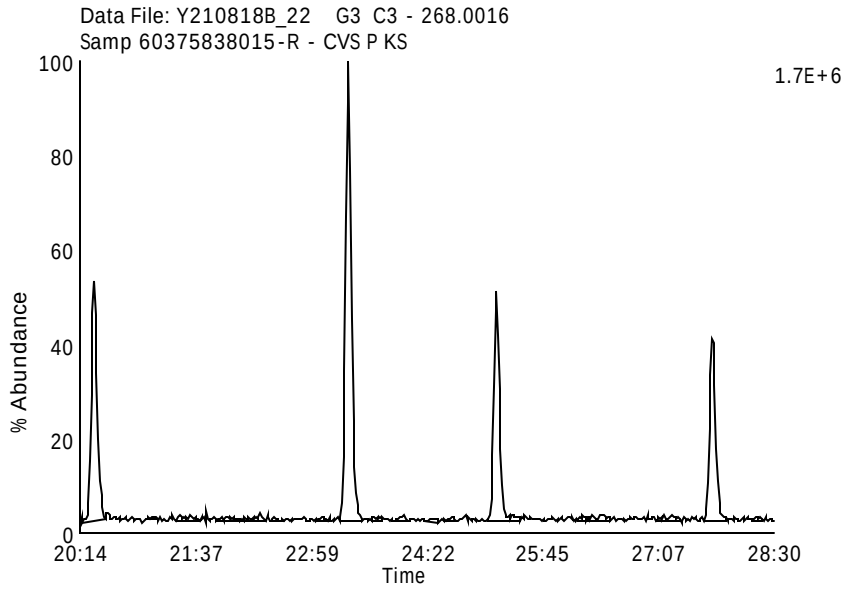


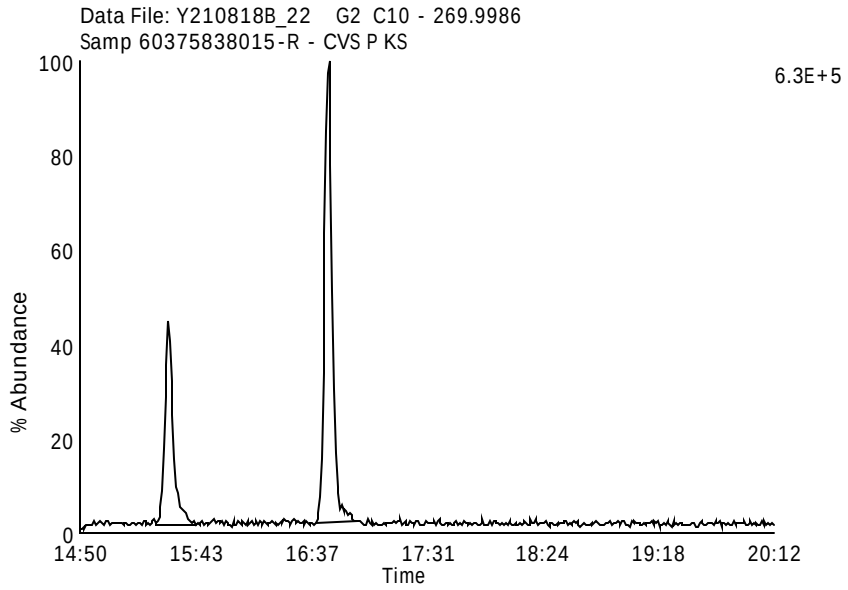


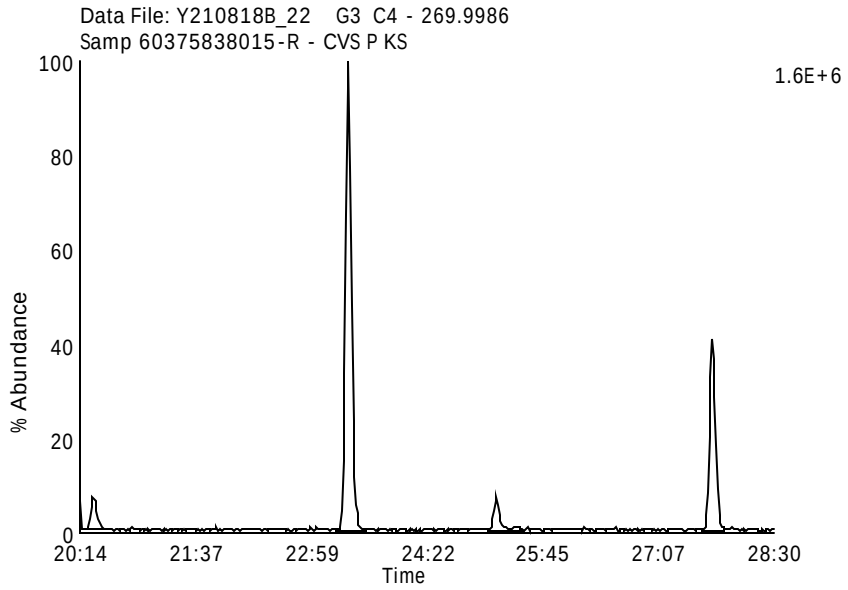
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5







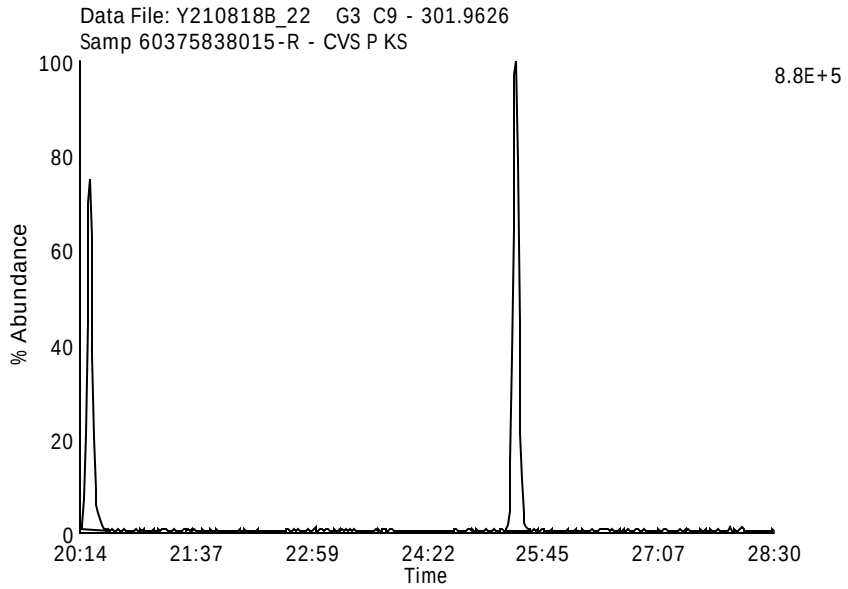


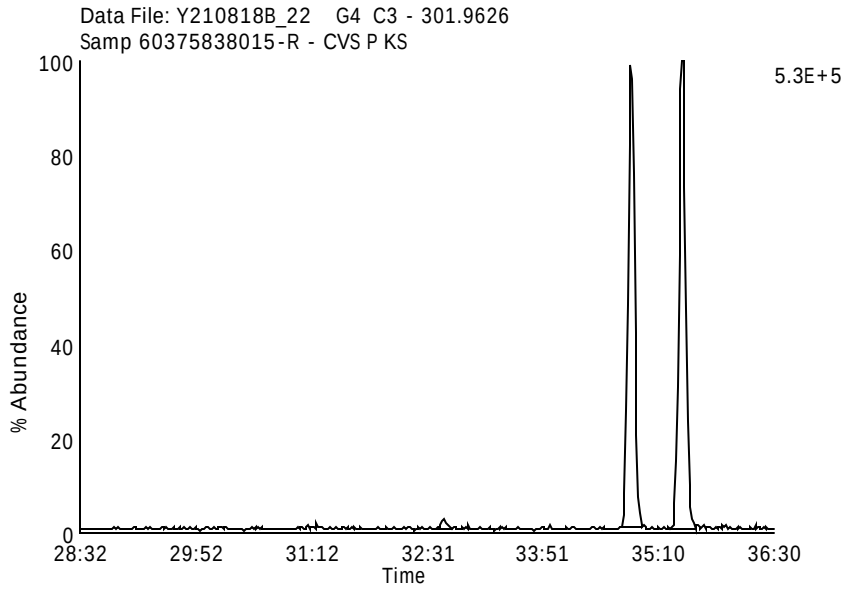
Labeled Tetra Chlorinated Biphenyls

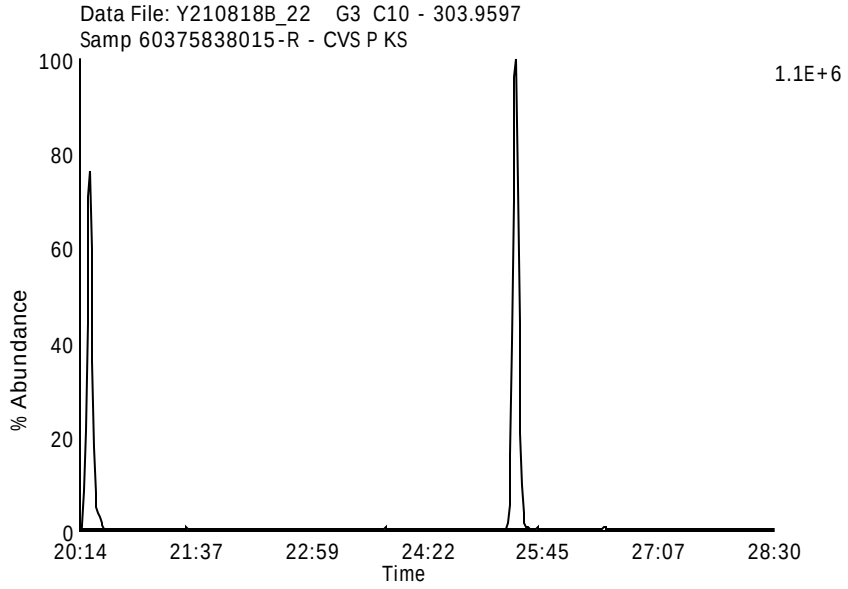
Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R

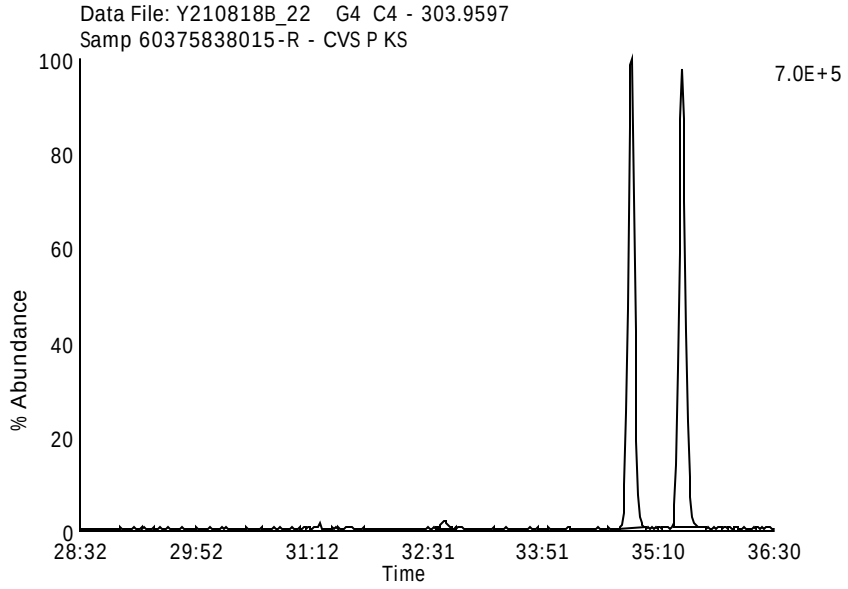
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5







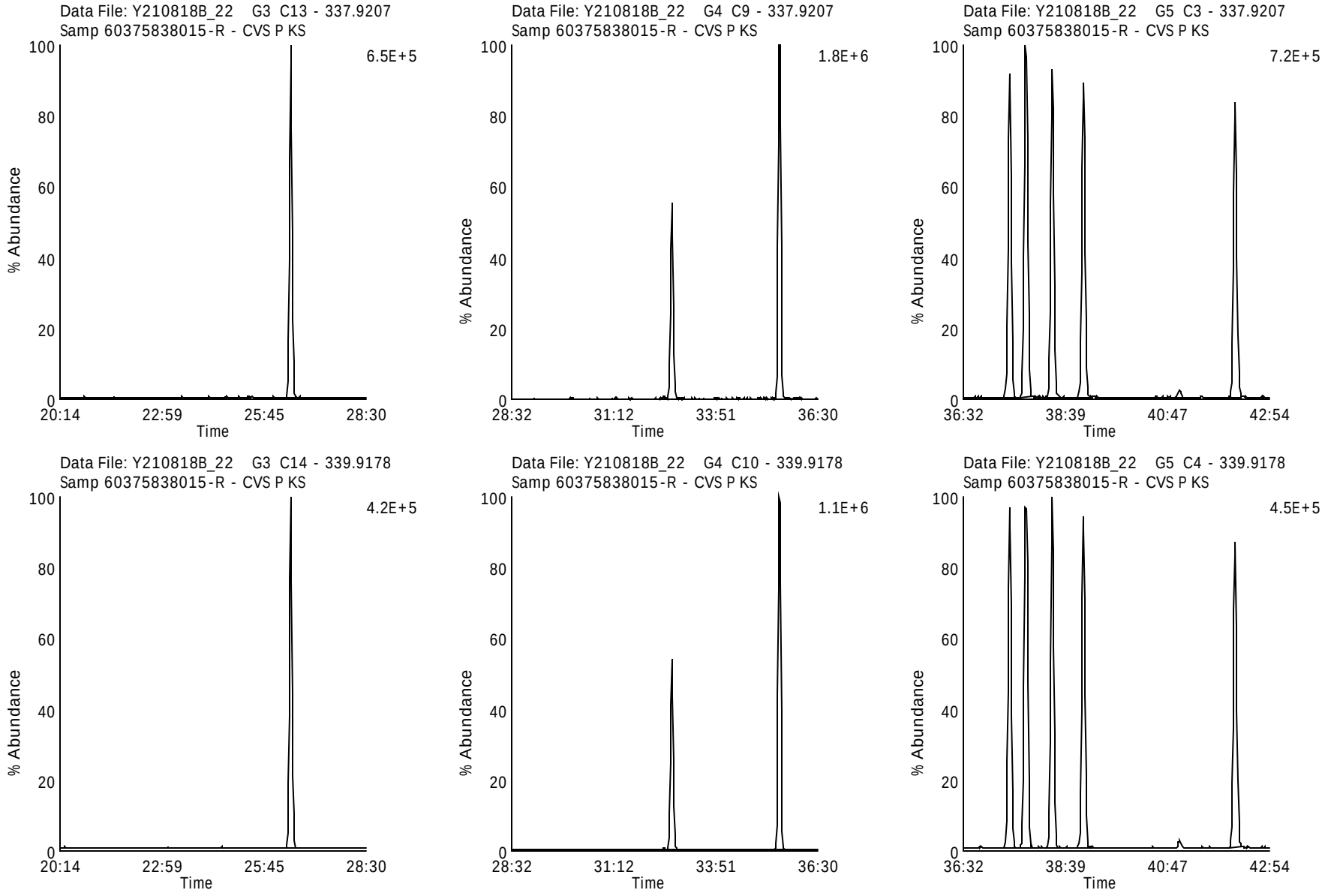


Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R

Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5

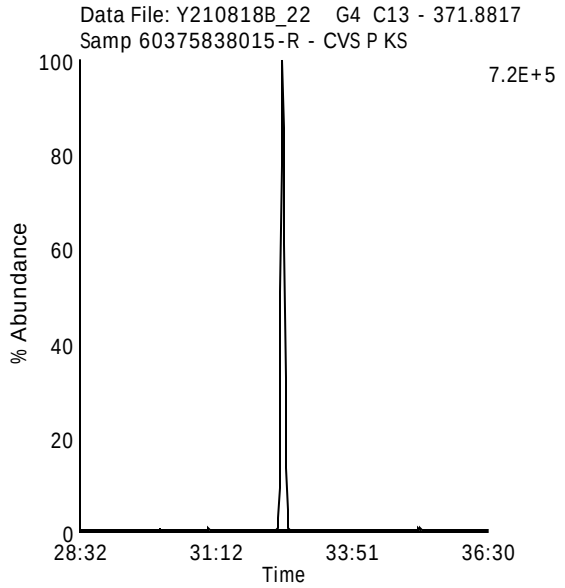


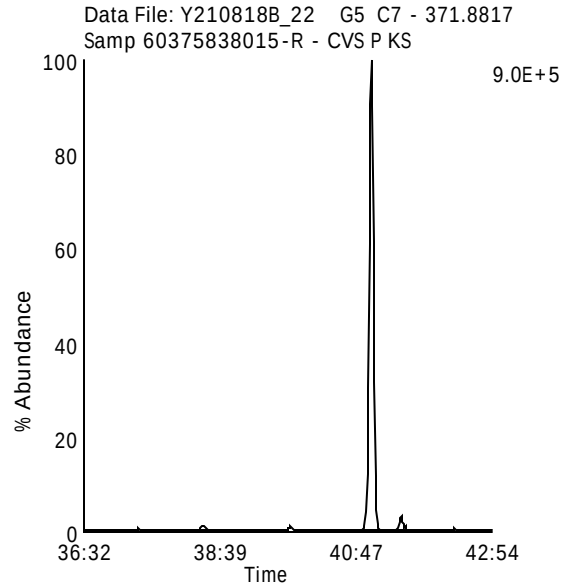
Labeled Hexa Chlorinated Biphenyls

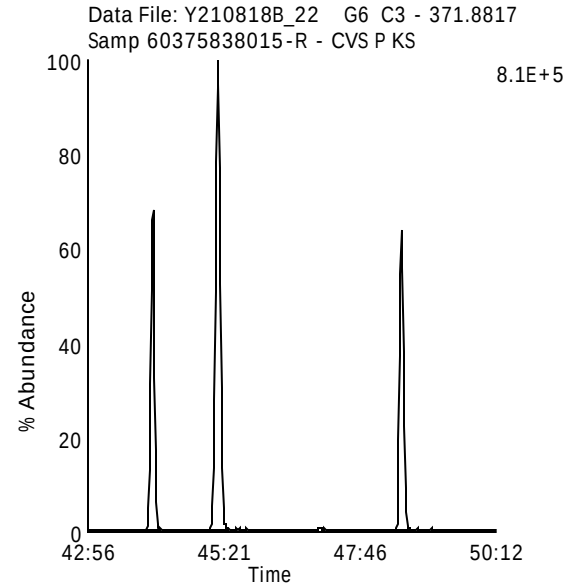
Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R

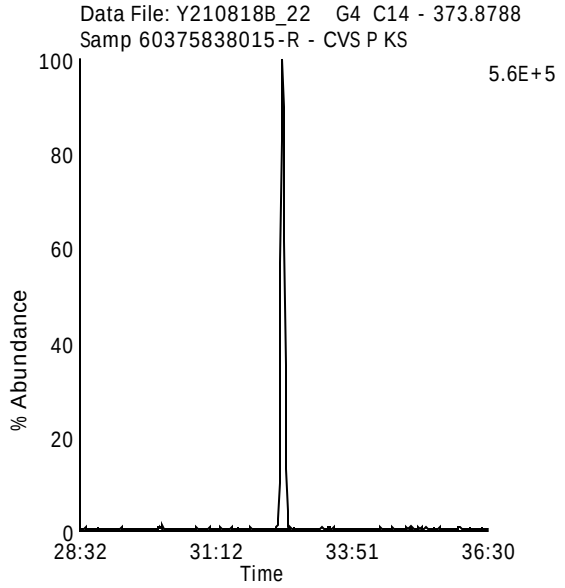
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

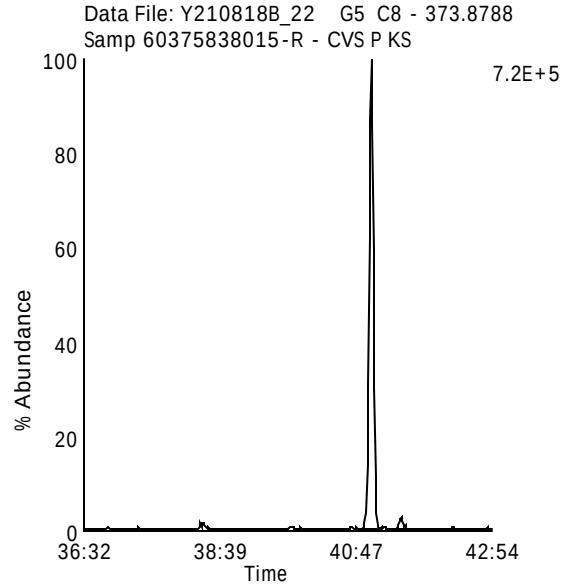
Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5

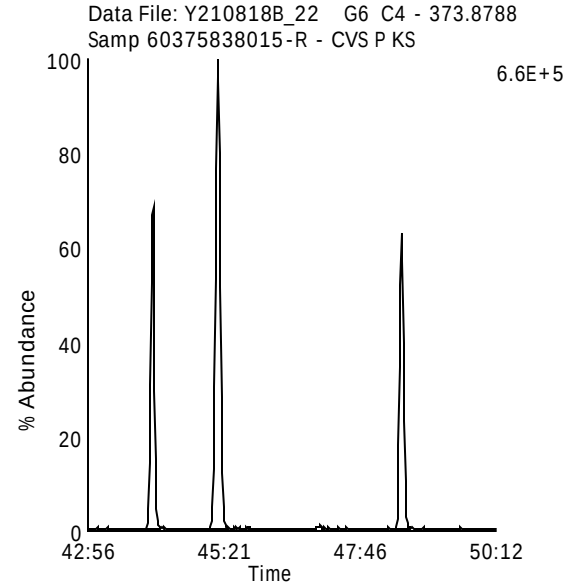






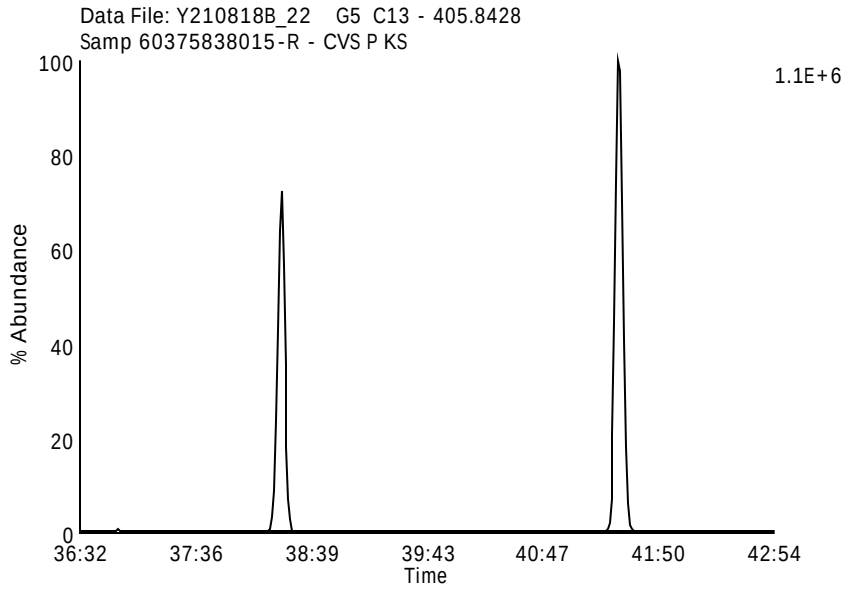


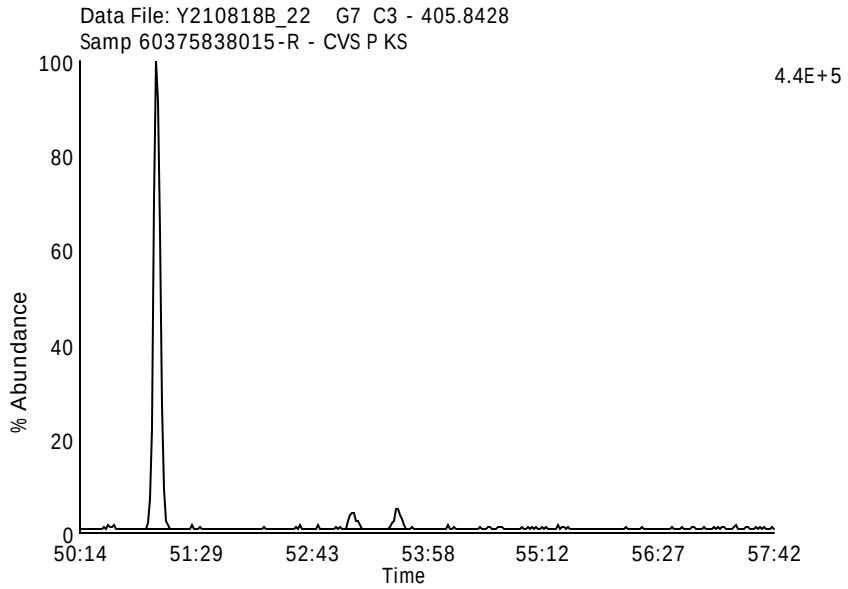


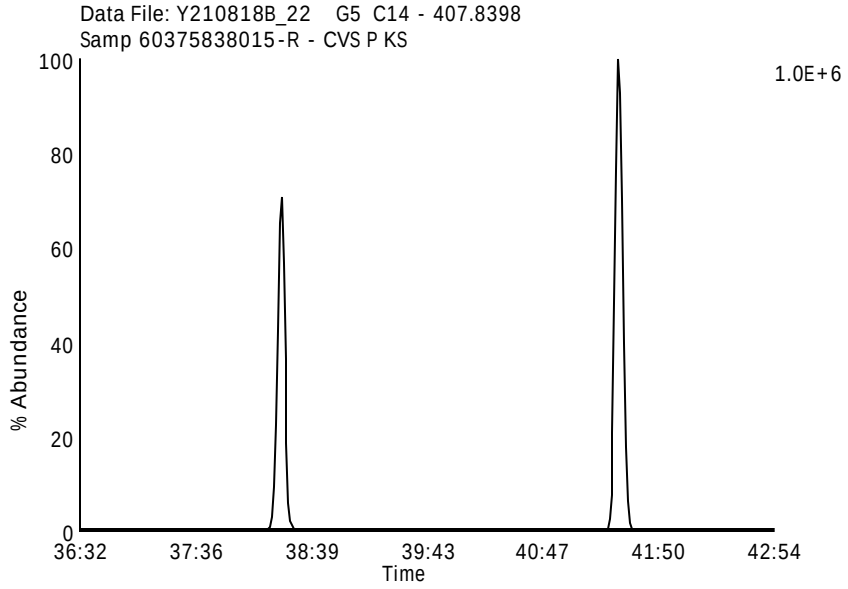


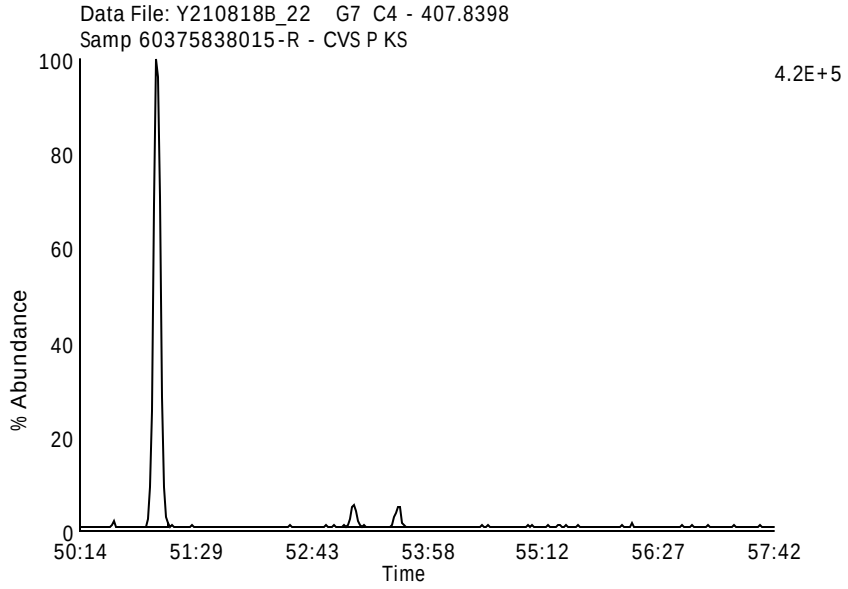
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



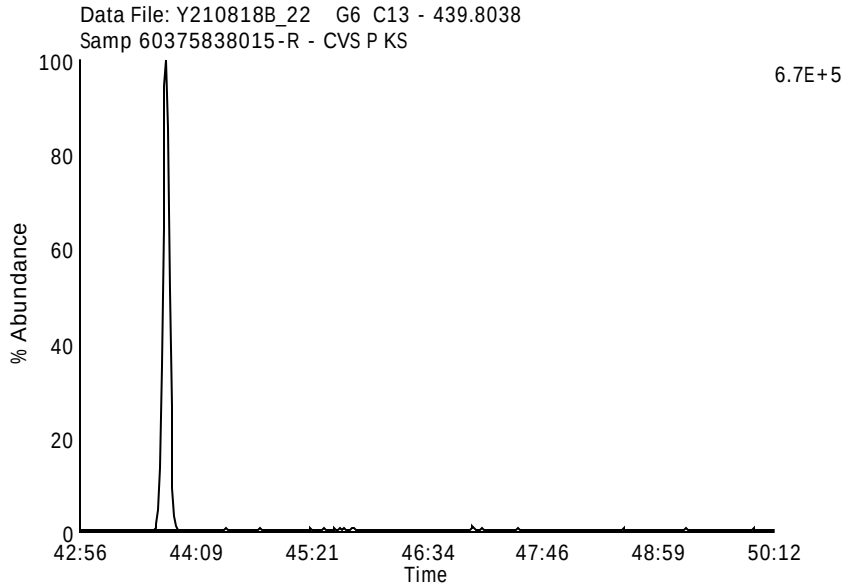


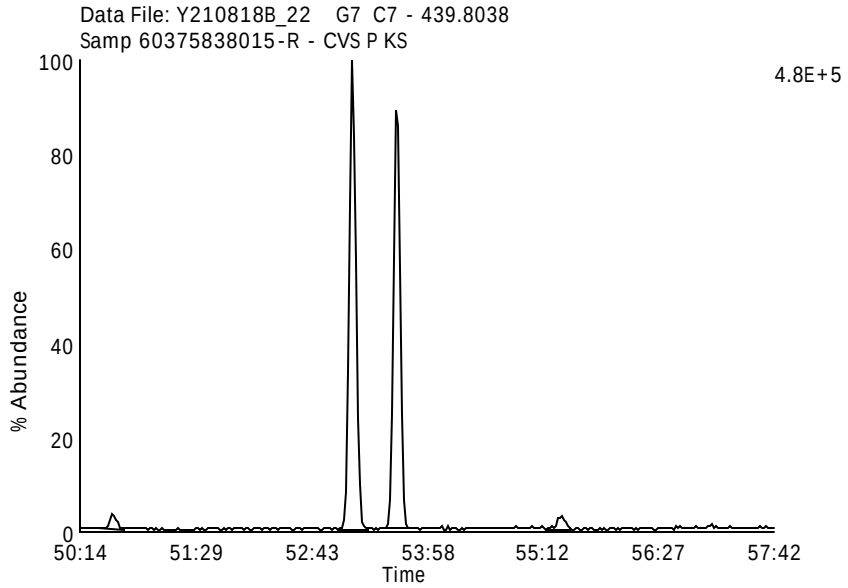


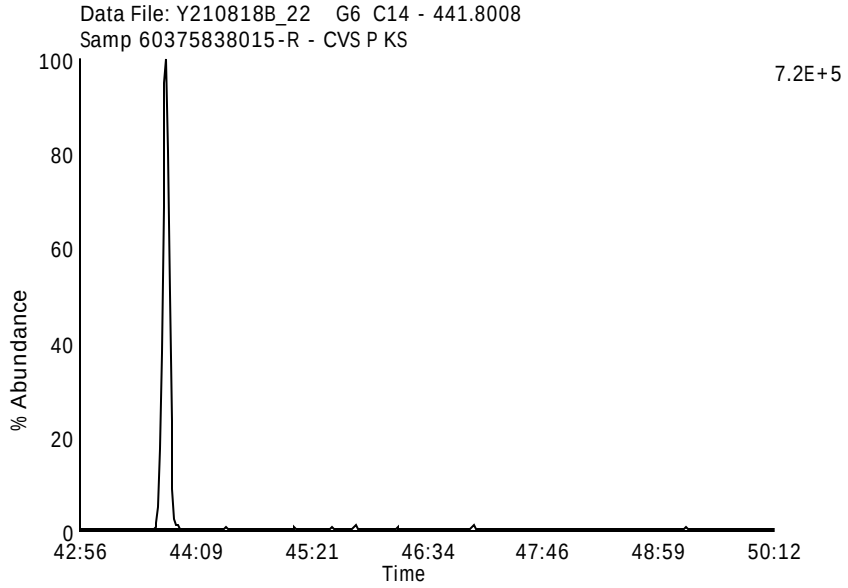


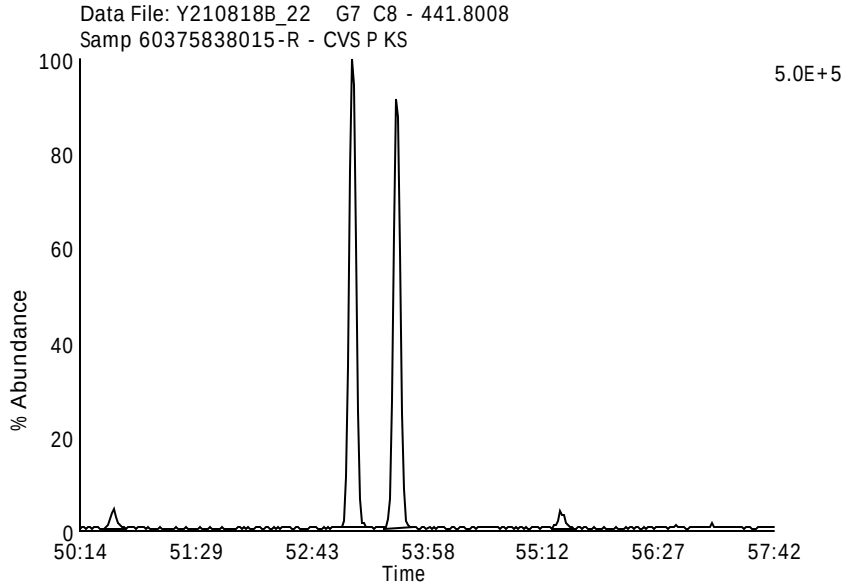
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



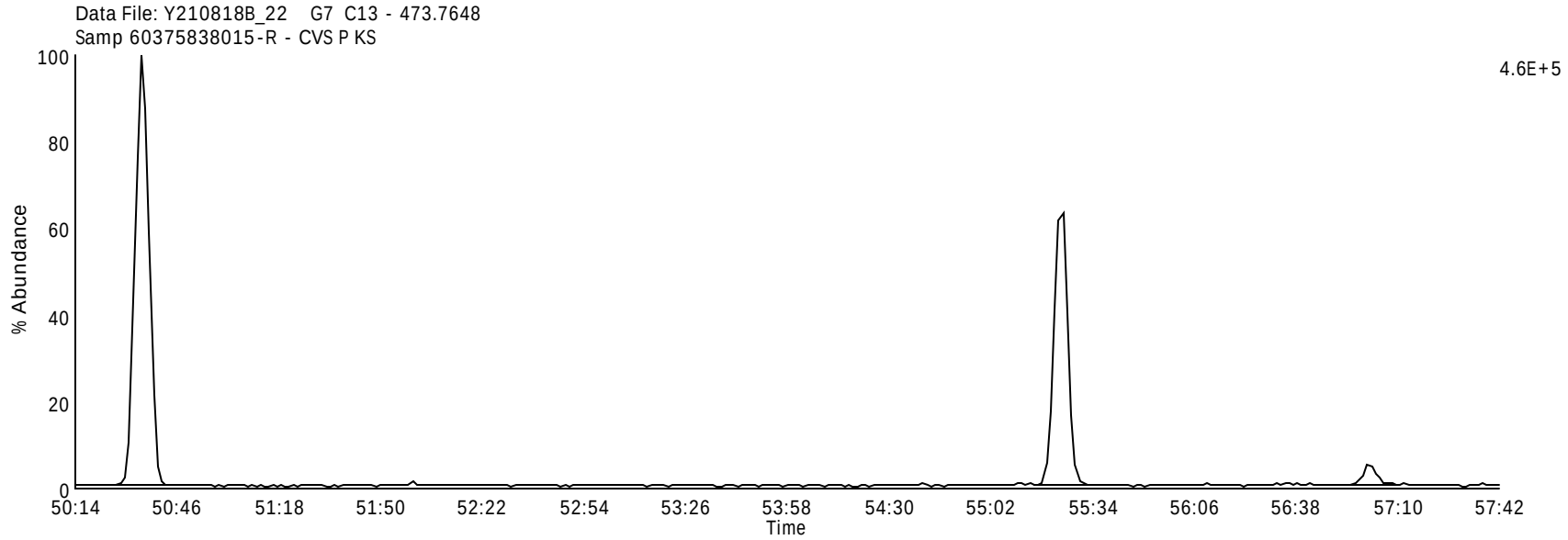


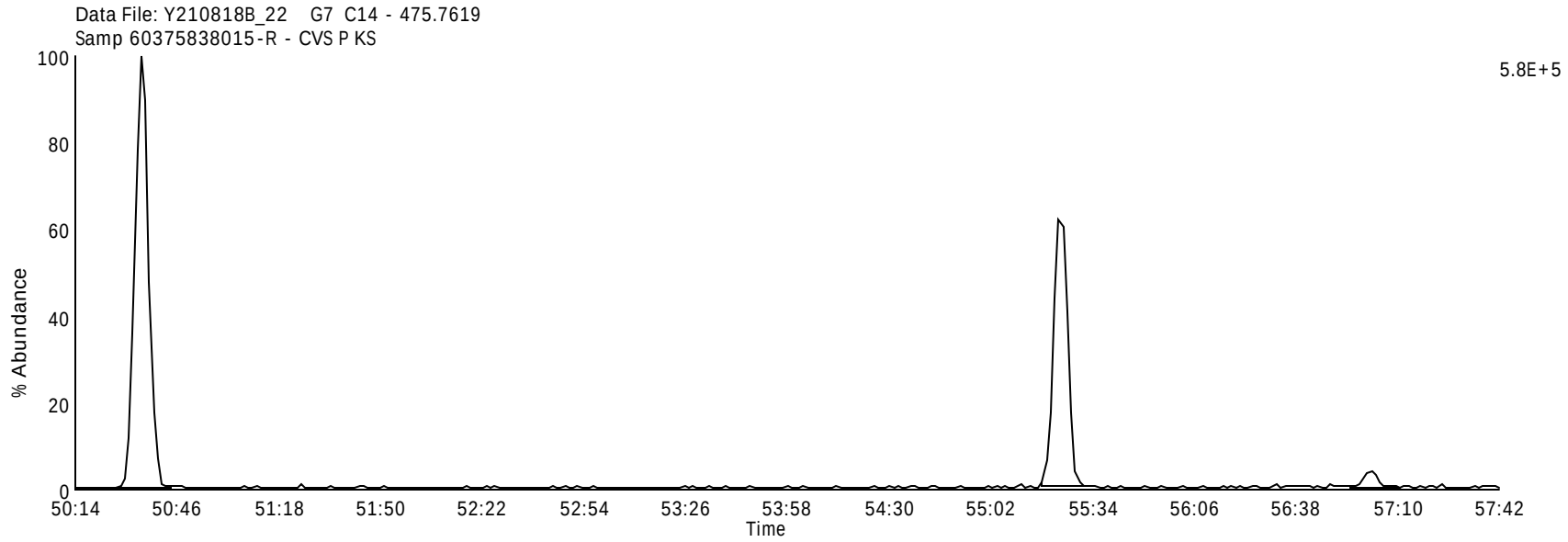




Labeled Nona Chlorinated Biphenyls

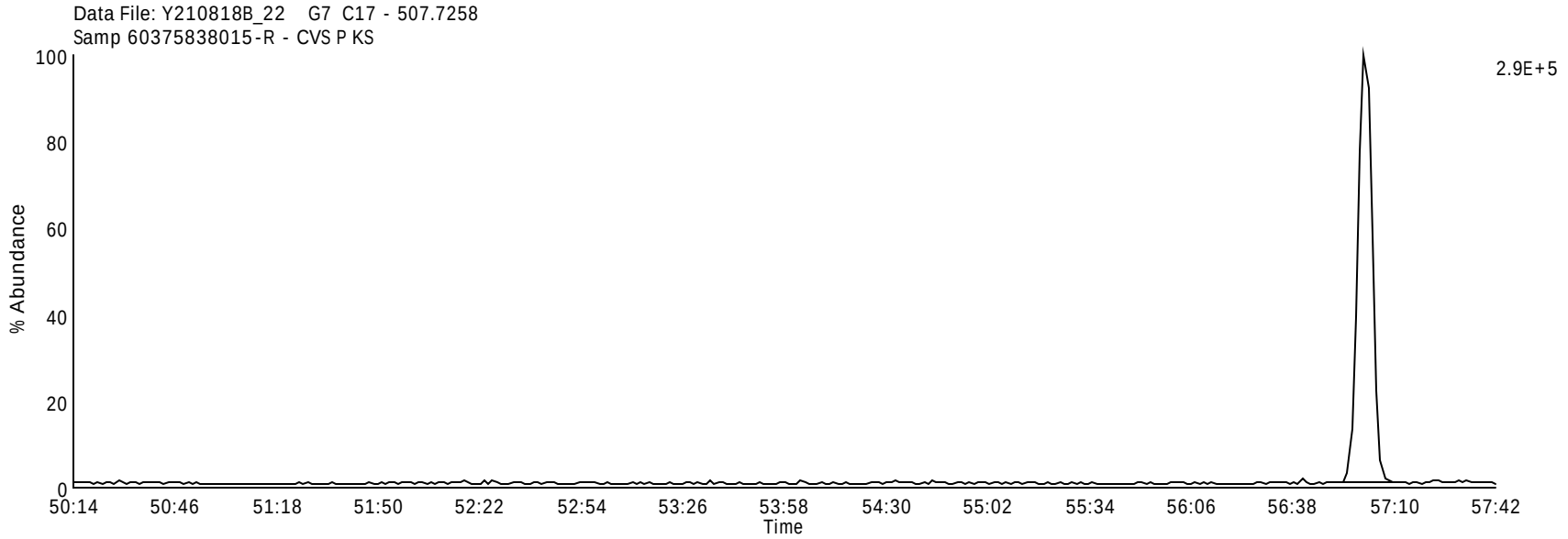
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

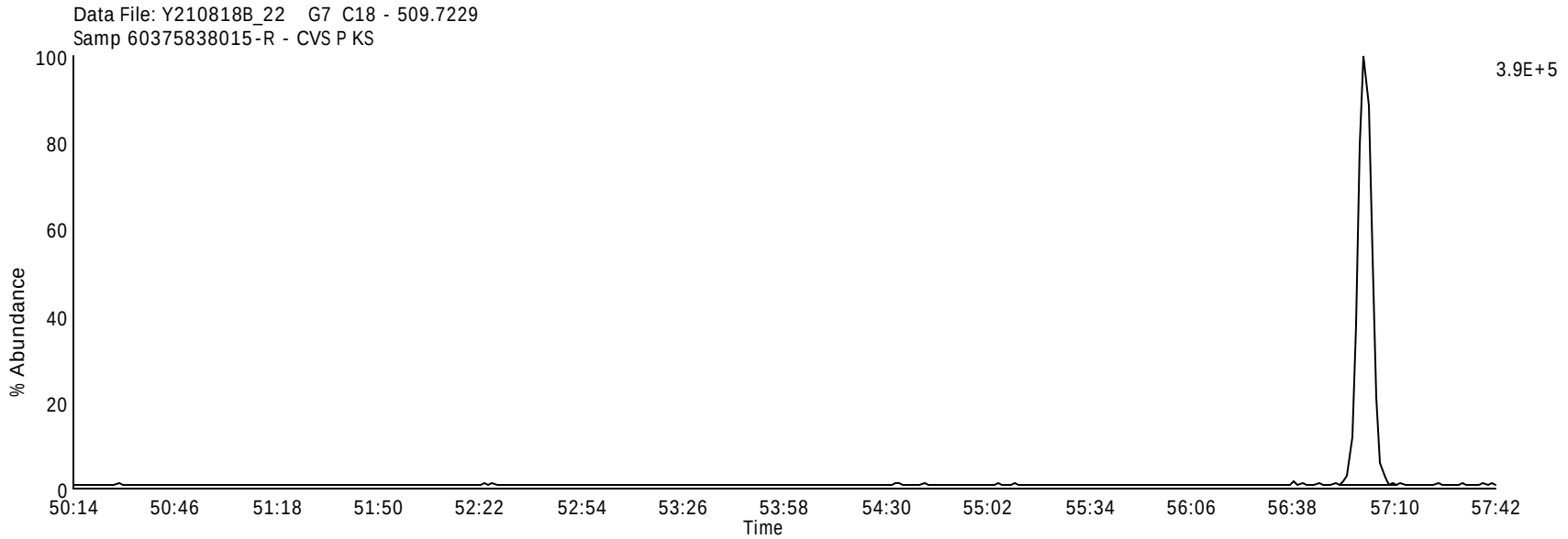




Labeled Deca Chlorinated Biphenyl

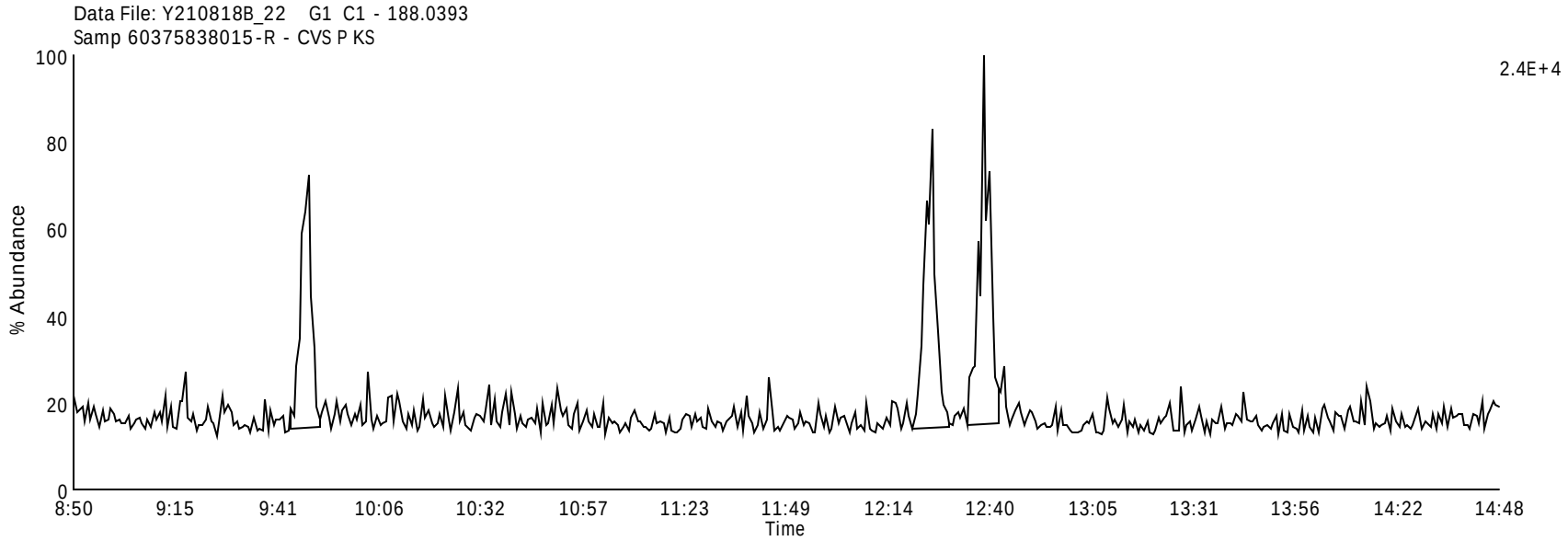
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

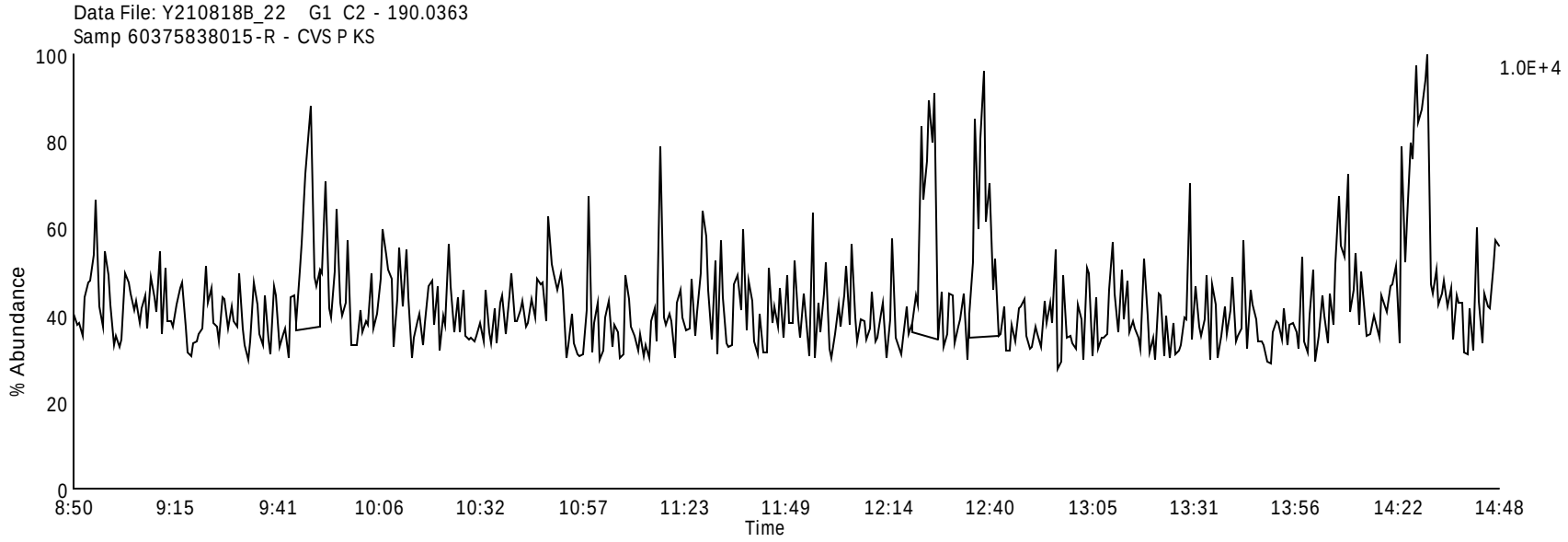




Mono Chlorinated Biphenyls

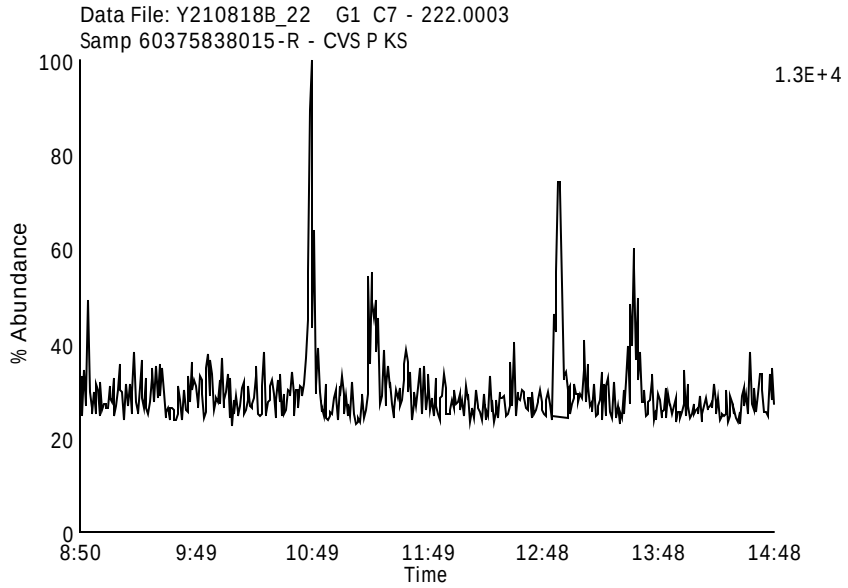
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

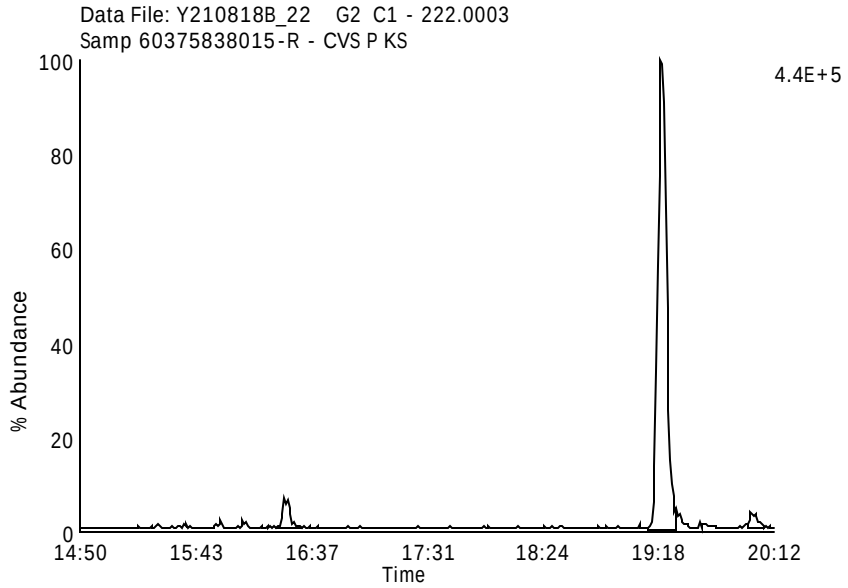


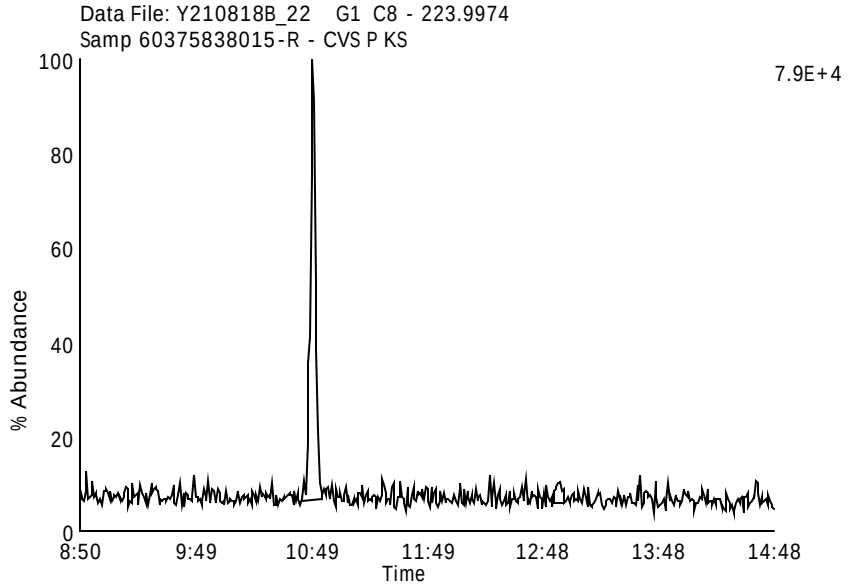


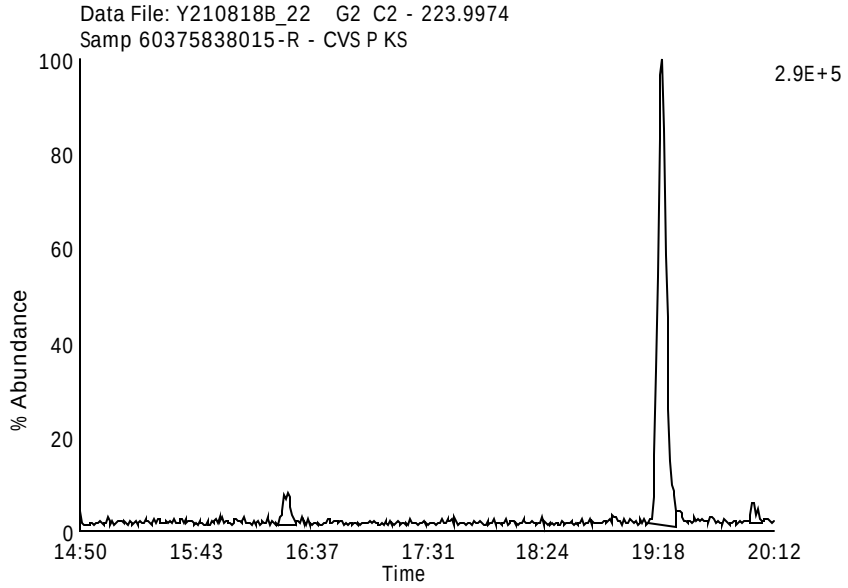
Di Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



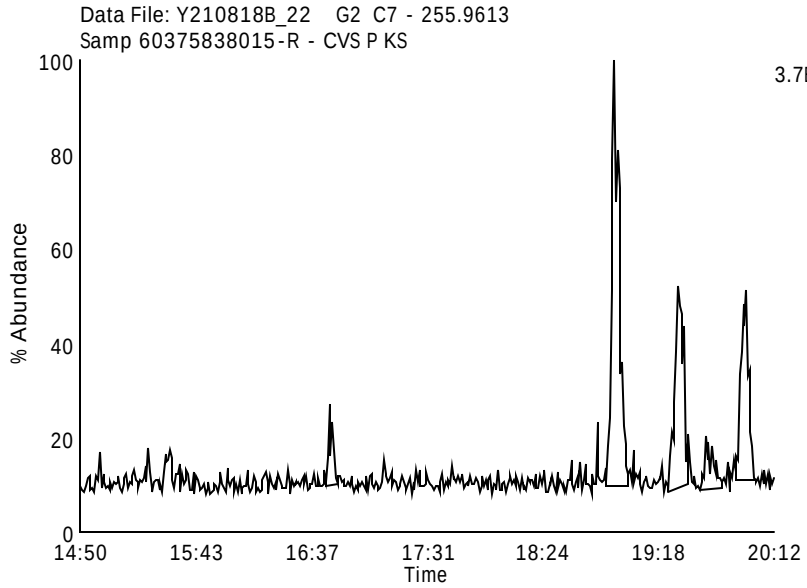


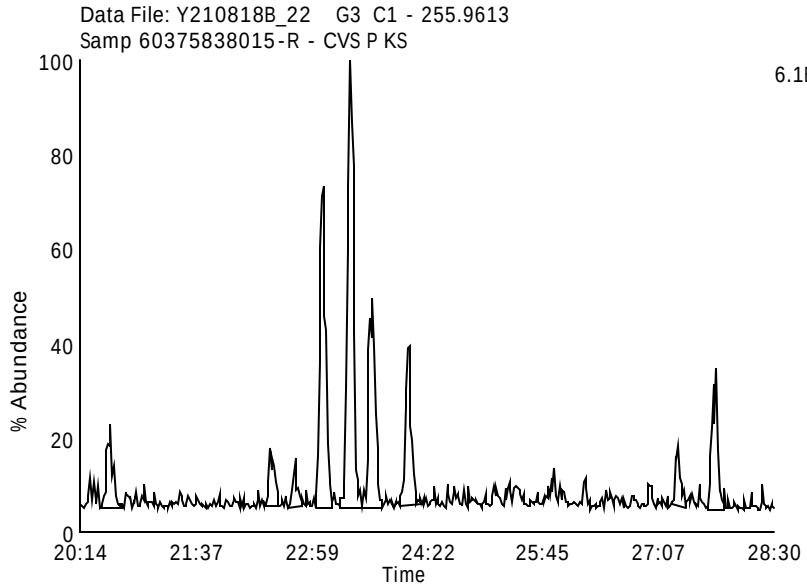


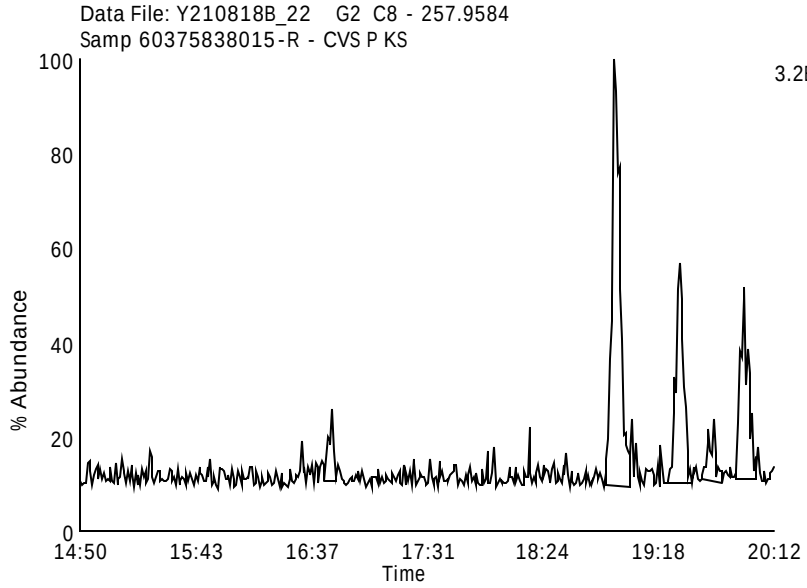


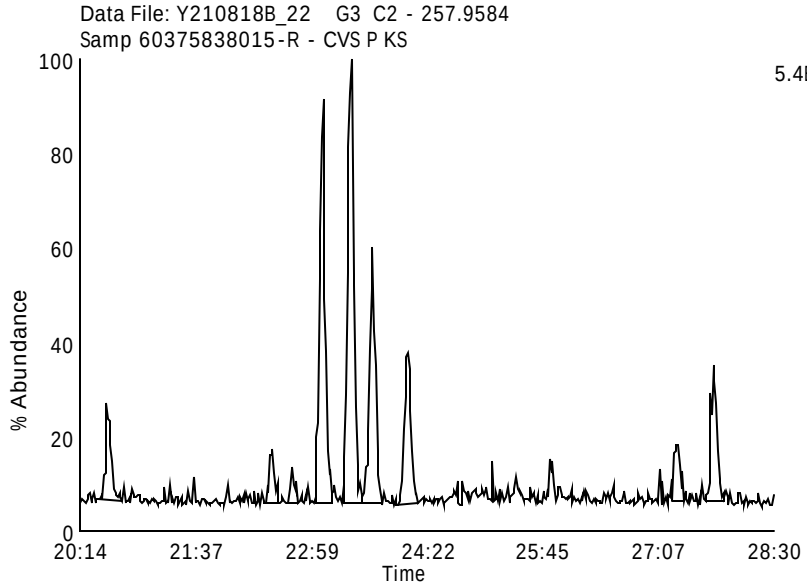
Tri Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



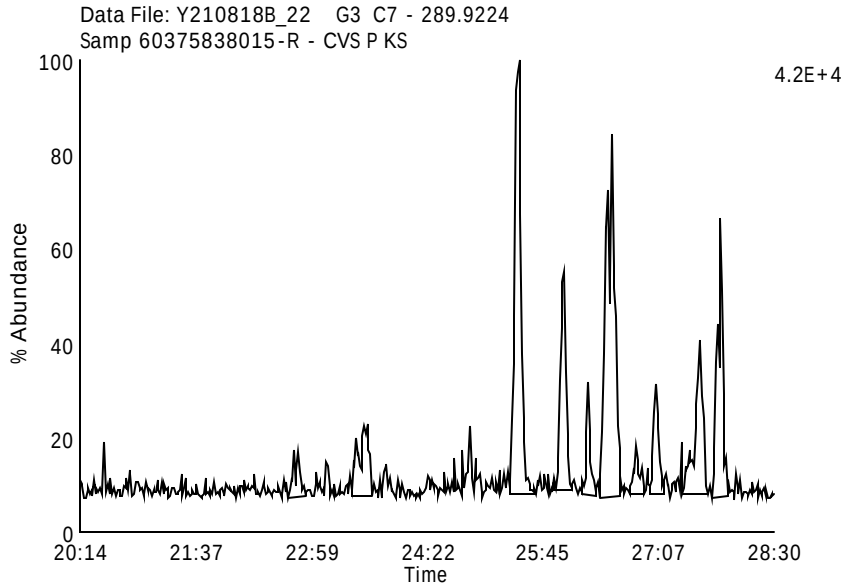


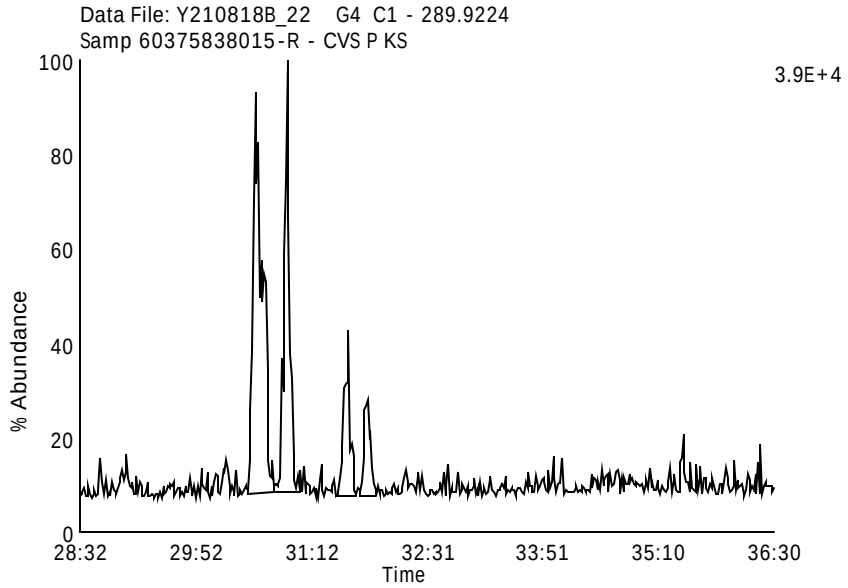


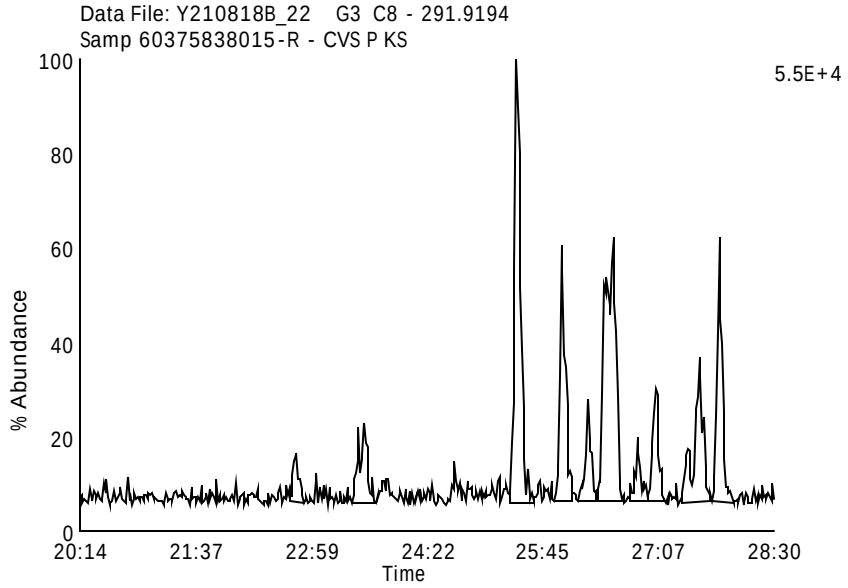


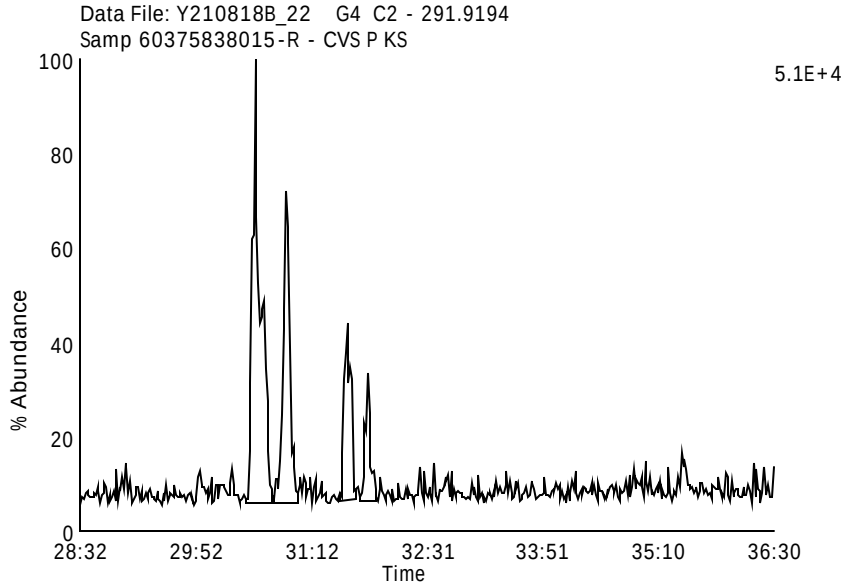
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5







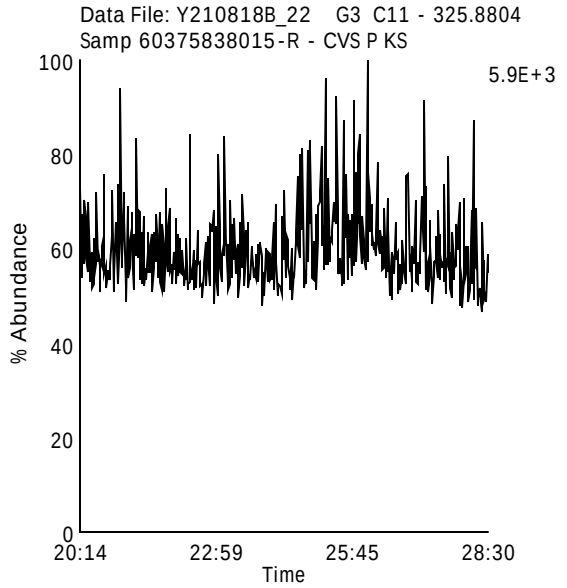


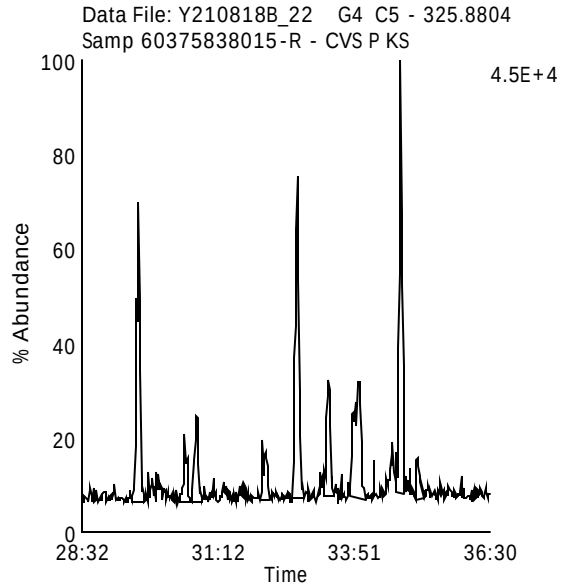
Penta Chlorinated Biphenyls

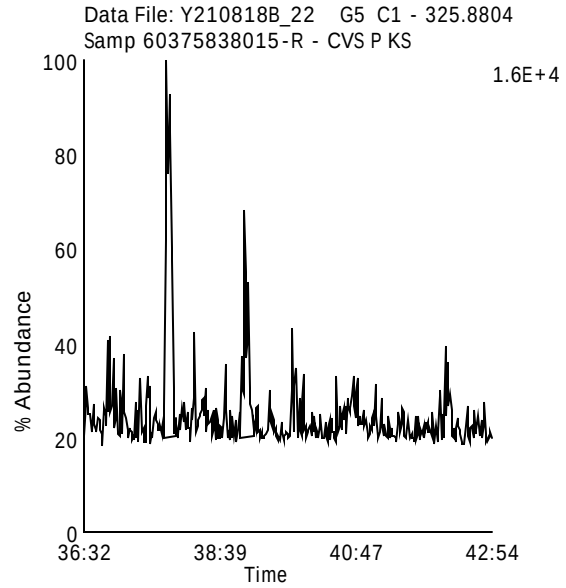
Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R

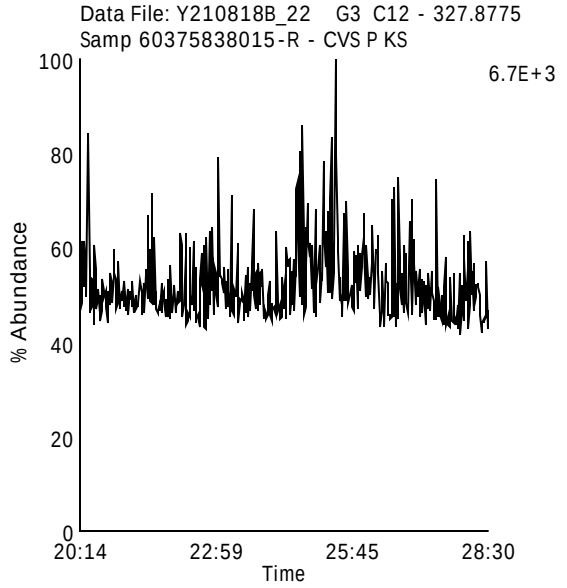
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

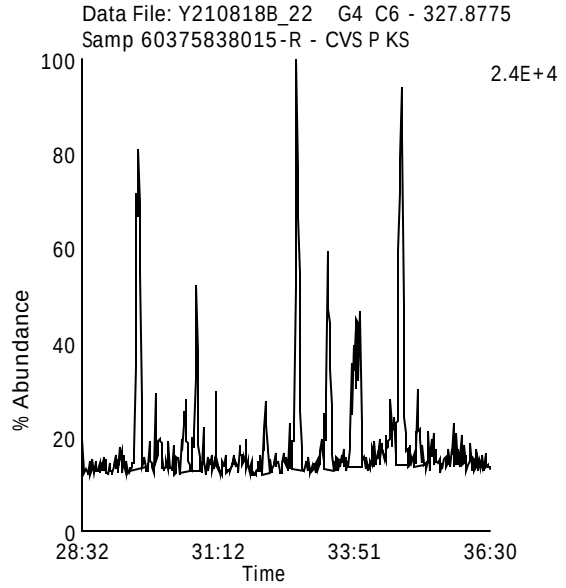
Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5

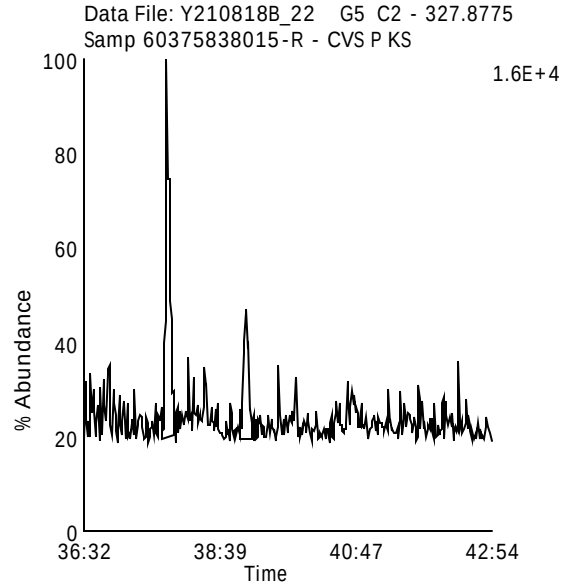






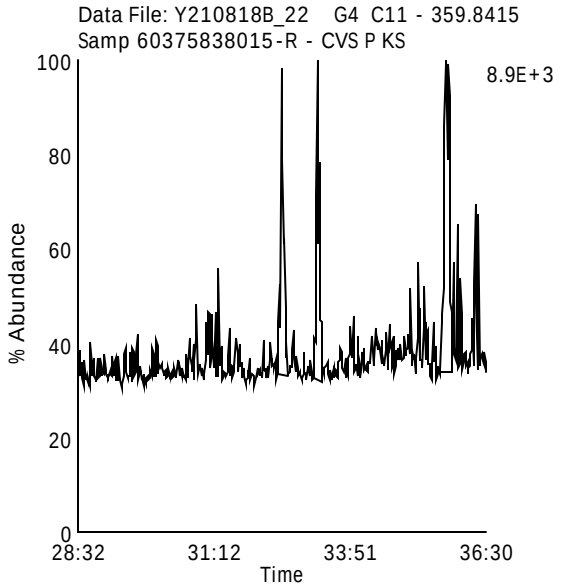


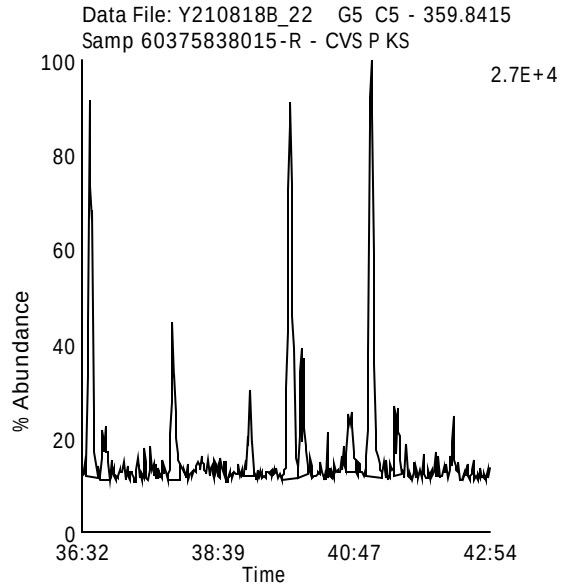


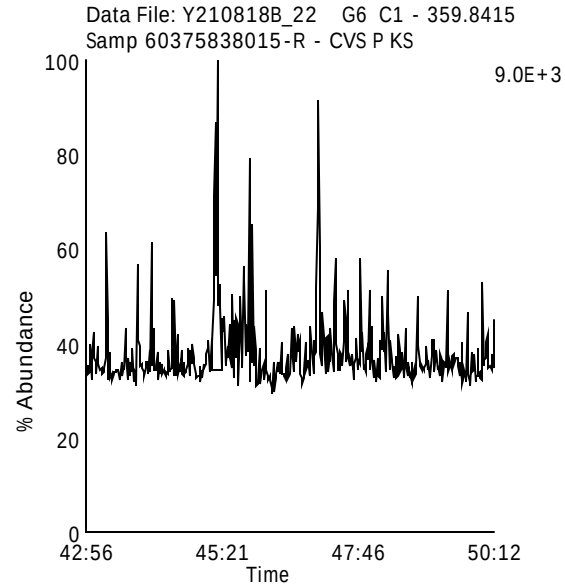


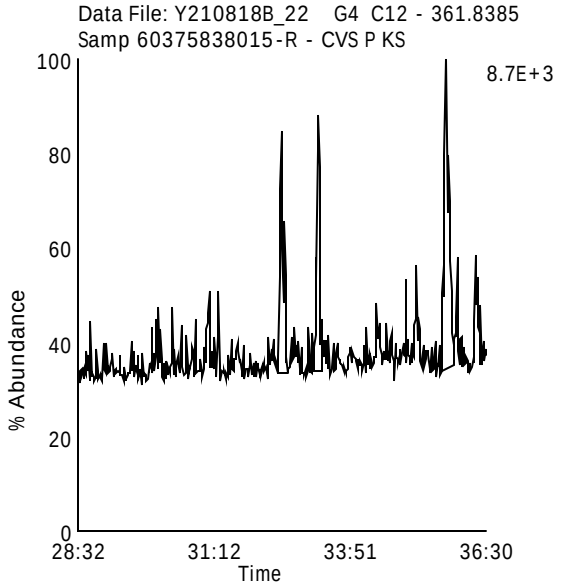
Hexa Chlorinated Biphenyls

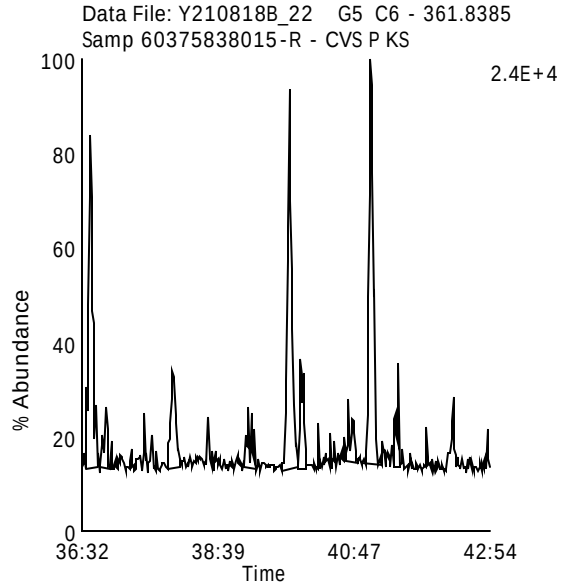
Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5

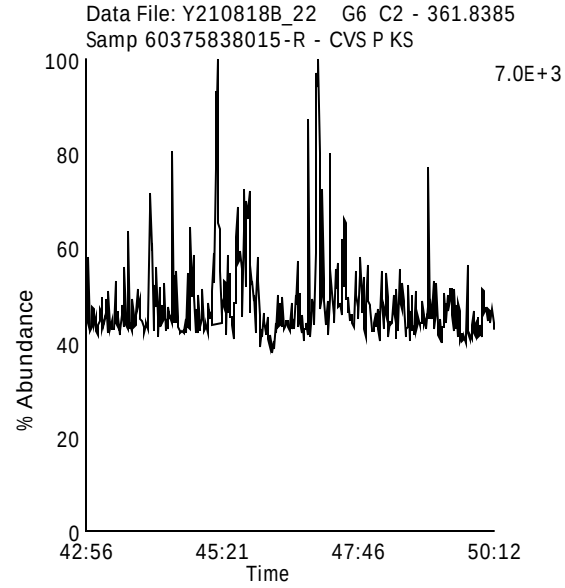








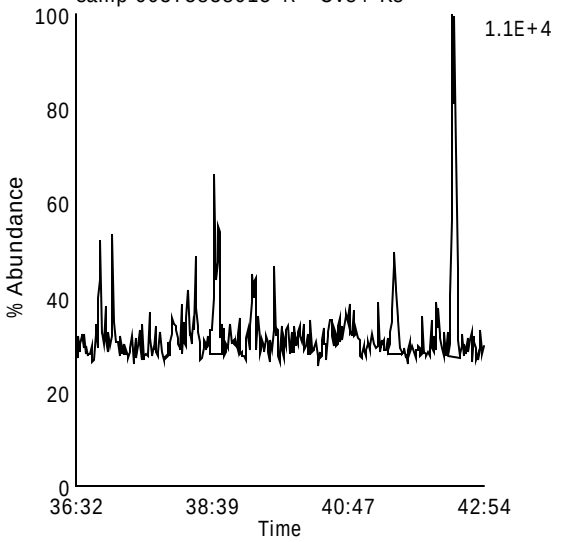




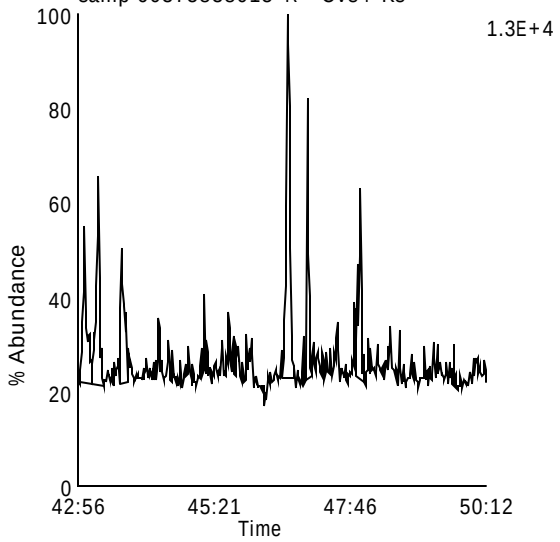
Hepta Chlorinated Biphenyls

Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5

Data File: Y210818B_22 G5 C11 - 393.8025
Samp 60375838015-R - CVS P KS



Data File: Y210818B_22 G6 C7 - 393.8025
Samp 60375838015-R - CVS P KS



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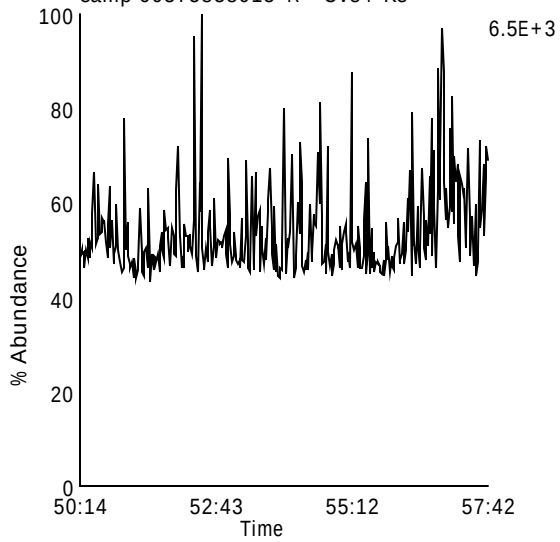
Samp 60375838015-R - CVS P KS



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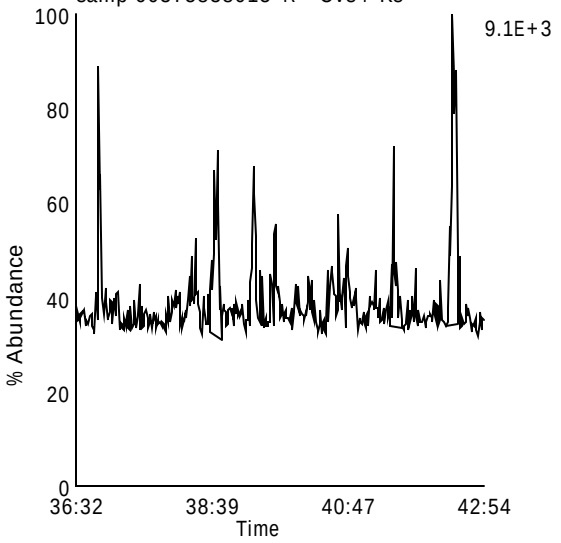
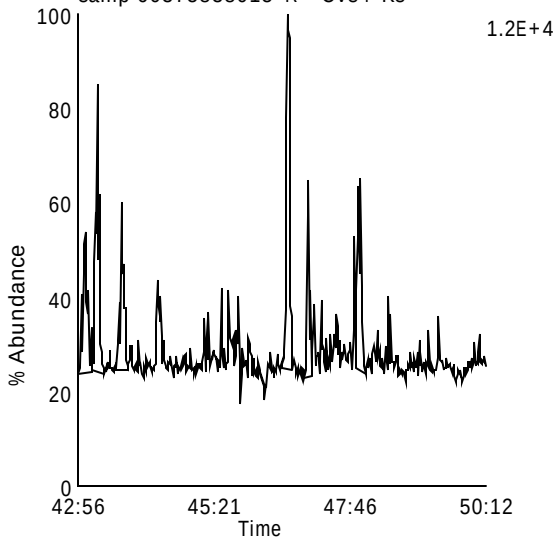
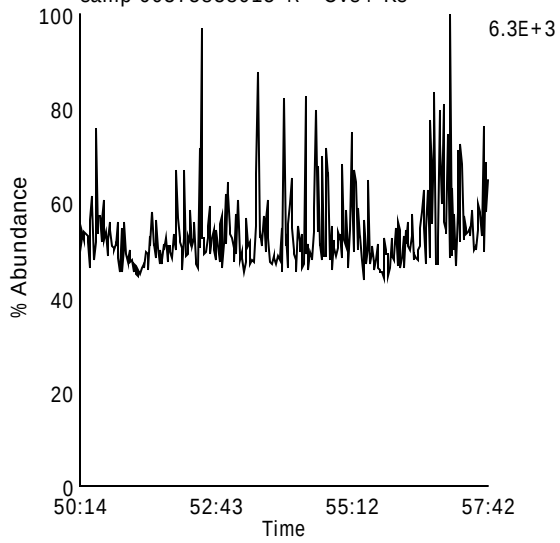
Samp 60375838015-R - CVS P KS



Data File: Y210818B_22 G6 C8 - 395.7995
Samp 60375838015-R - CVS P KS

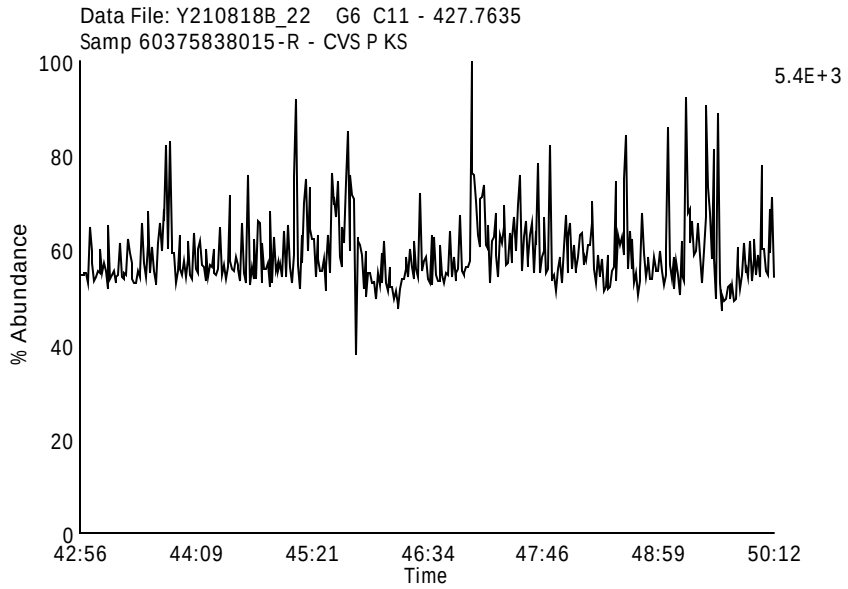


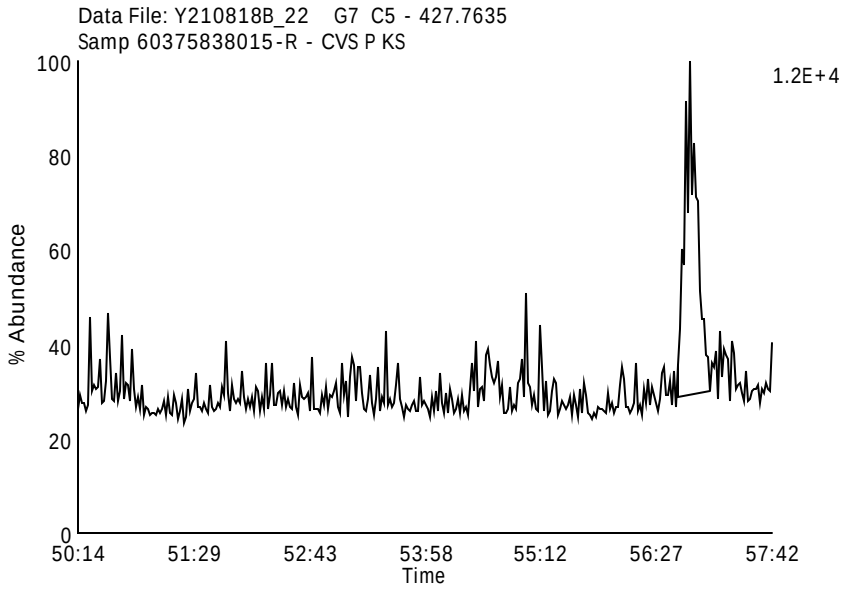
Data File: Y210818B_22 G7 C2 - 395.7995
Samp 60375838015-R - CVS P KS

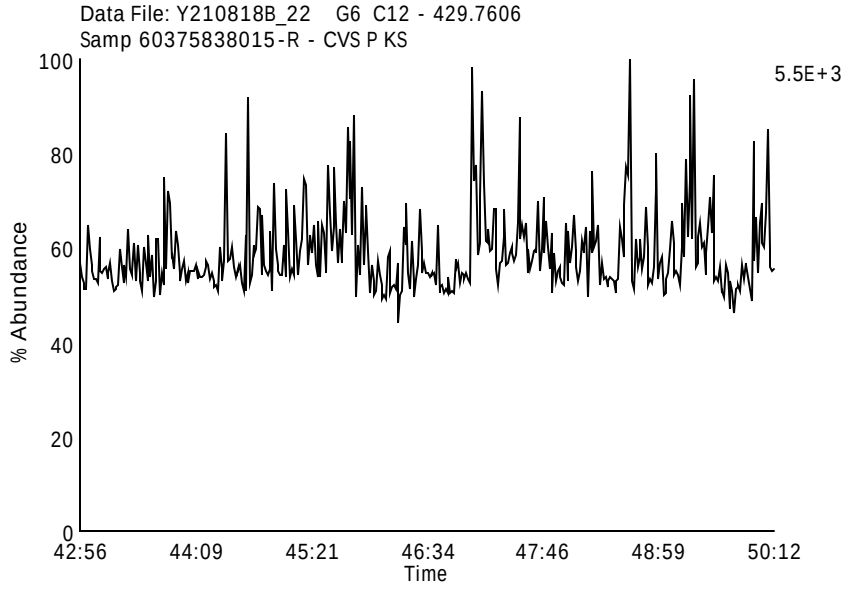


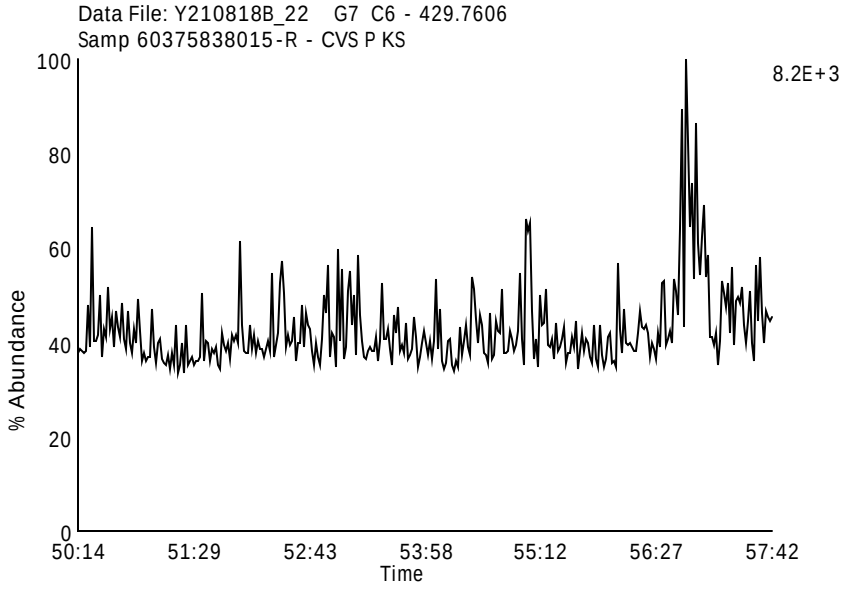
Octa Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



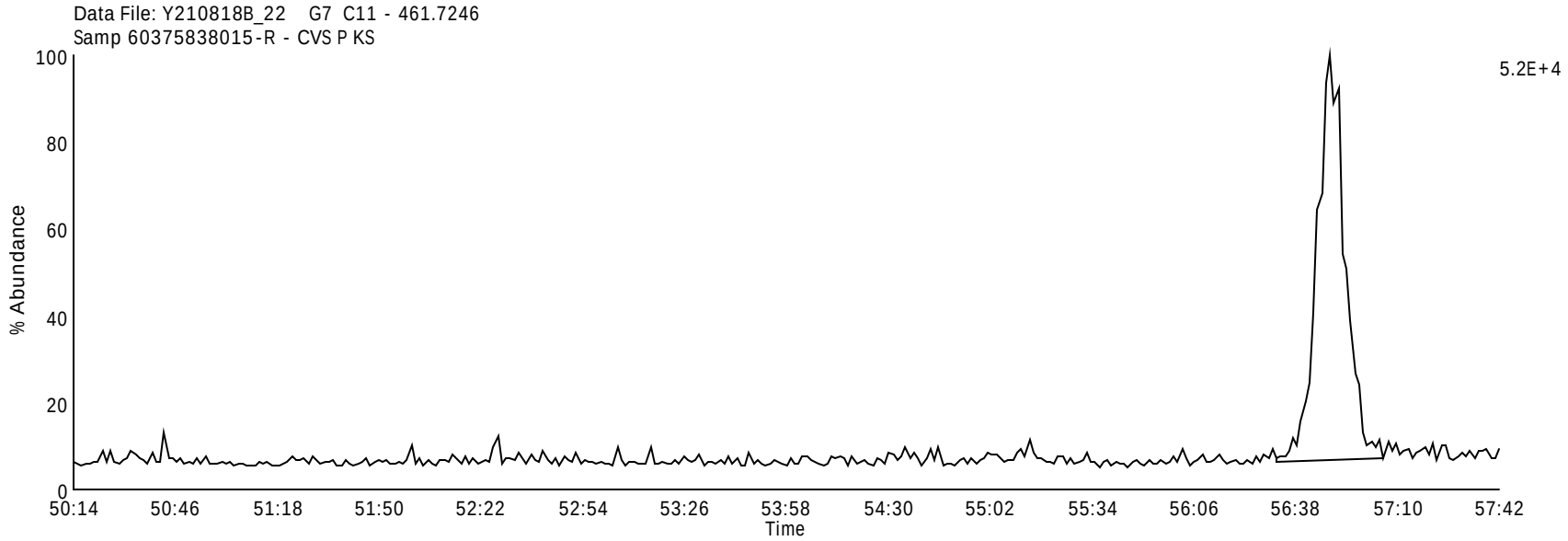


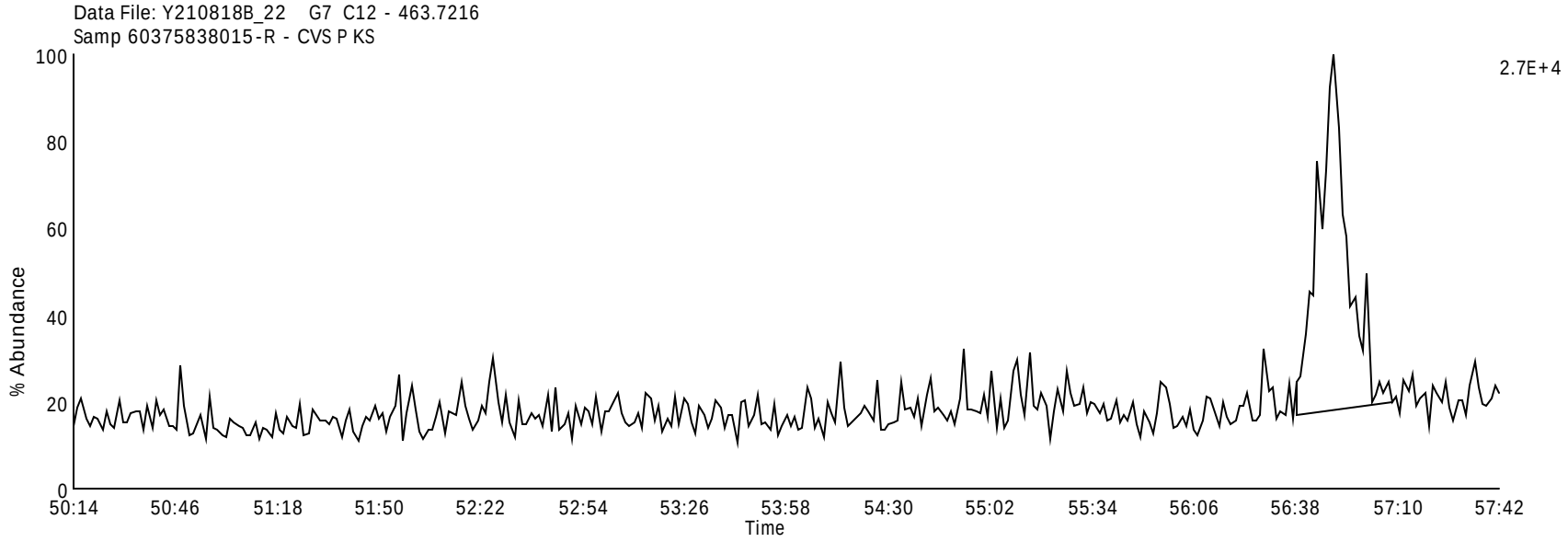




Nona Chlorinated Biphenyls

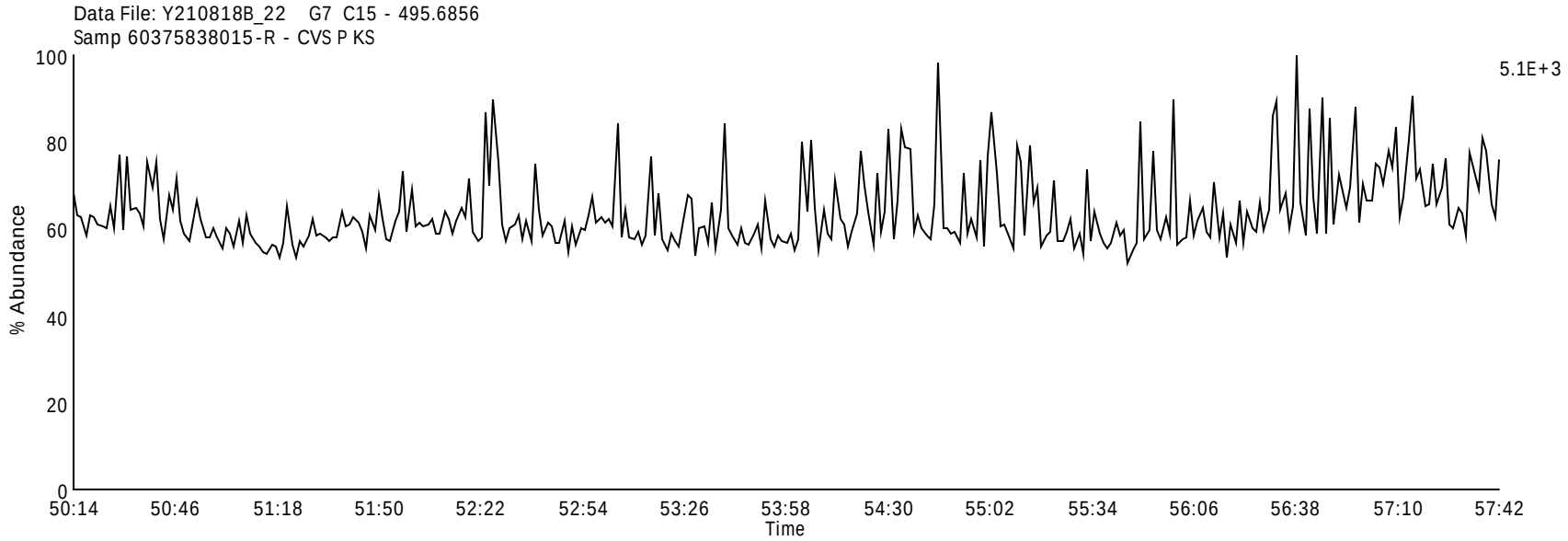
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

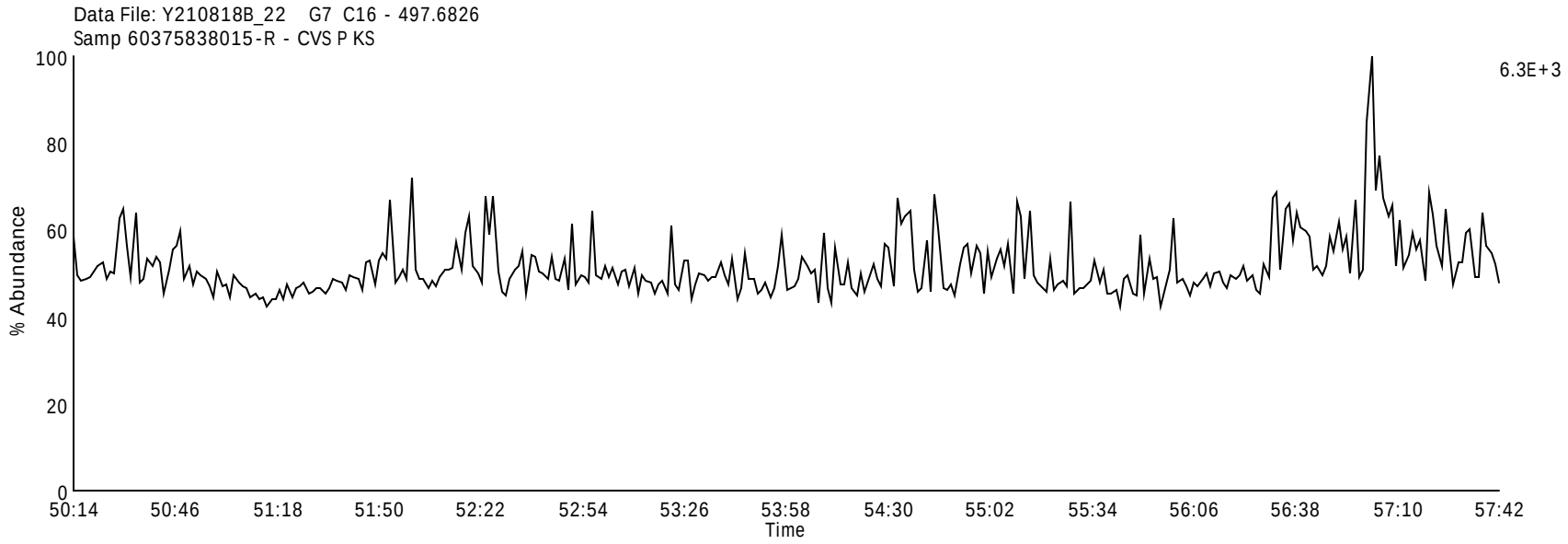




Deca Chlorinated Biphenyl

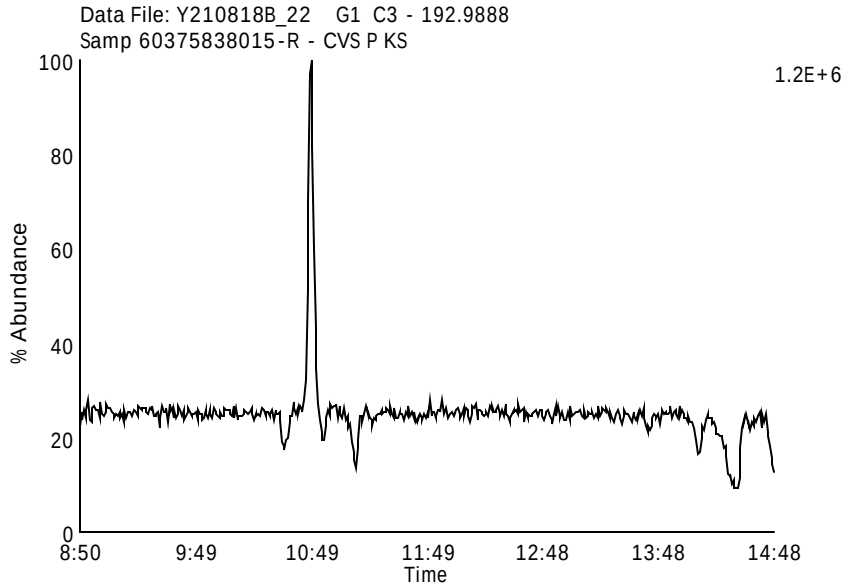
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

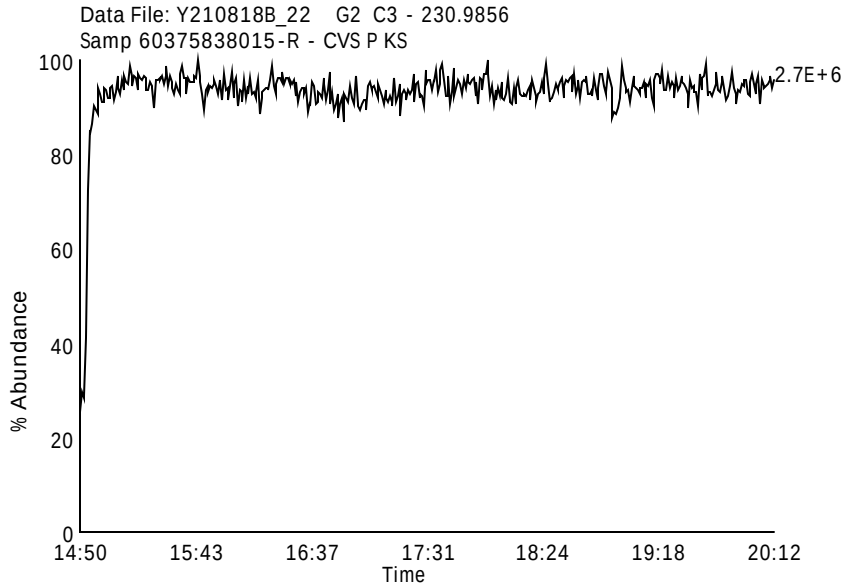


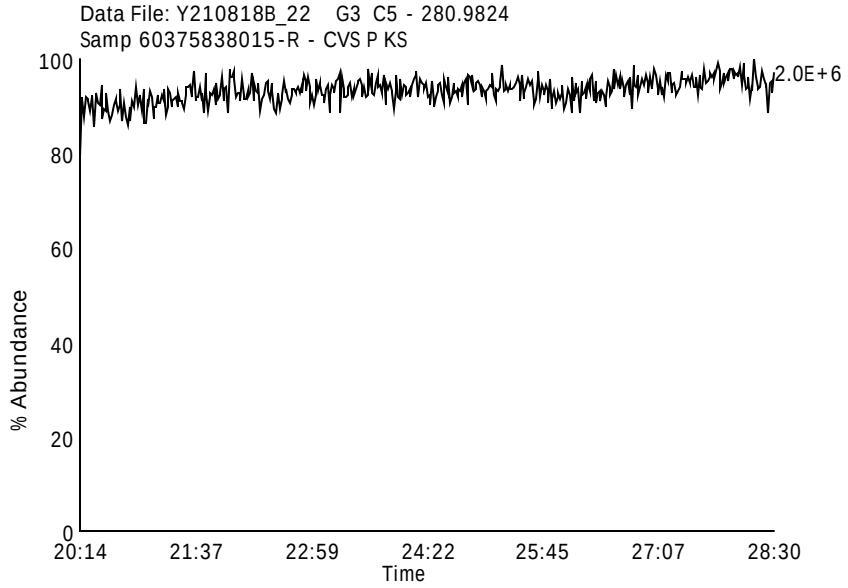


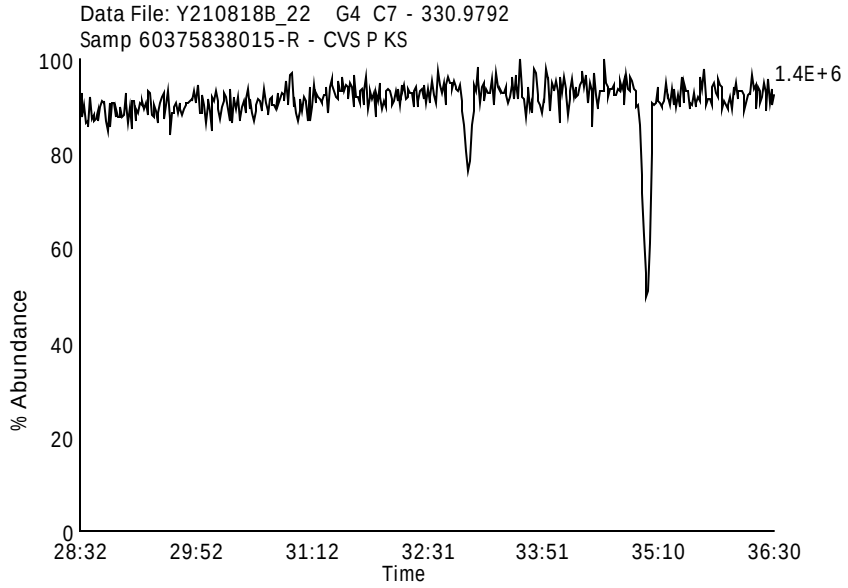
Group 1 - 4 Lock mass

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



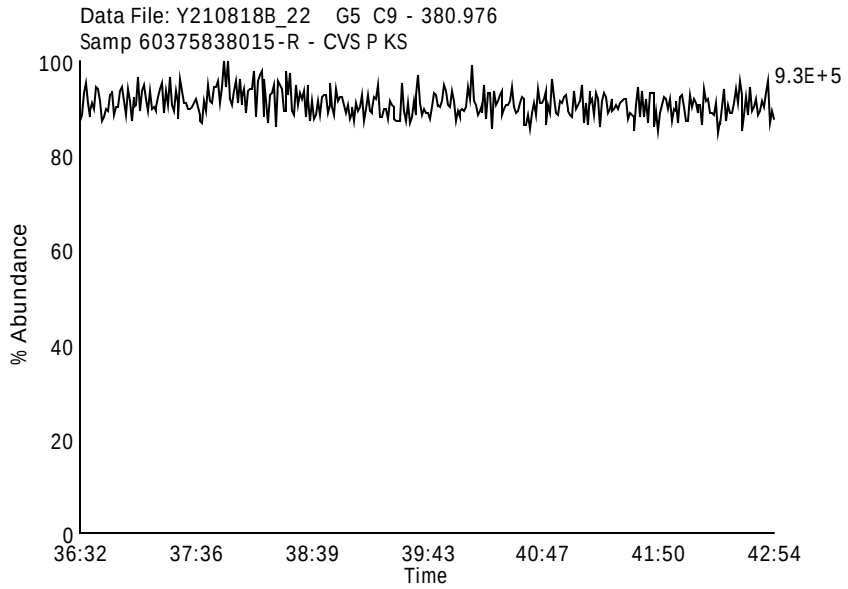


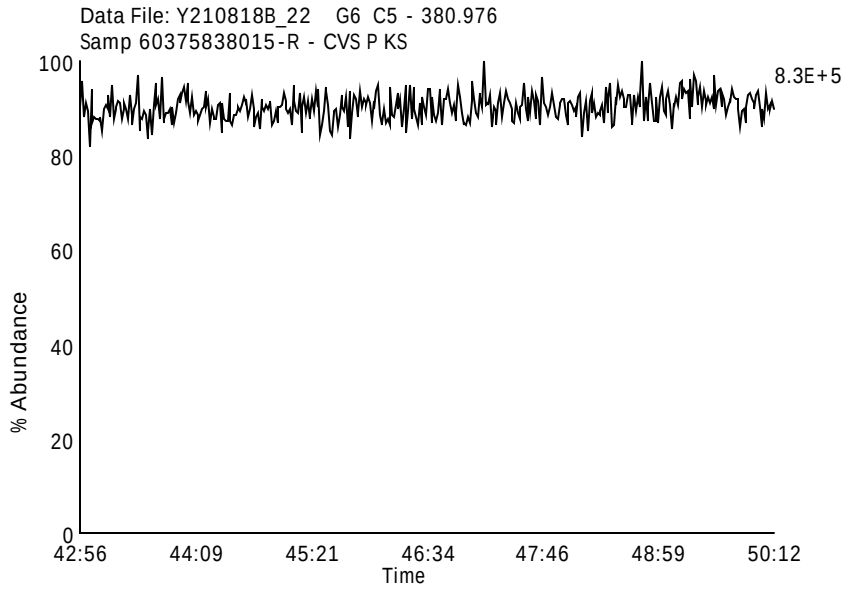


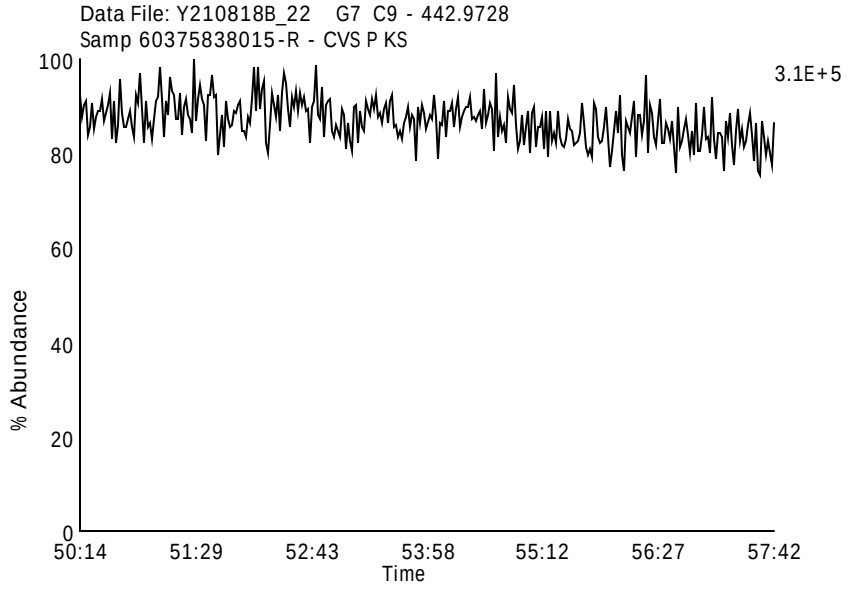


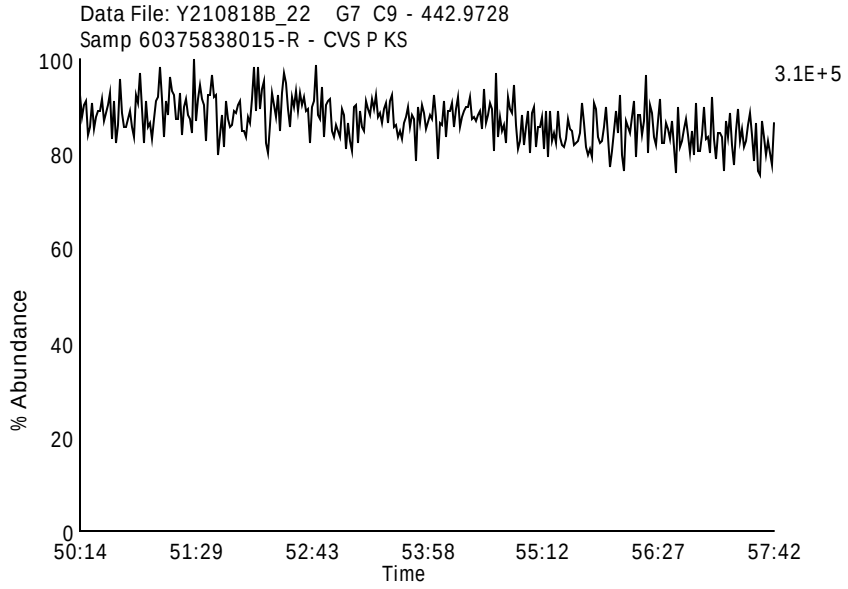
Group 5 - 7 Lock mass

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5









Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-28/1.5-2.5	Injected By	CVS
Lab ID	60375838006-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_21	GC Column ID	261111-02
Analyzed	08/19/2021 07:43	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.883	0.76	2928482	3876808	
13C-3,3',4,4'-TeCB	77	35.453	0.78	3134163	4036814	
13C-2,3,3',4,4'-PeCB	105	39.046	1.61	3502953	2181224	
13C-2,3,4,4',5-PeCB	114	38.409	1.51	3537536	2342149	
13C-2,3',4,4',5-PeCB	118	37.856	1.53	3625282	2370335	
13C-2,3',4,4',5'-PeCB	123	37.521	1.59	3505114	2201411	
13C-3,3',4,4',5-PeCB	126	42.199	1.53	3098053	2021162	
13C-HxCB(156/157)	156/157	45.255	1.26	5521610	4387311	
13C-2,3',4,4',5,5'-HxCB	167	44.098	1.19	2906672	2434413	
13C-3,3',4,4',5,5'-HxCB	169	48.525	1.23	2535400	2065655	
13C-2,3,3',4,4',5,5'-HpCB	189	51.086	1.00	2173083	2175617	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.05	9015393	8603753	
13C-2,3,3',5,5'-PeCB	111	35.520	1.56	9101357	5850811	
13C-2,2',3,3',5,5',6-HpCB	178	41.494	1.08	5846310	5412232	
Recovery Standards						
13C-2,5-DiCB	9	15.458	1.53	7606496	4977268	
13C-2,2',5,5'-TeCB	52	25.438	0.79	4137408	5235798	
13C-2,2',4,5,5'-PeCB	101	32.720	1.57	4925852	3133801	
13C-2,2',3,4,4',5'-HxCB	138	41.042	1.25	4221418	3375461	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.176	0.88	2211176	2510688	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-28/1.5-2.5	Injected By	CVS
Lab ID	60375838006-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_21	GC Column ID	261111-02
Analyzed	08/19/2021 07:43	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.486	0.73	38687	52888	
105		39.063	1.41	64457	45629	
118		37.906	1.35	115665	85497	
156	156/157	45.289	1.52	24404	16029	
157	156/157	45.289	1.52	(24404)	(16029)	

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-06/3-5	Injected By	CVS
Lab ID	60375838015-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_22	GC Column ID	261111-02
Analyzed	08/19/2021 08:42	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.866	0.75	2691790	3580499	
13C-3,3',4,4'-TeCB	77	35.453	0.80	2975364	3711106	
13C-2,3,3',4,4'-PeCB	105	39.046	1.54	3244120	2103564	
13C-2,3,4,4',5-PeCB	114	38.393	1.53	3309469	2164883	
13C-2,3',4,4',5-PeCB	118	37.839	1.55	3482813	2253502	
13C-2,3',4,4',5'-PeCB	123	37.504	1.51	3254221	2157726	
13C-3,3',4,4',5-PeCB	126	42.198	1.55	2994842	1936693	
13C-HxCB(156/157)	156/157	45.255	1.22	5276608	4322680	
13C-2,3',4,4',5,5'-HxCB	167	44.098	1.24	2830518	2274401	
13C-3,3',4,4',5,5'-HxCB	169	48.524	1.25	2569692	2050685	
13C-2,3,3',4,4',5,5'-HpCB	189	51.063	0.99	2194475	2217698	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.01	7939352	7851474	
13C-2,3,3',5,5'-PeCB	111	35.503	1.59	8802803	5522262	
13C-2,2',3,3',5,5',6-HpCB	178	41.477	1.09	5454703	4991740	
Recovery Standards						
13C-2,5-DiCB	9	15.422	1.52	8049058	5309163	
13C-2,2',5,5'-TeCB	52	25.438	0.80	4185790	5257096	
13C-2,2',4,5,5'-PeCB	101	32.720	1.59	5019260	3149011	
13C-2,2',3,4,4',5'-HxCB	138	41.025	1.27	4513686	3560684	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.175	0.90	2391223	2671266	

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-06/3-5	Injected By	CVS
Lab ID	60375838015-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_22	GC Column ID	261111-02
Analyzed	08/19/2021 08:42	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
105		39.046	1.37	35543	25945	
118		37.839	1.36	67854	50076	
156	156/157	45.289	1.39	25072	18077	
157	156/157	45.289	1.39	(25072)	(18077)	

REPORT OF LABORATORY ANALYSIS

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Appendix E

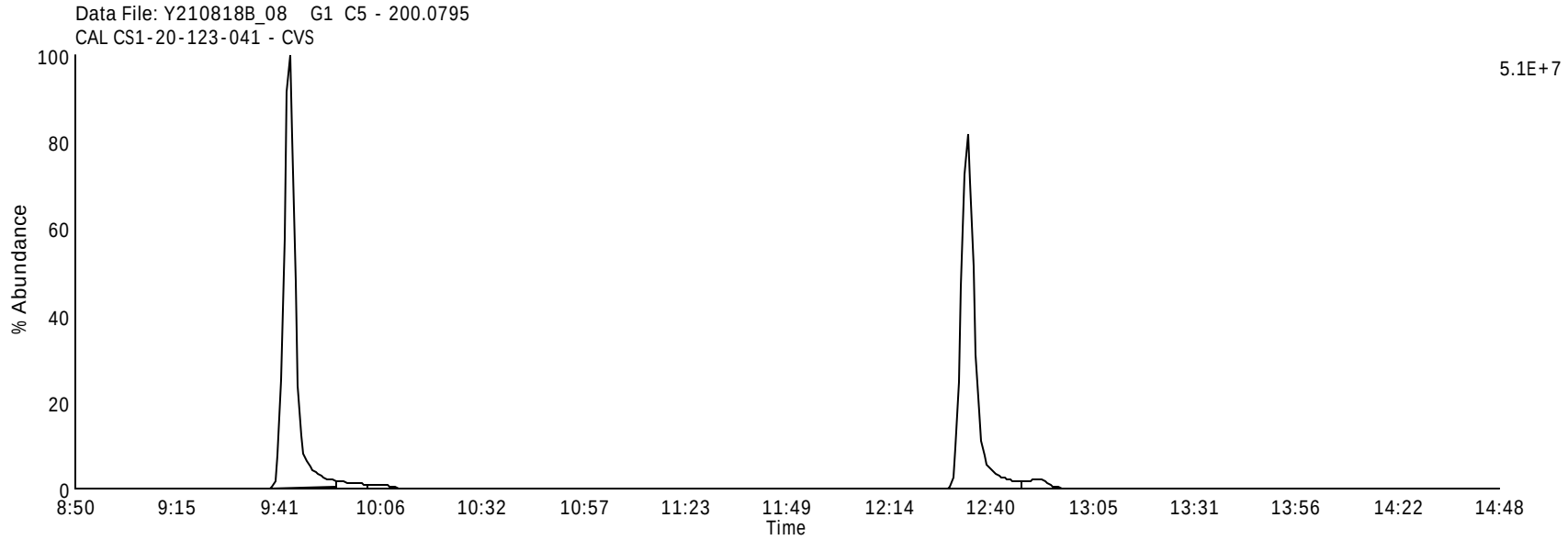
Calibration Raw Data

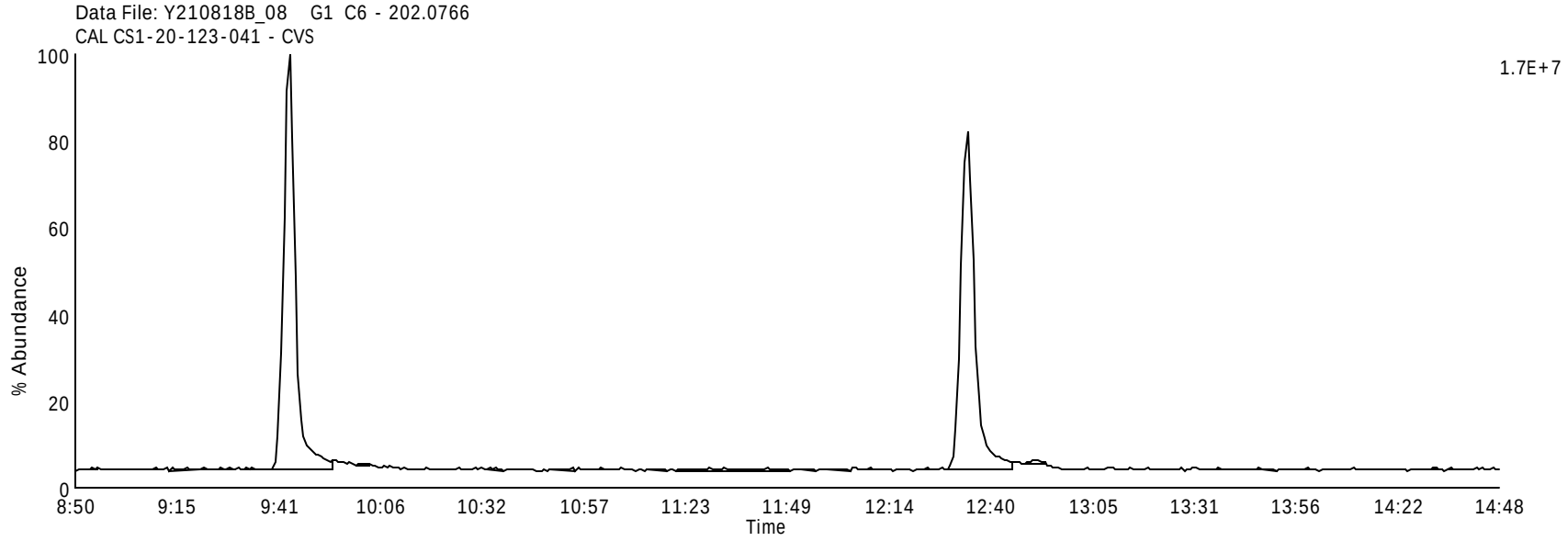
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

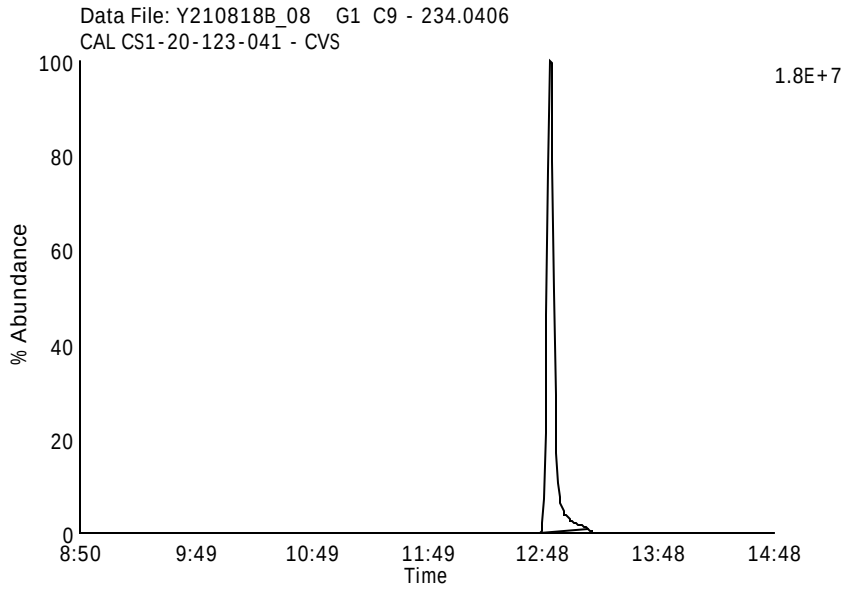
Sample Description: CAL CS1-20-123-041 - CVS

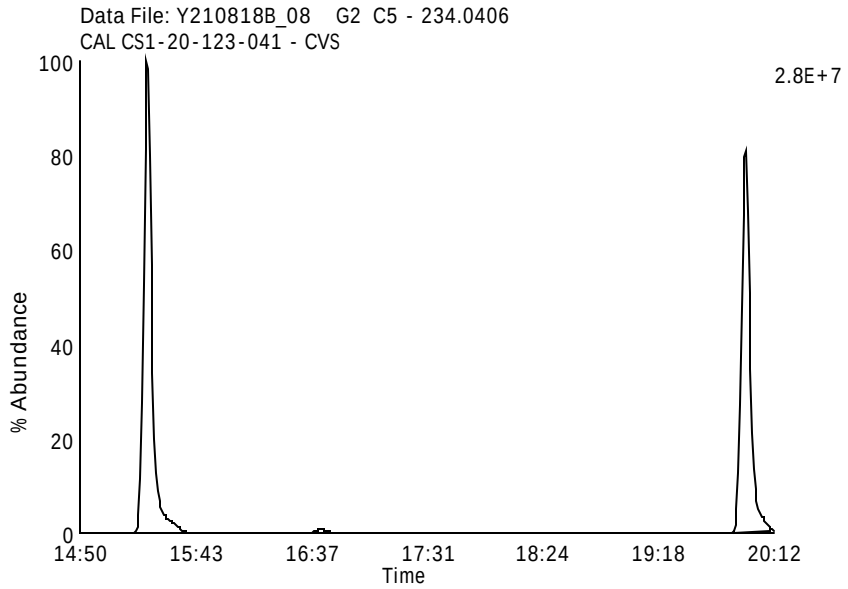


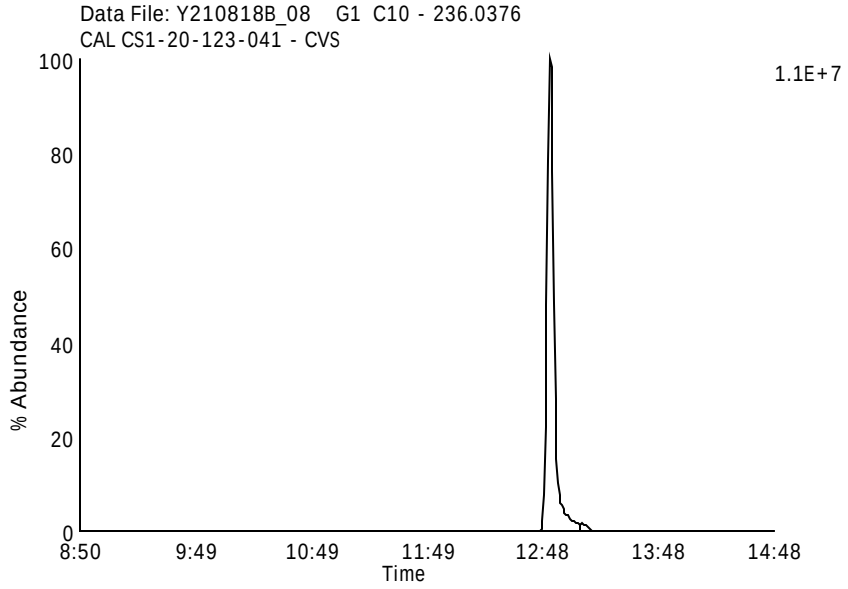


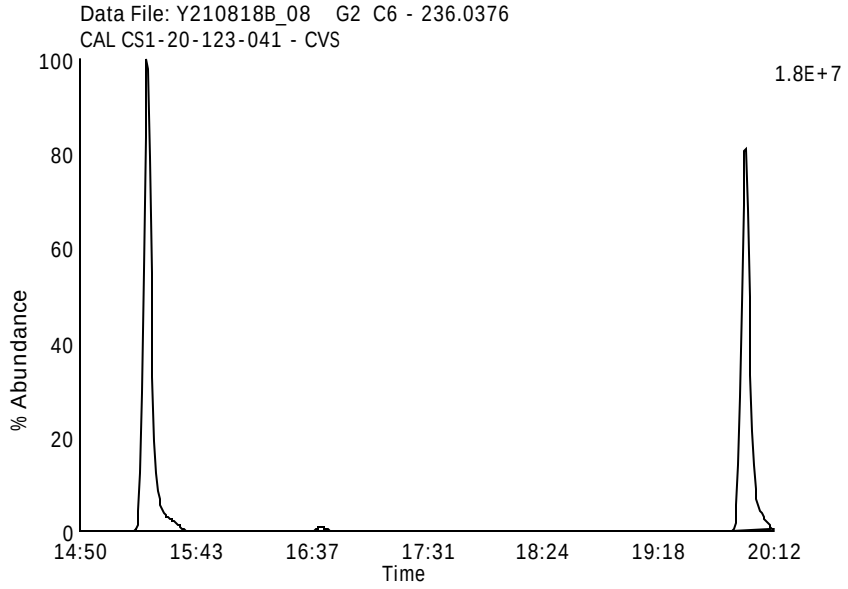
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



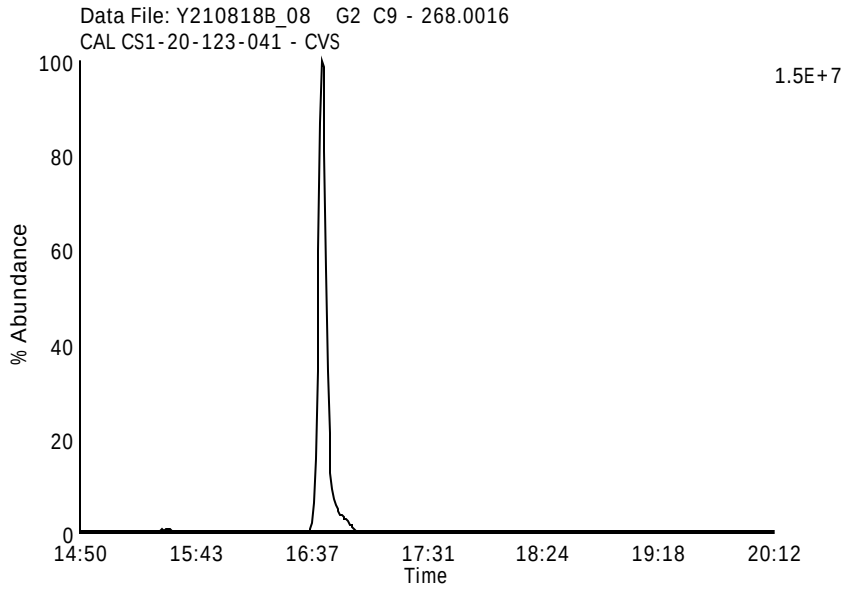


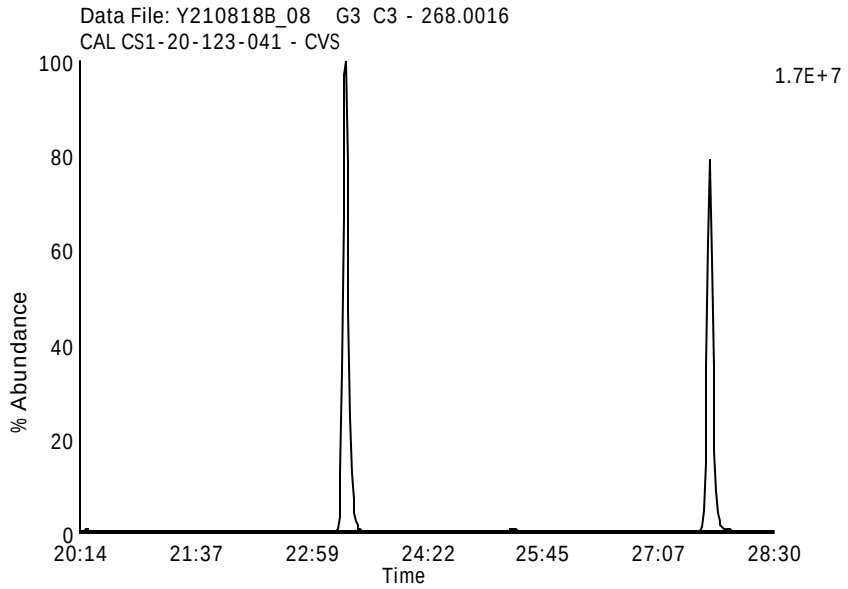


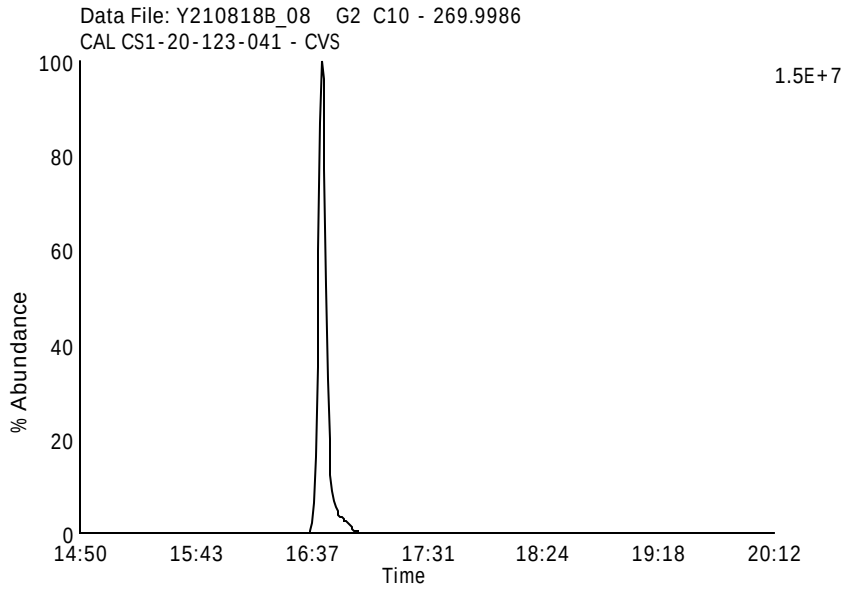


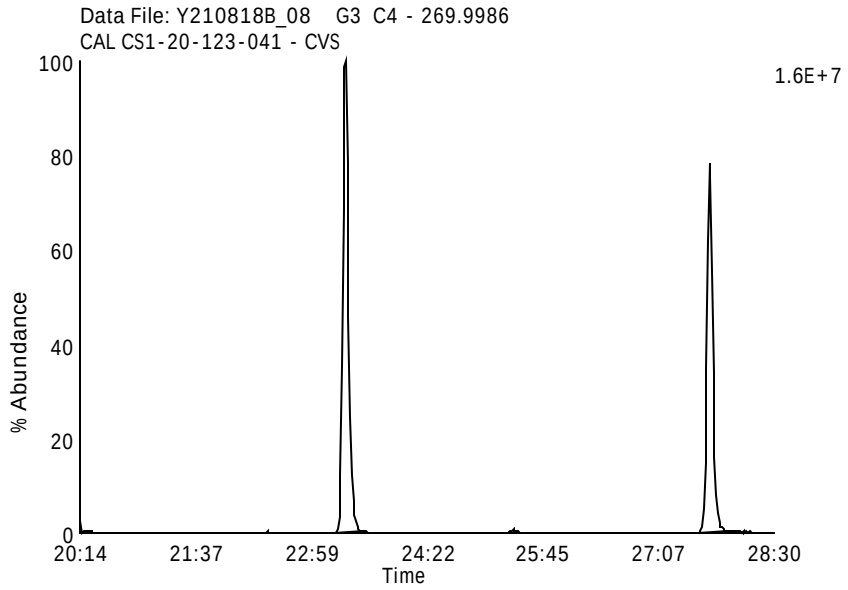
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS









Labeled Tetra Chlorinated Biphenyls

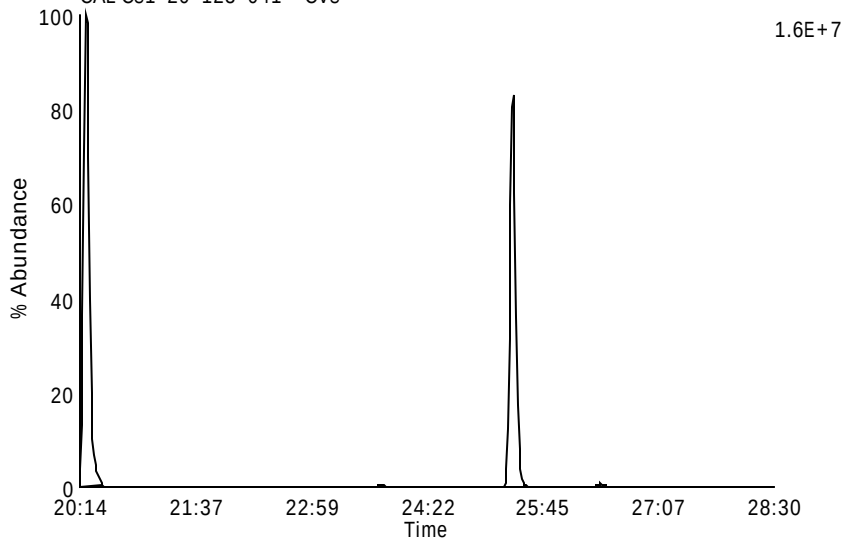
Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

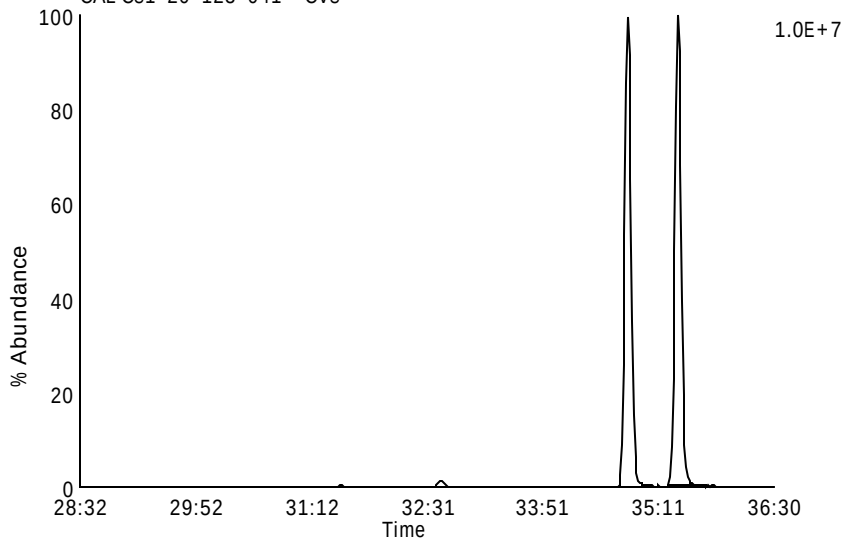
Data File: Y210818B_08 G3 C9 - 301.9626

CAL CS1-20-123-041 - CVS



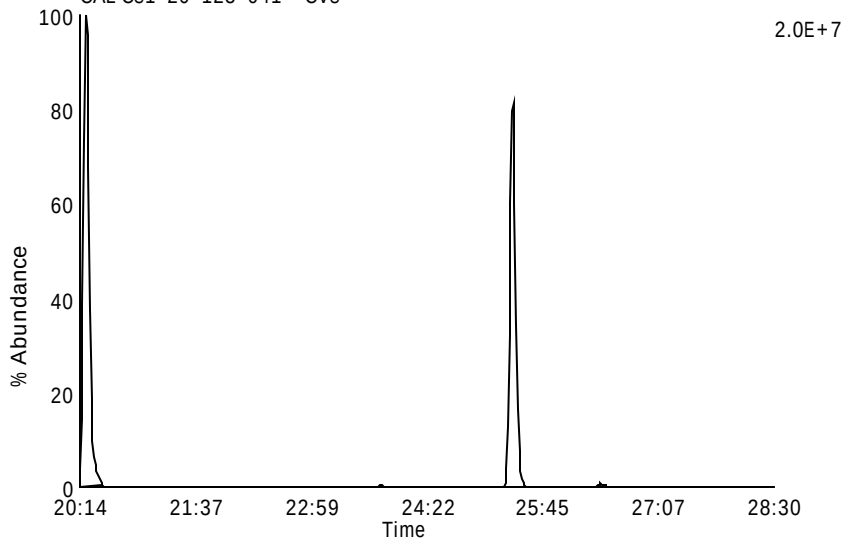
Data File: Y210818B_08 G4 C3 - 301.9626

CAL CS1-20-123-041 - CVS



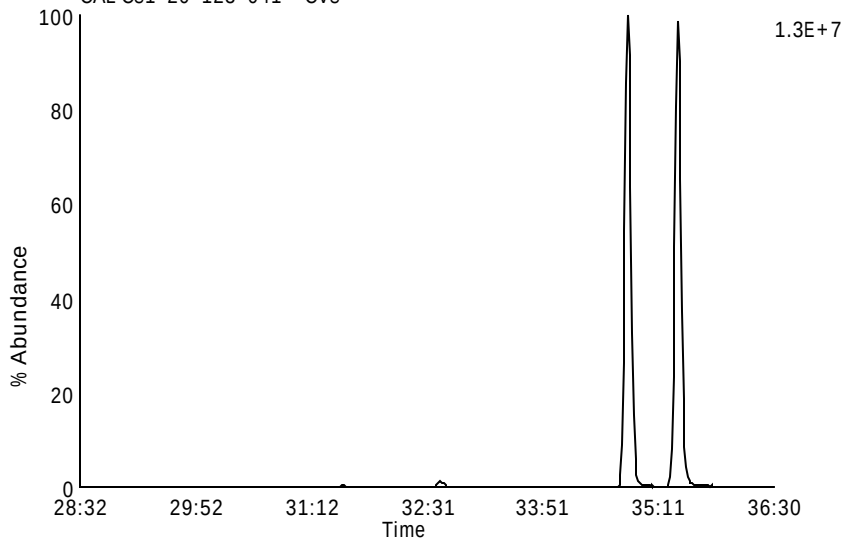
Data File: Y210818B_08 G3 C10 - 303.9597

CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C4 - 303.9597

CAL CS1-20-123-041 - CVS



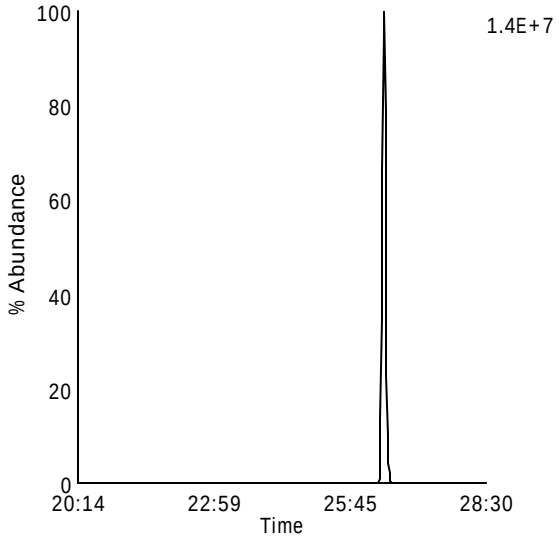
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

Data File: Y210818B_08 G3 C13 - 337.9207
CAL CS1-20-123-041 - CVS



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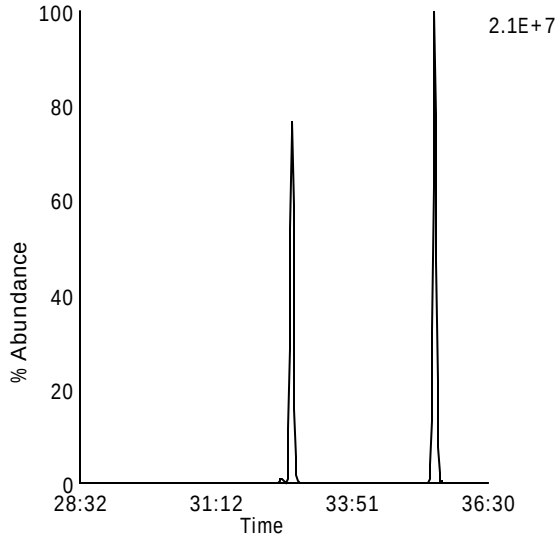
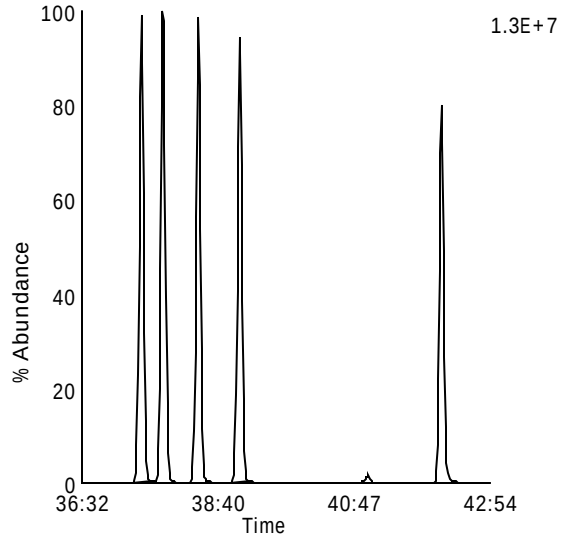
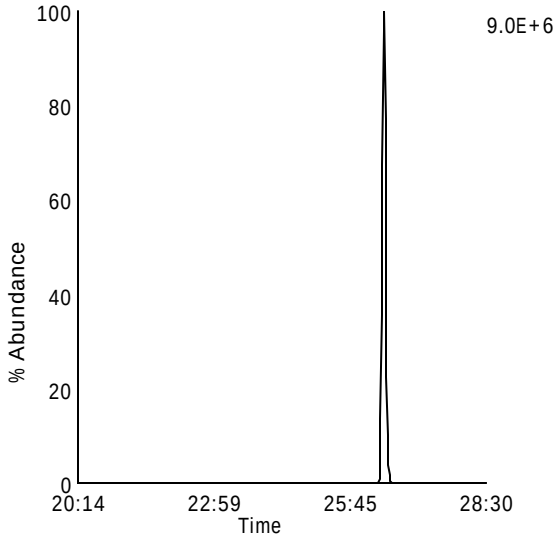
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C3 - 337.9207
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G3 C14 - 339.9178
CAL CS1-20-123-041 - CVS



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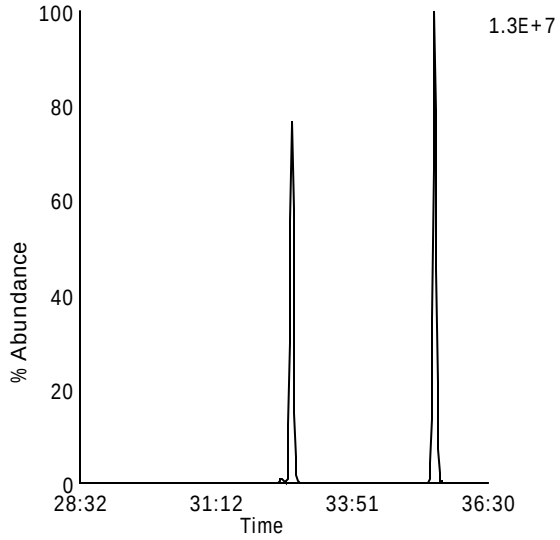
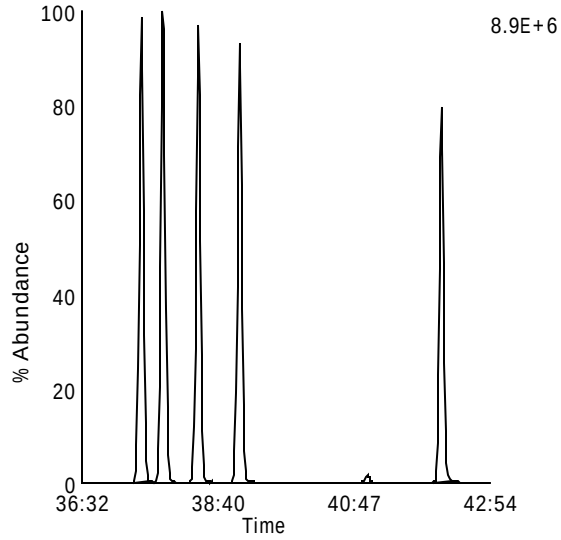
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C4 - 339.9178
CAL CS1-20-123-041 - CVS

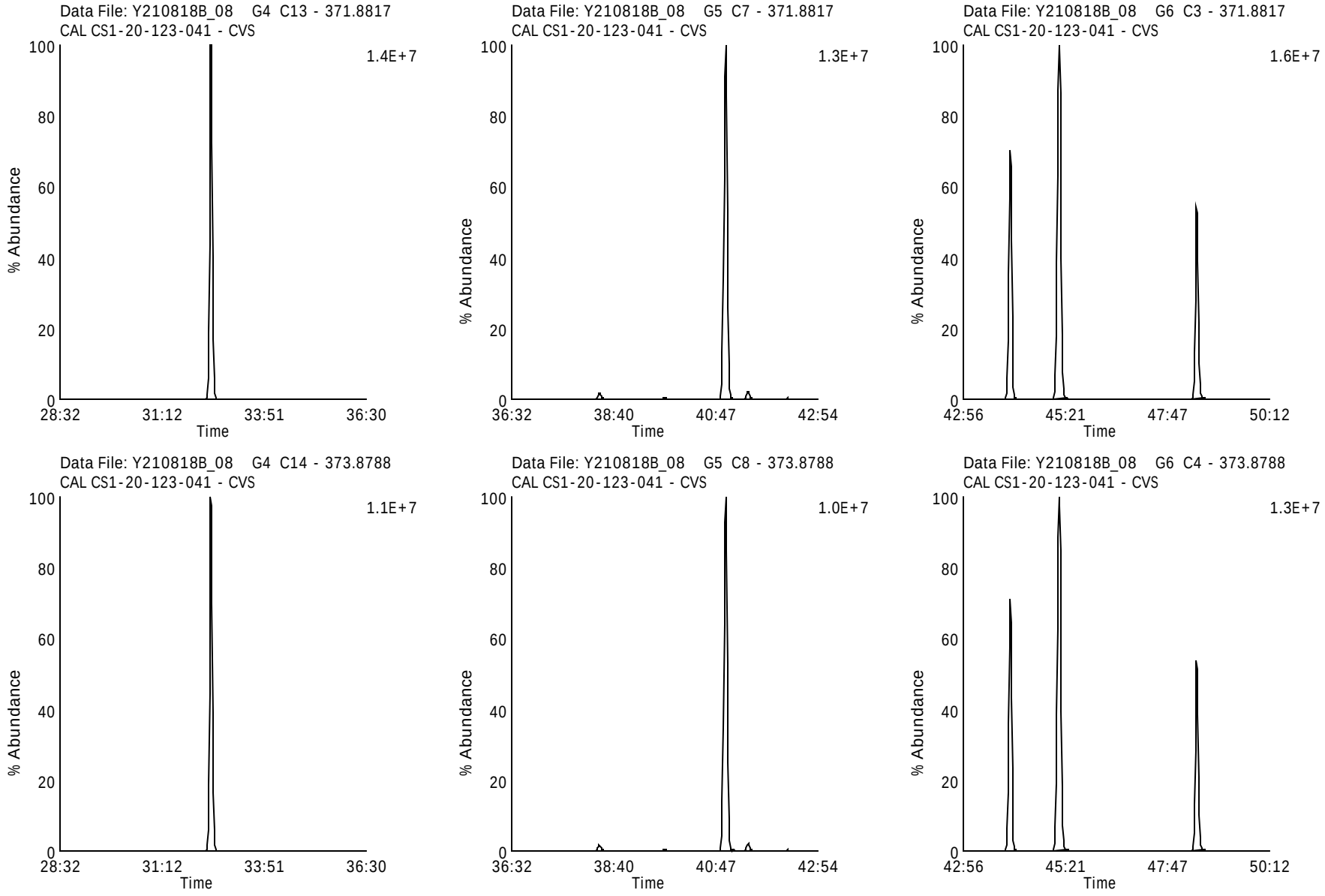


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

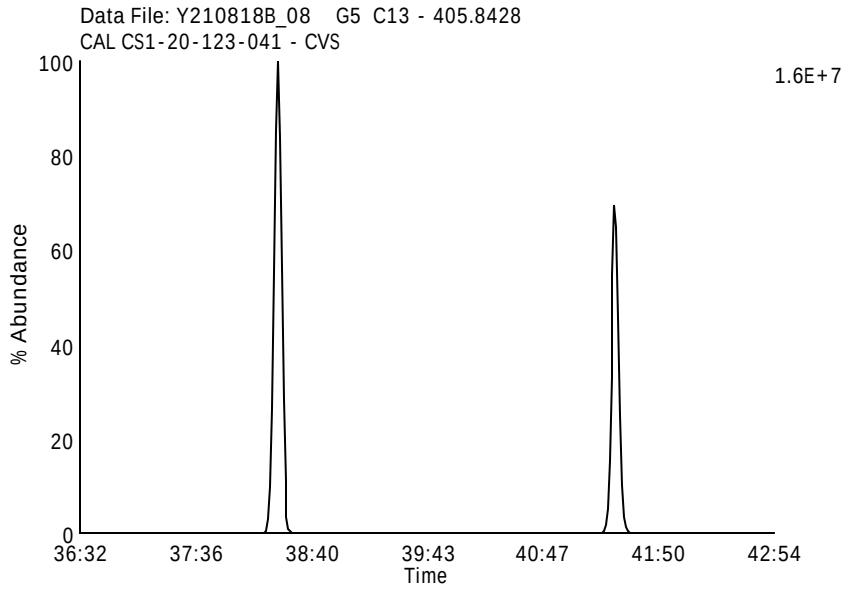
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

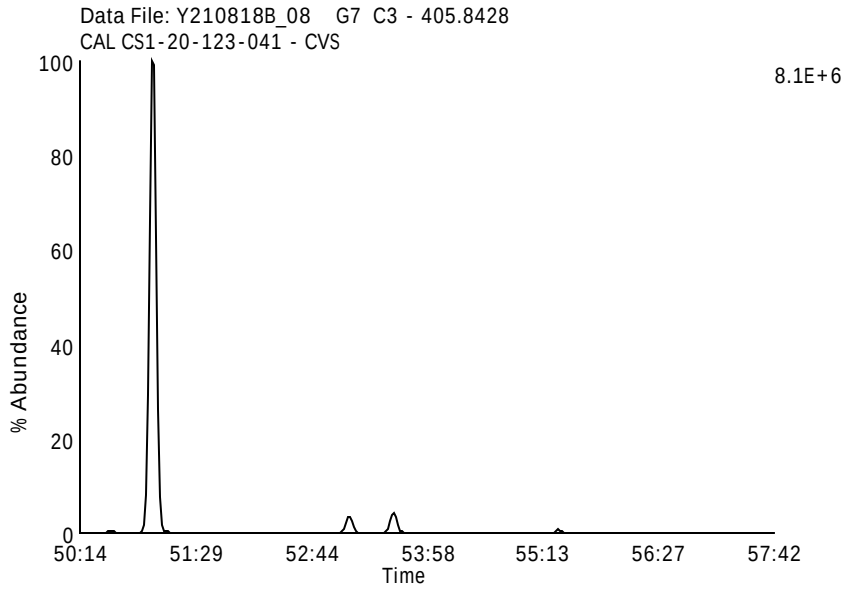
Sample Description: CAL CS1-20-123-041 - CVS

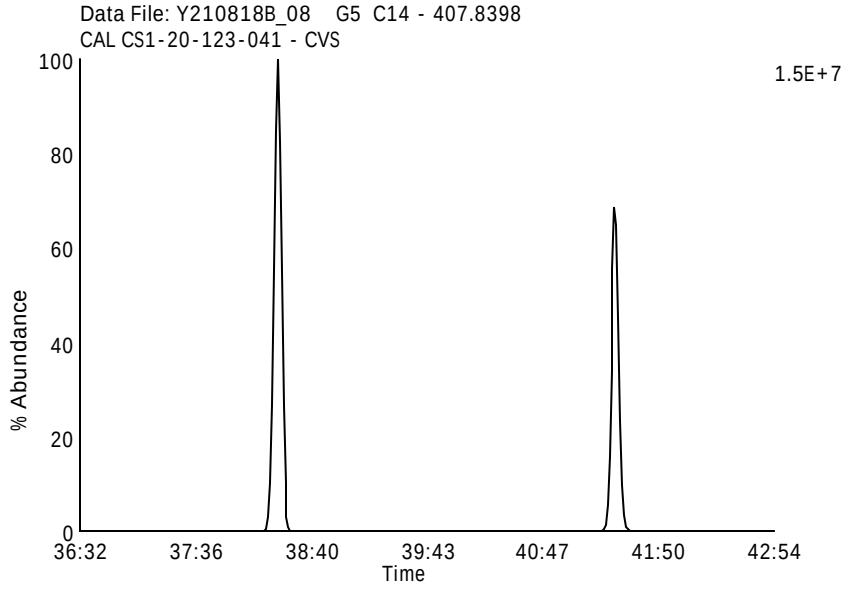


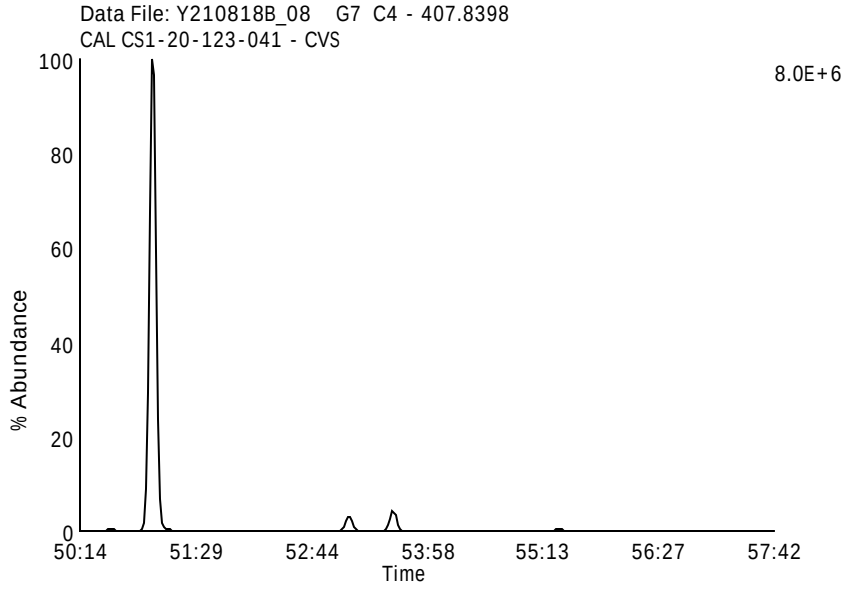
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS









Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

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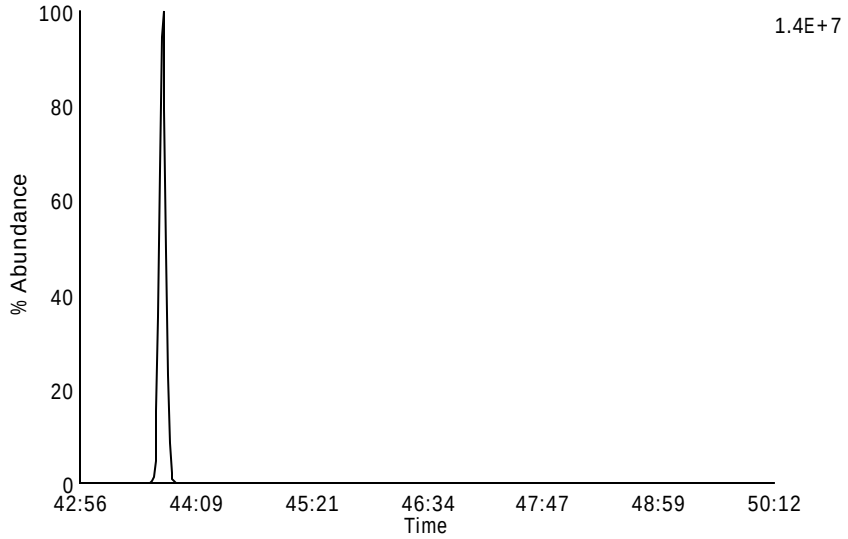
CAL CS1-20-123-041 - CVS



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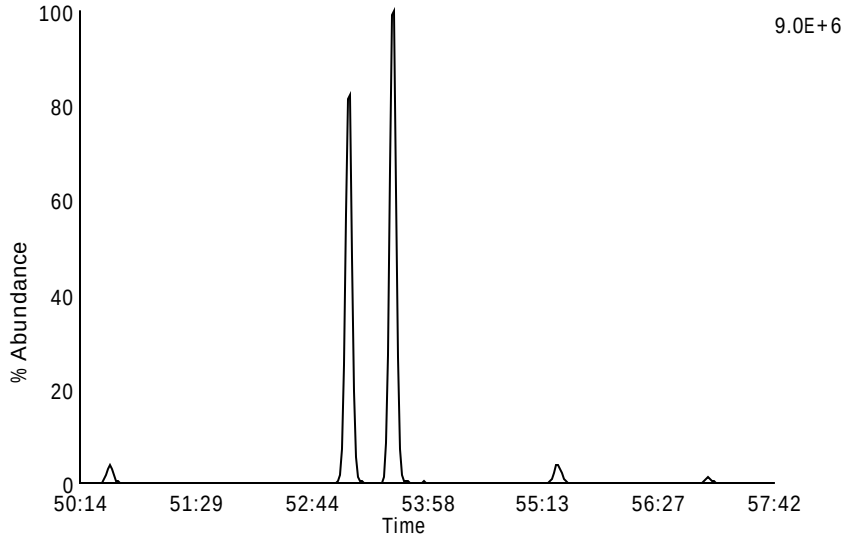
CAL CS1-20-123-041 - CVS



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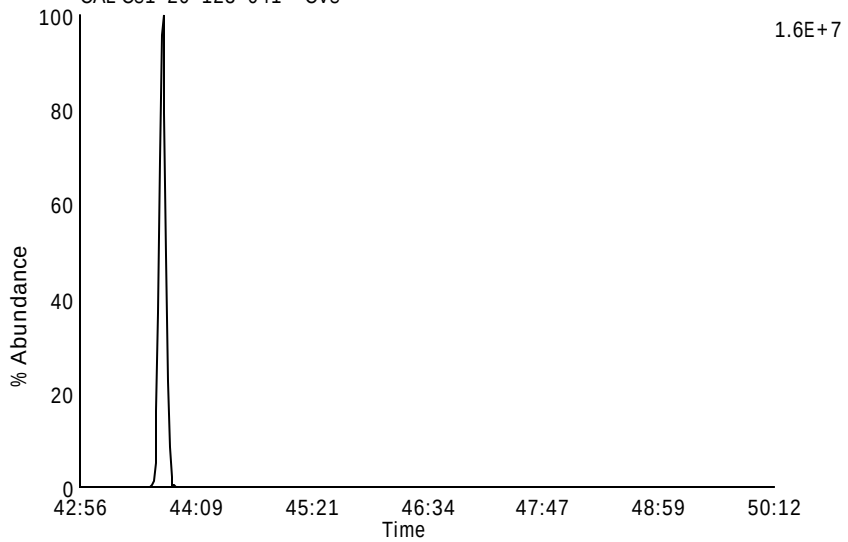
CAL CS1-20-123-041 - CVS



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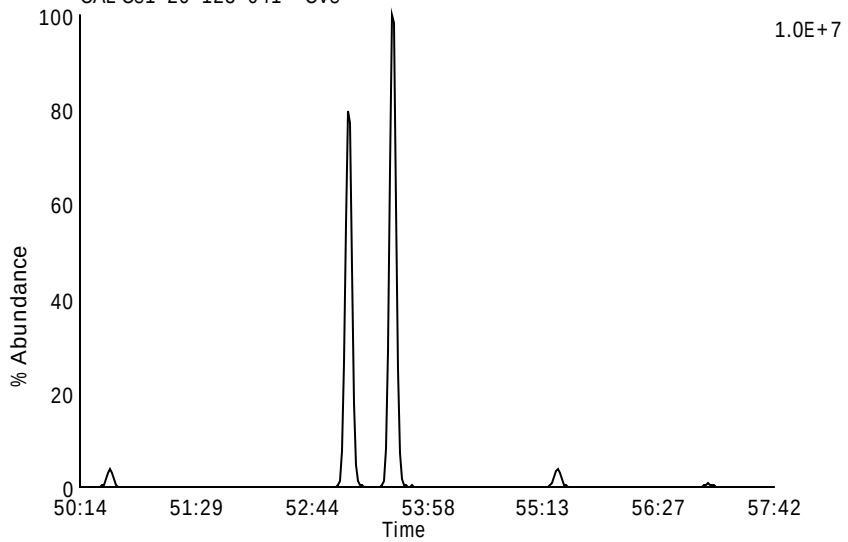
CAL CS1-20-123-041 - CVS

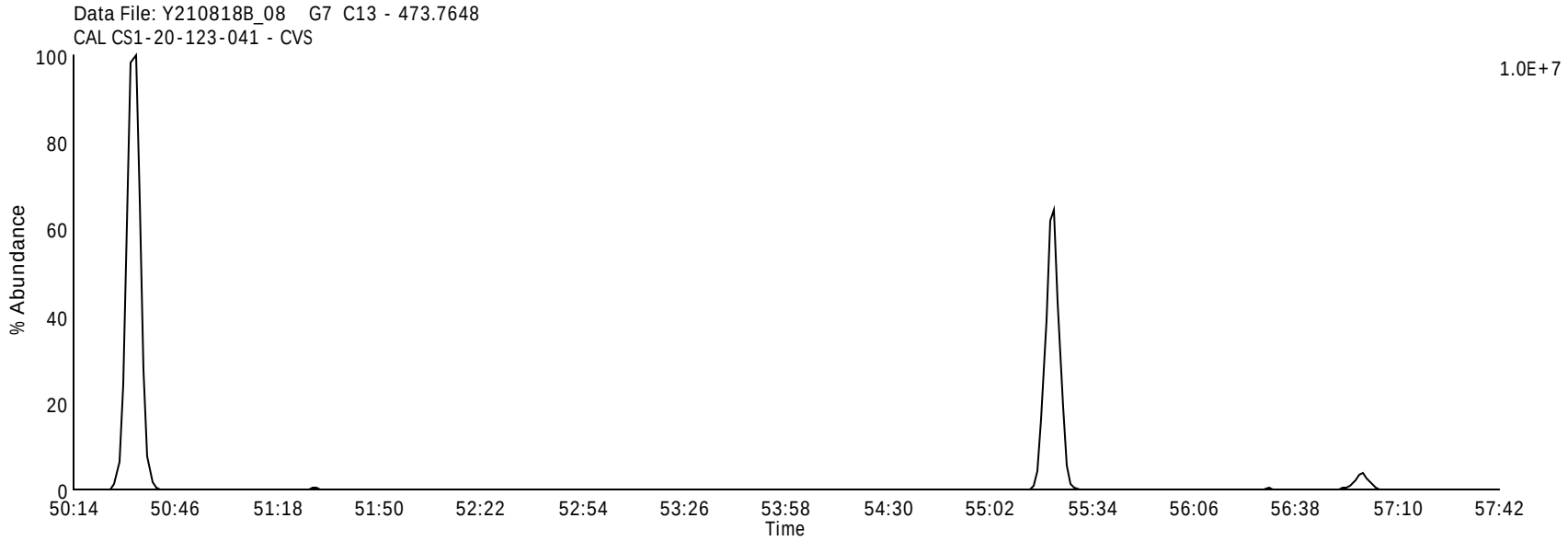


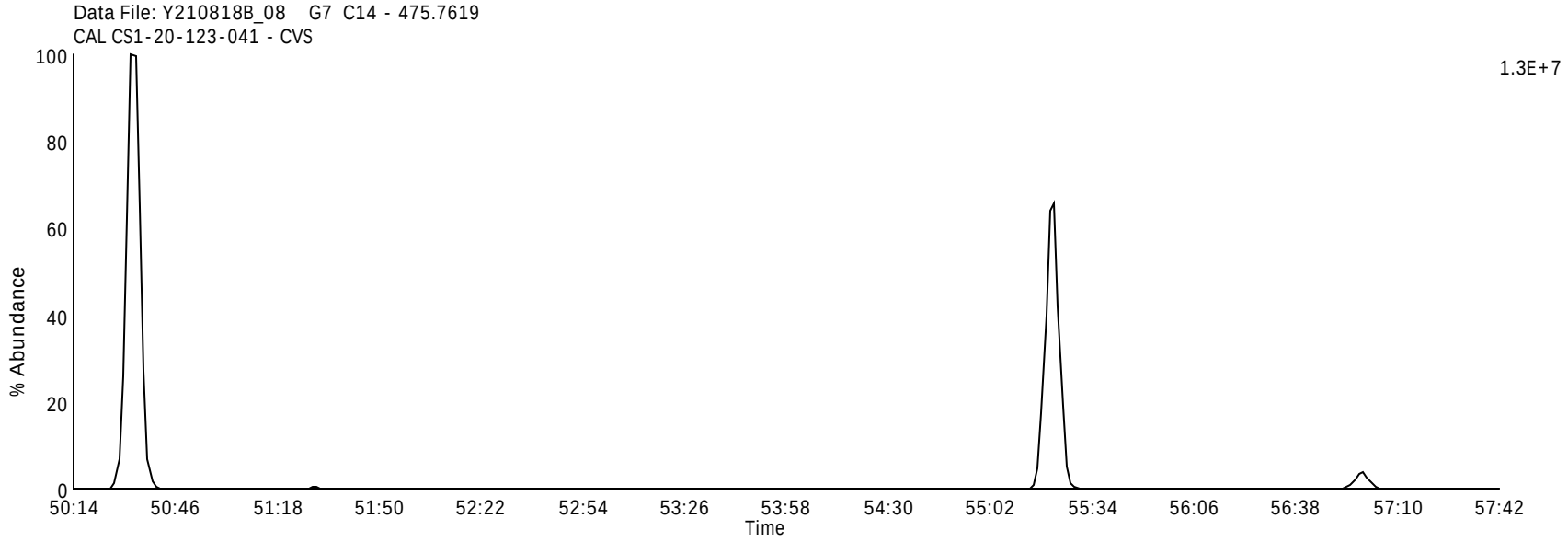
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



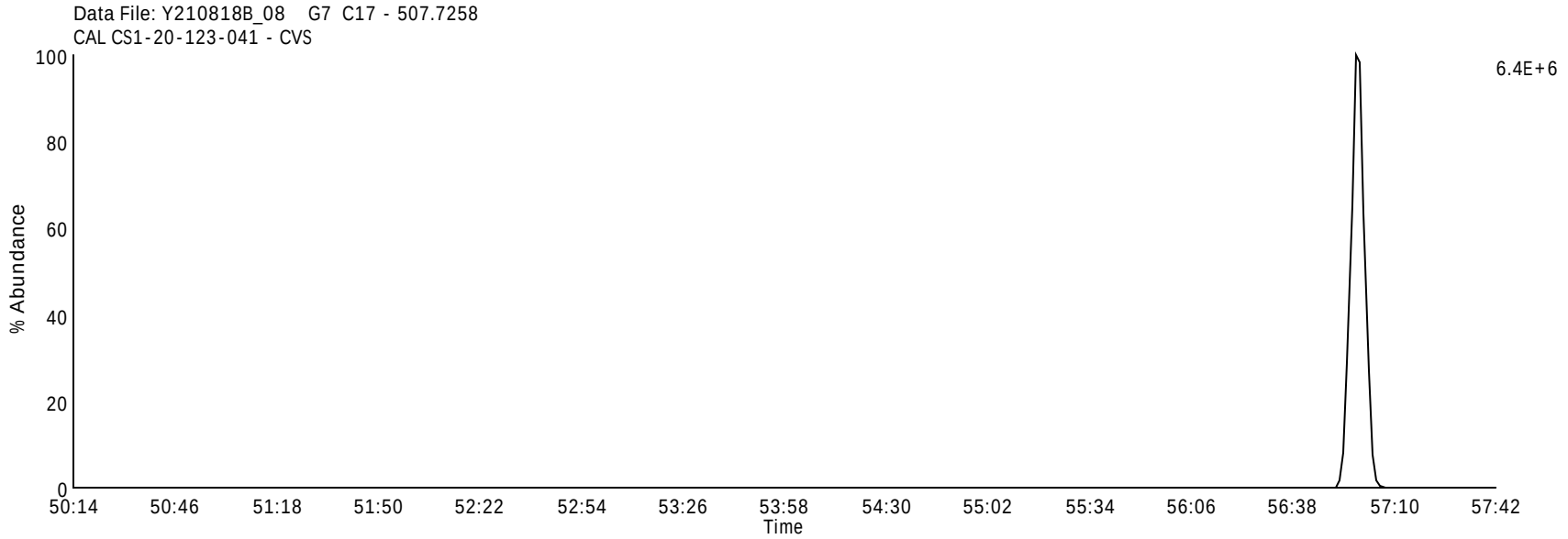


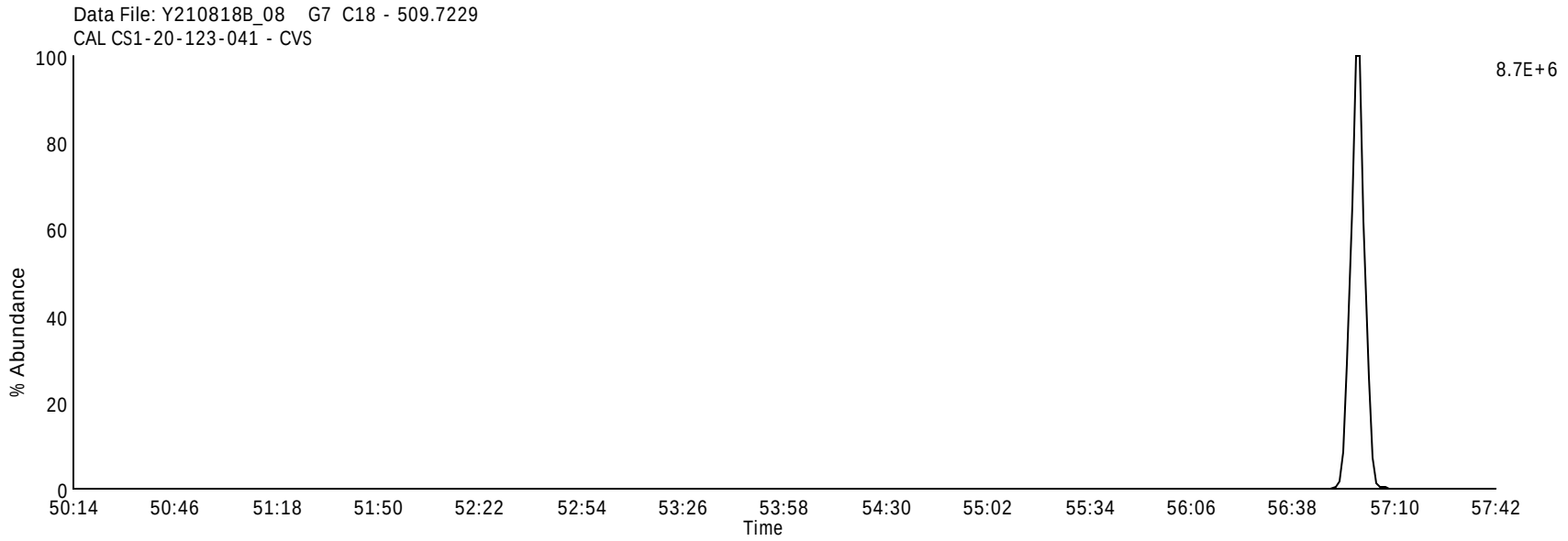
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



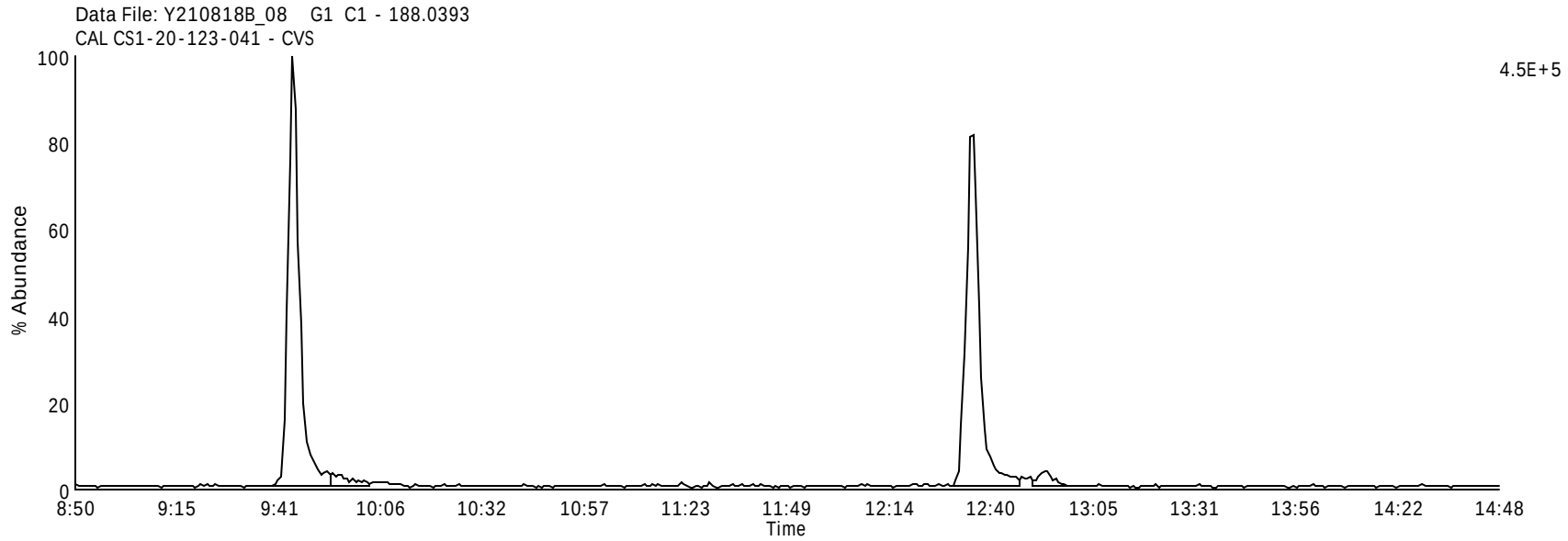


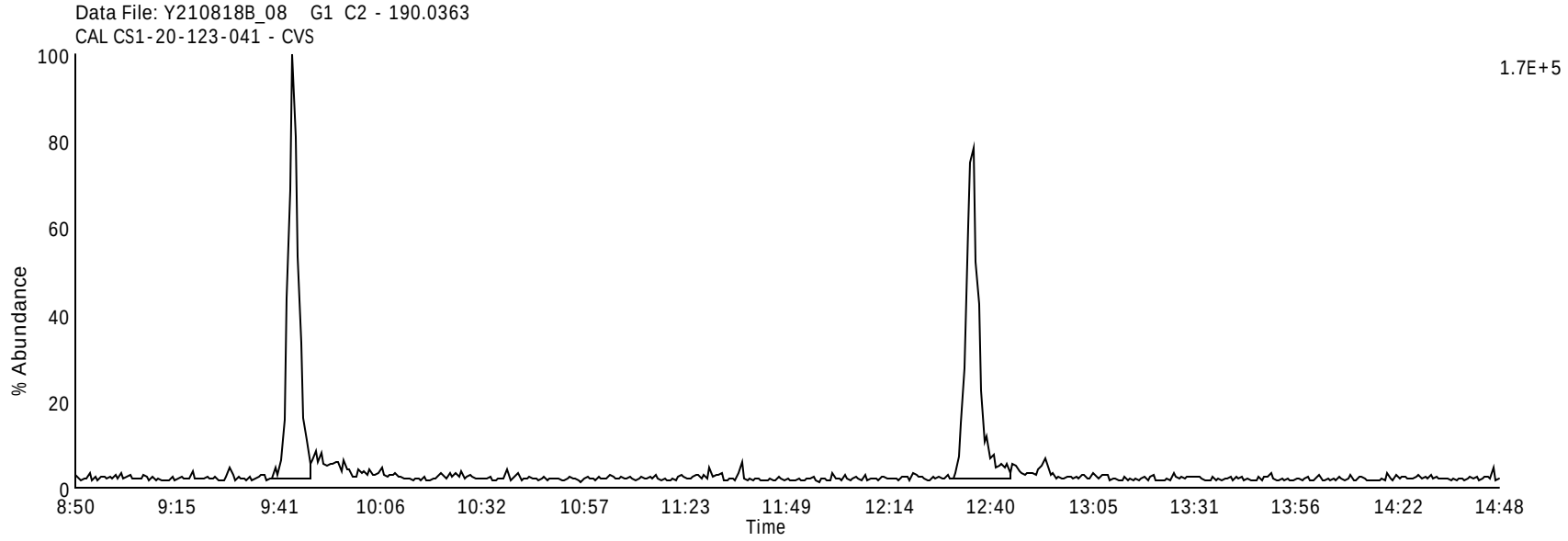
Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

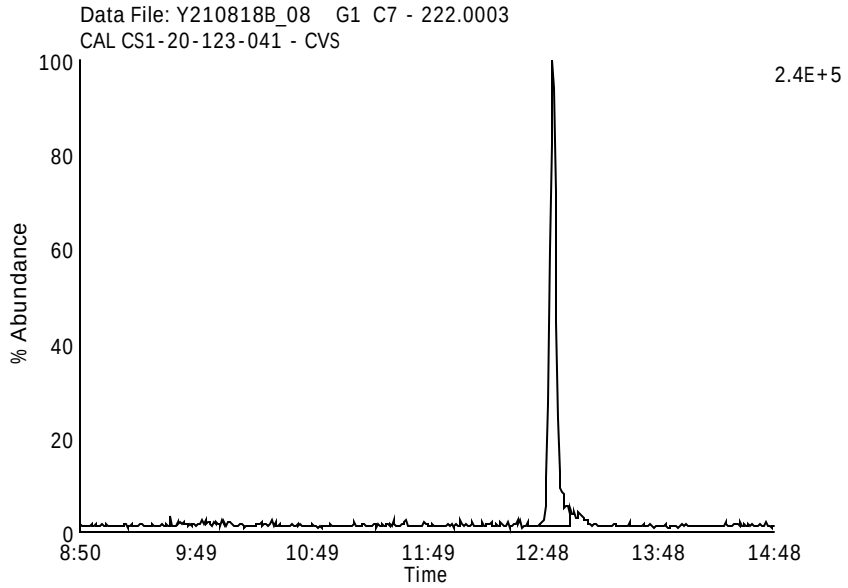
Sample Description: CAL CS1-20-123-041 - CVS

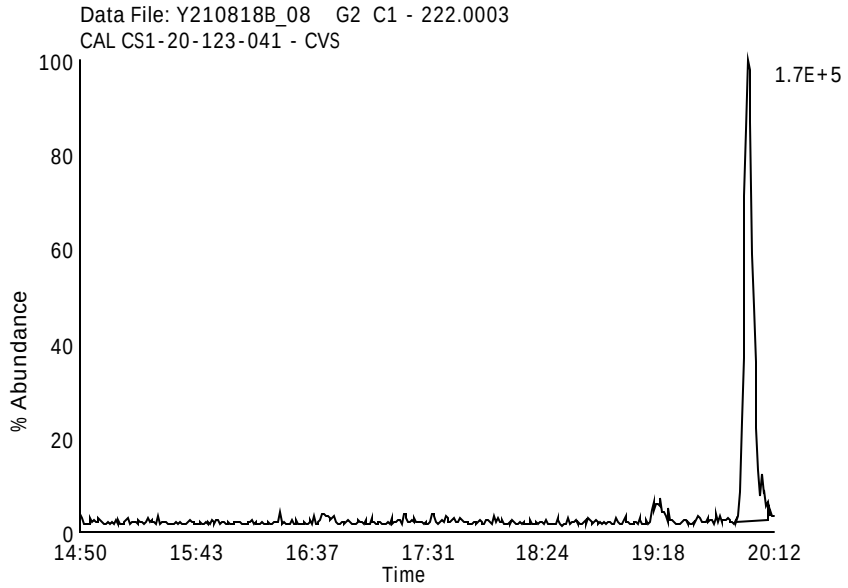


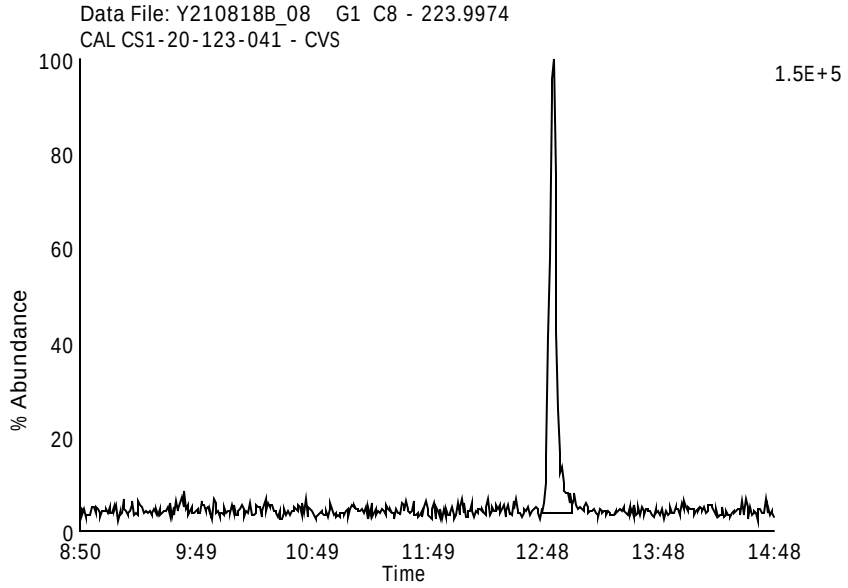


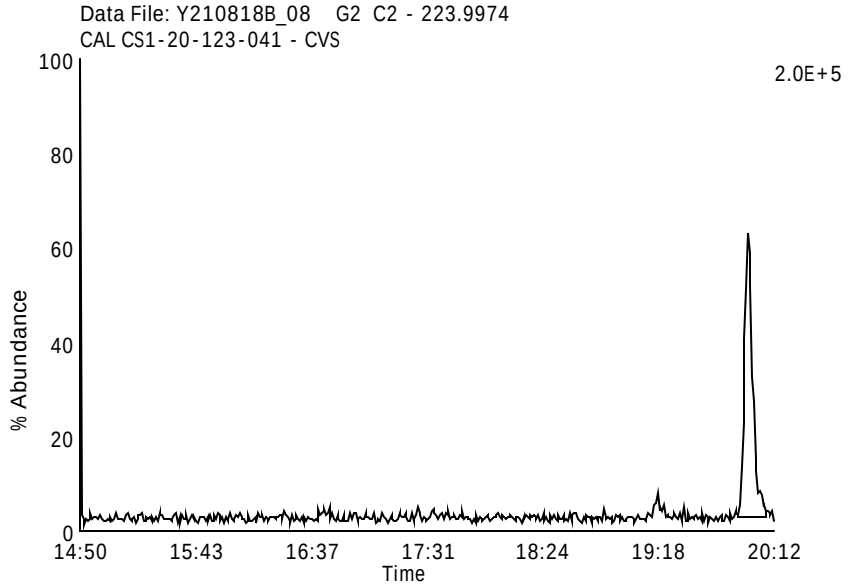
Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



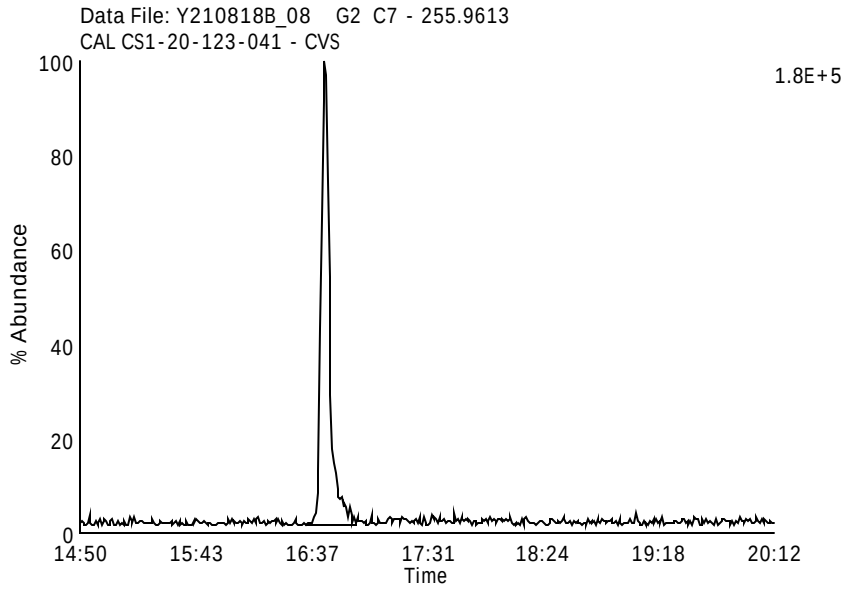


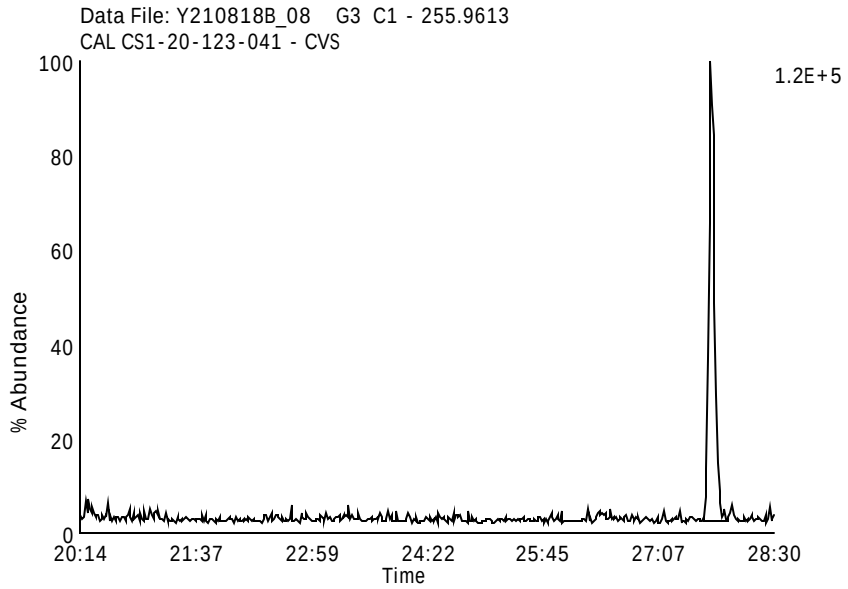


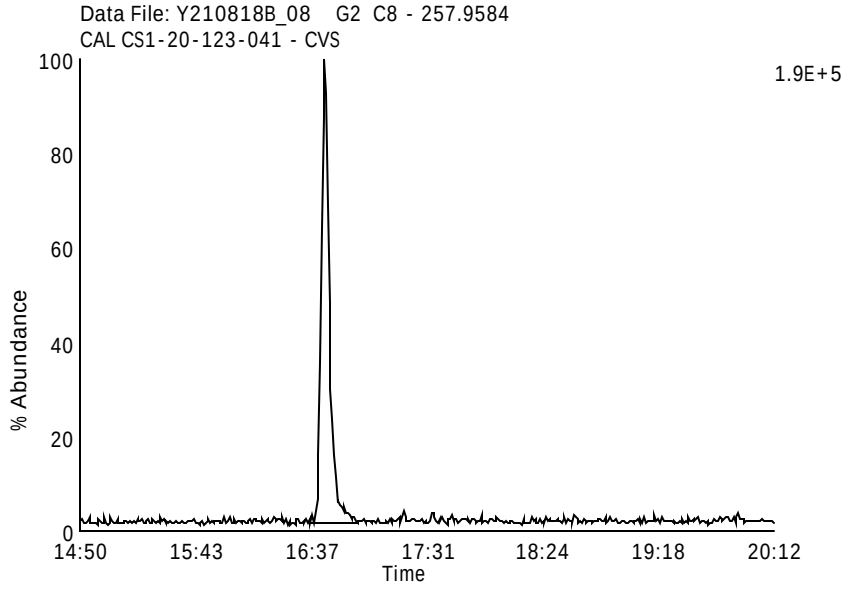


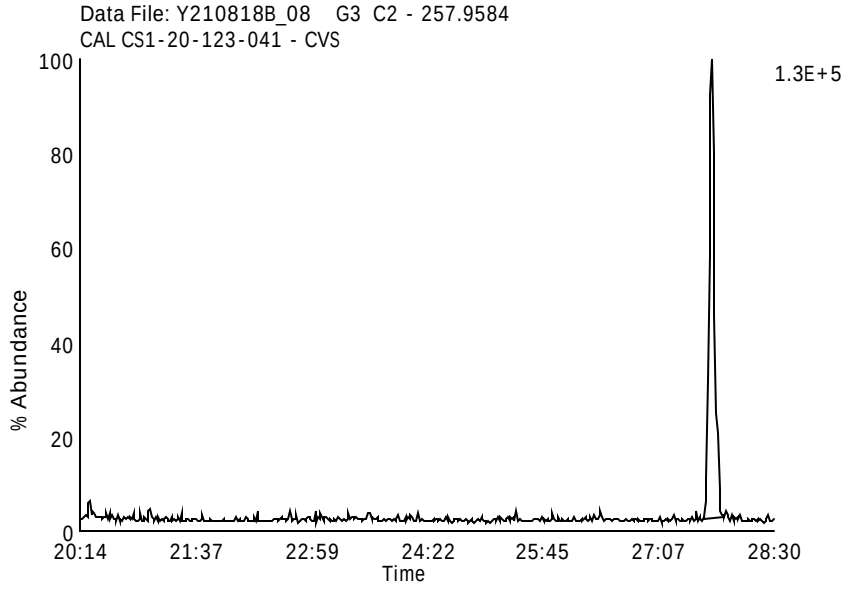
Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



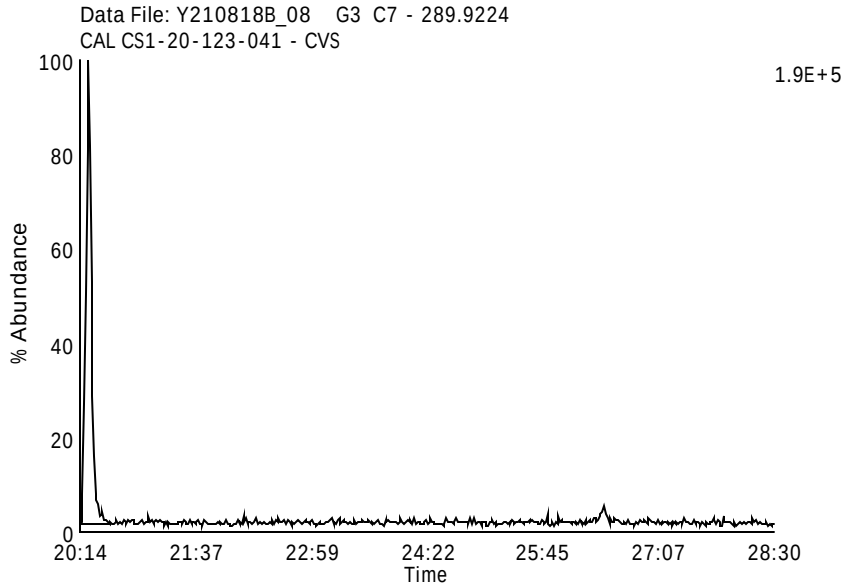


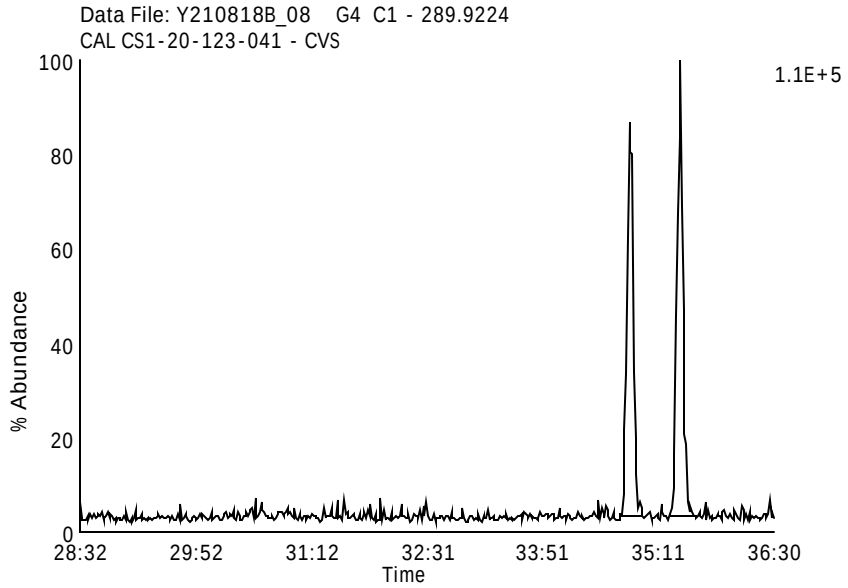


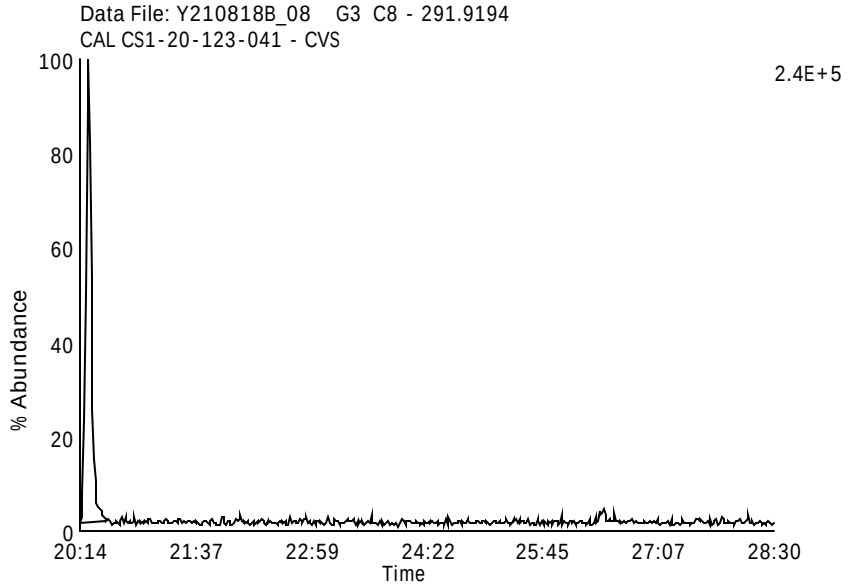


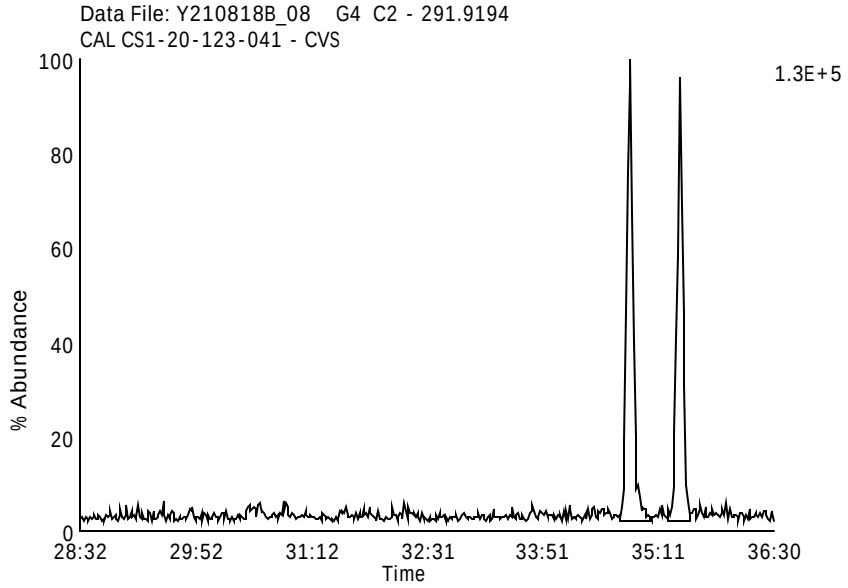
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS





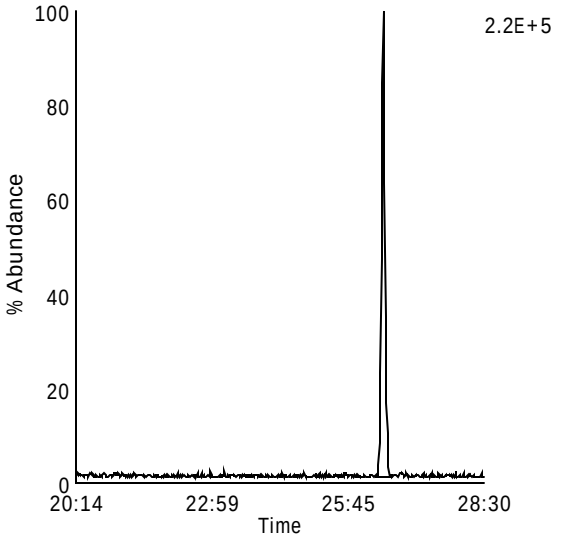




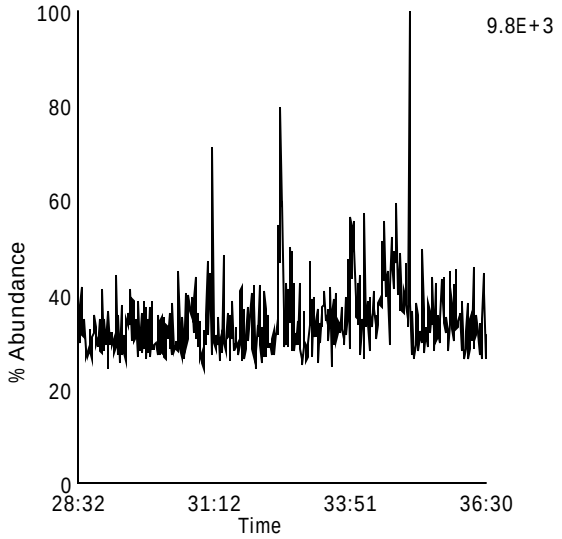
Penta Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

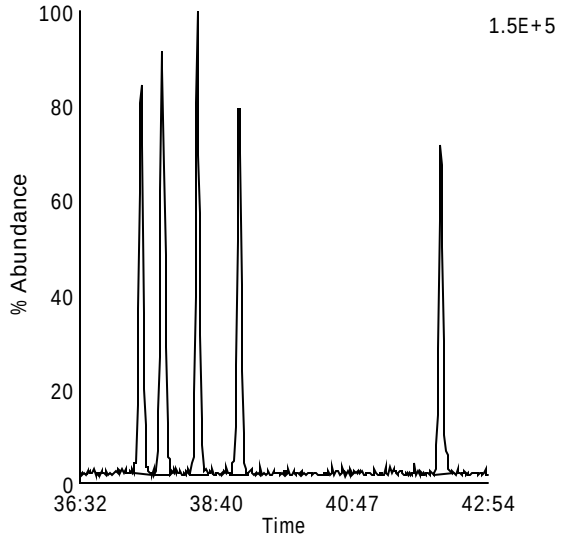
Data File: Y210818B_08 G3 C11 - 325.8804
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C5 - 325.8804
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C1 - 325.8804
CAL CS1-20-123-041 - CVS



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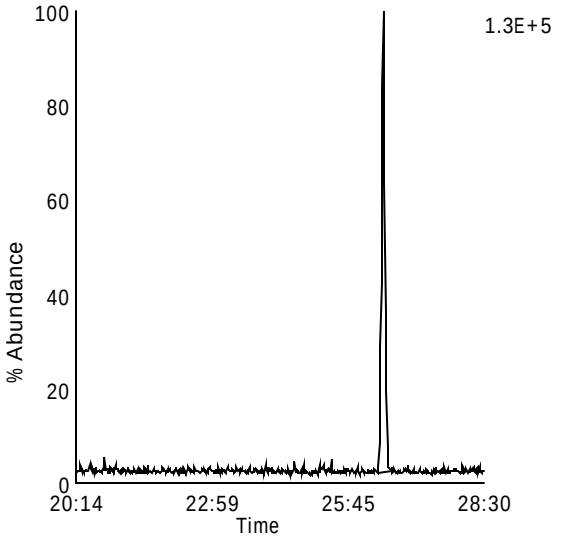
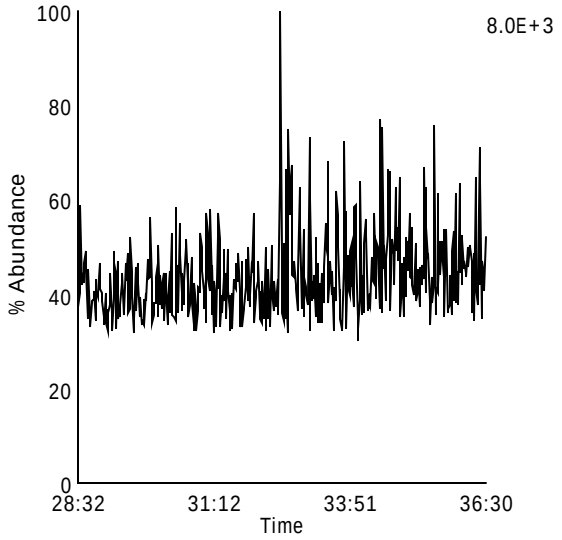
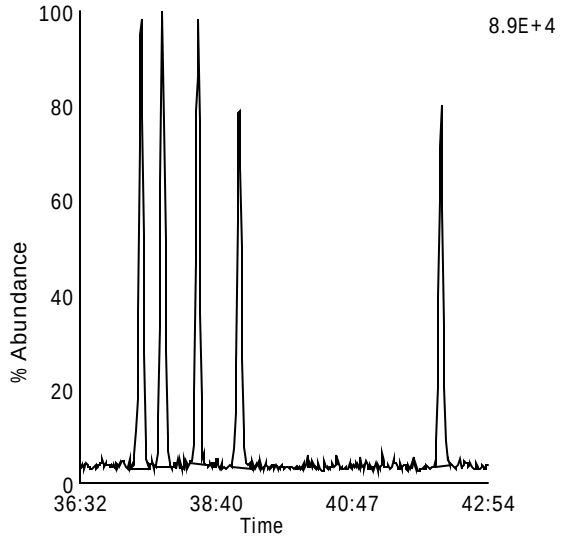
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C6 - 327.8775
CAL CS1-20-123-041 - CVS



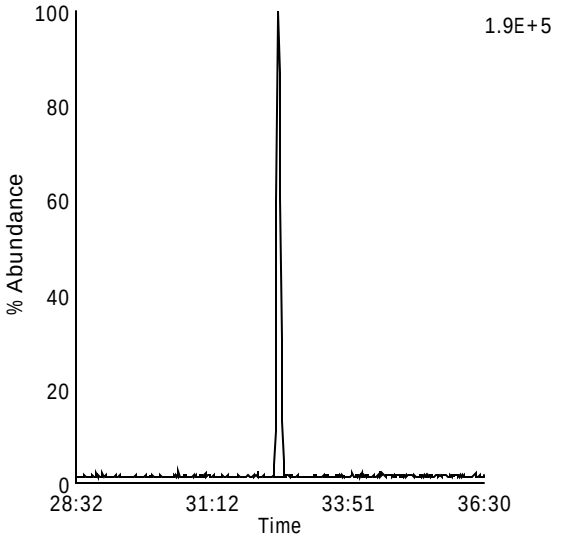
Data File: Y210818B_08 G5 C2 - 327.8775
CAL CS1-20-123-041 - CVS



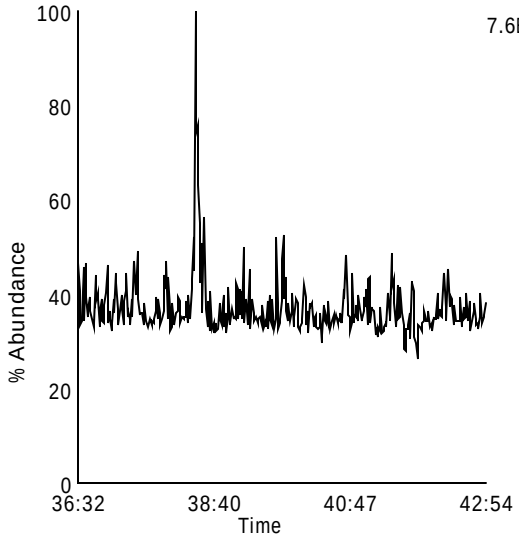
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

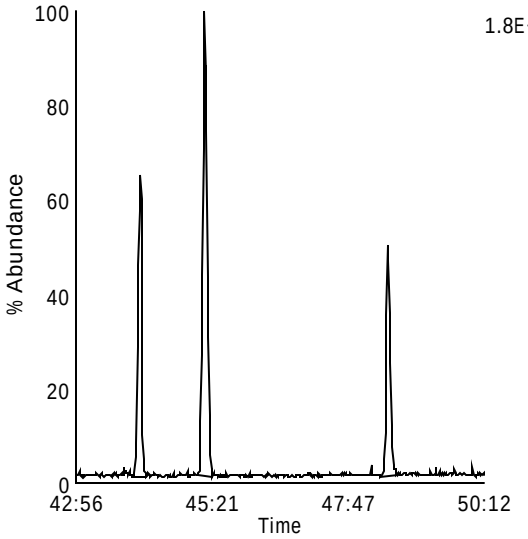
Data File: Y210818B_08 G4 C11 - 359.8415
CAL CS1-20-123-041 - CVS



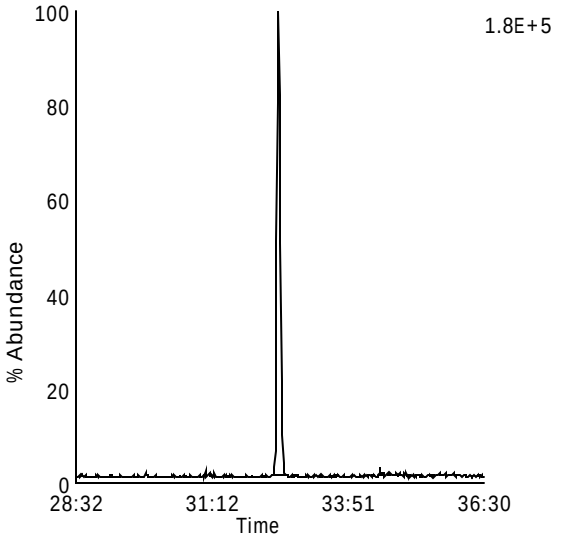
Data File: Y210818B_08 G5 C5 - 359.8415
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G6 C1 - 359.8415
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C12 - 361.8385
CAL CS1-20-123-041 - CVS



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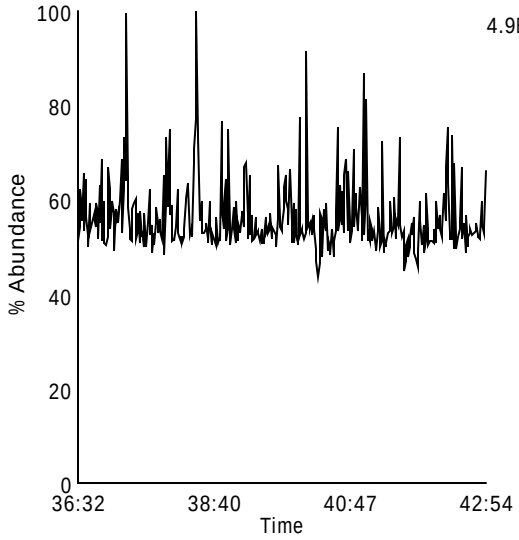
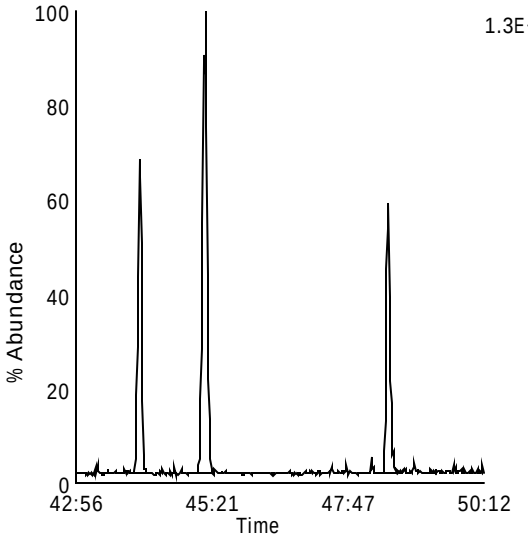
CAL CS1-20-123-041 - CVS

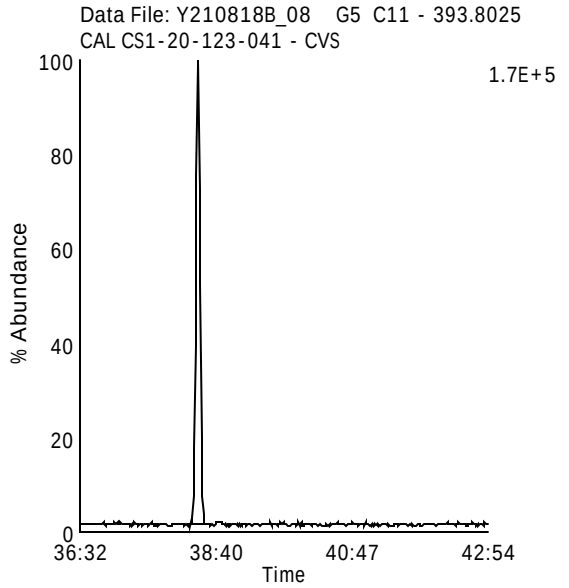


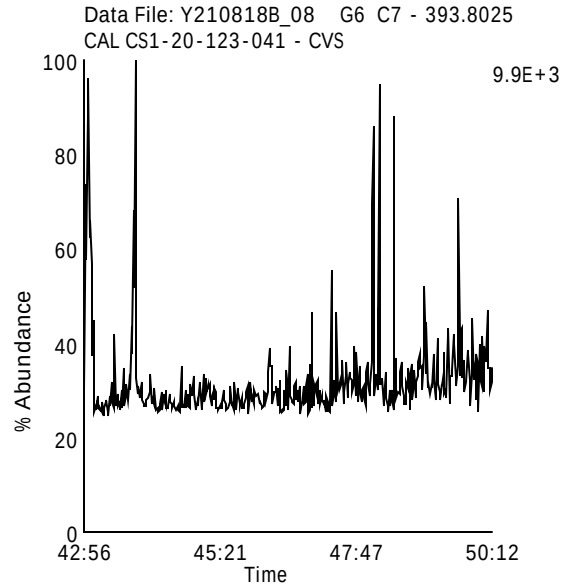
Data File: Y210818B_08 G6 C2 - 361.8385
CAL CS1-20-123-041 - CVS

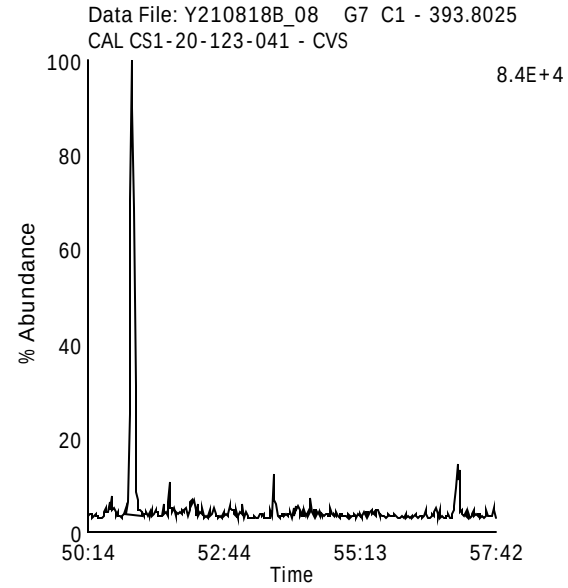


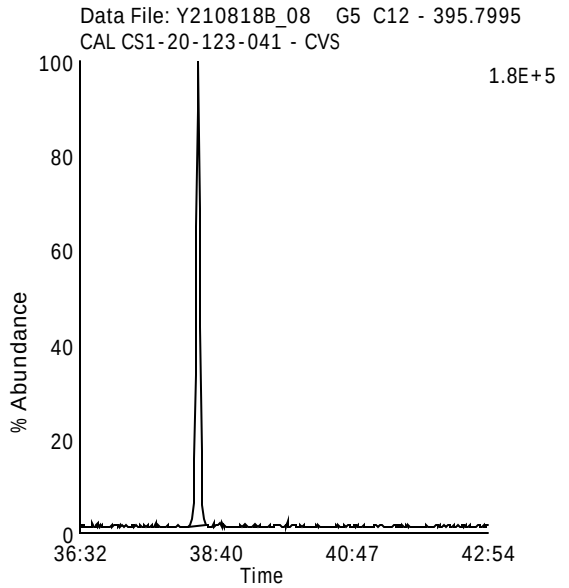
Hepta Chlorinated Biphenyls

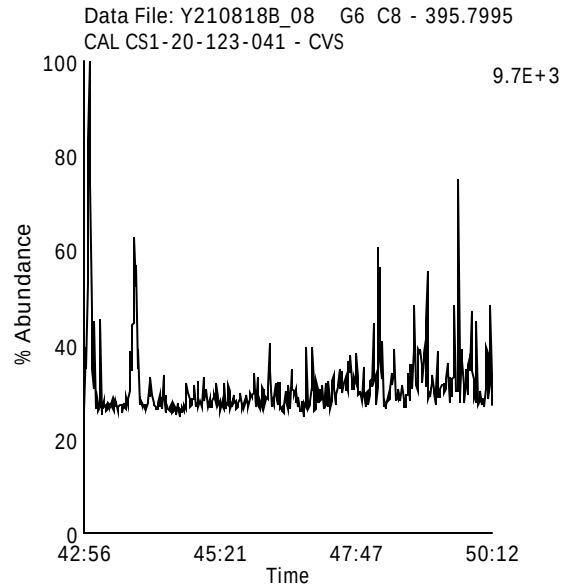
Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

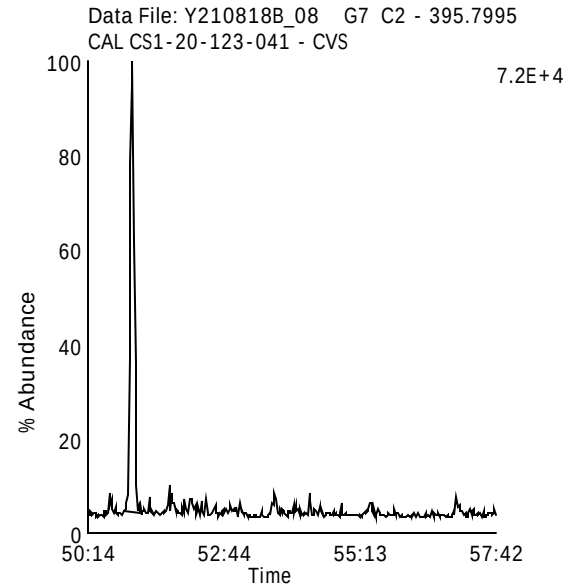






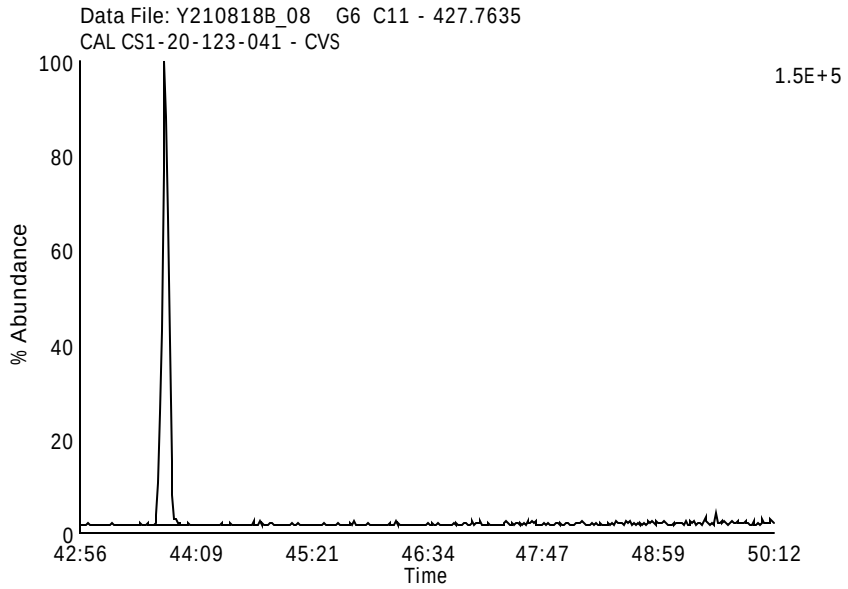


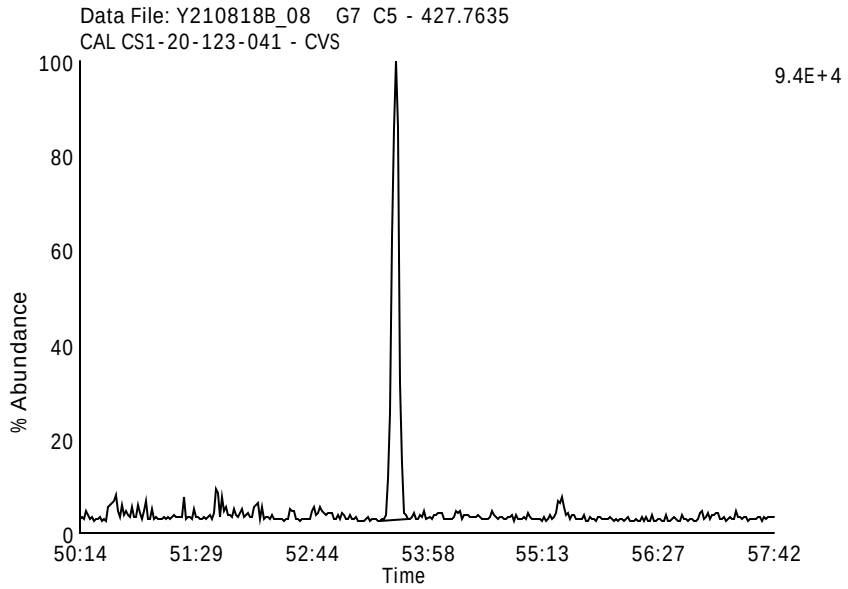


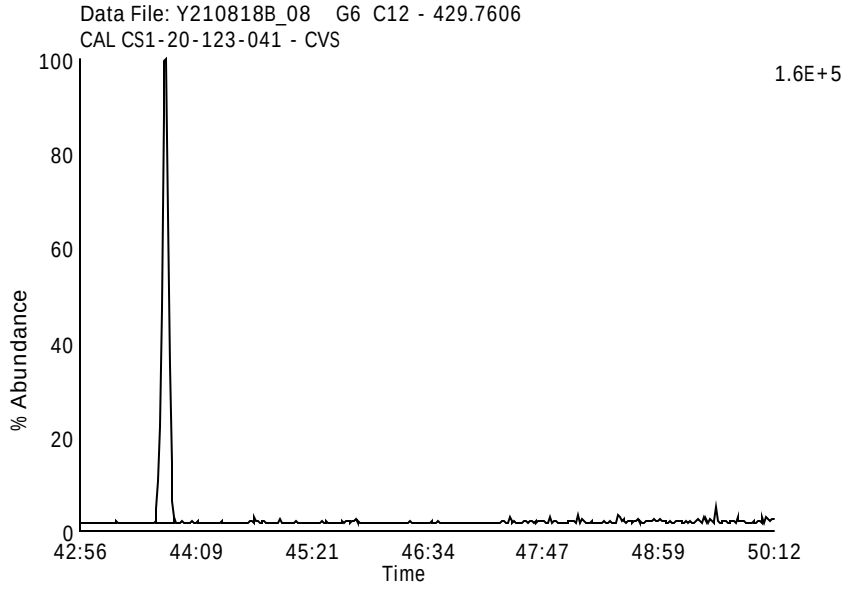


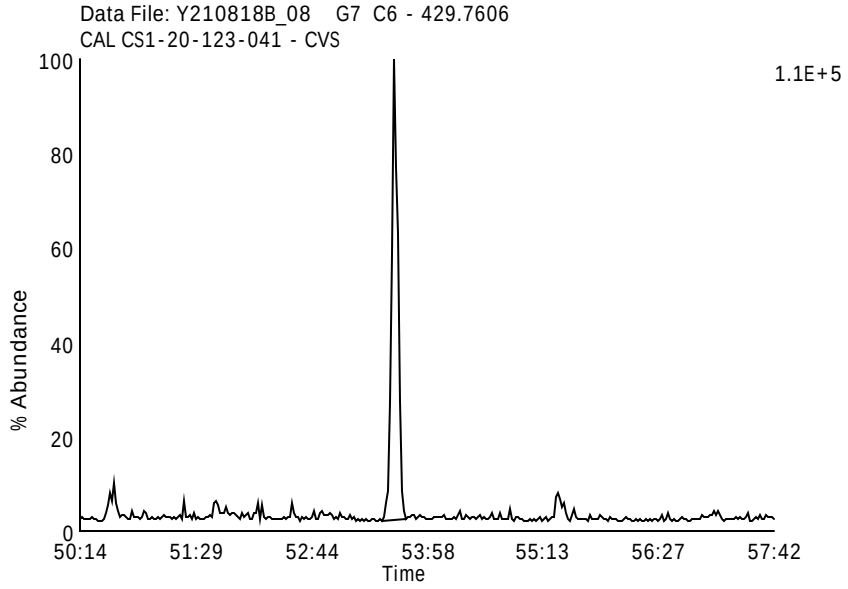
Octa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







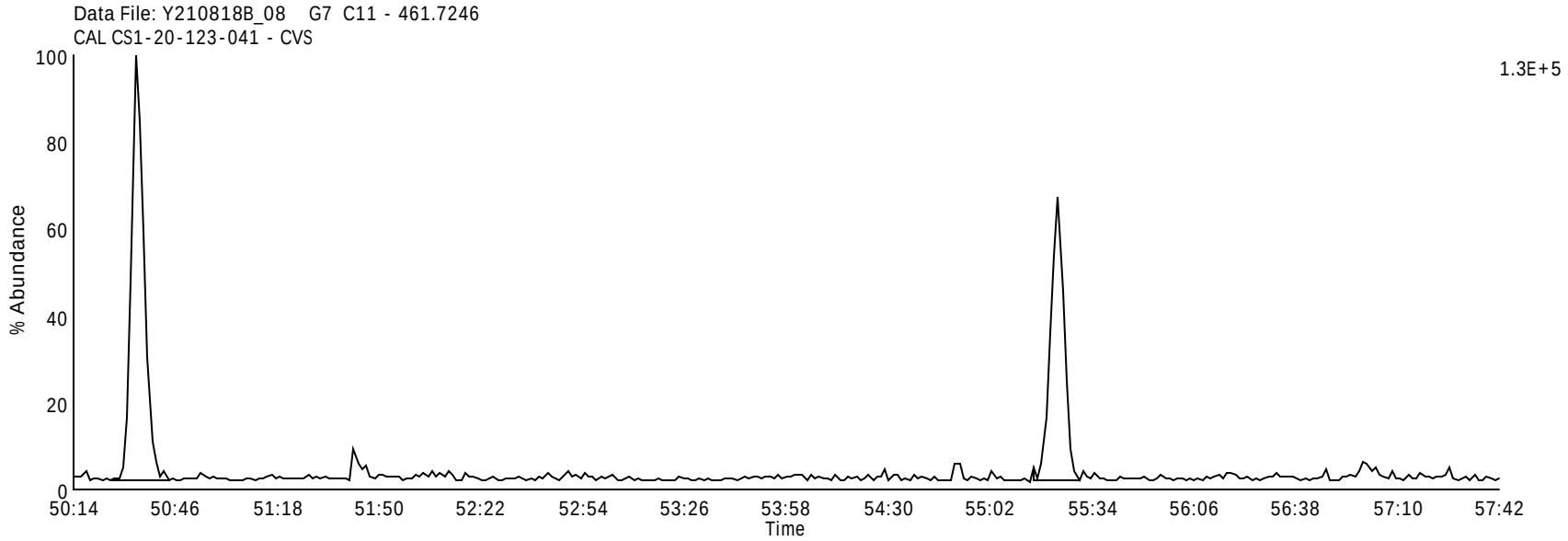


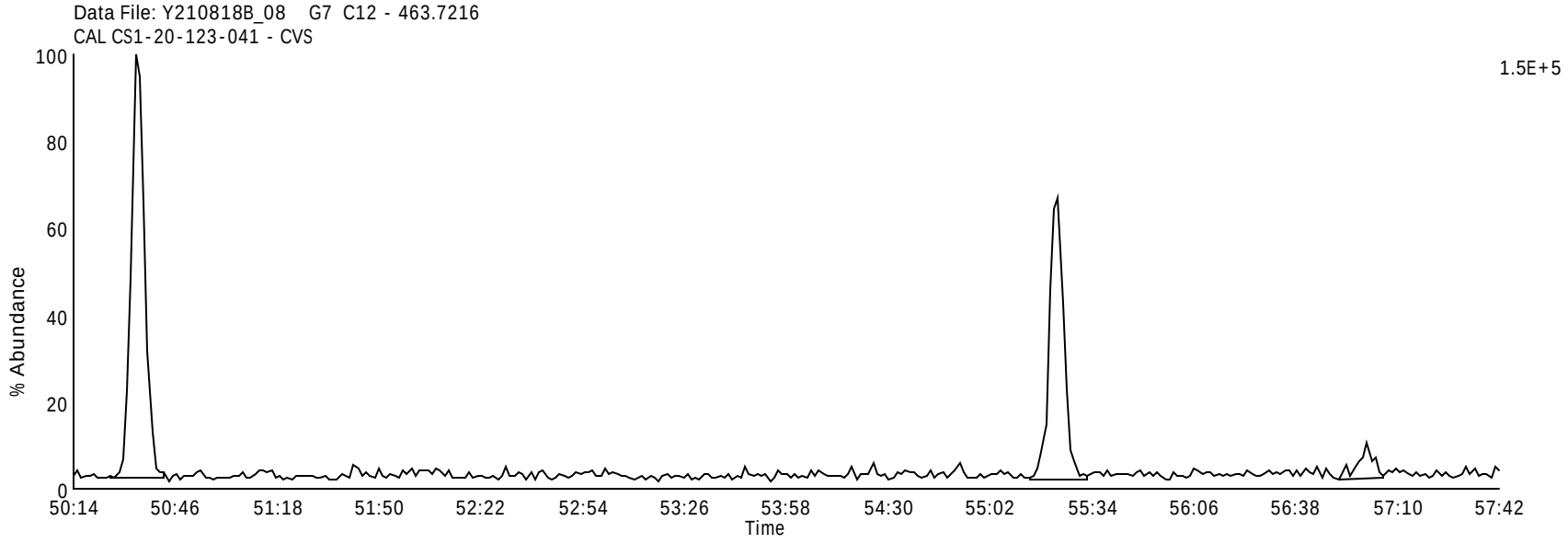
Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



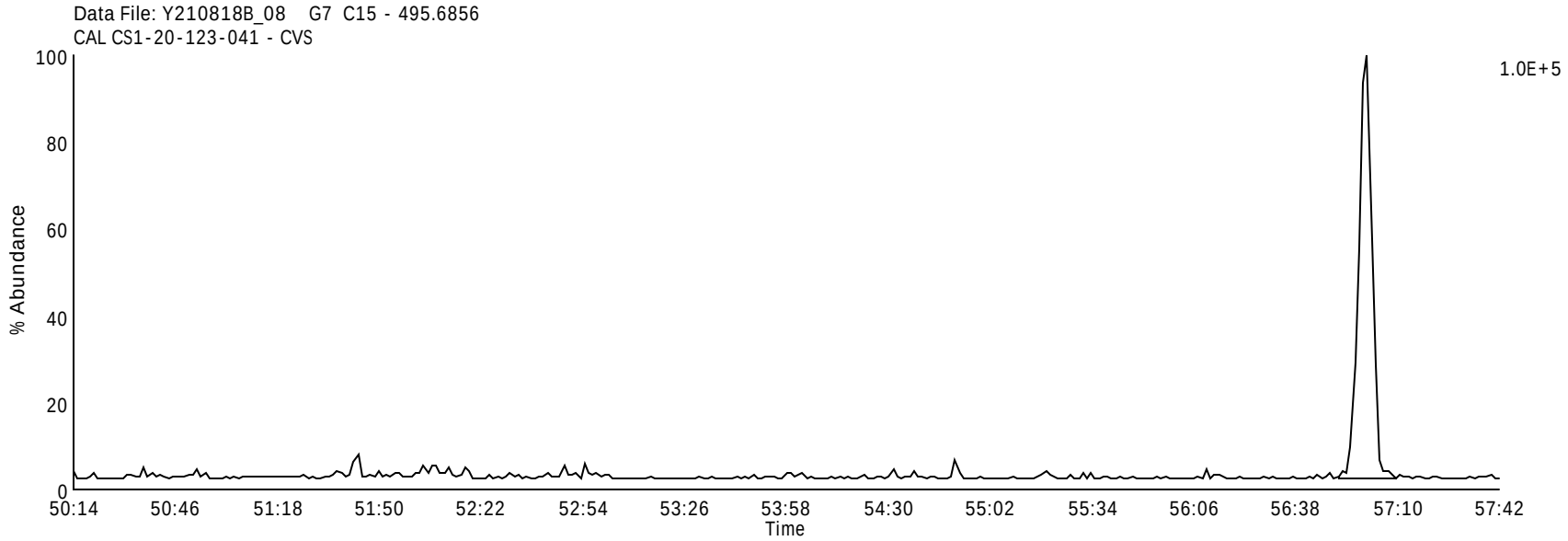


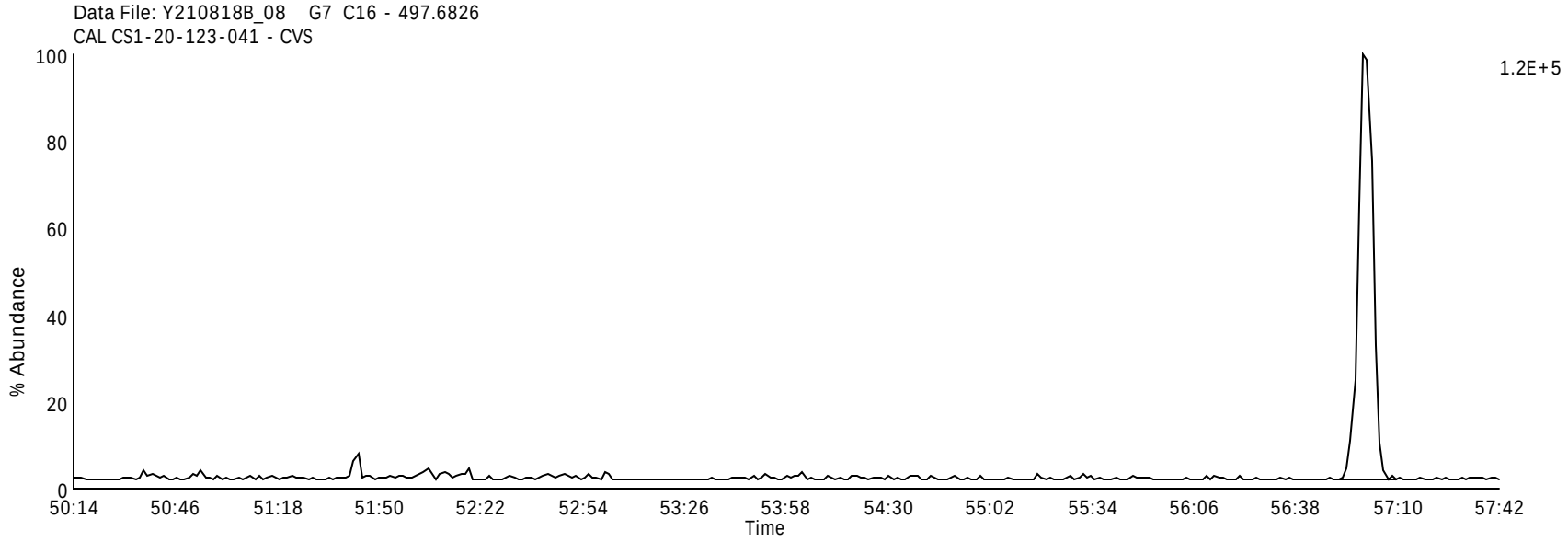
Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

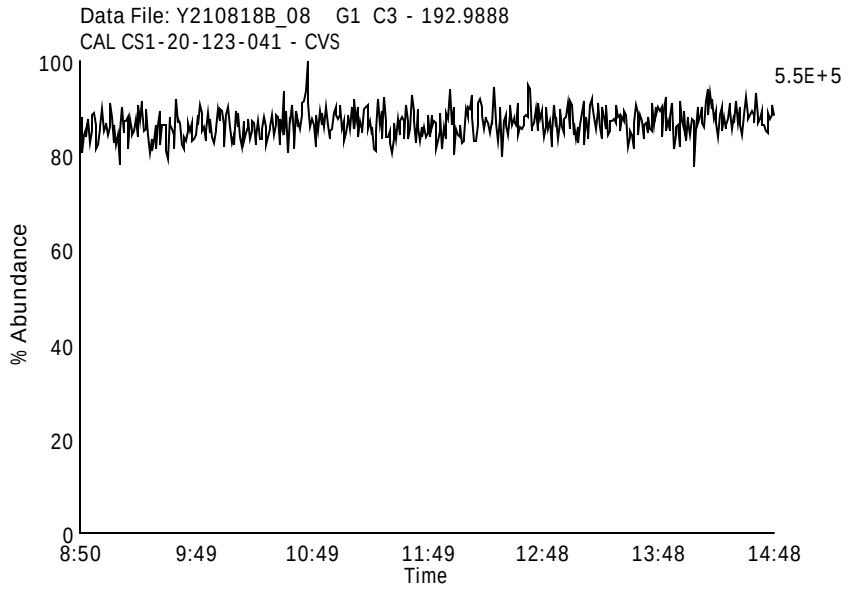
Sample Description: CAL CS1-20-123-041 - CVS

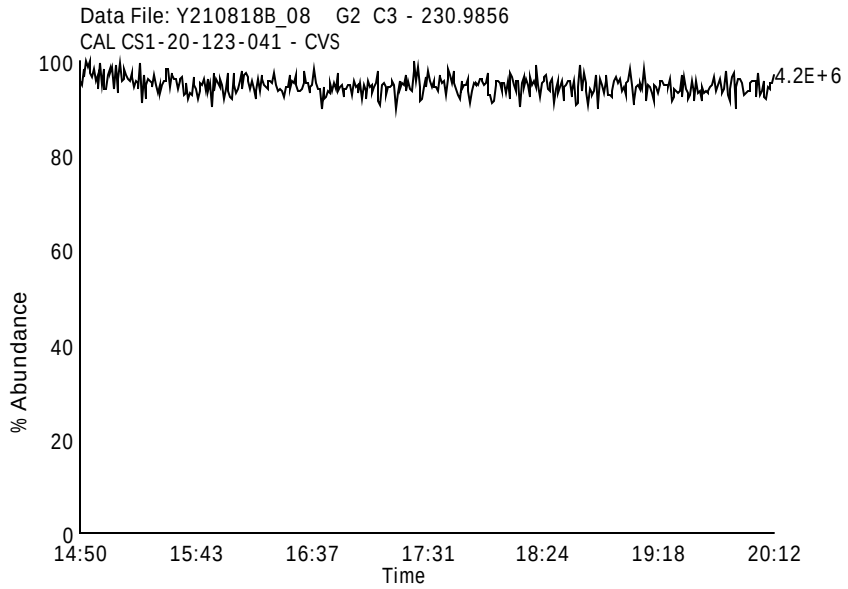


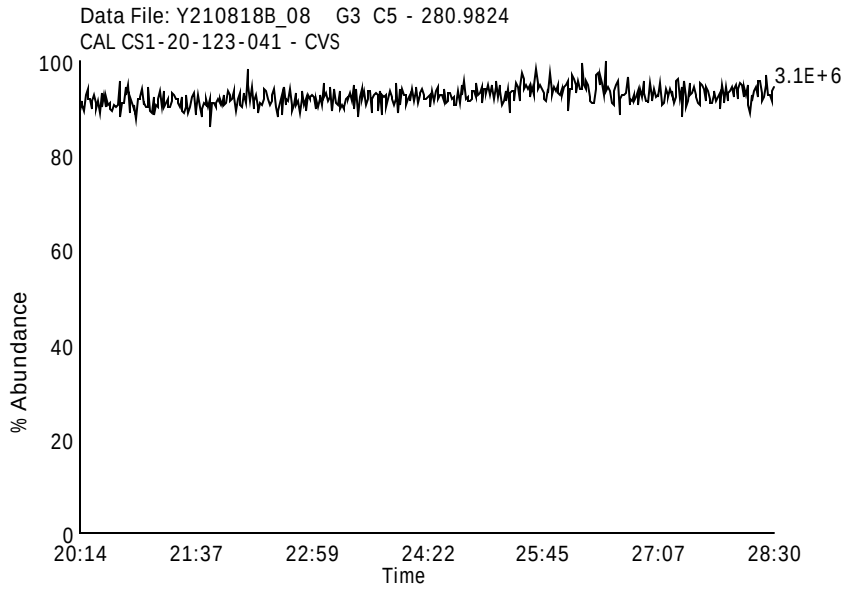


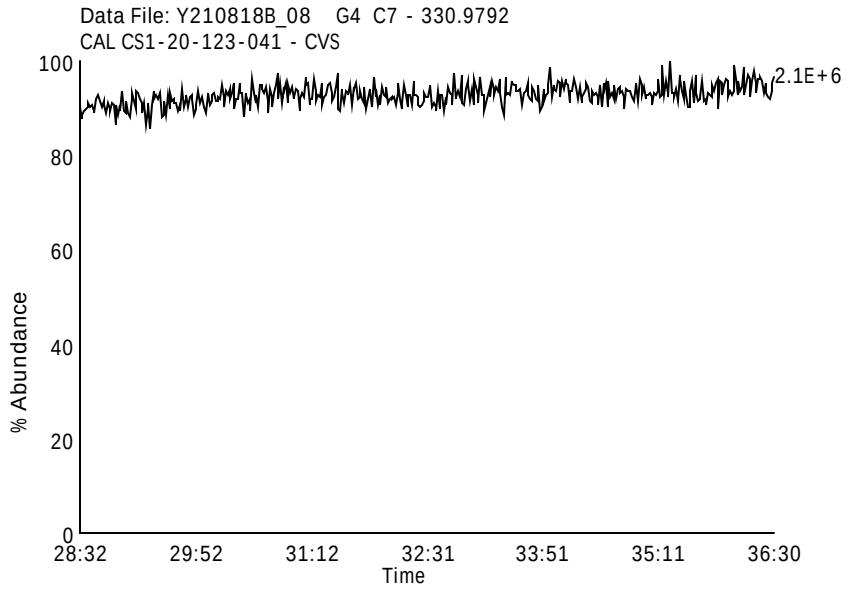
Group 1 - 4 Lock mass

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS





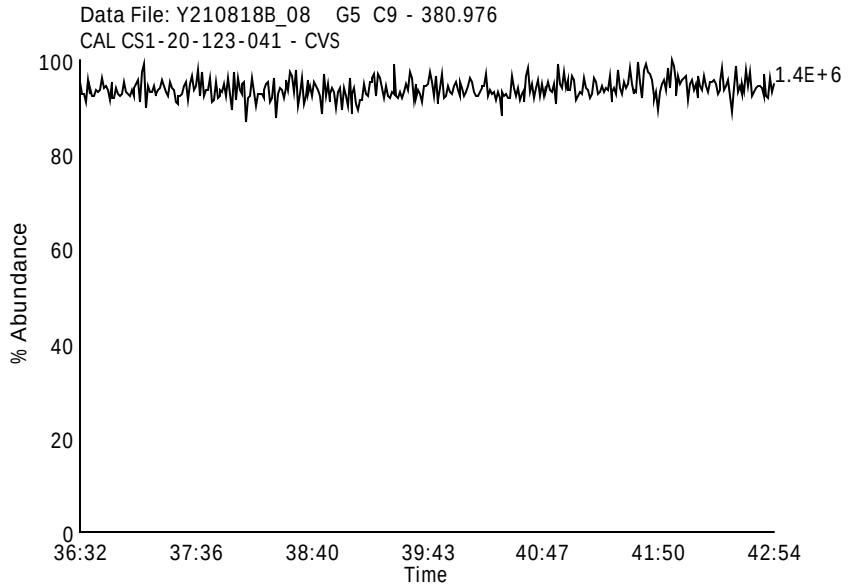


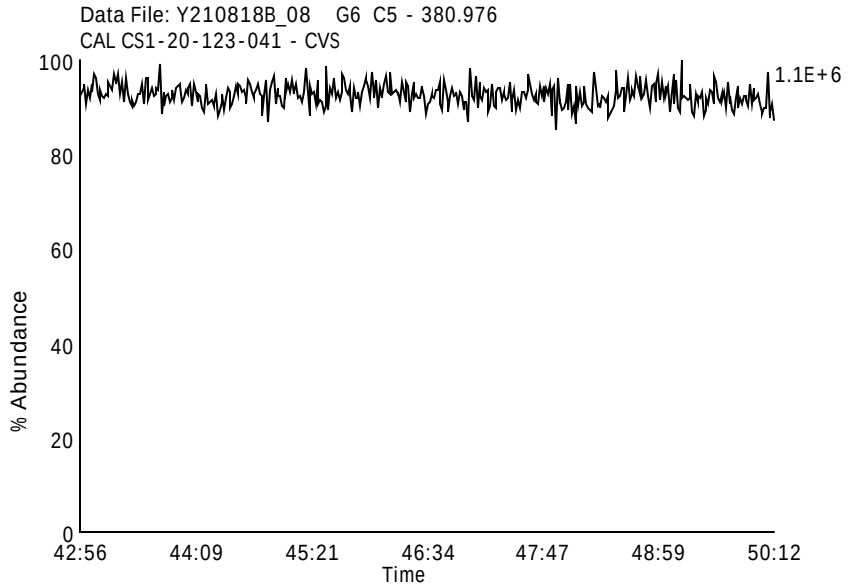


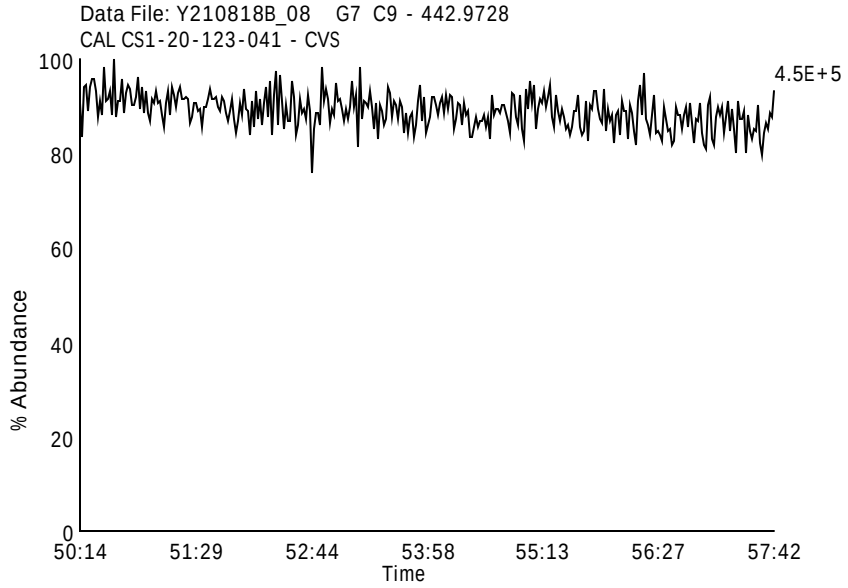
Group 5 - 7 Lock mass

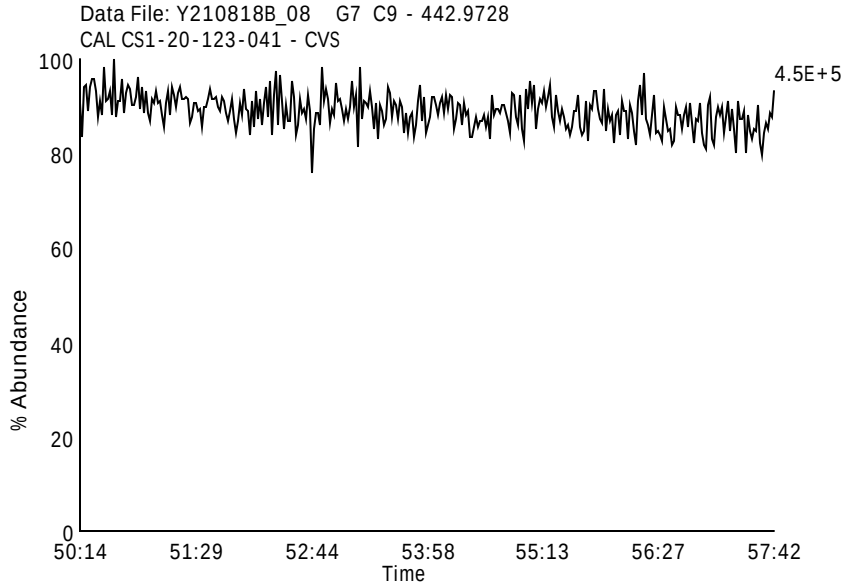
Data File Name: Y210818B_08
Date Acquired: 8/18/2021
Sample Description: CAL CS1-20-123-041 - CVS

Lab Sample ID: CS1-20-123-041
Instrument: 10MSHR12 (Y)







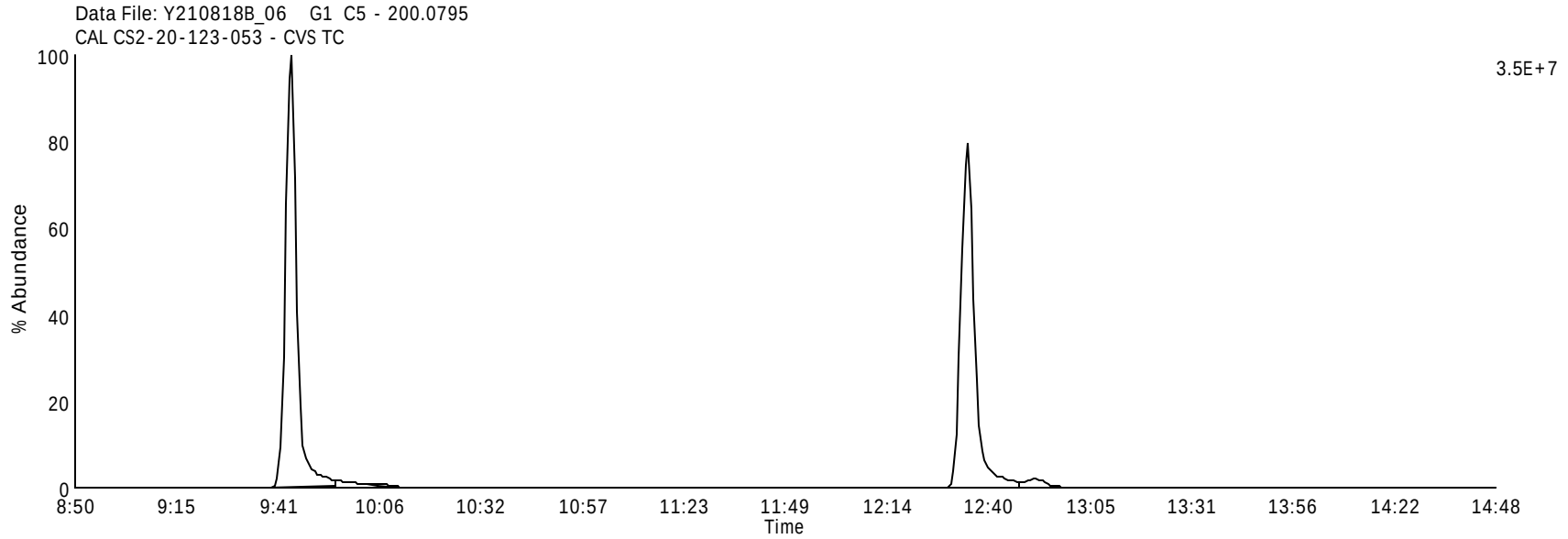


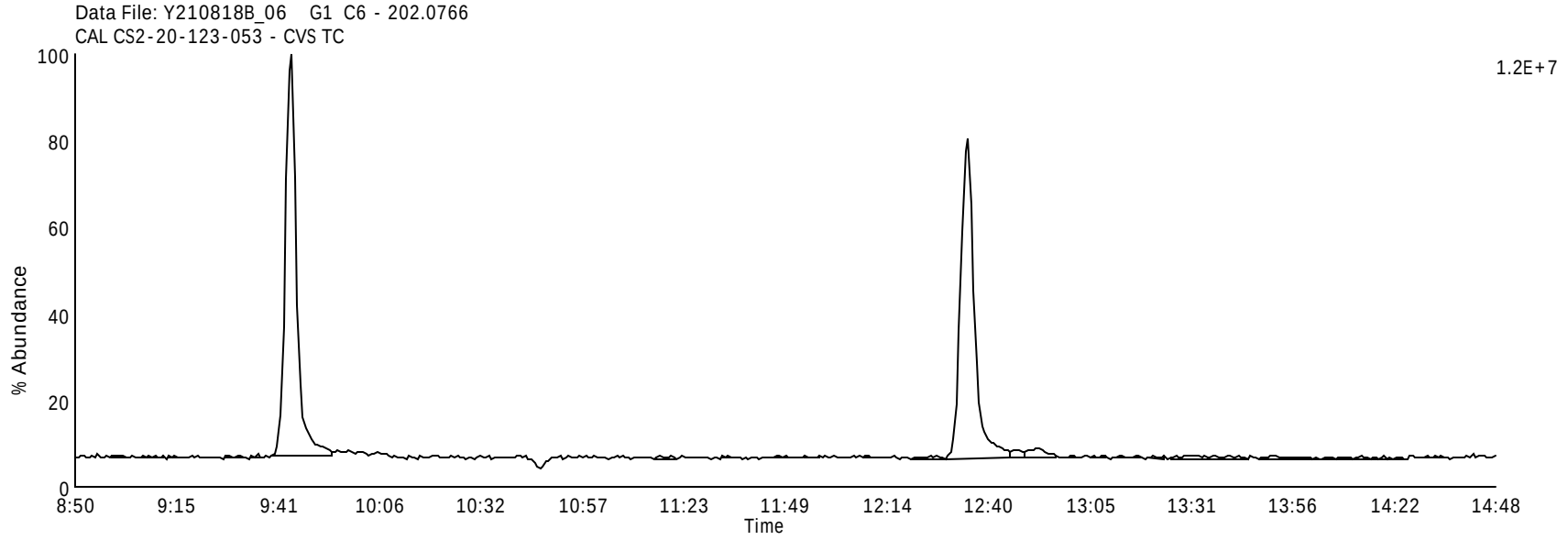
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

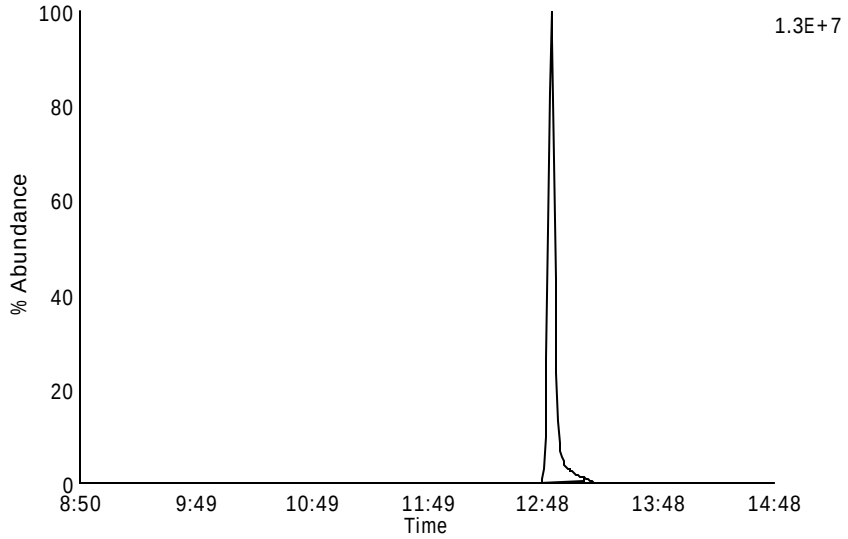




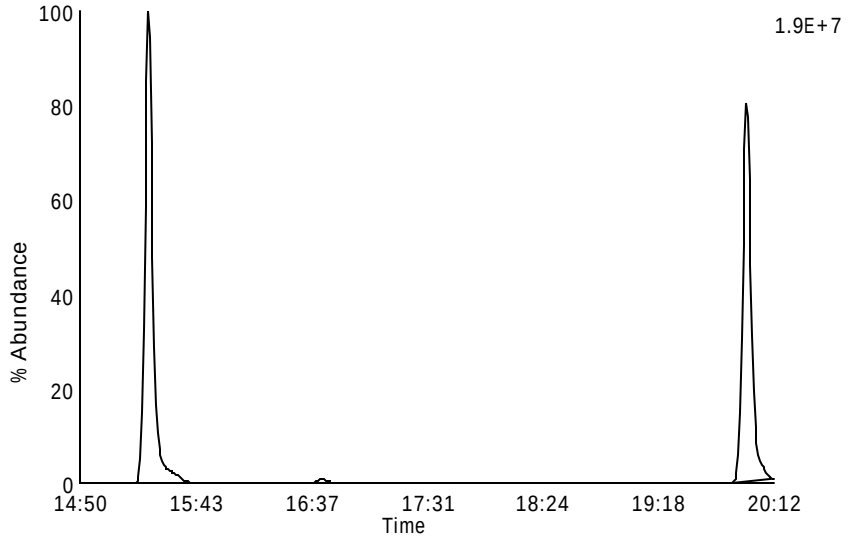
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC

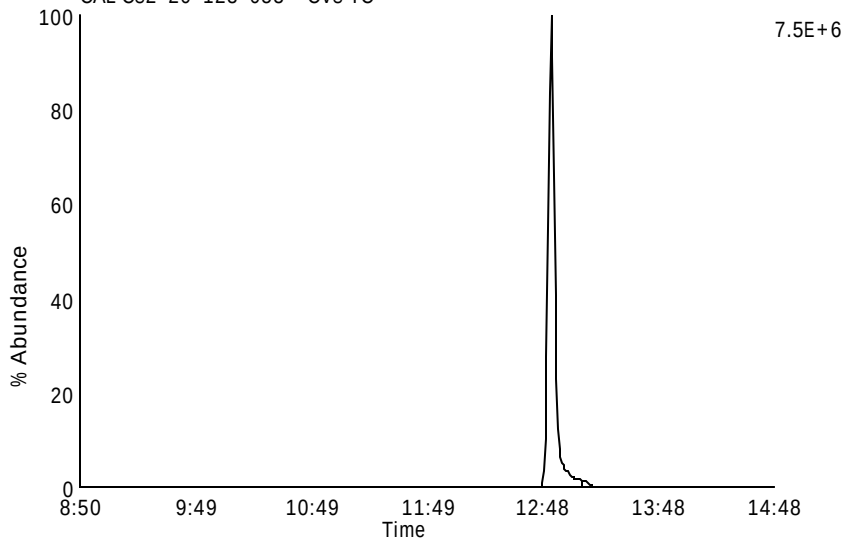
Data File: Y210818B_06 G1 C9 - 234.0406
CAL CS2-20-123-053 - CVS TC



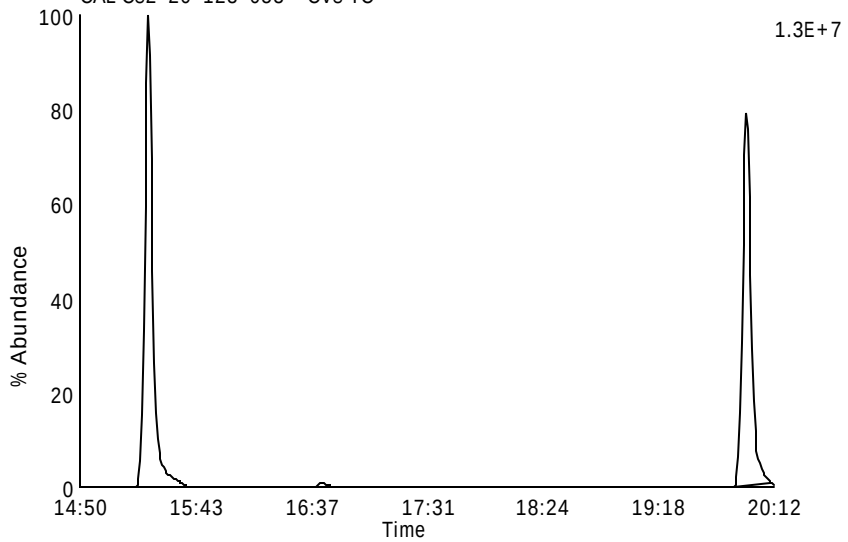
Data File: Y210818B_06 G2 C5 - 234.0406
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G1 C10 - 236.0376
CAL CS2-20-123-053 - CVS TC

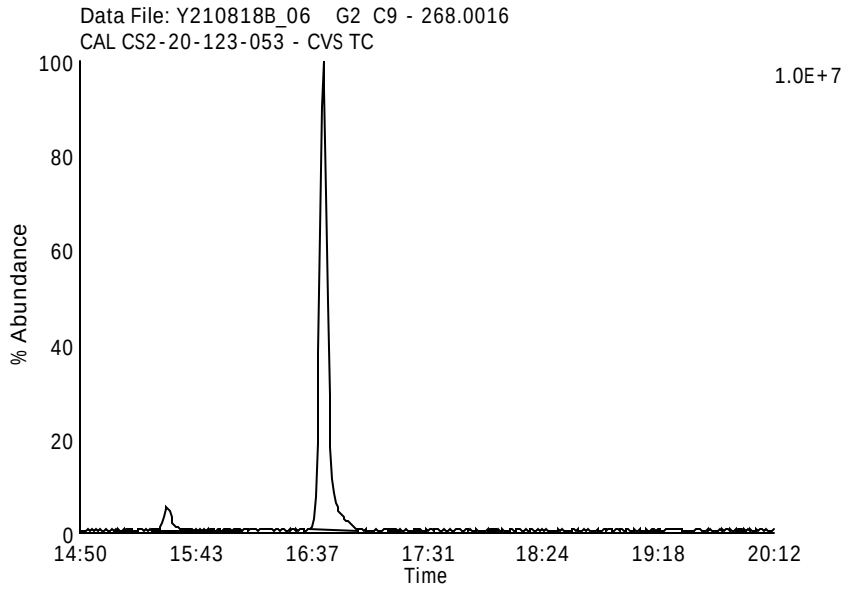


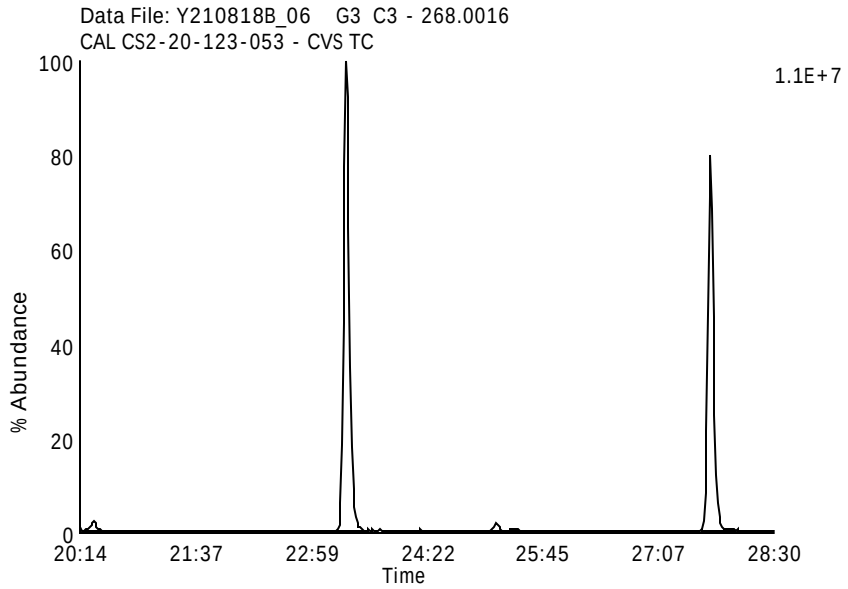
Data File: Y210818B_06 G2 C6 - 236.0376
CAL CS2-20-123-053 - CVS TC

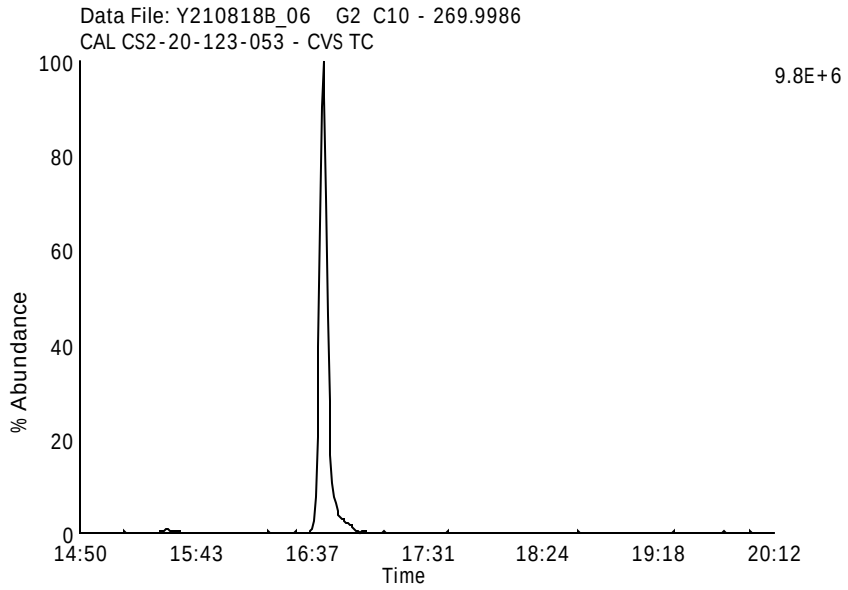


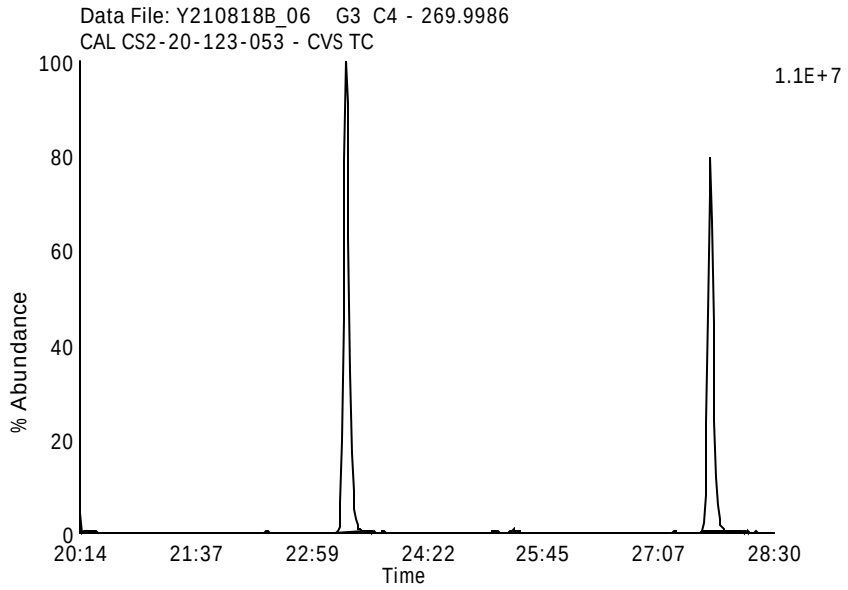
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC









Labeled Tetra Chlorinated Biphenyls

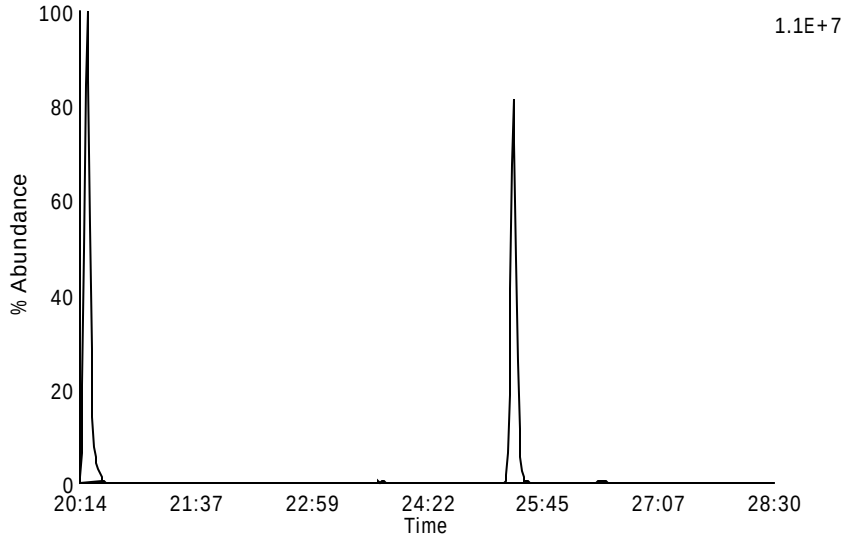
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

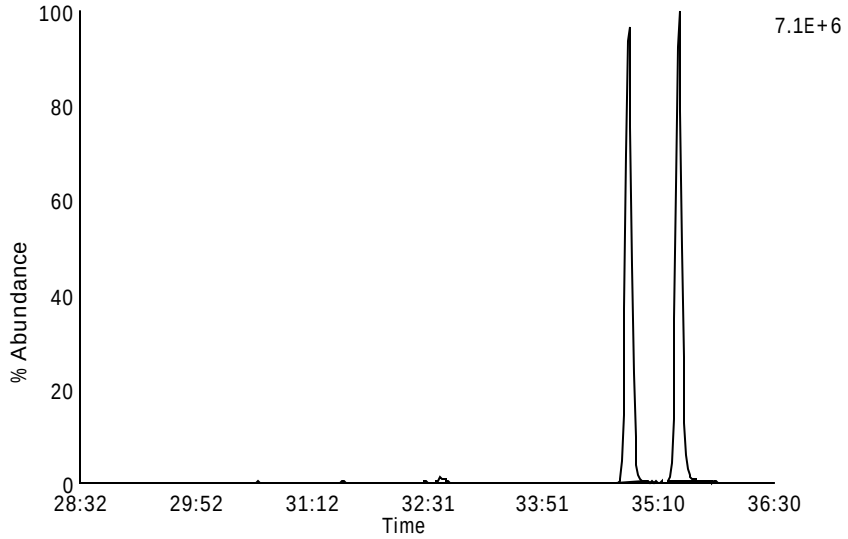
Data File: Y210818B_06 G3 C9 - 301.9626

CAL CS2-20-123-053 - CVS TC



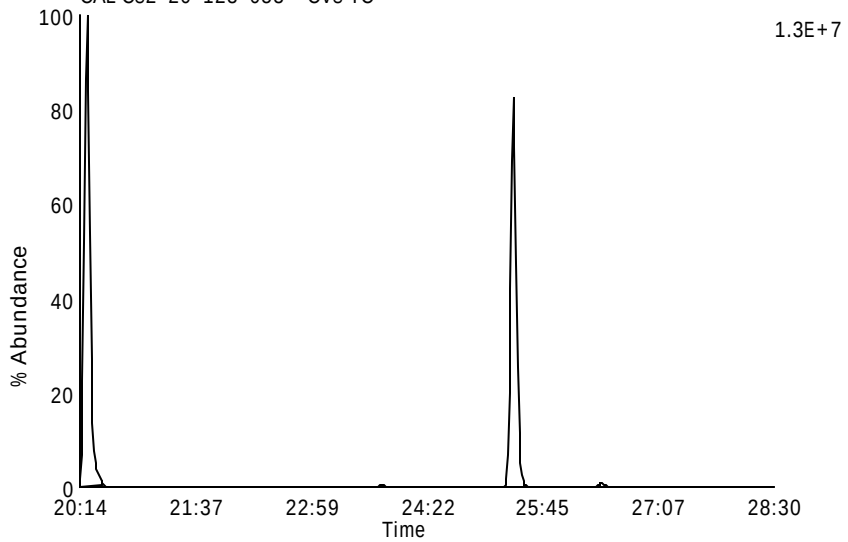
Data File: Y210818B_06 G4 C3 - 301.9626

CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G3 C10 - 303.9597

CAL CS2-20-123-053 - CVS TC



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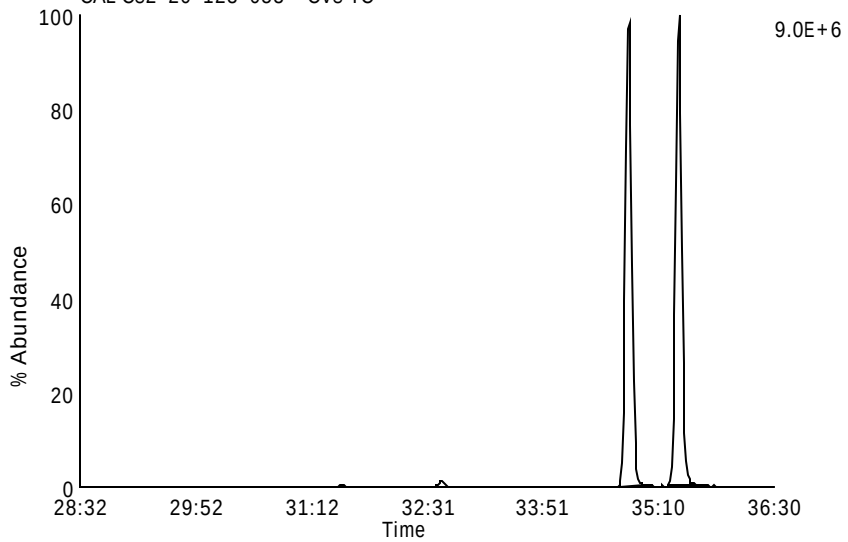
CAL CS2-20-123-053 - CVS TC

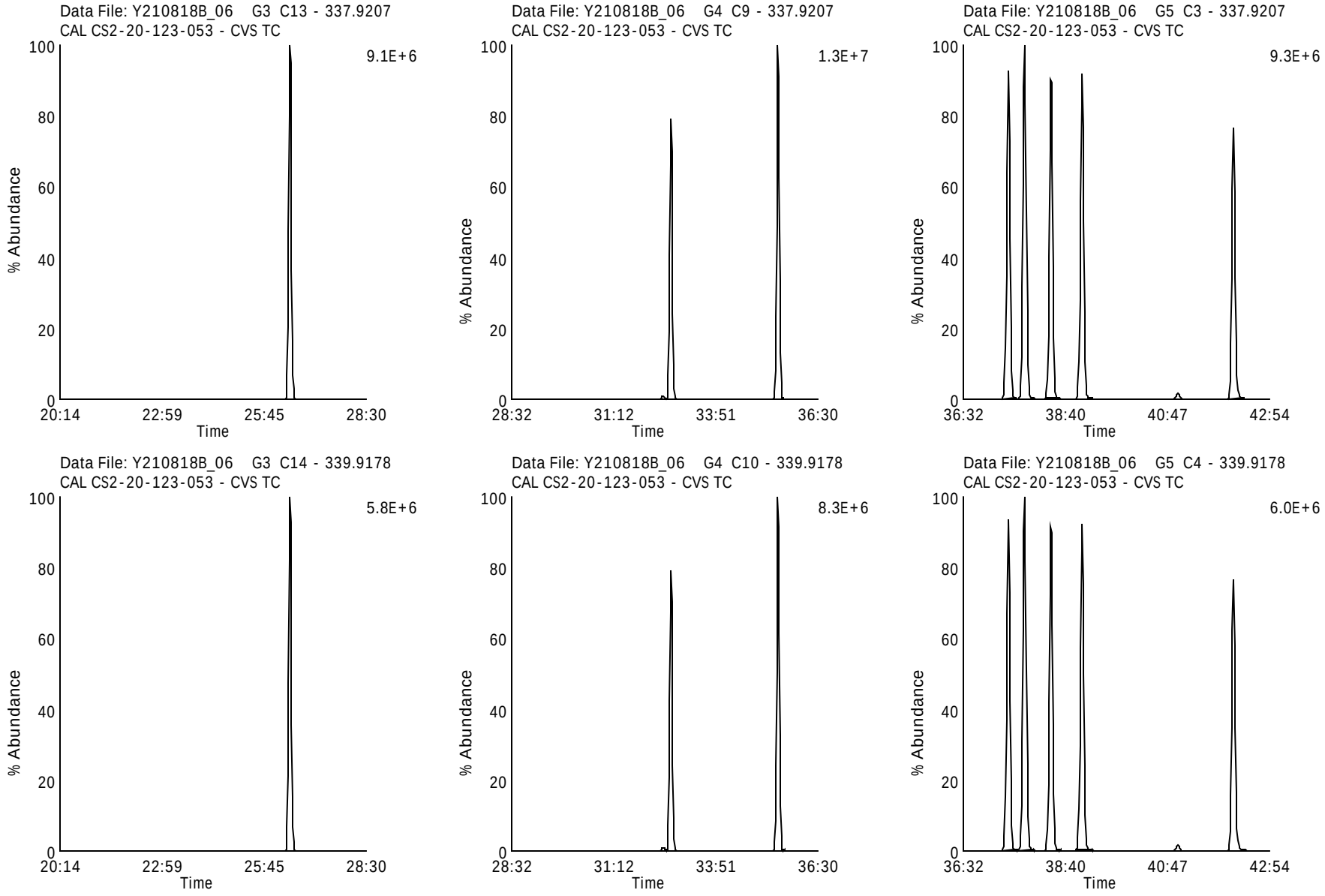


Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



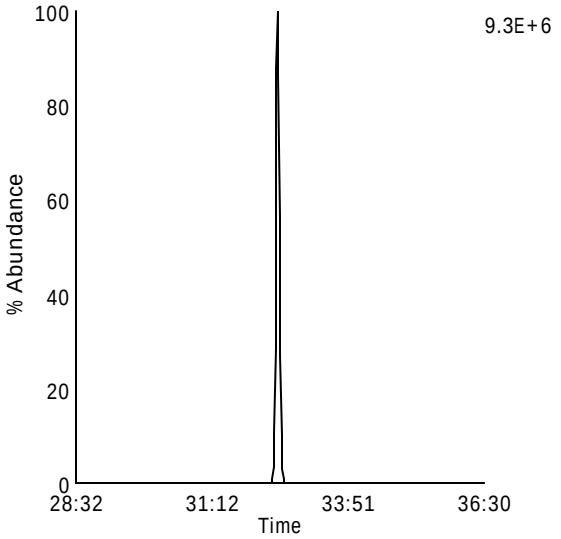
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

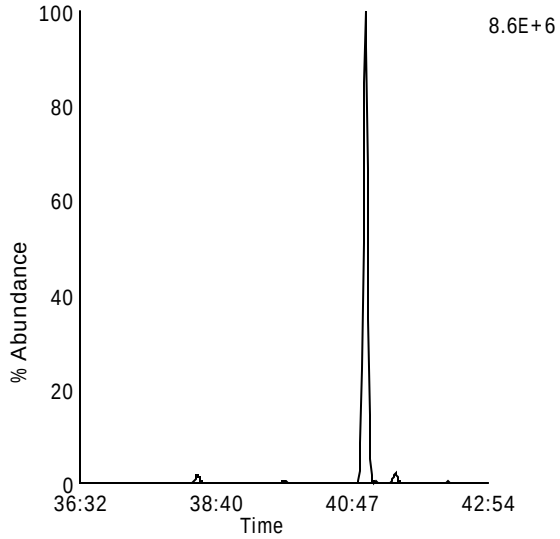
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

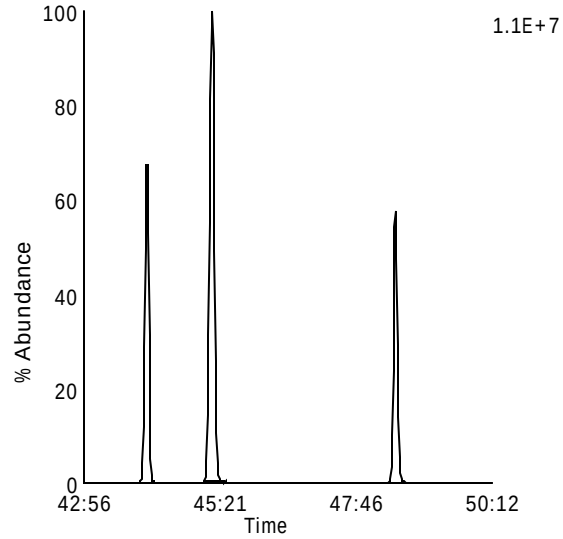
Data File: Y210818B_06 G4 C13 - 371.8817
CAL CS2-20-123-053 - CVS TC



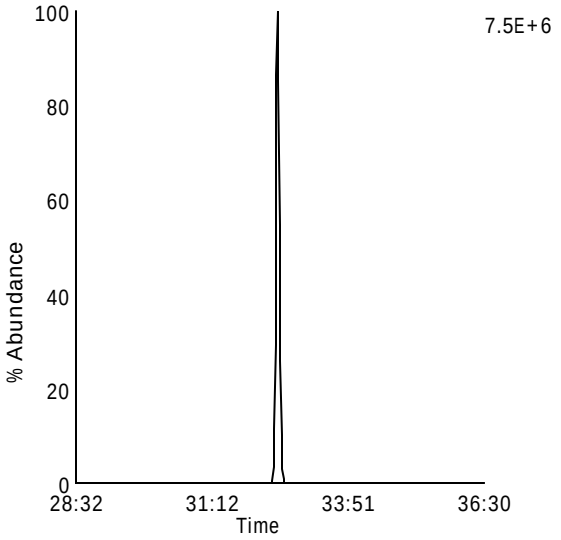
Data File: Y210818B_06 G5 C7 - 371.8817
CAL CS2-20-123-053 - CVS TC



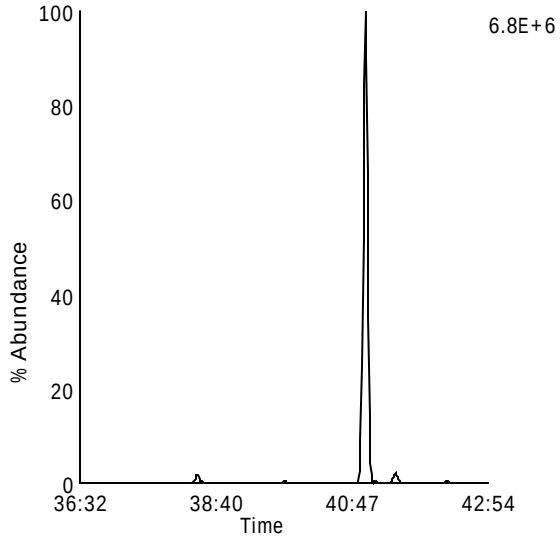
Data File: Y210818B_06 G6 C3 - 371.8817
CAL CS2-20-123-053 - CVS TC



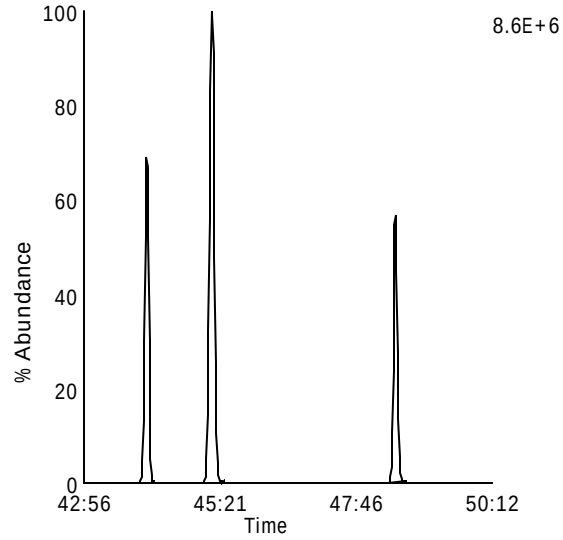
Data File: Y210818B_06 G4 C14 - 373.8788
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C8 - 373.8788
CAL CS2-20-123-053 - CVS TC

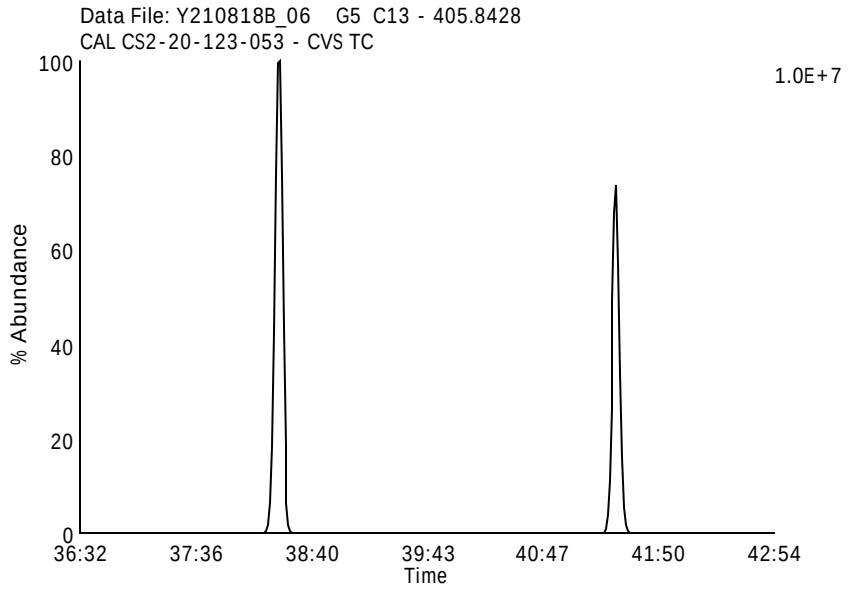


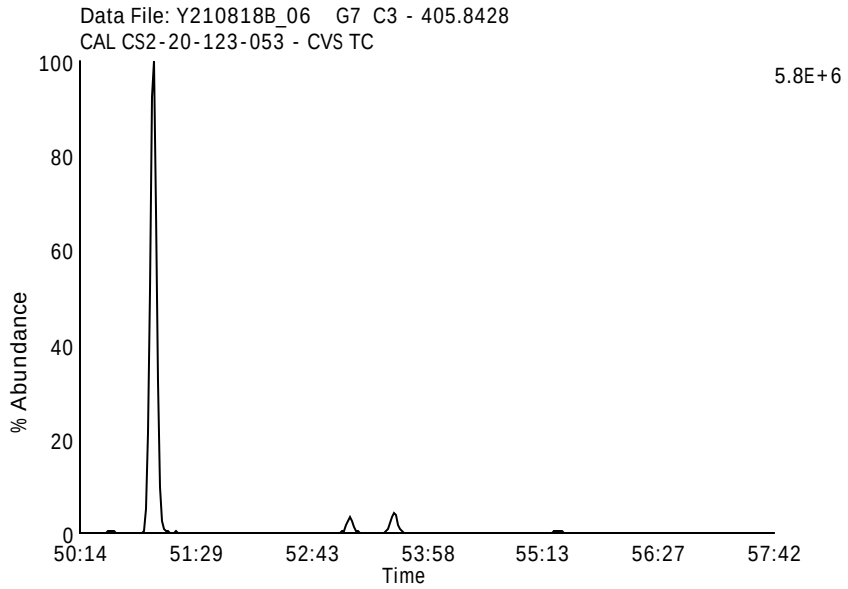
Data File: Y210818B_06 G6 C4 - 373.8788
CAL CS2-20-123-053 - CVS TC

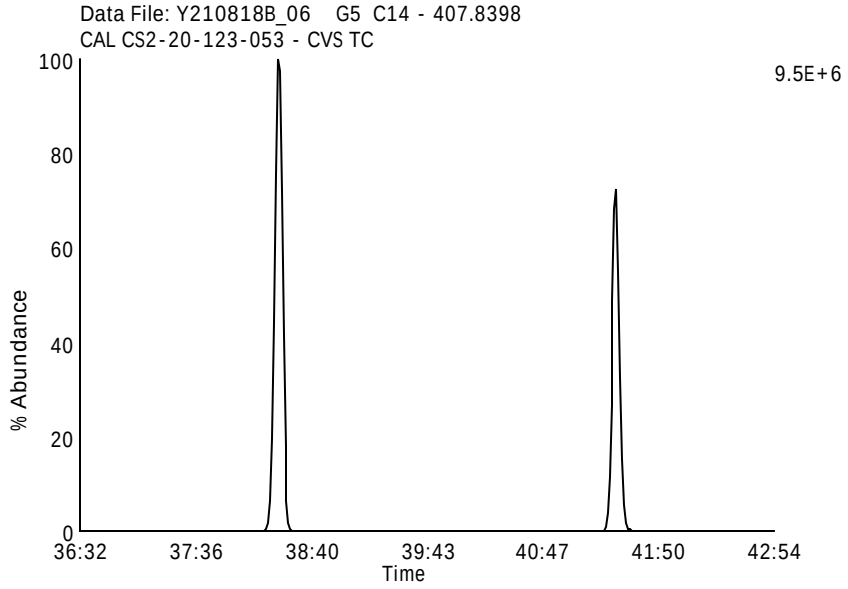


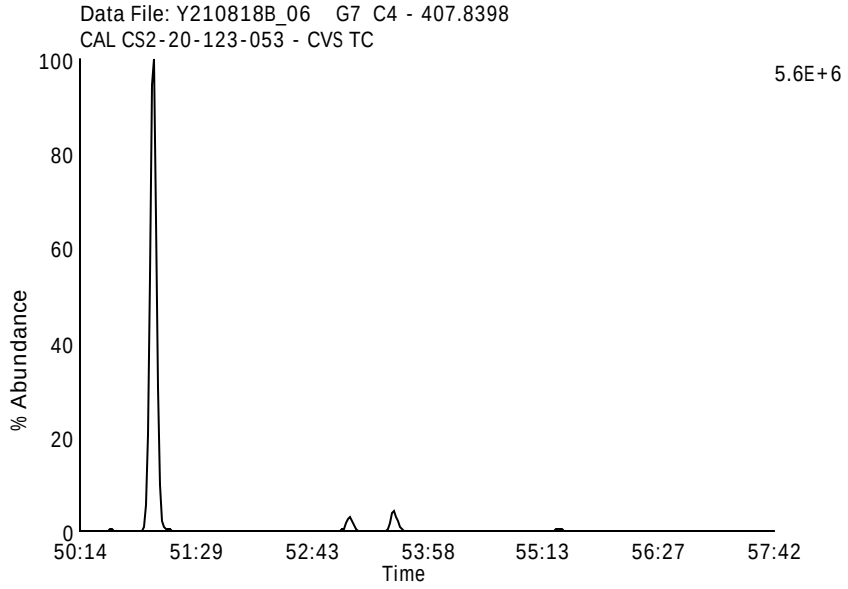
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC









Labeled Octa Chlorinated Biphenyls

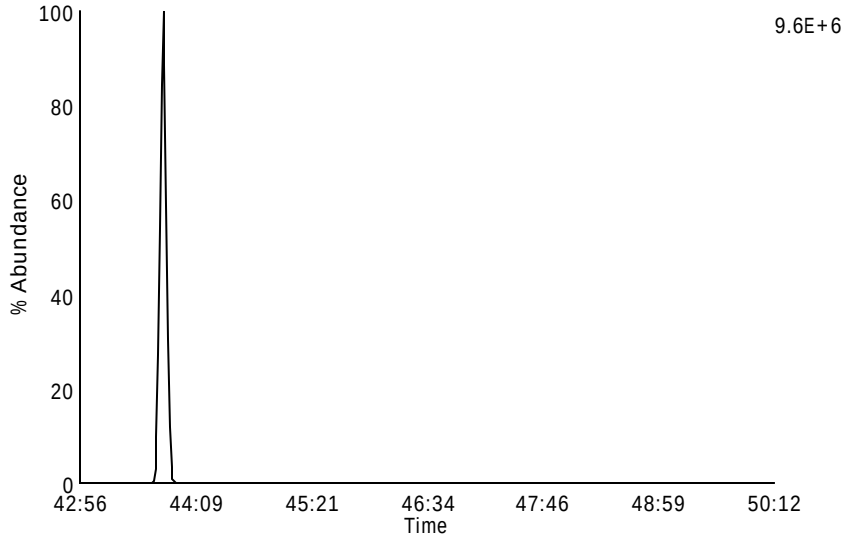
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

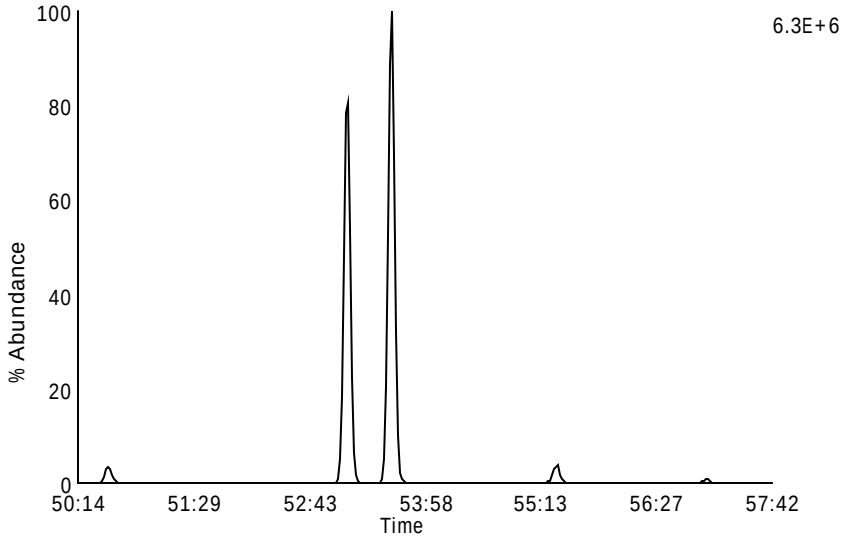
Data File: Y210818B_06 G6 C13 - 439.8038

CAL CS2-20-123-053 - CVS TC



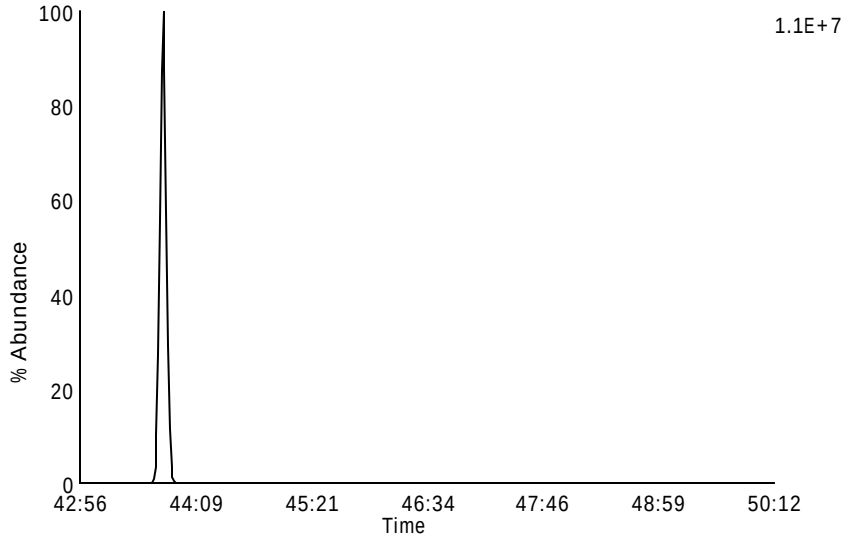
Data File: Y210818B_06 G7 C7 - 439.8038

CAL CS2-20-123-053 - CVS TC



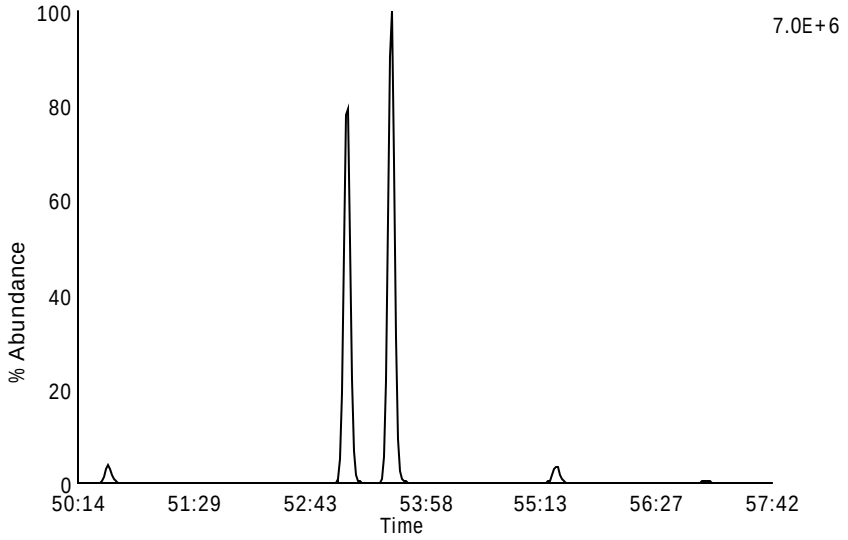
Data File: Y210818B_06 G6 C14 - 441.8008

CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G7 C8 - 441.8008

CAL CS2-20-123-053 - CVS TC

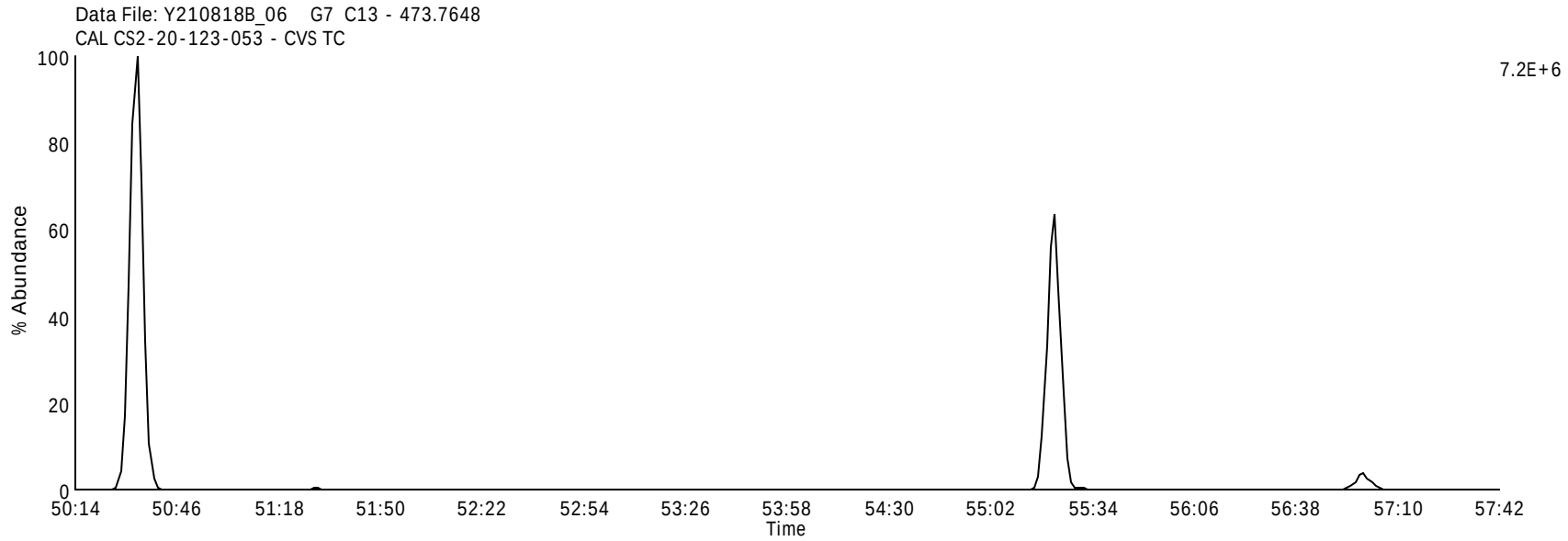


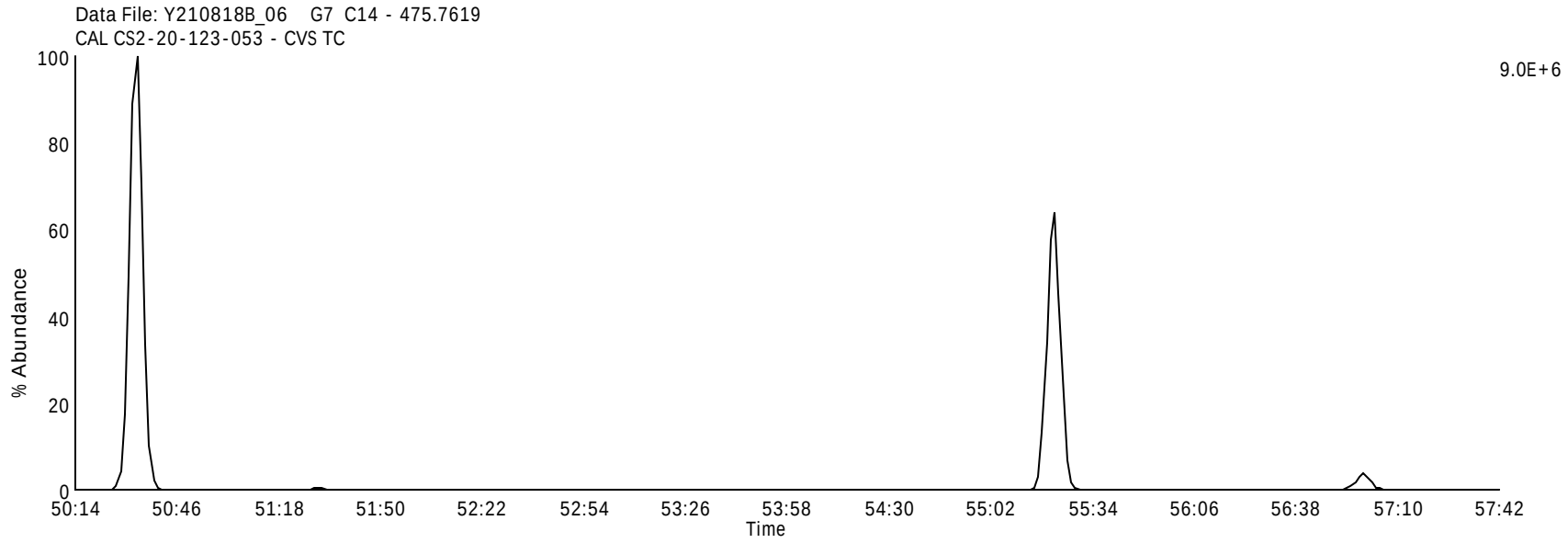
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



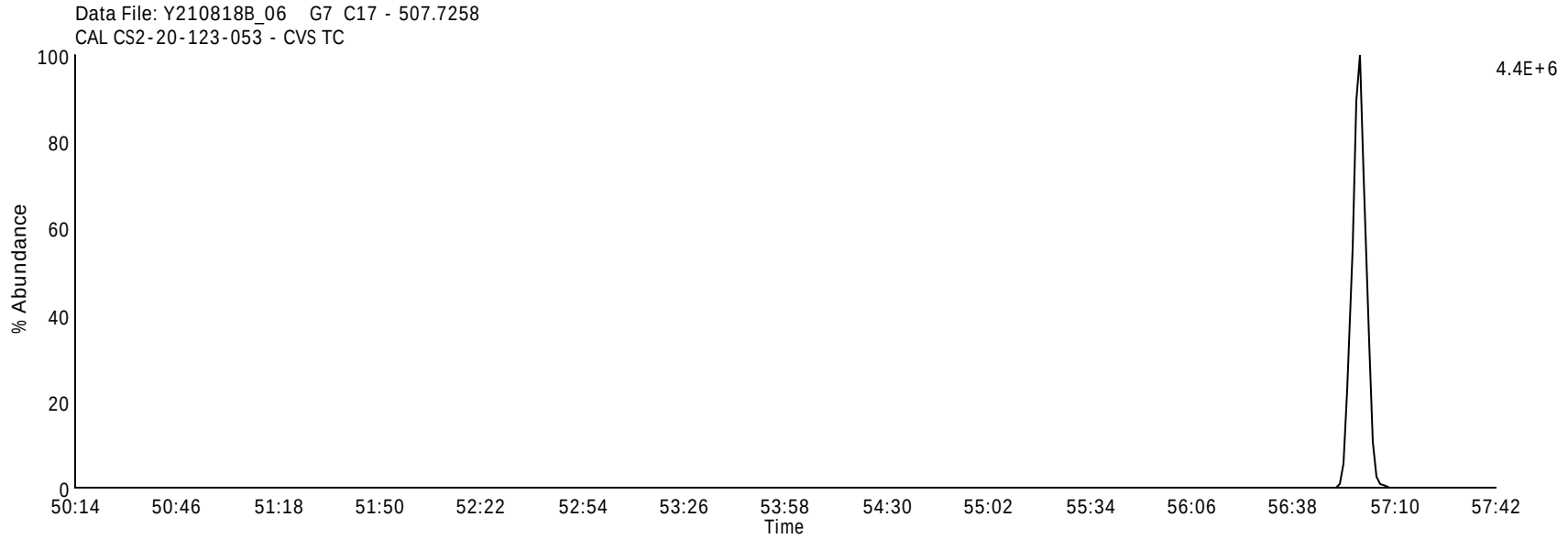


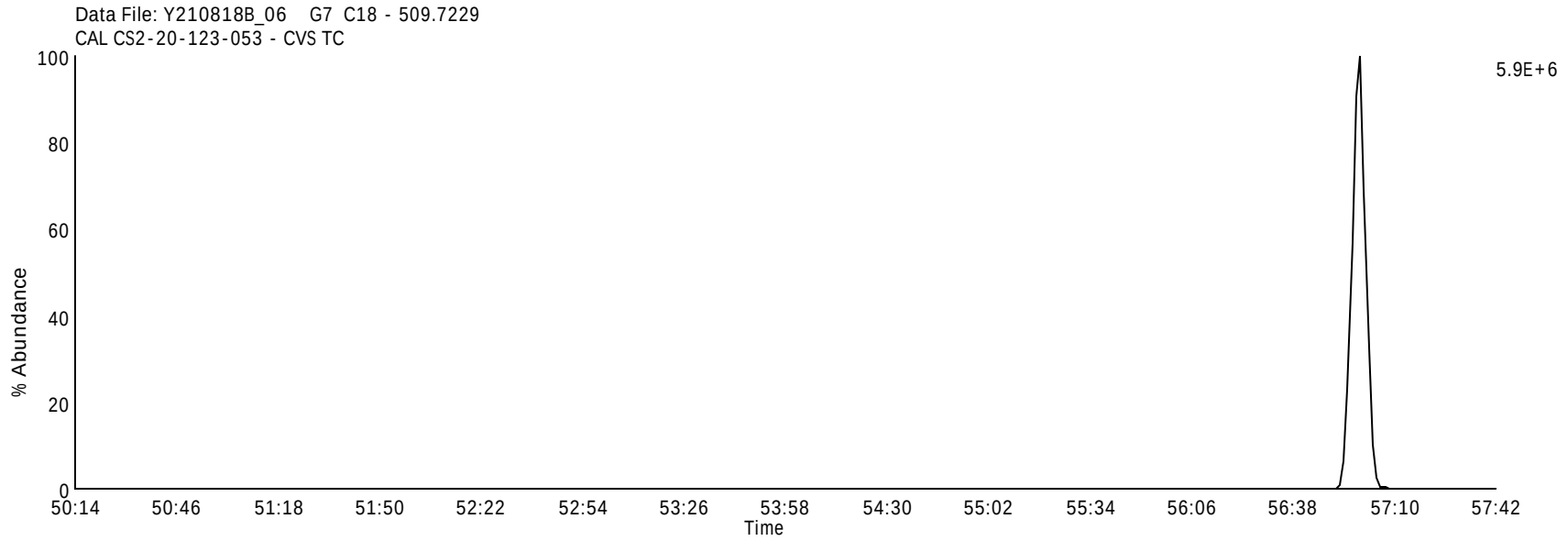
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



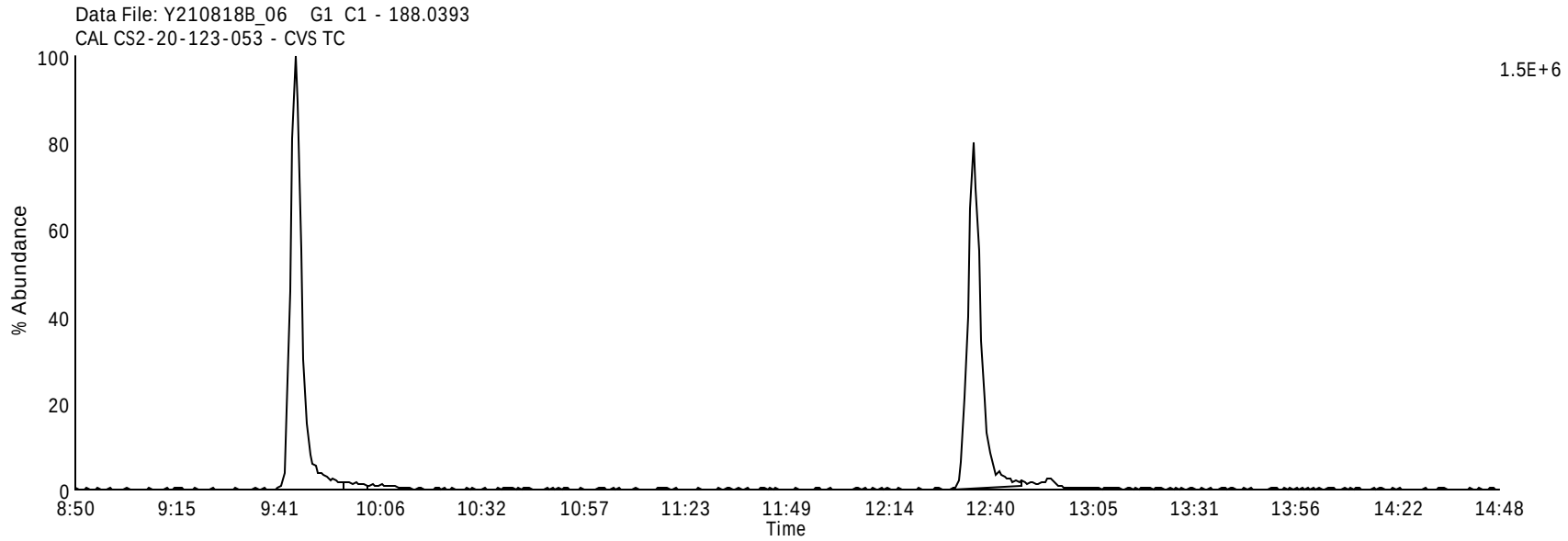


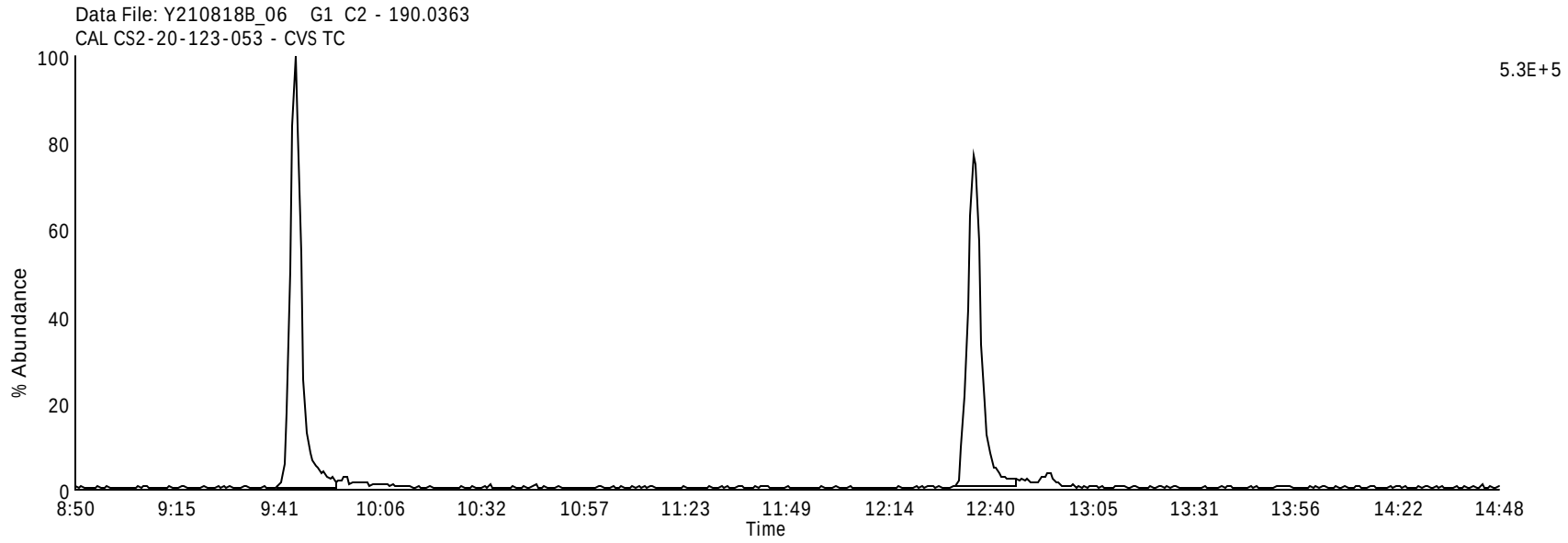
Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

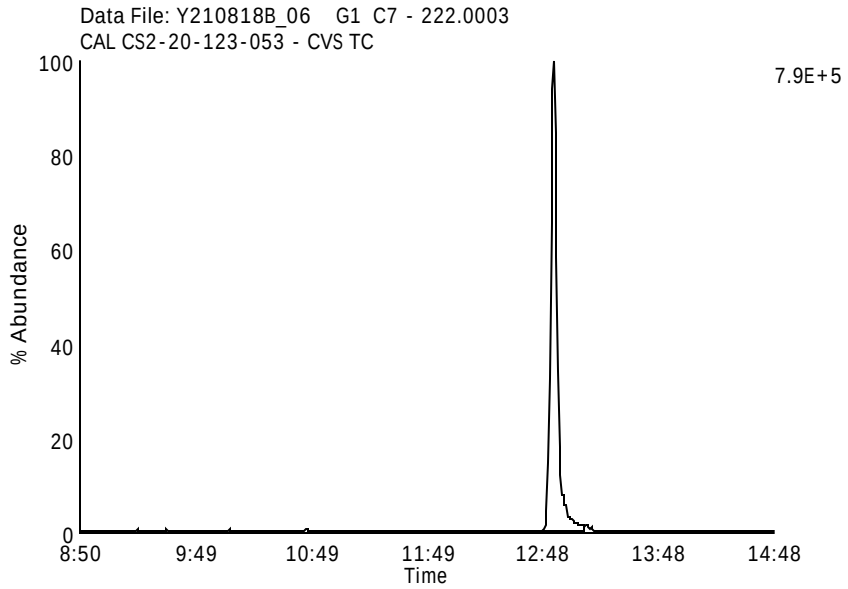
Sample Description: CAL CS2-20-123-053 - CVS TC

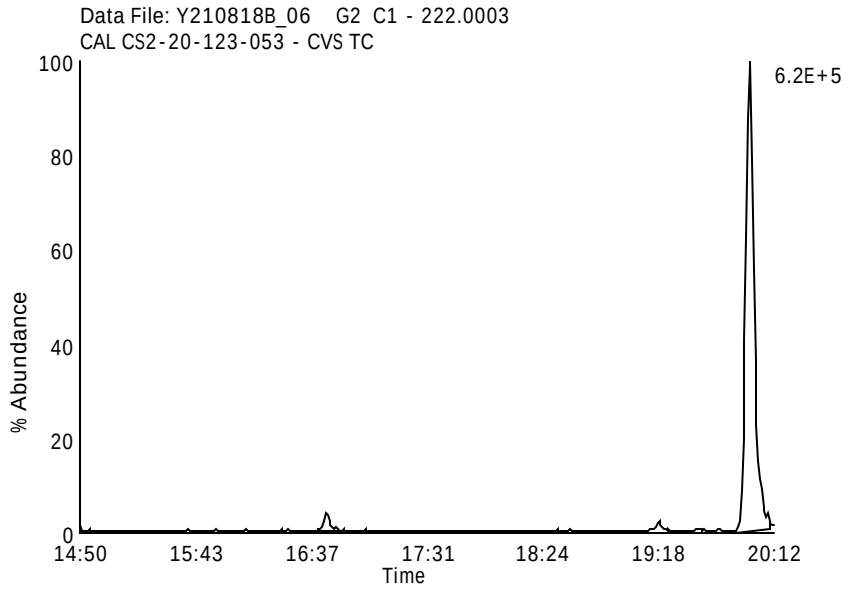


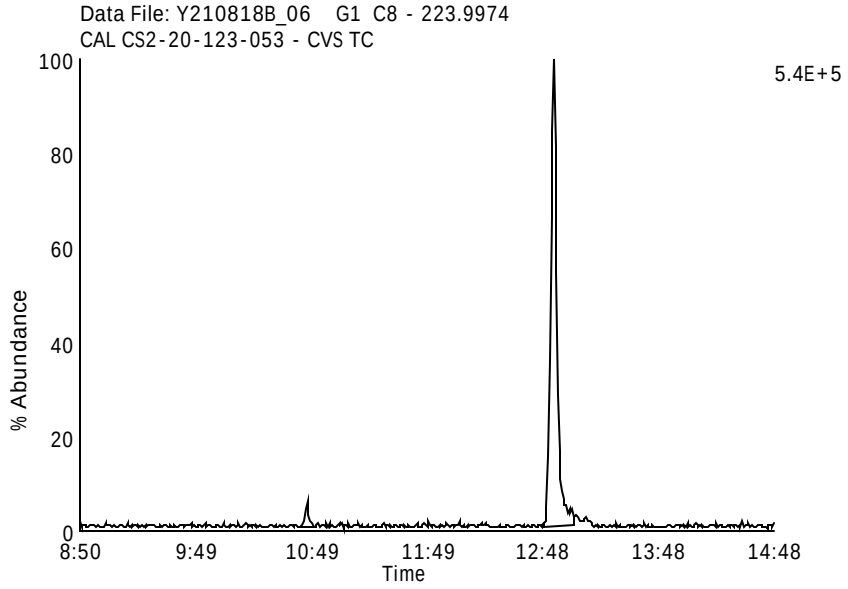


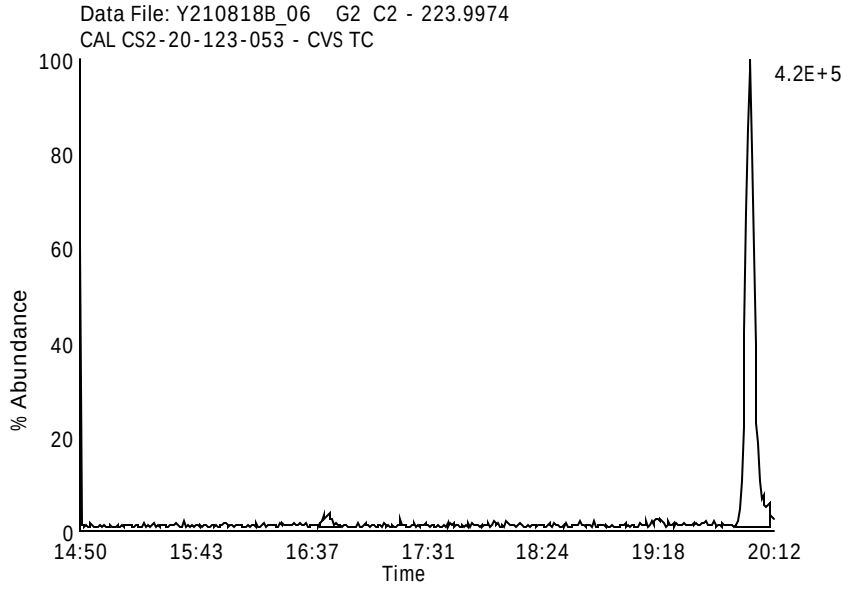
Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC









Tri Chlorinated Biphenyls

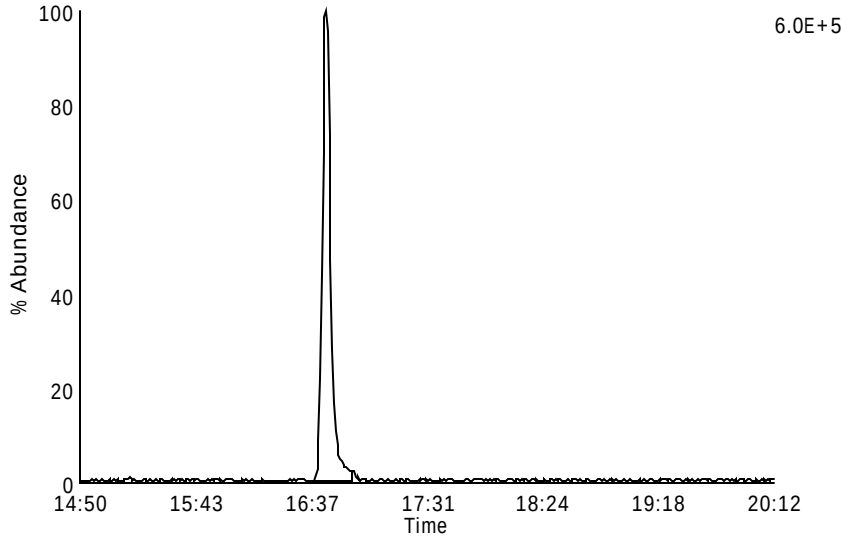
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

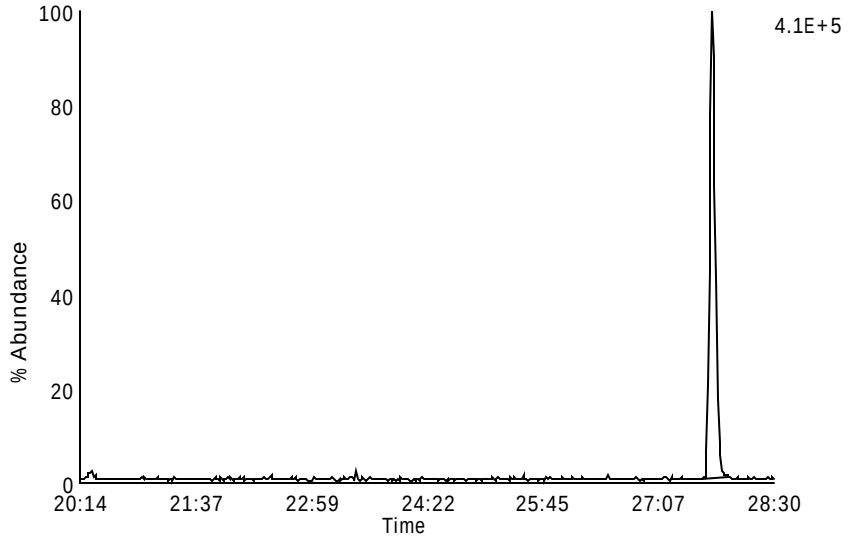
Data File: Y210818B_06 G2 C7 - 255.9613

CAL CS2-20-123-053 - CVS TC



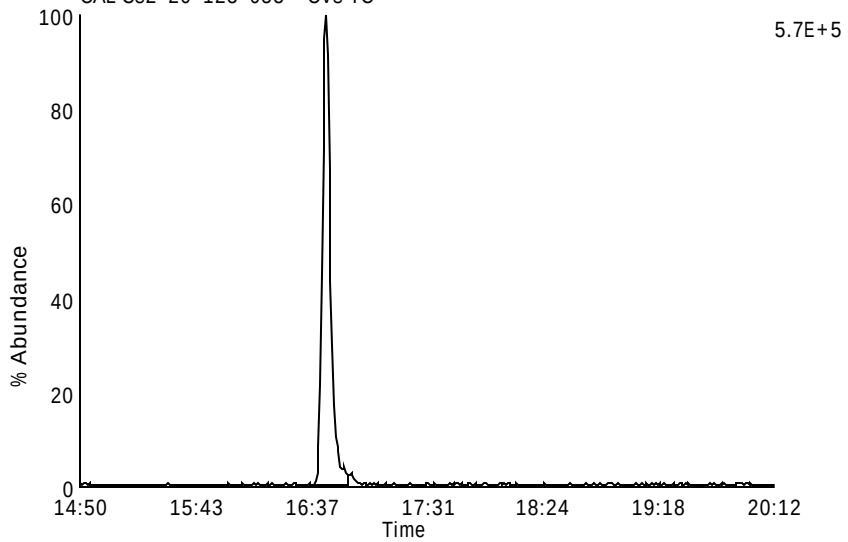
Data File: Y210818B_06 G3 C1 - 255.9613

CAL CS2-20-123-053 - CVS TC



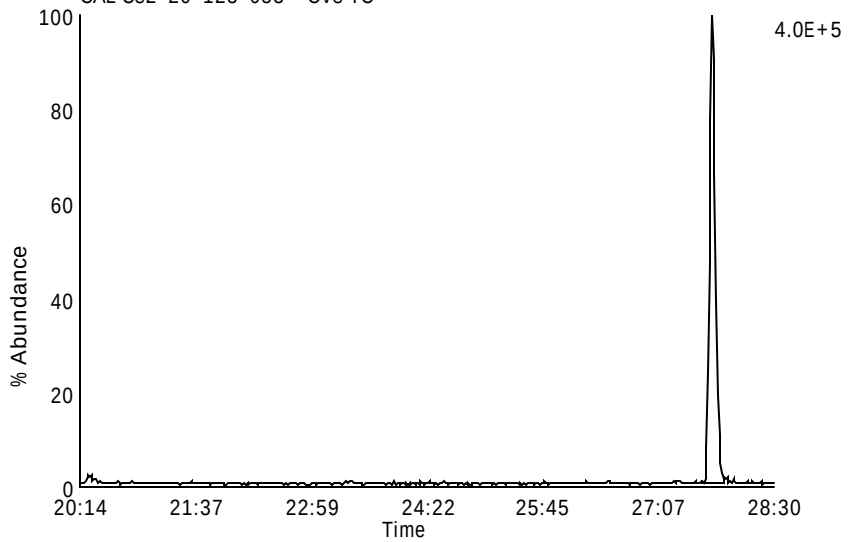
Data File: Y210818B_06 G2 C8 - 257.9584

CAL CS2-20-123-053 - CVS TC



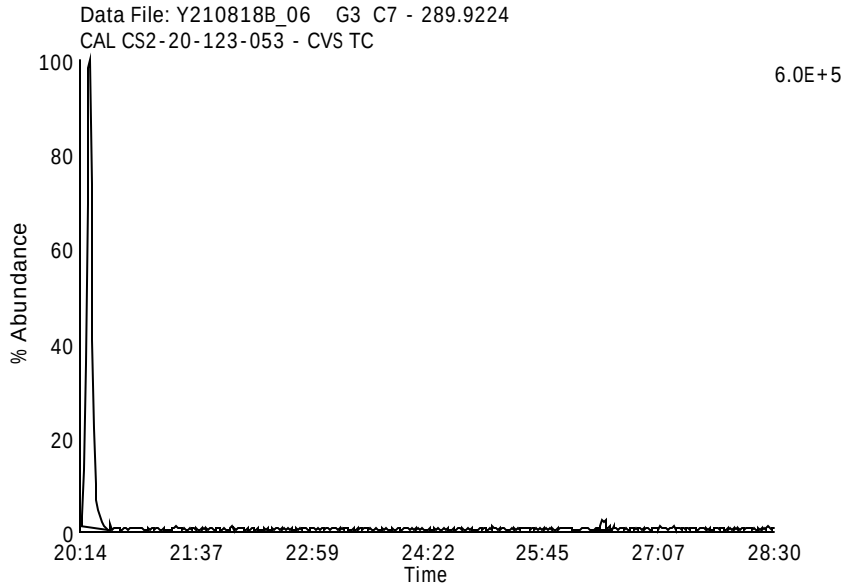
Data File: Y210818B_06 G3 C2 - 257.9584

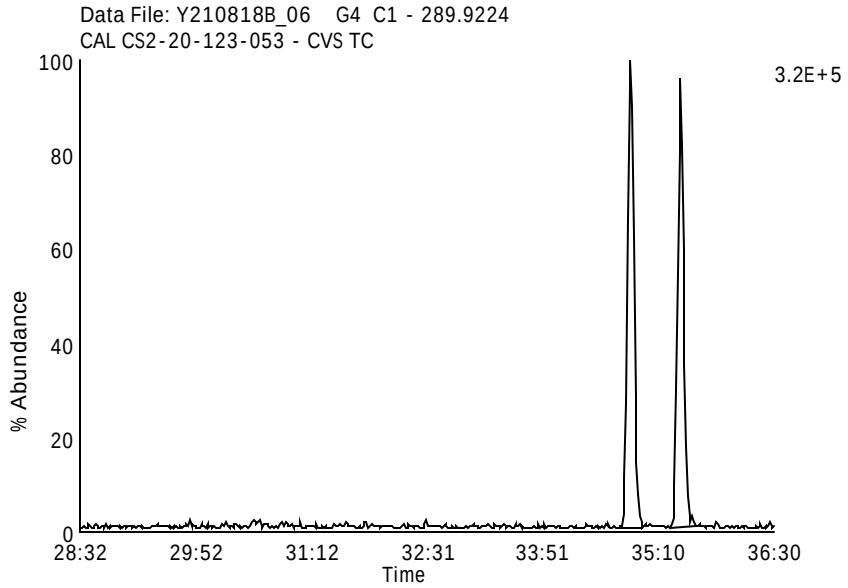
CAL CS2-20-123-053 - CVS TC

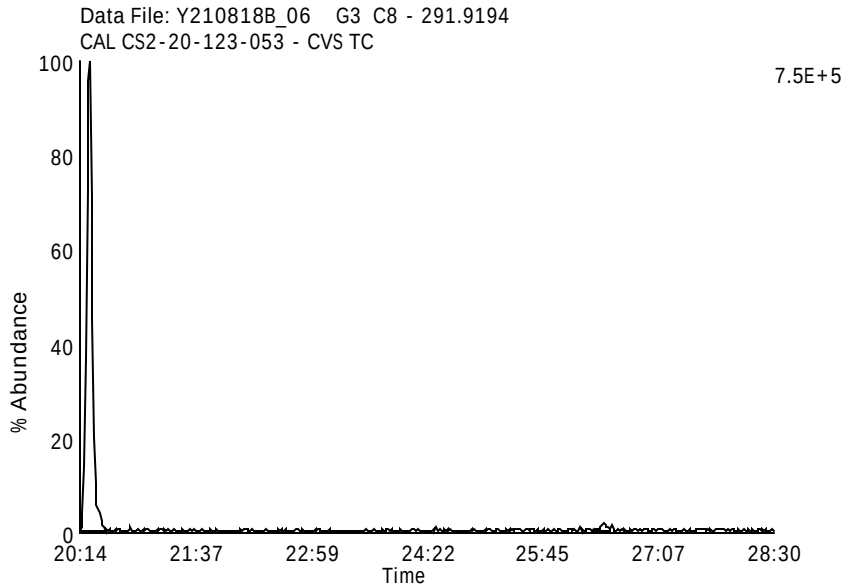


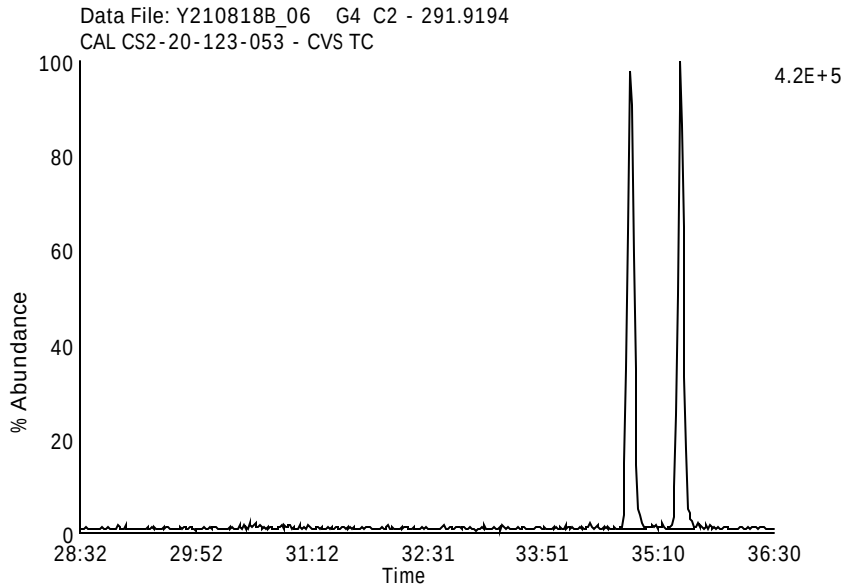
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC









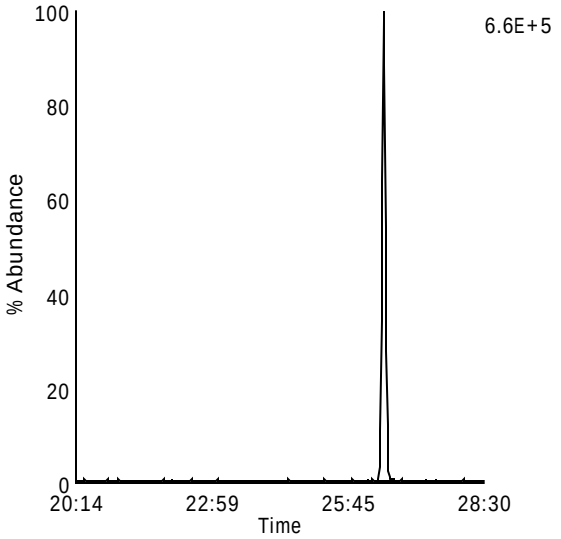
Penta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

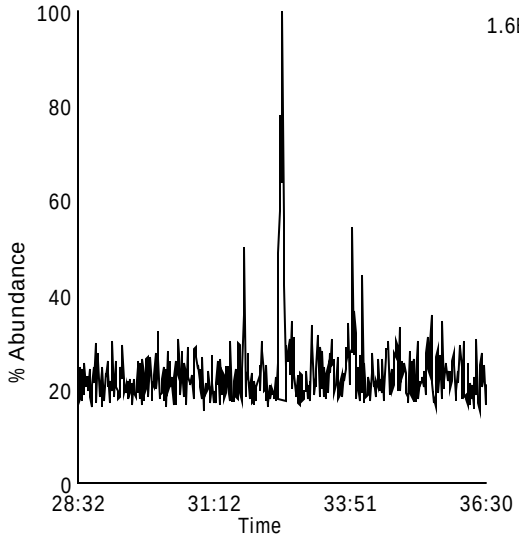
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

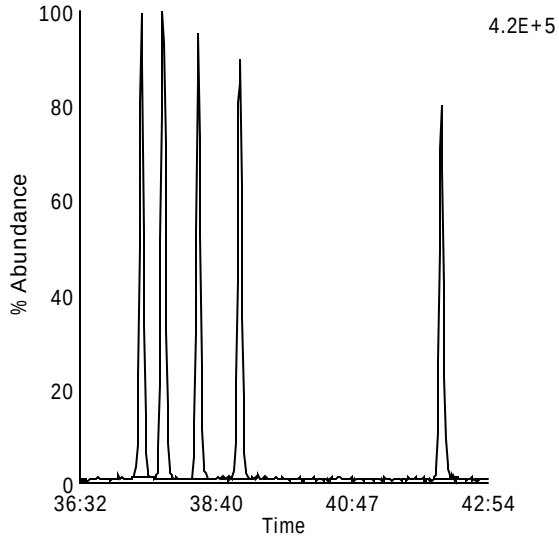
Data File: Y210818B_06 G3 C11 - 325.8804
CAL CS2-20-123-053 - CVS TC



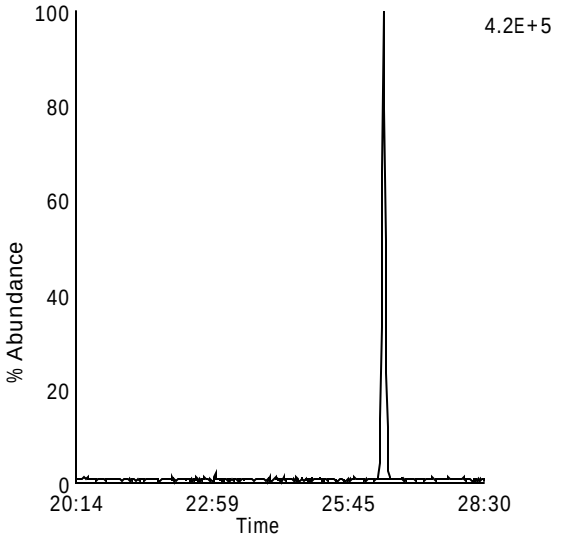
Data File: Y210818B_06 G4 C5 - 325.8804
CAL CS2-20-123-053 - CVS TC



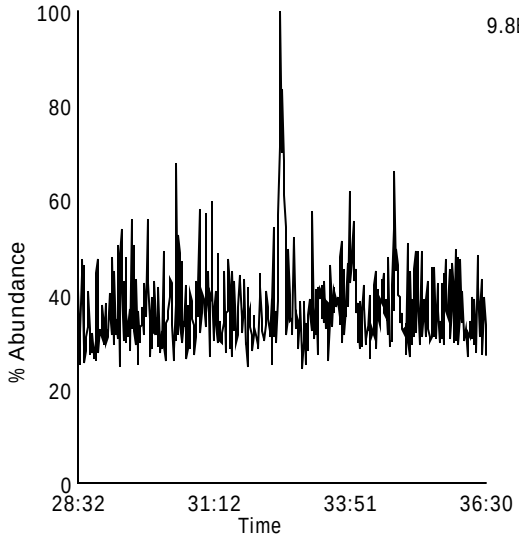
Data File: Y210818B_06 G5 C1 - 325.8804
CAL CS2-20-123-053 - CVS TC



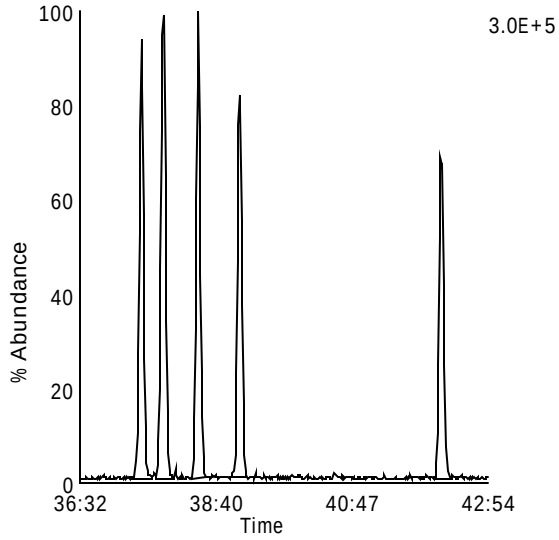
Data File: Y210818B_06 G3 C12 - 327.8775
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C6 - 327.8775
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C2 - 327.8775
CAL CS2-20-123-053 - CVS TC



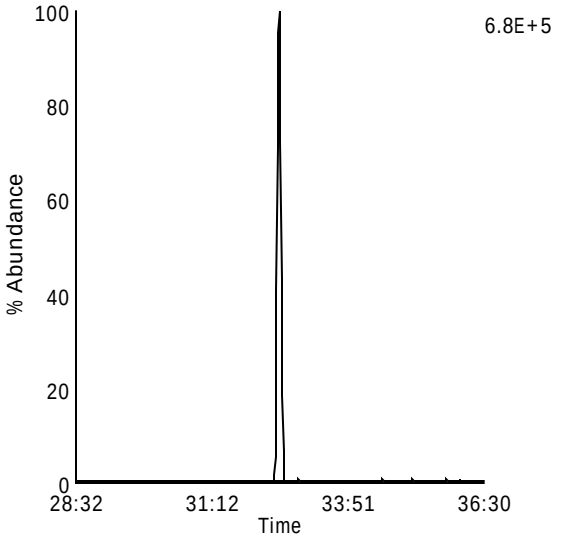
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

Data File: Y210818B_06 G4 C11 - 359.8415
CAL CS2-20-123-053 - CVS TC



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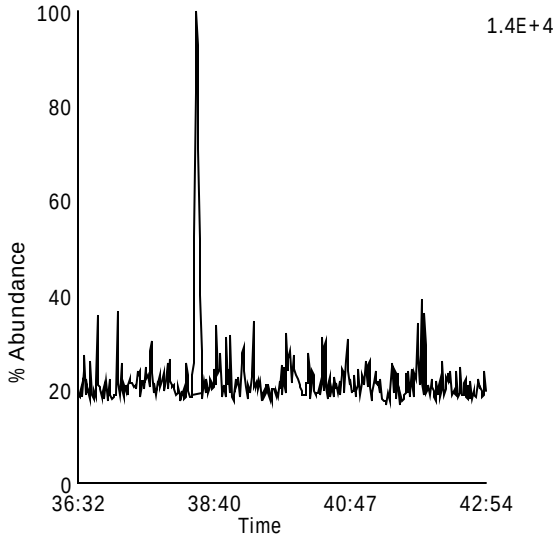
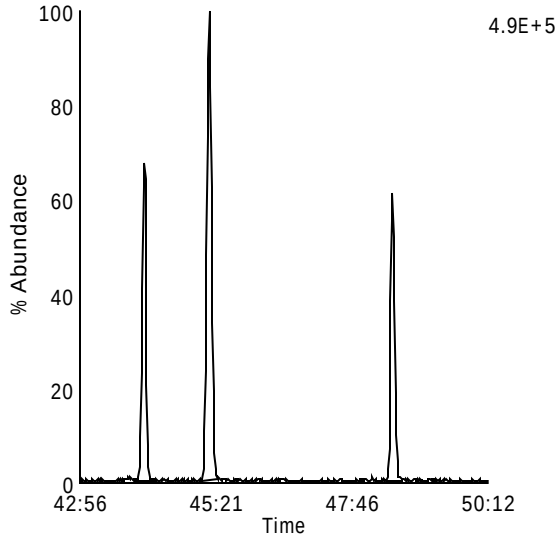
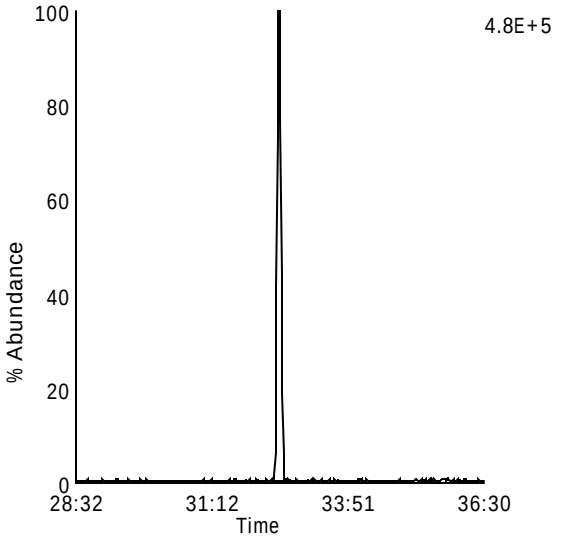
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G6 C1 - 359.8415
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C12 - 361.8385
CAL CS2-20-123-053 - CVS TC



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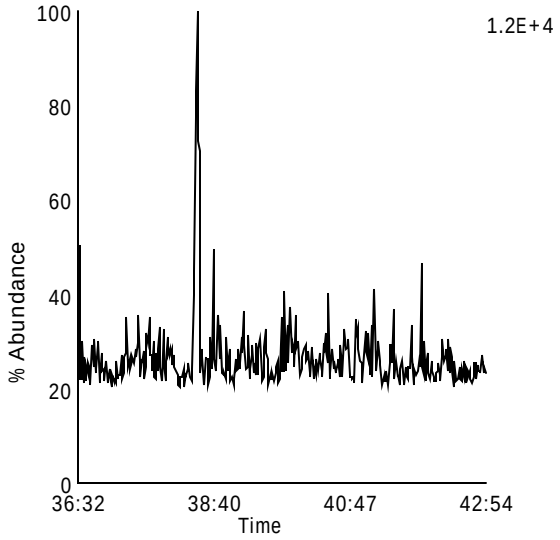
CAL CS2-20-123-053 - CVS TC



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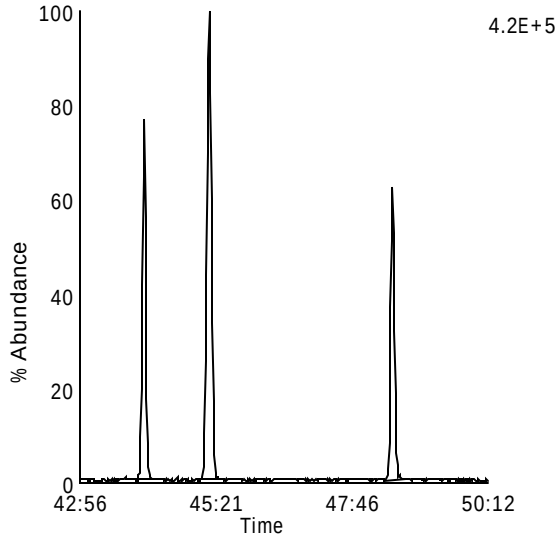
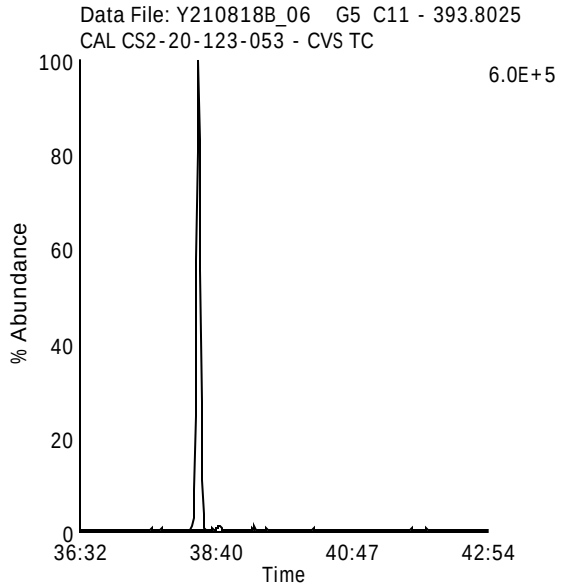
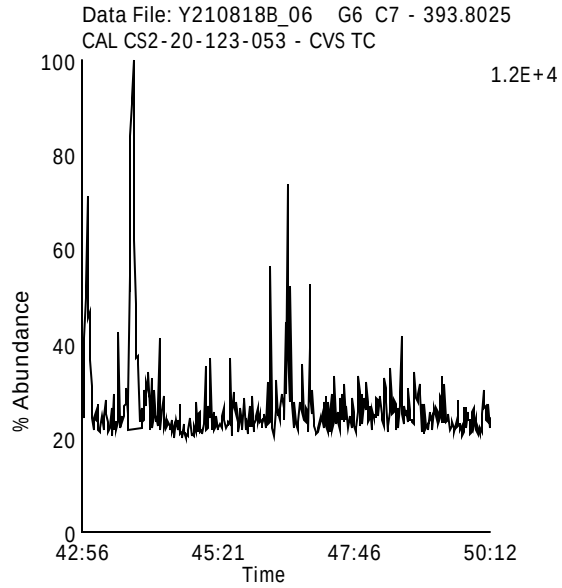
CAL CS2-20-123-053 - CVS TC

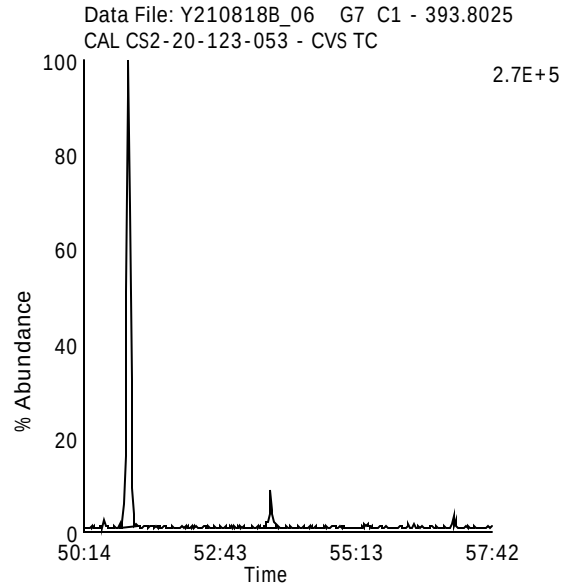


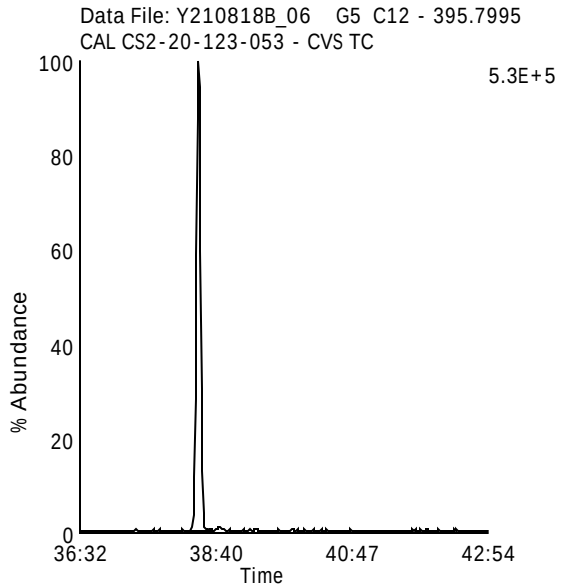
Hepta Chlorinated Biphenyls

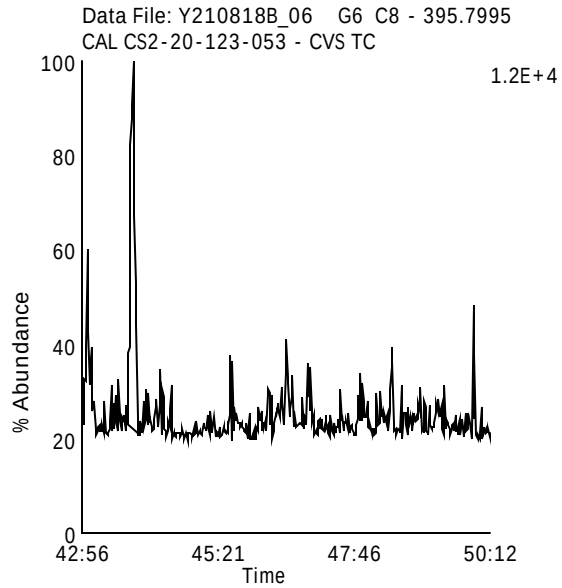
Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC

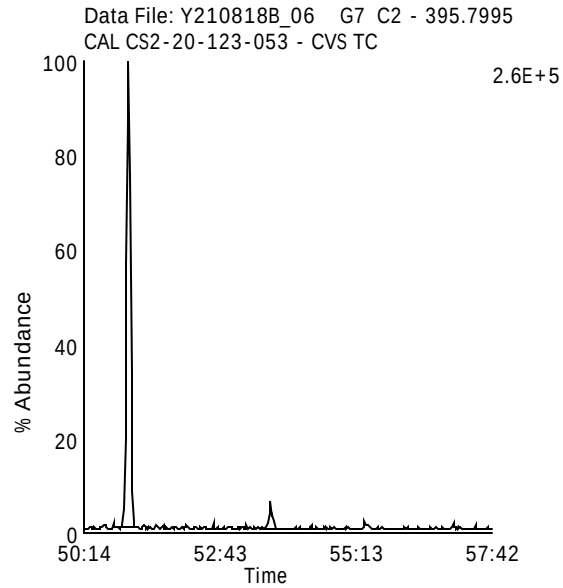






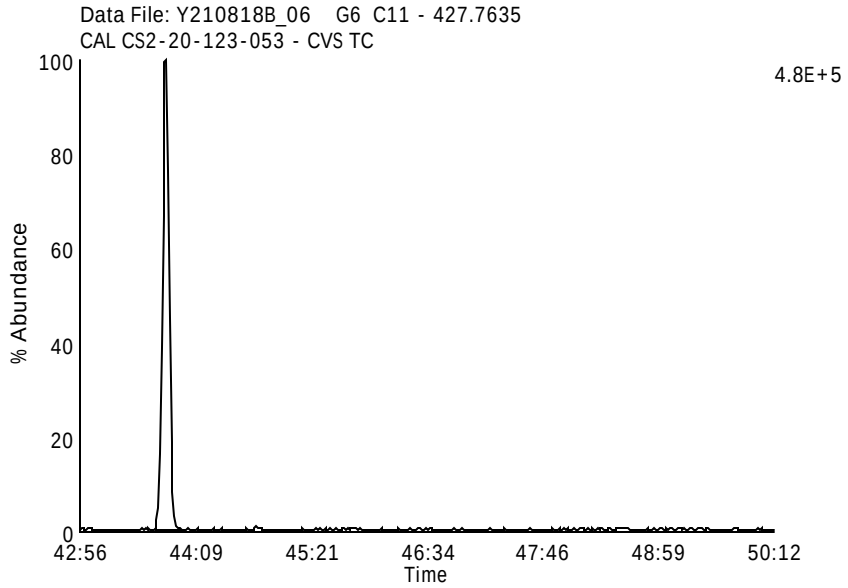


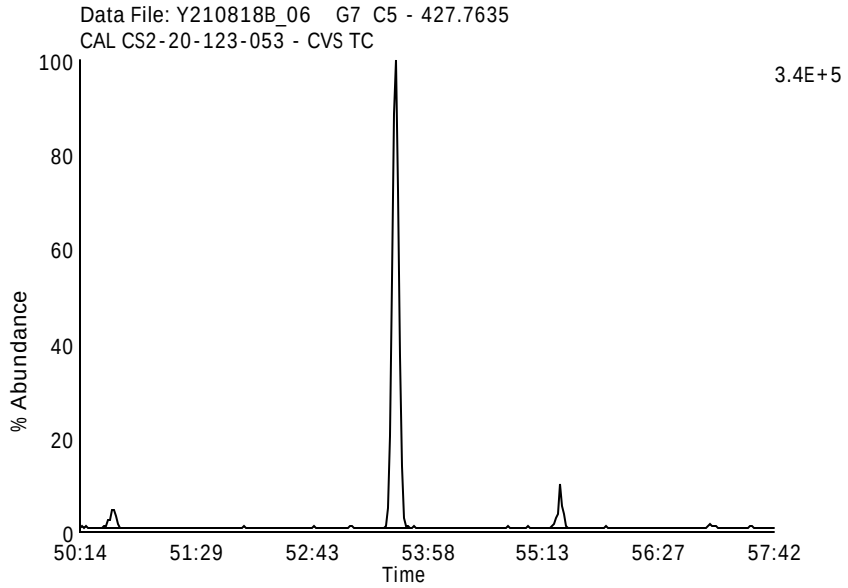


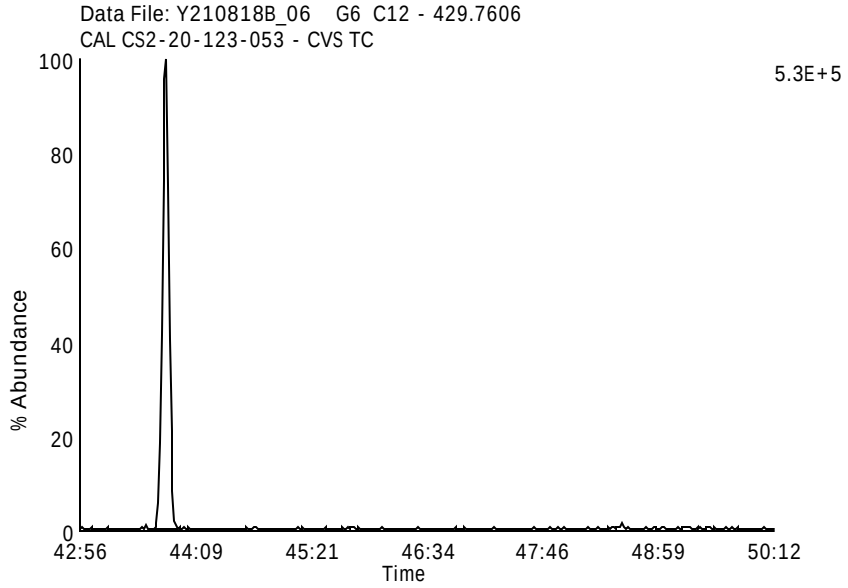


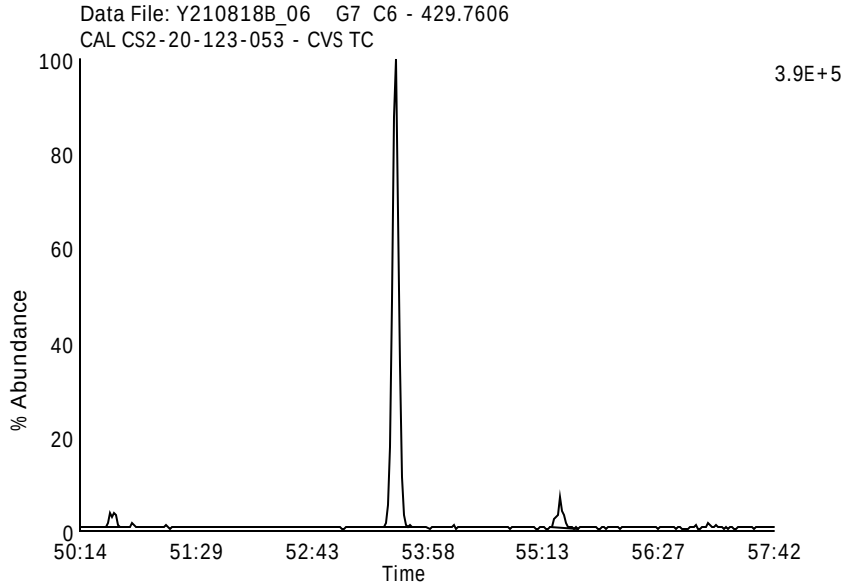
Octa Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







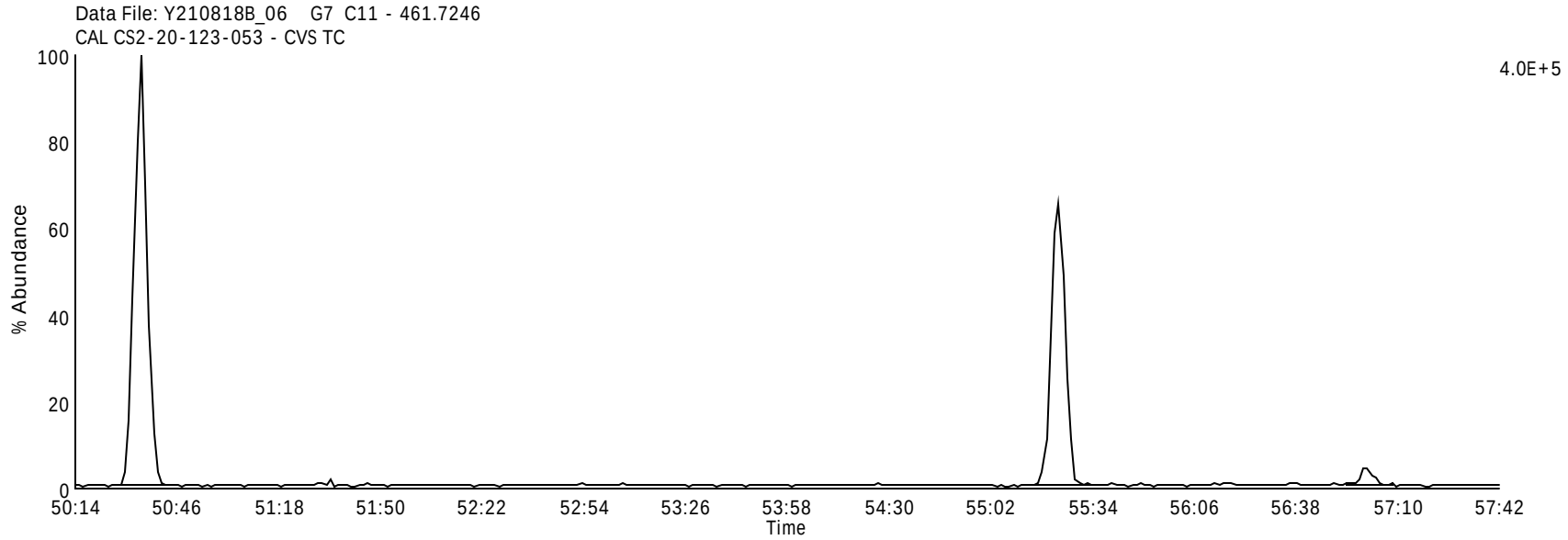


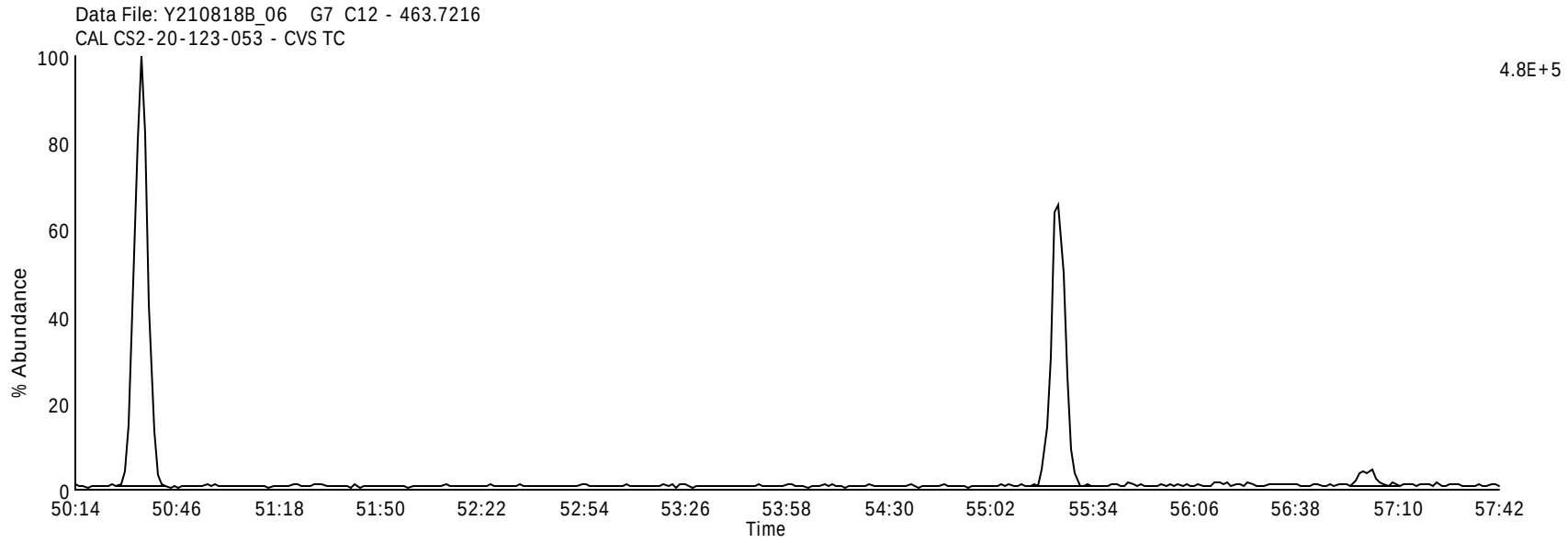
Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



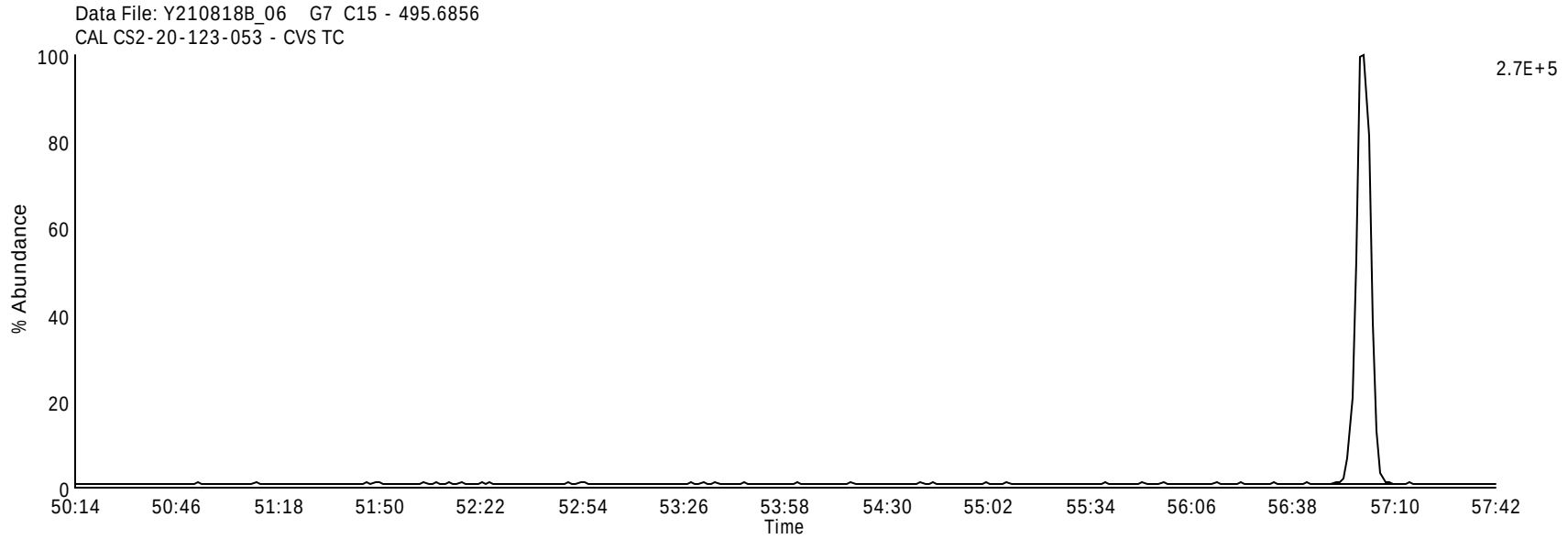


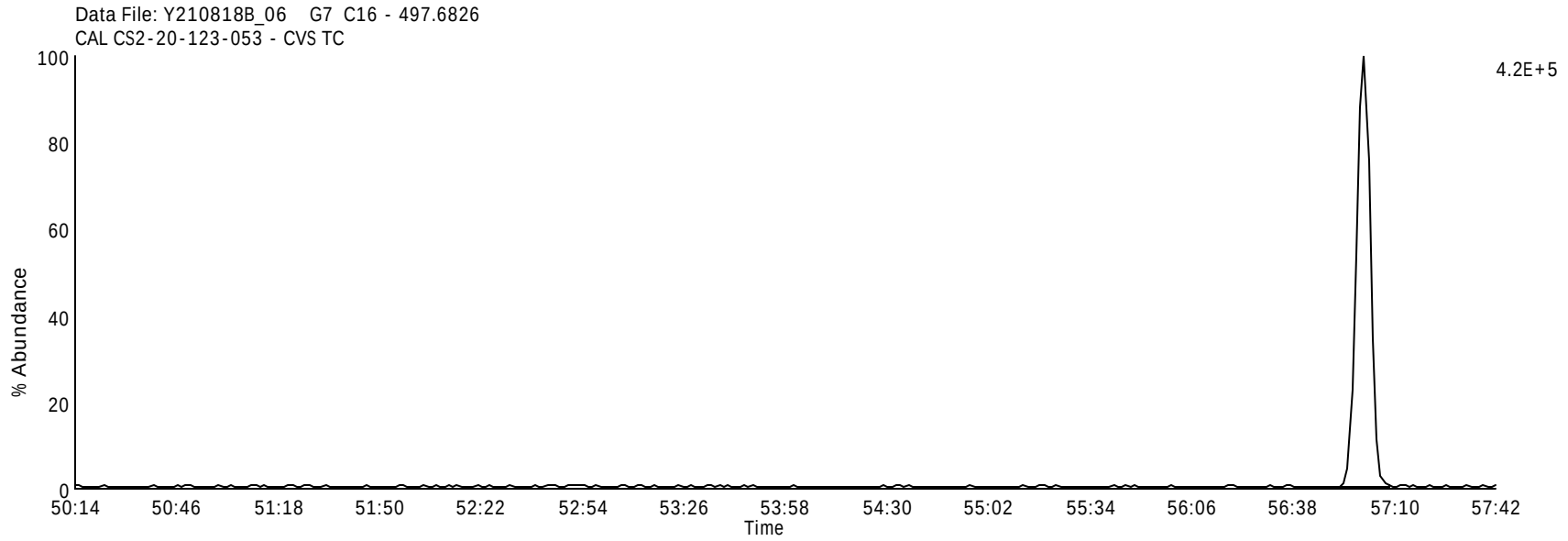
Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

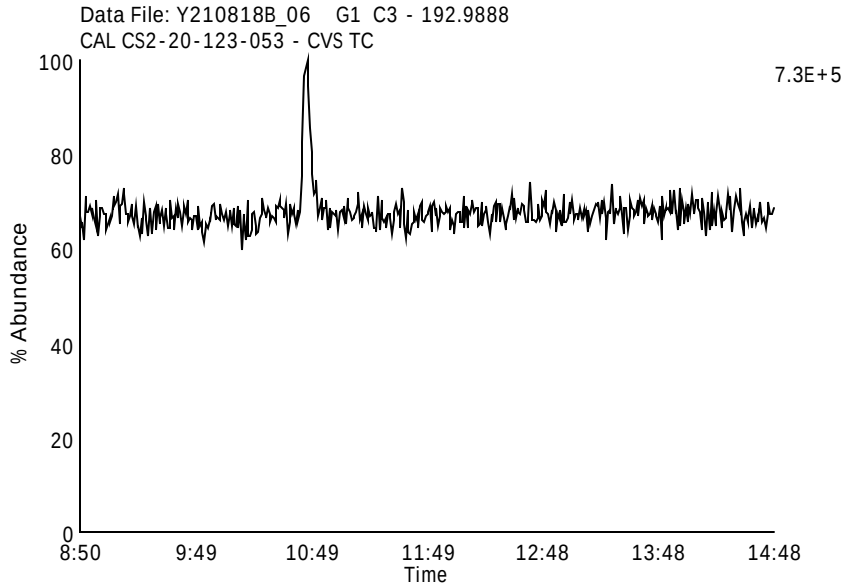
Sample Description: CAL CS2-20-123-053 - CVS TC

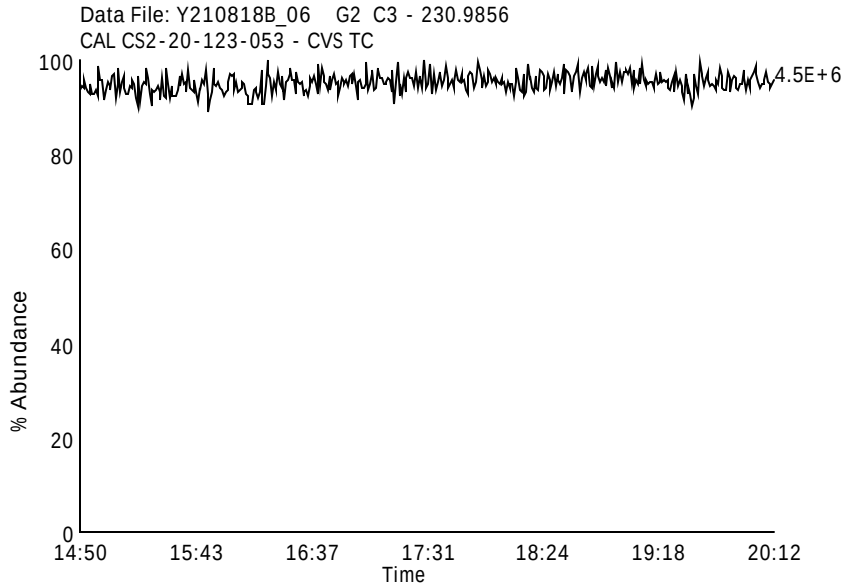


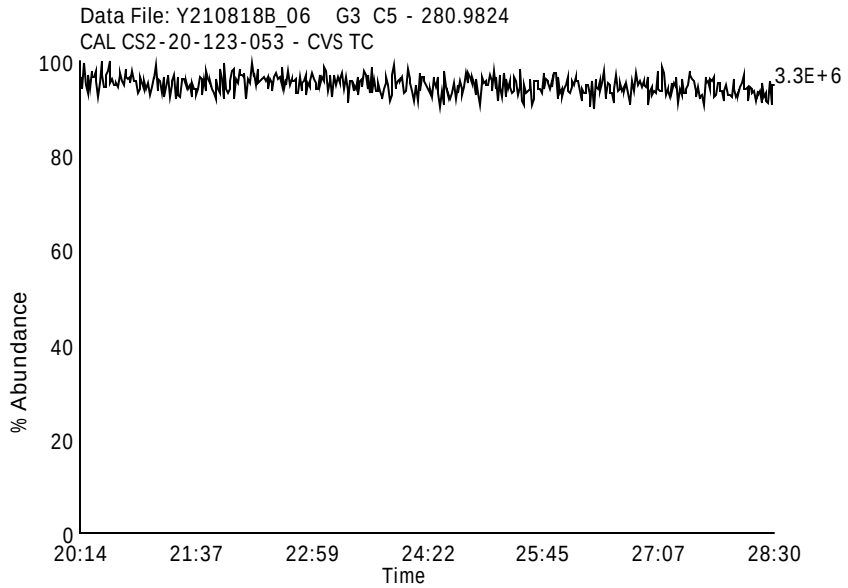


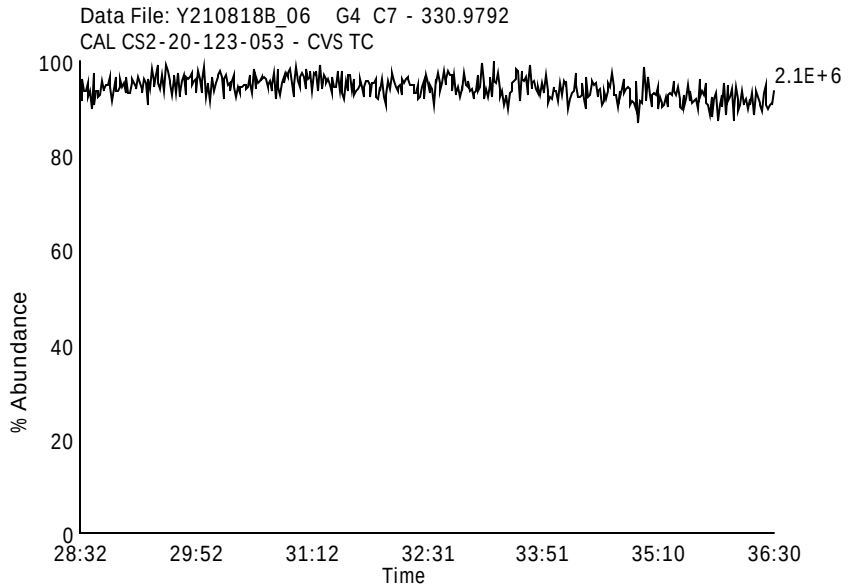
Group 1 - 4 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



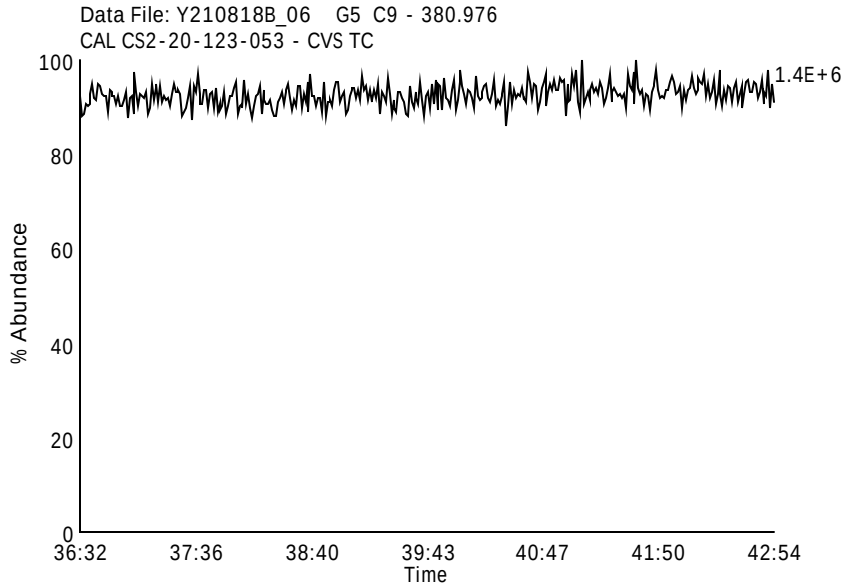


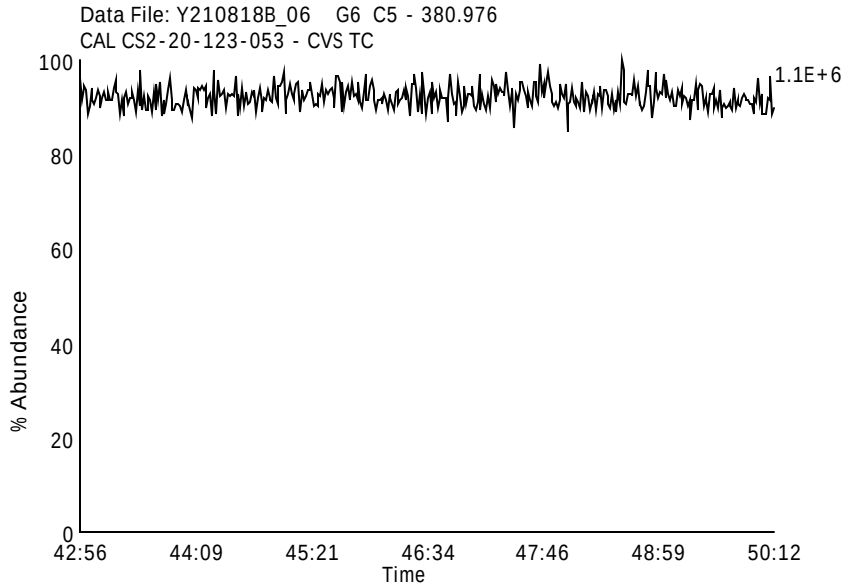


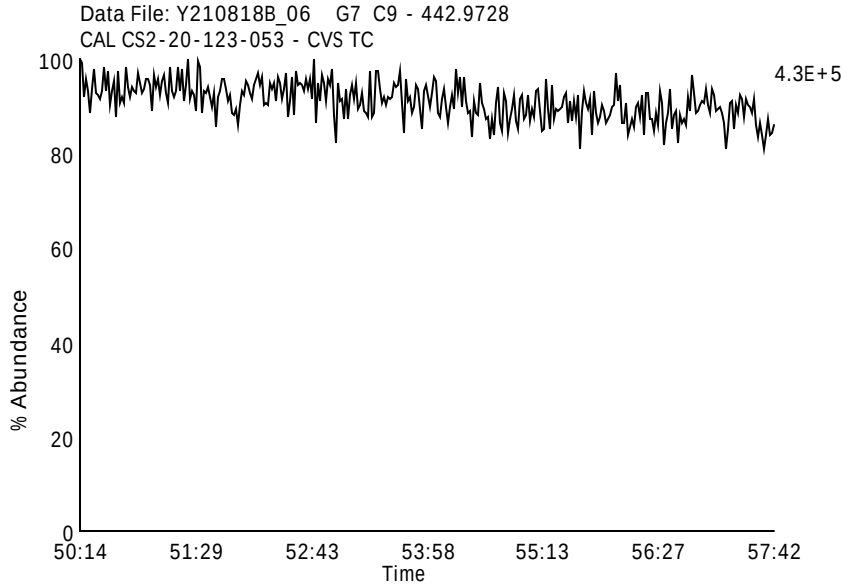


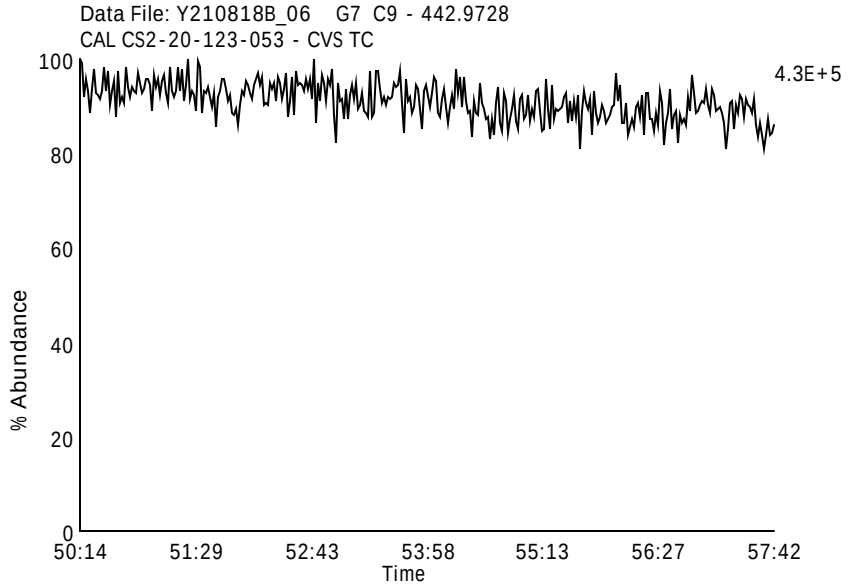
Group 5 - 7 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







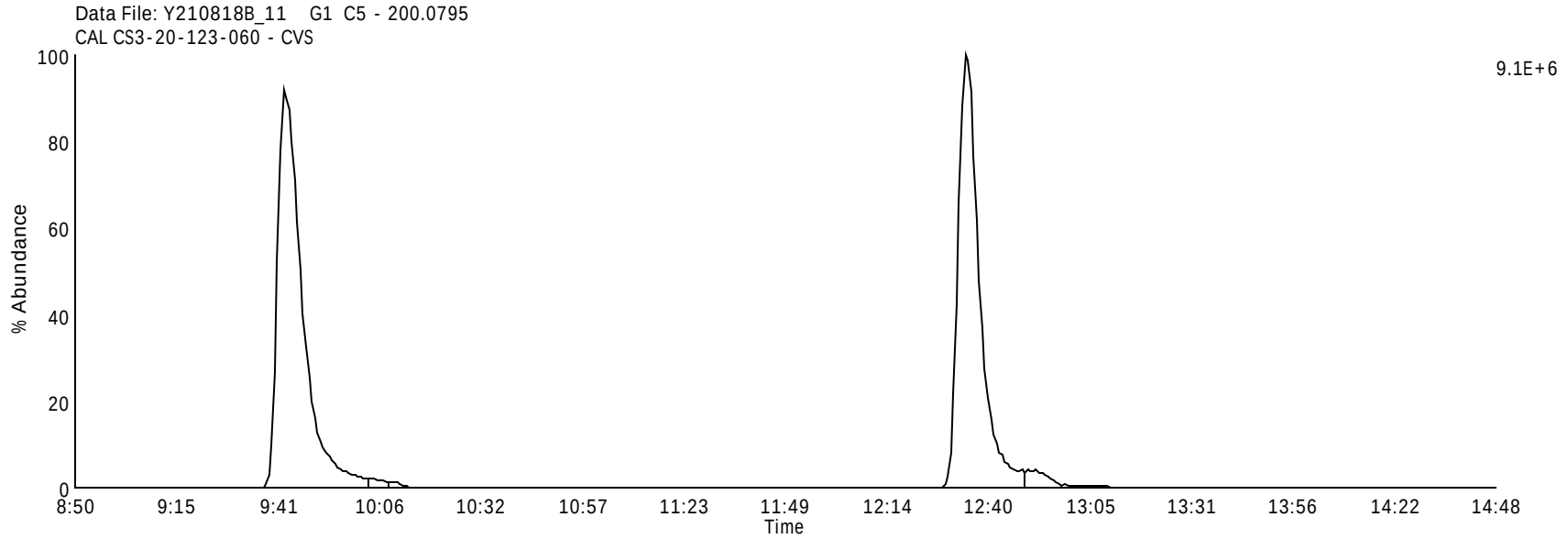


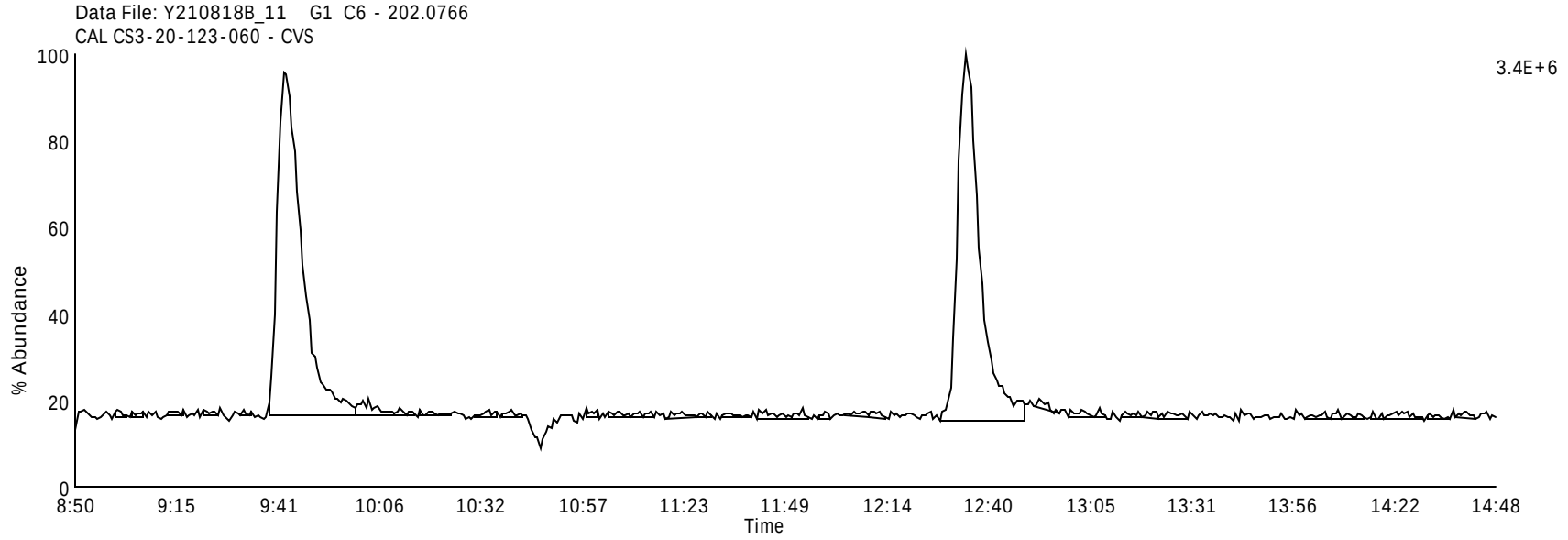
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS

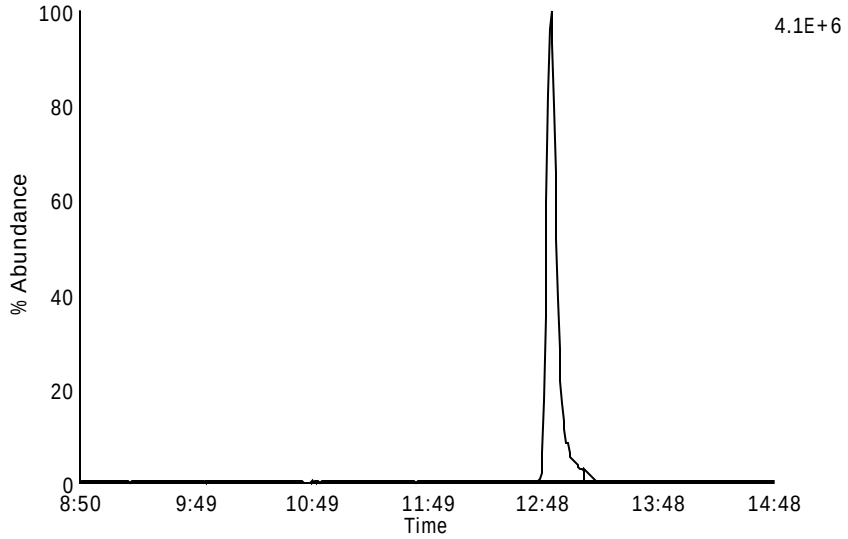




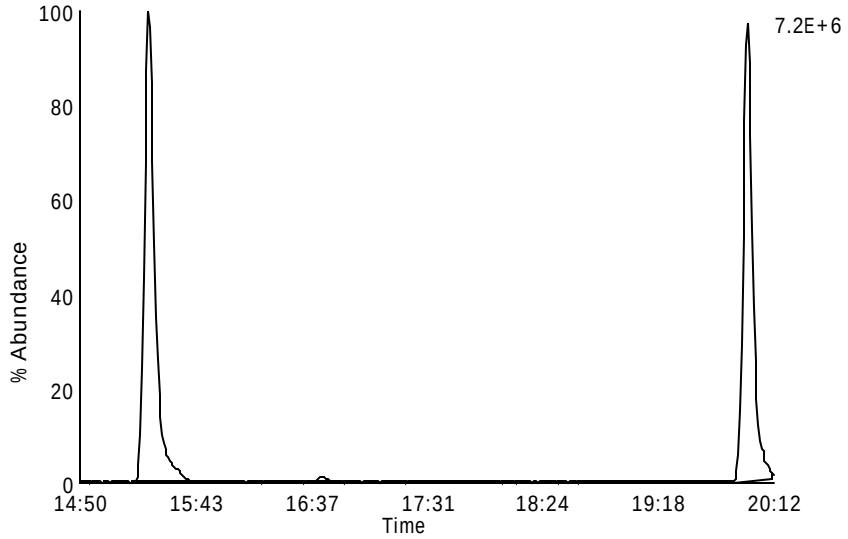
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

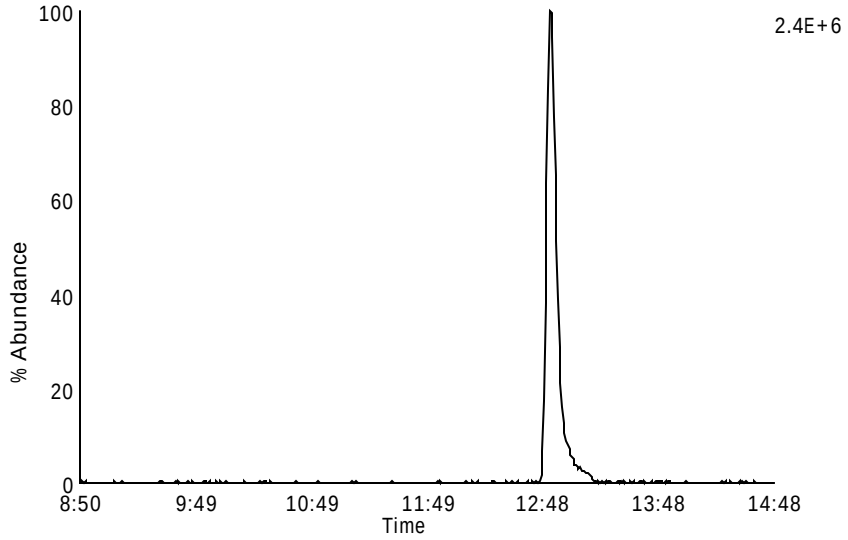
Data File: Y210818B_11 G1 C9 - 234.0406
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G2 C5 - 234.0406
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G1 C10 - 236.0376
CAL CS3-20-123-060 - CVS



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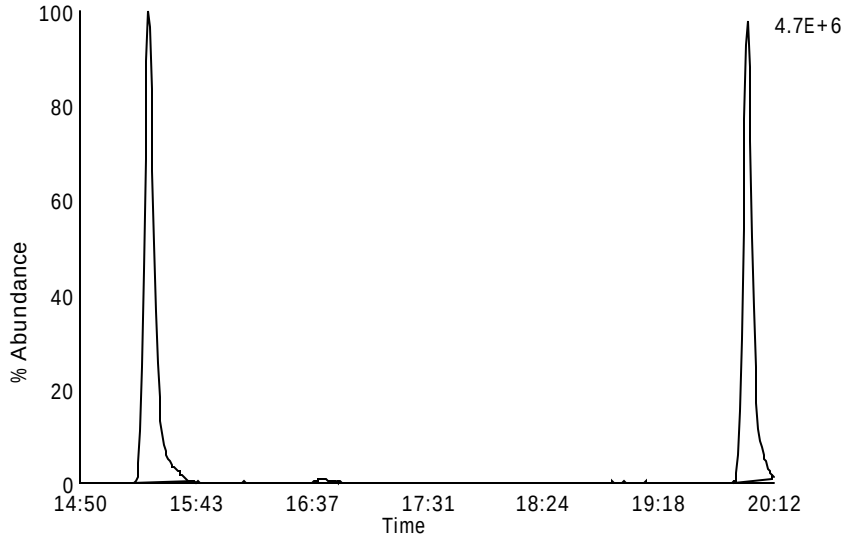
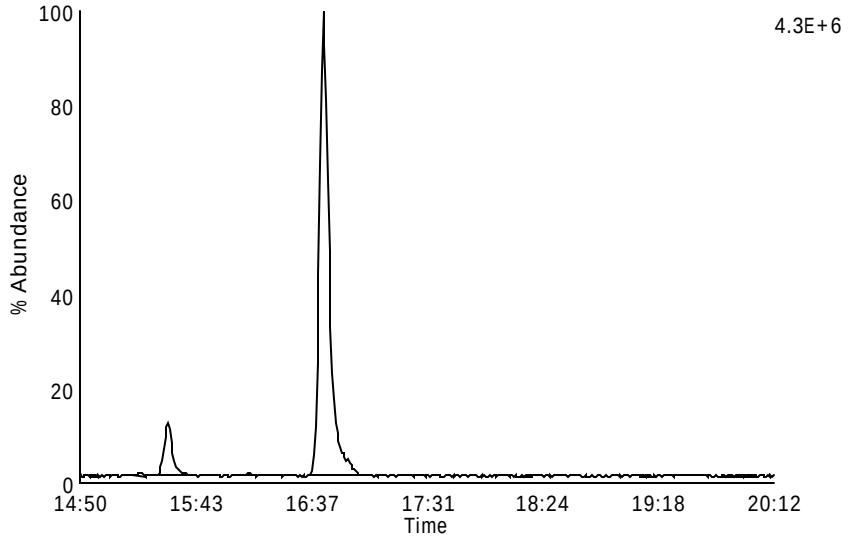
CAL CS3-20-123-060 - CVS



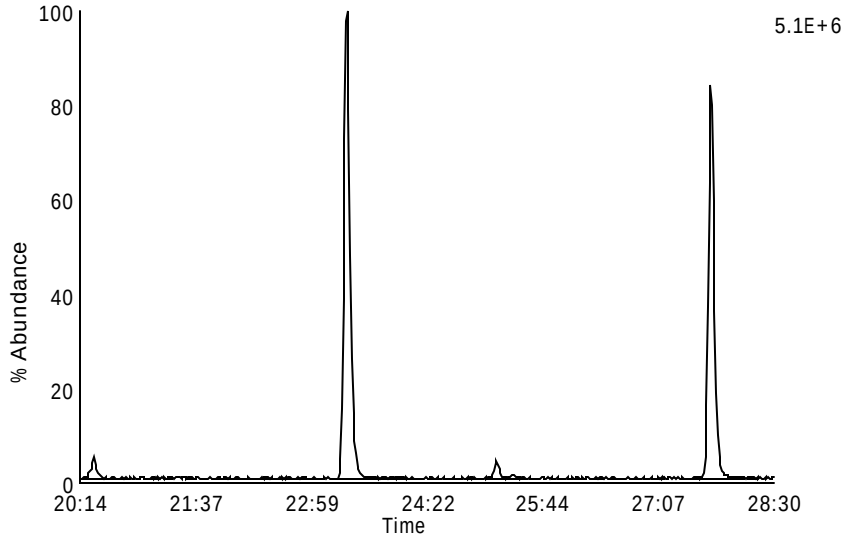
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

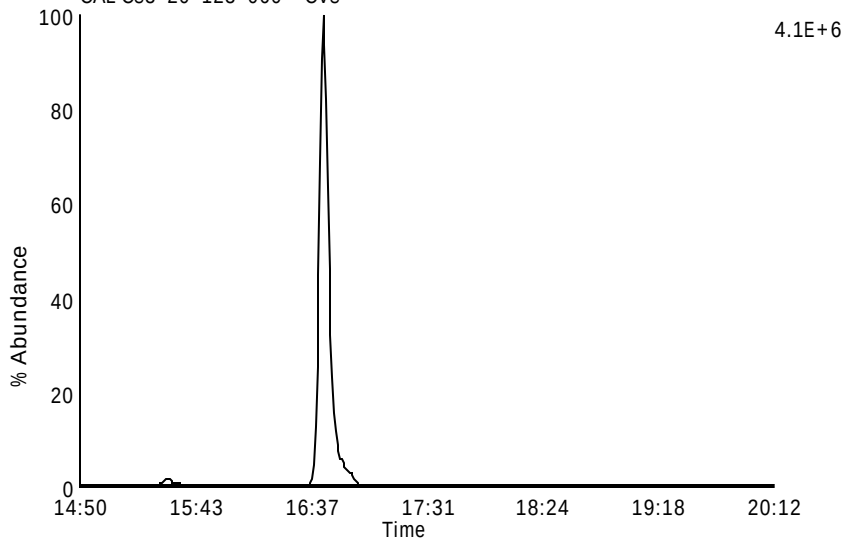
Data File: Y210818B_11 G2 C9 - 268.0016
CAL CS3-20-123-060 - CVS



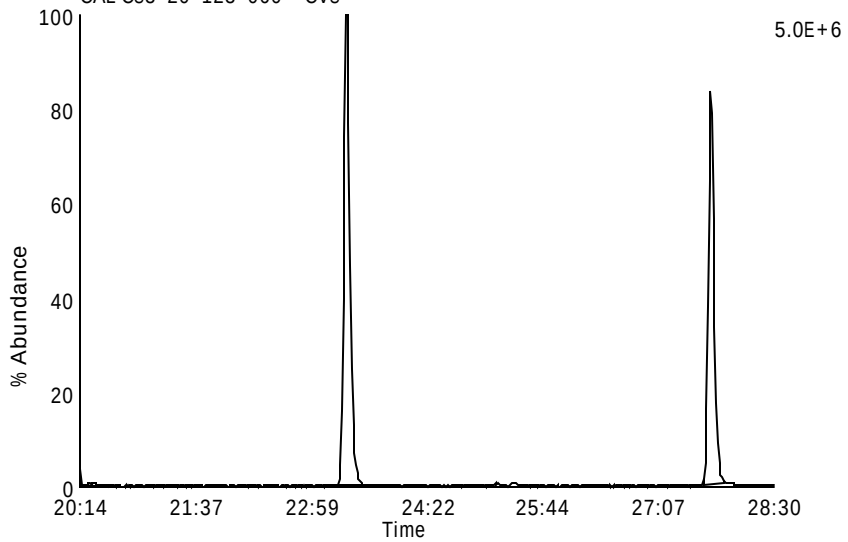
Data File: Y210818B_11 G3 C3 - 268.0016
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G2 C10 - 269.9986
CAL CS3-20-123-060 - CVS

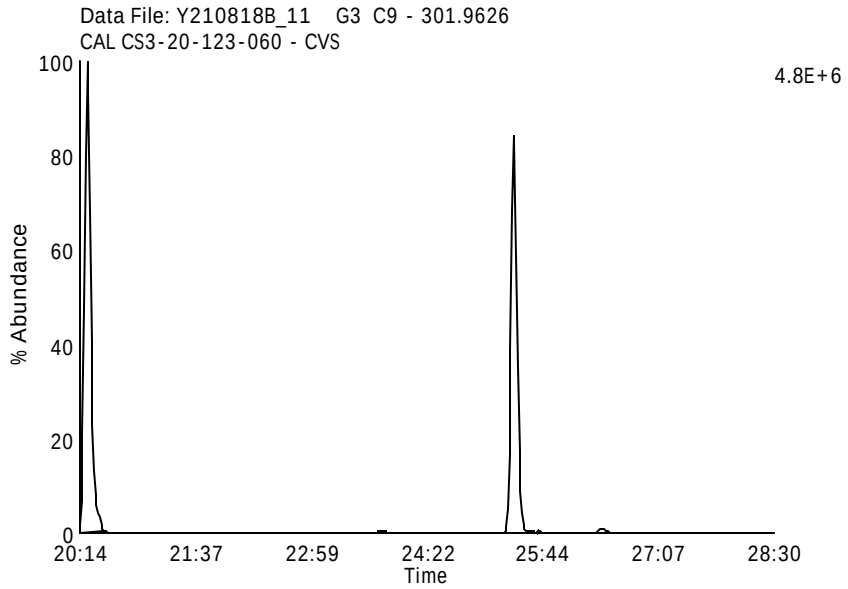


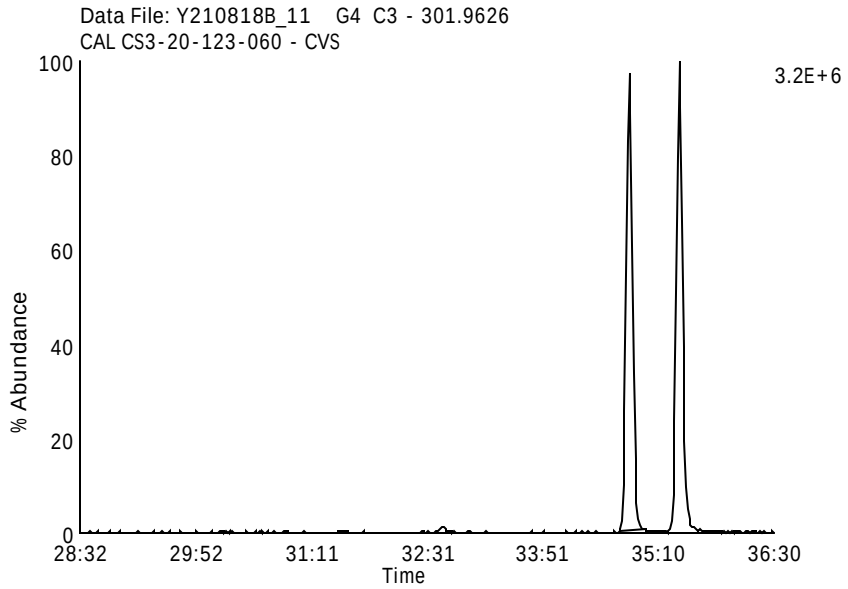
Data File: Y210818B_11 G3 C4 - 269.9986
CAL CS3-20-123-060 - CVS

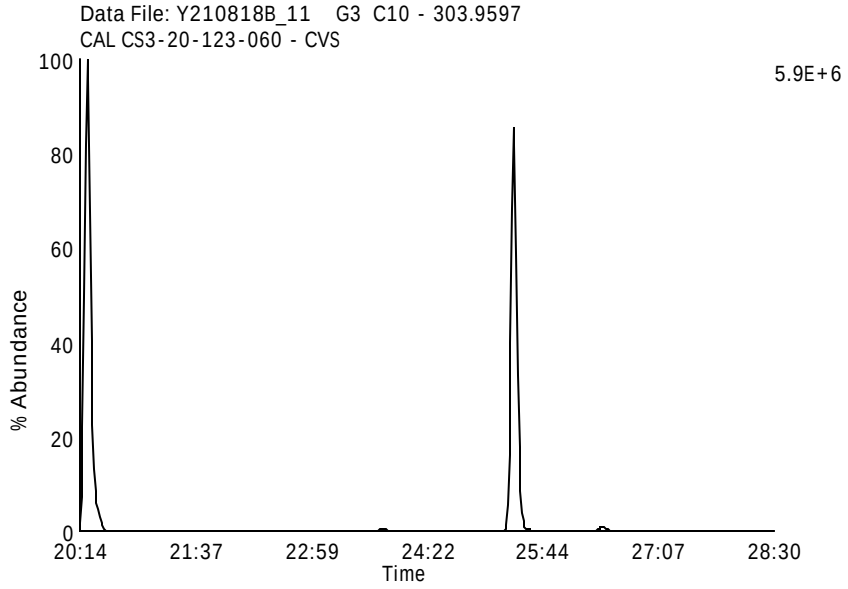


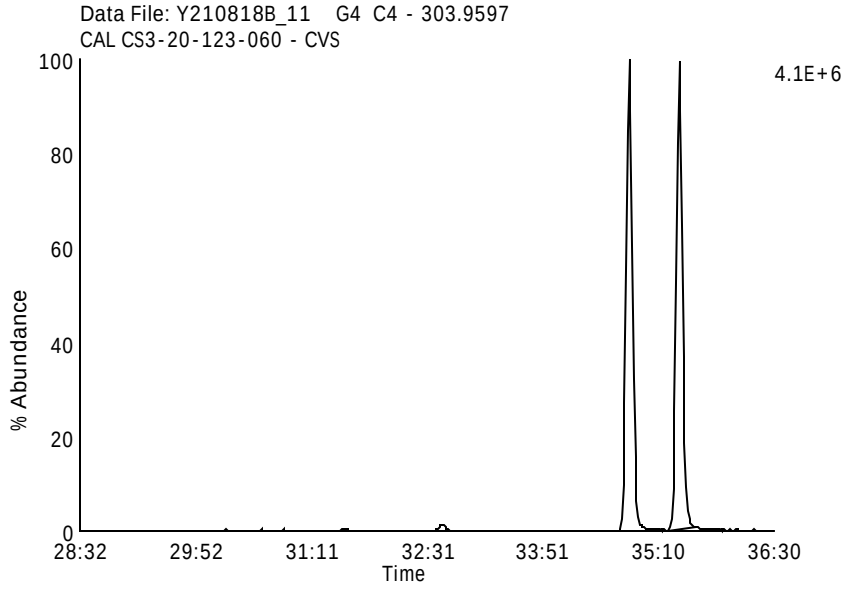
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







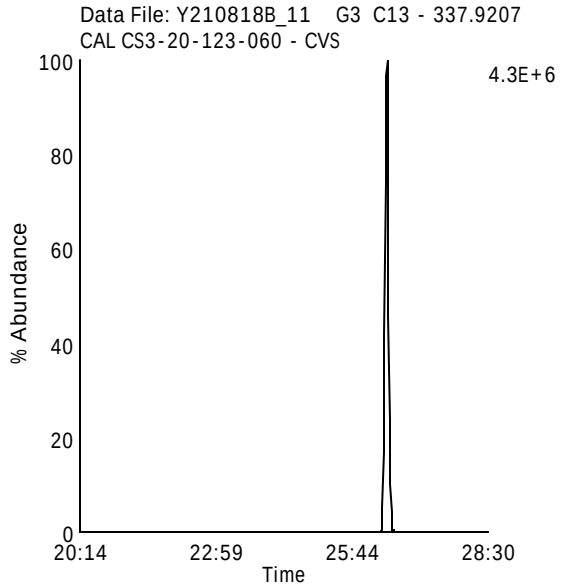


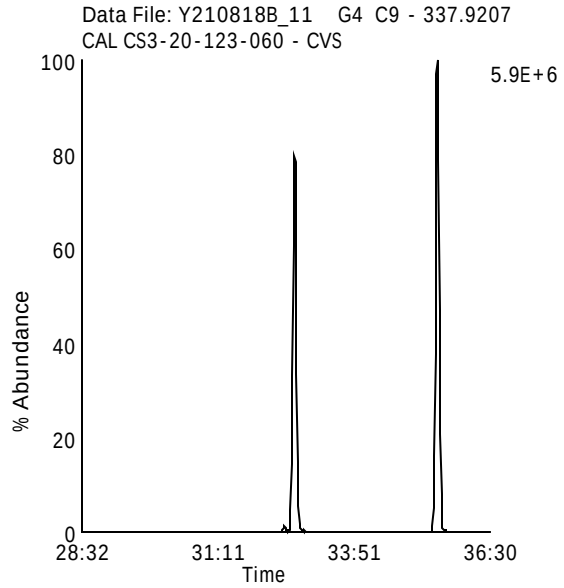
Labeled Penta Chlorinated Biphenyls

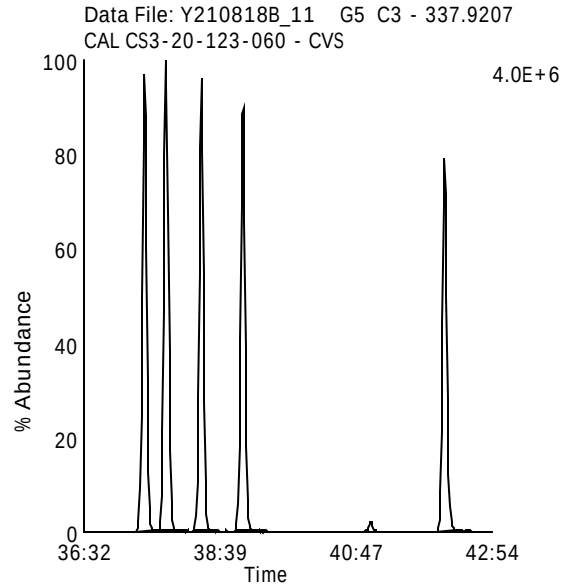
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

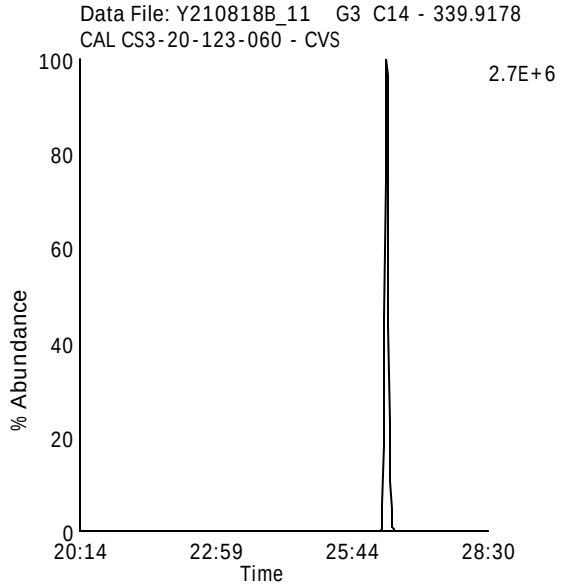
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

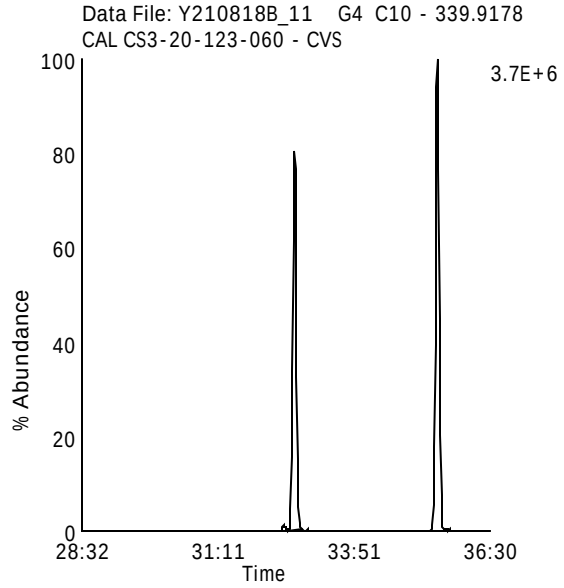
Sample Description: CAL CS3-20-123-060 - CVS

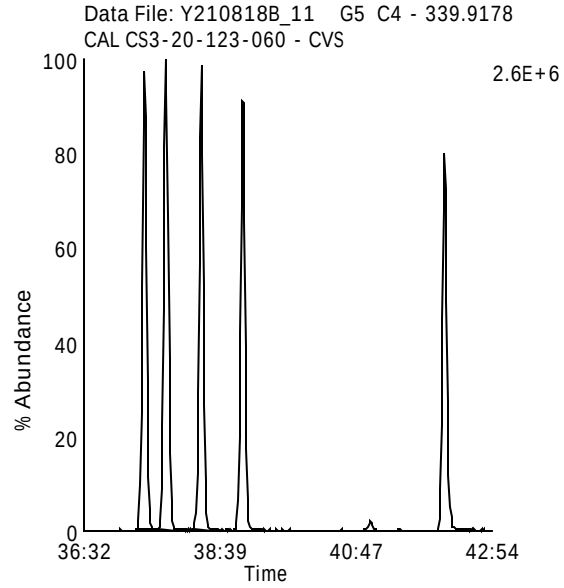










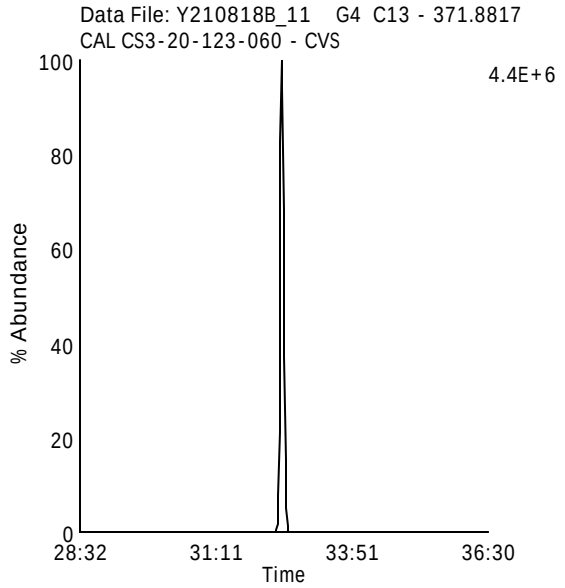


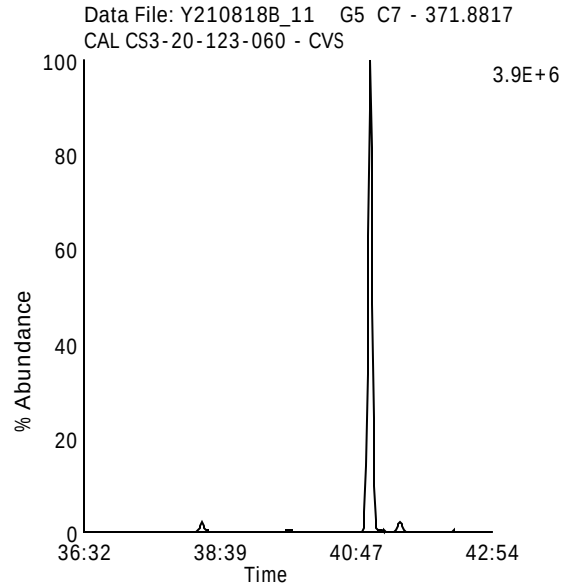
Labeled Hexa Chlorinated Biphenyls

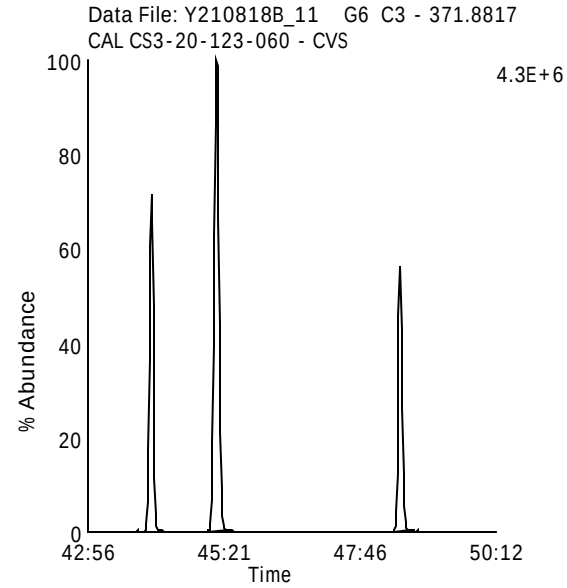
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

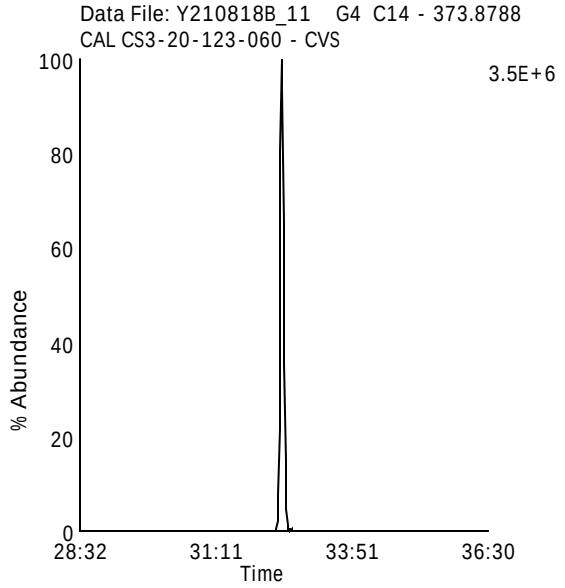
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

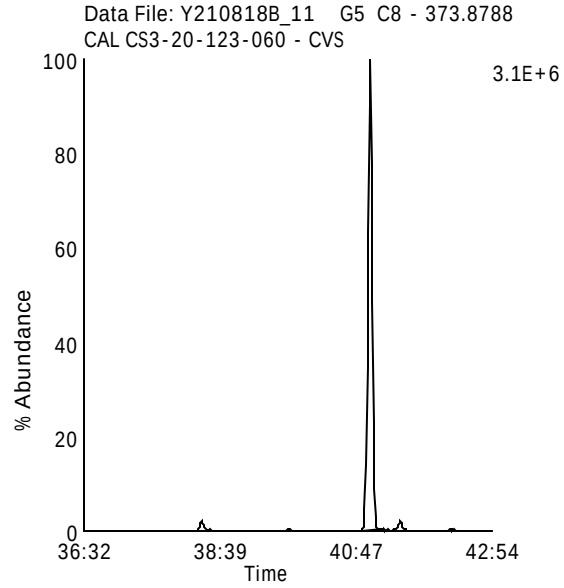
Sample Description: CAL CS3-20-123-060 - CVS

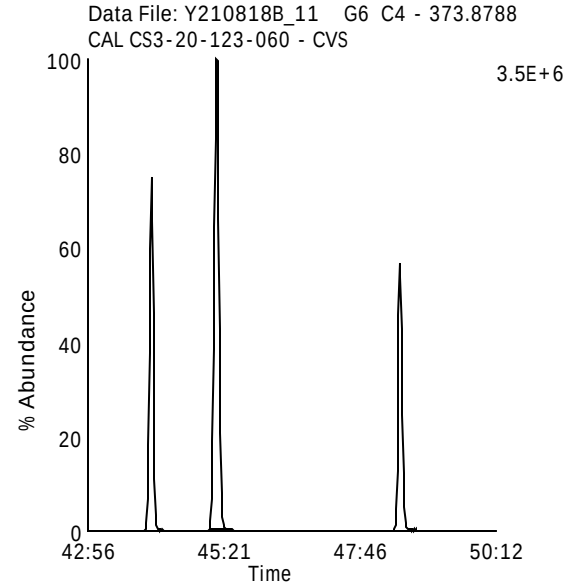






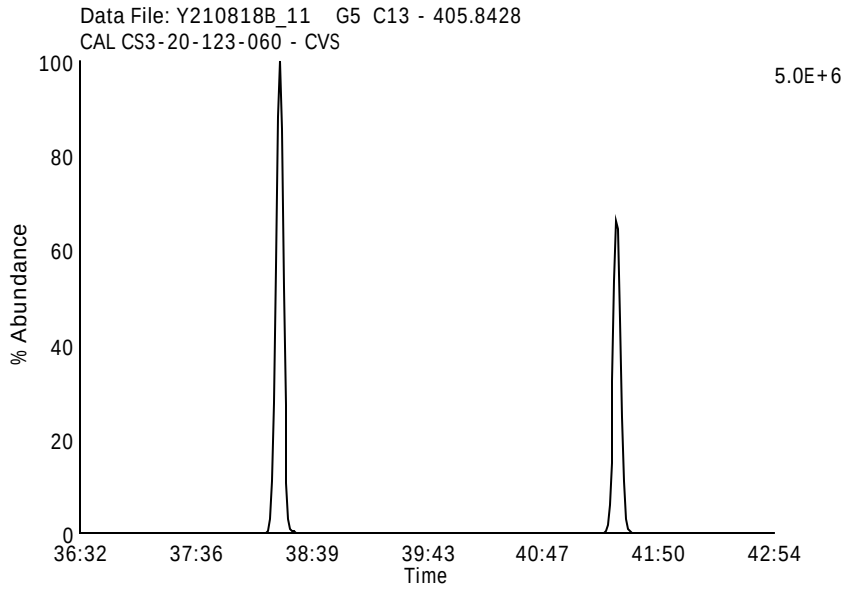


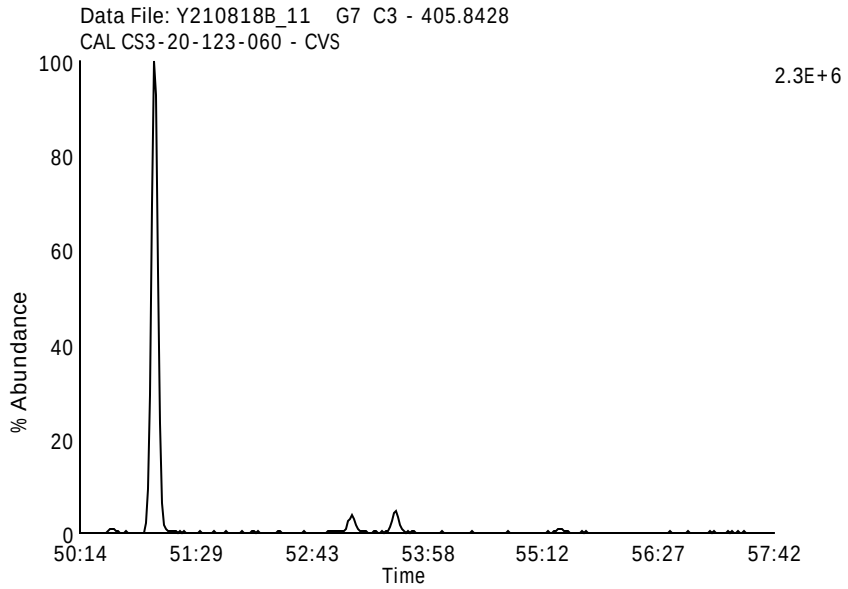


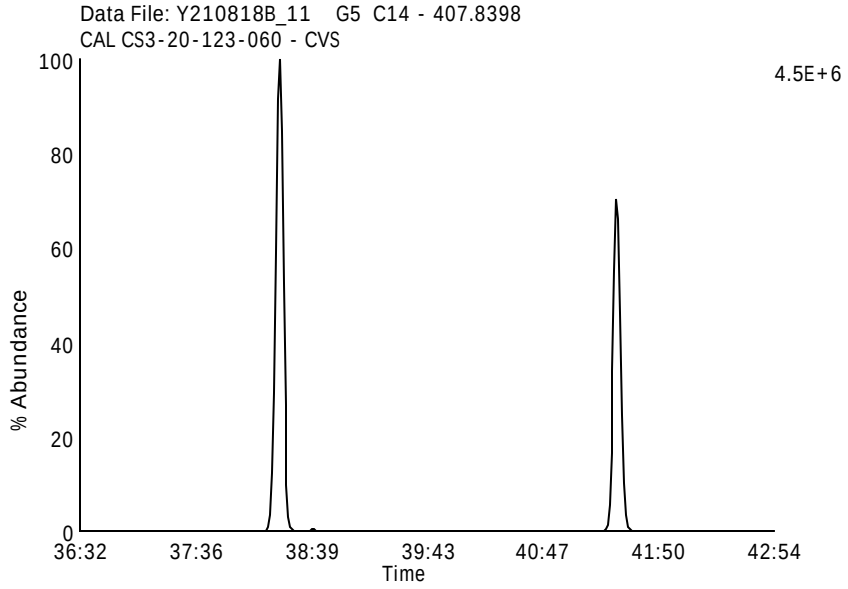


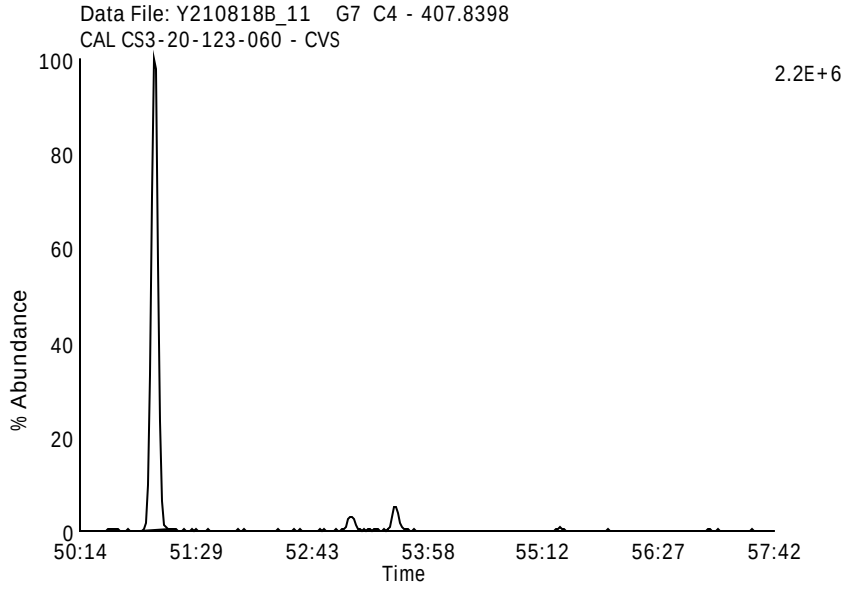
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





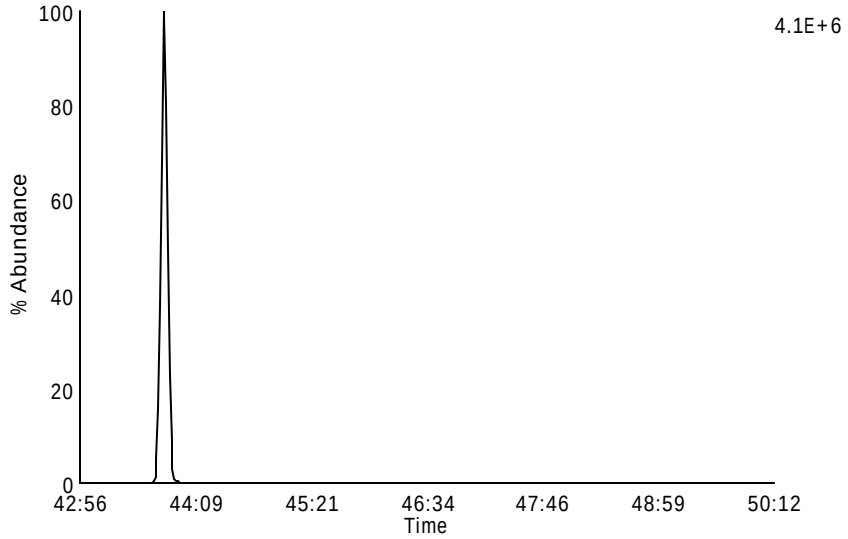




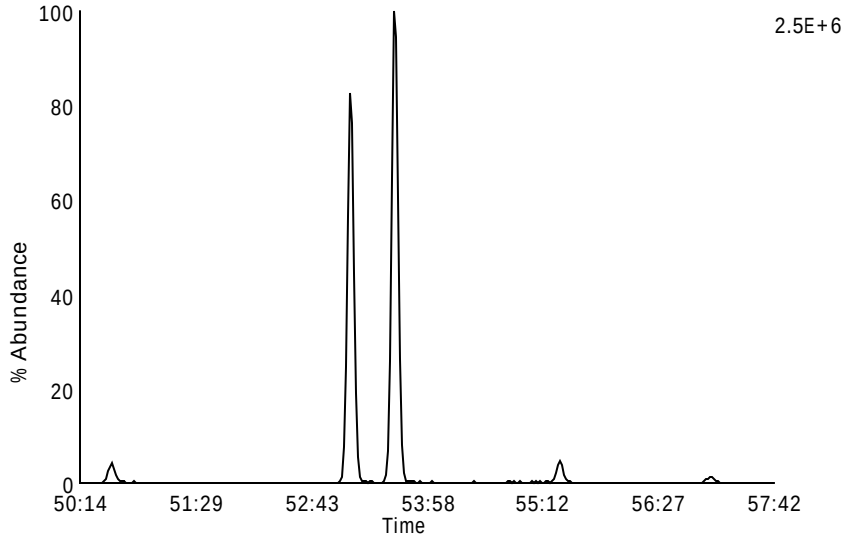
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

Data File: Y210818B_11 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



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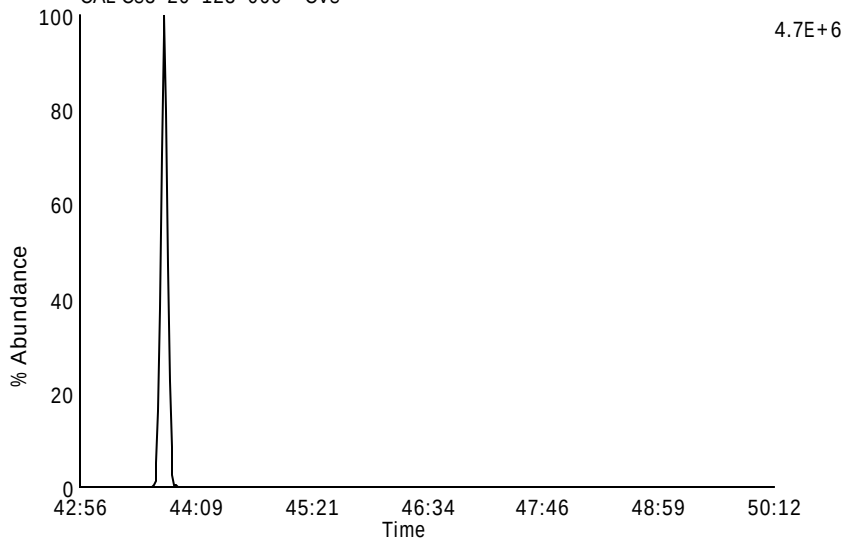
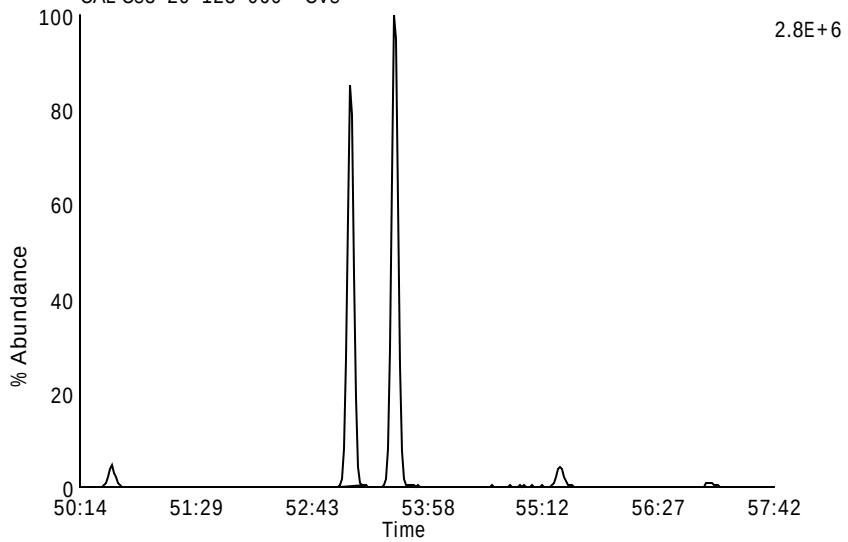
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

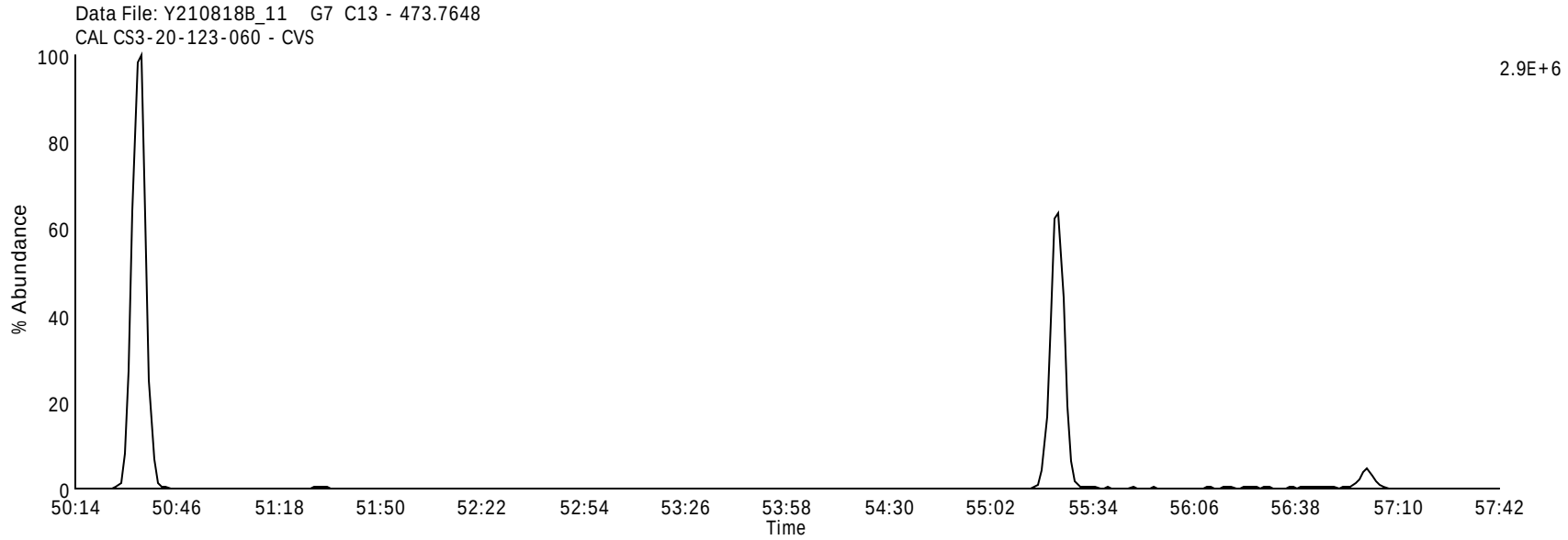


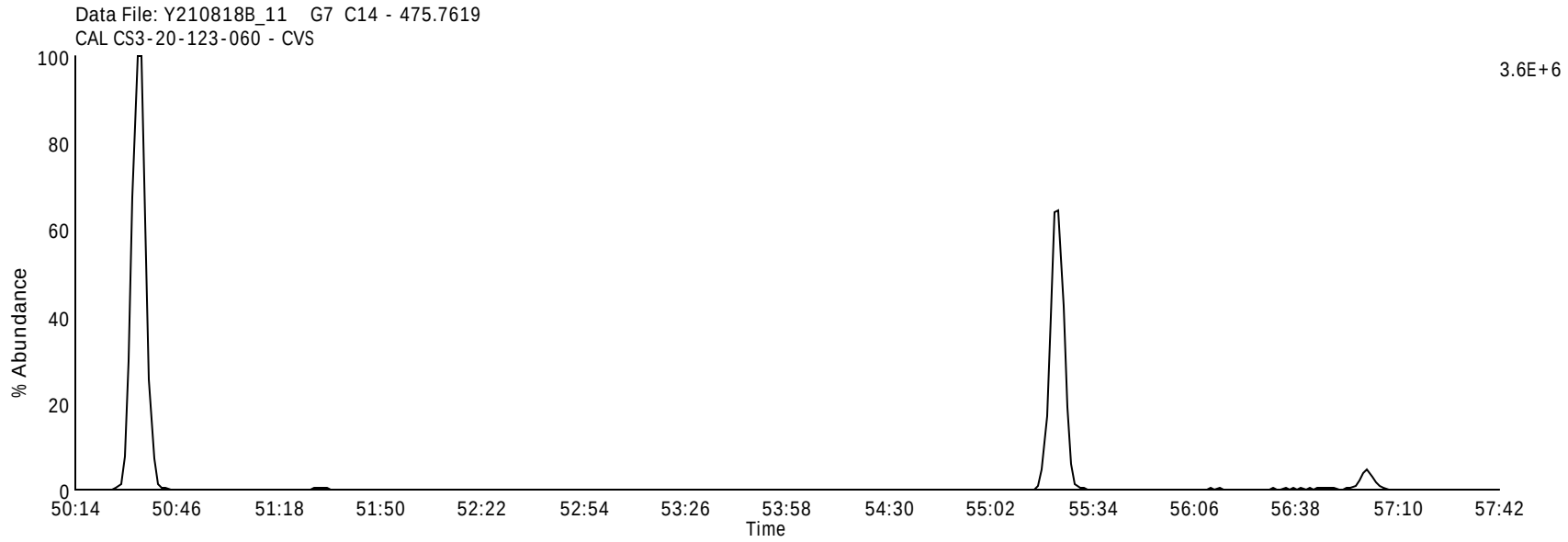
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



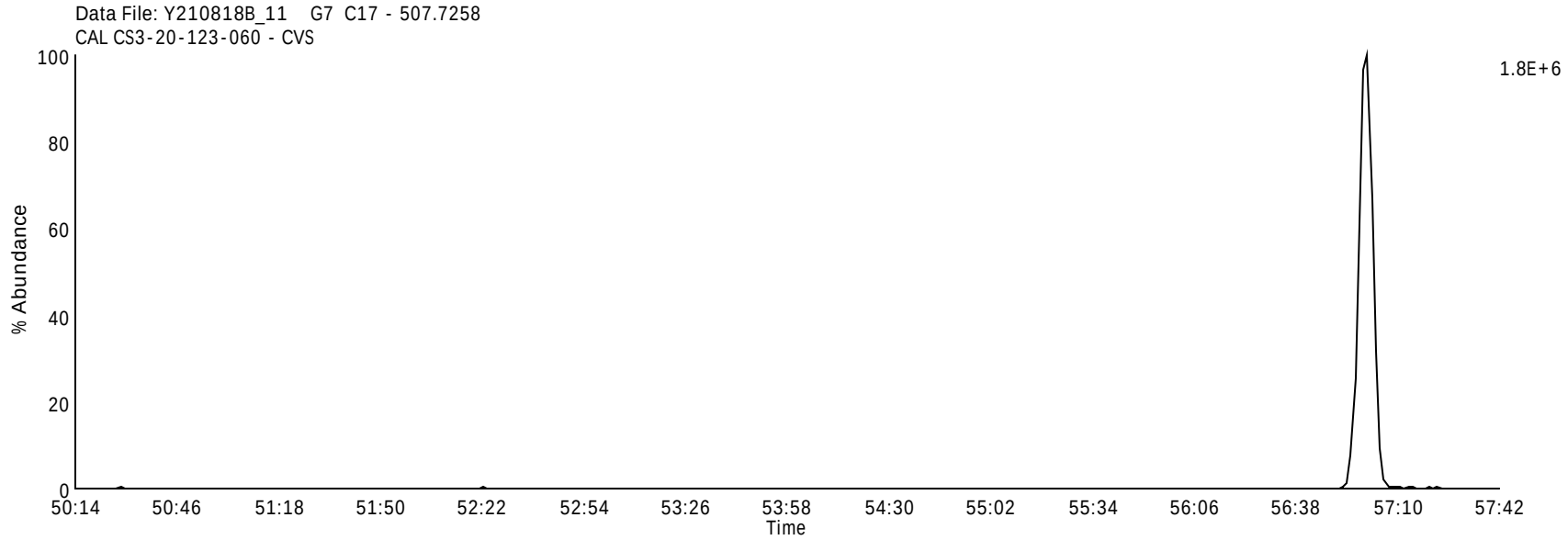


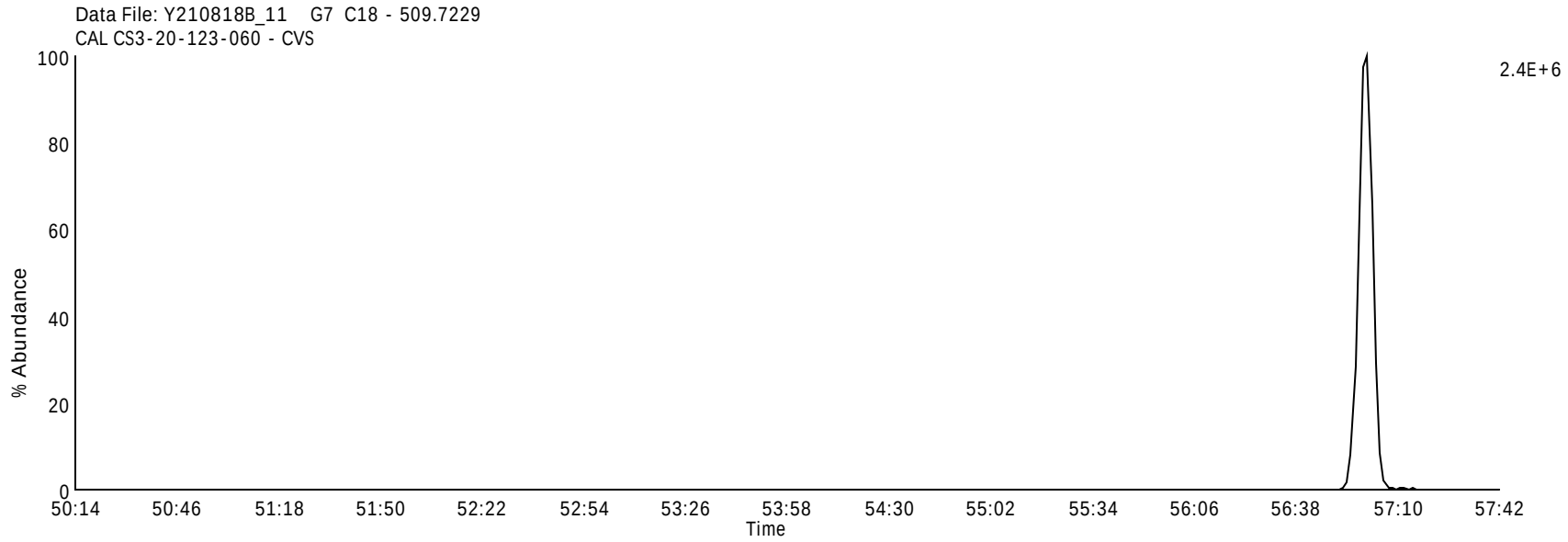
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



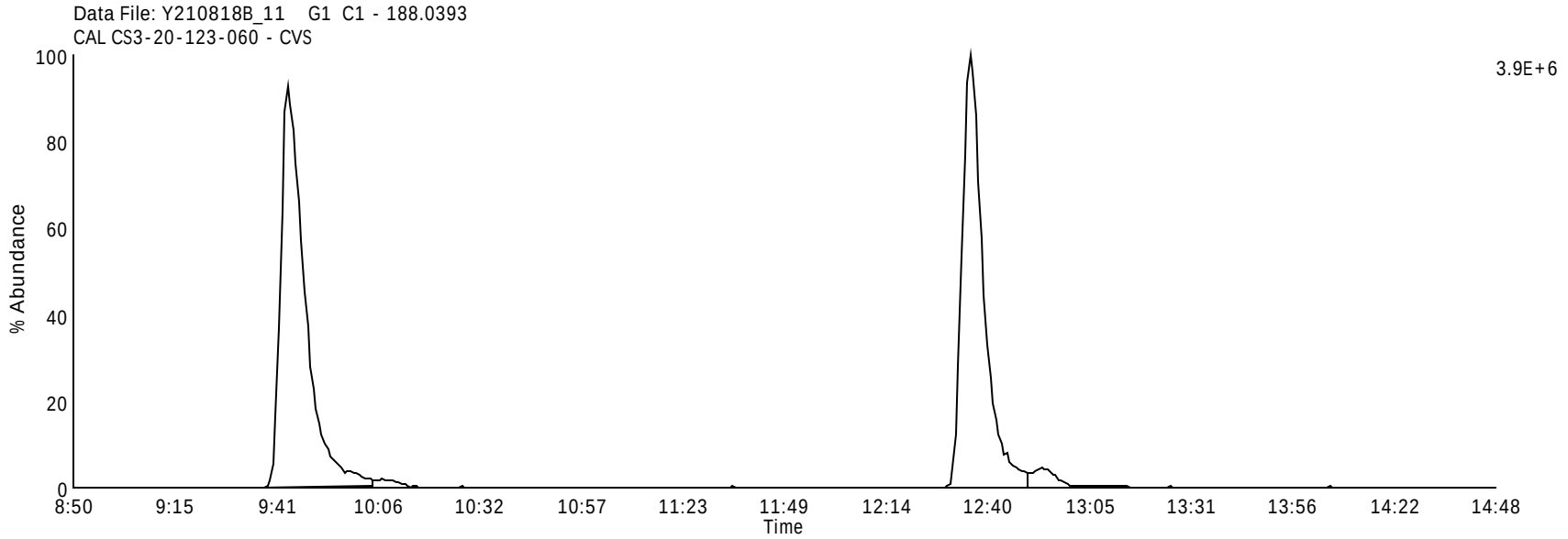


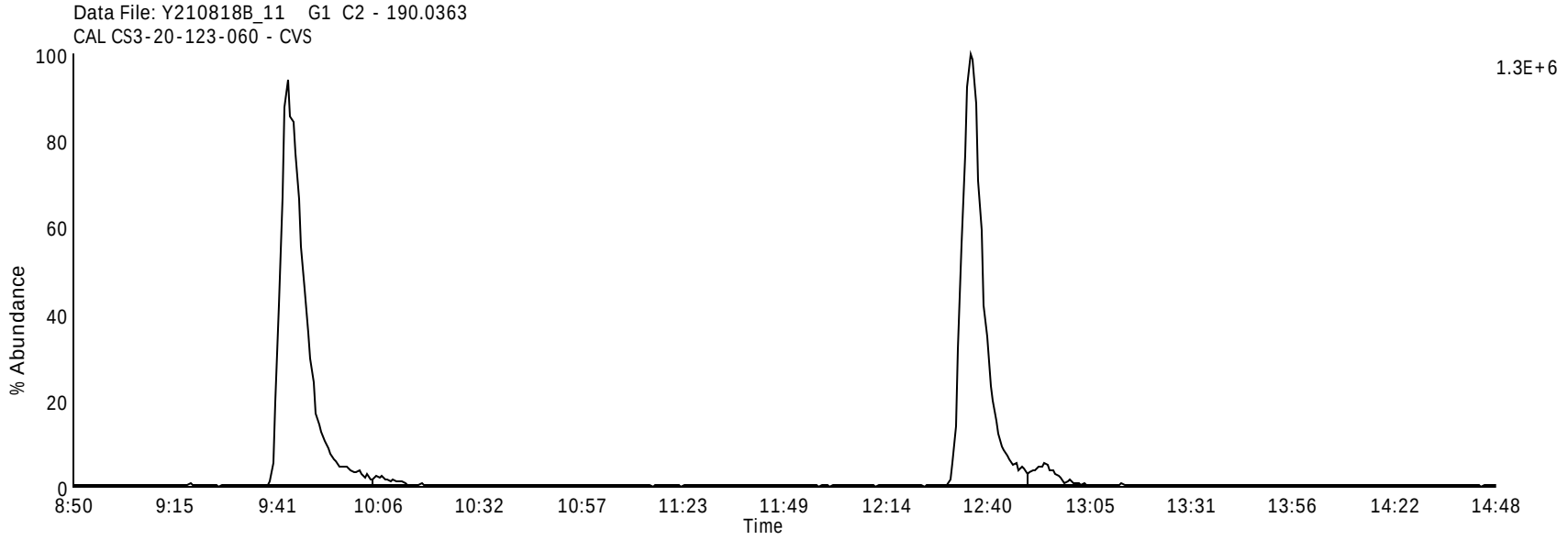
Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

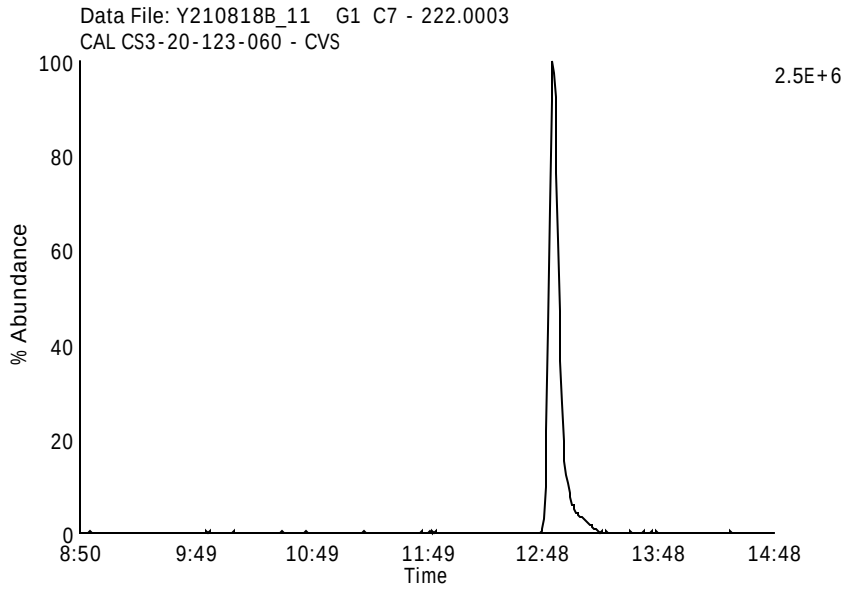
Sample Description: CAL CS3-20-123-060 - CVS

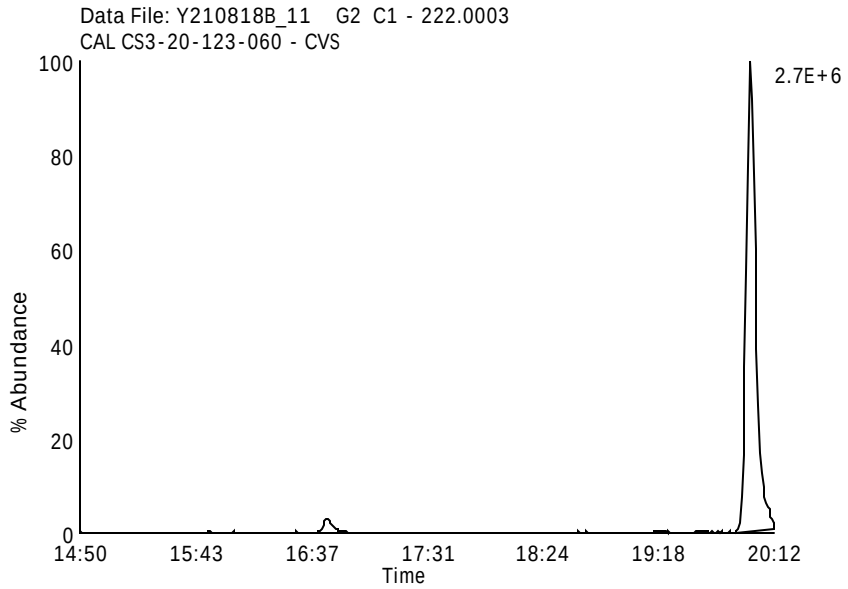


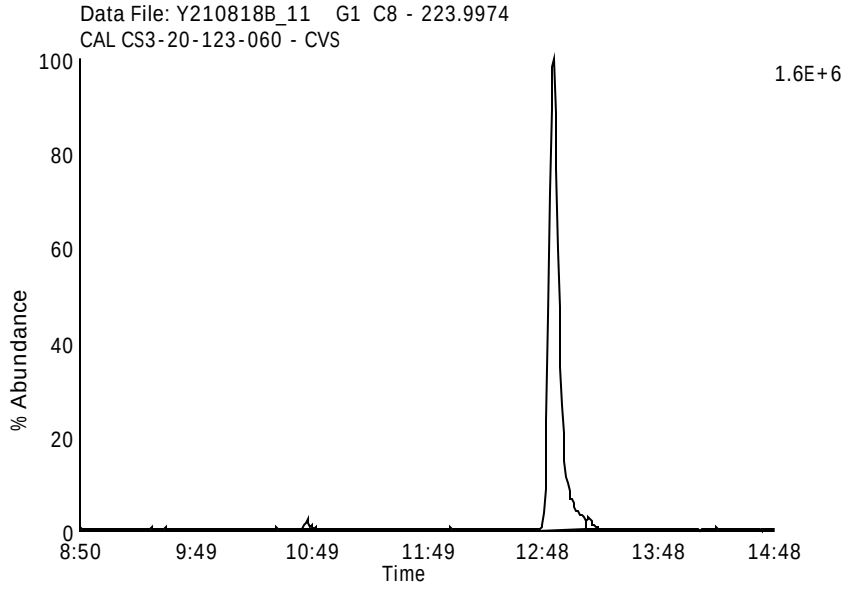


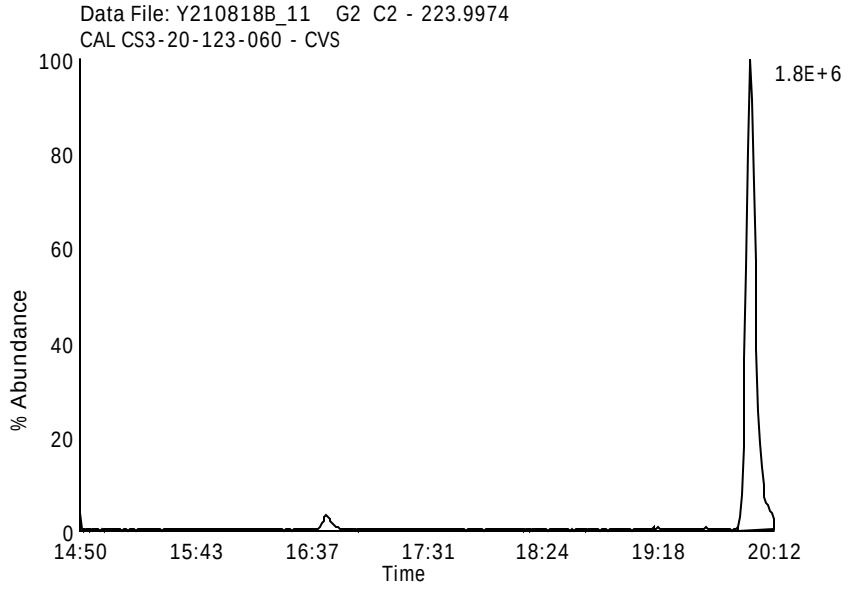
Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



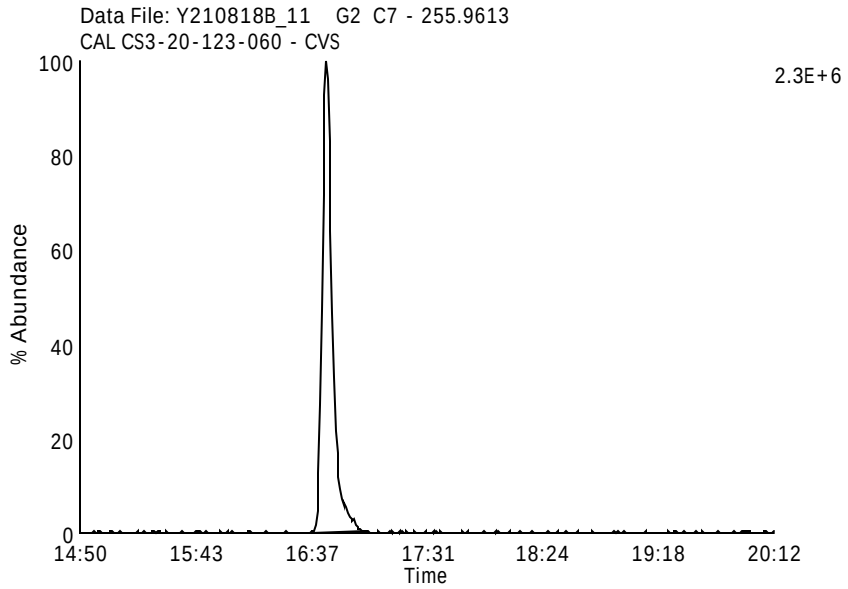


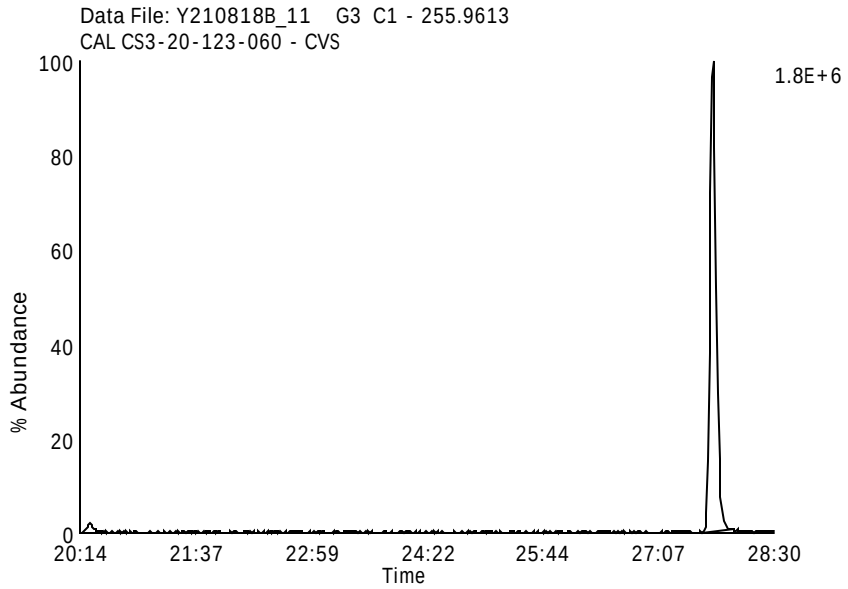


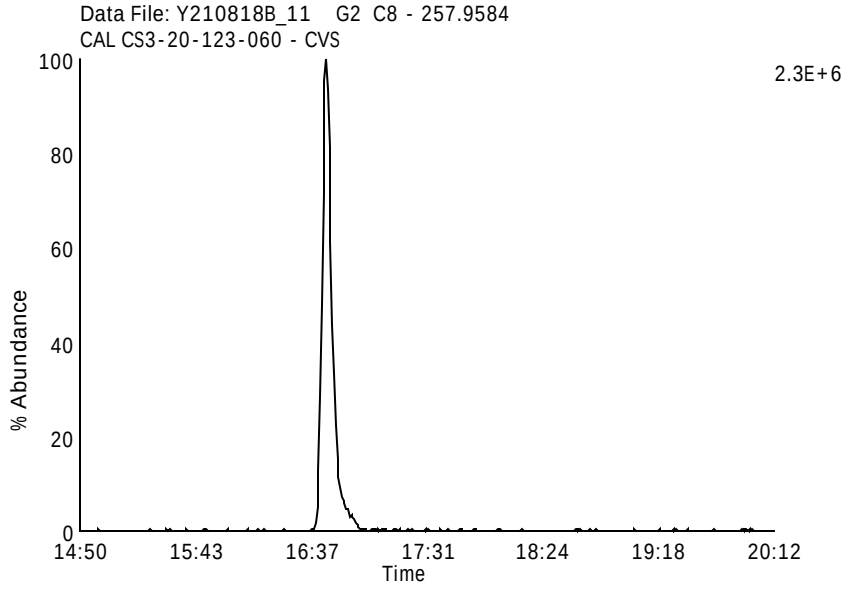


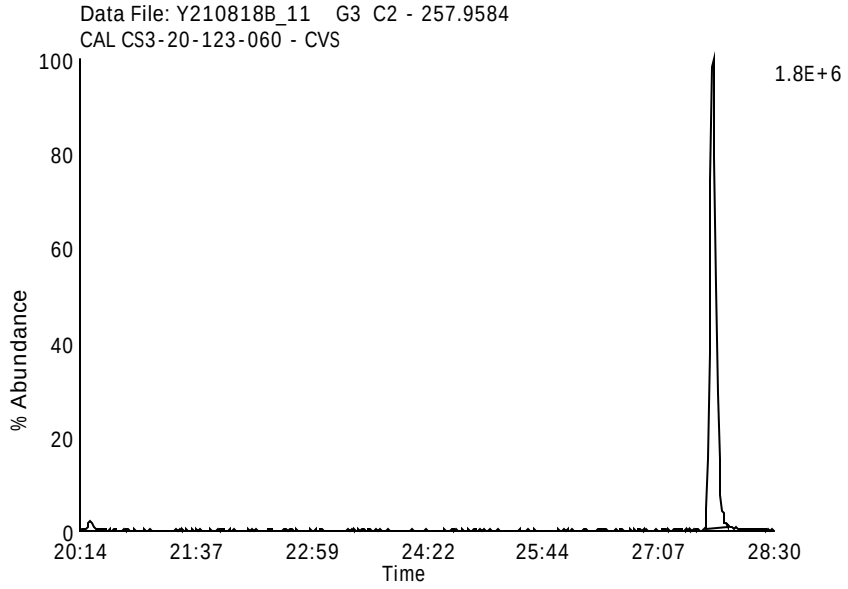
Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



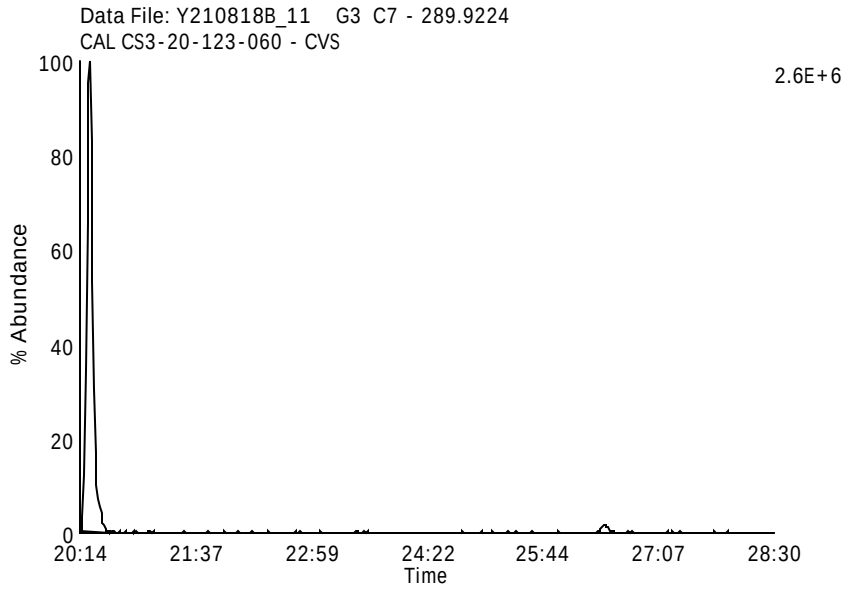


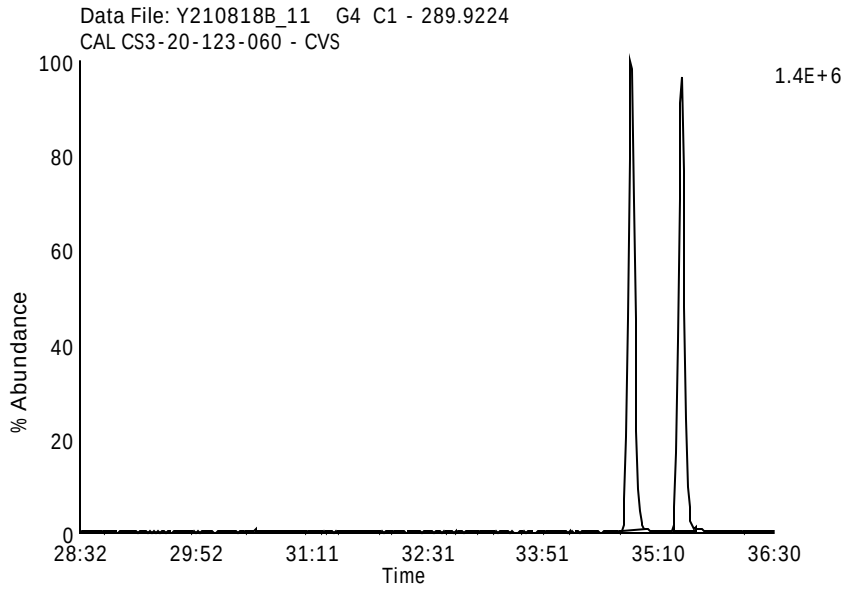


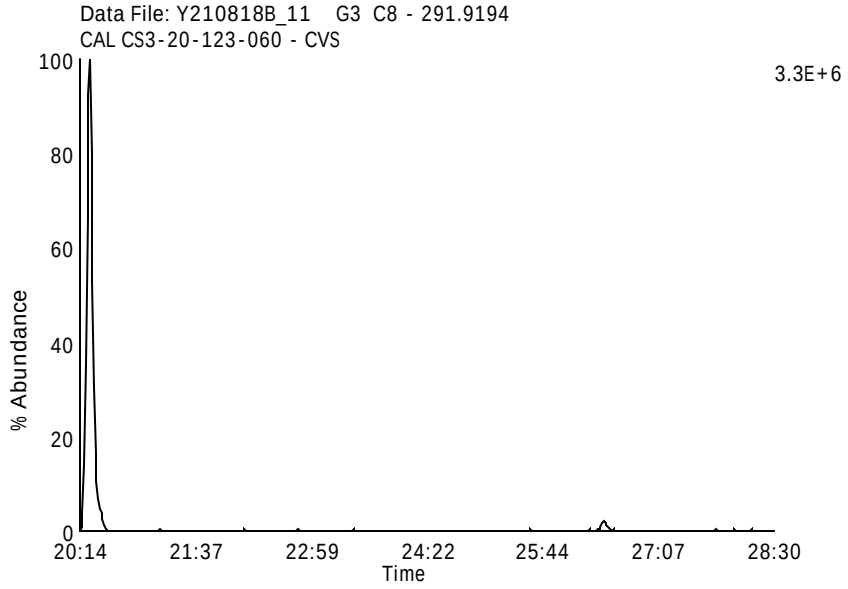


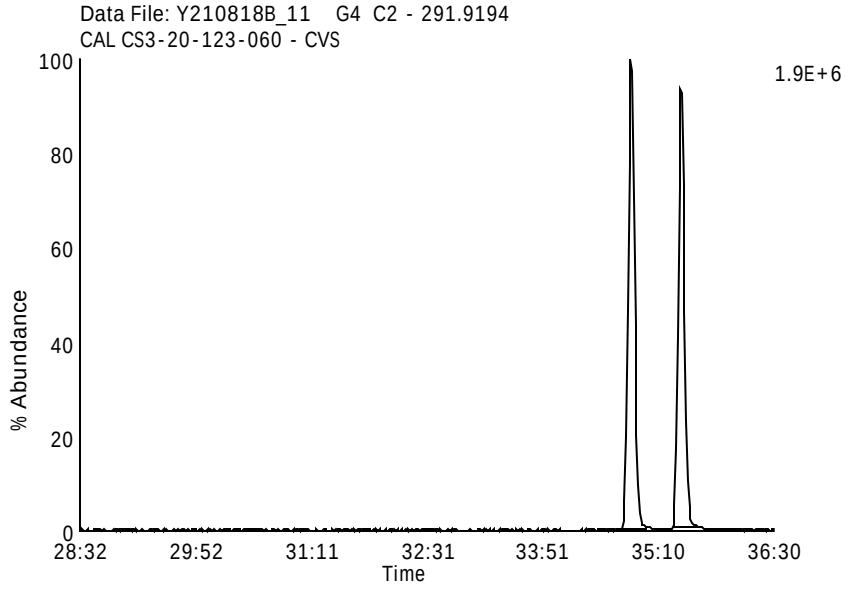
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



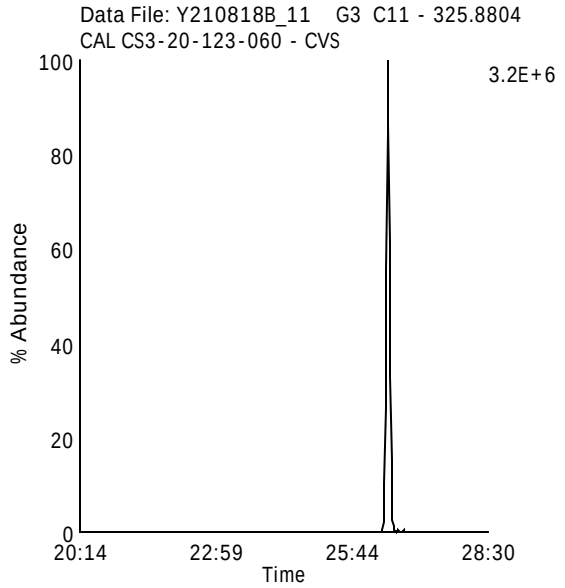


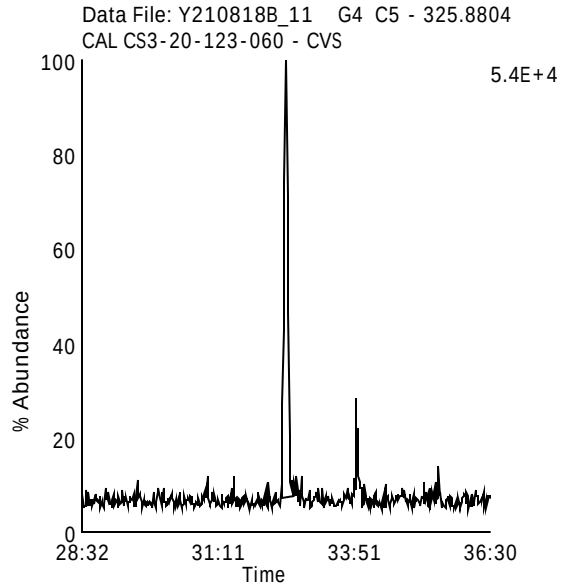


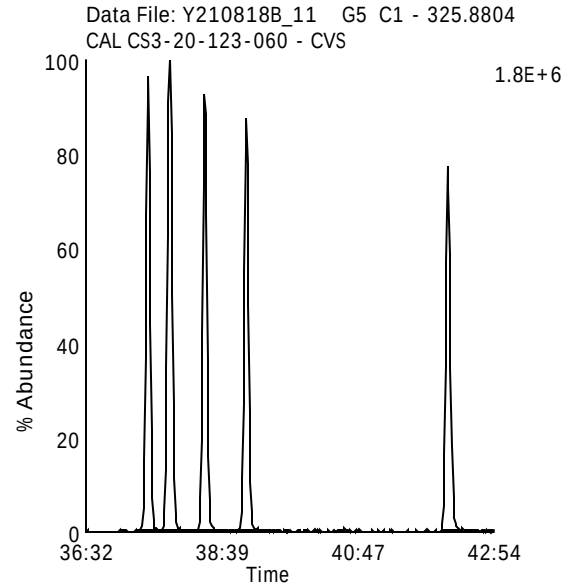


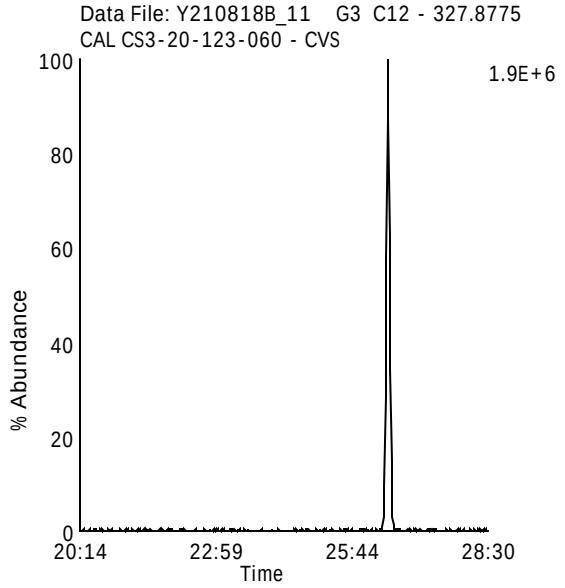
Penta Chlorinated Biphenyls

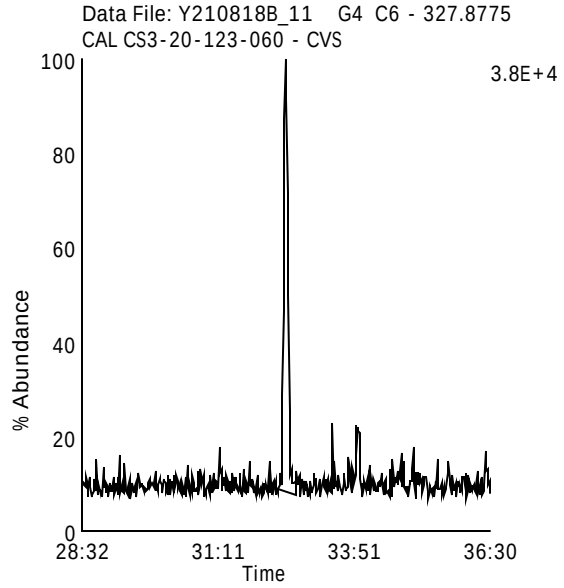
Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

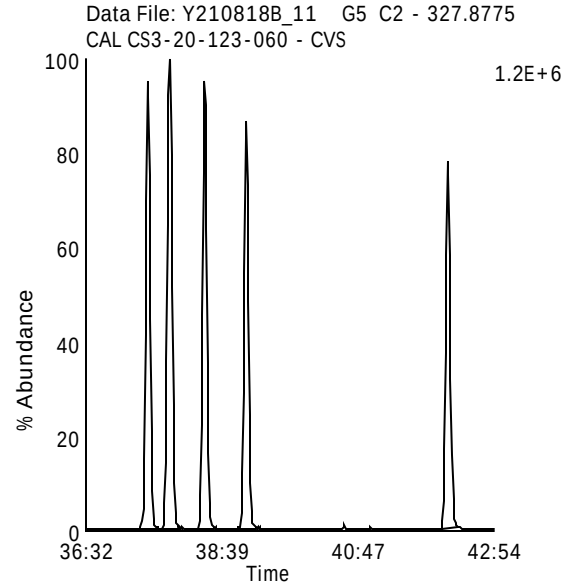










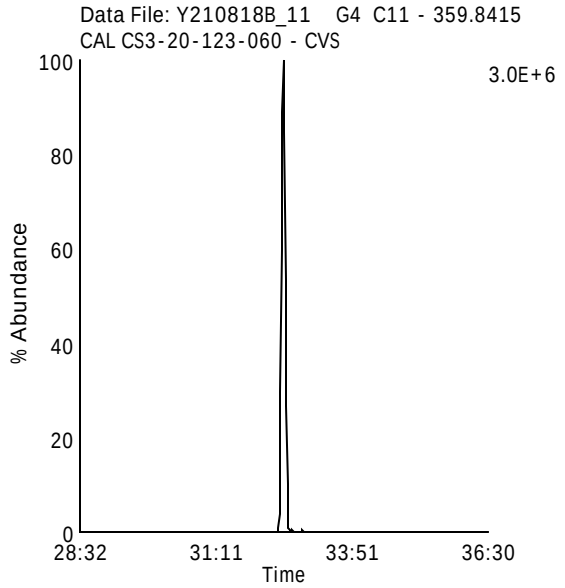


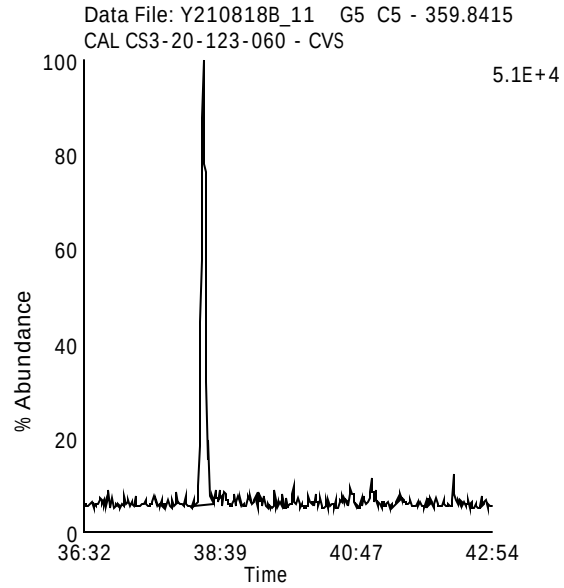
Hexa Chlorinated Biphenyls

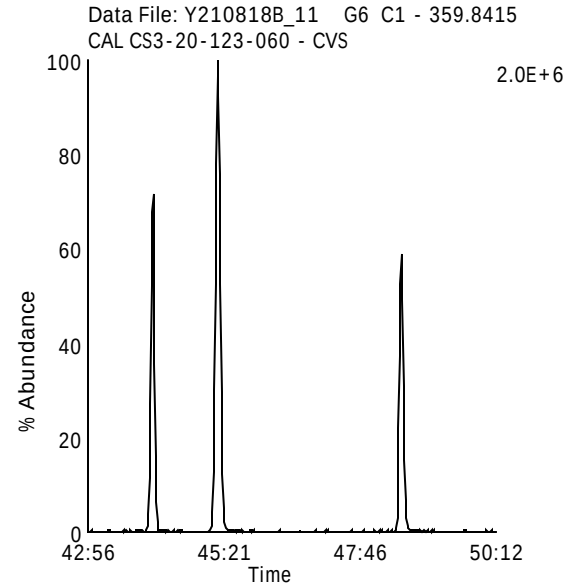
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

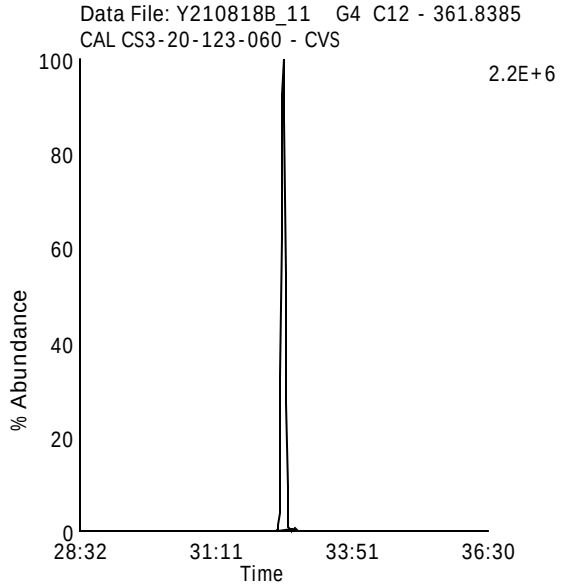
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

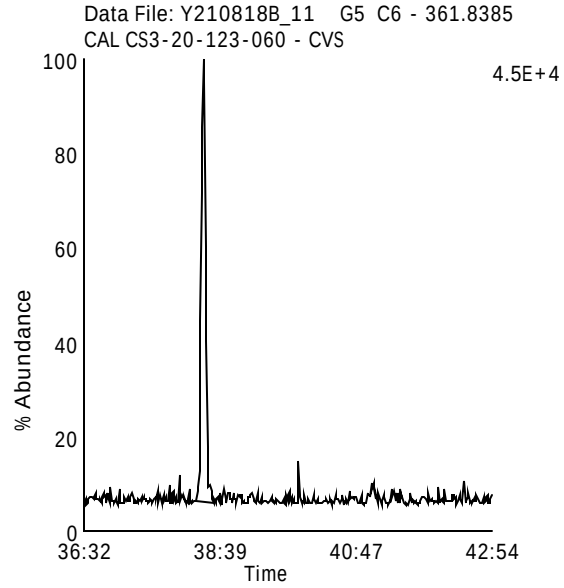
Sample Description: CAL CS3-20-123-060 - CVS

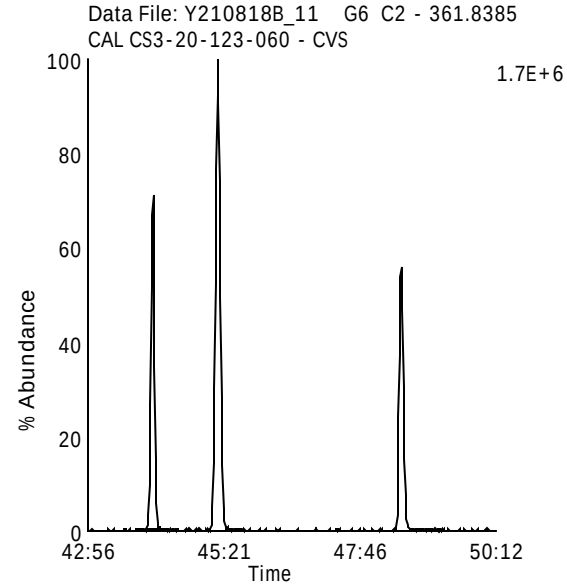










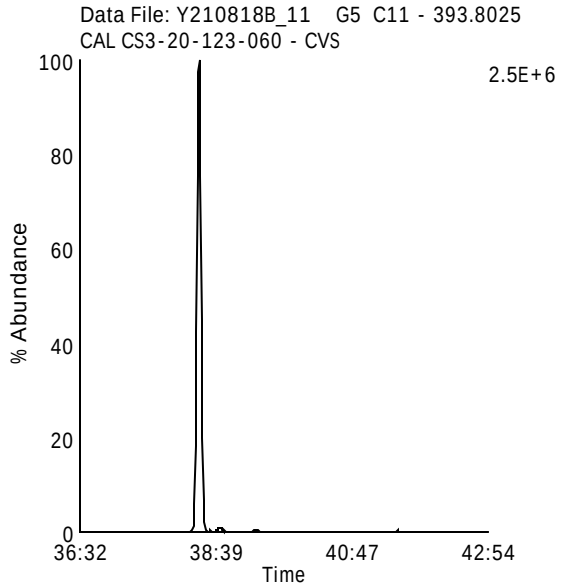


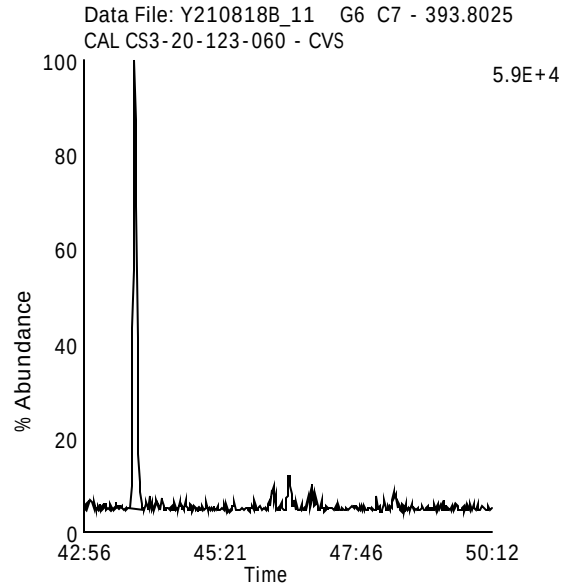
Hepta Chlorinated Biphenyls

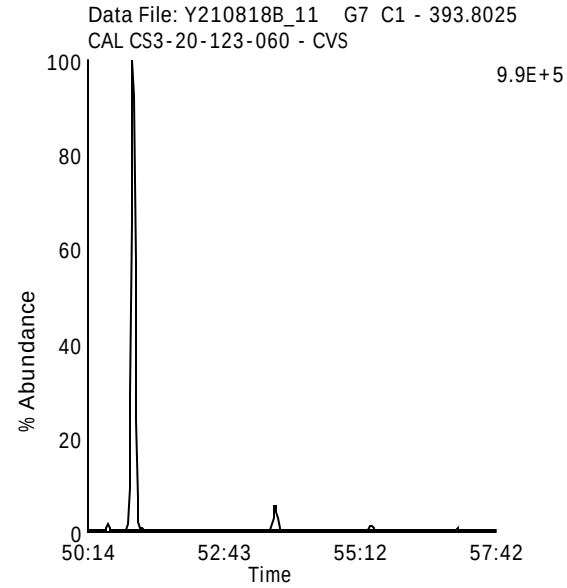
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

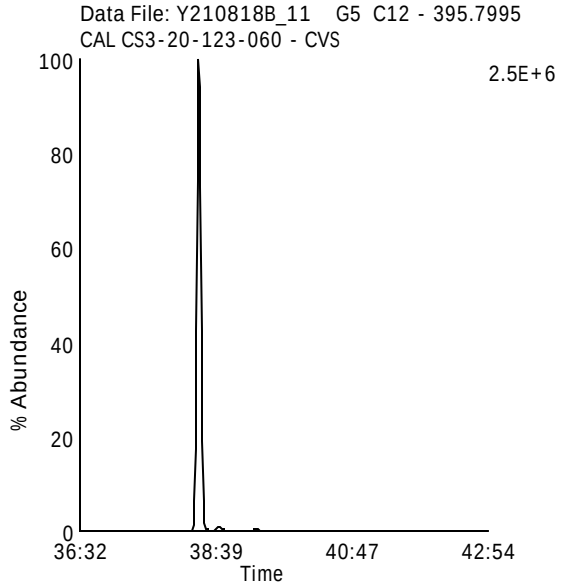
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

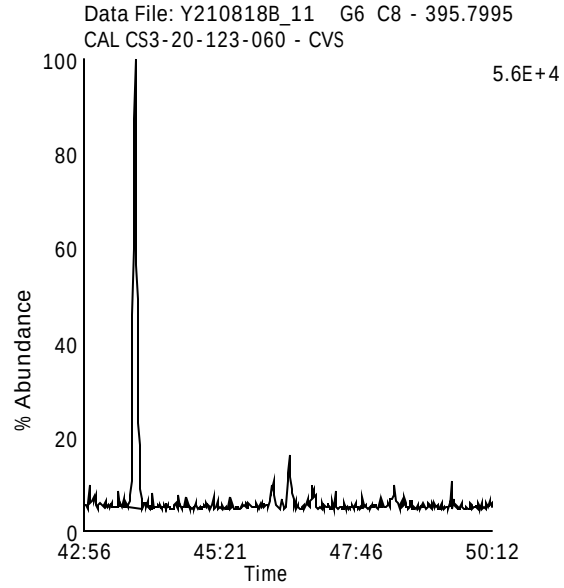
Sample Description: CAL CS3-20-123-060 - CVS

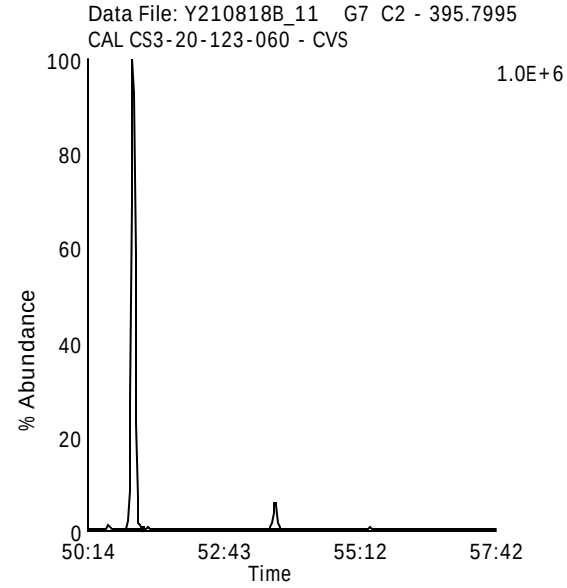






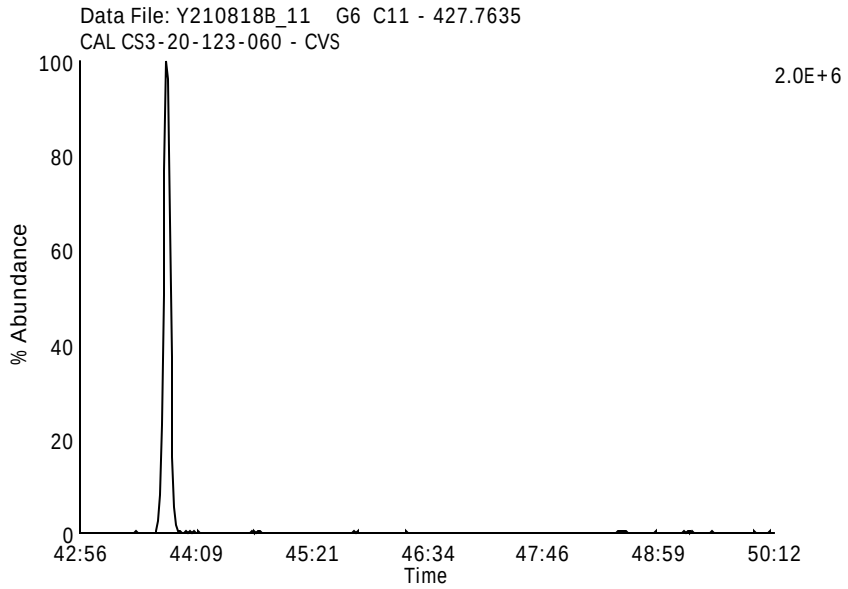


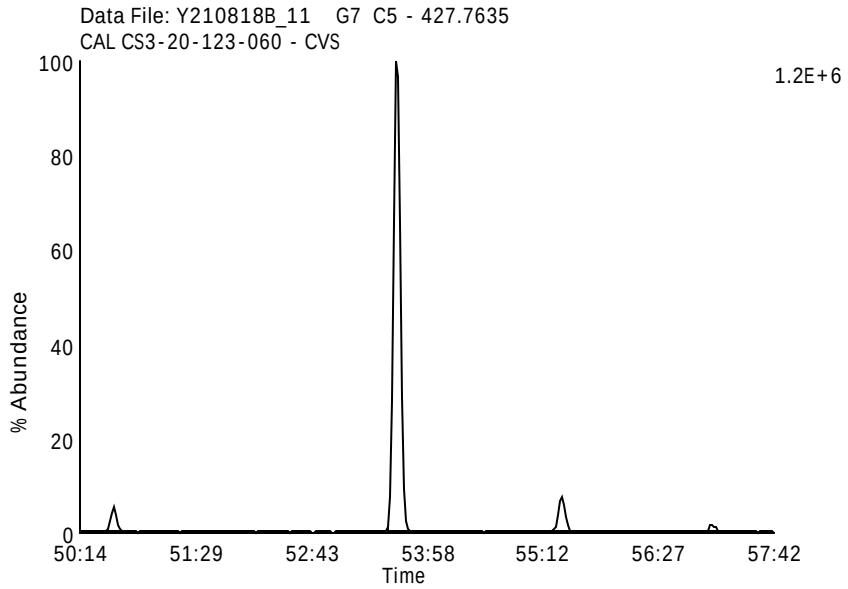


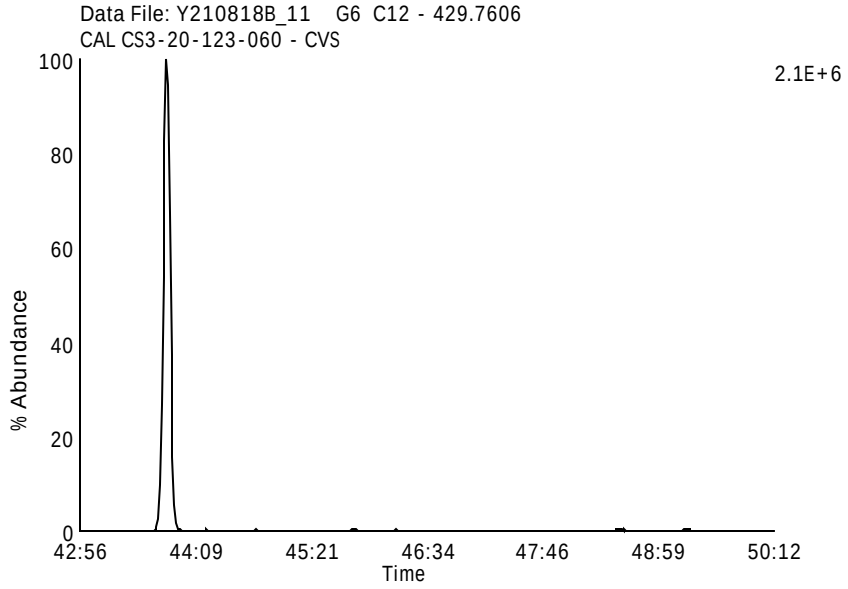


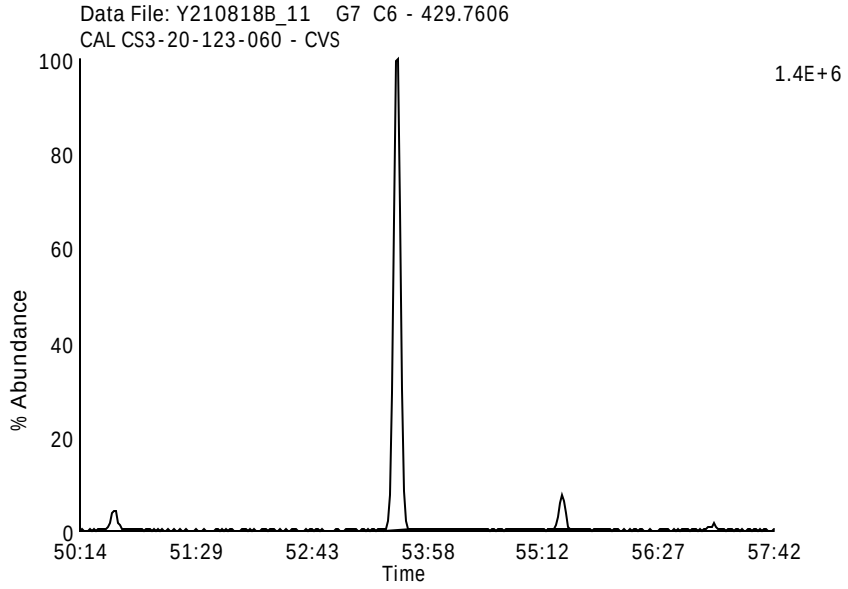
Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







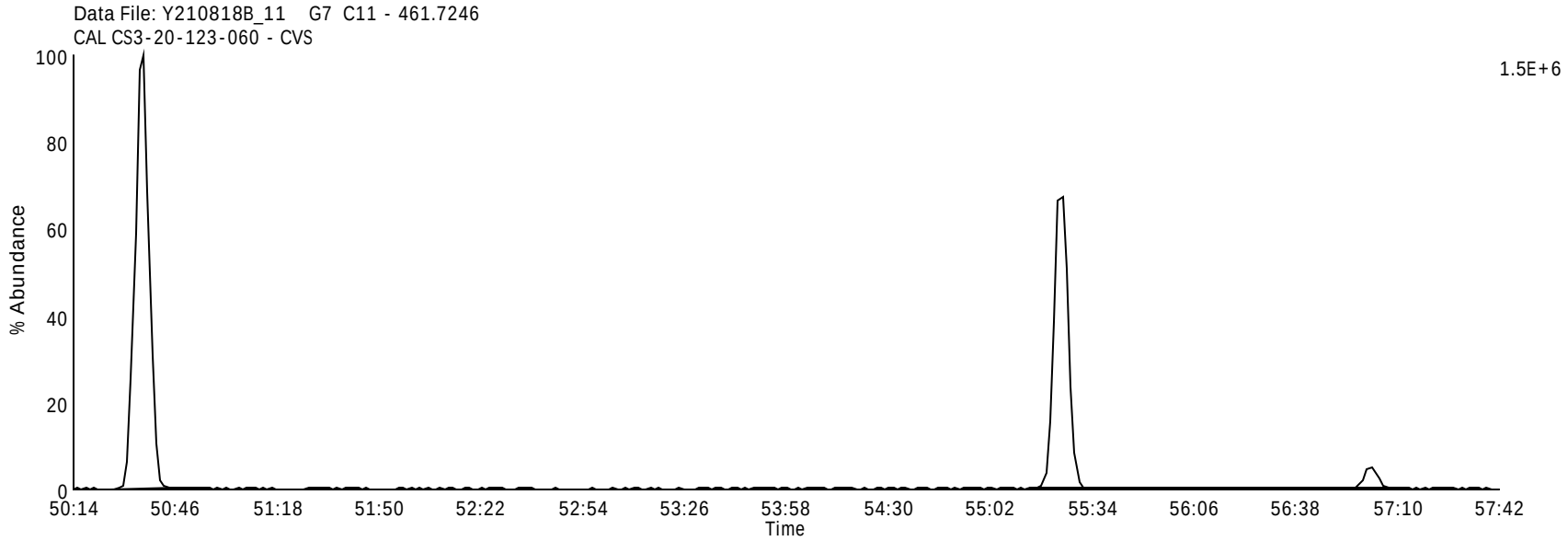


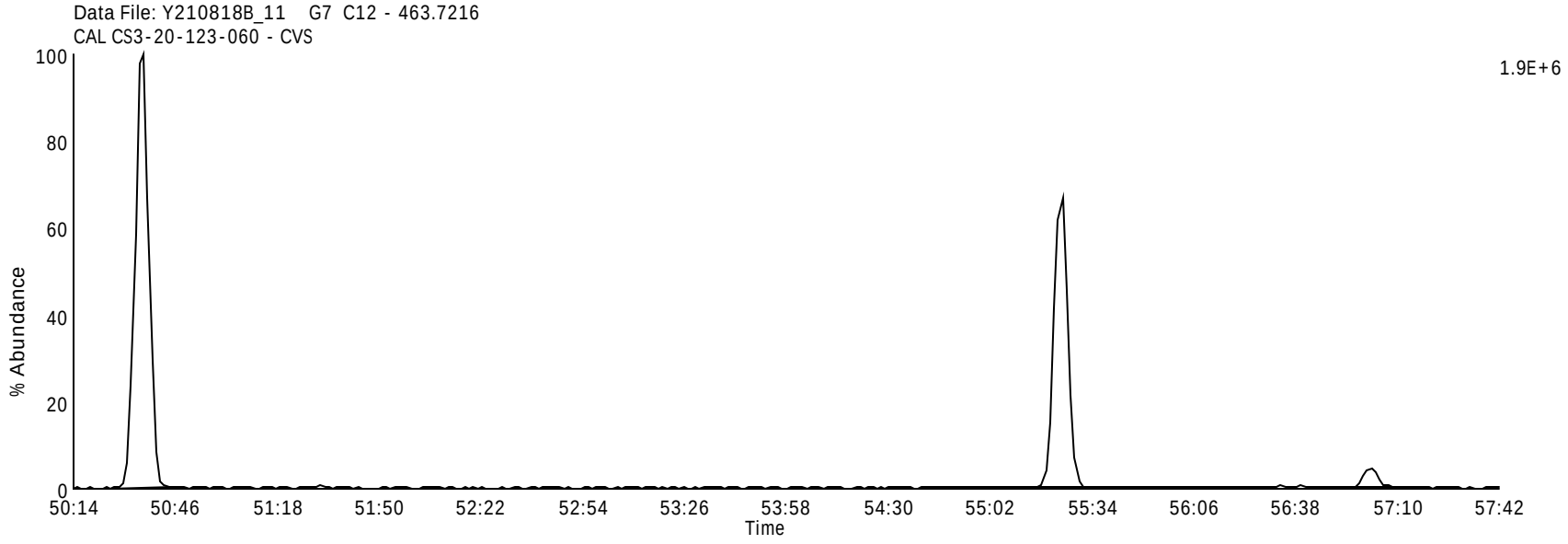
Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



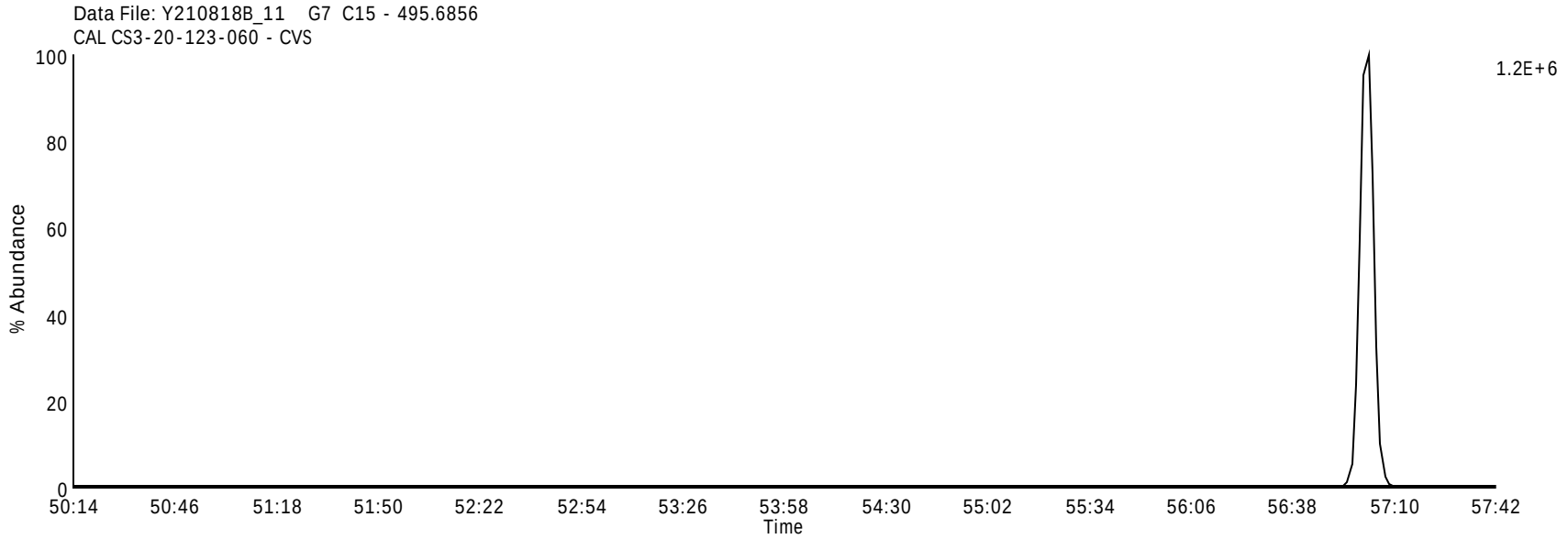


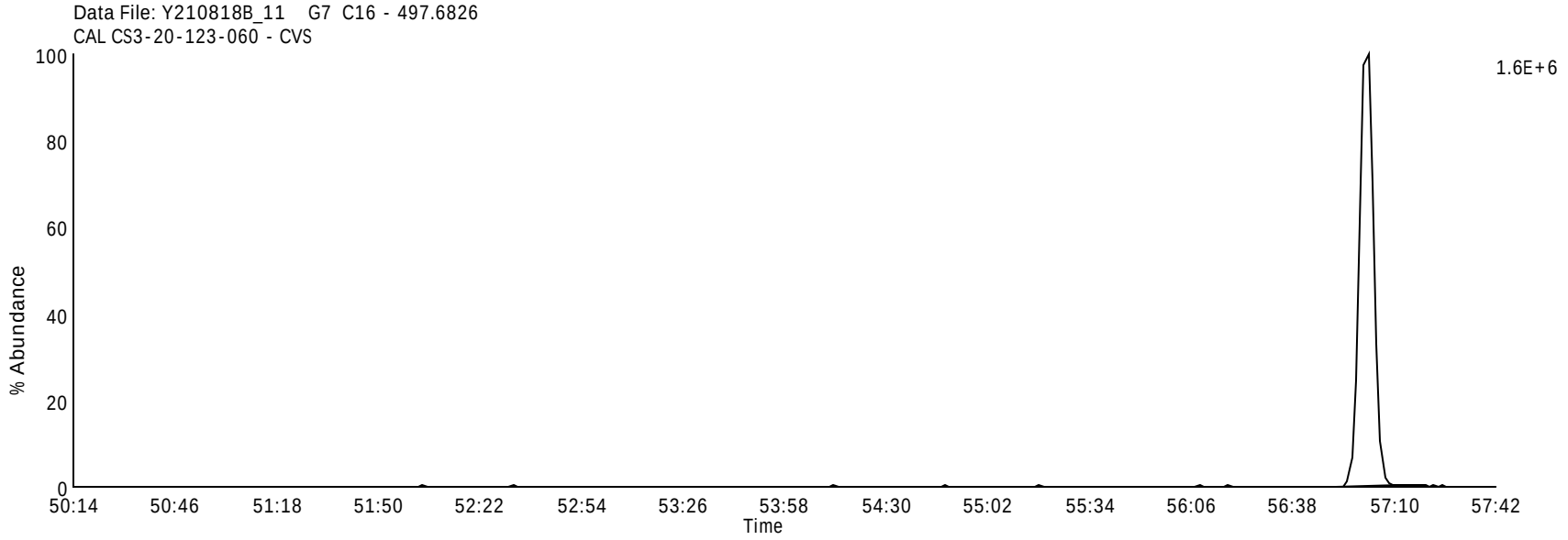
Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

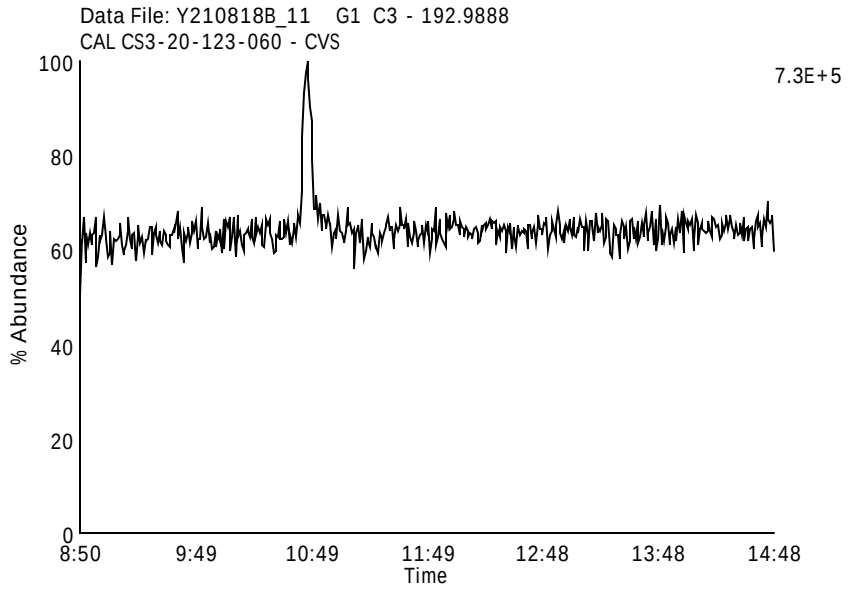
Sample Description: CAL CS3-20-123-060 - CVS

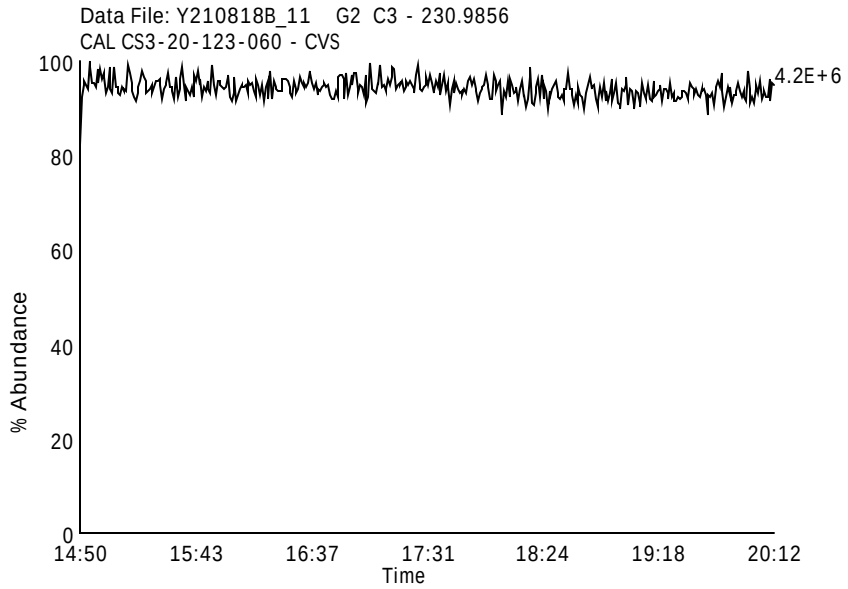


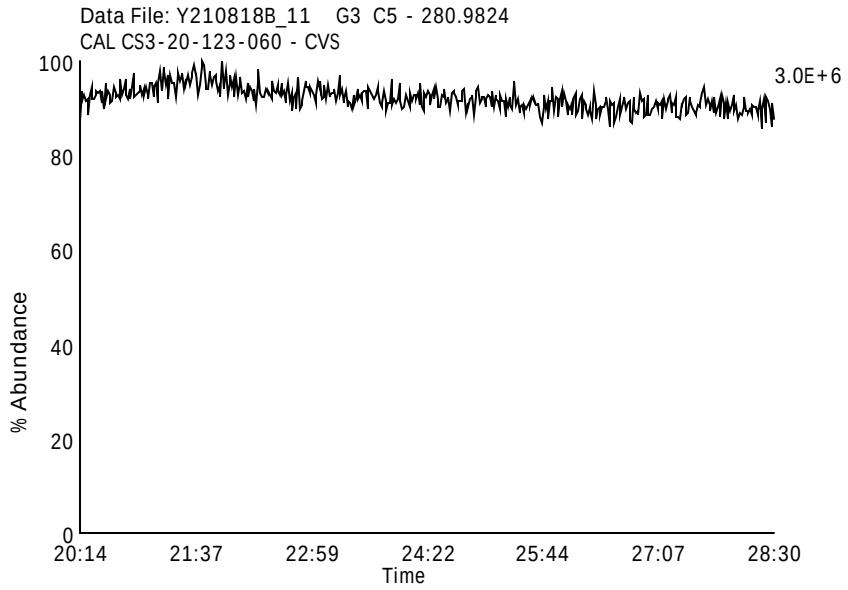


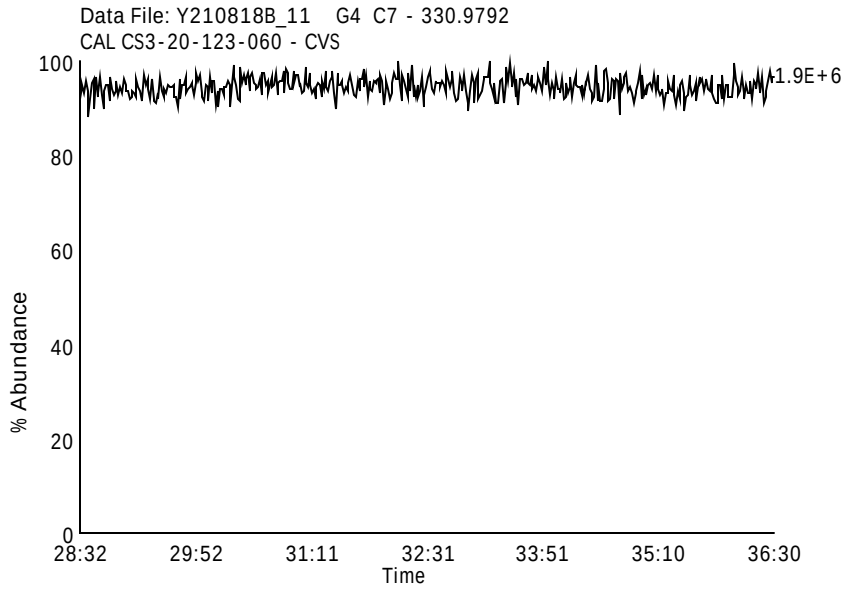
Group 1 - 4 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





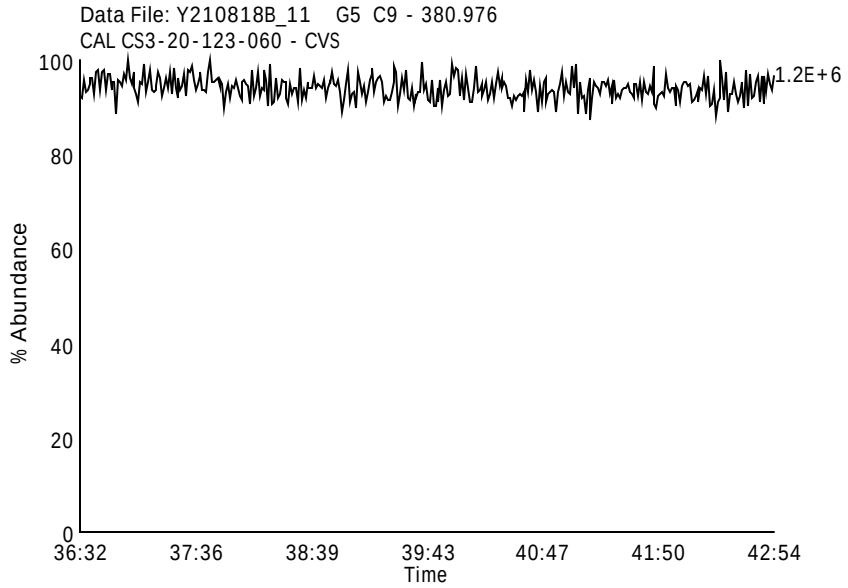


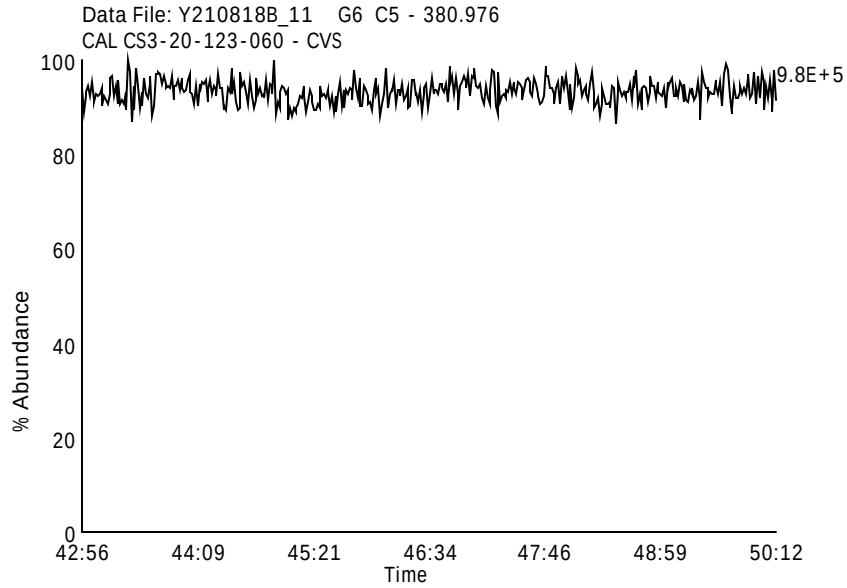


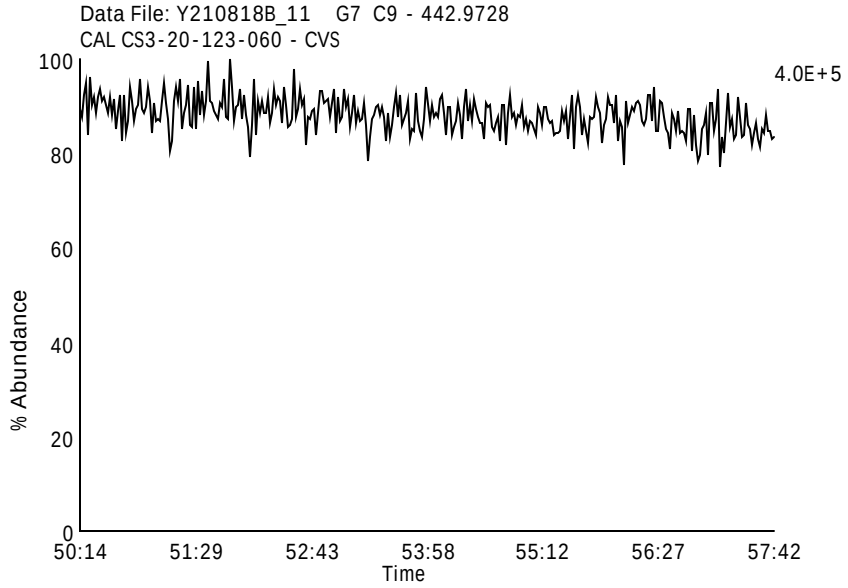
Group 5 - 7 Lock mass

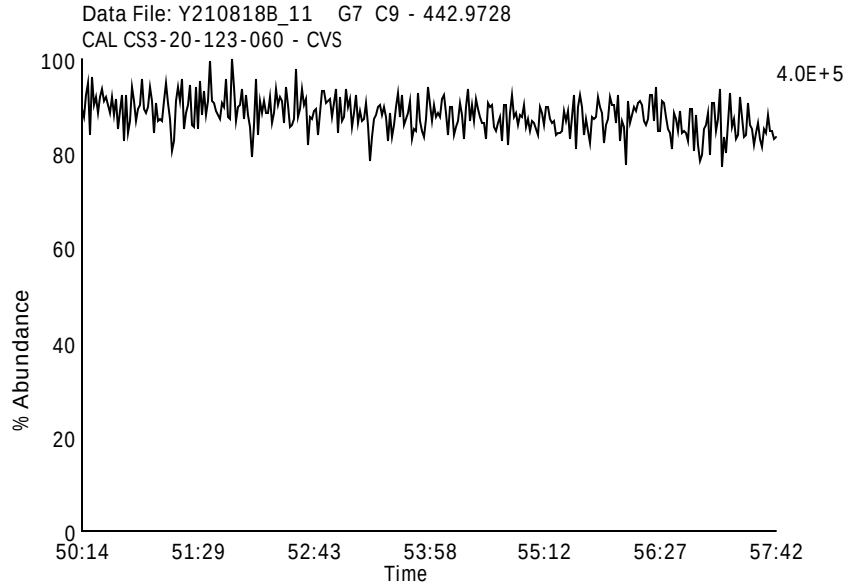
Data File Name: Y210818B_11
Date Acquired: 8/18/2021
Sample Description: CAL CS3-20-123-060 - CVS

Lab Sample ID: CS3-20-123-060
Instrument: 10MSHR12 (Y)







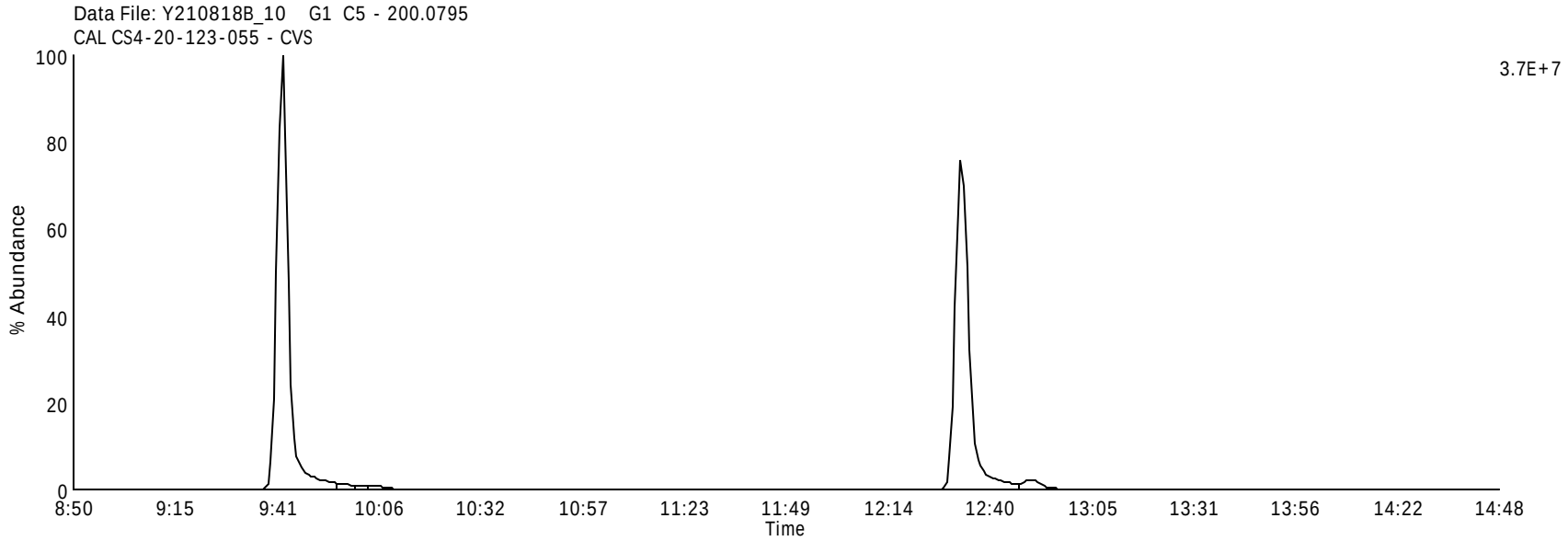


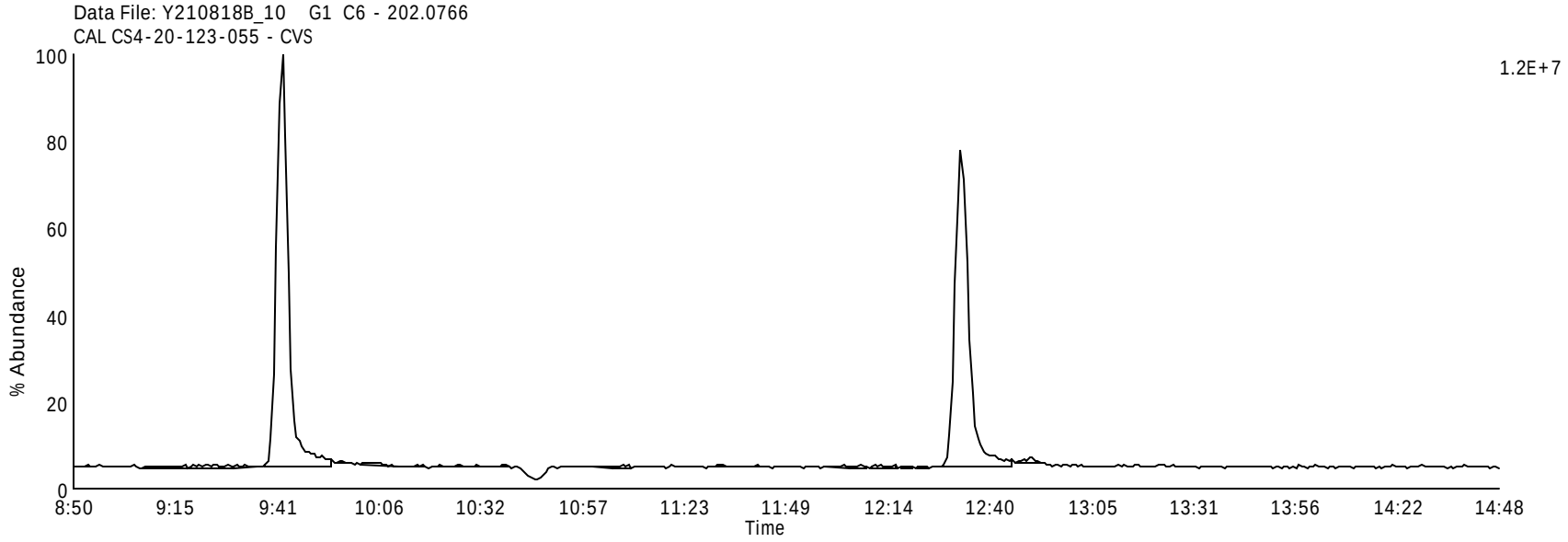
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

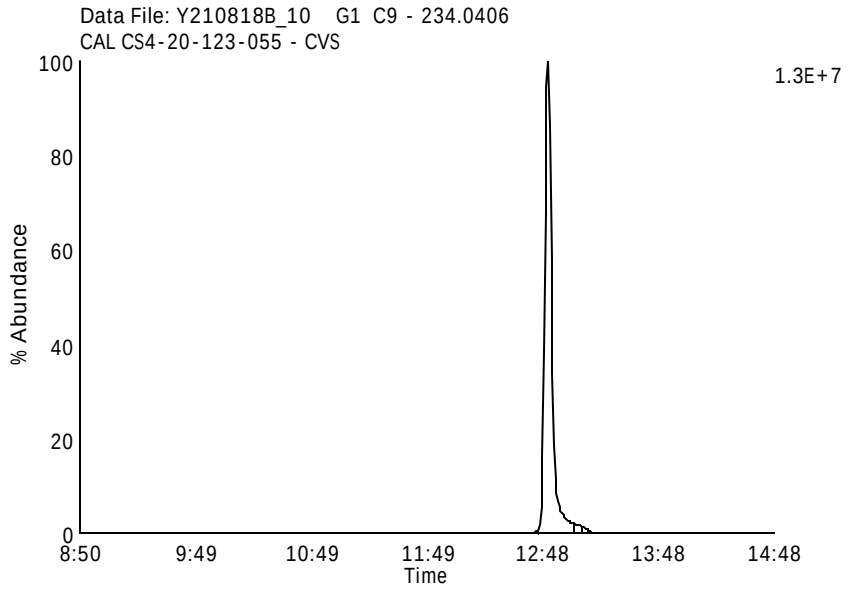
Sample Description: CAL CS4-20-123-055 - CVS

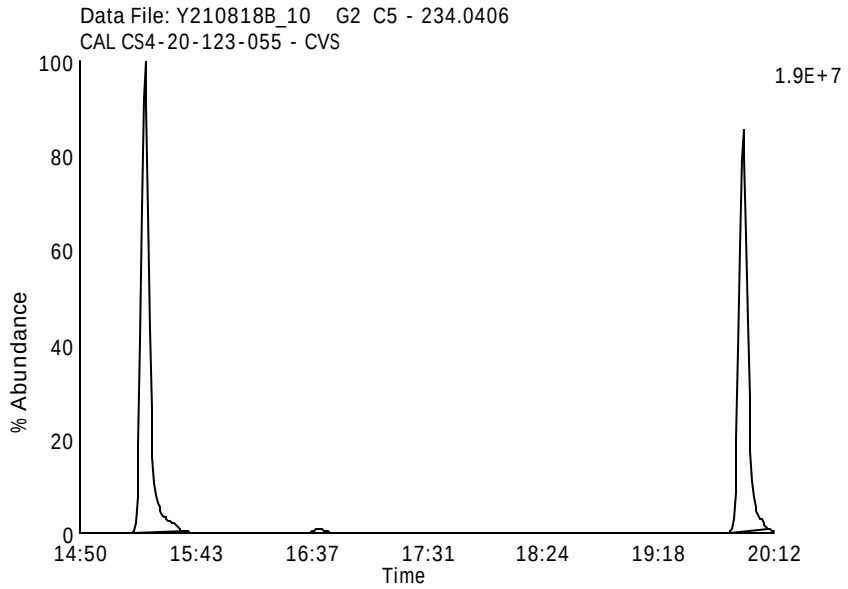


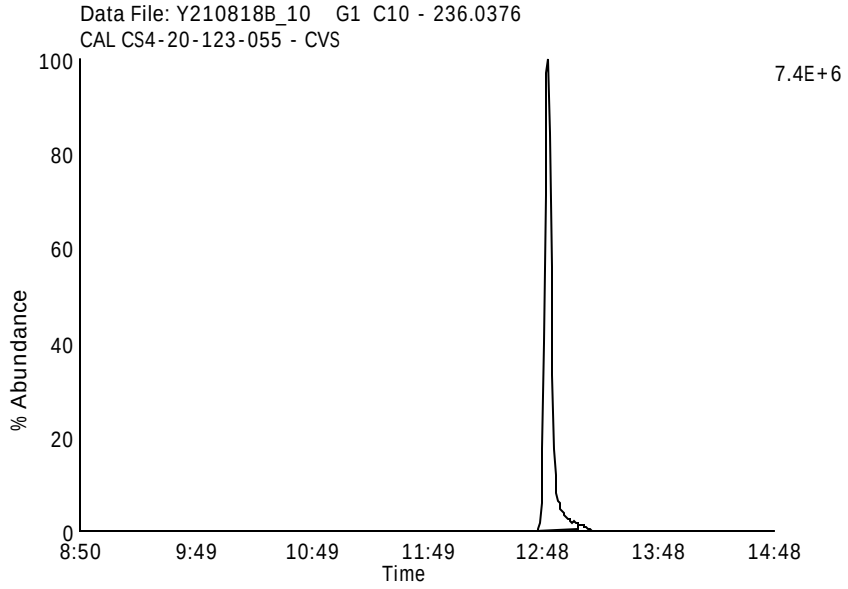


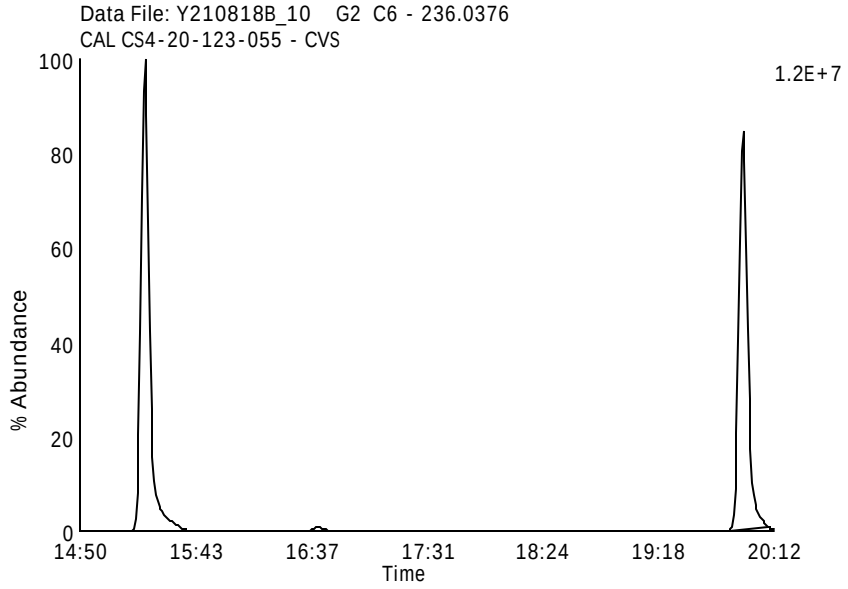
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS





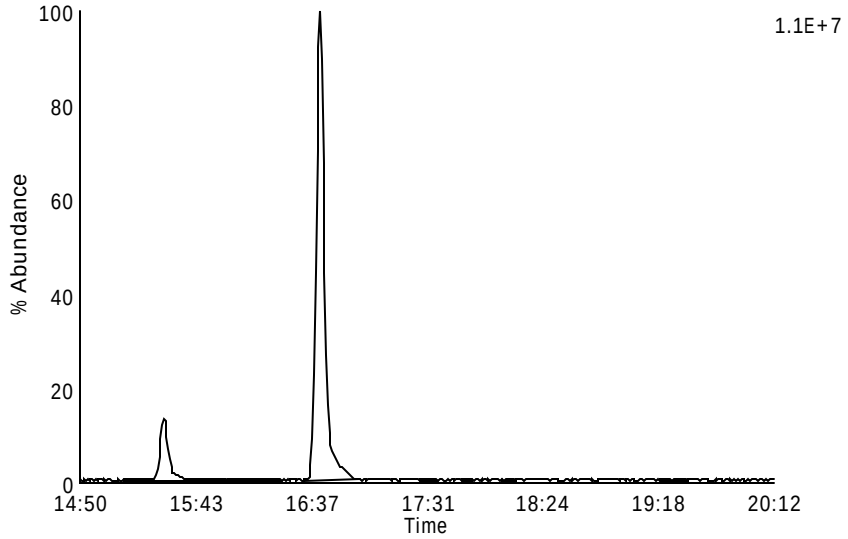




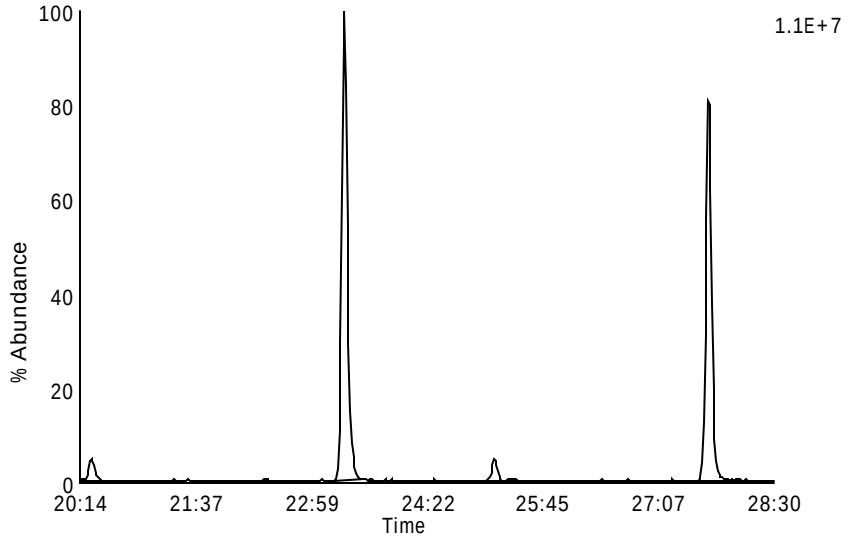
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

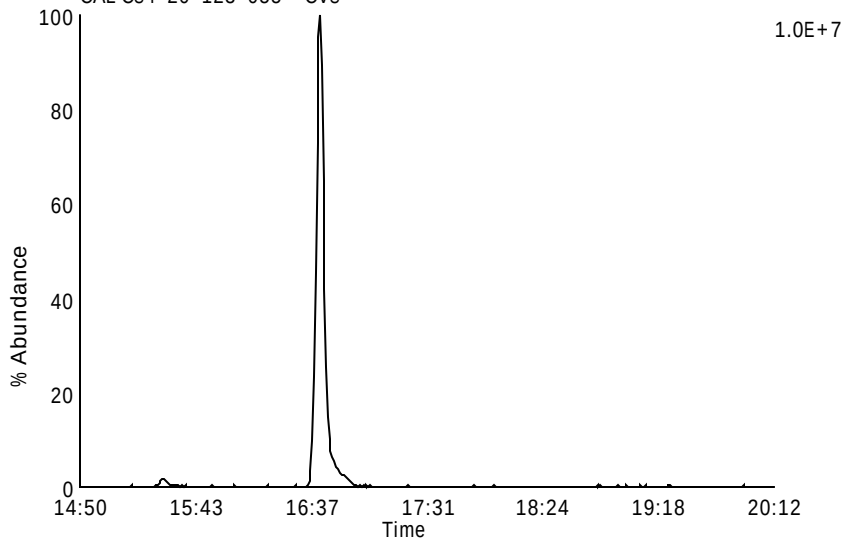
Data File: Y210818B_10 G2 C9 - 268.0016
CAL CS4-20-123-055 - CVS



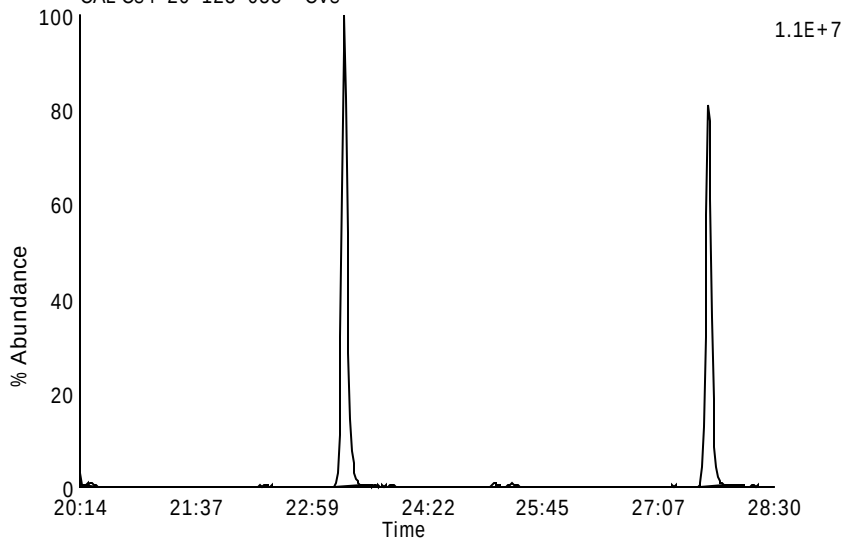
Data File: Y210818B_10 G3 C3 - 268.0016
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G2 C10 - 269.9986
CAL CS4-20-123-055 - CVS

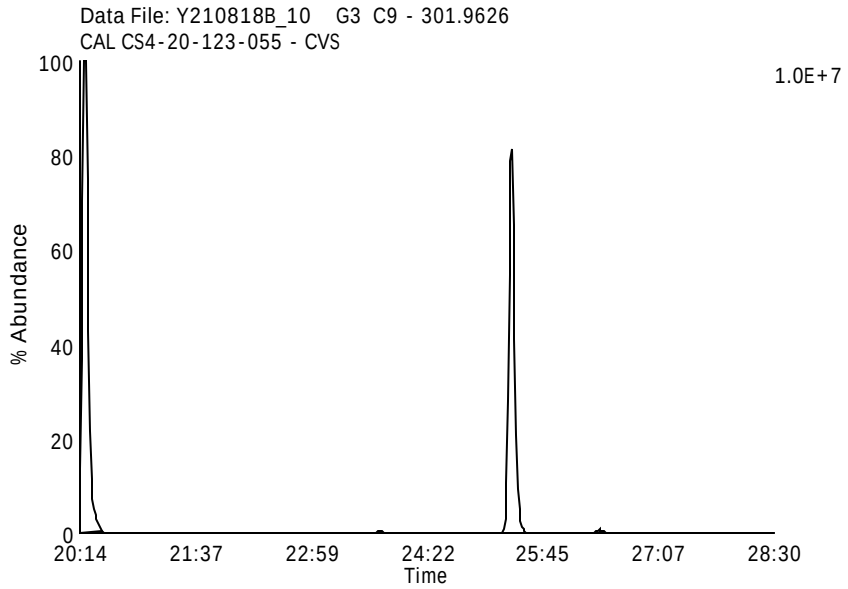


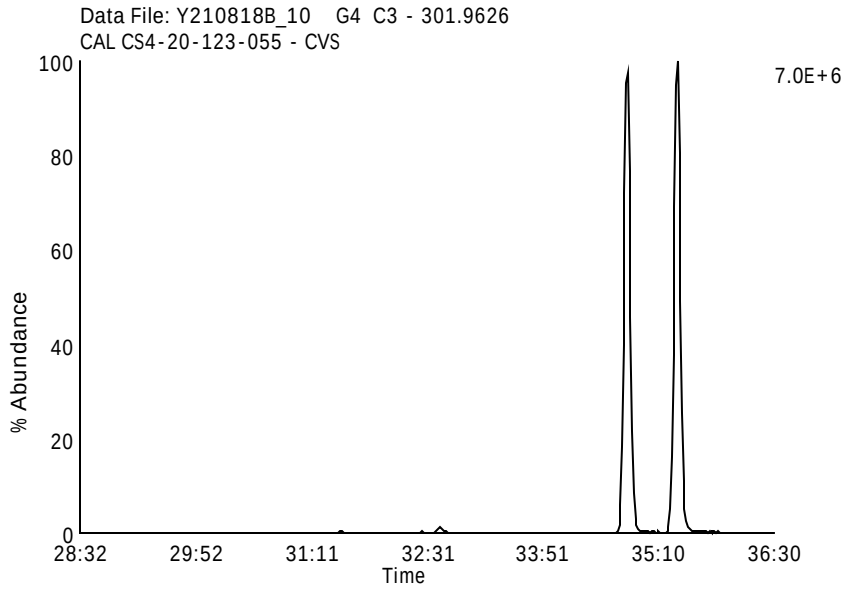
Data File: Y210818B_10 G3 C4 - 269.9986
CAL CS4-20-123-055 - CVS

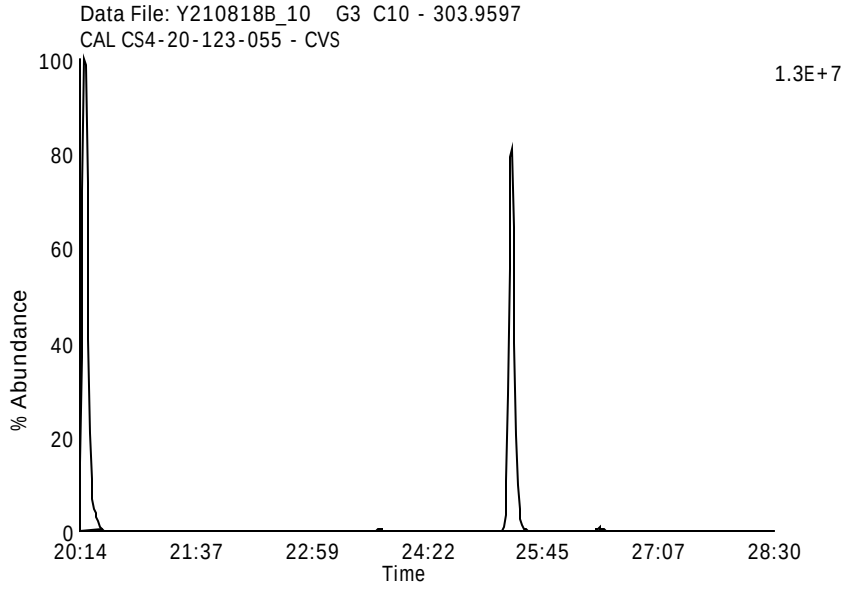


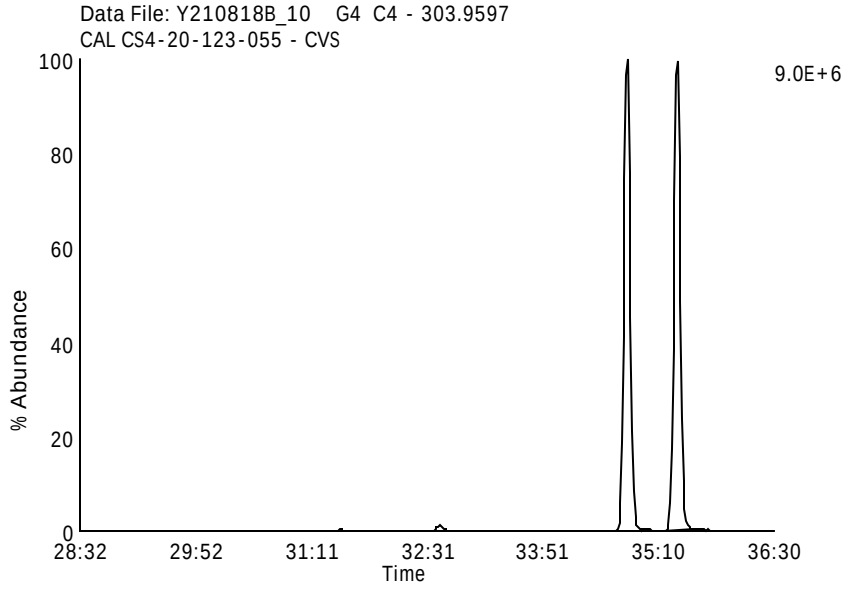
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS









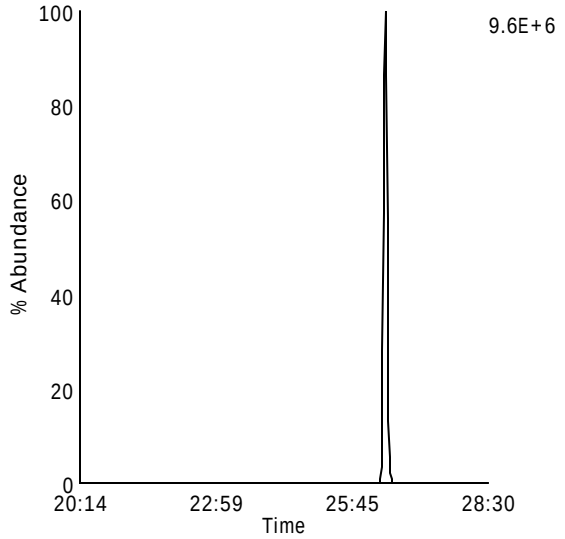
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

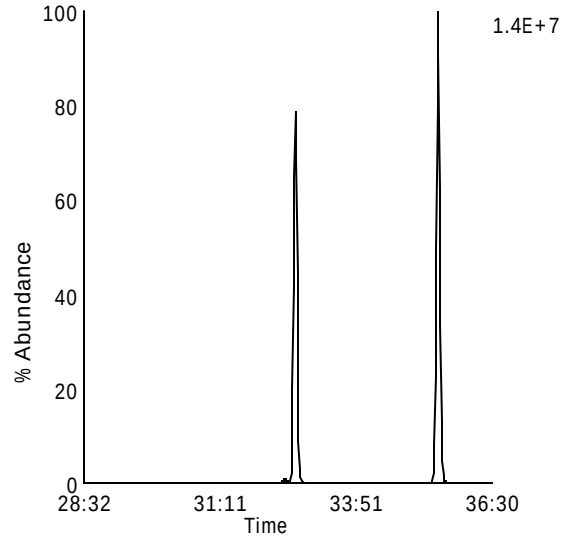
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

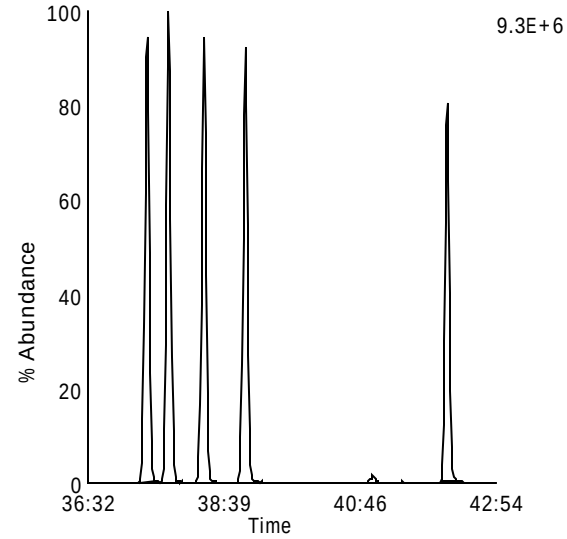
Data File: Y210818B_10 G3 C13 - 337.9207
CAL CS4-20-123-055 - CVS



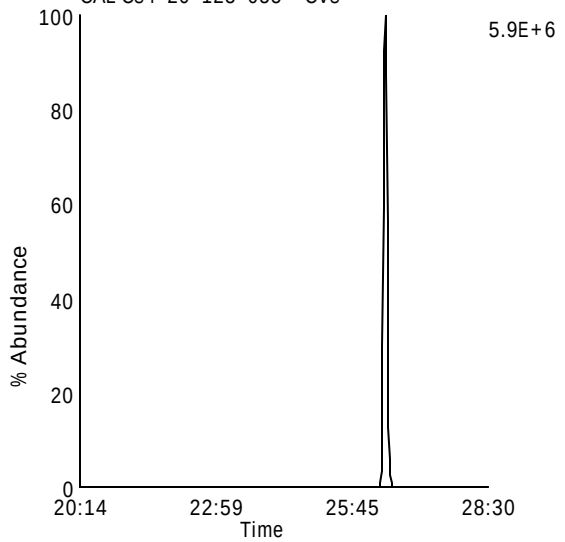
Data File: Y210818B_10 G4 C9 - 337.9207
CAL CS4-20-123-055 - CVS



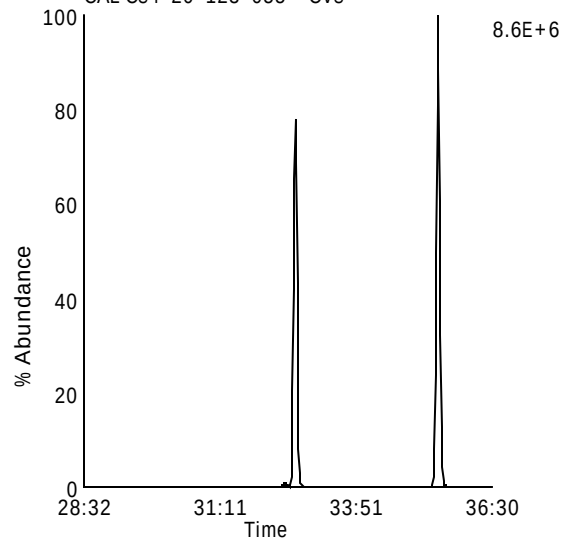
Data File: Y210818B_10 G5 C3 - 337.9207
CAL CS4-20-123-055 - CVS



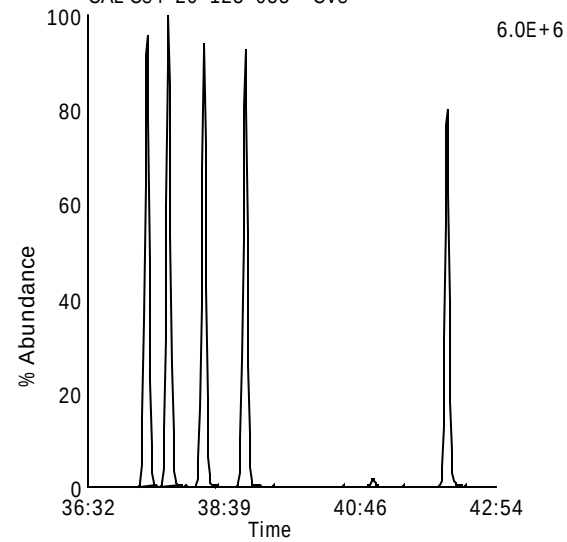
Data File: Y210818B_10 G3 C14 - 339.9178
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G4 C10 - 339.9178
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G5 C4 - 339.9178
CAL CS4-20-123-055 - CVS

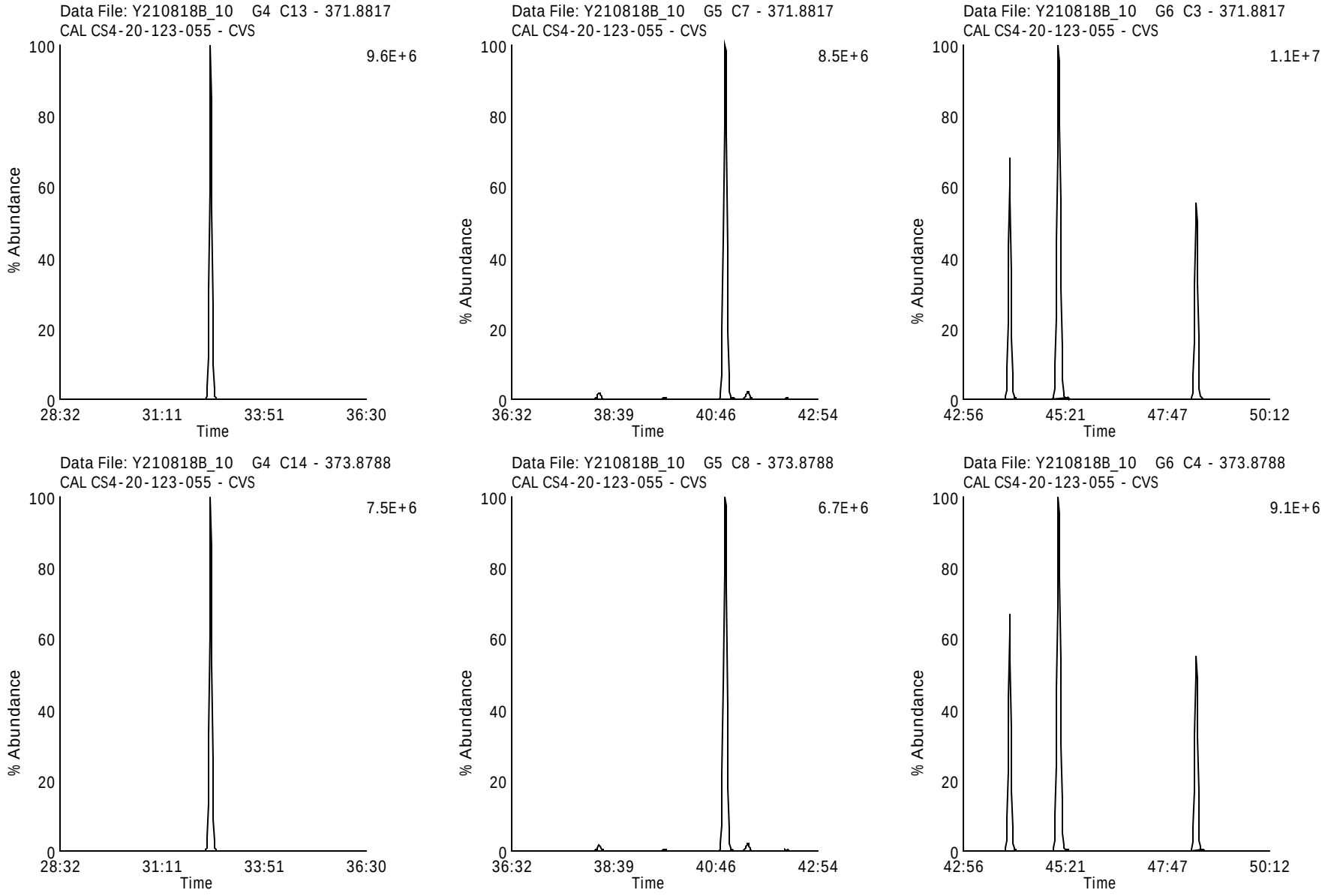


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

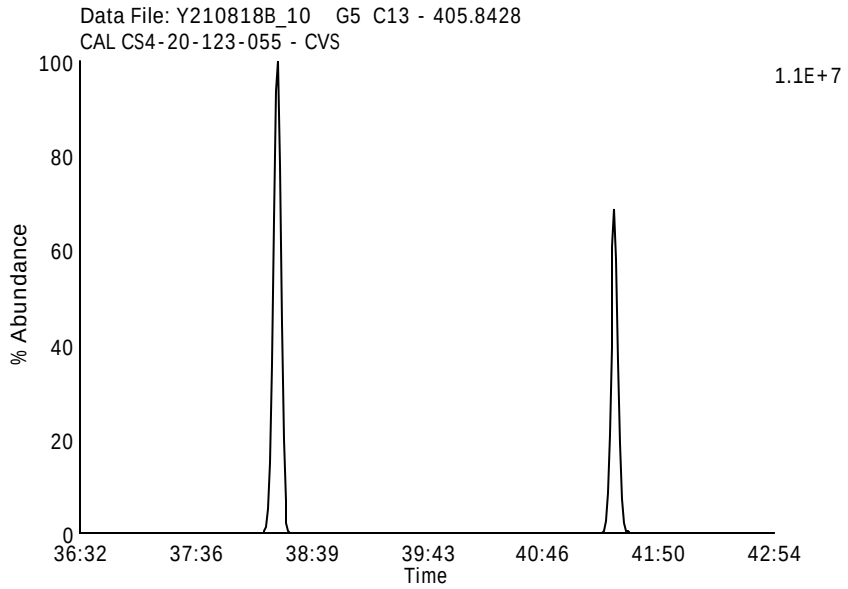
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

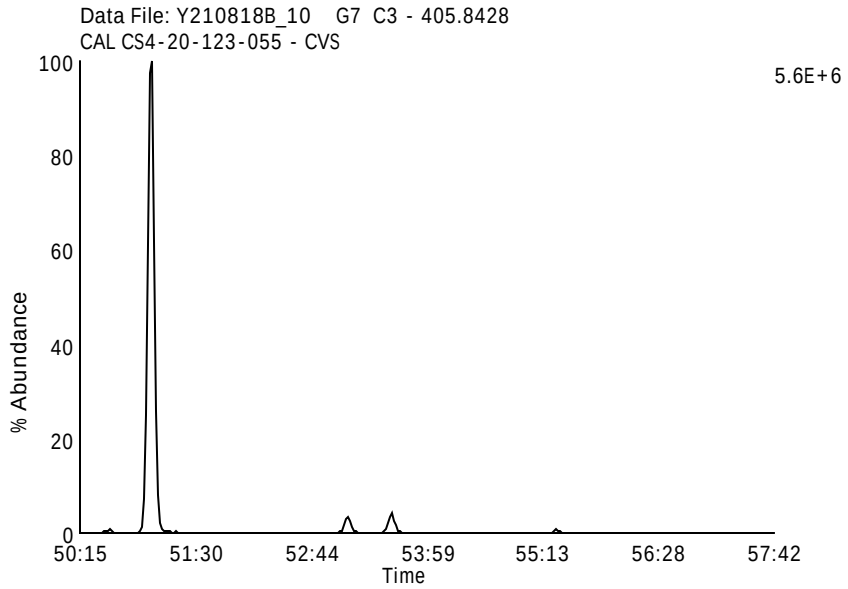
Sample Description: CAL CS4-20-123-055 - CVS

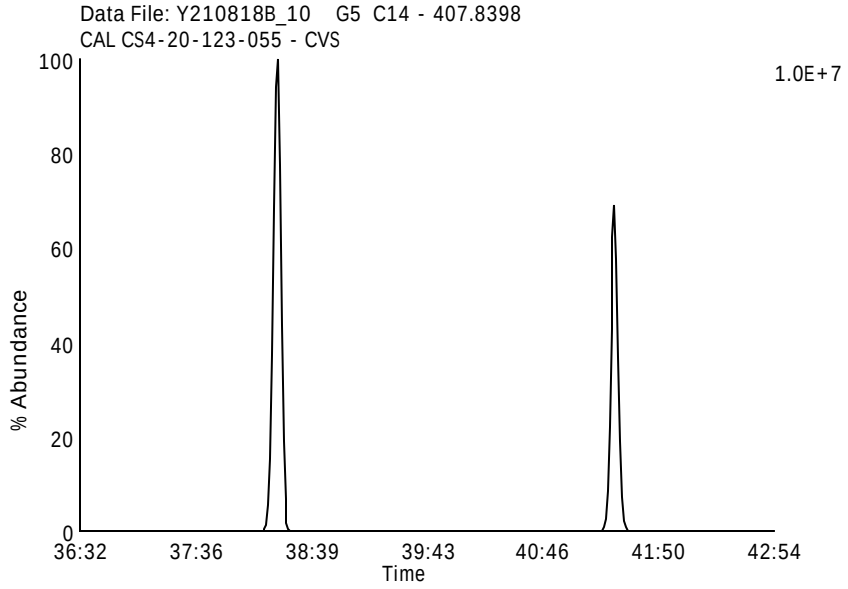


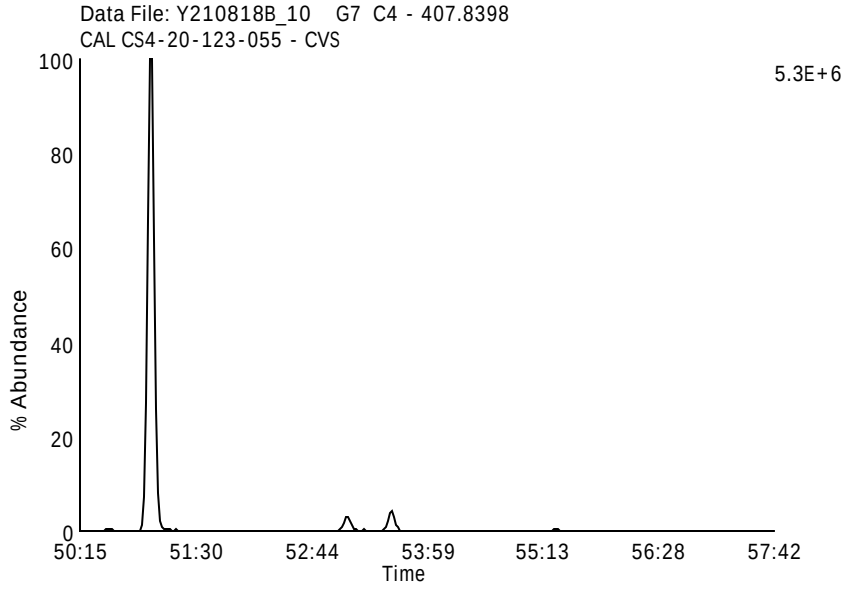
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS





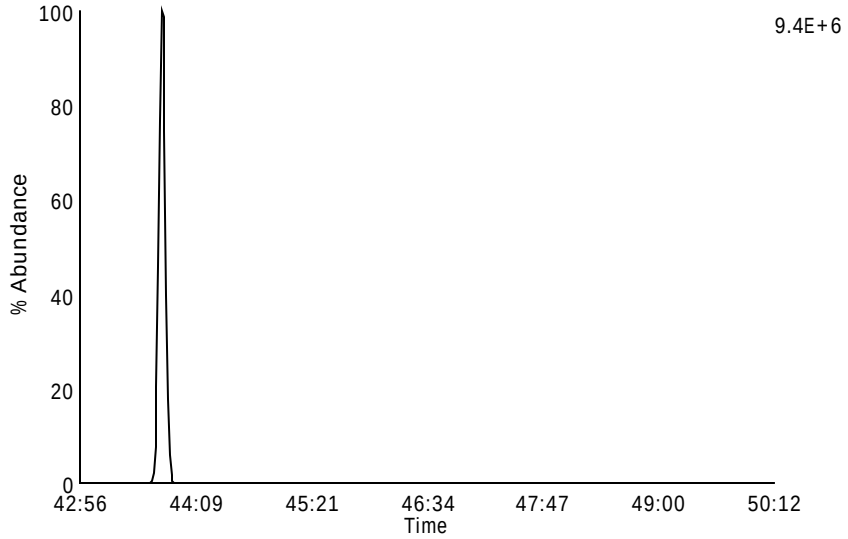




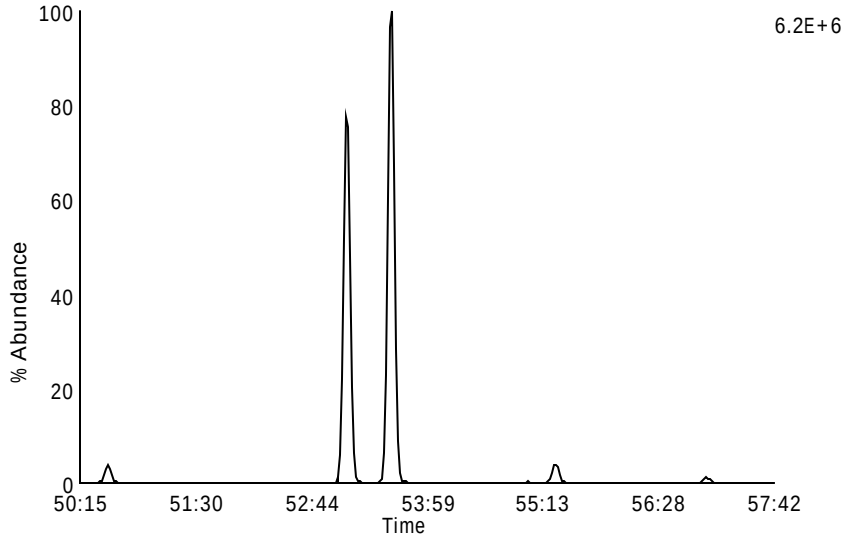
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

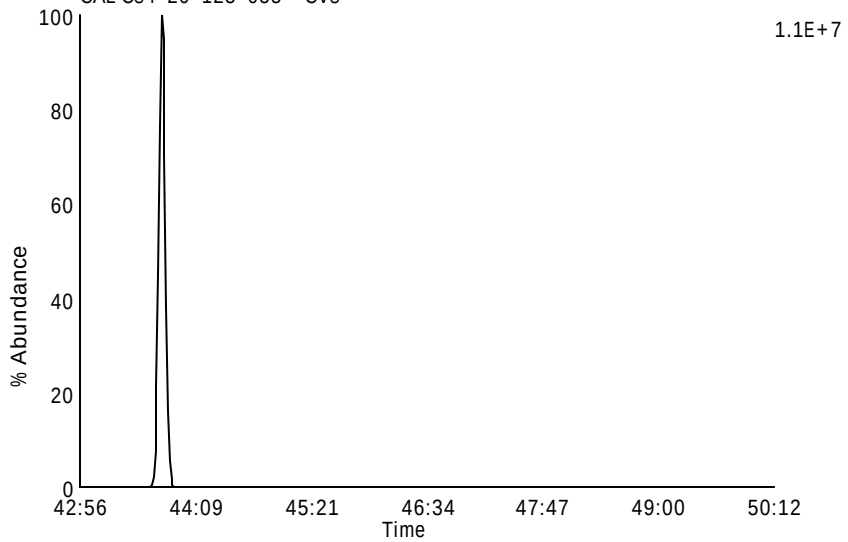
Data File: Y210818B_10 G6 C13 - 439.8038
CAL CS4-20-123-055 - CVS



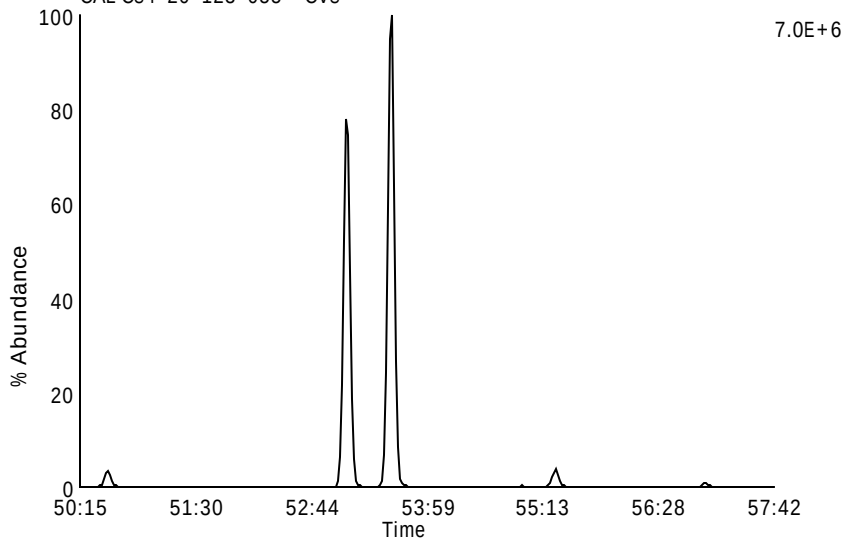
Data File: Y210818B_10 G7 C7 - 439.8038
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G6 C14 - 441.8008
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G7 C8 - 441.8008
CAL CS4-20-123-055 - CVS

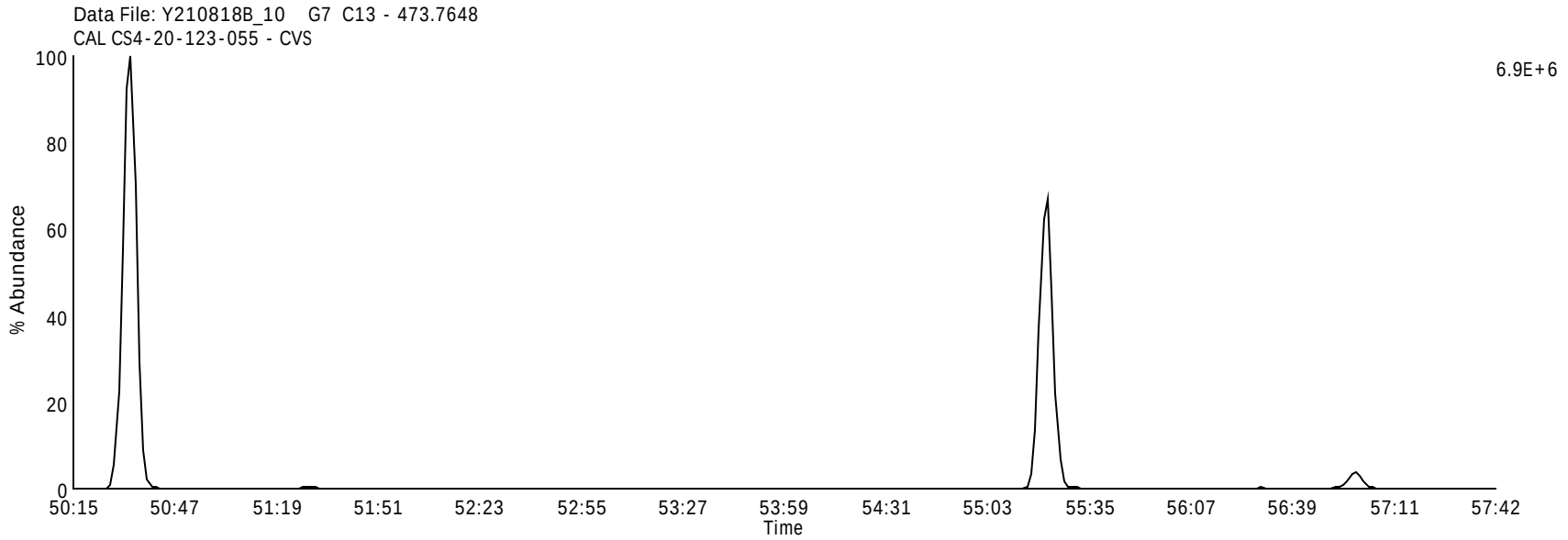


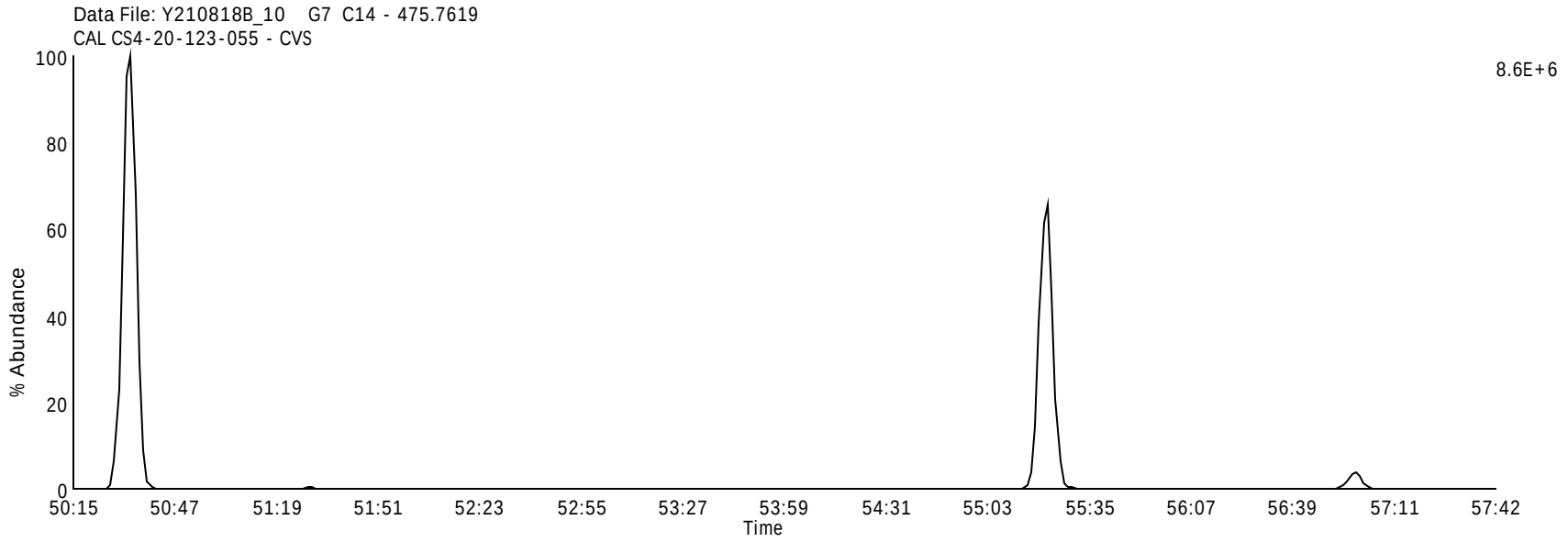
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



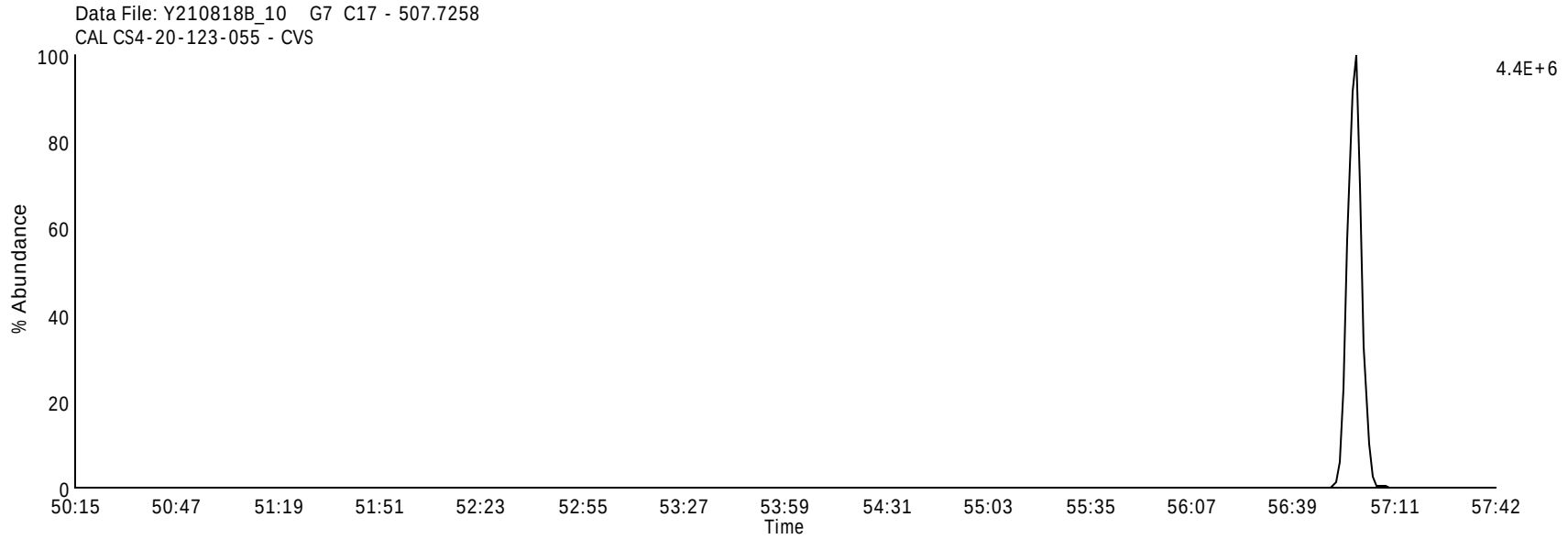


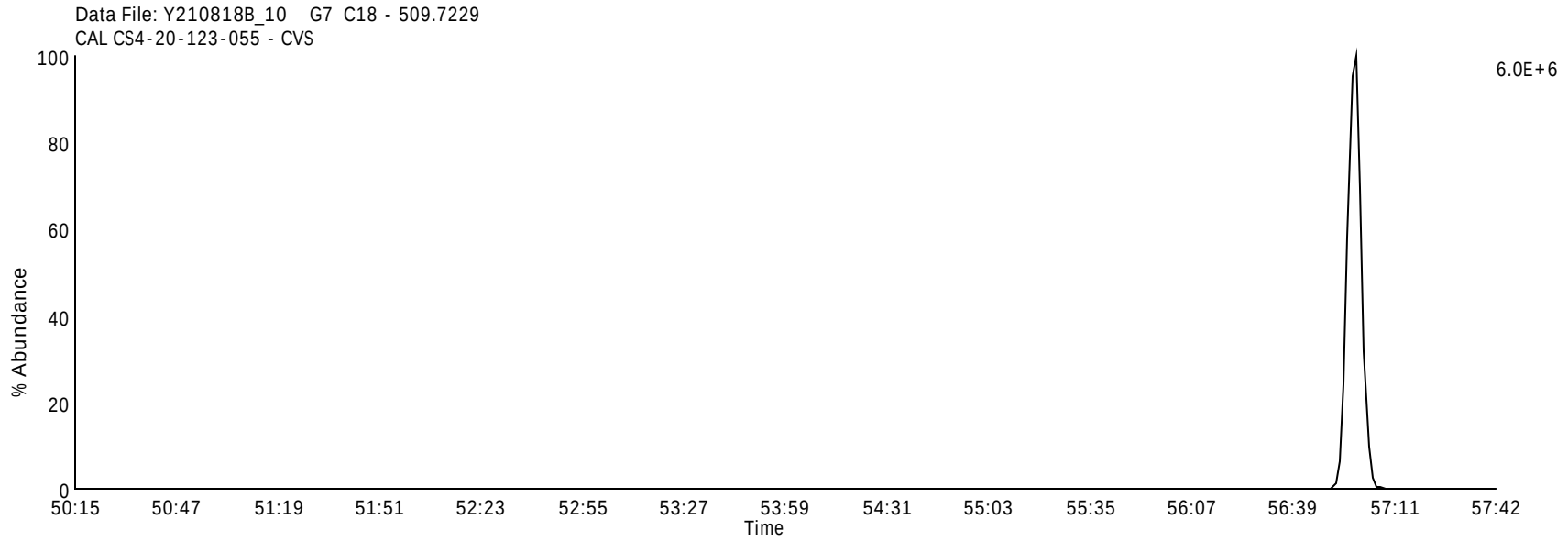
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



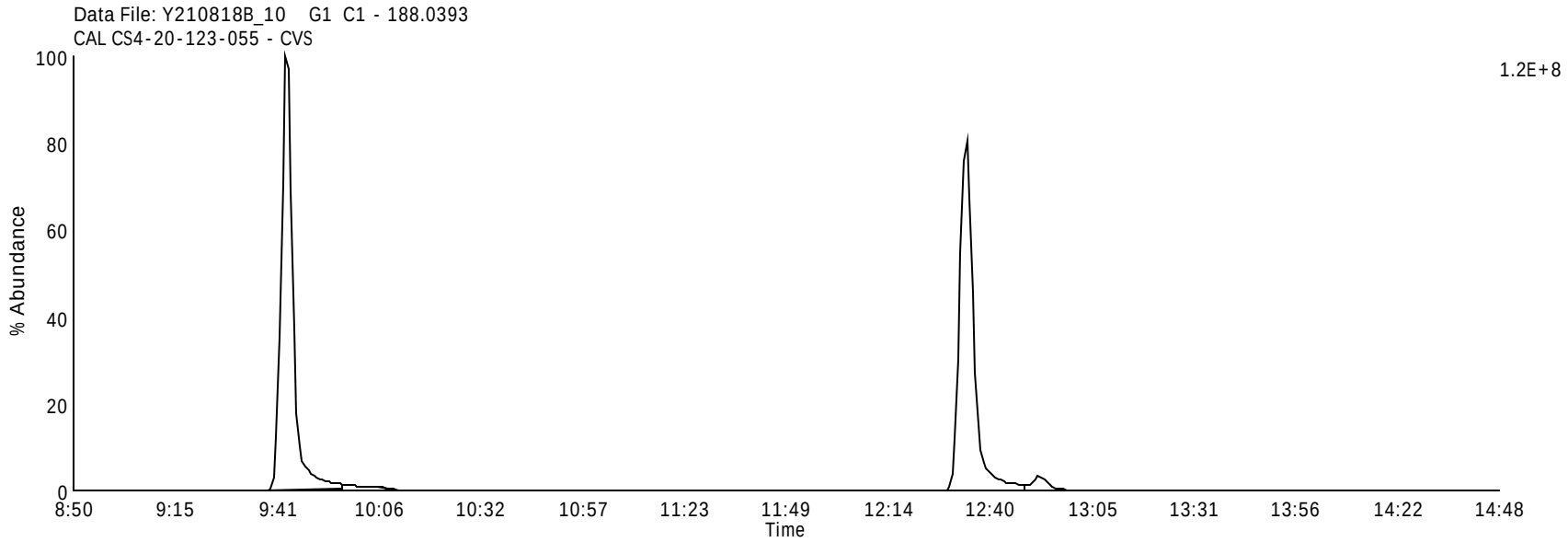


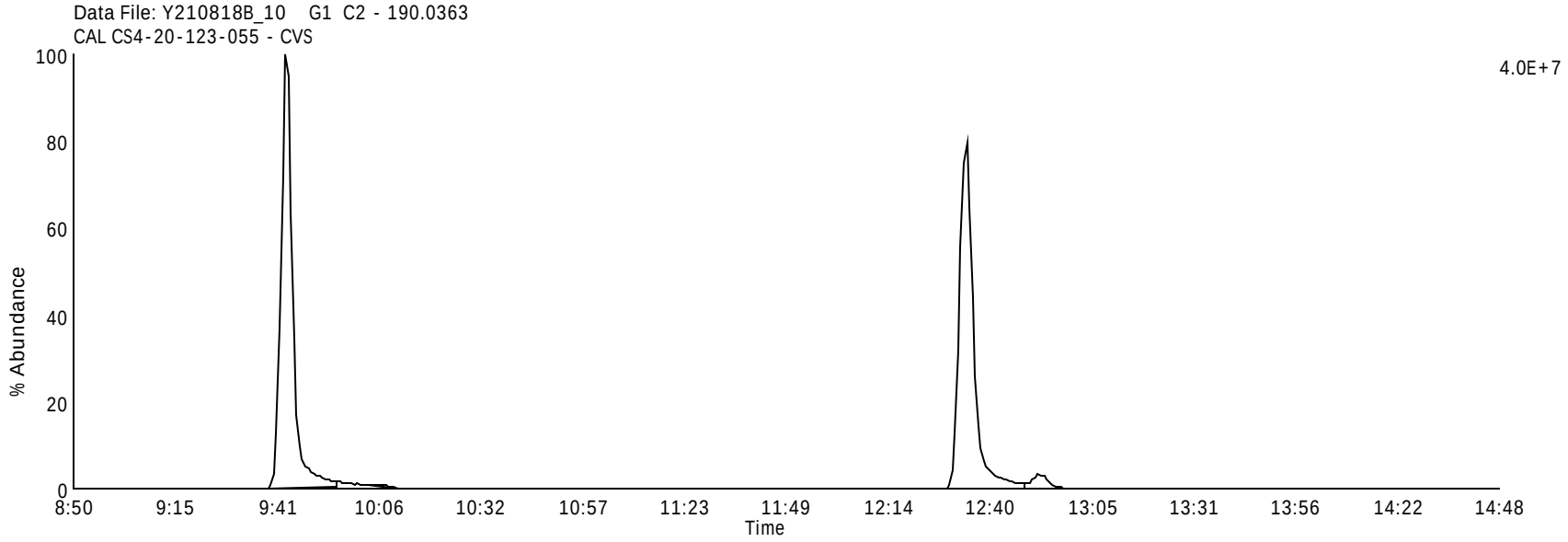
Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

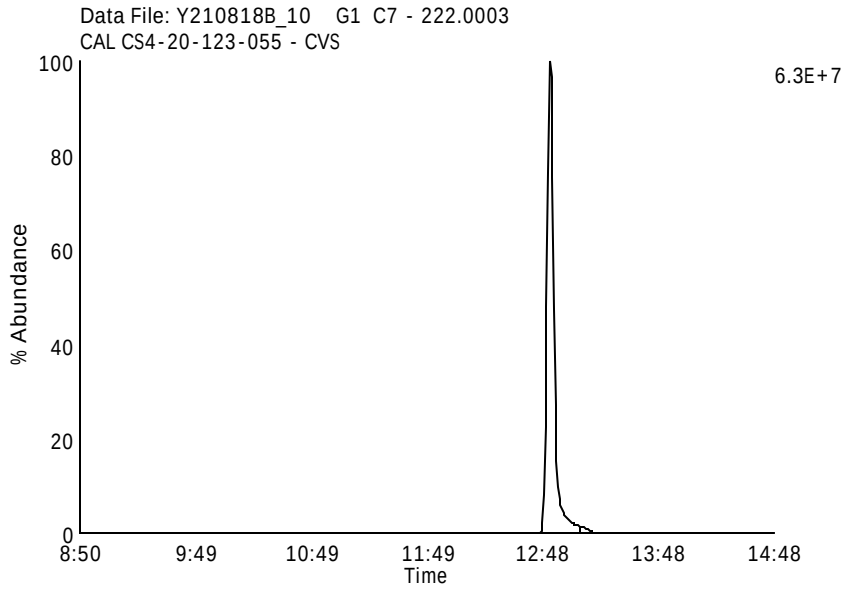
Sample Description: CAL CS4-20-123-055 - CVS

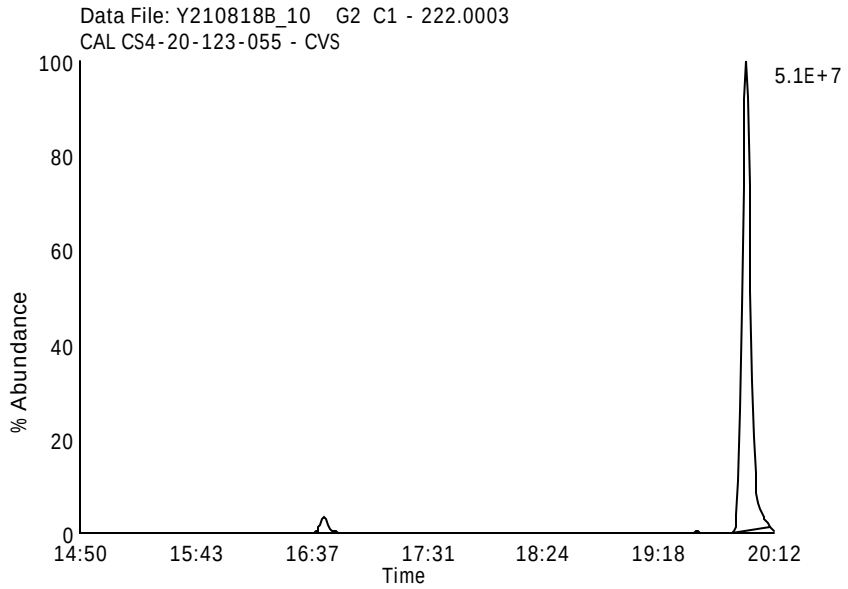


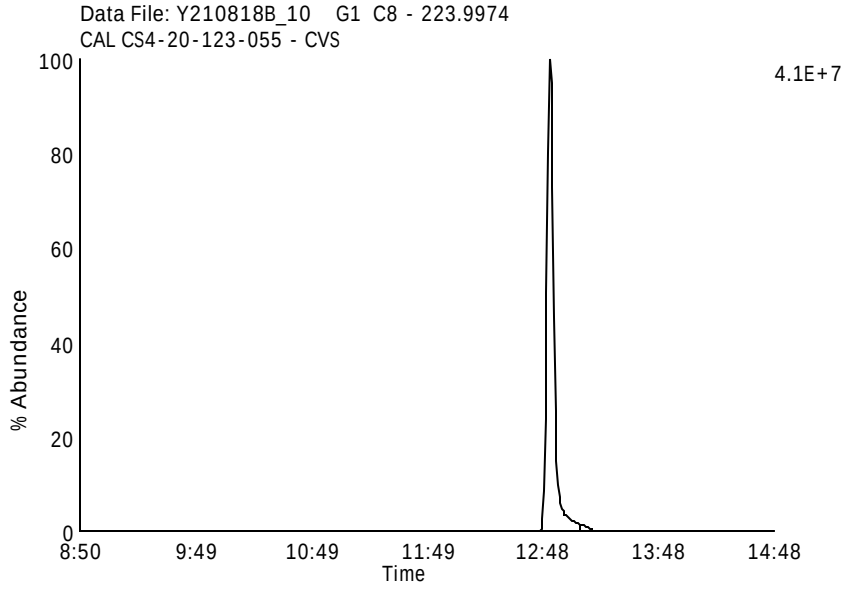


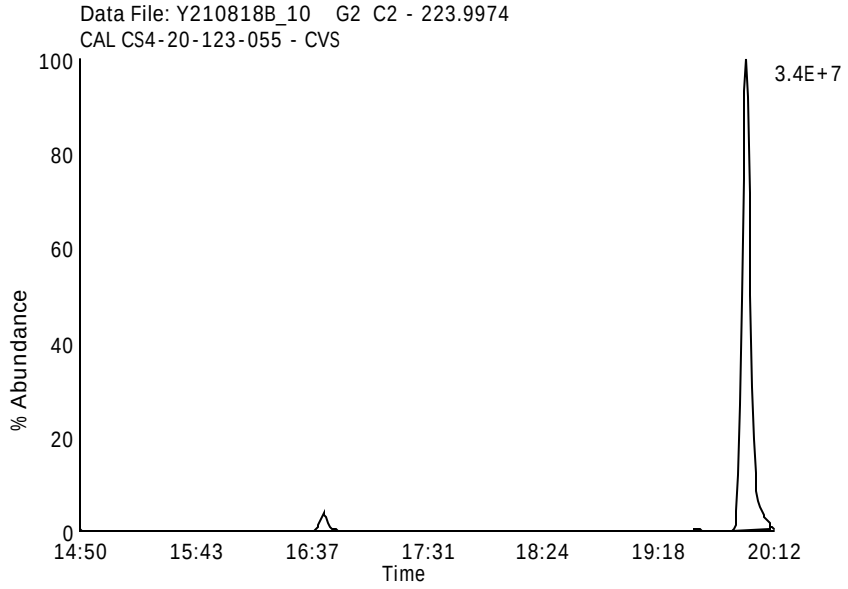
Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



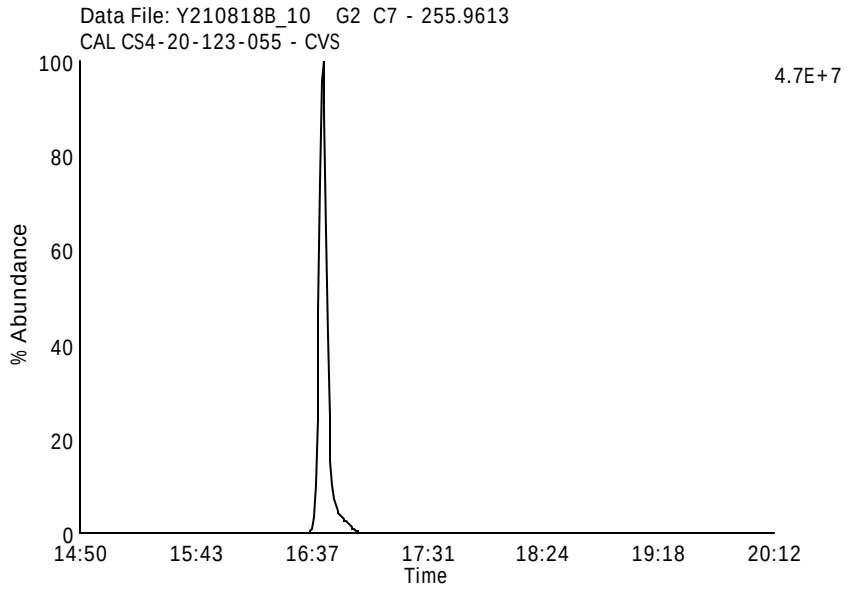


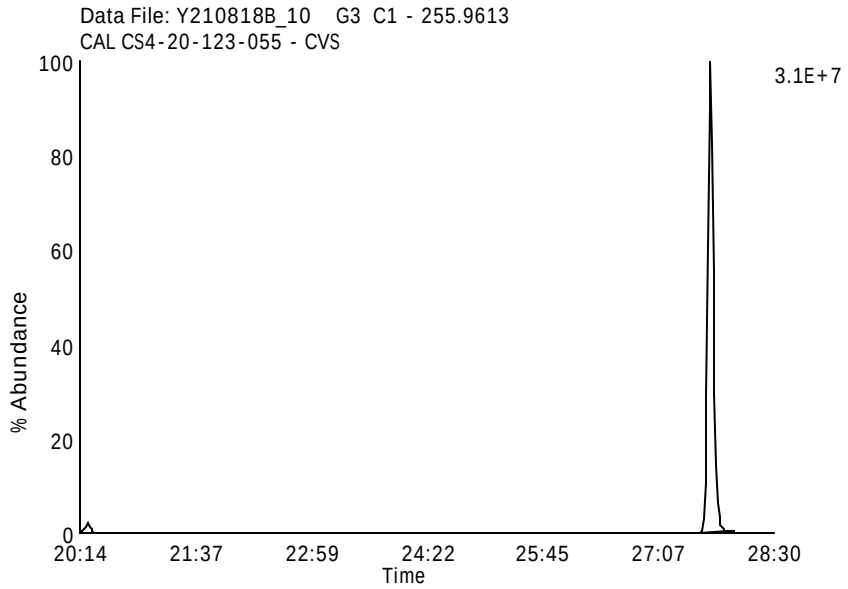


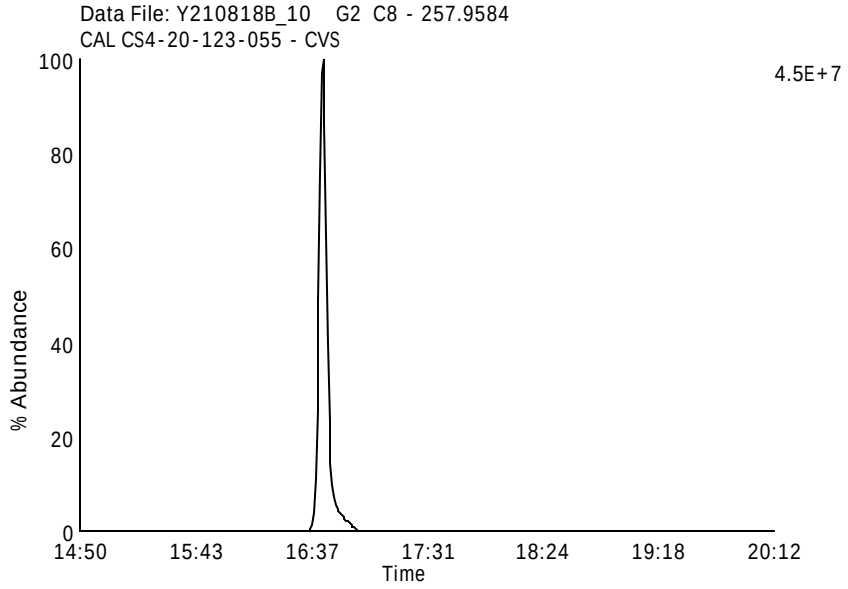


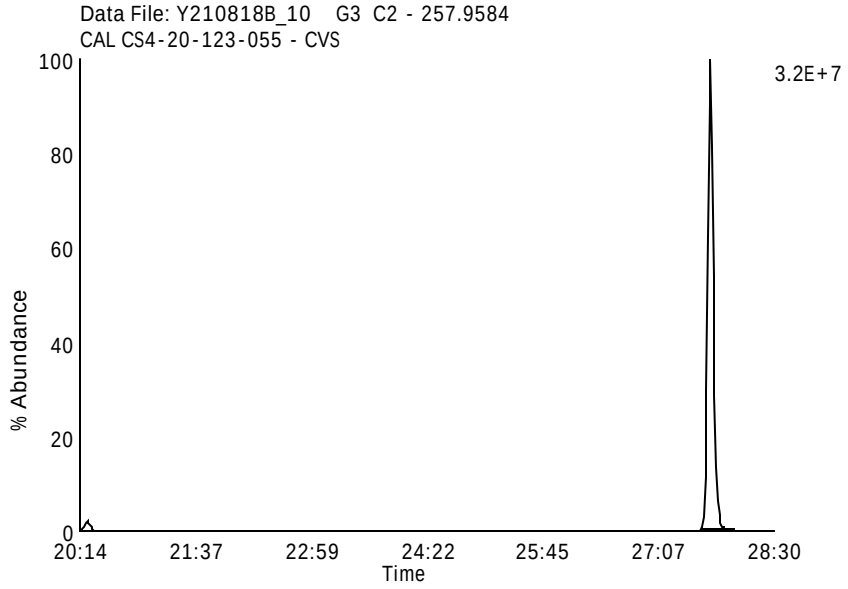
Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



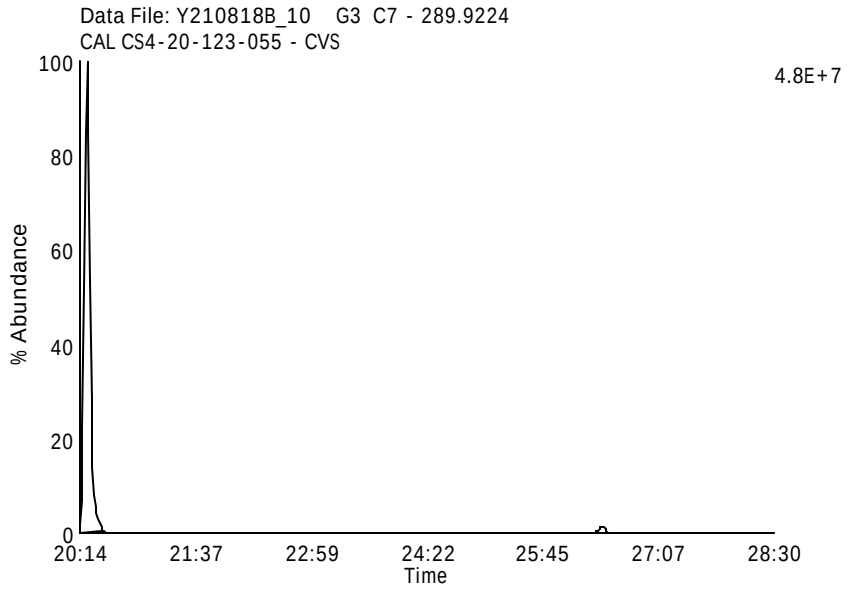


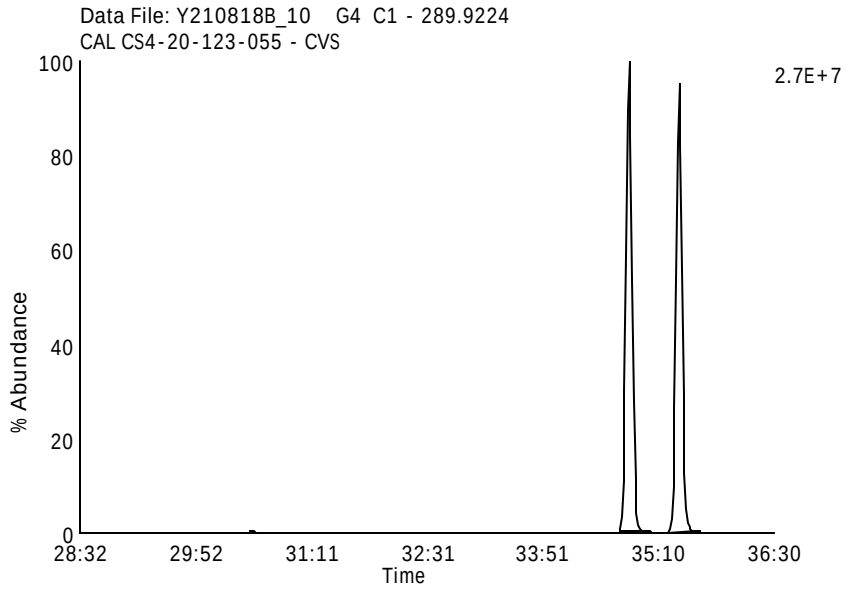


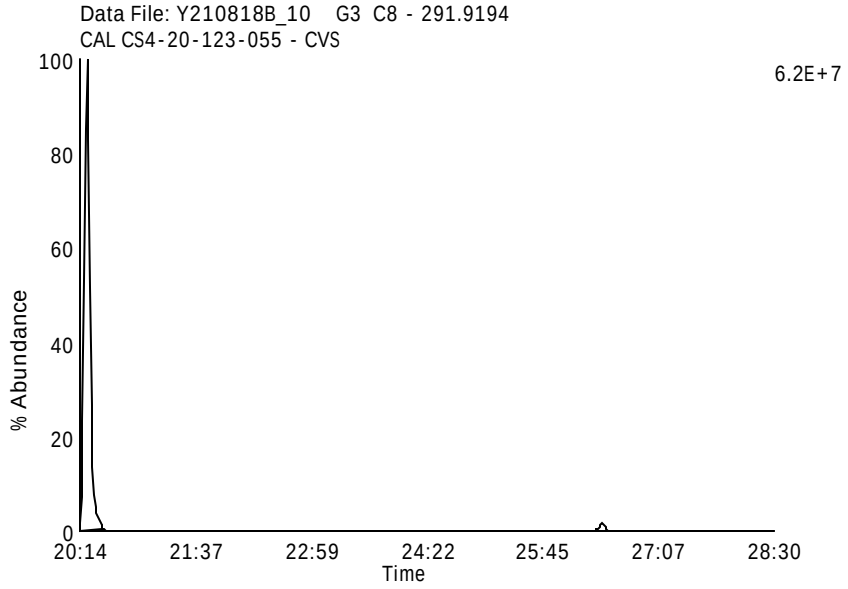


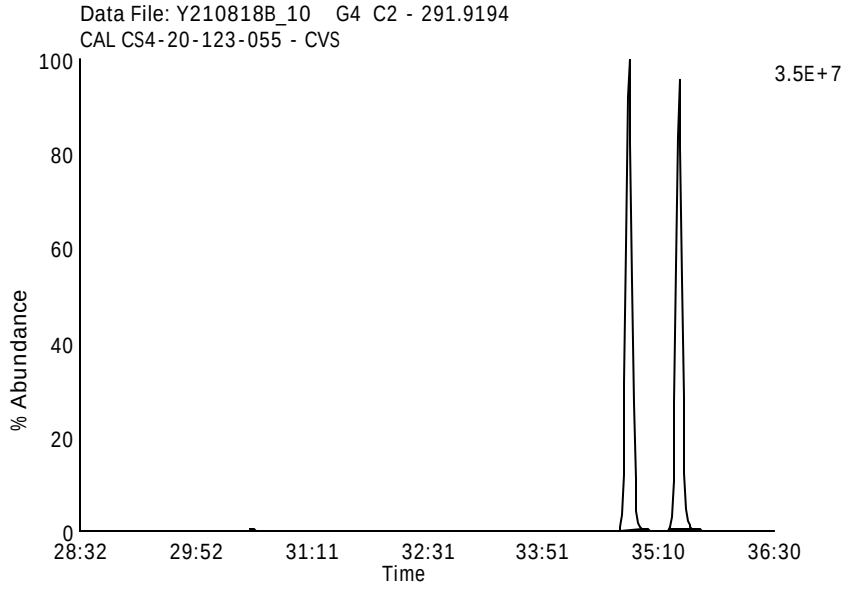
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



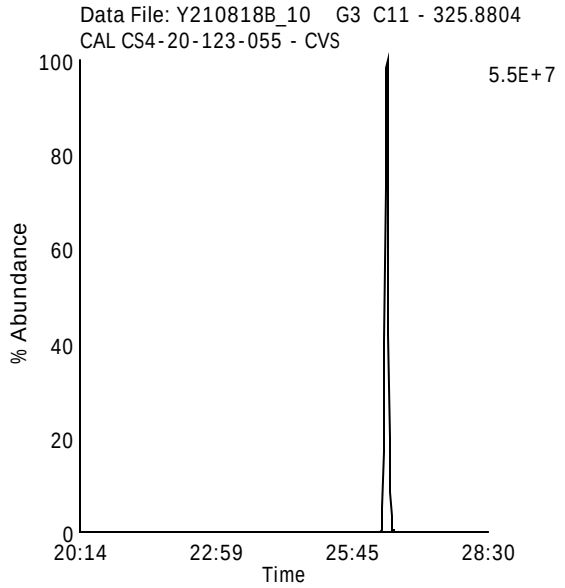


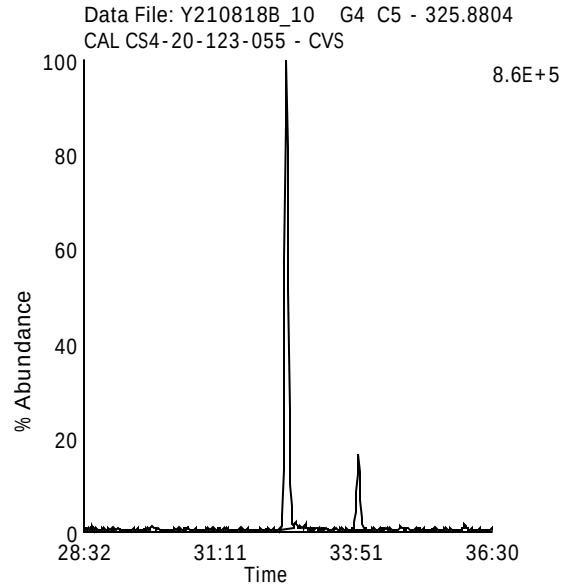


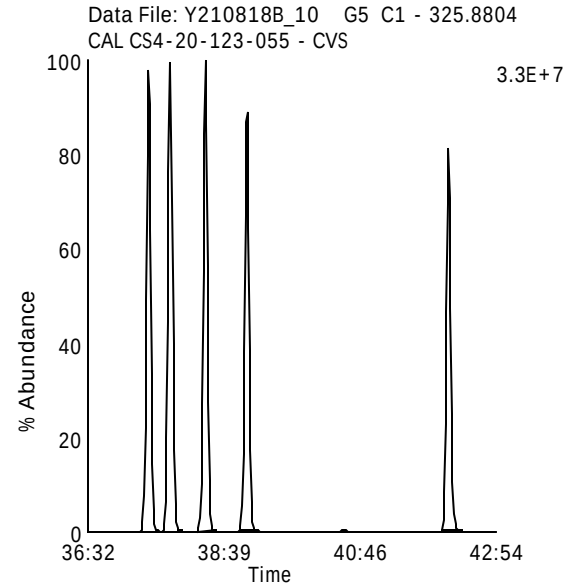


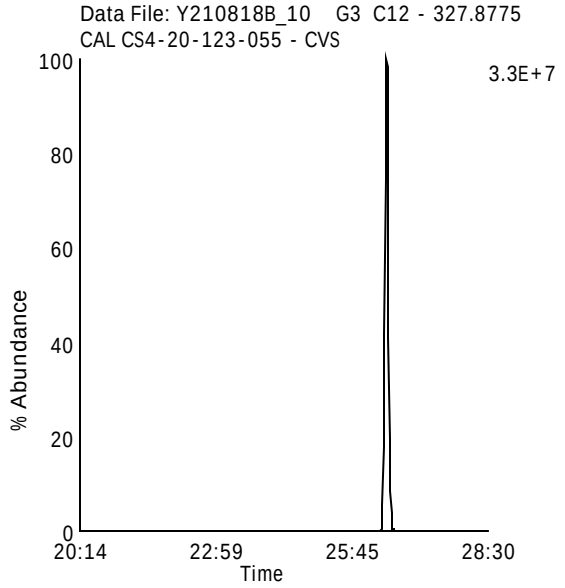
Penta Chlorinated Biphenyls

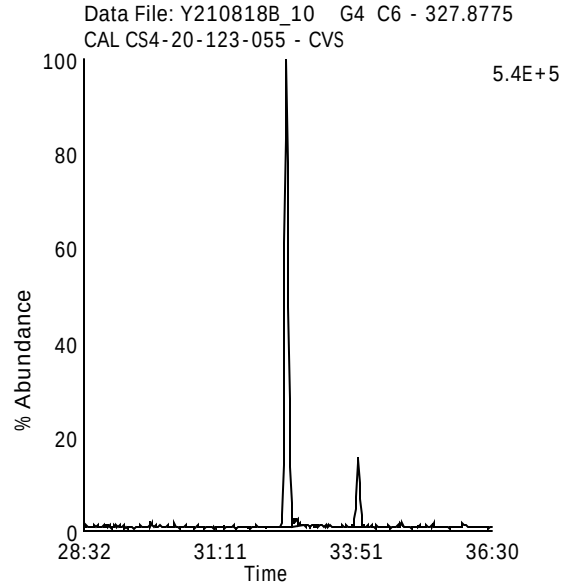
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

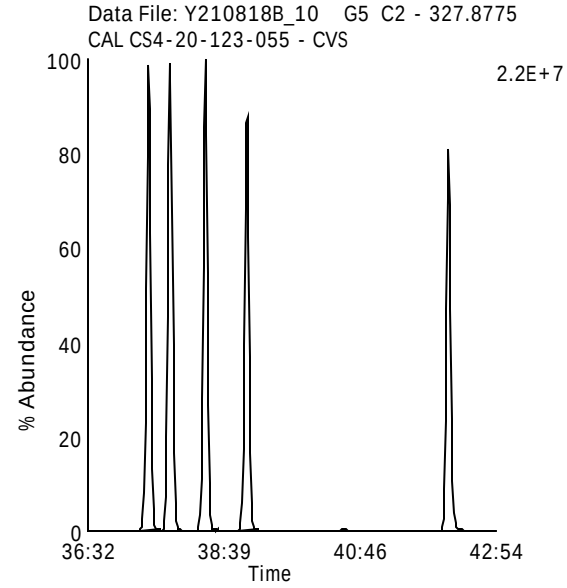






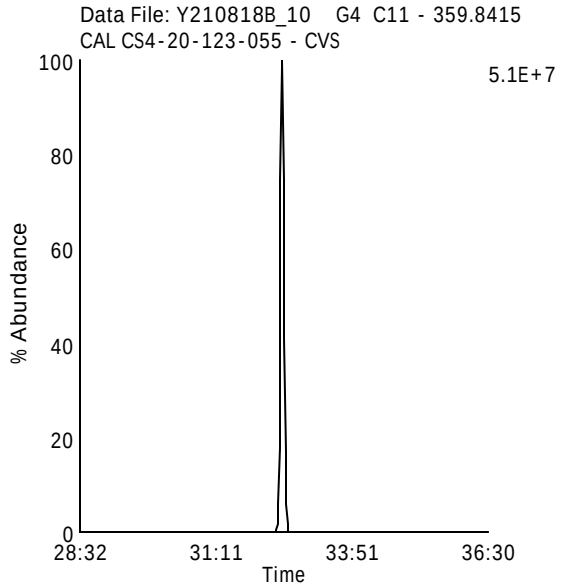


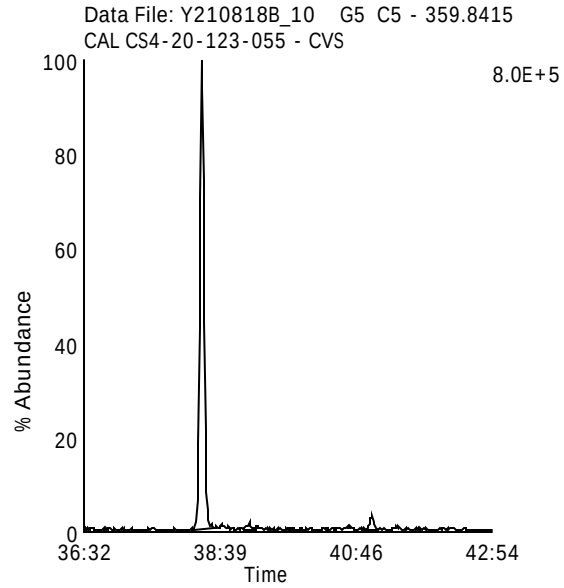


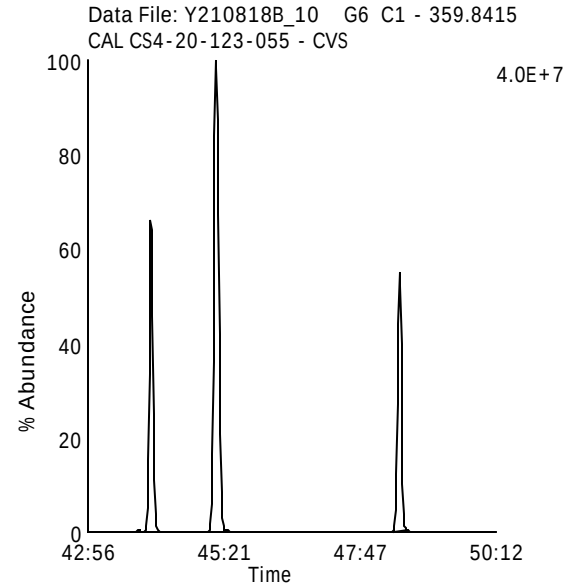


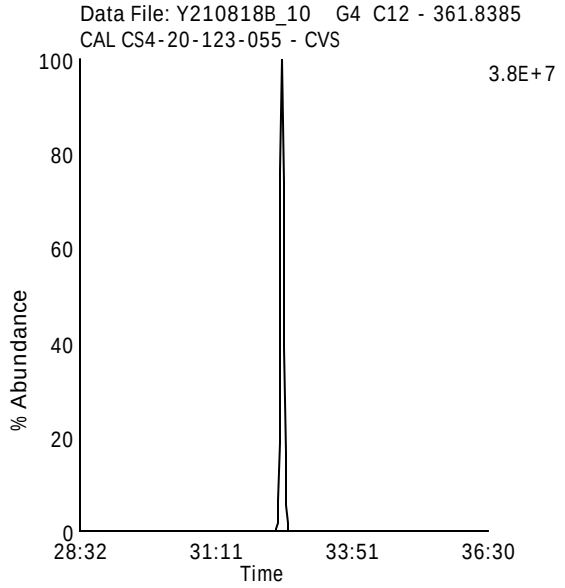
Hexa Chlorinated Biphenyls

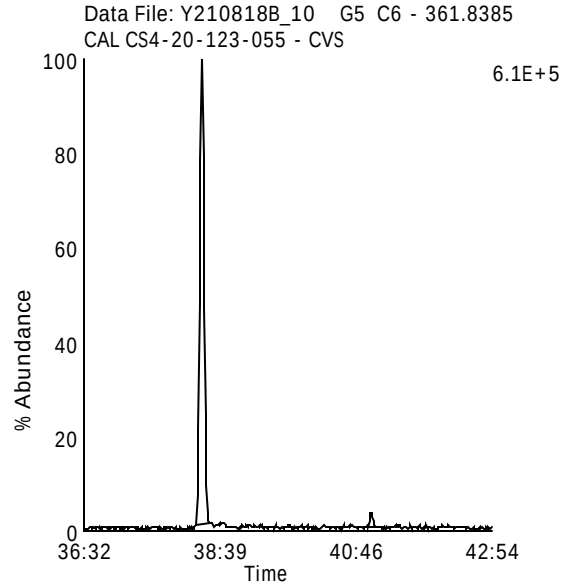
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

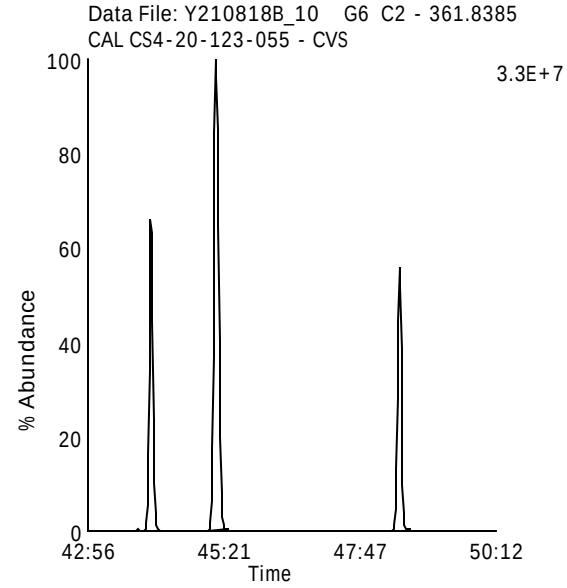






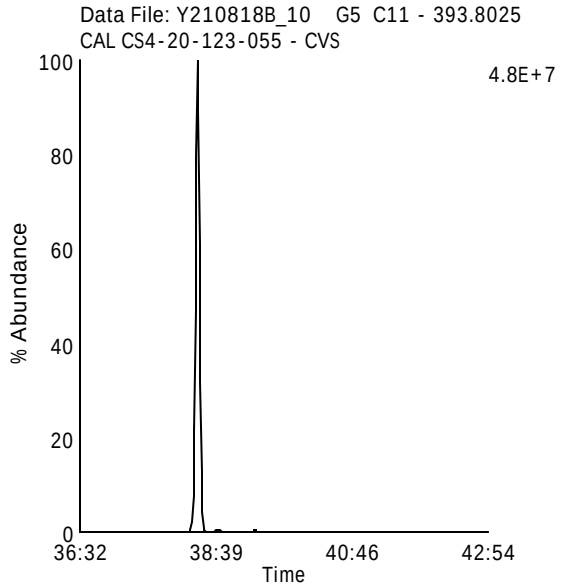


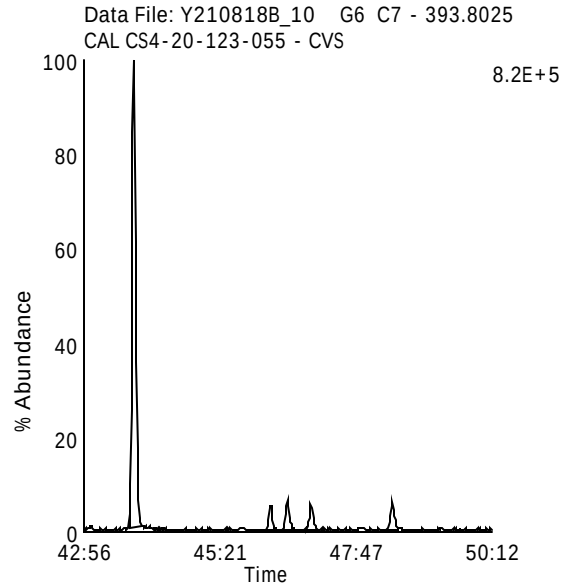


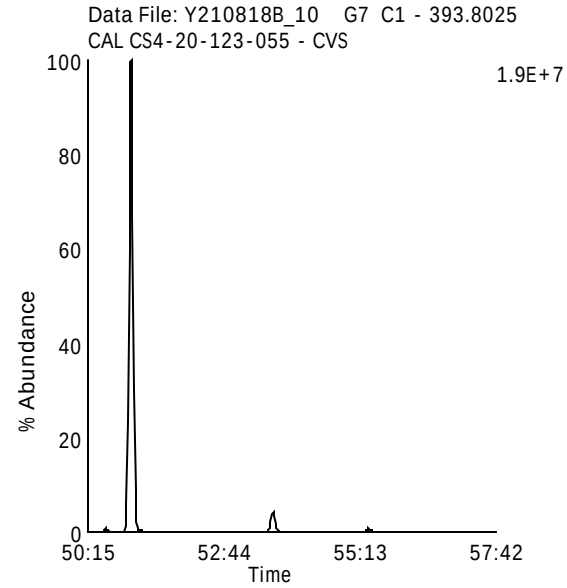


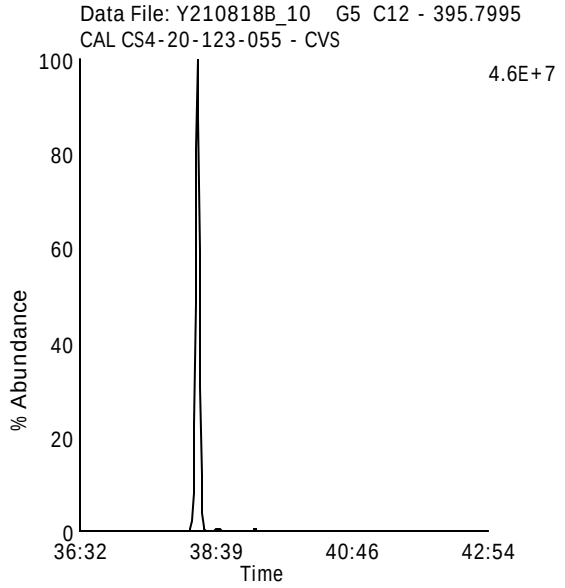
Hepta Chlorinated Biphenyls

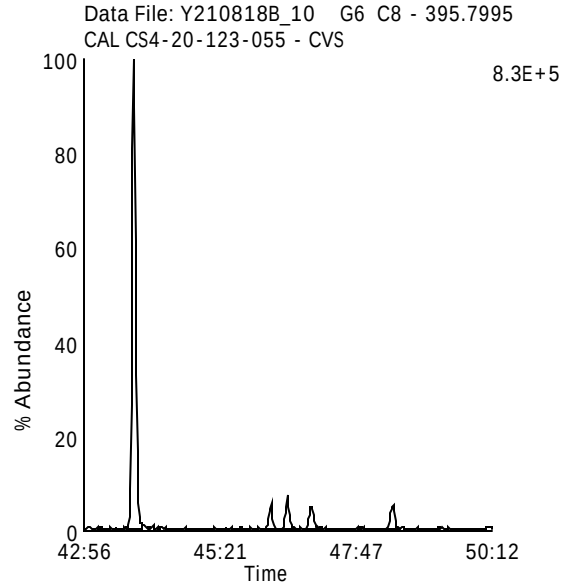
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

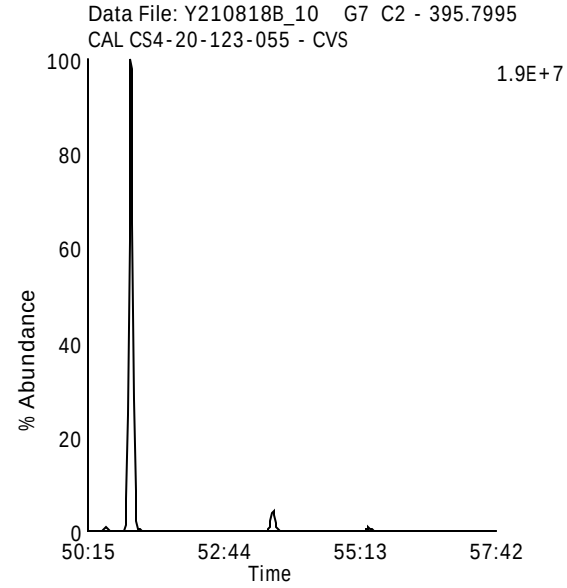






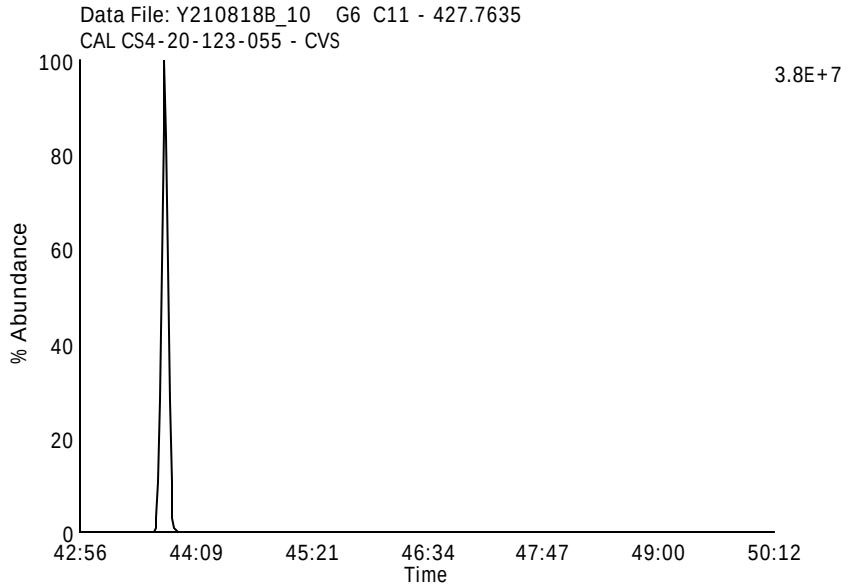


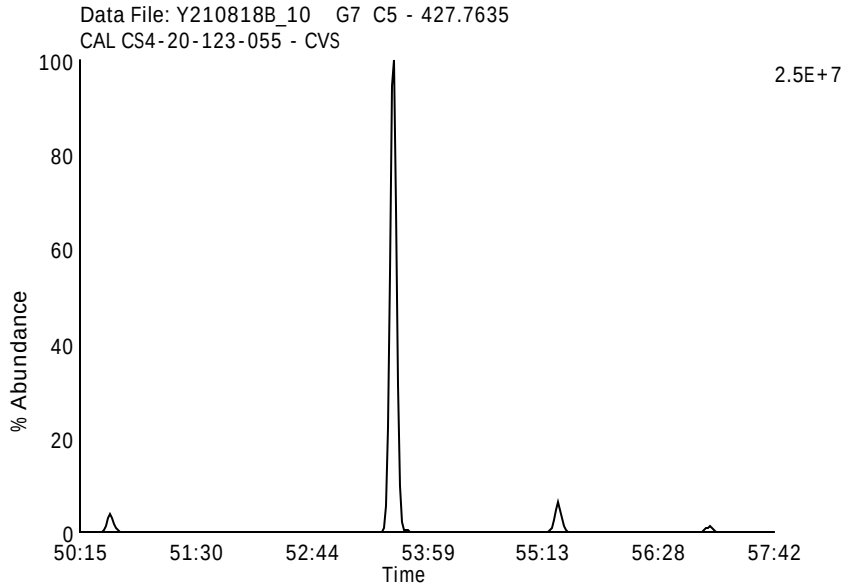


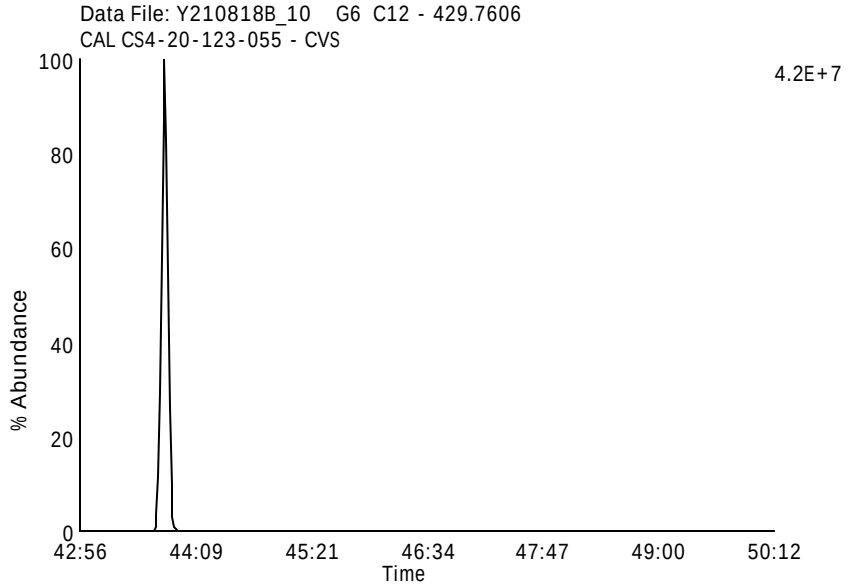


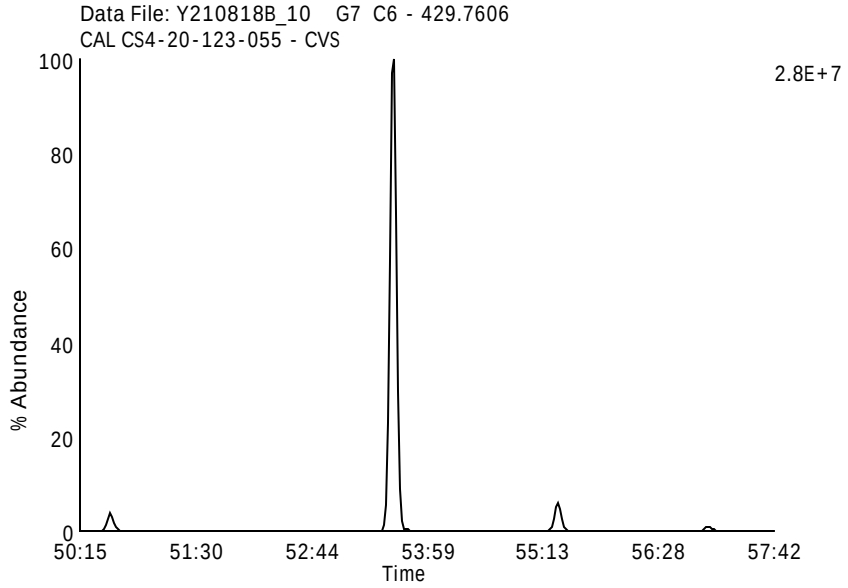
Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS









Nona Chlorinated Biphenyls

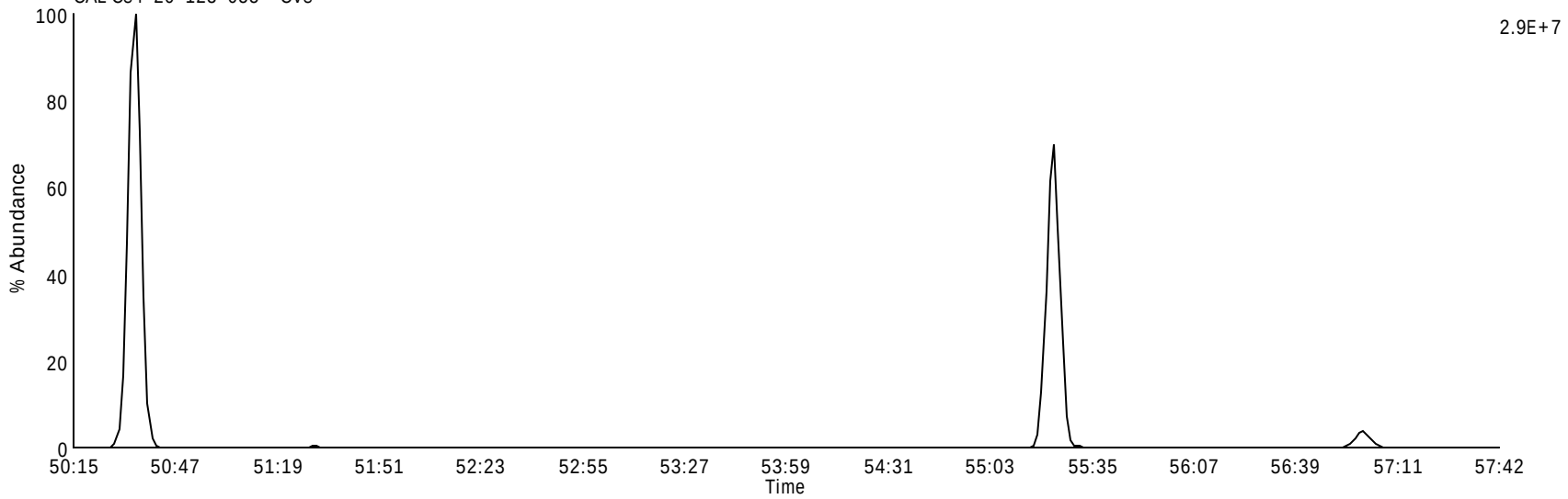
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

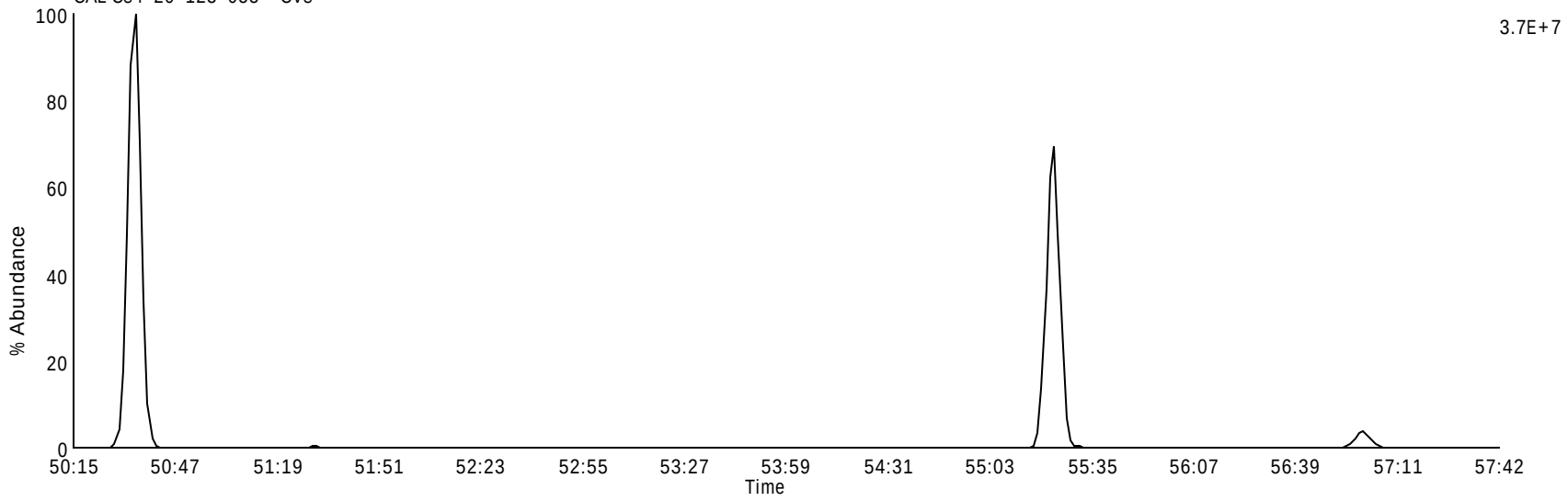
Data File: Y210818B_10 G7 C11 - 461.7246

CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G7 C12 - 463.7216

CAL CS4-20-123-055 - CVS

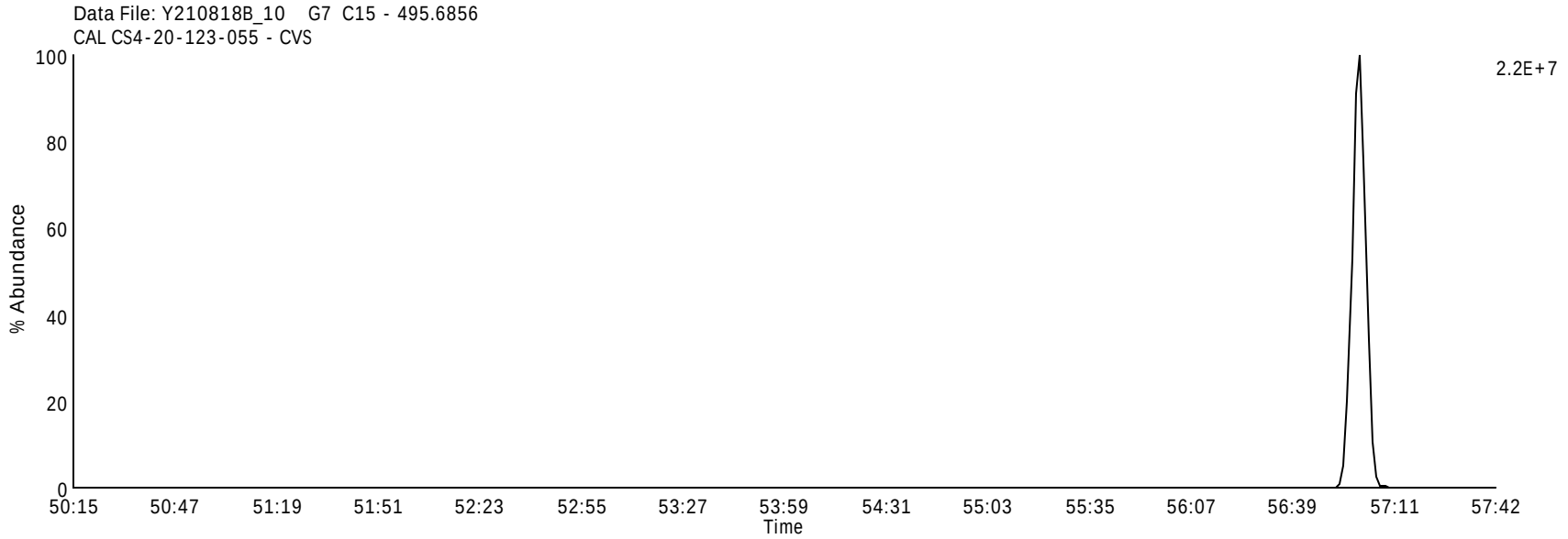


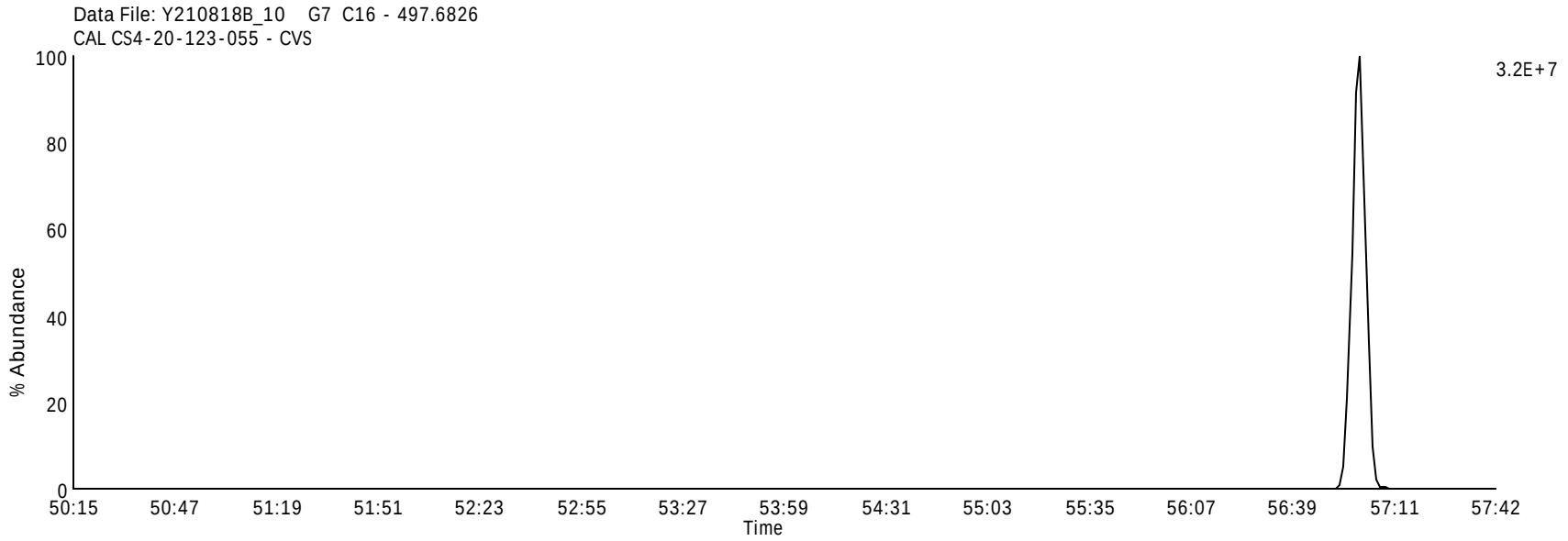
Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

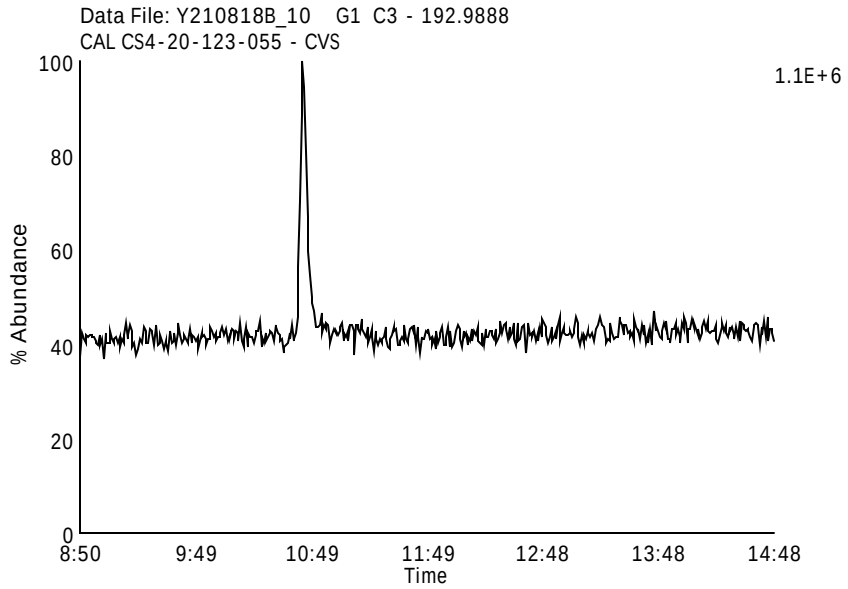
Sample Description: CAL CS4-20-123-055 - CVS

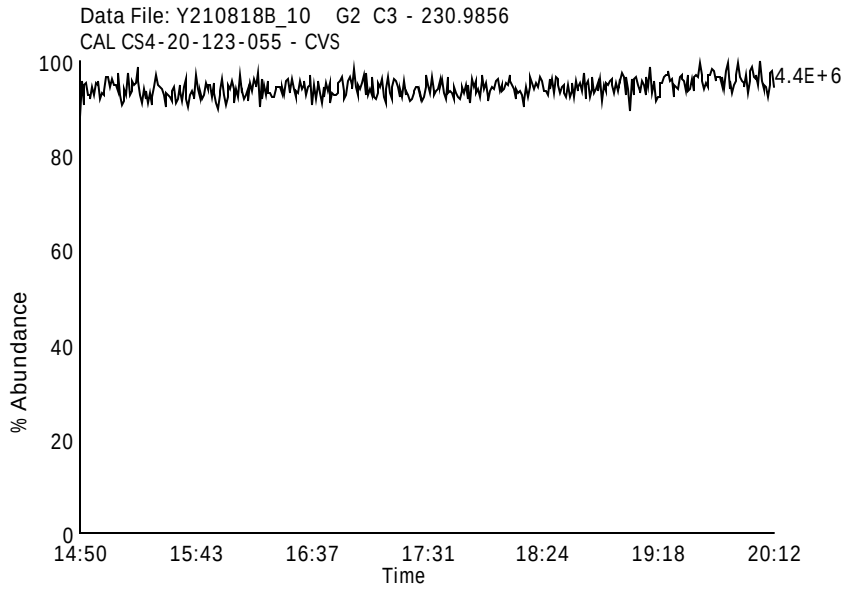


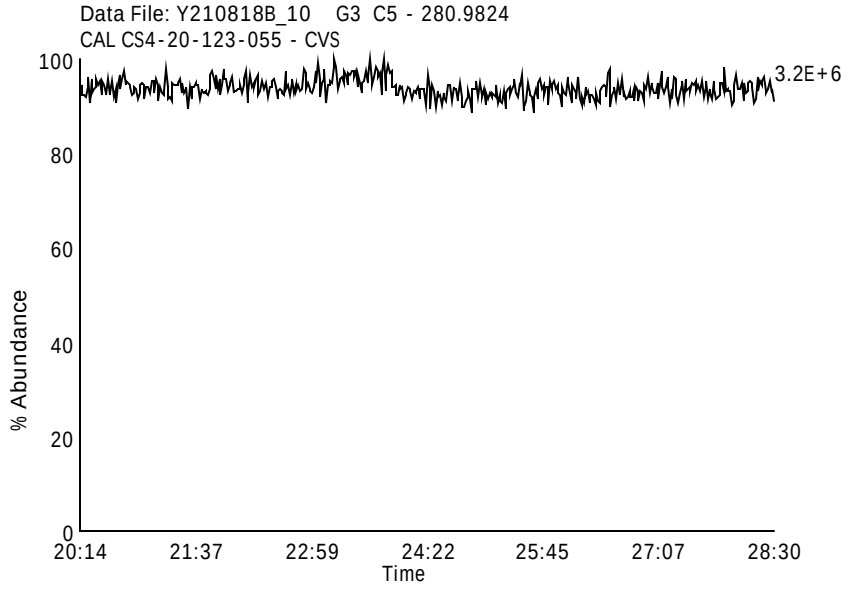


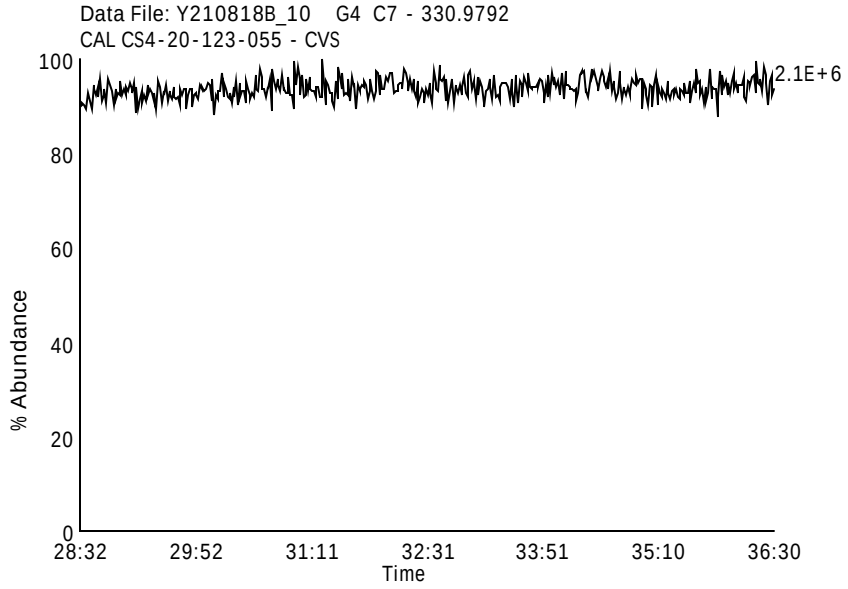
Group 1 - 4 Lock mass

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS





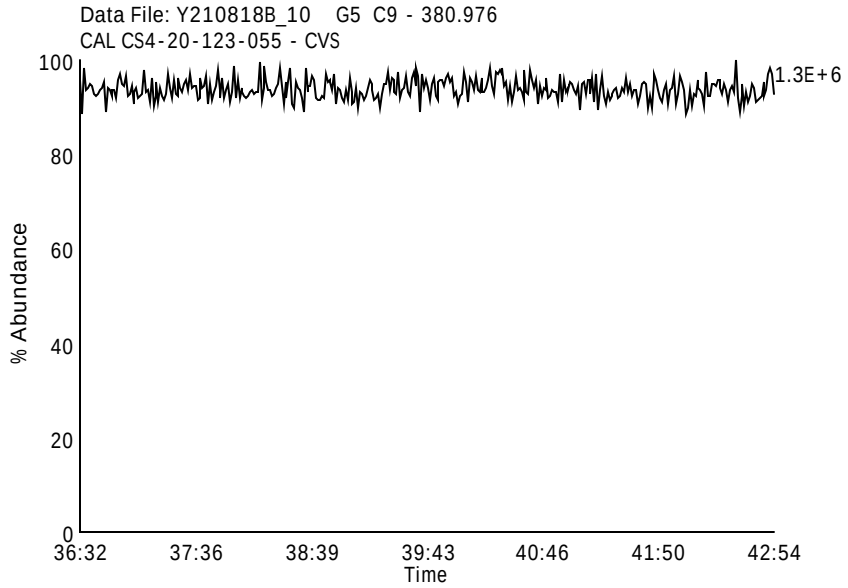


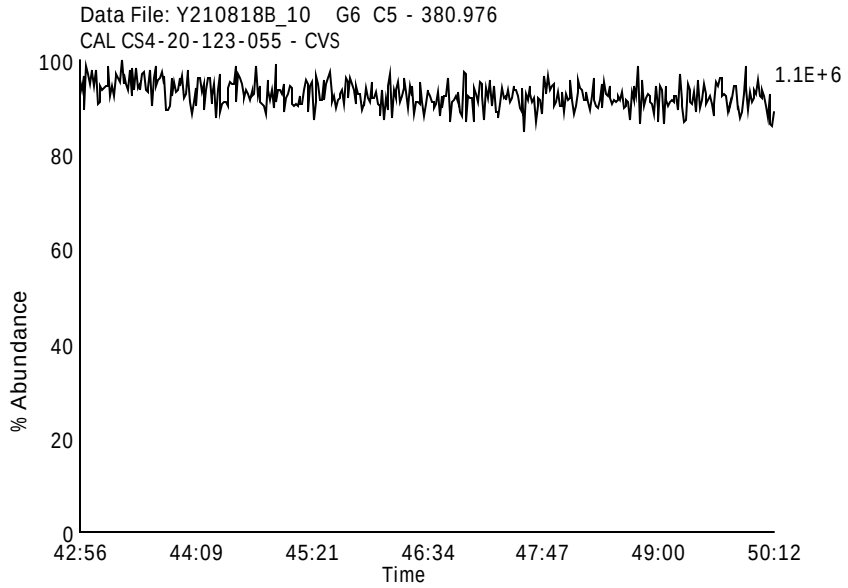


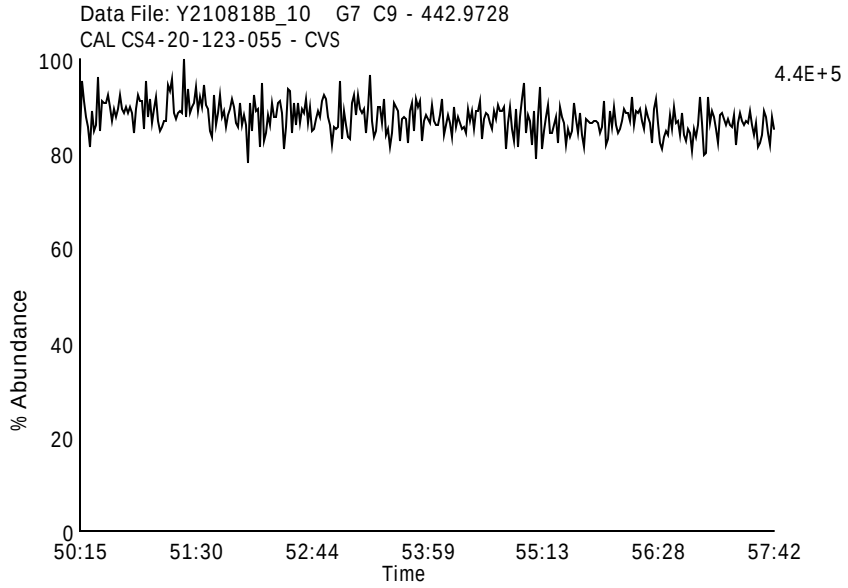
Group 5 - 7 Lock mass

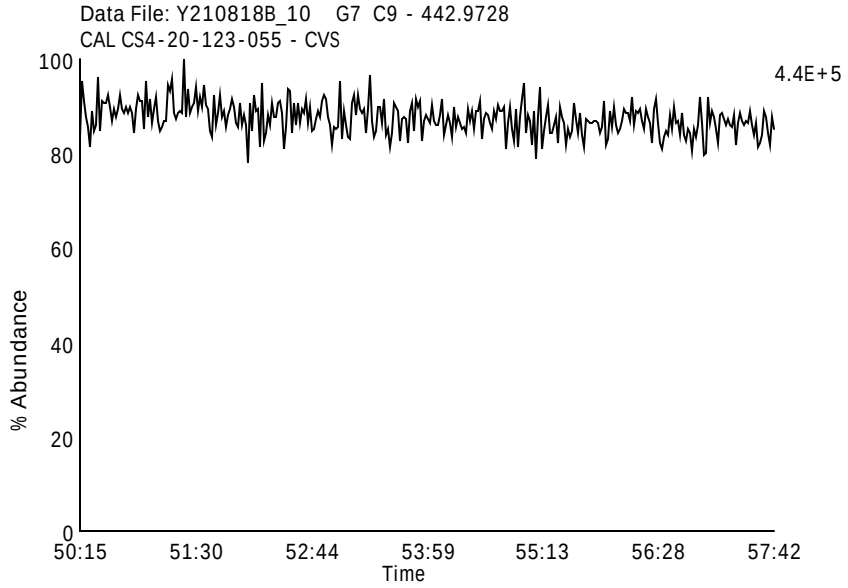
Data File Name: Y210818B_10
Date Acquired: 8/18/2021
Sample Description: CAL CS4-20-123-055 - CVS

Lab Sample ID: CS4-20-123-055
Instrument: 10MSHR12 (Y)



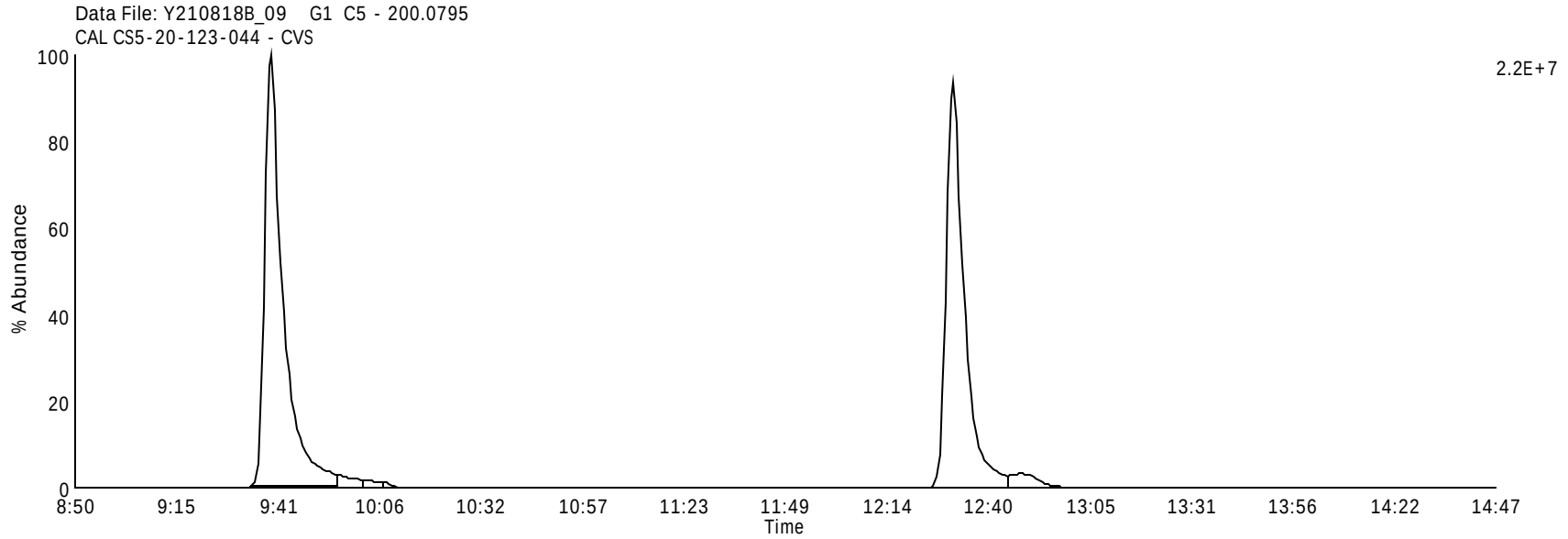


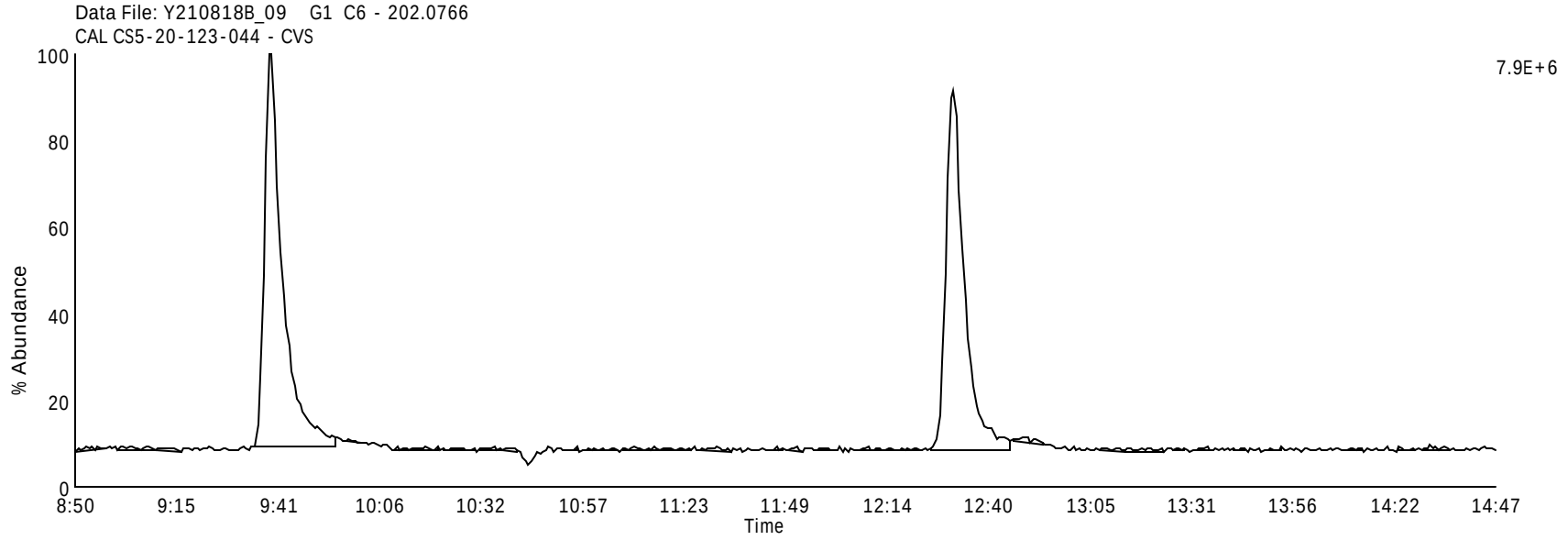




Labeled Mono Chlorinated Biphenyls

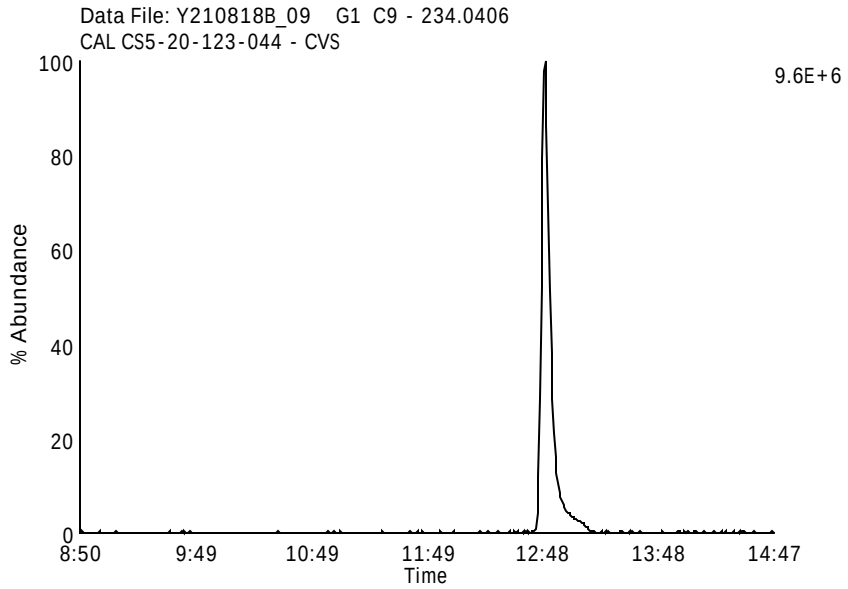
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

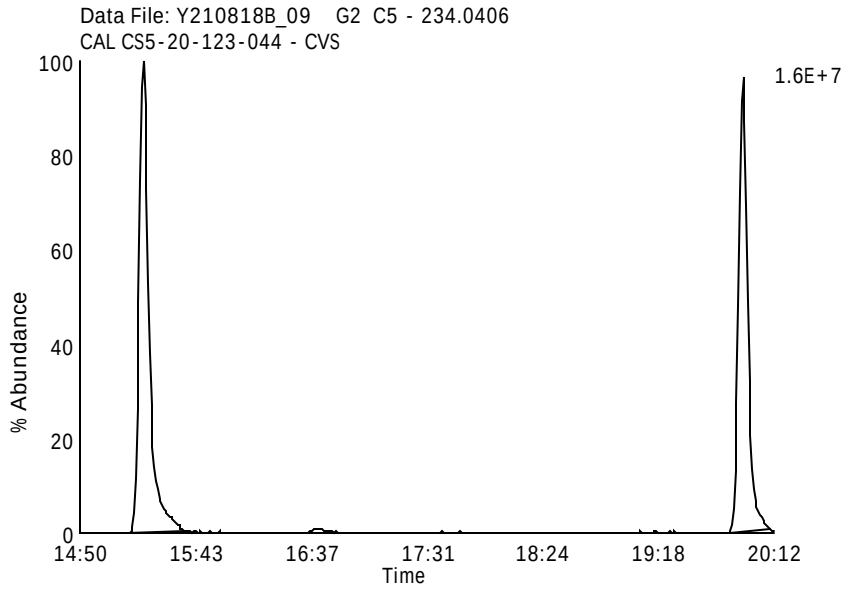


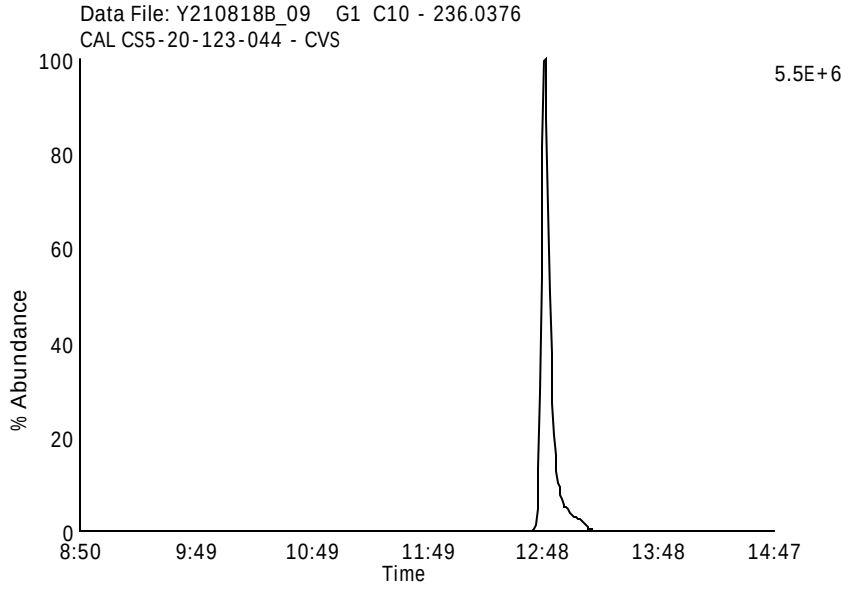


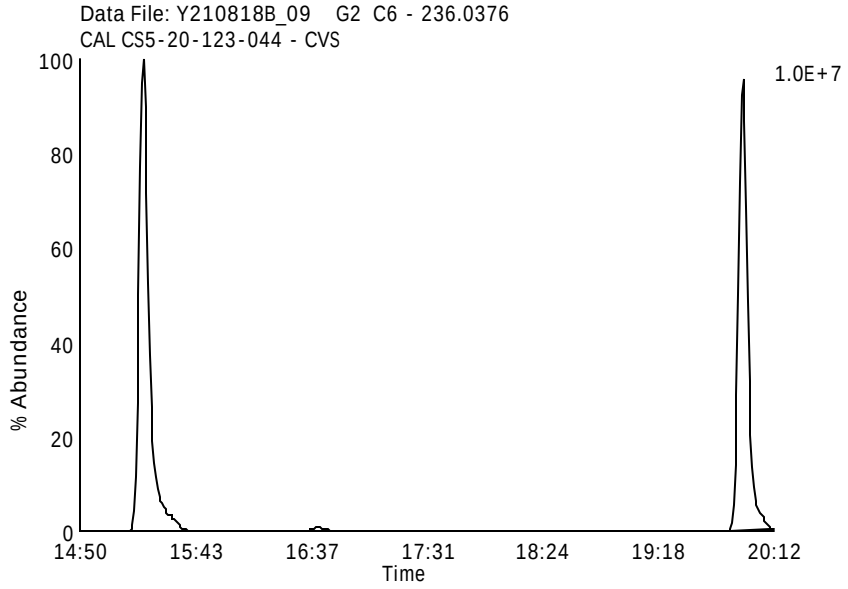
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS









Labeled Tri Chlorinated Biphenyls

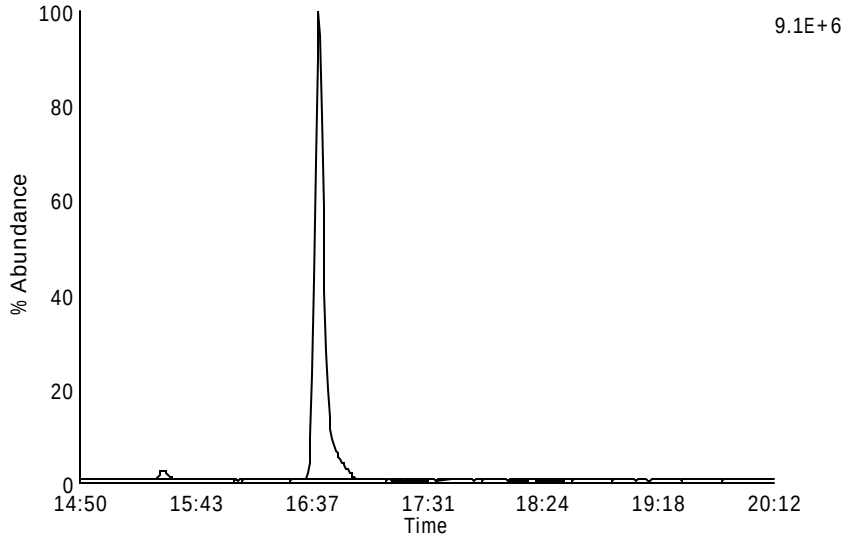
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

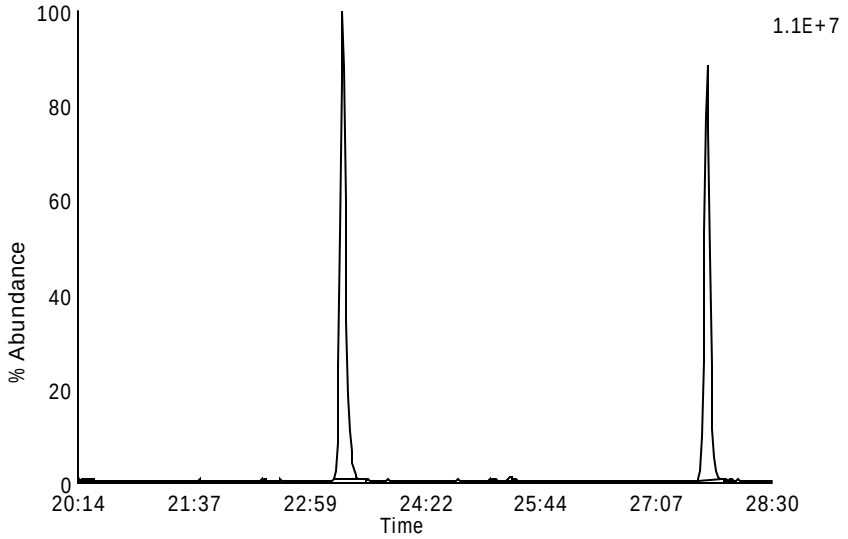
Data File: Y210818B_09 G2 C9 - 268.0016

CAL CS5-20-123-044 - CVS



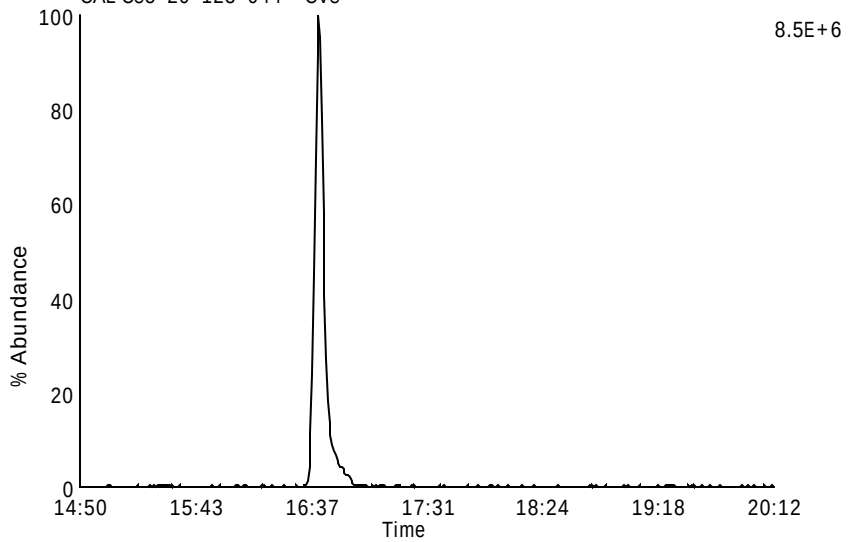
Data File: Y210818B_09 G3 C3 - 268.0016

CAL CS5-20-123-044 - CVS



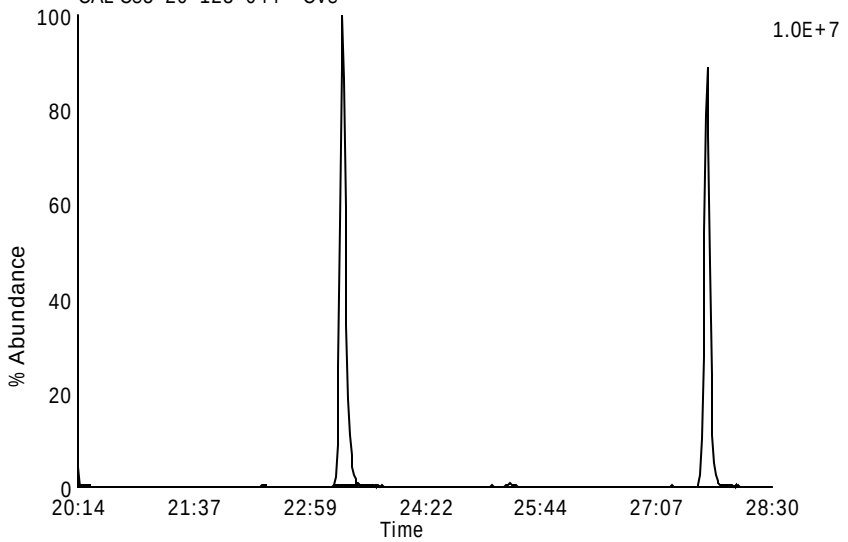
Data File: Y210818B_09 G2 C10 - 269.9986

CAL CS5-20-123-044 - CVS



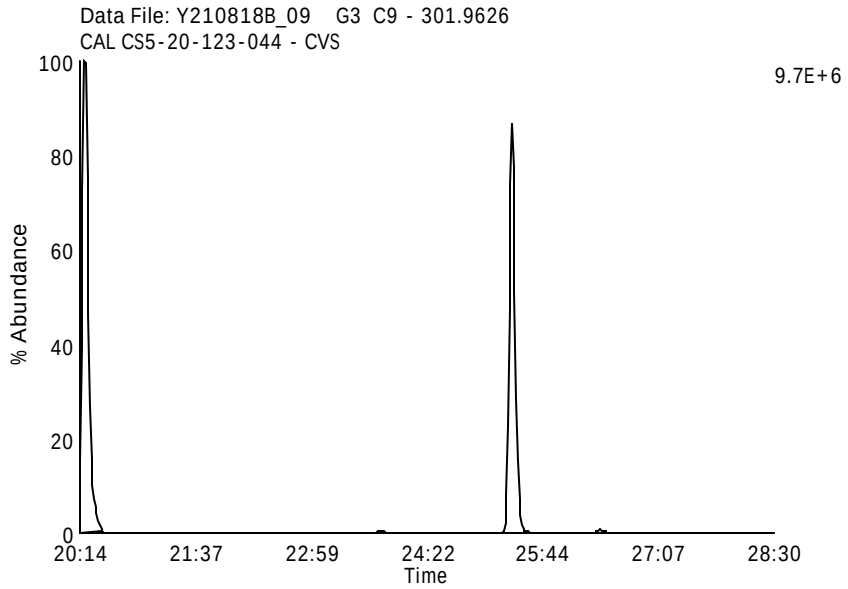
Data File: Y210818B_09 G3 C4 - 269.9986

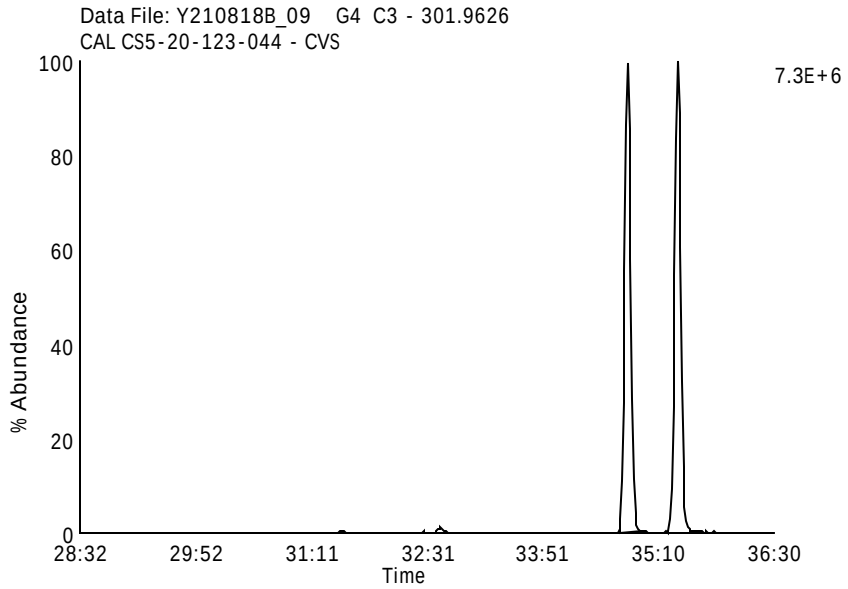
CAL CS5-20-123-044 - CVS

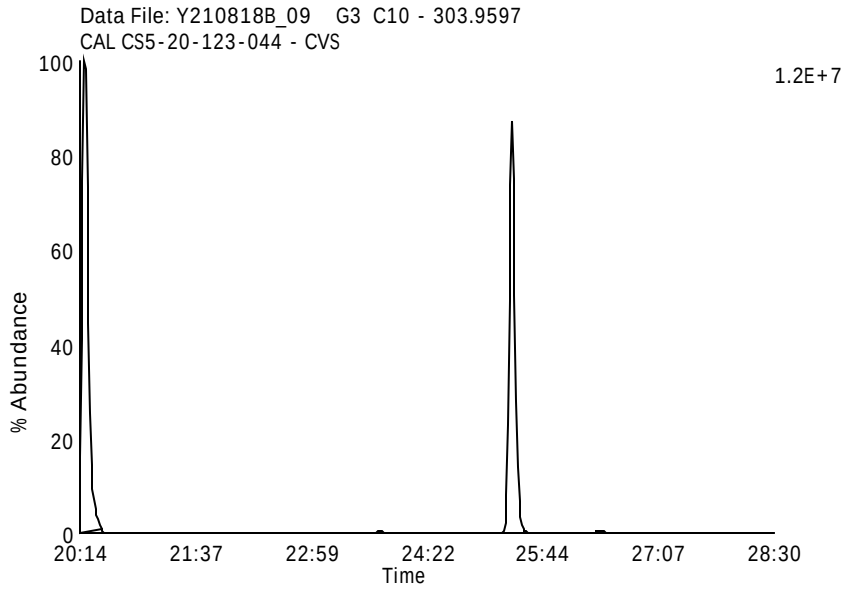


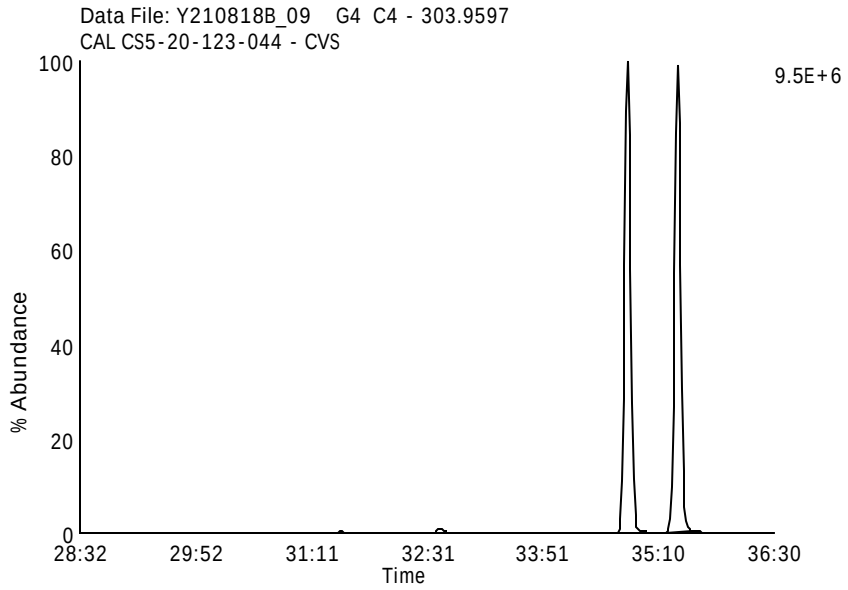
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS







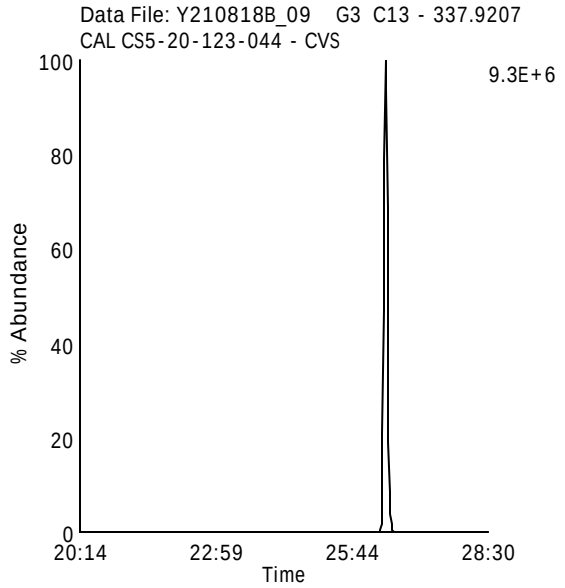


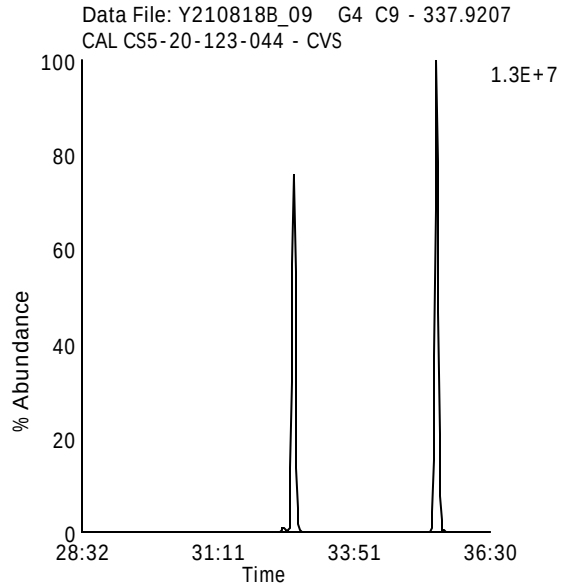
Labeled Penta Chlorinated Biphenyls

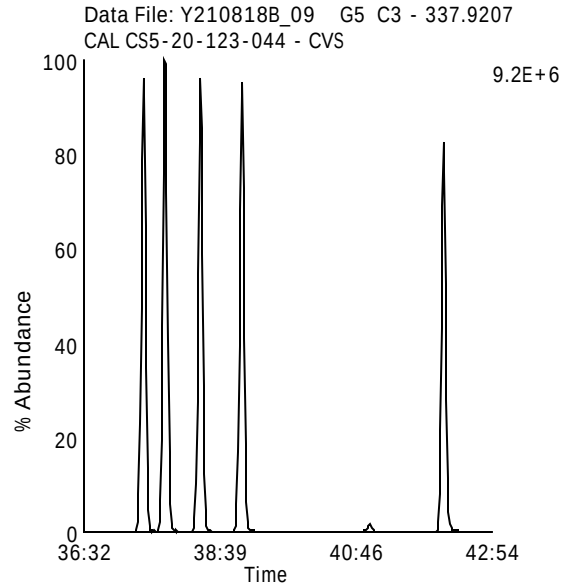
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

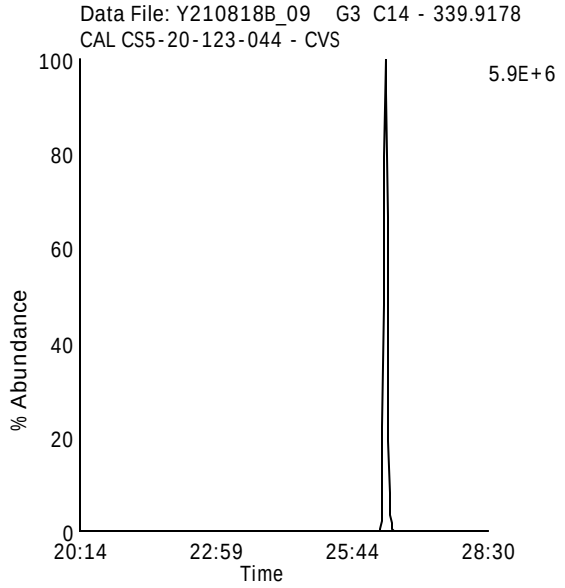
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

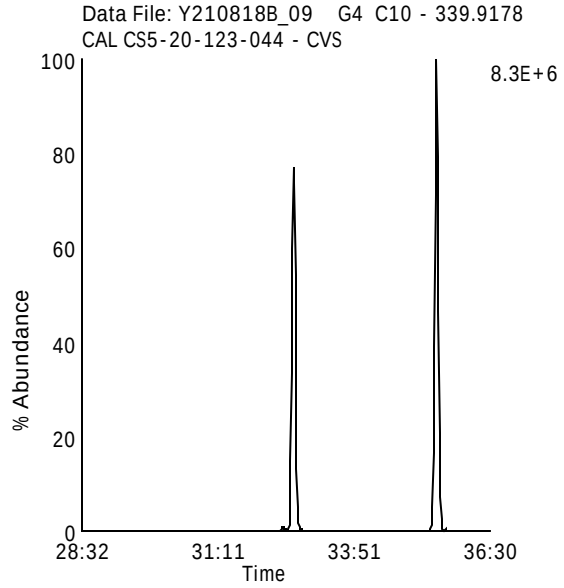
Sample Description: CAL CS5-20-123-044 - CVS

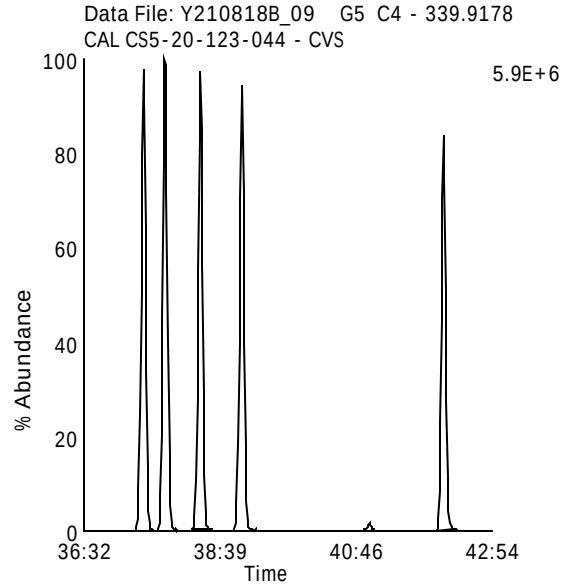












Labeled Hexa Chlorinated Biphenyls

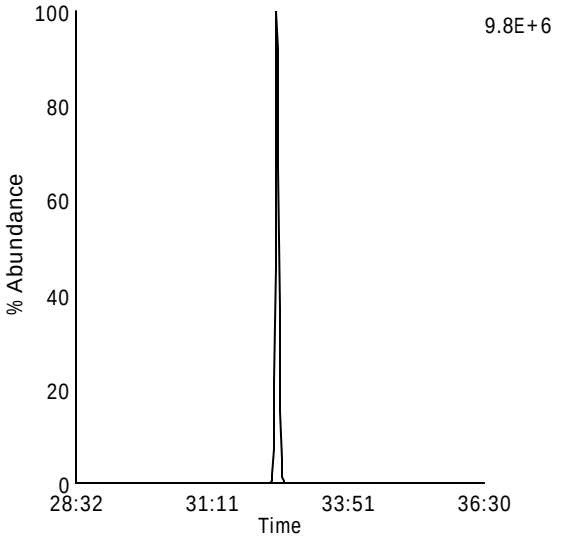
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

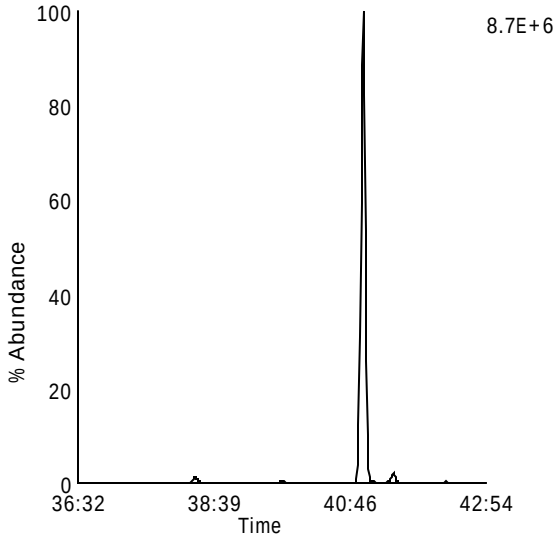
Data File: Y210818B_09 G4 C13 - 371.8817

CAL CS5-20-123-044 - CVS



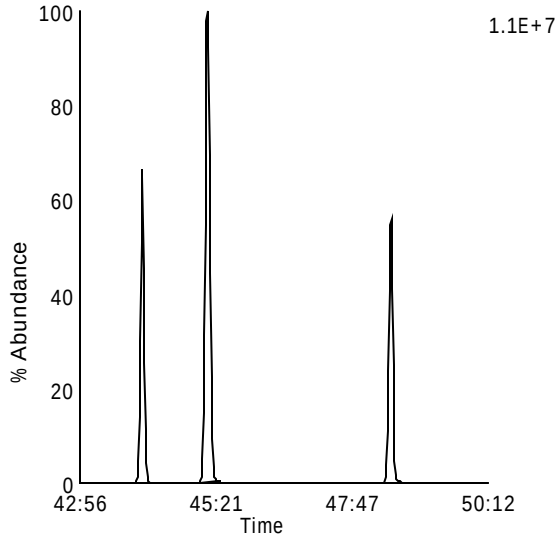
Data File: Y210818B_09 G5 C7 - 371.8817

CAL CS5-20-123-044 - CVS



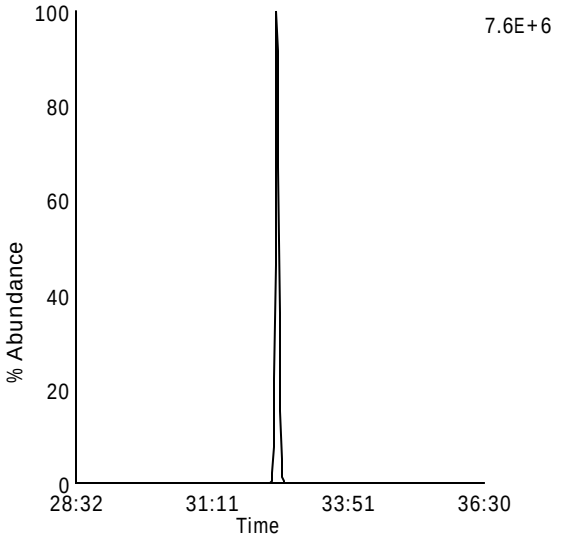
Data File: Y210818B_09 G6 C3 - 371.8817

CAL CS5-20-123-044 - CVS



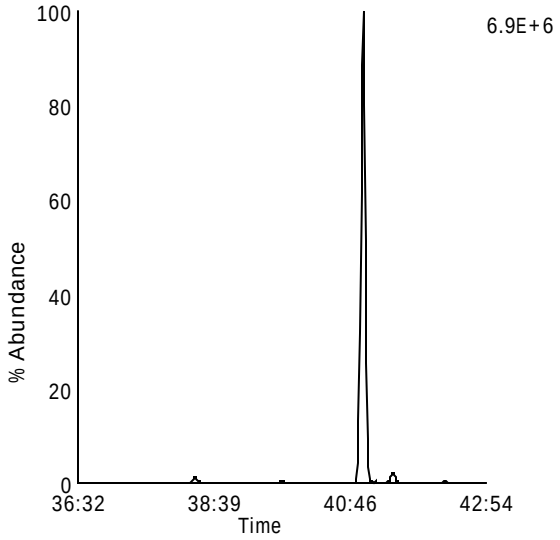
Data File: Y210818B_09 G4 C14 - 373.8788

CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G5 C8 - 373.8788

CAL CS5-20-123-044 - CVS



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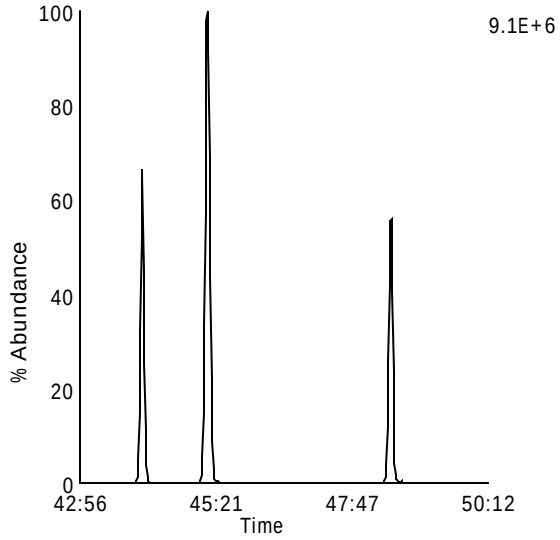
CAL CS5-20-123-044 - CVS

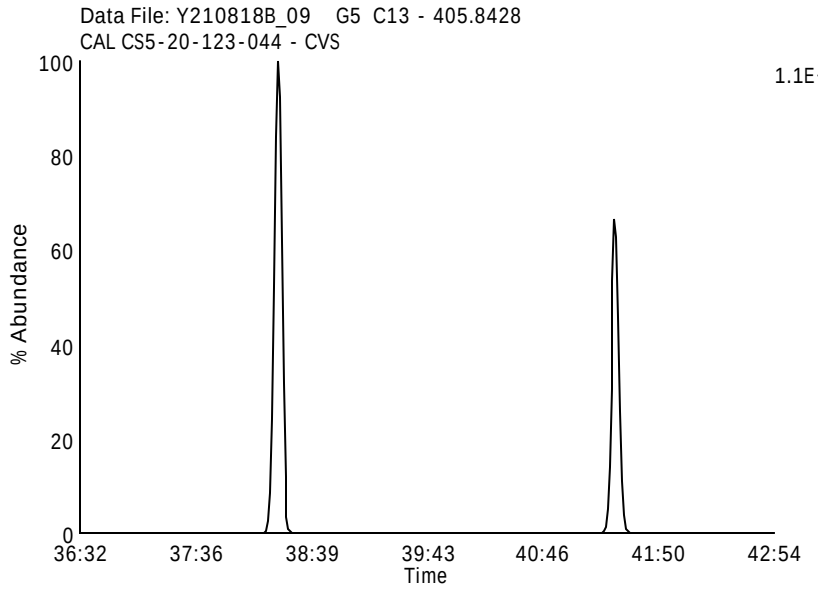


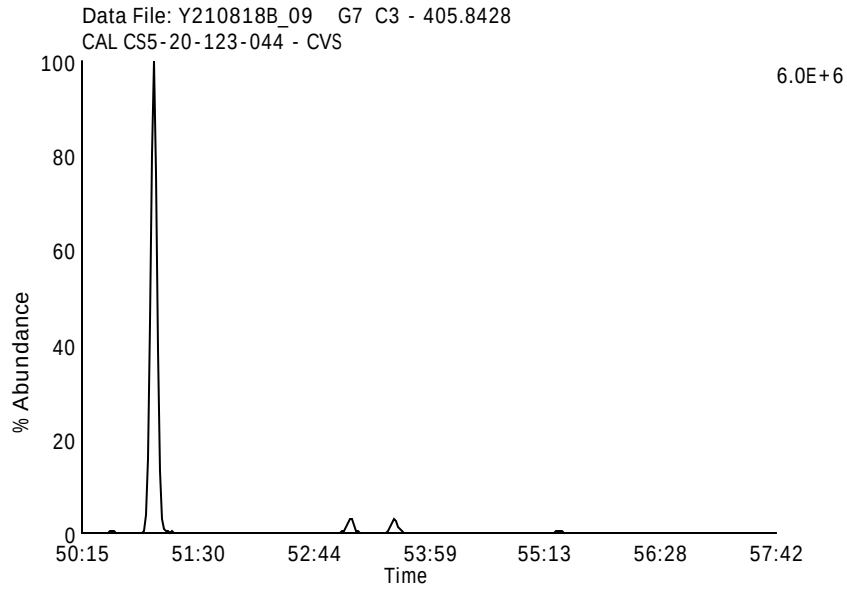
Labeled Hepta Chlorinated Biphenyls

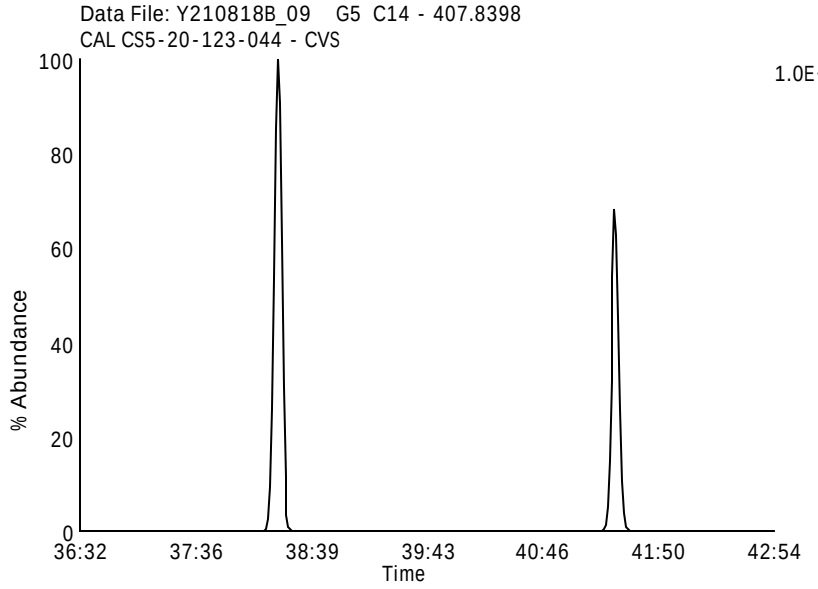
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

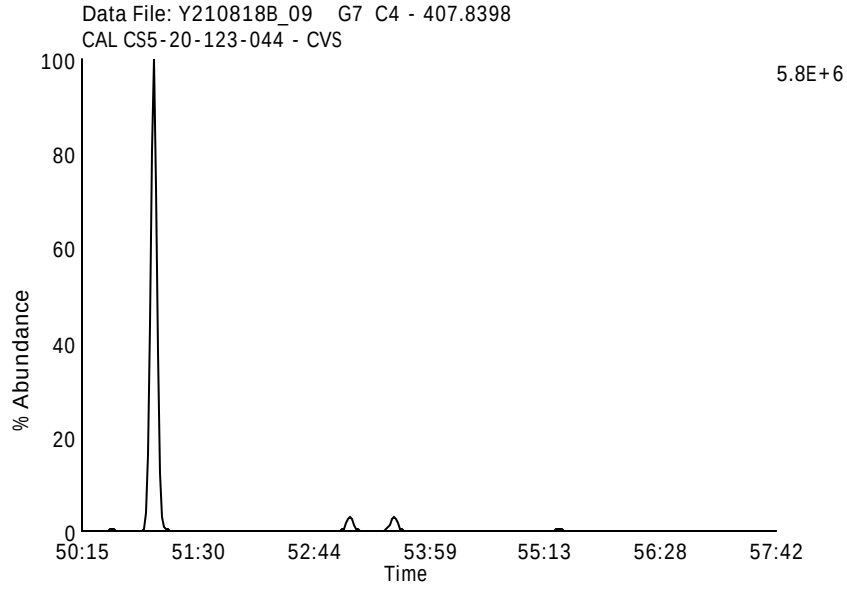
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS









Labeled Octa Chlorinated Biphenyls

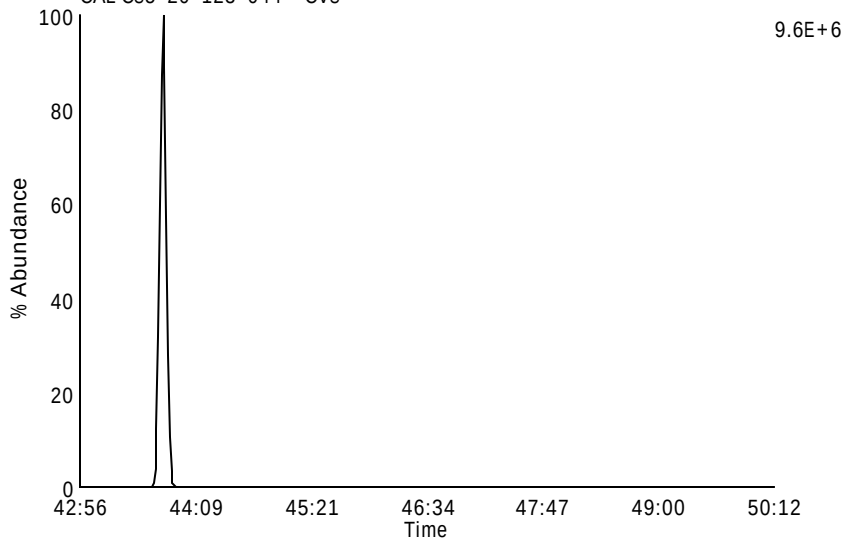
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

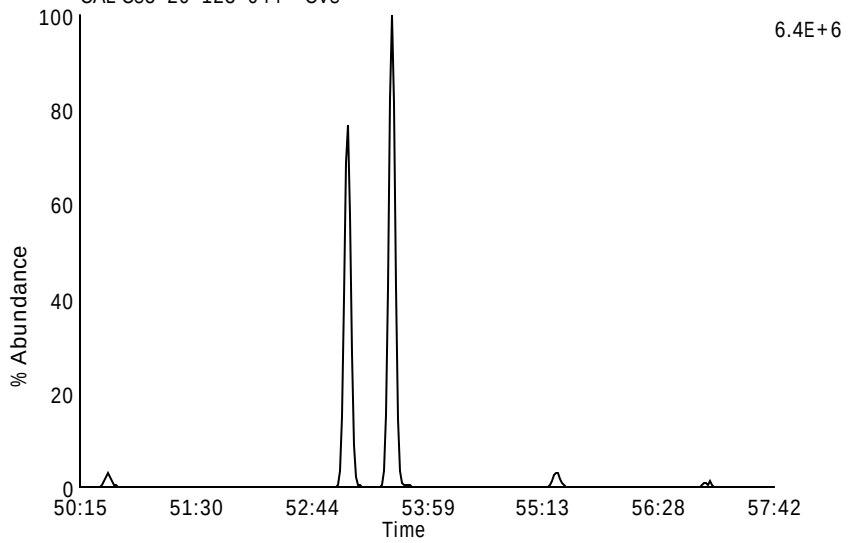
Data File: Y210818B_09 G6 C13 - 439.8038

CAL CS5-20-123-044 - CVS



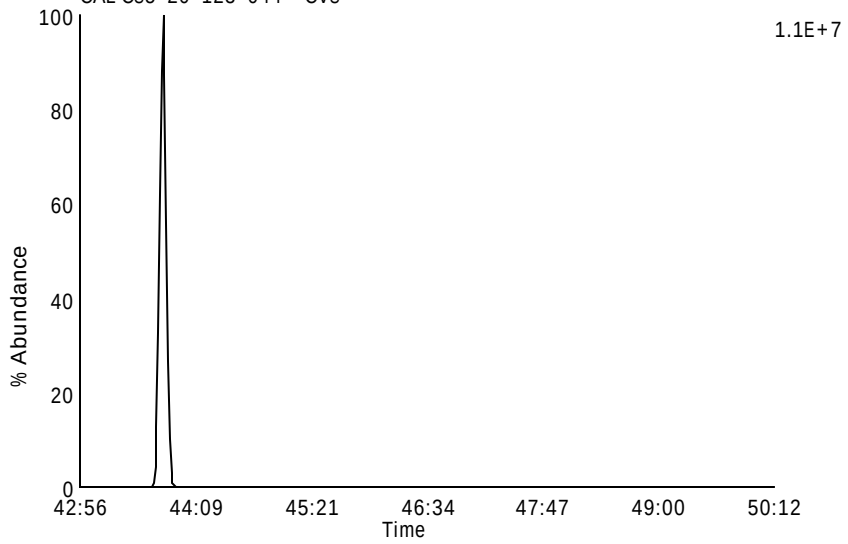
Data File: Y210818B_09 G7 C7 - 439.8038

CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G6 C14 - 441.8008

CAL CS5-20-123-044 - CVS



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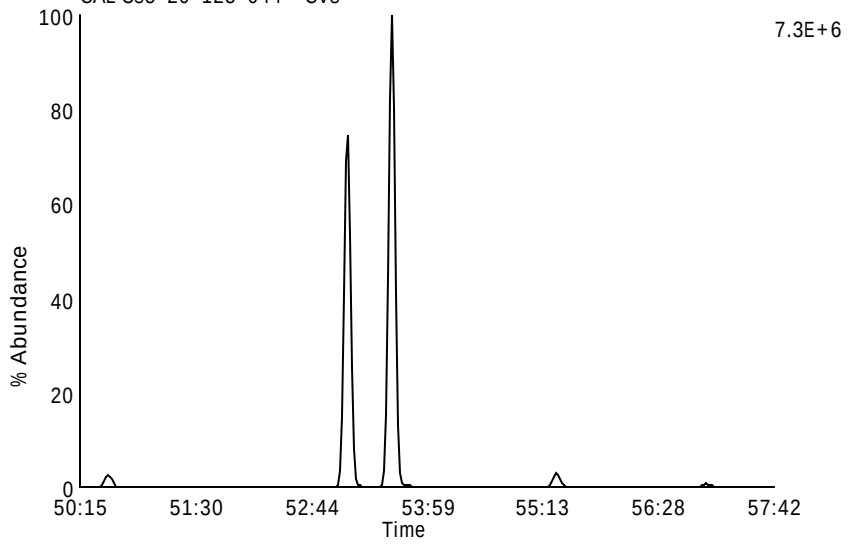
CAL CS5-20-123-044 - CVS

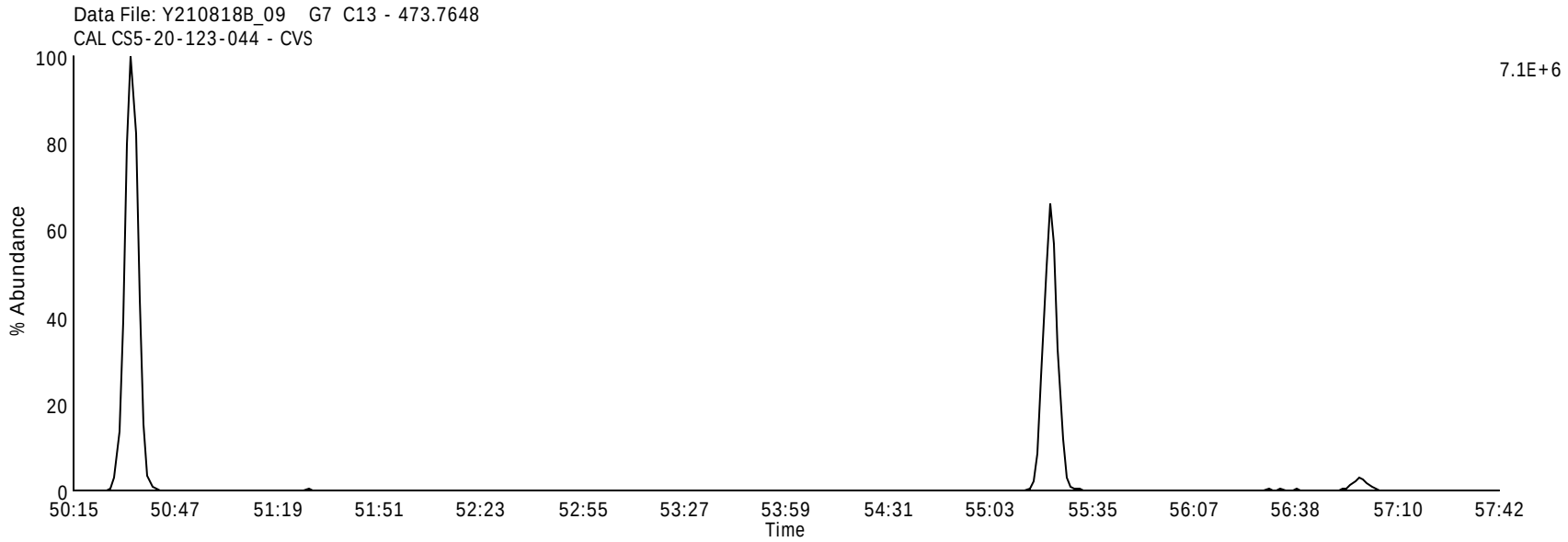


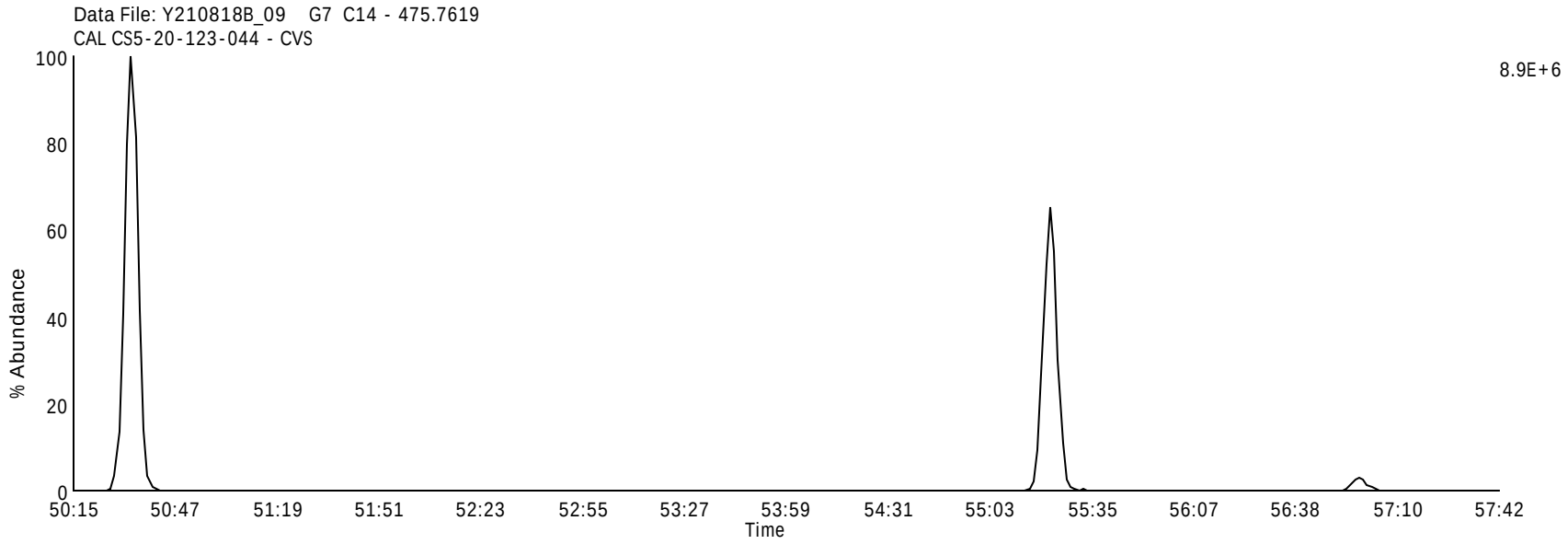
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



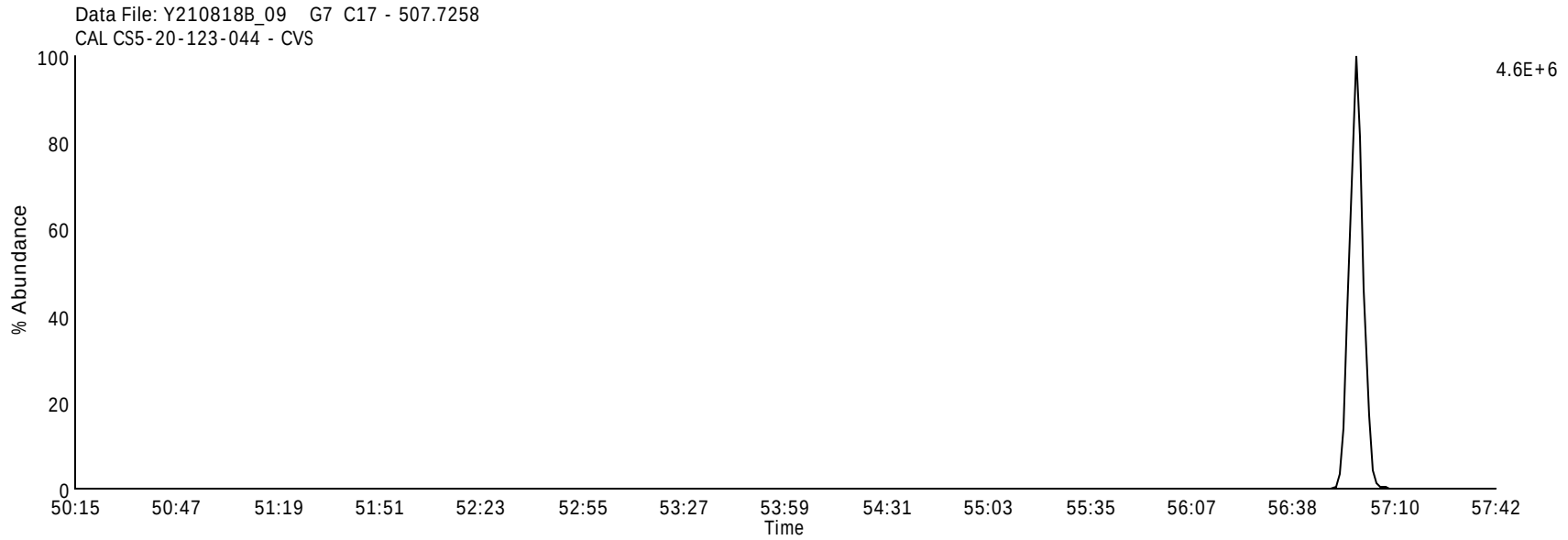


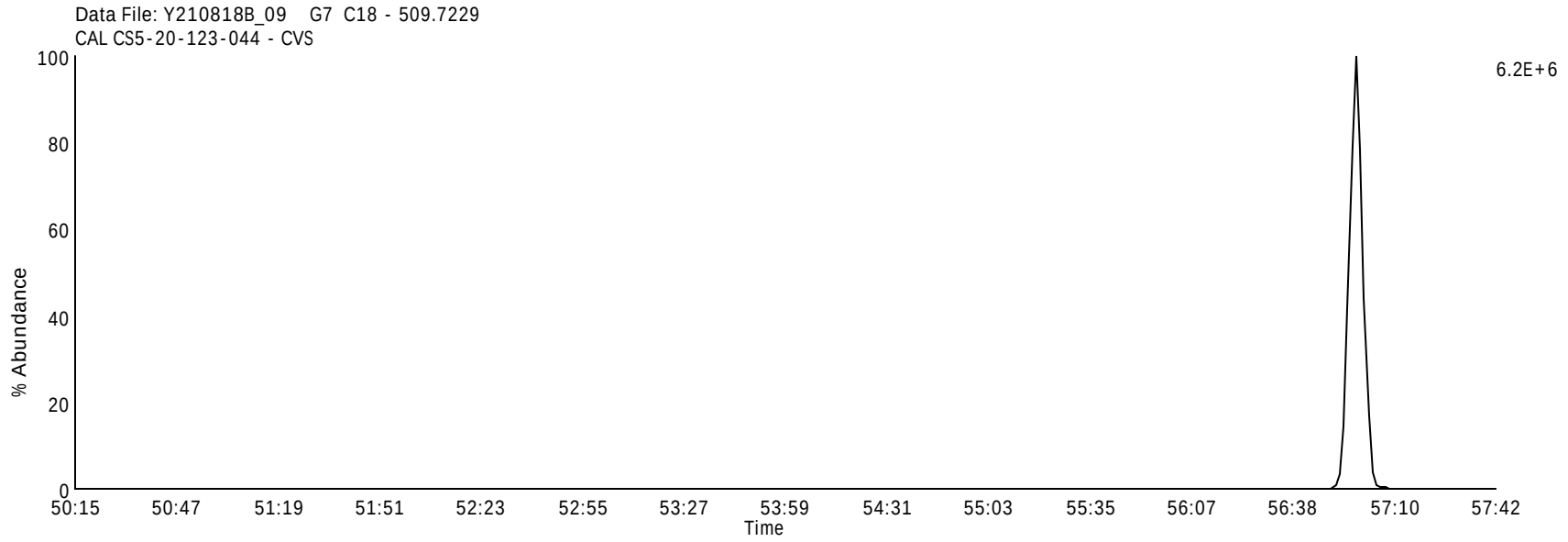
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

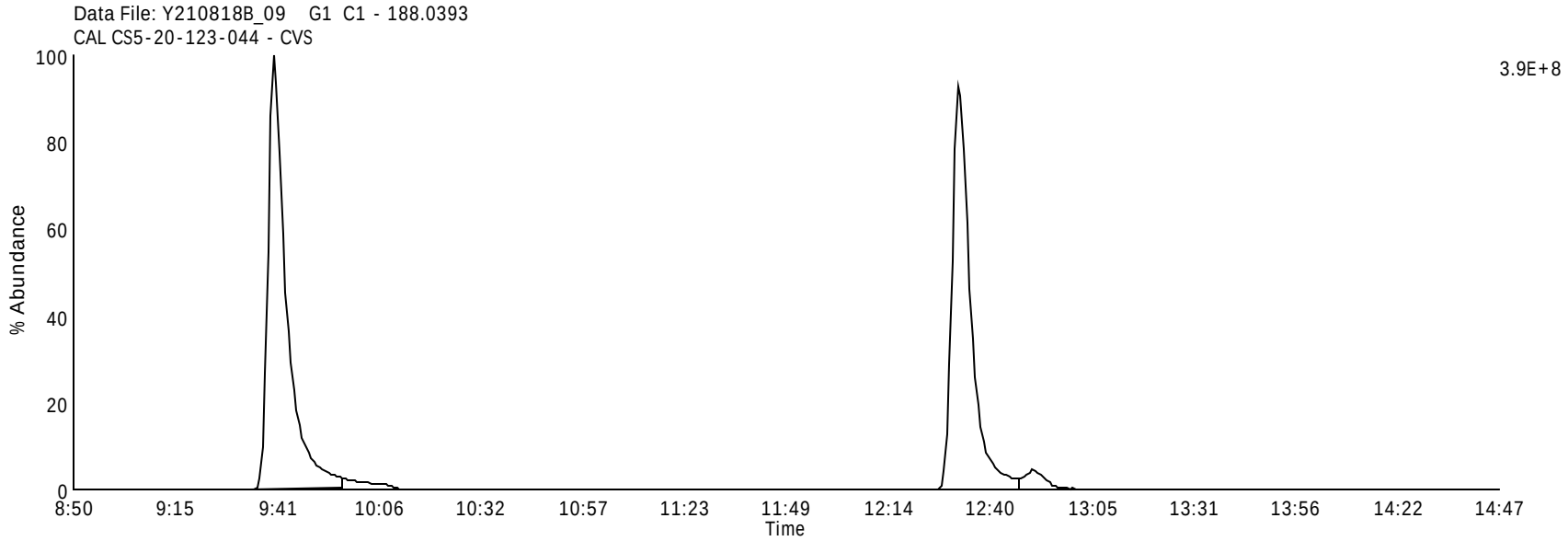
Sample Description: CAL CS5-20-123-044 - CVS

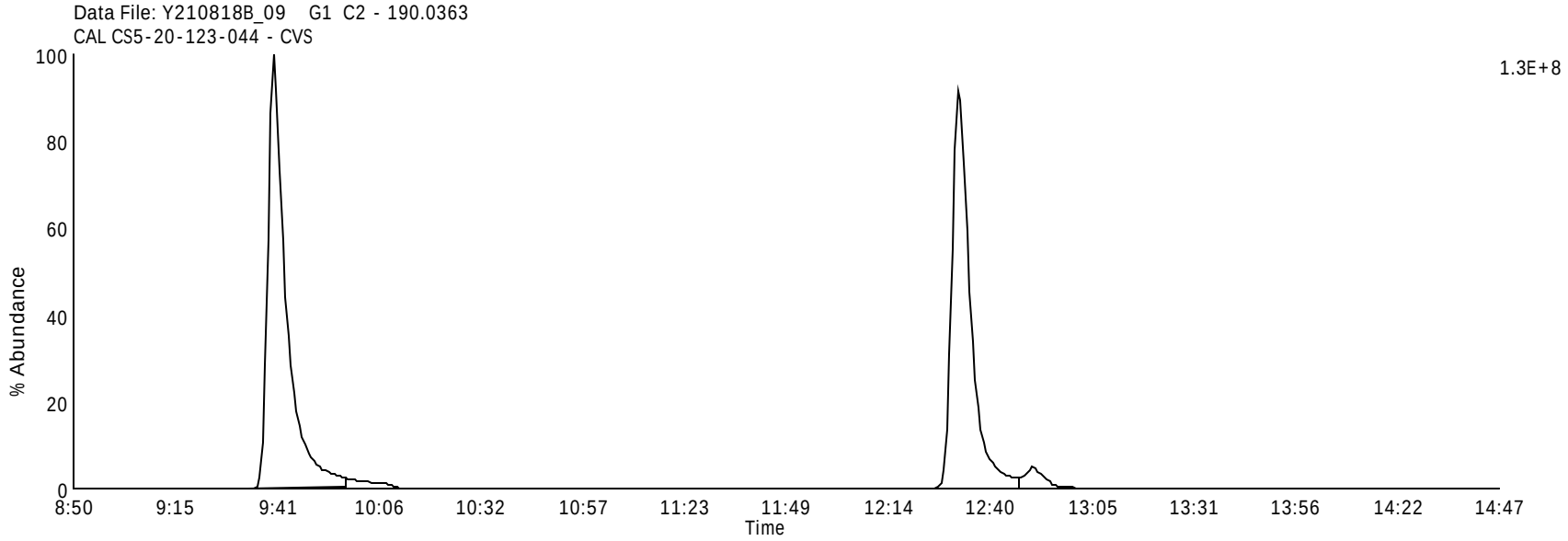




Mono Chlorinated Biphenyls

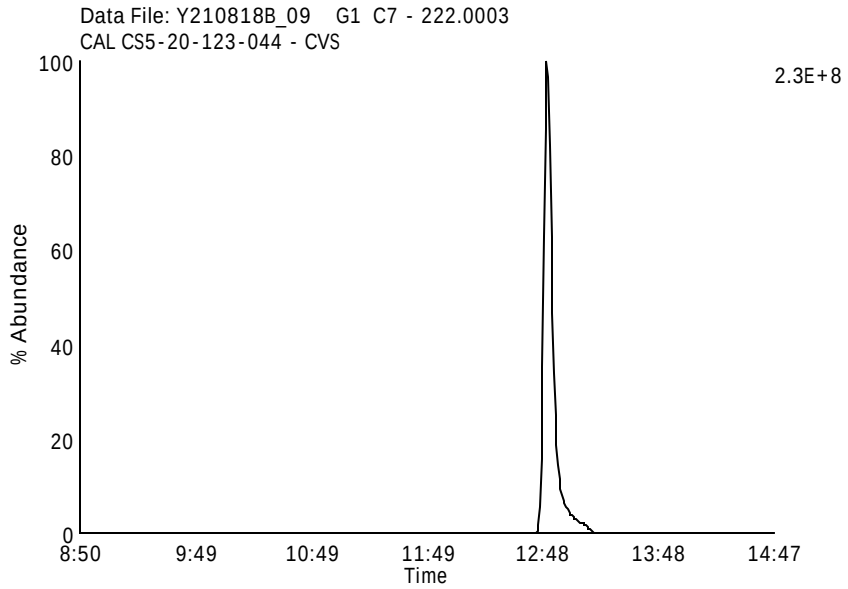
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

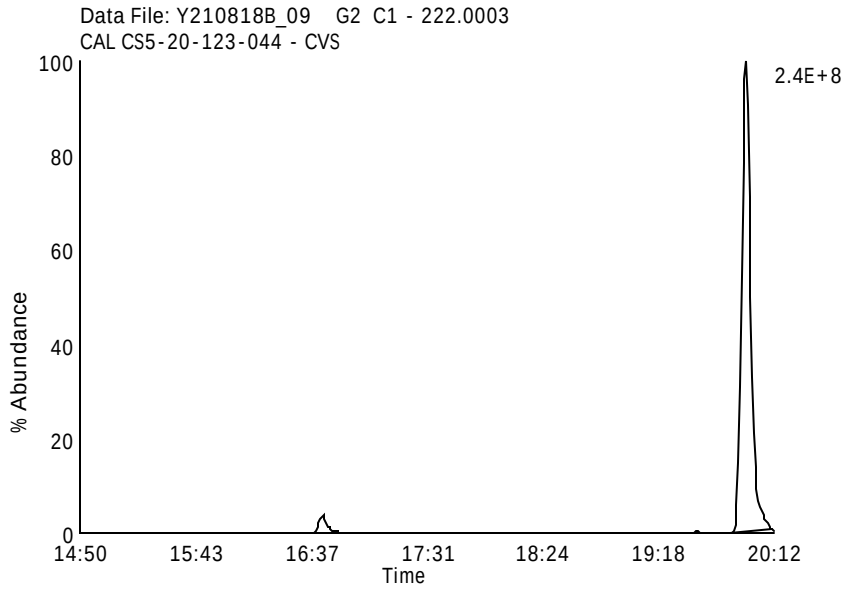


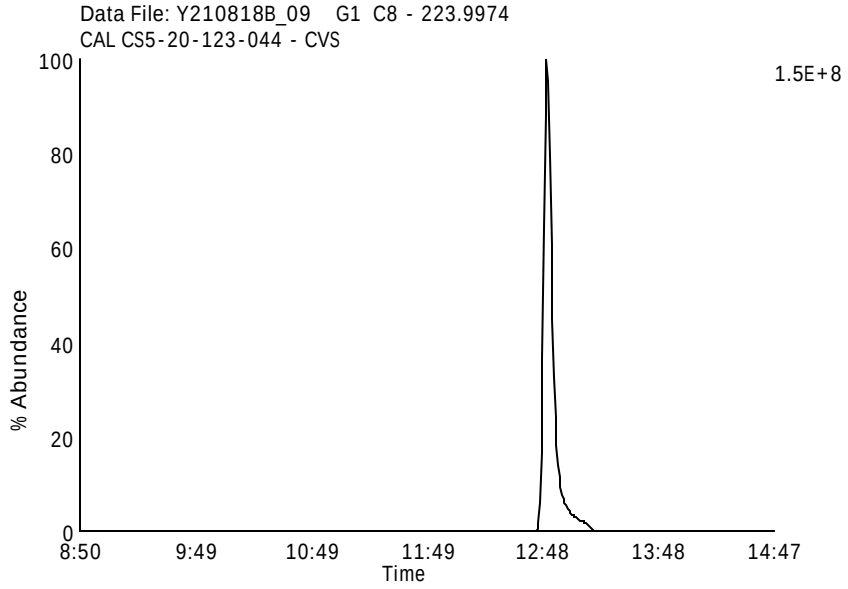


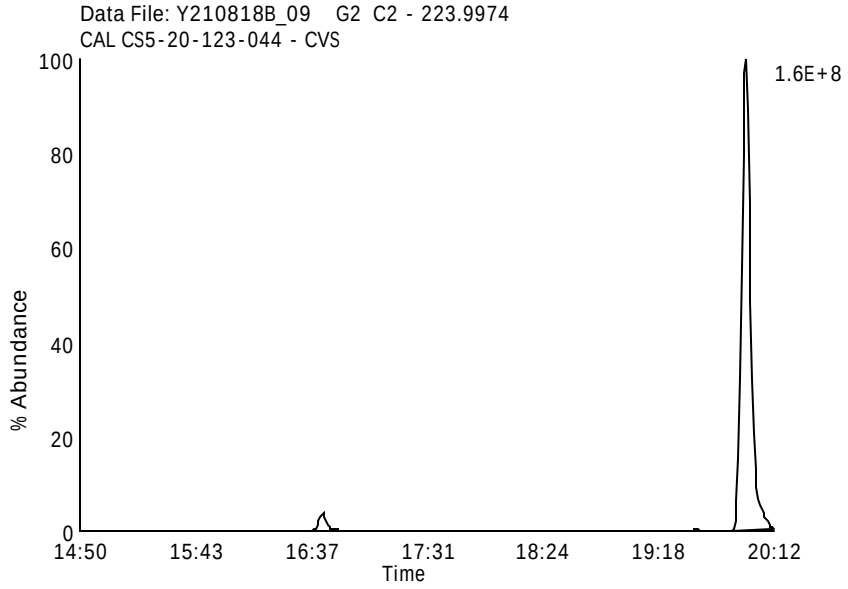
Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



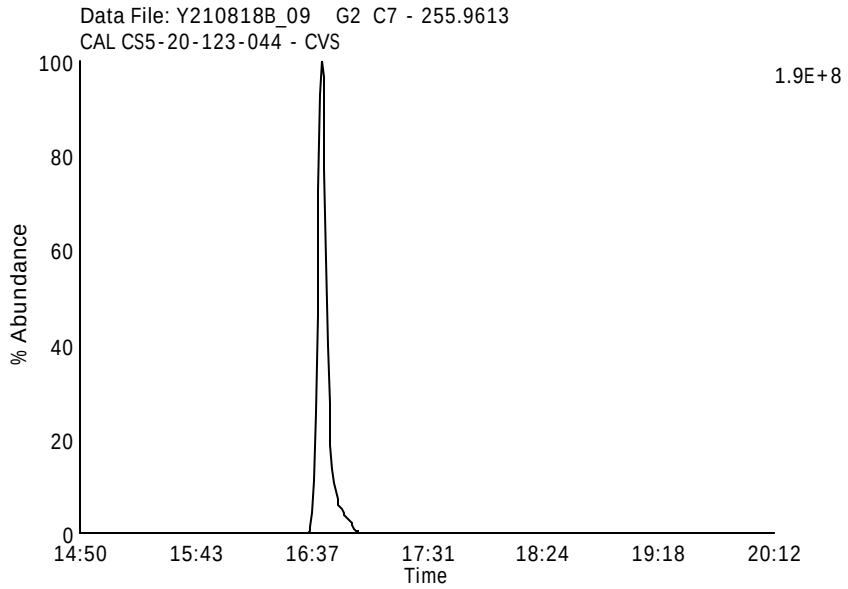


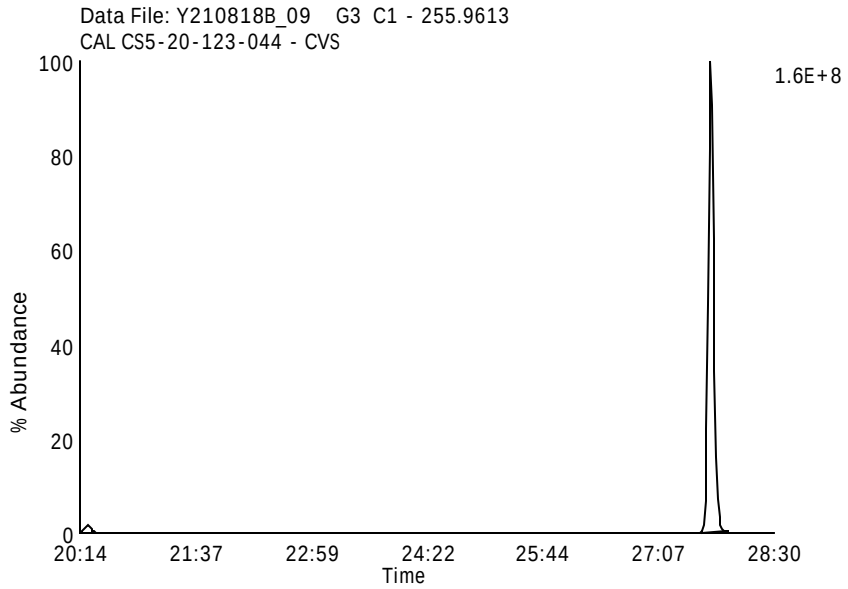


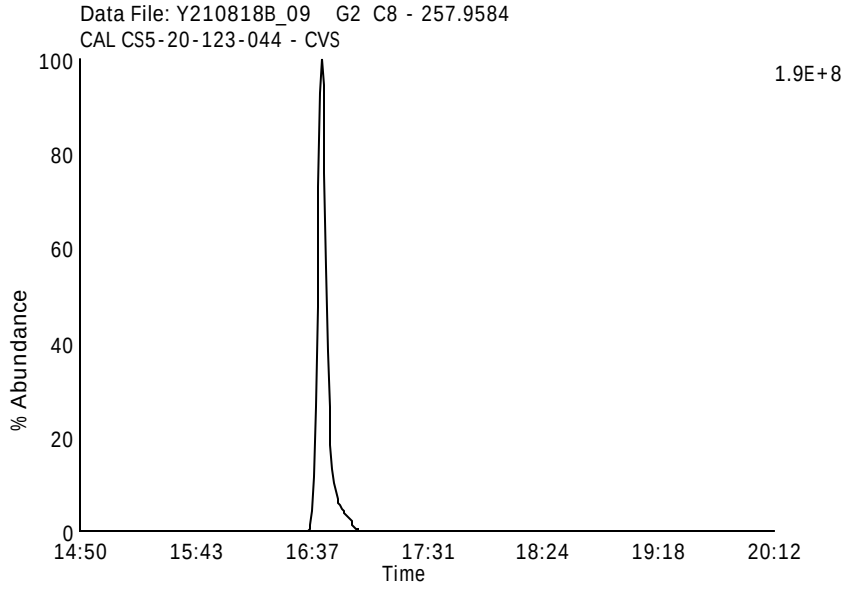


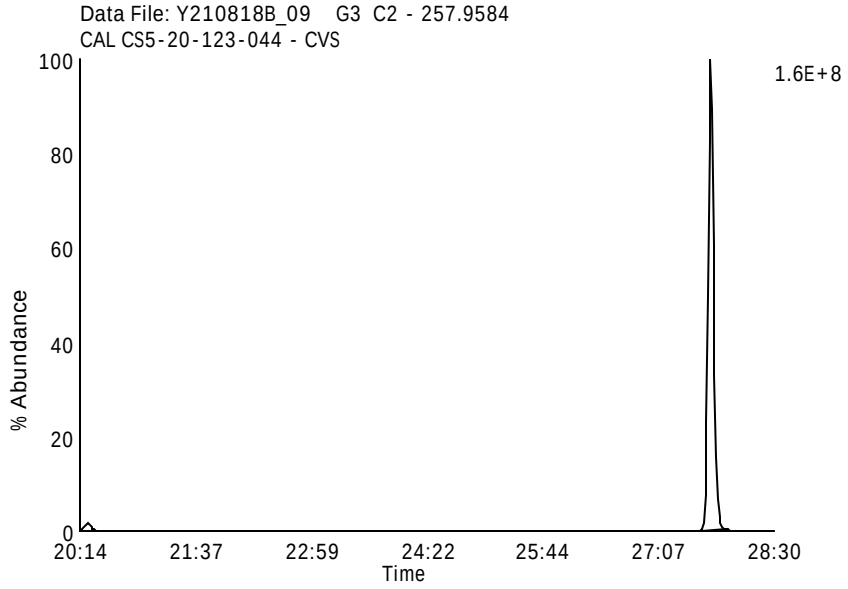
Tri Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



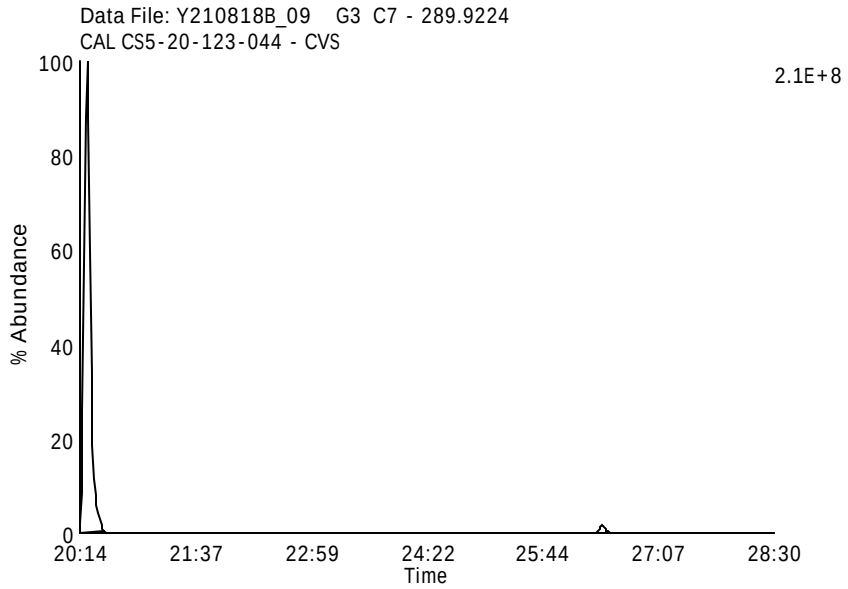


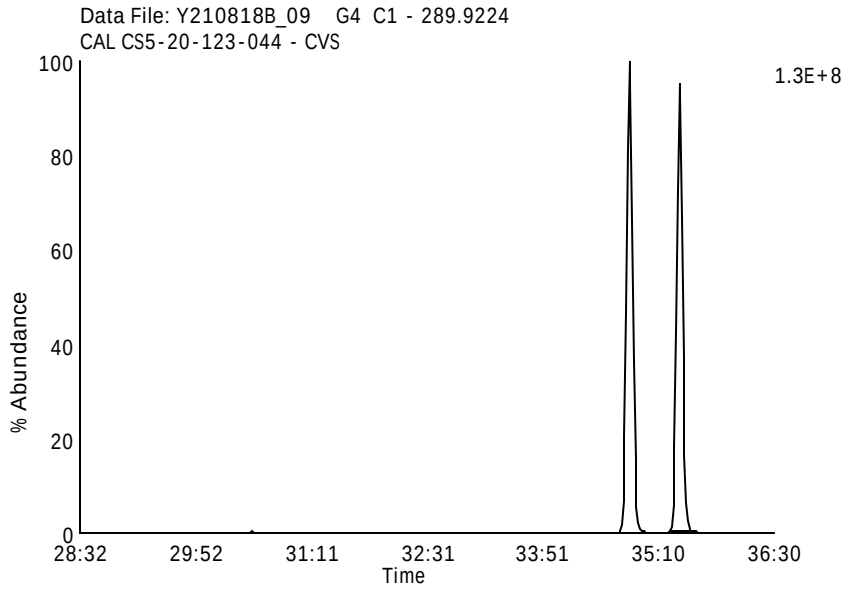


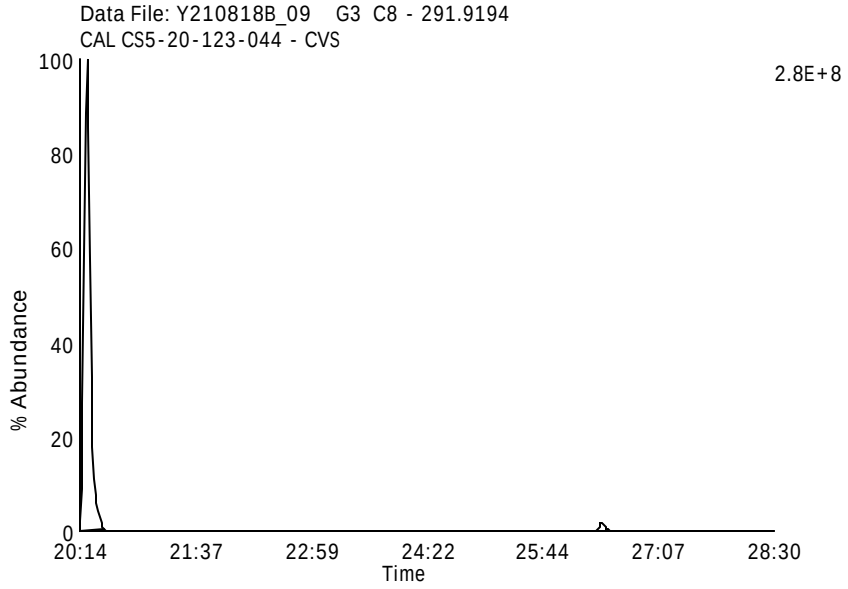


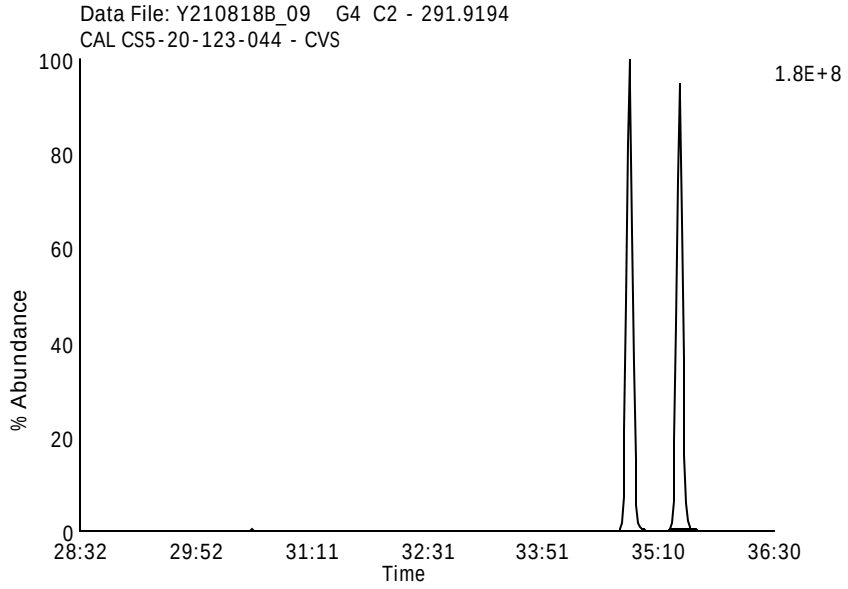
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



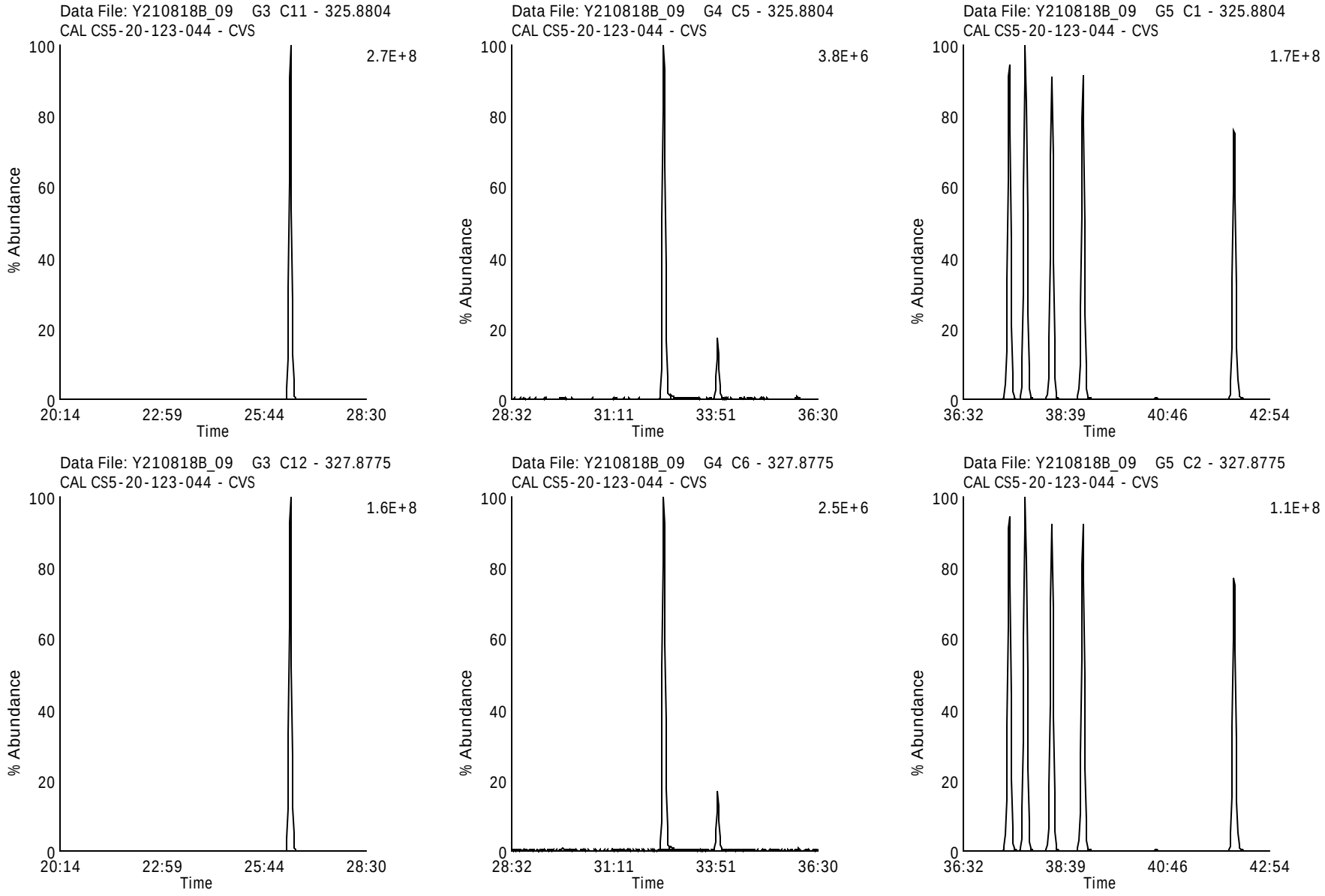






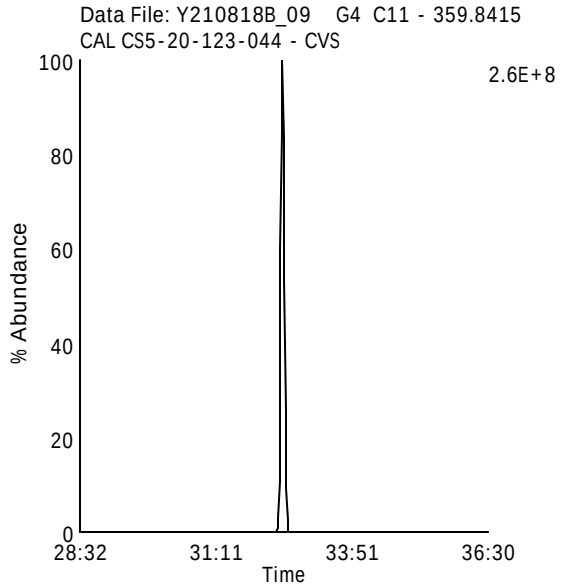
Penta Chlorinated Biphenyls

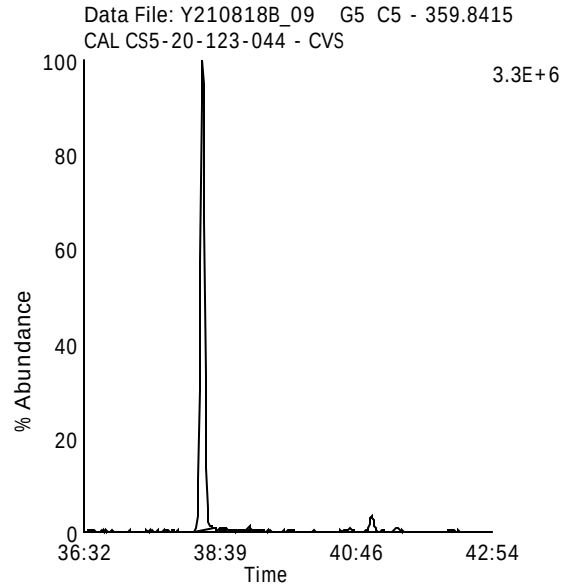
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

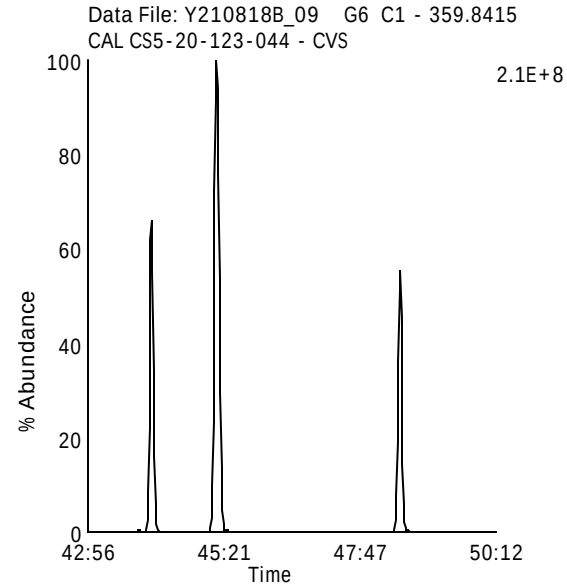


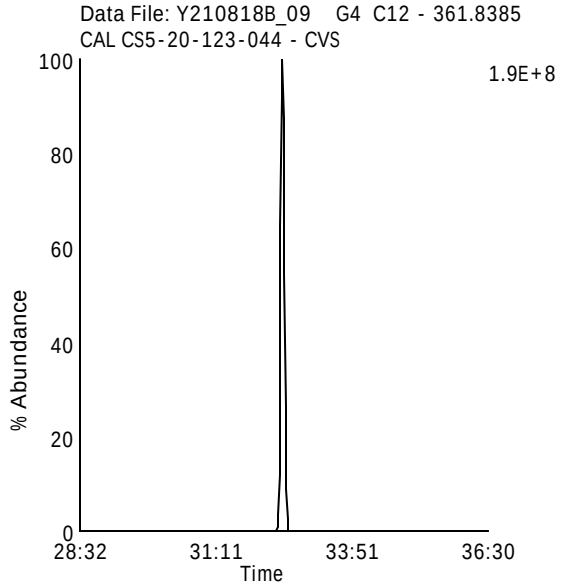
Hexa Chlorinated Biphenyls

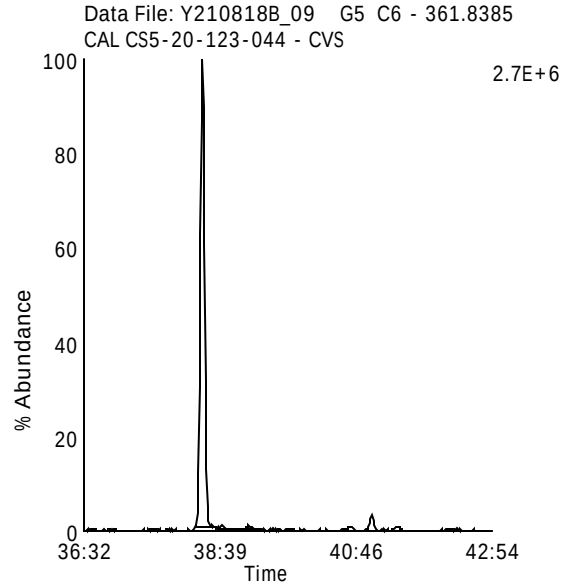
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

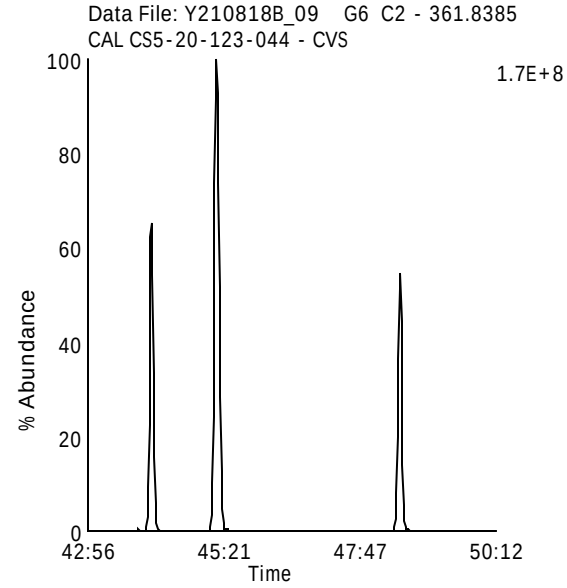






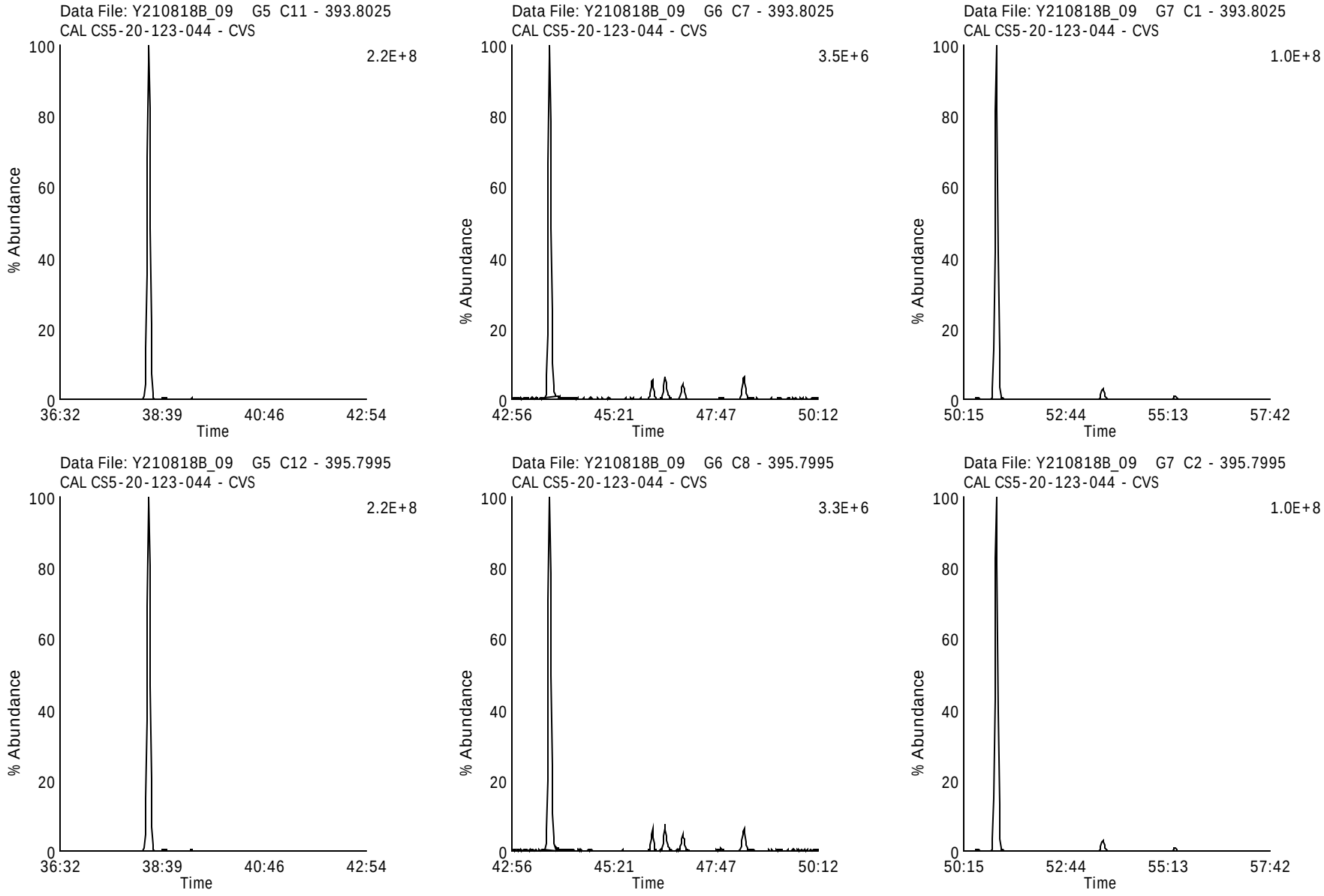






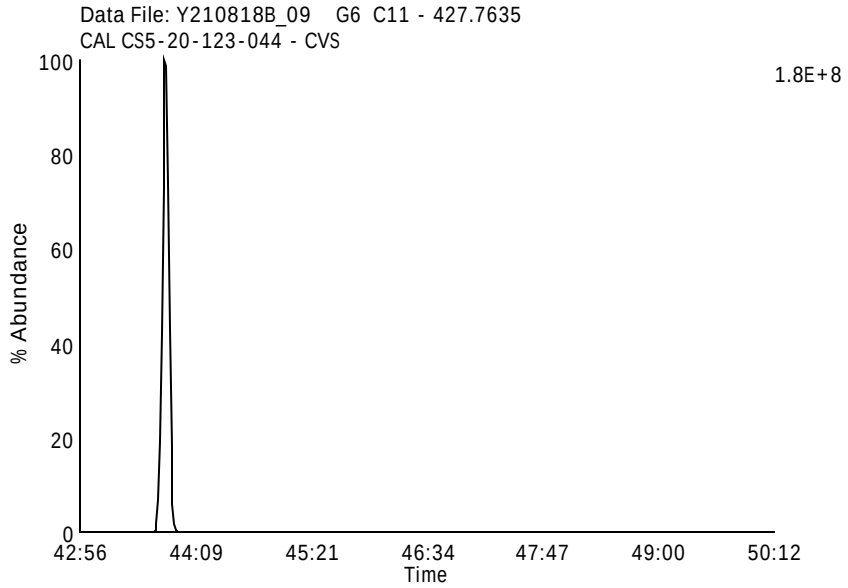
Hepta Chlorinated Biphenyls

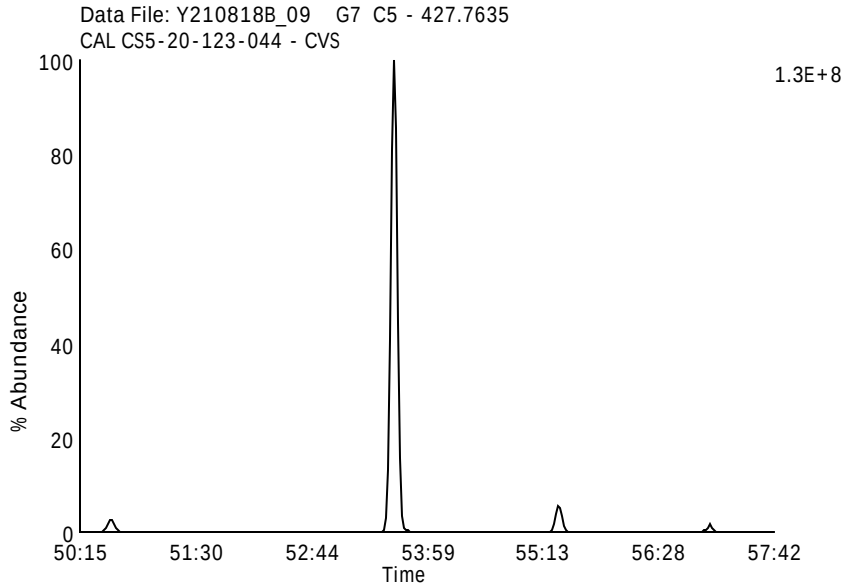
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

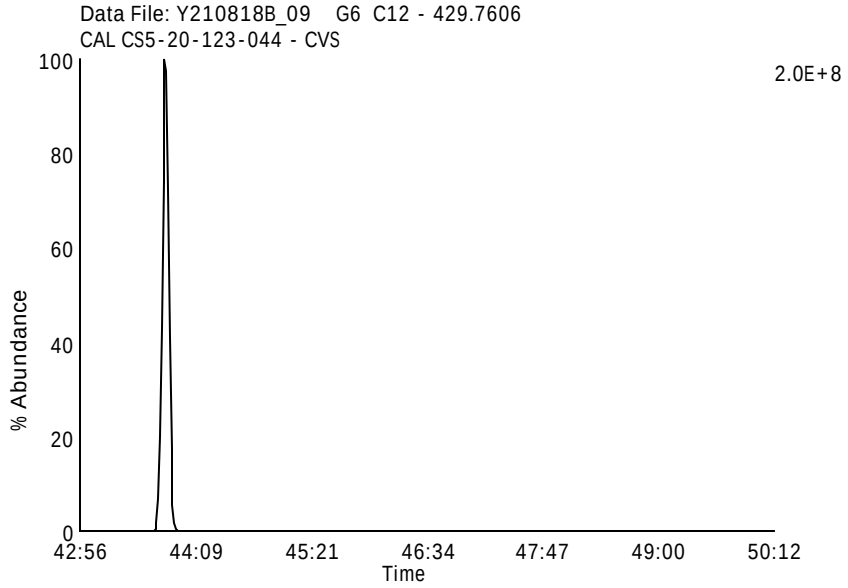


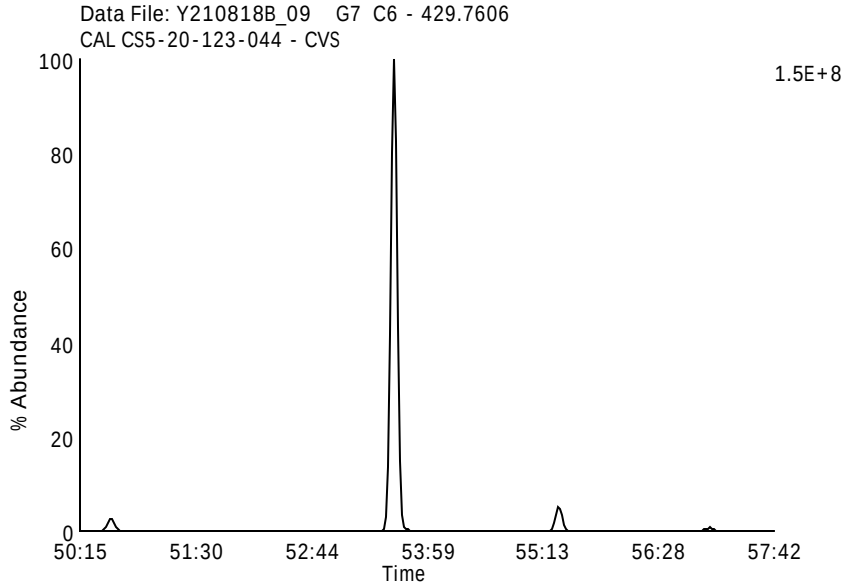
Octa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS







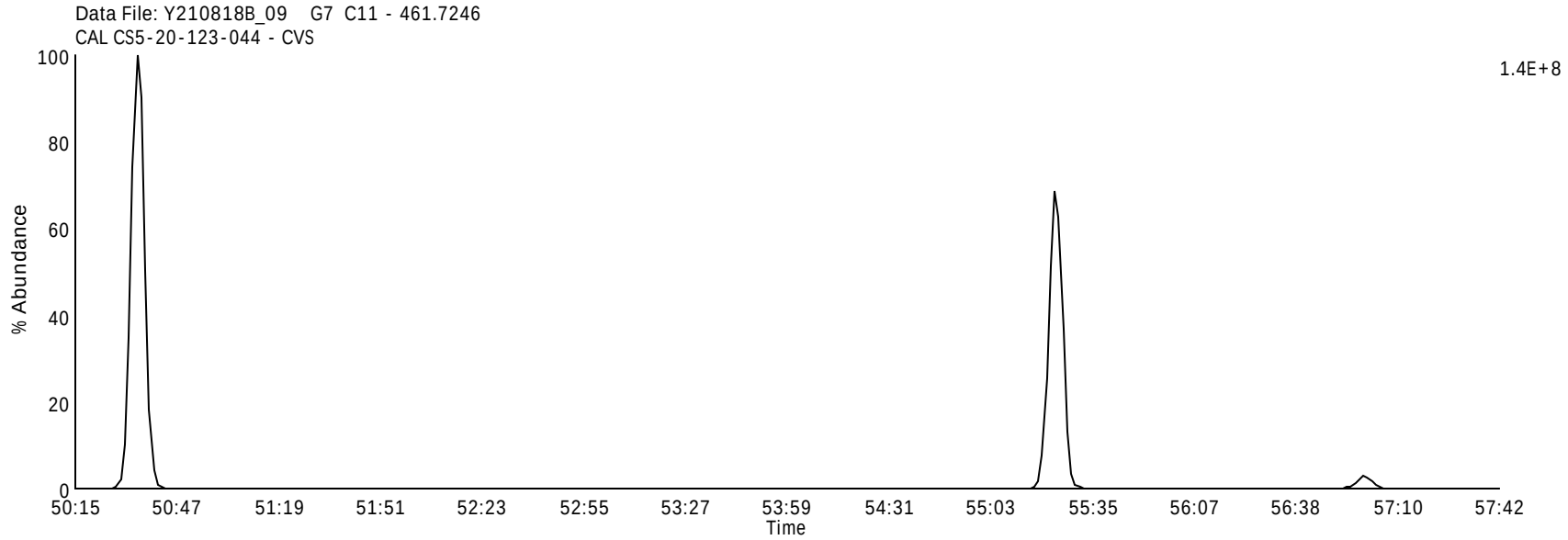


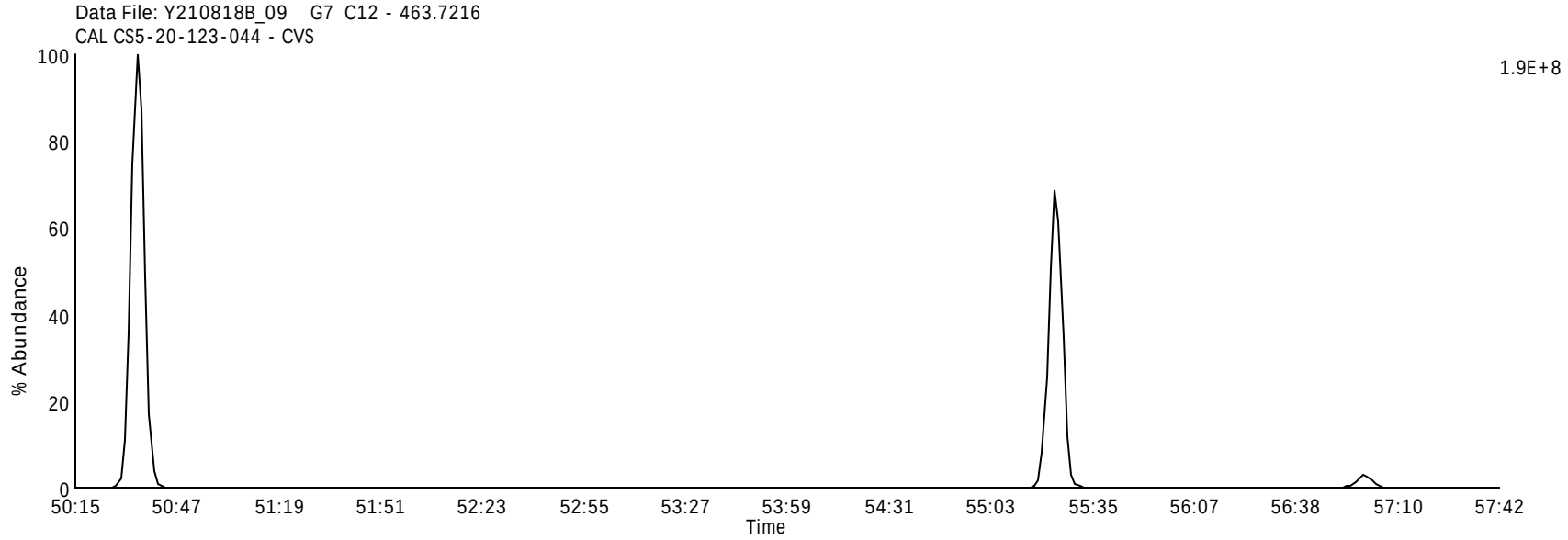
Nona Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



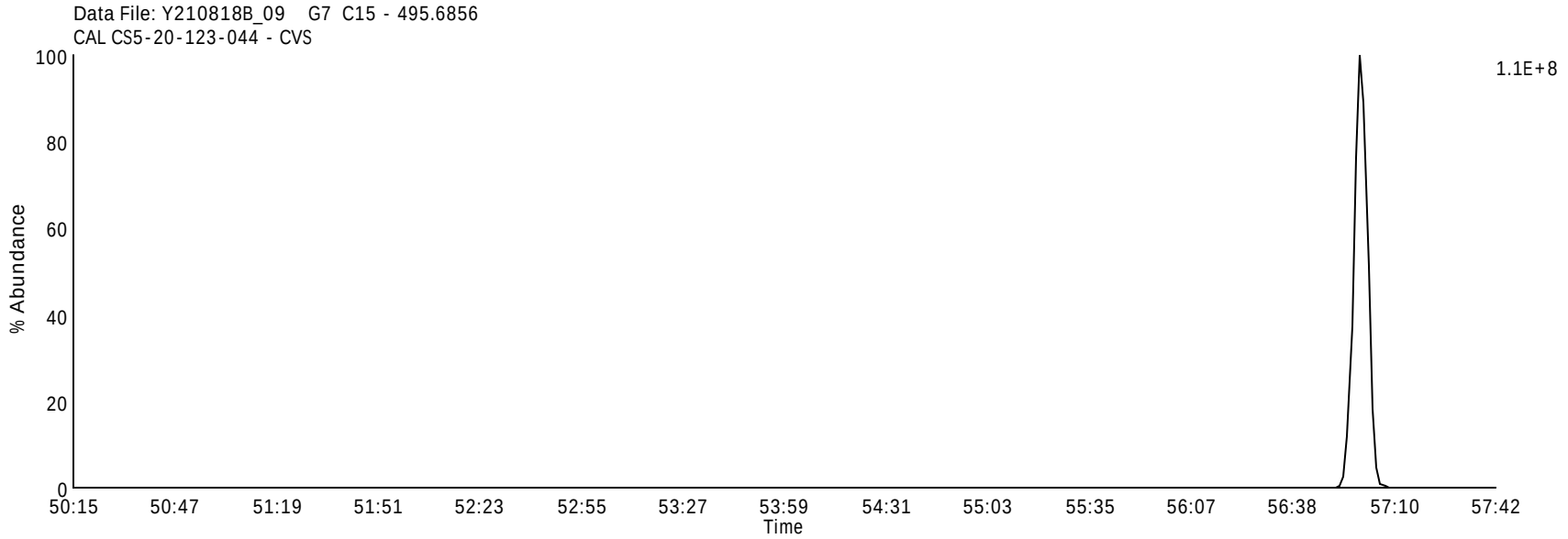


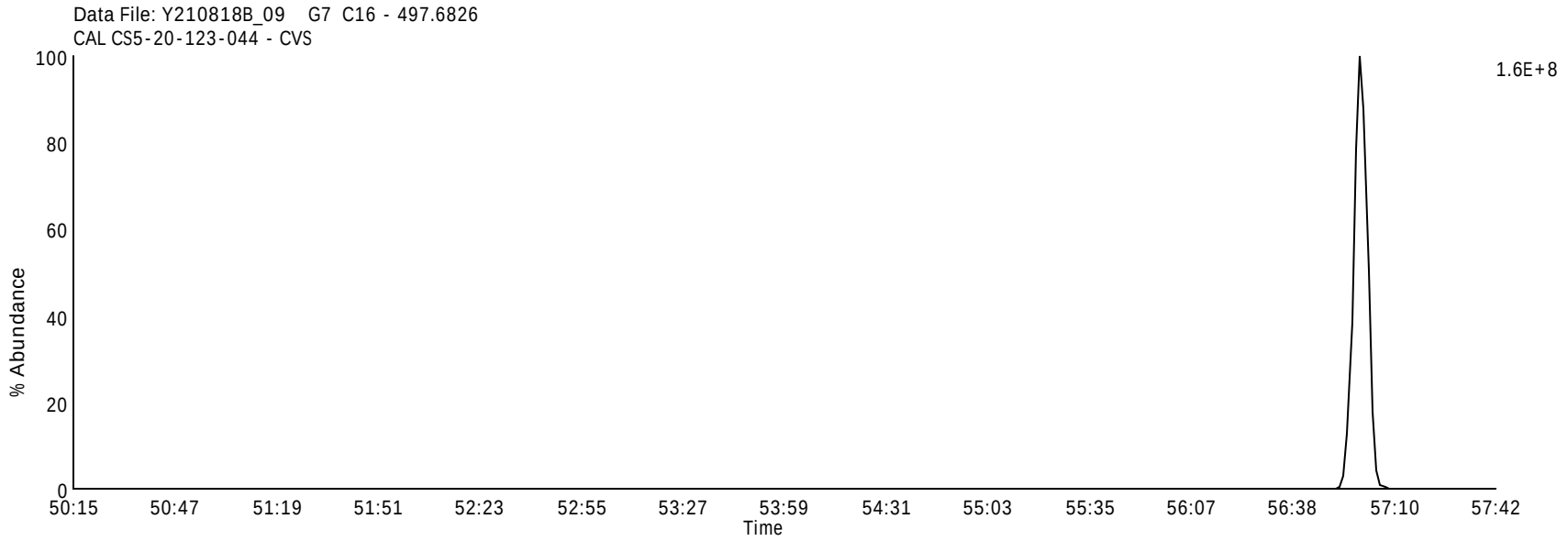
Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

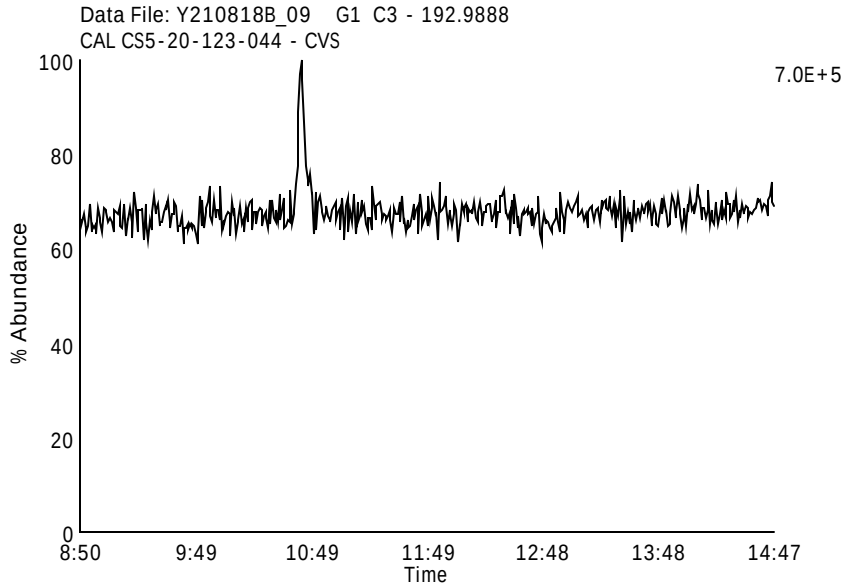


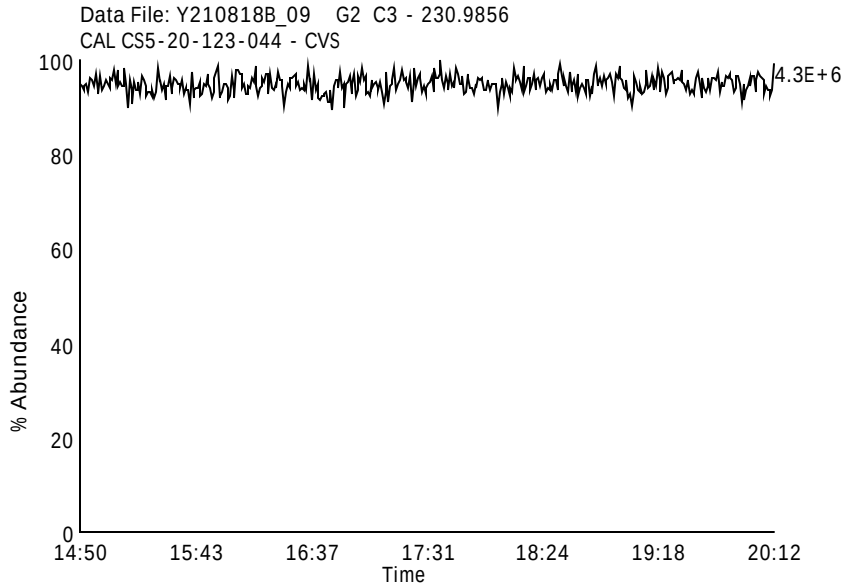


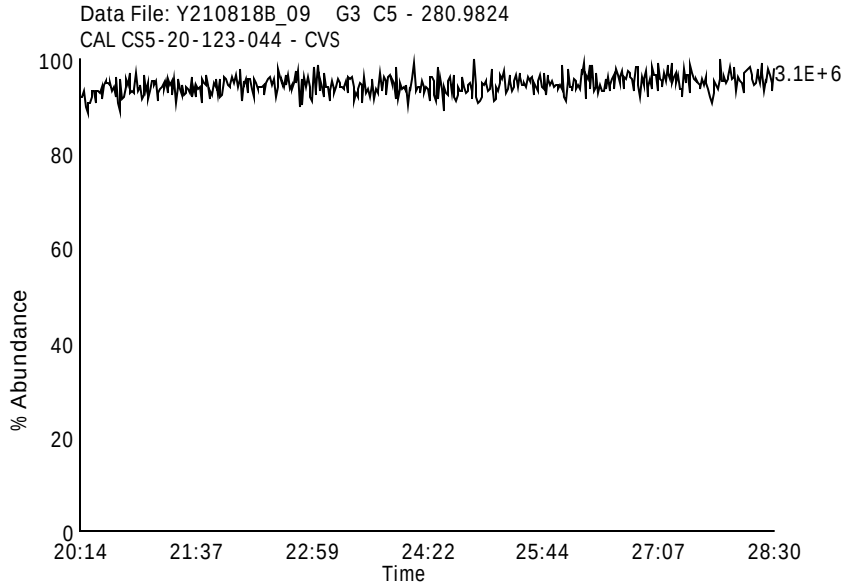
Group 1 - 4 Lock mass

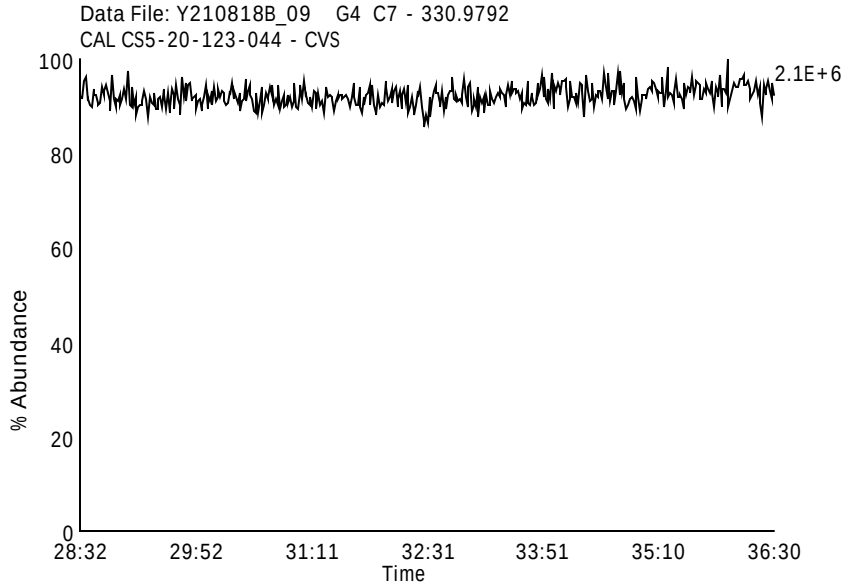
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)





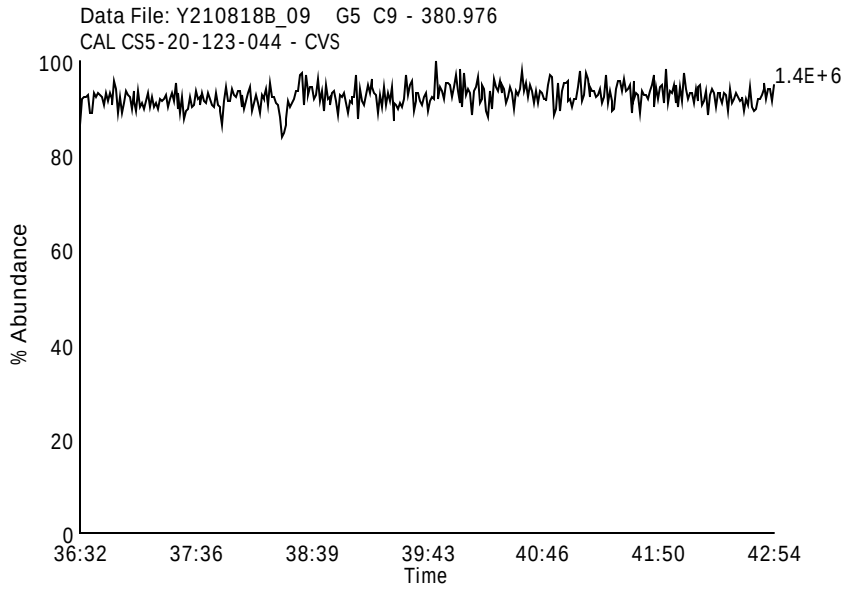


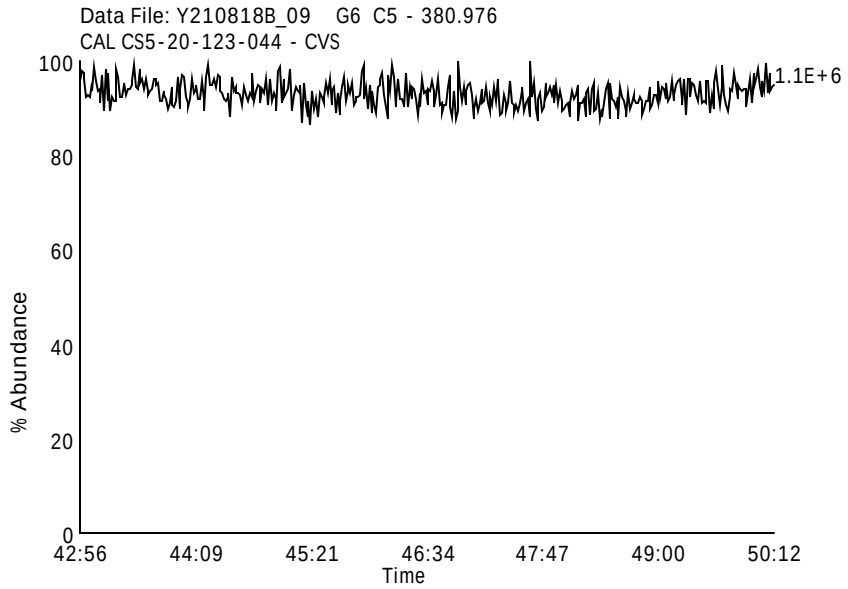


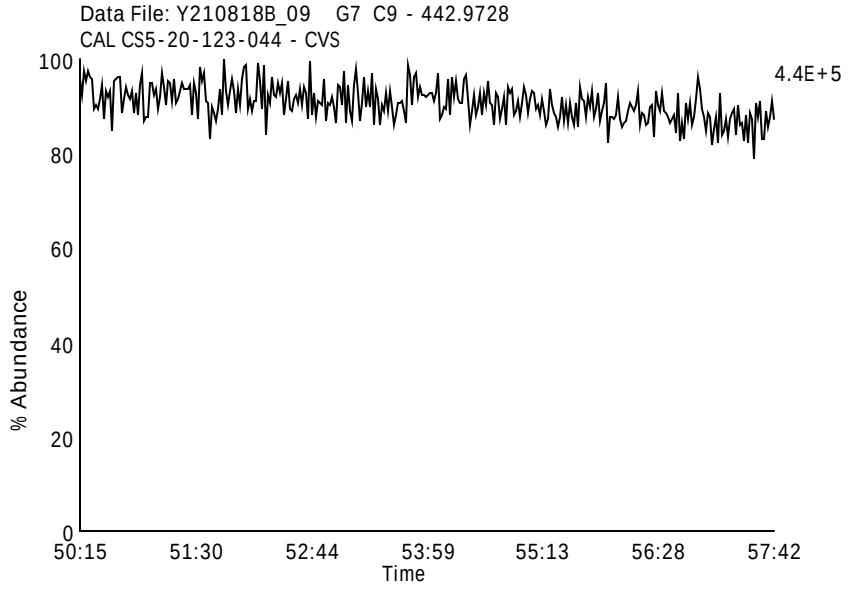
Group 5 - 7 Lock mass

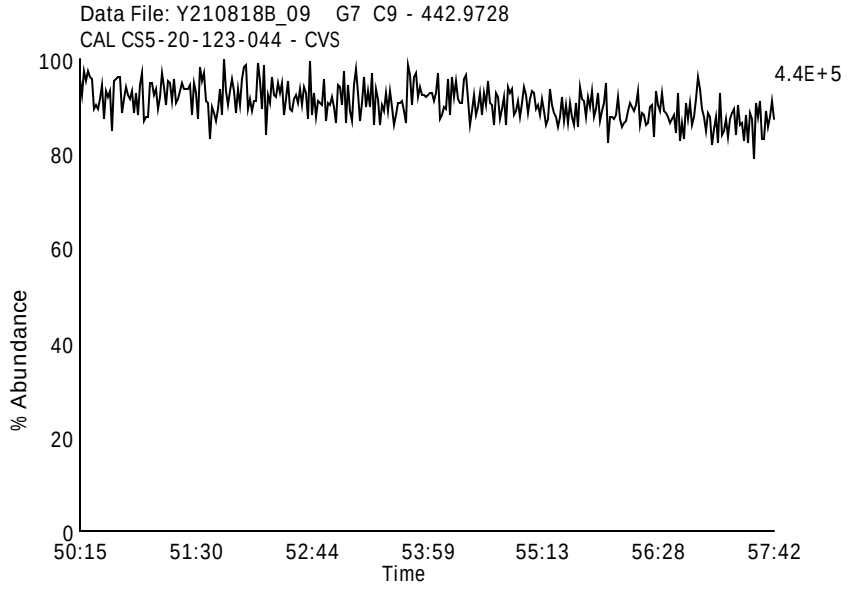
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)



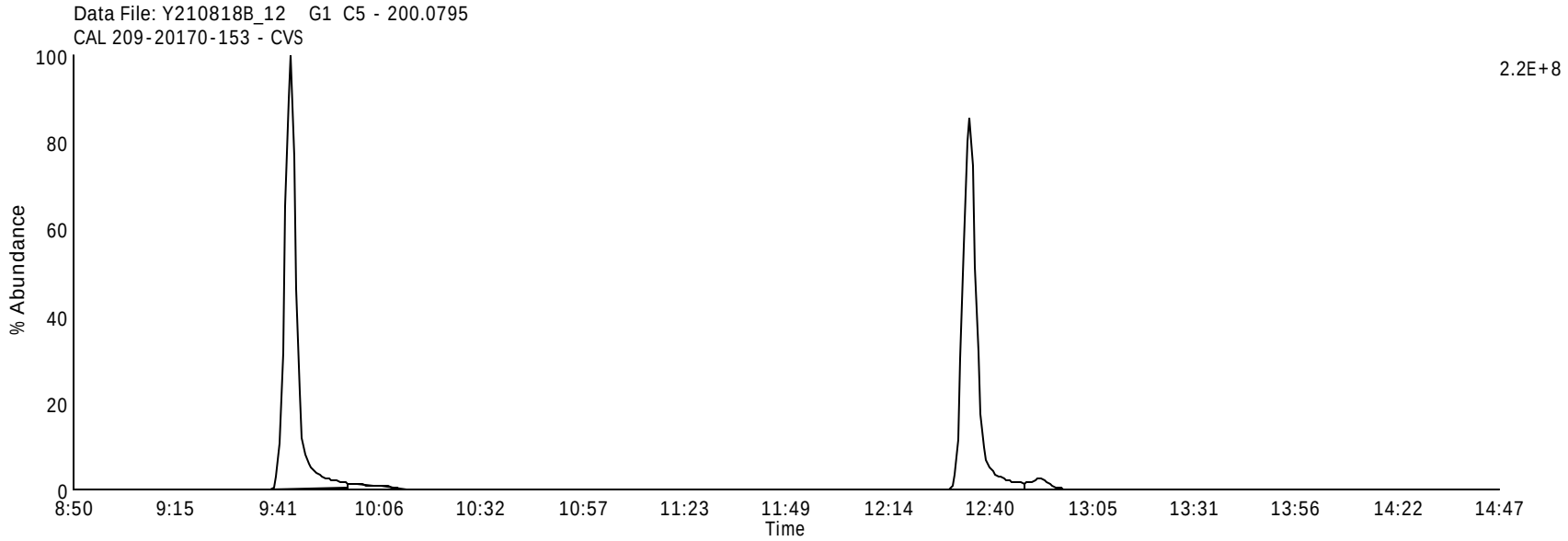


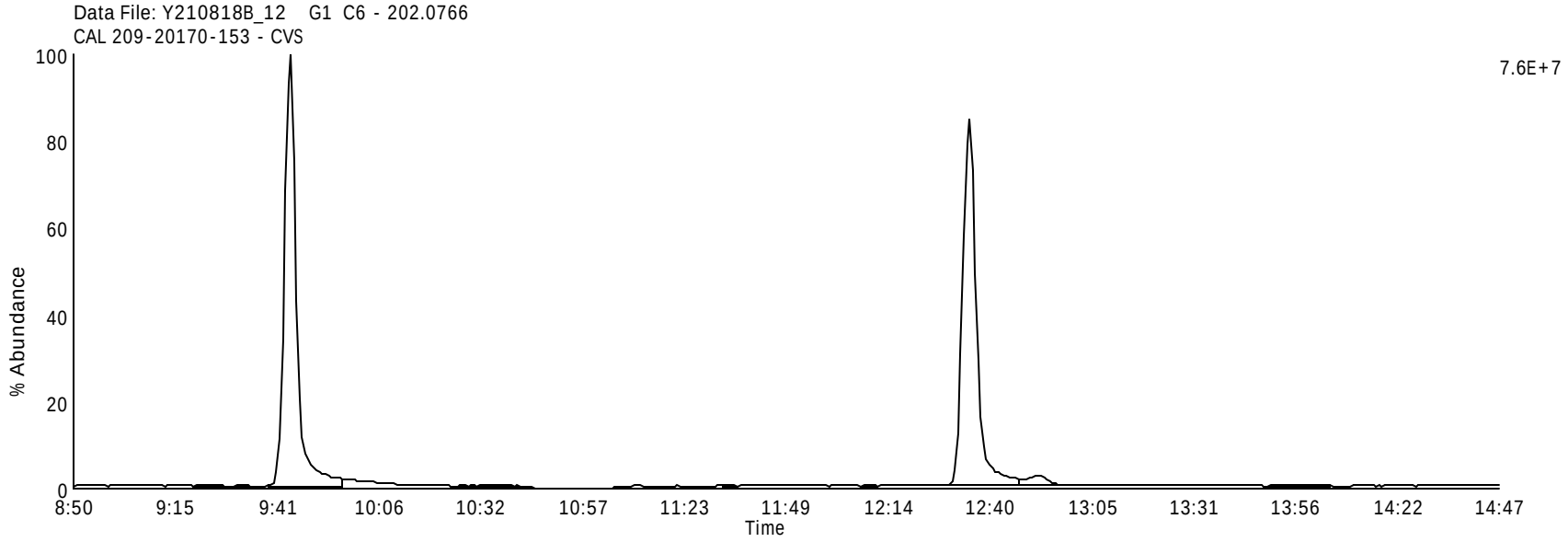




Labeled Mono Chlorinated Biphenyls

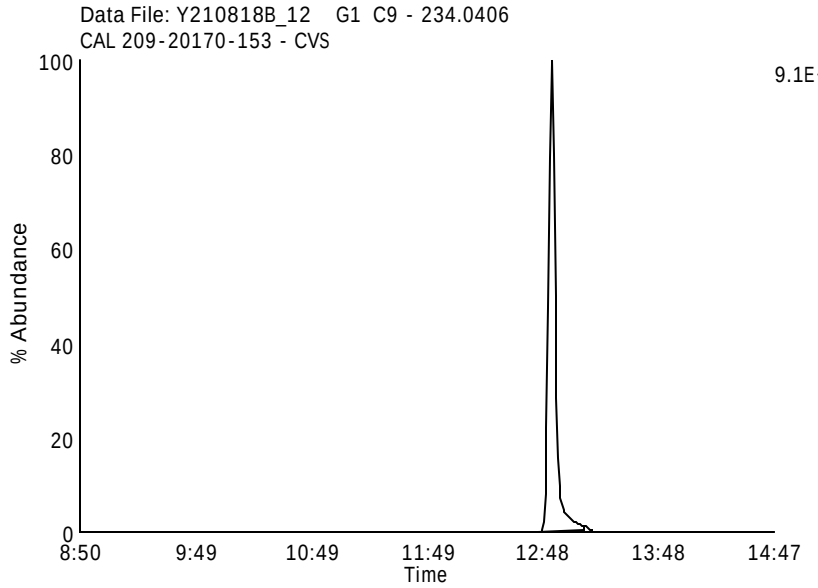
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

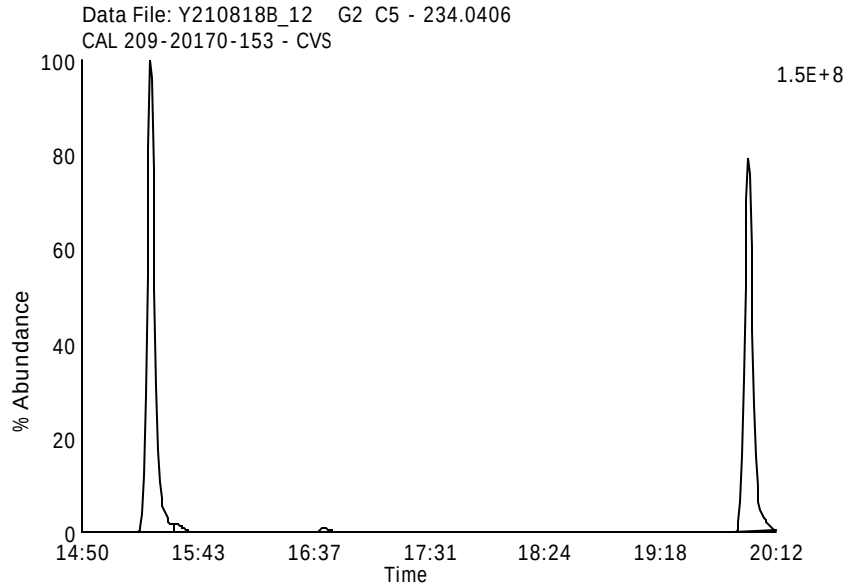


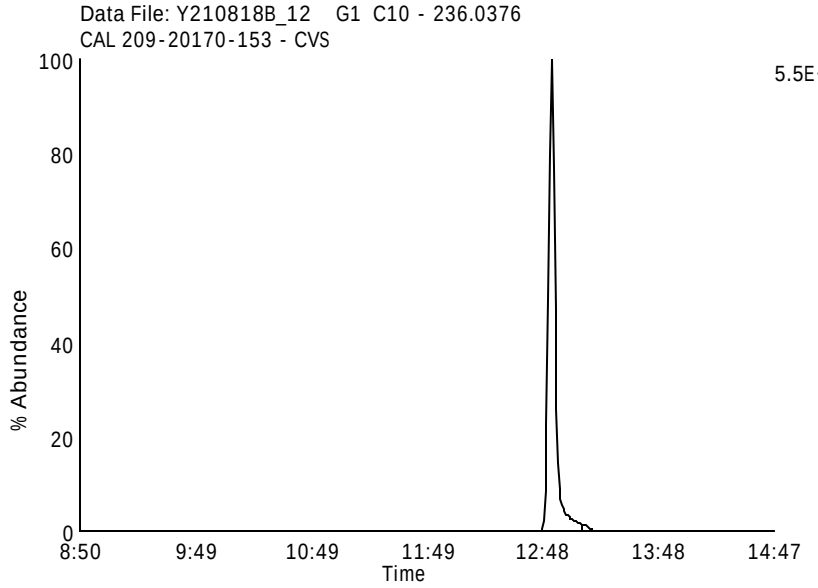


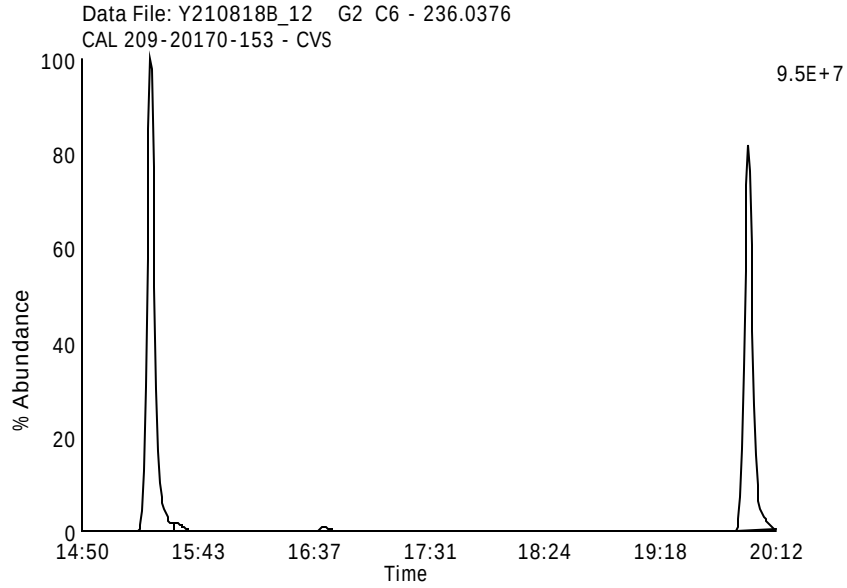
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



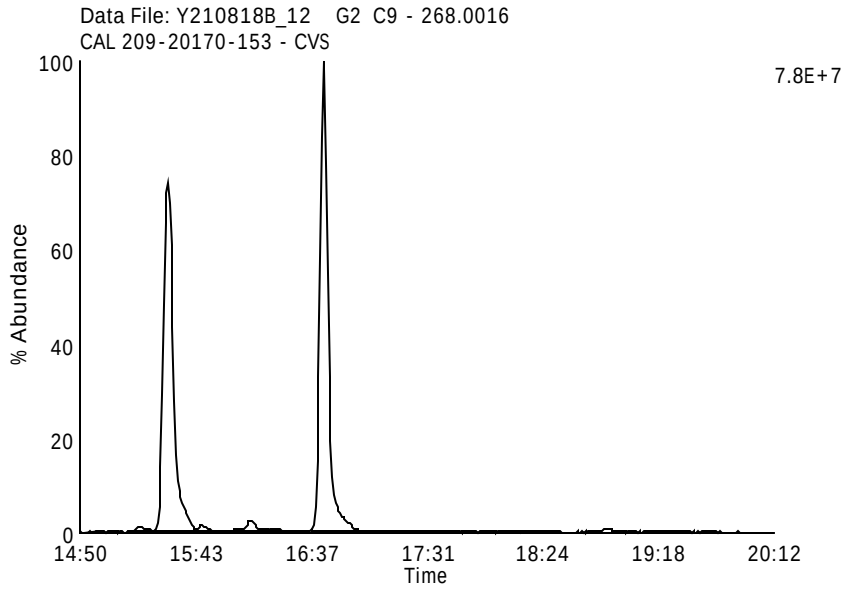


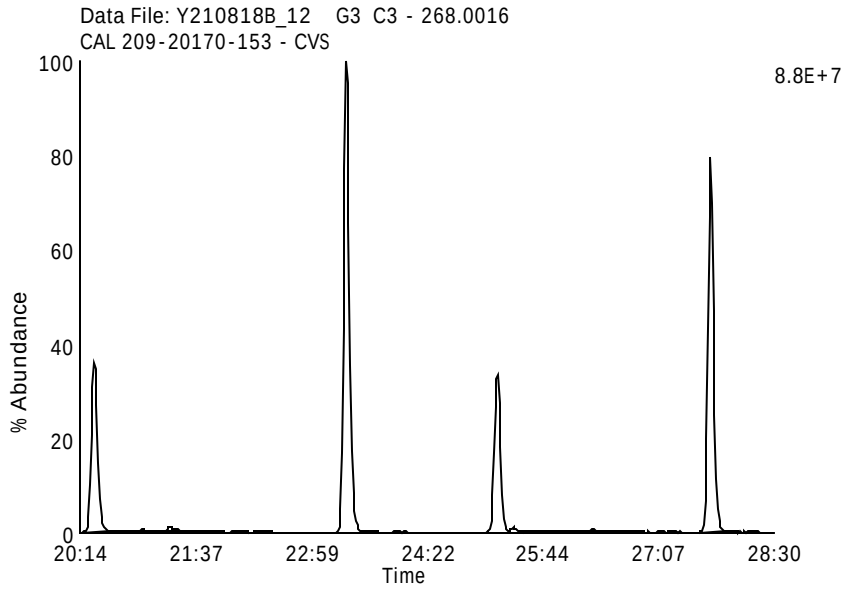


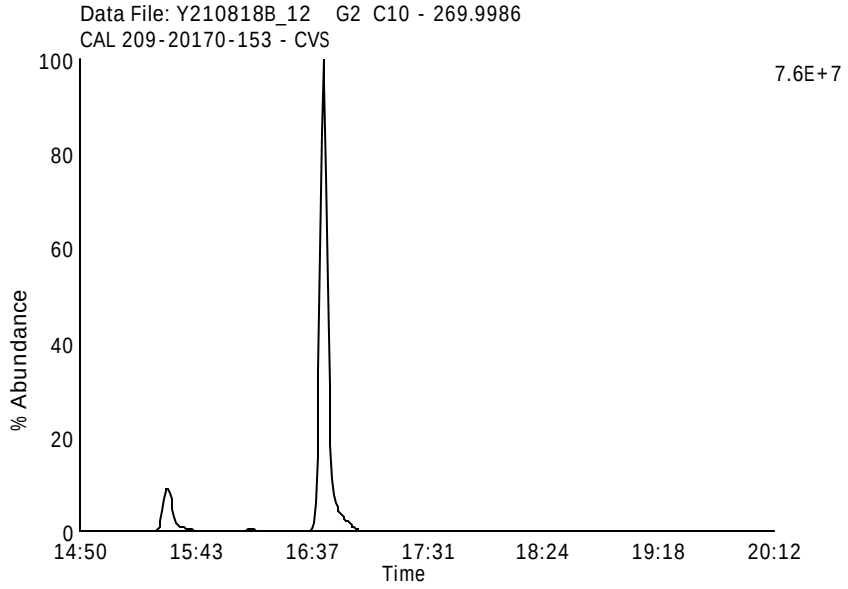


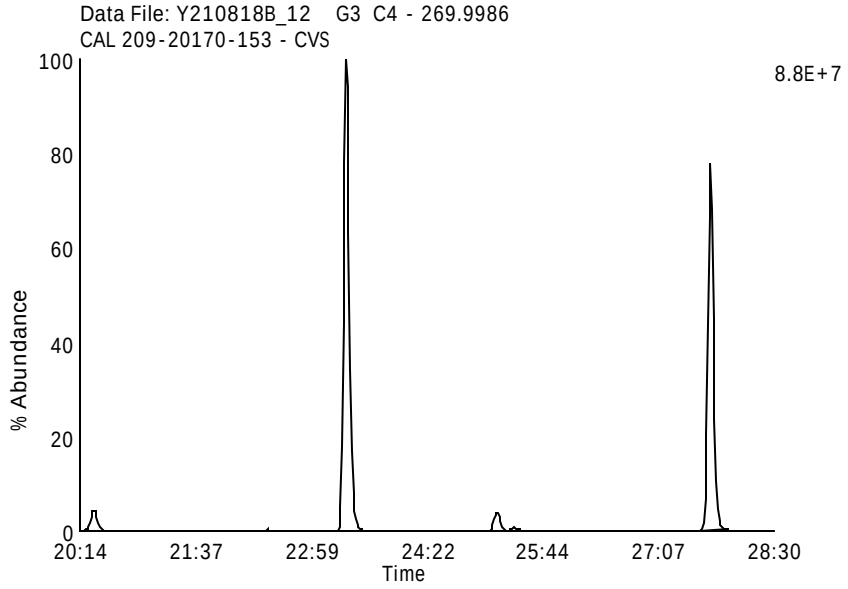
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



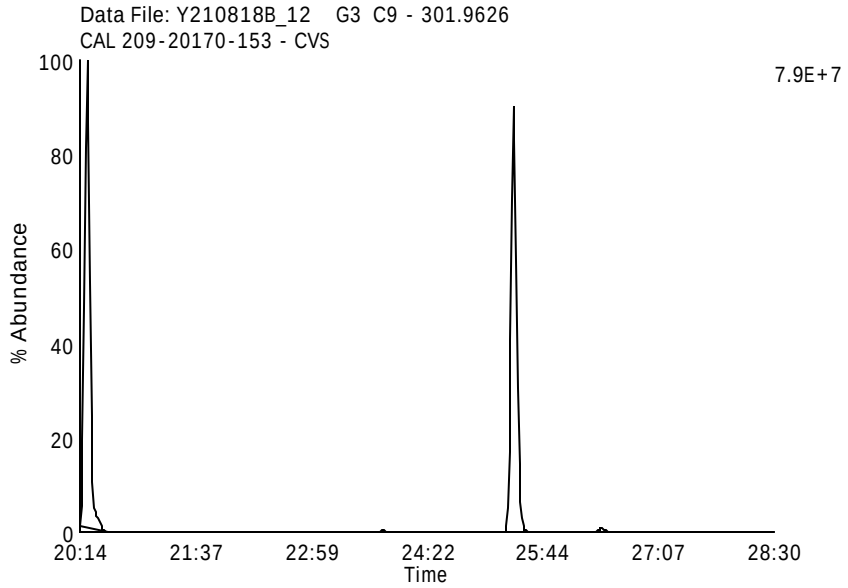


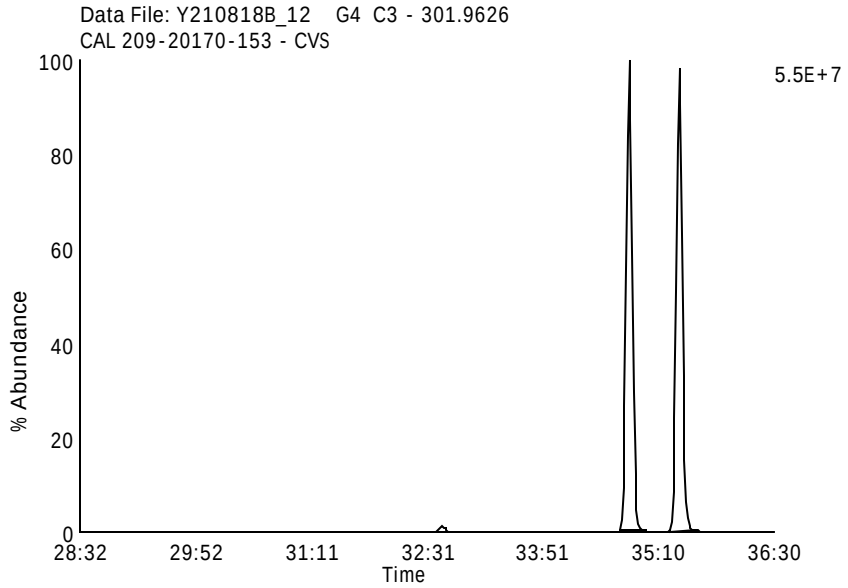


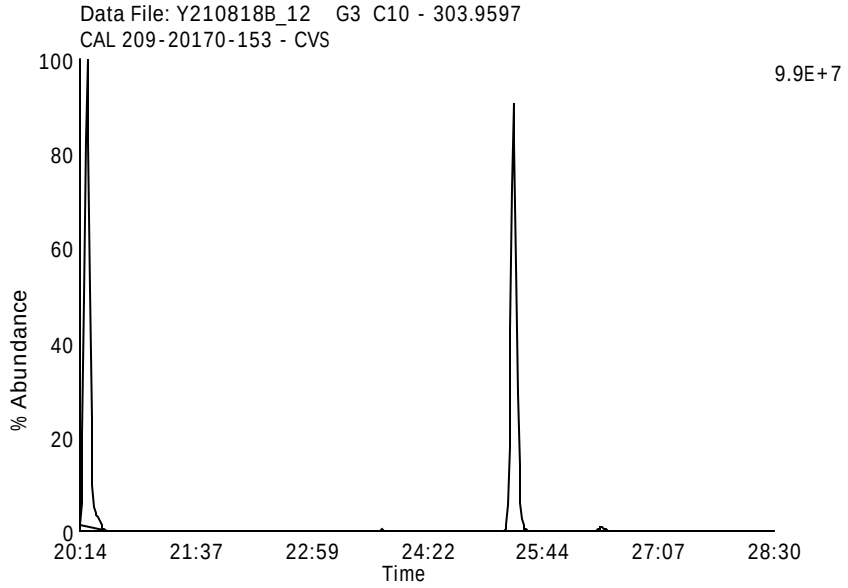


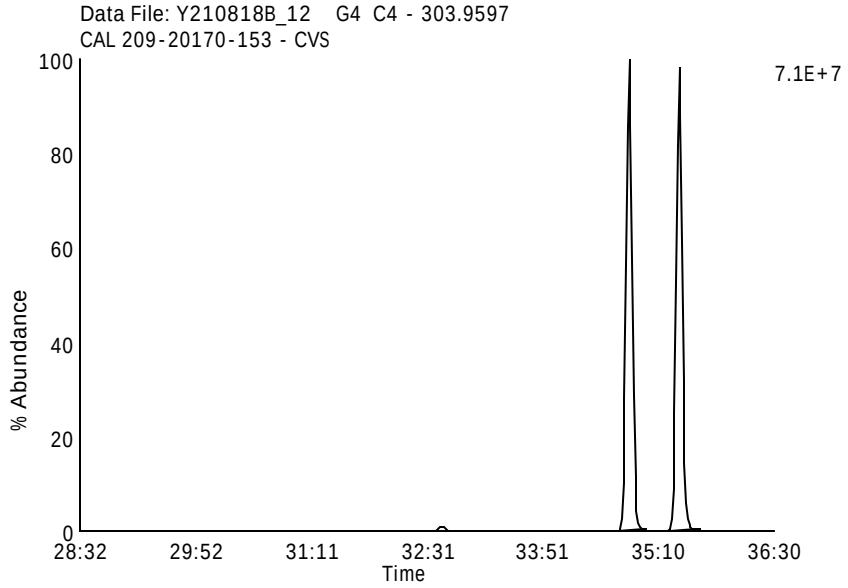
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



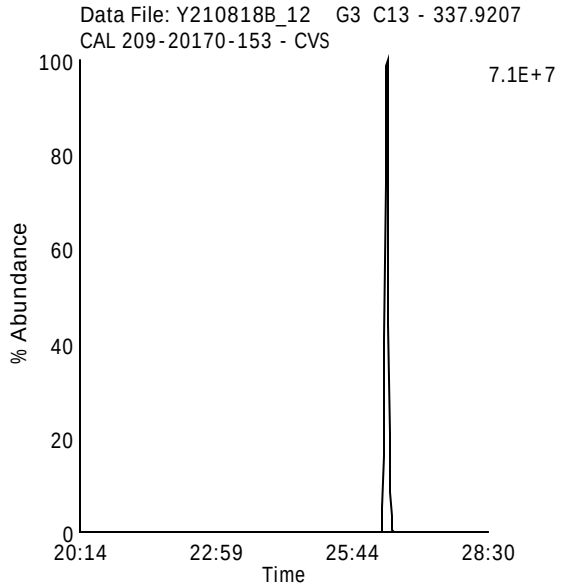


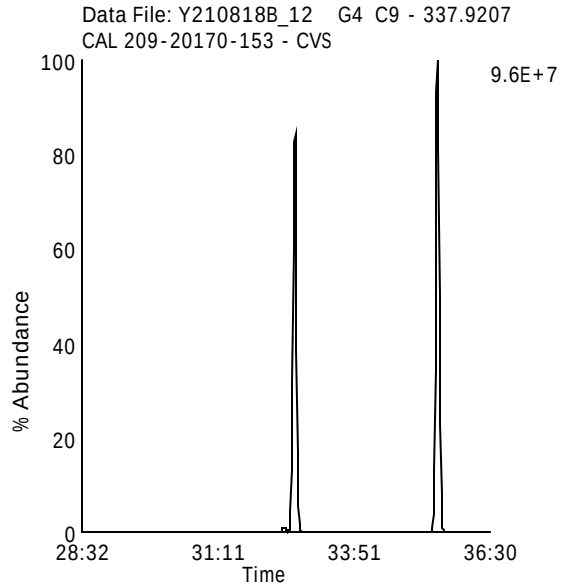


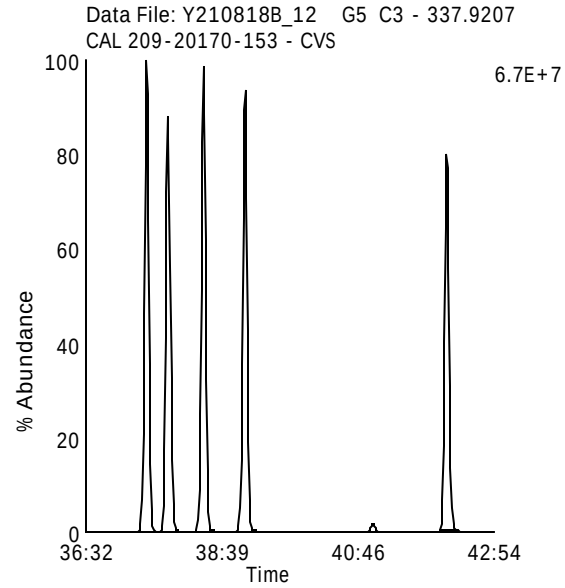


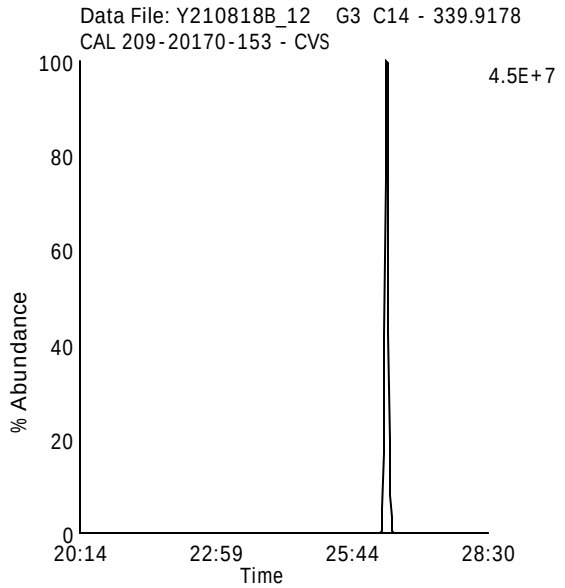
Labeled Penta Chlorinated Biphenyls

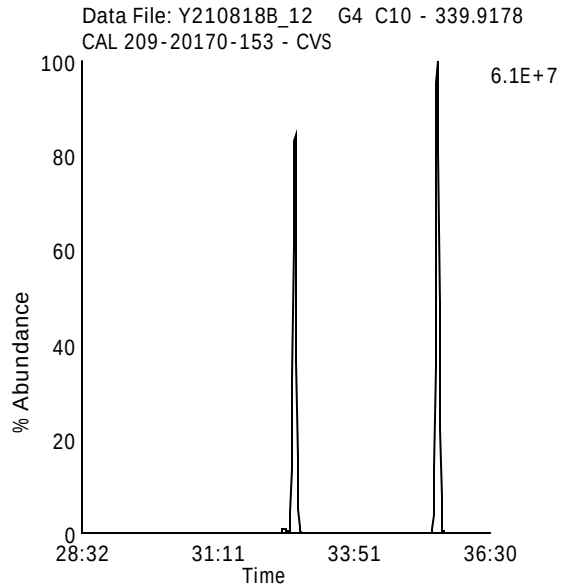
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

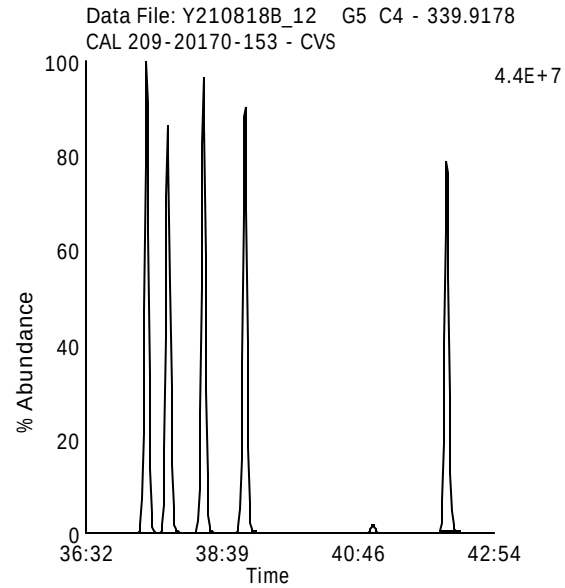






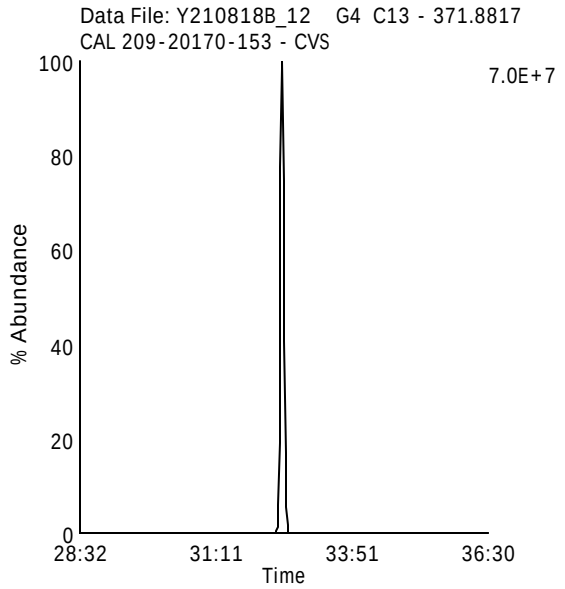


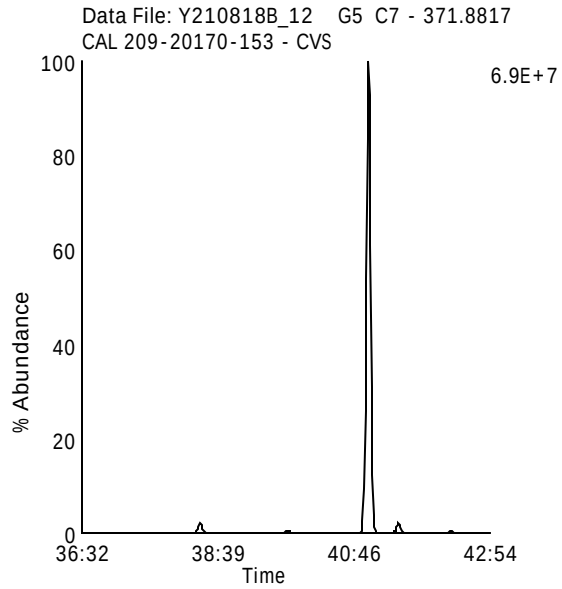


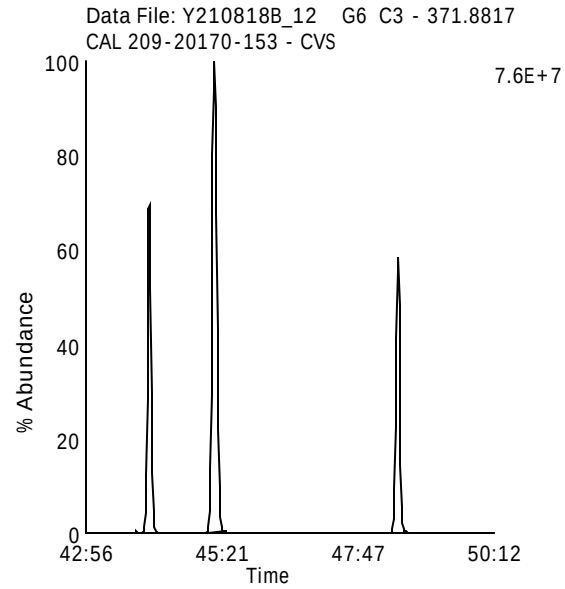


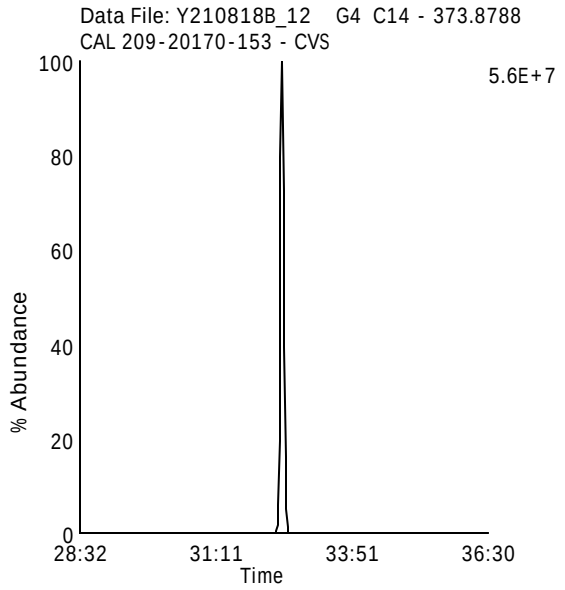
Labeled Hexa Chlorinated Biphenyls

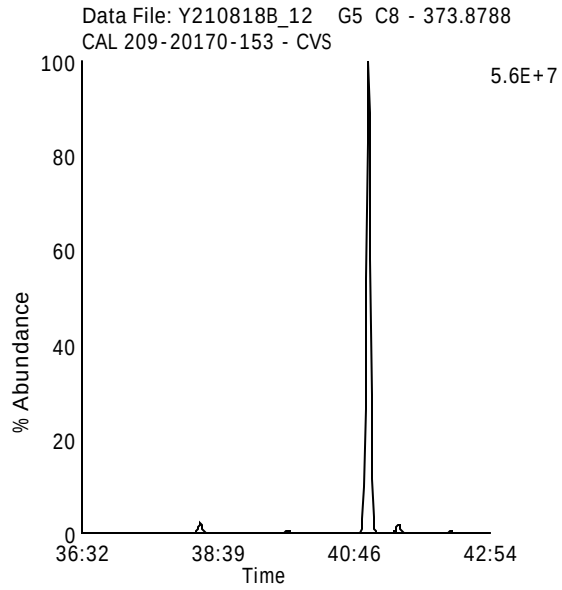
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

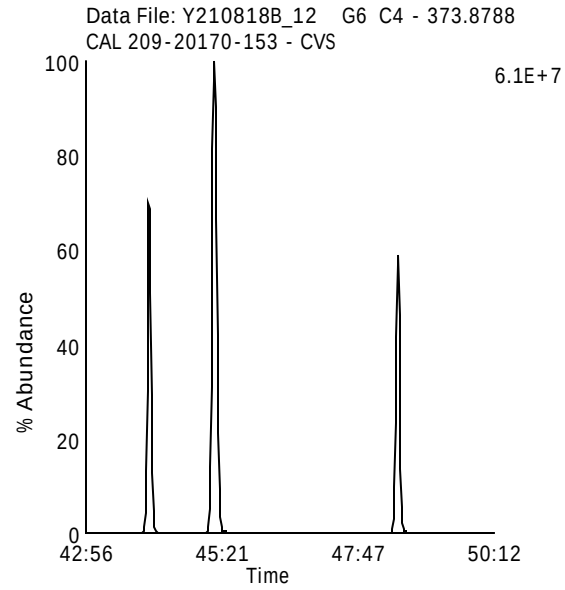






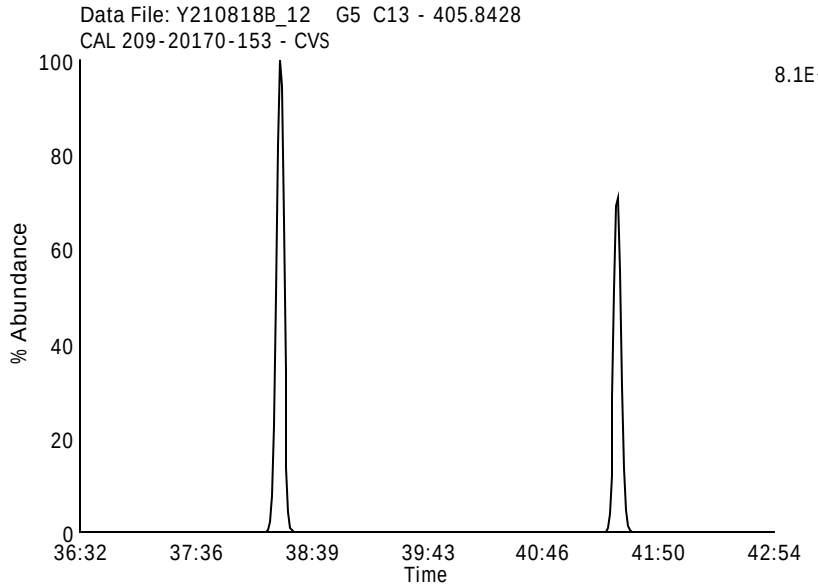


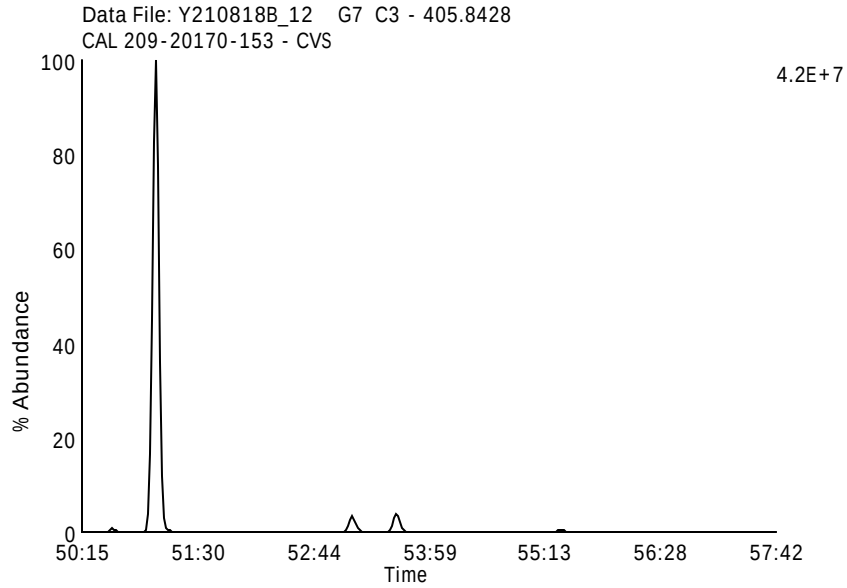


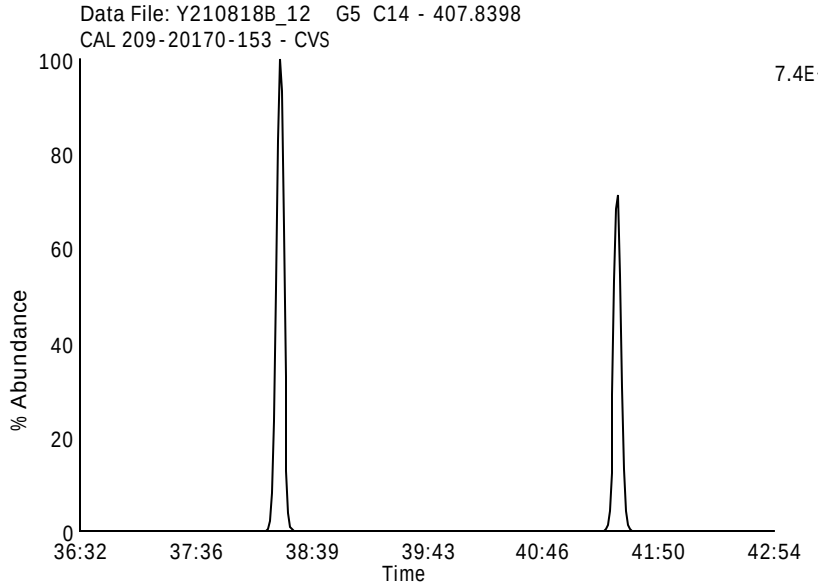


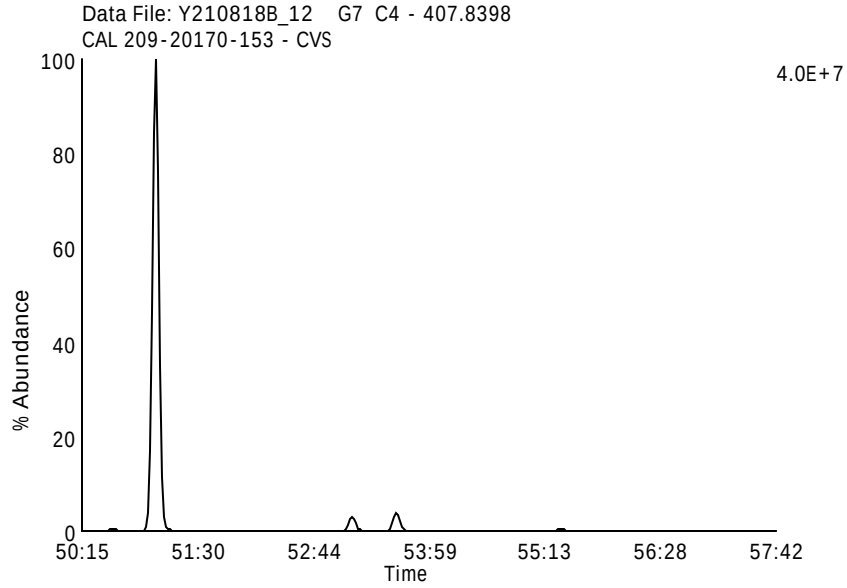
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





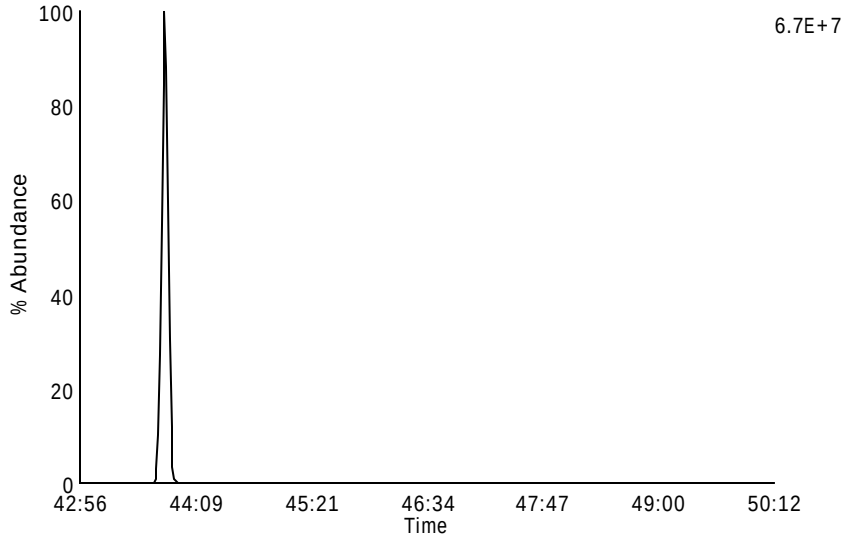




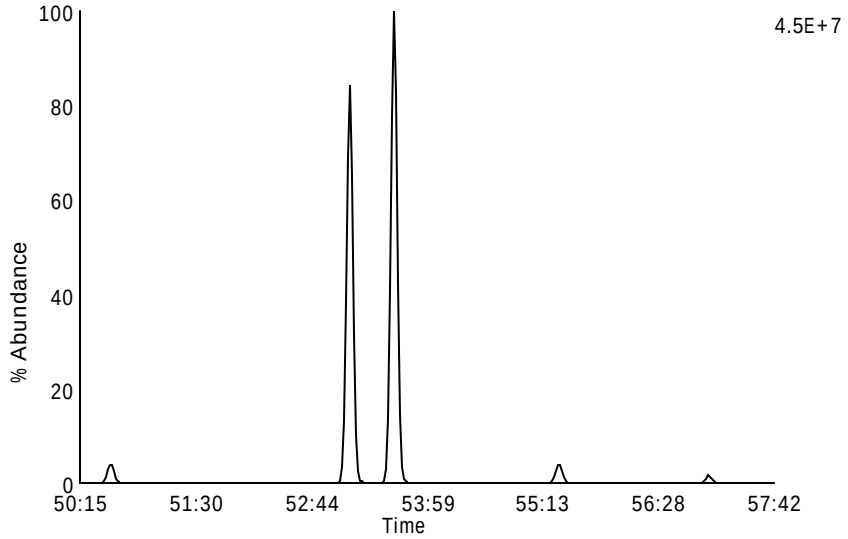
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

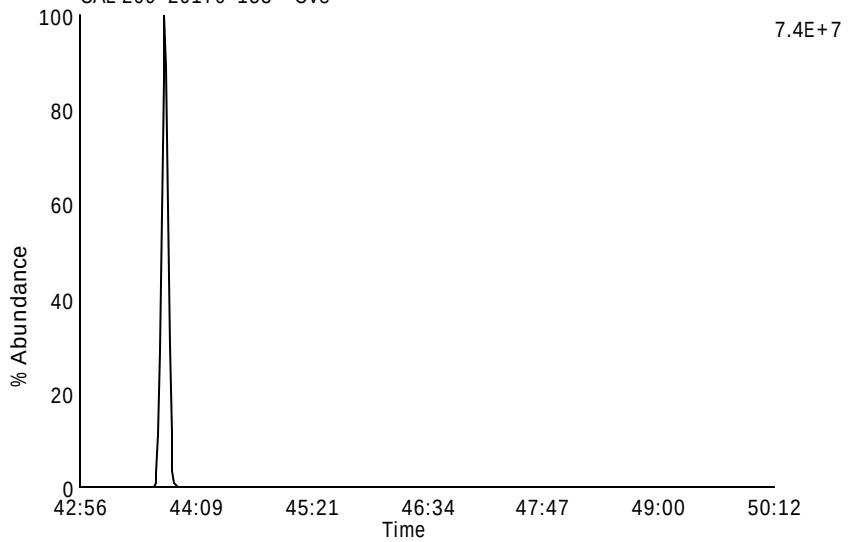
Data File: Y210818B_12 G6 C13 - 439.8038
CAL 209-20170-153 - CVS



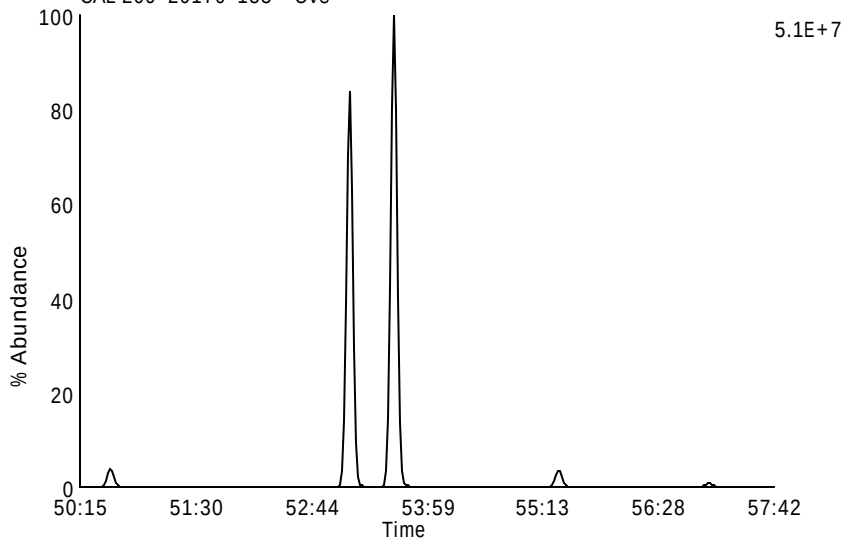
Data File: Y210818B_12 G7 C7 - 439.8038
CAL 209-20170-153 - CVS



Data File: Y210818B_12 G6 C14 - 441.8008
CAL 209-20170-153 - CVS

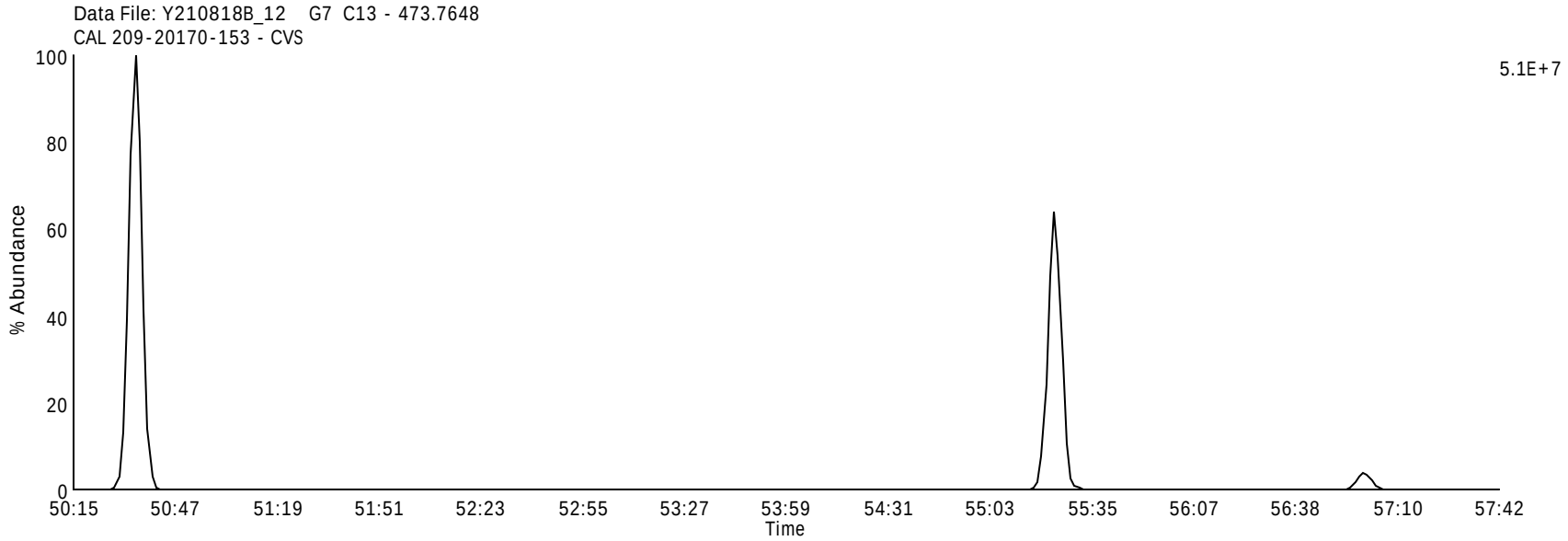


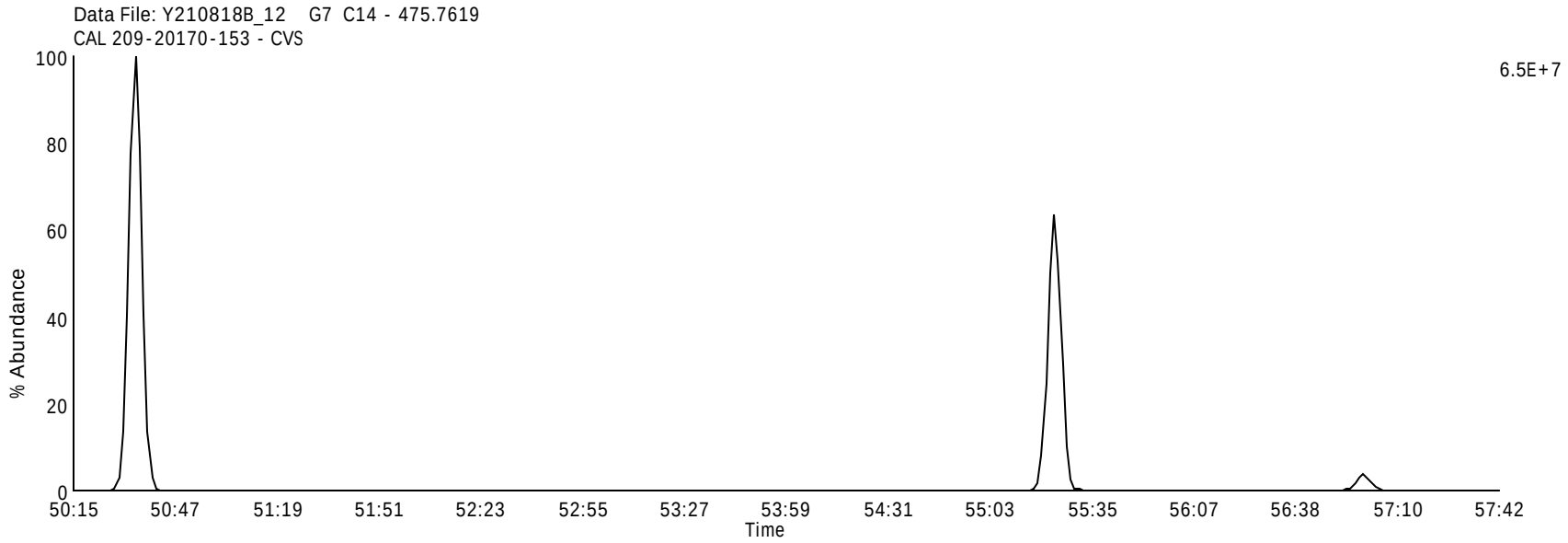
Data File: Y210818B_12 G7 C8 - 441.8008
CAL 209-20170-153 - CVS



Labeled Nona Chlorinated Biphenyls

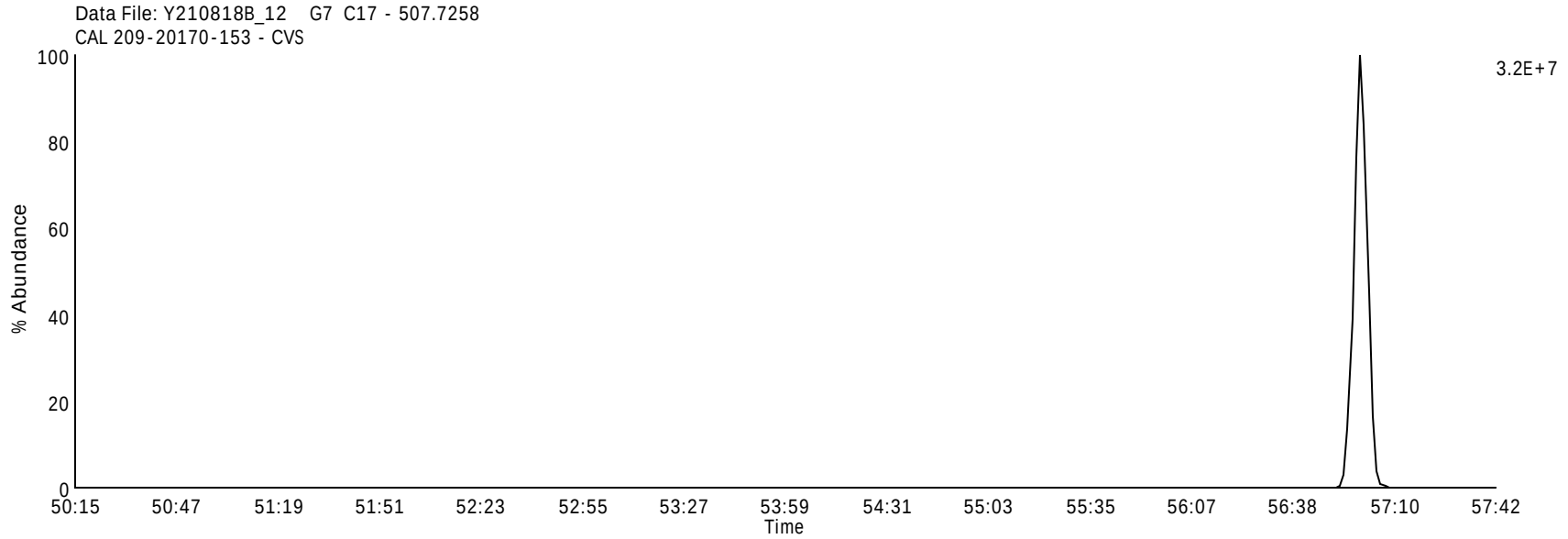
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

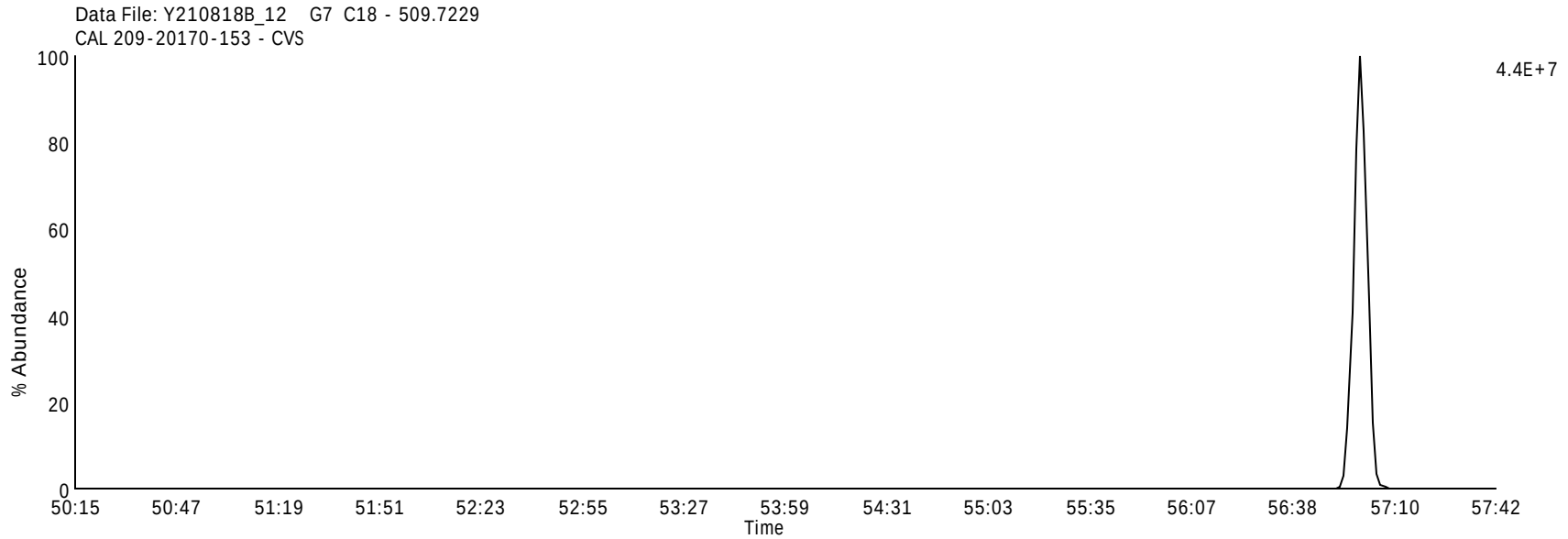




Labeled Deca Chlorinated Biphenyl

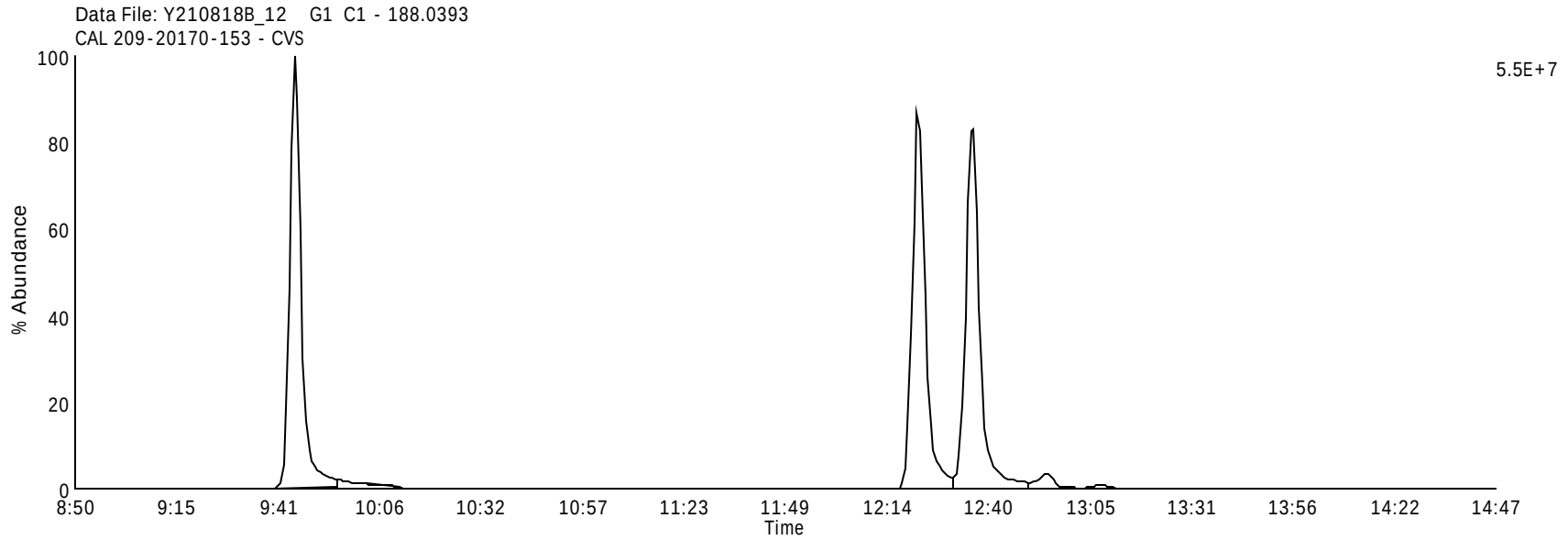
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

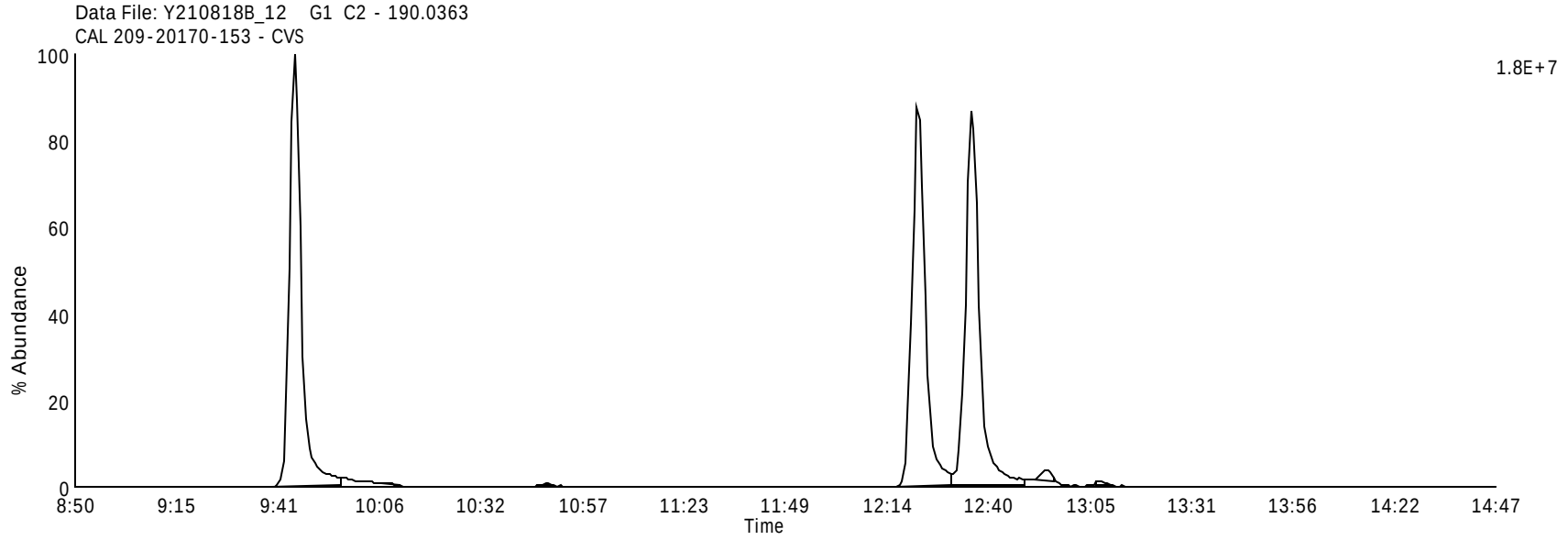




Mono Chlorinated Biphenyls

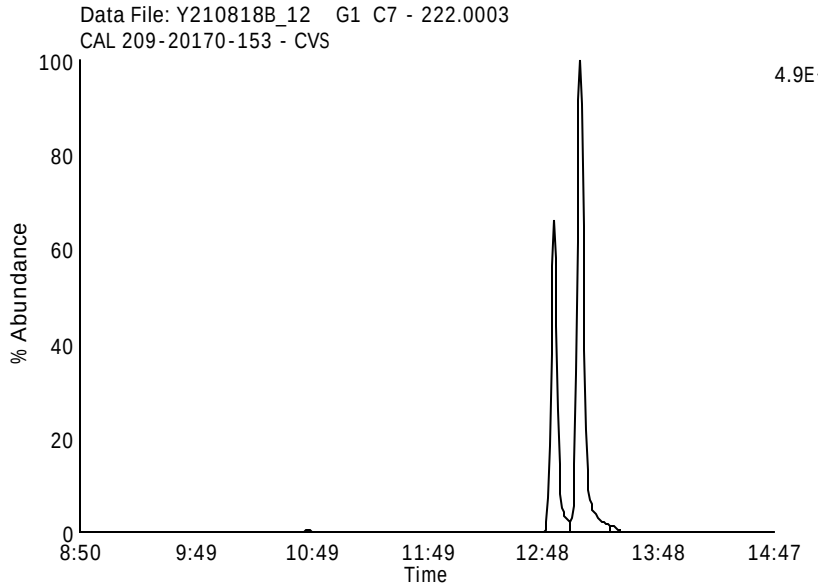
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

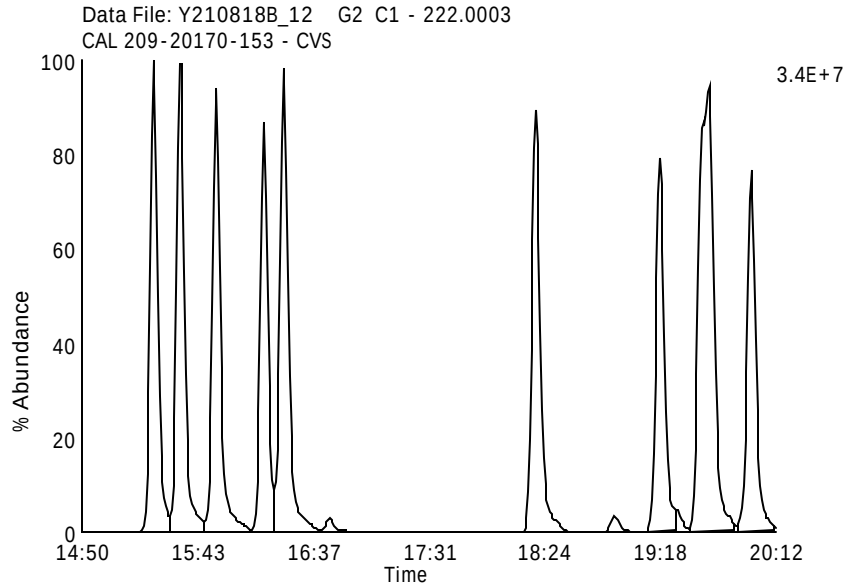


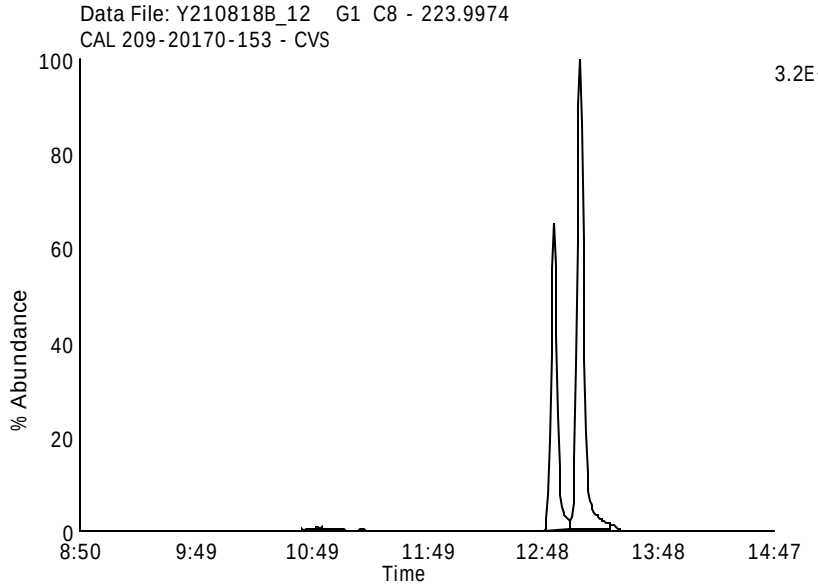


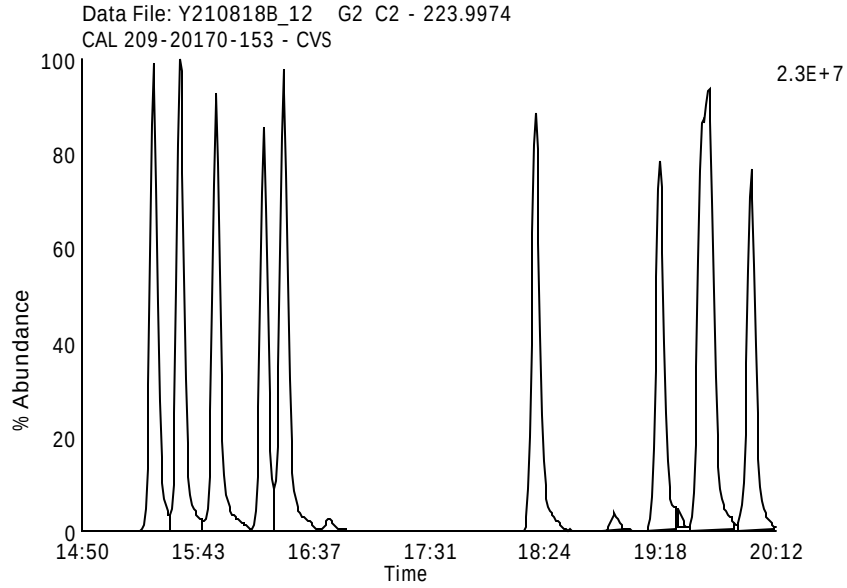
Di Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



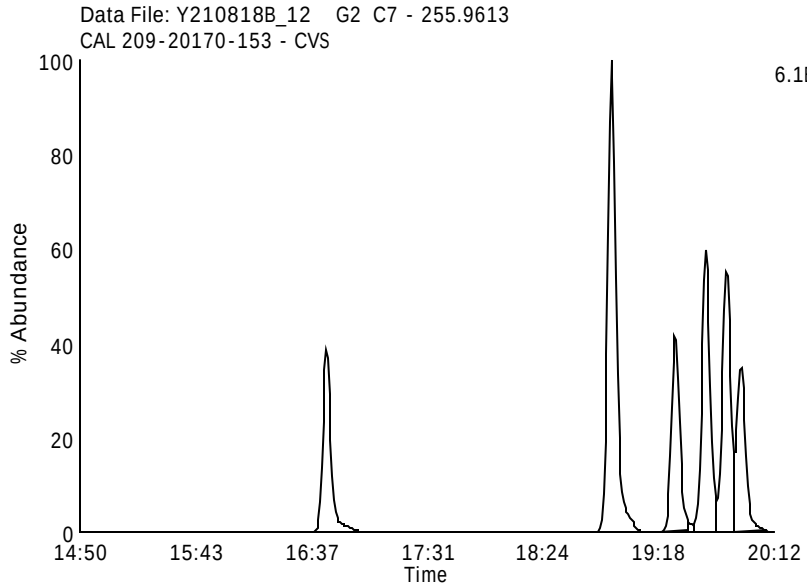


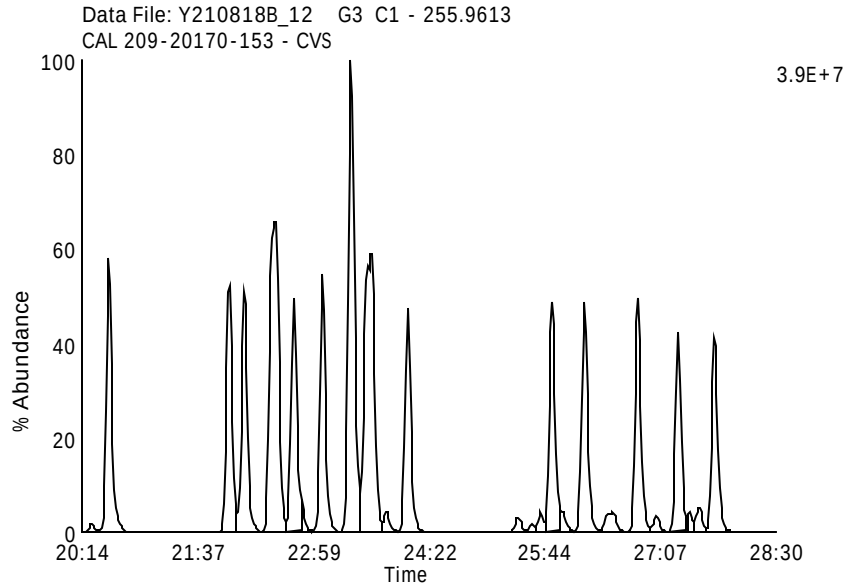


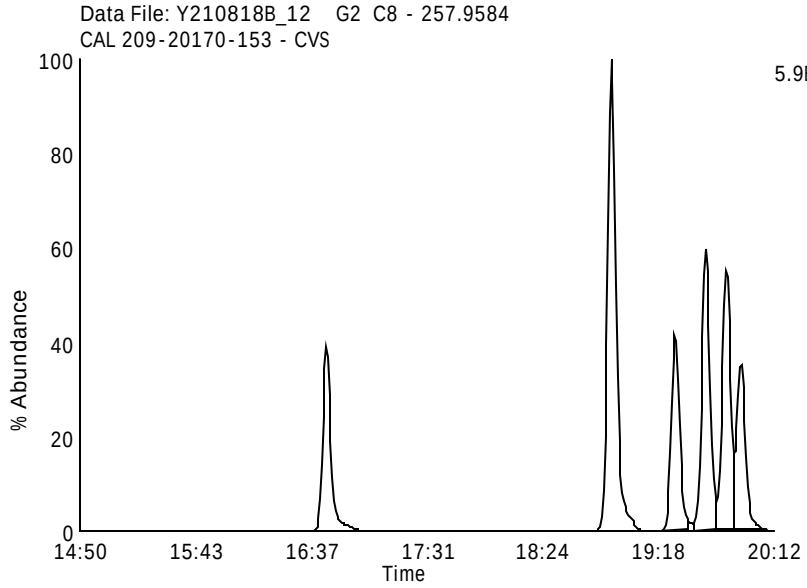


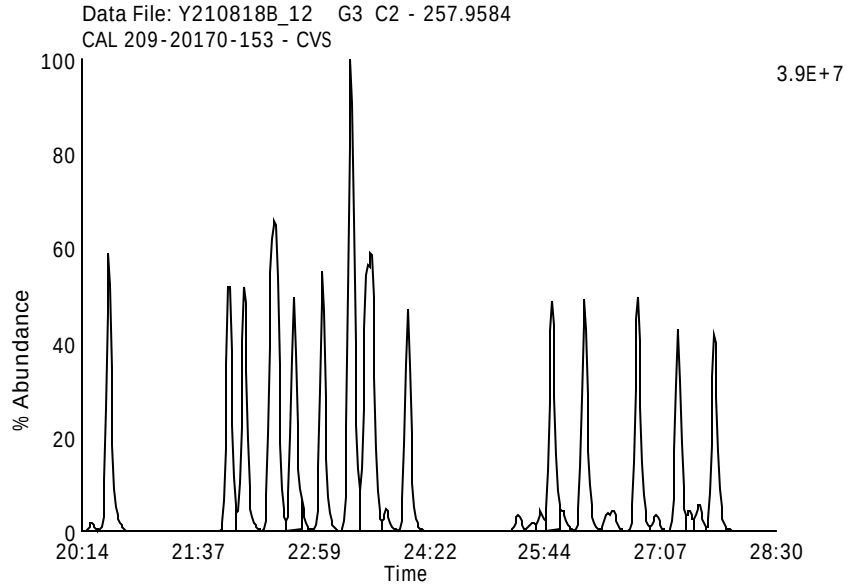
Tri Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



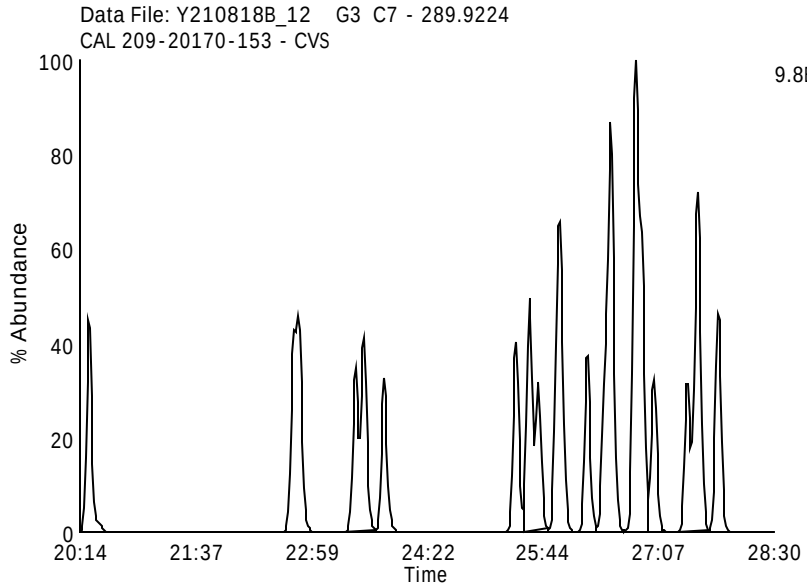


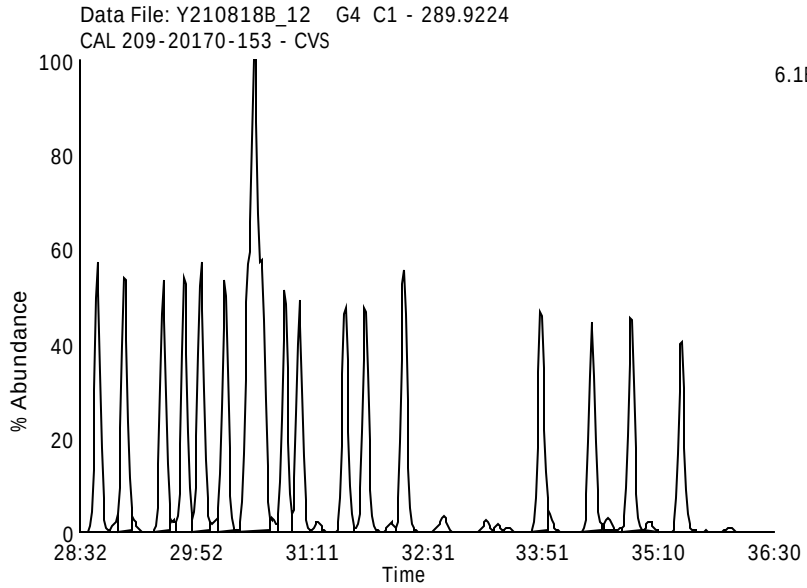


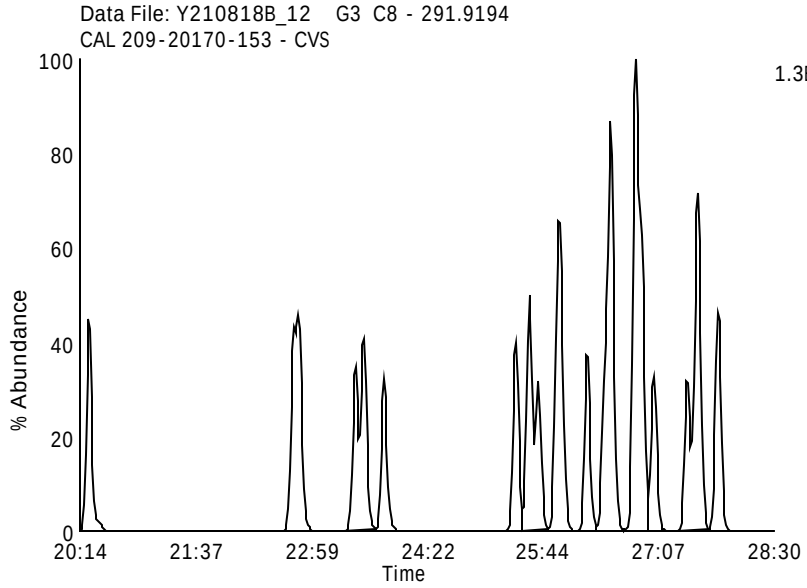


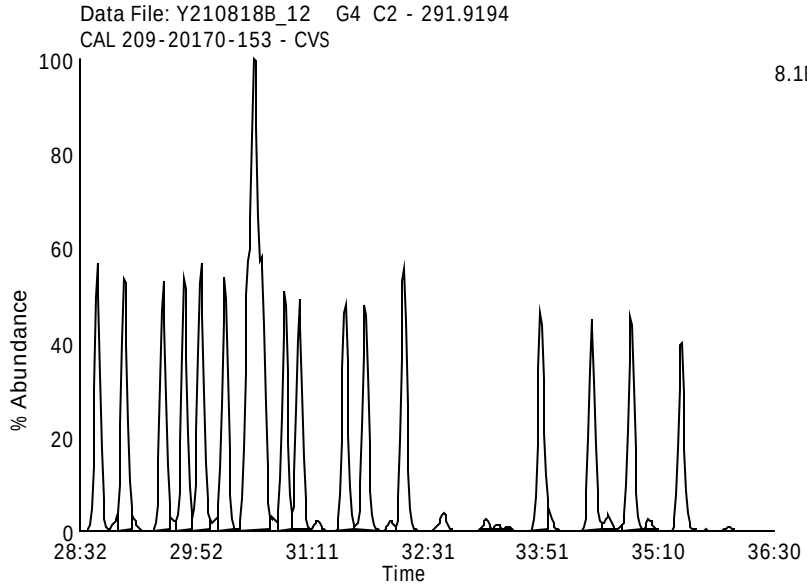
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





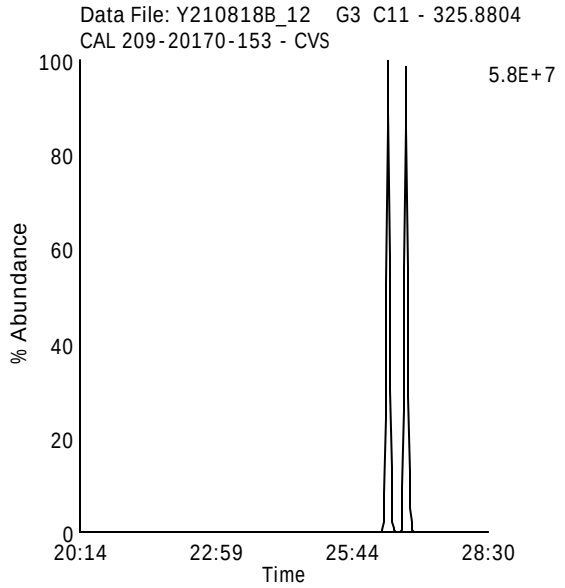


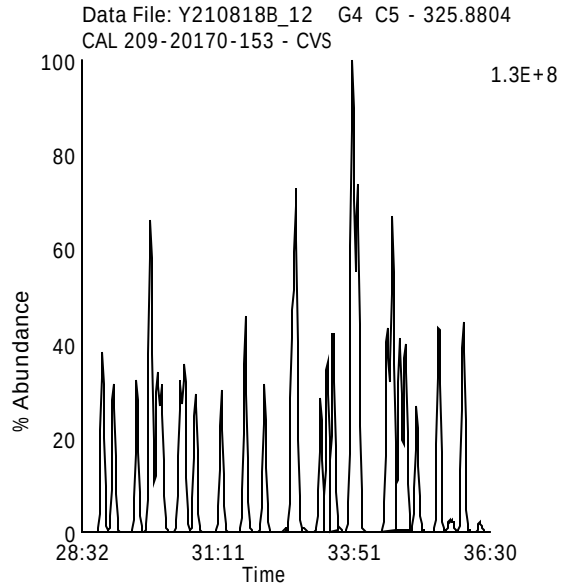


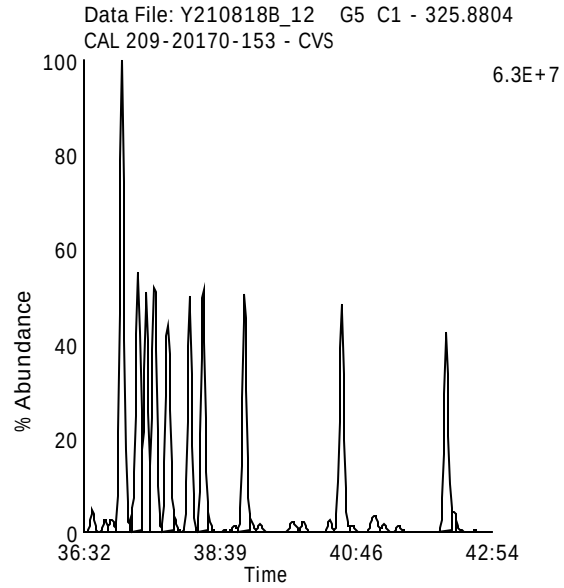
Penta Chlorinated Biphenyls

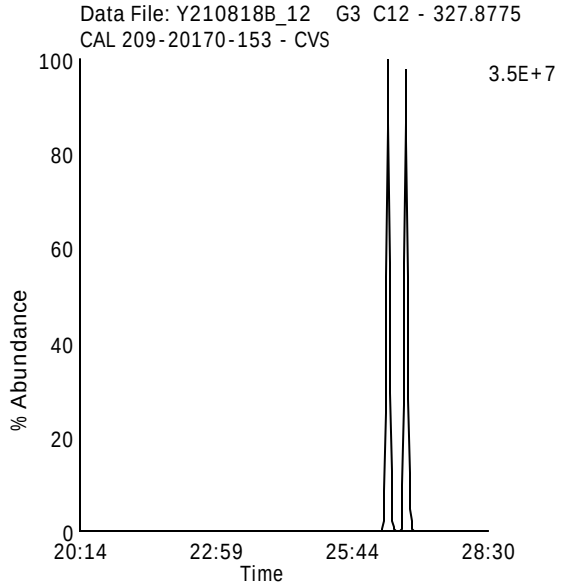
Data File Name: Y210818B_12
Date Acquired: 8/18/2021
Sample Description: CAL 209-20170-153 - CVS

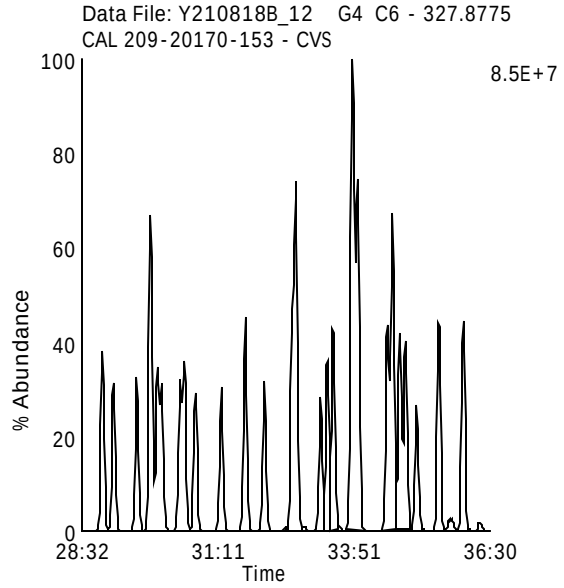
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

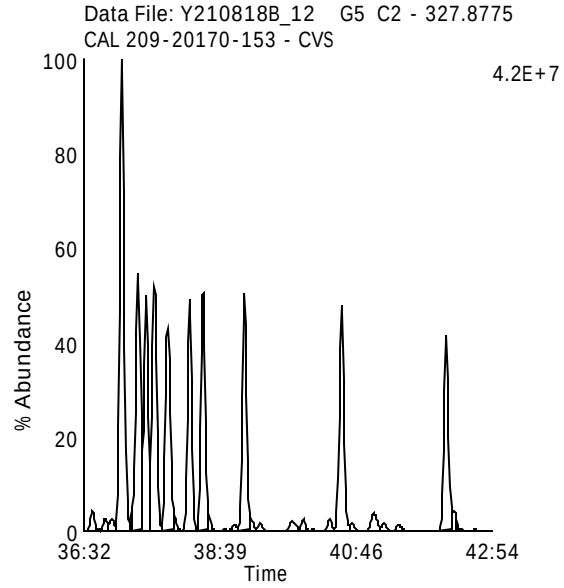






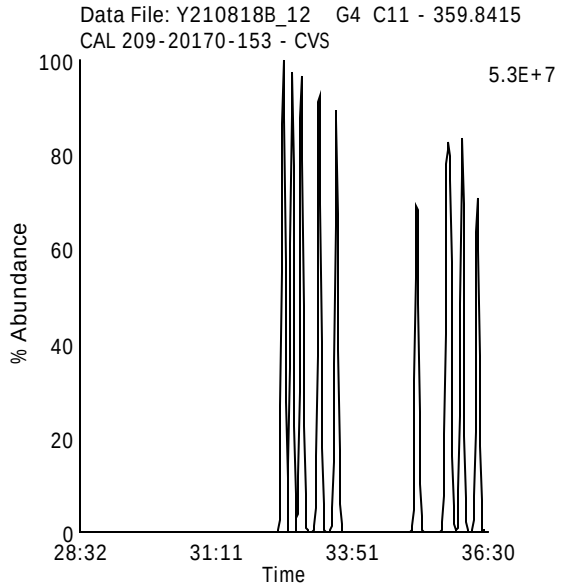


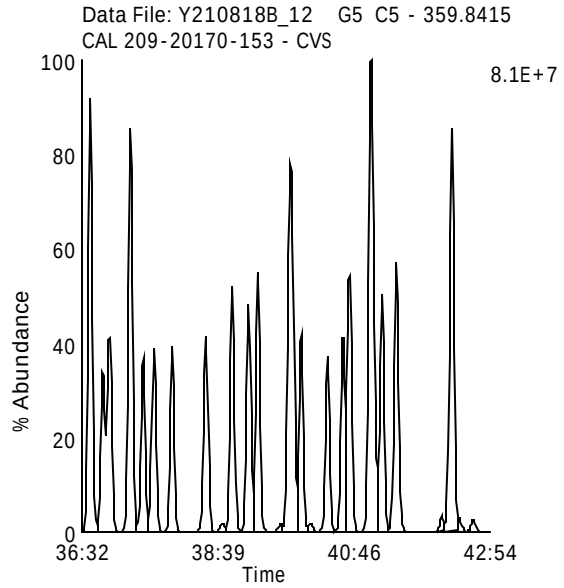


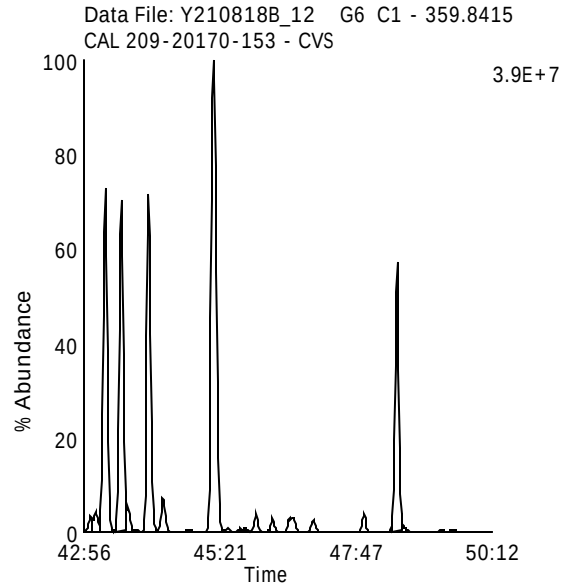


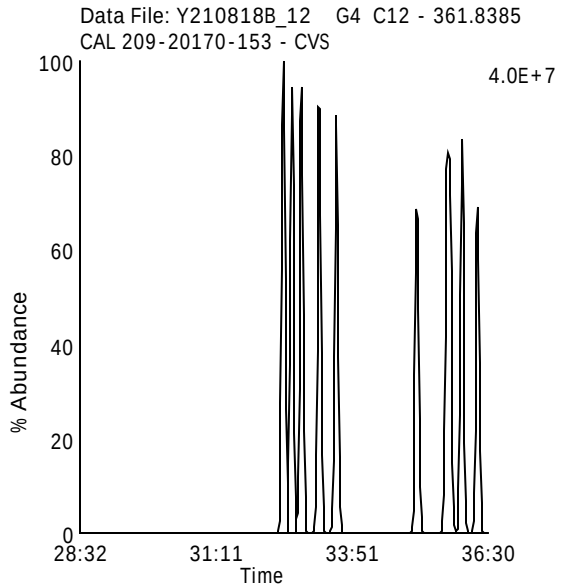
Hexa Chlorinated Biphenyls

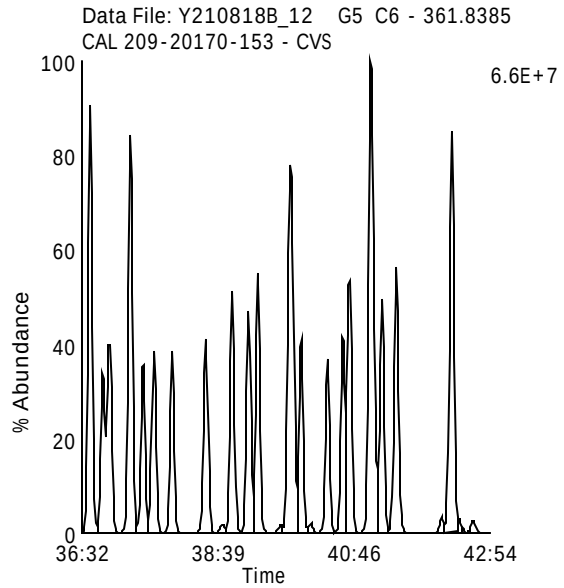
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

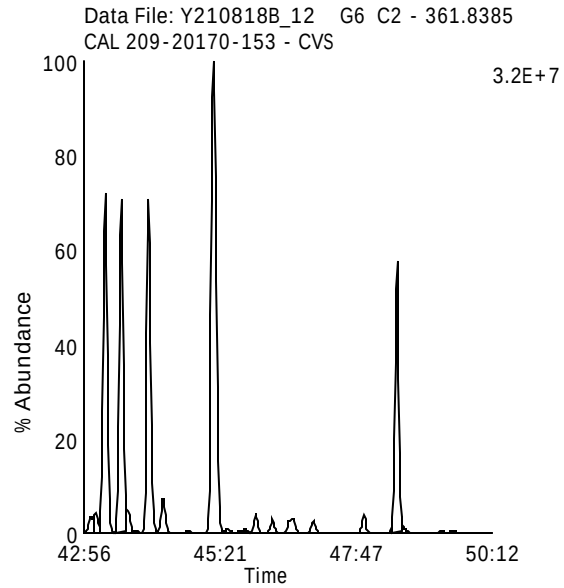








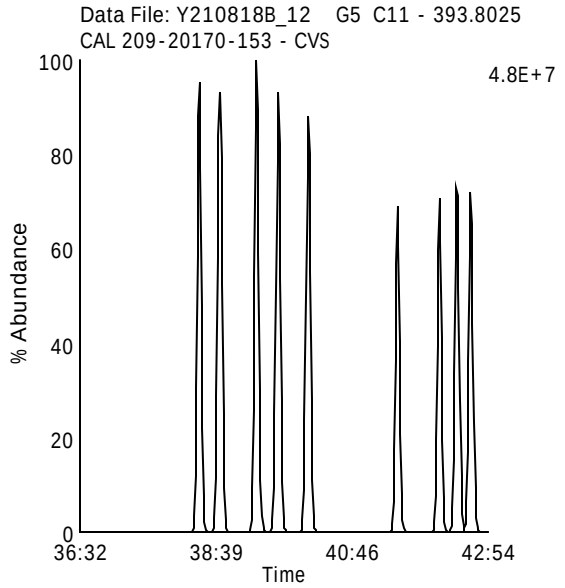


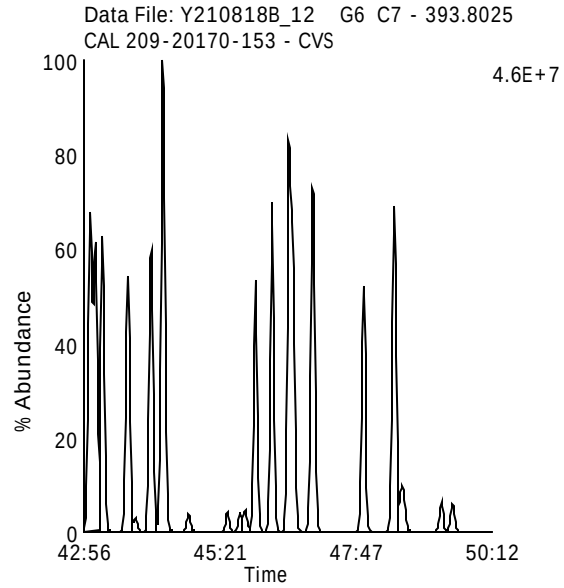


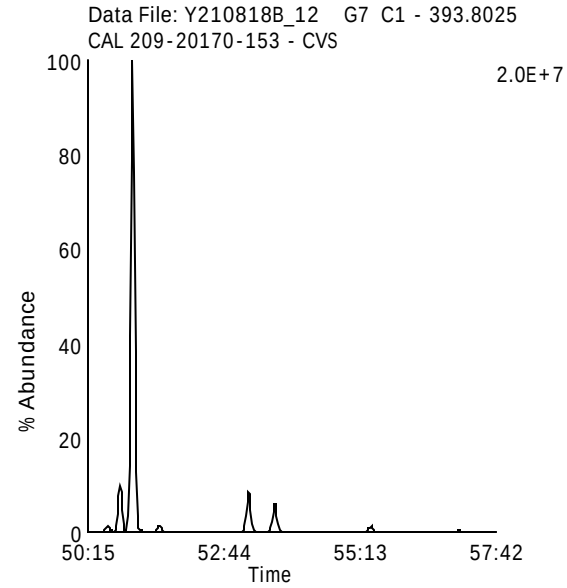
Hepta Chlorinated Biphenyls

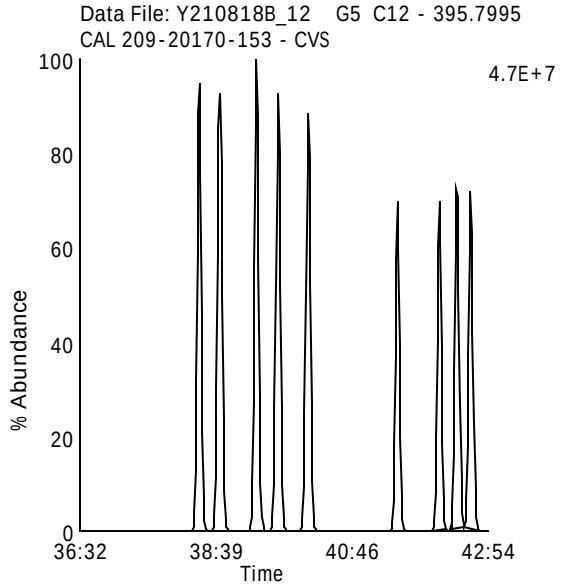
Data File Name: Y210818B_12
Date Acquired: 8/18/2021
Sample Description: CAL 209-20170-153 - CVS

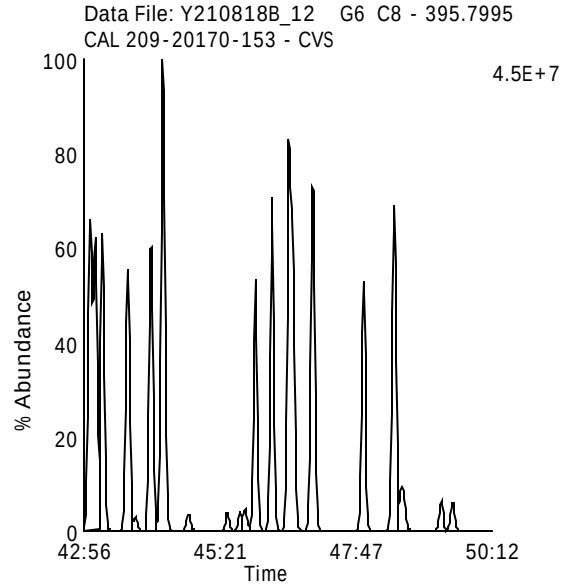
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

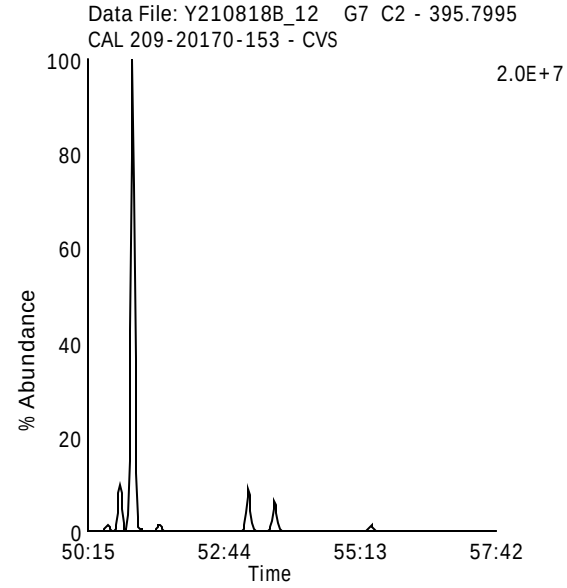






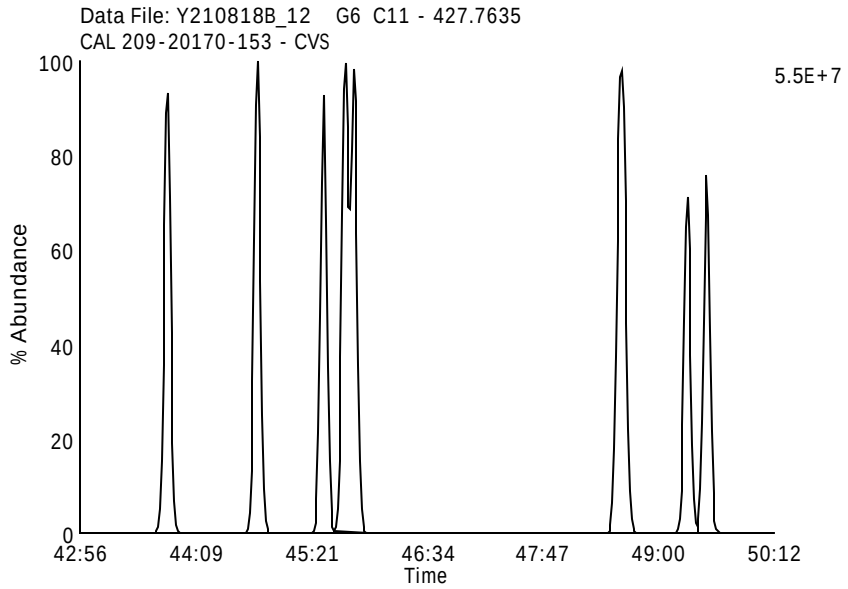


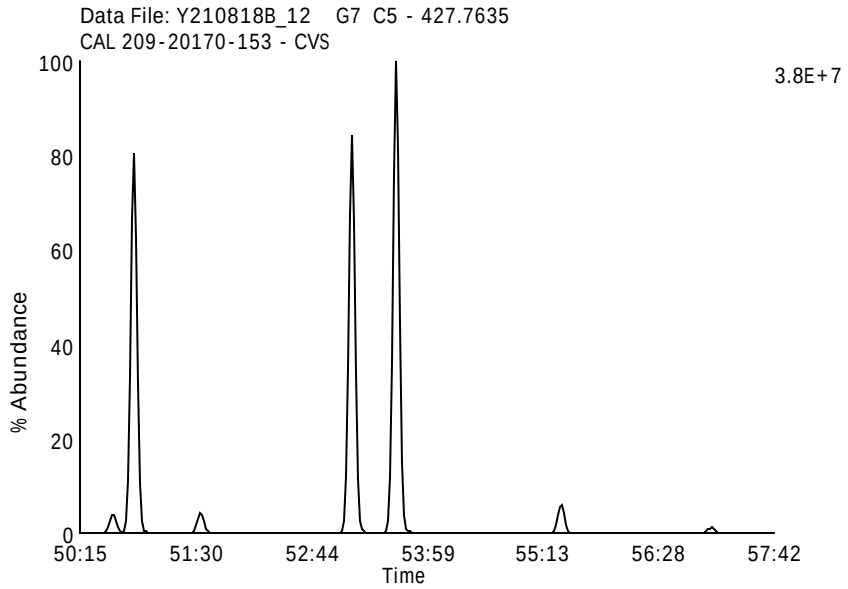


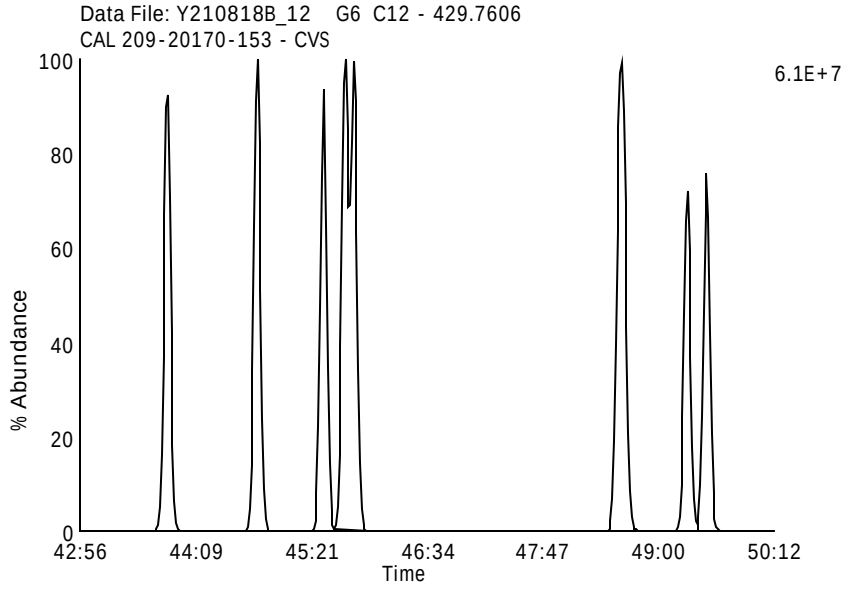


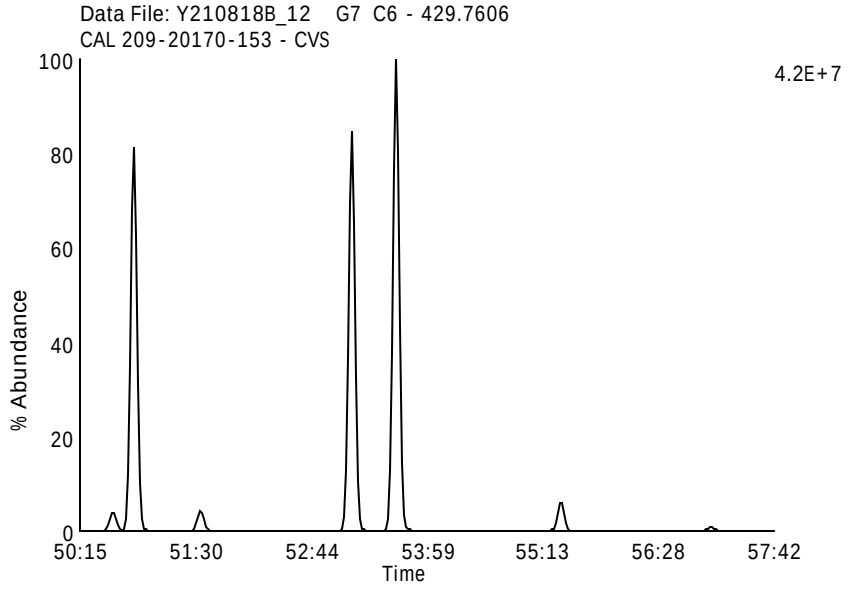
Octa Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



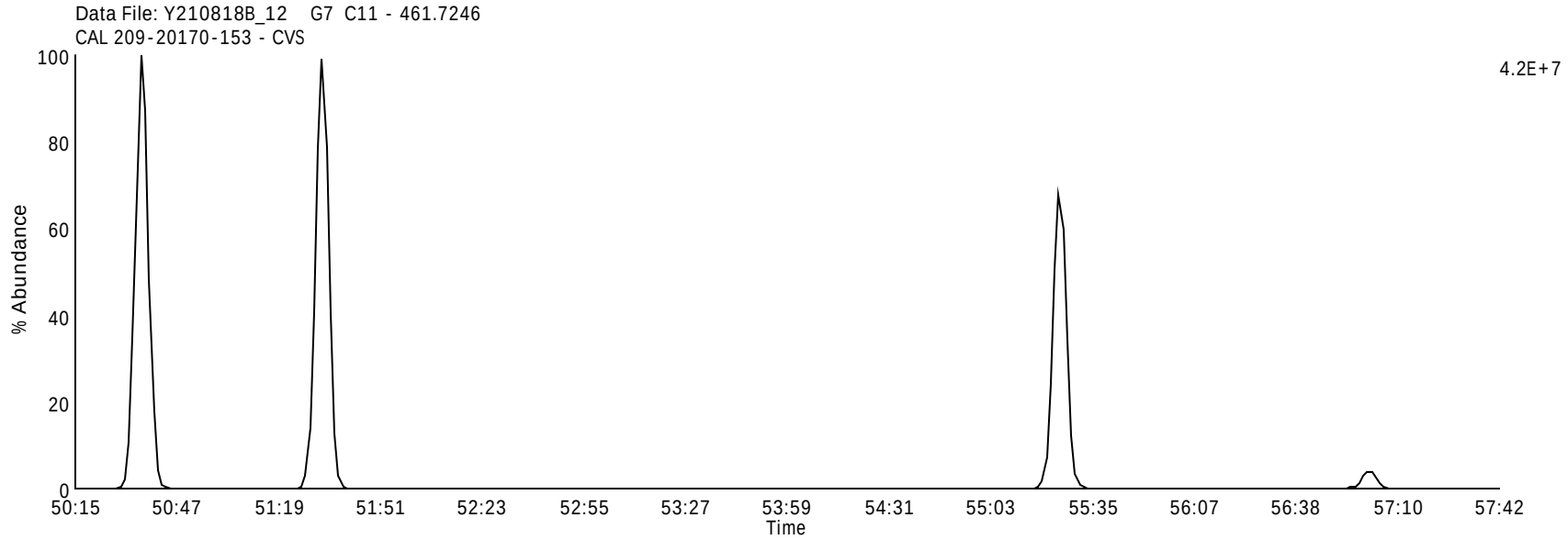


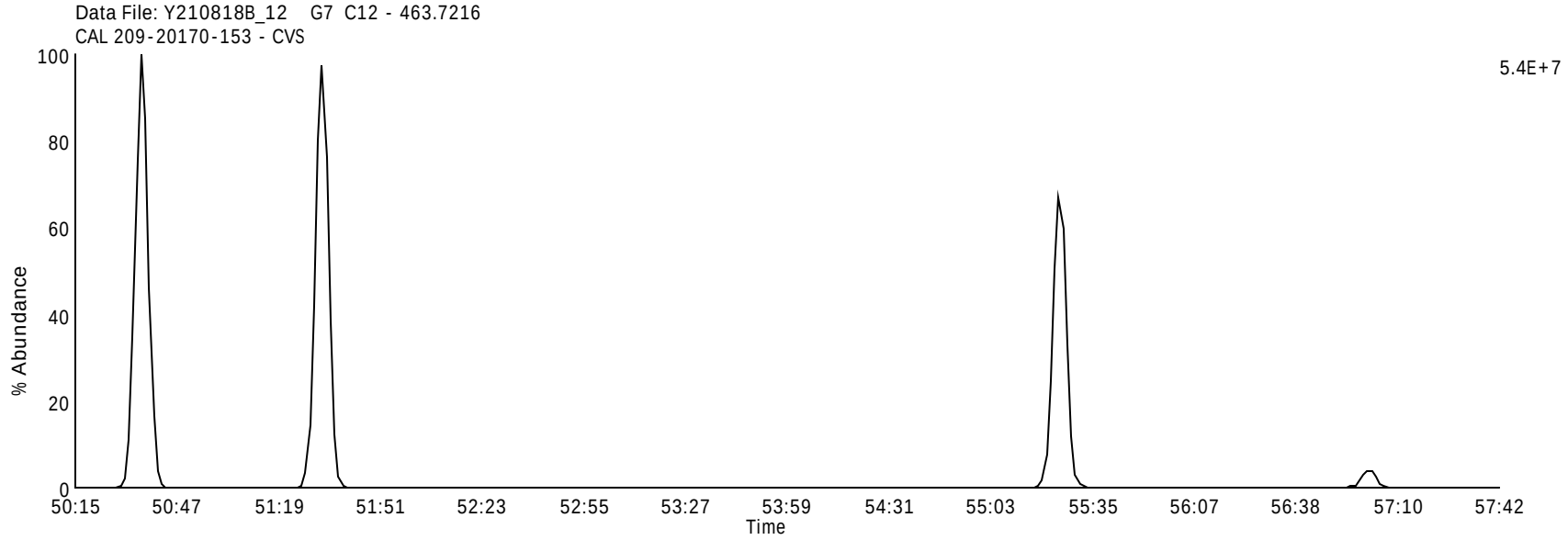




Nona Chlorinated Biphenyls

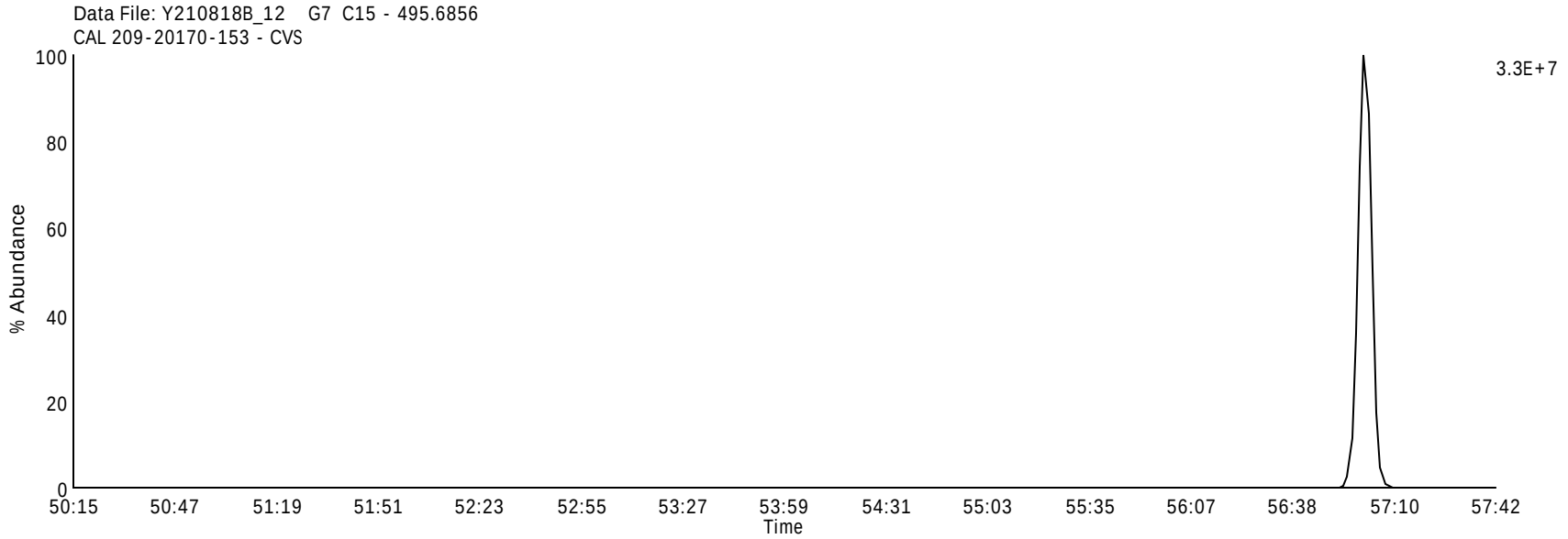
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

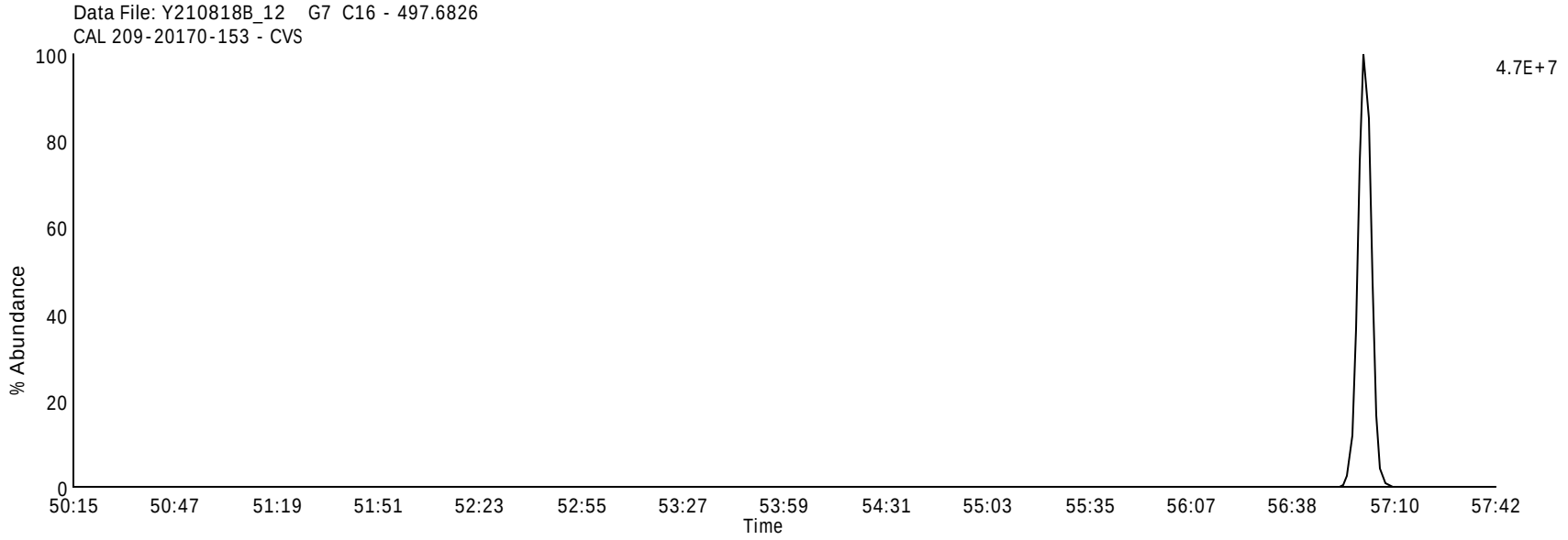




Deca Chlorinated Biphenyl

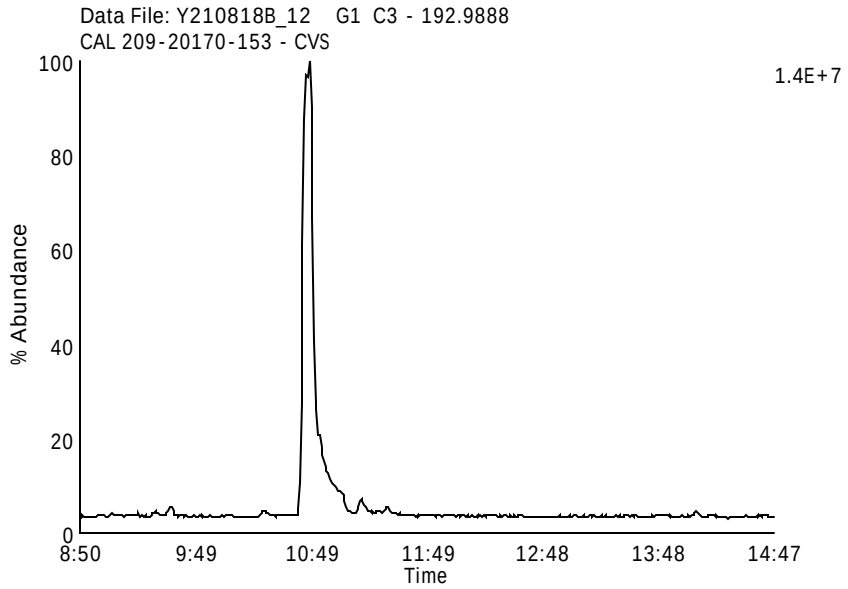
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

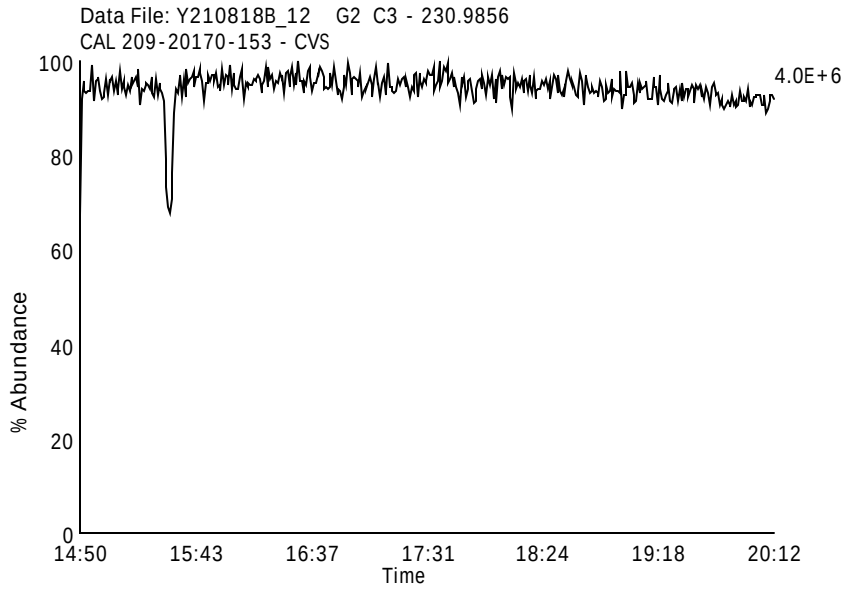


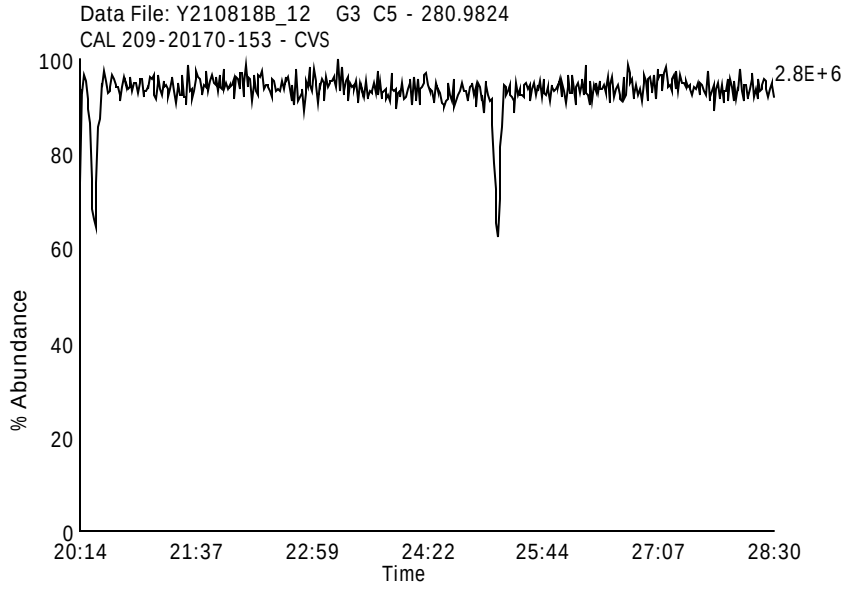


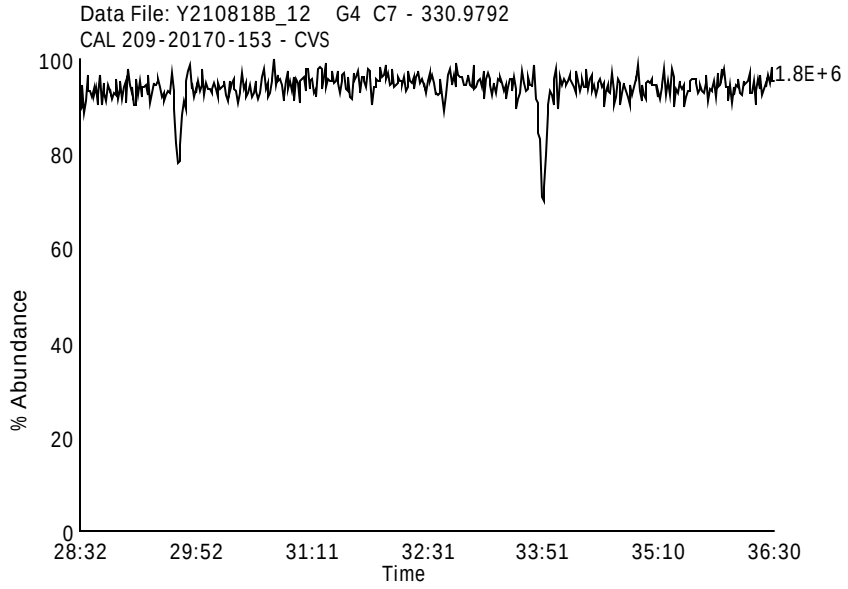
Group 1 - 4 Lock mass

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



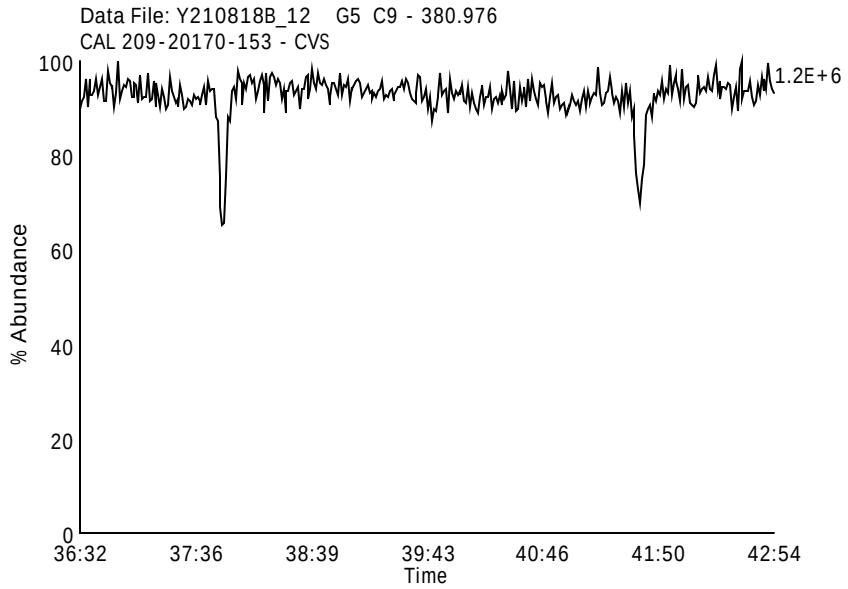


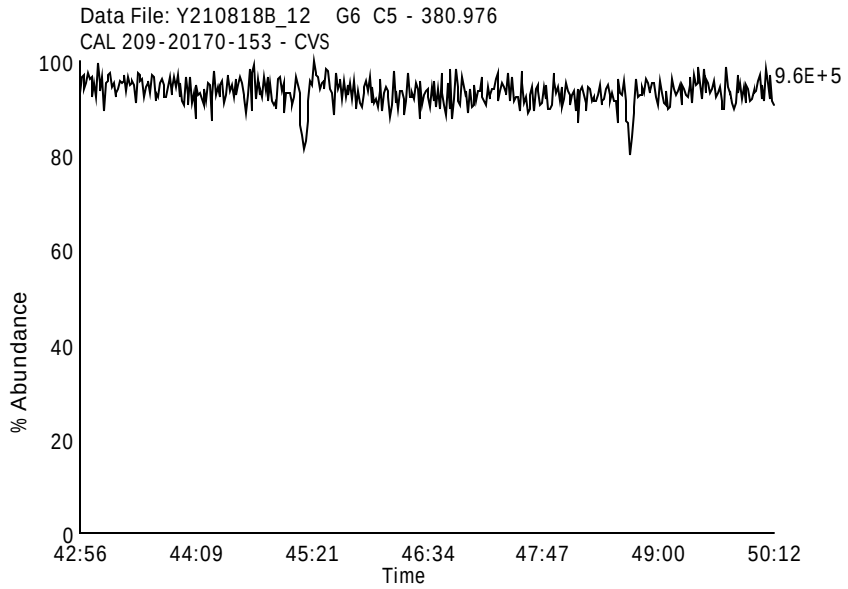


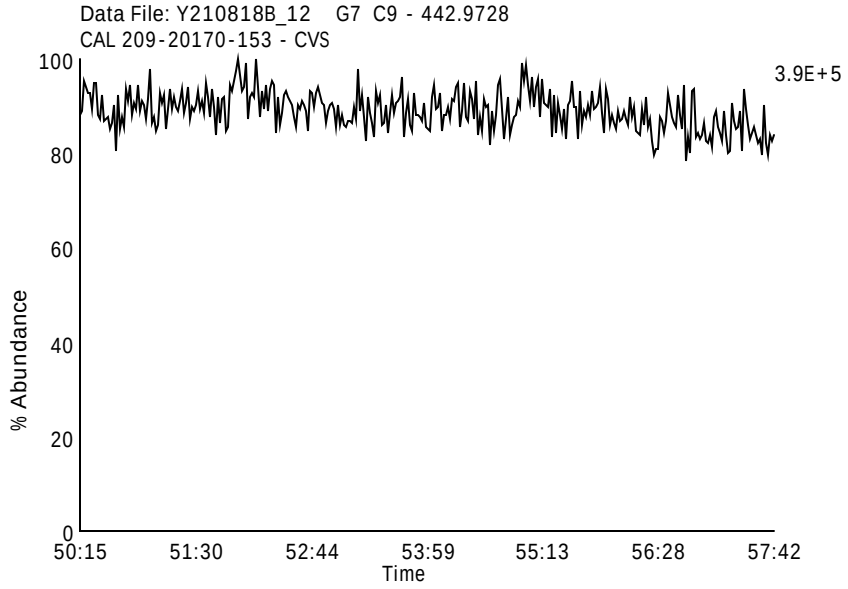


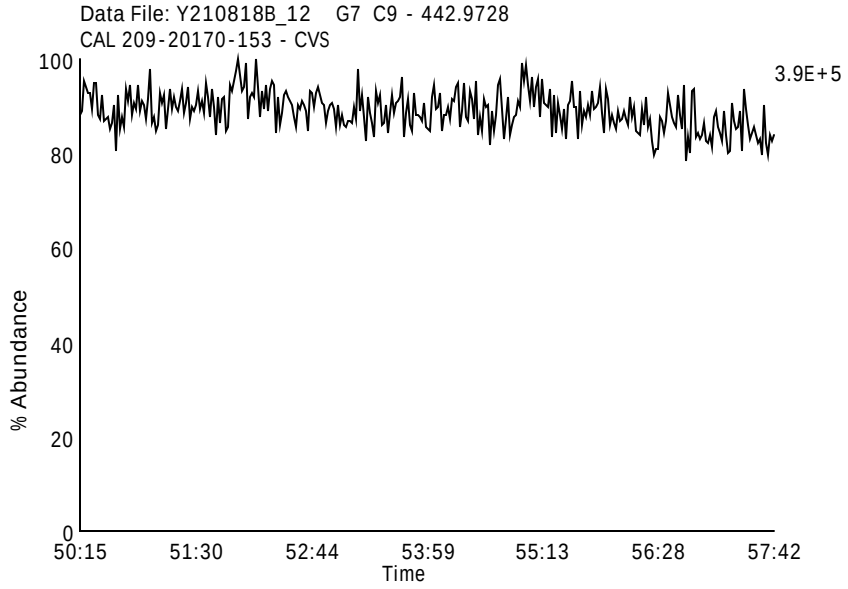
Group 5 - 7 Lock mass

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix







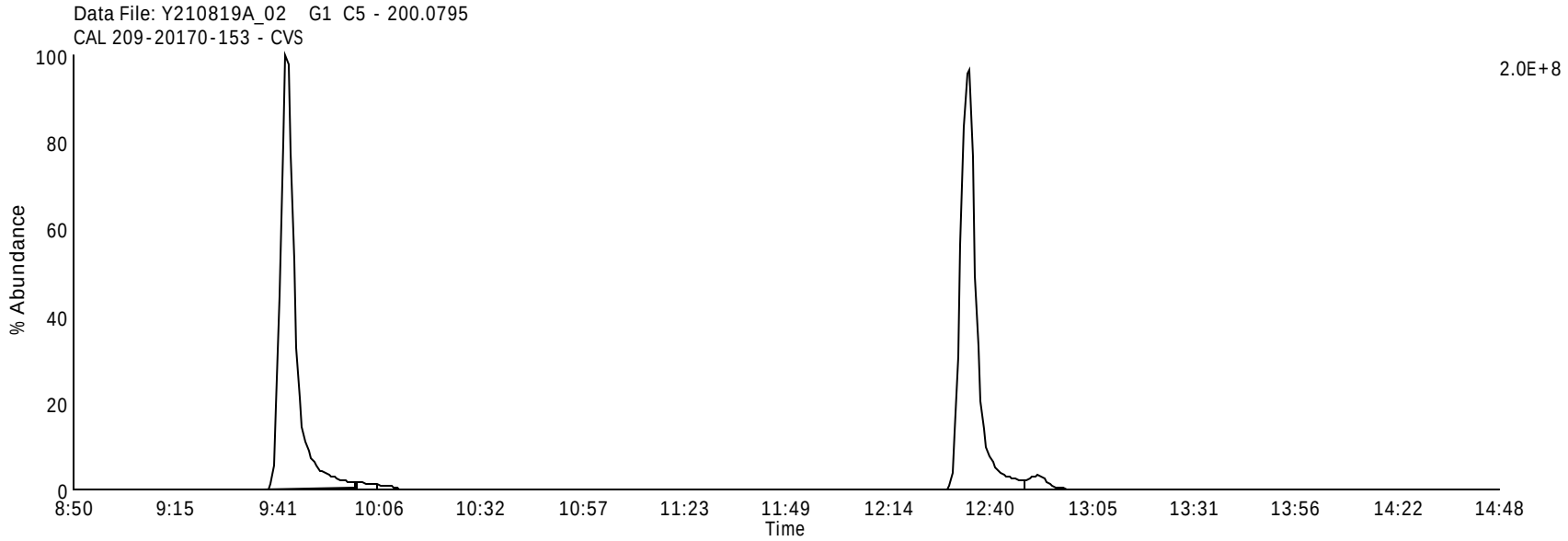


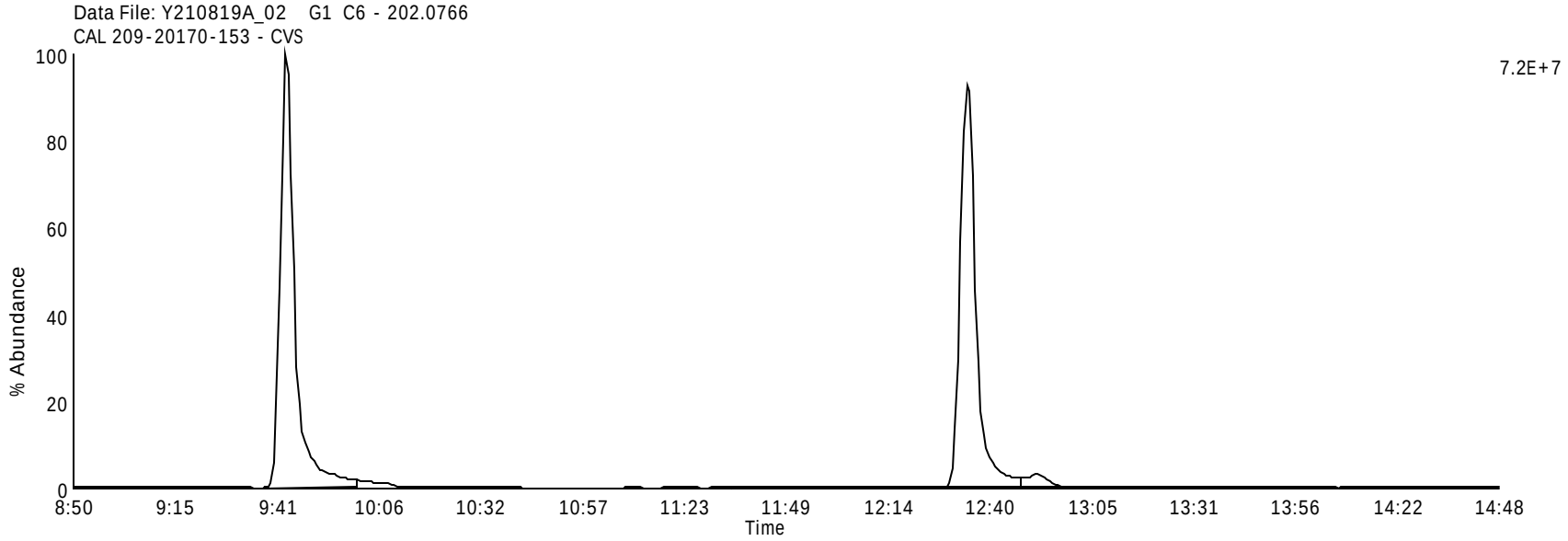
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210819A_02 | Lab Sample ID: 209-20170-153

Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

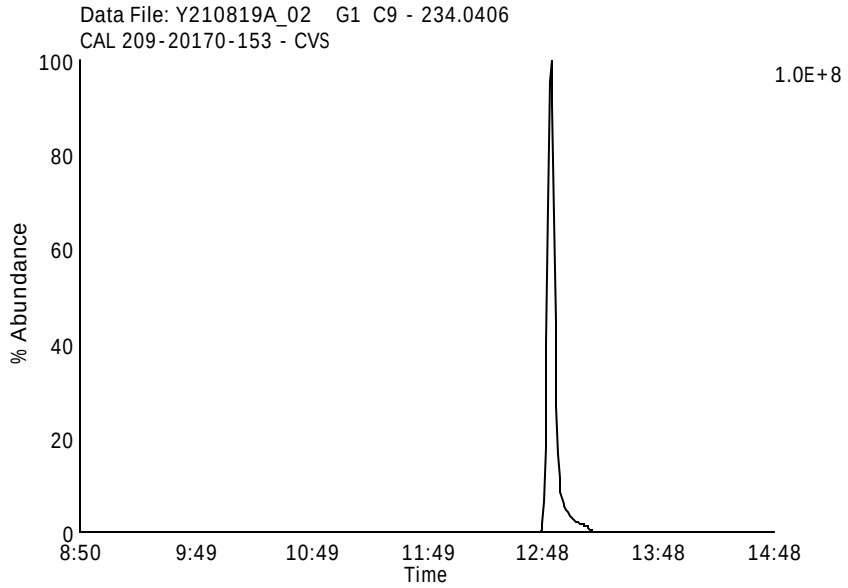
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

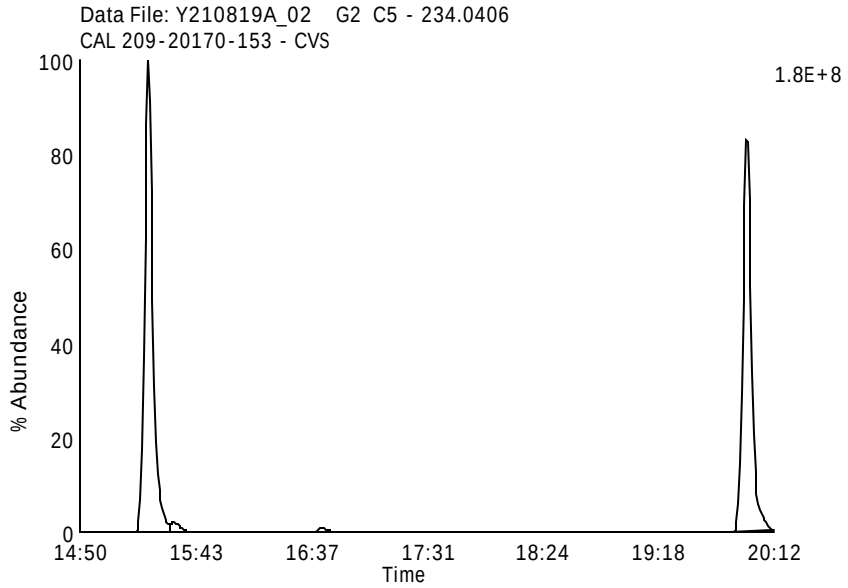


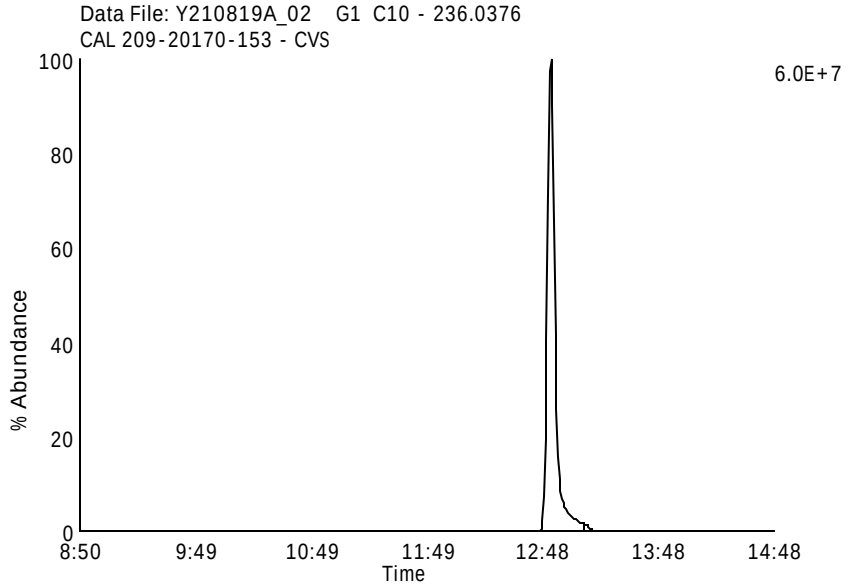


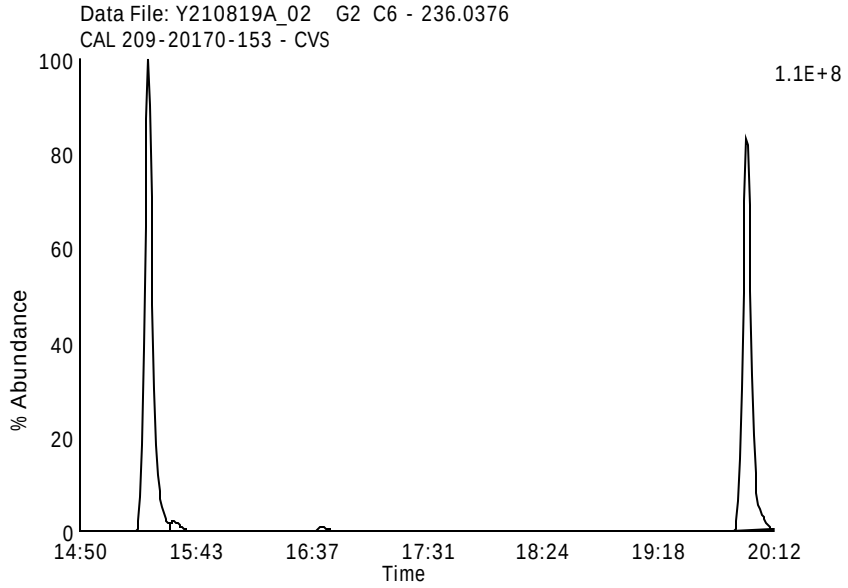
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



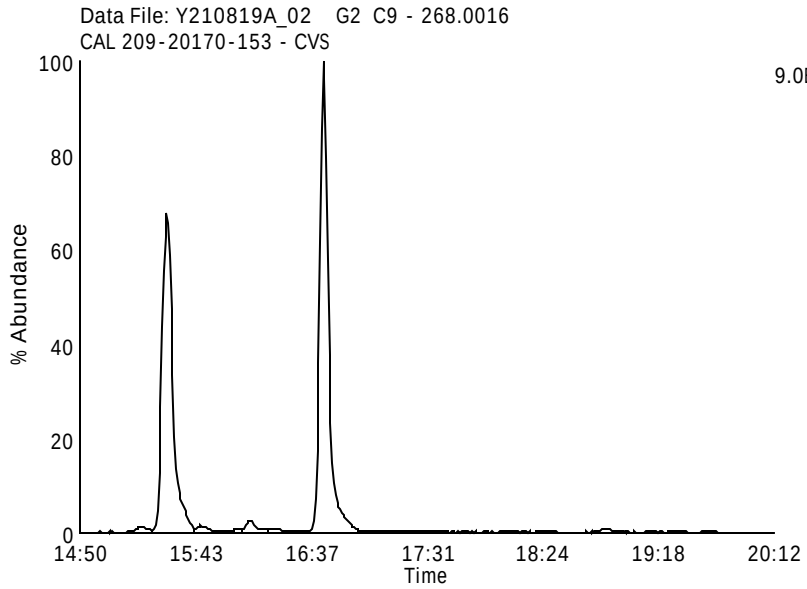


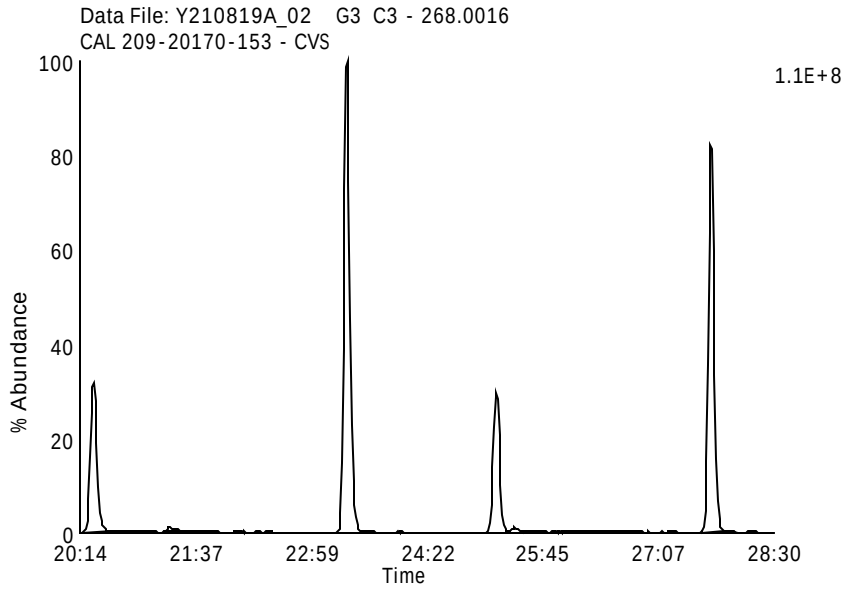


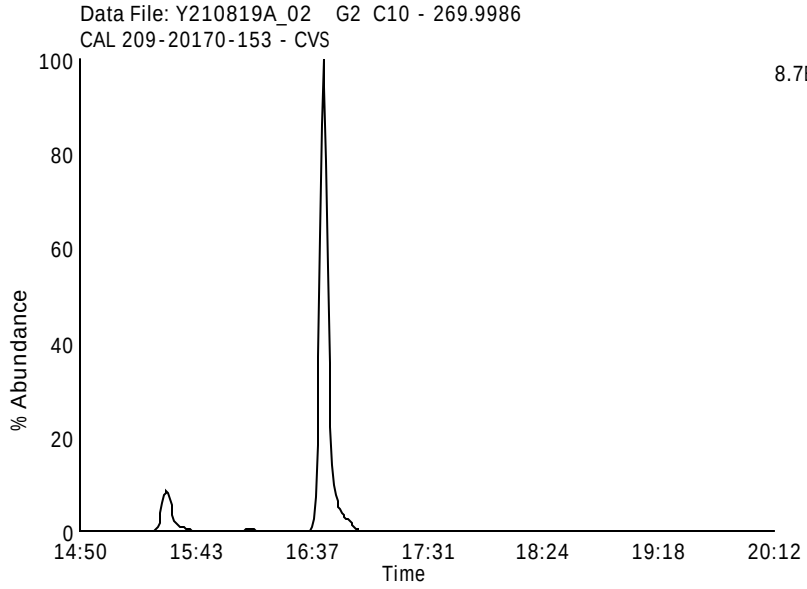


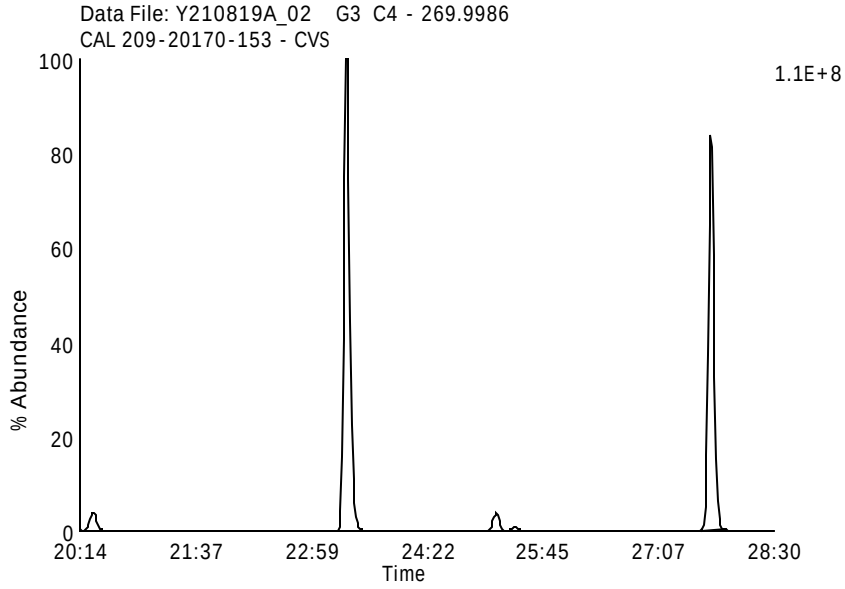
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





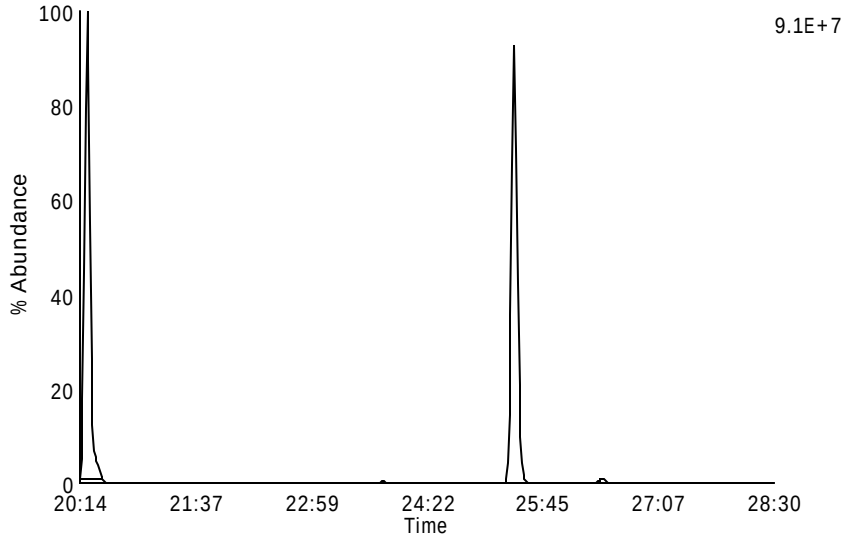




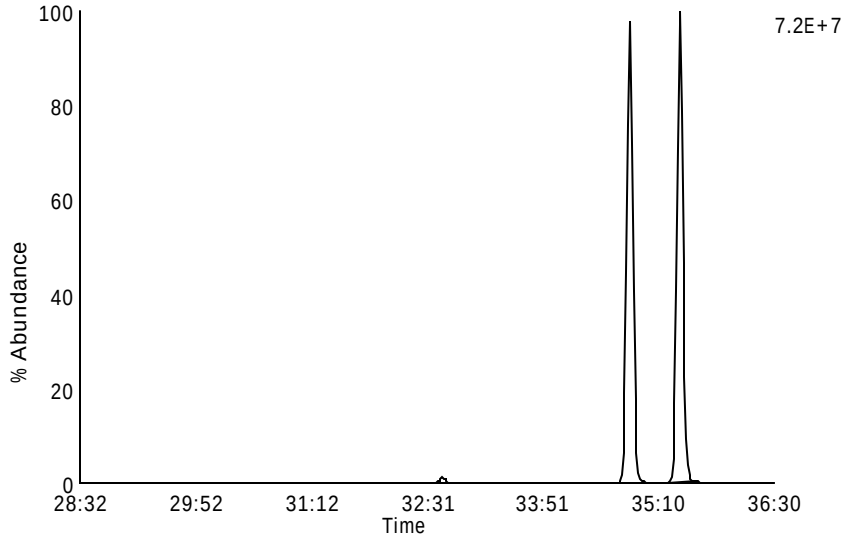
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

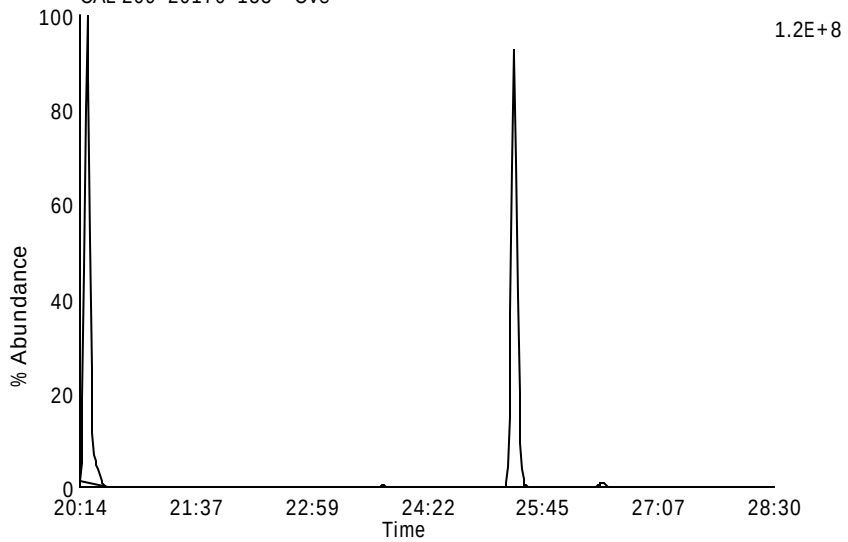
Data File: Y210819A_02 G3 C9 - 301.9626
CAL 209-20170-153 - CVS



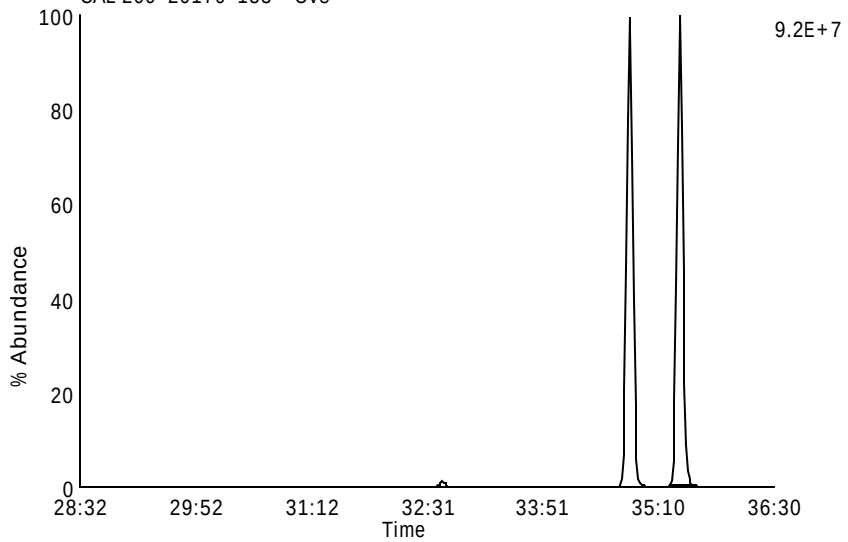
Data File: Y210819A_02 G4 C3 - 301.9626
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G3 C10 - 303.9597
CAL 209-20170-153 - CVS

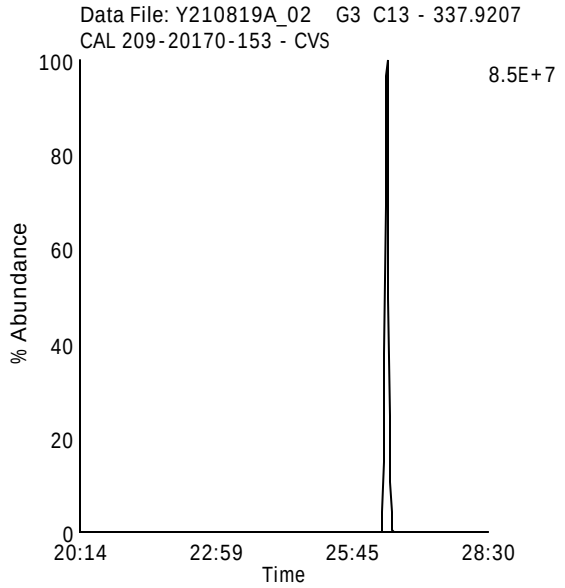


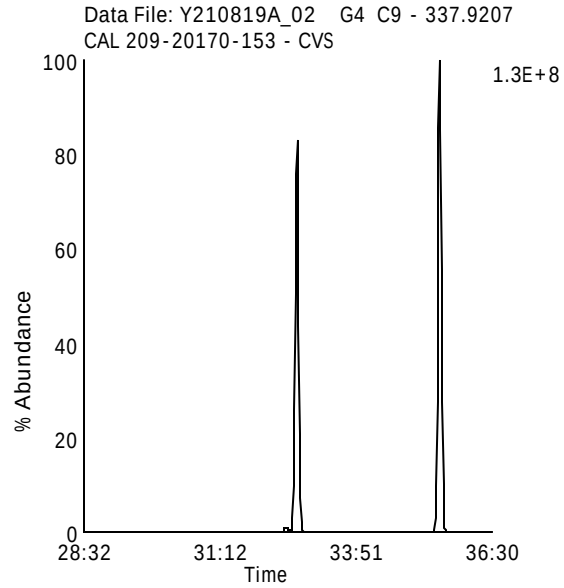
Data File: Y210819A_02 G4 C4 - 303.9597
CAL 209-20170-153 - CVS

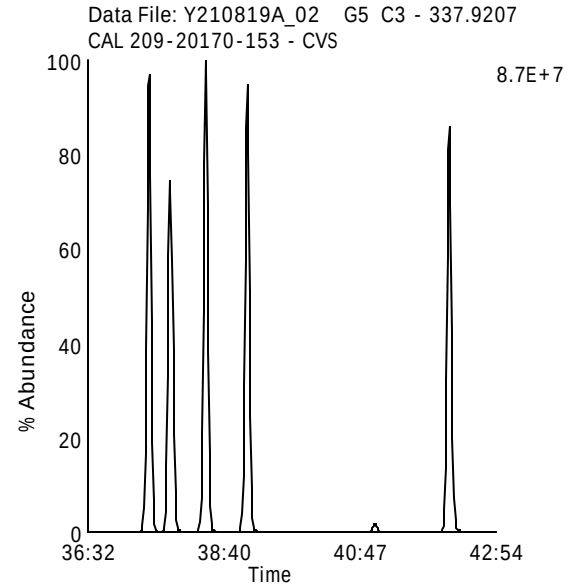


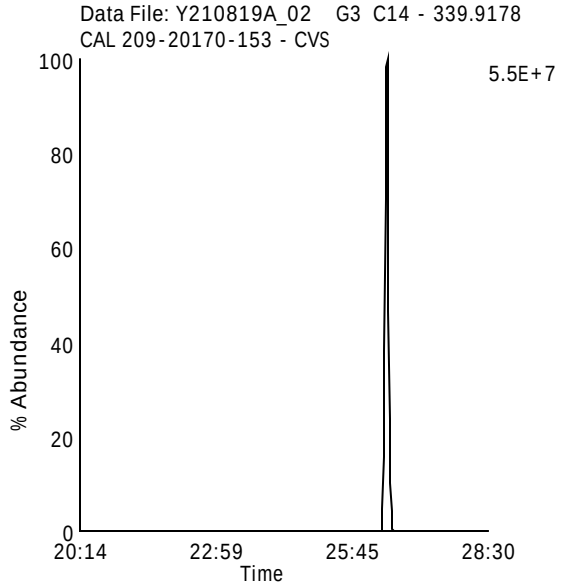
Labeled Penta Chlorinated Biphenyls

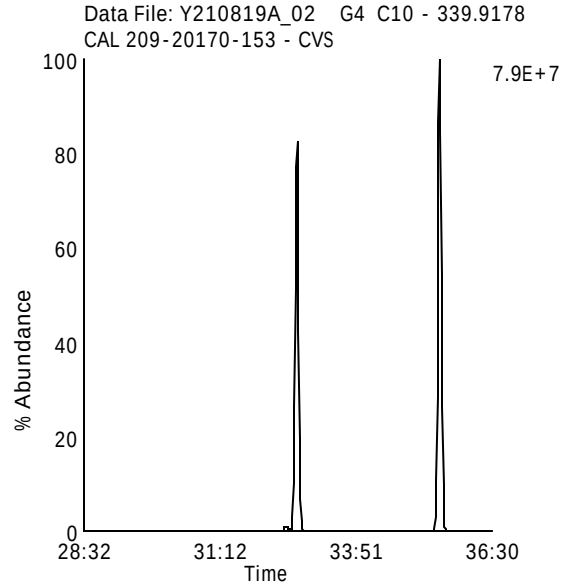
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

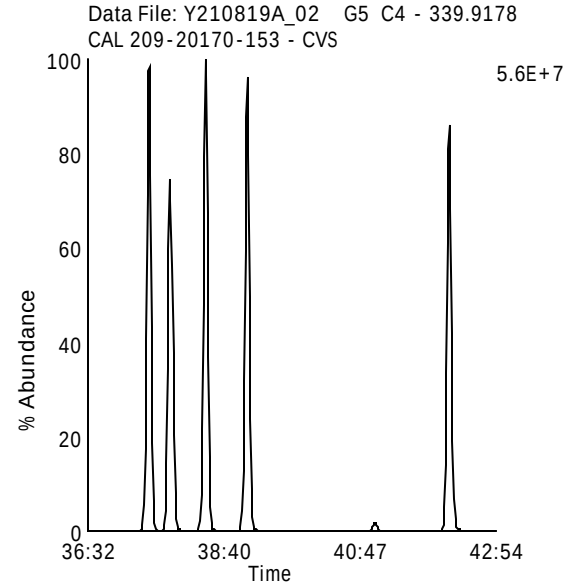






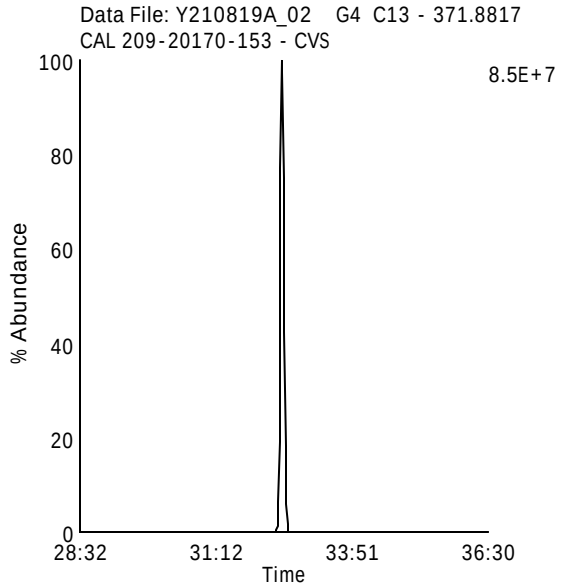


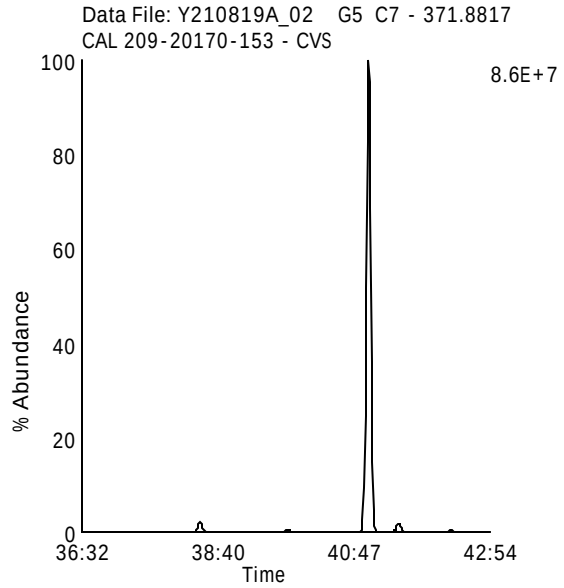


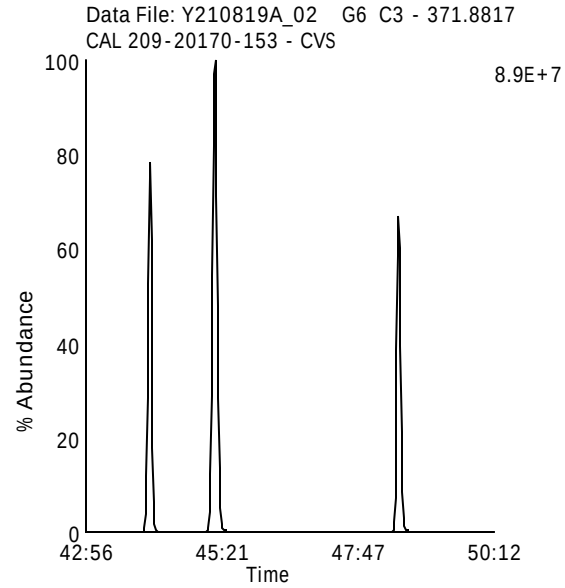


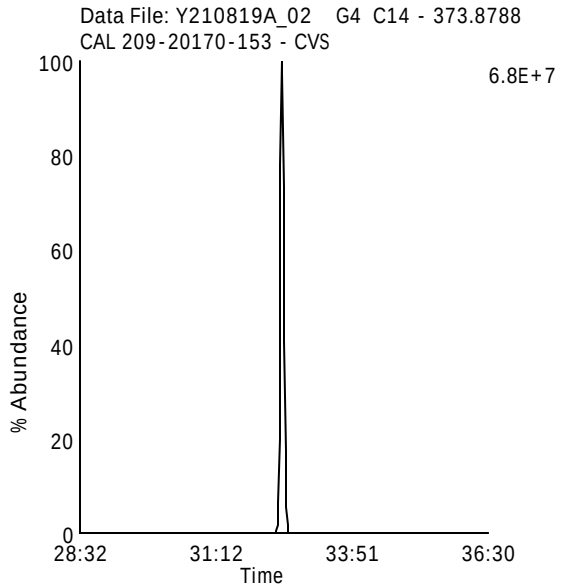
Labeled Hexa Chlorinated Biphenyls

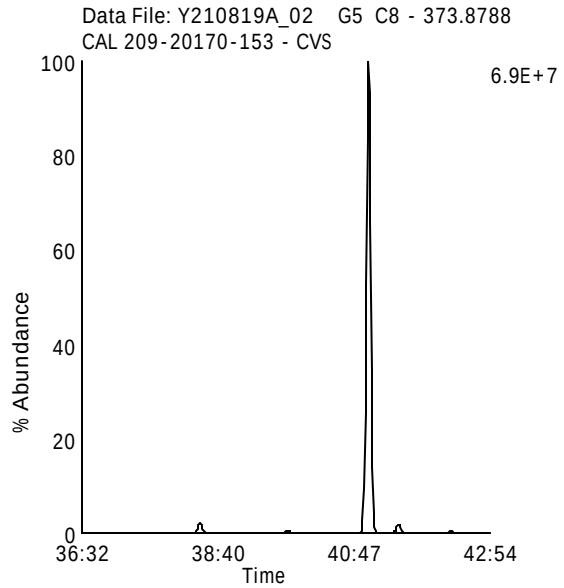
Data File Name: Y210819A_02 | Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

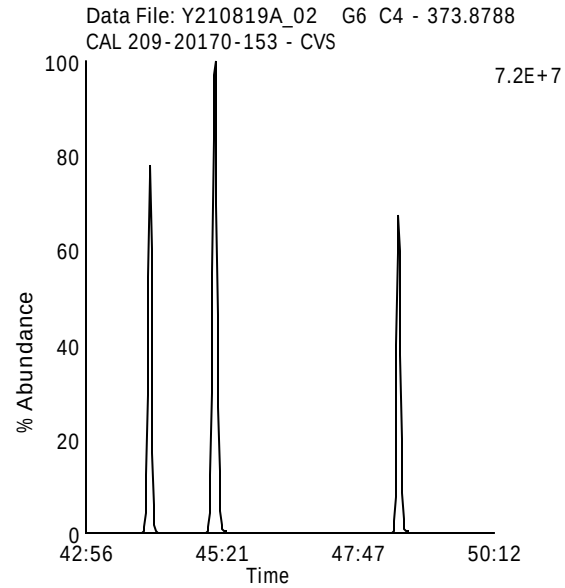






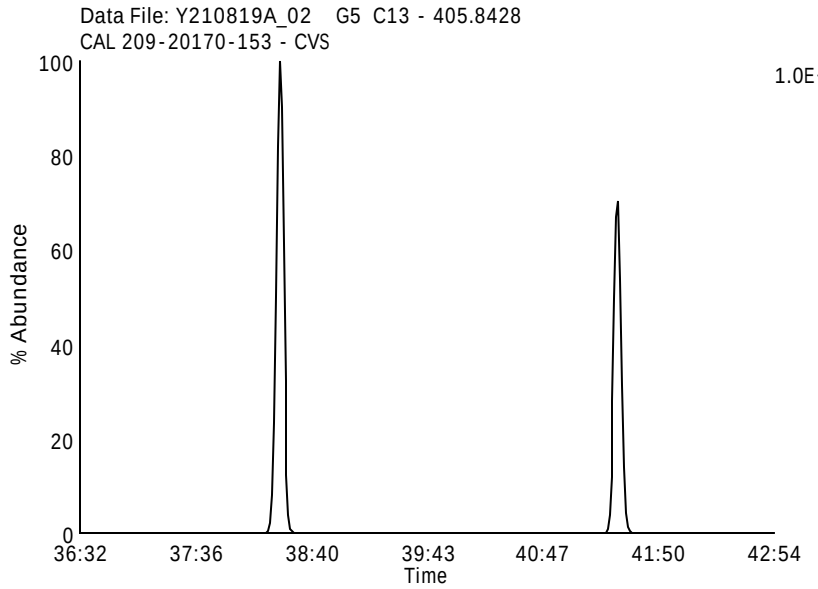


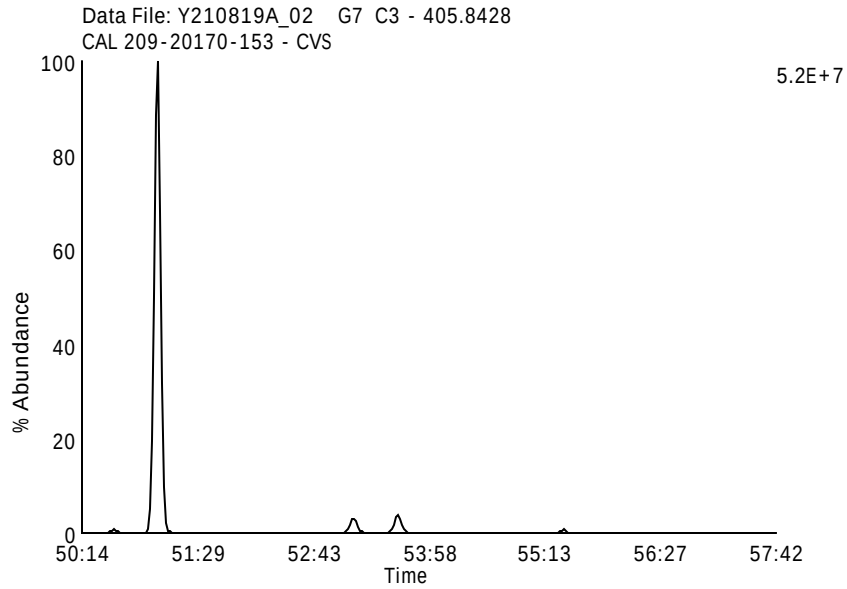


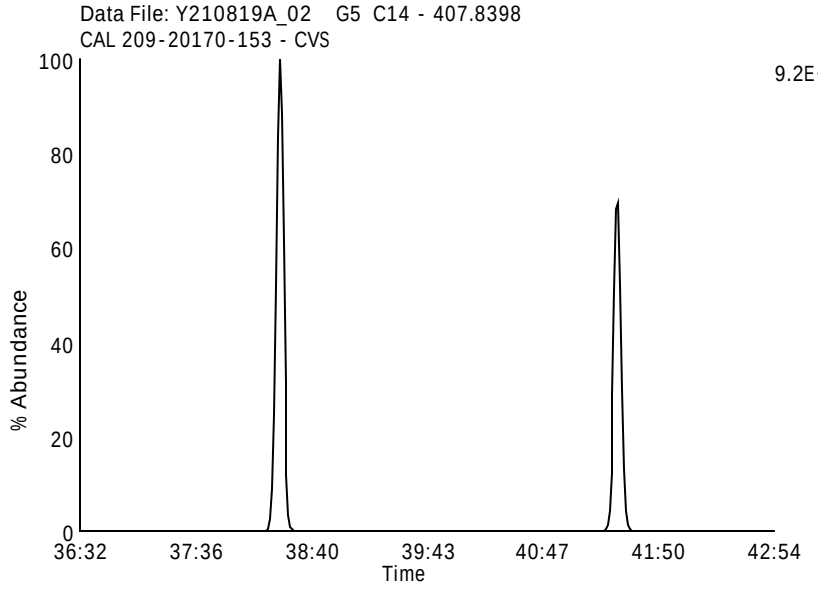


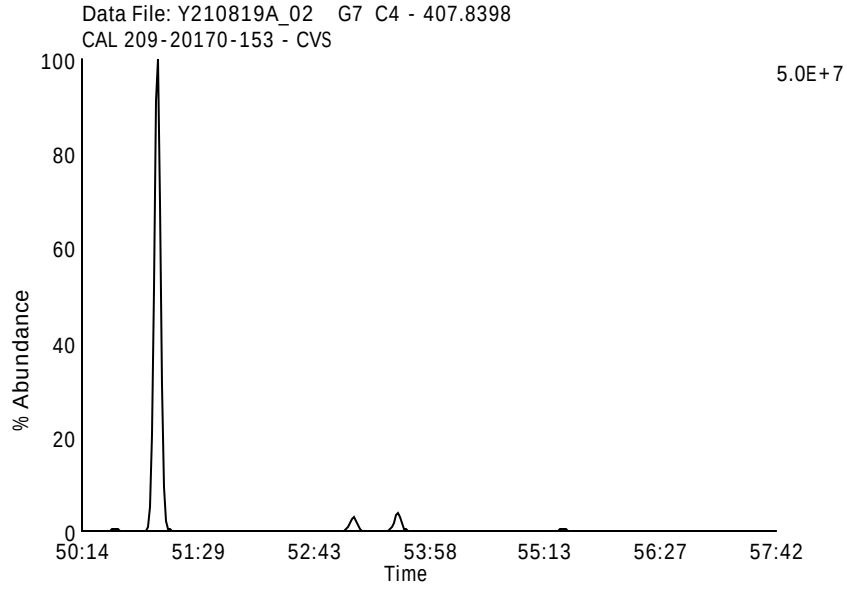
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





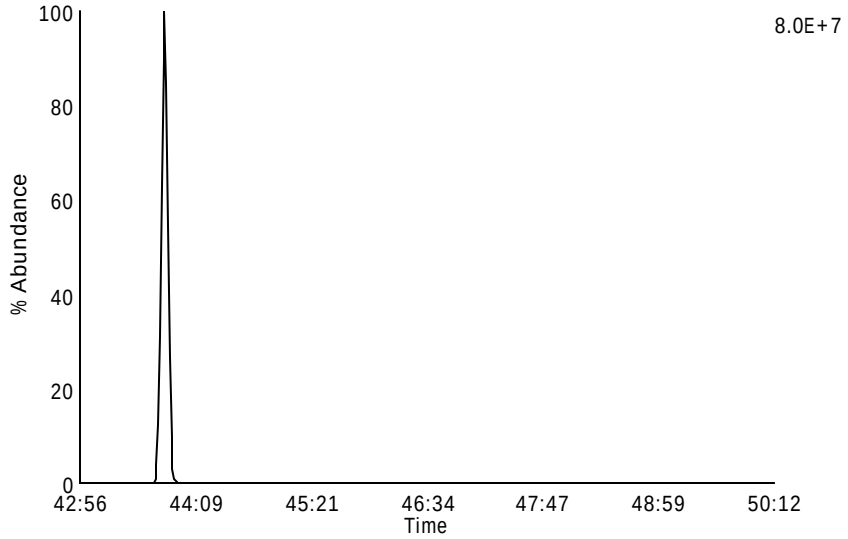




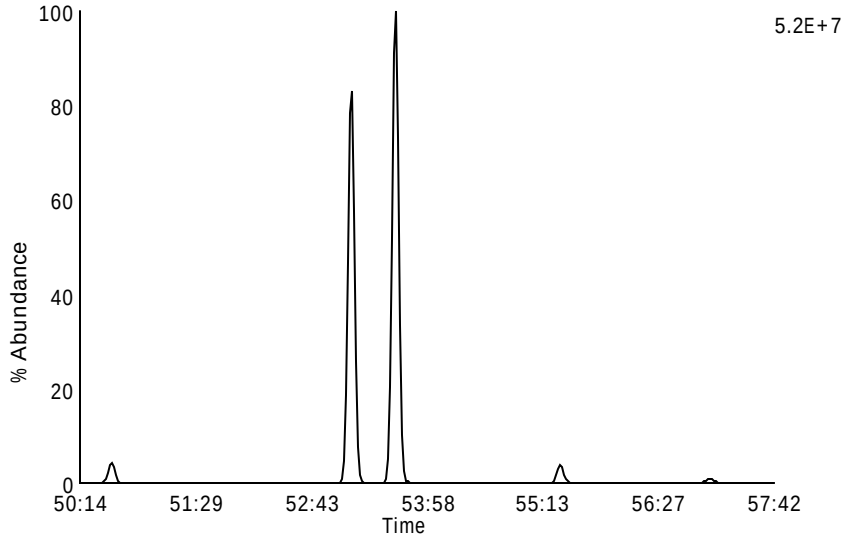
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

Data File: Y210819A_02 G6 C13 - 439.8038
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G7 C7 - 439.8038
CAL 209-20170-153 - CVS



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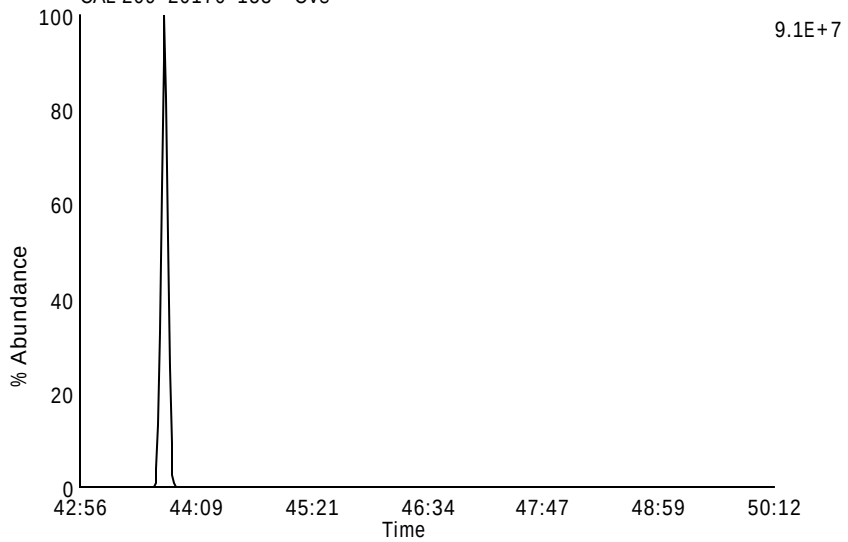
CAL 209-20170-153 - CVS



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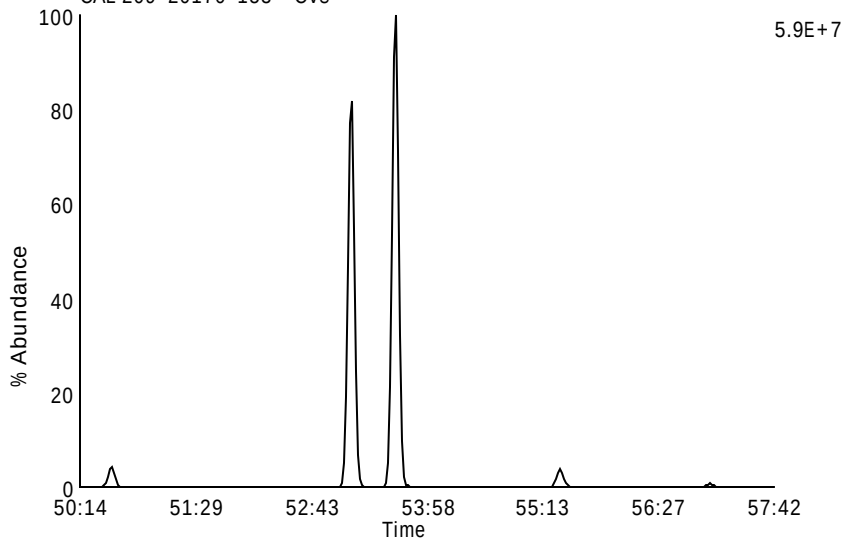
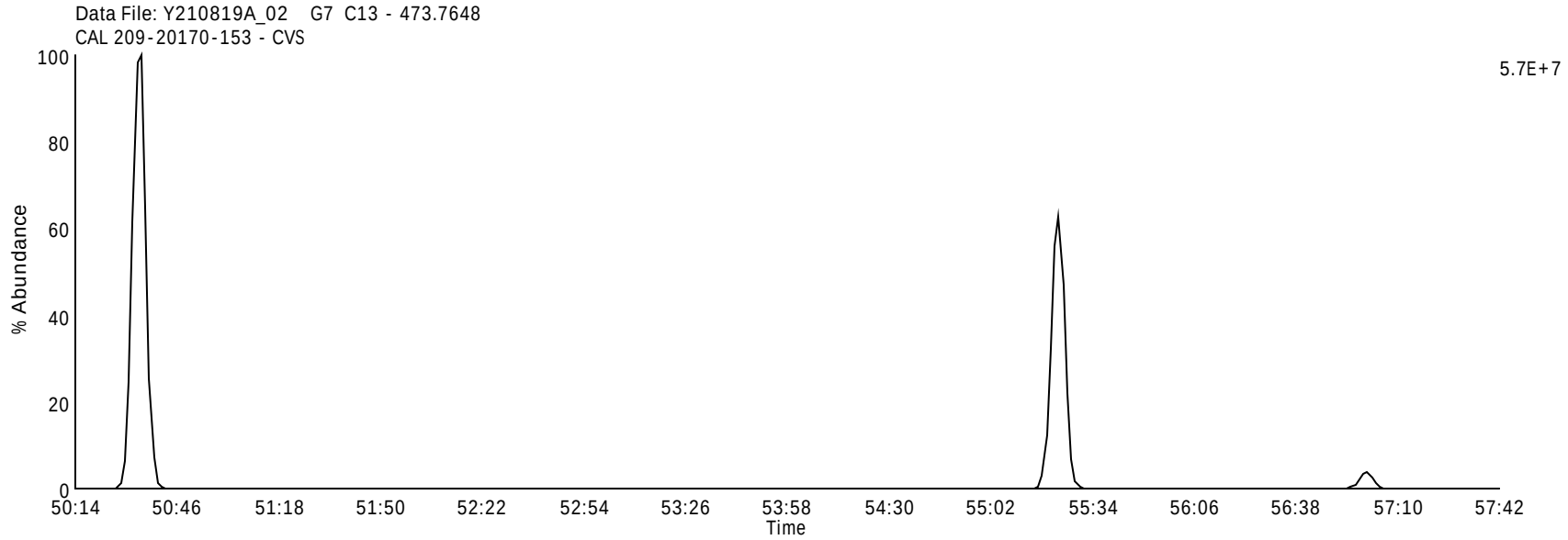
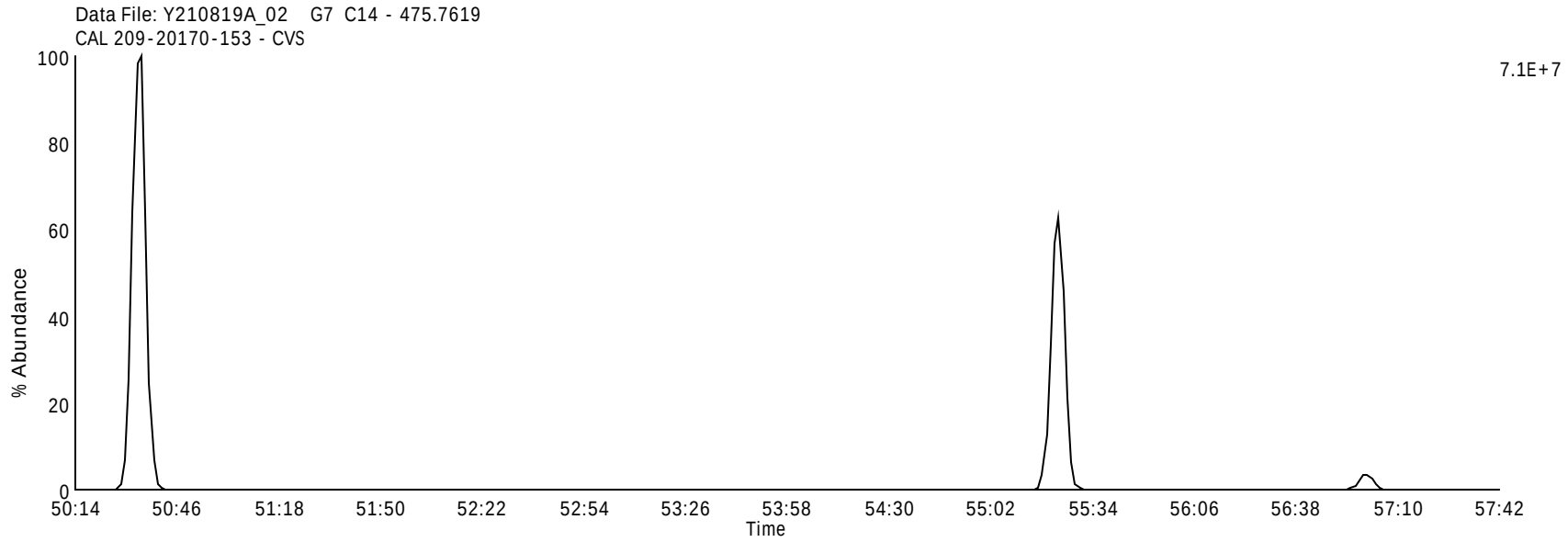
CAL 209-20170-153 - CVS



Labeled Nona Chlorinated Biphenyls

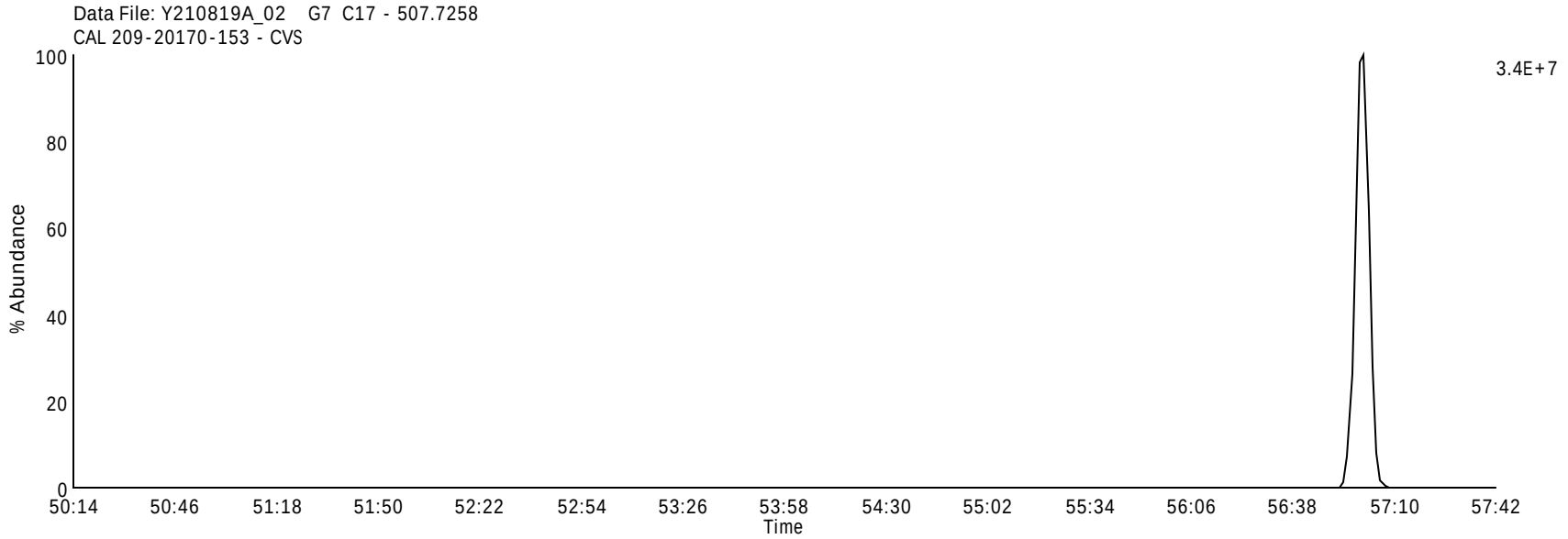
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

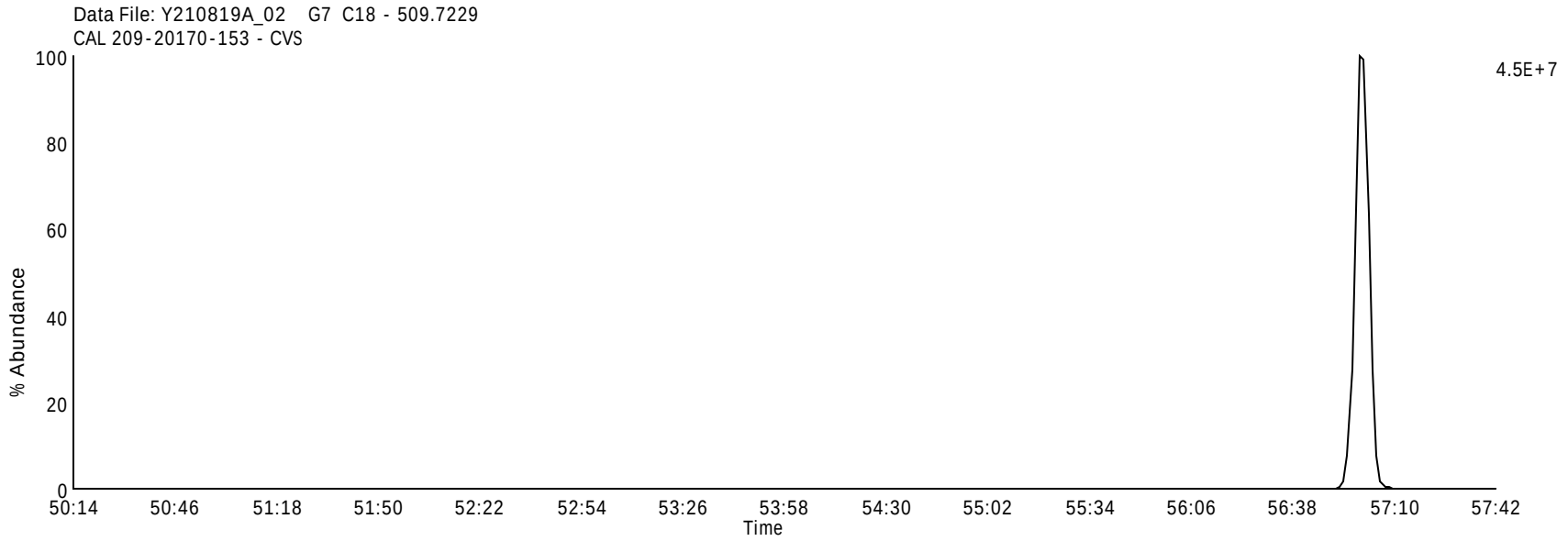




Labeled Deca Chlorinated Biphenyl

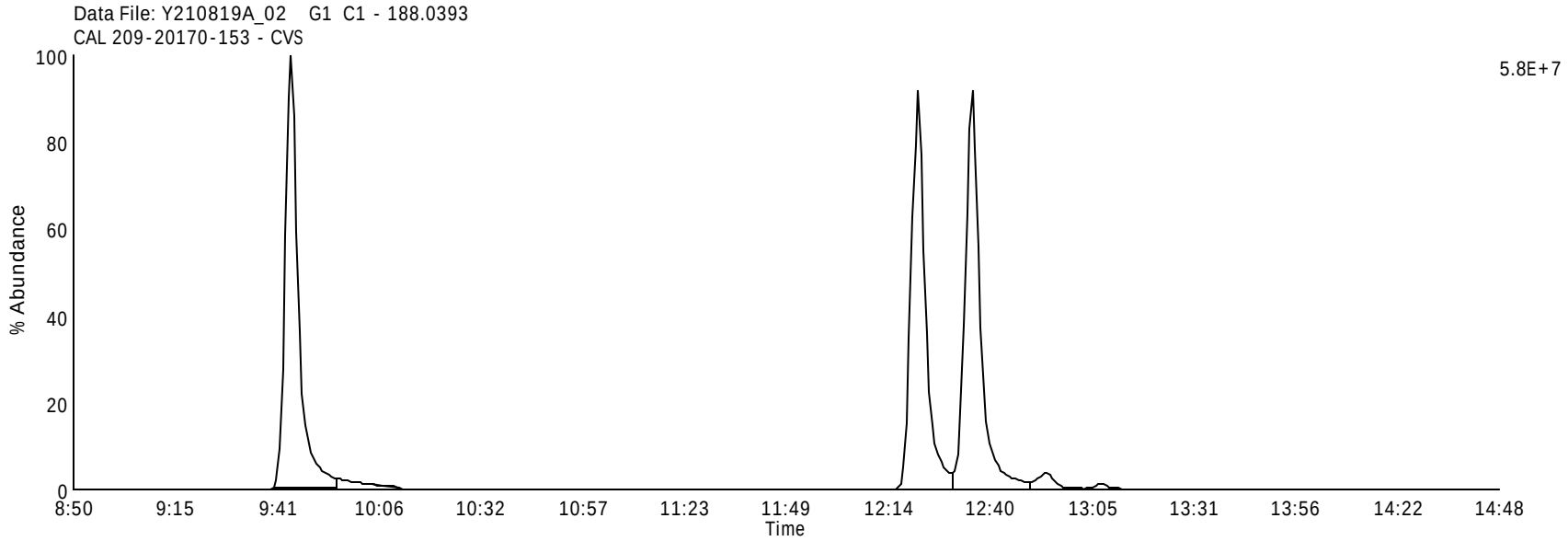
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

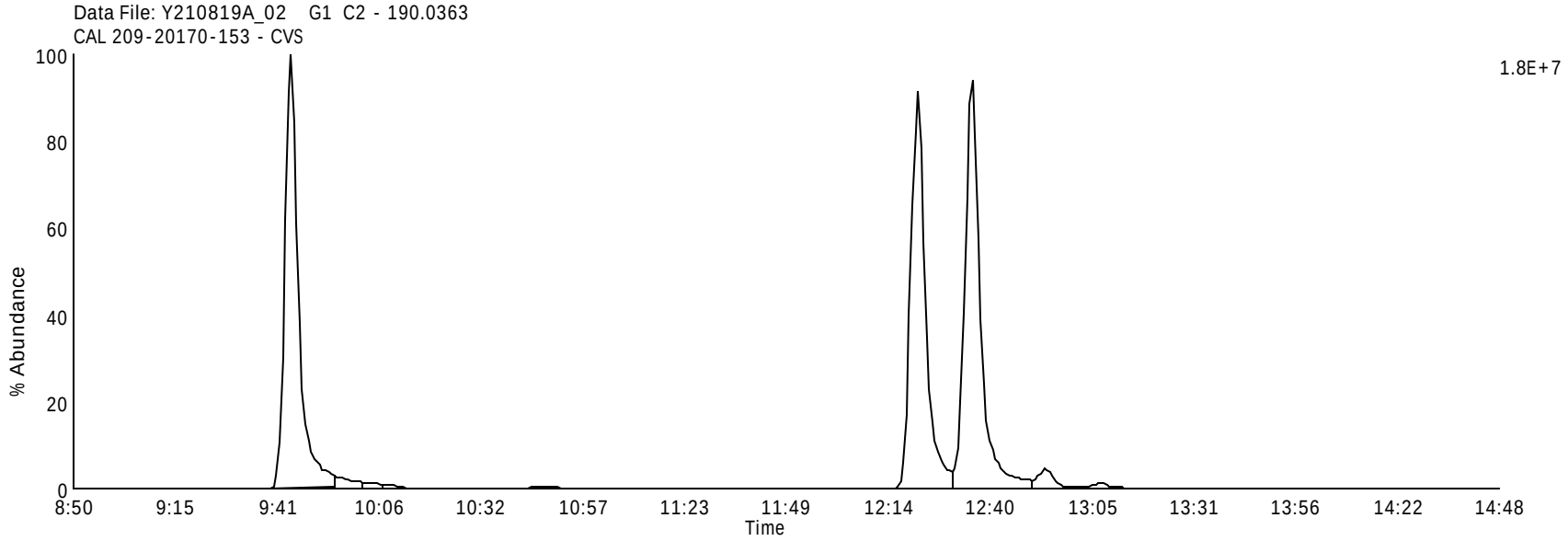




Mono Chlorinated Biphenyls

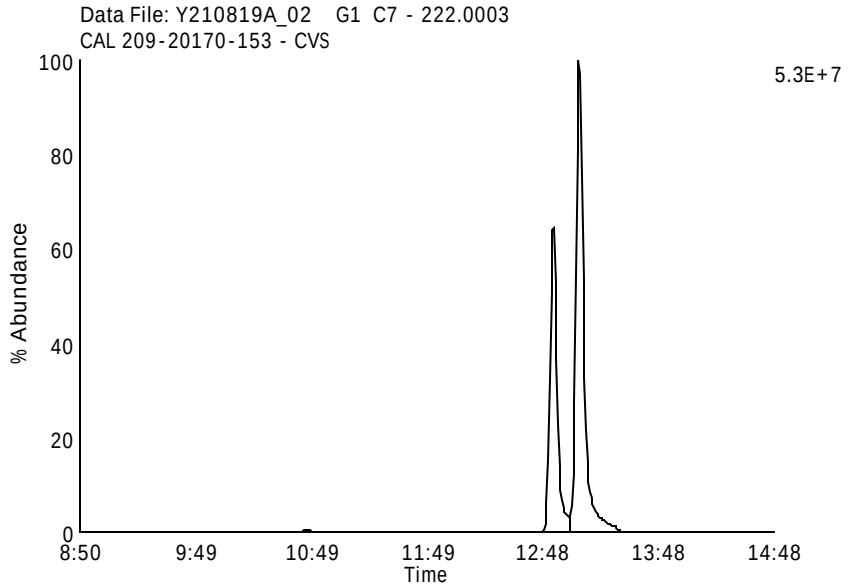
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

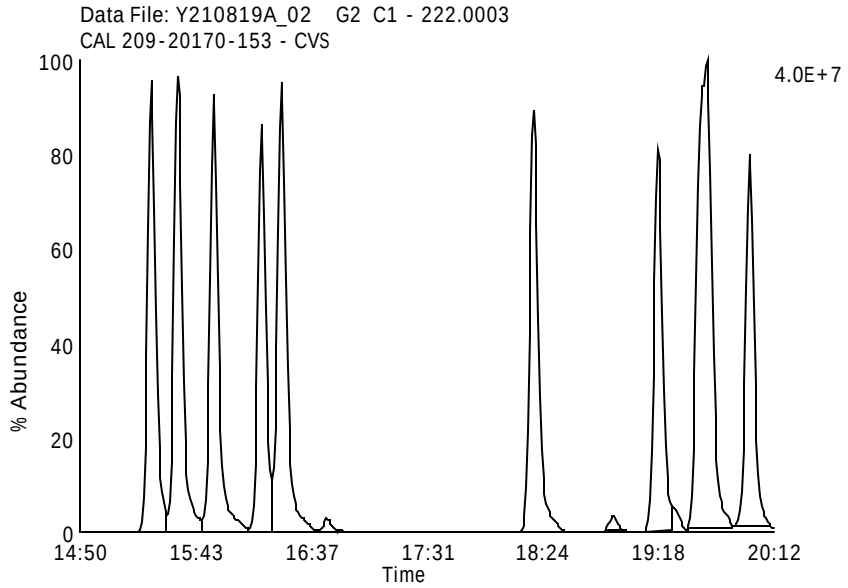


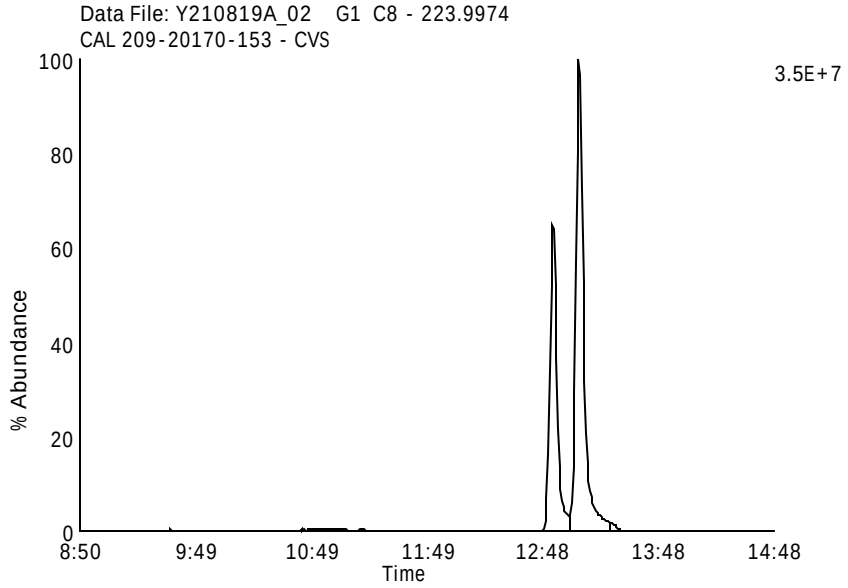


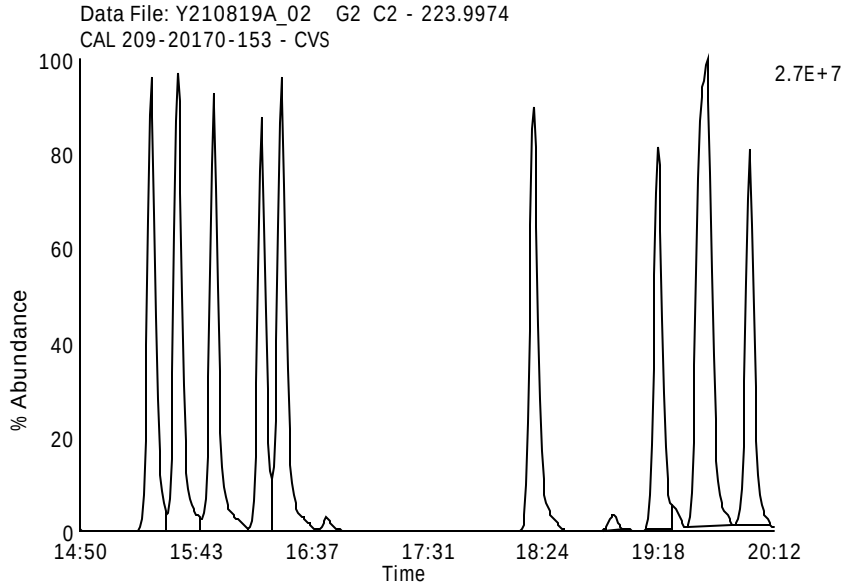
Di Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



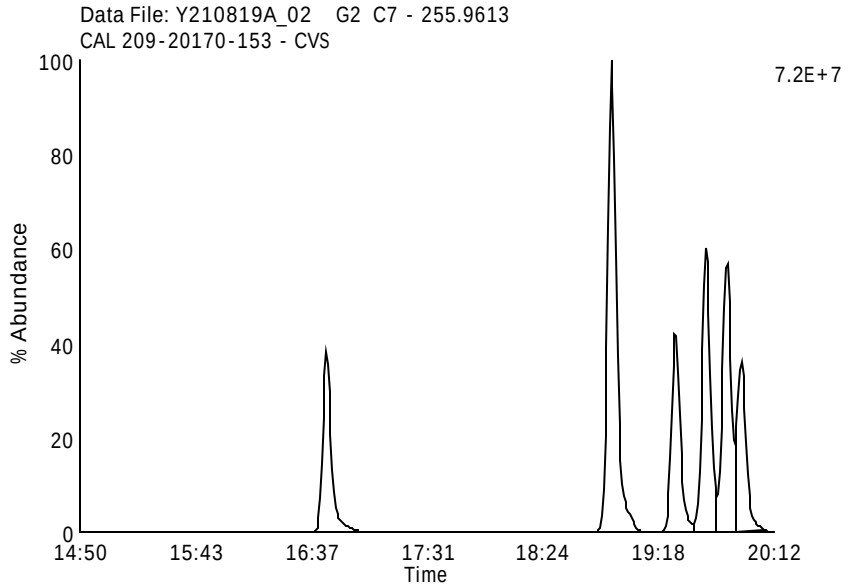


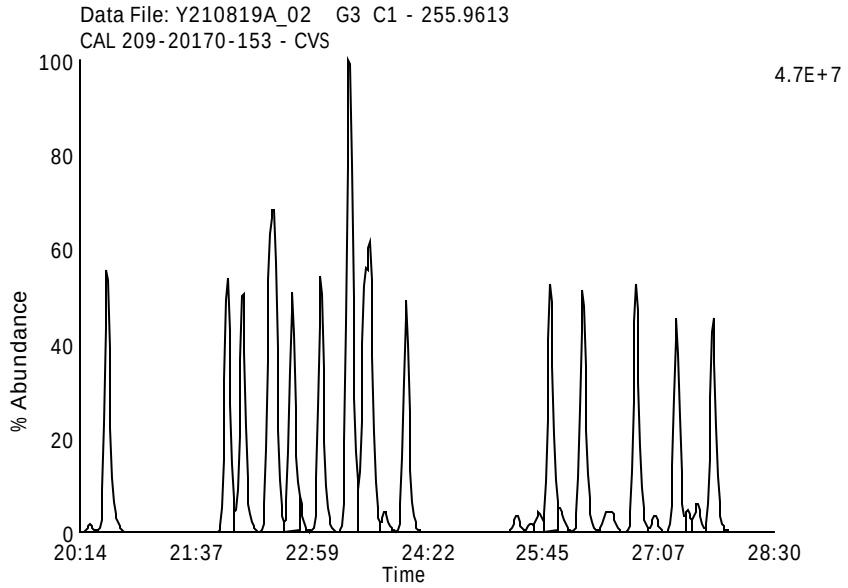


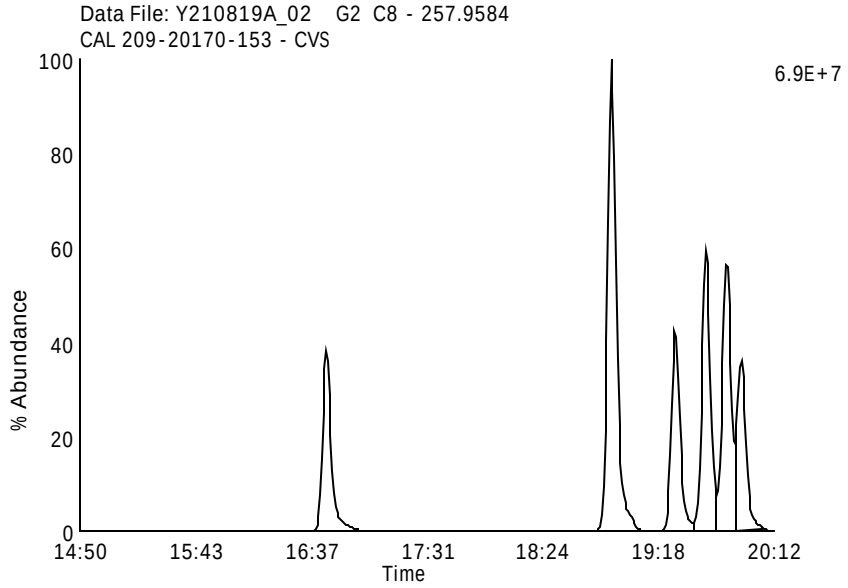


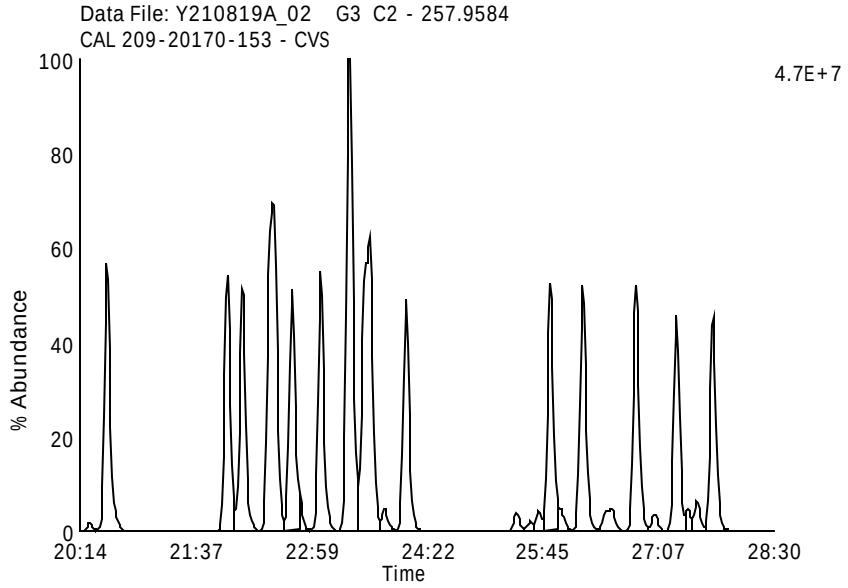
Tri Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



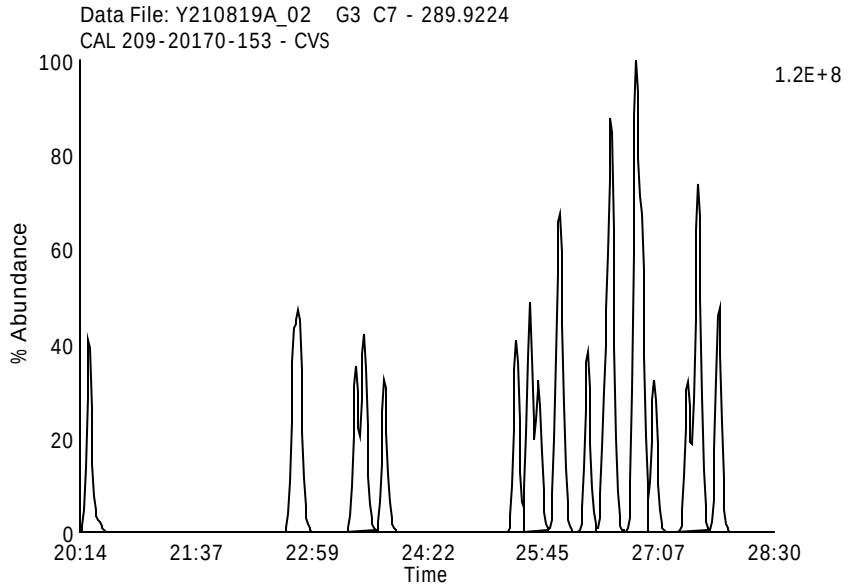


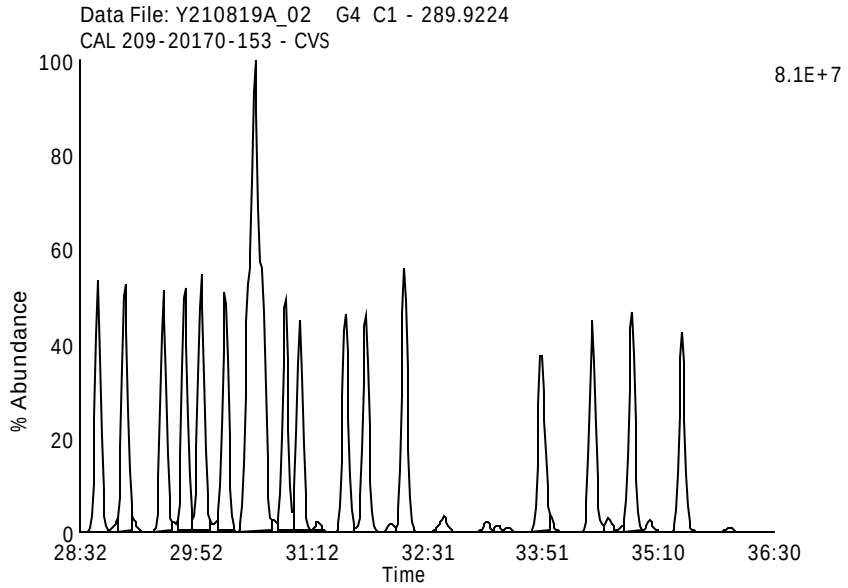


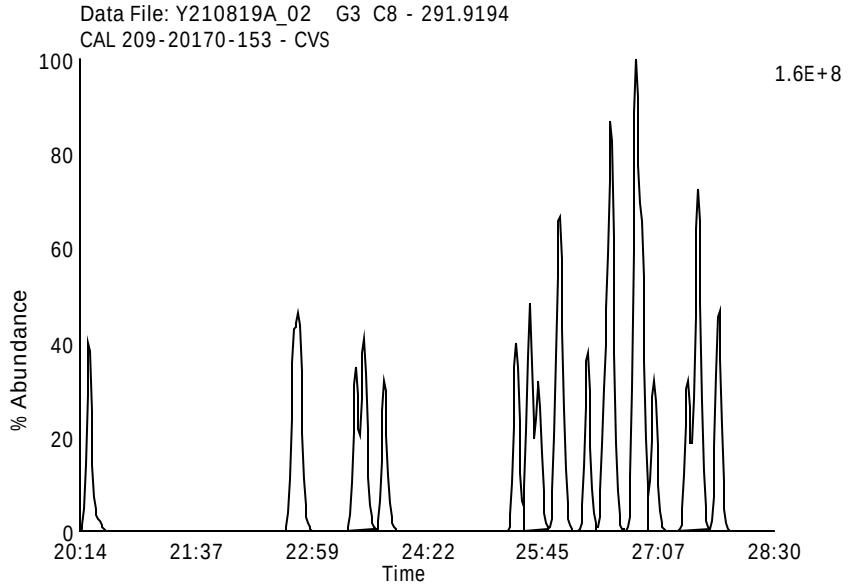


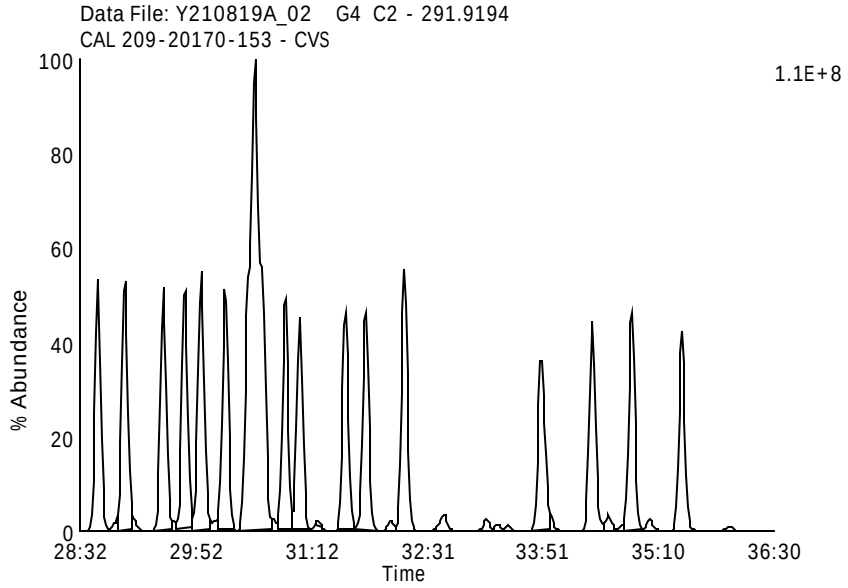
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



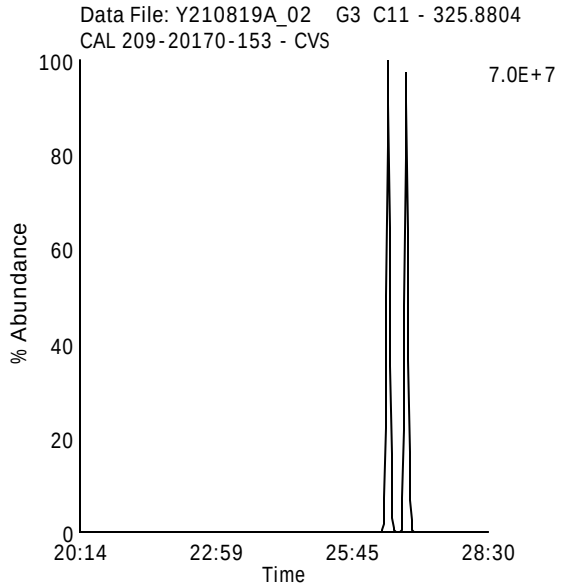


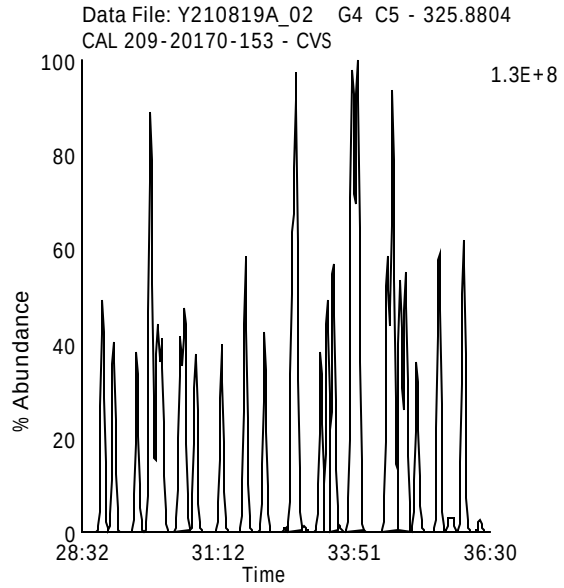


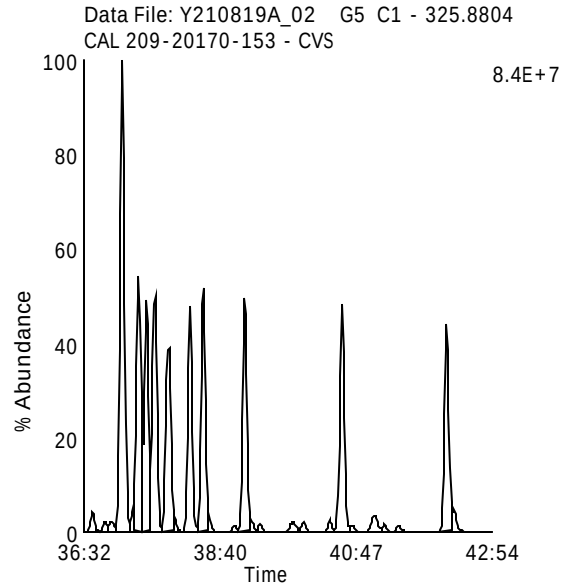


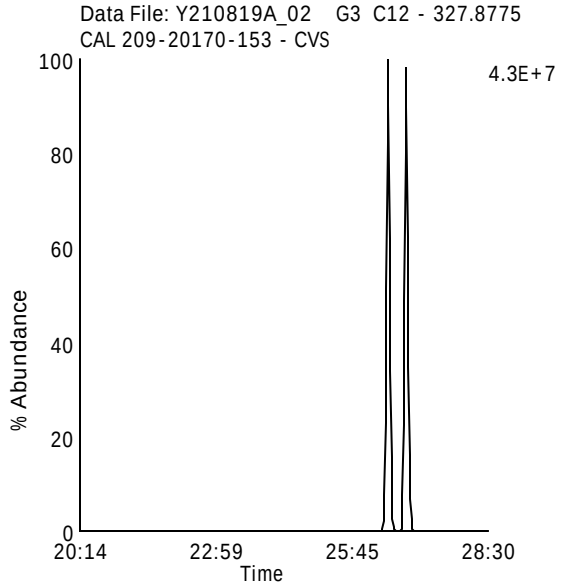
Penta Chlorinated Biphenyls

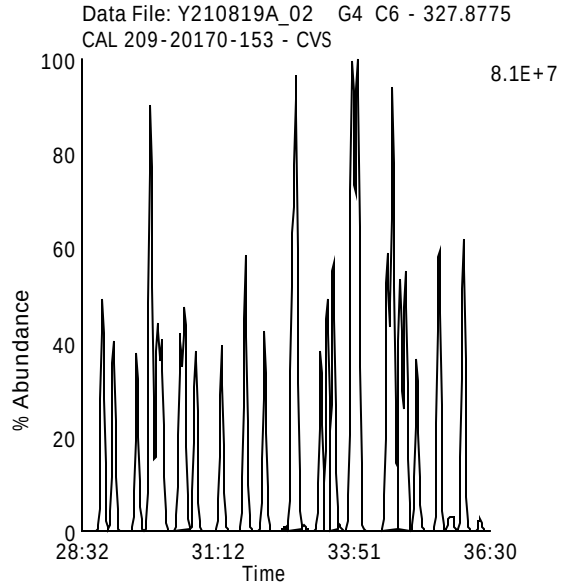
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

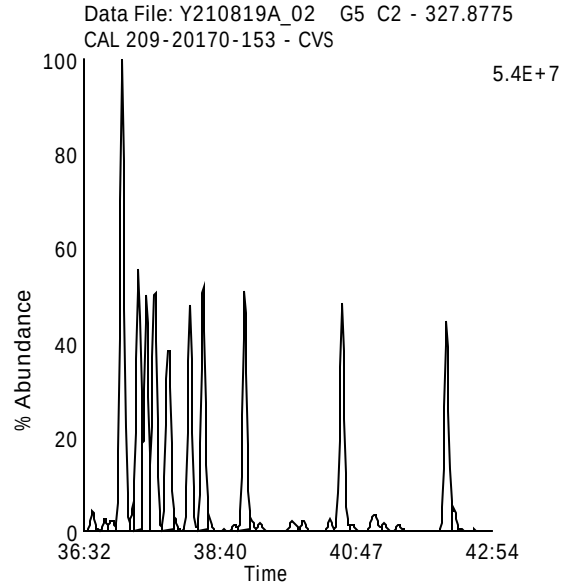






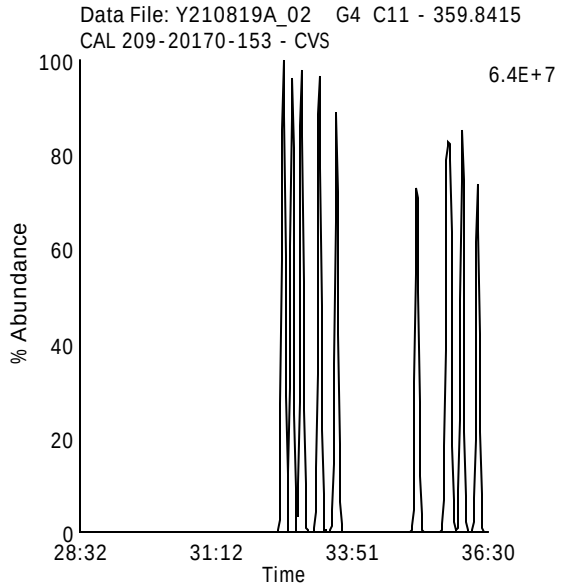


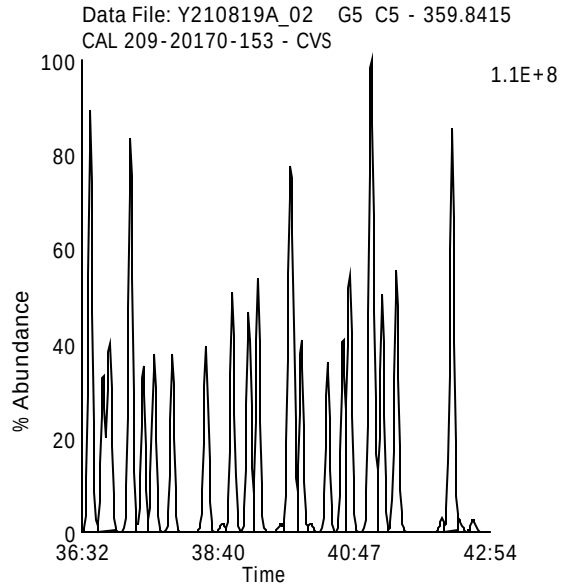


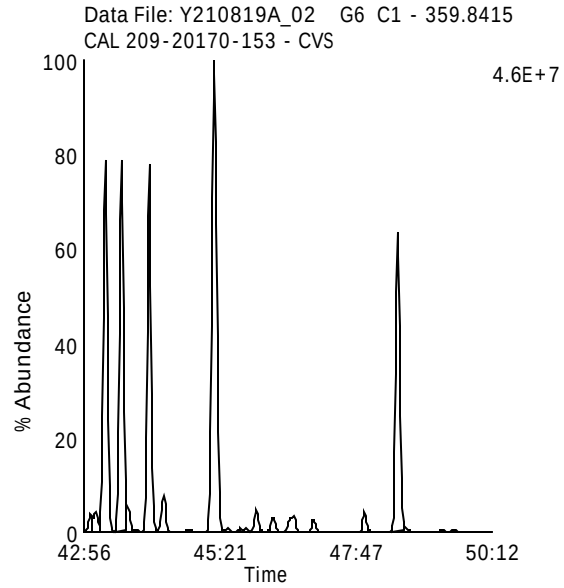


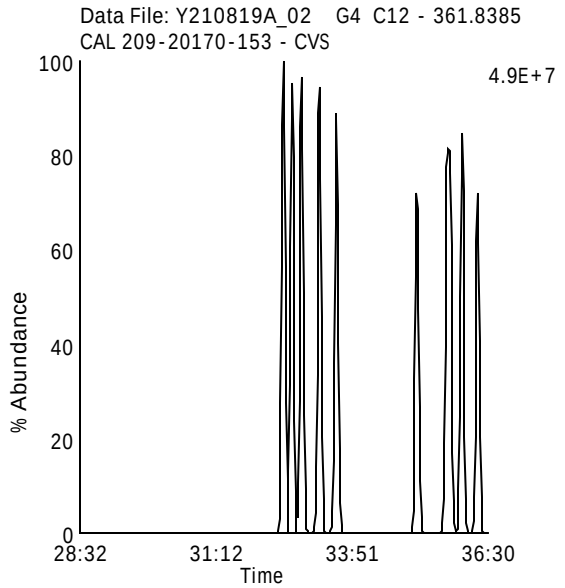
Hexa Chlorinated Biphenyls

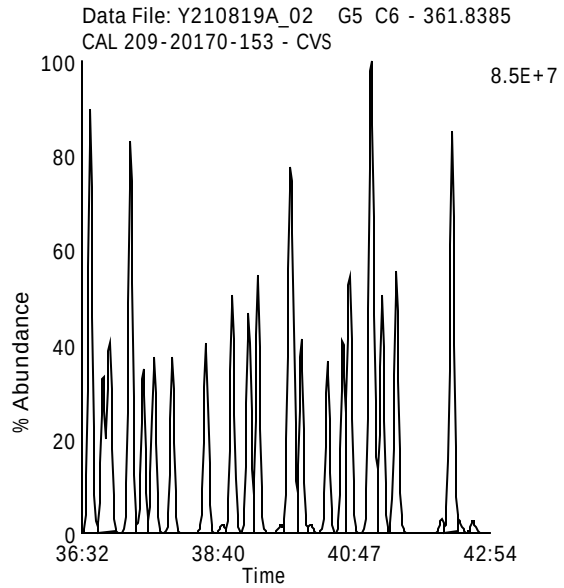
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

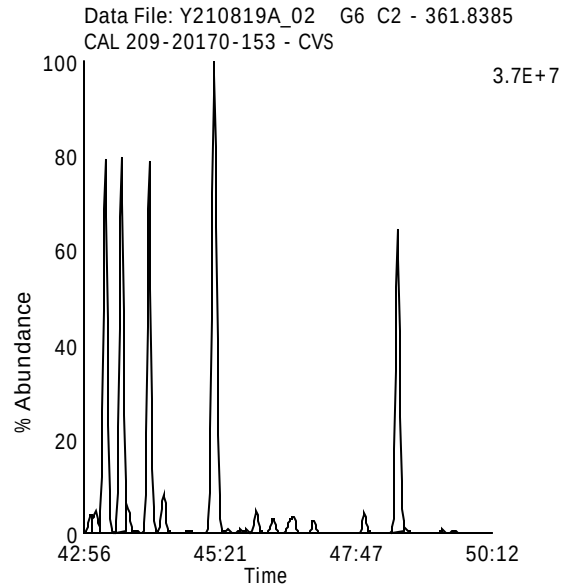






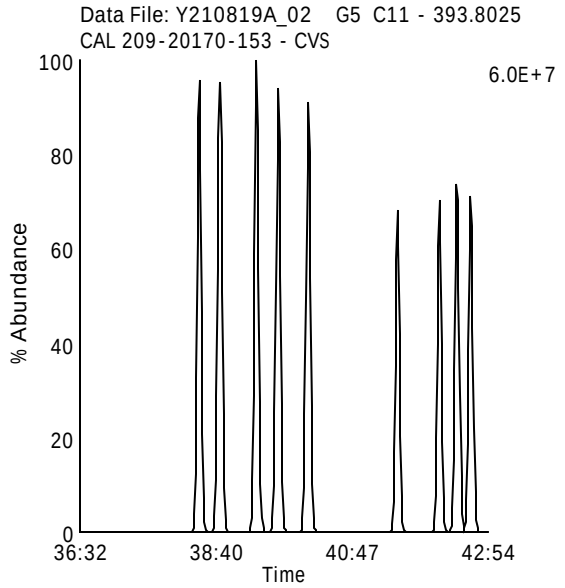


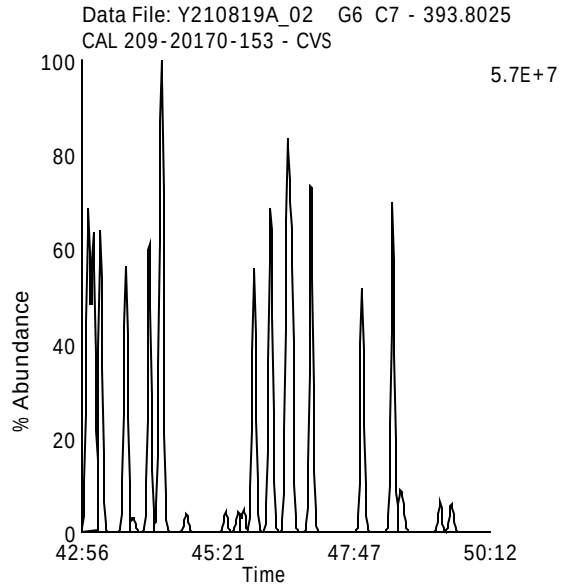


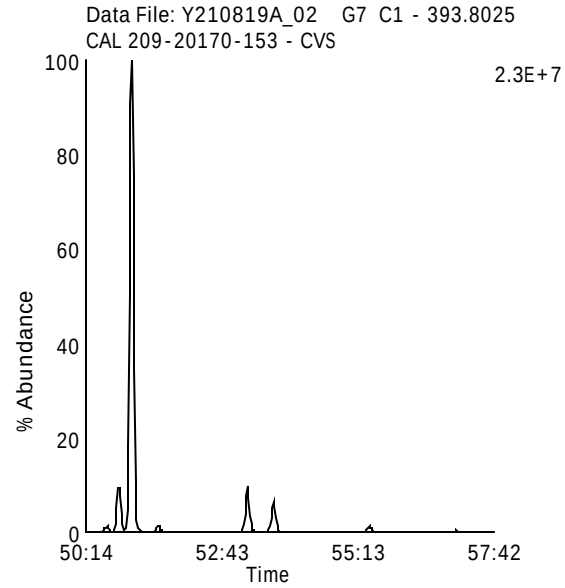


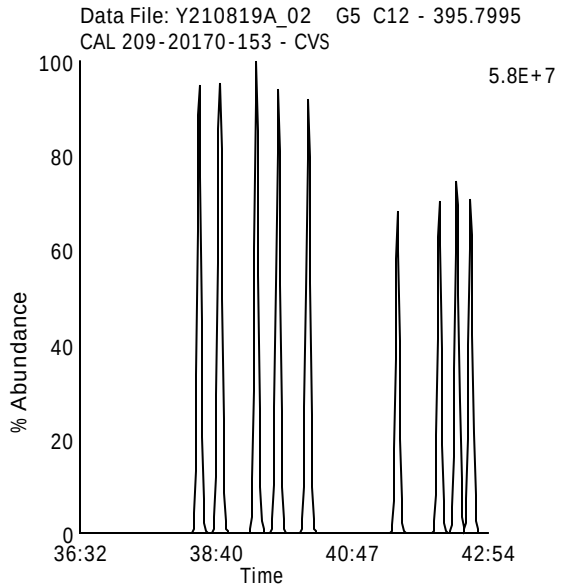
Hepta Chlorinated Biphenyls

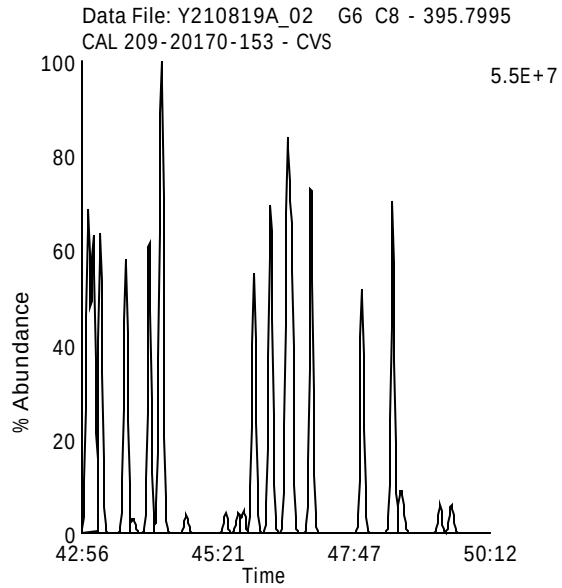
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

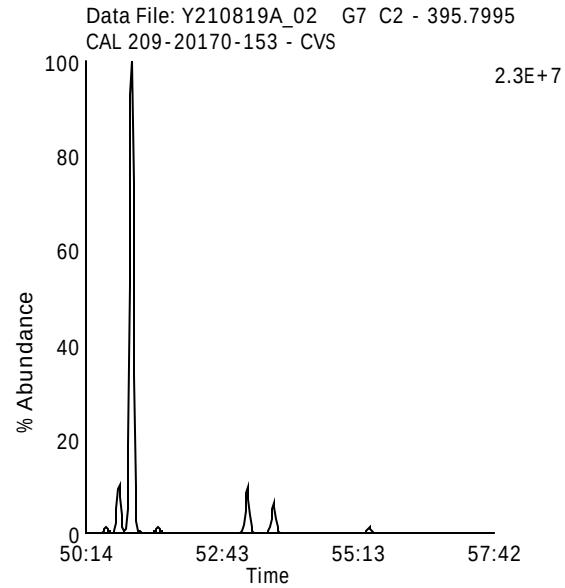






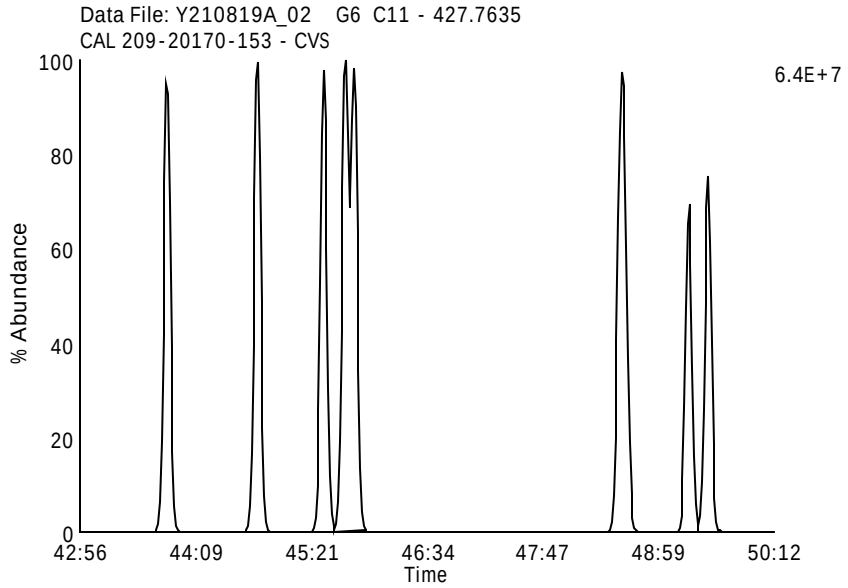


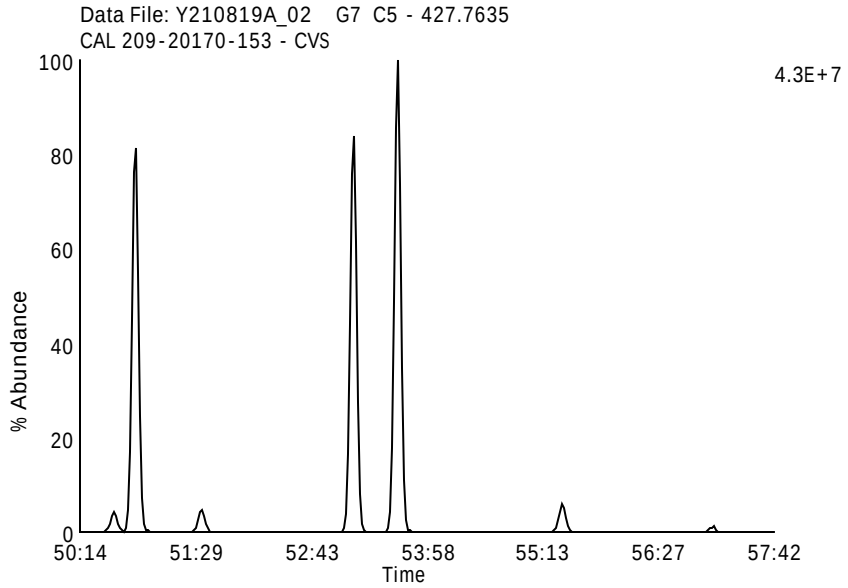


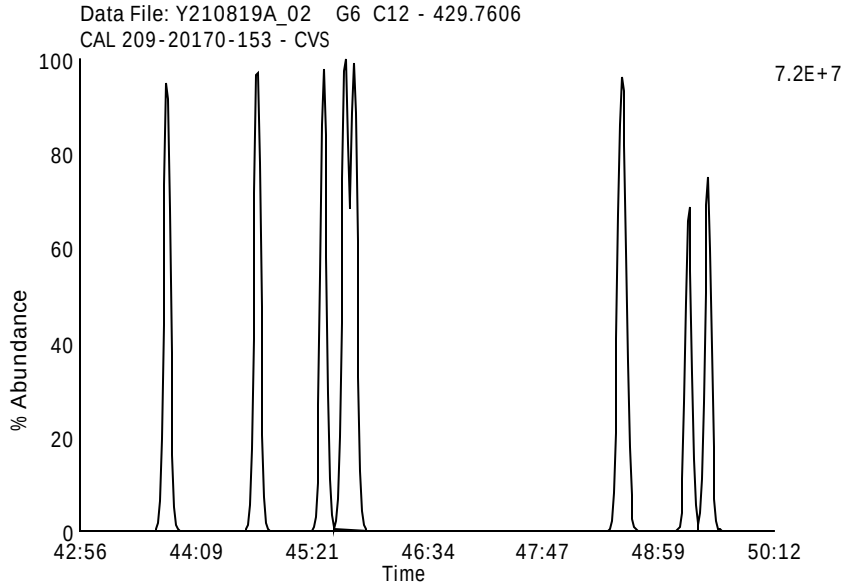


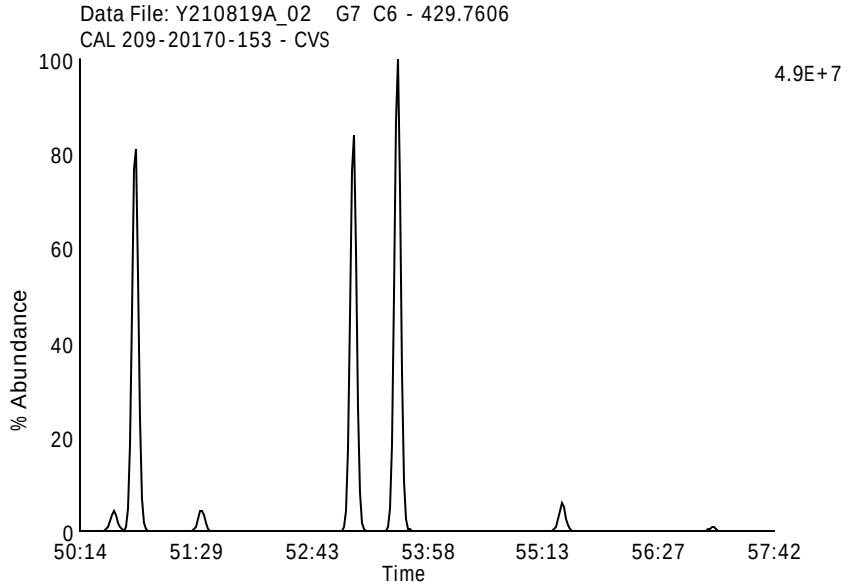
Octa Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix







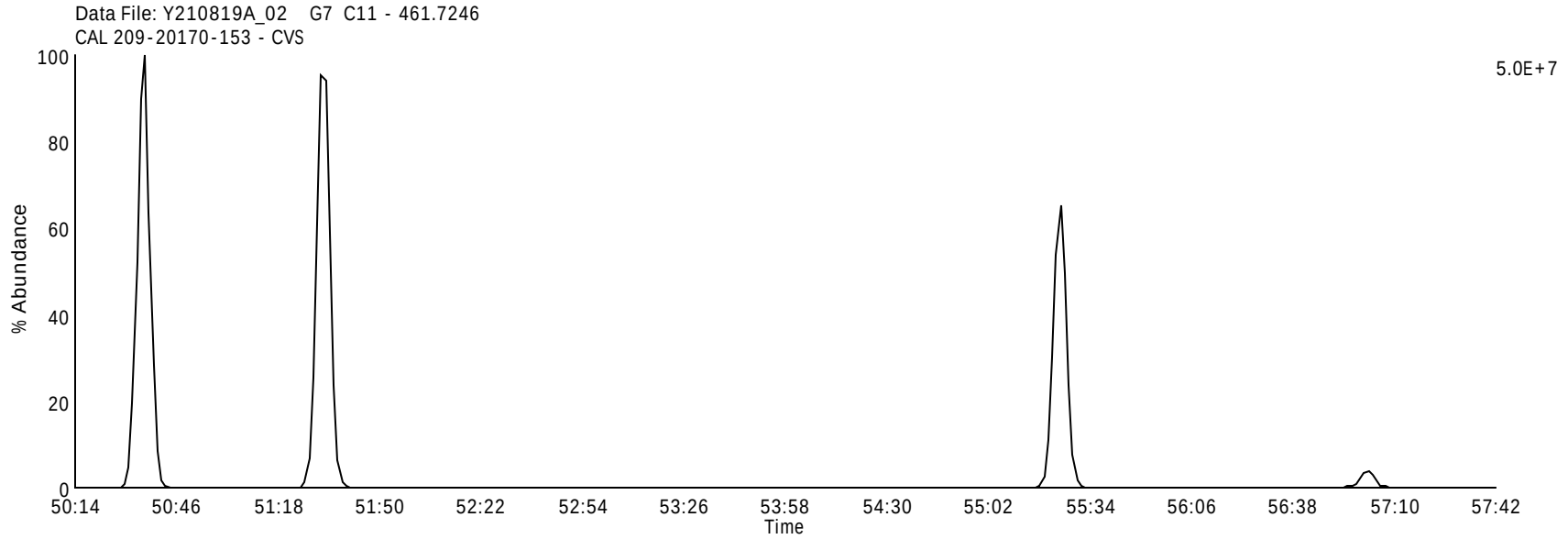


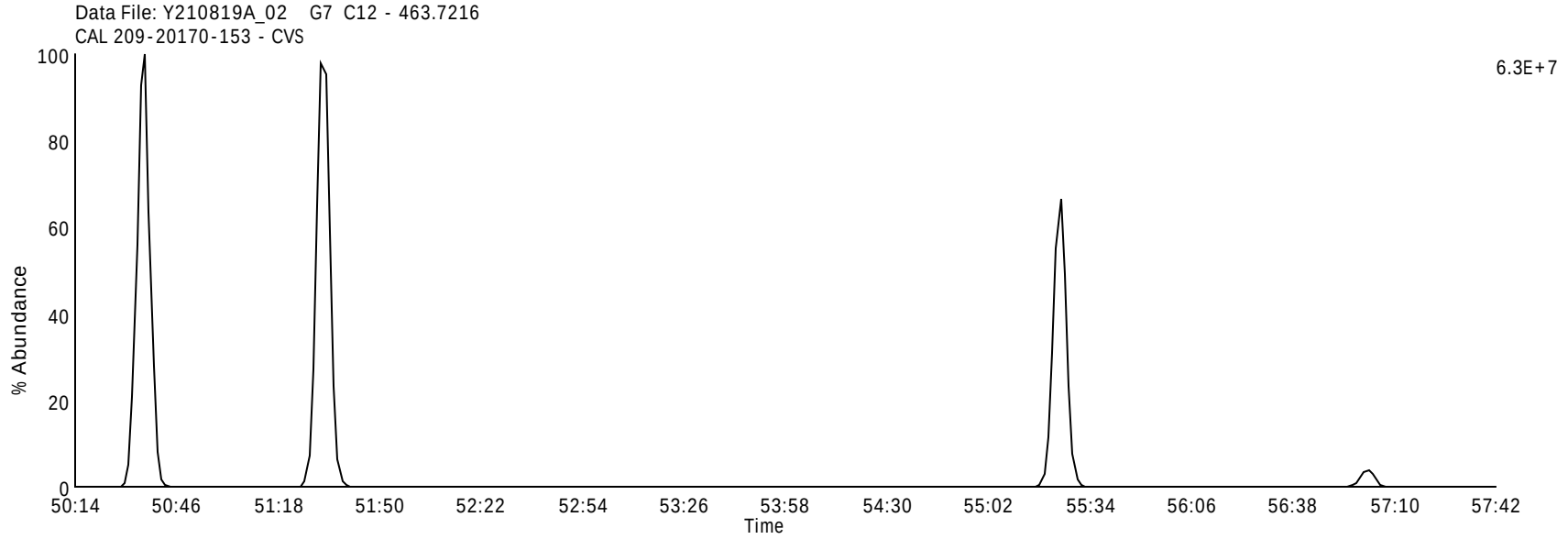
Nona Chlorinated Biphenyls

Data File Name: Y210819A_02 | Lab Sample ID: 209-20170-153

Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

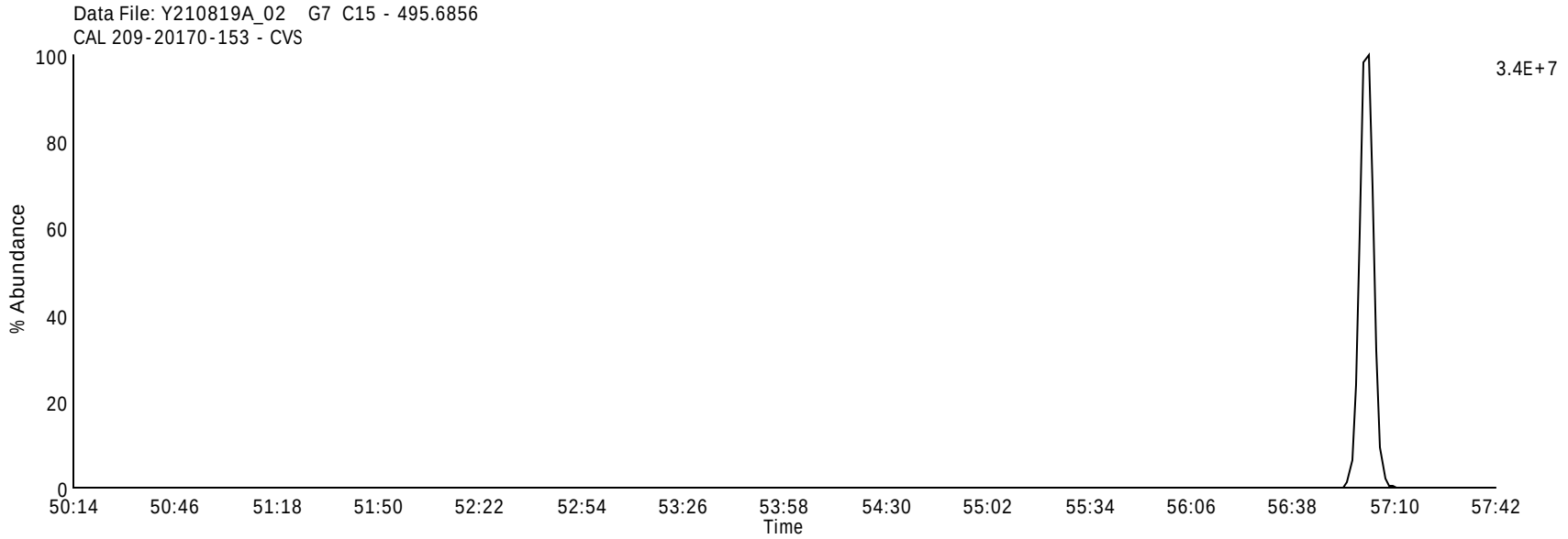
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

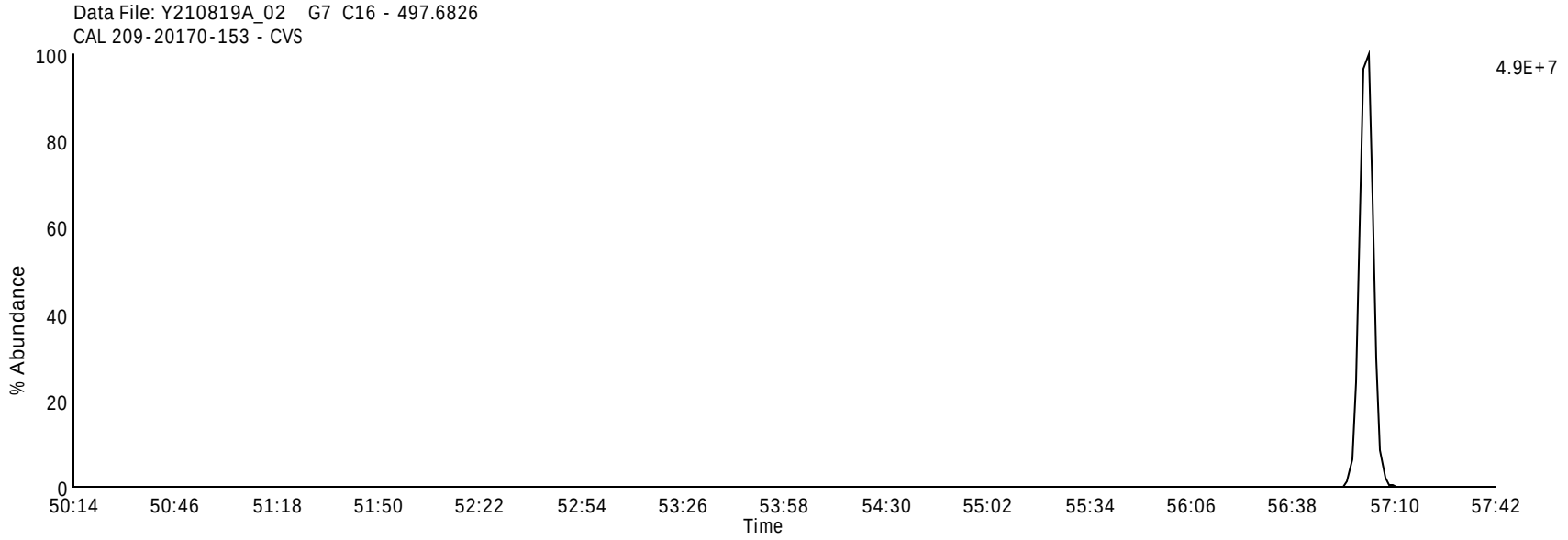




Deca Chlorinated Biphenyl

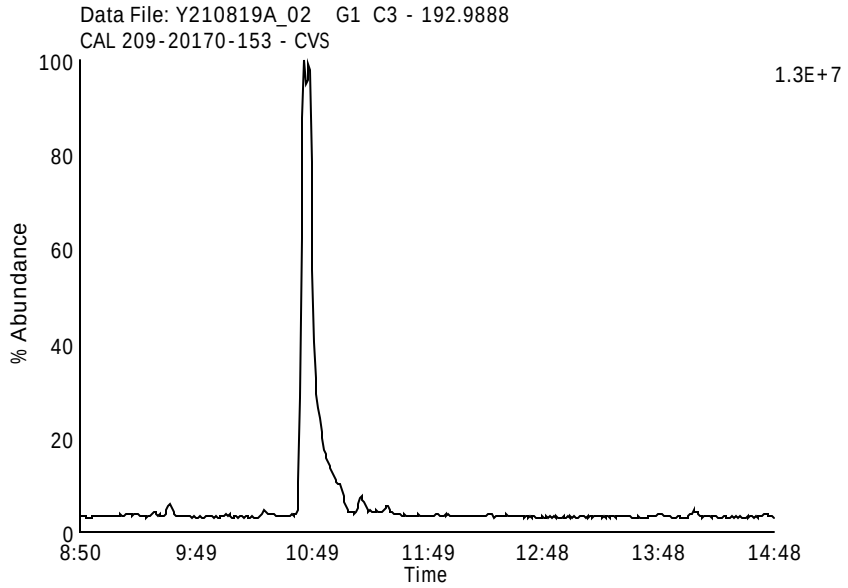
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

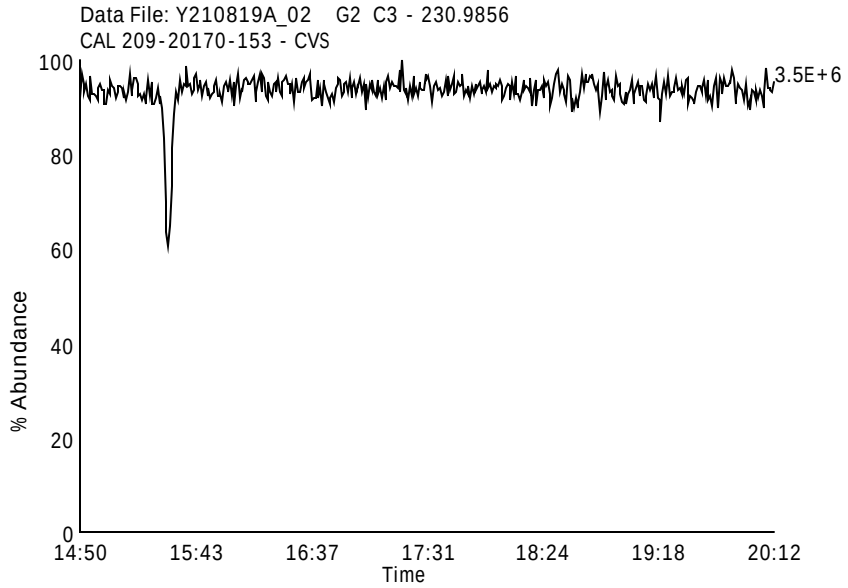


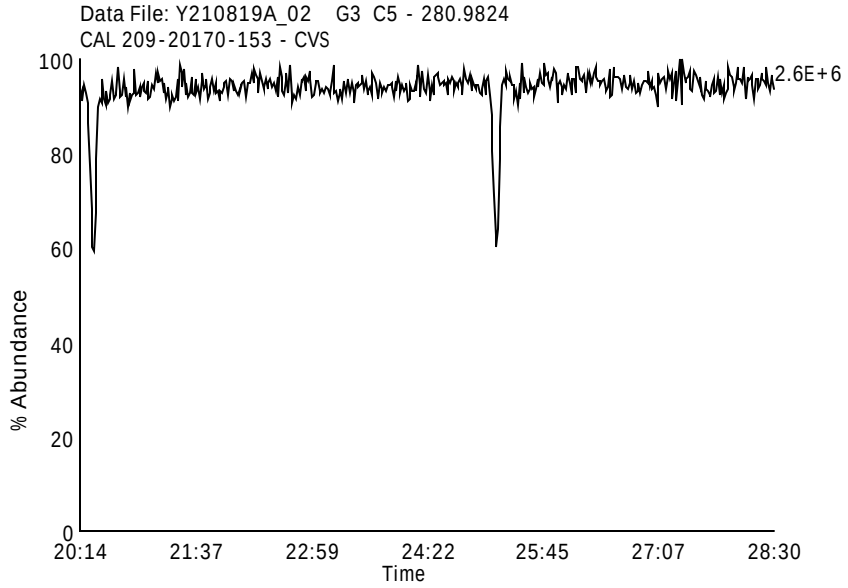


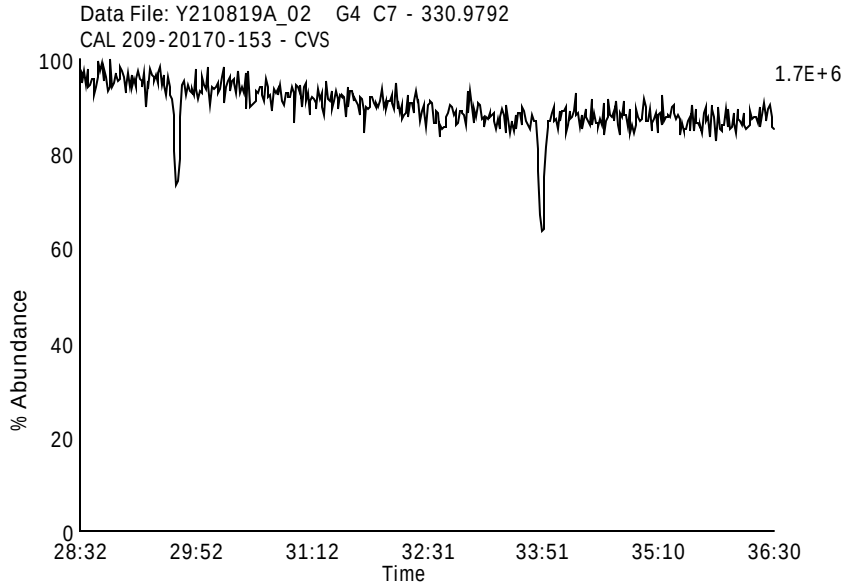
Group 1 - 4 Lock mass

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





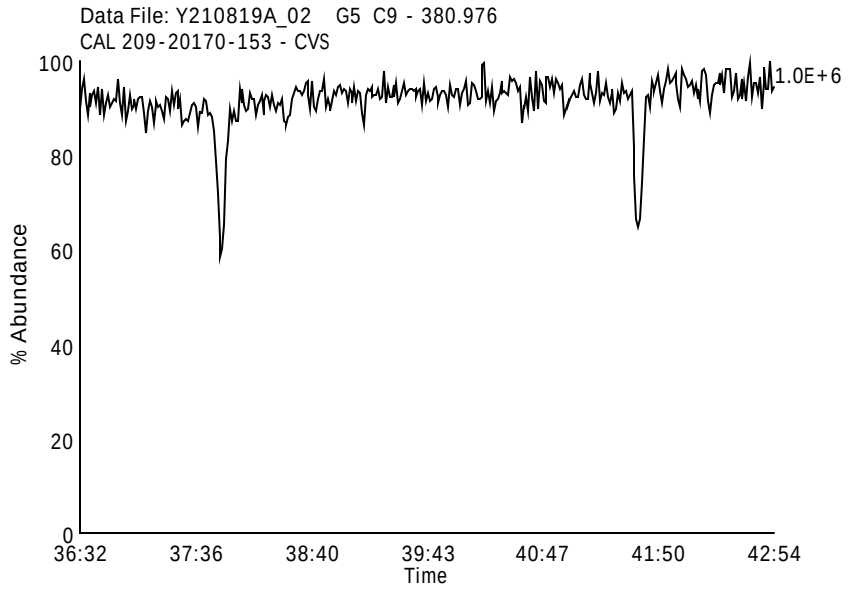


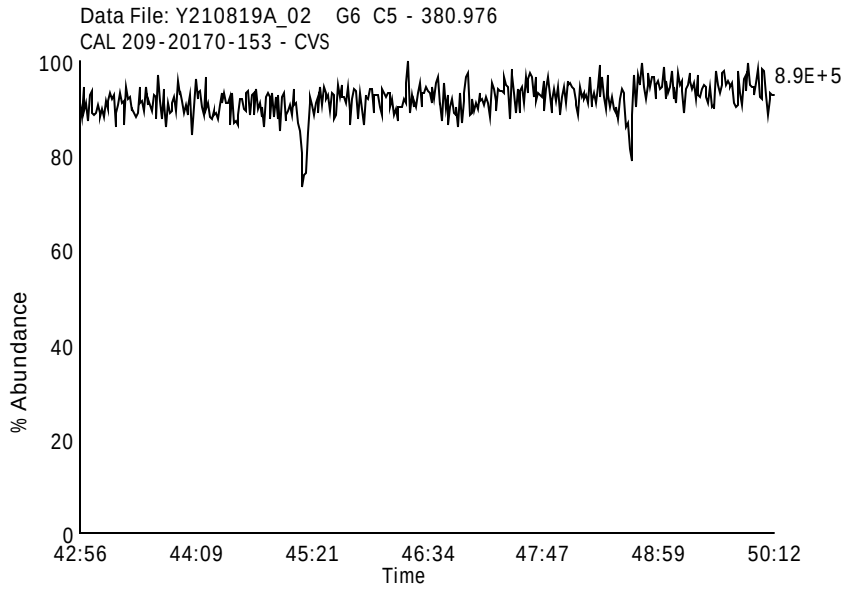


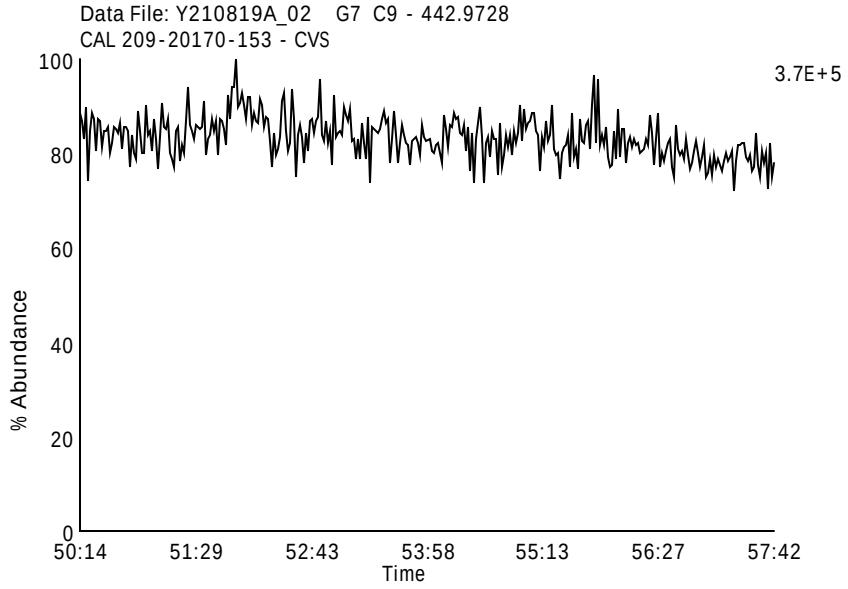
Group 5 - 7 Lock mass

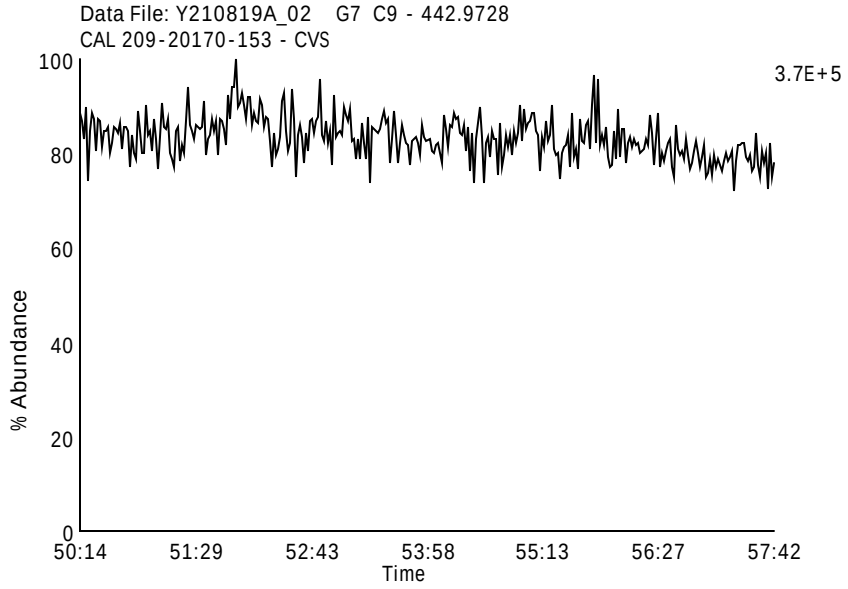
Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix







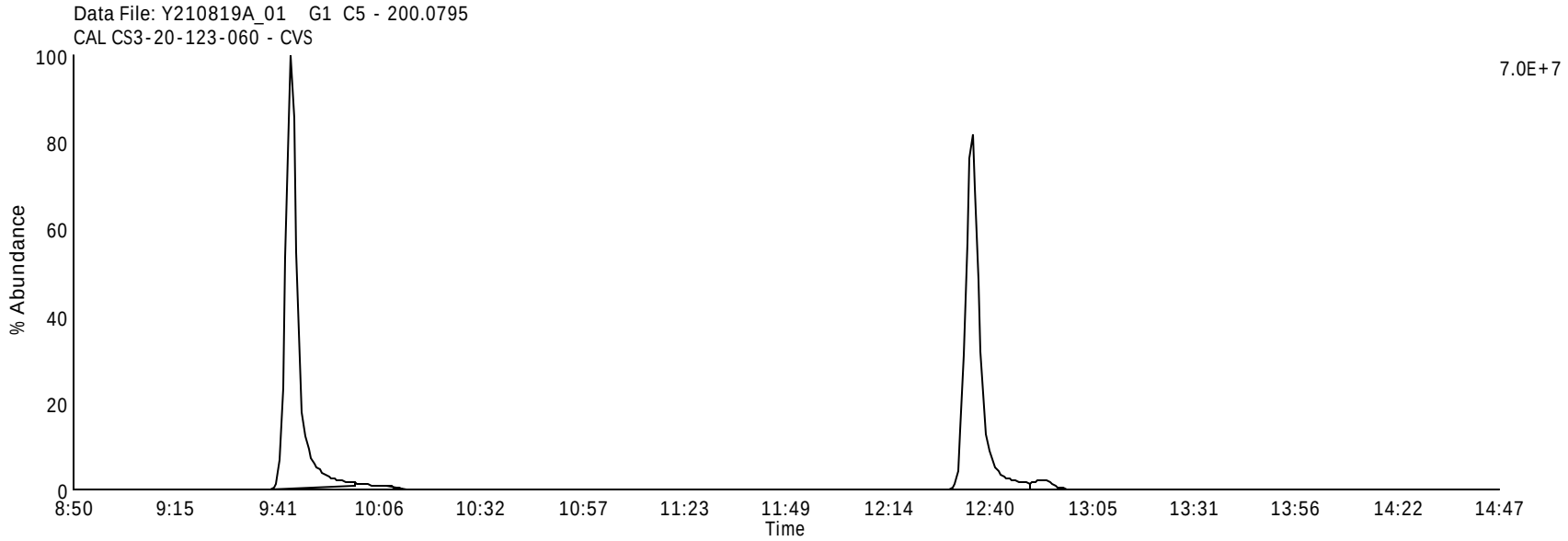


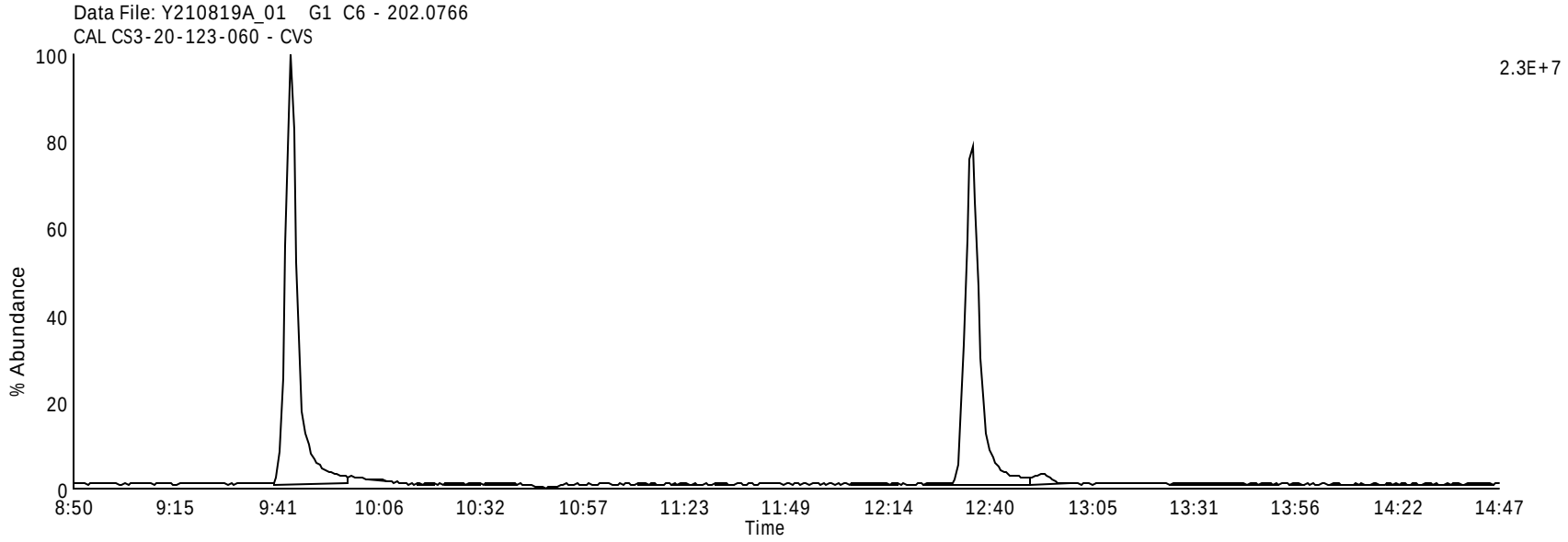
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

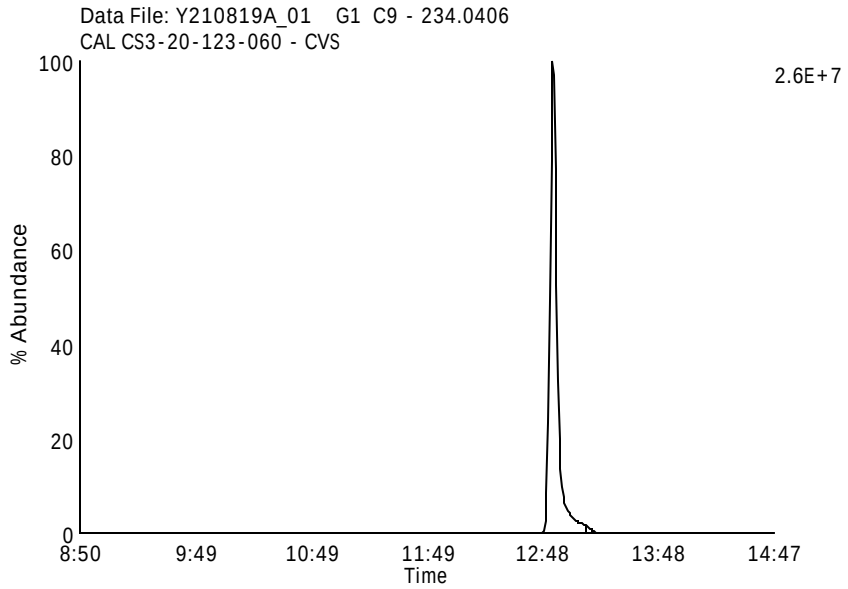
Sample Description: CAL CS3-20-123-060 - CVS

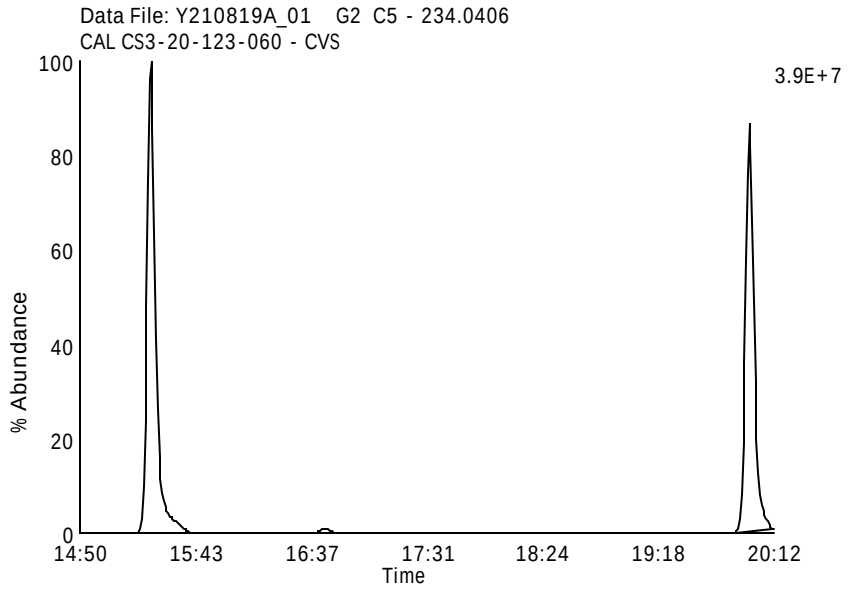


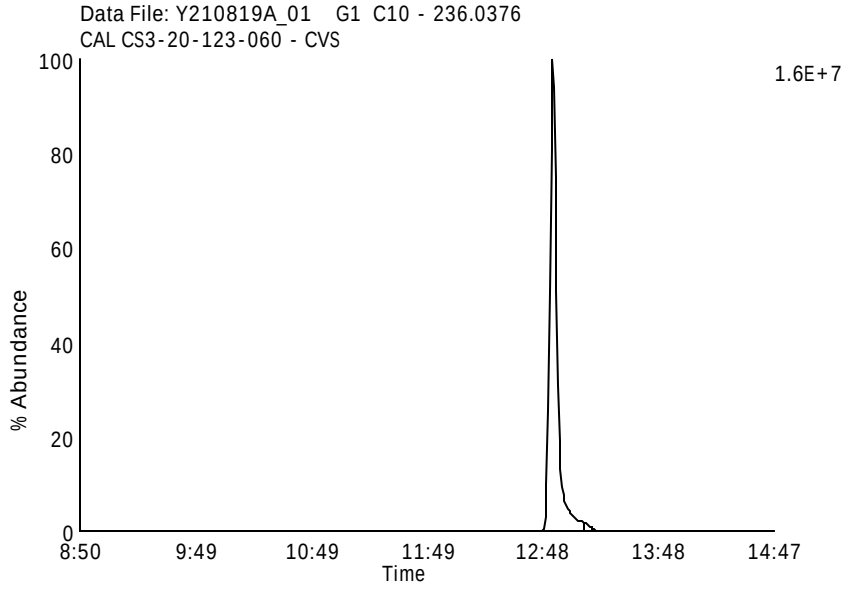


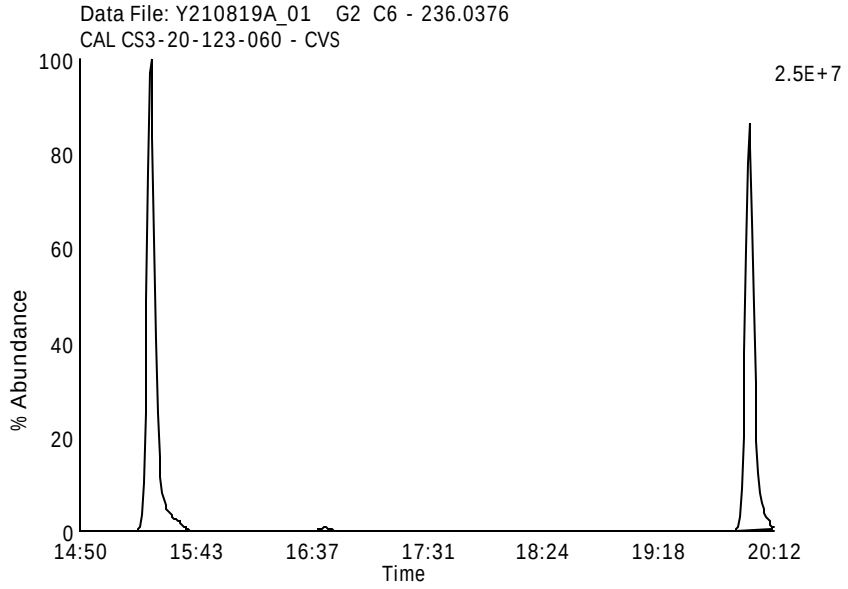
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





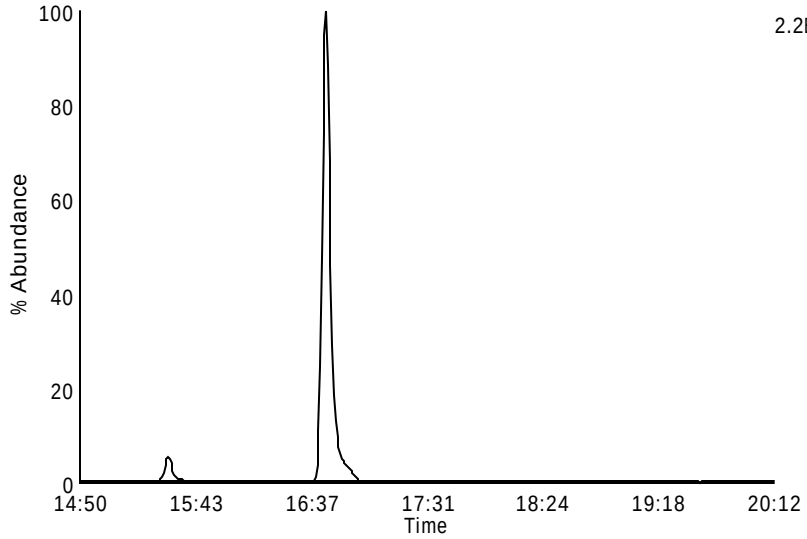




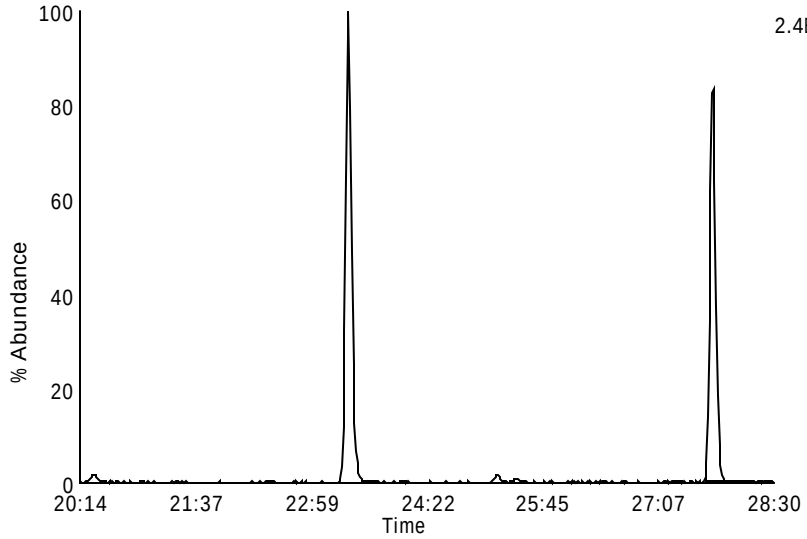
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

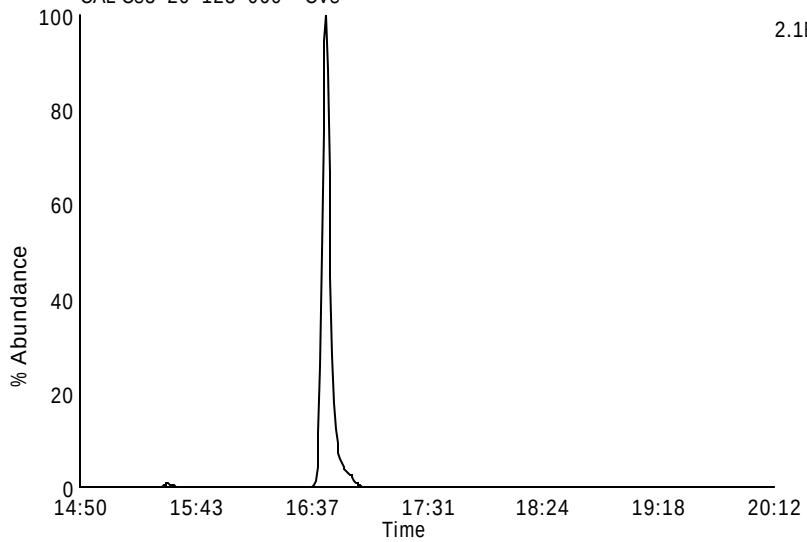
Data File: Y210819A_01 G2 C9 - 268.0016
CAL CS3-20-123-060 - CVS



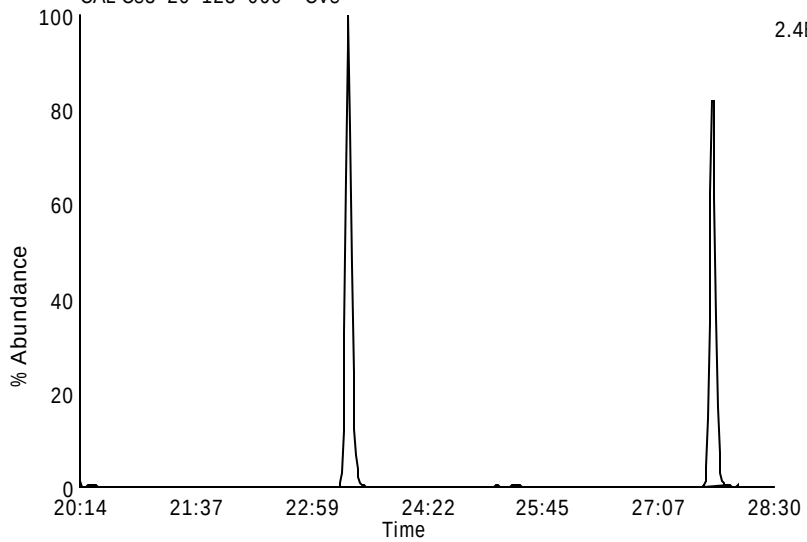
Data File: Y210819A_01 G3 C3 - 268.0016
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G2 C10 - 269.9986
CAL CS3-20-123-060 - CVS

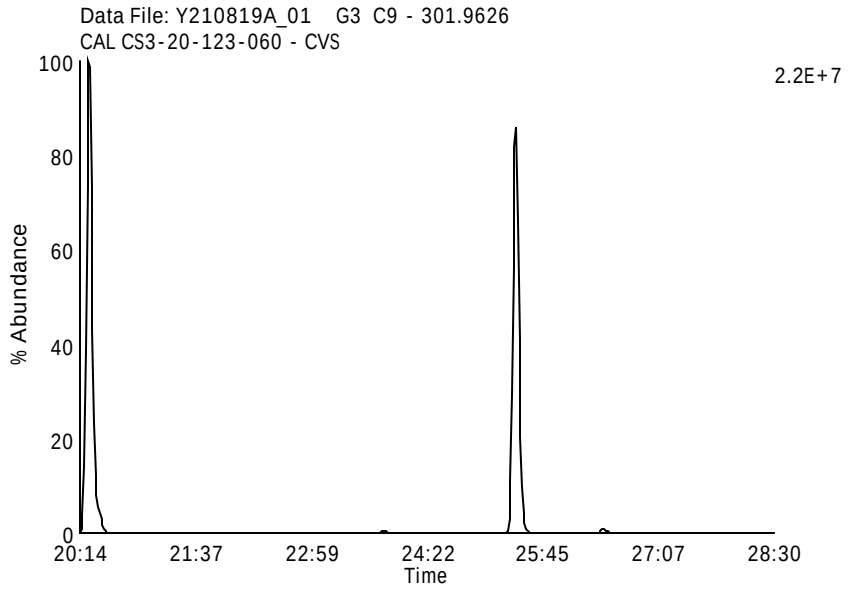


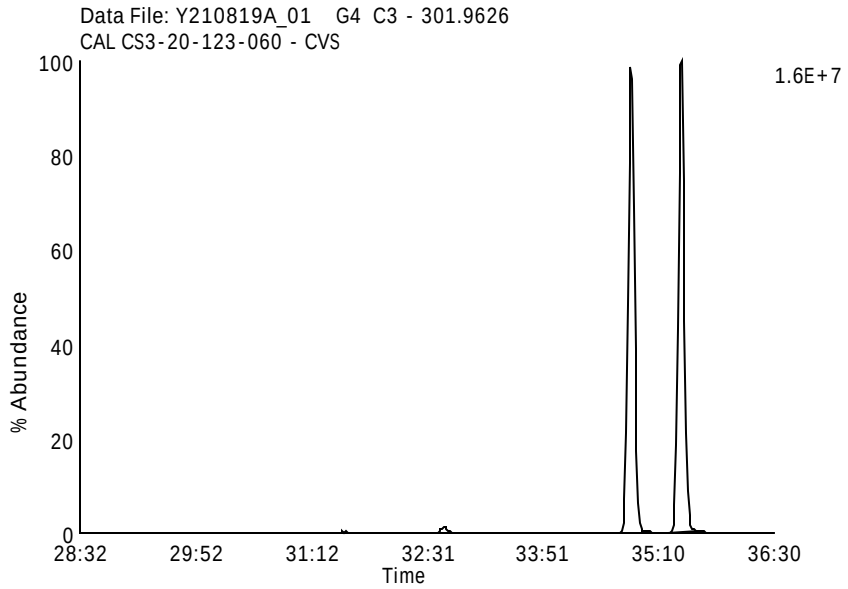
Data File: Y210819A_01 G3 C4 - 269.9986
CAL CS3-20-123-060 - CVS

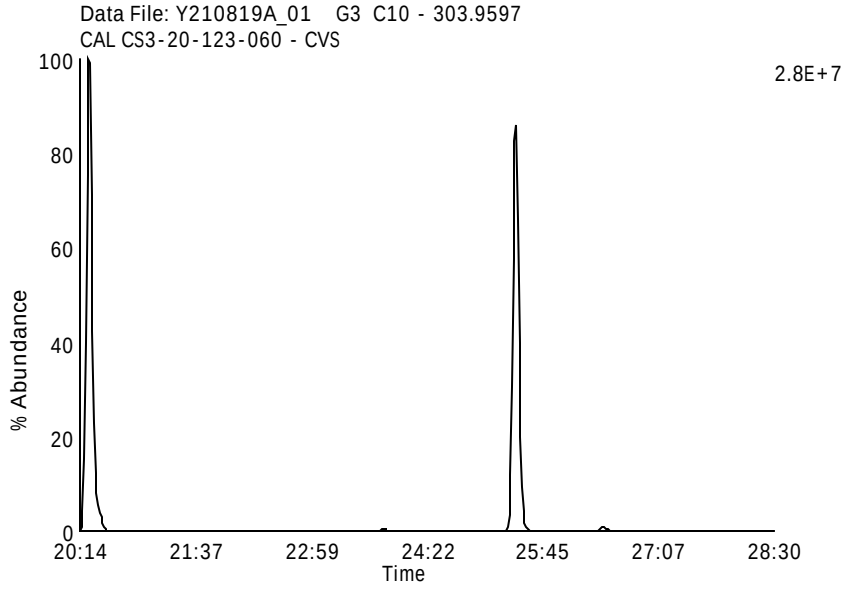


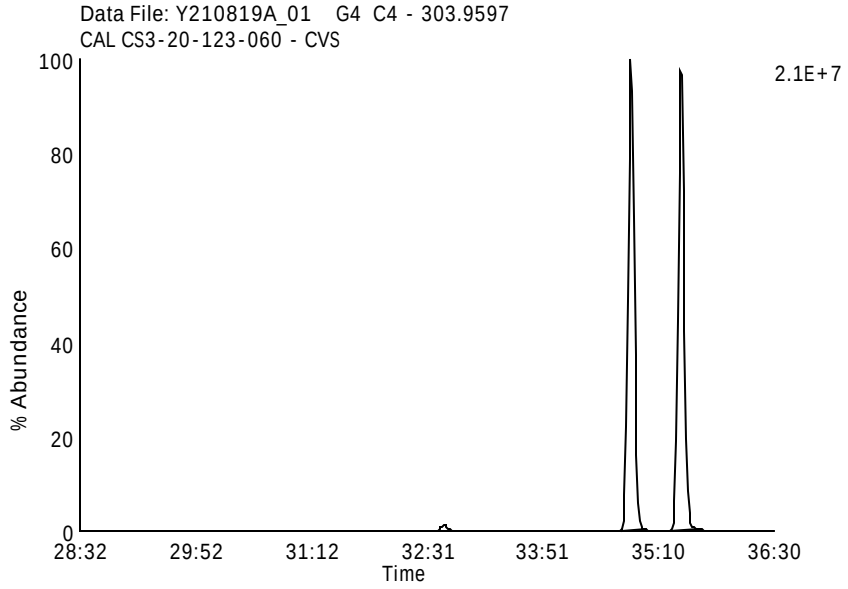
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







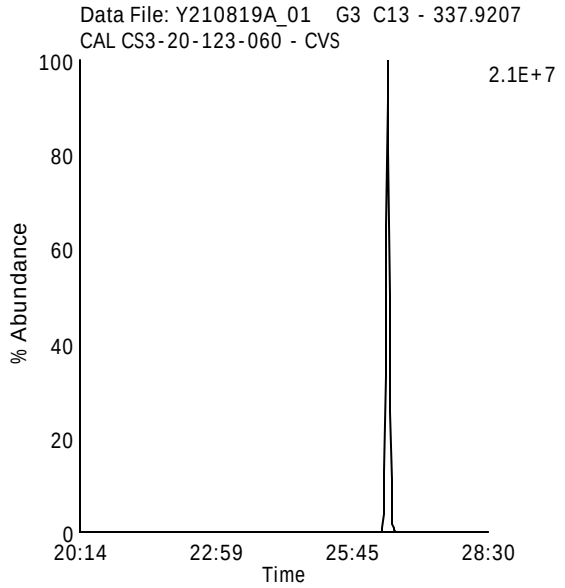


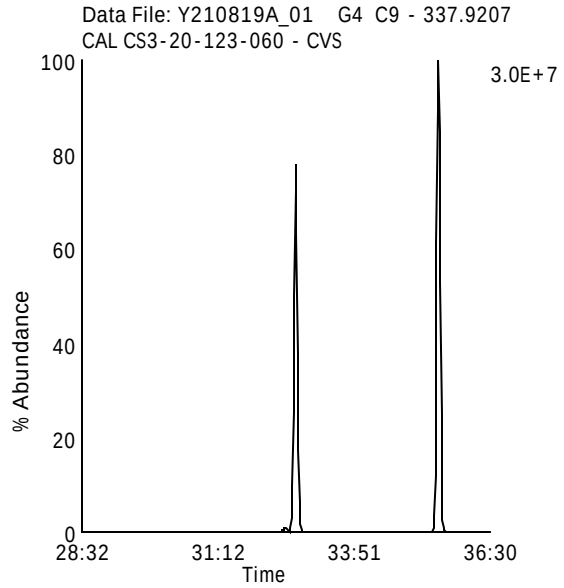
Labeled Penta Chlorinated Biphenyls

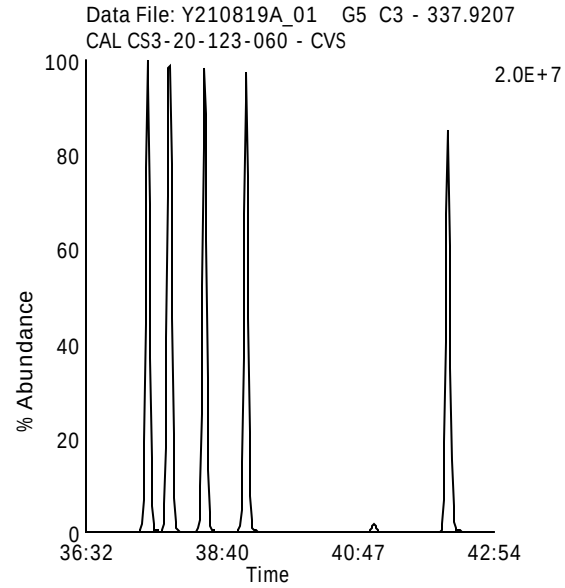
Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

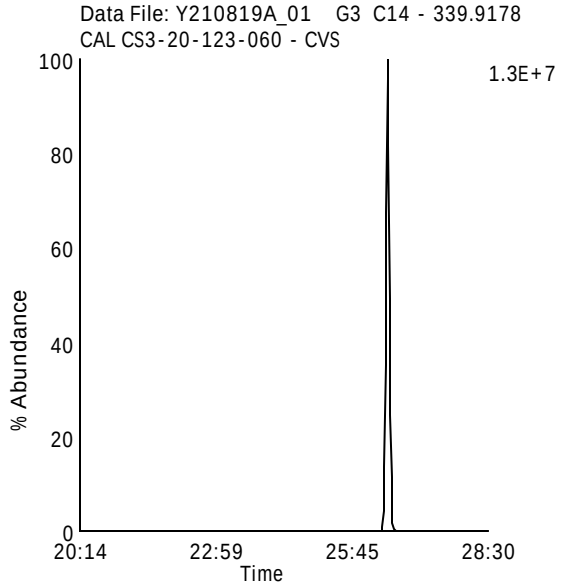
Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

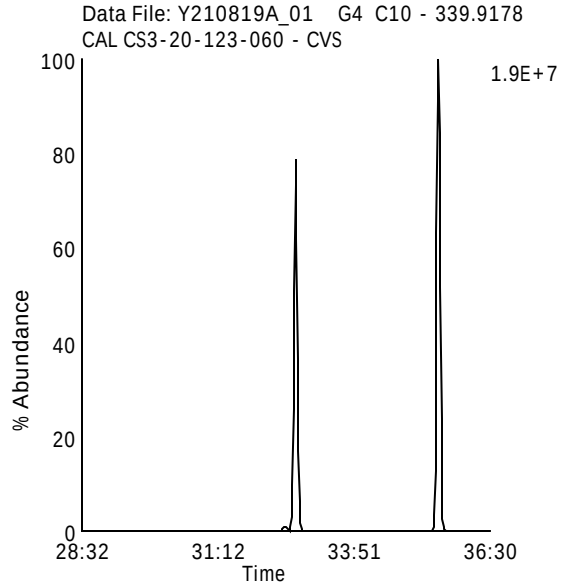
Sample Description: CAL CS3-20-123-060 - CVS

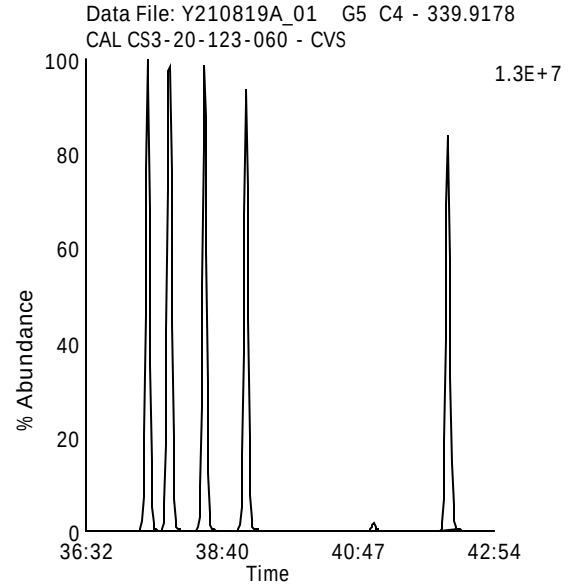










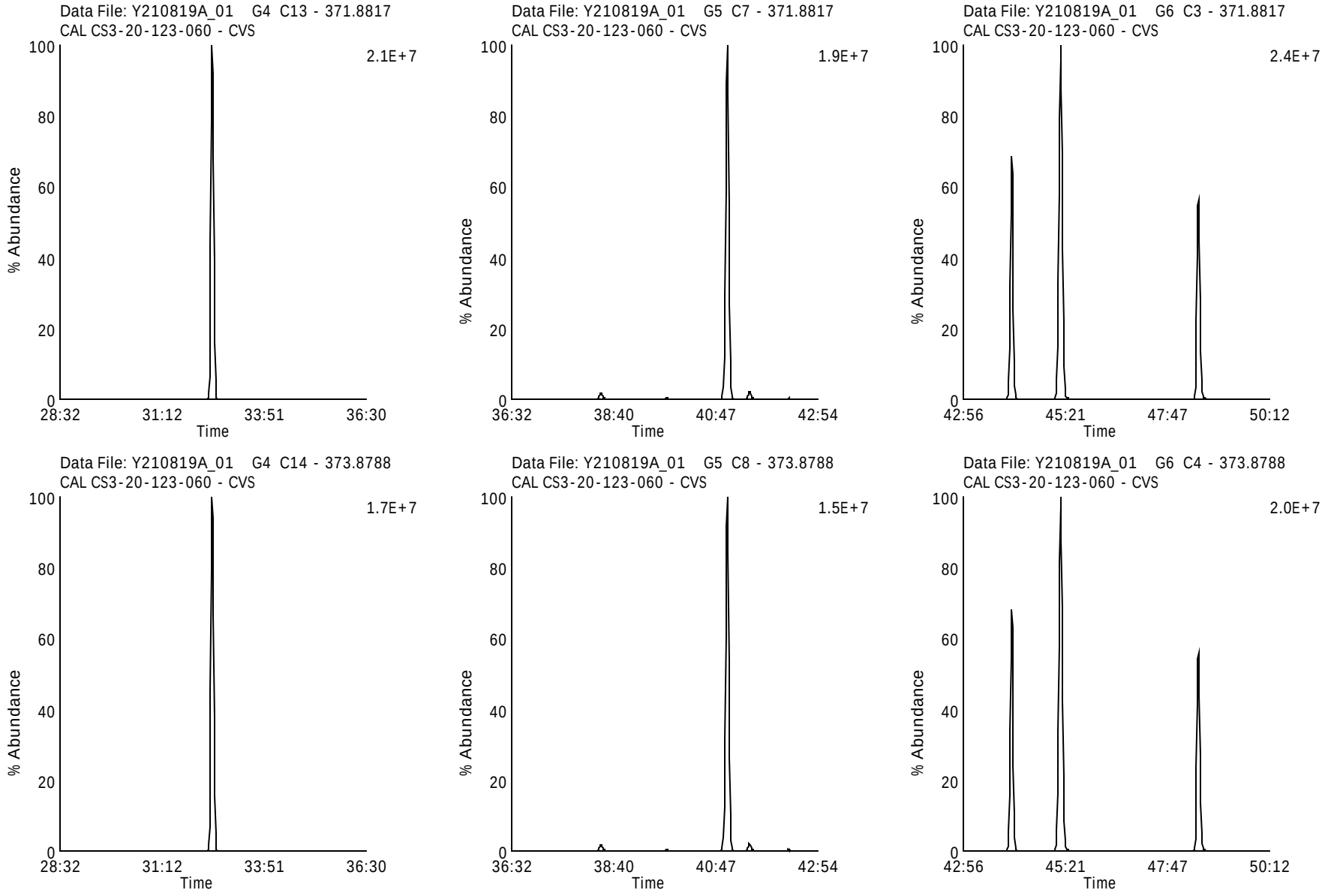


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

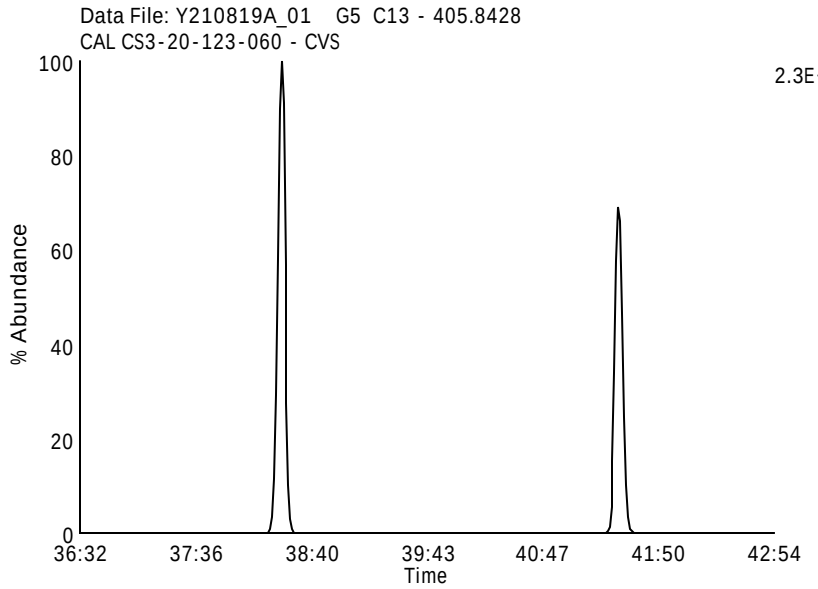
Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

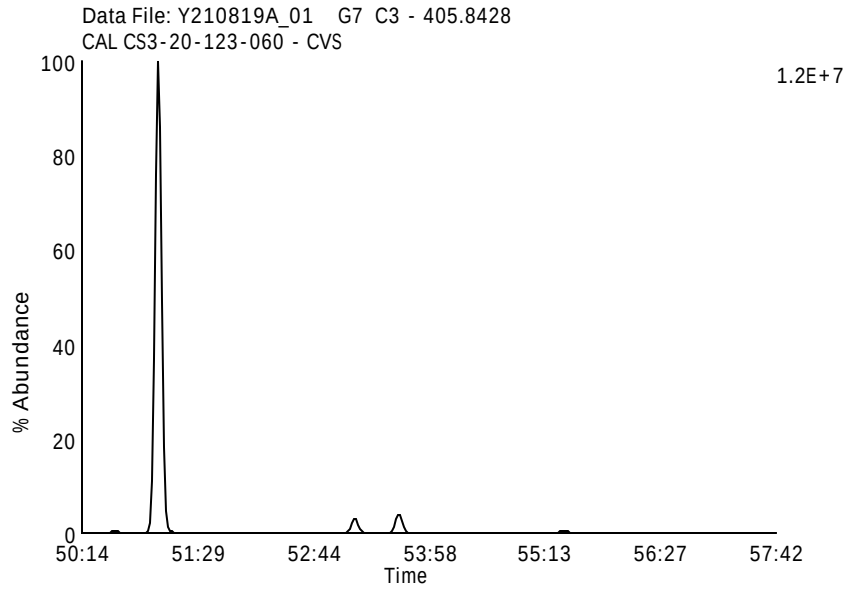
Sample Description: CAL CS3-20-123-060 - CVS

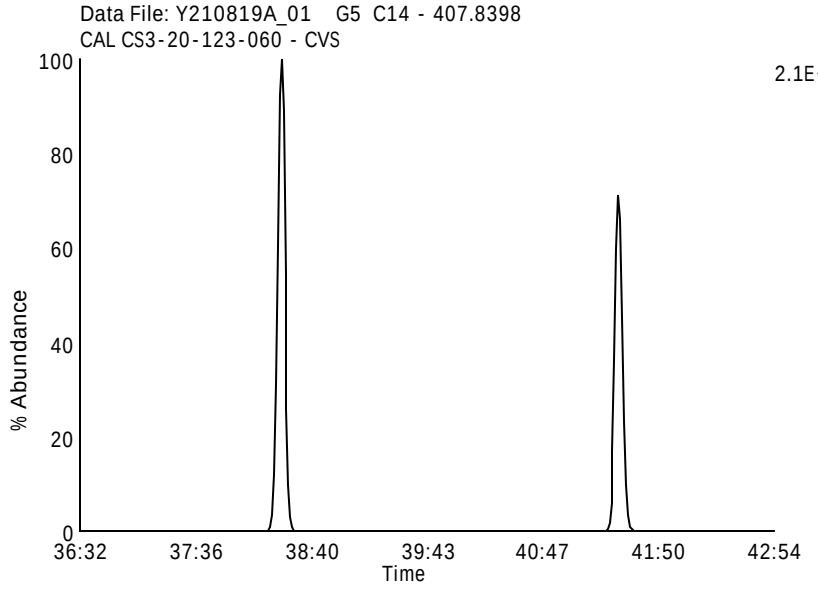


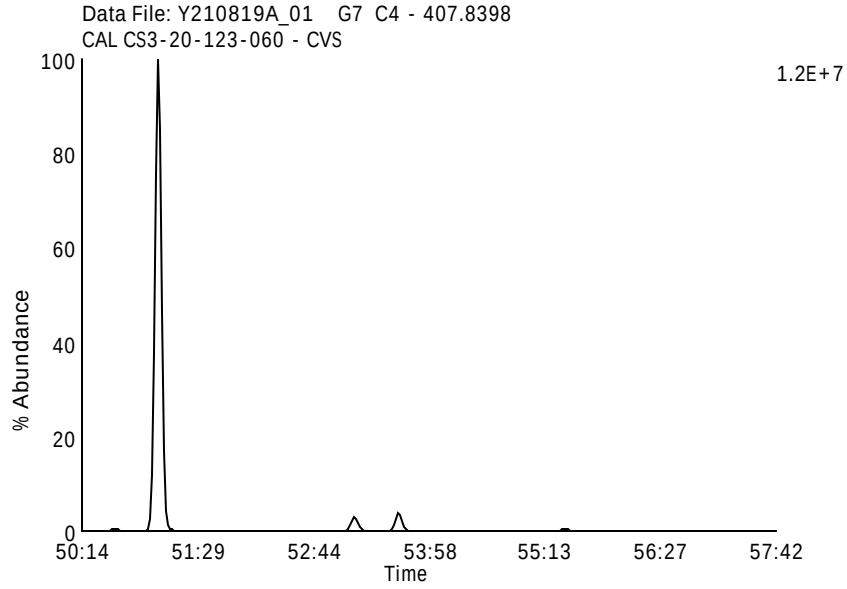
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





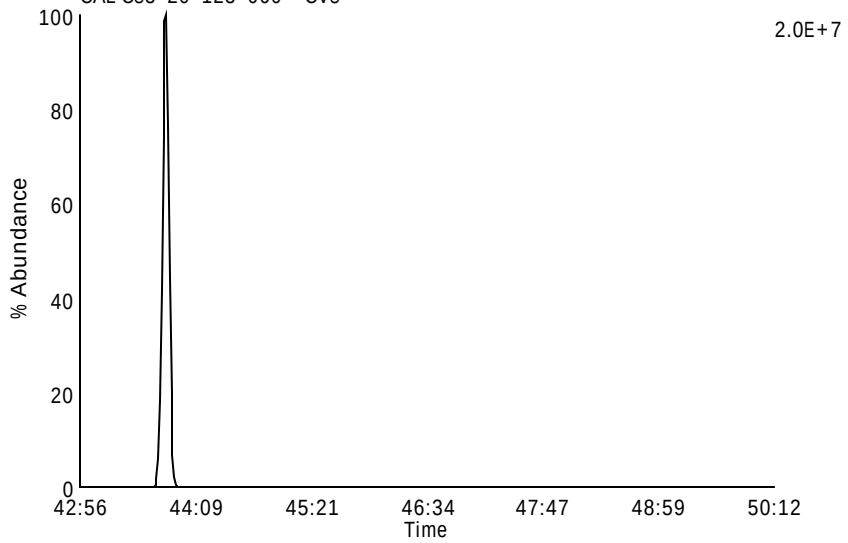




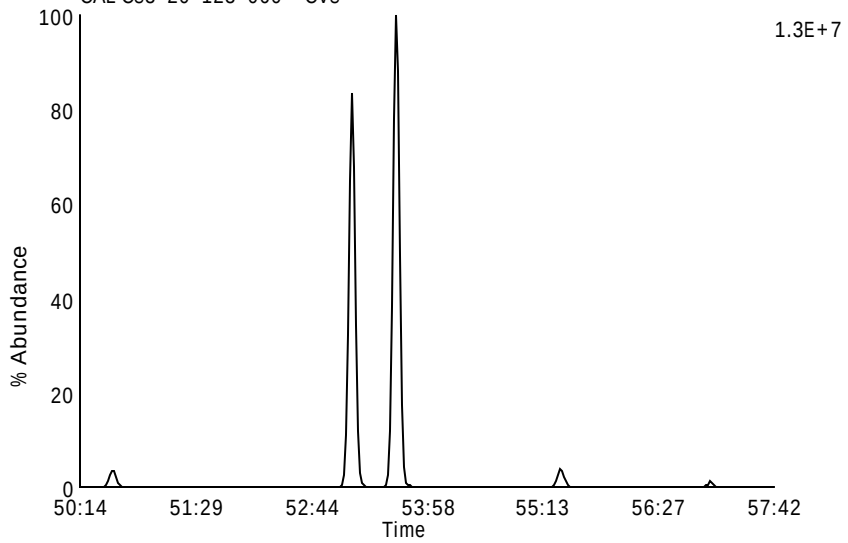
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

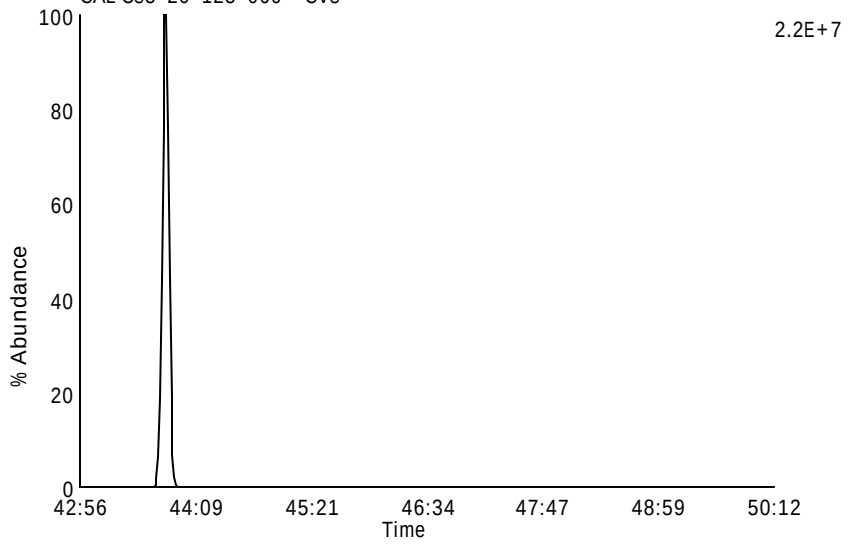
Data File: Y210819A_01 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



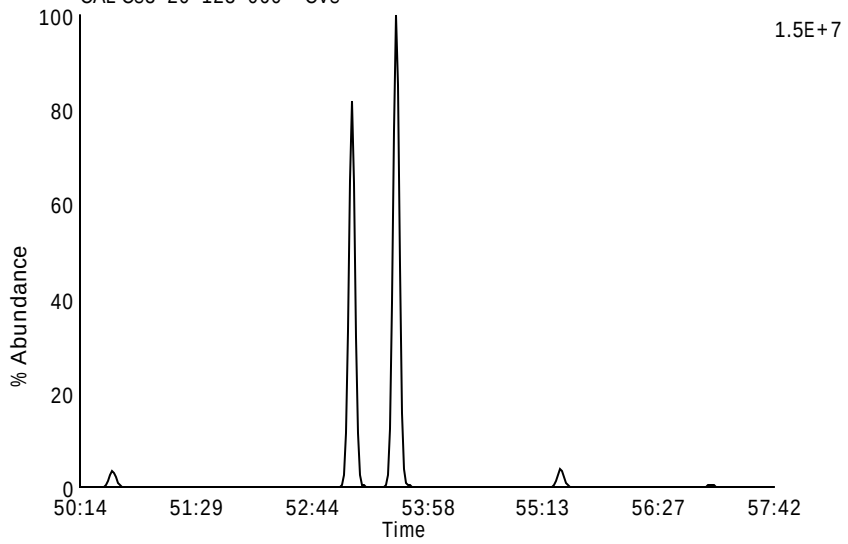
Data File: Y210819A_01 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G6 C14 - 441.8008
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

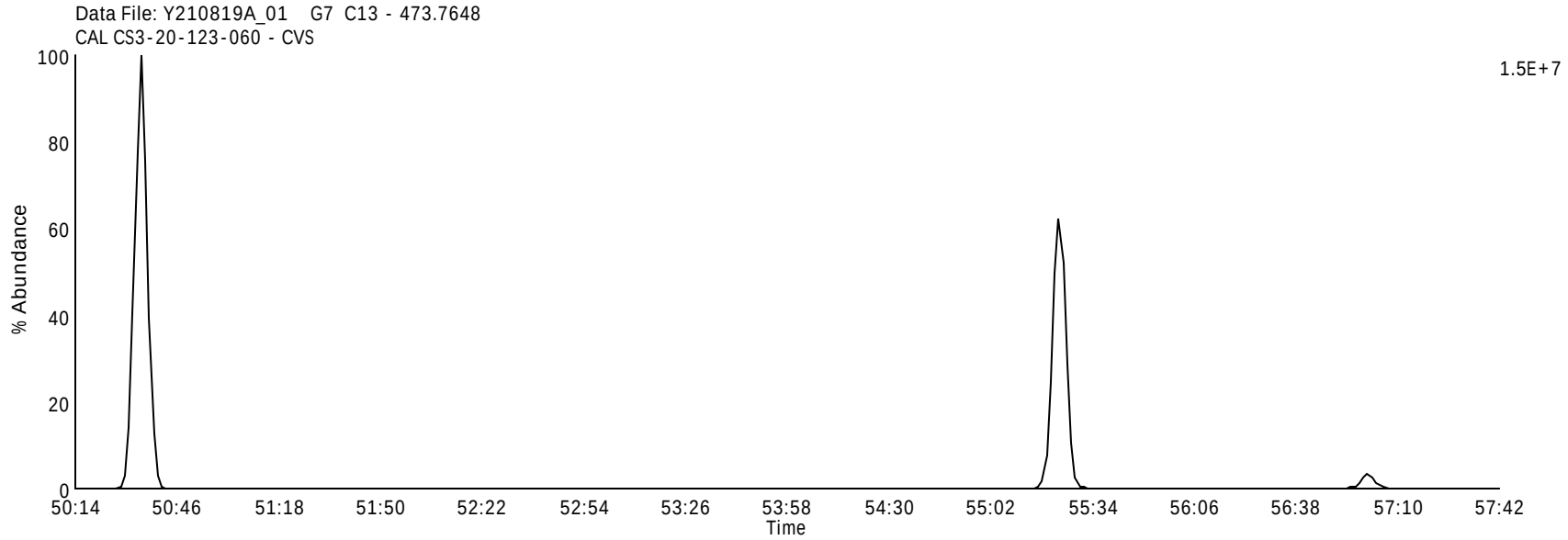


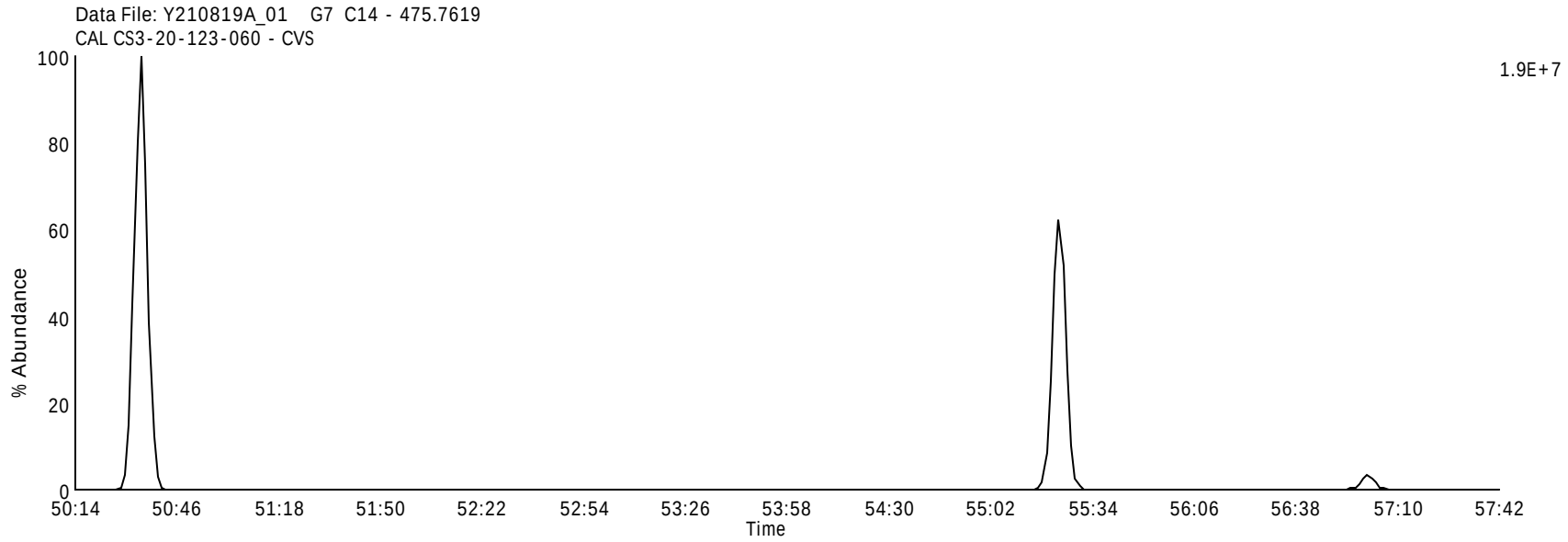
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



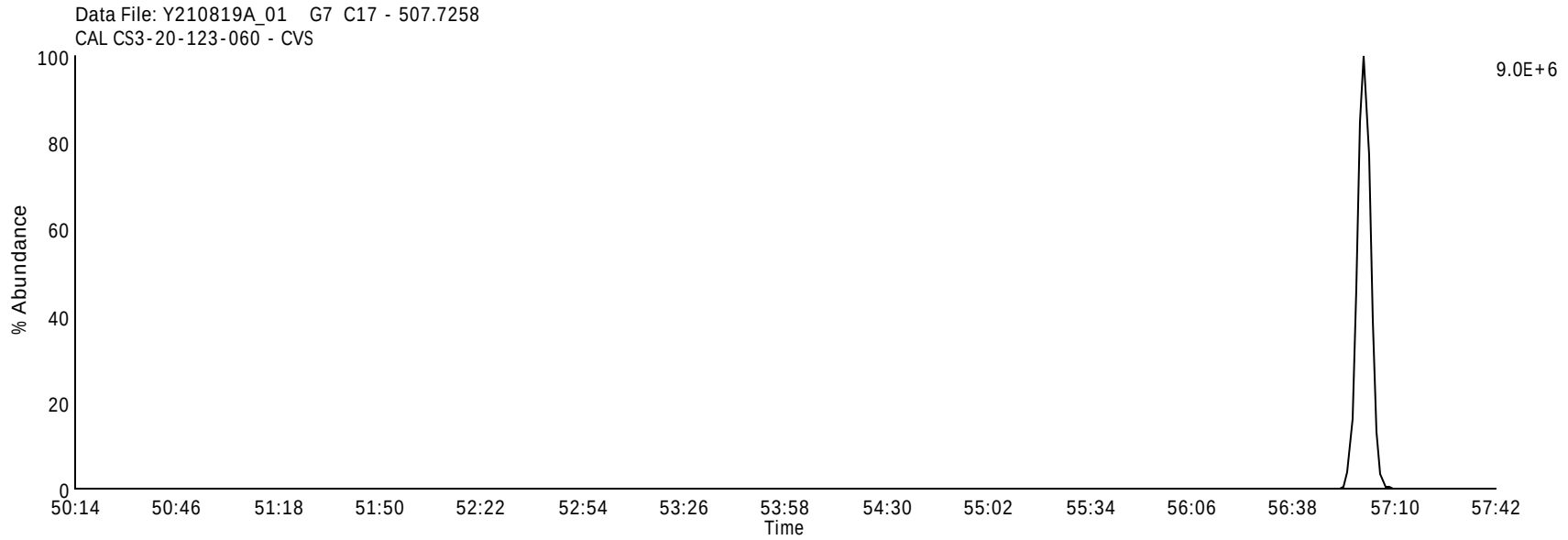


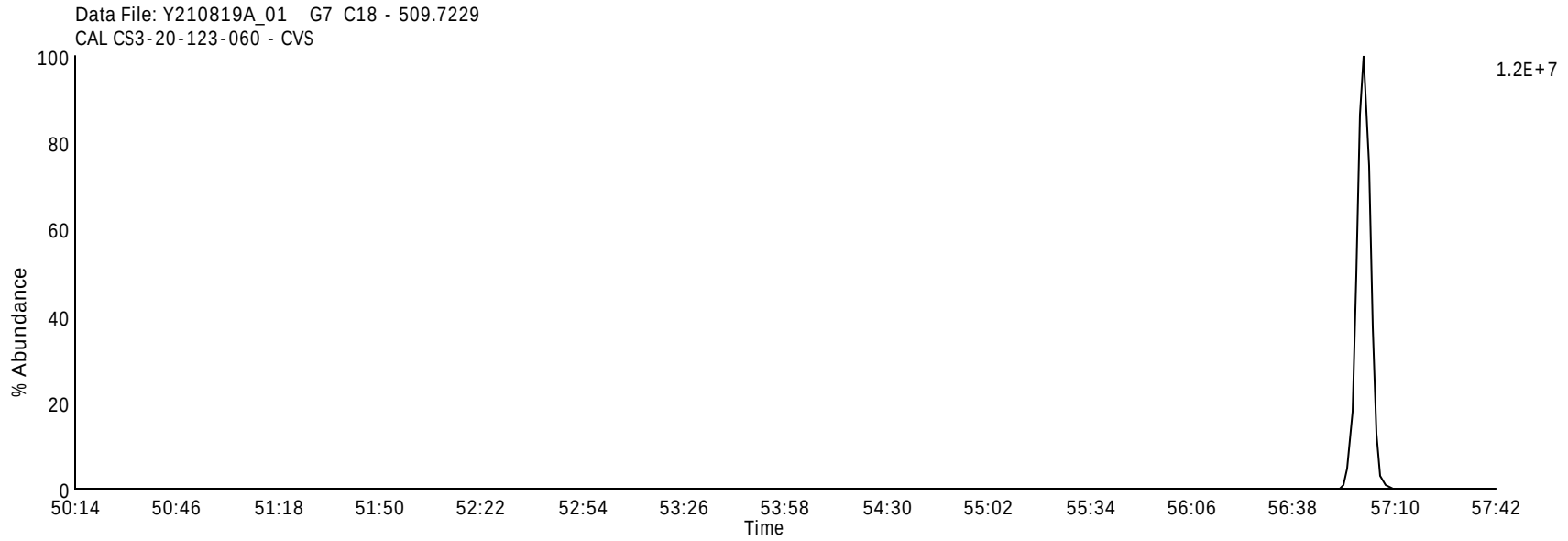
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



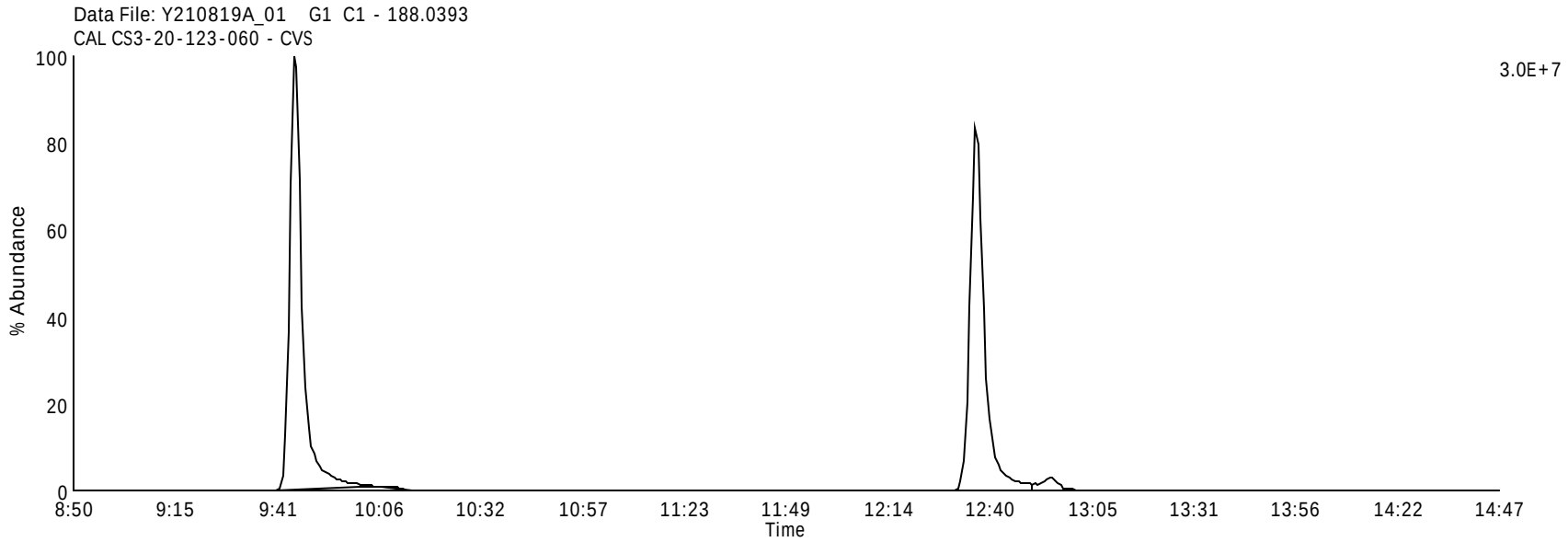


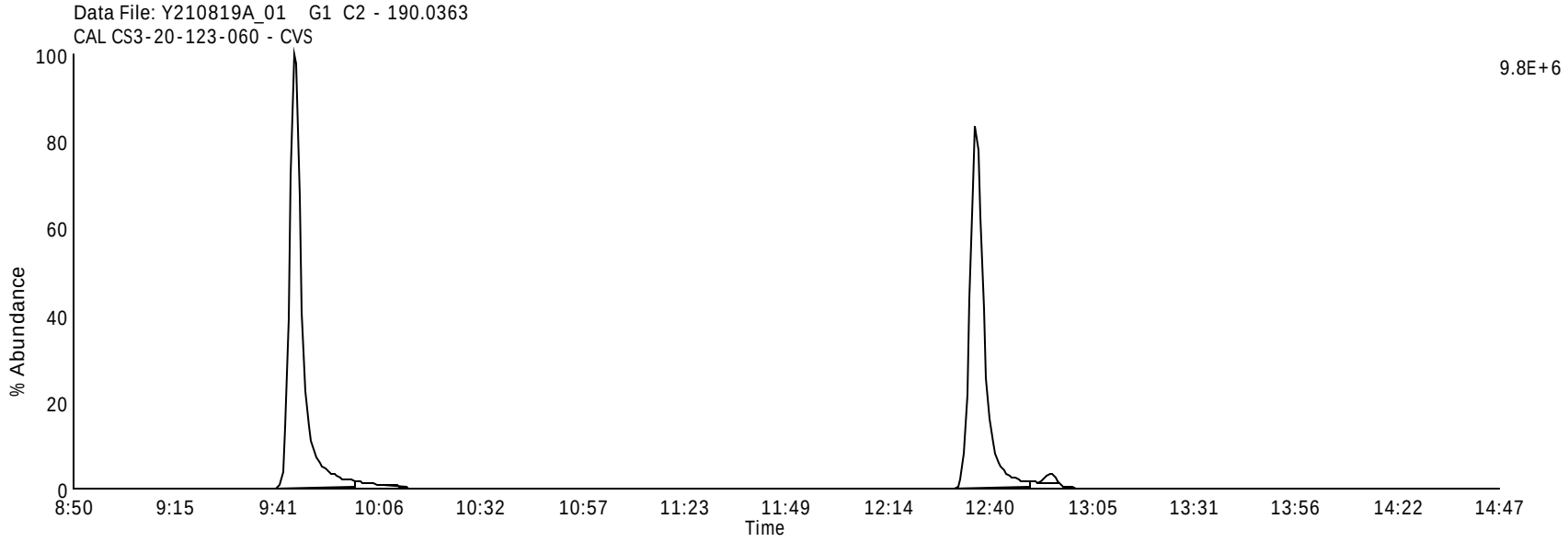
Mono Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

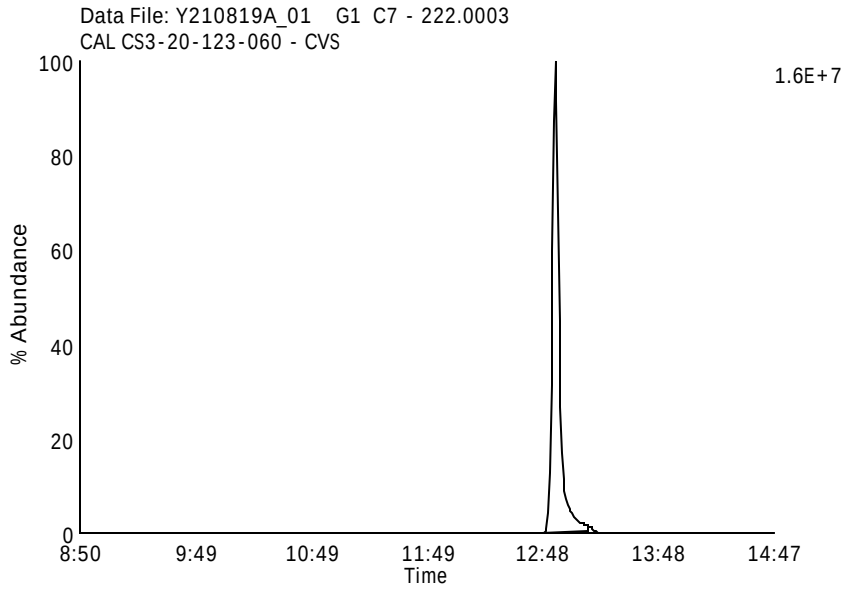
Sample Description: CAL CS3-20-123-060 - CVS

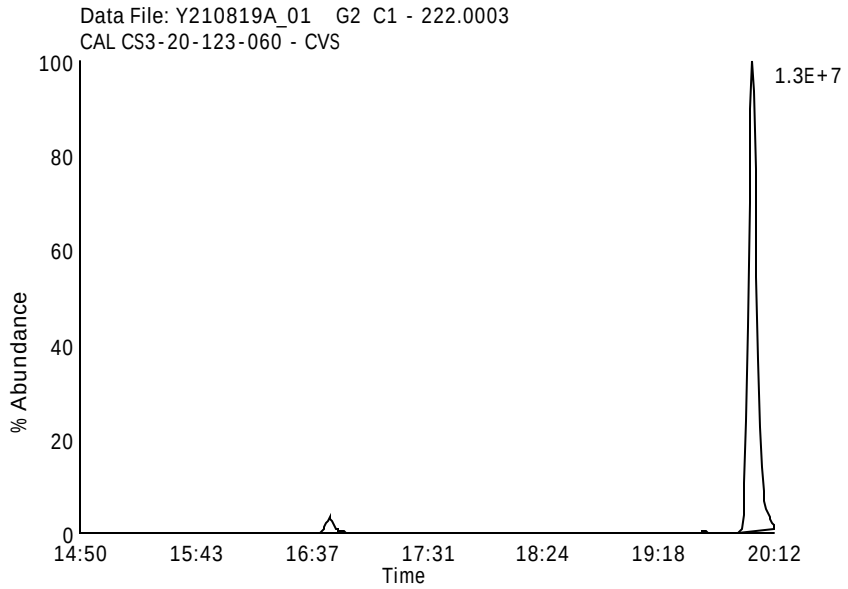


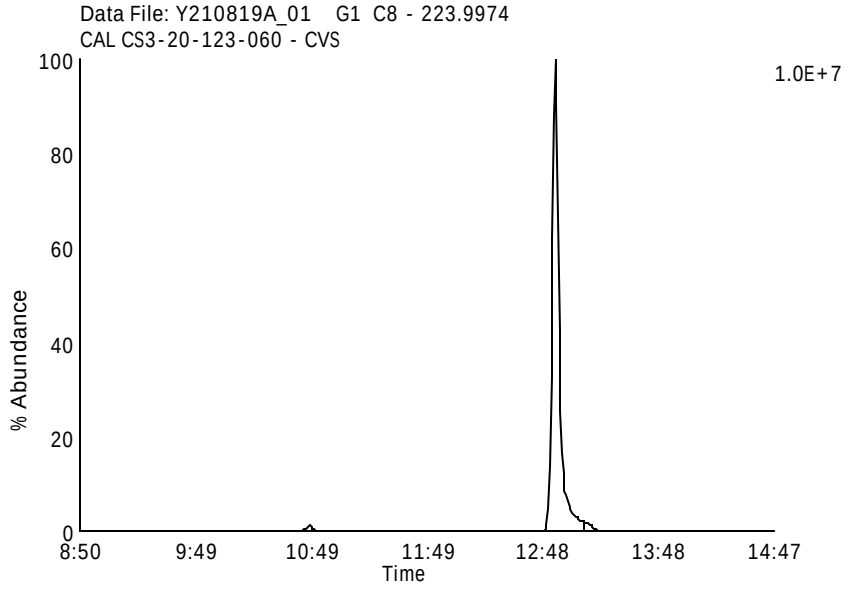


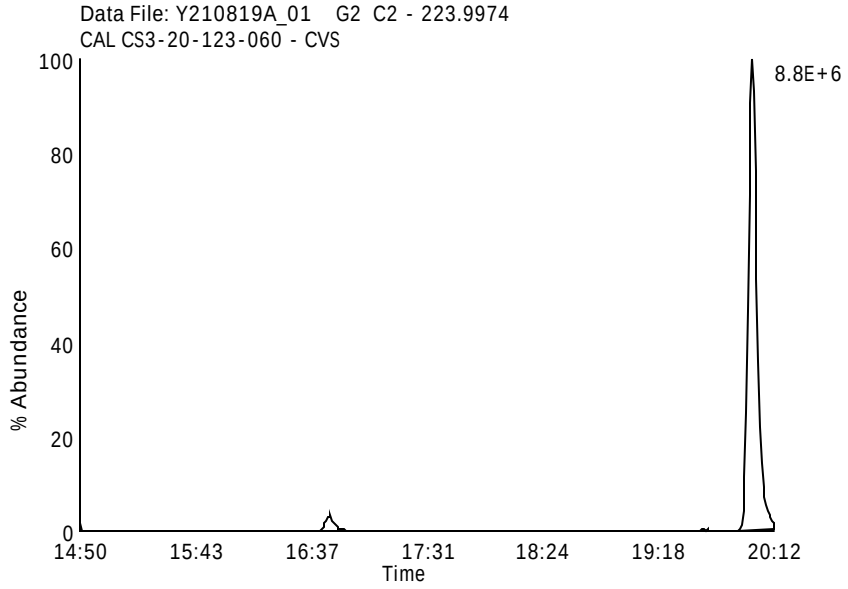
Di Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





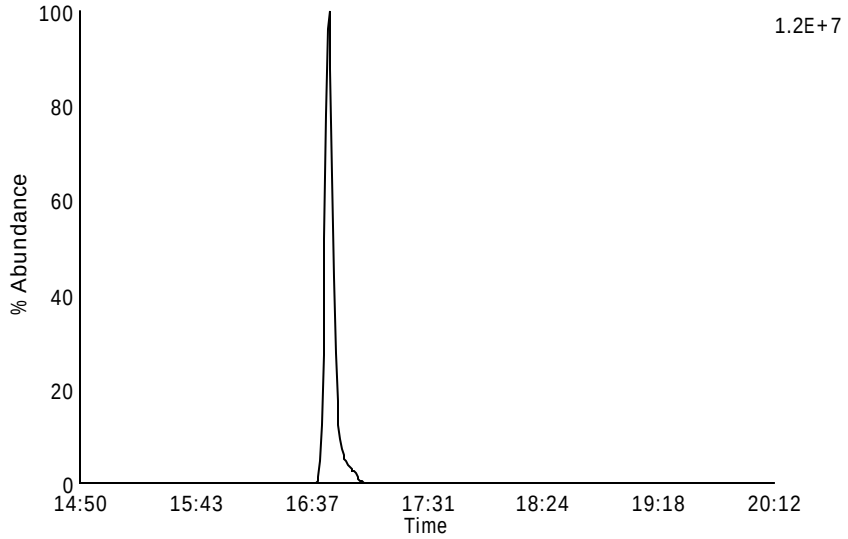




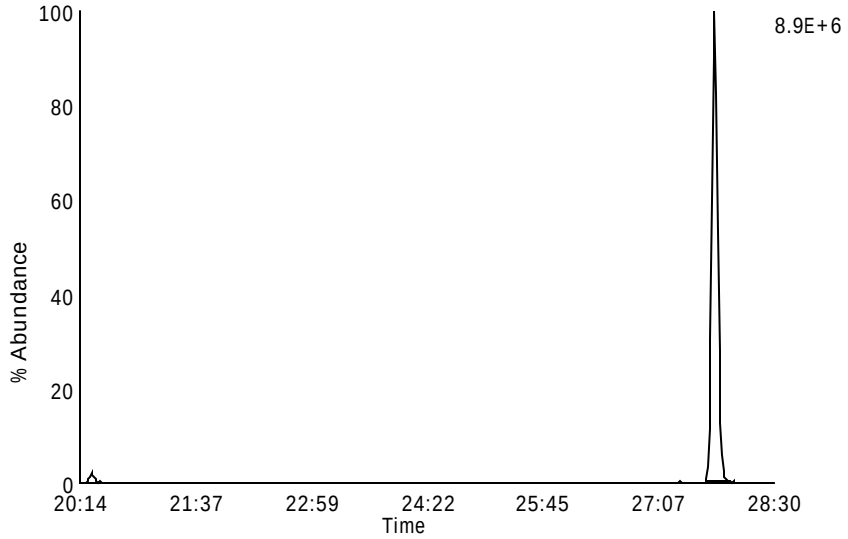
Tri Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

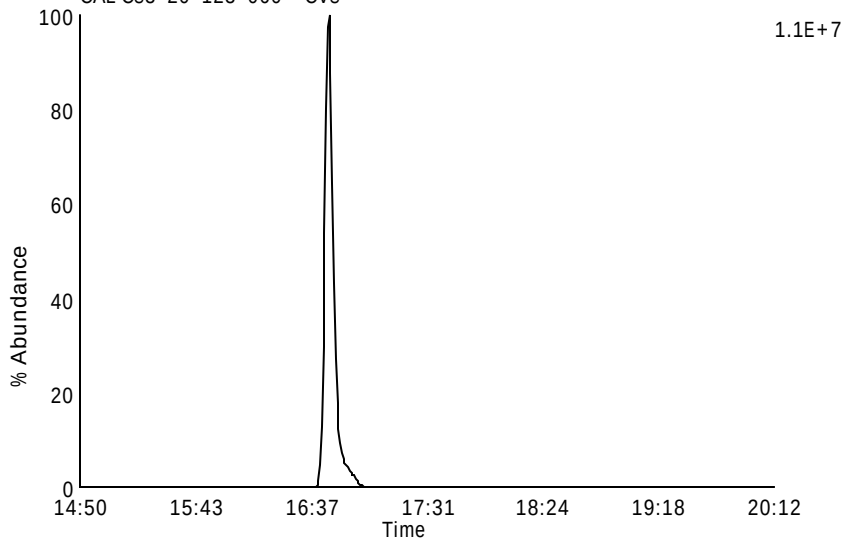
Data File: Y210819A_01 G2 C7 - 255.9613
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G3 C1 - 255.9613
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G2 C8 - 257.9584
CAL CS3-20-123-060 - CVS



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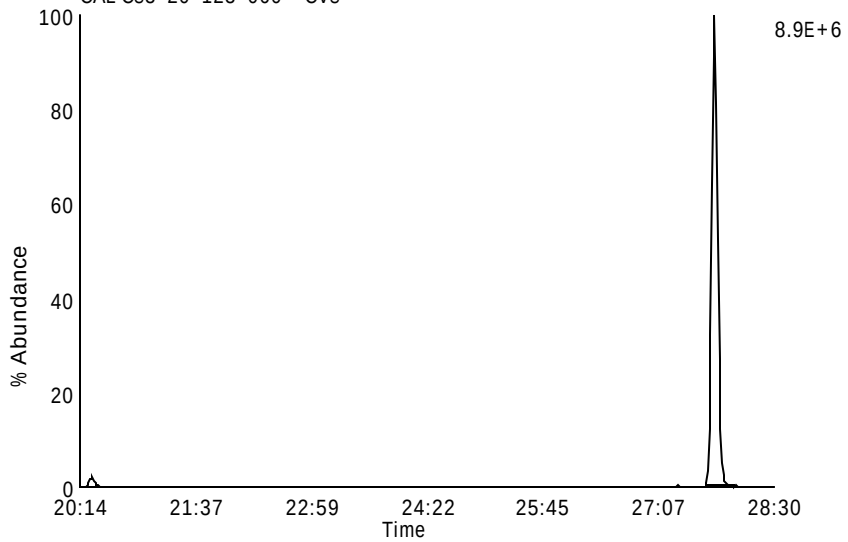
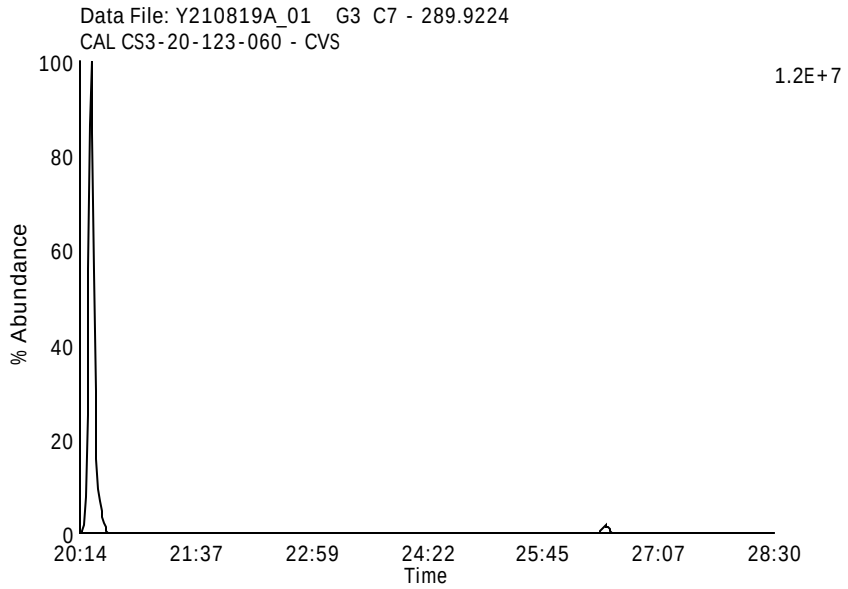
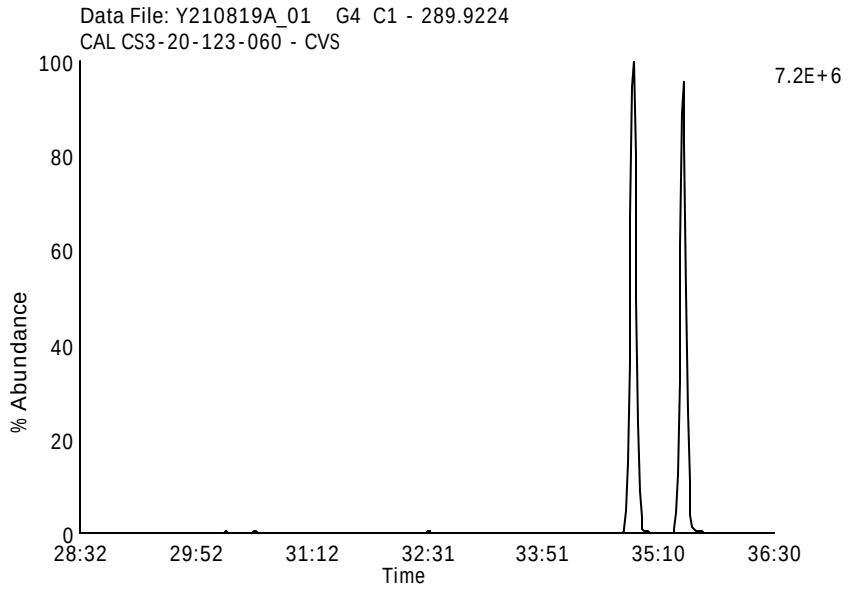
CAL CS3-20-123-060 - CVS

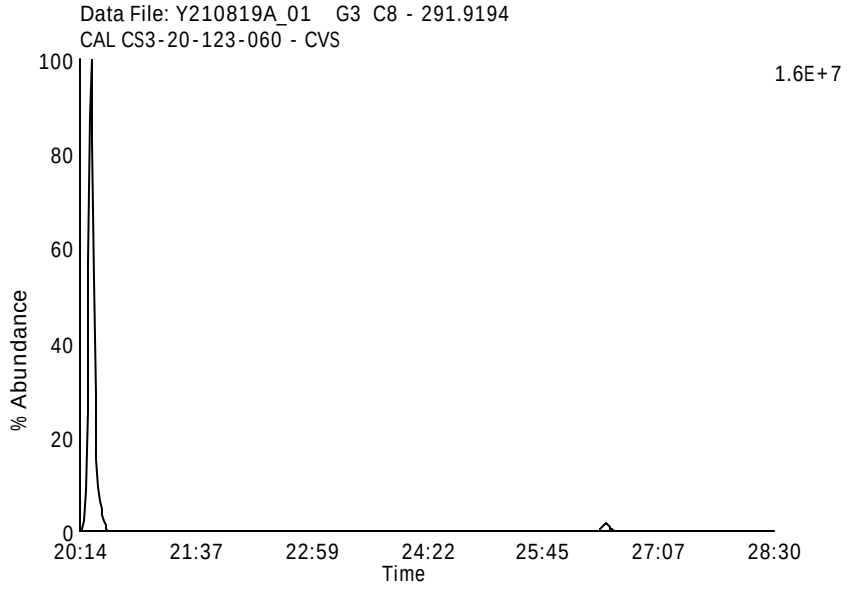


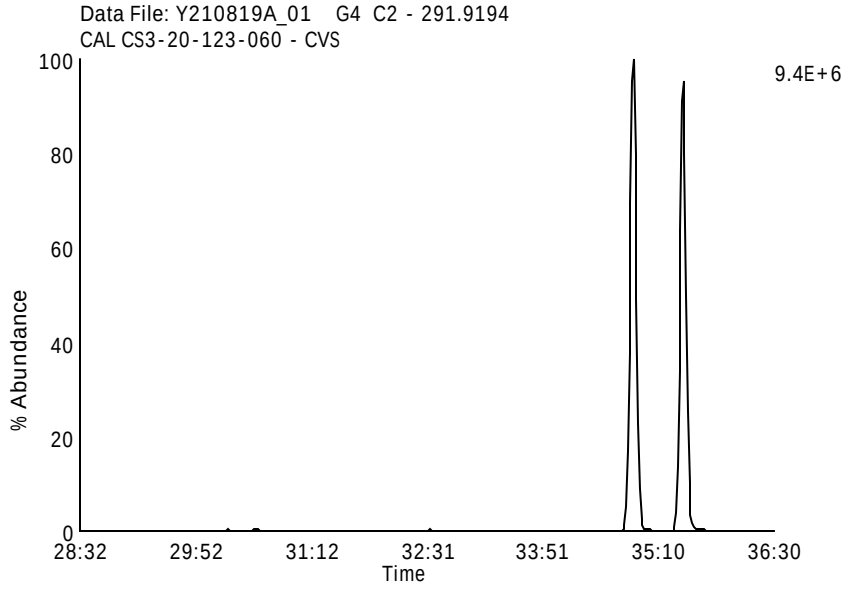
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



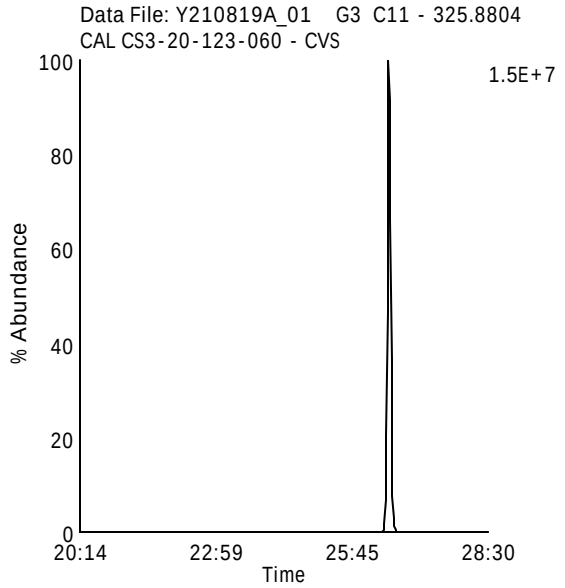


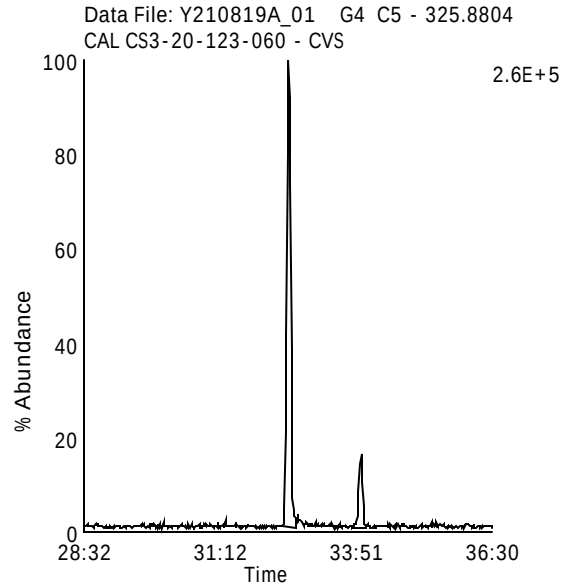


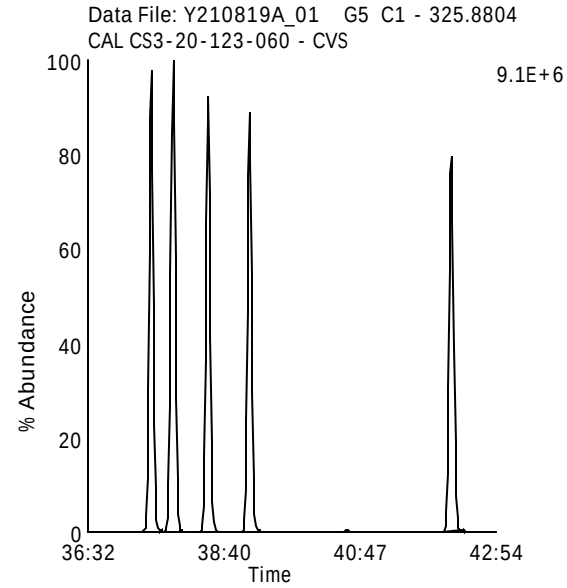


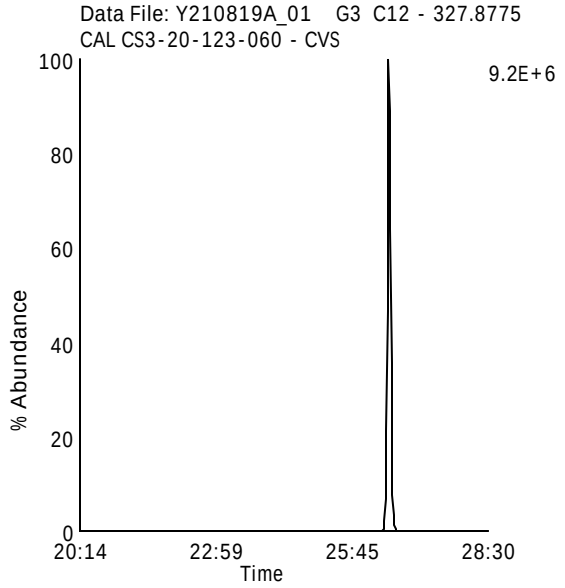
Penta Chlorinated Biphenyls

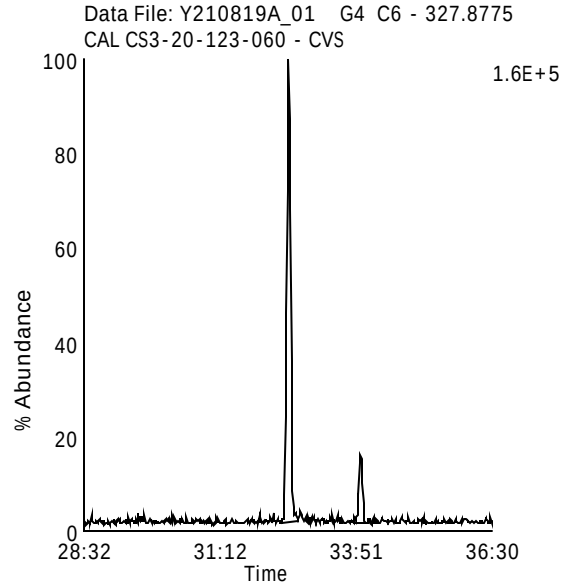
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

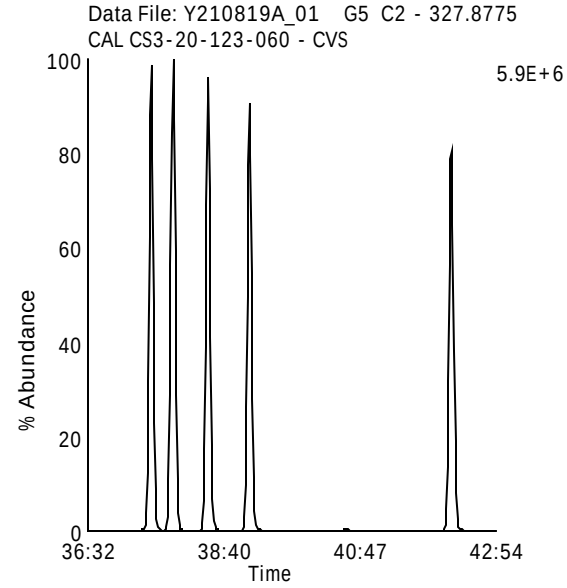






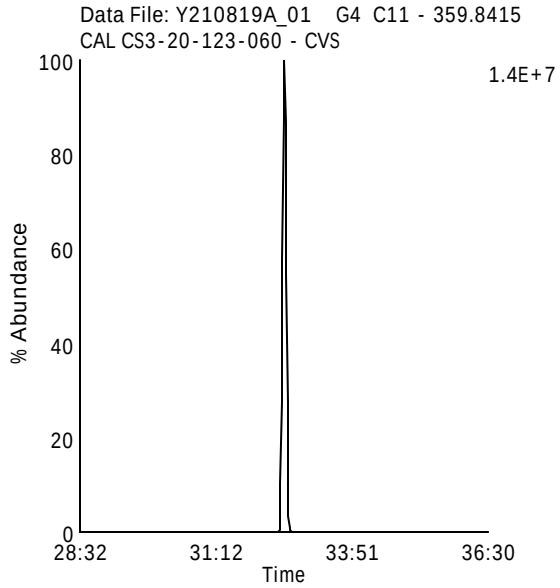


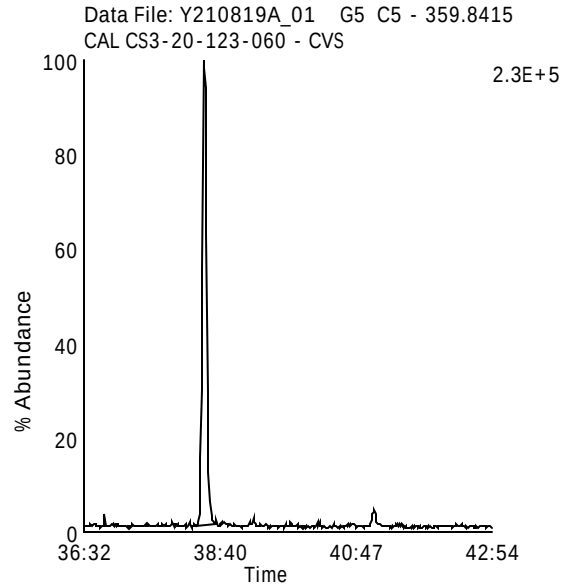


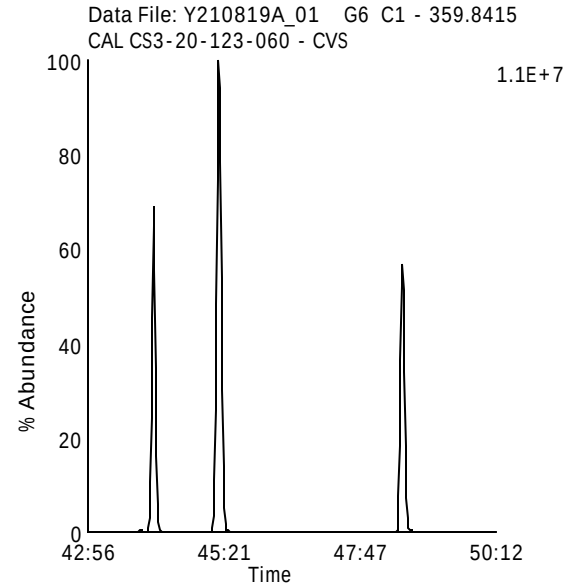


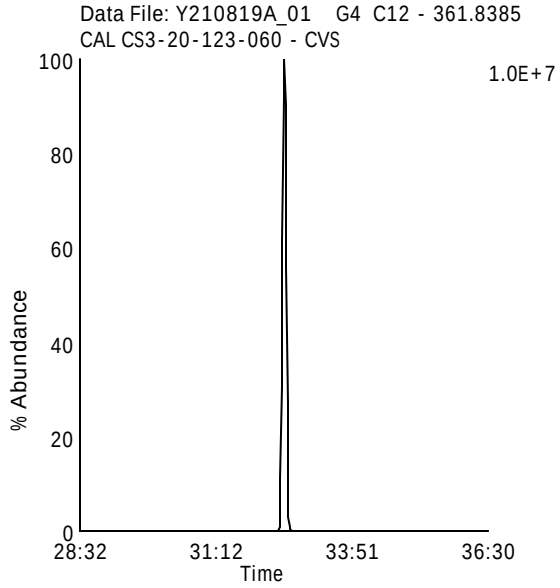
Hexa Chlorinated Biphenyls

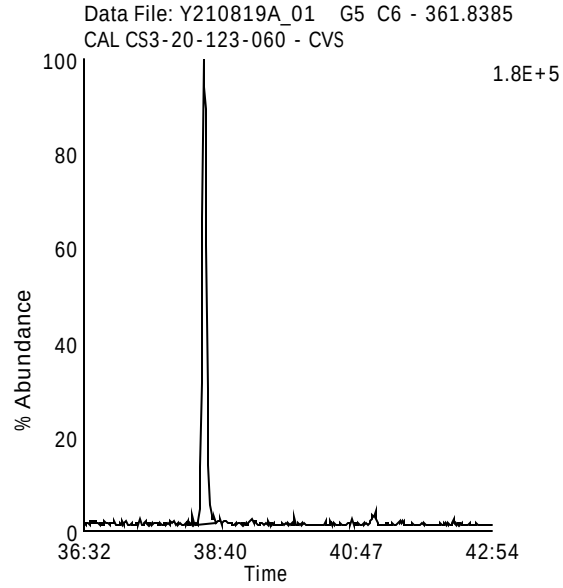
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

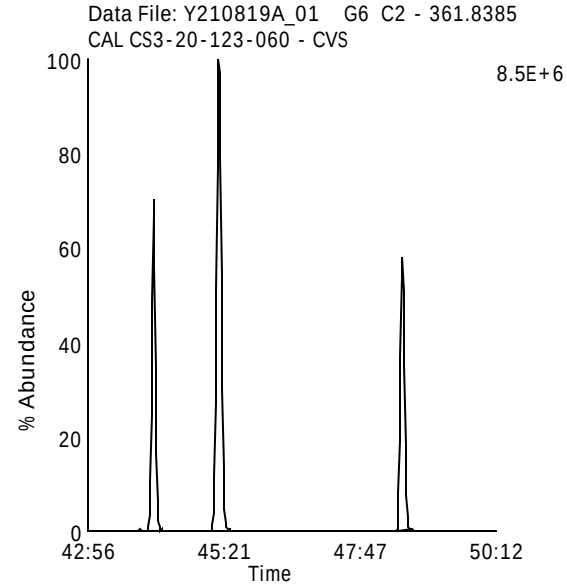






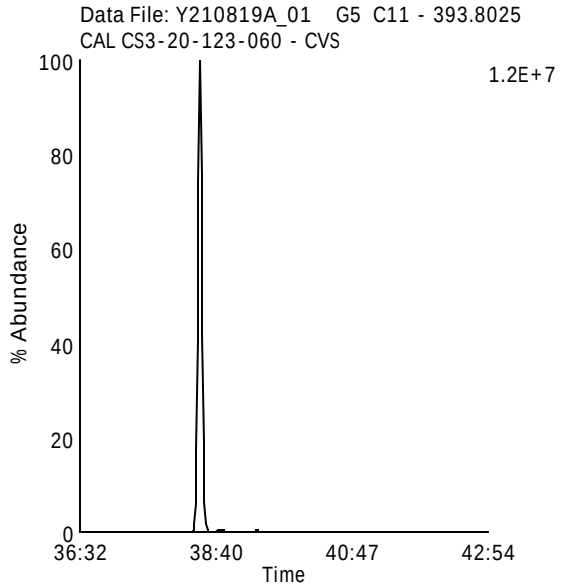


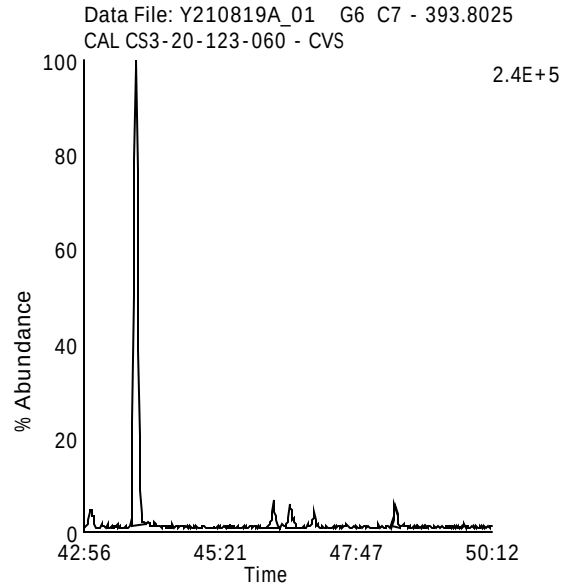


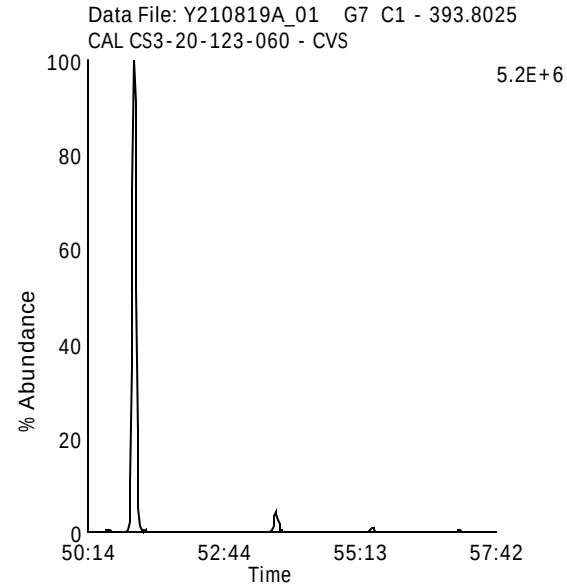


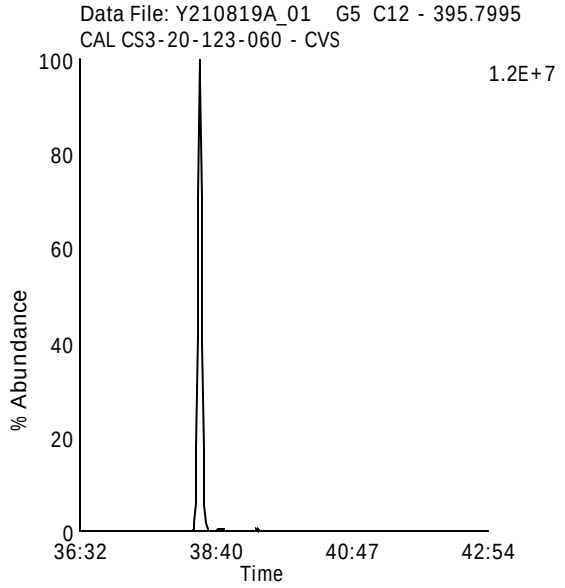
Hepta Chlorinated Biphenyls

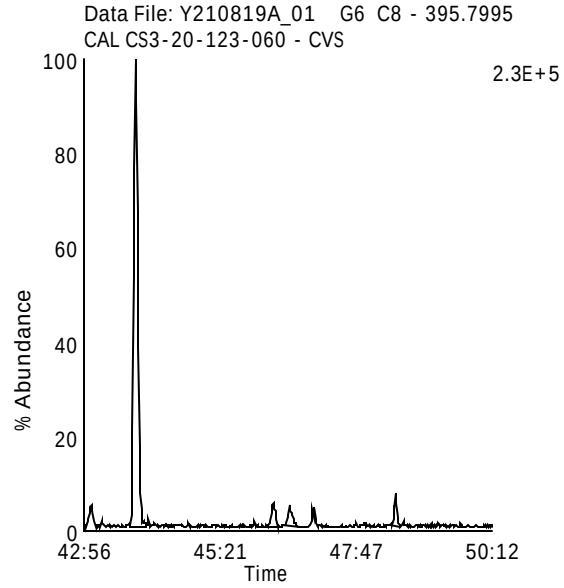
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

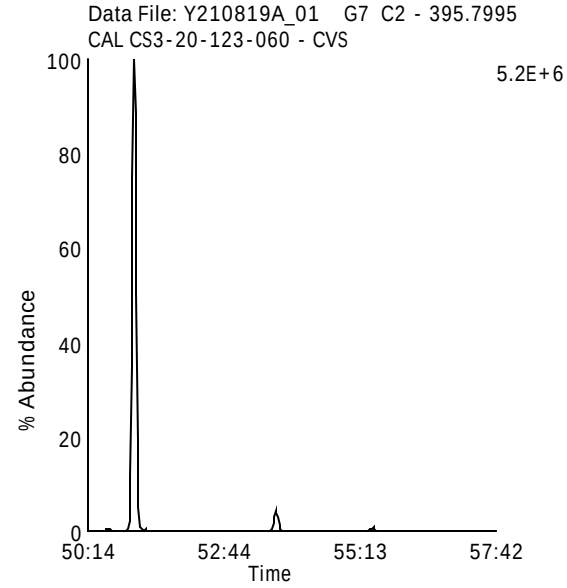






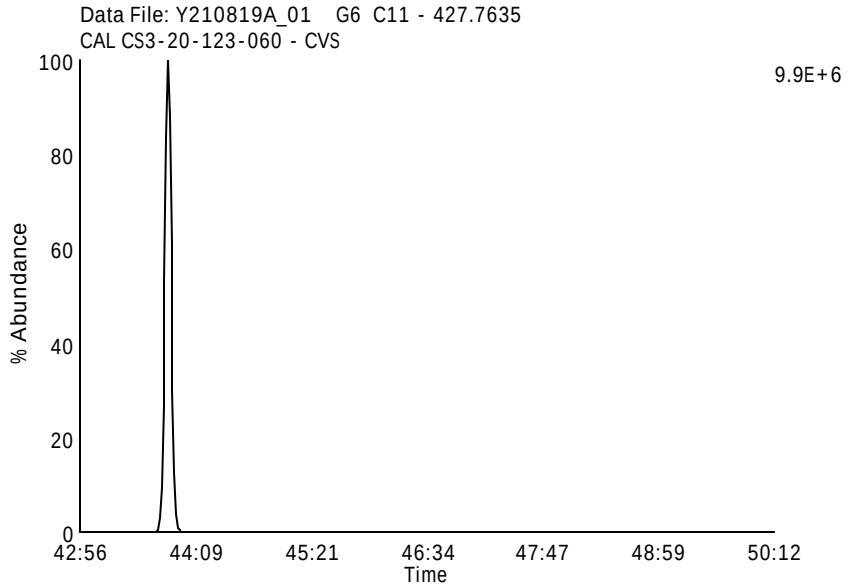


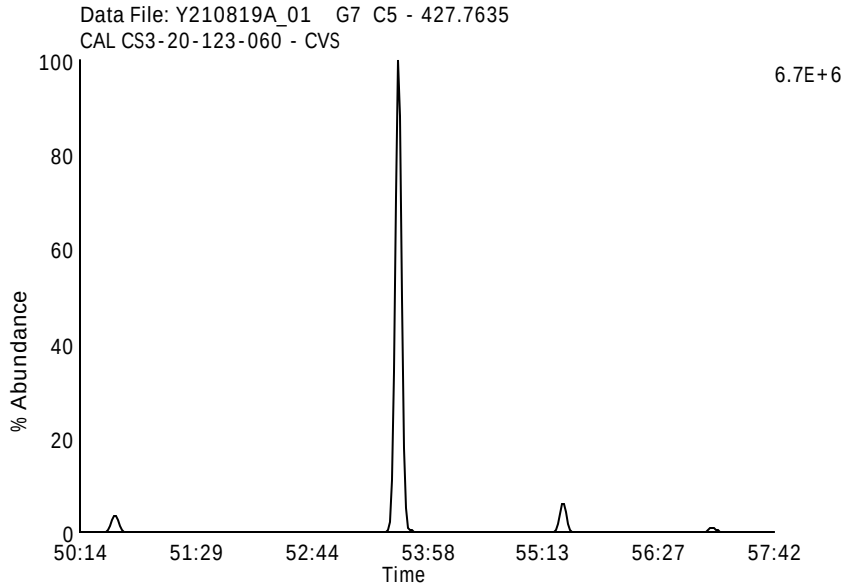


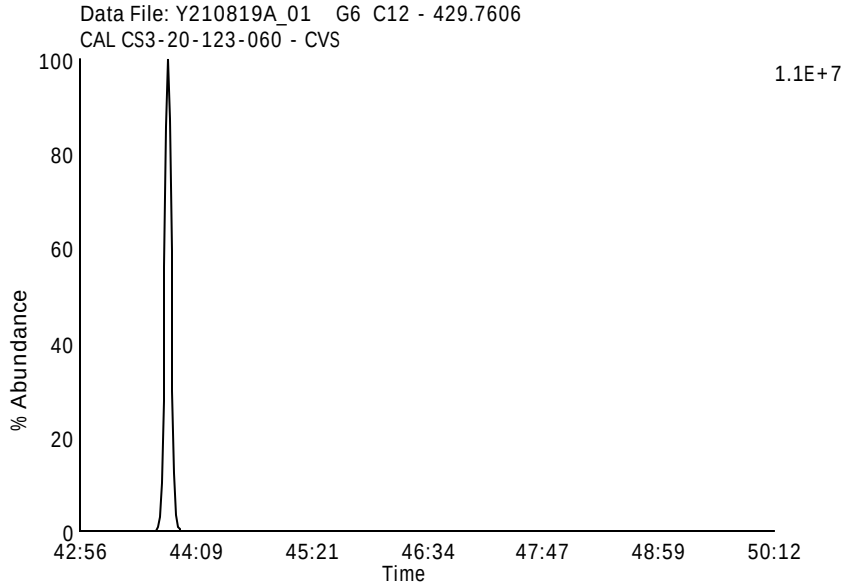


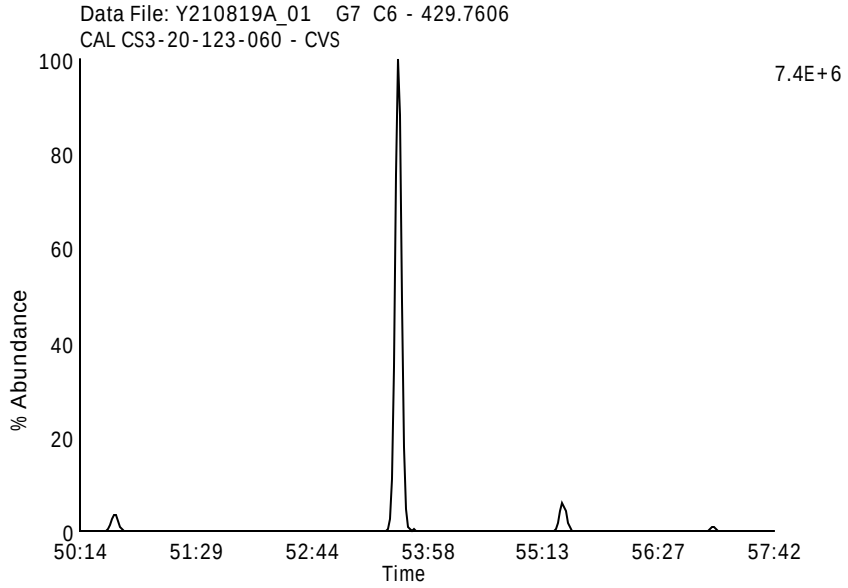
Octa Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







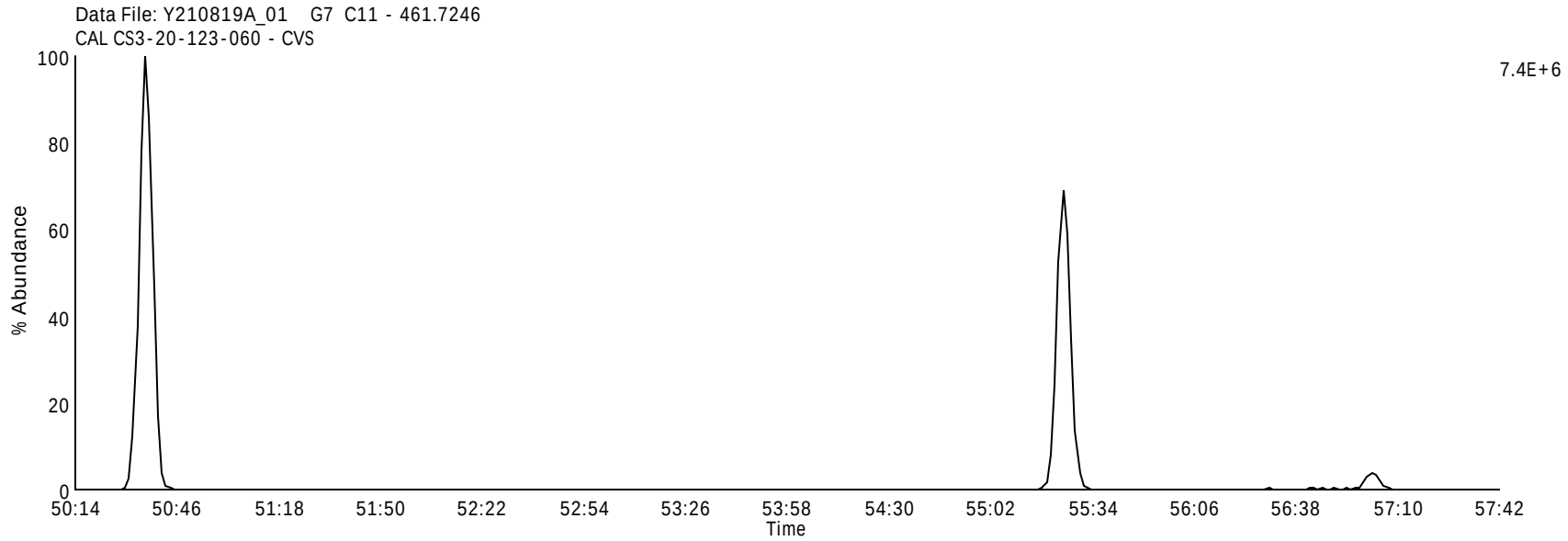


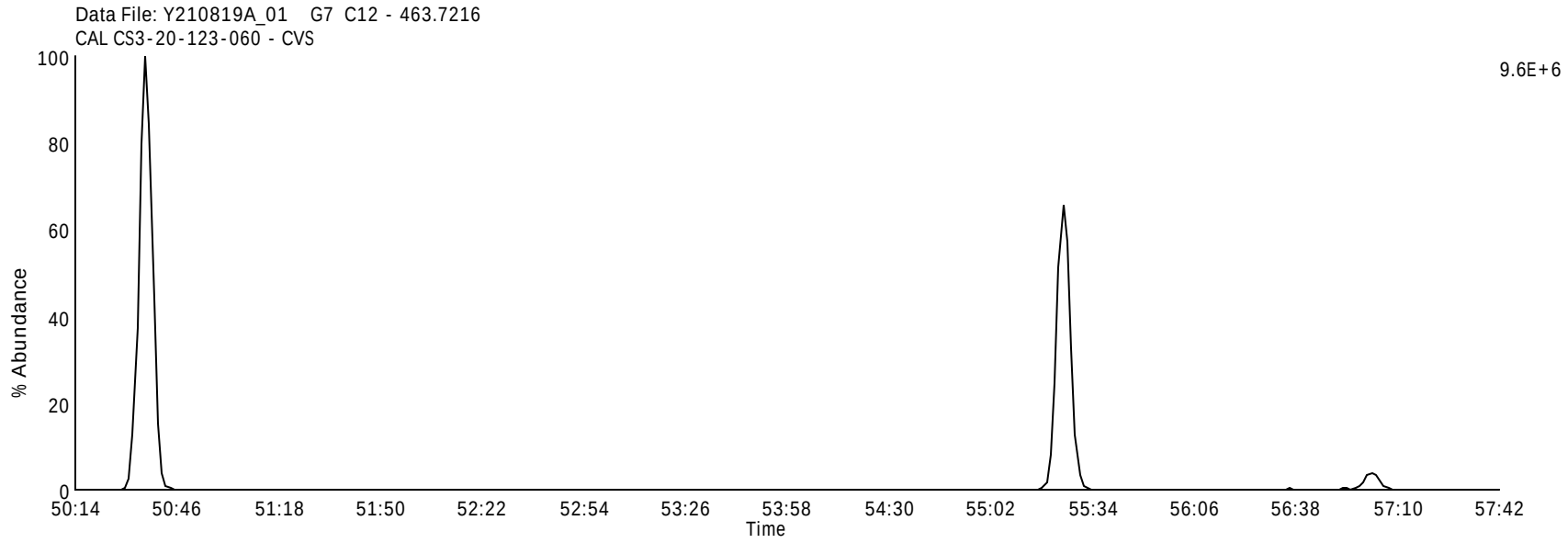
Nona Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



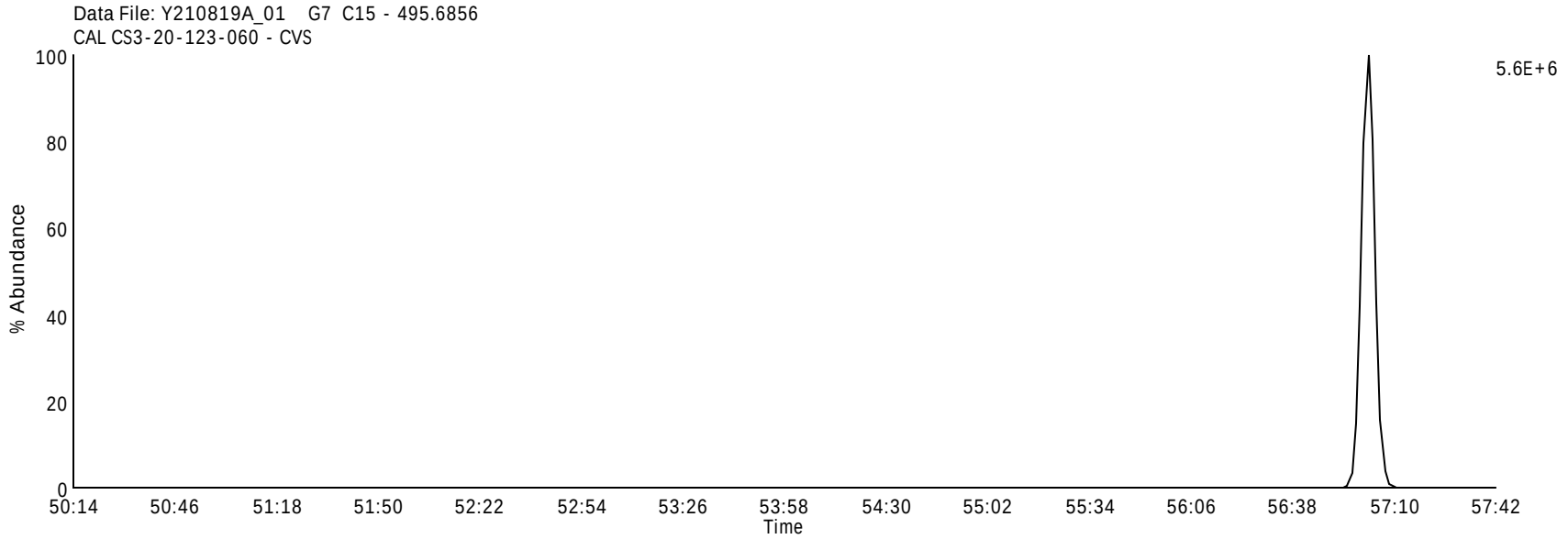


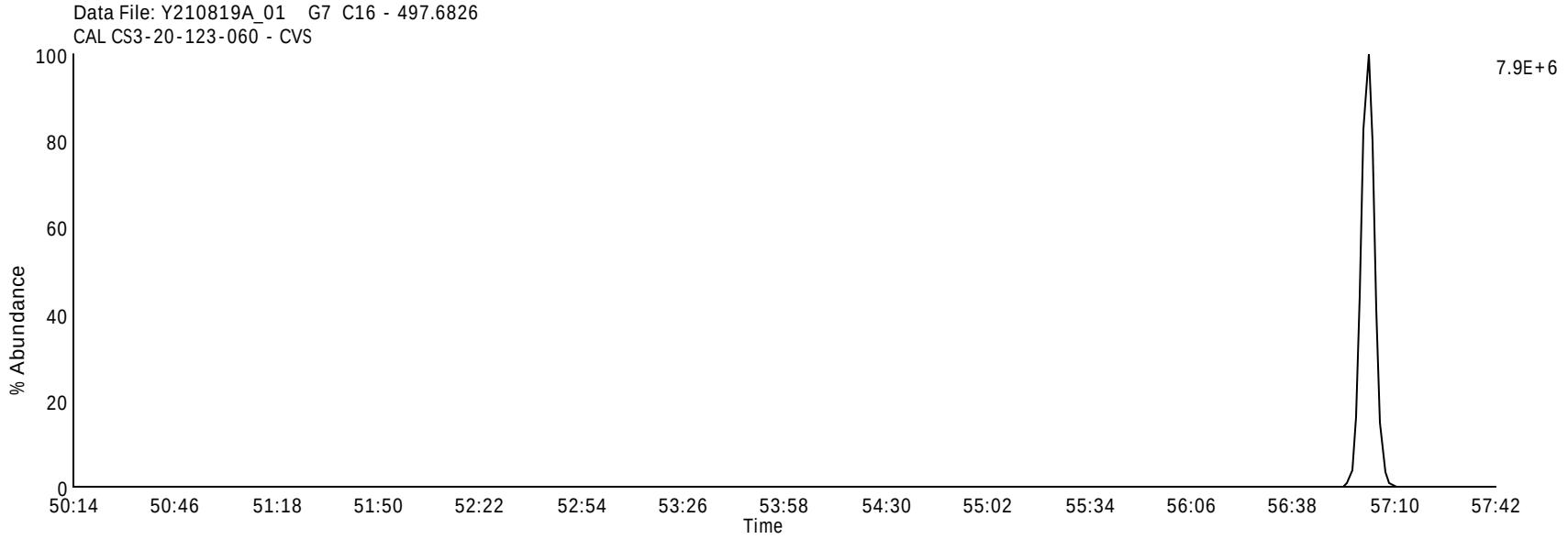
Deca Chlorinated Biphenyl

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

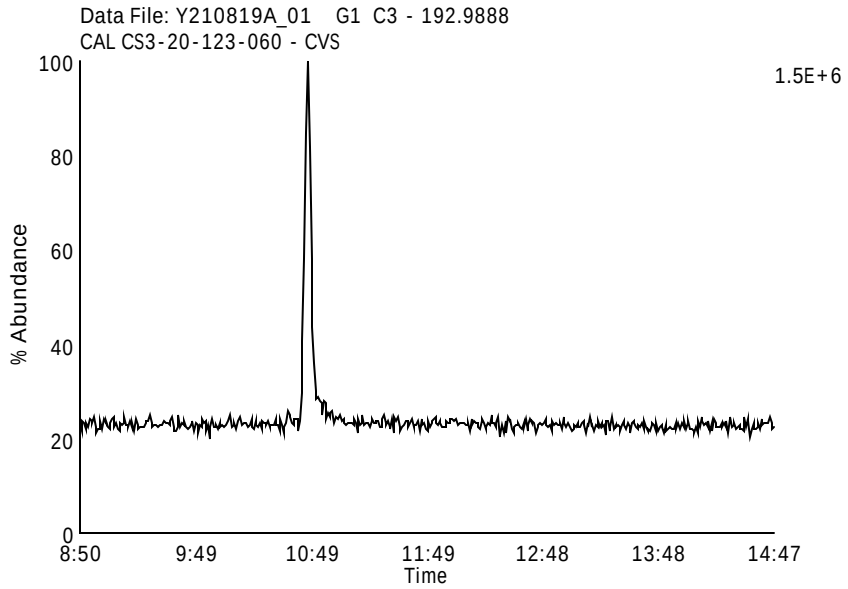
Sample Description: CAL CS3-20-123-060 - CVS

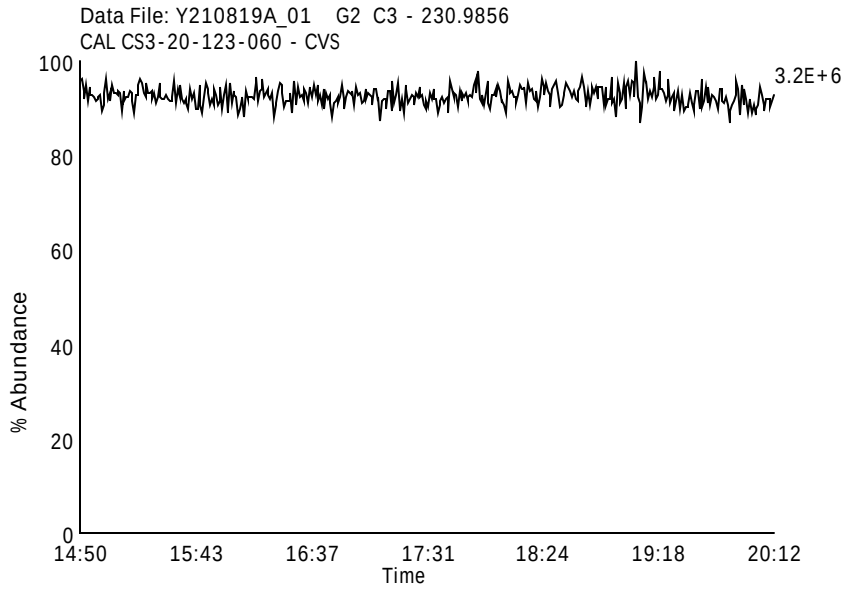


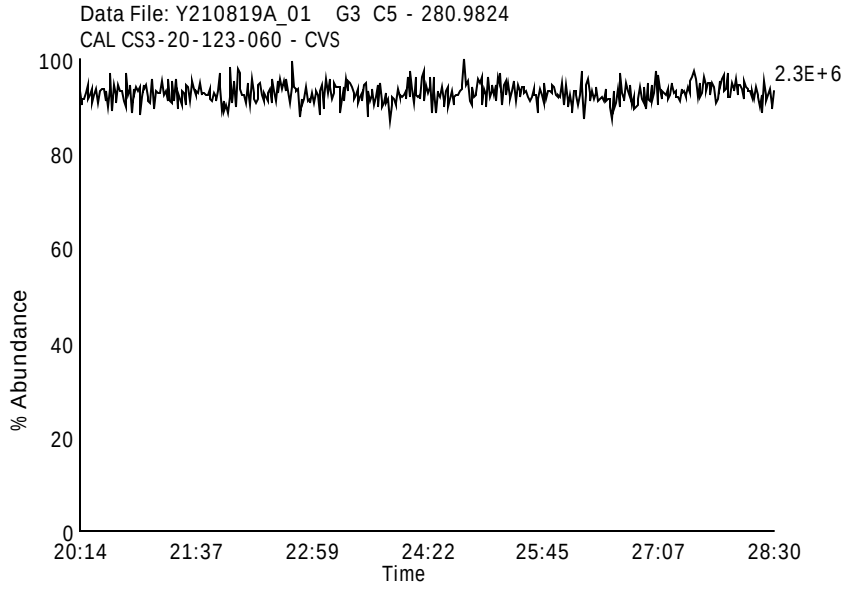


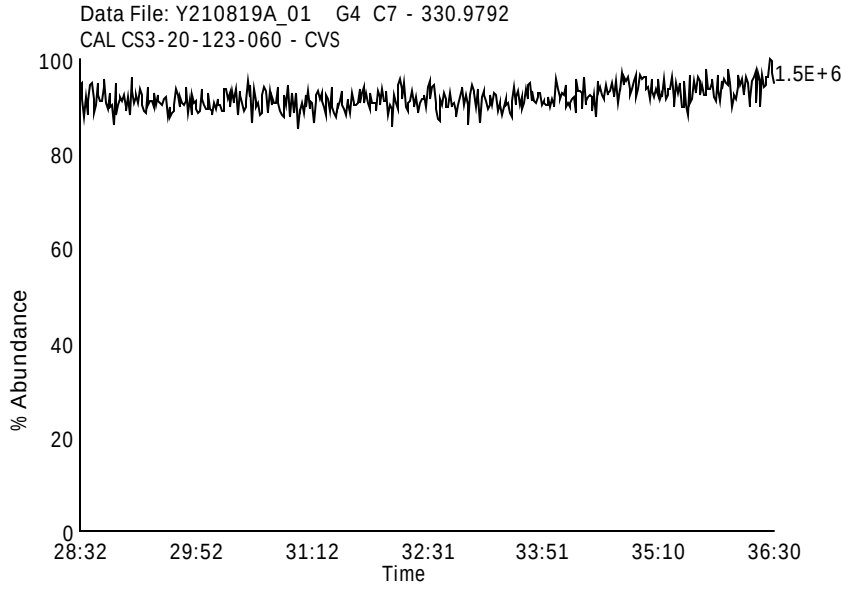
Group 1 - 4 Lock mass

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





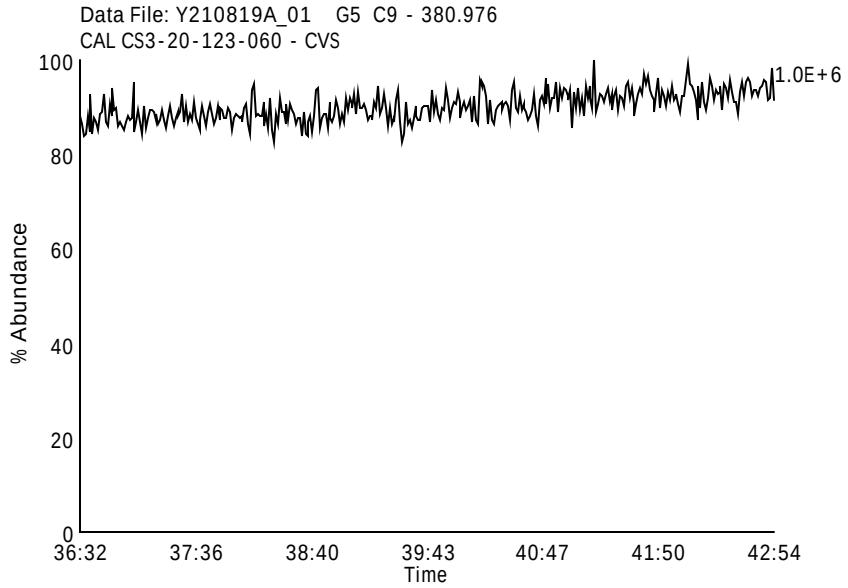


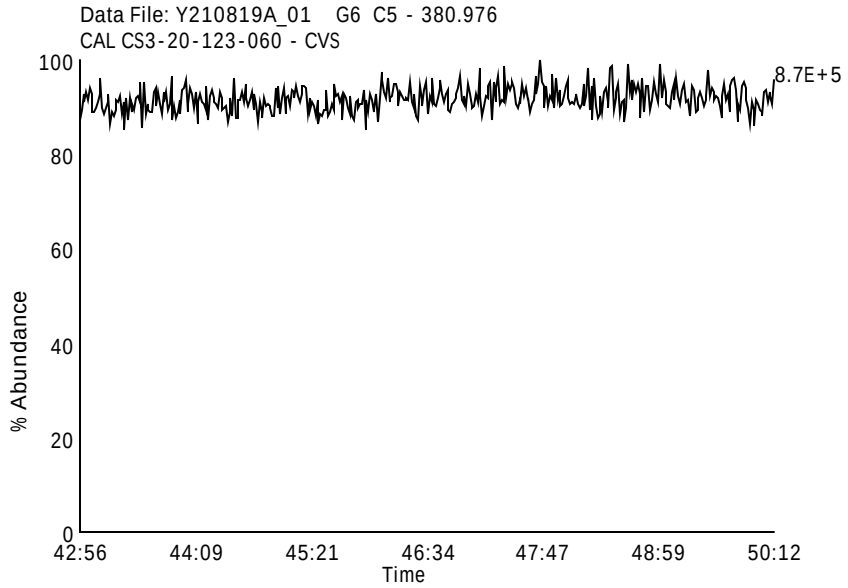


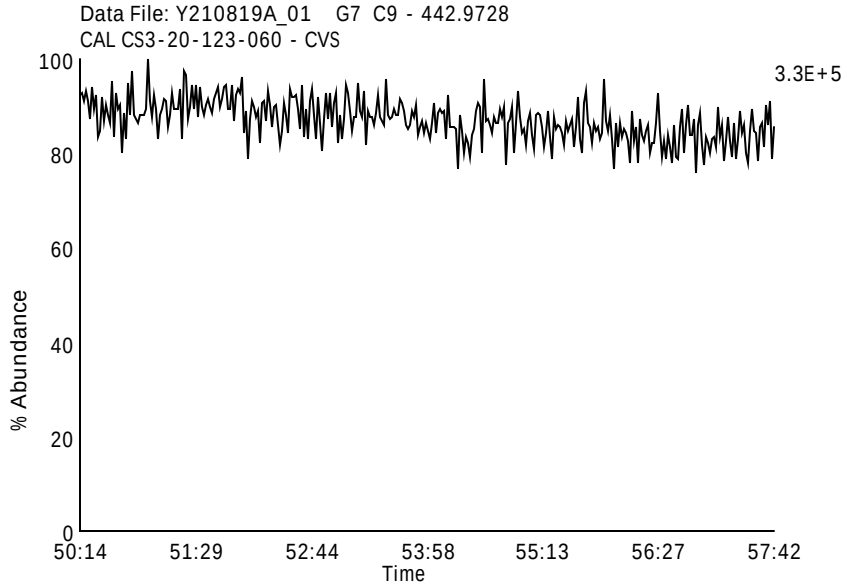
Group 5 - 7 Lock mass

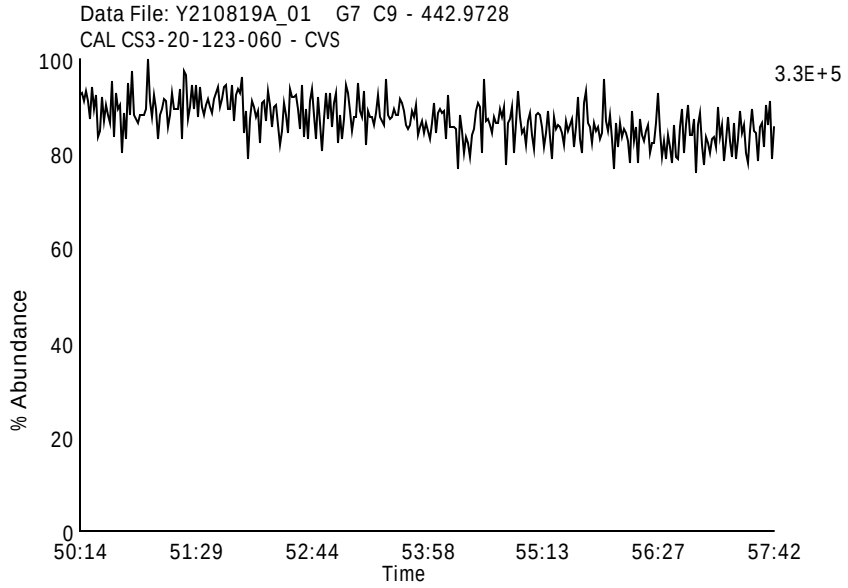
Data File Name: Y210819A_01
Date Acquired: 8/19/2021
Sample Description: CAL CS3-20-123-060 - CVS

Lab Sample ID: CS3-20-123-060
Instrument: 10MSHR12 (Y)









Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.834	0.77	51208204	66385842	
13C-3,3',4,4'-TeCB	77	35.404	0.78	51510819	65778826	
13C-2,3,3',4,4'-PeCB	105	38.998	1.54	62053684	40199072	
13C-2,3,4,4',5-PeCB	114	38.361	1.53	63364259	41331947	
13C-2,3',4,4',5-PeCB	118	37.808	1.53	66222064	43162719	
13C-2,3',4,4',5'-PeCB	123	37.472	1.53	63261741	41245986	
13C-3,3',4,4',5-PeCB	126	42.151	1.57	53825037	34264684	
13C-HxCB(156/157)	156/157	45.208	1.22	102568128	83923047	
13C-2,3',4,4',5,5'-HxCB	167	44.051	1.23	54766966	44508663	
13C-3,3',4,4',5,5'-HxCB	169	48.479	1.23	44916129	36397189	
13C-2,3,3',4,4',5,5'-HpCB	189	51.026	1.02	42127094	41118145	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.03	82906534	80731238	
13C-2,3,3',5,5'-PeCB	111	35.471	1.60	96770041	60487785	
13C-2,2',3,3',5,5',6-HpCB	178	41.447	1.08	54880980	50588888	
Recovery Standards						
13C-2,5-DiCB	9	15.349	1.54	127392779	82964986	
13C-2,2',5,5'-TeCB	52	25.405	0.80	64362200	80721712	
13C-2,2',4,5,5'-PeCB	101	32.687	1.61	76585881	47607767	
13C-2,2',3,4,4',5'-HxCB	138	40.994	1.27	64490799	50853483	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.160	0.92	38348105	41726961	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.438	0.83	501814	607875	
81		34.851	0.72	456320	635945	
105		39.032	1.61	566945	352117	
114		38.378	1.53	600972	392715	
118		37.825	1.59	644411	405832	
123		37.506	1.42	603428	424525	
126		42.168	1.49	487021	327868	
156	156/157	45.225	1.25	1035842	827301	
157	156/157	45.225	1.25	(1035842)	(827301)	
167		44.084	1.25	538218	431899	
169		48.495	1.14	427965	374978	
189		51.047	1.10	410825	372156	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.850	0.76	33891332	44310376	
13C-3,3',4,4'-TeCB	77	35.420	0.77	34260374	44451965	
13C-2,3,3',4,4'-PeCB	105	39.014	1.54	41448453	26867484	
13C-2,3,4,4',5-PeCB	114	38.360	1.53	41156130	26821258	
13C-2,3',4,4',5-PeCB	118	37.823	1.55	43913917	28293186	
13C-2,3',4,4',5'-PeCB	123	37.488	1.53	42068498	27527636	
13C-3,3',4,4',5-PeCB	126	42.166	1.53	36221472	23742934	
13C-HxCB(156/157)	156/157	45.223	1.22	67390123	55431577	
13C-2,3',4,4',5,5'-HxCB	167	44.066	1.21	35666666	29418827	
13C-3,3',4,4',5,5'-HxCB	169	48.493	1.24	30688196	24842885	
13C-2,3,3',4,4',5,5'-HpCB	189	51.044	1.02	28764321	28122685	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.01	53600329	52989259	
13C-2,3,3',5,5'-PeCB	111	35.470	1.60	63084152	39378340	
13C-2,2',3,3',5,5',6-HpCB	178	41.462	1.09	35842158	32832358	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.53	83452779	54466090	
13C-2,2',5,5'-TeCB	52	25.404	0.80	42121385	52745355	
13C-2,2',4,5,5'-PeCB	101	32.687	1.59	49762849	31201326	
13C-2,2',3,4,4',5'-HxCB	138	40.992	1.26	41685419	33048264	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.156	0.91	25528617	28012392	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

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Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.437	0.74	1519692	2060098	
81		34.867	0.74	1604994	2175256	
105		39.047	1.54	1922768	1250991	
114		38.393	1.41	1876437	1335265	
118		37.840	1.47	2033118	1378641	
123		37.505	1.47	1924699	1306566	
126		42.183	1.47	1609066	1094892	
156	156/157	45.240	1.19	3194335	2677855	
157	156/157	45.240	1.19	(3194335)	(2677855)	
167		44.083	1.18	1689220	1433831	
169		48.510	1.21	1514546	1248104	
189		51.066	1.00	1288821	1289718	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.848	0.76	15482827	20415180	
13C-3,3',4,4'-TeCB	77	35.419	0.80	16235531	20406222	
13C-2,3,3',4,4'-PeCB	105	39.029	1.50	17530979	11682823	
13C-2,3,4,4',5-PeCB	114	38.375	1.51	18054772	11978158	
13C-2,3',4,4',5-PeCB	118	37.822	1.52	19150985	12610753	
13C-2,3',4,4',5'-PeCB	123	37.486	1.55	18627896	12055363	
13C-3,3',4,4',5-PeCB	126	42.165	1.54	15761201	10258884	
13C-HxCB(156/157)	156/157	45.222	1.23	27885801	22733884	
13C-2,3',4,4',5,5'-HxCB	167	44.065	1.21	15205904	12550764	
13C-3,3',4,4',5,5'-HxCB	169	48.508	1.22	12578703	10327607	
13C-2,3,3',4,4',5,5'-HpCB	189	51.043	1.03	11578654	11263039	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.425	1.03	26265414	25481217	
13C-2,3,3',5,5'-PeCB	111	35.486	1.61	29126575	18044938	
13C-2,2',3,3',5,5',6-HpCB	178	41.460	1.07	16153584	15031324	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.55	40918082	26392839	
13C-2,2',5,5'-TeCB	52	25.403	0.82	20417393	24823362	
13C-2,2',4,5,5'-PeCB	101	32.685	1.59	23106412	14493249	
13C-2,2',3,4,4',5'-HxCB	138	41.008	1.25	18284670	14647807	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.155	0.90	10479666	11607480	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.452	0.75	6908630	9157518	
81		34.865	0.76	7186537	9501154	
105		39.046	1.53	7946966	5189522	
114		38.392	1.50	8298330	5548139	
118		37.855	1.52	8853400	5831352	
123		37.520	1.49	8417688	5655194	
126		42.181	1.53	7036829	4607937	
156	156/157	45.255	1.22	13016131	10671543	
157	156/157	45.255	1.22	(13016131)	(10671543)	
167		44.098	1.25	7020713	5612988	
169		48.525	1.21	5836654	4837214	
189		51.064	0.99	4922715	4958579	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.832	0.77	34210797	44266996	
13C-3,3',4,4'-TeCB	77	35.402	0.79	35395450	44823730	
13C-2,3,3',4,4'-PeCB	105	38.995	1.51	40728648	26923537	
13C-2,3,4,4',5-PeCB	114	38.357	1.55	42745928	27575415	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44657518	28840602	
13C-2,3',4,4',5'-PeCB	123	37.469	1.53	43022555	28210031	
13C-3,3',4,4',5-PeCB	126	42.147	1.53	36577625	23922117	
13C-HxCB(156/157)	156/157	45.203	1.23	69653134	56819445	
13C-2,3',4,4',5,5'-HxCB	167	44.046	1.25	36559258	29211015	
13C-3,3',4,4',5,5'-HxCB	169	48.472	1.24	30651857	24792300	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.03	28316147	27496668	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	55689198	54423067	
13C-2,3,3',5,5'-PeCB	111	35.452	1.60	64883754	40430467	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.07	36247946	33766626	
Recovery Standards						
13C-2,5-DiCB	9	15.337	1.53	84686939	55315081	
13C-2,2',5,5'-TeCB	52	25.387	0.80	42416046	52980659	
13C-2,2',4,5,5'-PeCB	101	32.668	1.62	50281923	31100077	
13C-2,2',3,4,4',5'-HxCB	138	40.973	1.25	41920878	33447291	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.126	0.90	24833766	27679627	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.418	0.77	122699703	159707089	
81		34.848	0.75	125942207	167138424	
105		39.028	1.52	143263175	94554749	
114		38.374	1.51	154363717	102247755	
118		37.821	1.52	158518382	104050458	
123		37.486	1.51	153580769	101647751	
126		42.163	1.50	127752628	85082410	
156	156/157	45.220	1.23	254098813	207052129	
157	156/157	45.220	1.23	(254098813)	(207052129)	
167		44.063	1.22	131084207	107816581	
169		48.489	1.21	109583957	90325860	
189		51.057	1.01	98180269	97375448	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.831	0.77	34784792	45413028	
13C-3,3',4,4'-TeCB	77	35.401	0.79	35556353	44802460	
13C-2,3,3',4,4'-PeCB	105	39.011	1.54	42719780	27666457	
13C-2,3,4,4',5-PeCB	114	38.357	1.56	42911393	27511946	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44868121	28881141	
13C-2,3',4,4',5'-PeCB	123	37.468	1.51	42837264	28287898	
13C-3,3',4,4',5-PeCB	126	42.146	1.55	37305170	24073584	
13C-HxCB(156/157)	156/157	45.219	1.25	71784489	57574094	
13C-2,3',4,4',5,5'-HxCB	167	44.045	1.24	36763440	29578303	
13C-3,3',4,4',5,5'-HxCB	169	48.488	1.23	31756784	25737966	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.04	29222728	28169942	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	51908930	51091675	
13C-2,3,3',5,5'-PeCB	111	35.468	1.60	64649598	40423708	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.08	35851672	33086489	
Recovery Standards						
13C-2,5-DiCB	9	15.325	1.52	83143628	54673112	
13C-2,2',5,5'-TeCB	52	25.386	0.80	41733434	52403278	
13C-2,2',4,5,5'-PeCB	101	32.668	1.61	49712591	30937614	
13C-2,2',3,4,4',5'-HxCB	138	40.989	1.27	41161616	32464857	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.146	0.92	24949098	27236268	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.417	0.76	616806932	810414208	
81		34.847	0.76	639607623	840095356	
105		39.027	1.54	745301804	485163987	
114		38.374	1.52	780283922	512899091	
118		37.837	1.53	803499802	526013471	
123		37.502	1.52	785601740	516404877	
126		42.162	1.52	649914791	428105060	
156	156/157	45.236	1.22	1286847987	1051857892	
157	156/157	45.236	1.22	(1286847987)	(1051857892)	
167		44.079	1.22	653652175	535863549	
169		48.505	1.22	557599158	455624388	
189		51.056	1.01	503772747	500470805	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	209 Mix	Injected By	CVS
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_12	GC Column ID	261111-02
Analyzed	08/18/2021 22:46	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.847	0.77	261939892	340717538	
13C-3,3',4,4'-TeCB	77	35.417	0.78	263079957	337687425	
13C-2,3,3',4,4'-PeCB	105	39.027	1.54	301762200	195654754	
13C-2,3,4,4',5-PeCB	114	38.373	1.55	319273384	206446336	
13C-2,3',4,4',5-PeCB	118	37.820	1.55	285920586	183937225	
13C-2,3',4,4',5'-PeCB	123	37.485	1.53	313436211	205254716	
13C-3,3',4,4',5-PeCB	126	42.162	1.54	264403772	172198516	
13C-HxCB(156/157)	156/157	45.236	1.22	465580970	380670626	
13C-2,3',4,4',5,5'-HxCB	167	44.079	1.22	258717686	211356442	
13C-3,3',4,4',5,5'-HxCB	169	48.505	1.24	220535522	177818152	
13C-2,3,3',4,4',5,5'-HpCB	189	51.056	1.04	204725613	197053053	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.408	1.02	422954227	416691418	
13C-2,3,3',5,5'-PeCB	111	35.485	1.58	458291424	289581214	
13C-2,2',3,3',5,5',6-HpCB	178	41.475	1.10	279951616	254366604	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.54	635712772	412478384	
13C-2,2',5,5'-TeCB	52	25.403	0.80	336937561	422961206	
13C-2,2',4,5,5'-PeCB	101	32.701	1.60	391761849	245471967	
13C-2,2',3,4,4',5'-HxCB	138	41.006	1.24	331269487	267326199	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.167	0.90	186641000	208016820	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

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Client ID	209 Mix	Injected By	CVS
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_12	GC Column ID	261111-02
Analyzed	08/18/2021 22:46	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.451	0.77	123538736	160442709	
81		34.864	0.76	134870249	177996834	
105		39.044	1.52	153616365	101179020	
114		38.407	1.51	161398999	106639926	
118		37.854	1.53	141072744	92413810	
123		37.518	1.53	158852111	103945553	
126		42.196	1.53	131270293	85832237	
156	156/157	45.252	1.21	244127137	201294827	
157	156/157	45.252	1.21	(244127137)	(201294827)	
167		44.096	1.22	137613478	113097201	
169		48.521	1.22	112215927	92218459	
189		51.077	1.01	96188981	95113403	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	209 Mix	Injected By	BAL
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_02	GC Column ID	261111-02
Analyzed	08/19/2021 12:34	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.78	350345770	451311493	
13C-3,3',4,4'-TeCB	77	35.437	0.78	358586273	458242779	
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	398629988	258944921	
13C-2,3,4,4',5-PeCB	114	38.377	1.55	419130683	270353368	
13C-2,3',4,4',5-PeCB	118	37.824	1.56	337445748	216941583	
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	410374649	269449681	
13C-3,3',4,4',5-PeCB	126	42.183	1.54	364322549	235855149	
13C-HxCB(156/157)	156/157	45.240	1.24	575112371	464923773	
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.23	339862330	276398261	
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.22	290428710	237778570	
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.04	253341233	243605827	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.02	541390962	530905480	
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	591983650	372433434	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	345763984	313264751	
Recovery Standards						
13C-2,5-DiCB	9	15.362	1.54	782172916	509269814	
13C-2,2',5,5'-TeCB	52	25.422	0.80	421169308	527768351	
13C-2,2',4,5,5'-PeCB	101	32.704	1.59	499361743	313509468	
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.26	421031924	334204391	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.178	0.91	218688168	240803952	

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	209 Mix	Injected By	BAL
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_02	GC Column ID	261111-02
Analyzed	08/19/2021 12:34	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.454	0.76	166566667	220048410	
81		34.884	0.76	181047236	236944635	
105		39.048	1.53	203070371	132300918	
114		38.410	1.51	210237379	139196253	
118		37.874	1.54	175160210	113880571	
123		37.522	1.51	203626798	134960104	
126		42.200	1.51	178649325	118163826	
156	156/157	45.257	1.21	301198333	248040417	
157	156/157	45.257	1.21	(301198333)	(248040417)	
167		44.100	1.22	181932165	148977128	
169		48.527	1.22	146914658	120346982	
189		51.088	1.01	117996108	116718149	

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Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_01	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.78	76295120	98381686	
13C-3,3',4,4'-TeCB	77	35.454	0.78	78929962	101541891	
13C-2,3,3',4,4'-PeCB	105	39.048	1.56	92088980	58982498	
13C-2,3,4,4',5-PeCB	114	38.394	1.53	93027165	60623043	
13C-2,3',4,4',5-PeCB	118	37.857	1.53	96292104	62994671	
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	92167858	60532760	
13C-3,3',4,4',5-PeCB	126	42.184	1.56	83517503	53704511	
13C-HxCB(156/157)	156/157	45.257	1.22	150827777	123193956	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.24	79681101	64499936	
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.25	69189892	55401415	
13C-2,3,3',4,4',5,5'-HpCB	189	51.067	1.03	60877189	59391133	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.442	1.02	118547740	116543315	
13C-2,3,3',5,5'-PeCB	111	35.504	1.57	142505463	90652009	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.09	78675916	72137599	
Recovery Standards						
13C-2,5-DiCB	9	15.385	1.54	183687824	119270059	
13C-2,2',5,5'-TeCB	52	25.438	0.80	93852330	116963618	
13C-2,2',4,5,5'-PeCB	101	32.721	1.59	110190624	69130827	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.26	92932325	73691738	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.90	52289833	57816048	

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Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_01	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.471	0.76	34209870	44847202	
81		34.900	0.76	35137052	46445203	
105		39.064	1.51	38743046	25583524	
114		38.427	1.49	40374102	27105487	
118		37.874	1.54	43020795	27862576	
123		37.538	1.52	41321952	27158569	
126		42.217	1.51	35736156	23732630	
156	156/157	45.274	1.21	67597404	55647357	
157	156/157	45.274	1.21	(67597404)	(55647357)	
167		44.117	1.21	35422374	29210651	
169		48.544	1.22	30673526	25077221	
189		51.089	1.01	26406961	26266614	

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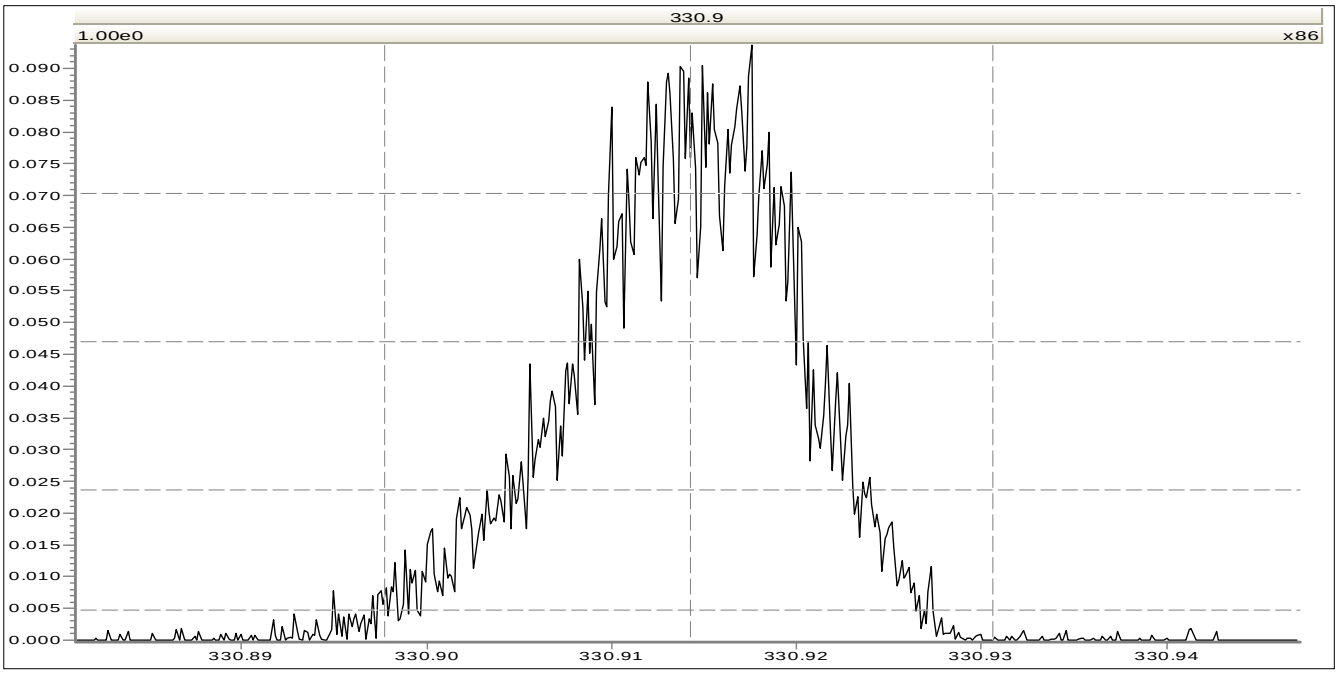

Source (EI+)

Ion Repeller (V)	-9.96
Focus 1	843
Beam Centre	37.3
Focus 2	4272
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-101.7
Z Deflect 1	-12.9
Z Deflect 2	-3.9
Z Focus 2	2338
Z Focus 3	0
Z Deflect 3	23.4
Y Focus	3492
Rotate 2	5.0
Curve 2	-4.1
Curve 3	0.8
Rotate 3	-40.5
Rotate 4	1.2
V Acc (V)	6495.96
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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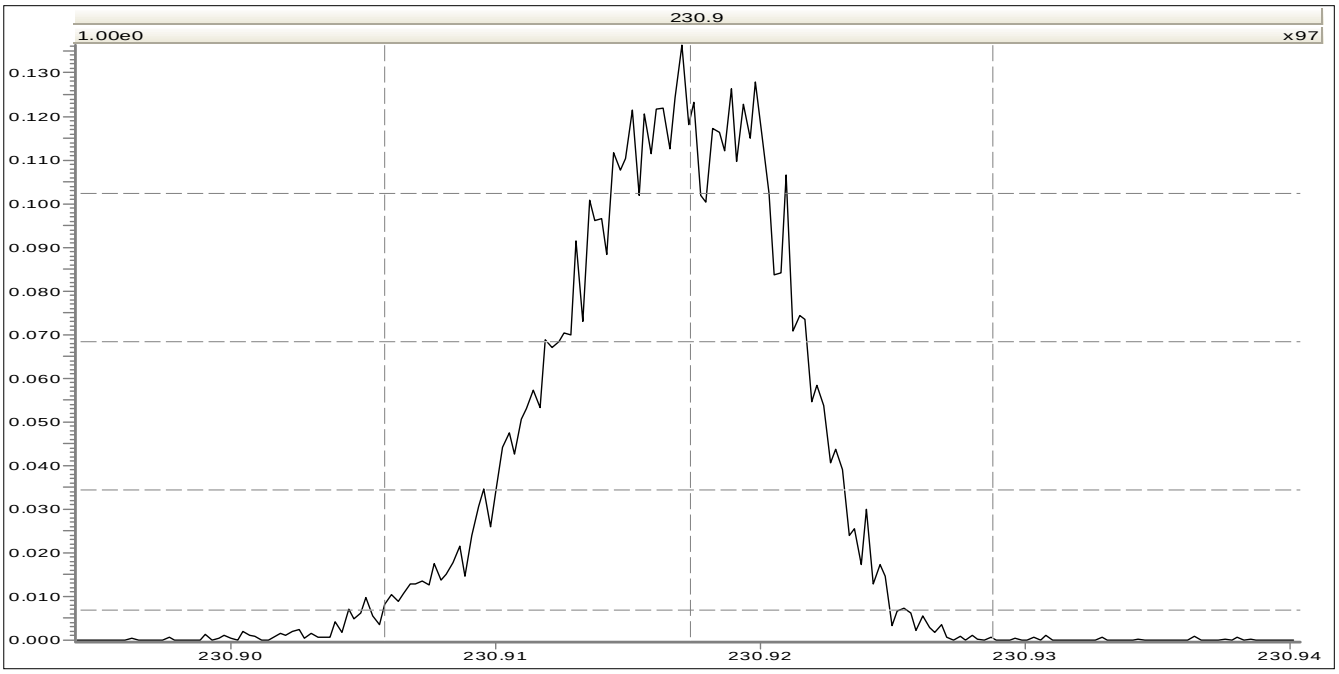

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.74
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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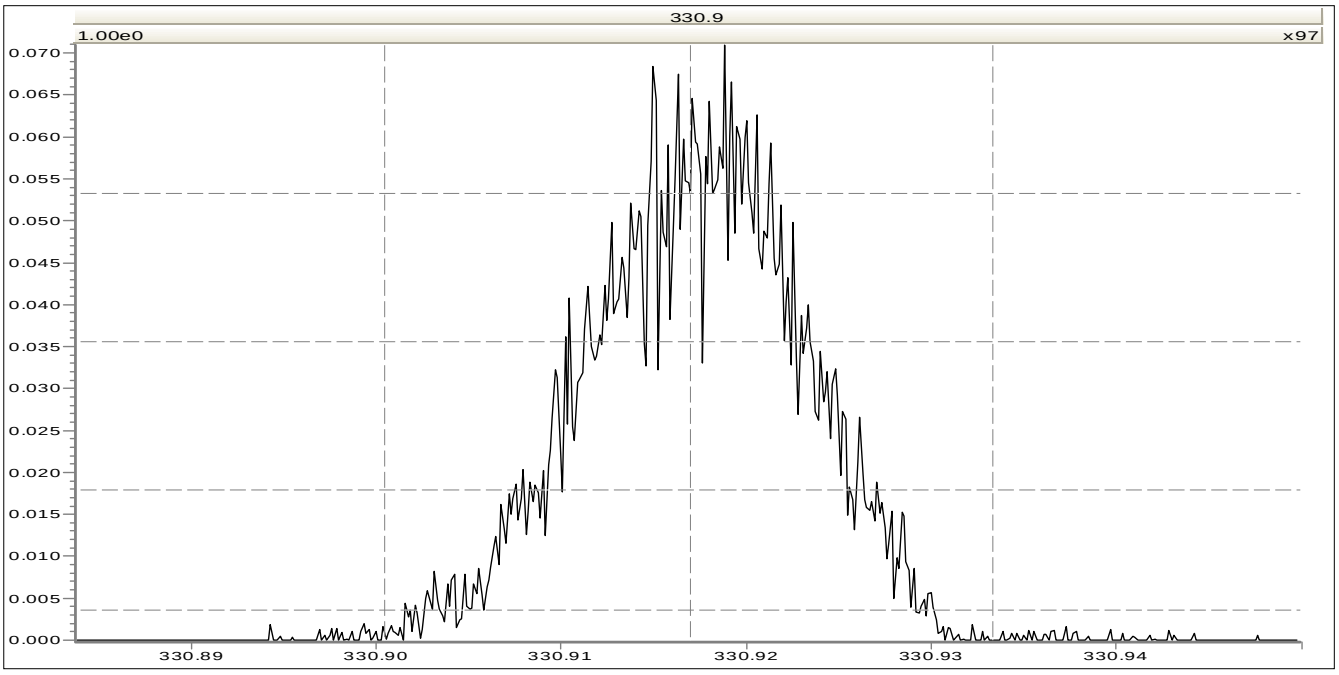

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.92
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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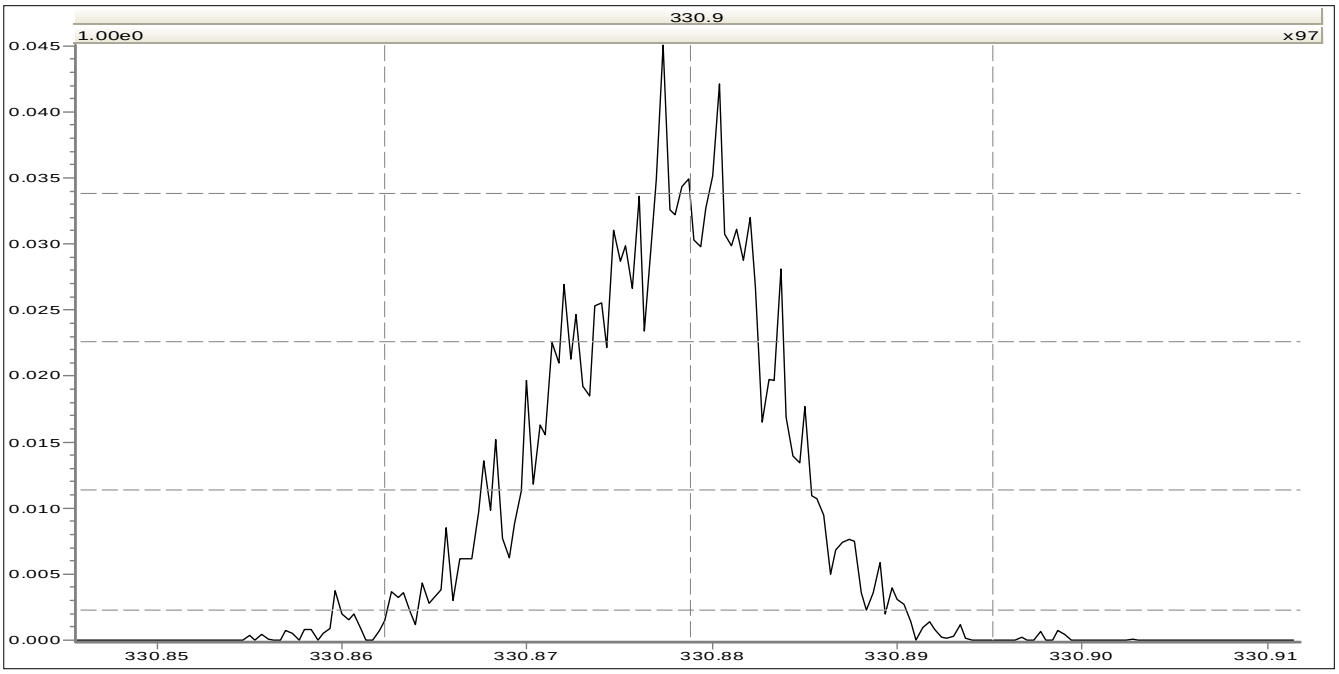


Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.92
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

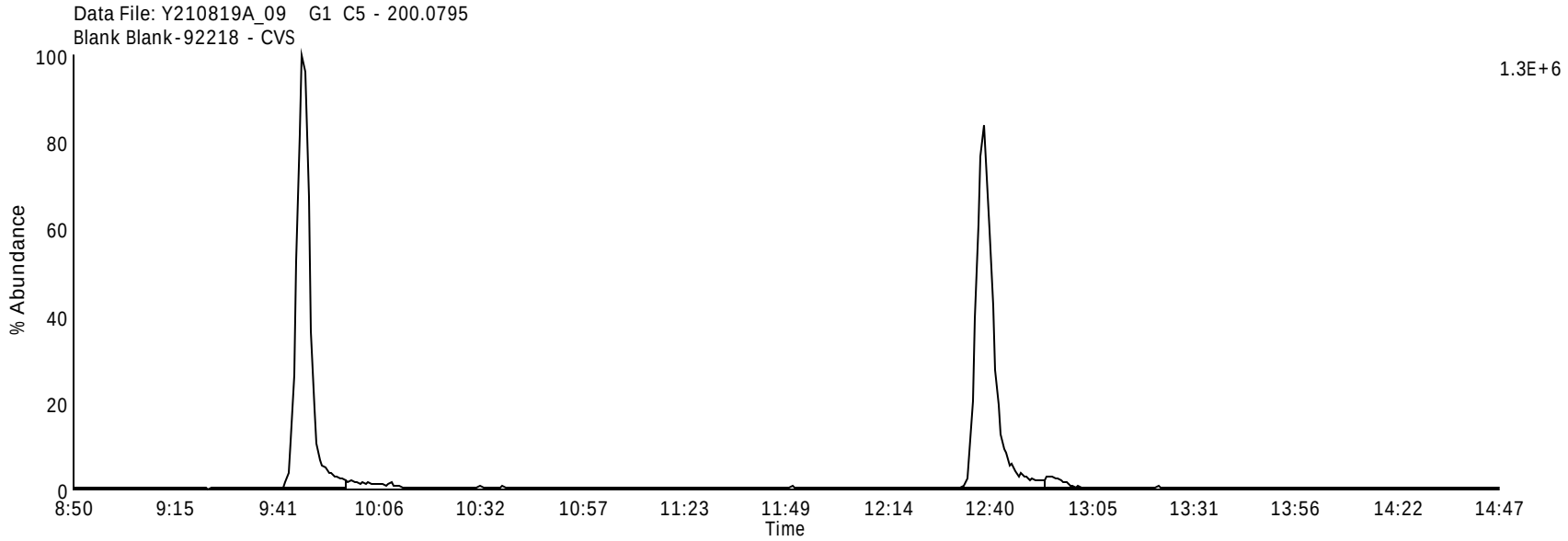
No information

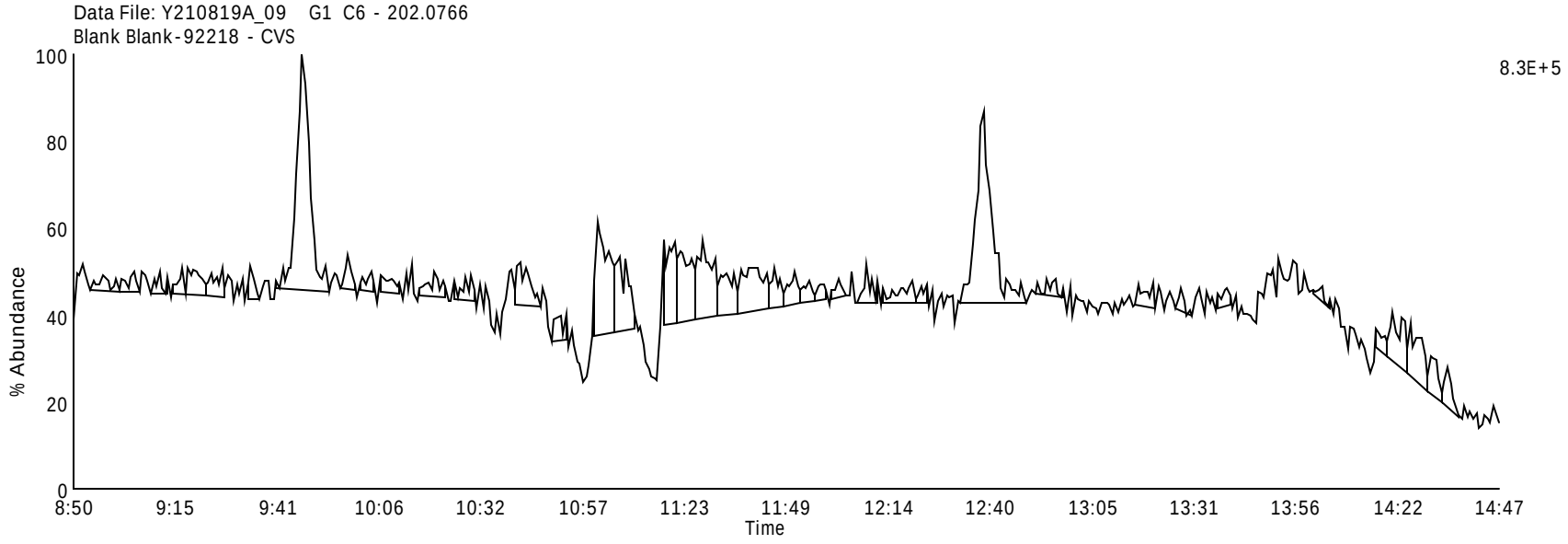
Appendix F

QC Raw Data

Labeled Mono Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

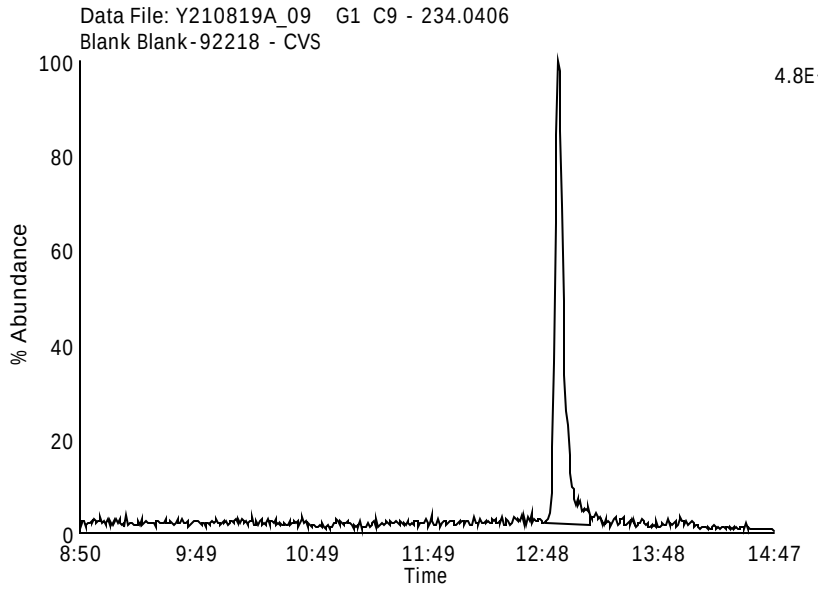


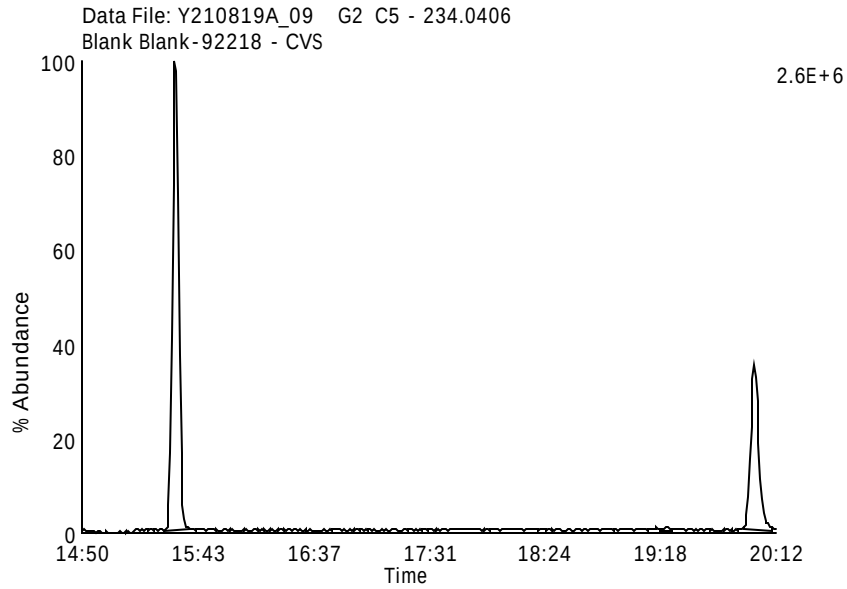


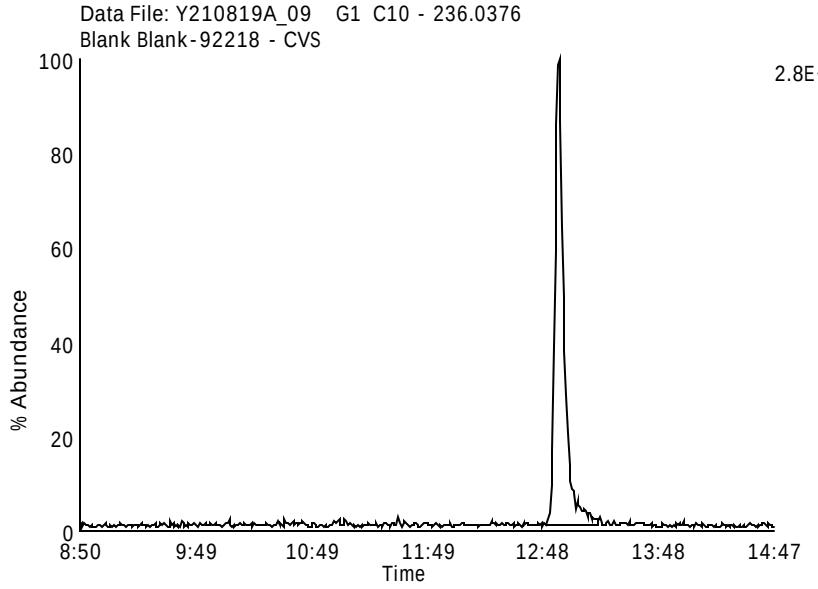
Labeled Di Chlorinated Biphenyls

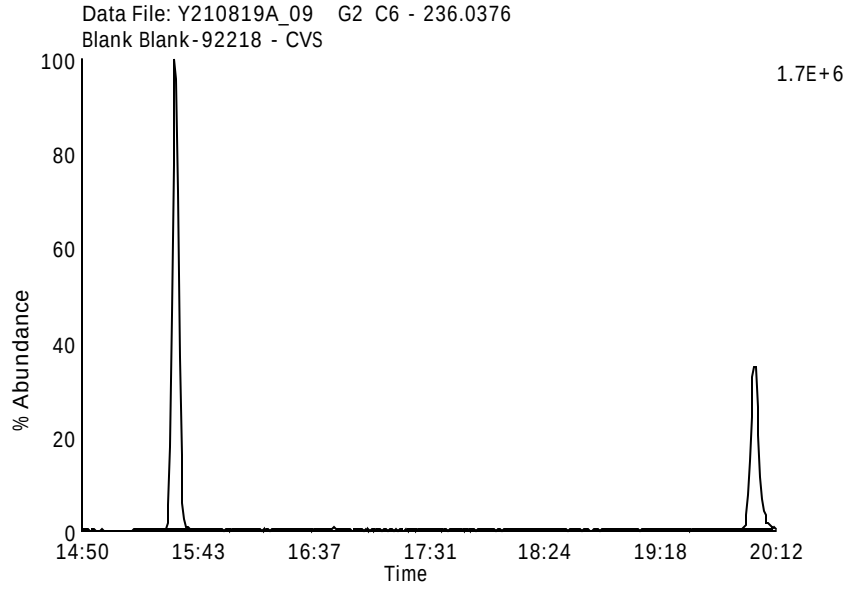
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX









Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_09
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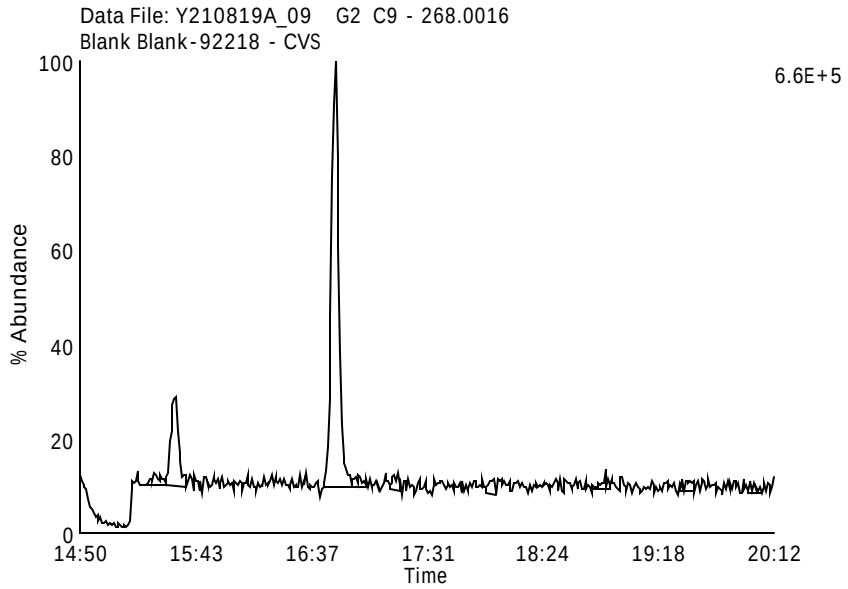
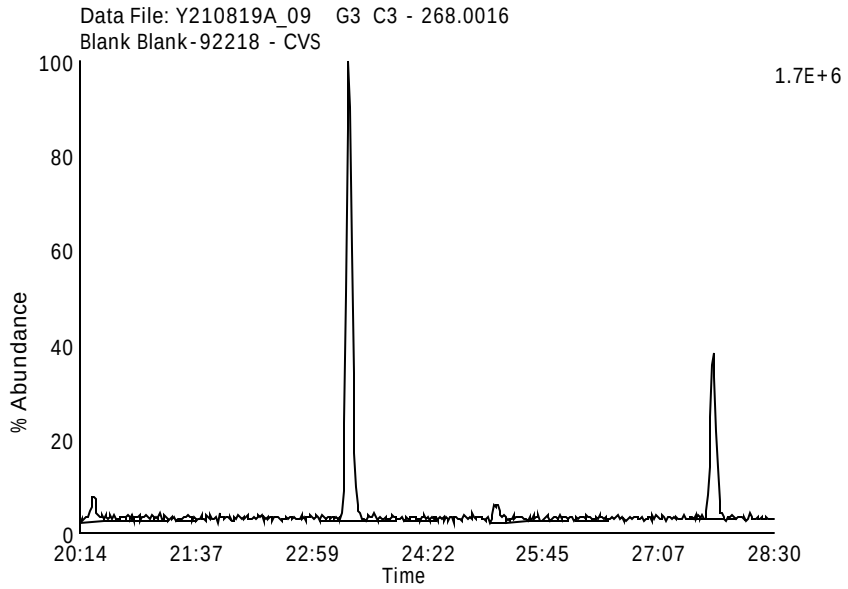
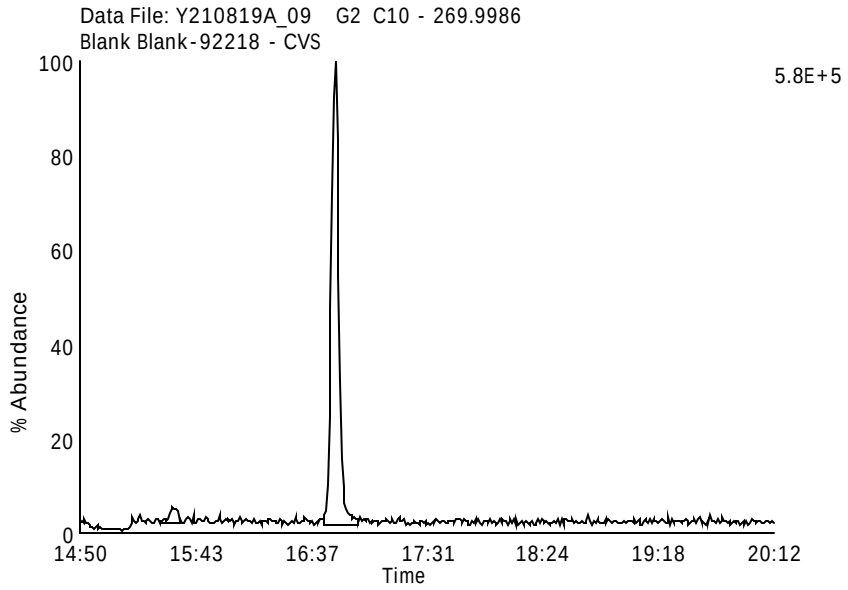
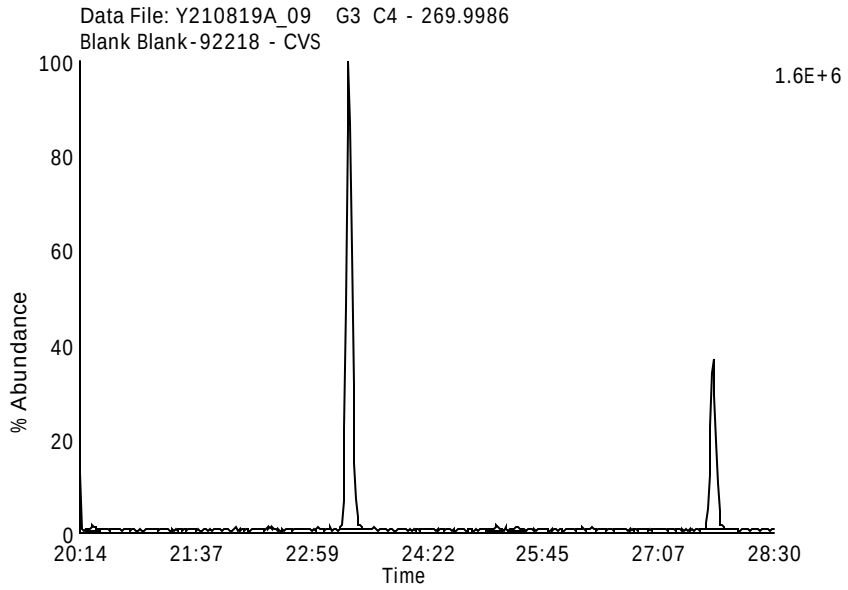
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX





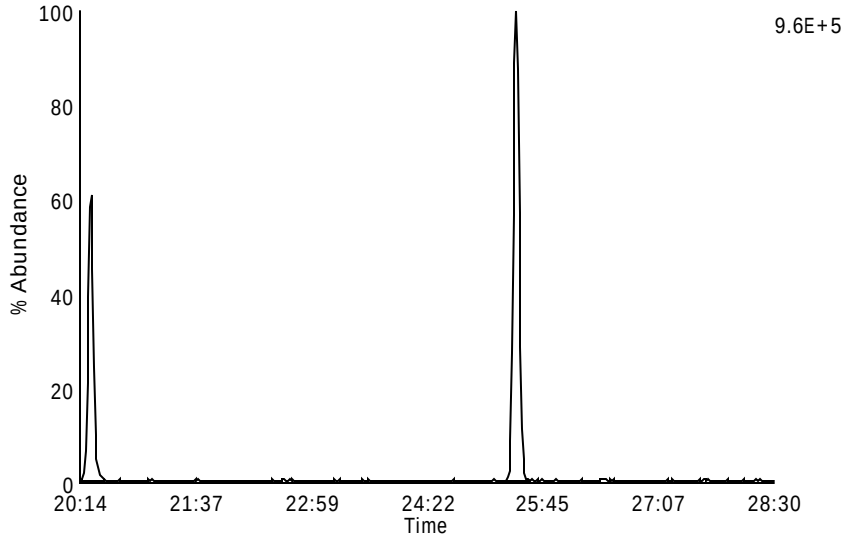




Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

Data File: Y210819A_09 G3 C9 - 301.9626
Blank Blank-92218 - CVS



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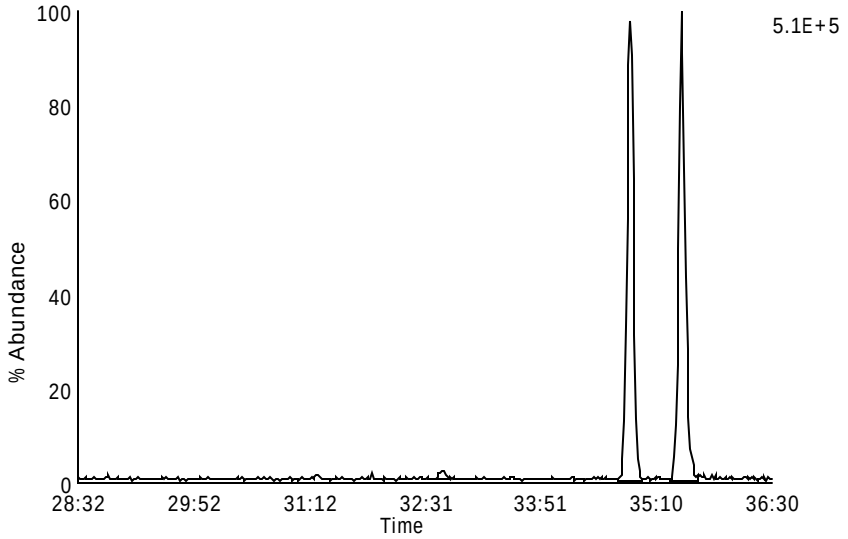

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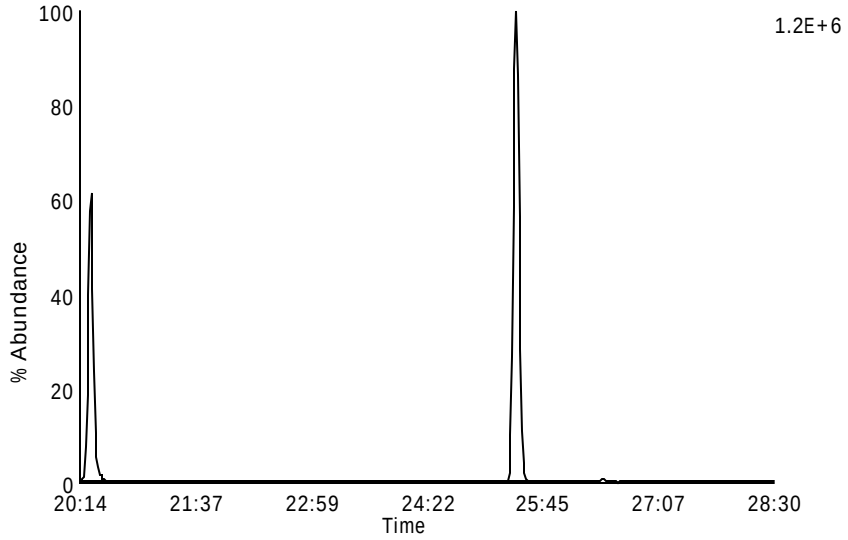

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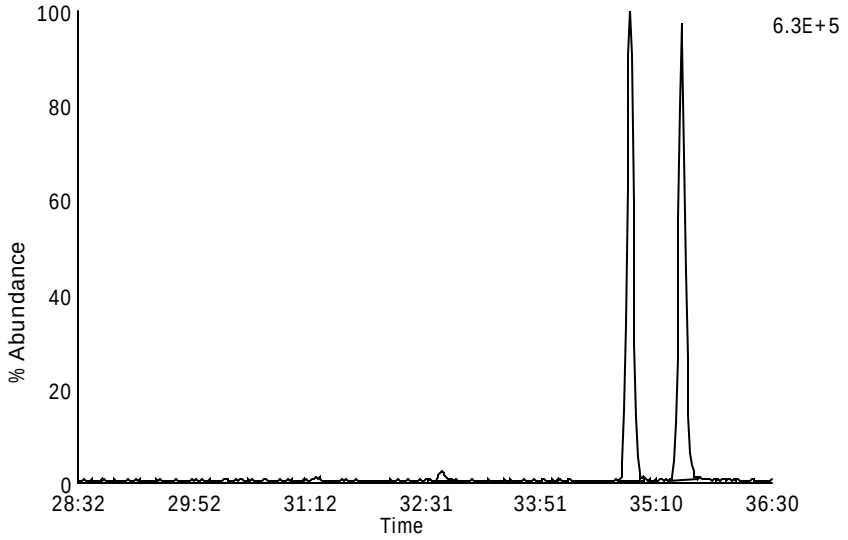
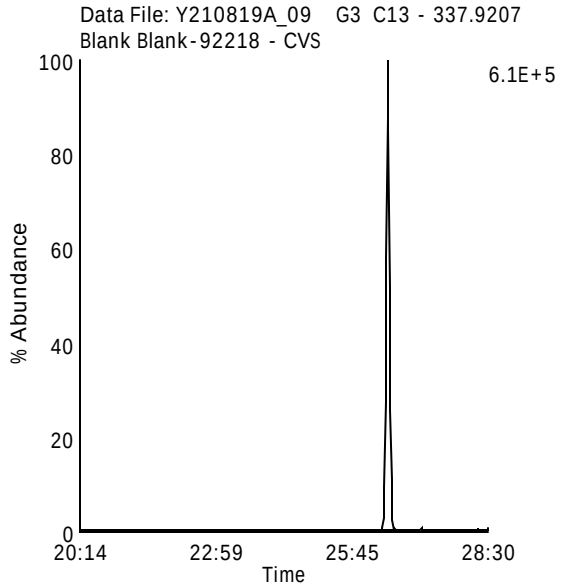
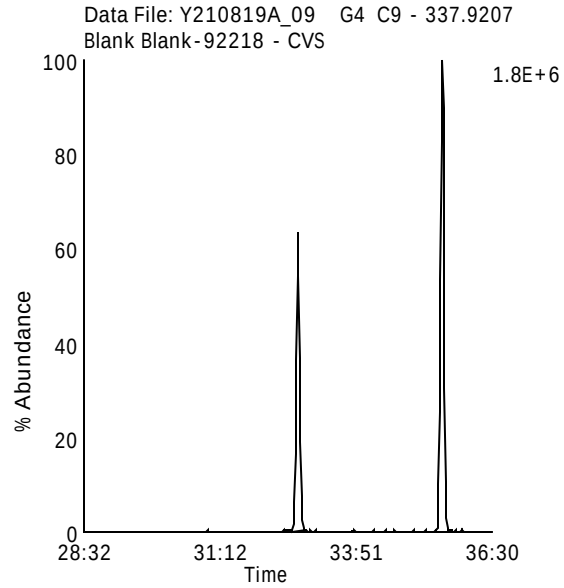
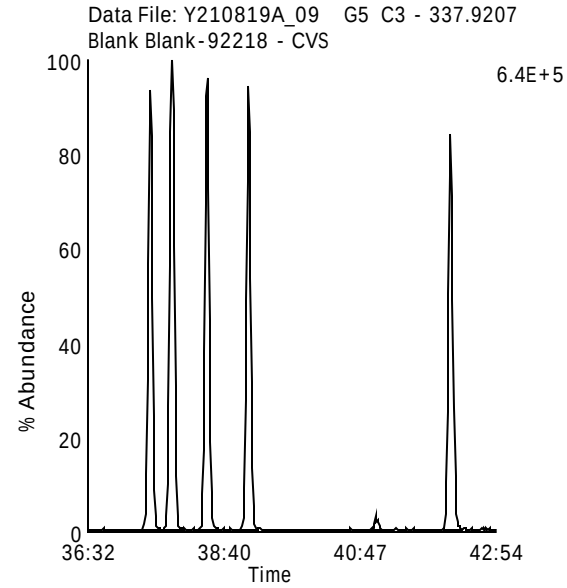


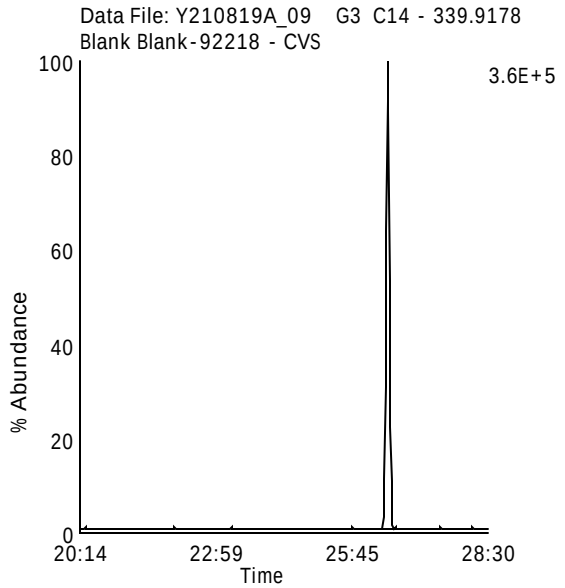
Labeled Penta Chlorinated Biphenyls

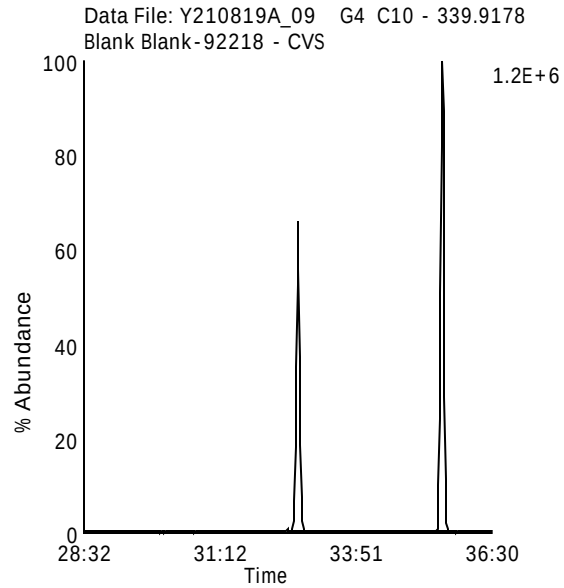
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

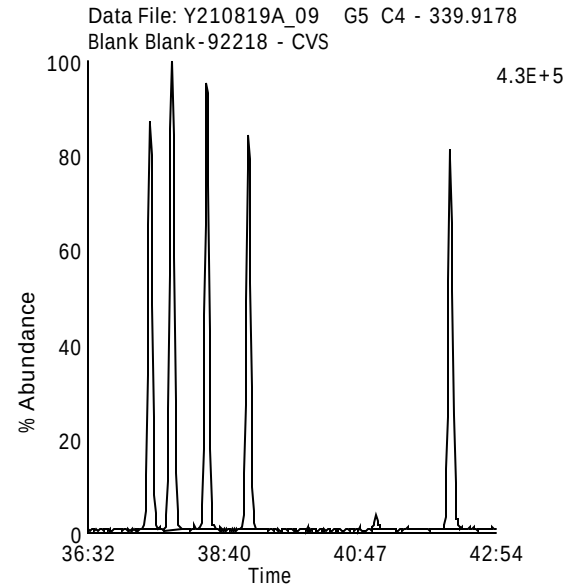






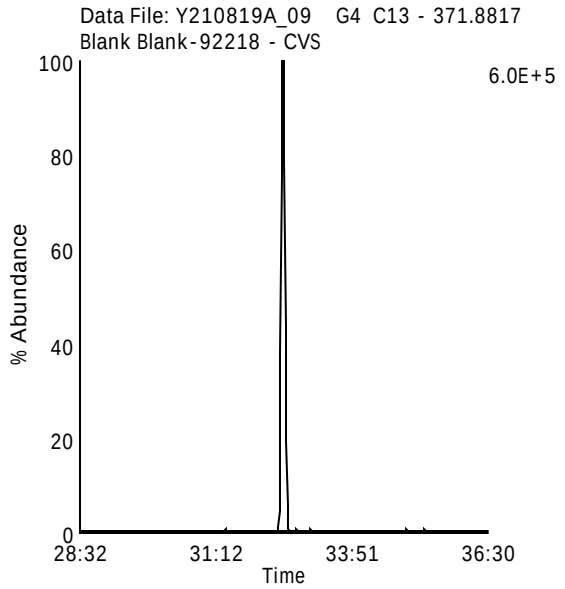


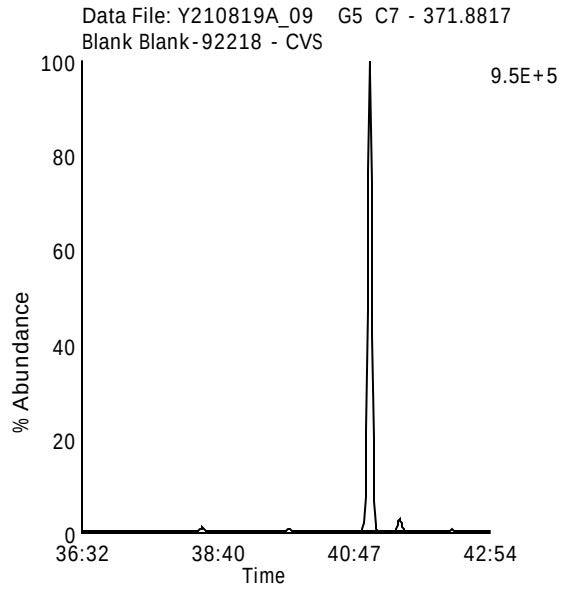


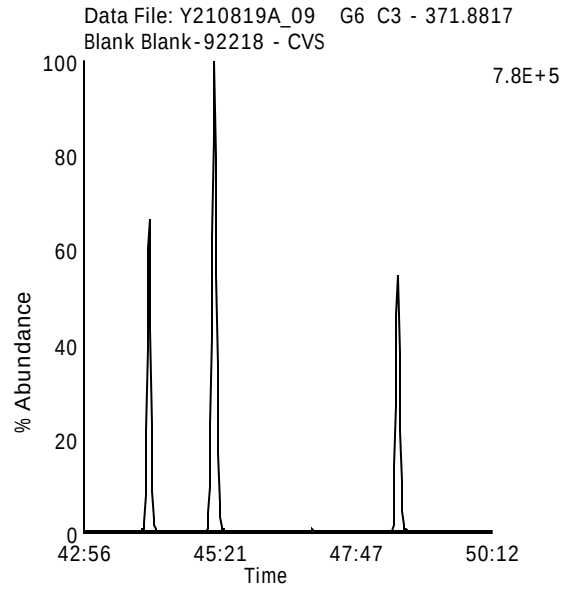


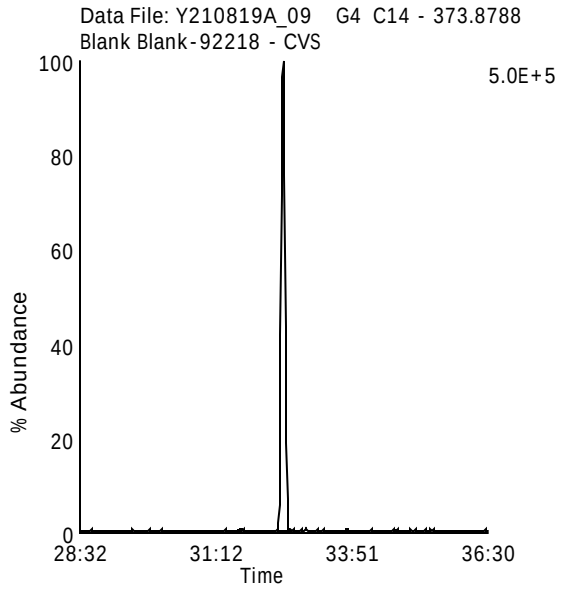
Labeled Hexa Chlorinated Biphenyls

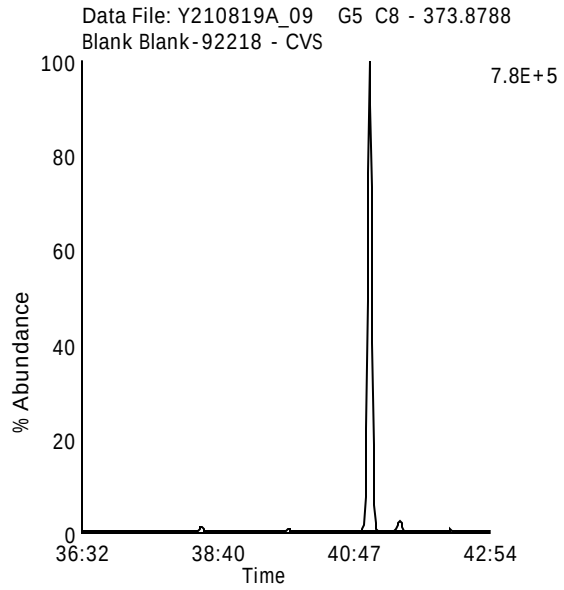
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

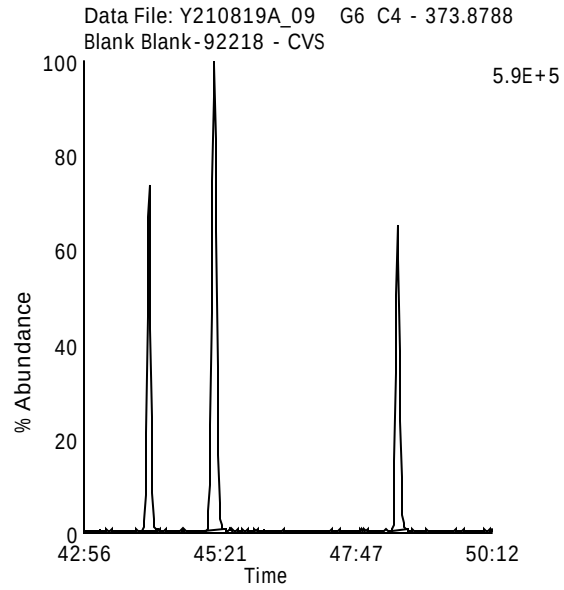






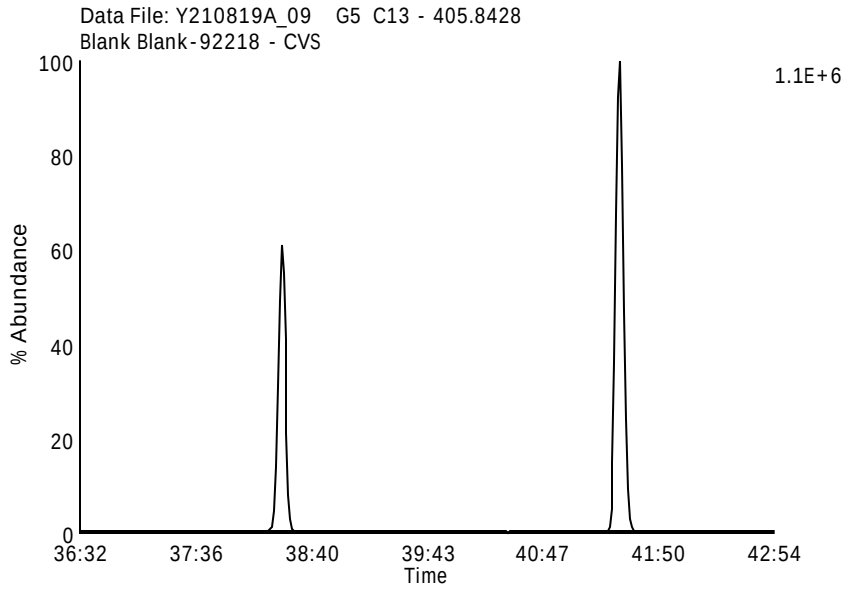


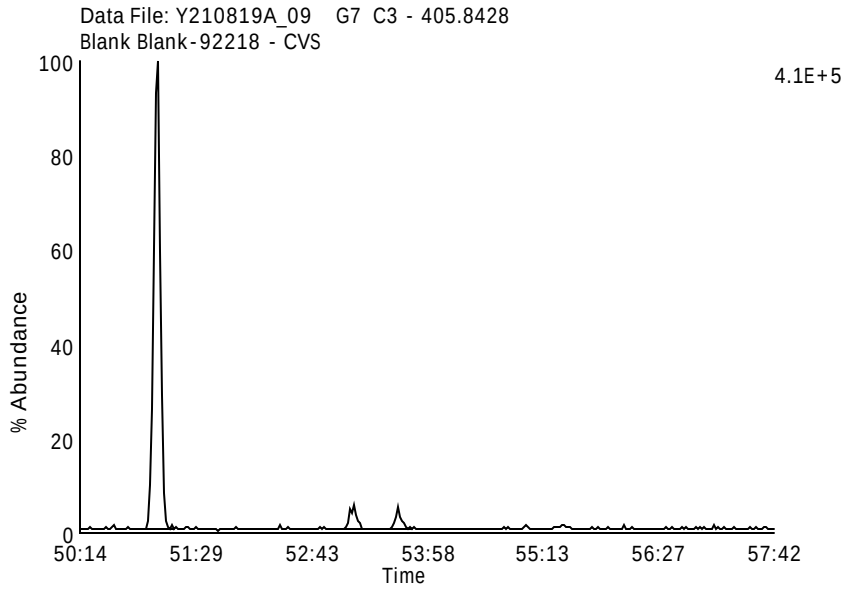


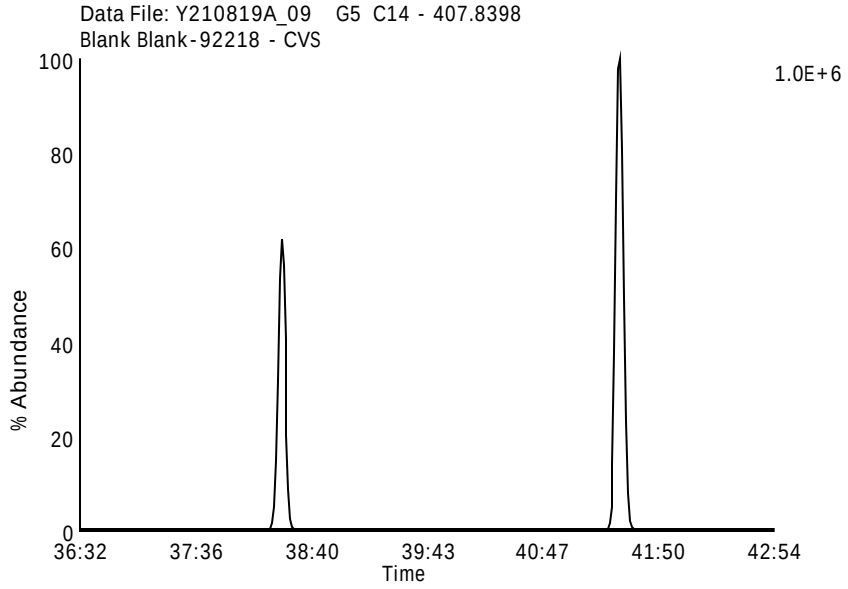


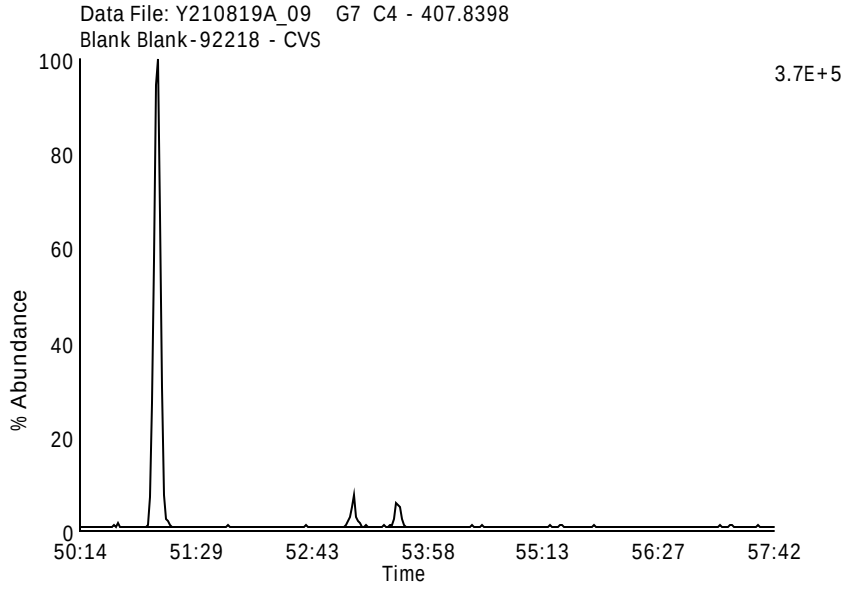
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



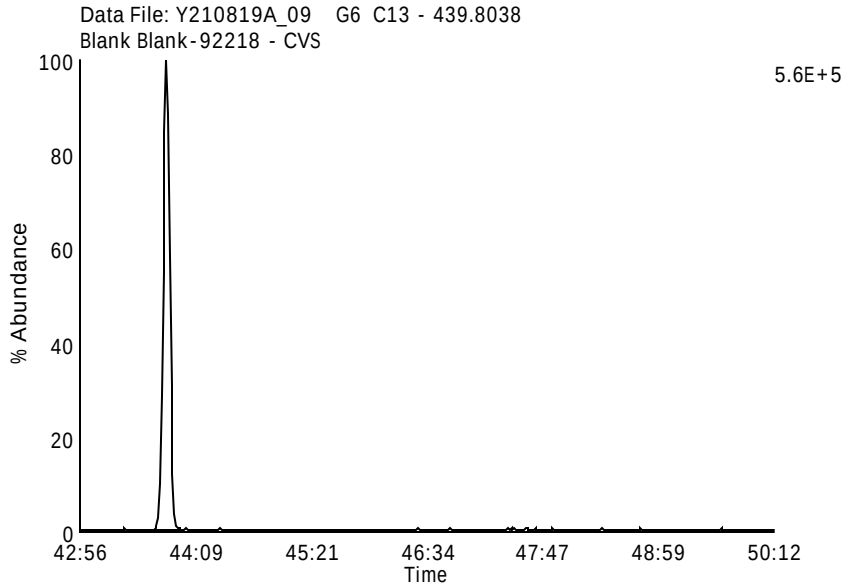


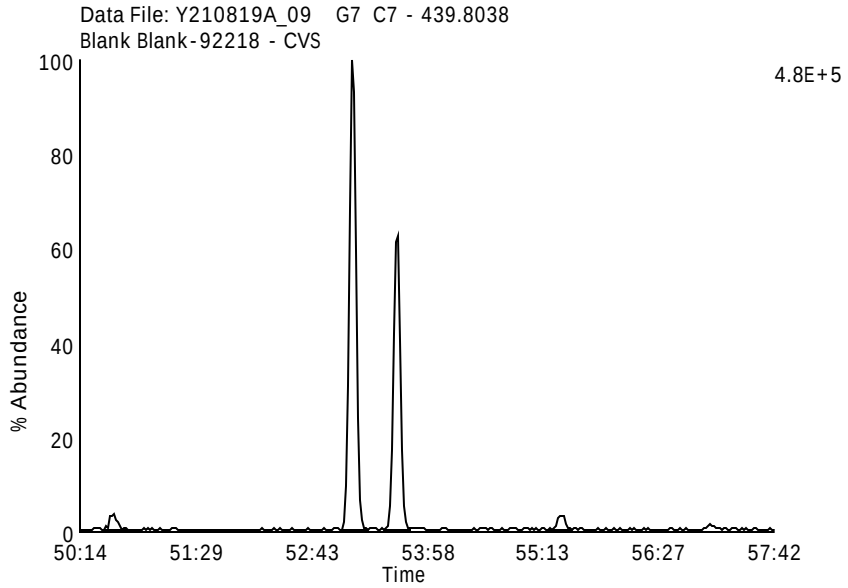


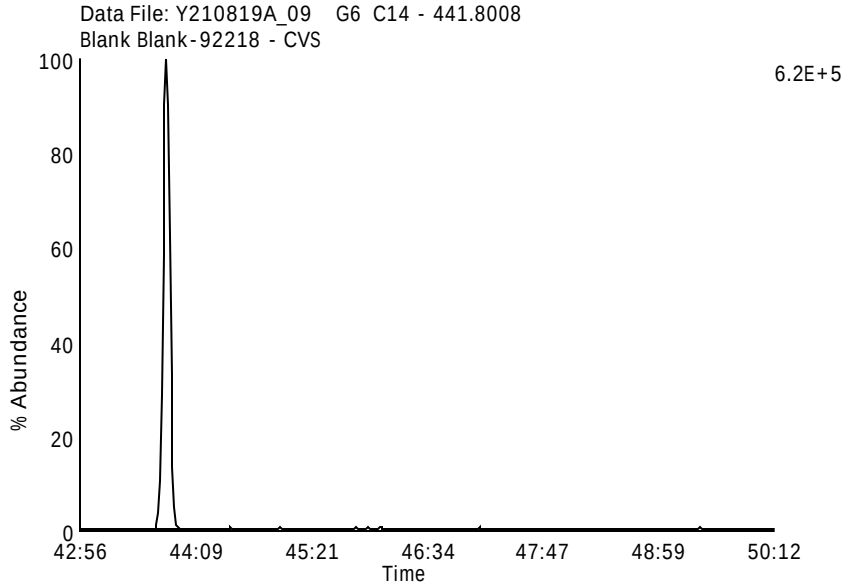


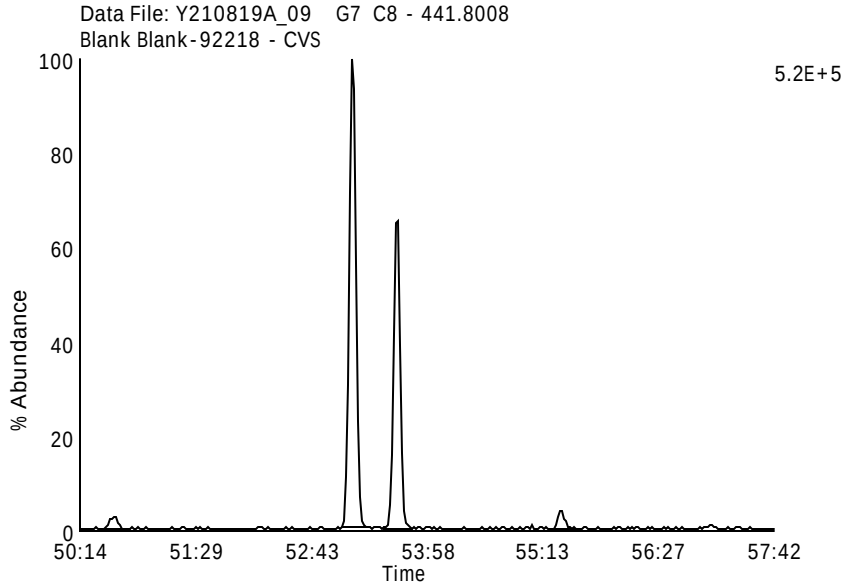
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



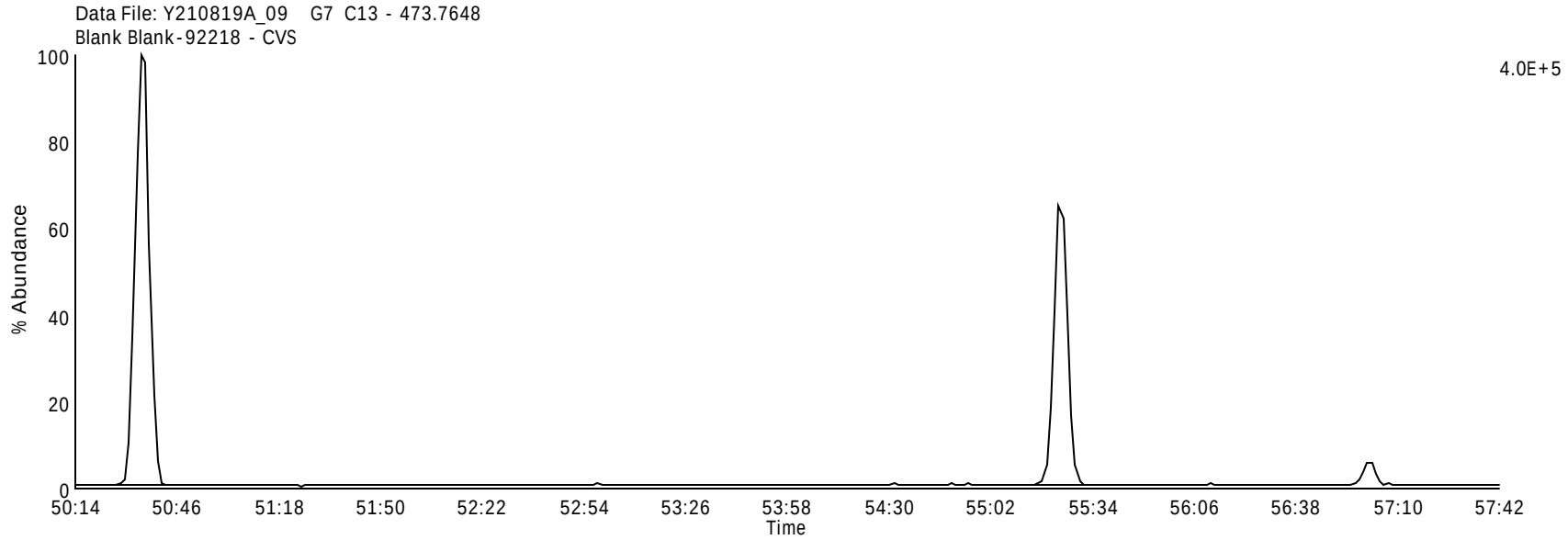


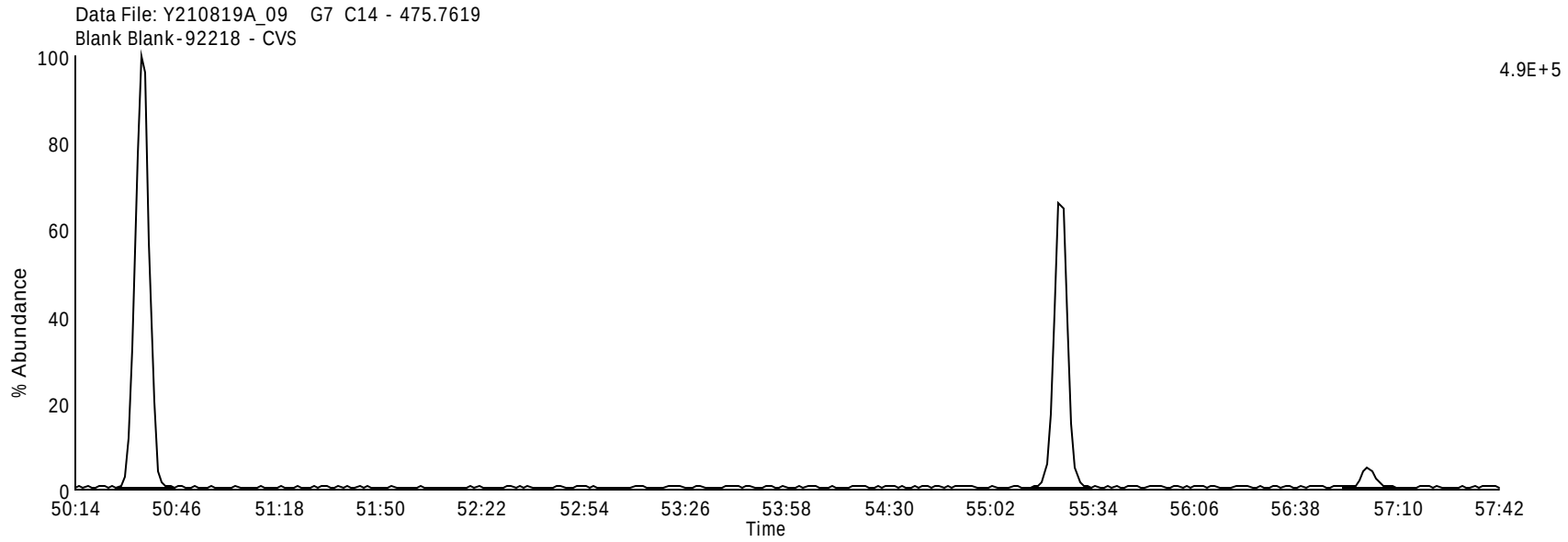




Labeled Nona Chlorinated Biphenyls

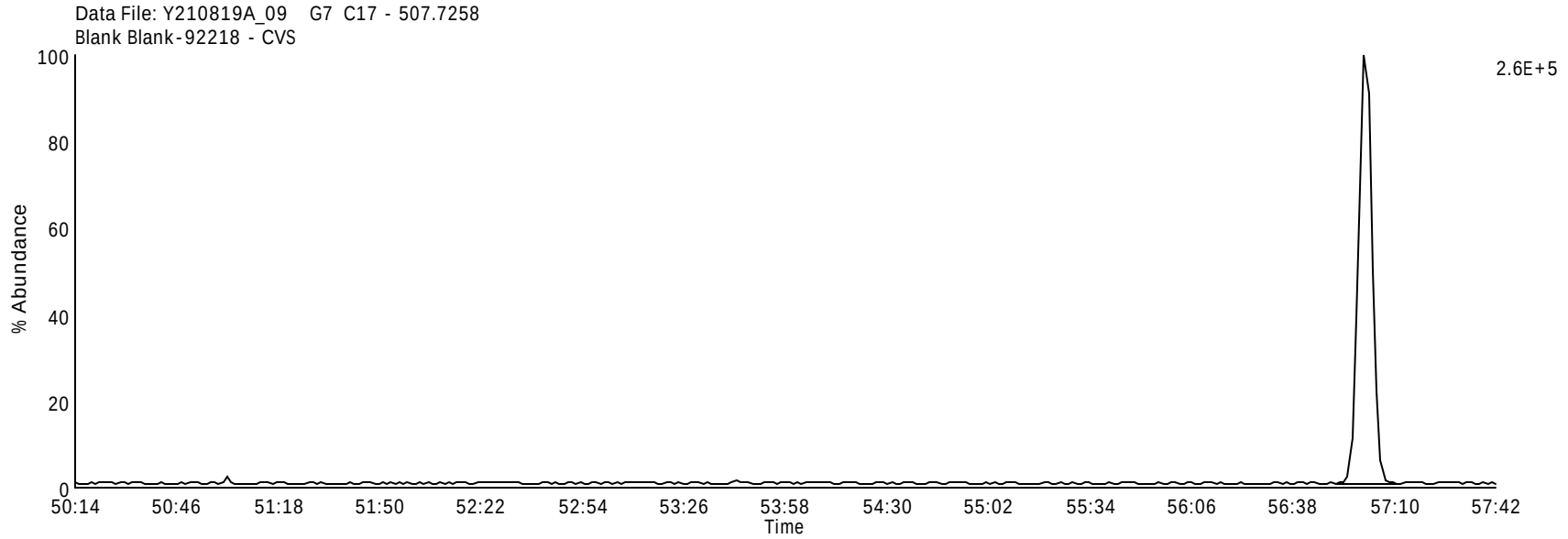
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

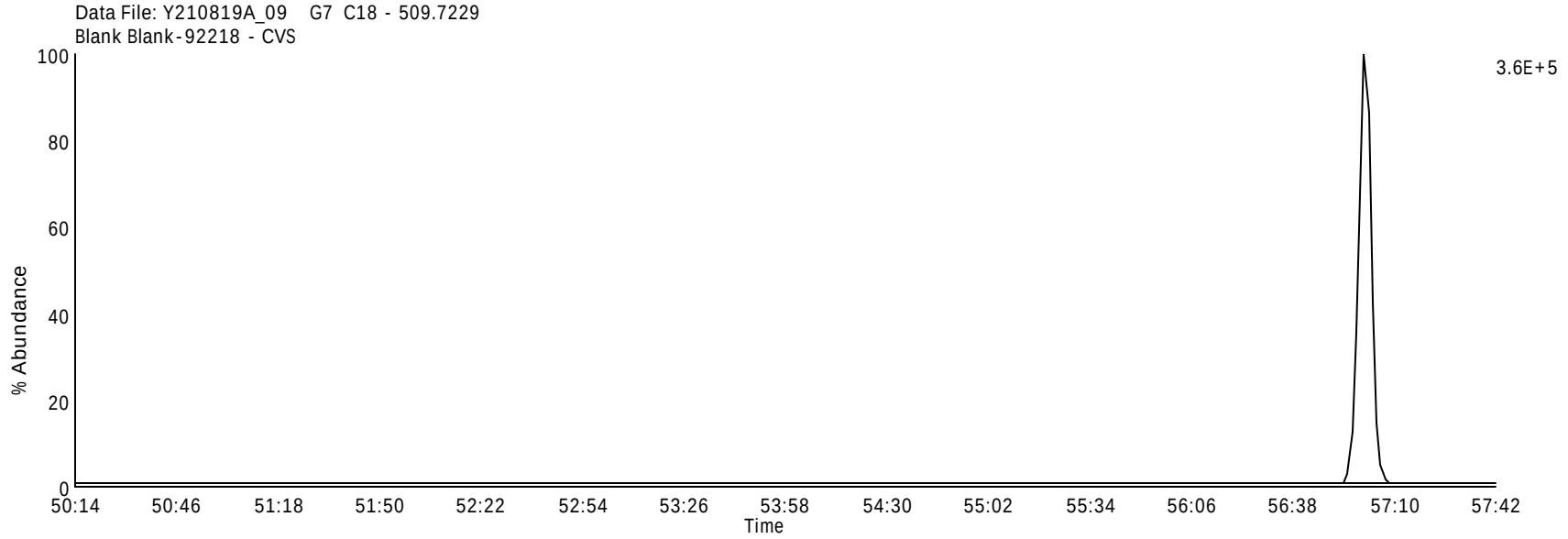




Labeled Deca Chlorinated Biphenyl

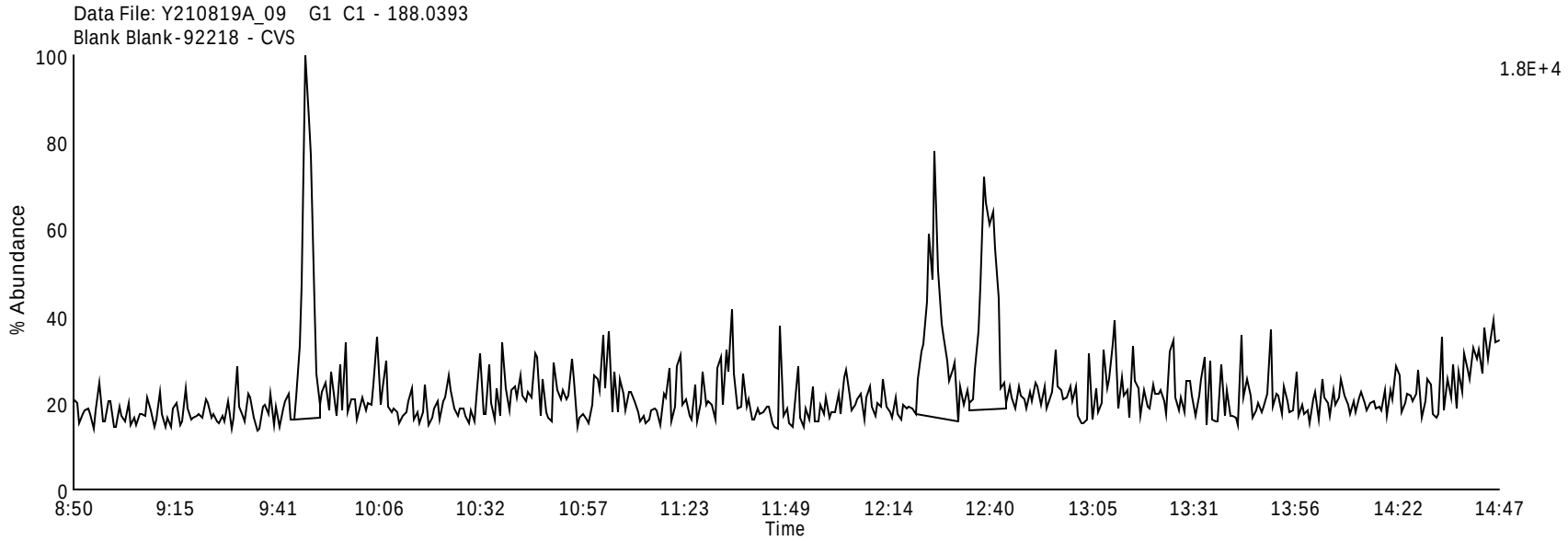
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

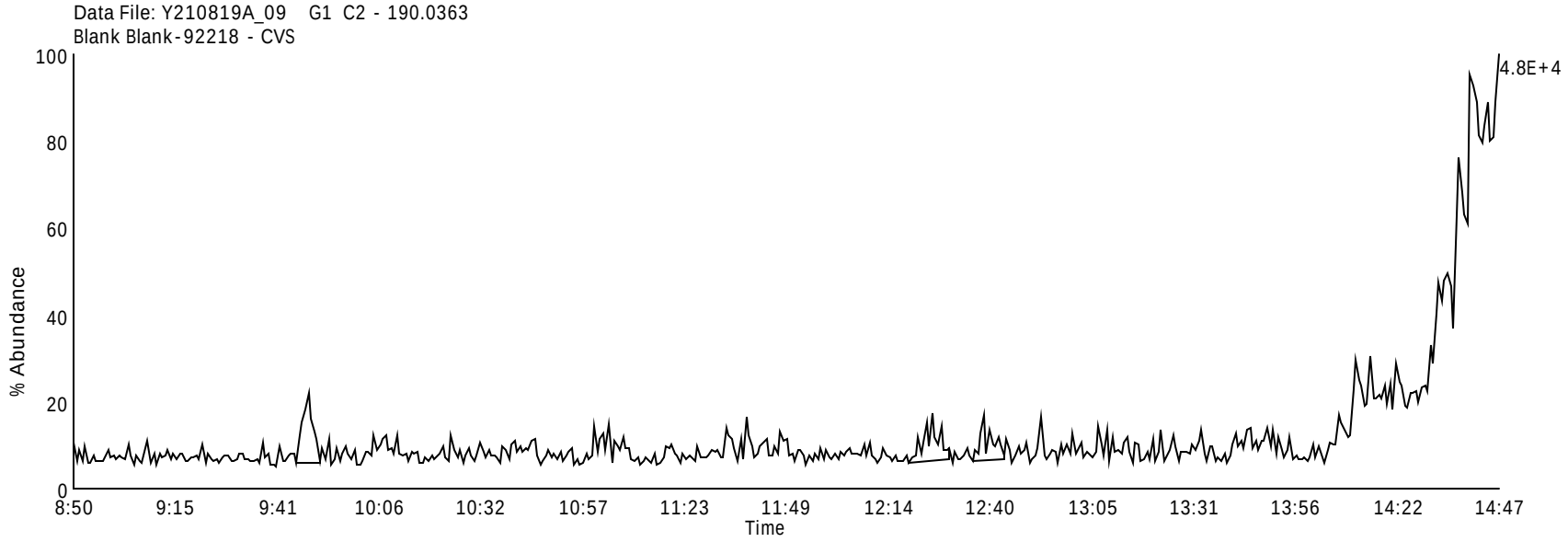




Mono Chlorinated Biphenyls

Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX



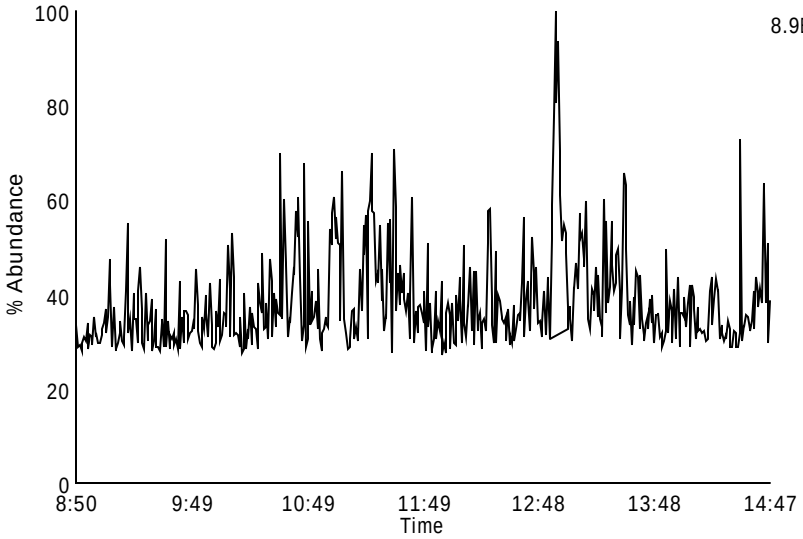


Di Chlorinated Biphenyls

Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX

Data File: Y210819A_09 G1 C7 - 222.0003
Blank Blank-92218 - CVS



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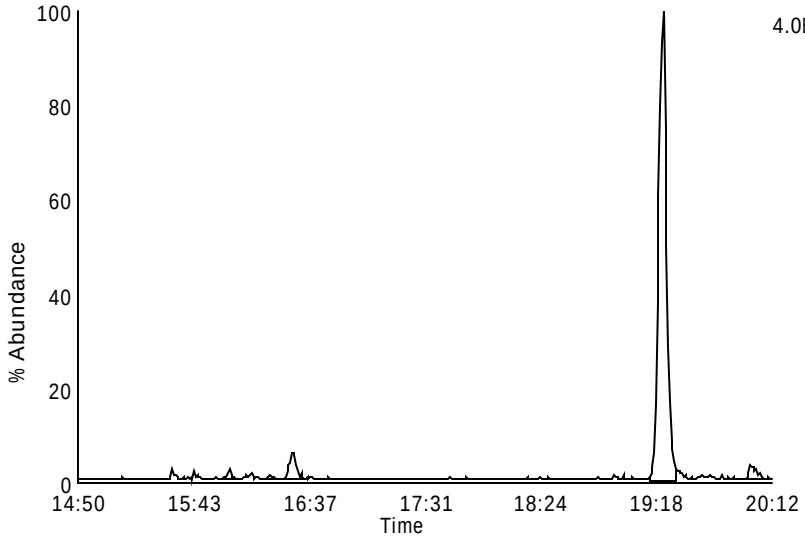
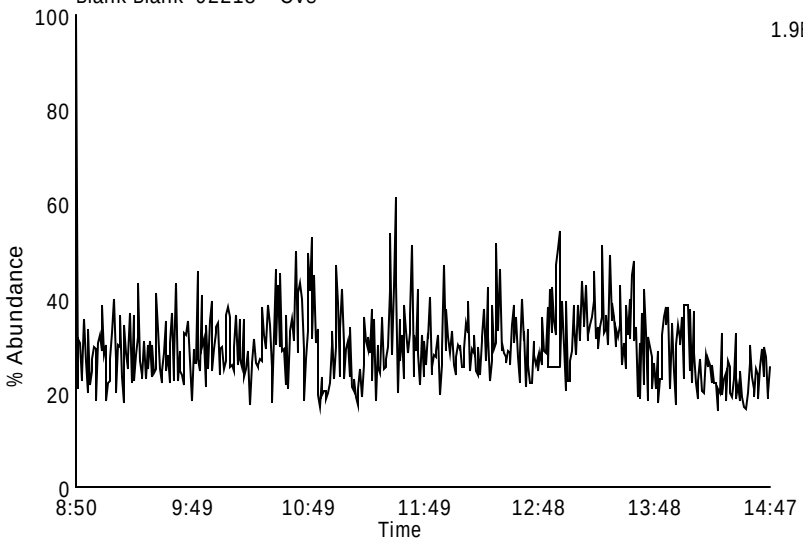
Blank Blank-92218 - CVS



Data File: Y210819A_09 G1 C8 - 223.9974
Blank Blank-92218 - CVS



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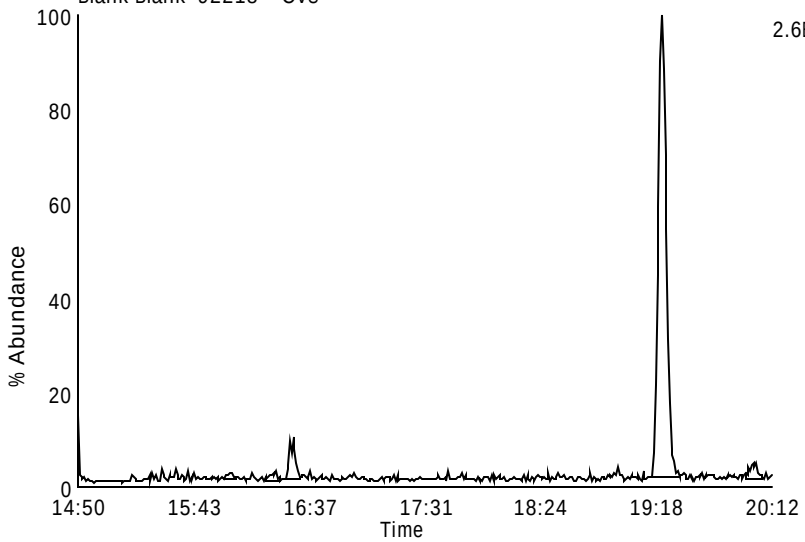
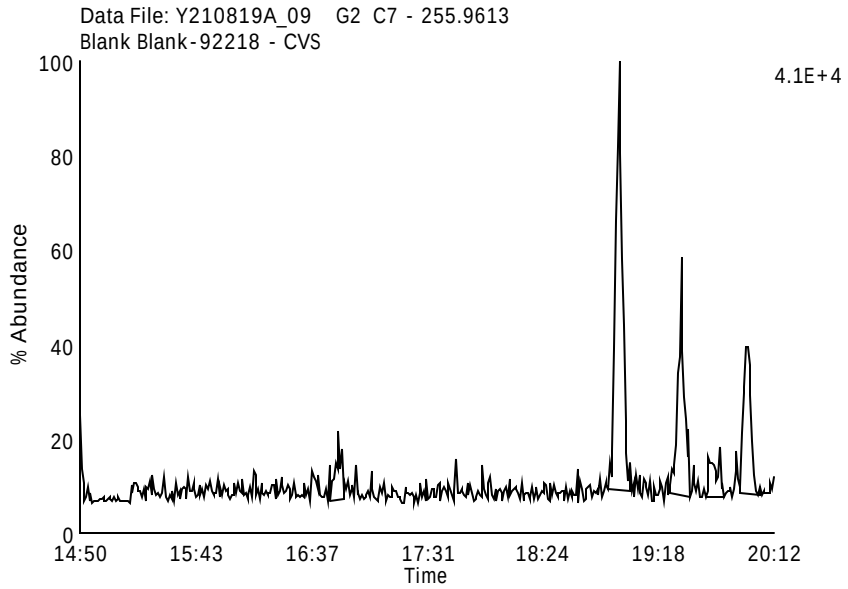
Blank Blank-92218 - CVS

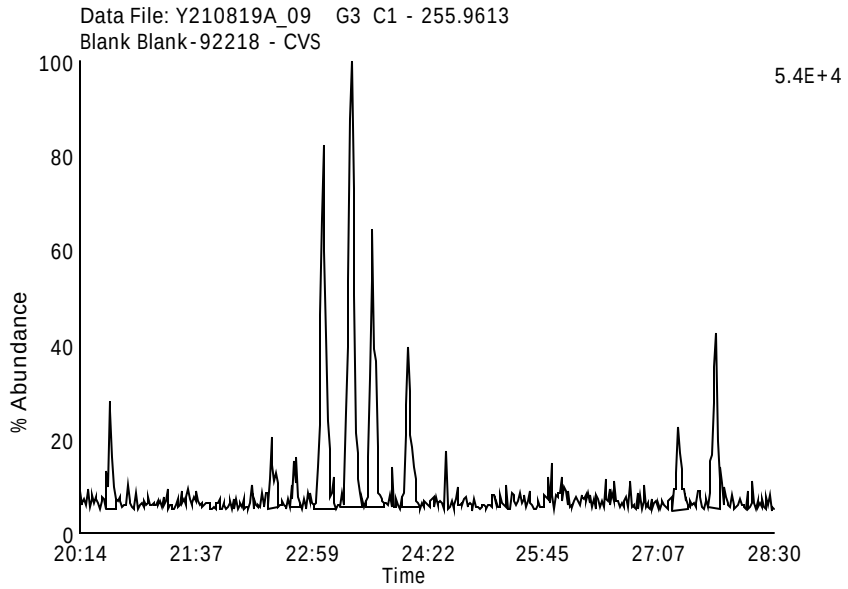


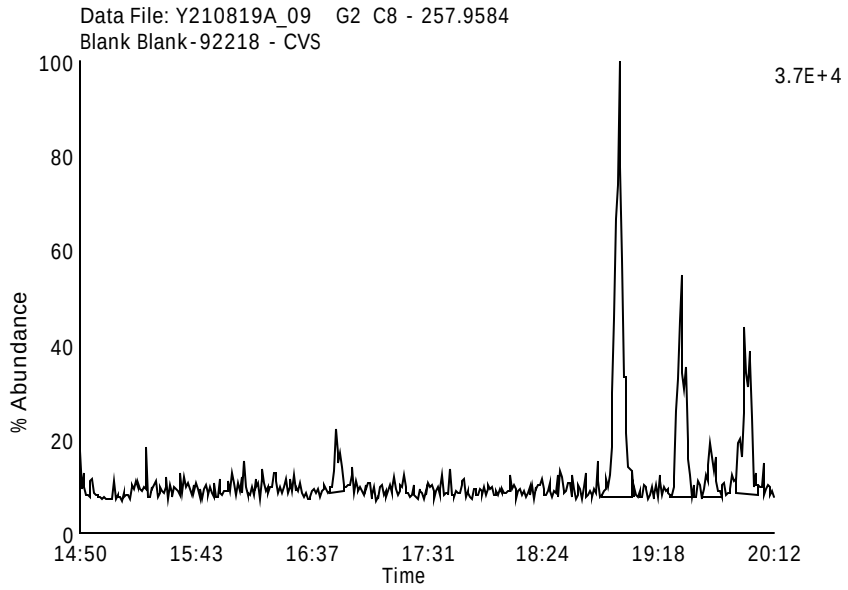
Tri Chlorinated Biphenyls

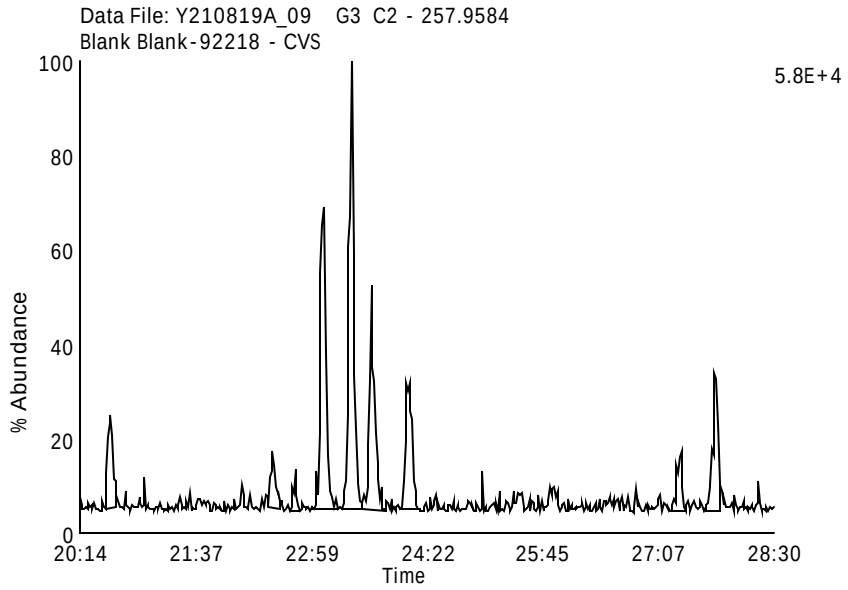
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX



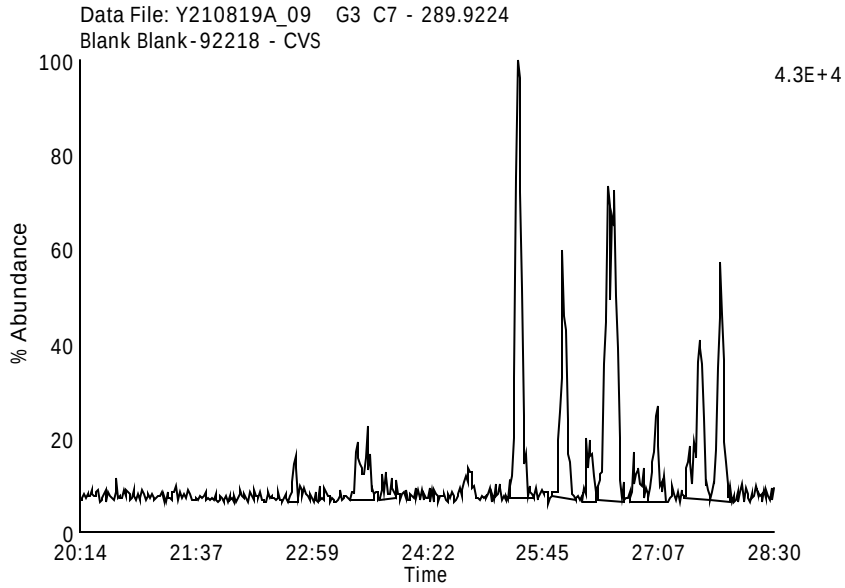


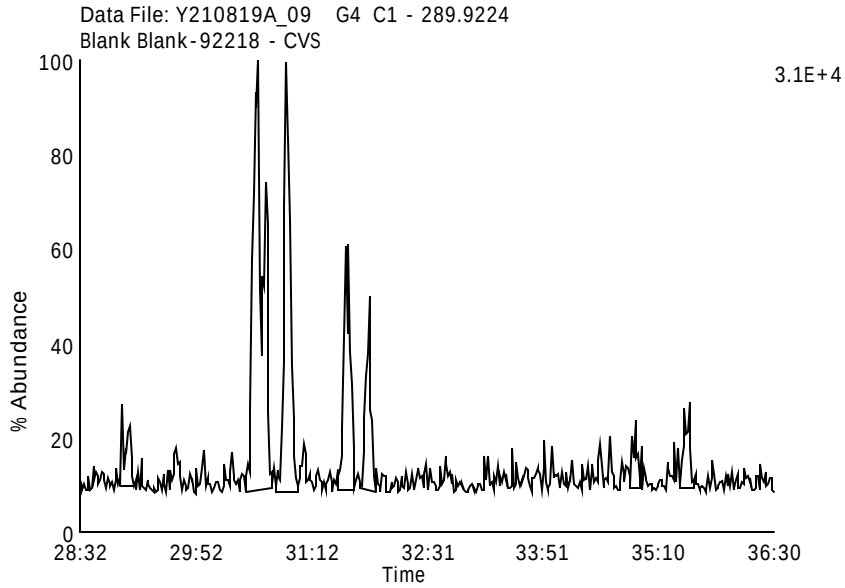


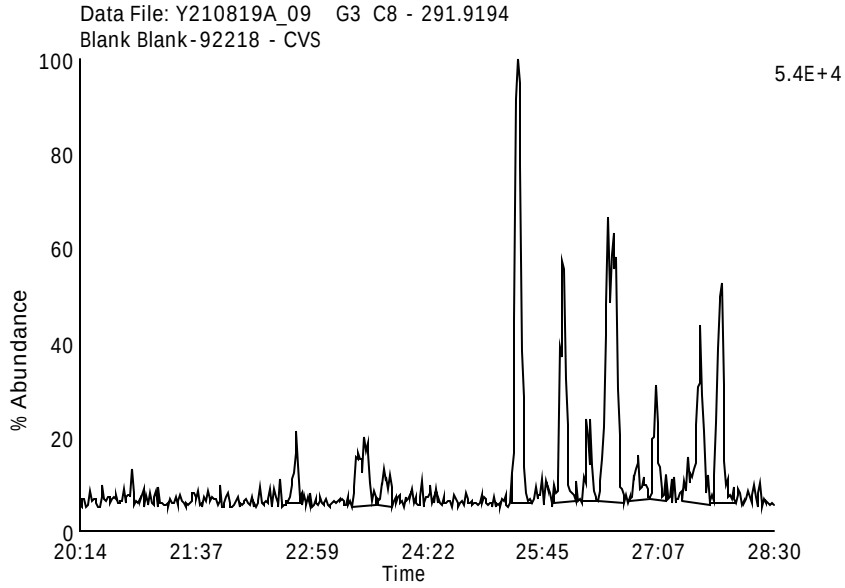


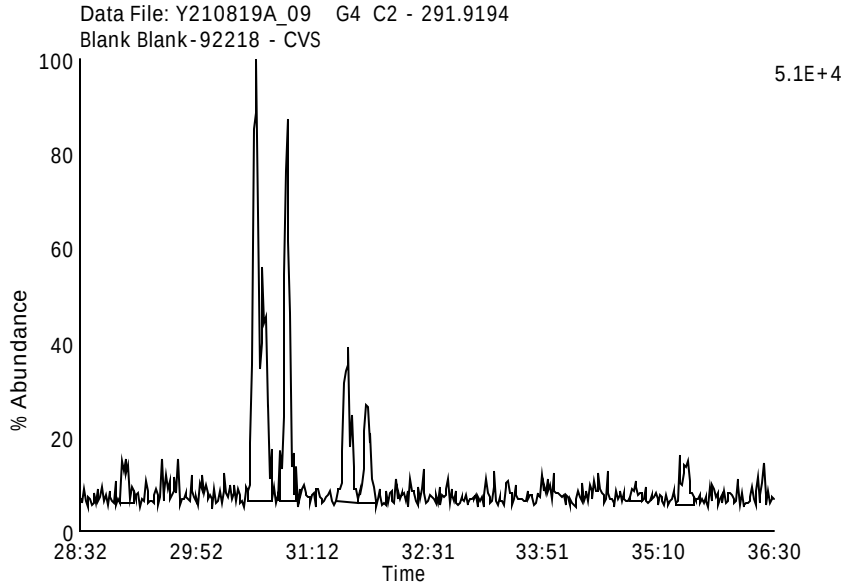
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



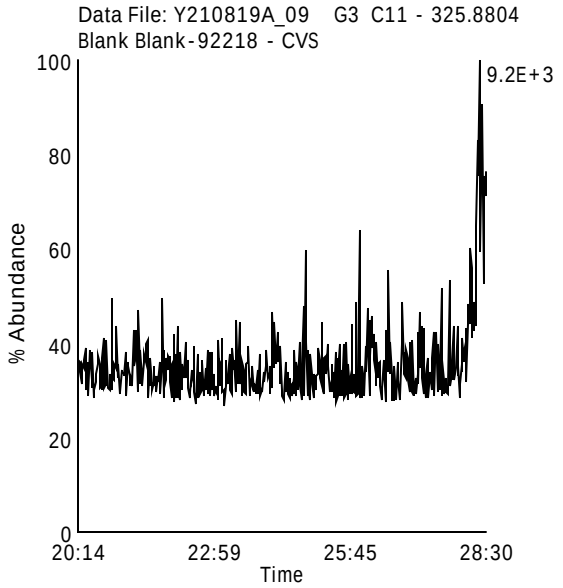


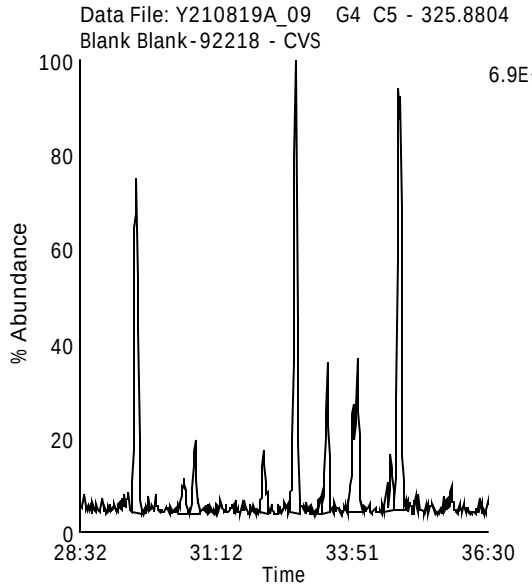


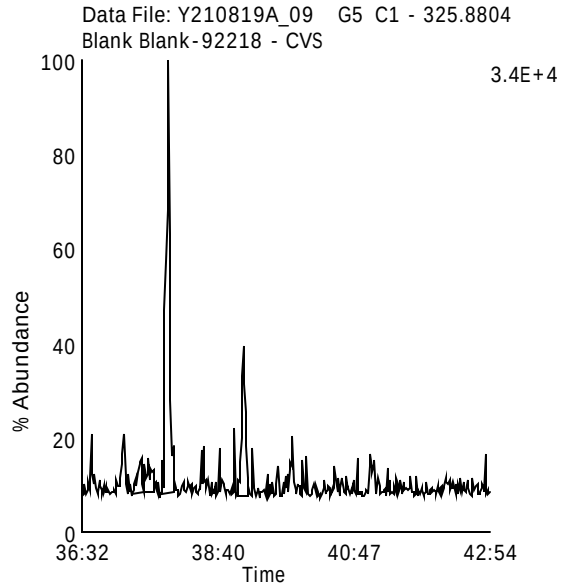


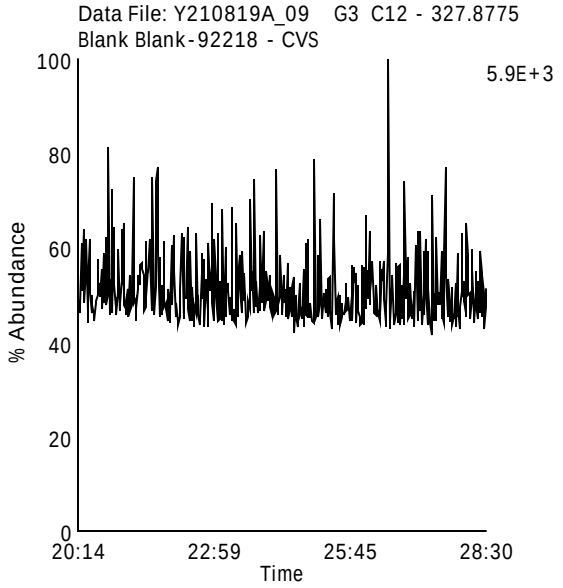
Penta Chlorinated Biphenyls

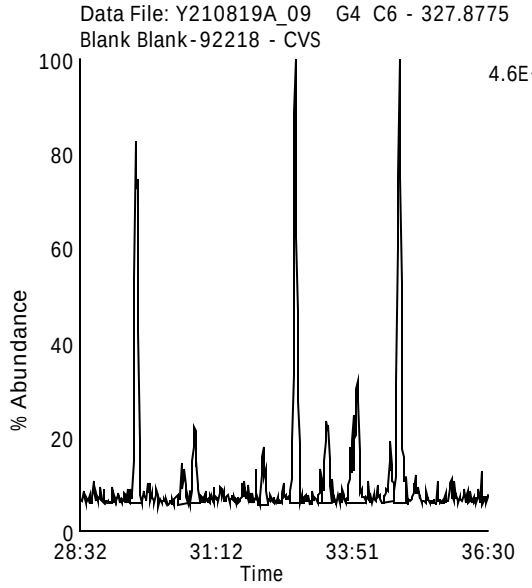
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

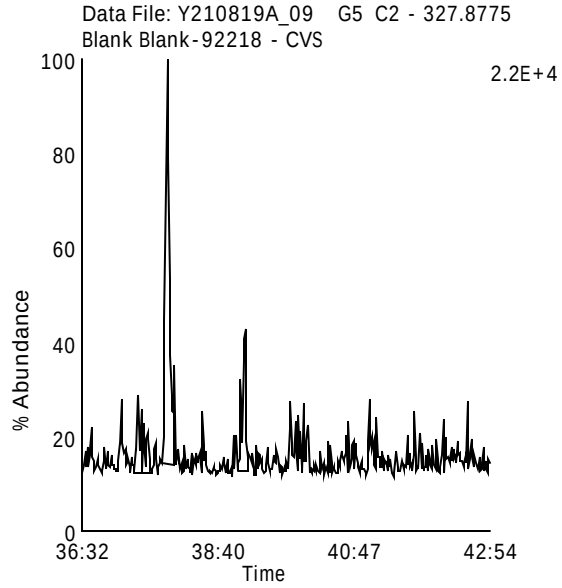






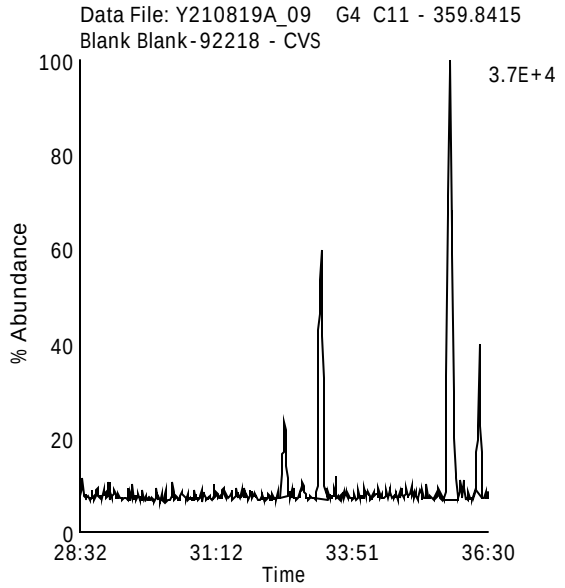


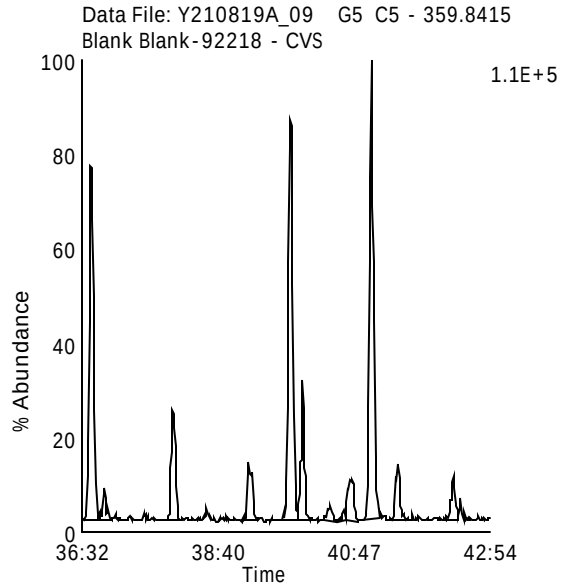


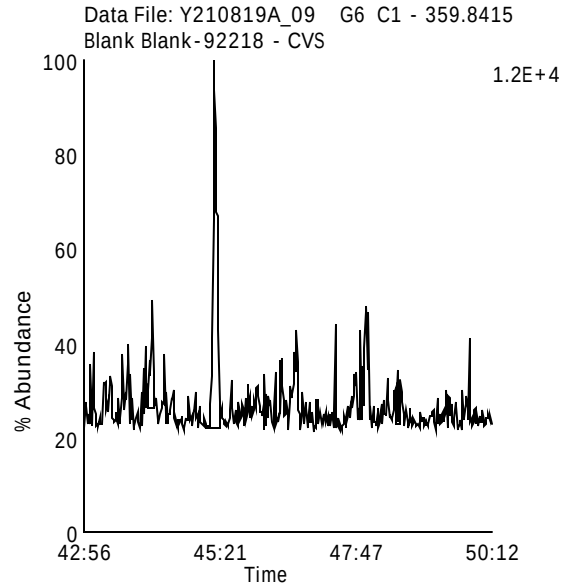


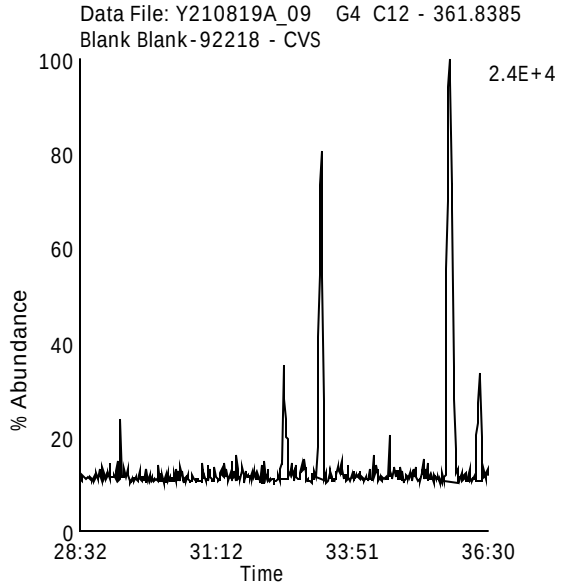
Hexa Chlorinated Biphenyls

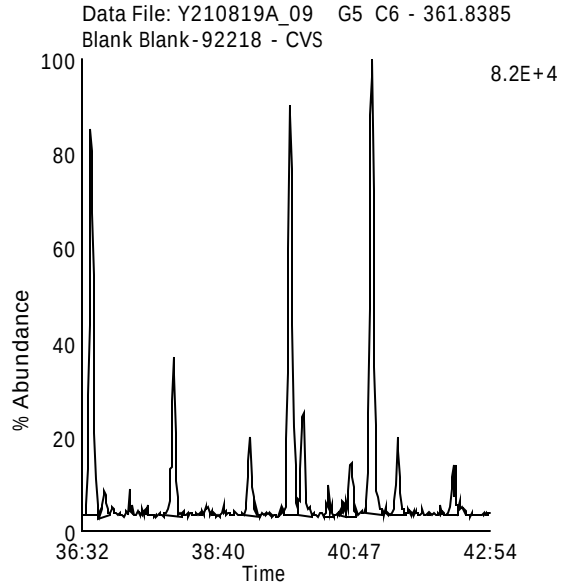
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

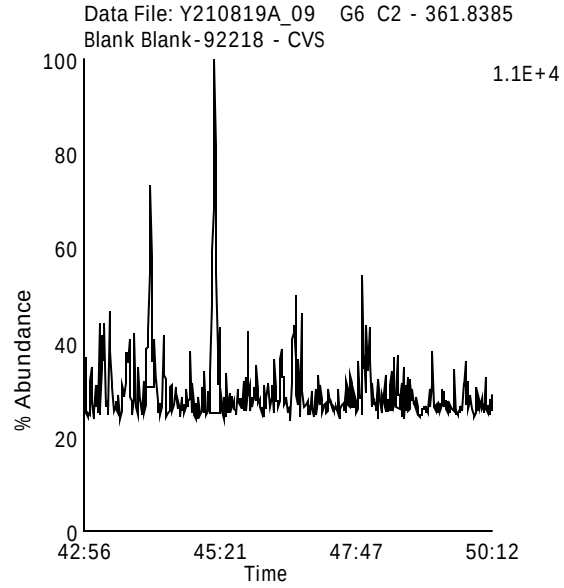






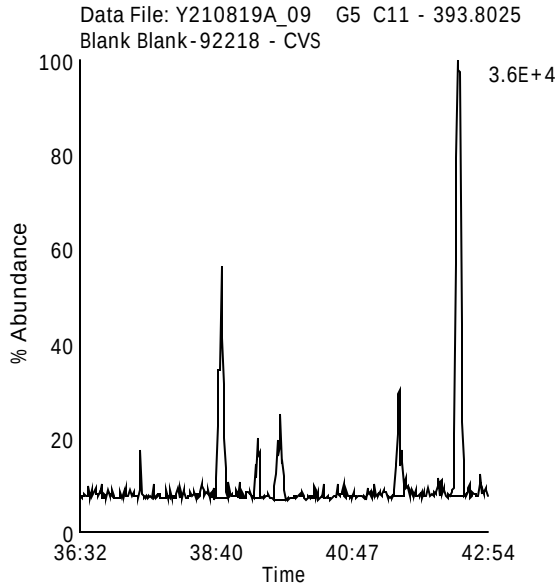


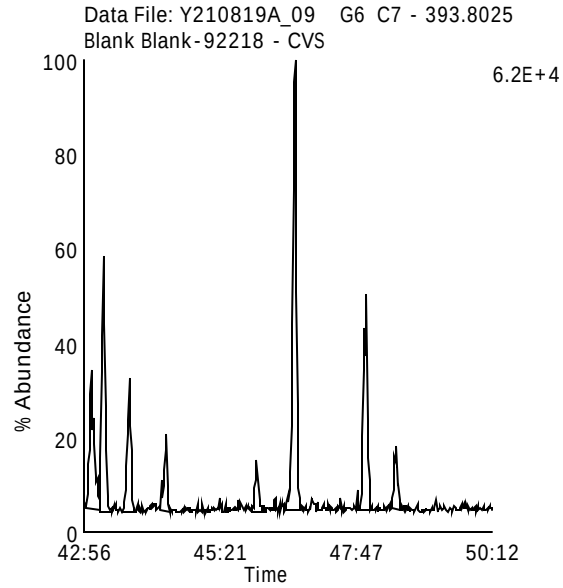


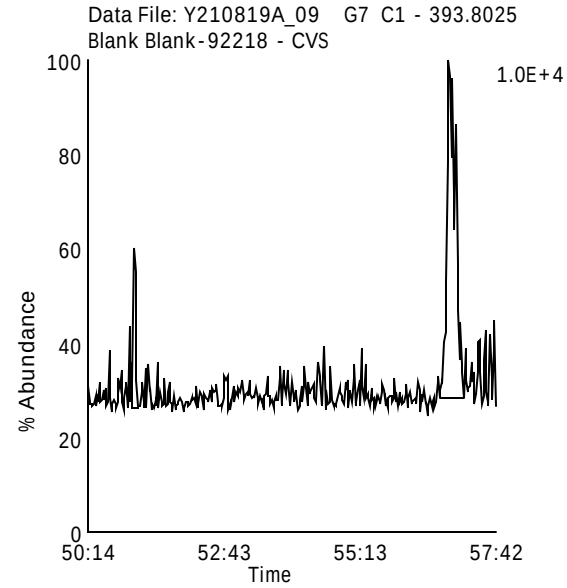


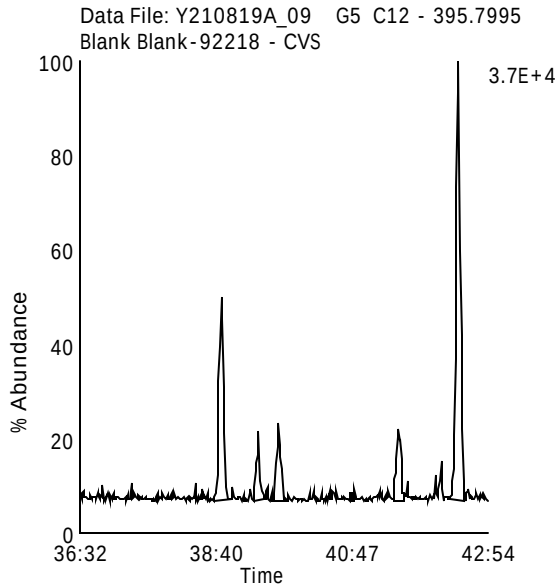
Hepta Chlorinated Biphenyls

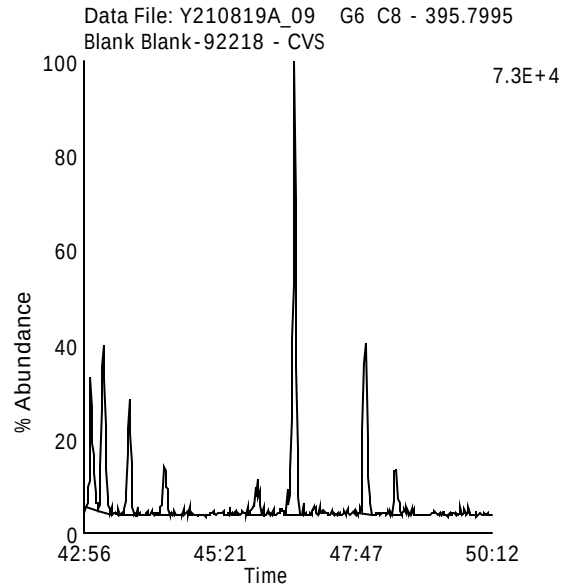
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

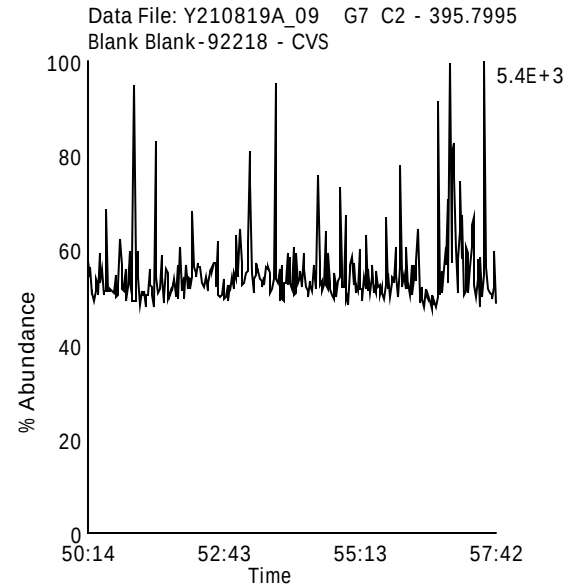










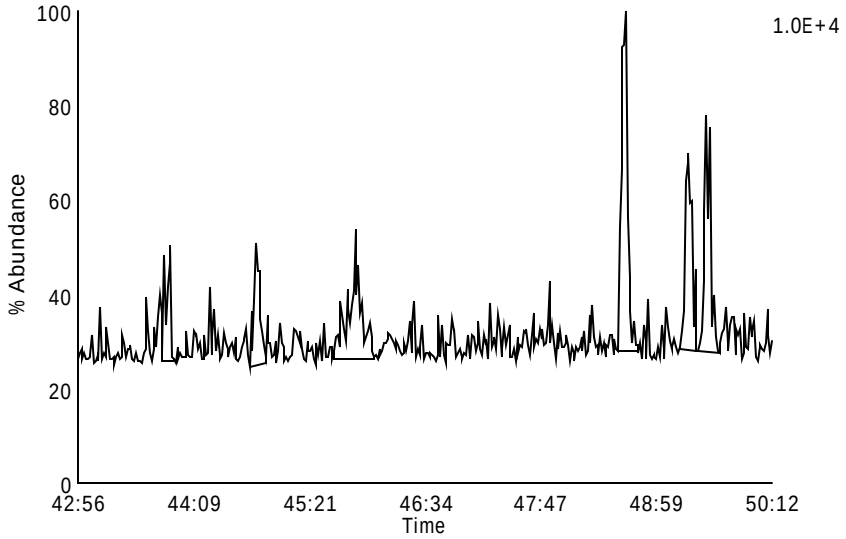


Octa Chlorinated Biphenyls

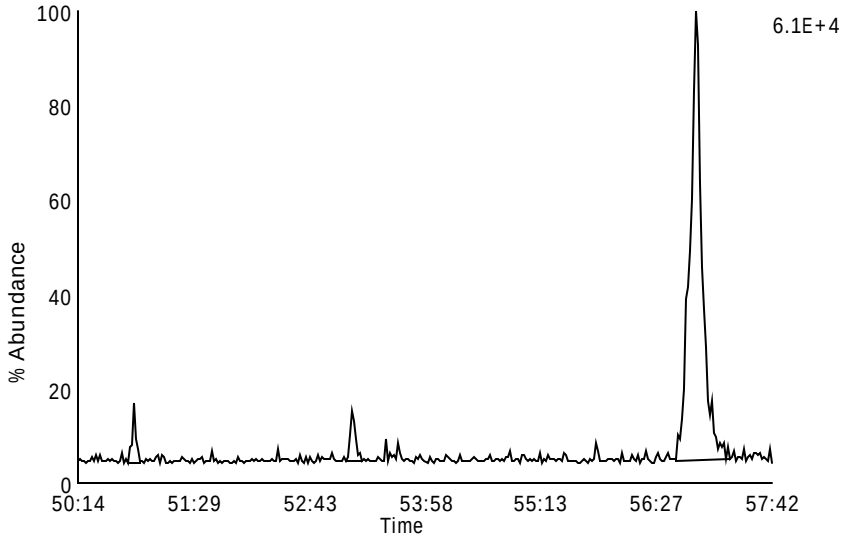
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX

Data File: Y210819A_09 G6 C11 - 427.7635
Blank Blank-92218 - CVS



Data File: Y210819A_09 G7 C5 - 427.7635
Blank Blank-92218 - CVS



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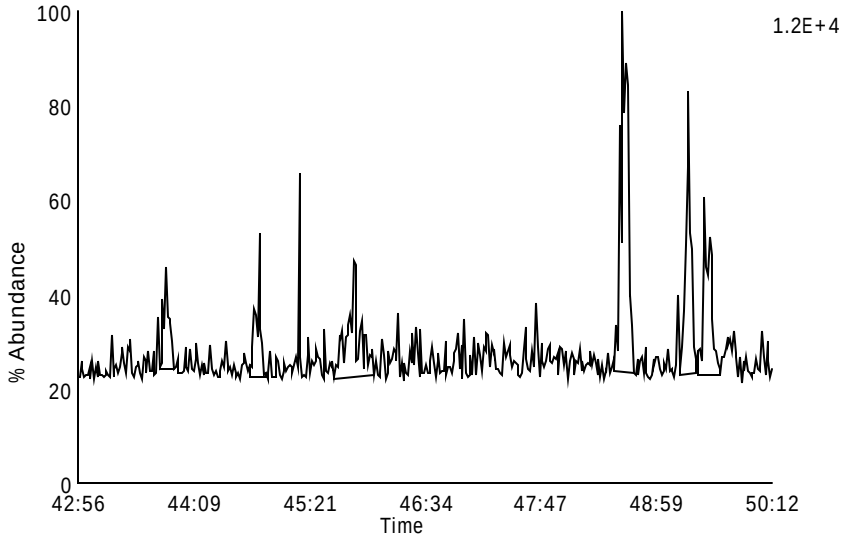
Blank Blank-92218 - CVS



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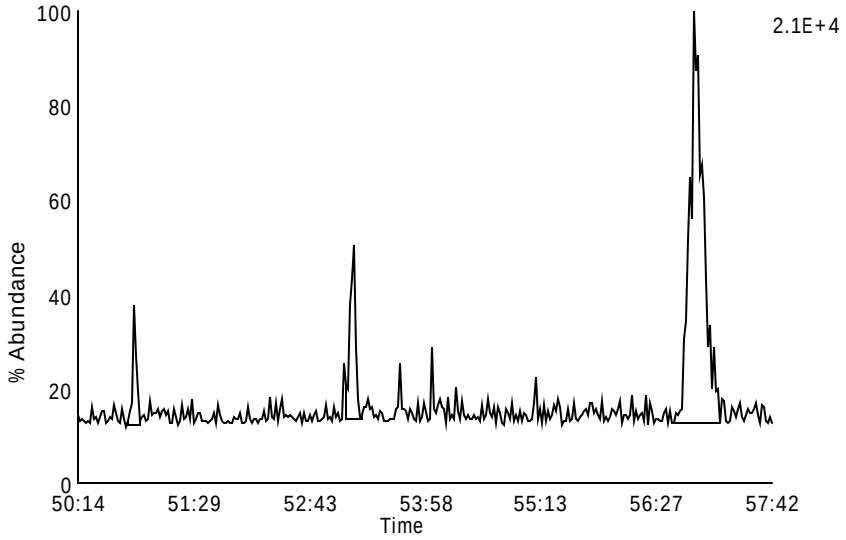
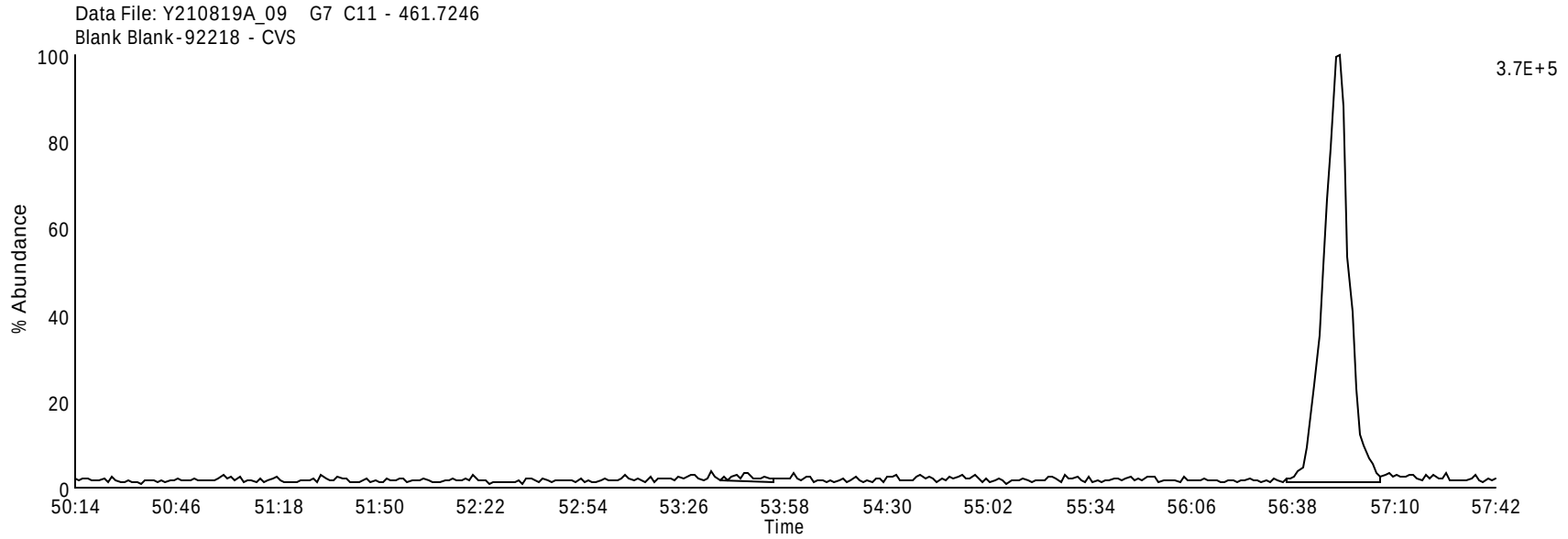
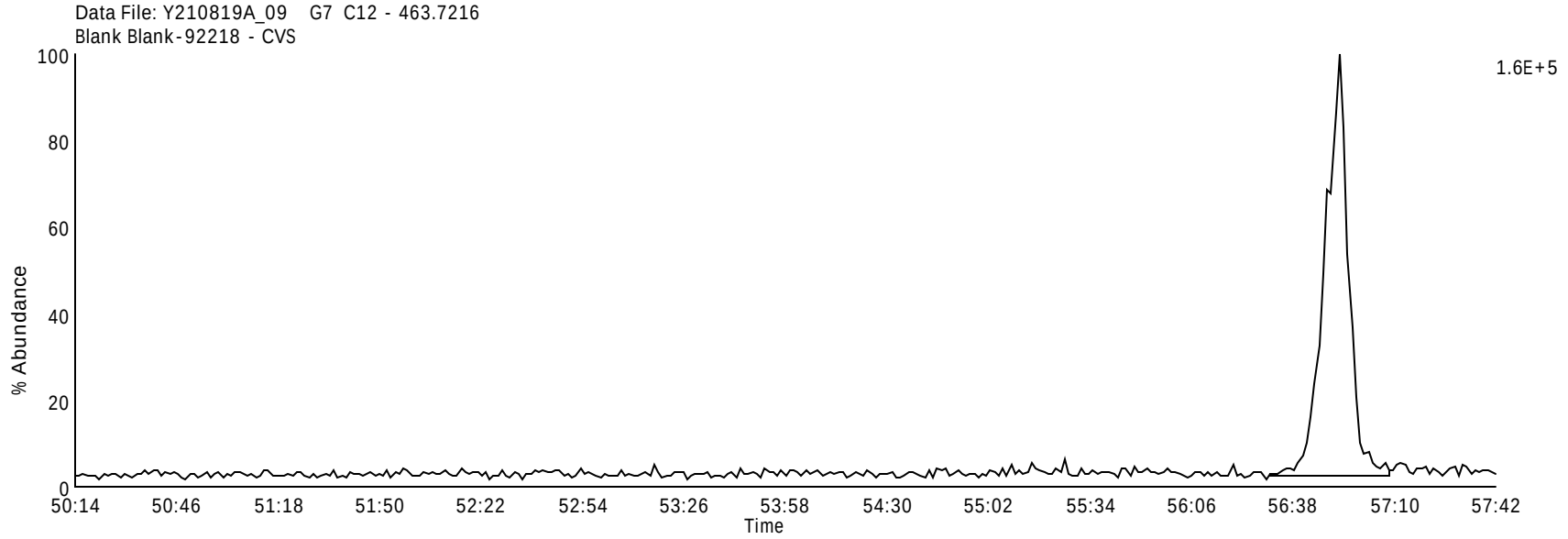


Nona Chlorinated Biphenyls

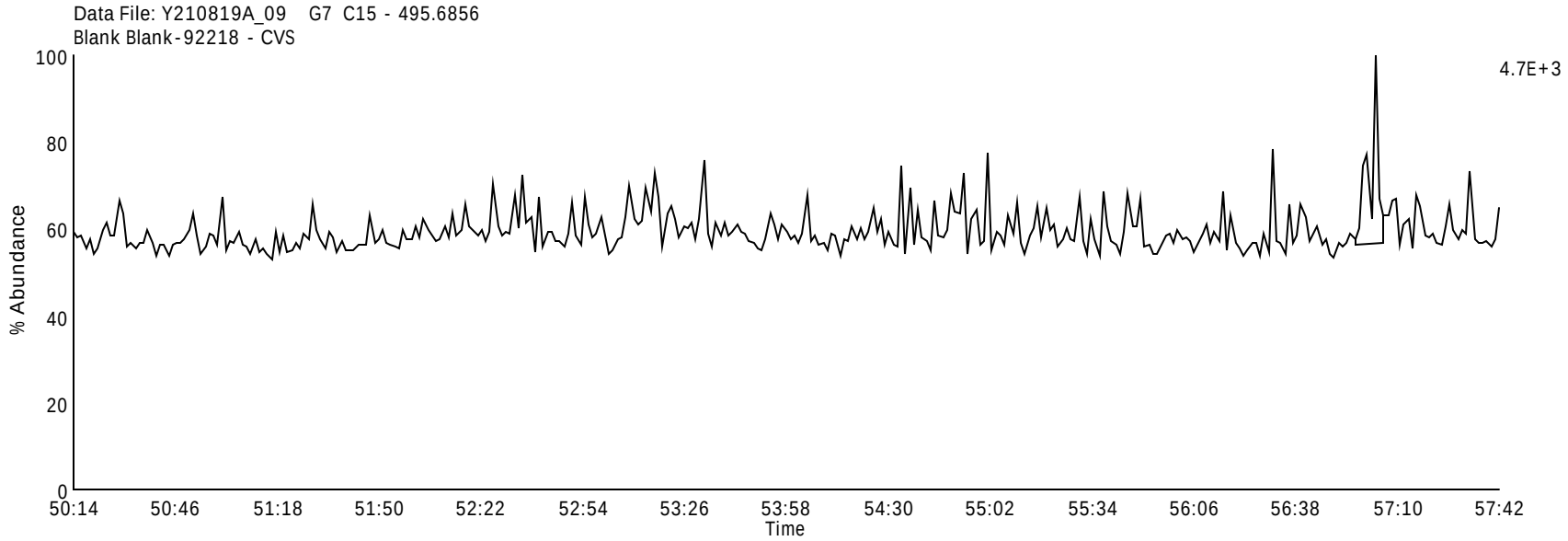
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

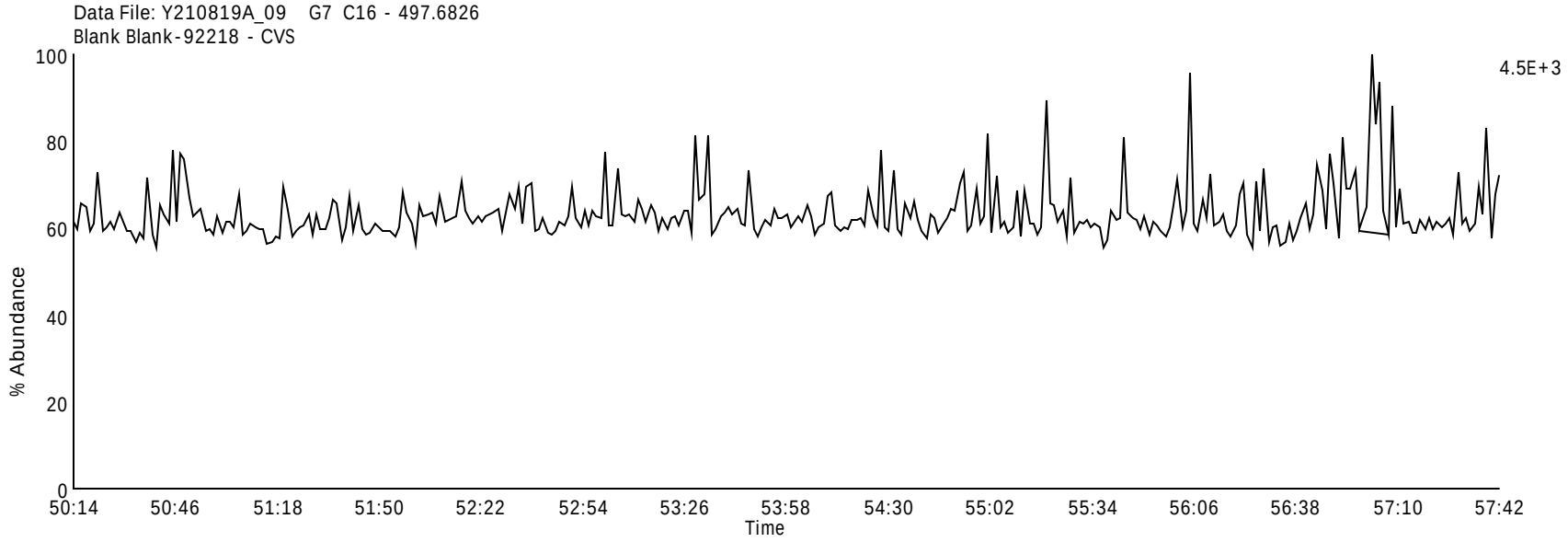




Deca Chlorinated Biphenyl

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

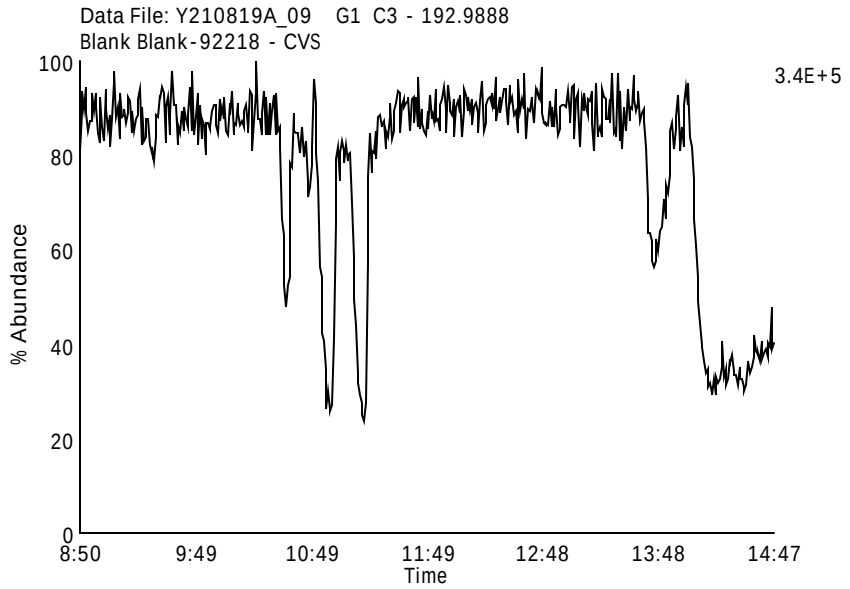


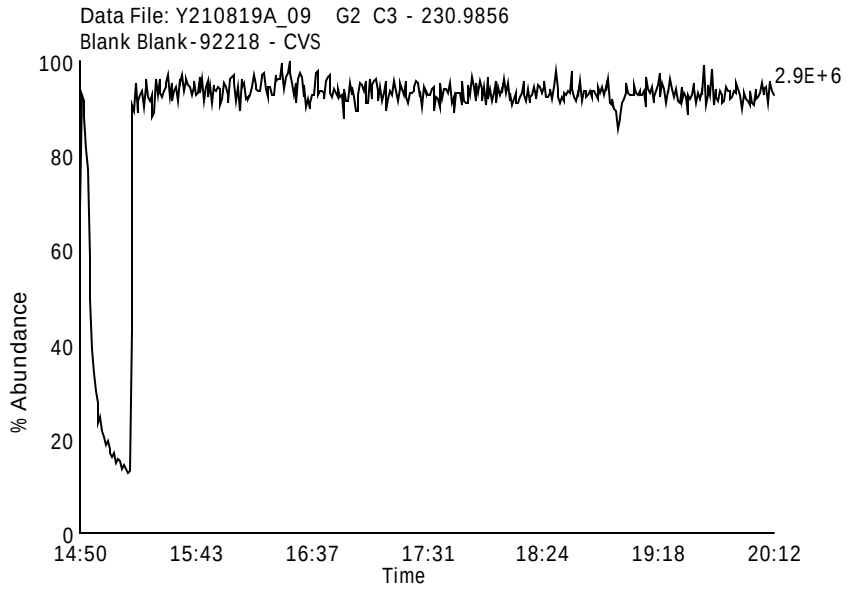


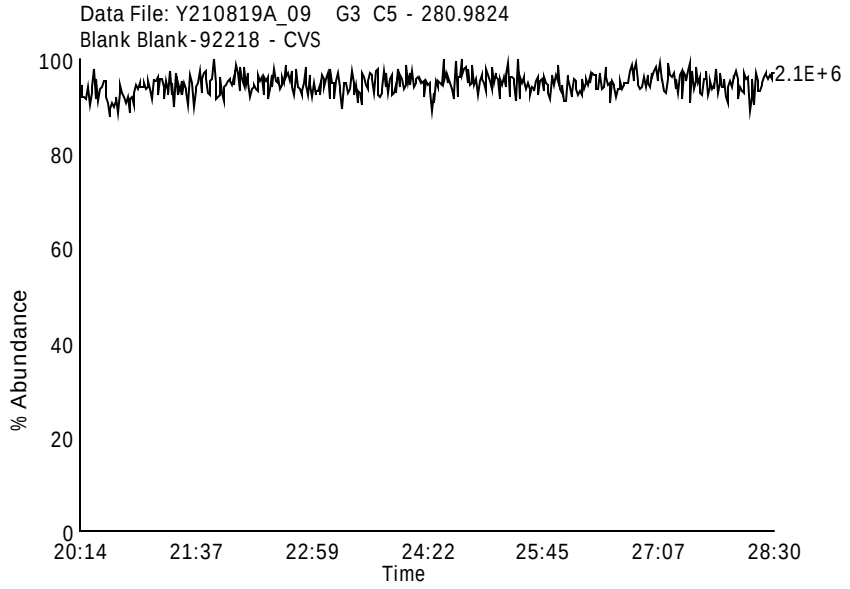
Group 1 - 4 Lock mass

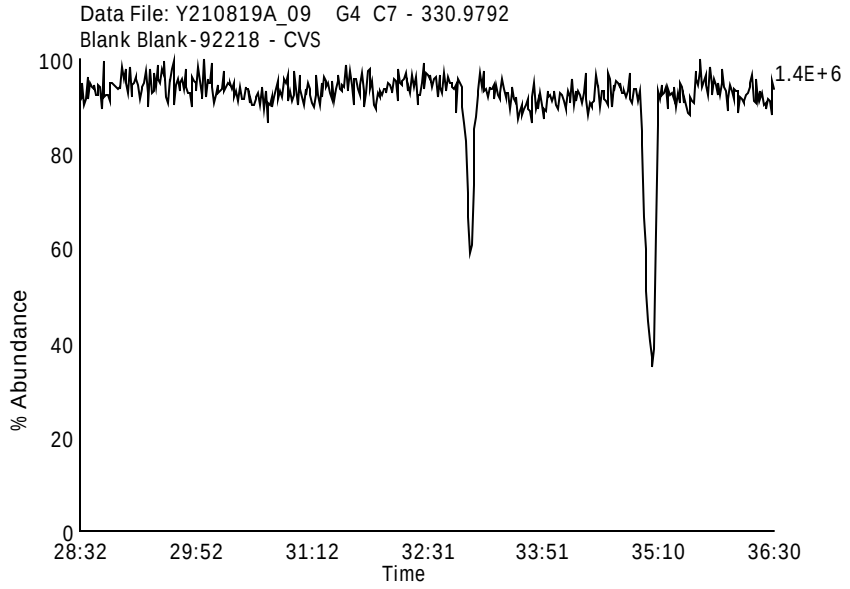
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX





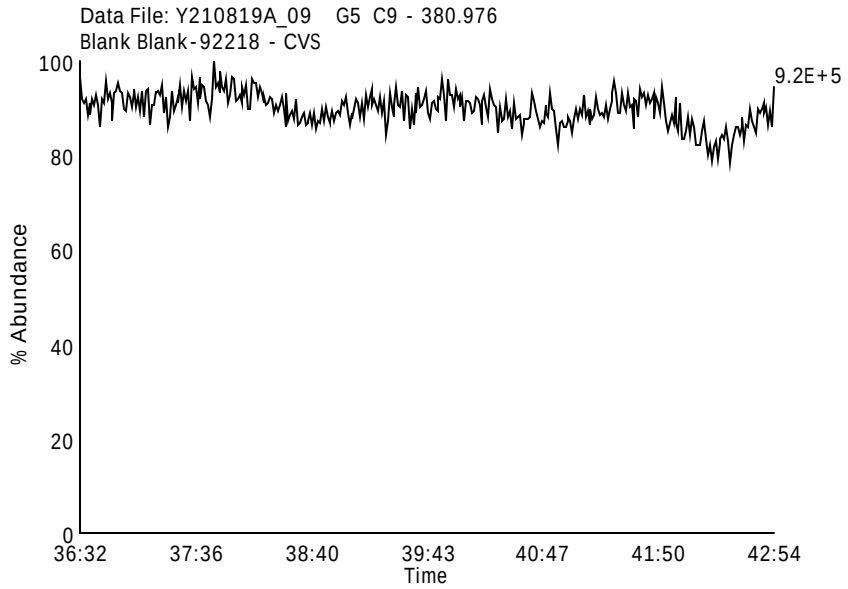


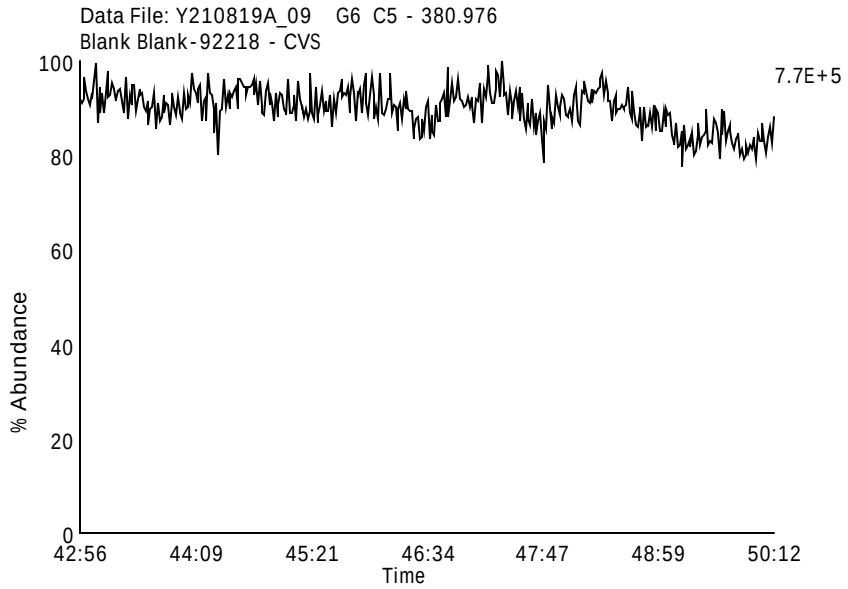


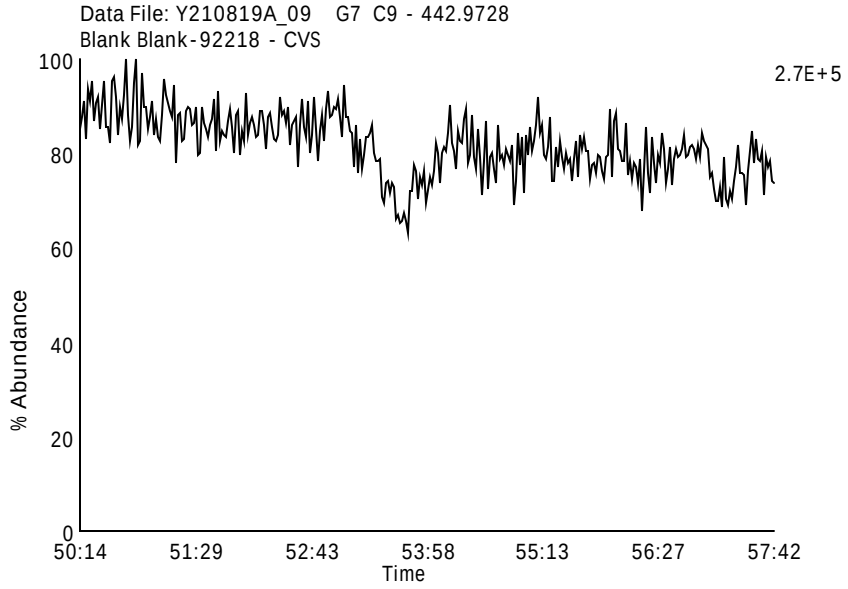
Group 5 - 7 Lock mass

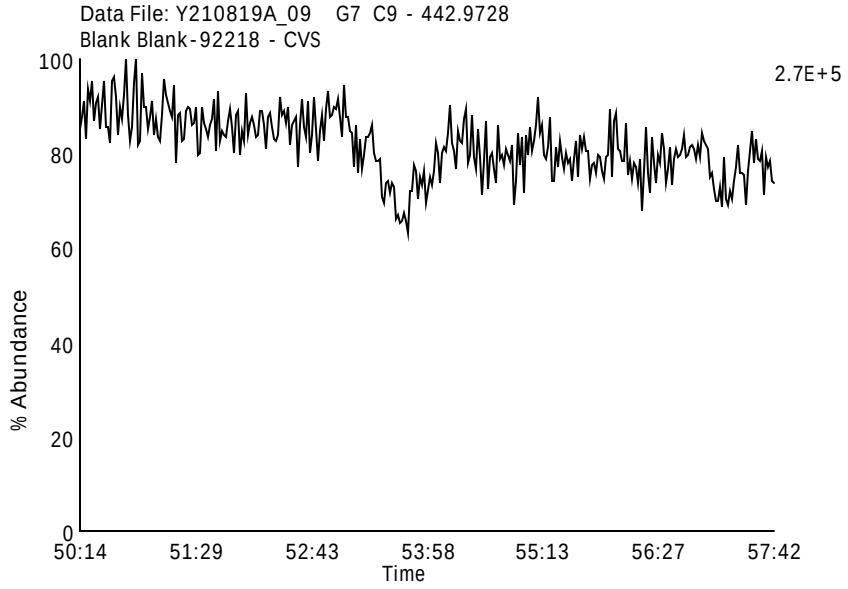
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX



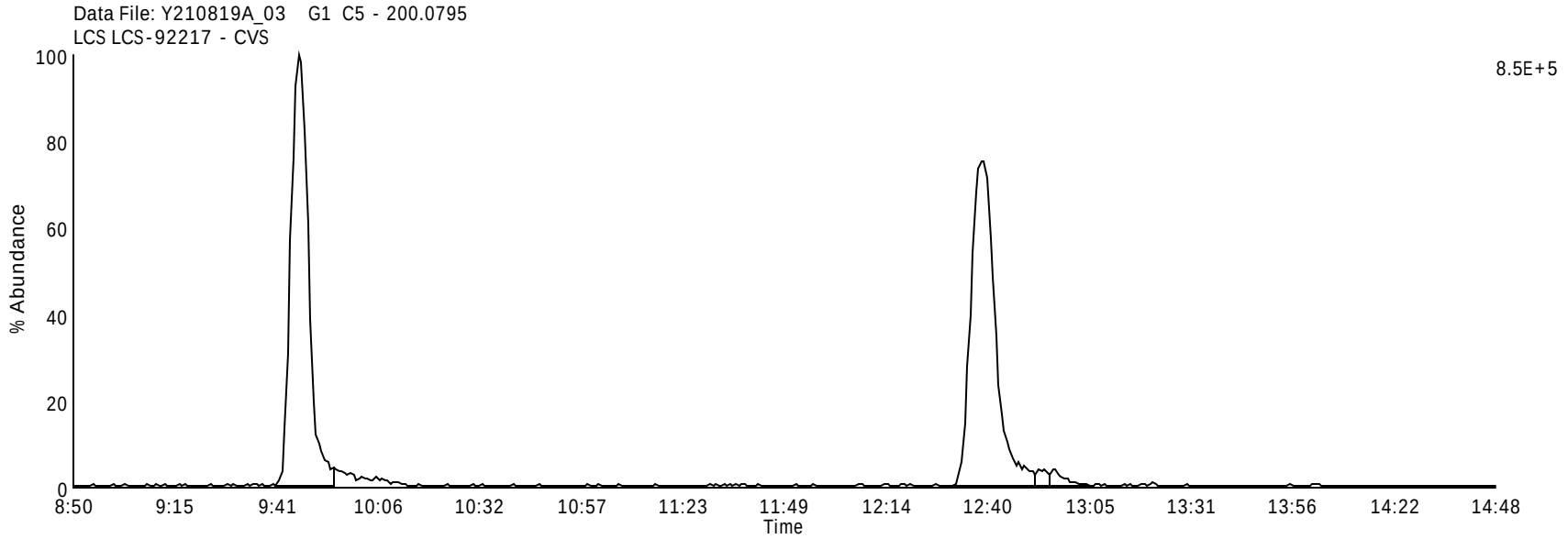


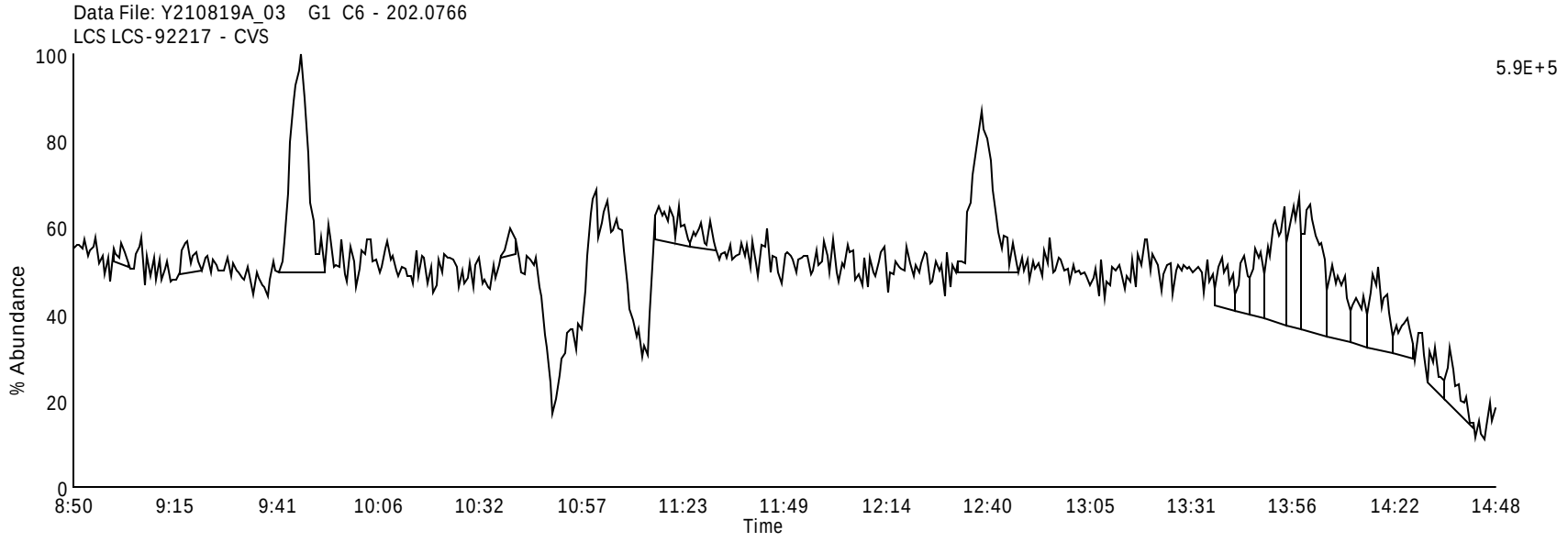




Labeled Mono Chlorinated Biphenyls

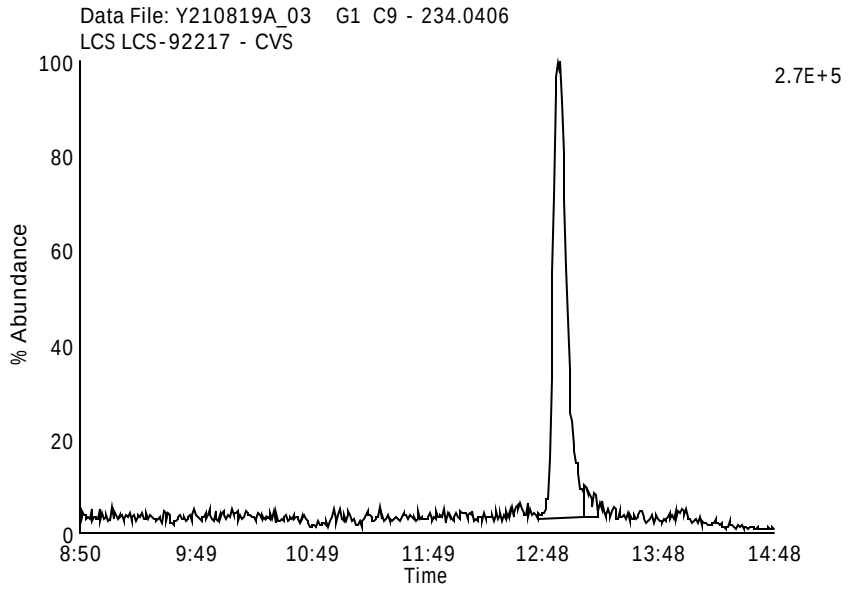
Data File Name: Y210819A_03 | Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS | Client Sample ID: CLCSCV

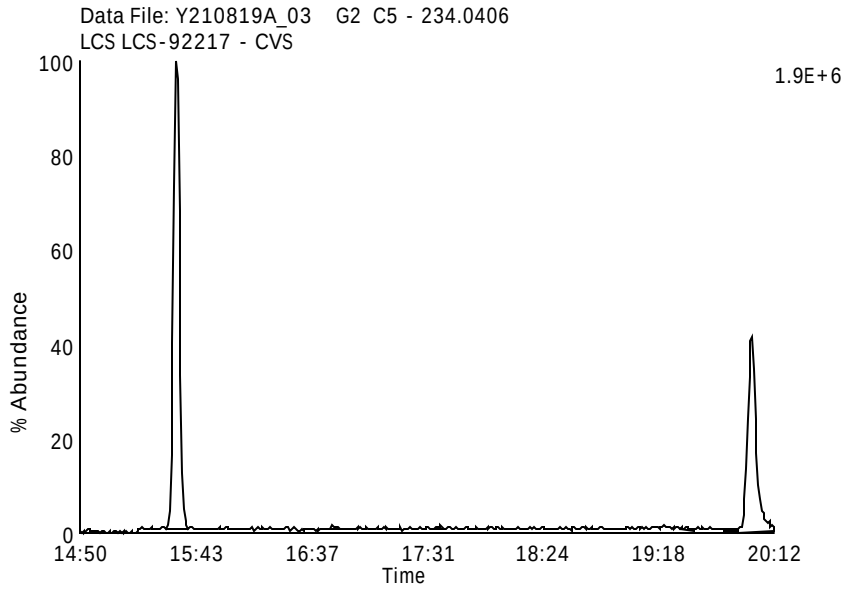


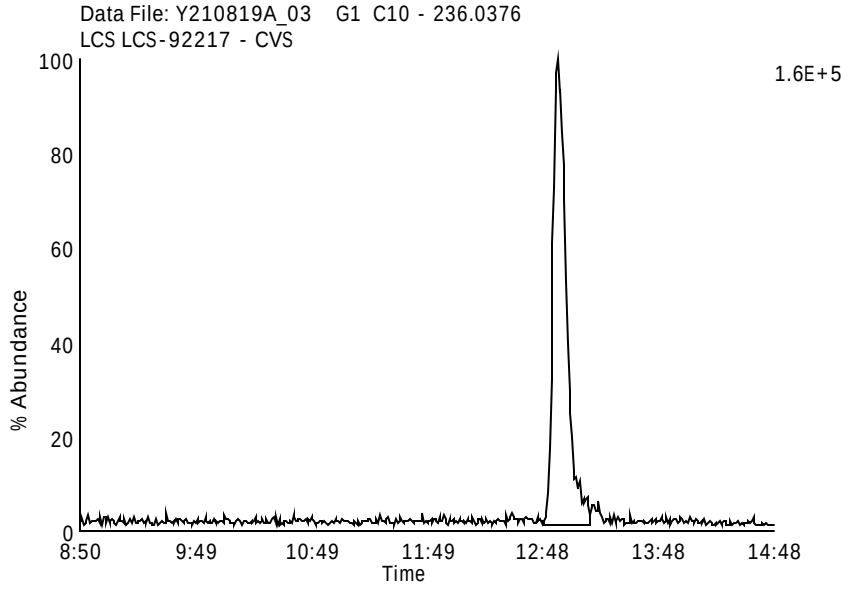


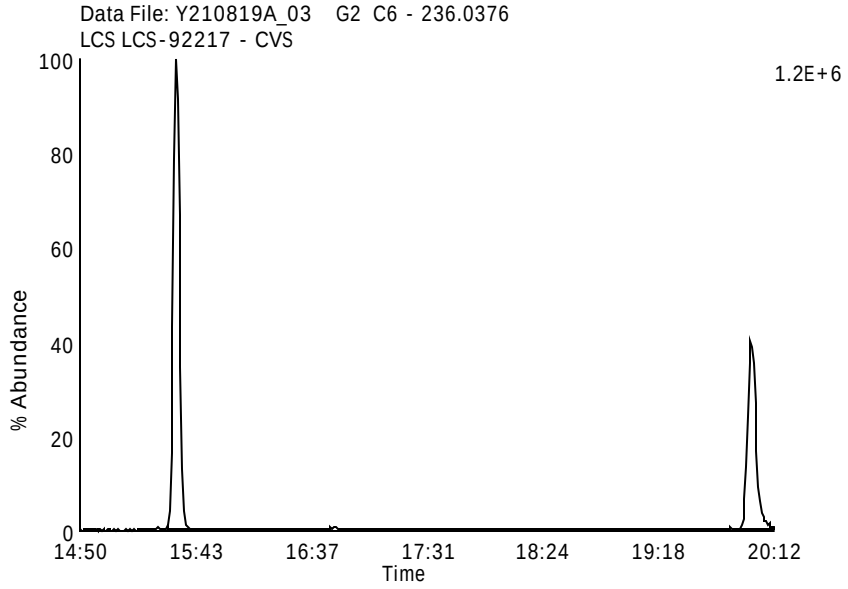
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



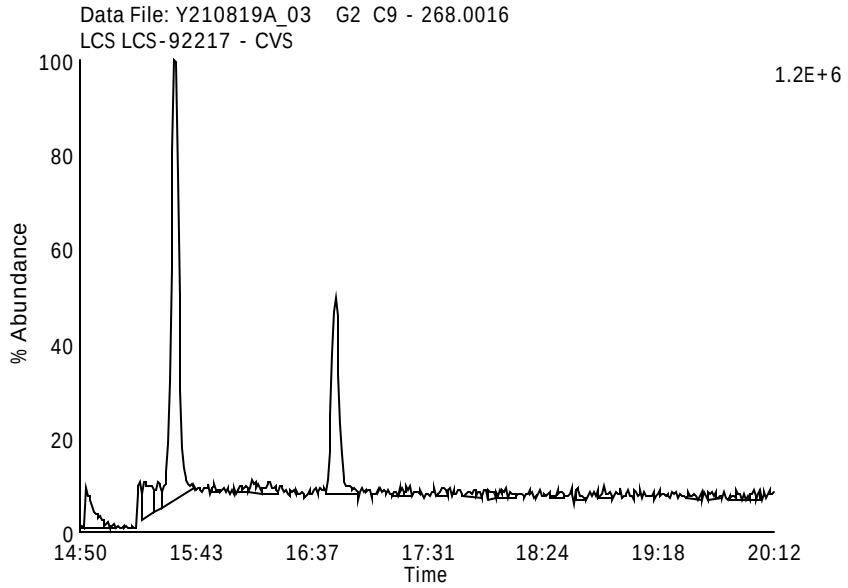


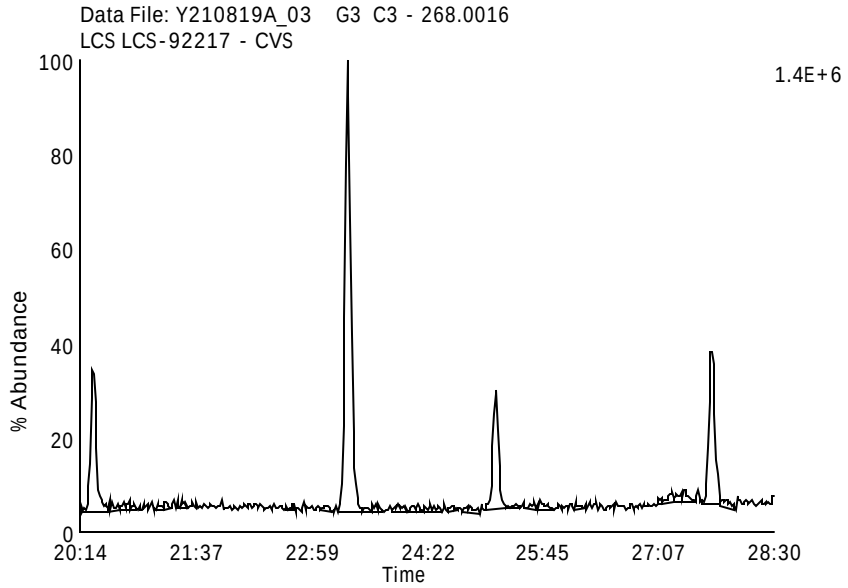


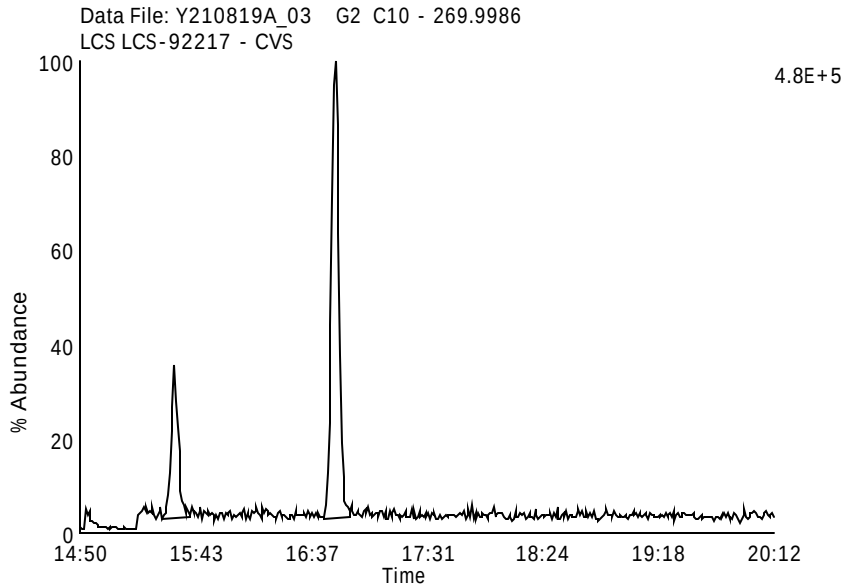


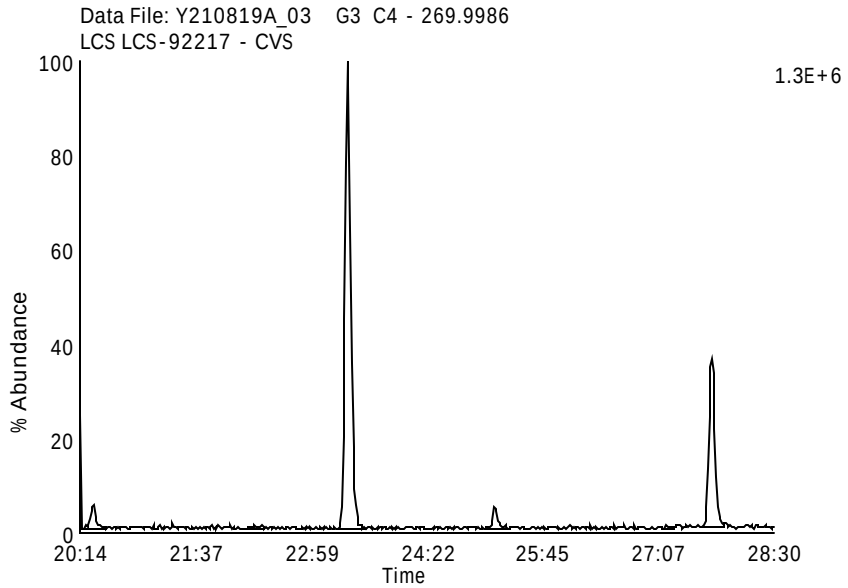
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



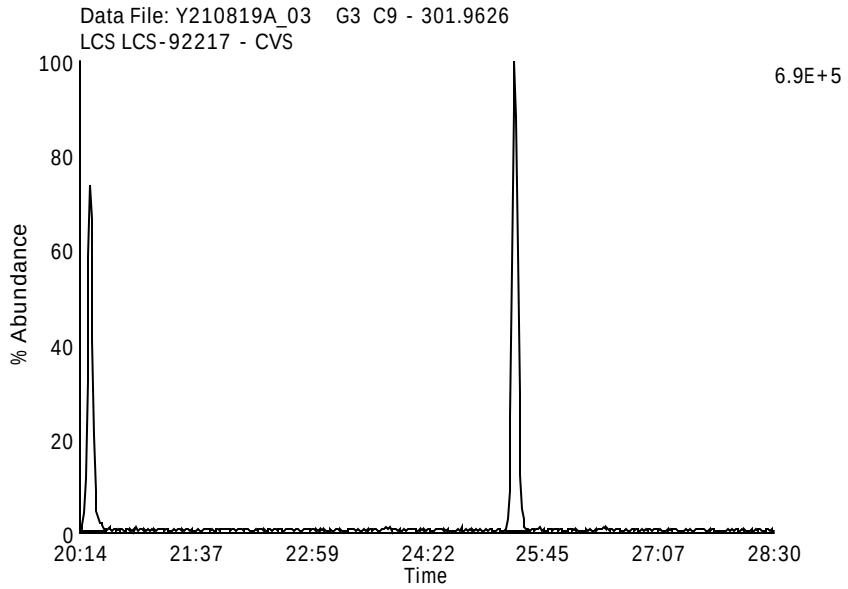


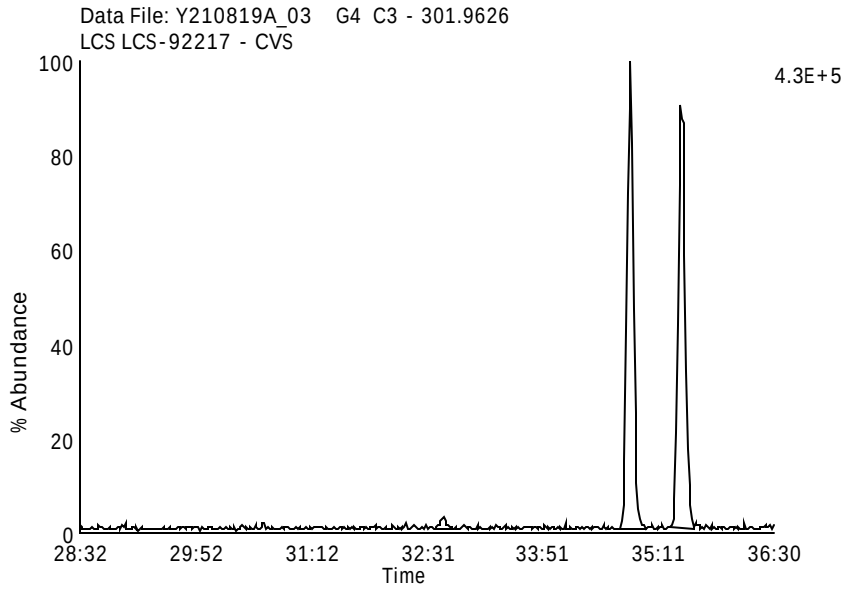


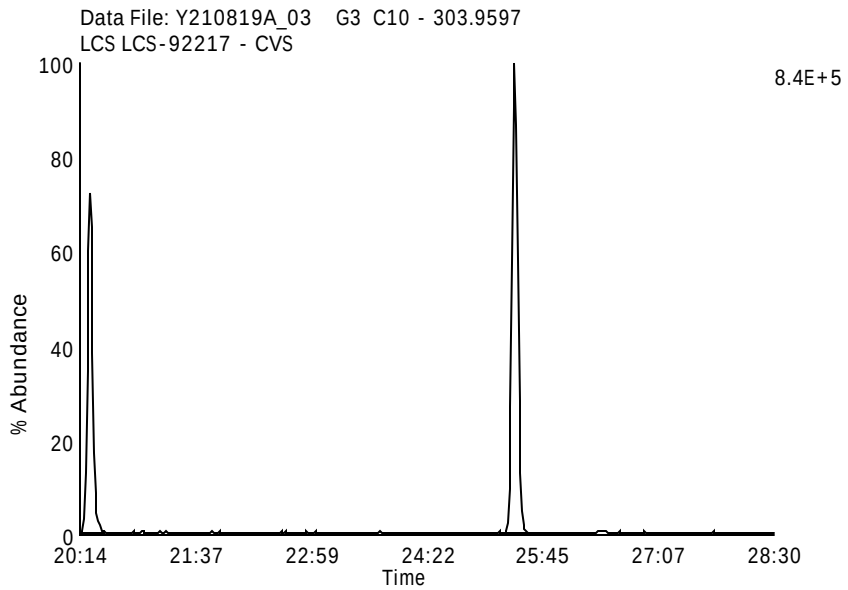


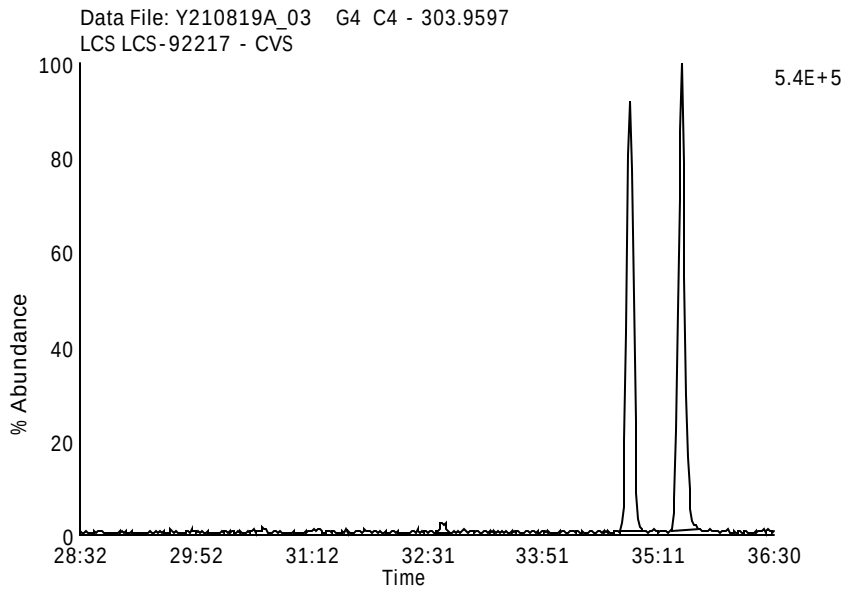
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



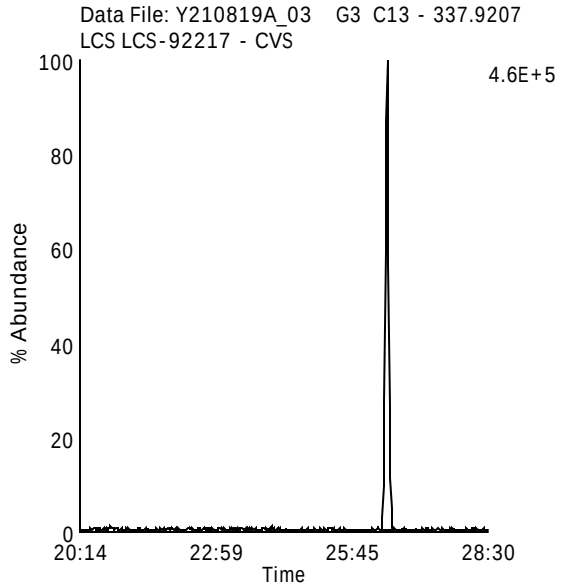


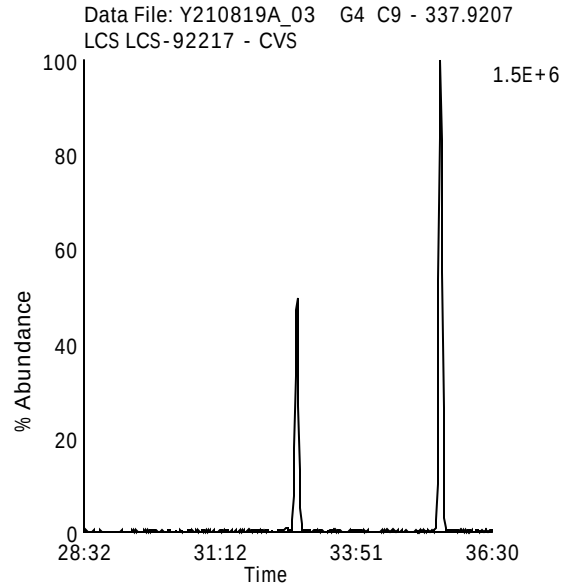


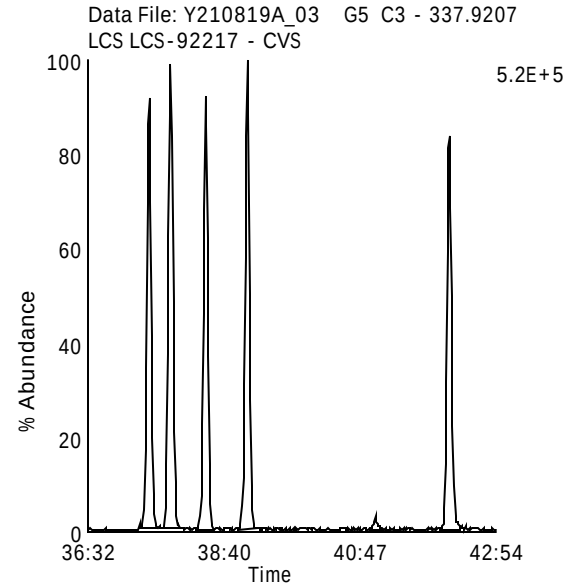


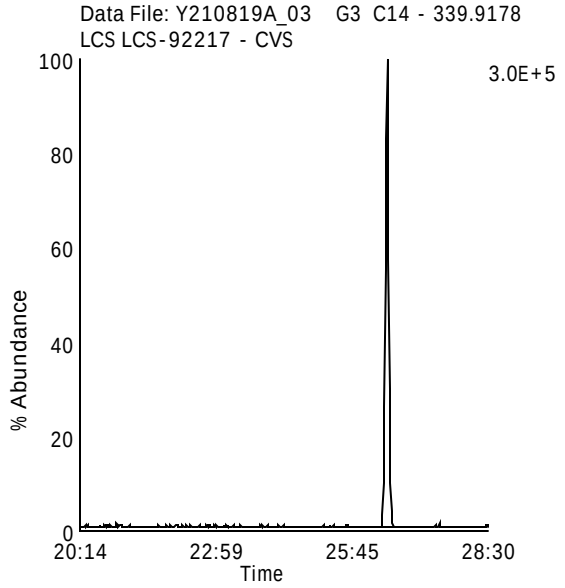
Labeled Penta Chlorinated Biphenyls

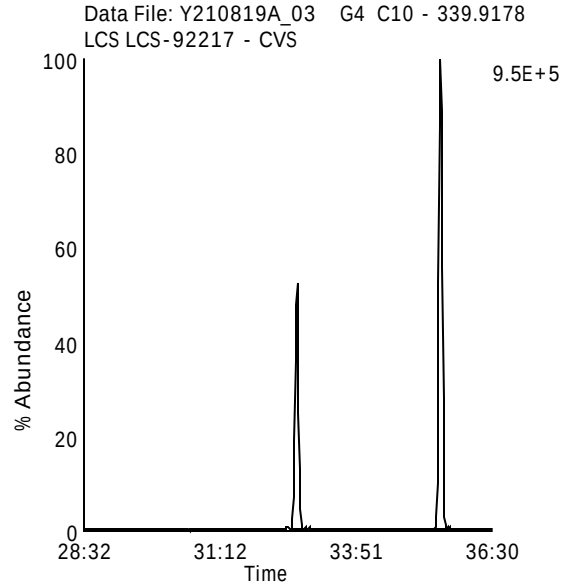
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

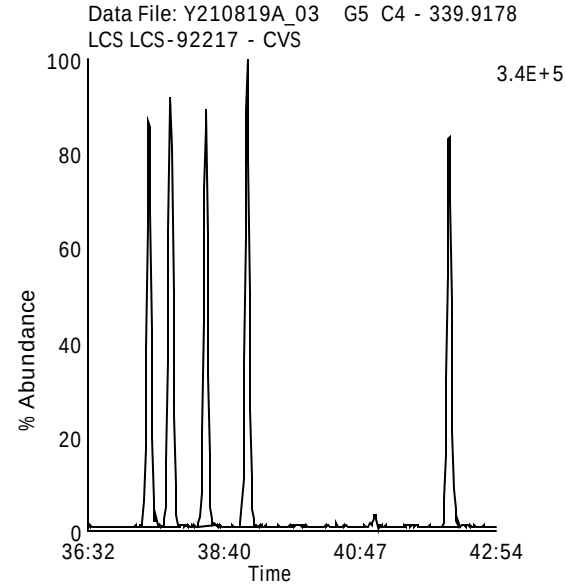






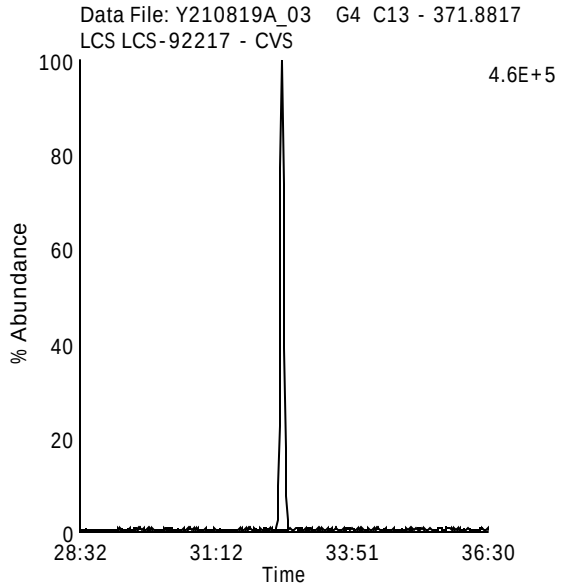


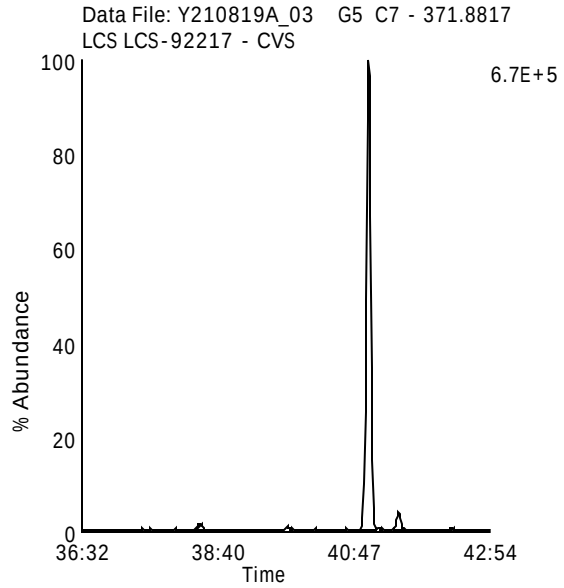


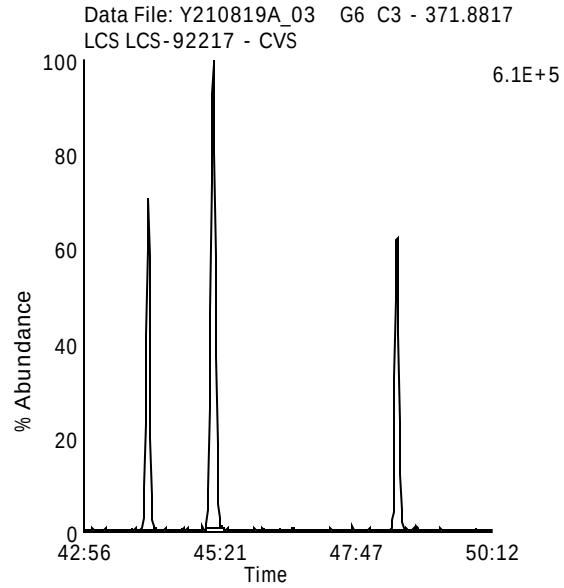


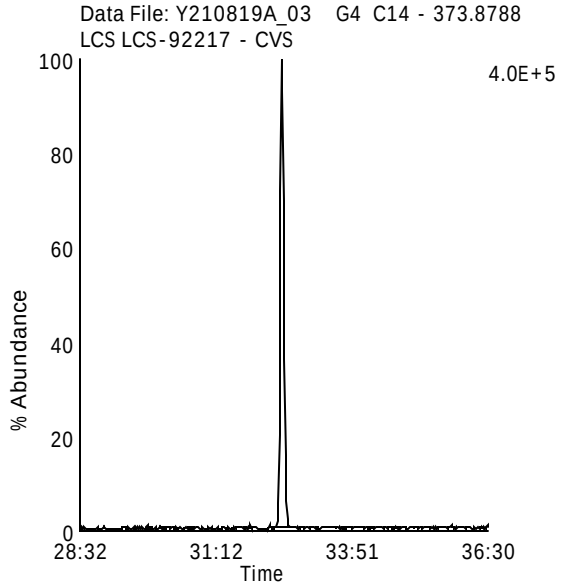
Labeled Hexa Chlorinated Biphenyls

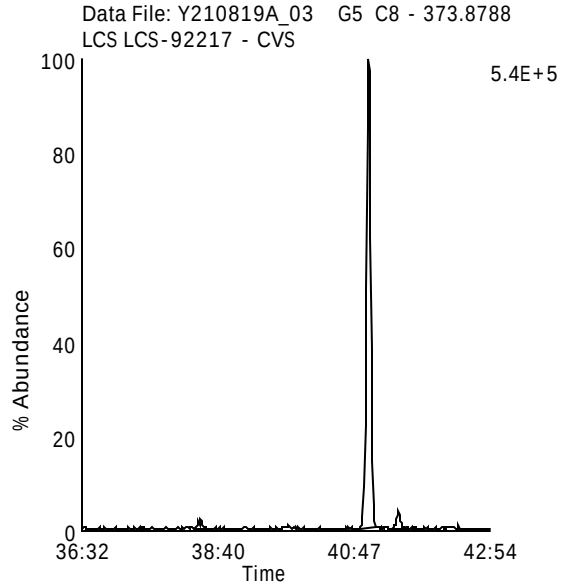
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

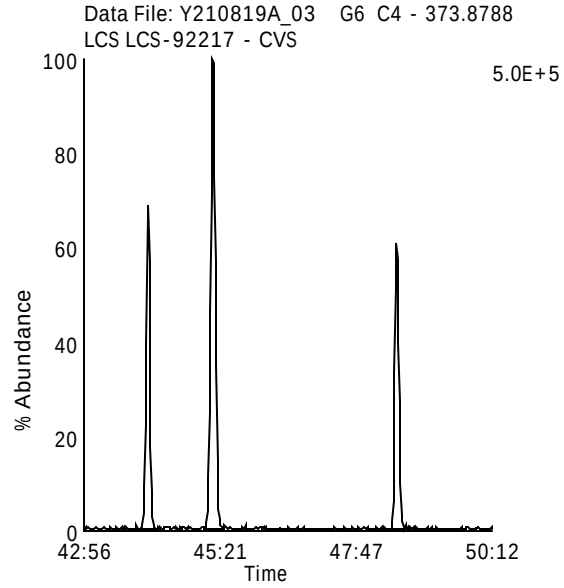






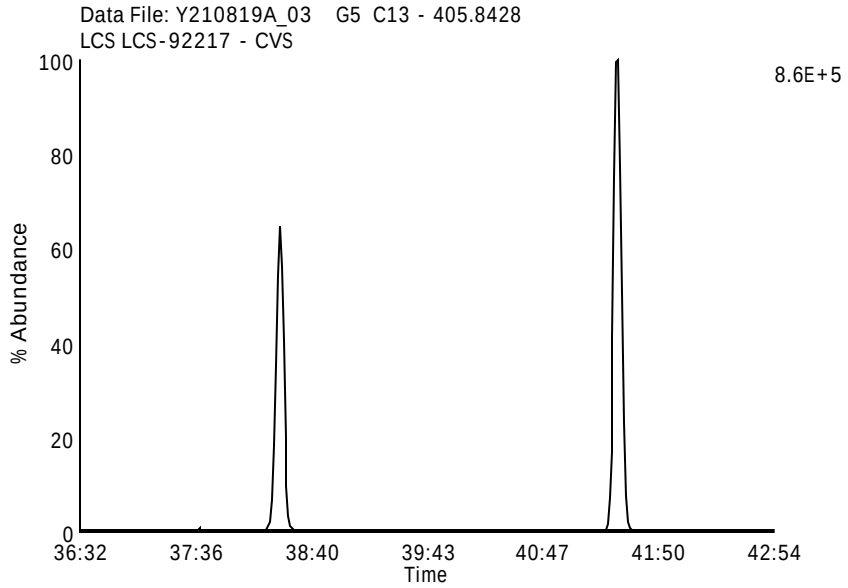


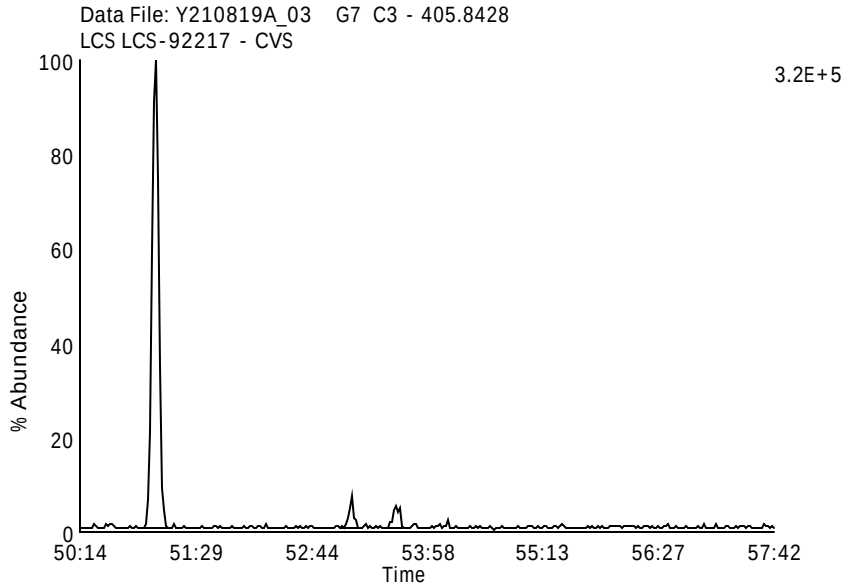


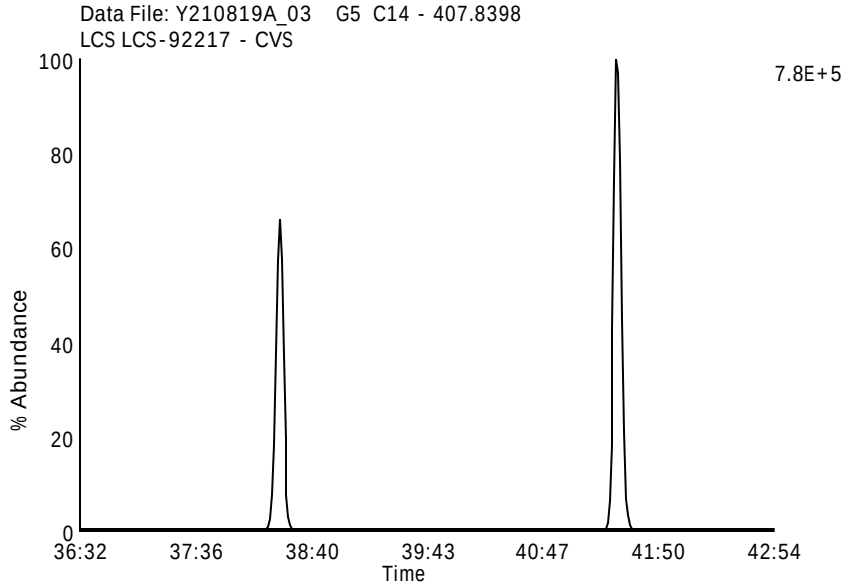


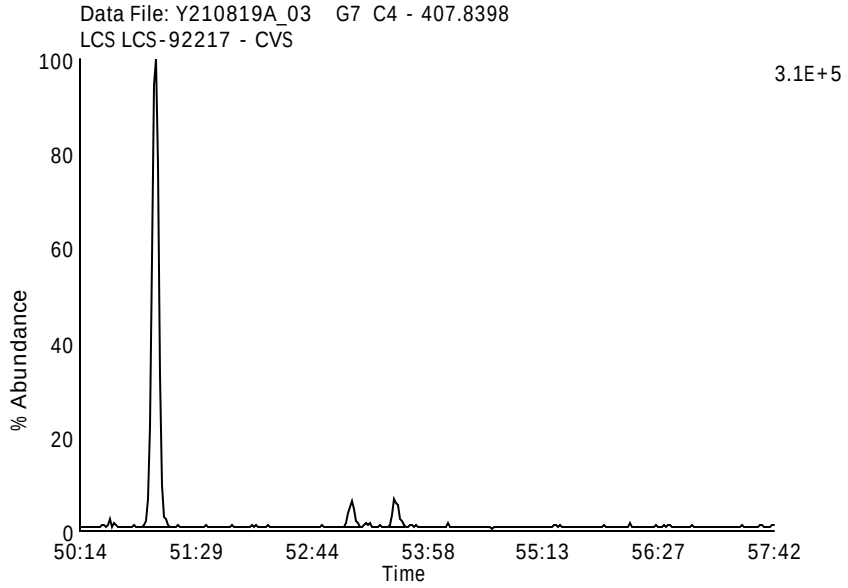
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



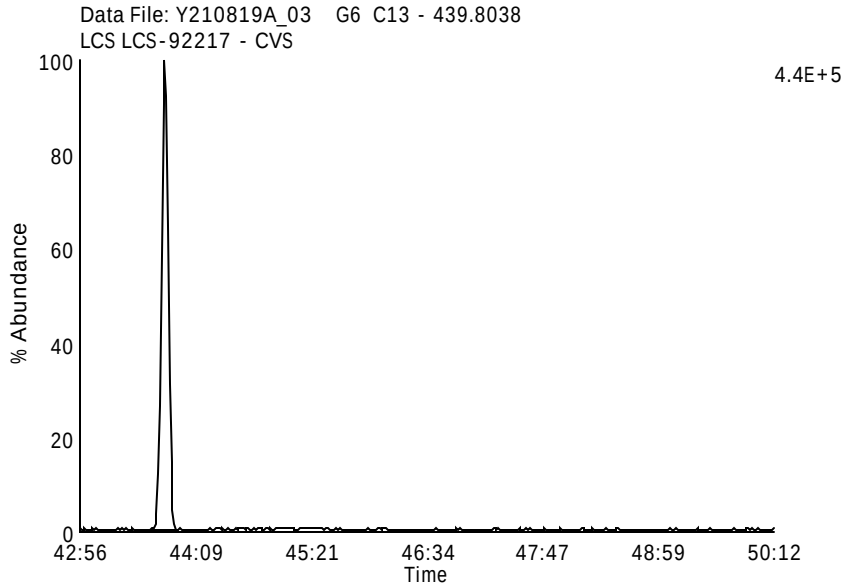


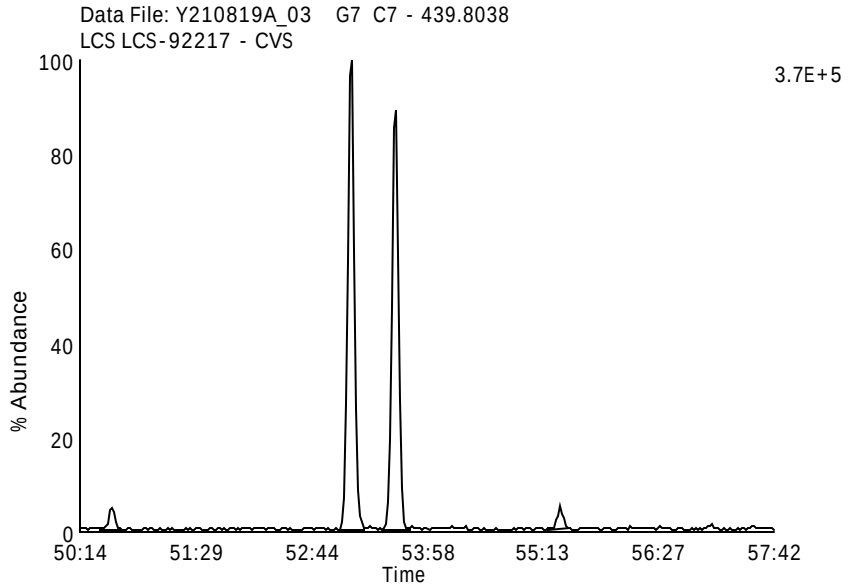


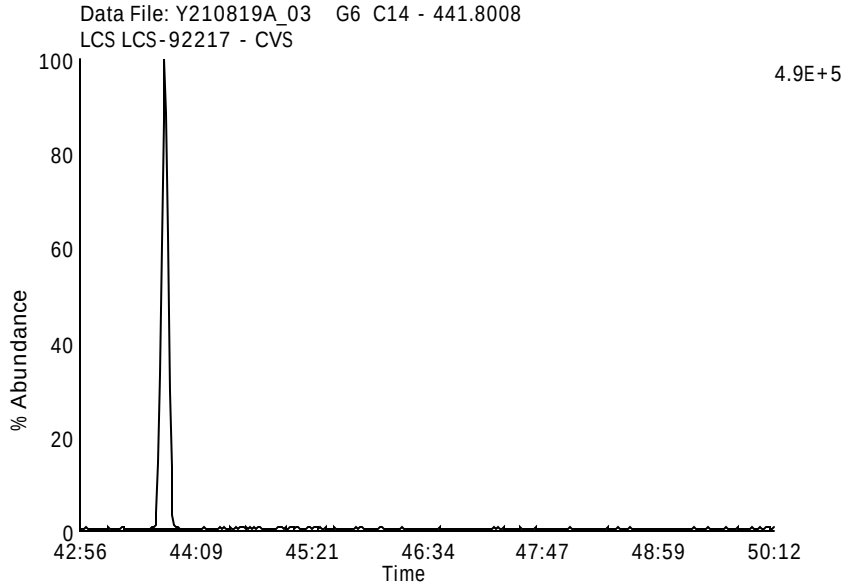


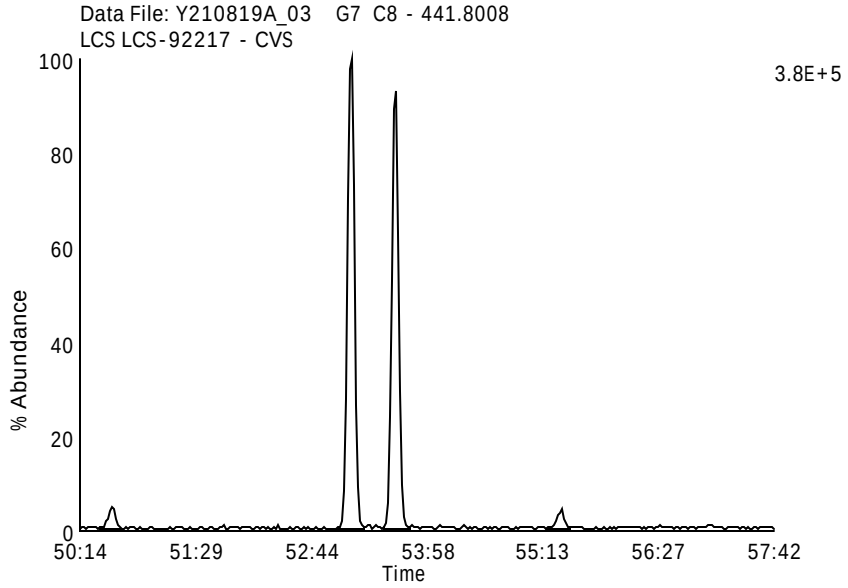
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



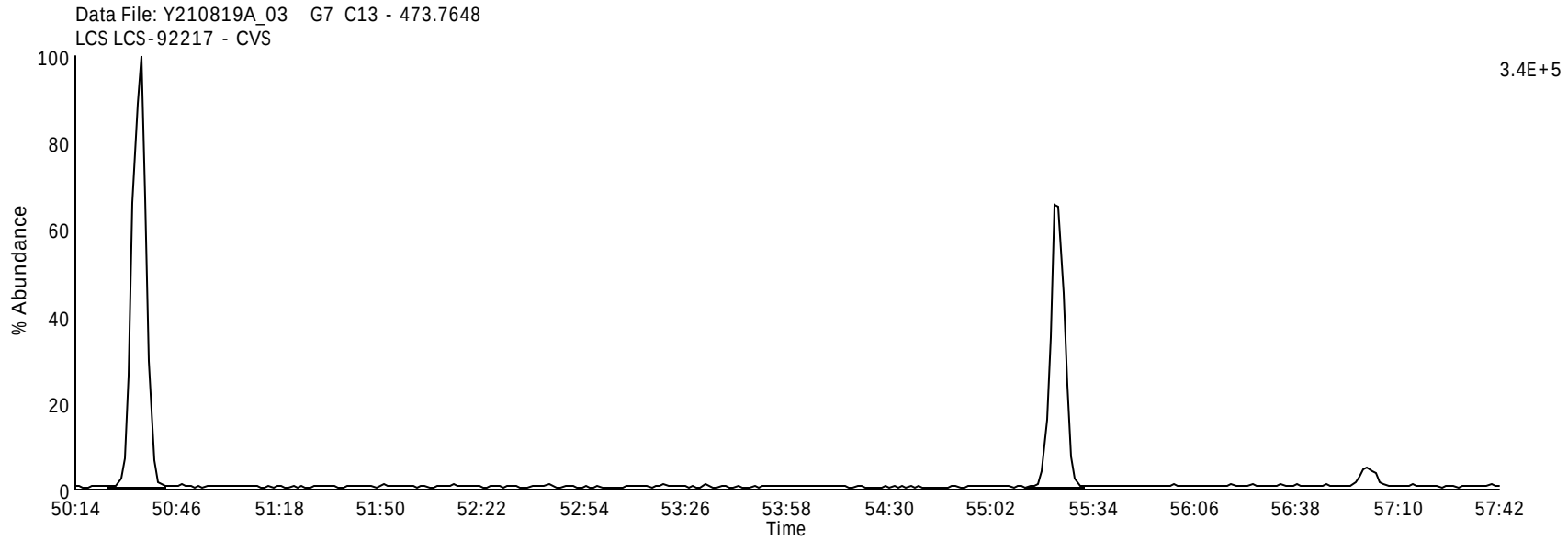


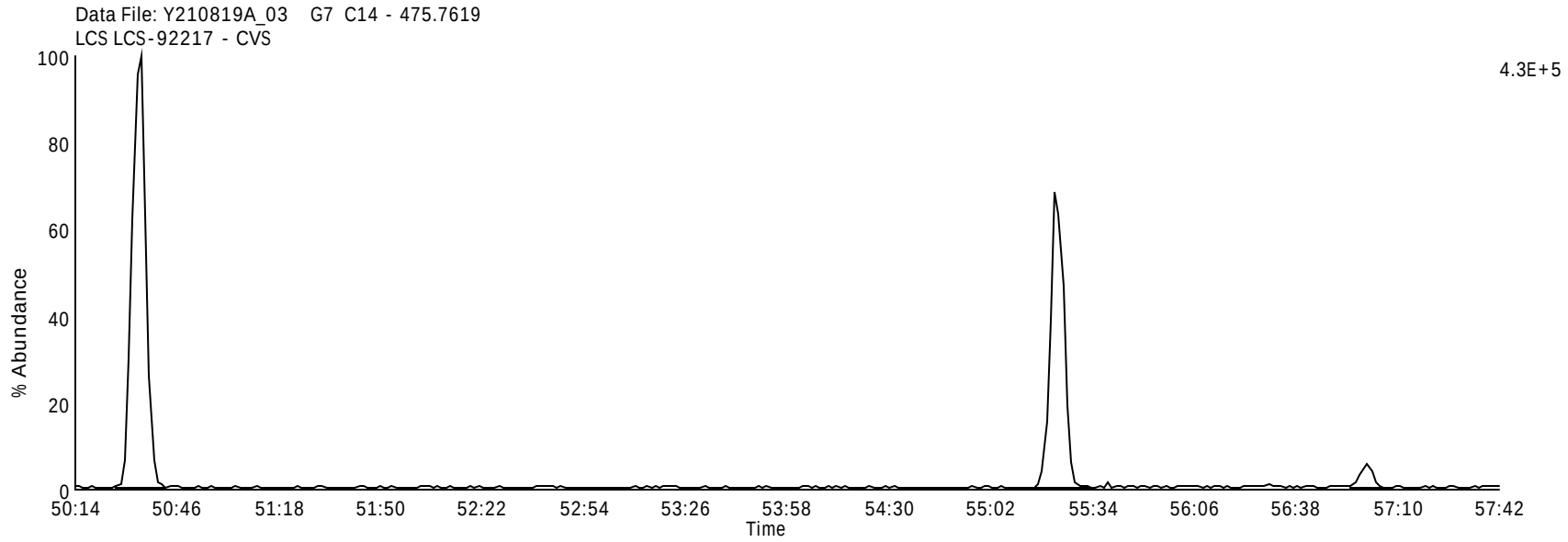




Labeled Nona Chlorinated Biphenyls

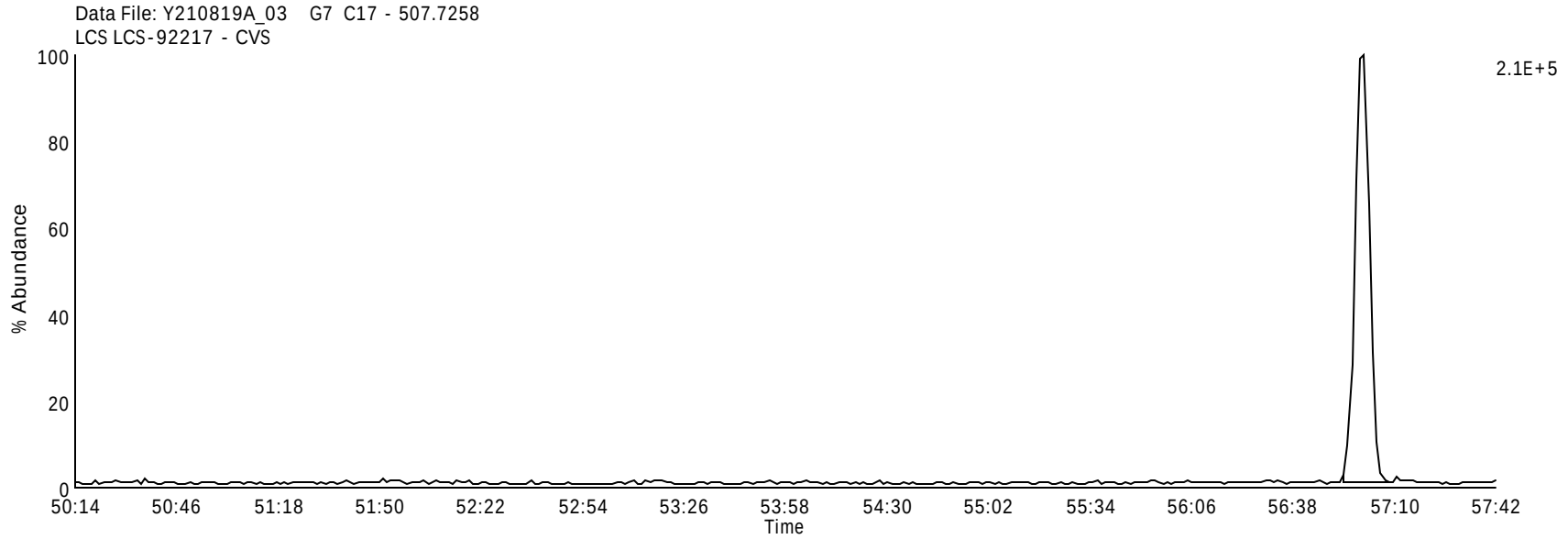
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

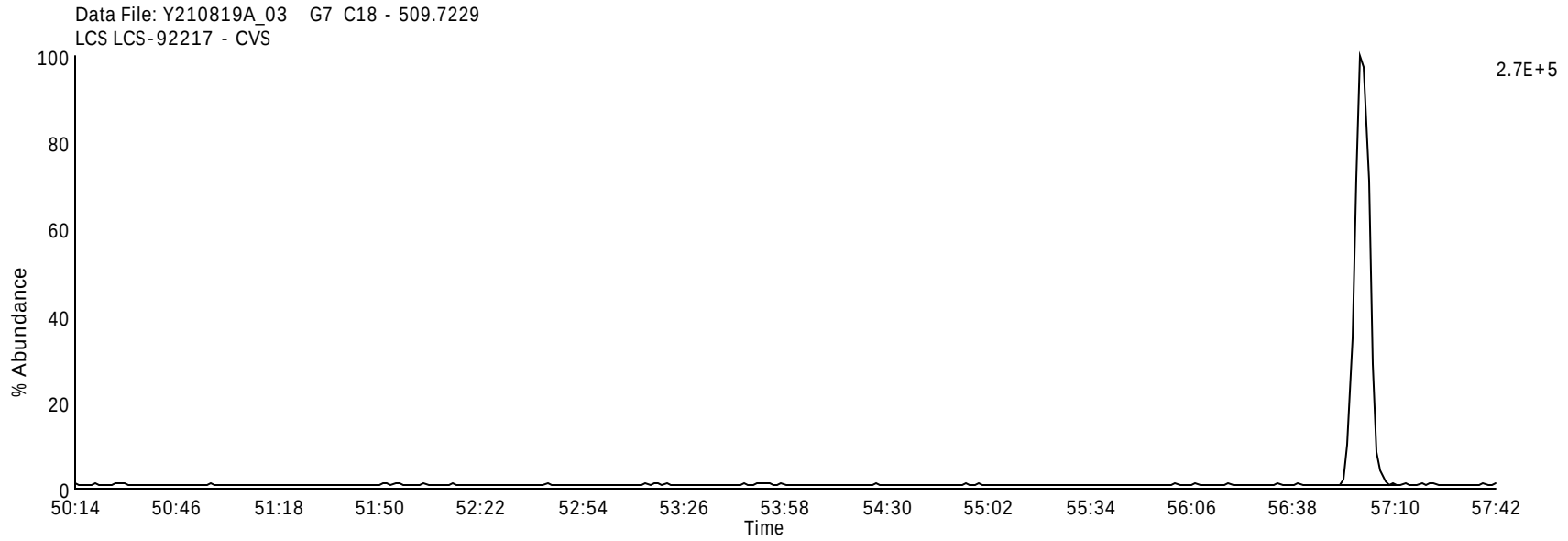




Labeled Deca Chlorinated Biphenyl

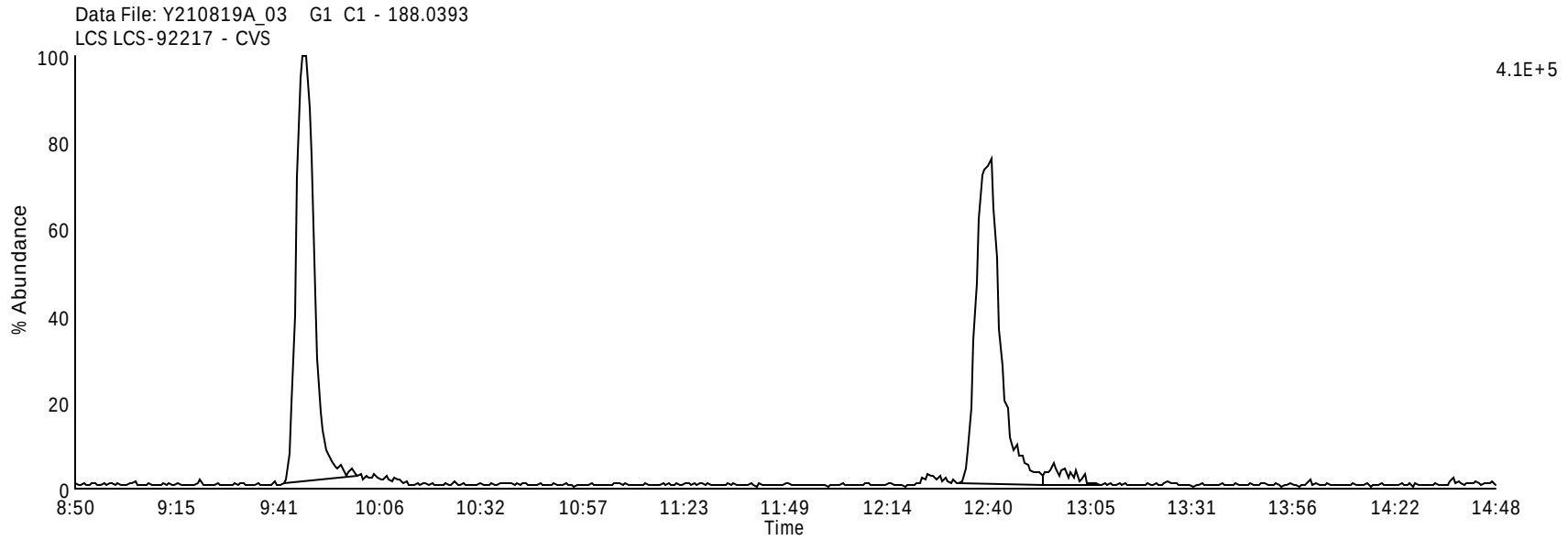
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

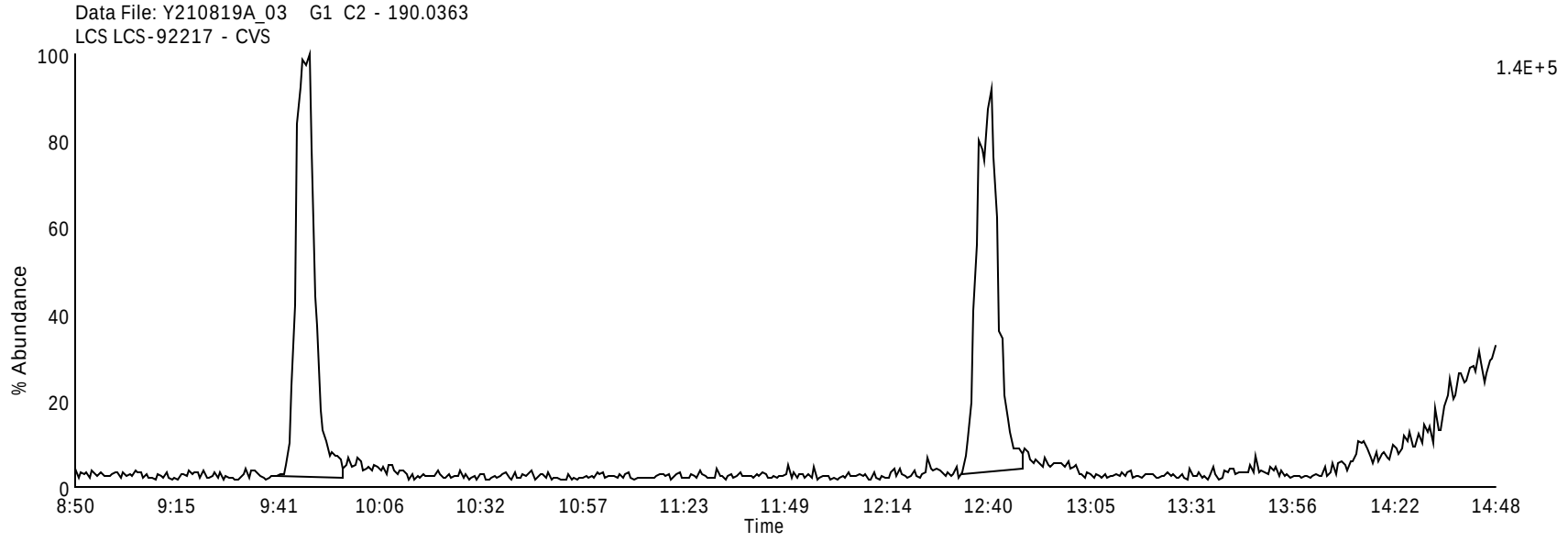




Mono Chlorinated Biphenyls

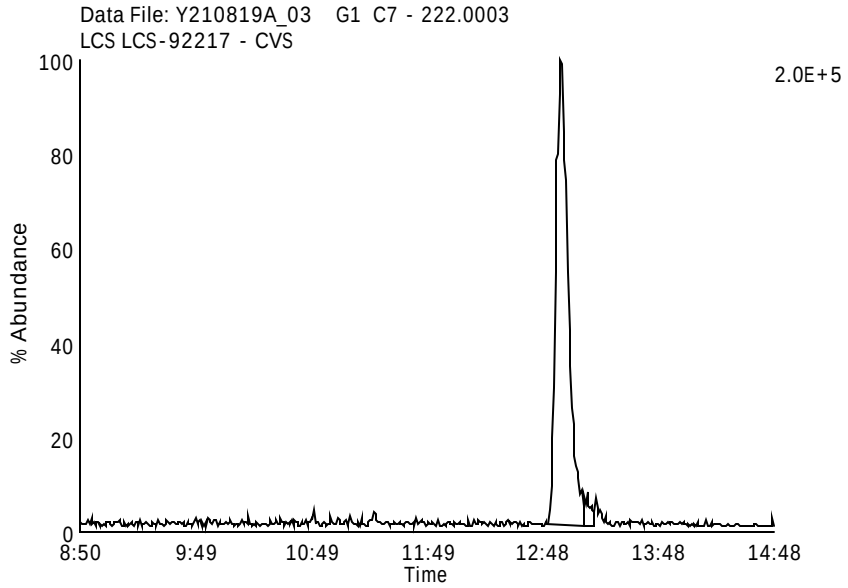
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

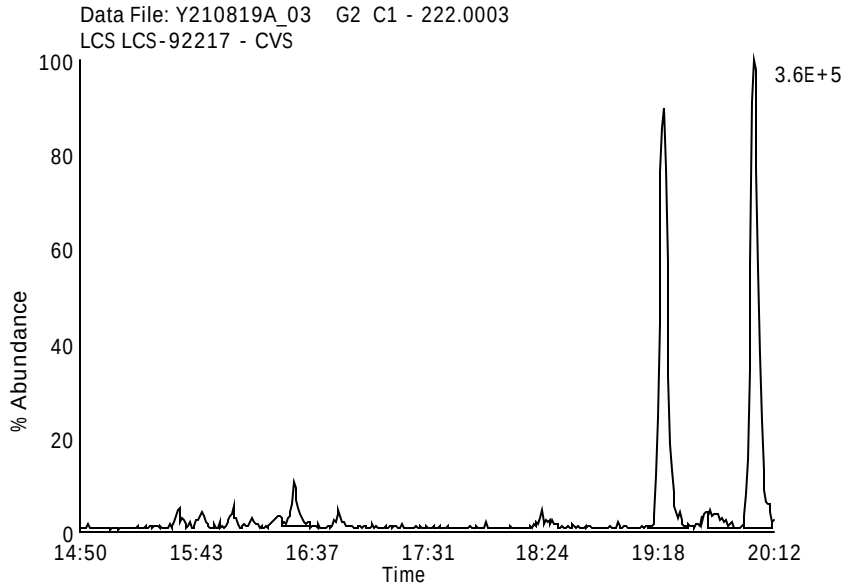


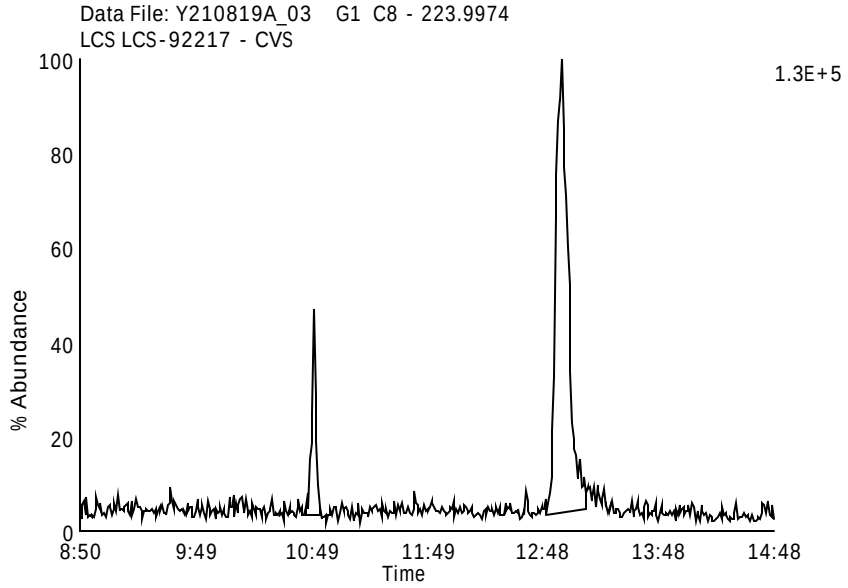


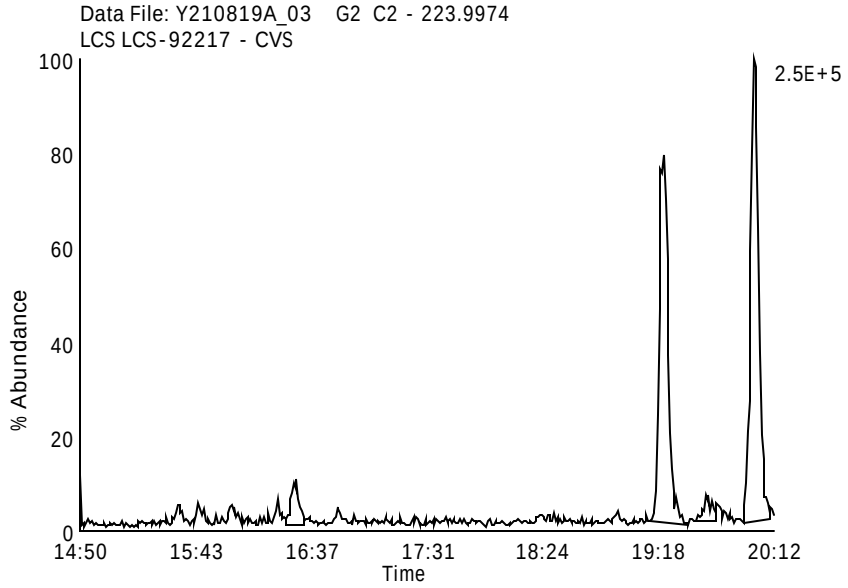
Di Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



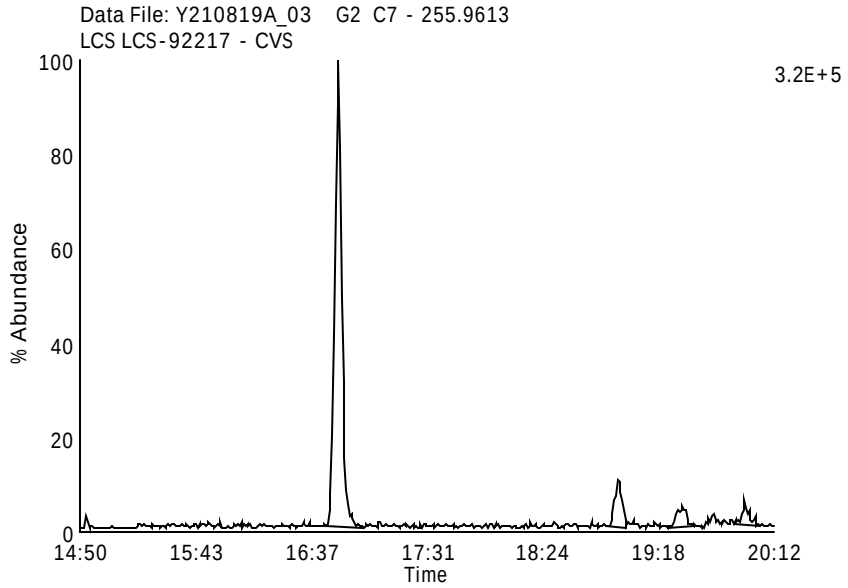


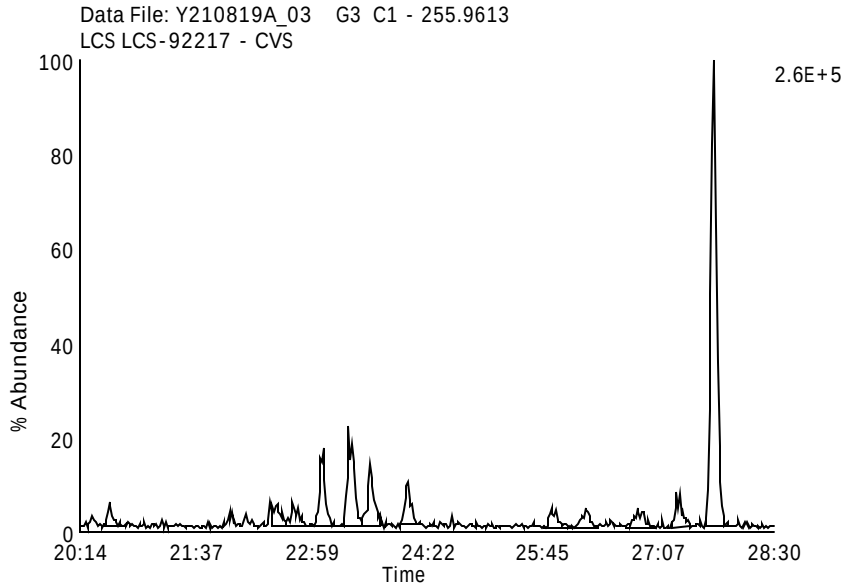


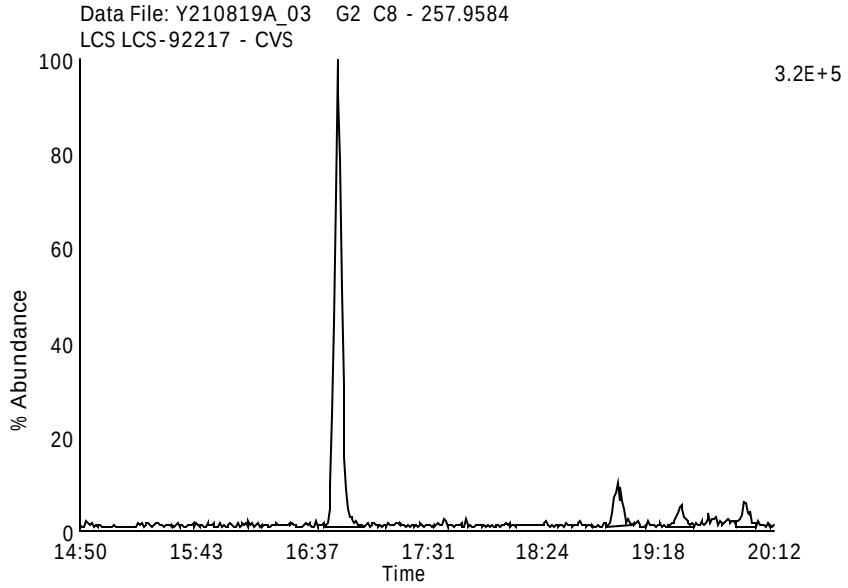


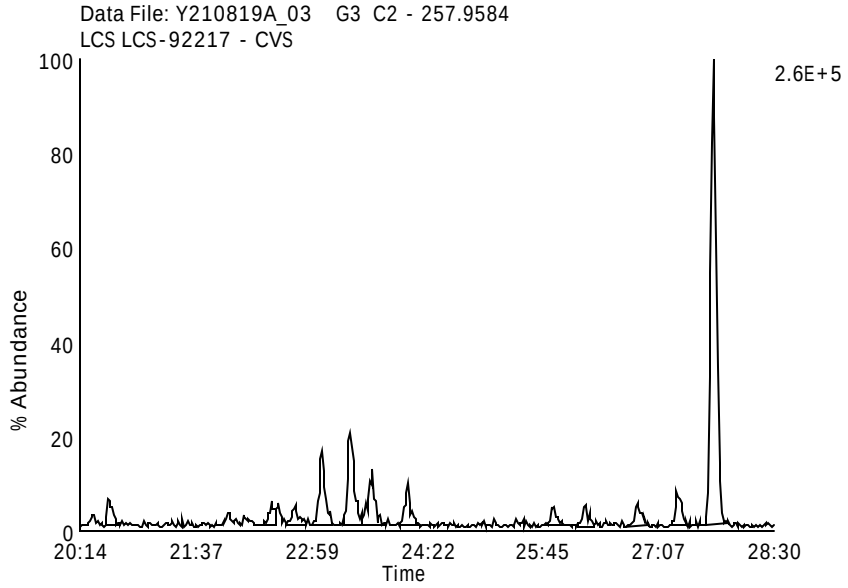
Tri Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



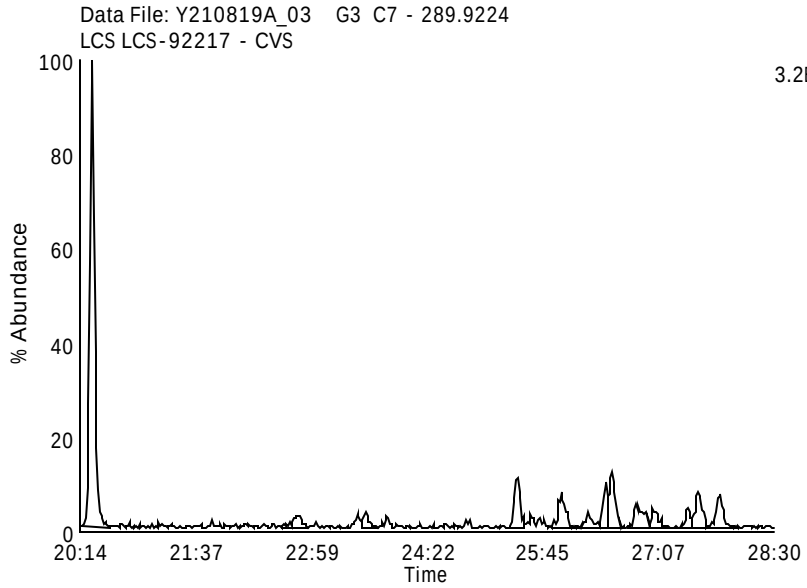


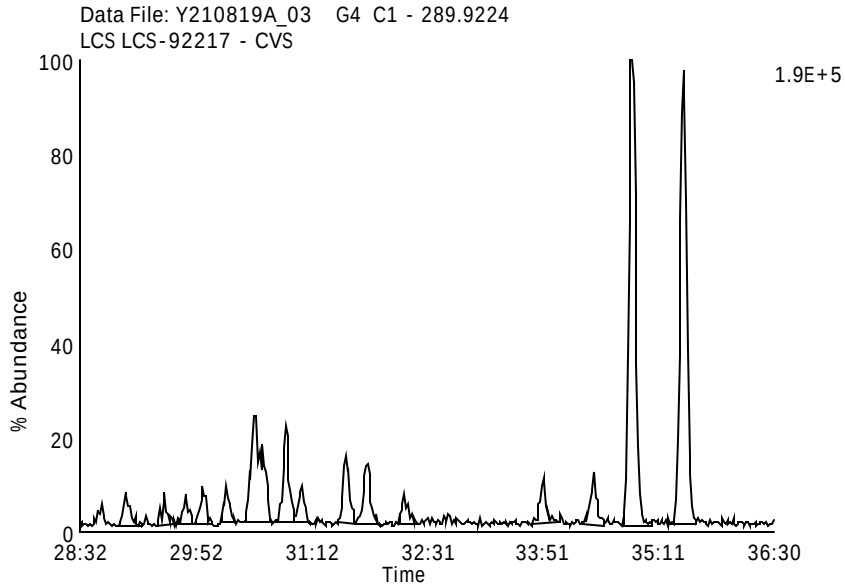


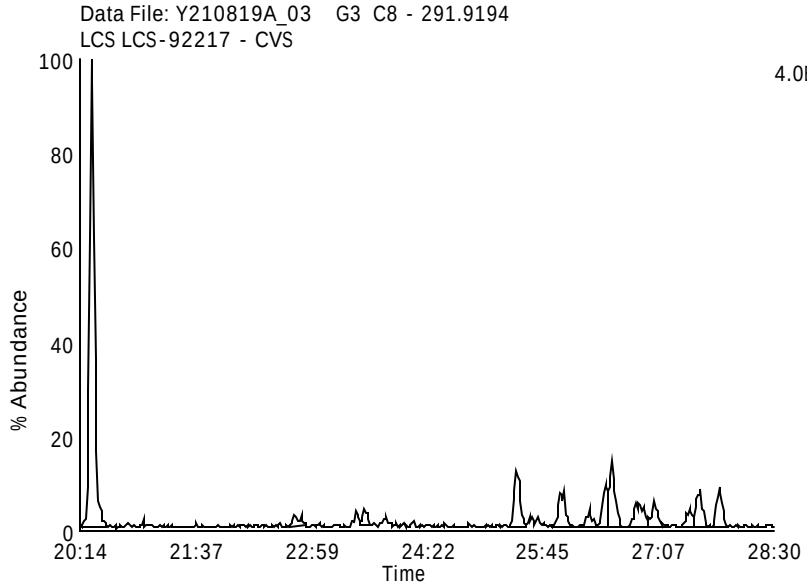


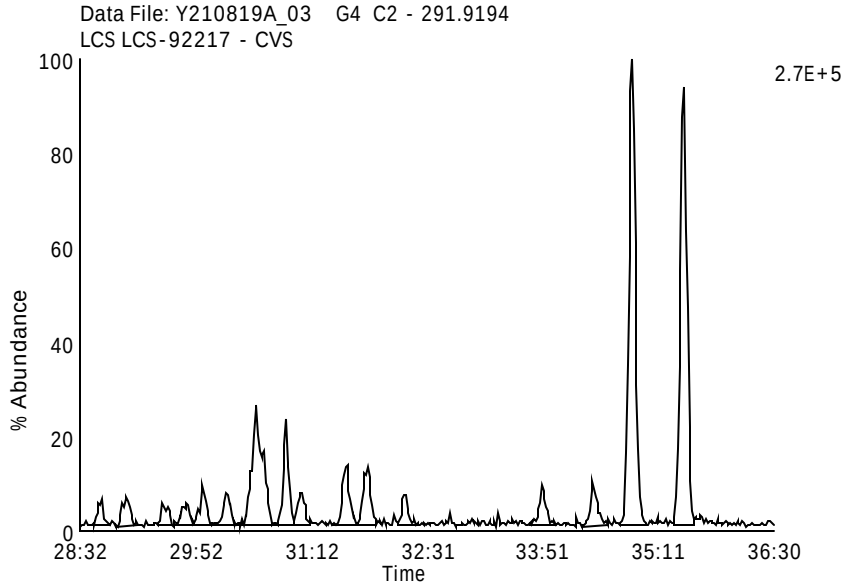
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



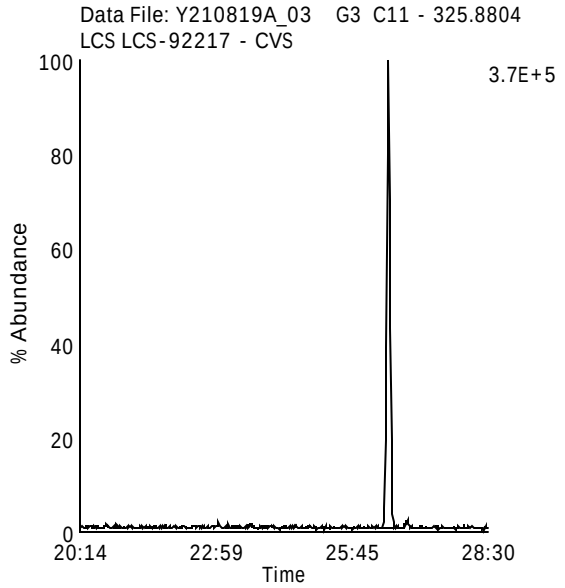


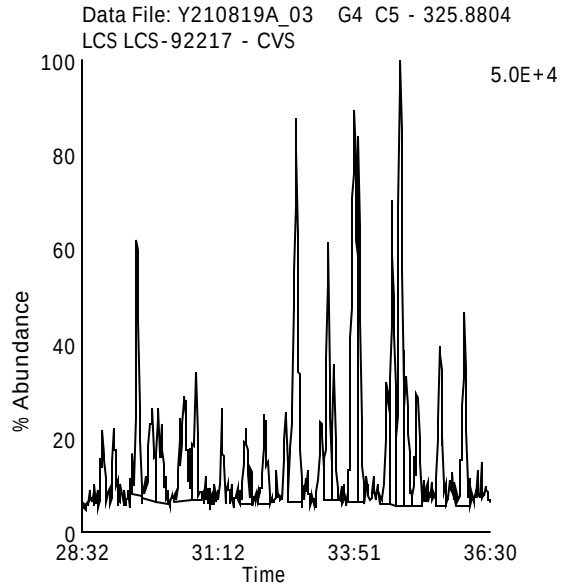


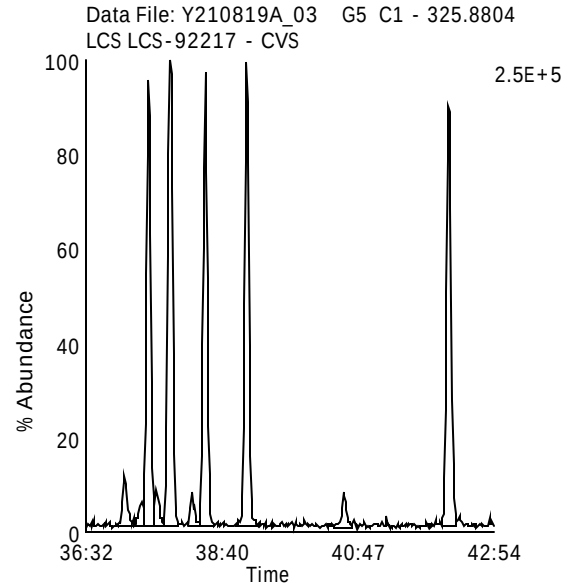


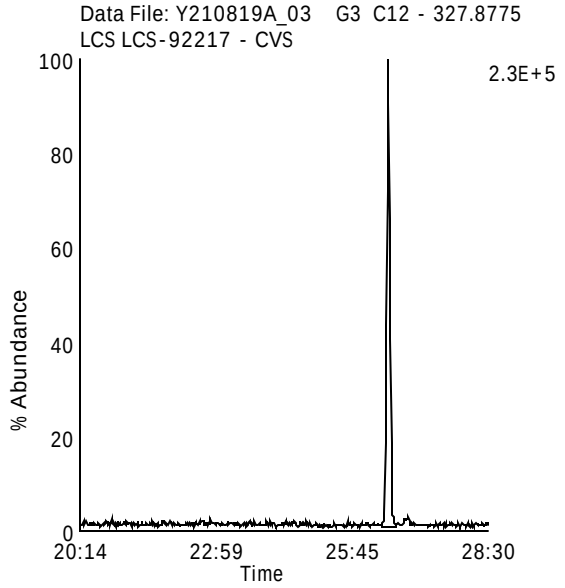
Penta Chlorinated Biphenyls

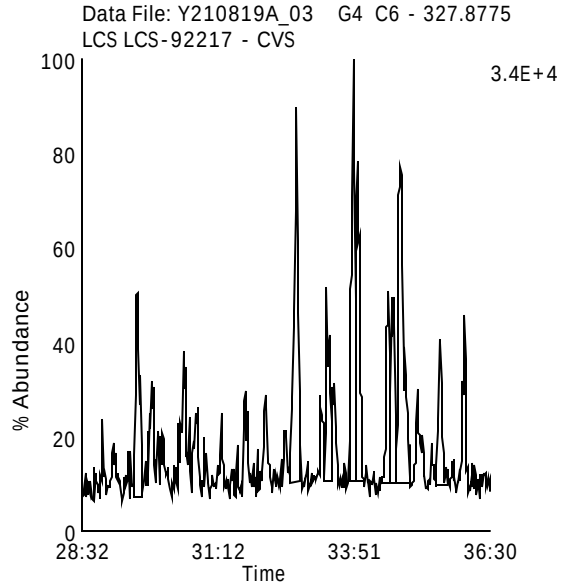
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

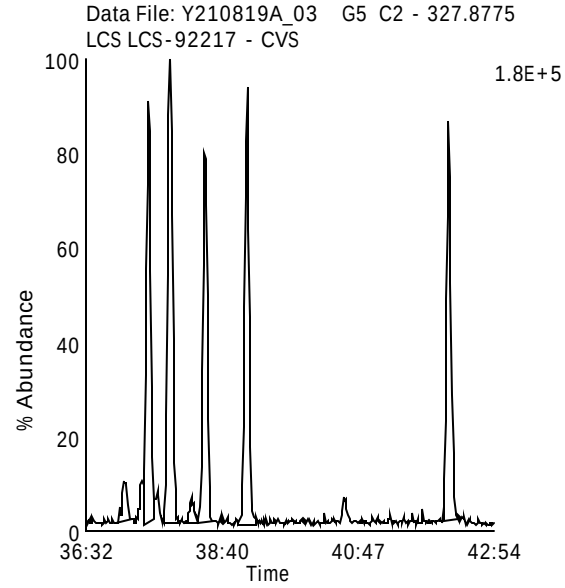






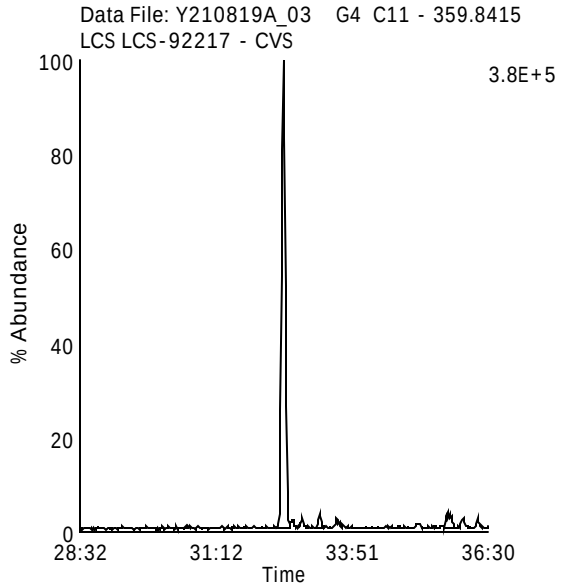


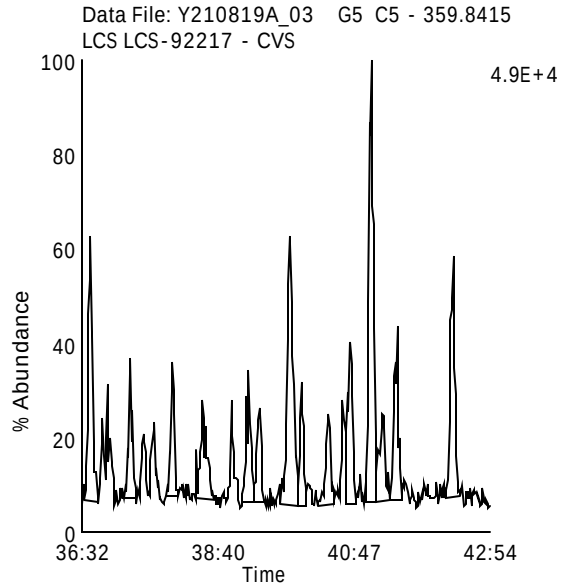


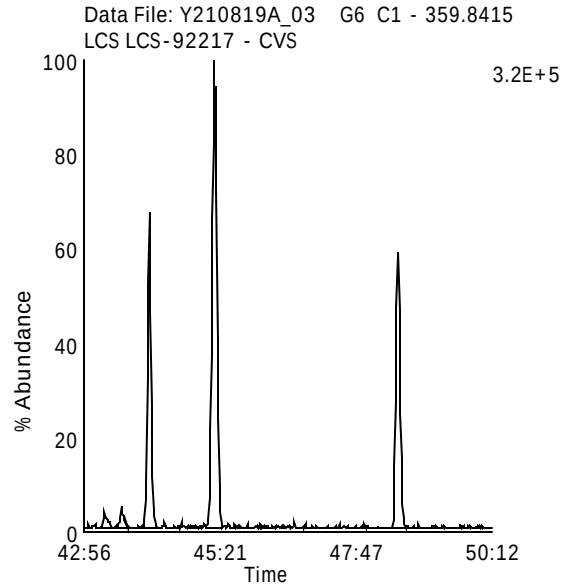


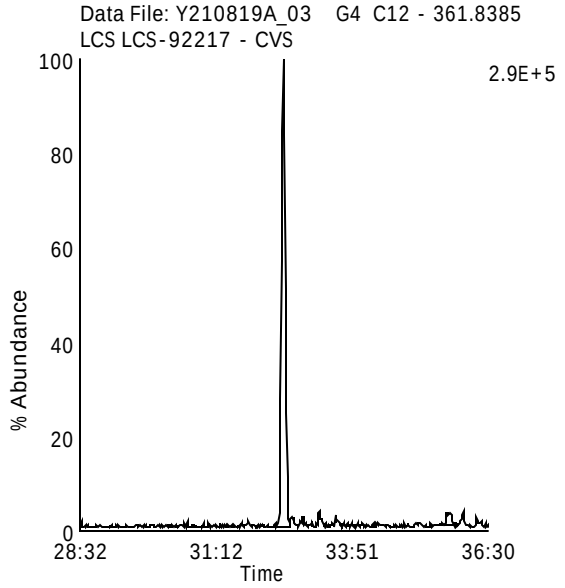
Hexa Chlorinated Biphenyls

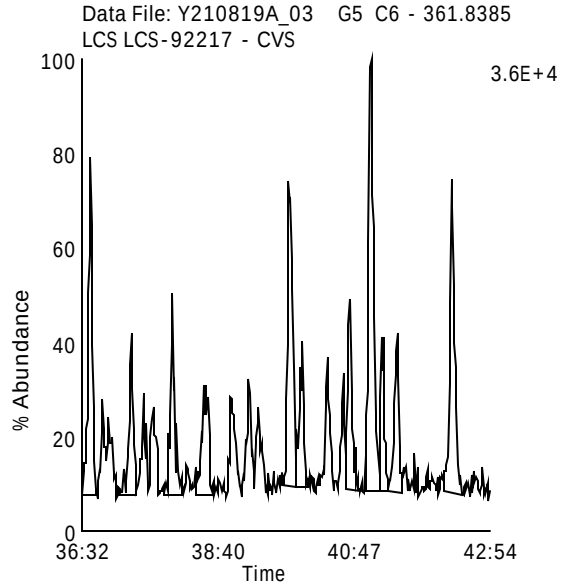
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

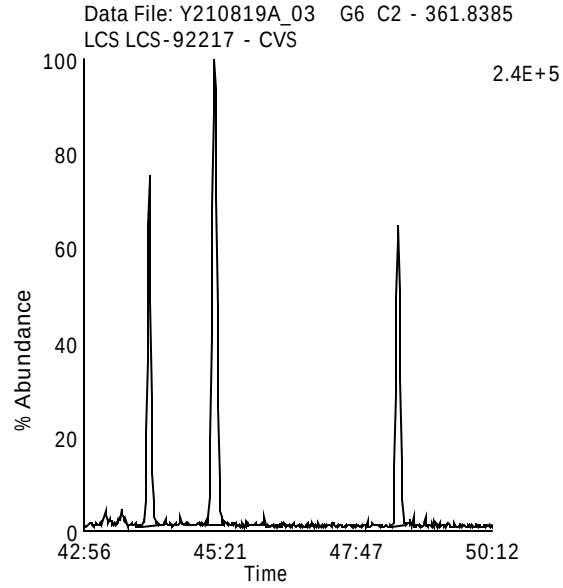






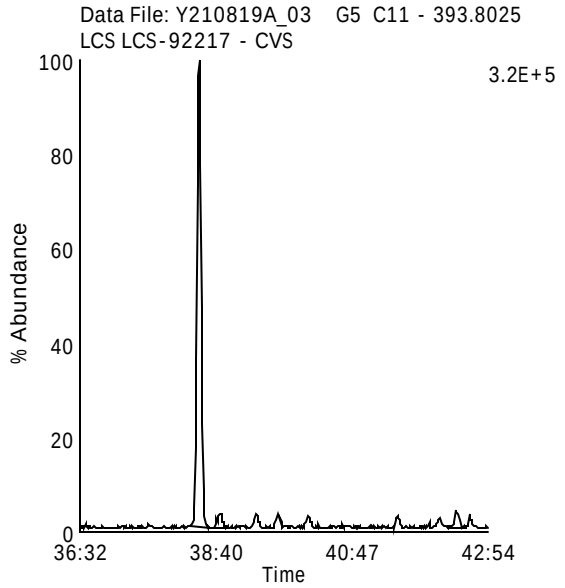


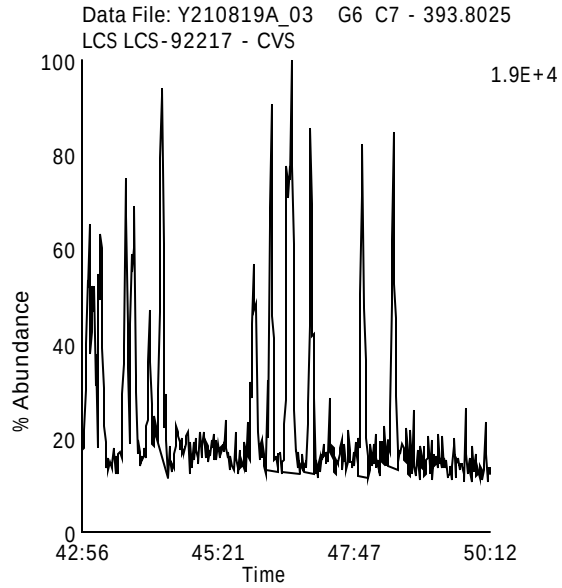


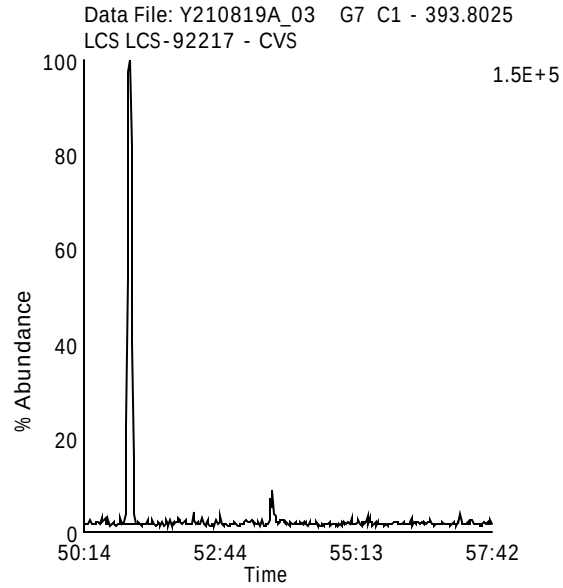


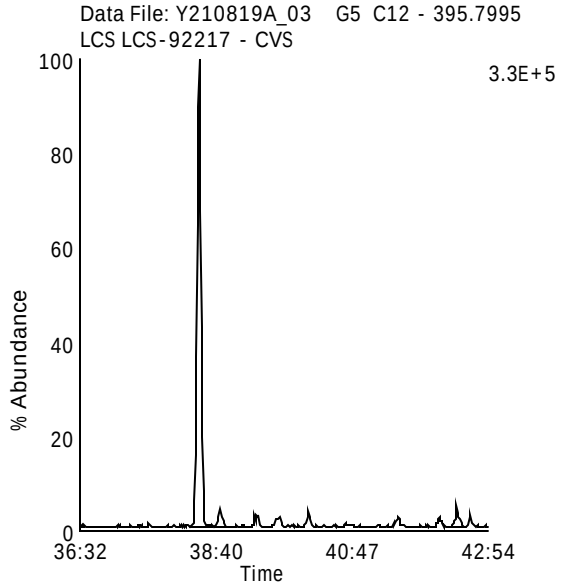
Hepta Chlorinated Biphenyls

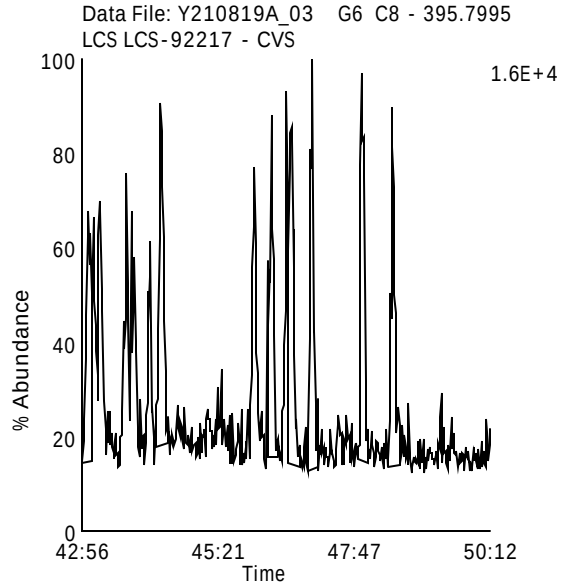
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

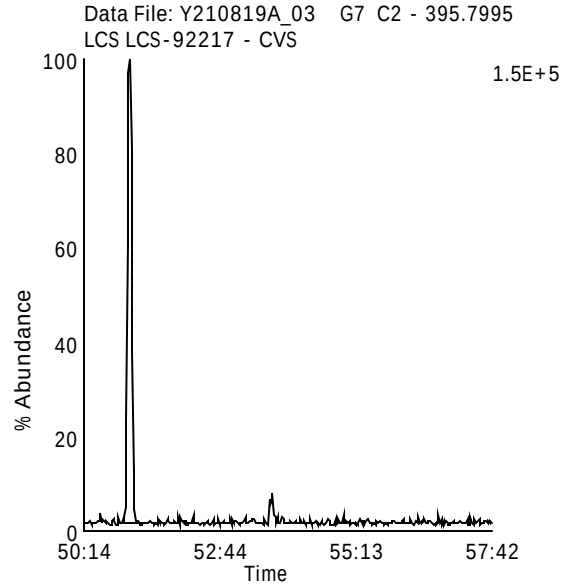






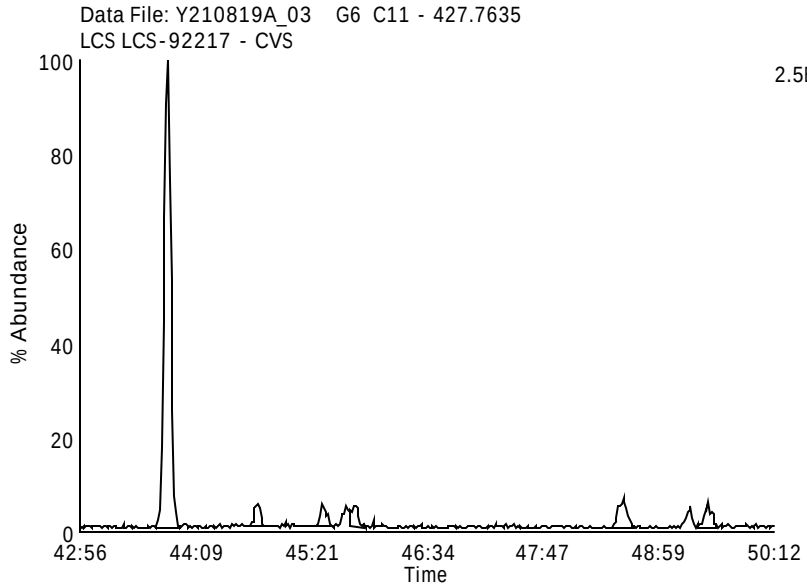


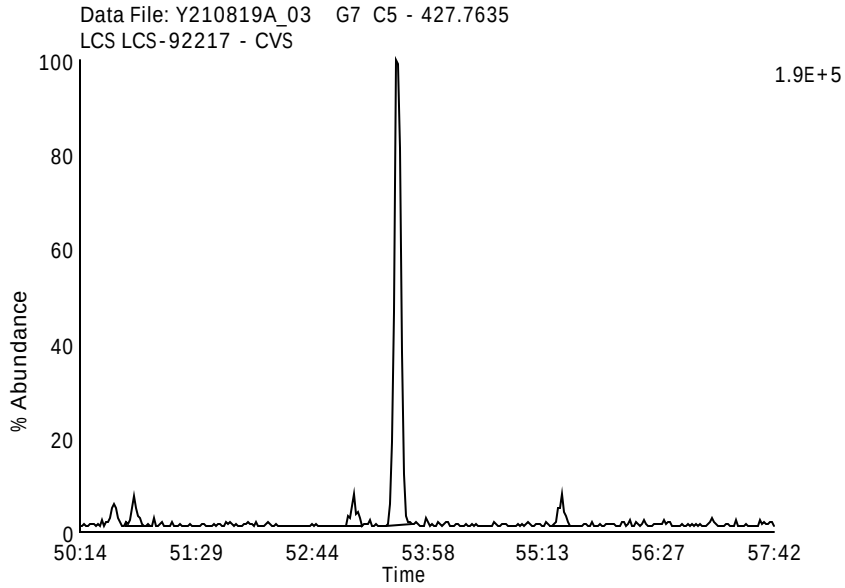


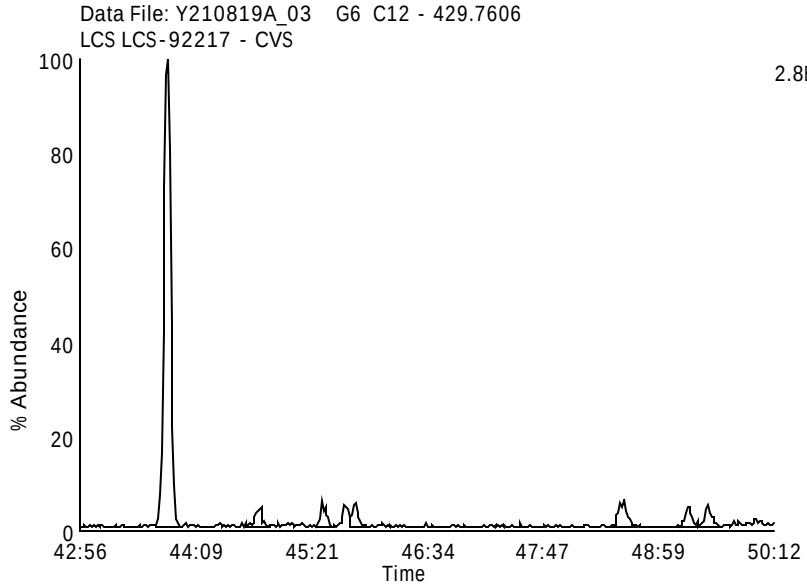


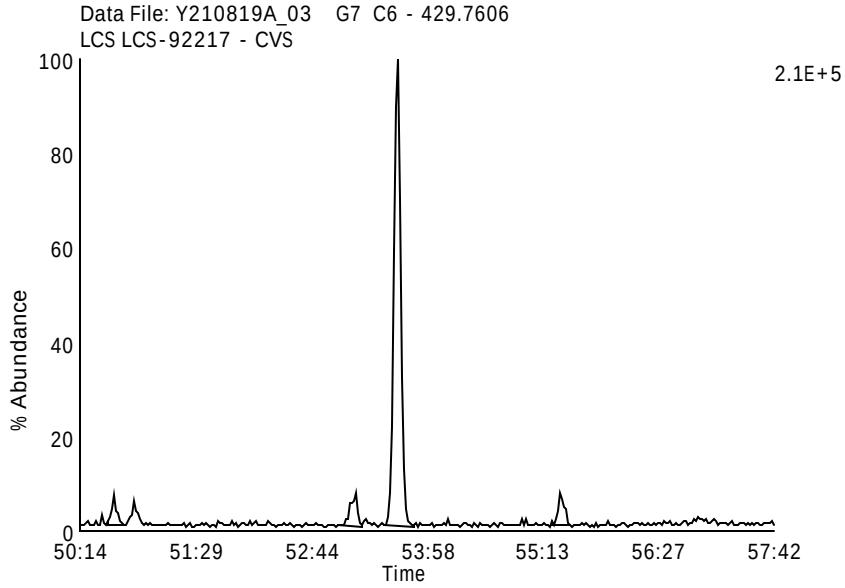
Octa Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



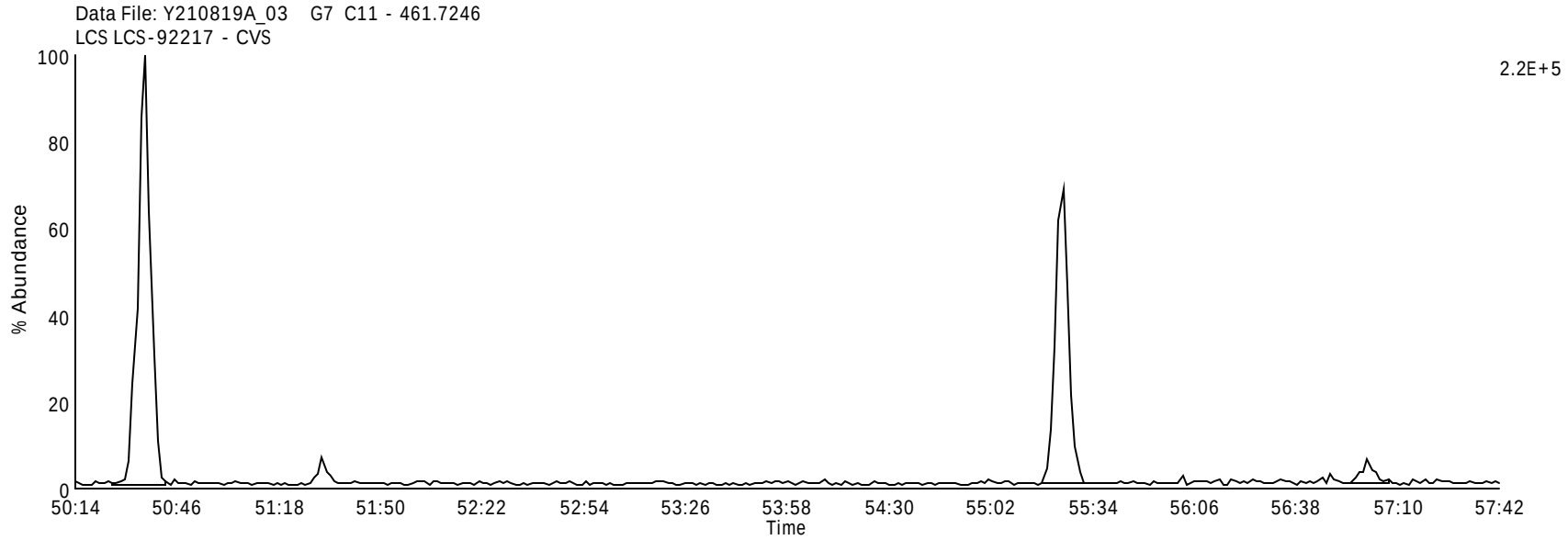


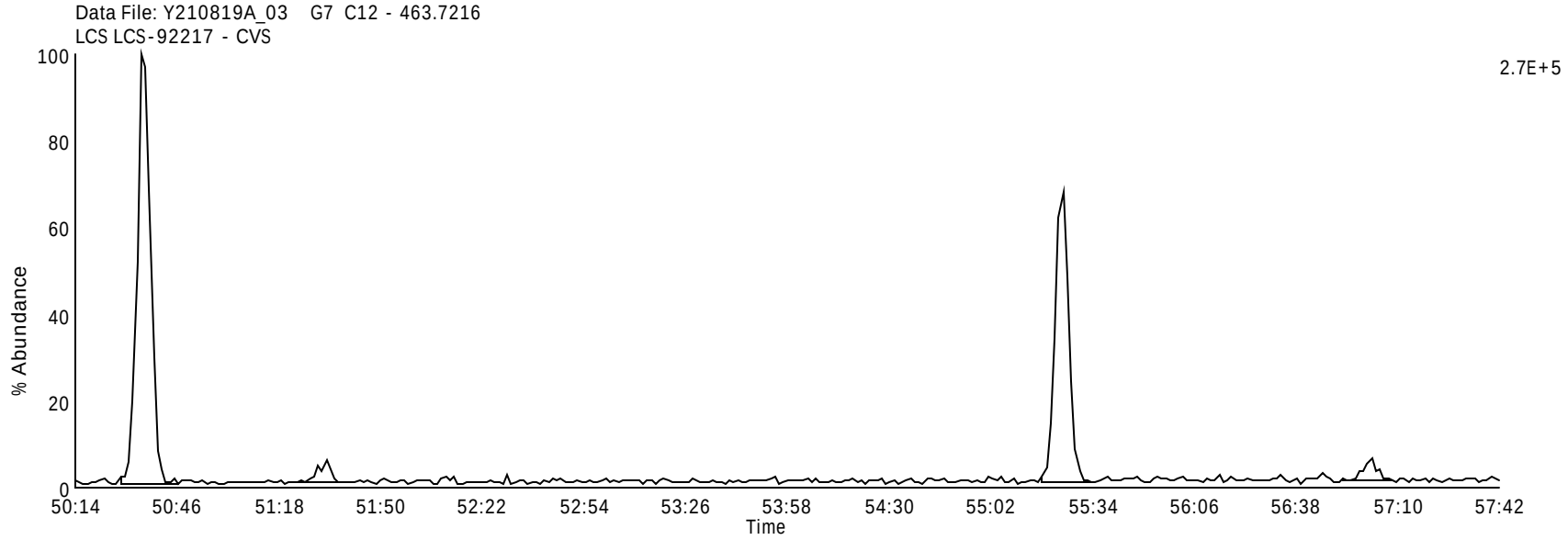




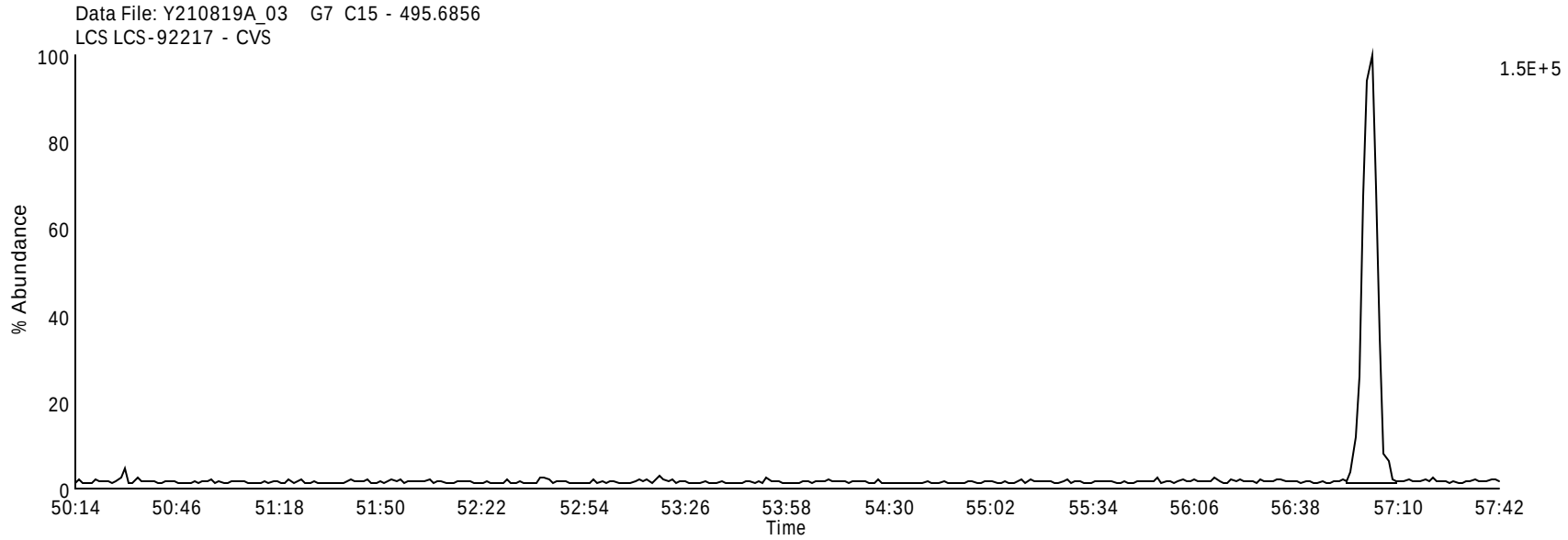
Nona Chlorinated Biphenyls

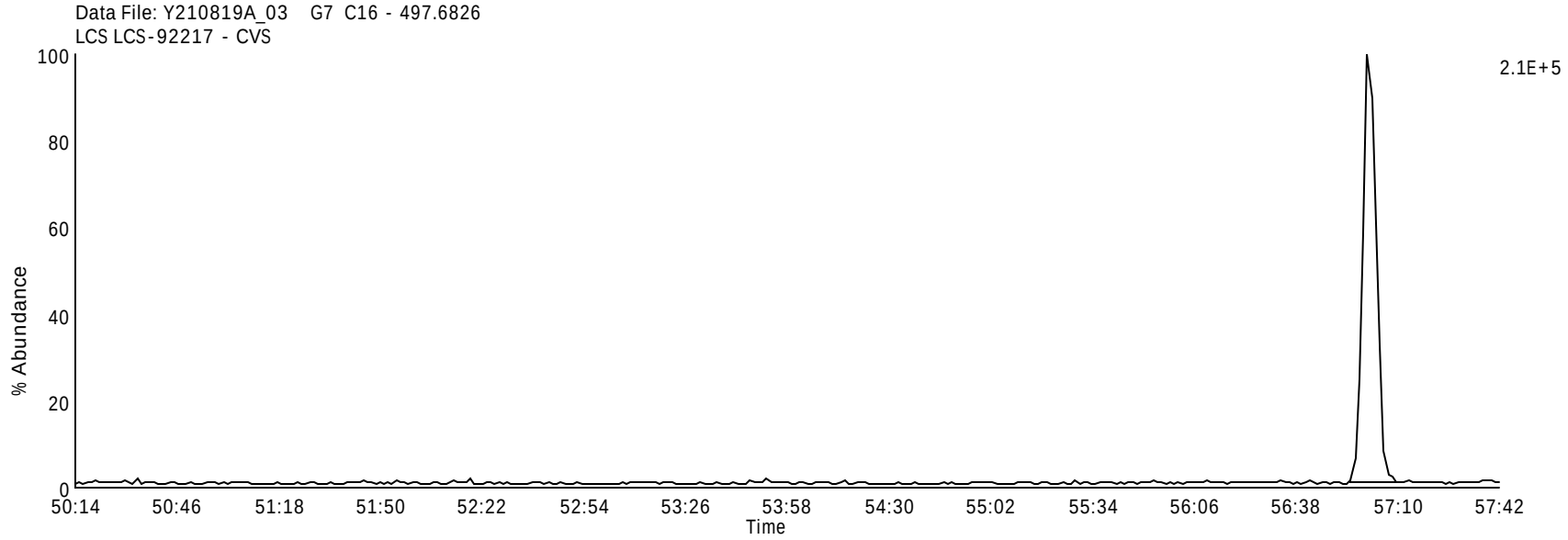
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV





Deca Chlorinated Biphenyl	
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

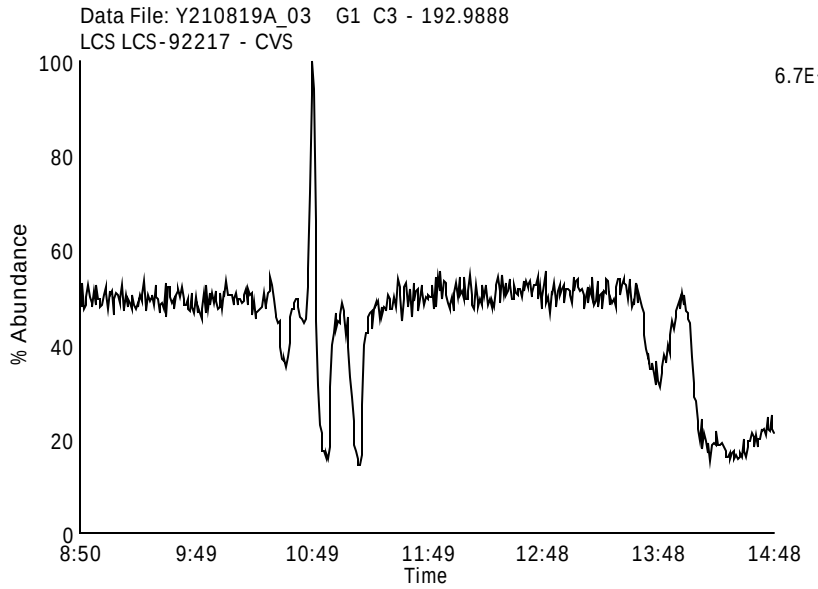


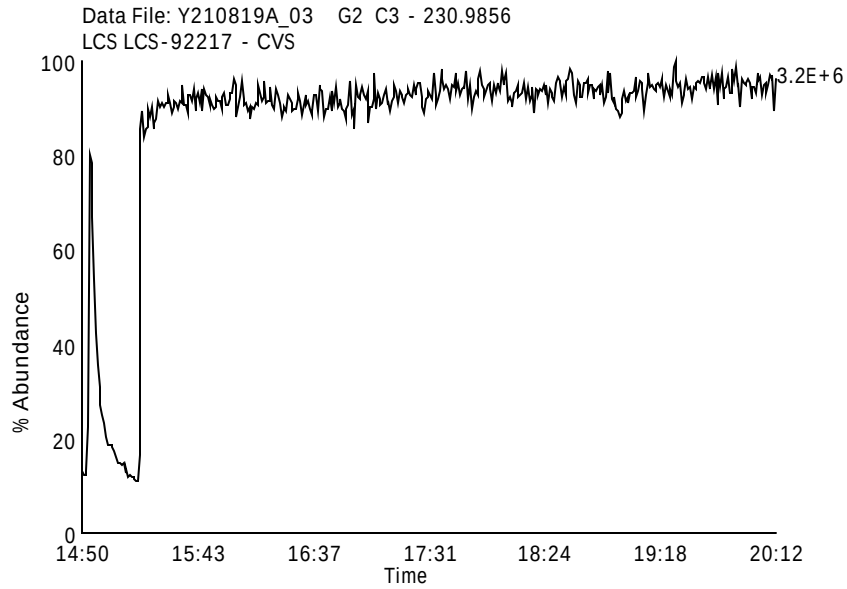


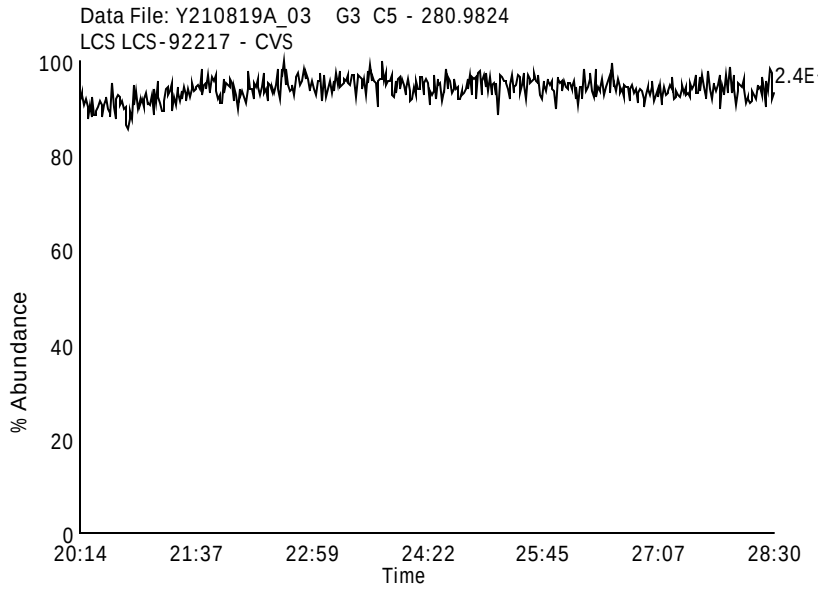
Group 1 - 4 Lock mass

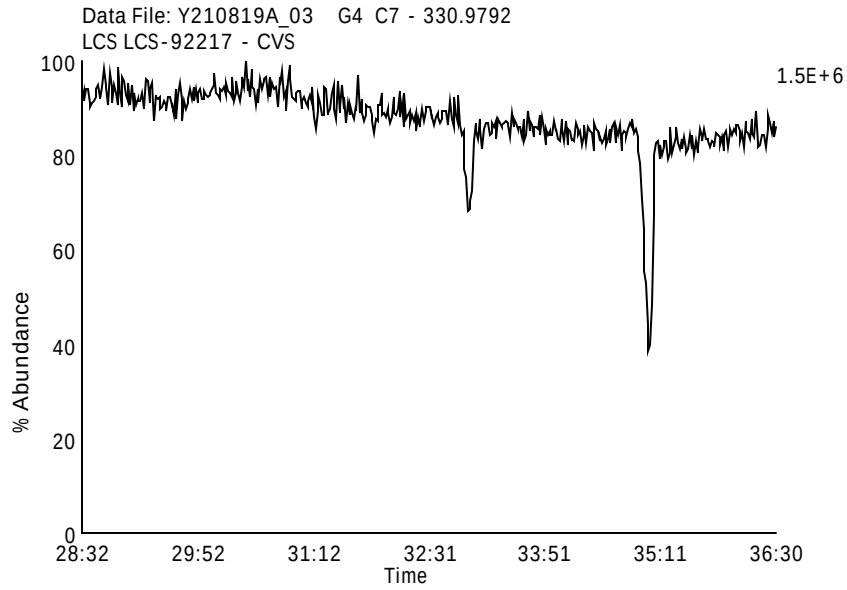
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV





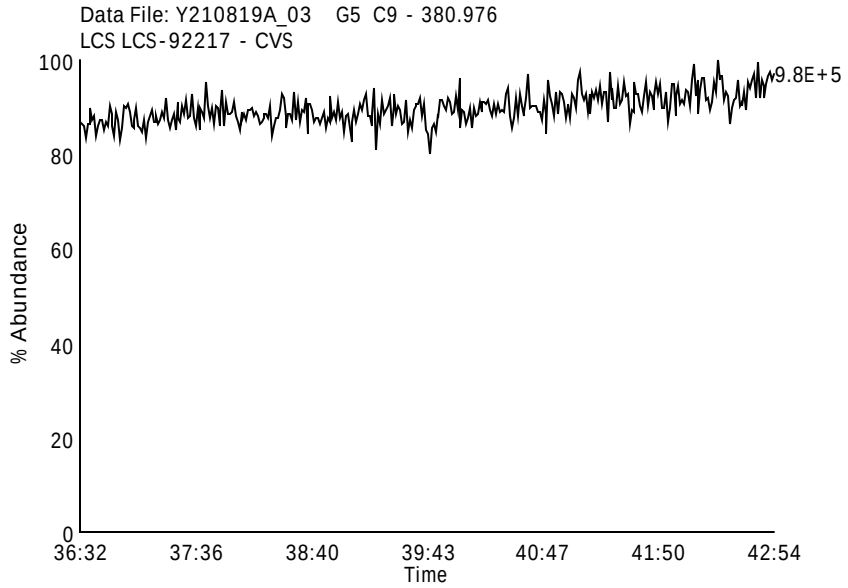


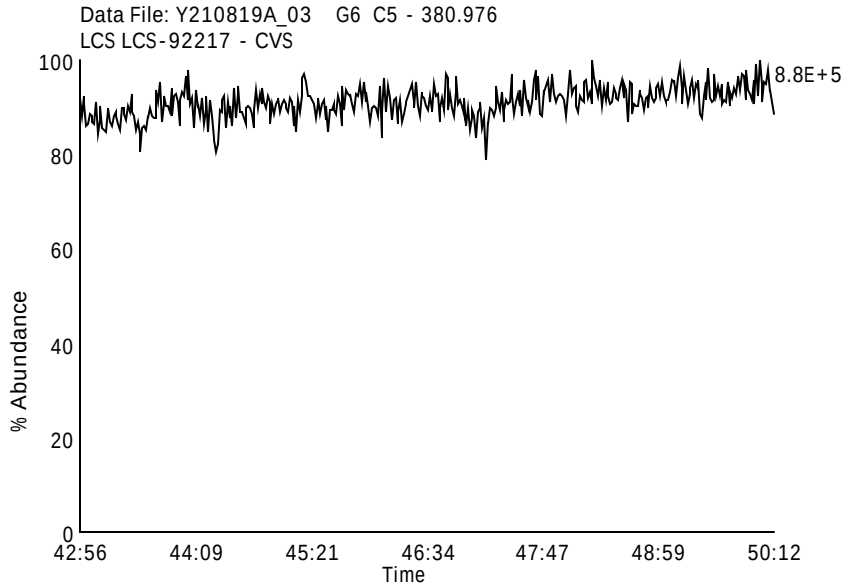


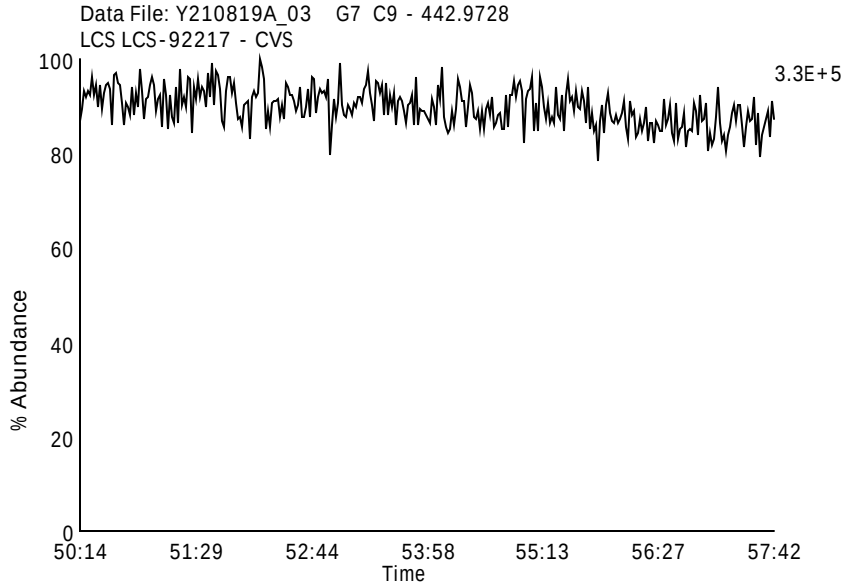
Group 5 - 7 Lock mass

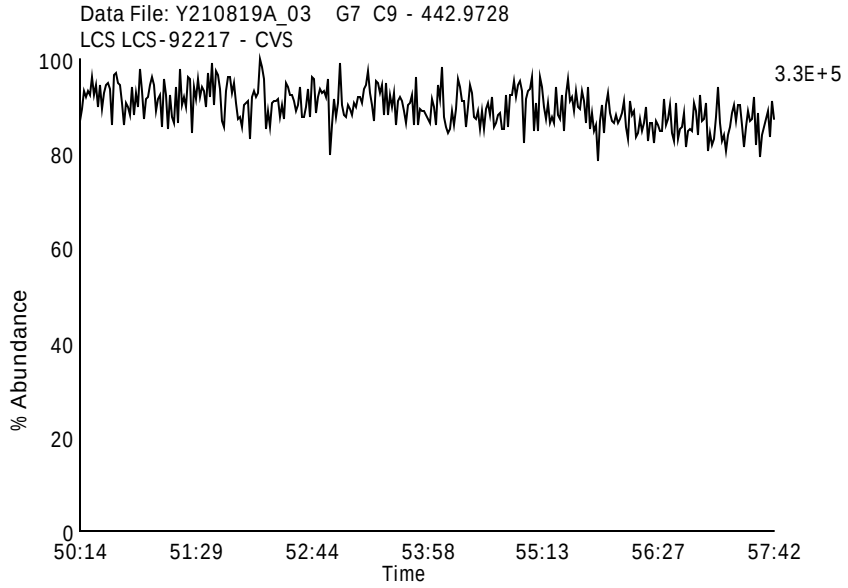
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV









Pace Analytical Services, LLC
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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CBLKHX	Injected By	CVS
Lab ID	BLANK-92218	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_09	GC Column ID	261111-02
Analyzed	08/19/2021 19:31	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.78	2518360	3210902	
13C-3,3',4,4'-TeCB	77	35.471	0.80	2697212	3391065	
13C-2,3,3',4,4'-PeCB	105	39.048	1.57	2894242	1847111	
13C-2,3,4,4',5-PeCB	114	38.411	1.52	3038823	1995677	
13C-2,3',4,4',5-PeCB	118	37.857	1.54	3060054	1989395	
13C-2,3',4,4',5'-PeCB	123	37.522	1.51	2939992	1945132	
13C-3,3',4,4',5-PeCB	126	42.200	1.53	2647592	1731898	
13C-HxCB(156/157)	156/157	45.274	1.24	4785122	3855351	
13C-2,3',4,4',5,5'-HxCB	167	44.100	1.23	2579704	2095511	
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.22	2182551	1794490	
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.10	2054367	1865289	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.04	7848974	7578425	
13C-2,3,3',5,5'-PeCB	111	35.538	1.61	8487907	5278023	
13C-2,2',3,3',5,5',6-HpCB	178	41.496	1.09	5491313	5018423	
Recovery Standards						
13C-2,5-DiCB	9	15.553	1.51	8593533	5691447	
13C-2,2',5,5'-TeCB	52	25.438	0.80	4575663	5744048	
13C-2,2',4,5,5'-PeCB	101	32.721	1.54	5387801	3503387	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.25	4742652	3796208	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.93	2466975	2651666	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CBLKHX	Injected By	CVS
Lab ID	BLANK-92218	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_09	GC Column ID	261111-02
Analyzed	08/19/2021 19:31	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.538	0.79	26909	33876	
81		34.917	1.78	14201	7977	
105		39.065	1.67	47302	28314	
118		37.891	1.62	119063	73586	
123		37.589	1.44	13424	9353	
156	156/157	45.257	1.17	49856	42453	
157	156/157	45.257	1.17	(49856)	(42453)	
167		44.151	0.52	9377	18130	
169		48.527	1.41	3356	2385	
189		51.088	2.08	9414	4534	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CLCSCV	Injected By	CVS
Lab ID	LCS-92217	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_03	GC Column ID	261111-02
Analyzed	08/19/2021 13:33	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.868	0.78	2111435	2708284	
13C-3,3',4,4'-TeCB	77	35.438	0.80	2284176	2841357	
13C-2,3,3',4,4'-PeCB	105	39.032	1.52	2478408	1632856	
13C-2,3,4,4',5-PeCB	114	38.378	1.55	2330025	1504294	
13C-2,3',4,4',5-PeCB	118	37.841	1.54	2460960	1595257	
13C-2,3',4,4',5'-PeCB	123	37.506	1.55	2321195	1497794	
13C-3,3',4,4',5-PeCB	126	42.185	1.54	2254783	1466086	
13C-HxCB(156/157)	156/157	45.258	1.23	3974052	3233763	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.22	2045827	1679232	
13C-3,3',4,4',5,5'-HxCB	169	48.529	1.22	1888640	1554165	
13C-2,3,3',4,4',5,5'-HpCB	189	51.068	1.02	1625922	1589676	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.04	6699982	6439049	
13C-2,3,3',5,5'-PeCB	111	35.505	1.55	6791667	4385104	
13C-2,2',3,3',5,5',6-HpCB	178	41.480	1.12	4351948	3878605	
Recovery Standards						
13C-2,5-DiCB	9	15.577	1.53	6042244	3937903	
13C-2,2',5,5'-TeCB	52	25.422	0.81	3272855	4030592	
13C-2,2',4,5,5'-PeCB	101	32.705	1.58	3736156	2365416	
13C-2,2',3,4,4',5'-HxCB	138	41.011	1.27	3348889	2643728	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.90	1844790	2055772	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CLCSCV	Injected By	CVS
Lab ID	LCS-92217	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_03	GC Column ID	261111-02
Analyzed	08/19/2021 13:33	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
81		34.885	0.79	1061766	1341581	
77		35.472	0.74	1047911	1408437	
105		39.049	1.46	1206307	823895	
114		38.411	1.56	1152202	737592	
118		37.858	1.43	1248369	873894	
123		37.523	1.44	1167558	811223	
126		42.201	1.63	1165474	714297	
156	156/157	45.258	1.24	2032908	1633070	
157	156/157	45.258	1.24	(2032908)	(1633070)	
167		44.101	1.15	1031393	894743	
169		48.545	1.23	970658	787410	
189		51.089	1.00	800418	802641	

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MSSV SIM - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2945158	2945158BLANK	92	107
2945159	2945159LCS	85	94
60375692001	GB-31/3-5	87	101
60375692002	GB-31/5-7	83	96
60375692003	GB-24/1-3	88	101
60375692004	GB-24/3-5	82	96
60375692005	GB-17/1-3	80	100
60375692006	GB-17/3-5	84	97
60375692009	GB-18/3-5	82	104
60375692010	GB-18/5-7	82	97
60375692013	GB-04/2-3	82	93
60375692014	GB-04/3-5	80	93
60375692015	GB-04/3-5D	80	94
60375692016	GB-05/3-5	81	92
60375692017	GB-05/5-7	80	94
60375692018	GB-12/2.5-3.5	79	97
60375692019	GB-12/4-6	82	94
60375692020	GB-19/0-2	82	105
60375692021	GB-19/3-5	77	93

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2945159LCS
Date Extracted: 07/23/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 072821.B\0728AP14.D
SDG No.: 60375692

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	31.9	26.5	83	45-120
Acenaphthylene	31.9	25.6	80	50-120
Anthracene	31.9	28.4	89	50-120
Benzo(a)anthracene	31.9	28.8	90	55-125
Benzo(a)pyrene	31.9	27.4	86	45-120
Benzo(b)fluoranthene	31.9	28.5	89	50-125
Benzo(g,h,i)perylene	31.9	30.2	95	40-120
Benzo(k)fluoranthene	31.9	29.0	91	55-120
Chrysene	31.9	28.6	90	55-120
Dibenz(a,h)anthracene	31.9	29.8	93	40-125
Fluoranthene	31.9	30.3	95	50-125
Fluorene	31.9	27.2	85	50-120
Indeno(1,2,3-cd)pyrene	31.9	29.2	92	44-125
Naphthalene	31.9	26.0	82	45-120
Phenanthrene	31.9	28.8	90	50-125
Pyrene	31.9	30.3	95	50-125

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 4:15

MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2945160MS
Date Extracted: 07/23/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSS5
Lab File ID: 072821.B\0728AP17.D
Parent Sample ID: 60375626032
SDG No.: 60375692

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	41.4	<1.5	34.5	83	10-150
Acenaphthylene	41.4	<1.5	33.6	81	30-125
Anthracene	41.4	<1.7	37.4	91	10-160
Benzo(a)anthracene	41.4	<1.9	37.3	90	10-160
Benzo(a)pyrene	41.4	<1.5	36.4	88	10-150
Benzo(b)fluoranthene	41.4	<2.0	36.4	88	10-165
Benzo(g,h,i)perylene	41.4	<1.8	36.0	87	10-155
Benzo(k)fluoranthene	41.4	<2.3	38.3	93	10-165
Chrysene	41.4	<2.0	36.7	89	10-150
Dibenz(a,h)anthracene	41.4	<1.8	35.7	86	10-175
Fluoranthene	41.4	<3.1	40.2	97	10-180
Fluorene	41.4	<1.6	36.0	87	20-145
Indeno(1,2,3-cd)pyrene	41.4	<1.8	34.7	84	10-150
Naphthalene	41.4	<1.8	34.6	84	10-165
Phenanthrene	41.4	<3.4	38.6	93	10-170
Pyrene	41.4	<2.2	39.9	96	10-180

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 4:15

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2945161MSD

Lab File ID (2): 072821.B\0728AP18.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	41.5	34.6	83	0	0-42	10-150
Acenaphthylene	41.5	34.0	82	1	0-44	30-125
Anthracene	41.5	37.5	90	0	0-54	10-160
Benzo(a)anthracene	41.5	38.4	92	3	0-62	10-160
Benzo(a)pyrene	41.5	37.2	90	2	0-66	10-150
Benzo(b)fluoranthene	41.5	40.3	97	10	0-61	10-165
Benzo(g,h,i)perylene	41.5	39.3	94	9	0-58	10-155
Benzo(k)fluoranthene	41.5	36.5	88	5	0-53	10-165
Chrysene	41.5	37.5	90	2	0-57	10-150
Dibenz(a,h)anthracene	41.5	39.0	94	9	0-48	10-175
Fluoranthene	41.5	40.4	97	1	0-54	10-180
Fluorene	41.5	36.6	88	2	0-39	20-145
Indeno(1,2,3-cd)pyrene	41.5	37.1	89	7	0-59	10-150
Naphthalene	41.5	35.0	84	1	0-54	10-165
Phenanthrene	41.5	38.3	92	1	0-51	10-170
Pyrene	41.5	40.3	97	1	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 4:15

SAMPLE NO.

2945158BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2945158

Lab File ID: 072821.B\0728AP13.D Date Analyzed: 07/28/2021 Time: 12:42

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2945159LCS	2945159	072821.B\0728AP14.D	07/28/2021 12:59
GB-31/3-5	60375692001	072821.B\0728AP19.D	07/28/2021 14:25
GB-31/5-7	60375692002	072821.B\0728AP20.D	07/28/2021 14:42
GB-24/1-3	60375692003	072821.B\0728AP21.D	07/28/2021 15:00
GB-24/3-5	60375692004	072821.B\0728AP22.D	07/28/2021 15:17
GB-17/1-3	60375692005	072821.B\0728AP23.D	07/28/2021 15:34
GB-17/3-5	60375692006	072821.B\0728AP24.D	07/28/2021 15:51
GB-18/3-5	60375692009	072821.B\0728AP25.D	07/28/2021 16:09
GB-18/5-7	60375692010	072821.B\0728AP26.D	07/28/2021 16:26
GB-04/2-3	60375692013	072821.B\0728AP27.D	07/28/2021 16:43
GB-04/3-5	60375692014	072821.B\0728AP28.D	07/28/2021 17:00
GB-04/3-5D	60375692015	072821.B\0728AP29.D	07/28/2021 17:18
GB-05/3-5	60375692016	072821.B\0728AP30.D	07/28/2021 17:35
GB-05/5-7	60375692017	072821.B\0728AP31.D	07/28/2021 17:52
GB-12/2.5-3.5	60375692018	072821.B\0728AP32.D	07/28/2021 18:09
GB-12/4-6	60375692019	072821.B\0728AP33.D	07/28/2021 18:26
GB-19/0-2	60375692020	072821.B\0728AP34.D	07/28/2021 18:43
GB-19/3-5	60375692021	072821.B\0728AP35.D	07/28/2021 19:01

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW
Lab File ID: 072721.B\0727ADFT.D DFTPP Injection Date 07/27/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.22	(16.76)[1]
68	Less than 2.00% of mass 69	0.37	(1.34)[2]
69	Mass 69 relative abundance	27.19	(20.51)[2]
70	Less than 2.00% of mass 69	0.15	(0.57)[2]
127	10.00 - 80.00% of mass 442	42.09	(31.74)[2]
197	Less than 2.00% of mass 198	0.00	
198	Greater than 50.00% of mass 442	100.00	(75.42)[2]
199	5.00 - 9.00% of mass 198	6.80	
275	10.00 - 60.00% of mass 442	26.56	(20.03)[2]
365	Greater than 1.00% of mass 442	3.84	(2.90)[2]
441	Present, but less than mass 443	20.27	
442	Greater than 50.00% of mass 198	132.60	
443	15.00 - 24.00% of mass 442	26.31	(19.84)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19896110CAL6	19896110CAL6	072721.B\0727API6.D	07/27/2021	08:37
19896111CAL1	19896111CAL1	072721.B\0727API1.D	07/27/2021	08:57
19896112CAL2	19896112CAL2	072721.B\0727API2.D	07/27/2021	09:14
19896113CAL3	19896113CAL3	072721.B\0727API3.D	07/27/2021	09:31
19896114CAL4	19896114CAL4	072721.B\0727API4.D	07/27/2021	09:48
19896115CAL5	19896115CAL5	072721.B\0727API5.D	07/27/2021	10:05
19896116CAL7	19896116CAL7	072721.B\0727API7.D	07/27/2021	10:22
19896117CAL8	19896117CAL8	072721.B\0727API8.D	07/27/2021	10:40
19896118ICV	19896118ICV	072721.B\0727APICV.D	07/27/2021	10:57

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW
Lab File ID: 072821.B\0728ADFT.D DFTPP Injection Date 07/28/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	21.45	(15.55)[1]
68	Less than 2.00% of mass 69	0.37	(1.37)[2]
69	Mass 69 relative abundance	26.65	(19.32)[2]
70	Less than 2.00% of mass 69	0.14	(0.54)[2]
127	10.00 - 80.00% of mass 442	41.60	(30.15)[2]
197	Less than 2.00% of mass 198	0.46	
198	Greater than 50.00% of mass 442	100.00	(72.49)[2]
199	5.00 - 9.00% of mass 198	6.76	
275	10.00 - 60.00% of mass 442	27.03	(19.59)[2]
365	Greater than 1.00% of mass 442	3.94	(2.86)[2]
441	Present, but less than mass 443	21.39	
442	Greater than 50.00% of mass 198	137.96	
443	15.00 - 24.00% of mass 442	27.35	(19.83)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19736764CCV	19736764CCV	072821.B\0728API6.D	07/28/2021	08:58
2945158BLANK	2945158BLANK	072821.B\0728AP13.D	07/28/2021	12:42
2945159LCS	2945159LCS	072821.B\0728AP14.D	07/28/2021	12:59
GB-31/3-5	60375692001	072821.B\0728AP19.D	07/28/2021	14:25
GB-31/5-7	60375692002	072821.B\0728AP20.D	07/28/2021	14:42
GB-24/1-3	60375692003	072821.B\0728AP21.D	07/28/2021	15:00
GB-24/3-5	60375692004	072821.B\0728AP22.D	07/28/2021	15:17
GB-17/1-3	60375692005	072821.B\0728AP23.D	07/28/2021	15:34
GB-17/3-5	60375692006	072821.B\0728AP24.D	07/28/2021	15:51
GB-18/3-5	60375692009	072821.B\0728AP25.D	07/28/2021	16:09
GB-18/5-7	60375692010	072821.B\0728AP26.D	07/28/2021	16:26
GB-04/2-3	60375692013	072821.B\0728AP27.D	07/28/2021	16:43
GB-04/3-5	60375692014	072821.B\0728AP28.D	07/28/2021	17:00
GB-04/3-5D	60375692015	072821.B\0728AP29.D	07/28/2021	17:18
GB-05/3-5	60375692016	072821.B\0728AP30.D	07/28/2021	17:35
GB-05/5-7	60375692017	072821.B\0728AP31.D	07/28/2021	17:52
GB-12/2.5-3.5	60375692018	072821.B\0728AP32.D	07/28/2021	18:09
GB-12/4-6	60375692019	072821.B\0728AP33.D	07/28/2021	18:26
GB-19/0-2	60375692020	072821.B\0728AP34.D	07/28/2021	18:43

MSSV SIM - FORM V SVOA-2

SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW

Lab File ID: 072821.B\0728ADFT.D DFTPP Injection Date: 07/28/2021

Instrument ID: 60MSS5 DFTPP Injection Time: 08:46

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
GB-19/3-5	60375692021	072821.B\0728AP35.D	07/28/2021	19:01

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW

Sample ID : 19736764CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:58

Lab File ID: 072821.B\0728API6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				120000	6.408	165213	9.875	212728	4.362
UPPER LIMIT				240000	6.908	330426	10.375	425456	4.862
LOWER LIMIT				60000	5.908	82606.5	9.375	106364	3.862
LAB SAMPLE ID	SAMPLE NO.								
2945158	2945158BLANK			136416	6.407	200956	9.869	221595	4.355
2945159	2945159LCS			137885	6.407	197960	9.873	229315	4.355
60375692001	GB-31/3-5			138327	6.408	203288	9.871	222021	4.357
60375692002	GB-31/5-7			140292	6.408	204807	9.873	224640	4.357
60375692003	GB-24/1-3			141696	6.408	202055	9.88	226032	4.357
60375692004	GB-24/3-5			136466	6.408	203134	9.869	217302	4.359
60375692005	GB-17/1-3			140354	6.408	182004	9.873	224422	4.358
60375692006	GB-17/3-5			141714	6.408	206840	9.871	230778	4.357
60375692009	GB-18/3-5			146244	6.408	174997	9.878	235388	4.357
60375692010	GB-18/5-7			144472	6.408	213146	9.87	231084	4.356
60375692013	GB-04/2-3			145796	6.408	214497	9.867	233528	4.356
60375692014	GB-04/3-5			140764	6.408	213632	9.864	226715	4.359
60375692015	GB-04/3-5D			141482	6.408	208906	9.867	226815	4.356
60375692016	GB-05/3-5			146705	6.408	215086	9.867	236448	4.355
60375692017	GB-05/5-7			143006	6.408	209405	9.868	230462	4.357
60375692018	GB-12/2.5-3.5			138784	6.408	197549	9.866	220252	4.358
60375692019	GB-12/4-6			150353	6.408	220012	9.868	243629	4.357
60375692020	GB-19/0-2			149972	6.408	195009	9.867	241563	4.362
60375692021	GB-19/3-5			146806	6.407	213214	9.867	236691	4.357

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)A

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW

Sample ID : 19736764CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:58

Lab File ID: 072821.B\0728API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		103173	11.209	215277	7.752
UPPER LIMIT		206346	11.709	430554	8.252
LOWER LIMIT		51586.5	10.709	107638.5	7.252
LAB SAMPLE ID	SAMPLE NO.				
2945158	2945158BLANK	135990	11.204	240965	7.753
2945159	2945159LCS	135470	11.209	240542	7.753
60375692001	GB-31/3-5	131966	11.206	245526	7.753
60375692002	GB-31/5-7	140836	11.21	244326	7.753
60375692003	GB-24/1-3	145505	11.218	244906	7.754
60375692004	GB-24/3-5	127976	11.203	241804	7.753
60375692005	GB-17/1-3	125838	11.209	251046	7.754
60375692006	GB-17/3-5	133059	11.206	248635	7.753
60375692009	GB-18/3-5	122041	11.213	254080	7.754
60375692010	GB-18/5-7	140307	11.203	254043	7.754
60375692013	GB-04/2-3	135799	11.2	263602	7.753
60375692014	GB-04/3-5	135480	11.195	250522	7.753
60375692015	GB-04/3-5D	130709	11.2	253157	7.753
60375692016	GB-05/3-5	137109	11.2	257186	7.753
60375692017	GB-05/5-7	133547	11.202	254750	7.753
60375692018	GB-12/2.5-3.5	126582	11.198	250193	7.753
60375692019	GB-12/4-6	138814	11.201	265556	7.753
60375692020	GB-19/0-2	134147	11.2	265433	7.753
60375692021	GB-19/3-5	130829	11.201	261165	7.753

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

GB-31/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692001
Date Analyzed: 07/28/2021 14:25
Lab File ID: 072821.B\0728AP19.D
Initial wt/vol: 30.14 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

GB-31/5-7

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692002
Date Analyzed: 07/28/2021 14:42
Lab File ID: 072821.B\0728AP20.D
Initial wt/vol: 30.5 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

GB-24/1-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692003
Date Analyzed: 07/28/2021 15:00
Lab File ID: 072821.B\0728AP21.D
Initial wt/vol: 30.75 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 17.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	6.2	
50-32-8	Benzo(a)pyrene	5.1	
205-99-2	Benzo(b)fluoranthene	11.2	
191-24-2	Benzo(g,h,i)perylene	7.0	
207-08-9	Benzo(k)fluoranthene	4.5	
218-01-9	Chrysene	8.8	
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	14.6	
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.4	
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	6.0	
129-00-0	Pyrene	15.2	

SAMPLE NO.

GB-24/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692004
Date Analyzed: 07/28/2021 15:17
Lab File ID: 072821.B\0728AP22.D
Initial wt/vol: 30.39 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

GB-17/1-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692005
Date Analyzed: 07/28/2021 15:34
Lab File ID: 072821.B\0728AP23.D
Initial wt/vol: 30.29 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	9.1	
56-55-3	Benzo(a)anthracene	91.0	
50-32-8	Benzo(a)pyrene	97.7	
205-99-2	Benzo(b)fluoranthene	204	
191-24-2	Benzo(g,h,i)perylene	109	
207-08-9	Benzo(k)fluoranthene	49.0	
218-01-9	Chrysene	136	
53-70-3	Dibenz(a,h)anthracene	19.6	
206-44-0	Fluoranthene	240	
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	86.6	
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	59.5	
129-00-0	Pyrene	210	

SAMPLE NO.

GB-17/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692006
Date Analyzed: 07/28/2021 15:51
Lab File ID: 072821.B\0728AP24.D
Initial wt/vol: 30.31 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	6.1	
50-32-8	Benzo(a)pyrene	6.3	
205-99-2	Benzo(b)fluoranthene	12.6	
191-24-2	Benzo(g,h,i)perylene	6.3	
207-08-9	Benzo(k)fluoranthene	6.3	
218-01-9	Chrysene	8.6	
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	19.4	
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.8	
91-20-3	Naphthalene	5.4	
85-01-8	Phenanthrene	6.3	
129-00-0	Pyrene	15.0	

SAMPLE NO.

GB-18/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692009
Date Analyzed: 07/28/2021 16:09
Lab File ID: 072821.B\0728AP25.D
Initial wt/vol: 30.46 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 23.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	31.0	
208-96-8	Acenaphthylene	18.0	
120-12-7	Anthracene	124	
56-55-3	Benzo(a)anthracene	237	
50-32-8	Benzo(a)pyrene	183	
205-99-2	Benzo(b)fluoranthene	229	
191-24-2	Benzo(g,h,i)perylene	118	
207-08-9	Benzo(k)fluoranthene	136	
218-01-9	Chrysene	236	
53-70-3	Dibenz(a,h)anthracene	22.6	
206-44-0	Fluoranthene	470	
86-73-7	Fluorene	40.2	
193-39-5	Indeno(1,2,3-cd)pyrene	91.5	
91-20-3	Naphthalene	8.3	
85-01-8	Phenanthrene	328	
129-00-0	Pyrene	586	

SAMPLE NO.

GB-18/5-7

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692010
Date Analyzed: 07/28/2021 16:26
Lab File ID: 072821.B\0728AP26.D
Initial wt/vol: 30.1 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 12.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	7.1	
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	4.7	
129-00-0	Pyrene	6.2	

SAMPLE NO.

GB-04/2-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692013
Date Analyzed: 07/28/2021 16:43
Lab File ID: 072821.B\0728AP27.D
Initial wt/vol: 30.89 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	16.2	
50-32-8	Benzo(a)pyrene	12.0	
205-99-2	Benzo(b)fluoranthene	27.5	
191-24-2	Benzo(g,h,i)perylene	11.1	
207-08-9	Benzo(k)fluoranthene	14.8	
218-01-9	Chrysene	25.1	
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	62.1	
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	9.1	
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	19.2	
129-00-0	Pyrene	50.7	

SAMPLE NO.

GB-04/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692014
Date Analyzed: 07/28/2021 17:00
Lab File ID: 072821.B\0728AP28.D
Initial wt/vol: 30.59 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	4.7	
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	6.7	
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	5.1	

SAMPLE NO.

GB-04/3-5D

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692015
Date Analyzed: 07/28/2021 17:18
Lab File ID: 072821.B\0728AP29.D
Initial wt/vol: 31.5 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

GB-05/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692016
Date Analyzed: 07/28/2021 17:35
Lab File ID: 072821.B\0728AP30.D
Initial wt/vol: 31.02 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

GB-05/5-7

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692017
Date Analyzed: 07/28/2021 17:52
Lab File ID: 072821.B\0728AP31.D
Initial wt/vol: 30.82 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

GB-12/2.5-3.5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692018
Date Analyzed: 07/28/2021 18:09
Lab File ID: 072821.B\0728AP32.D
Initial wt/vol: 30.67 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	6.3	
56-55-3	Benzo(a)anthracene	52.5	
50-32-8	Benzo(a)pyrene	41.1	
205-99-2	Benzo(b)fluoranthene	81.3	
191-24-2	Benzo(g,h,i)perylene	32.2	
207-08-9	Benzo(k)fluoranthene	39.5	
218-01-9	Chrysene	62.2	
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	143	
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	25.7	
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	30.6	
129-00-0	Pyrene	119	

SAMPLE NO.

GB-12/4-6

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692019
Date Analyzed: 07/28/2021 18:26
Lab File ID: 072821.B\0728AP33.D
Initial wt/vol: 30.46 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	9.4	
50-32-8	Benzo(a)pyrene	7.2	
205-99-2	Benzo(b)fluoranthene	15.5	
191-24-2	Benzo(g,h,i)perylene	6.1	
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	11.2	
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	26.8	
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	5.7	
129-00-0	Pyrene	21.2	

SAMPLE NO.

GB-19/0-2

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692020
Date Analyzed: 07/28/2021 18:43
Lab File ID: 072821.B\0728AP34.D
Initial wt/vol: 30.17 g
Final wt/vol: 1 mL
Dilution: 10
Instrument: 60MSS5
Percent Moisture: 12.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	686	
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	1160	
56-55-3	Benzo(a)anthracene	2240	
50-32-8	Benzo(a)pyrene	1640	
205-99-2	Benzo(b)fluoranthene	2870	
191-24-2	Benzo(g,h,i)perylene	1210	
207-08-9	Benzo(k)fluoranthene	1060	
218-01-9	Chrysene	2170	
53-70-3	Dibenz(a,h)anthracene	271	
206-44-0	Fluoranthene	4890	
86-73-7	Fluorene	568	
193-39-5	Indeno(1,2,3-cd)pyrene	1060	
91-20-3	Naphthalene	49.2	
85-01-8	Phenanthrene	4380	
129-00-0	Pyrene	4120	

SAMPLE NO.

GB-19/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/23/2021 04:13
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 60375692021
Date Analyzed: 07/28/2021 19:01
Lab File ID: 072821.B\0728AP35.D
Initial wt/vol: 30.88 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 15.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	5.3	
56-55-3	Benzo(a)anthracene	11.2	
50-32-8	Benzo(a)pyrene	8.8	
205-99-2	Benzo(b)fluoranthene	16.9	
191-24-2	Benzo(g,h,i)perylene	6.0	
207-08-9	Benzo(k)fluoranthene	4.2	
218-01-9	Chrysene	11.1	
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	29.9	
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.2	
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	22.0	
129-00-0	Pyrene	22.8	

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375692

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.11894	1.09422	1.06549	1.09074	1.06233	1.07547
Acenaphthylene	Averaged	1.79964	1.76321	1.71369	1.75430	1.72876	1.79109
Anthracene	Averaged	0.95480	0.98971	0.96996	1.02024	0.95352	0.91919
Benzo(a)anthracene	Averaged	1.27227	1.27235	1.22018	1.25033	1.17391	1.19779
Benzo(a)pyrene	Averaged	1.16001	1.16178	1.11150	1.18053	1.10095	1.09725
Benzo(b)fluoranthene	Averaged	1.36990	1.36367	1.29770	1.32666	1.29133	1.28286
Benzo(g,h,i)perylene	Averaged	0.56259	0.56634	0.51596	0.56411	0.50102	0.54197
Benzo(k)fluoranthene	Averaged	1.36448	1.32831	1.25870	1.40703	1.23369	1.19632
Chrysene	Averaged	1.10282	1.12963	1.07868	1.12828	1.06358	1.06173
Dibenz(a,h)anthracene	Averaged	0.74399	0.74879	0.70296	0.75423	0.68003	0.70465
Fluoranthene	Averaged	1.14036	1.17220	1.14496	1.19523	1.12899	1.08856
Fluorene	Averaged	1.28712	1.25285	1.22613	1.25270	1.22477	1.24394
Indeno(1,2,3-cd)pyrene	Averaged	0.78877	0.80206	0.74322	0.79324	0.72210	0.77636
Naphthalene	Averaged	1.01672	0.97880	0.95885	0.97000	0.94927	0.92788
Phenanthrene	Averaged	0.96149	0.98305	0.95421	1.00263	0.93523	0.92065
Pyrene	Averaged	1.39709	1.43920	1.38165	1.44039	1.35084	1.32652
2-Fluorobiphenyl (S)	Averaged	1.43833	1.39109	1.34963	1.37522	1.30411	1.31850
Terphenyl-d14 (S)	Averaged	1.37860	1.11909	1.05333	1.07924	1.01676	0.97814

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/08/2021 4:15

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375692

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.04529	0.97405
Acenaphthylene	Averaged	1.74049	1.61912
Anthracene	Averaged	0.89655	0.84396
Benzo(a)anthracene	Averaged	1.17451	1.07257
Benzo(a)pyrene	Averaged	1.07722	0.99775
Benzo(b)fluoranthene	Averaged	1.20236	1.15863
Benzo(g,h,i)perylene	Averaged	0.56424	0.45218
Benzo(k)fluoranthene	Averaged	1.13691	1.10135
Chrysene	Averaged	1.05875	1.00538
Dibenz(a,h)anthracene	Averaged	0.69301	0.59322
Fluoranthene	Averaged	1.03891	0.96136
Fluorene	Averaged	1.21855	1.12528
Indeno(1,2,3-cd)pyrene	Averaged	0.78171	0.64710
Naphthalene	Averaged	0.93595	0.88423
Phenanthrene	Averaged	0.88955	0.82761
Pyrene	Averaged	1.31974	1.20996
2-Fluorobiphenyl (S)	Averaged	1.28345	1.17304
Terphenyl-d14 (S)	Averaged	0.97497	0.91027

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375692

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	4.07400			1.06582	
Acenaphthylene	Averaged	3.24813			1.73879	
Anthracene	Averaged	5.89516			0.94349	
Benzo(a)anthracene	Averaged	5.51081			1.20424	
Benzo(a)pyrene	Averaged	5.27878			1.11087	
Benzo(b)fluoranthene	Averaged	5.73520			1.28664	
Benzo(g,h,i)perylene	Averaged	7.71237			0.53355	
Benzo(k)fluoranthene	Averaged	8.63097			1.25335	
Chrysene	Averaged	3.82632			1.07860	
Dibenz(a,h)anthracene	Averaged	7.43095			0.70261	
Fluoranthene	Averaged	6.92175			1.10882	
Fluorene	Averaged	3.84432			1.22892	
Indeno(1,2,3-cd)pyrene	Averaged	6.85201			0.75682	
Naphthalene	Averaged	4.10623			0.95271	
Phenanthrene	Averaged	5.96680			0.93430	
Pyrene	Averaged	5.55817			1.35818	
2-Fluorobiphenyl (S)	Averaged	6.06551			1.32917	
Terphenyl-d14 (S)	Averaged	13.46000			1.06380	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19896118ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:57

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721.B\0727APICV.D Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375692

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	0.22095	0.0500	0.9060	20.0000
Acenaphthylene	Averaged	1.73879	0.35133	0.0500	3.0080	20.0000
Anthracene	Averaged	0.94349	0.18059	0.0500	-2.5757	20.0000
Benzo(a)anthracene	Averaged	1.20424	0.22518	0.0500	-0.5352	20.0000
Benzo(a)pyrene	Averaged	1.11087	0.19714	0.0500	-1.2261	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	0.25506	0.0500	-0.2937	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.11115	0.0500	1.5775	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	0.25020	0.0500	-4.5498	20.0000
Chrysene	Averaged	1.07860	0.20717	0.0500	-1.5645	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.13678	0.0500	0.2906	20.0000
Fluoranthene	Averaged	1.10882	0.22009	0.0500	-1.8274	20.0000
Fluorene	Averaged	1.22892	0.24519	0.0500	1.2220	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.15867	0.0500	2.5815	20.0000
Naphthalene	Averaged	0.95271	0.18683	0.0500	-2.6064	20.0000
Phenanthrene	Averaged	0.93430	0.18236	0.0500	-1.4614	20.0000
Pyrene	Averaged	1.35818	0.26889	0.0500	-2.3305	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	0.00000	0.0500	-0.8029	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	0.00000	0.0500	-8.0523	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19736764CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 08:58

Instrument ID: 60MSS5 GC Column: Col 1
Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072821.B\0728API6.D
Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375692

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	1.06391	0.0500	-0.1793	20.0000
Acenaphthylene	Averaged	1.73879	1.77380	0.0500	2.0138	20.0000
Anthracene	Averaged	0.94349	0.91912	0.0500	-2.5832	20.0000
Benzo(a)anthracene	Averaged	1.20424	1.17702	0.0500	-2.2604	20.0000
Benzo(a)pyrene	Averaged	1.11087	1.07600	0.0500	-3.1391	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	1.32038	0.0500	2.6220	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.49315	0.0500	-7.5723	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	1.18442	0.0500	-5.4998	20.0000
Chrysene	Averaged	1.07860	1.06280	0.0500	-1.4653	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.66045	0.0500	-6.0001	20.0000
Fluoranthene	Averaged	1.10882	1.07122	0.0500	-3.3909	20.0000
Fluorene	Averaged	1.22892	1.23598	0.0500	0.5749	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.70906	0.0500	-6.3103	20.0000
Naphthalene	Averaged	0.95271	0.95405	0.0500	0.1402	20.0000
Phenanthrene	Averaged	0.93430	0.91713	0.0500	-1.8385	20.0000
Pyrene	Averaged	1.35818	1.40736	0.0500	3.6215	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	1.31314	0.0500	-1.2062	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	1.06237	0.0500	-0.1345	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

BLANK

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 2945158
Date Analyzed: 07/28/2021 12:42
Lab File ID: 072821.B\0728AP13.D
Initial wt/vol: 30.66 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375692
Date Extracted: 07/23/2021 15:09
Lab Sample ID: 2945159
Date Analyzed: 07/28/2021 12:59
Lab File ID: 072821.B\0728AP14.D
Initial wt/vol: 31.38 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	26.5	
208-96-8	Acenaphthylene	25.6	
120-12-7	Anthracene	28.4	
56-55-3	Benzo(a)anthracene	28.8	
50-32-8	Benzo(a)pyrene	27.4	
205-99-2	Benzo(b)fluoranthene	28.5	
191-24-2	Benzo(g,h,i)perylene	30.2	
207-08-9	Benzo(k)fluoranthene	29.0	
218-01-9	Chrysene	28.6	
53-70-3	Dibenz(a,h)anthracene	29.8	
206-44-0	Fluoranthene	30.3	
86-73-7	Fluorene	27.2	
193-39-5	Indeno(1,2,3-cd)pyrene	29.2	
91-20-3	Naphthalene	26.0	
85-01-8	Phenanthrene	28.8	
129-00-0	Pyrene	30.3	

PCB - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8

LAB SAMPLE ID	SAMPLE NAME	DCBP
2945143	2945143BLANK	91
2945144	2945144LCS	98
60375692001	GB-31/3-5	93
60375692002	GB-31/5-7	97
60375692003	GB-24/1-3	103
60375692004	GB-24/3-5	95
60375692005	GB-17/1-3	108
60375692006	GB-17/3-5	122*
60375692007	GB-25/0-2	100

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(35-120)

* Values outside of QC Limits

PCB - FORM II SVOA-2
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8

LAB SAMPLE ID	SAMPLE NAME	DCBP
2945148	2945148BLANK	97
2945149	2945149LCS	100
2945150	2945150MS	111
2945151	2945151MSD	99
60375692008	GB-25/2-4	102
60375692009	GB-18/3-5	109
60375692010	GB-18/5-7	104
60375692011	GB-11/1-3	104
60375692012	GB-11/3-5	97
60375692016	GB-05/3-5	94
60375692017	GB-05/5-7	110
60375692018	GB-12/2.5-3.5	115
60375692019	GB-12/4-6	112
60375692020	GB-19/0-2	101
60375692021	GB-19/3-5	100
60375692022	GB-26/3-4	100
60375692023	GB-26/4-5	103

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(35-120)

* Values outside of QC Limits

PCB - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2945144LCS
Date Extracted: 07/23/2021
Date Analyzed (1): 07/26/2021
Instrument: 60GCS8
LCS Lot No: 42472
Lab File ID: 072621-1.B\0726210025.D
SDG No.: 60375692

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	160	157	98	65-120
PCB-1260 (Aroclor 1260)	160	158	99	65-120

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2945149LCS
Date Extracted: 07/23/2021
Date Analyzed (1): 07/26/2021
Instrument: 60GCS8
LCS Lot No: 42472
Lab File ID: 072621-1.B\0726210027.D
SDG No.: 60375692

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	163	174	107	65-120
PCB-1260 (Aroclor 1260)	163	171	105	65-120

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2945145MS
Date Extracted: 07/23/2021
Date Analyzed (1): 07/27/2021
Instrument: 60GCS8
Lab File ID: 072621-1.B\0726210100.D
Parent Sample ID: 60375626032
SDG No.: 60375692

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	205	<10.1	232	114	30-130
PCB-1260 (Aroclor 1260)	205	<8.0	237	116	15-155

Spike Recovery: 0 out of 2 outside limits.

09/17/2021 11:15

PCB - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60GCS8 Matrix Spike Duplicate - Sample No: 2945146MSD

Lab File ID (2): 072621-1.B\0726210101.D Date Analyzed (2): 07/27/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
PCB-1016 (Aroclor 1016)	207	250	121	7	0-40	30-130
PCB-1260 (Aroclor 1260)	207	235	113	1	0-40	15-155

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

09/17/2021 11:15

PCB - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2945150MS
Date Extracted: 07/23/2021
Date Analyzed (1): 07/27/2021
Instrument: 60GCS8
Lab File ID: 072621-1.B\0726210112.D
Parent Sample ID: GB-25/2-4
SDG No.: 60375692

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	204	ND	258	126	30-130
PCB-1260 (Aroclor 1260)	204	ND	260	127	15-155

Spike Recovery: 0 out of 2 outside limits.

09/17/2021 11:15

PCB - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60GCS8 Matrix Spike Duplicate - Sample No: 2945151MSD

Lab File ID (2): 072621-1.B\0726210113.D Date Analyzed (2): 07/27/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
PCB-1016 (Aroclor 1016)	202	212	105	19	0-40	30-130
PCB-1260 (Aroclor 1260)	202	218	108	17	0-40	15-155

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

09/17/2021 11:15

SAMPLE NO.

2945143BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8 Matrix: Solid Lab Sample ID: 2945143

Lab File ID (1): 072621-1.B\0726210024.D Date Analyzed (1): 07/26/2021 Time (1): 15:09

Lab File ID (2): 072621-2.B\0726210024.D Date Analyzed (2): 07/26/2021 Time (2): 15:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2945144LCS	2945144	072621-1.B\0726210025.D	07/26/2021 15:27
2945144LCS	2945144	072621-2.B\0726210025.D	07/26/2021 15:27
GB-31/3-5	60375692001	072621-1.B\0726210102.D	07/27/2021 14:23
GB-31/5-7	60375692002	072621-1.B\0726210103.D	07/27/2021 14:41
GB-24/1-3	60375692003	072621-1.B\0726210104.D	07/27/2021 14:59
GB-24/3-5	60375692004	072621-1.B\0726210105.D	07/27/2021 15:17
GB-17/1-3	60375692005	072621-1.B\0726210106.D	07/27/2021 15:35
GB-17/3-5	60375692006	072621-1.B\0726210107.D	07/27/2021 15:53
GB-25/0-2	60375692007	072621-1.B\0726210108.D	07/27/2021 16:11

SAMPLE NO.

2945148BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60GCS8 Matrix: Solid Lab Sample ID: 2945148

Lab File ID (1): 072621-1.B\0726210026.D Date Analyzed (1): 07/26/2021 Time (1):15:45

Lab File ID (2): 072621-2.B\0726210026.D Date Analyzed (2): 07/26/2021 Time (2):15:45

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2945149LCS	2945149	072621-1.B\0726210027.D	07/26/2021 16:02
2945149LCS	2945149	072621-2.B\0726210027.D	07/26/2021 16:02
GB-25/2-4	60375692008	072621-1.B\0726210111.D	07/27/2021 17:04
2945150MS	2945150	072621-1.B\0726210112.D	07/27/2021 17:22
2945150MS	2945150	072621-2.B\0726210112.D	07/27/2021 17:22
2945151MSD	2945151	072621-1.B\0726210113.D	07/27/2021 17:40
2945151MSD	2945151	072621-2.B\0726210113.D	07/27/2021 17:40
GB-18/3-5	60375692009	072621-1.B\0726210114.D	07/27/2021 17:58
GB-18/5-7	60375692010	072621-1.B\0726210115.D	07/27/2021 18:16
GB-11/1-3	60375692011	072621-1.B\0726210116.D	07/27/2021 18:34
GB-11/3-5	60375692012	072621-1.B\0726210117.D	07/27/2021 18:52
GB-05/3-5	60375692016	072621-1.B\0726210118.D	07/27/2021 19:10
GB-05/5-7	60375692017	072621-1.B\0726210119.D	07/27/2021 19:28
GB-12/2.5-3.5	60375692018	072621-1.B\0726210120.D	07/27/2021 19:45
GB-12/4-6	60375692019	072621-1.B\0726210121.D	07/27/2021 20:03
GB-19/0-2	60375692020	072621-1.B\0726210122.D	07/27/2021 20:21
GB-19/3-5	60375692021	072621-1.B\0726210123.D	07/27/2021 20:39
GB-26/3-4	60375692022	072621-1.B\0726210124.D	07/27/2021 20:57
GB-26/4-5	60375692023	072621-1.B\0726210125.D	07/27/2021 21:15

SAMPLE NO.

GB-31/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375692001

Date Analyzed: 07/27/2021 14:23 Lab File ID: 072621-1.B\0726210102.D

Initial wt/vol: 30.46 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-31/5-7

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375692002

Date Analyzed: 07/27/2021 14:41 Lab File ID: 072621-1.B\0726210103.D

Initial wt/vol: 30.87 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-24/1-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375692003

Date Analyzed: 07/27/2021 14:59 Lab File ID: 072621-1.B\0726210104.D

Initial wt/vol: 30.82 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 17.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-24/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375692004

Date Analyzed: 07/27/2021 15:17 Lab File ID: 072621-1.B\0726210105.D

Initial wt/vol: 31.11 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-17/1-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375692005

Date Analyzed: 07/27/2021 15:35 Lab File ID: 072621-1.B\0726210106.D

Initial wt/vol: 30.22 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-17/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375692006

Date Analyzed: 07/27/2021 15:53 Lab File ID: 072621-1.B\0726210107.D

Initial wt/vol: 30.11 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-25/0-2

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 60375692007

Date Analyzed: 07/27/2021 16:11 Lab File ID: 072621-1.B\0726210108.D

Initial wt/vol: 30.81 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-25/2-4

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692008

Date Analyzed: 07/27/2021 17:04 Lab File ID: 072621-1.B\0726210111.D

Initial wt/vol: 30.88 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-18/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692009

Date Analyzed: 07/27/2021 17:58 Lab File ID: 072621-1.B\0726210114.D

Initial wt/vol: 30.29 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 23.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-18/5-7

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692010

Date Analyzed: 07/27/2021 18:16 Lab File ID: 072621-1.B\0726210115.D

Initial wt/vol: 30.89 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 12.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-11/1-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692011

Date Analyzed: 07/27/2021 18:34 Lab File ID: 072621-1.B\0726210116.D

Initial wt/vol: 30.04 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 17.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-11/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692012

Date Analyzed: 07/27/2021 18:52 Lab File ID: 072621-1.B\0726210117.D

Initial wt/vol: 30.1 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 26.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-05/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692016

Date Analyzed: 07/27/2021 19:10 Lab File ID: 072621-1.B\0726210118.D

Initial wt/vol: 30.47 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-05/5-7

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692017

Date Analyzed: 07/27/2021 19:28 Lab File ID: 072621-1.B\0726210119.D

Initial wt/vol: 30.04 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-12/2.5-3.5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692018

Date Analyzed: 07/27/2021 19:45 Lab File ID: 072621-1.B\0726210120.D

Initial wt/vol: 30.49 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-12/4-6

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692019

Date Analyzed: 07/27/2021 20:03 Lab File ID: 072621-1.B\0726210121.D

Initial wt/vol: 30.49 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-19/0-2

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692020

Date Analyzed: 07/27/2021 20:21 Lab File ID: 072621-1.B\0726210122.D

Initial wt/vol: 30.25 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 12.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-19/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692021

Date Analyzed: 07/27/2021 20:39 Lab File ID: 072621-1.B\0726210123.D

Initial wt/vol: 30.87 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 15.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-26/3-4

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692022

Date Analyzed: 07/27/2021 20:57 Lab File ID: 072621-1.B\0726210124.D

Initial wt/vol: 31.04 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 17.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

GB-26/4-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 60375692023

Date Analyzed: 07/27/2021 21:15 Lab File ID: 072621-1.B\0726210125.D

Initial wt/vol: 30.63 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Calibration File Names:

Level 01: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210011.D
Level 02: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210012.D
Level 03: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210013.D
Level 04: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210014.D
Level 05: 1268ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210028.D
1262ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210027.D
1248ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210026.D
1242ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210025.D
1232ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210024.D
122154ical	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210023.D
1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210015.D
Level 06: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210016.D
Level 07: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210017.D
Level 08: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210018.D
Level 09: 1660	\\192.168.60.5\chem\60GCS8.i\071921-1.b\0719210019.D

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
1 PCB-1221 (Aroclor 1221)(1)	+++++	+++++	+++++	+++++	294310	+++++					
	+++++	+++++	+++++				AVRG		294310		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	231048	+++++					
	+++++	+++++	+++++				AVRG		231048		0.000e+000
(3)	+++++	+++++	+++++	+++++	706613	+++++					
	+++++	+++++	+++++				AVRG		706613		0.000e+000
2 PCB-1016 (Aroclor 1016) (1)	701000	617470	623735	472270	556160	536698					
	551539	577039	426185				AVRG		562455		14.56844
(2)	1474020	1256300	1258035	980363	1159898	1121734					
	1150250	1219050	908607				AVRG		1169806		14.08357
(3)	717320	632120	633300	513313	603913	575502					
	590478	627801	467426				AVRG		595686		12.20793
(4)	531720	460970	475440	360343	429565	418728					
	435786	464843	338758				AVRG		435128		13.51976
(5)	437060	387660	408455	306180	375728	369180					
	391961	422341	314984				AVRG		379283		11.74202

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
3 PCB-1232 (Aroclor 1232)(1)	+++++	+++++	+++++	+++++	253720	+++++					
	+++++	+++++	+++++				AVRG		253720		0.000e+000
(2)	+++++	+++++	+++++	+++++	203418	+++++					
	+++++	+++++	+++++				AVRG		203418		0.000e+000
(3)	+++++	+++++	+++++	+++++	122595	+++++					
	+++++	+++++	+++++				AVRG		122595		0.000e+000
(4)	+++++	+++++	+++++	+++++	184538	+++++					
	+++++	+++++	+++++				AVRG		184538		0.000e+000
(5)	+++++	+++++	+++++	+++++	253583	+++++					
	+++++	+++++	+++++				AVRG		253583		0.000e+000
4 PCB-1242 (Aroclor 1242)(1)	+++++	+++++	+++++	+++++	1330733	+++++					
	+++++	+++++	+++++				AVRG		1330733		0.000e+000
(2)	+++++	+++++	+++++	+++++	682248	+++++					
	+++++	+++++	+++++				AVRG		682248		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(3)	+++++	+++++	+++++	+++++	386738	+++++					
	+++++	+++++	+++++				AVRG		386738		0.000e+000
(4)	+++++	+++++	+++++	+++++	619705	+++++					
	+++++	+++++	+++++				AVRG		619705		0.000e+000
(5)	+++++	+++++	+++++	+++++	525020	+++++					
	+++++	+++++	+++++				AVRG		525020		0.000e+000
5 PCB-1248 (Aroclor 1248)(1)	+++++	+++++	+++++	+++++	830558	+++++					
	+++++	+++++	+++++				AVRG		830558		0.000e+000
(2)	+++++	+++++	+++++	+++++	493200	+++++					
	+++++	+++++	+++++				AVRG		493200		0.000e+000
(3)	+++++	+++++	+++++	+++++	1191863	+++++					
	+++++	+++++	+++++				AVRG		1191863		0.000e+000
(4)	+++++	+++++	+++++	+++++	908805	+++++					
	+++++	+++++	+++++				AVRG		908805		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(5)	+++++	+++++	+++++	+++++	590705	+++++					
	+++++	+++++	+++++				AVRG		590705		0.000e+000
6 PCB-1254 (Aroclor 1254) (1)	+++++	+++++	+++++	+++++	996328	+++++					
	+++++	+++++	+++++				AVRG		996328		0.000e+000
(2)	+++++	+++++	+++++	+++++	545155	+++++					
	+++++	+++++	+++++				AVRG		545155		0.000e+000
(3)	+++++	+++++	+++++	+++++	1411958	+++++					
	+++++	+++++	+++++				AVRG		1411958		0.000e+000
(4)	+++++	+++++	+++++	+++++	1253878	+++++					
	+++++	+++++	+++++				AVRG		1253878		0.000e+000
(5)	+++++	+++++	+++++	+++++	1144150	+++++					
	+++++	+++++	+++++				AVRG		1144150		0.000e+000
7 PCB-1262 (Aroclor 1262) (1)	+++++	+++++	+++++	+++++	458313	+++++					
	+++++	+++++	+++++				AVRG		458313		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	788948	+++++					
	+++++	+++++	+++++				AVRG		788948		0.000e+000
(3)	+++++	+++++	+++++	+++++	426080	+++++					
	+++++	+++++	+++++				AVRG		426080		0.000e+000
(4)	+++++	+++++	+++++	+++++	1502183	+++++					
	+++++	+++++	+++++				AVRG		1502183		0.000e+000
(5)	+++++	+++++	+++++	+++++	726623	+++++					
	+++++	+++++	+++++				AVRG		726623		0.000e+000
8 PCB-1260 (Aroclor 1260) (1)	1078320	883840	903145	655493	771805	759566					
	790933	823628	600052				AVRG		807420		17.43656
(2)	1212460	1021120	1028500	739067	888230	870096					
	916671	956915	701937				AVRG		926111		16.74346
(3)	1116260	929960	962675	694600	847133	828108					
	916614	957911	723401				AVRG		886296		14.65006

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(4)	803880	702580	719520	524140	611455	615932					
	664773	699337	516835				AVRG		650939		14.38471
(5)	753860	653040	673655	496677	600428	588808					
	652154	683348	506383				AVRG		623150		13.46461
9 PCB-1268 (Aroclor 1268) (1)	+++++	+++++	+++++	+++++	528918	+++++					
	+++++	+++++	+++++				AVRG		528918		0.000e+000
(2)	+++++	+++++	+++++	+++++	1775430	+++++					
	+++++	+++++	+++++				AVRG		1775430		0.000e+000
(3)	+++++	+++++	+++++	+++++	1601693	+++++					
	+++++	+++++	+++++				AVRG		1601693		0.000e+000
(4)	+++++	+++++	+++++	+++++	1440105	+++++					
	+++++	+++++	+++++				AVRG		1440105		0.000e+000
(5)	+++++	+++++	+++++	+++++	615580	+++++					
	+++++	+++++	+++++				AVRG		615580		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
$ 10 Decachlorobiphenyl (S)	+++++	14101100	13899150	9711800	11997950	11973880					
	12475350	13201590	9881410				AVRG		12155279		13.63325

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Last Edit : 01-Sep-2021 16:32 glen

Average %RSD Results.
Calculated Average %RSD = 14.22131
Maximun Average %RSD = 0.000e+000
* Failed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Calibration File Names:

Level 01: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210011.D
Level 02: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210012.D
Level 03: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210013.D
Level 04: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210014.D
Level 05: 1268ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210028.D
1262ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210027.D
1248ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210026.D
1242ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210025.D
1232ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210024.D
122154ical	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210023.D
1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210015.D
Level 06: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210016.D
Level 07: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210017.D
Level 08: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210018.D
Level 09: 1660	\\192.168.60.5\chem\60GCS8.i\071921-2.b\0719210019.D

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
1 PCB-1221 (Aroclor 1221)(1)	+++++	+++++	+++++	+++++	380045	+++++					
	+++++	+++++	+++++				AVRG		380045		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	263670	+++++					
	+++++	+++++	+++++				AVRG		263670		0.000e+000
(3)	+++++	+++++	+++++	+++++	851690	+++++					
	+++++	+++++	+++++				AVRG		851690		0.000e+000
2 PCB-1016 (Aroclor 1016) (1)	996700	893740	951545	755627	901883	888710					
	914789	984287	738401				AVRG		891742		10.17367
(2)	2006820	1757760	1855205	1438297	1723153	1684282					
	1743626	1871209	1388984				AVRG		1718815		11.55558
(3)	744880	664970	714820	568070	689230	673498					
	710759	761491	575439				AVRG		678128		10.00046
(4)	720720	651250	704805	544383	661495	650810					
	676705	723377	532481				AVRG		651781		10.73622
(5)	732360	644920	694625	520613	647358	641362					
	679450	729886	545340				AVRG		648435		11.41152

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
3 PCB-1232 (Aroclor 1232) (1)	+++++	+++++	+++++	+++++	191013	+++++					
	+++++	+++++	+++++				AVRG		191013		0.000e+000
(2)	+++++	+++++	+++++	+++++	266690	+++++					
	+++++	+++++	+++++				AVRG		266690		0.000e+000
(3)	+++++	+++++	+++++	+++++	233038	+++++					
	+++++	+++++	+++++				AVRG		233038		0.000e+000
(4)	+++++	+++++	+++++	+++++	195433	+++++					
	+++++	+++++	+++++				AVRG		195433		0.000e+000
(5)	+++++	+++++	+++++	+++++	367300	+++++					
	+++++	+++++	+++++				AVRG		367300		0.000e+000
4 PCB-1242 (Aroclor 1242) (1)	+++++	+++++	+++++	+++++	806165	+++++					
	+++++	+++++	+++++				AVRG		806165		0.000e+000
(2)	+++++	+++++	+++++	+++++	600760	+++++					
	+++++	+++++	+++++				AVRG		600760		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(3)	+++++	+++++	+++++	+++++	436298	+++++					
	+++++	+++++	+++++				AVRG		436298		0.000e+000
(4)	+++++	+++++	+++++	+++++	846415	+++++					
	+++++	+++++	+++++				AVRG		846415		0.000e+000
(5)	+++++	+++++	+++++	+++++	891180	+++++					
	+++++	+++++	+++++				AVRG		891180		0.000e+000
5 PCB-1248 (Aroclor 1248) (1)	+++++	+++++	+++++	+++++	1006063	+++++					
	+++++	+++++	+++++				AVRG		1006063		0.000e+000
(2)	+++++	+++++	+++++	+++++	1690328	+++++					
	+++++	+++++	+++++				AVRG		1690328		0.000e+000
(3)	+++++	+++++	+++++	+++++	1500160	+++++					
	+++++	+++++	+++++				AVRG		1500160		0.000e+000
(4)	+++++	+++++	+++++	+++++	1641465	+++++					
	+++++	+++++	+++++				AVRG		1641465		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(5)	+++++	+++++	+++++	+++++	899370	+++++					
	+++++	+++++	+++++				AVRG		899370		0.000e+000
6 PCB-1254 (Aroclor 1254) (1)	+++++	+++++	+++++	+++++	1357715	+++++					
	+++++	+++++	+++++				AVRG		1357715		0.000e+000
(2)	+++++	+++++	+++++	+++++	1695888	+++++					
	+++++	+++++	+++++				AVRG		1695888		0.000e+000
(3)	+++++	+++++	+++++	+++++	2147213	+++++					
	+++++	+++++	+++++				AVRG		2147213		0.000e+000
(4)	+++++	+++++	+++++	+++++	2336995	+++++					
	+++++	+++++	+++++				AVRG		2336995		0.000e+000
(5)	+++++	+++++	+++++	+++++	1710738	+++++					
	+++++	+++++	+++++				AVRG		1710738		0.000e+000
7 PCB-1262 (Aroclor 1262) (1)	+++++	+++++	+++++	+++++	912865	+++++					
	+++++	+++++	+++++				AVRG		912865		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(2)	+++++	+++++	+++++	+++++	597670	+++++					
	+++++	+++++	+++++				AVRG		597670		0.000e+000
(3)	+++++	+++++	+++++	+++++	785118	+++++					
	+++++	+++++	+++++				AVRG		785118		0.000e+000
(4)	+++++	+++++	+++++	+++++	3122595	+++++					
	+++++	+++++	+++++				AVRG		3122595		0.000e+000
(5)	+++++	+++++	+++++	+++++	1451733	+++++					
	+++++	+++++	+++++				AVRG		1451733		0.000e+000
8 PCB-1260 (Aroclor 1260)(1)	1495060	1324320	1383265	1012713	1245415	1212336					
	1290330	1341149	998356				AVRG		1255883		13.02396
(2)	1934740	1666190	1759590	1270663	1591978	1557984					
	1663399	1733074	1288095				AVRG		1607301		13.39320
(3)	1294640	1150380	1238865	908323	1124700	1131828					
	1222590	1284839	983375				AVRG		1148838		11.49014

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
(4)	1515380	1294120	1392920	1001863	1255763	1249818					
	1346569	1426633	1063935				AVRG		1283000		12.91787
(5)	1355060	1166700	1232845	911380	1142930	1130968					
	1233821	1301609	979691				AVRG		1161667		12.33781
9 PCB-1268 (Aroclor 1268) (1)	+++++	+++++	+++++	+++++	1038453	+++++					
	+++++	+++++	+++++				AVRG		1038453		0.000e+000
(2)	+++++	+++++	+++++	+++++	3722930	+++++					
	+++++	+++++	+++++				AVRG		3722930		0.000e+000
(3)	+++++	+++++	+++++	+++++	2862560	+++++					
	+++++	+++++	+++++				AVRG		2862560		0.000e+000
(4)	+++++	+++++	+++++	+++++	2809675	+++++					
	+++++	+++++	+++++				AVRG		2809675		0.000e+000
(5)	+++++	+++++	+++++	+++++	1143225	+++++					
	+++++	+++++	+++++				AVRG		1143225		0.000e+000

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Compound (all.sb)	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.3000000 Level 4	0.4000000 Level 5	0.5000000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	0.8000000 Level 7	1.0000 Level 8	2.0000 Level 9								
$ 10 Decachlorobiphenyl (S)	30461200	23346800	23726300	16360700	20462550	20659520					
	21689325	22715900	16890525				AVRG		21812536		19.09245

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JUL-2021 17:09
End Cal Date : 19-JUL-2021 22:14
Quant Method : ESTD
Target Version : RC10A
Integrator : Falcon
Method file : \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Last Edit : 01-Sep-2021 08:35 60GCS8.i

Average %RSD Results.
Calculated Average %RSD = 12.37572
Maximun Average %RSD = 0.000e+000
* Failed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1660icv.spk
Quant Type: ESTD
Sublist File: 1660icv.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1660icv

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 PCB-1016 (Aroclor	0.4000	0.3532	88.30	75-125
8 PCB-1260 (Aroclor	0.4000	0.3529	88.22	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1660icv.spk
Quant Type: ESTD
Sublist File: 1660icv.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1660icv

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 PCB-1016 (Aroclor	0.4000	0.3501	87.53	75-125
8 PCB-1260 (Aroclor	0.4000	0.3537	88.43	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-1
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 122154icv.spk
Quant Type: ESTD
Sublist File: 122154.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,122154

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 PCB-1221 (Aroclor	0.4000	0.3248	81.20	75-125
6 PCB-1254 (Aroclor	0.4000	0.3187	79.67	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 122154icv.spk
Quant Type: ESTD
Sublist File: 122154.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,122154

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 PCB-1221 (Aroclor	0.4000	0.3175	79.38	75-125
6 PCB-1254 (Aroclor	0.4000	0.3343	83.57	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-1
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1232icv.spk
Quant Type: ESTD
Sublist File: 1232.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1232

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3 PCB-1232 (Aroclor	0.4000	0.3378	84.45	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Sample Matrix: Liquid
Lab Smp Id: ICV
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: 1232icv.spk
Sublist File: 1232.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1232

Client SDG: 60GCS8-071921-2
Fraction: 8082
Client Smp ID: ICV
Operator: AJA1
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3 PCB-1232 (Aroclor	0.4000	0.3633	90.82	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Sample Matrix: Liquid
Lab Smp Id: ICV
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: 1242icv.spk
Sublist File: 1242.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1242

Client SDG: 60GCS8-071921-1
Fraction: 8082
Client Smp ID: ICV
Operator: AJA1
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
4 PCB-1242 (Aroclor	0.4000	0.3911	97.77	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1242icv.spk
Quant Type: ESTD
Sublist File: 1242.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1242

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
4 PCB-1242 (Aroclor	0.4000	0.3820	95.50	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-1
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1248icv.spk
Quant Type: ESTD
Sublist File: 1248.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-1.b\8082-1.m
Misc Info: 35250,1248

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 PCB-1248 (Aroclor	0.4000	0.3239	80.97	75-125

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name: QC ACCOUNT
Client SDG: 60GCS8-071921-2
Sample Matrix: Liquid
Fraction: 8082
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: AJA1
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: 1248icv.spk
Quant Type: ESTD
Sublist File: 1248.sub
Method File: \\192.168.60.5\chem\60GCS8.i\071921-2.b\8082-2.m
Misc Info: 35250,1248

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 PCB-1248 (Aroclor	0.4000	0.2736	68.40*	75-125

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i
Lab File ID: 0726210018.D
Analysis Type: WATER
Lab Sample ID: CCV
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

Injection Date: 26-JUL-2021 13:22
Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Init. Cal. Times: 17:09 22:14
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	547255	0.010	-2.70244	15.00000	Aver	
(2)	1169806	1078555	0.010	-7.80055	15.00000	Aver	
(3)	595686	564850	0.010	-5.17651	15.00000	Aver	
(4)	435128	405930	0.010	-6.71025	15.00000	Aver	
(5)	379283	350248	0.010	-7.65540	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	727493	0.010	-9.89915	15.00000	Aver	
(2)	926111	837835	0.010	-9.53187	15.00000	Aver	
(3)	886296	803185	0.010	-9.37731	15.00000	Aver	
(4)	650939	612650	0.010	-5.88213	15.00000	Aver	
(5)	623150	577573	0.010	-7.31408	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	11224700	0.010	-7.65576	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 13:22
Lab File ID: 0726210018.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	891742	951160	0.010	6.66310	15.00000	Aver	
(2)	1718815	1729855	0.010	0.64230	15.00000	Aver	
(3)	678128	703583	0.010	3.75357	15.00000	Aver	
(4)	651781	691285	0.010	6.06099	15.00000	Aver	
(5)	648435	669295	0.010	3.21700	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	1255883	1312205	0.010	4.48468	15.00000	Aver	
(2)	1607301	1641095	0.010	2.10251	15.00000	Aver	
(3)	1148838	1206688	0.010	5.03550	15.00000	Aver	
(4)	1283000	1334163	0.010	3.98772	15.00000	Aver	
(5)	1161667	1236365	0.010	6.43023	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	21812536	21745125	0.010	-0.30905	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i
Lab File ID: 0726210028.D
Analysis Type: WATER
Lab Sample ID: CCV
Method: \\192.168.60.5\chem\60GCS8.i\072621-1.b\8082-1.m

Injection Date: 26-JUL-2021 16:20
Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Init. Cal. Times: 17:09 22:14
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS
2 PCB-1016 (Aroclor 1016) (1)	562455	618973	0.010	10.04835	15.00000	Aver	
(2)	1169806	1235135	0.010	5.58457	15.00000	Aver	
(3)	595686	639790	0.010	7.40394	15.00000	Aver	
(4)	435128	465668	0.010	7.01847	15.00000	Aver	
(5)	379283	405245	0.010	6.84498	15.00000	Aver	
8 PCB-1260 (Aroclor 1260) (1)	807420	843895	0.010	4.51745	15.00000	Aver	
(2)	926111	948665	0.010	2.43538	15.00000	Aver	
(3)	886296	931813	0.010	5.13562	15.00000	Aver	
(4)	650939	693320	0.010	6.51074	15.00000	Aver	
(5)	623150	669513	0.010	7.43999	15.00000	Aver	
$ 10 Decachlorobiphenyl (S)	12155279	12919750	0.010	6.28921	15.00000	Aver	

Average %D / Drift Results.

Calculated Average %D/Drift = 9.01260
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 26-JUL-2021 16:20
Lab File ID: 0726210028.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\192.168.60.5\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	891742	1061615	0.010	19.04952	15.00000	Aver		<-
(2)	1718815	1926363	0.010	12.07503	15.00000	Aver		
(3)	678128	782068	0.010	15.32734	15.00000	Aver		<-
(4)	651781	771653	0.010	18.39144	15.00000	Aver		<-
(5)	648435	749328	0.010	15.55941	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	1255883	1434600	0.010	14.23041	15.00000	Aver		
(2)	1607301	1830000	0.010	13.85544	15.00000	Aver		
(3)	1148838	1316070	0.010	14.55665	15.00000	Aver		
(4)	1283000	1472463	0.010	14.76714	15.00000	Aver		
(5)	1161667	1354098	0.010	16.56502	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	21812536	24597950	0.010	12.76979	15.00000	Aver		

Average %D / Drift Results.

Calculated Average %D/Drift = 11.59663
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 12:36
Lab File ID: 0726210096.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\v60wintarget\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	562455	701753	0.010	24.76598	15.00000	Aver		<-
(2)	1169806	1437705	0.010	22.90111	15.00000	Aver		<-
(3)	595686	737880	0.010	23.87068	15.00000	Aver		<-
(4)	435128	550495	0.010	26.51330	15.00000	Aver		<-
(5)	379283	482353	0.010	27.17478	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	807420	990248	0.010	22.64339	15.00000	Aver		<-
(2)	926111	1141513	0.010	23.25876	15.00000	Aver		<-
(3)	886296	1105800	0.010	24.76649	15.00000	Aver		<-
(4)	650939	823260	0.010	26.47267	15.00000	Aver		<-
(5)	623150	794945	0.010	27.56876	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	12155279	15416250	0.010	26.82761	15.00000	Aver		<-

Average %D / Drift Results.

Calculated Average %D/Drift = 36.66425
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 12:36
Lab File ID: 0726210096.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\v60wintarget\chem\60GCS8.i\072621-2.b\8082-2.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016)(1)	891742	1141303	0.010	27.98568	15.00000	Aver		<-
(2)	1718815	2148318	0.010	24.98829	15.00000	Aver		<-
(3)	678128	867638	0.010	27.94589	15.00000	Aver		<-
(4)	651781	844005	0.010	29.49218	15.00000	Aver		<-
(5)	648435	824483	0.010	27.14962	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260)(1)	1255883	1567965	0.010	24.84964	15.00000	Aver		<-
(2)	1607301	2032555	0.010	26.45761	15.00000	Aver		<-
(3)	1148838	1446968	0.010	25.95055	15.00000	Aver		<-
(4)	1283000	1632068	0.010	27.20713	15.00000	Aver		<-
(5)	1161667	1488335	0.010	28.12061	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	21812536	27498675	0.010	26.06822	15.00000	Aver		<-

Average %D / Drift Results.

Calculated Average %D/Drift = 26.92867
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 16:29
Lab File ID: 0726210109.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\v60wintarget\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	562455	697355	0.010	23.98413	15.00000	Aver		<-
(2)	1169806	1444595	0.010	23.49010	15.00000	Aver		<-
(3)	595686	740225	0.010	24.26434	15.00000	Aver		<-
(4)	435128	541508	0.010	24.44781	15.00000	Aver		<-
(5)	379283	476170	0.010	25.54473	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	807420	965708	0.010	19.60408	15.00000	Aver		<-
(2)	926111	1115958	0.010	20.49937	15.00000	Aver		<-
(3)	886296	1096380	0.010	23.70364	15.00000	Aver		<-
(4)	650939	797615	0.010	22.53298	15.00000	Aver		<-
(5)	623150	768490	0.010	23.32340	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	12155279	15127475	0.010	24.45190	15.00000	Aver		<-

Average %D / Drift Results.

Calculated Average %D/Drift = 23.25877
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i
Lab File ID: 0726210109.D
Analysis Type: WATER
Lab Sample ID: CCV
Method: \\v60wintarget\chem\60GCS8.i\072621-2.b\8082-2.m

Injection Date: 27-JUL-2021 16:29
Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Init. Cal. Times: 17:09 22:14
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	891742	1137045	0.010	27.50825	15.00000	Aver		<-
(2)	1718815	2138718	0.010	24.42977	15.00000	Aver		<-
(3)	678128	855250	0.010	26.11917	15.00000	Aver		<-
(4)	651781	829805	0.010	27.31354	15.00000	Aver		<-
(5)	648435	816540	0.010	25.92475	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	1255883	1548478	0.010	23.29794	15.00000	Aver		<-
(2)	1607301	1995078	0.010	24.12591	15.00000	Aver		<-
(3)	1148838	1443865	0.010	25.68050	15.00000	Aver		<-
(4)	1283000	1621650	0.010	26.39516	15.00000	Aver		<-
(5)	1161667	1459628	0.010	25.64938	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	21812536	26449950	0.010	21.26032	15.00000	Aver		<-

Average %D / Drift Results.

Calculated Average %D/Drift = 25.24588
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i
Lab File ID: 0726210126.D
Analysis Type: WATER
Lab Sample ID: CCV
Method: \\v60wintarget\chem\60GCS8.i\072621-2.b\8082-2.m

Injection Date: 27-JUL-2021 21:33
Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Init. Cal. Times: 17:09 22:14
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016)(1)	891742	1075233	0.010	20.57659	15.00000	Aver		<-
(2)	1718815	2003095	0.010	16.53930	15.00000	Aver		<-
(3)	678128	803838	0.010	18.53764	15.00000	Aver		<-
(4)	651781	781713	0.010	19.93490	15.00000	Aver		<-
(5)	648435	773450	0.010	19.27952	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260)(1)	1255883	1471715	0.010	17.18570	15.00000	Aver		<-
(2)	1607301	1871468	0.010	16.43538	15.00000	Aver		<-
(3)	1148838	1339118	0.010	16.56280	15.00000	Aver		<-
(4)	1283000	1496323	0.010	16.62685	15.00000	Aver		<-
(5)	1161667	1389230	0.010	19.58933	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	21812536	25178875	0.010	15.43305	15.00000	Aver		<-

Average %D / Drift Results.

Calculated Average %D/Drift = 17.88192
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 60GCS8.i Injection Date: 27-JUL-2021 21:33
Lab File ID: 0726210126.D Init. Cal. Date(s): 19-JUL-2021 19-JUL-2021
Analysis Type: WATER Init. Cal. Times: 17:09 22:14
Lab Sample ID: CCV Quant Type: ESTD
Method: \\v60wintarget\chem\60GCS8.i\072621-1.b\8082-1.m

COMPOUND	RRF / AMOUNT	RF0.400	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	QC FLAGS	
2 PCB-1016 (Aroclor 1016) (1)	562455	657350	0.010	16.87157	15.00000	Aver		<-
(2)	1169806	1341993	0.010	14.71920	15.00000	Aver		
(3)	595686	690328	0.010	15.88786	15.00000	Aver		<-
(4)	435128	508563	0.010	16.87648	15.00000	Aver		<-
(5)	379283	443333	0.010	16.88695	15.00000	Aver		<-
8 PCB-1260 (Aroclor 1260) (1)	807420	914070	0.010	13.20871	15.00000	Aver		
(2)	926111	1056825	0.010	14.11433	15.00000	Aver		
(3)	886296	1011690	0.010	14.14813	15.00000	Aver		
(4)	650939	763825	0.010	17.34201	15.00000	Aver		<-
(5)	623150	731298	0.010	17.35493	15.00000	Aver		<-
$ 10 Decachlorobiphenyl (S)	12155279	14411250	0.010	18.55960	15.00000	Aver		<-

Average %D / Drift Results.

Calculated Average %D/Drift = 36.66425
Maximun Average %D/Drift = 0.000e+000
* Failed Average %D/Drift Test.

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375692

Date Extracted: 07/23/2021 16:45 | Lab Sample ID: 2945143

Date Analyzed: 07/26/2021 15:09 | Lab File ID: 072621-1.B\0726210024.D

Initial wt/vol: 30.41 g | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60GCS8 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:45 Lab Sample ID: 2945144

Date Analyzed: 07/26/2021 15:27 Lab File ID: 072621-1.B\0726210025.D

Initial wt/vol: 31.24 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	157	
11096-82-5	PCB-1260 (Aroclor 1260)	158	

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 2945148

Date Analyzed: 07/26/2021 15:45 Lab File ID: 072621-1.B\0726210026.D

Initial wt/vol: 30.04 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 2945149

Date Analyzed: 07/26/2021 16:02 Lab File ID: 072621-1.B\0726210027.D

Initial wt/vol: 30.72 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	174	
11096-82-5	PCB-1260 (Aroclor 1260)	171	

SAMPLE NO.

MS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 2945150

Date Analyzed: 07/27/2021 17:22 Lab File ID: 072621-1.B\0726210112.D

Initial wt/vol: 30.06 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	258	
11096-82-5	PCB-1260 (Aroclor 1260)	260	

SAMPLE NO.

MSD

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/23/2021 04:13 Matrix: Solid SDG No.: 60375692

Date Extracted: 07/23/2021 16:34 Lab Sample ID: 2945151

Date Analyzed: 07/27/2021 17:40 Lab File ID: 072621-1.B\0726210113.D

Initial wt/vol: 30.53 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	212	
11096-82-5	PCB-1260 (Aroclor 1260)	218	

SAMPLE NO.

GB-31/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692001 Percent Moisture: 18.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/06/2021 14:50
7440-38-2	Arsenic	10.7		mg/kg	10	08/06/2021 14:50
7440-50-8	Copper	20.2		mg/kg	10	08/06/2021 14:50
7439-92-1	Lead	13.3		mg/kg	10	08/06/2021 14:50
7440-66-6	Zinc	62.3		mg/kg	10	08/06/2021 14:50

SAMPLE NO.

GB-31/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692002 Percent Moisture: 20.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/06/2021 14:51
7440-38-2	Arsenic	7.9		mg/kg	10	08/06/2021 14:51
7440-50-8	Copper	16.1		mg/kg	10	08/06/2021 14:51
7439-92-1	Lead	10.2		mg/kg	10	08/06/2021 14:51
7440-66-6	Zinc	46.9		mg/kg	10	08/06/2021 14:51

SAMPLE NO.

GB-24/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692003 Percent Moisture: 17.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/06/2021 14:53
7440-38-2	Arsenic	6.5		mg/kg	10	08/06/2021 14:53
7440-50-8	Copper	16.0		mg/kg	10	08/06/2021 14:53
7439-92-1	Lead	14.2		mg/kg	10	08/06/2021 14:53
7440-66-6	Zinc	68.2		mg/kg	10	08/06/2021 14:53

SAMPLE NO.

GB-24/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692004 Percent Moisture: 20.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/06/2021 14:55
7440-38-2	Arsenic	7.6		mg/kg	10	08/06/2021 14:55
7440-50-8	Copper	15.9		mg/kg	10	08/06/2021 14:55
7439-92-1	Lead	9.9		mg/kg	10	08/06/2021 14:55
7440-66-6	Zinc	42.9		mg/kg	10	08/06/2021 14:55

SAMPLE NO.

GB-17/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692005 Percent Moisture: 20.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/06/2021 15:01
7440-38-2	Arsenic	5.0		mg/kg	10	08/06/2021 15:01
7440-50-8	Copper	12.4		mg/kg	10	08/06/2021 15:01
7439-92-1	Lead	7.6		mg/kg	10	08/06/2021 15:01
7440-66-6	Zinc	40.7		mg/kg	10	08/06/2021 15:01

SAMPLE NO.

GB-17/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692006 Percent Moisture: 20.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/06/2021 15:03
7440-38-2	Arsenic	5.6		mg/kg	10	08/06/2021 15:03
7440-50-8	Copper	13.1		mg/kg	10	08/06/2021 15:03
7439-92-1	Lead	9.4		mg/kg	10	08/06/2021 15:03
7440-66-6	Zinc	42.6		mg/kg	10	08/06/2021 15:03

SAMPLE NO.

GB-25/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692007 Percent Moisture: 18.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/06/2021 15:05
7440-38-2	Arsenic	8.2		mg/kg	10	08/06/2021 15:05
7440-50-8	Copper	24.6		mg/kg	10	08/06/2021 15:05
7439-92-1	Lead	88.3		mg/kg	10	08/06/2021 15:05
7440-66-6	Zinc	82.3		mg/kg	10	08/06/2021 15:05

SAMPLE NO.

GB-25/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692008 Percent Moisture: 18.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/06/2021 15:06
7440-38-2	Arsenic	6.8		mg/kg	10	08/06/2021 15:06
7440-50-8	Copper	15.6		mg/kg	10	08/06/2021 15:06
7439-92-1	Lead	11.7		mg/kg	10	08/06/2021 15:06
7440-66-6	Zinc	42.5		mg/kg	10	08/06/2021 15:06

SAMPLE NO.

GB-18/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692009 Percent Moisture: 23.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/06/2021 15:11
7440-38-2	Arsenic	6.6		mg/kg	10	08/06/2021 15:11
7440-50-8	Copper	17.3		mg/kg	10	08/06/2021 15:11
7439-92-1	Lead	13.7		mg/kg	10	08/06/2021 15:11
7440-66-6	Zinc	34.1		mg/kg	10	08/06/2021 15:11

SAMPLE NO.

GB-18/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692010 Percent Moisture: 12.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/06/2021 15:13
7440-38-2	Arsenic	6.3		mg/kg	10	08/06/2021 15:13
7440-50-8	Copper	40.4		mg/kg	10	08/06/2021 15:13
7439-92-1	Lead	10		mg/kg	10	08/06/2021 15:13
7440-66-6	Zinc	ND	U	mg/kg	10	08/06/2021 15:13

SAMPLE NO.

GB-11/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692011 Percent Moisture: 17.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:22
7440-38-2	Arsenic	8.6		mg/kg	10	08/09/2021 14:22
7440-50-8	Copper	22.1		mg/kg	10	08/09/2021 14:22
7439-92-1	Lead	16.9		mg/kg	10	08/09/2021 14:22
7440-66-6	Zinc	52.5		mg/kg	10	08/09/2021 14:22

SAMPLE NO.

GB-11/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692012 Percent Moisture: 26.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:27
7440-38-2	Arsenic	8.7		mg/kg	10	08/09/2021 14:27
7440-50-8	Copper	24.2		mg/kg	10	08/09/2021 14:27
7439-92-1	Lead	14.5		mg/kg	10	08/09/2021 14:27
7440-66-6	Zinc	48.2		mg/kg	10	08/09/2021 14:27

SAMPLE NO.

GB-04/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692013 Percent Moisture: 21.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:28
7440-38-2	Arsenic	7.9		mg/kg	10	08/09/2021 14:28
7440-50-8	Copper	17.0		mg/kg	10	08/09/2021 14:28
7439-92-1	Lead	10.9		mg/kg	10	08/09/2021 14:28
7440-66-6	Zinc	43.5		mg/kg	10	08/09/2021 14:28

SAMPLE NO.

GB-04/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692014 Percent Moisture: 21.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:30
7440-38-2	Arsenic	7.9		mg/kg	10	08/09/2021 14:30
7440-50-8	Copper	14.8		mg/kg	10	08/09/2021 14:30
7439-92-1	Lead	10.2		mg/kg	10	08/09/2021 14:30
7440-66-6	Zinc	45.1		mg/kg	10	08/09/2021 14:30

SAMPLE NO.

GB-04/3-5D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692015 Percent Moisture: 21.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:36
7440-38-2	Arsenic	7.4		mg/kg	10	08/09/2021 14:36
7440-50-8	Copper	15.1		mg/kg	10	08/09/2021 14:36
7439-92-1	Lead	9.8		mg/kg	10	08/09/2021 14:36
7440-66-6	Zinc	46.0		mg/kg	10	08/09/2021 14:36

SAMPLE NO.

GB-05/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692016 Percent Moisture: 21.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:38
7440-38-2	Arsenic	5.7		mg/kg	10	08/09/2021 14:38
7440-50-8	Copper	15.5		mg/kg	10	08/09/2021 14:38
7439-92-1	Lead	8.3		mg/kg	10	08/09/2021 14:38
7440-66-6	Zinc	45.4		mg/kg	10	08/09/2021 14:38

SAMPLE NO.

GB-05/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692017 Percent Moisture: 21.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:39
7440-38-2	Arsenic	6.1		mg/kg	10	08/09/2021 14:39
7440-50-8	Copper	16.2		mg/kg	10	08/09/2021 14:39
7439-92-1	Lead	9.7		mg/kg	10	08/09/2021 14:39
7440-66-6	Zinc	48.2		mg/kg	10	08/09/2021 14:39

SAMPLE NO.

GB-12/2.5-3.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692018 Percent Moisture: 19.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:41
7440-38-2	Arsenic	9.4		mg/kg	10	08/09/2021 14:41
7440-50-8	Copper	19.1		mg/kg	10	08/09/2021 14:41
7439-92-1	Lead	12.3		mg/kg	10	08/09/2021 14:41
7440-66-6	Zinc	56.2		mg/kg	10	08/09/2021 14:41

SAMPLE NO.

GB-12/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692019 Percent Moisture: 19.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:43
7440-38-2	Arsenic	6.4		mg/kg	10	08/09/2021 14:43
7440-50-8	Copper	30.0		mg/kg	10	08/09/2021 14:43
7439-92-1	Lead	8.7		mg/kg	10	08/09/2021 14:43
7440-66-6	Zinc	34.4		mg/kg	10	08/09/2021 14:43

SAMPLE NO.

GB-19/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692020 Percent Moisture: 12.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:44
7440-38-2	Arsenic	5.4		mg/kg	10	08/09/2021 14:44
7440-50-8	Copper	17.0		mg/kg	10	08/09/2021 14:44
7439-92-1	Lead	81.5		mg/kg	10	08/09/2021 14:44
7440-66-6	Zinc	66.7		mg/kg	10	08/09/2021 14:44

SAMPLE NO.

GB-19/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692021 Percent Moisture: 15.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:46
7440-38-2	Arsenic	7.0		mg/kg	10	08/09/2021 14:46
7440-50-8	Copper	14.8		mg/kg	10	08/09/2021 14:46
7439-92-1	Lead	12.4		mg/kg	10	08/09/2021 14:46
7440-66-6	Zinc	34.5		mg/kg	10	08/09/2021 14:46

SAMPLE NO.

GB-26/3-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692022 Percent Moisture: 17.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 14:47
7440-38-2	Arsenic	6.1		mg/kg	10	08/09/2021 14:47
7440-50-8	Copper	13.6		mg/kg	10	08/09/2021 14:47
7439-92-1	Lead	14.4		mg/kg	10	08/09/2021 14:47
7440-66-6	Zinc	44.9		mg/kg	10	08/09/2021 14:47

SAMPLE NO.

GB-26/4-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692023 Percent Moisture: 19.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	ND	U	mg/kg	10	08/09/2021 15:02
7440-38-2	Arsenic	7.6		mg/kg	10	08/09/2021 15:02
7440-50-8	Copper	12.6		mg/kg	10	08/09/2021 15:02
7439-92-1	Lead	11.7		mg/kg	10	08/09/2021 15:02
7440-66-6	Zinc	37.5		mg/kg	10	08/09/2021 15:02

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Initial Calibration Verification				Continuing Calibration Verification						
	08/06/2021 13:29				08/06/2021 13:37			08/06/2021 14:22			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Antimony	50	49.7	99.4	90-110	40	39.7	99.1	40	39.1	97.8	90-110
Arsenic	50	49.2	98.4	90-110	40	39.5	98.7	40	39.0	97.4	90-110
Copper	50	50.2	100.4	90-110	40	39.9	99.8	40	39.6	99.0	90-110
Lead	50	48.3	96.5	90-110	40	38.6	96.5	40	37.9	94.7	90-110
Zinc	50	49.4	98.8	90-110	400	39.3	9.8	400	38.7	9.7	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification									
	08/06/2021 14:40			08/06/2021 14:58			08/06/2021 15:16			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Antimony	40	39.2	97.9	40	39.2	98.0	40	39.3	98.4	90-110
Arsenic	40	39.6	99.1	40	39.0	97.4	40	39.1	97.8	90-110
Copper	40	40.3	100.6	40	39.4	98.4	40	39.8	99.4	90-110
Lead	40	38.0	95.0	40	38.1	95.4	40	38.0	94.9	90-110
Zinc	400	39.0	9.8	400	38.6	9.7	400	38.7	9.7	90-110

FORM II INORGANIC-3

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification			
	08/06/2021 15:21			Control Limit
Analyte	True	Found	%R	
Antimony	40	38.5	96.2	90-110
Arsenic	40	39.0	97.4	90-110
Copper	40	39.5	98.7	90-110
Lead	40	37.8	94.4	90-110
Zinc	400	38.6	9.6	90-110

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Initial Calibration Verification				Continuing Calibration Verification						
	08/09/2021 14:07				08/09/2021 14:15			08/09/2021 14:33			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Antimony	50	49.5	98.9	90-110	40	39.5	98.6	40	39.3	98.2	90-110
Arsenic	50	49.9	99.9	90-110	40	40.2	100.4	40	40.4	101.0	90-110
Copper	50	50.7	101.4	90-110	40	40.5	101.4	40	41.2	102.9	90-110
Lead	50	48.8	97.6	90-110	40	39.2	98.0	40	39.2	97.9	90-110
Zinc	50	49.4	98.8	90-110	400	39.9	10.0	400	39.8	9.9	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification									
	08/09/2021 14:51			08/09/2021 14:55			08/09/2021 15:15			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Antimony	40	39.8	99.4	40	40.6	101.5	40	39.8	99.5	90-110
Arsenic	40	40.5	101.2	40	41.4	103.4	40	41.2	103.0	90-110
Copper	40	41.1	102.7	40	41.7	104.3	40	41.4	103.5	90-110
Lead	40	39.2	97.9	40	39.6	99.1	40	39.3	98.3	90-110
Zinc	400	39.9	10.0	400	40.9	10.2	400	40.1	10.0	90-110

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/06/2021 13:32

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	104.9	50-150
Arsenic	1.0	1.1	106.6	50-150
Copper	1.0	1.1	110.1	50-150
Lead	1.0	0.95	94.7	50-150
Zinc	10.0	10.7	107.4	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/06/2021 15:20

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.1	106.3	50-150
Arsenic	1.0	1.0	101.7	50-150
Copper	1.0	1.1	109.8	50-150
Lead	1.0	0.94	94.1	50-150
Zinc	10.0	10.7	107.0	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 46657 Analysis Date/Time: 08/09/2021 14:11

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	102.5	50-150
Arsenic	1.0	1.0	104.5	50-150
Copper	1.0	1.1	108.1	50-150
Lead	1.0	0.95	95.2	50-150
Zinc	10.0	10.0	100.3	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

CRDL Check Standard Source: 46657 Analysis Date/Time: 08/09/2021 14:54

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	103.1	50-150
Arsenic	1.0	1.0	104.7	50-150
Copper	1.0	1.1	108.7	50-150
Lead	1.0	0.96	95.7	50-150
Zinc	10.0	10.1	101.2	50-150

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/06/2021 13:30	C	08/06/2021 13:39	C	08/06/2021 14:23	C	08/06/2021 14:41	C	2952916	C
Antimony	0.0096	U	0.0096	U	0.0096	U	0.0096	U	ND	U
Arsenic	0.022	J	0.0090	U	0.0090	U	0.0095	J	ND	U
Copper	0.014	U	0.014	U	0.014	U	0.014	U	ND	U
Lead	0.019	J	0.013	J	0.012	J	0.017	J	ND	U
Zinc	0.11	U	0.11	U	0.11	U	0.11	U	ND	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract : GSA GOODFELLOW

Method Blank Matrix: Instrument ID: 60ICM3

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	08/06/2021 15:00	C	08/06/2021 15:18	C	08/06/2021 15:23	C
Antimony			0.0096	U	0.0096	U	0.0096	U
Arsenic			0.0090	U	0.011	J	0.0090	U
Copper			0.014	U	0.014	U	0.021	J
Lead			0.014	J	0.018	J	0.018	J
Zinc			0.11	U	0.11	U	0.11	U

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/09/2021 14:09	C	08/09/2021 14:17	C	08/09/2021 14:35	C	08/09/2021 14:52	C	2952930	C
Antimony	0.0096	U	0.0096	U	0.0096	U	0.0096	U	ND	U
Arsenic	0.0090	U	0.0090	U	0.0090	U	0.0090	U	ND	U
Copper	0.014	U	0.014	U	0.014	U	0.014	U	ND	U
Lead	0.018	J	0.012	J	0.014	J	0.013	J	ND	U
Zinc	0.11	U	0.11	U	0.11	U	0.11	U	ND	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)						Method Blank	
		C	08/09/2021 14:57	C	08/09/2021 15:16	C		C	2953701	C
Antimony			0.0096	U	0.0096	U			ND	U
Arsenic			0.0090	U	0.0090	U			ND	U
Copper			0.014	U	0.014	U			ND	U
Lead			0.012	J	0.013	J			ND	U
Zinc			0.11	U	0.11	U			ND	U

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Solution A Run Date: 08/06/2021 13:34

ICS Source: 46286,46287 Solution AB Run Date: 08/06/2021 13:35

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.0111		52.66651	105.3	80-120
Arsenic	0	50	0.05947		52.00913	104	80-120
Copper	0	50	0.08433		46.47826	93	80-120
Lead	0	50	0.02249		50.78644	101.6	80-120
Zinc	0	500	0.29135		465.60618	93.1	80-120

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Solution A Run Date: 08/09/2021 14:12

ICS Source: 46286,46287 Solution AB Run Date: 08/09/2021 14:14

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.00829		51.93847	103.9	80-120
Arsenic	0	50	0.05595		52.28534	104.6	80-120
Copper	0	50	0.07798		47.03219	94.1	80-120
Lead	0	50	0.01937		51.37417	102.7	80-120
Zinc	0	500	0.19625		471.10793	94.2	80-120

SAMPLE NO.

2952918MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: 60375838013

Percent Moisture: 22.7

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	32.7	<0.52	92.4	35*
Arsenic	mg/kg	75-125	97.2	9.8	92.4	95
Copper	mg/kg	75-125	108	17.4	92.4	97
Lead	mg/kg	75-125	108	14.3	92.4	102
Zinc	mg/kg	75-125	143	55.1	92.4	95

* Spike Recovery outside QC Limits

SAMPLE NO.

2952919MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: 60375838013

Percent Moisture: 22.7

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	34.6	<0.52	103	34*
Arsenic	mg/kg	75-125	105	9.8	103	93
Copper	mg/kg	75-125	115	17.4	103	95
Lead	mg/kg	75-125	115	14.3	103	98
Zinc	mg/kg	75-125	148	55.1	103	91

* Spike Recovery outside QC Limits

SAMPLE NO.

2952920MS

FORM V INORGANIC-3

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-25/2-4

Percent Moisture: 18.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	43.3	ND	114	38*
Arsenic	mg/kg	75-125	113	6.8	114	93
Copper	mg/kg	75-125	129	15.6	114	99
Lead	mg/kg	75-125	125	11.7	114	99
Zinc	mg/kg	75-125	152	42.5	114	96

* Spike Recovery outside QC Limits

SAMPLE NO.

2952921MSD

FORM V INORGANIC-4

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-25/2-4

Percent Moisture: 18.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	35.1	ND	97.8	36*
Arsenic	mg/kg	75-125	95.4	6.8	97.8	91
Copper	mg/kg	75-125	110	15.6	97.8	96
Lead	mg/kg	75-125	105	11.7	97.8	95
Zinc	mg/kg	75-125	134	42.5	97.8	94

* Spike Recovery outside QC Limits

SAMPLE NO.

2952932MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-11/1-3

Percent Moisture: 17.1

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	39.5	ND	116	34*
Arsenic	mg/kg	75-125	117	8.6	116	93
Copper	mg/kg	75-125	134	22.1	116	97
Lead	mg/kg	75-125	137	16.9	116	103
Zinc	mg/kg	75-125	155	52.5	116	89

* Spike Recovery outside QC Limits

SAMPLE NO.

2952933MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-11/1-3

Percent Moisture: 17.1

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	31.3	ND	100	31*
Arsenic	mg/kg	75-125	101	8.6	100	92
Copper	mg/kg	75-125	121	22.1	100	98
Lead	mg/kg	75-125	122	16.9	100	104
Zinc	mg/kg	75-125	144	52.5	100	91

* Spike Recovery outside QC Limits

SAMPLE NO.

2953703MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: 60376093012

Percent Moisture: 20.3

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	34.9	<0.63	101	34*
Arsenic	mg/kg	75-125	109	10.9	101	97
Copper	mg/kg	75-125	120	19.4	101	99
Lead	mg/kg	75-125	124	15.2	101	107
Zinc	mg/kg	75-125	160	61.5	101	98

* Spike Recovery outside QC Limits

SAMPLE NO.

2953704MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: 60376093012

Percent Moisture: 20.3

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	34.5	<0.63	95.1	36*
Arsenic	mg/kg	75-125	102	10.9	95.1	96
Copper	mg/kg	75-125	113	19.4	95.1	98
Lead	mg/kg	75-125	113	15.2	95.1	103
Zinc	mg/kg	75-125	153	61.5	95.1	96

* Spike Recovery outside QC Limits

SAMPLE NO.

2952919MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 22.7 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	32.7	34.6	6
Arsenic	20	97.2	105	8
Copper	20	108	115	7
Lead	20	108	115	6
Zinc	20	143	148	4

SAMPLE NO.

2952921MSD

FORM VI INORGANIC-2
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 18.8 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	43.3	35.1	21*
Arsenic	20	113	95.4	17
Copper	20	129	110	16
Lead	20	125	105	17
Zinc	20	152	134	13

* RPD outside QC Limits

SAMPLE NO.

2952933MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 17.1 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	39.5	31.3	23*
Arsenic	20	117	101	15
Copper	20	134	121	10
Lead	20	137	122	12
Zinc	20	155	144	8

* RPD outside QC Limits

SAMPLE NO.

2953704MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 20.3 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	34.9	34.5	1
Arsenic	20	109	102	7
Copper	20	120	113	6
Lead	20	124	113	9
Zinc	20	160	153	5

SAMPLE NO.

2952917LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	93.8	94	80	120
Arsenic	mg/kg	100	95.0	95	80	120
Copper	mg/kg	100	101	101	80	120
Lead	mg/kg	100	96.7	97	80	120
Zinc	mg/kg	100	93.8	94	80	120

SAMPLE NO.

2952931LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	96.3	96	80	120
Arsenic	mg/kg	100	98.6	99	80	120
Copper	mg/kg	100	105	105	80	120
Lead	mg/kg	100	99.8	100	80	120
Zinc	mg/kg	100	97.9	98	80	120

SAMPLE NO.

2953702LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	95.6	96	80	120
Arsenic	mg/kg	100	98.4	98	80	120
Copper	mg/kg	100	105	105	80	120
Lead	mg/kg	100	99.0	99	80	120
Zinc	mg/kg	100	96.4	96	80	120

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Preparation Method: None Instrument ID: 60ICM3

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Antimony	1.0	0.0096	01/10/2020
Arsenic	1.0	0.0090	01/10/2020
Copper	1.0	0.014	01/10/2020
Lead	1.0	0.0052	01/10/2020
Zinc	10.0	0.11	01/10/2020

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Instrument ID: 60ICM3

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Antimony	0.10	0.054	01/22/2021
Arsenic	0.10	0.011	01/22/2021
Copper	0.10	0.031	01/22/2021
Lead	0.050	0.013	01/22/2021
Zinc	0.50	0.084	01/22/2021

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract : GSA GOODFELLOW

Instrument ID: 60ICM3 Effective Date:05/07/2019

Analyte	Concentration (ug/L)
Antimony	5000
Arsenic	5000
Copper	5000
Lead	5000
Zinc	50000

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65390

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2952916	2952916	08/05/2021	0.5	50
2952917	2952917	08/05/2021	0.5	50
2952918	2952918	08/05/2021	0.7	50
2952919	2952919	08/05/2021	0.63	50
2952920	2952920	08/05/2021	0.54	50
2952921	2952921	08/05/2021	0.63	50
60375692001	GB-31/3-5	08/05/2021	0.59	50
60375692002	GB-31/5-7	08/05/2021	0.75	50
60375692003	GB-24/1-3	08/05/2021	0.62	50
60375692004	GB-24/3-5	08/05/2021	0.6	50
60375692005	GB-17/1-3	08/05/2021	0.57	50
60375692006	GB-17/3-5	08/05/2021	0.58	50
60375692007	GB-25/0-2	08/05/2021	0.52	50
60375692008	GB-25/2-4	08/05/2021	0.55	50
60375692009	GB-18/3-5	08/05/2021	0.7	50
60375692010	GB-18/5-7	08/05/2021	0.61	50

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65391

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2952930	2952930	08/05/2021	0.5	50
2952931	2952931	08/05/2021	0.5	50
2952932	2952932	08/05/2021	0.52	50
2952933	2952933	08/05/2021	0.6	50
60375692011	GB-11/1-3	08/05/2021	0.54	50
60375692012	GB-11/3-5	08/05/2021	0.52	50
60375692013	GB-04/2-3	08/05/2021	0.61	50
60375692014	GB-04/3-5	08/05/2021	0.59	50
60375692015	GB-04/3-5D	08/05/2021	0.74	50
60375692016	GB-05/3-5	08/05/2021	0.74	50
60375692017	GB-05/5-7	08/05/2021	0.53	50
60375692018	GB-12/2.5-3.5	08/05/2021	0.56	50
60375692019	GB-12/4-6	08/05/2021	0.56	50
60375692020	GB-19/0-2	08/05/2021	0.54	50
60375692021	GB-19/3-5	08/05/2021	0.61	50
60375692022	GB-26/3-4	08/05/2021	0.61	50

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65411

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2953701	2953701	08/06/2021	0.5	50
2953702	2953702	08/06/2021	0.5	50
2953703	2953703	08/06/2021	0.62	50
2953704	2953704	08/06/2021	0.66	50
60375692023	GB-26/4-5	08/06/2021	0.69	50

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/06/2021 13:20 End Date: 08/06/2021 15:23

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19784824CAL0	19784824CAL0	1	08/06/2021	13:20	X	X	X	X	X
19784825CAL1	19784825CAL1	1	08/06/2021	13:22	X	X	X	X	X
19784826CAL2	19784826CAL2	1	08/06/2021	13:24	X	X	X	X	X
19784827CAL3	19784827CAL3	1	08/06/2021	13:25	X	X	X	X	X
19784828CAL4	19784828CAL4	1	08/06/2021	13:27	X	X	X	X	X
19784829ICV	19784829ICV	1	08/06/2021	13:29	X	X	X	X	X
19784830ICB	19784830ICB	1	08/06/2021	13:30	X	X	X	X	X
19784831CRDL	19784831CRDL	1	08/06/2021	13:32	X	X	X	X	X
19784832ICSA	19784832ICSA	1	08/06/2021	13:34	X	X	X	X	X
19784833ICSAB	19784833ICSAB	1	08/06/2021	13:35	X	X	X	X	X
19784834CCV	19784834CCV	1	08/06/2021	13:37	X	X	X	X	X
19784835CCB	19784835CCB	1	08/06/2021	13:39	X	X	X	X	X
19784842CCV	19784842CCV	1	08/06/2021	14:22	X	X	X	X	X
19784843CCB	19784843CCB	1	08/06/2021	14:23	X	X	X	X	X
2952916BLANK	2952916	10	08/06/2021	14:25	X	X	X	X	X
2952917LCS	2952917	10	08/06/2021	14:27	X	X	X	X	X
60375838013	60375838013	10	08/06/2021	14:28	X	X	X	X	X
2952918MS	2952918	10	08/06/2021	14:30	X	X	X	X	X
2952919MSD	2952919	10	08/06/2021	14:32	X	X	X	X	X
19784844CCV	19784844CCV	1	08/06/2021	14:40	X	X	X	X	X
19784845CCB	19784845CCB	1	08/06/2021	14:41	X	X	X	X	X
GB-31/3-5	60375692001	10	08/06/2021	14:50	X	X	X	X	X
GB-31/5-7	60375692002	10	08/06/2021	14:51	X	X	X	X	X
GB-24/1-3	60375692003	10	08/06/2021	14:53	X	X	X	X	X
GB-24/3-5	60375692004	10	08/06/2021	14:55	X	X	X	X	X
19784846CCV	19784846CCV	1	08/06/2021	14:58	X	X	X	X	X
19784847CCB	19784847CCB	1	08/06/2021	15:00	X	X	X	X	X
GB-17/1-3	60375692005	10	08/06/2021	15:01	X	X	X	X	X
GB-17/3-5	60375692006	10	08/06/2021	15:03	X	X	X	X	X
GB-25/0-2	60375692007	10	08/06/2021	15:05	X	X	X	X	X
GB-25/2-4	60375692008	10	08/06/2021	15:06	X	X	X	X	X
2952920MS	2952920	10	08/06/2021	15:08	X	X	X	X	X
2952921MSD	2952921	10	08/06/2021	15:10	X	X	X	X	X
GB-18/3-5	60375692009	10	08/06/2021	15:11	X	X	X	X	X
GB-18/5-7	60375692010	10	08/06/2021	15:13	X	X	X	X	X
19784849CCV	19784849CCV	1	08/06/2021	15:16	X	X	X	X	X
19784850CCB	19784850CCB	1	08/06/2021	15:18	X	X	X	X	X
19784851CRDL	19784851CRDL	1	08/06/2021	15:20	X	X	X	X	X
19784852CCV	19784852CCV	1	08/06/2021	15:21	X	X	X	X	X
19784853CCB	19784853CCB	1	08/06/2021	15:23	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/09/2021 13:59 End Date: 08/09/2021 15:29

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19789348CAL0	19789348CAL0	1	08/09/2021	13:59	X	X	X	X	X
19789349CAL1	19789349CAL1	1	08/09/2021	14:01	X	X	X	X	X
19789350CAL2	19789350CAL2	1	08/09/2021	14:03	X	X	X	X	X
19789351CAL3	19789351CAL3	1	08/09/2021	14:04	X	X	X	X	X
19789352CAL4	19789352CAL4	1	08/09/2021	14:06	X	X	X	X	X
19789353ICV	19789353ICV	1	08/09/2021	14:07	X	X	X	X	X
19789354ICB	19789354ICB	1	08/09/2021	14:09	X	X	X	X	X
19789355CRDL	19789355CRDL	1	08/09/2021	14:11	X	X	X	X	X
19789356ICSA	19789356ICSA	1	08/09/2021	14:12	X	X	X	X	X
19789357ICSAB	19789357ICSAB	1	08/09/2021	14:14	X	X	X	X	X
19789358CCV	19789358CCV	1	08/09/2021	14:15	X	X	X	X	X
19789359CCB	19789359CCB	1	08/09/2021	14:17	X	X	X	X	X
2952930BLANK	2952930	10	08/09/2021	14:19	X	X	X	X	X
2952931LCS	2952931	10	08/09/2021	14:20	X	X	X	X	X
GB-11/1-3	60375692011	10	08/09/2021	14:22	X	X	X	X	X
2952932MS	2952932	10	08/09/2021	14:23	X	X	X	X	X
2952933MSD	2952933	10	08/09/2021	14:25	X	X	X	X	X
GB-11/3-5	60375692012	10	08/09/2021	14:27	X	X	X	X	X
GB-04/2-3	60375692013	10	08/09/2021	14:28	X	X	X	X	X
GB-04/3-5	60375692014	10	08/09/2021	14:30	X	X	X	X	X
19789360CCV	19789360CCV	1	08/09/2021	14:33	X	X	X	X	X
19789361CCB	19789361CCB	1	08/09/2021	14:35	X	X	X	X	X
GB-04/3-5D	60375692015	10	08/09/2021	14:36	X	X	X	X	X
GB-05/3-5	60375692016	10	08/09/2021	14:38	X	X	X	X	X
GB-05/5-7	60375692017	10	08/09/2021	14:39	X	X	X	X	X
GB-12/2.5-3.5	60375692018	10	08/09/2021	14:41	X	X	X	X	X
GB-12/4-6	60375692019	10	08/09/2021	14:43	X	X	X	X	X
GB-19/0-2	60375692020	10	08/09/2021	14:44	X	X	X	X	X
GB-19/3-5	60375692021	10	08/09/2021	14:46	X	X	X	X	X
GB-26/3-4	60375692022	10	08/09/2021	14:47	X	X	X	X	X
19789363CCV	19789363CCV	1	08/09/2021	14:51	X	X	X	X	X
19789364CCB	19789364CCB	1	08/09/2021	14:52	X	X	X	X	X
19789365CRDL	19789365CRDL	1	08/09/2021	14:54	X	X	X	X	X
19789366CCV	19789366CCV	1	08/09/2021	14:55	X	X	X	X	X
19789367CCB	19789367CCB	1	08/09/2021	14:57	X	X	X	X	X
2953701BLANK	2953701	10	08/09/2021	14:59	X	X	X	X	X
2953702LCS	2953702	10	08/09/2021	15:00	X	X	X	X	X
GB-26/4-5	60375692023	10	08/09/2021	15:02	X	X	X	X	X
19789368CCV	19789368CCV	1	08/09/2021	15:15	X	X	X	X	X
19789369CCB	19789369CCB	1	08/09/2021	15:16	X	X	X	X	X
60376093012	60376093012	10	08/09/2021	15:26	X	X	X	X	X
2953703MS	2953703	10	08/09/2021	15:27	X	X	X	X	X
2953704MSD	2953704	10	08/09/2021	15:29	X	X	X	X	X

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/06/2021 13:20 End Date: 08/06/2021 15:23

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19784824CAL0	13:20	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19784825CAL1	13:22	99.7	100.6	100.4	100.0	99.7	99.4	100.0
19784826CAL2	13:24	96.7	98.5	99.9	98.4	98.5	98.3	97.3
19784827CAL3	13:25	95.9	98.6	99.3	98.4	98.3	98.6	96.5
19784828CAL4	13:27	92.3	96.3	98.8	96.6	96.4	99.7	93.9
19784829ICV	13:29	96.1	99.9	101.3	97.8	99.2	101.0	96.8
19784830ICB	13:30	101.7	102.4	102.6	101.8	102.4	100.9	101.4
19784831CRDL	13:32	101.4	102.3	101.5	102.7	101.5	100.4	105.5
19784832ICSA	13:34	80.6	90.9	88.5	85.7	89.2	88.5	83.1
19784833ICSAB	13:35	81.3	92.1	88.2	86.6	88.6	89.1	84.2
19784834CCV	13:37	98.3	101.7	102.5	101.1	100.4	100.6	99.1
19784835CCB	13:39	103.0	102.5	102.1	102.8	102.8	98.7	102.9
19784842CCV	14:22	101.0	110.3	106.1	106.7	104.3	112.9	108.6
19784843CCB	14:23	106.1	111.1	107.5	109.2	107.4	110.8	116.9
2952916	14:25	102.9	104.1	102.7	105.3	101.1	92.7	105.7
2952917	14:27	101.3	106.4	103.8	106.4	101.7	99.0	102.8
60375838013	14:28	99.2	110.9	106.1	107.3	100.9	96.6	106.8
2952918	14:30	96.0	109.4	102.2	103.9	98.1	103.0	99.8
2952919	14:32	97.0	110.1	103.8	106.3	99.4	105.9	101.9
19784844CCV	14:40	101.9	112.8	108.2	109.2	105.8	120.6	114.6
19784845CCB	14:41	107.4	113.9	107.7	111.3	107.2	117.6	122.5
GB-31/3-5	14:50	101.5	118.9	108.3	110.8	102.8	104.1	110.5
GB-31/5-7	14:51	100.6	115.4	108.6	110.4	101.6	103.2	110.2
GB-24/1-3	14:53	94.0	101.3	101.1	100.1	96.3	89.3	95.6
GB-24/3-5	14:55	99.7	114.0	107.0	109.2	100.8	99.8	108.7
19784846CCV	14:58	101.7	111.7	107.1	107.5	104.8	118.1	113.0
19784847CCB	15:00	106.2	112.5	107.2	110.4	107.8	112.8	120.4
GB-17/1-3	15:01	101.6	113.4	108.2	111.0	102.8	99.6	111.1
GB-17/3-5	15:03	101.0	115.6	108.6	110.8	102.3	101.0	114.0
GB-25/0-2	15:05	102.2	117.7	108.1	111.7	102.6	102.3	111.2
GB-25/2-4	15:06	101.5	118.6	108.5	112.1	103.0	103.2	114.9
2952920	15:08	97.6	111.0	104.5	106.8	99.2	104.9	102.4
2952921	15:10	98.0	113.5	105.8	107.2	100.4	106.9	103.7
GB-18/3-5	15:11	98.7	114.6	106.1	108.5	100.6	101.9	104.7
GB-18/5-7	15:13	101.5	113.9	104.6	109.6	101.4	102.2	113.3
19784849CCV	15:16	102.1	115.9	107.9	109.5	105.2	121.8	119.4
19784850CCB	15:18	107.9	117.9	109.4	113.3	107.7	120.2	125.4
19784851CRDL	15:20	106.7	116.8	107.5	112.5	106.7	118.3	123.0
19784852CCV	15:21	100.6	109.2	106.4	107.3	103.9	114.0	105.7
19784853CCB	15:23	105.8	113.0	106.7	110.1	106.6	114.3	117.1

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/06/2021 13:20 End Date: 08/06/2021 15:23

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19784824CAL0	13:20	100.0	100.0	100.0
19784825CAL1	13:22	100.6	100.5	100.5
19784826CAL2	13:24	98.7	99.8	99.4
19784827CAL3	13:25	99.1	99.8	99.7
19784828CAL4	13:27	97.5	98.5	97.6
19784829ICV	13:29	100.2	100.5	99.5
19784830ICB	13:30	102.1	101.9	101.6
19784831CRDL	13:32	102.2	101.8	102.1
19784832ICSA	13:34	91.3	88.4	88.7
19784833ICSAB	13:35	92.5	89.1	89.3
19784834CCV	13:37	100.4	103.1	102.2
19784835CCB	13:39	101.9	102.9	103.1
19784842CCV	14:22	111.4	106.1	108.6
19784843CCB	14:23	112.9	107.2	110.5
2952916	14:25	100.4	102.4	102.8
2952917	14:27	101.9	103.3	105.1
60375838013	14:28	109.2	105.9	183.3
2952918	14:30	107.1	102.6	185.2
2952919	14:32	107.9	103.9	179.6
19784844CCV	14:40	117.3	107.9	111.9
19784845CCB	14:41	117.7	108.8	113.4
GB-31/3-5	14:50	115.0	109.4	231.7
GB-31/5-7	14:51	113.7	109.2	241.0
GB-24/1-3	14:53	98.8	100.6	194.0
GB-24/3-5	14:55	110.7	107.2	217.3
19784846CCV	14:58	114.9	106.3	110.6
19784847CCB	15:00	113.2	107.7	110.4
GB-17/1-3	15:01	112.2	107.9	198.6
GB-17/3-5	15:03	113.4	108.2	205.5
GB-25/0-2	15:05	114.3	107.7	196.3
GB-25/2-4	15:06	114.6	108.9	212.7
2952920	15:08	110.1	104.8	201.7
2952921	15:10	110.5	106.2	212.7
GB-18/3-5	15:11	112.5	106.8	239.7
GB-18/5-7	15:13	116.0	105.3	127.5
19784849CCV	15:16	120.1	107.7	113.5
19784850CCB	15:18	120.6	109.4	115.4
19784851CRDL	15:20	119.3	108.7	114.3
19784852CCV	15:21	112.1	106.4	108.6
19784853CCB	15:23	114.4	107.4	110.7

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/09/2021 13:59 End Date: 08/09/2021 15:29

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19789348CAL0	13:59	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19789349CAL1	14:01	98.9	98.8	98.9	98.1	97.8	98.7	98.3
19789350CAL2	14:03	96.1	96.8	99.2	95.3	96.6	99.9	95.4
19789351CAL3	14:04	95.4	97.0	98.0	94.9	96.4	100.4	94.2
19789352CAL4	14:06	92.3	96.2	97.7	94.6	95.5	101.5	93.4
19789353ICV	14:07	95.7	98.9	100.3	97.3	97.6	102.0	96.2
19789354ICB	14:09	99.9	101.0	99.7	99.6	98.9	99.2	100.0
19789355CRDL	14:11	100.6	101.0	100.3	100.4	98.8	100.0	100.3
19789356ICSA	14:12	80.8	91.9	88.0	87.9	87.2	90.5	83.8
19789357ICSAB	14:14	81.0	92.7	88.7	88.1	87.9	89.5	84.6
19789358CCV	14:15	98.6	101.8	102.9	102.4	99.6	100.8	99.4
19789359CCB	14:17	103.1	103.6	102.5	104.6	102.0	101.0	103.8
2952930	14:19	101.9	102.3	100.6	104.0	99.2	93.0	100.9
2952931	14:20	100.4	101.9	101.0	103.7	97.7	97.3	100.0
GB-11/1-3	14:22	97.6	107.0	103.8	105.1	97.5	94.3	100.5
2952932	14:23	96.2	107.2	101.5	104.2	96.9	100.6	99.6
2952933	14:25	96.7	107.9	103.5	104.9	97.9	103.6	100.0
GB-11/3-5	14:27	98.1	114.7	106.6	108.6	99.7	101.0	106.8
GB-04/2-3	14:28	99.5	112.3	106.4	109.0	100.1	100.7	104.9
GB-04/3-5	14:30	99.9	112.1	105.9	108.7	99.9	99.9	105.1
19789360CCV	14:33	99.8	107.0	104.5	106.5	100.8	109.6	104.1
19789361CCB	14:35	104.2	107.5	104.6	107.0	103.1	108.5	106.5
GB-04/3-5D	14:36	97.1	108.3	103.0	105.4	96.1	95.6	101.6
GB-05/3-5	14:38	98.7	111.5	104.9	108.2	97.7	99.4	103.6
GB-05/5-7	14:39	98.6	112.1	104.9	108.2	98.9	99.4	105.5
GB-12/2.5-3.5	14:41	99.4	112.7	106.5	109.0	99.9	99.3	105.6
GB-12/4-6	14:43	91.5	99.1	95.9	95.2	92.4	88.4	92.6
GB-19/0-2	14:44	98.6	109.4	103.8	106.6	98.1	96.0	103.2
GB-19/3-5	14:46	99.1	115.6	106.6	109.6	99.0	101.0	105.9
GB-26/3-4	14:47	99.8	113.3	106.3	109.3	99.0	101.0	105.8
19789363CCV	14:51	100.3	110.1	105.6	107.7	101.7	114.6	106.5
19789364CCB	14:52	104.6	109.4	104.4	107.0	102.9	111.3	107.8
19789365CRDL	14:54	103.9	108.4	104.7	107.5	102.7	107.9	107.6
19789366CCV	14:55	97.6	104.3	101.9	102.9	98.3	106.4	101.7
19789367CCB	14:57	103.5	107.5	103.1	106.2	102.0	106.2	106.6
2953701	14:59	102.3	104.5	101.4	104.8	99.1	93.7	102.9
2953702	15:00	99.8	103.6	100.6	104.6	97.2	96.6	101.5
GB-26/4-5	15:02	97.1	110.3	104.0	106.6	96.8	95.0	102.8
19789368CCV	15:15	100.3	112.4	105.3	108.8	101.7	118.9	107.5
19789369CCB	15:16	105.1	113.6	106.1	110.6	103.9	114.7	114.4

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/09/2021 13:59 End Date: 08/09/2021 15:29

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
60376093012	15:26	98.0	114.3	103.4	109.2	97.6	97.4	104.8
2953703	15:27	95.2	110.8	101.2	105.8	96.0	104.9	101.2
2953704	15:29	95.1	111.4	101.2	105.1	95.6	105.0	103.5

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19789348CAL0	13:59	100.0	100.0	100.0
19789349CAL1	14:01	99.9	100.2	99.9
19789350CAL2	14:03	97.7	99.0	97.5
19789351CAL3	14:04	98.8	98.2	98.2
19789352CAL4	14:06	99.2	98.0	98.1
19789353ICV	14:07	100.1	100.6	100.2
19789354ICB	14:09	101.4	100.6	100.9
19789355CRDL	14:11	100.5	100.7	101.1
19789356ICSA	14:12	93.1	89.3	90.3
19789357ICSAB	14:14	94.1	89.7	90.5
19789358CCV	14:15	101.3	103.0	102.4
19789359CCB	14:17	103.3	103.8	103.7
2952930	14:19	98.9	101.7	102.0
2952931	14:20	99.6	101.2	102.8
GB-11/1-3	14:22	104.7	104.7	195.8
2952932	14:23	106.2	102.6	187.7
2952933	14:25	108.5	105.2	212.5
GB-11/3-5	14:27	112.1	107.4	277.2
GB-04/2-3	14:28	111.1	107.6	208.1
GB-04/3-5	14:30	111.4	107.4	198.8
19789360CCV	14:33	109.6	105.6	107.5
19789361CCB	14:35	109.3	105.5	107.6
GB-04/3-5D	14:36	106.7	103.9	210.3
GB-05/3-5	14:38	110.6	106.7	226.4
GB-05/5-7	14:39	111.3	107.4	201.8
GB-12/2.5-3.5	14:41	112.5	107.1	222.9
GB-12/4-6	14:43	98.3	97.5	261.5
GB-19/0-2	14:44	108.0	105.7	189.7
GB-19/3-5	14:46	114.2	107.6	281.3
GB-26/3-4	14:47	113.2	107.6	227.4
19789363CCV	14:51	114.0	106.3	110.8
19789364CCB	14:52	112.3	105.1	108.8
19789365CRDL	14:54	109.8	105.8	108.1
19789366CCV	14:55	107.3	102.7	105.3

FORM XV INORGANIC-3

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/09/2021 13:59 End Date: 08/09/2021 15:29

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19789367CCB	14:57	108.5	104.4	107.7
2953701	14:59	101.5	102.8	103.9
2953702	15:00	101.6	100.9	104.9
GB-26/4-5	15:02	109.3	105.1	231.0
19789368CCV	15:15	117.5	106.3	111.6
19789369CCB	15:16	116.4	107.2	112.2
60376093012	15:26	111.3	104.9	168.3
2953703	15:27	110.5	103.4	176.6
2953704	15:29	110.7	101.8	176.7

SAMPLE NO.

GB-31/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.1		%	1	07/23/2021 13:37

SAMPLE NO.

GB-31/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.7		%	1	07/23/2021 13:38

SAMPLE NO.

GB-24/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	17.7		%	1	07/23/2021 13:38

SAMPLE NO.

GB-24/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.4		%	1	07/23/2021 13:38

SAMPLE NO.

GB-17/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.5		%	1	07/23/2021 13:38

SAMPLE NO.

GB-17/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.4		%	1	07/23/2021 13:38

SAMPLE NO.

GB-25/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.3		%	1	07/23/2021 13:38

SAMPLE NO.

GB-25/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.8		%	1	07/23/2021 13:38

SAMPLE NO.

GB-18/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	23.4		%	1	07/23/2021 13:38

SAMPLE NO.

GB-18/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	12.6		%	1	07/23/2021 13:38

SAMPLE NO.

GB-11/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	17.1		%	1	07/23/2021 13:38

SAMPLE NO.

GB-11/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692012 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	26.5		%	1	07/23/2021 13:38

SAMPLE NO.

GB-04/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692013 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.9		%	1	07/23/2021 13:38

SAMPLE NO.

GB-04/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.8		%	1	07/23/2021 13:39

SAMPLE NO.

GB-04/3-5D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.6		%	1	07/23/2021 13:39

SAMPLE NO.

GB-05/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.7		%	1	07/23/2021 13:39

SAMPLE NO.

GB-05/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.5		%	1	07/23/2021 13:39

SAMPLE NO.

GB-12/2.5-3.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.5		%	1	07/23/2021 13:39

SAMPLE NO.

GB-12/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.9		%	1	07/23/2021 13:39

SAMPLE NO.

GB-19/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	12.9		%	1	07/23/2021 13:39

SAMPLE NO.

GB-19/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692021 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	15.9		%	1	07/23/2021 14:28

SAMPLE NO.

GB-26/3-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692022 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	17.7		%	1	07/23/2021 14:28

SAMPLE NO.

GB-26/4-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Lab Sample ID: 60375692023 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.4		%	1	07/23/2021 14:28

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2945126	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									ND	U
Wet weight w/dish weight										

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract : GSA GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2945488	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									ND	U
Wet weight w/dish weight										

SAMPLE NO.

2945127DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	18.8	18.8	0

SAMPLE NO.

2945489DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	15.3	13.6	11

FORM IX INORGANIC-1
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Preparation Method: ASTM D2974 Instrument ID: 60BAL2

Concentration Units: %

Analyte	PQL	MDL	MDL Date
Percent Moisture	0.10	0.10	01/01/2021

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18377

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2945126	2945126	07/23/2021	1	1
2945127	2945127	07/23/2021	1	1
60375692001	GB-31/3-5	07/23/2021	1	1
60375692002	GB-31/5-7	07/23/2021	1	1
60375692003	GB-24/1-3	07/23/2021	1	1
60375692004	GB-24/3-5	07/23/2021	1	1
60375692005	GB-17/1-3	07/23/2021	1	1
60375692006	GB-17/3-5	07/23/2021	1	1
60375692007	GB-25/0-2	07/23/2021	1	1
60375692008	GB-25/2-4	07/23/2021	1	1
60375692009	GB-18/3-5	07/23/2021	1	1
60375692010	GB-18/5-7	07/23/2021	1	1
60375692011	GB-11/1-3	07/23/2021	1	1
60375692012	GB-11/3-5	07/23/2021	1	1
60375692013	GB-04/2-3	07/23/2021	1	1
60375692014	GB-04/3-5	07/23/2021	1	1
60375692015	GB-04/3-5D	07/23/2021	1	1
60375692016	GB-05/3-5	07/23/2021	1	1
60375692017	GB-05/5-7	07/23/2021	1	1
60375692018	GB-12/2.5-3.5	07/23/2021	1	1
60375692019	GB-12/4-6	07/23/2021	1	1
60375692020	GB-19/0-2	07/23/2021	1	1

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18379

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2945488	2945488	07/23/2021	1	1
2945489	2945489	07/23/2021	1	1
60375692021	GB-19/3-5	07/23/2021	1	1
60375692022	GB-26/3-4	07/23/2021	1	1
60375692023	GB-26/4-5	07/23/2021	1	1

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375692 Contract: GSA GOODFELLOW

Instrument ID: 60BAL2 Analysis Method: ASTM D2974

Start Date: 07/23/2021 13:37 End Date: 07/23/2021 14:28

Sample Name	Lab Sample ID	D/F	Date	Time	MOIST
2945126BLANK	2945126	1	07/23/2021	13:37	X
GB-31/3-5	60375692001	1	07/23/2021	13:37	X
2945127DUP	2945127	1	07/23/2021	13:38	X
GB-31/5-7	60375692002	1	07/23/2021	13:38	X
GB-24/1-3	60375692003	1	07/23/2021	13:38	X
GB-24/3-5	60375692004	1	07/23/2021	13:38	X
GB-17/1-3	60375692005	1	07/23/2021	13:38	X
GB-17/3-5	60375692006	1	07/23/2021	13:38	X
GB-25/0-2	60375692007	1	07/23/2021	13:38	X
GB-25/2-4	60375692008	1	07/23/2021	13:38	X
GB-18/3-5	60375692009	1	07/23/2021	13:38	X
GB-18/5-7	60375692010	1	07/23/2021	13:38	X
GB-11/1-3	60375692011	1	07/23/2021	13:38	X
GB-11/3-5	60375692012	1	07/23/2021	13:38	X
GB-04/2-3	60375692013	1	07/23/2021	13:38	X
GB-04/3-5	60375692014	1	07/23/2021	13:39	X
GB-04/3-5D	60375692015	1	07/23/2021	13:39	X
GB-05/3-5	60375692016	1	07/23/2021	13:39	X
GB-05/5-7	60375692017	1	07/23/2021	13:39	X
GB-12/2.5-3.5	60375692018	1	07/23/2021	13:39	X
GB-12/4-6	60375692019	1	07/23/2021	13:39	X
GB-19/0-2	60375692020	1	07/23/2021	13:39	X
2945488BLANK	2945488	1	07/23/2021	14:27	X
60375461001	60375461001	1	07/23/2021	14:27	X
2945489DUP	2945489	1	07/23/2021	14:27	X
GB-19/3-5	60375692021	1	07/23/2021	14:28	X
GB-26/3-4	60375692022	1	07/23/2021	14:28	X
GB-26/4-5	60375692023	1	07/23/2021	14:28	X

ANALYTICAL REPORT

August 19, 2021

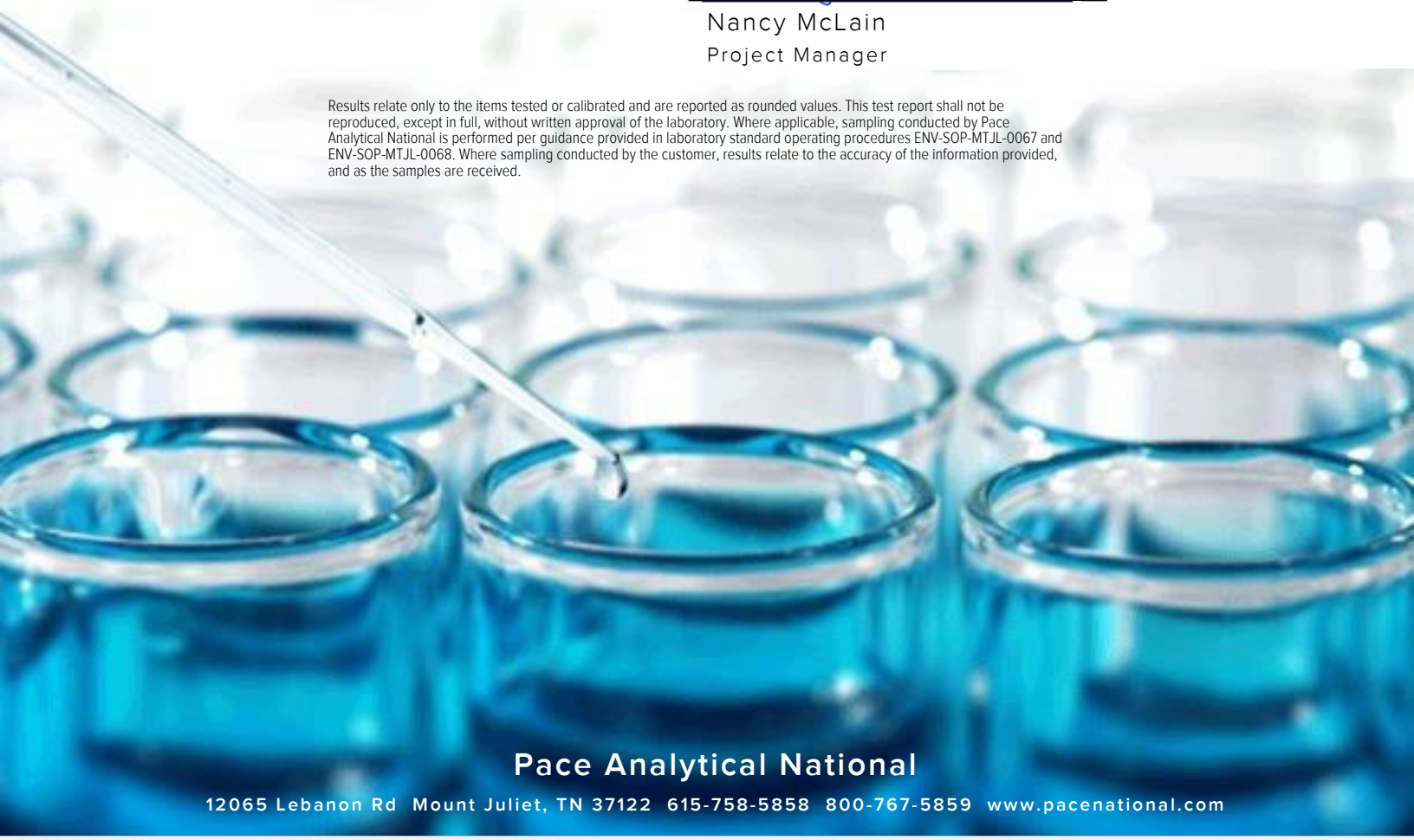
Pace Analytical - Lenexa, KS

Sample Delivery Group:	L1382497
Samples Received:	07/24/2021
Project Number:	60375692
Description:	GSA Goodfellow
Site:	024
Report To:	Jeff Shopper 9608 Loiret Boulevard Lenexa, KS 66219

Entire Report Reviewed By: (b) (6)

Nancy McLain
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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GB-41/4-6 L1382497-01 Solid

			Collected by	Collected date/time	Received date/time
				07/22/21 13:30	07/24/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1714895	1	07/31/21 07:43	07/31/21 07:49	CMK	Minneapolis, MN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1710286	1	07/26/21 17:15	07/29/21 00:40	GKM	Mt. Juliet, TN

GB-41/6-8 L1382497-02 Solid

			Collected by	Collected date/time	Received date/time
				07/22/21 13:32	07/24/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1714895	1	07/31/21 07:43	07/31/21 07:49	CMK	Minneapolis, MN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1710286	1	07/26/21 17:15	07/29/21 01:08	GKM	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

(b) (6)

Nancy McLain
Project Manager

Report Revision History

Level II Report - Version 1: 08/02/21 11:10

2540 G-2011 Total Solids

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1382497-01	**SDG:**	L1382497
Client Sample ID:	GB-41/4-6	**Collected Date/Time:**	07/22/21 13:30
Lab File ID:	09	**Received Date/Time:**	07/24/21 09:30
Instrument ID:	10BALP	**Preparation Date/Time:**	07/31/21 07:43
Analytical Batch:	WG1714895	**Analysis Date/Time:**	07/31/21 07:49
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	6.593 g
Total Solids (%):	81.0	**Final Wt/Vol:**	5.585 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	81.0	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1382497-02	**SDG:**	L1382497
Client Sample ID:	GB-41/6-8	**Collected Date/Time:**	07/22/21 13:32
Lab File ID:	10	**Received Date/Time:**	07/24/21 09:30
Instrument ID:	10BALP	**Preparation Date/Time:**	07/31/21 07:43
Analytical Batch:	WG1714895	**Analysis Date/Time:**	07/31/21 07:49
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	7.862 g
Total Solids (%):	80.6	**Final Wt/Vol:**	6.588 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	80.6	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3686462-1	**SDG:**	L1382497
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	01	**Received Date/Time:**	
Instrument ID:	10BALP	**Preparation Date/Time:**	07/31/21 07:43
Analytical Batch:	WG1714895	**Analysis Date/Time:**	07/31/21 07:49
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	1.285 g
Total Solids (%):		**Final Wt/Vol:**	1.285 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	0.000	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3686462-3	**SDG:**	L1382497
Client Sample ID:	DUP	**Collected Date/Time:**	07/21/21 13:12
Lab File ID:	02	**Received Date/Time:**	07/24/21 09:00
Instrument ID:	10BALP	**Preparation Date/Time:**	07/31/21 07:43
Analytical Batch:	WG1714895	**Analysis Date/Time:**	07/31/21 07:49
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	15.549 g
Total Solids (%):	89.8	**Final Wt/Vol:**	14.159 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	90.3	

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3686462-2	**SDG:**	L1382497
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	03	**Received Date/Time:**	
Instrument ID:	10BALP	**Preparation Date/Time:**	07/31/21 07:43
Analytical Batch:	WG1714895	**Analysis Date/Time:**	07/31/21 07:49
Dilution Factor:	1	**Prep Method:**	SM 2540 G
Analytical Method:	2540 G-2011	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	11.285 g
Total Solids (%):		**Final Wt/Vol:**	6.282 g

Analyte	CAS	Result	Qualifier
		%	
Total Solids	TSOLIDS	50.0	

SDG:	L1382497	**Calibration (begin) date/time:**	_____
Instrument ID:	10BALP	**Calibration (end) date/time:**	_____
Analytical Method:	2540 G-2011	**Analytical Run:**	WG1714895

Sample ID:	**BLANK Result**	**BLANK Qual**
File ID:	01	
Analyte	%	
TOTAL SOLIDS	0.000	

DUP Sample / File ID:	R3686462-3 / 02	**SDG:**	L1382497
OS Sample / File ID:	L1382481-02 / 07	**Analytical Batch:**	WG1714895
Instrument ID:	10BALP	**Dilution Factor:**	1
Analytical Method:	2540 G-2011	**Matrix:**	Solid

Analyte	OS Result	DUP Result	RPD	RPD Limits
	%	%	%	%
Total Solids	89.8	90.3	0.563	10

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY
L1382497-01,02

SAMPLE NO.:
R3686462-2

LCS Sample / File ID:	R3686462-2 / 03	**SDG:**	L1382497
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1714895
Instrument ID:	10BALP	**Dilution Factor:**	1
Analytical Method:	2540 G-2011	**Matrix:**	Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.0		100		85.0 - 115		

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1382497-01,02 **Analytical Method:** 2540 G-2011

Matrix: Solid **Prep Method:** SM 2540 G

Analyte	CAS	Wavelength	Mass	MDL	RDL
				%	%
Total Solids	TSOLIDS				

ANALYSIS LOG

SDG:	L1382497	**Analytical Method:**	2540 G-2011
Instrument ID:	10BALP	**Calibration Start Date:**	
Analytical Run:	WG1714895	**Calibration End Date:**	

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3686462-1	01	07/31/21 07:49	1	WG1714895
DUP	R3686462-3	02	07/31/21 07:49	1	WG1714895
LCS	R3686462-2	03	07/31/21 07:49	1	WG1714895
OS	L1382481-02	07	07/31/21 07:49		
GB-41/4-6	L1382497-01	09	07/31/21 07:49	1	WG1714895
GB-41/6-8	L1382497-02	10	07/31/21 07:49	1	WG1714895

8330B Semi-Volatile Organic Compounds (HPLC)

Analytical Method: 8330B **SDG:** L1382497
Matrix: Solid

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
GB-41/4-6	L1382497-01	HPLC4	0728000025	97.0	0
GB-41/6-8	L1382497-02	HPLC4	0728000026	96.9	0
OS	L1381569-04	HPLC4	0728000009	100	0
MS	R3685137-3	HPLC4	0728000004	98.1	0
MSD	R3685137-4	HPLC4	0728000005	101	0
BLANK	R3685137-1	HPLC4	0728000002	103	0
LCS	R3685137-2	HPLC4	0728000003	95.3	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	1,3-Dimethyl-2-NB	80.0 - 128

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1382497-01,02

SAMPLE NO.:
R3685137-3
R3685137-4

MS Sample / File ID: R3685137-3 / 0728000004
MSD Sample / File ID: R3685137-4 / 0728000005
OS Sample / File ID: L1381569-04 / 0728000009
Instrument ID: HPLC4
Analytical Method: 8330B

SDG: L1382497
Analytical Batch: WG1710286
Matrix: Solid

Analyte	Spike Amount (dry)	OS Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	mg/kg	*mg/kg*	*mg/kg*	*mg/kg*	*%*	*%*		*%*	*%*	*%*
Tetryl	9.71	U	10.2	10.5	105	108	1	46.0 - 158	2.60	20
2,4-Dinitrotoluene	9.71	U	9.40	9.58	96.7	98.6	1	78.0 - 138	1.93	20
4-Nitrotoluene (4-NT)	9.71	U	9.32	9.47	96.0	97.5	1	80.0 - 129	1.56	20
RDX	9.71	U	8.57	8.87	88.2	91.3	1	57.0 - 126	3.50	20
Nitrobenzene	9.71	U	9.48	9.71	97.6	100	1	80.0 - 126	2.42	20
2,6-Dinitrotoluene	9.71	U	9.29	9.59	95.6	98.7	1	80.0 - 125	3.23	20
2-Nitrotoluene	9.71	U	9.30	9.59	95.7	98.7	1	80.0 - 125	3.10	20
3-Nitrotoluene	9.71	U	9.46	9.73	97.4	100	1	80.0 - 120	2.80	20
1,3,5-Trinitrobenzene	9.71	U	9.53	9.81	98.1	101	1	80.0 - 133	2.90	20
1,3-Dinitrobenzene	9.71	U	9.29	9.60	95.6	98.9	1	80.0 - 138	3.36	20
2,4,6-Trinitrotoluene	9.71	U	9.31	9.51	95.9	97.9	1	80.0 - 127	2.08	20
4-Amino-2,6-Dinitrotoluene	9.71	U	9.23	9.48	95.0	97.6	1	80.0 - 127	2.74	20
2-Amino-4,6-Dinitrotoluene	9.71	U	9.10	9.37	93.7	96.5	1	80.0 - 135	2.91	20
HMX	9.71	U	9.49	9.73	97.7	100	1	79.0 - 125	2.41	20
PETN	9.71	U	10.3	9.82	106	101	1	77.0 - 145	4.85	20
Nitroglycerine	9.71	U	9.26	9.40	95.4	96.7	1	66.0 - 137	1.44	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY
L1382497-01,02

SAMPLE NO.:
R3685137-2

LCS Sample / File ID:	R3685137-2 / 0728000003	**SDG:**	L1382497
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1710286
Instrument ID:	HPLC4	**Dilution Factor:**	1
Analytical Method:	8330B	**Matrix:**	Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	mg/kg	*mg/kg*		*%*	*%*	*%*	*%*	*%*
Tetryl	8.00	7.60		95.0		80.0 - 122		
2,4-Dinitrotoluene	8.00	7.55		94.4		80.0 - 120		
4-Nitrotoluene (4-NT)	8.00	7.39		92.4		80.0 - 121		
RDX	8.00	7.47		93.4		80.0 - 120		
Nitrobenzene	8.00	7.54		94.3		80.0 - 120		
2,6-Dinitrotoluene	8.00	7.45		93.1		80.0 - 120		
2-Nitrotoluene	8.00	7.49		93.6		80.0 - 120		
3-Nitrotoluene	8.00	7.56		94.5		80.0 - 120		
1,3,5-Trinitrobenzene	8.00	7.49		93.6		80.0 - 124		
1,3-Dinitrobenzene	8.00	7.49		93.6		80.0 - 122		
2,4,6-Trinitrotoluene	8.00	7.31		91.4		80.0 - 120		
4-Amino-2,6-Dinitrotoluene	8.00	7.43		92.9		80.0 - 120		
2-Amino-4,6-Dinitrotoluene	8.00	7.25		90.6		80.0 - 123		
HMX	8.00	7.53		94.1		80.0 - 120		
PETN	8.00	7.70		96.3		80.0 - 137		
Nitroglycerine	8.00	7.32		91.5		78.0 - 120		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Lab Sample ID:	R3685137-1	**SDG:**	L1382497
Lab File ID:	0728000002	**Preparation Date/Time:**	07/26/21 17:15
Instrument ID:	HPLC4	**Analysis Date/Time:**	07/28/21 13:57
Analytical Batch:	WG1710286	**Dilution Factor:**	1
Analytical Method:	8330B	**Matrix:**	Solid

Sample ID	Lab Sample ID	Instrument	File ID	Analysis *date/time*
LCS	R3685137-2	HPLC4	0728000003	07/28/21 14:25
MS	R3685137-3	HPLC4	0728000004	07/28/21 14:53
MSD	R3685137-4	HPLC4	0728000005	07/28/21 15:21
OS	L1381569-04	HPLC4	0728000009	07/28/21 17:12
GB-41/4-6	L1382497-01	HPLC4	0728000025	07/29/21 00:40
GB-41/6-8	L1382497-02	HPLC4	0728000026	07/29/21 01:08

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1382497-01	**SDG:**	L1382497
Client Sample ID:	GB-41/4-6	**Collected Date/Time:**	07/22/21 13:30
Lab File ID:	0728000025	**Received Date/Time:**	07/24/21 09:30
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/29/21 00:40
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5.00 g
Total Solids (%):	81.0	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.20	1	U		0.108	0.617
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0968	0.617
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.170	0.617
RDX	121-82-4	4.847742	1	U		0.135	0.617
Nitrobenzene	98-95-3	8.63	1	U		0.106	0.617
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.107	0.617
2-Nitrotoluene	88-72-2	13.77	1	U		0.113	0.617
3-Nitrotoluene	99-08-1	15.83	1	U		0.140	0.617
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0484	0.617
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0636	0.617
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0779	0.617
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0708	0.617
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0788	0.617
HMX	2691-41-0	3.12	1	U		0.0962	0.617
PETN	78-11-5	17	1	U		0.262	0.617
Nitroglycerine	55-63-0	9.50	1	U		0.190	2.47

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1382497-02	**SDG:**	L1382497
Client Sample ID:	GB-41/6-8	**Collected Date/Time:**	07/22/21 13:32
Lab File ID:	0728000026	**Received Date/Time:**	07/24/21 09:30
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/29/21 01:08
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.04 g
Total Solids (%):	80.6	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry)	Qualifier	MDL (dry)	RDL (dry)
				mg/kg		*mg/kg*	*mg/kg*
Tetryl	479-45-8	8.20	1	U		0.109	0.620
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0972	0.620
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.171	0.620
RDX	121-82-4	4.847742	1	U		0.135	0.620
Nitrobenzene	98-95-3	8.63	1	U		0.107	0.620
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.107	0.620
2-Nitrotoluene	88-72-2	13.77	1	U		0.113	0.620
3-Nitrotoluene	99-08-1	15.83	1	U		0.140	0.620
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0486	0.620
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0639	0.620
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0782	0.620
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0711	0.620
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0791	0.620
HMX	2691-41-0	3.12	1	U		0.0966	0.620
PETN	78-11-5	17	1	U		0.263	0.620
Nitroglycerine	55-63-0	9.50	1	U		0.191	2.48

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	1

Analyte	**CS: 50**	**CS: 100**	**CS: 500**	**CS: 5000**	**CS: 10000**	**CS: 25000**
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	3.171385	3.173083	3.173223	3.169369	3.163009	3.170319
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	4.847742	4.855105	4.852368	4.842887	4.823464	4.841376
1,3,5-TRINITROBENZENE	6.519834	6.525268	6.522585	6.511855	6.487756	6.513189
M-DINITROBENZENE	7.715923	7.726374	7.722607	7.706491	7.671502	7.707696
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	8.157695	8.171274	8.167254	8.144935	8.098422	8.145638
NITROBENZENE	8.537642	8.545776	8.541567	8.528630	8.494763	8.532535
NITROGLYCERINE	9.539104	9.550113	9.542587	9.526826	9.481855	9.526034
2,4,6-TRINITROTOLUENE	9.897795	9.909935	9.903618	9.884956	9.836236	9.890092
4-AMINO-2,6-DINITROTOLUENE	10.227270	10.245760	10.240690	10.204140	10.125880	10.199470
2-AMINO-4,6-DINITROTOLUENE	10.813790	10.833760	10.8278	10.784020	10.695990	10.774710
2,6-DINITROTOLUENE	11.122860	11.134870	11.128170	11.105790	11.044940	11.110350
2,4-DINITROTOLUENE	11.5565	11.566070	11.558870	11.532060	11.463630	11.534850
2-NITROTOLUENE	13.220310	13.231650	13.219310	13.198350	13.129760	13.206620
4-NITROTOLUENE (4-NT)	14.237450	14.244390	14.2294	14.200370	14.119980	14.208990
3-NITROTOLUENE	15.175170	15.189170	15.171220	15.144040	15.061150	15.156730
PETN	16.359830	16.390830	16.365830	16.343550	16.257310	16.355280
1,3-DIMETHYL-2-NB	22.3265	22.348930	22.287570	22.243860	22.1301	22.290630
File ID:	03050000 01	03050000 02	03050000 03	03050000 04	03050000 05	03050000 06

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	2

Analyte	**CS: 50**	**CS: 100**	**CS: 500**	**CS: 5000**	**CS: 10000**	**CS: 25000**
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	3.171145	3.173019	3.173167	3.169886	3.163031	3.170523
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	4.847465	4.856752	4.852536	4.843367	4.823978	4.841408
1,3,5-TRINITROBENZENE	6.513167	6.524614	6.521931	6.511817	6.487702	6.513190
M-DINITROBENZENE	7.7190	7.725886	7.723182	7.706508	7.671550	7.707723
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	8.152849	8.169066	8.168149	8.144856	8.098416	8.145687
NITROBENZENE	8.5465	8.550094	8.541797	8.528927	8.494675	8.532819
NITROGLYCERINE	9.551976	9.546318	9.542693	9.526806	9.481840	9.526051
2,4,6-TRINITROTOLUENE	9.883112	9.914920	9.904042	9.884872	9.836247	9.890079
4-AMINO-2,6-DINITROTOLUENE	10.211050	10.2422	10.242930	10.204310	10.125880	10.199490
2-AMINO-4,6-DINITROTOLUENE	10.824160	10.839240	10.828920	10.784230	10.695980	10.774750
2,6-DINITROTOLUENE	11.128790	11.137640	11.128480	11.106350	11.045280	11.110870
2,4-DINITROTOLUENE	11.530060	11.5644	11.558820	11.532230	11.463750	11.534790
2-NITROTOLUENE	13.2364	13.2275	13.218980	13.198430	13.129690	13.206460
4-NITROTOLUENE (4-NT)	14.215070	14.241030	14.231020	14.200490	14.119990	14.208870
3-NITROTOLUENE	15.170940	15.176590	15.171680	15.144170	15.061160	15.156680
PETN	16.342550	16.383050	16.354550	16.3433	16.257190	16.3553
1,3-DIMETHYL-2-NB	22.295470	22.338270	22.294570	22.243620	22.130170	22.290530
File ID:	0305000001	0305000002	0305000003	0305000004	0305000005	0305000006

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	1

Analyte	RRF: 50	RRF: 100	RRF: 500	RRF: 5000	RRF: 10000	RRF: 25000
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.589540	5.664562	5.504399	5.697655	5.685221	5.769493
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	6.627079	6.641713	6.623152	6.800339	6.805037	6.885991
1,3,5-TRINITROBENZENE	3.389747	3.286280	3.265957	3.355976	3.345051	3.388134
M-DINITROBENZENE	5.606183	5.518289	5.589282	5.727194	5.726504	5.783947
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5.527175	5.228809	5.021992	4.606275	4.608745	4.710337
NITROBENZENE	7.420898	6.855742	7.049081	7.242441	7.227420	7.328022
NITROGLYCERINE	14.089440	15.680740	16.1890	17.247460	17.337280	17.527350
2,4,6-TRINITROTOLUENE	4.740914	4.912546	4.829156	4.746596	4.779355	4.836989
4-AMINO-2,6-DINITROTOLUENE	3.582543	3.858474	4.014325	4.325980	4.304340	4.368022
2-AMINO-4,6-DINITROTOLUENE	3.984769	4.452910	4.390662	4.559380	4.541370	4.622739
2,6-DINITROTOLUENE	4.998904	5.610472	5.671211	5.828244	5.876681	5.912287
2,4-DINITROTOLUENE	5.674341	6.289419	6.269518	6.414562	6.442437	6.536476
2-NITROTOLUENE	6.070773	6.471888	6.304039	6.554028	6.560824	6.659736
4-NITROTOLUENE (4-NT)	6.480818	6.397298	6.695450	6.950418	6.953605	7.047652
3-NITROTOLUENE	5.487788	5.173790	5.259140	5.332740	5.333148	5.408663
PETN	15.930950	16.917870	15.0885	15.588690	15.788370	15.991050
1,3-DIMETHYL-2-NB	6.182741	5.262676	5.641273	5.728670	5.751137	5.819782
File ID:	0305000001	0305000002	0305000003	0305000004	0305000005	0305000006

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	1

Analyte	RRF. Avg	%RSD	COD
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.651812	1.495026	
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	6.730552	1.543016	
1,3,5-TRINITROBENZENE	3.338524	1.416993	
M-DINITROBENZENE	5.658566	1.649432	
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	4.950555	6.939268	
NITROBENZENE	7.187267	2.590901	
NITROGLYCERINE	16.34521	7.388243	
2,4,6-TRINITROTOLUENE	4.807593	1.239571	
4-AMINO-2,6-DINITROTOLUENE	4.075614	7.044108	
2-AMINO-4,6-DINITROTOLUENE	4.425305	4.762099	
2,6-DINITROTOLUENE	5.649633	5.493203	
2,4-DINITROTOLUENE	6.271125	4.495281	
2-NITROTOLUENE	6.436882	3.052613	
4-NITROTOLUENE (4-NT)	6.754207	3.676371	
3-NITROTOLUENE	5.332545	1.88286	
PETN	15.88424	3.459426	
1,3-DIMETHYL-2-NB	5.731047	4.723774	

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	2

Analyte	RRF: 50	RRF: 100	RRF: 500	RRF: 5000	RRF: 10000	RRF: 25000
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.633768	5.647253	5.557384	5.673482	5.683707	5.833914
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5.907260	6.393801	5.962084	5.937918	5.985322	6.088652
1,3,5-TRINITROBENZENE	4.499539	4.331379	4.539626	4.616323	4.617117	4.720823
M-DINITROBENZENE	7.731681	6.886612	6.820469	7.052621	7.066782	7.146976
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5.901636	5.381108	5.249331	4.984086	4.985893	5.108619
NITROBENZENE	5.720191	4.362965	4.152251	4.689836	4.699152	4.778218
NITROGLYCERINE	8.371273	7.324890	7.949999	8.590228	8.657243	8.800561
2,4,6-TRINITROTOLUENE	5.554246	4.969740	5.155667	5.202672	5.248625	5.314285
4-AMINO-2,6-DINITROTOLUENE	3.831814	3.739945	4.112138	4.427781	4.405773	4.482646
2-AMINO-4,6-DINITROTOLUENE	4.388566	5.591607	5.409325	5.509248	5.472934	5.574760
2,6-DINITROTOLUENE	3.808333	4.389862	4.540375	4.561373	4.609254	4.646561
2,4-DINITROTOLUENE	6.435006	5.405881	5.680658	5.710578	5.734331	5.829613
2-NITROTOLUENE	3.683744	4.404376	4.070291	4.188663	4.187062	4.275749
4-NITROTOLUENE (4-NT)	3.900589	4.757668	4.602370	5.011945	4.980028	5.105704
3-NITROTOLUENE	3.380048	3.879897	3.747826	3.709057	3.695131	3.782742
PETN	8.824475	10.900370	8.594565	8.389874	8.371798	8.618650
1,3-DIMETHYL-2-NB	4.653997	3.636982	4.297176	4.294903	4.267369	4.332942
File ID:	0305000001	0305000002	0305000003	0305000004	0305000005	0305000006

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Analytical Method:	8330B	**Column:**	2

Analyte	RRF. Avg	%RSD	COD
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5.671585	1.467524	
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	6.045839	2.73823	
1,3,5-TRINITROBENZENE	4.554134	2.66575	
M-DINITROBENZENE	7.117524	4.161555	
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5.268445	6.003444	
NITROBENZENE	4.733769	10.39844	
NITROGLYCERINE	8.282366	6.11484	
2,4,6-TRINITROTOLUENE	5.240872	3.358477	
4-AMINO-2,6-DINITROTOLUENE	4.166683	7.081576	
2-AMINO-4,6-DINITROTOLUENE	5.324407	7.943564	
2,6-DINITROTOLUENE	4.42596	6.499156	
2,4-DINITROTOLUENE	5.799345	5.388772	
2-NITROTOLUENE	4.134981	5.45956	
4-NITROTOLUENE (4-NT)	4.726384	8.585922	
3-NITROTOLUENE	3.699117	4.187526	
PETN	8.949955	9.893087	
1,3-DIMETHYL-2-NB	4.247228	7.131004	

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0305000007	**Analysis date/time:**	03/05/21 17:19
Analytical Method:	8330B	**Sample ID:**	SSCV
Column:	1		

Analyte	True Value	Result	Result	Limits
	mg/l	*mg/l*	*% Rec.*	*%*
1,3,5-TRINITROBENZENE	5	4.867509	97.40	80 - 120
2,4,6-TRINITROTOLUENE	5	4.955375	99.10	80 - 120
2,4-DINITROTOLUENE	5	4.735329	94.70	80 - 120
2,6-DINITROTOLUENE	5	4.723269	94.50	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.729271	94.60	80 - 120
2-NITROTOLUENE	5	4.798087	96	80 - 120
3-NITROTOLUENE	5	4.902088	98	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	4.577782	91.60	80 - 120
4-NITROTOLUENE (4-NT)	5	4.74974	95	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	4.857015	97.10	80 - 120
M-DINITROBENZENE	5	4.827776	96.60	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	5.241039	105	80 - 120
NITROBENZENE	5	4.857778	97.20	80 - 120
NITROGLYCERINE	5	4.594164	91.90	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	4.861824	97.20	80 - 120
PETN	5	4.941242	98.80	80 - 120
1,3-DIMETHYL-2-NB	5	4.863212	97.30	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0305000007	**Analysis date/time:**	03/05/21 17:19
Analytical Method:	8330B	**Sample ID:**	SSCV
Column:	2		

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
1,3,5-TRINITROBENZENE	5	4.793229	95.90	80 - 120
2,4,6-TRINITROTOLUENE	5	4.906389	98.10	80 - 120
2,4-DINITROTOLUENE	5	4.881352	97.60	80 - 120
2,6-DINITROTOLUENE	5	4.714614	94.30	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.666031	93.30	80 - 120
2-NITROTOLUENE	5	4.846888	96.90	80 - 120
3-NITROTOLUENE	5	4.922045	98.40	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	4.561782	91.20	80 - 120
4-NITROTOLUENE (4-NT)	5	4.6244	92.50	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	4.963759	99.30	80 - 120
M-DINITROBENZENE	5	4.922615	98.50	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	5.162863	103	80 - 120
NITROBENZENE	5	4.975368	99.50	80 - 120
NITROGLYCERINE	5	4.674431	93.50	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	4.902349	98	80 - 120
PETN	5	5.212081	104	80 - 120
1,3-DIMETHYL-2-NB	5	4.885958	97.70	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0728000001	**Analysis date/time:**	07/28/21 13:29
Analytical Method:	8330B	**Sample ID:**	CCV
Column:	1		

Analyte	**True Value** *mg/l*	**Result** *mg/l*	**Result** *% Rec.*	**Limits** *%*
1,3,5-TRINITROBENZENE	5	5.119346	102	80 - 120
2,4,6-TRINITROTOLUENE	5	4.709817	94.20	80 - 120
2,4-DINITROTOLUENE	5	4.945993	98.90	80 - 120
2,6-DINITROTOLUENE	5	4.974489	99.50	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.863713	97.30	80 - 120
2-NITROTOLUENE	5	4.981042	99.60	80 - 120
3-NITROTOLUENE	5	5.073547	101	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	5.024354	100	80 - 120
4-NITROTOLUENE (4-NT)	5	4.928126	98.60	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	5.070966	101	80 - 120
M-DINITROBENZENE	5	5.014136	100	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	4.887751	97.80	80 - 120
NITROBENZENE	5	5.013699	100	80 - 120
NITROGLYCERINE	5	4.773796	95.50	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	5.05694	101	80 - 120
PETN	5	5.094374	102	80 - 120
1,3-DIMETHYL-2-NB	5	5.095556	102	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0728000016	**Analysis date/time:**	07/28/21 20:28
Analytical Method:	8330B	**Sample ID:**	CCV
Column:	1		

Analyte	**True Value** *mg/l*	**Result** *mg/l*	**Result** *% Rec.*	**Limits** *%*
1,3,5-TRINITROBENZENE	5	5.175539	104	80 - 120
2,4,6-TRINITROTOLUENE	5	4.993383	99.90	80 - 120
2,4-DINITROTOLUENE	5	5.085055	102	80 - 120
2,6-DINITROTOLUENE	5	5.109926	102	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.898995	98	80 - 120
2-NITROTOLUENE	5	5.072796	101	80 - 120
3-NITROTOLUENE	5	5.17971	104	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	4.993322	99.90	80 - 120
4-NITROTOLUENE (4-NT)	5	4.995618	99.90	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	5.137012	103	80 - 120
M-DINITROBENZENE	5	5.100545	102	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	5.276231	106	80 - 120
NITROBENZENE	5	5.158101	103	80 - 120
NITROGLYCERINE	5	4.919075	98.40	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	5.135967	103	80 - 120
PETN	5	5.391189	108	80 - 120
1,3-DIMETHYL-2-NB	5	5.144538	103	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1382497	**Calibration (begin) date/time:**	03/05/21 14:31
Instrument ID:	HPLC4	**Calibration (end) date/time:**	03/05/21 16:51
Lab File ID:	0728000027	**Analysis date/time:**	07/29/21 01:36
Analytical Method:	8330B	**Sample ID:**	CCV
Column:	1		

Analyte	**True Value** *mg/l*	**Result** *mg/l*	**Result** *% Rec.*	**Limits** *%*
1,3,5-TRINITROBENZENE	5	5.191061	104	80 - 120
2,4,6-TRINITROTOLUENE	5	4.792349	95.80	80 - 120
2,4-DINITROTOLUENE	5	5.088613	102	80 - 120
2,6-DINITROTOLUENE	5	5.130922	103	80 - 120
2-AMINO-4,6-DINITROTOLUENE	5	4.877768	97.60	80 - 120
2-NITROTOLUENE	5	5.041395	101	80 - 120
3-NITROTOLUENE	5	5.166539	103	80 - 120
4-AMINO-2,6-DINITROTOLUENE	5	5.106036	102	80 - 120
4-NITROTOLUENE (4-NT)	5	5.015634	100	80 - 120
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	5	5.119006	102	80 - 120
M-DINITROBENZENE	5	5.100635	102	80 - 120
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	5	4.857193	97.10	80 - 120
NITROBENZENE	5	5.135334	103	80 - 120
NITROGLYCERINE	5	4.883173	97.70	80 - 120
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	5	5.128294	103	80 - 120
PETN	5	5.328069	107	80 - 120
1,3-DIMETHYL-2-NB	5	5.140124	103	80 - 120

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ANALYTICAL SEQUENCE

SDG:	L1382497	**Analytical Method:**	8330B
Instrument ID:	HPLC4	**Calibration Start Date:**	03/05/21 14:31
		Calibration End Date:	03/05/21 16:51

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	50	0305000001	03/05/21 14:31		
CAL	100	0305000002	03/05/21 14:59		
CAL	500	0305000003	03/05/21 15:27		
CAL	5000	0305000004	03/05/21 15:55		
CAL	10000	0305000005	03/05/21 16:22		
CAL	25000	0305000006	03/05/21 16:51		
SSCV	HPLC4030521A03050000007527056	0305000007	03/05/21 17:19		
CCV	HPLC4072821A0728000001527056	0728000001	07/28/21 13:29		
BLANK	R3685137-1	0728000002	07/28/21 13:57	1	WG1710286
LCS	R3685137-2	0728000003	07/28/21 14:25	1	WG1710286
MS	R3685137-3	0728000004	07/28/21 14:53	1	WG1710286
MSD	R3685137-4	0728000005	07/28/21 15:21	1	WG1710286
L1381569-01	L1381569-01	0728000006	07/28/21 15:49	1	WG1710286
L1381569-02	L1381569-02	0728000007	07/28/21 16:17	1	WG1710286
L1381569-03	L1381569-03	0728000008	07/28/21 16:45	1	WG1710286
OS	L1381569-04	0728000009	07/28/21 17:12		
L1381569-04	L1381569-04	0728000009	07/28/21 17:12	1	WG1710286
L1381569-05	L1381569-05	0728000010	07/28/21 17:40	1	WG1710286
L1381684-41	L1381684-41	0728000011	07/28/21 18:08	1	WG1710286
L1381684-42	L1381684-42	0728000012	07/28/21 18:36	1	WG1710286
L1381684-43	L1381684-43	0728000013	07/28/21 19:04	1	WG1710286
L1381684-44	L1381684-44	0728000014	07/28/21 19:32	1.01	WG1710286
L1381684-45	L1381684-45	0728000015	07/28/21 20:00	1	WG1710286
CCV	HPLC4072821A0728000016527056	0728000016	07/28/21 20:28		
L1381684-46	L1381684-46	0728000017	07/28/21 20:56	1	WG1710286
L1381684-47	L1381684-47	0728000018	07/28/21 21:24	1.01	WG1710286
L1381684-48	L1381684-48	0728000019	07/28/21 21:52	1	WG1710286
L1381684-49	L1381684-49	0728000020	07/28/21 22:20	1	WG1710286
L1381684-50	L1381684-50	0728000021	07/28/21 22:48	1.01	WG1710286
L1381684-51	L1381684-51	0728000022	07/28/21 23:16	1	WG1710286
L1382161-01	L1382161-01	0728000023	07/28/21 23:44	1	WG1710286
L1382161-02	L1382161-02	0728000024	07/29/21 00:12	1	WG1710286
GB-41/4-6	L1382497-01	0728000025	07/29/21 00:40	1	WG1710286
GB-41/6-8	L1382497-02	0728000026	07/29/21 01:08	1	WG1710286
CCV	HPLC4072821A0728000027527056	0728000027	07/29/21 01:36		

Lab Sample ID:	R3685137-1	**SDG:**	L1382497
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0728000002	**Received Date/Time:**	_____
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 13:57
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration *mg/kg*	% Diff.
Tetryl	1	8.20	U	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	12	U	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.83	U	0
	2	14.215070	U	
RDX	1	4.847742	U	0
	2	4.847465	U	
Nitrobenzene	1	8.63	U	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.30	U	0
	2	11.128790	U	
2-Nitrotoluene	1	13.77	U	0
	2	13.2364	U	
3-Nitrotoluene	1	15.83	U	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.50	U	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.70	U	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10	U	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.35	U	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	11	U	0
	2	10.824160	U	
HMX	1	3.12	U	0
	2	3.171145	U	
PETN	1	17	U	0
	2	16.342550	U	
Nitroglycerine	1	9.50	U	0
	2	9.50	U	

Lab Sample ID:	R3685137-2	**SDG:**	L1382497
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0728000003	**Received Date/Time:**	_____
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:25
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration *mg/kg*	% Diff.
Tetryl	1	8.227209	7.60	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	11.709370	7.55	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.475090	7.39	0
	2	14.215070	U	
RDX	1	4.836536	7.47	0
	2	4.847465	U	
Nitrobenzene	1	8.635283	7.54	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.265990	7.45	0
	2	11.128790	U	
2-Nitrotoluene	1	13.440190	7.49	0
	2	13.2364	U	
3-Nitrotoluene	1	15.448640	7.56	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.560483	7.49	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.779504	7.49	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10.016720	7.31	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.323070	7.43	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	10.9197	7.25	0
	2	10.824160	U	
HMX	1	3.136364	7.53	0
	2	3.171145	U	
PETN	1	16.613330	7.70	0
	2	16.342550	U	
Nitroglycerine	1	9.605394	7.32	0
	2	9.50	U	

Lab Sample ID:	R3685137-3	**SDG:**	L1382497
Client Sample ID:	MS	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000004	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:53
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5.02 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration (dry) *mg/kg*	% Diff.
Tetryl	1	8.232952	10.2	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	11.719510	9.40	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.488650	9.32	0
	2	14.215070	U	
RDX	1	4.841878	8.57	0
	2	4.847465	U	
Nitrobenzene	1	8.642230	9.48	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.276240	9.29	0
	2	11.128790	U	
2-Nitrotoluene	1	13.452940	9.30	0
	2	13.2364	U	
3-Nitrotoluene	1	15.462660	9.46	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.565703	9.53	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.785204	9.29	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10.023870	9.31	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.331630	9.23	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	10.929730	9.10	0
	2	10.824160	U	
HMX	1	3.139785	9.49	0
	2	3.171145	U	
PETN	1	16.630880	10.3	0
	2	16.342550	U	
Nitroglycerine	1	9.613220	9.26	0
	2	9.50	U	

Lab Sample ID:	R3685137-4	**SDG:**	L1382497
Client Sample ID:	MSD	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000005	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 15:21
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	_____
Matrix:	Solid	**Initial Wt/Vol:**	5.03 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	Column	RT	Concentration (dry) *mg/kg*	% Diff.
Tetryl	1	8.242246	10.5	0
	2	8.152849	U	
2,4-Dinitrotoluene	1	11.728130	9.58	0
	2	11.530060	U	
4-Nitrotoluene (4-NT)	1	14.499050	9.47	0
	2	14.215070	U	
RDX	1	4.845890	8.87	0
	2	4.847465	U	
Nitrobenzene	1	8.649515	9.71	0
	2	8.5465	U	
2,6-Dinitrotoluene	1	11.285310	9.59	0
	2	11.128790	U	
2-Nitrotoluene	1	13.462390	9.59	0
	2	13.2364	U	
3-Nitrotoluene	1	15.4749	9.73	0
	2	15.170940	U	
1,3,5-Trinitrobenzene	1	6.570660	9.81	0
	2	6.513167	U	
1,3-Dinitrobenzene	1	7.792174	9.60	0
	2	7.7190	U	
2,4,6-Trinitrotoluene	1	10.032260	9.51	0
	2	9.883112	U	
4-Amino-2,6-Dinitrotoluene	1	10.341980	9.48	0
	2	10.211050	U	
2-Amino-4,6-Dinitrotoluene	1	10.939870	9.37	0
	2	10.824160	U	
HMX	1	3.141450	9.73	0
	2	3.171145	U	
PETN	1	16.6464	9.82	0
	2	16.342550	U	
Nitroglycerine	1	9.621762	9.40	0
	2	9.50	U	

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1382497-01,02 **Analytical Method:** 8330B
Matrix: Solid **Prep Method:** 8330

Analyte	CAS	MDL	RDL
		mg/kg	*mg/kg*
1,3,5-Trinitrobenzene	99-35-4	0.0392	0.50
1,3-Dinitrobenzene	99-65-0	0.0515	0.50
2,4,6-Trinitrotoluene	118-96-7	0.0631	0.50
4-Amino-2,6-Dinitrotoluene	19406-51-0	0.0573	0.50
2-Amino-4,6-Dinitrotoluene	35572-78-2	0.0638	0.50
HMX	2691-41-0	0.0779	0.50
PETN	78-11-5	0.2120	0.50
Nitroglycerine	55-63-0	0.1540	2
Tetryl	479-45-8	0.0876	0.50
2,4-Dinitrotoluene	121-14-2	0.0784	0.50
4-Nitrotoluene (4-NT)	99-99-0	0.1380	0.50
RDX	121-82-4	0.1090	0.50
Nitrobenzene	98-95-3	0.0862	0.50
2,6-Dinitrotoluene	606-20-2	0.0864	0.50
2-Nitrotoluene	88-72-2	0.0915	0.50
3-Nitrotoluene	99-08-1	0.1130	0.50

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-1	**SDG:**	L1382497
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	0728000002	**Received Date/Time:**	
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 13:57
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):		**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result	Qualifier	MDL	RDL
				mg/kg		*mg/kg*	*mg/kg*
Tetryl	479-45-8	8.20	1	U		0.0876	0.500
2,4-Dinitrotoluene	121-14-2	12	1	U		0.0784	0.500
4-Nitrotoluene (4-NT)	99-99-0	14.83	1	U		0.138	0.500
RDX	121-82-4	4.847742	1	U		0.109	0.500
Nitrobenzene	98-95-3	8.63	1	U		0.0862	0.500
2,6-Dinitrotoluene	606-20-2	11.30	1	U		0.0864	0.500
2-Nitrotoluene	88-72-2	13.77	1	U		0.0915	0.500
3-Nitrotoluene	99-08-1	15.83	1	U		0.113	0.500
1,3,5-Trinitrobenzene	99-35-4	6.50	1	U		0.0392	0.500
1,3-Dinitrobenzene	99-65-0	7.70	1	U		0.0515	0.500
2,4,6-Trinitrotoluene	118-96-7	10	1	U		0.0631	0.500
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.35	1	U		0.0573	0.500
2-Amino-4,6-Dinitrotoluene	35572-78-2	11	1	U		0.0638	0.500
HMX	2691-41-0	3.12	1	U		0.0779	0.500
PETN	78-11-5	17	1	U		0.212	0.500
Nitroglycerine	55-63-0	9.50	1	U		0.154	2.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-2	**SDG:**	L1382497
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	0728000003	**Received Date/Time:**	
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:25
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5 g
Total Solids (%):		**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result *mg/kg*	Qualifier	MDL *mg/kg*	RDL *mg/kg*
Tetryl	479-45-8	8.227209	1	7.60		0.0876	0.500
2,4-Dinitrotoluene	121-14-2	11.709370	1	7.55		0.0784	0.500
4-Nitrotoluene (4-NT)	99-99-0	14.475090	1	7.39		0.138	0.500
RDX	121-82-4	4.836536	1	7.47		0.109	0.500
Nitrobenzene	98-95-3	8.635283	1	7.54		0.0862	0.500
2,6-Dinitrotoluene	606-20-2	11.265990	1	7.45		0.0864	0.500
2-Nitrotoluene	88-72-2	13.440190	1	7.49		0.0915	0.500
3-Nitrotoluene	99-08-1	15.448640	1	7.56		0.113	0.500
1,3,5-Trinitrobenzene	99-35-4	6.560483	1	7.49		0.0392	0.500
1,3-Dinitrobenzene	99-65-0	7.779504	1	7.49		0.0515	0.500
2,4,6-Trinitrotoluene	118-96-7	10.016720	1	7.31		0.0631	0.500
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.323070	1	7.43		0.0573	0.500
2-Amino-4,6-Dinitrotoluene	35572-78-2	10.9197	1	7.25		0.0638	0.500
HMX	2691-41-0	3.136364	1	7.53		0.0779	0.500
PETN	78-11-5	16.613330	1	7.70		0.212	0.500
Nitroglycerine	55-63-0	9.605394	1	7.32		0.154	2.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-3	**SDG:**	L1382497
Client Sample ID:	MS	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000004	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 14:53
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.02 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.232952	1	10.2		0.107	0.610
2,4-Dinitrotoluene	121-14-2	11.719510	1	9.40		0.0957	0.610
4-Nitrotoluene (4-NT)	99-99-0	14.488650	1	9.32		0.168	0.610
RDX	121-82-4	4.841878	1	8.57		0.133	0.610
Nitrobenzene	98-95-3	8.642230	1	9.48		0.105	0.610
2,6-Dinitrotoluene	606-20-2	11.276240	1	9.29		0.105	0.610
2-Nitrotoluene	88-72-2	13.452940	1	9.30		0.112	0.610
3-Nitrotoluene	99-08-1	15.462660	1	9.46		0.138	0.610
1,3,5-Trinitrobenzene	99-35-4	6.565703	1	9.53		0.0478	0.610
1,3-Dinitrobenzene	99-65-0	7.785204	1	9.29		0.0628	0.610
2,4,6-Trinitrotoluene	118-96-7	10.023870	1	9.31		0.0770	0.610
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.331630	1	9.23		0.0699	0.610
2-Amino-4,6-Dinitrotoluene	35572-78-2	10.929730	1	9.10		0.0779	0.610
HMX	2691-41-0	3.139785	1	9.49		0.0951	0.610
PETN	78-11-5	16.630880	1	10.3		0.259	0.610
Nitroglycerine	55-63-0	9.613220	1	9.26		0.188	2.44

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3685137-4	**SDG:**	L1382497
Client Sample ID:	MSD	**Collected Date/Time:**	07/20/21 08:25
Lab File ID:	0728000005	**Received Date/Time:**	07/22/21 08:40
Instrument ID:	HPLC4	**Preparation Date/Time:**	07/26/21 17:15
Analytical Batch:	WG1710286	**Analysis Date/Time:**	07/28/21 15:21
Dilution Factor:	1	**Prep Method:**	8330
Analytical Method:	8330B	**Sample Vol Used:**	
Matrix:	Solid	**Initial Wt/Vol:**	5.03 g
Total Solids (%):	81.9	**Final Wt/Vol:**	20 mL

Analyte	CAS	RT	Column	Result (dry) *mg/kg*	Qualifier	MDL (dry) *mg/kg*	RDL (dry) *mg/kg*
Tetryl	479-45-8	8.242246	1	10.5		0.107	0.610
2,4-Dinitrotoluene	121-14-2	11.728130	1	9.58		0.0957	0.610
4-Nitrotoluene (4-NT)	99-99-0	14.499050	1	9.47		0.168	0.610
RDX	121-82-4	4.845890	1	8.87		0.133	0.610
Nitrobenzene	98-95-3	8.649515	1	9.71		0.105	0.610
2,6-Dinitrotoluene	606-20-2	11.285310	1	9.59		0.105	0.610
2-Nitrotoluene	88-72-2	13.462390	1	9.59		0.112	0.610
3-Nitrotoluene	99-08-1	15.4749	1	9.73		0.138	0.610
1,3,5-Trinitrobenzene	99-35-4	6.570660	1	9.81		0.0478	0.610
1,3-Dinitrobenzene	99-65-0	7.792174	1	9.60		0.0628	0.610
2,4,6-Trinitrotoluene	118-96-7	10.032260	1	9.51		0.0770	0.610
4-Amino-2,6-Dinitrotoluene	19406-51-0	10.341980	1	9.48		0.0699	0.610
2-Amino-4,6-Dinitrotoluene	35572-78-2	10.939870	1	9.37		0.0779	0.610
HMX	2691-41-0	3.141450	1	9.73		0.0951	0.610
PETN	78-11-5	16.6464	1	9.82		0.259	0.610
Nitroglycerine	55-63-0	9.621762	1	9.40		0.188	2.44

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

COD	Coefficient of Determination.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Mass	Mass of parameter.
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RT	Retention Time.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

K219

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: MO
Cert. Needed: ☐ Yes ☒ No

Workorder: 60375692 **Workorder Name:** GSA GOODFELLOW

Owner Received Date: 7/23/2021 **Results Requested By:** 8/6/2021

Report To	Subcontract To
Jeffrey Shopper Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 1(913)563-1408	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: 8330 Explosives (Nitroaromatics)	LAB USE ONLY
1	GB-41/4-6	PS	7/22/2021 13:30	60375692024	Solid	1	X	01
2	GB-41/6-8	PS	7/22/2021 13:32	60375692025	Solid	1	X	02
3								
4								
5								

1382497

Transfers	Released By	Date/Time	Received By	Date/Time
1	(b) (6)	7/23/21 1800	(b) (6)	7/24/21 930
2				
3				

Comments

Cooler Temperature on Receipt ____ °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

0.5±0=0.5 P360

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres.Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RAD Screen <0.5 mR/hr:	Y N		

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 60375743

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

August 05, 2021

Justin Carter
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: GSA GOODFELLOW
Pace Project No.: 60375743

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on July 22, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,
(b) (6)

Jeffrey Shopper
jeff.shopper@pacelabs.com
1(913)563-1408
Project Manager

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL
Jacquelin Lee, Burns & McDonnell

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CERTIFICATIONS

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 20-020-0
Arkansas Drinking Water
Illinois Certification #: 200030
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212020-2
Oklahoma Certification #: 9205/9935
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-19-12
Utah Certification #: KS000212019-9
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

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SAMPLE SUMMARY

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60375743001	**RB-01**	Water	07/19/21 17:10	07/22/21 13:40
60375743002	**RB-02**	Water	07/20/21 16:20	07/22/21 13:40
60375743003	**TB-03**	Water	07/19/21 17:10	07/22/21 13:40

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SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60375743001	**RB-01**	EPA 8082	AJA1	8	PASI-K
		EPA 8270C by SIM	JMT	18	PASI-K
		EPA 5030B/8260	PGH	87	PASI-K
		EPA 8260	VNH	5	PASI-K
60375743002	**RB-02**	EPA 8082	AJA1	8	PASI-K
		EPA 8270C by SIM	JMT	18	PASI-K
		EPA 5030B/8260	PGH	87	PASI-K
		EPA 8260	VNH	5	PASI-K
60375743003	**TB-03**	EPA 5030B/8260	PGH	87	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Method: **EPA 8082**
Description: 8082 GCS PCB, LV
Client: BURNS & MCDONNELL
Date: August 05, 2021

General Information:
2 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 735020

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2948685)
  - PCB-1260 (Aroclor 1260)
- LCS (Lab ID: 2948686)
  - PCB-1260 (Aroclor 1260)
- RB-01 (Lab ID: 60375743001)
  - PCB-1260 (Aroclor 1260)
- RB-02 (Lab ID: 60375743002)
  - PCB-1260 (Aroclor 1260)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Method: **EPA 8270C by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 05, 2021

General Information:
2 samples were analyzed for EPA 8270C by SIM by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: BURNS & MCDONNELL
Date: August 05, 2021

General Information:
3 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 734466

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: 734760

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375775018

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2947876)
  - 2-Chloroethylvinyl ether
  - Cyclohexanone
  - n-Heptane
- MSD (Lab ID: 2947877)
  - 2-Chloroethylvinyl ether
  - Cyclohexanone

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Method: **EPA 8260**
Description: 8260 MSV GRO and Oxygenates
Client: BURNS & MCDONNELL
Date: August 05, 2021

General Information:
2 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 734500

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Sample: RB-01 **Lab ID: 60375743001** Collected: 07/19/21 17:10 Received: 07/22/21 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB, LV	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:21	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:21	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:21	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:21	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:21	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:21	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:21	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	63	%	30-136	1	07/29/21 11:57	07/29/21 19:21	2051-24-3	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	208-96-8	
Anthracene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	207-08-9	
Chrysene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	53-70-3	
Fluoranthene	ND	ug/L	0.53	1	07/26/21 15:44	07/27/21 10:08	206-44-0	
Fluorene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	193-39-5	
Naphthalene	ND	ug/L	0.53	1	07/26/21 15:44	07/27/21 10:08	91-20-3	
Phenanthrene	ND	ug/L	0.53	1	07/26/21 15:44	07/27/21 10:08	85-01-8	
Pyrene	ND	ug/L	0.11	1	07/26/21 15:44	07/27/21 10:08	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	70	%	37-109	1	07/26/21 15:44	07/27/21 10:08	321-60-8	
Terphenyl-d14 (S)	81	%	34-120	1	07/26/21 15:44	07/27/21 10:08	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	1		07/29/21 03:01	67-64-1	
Acetonitrile	ND	ug/L	10.0	1		07/29/21 03:01	75-05-8	
Acrolein	ND	ug/L	50.0	1		07/29/21 03:01	107-02-8	
Acrylonitrile	ND	ug/L	20.0	1		07/29/21 03:01	107-13-1	
Benzene	ND	ug/L	1.0	1		07/29/21 03:01	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/29/21 03:01	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/29/21 03:01	74-97-5	
Bromodichloromethane	**1.8**	ug/L	1.0	1		07/29/21 03:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/29/21 03:01	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/29/21 03:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		07/29/21 03:01	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		07/29/21 03:01	104-51-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Sample: RB-01 **Lab ID: 60375743001** Collected: 07/19/21 17:10 Received: 07/22/21 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
sec-Butylbenzene	ND	ug/L	1.0	1		07/29/21 03:01	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/29/21 03:01	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		07/29/21 03:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/29/21 03:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/29/21 03:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/29/21 03:01	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	10.0	1		07/29/21 03:01	110-75-8	c2
Chloroform	**6.9**	ug/L	1.0	1		07/29/21 03:01	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/29/21 03:01	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/29/21 03:01	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/29/21 03:01	106-43-4	
Cyclohexane	ND	ug/L	1.0	1		07/29/21 03:01	110-82-7	
Cyclohexanone	ND	ug/L	20.0	1		07/29/21 03:01	108-94-1	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		07/29/21 03:01	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		07/29/21 03:01	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/29/21 03:01	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/29/21 03:01	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/29/21 03:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/29/21 03:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/29/21 03:01	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/29/21 03:01	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/29/21 03:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/29/21 03:01	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		07/29/21 03:01	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/29/21 03:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/29/21 03:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/29/21 03:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/29/21 03:01	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/29/21 03:01	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/29/21 03:01	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/29/21 03:01	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/29/21 03:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/29/21 03:01	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	1.0	1		07/29/21 03:01	60-29-7	
1,4-Dioxane (p-Dioxane)	ND	ug/L	100	1		07/29/21 03:01	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		07/29/21 03:01	100-41-4	
n-Heptane	ND	ug/L	10.0	1		07/29/21 03:01	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/29/21 03:01	87-68-3	
n-Hexane	ND	ug/L	10.0	1		07/29/21 03:01	110-54-3	
2-Hexanone	ND	ug/L	10.0	1		07/29/21 03:01	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/29/21 03:01	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/29/21 03:01	99-87-6	
Methyl acetate	ND	ug/L	1.0	1		07/29/21 03:01	79-20-9	
Methylcyclohexane	ND	ug/L	1.0	1		07/29/21 03:01	108-87-2	
Methylene Chloride	ND	ug/L	1.0	1		07/29/21 03:01	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/29/21 03:01	90-12-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Sample: RB-01 **Lab ID: 60375743001** Collected: 07/19/21 17:10 Received: 07/22/21 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
2-Methylnaphthalene	ND	ug/L	10.0	1		07/29/21 03:01	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		07/29/21 03:01	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/29/21 03:01	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		07/29/21 03:01	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		07/29/21 03:01	103-65-1	
Styrene	ND	ug/L	1.0	1		07/29/21 03:01	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/29/21 03:01	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/29/21 03:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/29/21 03:01	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		07/29/21 03:01	109-99-9	
Toluene	ND	ug/L	1.0	1		07/29/21 03:01	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/29/21 03:01	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/29/21 03:01	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/29/21 03:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/29/21 03:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/29/21 03:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/29/21 03:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		07/29/21 03:01	96-18-4	
1,2,3-Trimethylbenzene	ND	ug/L	1.0	1		07/29/21 03:01	526-73-8	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		07/29/21 03:01	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		07/29/21 03:01	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		07/29/21 03:01	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		07/29/21 03:01	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		07/29/21 03:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/29/21 03:01	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	80-120	1		07/29/21 03:01	460-00-4	
Toluene-d8 (S)	102	%	80-120	1		07/29/21 03:01	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1		07/29/21 03:01	2199-69-1	
Preservation pH	**1.0**		0.10	1		07/29/21 03:01		
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Pace Analytical Services - Kansas City							
TPH-GRO	ND	ug/L	500	1		07/28/21 06:45		
Surrogates								
Toluene-d8 (S)	98	%	80-120	1		07/28/21 06:45	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120	1		07/28/21 06:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120	1		07/28/21 06:45	2199-69-1	
Preservation pH	**1.0**		0.10	1		07/28/21 06:45		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Sample: RB-02 **Lab ID: 60375743002** Collected: 07/20/21 16:20 Received: 07/22/21 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB, LV	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:29	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:29	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:29	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:29	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:29	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:29	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:29	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	37	%	30-136	1	07/29/21 11:57	07/29/21 19:29	2051-24-3	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	83-32-9	
Acenaphthylene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	208-96-8	
Anthracene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	207-08-9	
Chrysene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	53-70-3	
Fluoranthene	ND	ug/L	0.48	1	07/26/21 15:44	07/27/21 10:22	206-44-0	
Fluorene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	193-39-5	
Naphthalene	ND	ug/L	0.48	1	07/26/21 15:44	07/27/21 10:22	91-20-3	
Phenanthrene	ND	ug/L	0.48	1	07/26/21 15:44	07/27/21 10:22	85-01-8	
Pyrene	ND	ug/L	0.095	1	07/26/21 15:44	07/27/21 10:22	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	69	%	37-109	1	07/26/21 15:44	07/27/21 10:22	321-60-8	
Terphenyl-d14 (S)	85	%	34-120	1	07/26/21 15:44	07/27/21 10:22	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	1		07/29/21 03:15	67-64-1	
Acetonitrile	ND	ug/L	10.0	1		07/29/21 03:15	75-05-8	
Acrolein	ND	ug/L	50.0	1		07/29/21 03:15	107-02-8	
Acrylonitrile	ND	ug/L	20.0	1		07/29/21 03:15	107-13-1	
Benzene	ND	ug/L	1.0	1		07/29/21 03:15	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/29/21 03:15	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/29/21 03:15	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/29/21 03:15	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/29/21 03:15	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/29/21 03:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		07/29/21 03:15	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		07/29/21 03:15	104-51-8	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Sample: RB-02 **Lab ID: 60375743002** Collected: 07/20/21 16:20 Received: 07/22/21 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
sec-Butylbenzene	ND	ug/L	1.0	1		07/29/21 03:15	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/29/21 03:15	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		07/29/21 03:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/29/21 03:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/29/21 03:15	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/29/21 03:15	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	10.0	1		07/29/21 03:15	110-75-8	c2
Chloroform	ND	ug/L	1.0	1		07/29/21 03:15	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/29/21 03:15	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/29/21 03:15	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/29/21 03:15	106-43-4	
Cyclohexane	ND	ug/L	1.0	1		07/29/21 03:15	110-82-7	
Cyclohexanone	ND	ug/L	20.0	1		07/29/21 03:15	108-94-1	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		07/29/21 03:15	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		07/29/21 03:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/29/21 03:15	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/29/21 03:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/29/21 03:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/29/21 03:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/29/21 03:15	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/29/21 03:15	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/29/21 03:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/29/21 03:15	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		07/29/21 03:15	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/29/21 03:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/29/21 03:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/29/21 03:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/29/21 03:15	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/29/21 03:15	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/29/21 03:15	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/29/21 03:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/29/21 03:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/29/21 03:15	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	1.0	1		07/29/21 03:15	60-29-7	
1,4-Dioxane (p-Dioxane)	ND	ug/L	100	1		07/29/21 03:15	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		07/29/21 03:15	100-41-4	
n-Heptane	ND	ug/L	10.0	1		07/29/21 03:15	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/29/21 03:15	87-68-3	
n-Hexane	ND	ug/L	10.0	1		07/29/21 03:15	110-54-3	
2-Hexanone	ND	ug/L	10.0	1		07/29/21 03:15	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/29/21 03:15	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/29/21 03:15	99-87-6	
Methyl acetate	ND	ug/L	1.0	1		07/29/21 03:15	79-20-9	
Methylcyclohexane	ND	ug/L	1.0	1		07/29/21 03:15	108-87-2	
Methylene Chloride	ND	ug/L	1.0	1		07/29/21 03:15	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/29/21 03:15	90-12-0	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Sample: RB-02 **Lab ID: 60375743002** Collected: 07/20/21 16:20 Received: 07/22/21 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
2-Methylnaphthalene	ND	ug/L	10.0	1		07/29/21 03:15	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		07/29/21 03:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/29/21 03:15	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		07/29/21 03:15	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		07/29/21 03:15	103-65-1	
Styrene	ND	ug/L	1.0	1		07/29/21 03:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/29/21 03:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/29/21 03:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/29/21 03:15	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		07/29/21 03:15	109-99-9	
Toluene	ND	ug/L	1.0	1		07/29/21 03:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/29/21 03:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/29/21 03:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/29/21 03:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/29/21 03:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/29/21 03:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/29/21 03:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		07/29/21 03:15	96-18-4	
1,2,3-Trimethylbenzene	ND	ug/L	1.0	1		07/29/21 03:15	526-73-8	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		07/29/21 03:15	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		07/29/21 03:15	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		07/29/21 03:15	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		07/29/21 03:15	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		07/29/21 03:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/29/21 03:15	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	80-120	1		07/29/21 03:15	460-00-4	
Toluene-d8 (S)	102	%	80-120	1		07/29/21 03:15	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1		07/29/21 03:15	2199-69-1	
Preservation pH	**1.0**		0.10	1		07/29/21 03:15		
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Pace Analytical Services - Kansas City							
TPH-GRO	ND	ug/L	500	1		07/28/21 07:01		
Surrogates								
Toluene-d8 (S)	102	%	80-120	1		07/28/21 07:01	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120	1		07/28/21 07:01	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1		07/28/21 07:01	2199-69-1	
Preservation pH	**1.0**		0.10	1		07/28/21 07:01		

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Sample: TB-03 **Lab ID: 60375743003** Collected: 07/19/21 17:10 Received: 07/22/21 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	1		07/28/21 03:31	67-64-1	
Acetonitrile	ND	ug/L	10.0	1		07/28/21 03:31	75-05-8	
Acrolein	ND	ug/L	50.0	1		07/28/21 03:31	107-02-8	
Acrylonitrile	ND	ug/L	20.0	1		07/28/21 03:31	107-13-1	
Benzene	ND	ug/L	1.0	1		07/28/21 03:31	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/28/21 03:31	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/28/21 03:31	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/28/21 03:31	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/28/21 03:31	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/28/21 03:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		07/28/21 03:31	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		07/28/21 03:31	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		07/28/21 03:31	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/28/21 03:31	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		07/28/21 03:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/28/21 03:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/28/21 03:31	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/28/21 03:31	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	10.0	1		07/28/21 03:31	110-75-8	c2
Chloroform	ND	ug/L	1.0	1		07/28/21 03:31	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/28/21 03:31	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/28/21 03:31	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/28/21 03:31	106-43-4	
Cyclohexane	ND	ug/L	1.0	1		07/28/21 03:31	110-82-7	
Cyclohexanone	ND	ug/L	20.0	1		07/28/21 03:31	108-94-1	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		07/28/21 03:31	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		07/28/21 03:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/28/21 03:31	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/28/21 03:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/28/21 03:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/28/21 03:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/28/21 03:31	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/28/21 03:31	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/28/21 03:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/28/21 03:31	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		07/28/21 03:31	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/28/21 03:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/28/21 03:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/28/21 03:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/28/21 03:31	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/28/21 03:31	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/28/21 03:31	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/28/21 03:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/28/21 03:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/28/21 03:31	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	1.0	1		07/28/21 03:31	60-29-7	

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ANALYTICAL RESULTS

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Sample: TB-03 **Lab ID: 60375743003** Collected: 07/19/21 17:10 Received: 07/22/21 13:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Kansas City							
1,4-Dioxane (p-Dioxane)	ND	ug/L	100	1		07/28/21 03:31	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		07/28/21 03:31	100-41-4	
n-Heptane	ND	ug/L	10.0	1		07/28/21 03:31	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		07/28/21 03:31	87-68-3	
n-Hexane	ND	ug/L	10.0	1		07/28/21 03:31	110-54-3	
2-Hexanone	ND	ug/L	10.0	1		07/28/21 03:31	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/28/21 03:31	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/28/21 03:31	99-87-6	
Methyl acetate	ND	ug/L	1.0	1		07/28/21 03:31	79-20-9	
Methylcyclohexane	ND	ug/L	1.0	1		07/28/21 03:31	108-87-2	
Methylene Chloride	ND	ug/L	1.0	1		07/28/21 03:31	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/28/21 03:31	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/28/21 03:31	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		07/28/21 03:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/28/21 03:31	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		07/28/21 03:31	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		07/28/21 03:31	103-65-1	
Styrene	ND	ug/L	1.0	1		07/28/21 03:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/28/21 03:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/28/21 03:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/28/21 03:31	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		07/28/21 03:31	109-99-9	
Toluene	ND	ug/L	1.0	1		07/28/21 03:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/28/21 03:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/28/21 03:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/28/21 03:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/28/21 03:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/28/21 03:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/28/21 03:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		07/28/21 03:31	96-18-4	
1,2,3-Trimethylbenzene	ND	ug/L	1.0	1		07/28/21 03:31	526-73-8	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		07/28/21 03:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		07/28/21 03:31	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		07/28/21 03:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		07/28/21 03:31	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		07/28/21 03:31	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/28/21 03:31	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	104	%	80-120	1		07/28/21 03:31	460-00-4	HS
Toluene-d8 (S)	104	%	80-120	1		07/28/21 03:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1		07/28/21 03:31	2199-69-1	
Preservation pH	**1.0**		0.10	1		07/28/21 03:31		

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

QC Batch: 734466
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60375743003

METHOD BLANK: 2947022
Matrix: Water
Associated Lab Samples: 60375743003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/28/21 01:52	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/28/21 01:52	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/28/21 01:52	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/28/21 01:52	
1,1-Dichloroethane	ug/L	ND	1.0	07/28/21 01:52	
1,1-Dichloroethene	ug/L	ND	1.0	07/28/21 01:52	
1,1-Dichloropropene	ug/L	ND	1.0	07/28/21 01:52	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/28/21 01:52	
1,2,3-Trichloropropane	ug/L	ND	2.5	07/28/21 01:52	
1,2,3-Trimethylbenzene	ug/L	ND	1.0	07/28/21 01:52	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/28/21 01:52	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/28/21 01:52	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	07/28/21 01:52	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/28/21 01:52	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/28/21 01:52	
1,2-Dichloroethane	ug/L	ND	1.0	07/28/21 01:52	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	07/28/21 01:52	
1,2-Dichloropropane	ug/L	ND	1.0	07/28/21 01:52	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/28/21 01:52	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/28/21 01:52	
1,3-Dichloropropane	ug/L	ND	1.0	07/28/21 01:52	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/28/21 01:52	
1,4-Dioxane (p-Dioxane)	ug/L	ND	100	07/28/21 01:52	
1-Methylnaphthalene	ug/L	ND	10.0	07/28/21 01:52	
2,2-Dichloropropane	ug/L	ND	1.0	07/28/21 01:52	
2-Butanone (MEK)	ug/L	ND	10.0	07/28/21 01:52	
2-Chloroethylvinyl ether	ug/L	ND	10.0	07/28/21 01:52	
2-Chlorotoluene	ug/L	ND	1.0	07/28/21 01:52	
2-Hexanone	ug/L	ND	10.0	07/28/21 01:52	
2-Methylnaphthalene	ug/L	ND	10.0	07/28/21 01:52	
4-Chlorotoluene	ug/L	ND	1.0	07/28/21 01:52	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	07/28/21 01:52	
Acetone	ug/L	ND	10.0	07/28/21 01:52	
Acetonitrile	ug/L	ND	10.0	07/28/21 01:52	
Acrolein	ug/L	ND	50.0	07/28/21 01:52	
Acrylonitrile	ug/L	ND	20.0	07/28/21 01:52	
Benzene	ug/L	ND	1.0	07/28/21 01:52	
Bromobenzene	ug/L	ND	1.0	07/28/21 01:52	
Bromochloromethane	ug/L	ND	1.0	07/28/21 01:52	
Bromodichloromethane	ug/L	ND	1.0	07/28/21 01:52	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

METHOD BLANK: 2947022 Matrix: Water
Associated Lab Samples: 60375743003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromoform	ug/L	ND	1.0	07/28/21 01:52	
Bromomethane	ug/L	ND	5.0	07/28/21 01:52	
Carbon disulfide	ug/L	ND	5.0	07/28/21 01:52	
Carbon tetrachloride	ug/L	ND	1.0	07/28/21 01:52	
Chlorobenzene	ug/L	ND	1.0	07/28/21 01:52	
Chloroethane	ug/L	ND	1.0	07/28/21 01:52	
Chloroform	ug/L	ND	1.0	07/28/21 01:52	
Chloromethane	ug/L	ND	1.0	07/28/21 01:52	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/28/21 01:52	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/28/21 01:52	
Cyclohexane	ug/L	ND	1.0	07/28/21 01:52	
Cyclohexanone	ug/L	ND	20.0	07/28/21 01:52	
Dibromochloromethane	ug/L	ND	1.0	07/28/21 01:52	
Dibromomethane	ug/L	ND	1.0	07/28/21 01:52	
Dichlorodifluoromethane	ug/L	ND	1.0	07/28/21 01:52	
Diethyl ether (Ethyl ether)	ug/L	ND	1.0	07/28/21 01:52	
Ethylbenzene	ug/L	ND	1.0	07/28/21 01:52	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	07/28/21 01:52	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/28/21 01:52	
m&p-Xylene	ug/L	ND	2.0	07/28/21 01:52	
Methyl acetate	ug/L	ND	1.0	07/28/21 01:52	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/28/21 01:52	
Methylcyclohexane	ug/L	ND	1.0	07/28/21 01:52	
Methylene Chloride	ug/L	ND	1.0	07/28/21 01:52	
n-Butylbenzene	ug/L	ND	1.0	07/28/21 01:52	
n-Heptane	ug/L	ND	10.0	07/28/21 01:52	
n-Hexane	ug/L	ND	10.0	07/28/21 01:52	
n-Propylbenzene	ug/L	ND	1.0	07/28/21 01:52	
Naphthalene	ug/L	ND	10.0	07/28/21 01:52	
o-Xylene	ug/L	ND	1.0	07/28/21 01:52	
p-Isopropyltoluene	ug/L	ND	1.0	07/28/21 01:52	
sec-Butylbenzene	ug/L	ND	1.0	07/28/21 01:52	
Styrene	ug/L	ND	1.0	07/28/21 01:52	
tert-Butylbenzene	ug/L	ND	1.0	07/28/21 01:52	
Tetrachloroethene	ug/L	ND	1.0	07/28/21 01:52	
Tetrahydrofuran	ug/L	ND	5.0	07/28/21 01:52	
Toluene	ug/L	ND	1.0	07/28/21 01:52	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/28/21 01:52	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/28/21 01:52	
Trichloroethene	ug/L	ND	1.0	07/28/21 01:52	
Trichlorofluoromethane	ug/L	ND	1.0	07/28/21 01:52	
Vinyl chloride	ug/L	ND	1.0	07/28/21 01:52	
Xylene (Total)	ug/L	ND	3.0	07/28/21 01:52	
1,2-Dichlorobenzene-d4 (S)	%	101	80-120	07/28/21 01:52	
4-Bromofluorobenzene (S)	%	102	80-120	07/28/21 01:52	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

METHOD BLANK: 2947022 Matrix: Water
Associated Lab Samples: 60375743003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene-d8 (S)	%	102	80-120	07/28/21 01:52	

LABORATORY CONTROL SAMPLE: 2947023

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.5	92	80-120	
1,1,1-Trichloroethane	ug/L	20	18.0	90	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	15.3	76	75-125	
1,1,2-Trichloroethane	ug/L	20	18.0	90	80-120	
1,1-Dichloroethane	ug/L	20	19.5	98	75-125	
1,1-Dichloroethene	ug/L	20	19.3	96	80-120	
1,1-Dichloropropene	ug/L	20	18.7	94	80-125	
1,2,3-Trichlorobenzene	ug/L	20	17.5	87	75-125	
1,2,3-Trichloropropane	ug/L	20	17.3	87	80-125	
1,2,3-Trimethylbenzene	ug/L	20	19.8	99	80-125	
1,2,4-Trichlorobenzene	ug/L	20	17.7	89	75-120	
1,2,4-Trimethylbenzene	ug/L	20	20.0	100	80-125	
1,2-Dibromo-3-chloropropane	ug/L	20	17.2	86	70-120	
1,2-Dibromoethane (EDB)	ug/L	20	18.9	95	80-120	
1,2-Dichlorobenzene	ug/L	20	18.4	92	80-120	
1,2-Dichloroethane	ug/L	20	18.0	90	75-120	
1,2-Dichloroethene (Total)	ug/L	40	39.1	98	80-120	
1,2-Dichloropropane	ug/L	20	19.4	97	80-125	
1,3,5-Trimethylbenzene	ug/L	20	19.6	98	80-125	
1,3-Dichlorobenzene	ug/L	20	18.7	93	80-120	
1,3-Dichloropropane	ug/L	20	18.3	92	80-120	
1,4-Dichlorobenzene	ug/L	20	18.8	94	80-120	
1,4-Dioxane (p-Dioxane)	ug/L	100	90J	90	10-180	
1-Methylnaphthalene	ug/L	20	15.9	80	40-160	
2,2-Dichloropropane	ug/L	20	14.8	74	60-130	
2-Butanone (MEK)	ug/L	100	101	101	40-150	
2-Chloroethylvinyl ether	ug/L	100	93.5	94	30-165	
2-Chlorotoluene	ug/L	20	19.9	100	80-120	
2-Hexanone	ug/L	100	101	101	45-150	
2-Methylnaphthalene	ug/L	20	14.1	70	55-150	
4-Chlorotoluene	ug/L	20	19.6	98	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	88.4	88	65-140	
Acetone	ug/L	100	109	109	20-175	
Acetonitrile	ug/L	100	92.3	92	25-180	
Acrolein	ug/L	100	83.5	84	10-200	
Acrylonitrile	ug/L	100	93.0	93	70-135	
Benzene	ug/L	20	19.3	96	80-120	
Bromobenzene	ug/L	20	19.0	95	80-120	
Bromochloromethane	ug/L	20	20.0	100	80-125	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

LABORATORY CONTROL SAMPLE: 2947023

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	20	19.1	95	80-125	
Bromoform	ug/L	20	18.5	92	60-135	
Bromomethane	ug/L	20	14.5	73	10-165	
Carbon disulfide	ug/L	20	18.9	95	75-135	
Carbon tetrachloride	ug/L	20	18.4	92	80-125	
Chlorobenzene	ug/L	20	19.3	97	80-120	
Chloroethane	ug/L	20	19.8	99	70-130	
Chloroform	ug/L	20	19.0	95	80-120	
Chloromethane	ug/L	20	18.1	90	35-155	
cis-1,2-Dichloroethene	ug/L	20	19.3	97	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.0	90	80-125	
Cyclohexane	ug/L	20	19.5	98	80-130	
Cyclohexanone	ug/L	100	82.9	83	10-180	
Dibromochloromethane	ug/L	20	18.5	93	70-120	
Dibromomethane	ug/L	20	18.1	91	80-120	
Dichlorodifluoromethane	ug/L	20	19.5	98	50-150	
Diethyl ether (Ethyl ether)	ug/L	20	19.1	96	70-140	
Ethylbenzene	ug/L	20	19.4	97	80-120	
Hexachloro-1,3-butadiene	ug/L	20	17.6	88	65-135	
Isopropylbenzene (Cumene)	ug/L	20	19.8	99	80-125	
m&p-Xylene	ug/L	40	39.2	98	75-130	
Methyl acetate	ug/L	100	85.3	85	45-140	
Methyl-tert-butyl ether	ug/L	20	18.4	92	65-130	
Methylcyclohexane	ug/L	20	19.2	96	80-125	
Methylene Chloride	ug/L	20	19.0	95	75-120	
n-Butylbenzene	ug/L	20	18.1	91	80-125	
n-Heptane	ug/L	20	17.8	89	10-180	
n-Hexane	ug/L	20	18.0	90	60-135	
n-Propylbenzene	ug/L	20	20.0	100	80-120	
Naphthalene	ug/L	20	17.2	86	70-120	
o-Xylene	ug/L	20	19.3	97	75-130	
p-Isopropyltoluene	ug/L	20	19.9	99	80-135	
sec-Butylbenzene	ug/L	20	19.8	99	80-120	
Styrene	ug/L	20	19.2	96	80-120	
tert-Butylbenzene	ug/L	20	19.4	97	80-120	
Tetrachloroethene	ug/L	20	18.9	95	80-120	
Tetrahydrofuran	ug/L	100	87.6	88	75-125	
Toluene	ug/L	20	19.1	95	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.0	90	75-120	
Trichloroethene	ug/L	20	21.6	108	80-120	
Trichlorofluoromethane	ug/L	20	19.5	98	80-130	
Vinyl chloride	ug/L	20	19.3	96	65-130	
Xylene (Total)	ug/L	60	58.5	97	80-120	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

QC Batch: 734760
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375743001, 60375743002

METHOD BLANK: 2947874 Matrix: Water
Associated Lab Samples: 60375743001, 60375743002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/29/21 01:50	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/29/21 01:50	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/29/21 01:50	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/29/21 01:50	
1,1-Dichloroethane	ug/L	ND	1.0	07/29/21 01:50	
1,1-Dichloroethene	ug/L	ND	1.0	07/29/21 01:50	
1,1-Dichloropropene	ug/L	ND	1.0	07/29/21 01:50	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/29/21 01:50	
1,2,3-Trichloropropane	ug/L	ND	2.5	07/29/21 01:50	
1,2,3-Trimethylbenzene	ug/L	ND	1.0	07/29/21 01:50	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/29/21 01:50	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/29/21 01:50	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	07/29/21 01:50	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/29/21 01:50	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/29/21 01:50	
1,2-Dichloroethane	ug/L	ND	1.0	07/29/21 01:50	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	07/29/21 01:50	
1,2-Dichloropropane	ug/L	ND	1.0	07/29/21 01:50	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/29/21 01:50	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/29/21 01:50	
1,3-Dichloropropane	ug/L	ND	1.0	07/29/21 01:50	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/29/21 01:50	
1,4-Dioxane (p-Dioxane)	ug/L	ND	100	07/29/21 01:50	
1-Methylnaphthalene	ug/L	ND	10.0	07/29/21 01:50	
2,2-Dichloropropane	ug/L	ND	1.0	07/29/21 01:50	
2-Butanone (MEK)	ug/L	ND	10.0	07/29/21 01:50	
2-Chloroethylvinyl ether	ug/L	ND	10.0	07/29/21 01:50	
2-Chlorotoluene	ug/L	ND	1.0	07/29/21 01:50	
2-Hexanone	ug/L	ND	10.0	07/29/21 01:50	
2-Methylnaphthalene	ug/L	ND	10.0	07/29/21 01:50	
4-Chlorotoluene	ug/L	ND	1.0	07/29/21 01:50	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	07/29/21 01:50	
Acetone	ug/L	ND	10.0	07/29/21 01:50	
Acetonitrile	ug/L	ND	10.0	07/29/21 01:50	
Acrolein	ug/L	ND	50.0	07/29/21 01:50	
Acrylonitrile	ug/L	ND	20.0	07/29/21 01:50	
Benzene	ug/L	ND	1.0	07/29/21 01:50	
Bromobenzene	ug/L	ND	1.0	07/29/21 01:50	
Bromochloromethane	ug/L	ND	1.0	07/29/21 01:50	
Bromodichloromethane	ug/L	ND	1.0	07/29/21 01:50	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

METHOD BLANK: 2947874 Matrix: Water
Associated Lab Samples: 60375743001, 60375743002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromoform	ug/L	ND	1.0	07/29/21 01:50	
Bromomethane	ug/L	ND	5.0	07/29/21 01:50	
Carbon disulfide	ug/L	ND	5.0	07/29/21 01:50	
Carbon tetrachloride	ug/L	ND	1.0	07/29/21 01:50	
Chlorobenzene	ug/L	ND	1.0	07/29/21 01:50	
Chloroethane	ug/L	ND	1.0	07/29/21 01:50	
Chloroform	ug/L	ND	1.0	07/29/21 01:50	
Chloromethane	ug/L	ND	1.0	07/29/21 01:50	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/29/21 01:50	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/29/21 01:50	
Cyclohexane	ug/L	ND	1.0	07/29/21 01:50	
Cyclohexanone	ug/L	ND	20.0	07/29/21 01:50	
Dibromochloromethane	ug/L	ND	1.0	07/29/21 01:50	
Dibromomethane	ug/L	ND	1.0	07/29/21 01:50	
Dichlorodifluoromethane	ug/L	ND	1.0	07/29/21 01:50	
Diethyl ether (Ethyl ether)	ug/L	ND	1.0	07/29/21 01:50	
Ethylbenzene	ug/L	ND	1.0	07/29/21 01:50	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	07/29/21 01:50	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/29/21 01:50	
m&p-Xylene	ug/L	ND	2.0	07/29/21 01:50	
Methyl acetate	ug/L	ND	1.0	07/29/21 01:50	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/29/21 01:50	
Methylcyclohexane	ug/L	ND	1.0	07/29/21 01:50	
Methylene Chloride	ug/L	ND	1.0	07/29/21 01:50	
n-Butylbenzene	ug/L	ND	1.0	07/29/21 01:50	
n-Heptane	ug/L	ND	10.0	07/29/21 01:50	
n-Hexane	ug/L	ND	10.0	07/29/21 01:50	
n-Propylbenzene	ug/L	ND	1.0	07/29/21 01:50	
Naphthalene	ug/L	ND	10.0	07/29/21 01:50	
o-Xylene	ug/L	ND	1.0	07/29/21 01:50	
p-Isopropyltoluene	ug/L	ND	1.0	07/29/21 01:50	
sec-Butylbenzene	ug/L	ND	1.0	07/29/21 01:50	
Styrene	ug/L	ND	1.0	07/29/21 01:50	
tert-Butylbenzene	ug/L	ND	1.0	07/29/21 01:50	
Tetrachloroethene	ug/L	ND	1.0	07/29/21 01:50	
Tetrahydrofuran	ug/L	ND	5.0	07/29/21 01:50	
Toluene	ug/L	ND	1.0	07/29/21 01:50	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/29/21 01:50	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/29/21 01:50	
Trichloroethene	ug/L	ND	1.0	07/29/21 01:50	
Trichlorofluoromethane	ug/L	ND	1.0	07/29/21 01:50	
Vinyl chloride	ug/L	ND	1.0	07/29/21 01:50	
Xylene (Total)	ug/L	ND	3.0	07/29/21 01:50	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120	07/29/21 01:50	
4-Bromofluorobenzene (S)	%	98	80-120	07/29/21 01:50	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

METHOD BLANK: 2947874 Matrix: Water
Associated Lab Samples: 60375743001, 60375743002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene-d8 (S)	%	101	80-120	07/29/21 01:50	

LABORATORY CONTROL SAMPLE: 2947875

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.4	92	80-120	
1,1,1-Trichloroethane	ug/L	20	17.0	85	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	75-125	
1,1,2-Trichloroethane	ug/L	20	17.9	90	80-120	
1,1-Dichloroethane	ug/L	20	18.8	94	75-125	
1,1-Dichloroethene	ug/L	20	18.9	94	80-120	
1,1-Dichloropropene	ug/L	20	18.5	93	80-125	
1,2,3-Trichlorobenzene	ug/L	20	17.1	85	75-125	
1,2,3-Trichloropropane	ug/L	20	17.0	85	80-125	
1,2,3-Trimethylbenzene	ug/L	20	19.3	97	80-125	
1,2,4-Trichlorobenzene	ug/L	20	17.7	89	75-120	
1,2,4-Trimethylbenzene	ug/L	20	18.9	95	80-125	
1,2-Dibromo-3-chloropropane	ug/L	20	16.6	83	70-120	
1,2-Dibromoethane (EDB)	ug/L	20	19.0	95	80-120	
1,2-Dichlorobenzene	ug/L	20	17.6	88	80-120	
1,2-Dichloroethane	ug/L	20	16.9	84	75-120	
1,2-Dichloroethene (Total)	ug/L	40	37.7	94	80-120	
1,2-Dichloropropane	ug/L	20	18.3	92	80-125	
1,3,5-Trimethylbenzene	ug/L	20	19.0	95	80-125	
1,3-Dichlorobenzene	ug/L	20	18.1	91	80-120	
1,3-Dichloropropane	ug/L	20	18.2	91	80-120	
1,4-Dichlorobenzene	ug/L	20	18.5	92	80-120	
1,4-Dioxane (p-Dioxane)	ug/L	100	81.8J	82	10-180	
1-Methylnaphthalene	ug/L	20	16.5	83	40-160	
2,2-Dichloropropane	ug/L	20	14.2	71	60-130	
2-Butanone (MEK)	ug/L	100	67.9	68	40-150	
2-Chloroethylvinyl ether	ug/L	100	94.2	94	30-165	
2-Chlorotoluene	ug/L	20	18.7	94	80-120	
2-Hexanone	ug/L	100	72.0	72	45-150	
2-Methylnaphthalene	ug/L	20	13.9	70	55-150	
4-Chlorotoluene	ug/L	20	19.1	96	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	84.7	85	65-140	
Acetone	ug/L	100	54.7	55	20-175	
Acetonitrile	ug/L	100	88.4	88	25-180	
Acrolein	ug/L	100	80.5	80	10-200	
Acrylonitrile	ug/L	100	88.3	88	70-135	
Benzene	ug/L	20	18.7	93	80-120	
Bromobenzene	ug/L	20	18.6	93	80-120	
Bromochloromethane	ug/L	20	19.9	100	80-125	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

LABORATORY CONTROL SAMPLE: 2947875

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	20	18.9	94	80-125	
Bromoform	ug/L	20	19.4	97	60-135	
Bromomethane	ug/L	20	15.9	80	10-165	
Carbon disulfide	ug/L	20	18.4	92	75-135	
Carbon tetrachloride	ug/L	20	18.0	90	80-125	
Chlorobenzene	ug/L	20	19.3	96	80-120	
Chloroethane	ug/L	20	19.5	97	70-130	
Chloroform	ug/L	20	18.2	91	80-120	
Chloromethane	ug/L	20	19.5	98	35-155	
cis-1,2-Dichloroethene	ug/L	20	18.8	94	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.6	88	80-125	
Cyclohexane	ug/L	20	19.7	99	80-130	
Cyclohexanone	ug/L	100	58.4	58	10-180	
Dibromochloromethane	ug/L	20	19.1	95	70-120	
Dibromomethane	ug/L	20	18.2	91	80-120	
Dichlorodifluoromethane	ug/L	20	19.2	96	50-150	
Diethyl ether (Ethyl ether)	ug/L	20	17.8	89	70-140	
Ethylbenzene	ug/L	20	19.5	98	80-120	
Hexachloro-1,3-butadiene	ug/L	20	17.9	89	65-135	
Isopropylbenzene (Cumene)	ug/L	20	19.7	98	80-125	
m&p-Xylene	ug/L	40	37.8	94	75-130	
Methyl acetate	ug/L	100	84.8	85	45-140	
Methyl-tert-butyl ether	ug/L	20	17.6	88	65-130	
Methylcyclohexane	ug/L	20	18.7	93	80-125	
Methylene Chloride	ug/L	20	18.6	93	75-120	
n-Butylbenzene	ug/L	20	17.2	86	80-125	
n-Heptane	ug/L	20	16.4	82	10-180	
n-Hexane	ug/L	20	17.4	87	60-135	
n-Propylbenzene	ug/L	20	18.5	93	80-120	
Naphthalene	ug/L	20	17.7	89	70-120	
o-Xylene	ug/L	20	18.8	94	75-130	
p-Isopropyltoluene	ug/L	20	19.2	96	80-135	
sec-Butylbenzene	ug/L	20	19.3	97	80-120	
Styrene	ug/L	20	19.1	96	80-120	
tert-Butylbenzene	ug/L	20	19.2	96	80-120	
Tetrachloroethene	ug/L	20	18.8	94	80-120	
Tetrahydrofuran	ug/L	100	87.5	87	75-125	
Toluene	ug/L	20	18.9	94	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.9	95	80-120	
trans-1,3-Dichloropropene	ug/L	20	17.5	88	75-120	
Trichloroethene	ug/L	20	19.1	95	80-120	
Trichlorofluoromethane	ug/L	20	18.8	94	80-130	
Vinyl chloride	ug/L	20	19.0	95	65-130	
Xylene (Total)	ug/L	60	56.6	94	80-120	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947876 2947877

Parameter	Units	60375775018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	500	500	484	483	97	97	70-125	0	15	
1,1,1-Trichloroethane	ug/L	ND	500	500	462	445	92	89	75-130	4	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	500	500	457	437	91	87	65-130	5	15	
1,1,2-Trichloroethane	ug/L	ND	500	500	458	451	92	90	70-120	1	20	
1,1-Dichloroethane	ug/L	ND	500	500	510	488	102	98	61-130	4	15	
1,1-Dichloroethene	ug/L	ND	500	500	518	496	104	99	60-135	4	25	
1,1-Dichloropropene	ug/L	ND	500	500	487	471	97	94	55-145	3	20	
1,2,3-Trichlorobenzene	ug/L	ND	500	500	428	452	86	90	55-120	5	25	
1,2,3-Trichloropropane	ug/L	ND	500	500	420	416	84	83	60-135	1	20	
1,2,3-Trimethylbenzene	ug/L	ND	500	500	500	489	100	98	80-120	2	20	
1,2,4-Trichlorobenzene	ug/L	ND	500	500	437	443	87	89	50-125	1	25	
1,2,4-Trimethylbenzene	ug/L	ND	500	500	507	488	101	98	60-135	4	20	
1,2-Dibromo-3-chloropropane	ug/L	ND	500	500	396	401	79	80	55-125	1	25	
1,2-Dibromoethane (EDB)	ug/L	ND	500	500	479	461	96	92	65-125	4	20	
1,2-Dichlorobenzene	ug/L	ND	500	500	462	452	92	90	65-120	2	20	
1,2-Dichloroethane	ug/L	ND	500	500	439	425	88	85	30-160	3	25	
1,2-Dichloroethene (Total)	ug/L	ND	1000	1000	1000	977	100	98	65-125	3	20	
1,2-Dichloropropane	ug/L	ND	500	500	480	467	96	93	65-130	3	20	
1,3,5-Trimethylbenzene	ug/L	ND	500	500	502	491	100	98	60-135	2	20	
1,3-Dichlorobenzene	ug/L	ND	500	500	482	474	96	95	65-120	2	20	
1,3-Dichloropropane	ug/L	ND	500	500	461	452	92	90	70-120	2	20	
1,4-Dichlorobenzene	ug/L	ND	500	500	474	469	95	94	60-125	1	20	
1,4-Dioxane (p-Dioxane)	ug/L	ND	2500	2500	1950J	2510	78	100	10-180		35	
1-Methylnaphthalene	ug/L	ND	500	500	374	451	75	90	30-135	19	20	
2,2-Dichloropropane	ug/L	ND	500	500	334	324	67	65	40-130	3	30	
2-Butanone (MEK)	ug/L	28.2J	2500	2500	1380	1440	54	56	30-130	4	25	
2-Chloroethylvinyl ether	ug/L	ND	2500	2500	ND	ND	1	1	10-160		25	M1
2-Chlorotoluene	ug/L	ND	500	500	490	490	98	98	65-125	0	20	
2-Hexanone	ug/L	ND	2500	2500	1710	1700	68	68	40-135	1	20	
2-Methylnaphthalene	ug/L	ND	500	500	339	403	68	81	45-135	17	30	
4-Chlorotoluene	ug/L	ND	500	500	495	490	99	98	65-125	1	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2500	2500	2060	2000	82	80	60-135	3	20	
Acetone	ug/L	ND	2500	2500	1120	1090	45	44	10-150	3	25	
Acetonitrile	ug/L	ND	2500	2500	2320	2210	93	88	80-120	5	20	
Acrolein	ug/L	ND	2500	2500	1650	1790	66	72	15-155	8	35	
Acrylonitrile	ug/L	ND	2500	2500	2180	2170	87	87	65-135	0	20	
Benzene	ug/L	ND	500	500	493	482	99	96	20-155	2	25	
Bromobenzene	ug/L	ND	500	500	467	470	93	94	65-120	1	15	
Bromochloromethane	ug/L	ND	500	500	510	495	102	99	65-125	3	20	
Bromodichloromethane	ug/L	ND	500	500	484	459	97	92	70-130	5	15	
Bromoform	ug/L	ND	500	500	453	455	91	91	50-125	0	20	
Bromomethane	ug/L	ND	500	500	389	437	78	87	10-155	12	45	
Carbon disulfide	ug/L	ND	500	500	481	480	96	96	55-140	0	25	
Carbon tetrachloride	ug/L	ND	500	500	478	463	96	93	70-140	3	20	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947876 2947877

Parameter	Units	60375775018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chlorobenzene	ug/L	ND	500	500	501	491	100	98	65-130	2	20	
Chloroethane	ug/L	ND	500	500	521	504	104	101	20-180	3	20	
Chloroform	ug/L	ND	500	500	479	467	96	93	70-125	2	20	
Chloromethane	ug/L	ND	500	500	548	540	110	108	20-160	1	30	
cis-1,2-Dichloroethene	ug/L	ND	500	500	491	480	98	96	55-130	2	20	
cis-1,3-Dichloropropene	ug/L	ND	500	500	438	434	88	87	60-125	1	20	
Cyclohexane	ug/L	ND	500	500	509	484	102	97	75-150	5	20	
Cyclohexanone	ug/L	ND	2500	2500	373J	484J	15	19	55-130		35	M1
Dibromochloromethane	ug/L	ND	500	500	471	474	94	95	65-120	1	20	
Dibromomethane	ug/L	ND	500	500	448	433	90	87	65-125	3	20	
Dichlorodifluoromethane	ug/L	ND	500	500	505	495	101	99	10-175	2	25	
Diethyl ether (Ethyl ether)	ug/L	ND	500	500	473	454	95	91	80-120	4	35	
Ethylbenzene	ug/L	2200	500	500	2710	2730	102	106	20-160	1	25	
Hexachloro-1,3-butadiene	ug/L	ND	500	500	444	432	89	86	40-130	3	30	
Isopropylbenzene (Cumene)	ug/L	18.6J	500	500	536	536	103	104	65-140	0	20	
m&p-Xylene	ug/L	6980	1000	1000	7880	7810	89	82	10-165	1	30	
Methyl acetate	ug/L	ND	2500	2500	2100	2040	84	82	40-140	3	20	
Methyl-tert-butyl ether	ug/L	ND	500	500	433	436	87	87	25-160	1	30	
Methylcyclohexane	ug/L	ND	500	500	468	472	94	94	65-155	1	20	
Methylene Chloride	ug/L	ND	500	500	471	481	93	95	60-125	2	25	
n-Butylbenzene	ug/L	ND	500	500	449	450	90	90	50-140	0	25	
n-Heptane	ug/L	ND	500	500	397	401	79	80	80-120	1	35	M1
n-Hexane	ug/L	ND	500	500	420	418	84	84	20-160	1	25	
n-Propylbenzene	ug/L	ND	500	500	492	498	98	100	60-130	1	20	
Naphthalene	ug/L	ND	500	500	433	455	87	91	30-150	5	25	
o-Xylene	ug/L	811	500	500	1320	1290	101	96	20-155	2	30	
p-Isopropyltoluene	ug/L	ND	500	500	516	503	103	101	50-150	3	20	
sec-Butylbenzene	ug/L	ND	500	500	502	495	100	99	60-140	1	20	
Styrene	ug/L	ND	500	500	525	518	105	104	40-145	1	30	
tert-Butylbenzene	ug/L	ND	500	500	496	483	99	97	60-130	3	20	
Tetrachloroethene	ug/L	ND	500	500	501	496	100	99	55-135	1	25	
Tetrahydrofuran	ug/L	ND	2500	2500	2120	2180	85	87	55-130	2	35	
Toluene	ug/L	9.0J	500	500	499	506	98	99	25-150	2	25	
trans-1,2-Dichloroethene	ug/L	ND	500	500	511	498	102	100	60-130	3	20	
trans-1,3-Dichloropropene	ug/L	ND	500	500	435	438	87	88	60-120	1	15	
Trichloroethene	ug/L	ND	500	500	477	466	95	92	50-145	3	20	
Trichlorofluoromethane	ug/L	ND	500	500	503	491	101	98	50-155	2	20	
Vinyl chloride	ug/L	ND	500	500	507	485	101	97	40-155	4	25	
Xylene (Total)	ug/L	7790	1500	1500	9190	9100	93	87	15-160	1	30	
1,2-Dichlorobenzene-d4 (S)	%						102	99	80-120			
4-Bromofluorobenzene (S)	%						98	98	80-120			
Toluene-d8 (S)	%						101	104	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

QC Batch: 734500
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV MO GRO Oxygenates
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375743001, 60375743002

METHOD BLANK: 2947141 Matrix: Water
Associated Lab Samples: 60375743001, 60375743002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	ug/L	ND	500	07/28/21 05:09	
1,2-Dichlorobenzene-d4 (S)	%	101	80-120	07/28/21 05:09	
4-Bromofluorobenzene (S)	%	100	80-120	07/28/21 05:09	
Toluene-d8 (S)	%	99	80-120	07/28/21 05:09	

LABORATORY CONTROL SAMPLE: 2947142

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	4000	3240	81	60-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

QC Batch: 735020
QC Batch Method: EPA 3510
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB, LV
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375743001, 60375743002

METHOD BLANK: 2948685 Matrix: Water
Associated Lab Samples: 60375743001, 60375743002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	ND	1.0	07/29/21 18:22	
PCB-1221 (Aroclor 1221)	ug/L	ND	1.0	07/29/21 18:22	
PCB-1232 (Aroclor 1232)	ug/L	ND	1.0	07/29/21 18:22	
PCB-1242 (Aroclor 1242)	ug/L	ND	1.0	07/29/21 18:22	
PCB-1248 (Aroclor 1248)	ug/L	ND	1.0	07/29/21 18:22	
PCB-1254 (Aroclor 1254)	ug/L	ND	1.0	07/29/21 18:22	
PCB-1260 (Aroclor 1260)	ug/L	ND	1.0	07/29/21 18:22	CH
Decachlorobiphenyl (S)	%	59	30-136	07/29/21 18:22	

LABORATORY CONTROL SAMPLE: 2948686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	3.0	61	40-120	
PCB-1260 (Aroclor 1260)	ug/L	5	3.8	77	55-120	CH
Decachlorobiphenyl (S)	%			50	30-136	

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QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

QC Batch: 734247
QC Batch Method: EPA 3510C
Analysis Method: EPA 8270C by SIM
Analysis Description: 8270 Water PAH by SIM MSSV
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375743001, 60375743002

METHOD BLANK: 2946347 Matrix: Water
Associated Lab Samples: 60375743001, 60375743002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	07/27/21 09:38	
Acenaphthylene	ug/L	ND	0.10	07/27/21 09:38	
Anthracene	ug/L	ND	0.10	07/27/21 09:38	
Benzo(a)anthracene	ug/L	ND	0.10	07/27/21 09:38	
Benzo(a)pyrene	ug/L	ND	0.10	07/27/21 09:38	
Benzo(b)fluoranthene	ug/L	ND	0.10	07/27/21 09:38	
Benzo(g,h,i)perylene	ug/L	ND	0.10	07/27/21 09:38	
Benzo(k)fluoranthene	ug/L	ND	0.10	07/27/21 09:38	
Chrysene	ug/L	ND	0.10	07/27/21 09:38	
Dibenz(a,h)anthracene	ug/L	ND	0.10	07/27/21 09:38	
Fluoranthene	ug/L	ND	0.50	07/27/21 09:38	
Fluorene	ug/L	ND	0.10	07/27/21 09:38	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	07/27/21 09:38	
Naphthalene	ug/L	ND	0.50	07/27/21 09:38	
Phenanthrene	ug/L	ND	0.50	07/27/21 09:38	
Pyrene	ug/L	ND	0.10	07/27/21 09:38	
2-Fluorobiphenyl (S)	%	64	37-109	07/27/21 09:38	
Terphenyl-d14 (S)	%	87	34-120	07/27/21 09:38	

LABORATORY CONTROL SAMPLE: 2946348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	6.1	61	46-102	
Acenaphthylene	ug/L	10	6.4	64	48-112	
Anthracene	ug/L	10	7.7	77	50-114	
Benzo(a)anthracene	ug/L	10	8.3	83	52-124	
Benzo(a)pyrene	ug/L	10	7.9	79	56-119	
Benzo(b)fluoranthene	ug/L	10	8.3	83	49-116	
Benzo(g,h,i)perylene	ug/L	10	8.0	80	43-120	
Benzo(k)fluoranthene	ug/L	10	7.6	76	48-110	
Chrysene	ug/L	10	7.4	74	53-105	
Dibenz(a,h)anthracene	ug/L	10	8.1	81	39-127	
Fluoranthene	ug/L	10	8.2	82	54-122	
Fluorene	ug/L	10	6.5	65	47-109	
Indeno(1,2,3-cd)pyrene	ug/L	10	8.1	81	47-124	
Naphthalene	ug/L	10	5.8	58	42-103	
Phenanthrene	ug/L	10	7.2	72	47-107	
Pyrene	ug/L	10	7.3	73	44-104	
2-Fluorobiphenyl (S)	%			62	37-109	

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: GSA GOODFELLOW
Pace Project No.: 60375743

LABORATORY CONTROL SAMPLE: 2946348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			73	34-120	

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QUALIFIERS

Project: GSA GOODFELLOW
Pace Project No.: 60375743

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 734466

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 734500

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
HS	Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
c2	Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW
Pace Project No.: 60375743

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375743001	**RB-01**	EPA 3510	735020	EPA 8082	735116
60375743002	**RB-02**	EPA 3510	735020	EPA 8082	735116
60375743001	**RB-01**	EPA 3510C	734247	EPA 8270C by SIM	734428
60375743002	**RB-02**	EPA 3510C	734247	EPA 8270C by SIM	734428
60375743001	**RB-01**	EPA 5030B/8260	734760		
60375743002	**RB-02**	EPA 5030B/8260	734760		
60375743003	**TB-03**	EPA 5030B/8260	734466		
60375743001	**RB-01**	EPA 8260	734500		
60375743002	**RB-02**	EPA 8260	734500		

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Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60375743

60375743

Client Name: Burns;McD

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☑ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☐ No ☑ Seals intact: Yes ☐ No ☑

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T-298 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 2.6 Corr. Factor -0.3 Corrected 2.3

Date and initials of person examining contents: 7/23/21

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO3, H2SO4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT# 603173	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☑Yes ☐No ☐N/A	TB have headspace
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

F-KS-C-003-Rev.11, February 28, 2018

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: Scottie Cranor
SCRANOR@BURNSMCD.COM

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS
Telephone: 913-563-1408

Document Control No: 133835-007
Lab. Reference No. or Episode No.:

Project Number: 133835

Client Name: GSA - Goodfellow

Sample Type

Matrix

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Matrix			Number of Containers	Analysis							Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		VOCs	PAHs	8260	PCBs				
RB-01							7/19	1710	X			10	X	X	X	X				60375743
RB-02							7/20	1620	X			10	X	X	X	X				YAG4U BP3N SVG9H
TB-03									X				X							2UK9H

Special Instructions:
SEE WORK ORDER

Relinquished By (signature): [redacted] (b) (6)	Date/Time 7/21/21 1405	Received By: [redacted] (b) (6)	Date/Time 14:05 7/2
Relinquished By (signature): 2.	Date/Time	Received By: [redacted] (b) (6)	Date/Time 7/22 1340

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt: 2.3

Laboratory Comments:

MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Instrument ID: 60MSV8

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947022	2947022BLANK	101	102	102
2947023	2947023LCS	100	101	102
60375743003	TB-03	100	104	104

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-2
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Instrument ID: 60MSV8

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947874	2947874BLANK	100	98	101
2947875	2947875LCS	100	99	102
60375743001	RB-01	104	97	102
60375743002	RB-02	100	99	102

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Instrument ID: 60MSVD

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947141	2947141BLANK	101	100	99
2947142	2947142LCS	98	100	101
60375743001	RB-01	102	101	98
60375743002	RB-02	100	98	102

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947023LCS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSV8
LCS Lot No: 45079
Lab File ID: 072721B.B\0727B_30LCS.D
SDG No.: 60375743

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	100	109	109	20-175
Acetonitrile	100	92.3	92	25-180
Acrolein	100	83.5	84	10-200
Acrylonitrile	100	93.0	93	70-135
Benzene	20.0	19.3	96	80-120
Bromobenzene	20.0	19.0	95	80-120
Bromochloromethane	20.0	20.0	100	80-125
Bromodichloromethane	20.0	19.1	95	80-125
Bromoform	20.0	18.5	92	60-135
Bromomethane	20.0	14.5	73	10-165
2-Butanone (MEK)	100	101	101	40-150
n-Butylbenzene	20.0	18.1	91	80-125
sec-Butylbenzene	20.0	19.8	99	80-120
tert-Butylbenzene	20.0	19.4	97	80-120
Carbon disulfide	20.0	18.9	95	75-135
Carbon tetrachloride	20.0	18.4	92	80-125
Chlorobenzene	20.0	19.3	97	80-120
Chloroethane	20.0	19.8	99	70-130
2-Chloroethylvinyl ether	100	93.5	94	30-165
Chloroform	20.0	19.0	95	80-120
Chloromethane	20.0	18.1	90	35-155
2-Chlorotoluene	20.0	19.9	100	80-120
4-Chlorotoluene	20.0	19.6	98	80-120
Cyclohexane	20.0	19.5	98	80-130
Cyclohexanone	100	82.9	83	10-180
1,2-Dibromo-3-chloropropane	20.0	17.2	86	70-120
Dibromochloromethane	20.0	18.5	93	70-120
1,2-Dibromoethane (EDB)	20.0	18.9	95	80-120
Dibromomethane	20.0	18.1	91	80-120
1,2-Dichlorobenzene	20.0	18.4	92	80-120
1,3-Dichlorobenzene	20.0	18.7	93	80-120
1,4-Dichlorobenzene	20.0	18.8	94	80-120
Dichlorodifluoromethane	20.0	19.5	98	50-150
1,1-Dichloroethane	20.0	19.5	98	75-125
1,2-Dichloroethane	20.0	18.0	90	75-120
1,2-Dichloroethene (Total)	40.0	39.1	98	80-120
1,1-Dichloroethene	20.0	19.3	96	80-120
cis-1,2-Dichloroethene	20.0	19.3	97	80-120
trans-1,2-Dichloroethene	20.0	19.8	99	80-120
1,2-Dichloropropane	20.0	19.4	97	80-125
1,3-Dichloropropane	20.0	18.3	92	80-120
2,2-Dichloropropane	20.0	14.8	74	60-130
1,1-Dichloropropene	20.0	18.7	94	80-125
cis-1,3-Dichloropropene	20.0	18.0	90	80-125
trans-1,3-Dichloropropene	20.0	18.0	90	75-120
Diethyl ether (Ethyl ether)	20.0	19.1	96	70-140
1,4-Dioxane (p-Dioxane)	100	90J	90	10-180

08/27/2021 11:27

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947023LCS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSV8
LCS Lot No: 45079
Lab File ID: 072721B.B\0727B_30LCS.D
SDG No.: 60375743

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Ethylbenzene	20.0	19.4	97	80-120
n-Heptane	20.0	17.8	89	10-180
Hexachloro-1,3-butadiene	20.0	17.6	88	65-135
n-Hexane	20.0	18.0	90	60-135
2-Hexanone	100	101	101	45-150
Isopropylbenzene (Cumene)	20.0	19.8	99	80-125
p-Isopropyltoluene	20.0	19.9	99	80-135
Methyl acetate	100	85.3	85	45-140
Methylcyclohexane	20.0	19.2	96	80-125
Methylene Chloride	20.0	19.0	95	75-120
1-Methylnaphthalene	20.0	15.9	80	40-160
2-Methylnaphthalene	20.0	14.1	70	55-150
4-Methyl-2-pentanone (MIBK)	100	88.4	88	65-140
Methyl-tert-butyl ether	20.0	18.4	92	65-130
Naphthalene	20.0	17.2	86	70-120
n-Propylbenzene	20.0	20.0	100	80-120
Styrene	20.0	19.2	96	80-120
1,1,1,2-Tetrachloroethane	20.0	18.5	92	80-120
1,1,2,2-Tetrachloroethane	20.0	15.3	76	75-125
Tetrachloroethene	20.0	18.9	95	80-120
Tetrahydrofuran	100	87.6	88	75-125
Toluene	20.0	19.1	95	80-120
1,2,3-Trichlorobenzene	20.0	17.5	87	75-125
1,2,4-Trichlorobenzene	20.0	17.7	89	75-120
1,1,1-Trichloroethane	20.0	18.0	90	80-120
1,1,2-Trichloroethane	20.0	18.0	90	80-120
Trichloroethene	20.0	21.6	108	80-120
Trichlorofluoromethane	20.0	19.5	98	80-130
1,2,3-Trichloropropane	20.0	17.3	87	80-125
1,2,3-Trimethylbenzene	20.0	19.8	99	80-125
1,2,4-Trimethylbenzene	20.0	20.0	100	80-125
1,3,5-Trimethylbenzene	20.0	19.6	98	80-125
Vinyl chloride	20.0	19.3	96	65-130
Xylene (Total)	60.0	58.5	97	80-120
m&p-Xylene	40.0	39.2	98	75-130
o-Xylene	20.0	19.3	97	75-130

Spike Recovery: 0 out of 83 outside limits.

08/27/2021 11:27

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2947875LCS

Date Extracted: 07/29/2021 | Date Analyzed (1): 07/29/2021

Instrument: 60MSV8 | LCS Lot No: 45079

Lab File ID: 072821B.B\0728B_30LCS.D | SDG No.: 60375743

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	100	54.7	55	20-175
Acetonitrile	100	88.4	88	25-180
Acrolein	100	80.5	80	10-200
Acrylonitrile	100	88.3	88	70-135
Benzene	20.0	18.7	93	80-120
Bromobenzene	20.0	18.6	93	80-120
Bromochloromethane	20.0	19.9	100	80-125
Bromodichloromethane	20.0	18.9	94	80-125
Bromoform	20.0	19.4	97	60-135
Bromomethane	20.0	15.9	80	10-165
2-Butanone (MEK)	100	67.9	68	40-150
n-Butylbenzene	20.0	17.2	86	80-125
sec-Butylbenzene	20.0	19.3	97	80-120
tert-Butylbenzene	20.0	19.2	96	80-120
Carbon disulfide	20.0	18.4	92	75-135
Carbon tetrachloride	20.0	18.0	90	80-125
Chlorobenzene	20.0	19.3	96	80-120
Chloroethane	20.0	19.5	97	70-130
2-Chloroethylvinyl ether	100	94.2	94	30-165
Chloroform	20.0	18.2	91	80-120
Chloromethane	20.0	19.5	98	35-155
2-Chlorotoluene	20.0	18.7	94	80-120
4-Chlorotoluene	20.0	19.1	96	80-120
Cyclohexane	20.0	19.7	99	80-130
Cyclohexanone	100	58.4	58	10-180
1,2-Dibromo-3-chloropropane	20.0	16.6	83	70-120
Dibromochloromethane	20.0	19.1	95	70-120
1,2-Dibromoethane (EDB)	20.0	19.0	95	80-120
Dibromomethane	20.0	18.2	91	80-120
1,2-Dichlorobenzene	20.0	17.6	88	80-120
1,3-Dichlorobenzene	20.0	18.1	91	80-120
1,4-Dichlorobenzene	20.0	18.5	92	80-120
Dichlorodifluoromethane	20.0	19.2	96	50-150
1,1-Dichloroethane	20.0	18.8	94	75-125
1,2-Dichloroethane	20.0	16.9	84	75-120
1,2-Dichloroethene (Total)	40.0	37.7	94	80-120
1,1-Dichloroethene	20.0	18.9	94	80-120
cis-1,2-Dichloroethene	20.0	18.8	94	80-120
trans-1,2-Dichloroethene	20.0	18.9	95	80-120
1,2-Dichloropropane	20.0	18.3	92	80-125
1,3-Dichloropropane	20.0	18.2	91	80-120
2,2-Dichloropropane	20.0	14.2	71	60-130
1,1-Dichloropropene	20.0	18.5	93	80-125
cis-1,3-Dichloropropene	20.0	17.6	88	80-125
trans-1,3-Dichloropropene	20.0	17.5	88	75-120
Diethyl ether (Ethyl ether)	20.0	17.8	89	70-140
1,4-Dioxane (p-Dioxane)	100	81.8J	82	10-180

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947875LCS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/29/2021
Instrument: 60MSV8
LCS Lot No: 45079
Lab File ID: 072821B.B\0728B_30LCS.D
SDG No.: 60375743

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Ethylbenzene	20.0	19.5	98	80-120
n-Heptane	20.0	16.4	82	10-180
Hexachloro-1,3-butadiene	20.0	17.9	89	65-135
n-Hexane	20.0	17.4	87	60-135
2-Hexanone	100	72.0	72	45-150
Isopropylbenzene (Cumene)	20.0	19.7	98	80-125
p-Isopropyltoluene	20.0	19.2	96	80-135
Methyl acetate	100	84.8	85	45-140
Methylcyclohexane	20.0	18.7	93	80-125
Methylene Chloride	20.0	18.6	93	75-120
1-Methylnaphthalene	20.0	16.5	83	40-160
2-Methylnaphthalene	20.0	13.9	70	55-150
4-Methyl-2-pentanone (MIBK)	100	84.7	85	65-140
Methyl-tert-butyl ether	20.0	17.6	88	65-130
Naphthalene	20.0	17.7	89	70-120
n-Propylbenzene	20.0	18.5	93	80-120
Styrene	20.0	19.1	96	80-120
1,1,1,2-Tetrachloroethane	20.0	18.4	92	80-120
1,1,2,2-Tetrachloroethane	20.0	18.8	94	75-125
Tetrachloroethene	20.0	18.8	94	80-120
Tetrahydrofuran	100	87.5	87	75-125
Toluene	20.0	18.9	94	80-120
1,2,3-Trichlorobenzene	20.0	17.1	85	75-125
1,2,4-Trichlorobenzene	20.0	17.7	89	75-120
1,1,1-Trichloroethane	20.0	17.0	85	80-120
1,1,2-Trichloroethane	20.0	17.9	90	80-120
Trichloroethene	20.0	19.1	95	80-120
Trichlorofluoromethane	20.0	18.8	94	80-130
1,2,3-Trichloropropane	20.0	17.0	85	80-125
1,2,3-Trimethylbenzene	20.0	19.3	97	80-125
1,2,4-Trimethylbenzene	20.0	18.9	95	80-125
1,3,5-Trimethylbenzene	20.0	19.0	95	80-125
Vinyl chloride	20.0	19.0	95	65-130
Xylene (Total)	60.0	56.6	94	80-120
m&p-Xylene	40.0	37.8	94	75-130
o-Xylene	20.0	18.8	94	75-130

Spike Recovery: 0 out of 83 outside limits.

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MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947142LCS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVD
LCS Lot No: 44858
Lab File ID: 072721BGRO.B\0727B_29.D
SDG No.: 60375743

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
TPH-GRO	4000	3240	81	60-120

Spike Recovery: 0 out of 1 outside limits.

MSV - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947876MS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/29/2021
Instrument: 60MSV8
Lab File ID: 072821B.B\0728B_49MS.D
Parent Sample ID: 60375775018
SDG No.: 60375743

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	500	ND	484	97	70-125
1,1,1-Trichloroethane	500	ND	462	92	75-130
1,1,2,2-Tetrachloroethane	500	ND	457	91	65-130
1,1,2-Trichloroethane	500	ND	458	92	70-120
1,1-Dichloroethane	500	ND	510	102	61-130
1,1-Dichloroethene	500	ND	518	104	60-135
1,1-Dichloropropene	500	ND	487	97	55-145
1,2,3-Trichlorobenzene	500	ND	428	86	55-120
1,2,3-Trichloropropane	500	ND	420	84	60-135
1,2,3-Trimethylbenzene	500	ND	500	100	80-120
1,2,4-Trichlorobenzene	500	ND	437	87	50-125
1,2,4-Trimethylbenzene	500	ND	507	101	60-135
1,2-Dibromo-3-chloropropane	500	ND	396	79	55-125
1,2-Dibromoethane (EDB)	500	ND	479	96	65-125
1,2-Dichlorobenzene	500	ND	462	92	65-120
1,2-Dichloroethane	500	ND	439	88	30-160
1,2-Dichloroethene (Total)	1000	ND	1000	100	65-125
1,2-Dichloropropane	500	ND	480	96	65-130
1,3,5-Trimethylbenzene	500	ND	502	100	60-135
1,3-Dichlorobenzene	500	ND	482	96	65-120
1,3-Dichloropropane	500	ND	461	92	70-120
1,4-Dichlorobenzene	500	ND	474	95	60-125
1,4-Dioxane (p-Dioxane)	2500	ND	1950J	78	10-180
1-Methylnaphthalene	500	ND	374	75	30-135
2,2-Dichloropropane	500	ND	334	67	40-130
2-Butanone (MEK)	2500	28.2J	1380	54	30-130
2-Chloroethylvinyl ether	2500	ND	ND	1	10-160
2-Chlorotoluene	500	ND	490	98	65-125
2-Hexanone	2500	ND	1710	68	40-135
2-Methylnaphthalene	500	ND	339	68	45-135
4-Chlorotoluene	500	ND	495	99	65-125
4-Methyl-2-pentanone (MIBK)	2500	ND	2060	82	60-135
Acetone	2500	ND	1120	45	10-150
Acetonitrile	2500	ND	2320	93	80-120
Acrolein	2500	ND	1650	66	15-155
Acrylonitrile	2500	ND	2180	87	65-135
Benzene	500	ND	493	99	20-155
Bromobenzene	500	ND	467	93	65-120
Bromochloromethane	500	ND	510	102	65-125
Bromodichloromethane	500	ND	484	97	70-130
Bromoform	500	ND	453	91	50-125
Bromomethane	500	ND	389	78	10-155
Carbon disulfide	500	ND	481	96	55-140
Carbon tetrachloride	500	ND	478	96	70-140
Chlorobenzene	500	ND	501	100	65-130
Chloroethane	500	ND	521	104	20-180
Chloroform	500	ND	479	96	70-125

MSV - FORM III VOA-2

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947876MS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/29/2021
Instrument: 60MSV8
Lab File ID: 072821B.B\0728B_49MS.D
Parent Sample ID: 60375775018
SDG No.: 60375743

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
Chloromethane	500	ND	548	110	20-160
Cyclohexane	500	ND	509	102	75-150
Cyclohexanone	2500	ND	373J	15	55-130
Dibromochloromethane	500	ND	471	94	65-120
Dibromomethane	500	ND	448	90	65-125
Dichlorodifluoromethane	500	ND	505	101	10-175
Diethyl ether (Ethyl ether)	500	ND	473	95	80-120
Ethylbenzene	500	2200	2710	102	20-160
Hexachloro-1,3-butadiene	500	ND	444	89	40-130
Isopropylbenzene (Cumene)	500	18.6J	536	103	65-140
Methyl acetate	2500	ND	2100	84	40-140
Methyl-tert-butyl ether	500	ND	433	87	25-160
Methylcyclohexane	500	ND	468	94	65-155
Methylene Chloride	500	ND	471	93	60-125
Naphthalene	500	ND	433	87	30-150
Styrene	500	ND	525	105	40-145
Tetrachloroethene	500	ND	501	100	55-135
Tetrahydrofuran	2500	ND	2120	85	55-130
Toluene	500	9.0J	499	98	25-150
Trichloroethene	500	ND	477	95	50-145
Trichlorofluoromethane	500	ND	503	101	50-155
Vinyl chloride	500	ND	507	101	40-155
Xylene (Total)	1500	7790	9190	93	15-160
cis-1,2-Dichloroethene	500	ND	491	98	55-130
cis-1,3-Dichloropropene	500	ND	438	88	60-125
m&p-Xylene	1000	6980	7880	89	10-165
n-Butylbenzene	500	ND	449	90	50-140
n-Heptane	500	ND	397	79	80-120
n-Hexane	500	ND	420	84	20-160
n-Propylbenzene	500	ND	492	98	60-130
o-Xylene	500	811	1320	101	20-155
p-Isopropyltoluene	500	ND	516	103	50-150
sec-Butylbenzene	500	ND	502	100	60-140
tert-Butylbenzene	500	ND	496	99	60-130
trans-1,2-Dichloroethene	500	ND	511	102	60-130
trans-1,3-Dichloropropene	500	ND	435	87	60-120

Spike Recovery: 3 out of 83 outside limits.

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MSV - FORM III VOA-3

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSV8 Matrix Spike Duplicate - Sample No: 2947877MSD

Lab File ID (2): 072821B.B\0728B_50MSD.D Date Analyzed (2): 07/29/2021

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	500	483	97	0	0-15	70-125
1,1,1-Trichloroethane	500	445	89	4	0-15	75-130
1,1,2,2-Tetrachloroethane	500	437	87	5	0-15	65-130
1,1,2-Trichloroethane	500	451	90	1	0-20	70-120
1,1-Dichloroethane	500	488	98	4	0-15	61-130
1,1-Dichloroethene	500	496	99	4	0-25	60-135
1,1-Dichloropropene	500	471	94	3	0-20	55-145
1,2,3-Trichlorobenzene	500	452	90	5	0-25	55-120
1,2,3-Trichloropropane	500	416	83	1	0-20	60-135
1,2,3-Trimethylbenzene	500	489	98	2	0-20	80-120
1,2,4-Trichlorobenzene	500	443	89	1	0-25	50-125
1,2,4-Trimethylbenzene	500	488	98	4	0-20	60-135
1,2-Dibromo-3-chloropropane	500	401	80	1	0-25	55-125
1,2-Dibromoethane (EDB)	500	461	92	4	0-20	65-125
1,2-Dichlorobenzene	500	452	90	2	0-20	65-120
1,2-Dichloroethane	500	425	85	3	0-25	30-160
1,2-Dichloroethene (Total)	1000	977	98	3	0-20	65-125
1,2-Dichloropropane	500	467	93	3	0-20	65-130
1,3,5-Trimethylbenzene	500	491	98	2	0-20	60-135
1,3-Dichlorobenzene	500	474	95	2	0-20	65-120
1,3-Dichloropropane	500	452	90	2	0-20	70-120
1,4-Dichlorobenzene	500	469	94	1	0-20	60-125
1,4-Dioxane (p-Dioxane)	2500	2510	100		0-35	10-180
1-Methylnaphthalene	500	451	90	19	0-20	30-135
2,2-Dichloropropane	500	324	65	3	0-30	40-130
2-Butanone (MEK)	2500	1440	56	4	0-25	30-130
2-Chloroethylvinyl ether	2500	ND	1		0-25	10-160
2-Chlorotoluene	500	490	98	0	0-20	65-125
2-Hexanone	2500	1700	68	1	0-20	40-135
2-Methylnaphthalene	500	403	81	17	0-30	45-135
4-Chlorotoluene	500	490	98	1	0-20	65-125
4-Methyl-2-pentanone (MIBK)	2500	2000	80	3	0-20	60-135
Acetone	2500	1090	44	3	0-25	10-150
Acetonitrile	2500	2210	88	5	0-20	80-120
Acrolein	2500	1790	72	8	0-35	15-155
Acrylonitrile	2500	2170	87	0	0-20	65-135
Benzene	500	482	96	2	0-25	20-155
Bromobenzene	500	470	94	1	0-15	65-120
Bromochloromethane	500	495	99	3	0-20	65-125
Bromodichloromethane	500	459	92	5	0-15	70-130
Bromoform	500	455	91	0	0-20	50-125
Bromomethane	500	437	87	12	0-45	10-155
Carbon disulfide	500	480	96	0	0-25	55-140
Carbon tetrachloride	500	463	93	3	0-20	70-140
Chlorobenzene	500	491	98	2	0-20	65-130
Chloroethane	500	504	101	3	0-20	20-180
Chloroform	500	467	93	2	0-20	70-125
Chloromethane	500	540	108	1	0-30	20-160
Cyclohexane	500	484	97	5	0-20	75-150

MSV - FORM III VOA-4

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSV8 Matrix Spike Duplicate - Sample No: 2947877MSD

Lab File ID (2): 072821B.B\0728B_50MSD.D Date Analyzed (2): 07/29/2021

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Cyclohexanone	2500	484J	19		0-35	55-130
Dibromochloromethane	500	474	95	1	0-20	65-120
Dibromomethane	500	433	87	3	0-20	65-125
Dichlorodifluoromethane	500	495	99	2	0-25	10-175
Diethyl ether (Ethyl ether)	500	454	91	4	0-35	80-120
Ethylbenzene	500	2730	106	1	0-25	20-160
Hexachloro-1,3-butadiene	500	432	86	3	0-30	40-130
Isopropylbenzene (Cumene)	500	536	104	0	0-20	65-140
Methyl acetate	2500	2040	82	3	0-20	40-140
Methyl-tert-butyl ether	500	436	87	1	0-30	25-160
Methylcyclohexane	500	472	94	1	0-20	65-155
Methylene Chloride	500	481	95	2	0-25	60-125
Naphthalene	500	455	91	5	0-25	30-150
Styrene	500	518	104	1	0-30	40-145
Tetrachloroethene	500	496	99	1	0-25	55-135
Tetrahydrofuran	2500	2180	87	2	0-35	55-130
Toluene	500	506	99	2	0-25	25-150
Trichloroethene	500	466	92	3	0-20	50-145
Trichlorofluoromethane	500	491	98	2	0-20	50-155
Vinyl chloride	500	485	97	4	0-25	40-155
Xylene (Total)	1500	9100	87	1	0-30	15-160
cis-1,2-Dichloroethene	500	480	96	2	0-20	55-130
cis-1,3-Dichloropropene	500	434	87	1	0-20	60-125
m&p-Xylene	1000	7810	82	1	0-30	10-165
n-Butylbenzene	500	450	90	0	0-25	50-140
n-Heptane	500	401	80	1	0-35	80-120
n-Hexane	500	418	84	1	0-25	20-160
n-Propylbenzene	500	498	100	1	0-20	60-130
o-Xylene	500	1290	96	2	0-30	20-155
p-Isopropyltoluene	500	503	101	3	0-20	50-150
sec-Butylbenzene	500	495	99	1	0-20	60-140
tert-Butylbenzene	500	483	97	3	0-20	60-130
trans-1,2-Dichloroethene	500	498	100	3	0-20	60-130
trans-1,3-Dichloropropene	500	438	88	1	0-15	60-120

RPD: 0 out of 80 outside limits.

Spike Recovery: 2 out of 83 outside limits.

08/27/2021 11:27

SAMPLE NO.

2947022BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Instrument ID: 60MSV8 Matrix: Water Lab Sample ID: 2947022

Lab File ID: 072721B.B\0727B_32BLK.D Date Analyzed: 07/28/2021 Time: 01:52

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947023LCS	2947023	072721B.B\0727B_30LCS.D	07/28/2021 01:24
TB-03	60375743003	072721B.B\0727B_39.D	07/28/2021 03:31

SAMPLE NO.

2947141BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Instrument ID: 60MSVD Matrix: Water Lab Sample ID: 2947141

Lab File ID (1): 072721B.B\0727B_31.D Date Analyzed (1): 07/28/2021 Time (1):05:09

Lab File ID (2): 072721BGRO.B\0727B_31.D Date Analyzed (2): 07/28/2021 Time (2):05:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947142LCS	2947142	072721B.B\0727B_28.D	07/28/2021 04:21
2947142LCS	2947142	072721BGRO.B\0727B_29.D	07/28/2021 04:37
RB-01	60375743001	072721B.B\0727B_37.D	07/28/2021 06:45
RB-01	60375743001	072721BGRO.B\0727B_37.D	07/28/2021 06:45
RB-02	60375743002	072721B.B\0727B_38.D	07/28/2021 07:01
RB-02	60375743002	072721BGRO.B\0727B_38.D	07/28/2021 07:01

SAMPLE NO.

2947874BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Instrument ID: 60MSV8 Matrix: Water Lab Sample ID: 2947874

Lab File ID: 072821B.B\0728B_32BLK.D Date Analyzed: 07/29/2021 Time: 01:50

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947875LCS	2947875	072821B.B\0728B_30LCS.D	07/29/2021 01:22
RB-01	60375743001	072821B.B\0728B_37.D	07/29/2021 03:01
RB-02	60375743002	072821B.B\0728B_38.D	07/29/2021 03:15

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW
Lab File ID: 072721A.B\0727A_05BFB.D BFB Injection Date 07/27/2021
Instrument ID: 60MSV8 BFB Injection Time 07:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	17.47	
75	30.00 - 66.00% of mass 95	40.95	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.38	
173	Less than 2.00% of mass 174	1.10	(0.93)[1]
174	50.00 - 120.00% of mass 95	118.08	
175	4.00 - 9.00% of mass 174	8.62	(7.30)[1]
176	93.00 - 101.00% of mass 174	114.78	(97.21)[1]
177	5.00 - 9.00% of mass 176	7.27	(6.33)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19726932CAL1	19726932CAL1	072721A.B\0727A_07.D	07/27/2021	08:10
19726925CAL2	19726925CAL2	072721A.B\0727A_08.D	07/27/2021	08:24
19726930CAL3	19726930CAL3	072721A.B\0727A_09.D	07/27/2021	08:38
19726931CAL4	19726931CAL4	072721A.B\0727A_10.D	07/27/2021	08:52
19726933CAL5	19726933CAL5	072721A.B\0727A_11.D	07/27/2021	09:06
19726927CAL6	19726927CAL6	072721A.B\0727A_12.D	07/27/2021	09:21
19726926CAL7	19726926CAL7	072721A.B\0727A_13.D	07/27/2021	09:35
19726929CAL8	19726929CAL8	072721A.B\0727A_14.D	07/27/2021	09:49
19726928ICV	19726928ICV	072721A.B\0727A_17.D	07/27/2021	10:32

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW
Lab File ID: 072721B.B\0727B_01.D BFB Injection Date 07/27/2021
Instrument ID: 60MSV8 BFB Injection Time 18:34

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	17.33	
75	30.00 - 66.00% of mass 95	41.14	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.78	
173	Less than 2.00% of mass 174	0.54	(0.47)[1]
174	50.00 - 120.00% of mass 95	113.60	
175	4.00 - 9.00% of mass 174	8.19	(7.21)[1]
176	93.00 - 101.00% of mass 174	111.67	(98.30)[1]
177	5.00 - 9.00% of mass 176	7.00	(6.27)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19732368CCV	19732368CCV	072721B.B\0727B_03CCV.D	07/27/2021	19:03
2947023LCS	2947023LCS	072721B.B\0727B_30LCS.D	07/28/2021	01:24
2947022BLANK	2947022BLANK	072721B.B\0727B_32BLK.D	07/28/2021	01:52
TB-03	60375743003	072721B.B\0727B_39.D	07/28/2021	03:31

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Lab File ID: 072821B.B\0728B_01.D BFB Injection Date: 07/28/2021

Instrument ID: 60MSV8 BFB Injection Time: 18:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	16.72	
75	30.00 - 66.00% of mass 95	38.42	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	7.23	
173	Less than 2.00% of mass 174	1.19	(1.02)[1]
174	50.00 - 120.00% of mass 95	116.99	
175	4.00 - 9.00% of mass 174	8.46	(7.23)[1]
176	93.00 - 101.00% of mass 174	114.79	(98.12)[1]
177	5.00 - 9.00% of mass 176	7.40	(6.45)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19738534CCV	19738534CCV	072821B.B\0728B_03CCV.D	07/28/2021	19:01
2947875LCS	2947875LCS	072821B.B\0728B_30LCS.D	07/29/2021	01:22
2947874BLANK	2947874BLANK	072821B.B\0728B_32BLK.D	07/29/2021	01:50
RB-01	60375743001	072821B.B\0728B_37.D	07/29/2021	03:01
RB-02	60375743002	072821B.B\0728B_38.D	07/29/2021	03:15

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Lab File ID: 072621B.B\0726B_01.D BFB Injection Date 07/26/2021

Instrument ID: 60MSVD BFB Injection Time 20:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	35.41	
75	30.00 - 66.00% of mass 95	49.67	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.64	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	95.23	
175	4.00 - 9.00% of mass 174	7.67	(8.05)[1]
176	93.00 - 101.00% of mass 174	90.43	(94.96)[1]
177	5.00 - 9.00% of mass 176	6.43	(7.12)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19725764CAL1	19725764CAL1	072621BGRO.B\0726B_06.D	07/26/2021	21:45
19725769CAL2	19725769CAL2	072621BGRO.B\0726B_07.D	07/26/2021	22:01
19725765CAL3	19725765CAL3	072621BGRO.B\0726B_08.D	07/26/2021	22:17
19725766CAL4	19725766CAL4	072621BGRO.B\0726B_09.D	07/26/2021	22:33
19725767CAL5	19725767CAL5	072621BGRO.B\0726B_10.D	07/26/2021	22:49
19725770CAL6	19725770CAL6	072621BGRO.B\0726B_11.D	07/26/2021	23:05
19725768ICV	19725768ICV	072621BGRO.B\0726B_13.D	07/26/2021	23:36

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW
Lab File ID: 072721B.B\0727B_01.D BFB Injection Date 07/27/2021
Instrument ID: 60MSVD BFB Injection Time 21:11

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	34.80	
75	30.00 - 66.00% of mass 95	48.97	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.42	
173	Less than 2.00% of mass 174	0.26	(0.27)[1]
174	50.00 - 120.00% of mass 95	95.29	
175	4.00 - 9.00% of mass 174	7.73	(8.12)[1]
176	93.00 - 101.00% of mass 174	92.53	(97.10)[1]
177	5.00 - 9.00% of mass 176	6.08	(6.57)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19734107CCV	19734107CCV	072721B.B\0727B_02.D	07/27/2021	21:27
19879369CCV	19879369CCV	072721BGRO.B\0727B_04.D	07/27/2021	21:59
2947142LCS	2947142LCS	072721B.B\0727B_28.D	07/28/2021	04:21
2947142LCS	2947142LCS	072721BGRO.B\0727B_29.D	07/28/2021	04:37
2947141BLANK	2947141BLANK	072721BGRO.B\0727B_31.D	07/28/2021	05:09
2947141BLANK	2947141BLANK	072721B.B\0727B_31.D	07/28/2021	05:09
RB-01	60375743001	072721BGRO.B\0727B_37.D	07/28/2021	06:45
RB-01	60375743001	072721B.B\0727B_37.D	07/28/2021	06:45
RB-02	60375743002	072721BGRO.B\0727B_38.D	07/28/2021	07:01
RB-02	60375743002	072721B.B\0727B_38.D	07/28/2021	07:01

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Sample ID : 19732368CCV Date Analyzed: 07/27/2021

Instrument ID: 60MSV8 GC Column: Col 1 Time Analyzed: 19:03

Lab File ID: 072721B.B\0727B_03CCV.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		371408	6.844	337416	5.284	1104467	3.31
UPPER LIMIT		742816	7.344	674832	5.784	2208934	3.81
LOWER LIMIT		185704	6.344	168708	4.784	552233.5	2.81
LAB SAMPLE ID	SAMPLE NO.						
2947022	2947022BLANK	354396	6.844	336949	5.284	1115674	3.31
2947023	2947023LCS	360382	6.844	333099	5.284	1090140	3.31
60375743003	TB-03	355423	6.844	331067	5.284	1106221	3.307

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Sample ID : 19738534CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSV8 GC Column: Col 1 Time Analyzed: 19:01

Lab File ID: 072821B.B\0728B_03CCV.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		373617	6.844	342530	5.285	1126456	3.31
UPPER LIMIT		747234	7.344	685060	5.785	2252912	3.81
LOWER LIMIT		186808.5	6.344	171265	4.785	563228	2.81
LAB SAMPLE ID	SAMPLE NO.						
2947874	2947874BLANK	366689	6.844	341481	5.284	1118234	3.31
2947875	2947875LCS	374270	6.844	340243	5.284	1128203	3.31
60375743001	RB-01	357375	6.844	322295	5.284	1076789	3.31
60375743002	RB-02	362268	6.844	327092	5.284	1081990	3.31

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Sample ID : 19734107CCV Date Analyzed: 07/27/2021

Instrument ID: 60MSVD GC Column: Col 1 Time Analyzed: 21:27

Lab File ID: 072721B.B\0727B_02.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		56393	7.801	52085	6.208	122901	4.208
UPPER LIMIT		112786	8.301	104170	6.708	245802	4.708
LOWER LIMIT		28196.5	7.301	26042.5	5.708	61450.5	3.708
LAB SAMPLE ID	SAMPLE NO.						
2947141	2947141BLANK	57526	7.804	55004	6.206	129513	4.202
2947142	2947142LCS	54813	7.804	50354	6.212	120427	4.205
60375743001	RB-01	55336	7.798	53618	6.206	124982	4.205
60375743002	RB-02	55672	7.801	51497	6.206	123302	4.202

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-03

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 03:31 Lab Sample ID: 60375743003

Date Analyzed: 07/28/2021 03:31 Lab File ID: 072721B.B\0727B_39.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
75-05-8	Acetonitrile	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
108-86-1	Bromobenzene	ND	U
74-97-5	Bromochloromethane	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
104-51-8	n-Butylbenzene	ND	U
135-98-8	sec-Butylbenzene	ND	U
98-06-6	tert-Butylbenzene	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
110-75-8	2-Chloroethylvinyl ether	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
95-49-8	2-Chlorotoluene	ND	U
106-43-4	4-Chlorotoluene	ND	U
110-82-7	Cyclohexane	ND	U
108-94-1	Cyclohexanone	ND	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	U
124-48-1	Dibromochloromethane	ND	U
106-93-4	1,2-Dibromoethane (EDB)	ND	U
74-95-3	Dibromomethane	ND	U
95-50-1	1,2-Dichlorobenzene	ND	U
541-73-1	1,3-Dichlorobenzene	ND	U
106-46-7	1,4-Dichlorobenzene	ND	U
75-71-8	Dichlorodifluoromethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
540-59-0	1,2-Dichloroethene (Total)	ND	U
75-35-4	1,1-Dichloroethene	ND	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-03

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 03:31 Lab Sample ID: 60375743003

Date Analyzed: 07/28/2021 03:31 Lab File ID: 072721B.B\0727B_39.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
142-28-9	1,3-Dichloropropane	ND	U
594-20-7	2,2-Dichloropropane	ND	U
563-58-6	1,1-Dichloropropene	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
60-29-7	Diethyl ether (Ethyl ether)	ND	U
123-91-1	1,4-Dioxane (p-Dioxane)	ND	U
100-41-4	Ethylbenzene	ND	U
142-82-5	n-Heptane	ND	U
87-68-3	Hexachloro-1,3-butadiene	ND	U
110-54-3	n-Hexane	ND	U
591-78-6	2-Hexanone	ND	U
98-82-8	Isopropylbenzene (Cumene)	ND	U
99-87-6	p-Isopropyltoluene	ND	U
79-20-9	Methyl acetate	ND	U
108-87-2	Methylcyclohexane	ND	U
75-09-2	Methylene Chloride	ND	U
90-12-0	1-Methylnaphthalene	ND	U
91-57-6	2-Methylnaphthalene	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
1634-04-4	Methyl-tert-butyl ether	ND	U
91-20-3	Naphthalene	ND	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	ND	U
100-42-5	Styrene	ND	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
109-99-9	Tetrahydrofuran	ND	U
108-88-3	Toluene	ND	U
87-61-6	1,2,3-Trichlorobenzene	ND	U
120-82-1	1,2,4-Trichlorobenzene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U

SAMPLE NO.

TB-03

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 03:31 Lab Sample ID: 60375743003

Date Analyzed: 07/28/2021 03:31 Lab File ID: 072721B.B\0727B_39.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U
526-73-8	1,2,3-Trimethylbenzene	ND	U
95-63-6	1,2,4-Trimethylbenzene	ND	U
108-67-8	1,3,5-Trimethylbenzene	ND	U
75-01-4	Vinyl chloride	ND	U
1330-20-7	Xylene (Total)	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-01

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/29/2021 03:01 Lab Sample ID: 60375743001

Date Analyzed: 07/29/2021 03:01 Lab File ID: 072821B.B\0728B_37.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
75-05-8	Acetonitrile	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
108-86-1	Bromobenzene	ND	U
74-97-5	Bromochloromethane	ND	U
75-27-4	Bromodichloromethane	1.8	
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
104-51-8	n-Butylbenzene	ND	U
135-98-8	sec-Butylbenzene	ND	U
98-06-6	tert-Butylbenzene	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
110-75-8	2-Chloroethylvinyl ether	ND	U
67-66-3	Chloroform	6.9	
74-87-3	Chloromethane	ND	U
95-49-8	2-Chlorotoluene	ND	U
106-43-4	4-Chlorotoluene	ND	U
110-82-7	Cyclohexane	ND	U
108-94-1	Cyclohexanone	ND	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	U
124-48-1	Dibromochloromethane	ND	U
106-93-4	1,2-Dibromoethane (EDB)	ND	U
74-95-3	Dibromomethane	ND	U
95-50-1	1,2-Dichlorobenzene	ND	U
541-73-1	1,3-Dichlorobenzene	ND	U
106-46-7	1,4-Dichlorobenzene	ND	U
75-71-8	Dichlorodifluoromethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
540-59-0	1,2-Dichloroethene (Total)	ND	U
75-35-4	1,1-Dichloroethene	ND	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-01

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/29/2021 03:01 Lab Sample ID: 60375743001

Date Analyzed: 07/29/2021 03:01 Lab File ID: 072821B.B\0728B_37.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
142-28-9	1,3-Dichloropropane	ND	U
594-20-7	2,2-Dichloropropane	ND	U
563-58-6	1,1-Dichloropropene	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
60-29-7	Diethyl ether (Ethyl ether)	ND	U
123-91-1	1,4-Dioxane (p-Dioxane)	ND	U
100-41-4	Ethylbenzene	ND	U
142-82-5	n-Heptane	ND	U
87-68-3	Hexachloro-1,3-butadiene	ND	U
110-54-3	n-Hexane	ND	U
591-78-6	2-Hexanone	ND	U
98-82-8	Isopropylbenzene (Cumene)	ND	U
99-87-6	p-Isopropyltoluene	ND	U
79-20-9	Methyl acetate	ND	U
108-87-2	Methylcyclohexane	ND	U
75-09-2	Methylene Chloride	ND	U
90-12-0	1-Methylnaphthalene	ND	U
91-57-6	2-Methylnaphthalene	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
1634-04-4	Methyl-tert-butyl ether	ND	U
91-20-3	Naphthalene	ND	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	ND	U
100-42-5	Styrene	ND	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
109-99-9	Tetrahydrofuran	ND	U
108-88-3	Toluene	ND	U
87-61-6	1,2,3-Trichlorobenzene	ND	U
120-82-1	1,2,4-Trichlorobenzene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U

SAMPLE NO.

MSV - FORM I VOA-3
VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-01

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW
Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743
Date Extracted: 07/29/2021 03:01 Lab Sample ID: 60375743001
Date Analyzed: 07/29/2021 03:01 Lab File ID: 072821B.B\0728B_37.D
Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U
526-73-8	1,2,3-Trimethylbenzene	ND	U
95-63-6	1,2,4-Trimethylbenzene	ND	U
108-67-8	1,3,5-Trimethylbenzene	ND	U
75-01-4	Vinyl chloride	ND	U
1330-20-7	Xylene (Total)	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-02

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/29/2021 03:15 Lab Sample ID: 60375743002

Date Analyzed: 07/29/2021 03:15 Lab File ID: 072821B.B\0728B_38.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
75-05-8	Acetonitrile	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
108-86-1	Bromobenzene	ND	U
74-97-5	Bromochloromethane	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
104-51-8	n-Butylbenzene	ND	U
135-98-8	sec-Butylbenzene	ND	U
98-06-6	tert-Butylbenzene	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
110-75-8	2-Chloroethylvinyl ether	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
95-49-8	2-Chlorotoluene	ND	U
106-43-4	4-Chlorotoluene	ND	U
110-82-7	Cyclohexane	ND	U
108-94-1	Cyclohexanone	ND	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	U
124-48-1	Dibromochloromethane	ND	U
106-93-4	1,2-Dibromoethane (EDB)	ND	U
74-95-3	Dibromomethane	ND	U
95-50-1	1,2-Dichlorobenzene	ND	U
541-73-1	1,3-Dichlorobenzene	ND	U
106-46-7	1,4-Dichlorobenzene	ND	U
75-71-8	Dichlorodifluoromethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
540-59-0	1,2-Dichloroethene (Total)	ND	U
75-35-4	1,1-Dichloroethene	ND	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-02

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/29/2021 03:15 Lab Sample ID: 60375743002

Date Analyzed: 07/29/2021 03:15 Lab File ID: 072821B.B\0728B_38.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
142-28-9	1,3-Dichloropropane	ND	U
594-20-7	2,2-Dichloropropane	ND	U
563-58-6	1,1-Dichloropropene	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
60-29-7	Diethyl ether (Ethyl ether)	ND	U
123-91-1	1,4-Dioxane (p-Dioxane)	ND	U
100-41-4	Ethylbenzene	ND	U
142-82-5	n-Heptane	ND	U
87-68-3	Hexachloro-1,3-butadiene	ND	U
110-54-3	n-Hexane	ND	U
591-78-6	2-Hexanone	ND	U
98-82-8	Isopropylbenzene (Cumene)	ND	U
99-87-6	p-Isopropyltoluene	ND	U
79-20-9	Methyl acetate	ND	U
108-87-2	Methylcyclohexane	ND	U
75-09-2	Methylene Chloride	ND	U
90-12-0	1-Methylnaphthalene	ND	U
91-57-6	2-Methylnaphthalene	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
1634-04-4	Methyl-tert-butyl ether	ND	U
91-20-3	Naphthalene	ND	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	ND	U
100-42-5	Styrene	ND	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
109-99-9	Tetrahydrofuran	ND	U
108-88-3	Toluene	ND	U
87-61-6	1,2,3-Trichlorobenzene	ND	U
120-82-1	1,2,4-Trichlorobenzene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U

SAMPLE NO.

MSV - FORM I VOA-3
VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-02

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW
Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743
Date Extracted: 07/29/2021 03:15 Lab Sample ID: 60375743002
Date Analyzed: 07/29/2021 03:15 Lab File ID: 072821B.B\0728B_38.D
Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U
526-73-8	1,2,3-Trimethylbenzene	ND	U
95-63-6	1,2,4-Trimethylbenzene	ND	U
108-67-8	1,3,5-Trimethylbenzene	ND	U
75-01-4	Vinyl chloride	ND	U
1330-20-7	Xylene (Total)	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

RB-01

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 06:45 Lab Sample ID: 60375743001

Date Analyzed: 07/28/2021 06:45 Lab File ID: 072721BGRO.B\0727B_37.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	ND	U

SAMPLE NO.

RB-01

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 06:45 Lab Sample ID: 60375743001

Date Analyzed: 07/28/2021 06:45 Lab File ID: 072721B.B\0727B_37.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	null	Q
	Preservation pH	1.0	

SAMPLE NO.

RB-02

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 07:01 Lab Sample ID: 60375743002

Date Analyzed: 07/28/2021 07:01 Lab File ID: 072721B.B\0727B_38.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	null	Q
	Preservation pH	1.0	

SAMPLE NO.

RB-02

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 07:01 Lab Sample ID: 60375743002

Date Analyzed: 07/28/2021 07:01 Lab File ID: 072721BGRO.B\0727B_38.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	ND	U

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Wt Linear	0.11433	0.11555	0.08534	0.07545	0.08715	0.08586
Acetonitrile	Averaged	0.15454	0.20681	0.17010	0.15898	0.17265	0.16350
Acrolein	Averaged	0.03408	0.03913	0.02875	0.02849	0.03036	0.03125
Acrylonitrile	Averaged	0.06805	0.07430	0.06324	0.06315	0.06796	0.07100
Benzene	Averaged	1.38630	1.89829	1.57232	1.55484	1.68499	1.61993
Bromobenzene	Averaged	1.52367	1.75978	1.40500	1.38561	1.50972	1.46312
Bromochloromethane	Averaged	0.24723	0.27337	0.25015	0.25273	0.26243	0.23781
Bromodichloromethane	Averaged	0.38965	0.51981	0.45453	0.45010	0.50541	0.49568
Bromoform	Averaged	0.68861	0.49233	0.50804	0.51974	0.60027	0.63493
Bromomethane	Wt Linear	0.36027	0.31897	0.19392	0.17807	0.22723	0.23029
2-Butanone (MEK)	Averaged	0.11206	0.10468	0.10249	0.09648	0.11173	0.11558
n-Butylbenzene	Averaged	3.68783	3.54792	2.86627	2.79693	3.05325	2.85132
sec-Butylbenzene	Averaged	4.27501	5.01108	4.17150	4.06409	4.62868	4.33093
tert-Butylbenzene	Averaged	3.52566	3.65528	3.09159	2.98847	3.38982	3.15574
Carbon disulfide	Averaged	0.99466	1.30416	1.04682	0.98414	1.07975	0.98035
Carbon tetrachloride	Averaged	0.58397	0.79830	0.64918	0.60995	0.70172	0.67533
Chlorobenzene	Averaged	3.71211	4.54122	3.66634	3.53824	3.94990	3.71812
Chloroethane	Wt Linear	0.24512	0.36552	0.27474	0.23709	0.26076	0.24065
2-Chloroethylvinyl ether	Averaged	0.07977	0.08413	0.08450	0.08687	0.09960	0.10462
Chloroform	Averaged	0.71568	0.91280	0.75648	0.72105	0.80197	0.75378
Chloromethane	Averaged	0.30537	0.38181	0.30780	0.30928	0.32865	0.28974
2-Chlorotoluene	Averaged	3.10438	3.15369	2.82147	2.84381	3.04674	2.88160
4-Chlorotoluene	Averaged	1.33093	1.53386	1.23245	1.22655	1.33487	1.28092
Cyclohexane	Averaged	0.59082	0.81832	0.73842	0.69217	0.74907	0.74057
Cyclohexanone	Averaged	0.06878	0.08184	0.06672	0.07073	0.08431	0.08563
1,2-Dibromo-3-chloropropane	Wt Linear	0.08798	0.03942	0.06326	0.05838	0.06522	0.07209
Dibromochloromethane	Averaged	1.21549	1.23099	1.04395	1.03989	1.19941	1.20930
1,2-Dibromoethane (EDB)	Averaged	0.86677	1.02502	0.81998	0.86565	0.95035	0.95454
Dibromomethane	Averaged	0.20441	0.26855	0.22104	0.21465	0.22783	0.23294
1,2-Dichlorobenzene	Averaged	2.54293	2.45906	2.00056	1.99441	2.16702	2.02147
1,3-Dichlorobenzene	Averaged	2.80688	2.72732	2.24002	2.30703	2.44200	2.31884
1,4-Dichlorobenzene	Averaged	2.97987	2.69764	2.23697	2.27139	2.46710	2.30786
Dichlorodifluoromethane	Averaged	0.36948	0.58941	0.45682	0.43647	0.49217	0.45690
1,1-Dichloroethane	Averaged	0.59717	0.91196	0.76299	0.76278	0.81484	0.77740
1,2-Dichloroethane	Averaged	0.41579	0.51743	0.45401	0.43648	0.48670	0.47313

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1-Dichloroethene	Averaged	0.35616	0.51644	0.43047	0.38974	0.43514	0.40494
cis-1,2-Dichloroethene	Averaged	0.44841	0.60138	0.49135	0.48179	0.53578	0.50825
trans-1,2-Dichloroethene	Averaged	0.37658	0.54535	0.46678	0.44497	0.49525	0.47730
1,2-Dichloropropane	Averaged	0.36550	0.47625	0.41227	0.38836	0.43413	0.42577
1,3-Dichloropropane	Averaged	1.36362	1.50204	1.32049	1.32148	1.44613	1.40179
2,2-Dichloropropane	Averaged	0.58123	0.78787	0.64679	0.58049	0.65257	0.60881
1,1-Dichloropropene	Averaged	0.49708	0.62508	0.54974	0.51654	0.59065	0.56669
cis-1,3-Dichloropropene	Averaged	0.55049	0.64609	0.54405	0.54632	0.61450	0.59795
trans-1,3-Dichloropropene	Averaged	1.41887	1.64722	1.38018	1.36633	1.50560	1.52202
Diethyl ether (Ethyl ether)	Averaged	0.14179	0.19662	0.15627	0.15691	0.17448	0.16983
1,4-Dioxane (p-Dioxane)	Wt Linear				0.00100	0.00143	0.00154
Ethylbenzene	Averaged	1.70632	2.00905	1.81112	1.74235	1.97544	1.88105
n-Heptane	Averaged	0.06312	0.10382	0.08779	0.08069	0.09334	0.08785
Hexachloro-1,3-butadiene	Averaged		0.80083	0.59424	0.58961	0.63742	0.59615
n-Hexane	Averaged	0.52422	0.68558	0.57739	0.53056	0.62641	0.60005
2-Hexanone	Averaged	0.47098	0.45267	0.41525	0.37853	0.45129	0.46600
Isopropylbenzene (Cumene)	Averaged	4.85233	6.11952	5.20262	4.84000	5.44377	5.19588
p-Isopropyltoluene	Averaged	3.85970	4.45145	3.64513	3.69079	4.13422	3.80948
Methyl acetate	Averaged	0.15807	0.17945	0.13909	0.13925	0.15099	0.14992
Methylcyclohexane	Averaged	0.50965	0.79994	0.63205	0.57509	0.67390	0.64484
Methylene Chloride	Averaged	0.35106	0.45032	0.33586	0.33949	0.36453	0.34913
1-Methylnaphthalene	Averaged		0.70569	0.56827	0.57270	0.63643	0.66932
2-Methylnaphthalene	Wt Linear	1.32646	0.88418	0.64074	0.68131	0.79886	0.83344
4-Methyl-2-pentanone (MIBK)	Averaged	0.16983	0.19744	0.16501	0.16518	0.18715	0.19362
Methyl-tert-butyl ether	Averaged	0.65593	0.82056	0.73758	0.71479	0.80057	0.80787
Naphthalene	Averaged	1.94606	1.81215	1.49687	1.55739	1.74007	1.76295
n-Propylbenzene	Averaged	1.34174	1.61256	1.29505	1.25302	1.37625	1.32494
Styrene	Averaged	3.15682	3.81692	3.23428	3.24106	3.59540	3.46248
1,1,1,2-Tetrachloroethane	Averaged	1.30597	1.67992	1.32858	1.32942	1.50557	1.46464
1,1,2,2-Tetrachloroethane	Averaged	0.70908	0.69696	0.61028	0.63522	0.69061	0.70405
Tetrachloroethene	Averaged	1.77158	2.34647	1.98881	1.83313	2.02232	1.92238
Tetrahydrofuran	Averaged	0.04745	0.05710	0.04809	0.04960	0.05425	0.05781
Toluene	Averaged	3.14401	3.98938	3.23472	3.09746	3.44084	3.22670
1,2,3-Trichlorobenzene	Averaged	0.92755	0.99358	0.71159	0.74383	0.80504	0.82204
1,2,4-Trichlorobenzene	Averaged	1.27464	1.13017	0.98218	0.91255	1.05769	1.04185

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-3
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1,1-Trichloroethane	Averaged	0.63203	0.82816	0.72667	0.66061	0.75308	0.70405
1,1,2-Trichloroethane	Averaged	0.83114	0.89963	0.72984	0.69404	0.77627	0.76395
Trichloroethene	Averaged	0.46384	0.58439	0.47937	0.44923	0.49882	0.47971
Trichlorofluoromethane	Averaged	0.61074	0.93004	0.76728	0.71635	0.78258	0.71159
1,2,3-Trichloropropane	Averaged	0.25426	0.25414	0.18322	0.19371	0.19795	0.20576
1,2,3-Trimethylbenzene	Averaged	3.65241	3.83756	3.23307	3.18640	3.49794	3.23088
1,2,4-Trimethylbenzene	Averaged	3.53572	4.08879	3.35777	3.38343	3.67746	3.44530
1,3,5-Trimethylbenzene	Averaged	3.67031	4.16094	3.48076	3.38200	3.82410	3.57020
Vinyl chloride	Averaged	0.40782	0.53273	0.45398	0.42143	0.47784	0.44001
m&p-Xylene	Averaged	2.13591	2.60324	2.19995	2.09828	2.38972	2.23455
o-Xylene	Averaged	2.19676	2.51542	2.00259	1.96730	2.20973	2.16036
4-Bromofluorobenzene (S)	Averaged	0.77622	0.77774	0.74845	0.76015	0.77787	0.75365
1,2-Dichlorobenzene-d4 (S)	Averaged	0.85452	0.83377	0.82298	0.83747	0.83975	0.84155
Toluene-d8 (S)	Averaged	2.86470	2.88478	2.91207	2.85698	2.84025	2.85457

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acetone	Wt Linear	0.07683	0.07565
Acetonitrile	Averaged	0.15134	0.13297
Acrolein	Averaged	0.03270	0.03302
Acrylonitrile	Averaged	0.06941	0.06971
Benzene	Averaged	1.59617	1.52881
Bromobenzene	Averaged	1.50469	1.47616
Bromochloromethane	Averaged	0.23104	0.22648
Bromodichloromethane	Averaged	0.50821	0.50528
Bromoform	Averaged	0.62828	0.65931
Bromomethane	Wt Linear	0.25837	0.28122
2-Butanone (MEK)	Averaged	0.10100	0.11337
n-Butylbenzene	Averaged	2.88657	2.91044
sec-Butylbenzene	Averaged	4.21764	3.97899
tert-Butylbenzene	Averaged	3.10629	3.00589
Carbon disulfide	Averaged	0.97569	0.95079
Carbon tetrachloride	Averaged	0.69403	0.69713
Chlorobenzene	Averaged	3.69329	3.67229
Chloroethane	Wt Linear	0.24291	0.24177
2-Chloroethylvinyl ether	Averaged	0.10184	0.10761
Chloroform	Averaged	0.75234	0.74001
Chloromethane	Averaged	0.32757	0.36065
2-Chlorotoluene	Averaged	2.78828	2.81752
4-Chlorotoluene	Averaged	1.33638	1.32327
Cyclohexane	Averaged	0.71510	0.76522
Cyclohexanone	Averaged	0.07874	0.08088
1,2-Dibromo-3-chloropropane	Wt Linear	0.06906	0.07643
Dibromochloromethane	Averaged	1.24870	1.34317
1,2-Dibromoethane (EDB)	Averaged	0.93028	0.96787
Dibromomethane	Averaged	0.22815	0.22832
1,2-Dichlorobenzene	Averaged	2.02552	2.06886
1,3-Dichlorobenzene	Averaged	2.34315	2.32672
1,4-Dichlorobenzene	Averaged	2.31564	2.31392
Dichlorodifluoromethane	Averaged	0.45946	0.44370
1,1-Dichloroethane	Averaged	0.78366	0.78271
1,2-Dichloroethane	Averaged	0.45873	0.45448

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1-Dichloroethene	Averaged	0.39276	0.36246
cis-1,2-Dichloroethene	Averaged	0.52440	0.52362
trans-1,2-Dichloroethene	Averaged	0.49350	0.49212
1,2-Dichloropropane	Averaged	0.42533	0.43319
1,3-Dichloropropane	Averaged	1.36220	1.42034
2,2-Dichloropropane	Averaged	0.63079	0.62334
1,1-Dichloropropene	Averaged	0.57171	0.57578
cis-1,3-Dichloropropene	Averaged	0.60744	0.60173
trans-1,3-Dichloropropene	Averaged	1.47319	1.59351
Diethyl ether (Ethyl ether)	Averaged	0.16895	0.17311
1,4-Dioxane (p-Dioxane)	Wt Linear	0.00140	0.00136
Ethylbenzene	Averaged	1.89619	1.94547
n-Heptane	Averaged	0.09001	0.09310
Hexachloro-1,3-butadiene	Averaged	0.64474	0.75349
n-Hexane	Averaged	0.59635	0.59887
2-Hexanone	Averaged	0.43384	0.43456
Isopropylbenzene (Cumene)	Averaged	4.94301	4.67459
p-Isopropyltoluene	Averaged	3.78986	3.65500
Methyl acetate	Averaged	0.13680	0.12942
Methylcyclohexane	Averaged	0.64642	0.64117
Methylene Chloride	Averaged	0.35073	0.36851
1-Methylnaphthalene	Averaged	0.76009	0.80610
2-Methylnaphthalene	Wt Linear	0.90149	1.00297
4-Methyl-2-pentanone (MIBK)	Averaged	0.18222	0.17116
Methyl-tert-butyl ether	Averaged	0.78567	0.79804
Naphthalene	Averaged	1.85615	2.01492
n-Propylbenzene	Averaged	1.37008	1.35466
Styrene	Averaged	3.38618	3.36382
1,1,1,2-Tetrachloroethane	Averaged	1.47529	1.51651
1,1,2,2-Tetrachloroethane	Averaged	0.70142	0.65932
Tetrachloroethene	Averaged	1.94600	2.06966
Tetrahydrofuran	Averaged	0.05484	0.05448
Toluene	Averaged	3.24715	3.47515
1,2,3-Trichlorobenzene	Averaged	0.86645	0.97634
1,2,4-Trichlorobenzene	Averaged	1.10000	1.21254

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1,1-Trichloroethane	Averaged	0.71454	0.71695
1,1,2-Trichloroethane	Averaged	0.73245	0.78527
Trichloroethene	Averaged	0.48101	0.48458
Trichlorofluoromethane	Averaged	0.67551	0.60475
1,2,3-Trichloropropane	Averaged	0.20383	0.18742
1,2,3-Trimethylbenzene	Averaged	3.21615	3.21287
1,2,4-Trimethylbenzene	Averaged	3.43390	3.35643
1,3,5-Trimethylbenzene	Averaged	3.58556	3.42863
Vinyl chloride	Averaged	0.44466	0.43685
m&p-Xylene	Averaged	2.24098	2.18349
o-Xylene	Averaged	2.13897	2.17457
4-Bromofluorobenzene (S)	Averaged	0.76554	0.73909
1,2-Dichlorobenzene-d4 (S)	Averaged	0.83808	0.85782
Toluene-d8 (S)	Averaged	2.85771	3.04022

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-7
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Wt Linear		0.99730	0.00244870	0.07763	
Acetonitrile	Averaged	13.01359			0.16386	
Acrolein	Averaged	10.64979			0.03222	
Acrylonitrile	Averaged	5.49340			0.06835	
Benzene	Averaged	9.11737			1.60521	
Bromobenzene	Averaged	7.62946			1.50347	
Bromochloromethane	Averaged	6.35306			0.24765	
Bromodichloromethane	Averaged	9.21074			0.47858	
Bromoform	Averaged	12.66784			0.59144	
Bromomethane	Wt Linear		0.99030	-0.0002694	0.26258	
2-Butanone (MEK)	Averaged	6.45022			0.10717	
n-Butylbenzene	Averaged	11.21945			3.07507	
sec-Butylbenzene	Averaged	7.73823			4.33474	
tert-Butylbenzene	Averaged	7.75237			3.23984	
Carbon disulfide	Averaged	11.04200			1.03955	
Carbon tetrachloride	Averaged	9.67190			0.67620	
Chlorobenzene	Averaged	8.29288			3.81144	
Chloroethane	Wt Linear		0.99907	0.00086200	0.24264	
2-Chloroethylvinyl ether	Averaged	11.63448			0.09362	
Chloroform	Averaged	8.28227			0.76926	
Chloromethane	Averaged	9.46207			0.32636	
2-Chlorotoluene	Averaged	4.96436			2.93219	
4-Chlorotoluene	Averaged	7.22200			1.32490	
Cyclohexane	Averaged	9.08889			0.72621	
Cyclohexanone	Averaged	9.56277			0.07721	
1,2-Dibromo-3-chloropropane	Wt Linear		0.99580	-0.0002658	0.07293	
Dibromochloromethane	Averaged	8.60361			1.19136	
1,2-Dibromoethane (EDB)	Averaged	7.24600			0.92256	
Dibromomethane	Averaged	8.19970			0.22824	
1,2-Dichlorobenzene	Averaged	10.12117			2.15998	
1,3-Dichlorobenzene	Averaged	8.65197			2.43900	
1,4-Dichlorobenzene	Averaged	10.65351			2.44880	
Dichlorodifluoromethane	Averaged	13.34774			0.46305	
1,1-Dichloroethane	Averaged	11.17533			0.77419	
1,2-Dichloroethane	Averaged	6.70711			0.46209	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

08/27/2021 11:28

MSV - FORM VI VOA-8
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1-Dichloroethene	Averaged	12.42762			0.41101	
cis-1,2-Dichloroethene	Averaged	8.75497			0.51437	
trans-1,2-Dichloroethene	Averaged	10.28892			0.47398	
1,2-Dichloropropane	Averaged	7.85905			0.42010	
1,3-Dichloropropane	Averaged	4.51962			1.39226	
2,2-Dichloropropane	Averaged	10.31165			0.63899	
1,1-Dichloropropene	Averaged	7.22782			0.56166	
cis-1,3-Dichloropropene	Averaged	6.36240			0.58857	
trans-1,3-Dichloropropene	Averaged	6.68881			1.48836	
Diethyl ether (Ethyl ether)	Averaged	9.67885			0.16725	
1,4-Dioxane (p-Dioxane)	Wt Linear		0.99496	-0.0001734	0.00141	
Ethylbenzene	Averaged	5.83787			1.87087	
n-Heptane	Averaged	13.52389			0.08747	
Hexachloro-1,3-butadiene	Averaged	12.78713			0.65950	
n-Hexane	Averaged	8.71369			0.59243	
2-Hexanone	Averaged	6.87653			0.43789	
Isopropylbenzene (Cumene)	Averaged	8.92514			5.15896	
p-Isopropyltoluene	Averaged	7.20093			3.87945	
Methyl acetate	Averaged	10.63073			0.14787	
Methylcyclohexane	Averaged	12.93924			0.64038	
Methylene Chloride	Averaged	10.09057			0.36370	
1-Methylnaphthalene	Averaged	13.37082			0.67408	
2-Methylnaphthalene	Wt Linear		0.99072	-0.0020451	0.93334	
4-Methyl-2-pentanone (MIBK)	Averaged	7.20363			0.17895	
Methyl-tert-butyl ether	Averaged	7.47174			0.76513	
Naphthalene	Averaged	10.01633			1.77332	
n-Propylbenzene	Averaged	7.88023			1.36604	
Styrene	Averaged	6.36169			3.40712	
1,1,1,2-Tetrachloroethane	Averaged	8.68998			1.45074	
1,1,2,2-Tetrachloroethane	Averaged	5.43351			0.67587	
Tetrachloroethene	Averaged	8.78144			1.98754	
Tetrahydrofuran	Averaged	7.60349			0.05295	
Toluene	Averaged	8.55718			3.35692	
1,2,3-Trichlorobenzene	Averaged	12.16121			0.85580	
1,2,4-Trichlorobenzene	Averaged	10.82615			1.08895	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

08/27/2021 11:28

MSV - FORM VI VOA-9

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:10 09:49

LAB FILE ID

CAL1 = 072721A.B\0727A_07.D CAL2 = 072721A.B\0727A_08.D CAL3 = 072721A.B\0727A_09.D

CAL4 = 072721A.B\0727A_10.D CAL5 = 072721A.B\0727A_11.D CAL6 = 072721A.B\0727A_12.D

CAL7 = 072721A.B\0727A_13.D CAL8 = 072721A.B\0727A_14.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1,1-Trichloroethane	Averaged	8.22157			0.71701	
1,1,2-Trichloroethane	Averaged	8.33080			0.77657	
Trichloroethene	Averaged	8.32847			0.49012	
Trichlorofluoromethane	Averaged	14.50341			0.72486	
1,2,3-Trichloropropane	Averaged	13.46690			0.21004	
1,2,3-Trimethylbenzene	Averaged	7.35491			3.38341	
1,2,4-Trimethylbenzene	Averaged	7.02394			3.53485	
1,3,5-Trimethylbenzene	Averaged	6.97436			3.63781	
Vinyl chloride	Averaged	8.57098			0.45191	
m&p-Xylene	Averaged	7.22305			2.26077	
o-Xylene	Averaged	7.62552			2.17071	
4-Bromofluorobenzene (S)	Averaged	1.91725			0.76234	
1,2-Dichlorobenzene-d4 (S)	Averaged	1.32184			0.84074	
Toluene-d8 (S)	Averaged	2.25001			2.88891	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVD GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/26/2021 07/26/2021 Calibration Time(s): 21:45 23:05

LAB FILE ID

CAL1 = 072621BGRO.B\0726B_06.D CAL2 = 072621BGRO.B\0726B_07.D CAL3 = 072621BGRO.B\0726B_08.D

CAL4 = 072621BGRO.B\0726B_09.D CAL5 = 072621BGRO.B\0726B_10.D CAL6 = 072621BGRO.B\0726B_11.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
TPH-GRO	Averaged	4992.3440	4641.6980	4270.6630	4485.9027	4618.3383	5100.3224
4-Bromofluorobenzene (S)	Averaged	5565.8400	5422.4200	5882.2200	7181.7600	10154.9000	12917.1200
1,2-Dichlorobenzene-d4 (S)	Averaged	6719.3000	6720.8000	7396.3200	9216.9000	12195.0000	21415.5600
Toluene-d8 (S)	Averaged	8099.4200	7999.9000	8656.9200	9371.4400	11471.1800	13827.9800

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVD GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/26/2021 07/26/2021 Calibration Time(s): 21:45 23:05

LAB FILE ID

CAL1 = 072621BGRO.B\0726B_06.D CAL2 = 072621BGRO.B\0726B_07.D CAL3 = 072621BGRO.B\0726B_08.D

CAL4 = 072621BGRO.B\0726B_09.D CAL5 = 072621BGRO.B\0726B_10.D CAL6 = 072621BGRO.B\0726B_11.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
TPH-GRO	Averaged	6.64511			4684.87809	
4-Bromofluorobenzene (S)	Averaged	38.79378			7854.04333	
1,2-Dichlorobenzene-d4 (S)	Averaged	53.61275			10610.6466	
Toluene-d8 (S)	Averaged	23.27646			9904.47333	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

19726928ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:32

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721A.B\0727A_17.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375743

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	117.8537	0.0500	17.8538	20.0000
Acetonitrile	Averaged	0.16386	0.16851	0.0500	2.8354	20.0000
Acrolein	Averaged	0.03222	0.03329	0.0500	3.3161	20.0000
Acrylonitrile	Averaged	0.06835	0.06930	0.0500	1.3840	20.0000
Benzene	Averaged	1.60521	1.69206	0.3000	5.4108	20.0000
Bromobenzene	Averaged	1.50347	1.50251	0.0500	-0.0639	20.0000
Bromochloromethane	Averaged	0.24765	0.25530	0.0500	3.0880	20.0000
Bromodichloromethane	Averaged	0.47858	0.52110	0.0500	8.8837	20.0000
Bromoform	Averaged	0.59144	0.62580	0.1000	5.8088	20.0000
Bromomethane	Wt Linear	20	22.25395	0.0500	11.2698	20.0000
2-Butanone (MEK)	Averaged	0.10717	0.11685	0.0500	9.0311	20.0000
n-Butylbenzene	Averaged	3.07507	3.04790	0.0500	-0.8836	20.0000
sec-Butylbenzene	Averaged	4.33474	4.49869	0.0500	3.7823	20.0000
tert-Butylbenzene	Averaged	3.23984	3.37951	0.0500	4.3111	20.0000
Carbon disulfide	Averaged	1.03955	1.07879	0.0500	3.7751	20.0000
Carbon tetrachloride	Averaged	0.67620	0.70712	0.1000	4.5721	20.0000
Chlorobenzene	Averaged	3.81144	3.92216	0.3000	2.9050	20.0000
Chloroethane	Wt Linear	20	20.82950	0.0500	4.1475	20.0000
2-Chloroethylvinyl ether	Averaged	0.09362	0.10248	0.0500	9.4648	20.0000
Chloroform	Averaged	0.76926	0.80710	0.0500	4.9178	20.0000
Chloromethane	Averaged	0.32636	0.31020	0.1000	-4.9527	20.0000
2-Chlorotoluene	Averaged	2.93219	3.15036	0.0500	7.4406	20.0000
4-Chlorotoluene	Averaged	1.32490	1.36462	0.0500	2.9976	20.0000
Cyclohexane	Averaged	0.72621	0.75686	0.0500	4.2203	20.0000
Cyclohexanone	Averaged	0.07721	0.07977	0.0500	3.3284	20.0000
1,2-Dibromo-3-chloropropane	Wt Linear	20	20.12894	0.0500	0.6447	20.0000
Dibromochloromethane	Averaged	1.19136	1.25232	0.0500	5.1165	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.92256	0.97698	0.0500	5.8991	20.0000
Dibromomethane	Averaged	0.22824	0.23484	0.0500	2.8945	20.0000
1,2-Dichlorobenzene	Averaged	2.15998	2.14890	0.0500	-0.5131	20.0000
1,3-Dichlorobenzene	Averaged	2.43900	2.51537	0.0500	3.1312	20.0000
1,4-Dichlorobenzene	Averaged	2.44880	2.50372	0.0500	2.2429	20.0000
Dichlorodifluoromethane	Averaged	0.46305	0.49914	0.0500	7.7927	20.0000
1,1-Dichloroethane	Averaged	0.77419	0.82989	0.1000	7.1942	20.0000
1,2-Dichloroethane	Averaged	0.46209	0.48014	0.0500	3.9059	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

19726928ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:32

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721A.B\0727A_17.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375743

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41101	0.44014	0.1000	7.0858	20.0000
cis-1,2-Dichloroethene	Averaged	0.51437	0.52408	0.1000	1.8869	20.0000
trans-1,2-Dichloroethene	Averaged	0.47398	0.50787	0.1000	7.1495	20.0000
1,2-Dichloropropane	Averaged	0.42010	0.44923	0.0500	6.9332	20.0000
1,3-Dichloropropane	Averaged	1.39226	1.41537	0.0500	1.6598	20.0000
2,2-Dichloropropane	Averaged	0.63899	0.62170	0.0500	-2.7056	20.0000
1,1-Dichloropropene	Averaged	0.56166	0.58944	0.0500	4.9457	20.0000
cis-1,3-Dichloropropene	Averaged	0.58857	0.62415	0.0500	6.0438	20.0000
trans-1,3-Dichloropropene	Averaged	1.48836	1.55547	0.0500	4.5087	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.16725	0.17361	0.0500	3.8067	20.0000
1,4-Dioxane (p-Dioxane)	Wt Linear	100	104.0454	0.0500	4.0455	20.0000
Ethylbenzene	Averaged	1.87087	1.96909	0.3000	5.2496	20.0000
n-Heptane	Averaged	0.08747	0.09499	0.0500	8.6008	20.0000
Hexachloro-1,3-butadiene	Averaged	0.65950	0.67640	0.0500	2.5636	20.0000
n-Hexane	Averaged	0.59243	0.61529	0.0500	3.8589	20.0000
2-Hexanone	Averaged	0.43789	0.49733	0.0500	13.5745	20.0000
Isopropylbenzene (Cumene)	Averaged	5.15896	5.46237	0.0500	5.8812	20.0000
p-Isopropyltoluene	Averaged	3.87945	4.18266	0.0500	7.8157	20.0000
Methyl acetate	Averaged	0.14787	0.14795	0.0500	0.0535	20.0000
Methylcyclohexane	Averaged	0.64038	0.67668	0.0500	5.6685	20.0000
Methylene Chloride	Averaged	0.36370	0.36734	0.0500	1.0011	20.0000
1-Methylnaphthalene	Averaged	0.67408	0.68851	0.0500	2.1403	20.0000
2-Methylnaphthalene	Wt Linear	20	18.33865	0.0500	-8.3067	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.17895	0.18490	0.0500	3.3227	20.0000
Methyl-tert-butyl ether	Averaged	0.76513	0.80980	0.3000	5.8394	20.0000
Naphthalene	Averaged	1.77332	1.76001	0.3000	-0.7506	20.0000
n-Propylbenzene	Averaged	1.36604	1.41864	0.0500	3.8504	20.0000
Styrene	Averaged	3.40712	3.62151	0.0500	6.2925	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.45074	1.46338	0.0500	0.8712	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67587	0.70551	0.3000	4.3852	20.0000
Tetrachloroethene	Averaged	1.98754	2.03892	0.1000	2.5850	20.0000
Tetrahydrofuran	Averaged	0.05295	0.05424	0.0500	2.4398	20.0000
Toluene	Averaged	3.35692	3.39361	0.3000	1.0928	20.0000
1,2,3-Trichlorobenzene	Averaged	0.85580	0.85826	0.0500	0.2870	20.0000
1,2,4-Trichlorobenzene	Averaged	1.08895	1.08136	0.0500	-0.6969	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

08/27/2021 11:27

SAMPLE NO.

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

19726928ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:32

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721A.B\0727A_17.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375743

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.71701	0.71107	0.0500	-0.8286	20.0000
1,1,2-Trichloroethane	Averaged	0.77657	0.74628	0.0500	-3.9009	20.0000
Trichloroethene	Averaged	0.49012	0.50166	0.1000	2.3558	20.0000
Trichlorofluoromethane	Averaged	0.72486	0.77333	0.0500	6.6874	20.0000
1,2,3-Trichloropropane	Averaged	0.21004	0.21628	0.0500	2.9715	20.0000
1,2,3-Trimethylbenzene	Averaged	3.38341	3.56780	0.0500	5.4497	20.0000
1,2,4-Trimethylbenzene	Averaged	3.53485	3.71462	0.0500	5.0856	20.0000
1,3,5-Trimethylbenzene	Averaged	3.63781	3.79984	0.0500	4.4541	20.0000
Vinyl chloride	Averaged	0.45191	0.47913	0.0500	6.0216	20.0000
m&p-Xylene	Averaged	2.26077	2.33342	0.3000	3.2137	20.0000
o-Xylene	Averaged	2.17071	2.23268	0.3000	2.8548	20.0000
4-Bromofluorobenzene (S)	Averaged	0.76234	0.77081	0.3000	1.1116	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.84074	0.83365	0.2000	-0.8435	20.0000
Toluene-d8 (S)	Averaged	2.88891	2.85437	0.3000	-1.1954	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19732368CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 19:03

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721B.B\0727B_03CCV.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375743

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	101.2284	0.0500	1.2284	20.0000
Acetonitrile	Averaged	0.16386	0.15892	0.0500	-3.0188	20.0000
Acrolein	Averaged	0.03222	0.02995	0.0500	-7.0550	20.0000
Acrylonitrile	Averaged	0.06835	0.06814	0.0500	-0.3137	20.0000
Benzene	Averaged	1.60521	1.60452	0.3000	-0.0427	20.0000
Bromobenzene	Averaged	1.50347	1.45551	0.0500	-3.1900	20.0000
Bromochloromethane	Averaged	0.24765	0.24400	0.0500	-1.4755	20.0000
Bromodichloromethane	Averaged	0.47858	0.47246	0.0500	-1.2789	20.0000
Bromoform	Averaged	0.59144	0.56548	0.1000	-4.3891	20.0000
Bromomethane	Wt Linear	20	15.11588	0.0500	-24.4206	20.0000
2-Butanone (MEK)	Averaged	0.10717	0.10454	0.0500	-2.4573	20.0000
n-Butylbenzene	Averaged	3.07507	2.87099	0.0500	-6.6366	20.0000
sec-Butylbenzene	Averaged	4.33474	4.37958	0.0500	1.0344	20.0000
tert-Butylbenzene	Averaged	3.23984	3.17303	0.0500	-2.0623	20.0000
Carbon disulfide	Averaged	1.03955	1.00506	0.0500	-3.3172	20.0000
Carbon tetrachloride	Averaged	0.67620	0.66345	0.1000	-1.8858	20.0000
Chlorobenzene	Averaged	3.81144	3.76418	0.3000	-1.2399	20.0000
Chloroethane	Wt Linear	20	20.21313	0.0500	1.0657	20.0000
2-Chloroethylvinyl ether	Averaged	0.09362	0.09555	0.0500	2.0617	20.0000
Chloroform	Averaged	0.76926	0.73702	0.0500	-4.1916	20.0000
Chloromethane	Averaged	0.32636	0.26349	0.1000	-19.2633	20.0000
2-Chlorotoluene	Averaged	2.93219	2.95374	0.0500	0.7350	20.0000
4-Chlorotoluene	Averaged	1.32490	1.28281	0.0500	-3.1767	20.0000
Cyclohexane	Averaged	0.72621	0.75895	0.0500	4.5077	20.0000
Cyclohexanone	Averaged	0.07721	0.07458	0.0500	-3.4059	20.0000
1,2-Dibromo-3-chloropropane	Wt Linear	20	18.14922	0.0500	-9.2539	20.0000
Dibromochloromethane	Averaged	1.19136	1.14120	0.0500	-4.2102	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.92256	0.93916	0.0500	1.7993	20.0000
Dibromomethane	Averaged	0.22824	0.22167	0.0500	-2.8792	20.0000
1,2-Dichlorobenzene	Averaged	2.15998	2.04564	0.0500	-5.2935	20.0000
1,3-Dichlorobenzene	Averaged	2.43900	2.36283	0.0500	-3.1230	20.0000
1,4-Dichlorobenzene	Averaged	2.44880	2.32395	0.0500	-5.0982	20.0000
Dichlorodifluoromethane	Averaged	0.46305	0.45794	0.0500	-1.1050	20.0000
1,1-Dichloroethane	Averaged	0.77419	0.77040	0.1000	-0.4899	20.0000
1,2-Dichloroethane	Averaged	0.46209	0.45875	0.0500	-0.7240	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

08/27/2021 11:27

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19732368CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 19:03

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721B.B\0727B_03CCV.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375743

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41101	0.39911	0.1000	-2.8963	20.0000
cis-1,2-Dichloroethene	Averaged	0.51437	0.49451	0.1000	-3.8607	20.0000
trans-1,2-Dichloroethene	Averaged	0.47398	0.46873	0.1000	-1.1082	20.0000
1,2-Dichloropropane	Averaged	0.42010	0.40734	0.0500	-3.0370	20.0000
1,3-Dichloropropane	Averaged	1.39226	1.37914	0.0500	-0.9428	20.0000
2,2-Dichloropropane	Averaged	0.63899	0.56043	0.0500	-12.2943	20.0000
1,1-Dichloropropene	Averaged	0.56166	0.56274	0.0500	0.1919	20.0000
cis-1,3-Dichloropropene	Averaged	0.58857	0.56748	0.0500	-3.5842	20.0000
trans-1,3-Dichloropropene	Averaged	1.48836	1.47157	0.0500	-1.1286	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.16725	0.16580	0.0500	-0.8662	20.0000
1,4-Dioxane (p-Dioxane)	Wt Linear	100	99.07071	0.0500	-0.9293	20.0000
Ethylbenzene	Averaged	1.87087	1.88628	0.3000	0.8237	20.0000
n-Heptane	Averaged	0.08747	0.08249	0.0500	-5.6909	20.0000
Hexachloro-1,3-butadiene	Averaged	0.65950	0.59722	0.0500	-9.4430	20.0000
n-Hexane	Averaged	0.59243	0.57606	0.0500	-2.7636	20.0000
2-Hexanone	Averaged	0.43789	0.43454	0.0500	-0.7650	20.0000
Isopropylbenzene (Cumene)	Averaged	5.15896	5.13386	0.0500	-0.4867	20.0000
p-Isopropyltoluene	Averaged	3.87945	3.85087	0.0500	-0.7369	20.0000
Methyl acetate	Averaged	0.14787	0.14077	0.0500	-4.8013	20.0000
Methylcyclohexane	Averaged	0.64038	0.64143	0.0500	0.1630	20.0000
Methylene Chloride	Averaged	0.36370	0.35959	0.0500	-1.1320	20.0000
1-Methylnaphthalene	Averaged	0.67408	0.57656	0.0500	-14.4683	20.0000
2-Methylnaphthalene	Wt Linear	20	14.72389	0.0500	-26.3805	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.17895	0.18041	0.0500	0.8147	20.0000
Methyl-tert-butyl ether	Averaged	0.76513	0.75758	0.3000	-0.9859	20.0000
Naphthalene	Averaged	1.77332	1.61798	0.3000	-8.7596	20.0000
n-Propylbenzene	Averaged	1.36604	1.32039	0.0500	-3.3413	20.0000
Styrene	Averaged	3.40712	3.44296	0.0500	1.0520	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.45074	1.44213	0.0500	-0.5933	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67587	0.66400	0.3000	-1.7558	20.0000
Tetrachloroethene	Averaged	1.98754	1.97743	0.1000	-0.5090	20.0000
Tetrahydrofuran	Averaged	0.05295	0.05422	0.0500	2.3980	20.0000
Toluene	Averaged	3.35692	3.31566	0.3000	-1.2292	20.0000
1,2,3-Trichlorobenzene	Averaged	0.85580	0.77880	0.0500	-8.9976	20.0000
1,2,4-Trichlorobenzene	Averaged	1.08895	0.99310	0.0500	-8.8024	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

08/27/2021 11:27

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19732368CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 19:03

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721B.B\0727B_03CCV.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375743

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.71701	0.68756	0.0500	-4.1073	20.0000
1,1,2-Trichloroethane	Averaged	0.77657	0.75218	0.0500	-3.1412	20.0000
Trichloroethene	Averaged	0.49012	0.49175	0.1000	0.3337	20.0000
Trichlorofluoromethane	Averaged	0.72486	0.74211	0.0500	2.3806	20.0000
1,2,3-Trichloropropane	Averaged	0.21004	0.20040	0.0500	-4.5879	20.0000
1,2,3-Trimethylbenzene	Averaged	3.38341	3.39435	0.0500	0.3234	20.0000
1,2,4-Trimethylbenzene	Averaged	3.53485	3.50839	0.0500	-0.7487	20.0000
1,3,5-Trimethylbenzene	Averaged	3.63781	3.63109	0.0500	-0.1846	20.0000
Vinyl chloride	Averaged	0.45191	0.44215	0.0500	-2.1613	20.0000
m&p-Xylene	Averaged	2.26077	2.27565	0.3000	0.6583	20.0000
o-Xylene	Averaged	2.17071	2.13104	0.3000	-1.8275	20.0000
4-Bromofluorobenzene (S)	Averaged	0.76234	0.75148	0.3000	-1.4249	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.84074	0.84374	0.2000	0.3565	20.0000
Toluene-d8 (S)	Averaged	2.88891	2.94253	0.3000	1.8560	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19738534CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 19:01

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072821B.B\0728B_03CCV.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375743

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	65.01039	0.0500	-34.9896	20.0000
Acetonitrile	Averaged	0.16386	0.15138	0.0500	-7.6153	20.0000
Acrolein	Averaged	0.03222	0.02543	0.0500	-21.0871	20.0000
Acrylonitrile	Averaged	0.06835	0.06341	0.0500	-7.2365	20.0000
Benzene	Averaged	1.60521	1.56245	0.3000	-2.6636	20.0000
Bromobenzene	Averaged	1.50347	1.41579	0.0500	-5.8319	20.0000
Bromochloromethane	Averaged	0.24765	0.24161	0.0500	-2.4399	20.0000
Bromodichloromethane	Averaged	0.47858	0.43904	0.0500	-8.2635	20.0000
Bromoform	Averaged	0.59144	0.52947	0.1000	-10.4775	20.0000
Bromomethane	Wt Linear	20	13.67657	0.0500	-31.6171	20.0000
2-Butanone (MEK)	Averaged	0.10717	0.07706	0.0500	-28.1007	20.0000
n-Butylbenzene	Averaged	3.07507	2.78468	0.0500	-9.4434	20.0000
sec-Butylbenzene	Averaged	4.33474	4.31661	0.0500	-0.4181	20.0000
tert-Butylbenzene	Averaged	3.23984	3.17608	0.0500	-1.9681	20.0000
Carbon disulfide	Averaged	1.03955	0.98507	0.0500	-5.2404	20.0000
Carbon tetrachloride	Averaged	0.67620	0.61548	0.1000	-8.9795	20.0000
Chlorobenzene	Averaged	3.81144	3.64456	0.3000	-4.3783	20.0000
Chloroethane	Wt Linear	20	18.92713	0.0500	-5.3643	20.0000
2-Chloroethylvinyl ether	Averaged	0.09362	0.08880	0.0500	-5.1455	20.0000
Chloroform	Averaged	0.76926	0.71012	0.0500	-7.6887	20.0000
Chloromethane	Averaged	0.32636	0.30372	0.1000	-6.9380	20.0000
2-Chlorotoluene	Averaged	2.93219	2.89696	0.0500	-1.2015	20.0000
4-Chlorotoluene	Averaged	1.32490	1.28679	0.0500	-2.8765	20.0000
Cyclohexane	Averaged	0.72621	0.73047	0.0500	0.5860	20.0000
Cyclohexanone	Averaged	0.07721	0.05141	0.0500	-33.4092	20.0000
1,2-Dibromo-3-chloropropane	Wt Linear	20	15.57140	0.0500	-22.1430	20.0000
Dibromochloromethane	Averaged	1.19136	1.07987	0.0500	-9.3584	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.92256	0.87182	0.0500	-5.4997	20.0000
Dibromomethane	Averaged	0.22824	0.20972	0.0500	-8.1143	20.0000
1,2-Dichlorobenzene	Averaged	2.15998	1.98364	0.0500	-8.1639	20.0000
1,3-Dichlorobenzene	Averaged	2.43900	2.27279	0.0500	-6.8146	20.0000
1,4-Dichlorobenzene	Averaged	2.44880	2.28944	0.0500	-6.5078	20.0000
Dichlorodifluoromethane	Averaged	0.46305	0.48161	0.0500	4.0077	20.0000
1,1-Dichloroethane	Averaged	0.77419	0.74354	0.1000	-3.9591	20.0000
1,2-Dichloroethane	Averaged	0.46209	0.41286	0.0500	-10.6553	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19738534CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 19:01

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072821B.B\0728B_03CCV.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375743

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41101	0.39943	0.1000	-2.8193	20.0000
cis-1,2-Dichloroethene	Averaged	0.51437	0.47993	0.1000	-6.6970	20.0000
trans-1,2-Dichloroethene	Averaged	0.47398	0.47419	0.1000	0.0438	20.0000
1,2-Dichloropropane	Averaged	0.42010	0.39204	0.0500	-6.6800	20.0000
1,3-Dichloropropane	Averaged	1.39226	1.28916	0.0500	-7.4051	20.0000
2,2-Dichloropropane	Averaged	0.63899	0.53110	0.0500	-16.8839	20.0000
1,1-Dichloropropene	Averaged	0.56166	0.53418	0.0500	-4.8926	20.0000
cis-1,3-Dichloropropene	Averaged	0.58857	0.54049	0.0500	-8.1691	20.0000
trans-1,3-Dichloropropene	Averaged	1.48836	1.33759	0.0500	-10.1301	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.16725	0.15409	0.0500	-7.8678	20.0000
1,4-Dioxane (p-Dioxane)	Wt Linear	100	76.65462	0.0500	-23.3454	20.0000
Ethylbenzene	Averaged	1.87087	1.86446	0.3000	-0.3430	20.0000
n-Heptane	Averaged	0.08747	0.08083	0.0500	-7.5851	20.0000
Hexachloro-1,3-butadiene	Averaged	0.65950	0.57790	0.0500	-12.3719	20.0000
n-Hexane	Averaged	0.59243	0.55213	0.0500	-6.8026	20.0000
2-Hexanone	Averaged	0.43789	0.32093	0.0500	-26.7104	20.0000
Isopropylbenzene (Cumene)	Averaged	5.15896	5.11636	0.0500	-0.8258	20.0000
p-Isopropyltoluene	Averaged	3.87945	3.80308	0.0500	-1.9687	20.0000
Methyl acetate	Averaged	0.14787	0.12414	0.0500	-16.0528	20.0000
Methylcyclohexane	Averaged	0.64038	0.62240	0.0500	-2.8084	20.0000
Methylene Chloride	Averaged	0.36370	0.35196	0.0500	-3.2298	20.0000
1-Methylnaphthalene	Averaged	0.67408	0.50560	0.0500	-24.9949	20.0000
2-Methylnaphthalene	Wt Linear	20	13.18485	0.0500	-34.0757	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.17895	0.15331	0.0500	-14.3271	20.0000
Methyl-tert-butyl ether	Averaged	0.76513	0.69506	0.3000	-9.1580	20.0000
Naphthalene	Averaged	1.77332	1.50195	0.3000	-15.3032	20.0000
n-Propylbenzene	Averaged	1.36604	1.33690	0.0500	-2.1332	20.0000
Styrene	Averaged	3.40712	3.31043	0.0500	-2.8380	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.45074	1.34802	0.0500	-7.0803	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67587	0.62701	0.3000	-7.2295	20.0000
Tetrachloroethene	Averaged	1.98754	1.92562	0.1000	-3.1156	20.0000
Tetrahydrofuran	Averaged	0.05295	0.04632	0.0500	-12.5241	20.0000
Toluene	Averaged	3.35692	3.26856	0.3000	-2.6323	20.0000
1,2,3-Trichlorobenzene	Averaged	0.85580	0.71773	0.0500	-16.1332	20.0000
1,2,4-Trichlorobenzene	Averaged	1.08895	0.94215	0.0500	-13.4813	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

08/27/2021 11:27

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19738534CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 19:01

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072821B.B\0728B_03CCV.D Init. Calib. Time(s): 08:10 09:49

SDG No.: 60375743

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.71701	0.65293	0.0500	-8.9367	20.0000
1,1,2-Trichloroethane	Averaged	0.77657	0.68968	0.0500	-11.1898	20.0000
Trichloroethene	Averaged	0.49012	0.45868	0.1000	-6.4153	20.0000
Trichlorofluoromethane	Averaged	0.72486	0.69609	0.0500	-3.9678	20.0000
1,2,3-Trichloropropane	Averaged	0.21004	0.19175	0.0500	-8.7042	20.0000
1,2,3-Trimethylbenzene	Averaged	3.38341	3.23184	0.0500	-4.4799	20.0000
1,2,4-Trimethylbenzene	Averaged	3.53485	3.46366	0.0500	-2.0139	20.0000
1,3,5-Trimethylbenzene	Averaged	3.63781	3.53965	0.0500	-2.6982	20.0000
Vinyl chloride	Averaged	0.45191	0.44478	0.0500	-1.5798	20.0000
m&p-Xylene	Averaged	2.26077	2.16584	0.3000	-4.1987	20.0000
o-Xylene	Averaged	2.17071	2.06666	0.3000	-4.7935	20.0000
4-Bromofluorobenzene (S)	Averaged	0.76234	0.74686	0.3000	-2.0306	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.84074	0.84387	0.2000	0.3725	20.0000
Toluene-d8 (S)	Averaged	2.88891	2.95163	0.3000	2.1712	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19725768ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 07/26/2021 Time: 23:36

Instrument ID: 60MSVD GC Column: Col 2 Init. Calib. Date(s): 07/26/2021 07/26/2021

Lab File ID: 072621BGRO.B\0726B_13.D Init. Calib. Time(s): 21:45 23:05

SDG No.: 60375743

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	4684.878	3850.012	0.0100	-17.8204	20.0000
4-Bromofluorobenzene (S)	Averaged	7854.043	7906.080	0.0100	0.6625	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	10610.64	10302.60	0.0100	-2.9032	20.0000
Toluene-d8 (S)	Averaged	9904.473	9597.860	0.0100	-3.0957	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19879369CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/27/2021 Time: 21:59

Instrument ID: 60MSVD GC Column: Col 2
Init. Calib. Date(s): 07/26/2021 07/26/2021

Lab File ID: 072721BGRO.B\0727B_04.D
Init. Calib. Time(s): 21:45 23:05

SDG No.: 60375743

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	4684.878	4268.562	0.0100	-8.8864	20.0000
4-Bromofluorobenzene (S)	Averaged	7854.043	7052.620	0.0100	-10.2040	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	10610.64	9070.240	0.0100	-14.5176	20.0000
Toluene-d8 (S)	Averaged	9904.473	9230.520	0.0100	-6.8045	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

LCS

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 01:24 Lab Sample ID: 2947023

Date Analyzed: 07/28/2021 01:24 Lab File ID: 072721B.B\0727B_30LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	109	
75-05-8	Acetonitrile	92.3	
107-02-8	Acrolein	83.5	
107-13-1	Acrylonitrile	93.0	
71-43-2	Benzene	19.3	
108-86-1	Bromobenzene	19.0	
74-97-5	Bromochloromethane	20.0	
75-27-4	Bromodichloromethane	19.1	
75-25-2	Bromoform	18.5	
74-83-9	Bromomethane	14.5	
78-93-3	2-Butanone (MEK)	101	
104-51-8	n-Butylbenzene	18.1	
135-98-8	sec-Butylbenzene	19.8	
98-06-6	tert-Butylbenzene	19.4	
75-15-0	Carbon disulfide	18.9	
56-23-5	Carbon tetrachloride	18.4	
108-90-7	Chlorobenzene	19.3	
75-00-3	Chloroethane	19.8	
110-75-8	2-Chloroethylvinyl ether	93.5	
67-66-3	Chloroform	19.0	
74-87-3	Chloromethane	18.1	
95-49-8	2-Chlorotoluene	19.9	
106-43-4	4-Chlorotoluene	19.6	
110-82-7	Cyclohexane	19.5	
108-94-1	Cyclohexanone	82.9	
96-12-8	1,2-Dibromo-3-chloropropane	17.2	
124-48-1	Dibromochloromethane	18.5	
106-93-4	1,2-Dibromoethane (EDB)	18.9	
74-95-3	Dibromomethane	18.1	
95-50-1	1,2-Dichlorobenzene	18.4	
541-73-1	1,3-Dichlorobenzene	18.7	
106-46-7	1,4-Dichlorobenzene	18.8	
75-71-8	Dichlorodifluoromethane	19.5	
75-34-3	1,1-Dichloroethane	19.5	
107-06-2	1,2-Dichloroethane	18.0	
540-59-0	1,2-Dichloroethene (Total)	39.1	
75-35-4	1,1-Dichloroethene	19.3	

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

LCS

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 01:24 Lab Sample ID: 2947023

Date Analyzed: 07/28/2021 01:24 Lab File ID: 072721B.B\0727B_30LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	19.3	
156-60-5	trans-1,2-Dichloroethene	19.8	
78-87-5	1,2-Dichloropropane	19.4	
142-28-9	1,3-Dichloropropane	18.3	
594-20-7	2,2-Dichloropropane	14.8	
563-58-6	1,1-Dichloropropene	18.7	
10061-01-5	cis-1,3-Dichloropropene	18.0	
10061-02-6	trans-1,3-Dichloropropene	18.0	
60-29-7	Diethyl ether (Ethyl ether)	19.1	
123-91-1	1,4-Dioxane (p-Dioxane)	90	J
100-41-4	Ethylbenzene	19.4	
142-82-5	n-Heptane	17.8	
87-68-3	Hexachloro-1,3-butadiene	17.6	
110-54-3	n-Hexane	18.0	
591-78-6	2-Hexanone	101	
98-82-8	Isopropylbenzene (Cumene)	19.8	
99-87-6	p-Isopropyltoluene	19.9	
79-20-9	Methyl acetate	85.3	
108-87-2	Methylcyclohexane	19.2	
75-09-2	Methylene Chloride	19.0	
90-12-0	1-Methylnaphthalene	15.9	
91-57-6	2-Methylnaphthalene	14.1	
108-10-1	4-Methyl-2-pentanone (MIBK)	88.4	
1634-04-4	Methyl-tert-butyl ether	18.4	
91-20-3	Naphthalene	17.2	
103-65-1	n-Propylbenzene	20.0	
100-42-5	Styrene	19.2	
630-20-6	1,1,1,2-Tetrachloroethane	18.5	
79-34-5	1,1,2,2-Tetrachloroethane	15.3	
127-18-4	Tetrachloroethene	18.9	
109-99-9	Tetrahydrofuran	87.6	
108-88-3	Toluene	19.1	
87-61-6	1,2,3-Trichlorobenzene	17.5	
120-82-1	1,2,4-Trichlorobenzene	17.7	
71-55-6	1,1,1-Trichloroethane	18.0	
79-00-5	1,1,2-Trichloroethane	18.0	
79-01-6	Trichloroethene	21.6	

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 01:24 Lab Sample ID: 2947023

Date Analyzed: 07/28/2021 01:24 Lab File ID: 072721B.B\0727B_30LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	19.5	
96-18-4	1,2,3-Trichloropropane	17.3	
526-73-8	1,2,3-Trimethylbenzene	19.8	
95-63-6	1,2,4-Trimethylbenzene	20.0	
108-67-8	1,3,5-Trimethylbenzene	19.6	
75-01-4	Vinyl chloride	19.3	
1330-20-7	Xylene (Total)	58.5	
179601-23-1	m&p-Xylene	39.2	
95-47-6	o-Xylene	19.3	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Water | SDG No.: 60375743

Date Extracted: 07/28/2021 01:52 | Lab Sample ID: 2947022

Date Analyzed: 07/28/2021 01:52 | Lab File ID: 072721B.B\0727B_32BLK.D

Initial wt/vol: 10 mL | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60MSV8 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
75-05-8	Acetonitrile	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
108-86-1	Bromobenzene	ND	U
74-97-5	Bromochloromethane	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
104-51-8	n-Butylbenzene	ND	U
135-98-8	sec-Butylbenzene	ND	U
98-06-6	tert-Butylbenzene	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
110-75-8	2-Chloroethylvinyl ether	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
95-49-8	2-Chlorotoluene	ND	U
106-43-4	4-Chlorotoluene	ND	U
110-82-7	Cyclohexane	ND	U
108-94-1	Cyclohexanone	ND	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	U
124-48-1	Dibromochloromethane	ND	U
106-93-4	1,2-Dibromoethane (EDB)	ND	U
74-95-3	Dibromomethane	ND	U
95-50-1	1,2-Dichlorobenzene	ND	U
541-73-1	1,3-Dichlorobenzene	ND	U
106-46-7	1,4-Dichlorobenzene	ND	U
75-71-8	Dichlorodifluoromethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
540-59-0	1,2-Dichloroethene (Total)	ND	U
75-35-4	1,1-Dichloroethene	ND	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 01:52 Lab Sample ID: 2947022

Date Analyzed: 07/28/2021 01:52 Lab File ID: 072721B.B\0727B_32BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
142-28-9	1,3-Dichloropropane	ND	U
594-20-7	2,2-Dichloropropane	ND	U
563-58-6	1,1-Dichloropropene	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
60-29-7	Diethyl ether (Ethyl ether)	ND	U
123-91-1	1,4-Dioxane (p-Dioxane)	ND	U
100-41-4	Ethylbenzene	ND	U
142-82-5	n-Heptane	ND	U
87-68-3	Hexachloro-1,3-butadiene	ND	U
110-54-3	n-Hexane	ND	U
591-78-6	2-Hexanone	ND	U
98-82-8	Isopropylbenzene (Cumene)	ND	U
99-87-6	p-Isopropyltoluene	ND	U
79-20-9	Methyl acetate	ND	U
108-87-2	Methylcyclohexane	ND	U
75-09-2	Methylene Chloride	ND	U
90-12-0	1-Methylnaphthalene	ND	U
91-57-6	2-Methylnaphthalene	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
1634-04-4	Methyl-tert-butyl ether	ND	U
91-20-3	Naphthalene	ND	U
103-65-1	n-Propylbenzene	ND	U
100-42-5	Styrene	ND	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
109-99-9	Tetrahydrofuran	ND	U
108-88-3	Toluene	ND	U
87-61-6	1,2,3-Trichlorobenzene	ND	U
120-82-1	1,2,4-Trichlorobenzene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 01:52 Lab Sample ID: 2947022

Date Analyzed: 07/28/2021 01:52 Lab File ID: 072721B.B\0727B_32BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U
526-73-8	1,2,3-Trimethylbenzene	ND	U
95-63-6	1,2,4-Trimethylbenzene	ND	U
108-67-8	1,3,5-Trimethylbenzene	ND	U
75-01-4	Vinyl chloride	ND	U
1330-20-7	Xylene (Total)	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Water | SDG No.: 60375743

Date Extracted: 07/29/2021 01:22 | Lab Sample ID: 2947875

Date Analyzed: 07/29/2021 01:22 | Lab File ID: 072821B.B\0728B_30LCS.D

Initial wt/vol: 10 mL | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60MSV8 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	54.7	
75-05-8	Acetonitrile	88.4	
107-02-8	Acrolein	80.5	
107-13-1	Acrylonitrile	88.3	
71-43-2	Benzene	18.7	
108-86-1	Bromobenzene	18.6	
74-97-5	Bromochloromethane	19.9	
75-27-4	Bromodichloromethane	18.9	
75-25-2	Bromoform	19.4	
74-83-9	Bromomethane	15.9	
78-93-3	2-Butanone (MEK)	67.9	
104-51-8	n-Butylbenzene	17.2	
135-98-8	sec-Butylbenzene	19.3	
98-06-6	tert-Butylbenzene	19.2	
75-15-0	Carbon disulfide	18.4	
56-23-5	Carbon tetrachloride	18.0	
108-90-7	Chlorobenzene	19.3	
75-00-3	Chloroethane	19.5	
110-75-8	2-Chloroethylvinyl ether	94.2	
67-66-3	Chloroform	18.2	
74-87-3	Chloromethane	19.5	
95-49-8	2-Chlorotoluene	18.7	
106-43-4	4-Chlorotoluene	19.1	
110-82-7	Cyclohexane	19.7	
108-94-1	Cyclohexanone	58.4	
96-12-8	1,2-Dibromo-3-chloropropane	16.6	
124-48-1	Dibromochloromethane	19.1	
106-93-4	1,2-Dibromoethane (EDB)	19.0	
74-95-3	Dibromomethane	18.2	
95-50-1	1,2-Dichlorobenzene	17.6	
541-73-1	1,3-Dichlorobenzene	18.1	
106-46-7	1,4-Dichlorobenzene	18.5	
75-71-8	Dichlorodifluoromethane	19.2	
75-34-3	1,1-Dichloroethane	18.8	
107-06-2	1,2-Dichloroethane	16.9	
540-59-0	1,2-Dichloroethene (Total)	37.7	
75-35-4	1,1-Dichloroethene	18.9	

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

LCS

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/29/2021 01:22 Lab Sample ID: 2947875

Date Analyzed: 07/29/2021 01:22 Lab File ID: 072821B.B\0728B_30LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	18.8	
156-60-5	trans-1,2-Dichloroethene	18.9	
78-87-5	1,2-Dichloropropane	18.3	
142-28-9	1,3-Dichloropropane	18.2	
594-20-7	2,2-Dichloropropane	14.2	
563-58-6	1,1-Dichloropropene	18.5	
10061-01-5	cis-1,3-Dichloropropene	17.6	
10061-02-6	trans-1,3-Dichloropropene	17.5	
60-29-7	Diethyl ether (Ethyl ether)	17.8	
123-91-1	1,4-Dioxane (p-Dioxane)	81.8	J
100-41-4	Ethylbenzene	19.5	
142-82-5	n-Heptane	16.4	
87-68-3	Hexachloro-1,3-butadiene	17.9	
110-54-3	n-Hexane	17.4	
591-78-6	2-Hexanone	72.0	
98-82-8	Isopropylbenzene (Cumene)	19.7	
99-87-6	p-Isopropyltoluene	19.2	
79-20-9	Methyl acetate	84.8	
108-87-2	Methylcyclohexane	18.7	
75-09-2	Methylene Chloride	18.6	
90-12-0	1-Methylnaphthalene	16.5	
91-57-6	2-Methylnaphthalene	13.9	
108-10-1	4-Methyl-2-pentanone (MIBK)	84.7	
1634-04-4	Methyl-tert-butyl ether	17.6	
91-20-3	Naphthalene	17.7	
103-65-1	n-Propylbenzene	18.5	
100-42-5	Styrene	19.1	
630-20-6	1,1,1,2-Tetrachloroethane	18.4	
79-34-5	1,1,2,2-Tetrachloroethane	18.8	
127-18-4	Tetrachloroethene	18.8	
109-99-9	Tetrahydrofuran	87.5	
108-88-3	Toluene	18.9	
87-61-6	1,2,3-Trichlorobenzene	17.1	
120-82-1	1,2,4-Trichlorobenzene	17.7	
71-55-6	1,1,1-Trichloroethane	17.0	
79-00-5	1,1,2-Trichloroethane	17.9	
79-01-6	Trichloroethene	19.1	

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/29/2021 01:22 Lab Sample ID: 2947875

Date Analyzed: 07/29/2021 01:22 Lab File ID: 072821B.B\0728B_30LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	18.8	
96-18-4	1,2,3-Trichloropropane	17.0	
526-73-8	1,2,3-Trimethylbenzene	19.3	
95-63-6	1,2,4-Trimethylbenzene	18.9	
108-67-8	1,3,5-Trimethylbenzene	19.0	
75-01-4	Vinyl chloride	19.0	
1330-20-7	Xylene (Total)	56.6	
179601-23-1	m&p-Xylene	37.8	
95-47-6	o-Xylene	18.8	

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA GOODFELLOW

Date Received: | Matrix: Water | SDG No.: 60375743

Date Extracted: 07/29/2021 01:50 | Lab Sample ID: 2947874

Date Analyzed: 07/29/2021 01:50 | Lab File ID: 072821B.B\0728B_32BLK.D

Initial wt/vol: 10 mL | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60MSV8 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
75-05-8	Acetonitrile	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
108-86-1	Bromobenzene	ND	U
74-97-5	Bromochloromethane	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
104-51-8	n-Butylbenzene	ND	U
135-98-8	sec-Butylbenzene	ND	U
98-06-6	tert-Butylbenzene	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
110-75-8	2-Chloroethylvinyl ether	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
95-49-8	2-Chlorotoluene	ND	U
106-43-4	4-Chlorotoluene	ND	U
110-82-7	Cyclohexane	ND	U
108-94-1	Cyclohexanone	ND	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	U
124-48-1	Dibromochloromethane	ND	U
106-93-4	1,2-Dibromoethane (EDB)	ND	U
74-95-3	Dibromomethane	ND	U
95-50-1	1,2-Dichlorobenzene	ND	U
541-73-1	1,3-Dichlorobenzene	ND	U
106-46-7	1,4-Dichlorobenzene	ND	U
75-71-8	Dichlorodifluoromethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
540-59-0	1,2-Dichloroethene (Total)	ND	U
75-35-4	1,1-Dichloroethene	ND	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/29/2021 01:50 Lab Sample ID: 2947874

Date Analyzed: 07/29/2021 01:50 Lab File ID: 072821B.B\0728B_32BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
142-28-9	1,3-Dichloropropane	ND	U
594-20-7	2,2-Dichloropropane	ND	U
563-58-6	1,1-Dichloropropene	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
60-29-7	Diethyl ether (Ethyl ether)	ND	U
123-91-1	1,4-Dioxane (p-Dioxane)	ND	U
100-41-4	Ethylbenzene	ND	U
142-82-5	n-Heptane	ND	U
87-68-3	Hexachloro-1,3-butadiene	ND	U
110-54-3	n-Hexane	ND	U
591-78-6	2-Hexanone	ND	U
98-82-8	Isopropylbenzene (Cumene)	ND	U
99-87-6	p-Isopropyltoluene	ND	U
79-20-9	Methyl acetate	ND	U
108-87-2	Methylcyclohexane	ND	U
75-09-2	Methylene Chloride	ND	U
90-12-0	1-Methylnaphthalene	ND	U
91-57-6	2-Methylnaphthalene	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
1634-04-4	Methyl-tert-butyl ether	ND	U
91-20-3	Naphthalene	ND	U
103-65-1	n-Propylbenzene	ND	U
100-42-5	Styrene	ND	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
109-99-9	Tetrahydrofuran	ND	U
108-88-3	Toluene	ND	U
87-61-6	1,2,3-Trichlorobenzene	ND	U
120-82-1	1,2,4-Trichlorobenzene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/29/2021 01:50 Lab Sample ID: 2947874

Date Analyzed: 07/29/2021 01:50 Lab File ID: 072821B.B\0728B_32BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U
526-73-8	1,2,3-Trimethylbenzene	ND	U
95-63-6	1,2,4-Trimethylbenzene	ND	U
108-67-8	1,3,5-Trimethylbenzene	ND	U
75-01-4	Vinyl chloride	ND	U
1330-20-7	Xylene (Total)	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 04:37 Lab Sample ID: 2947142

Date Analyzed: 07/28/2021 04:37 Lab File ID: 072721BGRO.B\0727B_29.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	3240	

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/28/2021 05:09 Lab Sample ID: 2947141

Date Analyzed: 07/28/2021 05:09 Lab File ID: 072721BGRO.B\0727B_31.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	ND	U

MSSV SIM - FORM II SVOA-1
WATER SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Instrument ID: 60MSS8

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2946347	2946347BLANK	64	87
2946348	2946348LCS	62	73
60375743001	RB-01	70	81
60375743002	RB-02	69	85

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(37-109)
(TD14) = Terphenyl-d14 (S)	(34-120)

* Values outside of QC Limits

MSSV SIM - FORM III SVOA-1
WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2946348LCS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSS8
LCS Lot No: 44362
Lab File ID: 072721.B\0727AP02.D
SDG No.: 60375743

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acenaphthene	10.0	6.1	61	46-102
Acenaphthylene	10.0	6.4	64	48-112
Anthracene	10.0	7.7	77	50-114
Benzo(a)anthracene	10.0	8.3	83	52-124
Benzo(a)pyrene	10.0	7.9	79	56-119
Benzo(b)fluoranthene	10.0	8.3	83	49-116
Benzo(g,h,i)perylene	10.0	8.0	80	43-120
Benzo(k)fluoranthene	10.0	7.6	76	48-110
Chrysene	10.0	7.4	74	53-105
Dibenz(a,h)anthracene	10.0	8.1	81	39-127
Fluoranthene	10.0	8.2	82	54-122
Fluorene	10.0	6.5	65	47-109
Indeno(1,2,3-cd)pyrene	10.0	8.1	81	47-124
Naphthalene	10.0	5.8	58	42-103
Phenanthrene	10.0	7.2	72	47-107
Pyrene	10.0	7.3	73	44-104

Spike Recovery: 0 out of 16 outside limits.

SAMPLE NO.

2946347BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Instrument ID: 60MSS8 Matrix: Water Lab Sample ID: 2946347

Lab File ID: 072721.B\0727AP04.D Date Analyzed: 07/27/2021 Time: 09:38

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2946348LCS	2946348	072721.B\0727AP02.D	07/27/2021 09:09
RB-01	60375743001	072721.B\0727AP06.D	07/27/2021 10:08
RB-02	60375743002	072721.B\0727AP07.D	07/27/2021 10:22

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW
Lab File ID: 071421.B\0714ADFT.D DFTPP Injection Date 07/14/2021
Instrument ID: 60MSS8 DFTPP Injection Time 11:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	32.83	(22.44)[1]
68	Less than 2.00% of mass 69	0.66	(1.88)[2]
69	Mass 69 relative abundance	35.41	(24.21)[2]
70	Less than 2.00% of mass 69	0.18	(0.52)[2]
127	10.00 - 80.00% of mass 442	47.06	(32.16)[2]
197	Less than 2.00% of mass 198	1.52	
198	Greater than 50.00% of mass 442	100.00	(68.35)[2]
199	5.00 - 9.00% of mass 198	7.04	
275	10.00 - 60.00% of mass 442	26.76	(18.29)[2]
365	Greater than 1.00% of mass 442	4.68	(3.20)[2]
441	Present, but less than mass 443	23.19	
442	Greater than 50.00% of mass 198	146.31	
443	15.00 - 24.00% of mass 442	29.06	(19.86)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19793869CAL6	19793869CAL6	071421.B\0714API6A.D	07/14/2021	12:26
19793870CAL2	19793870CAL2	071421.B\0714API2.D	07/14/2021	12:58
19793871CAL1	19793871CAL1	071421.B\0714API1A.D	07/14/2021	13:12
19793872CAL3	19793872CAL3	071421.B\0714API3.D	07/14/2021	13:27
19793873CAL4	19793873CAL4	071421.B\0714API4.D	07/14/2021	13:42
19793874CAL5	19793874CAL5	071421.B\0714API5.D	07/14/2021	13:56
19793875CAL7	19793875CAL7	071421.B\0714API7.D	07/14/2021	14:11
19793876CAL8	19793876CAL8	071421.B\0714API8.D	07/14/2021	14:26
19793877ICV	19793877ICV	071421.B\0714APICV.D	07/14/2021	14:42

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW
Lab File ID: 072721.B\0727ADFT.D DFTPP Injection Date 07/27/2021
Instrument ID: 60MSS8 DFTPP Injection Time 08:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	39.94	(26.93)[1]
68	Less than 2.00% of mass 69	0.79	(1.98)[2]
69	Mass 69 relative abundance	40.05	(27.00)[2]
70	Less than 2.00% of mass 69	0.21	(0.53)[2]
127	10.00 - 80.00% of mass 442	47.44	(31.98)[2]
197	Less than 2.00% of mass 198	2.09	
198	Greater than 50.00% of mass 442	100.00	(67.42)[2]
199	5.00 - 9.00% of mass 198	6.81	
275	10.00 - 60.00% of mass 442	26.72	(18.01)[2]
365	Greater than 1.00% of mass 442	4.74	(3.20)[2]
441	Present, but less than mass 443	23.70	
442	Greater than 50.00% of mass 198	148.33	
443	15.00 - 24.00% of mass 442	28.09	(18.94)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19812981CCV	19812981CCV	072721.B\0727API6.D	07/27/2021	08:34
2946348LCS	2946348LCS	072721.B\0727AP02.D	07/27/2021	09:09
2946347BLANK	2946347BLANK	072721.B\0727AP04.D	07/27/2021	09:38
RB-01	60375743001	072721.B\0727AP06.D	07/27/2021	10:08
RB-02	60375743002	072721.B\0727AP07.D	07/27/2021	10:22

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Sample ID : 19812981CCV Date Analyzed: 07/27/2021

Instrument ID: 60MSS8 GC Column: Col 1 Time Analyzed: 08:34

Lab File ID: 072721.B\0727API6.D

		AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT	AREA PERYD12IS	RT
12 HOUR STD		5000	5.063	6596	8.038	12615	3.81	6328	9.309
UPPER LIMIT		10000	5.563	13192	8.538	25230	4.31	12656	9.809
LOWER LIMIT		2500	4.563	3298	7.538	6307.5	3.31	3164	8.809
LAB SAMPLE ID	SAMPLE NO.								
2946347	2946347BLANK	4452	5.058	7736	8.023	11043	3.808	7915	9.288
2946348	2946348LCS	4715	5.058	8575	8.023	11565	3.808	8782	9.288
60375743001	RB-01	4128	5.058	7753	8.023	10499	3.808	8177	9.288
60375743002	RB-02	4296	5.058	6713	8.023	10850	3.808	6874	9.288

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)
PERYD12IS = Perylene-d12 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Sample ID : 19812981CCV Date Analyzed: 07/27/2021

Instrument ID: 60MSS8 GC Column: Col 1 Time Analyzed: 08:34

Lab File ID: 072721.B\0727API6.D

		AREA PHENAD10IS	RT
12 HOUR STD		14441	6.127
UPPER LIMIT		28882	6.627
LOWER LIMIT		7220.5	5.627
LAB SAMPLE ID	SAMPLE NO.		
2946347	2946347BLANK	14149	6.122
2946348	2946348LCS	14833	6.122
60375743001	RB-01	13253	6.124
60375743002	RB-02	13235	6.124

PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

RB-01

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW
Date Received: 07/22/2021 13:40 Matrix: Water SDG No.: 60375743
Date Extracted: 07/26/2021 15:44 Lab Sample ID: 60375743001
Date Analyzed: 07/27/2021 10:08 Lab File ID: 072721.B\0727AP06.D
Initial wt/vol: 95 mL Final wt/vol: 1 mL Dilution: 1 Instrument: 60MSS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

RB-02

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 13:40
Matrix: Water
SDG No.: 60375743
Date Extracted: 07/26/2021 15:44
Lab Sample ID: 60375743002
Date Analyzed: 07/27/2021 10:22
Lab File ID: 072721.B\0727AP07.D
Initial wt/vol: 105 mL
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/14/2021 07/14/2021 Calibration Time(s): 12:26 14:26

LAB FILE ID

CAL1 = 071421.B\0714API1A.D CAL2 = 071421.B\0714API2.D CAL3 = 071421.B\0714API3.D

CAL4 = 071421.B\0714API4.D CAL5 = 071421.B\0714API5.D CAL6 = 071421.B\0714API6A.D

CAL7 = 071421.B\0714API7.D CAL8 = 071421.B\0714API8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.30574	1.45013	1.37486	1.41640	1.26168	1.27937
Acenaphthylene	Averaged	1.53979	1.72719	1.69319	1.72850	1.56419	1.66879
Anthracene	Averaged	0.63741	0.78851	0.73001	0.77263	0.68366	0.72173
Benzo(a)anthracene	Averaged	1.08231	1.06312	1.01903	0.97371	0.86221	0.92253
Benzo(a)pyrene	Averaged	1.15084	1.13219	0.99578	1.00665	0.88362	0.93515
Benzo(b)fluoranthene	Averaged	0.84684	1.00214	0.92430	0.95632	0.78881	0.88615
Benzo(g,h,i)perylene	Averaged	0.96989	1.03657	0.99578	0.98277	0.86971	0.87411
Benzo(k)fluoranthene	Averaged	1.02056	1.03274	1.05426	1.07831	1.01972	1.03342
Chrysene	Averaged	1.20336	1.30931	1.24002	1.29428	1.11847	1.07999
Dibenz(a,h)anthracene	Averaged	0.94094	0.93712	1.07050	0.99642	0.90511	0.90286
Fluoranthene	Averaged	0.83056	0.77165	0.77032	0.75713	0.67149	0.70764
Fluorene	Averaged	1.42892	1.67413	1.54095	1.56054	1.39879	1.44456
Indeno(1,2,3-cd)pyrene	Averaged	1.04951	1.10924	1.15984	1.11585	0.98390	1.00340
Naphthalene	Averaged	0.95637	1.09614	1.02610	1.04648	0.93160	0.93857
Phenanthrene	Averaged	0.78034	0.89901	0.87557	0.85904	0.75975	0.77753
Pyrene	Averaged	1.47394	1.55178	1.59761	1.57317	1.39789	1.44773
2-Fluorobiphenyl (S)	Averaged	2.68539	2.31078	2.91580	3.01454	2.70598	2.73750
Terphenyl-d14 (S)	Averaged		1.29812	1.31369	1.29588	1.15639	1.23773

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/14/2021 07/14/2021 Calibration Time(s): 12:26 14:26

LAB FILE ID

CAL1 = 071421.B\0714API1A.D CAL2 = 071421.B\0714API2.D CAL3 = 071421.B\0714API3.D

CAL4 = 071421.B\0714API4.D CAL5 = 071421.B\0714API5.D CAL6 = 071421.B\0714API6A.D

CAL7 = 071421.B\0714API7.D CAL8 = 071421.B\0714API8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.26749	1.29973
Acenaphthylene	Averaged	1.66682	1.75799
Anthracene	Averaged	0.72451	0.72522
Benzo(a)anthracene	Averaged	0.89694	0.88713
Benzo(a)pyrene	Averaged	0.91737	0.92715
Benzo(b)fluoranthene	Averaged	0.86233	0.84651
Benzo(g,h,i)perylene	Averaged	0.88467	0.87147
Benzo(k)fluoranthene	Averaged	0.97855	1.02472
Chrysene	Averaged	1.00768	0.98339
Dibenz(a,h)anthracene	Averaged	0.90376	0.88148
Fluoranthene	Averaged	0.72466	0.74897
Fluorene	Averaged	1.42590	1.45536
Indeno(1,2,3-cd)pyrene	Averaged	1.00311	0.98848
Naphthalene	Averaged	0.93165	0.98412
Phenanthrene	Averaged	0.77587	0.77212
Pyrene	Averaged	1.37292	1.35692
2-Fluorobiphenyl (S)	Averaged	2.71840	2.86236
Terphenyl-d14 (S)	Averaged	1.13614	1.11975

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS8 GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/14/2021 07/14/2021 Calibration Time(s): 12:26 14:26

LAB FILE ID

CAL1 = 071421.B\0714API1A.D CAL2 = 071421.B\0714API2.D CAL3 = 071421.B\0714API3.D

CAL4 = 071421.B\0714API4.D CAL5 = 071421.B\0714API5.D CAL6 = 071421.B\0714API6A.D

CAL7 = 071421.B\0714API7.D CAL8 = 071421.B\0714API8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	5.42307			1.33192	
Acenaphthylene	Averaged	4.70412			1.66831	
Anthracene	Averaged	6.54762			0.72296	
Benzo(a)anthracene	Averaged	8.72261			0.96337	
Benzo(a)pyrene	Averaged	10.05344			0.99359	
Benzo(b)fluoranthene	Averaged	7.71239			0.88918	
Benzo(g,h,i)perylene	Averaged	7.23141			0.93562	
Benzo(k)fluoranthene	Averaged	2.79662			1.03028	
Chrysene	Averaged	10.90124			1.15456	
Dibenz(a,h)anthracene	Averaged	6.65381			0.94227	
Fluoranthene	Averaged	6.39044			0.74780	
Fluorene	Averaged	6.25461			1.49114	
Indeno(1,2,3-cd)pyrene	Averaged	6.47042			1.05167	
Naphthalene	Averaged	6.20728			0.98888	
Phenanthrene	Averaged	6.84370			0.81240	
Pyrene	Averaged	6.37079			1.47149	
2-Fluorobiphenyl (S)	Averaged	7.66933			2.74384	
Terphenyl-d14 (S)	Averaged	6.84658			1.22253	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19793877ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/14/2021 Time: 14:42

Instrument ID: 60MSS8 GC Column: Col 1 Init. Calib. Date(s): 07/14/2021 07/14/2021

Lab File ID: 071421.B\0714APICV.D Init. Calib. Time(s): 12:26 14:26

SDG No.: 60375743

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.33192	1.40036	0.0500	5.1382	20.0000
Acenaphthylene	Averaged	1.66831	1.77331	0.0500	6.2938	20.0000
Anthracene	Averaged	0.72296	0.75782	0.0500	4.8218	20.0000
Benzo(a)anthracene	Averaged	0.96337	0.93468	0.0500	-2.9787	20.0000
Benzo(a)pyrene	Averaged	0.99359	0.97491	0.0500	-1.8806	20.0000
Benzo(b)fluoranthene	Averaged	0.88918	1.00369	0.0500	12.8782	20.0000
Benzo(g,h,i)perylene	Averaged	0.93562	1.01375	0.0500	8.3506	20.0000
Benzo(k)fluoranthene	Averaged	1.03028	1.14063	0.0500	10.7102	20.0000
Chrysene	Averaged	1.15456	1.13419	0.0500	-1.7650	20.0000
Dibenz(a,h)anthracene	Averaged	0.94227	0.97193	0.0500	3.1476	20.0000
Fluoranthene	Averaged	0.74780	0.77068	0.0500	3.0594	20.0000
Fluorene	Averaged	1.49114	1.57717	0.0500	5.7693	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	1.05167	1.15608	0.0500	9.9285	20.0000
Naphthalene	Averaged	0.98888	0.98045	0.0500	-0.8523	20.0000
Phenanthrene	Averaged	0.81240	0.83556	0.0500	2.8503	20.0000
Pyrene	Averaged	1.47149	1.53688	0.0500	4.4435	20.0000
2-Fluorobiphenyl (S)	Averaged	2.74384	0.00000	0.0500	0.0000	20.0000
Terphenyl-d14 (S)	Averaged	1.22253	0.00000	0.0500	0.0000	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19812981CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/27/2021 Time: 08:34

Instrument ID: 60MSS8 GC Column: Col 1
Init. Calib. Date(s): 07/14/2021 07/14/2021

Lab File ID: 072721.B\0727API6.D
Init. Calib. Time(s): 12:26 14:26

SDG No.: 60375743

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.33192	1.29000	0.0500	-3.1476	20.0000
Acenaphthylene	Averaged	1.66831	1.67820	0.0500	0.5929	20.0000
Anthracene	Averaged	0.72296	0.73797	0.0500	2.0758	20.0000
Benzo(a)anthracene	Averaged	0.96337	0.93466	0.0500	-2.9807	20.0000
Benzo(a)pyrene	Averaged	0.99359	0.92873	0.0500	-6.5282	20.0000
Benzo(b)fluoranthene	Averaged	0.88918	0.85493	0.0500	-3.8514	20.0000
Benzo(g,h,i)perylene	Averaged	0.93562	0.84592	0.0500	-9.5871	20.0000
Benzo(k)fluoranthene	Averaged	1.03028	1.01643	0.0500	-1.3442	20.0000
Chrysene	Averaged	1.15456	1.09309	0.0500	-5.3248	20.0000
Dibenz(a,h)anthracene	Averaged	0.94227	0.83281	0.0500	-11.6172	20.0000
Fluoranthene	Averaged	0.74780	0.68679	0.0500	-8.1583	20.0000
Fluorene	Averaged	1.49114	1.39240	0.0500	-6.6221	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	1.05167	0.95038	0.0500	-9.6312	20.0000
Naphthalene	Averaged	0.98888	0.94229	0.0500	-4.7110	20.0000
Phenanthrene	Averaged	0.81240	0.77647	0.0500	-4.4233	20.0000
Pyrene	Averaged	1.47149	1.53851	0.0500	4.5541	20.0000
2-Fluorobiphenyl (S)	Averaged	2.74384	2.73160	0.0500	-0.4462	20.0000
Terphenyl-d14 (S)	Averaged	1.22253	1.24576	0.0500	1.8998	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Water
SDG No.: 60375743
Date Extracted: 07/26/2021 15:44
Lab Sample ID: 2946348
Date Analyzed: 07/27/2021 09:09
Lab File ID: 072721.B\0727AP02.D
Initial wt/vol: 100 mL
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	6.1	
208-96-8	Acenaphthylene	6.4	
120-12-7	Anthracene	7.7	
56-55-3	Benzo(a)anthracene	8.3	
50-32-8	Benzo(a)pyrene	7.9	
205-99-2	Benzo(b)fluoranthene	8.3	
191-24-2	Benzo(g,h,i)perylene	8.0	
207-08-9	Benzo(k)fluoranthene	7.6	
218-01-9	Chrysene	7.4	
53-70-3	Dibenz(a,h)anthracene	8.1	
206-44-0	Fluoranthene	8.2	
86-73-7	Fluorene	6.5	
193-39-5	Indeno(1,2,3-cd)pyrene	8.1	
91-20-3	Naphthalene	5.8	
85-01-8	Phenanthrene	7.2	
129-00-0	Pyrene	7.3	

SAMPLE NO.

BLANK

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received:
Matrix: Water
SDG No.: 60375743
Date Extracted: 07/26/2021 15:44
Lab Sample ID: 2946347
Date Analyzed: 07/27/2021 09:38
Lab File ID: 072721.B\0727AP04.D
Initial wt/vol: 100 mL
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

PCB - FORM II SVOA-1
WATER SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Instrument ID: 60GCSG

LAB SAMPLE ID	SAMPLE NAME	DCBP
2948685	2948685BLANK	59
2948686	2948686LCS	50
60375743001	RB-01	63
60375743002	RB-02	37

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(30-136)

* Values outside of QC Limits

PCB - FORM III SVOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2948686LCS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/29/2021
Instrument: 60GCSG
LCS Lot No: 42472
Lab File ID: 072921-1.B\0729210000032.D
SDG No.: 60375743

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	5.0	3.0	61	40-120
PCB-1260 (Aroclor 1260)	5.0	3.8	77	55-120

Spike Recovery: 0 out of 2 outside limits.

SAMPLE NO.

2948685BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375743 Contract: GSA GOODFELLOW

Instrument ID: 60GCSG Matrix: Water Lab Sample ID: 2948685

Lab File ID (1): 072921-1.B\0729210000031.D Date Analyzed (1): 07/29/2021 Time (1): 18:22

Lab File ID (2): 072921-2.B\0729210000031.D Date Analyzed (2): 07/29/2021 Time (2): 18:22

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2948686LCS	2948686	072921-1.B\0729210000032.D	07/29/2021 18:30
2948686LCS	2948686	072921-2.B\0729210000032.D	07/29/2021 18:30
RB-01	60375743001	072921-1.B\0729210000039.D	07/29/2021 19:21
RB-02	60375743002	072921-1.B\0729210000040.D	07/29/2021 19:29

SAMPLE NO.

RB-01

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 13:40
Matrix: Water SDG No.: 60375743
Date Extracted: 07/29/2021 11:57
Lab Sample ID: 60375743001
Date Analyzed: 07/29/2021 19:21
Lab File ID: 072921-1.B\0729210000039.D
Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

RB-02

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA GOODFELLOW
Date Received: 07/22/2021 13:40
Matrix: Water SDG No.: 60375743
Date Extracted: 07/29/2021 11:57
Lab Sample ID: 60375743002
Date Analyzed: 07/29/2021 19:29
Lab File ID: 072921-1.B\0729210000040.D
Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	10159600.0000	9332000.00000	8705250.00000	9701000.00000	8449925.00000	9905440.00000
Aroclor 1016	2	Averaged	31576400.0000	28475600.0000	24799850.0000	24894466.6666	22477450.0000	27520540.0000
Aroclor 1016	3	Averaged	16950600.0000	12364500.0000	10584450.0000	10854100.0000	9581950.00000	11667100.0000
Aroclor 1016	4	Averaged	12956400.0000	9012500.00000	7466050.00000	7678433.33333	7068625.00000	9167320.00000
Aroclor 1260	1	Averaged	15050000.0000	17903300.0000	14889300.0000	13795266.6666	13036900.0000	16817700.0000
Aroclor 1260	2	Averaged	23802400.0000	19707900.0000	16121550.0000	14732866.6666	13712350.0000	17320340.0000
Aroclor 1260	3	Averaged	30791200.0000	23699700.0000	19924950.0000	17029866.6666	16266300.0000	21205080.0000
Aroclor 1260	4	Averaged	21667800.0000	15689500.0000	12952100.0000	11476466.6666	10937975.0000	13648520.0000
Aroclor 1260	5	Averaged	20760000.0000	14143400.0000	11297500.0000	10523500.0000	10070400.0000	12370860.0000
Decachlorobiphenyl		Averaged		211868000.000	169425000.000	157968000.000	142147250.000	172693600.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	6912300.00000	7161230.00000	5743125.00000
Aroclor 1016	2	Averaged	20502062.5000	21098660.0000	17656720.0000
Aroclor 1016	3	Averaged	8377650.00000	8532050.00000	6994225.00000
Aroclor 1016	4	Averaged	6237512.50000	6334360.00000	5175200.00000
Aroclor 1260	1	Averaged	11349250.0000	11329330.0000	10064720.0000
Aroclor 1260	2	Averaged	12236225.0000	12443550.0000	10631715.0000
Aroclor 1260	3	Averaged	14590500.0000	15918700.0000	13313800.0000
Aroclor 1260	4	Averaged	9757312.50000	9895520.00000	8203050.00000
Aroclor 1260	5	Averaged	9016312.50000	9131750.00000	7608320.00000
Decachlorobiphenyl		Averaged	135044750.000	135919600.000	113984450.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	18.57			6784121.85	
Aroclor 1016	2	Averaged	16.90			17723620.64	
Aroclor 1016	3	Averaged	18.73			9276350.31	
Aroclor 1016	4	Averaged	17.94			7363139.27	
Aroclor 1260	1	Averaged	17.70			14027393.42	
Aroclor 1260	2	Averaged	19.17			16300539.58	
Aroclor 1260	3	Averaged	18.01			17350647.18	
Aroclor 1260	4	Averaged	18.92			12232884.37	
Aroclor 1260	5	Averaged	18.05			11579601.70	
Decachlorobiphenyl		Averaged	19.48			154881331.25	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	248486200.000	187648800.000	133519750.000	141841800.000	124781100.000	146024400.000
Aroclor 1016	2	Averaged	286155800.000	299195600.000	226633700.000	229459266.666	214528900.000	260187220.000
Aroclor 1016	3	Averaged	125731800.000	104623800.000	84913550.0000	86696066.6666	76584225.0000	93607620.0000
Aroclor 1016	4	Averaged	53418400.0000	51305700.0000	41716550.0000	46131600.0000	43273225.0000	48213880.0000
Aroclor 1016	5	Averaged	106124000.000	66502000.0000	58428250.0000	63040700.0000	53734475.0000	67930280.0000
Aroclor 1260	1	Averaged	82519000.0000	81893500.0000	71898700.0000	66793466.6666	64233100.0000	79630980.0000
Aroclor 1260	2	Averaged	61430000.0000	48875200.0000	36744550.0000	35238033.3333	32503825.0000	40698040.0000
Aroclor 1260	3	Averaged	49415800.0000	57082400.0000	43799450.0000	40332433.3333	35966500.0000	46171920.0000
Aroclor 1260	4	Averaged	86355200.0000	64088000.0000	53923600.0000	51623466.6666	48386450.0000	58778320.0000
Aroclor 1260	5	Averaged	173295600.000	127959800.000	101186650.000	102650666.666	94806125.0000	119729040.000
Decachlorobiphenyl		Averaged	877434000.000	826675000.000	662854000.000	633834000.000	598170750.000	737774000.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	110459150.000	112635320.000	97937800.0000
Aroclor 1016	2	Averaged	198726537.500	208554800.000	244640830.000
Aroclor 1016	3	Averaged	69816075.0000	75180660.0000	64667800.0000
Aroclor 1016	4	Averaged	55246762.5000	39395810.0000	34315640.0000
Aroclor 1016	5	Averaged	51755937.5000	51576980.0000	44562880.0000
Aroclor 1260	1	Averaged	59105650.0000	61671510.0000	54896175.0000
Aroclor 1260	2	Averaged	29772800.0000	30677690.0000	26169155.0000
Aroclor 1260	3	Averaged	33318225.0000	41312560.0000	34745225.0000
Aroclor 1260	4	Averaged	45459787.5000	46209230.0000	39910420.0000
Aroclor 1260	5	Averaged	92740350.0000	96177060.0000	87581640.0000
Decachlorobiphenyl		Averaged	575062000.000	583530100.000	496588250.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	19.00			105907364.79	
Aroclor 1016	2	Averaged	16.45			189019616.94	
Aroclor 1016	3	Averaged	16.47			71296828.43	
Aroclor 1016	4	Averaged	17.50			51419036.85	
Aroclor 1016	5	Averaged	15.62			63861538.85	
Aroclor 1260	1	Averaged	16.62			79969425.64	
Aroclor 1260	2	Averaged	18.22			42208332.60	
Aroclor 1260	3	Averaged	18.94			54739175.92	
Aroclor 1260	4	Averaged	19.39			65081862.68	
Aroclor 1260	5	Averaged	16.88			127455452.31	
Decachlorobiphenyl		Averaged	18.78			665769122.22	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	1.796	1.795	1.796	1.796	1.795	1.795	1.794	1.796
Aroclor 1016	2	1.91	1.909	1.909	1.911	1.909	1.908	1.907	1.909
Aroclor 1016	3	1.96	1.959	1.959	1.96	1.959	1.959	1.958	1.96
Aroclor 1016	4	2.176	2.175	2.176	2.176	2.175	2.175	2.175	2.176
Aroclor 1260	1	2.84	2.84	2.84	2.841	2.84	2.84	2.84	2.84
Aroclor 1260	2	2.966	2.965	2.966	2.966	2.965	2.965	2.965	2.966
Aroclor 1260	3	3.127	3.126	3.127	3.127	3.126	3.126	3.126	3.127
Aroclor 1260	4	3.217	3.217	3.217	3.217	3.217	3.217	3.217	3.217
Aroclor 1260	5	3.354	3.353	3.354	3.354	3.353	3.354	3.354	3.354
Decachlorobiphenyl		4.41	4.41	4.41	4.41	4.409	4.411	4.411	4.41

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	1.796	1.796	1.676	1.916
Aroclor 1016	2	1.91	1.909	1.789	2.029
Aroclor 1016	3	1.96	1.959	1.839	2.079
Aroclor 1016	4	2.176	2.176	2.056	2.296
Aroclor 1260	1	2.841	2.84	2.72	2.96
Aroclor 1260	2	2.966	2.966	2.846	3.086
Aroclor 1260	3	3.127	3.127	3.007	3.247
Aroclor 1260	4	3.217	3.217	3.097	3.337
Aroclor 1260	5	3.354	3.353	3.233	3.473
Decachlorobiphenyl		4.411	4.41	4.29	4.53

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	1.674	1.673	1.673	1.675	1.674	1.673	1.672	1.674
Aroclor 1016	2	1.859	1.86	1.86	1.862	1.86	1.861	1.86	1.861
Aroclor 1016	3	1.929	1.929	1.929	1.931	1.93	1.929	1.929	1.93
Aroclor 1016	4	2.015	2.015	2.015	2.015	2.014	2.014	2.013	2.014
Aroclor 1016	5	2.164	2.164	2.165	2.165	2.164	2.164	2.164	2.165
Aroclor 1260	1	2.813	2.813	2.814	2.813	2.813	2.813	2.813	2.813
Aroclor 1260	2	2.995	2.995	2.995	2.995	2.995	2.995	2.995	2.995
Aroclor 1260	3	3.151	3.15	3.153	3.152	3.151	3.152	3.152	3.152
Aroclor 1260	4	3.342	3.341	3.342	3.342	3.341	3.342	3.342	3.342
Aroclor 1260	5	3.446	3.446	3.447	3.447	3.446	3.447	3.447	3.447
Decachlorobiphenyl		4.367	4.368	4.368	4.368	4.367	4.369	4.369	4.369

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	1.675	1.673	1.553	1.793
Aroclor 1016	2	1.865	1.861	1.741	1.981
Aroclor 1016	3	1.93	1.929	1.809	2.049
Aroclor 1016	4	2.015	2.015	1.895	2.135
Aroclor 1016	5	2.165	2.164	2.044	2.284
Aroclor 1260	1	2.814	2.812	2.692	2.932
Aroclor 1260	2	2.996	2.996	2.876	3.116
Aroclor 1260	3	3.153	3.151	3.031	3.271
Aroclor 1260	4	3.342	3.341	3.221	3.461
Aroclor 1260	5	3.448	3.447	3.327	3.567
Decachlorobiphenyl		4.369	4.369	4.249	4.489

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-1.B\0721210000073.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	2527550.00000	0.00			2131625.00	
Aroclor 1221	2	Averaged	1476475.00000	0.00			1608950.00	
Aroclor 1221	3	Averaged	6416825.00000	0.00			5273325.00	
Aroclor 1254	1	Averaged	8609950.00000	0.00			9077550.00	
Aroclor 1254	2	Averaged	11791375.0000	0.00			11510200.00	
Aroclor 1254	3	Averaged	14012450.0000	0.00			15443500.00	
Aroclor 1254	4	Averaged	14109775.0000	0.00			13237900.00	
Aroclor 1254	5	Averaged	8801550.00000	0.00			9272000.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-2.B\0721210000073.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	54051000.0000	0.00			36050100.00	
Aroclor 1221	2	Averaged	32000875.0000	0.00			25768525.00	
Aroclor 1221	3	Averaged	89519450.0000	0.00			63845600.00	
Aroclor 1254	1	Averaged	49834650.0000	0.00			62784150.00	
Aroclor 1254	2	Averaged	66270700.0000	0.00			78219700.00	
Aroclor 1254	3	Averaged	43054825.0000	0.00			50511200.00	
Aroclor 1254	4	Averaged	79576525.0000	0.00			90063100.00	
Aroclor 1254	5	Averaged	46964325.0000	0.00			56407875.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-1.B\0721210000073.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	1.48	1.48	1.36	1.6
Aroclor 1221	2	1.521	1.521	1.401	1.641
Aroclor 1221	3	1.543	1.543	1.423	1.663
Aroclor 1254	1	2.396	2.396	2.276	2.516
Aroclor 1254	2	2.509	2.509	2.389	2.629
Aroclor 1254	3	2.712	2.712	2.592	2.832
Aroclor 1254	4	2.846	2.846	2.726	2.966
Aroclor 1254	5	3	3	2.88	3.12

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-2.B\0721210000073.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	1.417	1.417	1.297	1.537
Aroclor 1221	2	1.47	1.47	1.35	1.59
Aroclor 1221	3	1.497	1.497	1.377	1.617
Aroclor 1254	1	2.382	2.382	2.262	2.502
Aroclor 1254	2	2.442	2.442	2.322	2.562
Aroclor 1254	3	2.65	2.65	2.53	2.77
Aroclor 1254	4	2.71	2.71	2.59	2.83
Aroclor 1254	5	3.117	3.117	2.997	3.237

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-1.B\0721210000074.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	3277725.00000	0.00			2529725.00	
Aroclor 1232	2	Averaged	2664550.00000	0.00			2364325.00	
Aroclor 1232	3	Averaged	1783825.00000	0.00			1992650.00	
Aroclor 1232	4	Averaged	2193500.00000	0.00			2017500.00	
Aroclor 1232	5	Averaged	1386575.00000	0.00			1665700.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-2.B\0721210000074.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	25841775.0000	0.00			22278500.00	
Aroclor 1232	2	Averaged	11903900.0000	0.00			15022950.00	
Aroclor 1232	3	Averaged	17268375.0000	0.00			18242400.00	
Aroclor 1232	4	Averaged	11603000.0000	0.00			13431300.00	
Aroclor 1232	5	Averaged	19397050.0000	0.00			21684000.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-1.B\0721210000074.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	1.795	1.795	1.675	1.915
Aroclor 1232	2	1.996	1.996	1.876	2.116
Aroclor 1232	3	2.091	2.091	1.971	2.211
Aroclor 1232	4	2.195	2.195	2.075	2.315
Aroclor 1232	5	2.351	2.351	2.231	2.471

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-2.B\0721210000074.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	1.796	1.796	1.676	1.916
Aroclor 1232	2	2.015	2.015	1.895	2.135
Aroclor 1232	3	2.233	2.233	2.113	2.353
Aroclor 1232	4	2.301	2.301	2.181	2.421
Aroclor 1232	5	2.358	2.358	2.238	2.478

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-1.B\0721210000075.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	15607225.0000	0.00			11322650.00	
Aroclor 1242	2	Averaged	4259425.00000	0.00			4326975.00	
Aroclor 1242	3	Averaged	6223800.00000	0.00			4894100.00	
Aroclor 1242	4	Averaged	5065025.00000	0.00			5741650.00	
Aroclor 1242	5	Averaged	5232800.00000	0.00			5110350.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-2.B\0721210000075.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	147425975.000	0.00			112837775.00	
Aroclor 1242	2	Averaged	26979700.0000	0.00			33153375.00	
Aroclor 1242	3	Averaged	41108475.0000	0.00			43495650.00	
Aroclor 1242	4	Averaged	35512900.0000	0.00			38677750.00	
Aroclor 1242	5	Averaged	48800325.0000	0.00			37639725.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-1.B\0721210000075.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	1.91	1.91	1.79	2.03
Aroclor 1242	2	2.066	2.066	1.946	2.186
Aroclor 1242	3	2.24	2.24	2.12	2.36
Aroclor 1242	4	2.369	2.369	2.249	2.489
Aroclor 1242	5	2.485	2.485	2.365	2.605

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-2.B\0721210000075.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	1.861	1.861	1.741	1.981
Aroclor 1242	2	1.988	1.988	1.868	2.108
Aroclor 1242	3	2.165	2.165	2.045	2.285
Aroclor 1242	4	2.358	2.358	2.238	2.478
Aroclor 1242	5	2.494	2.494	2.374	2.614

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-1.B\0721210000076.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	7021850.00000	0.00			7521200.00	
Aroclor 1248	2	Averaged	7661525.00000	0.00			8185225.00	
Aroclor 1248	3	Averaged	10469050.0000	0.00			9850050.00	
Aroclor 1248	4	Averaged	7773625.00000	0.00			7900500.00	
Aroclor 1248	5	Averaged	5718800.00000	0.00			5895125.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-2.B\0721210000076.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	48772050.0000	0.00			58058825.00	
Aroclor 1248	2	Averaged	65383750.0000	0.00			74406450.00	
Aroclor 1248	3	Averaged	31825625.0000	0.00			38664850.00	
Aroclor 1248	4	Averaged	54062425.0000	0.00			62073200.00	
Aroclor 1248	5	Averaged	32843000.0000	0.00			35133275.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-1.B\0721210000076.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	2.066	2.066	1.946	2.186
Aroclor 1248	2	2.175	2.175	2.055	2.295
Aroclor 1248	3	2.391	2.391	2.271	2.511
Aroclor 1248	4	2.485	2.485	2.365	2.605
Aroclor 1248	5	2.711	2.711	2.591	2.831

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375743

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-2.B\0721210000076.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	2.015	2.015	1.895	2.135
Aroclor 1248	2	2.165	2.165	2.045	2.285
Aroclor 1248	3	2.302	2.302	2.182	2.422
Aroclor 1248	4	2.358	2.358	2.238	2.478
Aroclor 1248	5	2.709	2.709	2.589	2.829

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19708972ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/21/2021 Time: 23:19

Instrument ID: 60GCSG GC Column: Col 1 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000071.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375743

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	1.796	1.676	1.916	6784121.850	9840500.000	17.3494
Aroclor 1016	2	Averaged	1.91	1.789	2.029	17723620.64	28279075.00	17.7633
Aroclor 1016	3	Averaged	1.96	1.839	2.079	9276350.312	11766175.00	20.9635
Aroclor 1016	4	Averaged	2.176	2.056	2.296	7363139.270	8519125.000	22.0071
Aroclor 1260	1	Averaged	2.775	2.72	2.96	14027393.42	6789700.000	24.6002
Aroclor 1260	2	Averaged	2.966	2.846	3.086	16300539.58	18764475.00	29.9670
Aroclor 1260	3	Averaged	3.126	3.007	3.247	17350647.18	20999425.00	23.7089
Aroclor 1260	4	Averaged	3.217	3.097	3.337	12232884.37	14239500.00	26.8799
Aroclor 1260	5	Averaged	3.354	3.233	3.473	11579601.70	13304875.00	28.8889

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19708960ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/21/2021 Time: 23:19

Instrument ID: 60GCSG GC Column: Col 2 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000071.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375743

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	1.674	1.553	1.793	105907364.7	159778875.0	22.8217
Aroclor 1016	2	Averaged	1.861	1.741	1.981	189019616.9	274014250.0	10.1054
Aroclor 1016	3	Averaged	1.93	1.809	2.049	71296828.43	102058350.0	26.3402
Aroclor 1016	4	Averaged	2.014	1.895	2.135	51419036.85	51366750.00	18.7805
Aroclor 1016	5	Averaged	2.164	2.044	2.284	63861538.85	75244275.00	25.2164
Aroclor 1260	1	Averaged	2.813	2.692	2.932	79969425.64	99424775.00	34.6110
Aroclor 1260	2	Averaged	2.995	2.876	3.116	42208332.60	47718550.00	32.8614
Aroclor 1260	3	Averaged	3.152	3.031	3.271	54739175.92	51777000.00	22.7561
Aroclor 1260	4	Averaged	3.342	3.221	3.461	65081862.68	66615100.00	25.3386
Aroclor 1260	5	Averaged	3.447	3.327	3.567	127455452.3	137918700.0	26.3073

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19709046ICV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:26

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000080.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375743

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	1.48	1.36	1.6	2131625.000	2708350.000	-1.0673
Aroclor 1221	2	Averaged	1.521	1.401	1.641	1608950.000	1620350.000	-1.0566
Aroclor 1221	3	Averaged	1.542	1.423	1.663	5273325.000	6163800.000	-5.8677
Aroclor 1254	1	Averaged	2.395	2.276	2.516	9077550.000	8997850.000	0.8931
Aroclor 1254	2	Averaged	2.507	2.389	2.629	11510200.00	12562750.00	4.5355
Aroclor 1254	3	Averaged	2.711	2.592	2.832	15443500.00	14801875.00	-1.4046
Aroclor 1254	4	Averaged	2.846	2.726	2.966	13237900.00	15071700.00	2.8318
Aroclor 1254	5	Averaged	3	2.88	3.12	9272000.000	9190650.000	0.6137

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

08/24/2021 9:31

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19709038ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/22/2021 Time: 00:26

Instrument ID: 60GCSG GC Column: Col 2 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000080.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375743

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	1.416	1.297	1.537	36050100.00	56636000.00	-1.1130
Aroclor 1221	2	Averaged	1.47	1.35	1.59	25768525.00	31233375.00	5.1691
Aroclor 1221	3	Averaged	1.497	1.377	1.617	63845600.00	88320950.00	-2.3070
Aroclor 1254	1	Averaged	2.381	2.262	2.502	62784150.00	50808700.00	0.0221
Aroclor 1254	2	Averaged	2.441	2.322	2.562	78219700.00	67241875.00	0.7838
Aroclor 1254	3	Averaged	2.649	2.53	2.77	50511200.00	47014075.00	4.6493
Aroclor 1254	4	Averaged	2.71	2.59	2.83	90063100.00	80282100.00	-1.1403
Aroclor 1254	5	Averaged	3.116	2.997	3.237	56407875.00	51470550.00	8.9767

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19709066ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/22/2021 Time: 00:33

Instrument ID: 60GCSG GC Column: Col 1 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000081.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375743

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	1.795	1.675	1.915	2529725.000	2732350.000	-9.8113
Aroclor 1232	2	Averaged	1.997	1.876	2.116	2364325.000	2362525.000	-11.1861
Aroclor 1232	3	Averaged	2.09	1.971	2.211	1992650.000	1806875.000	-6.6908
Aroclor 1232	4	Averaged	2.195	2.075	2.315	2017500.000	1918325.000	-8.6183
Aroclor 1232	5	Averaged	2.351	2.231	2.471	1665700.000	1211800.000	-8.1782

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19709060ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:33

Instrument ID: 60GCSG GC Column: Col 2
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000081.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375743

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	1.796	1.676	1.916	22278500.00	12555675.00	-11.9347
Aroclor 1232	2	Averaged	2.014	1.895	2.135	15022950.00	13650850.00	10.1724
Aroclor 1232	3	Averaged	2.233	2.113	2.353	18242400.00	16306200.00	-1.7221
Aroclor 1232	4	Averaged	2.302	2.181	2.421	13431300.00	12135475.00	0.4357
Aroclor 1232	5	Averaged	2.359	2.238	2.478	21684000.00	17876525.00	-8.5060

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19709032ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:41

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000082.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375743

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	1.91	1.79	2.03	11322650.00	14554325.00	-7.1273
Aroclor 1242	2	Averaged	2.067	1.946	2.186	4326975.000	4208400.000	-0.0410
Aroclor 1242	3	Averaged	2.239	2.12	2.36	4894100.000	5940375.000	-6.4164
Aroclor 1242	4	Averaged	2.368	2.249	2.489	5741650.000	4728425.000	-7.5388
Aroclor 1242	5	Averaged	2.485	2.365	2.605	5110350.000	4791800.000	-10.9704

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19709037ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/22/2021 Time: 00:41

Instrument ID: 60GCSG GC Column: Col 2 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000082.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375743

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	1.86	1.741	1.981	112837775.0	136760550.0	-7.6076
Aroclor 1242	2	Averaged	1.989	1.868	2.108	33153375.00	25375700.00	-10.1003
Aroclor 1242	3	Averaged	2.164	2.045	2.285	43495650.00	39707625.00	-1.4149
Aroclor 1242	4	Averaged	2.358	2.238	2.478	38677750.00	29247400.00	-9.4015
Aroclor 1242	5	Averaged	2.494	2.374	2.614	37639725.00	41819275.00	-13.9500

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19709043ICV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:48

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000083.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375743

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	2.066	1.946	2.186	7521200.000	6846200.000	-6.3271
Aroclor 1248	2	Averaged	2.175	2.055	2.295	8185225.000	7670475.000	-7.2695
Aroclor 1248	3	Averaged	2.391	2.271	2.511	9850050.000	10216025.00	-6.2591
Aroclor 1248	4	Averaged	2.484	2.365	2.605	7900500.000	7335900.000	-8.0118
Aroclor 1248	5	Averaged	2.711	2.591	2.831	5895125.000	5679375.000	-5.0720

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19709035ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/22/2021 Time: 00:48

Instrument ID: 60GCSG GC Column: Col 2 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000083.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375743

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	2.013	1.895	2.135	58058825.00	41245425.00	-10.5436
Aroclor 1248	2	Averaged	2.164	2.045	2.285	74406450.00	57398250.00	-10.3808
Aroclor 1248	3	Averaged	2.3	2.182	2.422	38664850.00	27009600.00	-11.1029
Aroclor 1248	4	Averaged	2.357	2.238	2.478	62073200.00	47124450.00	-10.8562
Aroclor 1248	5	Averaged	2.71	2.589	2.829	35133275.00	30375375.00	-6.0203

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/29/2021 11:57 Lab Sample ID: 2948685

Date Analyzed: 07/29/2021 18:22 Lab File ID: 072921-1.B\0729210000031.D

Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375743

Date Extracted: 07/29/2021 11:57 Lab Sample ID: 2948686

Date Analyzed: 07/29/2021 18:30 Lab File ID: 072921-1.B\0729210000032.D

Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	3.0	
11096-82-5	PCB-1260 (Aroclor 1260)	3.8	

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 60375838

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Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

August 30, 2021

Justin Carter
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on July 24, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

(b) (6) [redacted]

Jeffrey Shopper
jeff.shopper@pacelabs.com
1(913)563-1408
Project Manager

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL
Jacquelin Lee, Burns & McDonnell

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CERTIFICATIONS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 20-020-0
Arkansas Drinking Water
Illinois Certification #: 2000302021-3
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212020-2
Oklahoma Certification #: 9205/9935
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-19-12
Utah Certification #: KS000212019-9
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

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SAMPLE SUMMARY

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60375838001	GB-42/2-3	Solid	07/22/21 14:18	07/24/21 04:00
60375838002	GB-42/3-5	Solid	07/22/21 14:25	07/24/21 04:00
60375838003	GB-35/2-3	Solid	07/22/21 14:40	07/24/21 04:00
60375838004	GB-35/3-5	Solid	07/22/21 14:45	07/24/21 04:00
60375838005	GB-35/3-5D	Solid	07/22/21 14:45	07/24/21 04:00
60375838006	GB-28/1.5-2.5	Solid	07/22/21 15:27	07/24/21 04:00
60375838007	GB-28/3-5	Solid	07/22/21 15:33	07/24/21 04:00
60375838008	GB-21/0.5-2.5	Solid	07/23/21 07:41	07/24/21 04:00
60375838009	GB-21/3-5	Solid	07/23/21 07:45	07/24/21 04:00
60375838010	GB-14/0-2	Solid	07/23/21 08:45	07/24/21 04:00
60375838011	GB-14/3-5	Solid	07/23/21 08:50	07/24/21 04:00
60375838012	GB-07/2.5-3.5	Solid	07/23/21 09:13	07/24/21 04:00
60375838013	GB-07/7-9	Solid	07/23/21 09:36	07/24/21 04:00
60375838014	GB-06/2-3	Solid	07/23/21 10:05	07/24/21 04:00
60375838015	GB-06/3-5	Solid	07/23/21 10:10	07/24/21 04:00
60375838016	GB-13/0-2	Solid	07/23/21 10:32	07/24/21 04:00
60375838017	GB-13/3-5	Solid	07/23/21 10:36	07/24/21 04:00
60375838018	GB-20/0-2	Solid	07/23/21 11:02	07/24/21 04:00
60375838019	GB-20/3-4	Solid	07/23/21 11:07	07/24/21 04:00
60375838020	GB-27/0.5-2	Solid	07/23/21 11:35	07/24/21 04:00
60375838021	GB-27/3-5	Solid	07/23/21 11:39	07/24/21 04:00
60375838022	GB-08/2.5-3.5	Solid	07/23/21 13:07	07/24/21 04:00
60375838023	GB-08/4-6	Solid	07/23/21 13:12	07/24/21 04:00
60375838024	GB-09/1.5-3	Solid	07/23/21 13:33	07/24/21 04:00
60375838025	GB-09/4-6	Solid	07/23/21 13:37	07/24/21 04:00
60375838026	TB-3	Water	07/23/21 08:00	07/24/21 04:00
60375838027	RB-03	Water	07/21/21 15:10	07/24/21 04:00
60375838028	RB-04	Water	07/22/21 15:15	07/24/21 04:00
60375838029	RB-05	Water	07/23/21 08:05	07/24/21 04:00
60375838030	TB-4	Water	07/23/21 08:05	07/24/21 04:00

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SAMPLE ANALYTE COUNT

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60375838001	GB-42/2-3	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838002	GB-42/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838003	GB-35/2-3	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838004	GB-35/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838005	GB-35/3-5D	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838006	GB-28/1.5-2.5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838007	GB-28/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838008	GB-21/0.5-2.5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838009	GB-21/3-5	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838010	GB-14/0-2	EPA 8082	AJA1	8	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838011	**GB-14/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838012	**GB-07/2.5-3.5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838013	**GB-07/7-9**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838014	**GB-06/2-3**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838015	**GB-06/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838016	**GB-13/0-2**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838017	**GB-13/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838018	**GB-20/0-2**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838019	**GB-20/3-4**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838020	**GB-27/0.5-2**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838021	**GB-27/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838022	**GB-08/2.5-3.5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838023	**GB-08/4-6**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838024	**GB-09/1.5-3**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838025	**GB-09/4-6**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375838026	**TB-3**	EPA 5030B/8260	PGH	87	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60375838027	**RB-03**	EPA 8082	AJA1	8	PASI-K
		EPA 8270C by SIM	JMT	18	PASI-K
		EPA 5030B/8260	PGH	87	PASI-K
		EPA 8260	VNH	5	PASI-K
60375838028	**RB-04**	EPA 8082	AJA1	8	PASI-K
		EPA 8270C by SIM	JMT	18	PASI-K
		EPA 5030B/8260	PGH	87	PASI-K
		EPA 8260	VNH	5	PASI-K
60375838029	**RB-05**	EPA 8082	AJA1	8	PASI-K
		EPA 8270C by SIM	JMT	18	PASI-K
		EPA 5030B/8260	PGH	87	PASI-K
		EPA 8260	VNH	5	PASI-K
60375838030	**TB-4**	EPA 5030B/8260	PGH	87	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
25 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 8082**
Description: 8082 GCS PCB, LV
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
3 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 735020

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2948685)
  - PCB-1260 (Aroclor 1260)
- LCS (Lab ID: 2948686)
  - PCB-1260 (Aroclor 1260)
- RB-03 (Lab ID: 60375838027)
  - PCB-1260 (Aroclor 1260)
- RB-04 (Lab ID: 60375838028)
  - PCB-1260 (Aroclor 1260)
- RB-05 (Lab ID: 60375838029)
  - PCB-1260 (Aroclor 1260)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
25 samples were analyzed for EPA 6020 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 735728

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375838021

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2951049)
  - Antimony
- MSD (Lab ID: 2951050)
  - Antimony

QC Batch: 736159

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375626032

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2952437)
  - Antimony
- MSD (Lab ID: 2952438)
  - Antimony

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BURNS & MCDONNELL
Date: August 30, 2021

QC Batch: 736159

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375626032

R1: RPD value was outside control limits.

- MSD (Lab ID: 2952438)
  - Antimony
  - Arsenic
  - Copper
  - Lead

QC Batch: 736298

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375692008,60375838013

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2952918)
  - Antimony
- MS (Lab ID: 2952920)
  - Antimony
- MSD (Lab ID: 2952919)
  - Antimony
- MSD (Lab ID: 2952921)
  - Antimony

R1: RPD value was outside control limits.

- MSD (Lab ID: 2952921)
  - Antimony

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
23 samples were analyzed for EPA 8270 by SIM by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 734192

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375838013

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2946218)
  - Naphthalene
- MSD (Lab ID: 2946219)
  - Acenaphthene
  - Fluoranthene
  - Fluorene
  - Naphthalene
  - Phenanthrene

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 30, 2021

QC Batch: 734192

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375838013

R1: RPD value was outside control limits.

- MSD (Lab ID: 2946219)
  - Acenaphthene
  - Fluorene
  - Naphthalene

Additional Comments:

Analyte Comments:

QC Batch: 734193

D4: Sample was diluted due to the presence of high levels of target analytes.

- GB-13/0-2 (Lab ID: 60375838016)
  - 2-Fluorobiphenyl (S)

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 8270**
Description: 8270 MSSV DRO/ORO
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
4 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 8270C by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
3 samples were analyzed for EPA 8270C by SIM by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
4 samples were analyzed for EPA 8260B by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035A/5030 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 734679

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375838013

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2947594)
  - 1,1,2,2-Tetrachloroethane
  - Iodomethane
  - Methyl acetate
- MSD (Lab ID: 2947595)
  - 1,1,2,2-Tetrachloroethane
  - 1,1-Dichloroethene
  - Methyl acetate
  - Trichloroethene

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: August 30, 2021

QC Batch: 734679

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375838013

R1: RPD value was outside control limits.

- MSD (Lab ID: 2947595)
  - Iodomethane

Additional Comments:

Analyte Comments:

QC Batch: 734679

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 2947592)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-07/2.5-3.5 (Lab ID: 60375838012)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-07/7-9 (Lab ID: 60375838013)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-14/0-2 (Lab ID: 60375838010)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-14/3-5 (Lab ID: 60375838011)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- LCS (Lab ID: 2947593)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MS (Lab ID: 2947594)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MSD (Lab ID: 2947595)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
5 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 735565

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 8260**
Description: 8260 MSV GRO and Oxygenates
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
3 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 734716

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Method: **EPA 8260**
Description: 8260 MSV GRO and Oxygenates
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
4 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-42/2-3 **Lab ID: 60375838001** Collected: 07/22/21 14:18 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10**	ug/kg	40.1	1	07/26/21 12:05	07/28/21 04:24	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.1	1	07/26/21 12:05	07/28/21 04:24	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.1	1	07/26/21 12:05	07/28/21 04:24	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.1	1	07/26/21 12:05	07/28/21 04:24	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.1	1	07/26/21 12:05	07/28/21 04:24	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.1	1	07/26/21 12:05	07/28/21 04:24	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.1	1	07/26/21 12:05	07/28/21 04:24	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	91	%	35-120	1	07/26/21 12:05	07/28/21 04:24	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.59**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 13:50	7440-36-0	
Arsenic	**7.8**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 13:50	7440-38-2	
Copper	**15.6**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 13:50	7440-50-8	
Lead	**9.6**	mg/kg	0.55	10	08/05/21 08:34	08/06/21 13:50	7439-92-1	
Zinc	**48.9**	mg/kg	5.5	10	08/05/21 08:34	08/06/21 13:50	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.4**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	83-32-9	
Acenaphthylene	**<1.4**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	208-96-8	
Anthracene	**<1.6**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	120-12-7	
Benzo(a)anthracene	**<1.8**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	56-55-3	
Benzo(a)pyrene	**<1.4**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	50-32-8	
Benzo(b)fluoranthene	**<1.9**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	205-99-2	
Benzo(g,h,i)perylene	**<1.7**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	207-08-9	
Chrysene	**<1.8**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	53-70-3	
Fluoranthene	**<2.9**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	206-44-0	
Fluorene	**<1.5**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	193-39-5	
Naphthalene	**<1.7**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	91-20-3	
Phenanthrene	**<3.2**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	85-01-8	
Pyrene	**<2.1**	ug/kg	3.9	1	07/26/21 13:53	07/28/21 20:27	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	85	%	40-120	1	07/26/21 13:53	07/28/21 20:27	321-60-8	
Terphenyl-d14 (S)	90	%	45-130	1	07/26/21 13:53	07/28/21 20:27	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.9**	%	0.50	1		07/26/21 13:31		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-42/3-5 **Lab ID: 60375838002** Collected: 07/22/21 14:25 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 04:42	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 04:42	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 04:42	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 04:42	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 04:42	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 04:42	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 04:42	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	86	%	35-120	1	07/26/21 12:05	07/28/21 04:42	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.52**	mg/kg	0.96	10	08/05/21 08:34	08/06/21 13:52	7440-36-0	
Arsenic	**2.6**	mg/kg	0.96	10	08/05/21 08:34	08/06/21 13:52	7440-38-2	
Copper	**12.6**	mg/kg	0.96	10	08/05/21 08:34	08/06/21 13:52	7440-50-8	
Lead	**8.0**	mg/kg	0.48	10	08/05/21 08:34	08/06/21 13:52	7439-92-1	
Zinc	**42.3**	mg/kg	4.8	10	08/05/21 08:34	08/06/21 13:52	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	50-32-8	
Benzo(b)fluoranthene	**<2.0**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	207-08-9	
Chrysene	**<1.9**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	53-70-3	
Fluoranthene	**<3.0**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	91-20-3	
Phenanthrene	**<3.3**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	85-01-8	
Pyrene	**<2.2**	ug/kg	4.1	1	07/26/21 13:53	07/28/21 20:44	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	40-120	1	07/26/21 13:53	07/28/21 20:44	321-60-8	
Terphenyl-d14 (S)	88	%	45-130	1	07/26/21 13:53	07/28/21 20:44	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.7**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-35/2-3 **Lab ID: 60375838003** Collected: 07/22/21 14:40 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.6**	ug/kg	38.8	1	07/26/21 12:05	07/28/21 05:00	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.2**	ug/kg	38.8	1	07/26/21 12:05	07/28/21 05:00	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.8	1	07/26/21 12:05	07/28/21 05:00	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.3**	ug/kg	38.8	1	07/26/21 12:05	07/28/21 05:00	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	38.8	1	07/26/21 12:05	07/28/21 05:00	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.8	1	07/26/21 12:05	07/28/21 05:00	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.6**	ug/kg	38.8	1	07/26/21 12:05	07/28/21 05:00	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	93	%	35-120	1	07/26/21 12:05	07/28/21 05:00	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.63**	mg/kg	1.2	10	08/05/21 08:34	08/06/21 13:53	7440-36-0	
Arsenic	**6.6**	mg/kg	1.2	10	08/05/21 08:34	08/06/21 13:53	7440-38-2	
Copper	**15.6**	mg/kg	1.2	10	08/05/21 08:34	08/06/21 13:53	7440-50-8	
Lead	**16.6**	mg/kg	0.58	10	08/05/21 08:34	08/06/21 13:53	7439-92-1	
Zinc	**46.0**	mg/kg	5.8	10	08/05/21 08:34	08/06/21 13:53	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	208-96-8	
Anthracene	**7.7**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	120-12-7	
Benzo(a)anthracene	**40.2**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	56-55-3	
Benzo(a)pyrene	**35.0**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	50-32-8	
Benzo(b)fluoranthene	**64.0**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	205-99-2	
Benzo(g,h,i)perylene	**27.1**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	191-24-2	
Benzo(k)fluoranthene	**19.6**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	207-08-9	
Chrysene	**44.4**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	218-01-9	
Dibenz(a,h)anthracene	**5.0**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	53-70-3	
Fluoranthene	**105**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	206-44-0	
Fluorene	**2.0J**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	86-73-7	
Indeno(1,2,3-cd)pyrene	**22.3**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	193-39-5	
Naphthalene	**<1.7**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	91-20-3	
Phenanthrene	**40.6**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	85-01-8	
Pyrene	**86.0**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 12:18	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	89	%	40-120	1	07/26/21 13:53	07/29/21 12:18	321-60-8	
Terphenyl-d14 (S)	110	%	45-130	1	07/26/21 13:53	07/29/21 12:18	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**17.1**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-35/3-5 **Lab ID: 60375838004** Collected: 07/22/21 14:45 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.8	1	07/26/21 12:05	07/28/21 05:17	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.8	1	07/26/21 12:05	07/28/21 05:17	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.8	1	07/26/21 12:05	07/28/21 05:17	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.8	1	07/26/21 12:05	07/28/21 05:17	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.8	1	07/26/21 12:05	07/28/21 05:17	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.8	1	07/26/21 12:05	07/28/21 05:17	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.8	1	07/26/21 12:05	07/28/21 05:17	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	89	%	35-120	1	07/26/21 12:05	07/28/21 05:17	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.62**	mg/kg	1.2	10	08/05/21 08:34	08/06/21 14:00	7440-36-0	
Arsenic	**14.9**	mg/kg	1.2	10	08/05/21 08:34	08/06/21 14:00	7440-38-2	
Copper	**22.1**	mg/kg	1.2	10	08/05/21 08:34	08/06/21 14:00	7440-50-8	
Lead	**17.6**	mg/kg	0.58	10	08/05/21 08:34	08/06/21 14:00	7439-92-1	
Zinc	**57.0**	mg/kg	5.8	10	08/05/21 08:34	08/06/21 14:00	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	50-32-8	
Benzo(b)fluoranthene	**2.3J**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	207-08-9	
Chrysene	**<2.0**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	53-70-3	
Fluoranthene	**5.0**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	91-20-3	
Phenanthrene	**<3.4**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	85-01-8	
Pyrene	**3.9J**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:35	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	89	%	40-120	1	07/26/21 13:53	07/29/21 12:35	321-60-8	
Terphenyl-d14 (S)	104	%	45-130	1	07/26/21 13:53	07/29/21 12:35	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.9**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-35/3-5D **Lab ID: 60375838005** Collected: 07/22/21 14:45 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.0**	ug/kg	40.3	1	07/26/21 12:05	07/28/21 05:35	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.3	1	07/26/21 12:05	07/28/21 05:35	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.3	1	07/26/21 12:05	07/28/21 05:35	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.3	1	07/26/21 12:05	07/28/21 05:35	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.3	1	07/26/21 12:05	07/28/21 05:35	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.3	1	07/26/21 12:05	07/28/21 05:35	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.3	1	07/26/21 12:05	07/28/21 05:35	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	93	%	35-120	1	07/26/21 12:05	07/28/21 05:35	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.59**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:02	7440-36-0	
Arsenic	**6.2**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:02	7440-38-2	
Copper	**12.9**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:02	7440-50-8	
Lead	**10.7**	mg/kg	0.55	10	08/05/21 08:34	08/06/21 14:02	7439-92-1	
Zinc	**47.3**	mg/kg	5.5	10	08/05/21 08:34	08/06/21 14:02	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	120-12-7	
Benzo(a)anthracene	**7.6**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	56-55-3	
Benzo(a)pyrene	**6.1**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	50-32-8	
Benzo(b)fluoranthene	**12.0**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	205-99-2	
Benzo(g,h,i)perylene	**5.2**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	191-24-2	
Benzo(k)fluoranthene	**3.5J**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	207-08-9	
Chrysene	**8.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	53-70-3	
Fluoranthene	**24.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.1**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	91-20-3	
Phenanthrene	**11.0**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	85-01-8	
Pyrene	**19.3**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 12:52	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%	40-120	1	07/26/21 13:53	07/29/21 12:52	321-60-8	
Terphenyl-d14 (S)	92	%	45-130	1	07/26/21 13:53	07/29/21 12:52	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.6**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-28/1.5-2.5 **Lab ID: 60375838006** Collected: 07/22/21 15:27 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.2**	ug/kg	41.2	1	07/26/21 12:05	07/28/21 05:53	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.8**	ug/kg	41.2	1	07/26/21 12:05	07/28/21 05:53	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.2	1	07/26/21 12:05	07/28/21 05:53	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.9**	ug/kg	41.2	1	07/26/21 12:05	07/28/21 05:53	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.2	1	07/26/21 12:05	07/28/21 05:53	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.2	1	07/26/21 12:05	07/28/21 05:53	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	41.2	1	07/26/21 12:05	07/28/21 05:53	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	90	%	35-120	1	07/26/21 12:05	07/28/21 05:53	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.62**	mg/kg	1.2	10	08/05/21 08:34	08/06/21 14:03	7440-36-0	
Arsenic	**6.9**	mg/kg	1.2	10	08/05/21 08:34	08/06/21 14:03	7440-38-2	
Copper	**14.6**	mg/kg	1.2	10	08/05/21 08:34	08/06/21 14:03	7440-50-8	
Lead	**11.5**	mg/kg	0.58	10	08/05/21 08:34	08/06/21 14:03	7439-92-1	
Zinc	**46.0**	mg/kg	5.8	10	08/05/21 08:34	08/06/21 14:03	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	120-12-7	
Benzo(a)anthracene	**7.4**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	50-32-8	
Benzo(b)fluoranthene	**14.0**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	205-99-2	
Benzo(g,h,i)perylene	**6.1**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	191-24-2	
Benzo(k)fluoranthene	**4.3**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	207-08-9	
Chrysene	**9.9**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	53-70-3	
Fluoranthene	**24.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	91-20-3	
Phenanthrene	**8.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	85-01-8	
Pyrene	**19.6**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 13:09	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	86	%	40-120	1	07/26/21 13:53	07/29/21 13:09	321-60-8	
Terphenyl-d14 (S)	102	%	45-130	1	07/26/21 13:53	07/29/21 13:09	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.0**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-28/3-5 **Lab ID: 60375838007** Collected: 07/22/21 15:33 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.5**	ug/kg	38.4	1	07/26/21 12:05	07/28/21 06:11	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.1**	ug/kg	38.4	1	07/26/21 12:05	07/28/21 06:11	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.4	1	07/26/21 12:05	07/28/21 06:11	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.2**	ug/kg	38.4	1	07/26/21 12:05	07/28/21 06:11	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	38.4	1	07/26/21 12:05	07/28/21 06:11	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.4	1	07/26/21 12:05	07/28/21 06:11	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.6**	ug/kg	38.4	1	07/26/21 12:05	07/28/21 06:11	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	105	%	35-120	1	07/26/21 12:05	07/28/21 06:11	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.48**	mg/kg	0.88	10	08/05/21 08:34	08/06/21 14:05	7440-36-0	
Arsenic	**5.2**	mg/kg	0.88	10	08/05/21 08:34	08/06/21 14:05	7440-38-2	
Copper	**13.2**	mg/kg	0.88	10	08/05/21 08:34	08/06/21 14:05	7440-50-8	
Lead	**11.7**	mg/kg	0.44	10	08/05/21 08:34	08/06/21 14:05	7439-92-1	
Zinc	**31.8**	mg/kg	4.4	10	08/05/21 08:34	08/06/21 14:05	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	208-96-8	
Anthracene	**<1.6**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	120-12-7	
Benzo(a)anthracene	**10.3**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	56-55-3	
Benzo(a)pyrene	**9.7**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	50-32-8	
Benzo(b)fluoranthene	**20.0**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	205-99-2	
Benzo(g,h,i)perylene	**8.1**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	191-24-2	
Benzo(k)fluoranthene	**6.2**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	207-08-9	
Chrysene	**14.2**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	53-70-3	
Fluoranthene	**35.9**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	206-44-0	
Fluorene	**<1.5**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	86-73-7	
Indeno(1,2,3-cd)pyrene	**6.5**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	193-39-5	
Naphthalene	**<1.7**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	91-20-3	
Phenanthrene	**11.6**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	85-01-8	
Pyrene	**27.9**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 13:26	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	40-120	1	07/26/21 13:53	07/29/21 13:26	321-60-8	
Terphenyl-d14 (S)	97	%	45-130	1	07/26/21 13:53	07/29/21 13:26	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.2**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-21/0.5-2.5 **Lab ID: 60375838008** Collected: 07/23/21 07:41 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 06:29	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 06:29	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 06:29	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 06:29	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 06:29	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 06:29	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.8	1	07/26/21 12:05	07/28/21 06:29	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	96	%	35-120	1	07/26/21 12:05	07/28/21 06:29	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.58**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:07	7440-36-0	
Arsenic	**6.5**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:07	7440-38-2	
Copper	**13.6**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:07	7440-50-8	
Lead	**11.5**	mg/kg	0.54	10	08/05/21 08:34	08/06/21 14:07	7439-92-1	
Zinc	**33.9**	mg/kg	5.4	10	08/05/21 08:34	08/06/21 14:07	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**10.6**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	83-32-9	
Acenaphthylene	**3.4J**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	208-96-8	
Anthracene	**20.6**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	120-12-7	
Benzo(a)anthracene	**243**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	56-55-3	
Benzo(a)pyrene	**295**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	50-32-8	
Benzo(b)fluoranthene	**566**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	205-99-2	
Benzo(g,h,i)perylene	**255**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	191-24-2	
Benzo(k)fluoranthene	**154**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	207-08-9	
Chrysene	**407**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	218-01-9	
Dibenz(a,h)anthracene	**49.4**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	53-70-3	
Fluoranthene	**639**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	206-44-0	
Fluorene	**14.0**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	86-73-7	
Indeno(1,2,3-cd)pyrene	**216**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	91-20-3	
Phenanthrene	**288**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	85-01-8	
Pyrene	**610**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 13:43	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	84	%	40-120	1	07/26/21 13:53	07/29/21 13:43	321-60-8	
Terphenyl-d14 (S)	102	%	45-130	1	07/26/21 13:53	07/29/21 13:43	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.8**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-21/3-5 **Lab ID: 60375838009** Collected: 07/23/21 07:45 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.3	1	07/26/21 12:05	07/28/21 06:47	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.3	1	07/26/21 12:05	07/28/21 06:47	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.3	1	07/26/21 12:05	07/28/21 06:47	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.3	1	07/26/21 12:05	07/28/21 06:47	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.3	1	07/26/21 12:05	07/28/21 06:47	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.3	1	07/26/21 12:05	07/28/21 06:47	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.7**	ug/kg	39.3	1	07/26/21 12:05	07/28/21 06:47	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	99	%	35-120	1	07/26/21 12:05	07/28/21 06:47	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.61**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:08	7440-36-0	
Arsenic	**5.4**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:08	7440-38-2	
Copper	**11.1**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:08	7440-50-8	
Lead	**13.8**	mg/kg	0.56	10	08/05/21 08:34	08/06/21 14:08	7439-92-1	
Zinc	**30.7**	mg/kg	5.6	10	08/05/21 08:34	08/06/21 14:08	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**2.4J**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	83-32-9	
Acenaphthylene	**<1.4**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	208-96-8	
Anthracene	**5.6**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	120-12-7	
Benzo(a)anthracene	**48.5**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	56-55-3	
Benzo(a)pyrene	**56.9**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	50-32-8	
Benzo(b)fluoranthene	**127**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	205-99-2	
Benzo(g,h,i)perylene	**49.3**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	191-24-2	
Benzo(k)fluoranthene	**43.6**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	207-08-9	
Chrysene	**73.1**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	218-01-9	
Dibenz(a,h)anthracene	**9.6**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	53-70-3	
Fluoranthene	**147**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	206-44-0	
Fluorene	**3.1J**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	86-73-7	
Indeno(1,2,3-cd)pyrene	**42.3**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	193-39-5	
Naphthalene	**<1.6**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	91-20-3	
Phenanthrene	**60.6**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	85-01-8	
Pyrene	**119**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:01	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	82	%	40-120	1	07/26/21 13:53	07/29/21 14:01	321-60-8	
Terphenyl-d14 (S)	97	%	45-130	1	07/26/21 13:53	07/29/21 14:01	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**17.8**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-14/0-2 **Lab ID: 60375838010** Collected: 07/23/21 08:45 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10**	ug/kg	40.1	1	07/26/21 12:05	07/29/21 22:50	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	40.1	1	07/26/21 12:05	07/29/21 22:50	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.1	1	07/26/21 12:05	07/29/21 22:50	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	40.1	1	07/26/21 12:05	07/29/21 22:50	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	40.1	1	07/26/21 12:05	07/29/21 22:50	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.1	1	07/26/21 12:05	07/29/21 22:50	11097-69-1	
PCB-1260 (Aroclor 1260)	**43.3**	ug/kg	40.1	1	07/26/21 12:05	07/29/21 22:50	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	79	%	35-120	1	07/26/21 12:05	07/29/21 22:50	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.58**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:10	7440-36-0	
Arsenic	**6.3**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:10	7440-38-2	
Copper	**14.6**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:10	7440-50-8	
Lead	**13.1**	mg/kg	0.54	10	08/05/21 08:34	08/06/21 14:10	7439-92-1	
Zinc	**39.0**	mg/kg	5.4	10	08/05/21 08:34	08/06/21 14:10	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**7.1J**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	83-32-9	
Acenaphthylene	**<2.9**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	208-96-8	
Anthracene	**15.5**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	120-12-7	
Benzo(a)anthracene	**114**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	56-55-3	
Benzo(a)pyrene	**128**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	50-32-8	
Benzo(b)fluoranthene	**252**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	205-99-2	
Benzo(g,h,i)perylene	**119**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	191-24-2	
Benzo(k)fluoranthene	**78.0**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	207-08-9	
Chrysene	**159**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	218-01-9	
Dibenz(a,h)anthracene	**22.8**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	53-70-3	
Fluoranthene	**309**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	206-44-0	
Fluorene	**7.4J**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	86-73-7	
Indeno(1,2,3-cd)pyrene	**94.6**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	193-39-5	
Naphthalene	**<3.3**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	91-20-3	
Phenanthrene	**133**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	85-01-8	
Pyrene	**248**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 17:44	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	66	%	40-120	1	07/26/21 15:31	07/29/21 17:44	321-60-8	
Terphenyl-d14 (S)	75	%	45-130	1	07/26/21 15:31	07/29/21 17:44	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**23.0**	mg/kg	17.8	1	07/26/21 15:31	07/28/21 18:49		
TPH-DRO	**9.5J**	mg/kg	17.8	1	07/26/21 15:31	07/28/21 18:49		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-14/0-2 **Lab ID: 60375838010** Collected: 07/23/21 08:45 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	68	%	30-120	1	07/26/21 15:31	07/28/21 18:49	4165-60-0	
2-Fluorobiphenyl (S)	70	%	40-120	1	07/26/21 15:31	07/28/21 18:49	321-60-8	
Terphenyl-d14 (S)	66	%	45-120	1	07/26/21 15:31	07/28/21 18:49	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**46.6**	ug/kg	19.5	1	07/28/21 08:05	07/28/21 10:58	67-64-1	
Acrolein	**<73.7**	ug/kg	97.4	1	07/28/21 08:05	07/28/21 10:58	107-02-8	
Acrylonitrile	**<3.1**	ug/kg	97.4	1	07/28/21 08:05	07/28/21 10:58	107-13-1	
Benzene	**<0.48**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	71-43-2	
Bromobenzene	**<0.91**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	108-86-1	
Bromochloromethane	**<0.59**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	74-97-5	
Bromodichloromethane	**<0.59**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	75-27-4	
Bromoform	**<0.56**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	75-25-2	
Bromomethane	**<2.9**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	74-83-9	
2-Butanone (MEK)	**8.4J**	ug/kg	9.7	1	07/28/21 08:05	07/28/21 10:58	78-93-3	
n-Butylbenzene	**<0.63**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	104-51-8	
sec-Butylbenzene	**<0.71**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	135-98-8	
tert-Butylbenzene	**<0.86**	ug/kg	24.4	1	07/28/21 08:05	07/28/21 10:58	98-06-6	
Carbon disulfide	**<0.63**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	75-15-0	
Carbon tetrachloride	**<0.84**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	56-23-5	
Chlorobenzene	**<0.61**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	108-90-7	
Chloroethane	**<1.5**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	75-00-3	
Chloroform	**<0.48**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	67-66-3	
Chloromethane	**<0.78**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	74-87-3	
2-Chlorotoluene	**<0.71**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	95-49-8	
4-Chlorotoluene	**<0.58**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	106-43-4	
Cyclohexanone	**<12.4**	ug/kg	19.5	1	07/28/21 08:05	07/28/21 10:58	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/kg	9.7	1	07/28/21 08:05	07/28/21 10:58	96-12-8	
Dibromochloromethane	**<0.63**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	124-48-1	
1,2-Dibromoethane (EDB)	**<0.52**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	106-93-4	
Dibromomethane	**<0.58**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	74-95-3	
1,2-Dichlorobenzene	**<0.61**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	95-50-1	
1,3-Dichlorobenzene	**<0.70**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	541-73-1	
1,4-Dichlorobenzene	**<0.79**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	106-46-7	
1,1-Dichloroethane	**<0.38**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	75-34-3	
1,2-Dichloroethane	**<0.39**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	540-59-0	
1,1-Dichloroethene	**<0.62**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	75-35-4	
cis-1,2-Dichloroethene	**<0.42**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	156-59-2	
trans-1,2-Dichloroethene	**<0.66**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	156-60-5	
1,2-Dichloropropane	**<0.95**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	78-87-5	
1,3-Dichloropropane	**<0.67**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	142-28-9	
2,2-Dichloropropane	**<0.46**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	594-20-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-14/0-2 **Lab ID: 60375838010** Collected: 07/23/21 08:45 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<0.88**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	563-58-6	
cis-1,3-Dichloropropene	**<0.52**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	10061-01-5	
trans-1,3-Dichloropropene	**<0.45**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.55**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	60-29-7	
Ethylbenzene	**<0.45**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	100-41-4	
n-Heptane	**<4.4**	ug/kg	9.7	1	07/28/21 08:05	07/28/21 10:58	142-82-5	
Hexachloro-1,3-butadiene	**<0.83**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	87-68-3	
n-Hexane	**<0.67**	ug/kg	9.7	1	07/28/21 08:05	07/28/21 10:58	110-54-3	
2-Hexanone	**<2.4**	ug/kg	19.5	1	07/28/21 08:05	07/28/21 10:58	591-78-6	
Iodomethane	**<1.5**	ug/kg	9.7	1	07/28/21 08:05	07/28/21 10:58	74-88-4	
Isopropylbenzene (Cumene)	**<0.56**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	98-82-8	
p-Isopropyltoluene	**<0.67**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	99-87-6	
Methyl acetate	**<1.1**	ug/kg	97.4	1	07/28/21 08:05	07/28/21 10:58	79-20-9	
Methylene Chloride	**<2.7**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.0**	ug/kg	9.7	1	07/28/21 08:05	07/28/21 10:58	108-10-1	
Methyl-tert-butyl ether	**<0.47**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	1634-04-4	
Naphthalene	**<0.80**	ug/kg	9.7	1	07/28/21 08:05	07/28/21 10:58	91-20-3	
n-Propylbenzene	**<0.78**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	103-65-1	
Styrene	**<0.57**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.99**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.97**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	79-34-5	
Tetrachloroethene	**<0.40**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	127-18-4	
Tetrahydrofuran	**<0.76**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	109-99-9	N2
Toluene	**<0.34**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	108-88-3	
1,2,3-Trichlorobenzene	**<0.78**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	87-61-6	
1,2,4-Trichlorobenzene	**<0.78**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	120-82-1	
1,1,1-Trichloroethane	**<0.73**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	71-55-6	
1,1,2-Trichloroethane	**<0.61**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	79-00-5	
Trichloroethene	**<0.71**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	79-01-6	
Trichlorofluoromethane	**<0.60**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	75-69-4	
1,2,3-Trichloropropane	**<2.1**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.9**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.9**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	526-73-8	
1,2,4-Trimethylbenzene	**<0.65**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	95-63-6	
1,3,5-Trimethylbenzene	**<0.61**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	108-67-8	
Vinyl acetate	**<0.55**	ug/kg	97.4	1	07/28/21 08:05	07/28/21 10:58	108-05-4	
Vinyl chloride	**<0.65**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	1330-20-7	
m&p-Xylene	**<0.62**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	179601-23-1	
o-Xylene	**<0.36**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 10:58	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%	80-120	1	07/28/21 08:05	07/28/21 10:58	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120	1	07/28/21 08:05	07/28/21 10:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/28/21 08:05	07/28/21 10:58	2199-69-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-14/0-2 **Lab ID: 60375838010** Collected: 07/23/21 08:45 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City							
TPH-GRO	**<0.053**	mg/kg	0.49	1	07/28/21 08:05	07/28/21 10:58		
Surrogates								
Toluene-d8 (S)	101	%	78-122	1	07/28/21 08:05	07/28/21 10:58	2037-26-5	
4-Bromofluorobenzene (S)	103	%	69-133	1	07/28/21 08:05	07/28/21 10:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/28/21 08:05	07/28/21 10:58	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**18.4**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-14/3-5 **Lab ID: 60375838011** Collected: 07/23/21 08:50 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.9	1	07/26/21 12:05	07/29/21 23:08	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.9	1	07/26/21 12:05	07/29/21 23:08	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	39.9	1	07/26/21 12:05	07/29/21 23:08	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.9	1	07/26/21 12:05	07/29/21 23:08	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.9	1	07/26/21 12:05	07/29/21 23:08	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.9	1	07/26/21 12:05	07/29/21 23:08	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	39.9	1	07/26/21 12:05	07/29/21 23:08	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	78	%	35-120	1	07/26/21 12:05	07/29/21 23:08	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.57**	mg/kg	1.0	10	08/05/21 08:34	08/06/21 14:12	7440-36-0	
Arsenic	**5.4**	mg/kg	1.0	10	08/05/21 08:34	08/06/21 14:12	7440-38-2	
Copper	**11.2**	mg/kg	1.0	10	08/05/21 08:34	08/06/21 14:12	7440-50-8	
Lead	**13.2**	mg/kg	0.52	10	08/05/21 08:34	08/06/21 14:12	7439-92-1	
Zinc	**35.8**	mg/kg	5.2	10	08/05/21 08:34	08/06/21 14:12	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<2.9**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	83-32-9	
Acenaphthylene	**<2.9**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	208-96-8	
Anthracene	**<3.2**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	120-12-7	
Benzo(a)anthracene	**<3.7**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	56-55-3	
Benzo(a)pyrene	**<2.8**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	50-32-8	
Benzo(b)fluoranthene	**4.6J**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	205-99-2	
Benzo(g,h,i)perylene	**<3.5**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	191-24-2	
Benzo(k)fluoranthene	**<4.3**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	207-08-9	
Chrysene	**<3.7**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	218-01-9	
Dibenz(a,h)anthracene	**<3.3**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	53-70-3	
Fluoranthene	**8.2**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	206-44-0	
Fluorene	**<3.0**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.3**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	193-39-5	
Naphthalene	**5.2J**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	91-20-3	
Phenanthrene	**<6.4**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	85-01-8	
Pyrene	**6.5J**	ug/kg	7.8	1	07/26/21 15:31	07/29/21 18:02	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	66	%	40-120	1	07/26/21 15:31	07/29/21 18:02	321-60-8	
Terphenyl-d14 (S)	71	%	45-130	1	07/26/21 15:31	07/29/21 18:02	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**8.5J**	mg/kg	17.7	1	07/26/21 15:31	07/28/21 19:09		
TPH-DRO	**2.4J**	mg/kg	17.7	1	07/26/21 15:31	07/28/21 19:09		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-14/3-5 **Lab ID: 60375838011** Collected: 07/23/21 08:50 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	73	%	30-120	1	07/26/21 15:31	07/28/21 19:09	4165-60-0	
2-Fluorobiphenyl (S)	71	%	40-120	1	07/26/21 15:31	07/28/21 19:09	321-60-8	
Terphenyl-d14 (S)	63	%	45-120	1	07/26/21 15:31	07/28/21 19:09	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**<15.9**	ug/kg	19.6	1	07/28/21 08:05	07/28/21 11:14	67-64-1	
Acrolein	**<74.2**	ug/kg	98.1	1	07/28/21 08:05	07/28/21 11:14	107-02-8	
Acrylonitrile	**<3.1**	ug/kg	98.1	1	07/28/21 08:05	07/28/21 11:14	107-13-1	
Benzene	**<0.48**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	71-43-2	
Bromobenzene	**<0.92**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	108-86-1	
Bromochloromethane	**<0.59**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	74-97-5	
Bromodichloromethane	**<0.59**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	75-27-4	
Bromoform	**<0.56**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	75-25-2	
Bromomethane	**<2.9**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	74-83-9	
2-Butanone (MEK)	**<3.3**	ug/kg	9.8	1	07/28/21 08:05	07/28/21 11:14	78-93-3	
n-Butylbenzene	**<0.64**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	104-51-8	
sec-Butylbenzene	**<0.72**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	135-98-8	
tert-Butylbenzene	**<0.87**	ug/kg	24.5	1	07/28/21 08:05	07/28/21 11:14	98-06-6	
Carbon disulfide	**<0.63**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	75-15-0	
Carbon tetrachloride	**<0.84**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	56-23-5	
Chlorobenzene	**<0.62**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	108-90-7	
Chloroethane	**<1.5**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	75-00-3	
Chloroform	**<0.48**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	67-66-3	
Chloromethane	**<0.78**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	74-87-3	
2-Chlorotoluene	**<0.71**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	95-49-8	
4-Chlorotoluene	**<0.59**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	106-43-4	
Cyclohexanone	**<12.5**	ug/kg	19.6	1	07/28/21 08:05	07/28/21 11:14	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/kg	9.8	1	07/28/21 08:05	07/28/21 11:14	96-12-8	
Dibromochloromethane	**<0.63**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	124-48-1	
1,2-Dibromoethane (EDB)	**<0.52**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	106-93-4	
Dibromomethane	**<0.59**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	74-95-3	
1,2-Dichlorobenzene	**<0.61**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	95-50-1	
1,3-Dichlorobenzene	**<0.71**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	541-73-1	
1,4-Dichlorobenzene	**<0.79**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	106-46-7	
1,1-Dichloroethane	**<0.38**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	75-34-3	
1,2-Dichloroethane	**<0.39**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	540-59-0	
1,1-Dichloroethene	**<0.63**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	75-35-4	
cis-1,2-Dichloroethene	**<0.42**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	156-59-2	
trans-1,2-Dichloroethene	**<0.67**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	156-60-5	
1,2-Dichloropropane	**<0.96**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	78-87-5	
1,3-Dichloropropane	**<0.68**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	142-28-9	
2,2-Dichloropropane	**<0.47**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	594-20-7	

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-14/3-5 **Lab ID: 60375838011** Collected: 07/23/21 08:50 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030							
	Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<0.88**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	563-58-6	
cis-1,3-Dichloropropene	**<0.52**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	10061-01-5	
trans-1,3-Dichloropropene	**<0.45**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.55**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	60-29-7	
Ethylbenzene	**<0.45**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	100-41-4	
n-Heptane	**<4.4**	ug/kg	9.8	1	07/28/21 08:05	07/28/21 11:14	142-82-5	
Hexachloro-1,3-butadiene	**<0.83**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	87-68-3	
n-Hexane	**<0.68**	ug/kg	9.8	1	07/28/21 08:05	07/28/21 11:14	110-54-3	
2-Hexanone	**<2.4**	ug/kg	19.6	1	07/28/21 08:05	07/28/21 11:14	591-78-6	
Iodomethane	**<1.5**	ug/kg	9.8	1	07/28/21 08:05	07/28/21 11:14	74-88-4	
Isopropylbenzene (Cumene)	**<0.56**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	98-82-8	
p-Isopropyltoluene	**<0.67**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	99-87-6	
Methyl acetate	**<1.1**	ug/kg	98.1	1	07/28/21 08:05	07/28/21 11:14	79-20-9	
Methylene Chloride	**<2.7**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.0**	ug/kg	9.8	1	07/28/21 08:05	07/28/21 11:14	108-10-1	
Methyl-tert-butyl ether	**<0.47**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	1634-04-4	
Naphthalene	**<0.81**	ug/kg	9.8	1	07/28/21 08:05	07/28/21 11:14	91-20-3	
n-Propylbenzene	**<0.79**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	103-65-1	
Styrene	**<0.58**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.98**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	79-34-5	
Tetrachloroethene	**<0.41**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	127-18-4	
Tetrahydrofuran	**<0.77**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	109-99-9	N2
Toluene	**<0.35**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	108-88-3	
1,2,3-Trichlorobenzene	**<0.78**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	87-61-6	
1,2,4-Trichlorobenzene	**<0.78**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	120-82-1	
1,1,1-Trichloroethane	**<0.73**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	71-55-6	
1,1,2-Trichloroethane	**<0.62**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	79-00-5	
Trichloroethene	**<0.71**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	79-01-6	
Trichlorofluoromethane	**<0.60**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	75-69-4	
1,2,3-Trichloropropane	**<2.1**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.9**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	76-13-1	N2
1,2,3-Trimethylbenzene	**<2.0**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	526-73-8	
1,2,4-Trimethylbenzene	**<0.66**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	95-63-6	
1,3,5-Trimethylbenzene	**<0.62**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	108-67-8	
Vinyl acetate	**<0.55**	ug/kg	98.1	1	07/28/21 08:05	07/28/21 11:14	108-05-4	
Vinyl chloride	**<0.65**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	1330-20-7	
m&p-Xylene	**<0.62**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	179601-23-1	
o-Xylene	**<0.37**	ug/kg	4.9	1	07/28/21 08:05	07/28/21 11:14	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%	80-120	1	07/28/21 08:05	07/28/21 11:14	2037-26-5	
4-Bromofluorobenzene (S)	104	%	80-120	1	07/28/21 08:05	07/28/21 11:14	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/28/21 08:05	07/28/21 11:14	2199-69-1	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-14/3-5 **Lab ID: 60375838011** Collected: 07/23/21 08:50 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City							
TPH-GRO	**<0.054**	mg/kg	0.49	1	07/28/21 08:05	07/28/21 11:14		
Surrogates								
Toluene-d8 (S)	102	%	78-122	1	07/28/21 08:05	07/28/21 11:14	2037-26-5	
4-Bromofluorobenzene (S)	104	%	69-133	1	07/28/21 08:05	07/28/21 11:14	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/28/21 08:05	07/28/21 11:14	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.2**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-07/2.5-3.5 **Lab ID: 60375838012** Collected: 07/23/21 09:13 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.6	1	07/26/21 12:05	07/29/21 23:26	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.6	1	07/26/21 12:05	07/29/21 23:26	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.6	1	07/26/21 12:05	07/29/21 23:26	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.6	1	07/26/21 12:05	07/29/21 23:26	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.6	1	07/26/21 12:05	07/29/21 23:26	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.6	1	07/26/21 12:05	07/29/21 23:26	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.6	1	07/26/21 12:05	07/29/21 23:26	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	82	%	35-120	1	07/26/21 12:05	07/29/21 23:26	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.61**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:13	7440-36-0	
Arsenic	**3.4**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:13	7440-38-2	
Copper	**9.5**	mg/kg	1.1	10	08/05/21 08:34	08/06/21 14:13	7440-50-8	
Lead	**8.1**	mg/kg	0.56	10	08/05/21 08:34	08/06/21 14:13	7439-92-1	
Zinc	**36.0**	mg/kg	5.6	10	08/05/21 08:34	08/06/21 14:13	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**35.7**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	83-32-9	
Acenaphthylene	**4.3J**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	208-96-8	
Anthracene	**78.8**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	120-12-7	
Benzo(a)anthracene	**163**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	56-55-3	
Benzo(a)pyrene	**126**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	50-32-8	
Benzo(b)fluoranthene	**203**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	205-99-2	
Benzo(g,h,i)perylene	**73.1**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	191-24-2	
Benzo(k)fluoranthene	**106**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	207-08-9	
Chrysene	**153**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	218-01-9	
Dibenz(a,h)anthracene	**17.3**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	53-70-3	
Fluoranthene	**394**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	206-44-0	
Fluorene	**20.5**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	86-73-7	
Indeno(1,2,3-cd)pyrene	**63.5**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	193-39-5	
Naphthalene	**4.8J**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	91-20-3	
Phenanthrene	**365**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	85-01-8	
Pyrene	**385**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:19	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	65	%	40-120	1	07/26/21 15:31	07/29/21 18:19	321-60-8	
Terphenyl-d14 (S)	72	%	45-130	1	07/26/21 15:31	07/29/21 18:19	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**16.5J**	mg/kg	18.9	1	07/26/21 15:31	07/28/21 19:29		
TPH-DRO	**8.0J**	mg/kg	18.9	1	07/26/21 15:31	07/28/21 19:29		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-07/2.5-3.5 **Lab ID: 60375838012** Collected: 07/23/21 09:13 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	71	%	30-120	1	07/26/21 15:31	07/28/21 19:29	4165-60-0	
2-Fluorobiphenyl (S)	73	%	40-120	1	07/26/21 15:31	07/28/21 19:29	321-60-8	
Terphenyl-d14 (S)	63	%	45-120	1	07/26/21 15:31	07/28/21 19:29	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**<14.6**	ug/kg	18.0	1	07/28/21 08:05	07/28/21 11:29	67-64-1	
Acrolein	**<67.9**	ug/kg	89.8	1	07/28/21 08:05	07/28/21 11:29	107-02-8	
Acrylonitrile	**<2.8**	ug/kg	89.8	1	07/28/21 08:05	07/28/21 11:29	107-13-1	
Benzene	**<0.44**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	71-43-2	
Bromobenzene	**<0.84**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	108-86-1	
Bromochloromethane	**<0.54**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	74-97-5	
Bromodichloromethane	**<0.54**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	75-27-4	
Bromoform	**<0.52**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	75-25-2	
Bromomethane	**<2.6**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	74-83-9	
2-Butanone (MEK)	**<3.1**	ug/kg	9.0	1	07/28/21 08:05	07/28/21 11:29	78-93-3	
n-Butylbenzene	**<0.58**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	104-51-8	
sec-Butylbenzene	**<0.66**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	135-98-8	
tert-Butylbenzene	**<0.79**	ug/kg	22.5	1	07/28/21 08:05	07/28/21 11:29	98-06-6	
Carbon disulfide	**<0.58**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	75-15-0	
Carbon tetrachloride	**<0.77**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	56-23-5	
Chlorobenzene	**<0.56**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	108-90-7	
Chloroethane	**<1.3**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	75-00-3	
Chloroform	**<0.44**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	67-66-3	
Chloromethane	**<0.72**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	74-87-3	
2-Chlorotoluene	**<0.65**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	95-49-8	
4-Chlorotoluene	**<0.54**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	106-43-4	
Cyclohexanone	**<11.4**	ug/kg	18.0	1	07/28/21 08:05	07/28/21 11:29	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.6**	ug/kg	9.0	1	07/28/21 08:05	07/28/21 11:29	96-12-8	
Dibromochloromethane	**<0.58**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	124-48-1	
1,2-Dibromoethane (EDB)	**<0.48**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	106-93-4	
Dibromomethane	**<0.54**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	74-95-3	
1,2-Dichlorobenzene	**<0.56**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	95-50-1	
1,3-Dichlorobenzene	**<0.65**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	541-73-1	
1,4-Dichlorobenzene	**<0.73**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	106-46-7	
1,1-Dichloroethane	**<0.35**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	75-34-3	
1,2-Dichloroethane	**<0.36**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	107-06-2	
1,2-Dichloroethene (Total)	**<1.0**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	540-59-0	
1,1-Dichloroethene	**<0.57**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	75-35-4	
cis-1,2-Dichloroethene	**<0.39**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	156-59-2	
trans-1,2-Dichloroethene	**<0.61**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	156-60-5	
1,2-Dichloropropane	**<0.88**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	78-87-5	
1,3-Dichloropropane	**<0.62**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	142-28-9	
2,2-Dichloropropane	**<0.43**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	594-20-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-07/2.5-3.5 **Lab ID: 60375838012** Collected: 07/23/21 09:13 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<0.81**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	563-58-6	
cis-1,3-Dichloropropene	**<0.48**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	10061-01-5	
trans-1,3-Dichloropropene	**<0.41**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.50**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	60-29-7	
Ethylbenzene	**<0.41**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	100-41-4	
n-Heptane	**<4.1**	ug/kg	9.0	1	07/28/21 08:05	07/28/21 11:29	142-82-5	
Hexachloro-1,3-butadiene	**<0.76**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	87-68-3	
n-Hexane	**<0.62**	ug/kg	9.0	1	07/28/21 08:05	07/28/21 11:29	110-54-3	
2-Hexanone	**<2.2**	ug/kg	18.0	1	07/28/21 08:05	07/28/21 11:29	591-78-6	
Iodomethane	**<1.4**	ug/kg	9.0	1	07/28/21 08:05	07/28/21 11:29	74-88-4	
Isopropylbenzene (Cumene)	**<0.51**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	98-82-8	
p-Isopropyltoluene	**<0.62**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	99-87-6	
Methyl acetate	**<0.97**	ug/kg	89.8	1	07/28/21 08:05	07/28/21 11:29	79-20-9	
Methylene Chloride	**<2.5**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.7**	ug/kg	9.0	1	07/28/21 08:05	07/28/21 11:29	108-10-1	
Methyl-tert-butyl ether	**<0.43**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	1634-04-4	
Naphthalene	**<0.74**	ug/kg	9.0	1	07/28/21 08:05	07/28/21 11:29	91-20-3	
n-Propylbenzene	**<0.72**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	103-65-1	
Styrene	**<0.53**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.92**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.90**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	79-34-5	
Tetrachloroethene	**<0.37**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	127-18-4	
Tetrahydrofuran	**<0.70**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	109-99-9	N2
Toluene	**0.34J**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	108-88-3	
1,2,3-Trichlorobenzene	**<0.72**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	87-61-6	
1,2,4-Trichlorobenzene	**<0.72**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	120-82-1	
1,1,1-Trichloroethane	**<0.67**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	71-55-6	
1,1,2-Trichloroethane	**<0.57**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	79-00-5	
Trichloroethene	**<0.65**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	79-01-6	
Trichlorofluoromethane	**<0.55**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	75-69-4	
1,2,3-Trichloropropane	**<1.9**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.5**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.8**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	526-73-8	
1,2,4-Trimethylbenzene	**<0.60**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	95-63-6	
1,3,5-Trimethylbenzene	**<0.56**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	108-67-8	
Vinyl acetate	**<0.51**	ug/kg	89.8	1	07/28/21 08:05	07/28/21 11:29	108-05-4	
Vinyl chloride	**<0.60**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	75-01-4	
Xylene (Total)	**<1.0**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	1330-20-7	
m&p-Xylene	**<0.57**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	179601-23-1	
o-Xylene	**<0.34**	ug/kg	4.5	1	07/28/21 08:05	07/28/21 11:29	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	80-120	1	07/28/21 08:05	07/28/21 11:29	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-120	1	07/28/21 08:05	07/28/21 11:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120	1	07/28/21 08:05	07/28/21 11:29	2199-69-1	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-07/2.5-3.5 **Lab ID: 60375838012** Collected: 07/23/21 09:13 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City							
TPH-GRO	**<0.049**	mg/kg	0.45	1	07/28/21 08:05	07/28/21 11:29		
Surrogates								
Toluene-d8 (S)	99	%	78-122	1	07/28/21 08:05	07/28/21 11:29	2037-26-5	
4-Bromofluorobenzene (S)	105	%	69-133	1	07/28/21 08:05	07/28/21 11:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120	1	07/28/21 08:05	07/28/21 11:29	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.9**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-07/7-9 **Lab ID: 60375838013** Collected: 07/23/21 09:36 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.6**	ug/kg	42.5	1	07/26/21 12:05	07/29/21 23:44	12674-11-2	
PCB-1221 (Aroclor 1221)	**<10.1**	ug/kg	42.5	1	07/26/21 12:05	07/29/21 23:44	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	42.5	1	07/26/21 12:05	07/29/21 23:44	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.2**	ug/kg	42.5	1	07/26/21 12:05	07/29/21 23:44	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	42.5	1	07/26/21 12:05	07/29/21 23:44	12672-29-6	
PCB-1254 (Aroclor 1254)	**<4.0**	ug/kg	42.5	1	07/26/21 12:05	07/29/21 23:44	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.4**	ug/kg	42.5	1	07/26/21 12:05	07/29/21 23:44	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	80	%	35-120	1	07/26/21 12:05	07/29/21 23:44	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.52**	mg/kg	0.97	10	08/05/21 11:25	08/06/21 14:28	7440-36-0	M1
Arsenic	**9.8**	mg/kg	0.97	10	08/05/21 11:25	08/06/21 14:28	7440-38-2	
Copper	**17.4**	mg/kg	0.97	10	08/05/21 11:25	08/06/21 14:28	7440-50-8	
Lead	**14.3**	mg/kg	0.48	10	08/05/21 11:25	08/06/21 14:28	7439-92-1	
Zinc	**55.1**	mg/kg	4.8	10	08/05/21 11:25	08/06/21 14:28	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**38.9**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	83-32-9	M1,R1
Acenaphthylene	**<3.1**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	208-96-8	
Anthracene	**5.8J**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	120-12-7	
Benzo(a)anthracene	**8.0J**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	56-55-3	
Benzo(a)pyrene	**6.3J**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	50-32-8	
Benzo(b)fluoranthene	**13.4**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	205-99-2	
Benzo(g,h,i)perylene	**4.5J**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	191-24-2	
Benzo(k)fluoranthene	**4.9J**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	207-08-9	
Chrysene	**9.7**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	218-01-9	
Dibenz(a,h)anthracene	**<3.6**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	53-70-3	
Fluoranthene	**24.2**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	206-44-0	M1
Fluorene	**41.5**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	86-73-7	M1,R1
Indeno(1,2,3-cd)pyrene	**<3.6**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	193-39-5	
Naphthalene	**111**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	91-20-3	M1,R1
Phenanthrene	**45.2**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	85-01-8	M1
Pyrene	**21.0**	ug/kg	8.3	1	07/26/21 15:31	07/29/21 18:36	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	64	%	40-120	1	07/26/21 15:31	07/29/21 18:36	321-60-8	
Terphenyl-d14 (S)	71	%	45-130	1	07/26/21 15:31	07/29/21 18:36	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**20.6**	mg/kg	18.9	1	07/26/21 15:31	07/28/21 19:48		
TPH-DRO	**21.7**	mg/kg	18.9	1	07/26/21 15:31	07/28/21 19:48		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-07/7-9 **Lab ID: 60375838013** Collected: 07/23/21 09:36 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	60	%	30-120	1	07/26/21 15:31	07/28/21 19:48	4165-60-0	
2-Fluorobiphenyl (S)	69	%	40-120	1	07/26/21 15:31	07/28/21 19:48	321-60-8	
Terphenyl-d14 (S)	65	%	45-120	1	07/26/21 15:31	07/28/21 19:48	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**46.6**	ug/kg	21.1	1	07/28/21 08:05	07/28/21 11:45	67-64-1	
Acrolein	**<79.9**	ug/kg	106	1	07/28/21 08:05	07/28/21 11:45	107-02-8	
Acrylonitrile	**<3.4**	ug/kg	106	1	07/28/21 08:05	07/28/21 11:45	107-13-1	
Benzene	**<0.52**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	71-43-2	
Bromobenzene	**<0.99**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	108-86-1	
Bromochloromethane	**<0.64**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	74-97-5	
Bromodichloromethane	**<0.64**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	75-27-4	
Bromoform	**<0.61**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	75-25-2	
Bromomethane	**<3.1**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	74-83-9	
2-Butanone (MEK)	**8.8J**	ug/kg	10.6	1	07/28/21 08:05	07/28/21 11:45	78-93-3	
n-Butylbenzene	**<0.69**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	104-51-8	
sec-Butylbenzene	**<0.77**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	135-98-8	
tert-Butylbenzene	**<0.93**	ug/kg	26.4	1	07/28/21 08:05	07/28/21 11:45	98-06-6	
Carbon disulfide	**5.2J**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	75-15-0	
Carbon tetrachloride	**<0.91**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	56-23-5	
Chlorobenzene	**<0.66**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	108-90-7	
Chloroethane	**<1.6**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	75-00-3	
Chloroform	**<0.52**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	67-66-3	
Chloromethane	**<0.84**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	74-87-3	
2-Chlorotoluene	**<0.77**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	95-49-8	
4-Chlorotoluene	**<0.63**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	106-43-4	
Cyclohexanone	**<13.4**	ug/kg	21.1	1	07/28/21 08:05	07/28/21 11:45	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.9**	ug/kg	10.6	1	07/28/21 08:05	07/28/21 11:45	96-12-8	
Dibromochloromethane	**<0.68**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	124-48-1	
1,2-Dibromoethane (EDB)	**<0.57**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	106-93-4	
Dibromomethane	**<0.63**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	74-95-3	
1,2-Dichlorobenzene	**<0.66**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	95-50-1	
1,3-Dichlorobenzene	**<0.76**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	541-73-1	
1,4-Dichlorobenzene	**<0.86**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	106-46-7	
1,1-Dichloroethane	**<0.41**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	75-34-3	
1,2-Dichloroethane	**<0.42**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	107-06-2	
1,2-Dichloroethene (Total)	**<1.2**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	540-59-0	
1,1-Dichloroethene	**<0.68**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	75-35-4	M1
cis-1,2-Dichloroethene	**<0.46**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	156-59-2	
trans-1,2-Dichloroethene	**<0.72**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	78-87-5	
1,3-Dichloropropane	**<0.73**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	142-28-9	
2,2-Dichloropropane	**<0.50**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	594-20-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-07/7-9 **Lab ID: 60375838013** Collected: 07/23/21 09:36 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<0.95**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	563-58-6	
cis-1,3-Dichloropropene	**<0.56**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	10061-01-5	
trans-1,3-Dichloropropene	**<0.48**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.59**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	60-29-7	
Ethylbenzene	**<0.49**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	100-41-4	
n-Heptane	**<4.8**	ug/kg	10.6	1	07/28/21 08:05	07/28/21 11:45	142-82-5	
Hexachloro-1,3-butadiene	**<0.90**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	87-68-3	
n-Hexane	**<0.73**	ug/kg	10.6	1	07/28/21 08:05	07/28/21 11:45	110-54-3	
2-Hexanone	**<2.6**	ug/kg	21.1	1	07/28/21 08:05	07/28/21 11:45	591-78-6	
Iodomethane	**<1.6**	ug/kg	10.6	1	07/28/21 08:05	07/28/21 11:45	74-88-4	M1,R1
Isopropylbenzene (Cumene)	**<0.60**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	98-82-8	
p-Isopropyltoluene	**1.4J**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	99-87-6	
Methyl acetate	**<1.1**	ug/kg	106	1	07/28/21 08:05	07/28/21 11:45	79-20-9	M1
Methylene Chloride	**<2.9**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.2**	ug/kg	10.6	1	07/28/21 08:05	07/28/21 11:45	108-10-1	
Methyl-tert-butyl ether	**<0.51**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	1634-04-4	
Naphthalene	**13.9**	ug/kg	10.6	1	07/28/21 08:05	07/28/21 11:45	91-20-3	
n-Propylbenzene	**<0.85**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	103-65-1	
Styrene	**<0.62**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.1**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.1**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	79-34-5	M1
Tetrachloroethene	**<0.44**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	127-18-4	
Tetrahydrofuran	**<0.83**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	109-99-9	N2
Toluene	**<0.37**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	108-88-3	
1,2,3-Trichlorobenzene	**<0.84**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	87-61-6	
1,2,4-Trichlorobenzene	**<0.84**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	120-82-1	
1,1,1-Trichloroethane	**<0.79**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	71-55-6	
1,1,2-Trichloroethane	**<0.67**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	79-00-5	
Trichloroethene	**<0.77**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	79-01-6	M1
Trichlorofluoromethane	**<0.65**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	75-69-4	
1,2,3-Trichloropropane	**<2.3**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<5.3**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	76-13-1	N2
1,2,3-Trimethylbenzene	**<2.1**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	526-73-8	
1,2,4-Trimethylbenzene	**<0.71**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	95-63-6	
1,3,5-Trimethylbenzene	**<0.66**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	108-67-8	
Vinyl acetate	**<0.60**	ug/kg	106	1	07/28/21 08:05	07/28/21 11:45	108-05-4	
Vinyl chloride	**<0.70**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	75-01-4	
Xylene (Total)	**<1.2**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	1330-20-7	
m&p-Xylene	**<0.67**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	179601-23-1	
o-Xylene	**<0.39**	ug/kg	5.3	1	07/28/21 08:05	07/28/21 11:45	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%	80-120	1	07/28/21 08:05	07/28/21 11:45	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120	1	07/28/21 08:05	07/28/21 11:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120	1	07/28/21 08:05	07/28/21 11:45	2199-69-1	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-07/7-9 **Lab ID: 60375838013** Collected: 07/23/21 09:36 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035							
	Pace Analytical Services - Kansas City							
TPH-GRO	**<0.058**	mg/kg	0.53	1	07/28/21 08:05	07/28/21 11:45		
Surrogates								
Toluene-d8 (S)	102	%	78-122	1	07/28/21 08:05	07/28/21 11:45	2037-26-5	
4-Bromofluorobenzene (S)	103	%	69-133	1	07/28/21 08:05	07/28/21 11:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120	1	07/28/21 08:05	07/28/21 11:45	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974							
	Pace Analytical Services - Kansas City							
Percent Moisture	**22.7**	%	0.50	1		07/26/21 13:31		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-06/2-3 **Lab ID: 60375838014** Collected: 07/23/21 10:05 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.6**	ug/kg	38.6	1	07/26/21 12:05	07/30/21 00:37	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.2**	ug/kg	38.6	1	07/26/21 12:05	07/30/21 00:37	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.6	1	07/26/21 12:05	07/30/21 00:37	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.3**	ug/kg	38.6	1	07/26/21 12:05	07/30/21 00:37	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	38.6	1	07/26/21 12:05	07/30/21 00:37	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.6	1	07/26/21 12:05	07/30/21 00:37	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.6**	ug/kg	38.6	1	07/26/21 12:05	07/30/21 00:37	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	76	%	35-120	1	07/26/21 12:05	07/30/21 00:37	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.58**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 14:33	7440-36-0	
Arsenic	**9.5**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 14:33	7440-38-2	
Copper	**19.5**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 14:33	7440-50-8	
Lead	**14.2**	mg/kg	0.54	10	08/05/21 11:25	08/06/21 14:33	7439-92-1	
Zinc	**58.8**	mg/kg	5.4	10	08/05/21 11:25	08/06/21 14:33	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**1.5J**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	83-32-9	
Acenaphthylene	**<1.4**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	208-96-8	
Anthracene	**4.6**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	120-12-7	
Benzo(a)anthracene	**7.2**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	56-55-3	
Benzo(a)pyrene	**<1.4**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	50-32-8	
Benzo(b)fluoranthene	**13.1**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	205-99-2	
Benzo(g,h,i)perylene	**4.4**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	191-24-2	
Benzo(k)fluoranthene	**5.3**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	207-08-9	
Chrysene	**9.2**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	218-01-9	
Dibenz(a,h)anthracene	**<1.6**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	53-70-3	
Fluoranthene	**19.9**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	206-44-0	
Fluorene	**2.5J**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.0**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	193-39-5	
Naphthalene	**1.9J**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	91-20-3	
Phenanthrene	**8.8**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	85-01-8	
Pyrene	**24.7**	ug/kg	3.8	1	07/26/21 13:53	07/29/21 14:18	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	75	%	40-120	1	07/26/21 13:53	07/29/21 14:18	321-60-8	
Terphenyl-d14 (S)	89	%	45-130	1	07/26/21 13:53	07/29/21 14:18	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**15.9**	%	0.50	1		07/26/21 13:32		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-06/3-5 **Lab ID: 60375838015** Collected: 07/23/21 10:10 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.6	1	07/26/21 12:05	07/30/21 00:55	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.6	1	07/26/21 12:05	07/30/21 00:55	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.6	1	07/26/21 12:05	07/30/21 00:55	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.6	1	07/26/21 12:05	07/30/21 00:55	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.6	1	07/26/21 12:05	07/30/21 00:55	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.6	1	07/26/21 12:05	07/30/21 00:55	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.6	1	07/26/21 12:05	07/30/21 00:55	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	78	%	35-120	1	07/26/21 12:05	07/30/21 00:55	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.65**	mg/kg	1.2	10	08/05/21 11:25	08/06/21 14:35	7440-36-0	
Arsenic	**11.7**	mg/kg	1.2	10	08/05/21 11:25	08/06/21 14:35	7440-38-2	
Copper	**21.3**	mg/kg	1.2	10	08/05/21 11:25	08/06/21 14:35	7440-50-8	
Lead	**15.3**	mg/kg	0.61	10	08/05/21 11:25	08/06/21 14:35	7439-92-1	
Zinc	**66.6**	mg/kg	6.1	10	08/05/21 11:25	08/06/21 14:35	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	50-32-8	
Benzo(b)fluoranthene	**2.6J**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	207-08-9	
Chrysene	**2.2J**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	53-70-3	
Fluoranthene	**6.0**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	91-20-3	
Phenanthrene	**3.9J**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	85-01-8	
Pyrene	**4.6**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 14:35	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	78	%	40-120	1	07/26/21 13:53	07/29/21 14:35	321-60-8	
Terphenyl-d14 (S)	89	%	45-130	1	07/26/21 13:53	07/29/21 14:35	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.8**	%	0.50	1		07/26/21 14:13		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-13/0-2 **Lab ID: 60375838016** Collected: 07/23/21 10:32 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.6	1	07/26/21 12:05	07/30/21 01:13	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.6	1	07/26/21 12:05	07/30/21 01:13	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.6	1	07/26/21 12:05	07/30/21 01:13	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.6	1	07/26/21 12:05	07/30/21 01:13	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.6	1	07/26/21 12:05	07/30/21 01:13	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.6	1	07/26/21 12:05	07/30/21 01:13	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.6	1	07/26/21 12:05	07/30/21 01:13	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	82	%	35-120	1	07/26/21 12:05	07/30/21 01:13	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.59**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 14:36	7440-36-0	
Arsenic	**6.7**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 14:36	7440-38-2	
Copper	**17.7**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 14:36	7440-50-8	
Lead	**25.8**	mg/kg	0.55	10	08/05/21 11:25	08/06/21 14:36	7439-92-1	
Zinc	**54.3**	mg/kg	5.5	10	08/05/21 11:25	08/06/21 14:36	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**237**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	83-32-9	
Acenaphthylene	**<15.0**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	208-96-8	
Anthracene	**645**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	120-12-7	
Benzo(a)anthracene	**1860**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	56-55-3	
Benzo(a)pyrene	**1520**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	50-32-8	
Benzo(b)fluoranthene	**2730**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	205-99-2	
Benzo(g,h,i)perylene	**1500**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	191-24-2	
Benzo(k)fluoranthene	**768**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	207-08-9	
Chrysene	**1940**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	218-01-9	
Dibenz(a,h)anthracene	**299**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	53-70-3	
Fluoranthene	**4270**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	206-44-0	
Fluorene	**298**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	86-73-7	
Indeno(1,2,3-cd)pyrene	**1180**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	193-39-5	
Naphthalene	**40.9**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	91-20-3	
Phenanthrene	**3520**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	85-01-8	
Pyrene	**3680**	ug/kg	40.3	10	07/26/21 13:53	07/29/21 14:52	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	74	%	40-120	10	07/26/21 13:53	07/29/21 14:52	321-60-8	D4
Terphenyl-d14 (S)	96	%	45-130	10	07/26/21 13:53	07/29/21 14:52	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**18.7**	%	0.50	1		07/26/21 14:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-13/3-5 **Lab ID: 60375838017** Collected: 07/23/21 10:36 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.5**	ug/kg	38.2	1	07/26/21 12:05	07/30/21 01:31	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.1**	ug/kg	38.2	1	07/26/21 12:05	07/30/21 01:31	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.2	1	07/26/21 12:05	07/30/21 01:31	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.2**	ug/kg	38.2	1	07/26/21 12:05	07/30/21 01:31	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	38.2	1	07/26/21 12:05	07/30/21 01:31	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.2	1	07/26/21 12:05	07/30/21 01:31	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.5**	ug/kg	38.2	1	07/26/21 12:05	07/30/21 01:31	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	79	%	35-120	1	07/26/21 12:05	07/30/21 01:31	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.51**	mg/kg	0.95	10	08/05/21 11:25	08/06/21 14:43	7440-36-0	
Arsenic	**7.0**	mg/kg	0.95	10	08/05/21 11:25	08/06/21 14:43	7440-38-2	
Copper	**16.3**	mg/kg	0.95	10	08/05/21 11:25	08/06/21 14:43	7440-50-8	
Lead	**27.3**	mg/kg	0.47	10	08/05/21 11:25	08/06/21 14:43	7439-92-1	
Zinc	**44.1**	mg/kg	4.7	10	08/05/21 11:25	08/06/21 14:43	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**33.8**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	83-32-9	
Acenaphthylene	**7.4**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	208-96-8	
Anthracene	**110**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	120-12-7	
Benzo(a)anthracene	**423**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	56-55-3	
Benzo(a)pyrene	**361**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	50-32-8	
Benzo(b)fluoranthene	**602**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	205-99-2	
Benzo(g,h,i)perylene	**286**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	191-24-2	
Benzo(k)fluoranthene	**305**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	207-08-9	
Chrysene	**452**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	218-01-9	
Dibenz(a,h)anthracene	**58.3**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	53-70-3	
Fluoranthene	**931**	ug/kg	37.4	10	07/26/21 13:53	07/30/21 10:56	206-44-0	
Fluorene	**38.6**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	86-73-7	
Indeno(1,2,3-cd)pyrene	**235**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	193-39-5	
Naphthalene	**6.4**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	91-20-3	
Phenanthrene	**550**	ug/kg	3.7	1	07/26/21 13:53	07/29/21 15:09	85-01-8	
Pyrene	**785**	ug/kg	37.4	10	07/26/21 13:53	07/30/21 10:56	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	88	%	40-120	1	07/26/21 13:53	07/29/21 15:09	321-60-8	
Terphenyl-d14 (S)	107	%	45-130	1	07/26/21 13:53	07/29/21 15:09	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**16.0**	%	0.50	1		07/26/21 14:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-20/0-2 **Lab ID: 60375838018** Collected: 07/23/21 11:02 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.3	1	07/26/21 12:05	07/30/21 01:49	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.3	1	07/26/21 12:05	07/30/21 01:49	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.3	1	07/26/21 12:05	07/30/21 01:49	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.3	1	07/26/21 12:05	07/30/21 01:49	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.3	1	07/26/21 12:05	07/30/21 01:49	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.3	1	07/26/21 12:05	07/30/21 01:49	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.7**	ug/kg	39.3	1	07/26/21 12:05	07/30/21 01:49	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	82	%	35-120	1	07/26/21 12:05	07/30/21 01:49	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.57**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 14:45	7440-36-0	
Arsenic	**5.8**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 14:45	7440-38-2	
Copper	**11.2**	mg/kg	1.1	10	08/05/21 11:25	08/06/21 14:45	7440-50-8	
Lead	**14.5**	mg/kg	0.53	10	08/05/21 11:25	08/06/21 14:45	7439-92-1	
Zinc	**34.0**	mg/kg	5.3	10	08/05/21 11:25	08/06/21 14:45	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**18.2**	%	0.50	1		07/26/21 14:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-20/3-4 **Lab ID: 60375838019** Collected: 07/23/21 11:07 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.4**	ug/kg	41.9	1	07/26/21 12:05	07/30/21 02:07	12674-11-2	
PCB-1221 (Aroclor 1221)	**<10**	ug/kg	41.9	1	07/26/21 12:05	07/30/21 02:07	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	41.9	1	07/26/21 12:05	07/30/21 02:07	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.1**	ug/kg	41.9	1	07/26/21 12:05	07/30/21 02:07	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	41.9	1	07/26/21 12:05	07/30/21 02:07	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.9	1	07/26/21 12:05	07/30/21 02:07	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.3**	ug/kg	41.9	1	07/26/21 12:05	07/30/21 02:07	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	78	%	35-120	1	07/26/21 12:05	07/30/21 02:07	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.62**	mg/kg	1.2	10	08/05/21 11:25	08/06/21 14:46	7440-36-0	
Arsenic	**5.1**	mg/kg	1.2	10	08/05/21 11:25	08/06/21 14:46	7440-38-2	
Copper	**11.1**	mg/kg	1.2	10	08/05/21 11:25	08/06/21 14:46	7440-50-8	
Lead	**14.0**	mg/kg	0.58	10	08/05/21 11:25	08/06/21 14:46	7439-92-1	
Zinc	**42.8**	mg/kg	5.8	10	08/05/21 11:25	08/06/21 14:46	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**22.8**	%	0.50	1		07/26/21 14:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-27/0.5-2 **Lab ID: 60375838020** Collected: 07/23/21 11:35 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:00	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:00	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:00	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:00	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:00	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:00	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:00	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	79	%	35-120	1	07/26/21 13:31	07/30/21 03:00	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.56**	mg/kg	1.0	10	08/05/21 11:25	08/06/21 14:48	7440-36-0	
Arsenic	**5.4**	mg/kg	1.0	10	08/05/21 11:25	08/06/21 14:48	7440-38-2	
Copper	**13.8**	mg/kg	1.0	10	08/05/21 11:25	08/06/21 14:48	7440-50-8	
Lead	**9.1**	mg/kg	0.52	10	08/05/21 11:25	08/06/21 14:48	7439-92-1	
Zinc	**41.6**	mg/kg	5.2	10	08/05/21 11:25	08/06/21 14:48	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**14.8**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	83-32-9	
Acenaphthylene	**9.3**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	208-96-8	
Anthracene	**46.0**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	120-12-7	
Benzo(a)anthracene	**216**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	56-55-3	
Benzo(a)pyrene	**192**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	50-32-8	
Benzo(b)fluoranthene	**316**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	205-99-2	
Benzo(g,h,i)perylene	**167**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	191-24-2	
Benzo(k)fluoranthene	**108**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	207-08-9	
Chrysene	**219**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	218-01-9	
Dibenz(a,h)anthracene	**29.8**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	53-70-3	
Fluoranthene	**376**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	206-44-0	
Fluorene	**9.9**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	86-73-7	
Indeno(1,2,3-cd)pyrene	**132**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	193-39-5	
Naphthalene	**7.4**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	91-20-3	
Phenanthrene	**185**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	85-01-8	
Pyrene	**401**	ug/kg	3.9	1	07/26/21 13:53	07/29/21 15:27	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	78	%	40-120	1	07/26/21 13:53	07/29/21 15:27	321-60-8	
Terphenyl-d14 (S)	100	%	45-130	1	07/26/21 13:53	07/29/21 15:27	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**18.7**	%	0.50	1		07/26/21 14:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-27/3-5 **Lab ID: 60375838021** Collected: 07/23/21 11:39 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:54	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:54	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:54	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:54	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:54	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:54	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	39.9	1	07/26/21 13:31	07/30/21 03:54	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	76	%	35-120	1	07/26/21 13:31	07/30/21 03:54	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.49**	mg/kg	0.90	10	08/04/21 10:12	08/05/21 10:43	7440-36-0	M1
Arsenic	**5.7**	mg/kg	0.90	10	08/04/21 10:12	08/05/21 10:43	7440-38-2	
Copper	**13.2**	mg/kg	0.90	10	08/04/21 10:12	08/05/21 10:43	7440-50-8	
Lead	**7.2**	mg/kg	0.45	10	08/04/21 10:12	08/05/21 10:43	7439-92-1	
Zinc	**36.7**	mg/kg	4.5	10	08/04/21 10:12	08/05/21 10:43	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	120-12-7	
Benzo(a)anthracene	**<1.9**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	50-32-8	
Benzo(b)fluoranthene	**<2.0**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	207-08-9	
Chrysene	**<1.9**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	53-70-3	
Fluoranthene	**<3.0**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.7**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	91-20-3	
Phenanthrene	**<3.3**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	85-01-8	
Pyrene	**2.3J**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 15:44	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	75	%	40-120	1	07/26/21 13:53	07/29/21 15:44	321-60-8	
Terphenyl-d14 (S)	85	%	45-130	1	07/26/21 13:53	07/29/21 15:44	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.6**	%	0.50	1		07/26/21 14:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-08/2.5-3.5 **Lab ID: 60375838022** Collected: 07/23/21 13:07 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.8	1	07/26/21 13:31	07/30/21 04:12	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.8	1	07/26/21 13:31	07/30/21 04:12	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.8	1	07/26/21 13:31	07/30/21 04:12	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.8	1	07/26/21 13:31	07/30/21 04:12	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.8	1	07/26/21 13:31	07/30/21 04:12	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.8	1	07/26/21 13:31	07/30/21 04:12	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.8	1	07/26/21 13:31	07/30/21 04:12	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	82	%	35-120	1	07/26/21 13:31	07/30/21 04:12	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.52**	mg/kg	0.96	10	08/04/21 10:12	08/05/21 10:48	7440-36-0	
Arsenic	**6.1**	mg/kg	0.96	10	08/04/21 10:12	08/05/21 10:48	7440-38-2	
Copper	**22.2**	mg/kg	0.96	10	08/04/21 10:12	08/05/21 10:48	7440-50-8	
Lead	**9.0**	mg/kg	0.48	10	08/04/21 10:12	08/05/21 10:48	7439-92-1	
Zinc	**46.4**	mg/kg	4.8	10	08/04/21 10:12	08/05/21 10:48	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	120-12-7	
Benzo(a)anthracene	**4.0**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	56-55-3	
Benzo(a)pyrene	**3.1J**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	50-32-8	
Benzo(b)fluoranthene	**6.6**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	205-99-2	
Benzo(g,h,i)perylene	**3.2J**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	191-24-2	
Benzo(k)fluoranthene	**2.3J**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	207-08-9	
Chrysene	**4.5**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	53-70-3	
Fluoranthene	**10.9**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	86-73-7	
Indeno(1,2,3-cd)pyrene	**2.3J**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	91-20-3	
Phenanthrene	**5.1**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	85-01-8	
Pyrene	**9.0**	ug/kg	4.0	1	07/26/21 13:53	07/29/21 16:01	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	79	%	40-120	1	07/26/21 13:53	07/29/21 16:01	321-60-8	
Terphenyl-d14 (S)	91	%	45-130	1	07/26/21 13:53	07/29/21 16:01	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.9**	%	0.50	1		07/26/21 14:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-08/4-6 **Lab ID: 60375838023** Collected: 07/23/21 13:12 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.5**	ug/kg	42.1	1	07/26/21 13:31	07/30/21 04:29	12674-11-2	
PCB-1221 (Aroclor 1221)	**<10.0**	ug/kg	42.1	1	07/26/21 13:31	07/30/21 04:29	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	42.1	1	07/26/21 13:31	07/30/21 04:29	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.2**	ug/kg	42.1	1	07/26/21 13:31	07/30/21 04:29	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	42.1	1	07/26/21 13:31	07/30/21 04:29	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	42.1	1	07/26/21 13:31	07/30/21 04:29	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.3**	ug/kg	42.1	1	07/26/21 13:31	07/30/21 04:29	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	84	%	35-120	1	07/26/21 13:31	07/30/21 04:29	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.68**	mg/kg	1.3	10	08/04/21 10:12	08/05/21 10:49	7440-36-0	
Arsenic	**6.6**	mg/kg	1.3	10	08/04/21 10:12	08/05/21 10:49	7440-38-2	
Copper	**15.6**	mg/kg	1.3	10	08/04/21 10:12	08/05/21 10:49	7440-50-8	
Lead	**11.5**	mg/kg	0.63	10	08/04/21 10:12	08/05/21 10:49	7439-92-1	
Zinc	**45.6**	mg/kg	6.3	10	08/04/21 10:12	08/05/21 10:49	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.6**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	83-32-9	
Acenaphthylene	**<1.6**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	208-96-8	
Anthracene	**3.4J**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	120-12-7	
Benzo(a)anthracene	**16.8**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	56-55-3	
Benzo(a)pyrene	**15.1**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	50-32-8	
Benzo(b)fluoranthene	**29.1**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	205-99-2	
Benzo(g,h,i)perylene	**11.5**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	191-24-2	
Benzo(k)fluoranthene	**14.1**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	207-08-9	
Chrysene	**21.8**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	53-70-3	
Fluoranthene	**58.5**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	206-44-0	
Fluorene	**<1.6**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	86-73-7	
Indeno(1,2,3-cd)pyrene	**9.5**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	91-20-3	
Phenanthrene	**21.7**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	85-01-8	
Pyrene	**46.6**	ug/kg	4.2	1	07/26/21 13:53	07/29/21 16:18	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	79	%	40-120	1	07/26/21 13:53	07/29/21 16:18	321-60-8	
Terphenyl-d14 (S)	94	%	45-130	1	07/26/21 13:53	07/29/21 16:18	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**22.4**	%	0.50	1		07/26/21 14:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-09/1.5-3 **Lab ID: 60375838024** Collected: 07/23/21 13:33 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.6	1	07/26/21 13:31	07/30/21 04:47	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.6	1	07/26/21 13:31	07/30/21 04:47	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.6	1	07/26/21 13:31	07/30/21 04:47	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.6	1	07/26/21 13:31	07/30/21 04:47	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.6	1	07/26/21 13:31	07/30/21 04:47	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.6	1	07/26/21 13:31	07/30/21 04:47	11097-69-1	
PCB-1260 (Aroclor 1260)	**9.2J**	ug/kg	40.6	1	07/26/21 13:31	07/30/21 04:47	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	83	%	35-120	1	07/26/21 13:31	07/30/21 04:47	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.65**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 10:51	7440-36-0	
Arsenic	**9.4**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 10:51	7440-38-2	
Copper	**16.9**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 10:51	7440-50-8	
Lead	**45.4**	mg/kg	0.61	10	08/04/21 10:12	08/05/21 10:51	7439-92-1	
Zinc	**59.6**	mg/kg	6.1	10	08/04/21 10:12	08/05/21 10:51	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**64.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	83-32-9	
Acenaphthylene	**7.6**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	208-96-8	
Anthracene	**191**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	120-12-7	
Benzo(a)anthracene	**752**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	56-55-3	
Benzo(a)pyrene	**633**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	50-32-8	
Benzo(b)fluoranthene	**1120**	ug/kg	40.6	10	07/26/21 13:53	07/30/21 11:13	205-99-2	
Benzo(g,h,i)perylene	**542**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	191-24-2	
Benzo(k)fluoranthene	**494**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	207-08-9	
Chrysene	**810**	ug/kg	40.6	10	07/26/21 13:53	07/30/21 11:13	218-01-9	
Dibenz(a,h)anthracene	**96.4**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	53-70-3	
Fluoranthene	**1940**	ug/kg	40.6	10	07/26/21 13:53	07/30/21 11:13	206-44-0	
Fluorene	**48.2**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	86-73-7	
Indeno(1,2,3-cd)pyrene	**415**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	193-39-5	
Naphthalene	**4.0J**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:35	91-20-3	
Phenanthrene	**994**	ug/kg	40.6	10	07/26/21 13:53	07/30/21 11:13	85-01-8	
Pyrene	**1670**	ug/kg	40.6	10	07/26/21 13:53	07/30/21 11:13	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	87	%	40-120	1	07/26/21 13:53	07/29/21 16:35	321-60-8	
Terphenyl-d14 (S)	113	%	45-130	1	07/26/21 13:53	07/29/21 16:35	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.3**	%	0.50	1		07/26/21 14:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: GB-09/4-6 **Lab ID: 60375838025** Collected: 07/23/21 13:37 Received: 07/24/21 04:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.6	1	07/26/21 13:31	07/30/21 05:05	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.6	1	07/26/21 13:31	07/30/21 05:05	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.6	1	07/26/21 13:31	07/30/21 05:05	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.6	1	07/26/21 13:31	07/30/21 05:05	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.6	1	07/26/21 13:31	07/30/21 05:05	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.6	1	07/26/21 13:31	07/30/21 05:05	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.6	1	07/26/21 13:31	07/30/21 05:05	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	81	%	35-120	1	07/26/21 13:31	07/30/21 05:05	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.57**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 10:52	7440-36-0	
Arsenic	**14.8**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 10:52	7440-38-2	
Copper	**20.2**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 10:52	7440-50-8	
Lead	**17.0**	mg/kg	0.53	10	08/04/21 10:12	08/05/21 10:52	7439-92-1	
Zinc	**65.3**	mg/kg	5.3	10	08/04/21 10:12	08/05/21 10:52	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	120-12-7	
Benzo(a)anthracene	**5.0**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	56-55-3	
Benzo(a)pyrene	**4.2**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	50-32-8	
Benzo(b)fluoranthene	**7.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	205-99-2	
Benzo(g,h,i)perylene	**3.2J**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	191-24-2	
Benzo(k)fluoranthene	**2.6J**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	207-08-9	
Chrysene	**5.0**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	53-70-3	
Fluoranthene	**13.3**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	86-73-7	
Indeno(1,2,3-cd)pyrene	**2.6J**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	91-20-3	
Phenanthrene	**7.9**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	85-01-8	
Pyrene	**11.1**	ug/kg	4.1	1	07/26/21 13:53	07/29/21 16:53	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	40-120	1	07/26/21 13:53	07/29/21 16:53	321-60-8	
Terphenyl-d14 (S)	97	%	45-130	1	07/26/21 13:53	07/29/21 16:53	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.9**	%	0.50	1		07/26/21 14:14		

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(913)599-5665

ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: TB-3 **Lab ID: 60375838026** Collected: 07/23/21 08:00 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	**<2.5**	ug/L	10.0	1		08/03/21 08:21	67-64-1	
Acetonitrile	**<1.1**	ug/L	10.0	1		08/03/21 08:21	75-05-8	
Acrolein	**<4.0**	ug/L	50.0	1		08/03/21 08:21	107-02-8	
Acrylonitrile	**<1.4**	ug/L	20.0	1		08/03/21 08:21	107-13-1	
Benzene	**<0.14**	ug/L	1.0	1		08/03/21 08:21	71-43-2	
Bromobenzene	**<0.088**	ug/L	1.0	1		08/03/21 08:21	108-86-1	
Bromochloromethane	**<0.20**	ug/L	1.0	1		08/03/21 08:21	74-97-5	
Bromodichloromethane	**<0.16**	ug/L	1.0	1		08/03/21 08:21	75-27-4	
Bromoform	**<0.68**	ug/L	1.0	1		08/03/21 08:21	75-25-2	
Bromomethane	**<0.46**	ug/L	5.0	1		08/03/21 08:21	74-83-9	
2-Butanone (MEK)	**<0.98**	ug/L	10.0	1		08/03/21 08:21	78-93-3	
n-Butylbenzene	**<0.15**	ug/L	1.0	1		08/03/21 08:21	104-51-8	
sec-Butylbenzene	**<0.11**	ug/L	1.0	1		08/03/21 08:21	135-98-8	
tert-Butylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 08:21	98-06-6	
Carbon disulfide	**<0.98**	ug/L	5.0	1		08/03/21 08:21	75-15-0	
Carbon tetrachloride	**<0.17**	ug/L	1.0	1		08/03/21 08:21	56-23-5	
Chlorobenzene	**<0.089**	ug/L	1.0	1		08/03/21 08:21	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	1		08/03/21 08:21	75-00-3	
2-Chloroethylvinyl ether	**<1.8**	ug/L	10.0	1		08/03/21 08:21	110-75-8	c2
Chloroform	**<0.22**	ug/L	1.0	1		08/03/21 08:21	67-66-3	
Chloromethane	**<0.28**	ug/L	1.0	1		08/03/21 08:21	74-87-3	
2-Chlorotoluene	**<0.11**	ug/L	1.0	1		08/03/21 08:21	95-49-8	
4-Chlorotoluene	**<0.15**	ug/L	1.0	1		08/03/21 08:21	106-43-4	
Cyclohexane	**<0.24**	ug/L	1.0	1		08/03/21 08:21	110-82-7	
Cyclohexanone	**<3.3**	ug/L	20.0	1		08/03/21 08:21	108-94-1	
1,2-Dibromo-3-chloropropane	**<0.78**	ug/L	2.5	1		08/03/21 08:21	96-12-8	
Dibromochloromethane	**<0.30**	ug/L	1.0	1		08/03/21 08:21	124-48-1	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	1		08/03/21 08:21	106-93-4	
Dibromomethane	**<0.11**	ug/L	1.0	1		08/03/21 08:21	74-95-3	
1,2-Dichlorobenzene	**<0.12**	ug/L	1.0	1		08/03/21 08:21	95-50-1	
1,3-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 08:21	541-73-1	
1,4-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 08:21	106-46-7	
Dichlorodifluoromethane	**<0.20**	ug/L	1.0	1		08/03/21 08:21	75-71-8	
1,1-Dichloroethane	**<0.12**	ug/L	1.0	1		08/03/21 08:21	75-34-3	
1,2-Dichloroethane	**<0.21**	ug/L	1.0	1		08/03/21 08:21	107-06-2	
1,2-Dichloroethene (Total)	**<0.22**	ug/L	1.0	1		08/03/21 08:21	540-59-0	
1,1-Dichloroethene	**<0.22**	ug/L	1.0	1		08/03/21 08:21	75-35-4	
cis-1,2-Dichloroethene	**<0.13**	ug/L	1.0	1		08/03/21 08:21	156-59-2	
trans-1,2-Dichloroethene	**<0.10**	ug/L	1.0	1		08/03/21 08:21	156-60-5	
1,2-Dichloropropane	**<0.14**	ug/L	1.0	1		08/03/21 08:21	78-87-5	
1,3-Dichloropropane	**<0.10**	ug/L	1.0	1		08/03/21 08:21	142-28-9	
2,2-Dichloropropane	**<0.16**	ug/L	1.0	1		08/03/21 08:21	594-20-7	
1,1-Dichloropropene	**<0.14**	ug/L	1.0	1		08/03/21 08:21	563-58-6	
cis-1,3-Dichloropropene	**<0.078**	ug/L	1.0	1		08/03/21 08:21	10061-01-5	
trans-1,3-Dichloropropene	**<0.18**	ug/L	1.0	1		08/03/21 08:21	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.23**	ug/L	1.0	1		08/03/21 08:21	60-29-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: TB-3 **Lab ID: 60375838026** Collected: 07/23/21 08:00 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Kansas City							
1,4-Dioxane (p-Dioxane)	**<4.4**	ug/L	100	1		08/03/21 08:21	123-91-1	
Ethylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 08:21	100-41-4	
n-Heptane	**<2.6**	ug/L	10.0	1		08/03/21 08:21	142-82-5	
Hexachloro-1,3-butadiene	**<0.42**	ug/L	1.0	1		08/03/21 08:21	87-68-3	
n-Hexane	**<0.22**	ug/L	10.0	1		08/03/21 08:21	110-54-3	
2-Hexanone	**<1.1**	ug/L	10.0	1		08/03/21 08:21	591-78-6	
Isopropylbenzene (Cumene)	**<0.097**	ug/L	1.0	1		08/03/21 08:21	98-82-8	
p-Isopropyltoluene	**<0.13**	ug/L	1.0	1		08/03/21 08:21	99-87-6	
Methyl acetate	**<0.87**	ug/L	1.0	1		08/03/21 08:21	79-20-9	
Methylcyclohexane	**<0.12**	ug/L	1.0	1		08/03/21 08:21	108-87-2	
Methylene Chloride	**<0.39**	ug/L	1.0	1		08/03/21 08:21	75-09-2	
1-Methylnaphthalene	**<2.6**	ug/L	10.0	1		08/03/21 08:21	90-12-0	
2-Methylnaphthalene	**<2.7**	ug/L	10.0	1		08/03/21 08:21	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<0.74**	ug/L	10.0	1		08/03/21 08:21	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/L	1.0	1		08/03/21 08:21	1634-04-4	
Naphthalene	**<0.82**	ug/L	10.0	1		08/03/21 08:21	91-20-3	
n-Propylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 08:21	103-65-1	
Styrene	**<0.12**	ug/L	1.0	1		08/03/21 08:21	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.084**	ug/L	1.0	1		08/03/21 08:21	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.15**	ug/L	1.0	1		08/03/21 08:21	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.0	1		08/03/21 08:21	127-18-4	
Tetrahydrofuran	**<2.8**	ug/L	5.0	1		08/03/21 08:21	109-99-9	
Toluene	**<0.25**	ug/L	1.0	1		08/03/21 08:21	108-88-3	
1,2,3-Trichlorobenzene	**<0.93**	ug/L	1.0	1		08/03/21 08:21	87-61-6	
1,2,4-Trichlorobenzene	**<0.73**	ug/L	1.0	1		08/03/21 08:21	120-82-1	
1,1,1-Trichloroethane	**<0.11**	ug/L	1.0	1		08/03/21 08:21	71-55-6	
1,1,2-Trichloroethane	**<0.14**	ug/L	1.0	1		08/03/21 08:21	79-00-5	
Trichloroethene	**<0.21**	ug/L	1.0	1		08/03/21 08:21	79-01-6	
Trichlorofluoromethane	**<0.16**	ug/L	1.0	1		08/03/21 08:21	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	2.5	1		08/03/21 08:21	96-18-4	
1,2,3-Trimethylbenzene	**<0.93**	ug/L	1.0	1		08/03/21 08:21	526-73-8	
1,2,4-Trimethylbenzene	**<0.32**	ug/L	1.0	1		08/03/21 08:21	95-63-6	
1,3,5-Trimethylbenzene	**<0.090**	ug/L	1.0	1		08/03/21 08:21	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	1		08/03/21 08:21	75-01-4	
Xylene (Total)	**<0.28**	ug/L	3.0	1		08/03/21 08:21	1330-20-7	
m&p-Xylene	**<0.22**	ug/L	2.0	1		08/03/21 08:21	179601-23-1	
o-Xylene	**<0.082**	ug/L	1.0	1		08/03/21 08:21	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	80-120	1		08/03/21 08:21	460-00-4	
Toluene-d8 (S)	100	%	80-120	1		08/03/21 08:21	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120	1		08/03/21 08:21	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/03/21 08:21		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: RB-03 **Lab ID: 60375838027** Collected: 07/21/21 15:10 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB, LV	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<0.15**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:43	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:43	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:43	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:43	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:43	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:43	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.19**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:43	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	41	%	30-136	1	07/29/21 11:57	07/29/21 19:43	2051-24-3	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C Pace Analytical Services - Kansas City							
Acenaphthene	**<0.055**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	83-32-9	
Acenaphthylene	**<0.038**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	208-96-8	
Anthracene	**<0.076**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	120-12-7	
Benzo(a)anthracene	**<0.041**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	56-55-3	
Benzo(a)pyrene	**0.092J**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	50-32-8	
Benzo(b)fluoranthene	**<0.059**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	205-99-2	
Benzo(g,h,i)perylene	**<0.047**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	191-24-2	
Benzo(k)fluoranthene	**<0.049**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	207-08-9	
Chrysene	**<0.048**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	218-01-9	
Dibenz(a,h)anthracene	**0.073J**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	53-70-3	
Fluoranthene	**<0.22**	ug/L	0.56	1	07/26/21 15:46	07/27/21 17:56	206-44-0	
Fluorene	**<0.077**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.080J**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	193-39-5	
Naphthalene	**0.12J**	ug/L	0.56	1	07/26/21 15:46	07/27/21 17:56	91-20-3	
Phenanthrene	**<0.46**	ug/L	0.56	1	07/26/21 15:46	07/27/21 17:56	85-01-8	
Pyrene	**<0.086**	ug/L	0.11	1	07/26/21 15:46	07/27/21 17:56	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	69	%	37-109	1	07/26/21 15:46	07/27/21 17:56	321-60-8	
Terphenyl-d14 (S)	81	%	34-120	1	07/26/21 15:46	07/27/21 17:56	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	**<2.5**	ug/L	10.0	1		08/03/21 10:43	67-64-1	
Acetonitrile	**<1.1**	ug/L	10.0	1		08/03/21 10:43	75-05-8	
Acrolein	**<4.0**	ug/L	50.0	1		08/03/21 10:43	107-02-8	
Acrylonitrile	**<1.4**	ug/L	20.0	1		08/03/21 10:43	107-13-1	
Benzene	**<0.14**	ug/L	1.0	1		08/03/21 10:43	71-43-2	
Bromobenzene	**<0.088**	ug/L	1.0	1		08/03/21 10:43	108-86-1	
Bromochloromethane	**<0.20**	ug/L	1.0	1		08/03/21 10:43	74-97-5	
Bromodichloromethane	**<0.16**	ug/L	1.0	1		08/03/21 10:43	75-27-4	
Bromoform	**<0.68**	ug/L	1.0	1		08/03/21 10:43	75-25-2	
Bromomethane	**<0.46**	ug/L	5.0	1		08/03/21 10:43	74-83-9	
2-Butanone (MEK)	**<0.98**	ug/L	10.0	1		08/03/21 10:43	78-93-3	
n-Butylbenzene	**<0.15**	ug/L	1.0	1		08/03/21 10:43	104-51-8	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: RB-03 **Lab ID: 60375838027** Collected: 07/21/21 15:10 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
sec-Butylbenzene	**<0.11**	ug/L	1.0	1		08/03/21 10:43	135-98-8	
tert-Butylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 10:43	98-06-6	
Carbon disulfide	**<0.98**	ug/L	5.0	1		08/03/21 10:43	75-15-0	
Carbon tetrachloride	**<0.17**	ug/L	1.0	1		08/03/21 10:43	56-23-5	
Chlorobenzene	**<0.089**	ug/L	1.0	1		08/03/21 10:43	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	1		08/03/21 10:43	75-00-3	
2-Chloroethylvinyl ether	**<1.8**	ug/L	10.0	1		08/03/21 10:43	110-75-8	c2
Chloroform	**0.67J**	ug/L	1.0	1		08/03/21 10:43	67-66-3	
Chloromethane	**<0.28**	ug/L	1.0	1		08/03/21 10:43	74-87-3	
2-Chlorotoluene	**<0.11**	ug/L	1.0	1		08/03/21 10:43	95-49-8	
4-Chlorotoluene	**<0.15**	ug/L	1.0	1		08/03/21 10:43	106-43-4	
Cyclohexane	**<0.24**	ug/L	1.0	1		08/03/21 10:43	110-82-7	
Cyclohexanone	**<3.3**	ug/L	20.0	1		08/03/21 10:43	108-94-1	
1,2-Dibromo-3-chloropropane	**<0.78**	ug/L	2.5	1		08/03/21 10:43	96-12-8	
Dibromochloromethane	**<0.30**	ug/L	1.0	1		08/03/21 10:43	124-48-1	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	1		08/03/21 10:43	106-93-4	
Dibromomethane	**<0.11**	ug/L	1.0	1		08/03/21 10:43	74-95-3	
1,2-Dichlorobenzene	**<0.12**	ug/L	1.0	1		08/03/21 10:43	95-50-1	
1,3-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 10:43	541-73-1	
1,4-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 10:43	106-46-7	
Dichlorodifluoromethane	**<0.20**	ug/L	1.0	1		08/03/21 10:43	75-71-8	
1,1-Dichloroethane	**<0.12**	ug/L	1.0	1		08/03/21 10:43	75-34-3	
1,2-Dichloroethane	**<0.21**	ug/L	1.0	1		08/03/21 10:43	107-06-2	
1,2-Dichloroethene (Total)	**<0.22**	ug/L	1.0	1		08/03/21 10:43	540-59-0	
1,1-Dichloroethene	**<0.22**	ug/L	1.0	1		08/03/21 10:43	75-35-4	
cis-1,2-Dichloroethene	**<0.13**	ug/L	1.0	1		08/03/21 10:43	156-59-2	
trans-1,2-Dichloroethene	**<0.10**	ug/L	1.0	1		08/03/21 10:43	156-60-5	
1,2-Dichloropropane	**<0.14**	ug/L	1.0	1		08/03/21 10:43	78-87-5	
1,3-Dichloropropane	**<0.10**	ug/L	1.0	1		08/03/21 10:43	142-28-9	
2,2-Dichloropropane	**<0.16**	ug/L	1.0	1		08/03/21 10:43	594-20-7	
1,1-Dichloropropene	**<0.14**	ug/L	1.0	1		08/03/21 10:43	563-58-6	
cis-1,3-Dichloropropene	**<0.078**	ug/L	1.0	1		08/03/21 10:43	10061-01-5	
trans-1,3-Dichloropropene	**<0.18**	ug/L	1.0	1		08/03/21 10:43	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.23**	ug/L	1.0	1		08/03/21 10:43	60-29-7	
1,4-Dioxane (p-Dioxane)	**<4.4**	ug/L	100	1		08/03/21 10:43	123-91-1	
Ethylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 10:43	100-41-4	
n-Heptane	**<2.6**	ug/L	10.0	1		08/03/21 10:43	142-82-5	
Hexachloro-1,3-butadiene	**<0.42**	ug/L	1.0	1		08/03/21 10:43	87-68-3	
n-Hexane	**<0.22**	ug/L	10.0	1		08/03/21 10:43	110-54-3	
2-Hexanone	**<1.1**	ug/L	10.0	1		08/03/21 10:43	591-78-6	
Isopropylbenzene (Cumene)	**<0.097**	ug/L	1.0	1		08/03/21 10:43	98-82-8	
p-Isopropyltoluene	**<0.13**	ug/L	1.0	1		08/03/21 10:43	99-87-6	
Methyl acetate	**<0.87**	ug/L	1.0	1		08/03/21 10:43	79-20-9	
Methylcyclohexane	**<0.12**	ug/L	1.0	1		08/03/21 10:43	108-87-2	
Methylene Chloride	**<0.39**	ug/L	1.0	1		08/03/21 10:43	75-09-2	
1-Methylnaphthalene	**<2.6**	ug/L	10.0	1		08/03/21 10:43	90-12-0	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: RB-03 **Lab ID: 60375838027** Collected: 07/21/21 15:10 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Kansas City							
2-Methylnaphthalene	**<2.7**	ug/L	10.0	1		08/03/21 10:43	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<0.74**	ug/L	10.0	1		08/03/21 10:43	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/L	1.0	1		08/03/21 10:43	1634-04-4	
Naphthalene	**<0.82**	ug/L	10.0	1		08/03/21 10:43	91-20-3	
n-Propylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 10:43	103-65-1	
Styrene	**<0.12**	ug/L	1.0	1		08/03/21 10:43	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.084**	ug/L	1.0	1		08/03/21 10:43	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.15**	ug/L	1.0	1		08/03/21 10:43	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.0	1		08/03/21 10:43	127-18-4	
Tetrahydrofuran	**<2.8**	ug/L	5.0	1		08/03/21 10:43	109-99-9	
Toluene	**<0.25**	ug/L	1.0	1		08/03/21 10:43	108-88-3	
1,2,3-Trichlorobenzene	**<0.93**	ug/L	1.0	1		08/03/21 10:43	87-61-6	
1,2,4-Trichlorobenzene	**<0.73**	ug/L	1.0	1		08/03/21 10:43	120-82-1	
1,1,1-Trichloroethane	**<0.11**	ug/L	1.0	1		08/03/21 10:43	71-55-6	
1,1,2-Trichloroethane	**<0.14**	ug/L	1.0	1		08/03/21 10:43	79-00-5	
Trichloroethene	**<0.21**	ug/L	1.0	1		08/03/21 10:43	79-01-6	
Trichlorofluoromethane	**<0.16**	ug/L	1.0	1		08/03/21 10:43	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	2.5	1		08/03/21 10:43	96-18-4	
1,2,3-Trimethylbenzene	**<0.93**	ug/L	1.0	1		08/03/21 10:43	526-73-8	
1,2,4-Trimethylbenzene	**<0.32**	ug/L	1.0	1		08/03/21 10:43	95-63-6	
1,3,5-Trimethylbenzene	**<0.090**	ug/L	1.0	1		08/03/21 10:43	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	1		08/03/21 10:43	75-01-4	
Xylene (Total)	**<0.28**	ug/L	3.0	1		08/03/21 10:43	1330-20-7	
m&p-Xylene	**<0.22**	ug/L	2.0	1		08/03/21 10:43	179601-23-1	
o-Xylene	**<0.082**	ug/L	1.0	1		08/03/21 10:43	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	80-120	1		08/03/21 10:43	460-00-4	
Toluene-d8 (S)	102	%	80-120	1		08/03/21 10:43	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120	1		08/03/21 10:43	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/03/21 10:43		
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260							
	Pace Analytical Services - Kansas City							
TPH-GRO	**<62.6**	ug/L	500	1		07/28/21 13:20		
Surrogates								
Toluene-d8 (S)	100	%	80-120	1		07/28/21 13:20	2037-26-5	
4-Bromofluorobenzene (S)	104	%	80-120	1		07/28/21 13:20	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1		07/28/21 13:20	2199-69-1	
Preservation pH	**1.0**		0.10	1		07/28/21 13:20		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: RB-04 **Lab ID: 60375838028** Collected: 07/22/21 15:15 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB, LV	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<0.15**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:51	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:51	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:51	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:51	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:51	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:51	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.19**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:51	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	43	%	30-136	1	07/29/21 11:57	07/29/21 19:51	2051-24-3	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C Pace Analytical Services - Kansas City							
Acenaphthene	**<0.047**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	83-32-9	
Acenaphthylene	**<0.033**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	208-96-8	
Anthracene	**<0.065**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	120-12-7	
Benzo(a)anthracene	**<0.035**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	56-55-3	
Benzo(a)pyrene	**<0.071**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	50-32-8	
Benzo(b)fluoranthene	**<0.051**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	205-99-2	
Benzo(g,h,i)perylene	**<0.040**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	191-24-2	
Benzo(k)fluoranthene	**<0.042**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	207-08-9	
Chrysene	**<0.041**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	218-01-9	
Dibenz(a,h)anthracene	**<0.050**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	53-70-3	
Fluoranthene	**<0.19**	ug/L	0.48	1	07/26/21 15:46	07/27/21 18:11	206-44-0	
Fluorene	**<0.066**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.048**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	193-39-5	
Naphthalene	**<0.076**	ug/L	0.48	1	07/26/21 15:46	07/27/21 18:11	91-20-3	
Phenanthrene	**<0.39**	ug/L	0.48	1	07/26/21 15:46	07/27/21 18:11	85-01-8	
Pyrene	**<0.074**	ug/L	0.095	1	07/26/21 15:46	07/27/21 18:11	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	63	%	37-109	1	07/26/21 15:46	07/27/21 18:11	321-60-8	
Terphenyl-d14 (S)	79	%	34-120	1	07/26/21 15:46	07/27/21 18:11	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	**4.8J**	ug/L	10.0	1		08/03/21 10:57	67-64-1	
Acetonitrile	**<1.1**	ug/L	10.0	1		08/03/21 10:57	75-05-8	
Acrolein	**<4.0**	ug/L	50.0	1		08/03/21 10:57	107-02-8	
Acrylonitrile	**<1.4**	ug/L	20.0	1		08/03/21 10:57	107-13-1	
Benzene	**<0.14**	ug/L	1.0	1		08/03/21 10:57	71-43-2	
Bromobenzene	**<0.088**	ug/L	1.0	1		08/03/21 10:57	108-86-1	
Bromochloromethane	**<0.20**	ug/L	1.0	1		08/03/21 10:57	74-97-5	
Bromodichloromethane	**<0.16**	ug/L	1.0	1		08/03/21 10:57	75-27-4	
Bromoform	**<0.68**	ug/L	1.0	1		08/03/21 10:57	75-25-2	
Bromomethane	**<0.46**	ug/L	5.0	1		08/03/21 10:57	74-83-9	
2-Butanone (MEK)	**<0.98**	ug/L	10.0	1		08/03/21 10:57	78-93-3	
n-Butylbenzene	**<0.15**	ug/L	1.0	1		08/03/21 10:57	104-51-8	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: RB-04 **Lab ID: 60375838028** Collected: 07/22/21 15:15 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Kansas City							
sec-Butylbenzene	**<0.11**	ug/L	1.0	1		08/03/21 10:57	135-98-8	
tert-Butylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 10:57	98-06-6	
Carbon disulfide	**<0.98**	ug/L	5.0	1		08/03/21 10:57	75-15-0	
Carbon tetrachloride	**<0.17**	ug/L	1.0	1		08/03/21 10:57	56-23-5	
Chlorobenzene	**<0.089**	ug/L	1.0	1		08/03/21 10:57	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	1		08/03/21 10:57	75-00-3	
2-Chloroethylvinyl ether	**<1.8**	ug/L	10.0	1		08/03/21 10:57	110-75-8	c2
Chloroform	**0.44J**	ug/L	1.0	1		08/03/21 10:57	67-66-3	
Chloromethane	**<0.28**	ug/L	1.0	1		08/03/21 10:57	74-87-3	
2-Chlorotoluene	**<0.11**	ug/L	1.0	1		08/03/21 10:57	95-49-8	
4-Chlorotoluene	**<0.15**	ug/L	1.0	1		08/03/21 10:57	106-43-4	
Cyclohexane	**<0.24**	ug/L	1.0	1		08/03/21 10:57	110-82-7	
Cyclohexanone	**<3.3**	ug/L	20.0	1		08/03/21 10:57	108-94-1	
1,2-Dibromo-3-chloropropane	**<0.78**	ug/L	2.5	1		08/03/21 10:57	96-12-8	
Dibromochloromethane	**<0.30**	ug/L	1.0	1		08/03/21 10:57	124-48-1	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	1		08/03/21 10:57	106-93-4	
Dibromomethane	**<0.11**	ug/L	1.0	1		08/03/21 10:57	74-95-3	
1,2-Dichlorobenzene	**<0.12**	ug/L	1.0	1		08/03/21 10:57	95-50-1	
1,3-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 10:57	541-73-1	
1,4-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 10:57	106-46-7	
Dichlorodifluoromethane	**<0.20**	ug/L	1.0	1		08/03/21 10:57	75-71-8	
1,1-Dichloroethane	**<0.12**	ug/L	1.0	1		08/03/21 10:57	75-34-3	
1,2-Dichloroethane	**<0.21**	ug/L	1.0	1		08/03/21 10:57	107-06-2	
1,2-Dichloroethene (Total)	**<0.22**	ug/L	1.0	1		08/03/21 10:57	540-59-0	
1,1-Dichloroethene	**<0.22**	ug/L	1.0	1		08/03/21 10:57	75-35-4	
cis-1,2-Dichloroethene	**<0.13**	ug/L	1.0	1		08/03/21 10:57	156-59-2	
trans-1,2-Dichloroethene	**<0.10**	ug/L	1.0	1		08/03/21 10:57	156-60-5	
1,2-Dichloropropane	**<0.14**	ug/L	1.0	1		08/03/21 10:57	78-87-5	
1,3-Dichloropropane	**<0.10**	ug/L	1.0	1		08/03/21 10:57	142-28-9	
2,2-Dichloropropane	**<0.16**	ug/L	1.0	1		08/03/21 10:57	594-20-7	
1,1-Dichloropropene	**<0.14**	ug/L	1.0	1		08/03/21 10:57	563-58-6	
cis-1,3-Dichloropropene	**<0.078**	ug/L	1.0	1		08/03/21 10:57	10061-01-5	
trans-1,3-Dichloropropene	**<0.18**	ug/L	1.0	1		08/03/21 10:57	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.23**	ug/L	1.0	1		08/03/21 10:57	60-29-7	
1,4-Dioxane (p-Dioxane)	**<4.4**	ug/L	100	1		08/03/21 10:57	123-91-1	
Ethylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 10:57	100-41-4	
n-Heptane	**<2.6**	ug/L	10.0	1		08/03/21 10:57	142-82-5	
Hexachloro-1,3-butadiene	**<0.42**	ug/L	1.0	1		08/03/21 10:57	87-68-3	
n-Hexane	**<0.22**	ug/L	10.0	1		08/03/21 10:57	110-54-3	
2-Hexanone	**<1.1**	ug/L	10.0	1		08/03/21 10:57	591-78-6	
Isopropylbenzene (Cumene)	**<0.097**	ug/L	1.0	1		08/03/21 10:57	98-82-8	
p-Isopropyltoluene	**<0.13**	ug/L	1.0	1		08/03/21 10:57	99-87-6	
Methyl acetate	**<0.87**	ug/L	1.0	1		08/03/21 10:57	79-20-9	
Methylcyclohexane	**<0.12**	ug/L	1.0	1		08/03/21 10:57	108-87-2	
Methylene Chloride	**<0.39**	ug/L	1.0	1		08/03/21 10:57	75-09-2	
1-Methylnaphthalene	**<2.6**	ug/L	10.0	1		08/03/21 10:57	90-12-0	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: RB-04 **Lab ID: 60375838028** Collected: 07/22/21 15:15 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
2-Methylnaphthalene	**<2.7**	ug/L	10.0	1		08/03/21 10:57	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<0.74**	ug/L	10.0	1		08/03/21 10:57	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/L	1.0	1		08/03/21 10:57	1634-04-4	
Naphthalene	**<0.82**	ug/L	10.0	1		08/03/21 10:57	91-20-3	
n-Propylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 10:57	103-65-1	
Styrene	**<0.12**	ug/L	1.0	1		08/03/21 10:57	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.084**	ug/L	1.0	1		08/03/21 10:57	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.15**	ug/L	1.0	1		08/03/21 10:57	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.0	1		08/03/21 10:57	127-18-4	
Tetrahydrofuran	**<2.8**	ug/L	5.0	1		08/03/21 10:57	109-99-9	
Toluene	**<0.25**	ug/L	1.0	1		08/03/21 10:57	108-88-3	
1,2,3-Trichlorobenzene	**<0.93**	ug/L	1.0	1		08/03/21 10:57	87-61-6	
1,2,4-Trichlorobenzene	**<0.73**	ug/L	1.0	1		08/03/21 10:57	120-82-1	
1,1,1-Trichloroethane	**<0.11**	ug/L	1.0	1		08/03/21 10:57	71-55-6	
1,1,2-Trichloroethane	**<0.14**	ug/L	1.0	1		08/03/21 10:57	79-00-5	
Trichloroethene	**<0.21**	ug/L	1.0	1		08/03/21 10:57	79-01-6	
Trichlorofluoromethane	**<0.16**	ug/L	1.0	1		08/03/21 10:57	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	2.5	1		08/03/21 10:57	96-18-4	
1,2,3-Trimethylbenzene	**<0.93**	ug/L	1.0	1		08/03/21 10:57	526-73-8	
1,2,4-Trimethylbenzene	**<0.32**	ug/L	1.0	1		08/03/21 10:57	95-63-6	
1,3,5-Trimethylbenzene	**<0.090**	ug/L	1.0	1		08/03/21 10:57	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	1		08/03/21 10:57	75-01-4	
Xylene (Total)	**<0.28**	ug/L	3.0	1		08/03/21 10:57	1330-20-7	
m&p-Xylene	**<0.22**	ug/L	2.0	1		08/03/21 10:57	179601-23-1	
o-Xylene	**<0.082**	ug/L	1.0	1		08/03/21 10:57	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	80-120	1		08/03/21 10:57	460-00-4	
Toluene-d8 (S)	99	%	80-120	1		08/03/21 10:57	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1		08/03/21 10:57	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/03/21 10:57		
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Pace Analytical Services - Kansas City							
TPH-GRO	**<62.6**	ug/L	500	1		07/28/21 13:36		
Surrogates								
Toluene-d8 (S)	101	%	80-120	1		07/28/21 13:36	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		07/28/21 13:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1		07/28/21 13:36	2199-69-1	
Preservation pH	**1.0**		0.10	1		07/28/21 13:36		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: RB-05 **Lab ID: 60375838029** Collected: 07/23/21 08:05 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB, LV	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<0.15**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:58	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:58	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:58	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:58	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:58	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.17**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:58	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.19**	ug/L	1.0	1	07/29/21 11:57	07/29/21 19:58	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	48	%	30-136	1	07/29/21 11:57	07/29/21 19:58	2051-24-3	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C Pace Analytical Services - Kansas City							
Acenaphthene	**<0.049**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	83-32-9	
Acenaphthylene	**<0.034**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	208-96-8	
Anthracene	**<0.069**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	120-12-7	
Benzo(a)anthracene	**<0.037**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	56-55-3	
Benzo(a)pyrene	**<0.074**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	50-32-8	
Benzo(b)fluoranthene	**<0.053**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	205-99-2	
Benzo(g,h,i)perylene	**<0.042**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	191-24-2	
Benzo(k)fluoranthene	**<0.044**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	207-08-9	
Chrysene	**<0.043**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	218-01-9	
Dibenz(a,h)anthracene	**<0.053**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	53-70-3	
Fluoranthene	**0.33J**	ug/L	0.50	1	07/26/21 15:46	07/27/21 18:26	206-44-0	
Fluorene	**<0.070**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.050**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	193-39-5	
Naphthalene	**<0.080**	ug/L	0.50	1	07/26/21 15:46	07/27/21 18:26	91-20-3	
Phenanthrene	**0.45J**	ug/L	0.50	1	07/26/21 15:46	07/27/21 18:26	85-01-8	
Pyrene	**0.17**	ug/L	0.10	1	07/26/21 15:46	07/27/21 18:26	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	72	%	37-109	1	07/26/21 15:46	07/27/21 18:26	321-60-8	
Terphenyl-d14 (S)	84	%	34-120	1	07/26/21 15:46	07/27/21 18:26	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	**<2.5**	ug/L	10.0	1		08/03/21 11:11	67-64-1	
Acetonitrile	**<1.1**	ug/L	10.0	1		08/03/21 11:11	75-05-8	
Acrolein	**<4.0**	ug/L	50.0	1		08/03/21 11:11	107-02-8	
Acrylonitrile	**<1.4**	ug/L	20.0	1		08/03/21 11:11	107-13-1	
Benzene	**<0.14**	ug/L	1.0	1		08/03/21 11:11	71-43-2	
Bromobenzene	**<0.088**	ug/L	1.0	1		08/03/21 11:11	108-86-1	
Bromochloromethane	**<0.20**	ug/L	1.0	1		08/03/21 11:11	74-97-5	
Bromodichloromethane	**<0.16**	ug/L	1.0	1		08/03/21 11:11	75-27-4	
Bromoform	**<0.68**	ug/L	1.0	1		08/03/21 11:11	75-25-2	
Bromomethane	**<0.46**	ug/L	5.0	1		08/03/21 11:11	74-83-9	
2-Butanone (MEK)	**<0.98**	ug/L	10.0	1		08/03/21 11:11	78-93-3	
n-Butylbenzene	**<0.15**	ug/L	1.0	1		08/03/21 11:11	104-51-8	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: RB-05 **Lab ID: 60375838029** Collected: 07/23/21 08:05 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
sec-Butylbenzene	**<0.11**	ug/L	1.0	1		08/03/21 11:11	135-98-8	
tert-Butylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 11:11	98-06-6	
Carbon disulfide	**<0.98**	ug/L	5.0	1		08/03/21 11:11	75-15-0	
Carbon tetrachloride	**<0.17**	ug/L	1.0	1		08/03/21 11:11	56-23-5	
Chlorobenzene	**<0.089**	ug/L	1.0	1		08/03/21 11:11	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	1		08/03/21 11:11	75-00-3	
2-Chloroethylvinyl ether	**<1.8**	ug/L	10.0	1		08/03/21 11:11	110-75-8	c2
Chloroform	**0.52J**	ug/L	1.0	1		08/03/21 11:11	67-66-3	
Chloromethane	**<0.28**	ug/L	1.0	1		08/03/21 11:11	74-87-3	
2-Chlorotoluene	**<0.11**	ug/L	1.0	1		08/03/21 11:11	95-49-8	
4-Chlorotoluene	**<0.15**	ug/L	1.0	1		08/03/21 11:11	106-43-4	
Cyclohexane	**<0.24**	ug/L	1.0	1		08/03/21 11:11	110-82-7	
Cyclohexanone	**<3.3**	ug/L	20.0	1		08/03/21 11:11	108-94-1	
1,2-Dibromo-3-chloropropane	**<0.78**	ug/L	2.5	1		08/03/21 11:11	96-12-8	
Dibromochloromethane	**<0.30**	ug/L	1.0	1		08/03/21 11:11	124-48-1	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	1		08/03/21 11:11	106-93-4	
Dibromomethane	**<0.11**	ug/L	1.0	1		08/03/21 11:11	74-95-3	
1,2-Dichlorobenzene	**<0.12**	ug/L	1.0	1		08/03/21 11:11	95-50-1	
1,3-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 11:11	541-73-1	
1,4-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 11:11	106-46-7	
Dichlorodifluoromethane	**<0.20**	ug/L	1.0	1		08/03/21 11:11	75-71-8	
1,1-Dichloroethane	**<0.12**	ug/L	1.0	1		08/03/21 11:11	75-34-3	
1,2-Dichloroethane	**<0.21**	ug/L	1.0	1		08/03/21 11:11	107-06-2	
1,2-Dichloroethene (Total)	**<0.22**	ug/L	1.0	1		08/03/21 11:11	540-59-0	
1,1-Dichloroethene	**<0.22**	ug/L	1.0	1		08/03/21 11:11	75-35-4	
cis-1,2-Dichloroethene	**<0.13**	ug/L	1.0	1		08/03/21 11:11	156-59-2	
trans-1,2-Dichloroethene	**<0.10**	ug/L	1.0	1		08/03/21 11:11	156-60-5	
1,2-Dichloropropane	**<0.14**	ug/L	1.0	1		08/03/21 11:11	78-87-5	
1,3-Dichloropropane	**<0.10**	ug/L	1.0	1		08/03/21 11:11	142-28-9	
2,2-Dichloropropane	**<0.16**	ug/L	1.0	1		08/03/21 11:11	594-20-7	
1,1-Dichloropropene	**<0.14**	ug/L	1.0	1		08/03/21 11:11	563-58-6	
cis-1,3-Dichloropropene	**<0.078**	ug/L	1.0	1		08/03/21 11:11	10061-01-5	
trans-1,3-Dichloropropene	**<0.18**	ug/L	1.0	1		08/03/21 11:11	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.23**	ug/L	1.0	1		08/03/21 11:11	60-29-7	
1,4-Dioxane (p-Dioxane)	**<4.4**	ug/L	100	1		08/03/21 11:11	123-91-1	
Ethylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 11:11	100-41-4	
n-Heptane	**<2.6**	ug/L	10.0	1		08/03/21 11:11	142-82-5	
Hexachloro-1,3-butadiene	**<0.42**	ug/L	1.0	1		08/03/21 11:11	87-68-3	
n-Hexane	**<0.22**	ug/L	10.0	1		08/03/21 11:11	110-54-3	
2-Hexanone	**<1.1**	ug/L	10.0	1		08/03/21 11:11	591-78-6	
Isopropylbenzene (Cumene)	**<0.097**	ug/L	1.0	1		08/03/21 11:11	98-82-8	
p-Isopropyltoluene	**<0.13**	ug/L	1.0	1		08/03/21 11:11	99-87-6	
Methyl acetate	**<0.87**	ug/L	1.0	1		08/03/21 11:11	79-20-9	
Methylcyclohexane	**<0.12**	ug/L	1.0	1		08/03/21 11:11	108-87-2	
Methylene Chloride	**<0.39**	ug/L	1.0	1		08/03/21 11:11	75-09-2	
1-Methylnaphthalene	**<2.6**	ug/L	10.0	1		08/03/21 11:11	90-12-0	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: RB-05 **Lab ID: 60375838029** Collected: 07/23/21 08:05 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
2-Methylnaphthalene	**<2.7**	ug/L	10.0	1		08/03/21 11:11	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<0.74**	ug/L	10.0	1		08/03/21 11:11	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/L	1.0	1		08/03/21 11:11	1634-04-4	
Naphthalene	**<0.82**	ug/L	10.0	1		08/03/21 11:11	91-20-3	
n-Propylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 11:11	103-65-1	
Styrene	**<0.12**	ug/L	1.0	1		08/03/21 11:11	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.084**	ug/L	1.0	1		08/03/21 11:11	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.15**	ug/L	1.0	1		08/03/21 11:11	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.0	1		08/03/21 11:11	127-18-4	
Tetrahydrofuran	**<2.8**	ug/L	5.0	1		08/03/21 11:11	109-99-9	
Toluene	**<0.25**	ug/L	1.0	1		08/03/21 11:11	108-88-3	
1,2,3-Trichlorobenzene	**<0.93**	ug/L	1.0	1		08/03/21 11:11	87-61-6	
1,2,4-Trichlorobenzene	**<0.73**	ug/L	1.0	1		08/03/21 11:11	120-82-1	
1,1,1-Trichloroethane	**<0.11**	ug/L	1.0	1		08/03/21 11:11	71-55-6	
1,1,2-Trichloroethane	**<0.14**	ug/L	1.0	1		08/03/21 11:11	79-00-5	
Trichloroethene	**<0.21**	ug/L	1.0	1		08/03/21 11:11	79-01-6	
Trichlorofluoromethane	**<0.16**	ug/L	1.0	1		08/03/21 11:11	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	2.5	1		08/03/21 11:11	96-18-4	
1,2,3-Trimethylbenzene	**<0.93**	ug/L	1.0	1		08/03/21 11:11	526-73-8	
1,2,4-Trimethylbenzene	**<0.32**	ug/L	1.0	1		08/03/21 11:11	95-63-6	
1,3,5-Trimethylbenzene	**<0.090**	ug/L	1.0	1		08/03/21 11:11	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	1		08/03/21 11:11	75-01-4	
Xylene (Total)	**<0.28**	ug/L	3.0	1		08/03/21 11:11	1330-20-7	
m&p-Xylene	**<0.22**	ug/L	2.0	1		08/03/21 11:11	179601-23-1	
o-Xylene	**<0.082**	ug/L	1.0	1		08/03/21 11:11	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	80-120	1		08/03/21 11:11	460-00-4	
Toluene-d8 (S)	101	%	80-120	1		08/03/21 11:11	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120	1		08/03/21 11:11	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/03/21 11:11		
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Pace Analytical Services - Kansas City							
TPH-GRO	**<62.6**	ug/L	500	1		07/28/21 13:52		
Surrogates								
Toluene-d8 (S)	103	%	80-120	1		07/28/21 13:52	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		07/28/21 13:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120	1		07/28/21 13:52	2199-69-1	
Preservation pH	**1.0**		0.10	1		07/28/21 13:52		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: TB-4 **Lab ID: 60375838030** Collected: 07/23/21 08:05 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	**<2.5**	ug/L	10.0	1		08/03/21 08:35	67-64-1	
Acetonitrile	**<1.1**	ug/L	10.0	1		08/03/21 08:35	75-05-8	
Acrolein	**<4.0**	ug/L	50.0	1		08/03/21 08:35	107-02-8	
Acrylonitrile	**<1.4**	ug/L	20.0	1		08/03/21 08:35	107-13-1	
Benzene	**<0.14**	ug/L	1.0	1		08/03/21 08:35	71-43-2	
Bromobenzene	**<0.088**	ug/L	1.0	1		08/03/21 08:35	108-86-1	
Bromochloromethane	**<0.20**	ug/L	1.0	1		08/03/21 08:35	74-97-5	
Bromodichloromethane	**<0.16**	ug/L	1.0	1		08/03/21 08:35	75-27-4	
Bromoform	**<0.68**	ug/L	1.0	1		08/03/21 08:35	75-25-2	
Bromomethane	**<0.46**	ug/L	5.0	1		08/03/21 08:35	74-83-9	
2-Butanone (MEK)	**<0.98**	ug/L	10.0	1		08/03/21 08:35	78-93-3	
n-Butylbenzene	**<0.15**	ug/L	1.0	1		08/03/21 08:35	104-51-8	
sec-Butylbenzene	**<0.11**	ug/L	1.0	1		08/03/21 08:35	135-98-8	
tert-Butylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 08:35	98-06-6	
Carbon disulfide	**<0.98**	ug/L	5.0	1		08/03/21 08:35	75-15-0	
Carbon tetrachloride	**<0.17**	ug/L	1.0	1		08/03/21 08:35	56-23-5	
Chlorobenzene	**<0.089**	ug/L	1.0	1		08/03/21 08:35	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	1		08/03/21 08:35	75-00-3	
2-Chloroethylvinyl ether	**<1.8**	ug/L	10.0	1		08/03/21 08:35	110-75-8	c2
Chloroform	**<0.22**	ug/L	1.0	1		08/03/21 08:35	67-66-3	
Chloromethane	**<0.28**	ug/L	1.0	1		08/03/21 08:35	74-87-3	
2-Chlorotoluene	**<0.11**	ug/L	1.0	1		08/03/21 08:35	95-49-8	
4-Chlorotoluene	**<0.15**	ug/L	1.0	1		08/03/21 08:35	106-43-4	
Cyclohexane	**<0.24**	ug/L	1.0	1		08/03/21 08:35	110-82-7	
Cyclohexanone	**<3.3**	ug/L	20.0	1		08/03/21 08:35	108-94-1	
1,2-Dibromo-3-chloropropane	**<0.78**	ug/L	2.5	1		08/03/21 08:35	96-12-8	
Dibromochloromethane	**<0.30**	ug/L	1.0	1		08/03/21 08:35	124-48-1	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	1		08/03/21 08:35	106-93-4	
Dibromomethane	**<0.11**	ug/L	1.0	1		08/03/21 08:35	74-95-3	
1,2-Dichlorobenzene	**<0.12**	ug/L	1.0	1		08/03/21 08:35	95-50-1	
1,3-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 08:35	541-73-1	
1,4-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 08:35	106-46-7	
Dichlorodifluoromethane	**<0.20**	ug/L	1.0	1		08/03/21 08:35	75-71-8	
1,1-Dichloroethane	**<0.12**	ug/L	1.0	1		08/03/21 08:35	75-34-3	
1,2-Dichloroethane	**<0.21**	ug/L	1.0	1		08/03/21 08:35	107-06-2	
1,2-Dichloroethene (Total)	**<0.22**	ug/L	1.0	1		08/03/21 08:35	540-59-0	
1,1-Dichloroethene	**<0.22**	ug/L	1.0	1		08/03/21 08:35	75-35-4	
cis-1,2-Dichloroethene	**<0.13**	ug/L	1.0	1		08/03/21 08:35	156-59-2	
trans-1,2-Dichloroethene	**<0.10**	ug/L	1.0	1		08/03/21 08:35	156-60-5	
1,2-Dichloropropane	**<0.14**	ug/L	1.0	1		08/03/21 08:35	78-87-5	
1,3-Dichloropropane	**<0.10**	ug/L	1.0	1		08/03/21 08:35	142-28-9	
2,2-Dichloropropane	**<0.16**	ug/L	1.0	1		08/03/21 08:35	594-20-7	
1,1-Dichloropropene	**<0.14**	ug/L	1.0	1		08/03/21 08:35	563-58-6	
cis-1,3-Dichloropropene	**<0.078**	ug/L	1.0	1		08/03/21 08:35	10061-01-5	
trans-1,3-Dichloropropene	**<0.18**	ug/L	1.0	1		08/03/21 08:35	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.23**	ug/L	1.0	1		08/03/21 08:35	60-29-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Sample: TB-4 **Lab ID: 60375838030** Collected: 07/23/21 08:05 Received: 07/24/21 04:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Kansas City							
1,4-Dioxane (p-Dioxane)	**<4.4**	ug/L	100	1		08/03/21 08:35	123-91-1	
Ethylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 08:35	100-41-4	
n-Heptane	**<2.6**	ug/L	10.0	1		08/03/21 08:35	142-82-5	
Hexachloro-1,3-butadiene	**<0.42**	ug/L	1.0	1		08/03/21 08:35	87-68-3	
n-Hexane	**<0.22**	ug/L	10.0	1		08/03/21 08:35	110-54-3	
2-Hexanone	**<1.1**	ug/L	10.0	1		08/03/21 08:35	591-78-6	
Isopropylbenzene (Cumene)	**<0.097**	ug/L	1.0	1		08/03/21 08:35	98-82-8	
p-Isopropyltoluene	**<0.13**	ug/L	1.0	1		08/03/21 08:35	99-87-6	
Methyl acetate	**<0.87**	ug/L	1.0	1		08/03/21 08:35	79-20-9	
Methylcyclohexane	**<0.12**	ug/L	1.0	1		08/03/21 08:35	108-87-2	
Methylene Chloride	**<0.39**	ug/L	1.0	1		08/03/21 08:35	75-09-2	
1-Methylnaphthalene	**<2.6**	ug/L	10.0	1		08/03/21 08:35	90-12-0	
2-Methylnaphthalene	**<2.7**	ug/L	10.0	1		08/03/21 08:35	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<0.74**	ug/L	10.0	1		08/03/21 08:35	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/L	1.0	1		08/03/21 08:35	1634-04-4	
Naphthalene	**<0.82**	ug/L	10.0	1		08/03/21 08:35	91-20-3	
n-Propylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 08:35	103-65-1	
Styrene	**<0.12**	ug/L	1.0	1		08/03/21 08:35	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.084**	ug/L	1.0	1		08/03/21 08:35	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.15**	ug/L	1.0	1		08/03/21 08:35	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.0	1		08/03/21 08:35	127-18-4	
Tetrahydrofuran	**<2.8**	ug/L	5.0	1		08/03/21 08:35	109-99-9	
Toluene	**<0.25**	ug/L	1.0	1		08/03/21 08:35	108-88-3	
1,2,3-Trichlorobenzene	**<0.93**	ug/L	1.0	1		08/03/21 08:35	87-61-6	
1,2,4-Trichlorobenzene	**<0.73**	ug/L	1.0	1		08/03/21 08:35	120-82-1	
1,1,1-Trichloroethane	**<0.11**	ug/L	1.0	1		08/03/21 08:35	71-55-6	
1,1,2-Trichloroethane	**<0.14**	ug/L	1.0	1		08/03/21 08:35	79-00-5	
Trichloroethene	**<0.21**	ug/L	1.0	1		08/03/21 08:35	79-01-6	
Trichlorofluoromethane	**<0.16**	ug/L	1.0	1		08/03/21 08:35	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	2.5	1		08/03/21 08:35	96-18-4	
1,2,3-Trimethylbenzene	**<0.93**	ug/L	1.0	1		08/03/21 08:35	526-73-8	
1,2,4-Trimethylbenzene	**<0.32**	ug/L	1.0	1		08/03/21 08:35	95-63-6	
1,3,5-Trimethylbenzene	**<0.090**	ug/L	1.0	1		08/03/21 08:35	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	1		08/03/21 08:35	75-01-4	
Xylene (Total)	**<0.28**	ug/L	3.0	1		08/03/21 08:35	1330-20-7	
m&p-Xylene	**<0.22**	ug/L	2.0	1		08/03/21 08:35	179601-23-1	
o-Xylene	**<0.082**	ug/L	1.0	1		08/03/21 08:35	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	80-120	1		08/03/21 08:35	460-00-4	
Toluene-d8 (S)	99	%	80-120	1		08/03/21 08:35	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1		08/03/21 08:35	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/03/21 08:35		

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 735728
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838021, 60375838022, 60375838023, 60375838024, 60375838025

METHOD BLANK: 2951047 Matrix: Solid
Associated Lab Samples: 60375838021, 60375838022, 60375838023, 60375838024, 60375838025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	08/05/21 10:40	
Arsenic	mg/kg	<0.11	1.0	08/05/21 10:40	
Copper	mg/kg	<0.31	1.0	08/05/21 10:40	
Lead	mg/kg	<0.13	0.50	08/05/21 10:40	
Zinc	mg/kg	<0.84	5.0	08/05/21 10:40	

LABORATORY CONTROL SAMPLE: 2951048

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	99.7	100	80-120	
Arsenic	mg/kg	100	98.2	98	80-120	
Copper	mg/kg	100	103	103	80-120	
Lead	mg/kg	100	97.1	97	80-120	
Zinc	mg/kg	100	96.0	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2951049 2951050

Parameter	Units	60375838021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.49	102	115	49.0	54.4	48	47	75-125	11	20	M1
Arsenic	mg/kg	5.7	102	115	102	116	94	96	75-125	13	20	
Copper	mg/kg	13.2	102	115	112	126	97	98	75-125	12	20	
Lead	mg/kg	7.2	102	115	108	122	98	100	75-125	13	20	
Zinc	mg/kg	36.7	102	115	138	150	99	98	75-125	8	20	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 736159
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838001, 60375838002, 60375838003, 60375838004, 60375838005, 60375838006, 60375838007, 60375838008, 60375838009, 60375838010, 60375838011, 60375838012

METHOD BLANK: 2952435 Matrix: Solid
Associated Lab Samples: 60375838001, 60375838002, 60375838003, 60375838004, 60375838005, 60375838006, 60375838007, 60375838008, 60375838009, 60375838010, 60375838011, 60375838012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	08/06/21 13:40	
Arsenic	mg/kg	<0.11	1.0	08/06/21 13:40	
Copper	mg/kg	<0.31	1.0	08/06/21 13:40	
Lead	mg/kg	<0.13	0.50	08/06/21 13:40	
Zinc	mg/kg	<0.84	5.0	08/06/21 13:40	

LABORATORY CONTROL SAMPLE: 2952436

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	95.1	95	80-120	
Arsenic	mg/kg	100	95.5	95	80-120	
Copper	mg/kg	100	103	103	80-120	
Lead	mg/kg	100	97.8	98	80-120	
Zinc	mg/kg	100	95.1	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952437 2952438

Parameter	Units	60375626032 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.60	120	93.1	47.4	32.4	39	35	75-125	38	20	M1,R1
Arsenic	mg/kg	9.5	120	93.1	121	96.9	93	94	75-125	22	20	R1
Copper	mg/kg	19.3	120	93.1	135	109	96	96	75-125	21	20	R1
Lead	mg/kg	12.3	120	93.1	129	105	97	99	75-125	21	20	R1
Zinc	mg/kg	59.5	120	93.1	172	146	93	92	75-125	16	20	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 736298
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838013, 60375838014, 60375838015, 60375838016, 60375838017, 60375838018, 60375838019, 60375838020

METHOD BLANK: 2952916 Matrix: Solid
Associated Lab Samples: 60375838013, 60375838014, 60375838015, 60375838016, 60375838017, 60375838018, 60375838019, 60375838020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	08/06/21 14:25	
Arsenic	mg/kg	<0.11	1.0	08/06/21 14:25	
Copper	mg/kg	<0.31	1.0	08/06/21 14:25	
Lead	mg/kg	<0.13	0.50	08/06/21 14:25	
Zinc	mg/kg	<0.84	5.0	08/06/21 14:25	

LABORATORY CONTROL SAMPLE: 2952917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	93.8	94	80-120	
Arsenic	mg/kg	100	95.0	95	80-120	
Copper	mg/kg	100	101	101	80-120	
Lead	mg/kg	100	96.7	97	80-120	
Zinc	mg/kg	100	93.8	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952918 2952919

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.52	92.4	103	32.7	34.6	35	34	75-125	6	20	M1
Arsenic	mg/kg	9.8	92.4	103	97.2	105	95	93	75-125	8	20	
Copper	mg/kg	17.4	92.4	103	108	115	97	95	75-125	7	20	
Lead	mg/kg	14.3	92.4	103	108	115	102	98	75-125	6	20	
Zinc	mg/kg	55.1	92.4	103	143	148	95	91	75-125	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2952920 2952921

Parameter	Units	60375692008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	ND	114	97.8	43.3	35.1	38	36	75-125	21	20	M1,R1
Arsenic	mg/kg	6.8	114	97.8	113	95.4	93	91	75-125	17	20	
Copper	mg/kg	15.6	114	97.8	129	110	99	96	75-125	16	20	
Lead	mg/kg	11.7	114	97.8	125	105	99	95	75-125	17	20	
Zinc	mg/kg	42.5	114	97.8	152	134	96	94	75-125	13	20	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734679
QC Batch Method: EPA 5035A/5030
Analysis Method: EPA 8260B
Analysis Description: 8260 MSV 5035A Volatile Organics
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838010, 60375838011, 60375838012, 60375838013

METHOD BLANK: 2947592 Matrix: Solid
Associated Lab Samples: 60375838010, 60375838011, 60375838012, 60375838013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<1.0	5.0	07/28/21 09:09	
1,1,1-Trichloroethane	ug/kg	<0.75	5.0	07/28/21 09:09	
1,1,2,2-Tetrachloroethane	ug/kg	<1.0	5.0	07/28/21 09:09	
1,1,2-Trichloroethane	ug/kg	<0.63	5.0	07/28/21 09:09	
1,1,2-Trichlorotrifluoroethane	ug/kg	<5.0	5.0	07/28/21 09:09	N2
1,1-Dichloroethane	ug/kg	<0.39	5.0	07/28/21 09:09	
1,1-Dichloroethene	ug/kg	<0.64	5.0	07/28/21 09:09	
1,1-Dichloropropene	ug/kg	<0.90	5.0	07/28/21 09:09	
1,2,3-Trichlorobenzene	ug/kg	<0.80	5.0	07/28/21 09:09	
1,2,3-Trichloropropane	ug/kg	<2.1	5.0	07/28/21 09:09	
1,2,3-Trimethylbenzene	ug/kg	<2.0	5.0	07/28/21 09:09	
1,2,4-Trichlorobenzene	ug/kg	<0.80	5.0	07/28/21 09:09	
1,2,4-Trimethylbenzene	ug/kg	<0.67	5.0	07/28/21 09:09	
1,2-Dibromo-3-chloropropane	ug/kg	<1.8	10.0	07/28/21 09:09	
1,2-Dibromoethane (EDB)	ug/kg	<0.54	5.0	07/28/21 09:09	
1,2-Dichlorobenzene	ug/kg	<0.62	5.0	07/28/21 09:09	
1,2-Dichloroethane	ug/kg	<0.40	5.0	07/28/21 09:09	
1,2-Dichloroethene (Total)	ug/kg	<1.1	5.0	07/28/21 09:09	
1,2-Dichloropropane	ug/kg	<0.98	5.0	07/28/21 09:09	
1,3,5-Trimethylbenzene	ug/kg	<0.63	5.0	07/28/21 09:09	
1,3-Dichlorobenzene	ug/kg	<0.72	5.0	07/28/21 09:09	
1,3-Dichloropropane	ug/kg	<0.69	5.0	07/28/21 09:09	
1,4-Dichlorobenzene	ug/kg	<0.81	5.0	07/28/21 09:09	
2,2-Dichloropropane	ug/kg	<0.48	5.0	07/28/21 09:09	
2-Butanone (MEK)	ug/kg	<3.4	10.0	07/28/21 09:09	
2-Chlorotoluene	ug/kg	<0.73	5.0	07/28/21 09:09	
2-Hexanone	ug/kg	<2.5	20.0	07/28/21 09:09	
4-Chlorotoluene	ug/kg	<0.60	5.0	07/28/21 09:09	
4-Methyl-2-pentanone (MIBK)	ug/kg	<3.0	10.0	07/28/21 09:09	
Acetone	ug/kg	<16.2	20.0	07/28/21 09:09	
Acrolein	ug/kg	<75.6	100	07/28/21 09:09	
Acrylonitrile	ug/kg	<3.2	100	07/28/21 09:09	
Benzene	ug/kg	<0.49	5.0	07/28/21 09:09	
Bromobenzene	ug/kg	<0.94	5.0	07/28/21 09:09	
Bromochloromethane	ug/kg	<0.60	5.0	07/28/21 09:09	
Bromodichloromethane	ug/kg	<0.60	5.0	07/28/21 09:09	
Bromoform	ug/kg	<0.58	5.0	07/28/21 09:09	
Bromomethane	ug/kg	<2.9	5.0	07/28/21 09:09	
Carbon disulfide	ug/kg	<0.64	5.0	07/28/21 09:09	
Carbon tetrachloride	ug/kg	<0.86	5.0	07/28/21 09:09	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

METHOD BLANK: 2947592 Matrix: Solid
Associated Lab Samples: 60375838010, 60375838011, 60375838012, 60375838013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlorobenzene	ug/kg	<0.63	5.0	07/28/21 09:09	
Chloroethane	ug/kg	<1.5	5.0	07/28/21 09:09	
Chloroform	ug/kg	<0.49	5.0	07/28/21 09:09	
Chloromethane	ug/kg	<0.80	5.0	07/28/21 09:09	
cis-1,2-Dichloroethene	ug/kg	<0.43	5.0	07/28/21 09:09	
cis-1,3-Dichloropropene	ug/kg	<0.53	5.0	07/28/21 09:09	
Cyclohexanone	ug/kg	<12.7	20.0	07/28/21 09:09	
Dibromochloromethane	ug/kg	<0.65	5.0	07/28/21 09:09	
Dibromomethane	ug/kg	<0.60	5.0	07/28/21 09:09	
Diethyl ether (Ethyl ether)	ug/kg	<0.56	5.0	07/28/21 09:09	
Ethylbenzene	ug/kg	<0.46	5.0	07/28/21 09:09	
Hexachloro-1,3-butadiene	ug/kg	<0.85	5.0	07/28/21 09:09	
Iodomethane	ug/kg	<1.5	10.0	07/28/21 09:09	
Isopropylbenzene (Cumene)	ug/kg	<0.57	5.0	07/28/21 09:09	
m&p-Xylene	ug/kg	<0.63	5.0	07/28/21 09:09	
Methyl acetate	ug/kg	<1.1	100	07/28/21 09:09	
Methyl-tert-butyl ether	ug/kg	<0.48	5.0	07/28/21 09:09	
Methylene Chloride	ug/kg	<2.7	5.0	07/28/21 09:09	
n-Butylbenzene	ug/kg	<0.65	5.0	07/28/21 09:09	
n-Heptane	ug/kg	<4.5	10.0	07/28/21 09:09	
n-Hexane	ug/kg	<0.69	10.0	07/28/21 09:09	
n-Propylbenzene	ug/kg	<0.80	5.0	07/28/21 09:09	
Naphthalene	ug/kg	<0.82	10.0	07/28/21 09:09	
o-Xylene	ug/kg	<0.37	5.0	07/28/21 09:09	
p-Isopropyltoluene	ug/kg	<0.69	5.0	07/28/21 09:09	
sec-Butylbenzene	ug/kg	<0.73	5.0	07/28/21 09:09	
Styrene	ug/kg	<0.59	5.0	07/28/21 09:09	
tert-Butylbenzene	ug/kg	<0.88	25.0	07/28/21 09:09	
Tetrachloroethene	ug/kg	<0.41	5.0	07/28/21 09:09	
Tetrahydrofuran	ug/kg	<0.78	5.0	07/28/21 09:09	N2
Toluene	ug/kg	<0.35	5.0	07/28/21 09:09	
trans-1,2-Dichloroethene	ug/kg	<0.68	5.0	07/28/21 09:09	
trans-1,3-Dichloropropene	ug/kg	<0.46	5.0	07/28/21 09:09	
Trichloroethene	ug/kg	<0.72	5.0	07/28/21 09:09	
Trichlorofluoromethane	ug/kg	<0.61	5.0	07/28/21 09:09	
Vinyl acetate	ug/kg	<0.56	100	07/28/21 09:09	
Vinyl chloride	ug/kg	<0.67	5.0	07/28/21 09:09	
Xylene (Total)	ug/kg	<1.1	5.0	07/28/21 09:09	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120	07/28/21 09:09	
4-Bromofluorobenzene (S)	%	103	80-120	07/28/21 09:09	
Toluene-d8 (S)	%	100	80-120	07/28/21 09:09	

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REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

LABORATORY CONTROL SAMPLE: 2947593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	104	104	80-130	
1,1,1-Trichloroethane	ug/kg	100	103	103	75-130	
1,1,2,2-Tetrachloroethane	ug/kg	100	93.5	94	75-120	
1,1,2-Trichloroethane	ug/kg	100	98.3	98	80-120	
1,1,2-Trichlorotrifluoroethane	ug/kg	100	112	112	80-120	N2
1,1-Dichloroethane	ug/kg	100	103	103	75-125	
1,1-Dichloroethene	ug/kg	100	109	109	70-130	
1,1-Dichloropropene	ug/kg	100	105	105	60-140	
1,2,3-Trichlorobenzene	ug/kg	100	101	101	80-125	
1,2,3-Trichloropropane	ug/kg	100	92.8	93	80-120	
1,2,3-Trimethylbenzene	ug/kg	100	98.0	98	80-120	
1,2,4-Trichlorobenzene	ug/kg	100	97.4	97	80-125	
1,2,4-Trimethylbenzene	ug/kg	100	98.3	98	80-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	103	103	75-135	
1,2-Dibromoethane (EDB)	ug/kg	100	101	101	80-125	
1,2-Dichlorobenzene	ug/kg	100	94.6	95	80-120	
1,2-Dichloroethane	ug/kg	100	95.3	95	80-120	
1,2-Dichloroethene (Total)	ug/kg	200	206	103	80-120	
1,2-Dichloropropane	ug/kg	100	99.4	99	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	101	101	80-125	
1,3-Dichlorobenzene	ug/kg	100	99.4	99	80-120	
1,3-Dichloropropane	ug/kg	100	96.3	96	80-120	
1,4-Dichlorobenzene	ug/kg	100	100	100	80-120	
2,2-Dichloropropane	ug/kg	100	109	109	75-130	
2-Butanone (MEK)	ug/kg	500	570	114	60-135	
2-Chlorotoluene	ug/kg	100	97.7	98	80-120	
2-Hexanone	ug/kg	500	555	111	70-135	
4-Chlorotoluene	ug/kg	100	100	100	80-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	460	92	75-130	
Acetone	ug/kg	500	591	118	50-150	
Acrolein	ug/kg	500	506	101	10-180	
Acrylonitrile	ug/kg	500	470	94	80-120	
Benzene	ug/kg	100	99.3	99	80-120	
Bromobenzene	ug/kg	100	96.3	96	80-120	
Bromochloromethane	ug/kg	100	100	100	75-120	
Bromodichloromethane	ug/kg	100	109	109	80-125	
Bromoform	ug/kg	100	90.9	91	80-135	
Bromomethane	ug/kg	100	98.4	98	35-135	
Carbon disulfide	ug/kg	100	109	109	65-140	
Carbon tetrachloride	ug/kg	100	113	113	75-140	
Chlorobenzene	ug/kg	100	99.7	100	80-120	
Chloroethane	ug/kg	100	87.7	88	50-135	
Chloroform	ug/kg	100	101	101	80-120	
Chloromethane	ug/kg	100	97.9	98	15-155	
cis-1,2-Dichloroethene	ug/kg	100	101	101	80-120	
cis-1,3-Dichloropropene	ug/kg	100	109	109	80-125	
Cyclohexanone	ug/kg	500	499	100	80-120	

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(913)599-5665

QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

LABORATORY CONTROL SAMPLE: 2947593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/kg	100	113	113	80-130	
Dibromomethane	ug/kg	100	98.3	98	80-120	
Diethyl ether (Ethyl ether)	ug/kg	100	99.5	99	80-120	
Ethylbenzene	ug/kg	100	100	100	80-120	
Hexachloro-1,3-butadiene	ug/kg	100	110	110	80-135	
Iodomethane	ug/kg	100	108	108	65-145	
Isopropylbenzene (Cumene)	ug/kg	100	103	103	75-135	
m&p-Xylene	ug/kg	200	201	101	80-125	
Methyl acetate	ug/kg	500	449	90	80-120	
Methyl-tert-butyl ether	ug/kg	100	96.7	97	75-130	
Methylene Chloride	ug/kg	100	90.4	90	65-120	
n-Butylbenzene	ug/kg	100	104	104	80-135	
n-Heptane	ug/kg	100	111	111	80-120	
n-Hexane	ug/kg	100	107	107	55-150	
n-Propylbenzene	ug/kg	100	101	101	80-125	
Naphthalene	ug/kg	100	97.8	98	80-120	
o-Xylene	ug/kg	100	98.9	99	80-125	
p-Isopropyltoluene	ug/kg	100	103	103	65-145	
sec-Butylbenzene	ug/kg	100	100	100	80-135	
Styrene	ug/kg	100	101	101	85-125	
tert-Butylbenzene	ug/kg	100	101	101	80-125	
Tetrachloroethene	ug/kg	100	105	105	80-130	
Tetrahydrofuran	ug/kg	500	432	86	80-120	N2
Toluene	ug/kg	100	99.3	99	80-120	
trans-1,2-Dichloroethene	ug/kg	100	105	105	75-125	
trans-1,3-Dichloropropene	ug/kg	100	109	109	80-130	
Trichloroethene	ug/kg	100	105	105	80-125	
Trichlorofluoromethane	ug/kg	100	113	113	65-135	
Vinyl acetate	ug/kg	100	96.2J	96	80-120	
Vinyl chloride	ug/kg	100	79.0	79	35-145	
Xylene (Total)	ug/kg	300	300	100	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947594 2947595

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	<1.1	101	99.9	57.7	71.1	57	71	25-130	21	35	
1,1,1-Trichloroethane	ug/kg	<0.79	101	99.9	69.8	80.8	69	81	45-120	15	35	
1,1,2,2-Tetrachloroethane	ug/kg	<1.1	101	99.9	1.7J	<1.0	2	0	10-145		35	M1
1,1,2-Trichloroethane	ug/kg	<0.67	101	99.9	39.1	47.8	39	48	25-130	20	35	
1,1,2-Trichlorotrifluoroethane	ug/kg	<5.3	101	99.9	70.8	83.0	70	83	35-120	16	35	N2

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947594 2947595

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/kg	<0.41	101	99.9	73.2	82.3	72	82	40-120	12	35	
1,1-Dichloroethene	ug/kg	<0.68	101	99.9	115	128	114	128	35-120	11	35	M1
1,1-Dichloropropene	ug/kg	<0.95	101	99.9	70.4	81.0	70	81	40-125	14	35	
1,2,3-Trichlorobenzene	ug/kg	<0.84	101	99.9	51.2	63.5	51	64	10-125	21	50	
1,2,3-Trichloropropane	ug/kg	<2.3	101	99.9	79.4	91.8	79	92	25-135	15	35	
1,2,3-Trimethylbenzene	ug/kg	<2.1	101	99.9	62.9	72.6	62	72	35-120	14	35	
1,2,4-Trichlorobenzene	ug/kg	<0.84	101	99.9	49.9	60.2	49	60	10-125	19	50	
1,2,4-Trimethylbenzene	ug/kg	<0.71	101	99.9	62.0	70.1	61	70	35-120	12	35	
1,2-Dibromo-3-chloropropane	ug/kg	<1.9	101	99.9	37.0	48.9	37	49	10-145	28	35	
1,2-Dibromoethane (EDB)	ug/kg	<0.57	101	99.9	80.5	94.1	80	94	30-140	15	35	
1,2-Dichlorobenzene	ug/kg	<0.66	101	99.9	59.7	69.6	59	70	10-125	15	35	
1,2-Dichloroethane	ug/kg	<0.42	101	99.9	74.9	85.8	74	86	35-120	14	35	
1,2-Dichloroethene (Total)	ug/kg	<1.2	202	199	144	164	71	82	40-120	13	35	
1,2-Dichloropropane	ug/kg	<1.0	101	99.9	72.5	82.4	72	83	35-120	13	35	
1,3,5-Trimethylbenzene	ug/kg	<0.66	101	99.9	61.1	71.3	60	71	15-130	15	35	
1,3-Dichlorobenzene	ug/kg	<0.76	101	99.9	59.2	68.9	59	69	10-125	15	37	
1,3-Dichloropropane	ug/kg	<0.73	101	99.9	76.9	89.7	76	90	30-120	15	35	
1,4-Dichlorobenzene	ug/kg	<0.86	101	99.9	59.0	68.8	58	69	10-125	15	35	
2,2-Dichloropropane	ug/kg	<0.50	101	99.9	70.4	81.3	70	81	40-120	14	35	
2-Butanone (MEK)	ug/kg	8.8J	506	499	513	576	100	114	20-145	11	35	
2-Chlorotoluene	ug/kg	<0.77	101	99.9	62.2	72.0	61	72	15-125	15	35	
2-Hexanone	ug/kg	<2.6	506	499	525	601	104	120	15-150	13	35	
4-Chlorotoluene	ug/kg	<0.63	101	99.9	60.3	71.5	60	72	10-125	17	35	
4-Methyl-2-pentanone (MIBK)	ug/kg	<3.2	506	499	480	550	95	110	30-140	14	35	
Acetone	ug/kg	46.6	506	499	528	549	95	101	10-165	4	35	
Acrolein	ug/kg	<79.9	506	499	488	542	96	109	10-200	11	60	
Acrylonitrile	ug/kg	<3.4	506	499	312	385	62	77	10-145	21	35	
Benzene	ug/kg	<0.52	101	99.9	69.6	79.2	69	79	35-120	13	35	
Bromobenzene	ug/kg	<0.99	101	99.9	63.0	73.1	62	73	15-125	15	35	
Bromochloromethane	ug/kg	<0.64	101	99.9	75.8	86.8	75	87	35-120	14	35	
Bromodichloromethane	ug/kg	<0.64	101	99.9	49.1	63.2	49	63	30-130	25	35	
Bromoform	ug/kg	<0.61	101	99.9	46.5	62.5	46	63	15-135	29	35	
Bromomethane	ug/kg	<3.1	101	99.9	29.2	36.0	29	36	10-120	21	35	
Carbon disulfide	ug/kg	5.2J	101	99.9	34.7	47.4	29	42	20-120	31	35	
Carbon tetrachloride	ug/kg	<0.91	101	99.9	54.6	71.9	54	72	40-125	27	35	
Chlorobenzene	ug/kg	<0.66	101	99.9	66.9	76.6	66	77	20-125	13	35	
Chloroethane	ug/kg	<1.6	101	99.9	68.9	76.5	68	77	25-120	10	35	
Chloroform	ug/kg	<0.52	101	99.9	76.8	87.2	76	87	40-125	13	35	
Chloromethane	ug/kg	<0.84	101	99.9	49.2	56.1	49	56	10-120	13	35	
cis-1,2-Dichloroethene	ug/kg	<0.46	101	99.9	72.3	82.8	72	83	35-120	13	35	
cis-1,3-Dichloropropene	ug/kg	<0.56	101	99.9	46.1	58.6	46	59	20-130	24	35	
Cyclohexanone	ug/kg	<13.4	506	499	458	534	91	107	35-120	15	35	
Dibromochloromethane	ug/kg	<0.68	101	99.9	51.2	67.2	51	67	25-135	27	35	
Dibromomethane	ug/kg	<0.63	101	99.9	77.8	92.0	77	92	30-125	17	35	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947594 2947595

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Diethyl ether (Ethyl ether)	ug/kg	<0.59	101	99.9	75.6	86.2	75	86	35-120	13	35	
Ethylbenzene	ug/kg	<0.49	101	99.9	67.4	76.4	67	77	35-120	13	35	
Hexachloro-1,3-butadiene	ug/kg	<0.90	101	99.9	50.2	55.4	50	56	10-125	10	45	
Iodomethane	ug/kg	<1.6	101	99.9	27.6	40.2	27	40	30-120	37	35	M1,R1
Isopropylbenzene (Cumene)	ug/kg	<0.60	101	99.9	67.0	75.8	66	76	20-135	12	35	
m&p-Xylene	ug/kg	<0.67	202	199	131	153	65	76	30-145	15	35	
Methyl acetate	ug/kg	<1.1	506	499	<1.1	<1.1	0	0	30-120		35	M1
Methyl-tert-butyl ether	ug/kg	<0.51	101	99.9	78.9	90.5	78	91	35-140	14	35	
Methylene Chloride	ug/kg	<2.9	101	99.9	66.4	75.9	65	76	10-135	13	35	
n-Butylbenzene	ug/kg	<0.69	101	99.9	58.0	64.2	57	64	10-130	10	35	
n-Heptane	ug/kg	<4.8	101	99.9	57.6	62.7	57	63	35-120	8	35	
n-Hexane	ug/kg	<0.73	101	99.9	59.0	65.9	58	66	10-150	11	35	
n-Propylbenzene	ug/kg	<0.85	101	99.9	61.8	71.2	61	71	20-125	14	35	
Naphthalene	ug/kg	13.9	101	99.9	102	108	87	94	10-160	6	35	
o-Xylene	ug/kg	<0.39	101	99.9	65.7	75.0	65	75	30-145	13	35	
p-Isopropyltoluene	ug/kg	1.4J	101	99.9	62.8	68.8	61	68	10-135	9	35	
sec-Butylbenzene	ug/kg	<0.77	101	99.9	60.3	66.0	60	66	15-135	9	35	
Styrene	ug/kg	<0.62	101	99.9	64.6	75.3	64	75	15-130	15	35	
tert-Butylbenzene	ug/kg	<0.93	101	99.9	62.4	71.9	62	72	15-135	14	35	
Tetrachloroethene	ug/kg	<0.44	101	99.9	82.9	85.6	82	86	30-125	3	35	
Tetrahydrofuran	ug/kg	<0.83	506	499	462	518	91	104	35-120	11	35	N2
Toluene	ug/kg	<0.37	101	99.9	68.5	77.6	68	78	35-120	12	35	
trans-1,2-Dichloroethene	ug/kg	<0.72	101	99.9	71.7	81.6	71	82	40-120	13	35	
trans-1,3-Dichloropropene	ug/kg	<0.48	101	99.9	50.6	63.6	50	64	20-135	23	35	
Trichloroethene	ug/kg	<0.77	101	99.9	133	153	132	154	25-140	14	35	M1
Trichlorofluoromethane	ug/kg	<0.65	101	99.9	65.5	78.6	65	79	35-120	18	35	
Vinyl acetate	ug/kg	<0.60	101	99.9	31.5J	36.2J	31	36	30-120		35	
Vinyl chloride	ug/kg	<0.70	101	99.9	61.1	67.5	60	68	10-120	10	35	
Xylene (Total)	ug/kg	<1.2	303	299	197	228	65	76	35-120	15	35	
1,2-Dichlorobenzene-d4 (S)	%						100	101	80-120			
4-Bromofluorobenzene (S)	%						98	98	80-120			
Toluene-d8 (S)	%						101	100	80-120			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 735565 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838026, 60375838027, 60375838028, 60375838029, 60375838030

METHOD BLANK: 2950695 Matrix: Water
Associated Lab Samples: 60375838026, 60375838027, 60375838028, 60375838029, 60375838030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.084	1.0	08/03/21 07:53	
1,1,1-Trichloroethane	ug/L	<0.11	1.0	08/03/21 07:53	
1,1,2,2-Tetrachloroethane	ug/L	<0.15	1.0	08/03/21 07:53	
1,1,2-Trichloroethane	ug/L	<0.14	1.0	08/03/21 07:53	
1,1-Dichloroethane	ug/L	<0.12	1.0	08/03/21 07:53	
1,1-Dichloroethene	ug/L	<0.22	1.0	08/03/21 07:53	
1,1-Dichloropropene	ug/L	<0.14	1.0	08/03/21 07:53	
1,2,3-Trichlorobenzene	ug/L	<0.93	1.0	08/03/21 07:53	
1,2,3-Trichloropropane	ug/L	<0.41	2.5	08/03/21 07:53	
1,2,3-Trimethylbenzene	ug/L	<0.93	1.0	08/03/21 07:53	
1,2,4-Trichlorobenzene	ug/L	<0.73	1.0	08/03/21 07:53	
1,2,4-Trimethylbenzene	ug/L	<0.32	1.0	08/03/21 07:53	
1,2-Dibromo-3-chloropropane	ug/L	<0.78	2.5	08/03/21 07:53	
1,2-Dibromoethane (EDB)	ug/L	<0.20	1.0	08/03/21 07:53	
1,2-Dichlorobenzene	ug/L	<0.12	1.0	08/03/21 07:53	
1,2-Dichloroethane	ug/L	<0.21	1.0	08/03/21 07:53	
1,2-Dichloroethene (Total)	ug/L	<0.22	1.0	08/03/21 07:53	
1,2-Dichloropropane	ug/L	<0.14	1.0	08/03/21 07:53	
1,3,5-Trimethylbenzene	ug/L	<0.090	1.0	08/03/21 07:53	
1,3-Dichlorobenzene	ug/L	<0.13	1.0	08/03/21 07:53	
1,3-Dichloropropane	ug/L	<0.10	1.0	08/03/21 07:53	
1,4-Dichlorobenzene	ug/L	<0.13	1.0	08/03/21 07:53	
1,4-Dioxane (p-Dioxane)	ug/L	<4.4	100	08/03/21 07:53	
1-Methylnaphthalene	ug/L	<2.6	10.0	08/03/21 07:53	
2,2-Dichloropropane	ug/L	<0.16	1.0	08/03/21 07:53	
2-Butanone (MEK)	ug/L	<0.98	10.0	08/03/21 07:53	
2-Chloroethylvinyl ether	ug/L	<1.8	10.0	08/03/21 07:53	
2-Chlorotoluene	ug/L	<0.11	1.0	08/03/21 07:53	
2-Hexanone	ug/L	<1.1	10.0	08/03/21 07:53	
2-Methylnaphthalene	ug/L	<2.7	10.0	08/03/21 07:53	
4-Chlorotoluene	ug/L	<0.15	1.0	08/03/21 07:53	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	10.0	08/03/21 07:53	
Acetone	ug/L	<2.5	10.0	08/03/21 07:53	
Acetonitrile	ug/L	<1.1	10.0	08/03/21 07:53	
Acrolein	ug/L	<4.0	50.0	08/03/21 07:53	
Acrylonitrile	ug/L	<1.4	20.0	08/03/21 07:53	
Benzene	ug/L	<0.14	1.0	08/03/21 07:53	
Bromobenzene	ug/L	<0.088	1.0	08/03/21 07:53	
Bromochloromethane	ug/L	<0.20	1.0	08/03/21 07:53	
Bromodichloromethane	ug/L	<0.16	1.0	08/03/21 07:53	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

METHOD BLANK: 2950695 Matrix: Water
Associated Lab Samples: 60375838026, 60375838027, 60375838028, 60375838029, 60375838030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromoform	ug/L	<0.68	1.0	08/03/21 07:53	
Bromomethane	ug/L	<0.46	5.0	08/03/21 07:53	
Carbon disulfide	ug/L	<0.98	5.0	08/03/21 07:53	
Carbon tetrachloride	ug/L	<0.17	1.0	08/03/21 07:53	
Chlorobenzene	ug/L	<0.089	1.0	08/03/21 07:53	
Chloroethane	ug/L	<0.37	1.0	08/03/21 07:53	
Chloroform	ug/L	<0.22	1.0	08/03/21 07:53	
Chloromethane	ug/L	<0.28	1.0	08/03/21 07:53	
cis-1,2-Dichloroethene	ug/L	<0.13	1.0	08/03/21 07:53	
cis-1,3-Dichloropropene	ug/L	<0.078	1.0	08/03/21 07:53	
Cyclohexane	ug/L	<0.24	1.0	08/03/21 07:53	
Cyclohexanone	ug/L	<3.3	20.0	08/03/21 07:53	
Dibromochloromethane	ug/L	<0.30	1.0	08/03/21 07:53	
Dibromomethane	ug/L	<0.11	1.0	08/03/21 07:53	
Dichlorodifluoromethane	ug/L	<0.20	1.0	08/03/21 07:53	
Diethyl ether (Ethyl ether)	ug/L	<0.23	1.0	08/03/21 07:53	
Ethylbenzene	ug/L	<0.12	1.0	08/03/21 07:53	
Hexachloro-1,3-butadiene	ug/L	0.52J	1.0	08/03/21 07:53	
Isopropylbenzene (Cumene)	ug/L	<0.097	1.0	08/03/21 07:53	
m&p-Xylene	ug/L	<0.22	2.0	08/03/21 07:53	
Methyl acetate	ug/L	<0.87	1.0	08/03/21 07:53	
Methyl-tert-butyl ether	ug/L	<0.13	1.0	08/03/21 07:53	
Methylcyclohexane	ug/L	<0.12	1.0	08/03/21 07:53	
Methylene Chloride	ug/L	<0.39	1.0	08/03/21 07:53	
n-Butylbenzene	ug/L	<0.15	1.0	08/03/21 07:53	
n-Heptane	ug/L	<2.6	10.0	08/03/21 07:53	
n-Hexane	ug/L	<0.22	10.0	08/03/21 07:53	
n-Propylbenzene	ug/L	<0.12	1.0	08/03/21 07:53	
Naphthalene	ug/L	<0.82	10.0	08/03/21 07:53	
o-Xylene	ug/L	<0.082	1.0	08/03/21 07:53	
p-Isopropyltoluene	ug/L	<0.13	1.0	08/03/21 07:53	
sec-Butylbenzene	ug/L	<0.11	1.0	08/03/21 07:53	
Styrene	ug/L	<0.12	1.0	08/03/21 07:53	
tert-Butylbenzene	ug/L	<0.12	1.0	08/03/21 07:53	
Tetrachloroethene	ug/L	<0.33	1.0	08/03/21 07:53	
Tetrahydrofuran	ug/L	<2.8	5.0	08/03/21 07:53	
Toluene	ug/L	<0.25	1.0	08/03/21 07:53	
trans-1,2-Dichloroethene	ug/L	<0.10	1.0	08/03/21 07:53	
trans-1,3-Dichloropropene	ug/L	<0.18	1.0	08/03/21 07:53	
Trichloroethene	ug/L	<0.21	1.0	08/03/21 07:53	
Trichlorofluoromethane	ug/L	<0.16	1.0	08/03/21 07:53	
Vinyl chloride	ug/L	<0.17	1.0	08/03/21 07:53	
Xylene (Total)	ug/L	<0.28	3.0	08/03/21 07:53	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120	08/03/21 07:53	
4-Bromofluorobenzene (S)	%	99	80-120	08/03/21 07:53	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

METHOD BLANK: 2950695 Matrix: Water
Associated Lab Samples: 60375838026, 60375838027, 60375838028, 60375838029, 60375838030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene-d8 (S)	%	99	80-120	08/03/21 07:53	

LABORATORY CONTROL SAMPLE: 2950696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.4	97	80-120	
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.1	91	75-125	
1,1,2-Trichloroethane	ug/L	20	18.9	94	80-120	
1,1-Dichloroethane	ug/L	20	20.4	102	75-125	
1,1-Dichloroethene	ug/L	20	21.1	105	80-120	
1,1-Dichloropropene	ug/L	20	20.2	101	80-125	
1,2,3-Trichlorobenzene	ug/L	20	17.8	89	75-125	
1,2,3-Trichloropropane	ug/L	20	19.1	95	80-125	
1,2,3-Trimethylbenzene	ug/L	20	20.5	103	80-125	
1,2,4-Trichlorobenzene	ug/L	20	18.6	93	75-120	
1,2,4-Trimethylbenzene	ug/L	20	19.8	99	80-125	
1,2-Dibromo-3-chloropropane	ug/L	20	18.3	91	70-120	
1,2-Dibromoethane (EDB)	ug/L	20	20.3	101	80-120	
1,2-Dichlorobenzene	ug/L	20	19.6	98	80-120	
1,2-Dichloroethane	ug/L	20	20.2	101	75-120	
1,2-Dichloroethene (Total)	ug/L	40	41.3	103	80-120	
1,2-Dichloropropane	ug/L	20	19.8	99	80-125	
1,3,5-Trimethylbenzene	ug/L	20	19.5	98	80-125	
1,3-Dichlorobenzene	ug/L	20	19.7	98	80-120	
1,3-Dichloropropane	ug/L	20	19.0	95	80-120	
1,4-Dichlorobenzene	ug/L	20	19.1	95	80-120	
1,4-Dioxane (p-Dioxane)	ug/L	100	122	122	10-180	
1-Methylnaphthalene	ug/L	20	20.9	105	40-160	
2,2-Dichloropropane	ug/L	20	20.5	102	60-130	
2-Butanone (MEK)	ug/L	100	102	102	40-150	
2-Chloroethylvinyl ether	ug/L	100	93.0	93	30-165	
2-Chlorotoluene	ug/L	20	19.4	97	80-120	
2-Hexanone	ug/L	100	98.7	99	45-150	
2-Methylnaphthalene	ug/L	20	20.9	104	55-150	
4-Chlorotoluene	ug/L	20	20.2	101	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	88.2	88	65-140	
Acetone	ug/L	100	102	102	20-175	
Acetonitrile	ug/L	100	96.6	97	25-180	
Acrolein	ug/L	100	89.5	89	10-200	
Acrylonitrile	ug/L	100	96.9	97	70-135	
Benzene	ug/L	20	19.8	99	80-120	
Bromobenzene	ug/L	20	20.2	101	80-120	
Bromochloromethane	ug/L	20	21.4	107	80-125	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

LABORATORY CONTROL SAMPLE: 2950696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	20	20.4	102	80-125	
Bromoform	ug/L	20	18.6	93	60-135	
Bromomethane	ug/L	20	18.4	92	10-165	
Carbon disulfide	ug/L	20	21.1	106	75-135	
Carbon tetrachloride	ug/L	20	20.8	104	80-125	
Chlorobenzene	ug/L	20	20.6	103	80-120	
Chloroethane	ug/L	20	20.5	102	70-130	
Chloroform	ug/L	20	20.7	104	80-120	
Chloromethane	ug/L	20	19.5	97	35-155	
cis-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	80-125	
Cyclohexane	ug/L	20	20.7	103	80-130	
Cyclohexanone	ug/L	100	89.3	89	10-180	
Dibromochloromethane	ug/L	20	19.3	97	70-120	
Dibromomethane	ug/L	20	19.1	96	80-120	
Dichlorodifluoromethane	ug/L	20	20.9	104	50-150	
Diethyl ether (Ethyl ether)	ug/L	20	19.4	97	70-140	
Ethylbenzene	ug/L	20	20.0	100	80-120	
Hexachloro-1,3-butadiene	ug/L	20	20.0	100	65-135	
Isopropylbenzene (Cumene)	ug/L	20	21.2	106	80-125	
m&p-Xylene	ug/L	40	40.0	100	75-130	
Methyl acetate	ug/L	100	93.1	93	45-140	
Methyl-tert-butyl ether	ug/L	20	19.3	96	65-130	
Methylcyclohexane	ug/L	20	20.7	103	80-125	
Methylene Chloride	ug/L	20	18.2	91	75-120	
n-Butylbenzene	ug/L	20	19.2	96	80-125	
n-Heptane	ug/L	20	20.9	105	10-180	
n-Hexane	ug/L	20	20.6	103	60-135	
n-Propylbenzene	ug/L	20	19.3	96	80-120	
Naphthalene	ug/L	20	16.6	83	70-120	
o-Xylene	ug/L	20	19.4	97	75-130	
p-Isopropyltoluene	ug/L	20	20.7	103	80-135	
sec-Butylbenzene	ug/L	20	19.9	100	80-120	
Styrene	ug/L	20	20.2	101	80-120	
tert-Butylbenzene	ug/L	20	19.8	99	80-120	
Tetrachloroethene	ug/L	20	21.4	107	80-120	
Tetrahydrofuran	ug/L	100	88.2	88	75-125	
Toluene	ug/L	20	19.9	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.3	106	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	75-120	
Trichloroethene	ug/L	20	19.8	99	80-120	
Trichlorofluoromethane	ug/L	20	23.3	116	80-130	
Vinyl chloride	ug/L	20	20.7	103	65-130	
Xylene (Total)	ug/L	60	59.3	99	80-120	
1,2-Dichlorobenzene-d4 (S)	%			95	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734716
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV MO GRO Oxygenates
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838027, 60375838028, 60375838029

METHOD BLANK: 2947718 Matrix: Water
Associated Lab Samples: 60375838027, 60375838028, 60375838029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	ug/L	<62.6	500	07/28/21 11:28	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120	07/28/21 11:28	
4-Bromofluorobenzene (S)	%	100	80-120	07/28/21 11:28	
Toluene-d8 (S)	%	98	80-120	07/28/21 11:28	

LABORATORY CONTROL SAMPLE: 2947719

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	4000	3360	84	60-120	
1,2-Dichlorobenzene-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734681
QC Batch Method: EPA 5035
Analysis Method: EPA 8260
Analysis Description: 8260 MSV GRO and Oxygenates
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838010, 60375838011, 60375838012, 60375838013

METHOD BLANK: 2947600 Matrix: Solid
Associated Lab Samples: 60375838010, 60375838011, 60375838012, 60375838013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.055	0.50	07/28/21 09:09	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120	07/28/21 09:09	
4-Bromofluorobenzene (S)	%	103	69-133	07/28/21 09:09	
Toluene-d8 (S)	%	100	78-122	07/28/21 09:09	

LABORATORY CONTROL SAMPLE: 2947601

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.3	82	61-140	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			96	69-133	
Toluene-d8 (S)	%			100	78-122	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734194
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838001, 60375838002, 60375838003, 60375838004, 60375838005, 60375838006, 60375838007, 60375838008, 60375838009, 60375838010, 60375838011, 60375838012, 60375838013, 60375838014, 60375838015, 60375838016, 60375838017, 60375838018, 60375838019

METHOD BLANK: 2946226 Matrix: Solid
Associated Lab Samples: 60375838001, 60375838002, 60375838003, 60375838004, 60375838005, 60375838006, 60375838007, 60375838008, 60375838009, 60375838010, 60375838011, 60375838012, 60375838013, 60375838014, 60375838015, 60375838016, 60375838017, 60375838018, 60375838019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<8.1	32.5	07/27/21 23:20	
PCB-1221 (Aroclor 1221)	ug/kg	<7.7	32.5	07/27/21 23:20	
PCB-1232 (Aroclor 1232)	ug/kg	<3.5	32.5	07/27/21 23:20	
PCB-1242 (Aroclor 1242)	ug/kg	<7.8	32.5	07/27/21 23:20	
PCB-1248 (Aroclor 1248)	ug/kg	<2.1	32.5	07/27/21 23:20	
PCB-1254 (Aroclor 1254)	ug/kg	<3.0	32.5	07/27/21 23:20	
PCB-1260 (Aroclor 1260)	ug/kg	<6.4	32.5	07/27/21 23:20	
Decachlorobiphenyl (S)	%	110	35-120	07/27/21 23:20	

LABORATORY CONTROL SAMPLE: 2946227

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	161	179	111	65-120	
PCB-1260 (Aroclor 1260)	ug/kg	161	184	114	65-120	
Decachlorobiphenyl (S)	%			115	35-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2946228 2946229

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<10.6	208	203	177	169	85	83	30-130	5	40	
PCB-1260 (Aroclor 1260)	ug/kg	<8.4	208	203	183	174	88	86	15-155	5	40	
Decachlorobiphenyl (S)	%						75	78	35-120		50	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734196
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838020, 60375838021, 60375838022, 60375838023, 60375838024, 60375838025

METHOD BLANK: 2946235 Matrix: Solid
Associated Lab Samples: 60375838020, 60375838021, 60375838022, 60375838023, 60375838024, 60375838025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<8.1	32.8	07/27/21 23:56	
PCB-1221 (Aroclor 1221)	ug/kg	<7.8	32.8	07/27/21 23:56	
PCB-1232 (Aroclor 1232)	ug/kg	<3.6	32.8	07/27/21 23:56	
PCB-1242 (Aroclor 1242)	ug/kg	<7.9	32.8	07/27/21 23:56	
PCB-1248 (Aroclor 1248)	ug/kg	<2.2	32.8	07/27/21 23:56	
PCB-1254 (Aroclor 1254)	ug/kg	<3.1	32.8	07/27/21 23:56	
PCB-1260 (Aroclor 1260)	ug/kg	<6.5	32.8	07/27/21 23:56	
Decachlorobiphenyl (S)	%	102	35-120	07/27/21 23:56	

LABORATORY CONTROL SAMPLE: 2946236

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	162	171	106	65-120	
PCB-1260 (Aroclor 1260)	ug/kg	162	173	107	65-120	
Decachlorobiphenyl (S)	%			103	35-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2946237 2946238

Parameter	Units	60375838020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<9.9	194	199	179	164	92	83	30-130	9	40	
PCB-1260 (Aroclor 1260)	ug/kg	<7.9	194	199	169	162	87	82	15-155	4	40	
Decachlorobiphenyl (S)	%						82	77	35-120		50	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 735020
QC Batch Method: EPA 3510
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB, LV
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838027, 60375838028, 60375838029

METHOD BLANK: 2948685 Matrix: Water
Associated Lab Samples: 60375838027, 60375838028, 60375838029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.15	1.0	07/29/21 18:22	
PCB-1221 (Aroclor 1221)	ug/L	<0.17	1.0	07/29/21 18:22	
PCB-1232 (Aroclor 1232)	ug/L	<0.17	1.0	07/29/21 18:22	
PCB-1242 (Aroclor 1242)	ug/L	<0.17	1.0	07/29/21 18:22	
PCB-1248 (Aroclor 1248)	ug/L	<0.17	1.0	07/29/21 18:22	
PCB-1254 (Aroclor 1254)	ug/L	<0.17	1.0	07/29/21 18:22	
PCB-1260 (Aroclor 1260)	ug/L	<0.19	1.0	07/29/21 18:22	CH
Decachlorobiphenyl (S)	%	59	30-136	07/29/21 18:22	

LABORATORY CONTROL SAMPLE: 2948686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	3.0	61	40-120	
PCB-1260 (Aroclor 1260)	ug/L	5	3.8	77	55-120	CH
Decachlorobiphenyl (S)	%			50	30-136	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734192
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838010, 60375838011, 60375838012, 60375838013

METHOD BLANK: 2946216 Matrix: Solid
Associated Lab Samples: 60375838010, 60375838011, 60375838012, 60375838013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<2.4	6.5	07/29/21 17:10	
Acenaphthylene	ug/kg	<2.4	6.5	07/29/21 17:10	
Anthracene	ug/kg	<2.7	6.5	07/29/21 17:10	
Benzo(a)anthracene	ug/kg	<3.1	6.5	07/29/21 17:10	
Benzo(a)pyrene	ug/kg	<2.4	6.5	07/29/21 17:10	
Benzo(b)fluoranthene	ug/kg	<3.2	6.5	07/29/21 17:10	
Benzo(g,h,i)perylene	ug/kg	<2.9	6.5	07/29/21 17:10	
Benzo(k)fluoranthene	ug/kg	<3.6	6.5	07/29/21 17:10	
Chrysene	ug/kg	<3.1	6.5	07/29/21 17:10	
Dibenz(a,h)anthracene	ug/kg	<2.8	6.5	07/29/21 17:10	
Fluoranthene	ug/kg	<4.9	6.5	07/29/21 17:10	
Fluorene	ug/kg	<2.6	6.5	07/29/21 17:10	
Indeno(1,2,3-cd)pyrene	ug/kg	<2.8	6.5	07/29/21 17:10	
Naphthalene	ug/kg	<2.8	6.5	07/29/21 17:10	
Phenanthrene	ug/kg	<5.4	6.5	07/29/21 17:10	
Pyrene	ug/kg	<3.5	6.5	07/29/21 17:10	
2-Fluorobiphenyl (S)	%	73	40-120	07/29/21 17:10	
Terphenyl-d14 (S)	%	79	45-130	07/29/21 17:10	

LABORATORY CONTROL SAMPLE: 2946217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	32	30.1	94	45-120	
Acenaphthylene	ug/kg	32	29.4	92	50-120	
Anthracene	ug/kg	32	31.3	98	50-120	
Benzo(a)anthracene	ug/kg	32	30.5	95	55-125	
Benzo(a)pyrene	ug/kg	32	28.4	89	45-120	
Benzo(b)fluoranthene	ug/kg	32	30.7	96	50-125	
Benzo(g,h,i)perylene	ug/kg	32	30.1	94	40-120	
Benzo(k)fluoranthene	ug/kg	32	31.7	99	55-120	
Chrysene	ug/kg	32	30.0	94	55-120	
Dibenz(a,h)anthracene	ug/kg	32	29.5	92	40-125	
Fluoranthene	ug/kg	32	33.1	103	50-125	
Fluorene	ug/kg	32	30.7	96	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	32	29.0	91	44-125	
Naphthalene	ug/kg	32	30.6	96	45-120	
Phenanthrene	ug/kg	32	31.6	99	50-125	
Pyrene	ug/kg	32	32.8	103	50-125	
2-Fluorobiphenyl (S)	%			106	40-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

LABORATORY CONTROL SAMPLE: 2946217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			119	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2946218 2946219

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	38.9	41.7	40.9	64.8	154	62	283	10-150	82	42	M1,R1
Acenaphthylene	ug/kg	<3.1	41.7	40.9	36.5	37.5	88	92	30-125	3	44	
Anthracene	ug/kg	5.8J	41.7	40.9	48.8	51.2	103	111	10-160	5	54	
Benzo(a)anthracene	ug/kg	8.0J	41.7	40.9	56.2	61.0	116	130	10-160	8	62	
Benzo(a)pyrene	ug/kg	6.3J	41.7	40.9	50.5	53.2	106	115	10-150	5	66	
Benzo(b)fluoranthene	ug/kg	13.4	41.7	40.9	63.1	67.6	119	133	10-165	7	61	
Benzo(g,h,i)perylene	ug/kg	4.5J	41.7	40.9	49.2	46.4	107	103	10-155	6	58	
Benzo(k)fluoranthene	ug/kg	4.9J	41.7	40.9	46.1	52.9	99	117	10-165	14	53	
Chrysene	ug/kg	9.7	41.7	40.9	57.4	63.7	115	132	10-150	10	57	
Dibenz(a,h)anthracene	ug/kg	<3.6	41.7	40.9	37.7	36.0	90	88	10-175	5	48	
Fluoranthene	ug/kg	24.2	41.7	40.9	89.3	104	156	195	10-180	15	54	M1
Fluorene	ug/kg	41.5	41.7	40.9	75.2	126	81	207	20-145	50	39	M1,R1
Indeno(1,2,3-cd)pyrene	ug/kg	<3.6	41.7	40.9	45.8	44.7	110	109	10-150	2	59	
Naphthalene	ug/kg	111	41.7	40.9	95.9	277	-36	406	10-165	97	54	M1,R1
Phenanthrene	ug/kg	45.2	41.7	40.9	111	122	158	188	10-170	10	51	M1
Pyrene	ug/kg	21.0	41.7	40.9	85.0	93.1	154	176	10-180	9	61	
2-Fluorobiphenyl (S)	%						91	94	40-120			
Terphenyl-d14 (S)	%						108	109	45-130			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734193
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838001, 60375838002, 60375838003, 60375838004, 60375838005, 60375838006, 60375838007, 60375838008, 60375838009, 60375838014, 60375838015, 60375838016, 60375838017, 60375838020, 60375838021, 60375838022, 60375838023, 60375838024, 60375838025

METHOD BLANK: 2946220
Matrix: Solid
Associated Lab Samples: 60375838001, 60375838002, 60375838003, 60375838004, 60375838005, 60375838006, 60375838007, 60375838008, 60375838009, 60375838014, 60375838015, 60375838016, 60375838017, 60375838020, 60375838021, 60375838022, 60375838023, 60375838024, 60375838025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<1.2	3.2	07/28/21 19:18	
Acenaphthylene	ug/kg	<1.2	3.2	07/28/21 19:18	
Anthracene	ug/kg	<1.3	3.2	07/28/21 19:18	
Benzo(a)anthracene	ug/kg	<1.5	3.2	07/28/21 19:18	
Benzo(a)pyrene	ug/kg	<1.2	3.2	07/28/21 19:18	
Benzo(b)fluoranthene	ug/kg	<1.5	3.2	07/28/21 19:18	
Benzo(g,h,i)perylene	ug/kg	<1.4	3.2	07/28/21 19:18	
Benzo(k)fluoranthene	ug/kg	<1.8	3.2	07/28/21 19:18	
Chrysene	ug/kg	<1.5	3.2	07/28/21 19:18	
Dibenz(a,h)anthracene	ug/kg	<1.4	3.2	07/28/21 19:18	
Fluoranthene	ug/kg	<2.4	3.2	07/28/21 19:18	
Fluorene	ug/kg	<1.2	3.2	07/28/21 19:18	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.4	3.2	07/28/21 19:18	
Naphthalene	ug/kg	<1.4	3.2	07/28/21 19:18	
Phenanthrene	ug/kg	<2.6	3.2	07/28/21 19:18	
Pyrene	ug/kg	<1.7	3.2	07/28/21 19:18	
2-Fluorobiphenyl (S)	%	91	40-120	07/28/21 19:18	
Terphenyl-d14 (S)	%	102	45-130	07/28/21 19:18	

LABORATORY CONTROL SAMPLE: 2946221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	33.2	27.3	82	45-120	
Acenaphthylene	ug/kg	33.2	26.7	80	50-120	
Anthracene	ug/kg	33.2	29.1	87	50-120	
Benzo(a)anthracene	ug/kg	33.2	28.6	86	55-125	
Benzo(a)pyrene	ug/kg	33.2	27.2	82	45-120	
Benzo(b)fluoranthene	ug/kg	33.2	30.0	90	50-125	
Benzo(g,h,i)perylene	ug/kg	33.2	27.3	82	40-120	
Benzo(k)fluoranthene	ug/kg	33.2	28.4	85	55-120	
Chrysene	ug/kg	33.2	28.0	84	55-120	
Dibenz(a,h)anthracene	ug/kg	33.2	27.5	83	40-125	
Fluoranthene	ug/kg	33.2	30.7	92	50-125	
Fluorene	ug/kg	33.2	28.1	84	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	33.2	27.4	82	44-125	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

LABORATORY CONTROL SAMPLE: 2946221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	33.2	27.2	82	45-120	
Phenanthrene	ug/kg	33.2	29.8	90	50-125	
Pyrene	ug/kg	33.2	30.8	93	50-125	
2-Fluorobiphenyl (S)	%			83	40-120	
Terphenyl-d14 (S)	%			93	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2946222 2946223

Parameter	Units	60375838001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<1.4	41.1	39.4	31.2	32.9	76	83	10-150	5	42	
Acenaphthylene	ug/kg	<1.4	41.1	39.4	31.1	32.4	76	82	30-125	4	44	
Anthracene	ug/kg	<1.6	41.1	39.4	33.6	35.1	82	89	10-160	4	54	
Benzo(a)anthracene	ug/kg	<1.8	41.1	39.4	33.5	35.2	81	89	10-160	5	62	
Benzo(a)pyrene	ug/kg	<1.4	41.1	39.4	30.8	32.5	75	82	10-150	5	66	
Benzo(b)fluoranthene	ug/kg	<1.9	41.1	39.4	34.1	36.8	83	93	10-165	8	61	
Benzo(g,h,i)perylene	ug/kg	<1.7	41.1	39.4	29.5	29.5	72	75	10-155	0	58	
Benzo(k)fluoranthene	ug/kg	<2.2	41.1	39.4	33.6	36.2	82	92	10-165	7	53	
Chrysene	ug/kg	<1.8	41.1	39.4	32.5	34.5	79	87	10-150	6	57	
Dibenz(a,h)anthracene	ug/kg	<1.7	41.1	39.4	29.9	29.7	73	75	10-175	1	48	
Fluoranthene	ug/kg	<2.9	41.1	39.4	35.8	38.4	81	91	10-180	7	54	
Fluorene	ug/kg	<1.5	41.1	39.4	32.8	34.7	80	88	20-145	6	39	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.7	41.1	39.4	28.9	28.8	70	73	10-150	0	59	
Naphthalene	ug/kg	<1.7	41.1	39.4	32.0	32.7	78	83	10-165	2	54	
Phenanthrene	ug/kg	<3.2	41.1	39.4	34.4	36.2	78	85	10-170	5	51	
Pyrene	ug/kg	<2.1	41.1	39.4	36.1	38.7	88	98	10-180	7	61	
2-Fluorobiphenyl (S)	%						77	84	40-120			
Terphenyl-d14 (S)	%						87	96	45-130			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734191
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 MSSV TPH ORO
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838010, 60375838011, 60375838012, 60375838013

METHOD BLANK: 2946212 Matrix: Solid
Associated Lab Samples: 60375838010, 60375838011, 60375838012, 60375838013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO	mg/kg	<1.4	14.9	07/28/21 14:48	
TPH-ORO	mg/kg	<1.4	14.9	07/28/21 14:48	
2-Fluorobiphenyl (S)	%	79	40-120	07/28/21 14:48	
Nitrobenzene-d5 (S)	%	79	30-120	07/28/21 14:48	
Terphenyl-d14 (S)	%	79	45-120	07/28/21 14:48	

LABORATORY CONTROL SAMPLE: 2946213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	321	280	87	40-120	
2-Fluorobiphenyl (S)	%			79	40-120	
Nitrobenzene-d5 (S)	%			86	30-120	
Terphenyl-d14 (S)	%			70	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2946214 2946215

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO	mg/kg	21.7	423	415	350	347	78	78	10-145	1	38	
2-Fluorobiphenyl (S)	%						71	75	40-120			
Nitrobenzene-d5 (S)	%						64	74	30-120			
Terphenyl-d14 (S)	%						60	65	45-120			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734248
QC Batch Method: EPA 3510C
Analysis Method: EPA 8270C by SIM
Analysis Description: 8270 Water PAH by SIM MSSV
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838027, 60375838028, 60375838029

METHOD BLANK: 2946349 Matrix: Water
Associated Lab Samples: 60375838027, 60375838028, 60375838029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	<0.049	0.10	07/27/21 14:31	
Acenaphthylene	ug/L	<0.034	0.10	07/27/21 14:31	
Anthracene	ug/L	<0.069	0.10	07/27/21 14:31	
Benzo(a)anthracene	ug/L	<0.037	0.10	07/27/21 14:31	
Benzo(a)pyrene	ug/L	<0.074	0.10	07/27/21 14:31	
Benzo(b)fluoranthene	ug/L	<0.053	0.10	07/27/21 14:31	
Benzo(g,h,i)perylene	ug/L	<0.042	0.10	07/27/21 14:31	
Benzo(k)fluoranthene	ug/L	<0.044	0.10	07/27/21 14:31	
Chrysene	ug/L	<0.043	0.10	07/27/21 14:31	
Dibenz(a,h)anthracene	ug/L	<0.053	0.10	07/27/21 14:31	
Fluoranthene	ug/L	<0.20	0.50	07/27/21 14:31	
Fluorene	ug/L	<0.070	0.10	07/27/21 14:31	
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	0.10	07/27/21 14:31	
Naphthalene	ug/L	<0.080	0.50	07/27/21 14:31	
Phenanthrene	ug/L	<0.41	0.50	07/27/21 14:31	
Pyrene	ug/L	<0.077	0.10	07/27/21 14:31	
2-Fluorobiphenyl (S)	%	69	37-109	07/27/21 14:31	
Terphenyl-d14 (S)	%	72	34-120	07/27/21 14:31	

LABORATORY CONTROL SAMPLE: 2946350

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	6.6	66	46-102	
Acenaphthylene	ug/L	10	7.1	71	48-112	
Anthracene	ug/L	10	8.0	80	50-114	
Benzo(a)anthracene	ug/L	10	8.6	86	52-124	
Benzo(a)pyrene	ug/L	10	7.9	79	56-119	
Benzo(b)fluoranthene	ug/L	10	8.6	86	49-116	
Benzo(g,h,i)perylene	ug/L	10	7.7	77	43-120	
Benzo(k)fluoranthene	ug/L	10	7.5	75	48-110	
Chrysene	ug/L	10	7.8	78	53-105	
Dibenz(a,h)anthracene	ug/L	10	7.8	78	39-127	
Fluoranthene	ug/L	10	9.0	90	54-122	
Fluorene	ug/L	10	7.2	72	47-109	
Indeno(1,2,3-cd)pyrene	ug/L	10	7.9	79	47-124	
Naphthalene	ug/L	10	6.3	63	42-103	
Phenanthrene	ug/L	10	7.5	75	47-107	
Pyrene	ug/L	10	8.0	80	44-104	
2-Fluorobiphenyl (S)	%			66	37-109	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

LABORATORY CONTROL SAMPLE: 2946350

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			85	34-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2946351 2946352

Parameter	Units	60375802033 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	<0.049	9.5	10.5	6.9	7.4	72	70	42-109	7	42	
Acenaphthylene	ug/L	<0.034	9.5	10.5	7.3	8.1	77	77	51-110	9	33	
Anthracene	ug/L	<0.069	9.5	10.5	7.8	8.6	81	82	50-118	11	38	
Benzo(a)anthracene	ug/L	<0.037	9.5	10.5	8.0	8.6	84	81	34-140	7	33	
Benzo(a)pyrene	ug/L	<0.074	9.5	10.5	7.3	8.2	77	78	34-133	11	35	
Benzo(b)fluoranthene	ug/L	<0.053	9.5	10.5	7.8	8.7	82	83	31-133	11	33	
Benzo(g,h,i)perylene	ug/L	<0.042	9.5	10.5	7.3	8.2	77	78	21-137	11	37	
Benzo(k)fluoranthene	ug/L	<0.044	9.5	10.5	7.1	7.7	74	73	30-121	8	42	
Chrysene	ug/L	<0.043	9.5	10.5	6.9	7.7	73	73	35-116	10	33	
Dibenz(a,h)anthracene	ug/L	<0.053	9.5	10.5	7.5	8.4	79	80	24-148	12	45	
Fluoranthene	ug/L	<0.20	9.5	10.5	8.1	9.0	85	85	44-133	11	37	
Fluorene	ug/L	<0.070	9.5	10.5	7.2	8.0	75	76	44-113	11	35	
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	9.5	10.5	7.5	8.4	79	80	21-149	12	50	
Naphthalene	ug/L	<0.080	9.5	10.5	6.6	7.2	69	68	35-107	9	36	
Phenanthrene	ug/L	<0.41	9.5	10.5	7.3	8.0	75	74	41-110	8	37	
Pyrene	ug/L	<0.077	9.5	10.5	7.4	7.8	78	74	26-114	5	35	
2-Fluorobiphenyl (S)	%						75	72	37-109			
Terphenyl-d14 (S)	%						82	76	34-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734162 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838001, 60375838002, 60375838003, 60375838004, 60375838005, 60375838006, 60375838007, 60375838008, 60375838009, 60375838010, 60375838011, 60375838012, 60375838013, 60375838014

METHOD BLANK: 2946128 Matrix: Solid
Associated Lab Samples: 60375838001, 60375838002, 60375838003, 60375838004, 60375838005, 60375838006, 60375838007, 60375838008, 60375838009, 60375838010, 60375838011, 60375838012, 60375838013, 60375838014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	07/26/21 13:30	

SAMPLE DUPLICATE: 2946129

Parameter	Units	60375838013 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	22.7	23.1	2	20	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

QC Batch: 734164
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375838015, 60375838016, 60375838017, 60375838018, 60375838019, 60375838020, 60375838021, 60375838022, 60375838023, 60375838024, 60375838025

METHOD BLANK: 2946134
Matrix: Solid
Associated Lab Samples: 60375838015, 60375838016, 60375838017, 60375838018, 60375838019, 60375838020, 60375838021, 60375838022, 60375838023, 60375838024, 60375838025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	07/26/21 14:13	

SAMPLE DUPLICATE: 2946135

Parameter	Units	60375711001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	16.6	16.6	0	20	

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QUALIFIERS

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 734716

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 735565

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D4	Sample was diluted due to the presence of high levels of target analytes.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
c2	Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375838001	GB-42/2-3	EPA 3546	734194	EPA 8082	734549
60375838002	GB-42/3-5	EPA 3546	734194	EPA 8082	734549
60375838003	GB-35/2-3	EPA 3546	734194	EPA 8082	734549
60375838004	GB-35/3-5	EPA 3546	734194	EPA 8082	734549
60375838005	GB-35/3-5D	EPA 3546	734194	EPA 8082	734549
60375838006	GB-28/1.5-2.5	EPA 3546	734194	EPA 8082	734549
60375838007	GB-28/3-5	EPA 3546	734194	EPA 8082	734549
60375838008	GB-21/0.5-2.5	EPA 3546	734194	EPA 8082	734549
60375838009	GB-21/3-5	EPA 3546	734194	EPA 8082	734549
60375838010	GB-14/0-2	EPA 3546	734194	EPA 8082	734549
60375838011	GB-14/3-5	EPA 3546	734194	EPA 8082	734549
60375838012	GB-07/2.5-3.5	EPA 3546	734194	EPA 8082	734549
60375838013	GB-07/7-9	EPA 3546	734194	EPA 8082	734549
60375838014	GB-06/2-3	EPA 3546	734194	EPA 8082	734549
60375838015	GB-06/3-5	EPA 3546	734194	EPA 8082	734549
60375838016	GB-13/0-2	EPA 3546	734194	EPA 8082	734549
60375838017	GB-13/3-5	EPA 3546	734194	EPA 8082	734549
60375838018	GB-20/0-2	EPA 3546	734194	EPA 8082	734549
60375838019	GB-20/3-4	EPA 3546	734194	EPA 8082	734549
60375838020	GB-27/0.5-2	EPA 3546	734196	EPA 8082	734550
60375838021	GB-27/3-5	EPA 3546	734196	EPA 8082	734550
60375838022	GB-08/2.5-3.5	EPA 3546	734196	EPA 8082	734550
60375838023	GB-08/4-6	EPA 3546	734196	EPA 8082	734550
60375838024	GB-09/1.5-3	EPA 3546	734196	EPA 8082	734550
60375838025	GB-09/4-6	EPA 3546	734196	EPA 8082	734550
60375838027	RB-03	EPA 3510	735020	EPA 8082	735116
60375838028	RB-04	EPA 3510	735020	EPA 8082	735116
60375838029	RB-05	EPA 3510	735020	EPA 8082	735116
60375838001	GB-42/2-3	EPA 3050	736159	EPA 6020	736382
60375838002	GB-42/3-5	EPA 3050	736159	EPA 6020	736382
60375838003	GB-35/2-3	EPA 3050	736159	EPA 6020	736382
60375838004	GB-35/3-5	EPA 3050	736159	EPA 6020	736382
60375838005	GB-35/3-5D	EPA 3050	736159	EPA 6020	736382
60375838006	GB-28/1.5-2.5	EPA 3050	736159	EPA 6020	736382
60375838007	GB-28/3-5	EPA 3050	736159	EPA 6020	736382
60375838008	GB-21/0.5-2.5	EPA 3050	736159	EPA 6020	736382
60375838009	GB-21/3-5	EPA 3050	736159	EPA 6020	736382
60375838010	GB-14/0-2	EPA 3050	736159	EPA 6020	736382
60375838011	GB-14/3-5	EPA 3050	736159	EPA 6020	736382
60375838012	GB-07/2.5-3.5	EPA 3050	736159	EPA 6020	736382
60375838013	GB-07/7-9	EPA 3050	736298	EPA 6020	736506
60375838014	GB-06/2-3	EPA 3050	736298	EPA 6020	736506
60375838015	GB-06/3-5	EPA 3050	736298	EPA 6020	736506
60375838016	GB-13/0-2	EPA 3050	736298	EPA 6020	736506
60375838017	GB-13/3-5	EPA 3050	736298	EPA 6020	736506
60375838018	GB-20/0-2	EPA 3050	736298	EPA 6020	736506
60375838019	GB-20/3-4	EPA 3050	736298	EPA 6020	736506

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375838020	GB-27/0.5-2	EPA 3050	736298	EPA 6020	736506
60375838021	GB-27/3-5	EPA 3050	735728	EPA 6020	736178
60375838022	GB-08/2.5-3.5	EPA 3050	735728	EPA 6020	736178
60375838023	GB-08/4-6	EPA 3050	735728	EPA 6020	736178
60375838024	GB-09/1.5-3	EPA 3050	735728	EPA 6020	736178
60375838025	GB-09/4-6	EPA 3050	735728	EPA 6020	736178
60375838001	GB-42/2-3	EPA 3546	734193	EPA 8270 by SIM	734847
60375838002	GB-42/3-5	EPA 3546	734193	EPA 8270 by SIM	734847
60375838003	GB-35/2-3	EPA 3546	734193	EPA 8270 by SIM	734847
60375838004	GB-35/3-5	EPA 3546	734193	EPA 8270 by SIM	734847
60375838005	GB-35/3-5D	EPA 3546	734193	EPA 8270 by SIM	734847
60375838006	GB-28/1.5-2.5	EPA 3546	734193	EPA 8270 by SIM	734847
60375838007	GB-28/3-5	EPA 3546	734193	EPA 8270 by SIM	734847
60375838008	GB-21/0.5-2.5	EPA 3546	734193	EPA 8270 by SIM	734847
60375838009	GB-21/3-5	EPA 3546	734193	EPA 8270 by SIM	734847
60375838010	GB-14/0-2	EPA 3546	734192	EPA 8270 by SIM	735012
60375838011	GB-14/3-5	EPA 3546	734192	EPA 8270 by SIM	735012
60375838012	GB-07/2.5-3.5	EPA 3546	734192	EPA 8270 by SIM	735012
60375838013	GB-07/7-9	EPA 3546	734192	EPA 8270 by SIM	735012
60375838014	GB-06/2-3	EPA 3546	734193	EPA 8270 by SIM	734847
60375838015	GB-06/3-5	EPA 3546	734193	EPA 8270 by SIM	734847
60375838016	GB-13/0-2	EPA 3546	734193	EPA 8270 by SIM	734847
60375838017	GB-13/3-5	EPA 3546	734193	EPA 8270 by SIM	734847
60375838020	GB-27/0.5-2	EPA 3546	734193	EPA 8270 by SIM	734847
60375838021	GB-27/3-5	EPA 3546	734193	EPA 8270 by SIM	734847
60375838022	GB-08/2.5-3.5	EPA 3546	734193	EPA 8270 by SIM	734847
60375838023	GB-08/4-6	EPA 3546	734193	EPA 8270 by SIM	734847
60375838024	GB-09/1.5-3	EPA 3546	734193	EPA 8270 by SIM	734847
60375838025	GB-09/4-6	EPA 3546	734193	EPA 8270 by SIM	734847
60375838010	GB-14/0-2	EPA 3546	734191	EPA 8270	734740
60375838011	GB-14/3-5	EPA 3546	734191	EPA 8270	734740
60375838012	GB-07/2.5-3.5	EPA 3546	734191	EPA 8270	734740
60375838013	GB-07/7-9	EPA 3546	734191	EPA 8270	734740
60375838027	RB-03	EPA 3510C	734248	EPA 8270C by SIM	734429
60375838028	RB-04	EPA 3510C	734248	EPA 8270C by SIM	734429
60375838029	RB-05	EPA 3510C	734248	EPA 8270C by SIM	734429
60375838010	GB-14/0-2	EPA 5035A/5030	734679	EPA 8260B	734710
60375838011	GB-14/3-5	EPA 5035A/5030	734679	EPA 8260B	734710
60375838012	GB-07/2.5-3.5	EPA 5035A/5030	734679	EPA 8260B	734710
60375838013	GB-07/7-9	EPA 5035A/5030	734679	EPA 8260B	734710
60375838026	TB-3	EPA 5030B/8260	735565		
60375838027	RB-03	EPA 5030B/8260	735565		
60375838028	RB-04	EPA 5030B/8260	735565		
60375838029	RB-05	EPA 5030B/8260	735565		
60375838030	TB-4	EPA 5030B/8260	735565		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA-GOODFELLOW
Pace Project No.: 60375838

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375838027	**RB-03**	EPA 8260	734716		
60375838028	**RB-04**	EPA 8260	734716		
60375838029	**RB-05**	EPA 8260	734716		
60375838010	**GB-14/0-2**	EPA 5035	734681	EPA 8260	734712
60375838011	**GB-14/3-5**	EPA 5035	734681	EPA 8260	734712
60375838012	**GB-07/2.5-3.5**	EPA 5035	734681	EPA 8260	734712
60375838013	**GB-07/7-9**	EPA 5035	734681	EPA 8260	734712
60375838001	**GB-42/2-3**	ASTM D2974	734162		
60375838002	**GB-42/3-5**	ASTM D2974	734162		
60375838003	**GB-35/2-3**	ASTM D2974	734162		
60375838004	**GB-35/3-5**	ASTM D2974	734162		
60375838005	**GB-35/3-5D**	ASTM D2974	734162		
60375838006	**GB-28/1.5-2.5**	ASTM D2974	734162		
60375838007	**GB-28/3-5**	ASTM D2974	734162		
60375838008	**GB-21/0.5-2.5**	ASTM D2974	734162		
60375838009	**GB-21/3-5**	ASTM D2974	734162		
60375838010	**GB-14/0-2**	ASTM D2974	734162		
60375838011	**GB-14/3-5**	ASTM D2974	734162		
60375838012	**GB-07/2.5-3.5**	ASTM D2974	734162		
60375838013	**GB-07/7-9**	ASTM D2974	734162		
60375838014	**GB-06/2-3**	ASTM D2974	734162		
60375838015	**GB-06/3-5**	ASTM D2974	734164		
60375838016	**GB-13/0-2**	ASTM D2974	734164		
60375838017	**GB-13/3-5**	ASTM D2974	734164		
60375838018	**GB-20/0-2**	ASTM D2974	734164		
60375838019	**GB-20/3-4**	ASTM D2974	734164		
60375838020	**GB-27/0.5-2**	ASTM D2974	734164		
60375838021	**GB-27/3-5**	ASTM D2974	734164		
60375838022	**GB-08/2.5-3.5**	ASTM D2974	734164		
60375838023	**GB-08/4-6**	ASTM D2974	734164		
60375838024	**GB-09/1.5-3**	ASTM D2974	734164		
60375838025	**GB-09/4-6**	ASTM D2974	734164		

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www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60375838

60375838

Client Name: Burns & McDonnell

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☒ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☒ None ☐ Other ☒ zplc

Thermometer Used: T296 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 1.3 **Corr. Factor** -0.3 **Corrected** 1.0

Temperature should be above freezing to 6°C 3.5, 2.6 3.0, 2.3

Date and initials of person examining contents: 7.24.21 (b) (6)

Chain of Custody present:	☒Yes ☐No ☐N/A	
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	
Samples arrived within holding time:	☒Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	JV 7/26/21
Sufficient volume:	☐Yes ☒No ☐N/A	~~only received 1 56FW for 8 / 2.5-3.5~~
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	
Containers intact:	☒Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☒N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	
Sample labels match COC: Date / time / ID / analyses	☒Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: SL/WT	☐Yes ☒No ☐N/A	
Containers requiring pH preservation in compliance? (HNO3, H2SO4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT# 60717 3	☒Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☒Yes ☐No ☐N/A	1 DGNH in cooler 1
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	1 DGNH in cooler 3
Samples from USDA Regulated Area: State:	☐Yes ☐No ☒N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☒N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Jeffrey Shopper Date: _____

F-KS-C-003-Rev.11, February 28, 2018

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 ~~Loiret Blvd~~ (cr) Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: 913-563-1408

Document Control No: 133835-011
Lab. Reference No. or Episode No.:

Project Number: 133835
Client Name: GSA-GoodFellow

Sample Type: Matrix

Sample Number: Group or SWMU Name	Sample Point	Sample Designator	Sample Event: Round	Year	Sample Depth (in feet): From	To	Sample Collected: Date	Time	Liquid	Solid	Gas	Number of Containers	Analysis: PAHs	Metals	PCBs	PCB Congeners	VOCs	MO DRO/GRO	GRO	Remarks
GB-42	2-3				2.0	3.0	7/22/21	1418		X		2	X	X	X					603758838
GB-42	3-5				3.0	5.0		1425		X		2	X	X	X					
GB-35	2-3				2.0	3.0		1440		X		2	X	X	X					
GB-35	3-5				3.0	5.0		1445		X		2	X	X	X					
GB-35	3-5D				3.0	5.0		1445		X		2	X	X	X					
GB-28	1.5-2.5				1.5	2.5		1527		X		3	X	X	X	X				
GB-28	3-5				3.0	5.0		1533		X		2	X	X	X					
GB-21	0.5-2.5				0.5	2.5	7/23/21	741		X		2	X	X	X					
GB-21	3-5				3.0	5.0		745		X		2	X	X	X					
GB-14	0-2				0	2.0		845		X		6	X	X	X		X	X	X	
GB-14	3-5				3.0	5.0		850		X		6	X	X	X		X	X	X	
~~GB-07~~ (2)	GB-07	2.5-3.5			2.5	3.5		913		X		6	X	X	X		X	X	X	
GB-07	7-9				7.0	9.0		936		X		6	X	X	X		X	X	X	
GB-07	7-9				7.0	9.0		936		X		6	X	X	X		X	X	X	
GB-07	7-9				7.0	9.0		936		X		6	X	X	X		X	X	X	

Sampler (signature): [redacted] (9) (a)

Special Instructions: SEE WORK ORDER

Relinquished By: [redacted] (9) (a) Date/Time: 7/23/21

Received By: [redacted] (9) (a) Date/Time: 1400 7/23

Relinquished By: [redacted] (9) (a) Date/Time: 7/23 H10

Received By: [redacted] (9) (a) Date/Time: 7/24.21 0400

Ice Present in Container: Yes [X] No [ ]

Temperature Upon Receipt: 1.0, 3.0, 2.5

Laboratory Comments:

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 ~~Ceriet BLVD~~ Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: 913-563-1408

Document Control No: 133835-012
Lab. Reference No. or Episode No.:

Project Number: 133835
Client Name: GSA-Goodfellow

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Sample Type / Matrix			Number of Containers	Analysis: PAHs	Metals	PCBs	PCB Congeners	VOCs		60375838 Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas								
GB-06	2-3				2.0	3.0	7/23/21	1005		X		2	X	X	X				
GB-06	3-5				3.0	5.0		1010		X		3	X	X	X	X			
GB-13	0-2				0	2.0		1032		X		2	X	X	X				
GB-13	3-5				3.0	5.0		1036		X		2	X	X	X				
GB-20	0-2				0	2.0		1102		X		1		X	X				
GB-20	3-4				3.0	4.0		1107		X		1		X	X				
GB-27	0.5-2				0.5	2.0		1135		X		2	X	X	X				
GB-27	3-5				3.0	5.0		1139		X		2	X	X	X				
GB-08	2.5-3.5				2.5	3.5		1307		X		2	X	X	X				
GB-08	~~4-5~~ 4-6				4.0	6.0		1312		X		2	X	X	X				
GB-09	1.5-3				1.5	3.0		1333		X		2	X	X	X				
GB-09	4-6				4.0	6.0	↓	1337		X		2	X	X	X				
TB-3					Lab Prepared				X			1					X		

104 of 943

3

Sampler (signature): [redacted]

Special Instructions:
SEE WORK ORDER

Relinquished By: [redacted] Date/Time 7/23/21 1700

Received By: [redacted] Date/Time 7/23/21 1700

Relinquished By: [redacted] Date/Time 7/24/21 0400

Received By: [redacted]

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt:

Laboratory Comments:

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: 913-563-1406

Document Control No: 133835-013
Lab. Reference No. or Episode No.:

Project Number: 133835

Client Name: GSA-Goodfellow

	Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Sample Type: Matrix			Number of Containers	Analysis: VOCs	PAHs	GRO	PCBs			60375838 Remarks
	Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas								
1	RB-03							7/21/20	1510	X			10	X	X	X	X			
1	RB-04							7/22/21	1515	X			10	X	X	X	X			
	RB-05							7/23/21	805	X			10	X	X	X	X			
	TB-4					Lab Prepared				X			1	X						

105 of 943

Special Instructions:
SEE WORK ORDER

Ice Present in Container: Yes [X] No [ ]

Temperature Upon Receipt:

Laboratory Comments:

[redacted] (b) (6)

Date/Time 7/23/21

[redacted] (b) (6)

Date/Time 7/23 1410

[redacted] (b) (6)

Date/Time 14:00 7/23

[redacted] (b) (6)

Date/Time 7.24.21 0400

Pace Analytical™
www.pacelabs.com

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Report Prepared for:

Jeffrey Shopper
PACE Kansas
9608 Loriet Blvd
Lenexa KS 66219

REPORT OF LABORATORY ANALYSIS FOR PCBs

Report Information:

Pace Project #: 10571721
Sample Receipt Date: 07/27/2021
Client Project #: 60375838 Burns & McDonnell
Client Sub PO #: N/A
State Cert #: N/A

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 4 PCB Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

(b) (6) [redacted]

August 30, 2021

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
August 25, 2021

Report of Laboratory Analysis

This report should not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

The results relate only to the samples included in this report.

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

This report presents the results from the analyses performed on two samples submitted by a representative of Pace Analytical Services, Kansas. The samples were analyzed for the presence or absence of the twelve dioxin-like polychlorinated biphenyl (PCB) congeners using USEPA Method 1668A. Reporting limits were set to signal-to-noised based estimated detection limits based on the amount of dry sample weight extracted.

The dilution levels noted on the data tables is being adjusted to allow the correct data flags to populate the electronic deliverables as well as the data tables. Samples and MDL extracts were analyzed at elevated volumes. That volume is being treated as a 1x dilution for calculation purposes, with larger dilutions being factored from that volume.

The recoveries of the isotopically-labeled PCB internal standards in the sample extracts ranged from 54-92%. All of the laboratory spike results tables, the isotopically-labeled PCB internal standards in the extracts were recovered within the target ranges for this method. Since the quantification of the native PCB congeners was based on internal standard and isotope dilution methodology, the data were automatically corrected for variation in recovery and accurate values were obtained.

It should be noted that the extracts from this project were double spiked with cleanup standards. The additional standard was taken into account with the calculation of cleanup recoveries. Cleanup standards are used to troubleshoot recovery issues with the internal standards. Their use is not associated with quantitation, and does not impact the PCB content determinations.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to produce signal at the retention time of congeners 156/157 and to contain trace levels of several other PCB congeners. Congeners present in the sample extracts at levels similar to the method blank were flagged "B" and may have originated in the laboratory.

Laboratory spike samples were also prepared using reference matrix that had been fortified with native standard materials. The results show that the spiked native compounds were recovered at 105-115%. These results were within the target ranges for the method. Matrix spikes were prepared with this sample set and were reported with project 10571414.

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
		Missouri	10100
A2LA	2926.01	Montana	CERT0092
Alabama	40770	Nebraska	NE-OS-18-06
Alaska-DW	MN00064	Nevada	MN00064
Alaska-UST	17-009	New Hampshire	2081
Arizona	AZ0014	New Jersey	MN002
Arkansas - WW	88-0680	New York	11647
Arkansas-DW	MN00064	North Carolina-	27700
California	2929	North Carolina-	530
Colorado	MN00064	North Dakota	R-036
Connecticut	PH-0256	Ohio-DW	41244
Florida	E87605	Ohio-VAP (170	CL101
Georgia	959	Ohio-VAP (180	CL110
Hawaii	MN00064	Oklahoma	9507
Idaho	MN00064	Oregon- rimary	MN300001
Illinois	200011	Oregon-Second	MN200001
Indiana	C-MN-01	Pennsylvania	68-00563
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003
Kentucky-DW	90062	Tennessee	TN02818
Kentucky-WW	90062	Texas	T104704192
Louisiana-DEQ	AI-84596	Utah	MN00064
Louisiana-DW	MN00064	Vermont	VT-027053137
Maine	MN00064	Virginia	460163
Maryland	322	Washington	C486
Michigan	9909	West Virginia-D	382
Minnesota	027-053-137	West Virginia-D	9952C
Minnesota-Ag	via MN 027-053	Wisconsin	999407970
Minnesota-Petr	1240	Wyoming-UST	via A2LA 2926.
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise (EDL)

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

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Appendix A

Sample Management

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Sample ID Cross Reference

Client Sample ID	Pace Sample ID	Date Received	Sample Type
GB-28/1.5-2.5	60375838006-R	07/27/2021	Solid
GB-06/3-5	60375838015-R	07/27/2021	Solid

REPORT OF LABORATORY ANALYSIS

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Internal Transfer Chain of Custody

[X] Samples Pre-Logged into eCOC.

State Of Origin: MO
Cert. Needed: [ ] Yes [X] No
Owner Received Date: 7/24/2021 **Results Requested By:** 8/23/2021

Workorder: 60375838 **Workorder Name:** GSA-GOODFELLOW

Pace Analytical® www.pacelabs.com

Report To	Subcontract To
Jeffrey Shopper Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 1(913)563-1408	Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

WO# : 10571721

10571721

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	1668A PCB Congeners	LAB USE ONLY
1	GB-28/1.5-2.5	PS	7/22/2021 15:27	60375838006	Solid	1	X	
2	GB-06/3-5	PS	7/23/2021 10:10	60375838015	Solid	1	X	
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	(b) (6) IPace	7-26-21 1300	(b) (6) /PACE	7/27/21 8:50
2				
3				

Comments

Cooler Temperature on Receipt 5.8 °C | **Custody Seal** Y or (N) | **Received on Ice** (Y) or N | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) - MN**	Document Revised: 14Apr2021 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0150 Rev.02**	Pace Analytical Services - **Minneapolis**

Sample Condition Upon Receipt

Client Name: PACE Kansas

Project #: WO#: 10571721

PM: RK1 Due Date: 08/24/21

CLIENT: PASI-KANS

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 500206514800 See Exceptions ☐ ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: _____ **Temp Blank?** ☒ Yes ☐ No

Thermometer: ☐ T1(0461) ☐ T2(1336) ☒ T3(0459) ☐ OS418-LS ☐ T4(0254) ☐ T5(0489) ☐ 160285052 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Dry ☐ Melted

Did Samples Originate in West Virginia? ☐ Yes ☒ No **Were All Container Temps Taken?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** 5.8 °C **Average Corrected Temp (no temp blank only):** _____ °C ☐ See Exceptions ENV-FRM-MIN4-0142 ☐ 1 Container

Correction Factor: TNE **Cooler Temp Corrected w/temp blank:** 5.8 °C

USDA Regulated Soil: (☐ N/A, water sample/Other: _____) **Date/Initials of Person Examining Contents:** (b) (6) 7/27/21

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☒ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒ Yes	☐ No		1.
Chain of Custody Relinquished?	☒ Yes	☐ No		2.
Sampler Name and/or Signature on COC?	☐ Yes	☐ No	☒ N/A	3.
Samples Arrived within Hold Time?	☒ Yes	☐ No		4.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		5. ☐ Fecal Coliform ☐ HPC ☐ Total Coliform/E coli ☐ BOD/cBOD ☐ Hex Chrome ☐ Turbidity ☐ Nitrate ☐ Nitrite ☐ Orthophos ☐ Other
Rush Turn Around Time Requested?	☐ Yes	☒ No		6.
Sufficient Volume?	☒ Yes	☐ No		7.
Correct Containers Used? -Pace Containers Used?	☒ Yes ☒ Yes	☐ No ☐ No		8.
Containers Intact?	☒ Yes	☐ No		9.
Field Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	10. Is sediment visible in the dissolved container? ☐ Yes ☐ No
Is sufficient information available to reconcile the samples to the COC?	☒ Yes	☐ No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐ ENV-FRM-MIN4-0142
Matrix: ☐ Water ☒ Soil ☐ Oil ☐ Other				
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☐ Yes	☐ No	☒ N/A	☐ NaOH ☐ HNO_3 ☐ H_2SO_4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐ Yes	☐ No	☒ N/A	Positive for Res. Chlorine? ☐ Yes ☐ No **pH Paper Lot#** **See Exception** ☐ ENV-FRM-MIN4-0142
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐ Yes	☐ No	☒ N/A	13. **See Exception** ☐ ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)?	☐ Yes	☐ No	☒ N/A	
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	Pace Trip Blank Lot # (if purchased): _____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: (b) (6) **Date:** 07/27/21

Note: Whenever there is a discrepancy affecting North Carolina compliance samples a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: (b) (6)

1668A - 209 | Solid | Soxhlet | EB-31098

Extract Solvents:

Extraction On (Date/Time): 08/10/21 14:15

QC Matrix Lot #: Silica 596 | **Toluene Lot #** 206135

Time of Spiking: 08/10/21 14:03 | **Hexane Lot #**

Extraction Off (Date/Time): 08/11/21 07:15

Balance: 10BALY | **MeCl Lot #**

Standards	Name/ID	Amount	Initial	Witness	Expiration Date	Dispenser
Internal Std.	209-I-20170-172	100	AH	SJ	07/20/22	Q763
Native	209-N-20170-144	100	AH	SJ	01/13/22	Q763
Cl37 Std.	209-CL-20170-174	100			07/29/22	Q678
Recovery	209R-20170-164	10	MCH		06/25/22	Q763
Tridecane	A0416109	10	MCH			Q763
Others						

#	Sample ID	Internal Standards	Native Standards	Extracted mL or g	Glassware Set	Location	Comments
1	BLANK-92218	x		10.7			
2	LCS-92217	x	x	10.5			
3	60375626032-MS-R	x	x	12.9		10-C16-049	
4	60375626032-MSD-R	x	x	12.6		10-C16-049	
5	60375481005-R	x		12.6		10-C16-046	
6	60375481009-R	x		12.9		10-C16-046	
7	60375481043-R	x		12.3		10-C16-046	
8	60375626013-R	x		13.1		10-C16-049	
9	60375626014-R	x		12.7		10-C16-049	
10	60375626032-R	x		12.6		10-C16-049	
11	60375692004-R	x		13.2		10-C16-053	
12	60375692012-R	x		13.6		10-C16-053	
13	60375692020-R	x		12.1		10-C16-053	
14	60375838006-R	x		12.9		10-C16-062	
15	60375838015-R	x		13.2		10-C16-062	

Relinquished By: M | Received By: | Date:

Batch Notes:

Silica		Alumina		Carbon		Florisil	
Initials	CW1/PED	Initials		Initials		Initials	
Date	8/11/2021	Date		Date		Date	
Neutral Batch	599	Alumina Lot #		Hexane Lot #		Florisil Lot #	
Basic Batch	750	Hexane Lot #		Dispenser		Hexane Lot #	
Acid Batch	876	Dispenser		50% Batch		Dispenser	
Hexane Lot #	213846	60% Batch		Dispenser		6% Batch	
Dispenser	Q758	Dispenser		75% Batch		Dispenser	
				Dispenser			
				Toluene Lot #			
				Dispenser			
				Methanol Lot #			
				Dispenser			

Acid Base

Sulphuric Acid Lot #	
Base Batch	

1 maybe double spiked with 209/cl. 8/13/21

Pace Analytical™

Solid Sample Moisture Log

Sample ID	Client Sample ID		% Moisture	% Solids	Amount Extracted	Assayed
60375838006	GB-28/1.5-2.5		20.0187	79.9813	12.93	7/27/2021
60375838015	GB-06/3-5		20.7939	79.2061	13.2	7/27/2021

Note:
Total weight is the amount of wet sample required to give 10g dry weight

Client names have been blacked out on notebook pages in order to preserve client confidentiality

Analysis Key Code List

- = Not used

✔ = Worked up

= See comment # below

Li = Liner, replace or clean

Ba = Baseplate, change

SyB = Syringe, replace – bent

SyP = Syringe, replace – plugged

SyO = Syringe, replace – other

IS = Injector Septum, replace

BS = Batch Septum, replace

Fi = Filament, replace

Co = Contacts, adjust

Ca = re-Calibrate

Tu = Tune

TC = Tune and Calibrate

CC () = Cut Column (length cut)

CO = Carry-Over possible

RRM = ReRun - Matrix

RRLM = ReRun – Lock Mass

RRBI = ReRun – Bad Injection

RRRT = ReRun – Retention Time shift

RR>S = Rerun – need better Sensitivity

Re = Re-extract

AS = Adjust Slits

LC = Leak Check

RB = Re-Boot system

CiS = Cleaned inner Source

CoS = Cleaned outer Source

AiS = Alternate inner Source

AoS = Alternate outer Source

<Y = Adjust Y focus down

>Y = Adjust Y focus up

Di () = Dilution needed (amount needed)

FE = Front End – liner, baseplate and septum

Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210818B.SPL
Last Modified: Wednesday, August 18, 2021 19:39:42 Central Daylight Time
Printed: Thursday, August 19, 2021 09:36:01 Central Daylight Time

10MSHR12 8/18/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210818B_01	CAL CS3/CPM-20-123-058 - CVS liner, TC	220717	8290/1613B	dioxfurY	DioxFur_Y	Tray1:1	1.000000	---
2	Y210818B_02	Blank Nonane - CVS	---	8290/1613B	dioxfurY	DioxFur_Y	Tray1:3	1.000000	---
3	Y210818B_03	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
4	Y210818B_04	CAL CS3-20-123-060 - CVS windows	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
5	Y210818B_05	CAL CS3-20-123-060 - CVS TC	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
6	Y210818B_06	CAL CS2-20-123-053 - CVS TC	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:15	1.000000	---
7	Y210818B_07	CAL CS1-20-123-041 - CVS bad inj	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
8	Y210818B_08	CAL CS1-20-123-041 - CVS	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
9	Y210818B_09	CAL CS5-20-123-044 - CVS	220331	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:17	1.000000	---
10	Y210818B_10	CAL CS4-20-123-055 - CVS	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:18	1.000000	---
11	Y210818B_11	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
12	Y210818B_12	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
13	Y210818B_13	LCS LCS-92213 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:19	1.000000	---
14	Y210818B_14	LCS LCSD-92214 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:20	1.000000	---
15	Y210818B_15	Samp 60375626032-MS-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:21	1.000000	---
16	Y210818B_16	Samp 60375626032-MSD-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:22	1.000000	---
17	Y210818B_17	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
18	Y210818B_18	Samp 60375626032-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:23	1.000000	---
19	Y210818B_19	Samp 60375626013-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:24	1.000000	---
20	Y210818B_20	Samp 60375626014-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:25	1.000000	---
21	Y210818B_21	Samp 60375838006-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:26	1.000000	---
22	Y210818B_22	Samp 60375838015-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:27	1.000000	---
23	Y210818B_23	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

ver 8/20/21 (b) (6)

(b) (6) 8/20/21

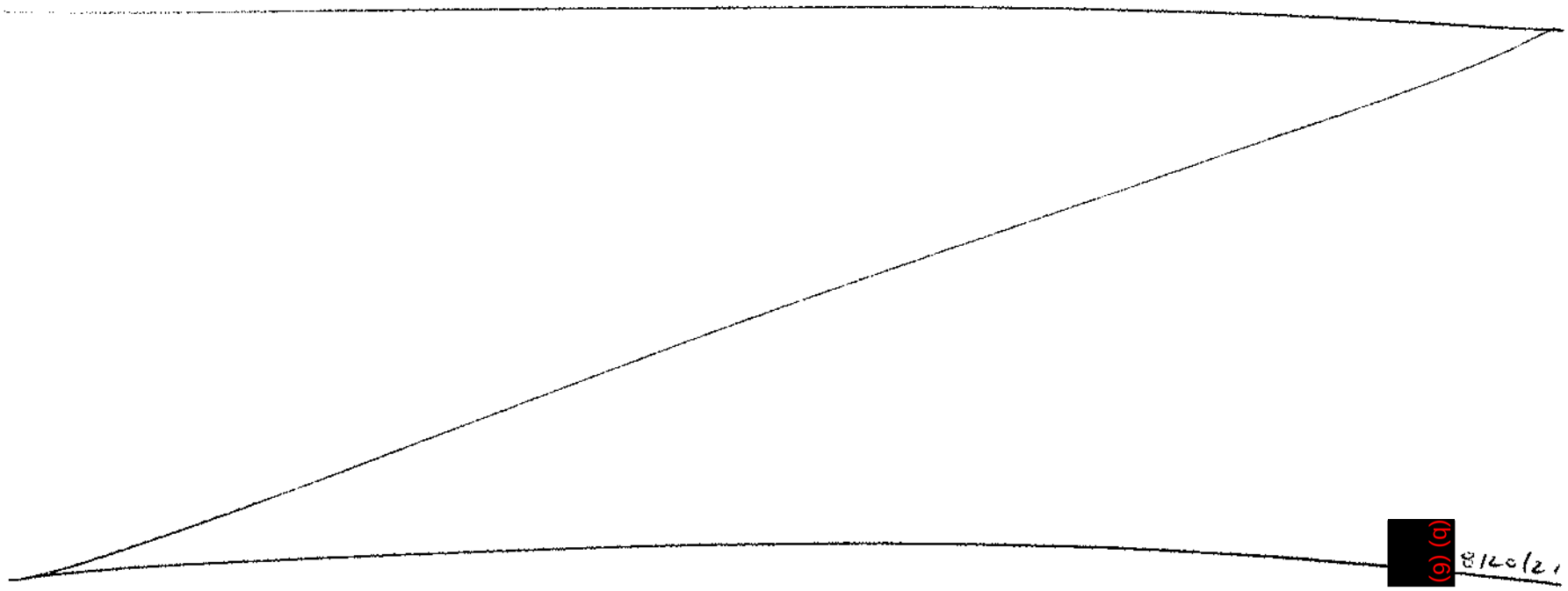
Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210819A.SPL
Last Modified: Thursday, August 19, 2021 14:21:07 Central Daylight Time
Printed: Thursday, August 19, 2021 14:21:10 Central Daylight Time

10MSHR13 8/19/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210819A_01	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
2	Y210819A_02	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
3	Y210819A_03	LCS LCS-92217 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
4	Y210819A_04	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
5	Y210819A_05	Samp 10573340001 - CVS [redacted] 2x	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:28	1.000000	---
6	Y210819A_06	Samp 10574009001 - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:29	1.000000	---
7	Y210819A_07	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
8	Y210819A_08	Samp 60375481005-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:30	1.000000	---
9	Y210819A_09	Blank Blank-92218 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:31	1.000000	---
10	Y210819A_10	Samp 60375481009-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:32	1.000000	---
11	Y210819A_11	Samp 60375481043-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:33	1.000000	---
12	Y210819A_12	Samp 60375692004-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:34	1.000000	---
13	Y210819A_13	Samp 60375692012-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:35	1.000000	---
14	Y210819A_14	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

ver 8/22/2 (b) (6)



(b) (6) 8/20/21

Appendix B

Sample Analysis Summary

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-28/1.5-2.5		
Lab Sample ID	60375838006-R		
Filename	Y210818B_21		
Injected By	CVS		
Total Amount Extracted	12.9 g	Matrix	Solid
% Moisture	20.0	Dilution	NA
Dry Weight Extracted	10.3 g	Collected	07/22/2021 15:27
ICAL ID	Y210818B12	Received	07/27/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 07:43

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.883	0.76	2.0	1.77	88
13C-3,3',4,4'-TeCB	77	35.453	0.78	2.0	1.85	92
13C-2,3,3',4,4'-PeCB	105	39.046	1.61	2.0	1.70	85
13C-2,3,4,4',5-PeCB	114	38.409	1.51	2.0	1.73	86
13C-2,3',4,4',5-PeCB	118	37.856	1.53	2.0	1.68	84
13C-2,3',4,4',5'-PeCB	123	37.521	1.59	2.0	1.66	83
13C-3,3',4,4',5-PeCB	126	42.199	1.53	2.0	1.74	87
13C-HxCB(156/157)	156/157	45.255	1.26	4.0	3.17	79
13C-2,3',4,4',5,5'-HxCB	167	44.098	1.19	2.0	1.62	81
13C-3,3',4,4',5,5'-HxCB	169	48.525	1.23	2.0	1.65	83
13C-2,3,3',4,4',5,5'-HpCB	189	51.086	1.00	2.0	1.74	87
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.79	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.720	1.57	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.042	1.25	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.176	0.88	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-28/1.5-2.5
Lab Sample ID	60375838006-R
Filename	Y210818B_21

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg		EMPC ng/Kg	EML ng/Kg
77		35.486	0.73	2.74	BJ	---	1.70
81		---	---	ND		---	1.74
105		39.063	1.41	4.18	BJ	---	2.15
114		---	---	ND		---	1.63
118		37.906	1.35	7.02	BJ	---	1.76
123		---	---	ND		---	1.89
126		---	---	ND		---	1.52
156	156/157	45.289	1.52	---	IJ	1.49	1.20
157	156/157	45.289	1.52	---	IJ	(1.49)	1.20
167		---	---	ND		---	0.757
169		---	---	ND		---	0.706
189		---	---	ND		---	0.829

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-28/1.5-2.5		
Lab Sample ID	60375838006-R		
Filename	Y210818B_21		
Injected By	CVS		
Total Amount Extracted	12.9 g	Matrix	Solid
% Moisture	20.0	Dilution	NA
Dry Weight Extracted	10.3 g	Collected	07/22/2021 15:27
ICAL ID	Y210818B12	Received	07/27/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 07:43

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.7	1.7	0.00010	0.0003	0.0003	0.0003
81	ND	1.7	0.00030	0.0000	0.0003	0.0005
105	4.2	2.2	0.00003	0.0001	0.0001	0.0001
114	ND	1.6	0.00003	0.0000	0.0000	0.0000
118	7.0	1.8	0.00003	0.0002	0.0002	0.0002
123	ND	1.9	0.00003	0.0000	0.0000	0.0001
126	ND	1.5	0.10000	0.0000	0.0758	0.1516
156/157	ND	1.2	0.00003	0.0000	0.0000	0.0000
167	ND	0.76	0.00003	0.0000	0.0000	0.0000
169	ND	0.71	0.03000	0.0000	0.0106	0.0212
189	ND	0.83	0.00003	0.0000	0.0000	0.0000
				0.00065 ng TEQ/Kg	**0.087 ng TEQ/Kg**	**0.17 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-06/3-5		
Lab Sample ID	60375838015-R		
Filename	Y210818B_22		
Injected By	CVS		
Total Amount Extracted	13.2 g	Matrix	Solid
% Moisture	20.8	Dilution	NA
Dry Weight Extracted	10.5 g	Collected	07/23/2021 10:10
ICAL ID	Y210818B12	Received	07/27/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 08:42

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.866	0.75	2.0	1.62	81
13C-3,3',4,4'-TeCB	77	35.453	0.80	2.0	1.71	85
13C-2,3,3',4,4'-PeCB	105	39.046	1.54	2.0	1.58	79
13C-2,3,4,4',5-PeCB	114	38.393	1.53	2.0	1.59	79
13C-2,3',4,4',5-PeCB	118	37.839	1.55	2.0	1.58	79
13C-2,3',4,4',5'-PeCB	123	37.504	1.51	2.0	1.55	78
13C-3,3',4,4',5-PeCB	126	42.198	1.55	2.0	1.66	83
13C-HxCB(156/157)	156/157	45.255	1.22	4.0	2.89	72
13C-2,3',4,4',5,5'-HxCB	167	44.098	1.24	2.0	1.45	73
13C-3,3',4,4',5,5'-HxCB	169	48.524	1.25	2.0	1.56	78
13C-2,3,3',4,4',5,5'-HpCB	189	51.063	0.99	2.0	1.64	82
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.720	1.59	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.025	1.27	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.175	0.90	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-06/3-5
Lab Sample ID	60375838015-R
Filename	Y210818B_22

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		---	---	ND	---	1.76
81		---	---	ND	---	2.40
105		39.046	1.37	2.45 BJ	---	1.21
114		---	---	ND	---	1.15
118		37.839	1.36	4.25 BJ	---	1.15
123		---	---	ND	---	1.53
126		---	---	ND	---	1.29
156	156/157	45.289	1.39	1.83 BJ	---	0.902
157	156/157	45.289	1.39	(1.83) BJ	---	0.902
167		---	---	ND	---	0.831
169		---	---	ND	---	0.947
189		---	---	ND	---	0.759

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-06/3-5		
Lab Sample ID	60375838015-R		
Filename	Y210818B_22		
Injected By	CVS		
Total Amount Extracted	13.2 g	Matrix	Solid
% Moisture	20.8	Dilution	NA
Dry Weight Extracted	10.5 g	Collected	07/23/2021 10:10
ICAL ID	Y210818B12	Received	07/27/2021 08:50
CCal Filename(s)	Y210818B_11	Extracted	08/10/2021 14:15
Method Blank ID	BLANK-92218	Analyzed	08/19/2021 08:42

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	ND	1.8	0.00010	0.0000	0.0001	0.0002
81	ND	2.4	0.00030	0.0000	0.0004	0.0007
105	2.5	1.2	0.00003	0.0001	0.0001	0.0001
114	ND	1.1	0.00003	0.0000	0.0000	0.0000
118	4.3	1.2	0.00003	0.0001	0.0001	0.0001
123	ND	1.5	0.00003	0.0000	0.0000	0.0000
126	ND	1.3	0.10000	0.0000	0.0643	0.1287
156/157	1.8	0.90	0.00003	0.0001	0.0001	0.0001
167	ND	0.83	0.00003	0.0000	0.0000	0.0000
169	ND	0.95	0.03000	0.0000	0.0142	0.0284
189	ND	0.76	0.00003	0.0000	0.0000	0.0000
				0.00026 ng TEQ/Kg	**0.079 ng TEQ/Kg**	**0.16 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

REPORT OF LABORATORY ANALYSIS

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Appendix C

QC and Calibration Results Summary

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID	BLANK-92218		
Filename	Y210819A_09		
Injected By	CVS	Matrix	Solid
Total Amount Extracted	10.7 g	Extracted	08/10/2021 14:15
ICAL ID	Y210819A02	Analyzed	08/19/2021 19:31
CCal Filename(s)	Y210819A_01	Dilution	NA

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.78	2.0	1.35	68
13C-3,3',4,4'-TeCB	77	35.471	0.80	2.0	1.42	71
13C-2,3,3',4,4'-PeCB	105	39.048	1.57	2.0	1.29	64
13C-2,3,4,4',5-PeCB	114	38.411	1.52	2.0	1.34	67
13C-2,3',4,4',5-PeCB	118	37.857	1.54	2.0	1.28	64
13C-2,3',4,4',5'-PeCB	123	37.522	1.51	2.0	1.29	64
13C-3,3',4,4',5-PeCB	126	42.200	1.53	2.0	1.35	68
13C-HxCB (156/157)	156/157	45.274	1.24	4.0	2.46	61
13C-2,3',4,4',5,5'-HxCB	167	44.100	1.23	2.0	1.26	63
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.22	2.0	1.27	64
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.10	2.0	1.45	72
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.438	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.721	1.54	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.25	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.93	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a total weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-92218
Filename Y210819A_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		35.538	0.79	2.07	---	1.69
81		---	---	ND	---	1.17
105		39.065	1.67	3.33	---	1.29
114		---	---	ND	---	1.14
118		37.891	1.62	7.71	---	0.966
123		---	---	ND	---	1.32
126		---	---	ND	---	1.19
156	156/157	45.257	1.17	4.24	---	1.00
157	156/157	45.257	1.17	(4.24)	---	1.00
167		44.151	0.52	---	0.728	0.694
169		---	---	ND	---	0.884
189		---	---	ND	---	0.735

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

Results reported on a total weight basis

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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	CBLKHX		
Lab Sample ID	BLANK-92218		
Filename	Y210819A_09		
Injected By	CVS		
Total Amount Extracted	10.7 g	Matrix	Solid
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	08/10/2021 07:27
ICAL ID	Y210819A02	Received	08/10/2021 07:27
CCal Filename(s)	Y210819A_01	Extracted	08/10/2021 14:15
Method Blank ID		Analyzed	08/19/2021 19:31

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.1	1.7	0.00010	0.0002	0.0002	0.0002
81	ND	1.2	0.00030	0.0000	0.0002	0.0004
105	3.3	1.3	0.00003	0.0001	0.0001	0.0001
114	ND	1.1	0.00003	0.0000	0.0000	0.0000
118	7.7	0.97	0.00003	0.0002	0.0002	0.0002
123	ND	1.3	0.00003	0.0000	0.0000	0.0000
126	ND	1.2	0.10000	0.0000	0.0595	0.1191
156/157	4.2	1.0	0.00003	0.0001	0.0001	0.0001
167	ND	0.69	0.00003	0.0000	0.0000	0.0000
169	ND	0.88	0.03000	0.0000	0.0133	0.0265
189	ND	0.73	0.00003	0.0000	0.0000	0.0000
			0.00069 ng TEQ/Kg	**0.074 ng TEQ/Kg**		**0.15 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Method 1668A Polychlorobiphenyls
Laboratory Control Spike Analysis Results

Lab Sample ID	LCS-92217		
Filename	Y210819A_03	Matrix	Solid
Total Amount Extracted	10.5 g	Dilution	NA
ICAL ID	Y210819A02	Extracted	08/10/2021 14:15
CCal Filename(s)	Y210819A_01	Analyzed	08/19/2021 13:33
Method Blank ID	BLANK-92218	Injected By	CVS

	Native Analytes			Labeled Analytes		
PCB Isomer	**Spiked (ng)**	**Found (ng)**	**% Recovery**	**Spiked (ng)**	**Found (ng)**	**% Recovery**
81	1.0	1.07	107	2.0	1.61	80
77	1.0	1.06	106	2.0	1.69	85
105	1.0	1.10	110	2.0	1.62	81
114	1.0	1.06	106	2.0	1.49	74
118	1.0	1.13	113	2.0	1.50	75
123	1.0	1.12	112	2.0	1.46	73
126	1.0	1.13	113	2.0	1.67	84
156/157	2.0	2.16	108	4.0	2.92	73
167	1.0	1.11	111	2.0	1.43	71
169	1.0	1.09	109	2.0	1.57	78
189	1.0	1.12	112	2.0	1.56	78

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

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1668A Polychlorobiphenyl Initial Calibration Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Labeled Analytes								
13C-2-MoCB	1	1.1281	1.1371	1.1947	1.1760	1.1630	1.1598	2.37
13C-4-MoCB	3	1.0640	1.0801	1.1344	1.0704	1.0791	1.0856	2.59
13C-2,2'-DiCB	4	0.5838	0.5905	0.6159	0.6016	0.6160	0.6016	2.42
13C-4,4'-DiCB	15	0.8671	0.8674	0.9026	0.8890	0.8838	0.8820	1.71
13C-2,2',6-TrCB	19	0.6518	0.6583	0.6793	0.6781	0.6675	0.6670	1.81
13C-3,4,4'-TrCB	37	0.9136	0.9078	0.9320	0.9281	0.9441	0.9251	1.57
13C-2,2',6,6'-TeCB	54	1.2015	1.1982	1.2367	1.2062	1.1969	1.2079	1.37
13C-3,4,4',5-TeCB	81	0.8105	0.8243	0.7935	0.8226	0.8519	0.8206	2.61
13C-3,3',4,4'-TeCB	77	0.8084	0.8297	0.8099	0.8409	0.8536	0.8285	2.36
13C-2,2',4,6,6'-PeCB	104	0.8928	0.8966	0.9380	0.9285	0.9345	0.9181	2.36
13C-2,3',4,4',5-PeCB	118	0.8808	0.8918	0.8447	0.9031	0.9144	0.8870	3.02
13C-2,3,4,4',5-PeCB	114	0.8430	0.8396	0.7988	0.8641	0.8732	0.8437	3.42
13C-2,3,3',4,4'-PeCB	105	0.8233	0.8438	0.7770	0.8313	0.8727	0.8296	4.21
13C-3,3',4,4',5-PeCB	126	0.7093	0.7406	0.6920	0.7434	0.7610	0.7293	3.83
13C-2,2',4,4',6,6'-HxCB	155	1.0410	1.0674	1.1567	1.0944	1.1268	1.0973	4.19
13C-2,3',4,4',5,5'-HxCB	167	0.8607	0.8709	0.8428	0.8727	0.9011	0.8696	2.44
13C-HxCB (156/157)	156/157	0.8084	0.8217	0.7685	0.8390	0.8785	0.8232	4.90
13C-3,3',4,4',5,5'-HxCB	169	0.7050	0.7431	0.6956	0.7356	0.7809	0.7320	4.63
13C-2,2',3,4',5,6,6'-HpCB	188	1.8461	1.8051	2.0332	1.9010	1.9439	1.9059	4.65
13C-2,3,3',4,4',5,5'-HpCB	189	1.0396	1.0625	1.0342	1.0628	1.0998	1.0598	2.44
13C-2,2',3,3',5,5',6,6'-OcCB	202	1.8555	1.8001	1.9524	1.8751	1.8944	1.8755	2.96
13C-2,3,3',4,4',5,5',6-OcCB	205	1.2295	1.2273	1.2103	1.2660	1.3073	1.2481	3.11
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	1.4825	1.4561	1.5068	1.4918	1.5154	1.4905	1.55
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.9735	0.9677	0.9782	0.9890	1.0198	0.9856	2.09
13C-DeCB	209	0.9807	0.9725	0.9894	1.0166	1.0325	0.9983	2.54
Cleanup Standards								
13C-2,4,4'-TrCB	28	1.1279	1.1236	1.1438	1.1543	1.0942	1.1287	2.03
13C-2,3,3',5,5'-PeCB	111	1.2662	1.2655	1.2546	1.2941	1.3028	1.2766	1.62
13C-2,2',3,3',5,5',6-HpCB	178	0.9144	0.9189	0.9469	0.9290	0.9363	0.9291	1.41
Recovery Standards								
13C-2,5-DiCB	9	1.9945	2.0083	2.1584	1.9996	1.9991	2.0320	3.49
13C-2,2',5,5'-TeCB	52	1.3756	1.3814	1.4507	1.3625	1.3655	1.3872	2.62
13C-2,2',4,5,5'-PeCB	101	1.1775	1.1790	1.2057	1.1624	1.1699	1.1789	1.39
13C-2,2',3,4,4',5'-HxCB	138	1.0936	1.0882	1.0560	1.0765	1.0680	1.0765	1.41
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.7592	0.7796	0.7083	0.7500	0.7570	0.7508	3.49

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Native Analytes								
3,3',4,4'-TeCB	77	0.9461	0.9096	0.8769	0.8801	0.8880	0.9002	3.19
3,4,4',5-TeCB	81	0.9288	0.9668	0.9297	0.9336	0.9225	0.9363	1.87
2,3,3',4,4'-PeCB	105	0.8988	0.9291	0.8993	0.8788	0.8741	0.8960	2.43
2,3,4,4',5-PeCB	114	0.9491	0.9449	0.9221	0.9123	0.9181	0.9293	1.79
2,3',4,4',5-PeCB	118	0.9601	0.9450	0.9247	0.8931	0.9014	0.9249	3.06
2,3',4,4',5'-PeCB	123	0.9836	0.9286	0.9173	0.8958	0.9153	0.9281	3.58
3,3',4,4',5-PeCB	126	0.9251	0.9019	0.8951	0.8795	0.8782	0.8959	2.14
(156/157)	156/157	0.9991	0.9562	0.9359	0.9116	0.9040	0.9413	4.07
2,3',4,4',5,5'-HxCB	167	0.9772	0.9597	0.9103	0.9081	0.8965	0.9304	3.84
3,3',4,4',5,5'-HxCB	169	0.9875	0.9950	0.9320	0.9014	0.8811	0.9394	5.40
2,3,3',4,4',5,5'-HpCB	189	0.9406	0.9065	0.8652	0.8759	0.8749	0.8926	3.47

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

		Data Files:		Time	Injected
ICAL ID	Y210818	CS-1	Y210818B_08	18:49	CVS
Calibration Date	08/18/2021	CS-2	Y210818B_06	16:45	CVS
Instrument	10MSHR12 (Y)	CS-3	Y210818B_11	21:47	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-4	Y210818B_10	20:47	CVS
Column ID No.	261111-02	CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Labeled Analytes							
13C-2-MoCB	1	3.14	3.09	3.16	3.11	3.19	2.66-3.60
13C-4-MoCB	3	3.15	3.11	3.02	3.15	3.11	2.66-3.60
13C-2,2'-DiCB	4	1.71	1.68	1.66	1.70	1.74	1.33-1.81
13C-4,4'-DiCB	15	1.53	1.54	1.55	1.54	1.53	1.33-1.81
13C-2,2',6-TrCB	19	1.03	1.05	1.03	1.04	1.04	0.88-1.20
13C-3,4,4'-TrCB	37	1.04	1.02	1.05	1.04	1.02	0.88-1.20
13C-2,2',6,6'-TeCB	54	0.80	0.79	0.80	0.80	0.81	0.65-0.89
13C-3,4,4',5-TeCB	81	0.77	0.76	0.76	0.77	0.77	0.65-0.89
13C-3,3',4,4'-TeCB	77	0.78	0.77	0.80	0.79	0.79	0.65-0.89
13C-2,2',4,6,6'-PeCB	104	1.58	1.57	1.60	1.59	1.58	1.32-1.78
13C-2,3',4,4',5-PeCB	118	1.53	1.55	1.52	1.55	1.55	1.32-1.78
13C-2,3,4,4',5-PeCB	114	1.53	1.53	1.51	1.55	1.56	1.32-1.78
13C-2,3,3',4,4'-PeCB	105	1.54	1.54	1.50	1.51	1.54	1.32-1.78
13C-3,3',4,4',5-PeCB	126	1.57	1.53	1.54	1.53	1.55	1.32-1.78
13C-2,2',4,4',6,6'-HxCB	155	1.26	1.26	1.26	1.27	1.26	1.05-1.43
13C-2,3',4,4',5,5'-HxCB	167	1.23	1.21	1.21	1.25	1.24	1.05-1.43
13C-HxCB (156/157)	156/157	1.22	1.22	1.23	1.23	1.25	1.05-1.43
13C-3,3',4,4',5,5'-HxCB	169	1.23	1.24	1.22	1.24	1.23	1.05-1.43
13C-2,2',3,4',5,6,6'-HpCB	188	1.09	1.08	1.09	1.10	1.10	0.88-1.20
13C-2,3,3',4,4',5,5'-HpCB	189	1.02	1.02	1.03	1.03	1.04	0.88-1.20
13C-2,2',3,3',5,5',6,6'-OcCB	202	0.90	0.90	0.91	0.89	0.88	0.76-1.02
13C-2,3,3',4,4',5,5',6-OcCB	205	0.89	0.90	0.90	0.90	0.88	0.76-1.02
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	0.80	0.79	0.80	0.80	0.80	0.66-0.90
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.79	0.79	0.80	0.81	0.81	0.66-0.90
13C-DeCB	209	0.74	0.74	0.73	0.74	0.73	0.59-0.79
Cleanup Standards							
13C-2,4,4'-TrCB	28	1.03	1.01	1.03	1.02	1.02	0.88-1.20
13C-2,3,3',5,5'-PeCB	111	1.60	1.60	1.61	1.60	1.60	1.32-1.78
13C-2,2',3,3',5,5',6-HpCB	178	1.08	1.09	1.07	1.07	1.08	0.88-1.20
Recovery Standards							
13C-2,5-DiCB	9	1.54	1.53	1.55	1.53	1.52	1.33-1.81
13C-2,2',5,5'-TeCB	52	0.80	0.80	0.82	0.80	0.80	0.65-0.89
13C-2,2',4,5,5'-PeCB	101	1.61	1.59	1.59	1.62	1.61	1.32-1.78
13C-2,2',3,4,4',5'-HxCB	138	1.27	1.26	1.25	1.25	1.27	1.05-1.43
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.92	0.91	0.90	0.90	0.92	0.76-1.02

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Native Analytes							
3,3',4,4'-TeCB	77	0.83	0.74	0.75	0.77	0.76	0.65-0.89
3,4,4',5-TeCB	81	0.72	0.74	0.76	0.75	0.76	0.65-0.89
2,3,3',4,4'-PeCB	105	1.61	1.54	1.53	1.52	1.54	1.32-1.78
2,3,4,4',5-PeCB	114	1.53	1.41	1.50	1.51	1.52	1.32-1.78
2,3',4,4',5-PeCB	118	1.59	1.47	1.52	1.52	1.53	1.32-1.78
2,3',4,4',5'-PeCB	123	1.42	1.47	1.49	1.51	1.52	1.32-1.78
3,3',4,4',5-PeCB	126	1.49	1.47	1.53	1.50	1.52	1.32-1.78
(156/157)	156/157	1.25	1.19	1.22	1.23	1.22	1.05-1.43
2,3',4,4',5,5'-HxCB	167	1.25	1.18	1.25	1.22	1.22	1.05-1.43
3,3',4,4',5,5'-HxCB	169	1.14	1.21	1.21	1.21	1.22	1.05-1.43
2,3,3',4,4',5,5'-HpCB	189	1.10	1.00	0.99	1.01	1.01	0.88-1.20

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210818B12	Data File	Y210818B_12
Calibration Date	08/18/2021	Injected By	CVS
Initial Calibration	Y210818B12	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

PCB Isomer	IUPAC	RT	Ratio	209 RF	Ical RF	%RSD	RFc
Internal Standards							
13C-3,4,4',5-TeCB	81	34.847	0.77	0.7931	0.8206	-3.35	0.8206
13C-3,3',4,4'-TeCB	77	35.417	0.78	0.7906	0.8285	-4.58	0.8285
13C-2,3,3',4,4'-PeCB	105	39.027	1.54	0.7806	0.8296	-5.91	0.8296
13C-2,3,4,4',5-PeCB	114	38.373	1.55	0.8250	0.8437	-2.22	0.8437
13C-2,3',4,4',5-PeCB	118	37.820	1.55	0.7373	0.8870	-16.87	0.8870
13C-2,3',4,4',5'-PeCB	123	37.485	1.53	0.8140	0.8549	-4.78	0.8549
13C-3,3',4,4',5-PeCB	126	42.162	1.54	0.6852	0.7293	-6.05	0.7293
13C-HxCB (156/157)	156/157	45.236	1.22	0.7069	0.8232	-14.14	0.8232
13C-2,3',4,4',5,5'-HxCB	167	44.079	1.22	0.7853	0.8696	-9.70	0.8696
13C-3,3',4,4',5,5'-HxCB	169	48.505	1.24	0.6655	0.7320	-9.09	0.7320
13C-2,3,3',4,4',5,5'-HpCB	189	51.056	1.04	1.0180	1.0598	-3.94	1.0598
Cleanup Standards							
13C-2,4,4'-TrCB	28	23.408	1.02	1.1049	1.1287	-2.11	1.1287
13C-2,3,3',5,5'-PeCB	111	35.485	1.58	1.1736	1.2766	-8.07	1.2766
13C-2,2',3,3',5,5',6-HpCB	178	41.475	1.10	0.8926	0.9291	-3.93	0.9291
RecoveryStandards							
13C-2,5-DiCB	9	15.361	1.54	1.9617	2.0320	-3.46	2.0320
13C-2,2',5,5'-TeCB	52	25.403	0.80	1.4222	1.3872	2.53	1.3872
13C-2,2',4,5,5'-PeCB	101	32.701	1.60	1.1926	1.1789	1.16	1.1789
13C-2,2',3,4,4',5'-HxCB	138	41.006	1.24	1.1203	1.0765	4.07	1.0765
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.167	0.90	0.7386	0.7508	-1.63	0.7508

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210818B12	Data File	Y210818B_12
Calibration Date	08/18/2021	Injected By	CVS
Initial Calibration	Y210818B12	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

IUPAC	Co-elutions	RT	Ratio	209 RF	Ical RF	%RSD	RFc
81		34.864	0.76	1.0383	0.9363	10.89	0.9363
77		35.451	0.77	0.9454	0.9002	5.03	0.9002
104		26.476	1.66	1.5336	1.4564	5.30	1.4564
105		39.044	1.52	1.0245	0.8960	14.33	0.8960
114		38.407	1.51	1.0197	0.9293	9.73	0.9293
118		37.854	1.53	0.9939	0.9249	7.46	0.9249
123		37.518	1.53	1.0133	0.9281	9.18	0.9281
126		42.196	1.53	0.9945	0.8959	11.00	0.8959
155		32.517	1.33	1.4219	1.3520	5.17	1.3520
156	156/157	45.252	1.21	1.0527	0.9413	11.83	0.9413
167		44.096	1.22	1.0667	0.9304	14.65	0.9304
169		48.521	1.22	1.0264	0.9394	9.26	0.9394
188		38.407	1.02	1.1449	1.0887	5.16	1.0887
189		51.077	1.01	0.9523	0.8926	6.68	0.8926

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210819A02	Data File	Y210819A_02
Calibration Date	08/19/2021	Injected By	CVS
Initial Calibration	Y210819A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

PCB Isomer	IUPAC	RT	Ratio	209 RF	Ical RF	%RSD	RFc
Internal Standards							
13C-3,4,4',5-TeCB	81	34.867	0.78	0.8448	0.8206	2.95	0.8206
13C-3,3',4,4'-TeCB	77	35.437	0.78	0.8608	0.8285	3.89	0.8285
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	0.8090	0.8296	-2.49	0.8296
13C-2,3,4,4',5-PeCB	114	38.377	1.55	0.8482	0.8437	0.53	0.8437
13C-2,3',4,4',5-PeCB	118	37.824	1.56	0.6820	0.8870	-23.11	0.8870
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	0.8363	0.8549	-2.17	0.8549
13C-3,3',4,4',5-PeCB	126	42.183	1.54	0.7383	0.7293	1.24	0.7293
13C-HxCB (156/157)	156/157	45.240	1.24	0.6886	0.8232	-16.36	0.8232
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.23	0.8160	0.8696	-6.17	0.8696
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.22	0.6994	0.7320	-4.46	0.7320
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.04	1.0815	1.0598	2.05	1.0598
Cleanup Standards							
13C-2,4,4'-TrCB	28	23.426	1.02	1.1300	1.1287	0.11	1.1287
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	1.1864	1.2766	-7.07	1.2766
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	0.8726	0.9291	-6.08	0.9291
RecoveryStandards							
13C-2,5-DiCB	9	15.362	1.54	1.9596	2.0320	-3.56	2.0320
13C-2,2',5,5'-TeCB	52	25.422	0.80	1.4399	1.3872	3.80	1.3872
13C-2,2',4,5,5'-PeCB	101	32.704	1.59	1.2334	1.1789	4.63	1.1789
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.26	1.1460	1.0765	6.46	1.0765
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.178	0.91	0.6972	0.7508	-7.14	0.7508

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210819A02	Data File	Y210819A_02
Calibration Date	08/19/2021	Injected By	CVS
Initial Calibration	Y210819A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

IUPAC	Co-elutions	RT	Ratio	209 RF	Ical RF	%RSD	RFc
81		34.884	0.76	1.0428	0.9363	11.38	0.9363
77		35.454	0.76	0.9466	0.9002	5.16	0.9002
104		26.478	1.65	1.5830	1.4564	8.69	1.4564
105		39.048	1.53	1.0200	0.8960	13.84	0.8960
114		38.410	1.51	1.0136	0.9293	9.07	0.9293
118		37.874	1.54	1.0427	0.9249	12.75	0.9249
123		37.522	1.51	0.9961	0.9281	7.33	0.9281
126		42.200	1.51	0.9891	0.8959	10.40	0.8959
155		32.520	1.32	1.4099	1.3520	4.28	1.3520
156	156/157	45.257	1.21	1.0562	0.9413	12.20	0.9413
167		44.100	1.22	1.0739	0.9304	15.43	0.9304
169		48.527	1.22	1.0120	0.9394	7.72	0.9394
188		38.410	1.02	1.1577	1.0887	6.34	1.0887
189		51.088	1.01	0.9446	0.8926	5.82	0.8926

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210819A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
Labeled Analytes						
13C-2,2',6-TrCB	19	16:44	1.04	0.6793	0.6670	1.85
13C-3,4,4'-TrCB	37	27:47	1.02	0.9504	0.9251	2.73
13C-2,2',6,6'-TeCB	54	20:20	0.81	1.2111	1.2079	0.27
13C-3,4,4',5-TeCB	81	34:52	0.78	0.8286	0.8206	0.97
13C-3,3',4,4'-TeCB	77	35:27	0.78	0.8561	0.8285	3.32
13C-2,3,3',4,4'-PeCB	105	39:02	1.56	0.8425	0.8296	1.55
13C-2,3,4,4',5-PeCB	114	38:23	1.53	0.8568	0.8437	1.55
13C-2,3',4,4',5-PeCB	118	37:51	1.53	0.8883	0.8870	0.15
13C-2,3',4,4',5'-PeCB	123	37:30	1.52	0.8515	0.8549	-0.39
13C-3,3',4,4',5-PeCB	126	42:11	1.56	0.7652	0.7293	4.93
13C-HxCB (156/157)	156/157	45:15	1.22	0.8223	0.8232	-0.12
13C-2,3',4,4',5,5'-HxCB	167	44:05	1.24	0.8653	0.8696	-0.50
13C-3,3',4,4',5,5'-HxCB	169	48:31	1.25	0.7477	0.7320	2.15
13C-2,3,3',4,4',5,5'-HpCB	189	51:04	1.03	1.0923	1.0598	3.07
Cleanup Standards						
13C-2,4,4'-TrCB	28	23:26	1.02	1.1151	1.1287	-1.20
13C-2,3,3',5,5'-PeCB	111	35:30	1.57	1.3002	1.2766	1.85
13C-2,2',3,3',5,5',6-HpCB	178	41:28	1.09	0.9051	0.9291	-2.58
Recovery Standards						
13C-2,5-DiCB	9	15:23	1.54	2.0088	2.0320	-1.14
13C-2,2',5,5'-TeCB	52	25:26	0.80	1.3979	1.3872	0.77
13C-2,2',4,5,5'-PeCB	101	32:43	1.59	1.1890	1.1789	0.86
13C-2,2',3,4,4',5'-HxCB	138	41:01	1.26	1.1048	1.0765	2.63
13C-2,2',3,3',4,4',5,5'-OcCB	194	53:10	0.90	0.7301	0.7508	-2.76

X = Outside Quality Control limits

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210819A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
3,3',4,4'-TeCB	77	35:28	0.76	0.8761	0.9002	-2.67
3,4,4',5-TeCB	81	34:54	0.76	0.9341	0.9363	-0.24
2,2',4,6,6'-PeCB	104	26:29	1.66	1.4276	1.4564	-1.97
2,3,3',4,4'-PeCB	105	39:03	1.51	0.8516	0.8960	-4.96
2,3,4,4',5-PeCB	114	38:25	1.49	0.8784	0.9293	-5.48
2,3',4,4',5-PeCB	118	37:52	1.54	0.8900	0.9249	-3.77
2,3',4,4',5'-PeCB	123	37:32	1.52	0.8969	0.9281	-3.36
3,3',4,4',5-PeCB	126	42:13	1.51	0.8668	0.8959	-3.26
2,2',4,4',6,6'-HxCB	155	32:32	1.33	1.3238	1.3520	-2.08
HxCB (156/157)	156/157	45:16	1.21	0.8995	0.9413	-4.44
2,3',4,4',5,5'-HxCB	167	44:07	1.21	0.8966	0.9304	-3.63
3,3',4,4',5,5'-HxCB	169	48:32	1.22	0.8949	0.9394	-4.73
2,2',3,4',5,6,6'-HpCB	188	38:25	1.02	1.0496	1.0887	-3.59
2,3,3',4,4',5,5'-HpCB	189	51:05	1.01	0.8759	0.8926	-1.87

X = Outside Quality Control limits

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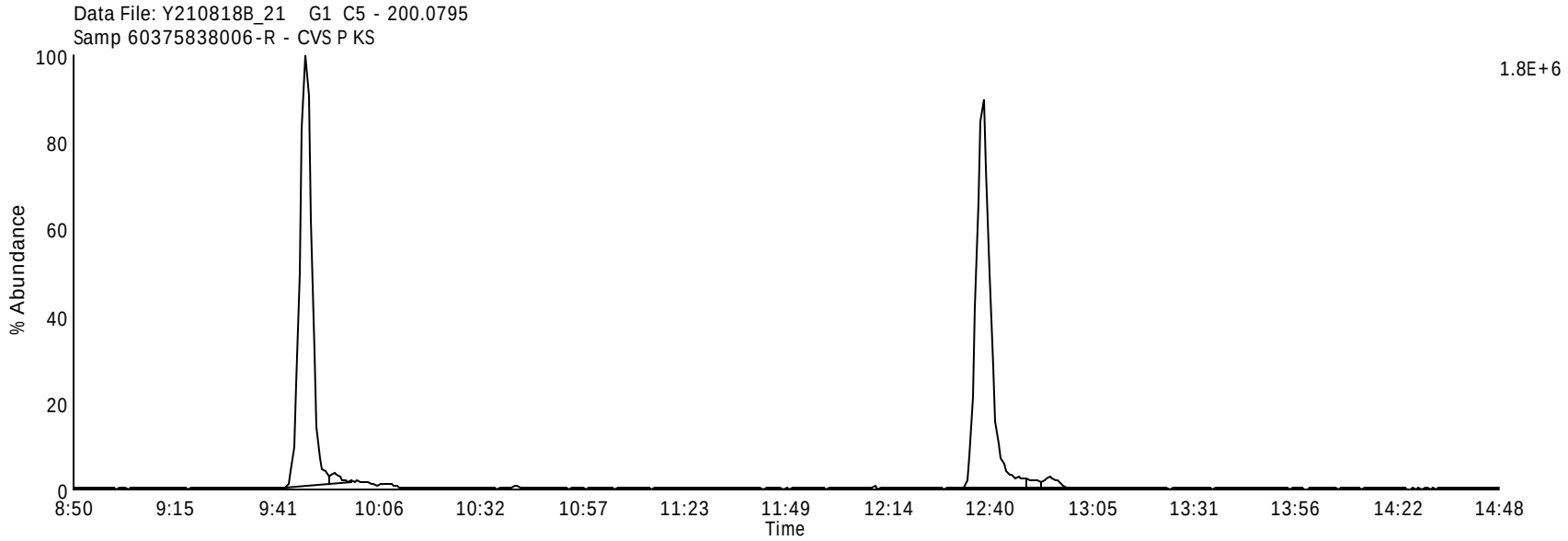
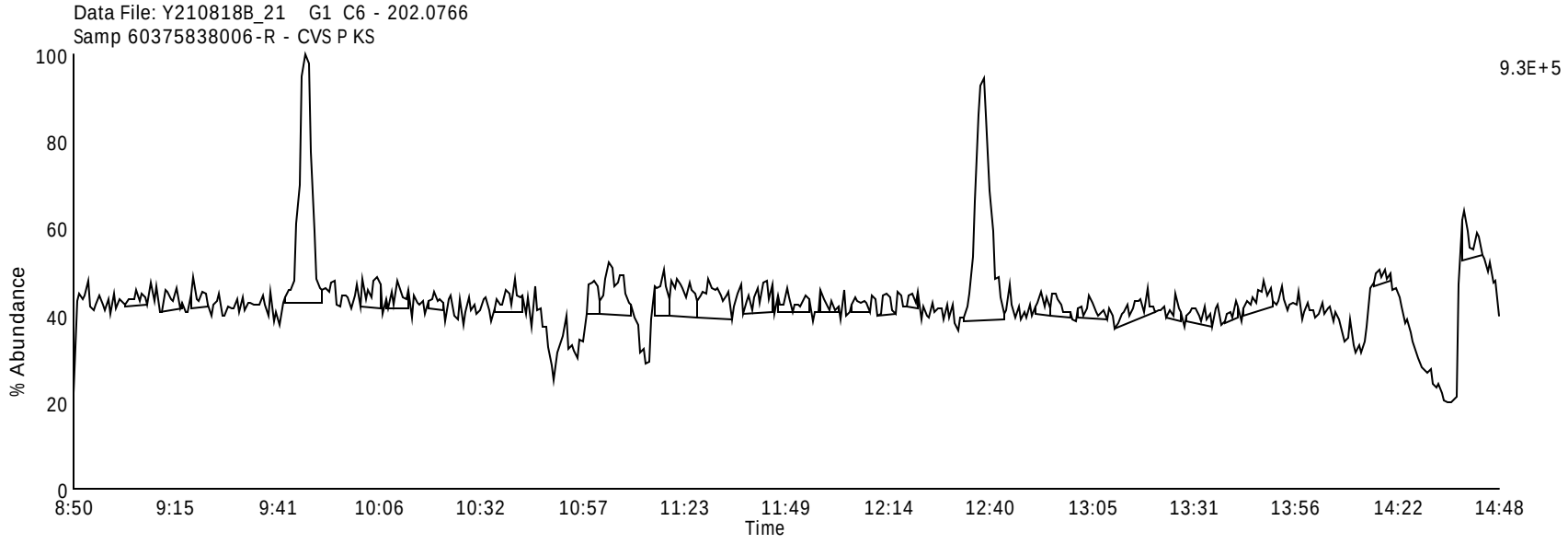
Appendix D

Sample Raw Data

Labeled Mono Chlorinated Biphenyls

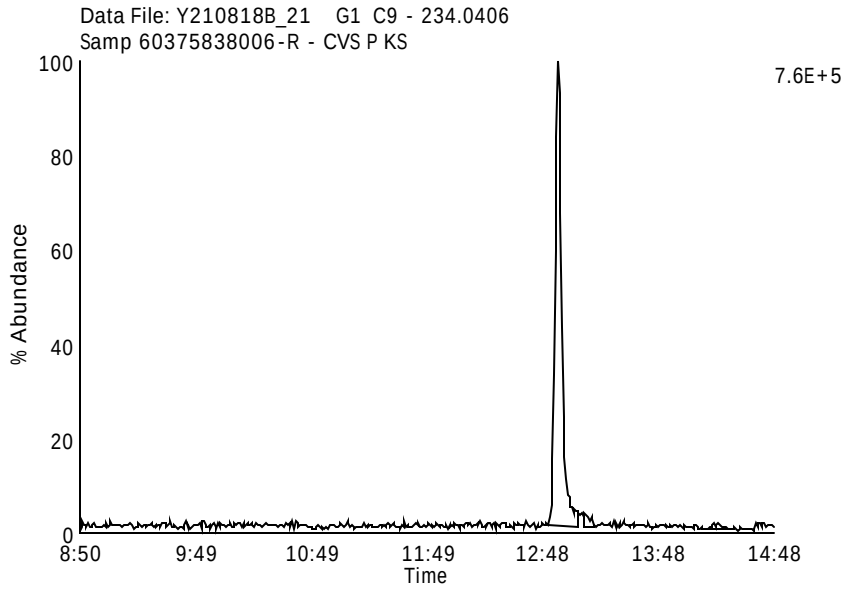
Data File Name: Y210818B_21 | Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS | Client Sample ID: GB-28/1.5-2.5

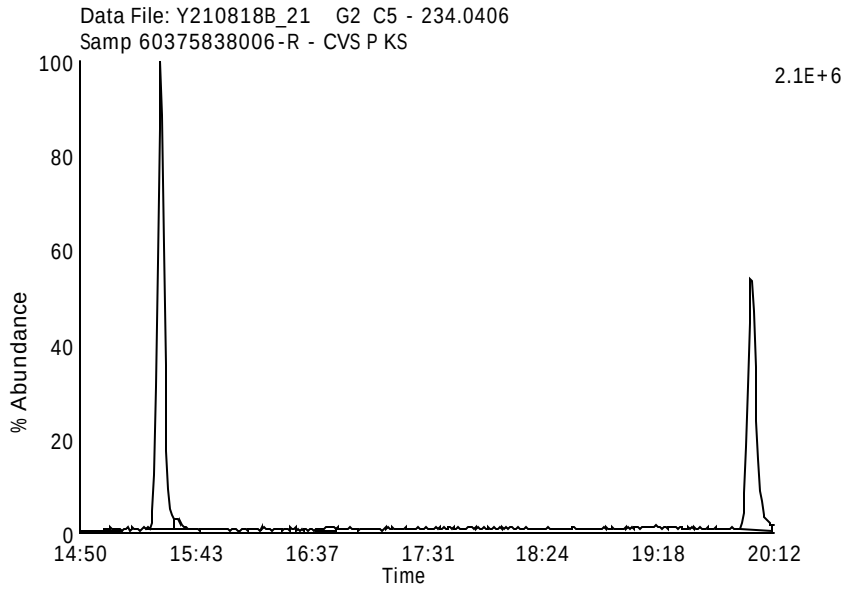


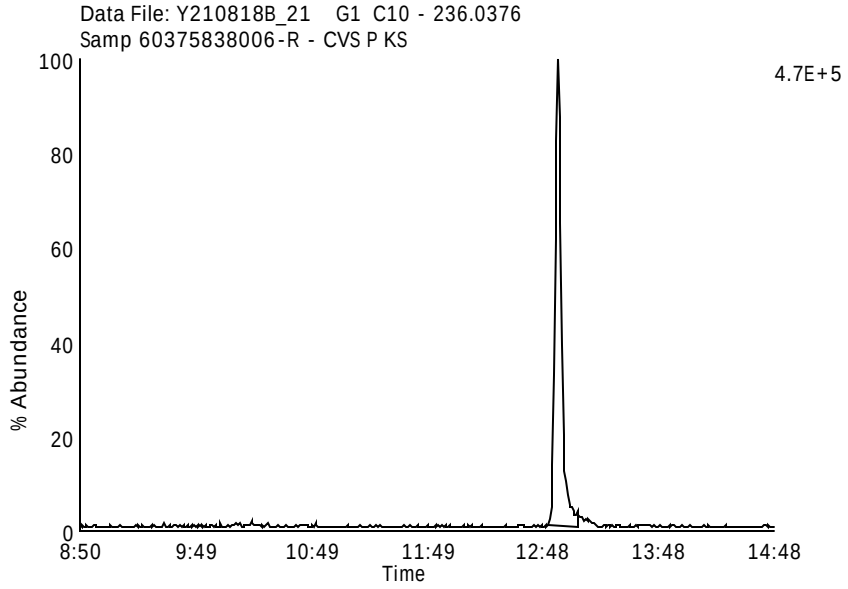


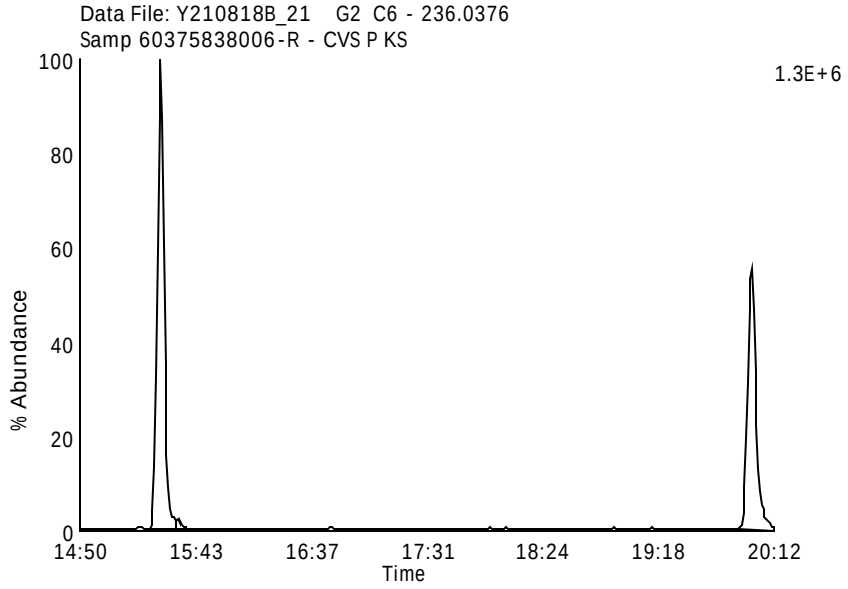
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



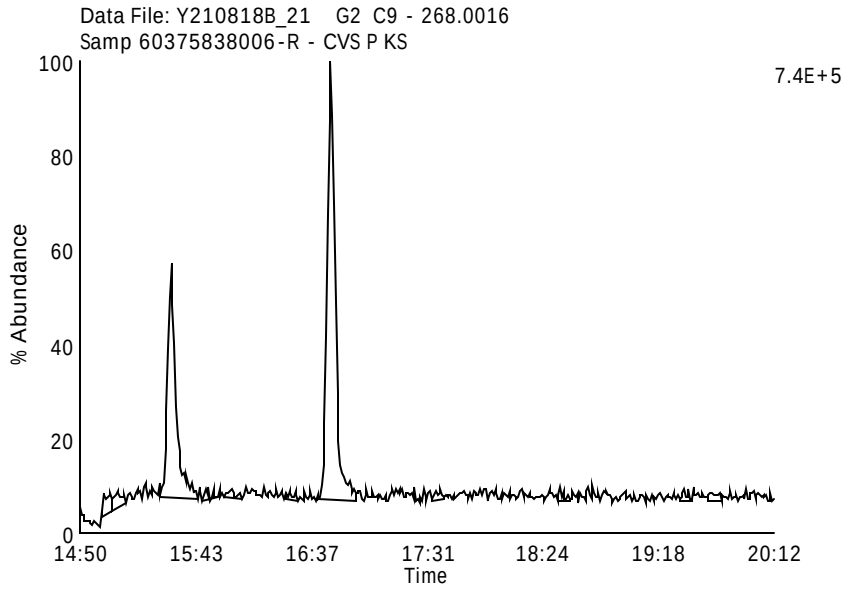


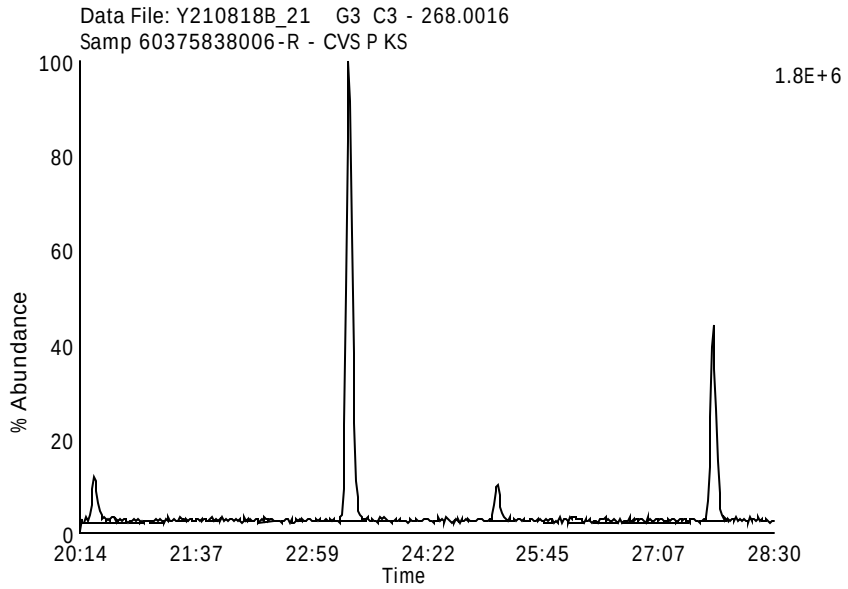


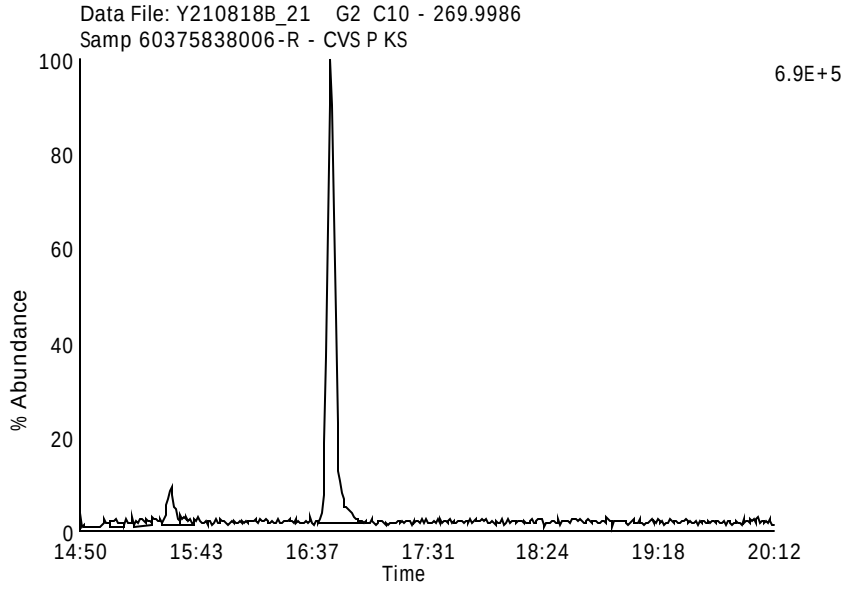


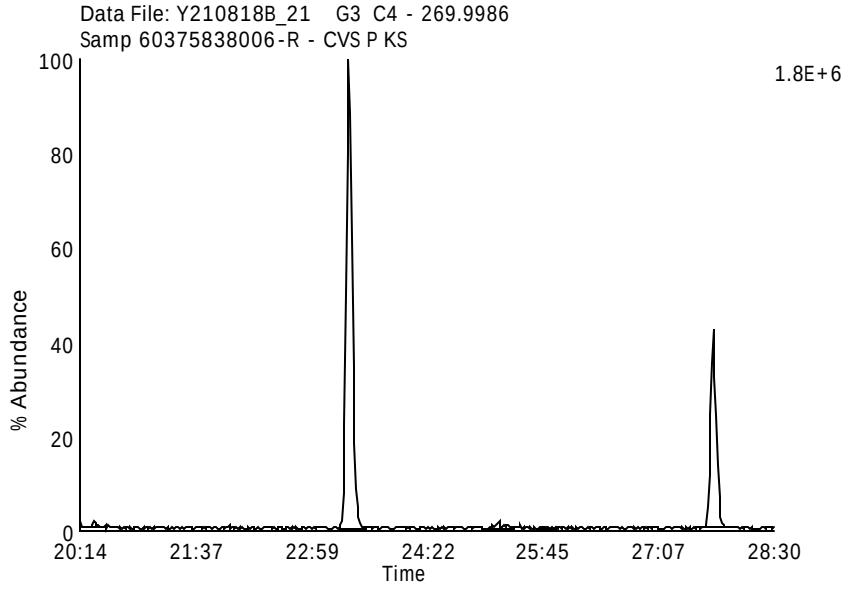
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



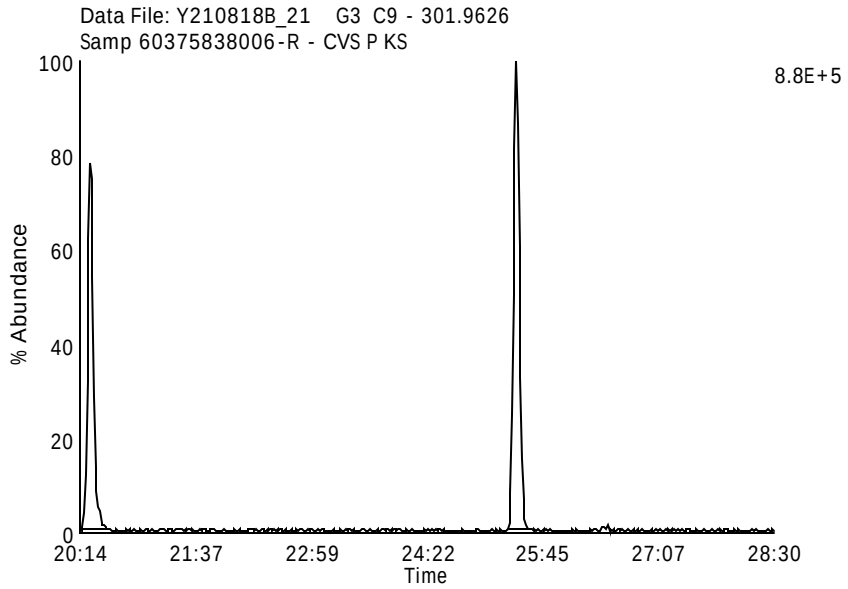


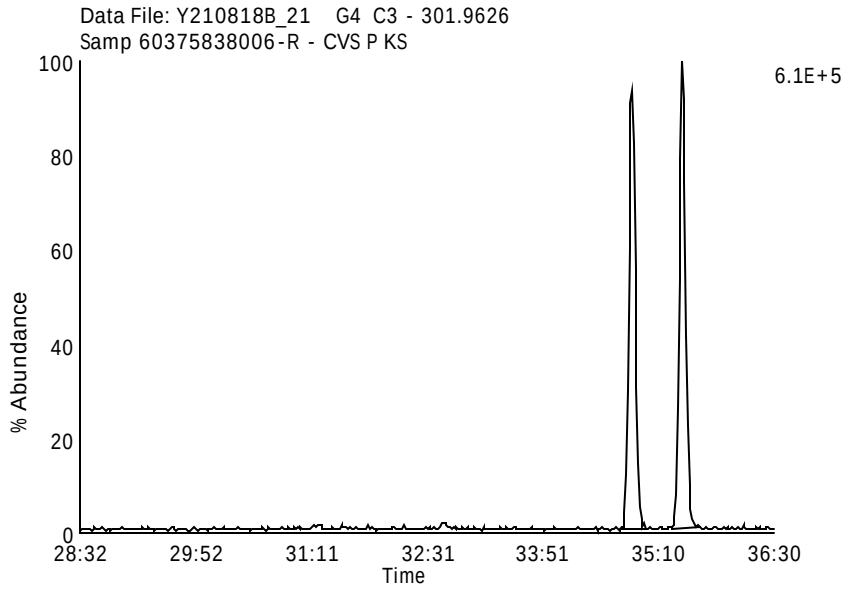


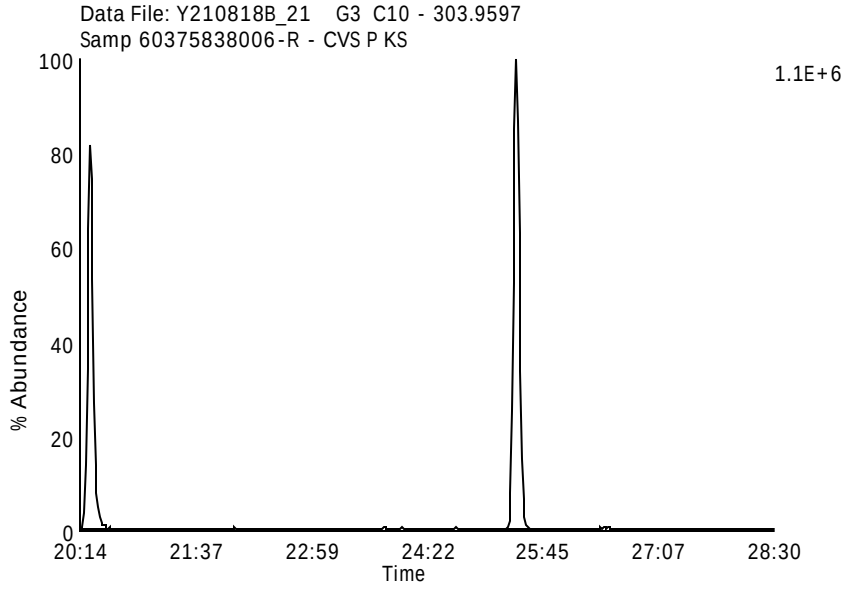


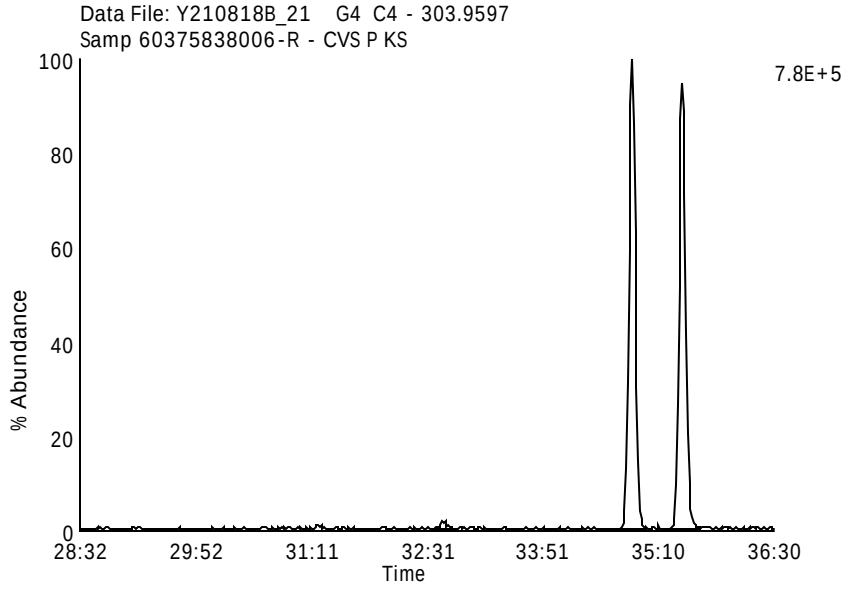
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



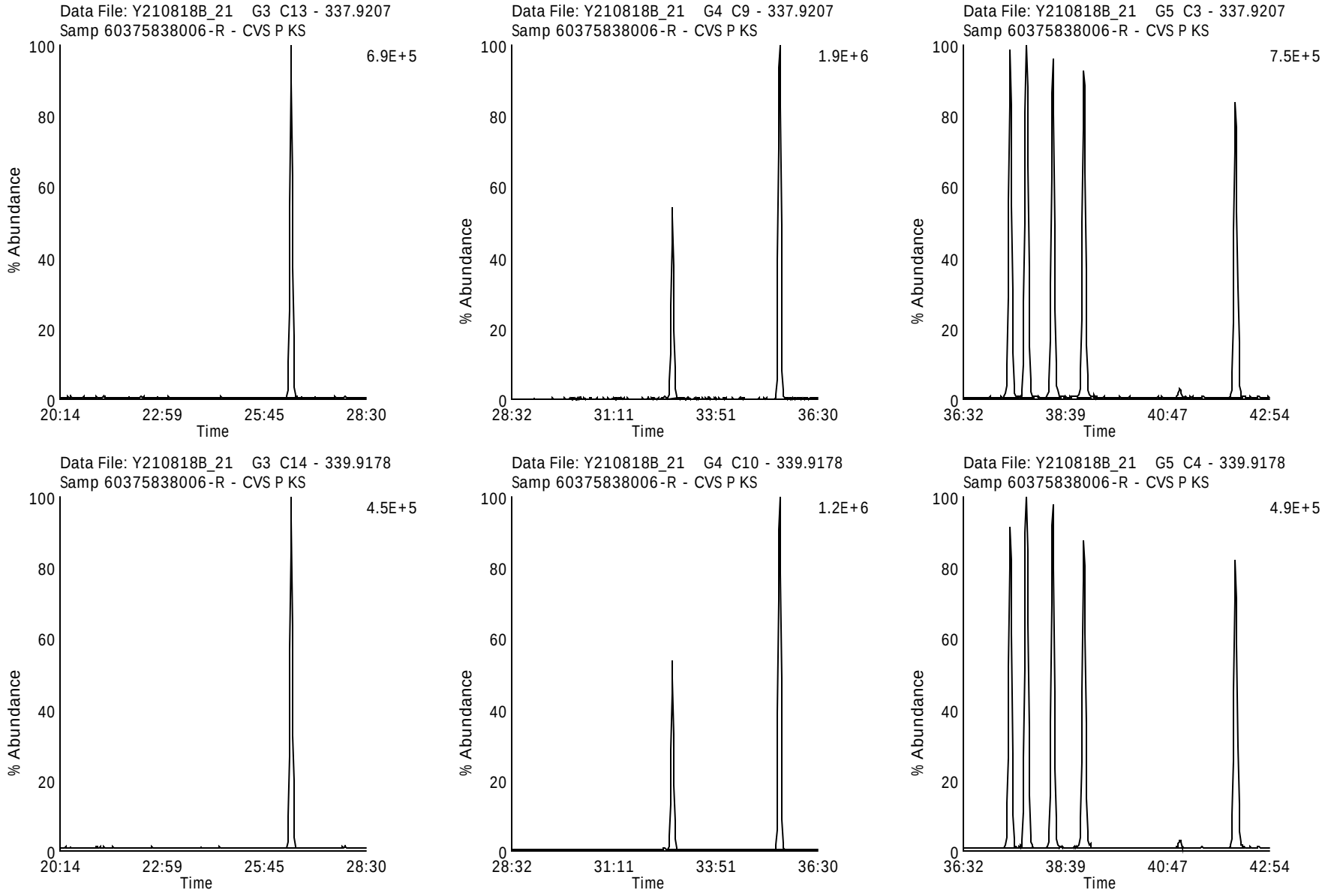






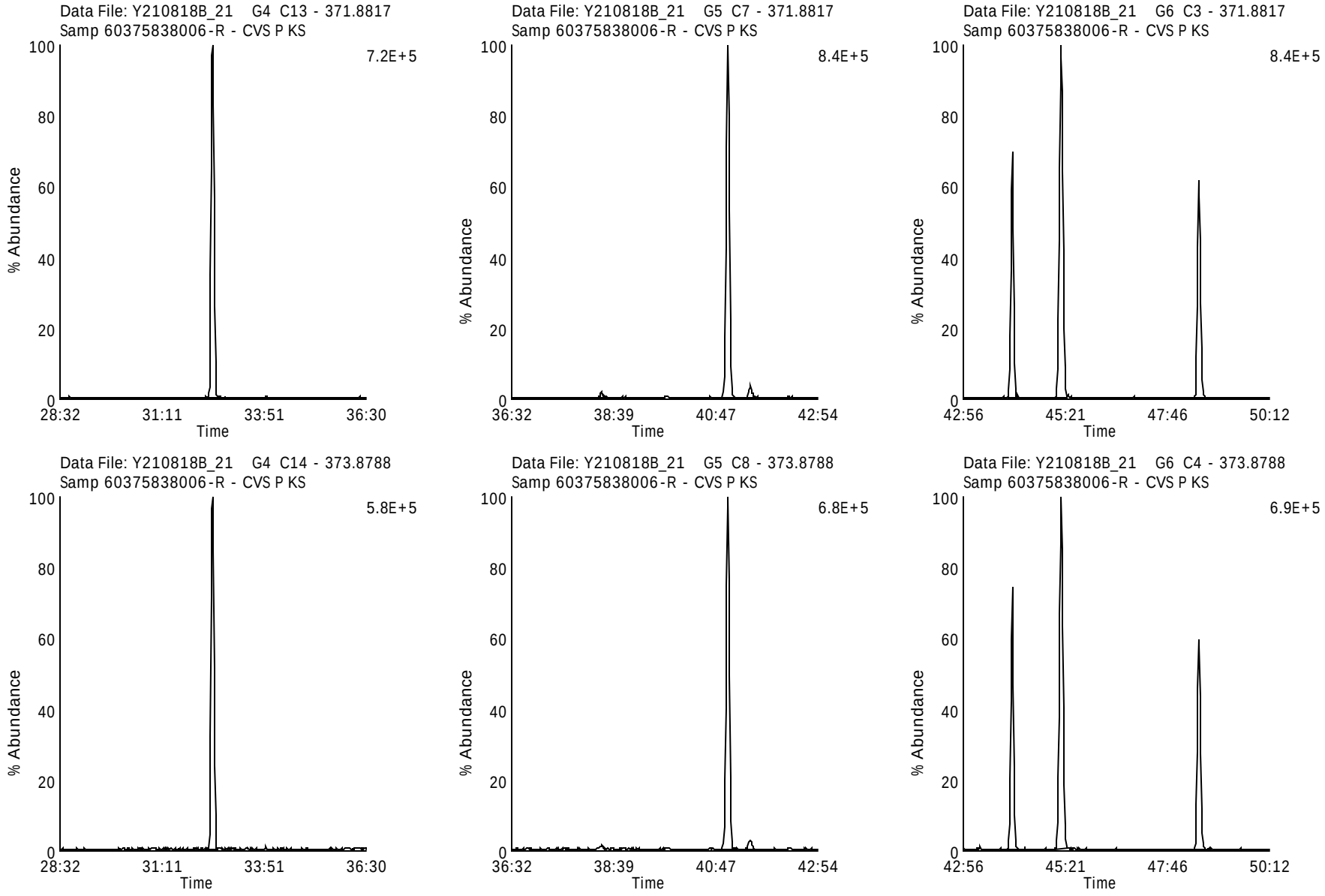
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_21 | Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS | Client Sample ID: GB-28/1.5-2.5



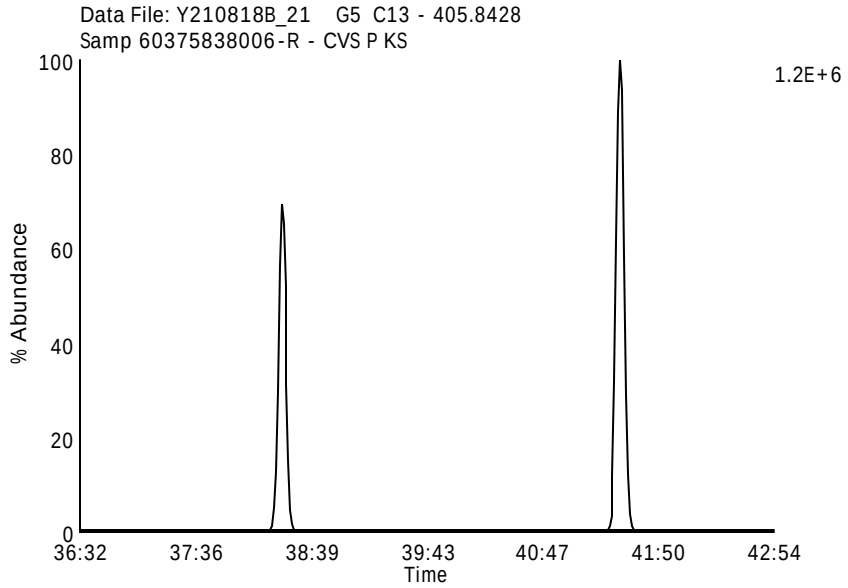
Labeled Hexa Chlorinated Biphenyls

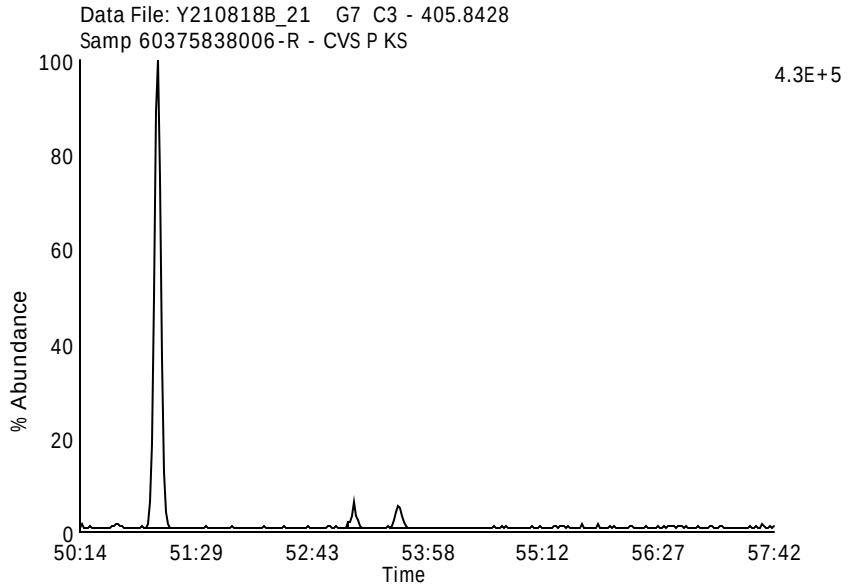
Data File Name: Y210818B_21 | Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS | Client Sample ID: GB-28/1.5-2.5

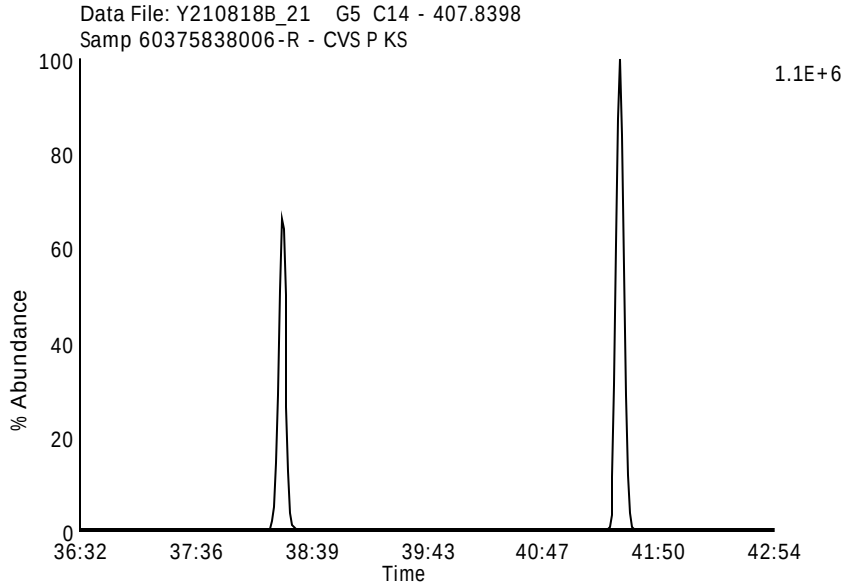


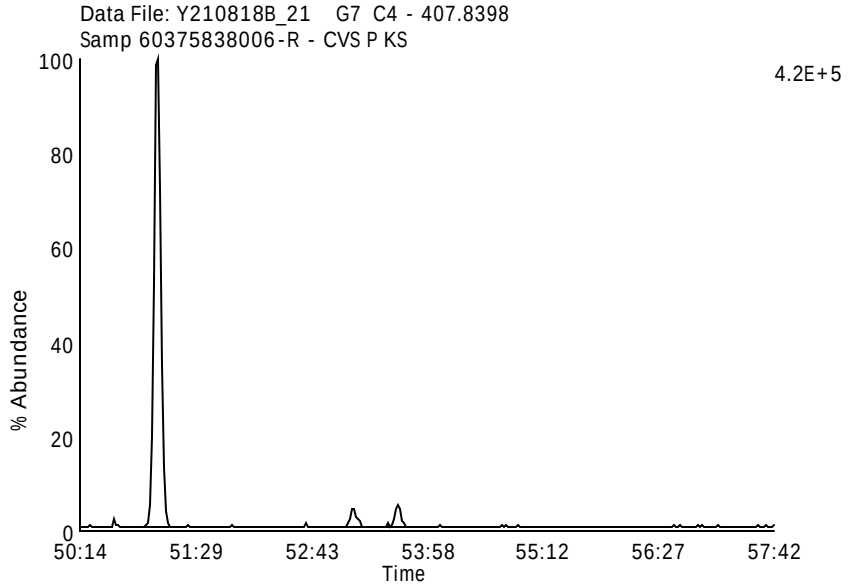
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5







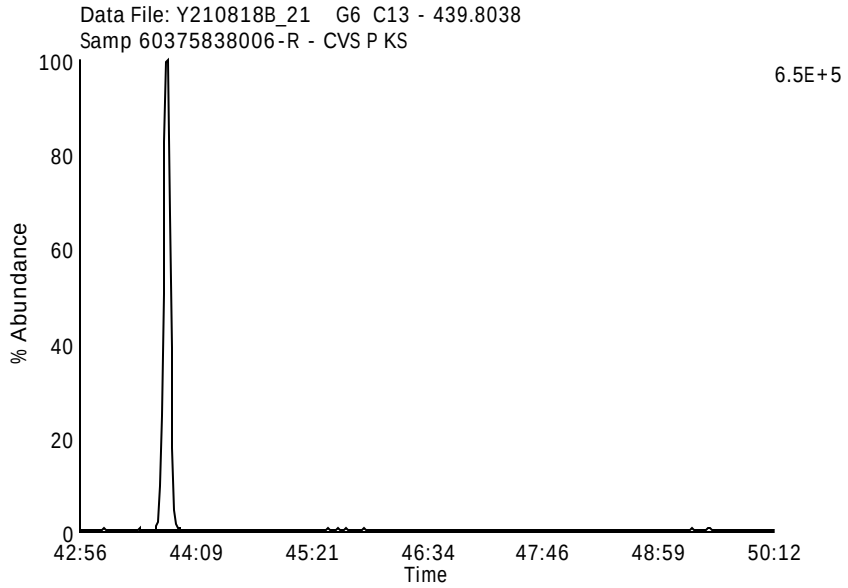


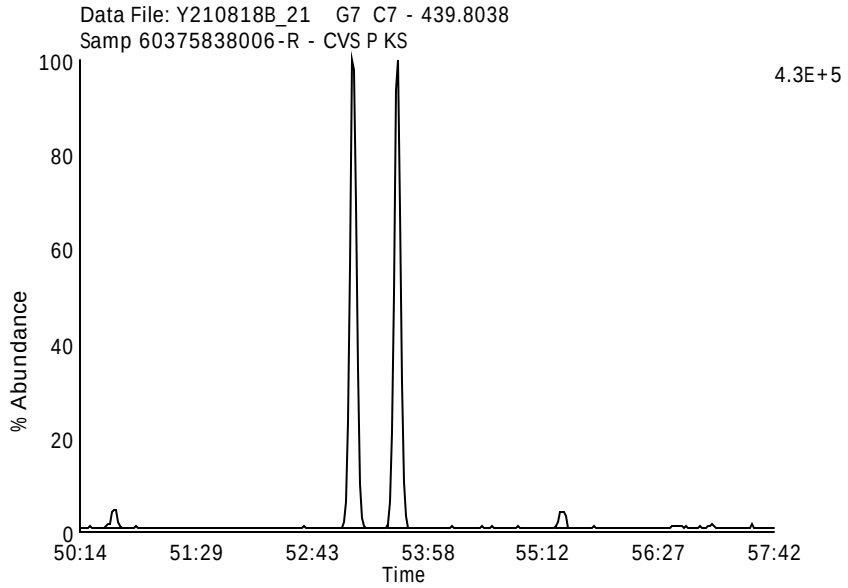
Labeled Octa Chlorinated Biphenyls

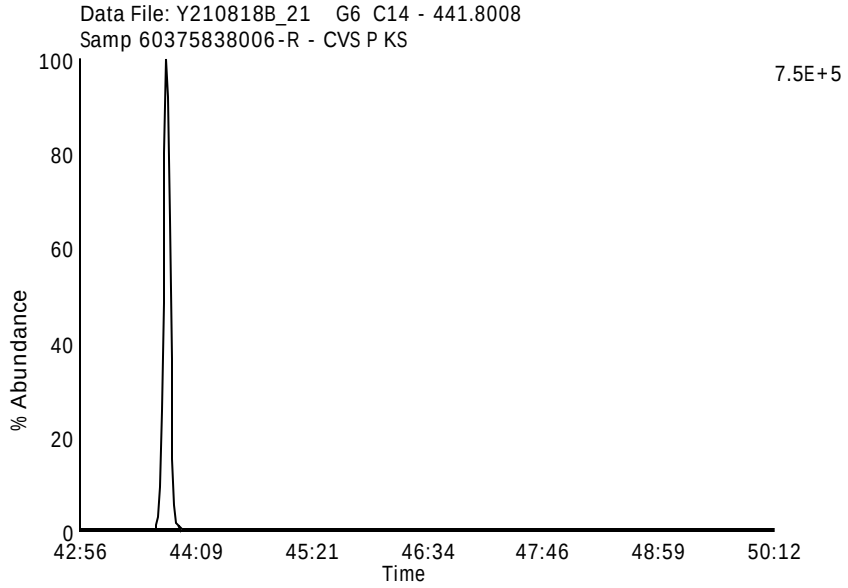
Data File Name: Y210818B_21 | Lab Sample ID: 60375838006-R

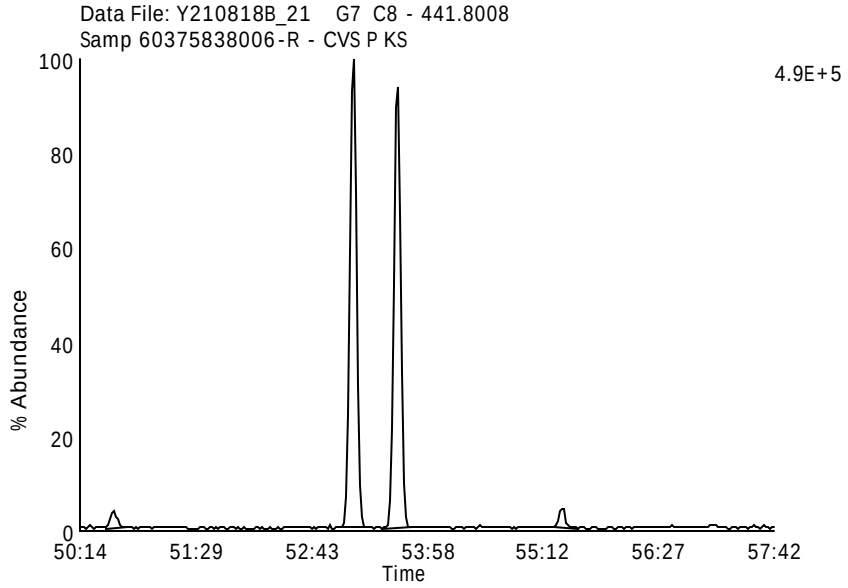
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

Sample Description: Samp 60375838006-R - CVS P KS | Client Sample ID: GB-28/1.5-2.5



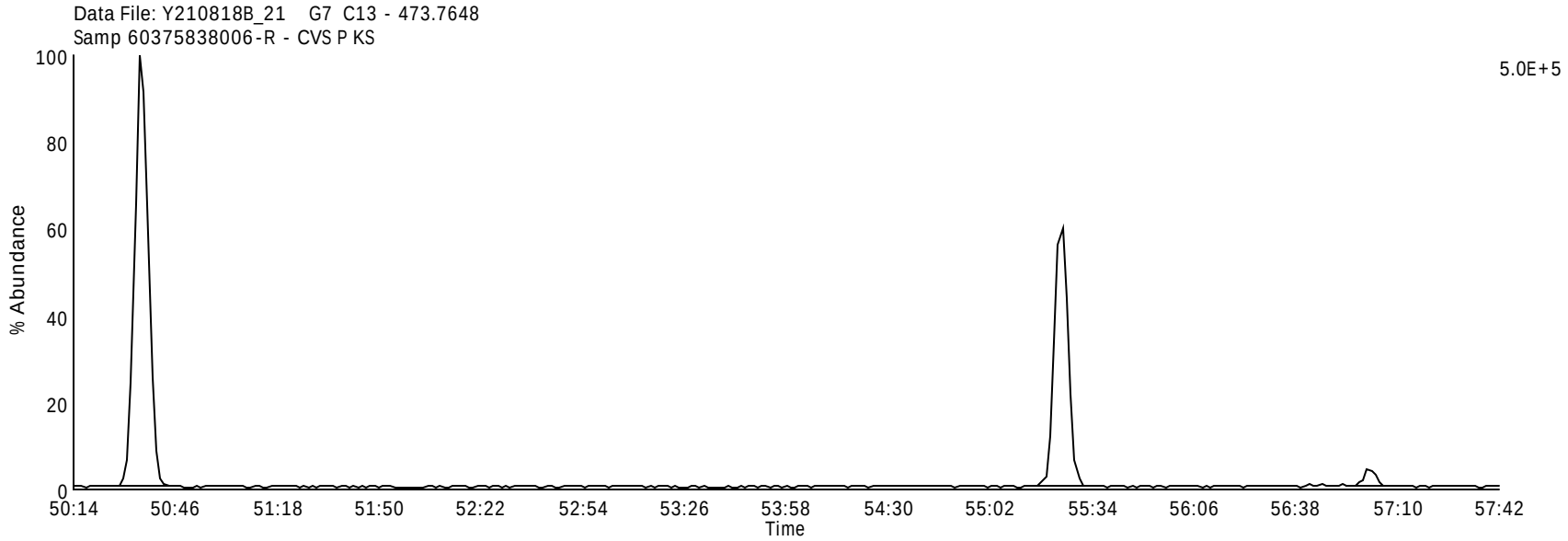


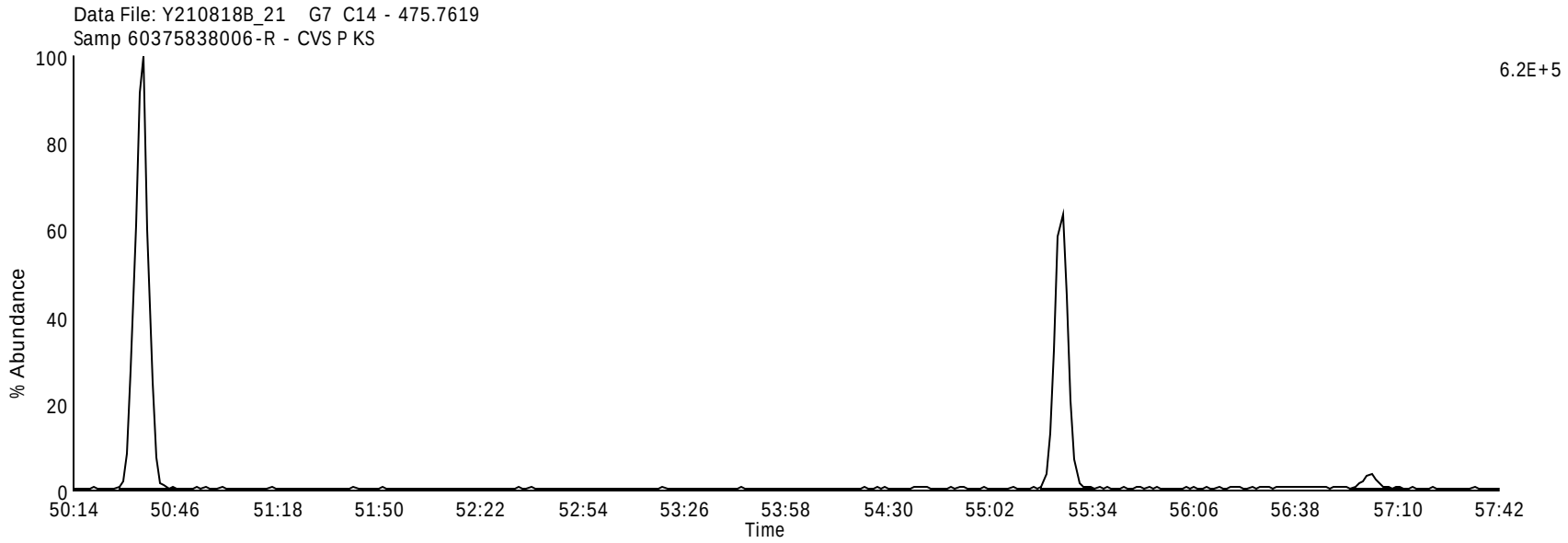




Labeled Nona Chlorinated Biphenyls

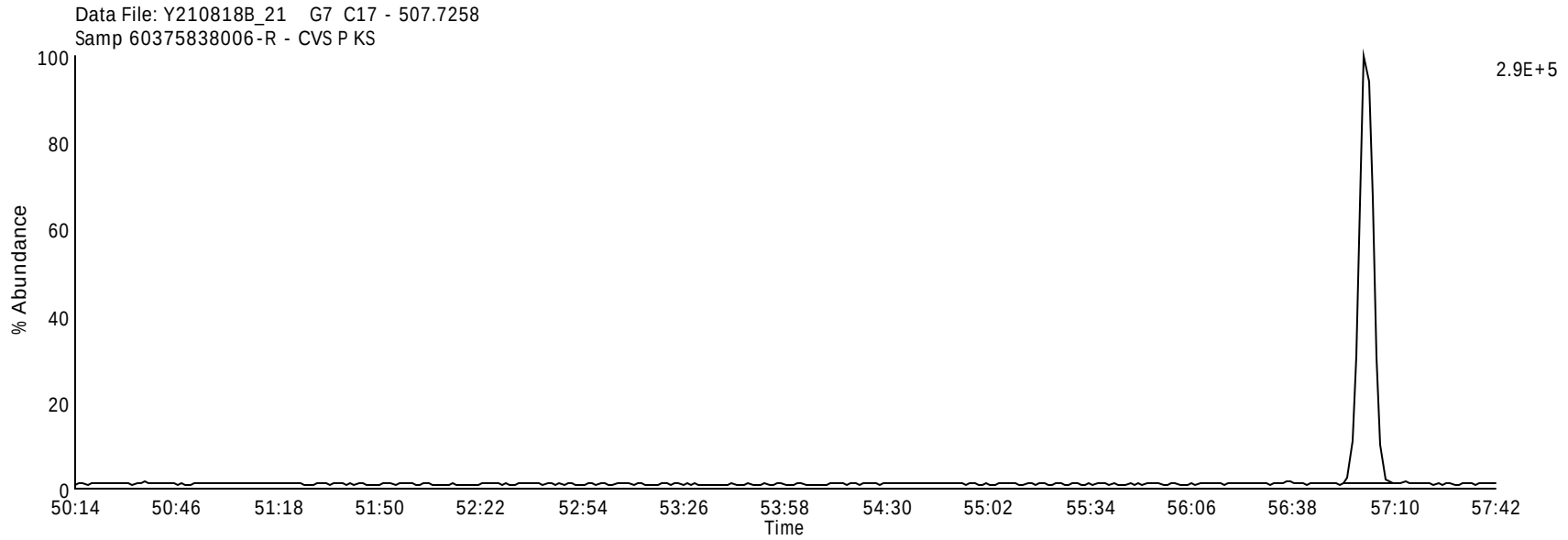
Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5

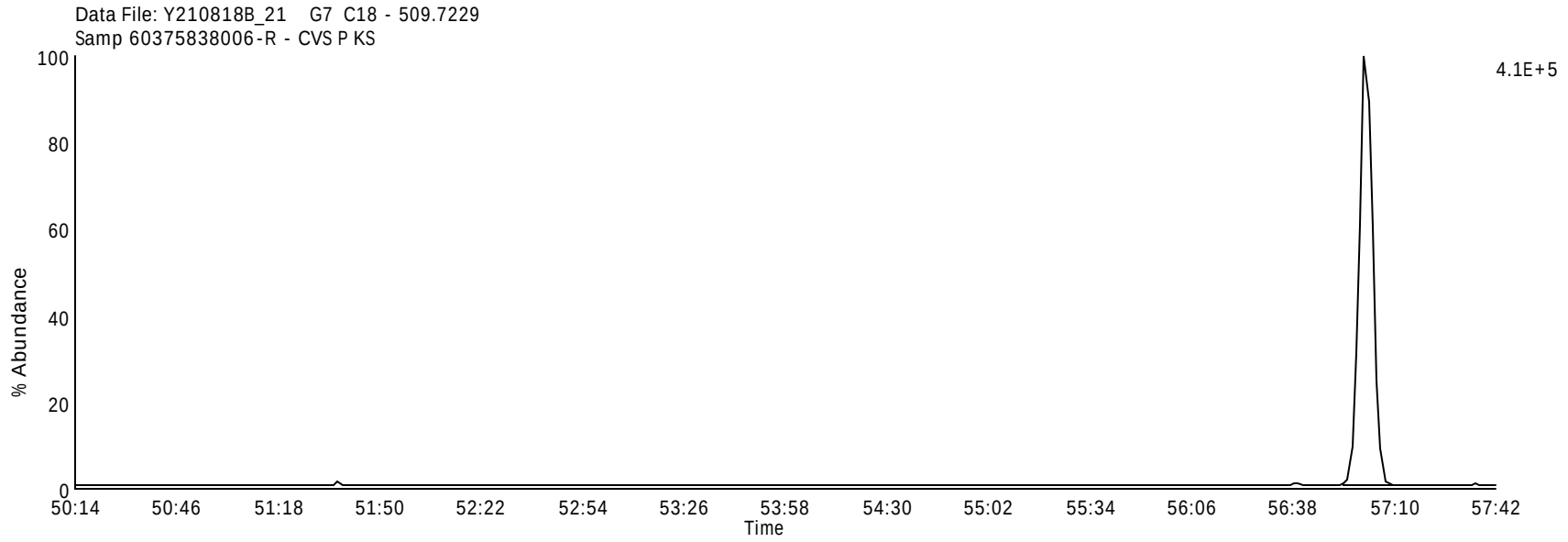




Labeled Deca Chlorinated Biphenyl

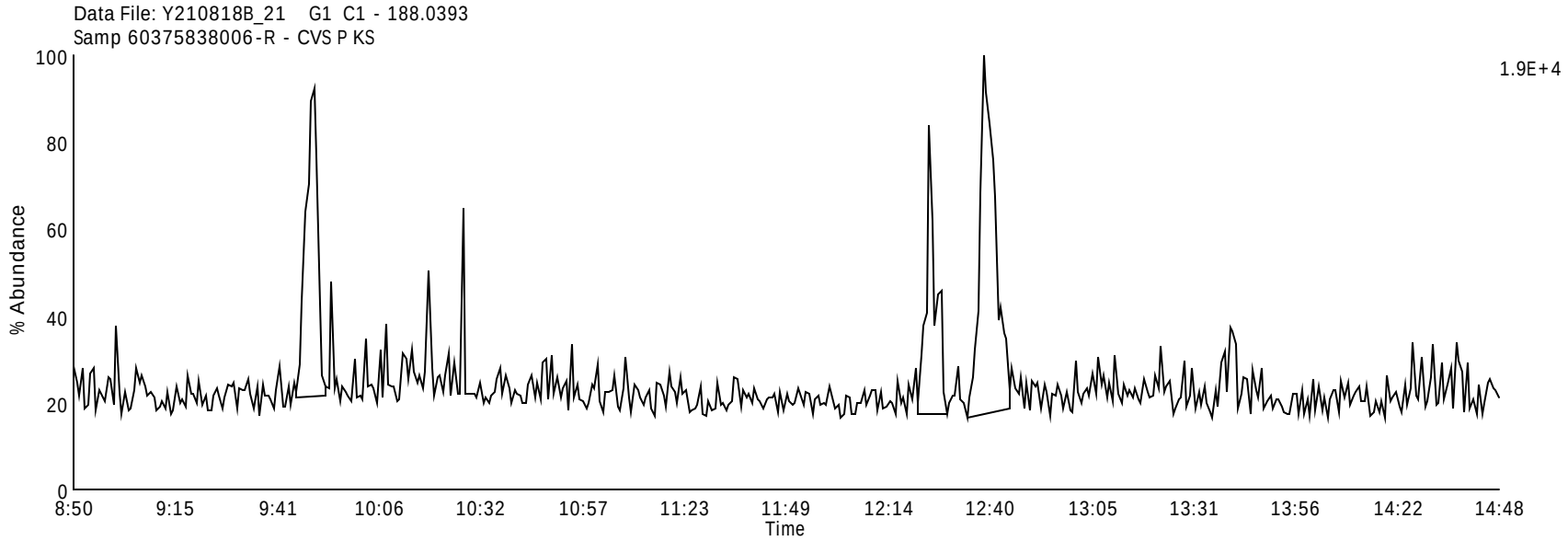
Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5

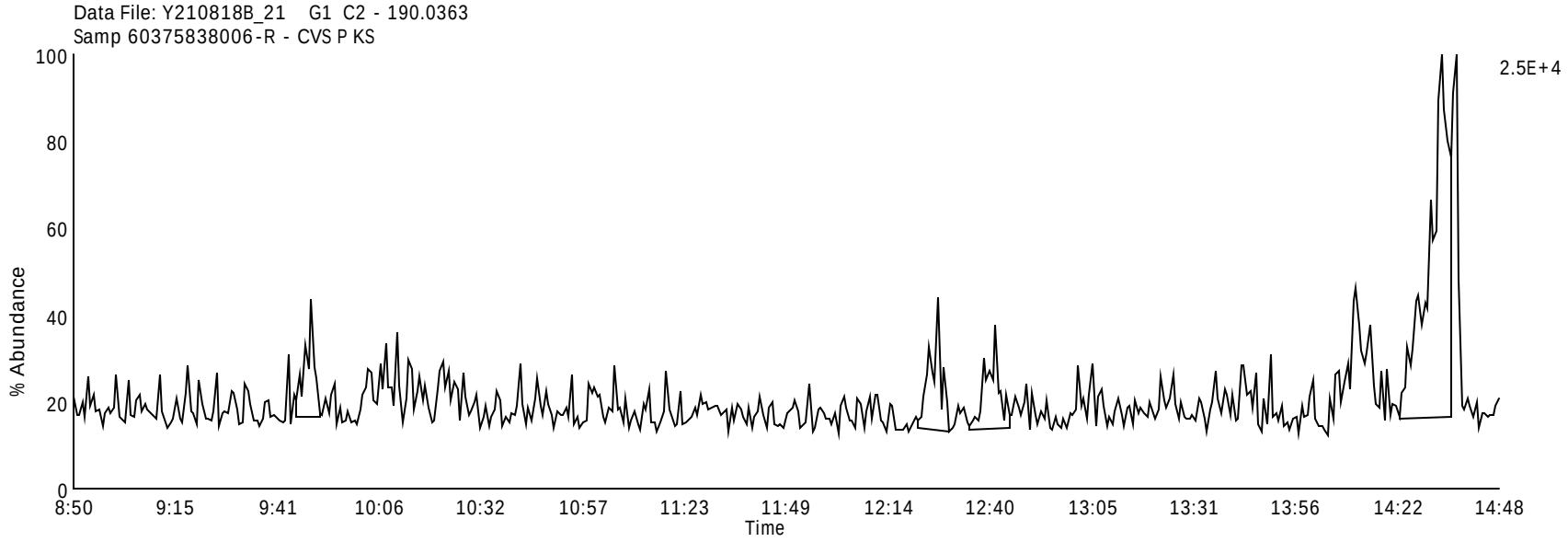




Mono Chlorinated Biphenyls

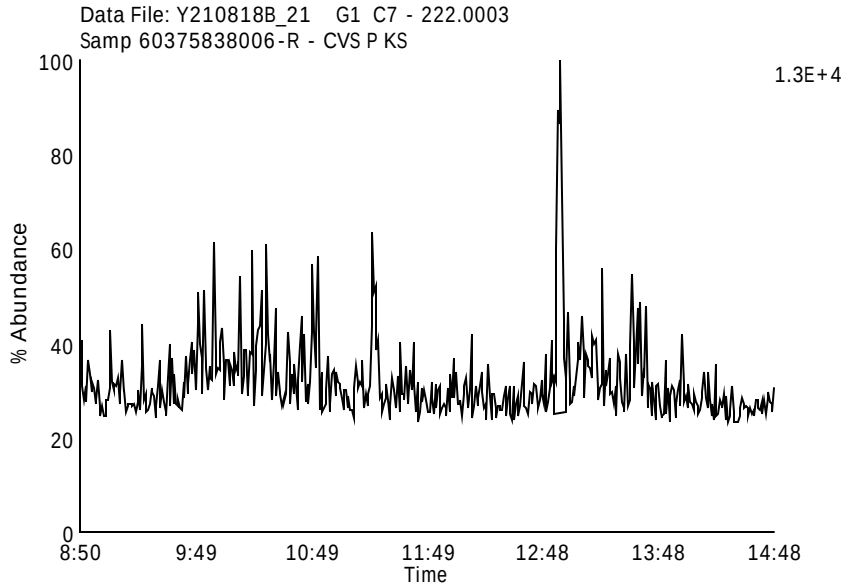
Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5

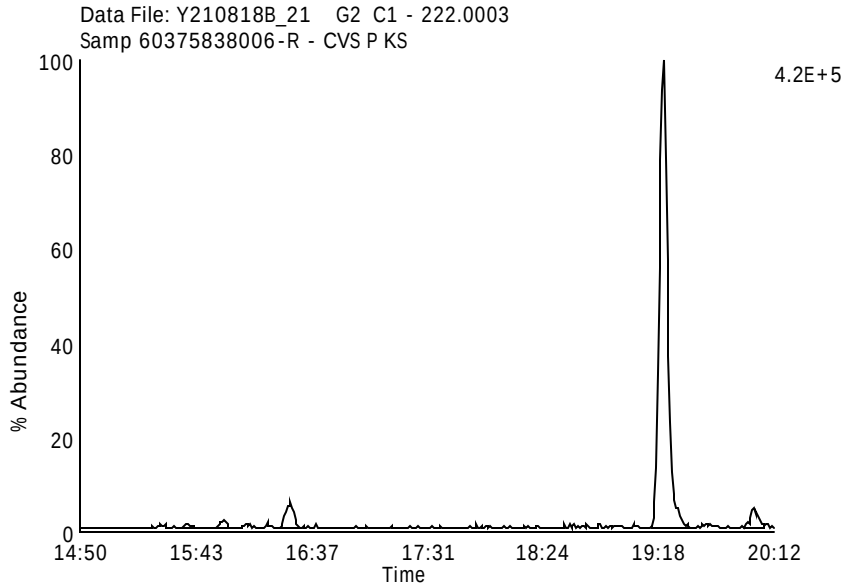


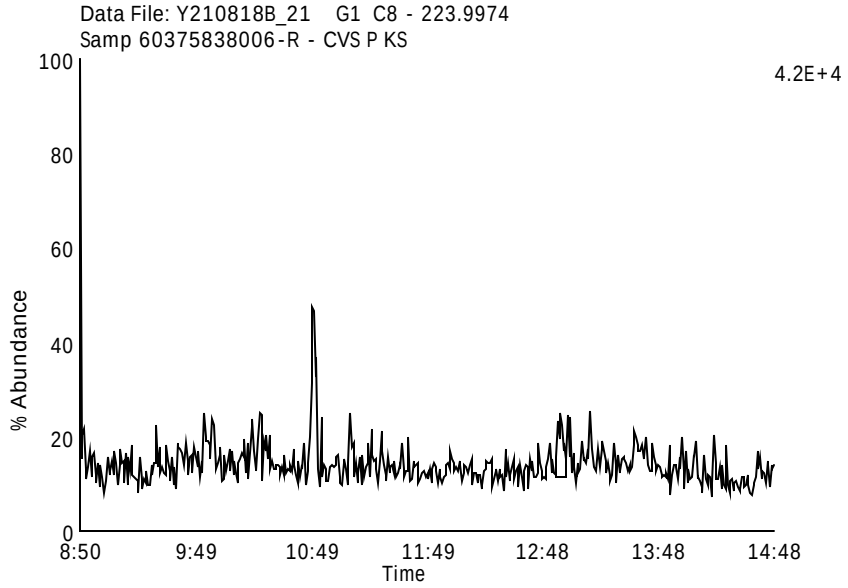


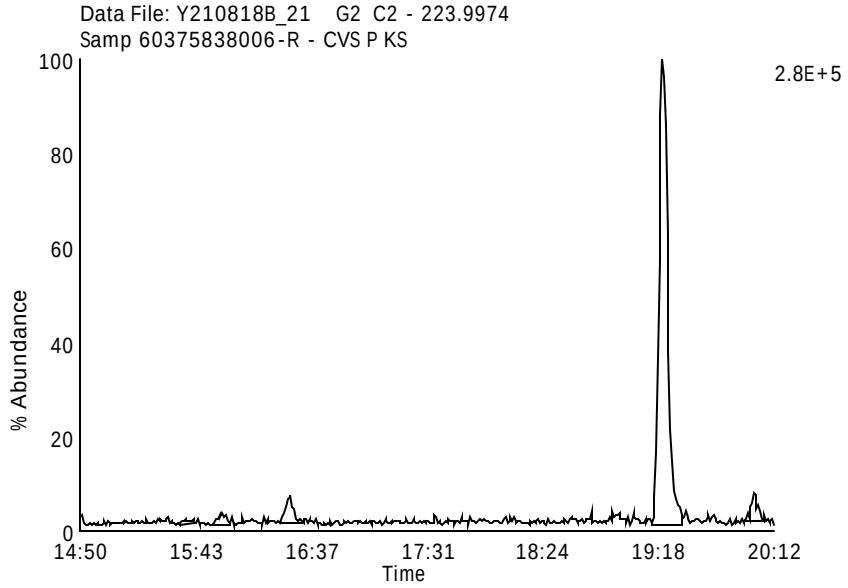
Di Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



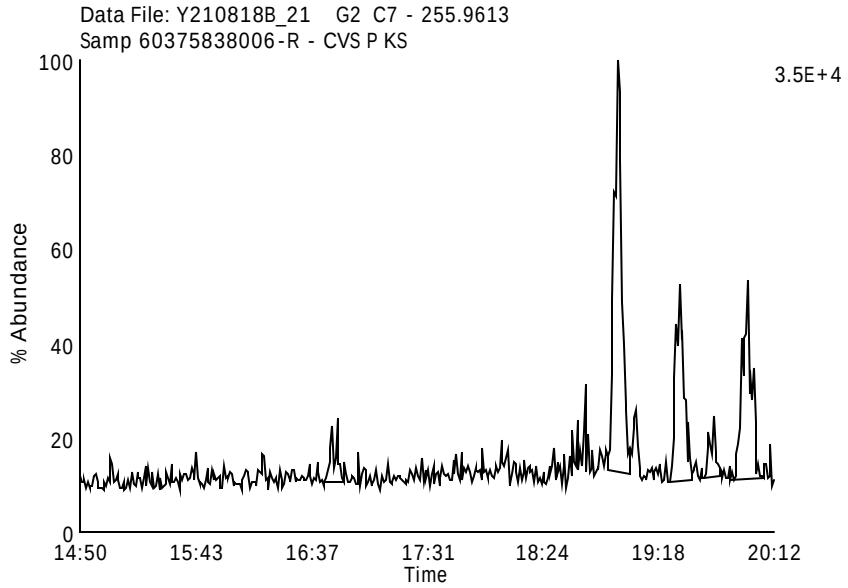


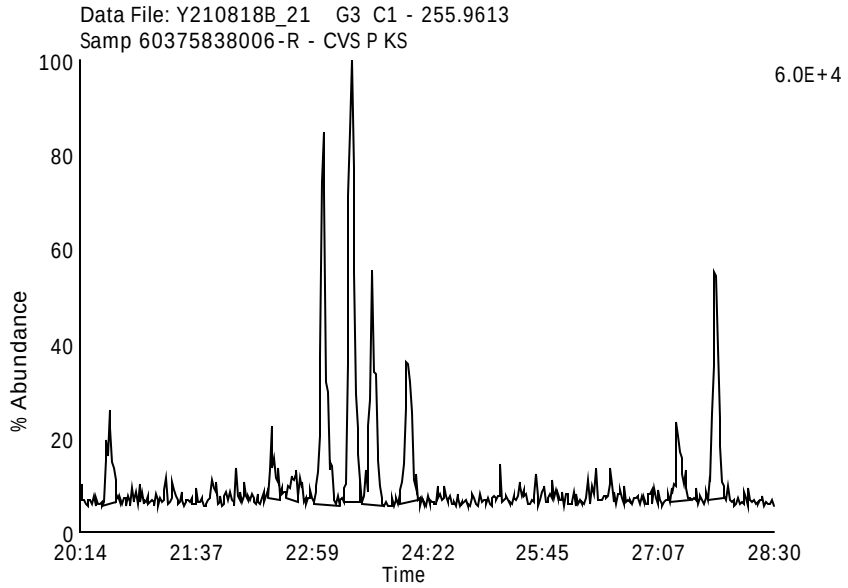


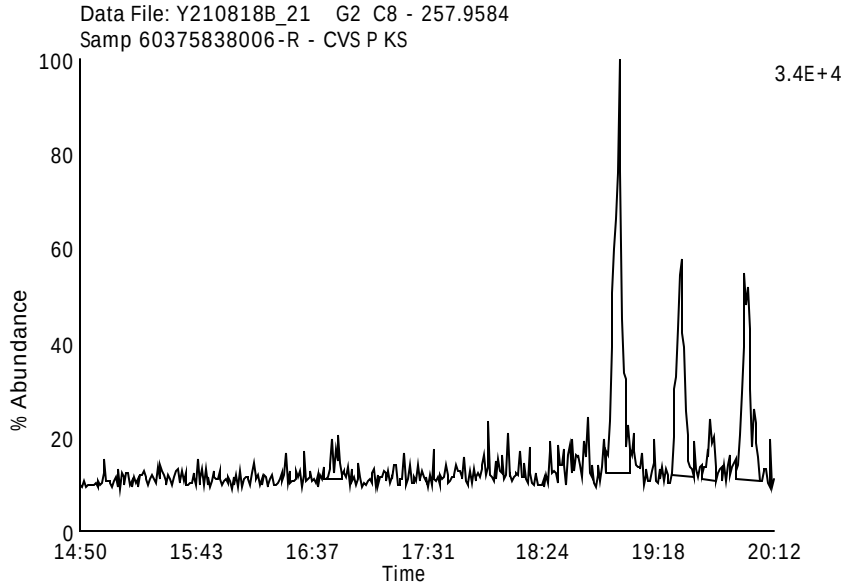


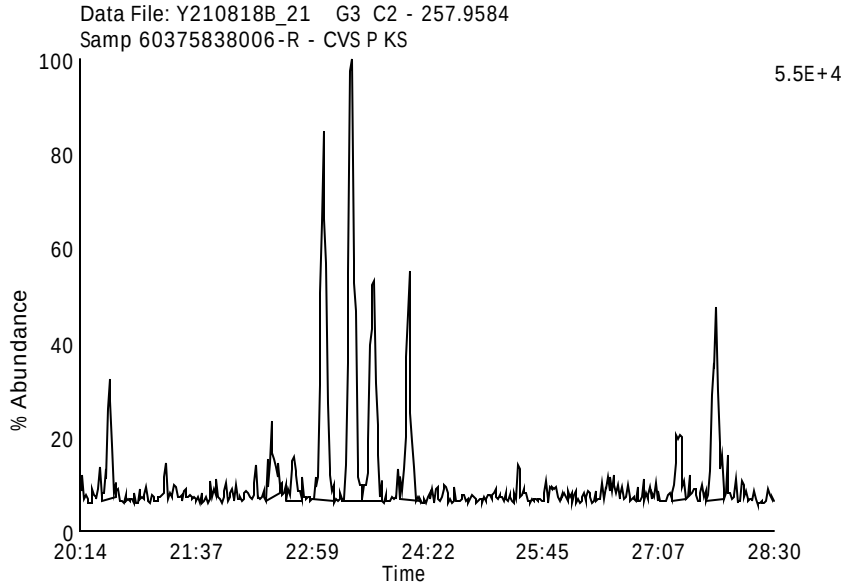
Tri Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



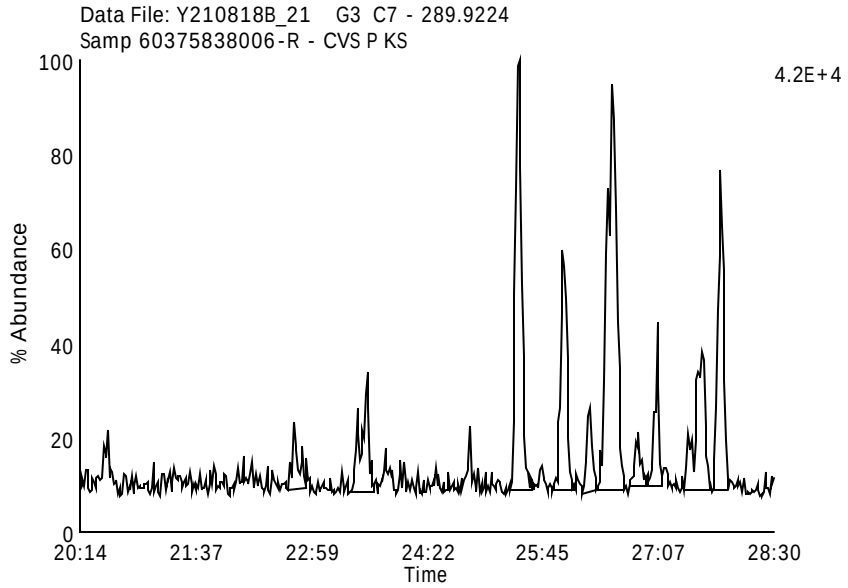


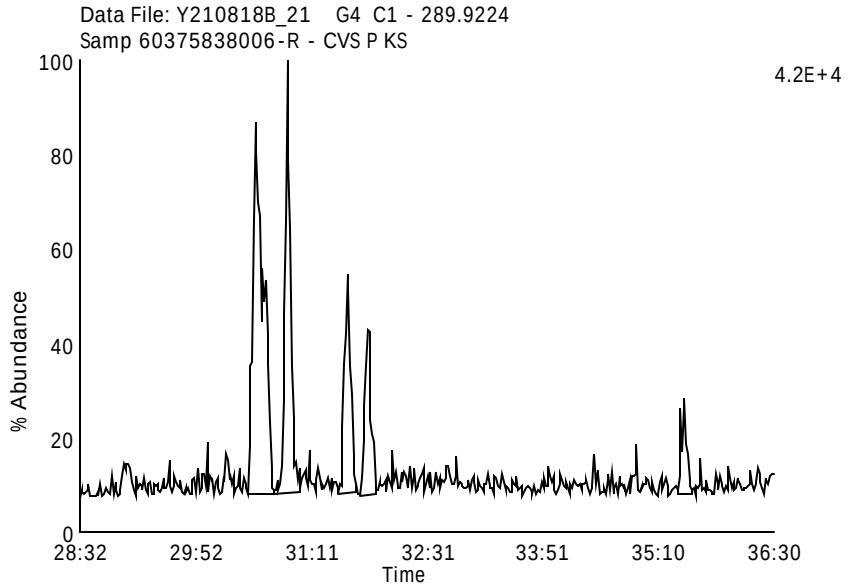


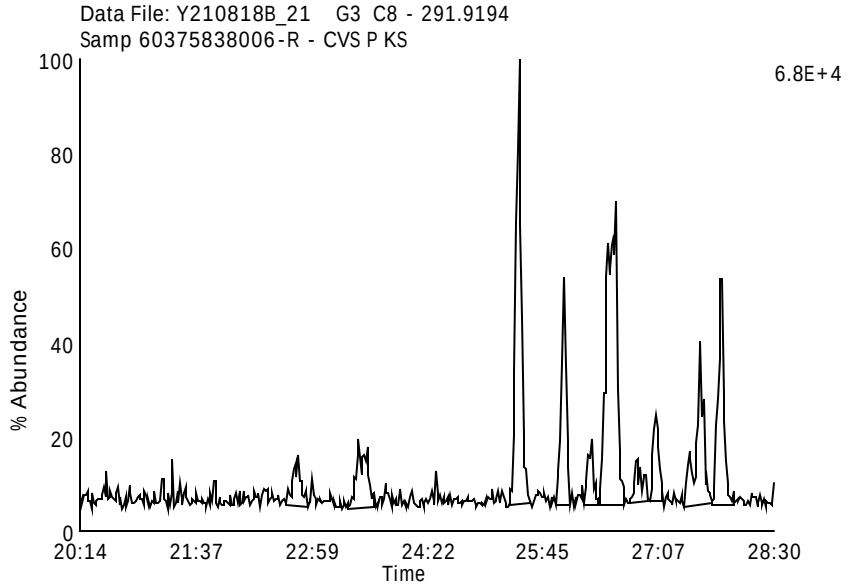


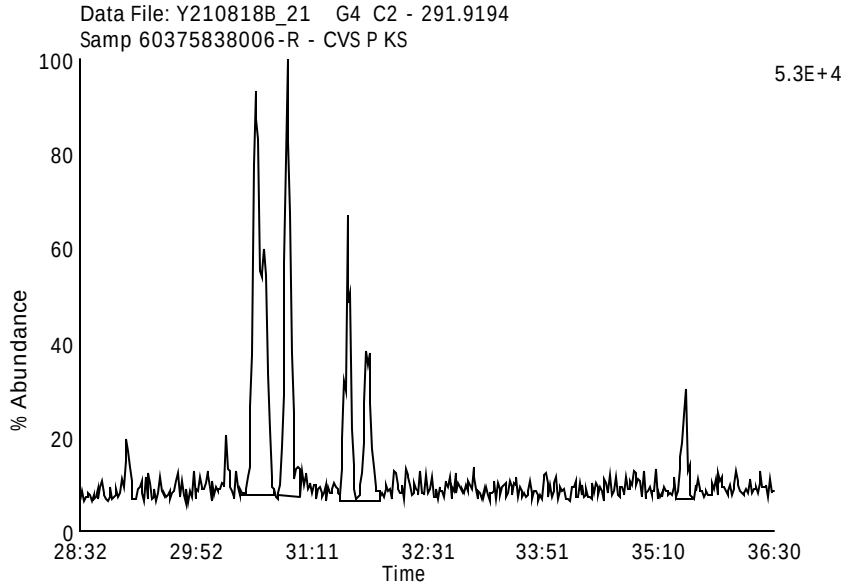
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_21 | Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS | Client Sample ID: GB-28/1.5-2.5



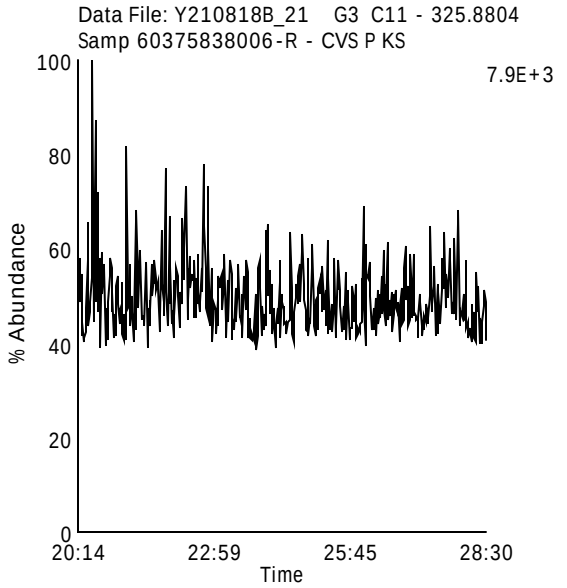


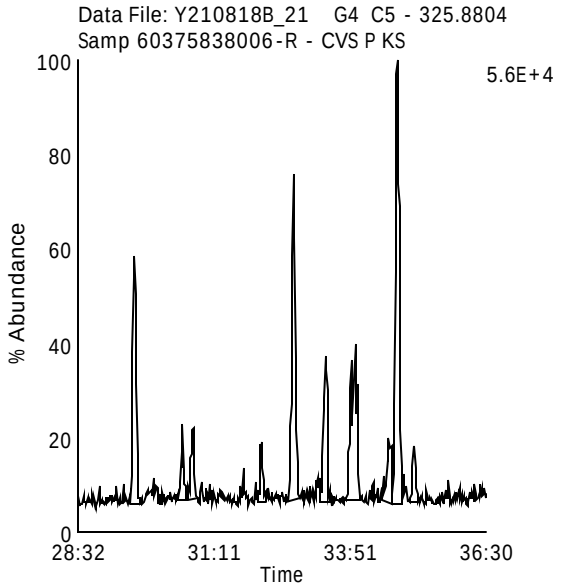


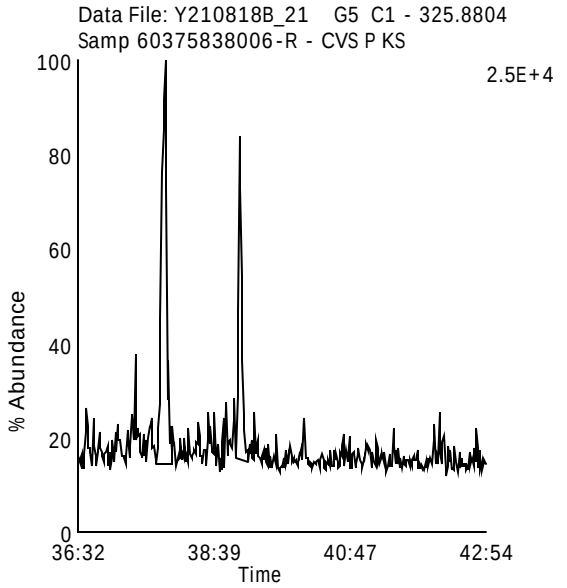


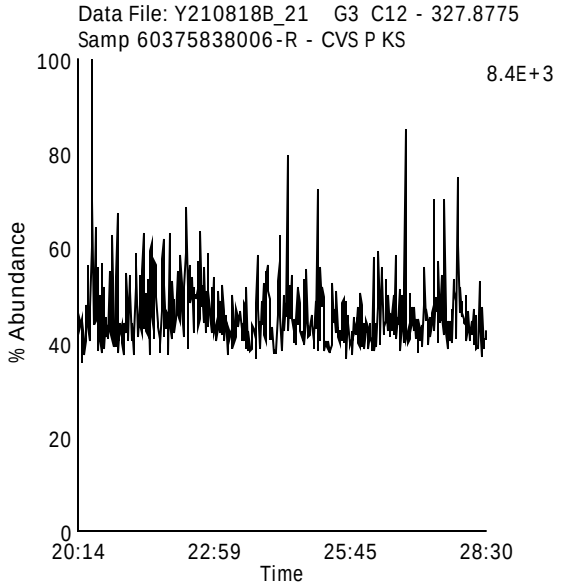
Penta Chlorinated Biphenyls

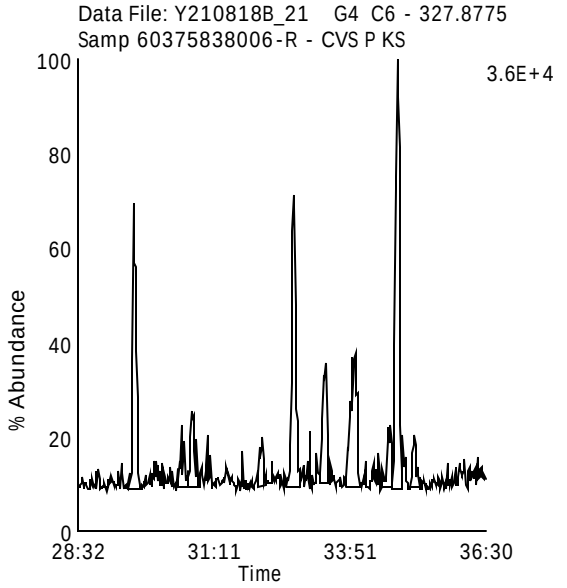
Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5

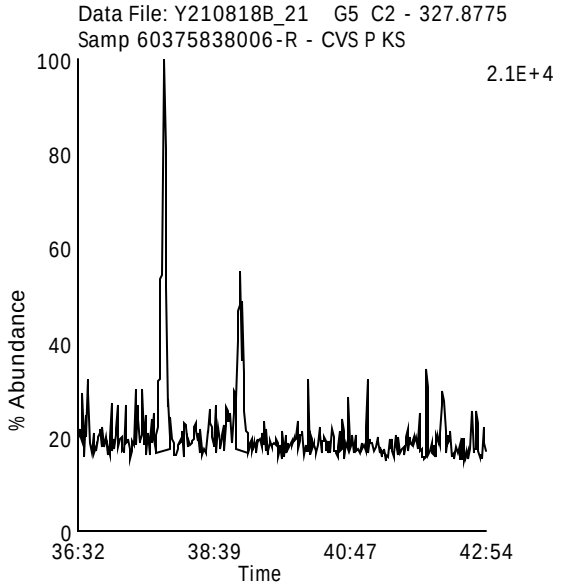






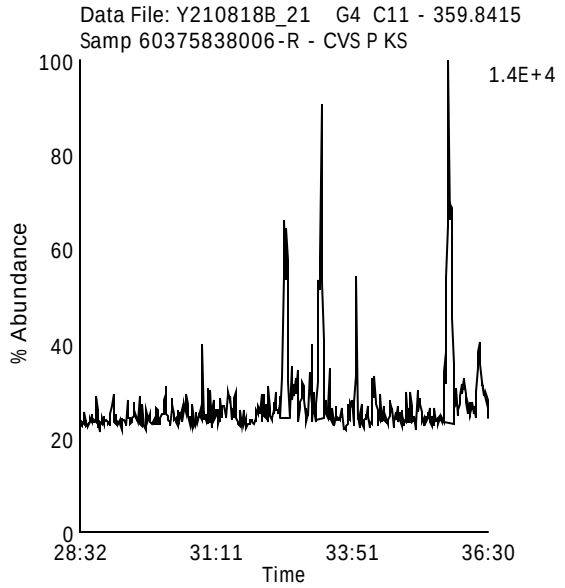


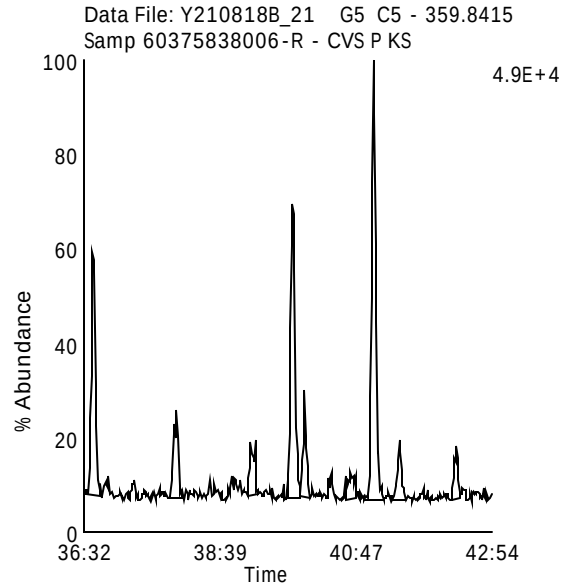


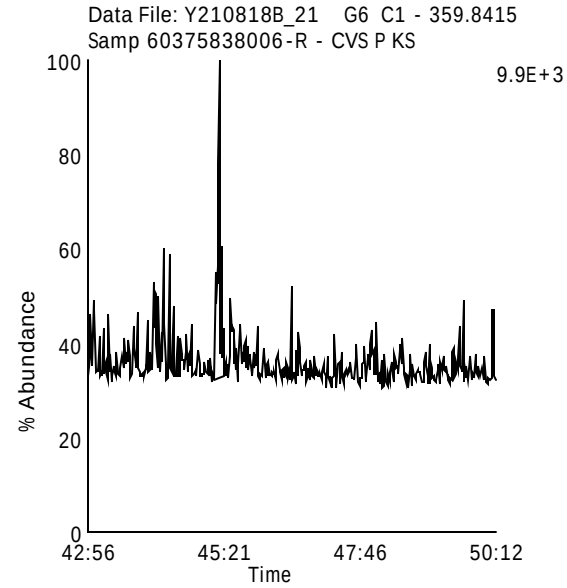


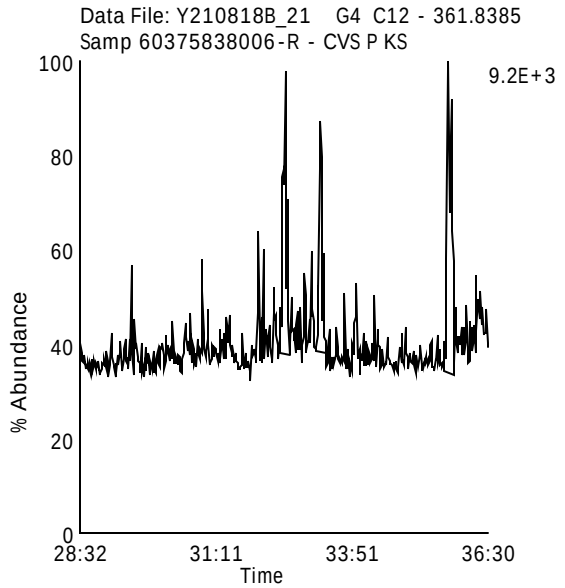
Hexa Chlorinated Biphenyls

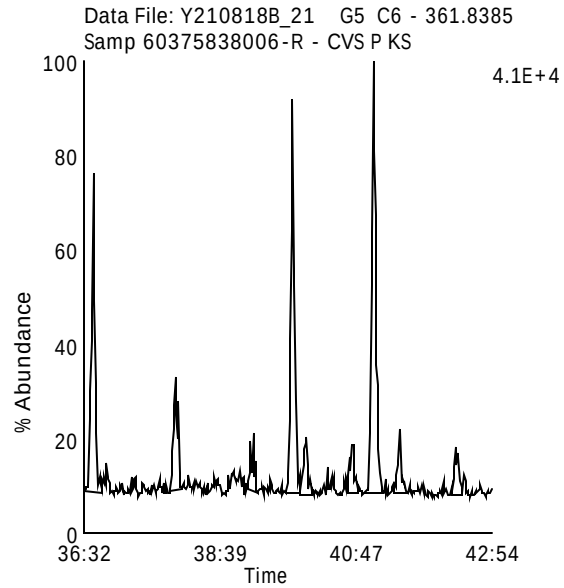
Data File Name: Y210818B_21 | Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS | Client Sample ID: GB-28/1.5-2.5

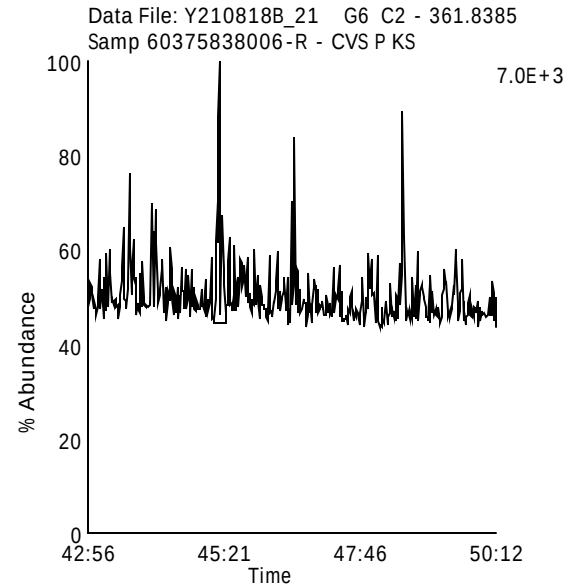






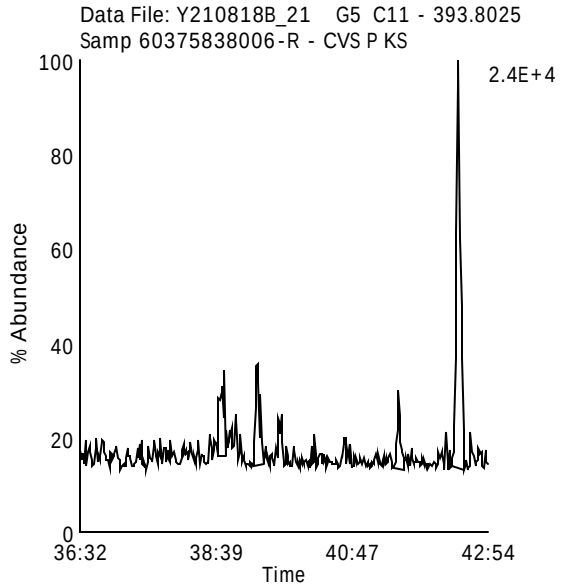


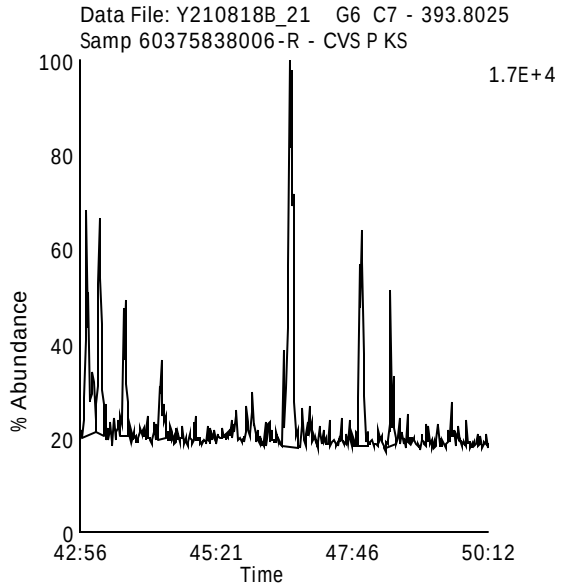


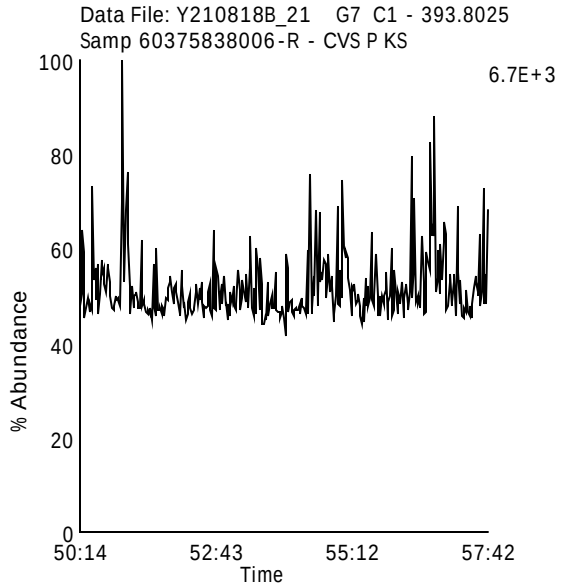


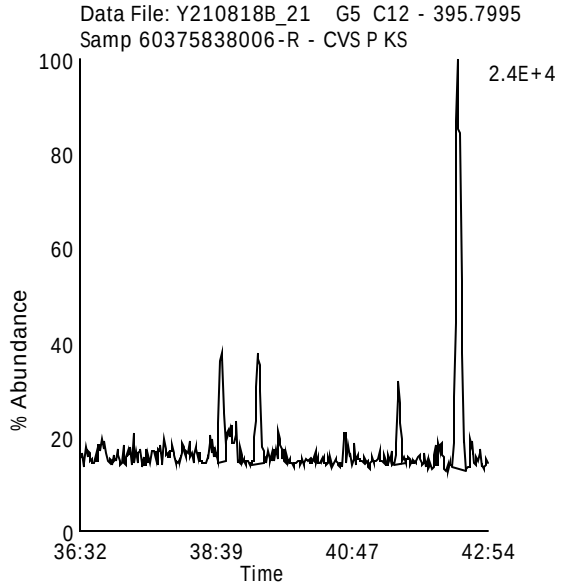
Hepta Chlorinated Biphenyls

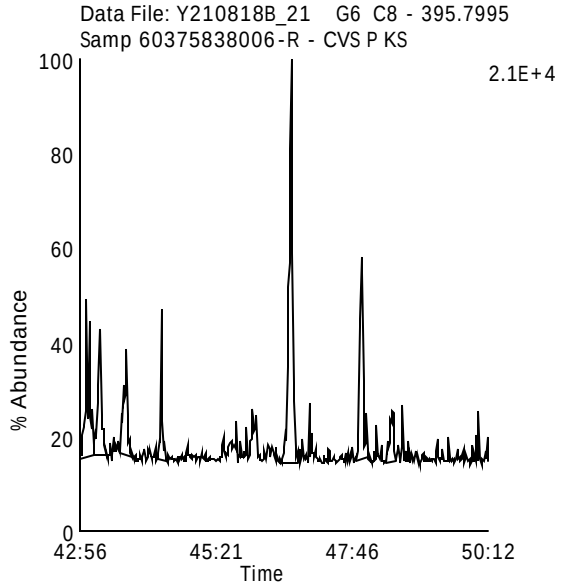
Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5

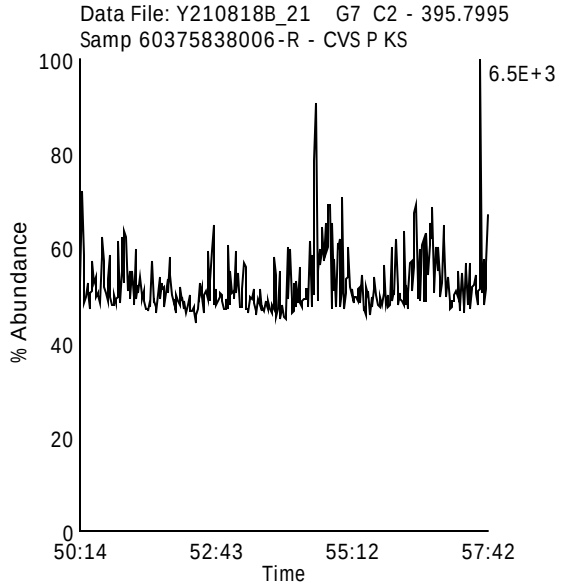






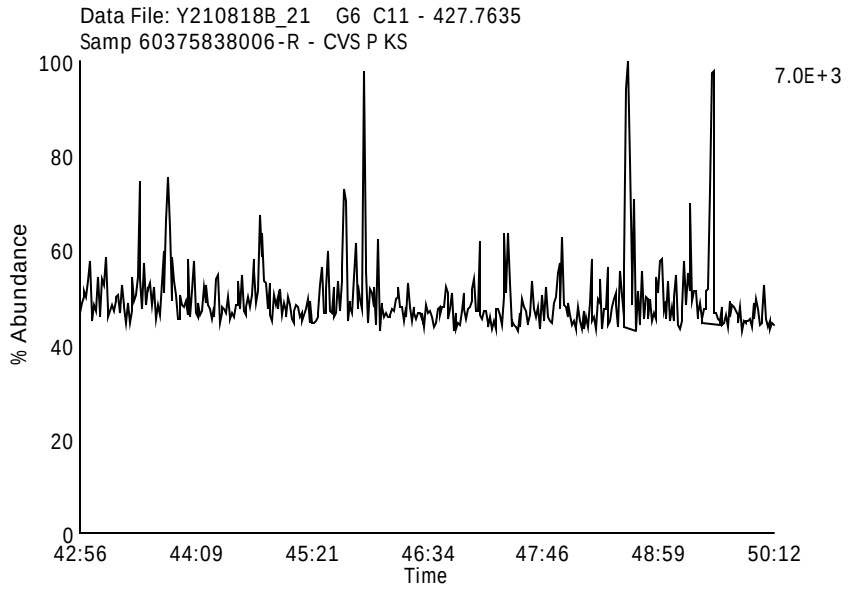


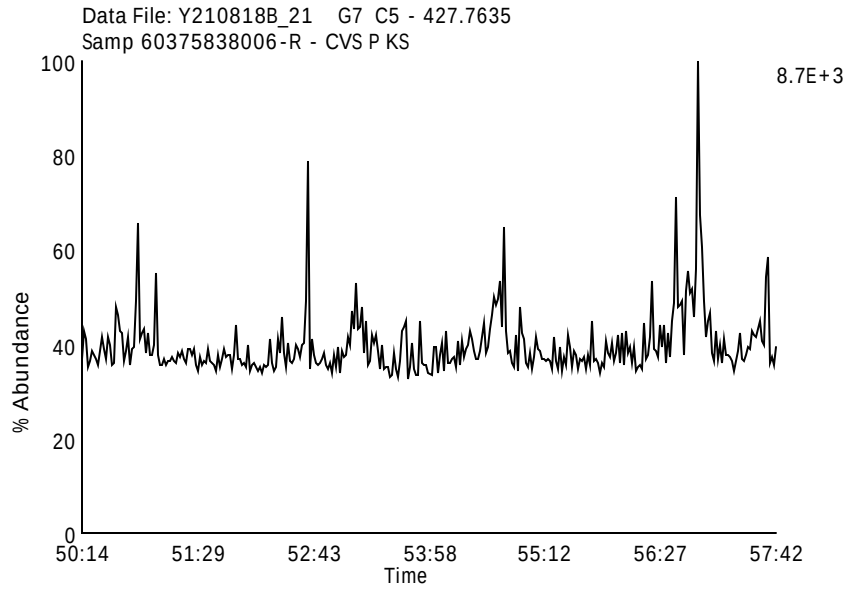


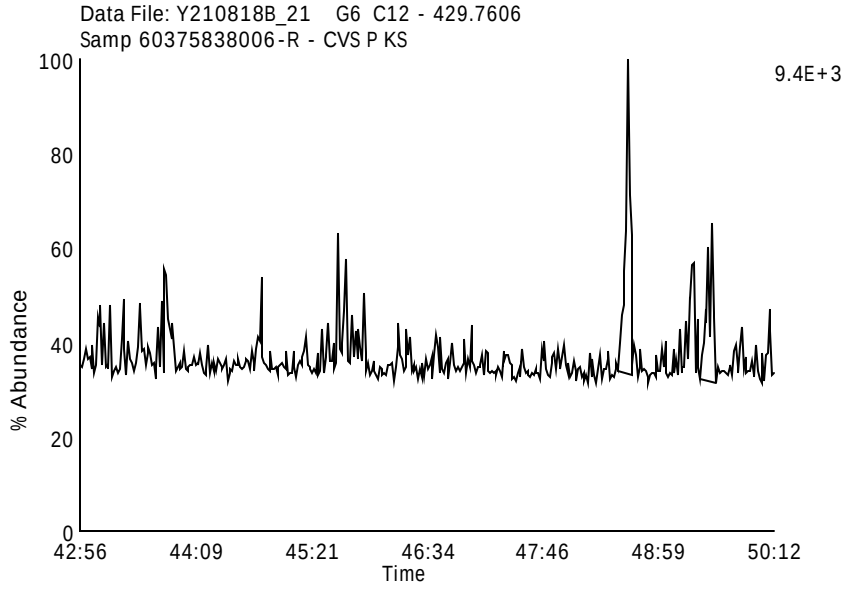


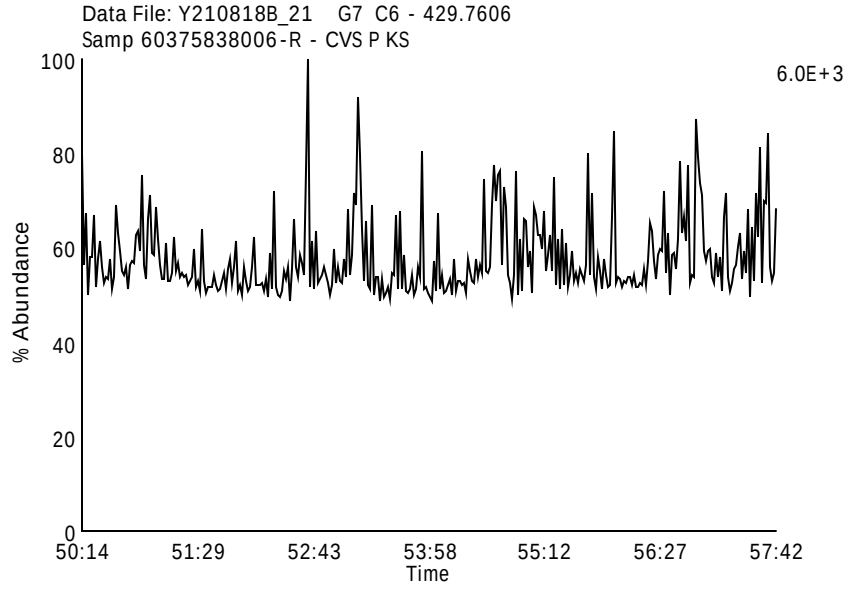
Octa Chlorinated Biphenyls

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



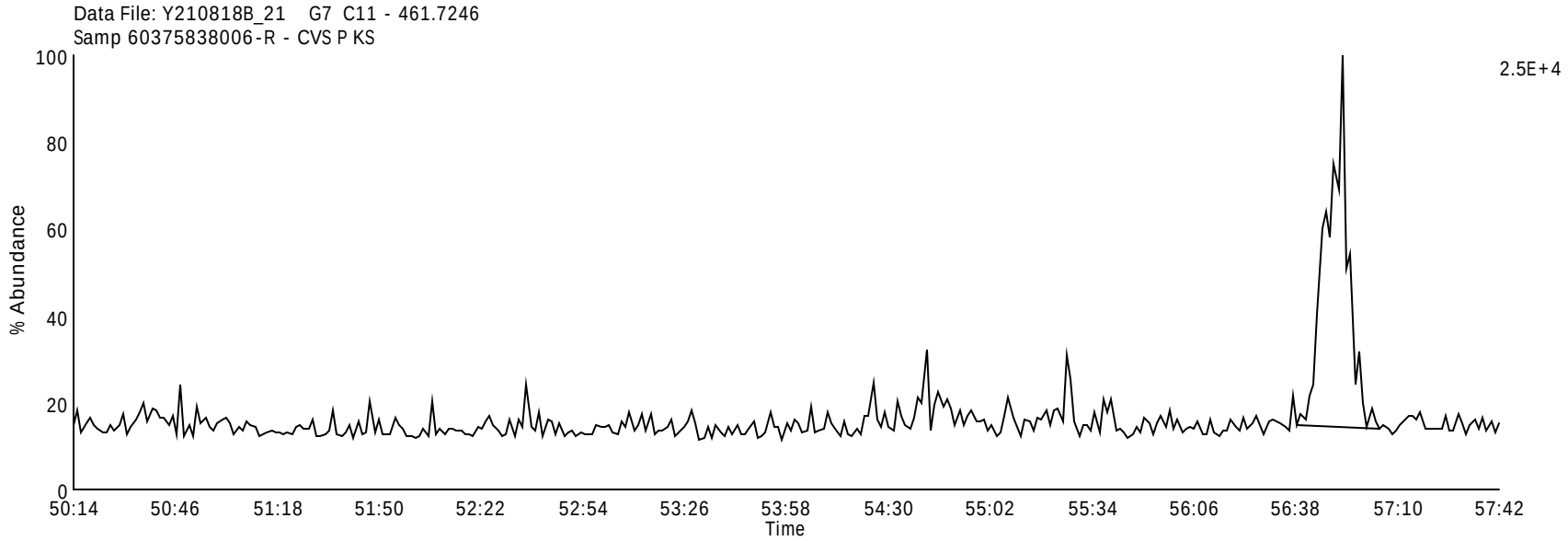


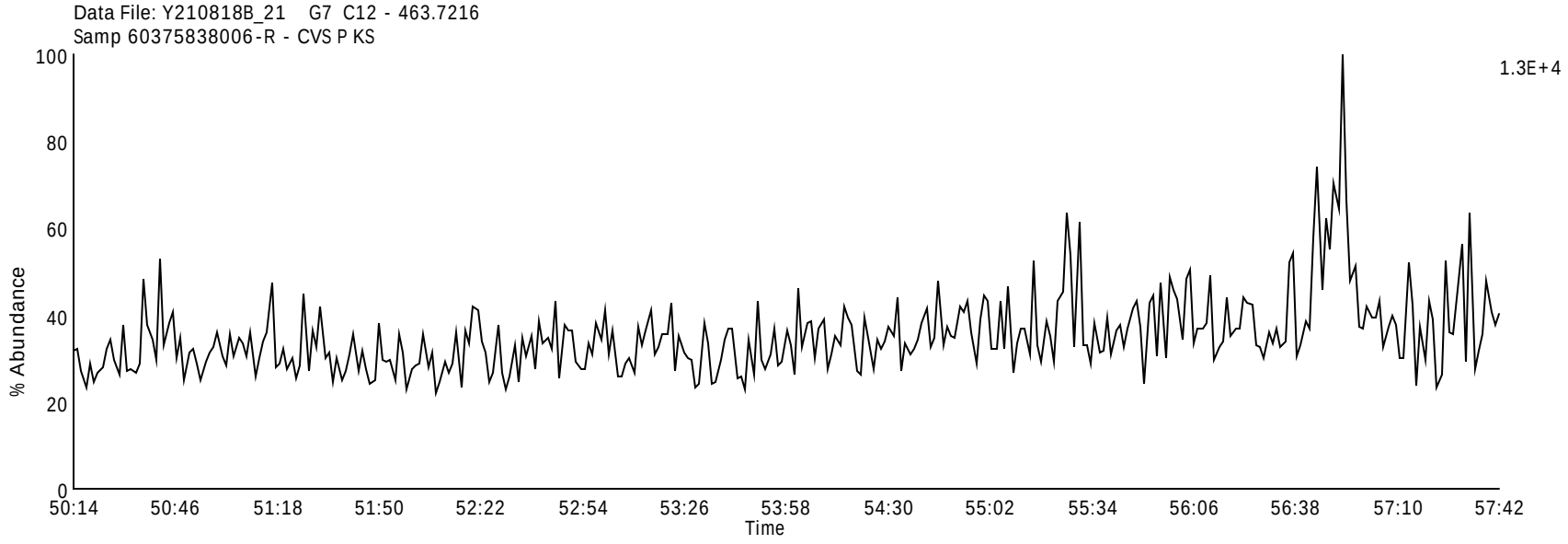




Nona Chlorinated Biphenyls

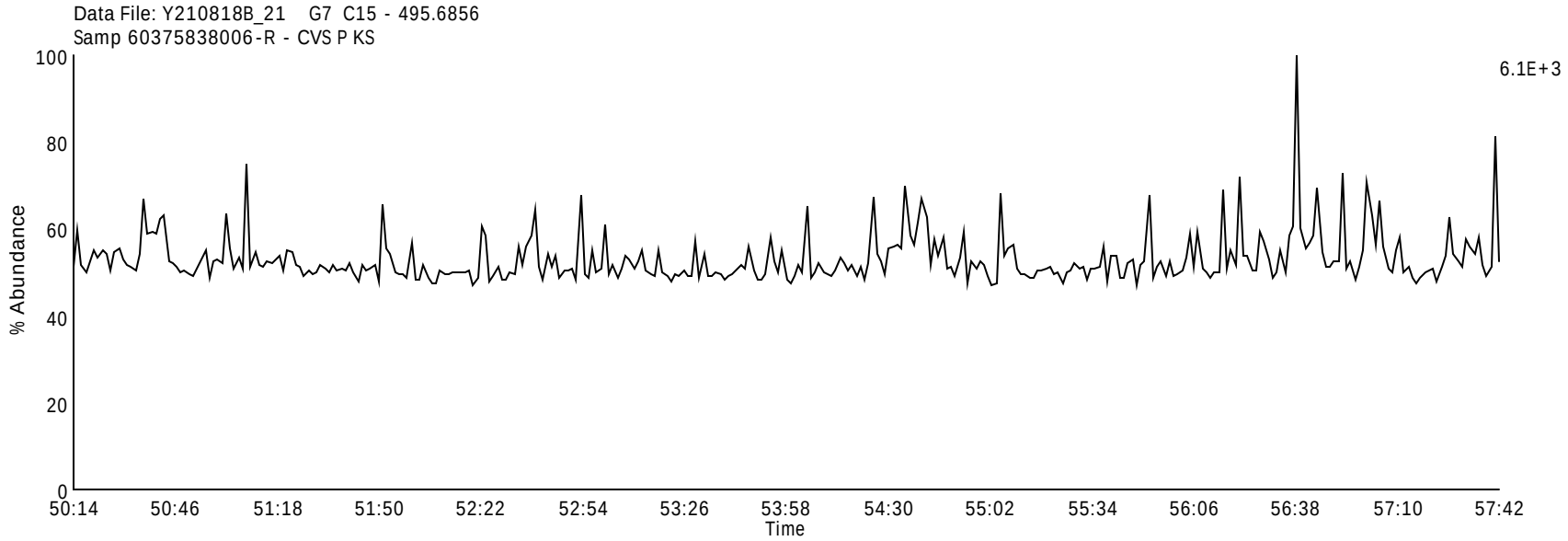
Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5

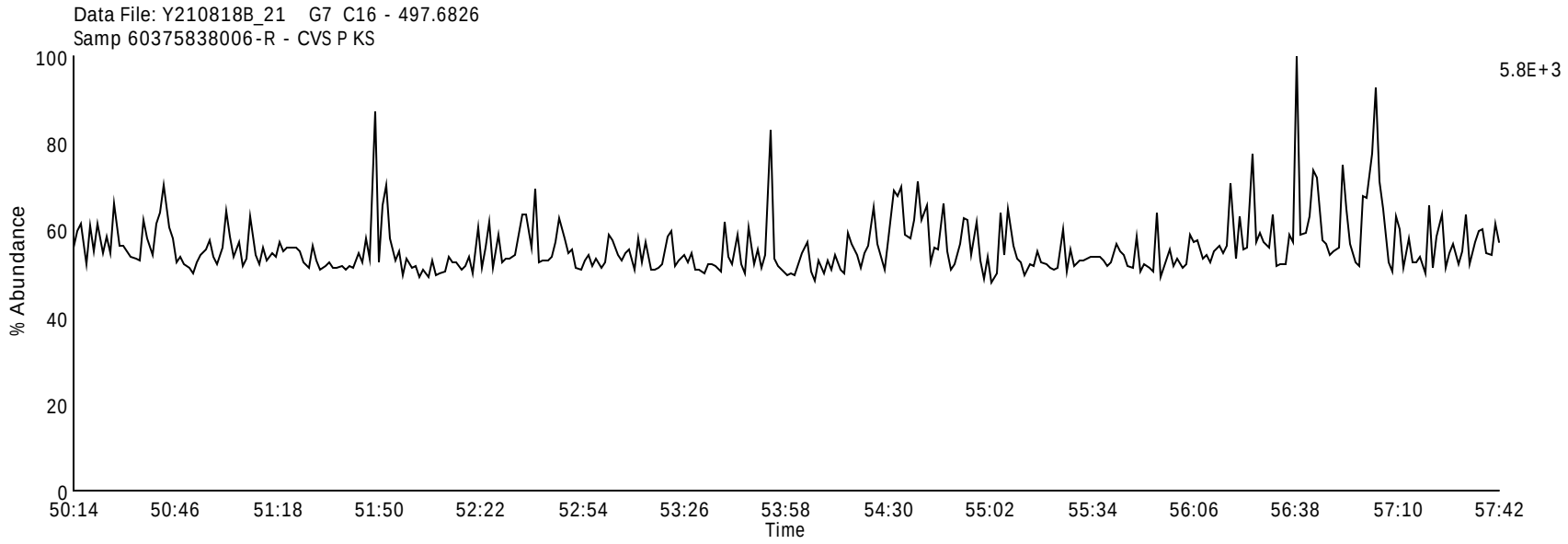




Deca Chlorinated Biphenyl

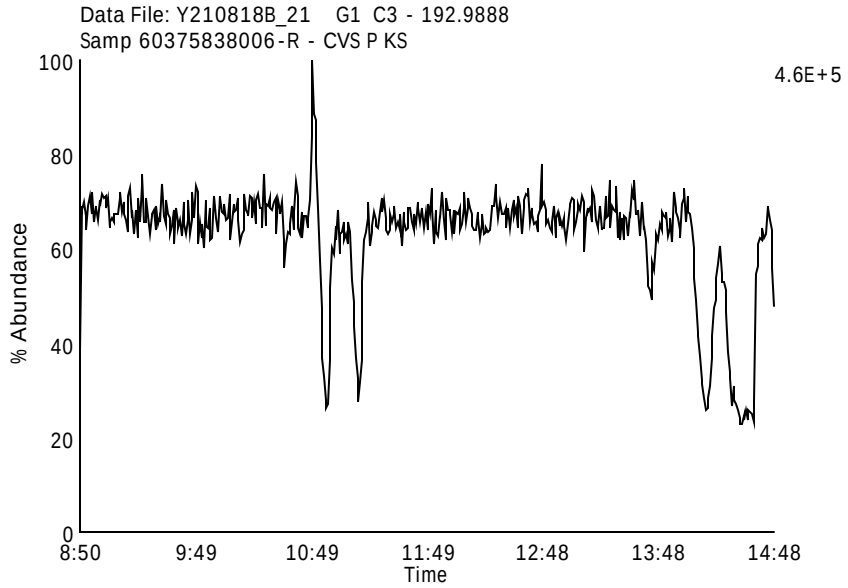
Data File Name: Y210818B_21	Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS	Client Sample ID: GB-28/1.5-2.5

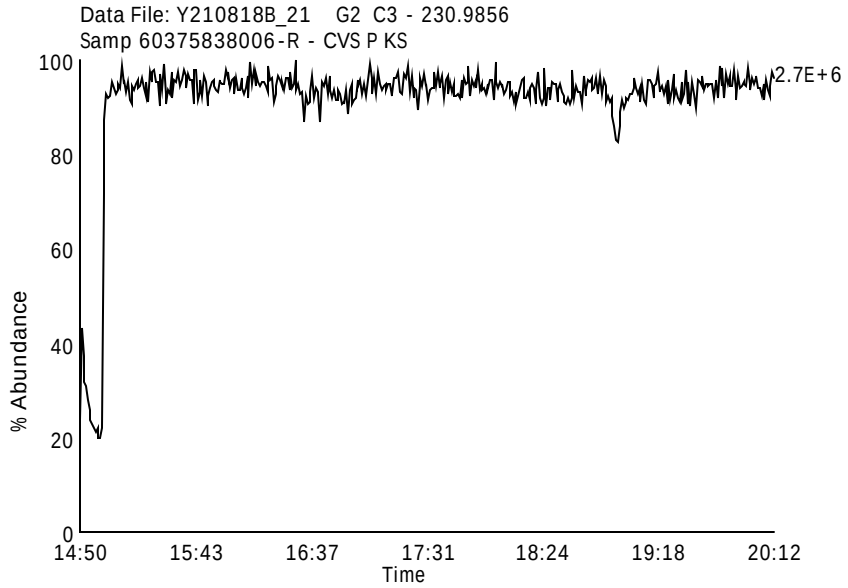


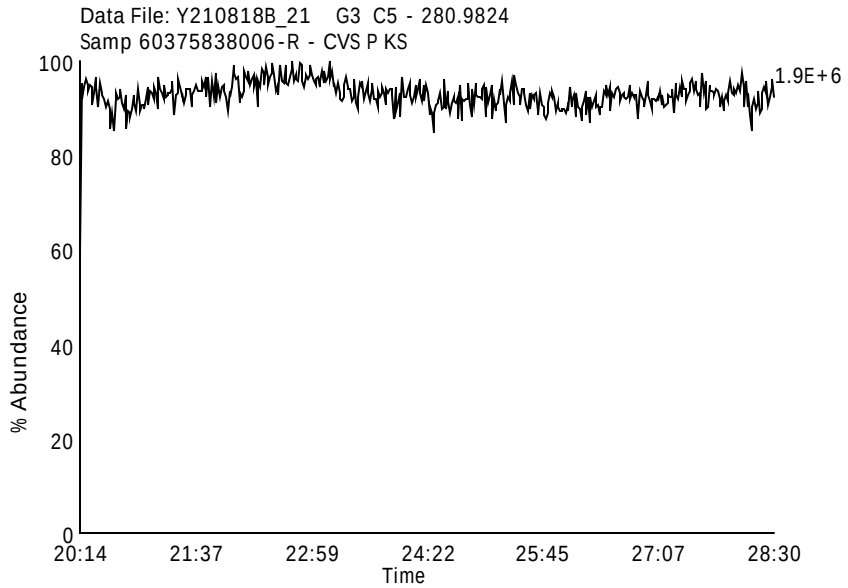


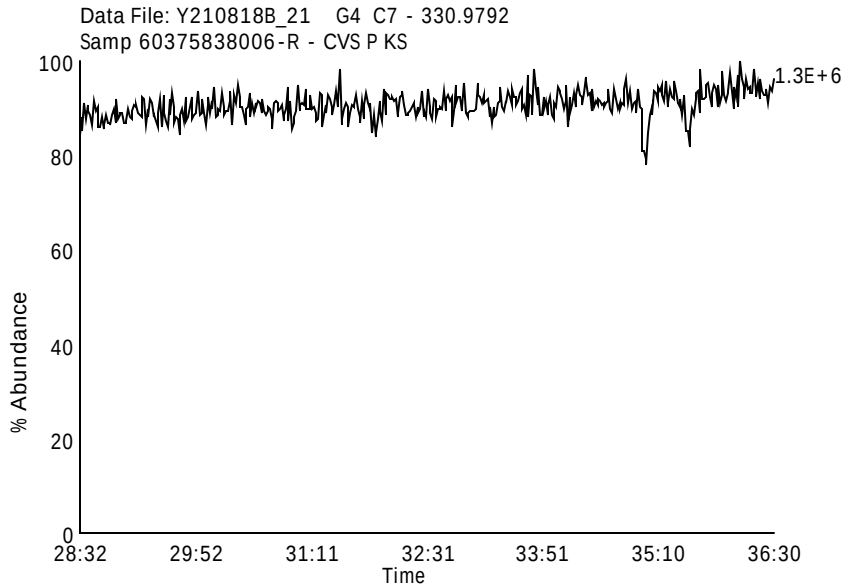
Group 1 - 4 Lock mass

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



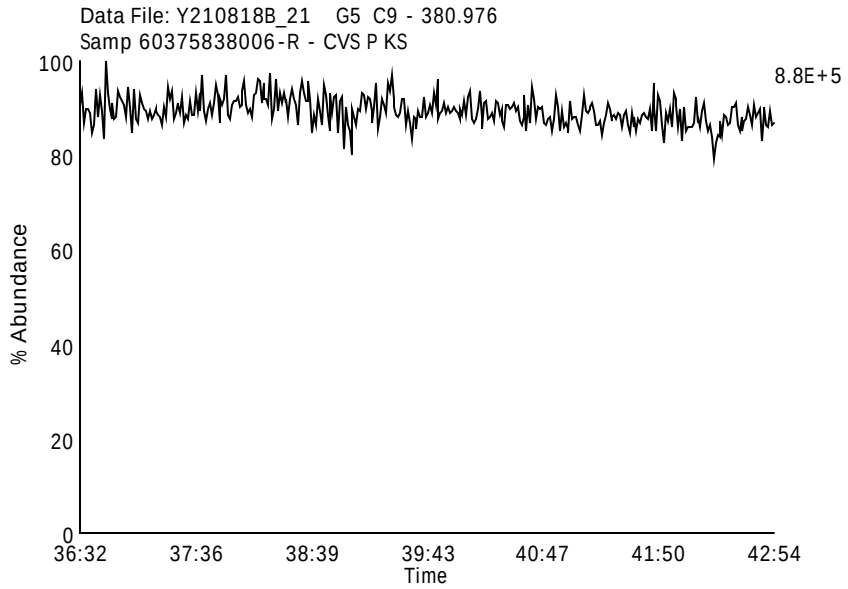


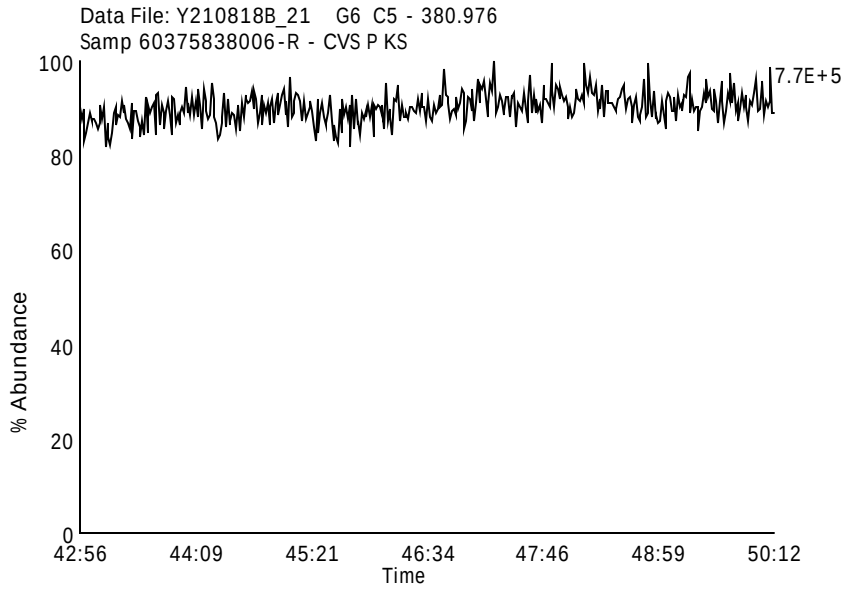


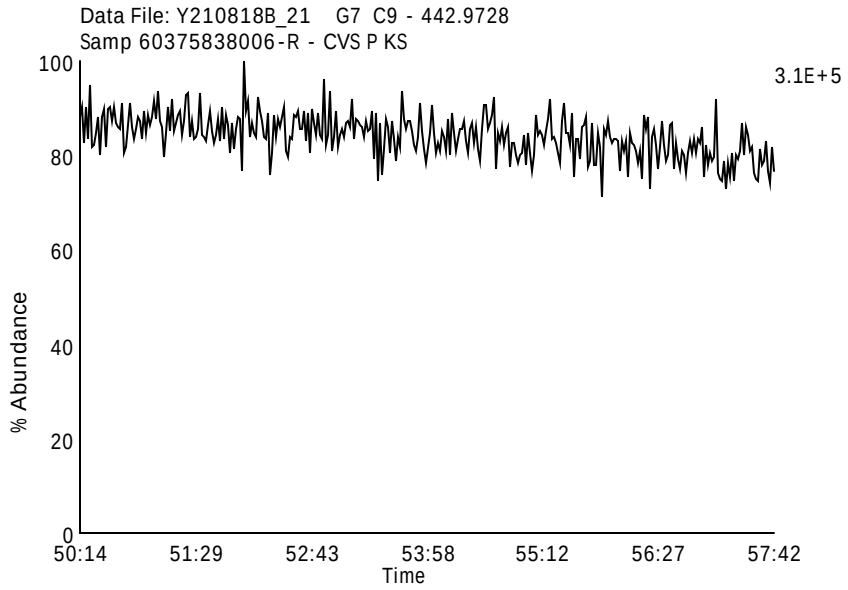


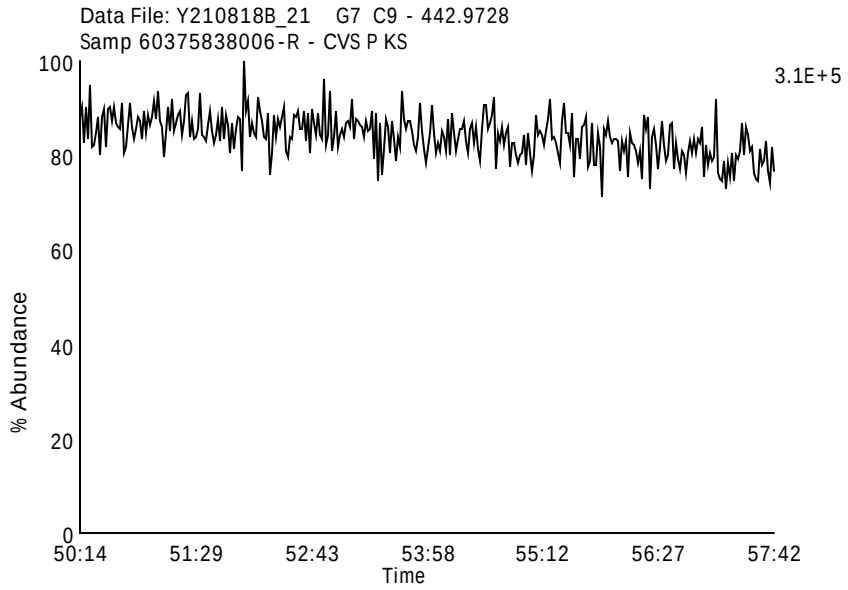
Group 5 - 7 Lock mass

Data File Name: Y210818B_21
Lab Sample ID: 60375838006-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838006-R - CVS P KS
Client Sample ID: GB-28/1.5-2.5



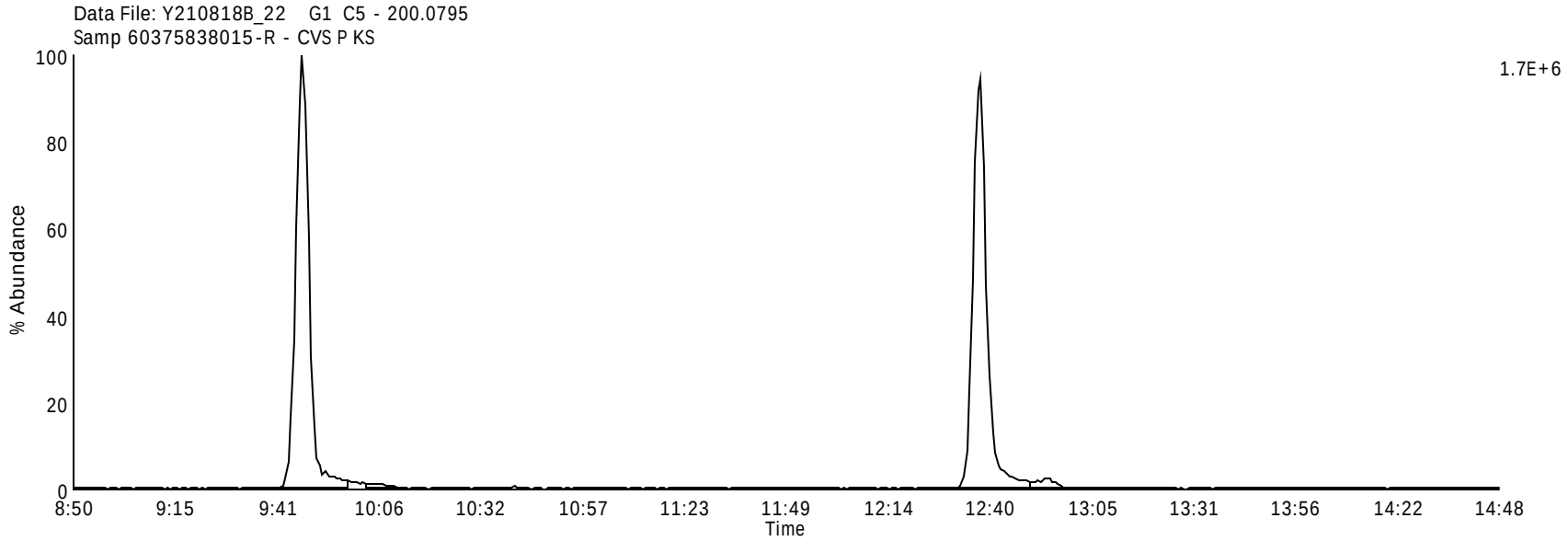


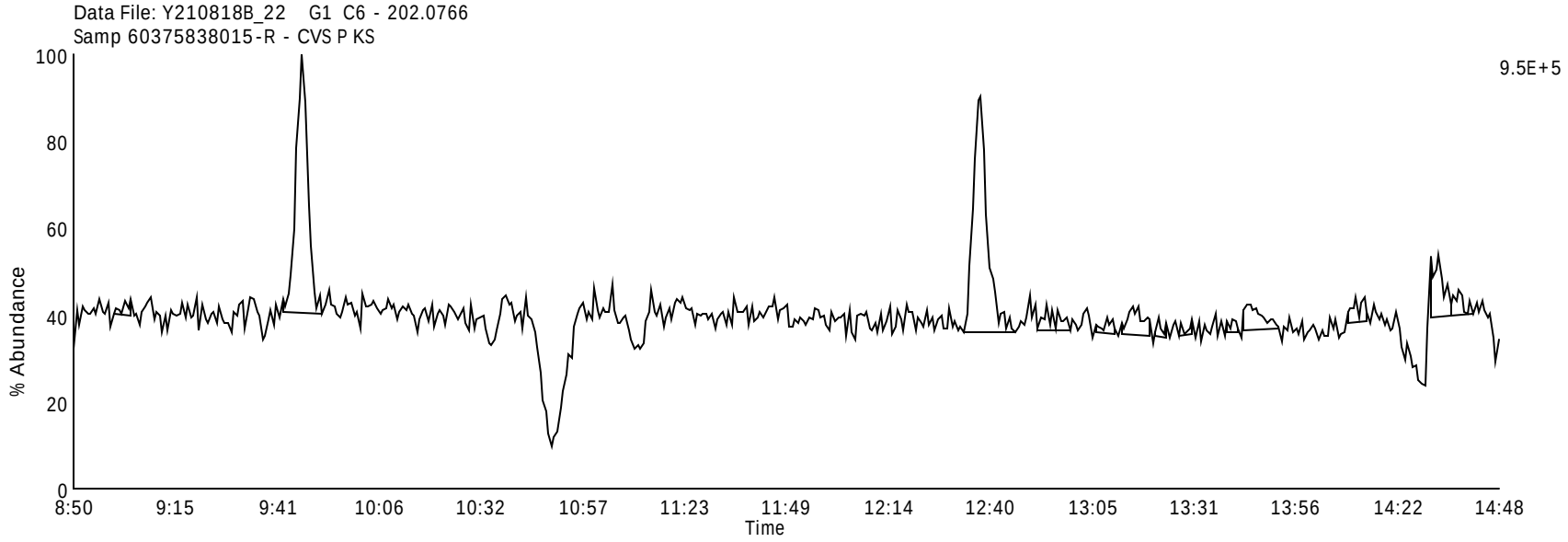




Labeled Mono Chlorinated Biphenyls

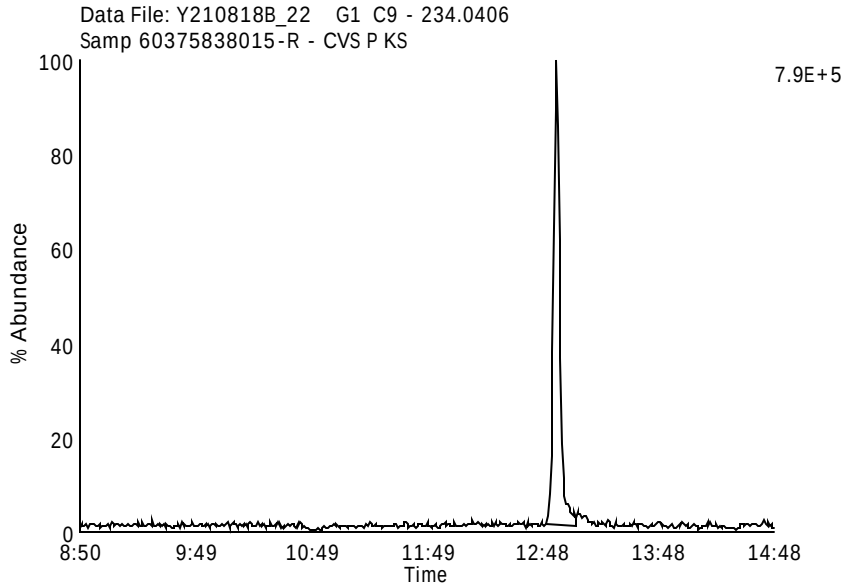
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

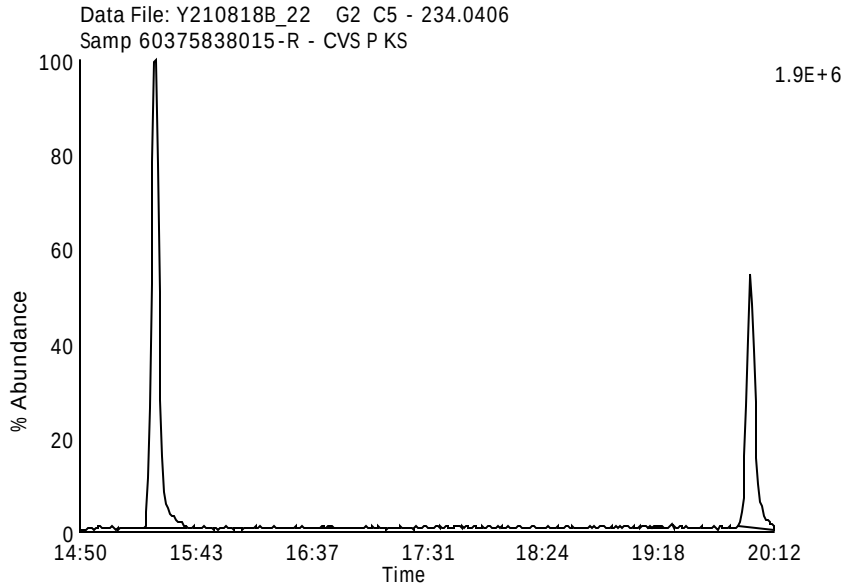


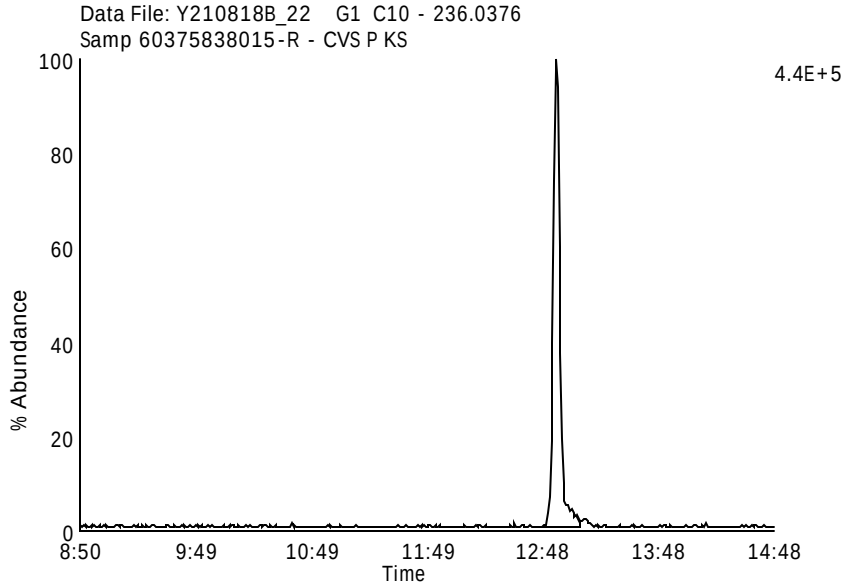


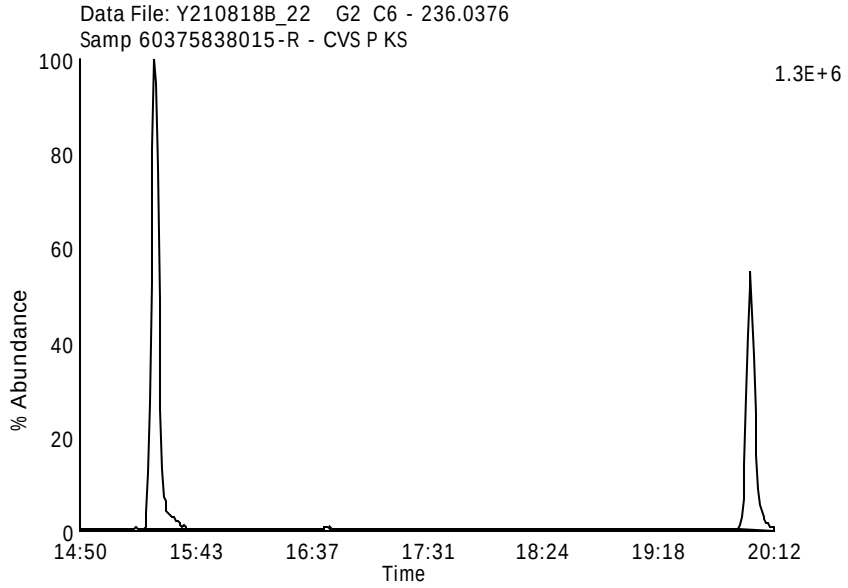
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



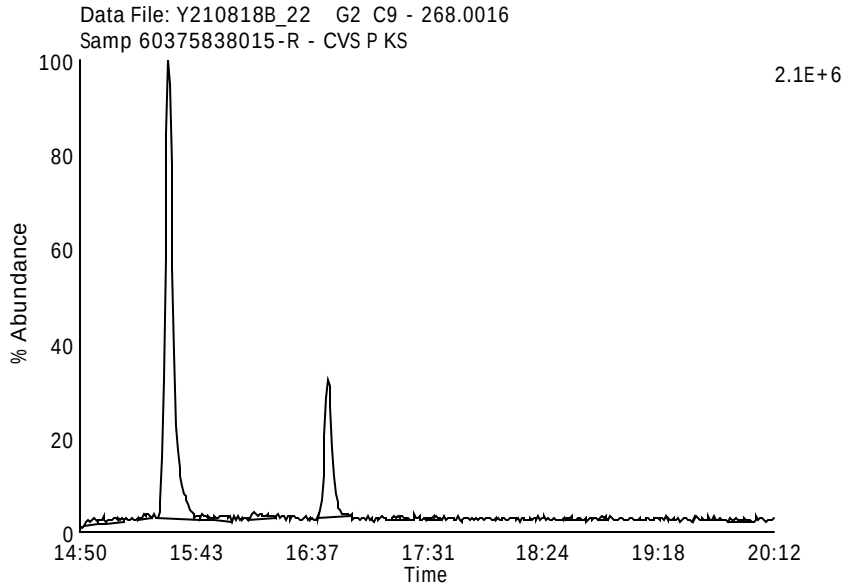


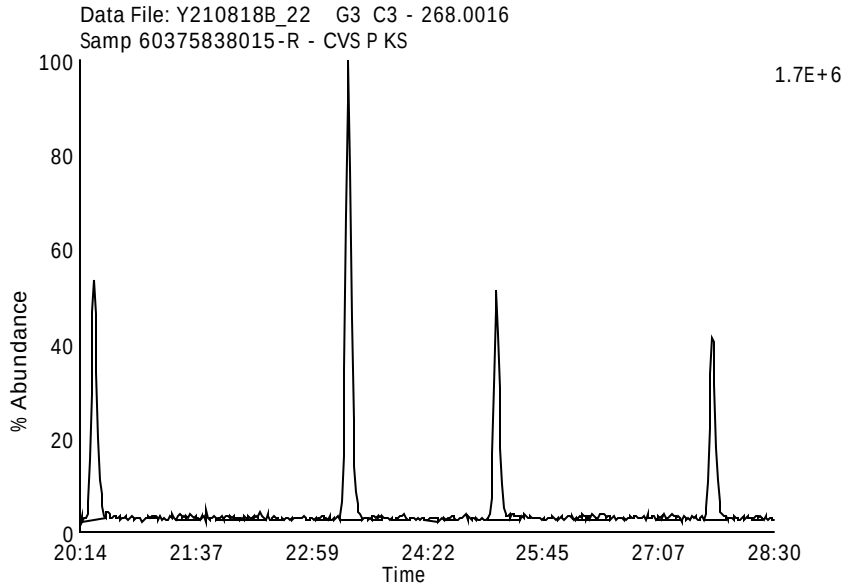


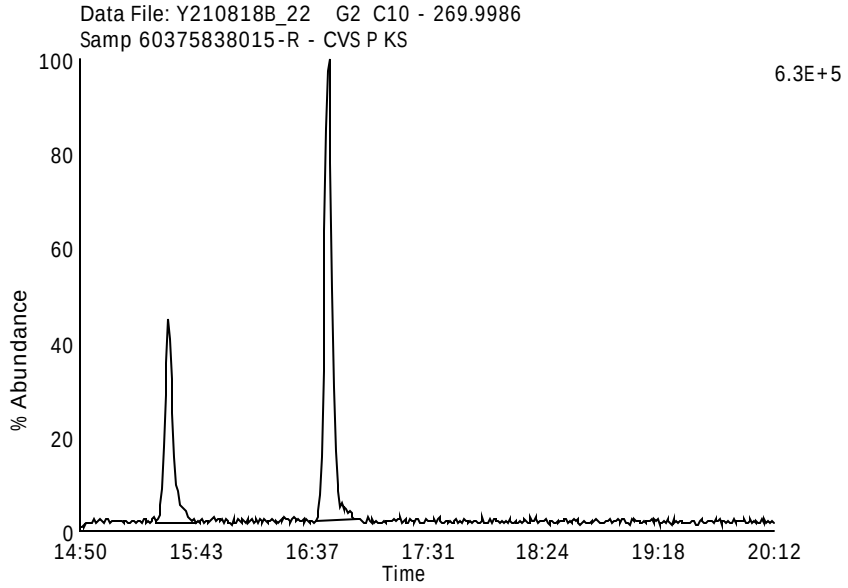


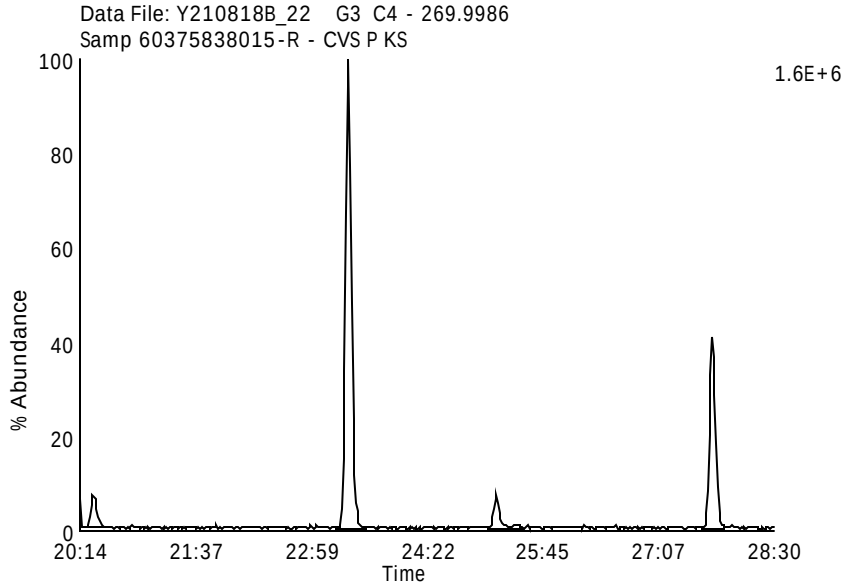
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



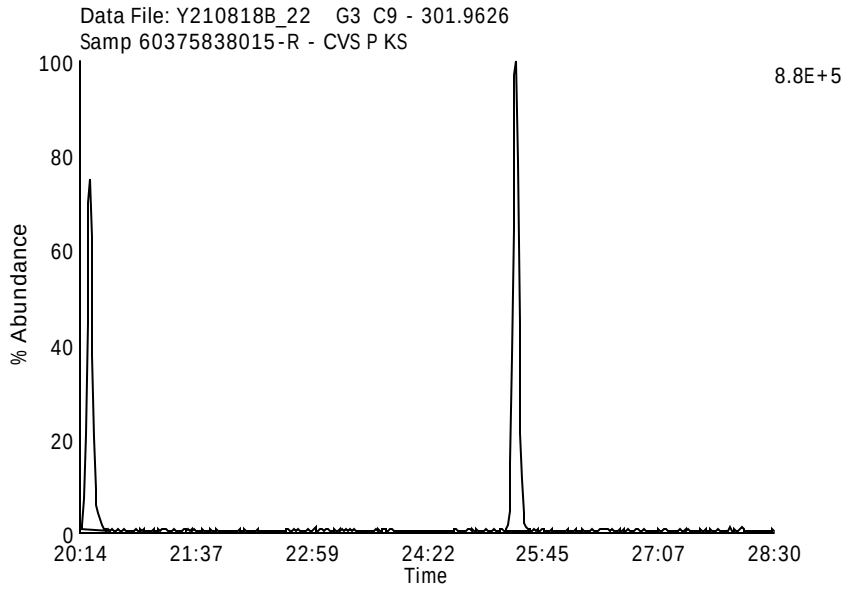


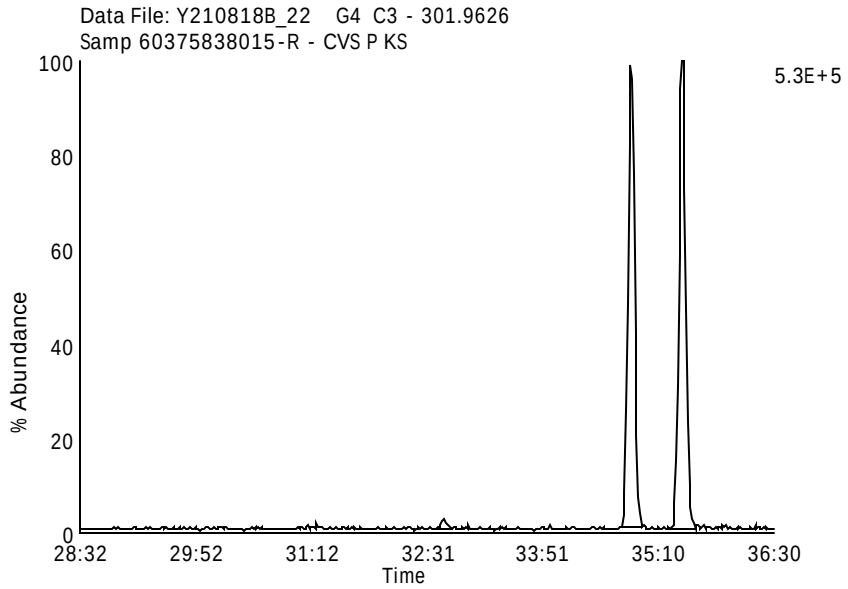


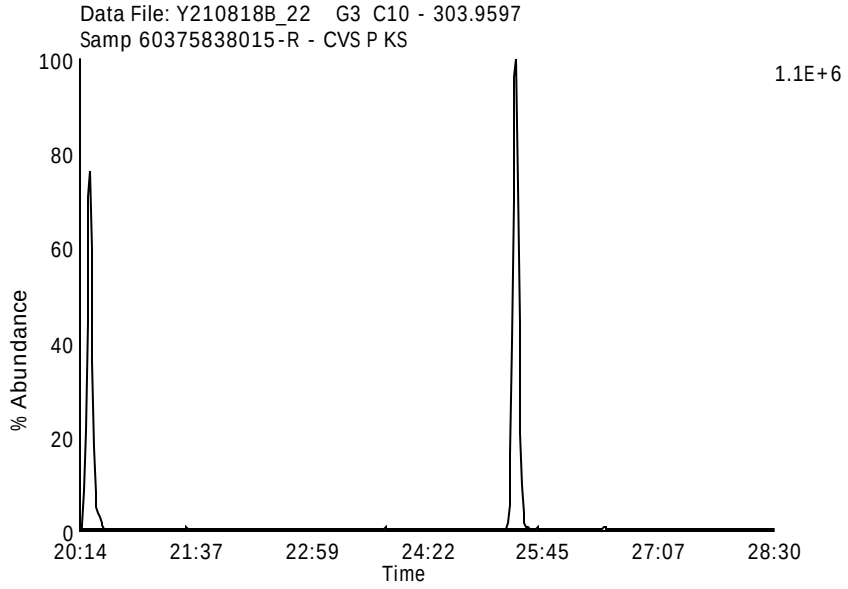


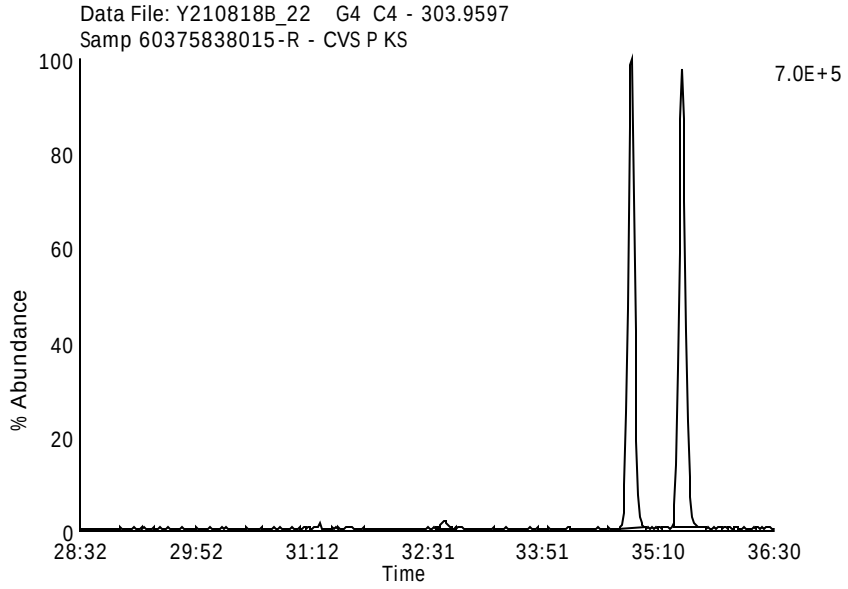
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



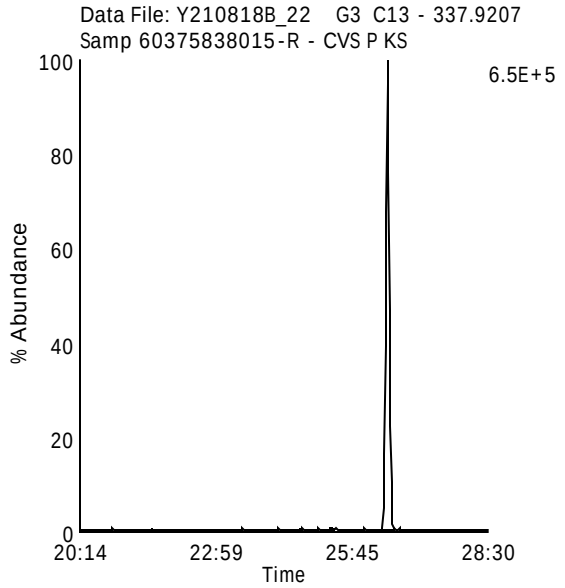


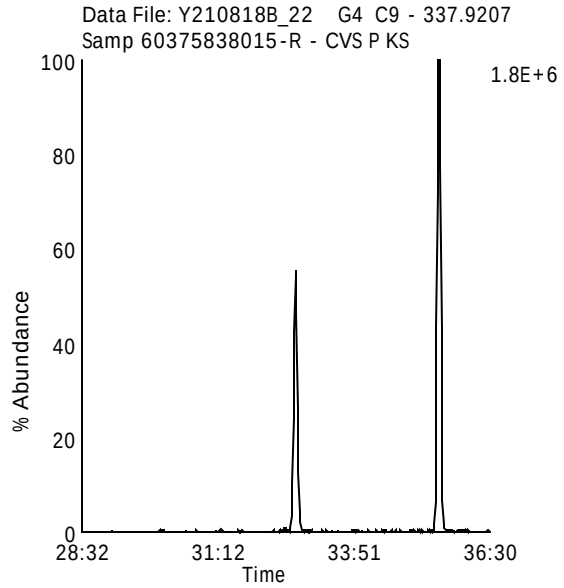


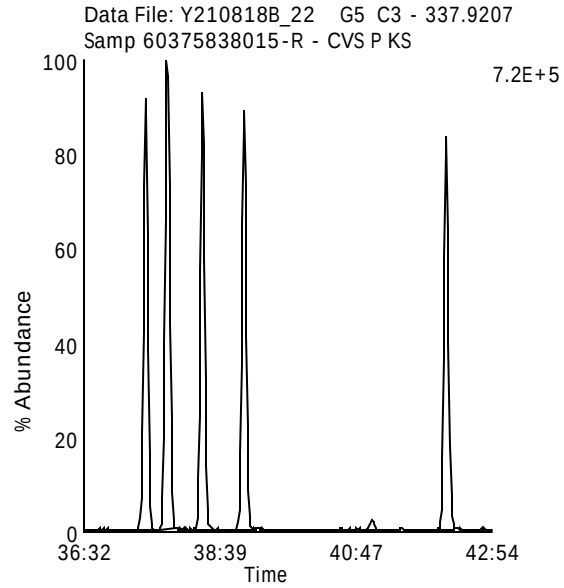


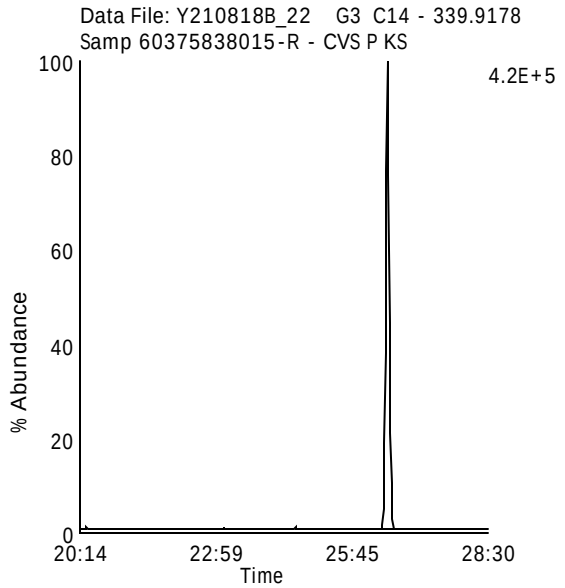
Labeled Penta Chlorinated Biphenyls

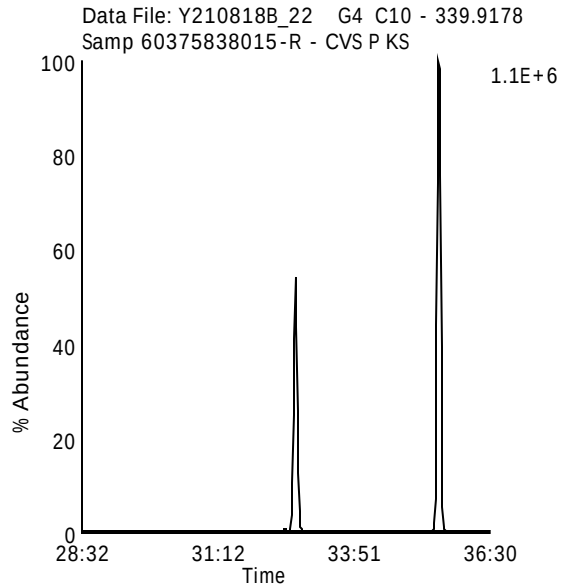
Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5

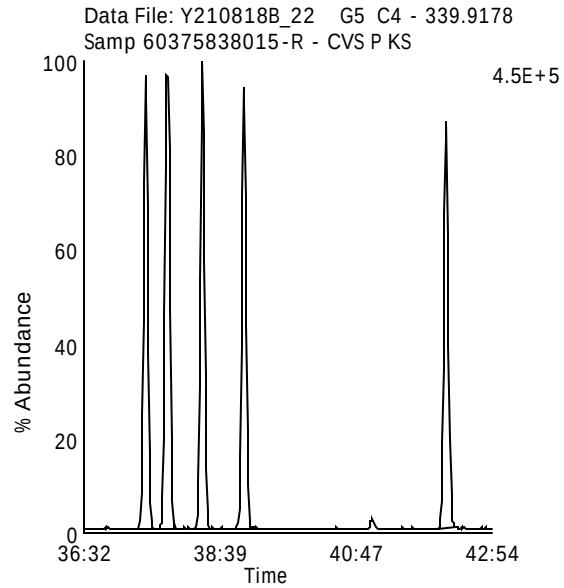






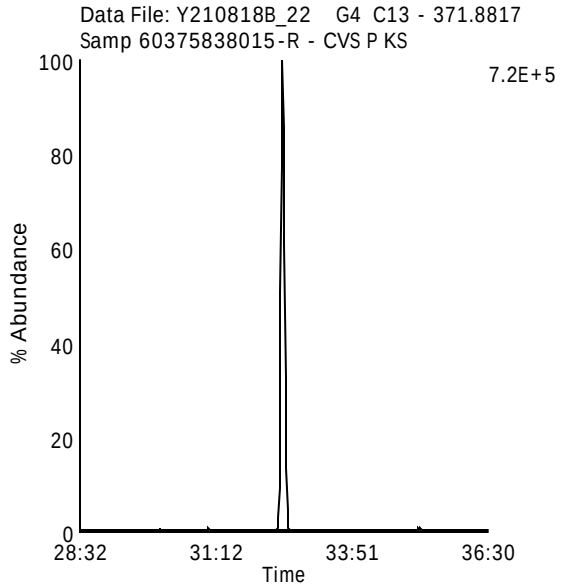


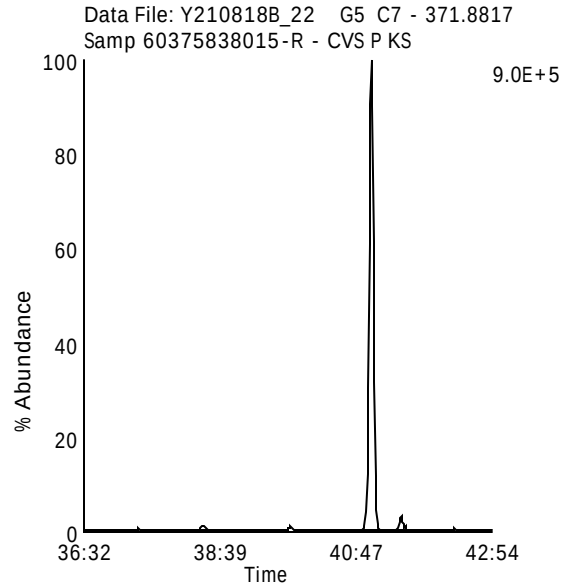


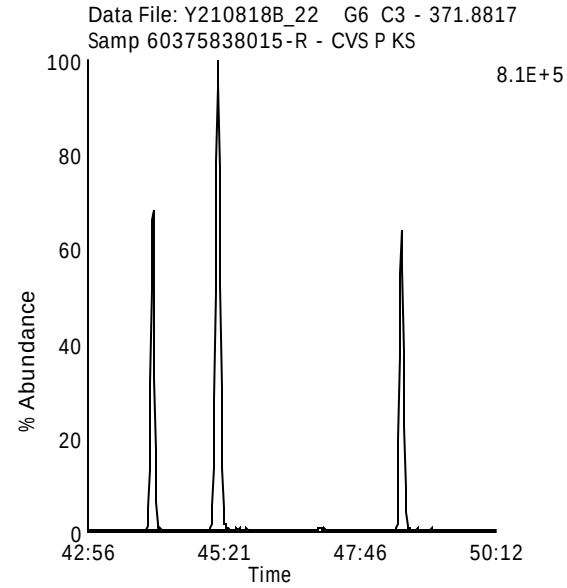


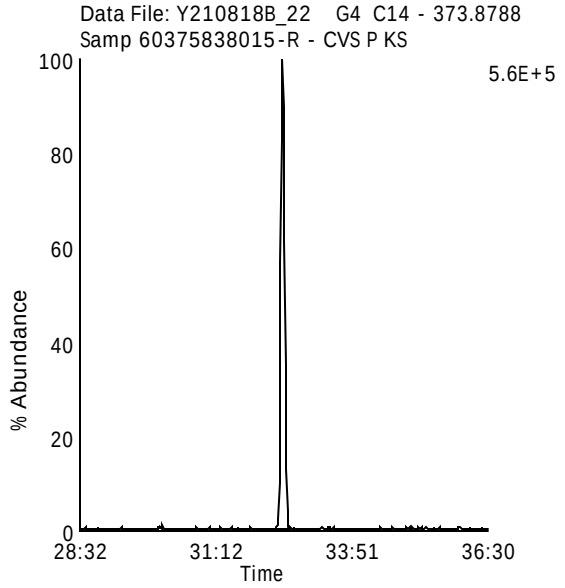
Labeled Hexa Chlorinated Biphenyls

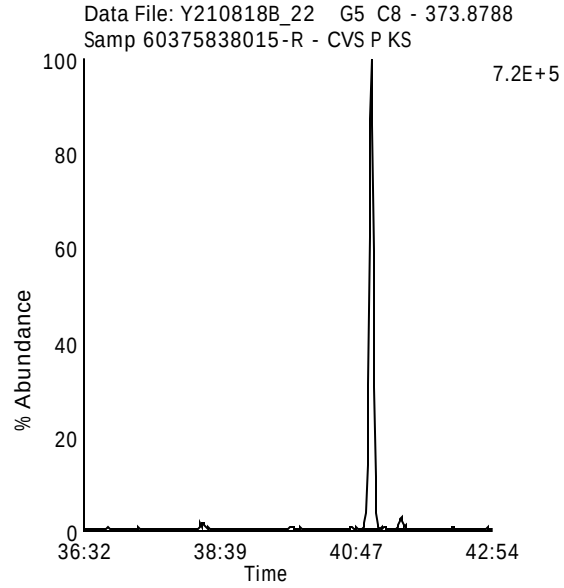
Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5

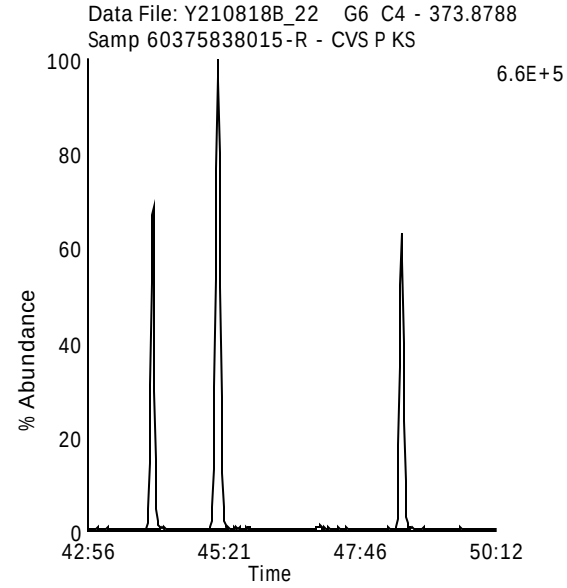






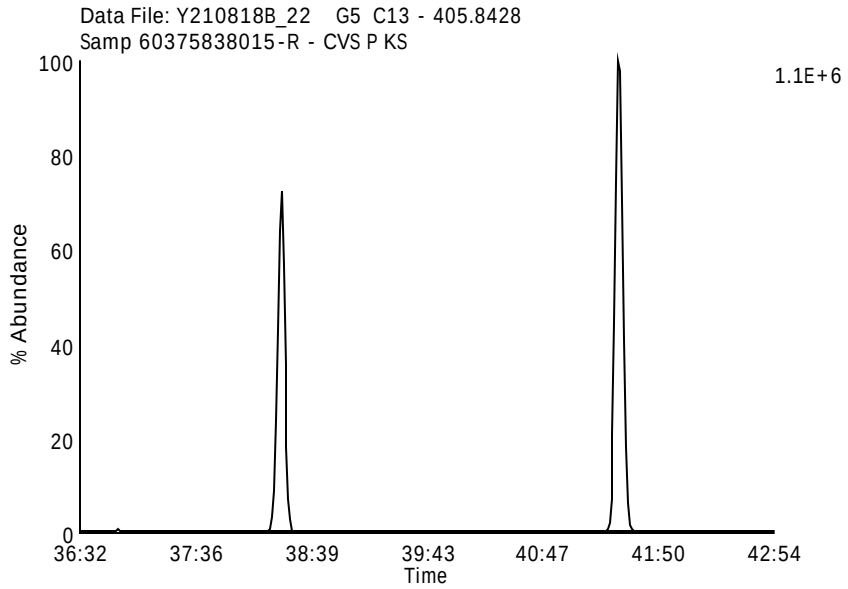


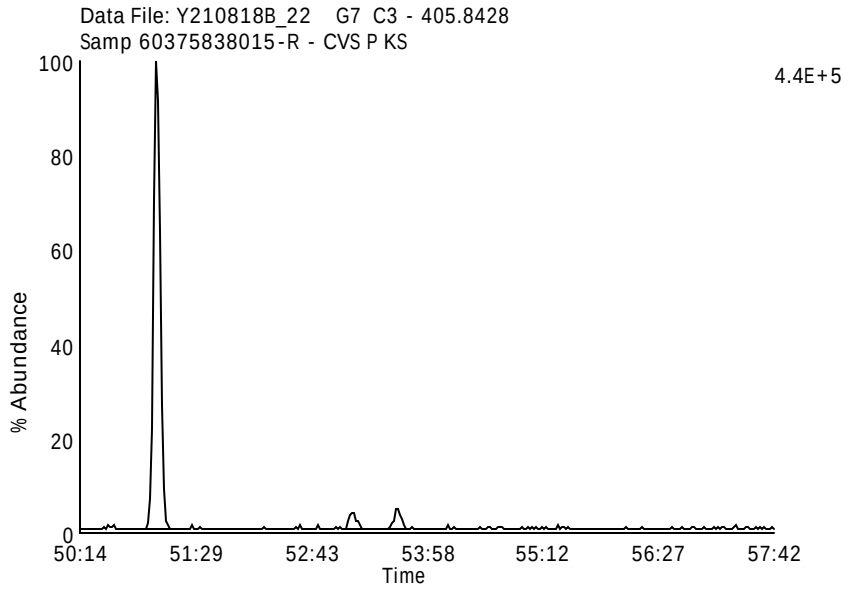


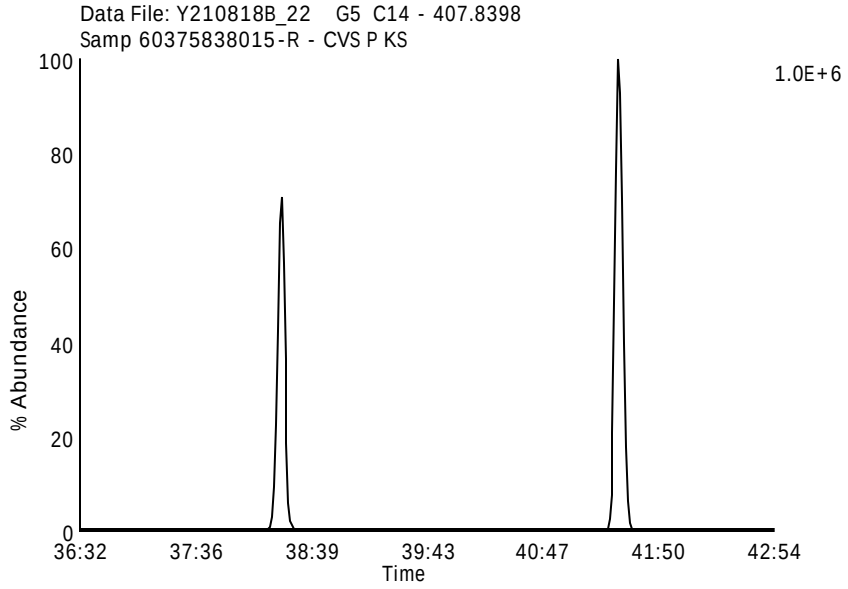


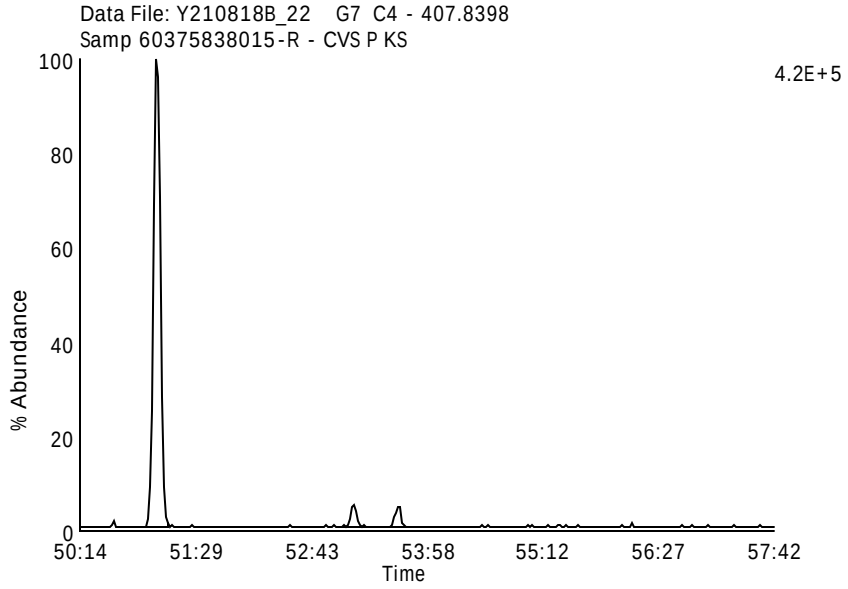
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



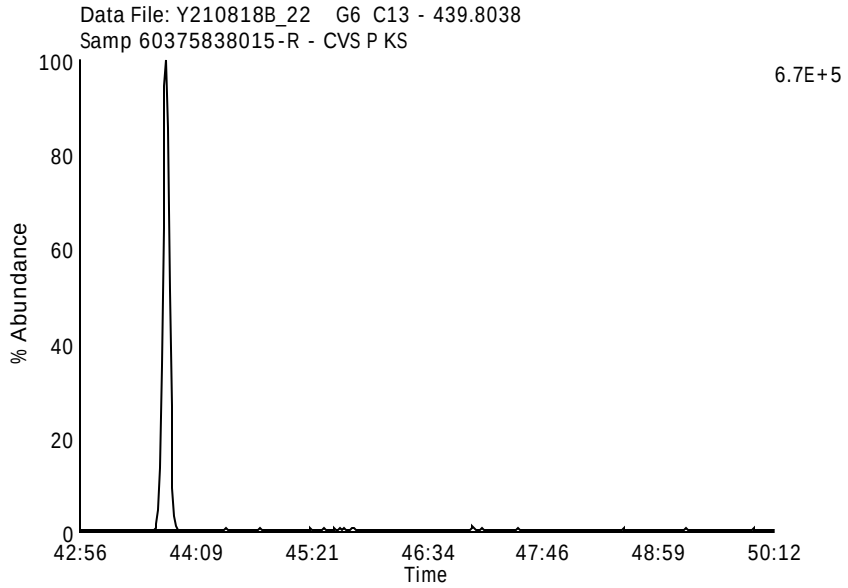


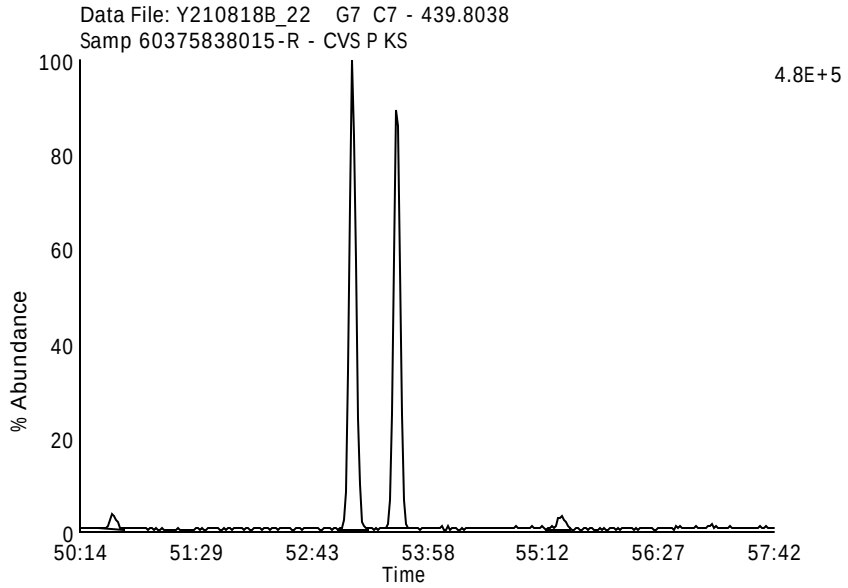


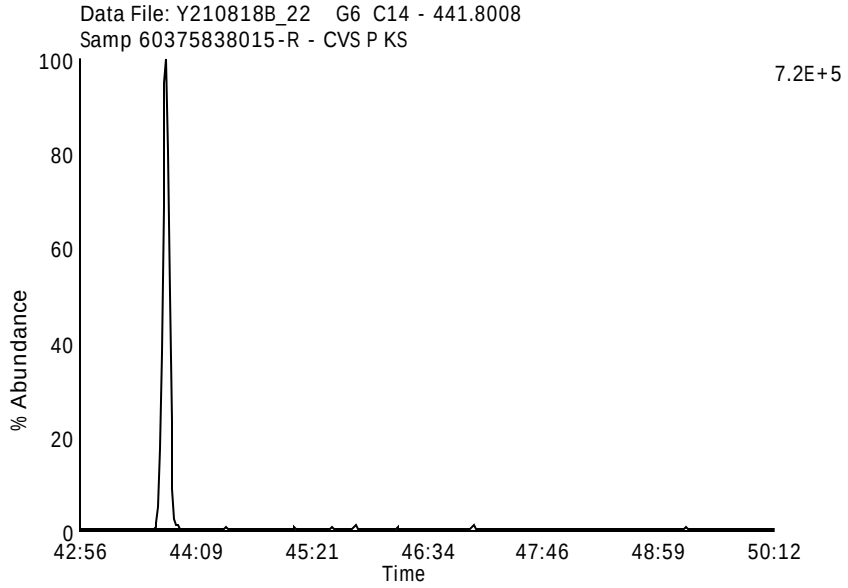


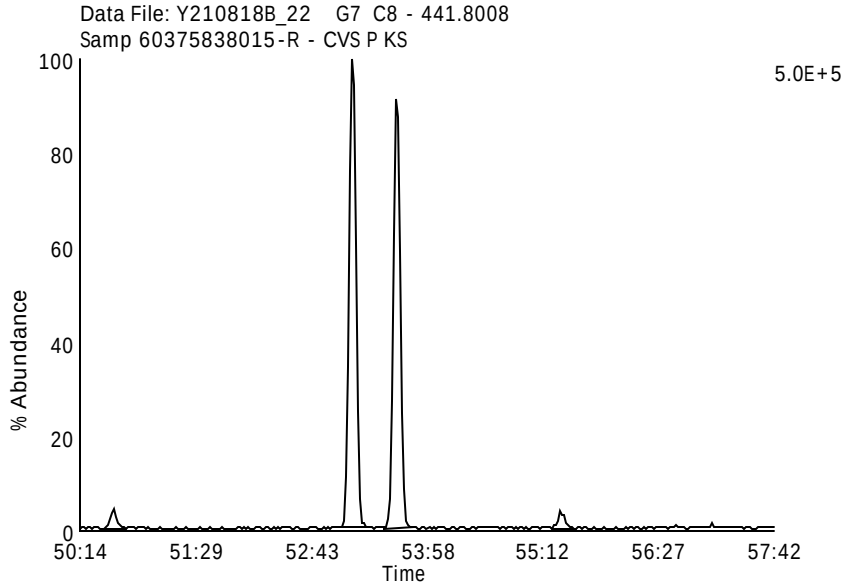
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



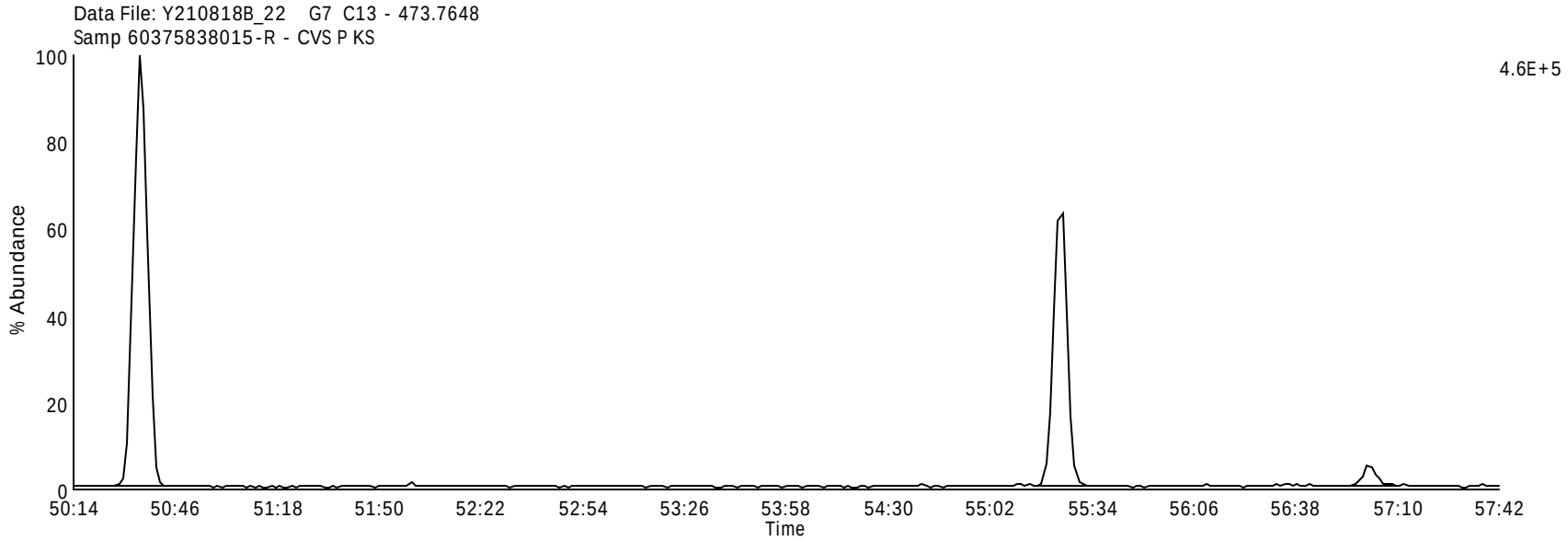


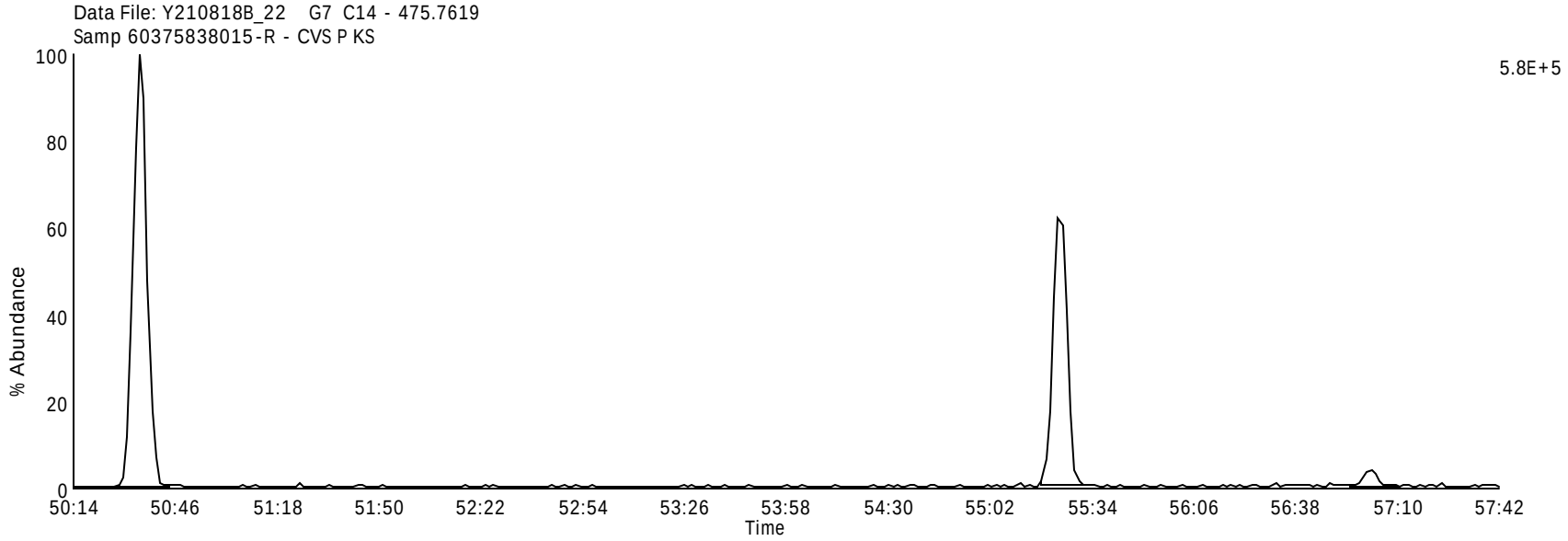




Labeled Nona Chlorinated Biphenyls

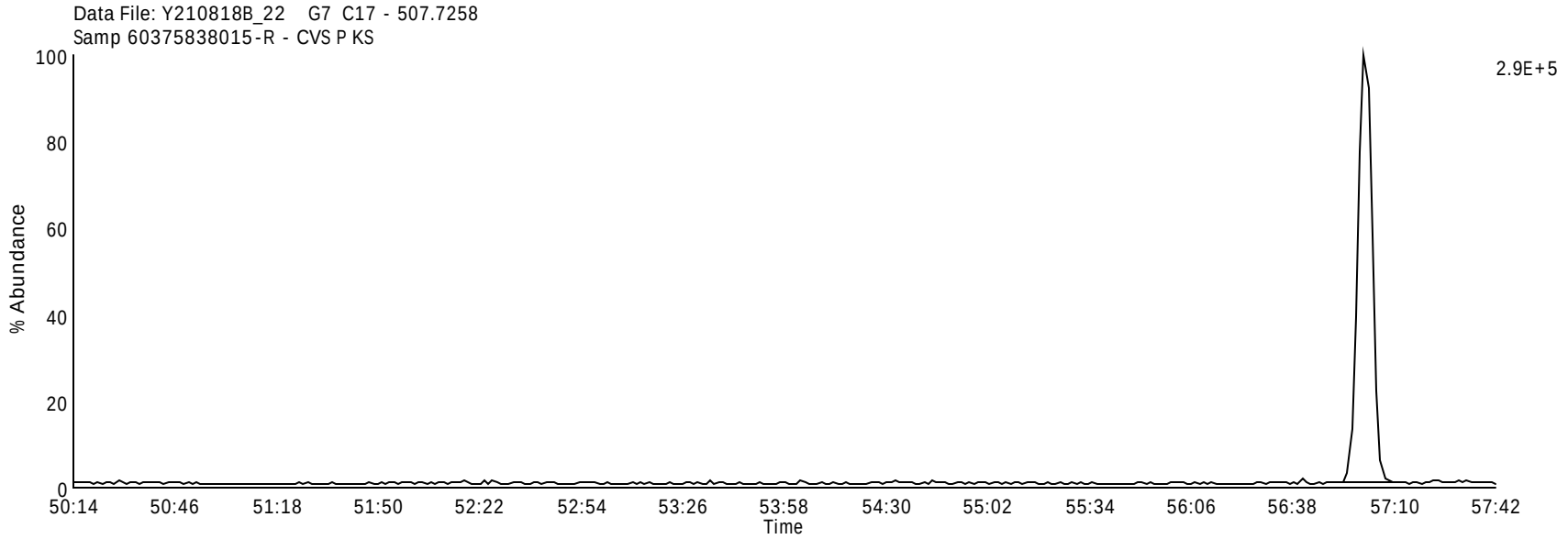
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

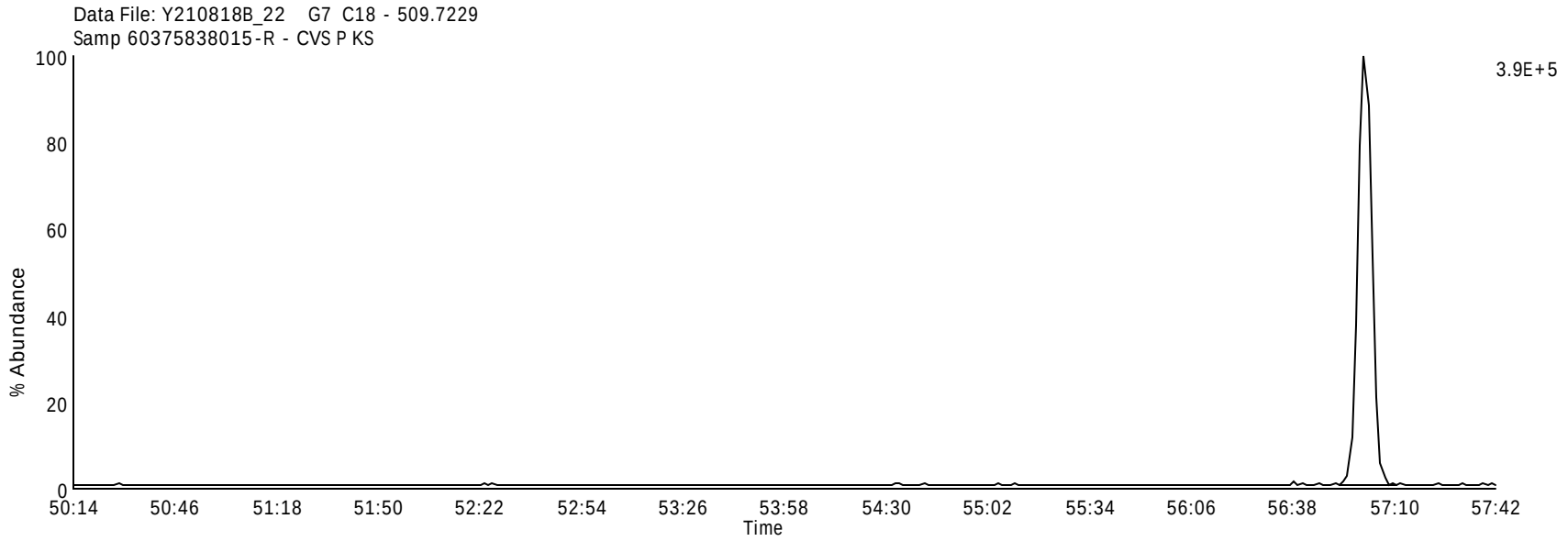




Labeled Deca Chlorinated Biphenyl

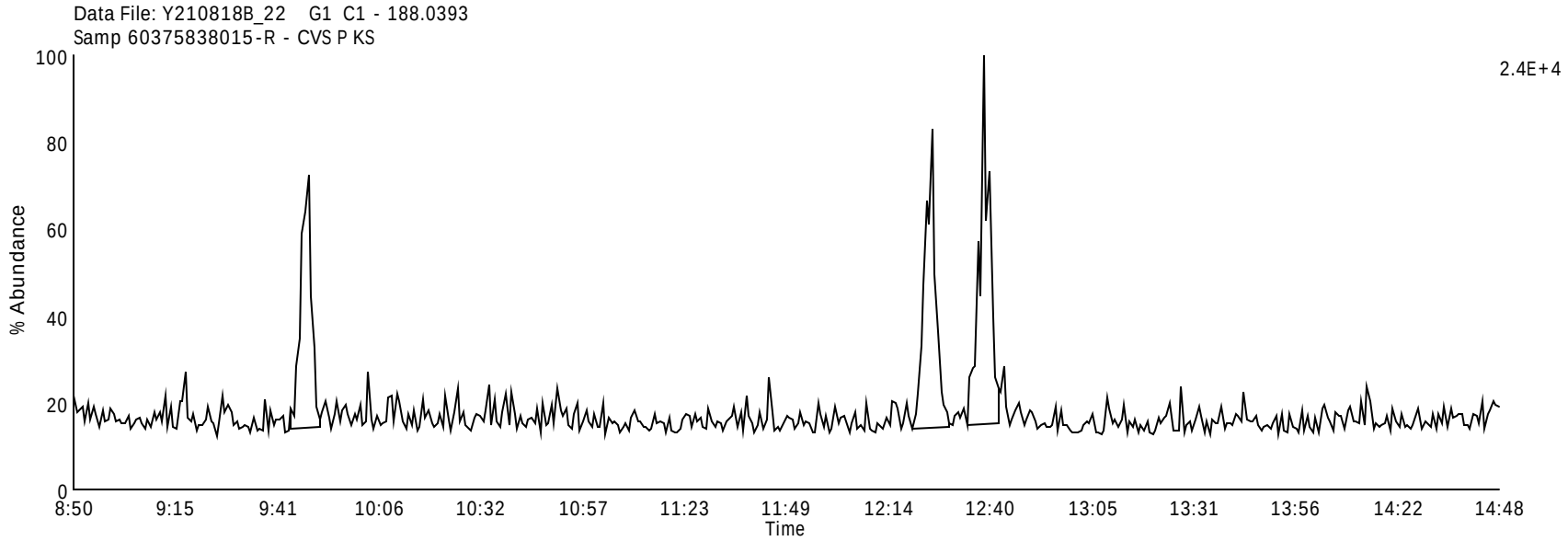
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

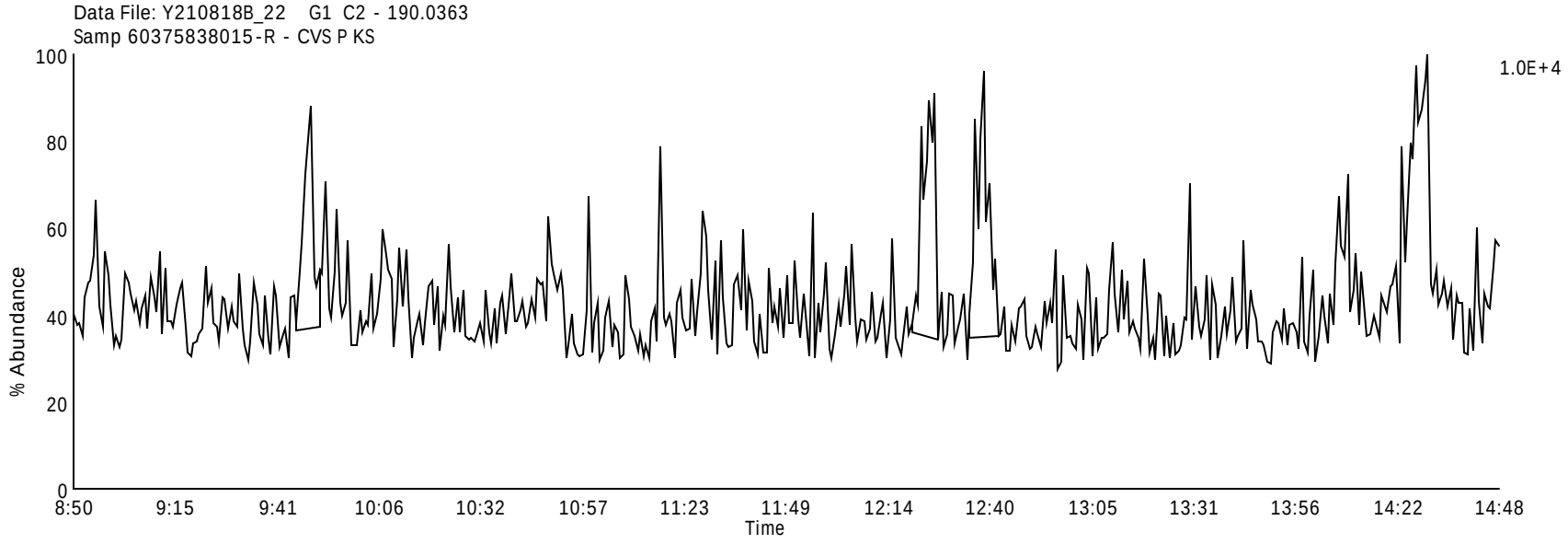




Mono Chlorinated Biphenyls

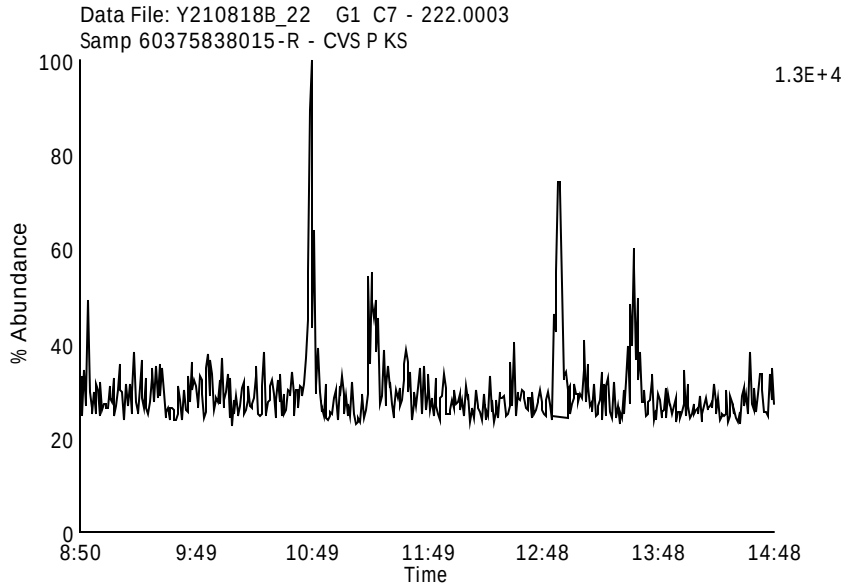
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

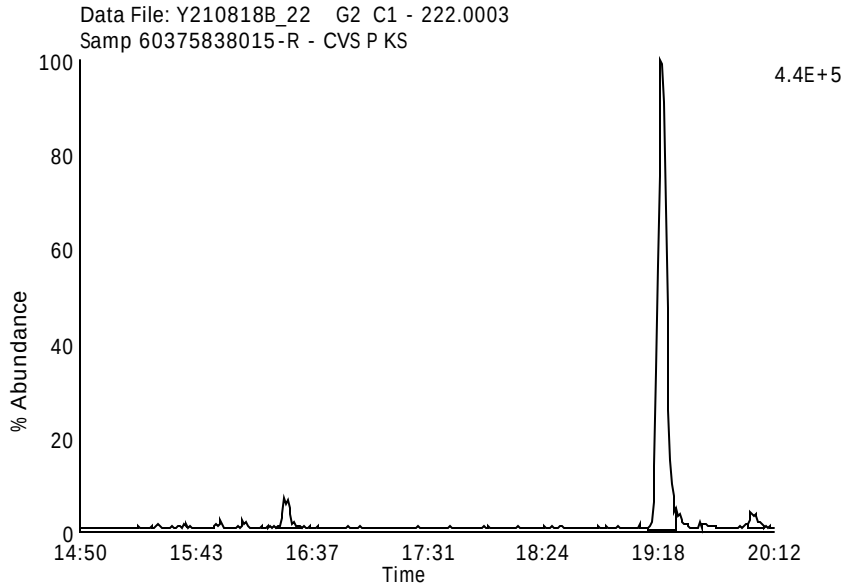


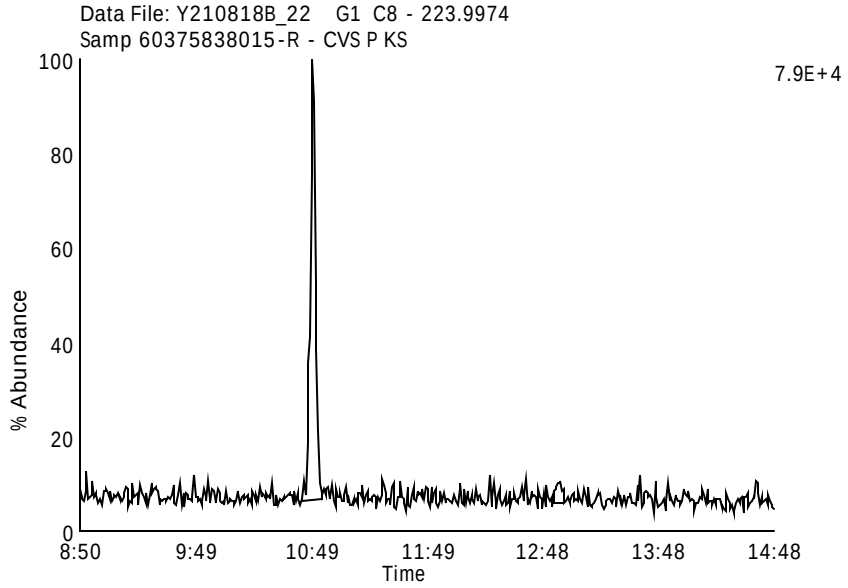


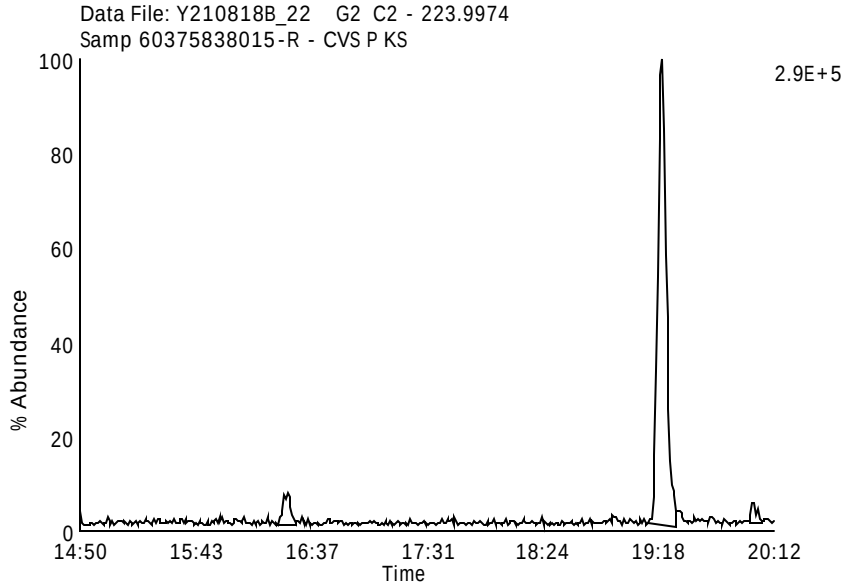
Di Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



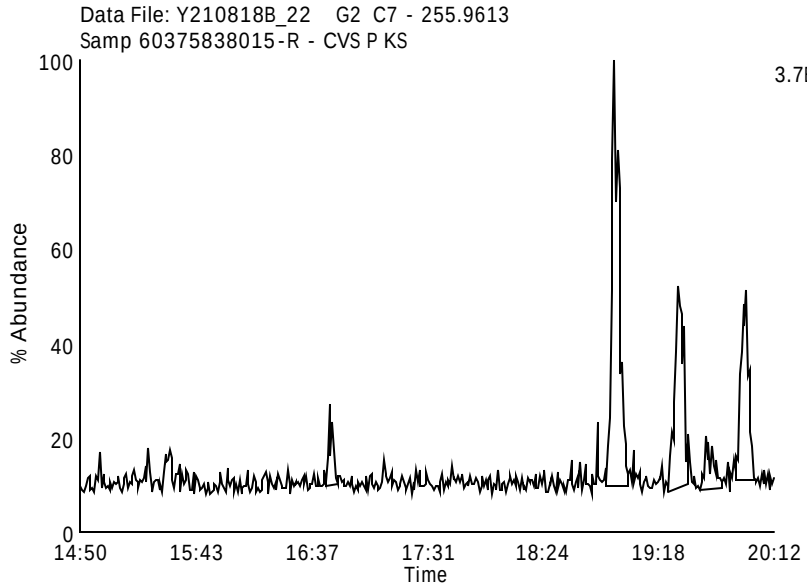


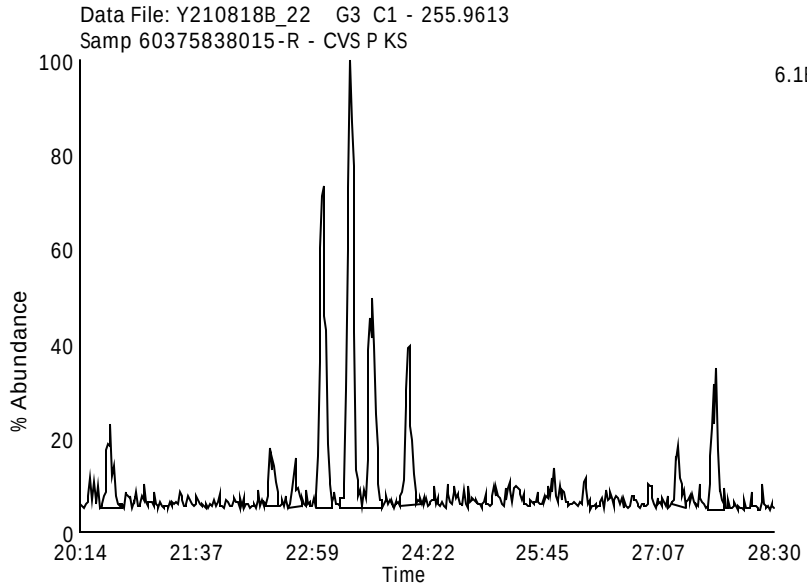


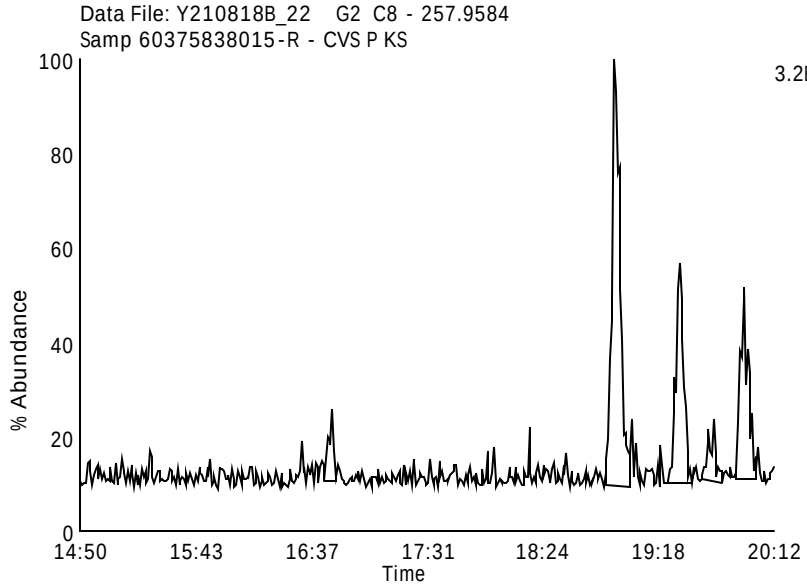


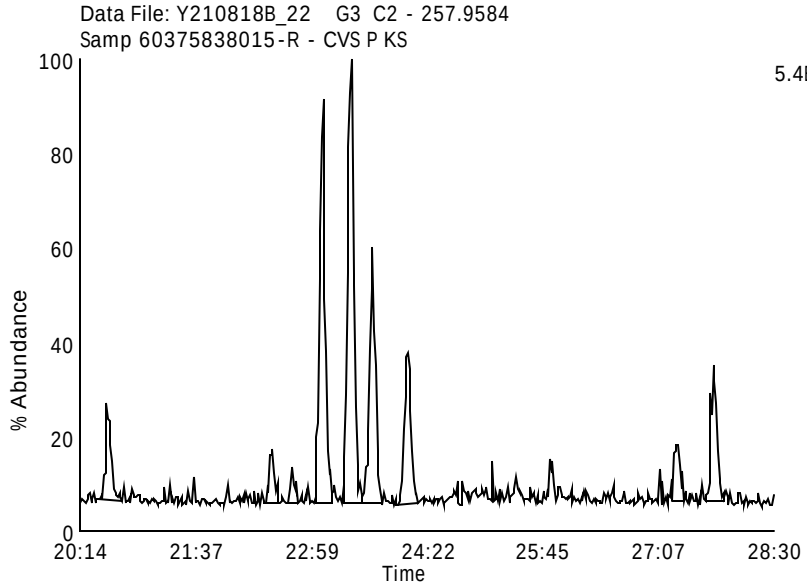
Tri Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5







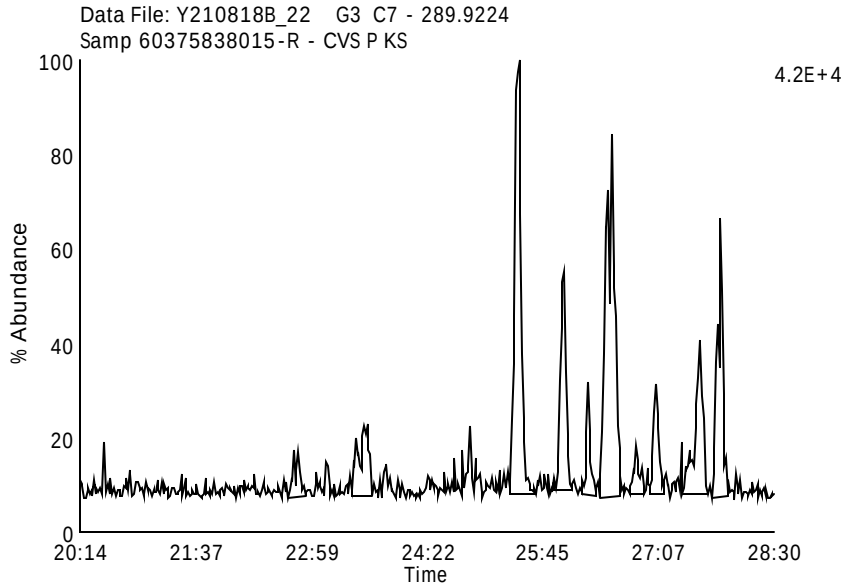


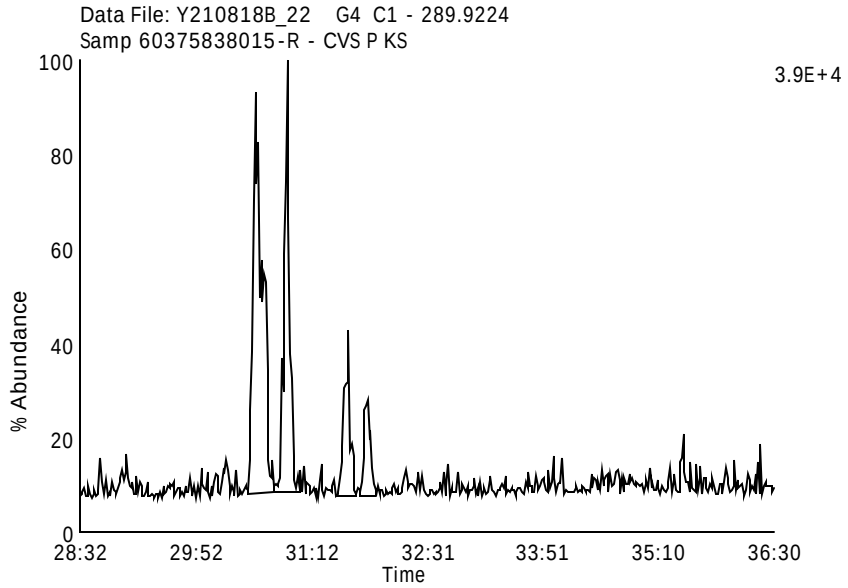
Tetra Chlorinated Biphenyls

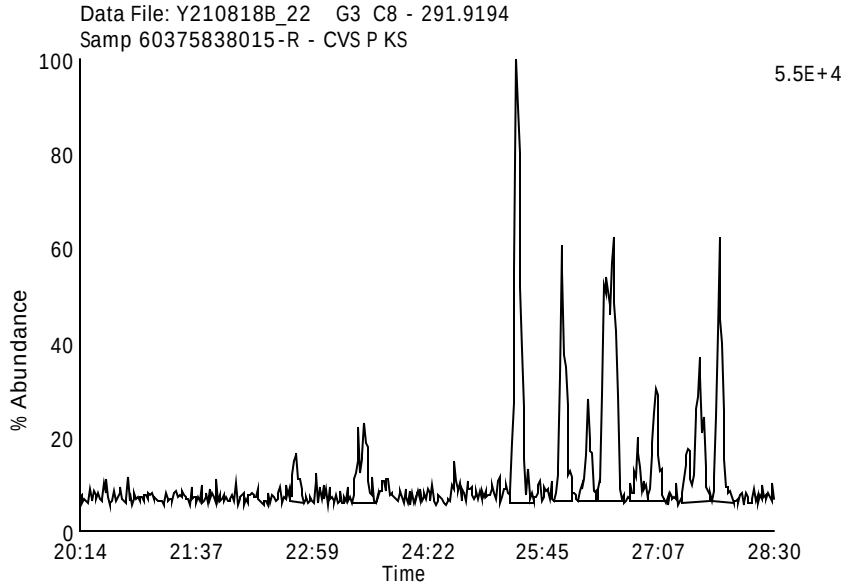
Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R

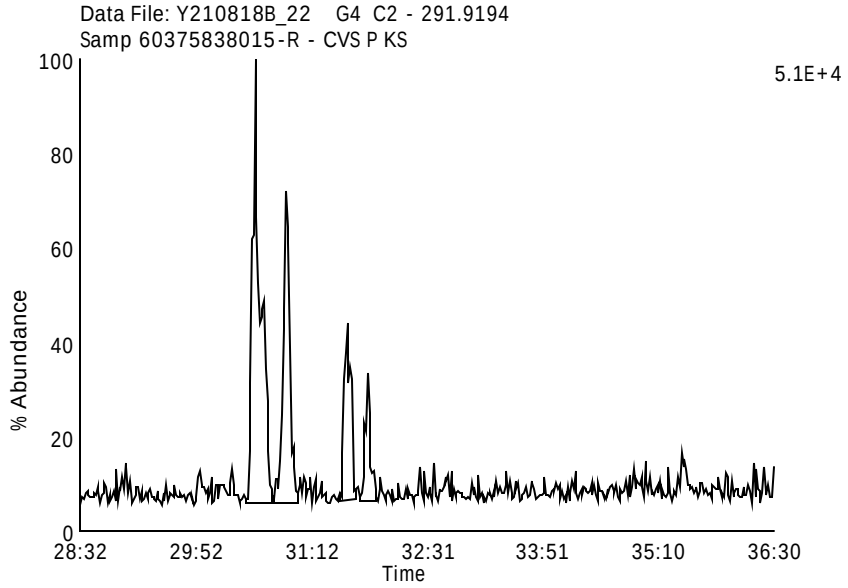
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5



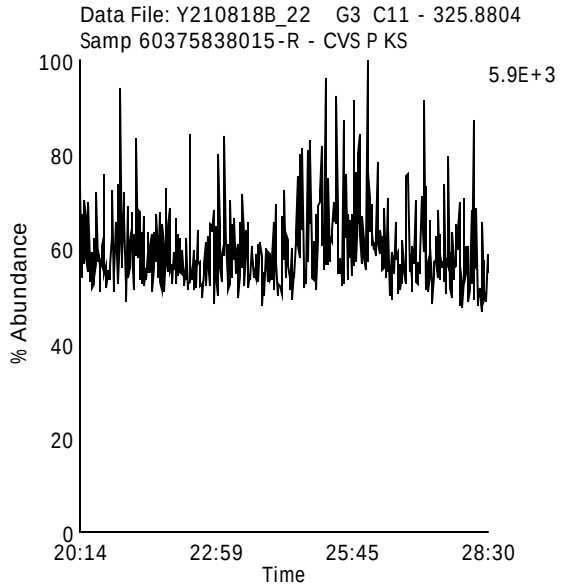


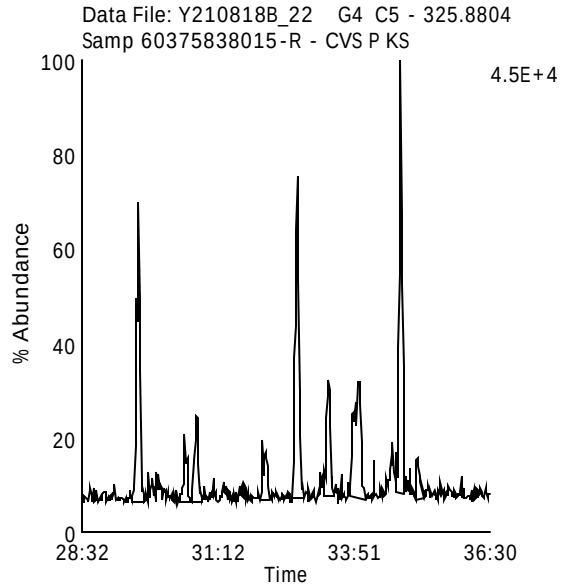


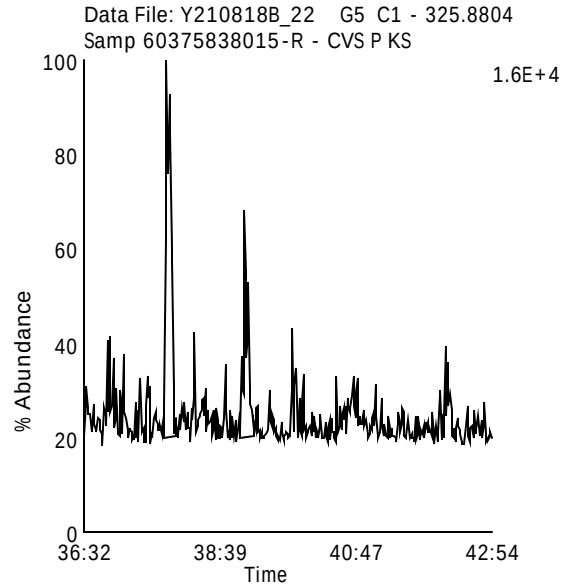


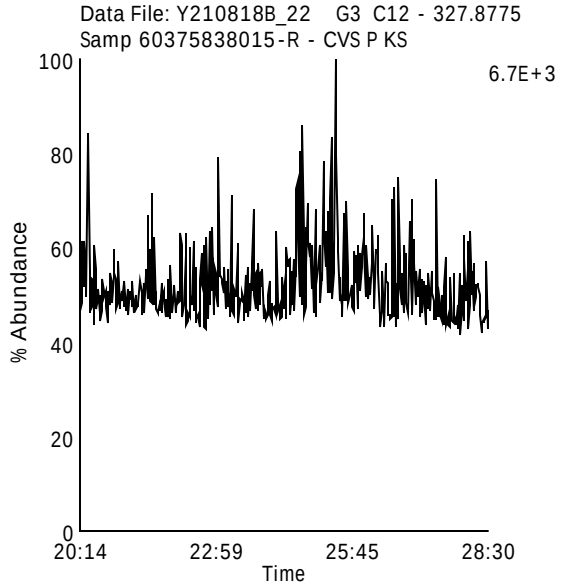
Penta Chlorinated Biphenyls

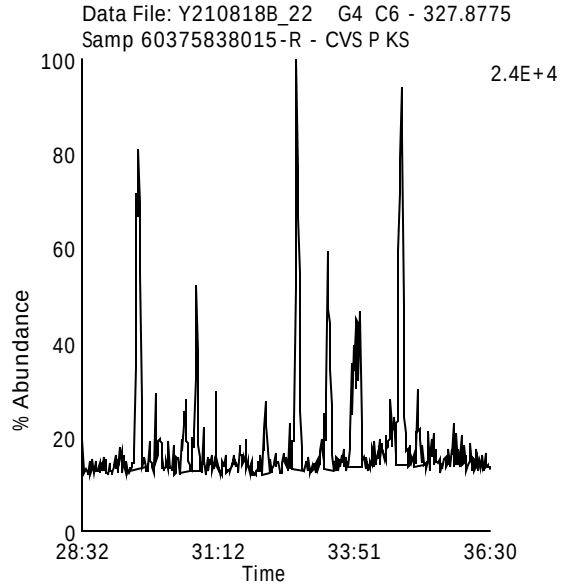
Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5

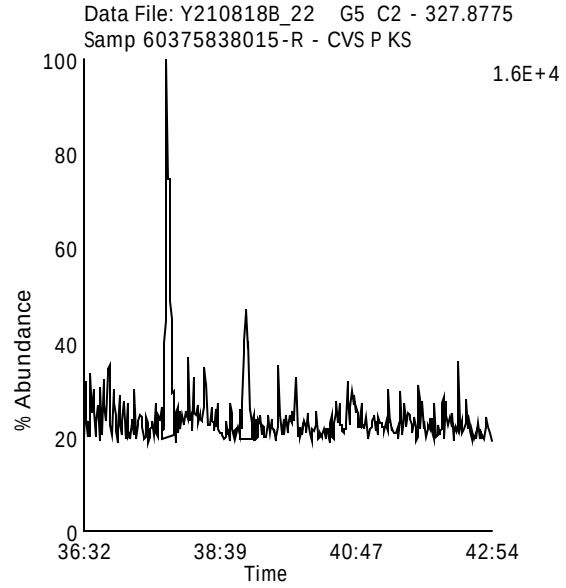






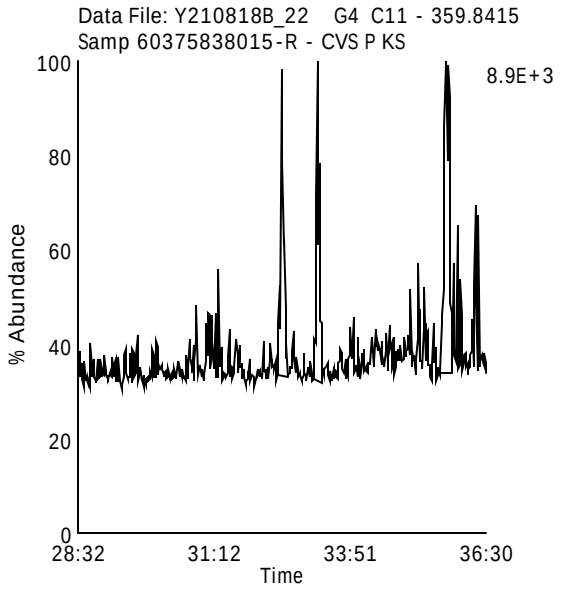


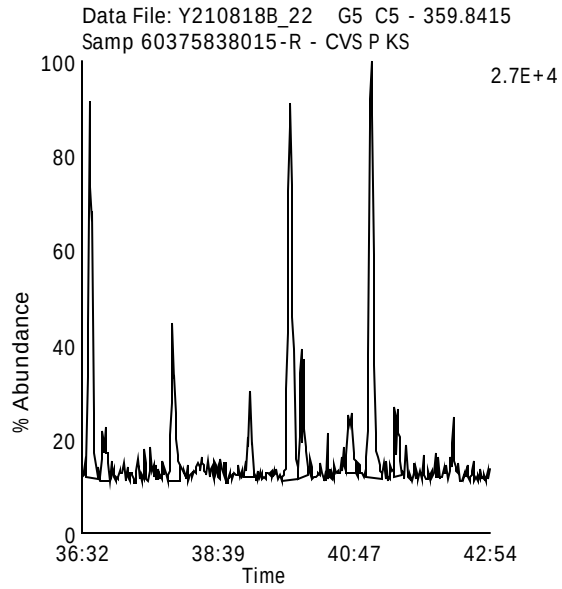


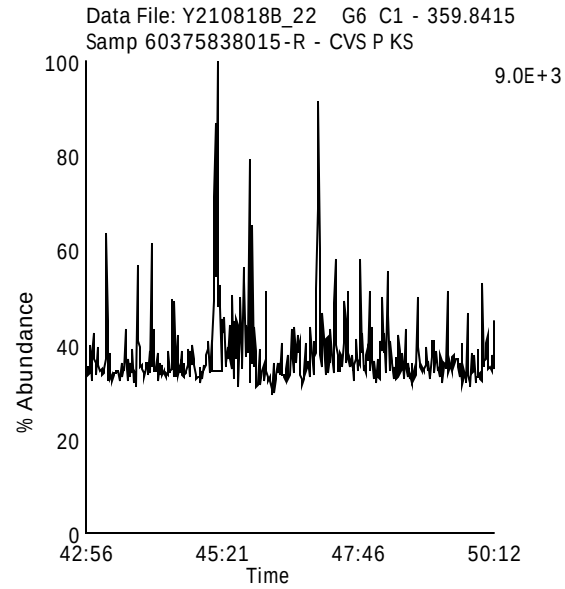


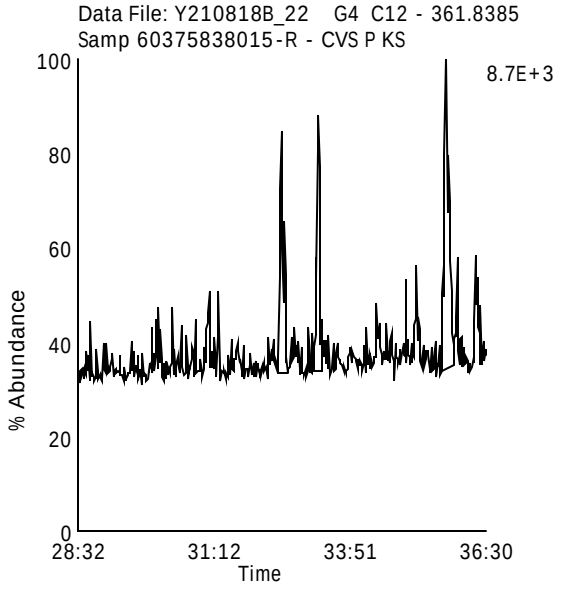
Hexa Chlorinated Biphenyls

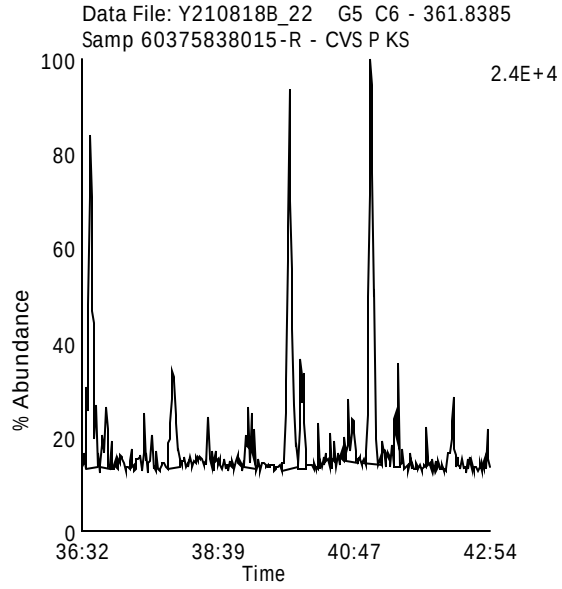
Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5

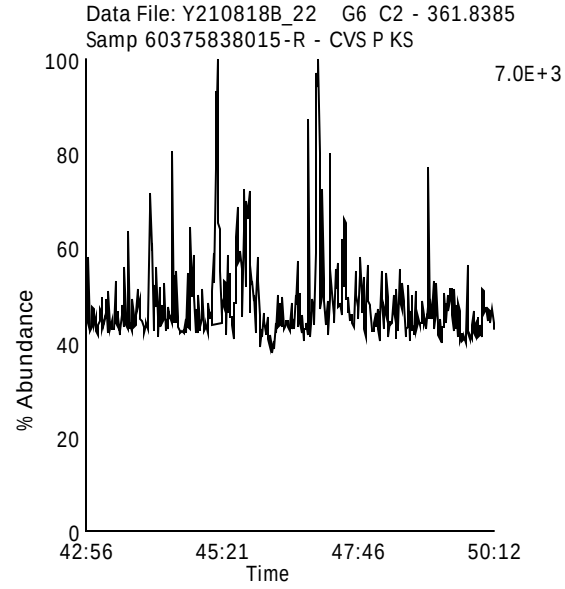










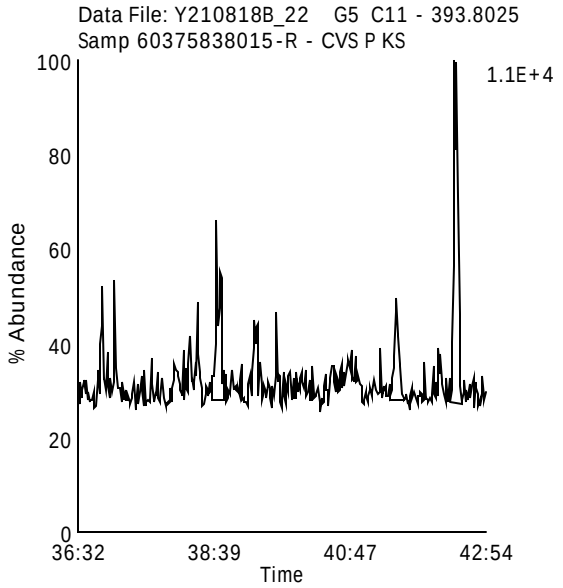


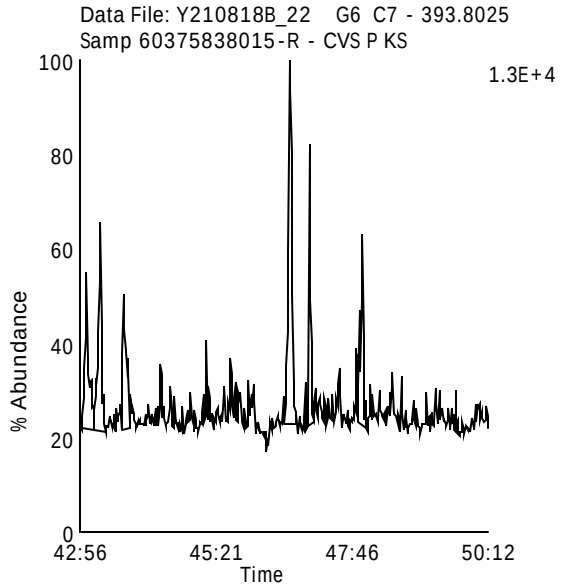
Hepta Chlorinated Biphenyls

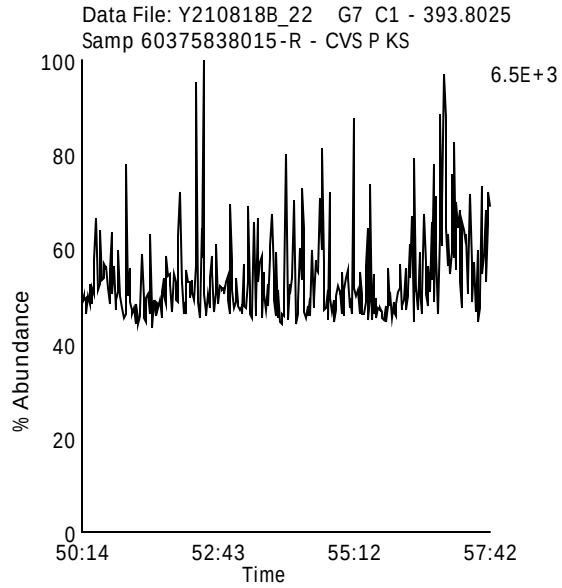
Data File Name: Y210818B_22 | Lab Sample ID: 60375838015-R

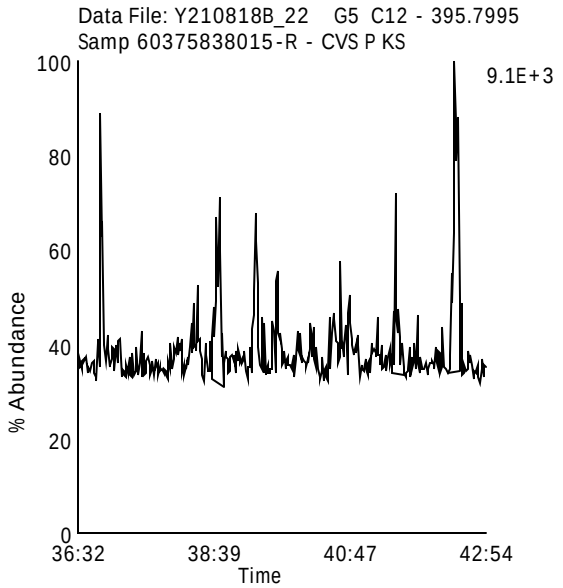
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)

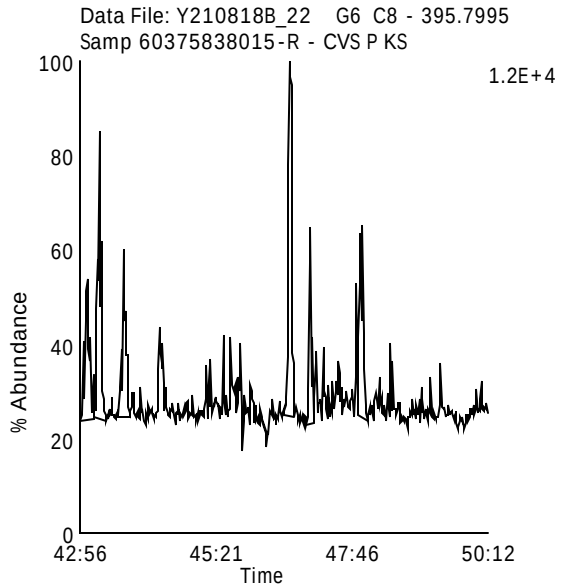
Sample Description: Samp 60375838015-R - CVS P KS | Client Sample ID: GB-06/3-5

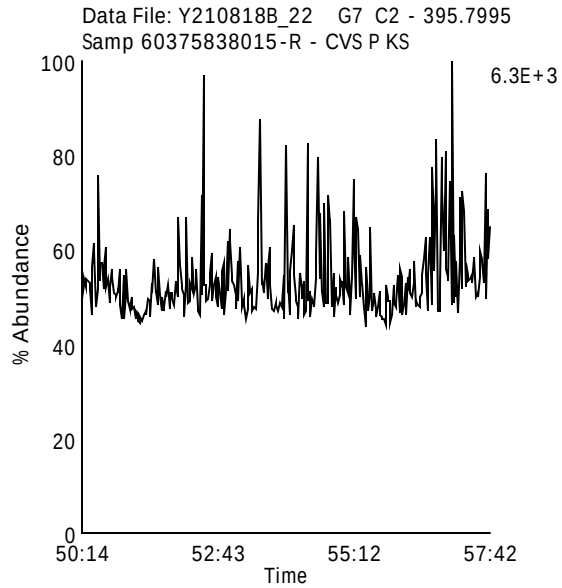






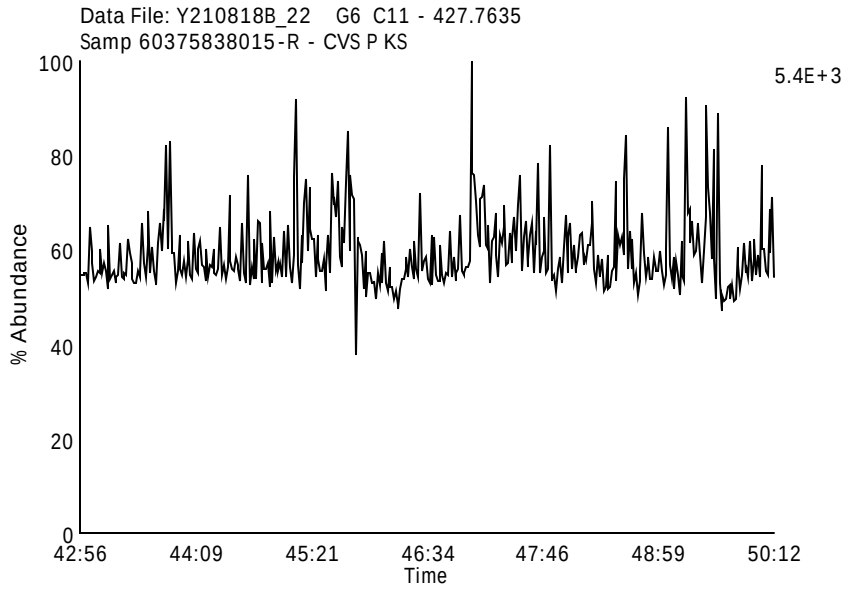


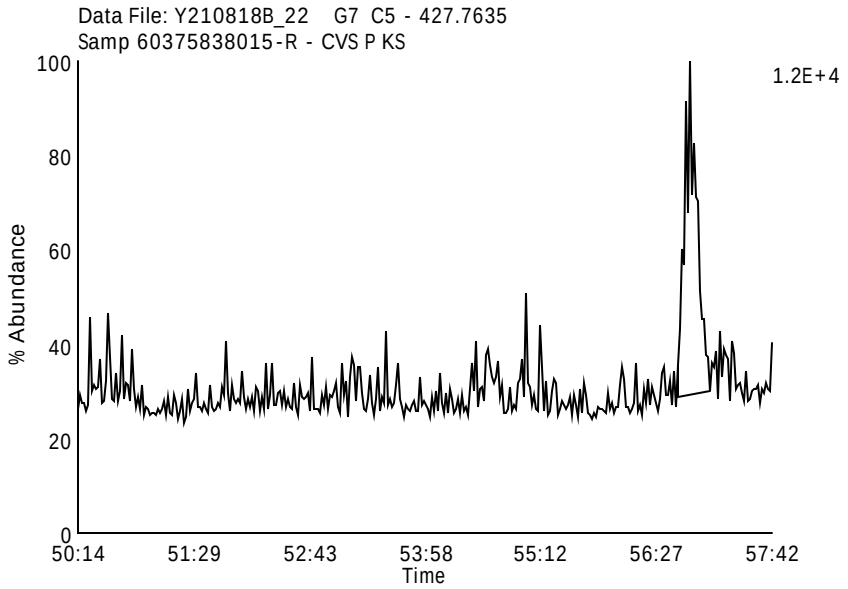


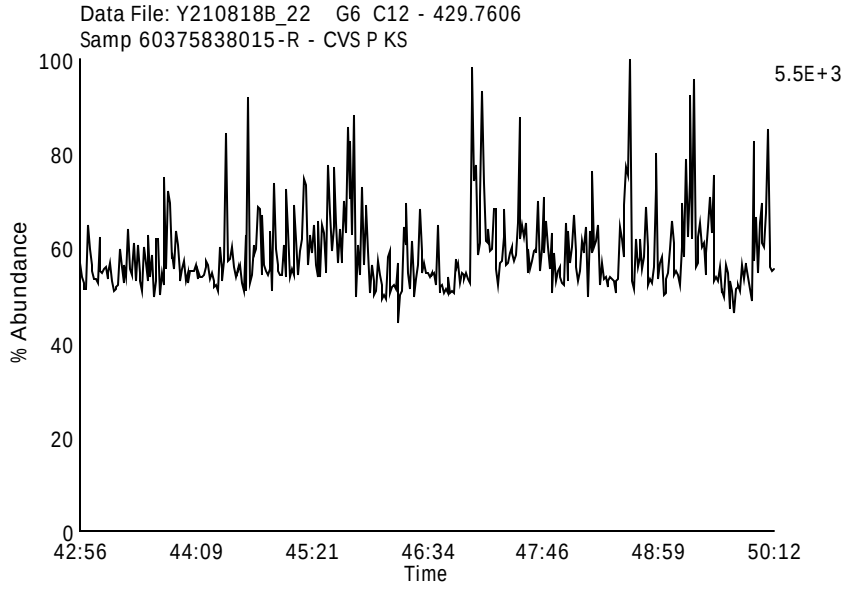


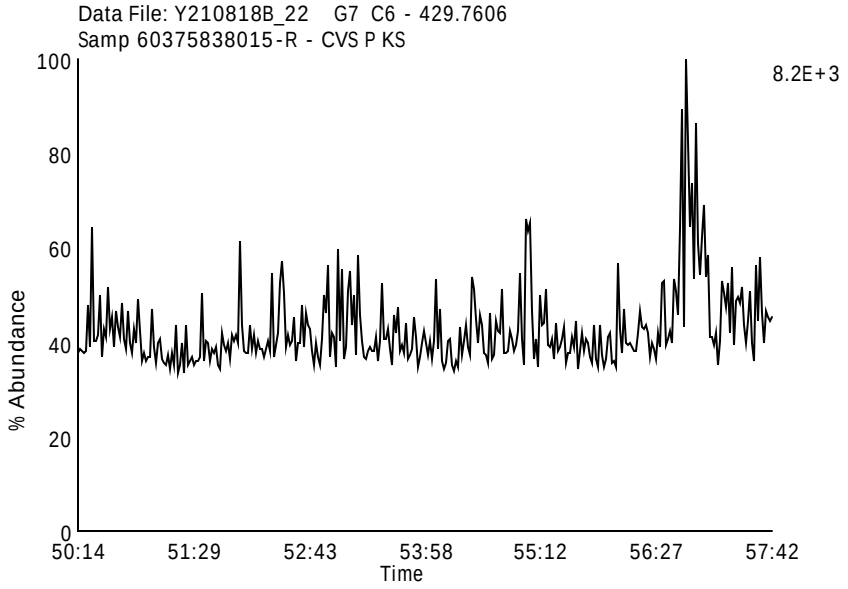
Octa Chlorinated Biphenyls

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



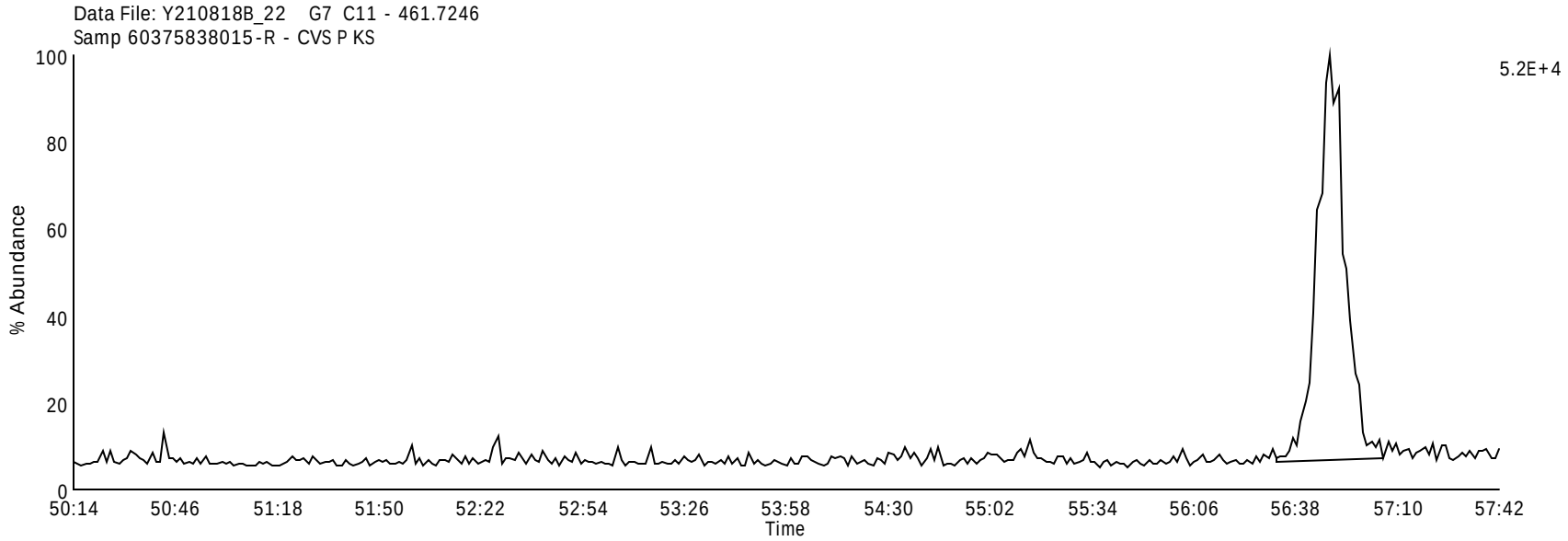


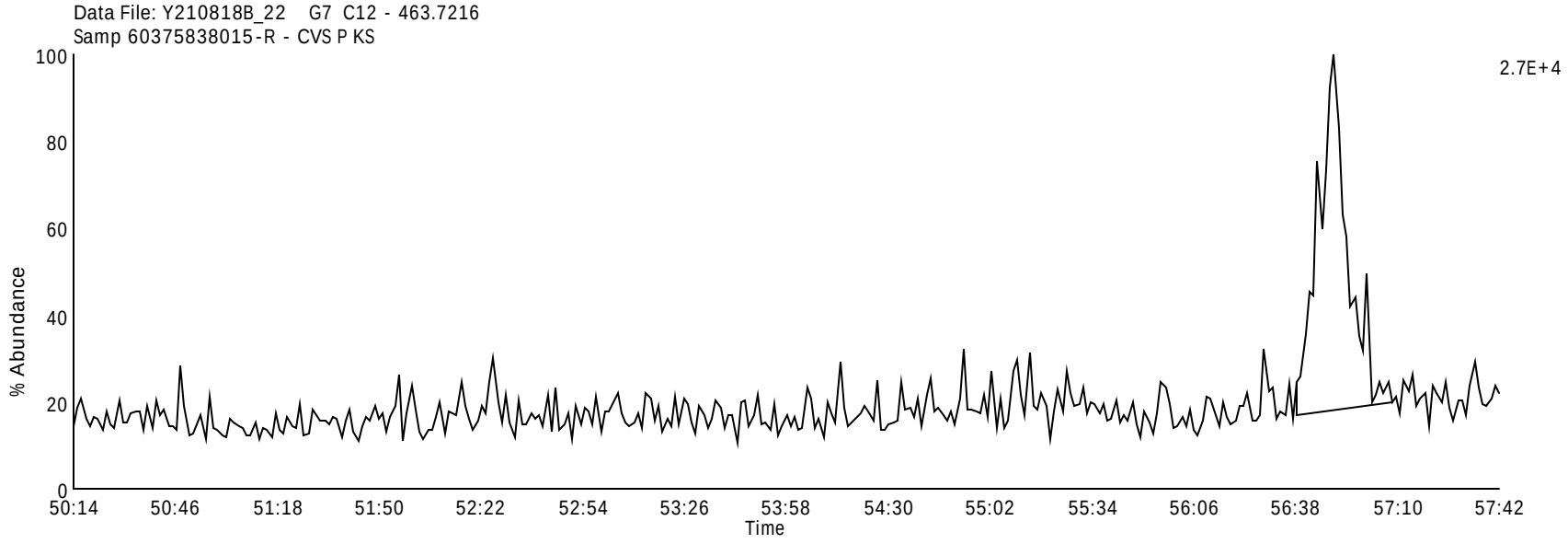




Nona Chlorinated Biphenyls

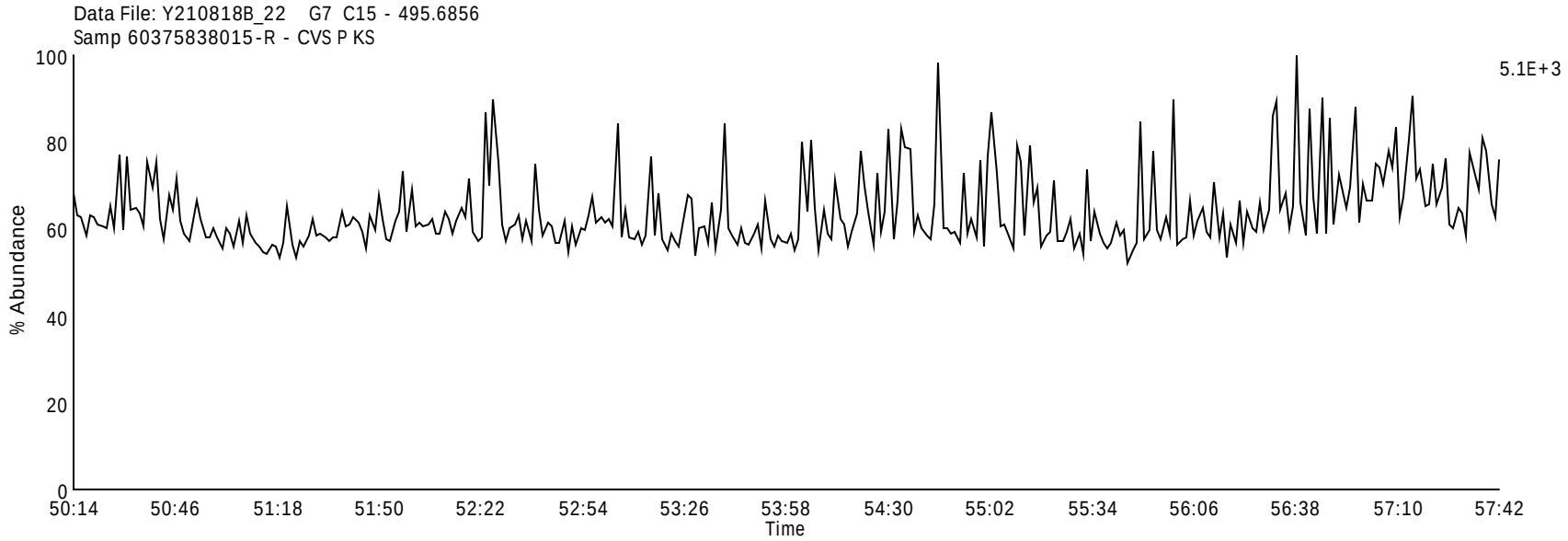
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

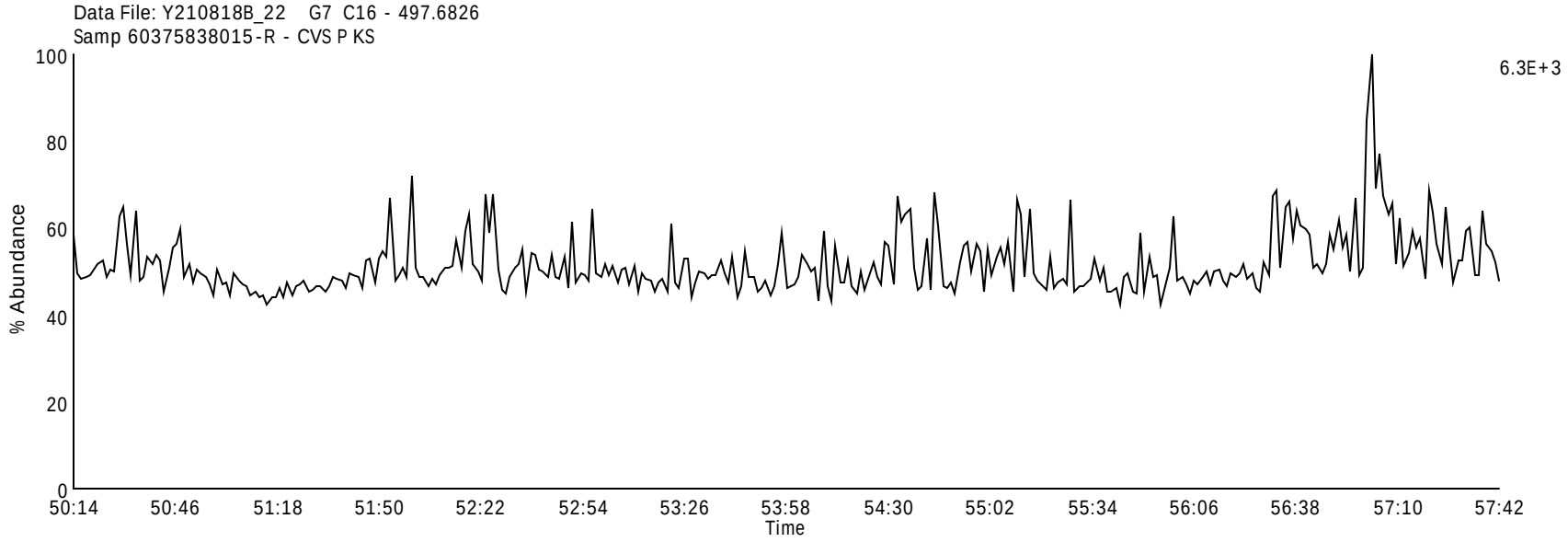




Deca Chlorinated Biphenyl

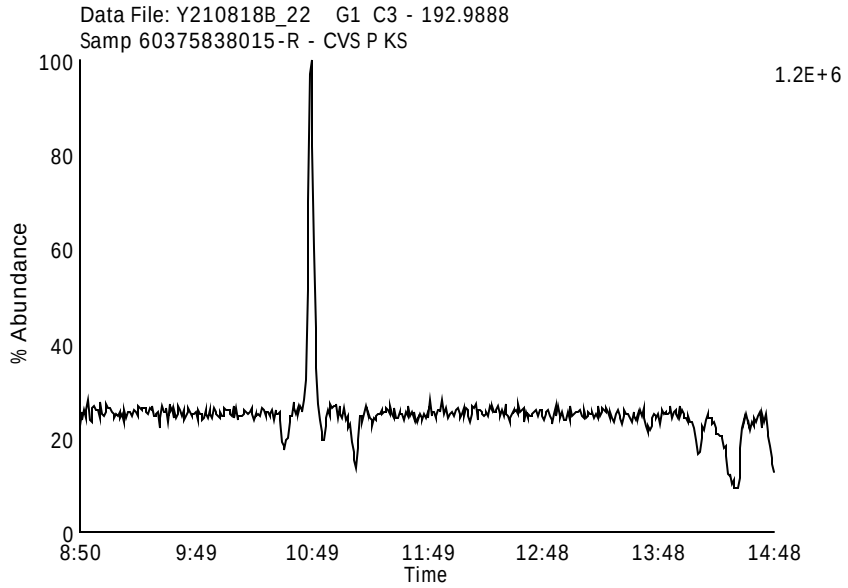
Data File Name: Y210818B_22	Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS	Client Sample ID: GB-06/3-5

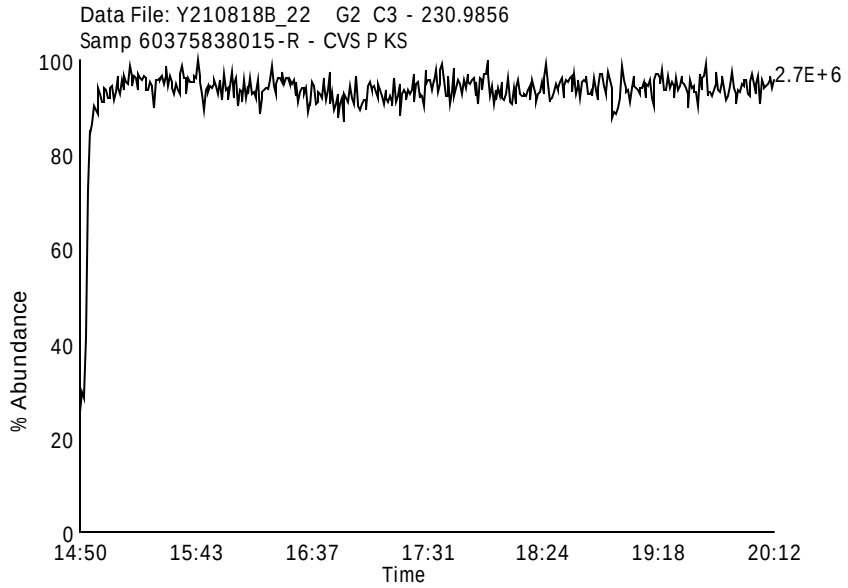


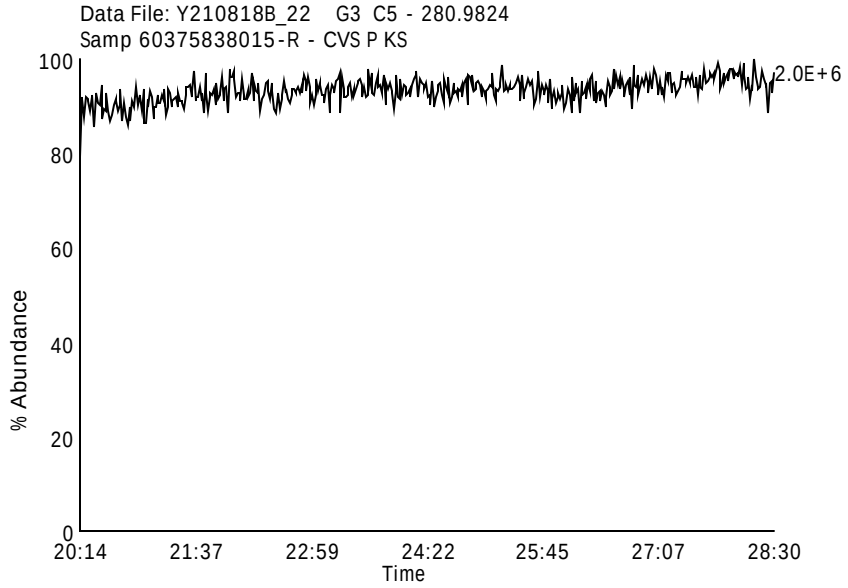


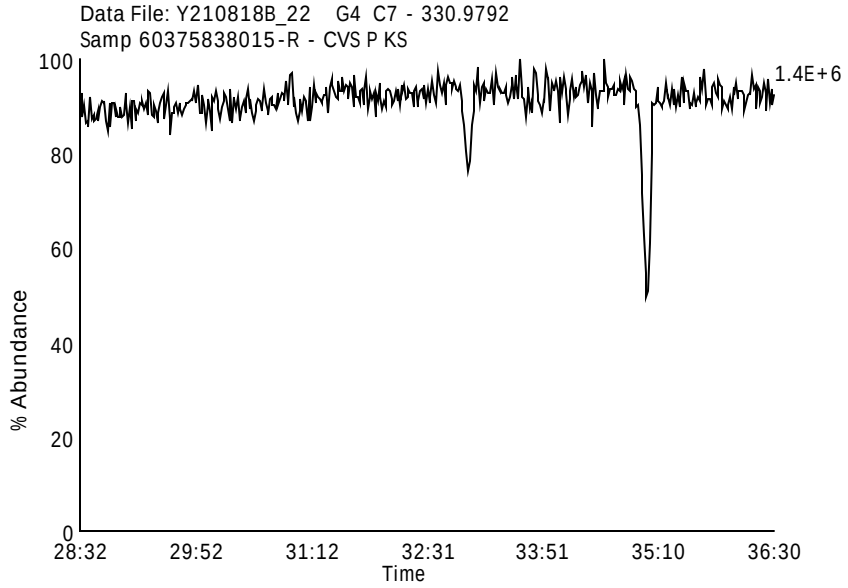
Group 1 - 4 Lock mass

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5



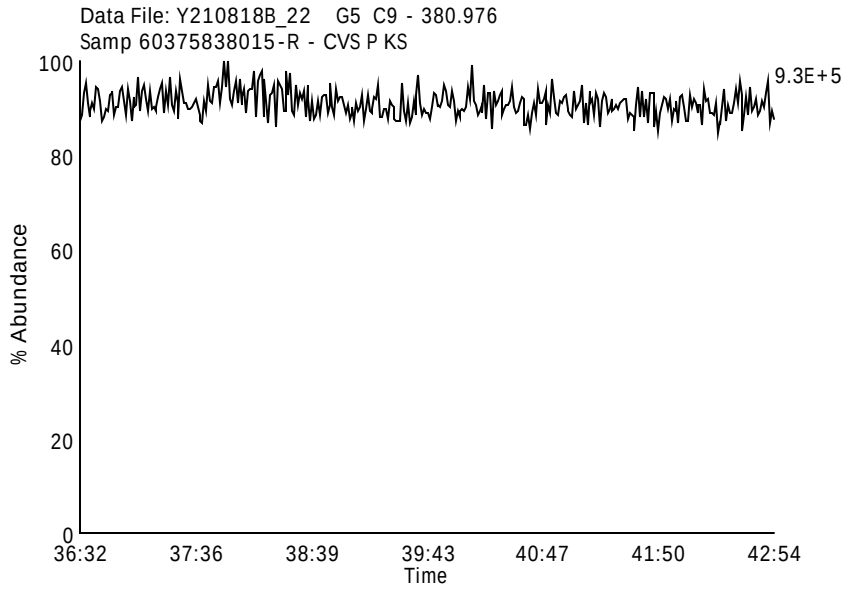


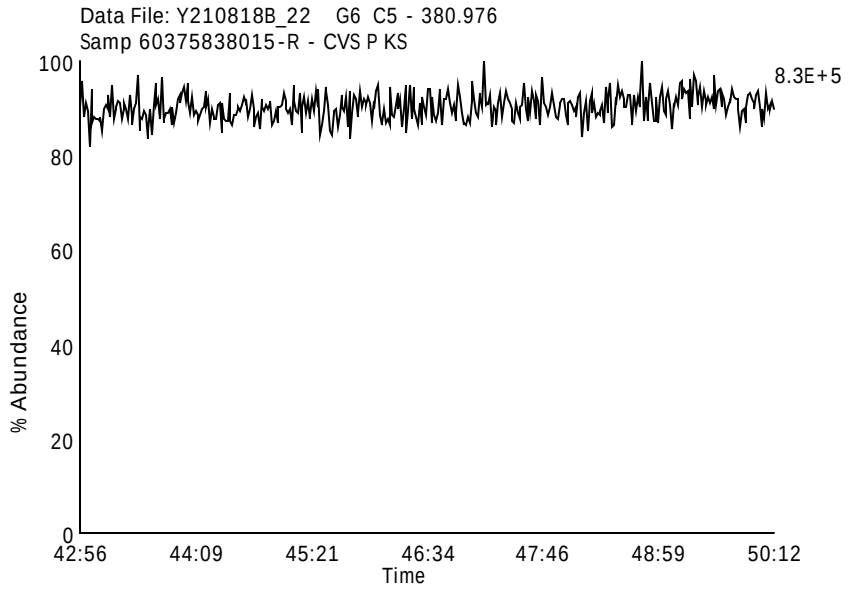


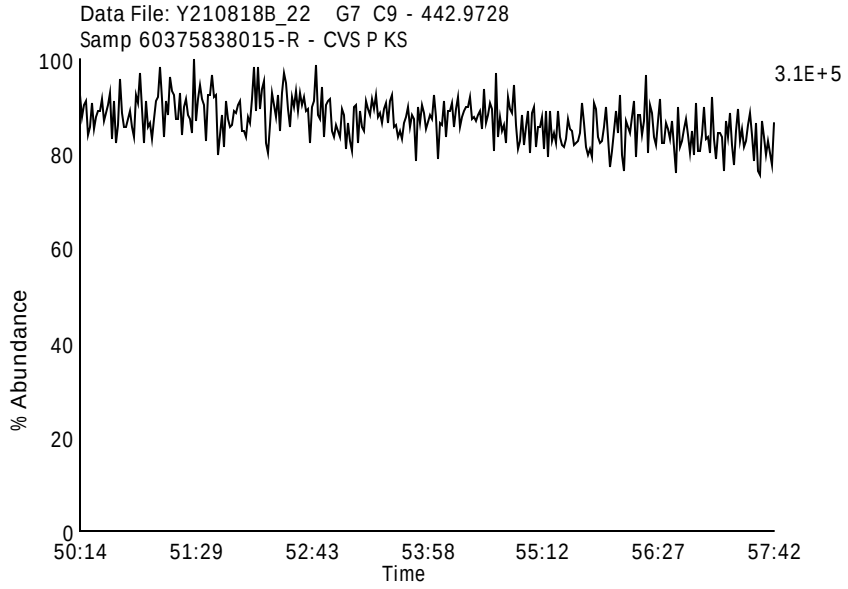


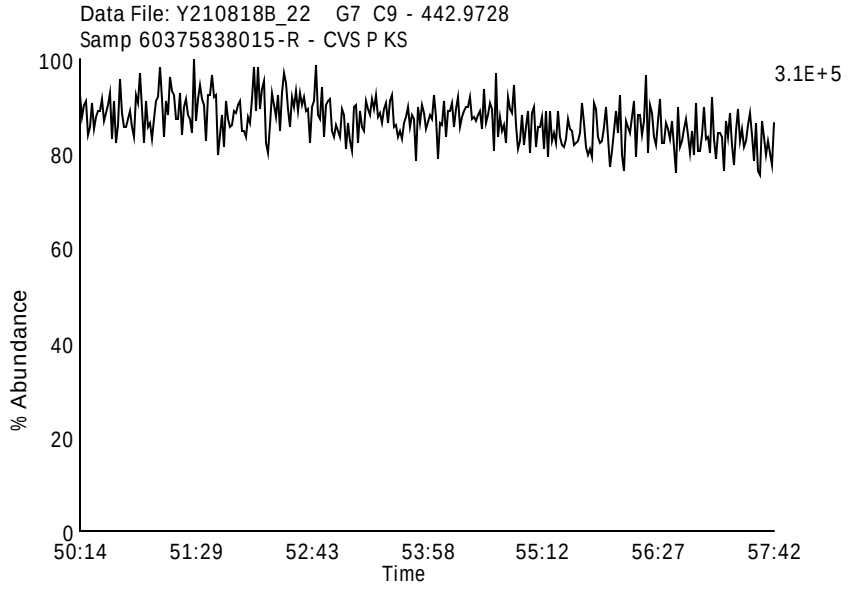
Group 5 - 7 Lock mass

Data File Name: Y210818B_22
Lab Sample ID: 60375838015-R
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375838015-R - CVS P KS
Client Sample ID: GB-06/3-5









Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-28/1.5-2.5	Injected By	CVS
Lab ID	60375838006-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_21	GC Column ID	261111-02
Analyzed	08/19/2021 07:43	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.883	0.76	2928482	3876808	
13C-3,3',4,4'-TeCB	77	35.453	0.78	3134163	4036814	
13C-2,3,3',4,4'-PeCB	105	39.046	1.61	3502953	2181224	
13C-2,3,4,4',5-PeCB	114	38.409	1.51	3537536	2342149	
13C-2,3',4,4',5-PeCB	118	37.856	1.53	3625282	2370335	
13C-2,3',4,4',5'-PeCB	123	37.521	1.59	3505114	2201411	
13C-3,3',4,4',5-PeCB	126	42.199	1.53	3098053	2021162	
13C-HxCB(156/157)	156/157	45.255	1.26	5521610	4387311	
13C-2,3',4,4',5,5'-HxCB	167	44.098	1.19	2906672	2434413	
13C-3,3',4,4',5,5'-HxCB	169	48.525	1.23	2535400	2065655	
13C-2,3,3',4,4',5,5'-HpCB	189	51.086	1.00	2173083	2175617	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.05	9015393	8603753	
13C-2,3,3',5,5'-PeCB	111	35.520	1.56	9101357	5850811	
13C-2,2',3,3',5,5',6-HpCB	178	41.494	1.08	5846310	5412232	
Recovery Standards						
13C-2,5-DiCB	9	15.458	1.53	7606496	4977268	
13C-2,2',5,5'-TeCB	52	25.438	0.79	4137408	5235798	
13C-2,2',4,5,5'-PeCB	101	32.720	1.57	4925852	3133801	
13C-2,2',3,4,4',5'-HxCB	138	41.042	1.25	4221418	3375461	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.176	0.88	2211176	2510688	

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-28/1.5-2.5	Injected By	CVS
Lab ID	60375838006-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_21	GC Column ID	261111-02
Analyzed	08/19/2021 07:43	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.486	0.73	38687	52888	
105		39.063	1.41	64457	45629	
118		37.906	1.35	115665	85497	
156	156/157	45.289	1.52	24404	16029	
157	156/157	45.289	1.52	(24404)	(16029)	

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Minneapolis, MN 55414

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Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-06/3-5	Injected By	CVS
Lab ID	60375838015-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_22	GC Column ID	261111-02
Analyzed	08/19/2021 08:42	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.866	0.75	2691790	3580499	
13C-3,3',4,4'-TeCB	77	35.453	0.80	2975364	3711106	
13C-2,3,3',4,4'-PeCB	105	39.046	1.54	3244120	2103564	
13C-2,3,4,4',5-PeCB	114	38.393	1.53	3309469	2164883	
13C-2,3',4,4',5-PeCB	118	37.839	1.55	3482813	2253502	
13C-2,3',4,4',5'-PeCB	123	37.504	1.51	3254221	2157726	
13C-3,3',4,4',5-PeCB	126	42.198	1.55	2994842	1936693	
13C-HxCB(156/157)	156/157	45.255	1.22	5276608	4322680	
13C-2,3',4,4',5,5'-HxCB	167	44.098	1.24	2830518	2274401	
13C-3,3',4,4',5,5'-HxCB	169	48.524	1.25	2569692	2050685	
13C-2,3,3',4,4',5,5'-HpCB	189	51.063	0.99	2194475	2217698	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.01	7939352	7851474	
13C-2,3,3',5,5'-PeCB	111	35.503	1.59	8802803	5522262	
13C-2,2',3,3',5,5',6-HpCB	178	41.477	1.09	5454703	4991740	
Recovery Standards						
13C-2,5-DiCB	9	15.422	1.52	8049058	5309163	
13C-2,2',5,5'-TeCB	52	25.438	0.80	4185790	5257096	
13C-2,2',4,5,5'-PeCB	101	32.720	1.59	5019260	3149011	
13C-2,2',3,4,4',5'-HxCB	138	41.025	1.27	4513686	3560684	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.175	0.90	2391223	2671266	

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Tel: 612-607-1700
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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-06/3-5	Injected By	CVS
Lab ID	60375838015-R	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_22	GC Column ID	261111-02
Analyzed	08/19/2021 08:42	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
105		39.046	1.37	35543	25945	
118		37.839	1.36	67854	50076	
156	156/157	45.289	1.39	25072	18077	
157	156/157	45.289	1.39	(25072)	(18077)	

REPORT OF LABORATORY ANALYSIS

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Appendix E

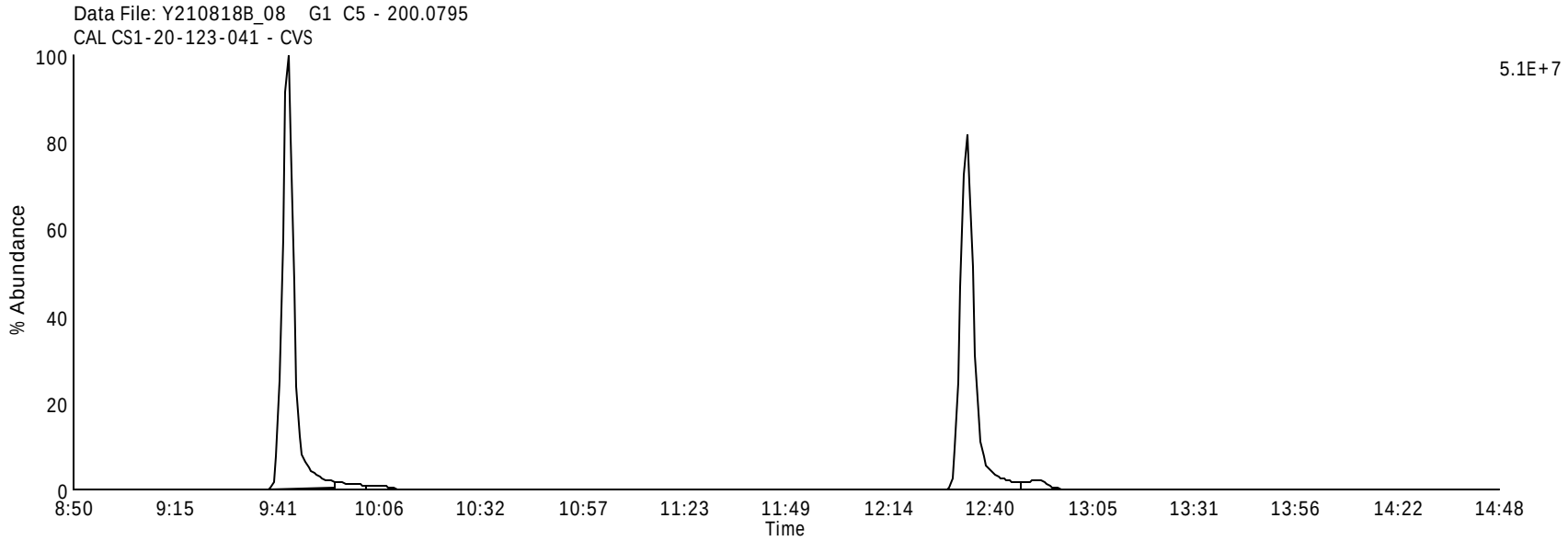
Calibration Raw Data

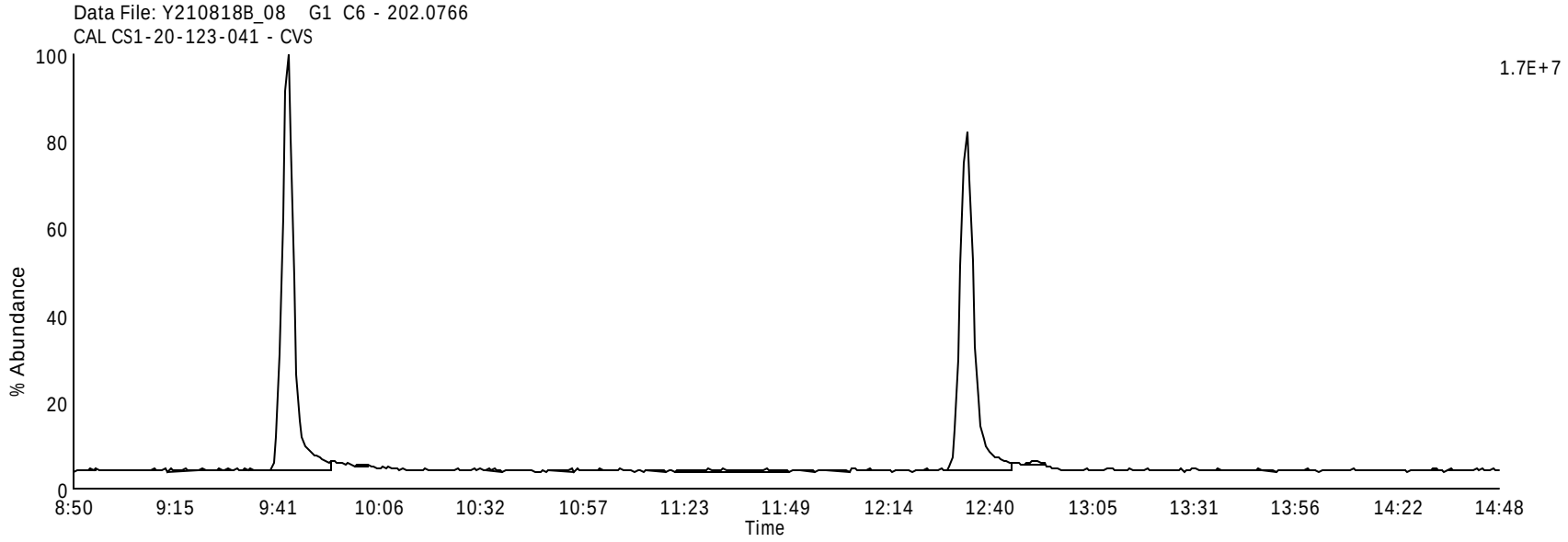
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

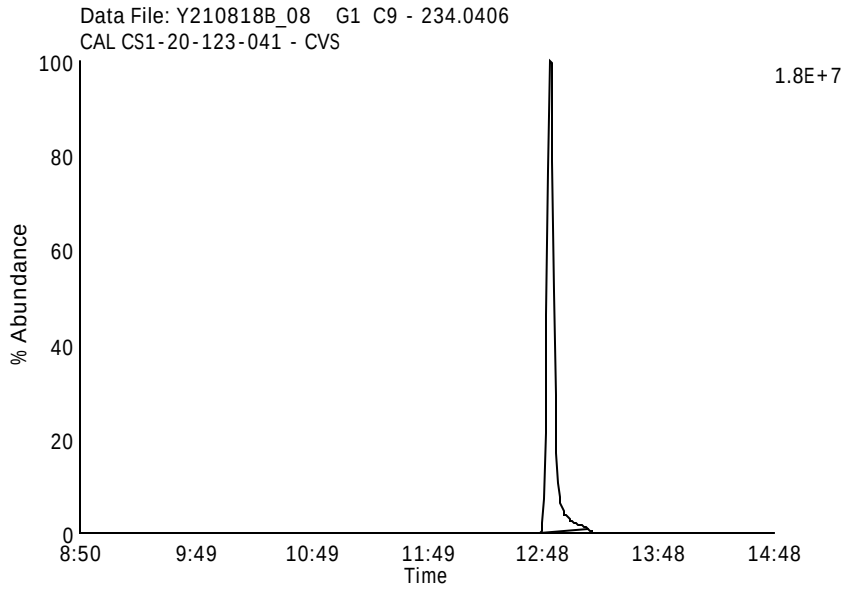
Sample Description: CAL CS1-20-123-041 - CVS

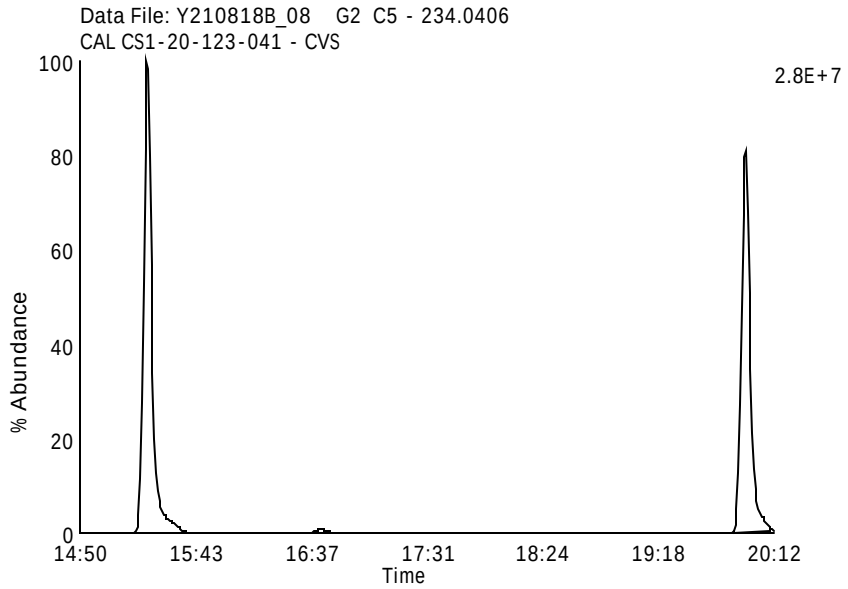


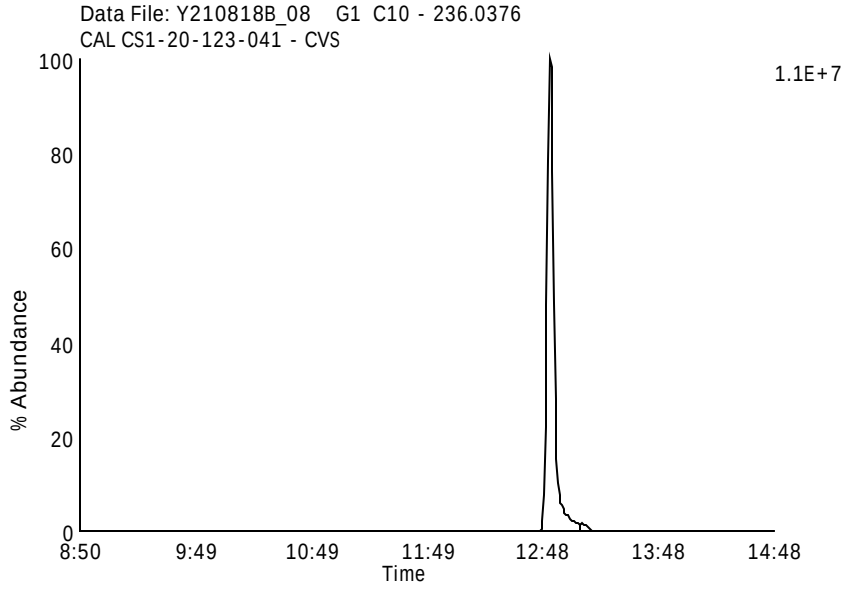


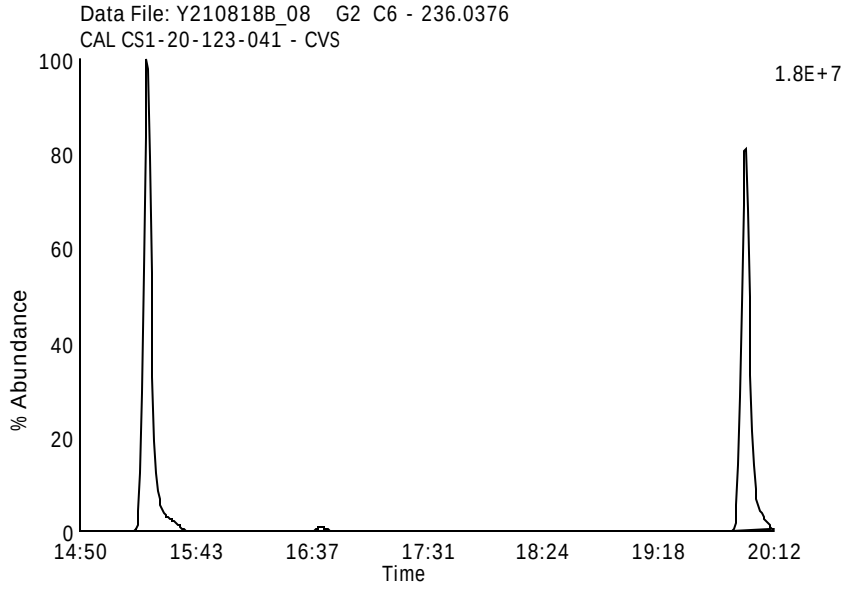
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



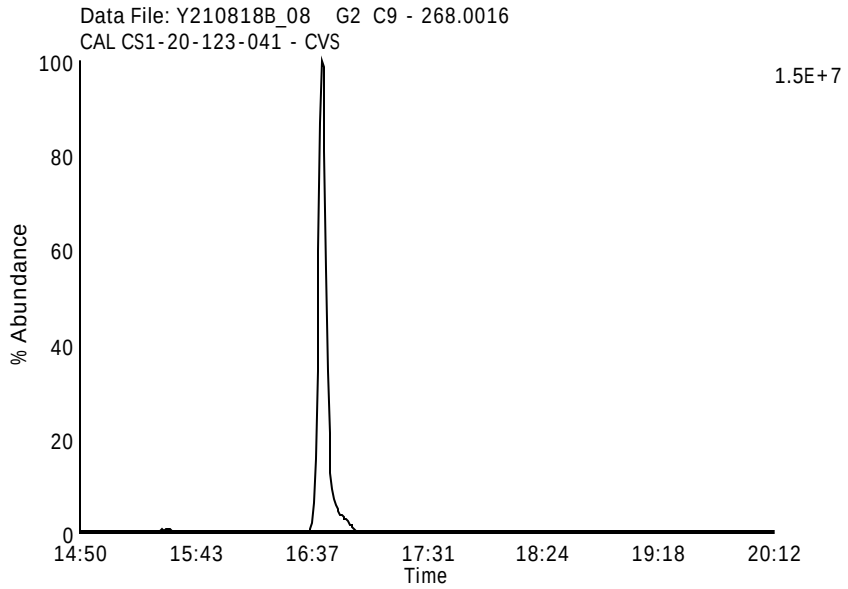


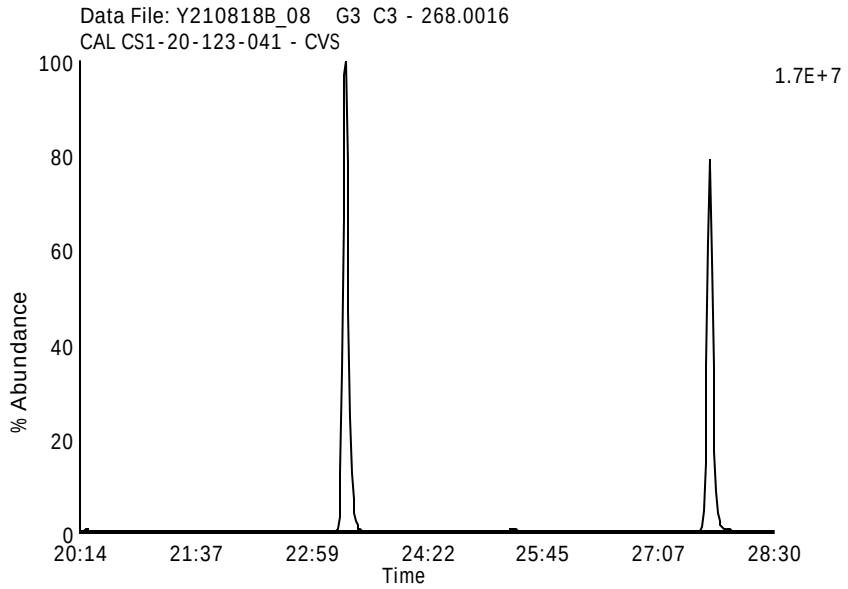


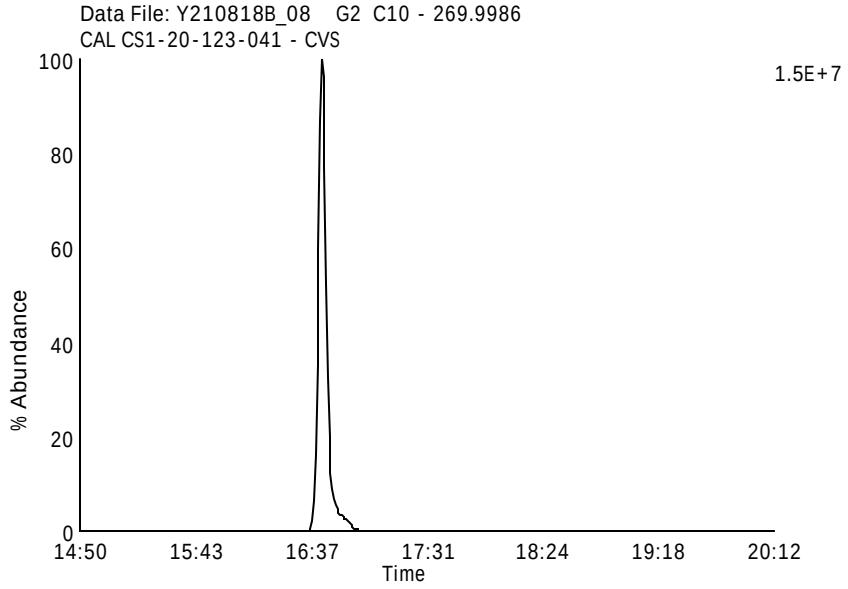


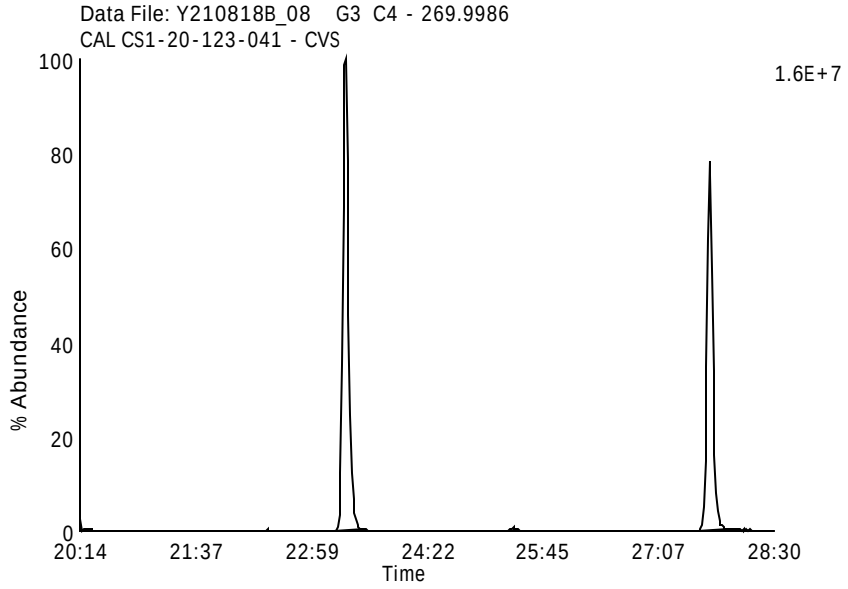
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



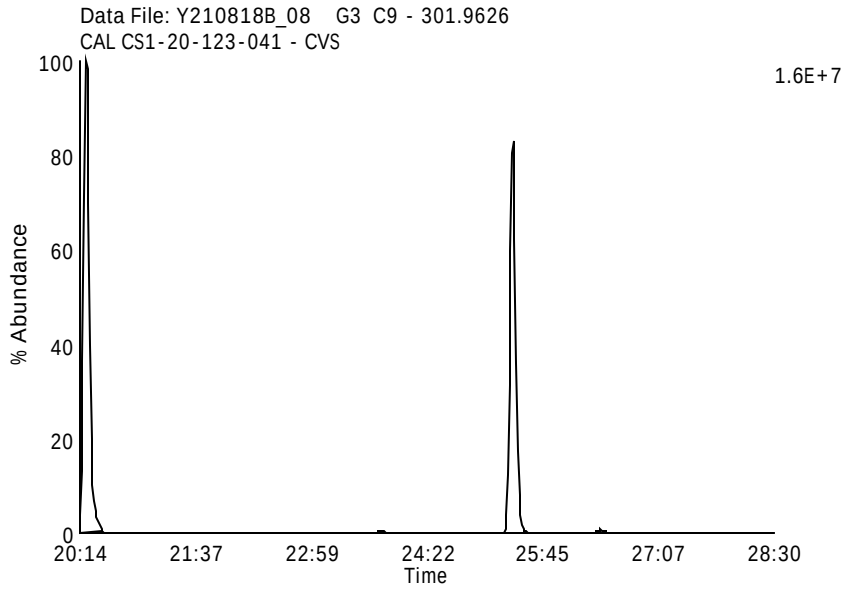


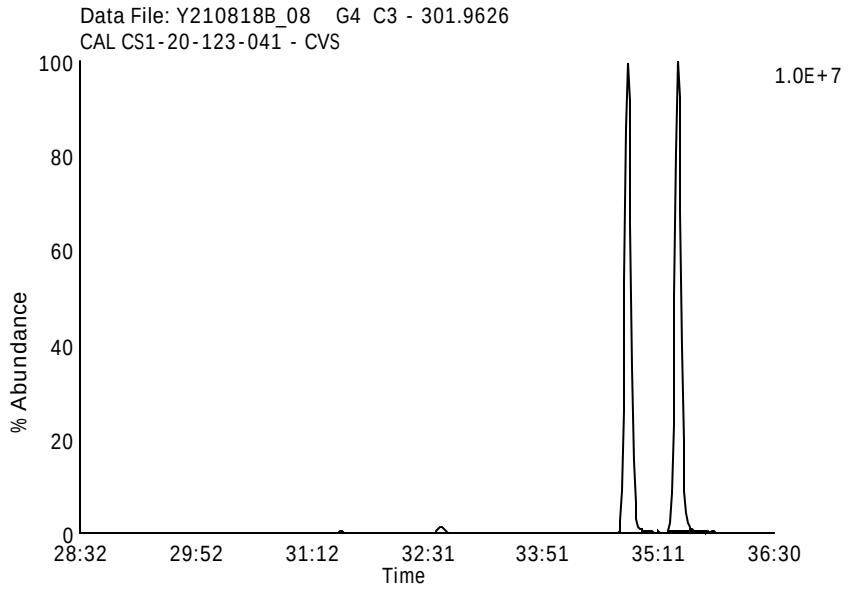


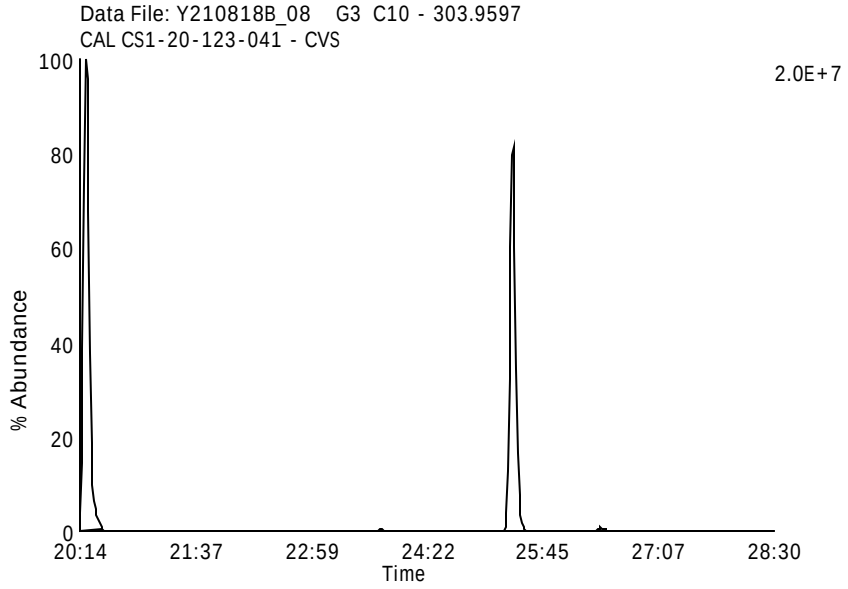


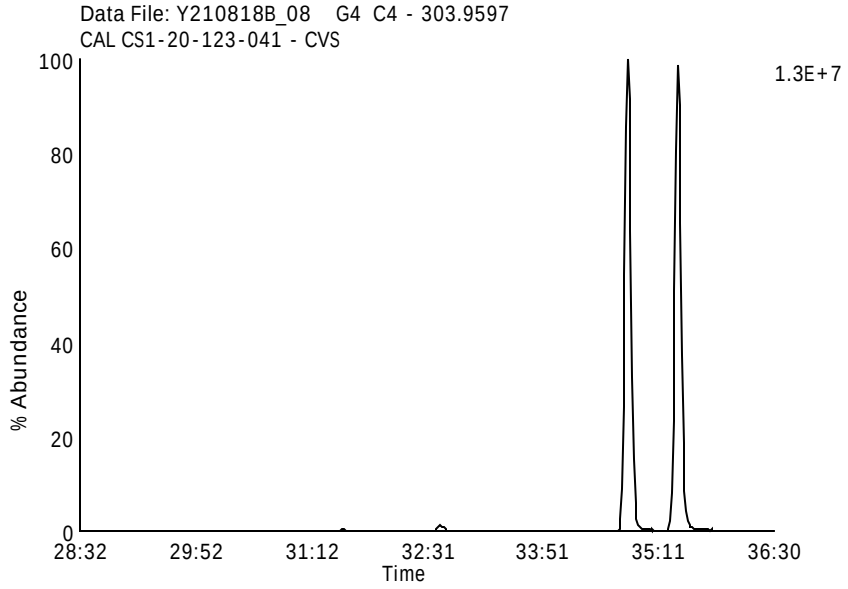
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS









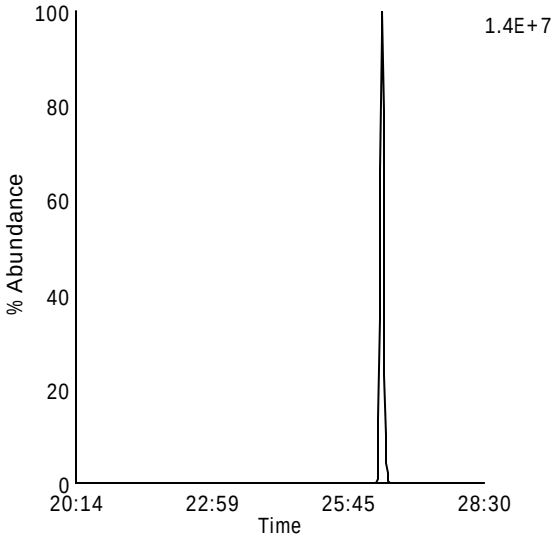
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

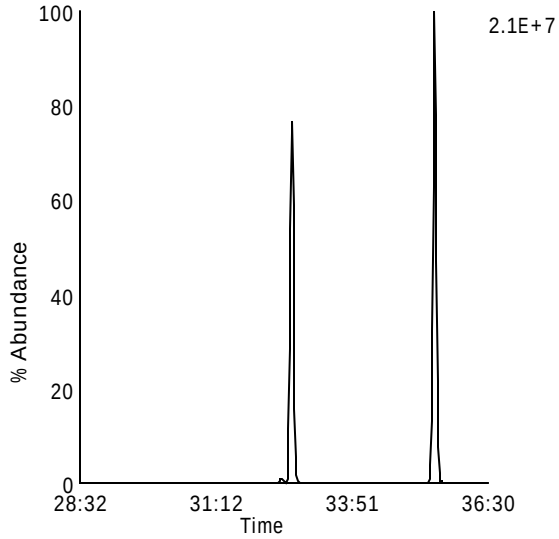
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

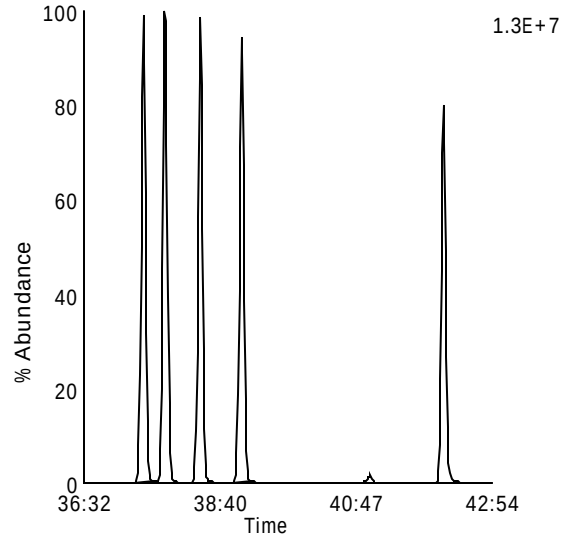
Data File: Y210818B_08 G3 C13 - 337.9207
CAL CS1-20-123-041 - CVS



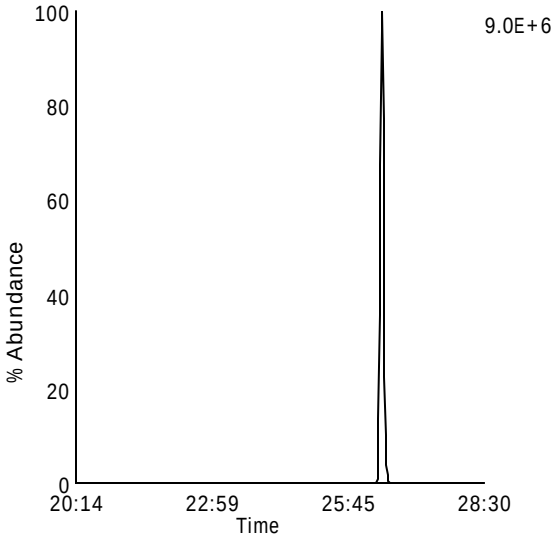
Data File: Y210818B_08 G4 C9 - 337.9207
CAL CS1-20-123-041 - CVS



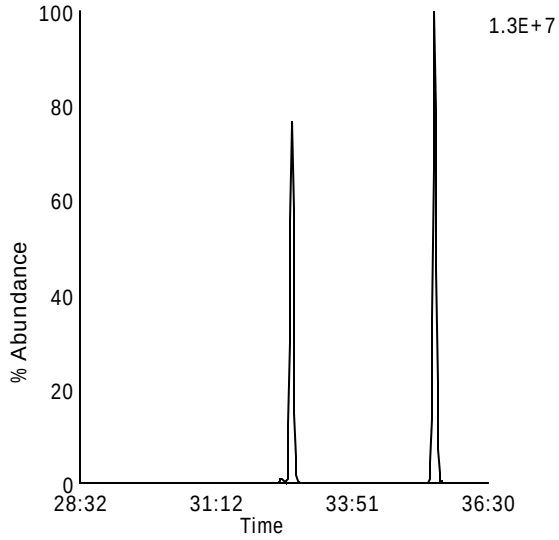
Data File: Y210818B_08 G5 C3 - 337.9207
CAL CS1-20-123-041 - CVS



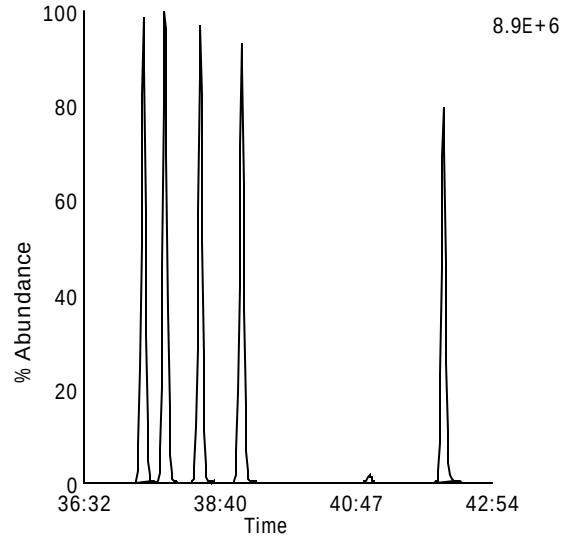
Data File: Y210818B_08 G3 C14 - 339.9178
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C10 - 339.9178
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C4 - 339.9178
CAL CS1-20-123-041 - CVS



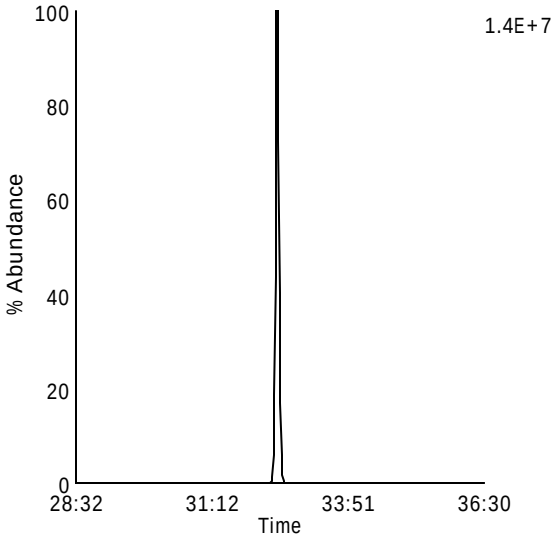
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

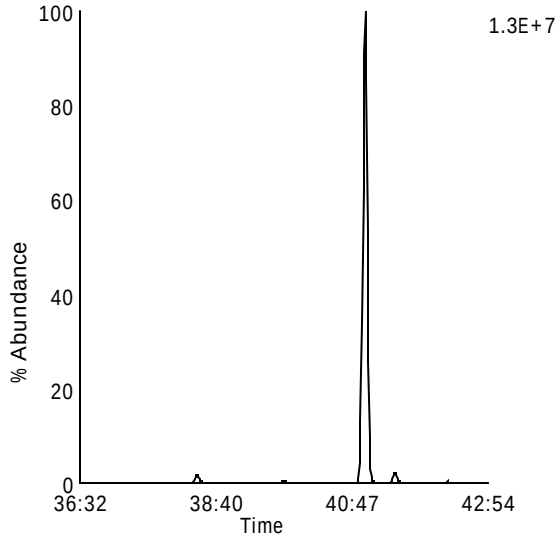
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

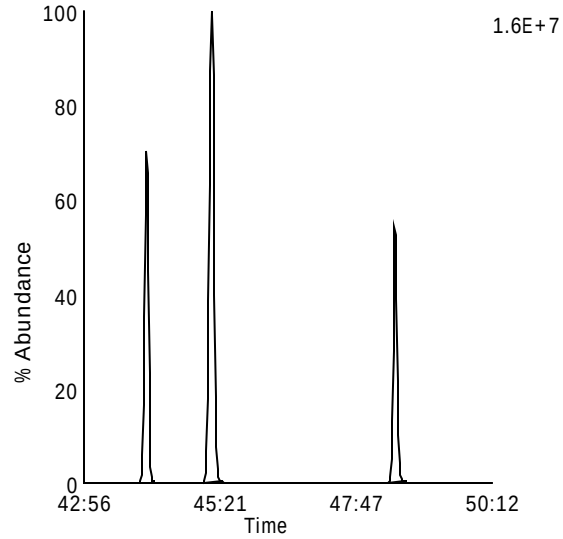
Data File: Y210818B_08 G4 C13 - 371.8817
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C7 - 371.8817
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G6 C3 - 371.8817
CAL CS1-20-123-041 - CVS



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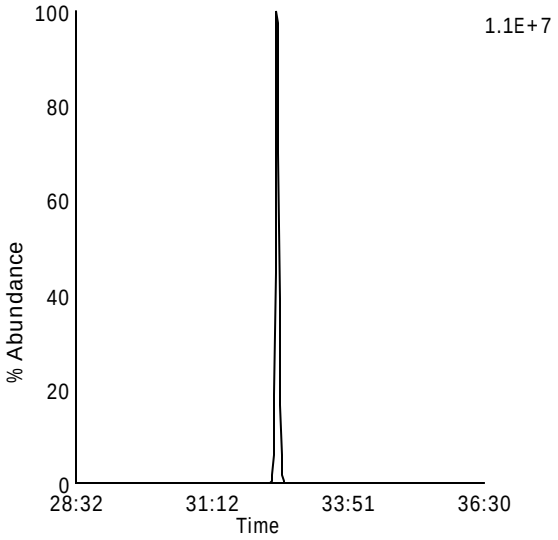
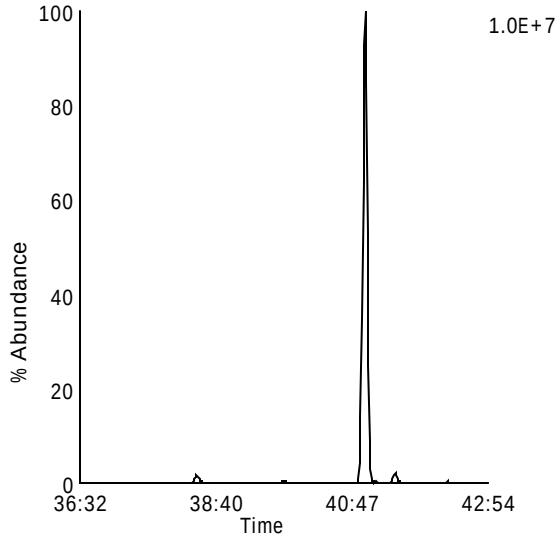
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C8 - 373.8788
CAL CS1-20-123-041 - CVS



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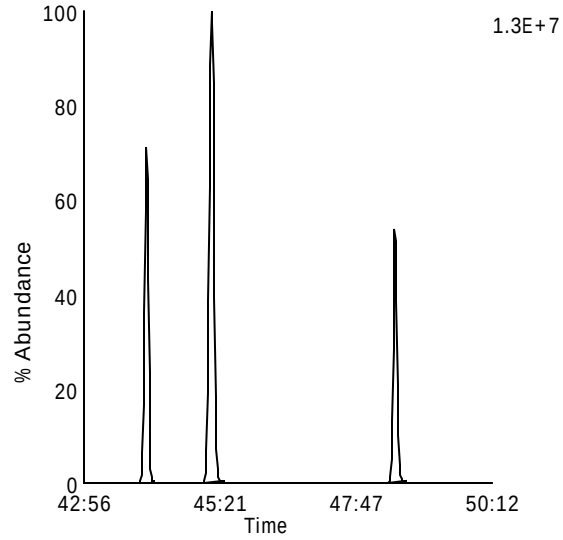
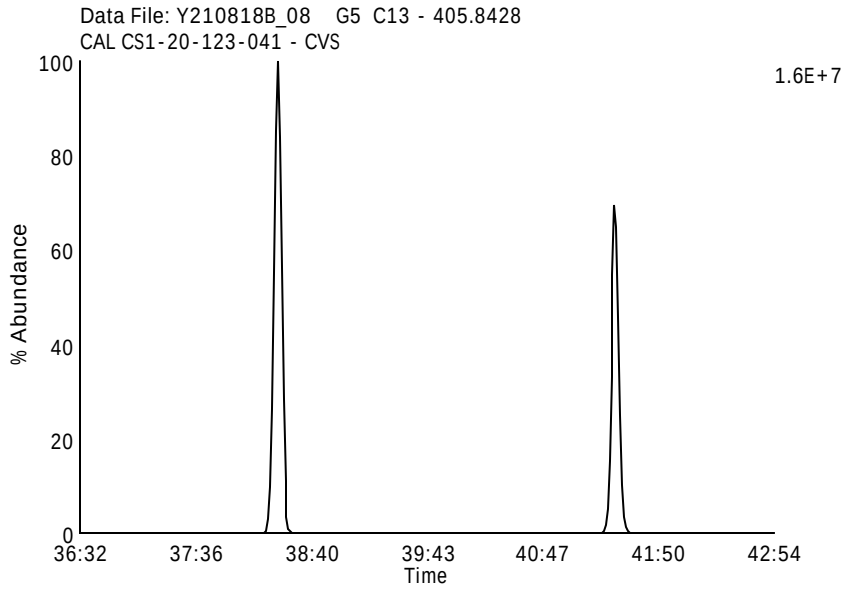
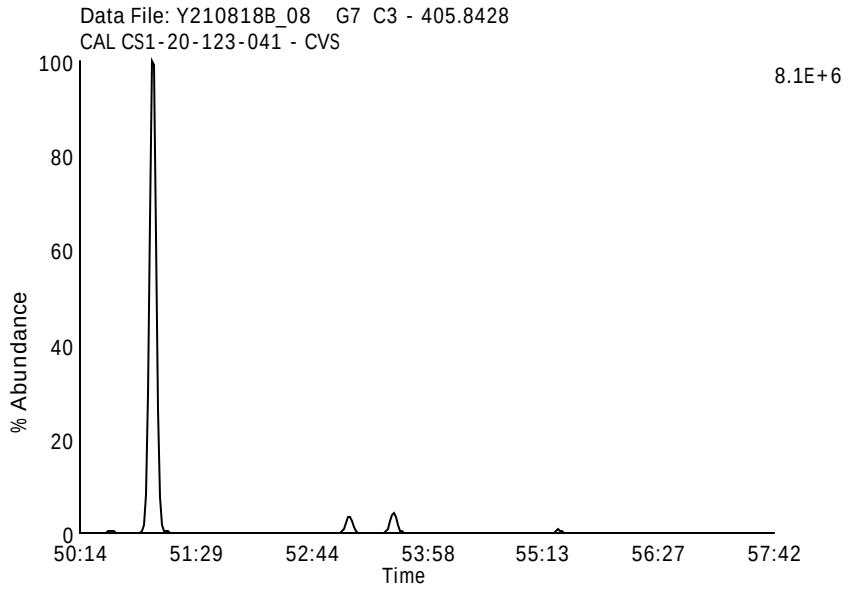
CAL CS1-20-123-041 - CVS

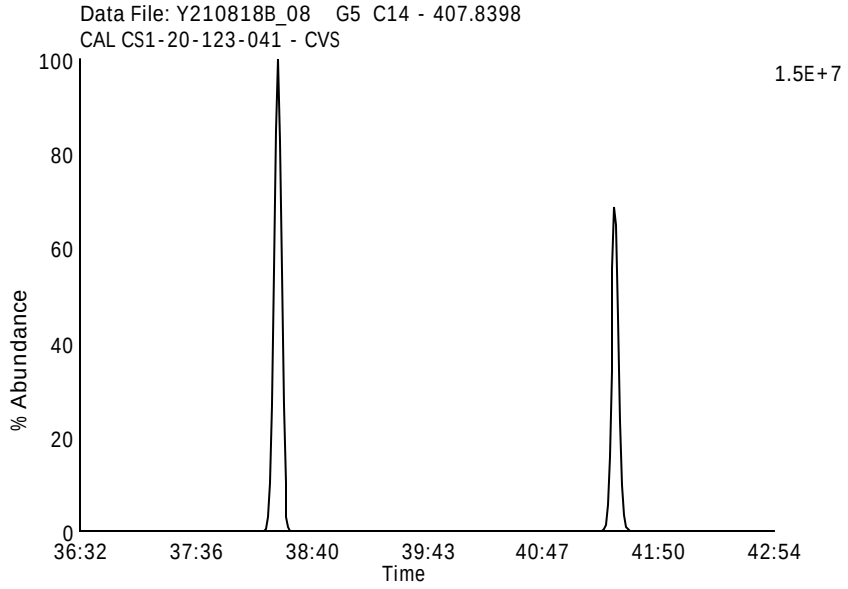


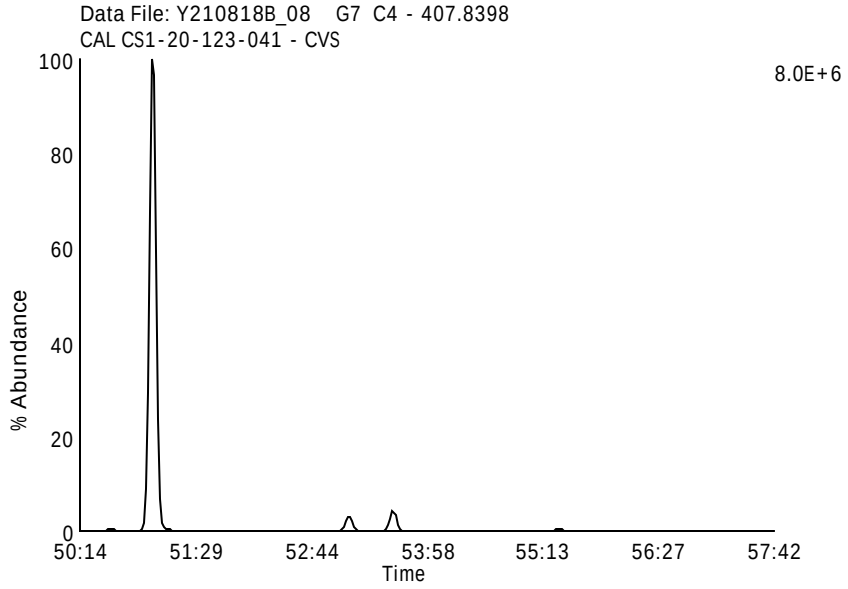
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS





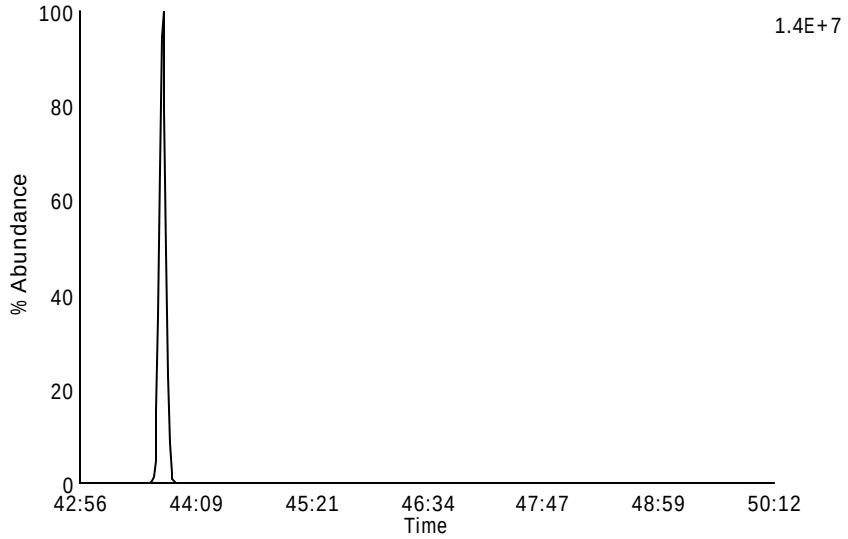




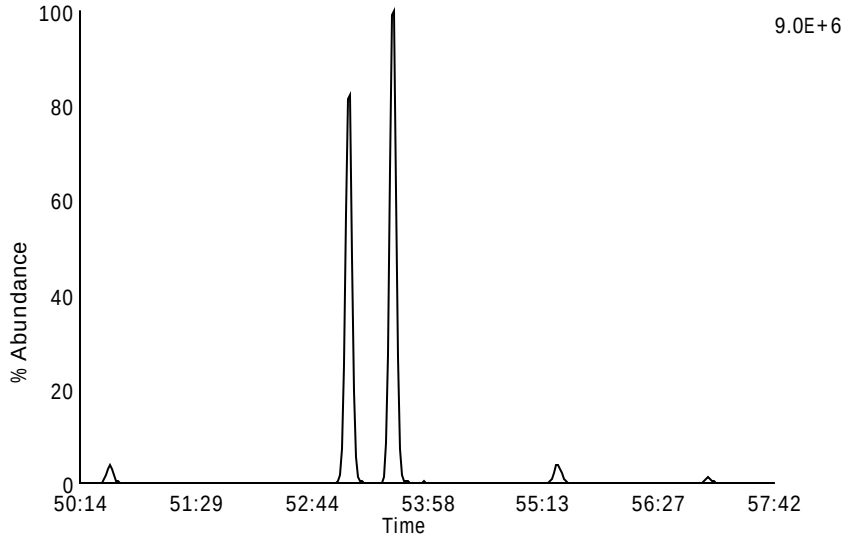
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

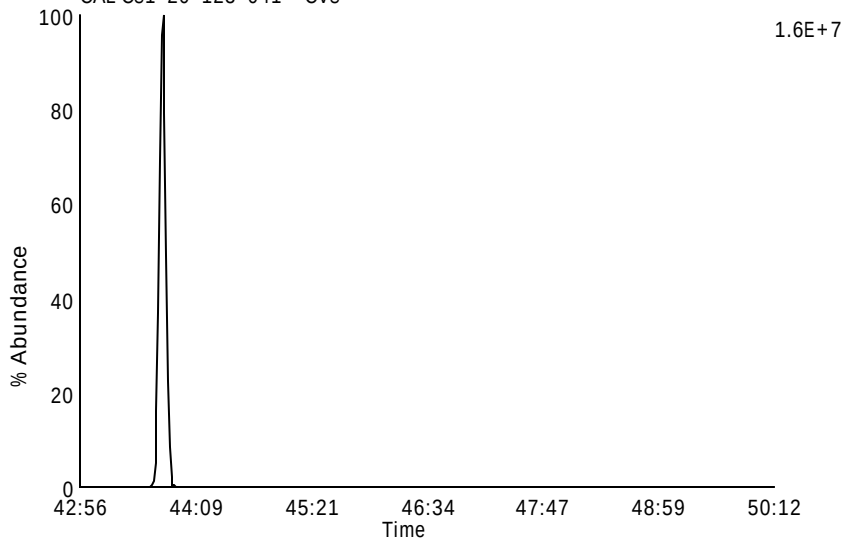
Data File: Y210818B_08 G6 C13 - 439.8038
CAL CS1-20-123-041 - CVS



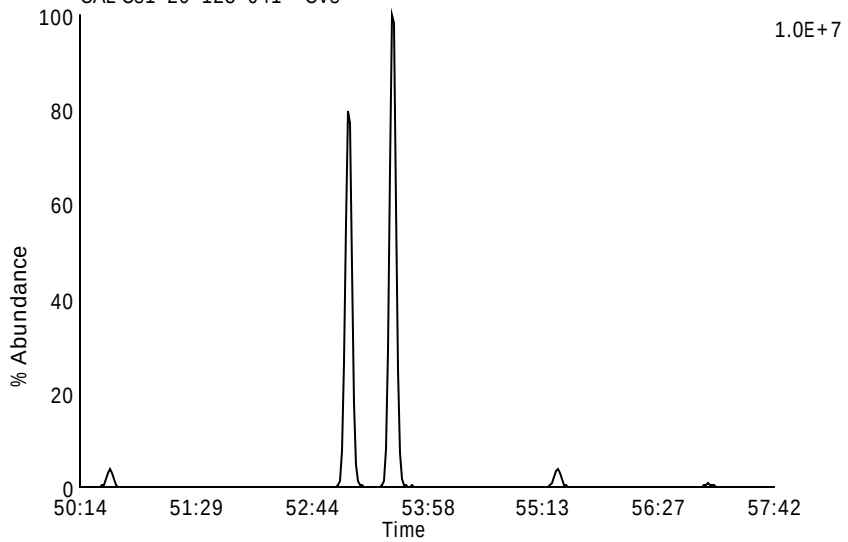
Data File: Y210818B_08 G7 C7 - 439.8038
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G6 C14 - 441.8008
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G7 C8 - 441.8008
CAL CS1-20-123-041 - CVS

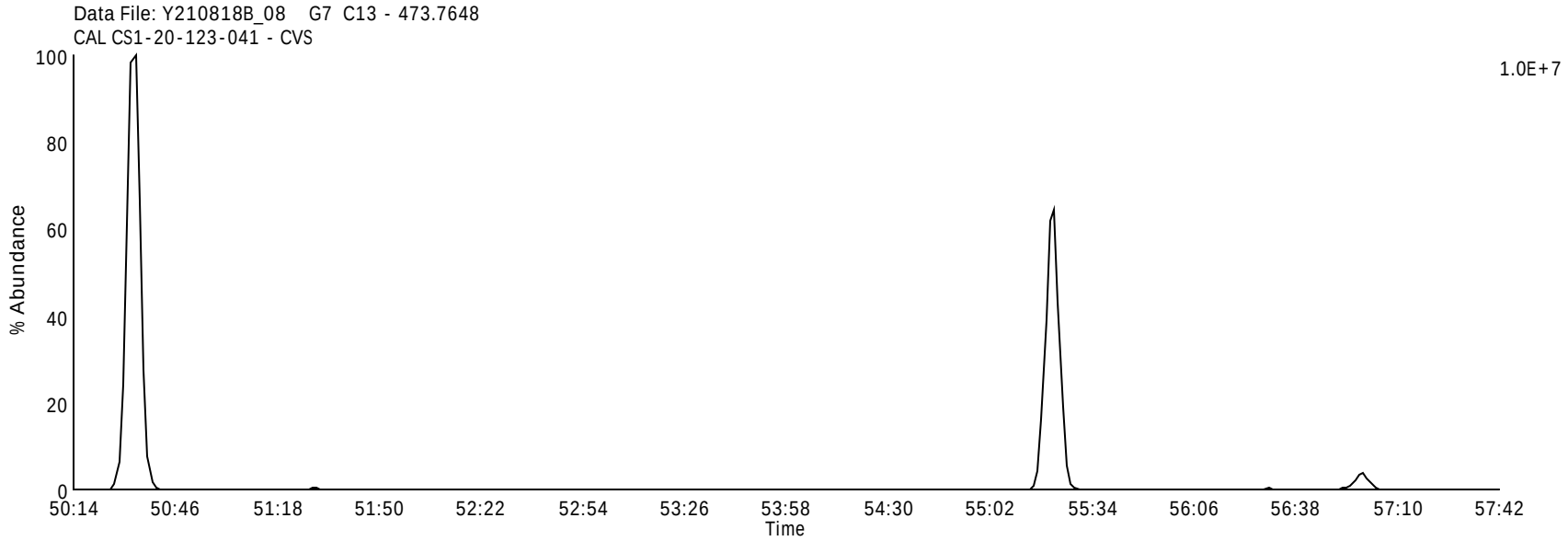


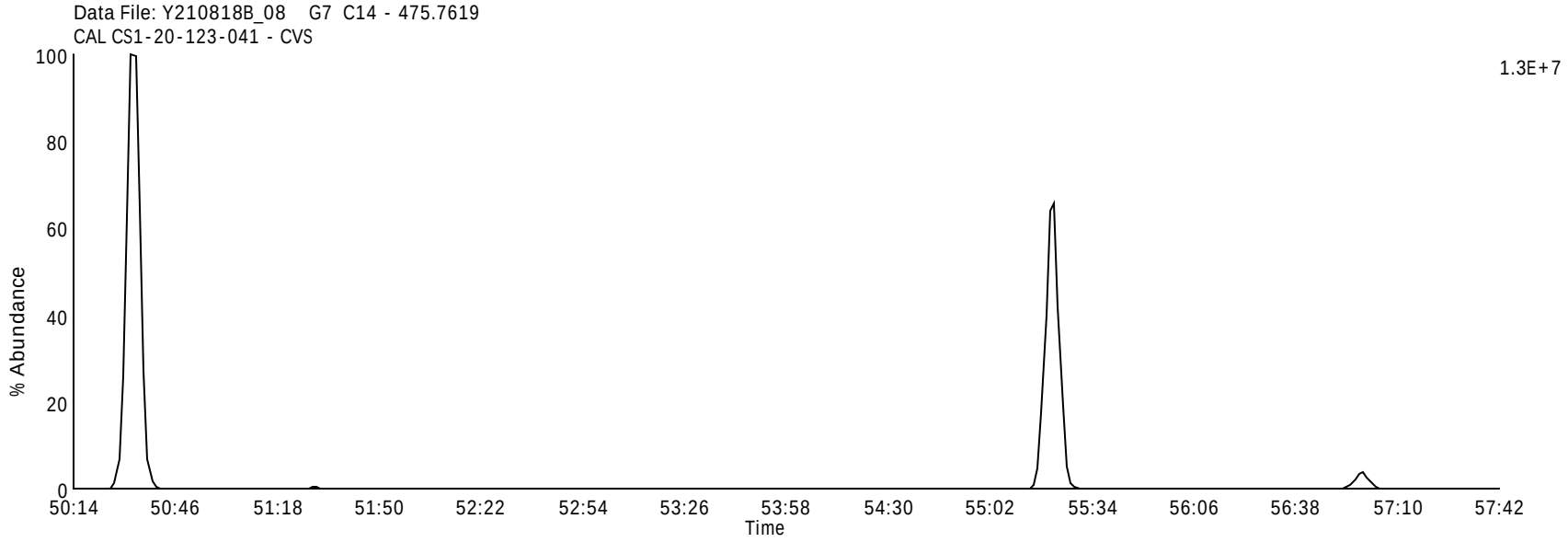
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



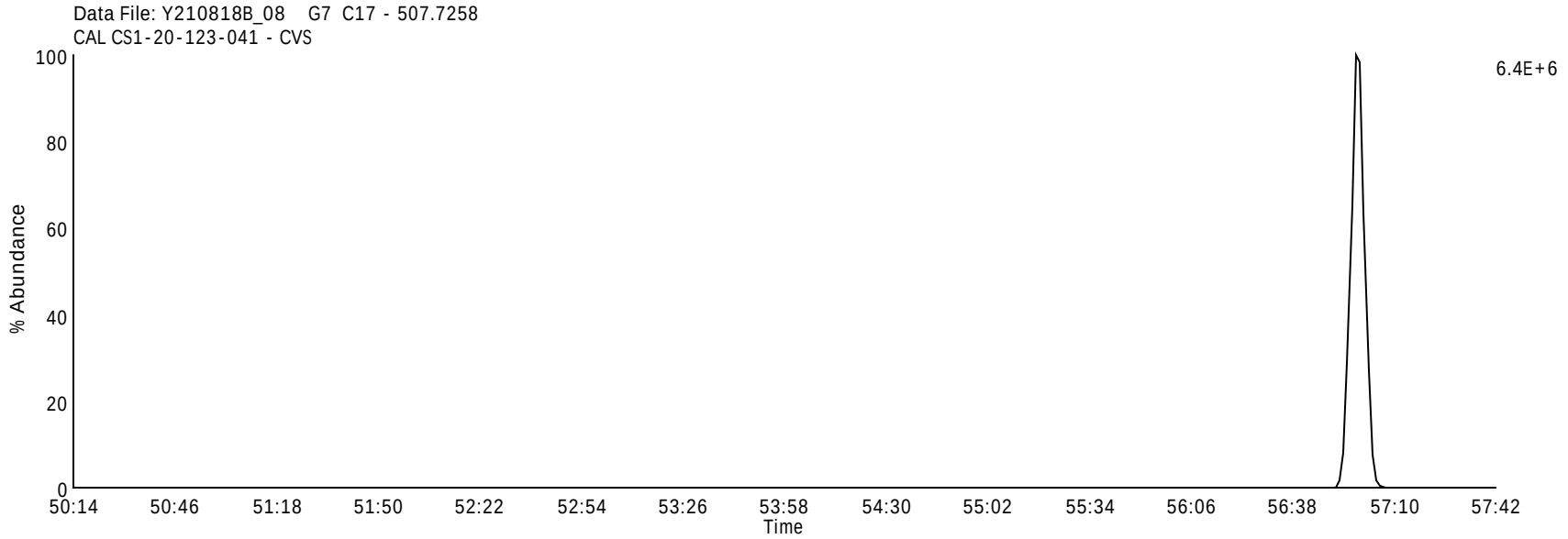


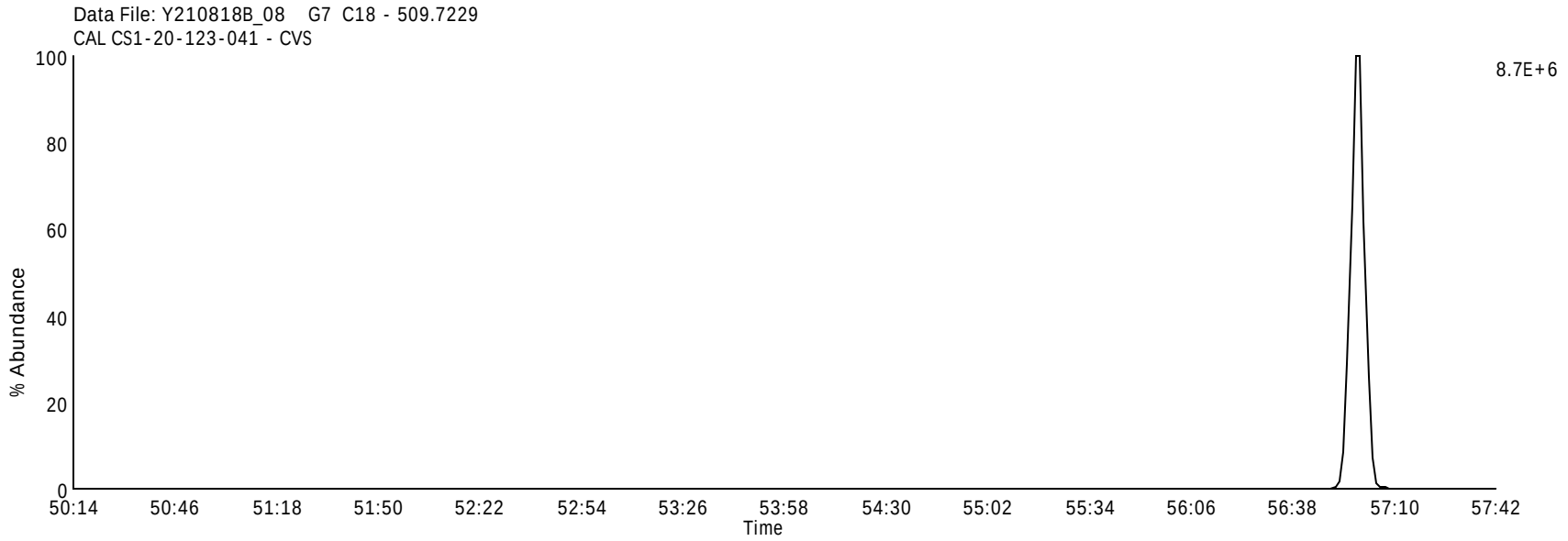
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



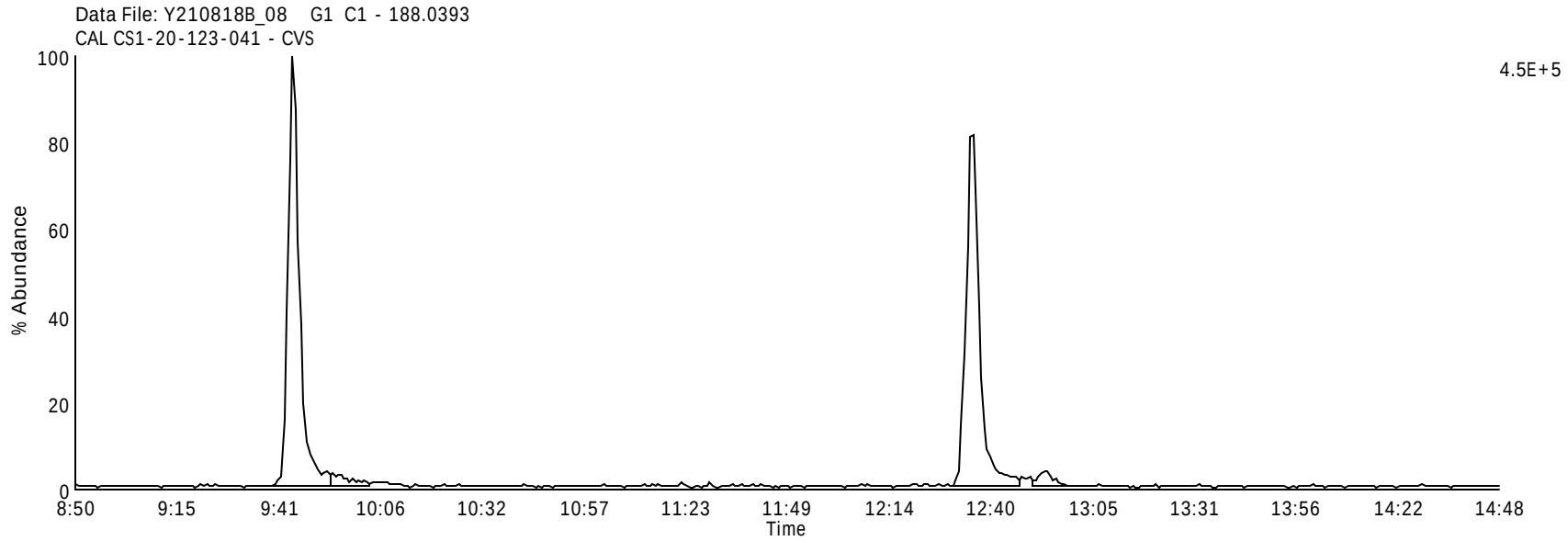


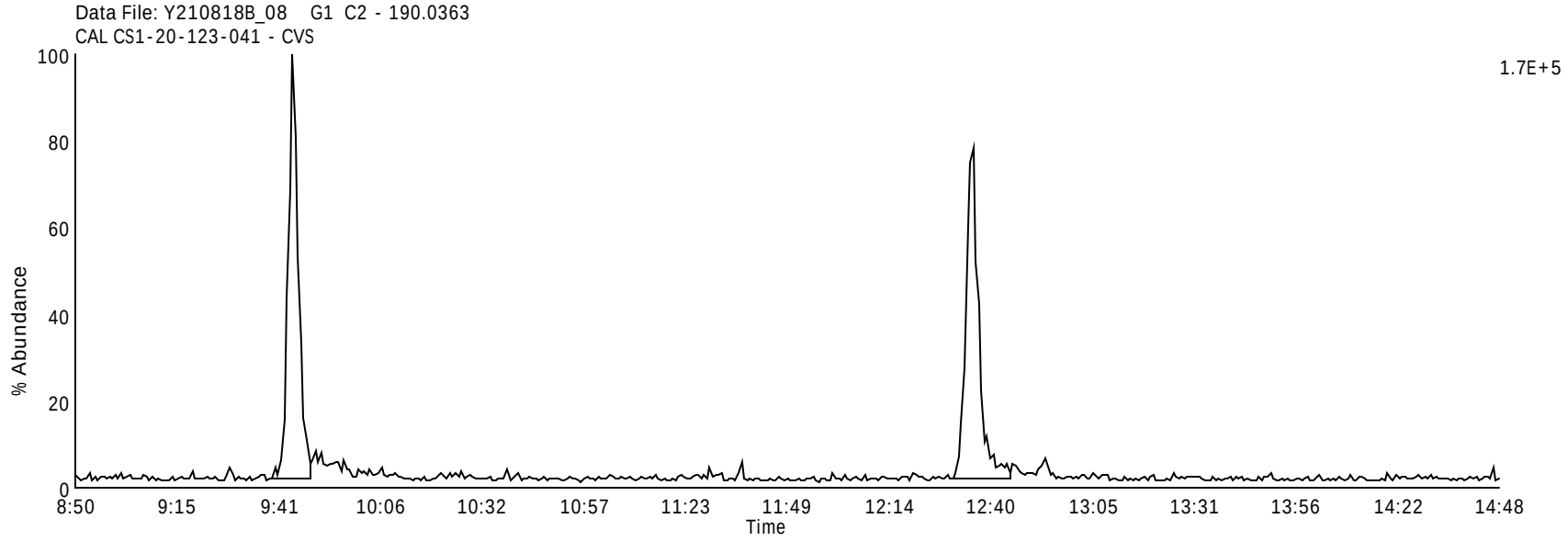
Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

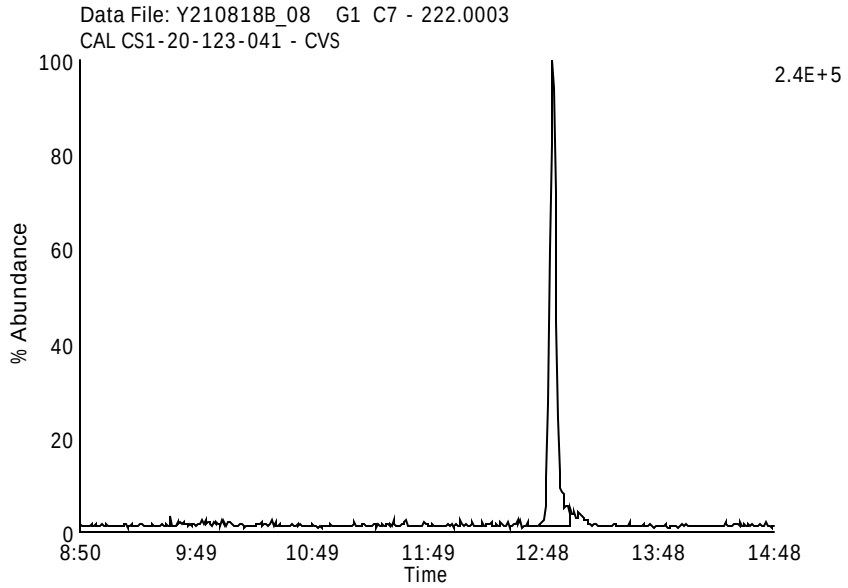
Sample Description: CAL CS1-20-123-041 - CVS

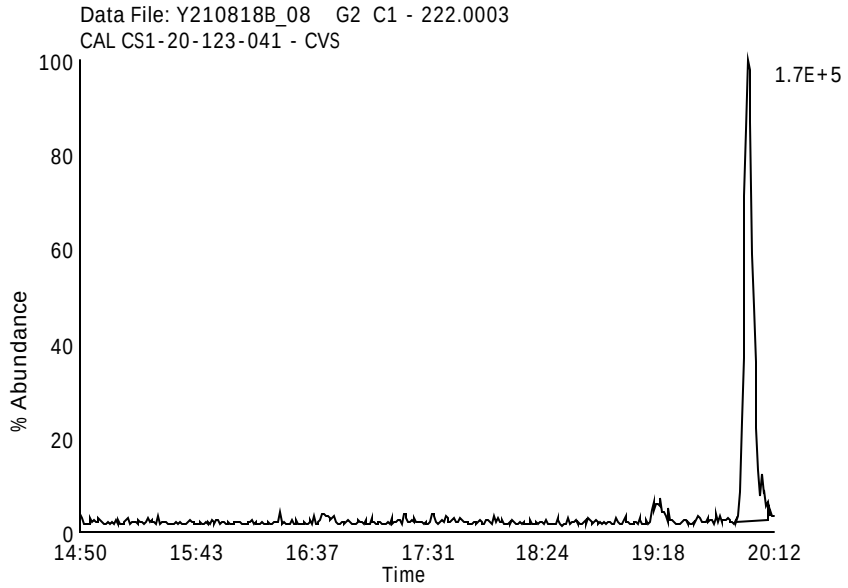


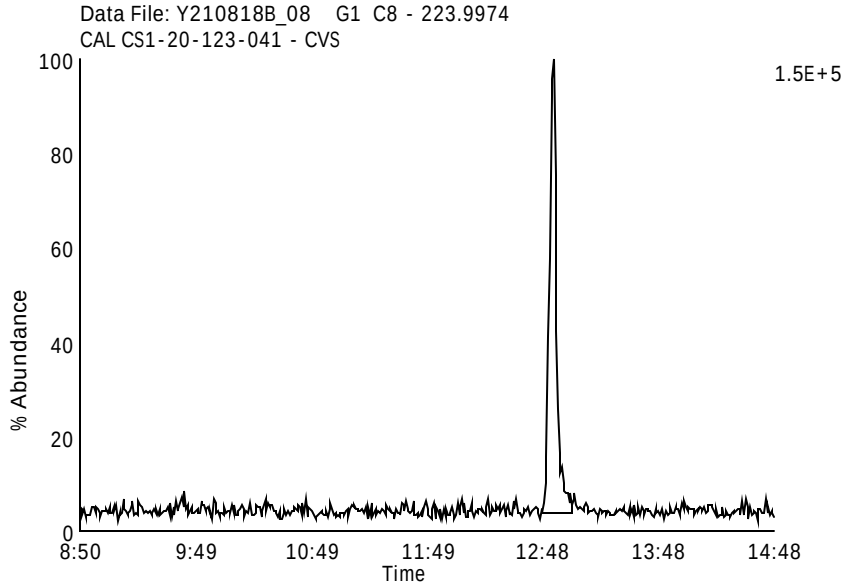


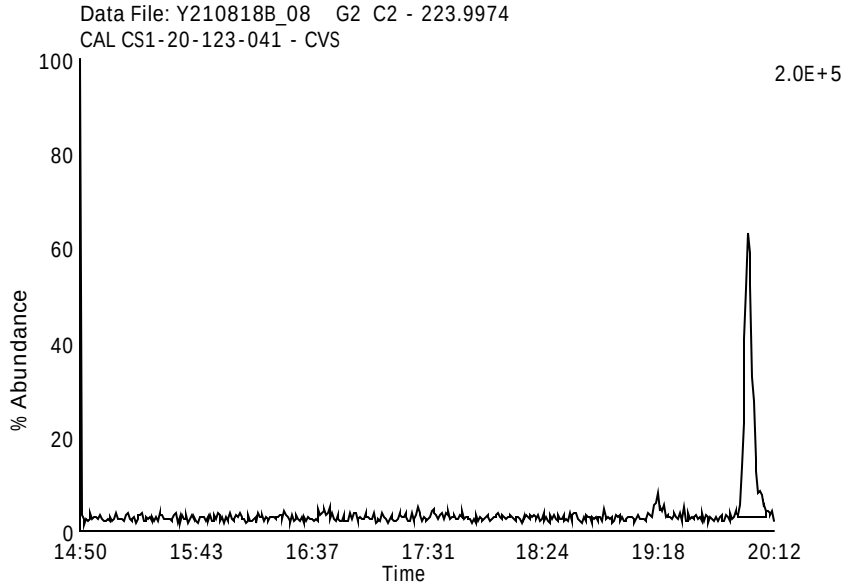
Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



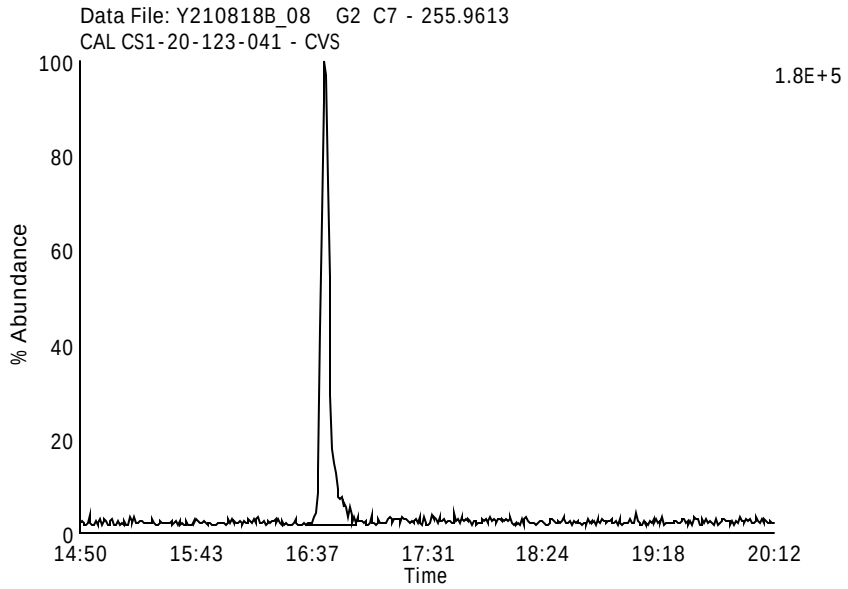


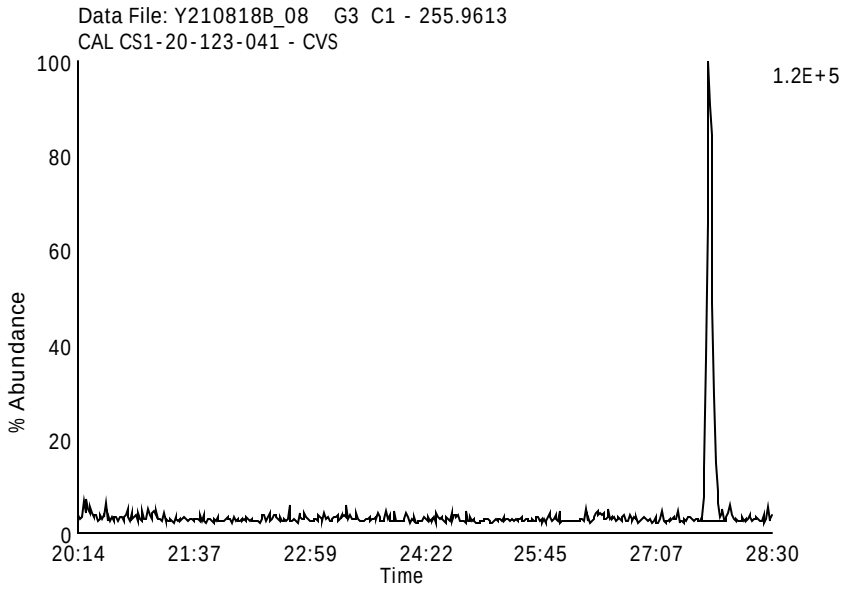


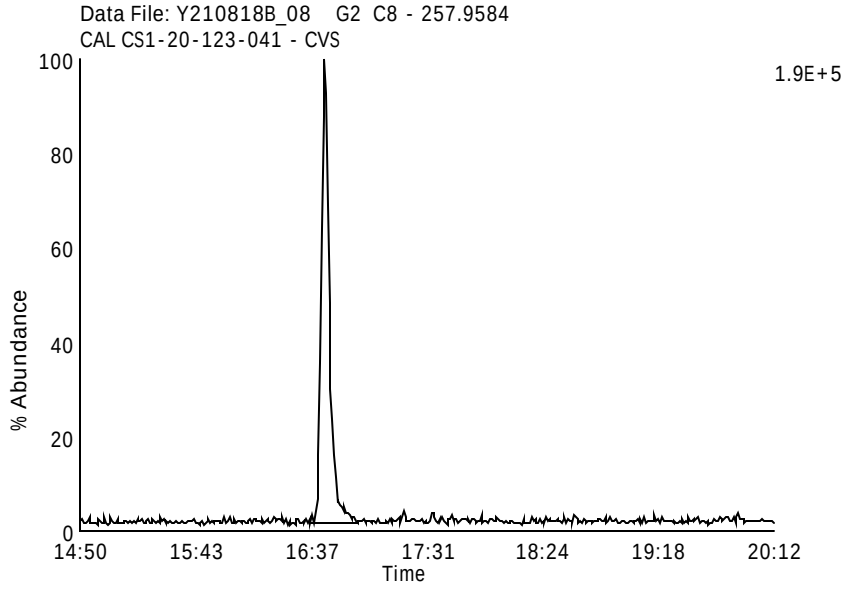


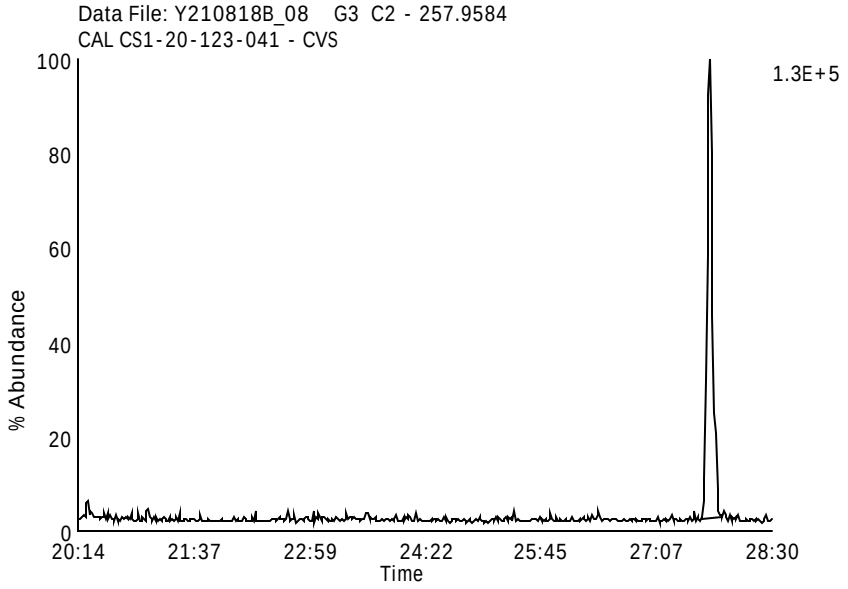
Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



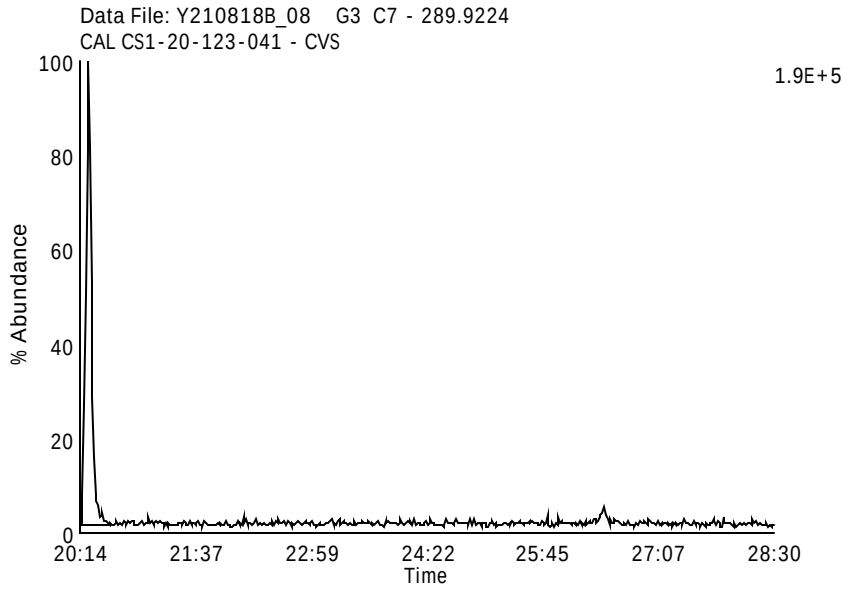


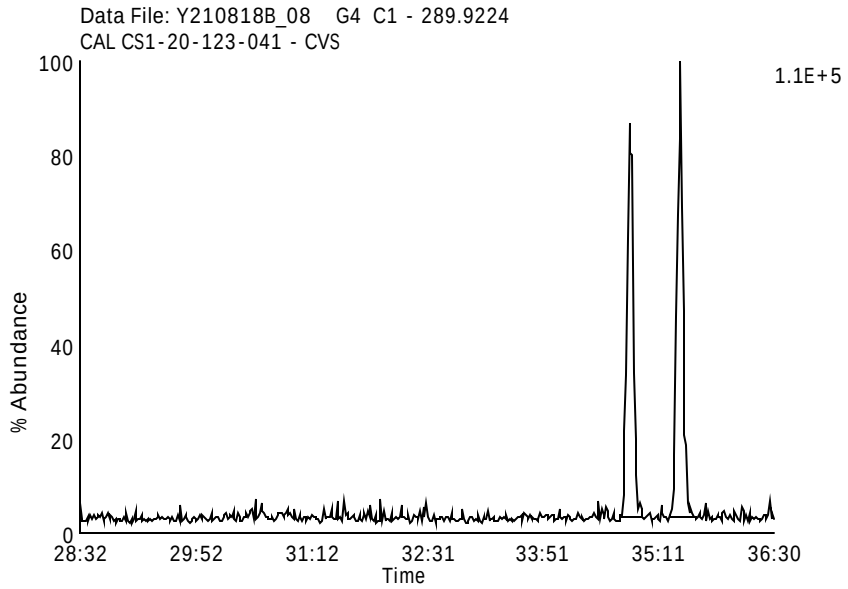


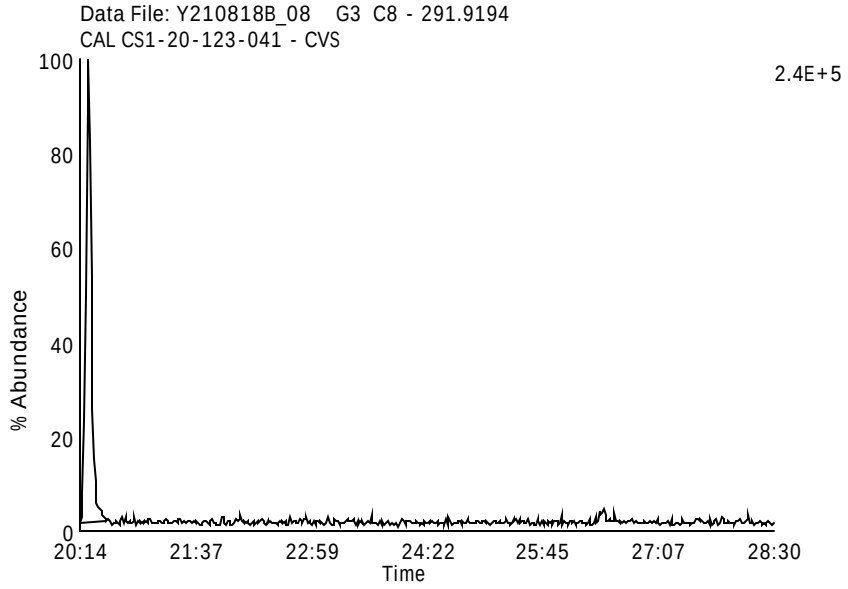


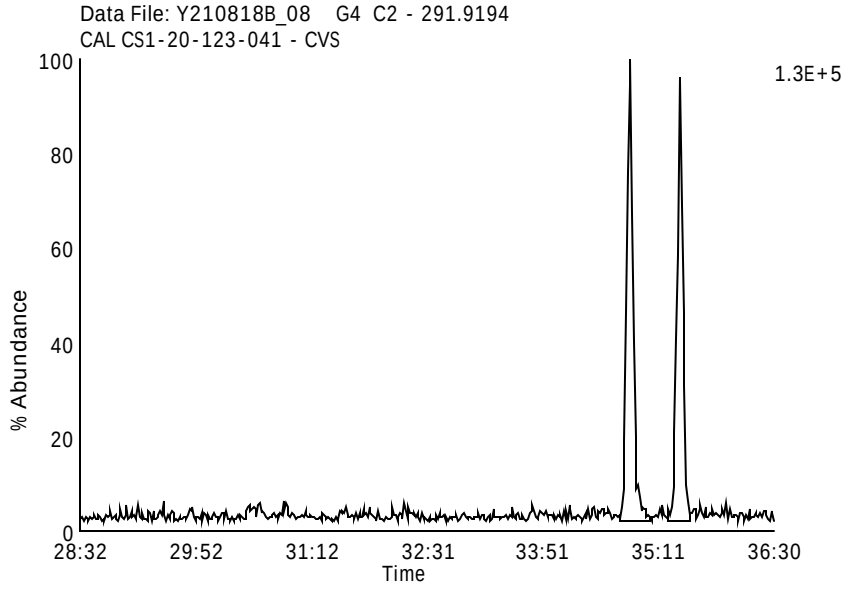
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







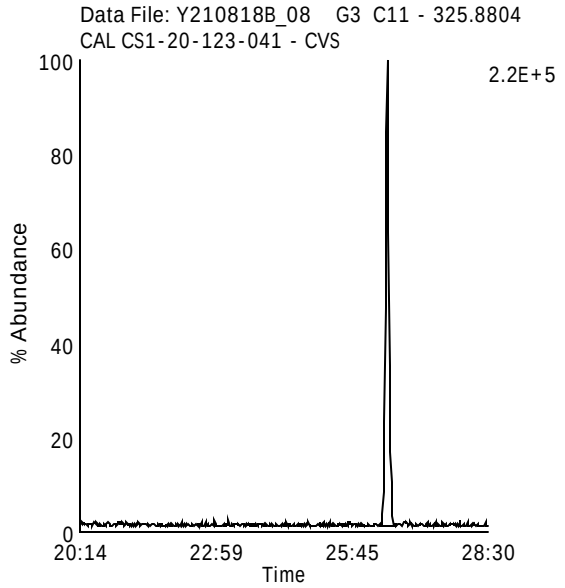


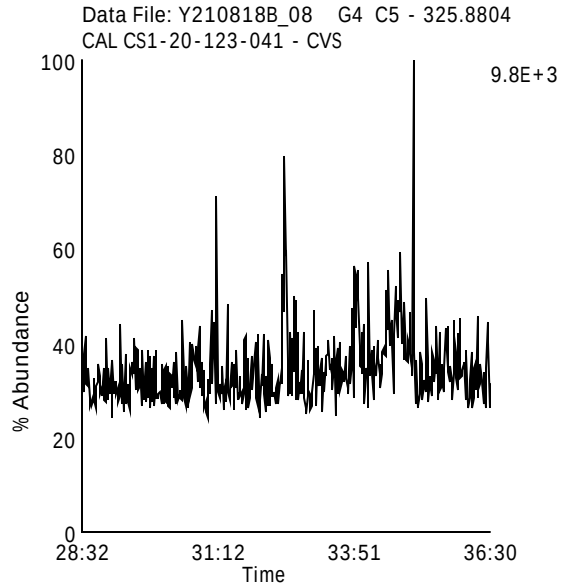
Penta Chlorinated Biphenyls

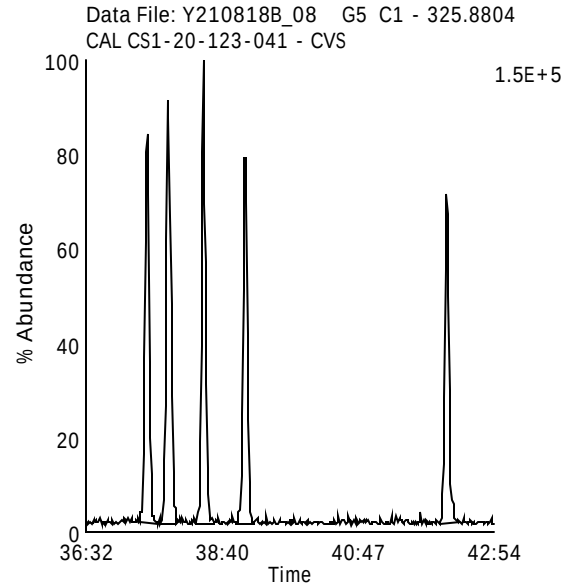
Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

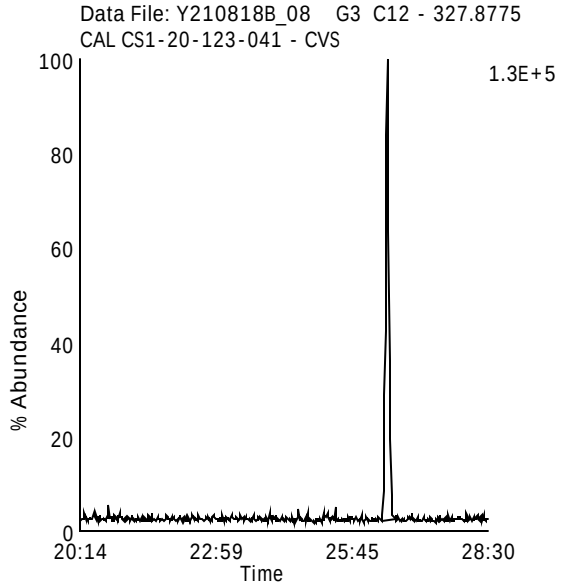
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

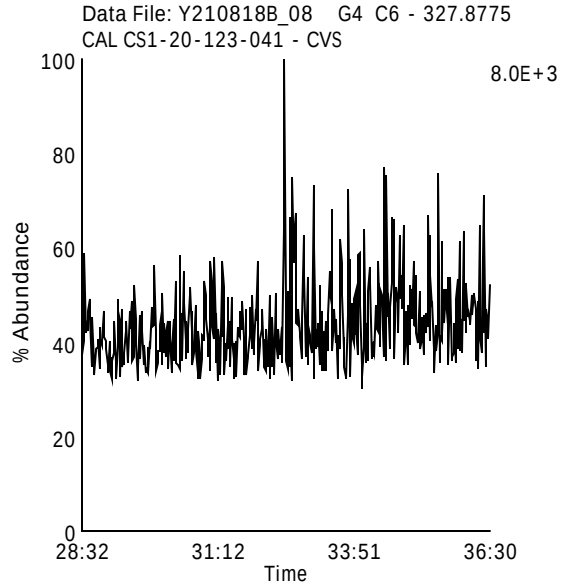
Sample Description: CAL CS1-20-123-041 - CVS

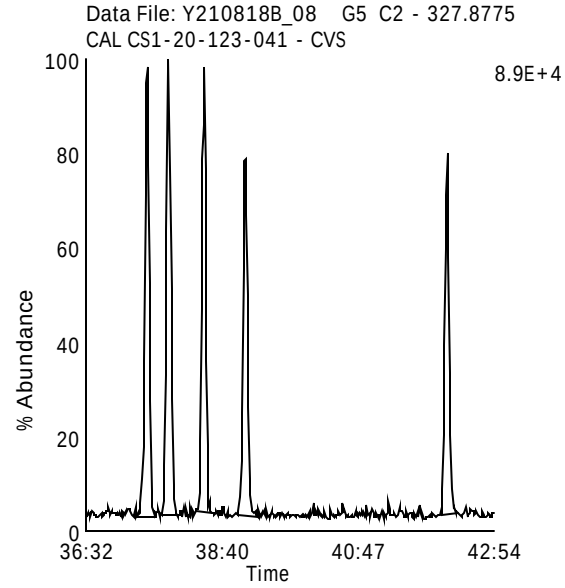






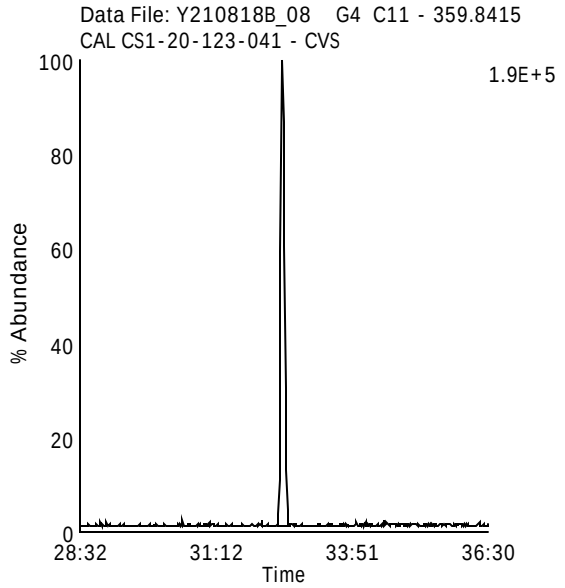


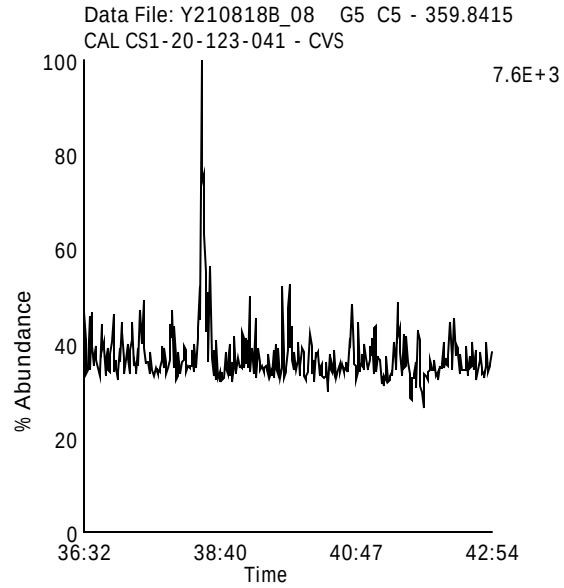


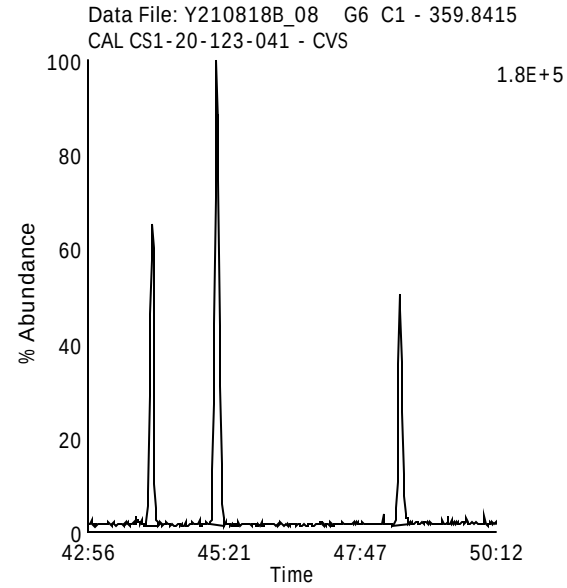


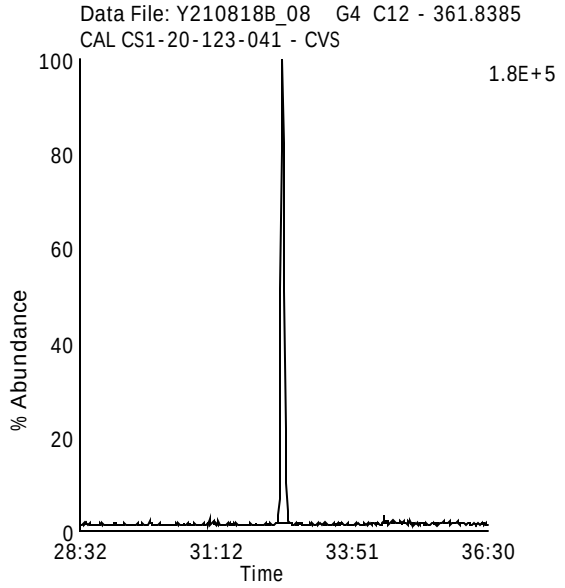
Hexa Chlorinated Biphenyls

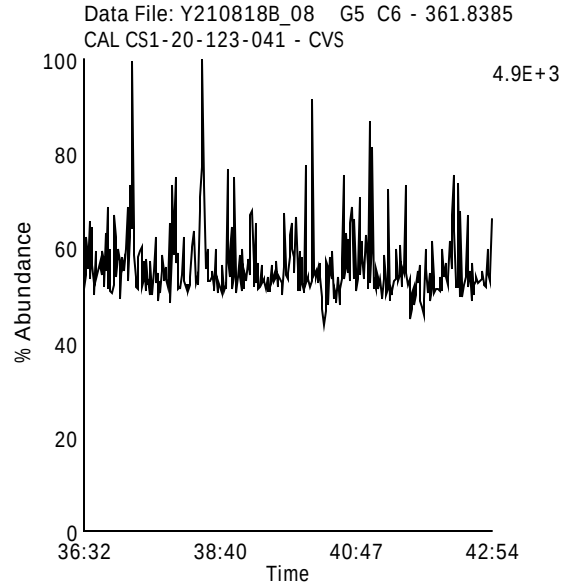
Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

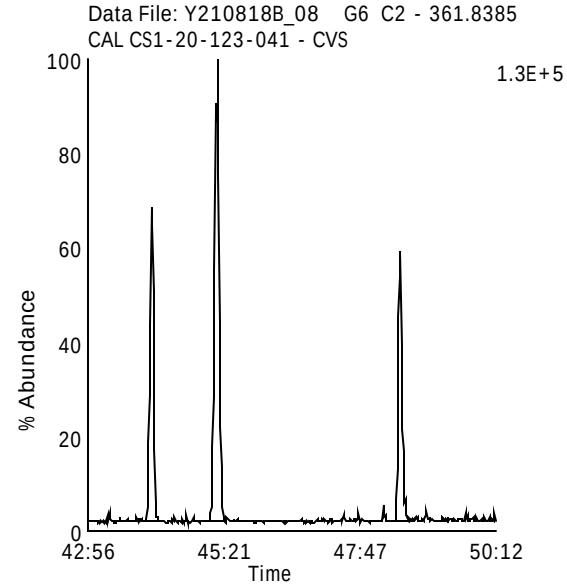






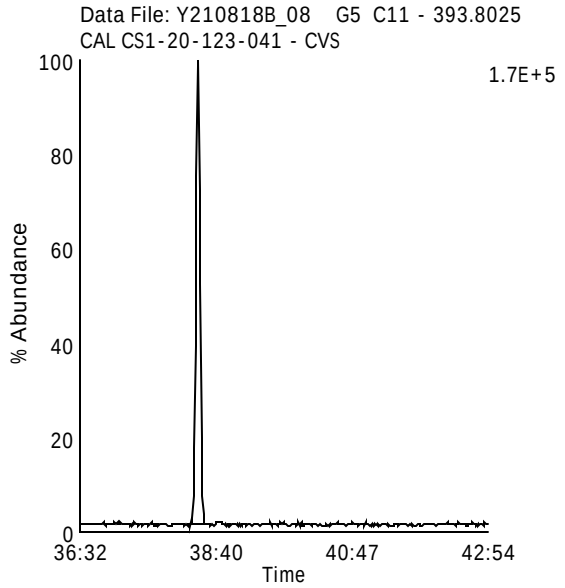


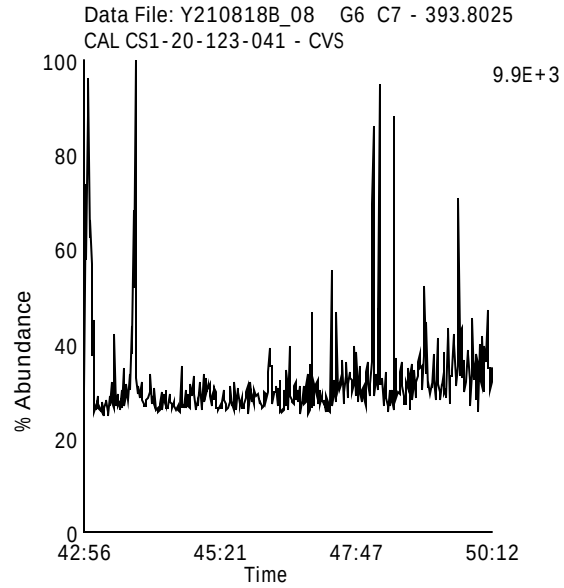


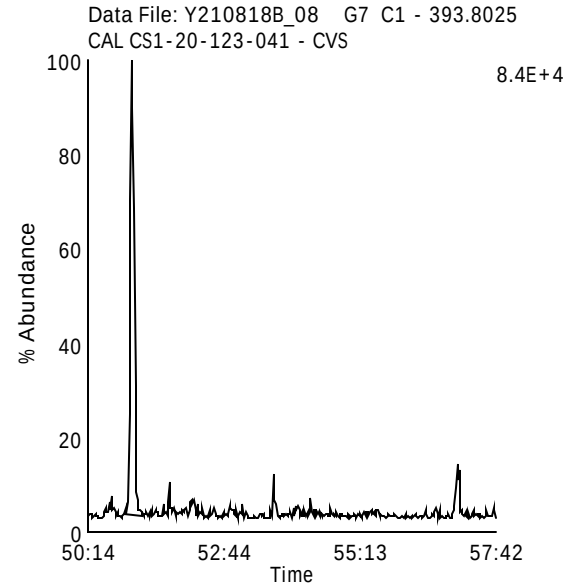


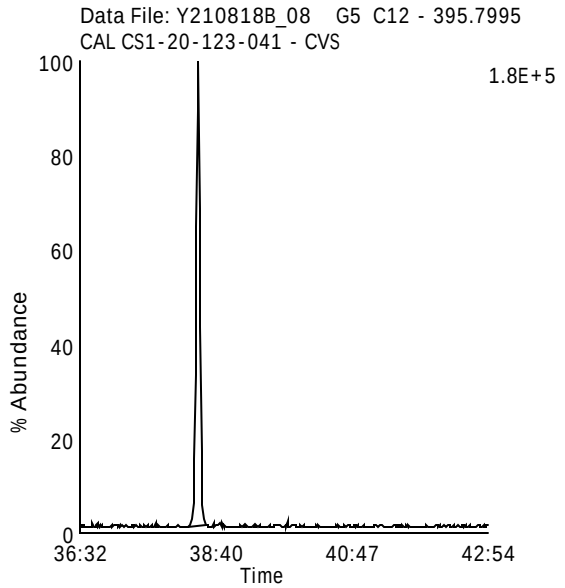
Hepta Chlorinated Biphenyls

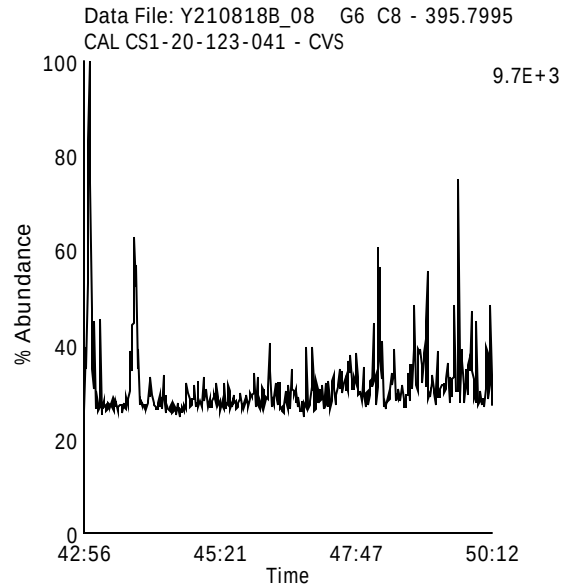
Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

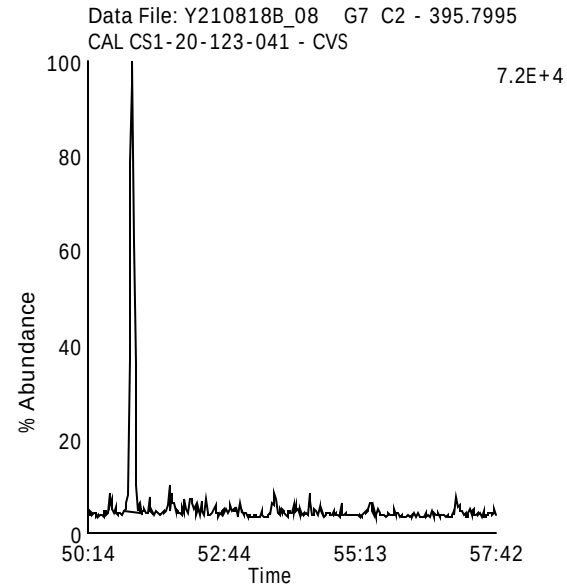










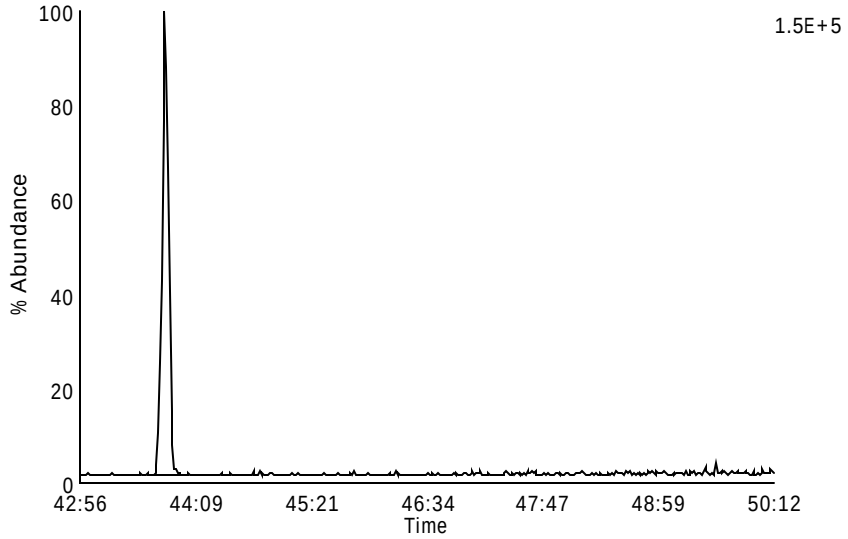


Octa Chlorinated Biphenyls

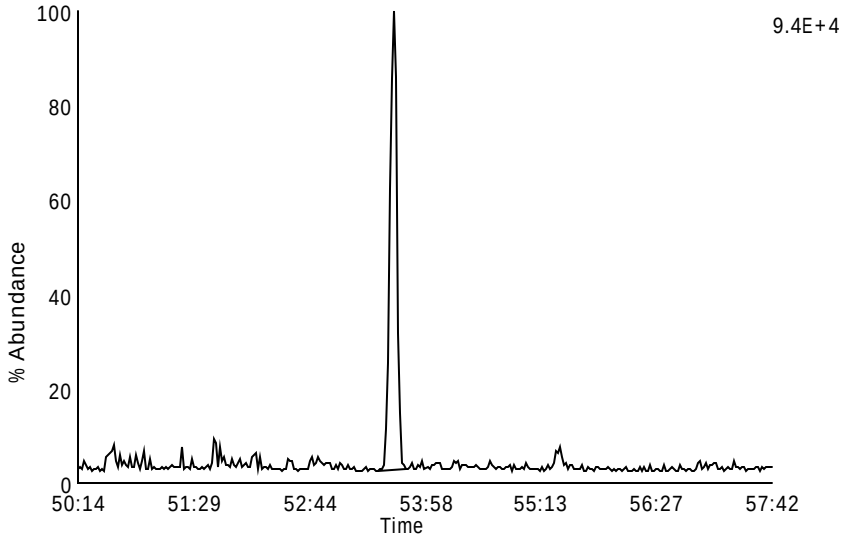
Data File Name: Y210818B_08
Date Acquired: 8/18/2021
Sample Description: CAL CS1-20-123-041 - CVS

Lab Sample ID: CS1-20-123-041
Instrument: 10MSHR12 (Y)

Data File: Y210818B_08 G6 C11 - 427.7635
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G7 C5 - 427.7635
CAL CS1-20-123-041 - CVS



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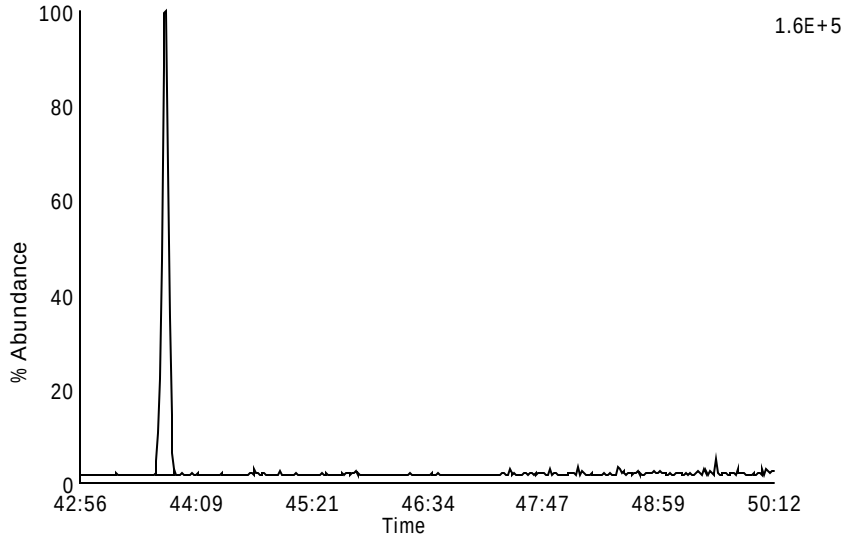
CAL CS1-20-123-041 - CVS



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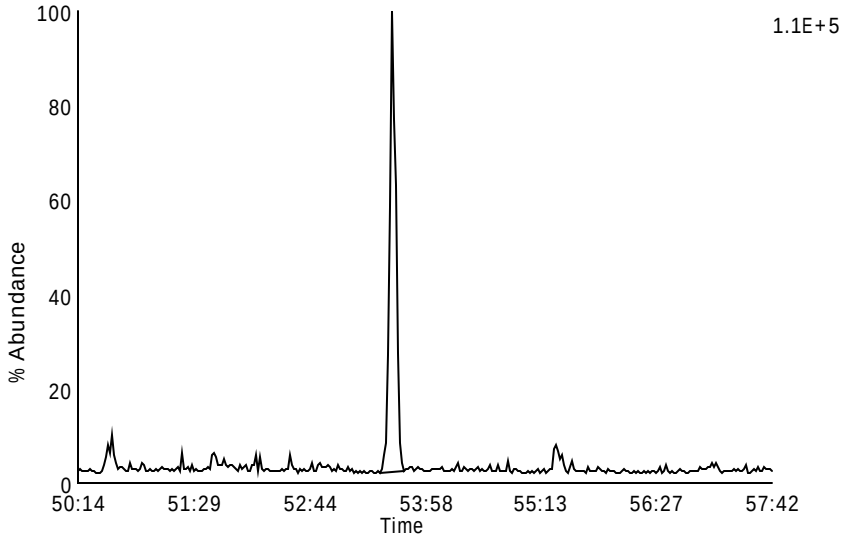
CAL CS1-20-123-041 - CVS

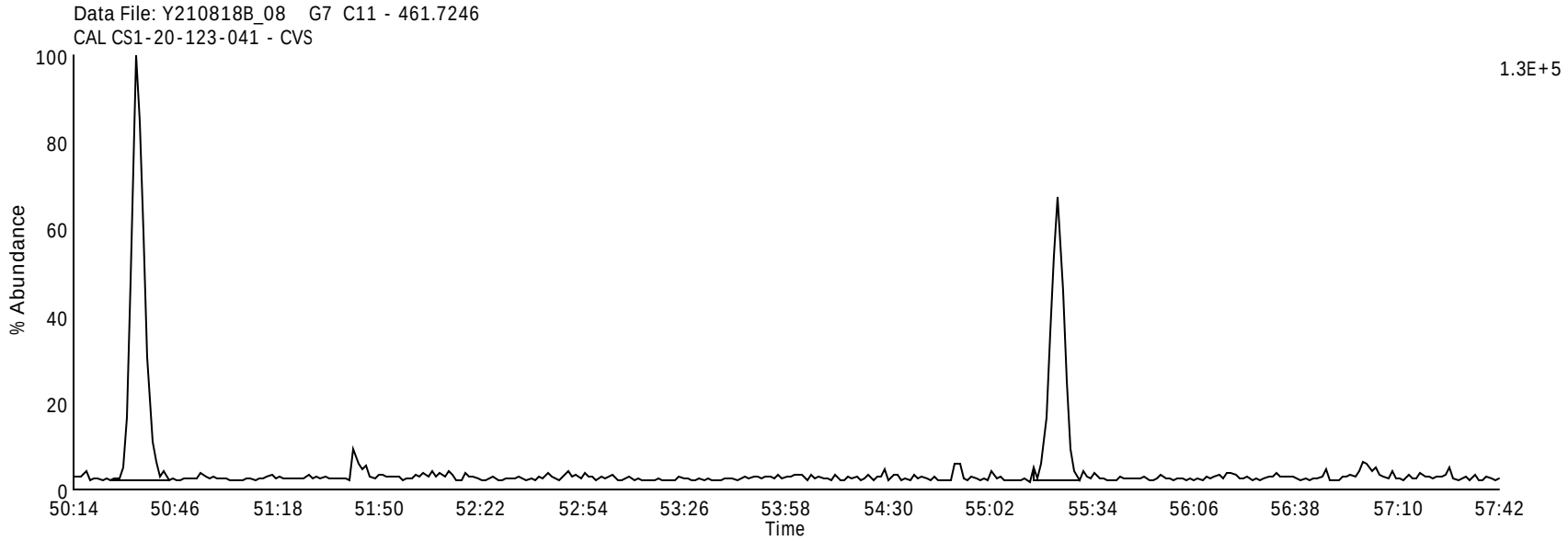


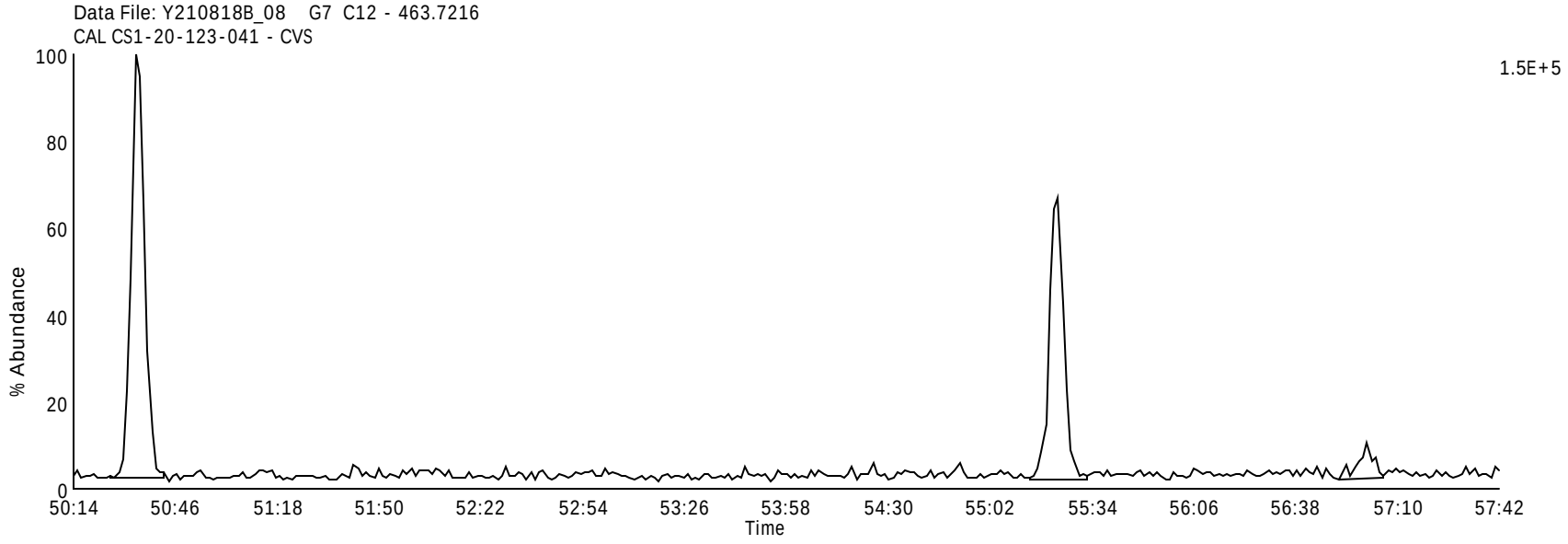
Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



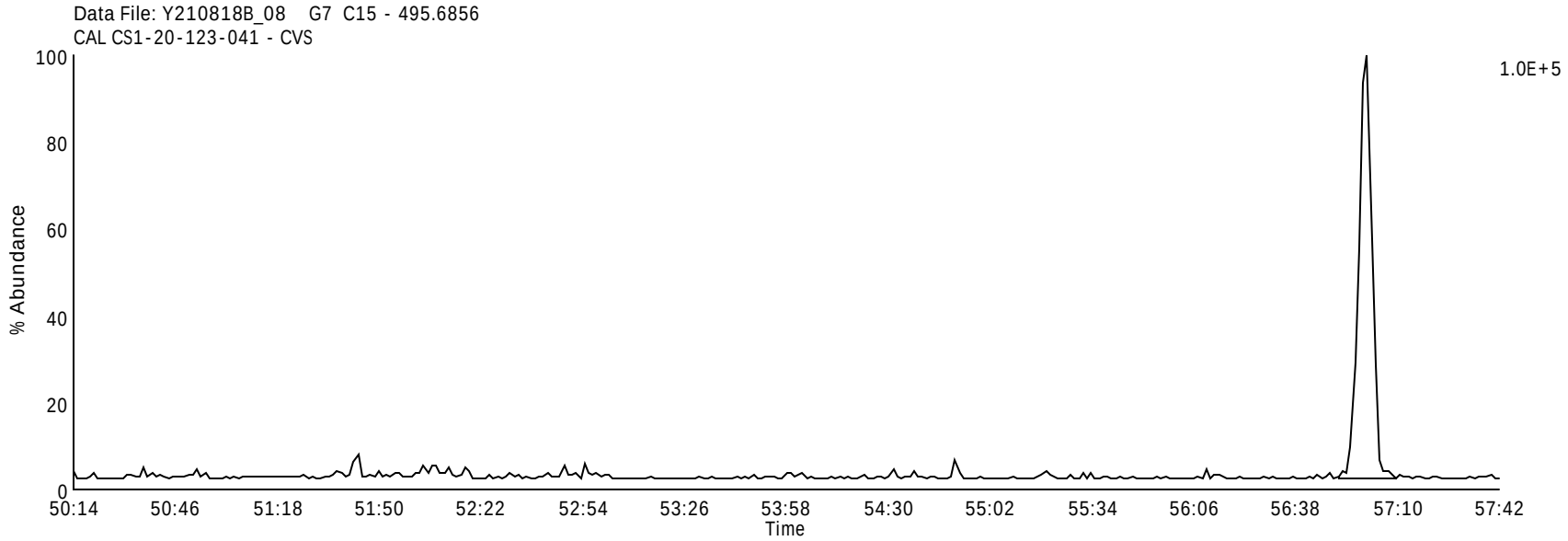


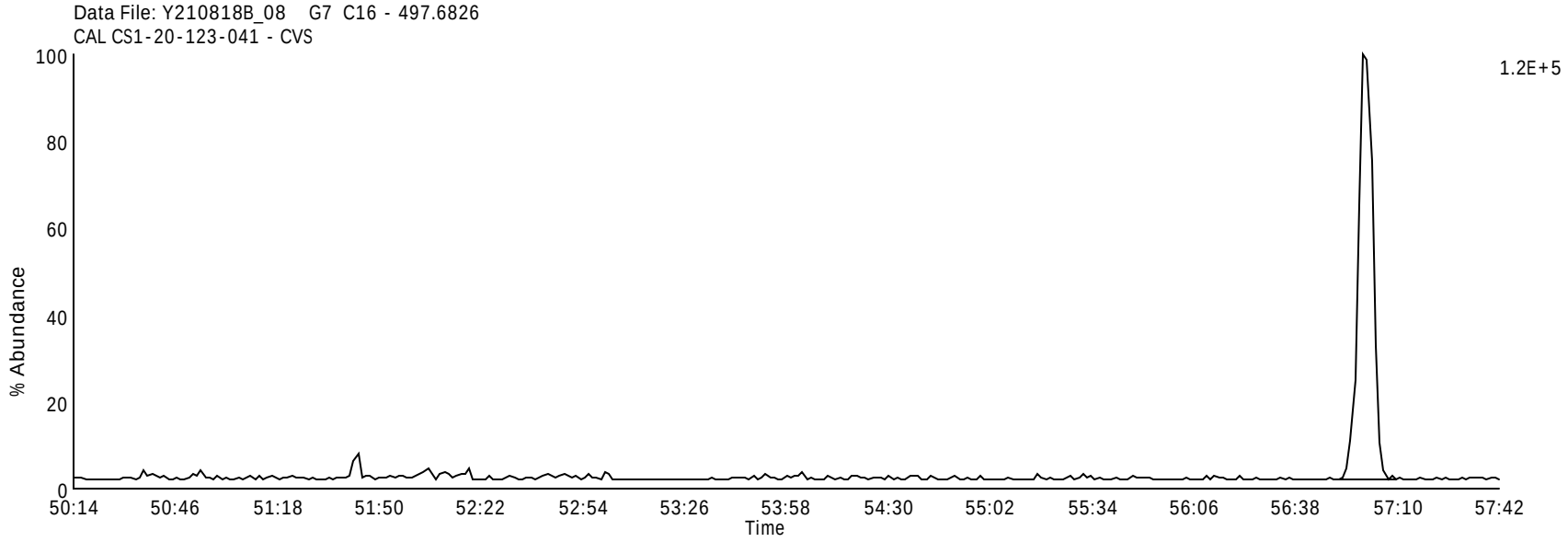
Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

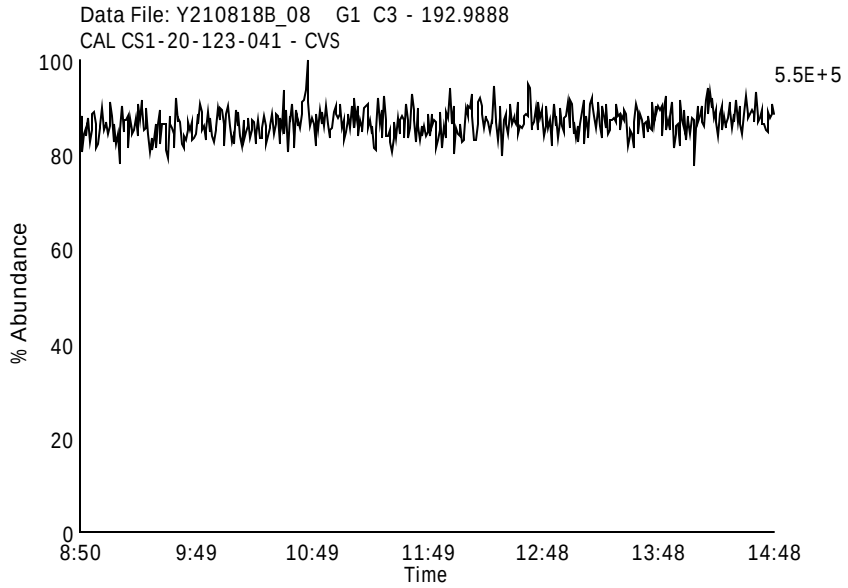


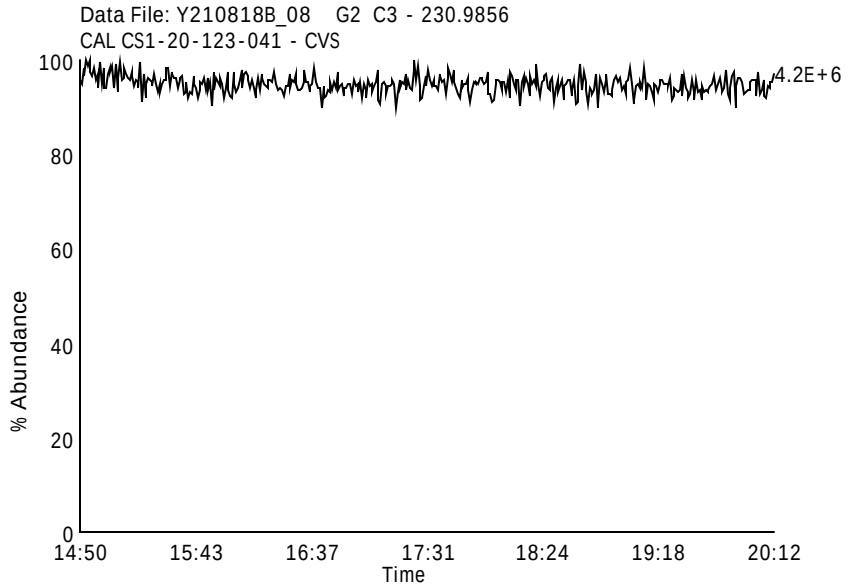


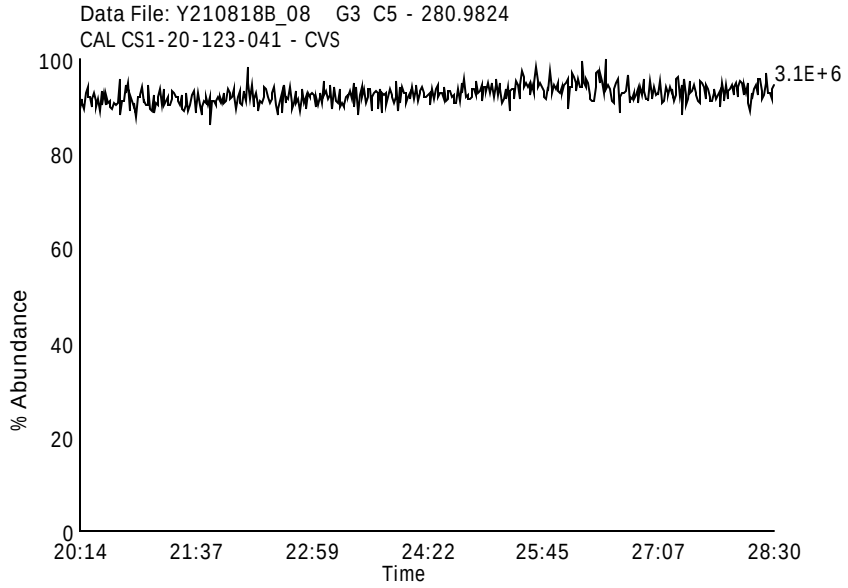
Group 1 - 4 Lock mass

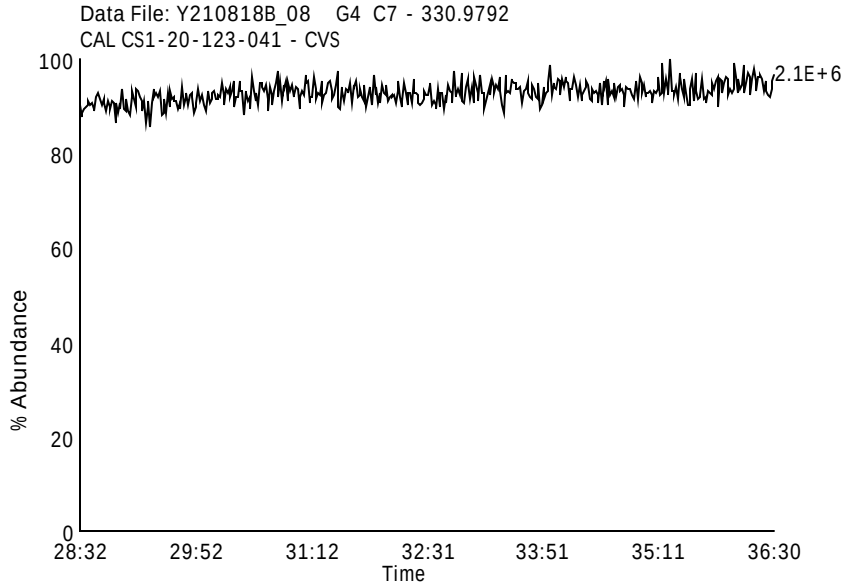
Data File Name: Y210818B_08
Date Acquired: 8/18/2021
Sample Description: CAL CS1-20-123-041 - CVS

Lab Sample ID: CS1-20-123-041
Instrument: 10MSHR12 (Y)





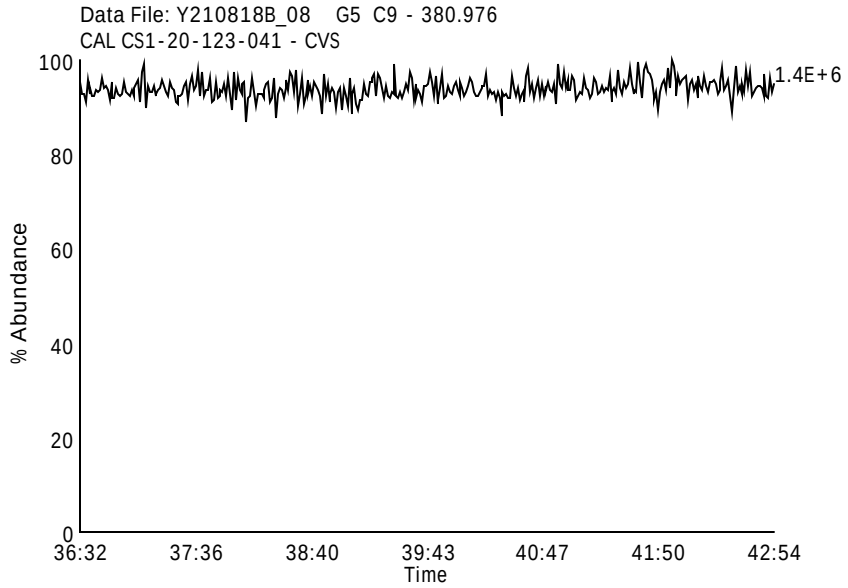


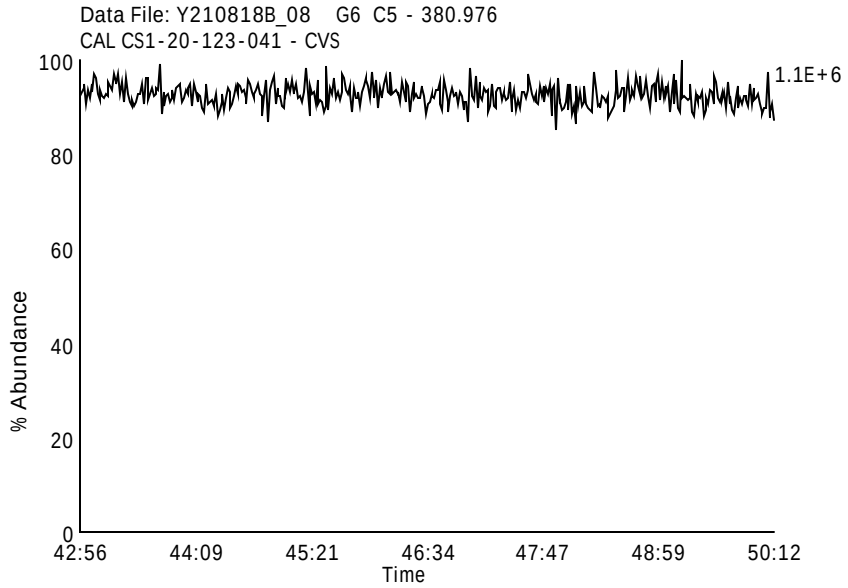


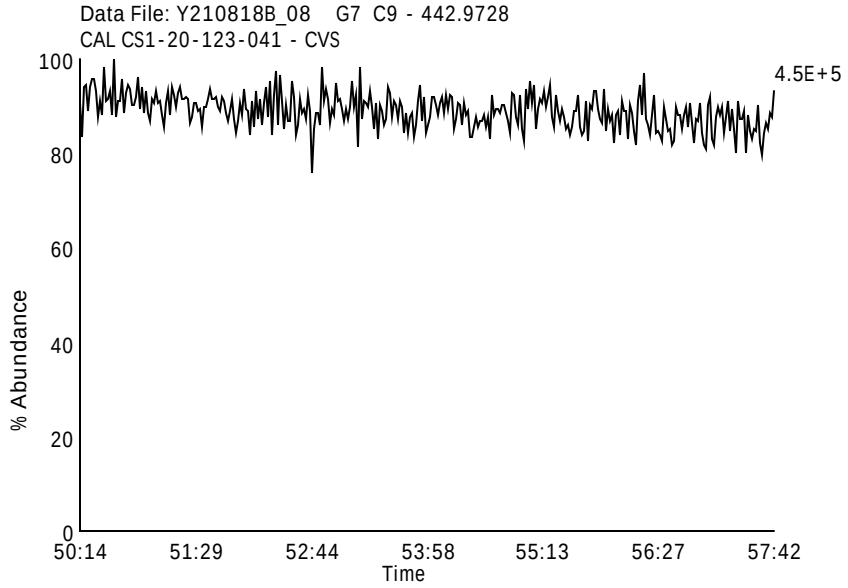
Group 5 - 7 Lock mass

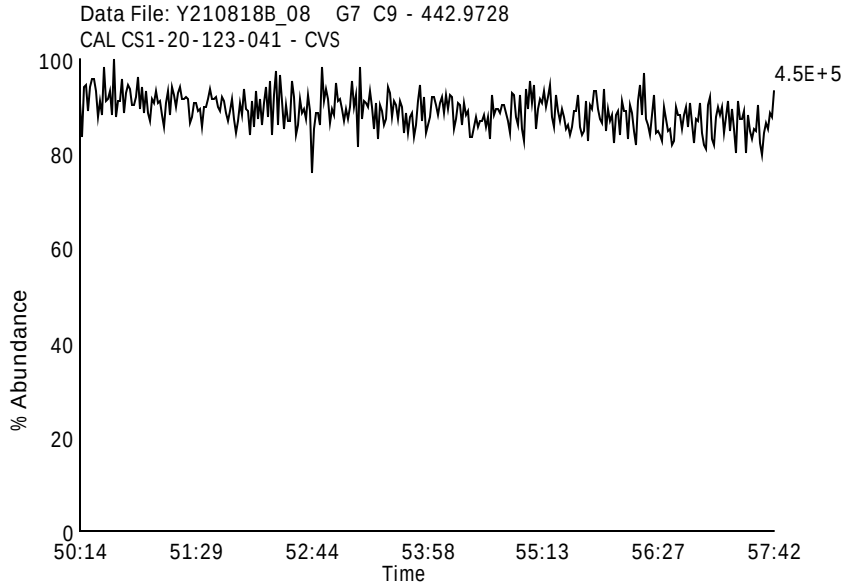
Data File Name: Y210818B_08
Date Acquired: 8/18/2021
Sample Description: CAL CS1-20-123-041 - CVS

Lab Sample ID: CS1-20-123-041
Instrument: 10MSHR12 (Y)







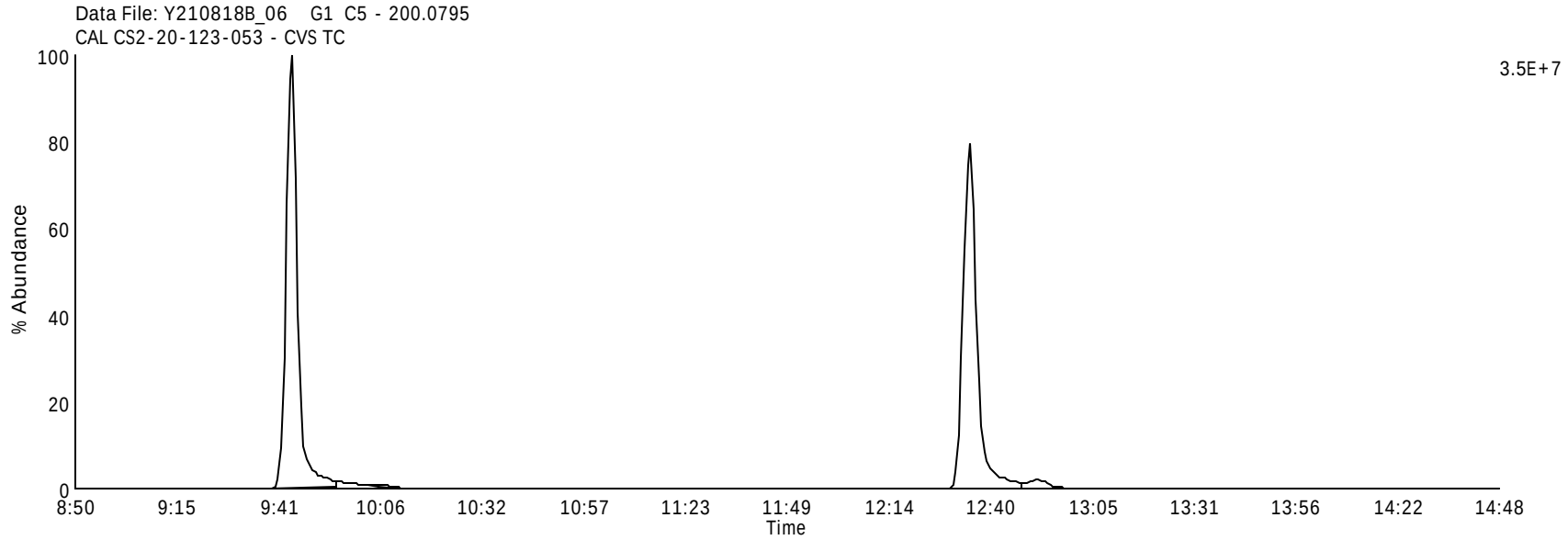


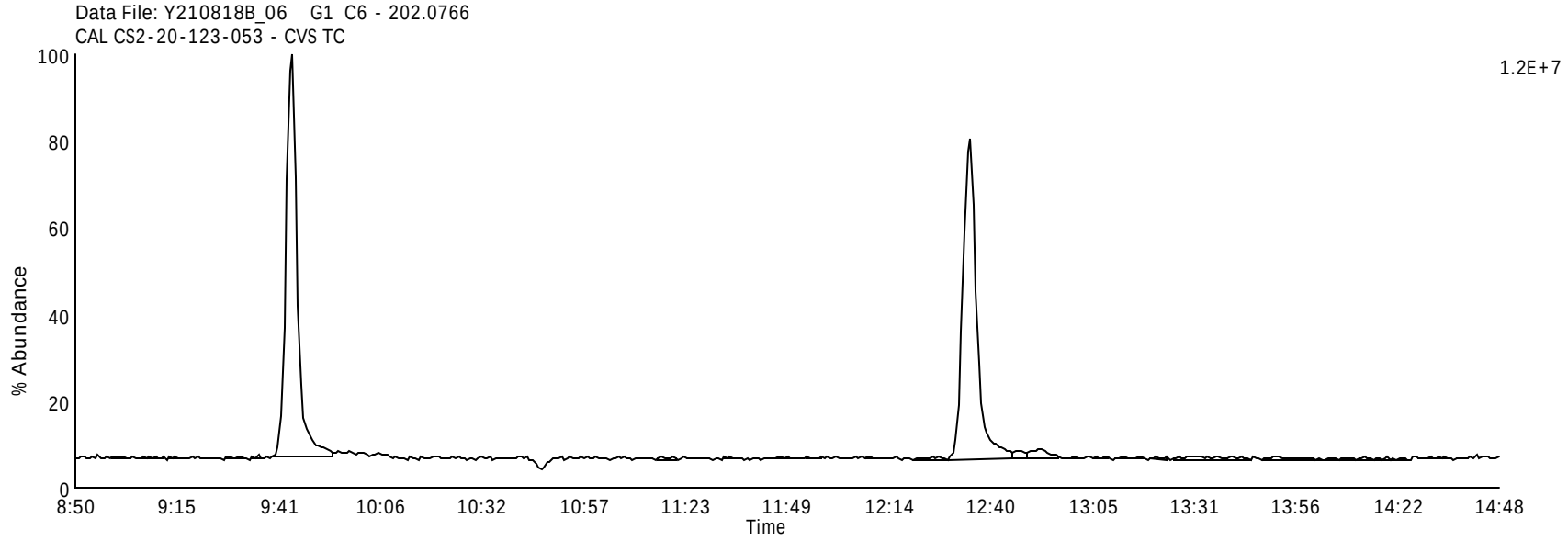
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

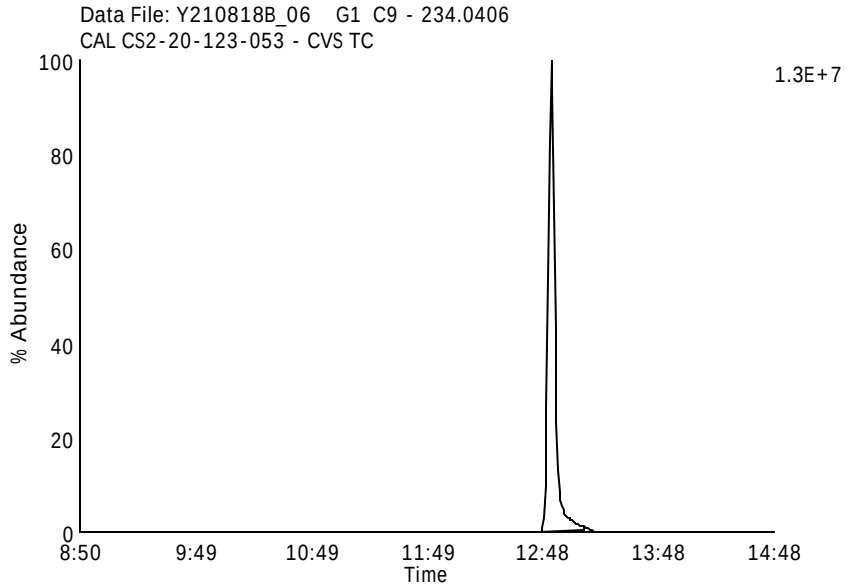
Sample Description: CAL CS2-20-123-053 - CVS TC

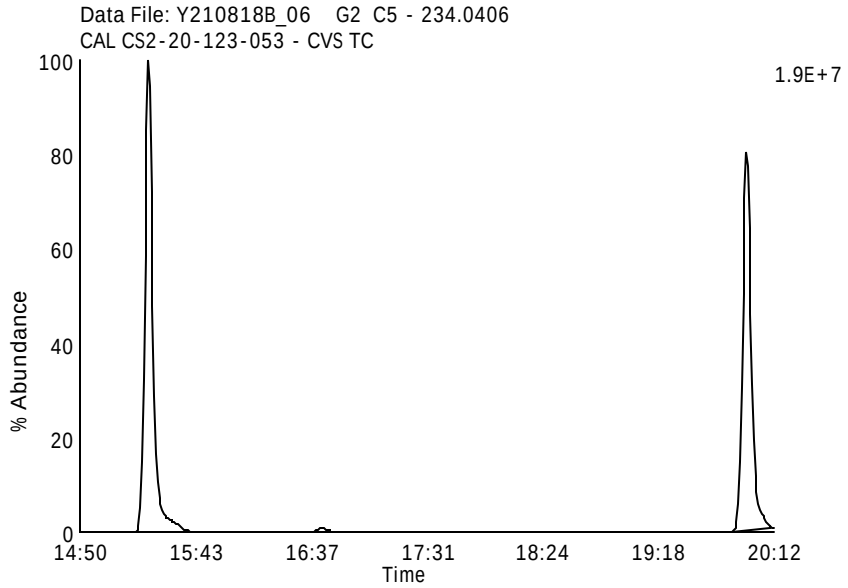


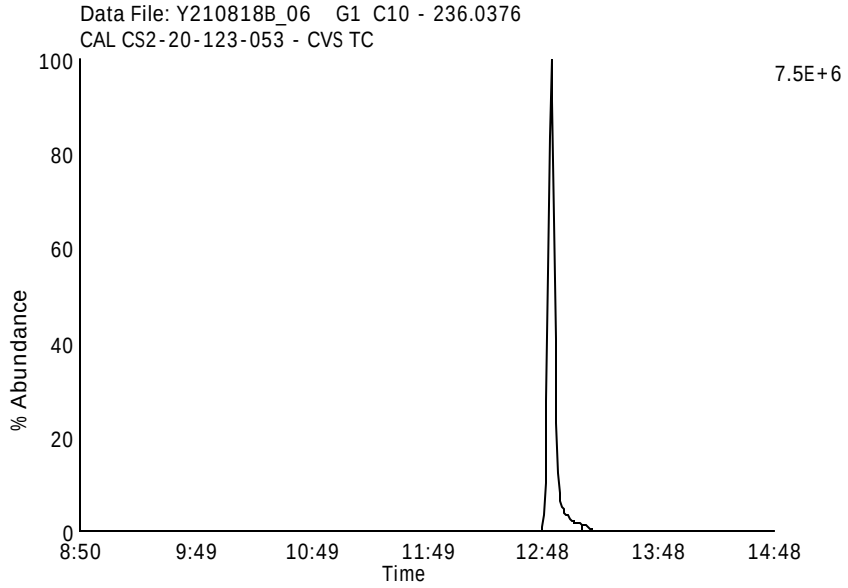


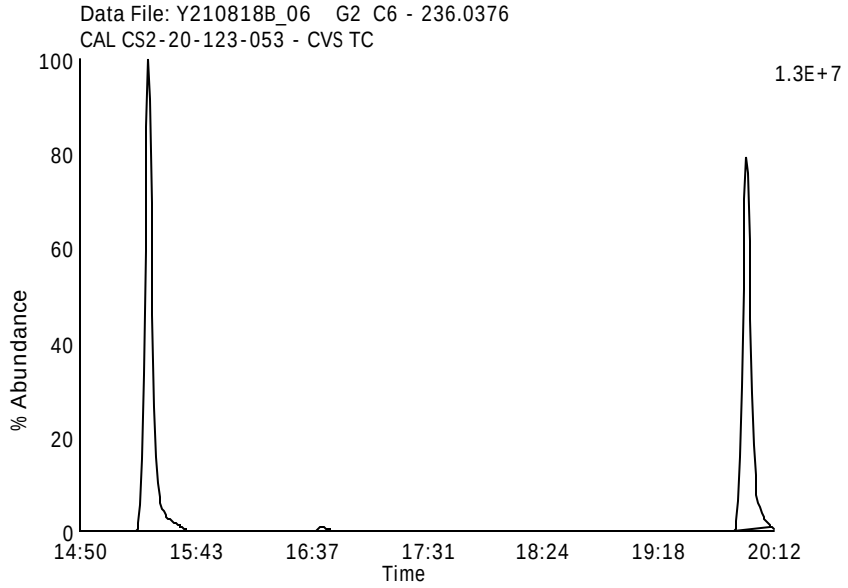
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



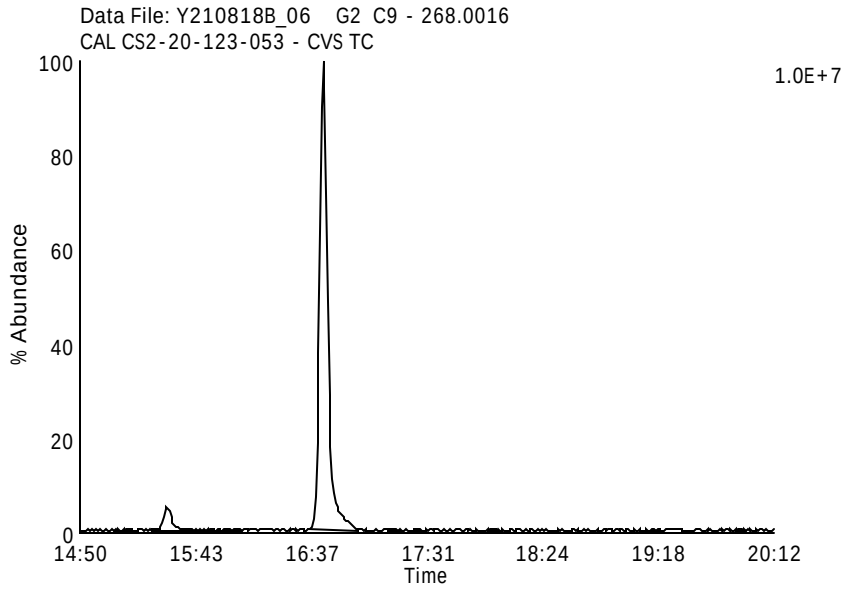


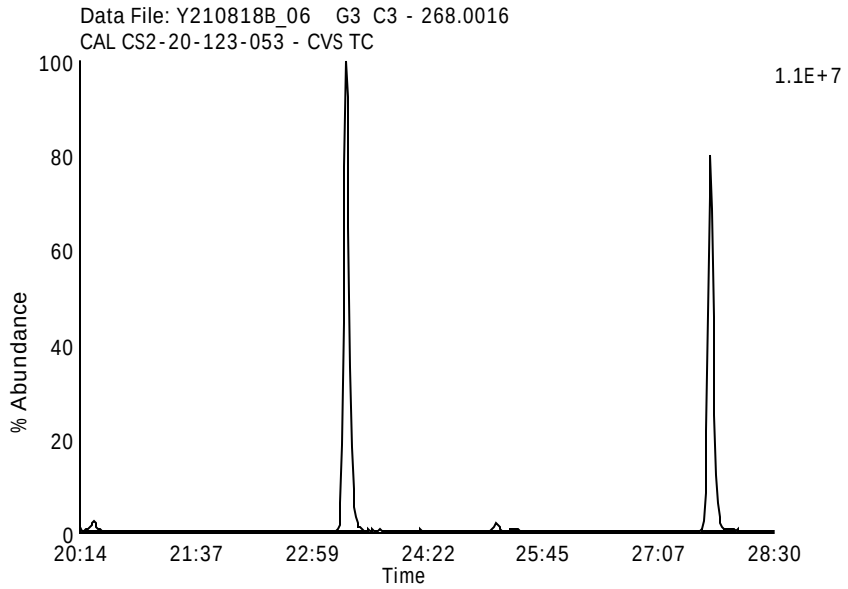


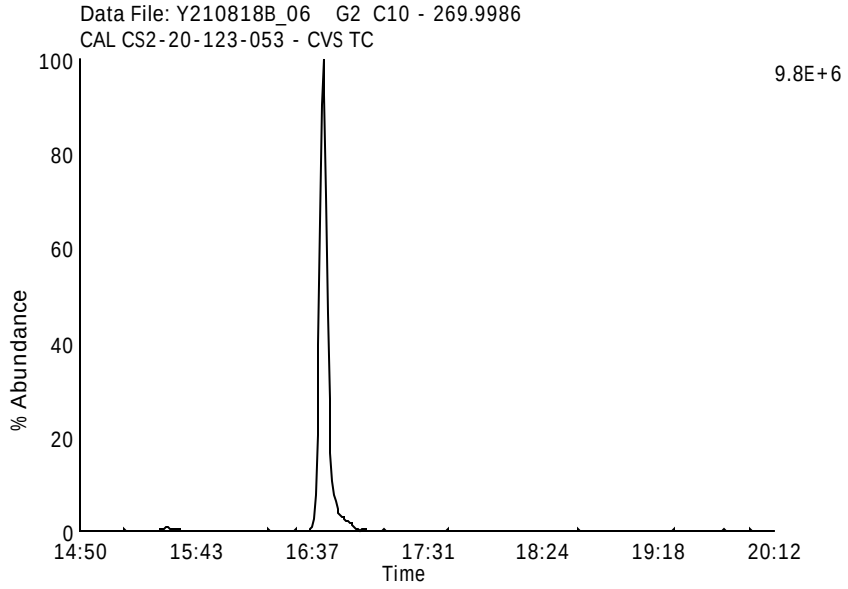


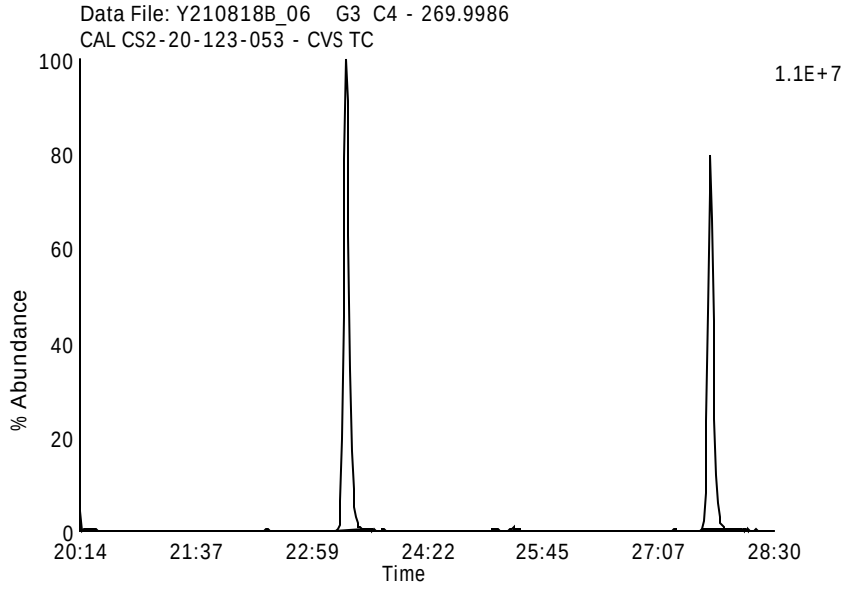
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







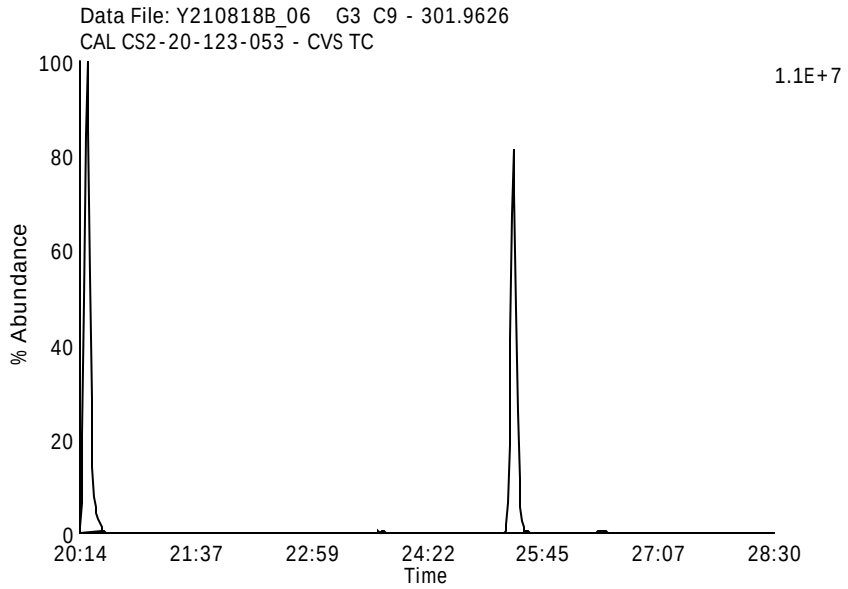


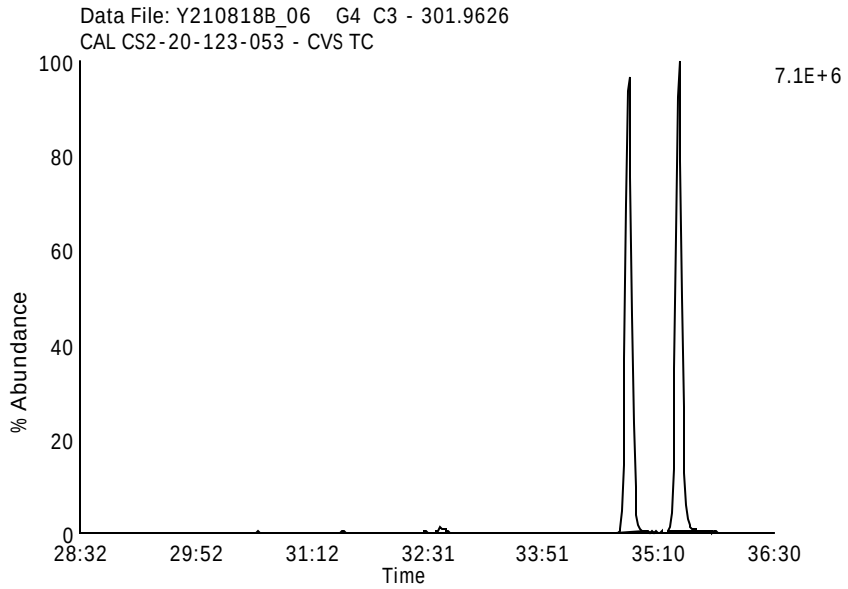
Labeled Tetra Chlorinated Biphenyls

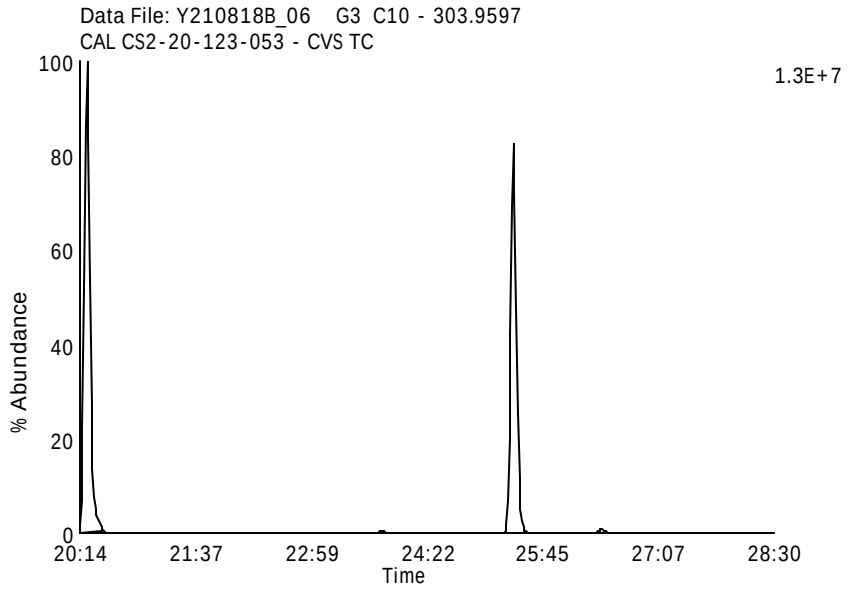
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

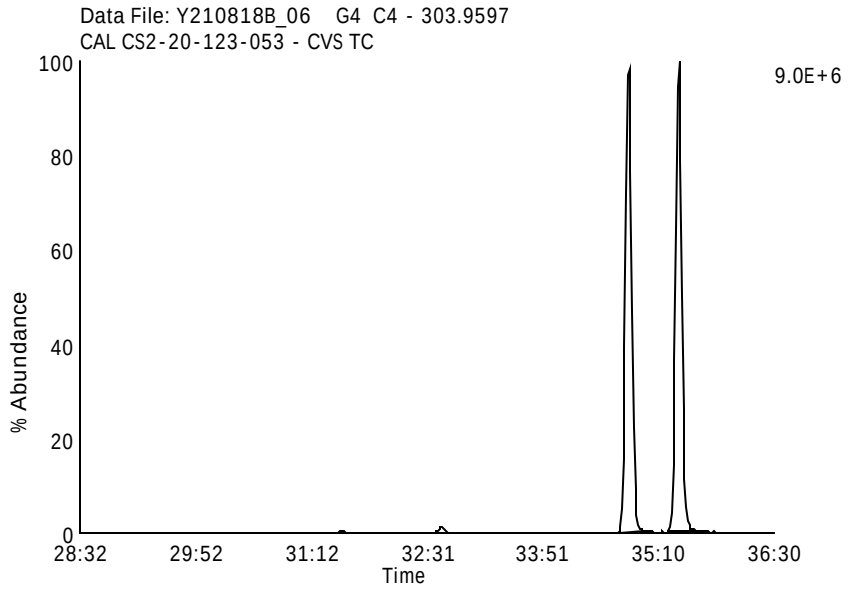
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC









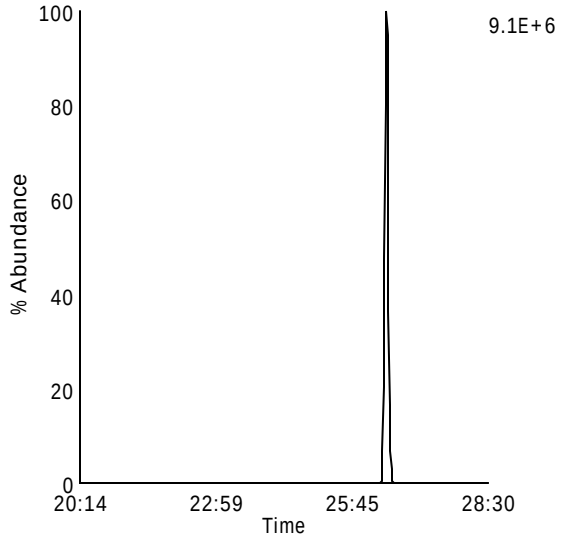
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

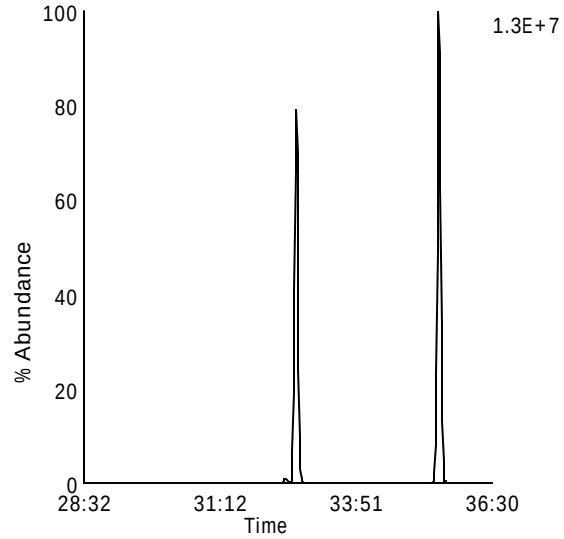
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

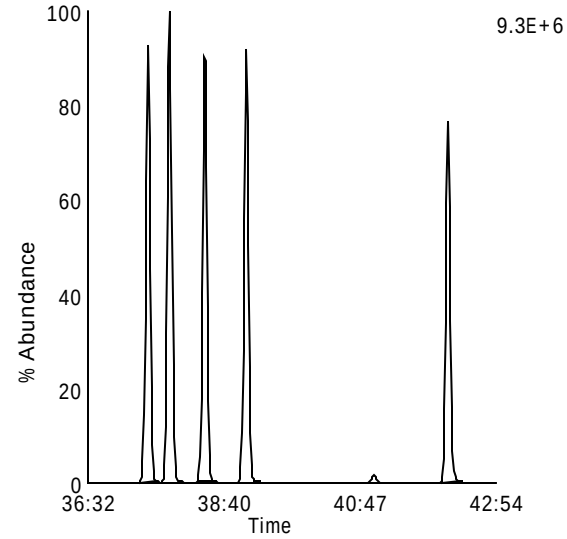
Data File: Y210818B_06 G3 C13 - 337.9207
CAL CS2-20-123-053 - CVS TC



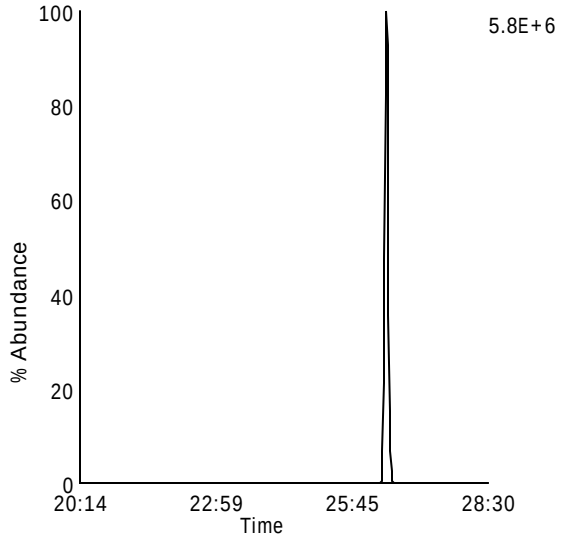
Data File: Y210818B_06 G4 C9 - 337.9207
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C3 - 337.9207
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G3 C14 - 339.9178
CAL CS2-20-123-053 - CVS TC



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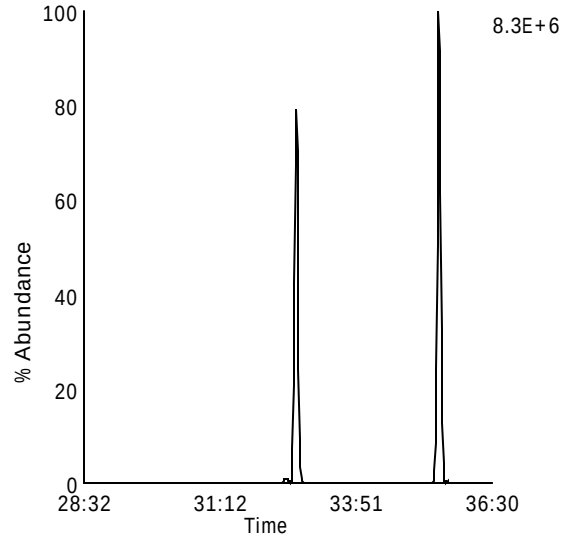
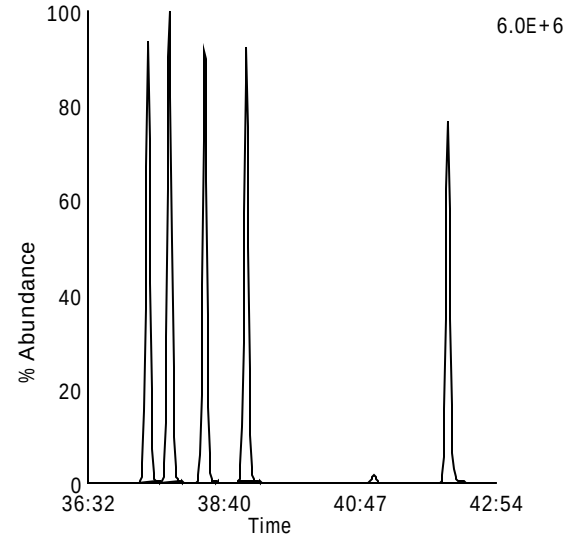
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C4 - 339.9178
CAL CS2-20-123-053 - CVS TC

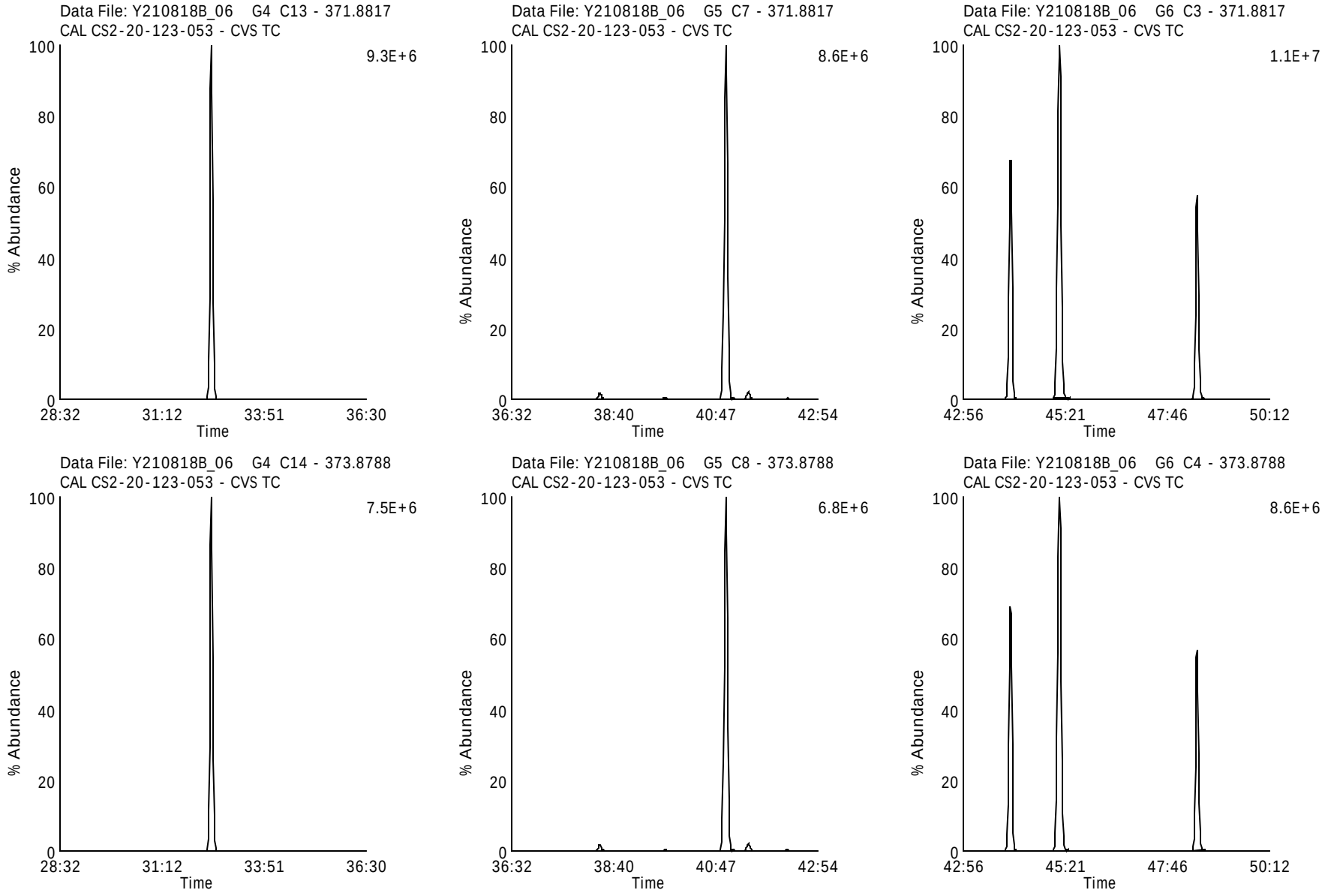


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

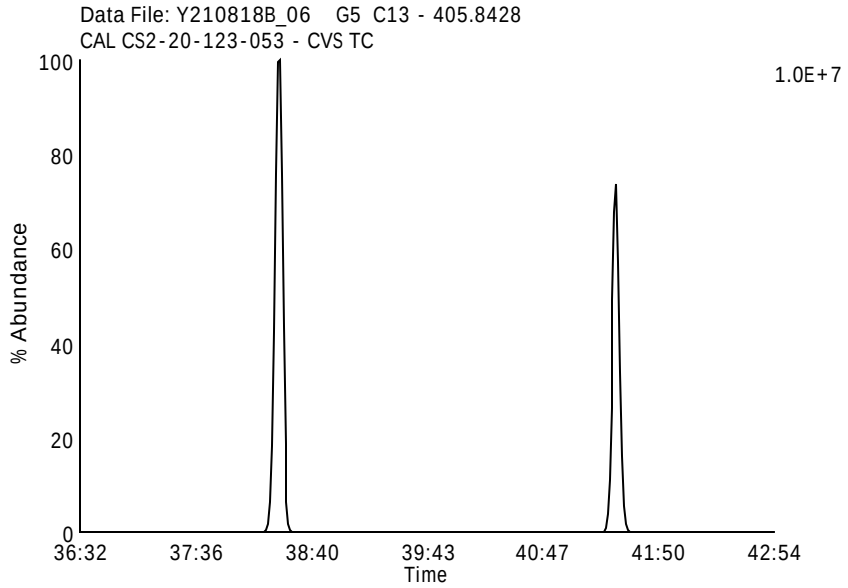


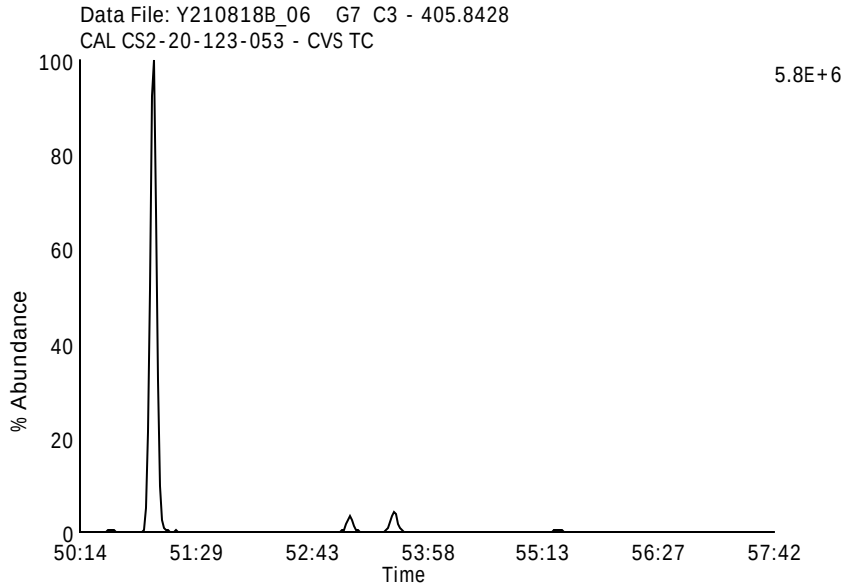
Labeled Hepta Chlorinated Biphenyls

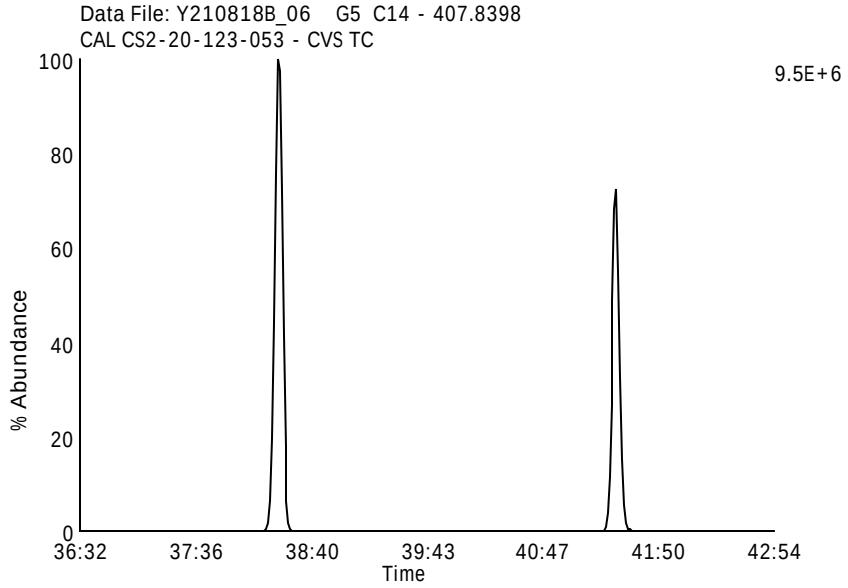
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

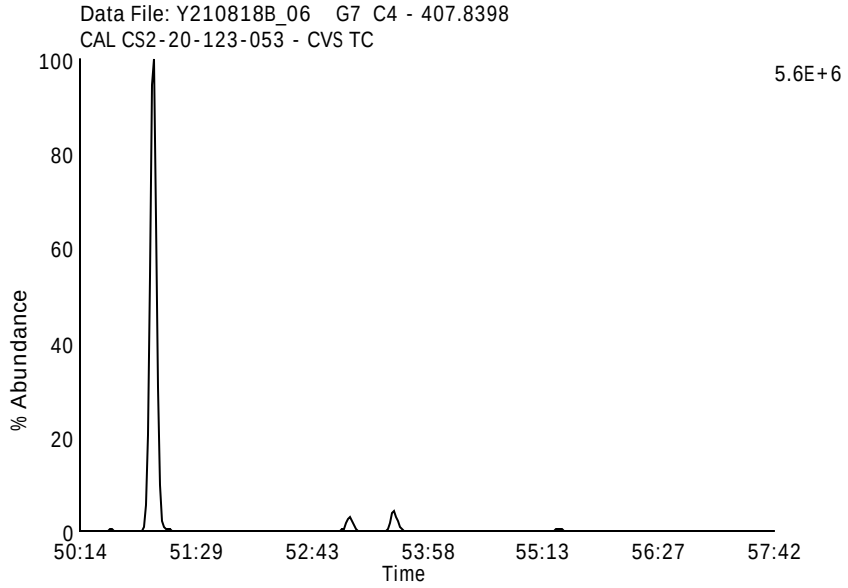
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC









Labeled Octa Chlorinated Biphenyls

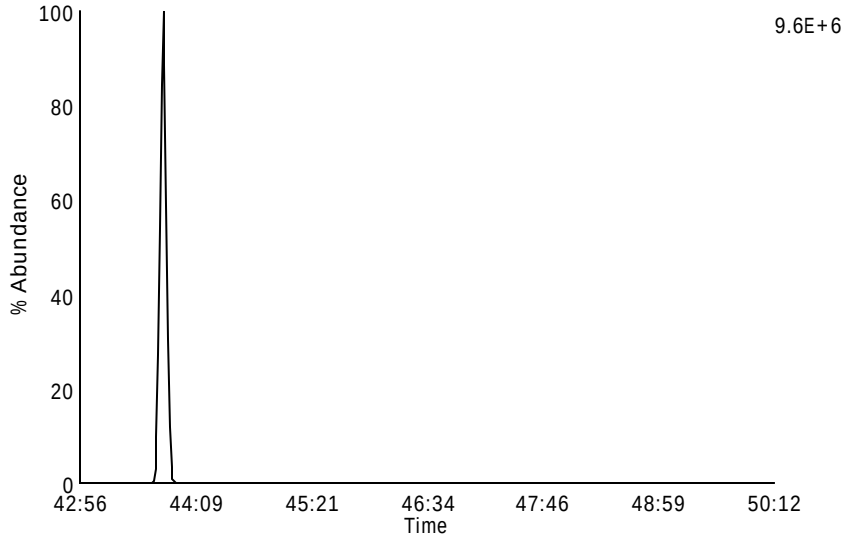
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

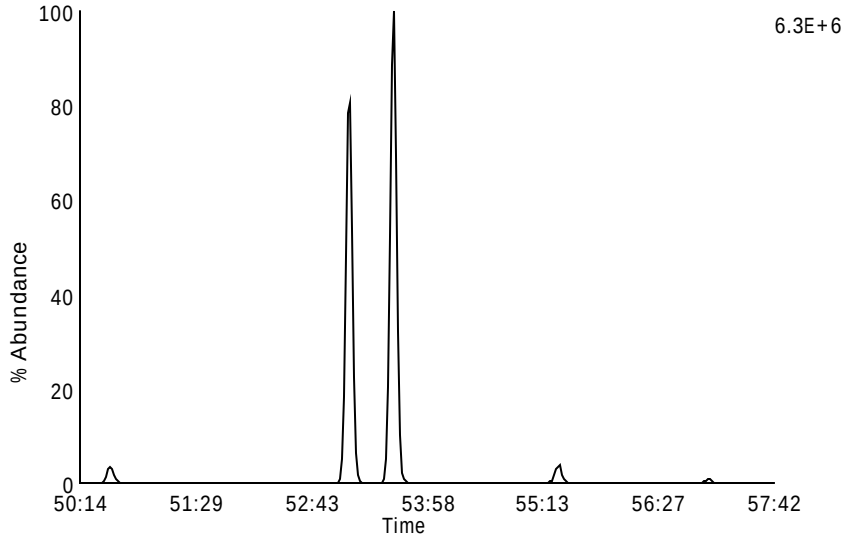
Data File: Y210818B_06 G6 C13 - 439.8038

CAL CS2-20-123-053 - CVS TC



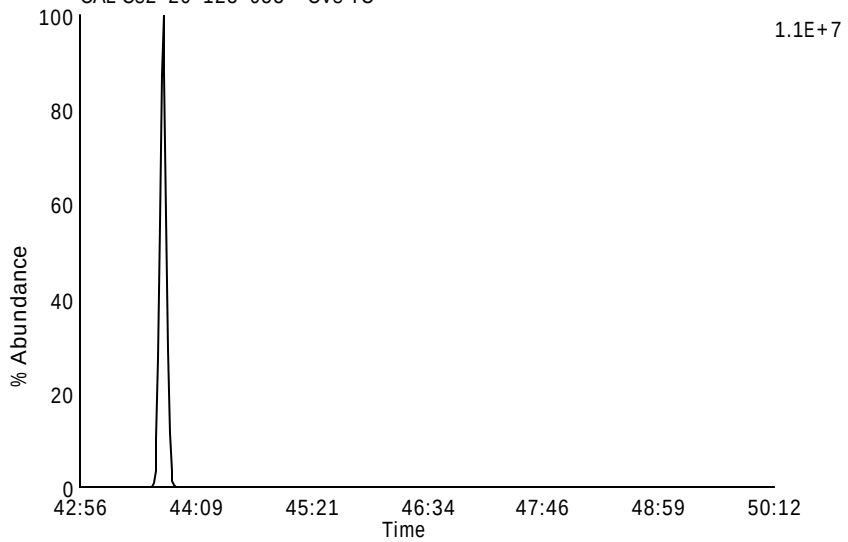
Data File: Y210818B_06 G7 C7 - 439.8038

CAL CS2-20-123-053 - CVS TC



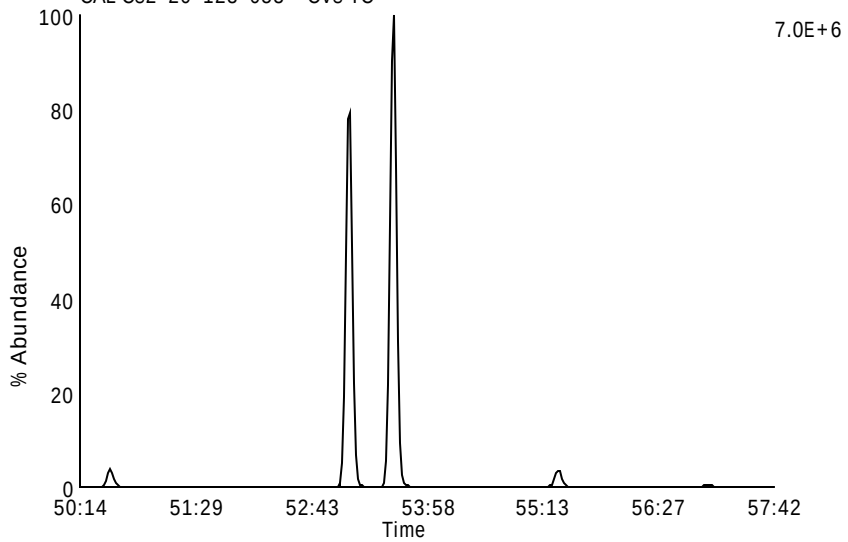
Data File: Y210818B_06 G6 C14 - 441.8008

CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G7 C8 - 441.8008

CAL CS2-20-123-053 - CVS TC

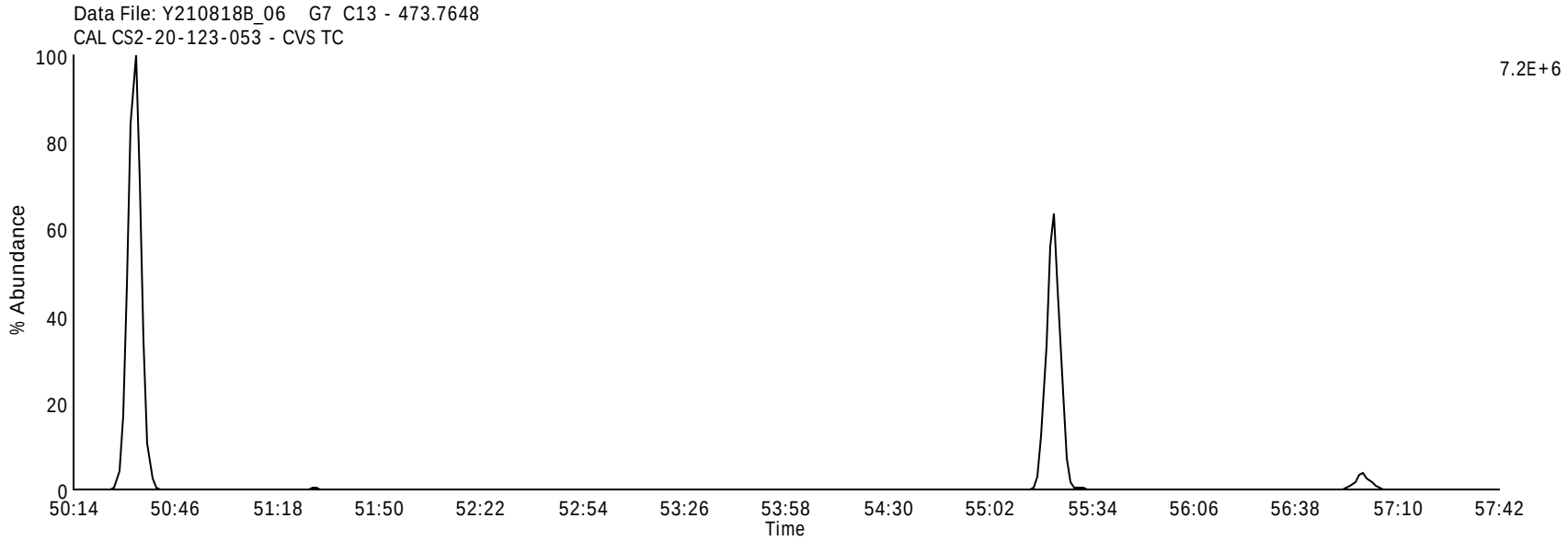


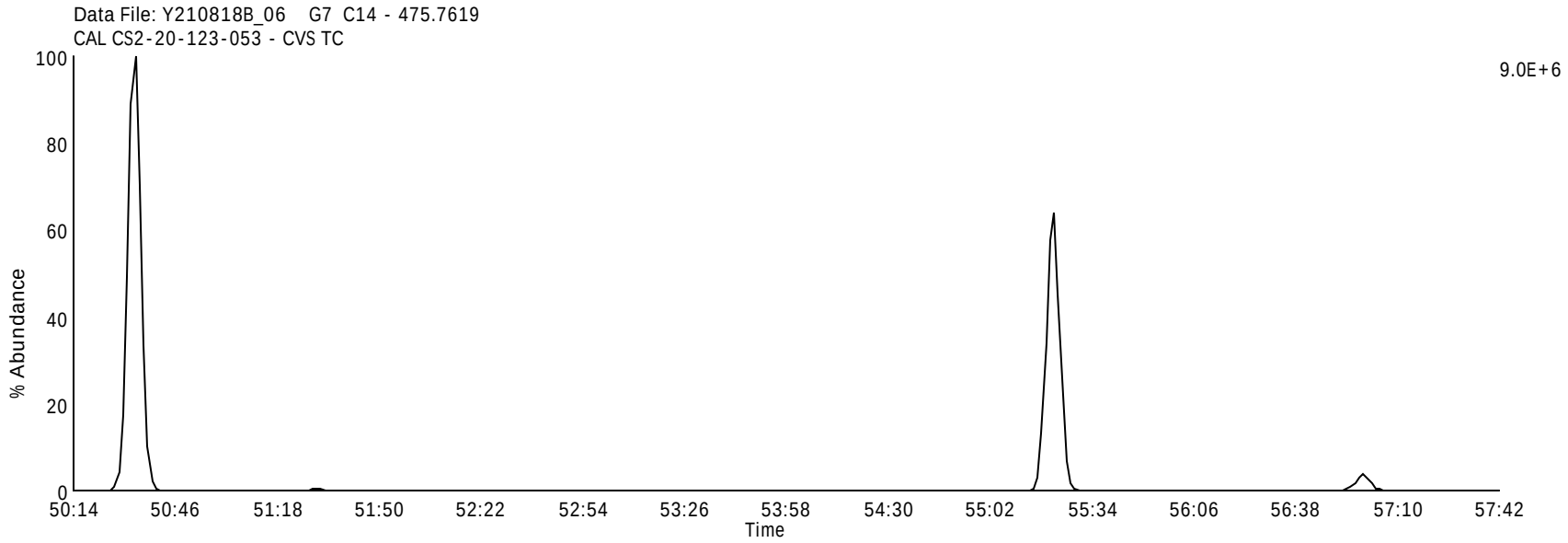
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



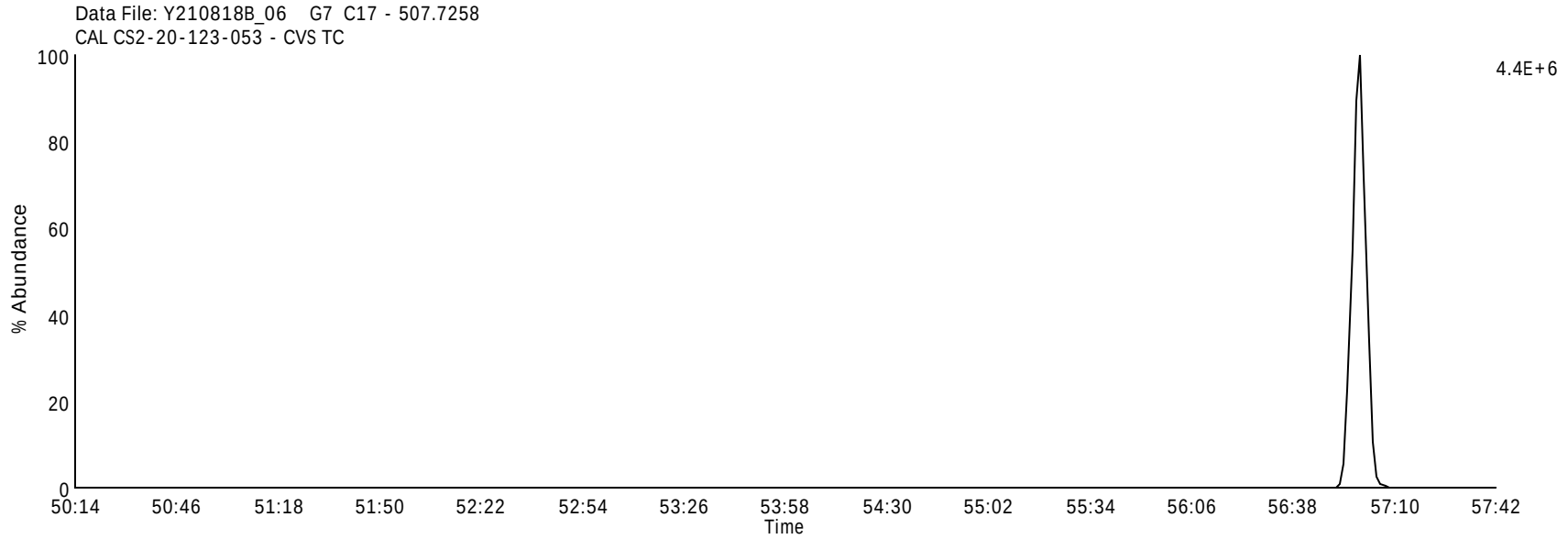


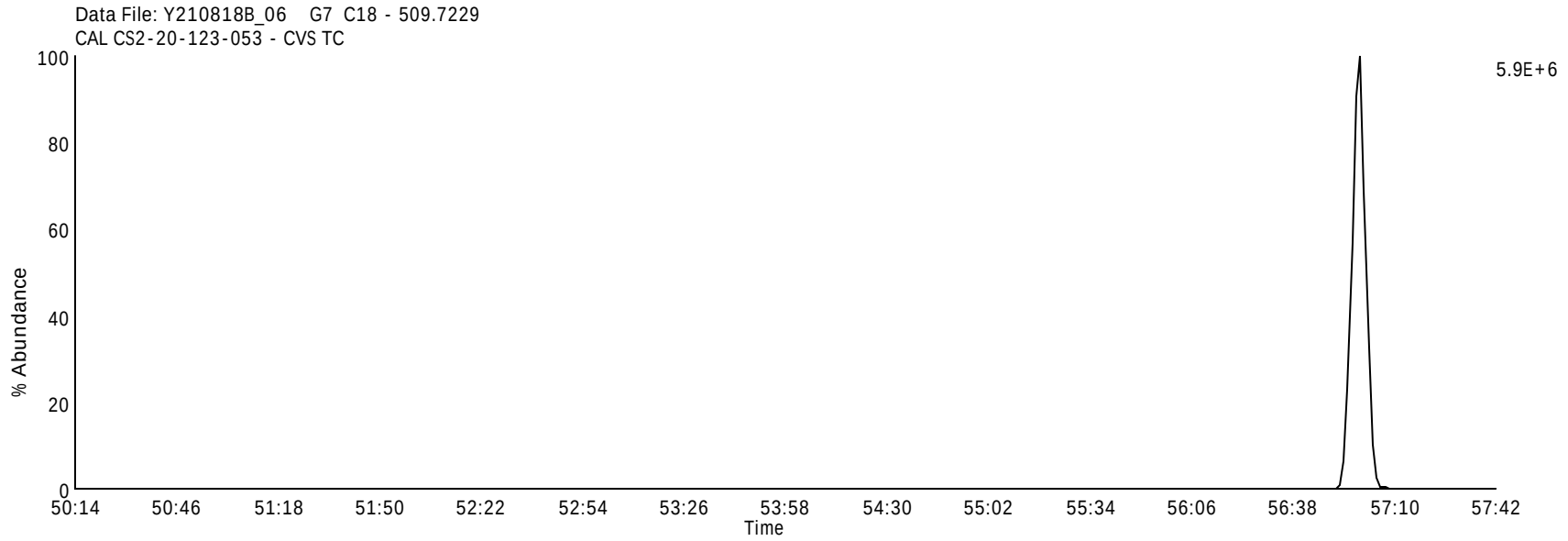
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



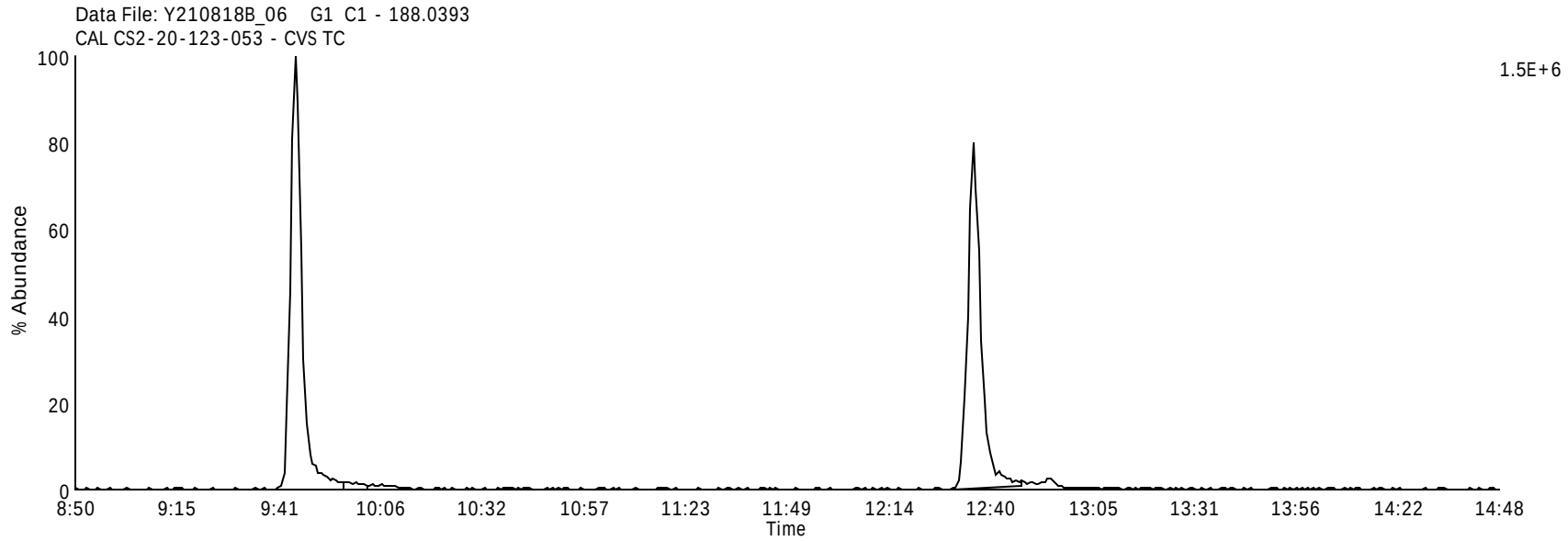


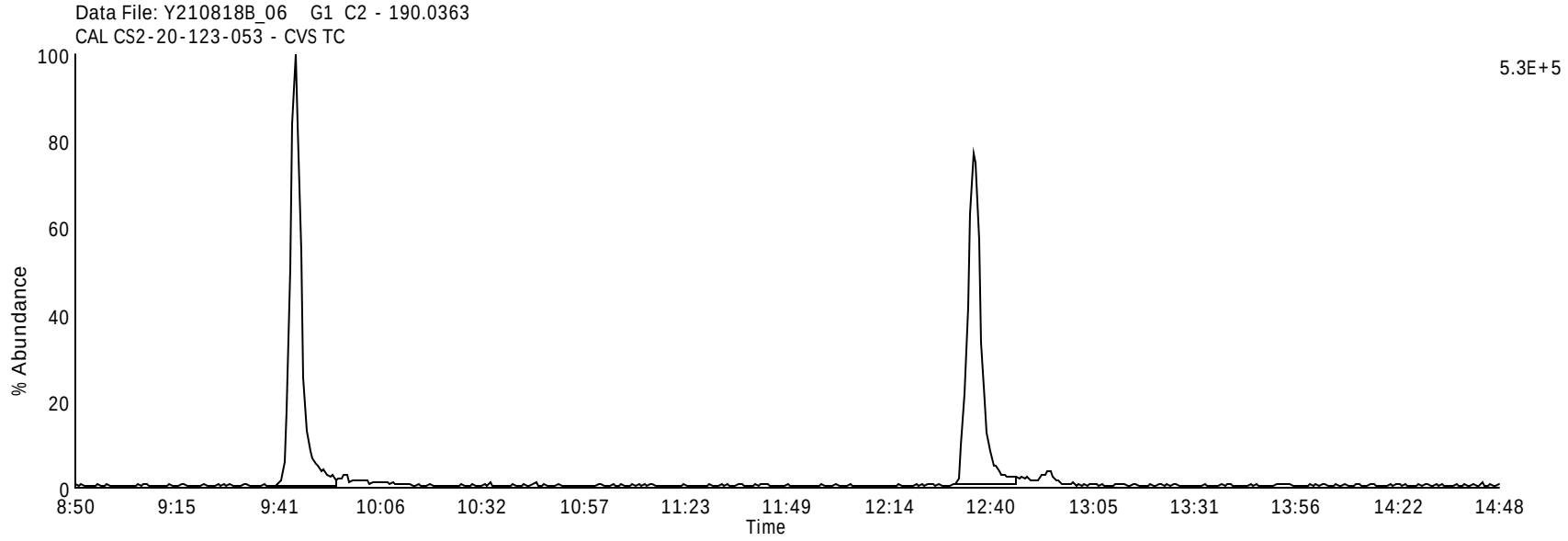
Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

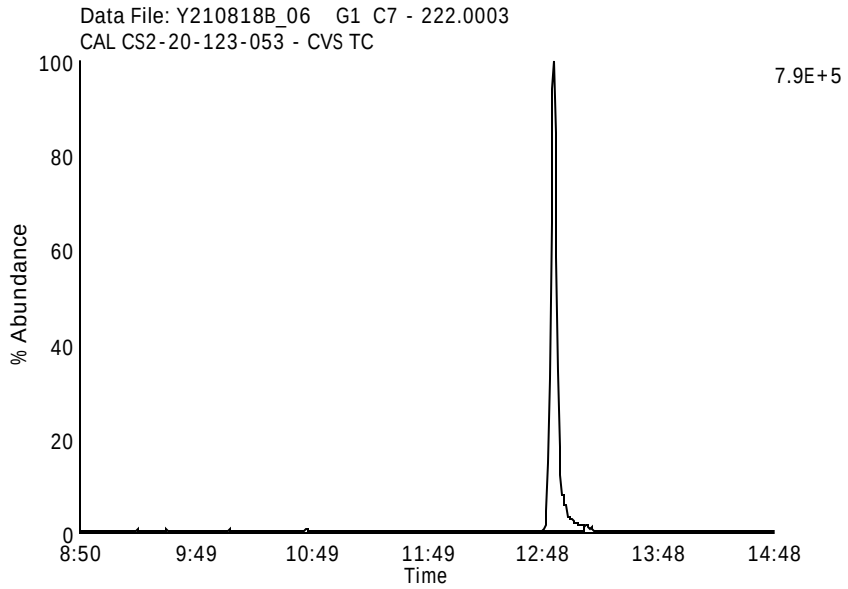
Sample Description: CAL CS2-20-123-053 - CVS TC

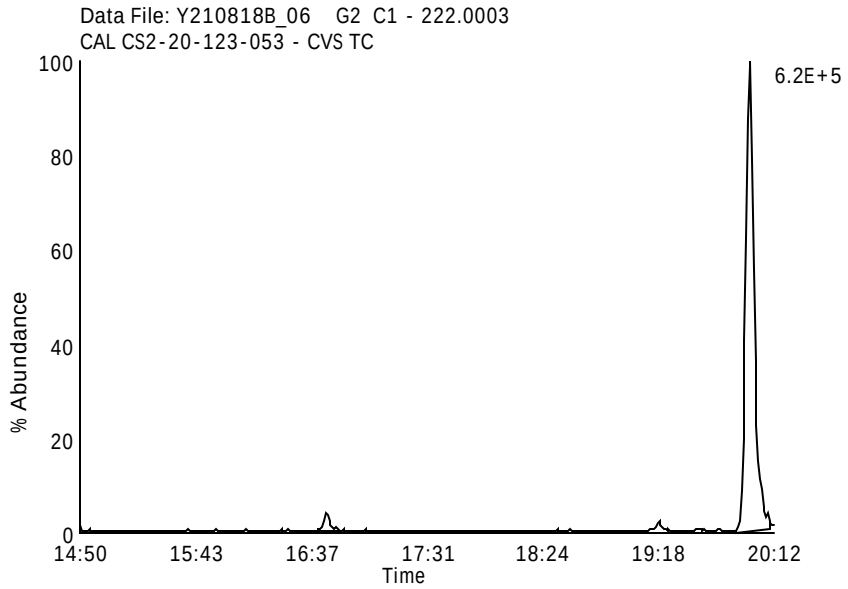


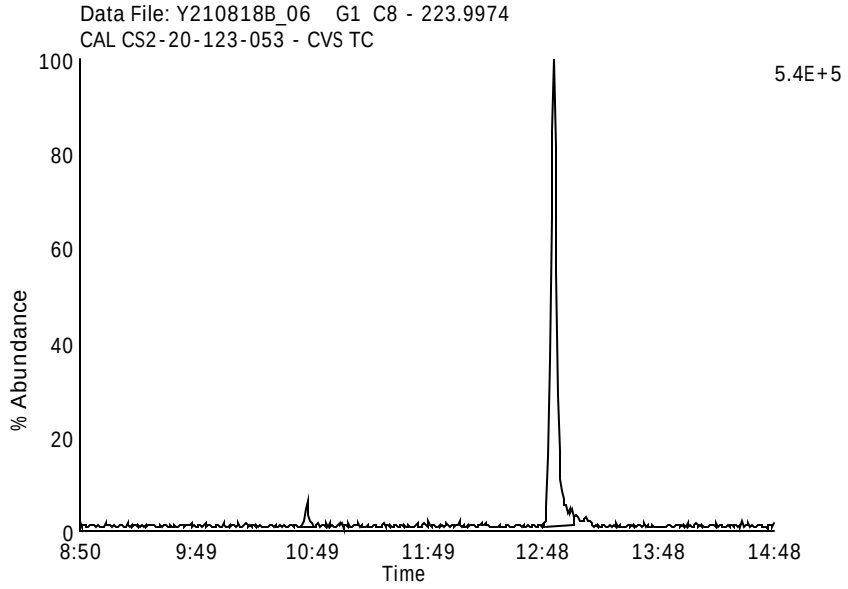


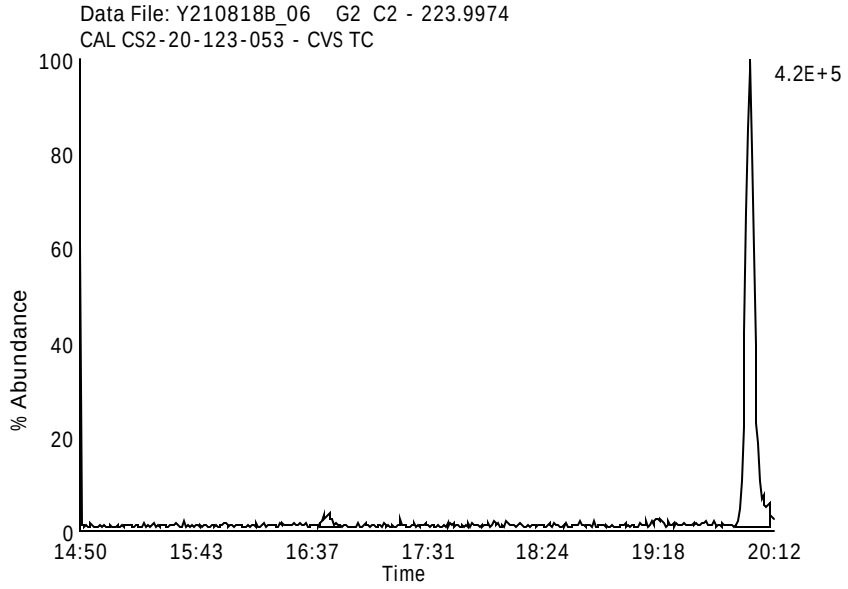
Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



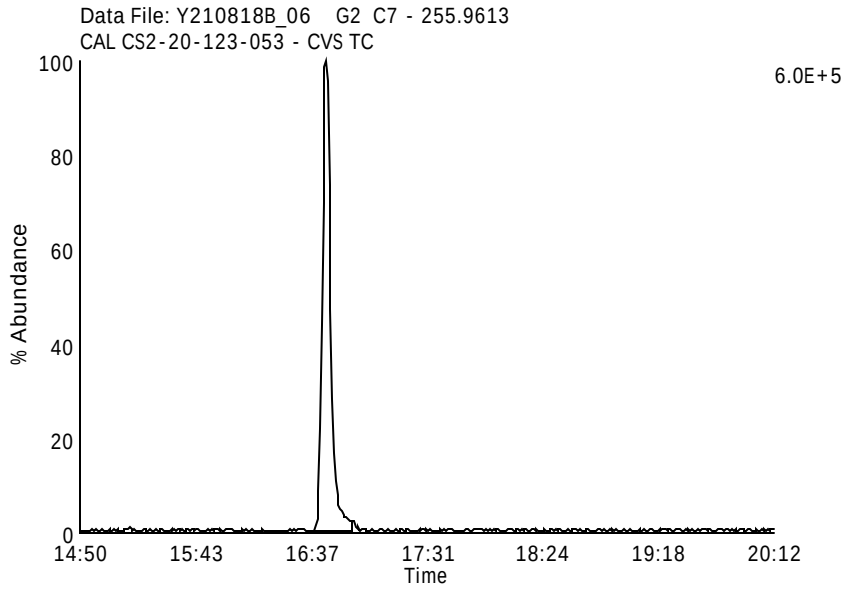


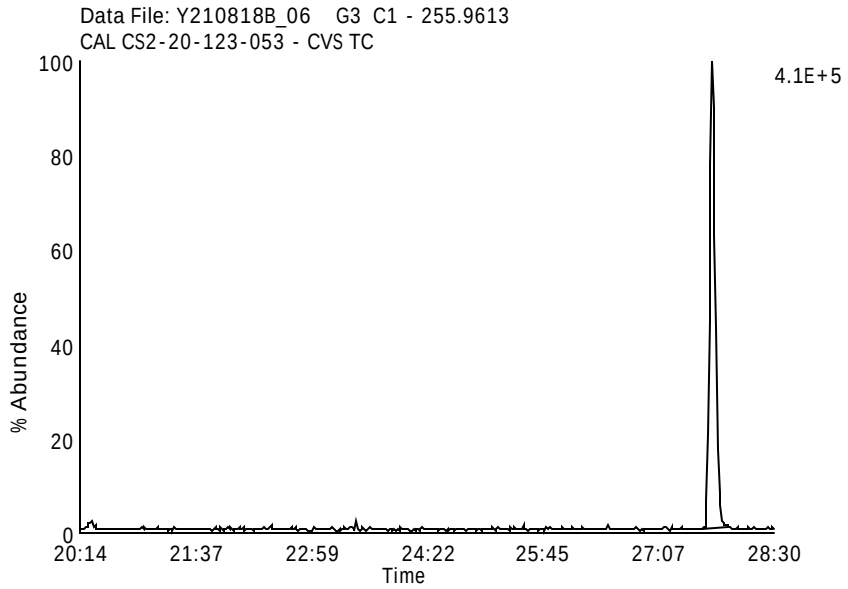


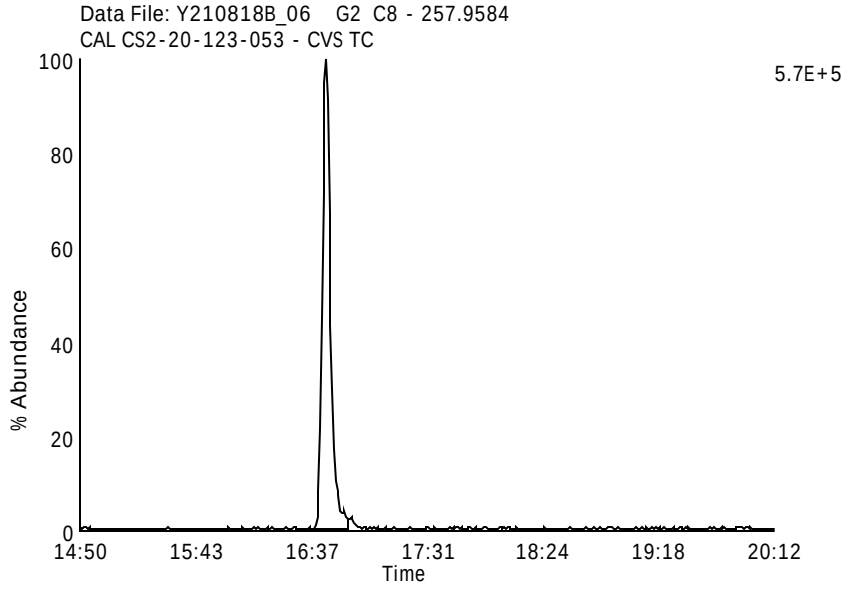


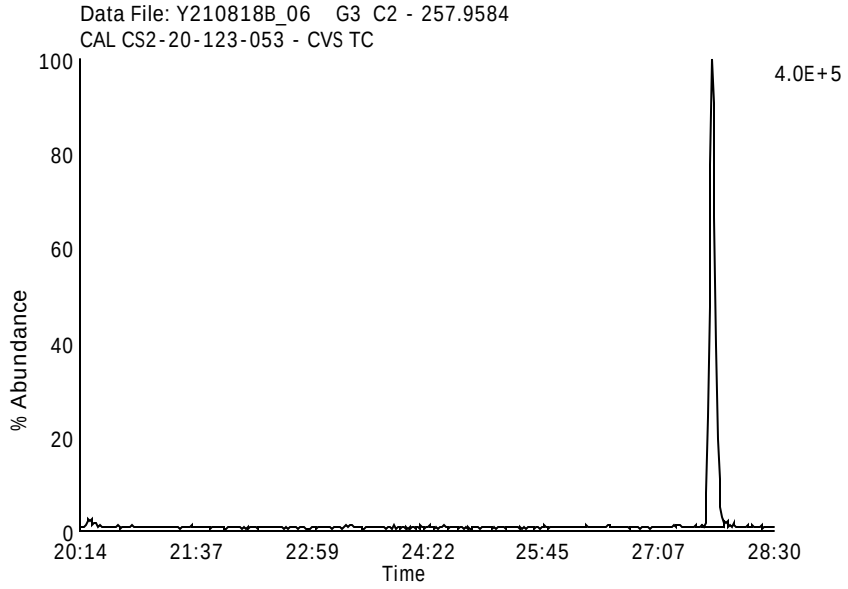
Tri Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



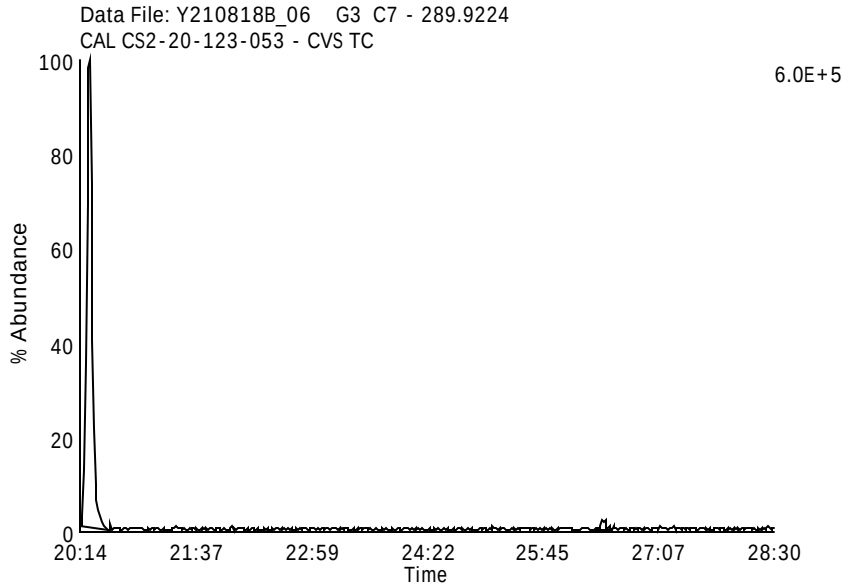


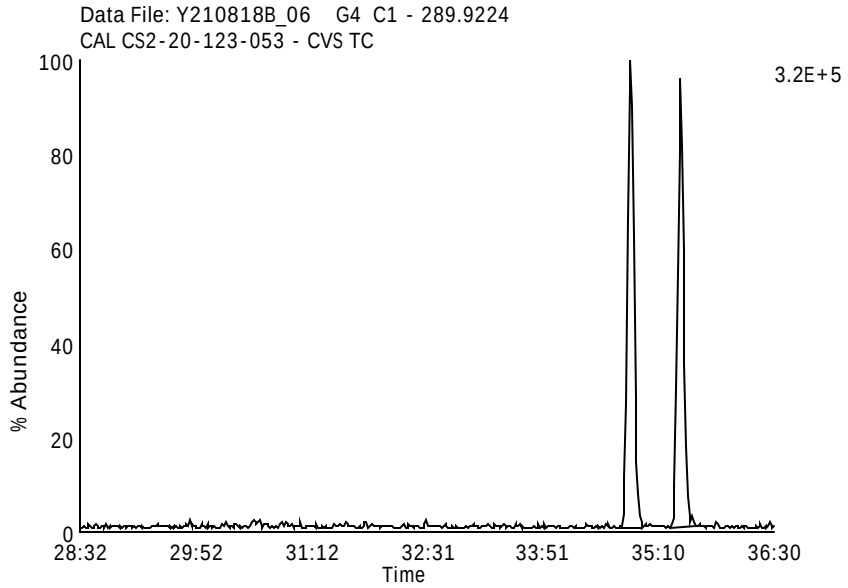


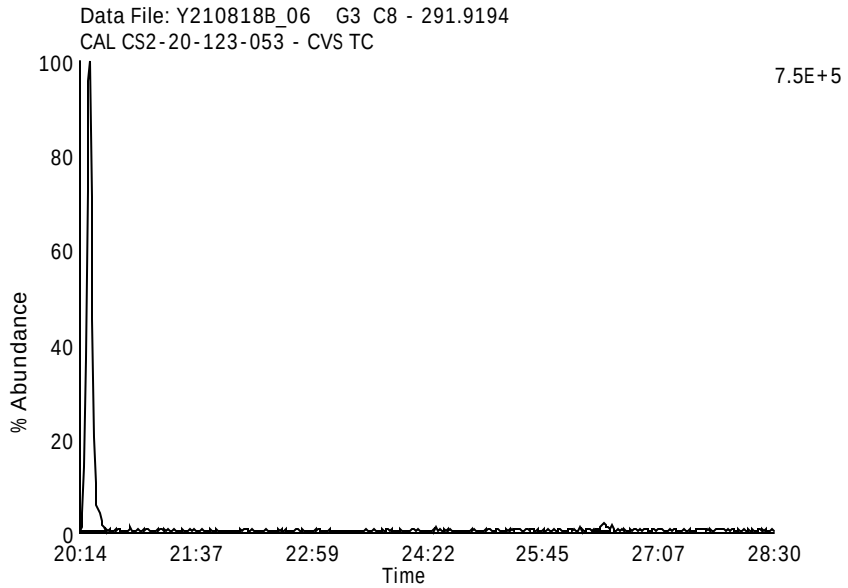


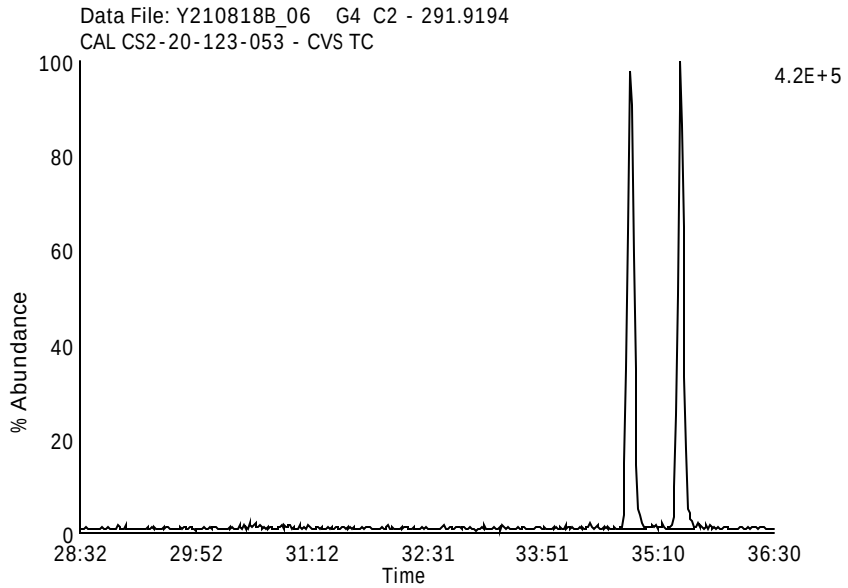
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC









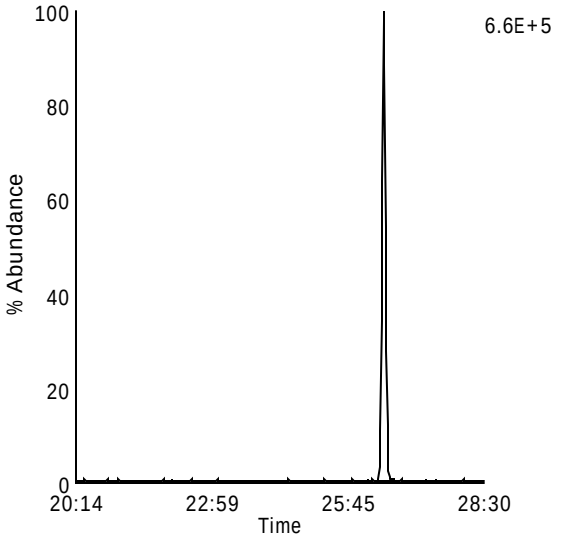
Penta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

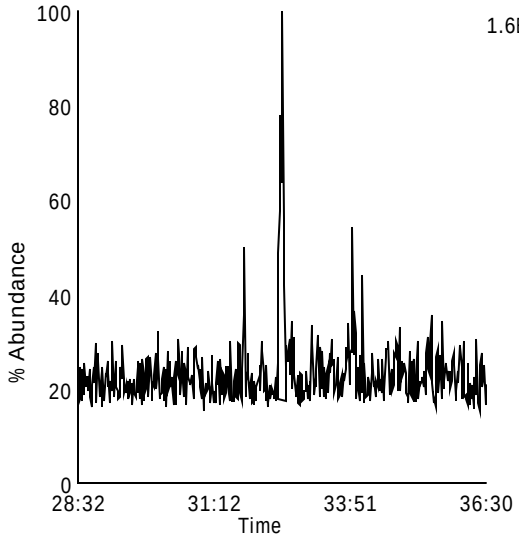
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

Data File: Y210818B_06 G3 C11 - 325.8804
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C5 - 325.8804
CAL CS2-20-123-053 - CVS TC



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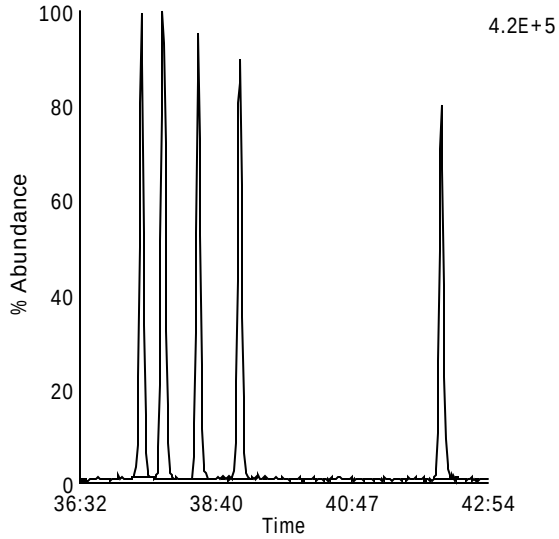
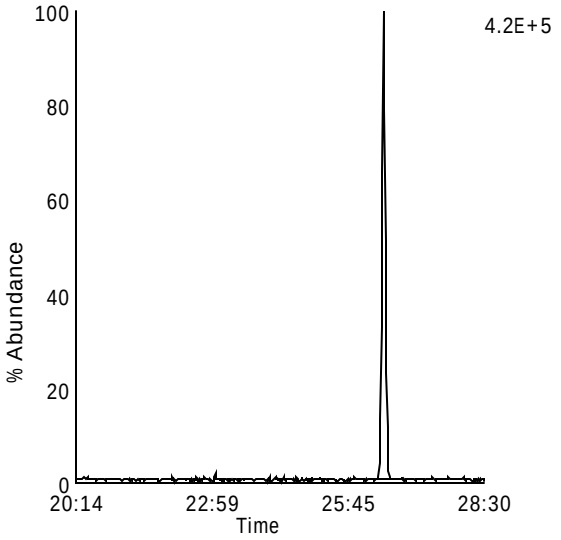
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G3 C12 - 327.8775
CAL CS2-20-123-053 - CVS TC



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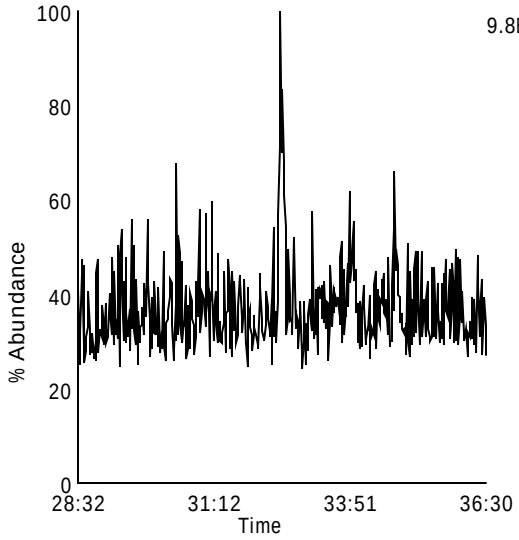
CAL CS2-20-123-053 - CVS TC



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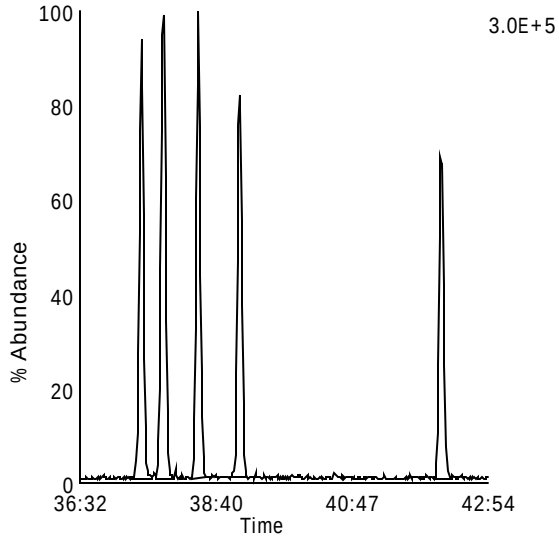
CAL CS2-20-123-053 - CVS TC



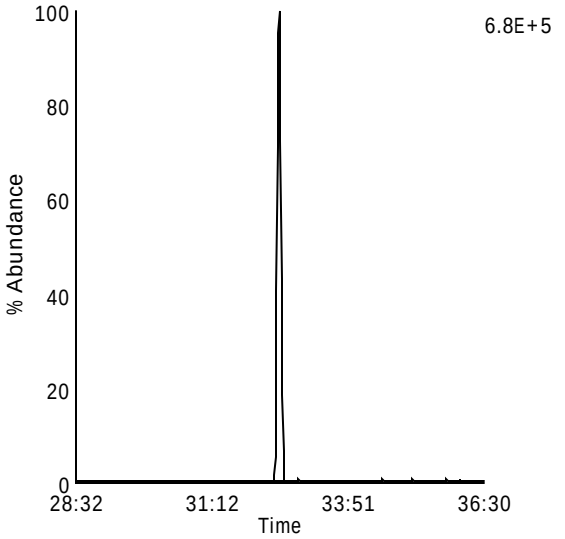
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

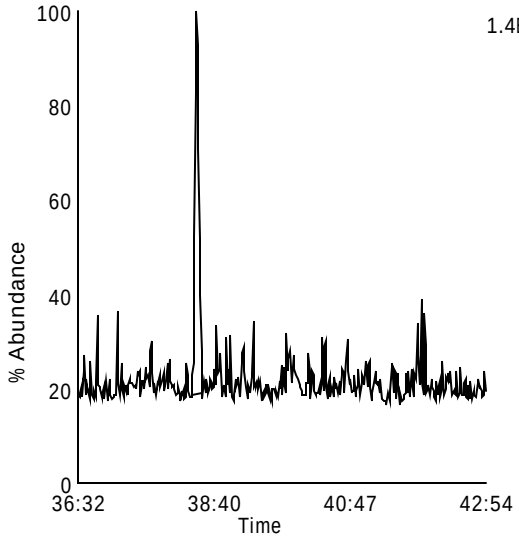
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

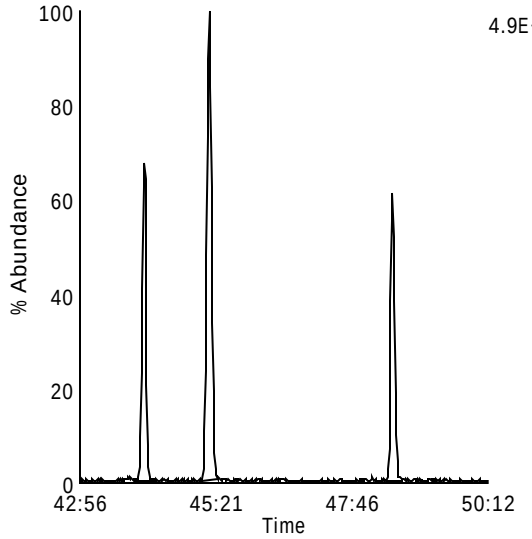
Data File: Y210818B_06 G4 C11 - 359.8415
CAL CS2-20-123-053 - CVS TC



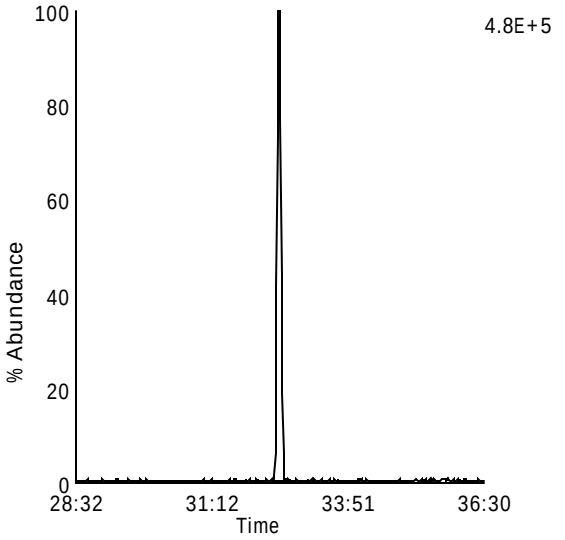
Data File: Y210818B_06 G5 C5 - 359.8415
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G6 C1 - 359.8415
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C12 - 361.8385
CAL CS2-20-123-053 - CVS TC



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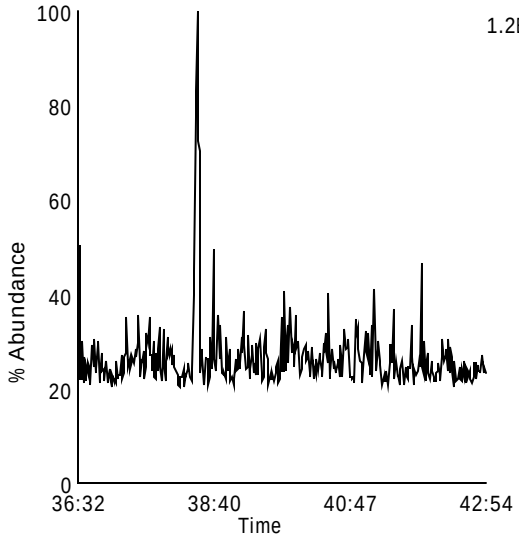
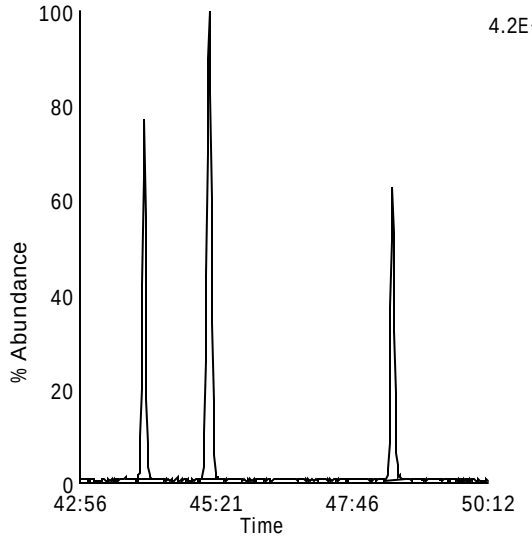
CAL CS2-20-123-053 - CVS TC

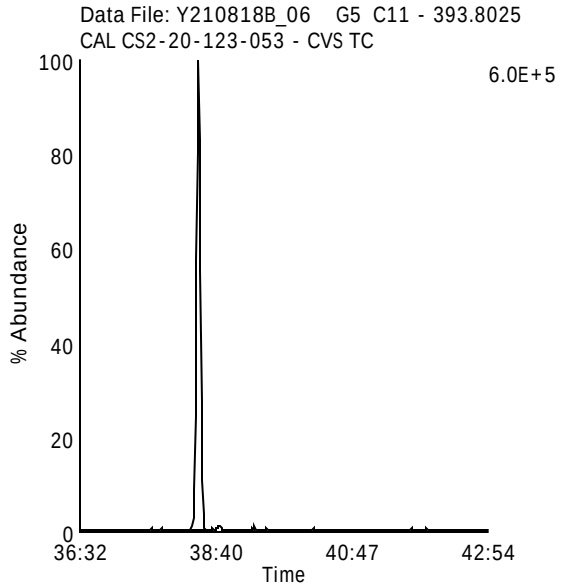


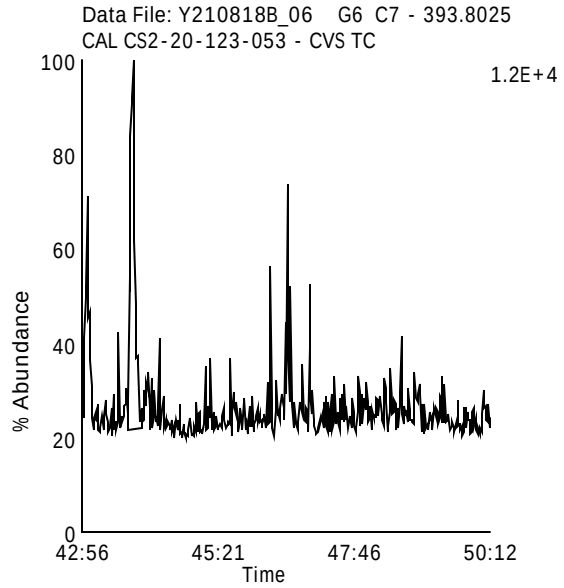
Data File: Y210818B_06 G6 C2 - 361.8385
CAL CS2-20-123-053 - CVS TC

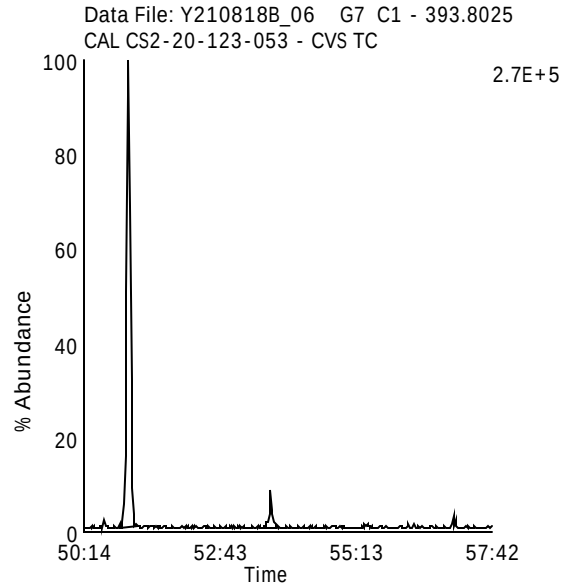


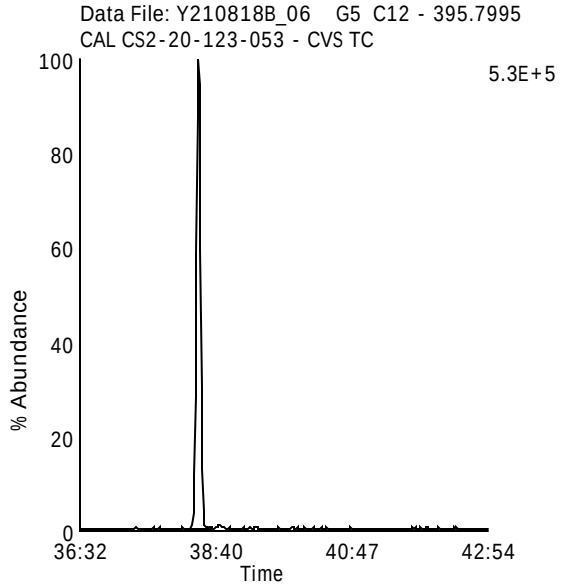
Hepta Chlorinated Biphenyls

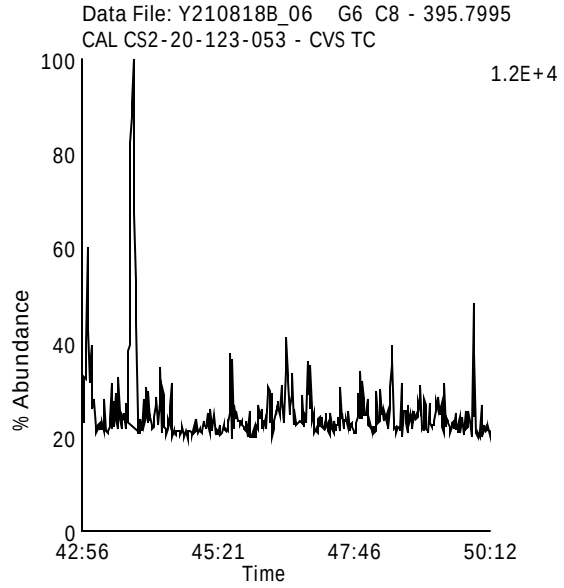
Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC

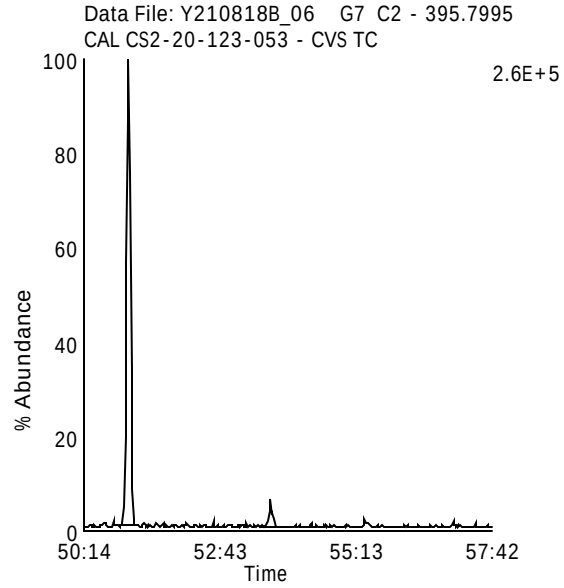






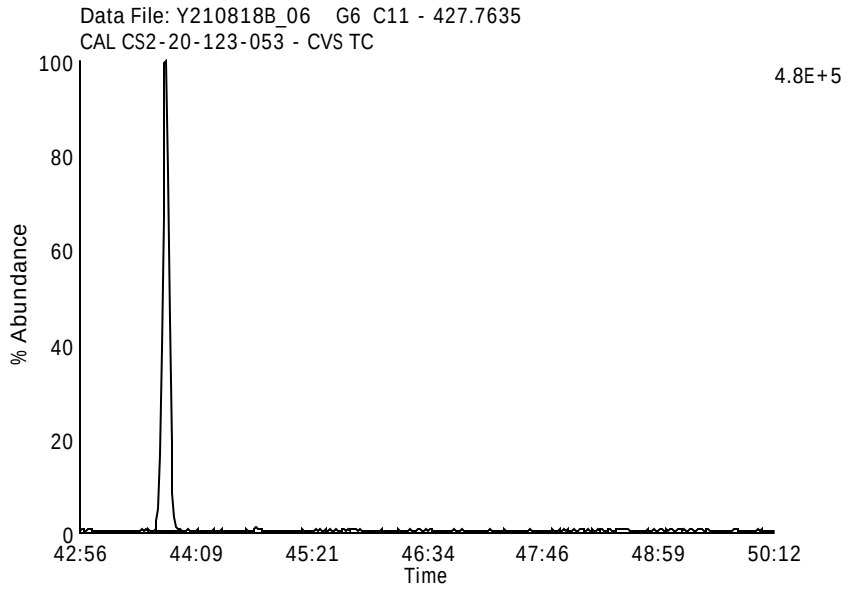


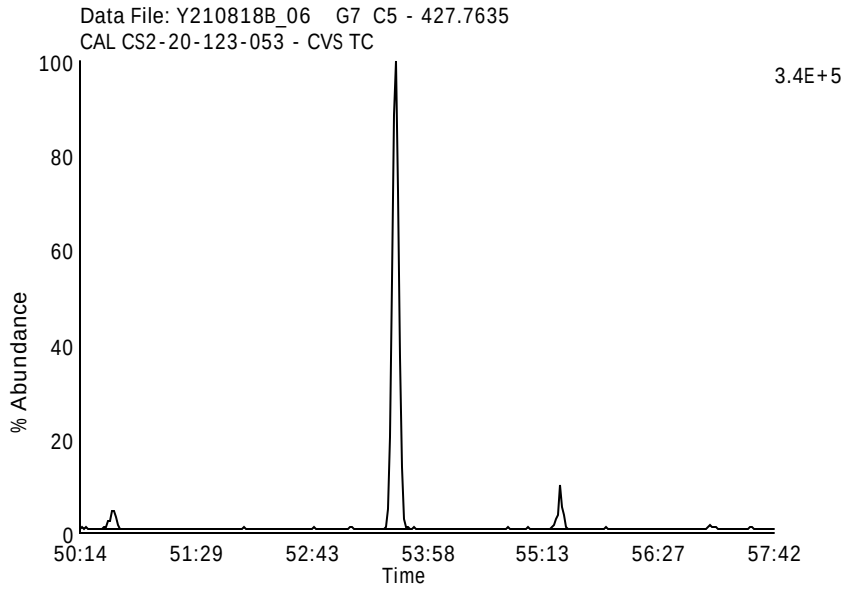


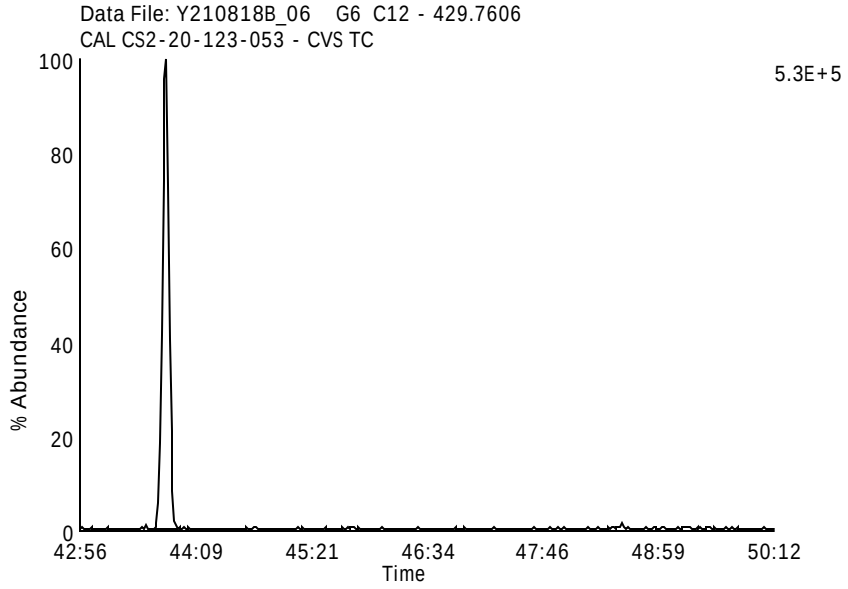


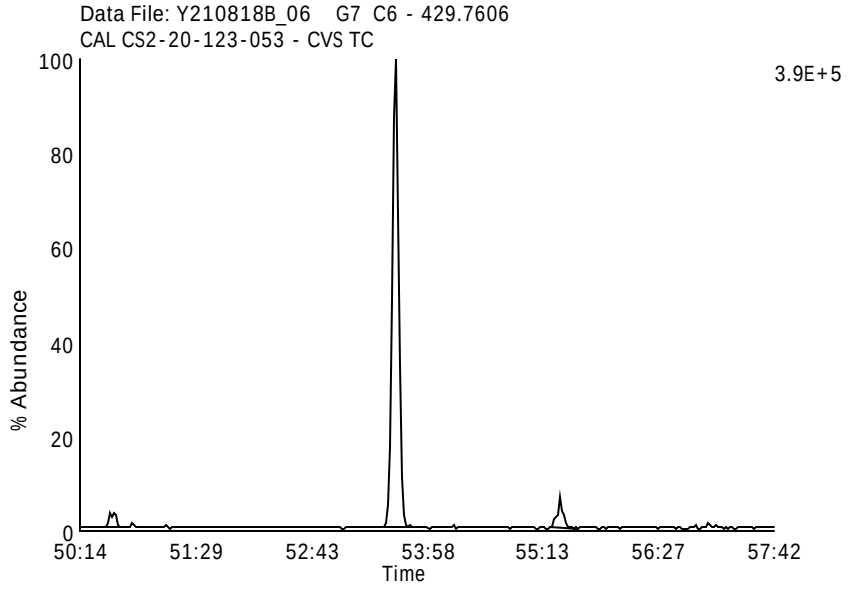
Octa Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







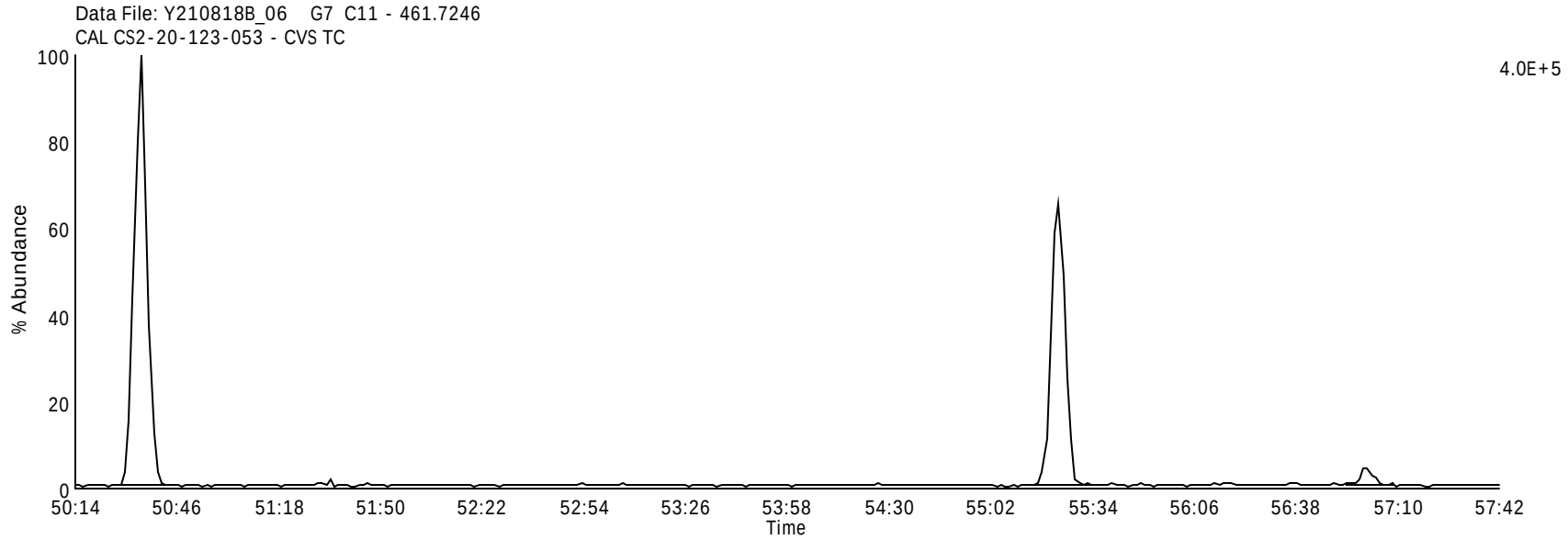


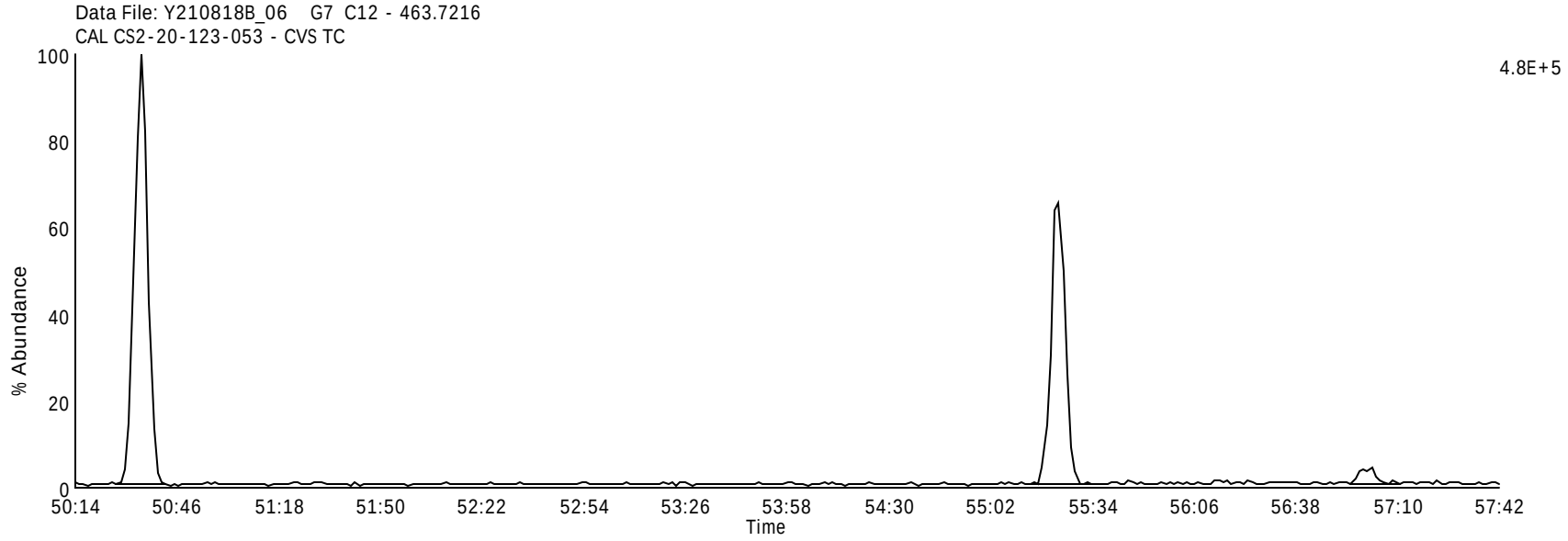
Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



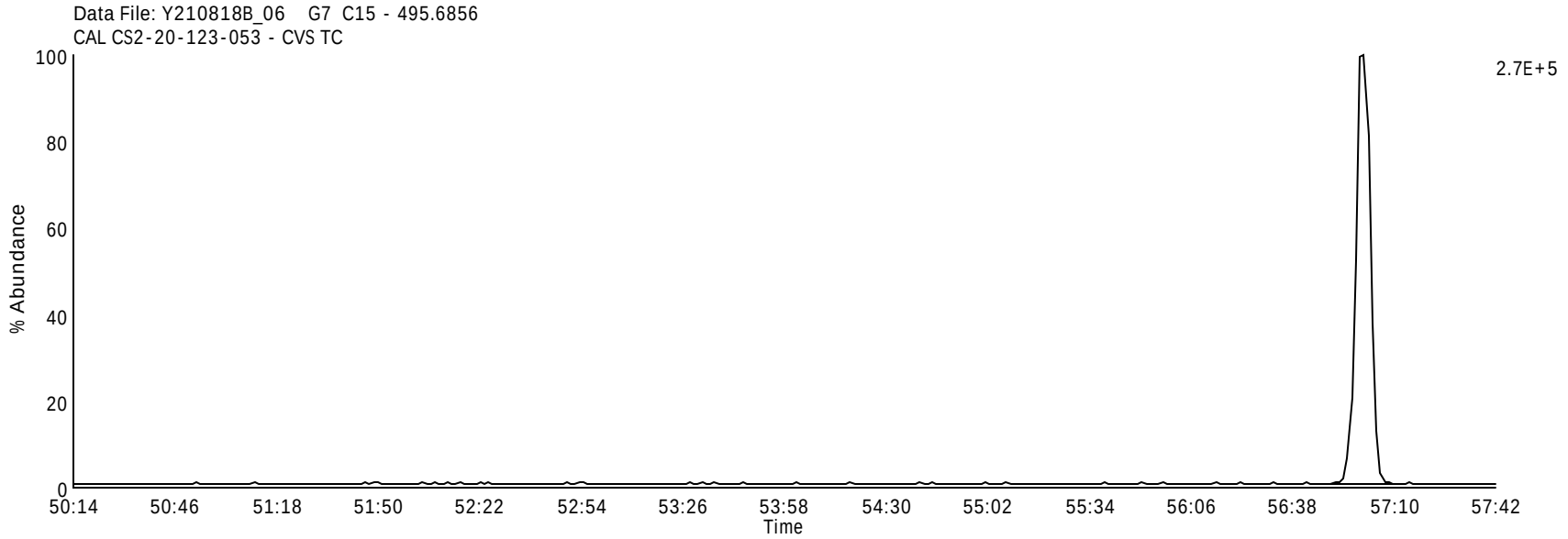


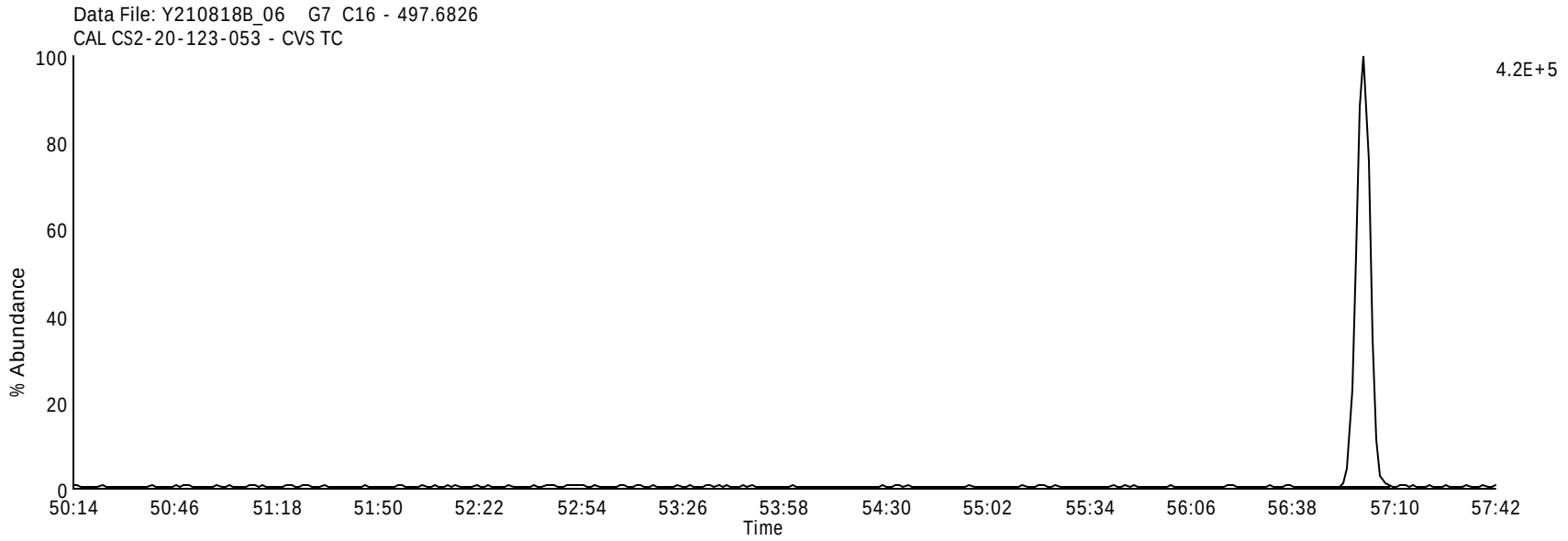
Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

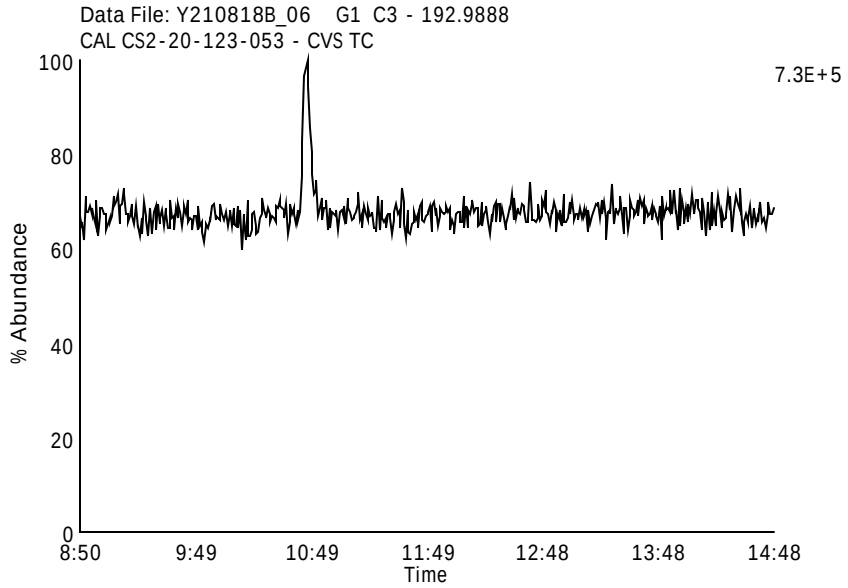
Sample Description: CAL CS2-20-123-053 - CVS TC

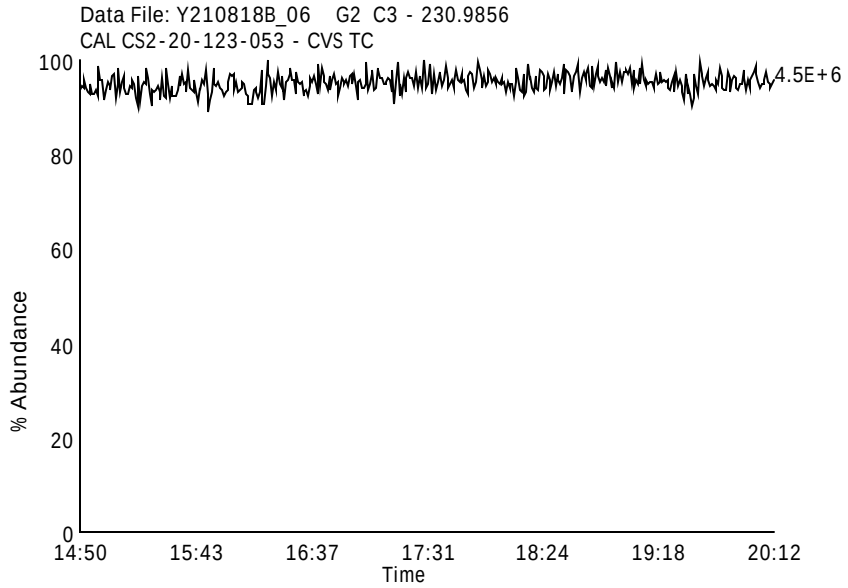


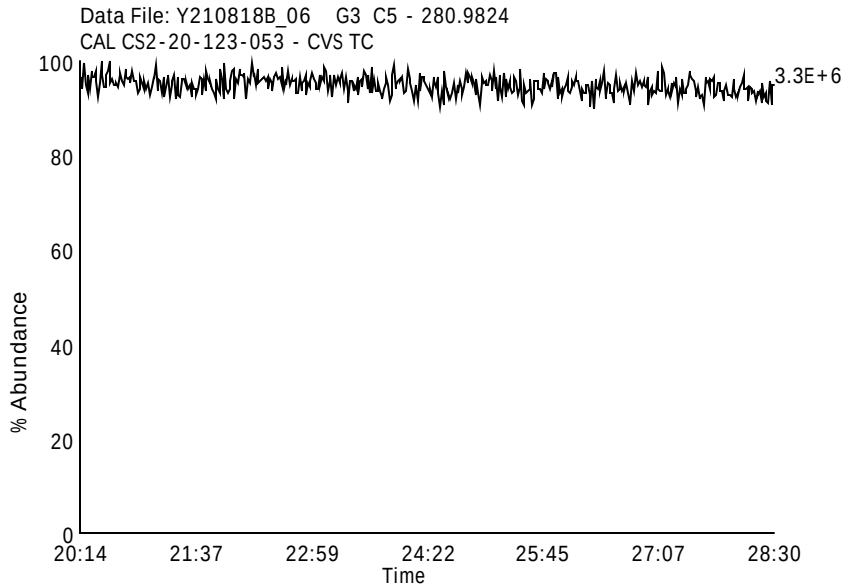


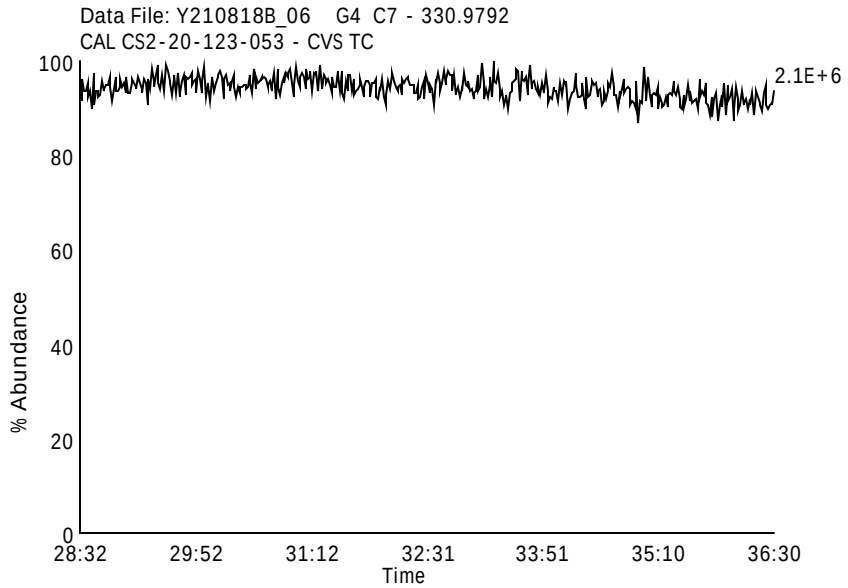
Group 1 - 4 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



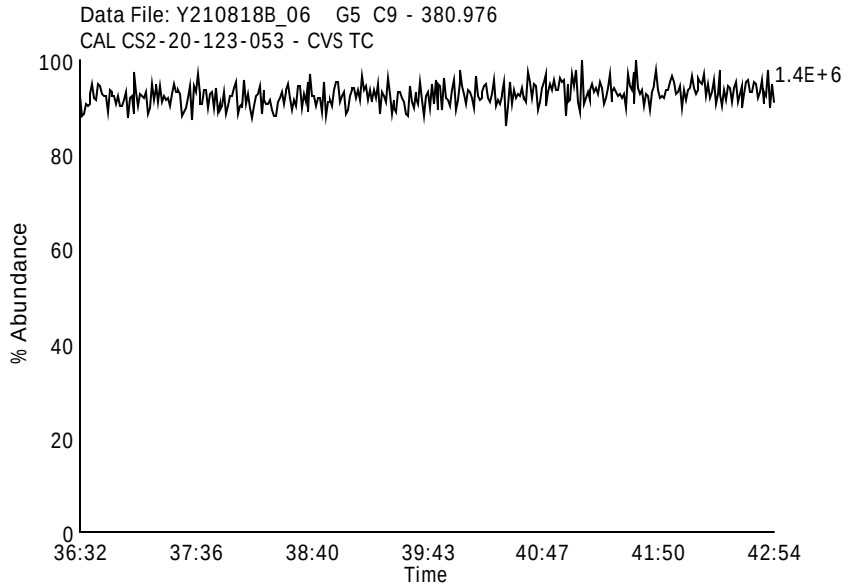


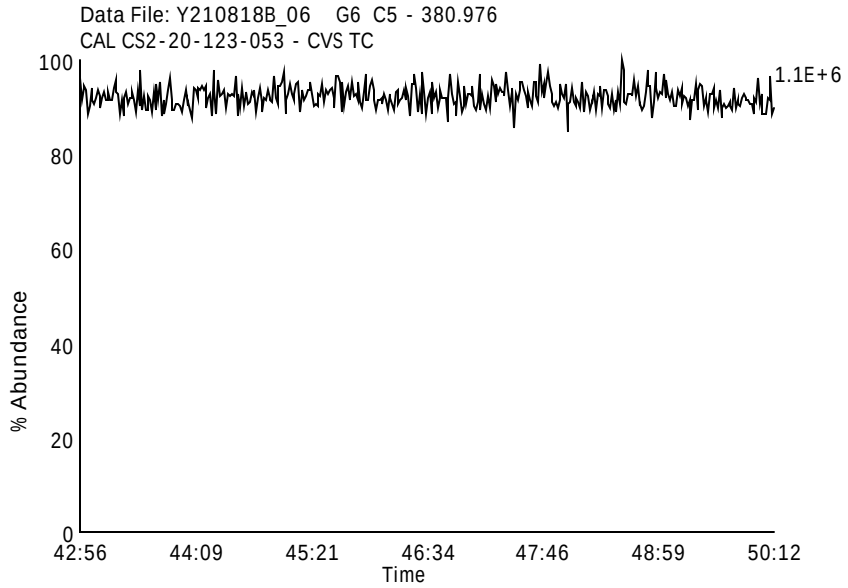


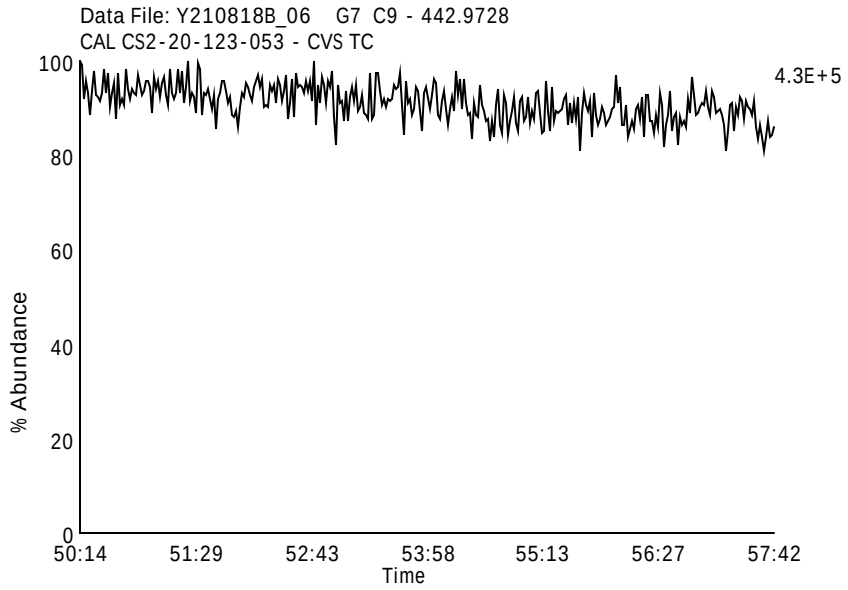


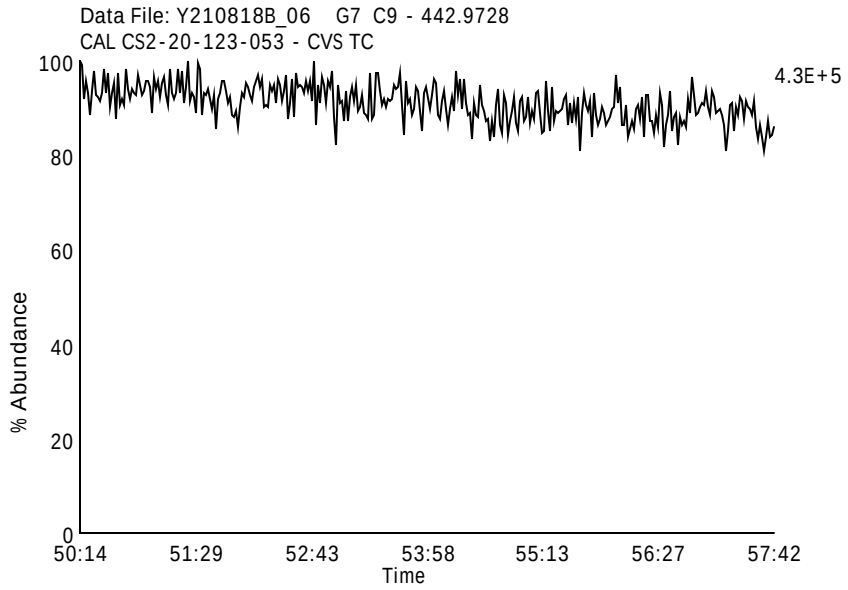
Group 5 - 7 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







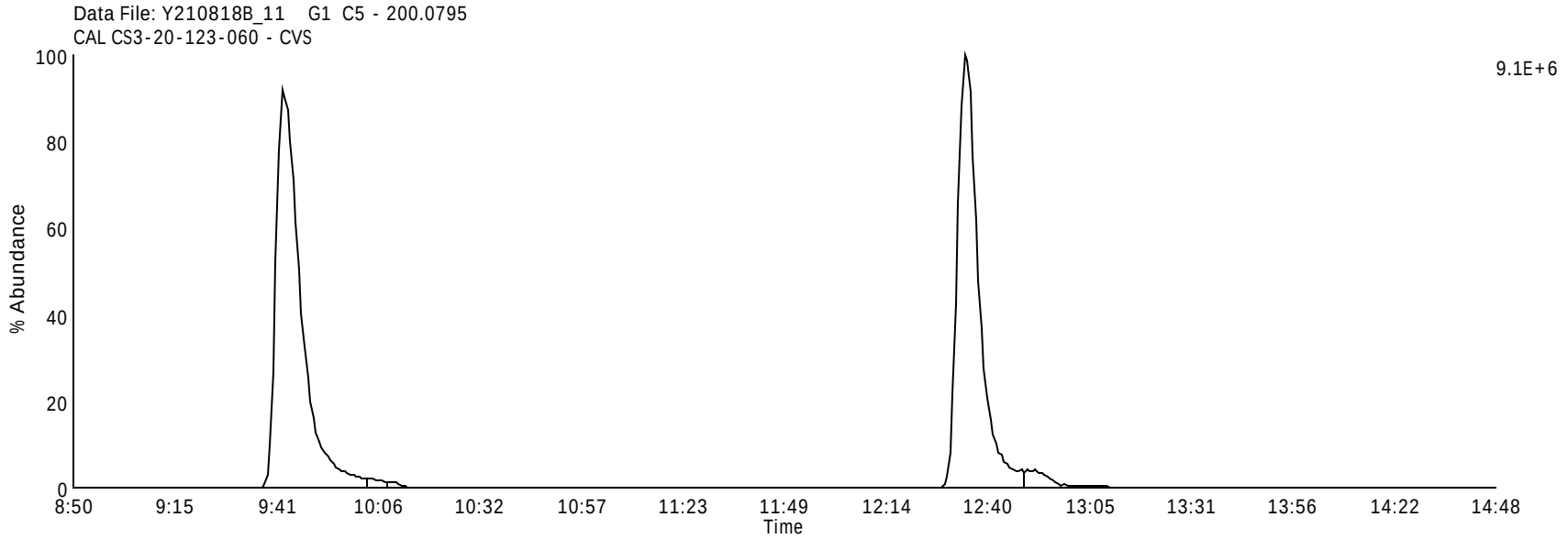


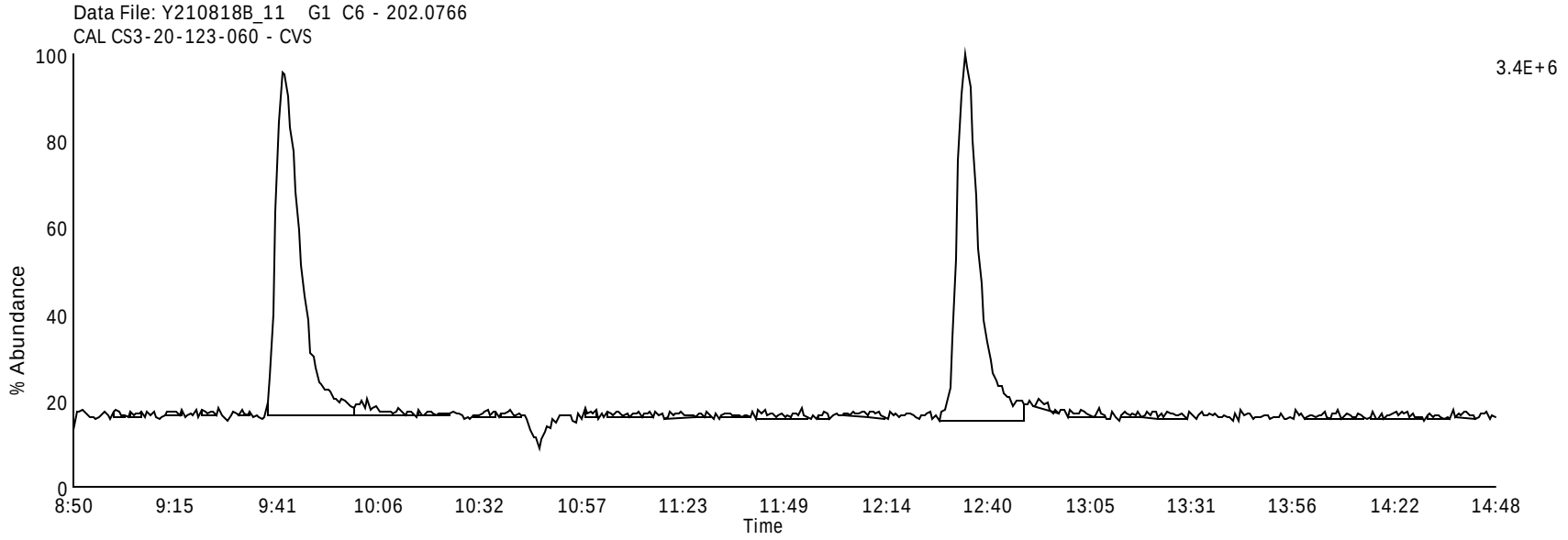
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

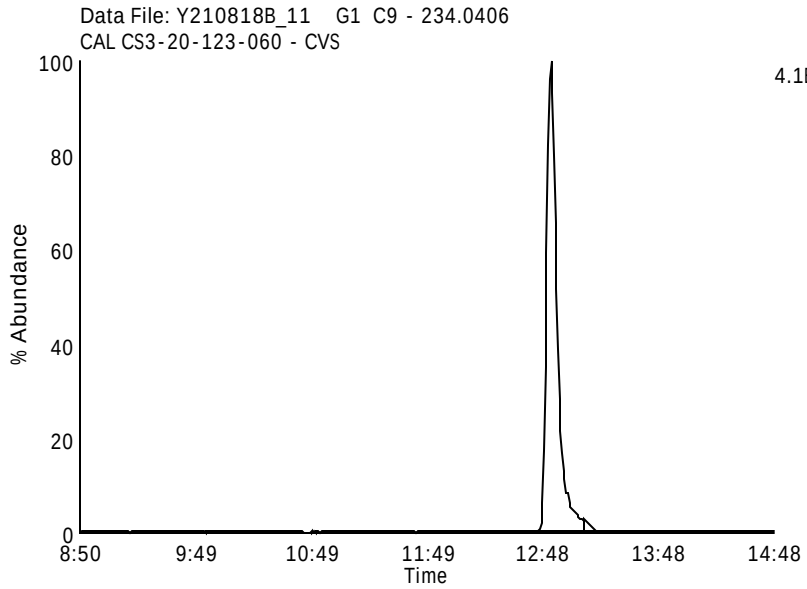
Sample Description: CAL CS3-20-123-060 - CVS

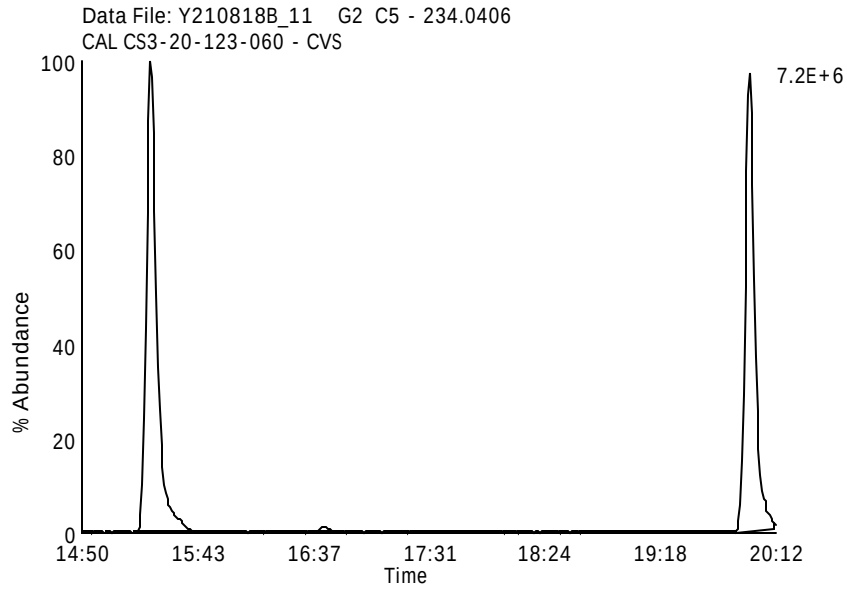


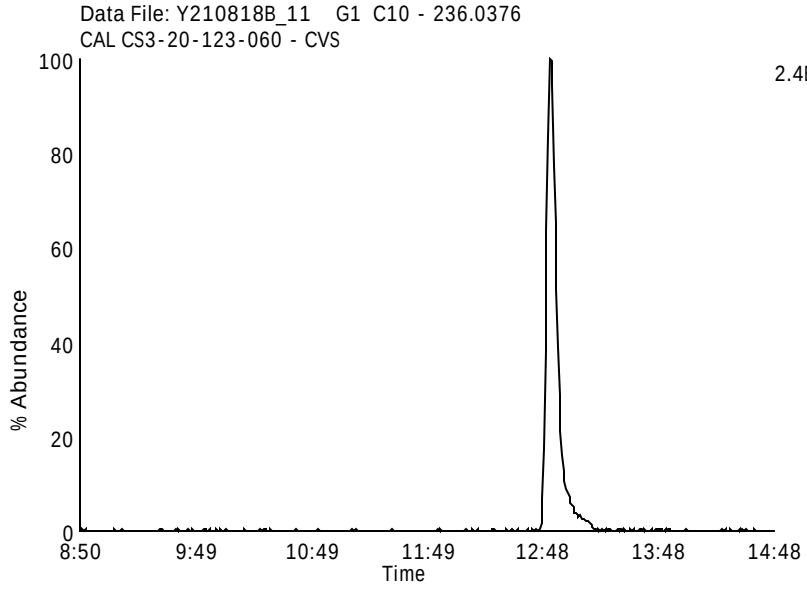


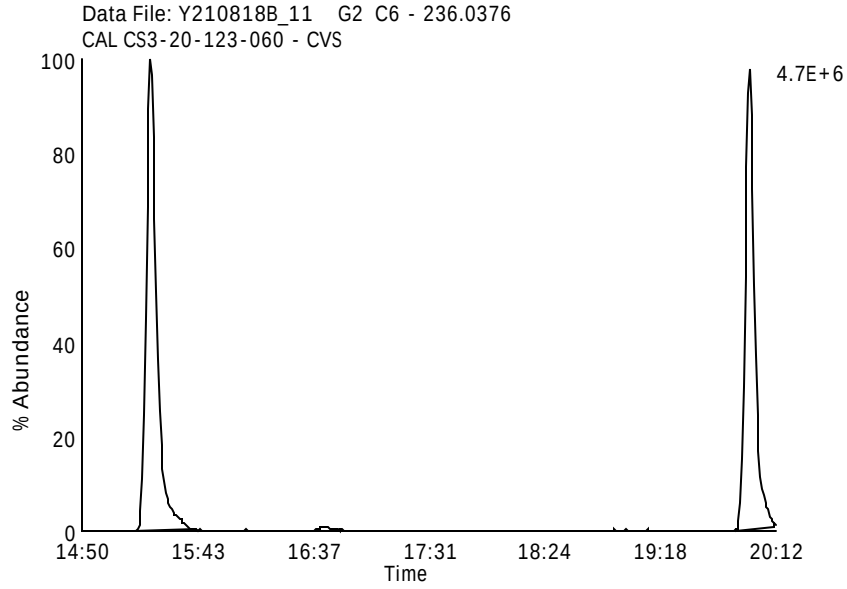
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



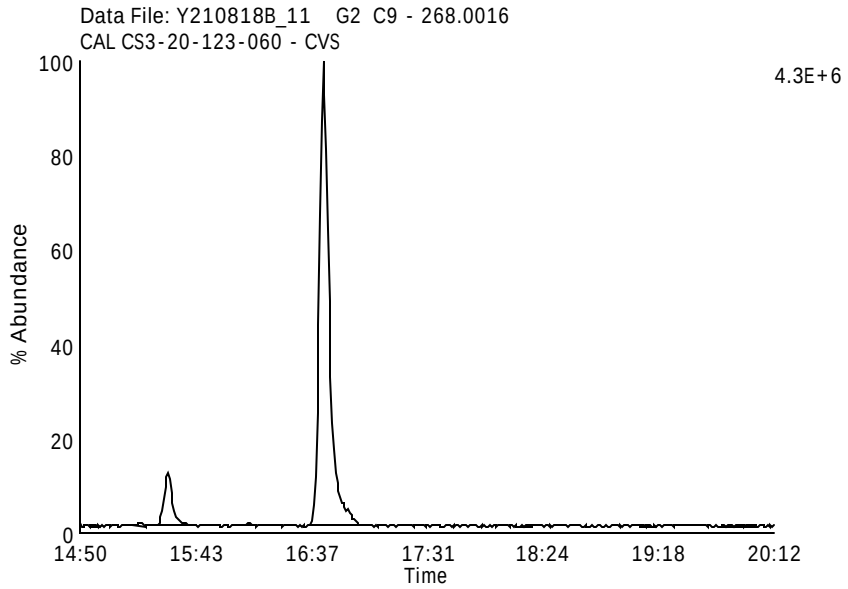


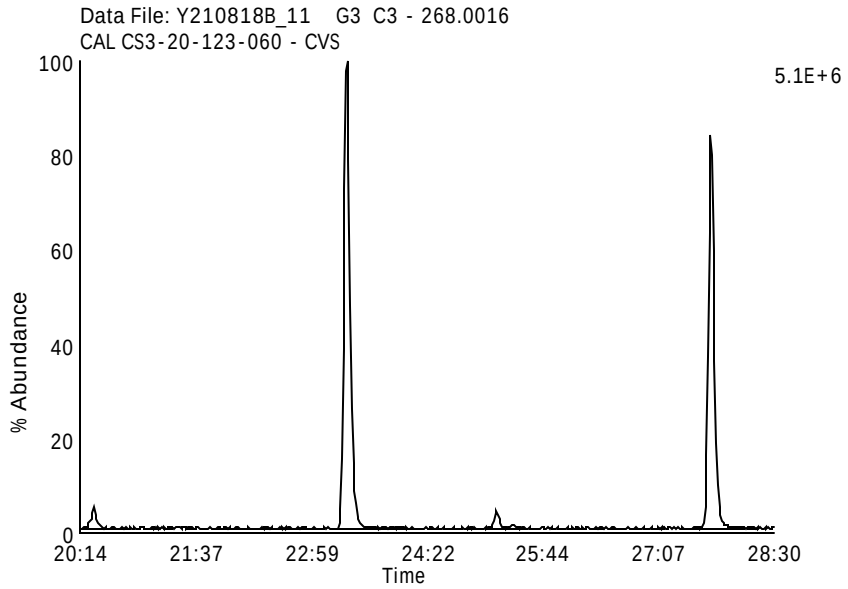


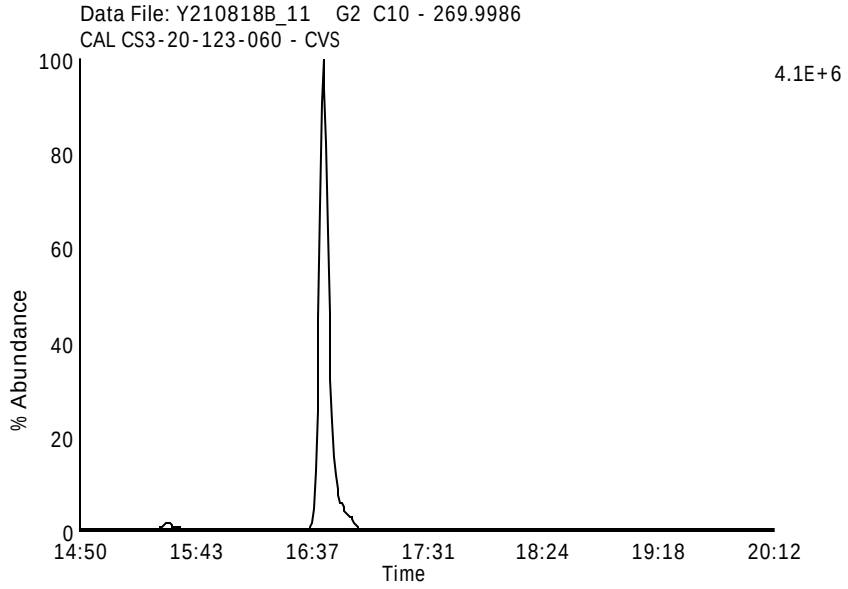


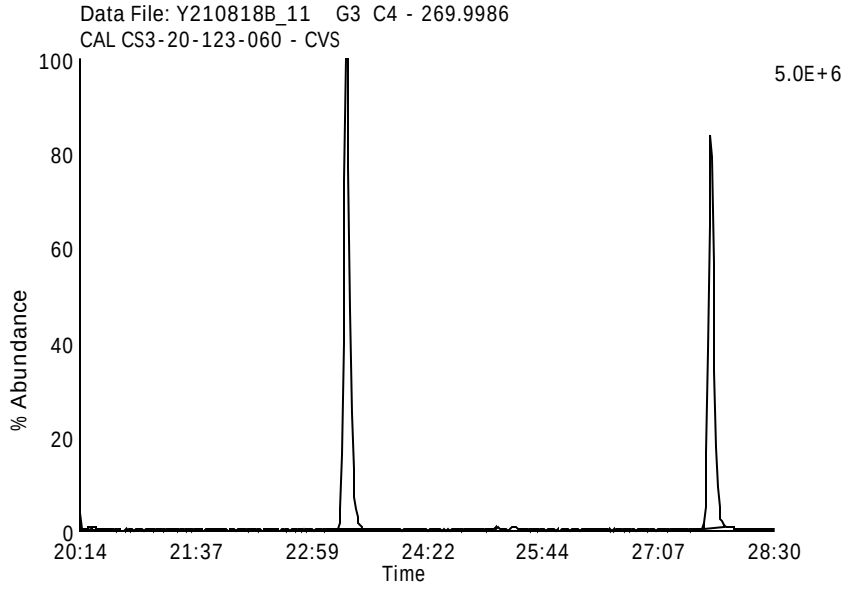
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



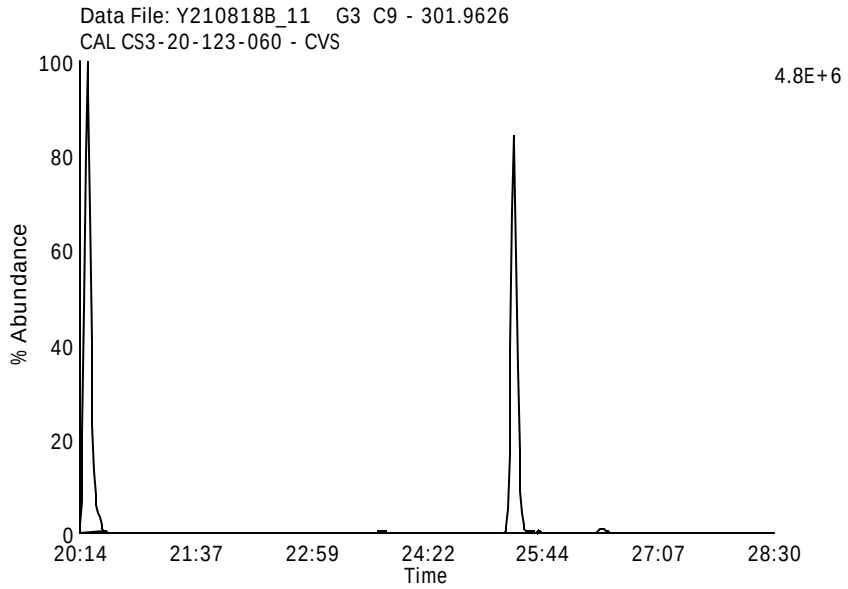


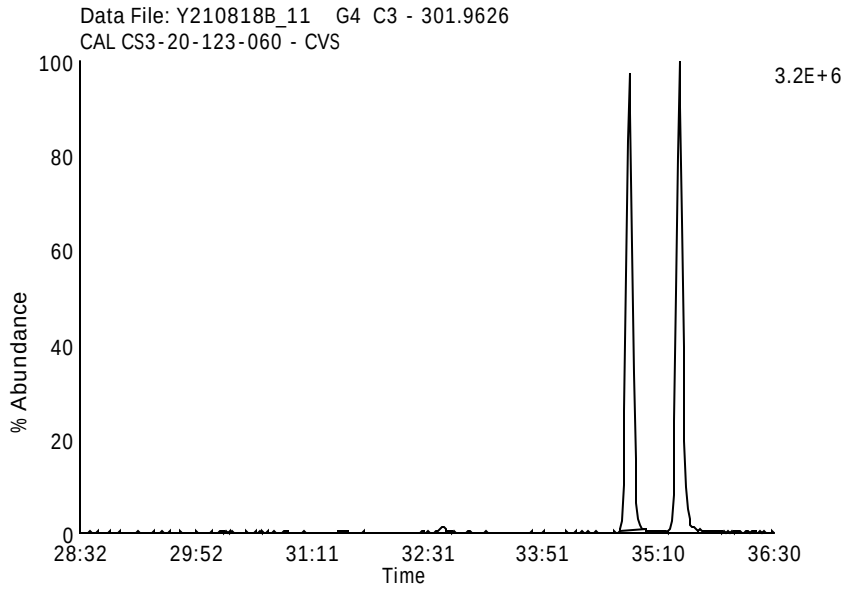


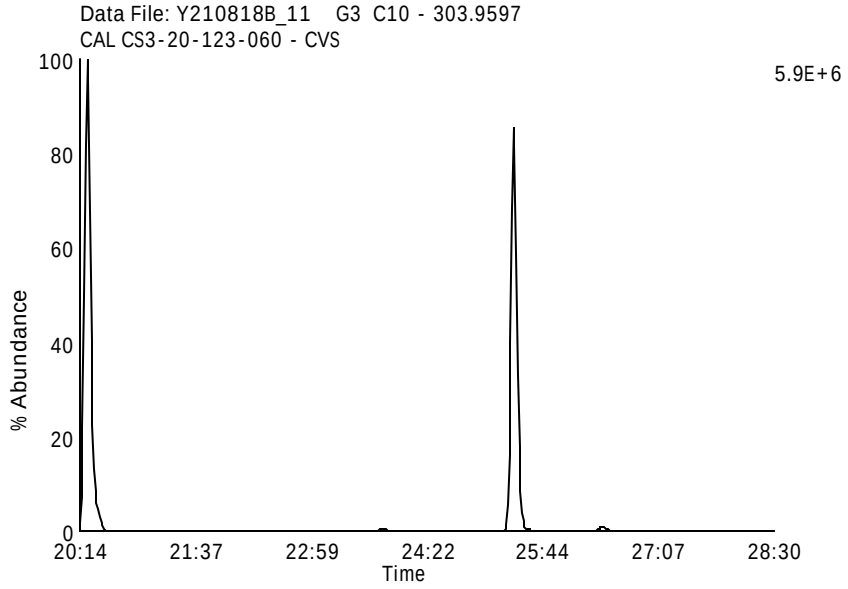


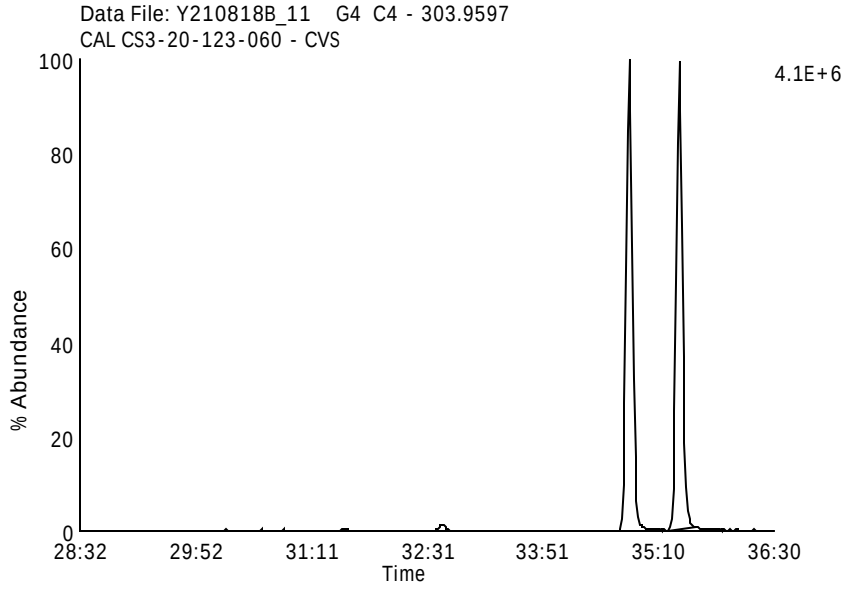
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







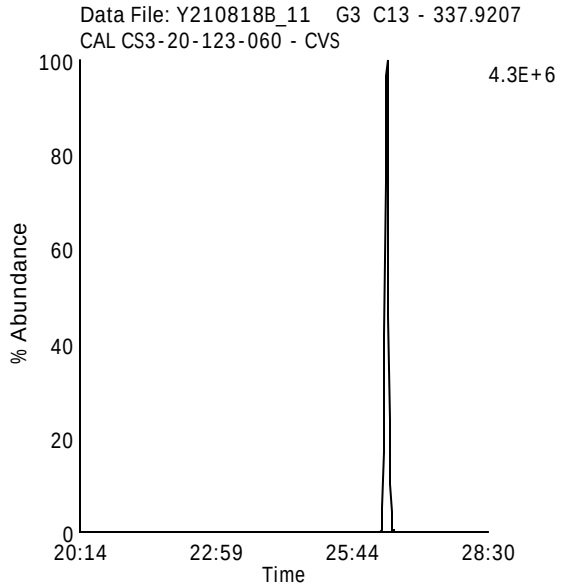


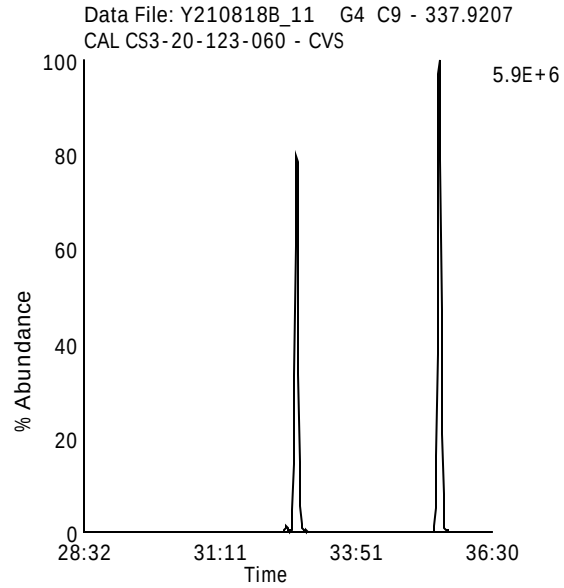
Labeled Penta Chlorinated Biphenyls

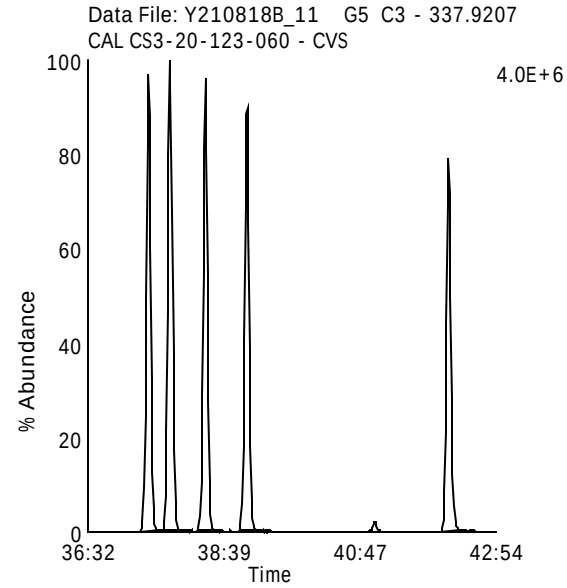
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

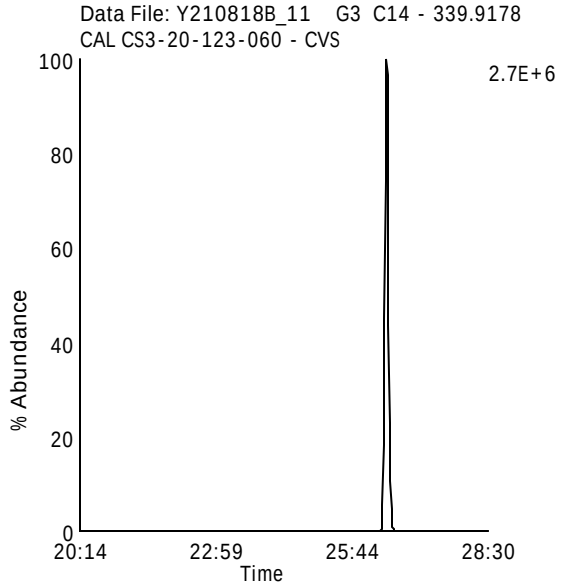
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

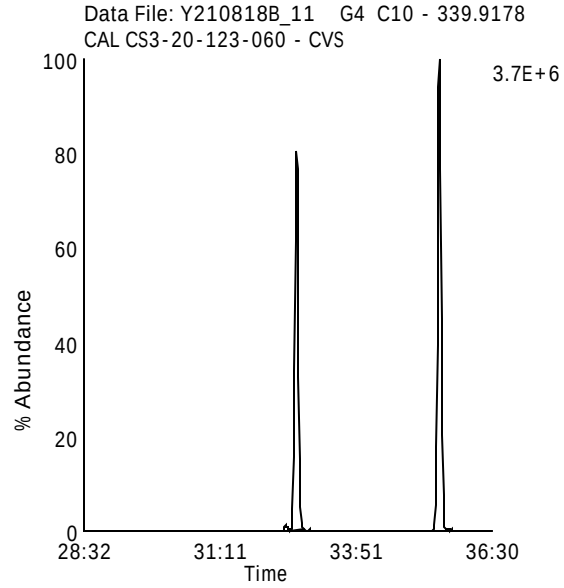
Sample Description: CAL CS3-20-123-060 - CVS

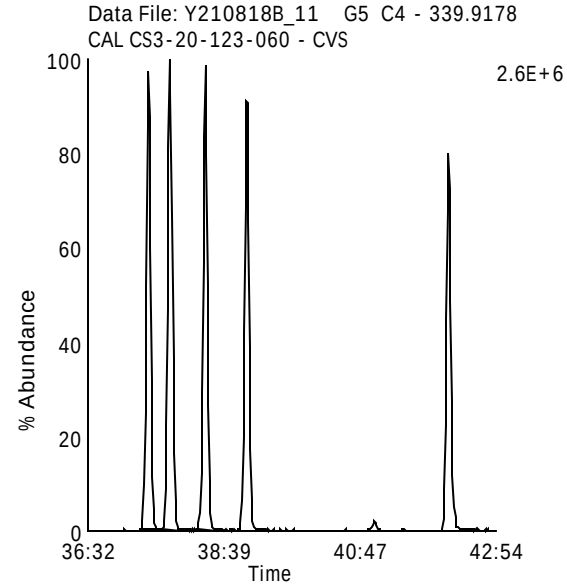










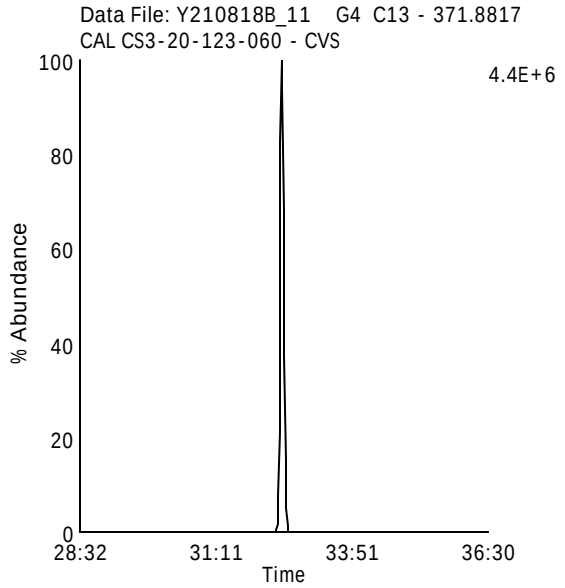


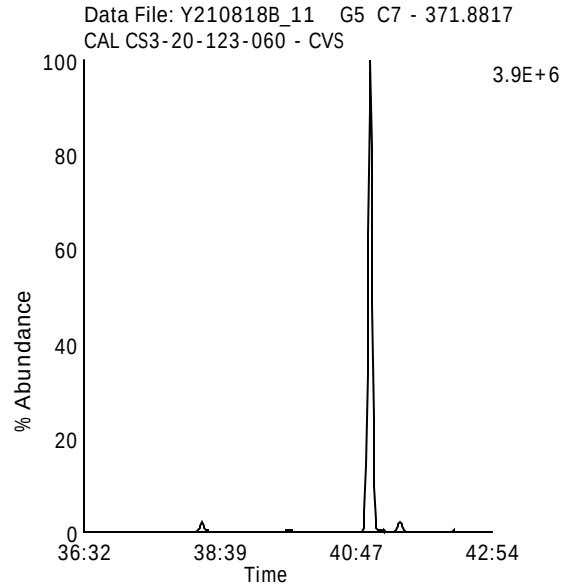
Labeled Hexa Chlorinated Biphenyls

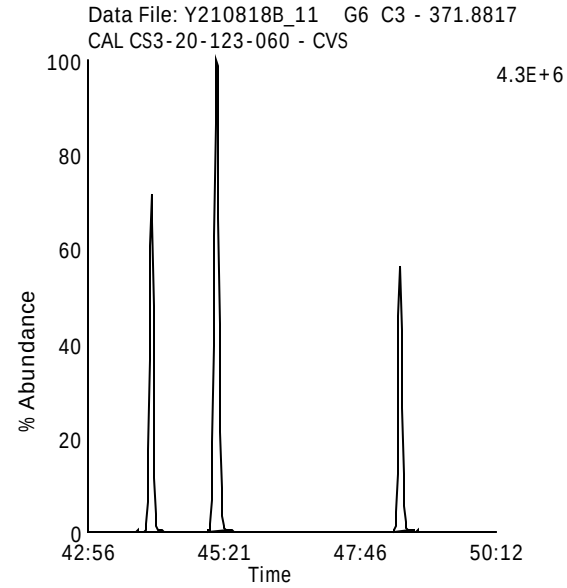
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

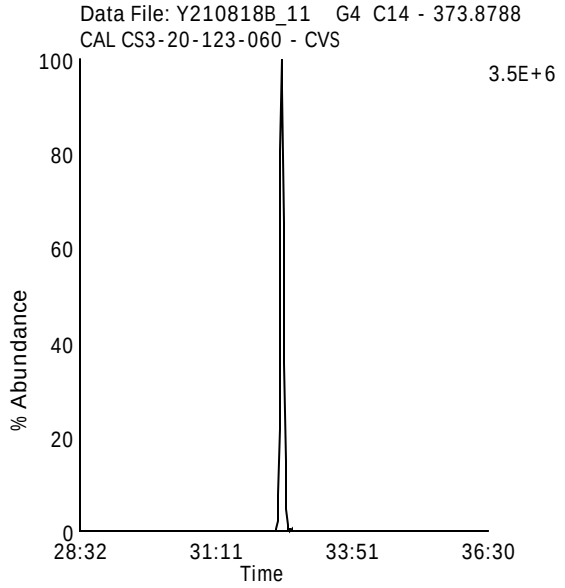
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

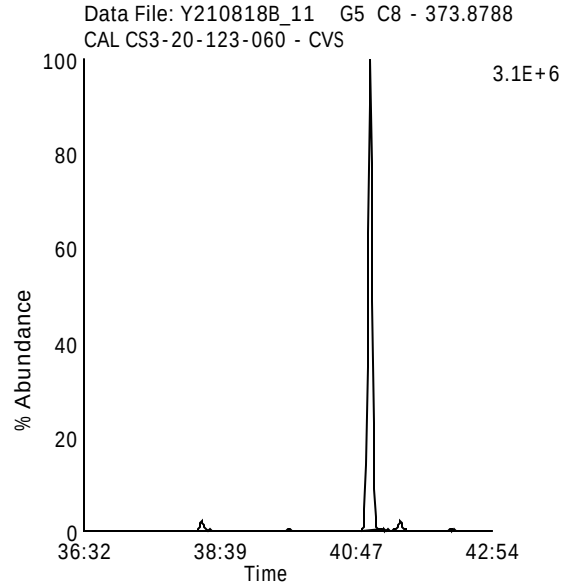
Sample Description: CAL CS3-20-123-060 - CVS

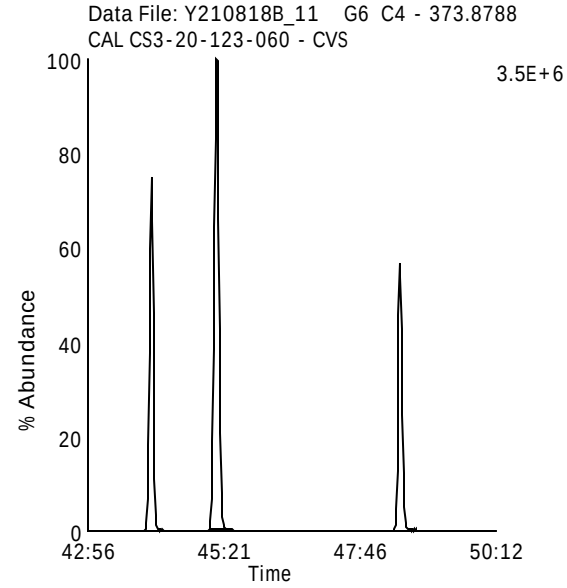






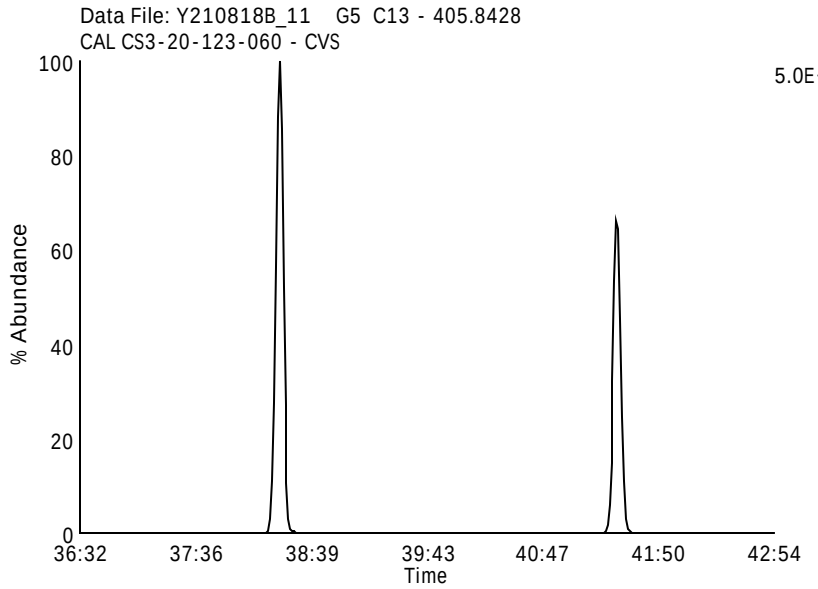


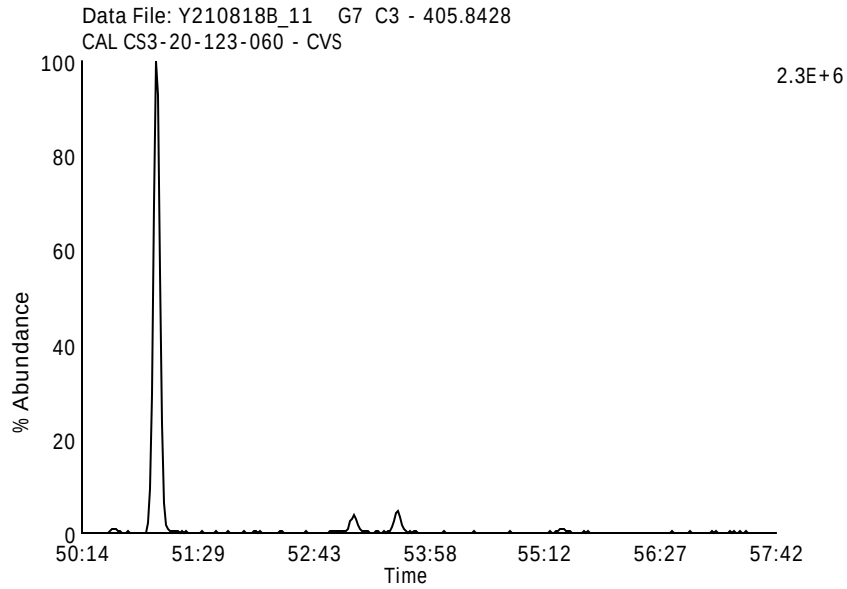


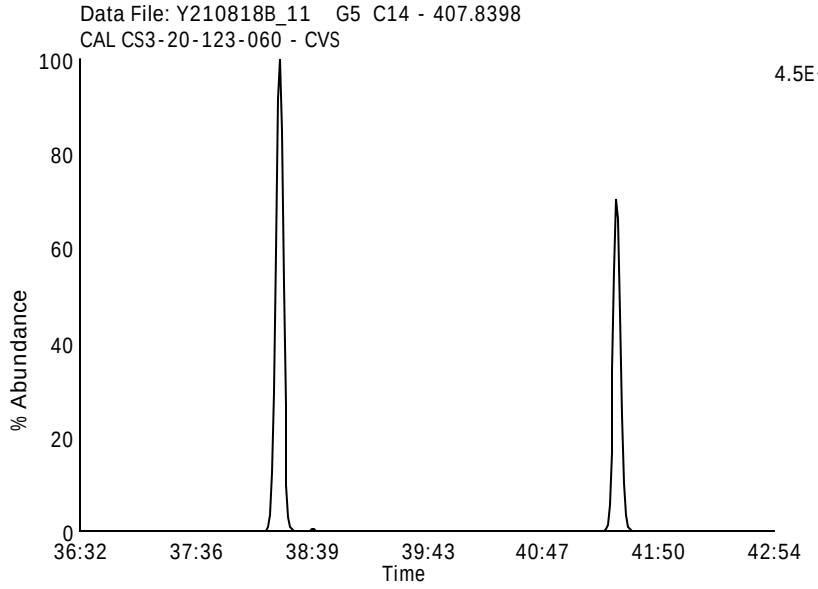


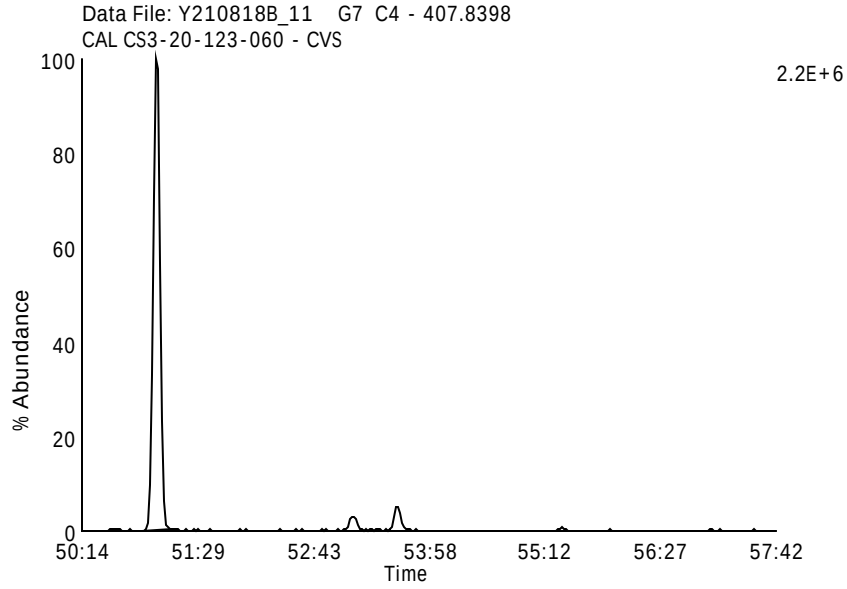
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





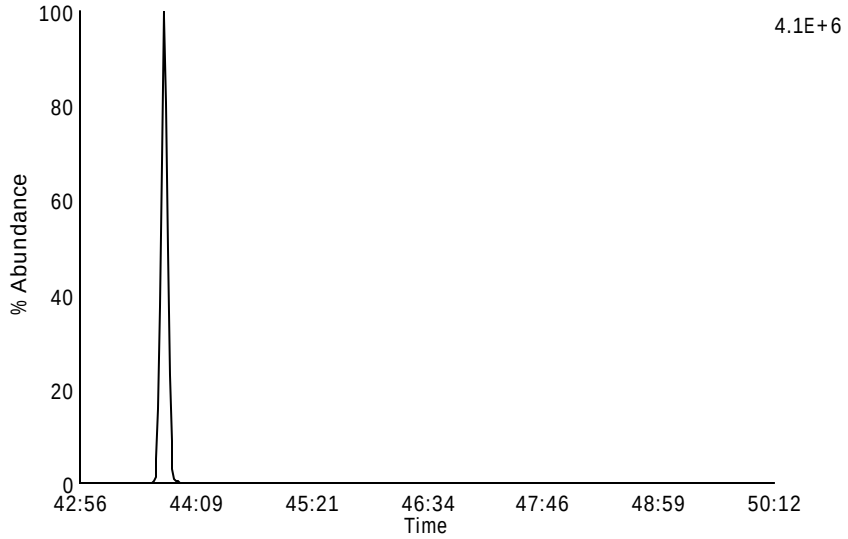




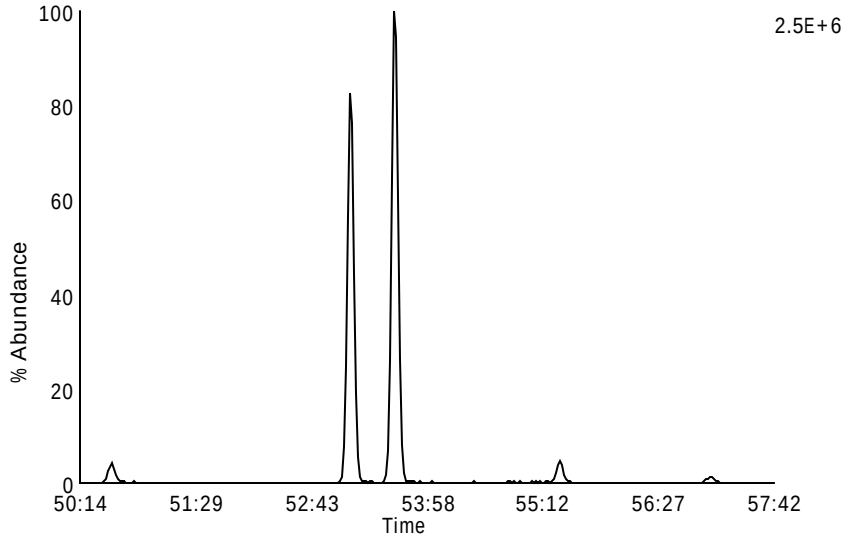
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

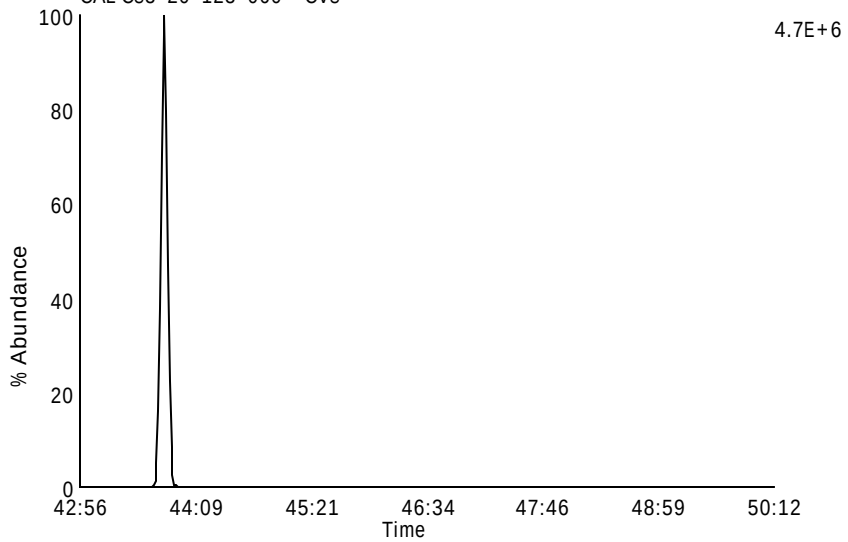
Data File: Y210818B_11 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



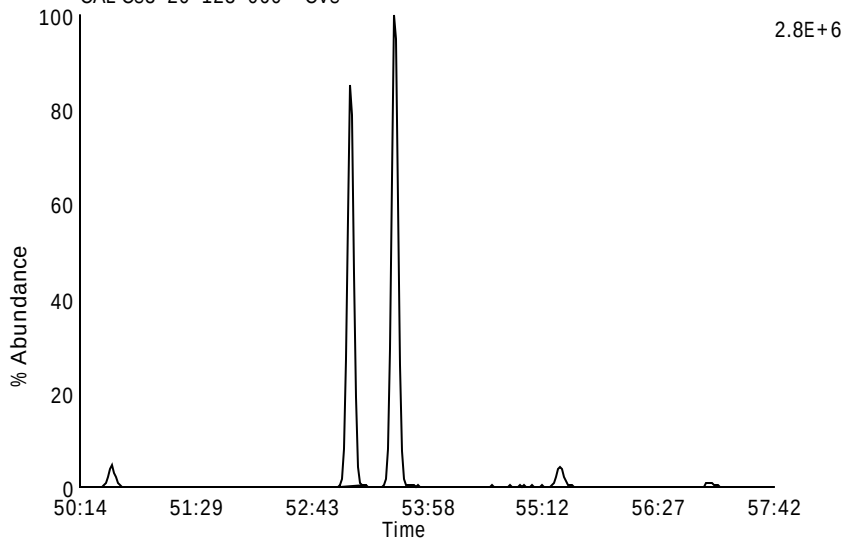
Data File: Y210818B_11 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G6 C14 - 441.8008
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

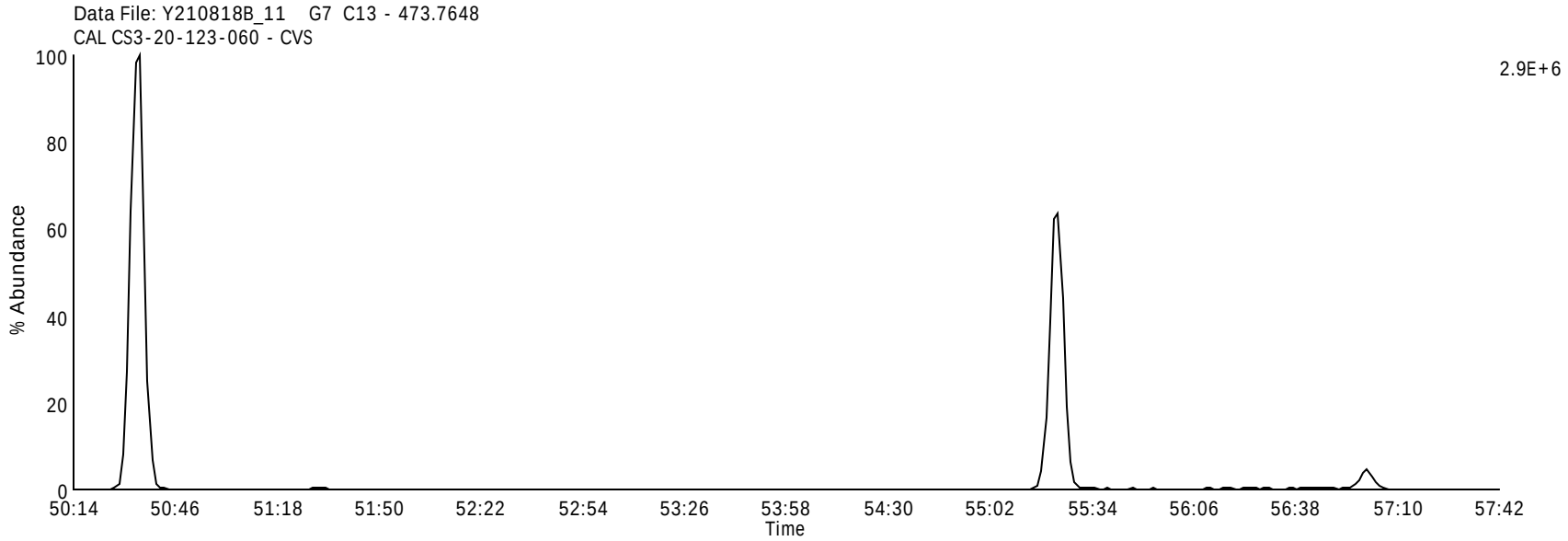


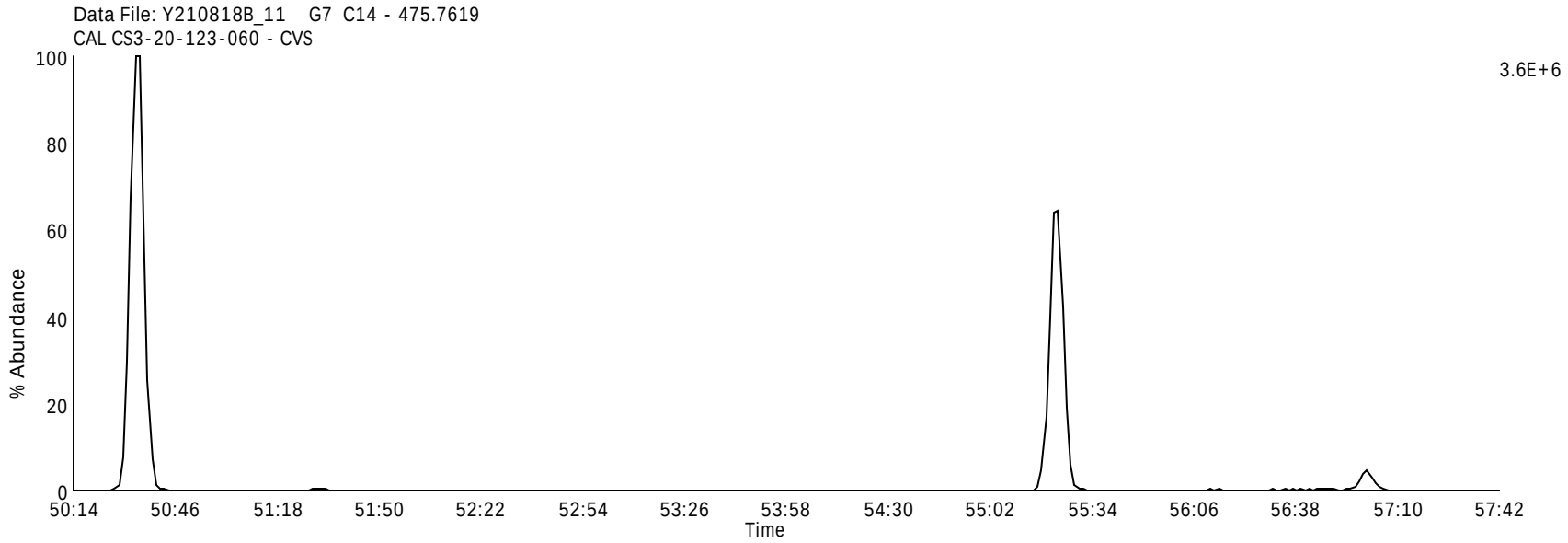
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



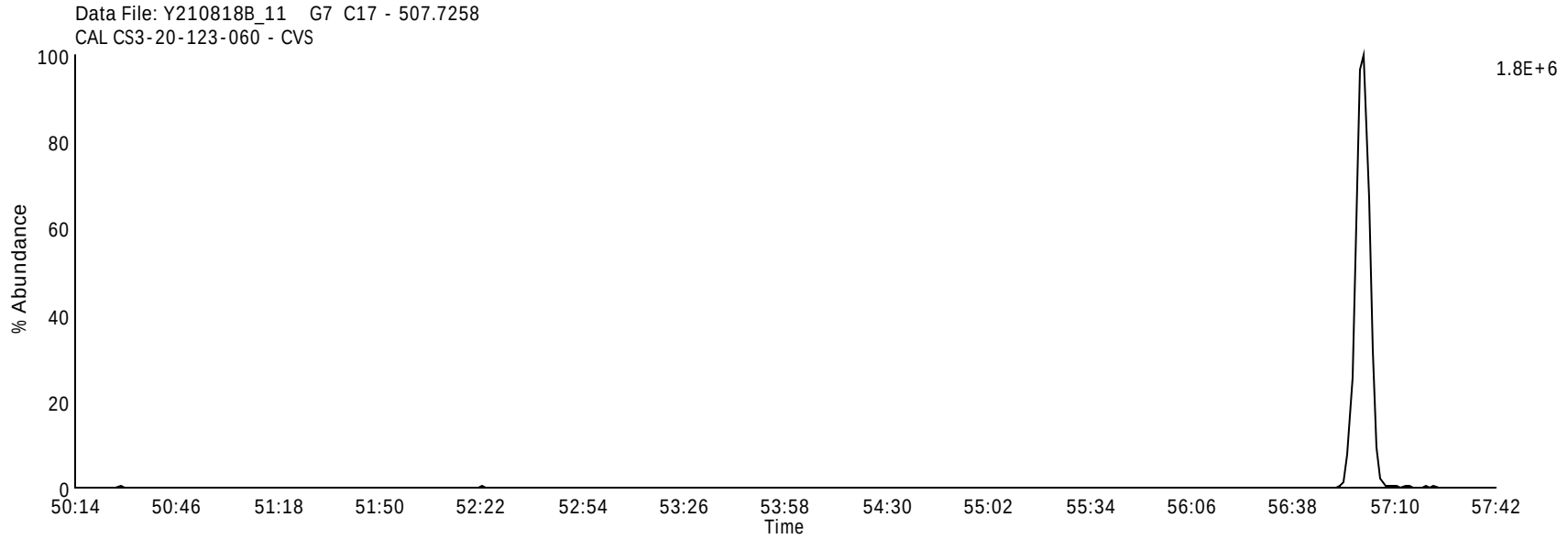


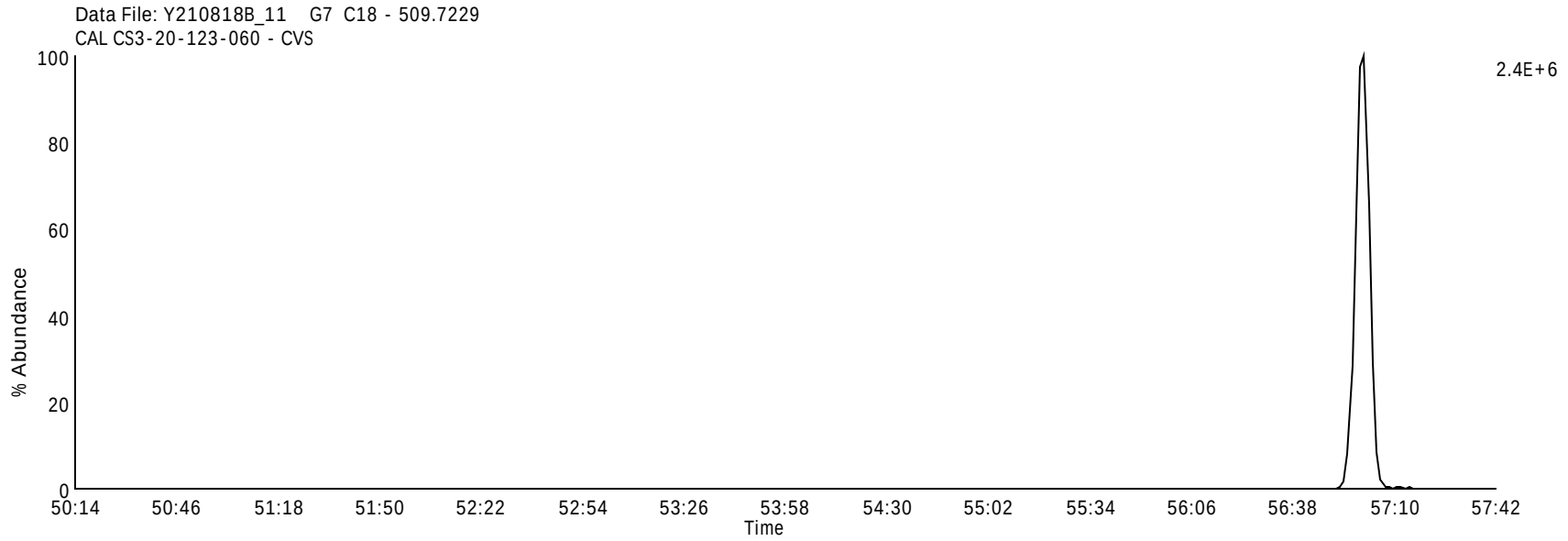
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



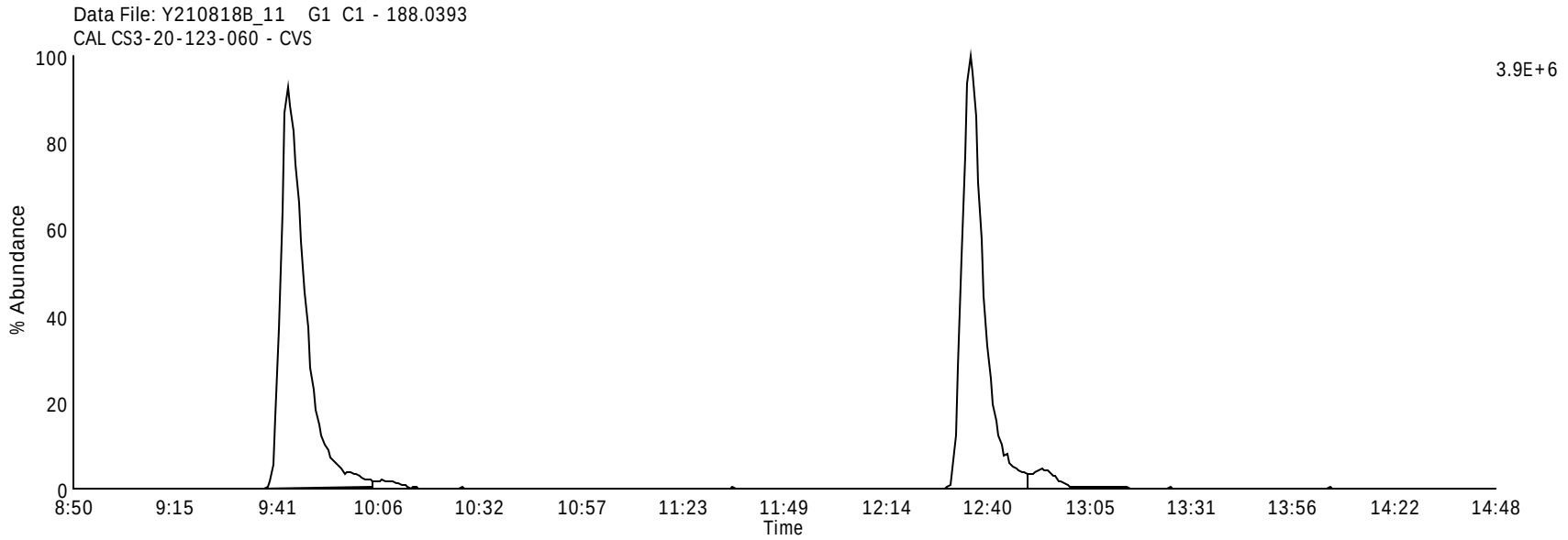


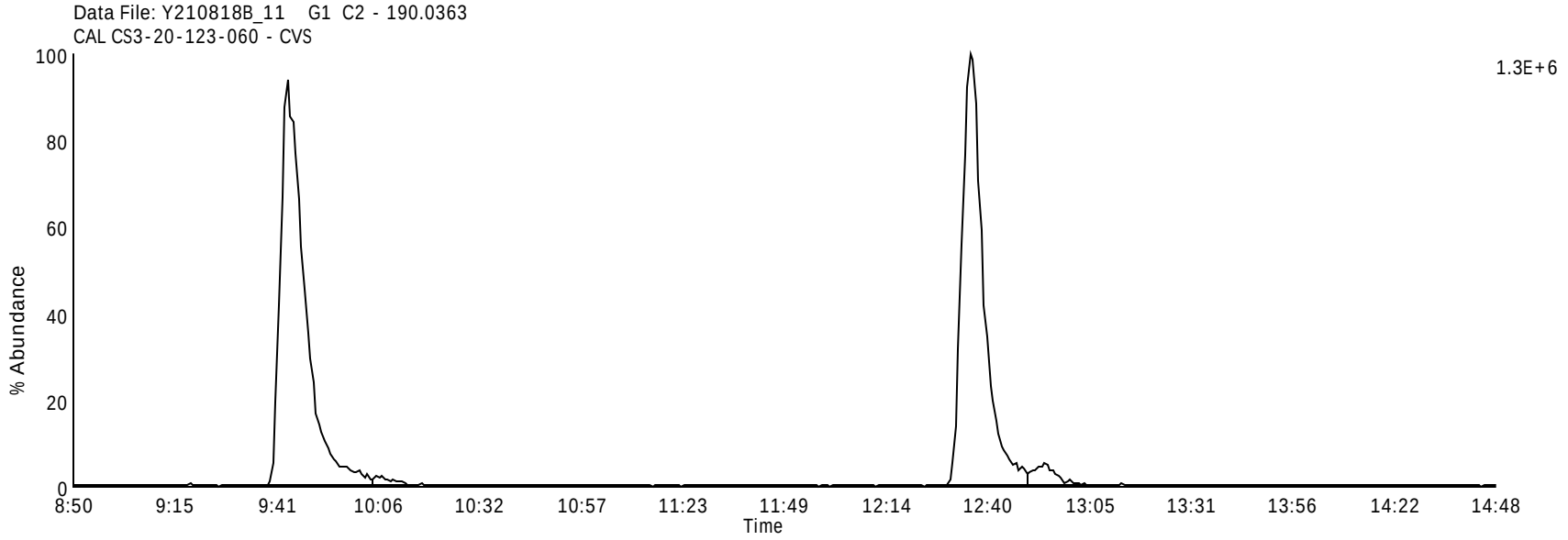
Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

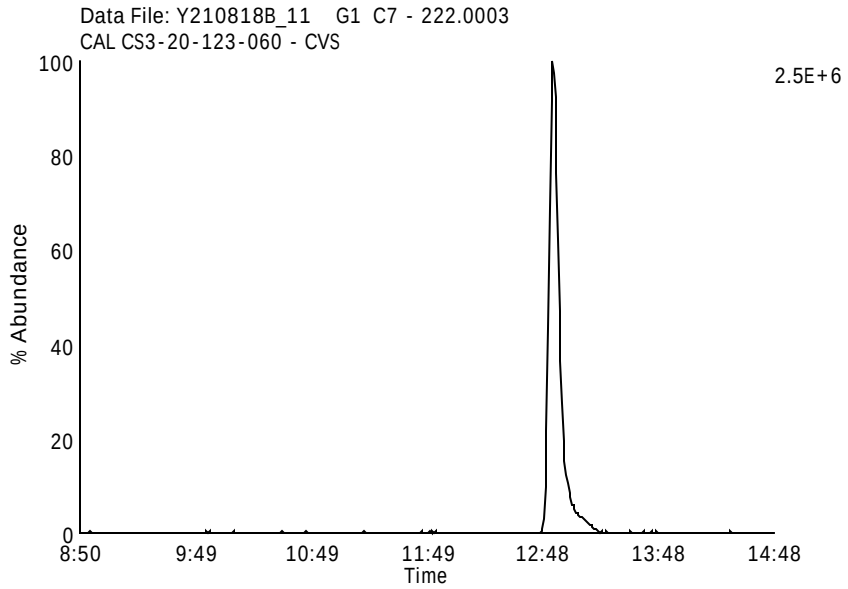
Sample Description: CAL CS3-20-123-060 - CVS

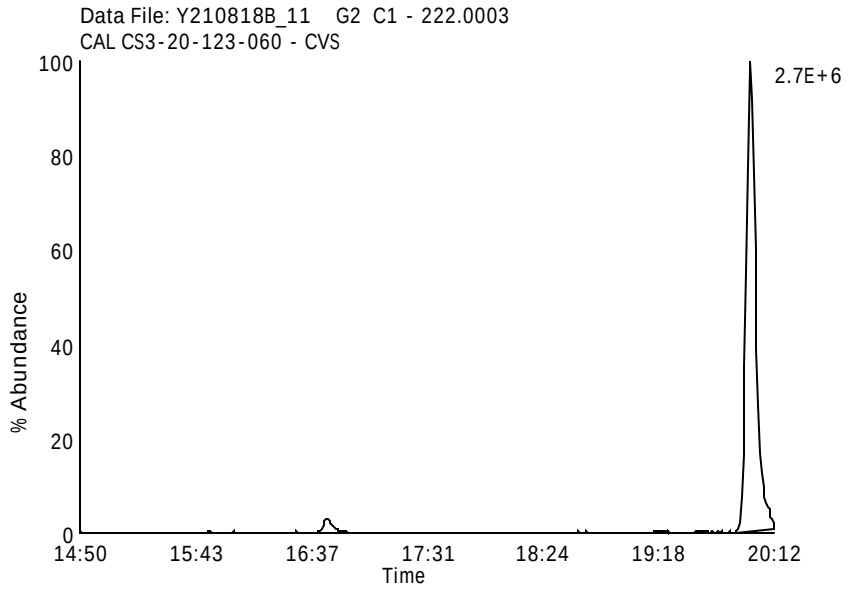


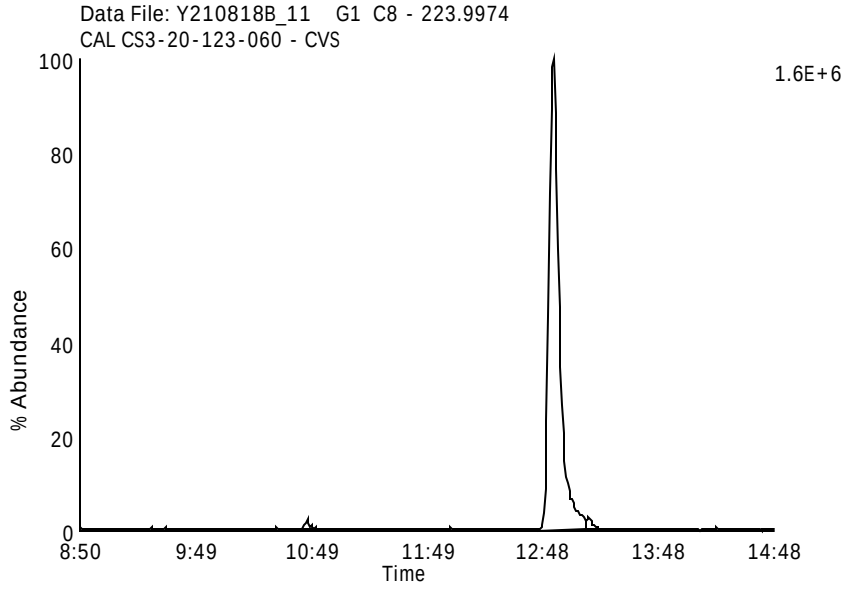


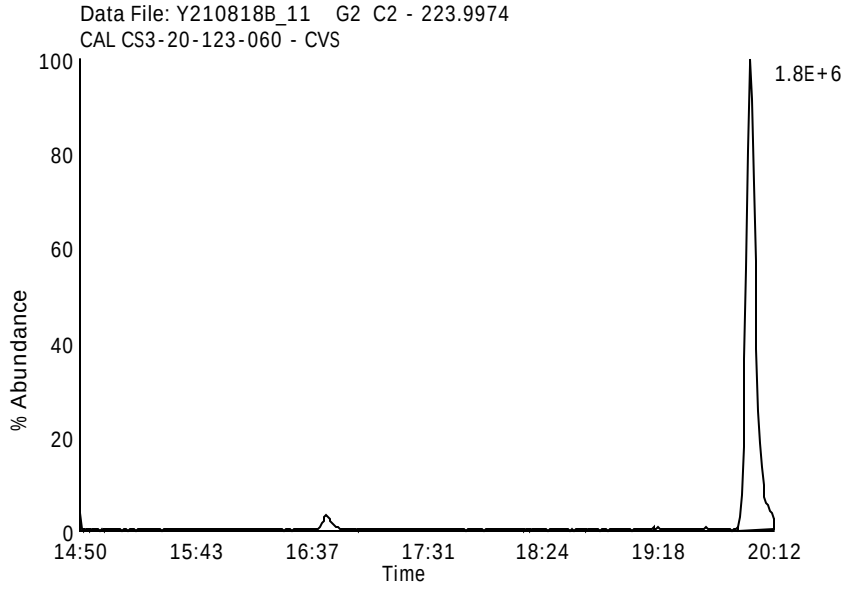
Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



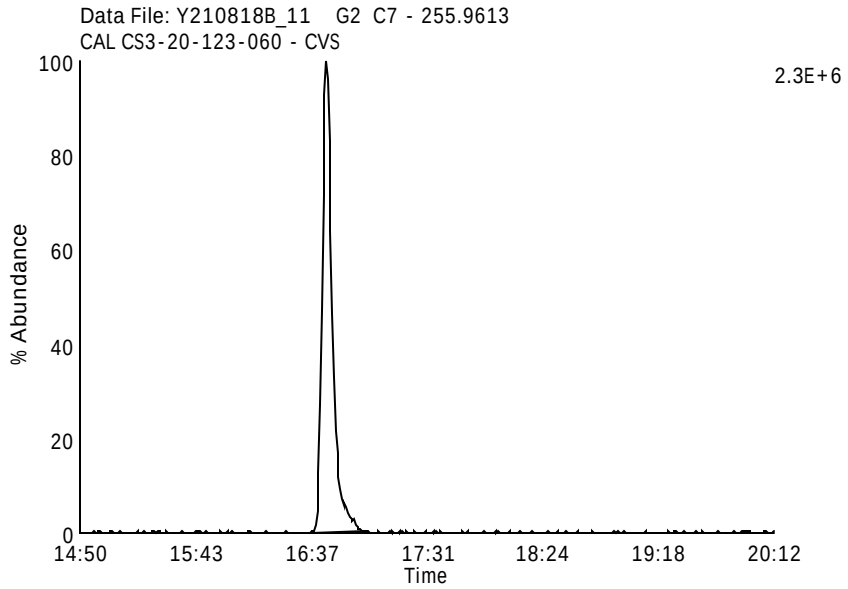


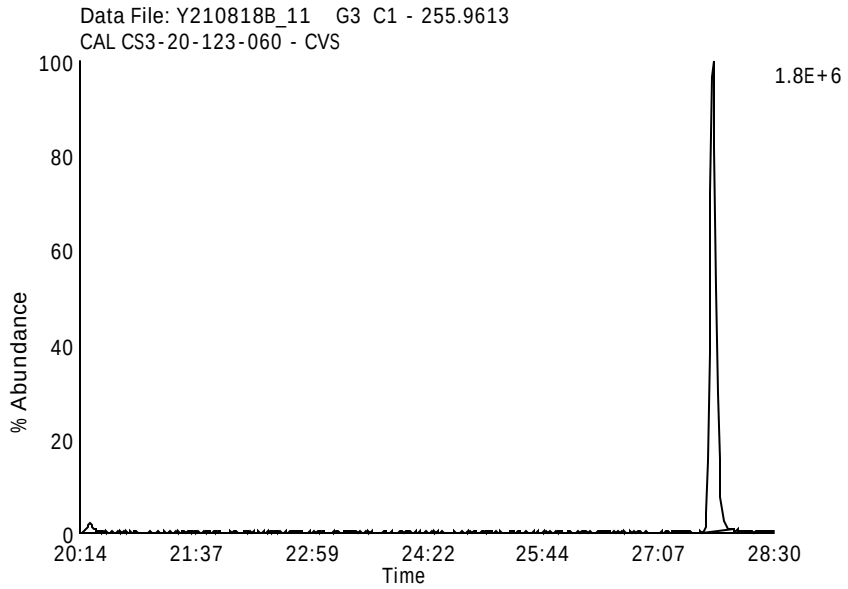


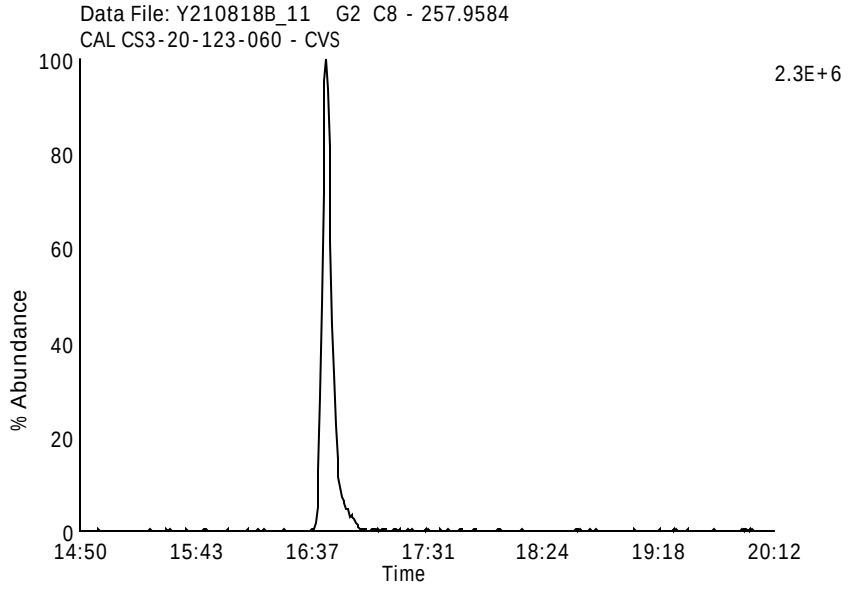


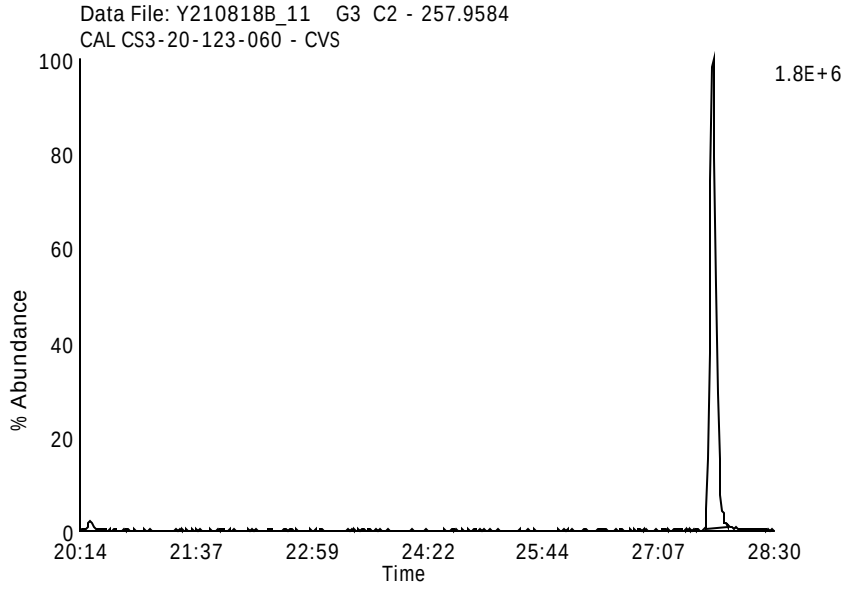
Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



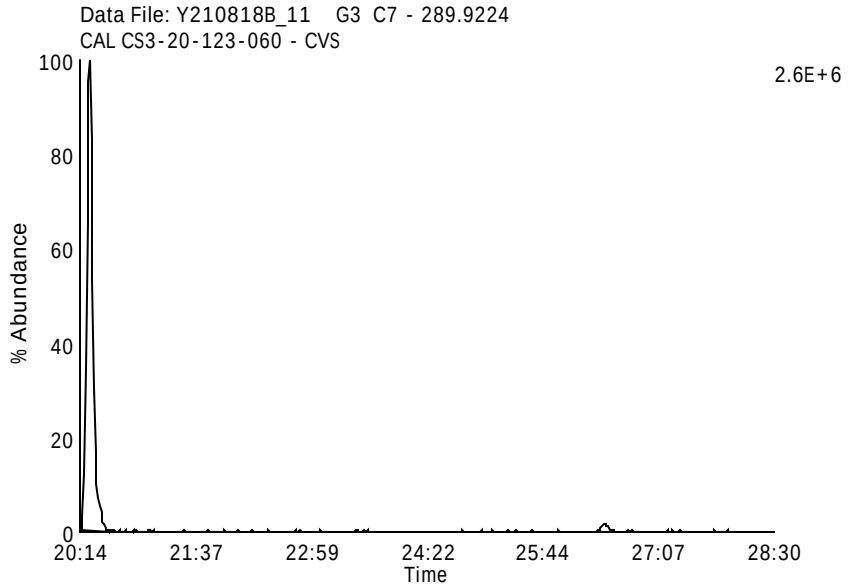


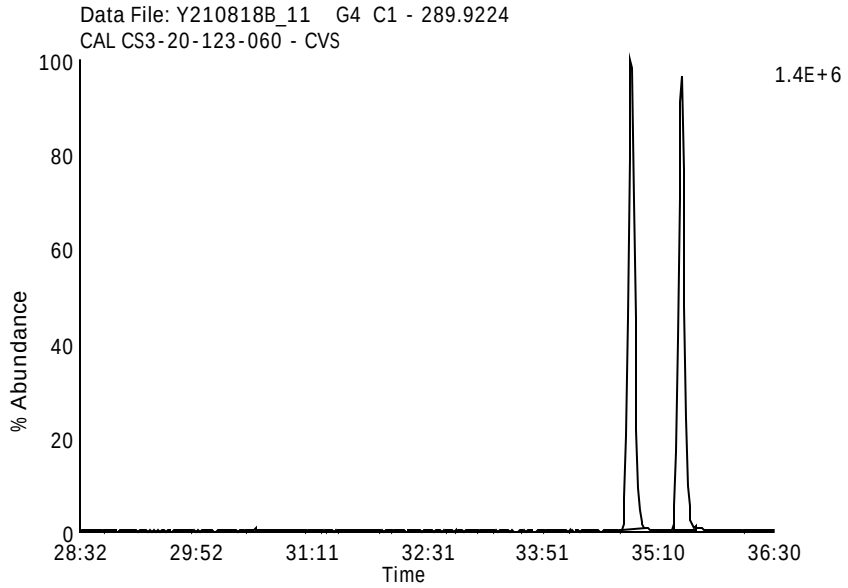


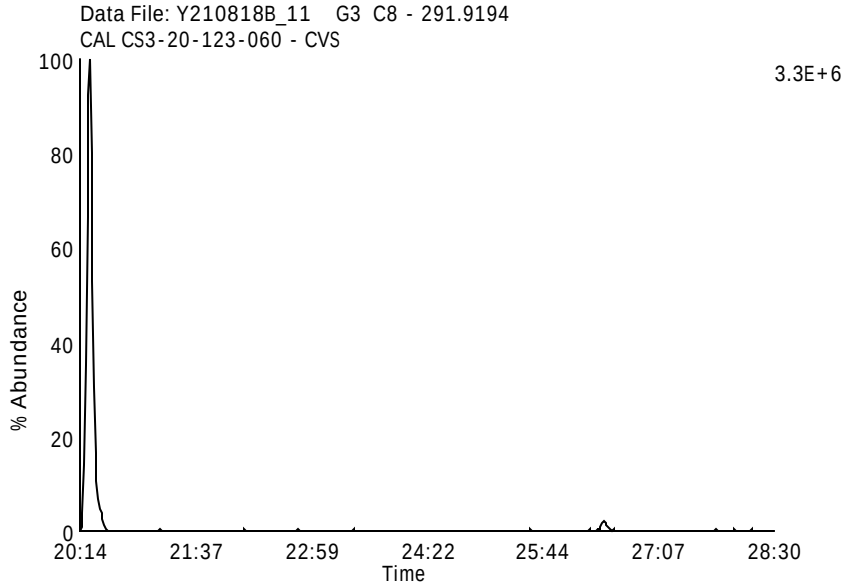


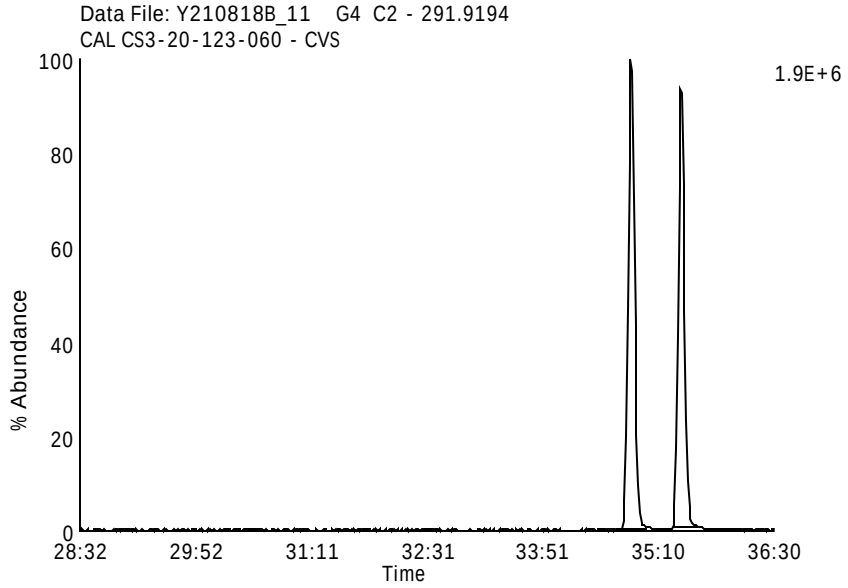
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



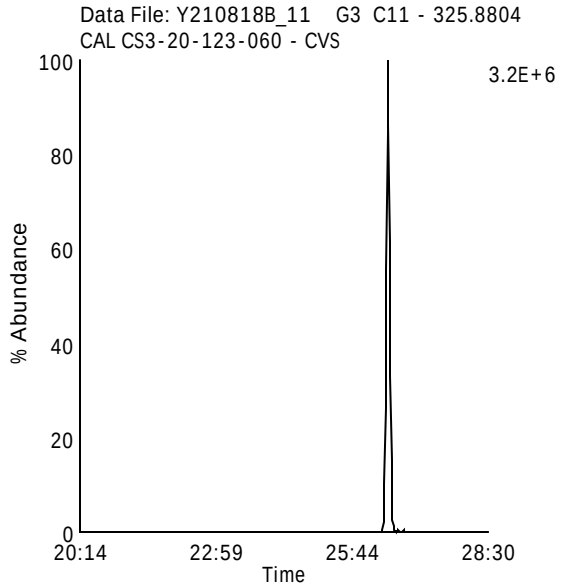


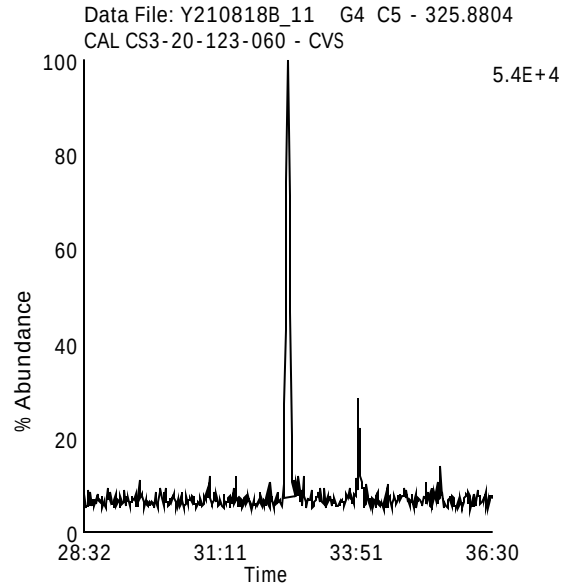


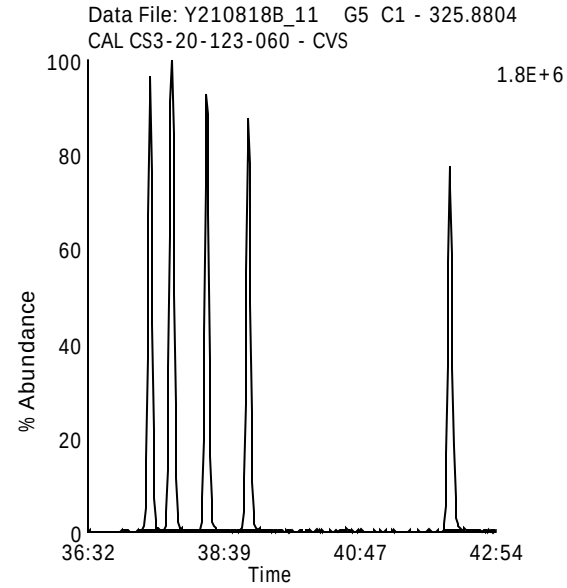


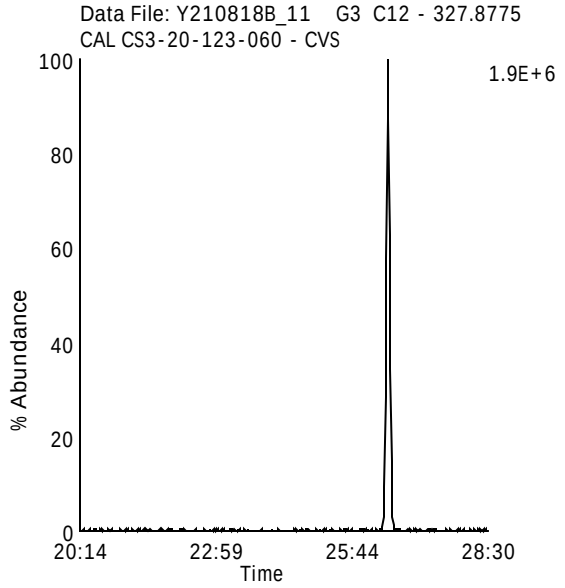
Penta Chlorinated Biphenyls

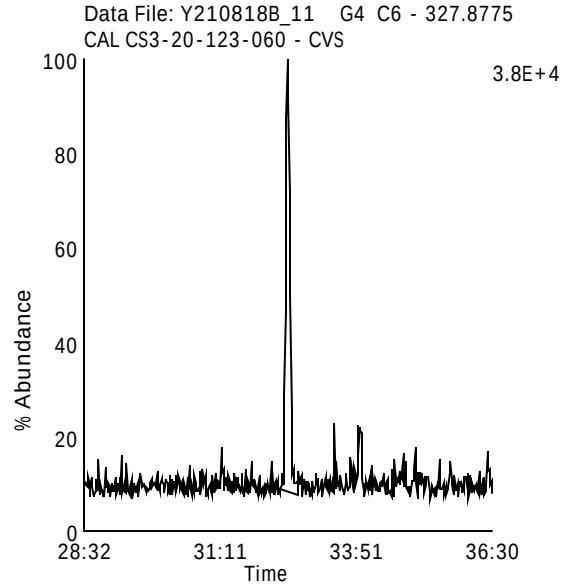
Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

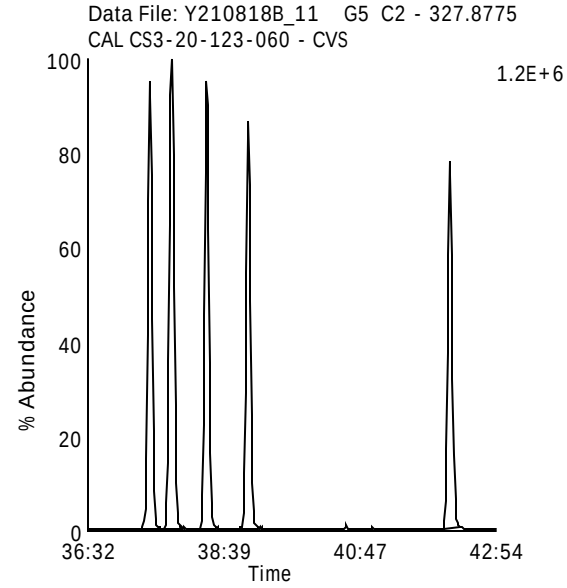










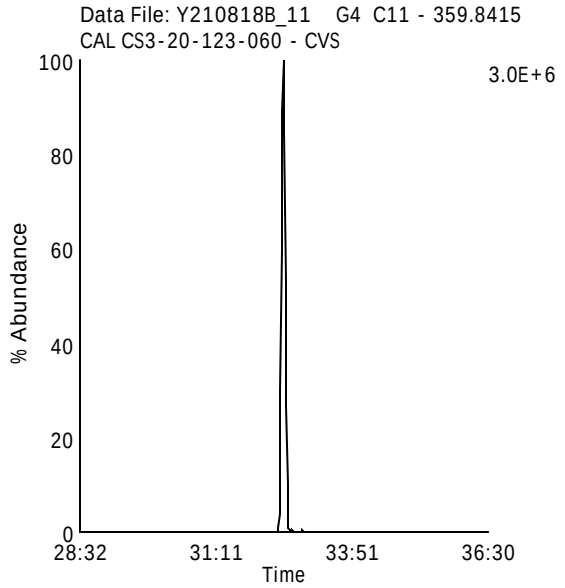


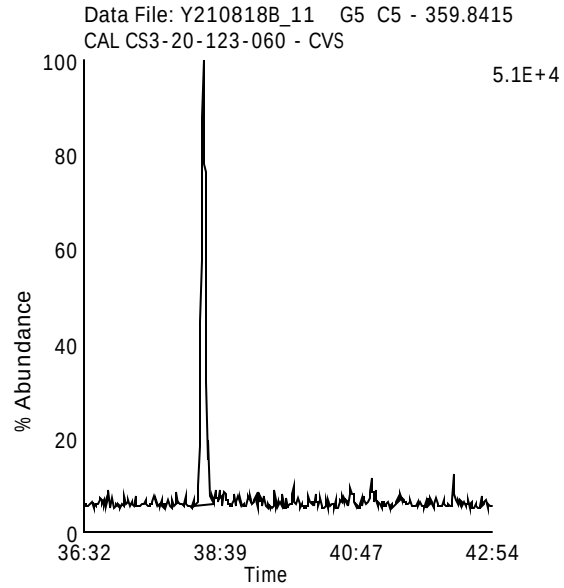
Hexa Chlorinated Biphenyls

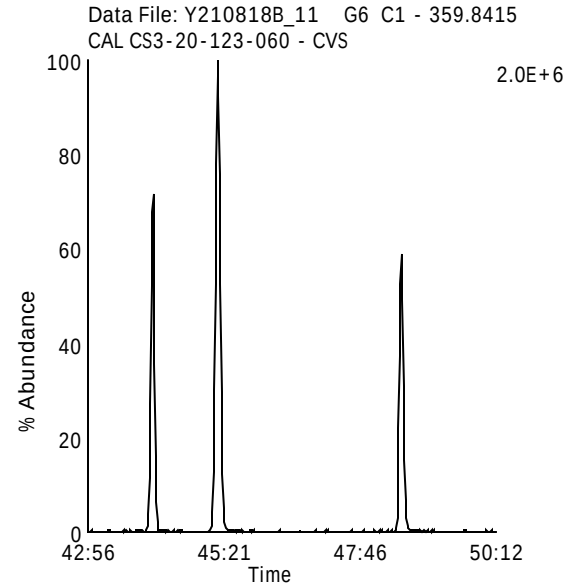
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

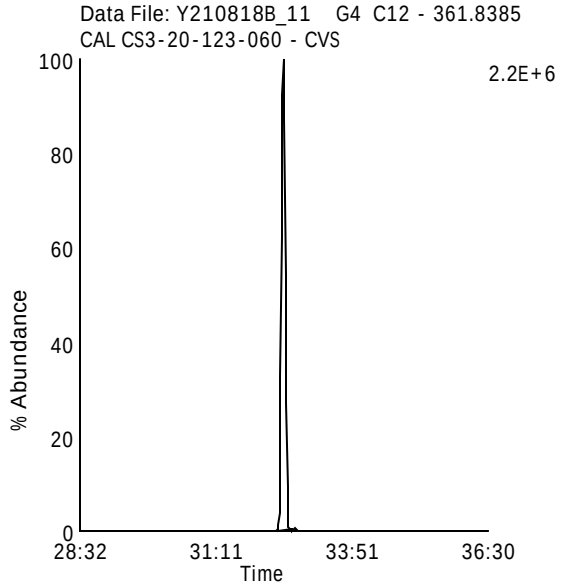
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

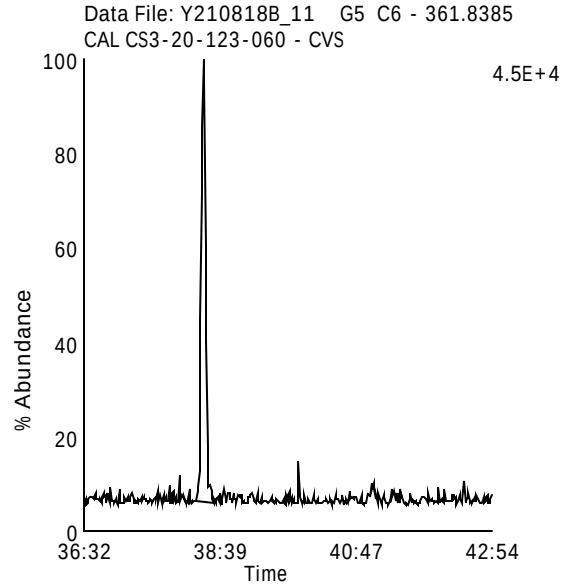
Sample Description: CAL CS3-20-123-060 - CVS

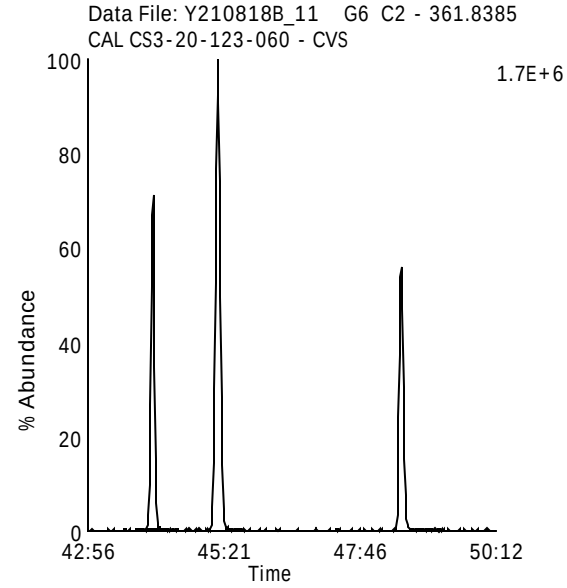






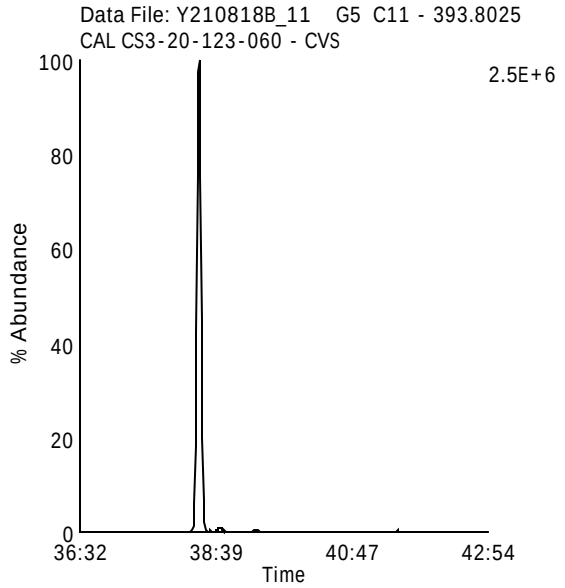


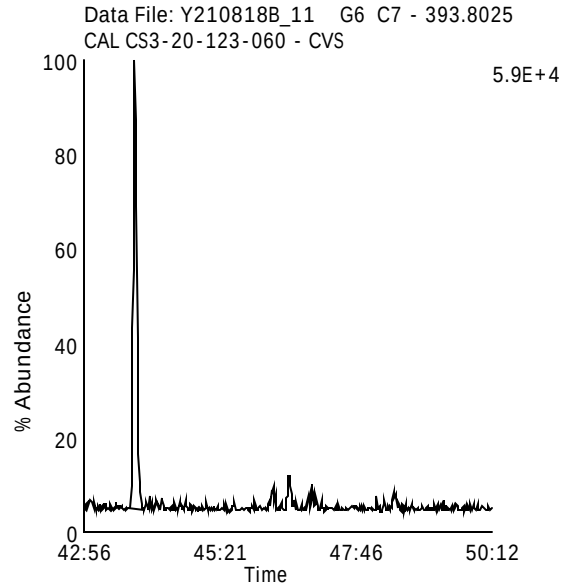


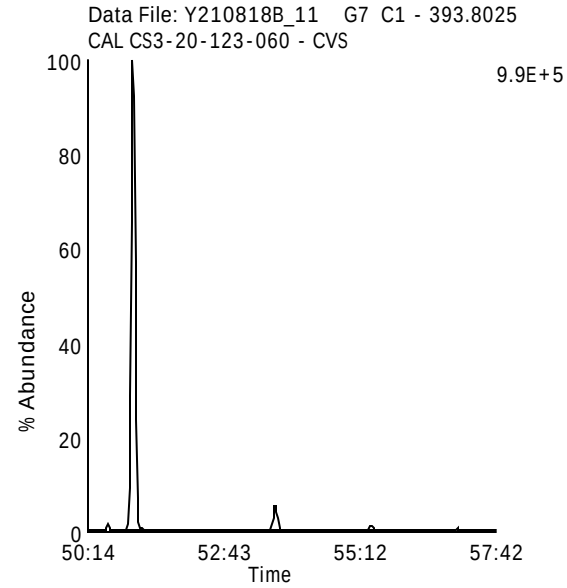


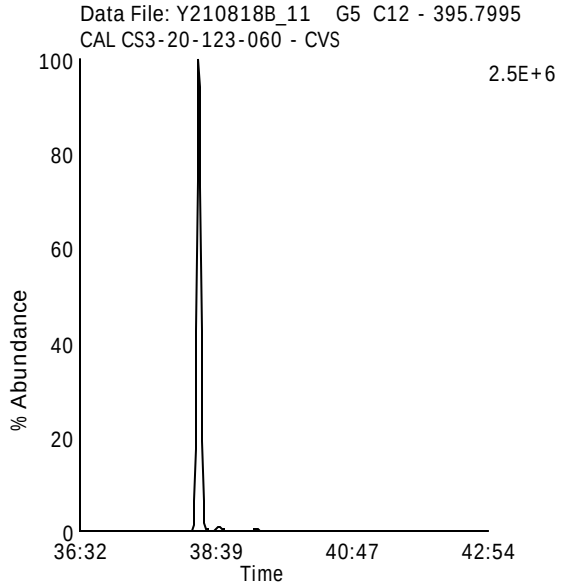
Hepta Chlorinated Biphenyls

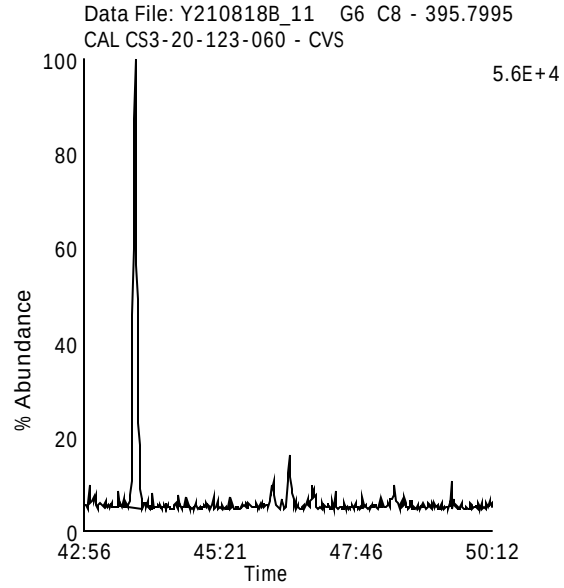
Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

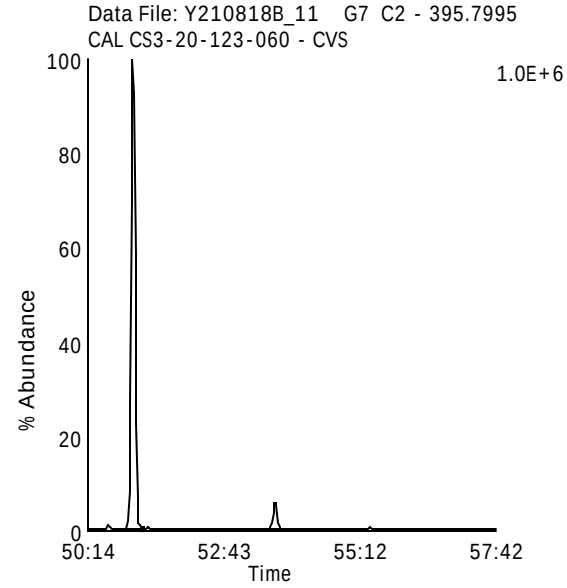






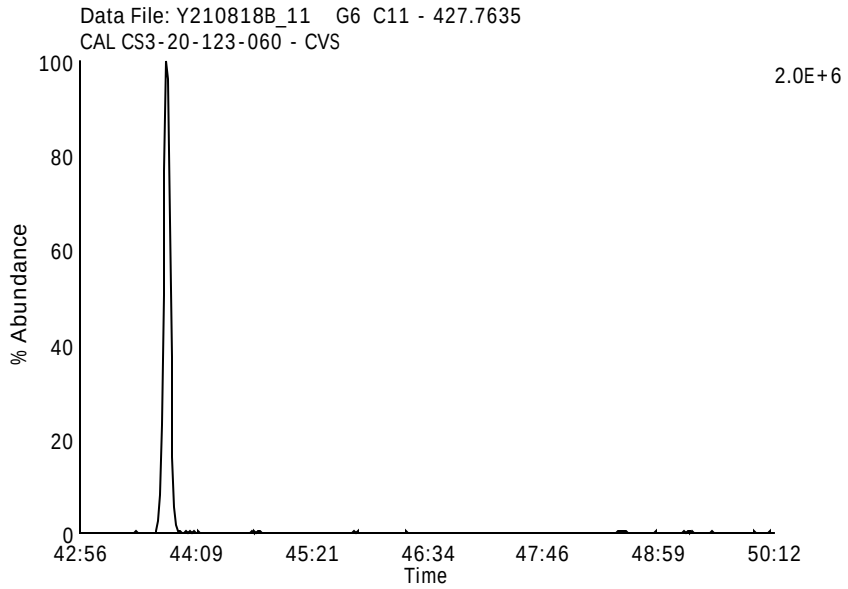


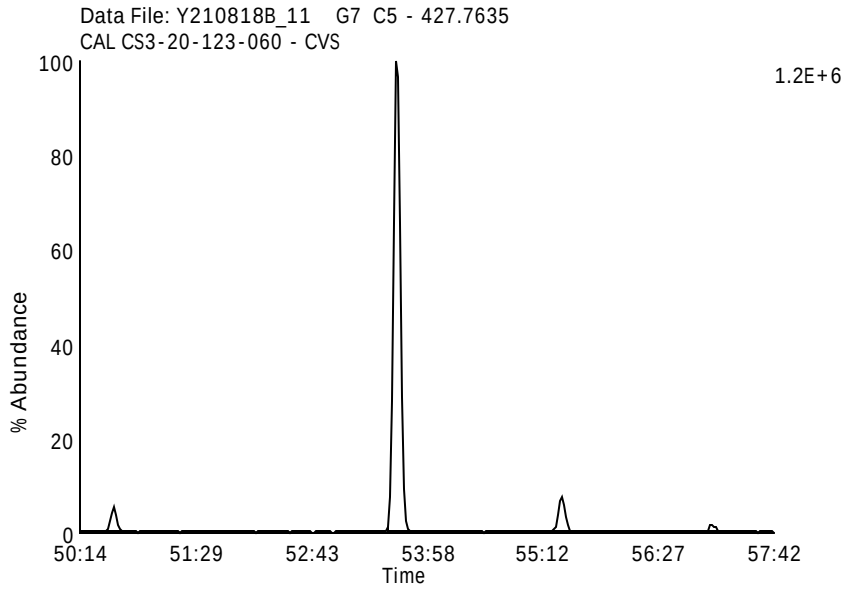


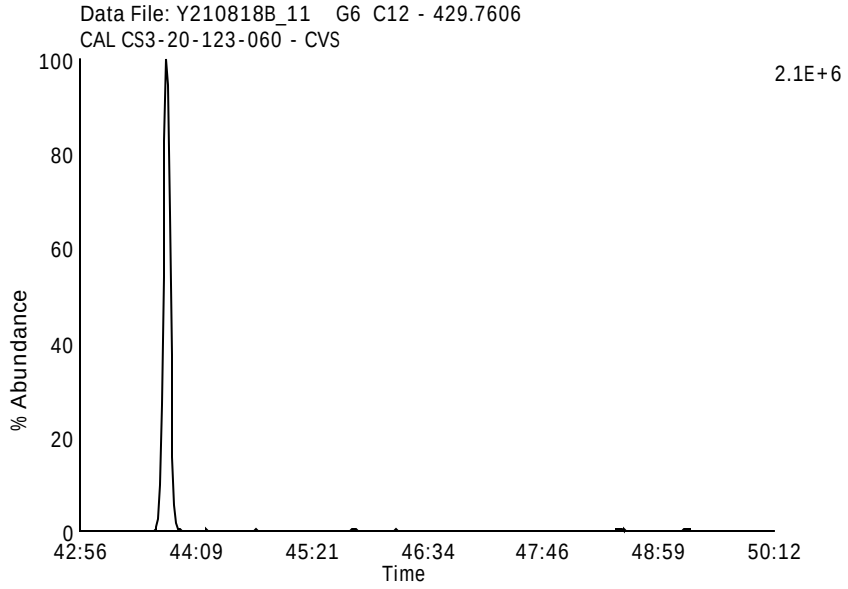


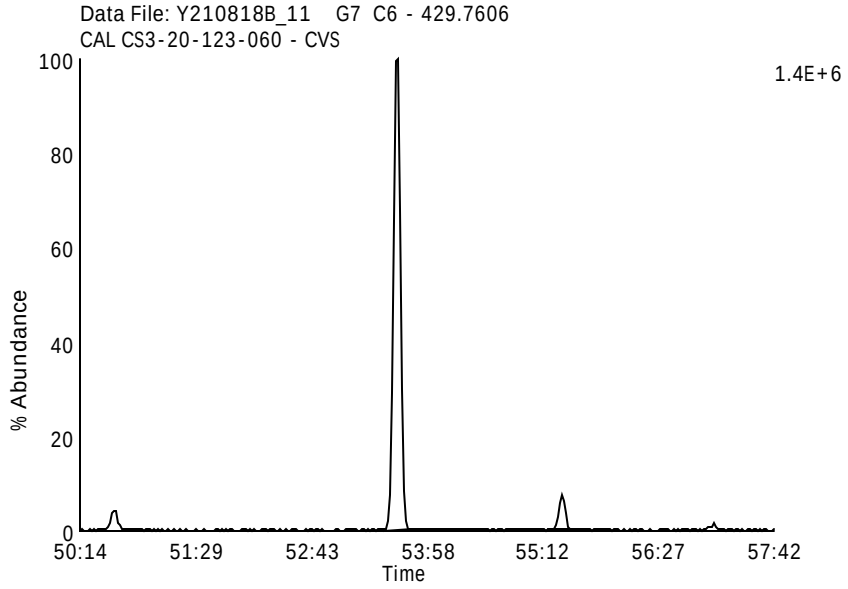
Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







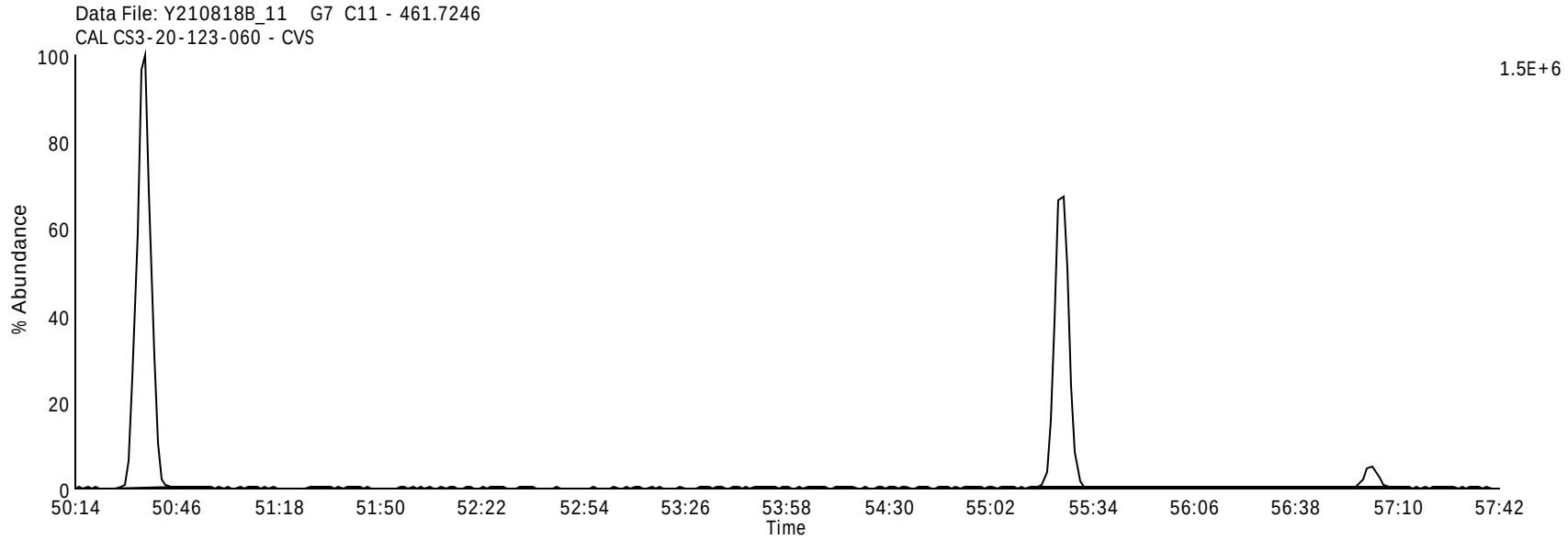


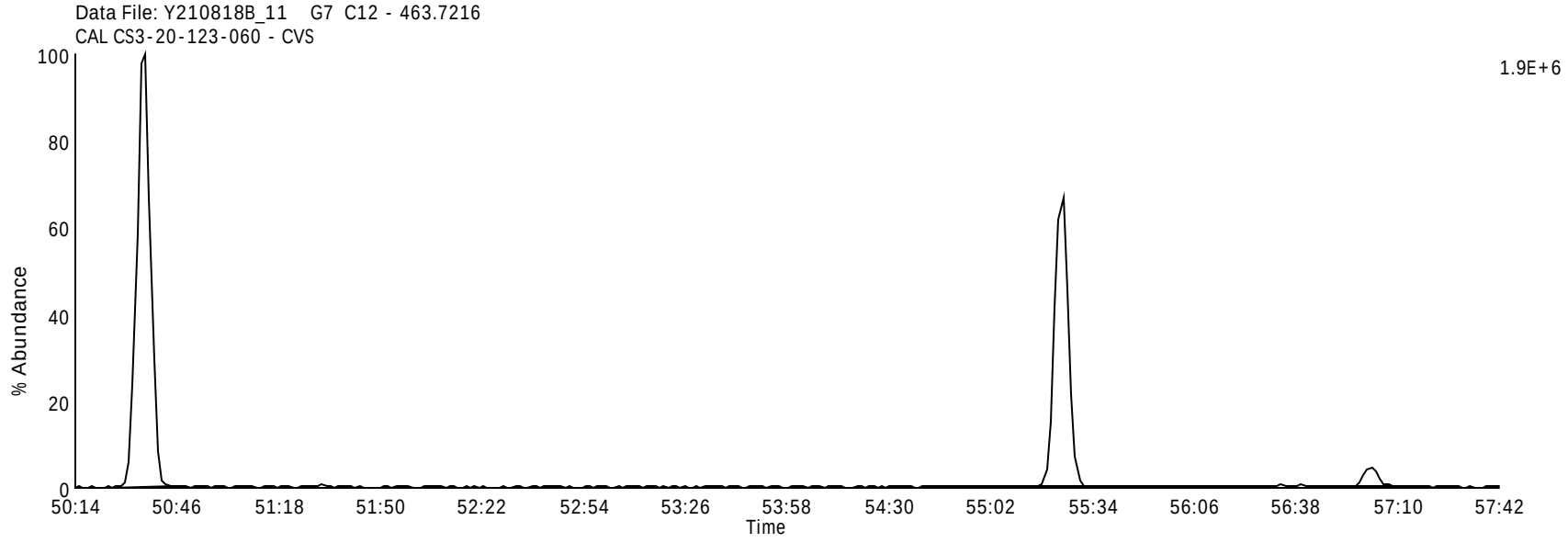
Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



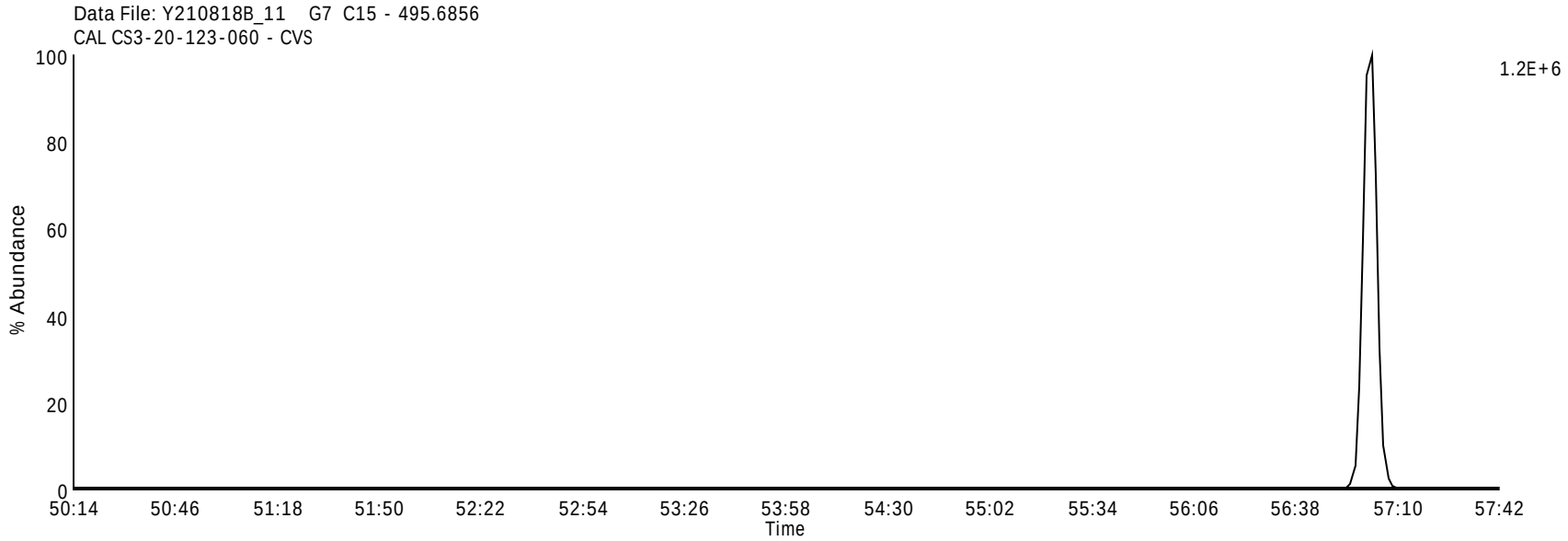


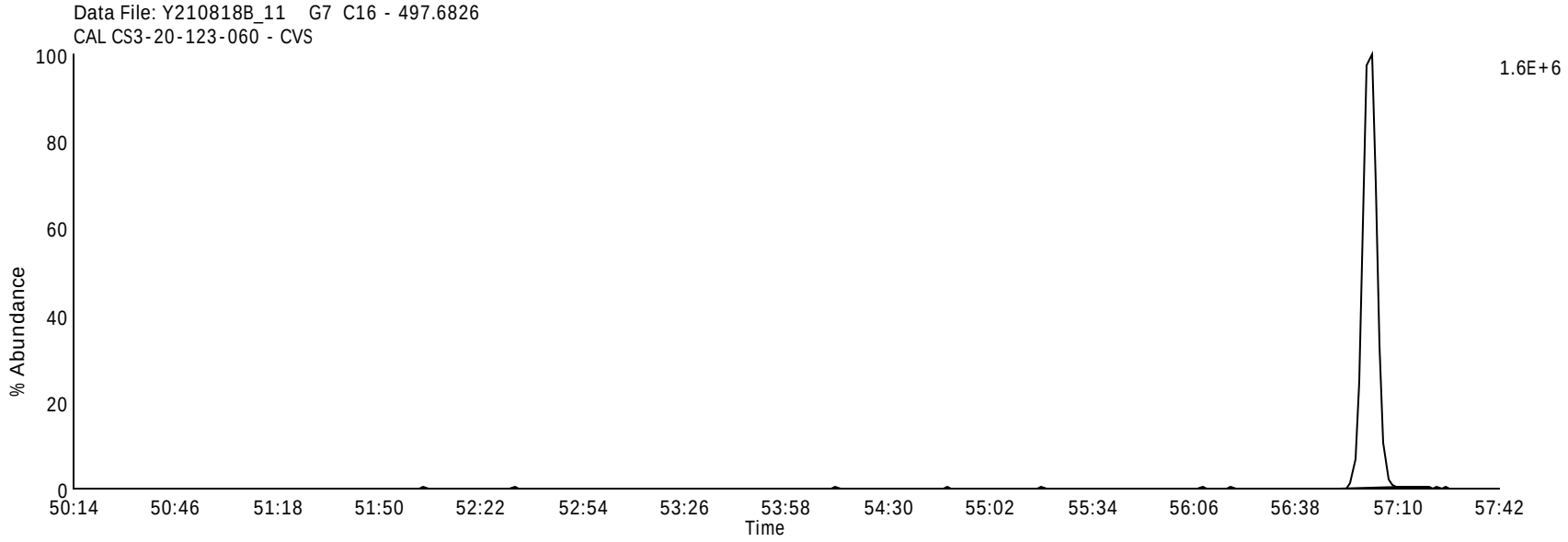
Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

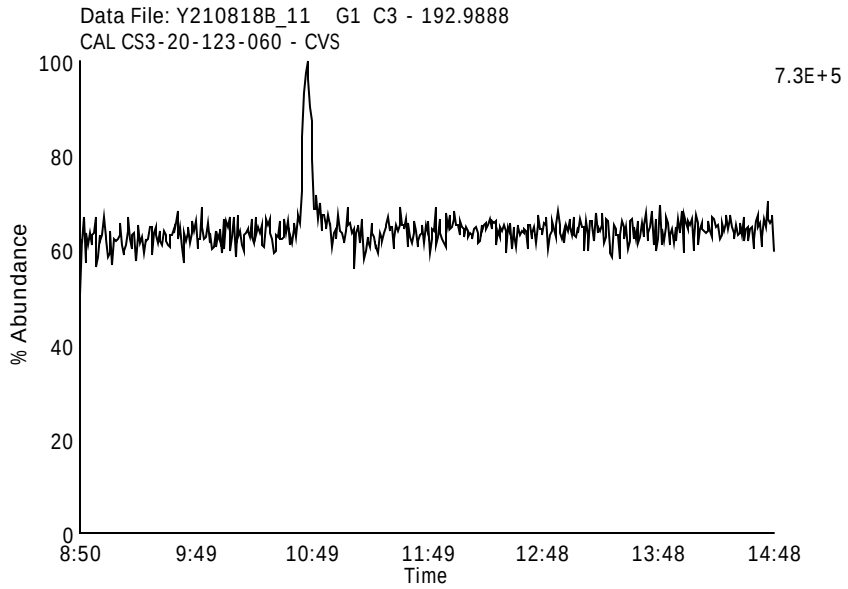
Sample Description: CAL CS3-20-123-060 - CVS

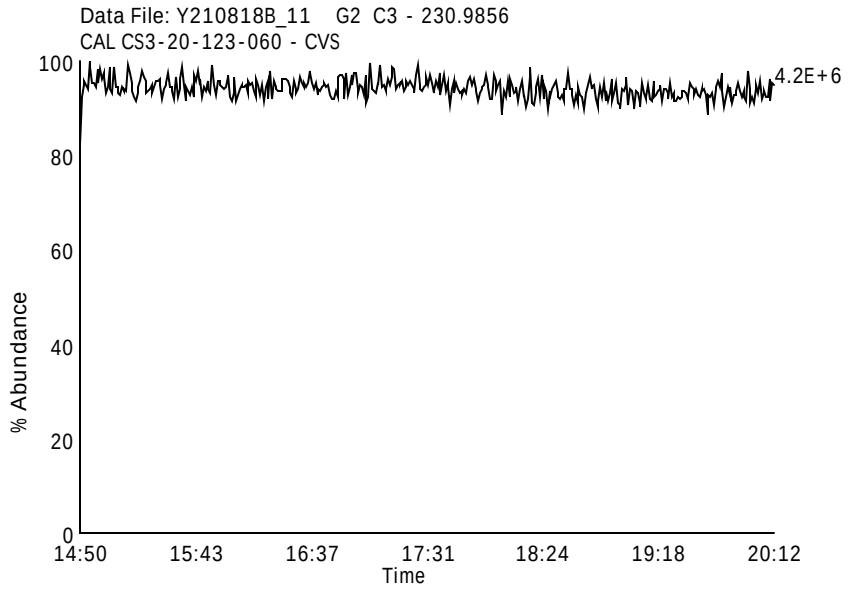


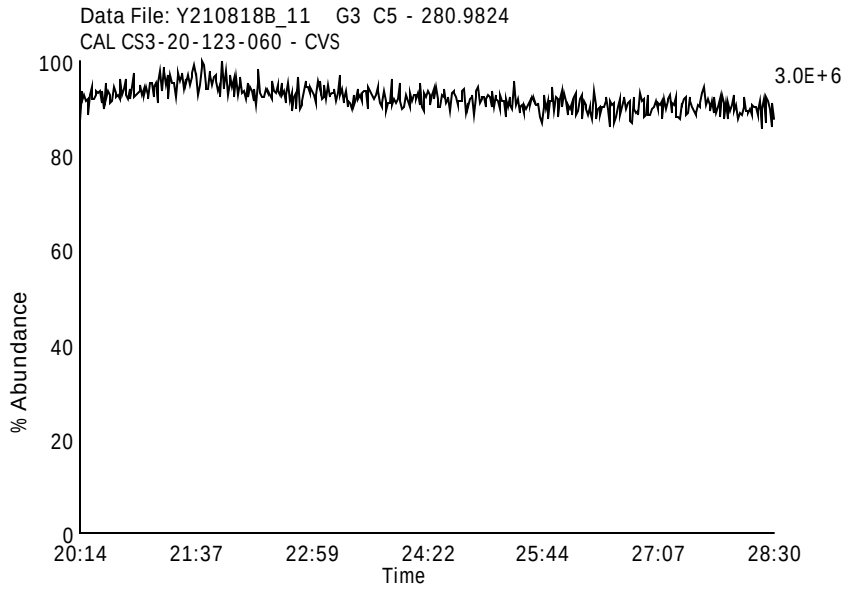


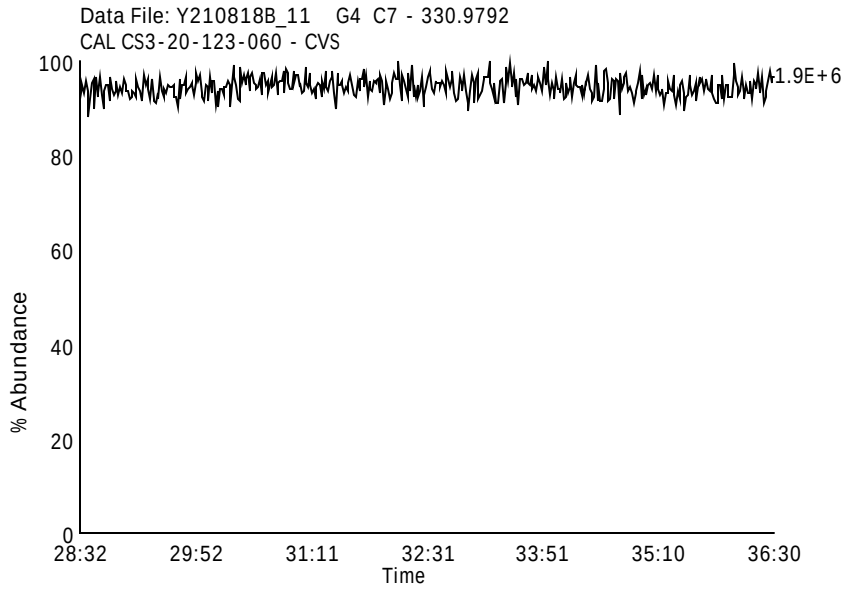
Group 1 - 4 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



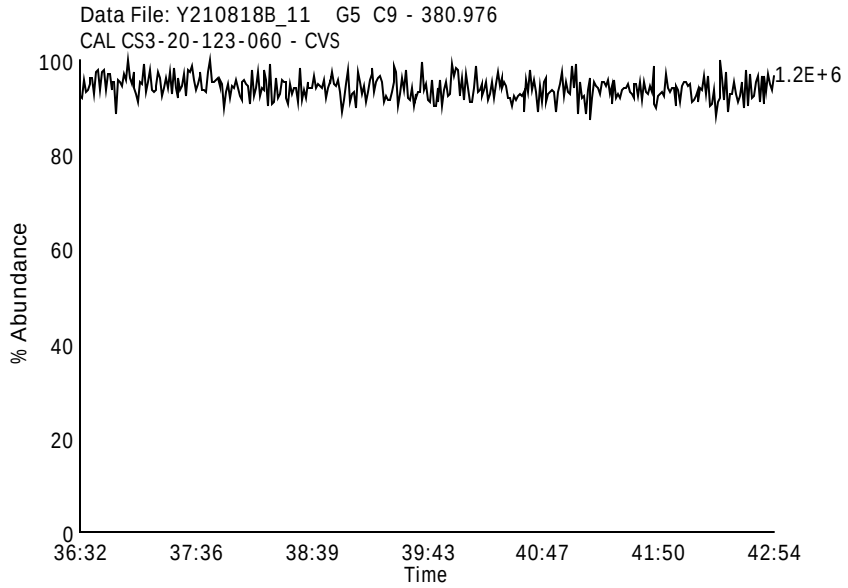


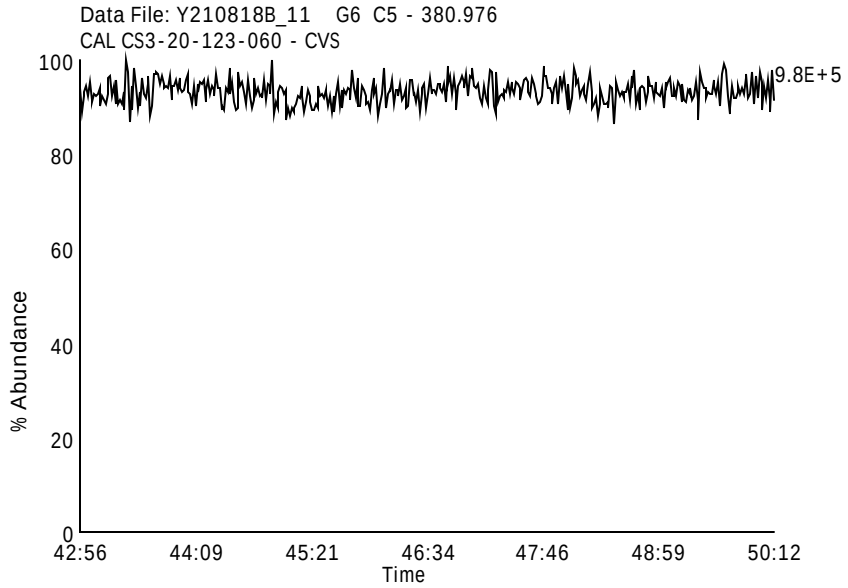


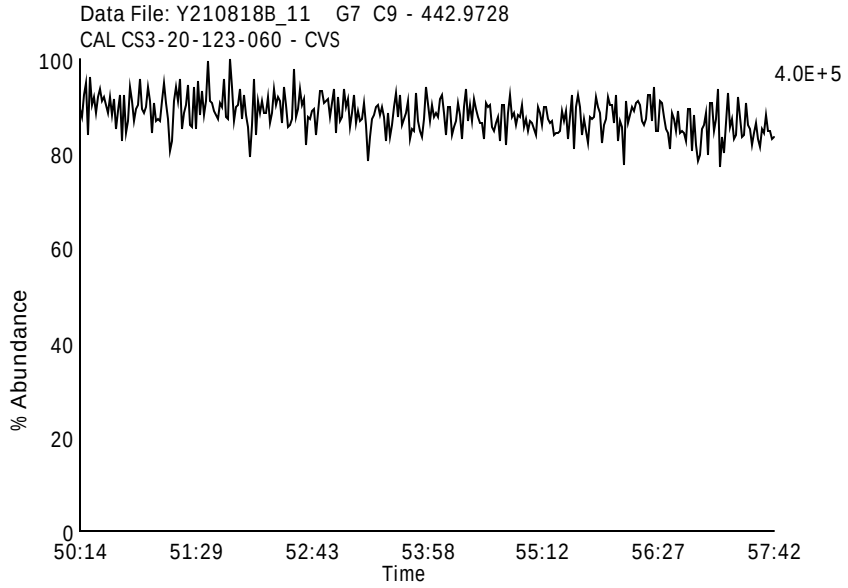


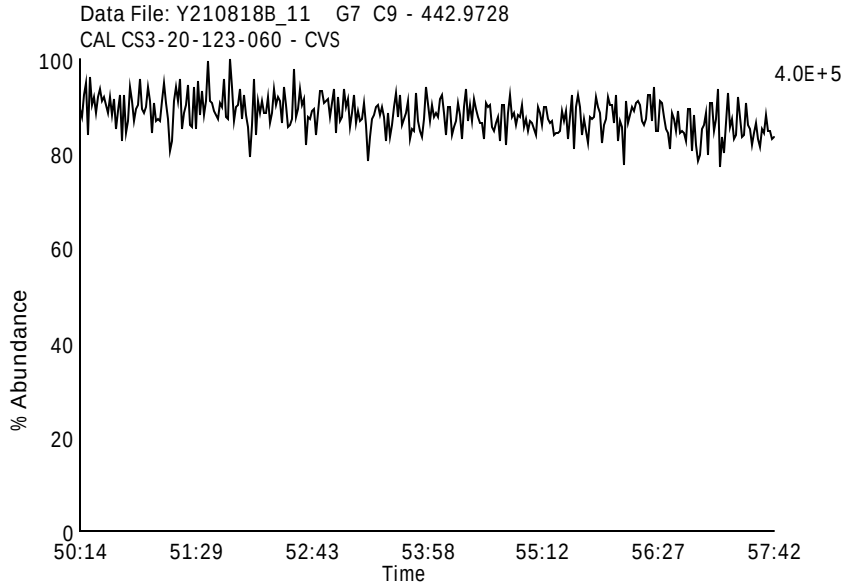
Group 5 - 7 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







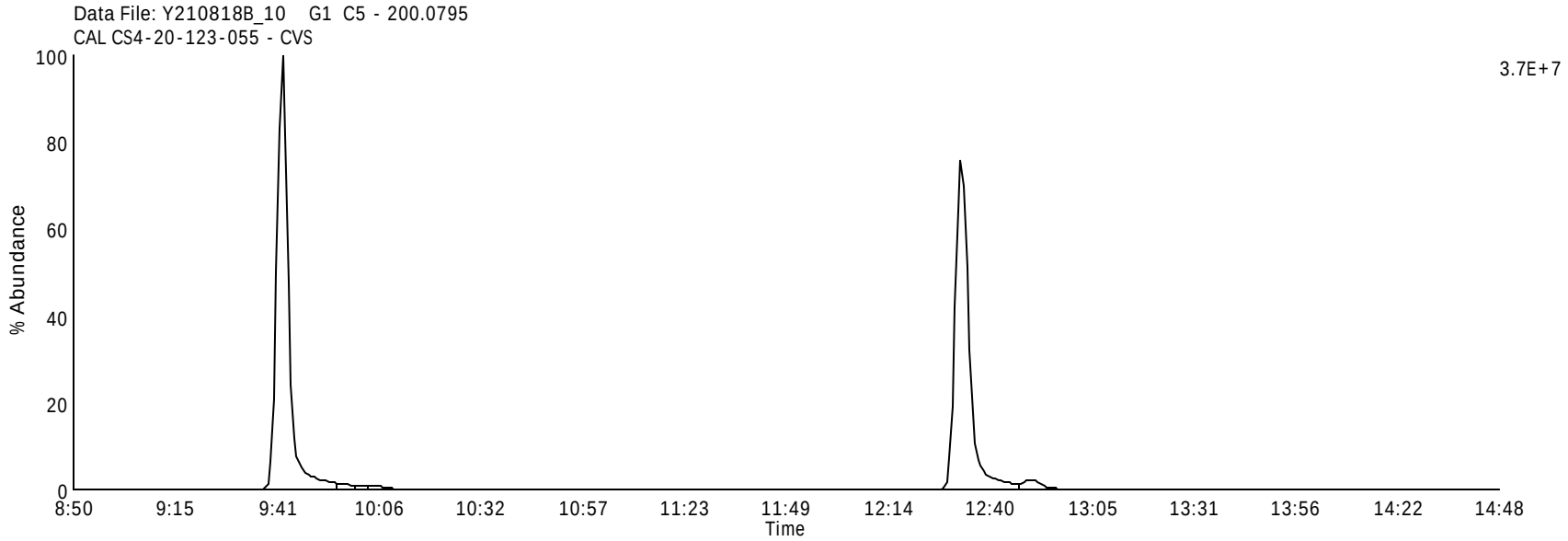


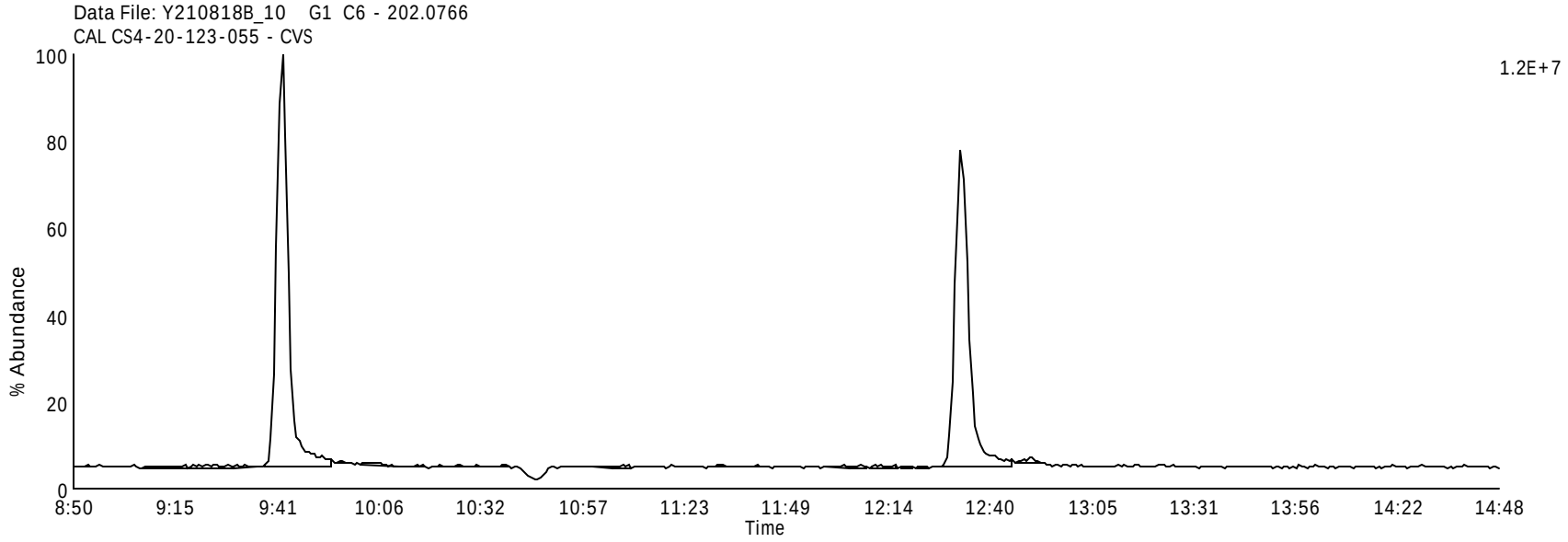
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

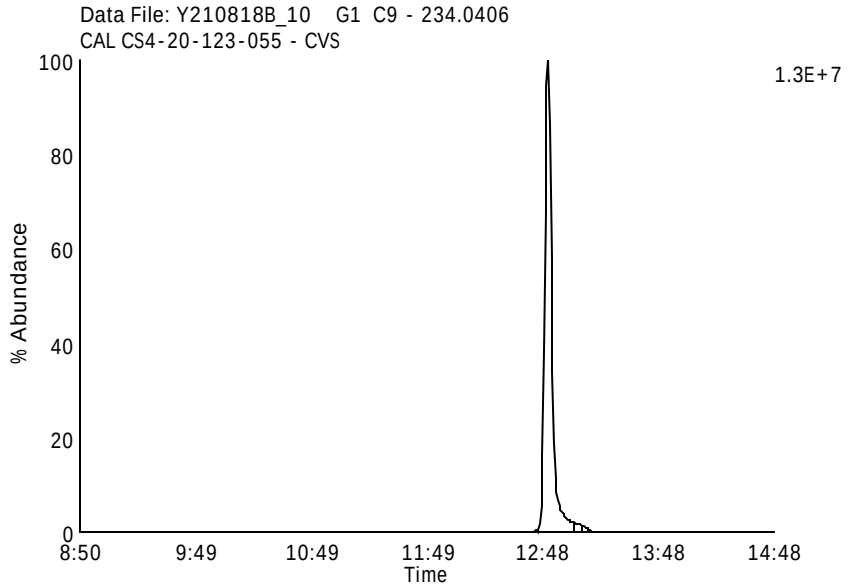
Sample Description: CAL CS4-20-123-055 - CVS

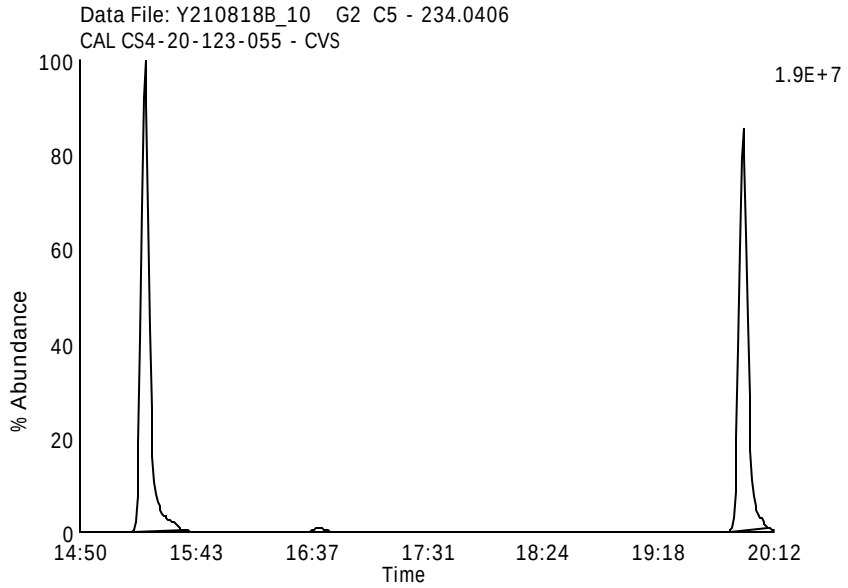


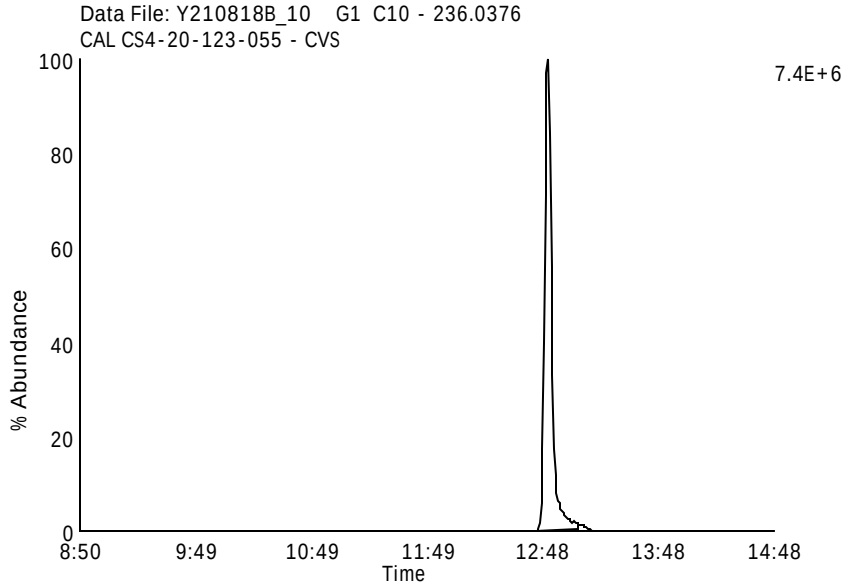


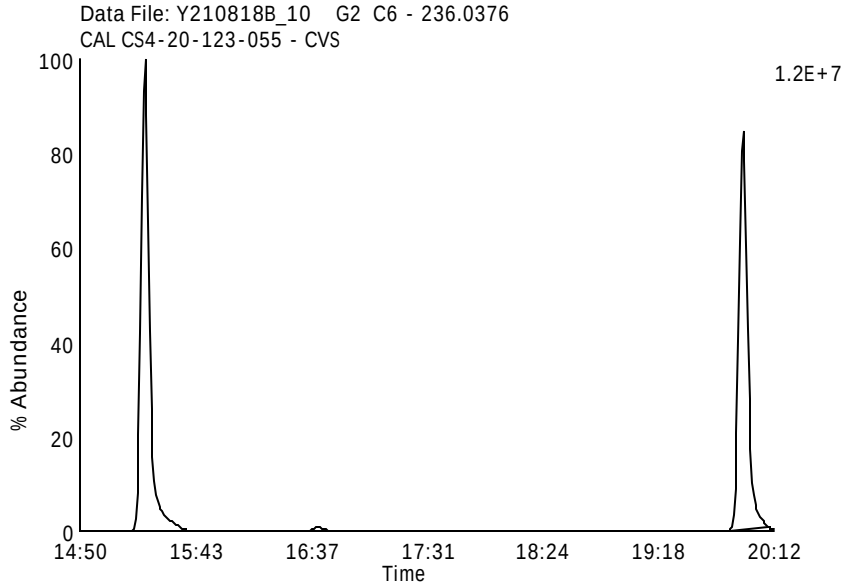
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



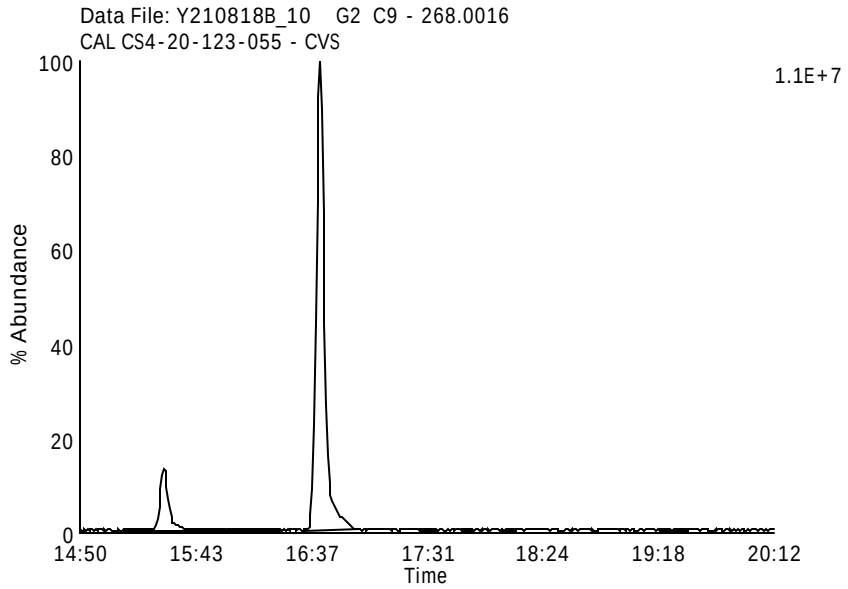


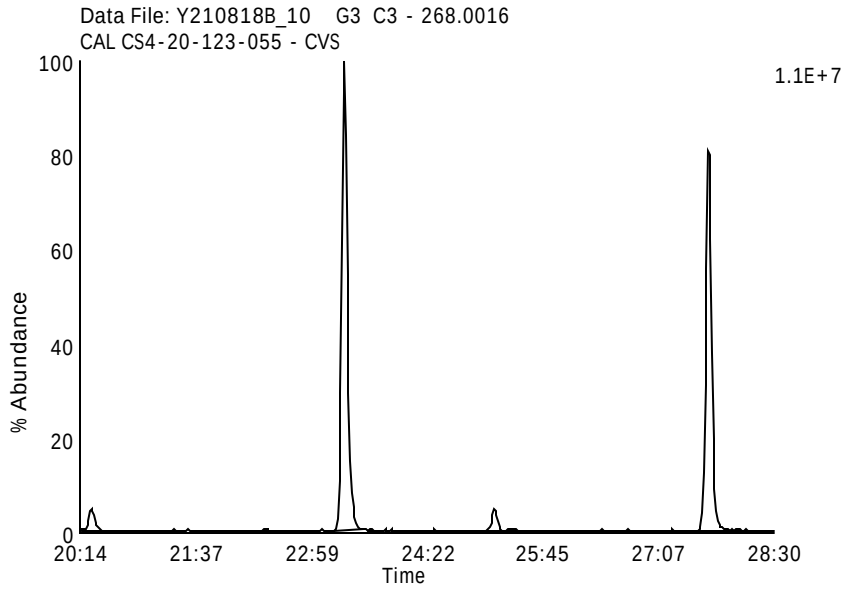


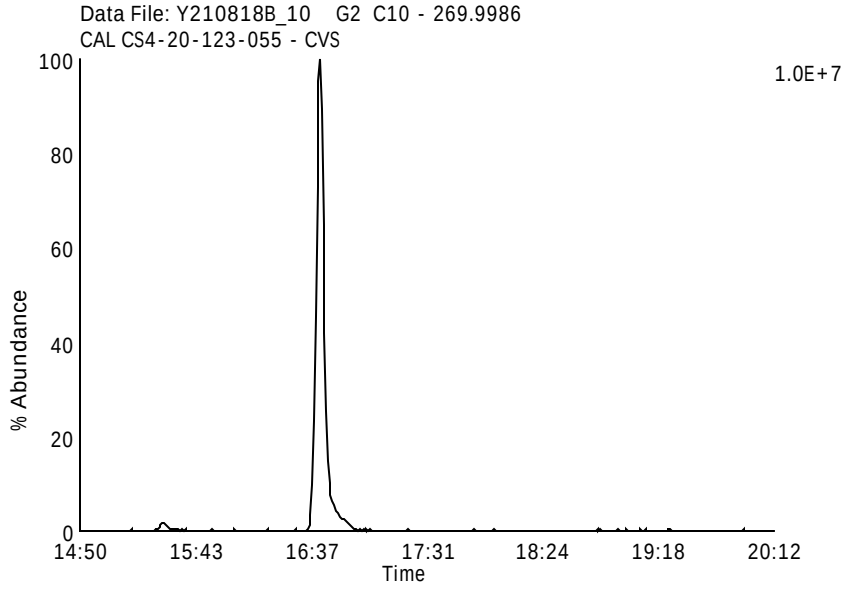


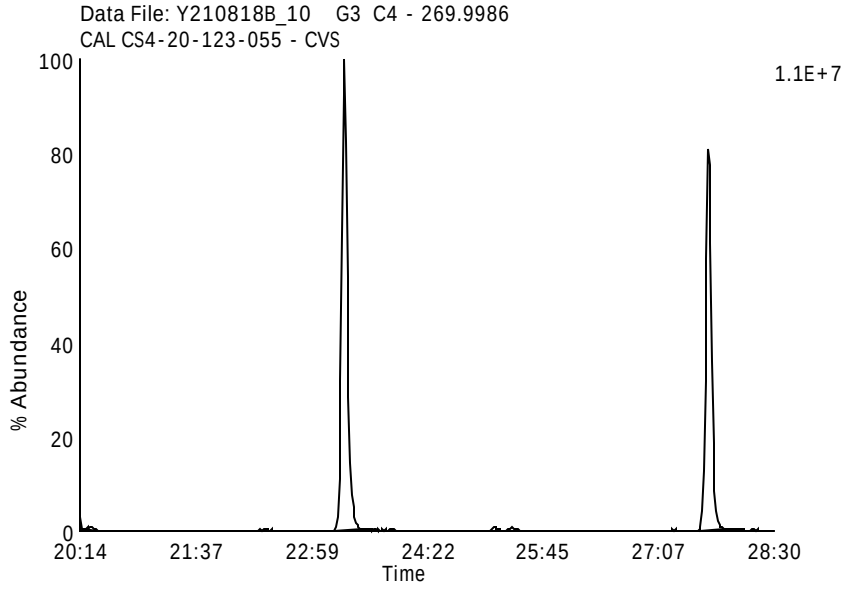
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



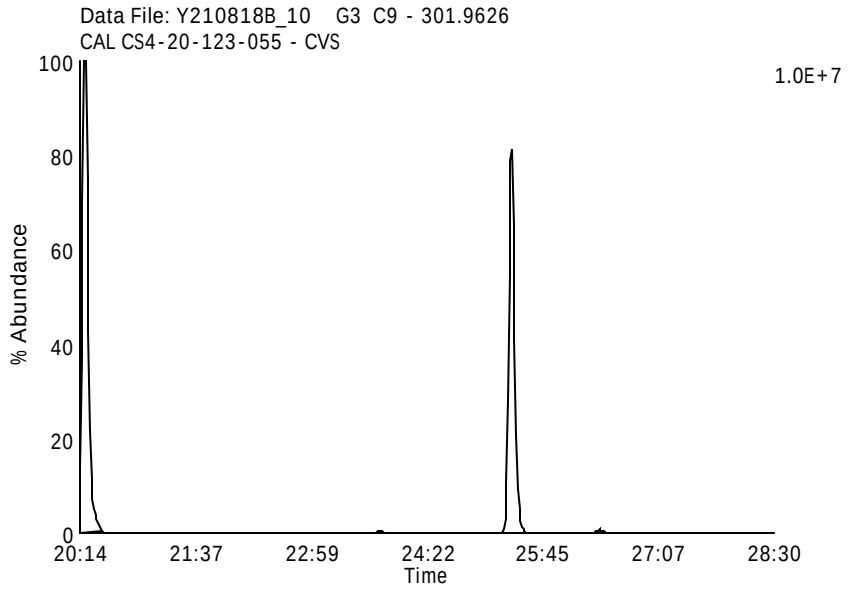


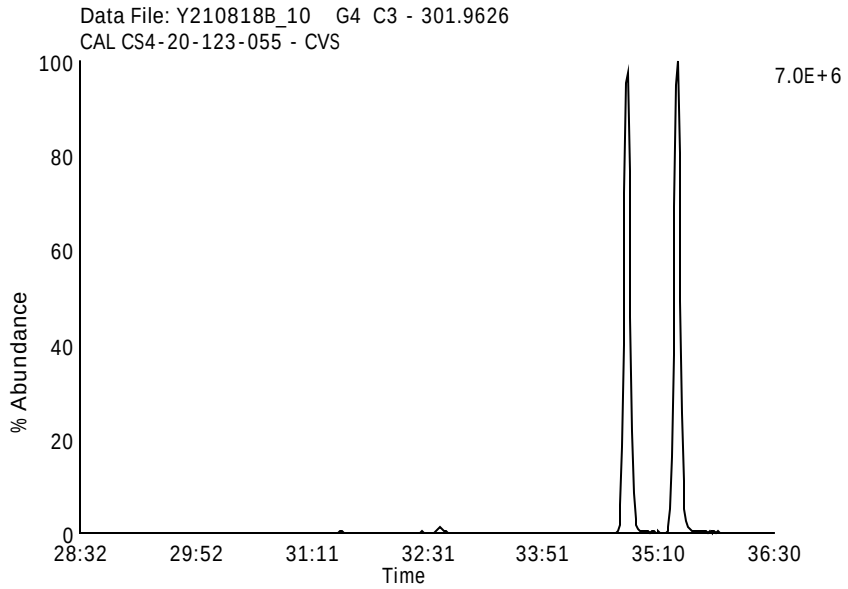


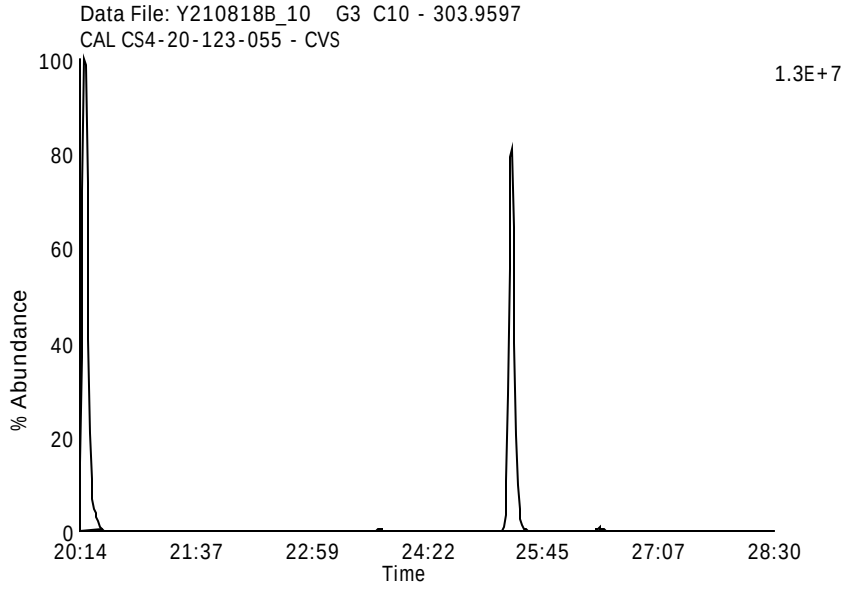


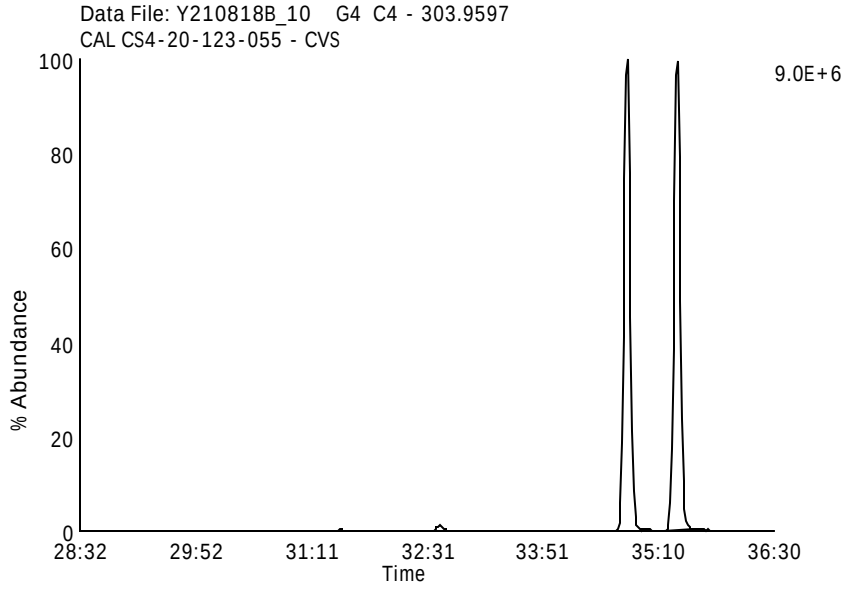
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS







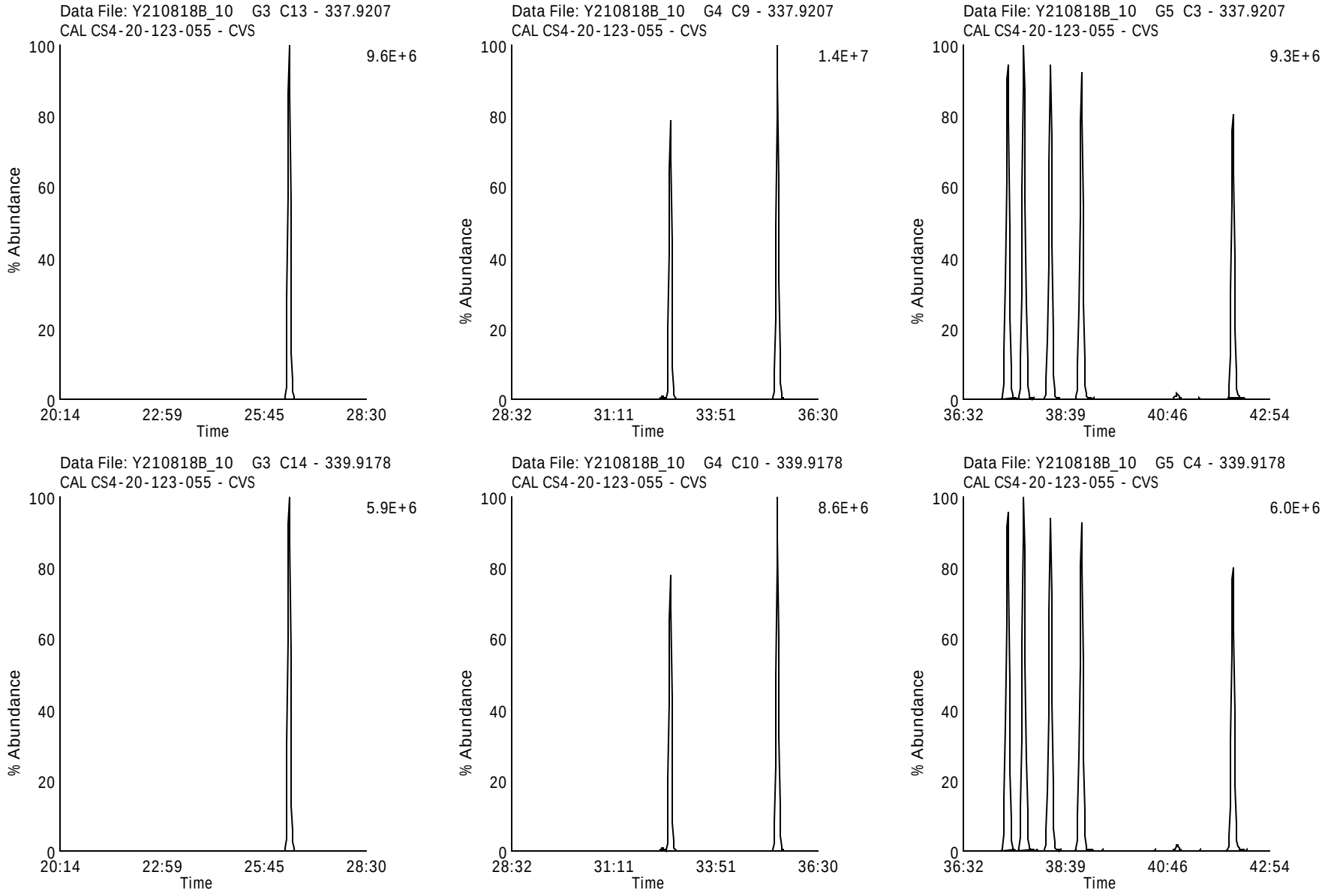


Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

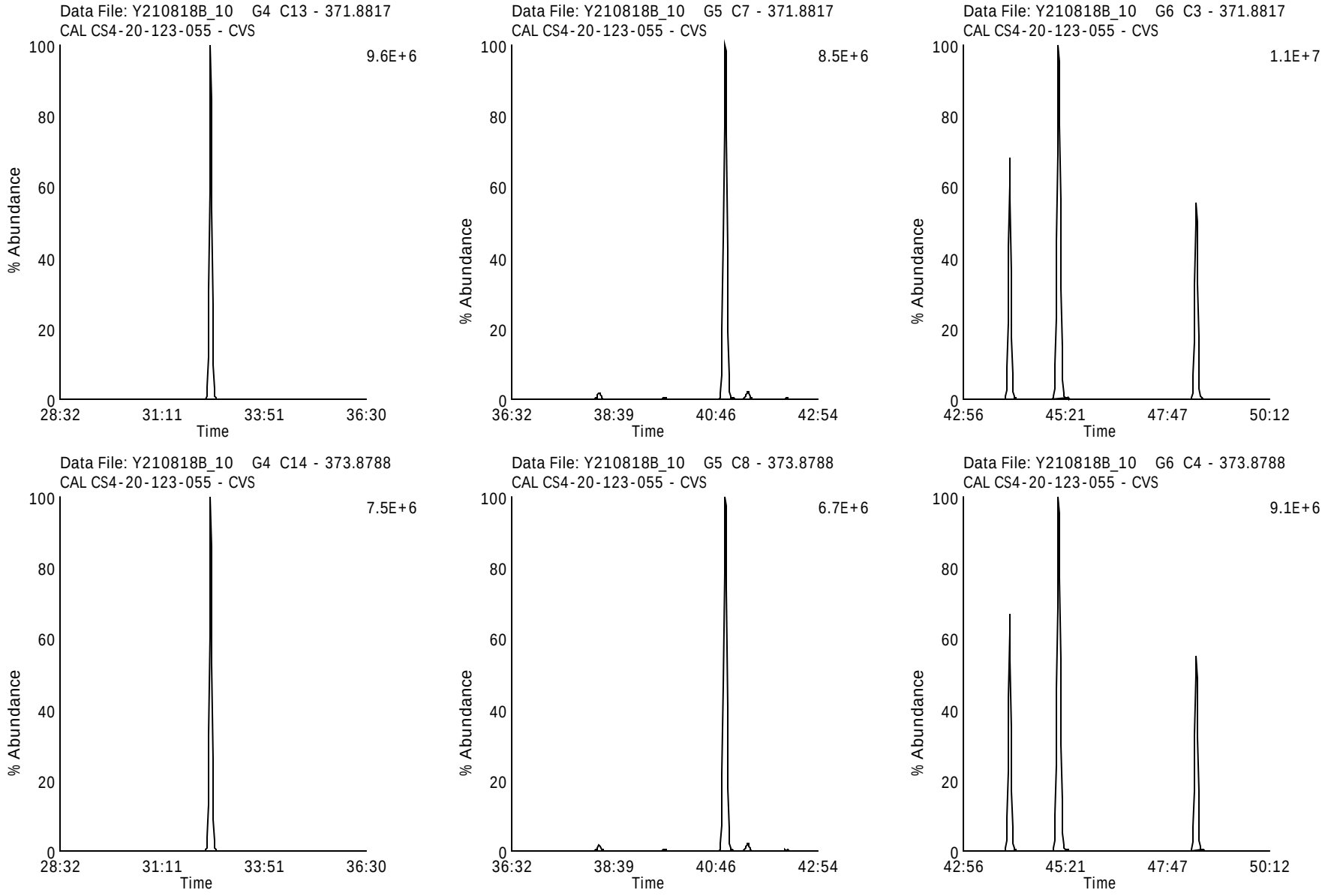


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

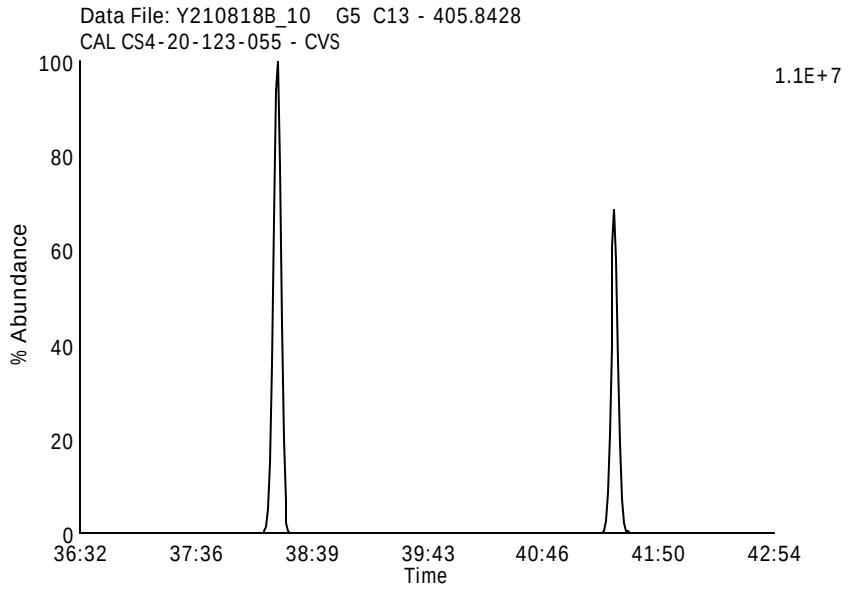
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

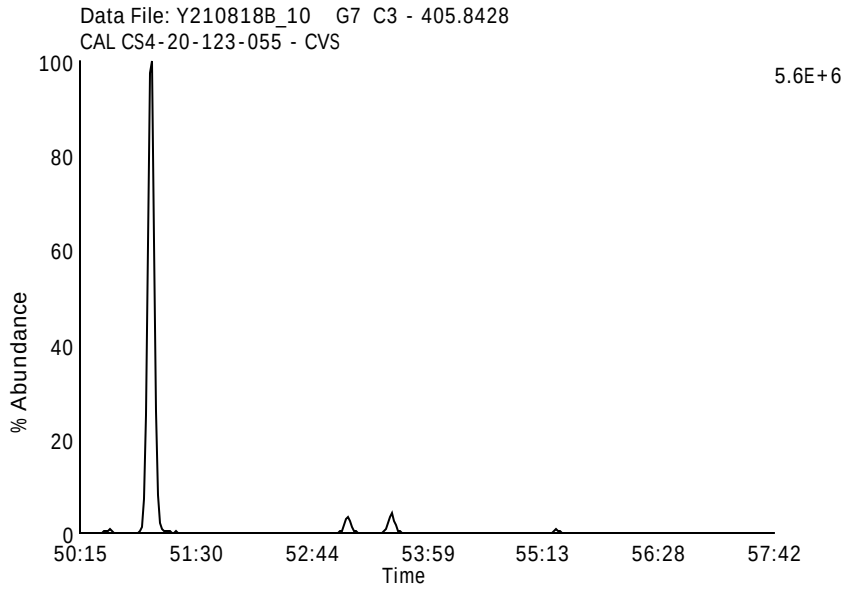
Sample Description: CAL CS4-20-123-055 - CVS

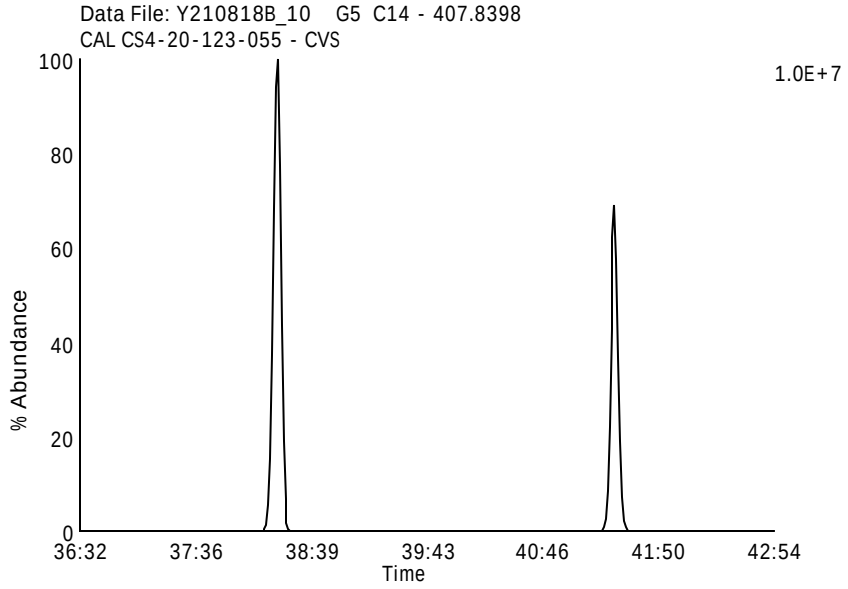


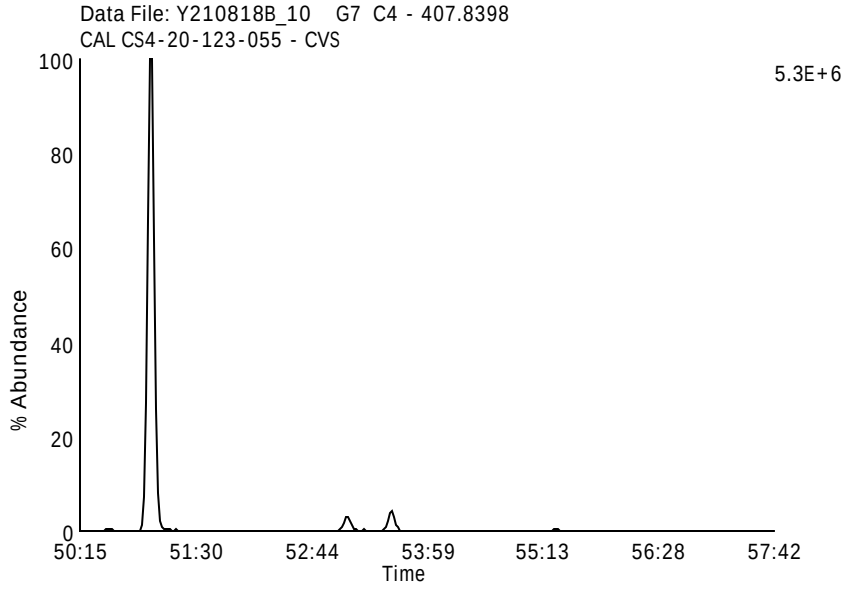
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS





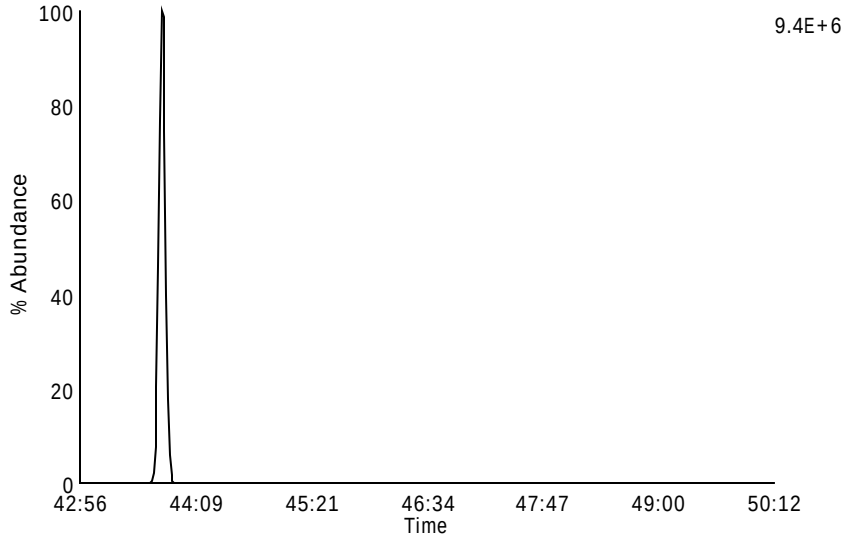




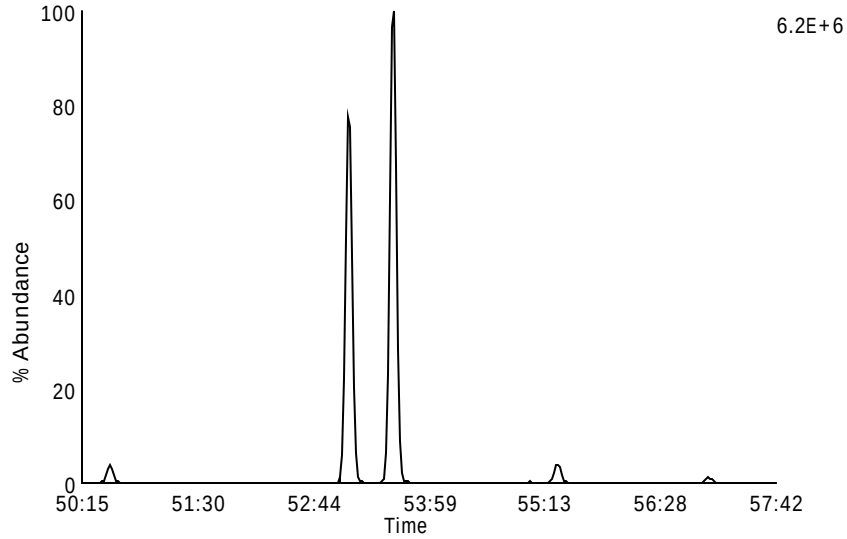
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

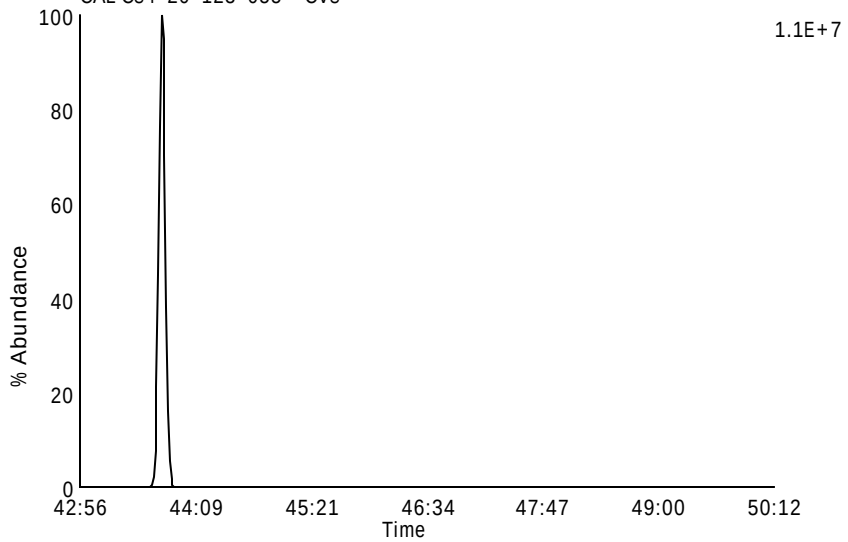
Data File: Y210818B_10 G6 C13 - 439.8038
CAL CS4-20-123-055 - CVS



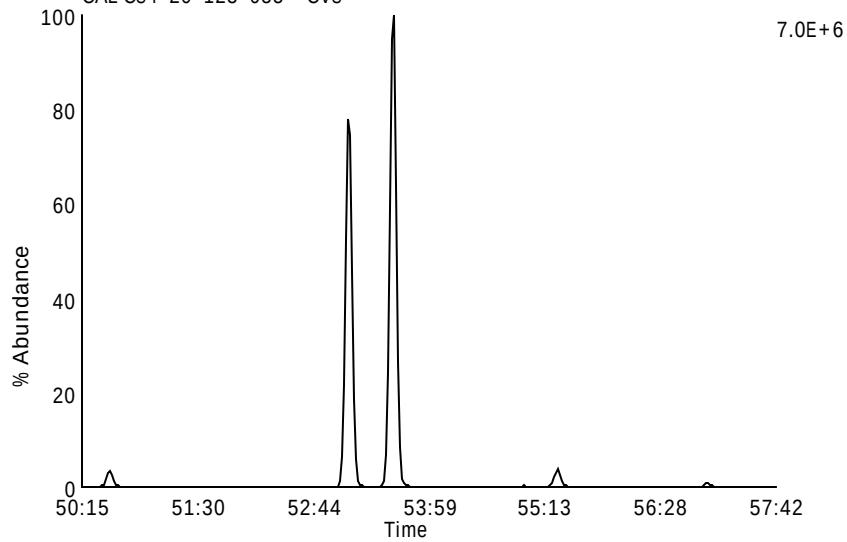
Data File: Y210818B_10 G7 C7 - 439.8038
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G6 C14 - 441.8008
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G7 C8 - 441.8008
CAL CS4-20-123-055 - CVS

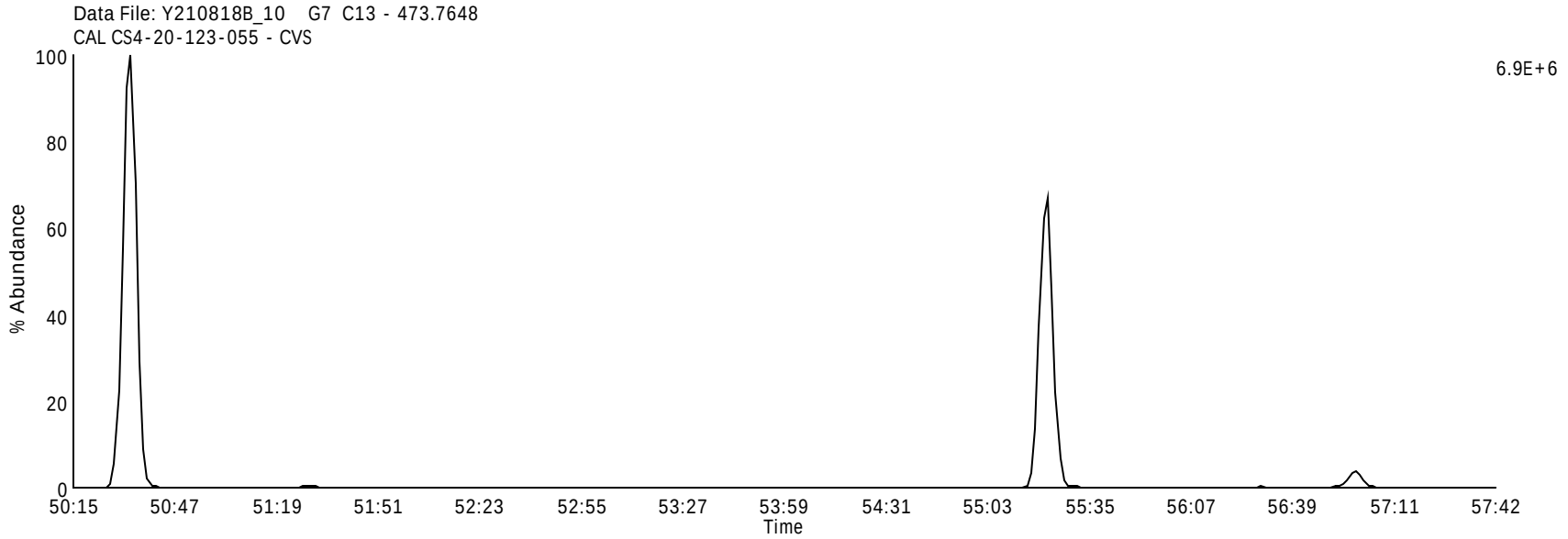


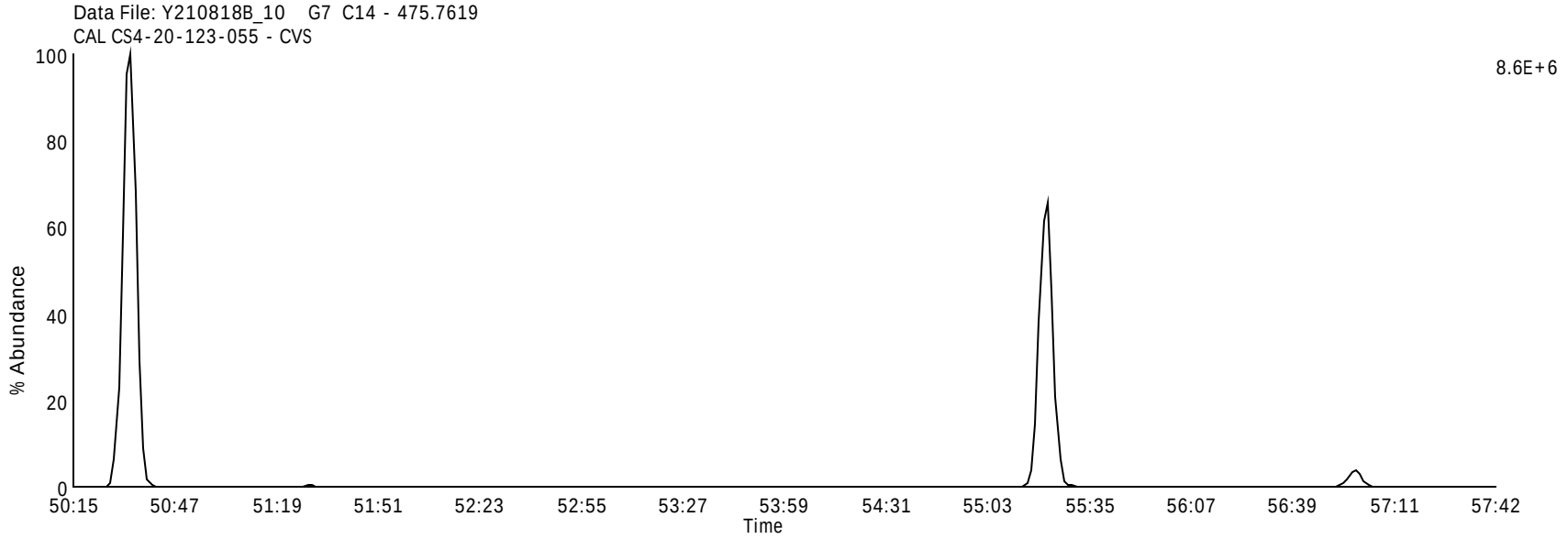
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



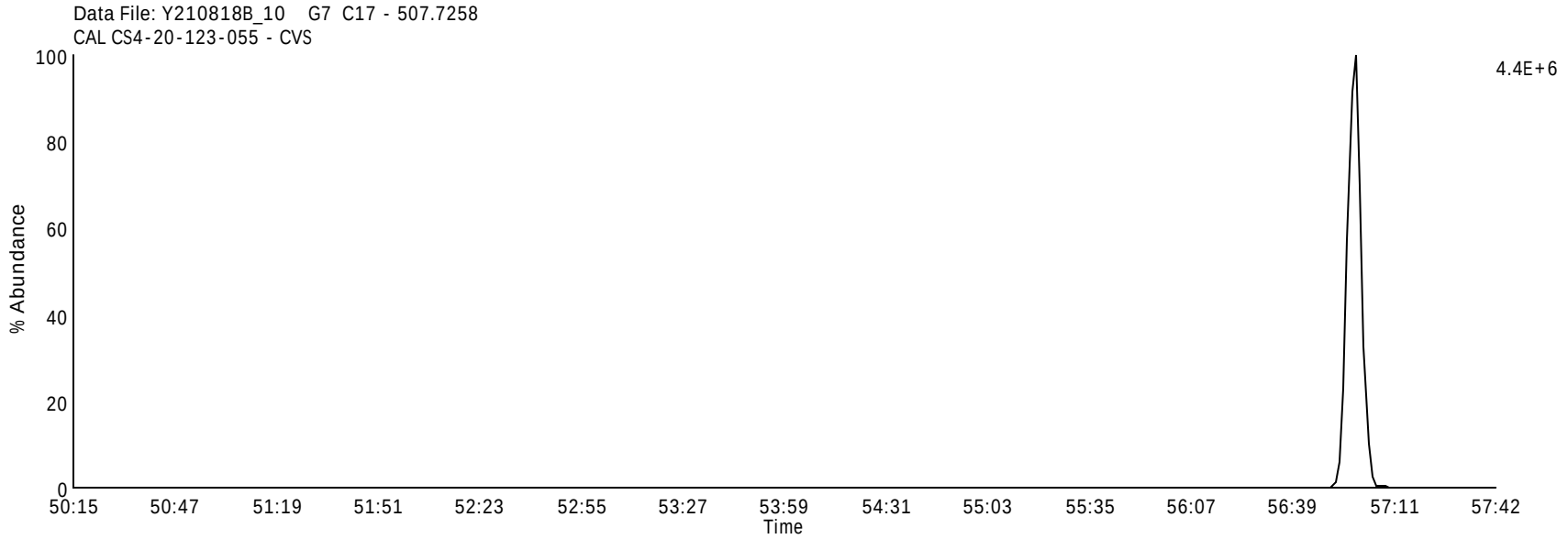


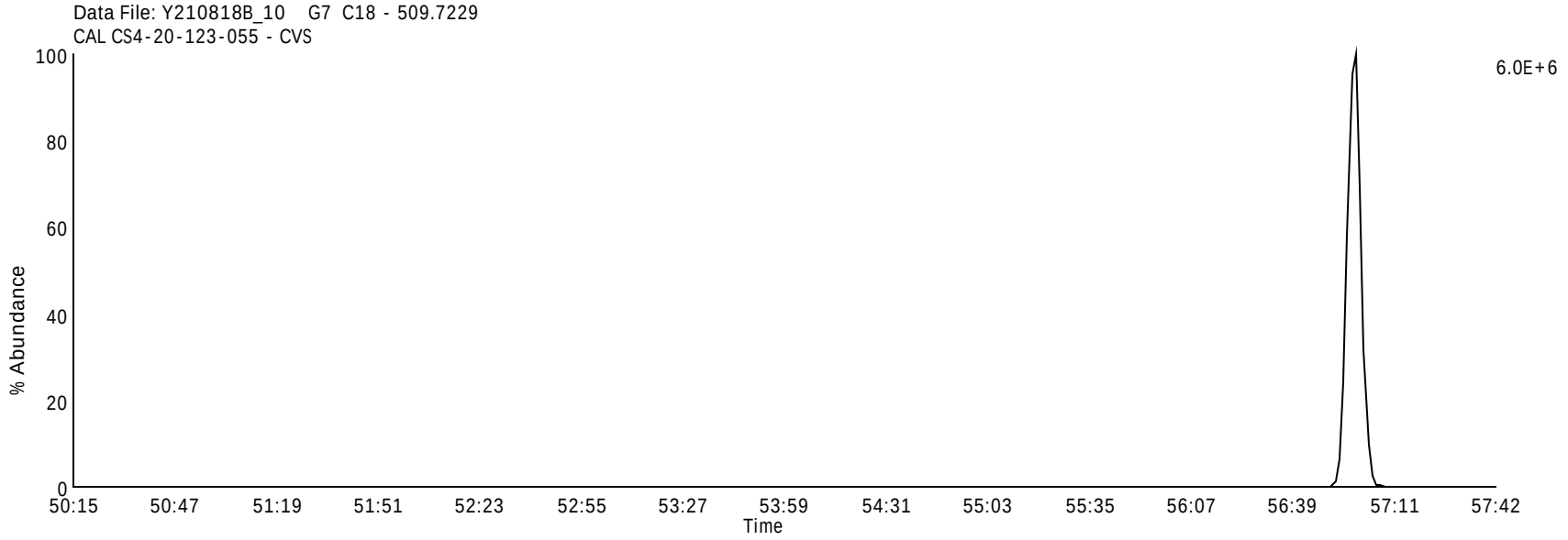
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



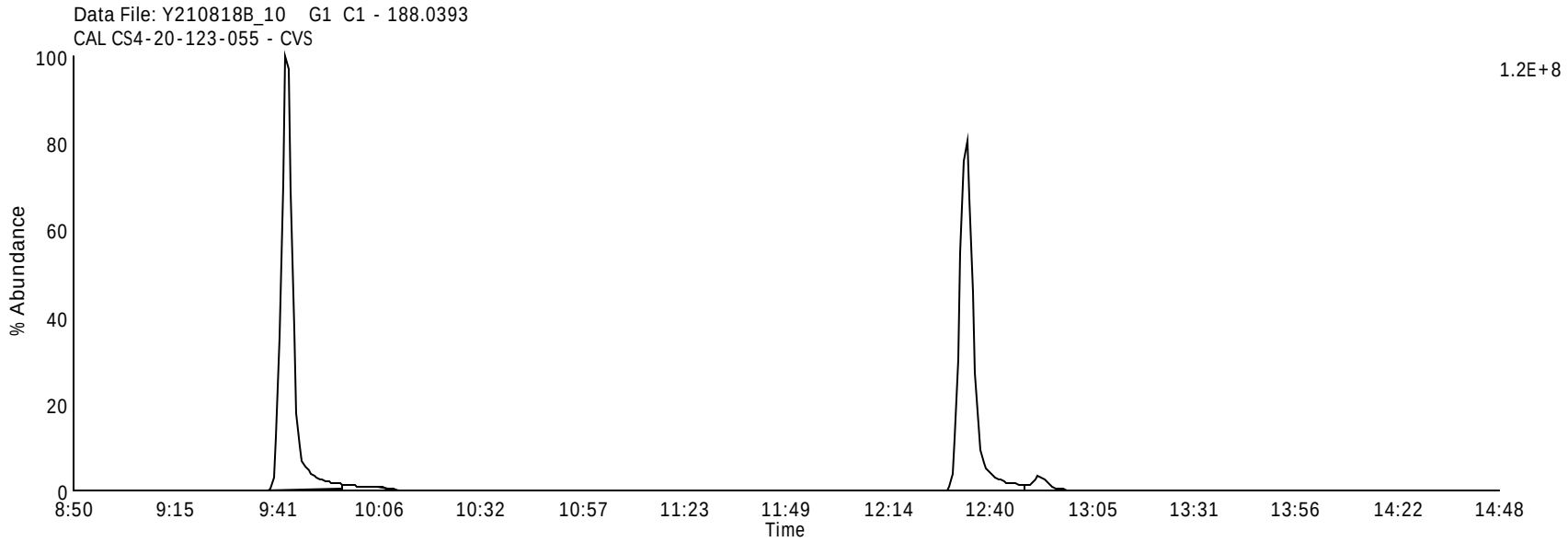


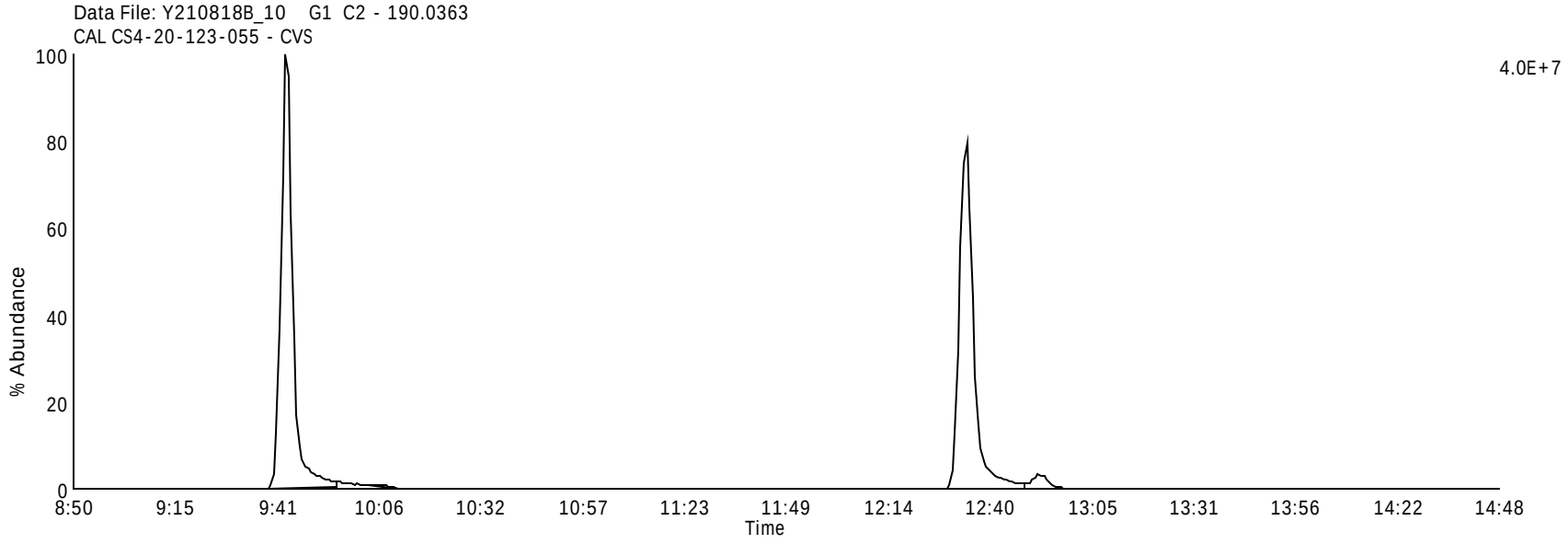
Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

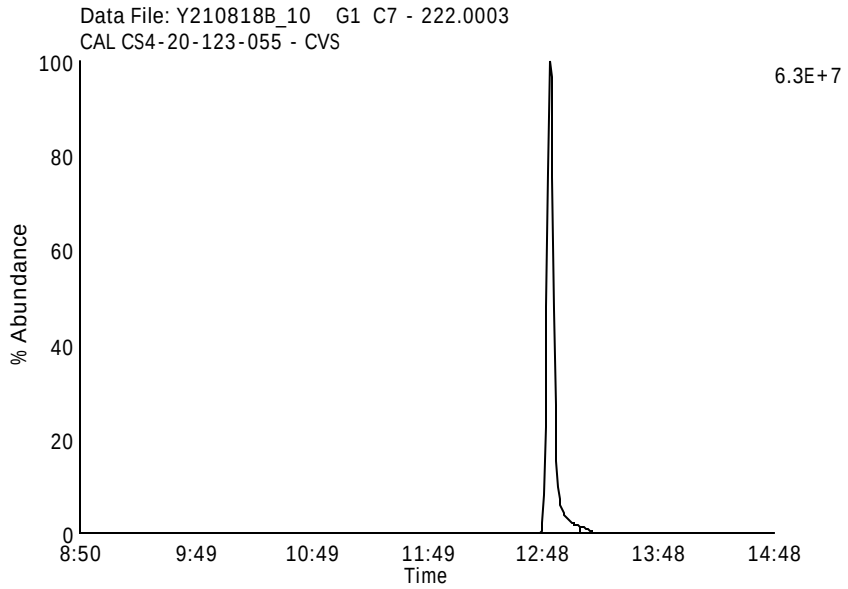
Sample Description: CAL CS4-20-123-055 - CVS

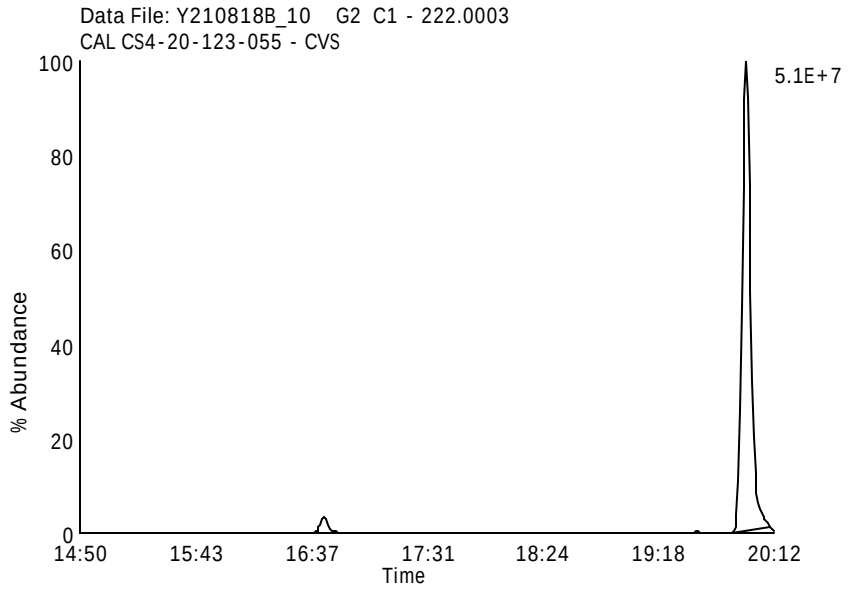


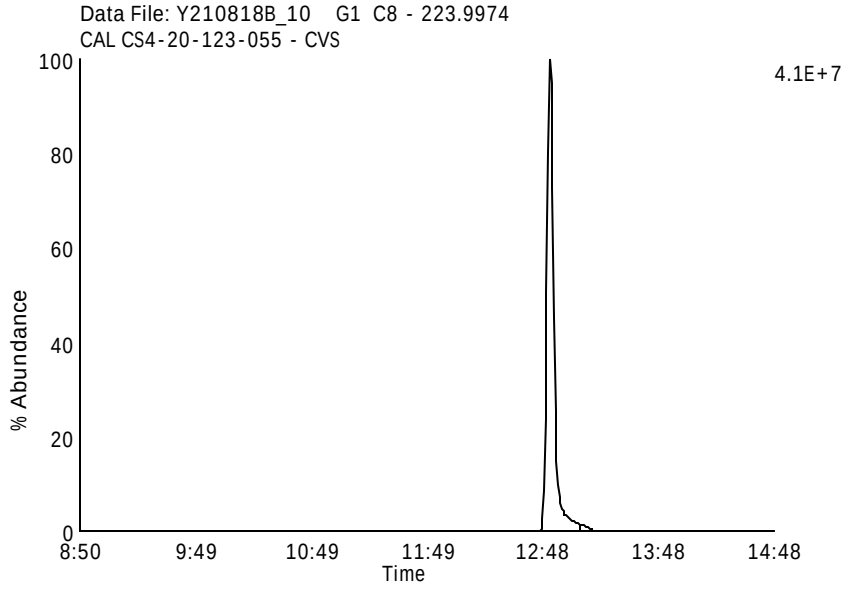


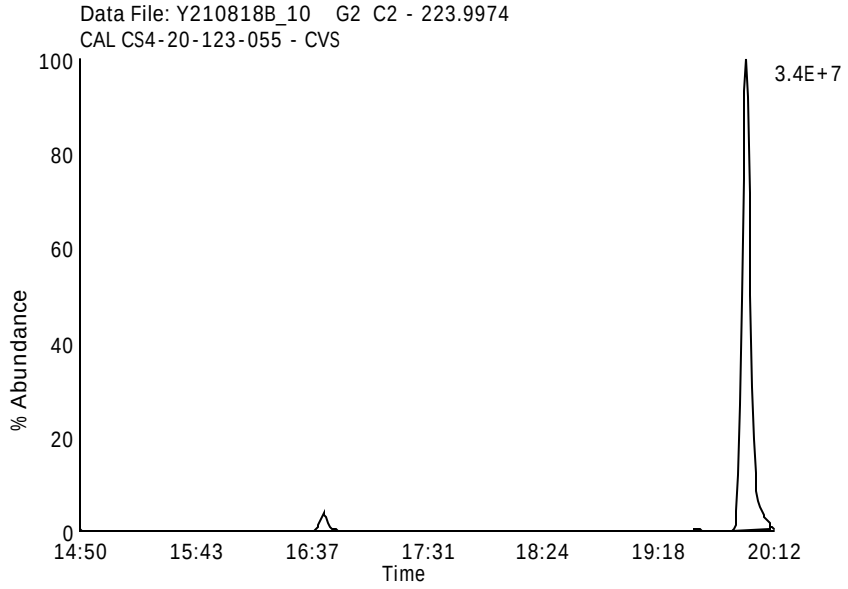
Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



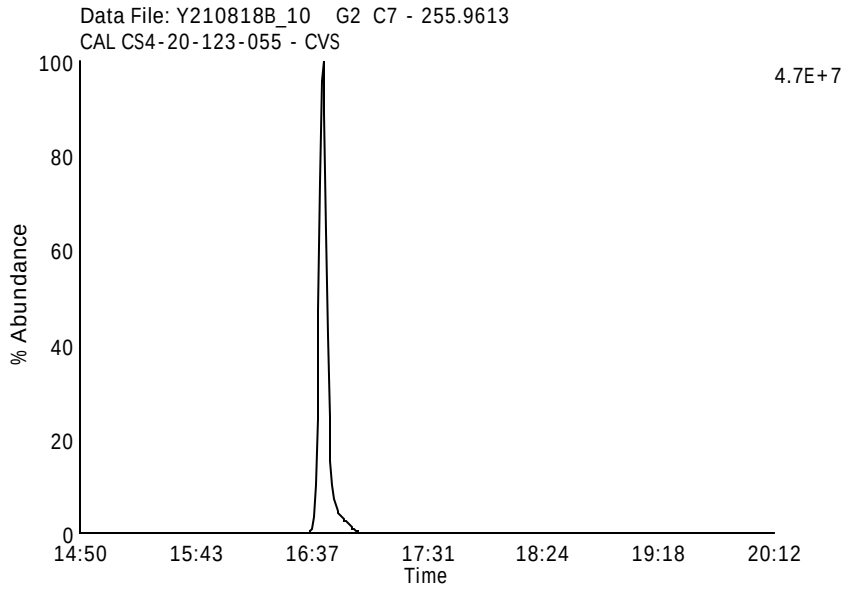


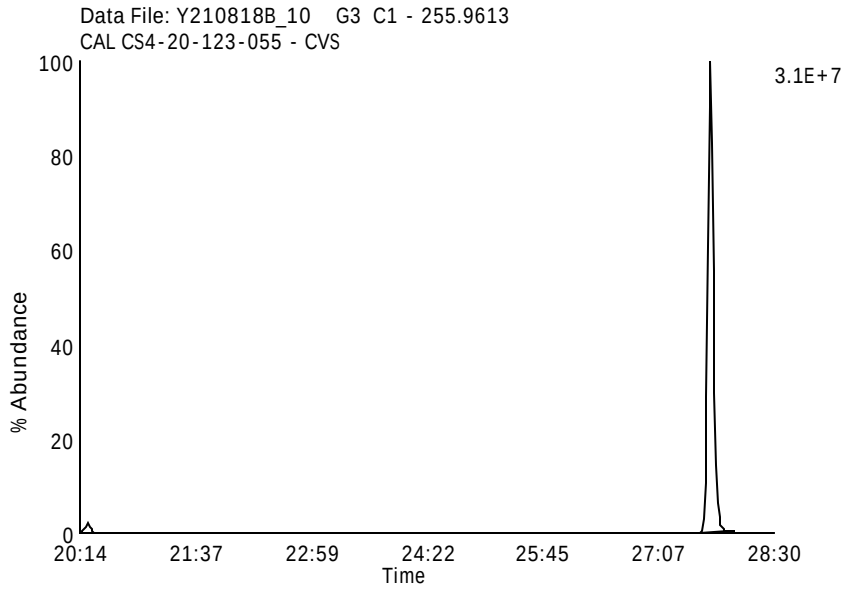


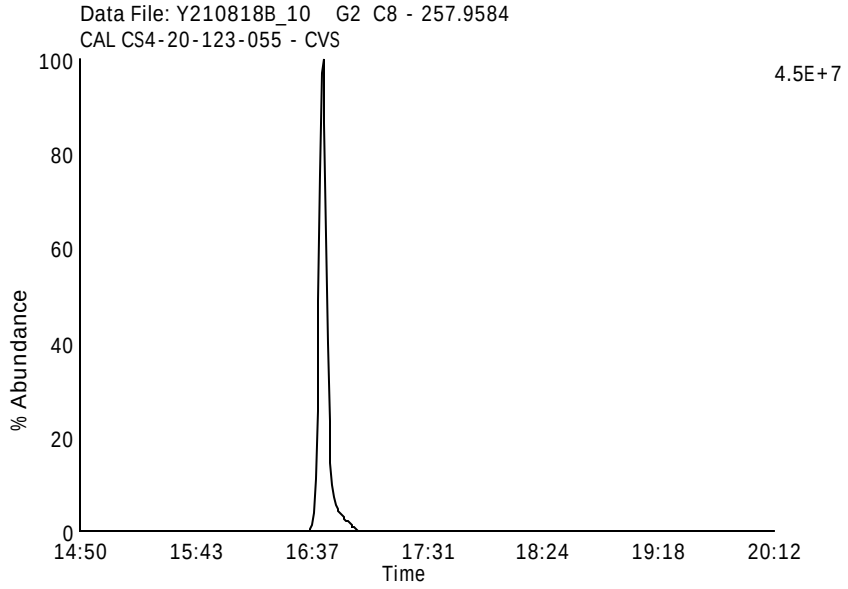


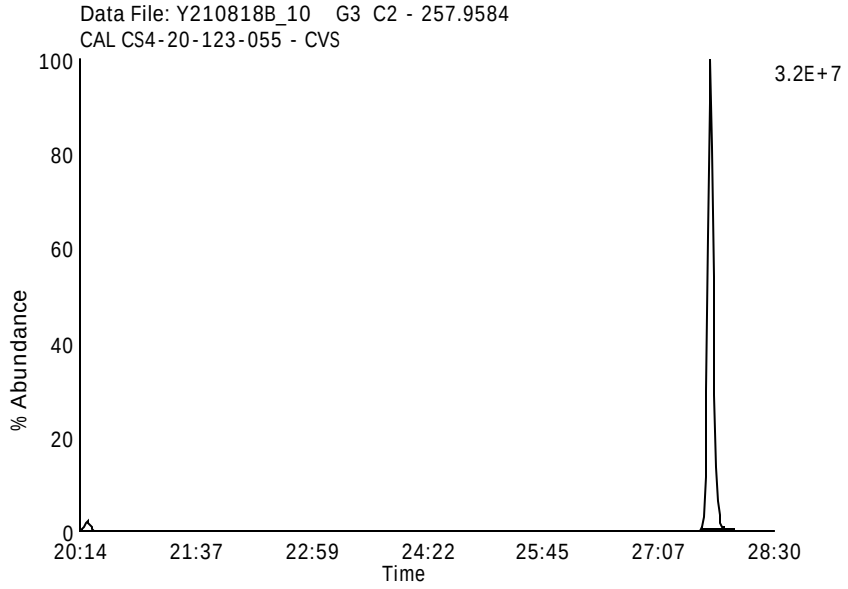
Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



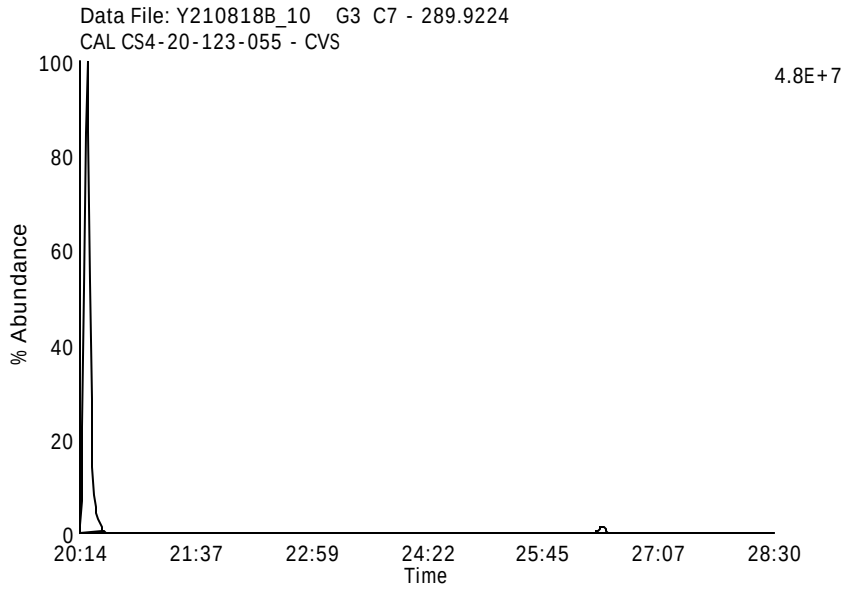


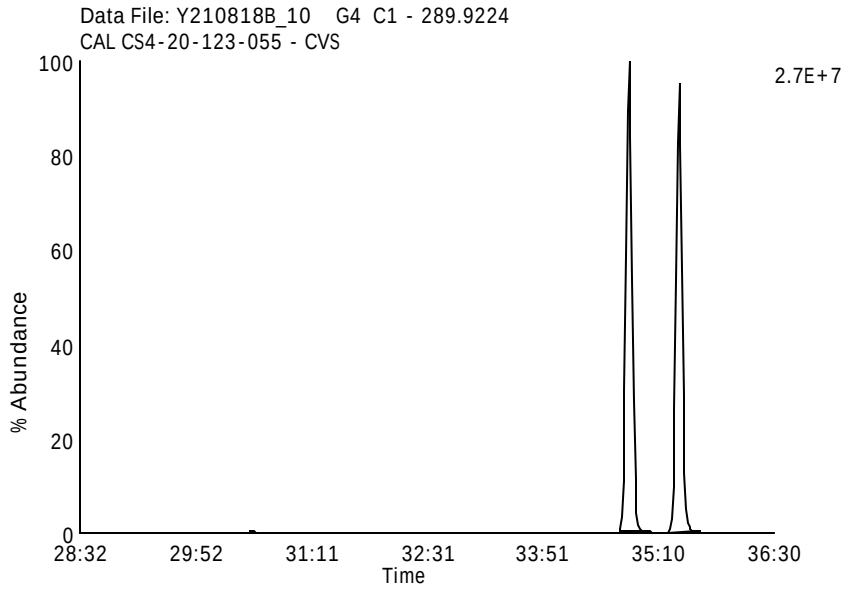


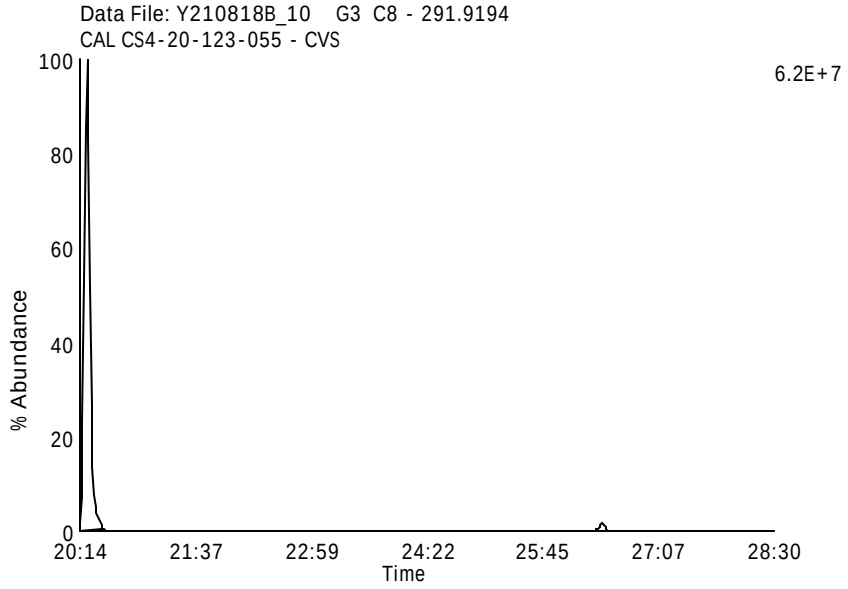


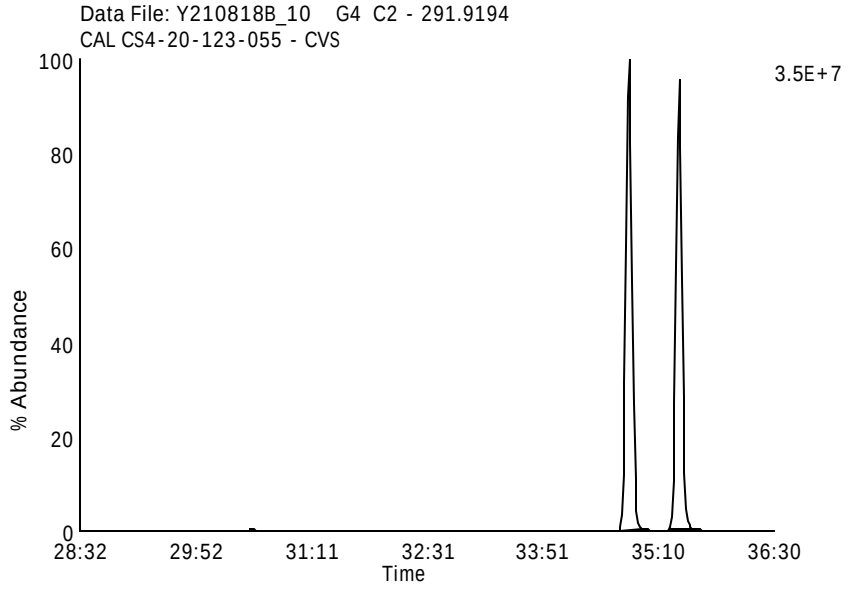
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



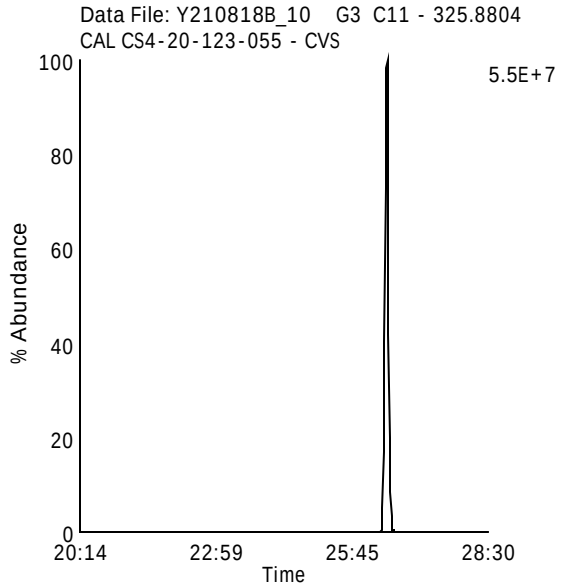


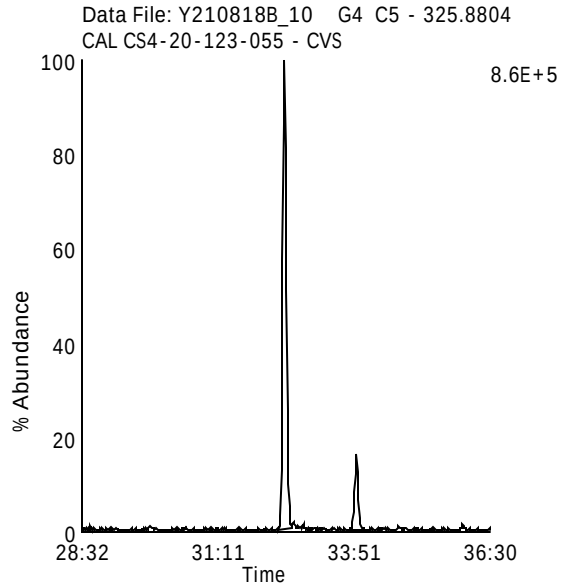


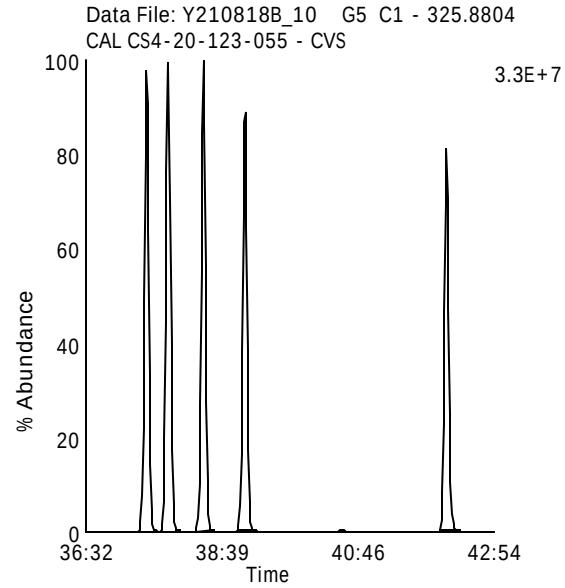


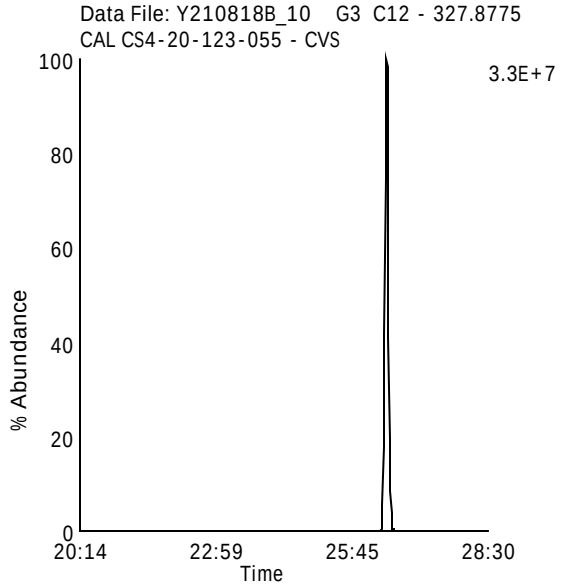
Penta Chlorinated Biphenyls

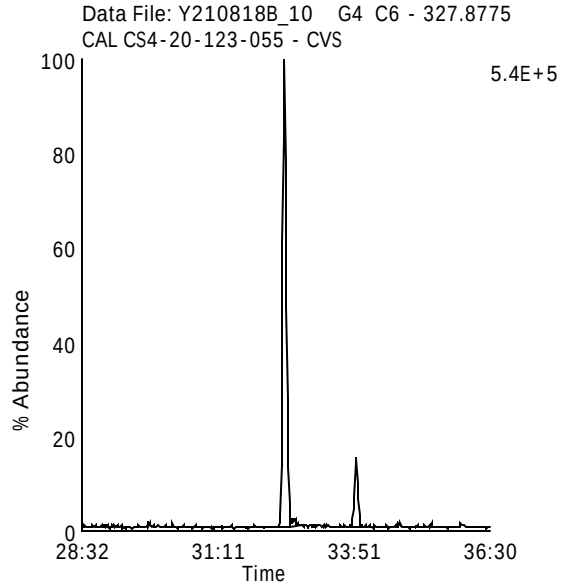
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

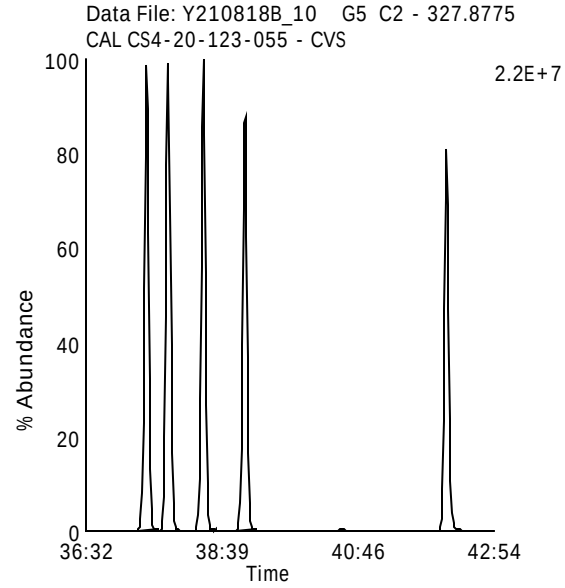








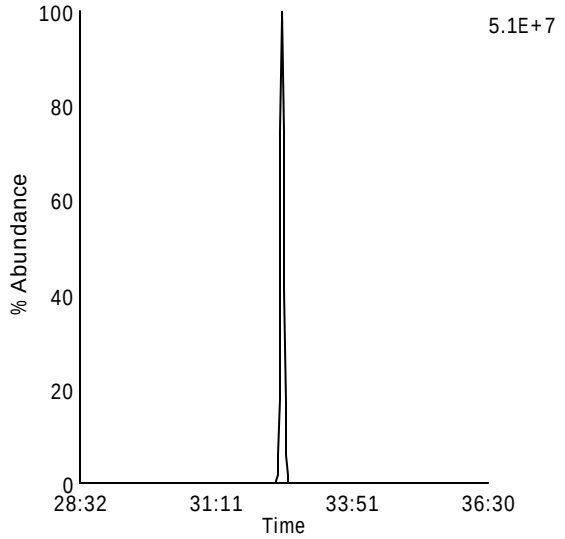




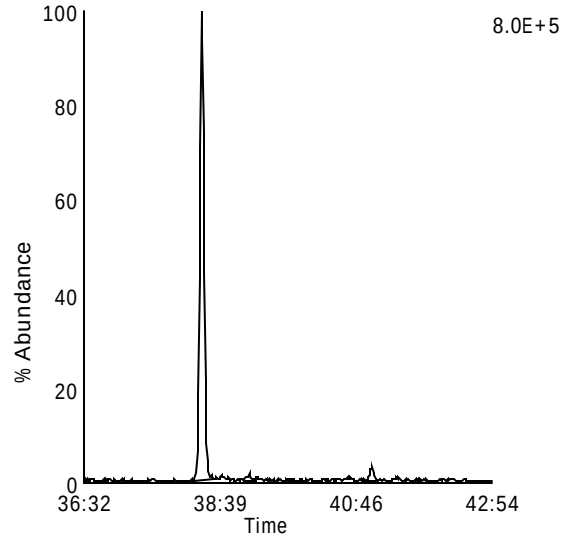
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

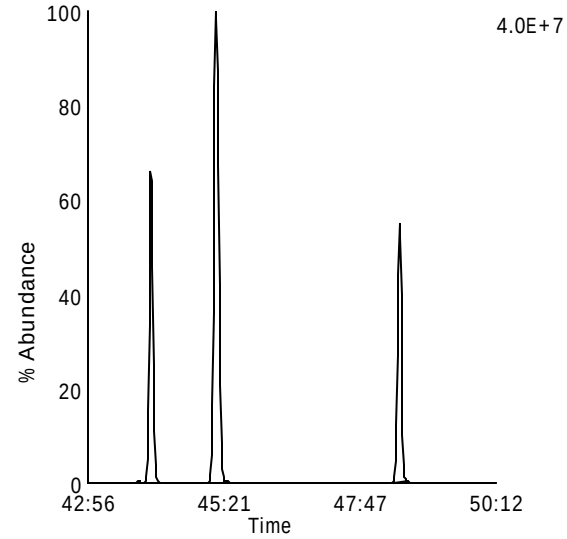
Data File: Y210818B_10 G4 C11 - 359.8415
CAL CS4-20-123-055 - CVS



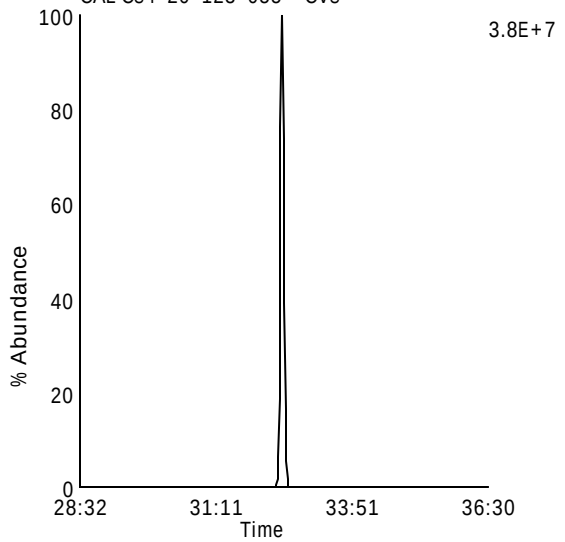
Data File: Y210818B_10 G5 C5 - 359.8415
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G6 C1 - 359.8415
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G4 C12 - 361.8385
CAL CS4-20-123-055 - CVS



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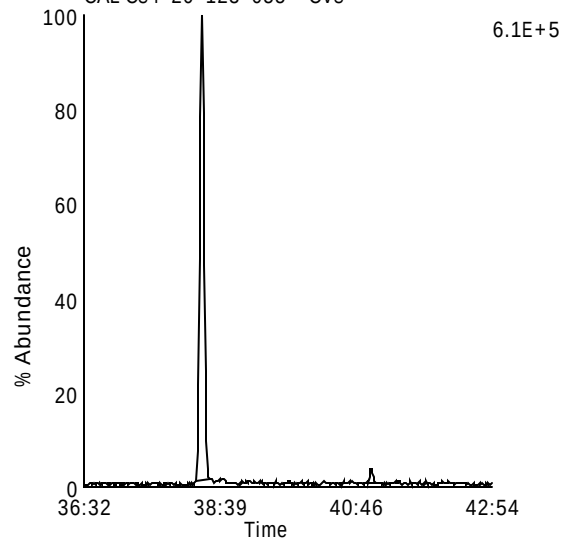
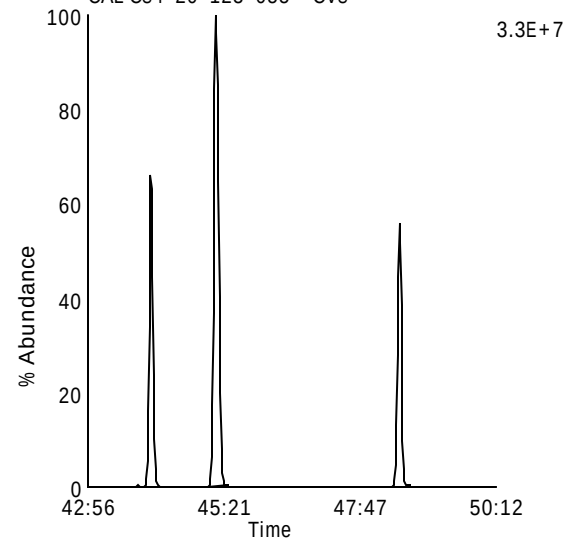
CAL CS4-20-123-055 - CVS

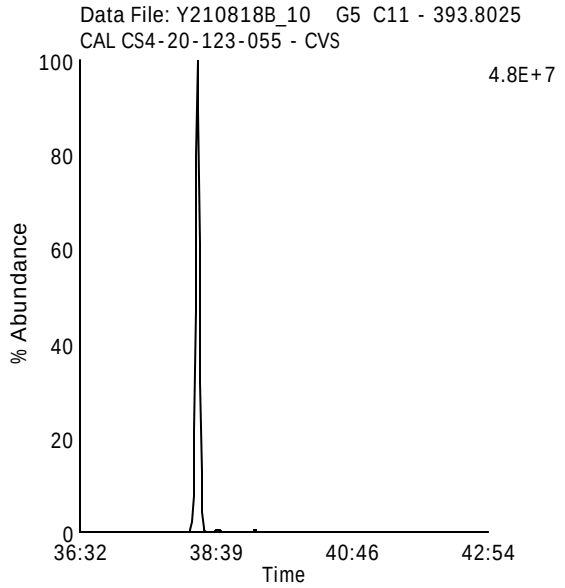


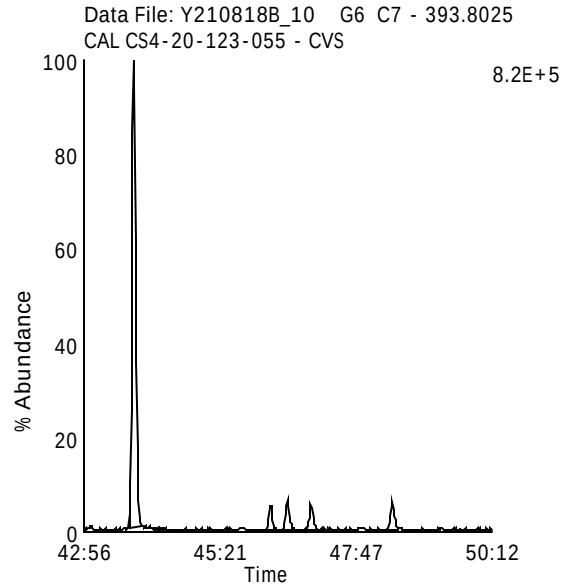
Data File: Y210818B_10 G6 C2 - 361.8385
CAL CS4-20-123-055 - CVS

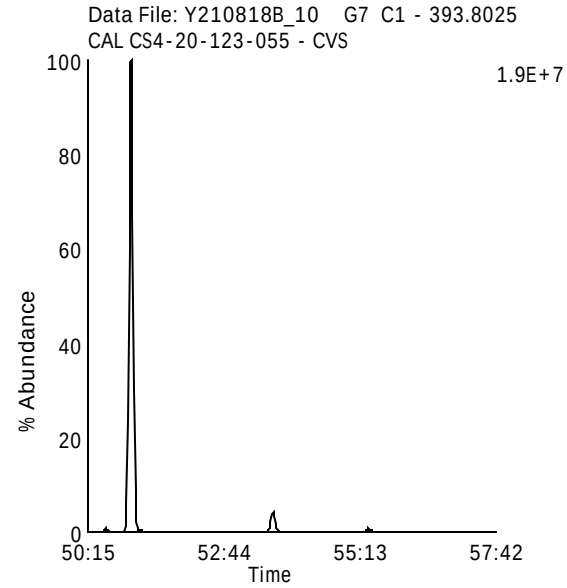


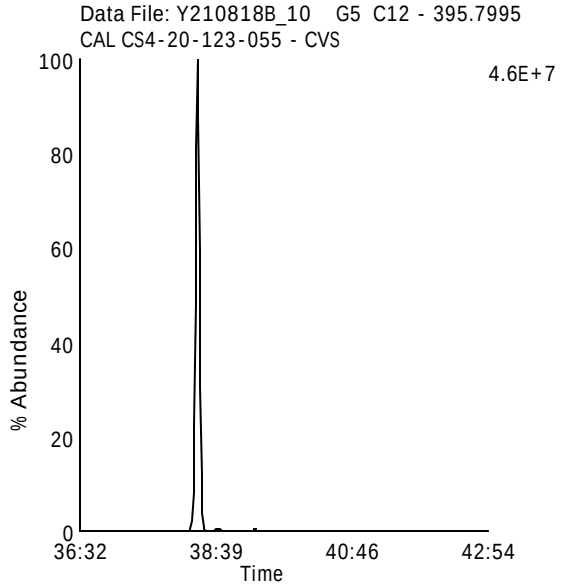
Hepta Chlorinated Biphenyls

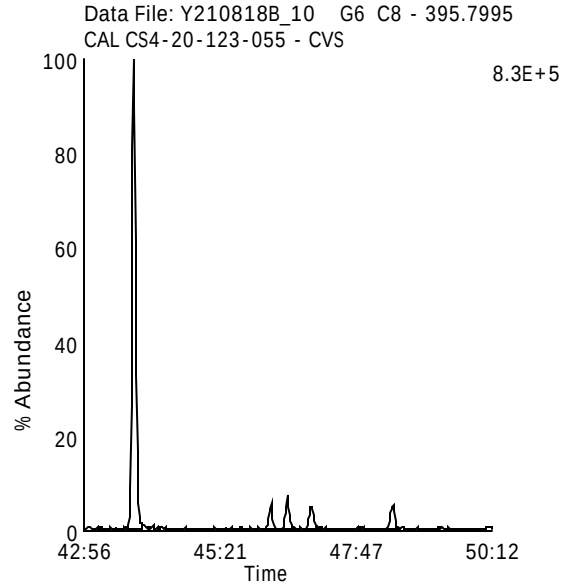
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

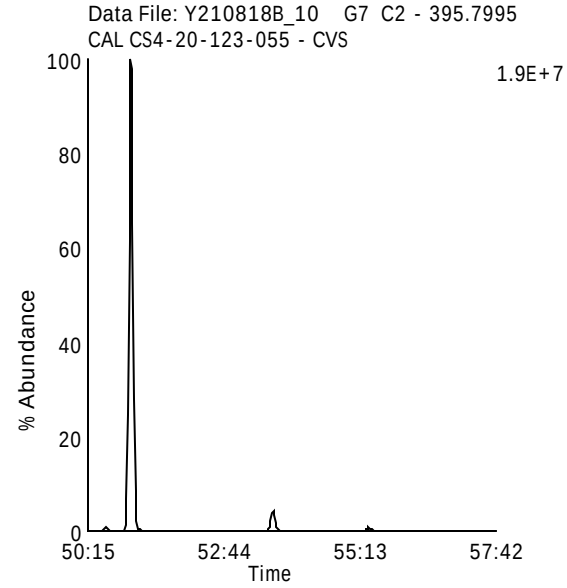






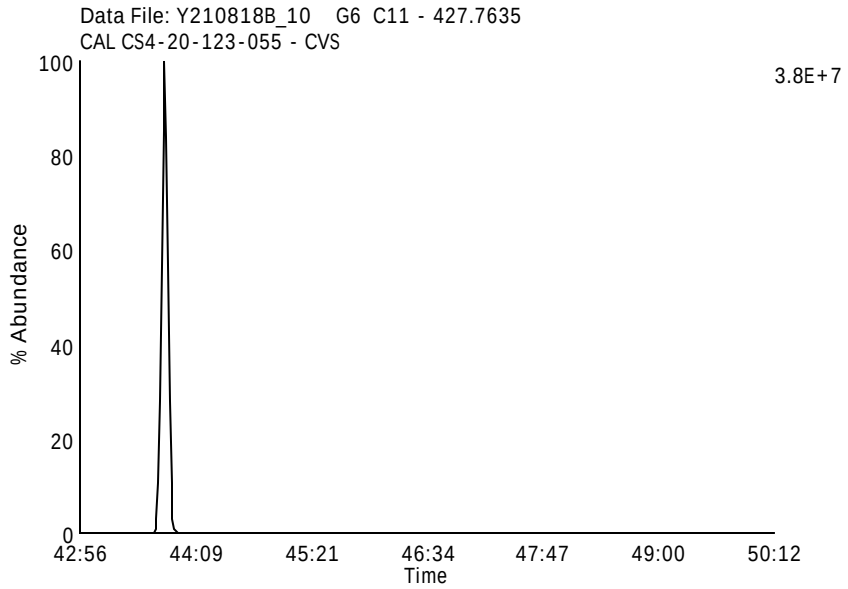


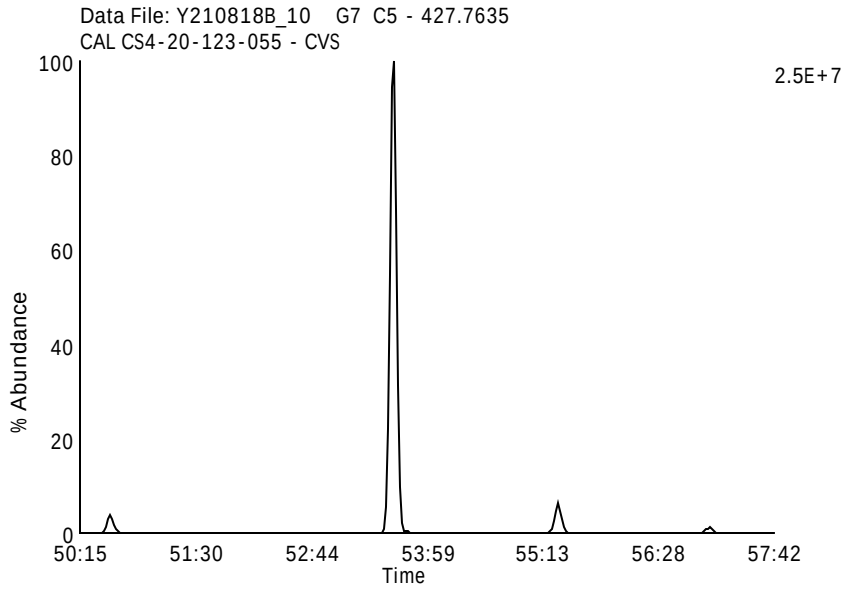


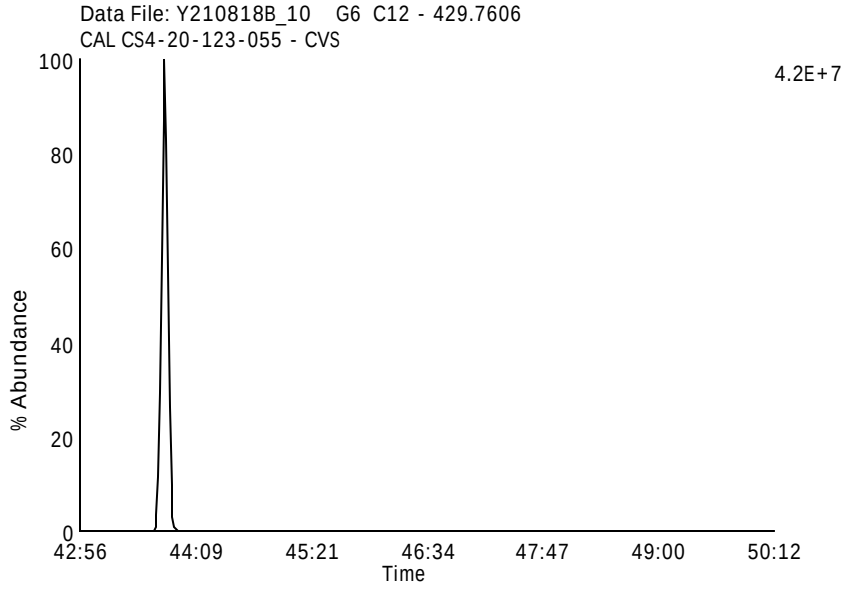


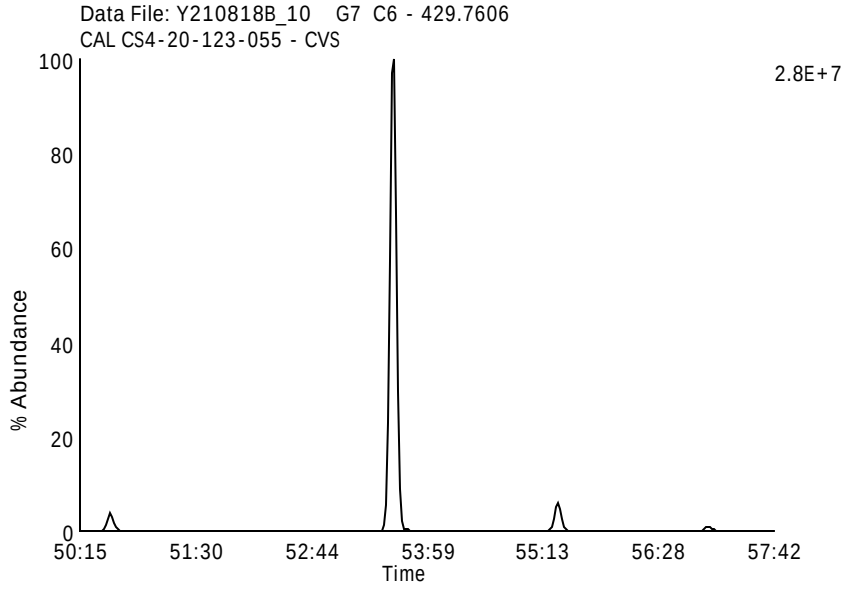
Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS







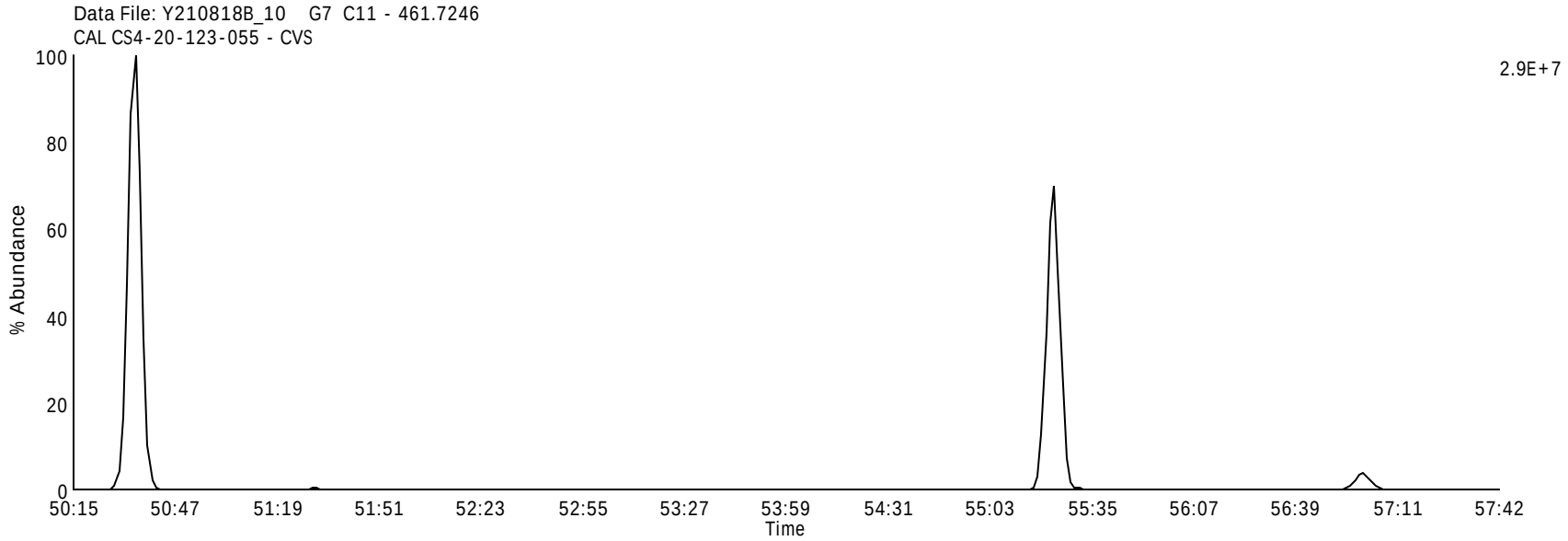


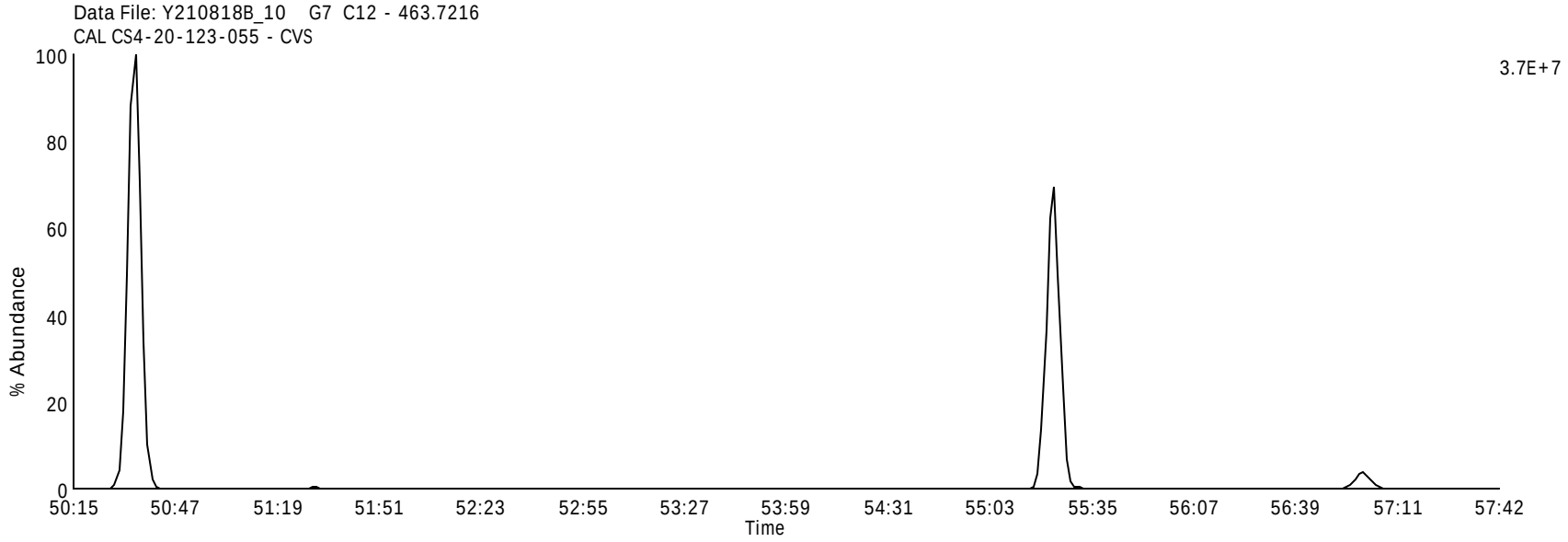
Nona Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



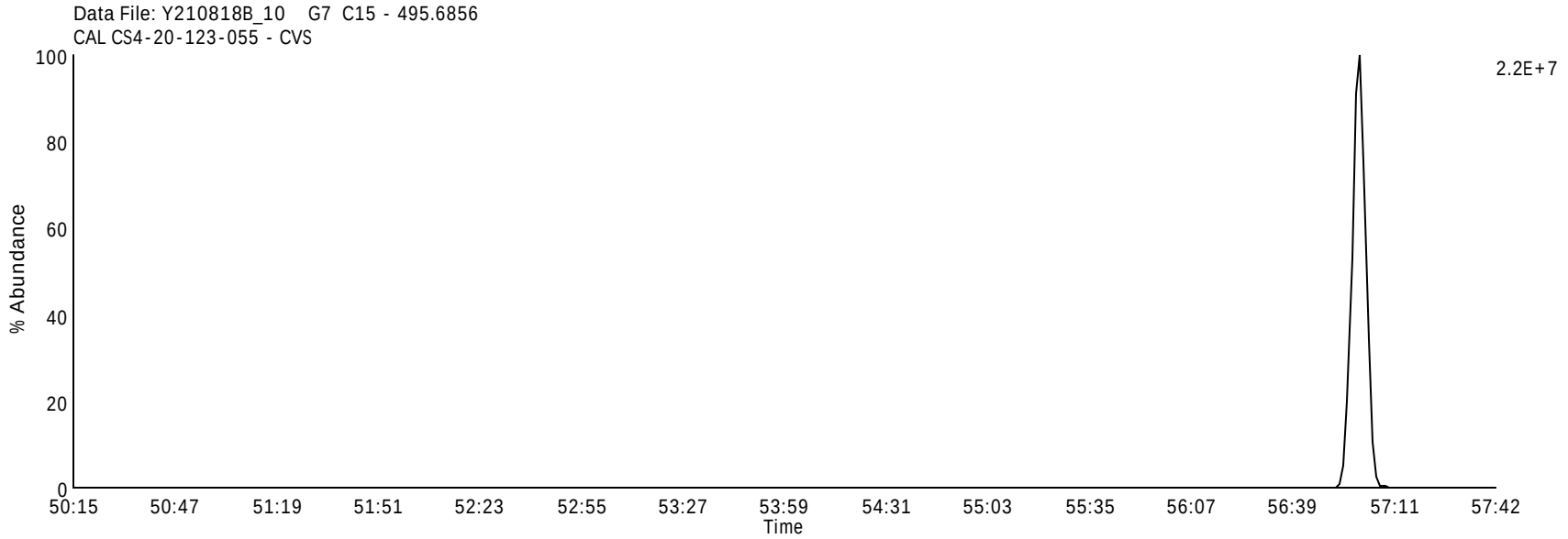


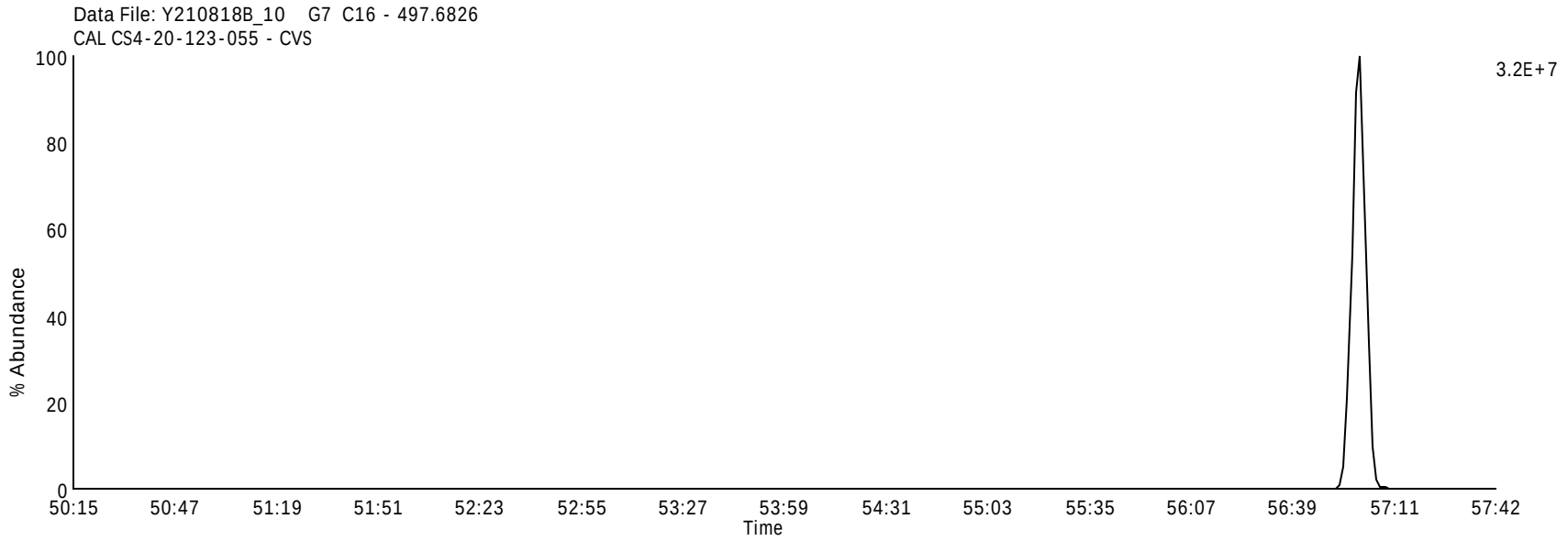
Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

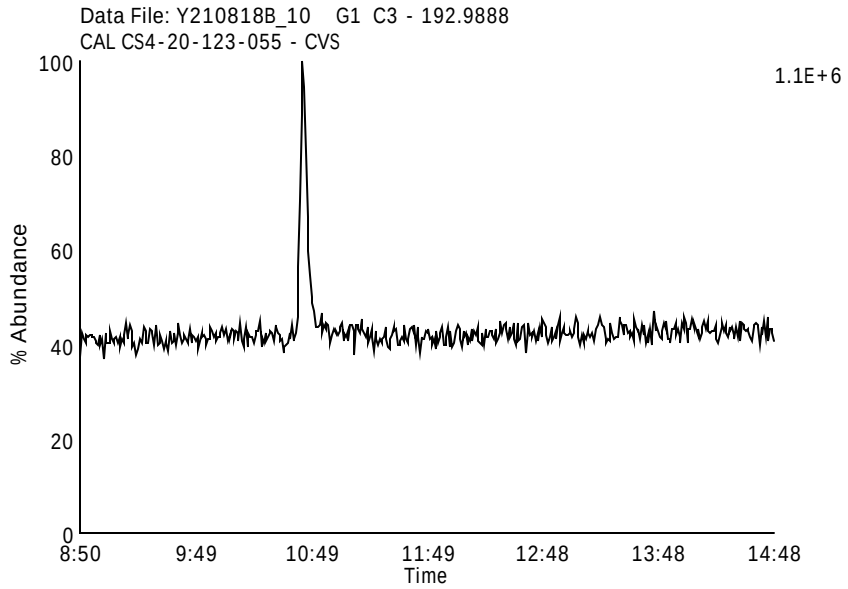
Sample Description: CAL CS4-20-123-055 - CVS

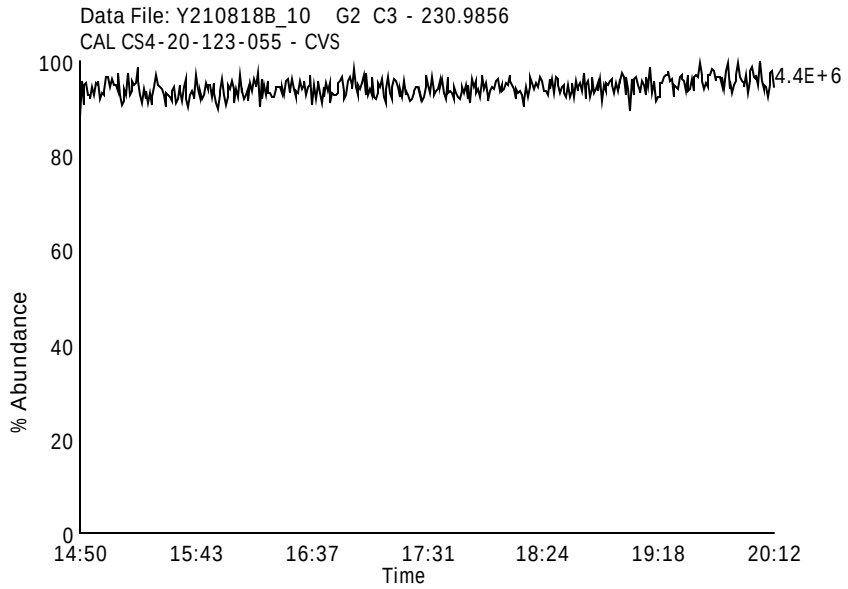


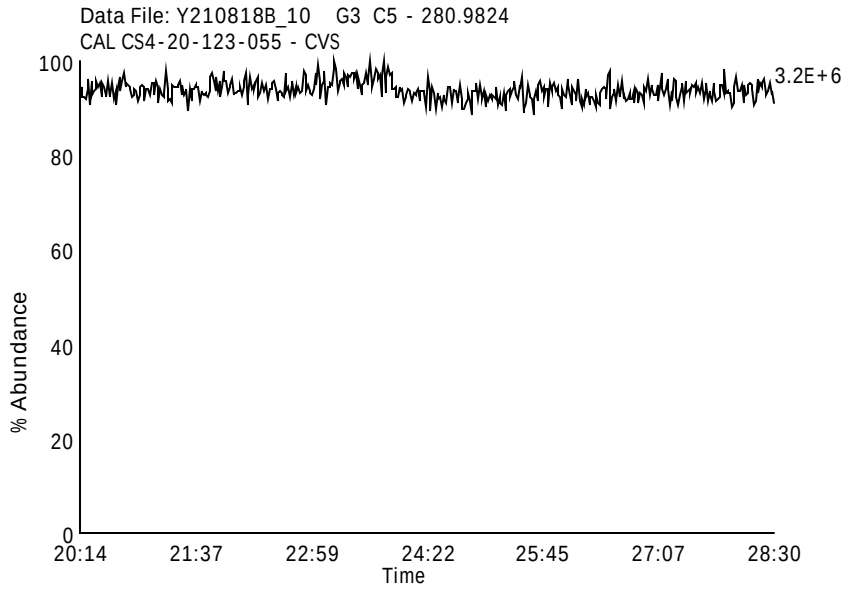


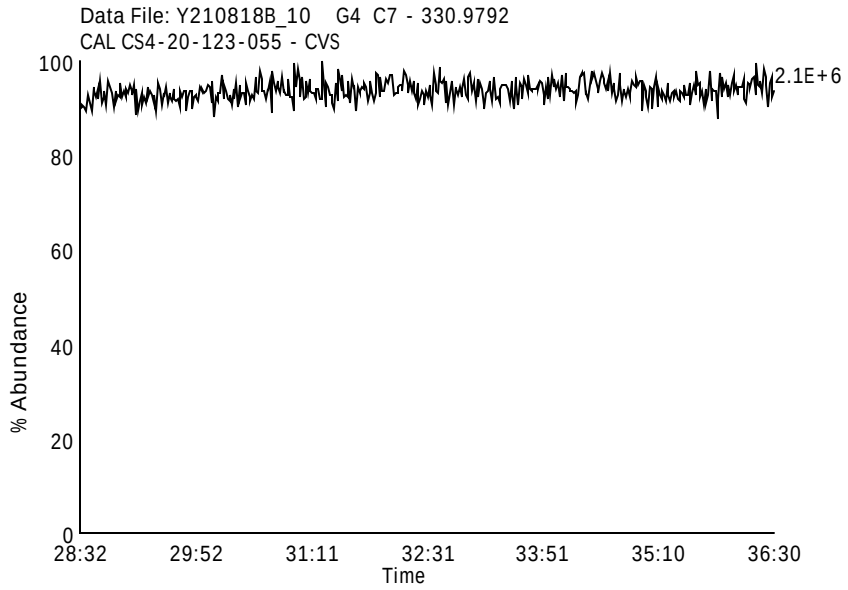
Group 1 - 4 Lock mass

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS





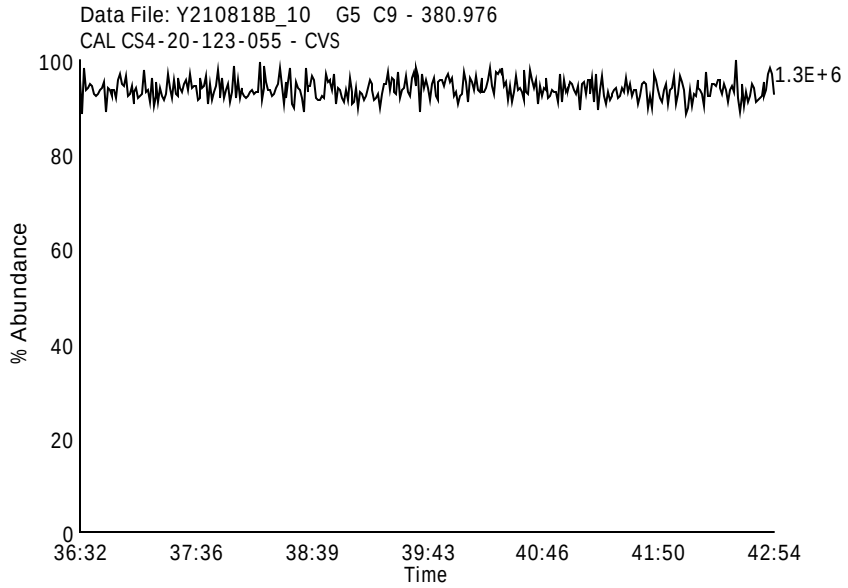


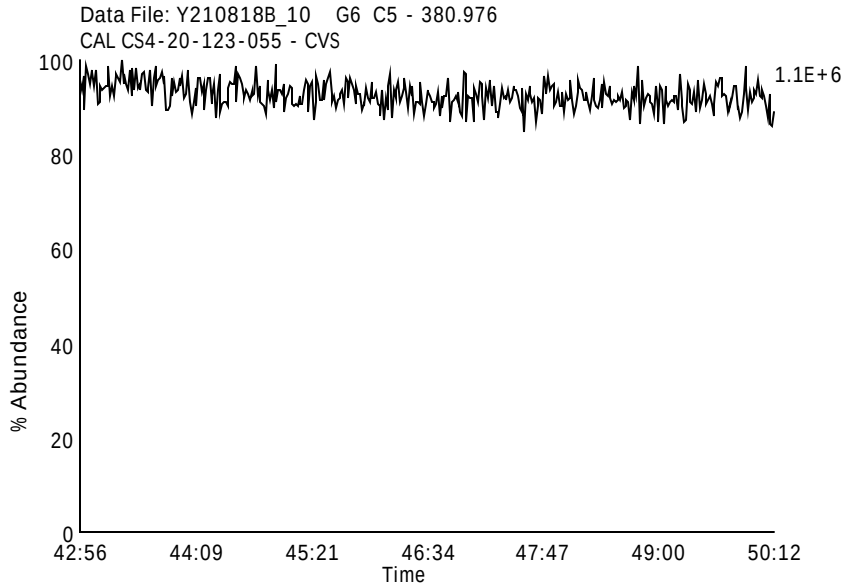


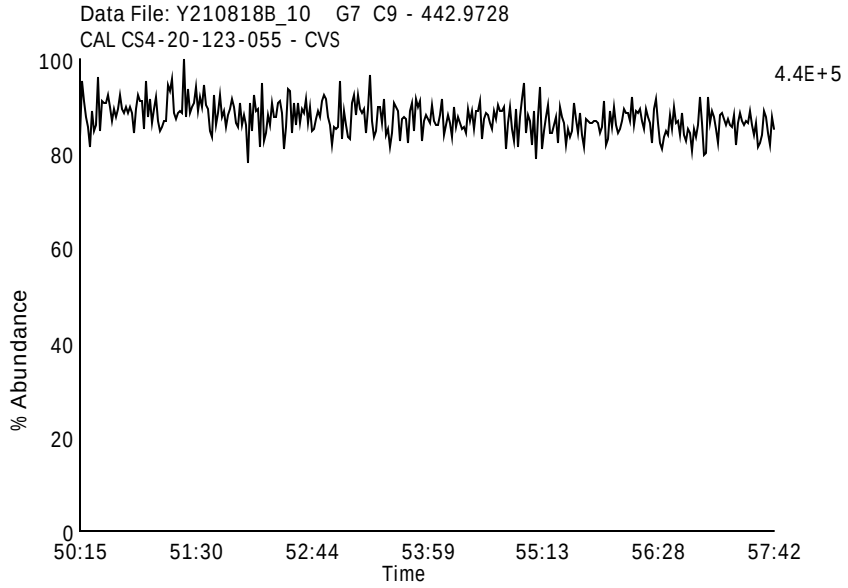
Group 5 - 7 Lock mass

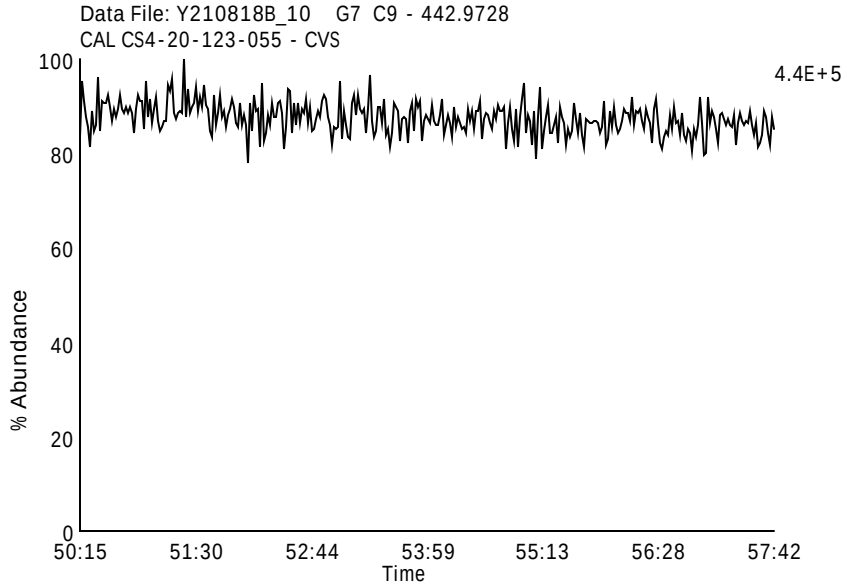
Data File Name: Y210818B_10
Date Acquired: 8/18/2021
Sample Description: CAL CS4-20-123-055 - CVS

Lab Sample ID: CS4-20-123-055
Instrument: 10MSHR12 (Y)







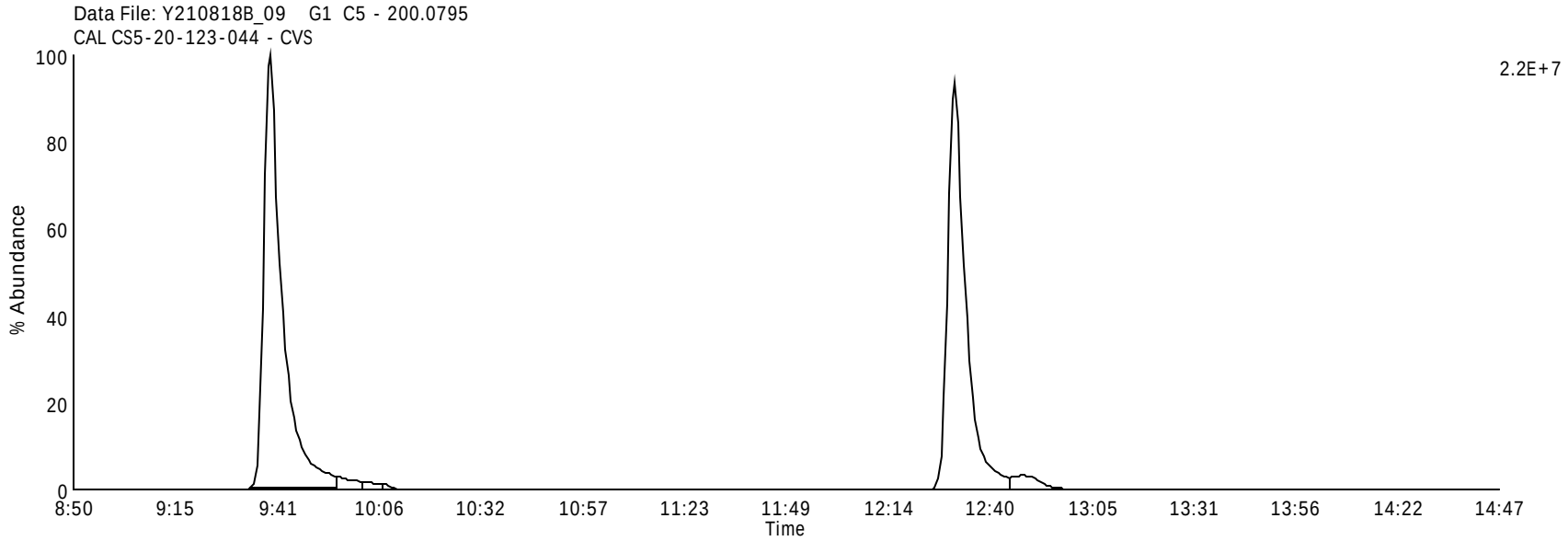


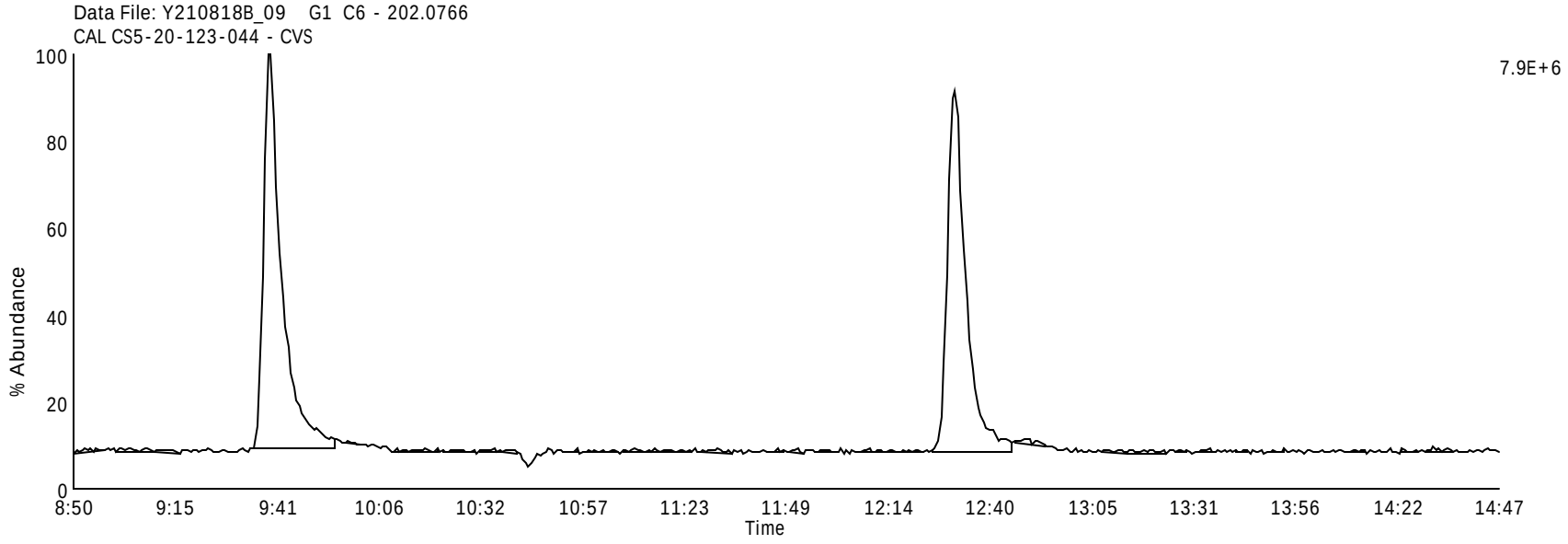
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

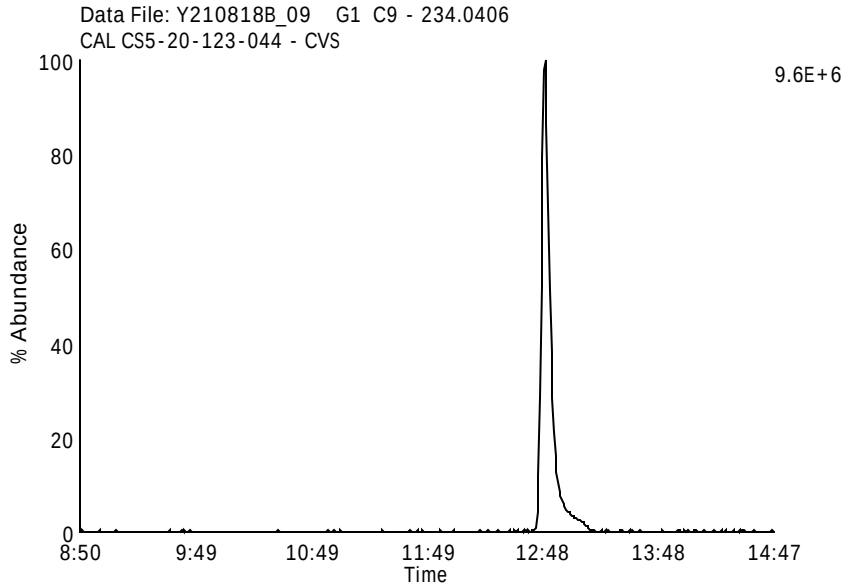
Sample Description: CAL CS5-20-123-044 - CVS

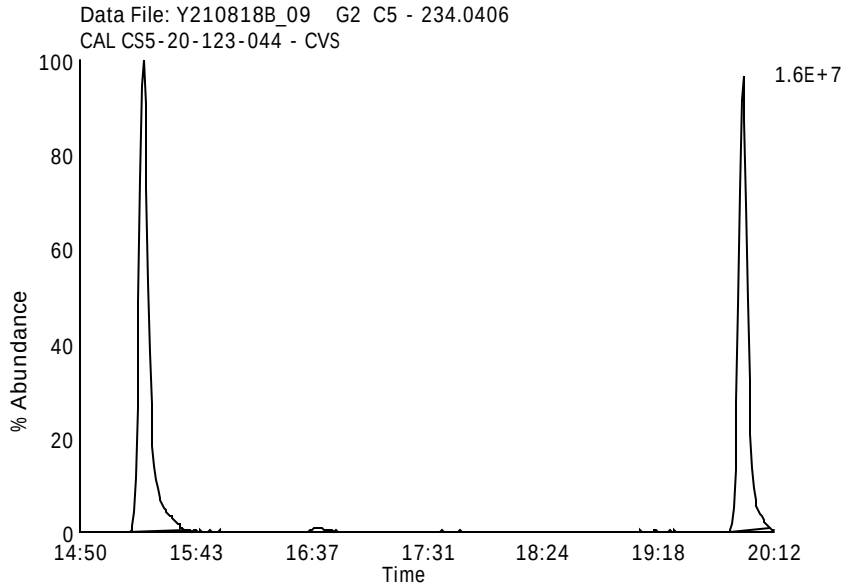


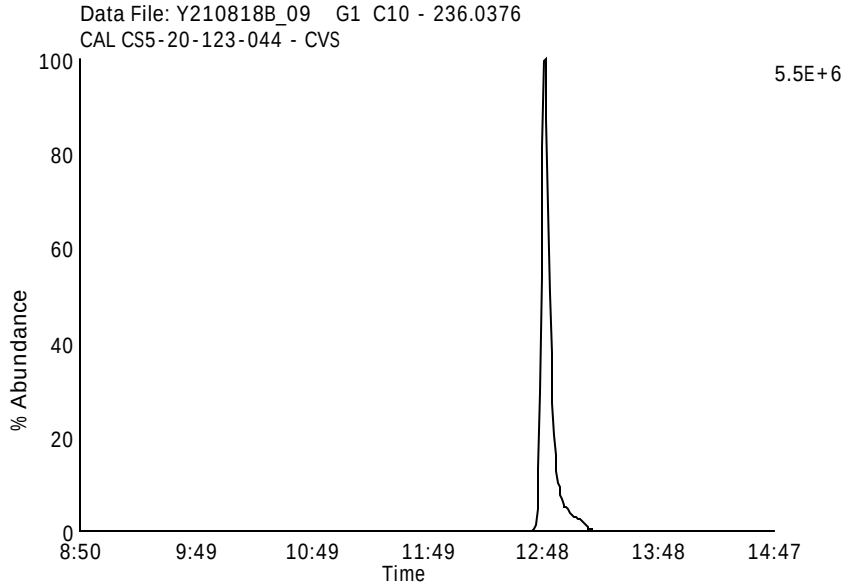


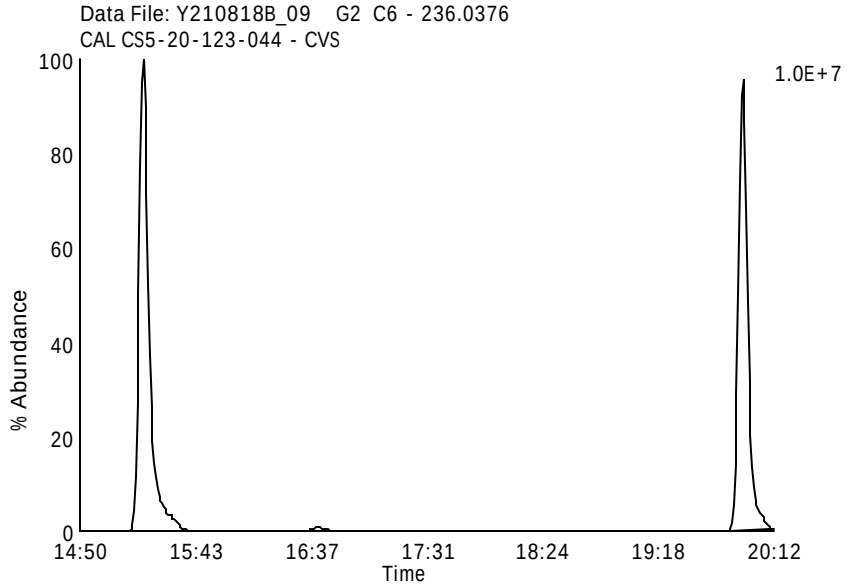
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS





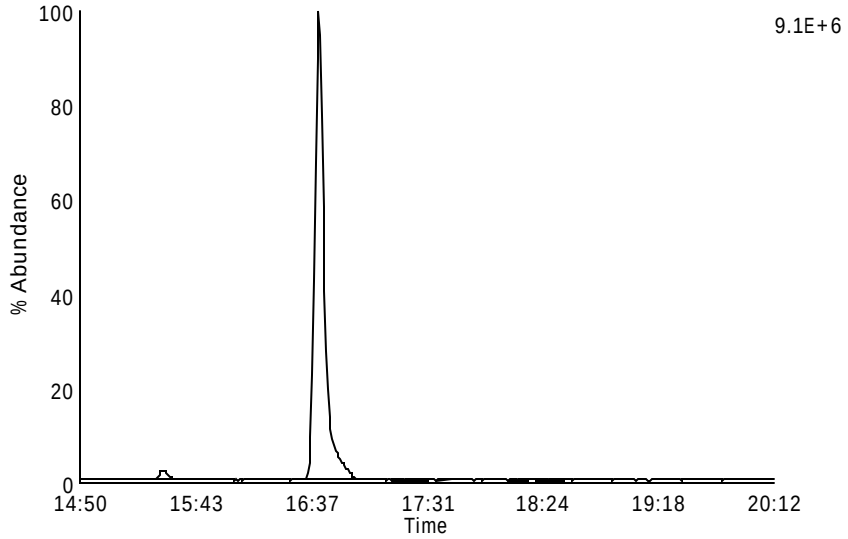




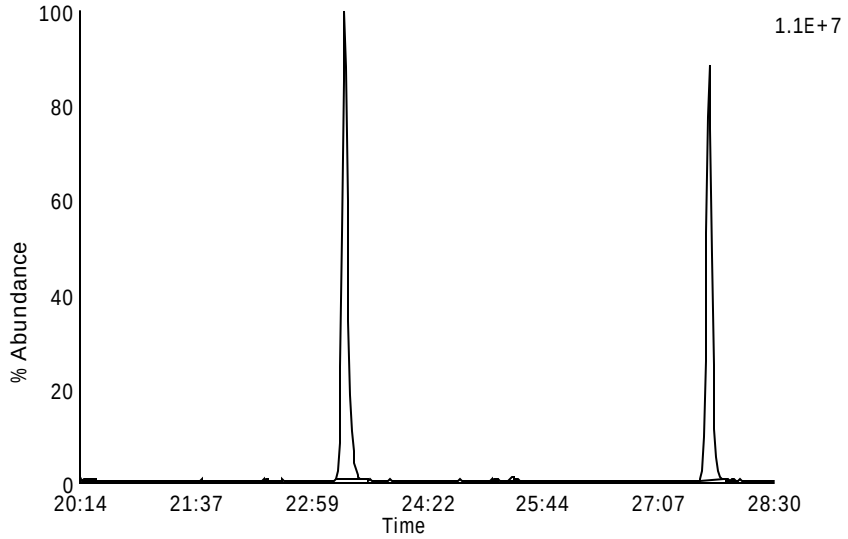
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

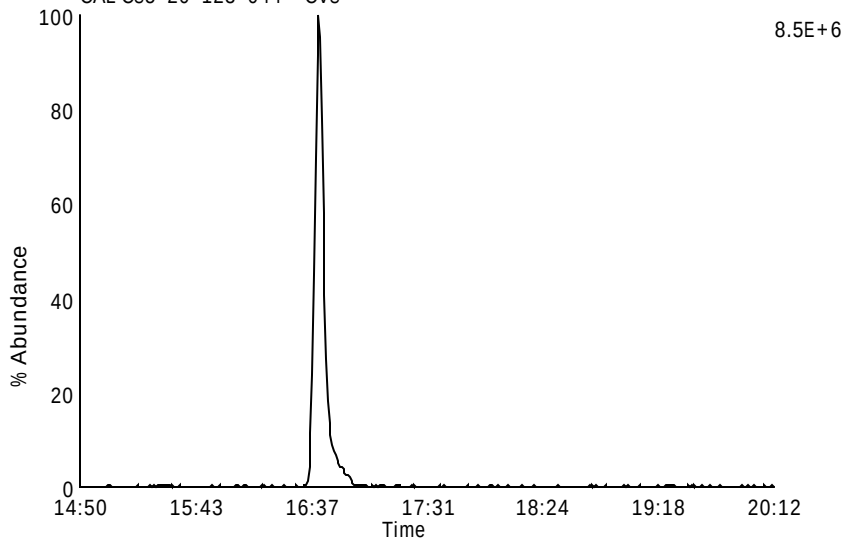
Data File: Y210818B_09 G2 C9 - 268.0016
CAL CS5-20-123-044 - CVS



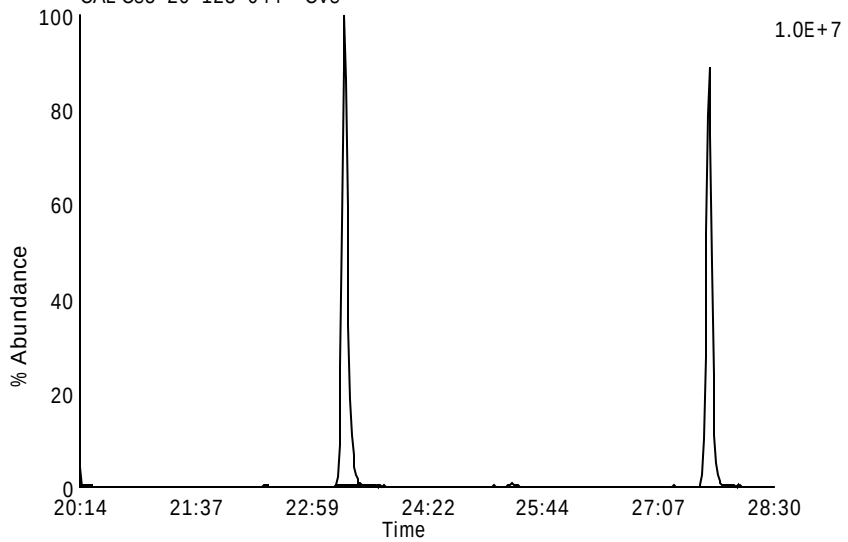
Data File: Y210818B_09 G3 C3 - 268.0016
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G2 C10 - 269.9986
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G3 C4 - 269.9986
CAL CS5-20-123-044 - CVS

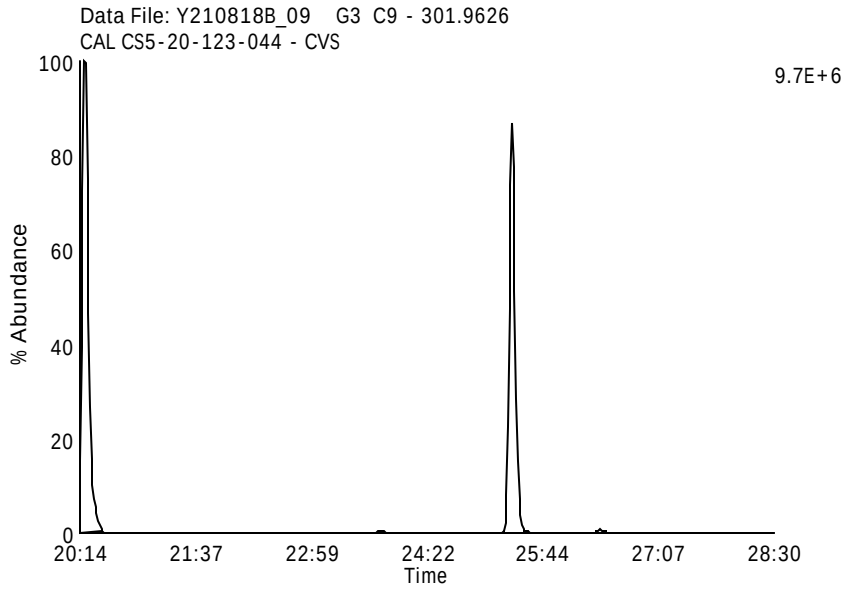


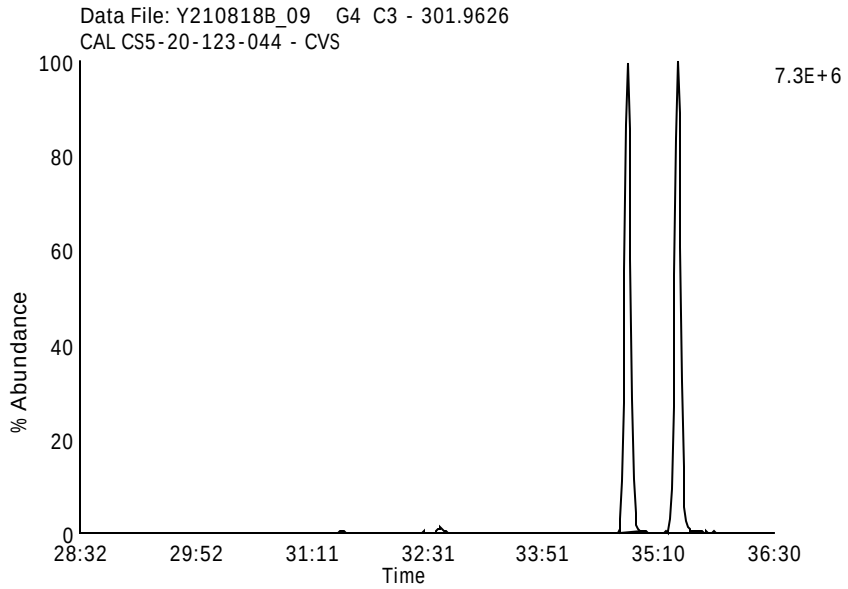
Labeled Tetra Chlorinated Biphenyls

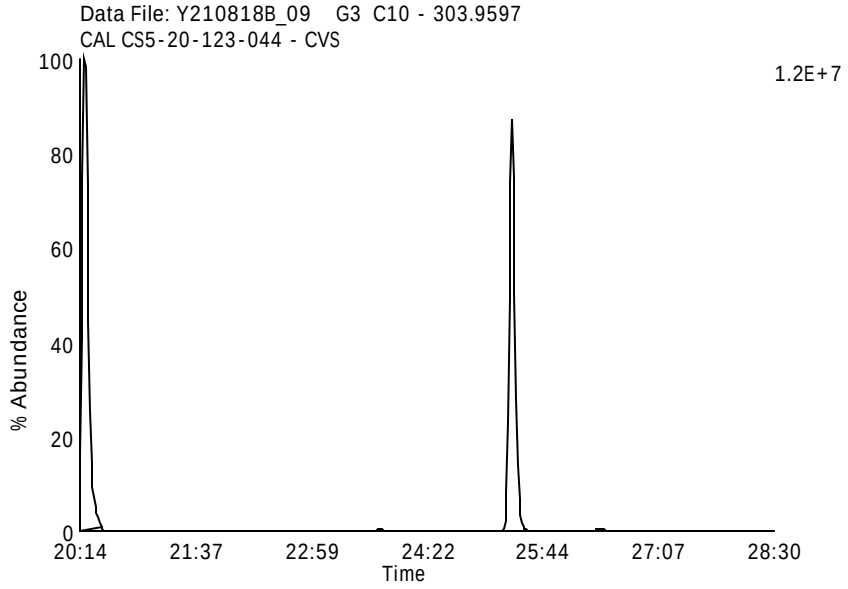
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

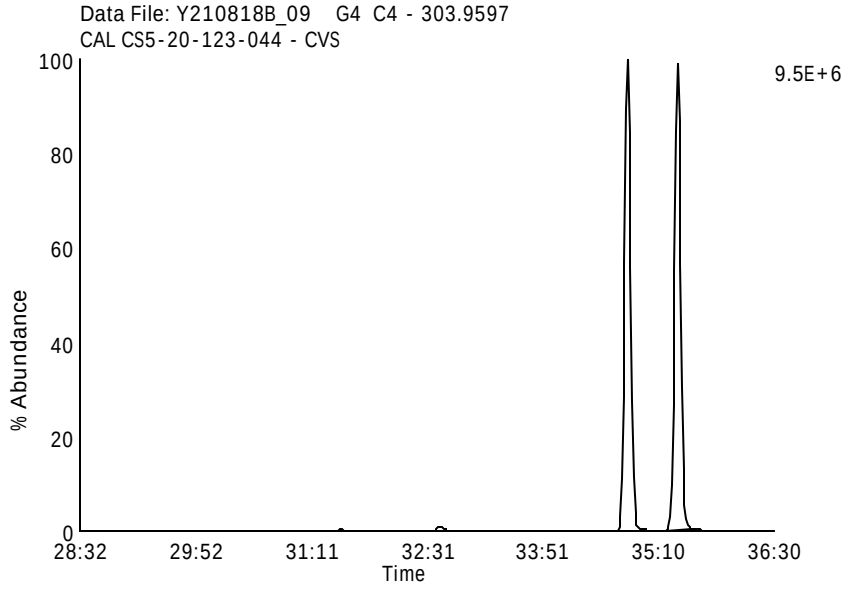
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS







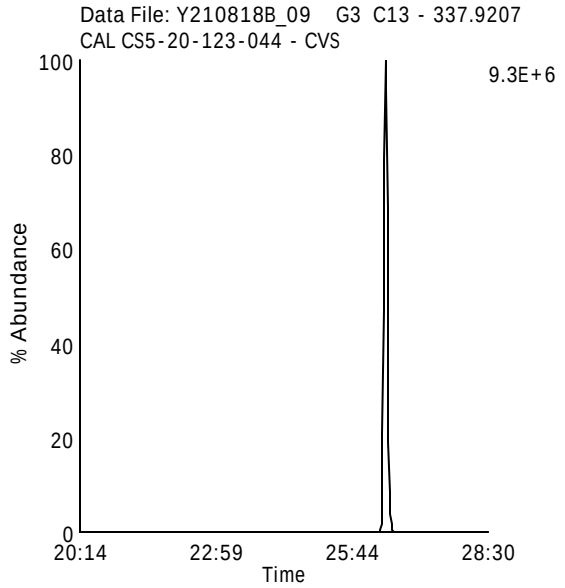


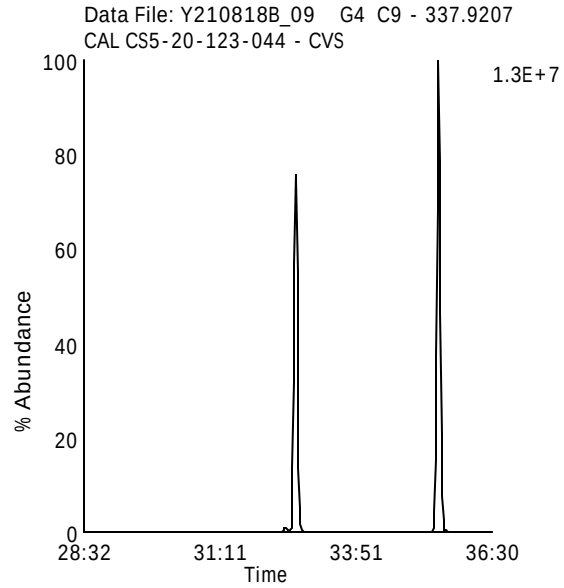
Labeled Penta Chlorinated Biphenyls

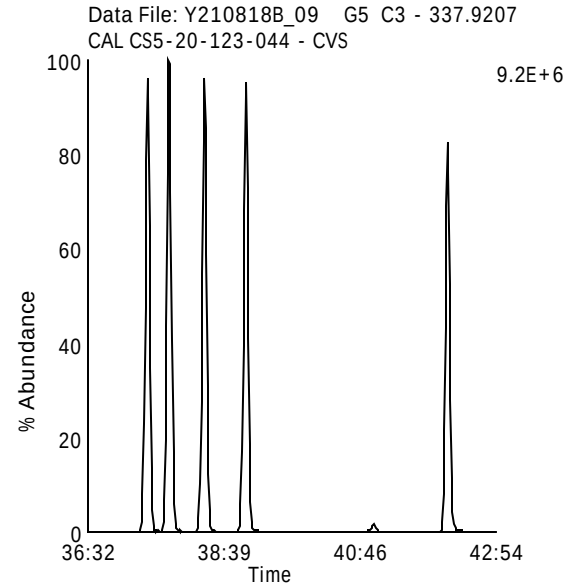
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

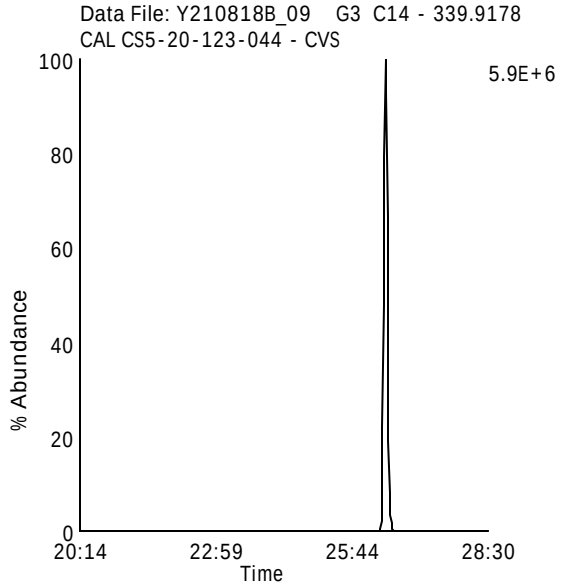
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

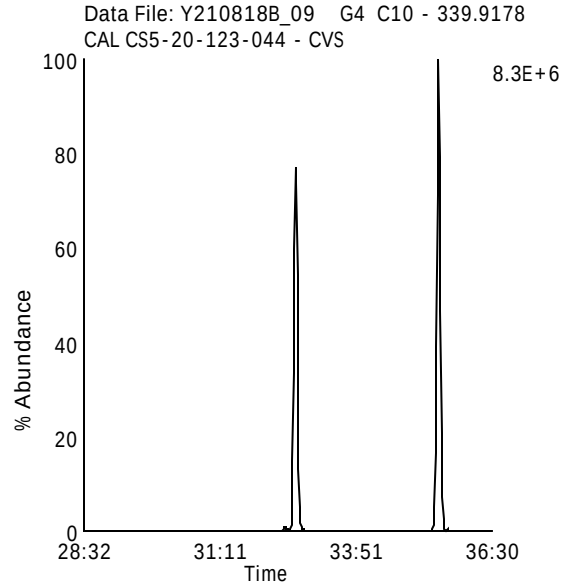
Sample Description: CAL CS5-20-123-044 - CVS

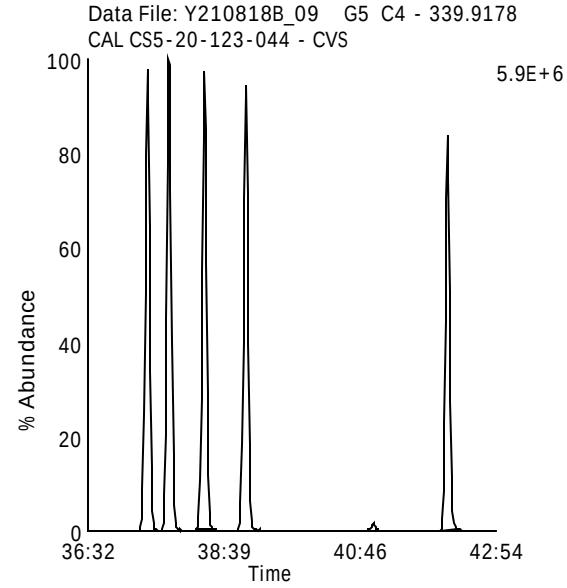












Labeled Hexa Chlorinated Biphenyls

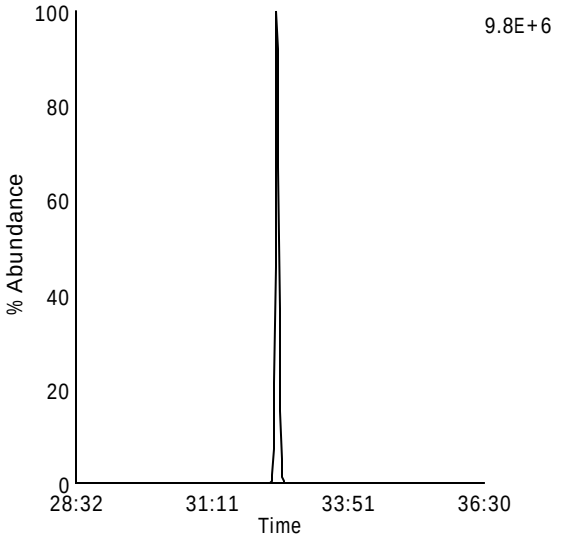
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

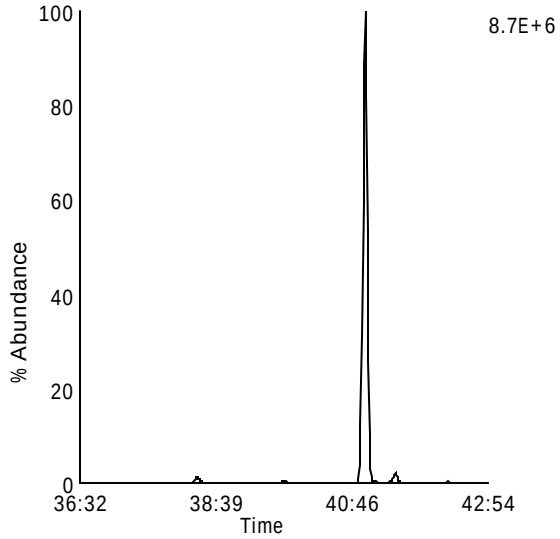
Data File: Y210818B_09 G4 C13 - 371.8817

CAL CS5-20-123-044 - CVS



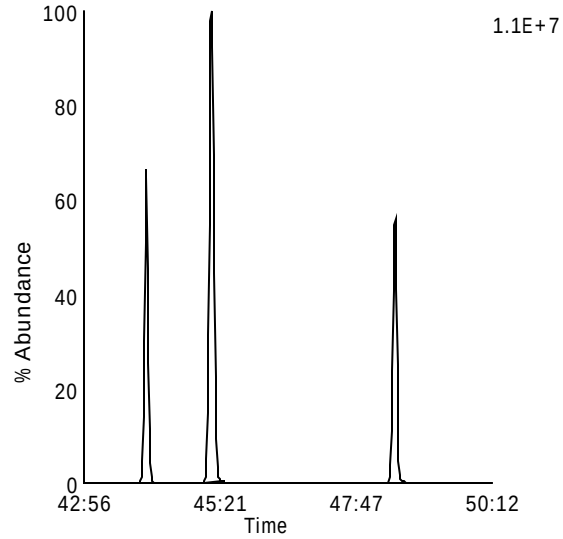
Data File: Y210818B_09 G5 C7 - 371.8817

CAL CS5-20-123-044 - CVS



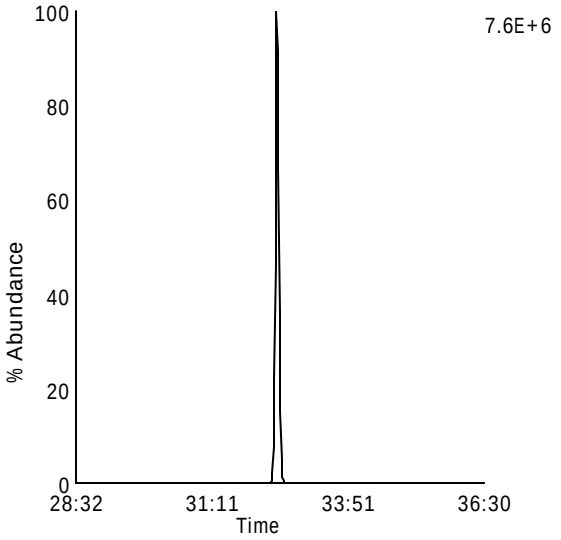
Data File: Y210818B_09 G6 C3 - 371.8817

CAL CS5-20-123-044 - CVS



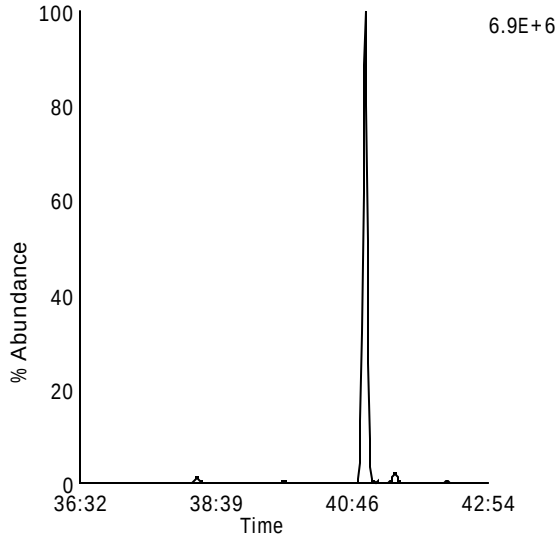
Data File: Y210818B_09 G4 C14 - 373.8788

CAL CS5-20-123-044 - CVS



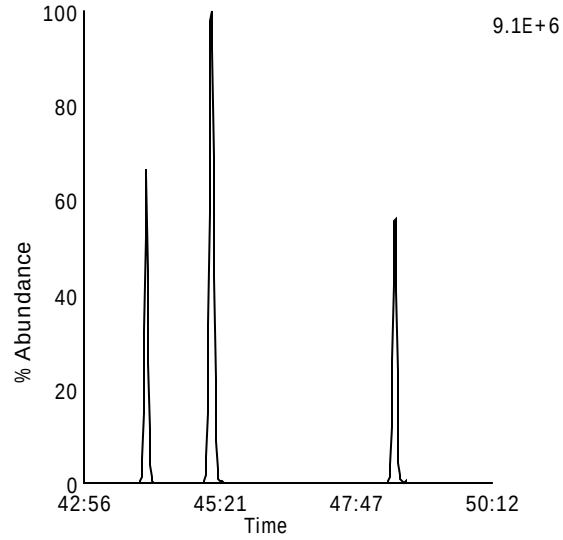
Data File: Y210818B_09 G5 C8 - 373.8788

CAL CS5-20-123-044 - CVS



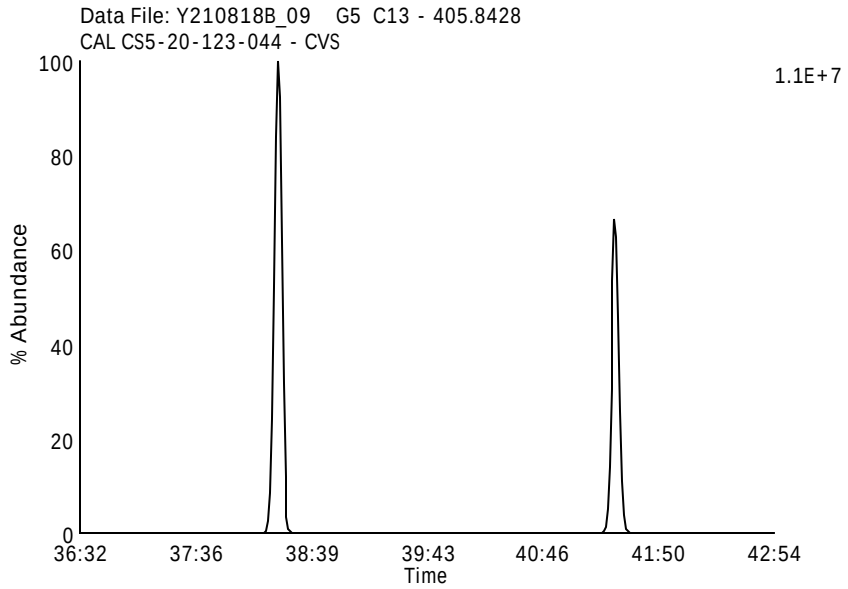
Data File: Y210818B_09 G6 C4 - 373.8788

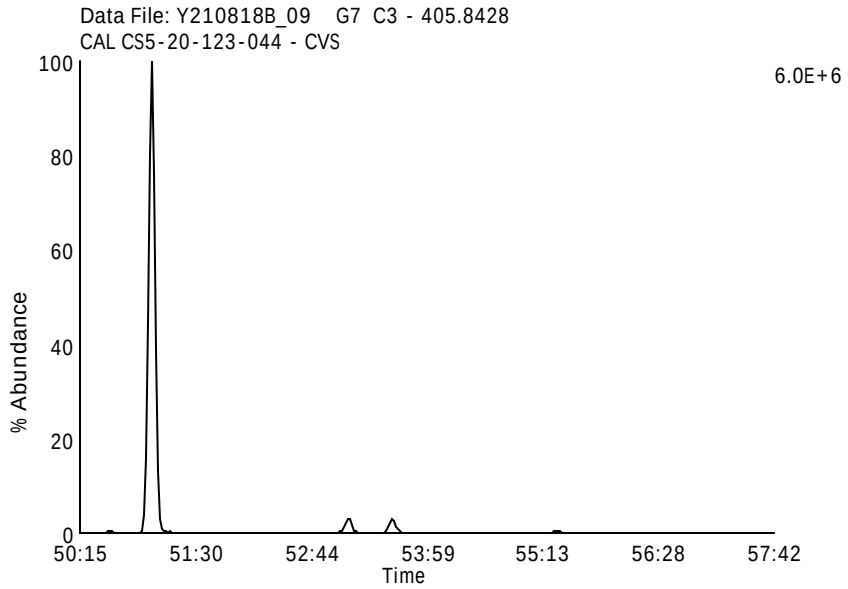
CAL CS5-20-123-044 - CVS

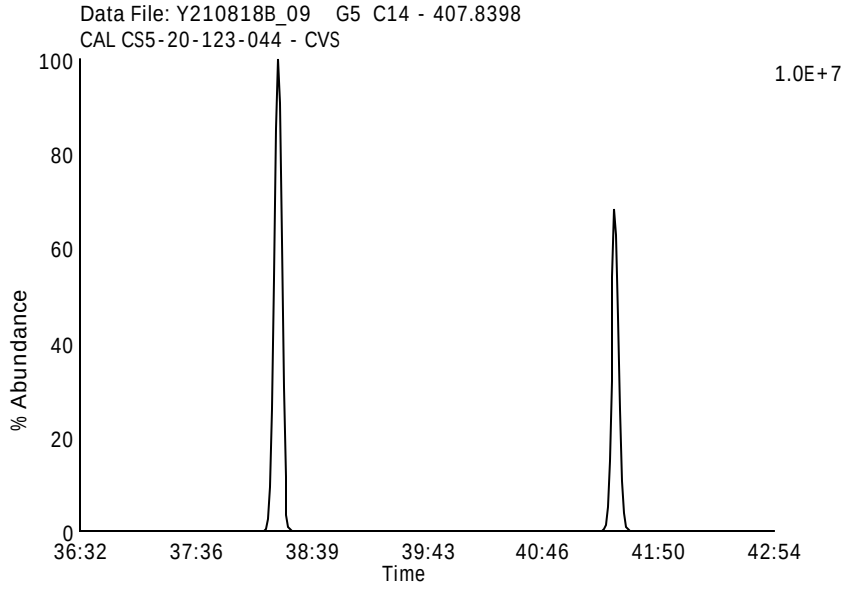


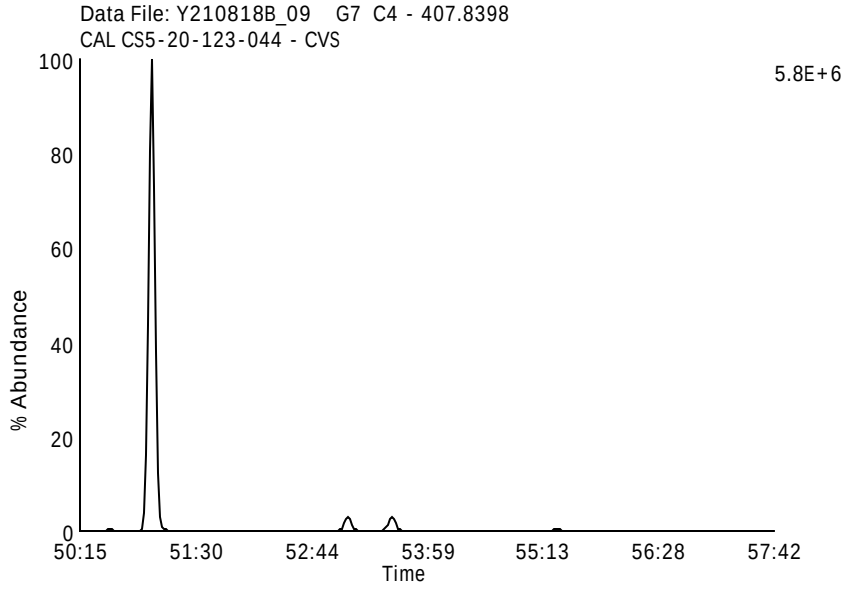
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS









Labeled Octa Chlorinated Biphenyls

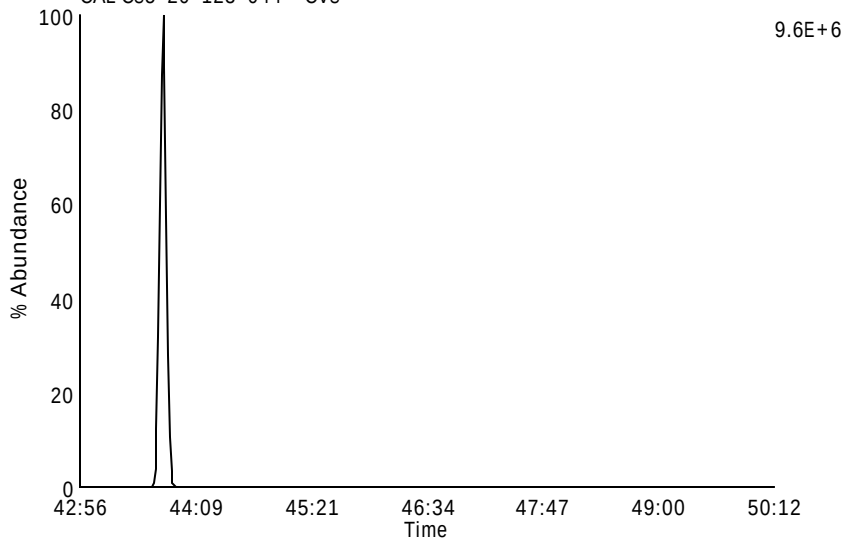
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

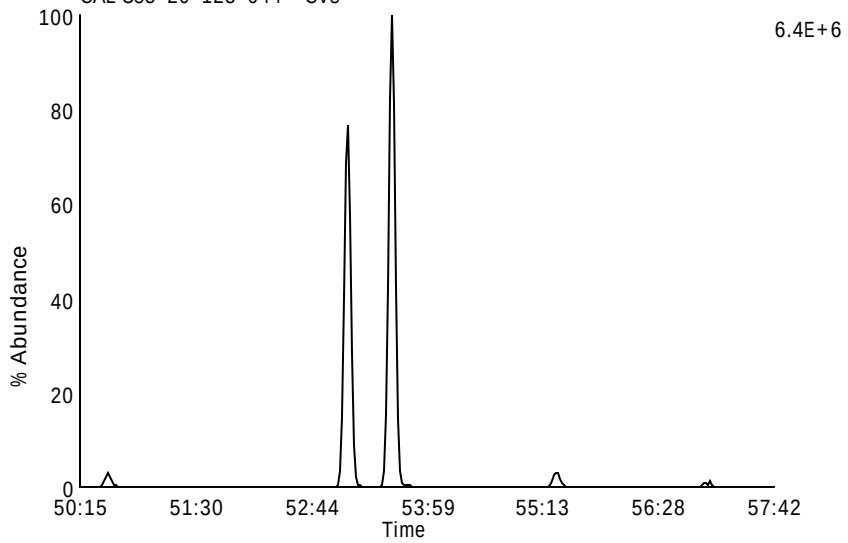
Data File: Y210818B_09 G6 C13 - 439.8038

CAL CS5-20-123-044 - CVS



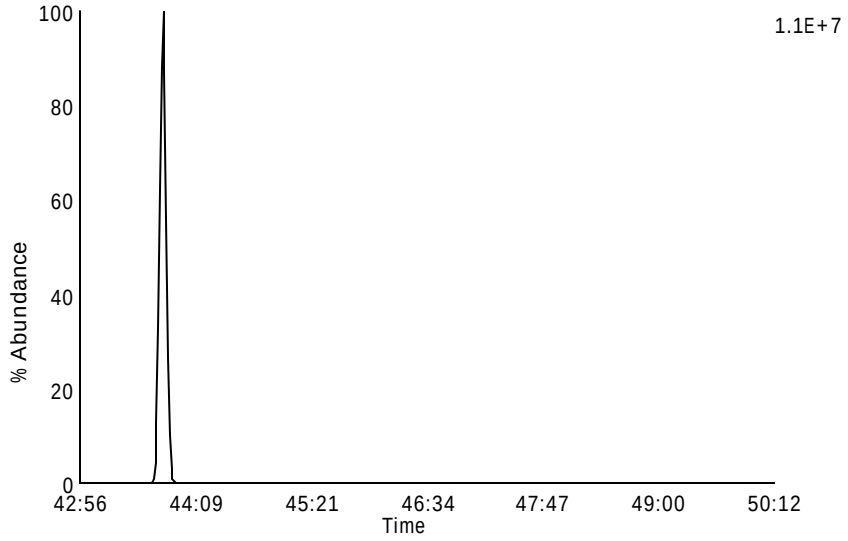
Data File: Y210818B_09 G7 C7 - 439.8038

CAL CS5-20-123-044 - CVS



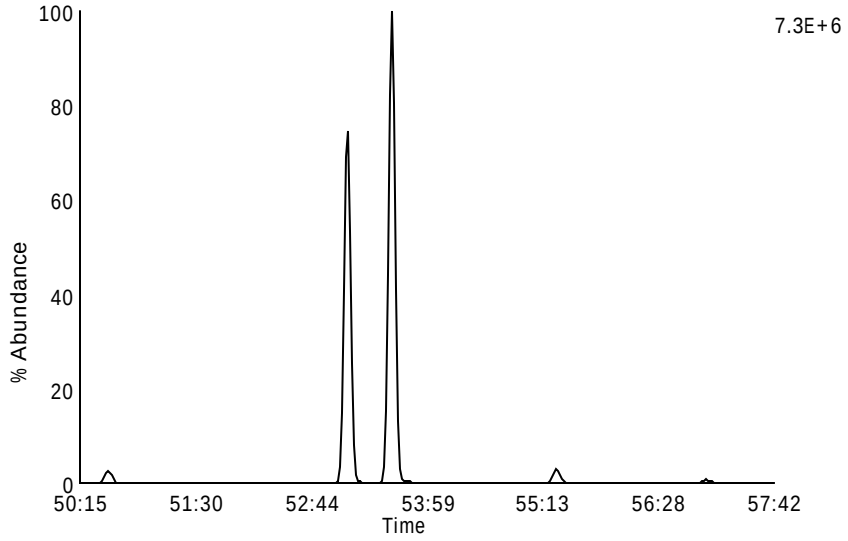
Data File: Y210818B_09 G6 C14 - 441.8008

CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G7 C8 - 441.8008

CAL CS5-20-123-044 - CVS

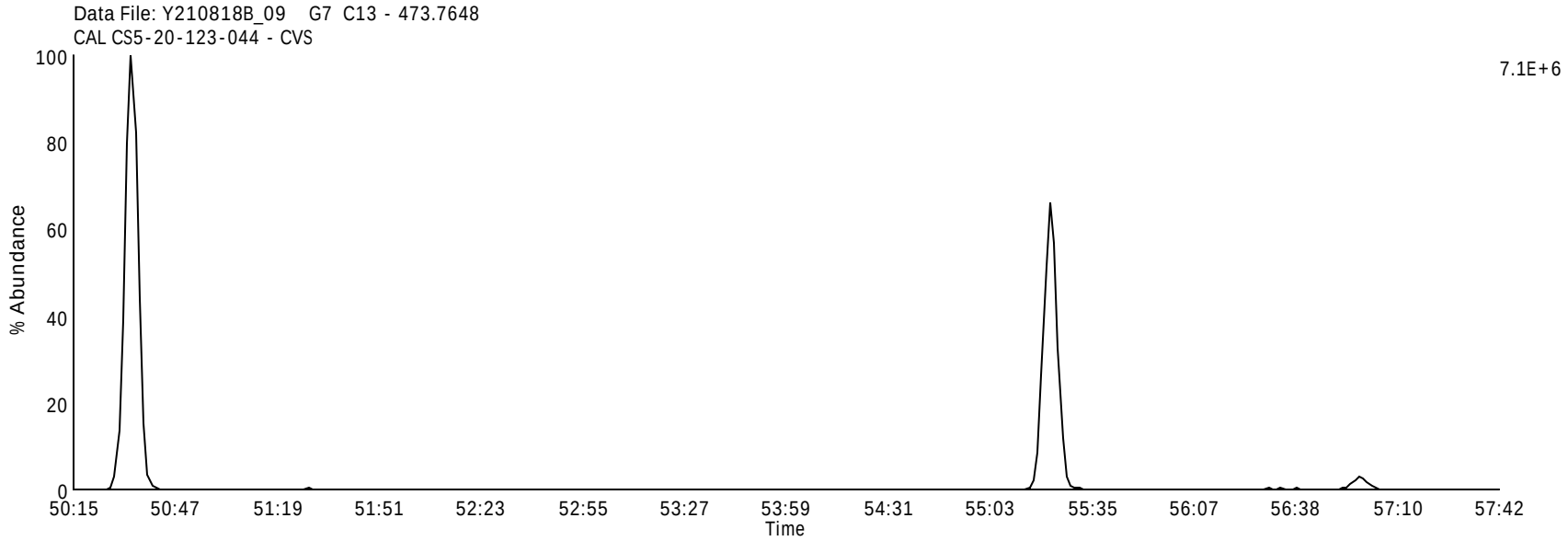


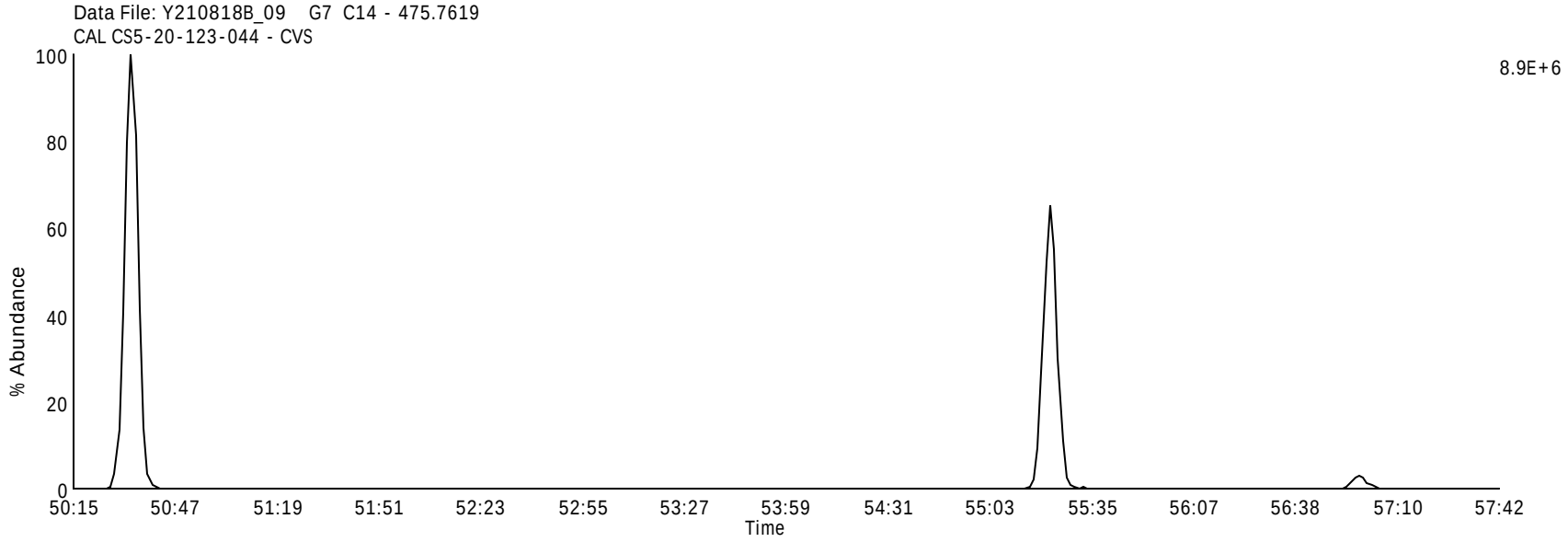
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



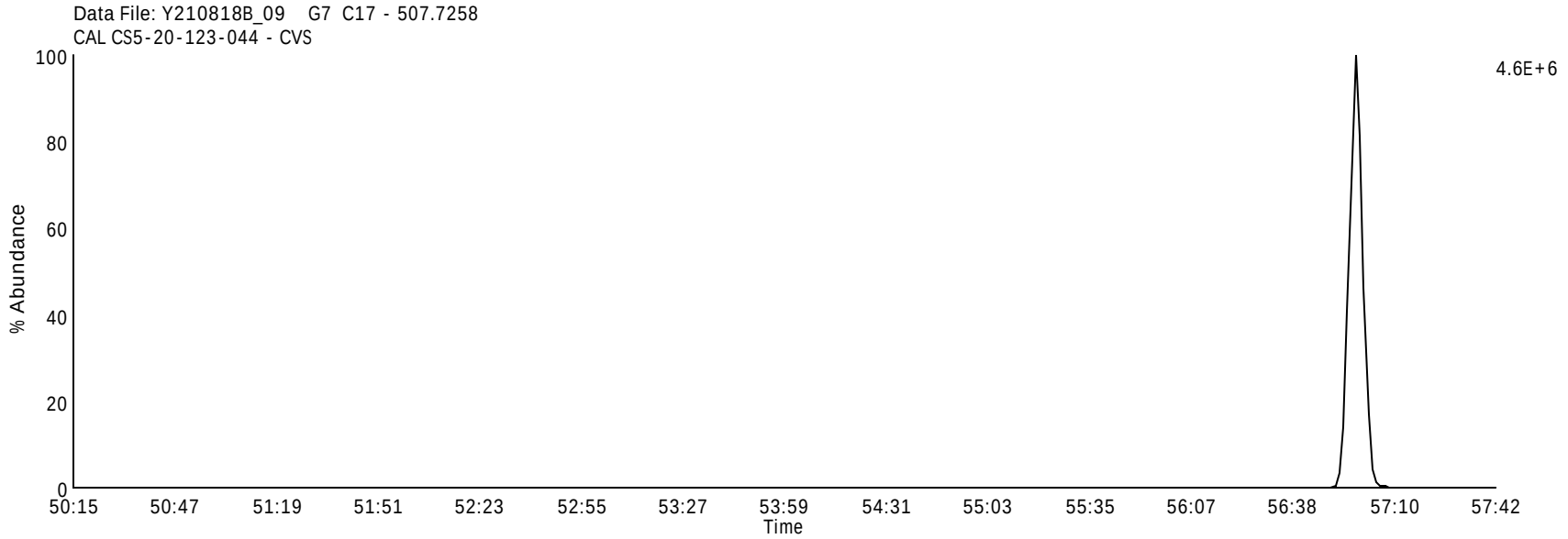


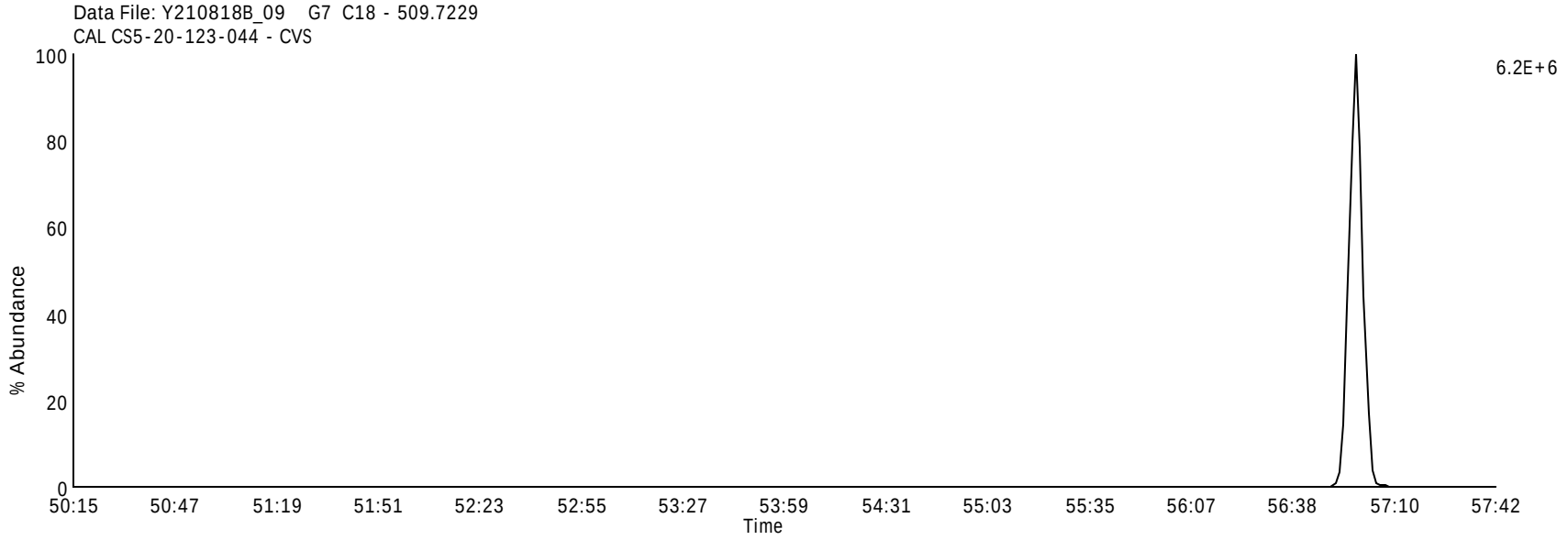
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

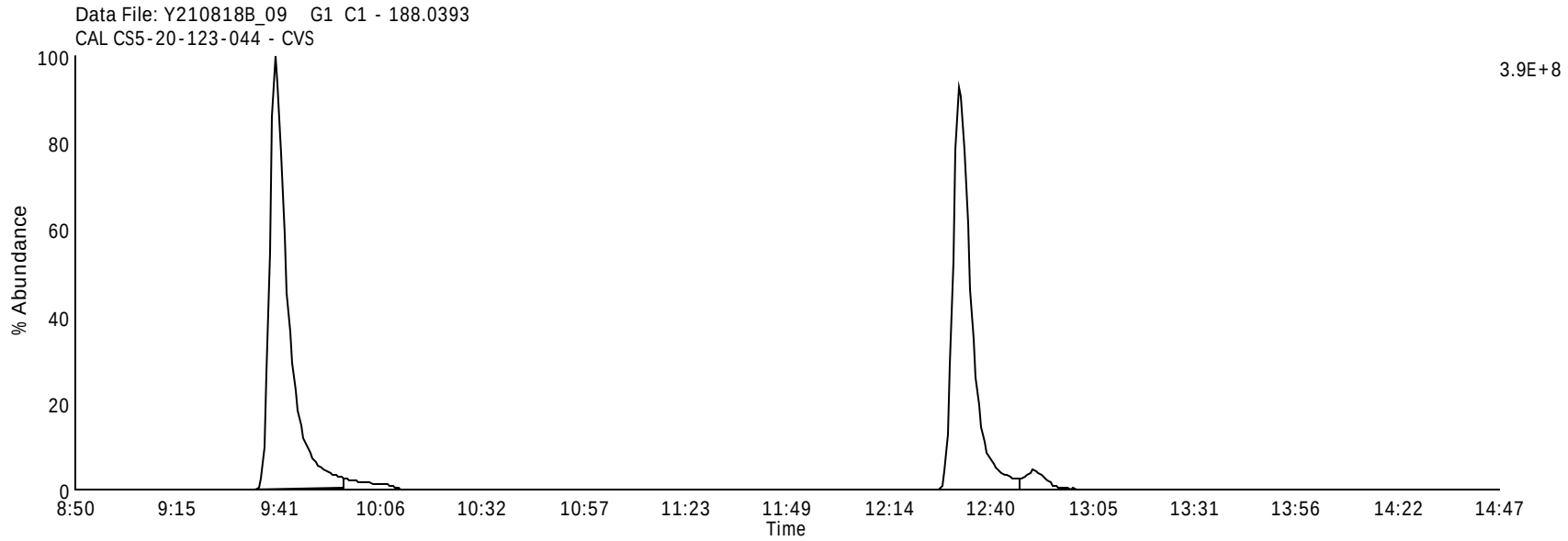
Sample Description: CAL CS5-20-123-044 - CVS

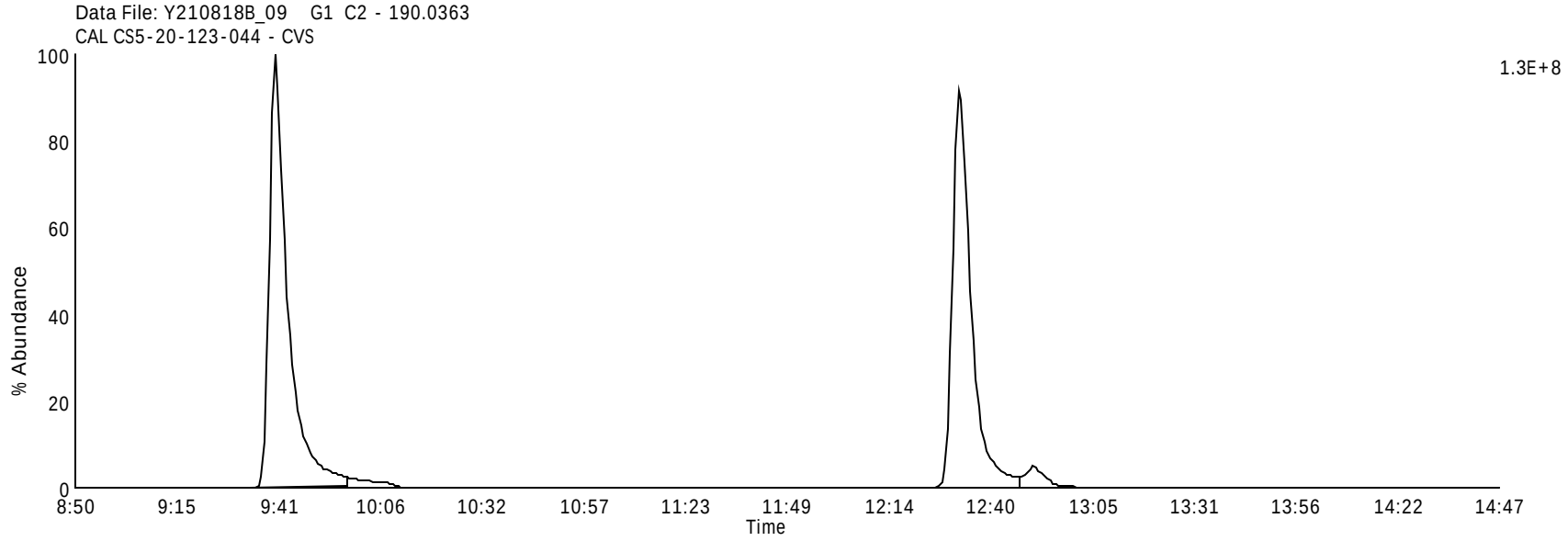




Mono Chlorinated Biphenyls

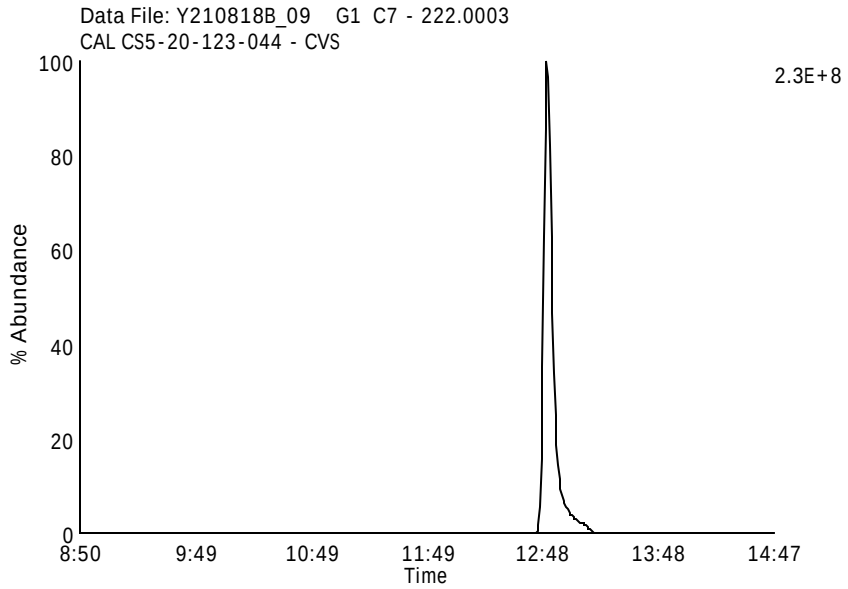
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

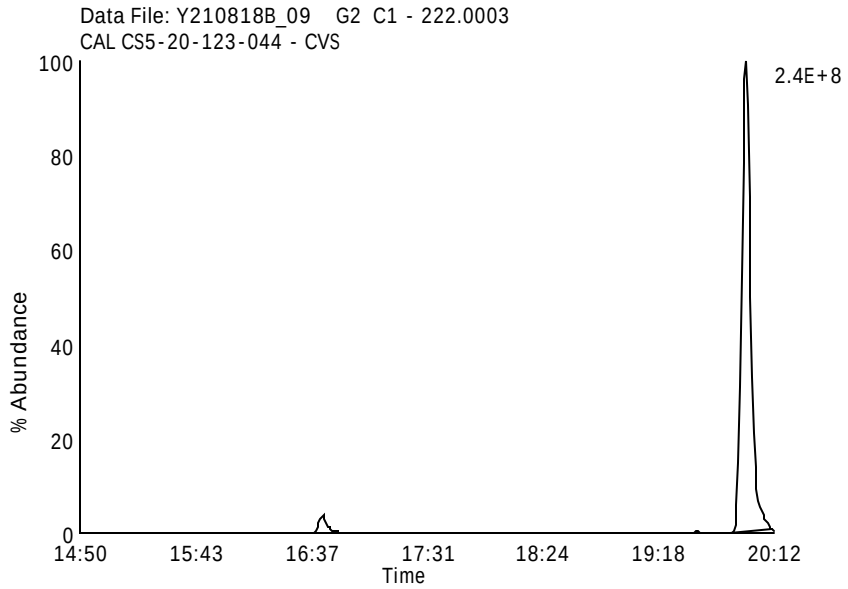


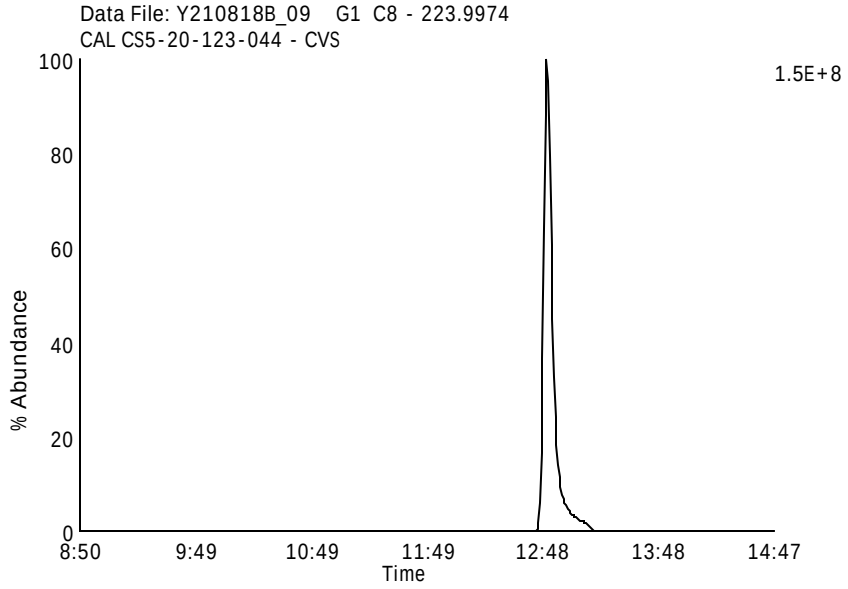


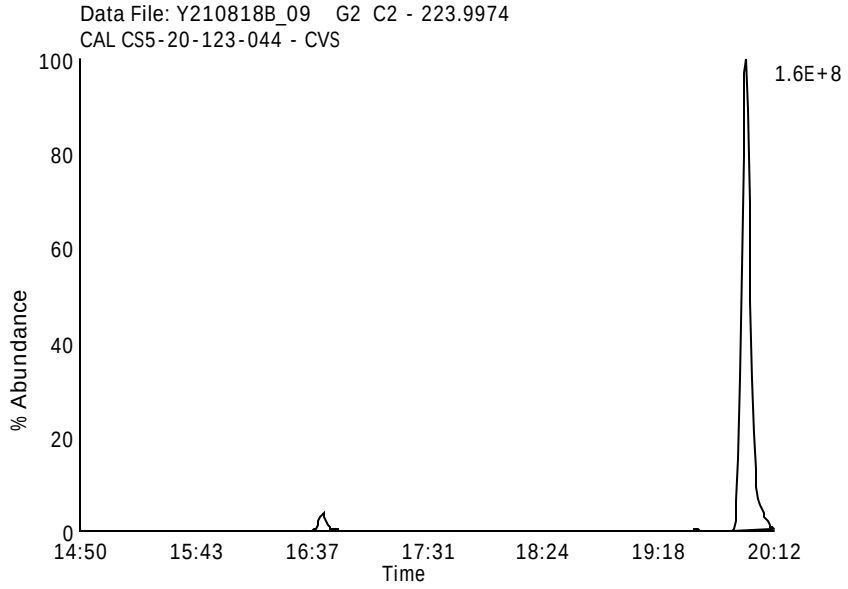
Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



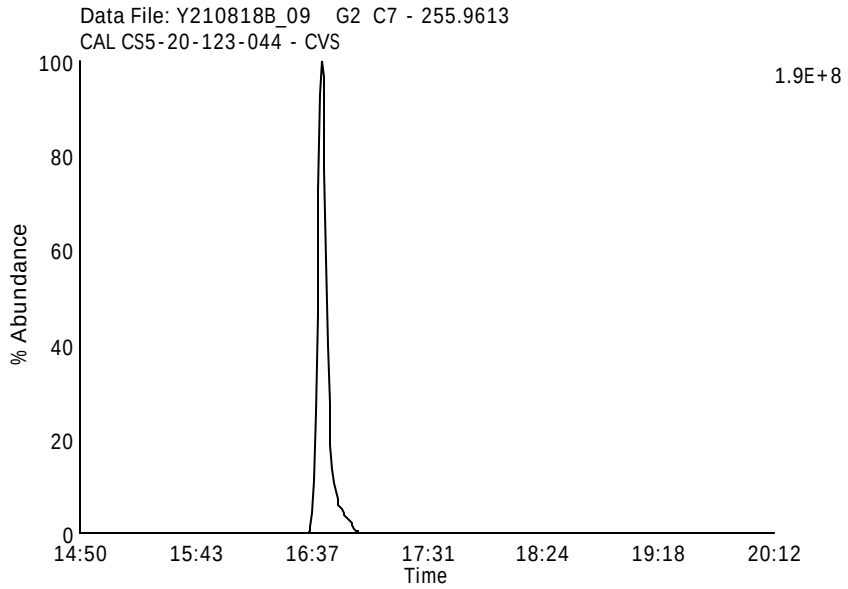


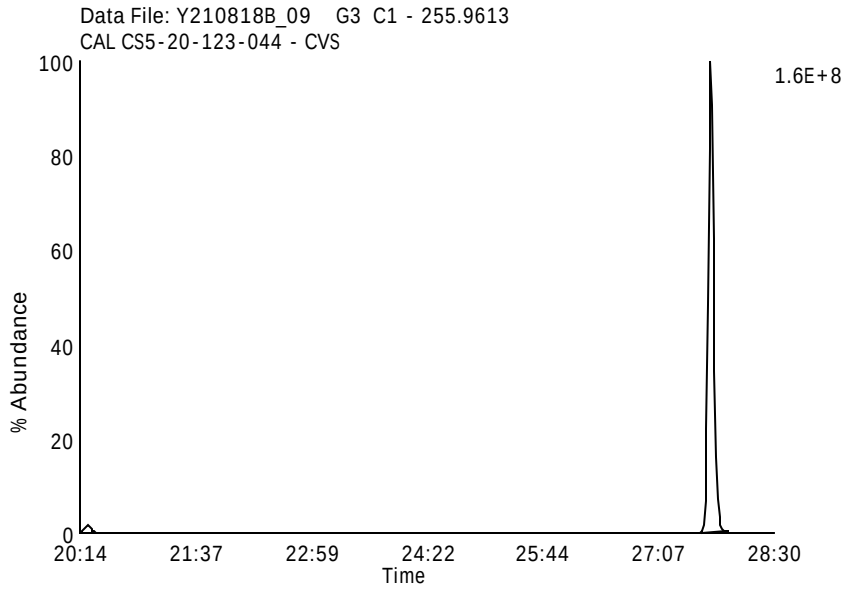


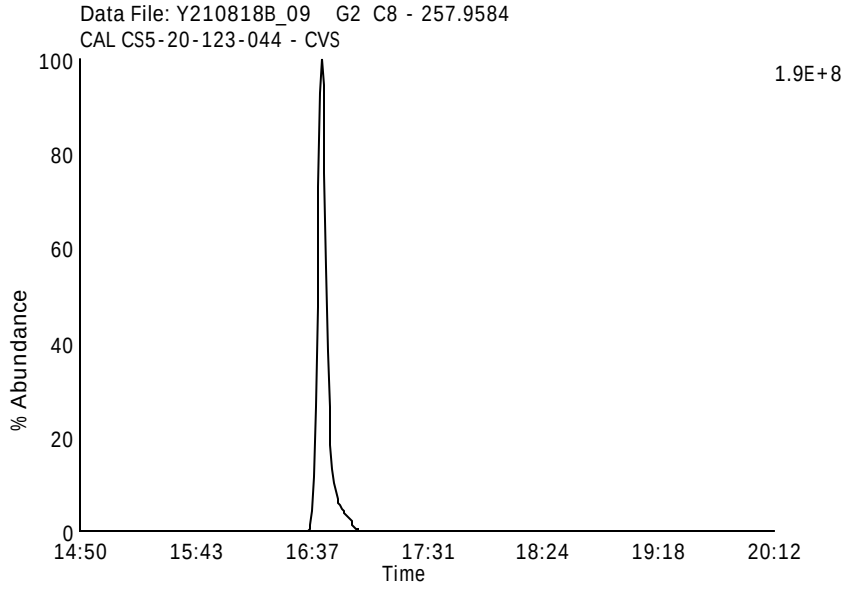


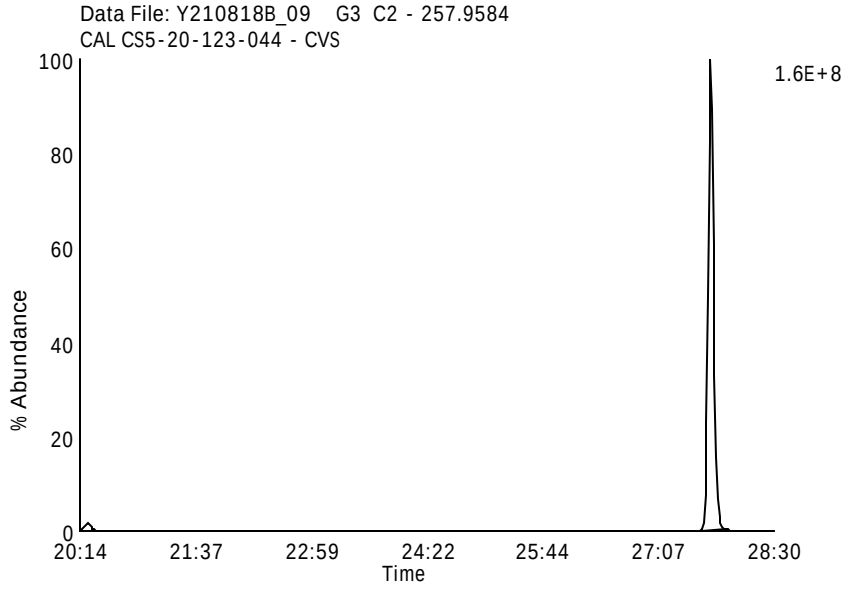
Tri Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



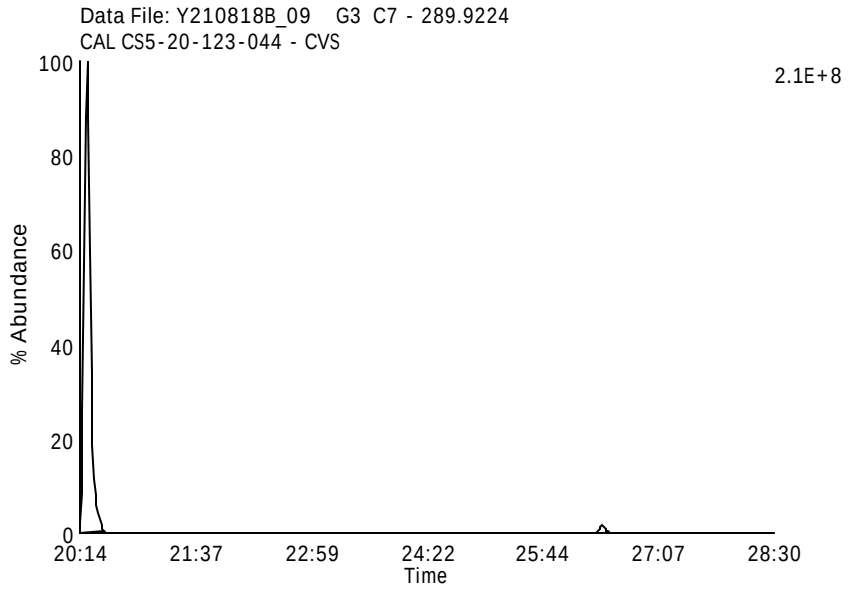


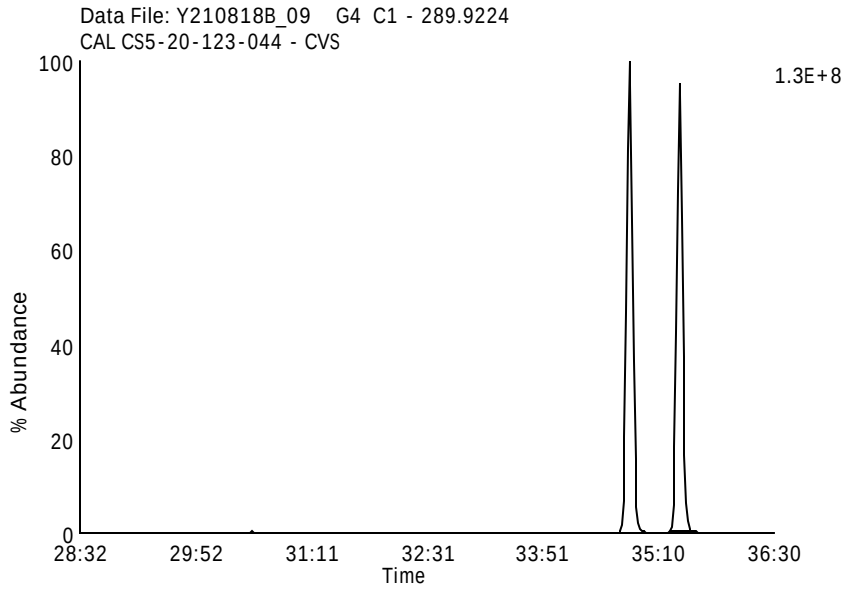


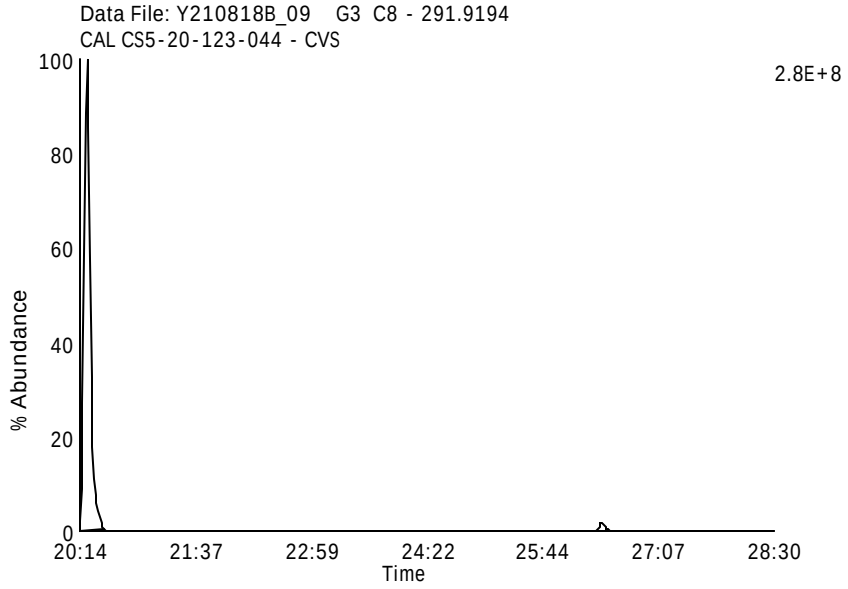


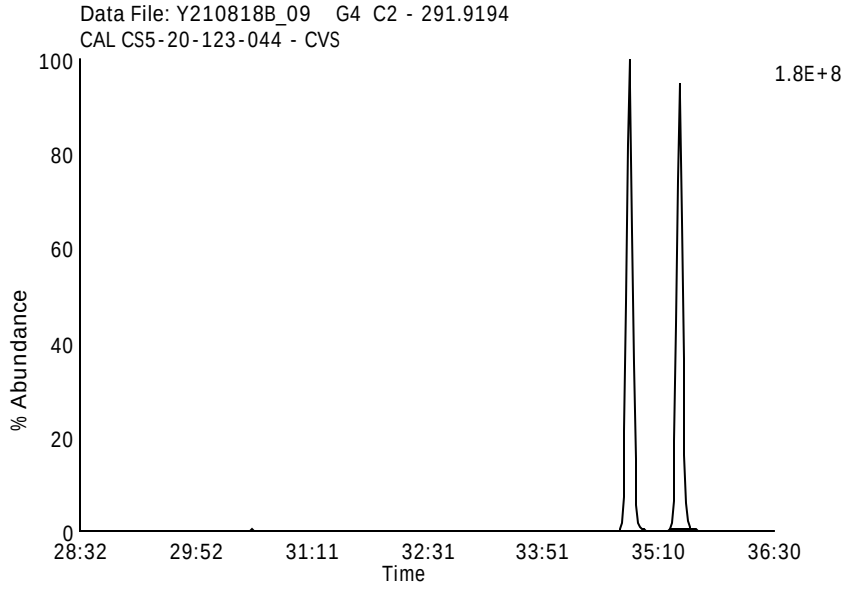
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



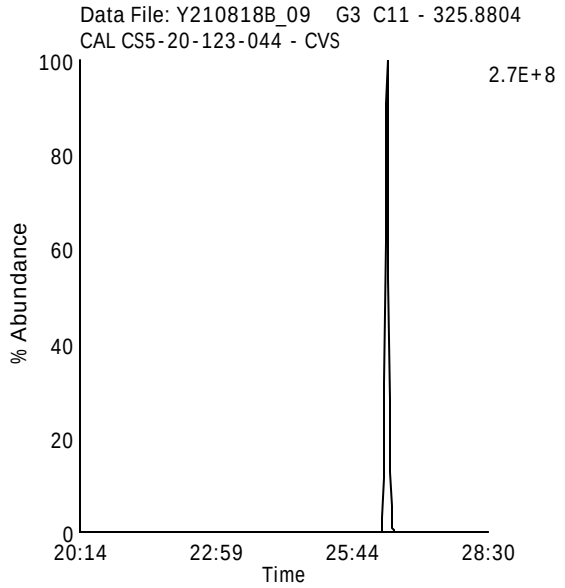


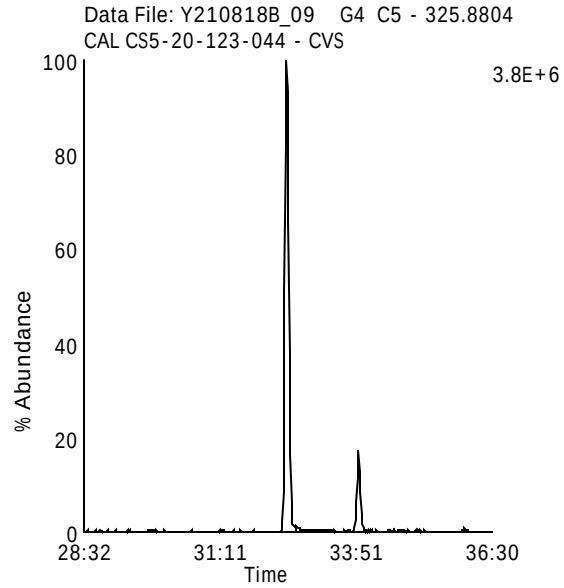


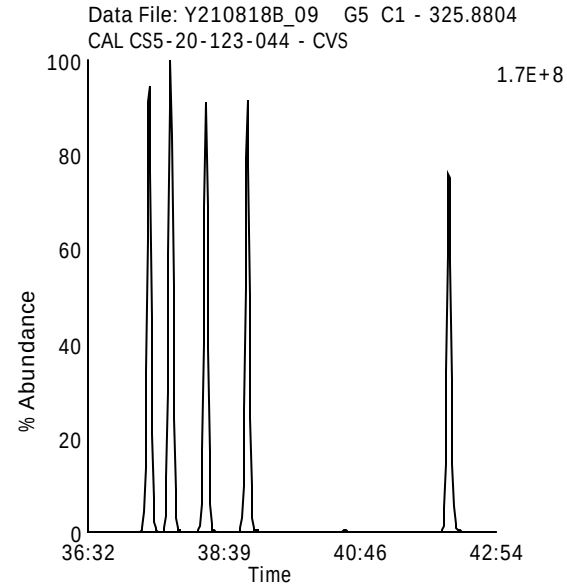


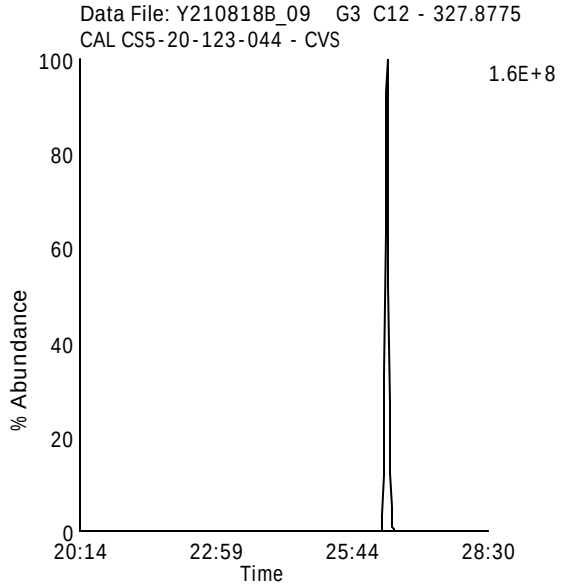
Penta Chlorinated Biphenyls

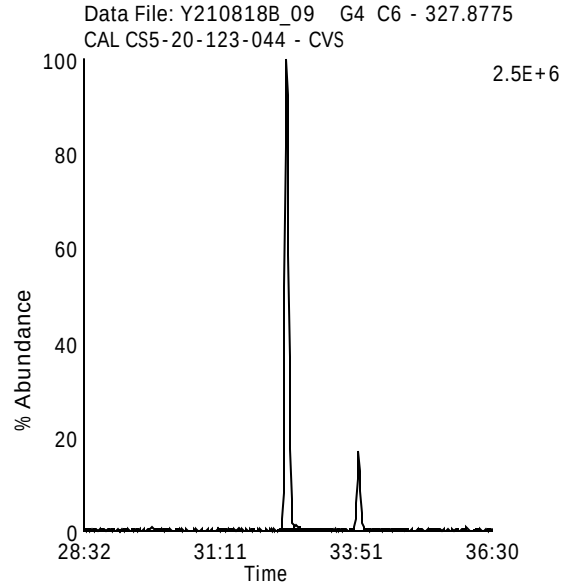
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

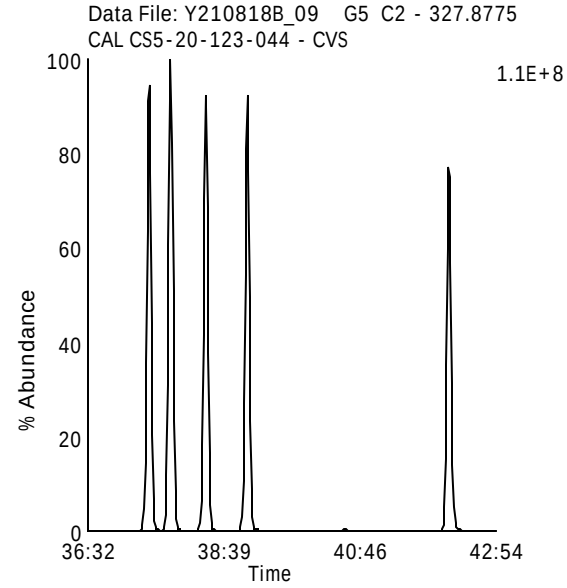








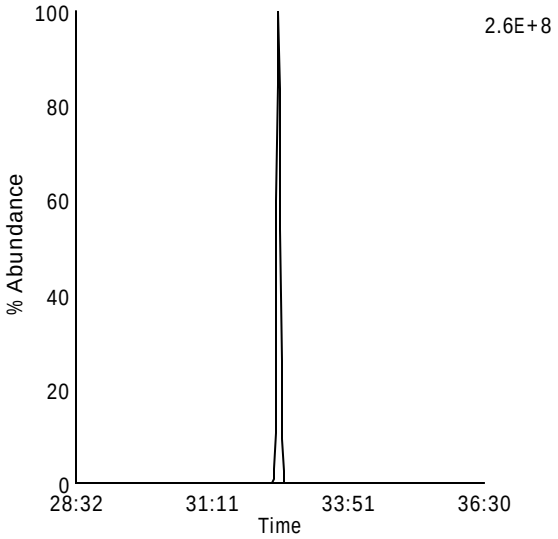




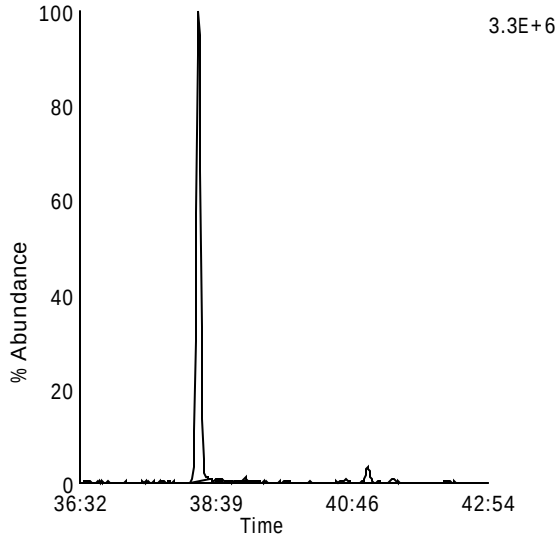
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

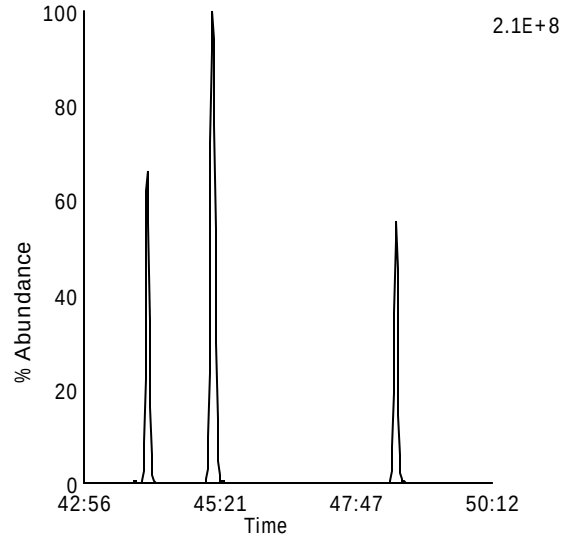
Data File: Y210818B_09 G4 C11 - 359.8415
CAL CS5-20-123-044 - CVS



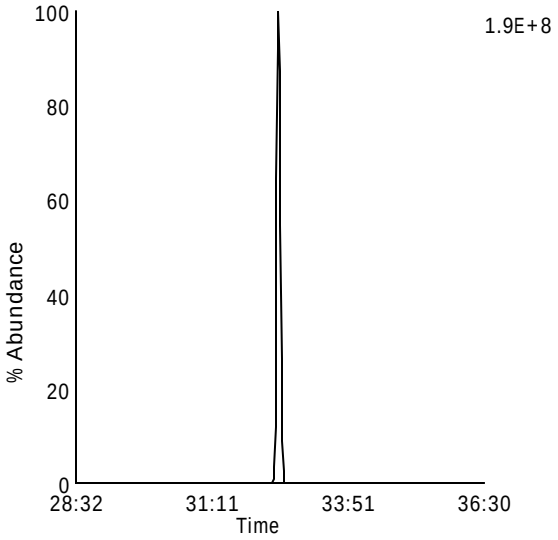
Data File: Y210818B_09 G5 C5 - 359.8415
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G6 C1 - 359.8415
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G4 C12 - 361.8385
CAL CS5-20-123-044 - CVS



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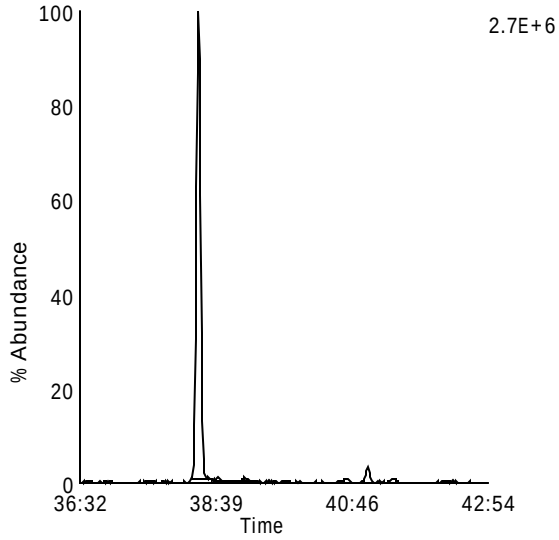
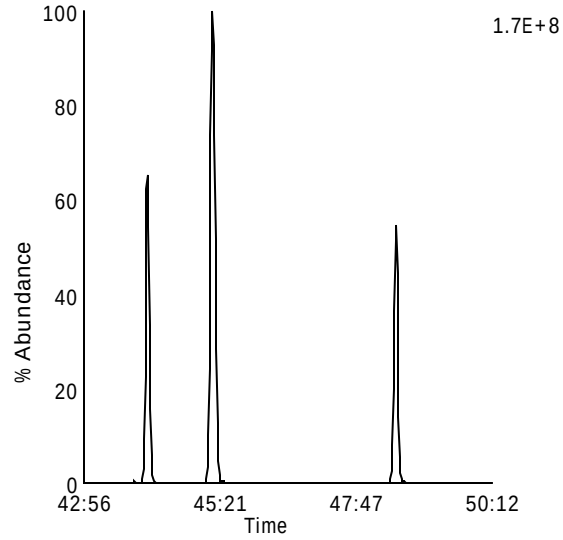
CAL CS5-20-123-044 - CVS

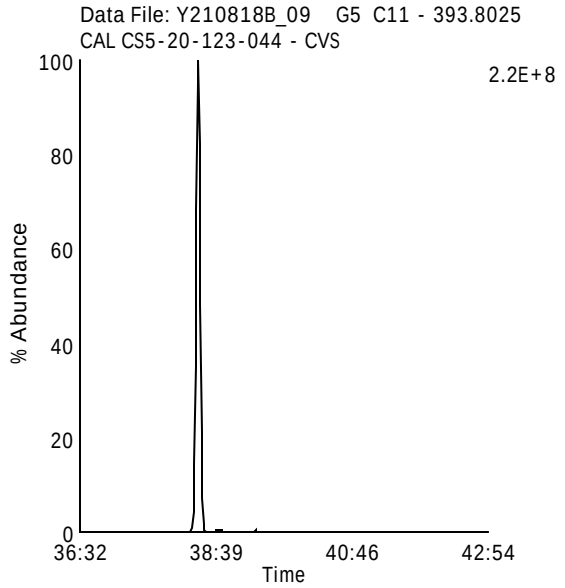


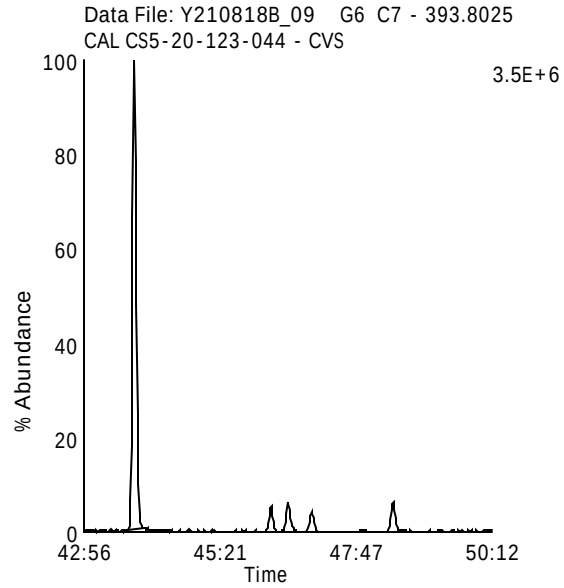
Data File: Y210818B_09 G6 C2 - 361.8385
CAL CS5-20-123-044 - CVS

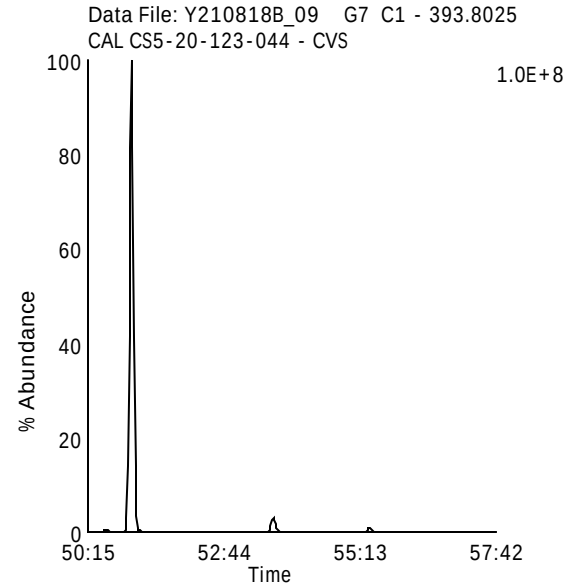


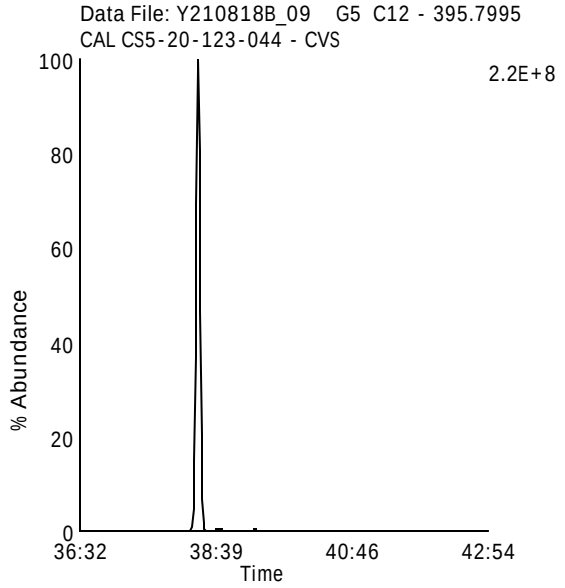
Hepta Chlorinated Biphenyls

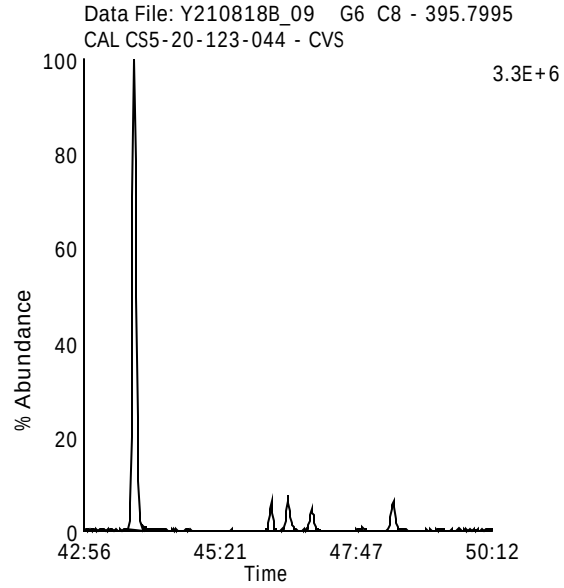
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

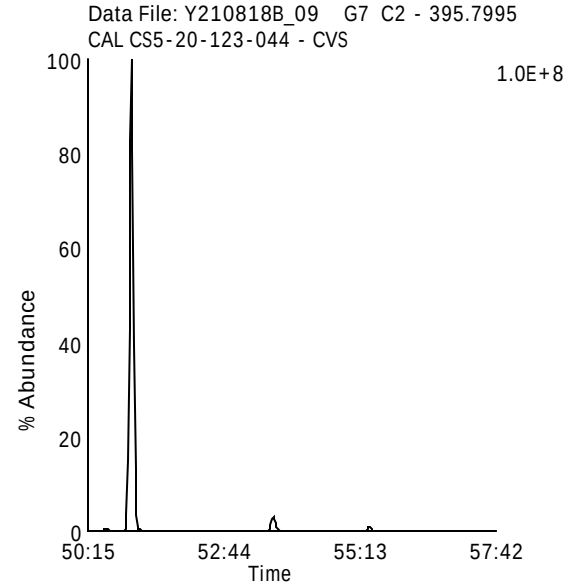






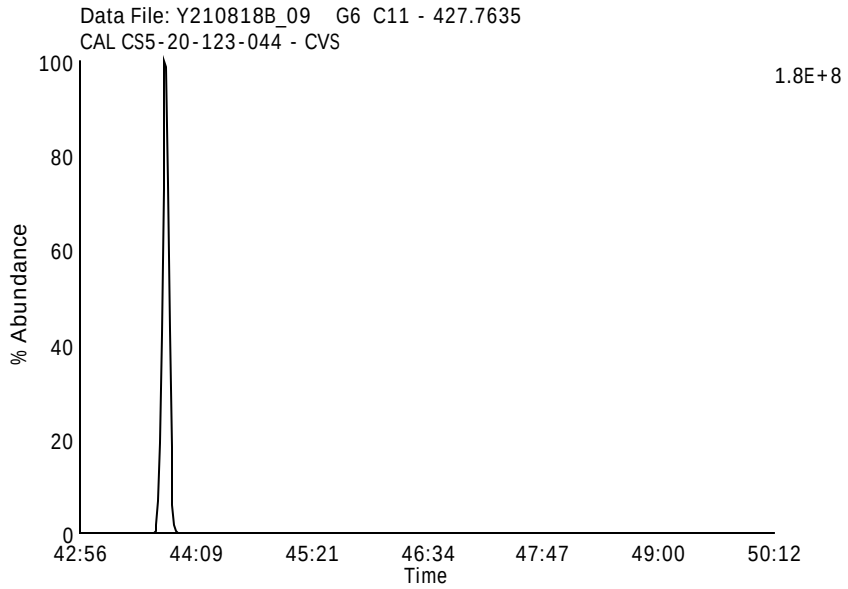


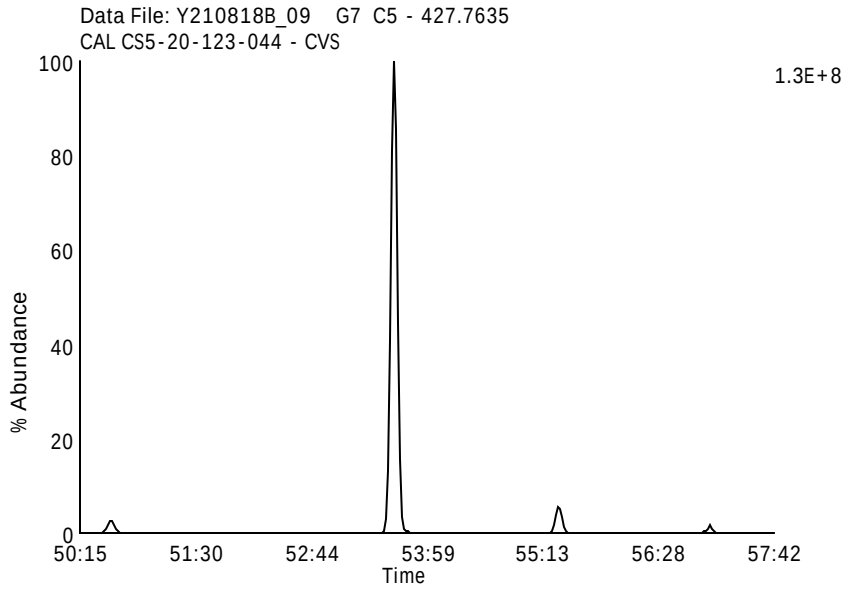


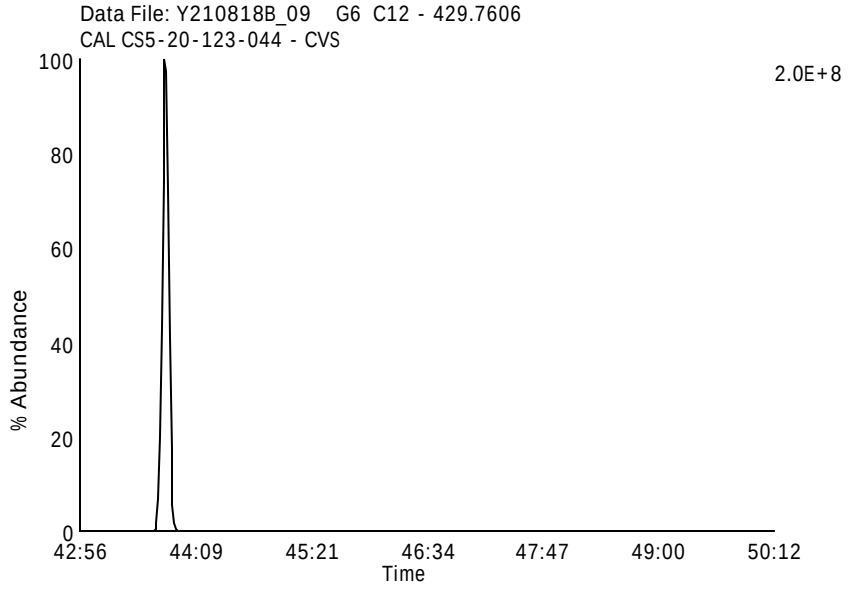


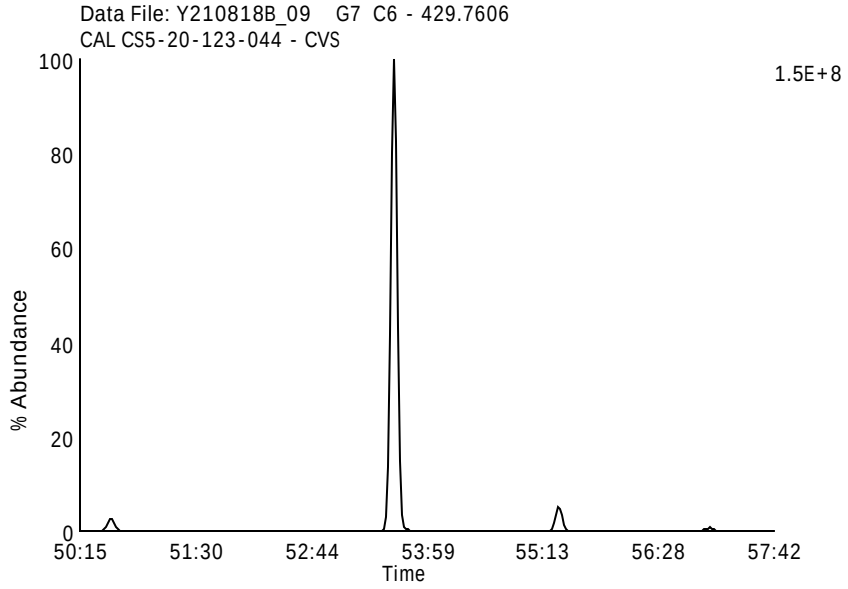
Octa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



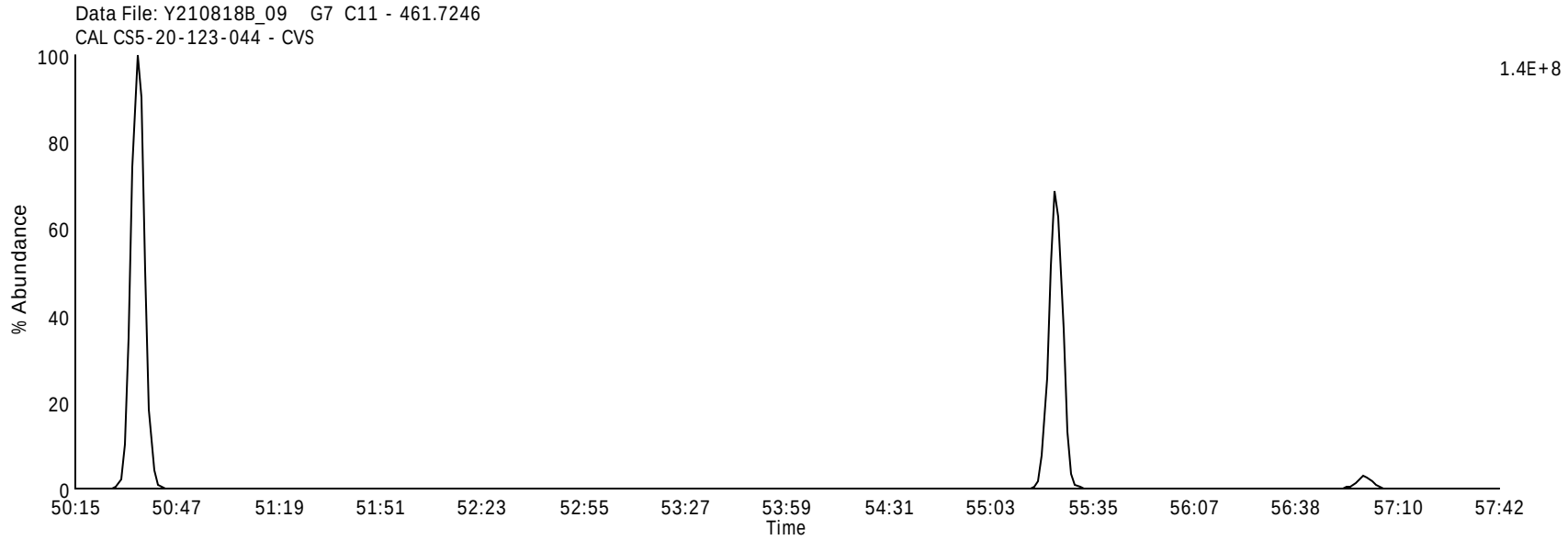


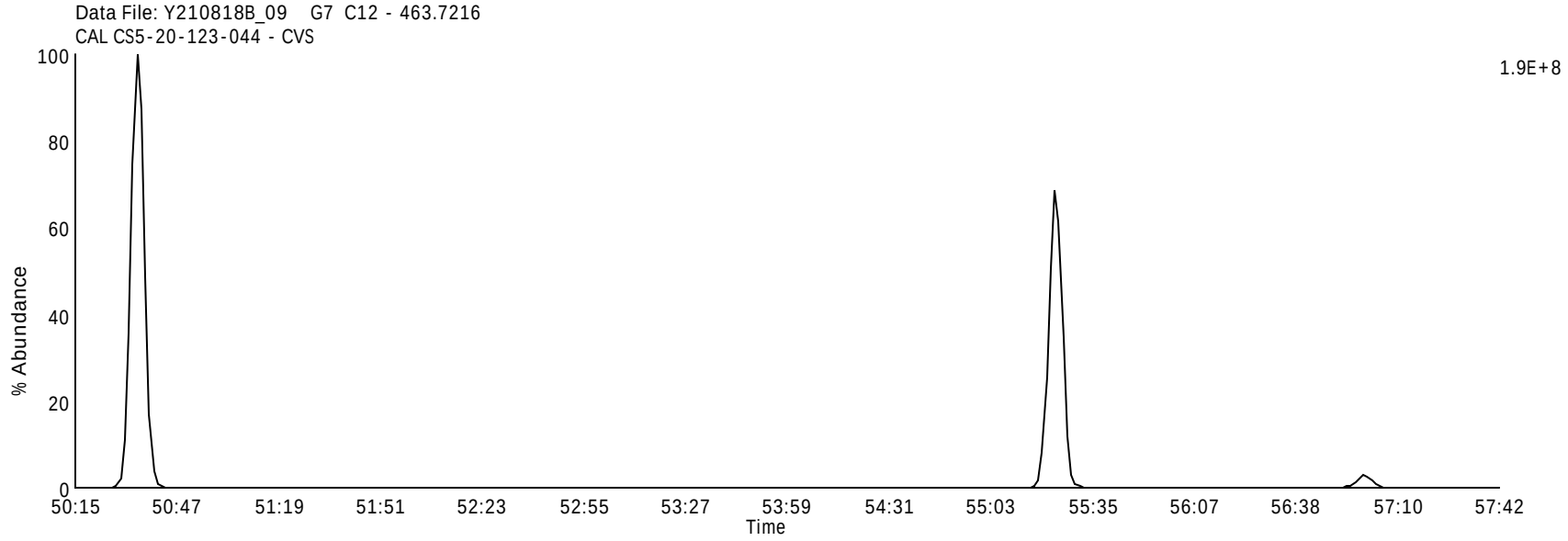




Nona Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



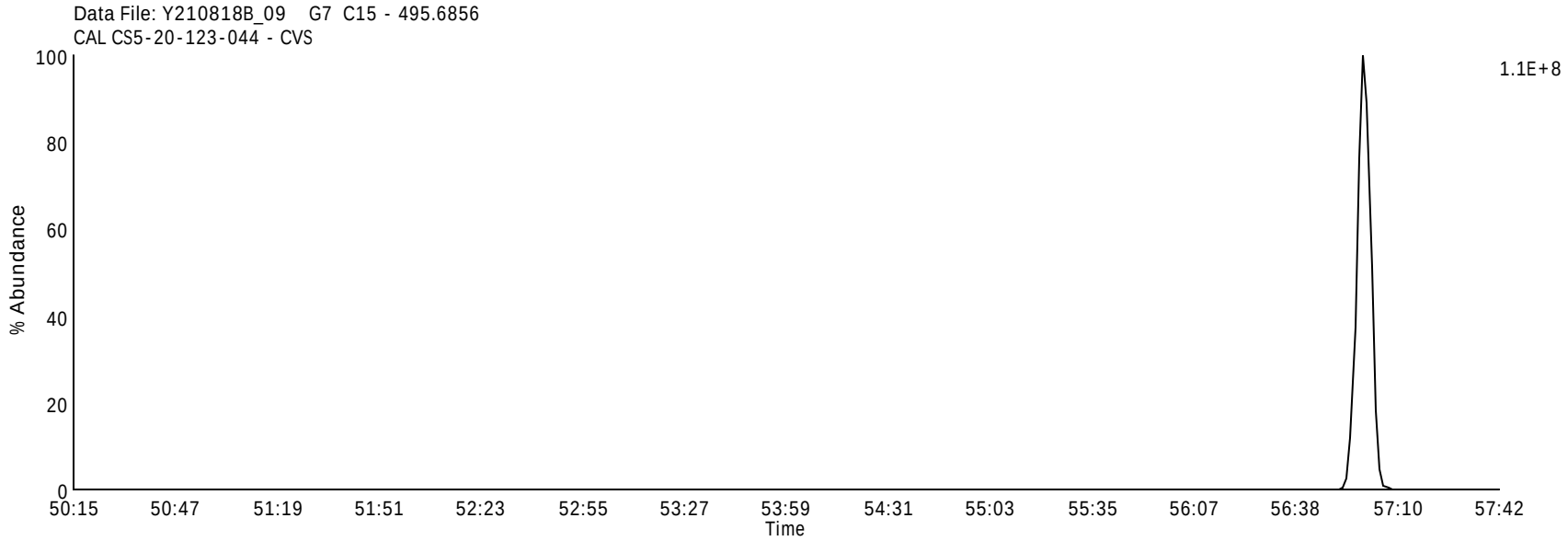


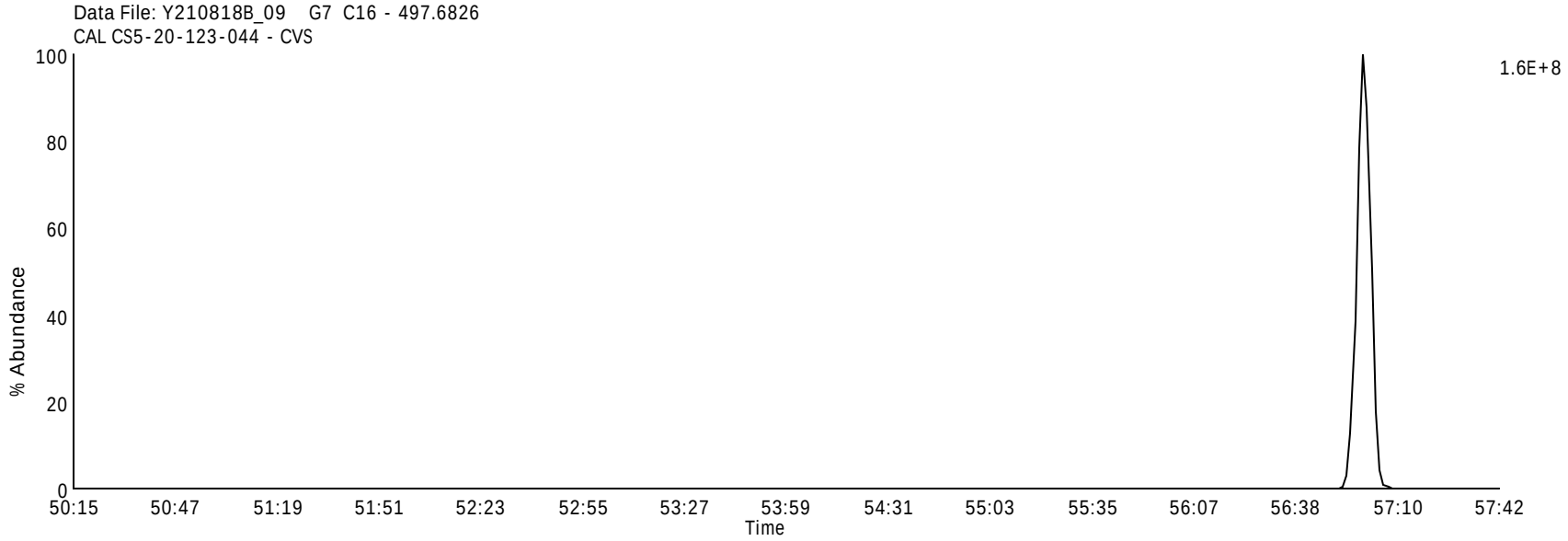
Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

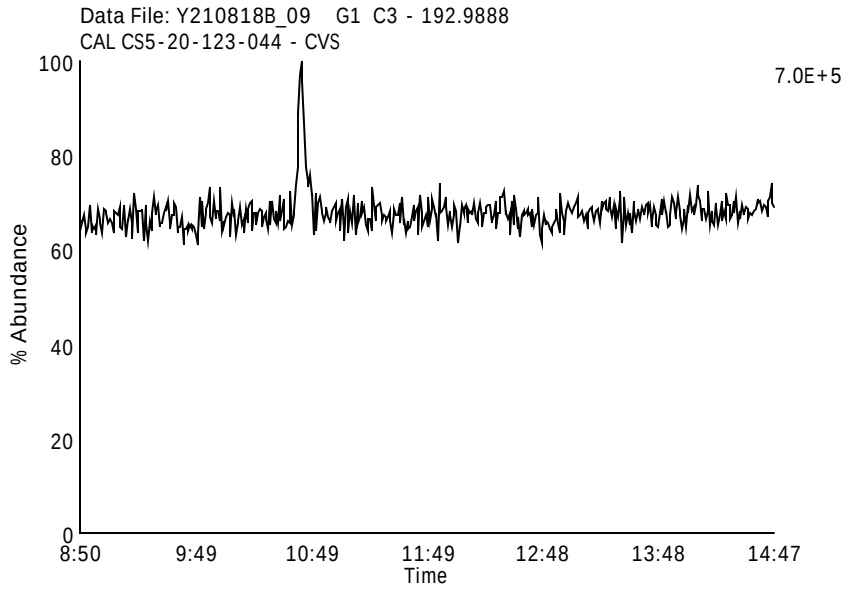
Sample Description: CAL CS5-20-123-044 - CVS

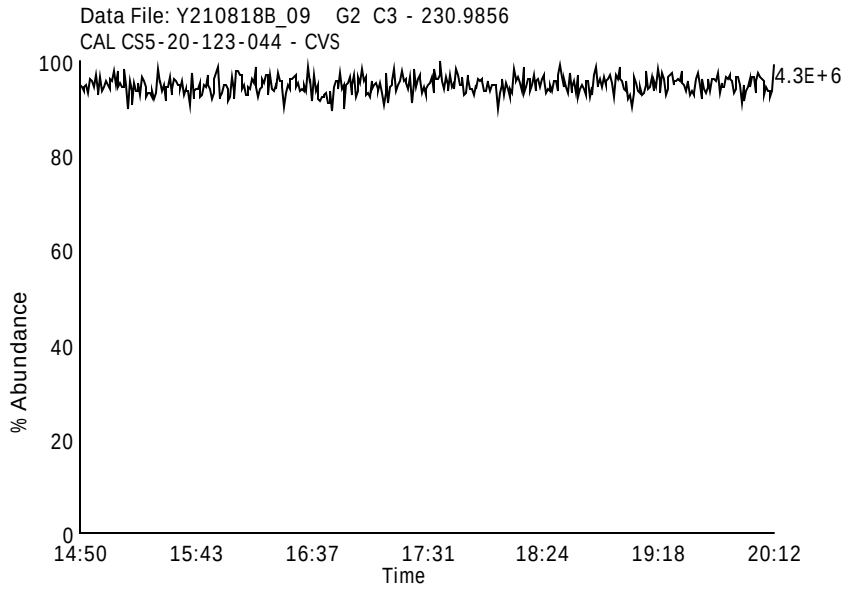


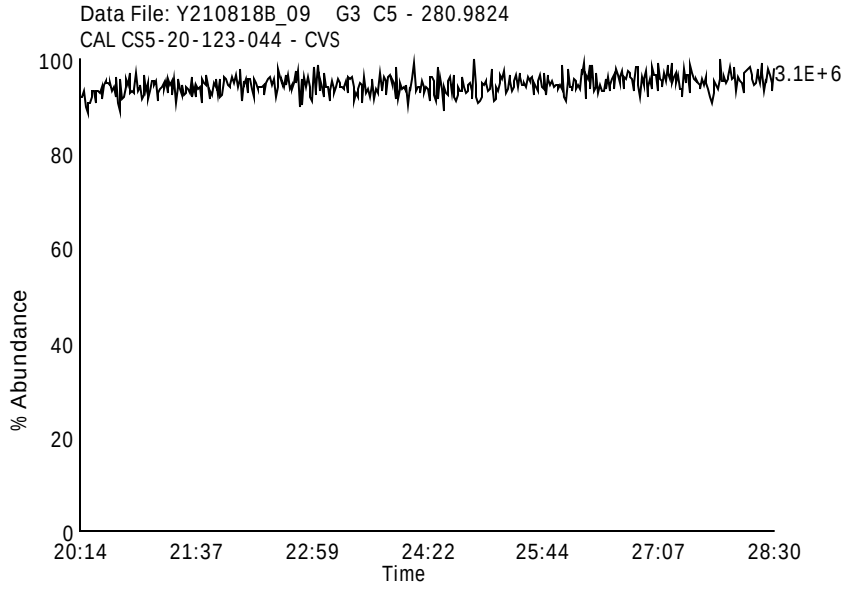


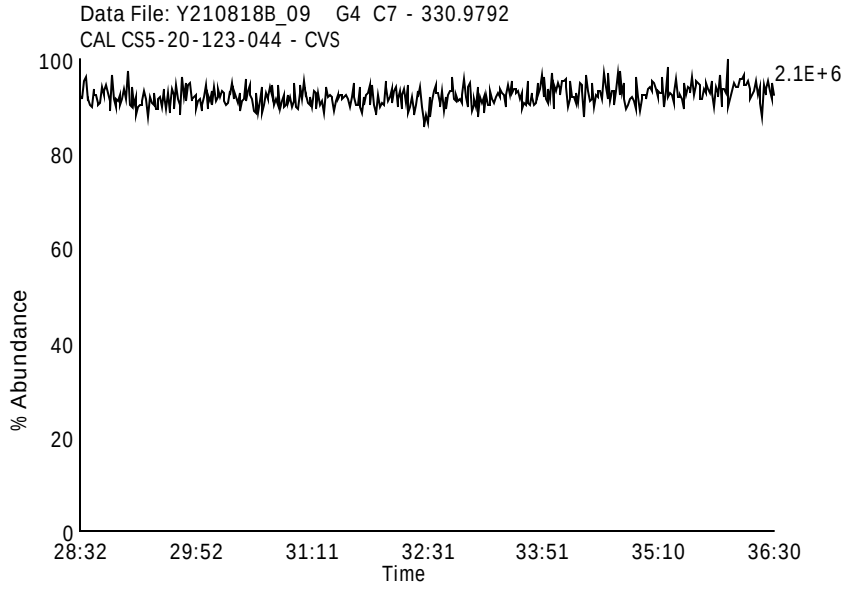
Group 1 - 4 Lock mass

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS





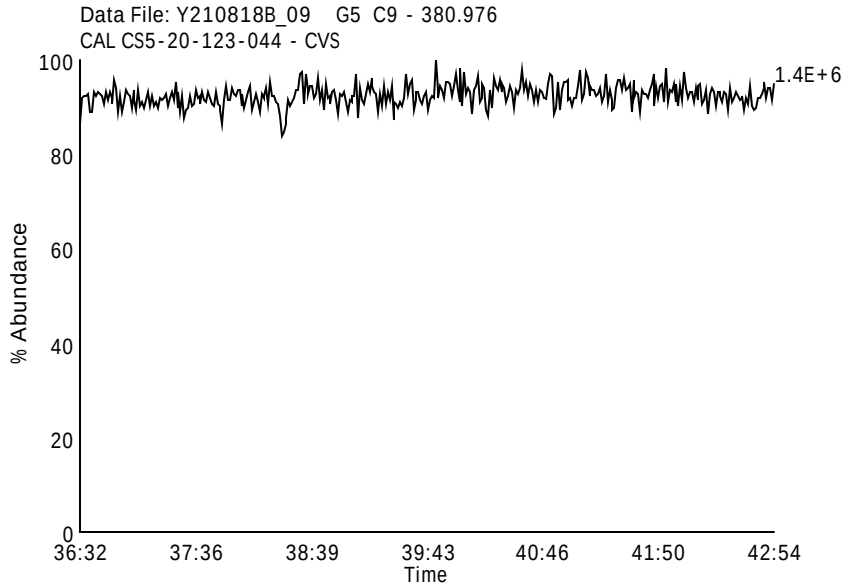


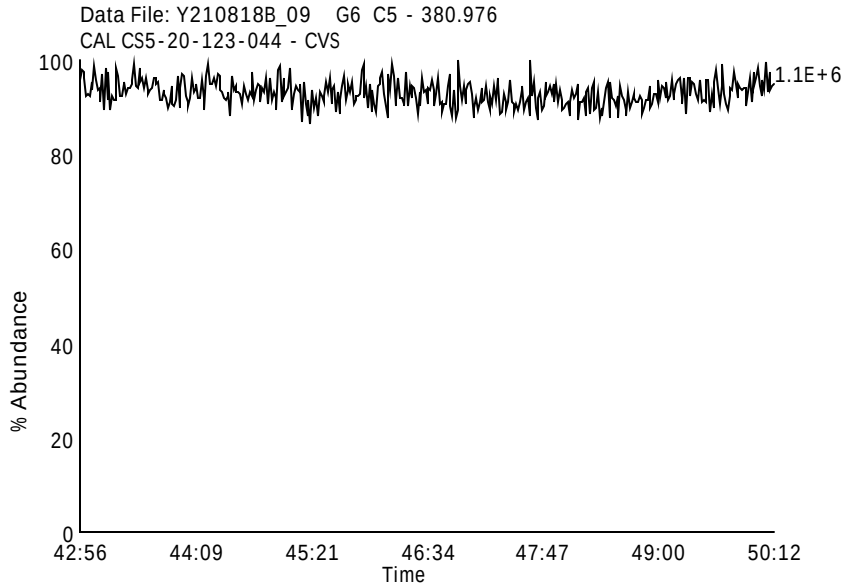


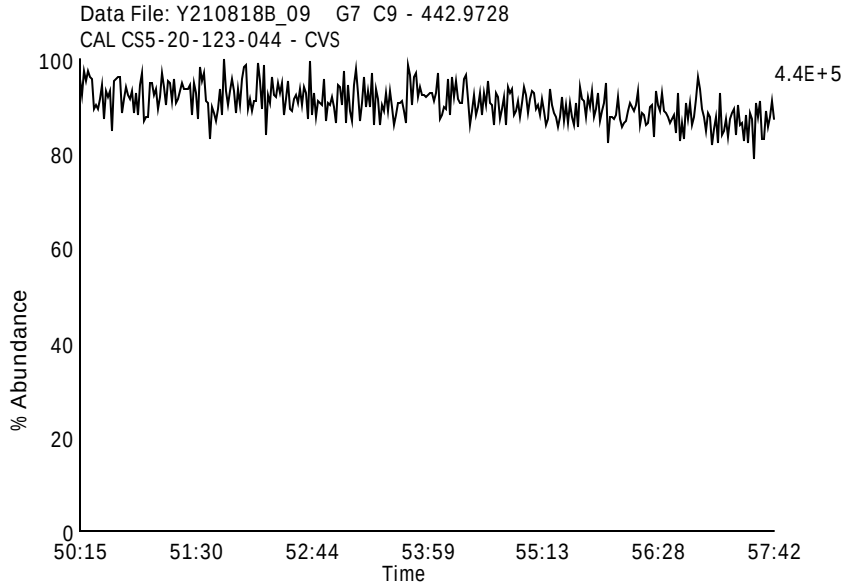
Group 5 - 7 Lock mass

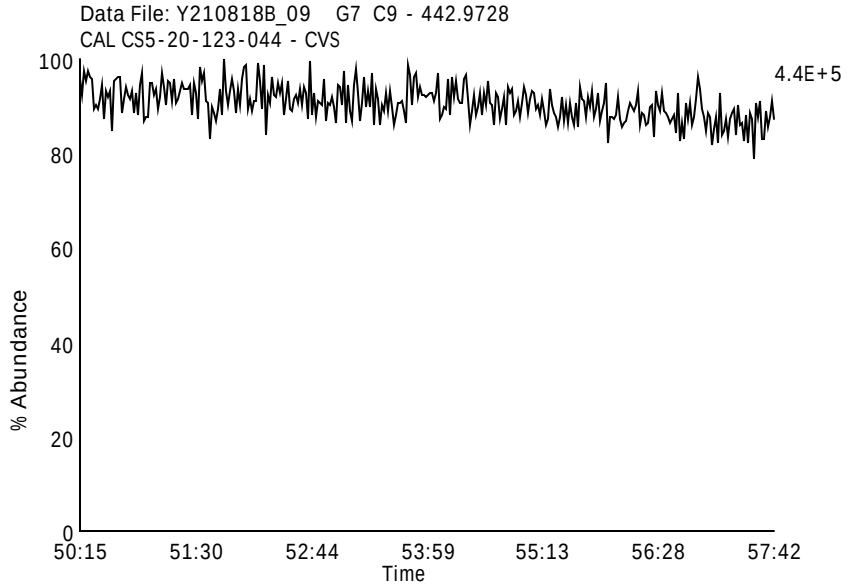
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)



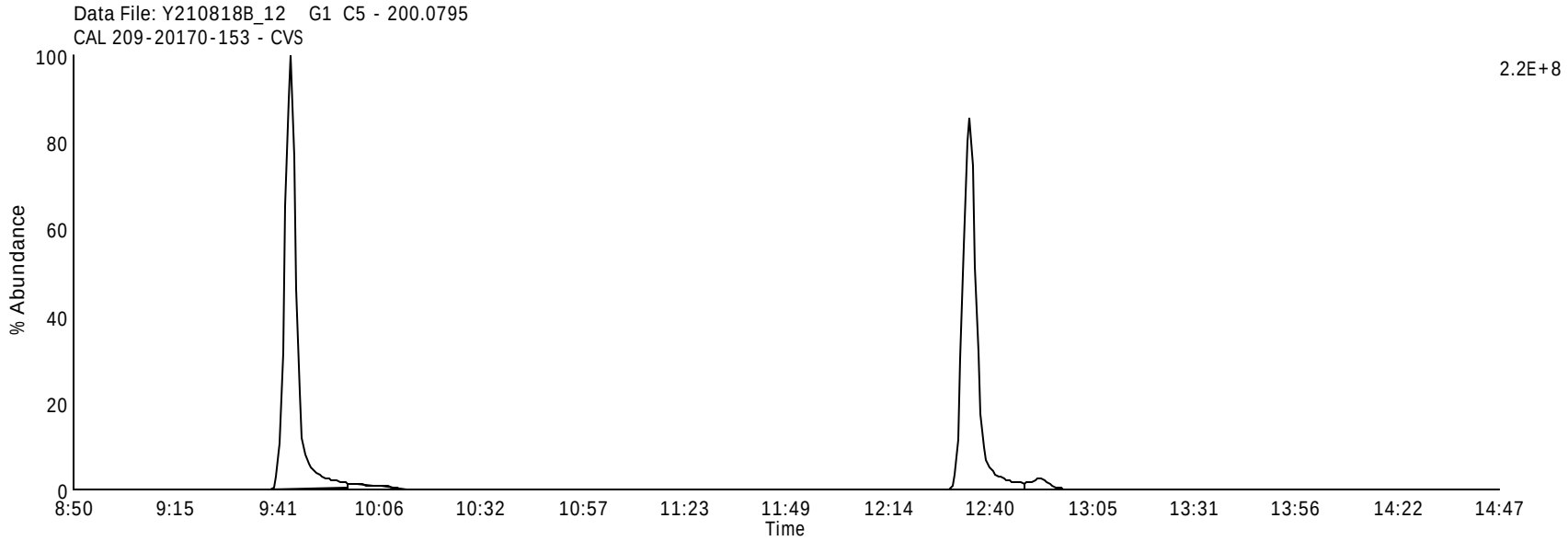


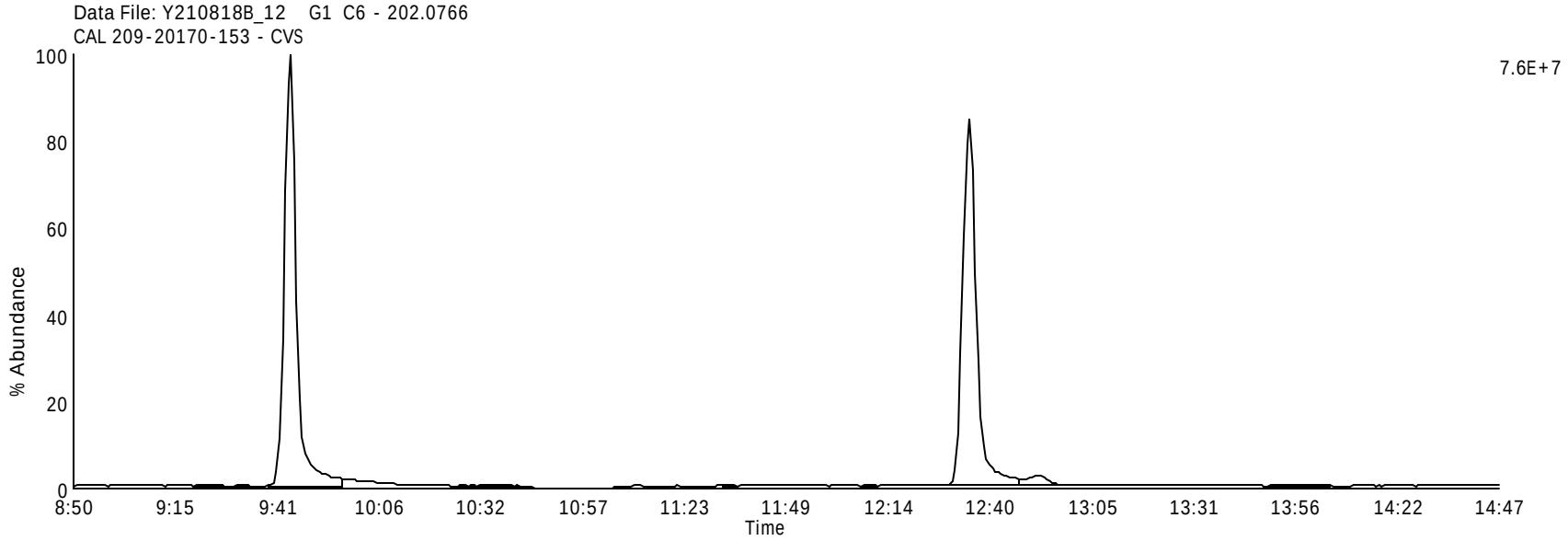




Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

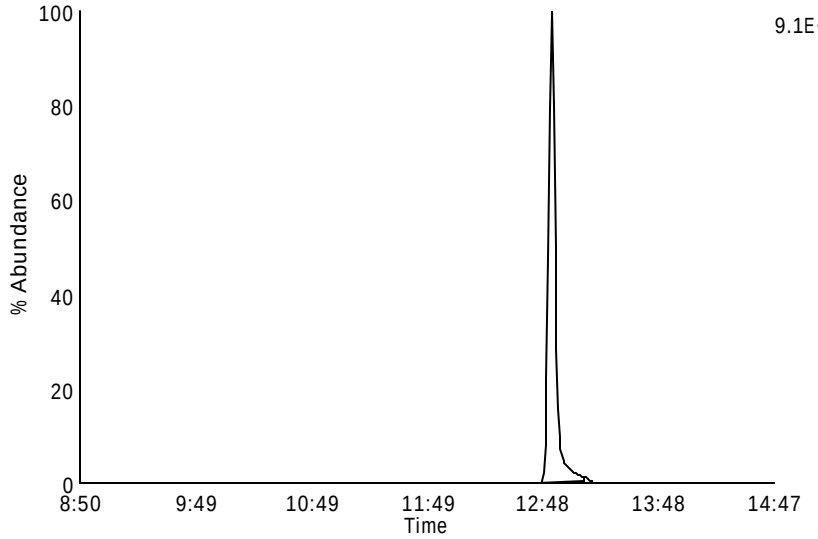




Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

Data File: Y210818B_12 G1 C9 - 234.0406
CAL 209-20170-153 - CVS



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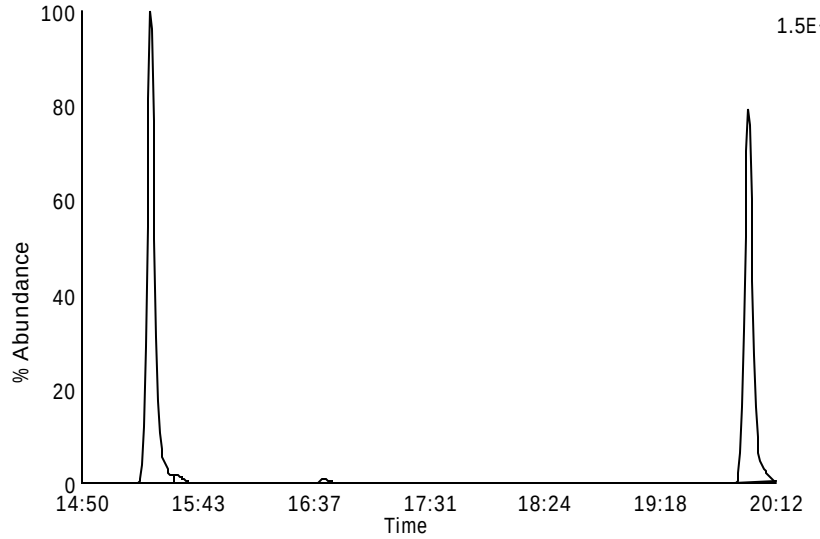
CAL 209-20170-153 - CVS



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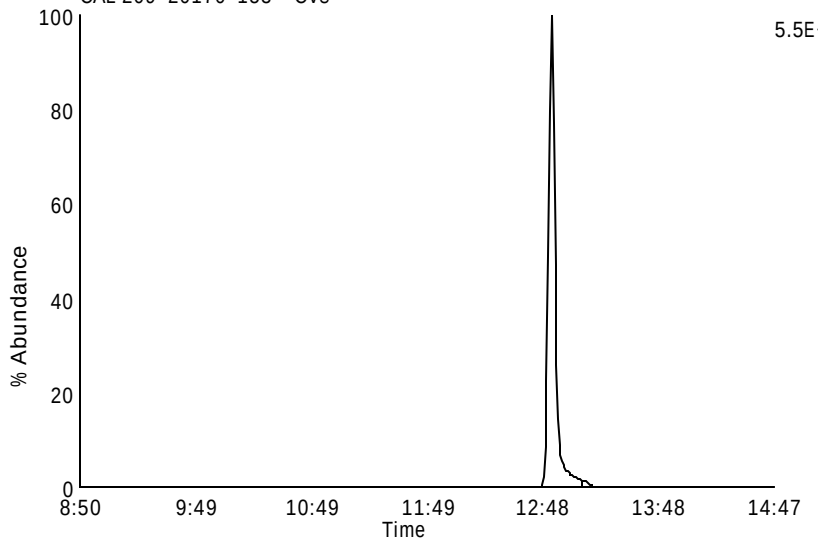
CAL 209-20170-153 - CVS



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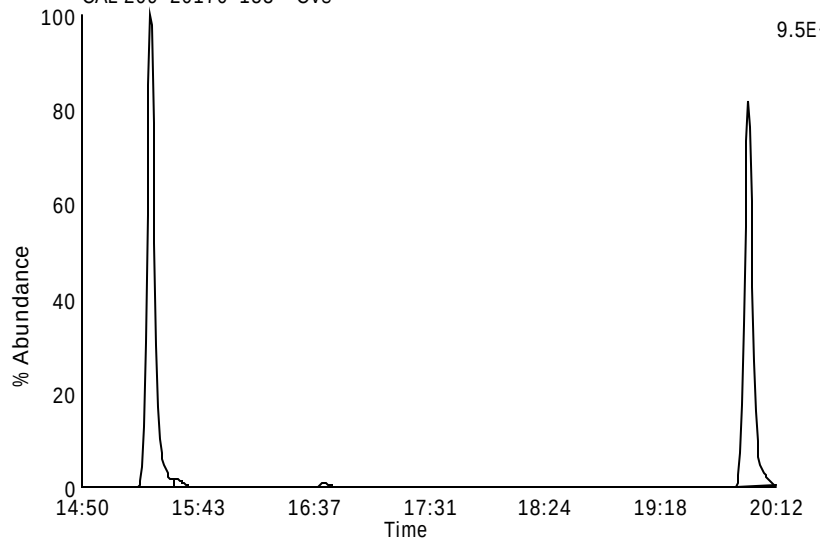
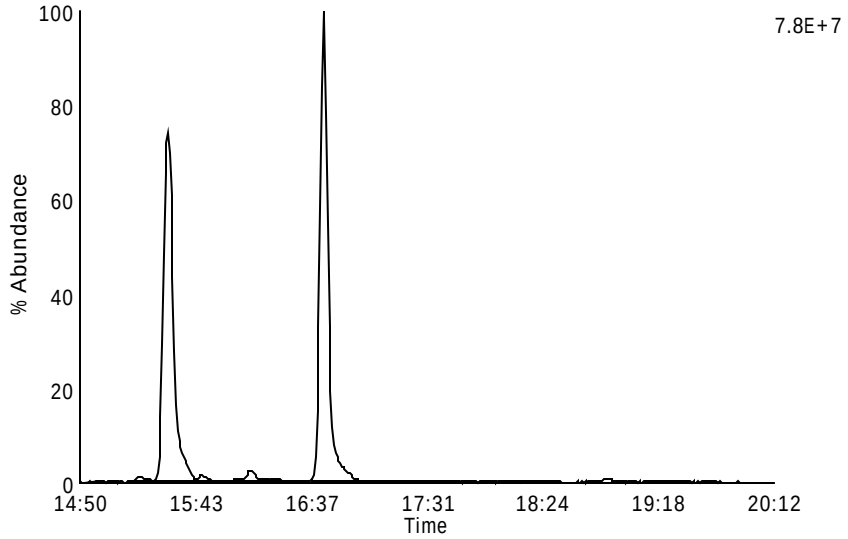
CAL 209-20170-153 - CVS



Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

Data File: Y210818B_12 G2 C9 - 268.0016
CAL 209-20170-153 - CVS



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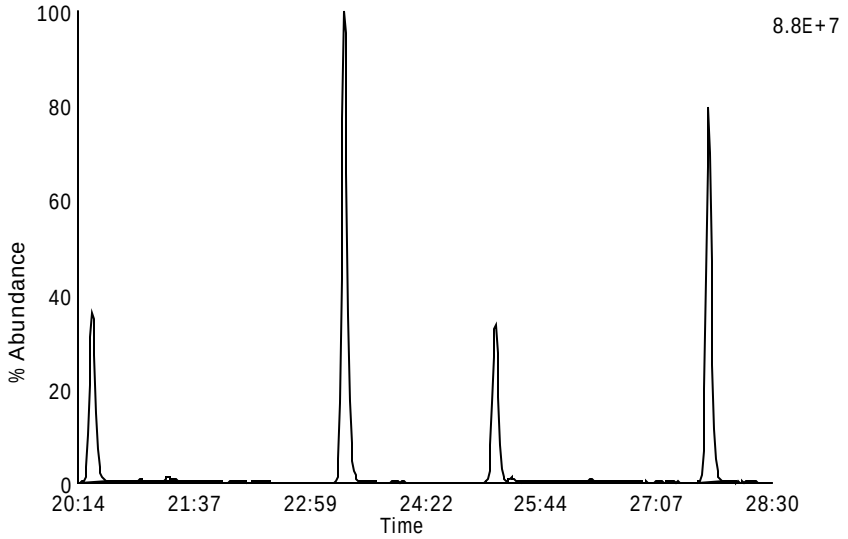
CAL 209-20170-153 - CVS



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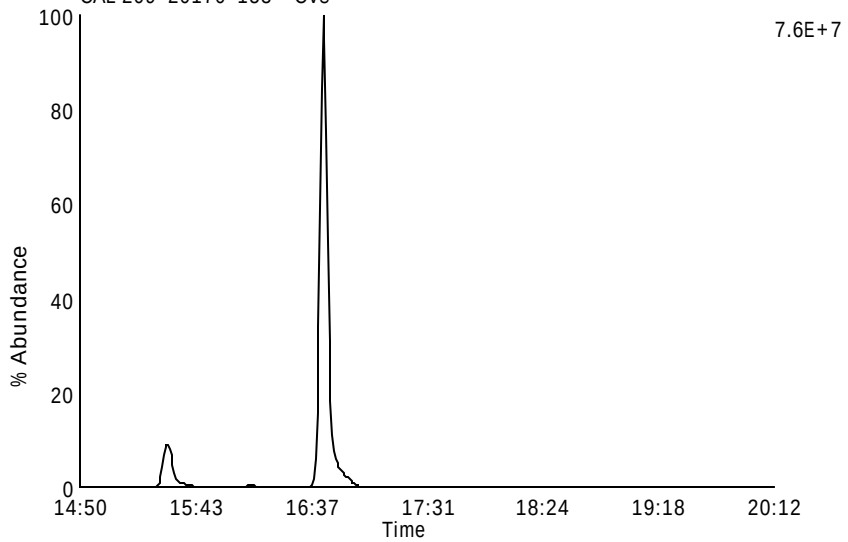
CAL 209-20170-153 - CVS



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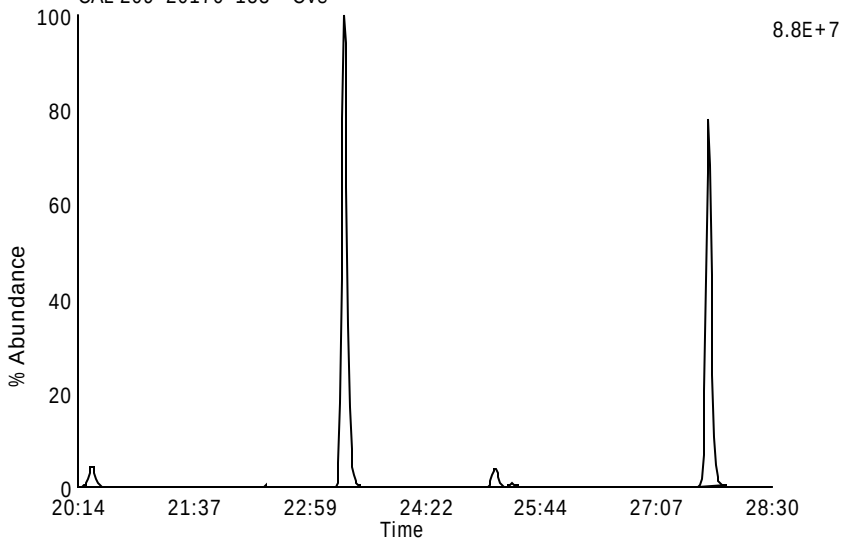
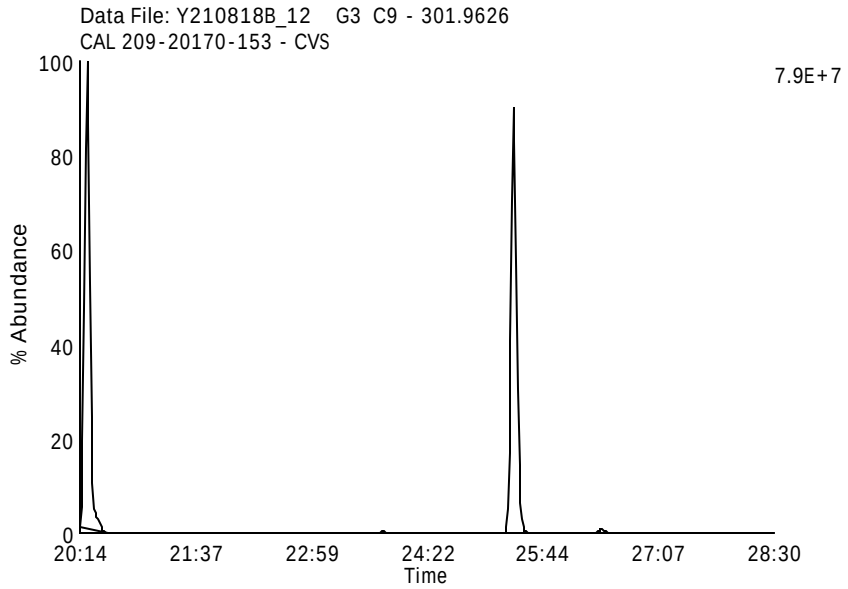
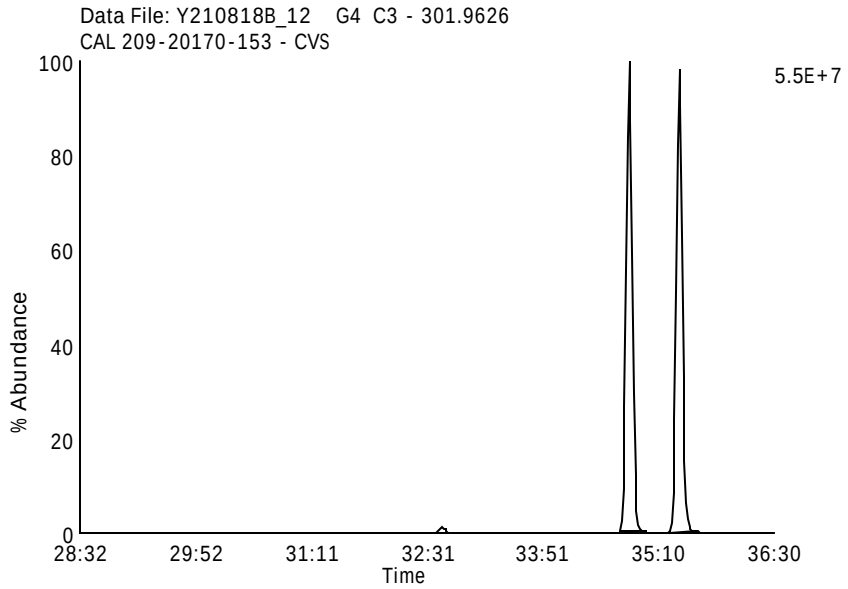
CAL 209-20170-153 - CVS

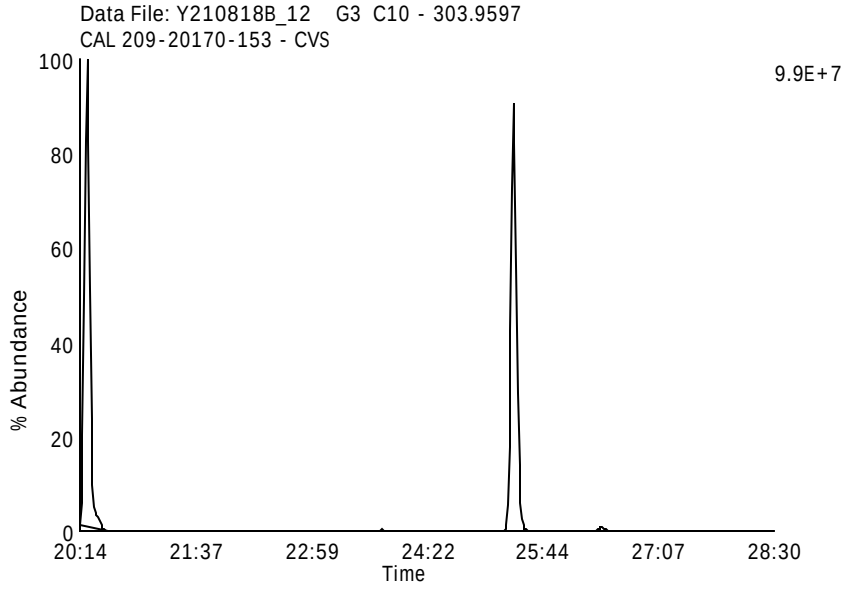


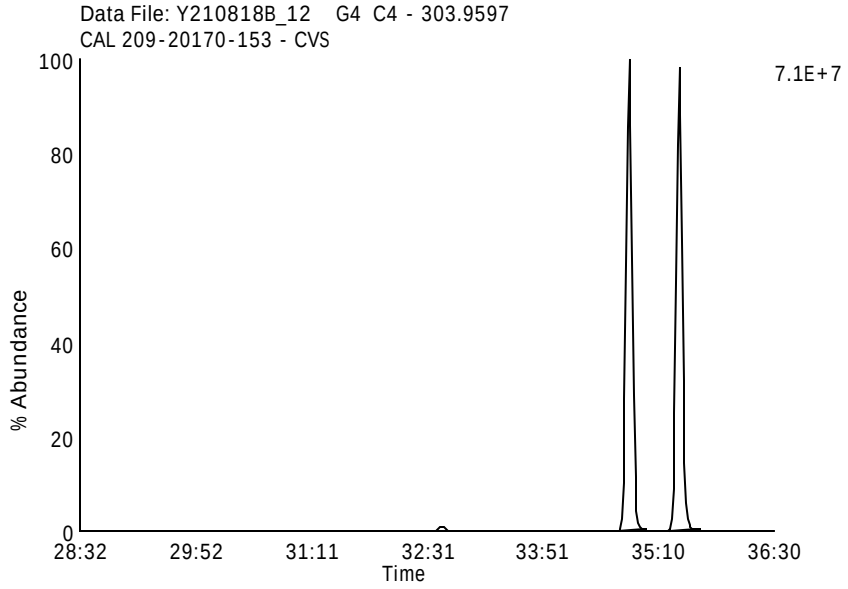
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



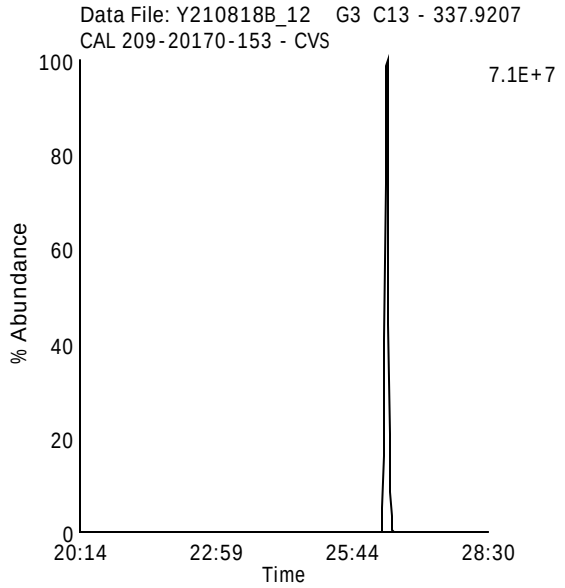


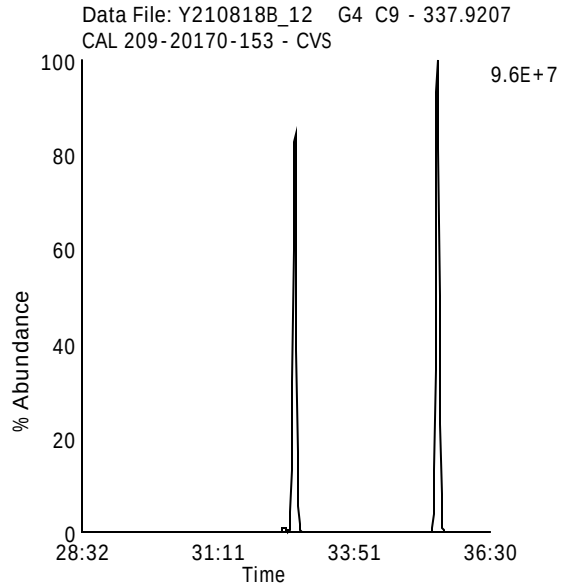


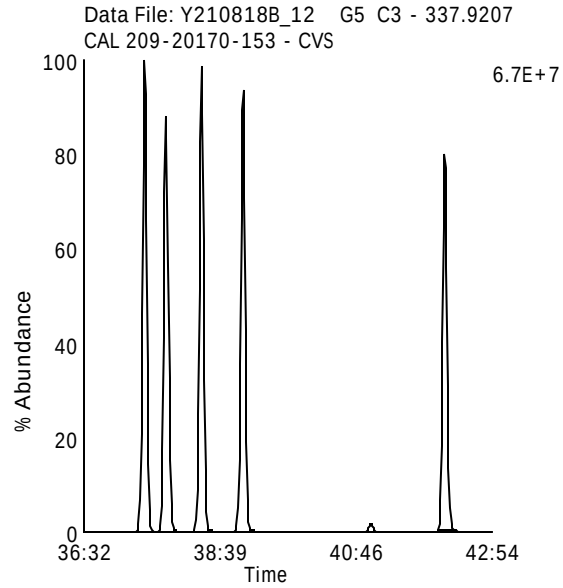


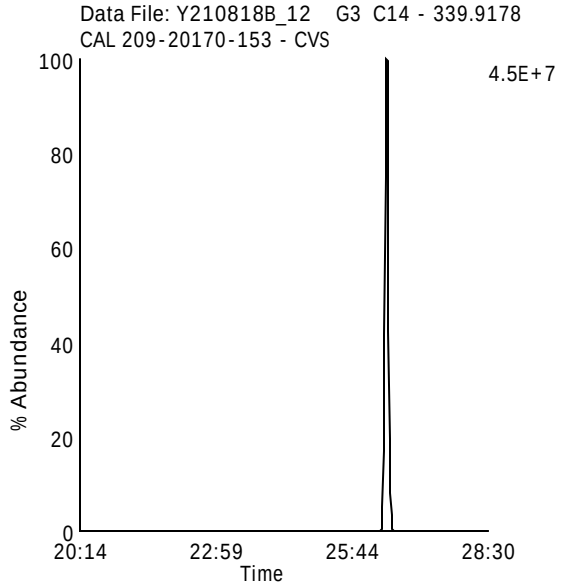
Labeled Penta Chlorinated Biphenyls

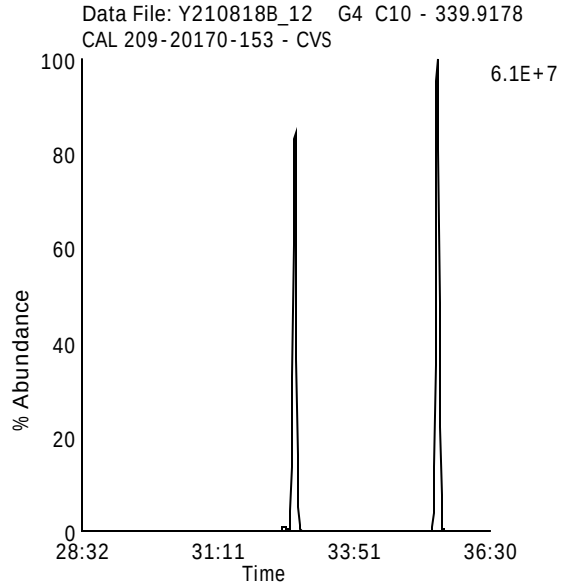
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

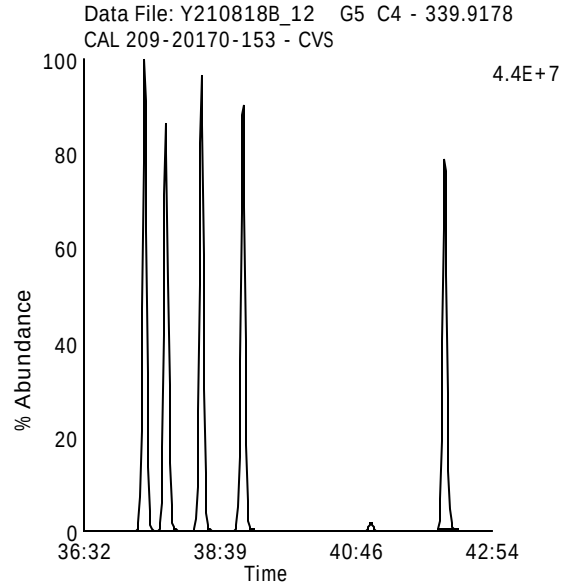








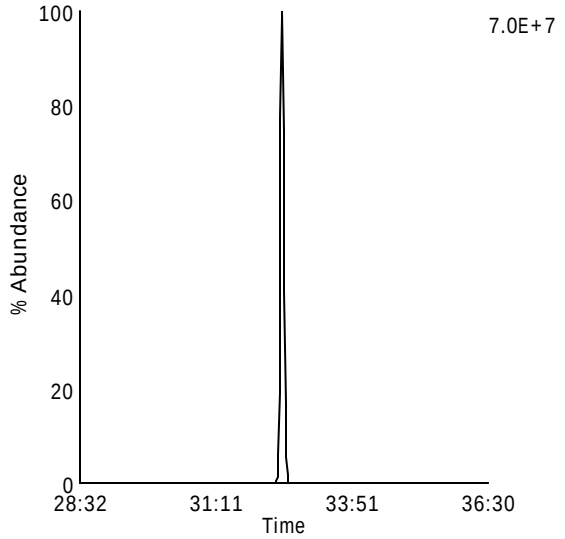




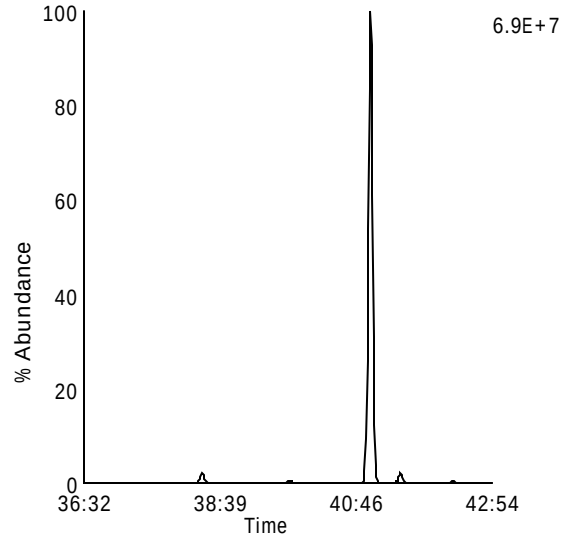
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

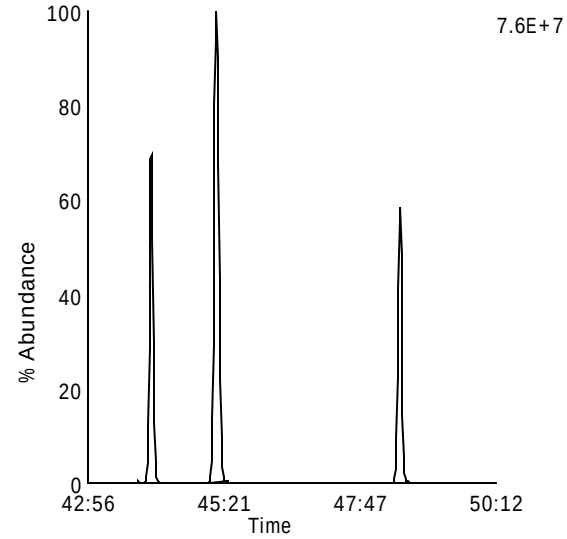
Data File: Y210818B_12 G4 C13 - 371.8817
CAL 209-20170-153 - CVS



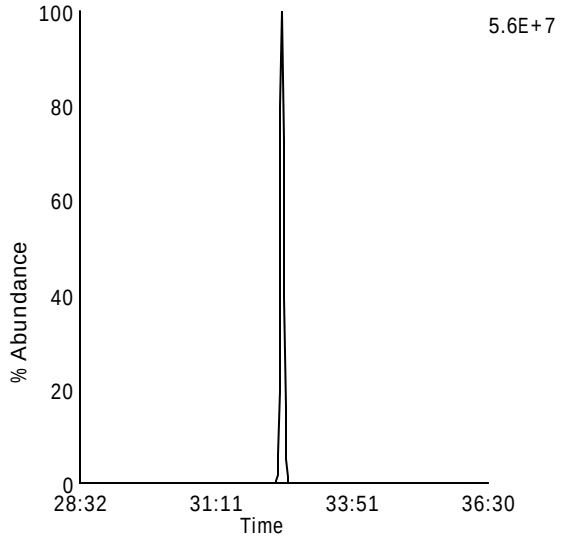
Data File: Y210818B_12 G5 C7 - 371.8817
CAL 209-20170-153 - CVS



Data File: Y210818B_12 G6 C3 - 371.8817
CAL 209-20170-153 - CVS



Data File: Y210818B_12 G4 C14 - 373.8788
CAL 209-20170-153 - CVS



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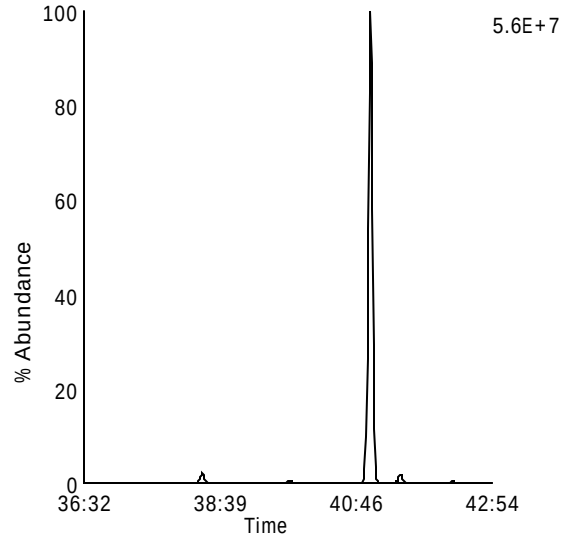
CAL 209-20170-153 - CVS



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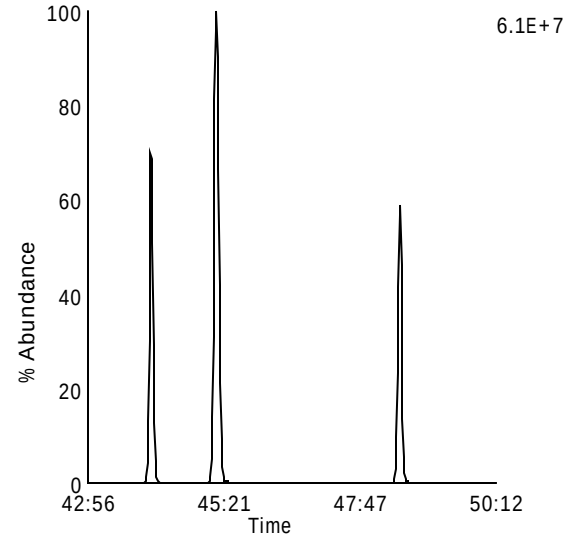
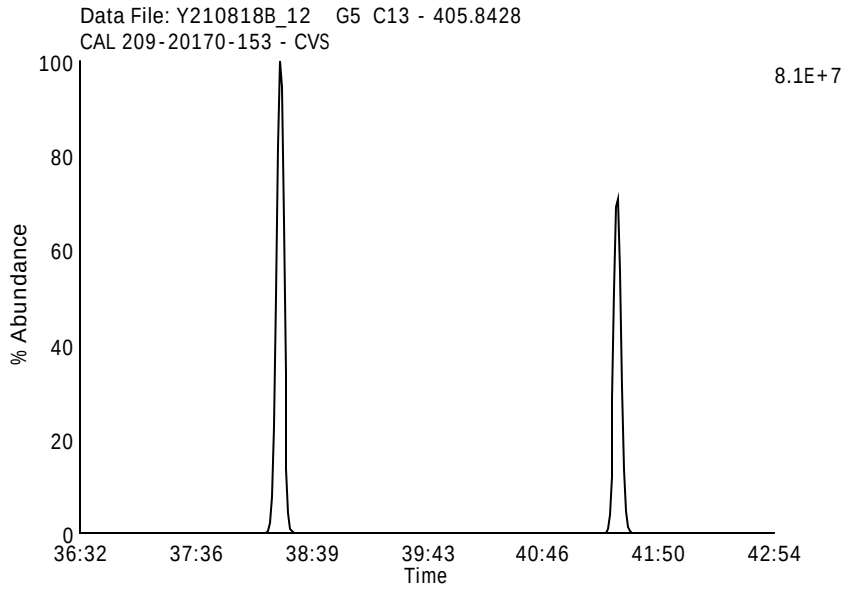
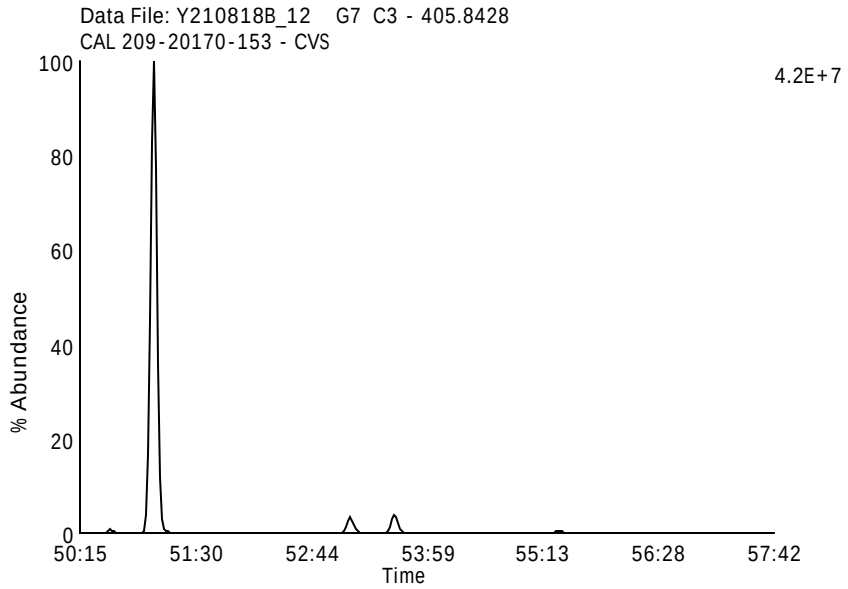
CAL 209-20170-153 - CVS

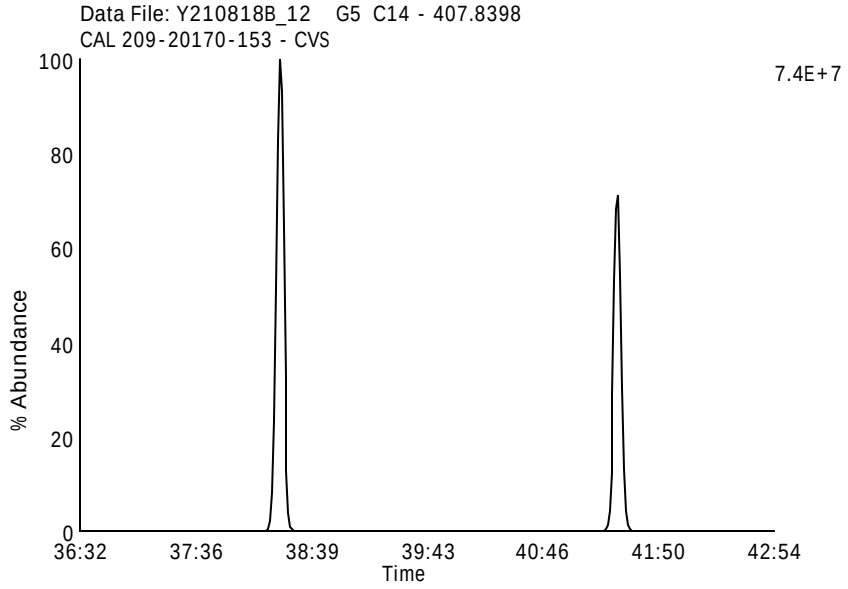


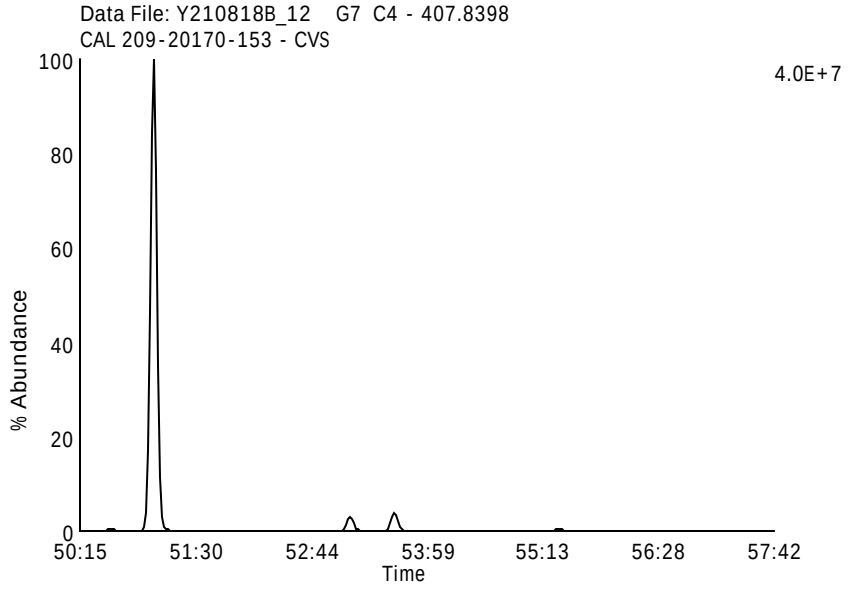
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



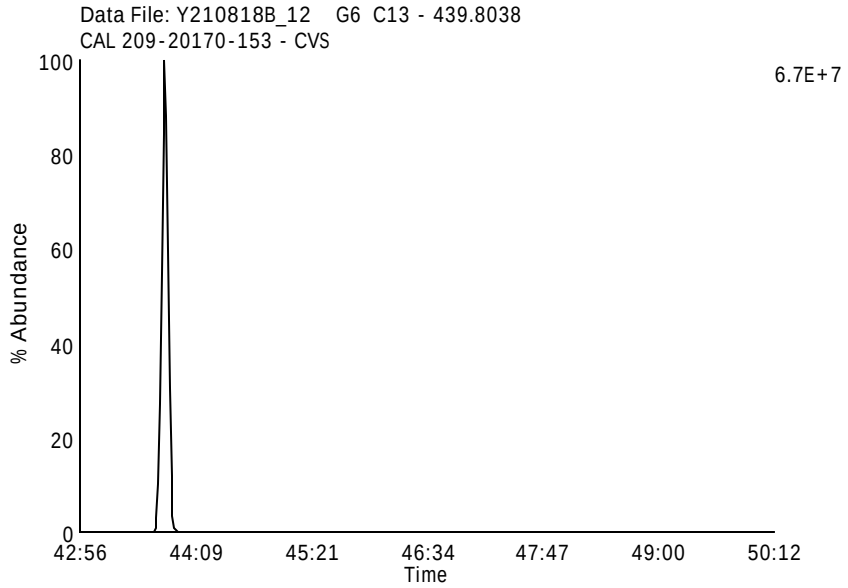


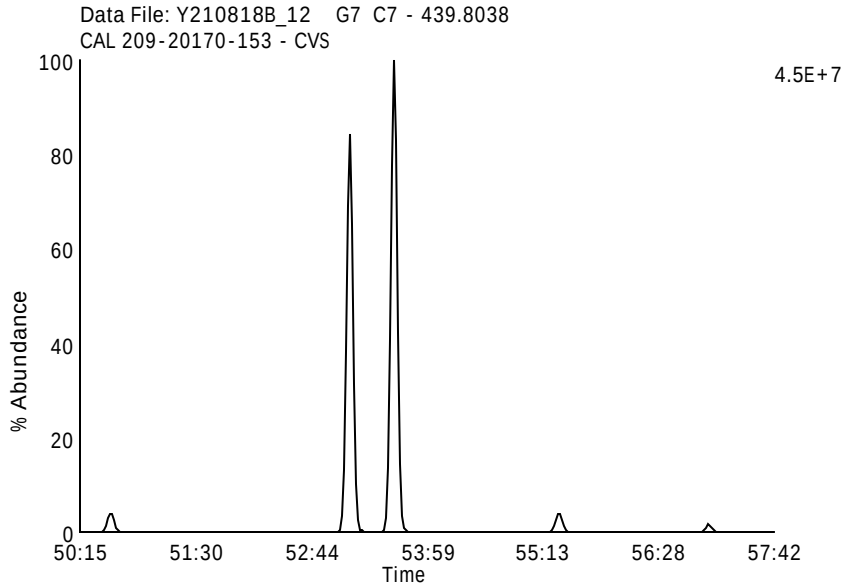


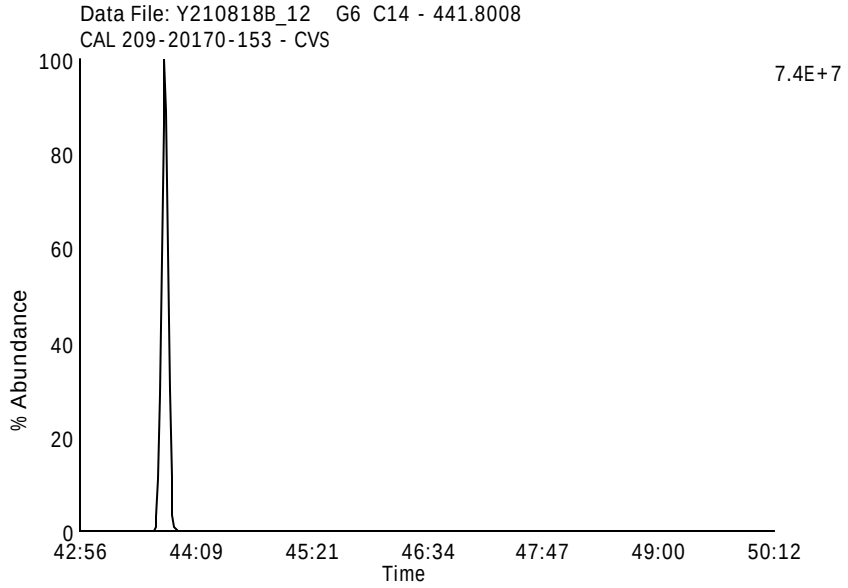


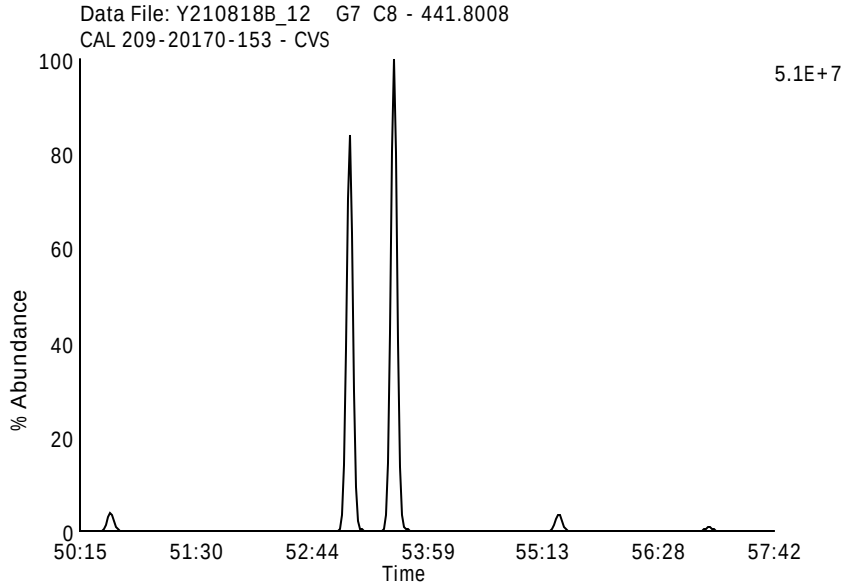
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



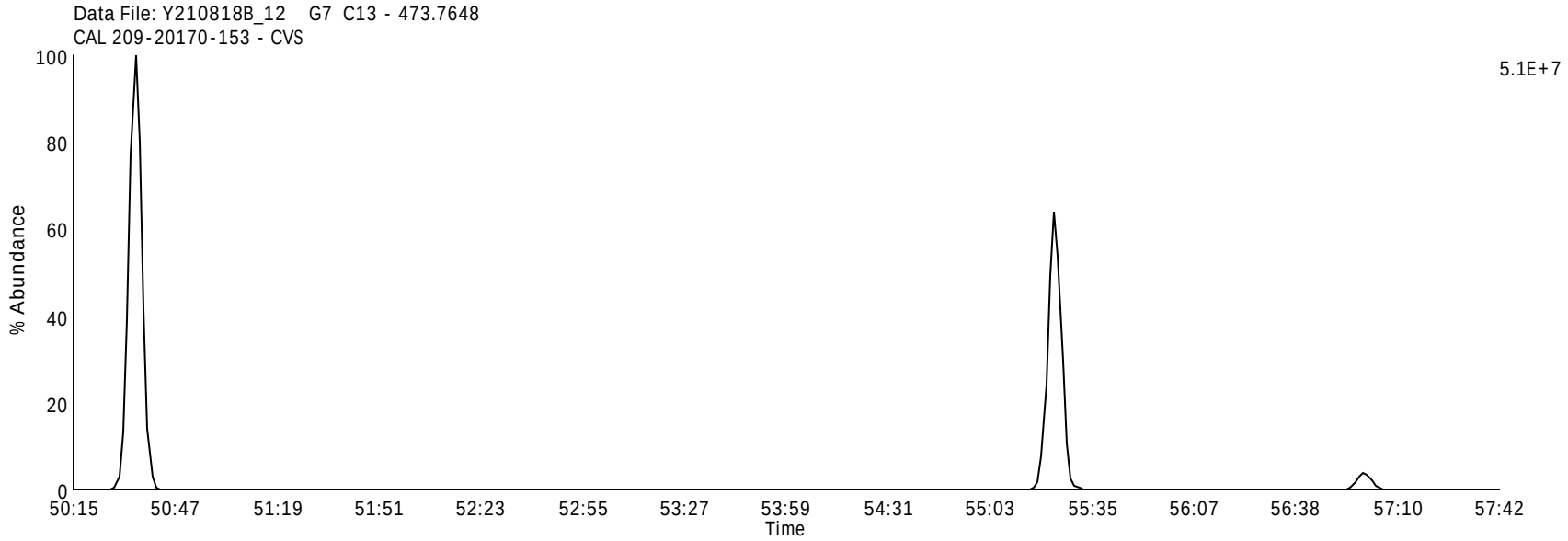


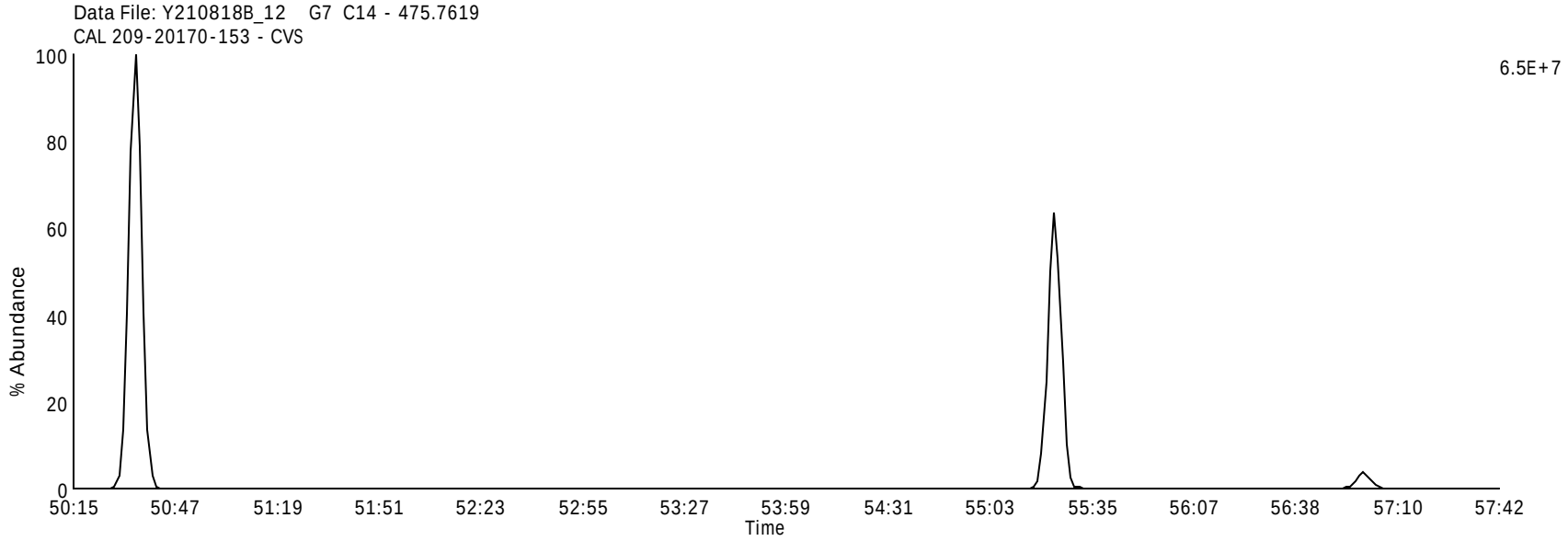




Labeled Nona Chlorinated Biphenyls

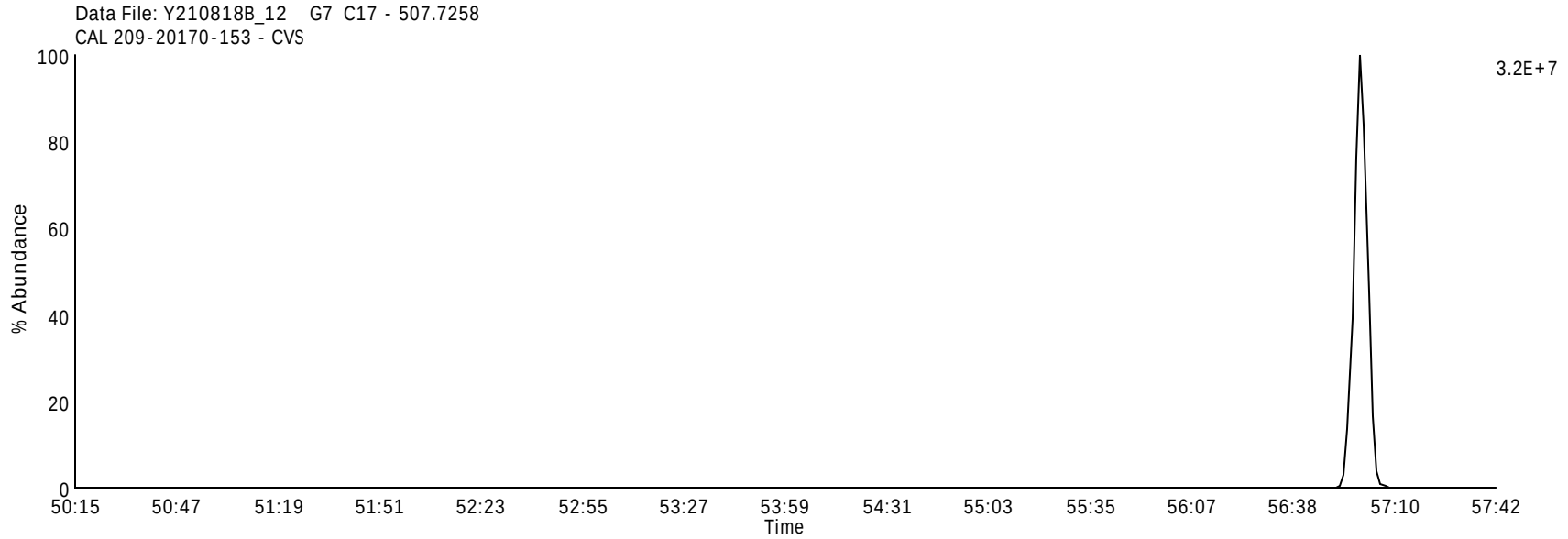
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

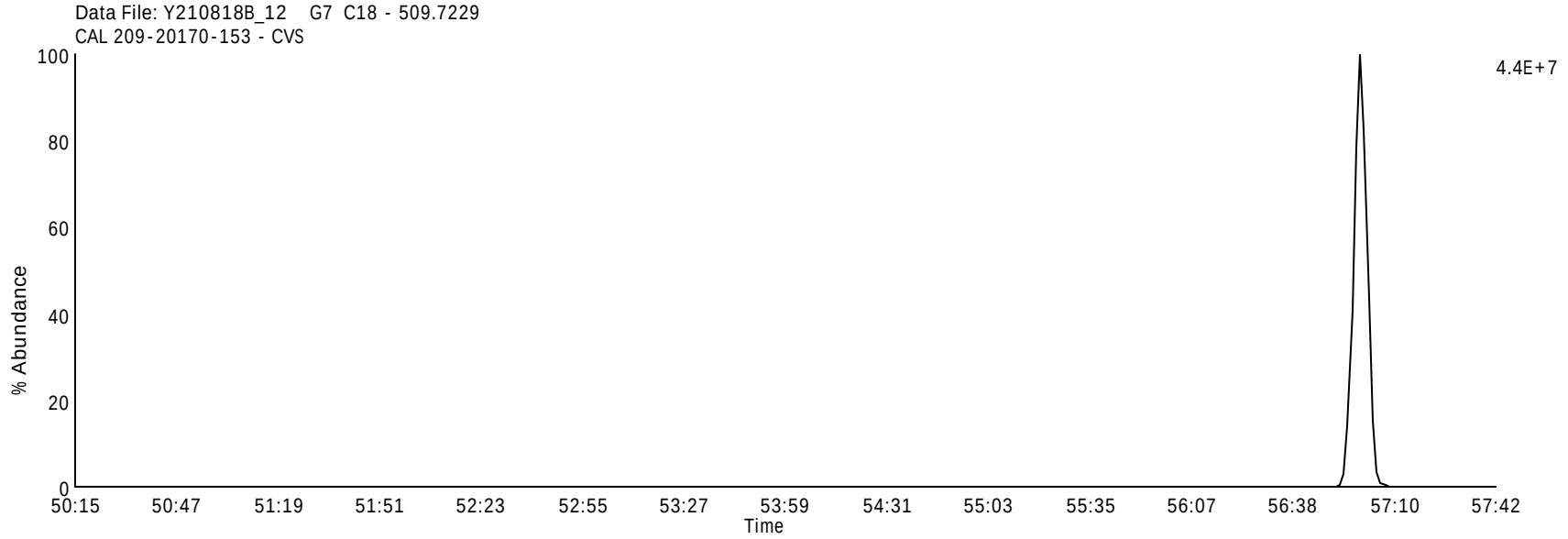




Labeled Deca Chlorinated Biphenyl

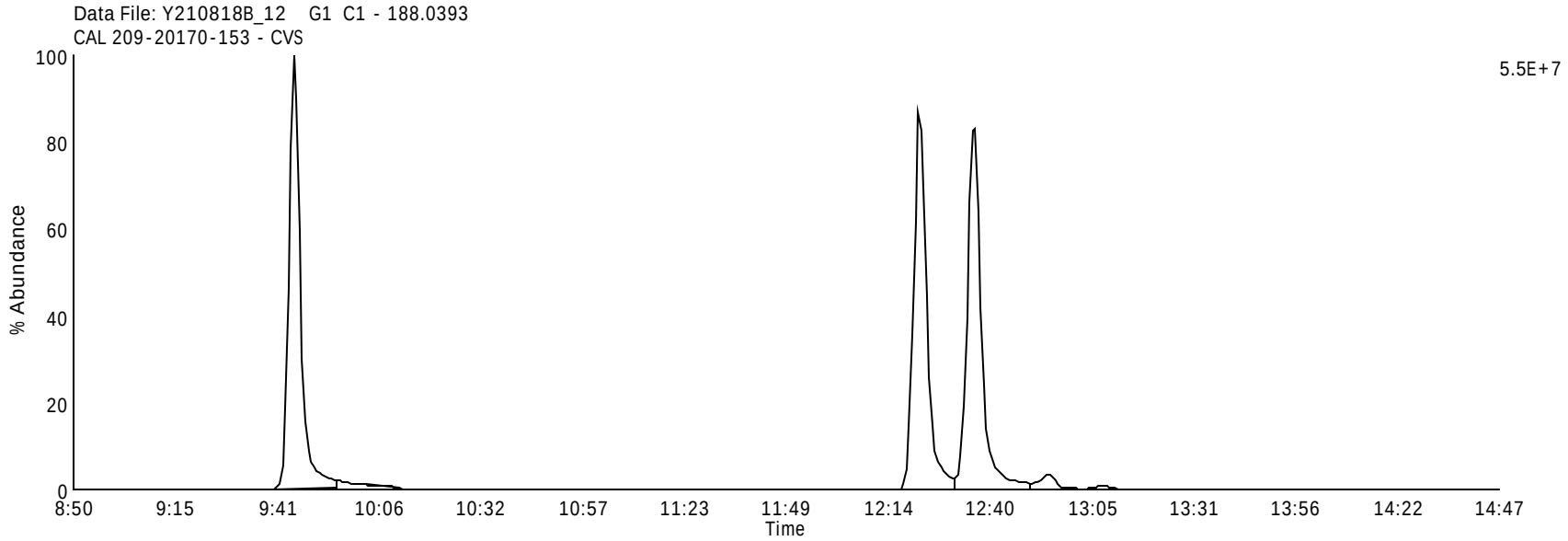
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

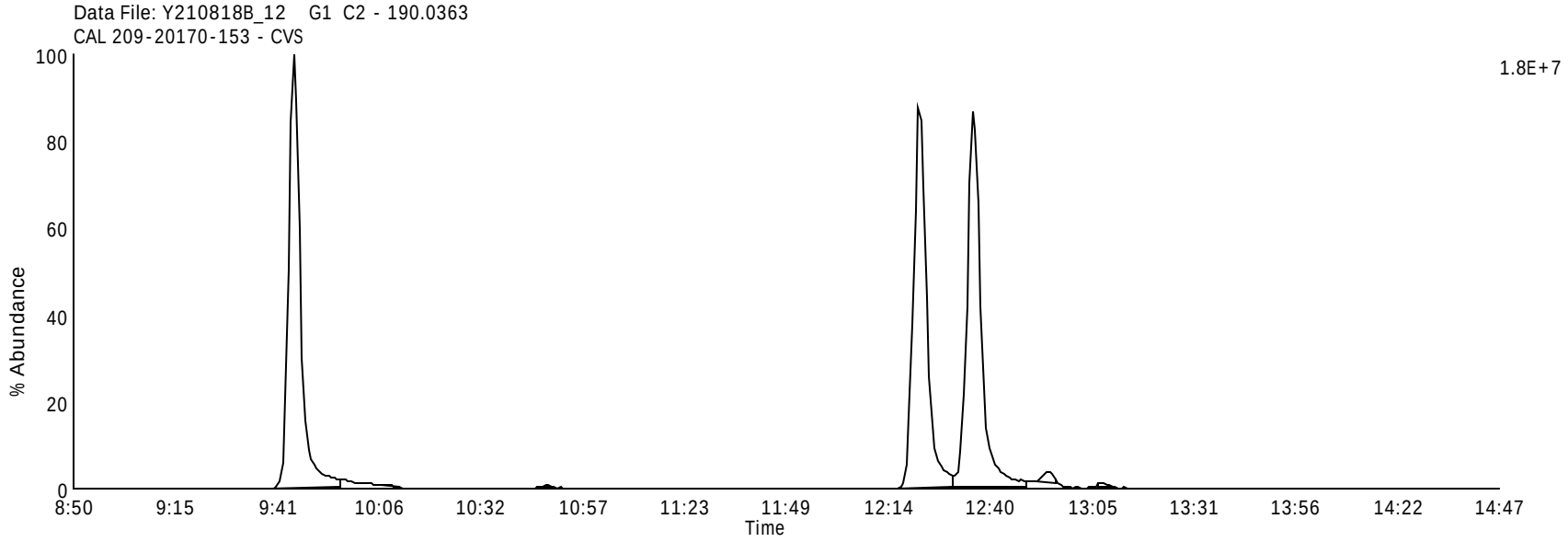




Mono Chlorinated Biphenyls

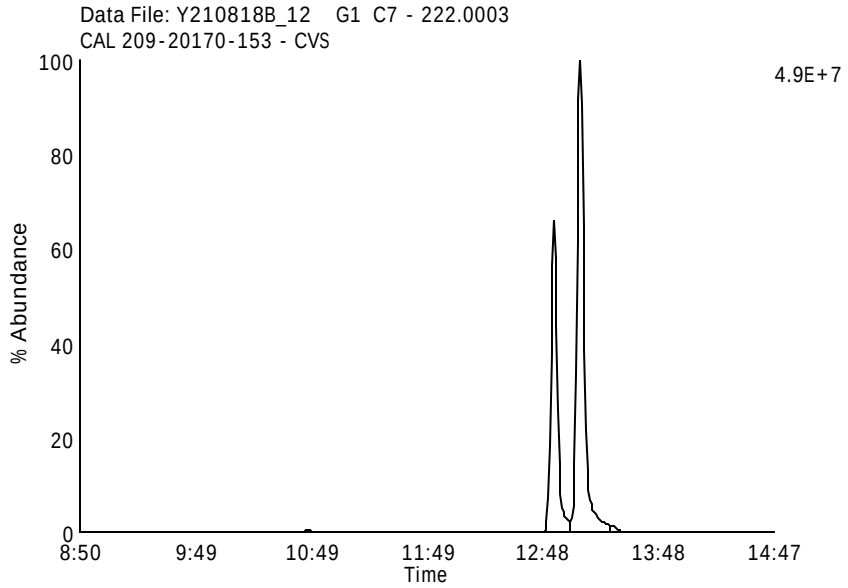
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

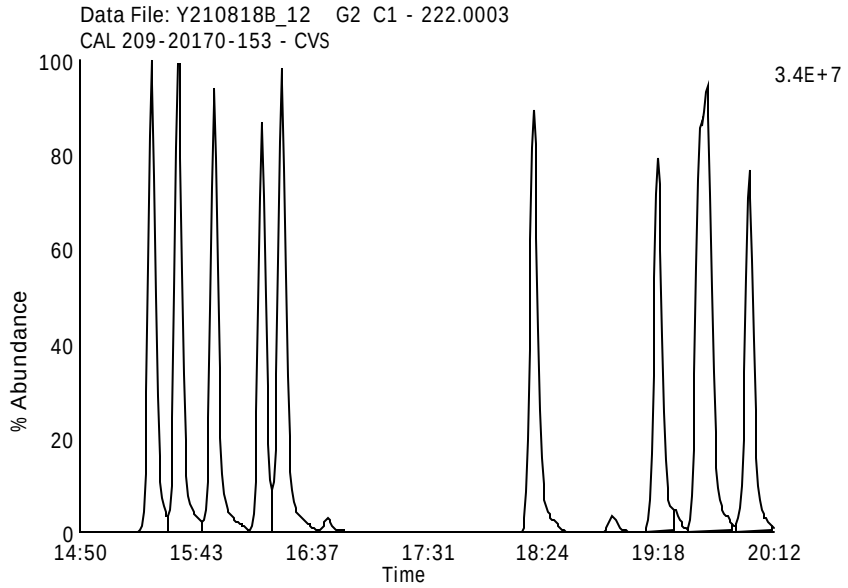


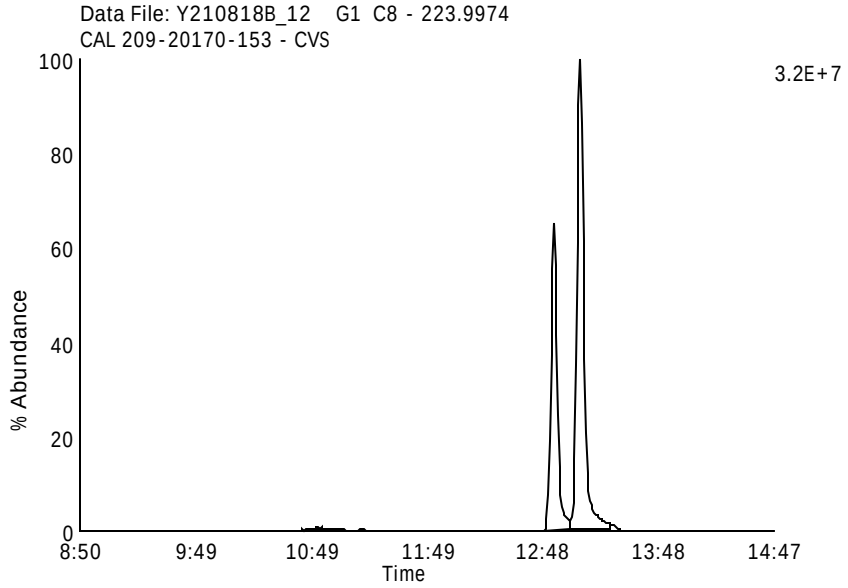


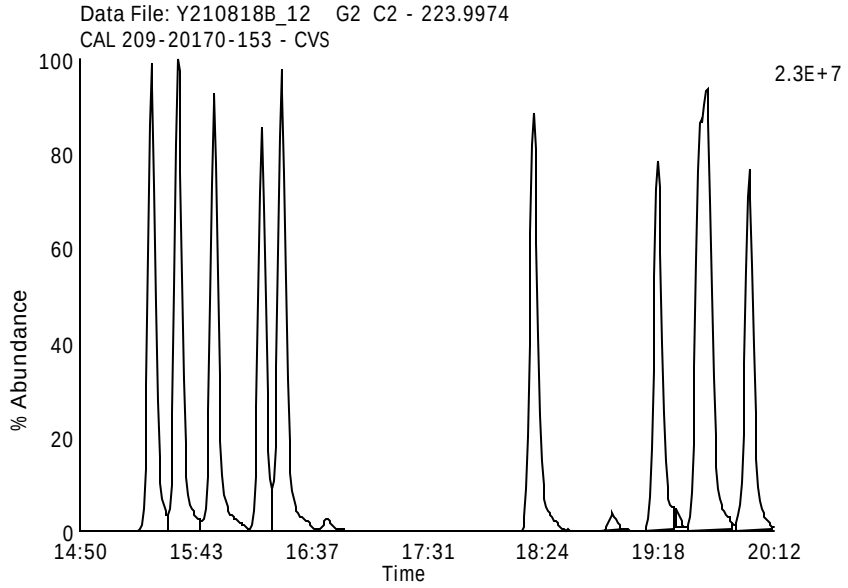
Di Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



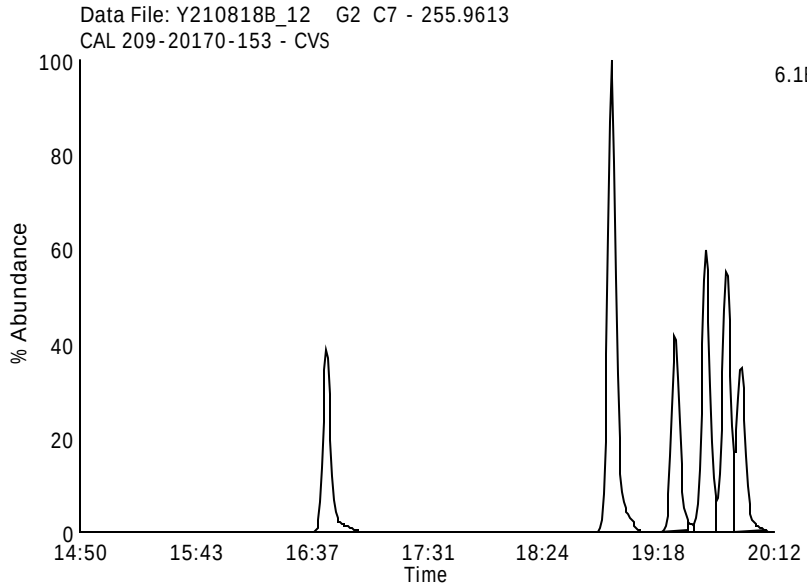


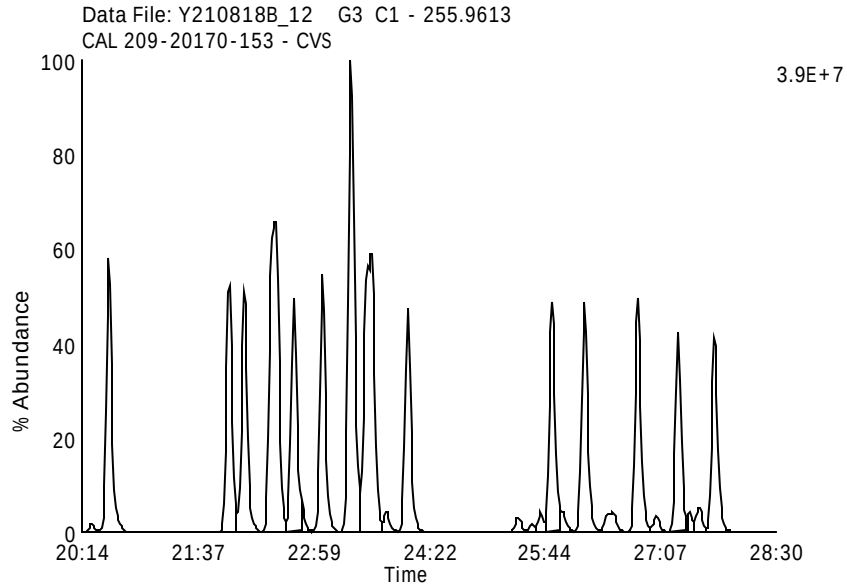


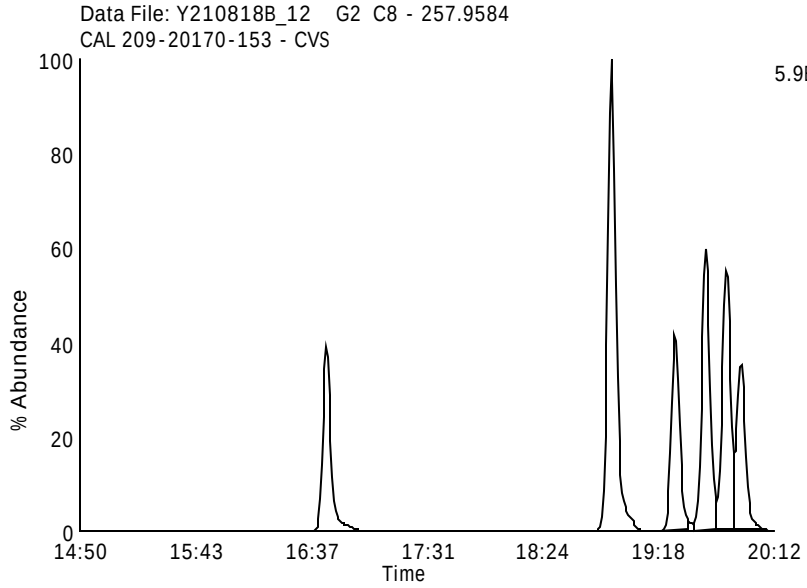


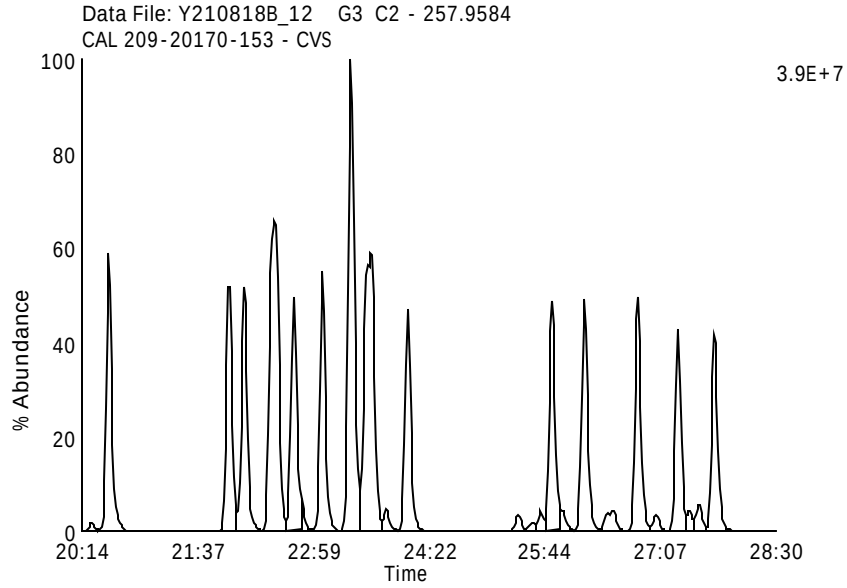
Tri Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





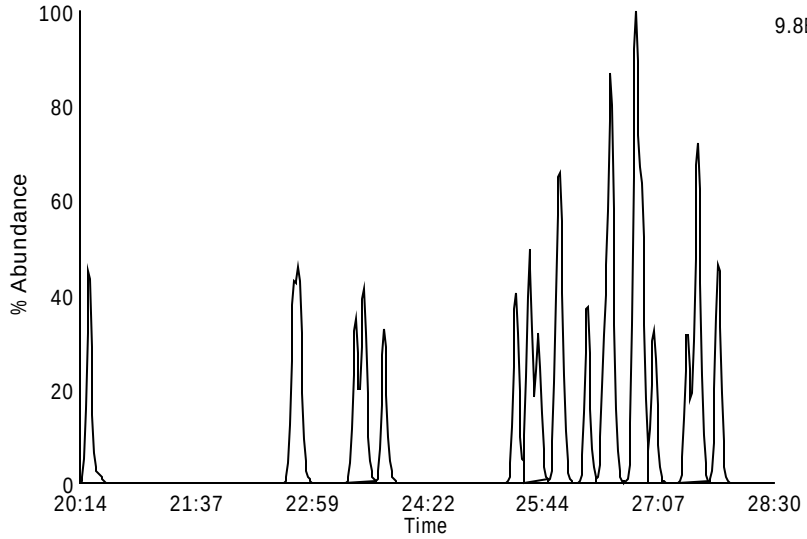




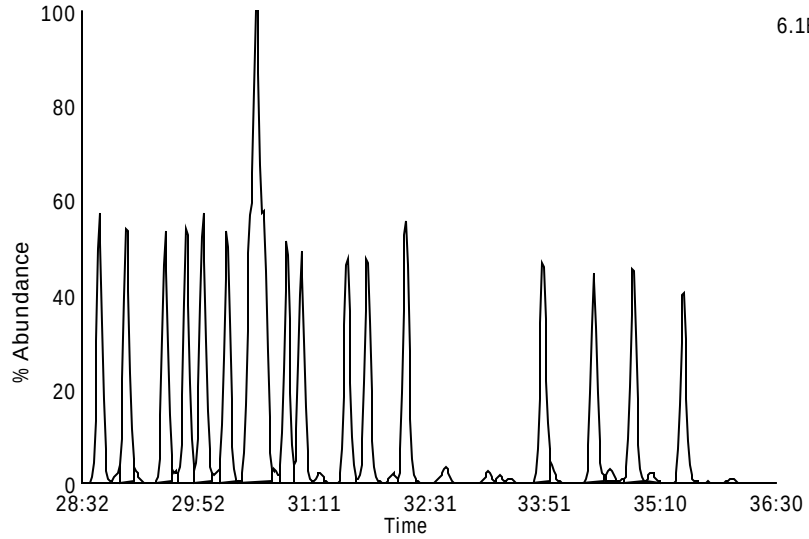
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

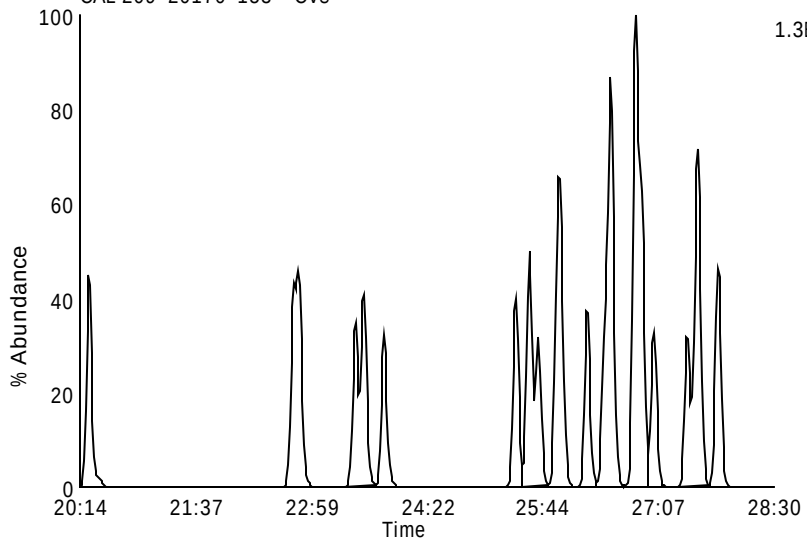
Data File: Y210818B_12 G3 C7 - 289.9224
CAL 209-20170-153 - CVS



Data File: Y210818B_12 G4 C1 - 289.9224
CAL 209-20170-153 - CVS



Data File: Y210818B_12 G3 C8 - 291.9194
CAL 209-20170-153 - CVS



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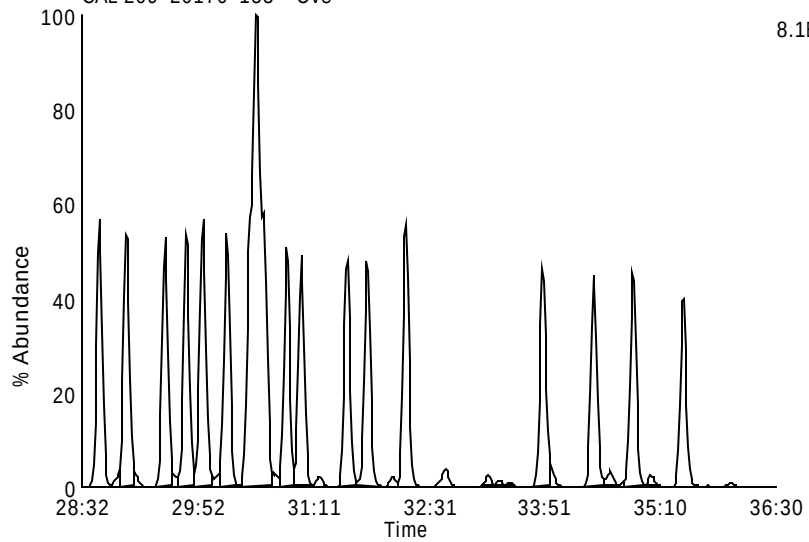
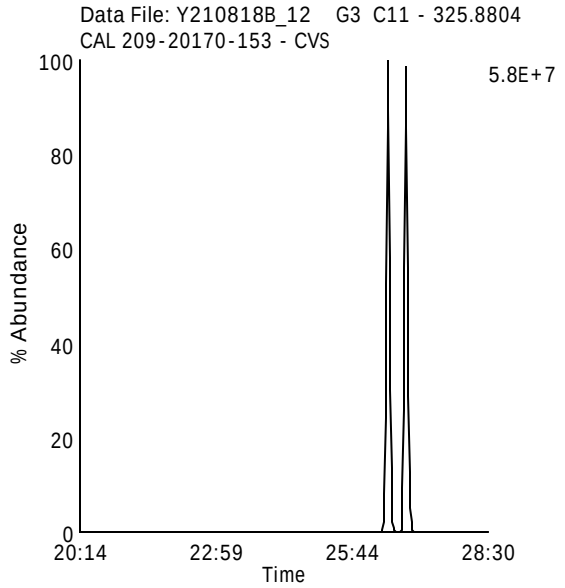
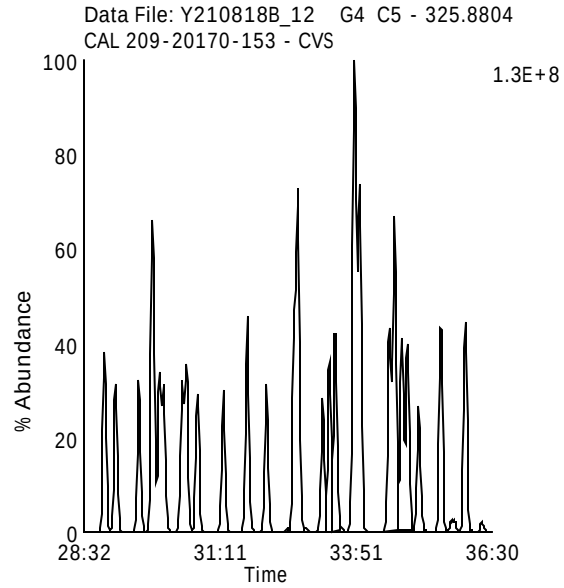
CAL 209-20170-153 - CVS

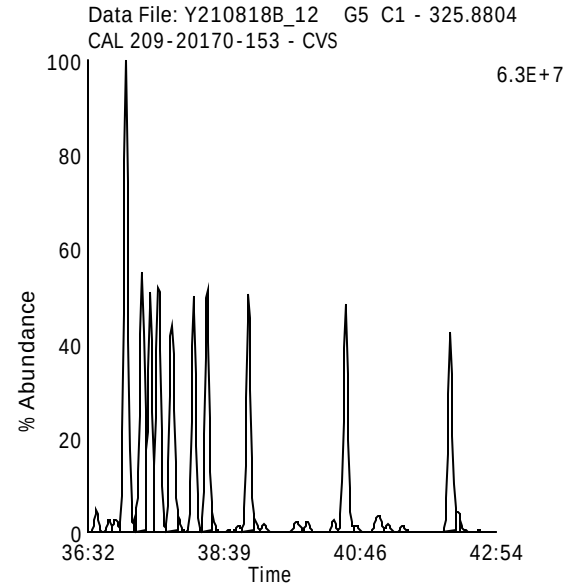


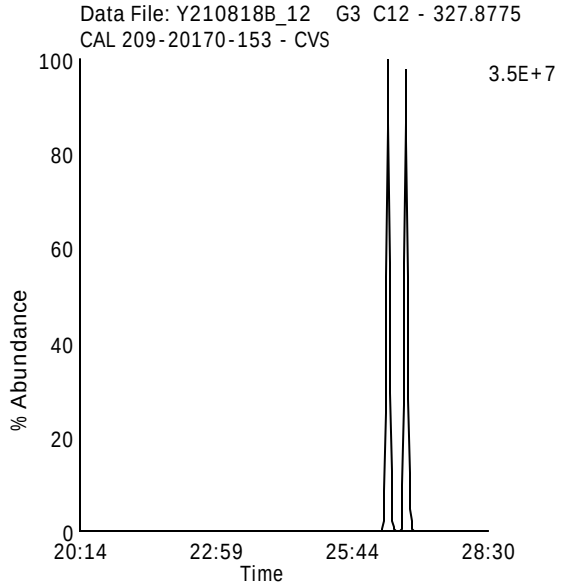
Penta Chlorinated Biphenyls

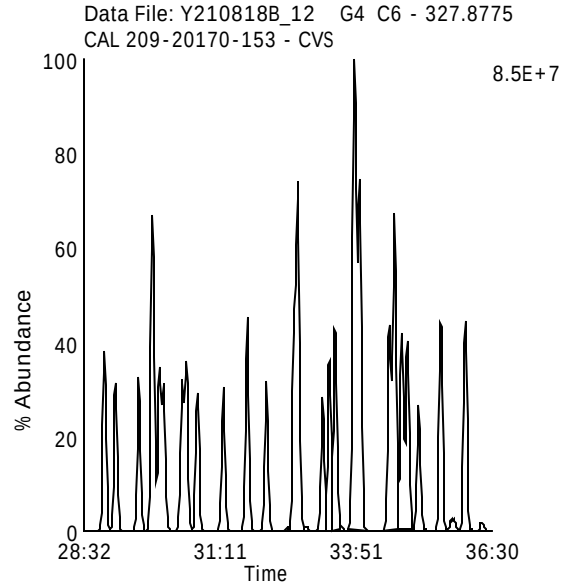
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

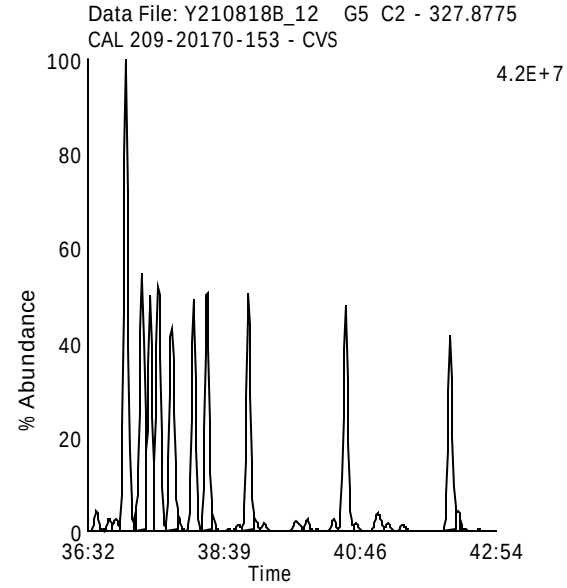






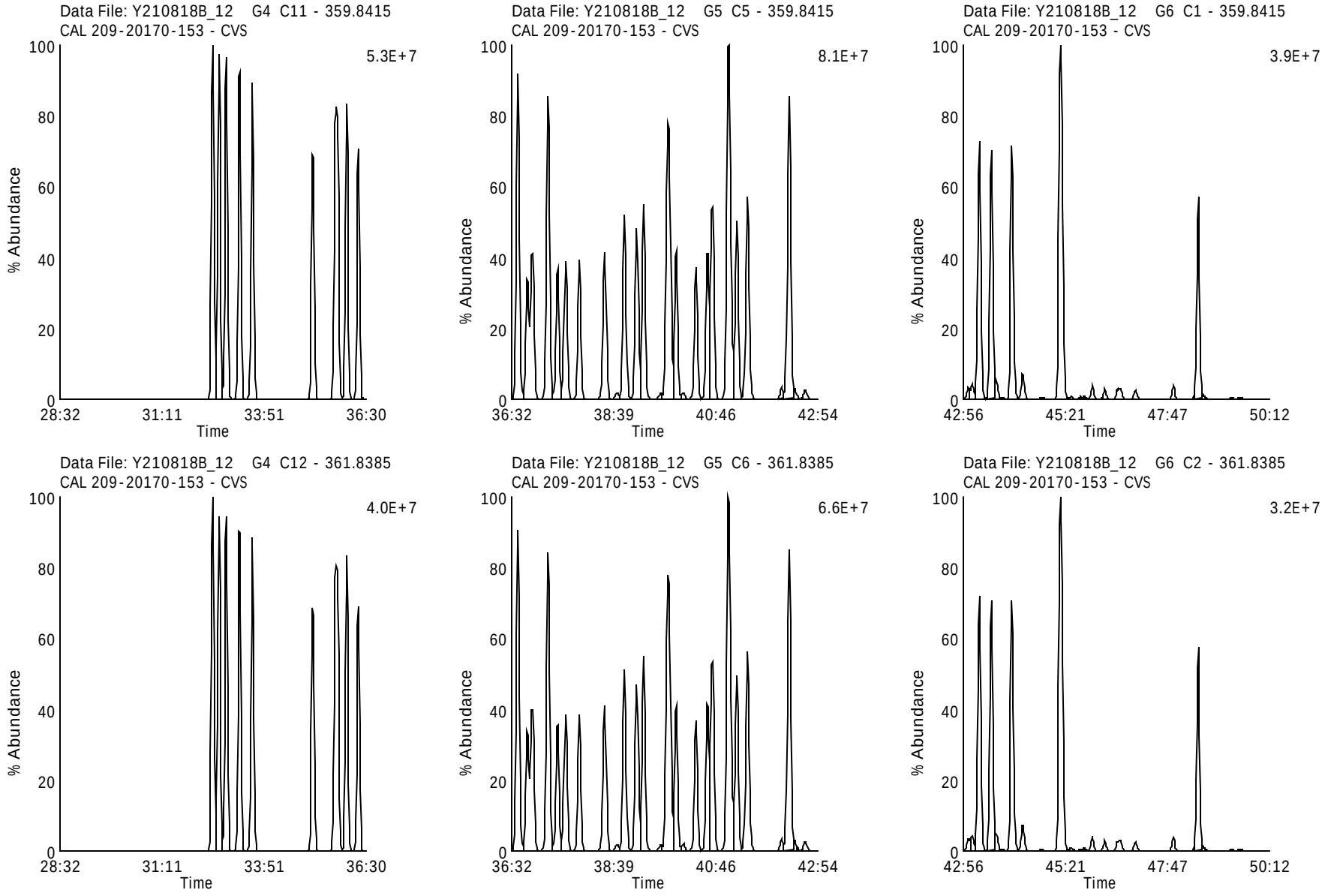






Hexa Chlorinated Biphenyls

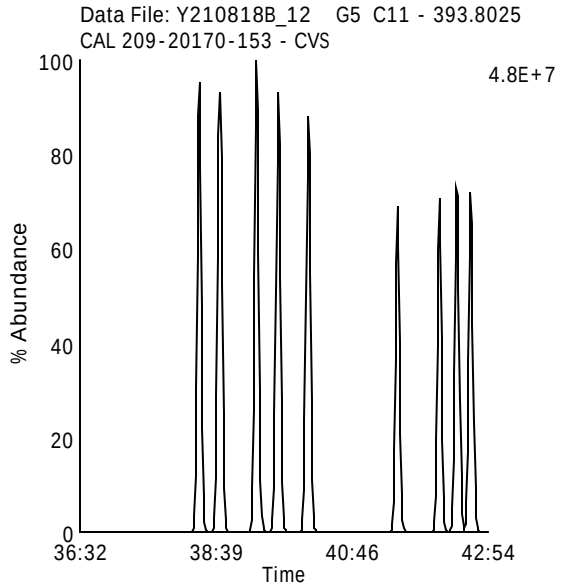
Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

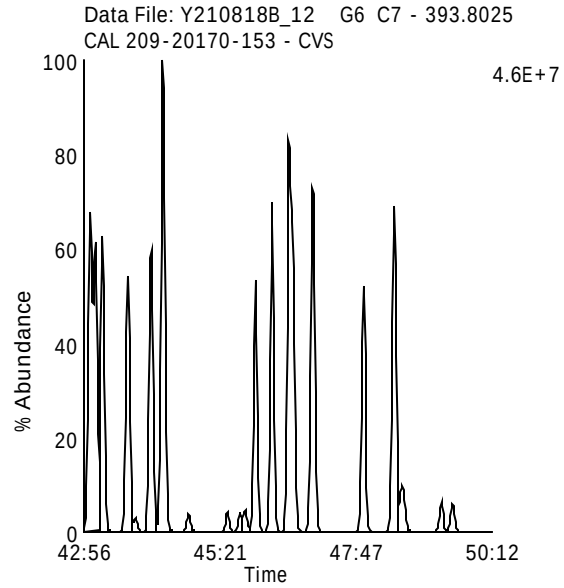


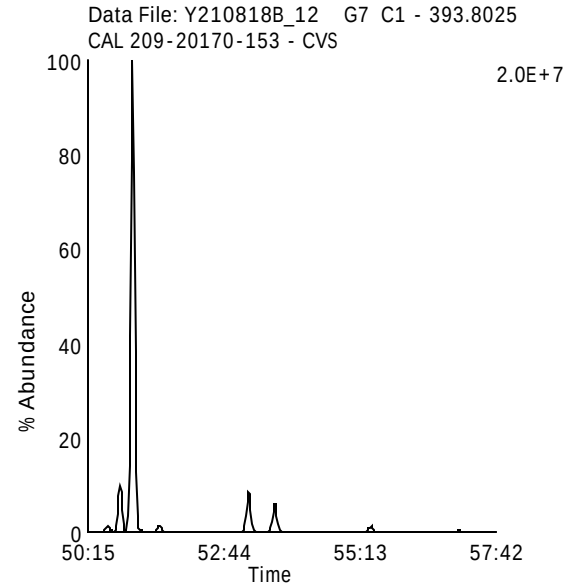
Hepta Chlorinated Biphenyls

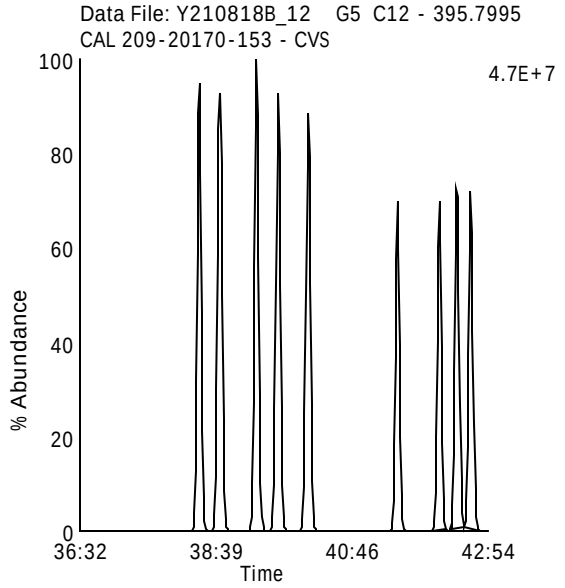
Data File Name: Y210818B_12
Date Acquired: 8/18/2021
Sample Description: CAL 209-20170-153 - CVS

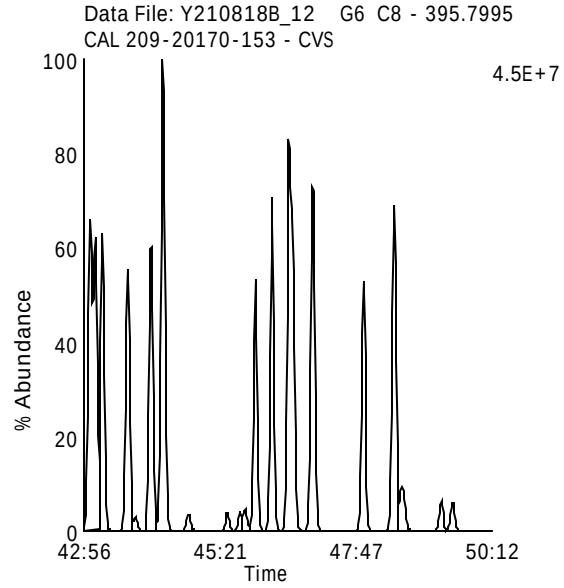
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

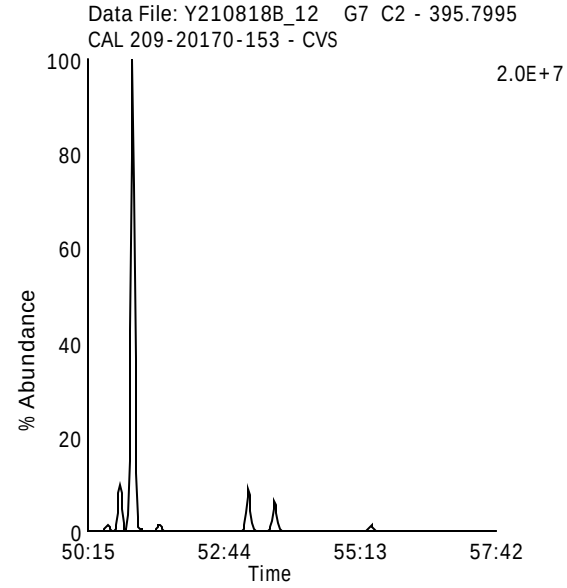






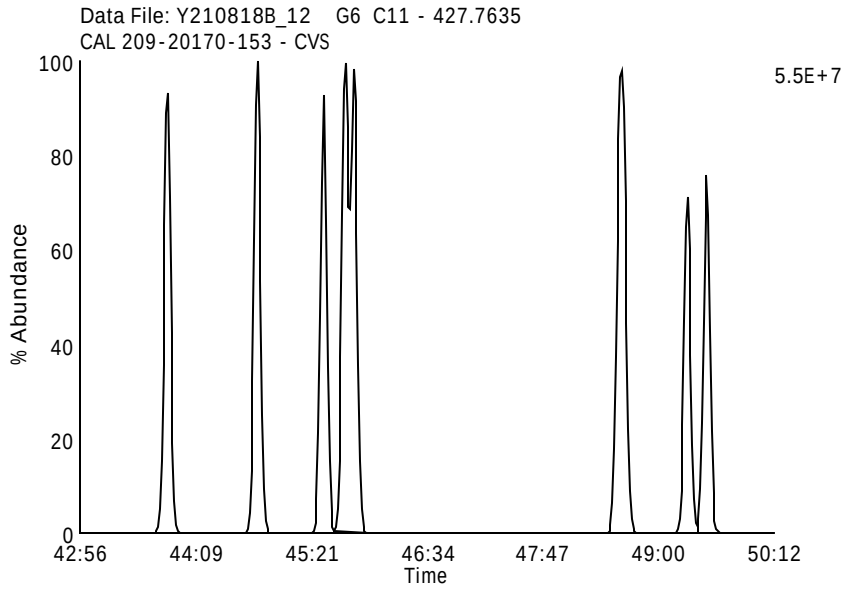


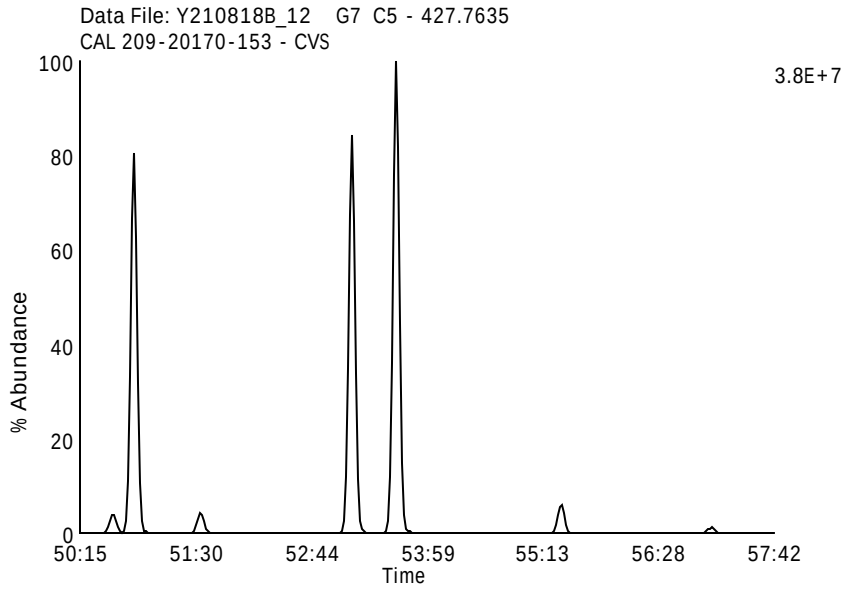


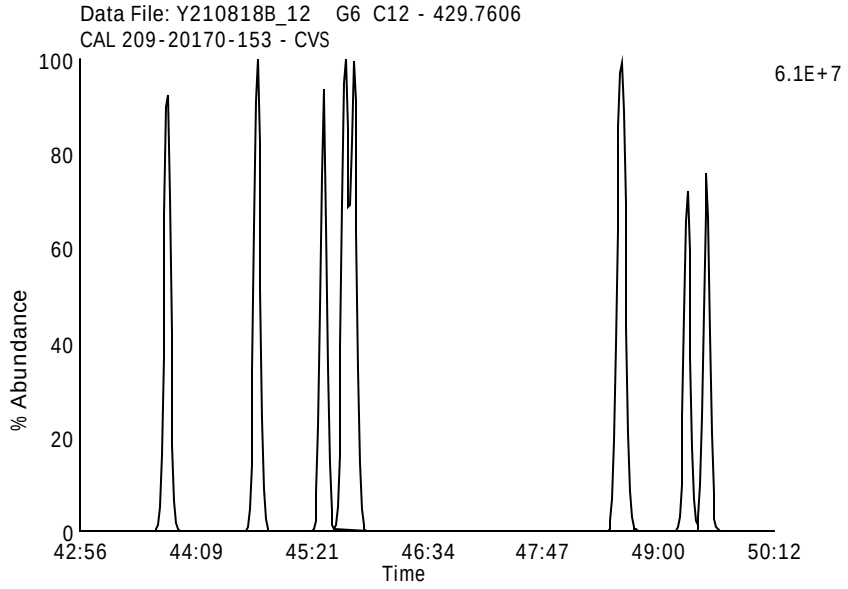


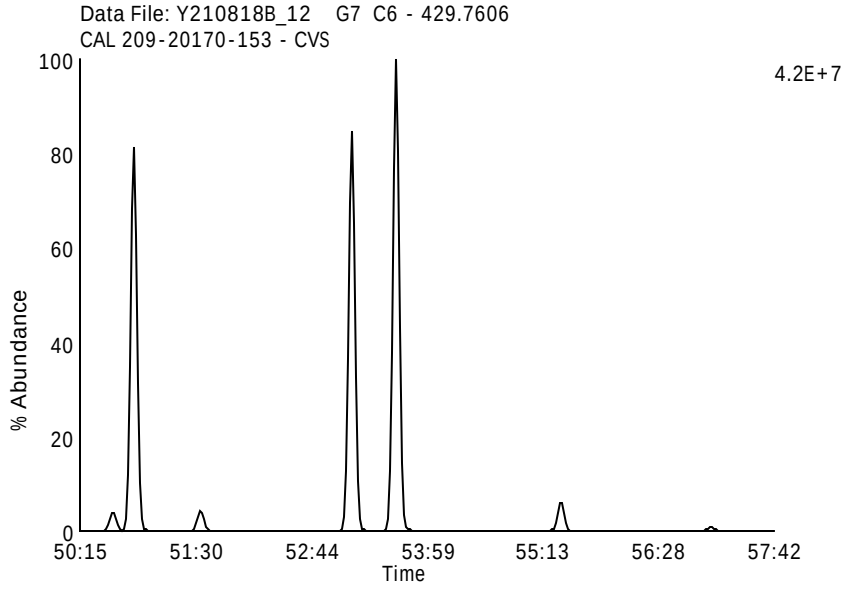
Octa Chlorinated Biphenyls

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



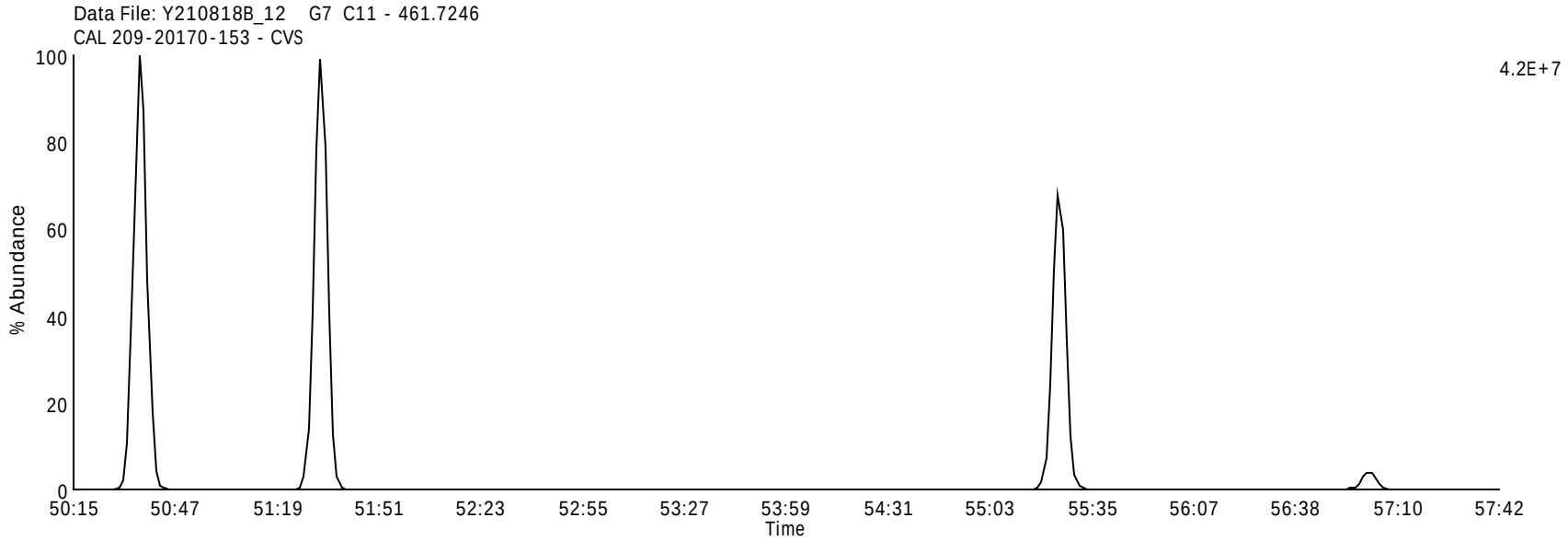


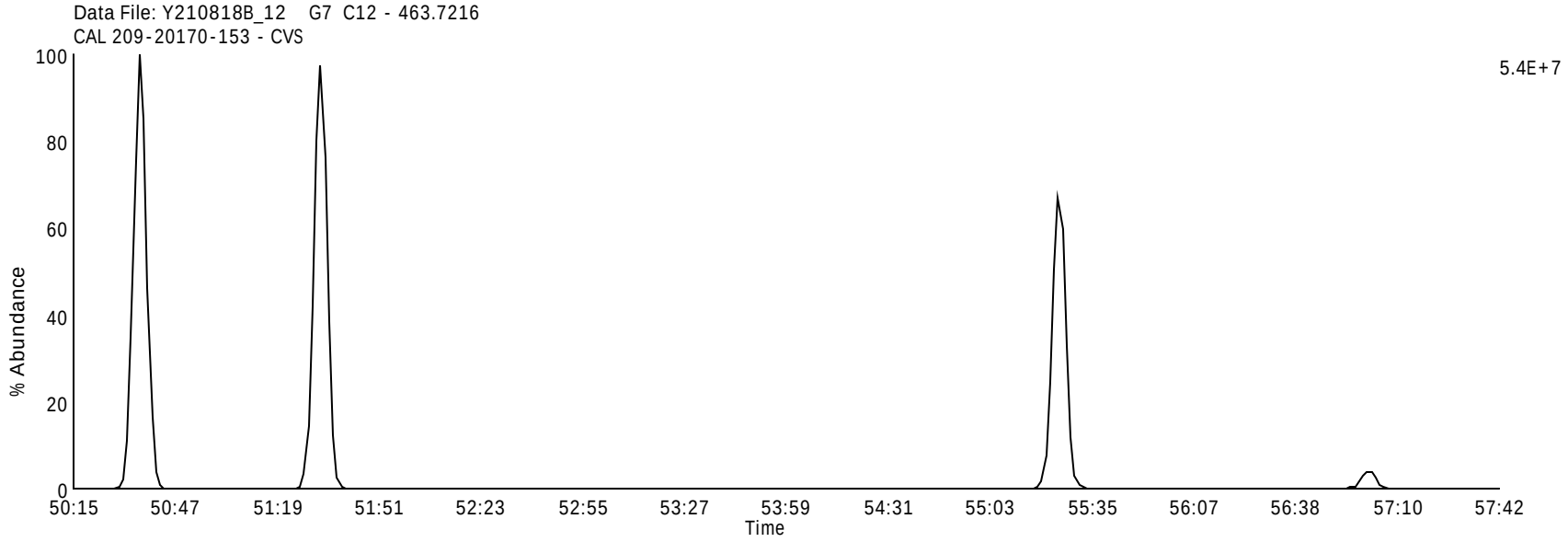




Nona Chlorinated Biphenyls

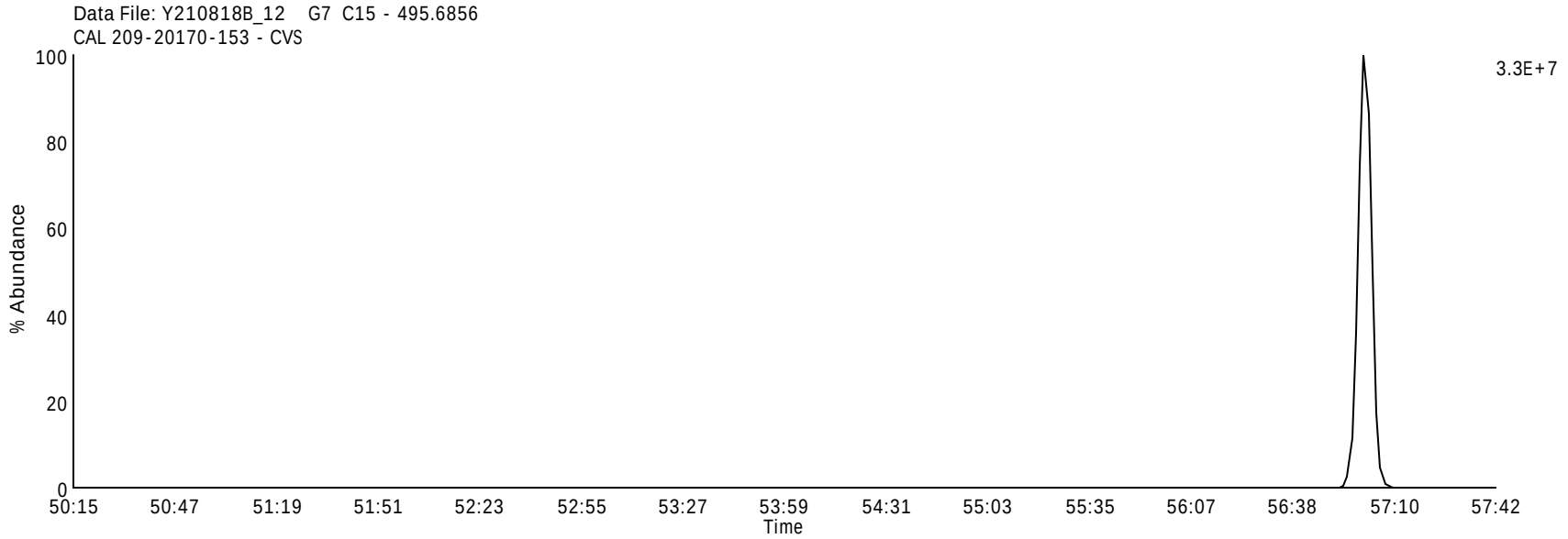
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

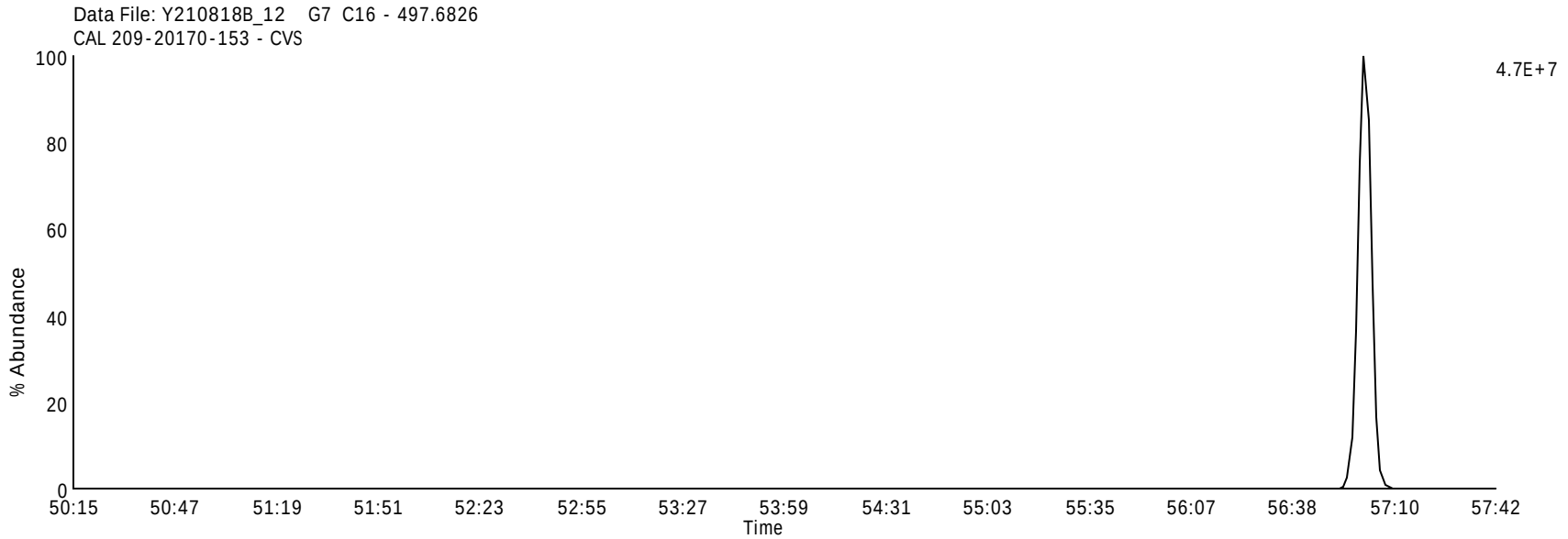




Deca Chlorinated Biphenyl

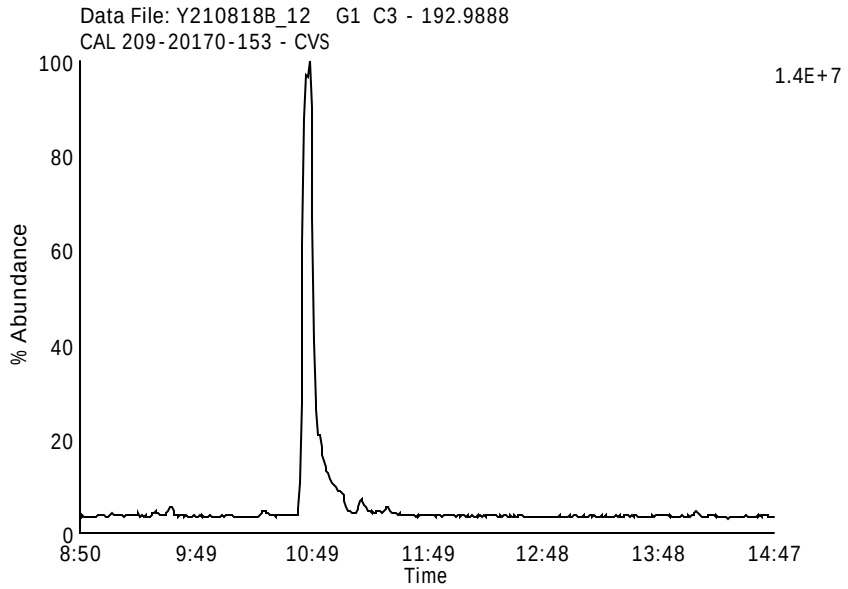
Data File Name: Y210818B_12	Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

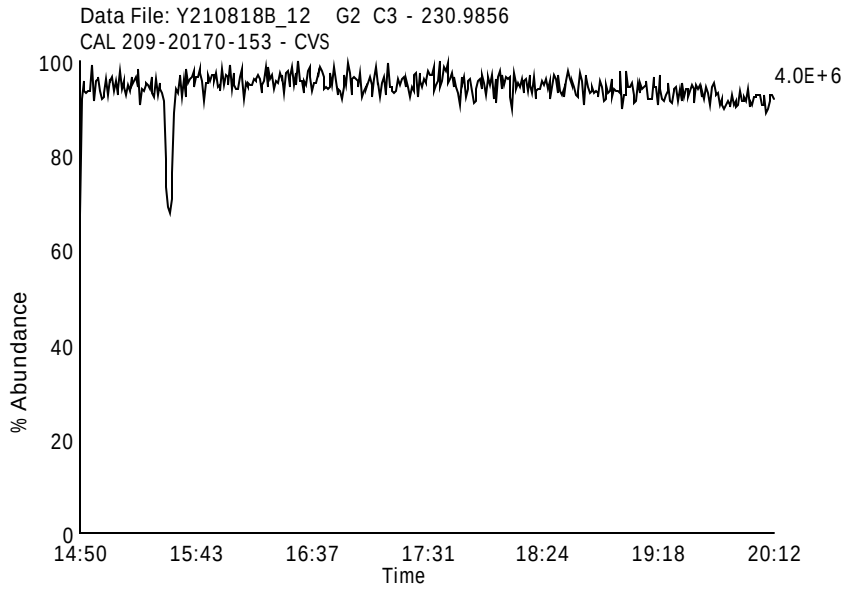


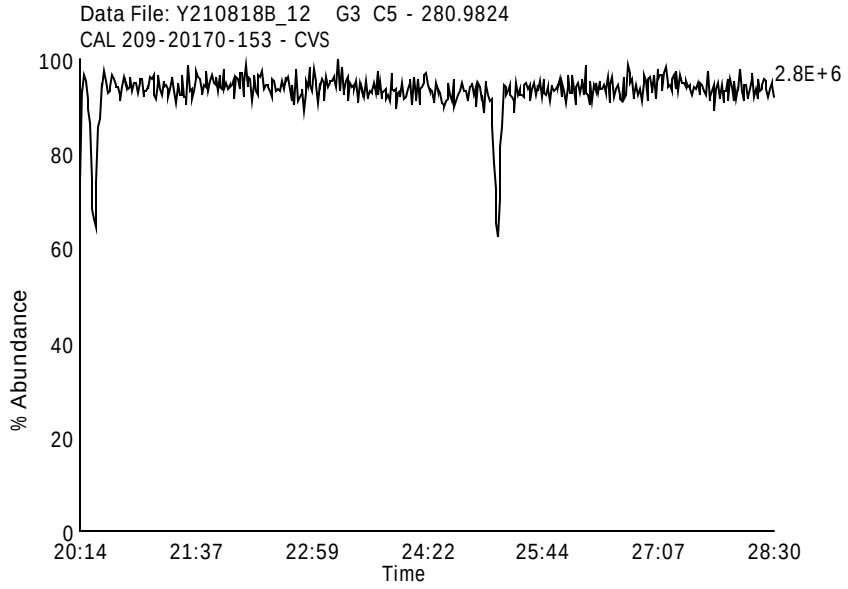


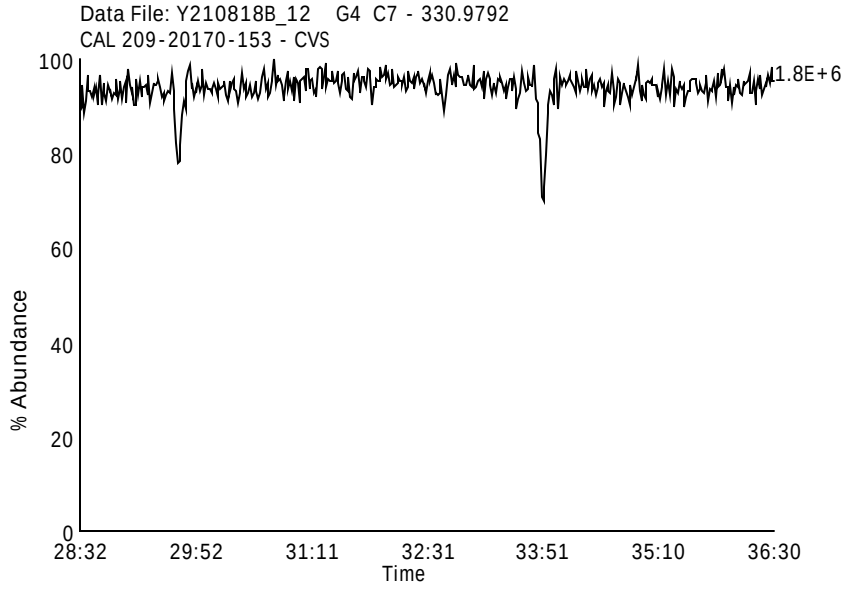
Group 1 - 4 Lock mass

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



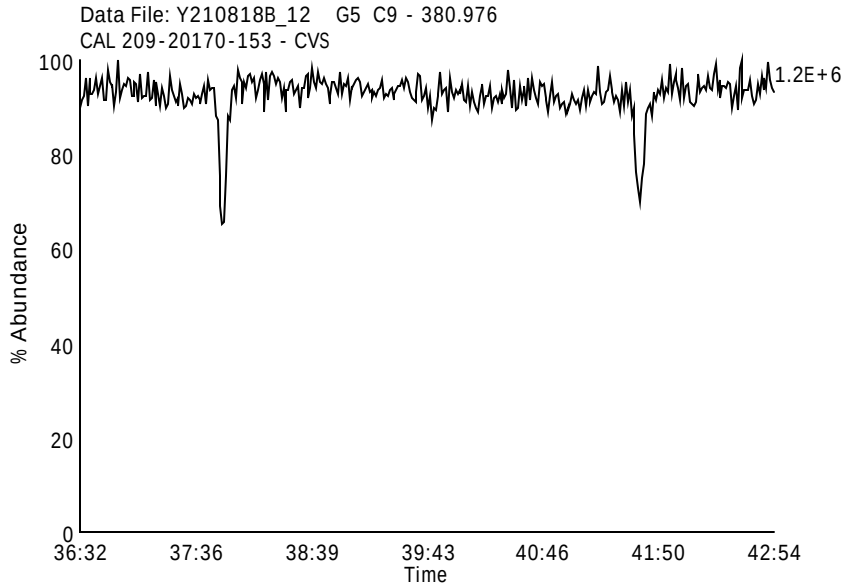


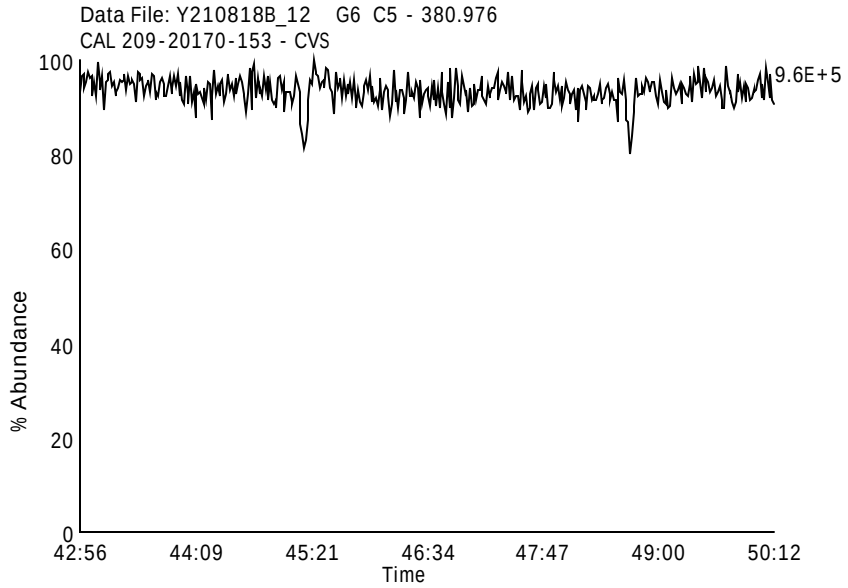


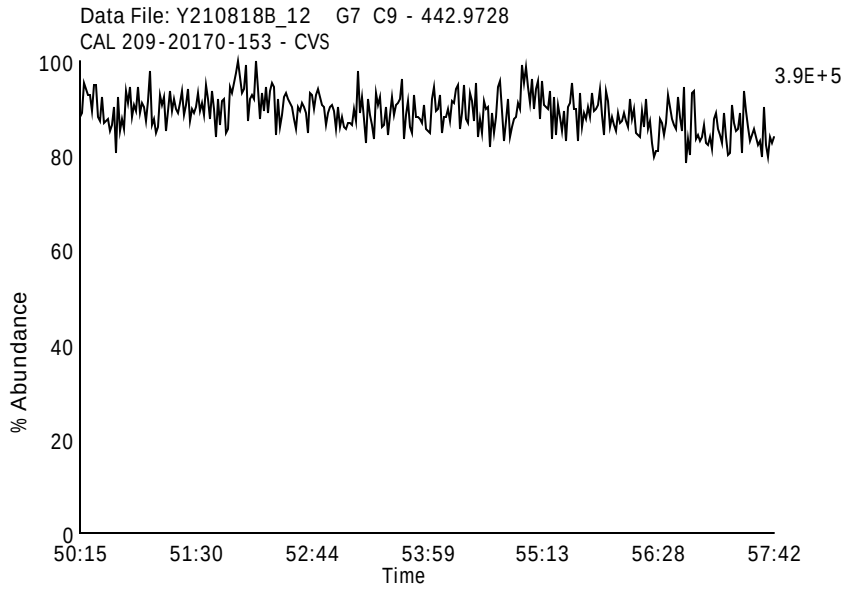


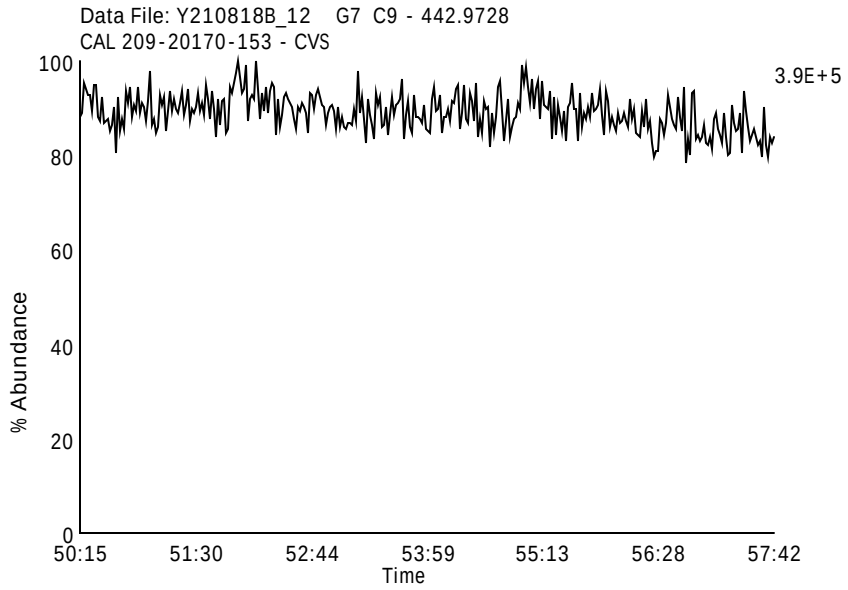
Group 5 - 7 Lock mass

Data File Name: Y210818B_12
Lab Sample ID: 209-20170-153
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



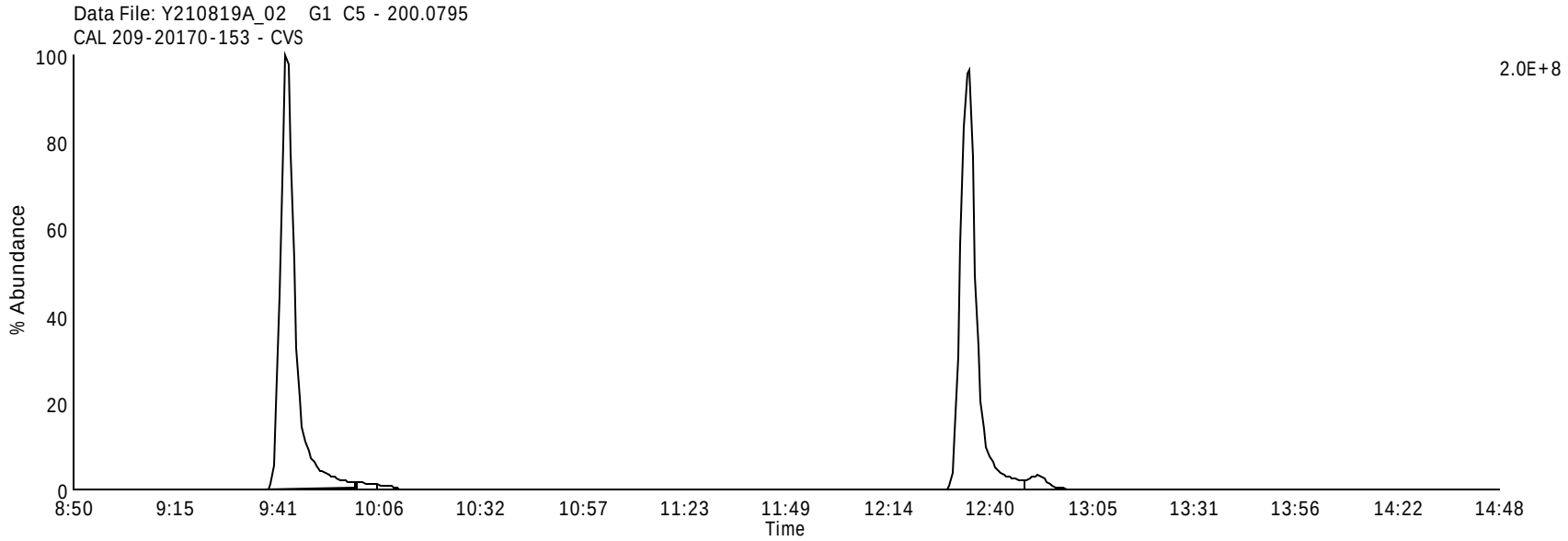


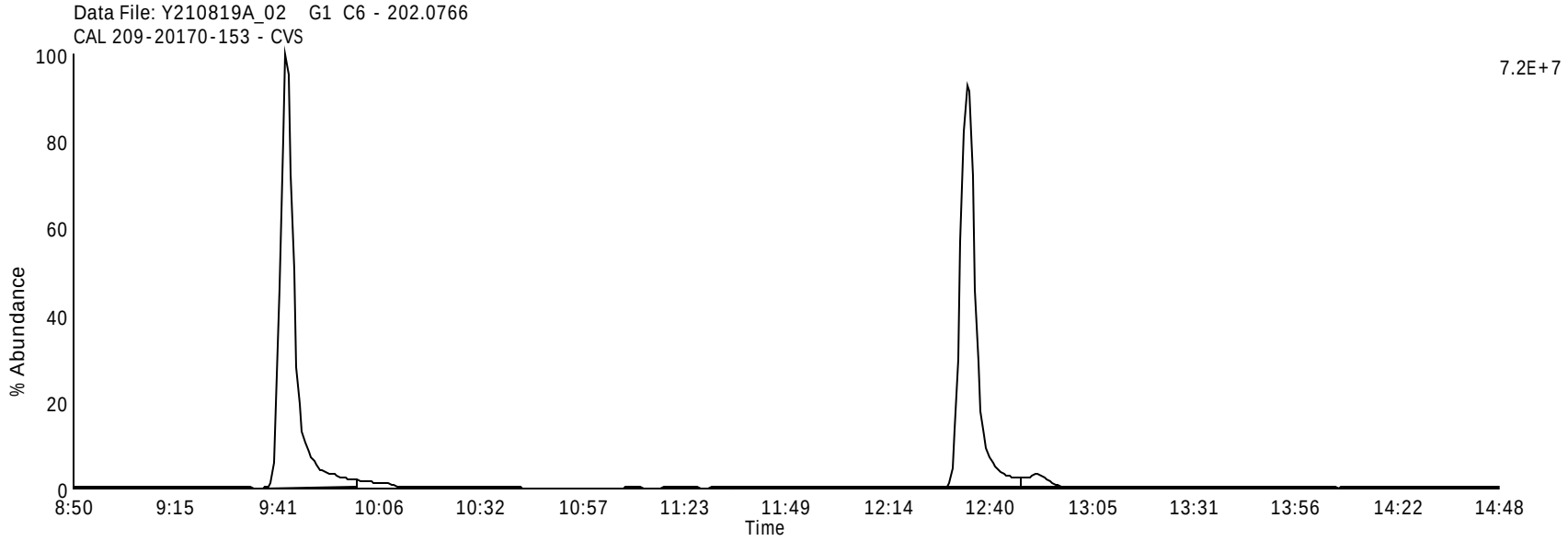




Labeled Mono Chlorinated Biphenyls

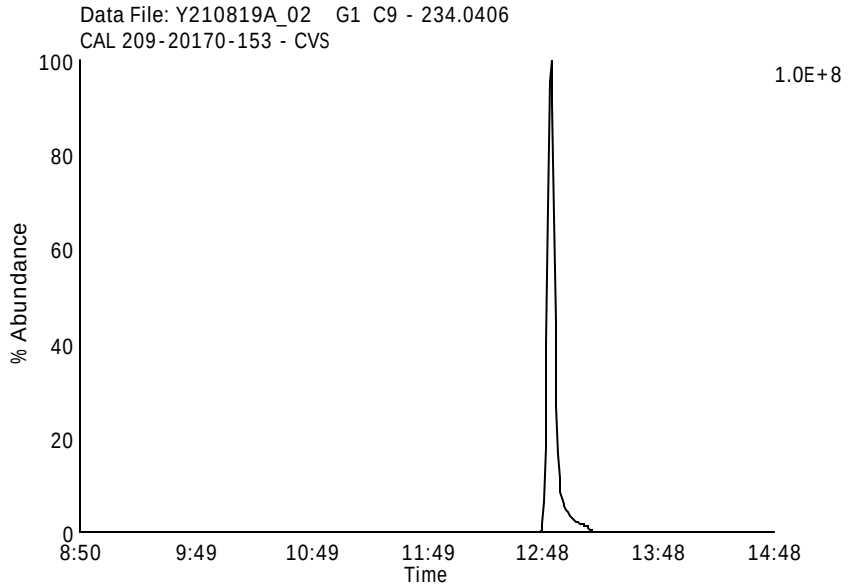
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

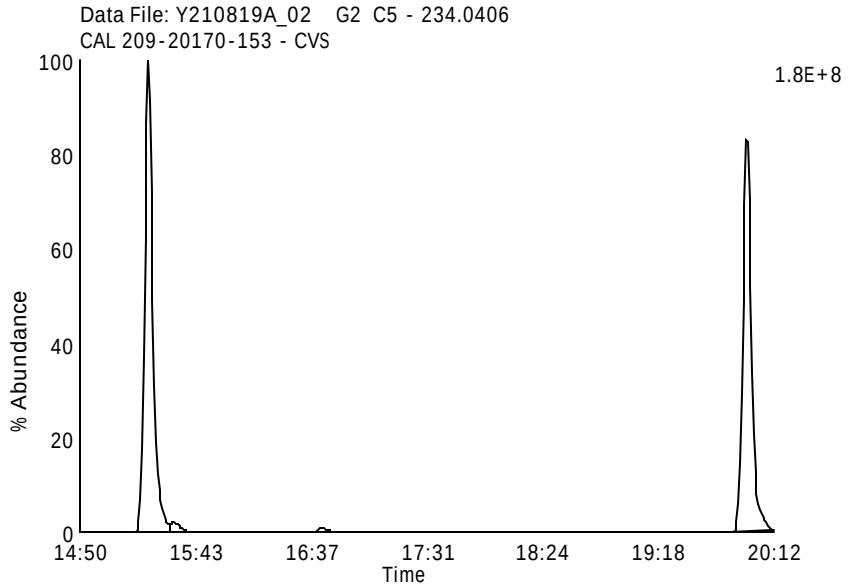


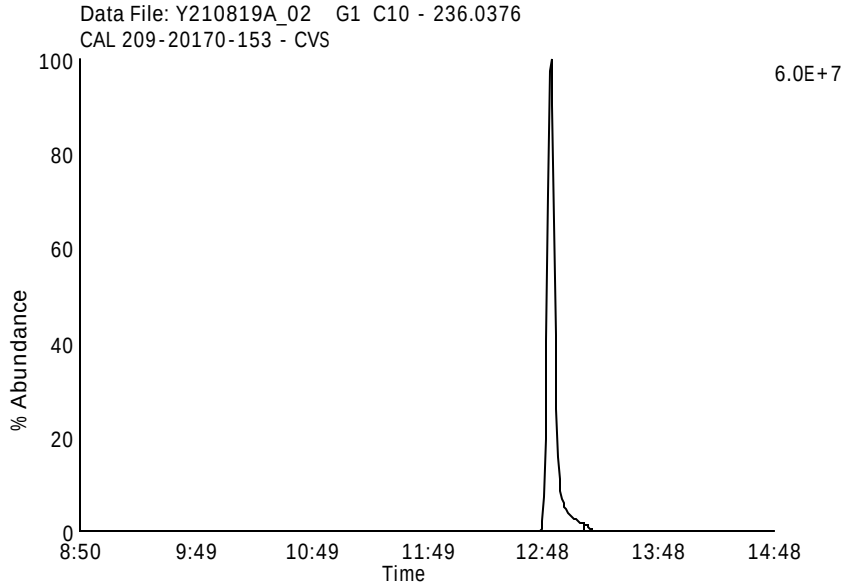


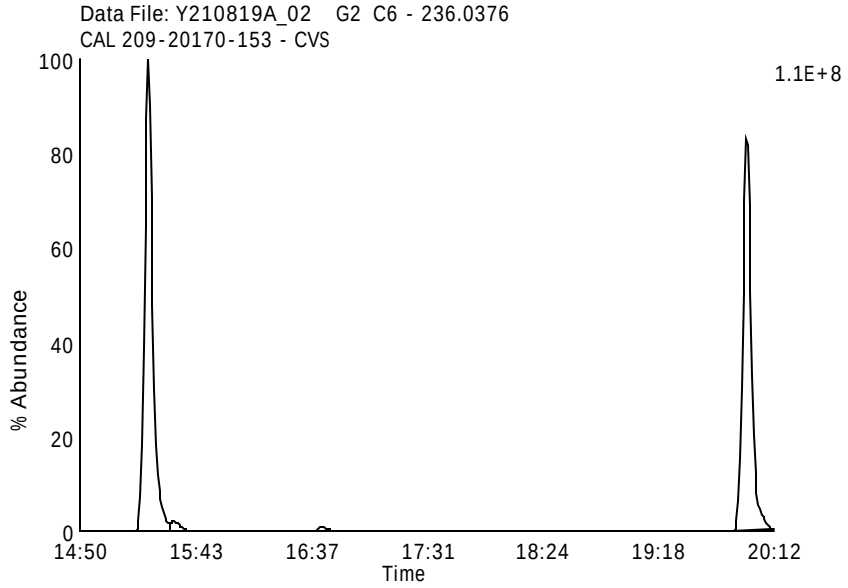
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



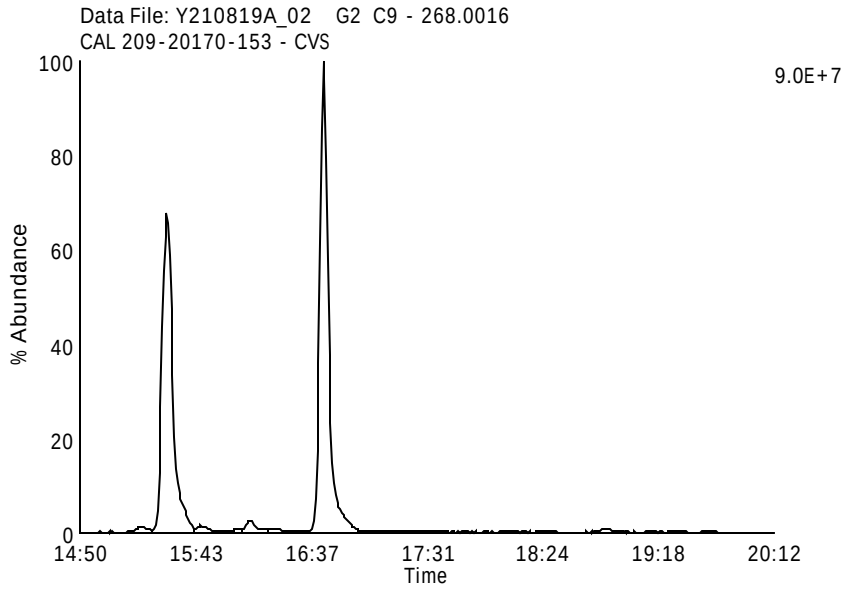


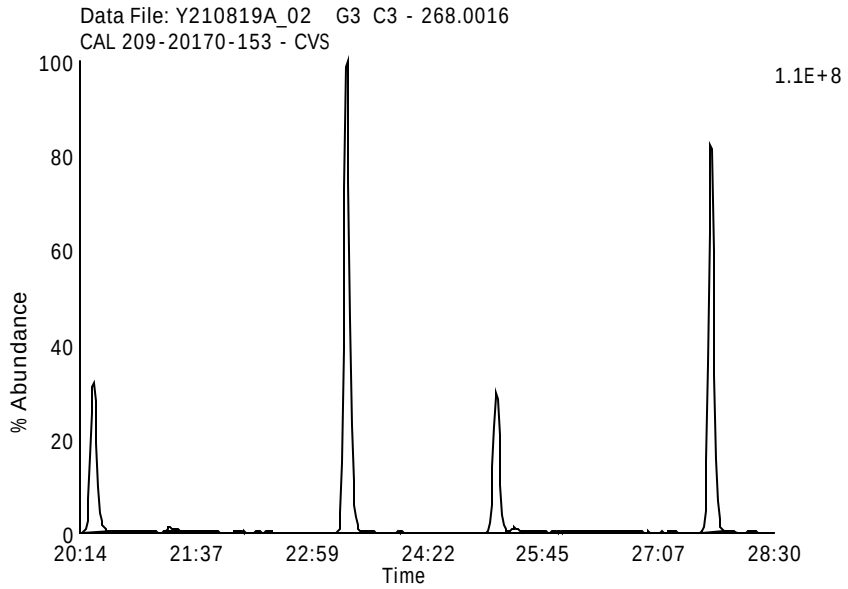


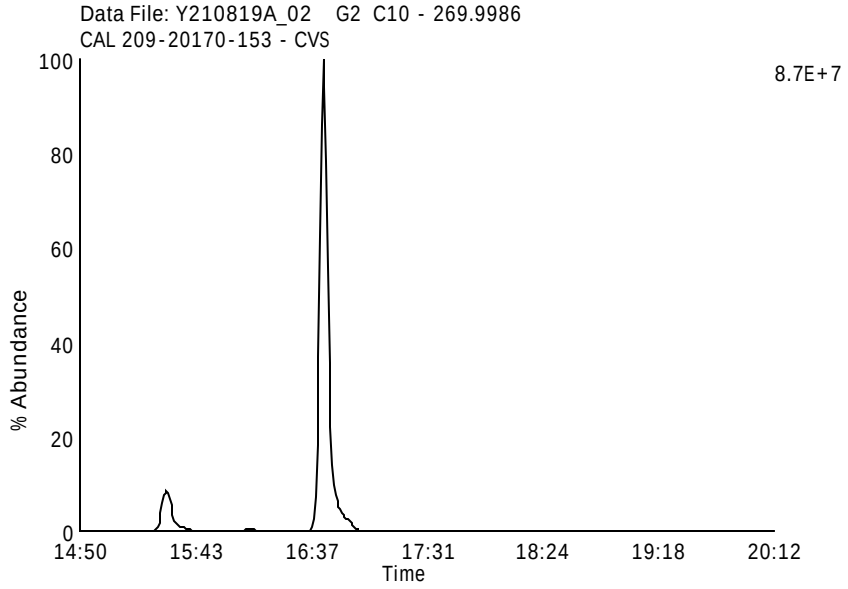


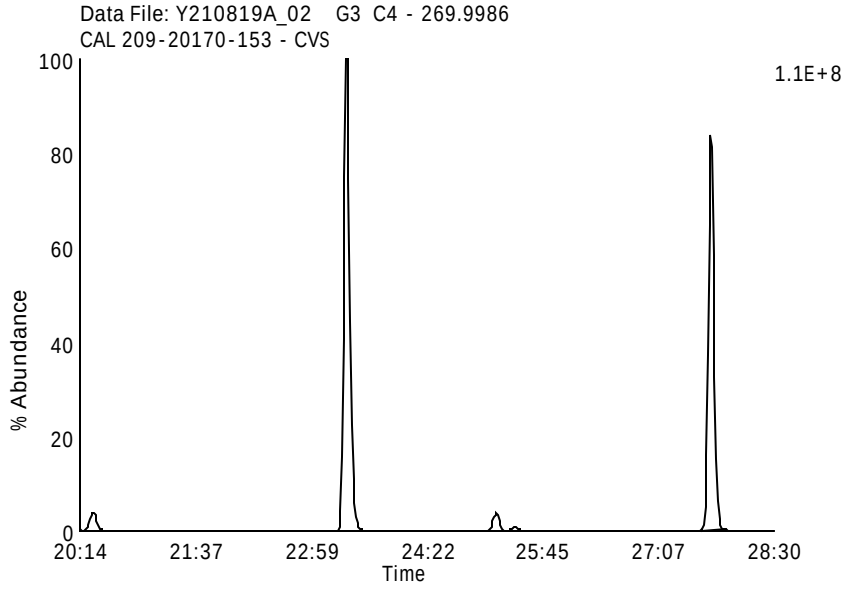
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





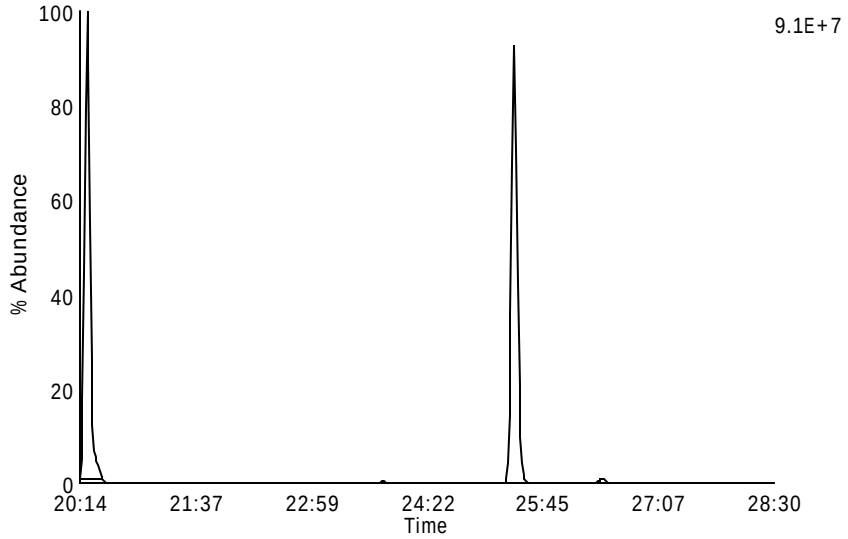




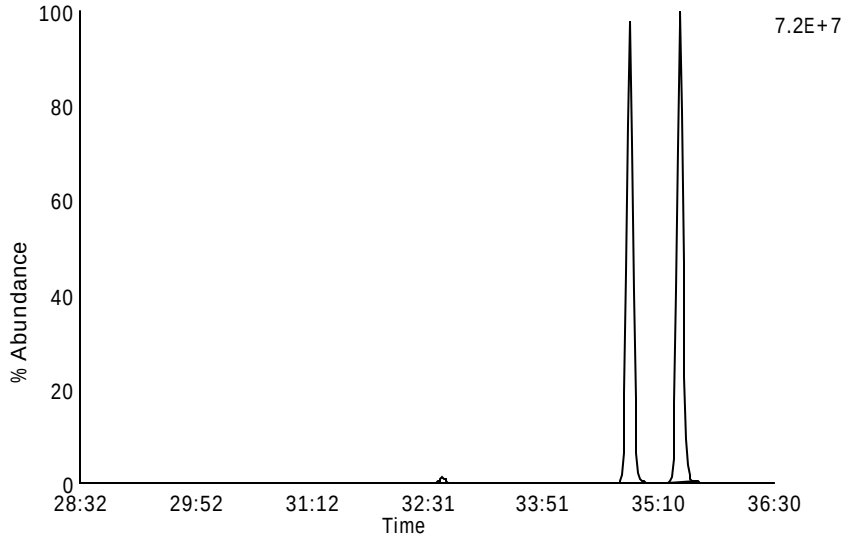
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

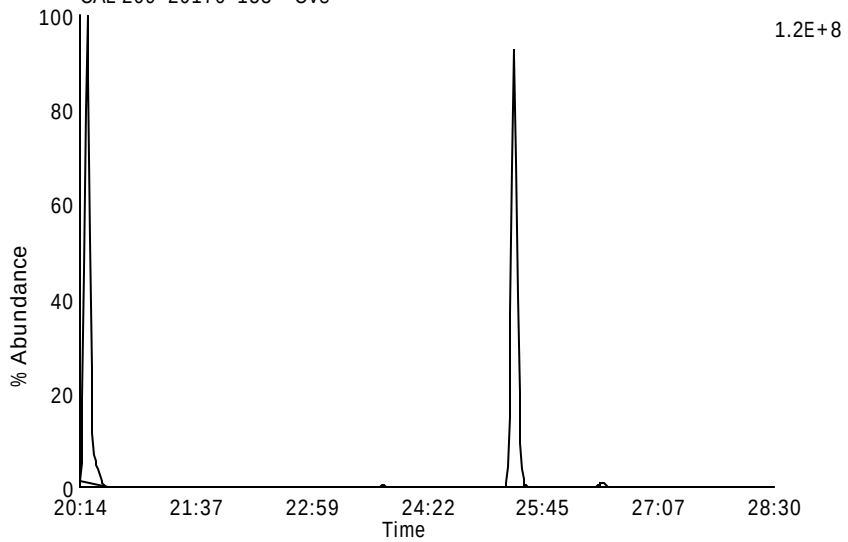
Data File: Y210819A_02 G3 C9 - 301.9626
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G4 C3 - 301.9626
CAL 209-20170-153 - CVS



Data File: Y210819A_02 G3 C10 - 303.9597
CAL 209-20170-153 - CVS



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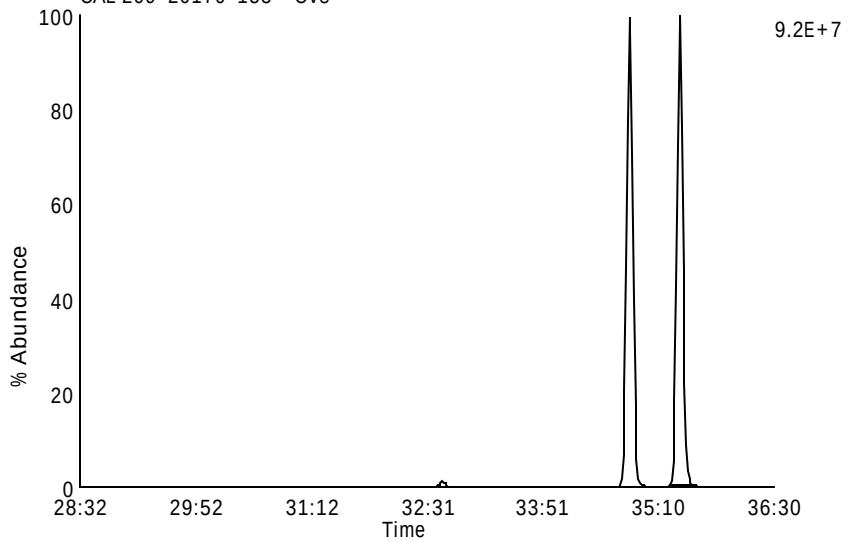
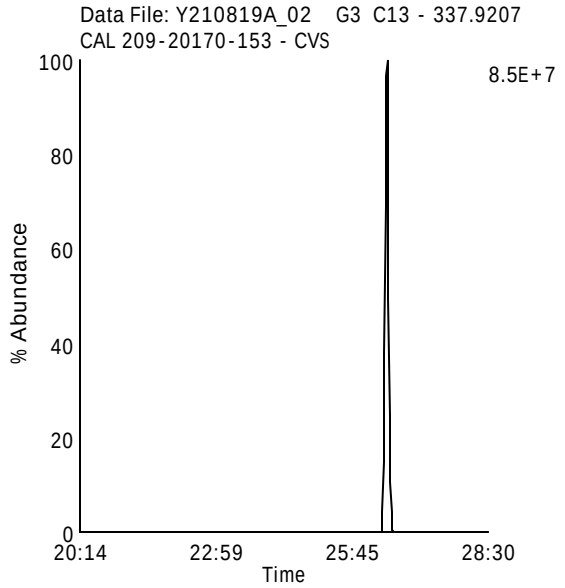
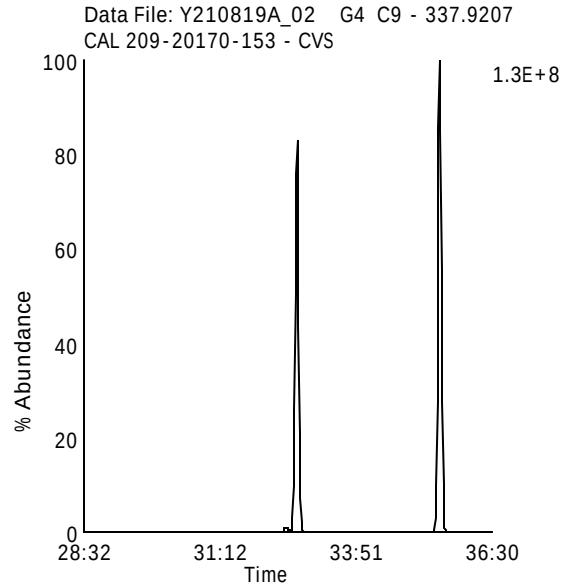
CAL 209-20170-153 - CVS

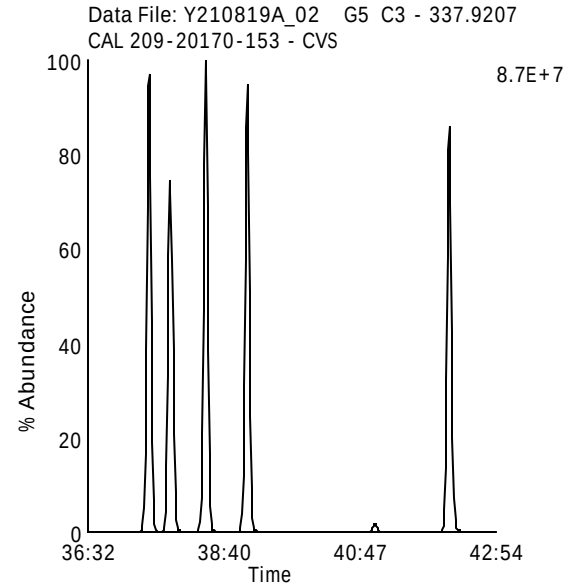


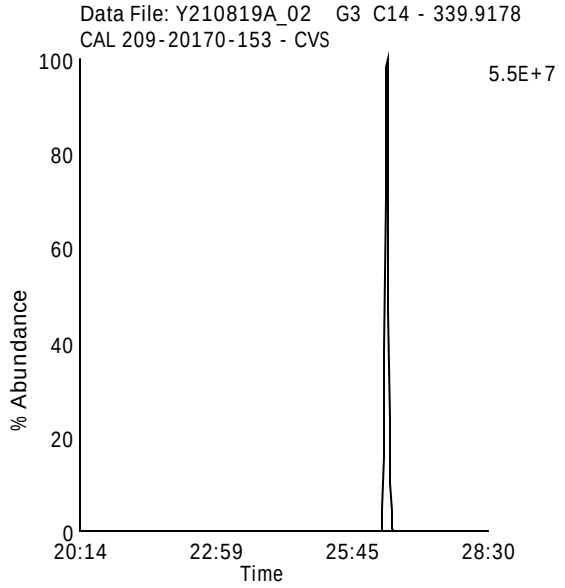
Labeled Penta Chlorinated Biphenyls

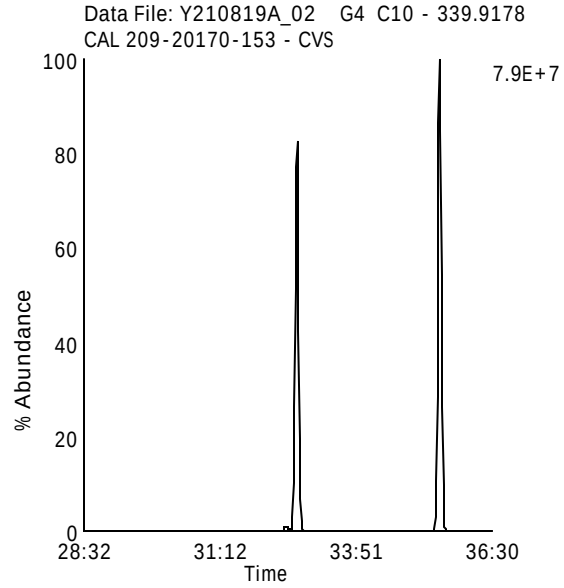
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

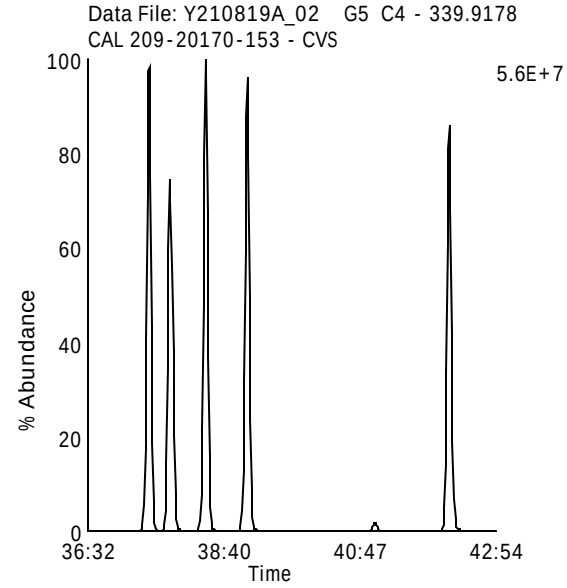






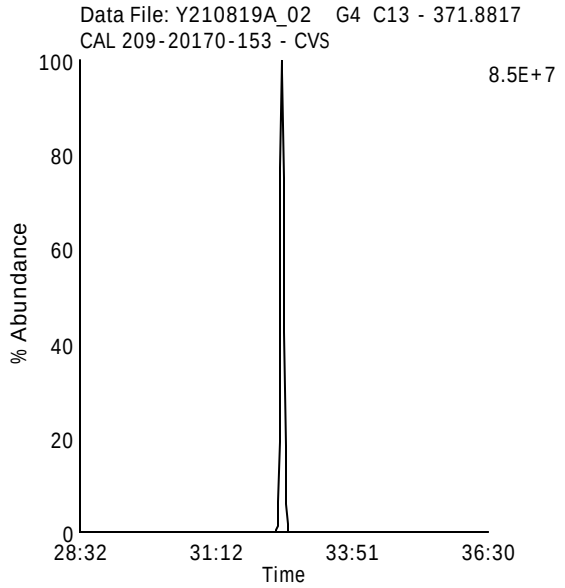


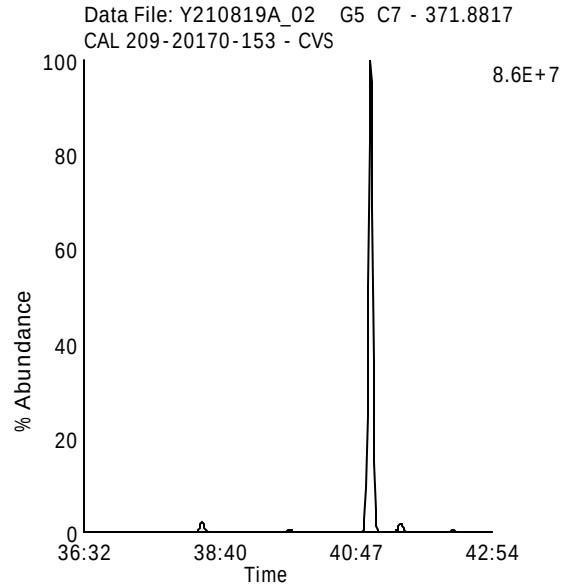


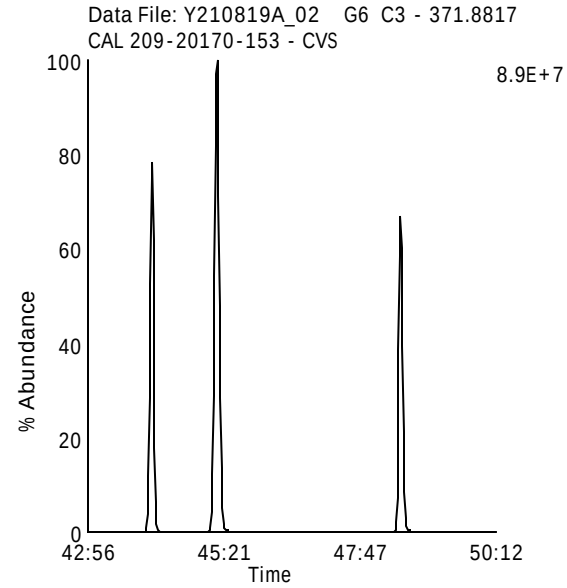


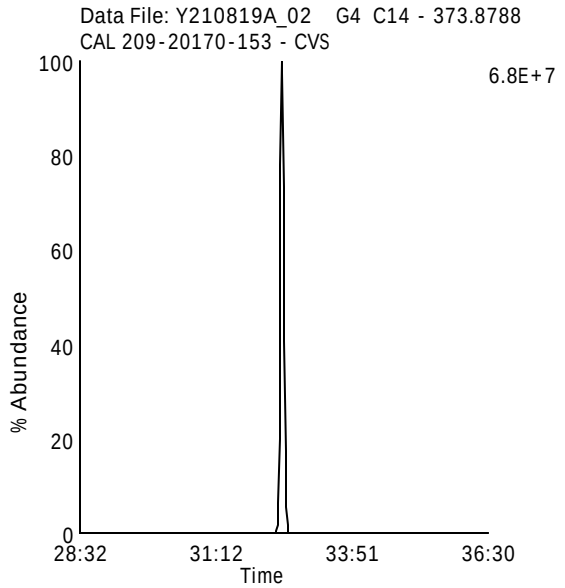
Labeled Hexa Chlorinated Biphenyls

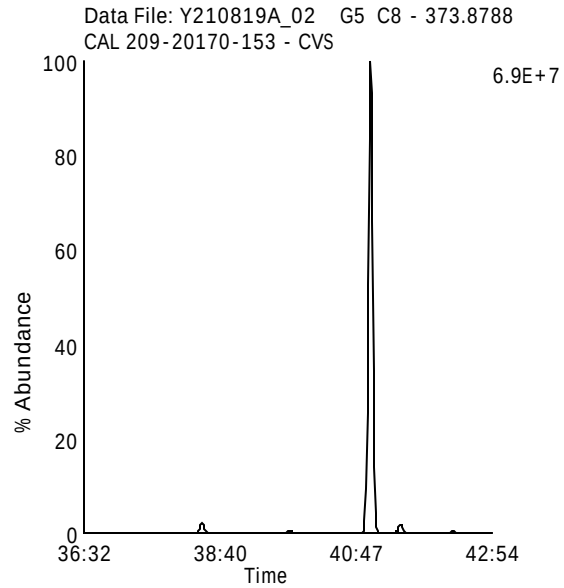
Data File Name: Y210819A_02 | Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021 | Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

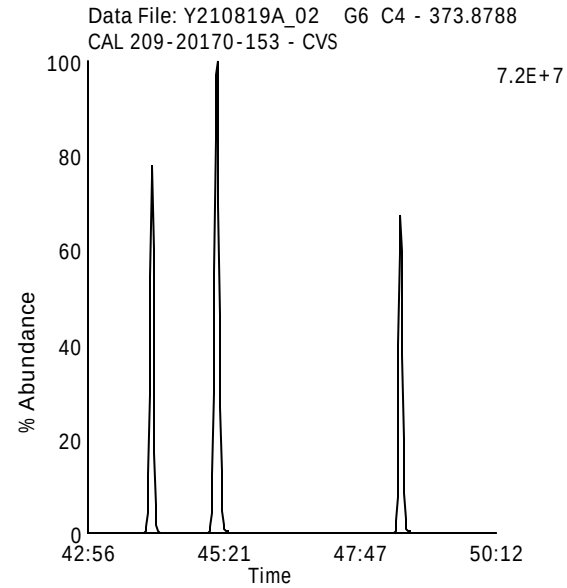






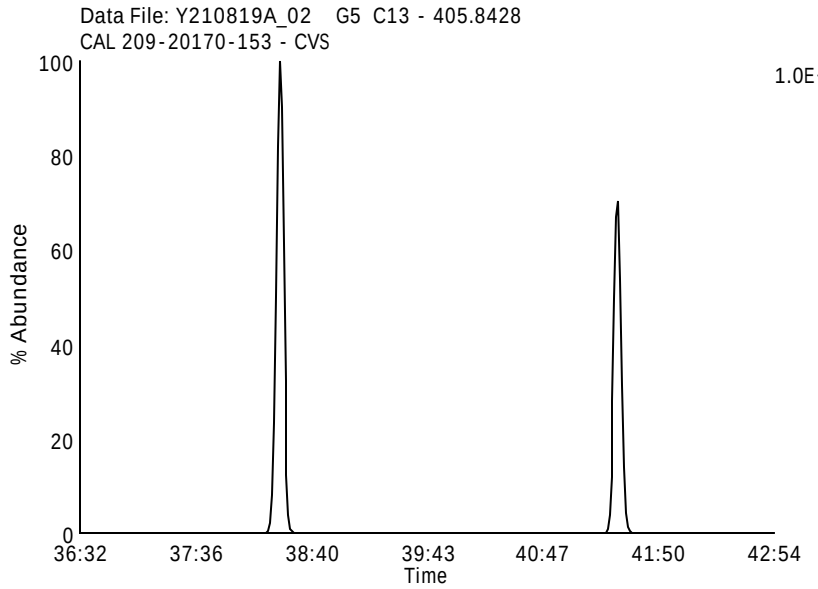


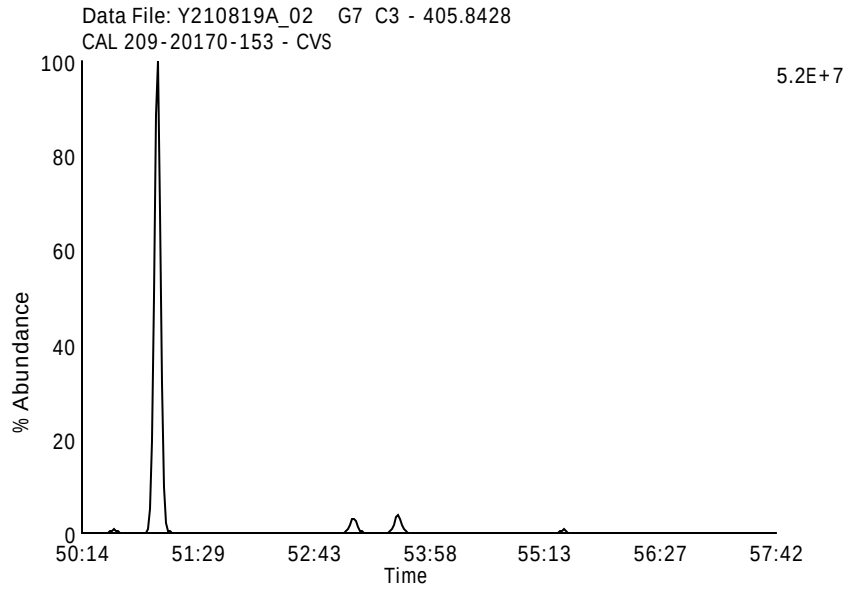


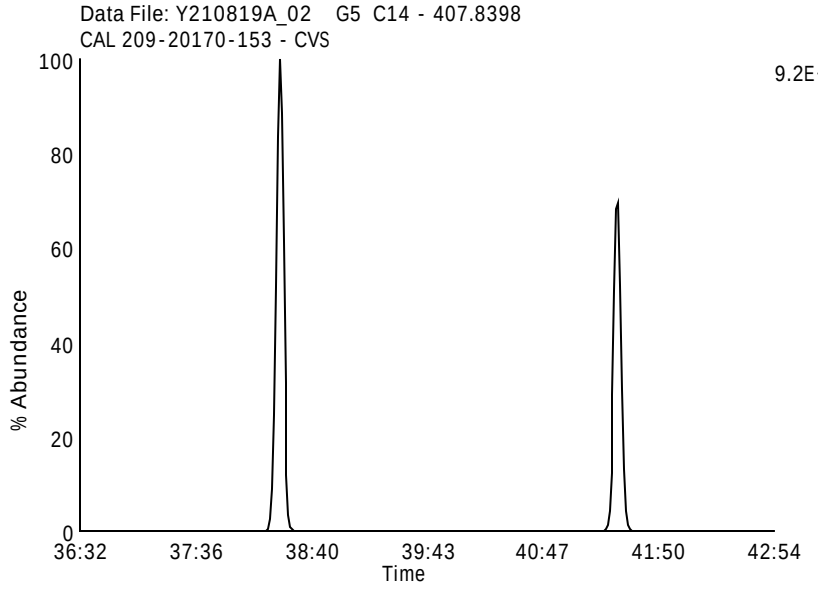


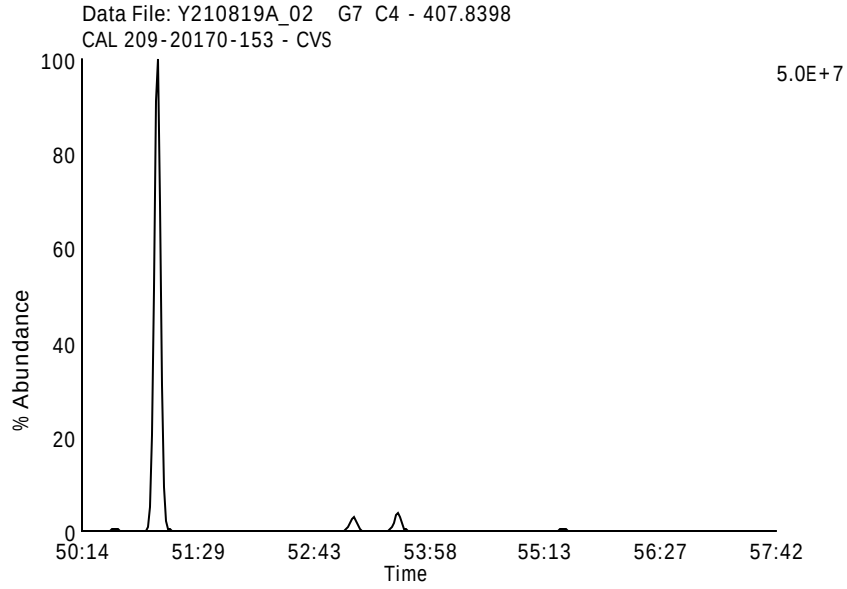
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





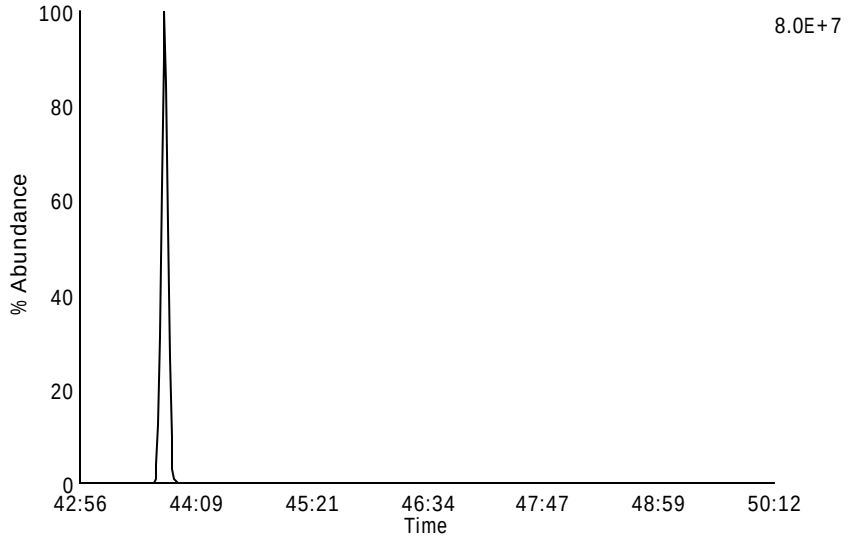




Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

Data File: Y210819A_02 G6 C13 - 439.8038
CAL 209-20170-153 - CVS



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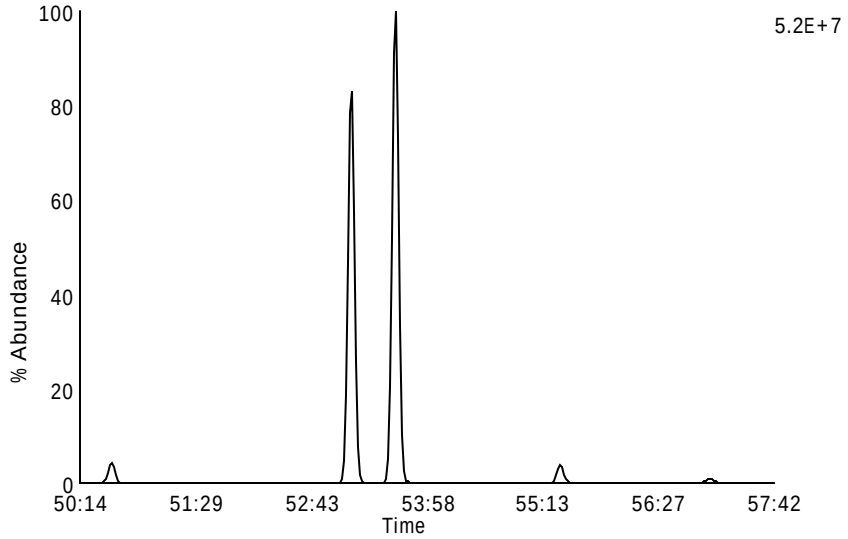

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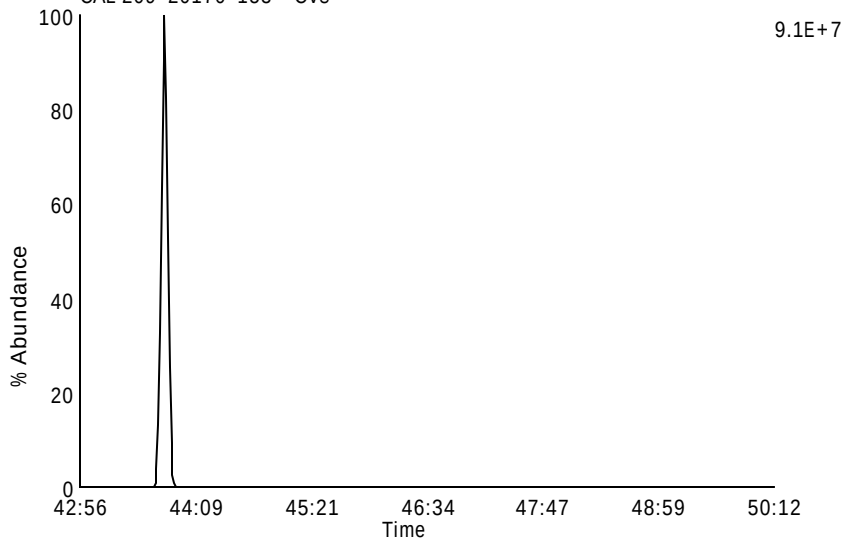
CAL 209-20170-153 - CVS



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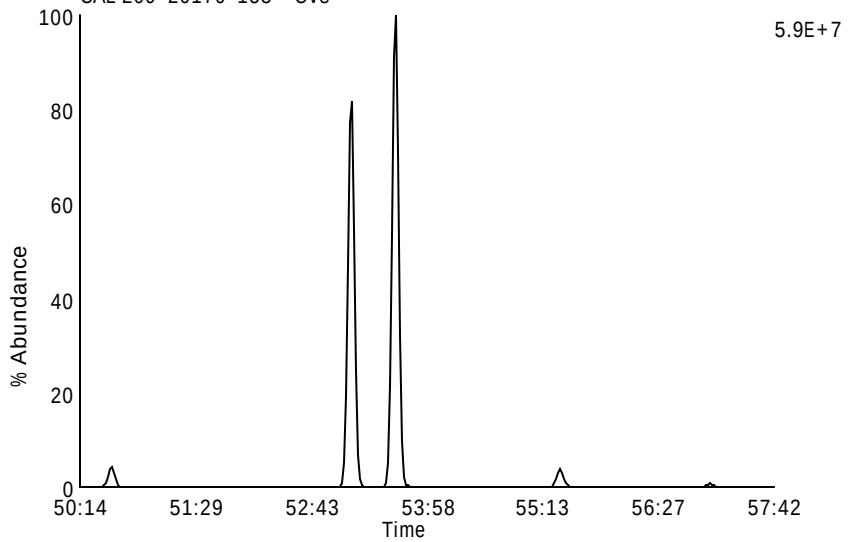
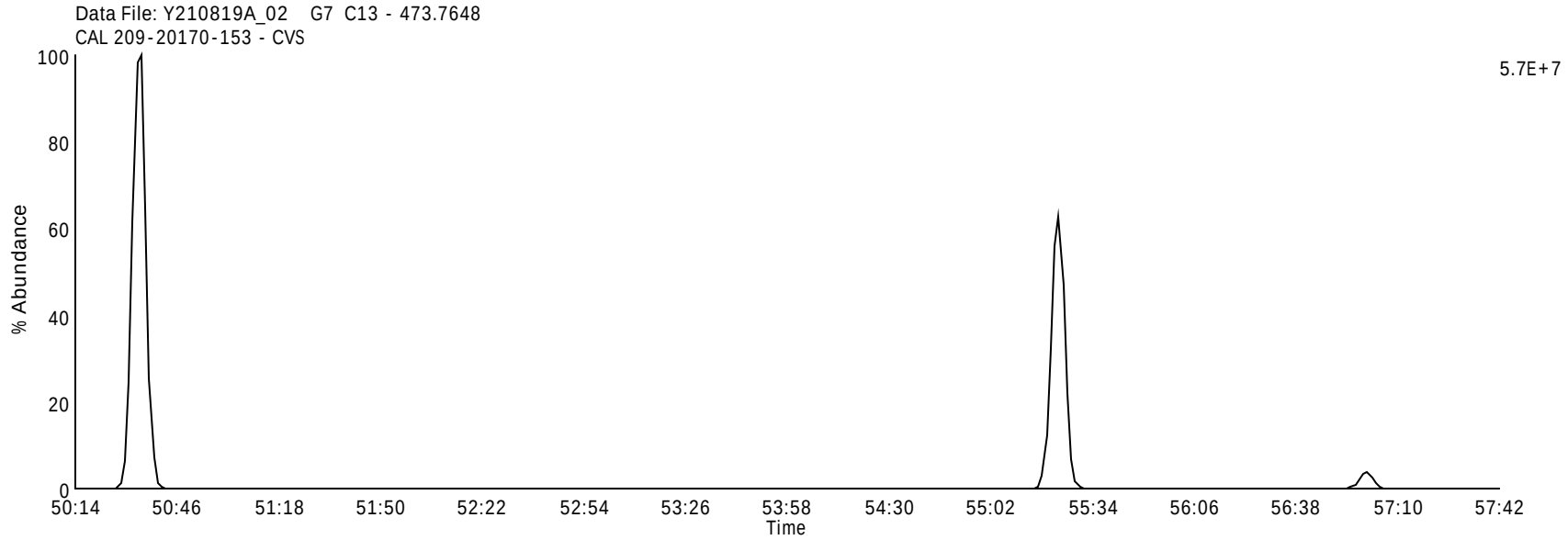
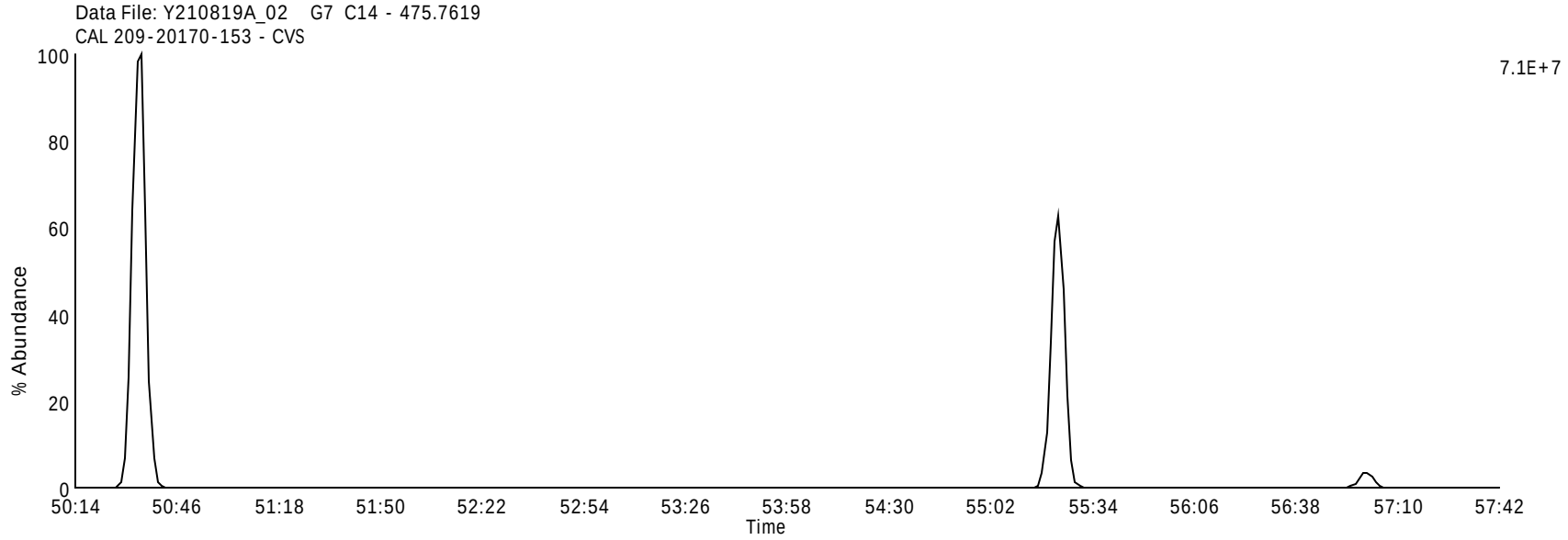
CAL 209-20170-153 - CVS



Labeled Nona Chlorinated Biphenyls

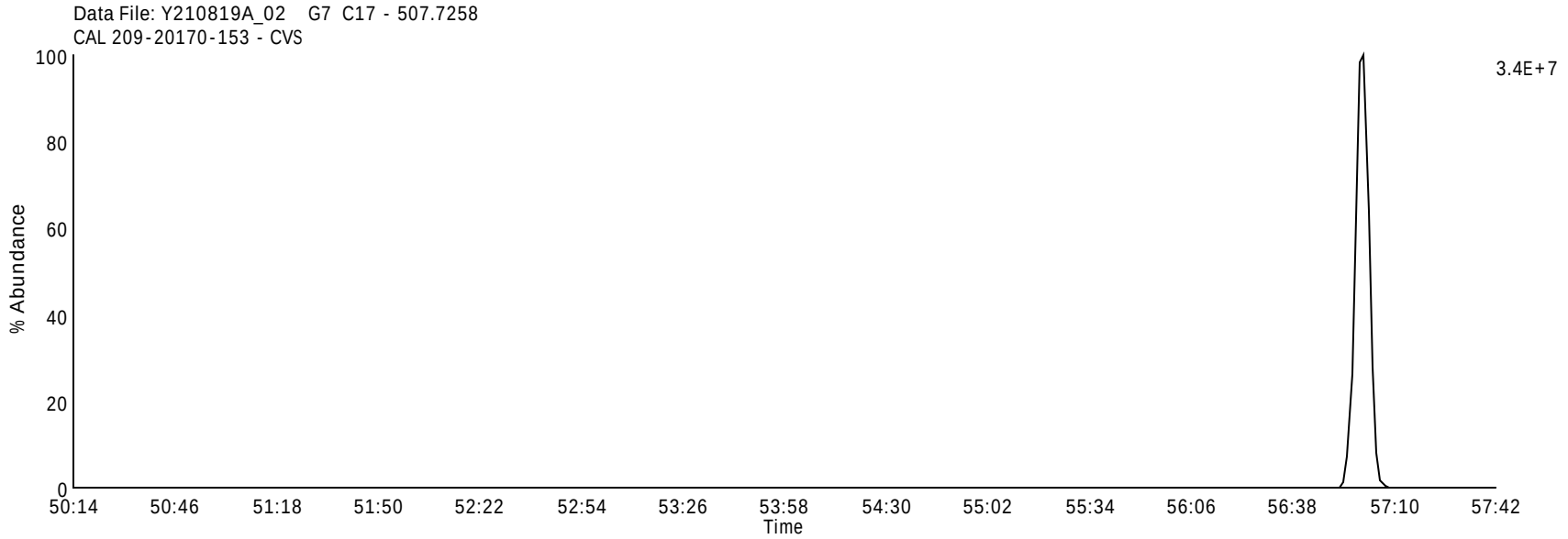
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

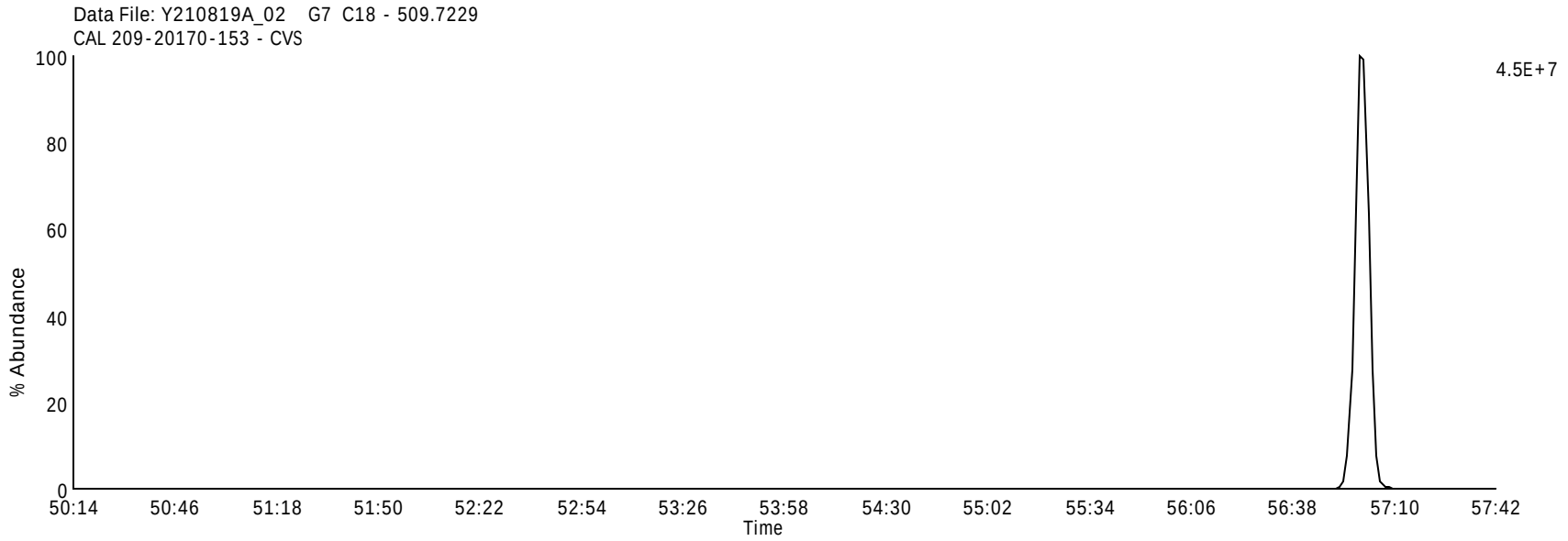




Labeled Deca Chlorinated Biphenyl

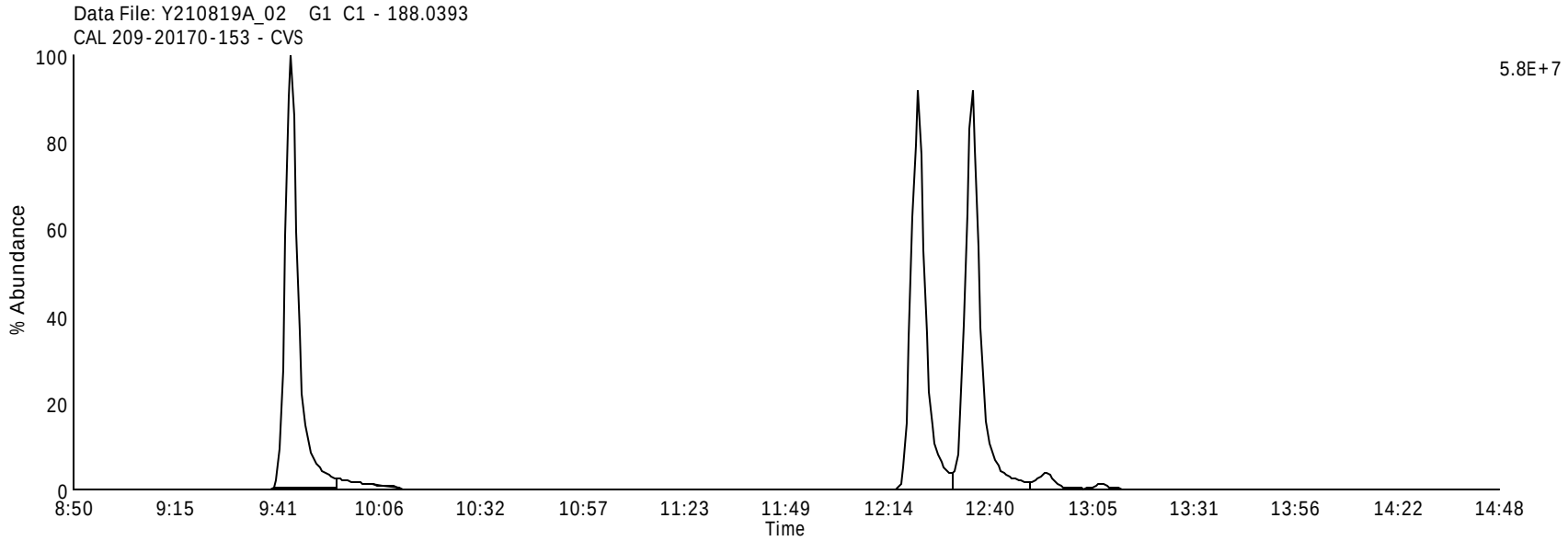
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

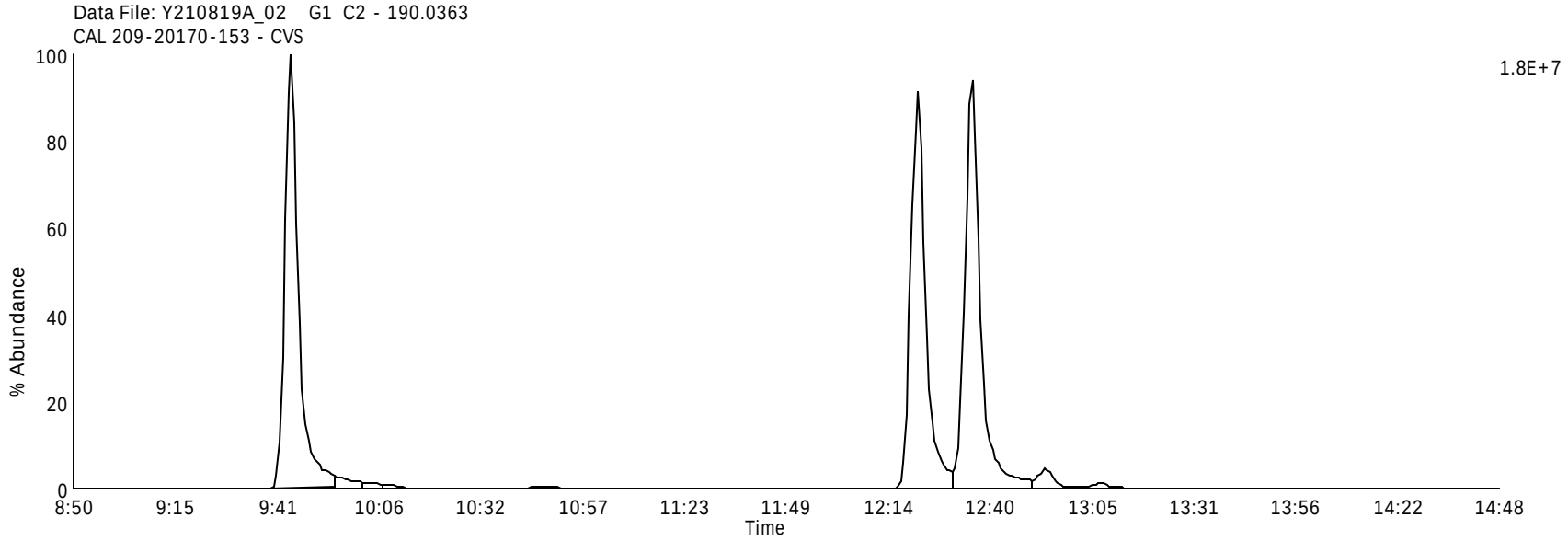




Mono Chlorinated Biphenyls

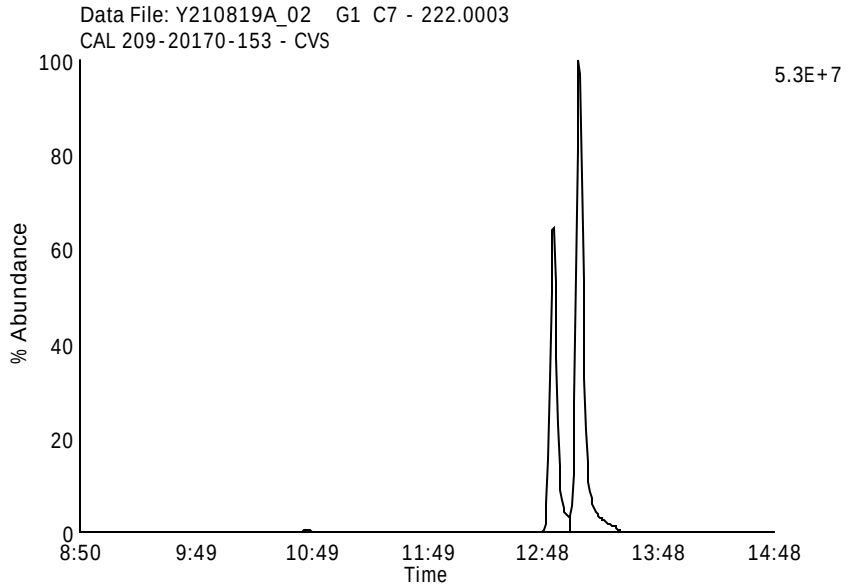
Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

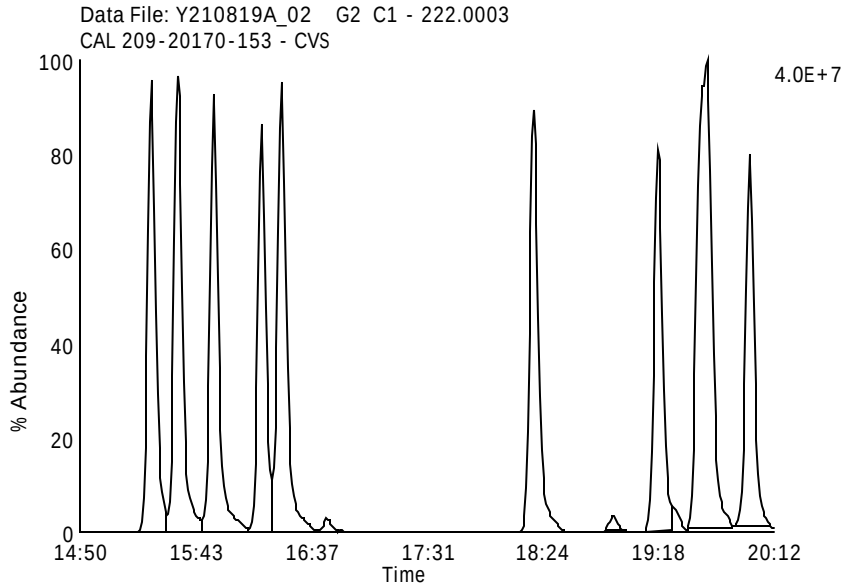


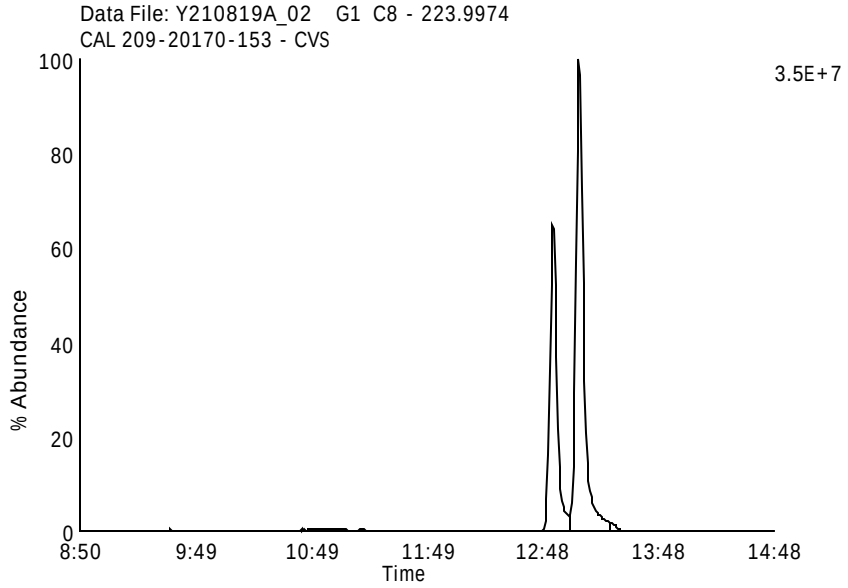


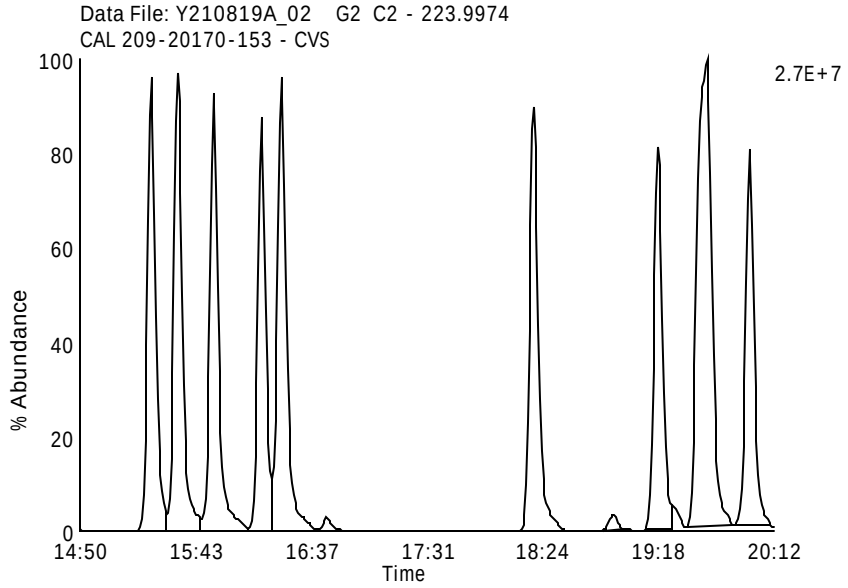
Di Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



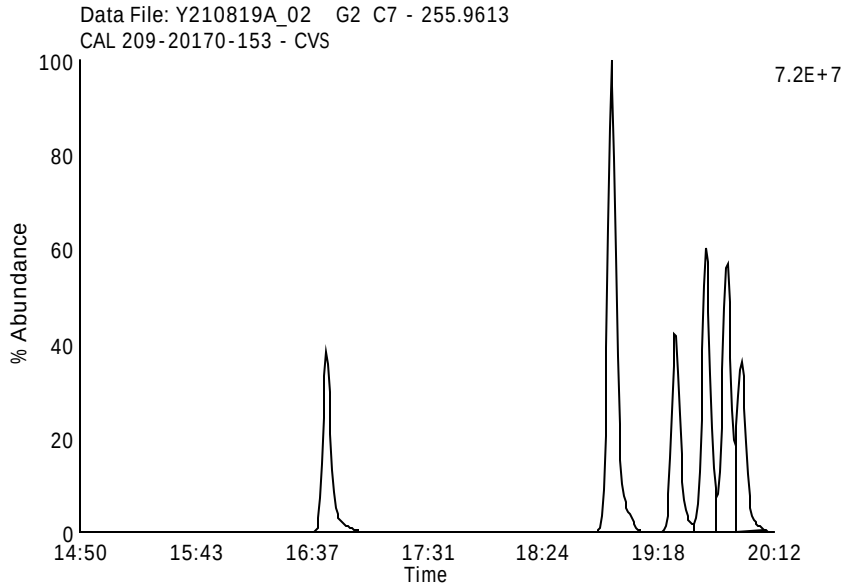


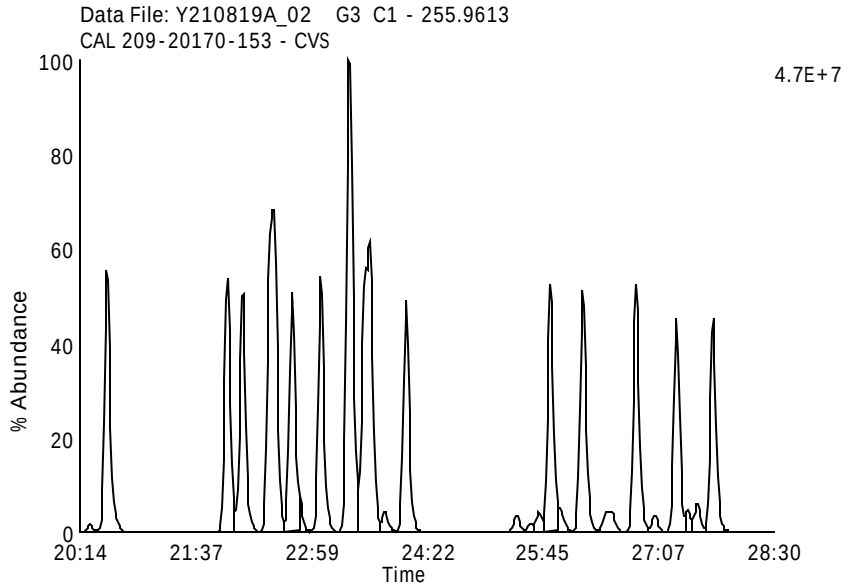


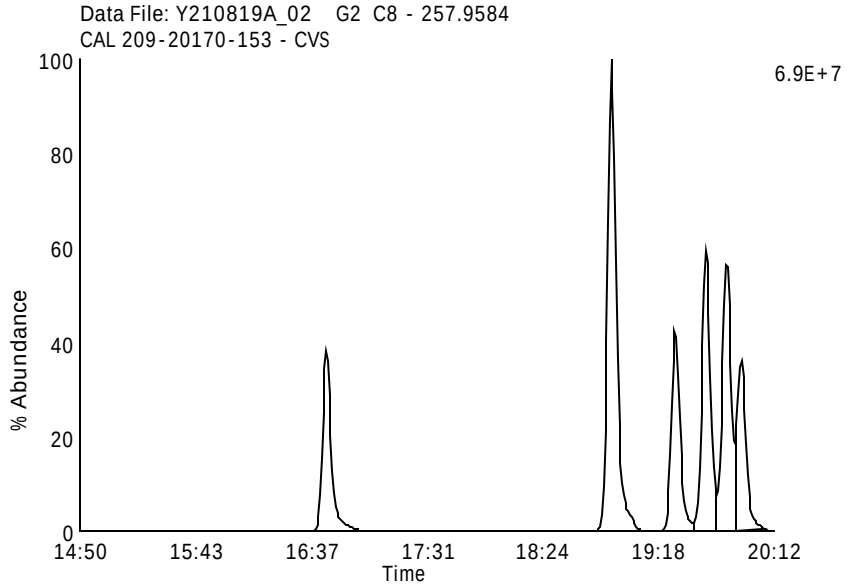


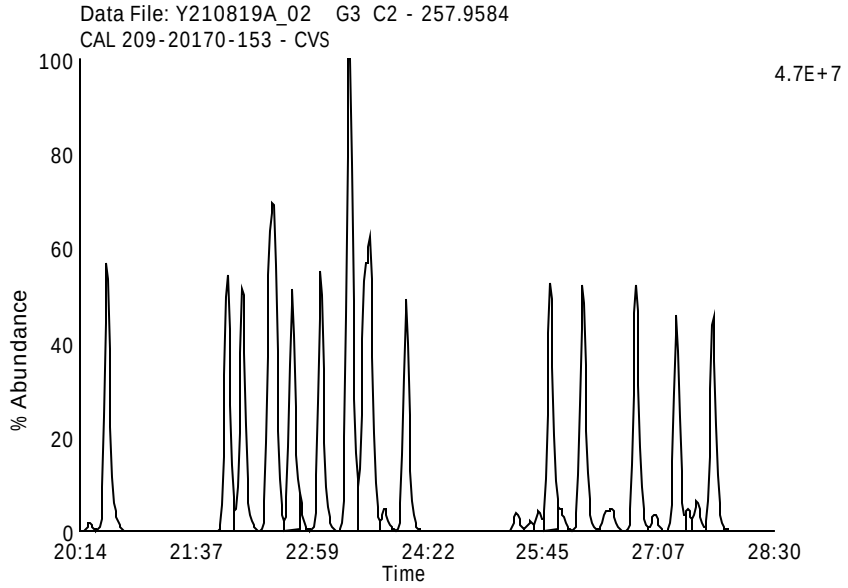
Tri Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



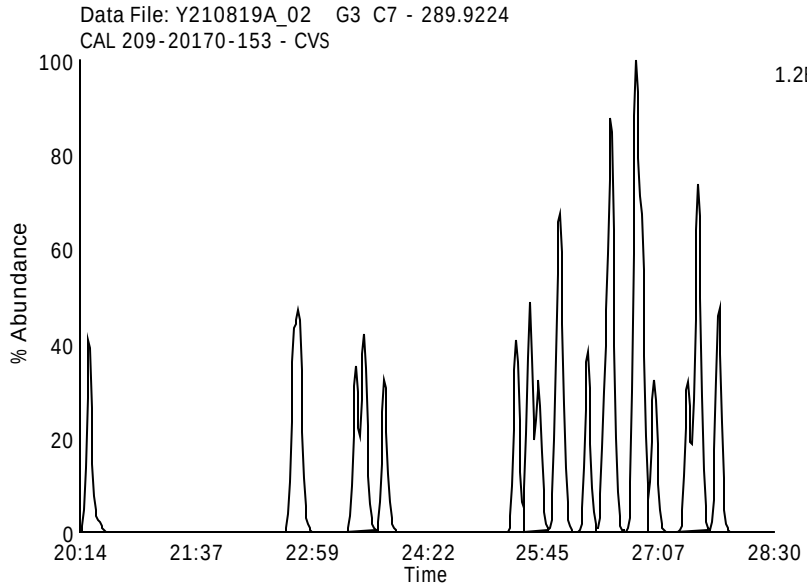


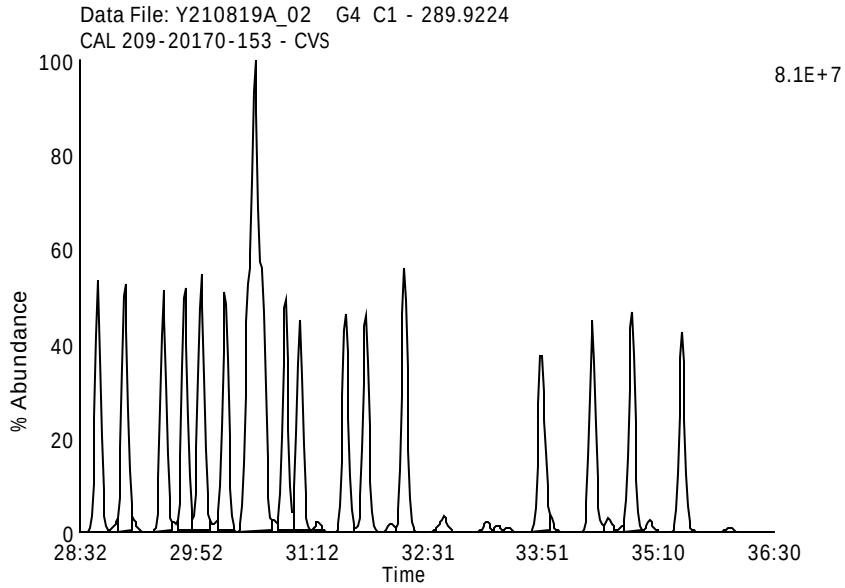


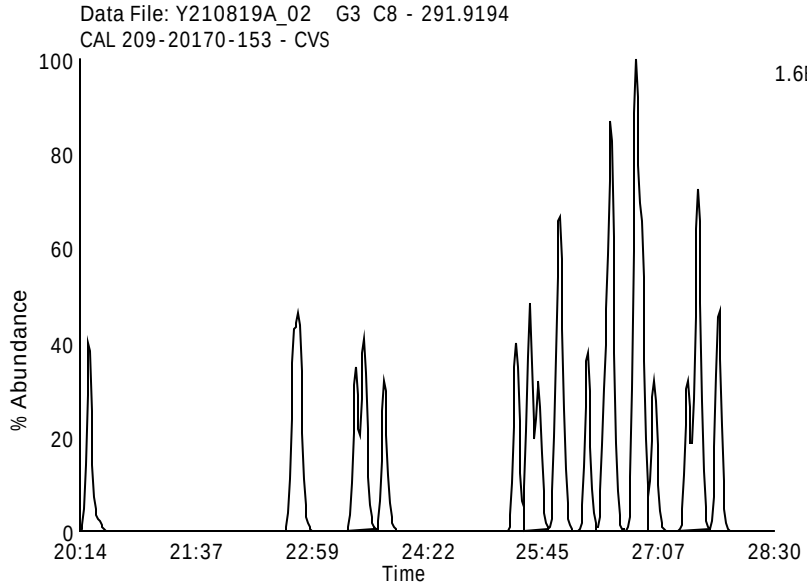


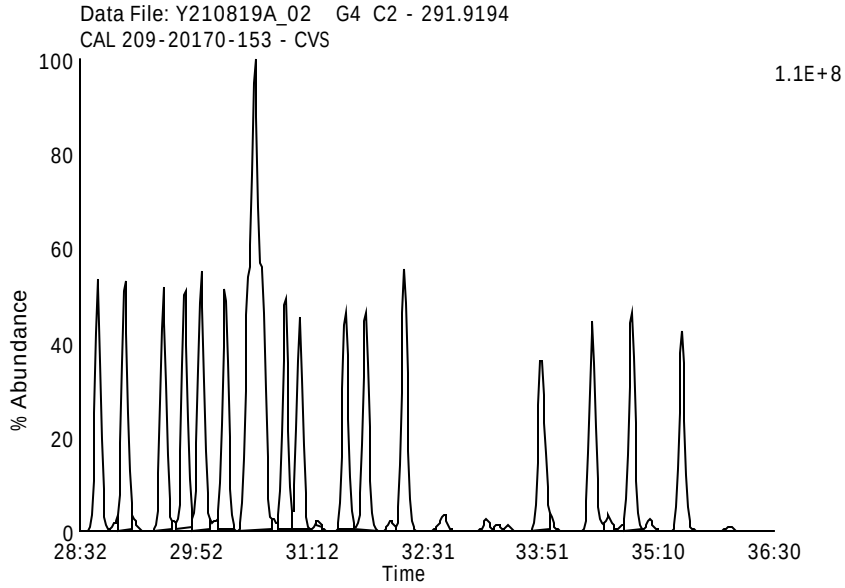
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



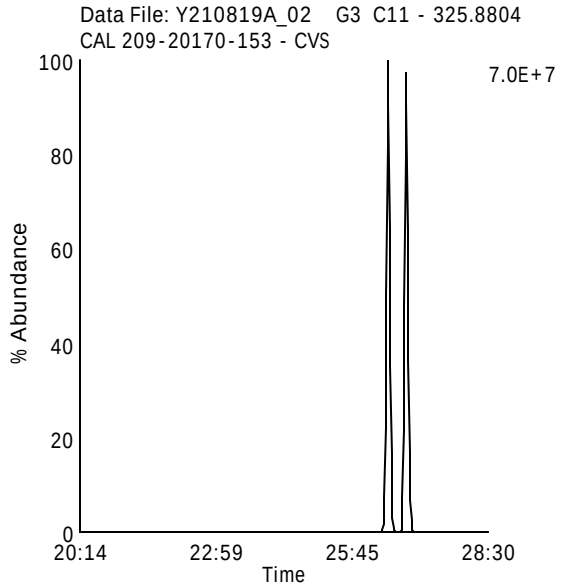


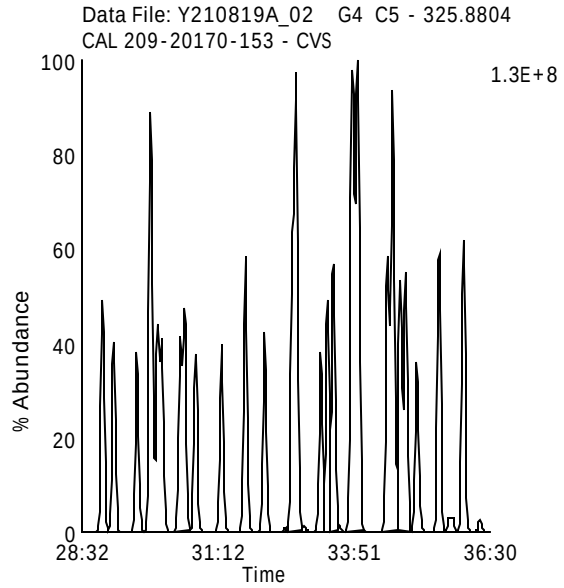


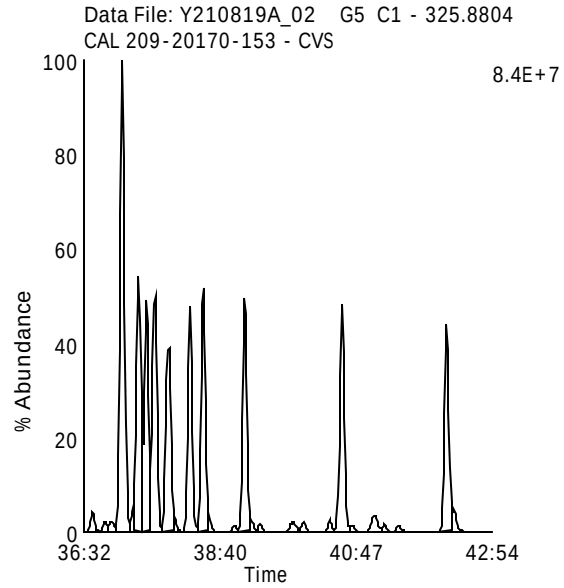


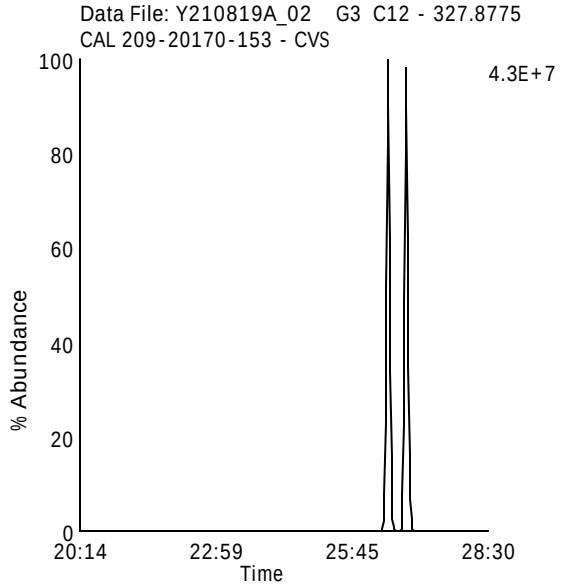
Penta Chlorinated Biphenyls

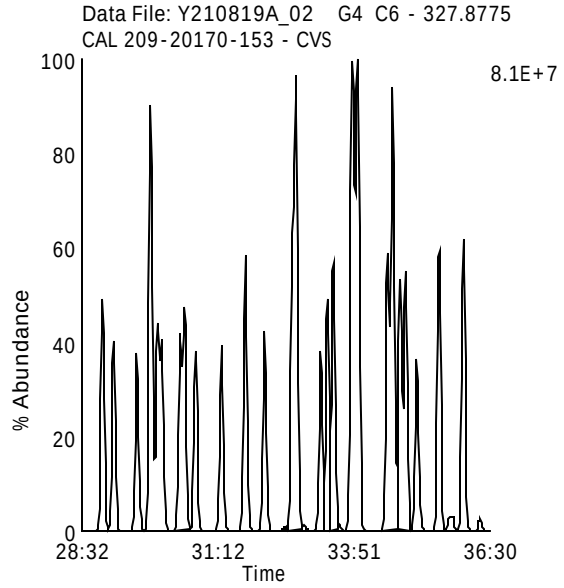
Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

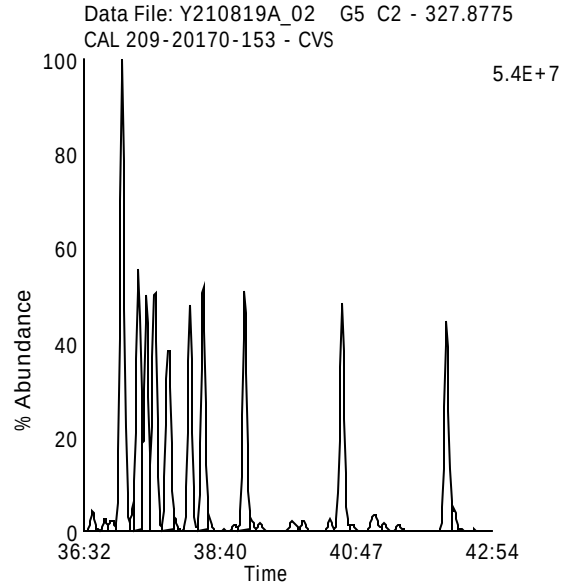








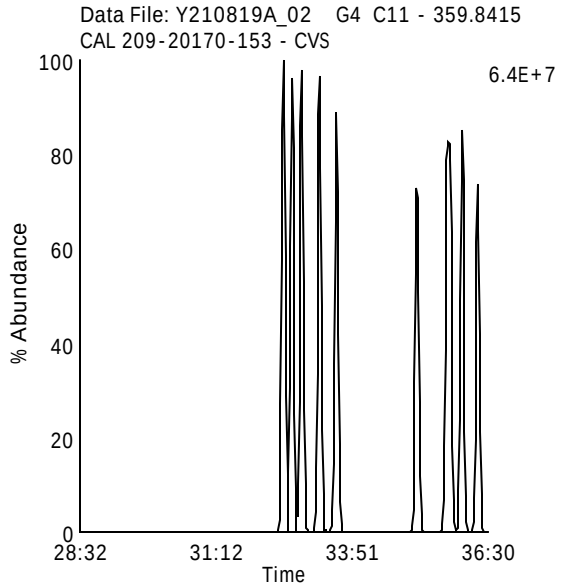


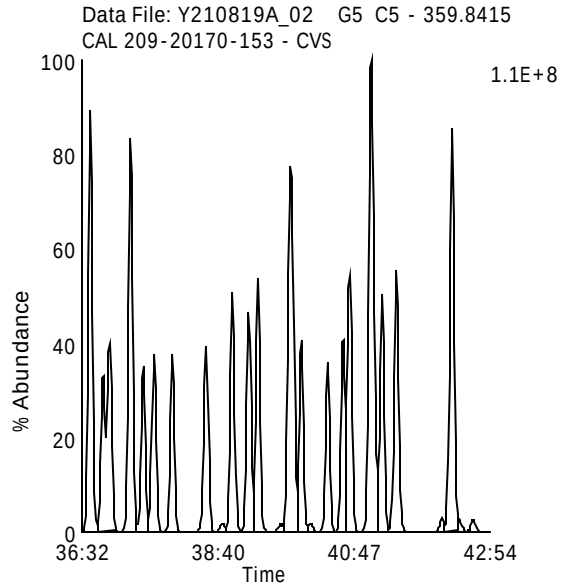


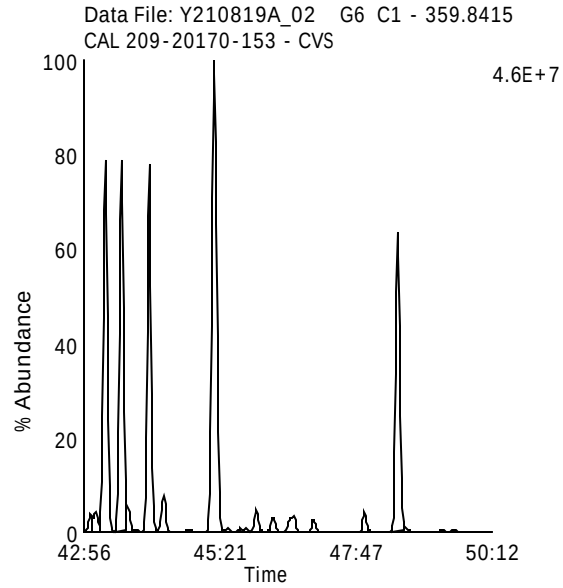
Hexa Chlorinated Biphenyls

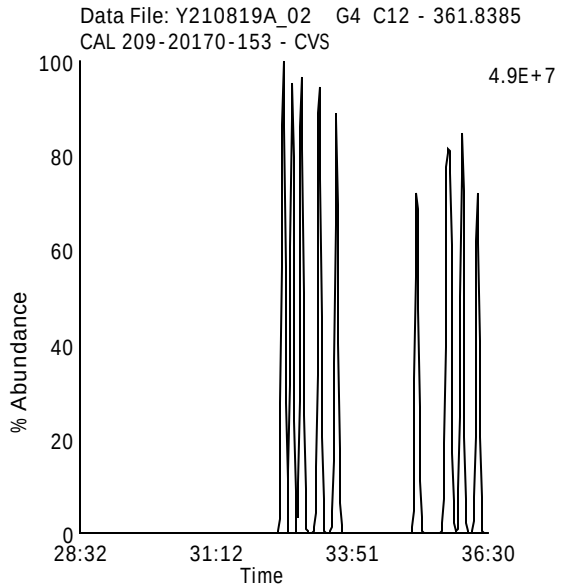
Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

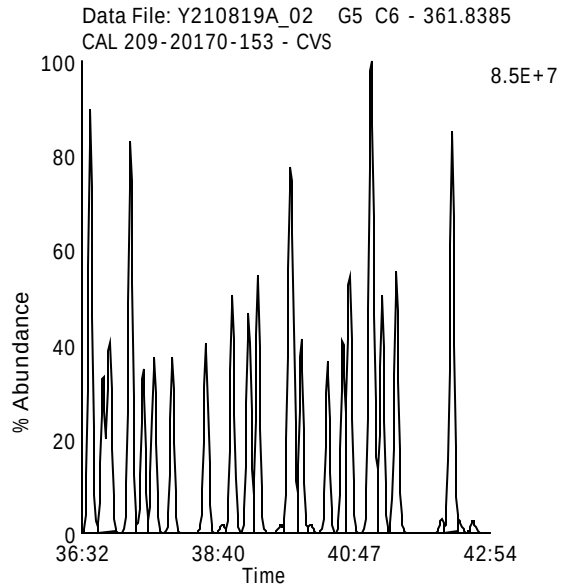
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

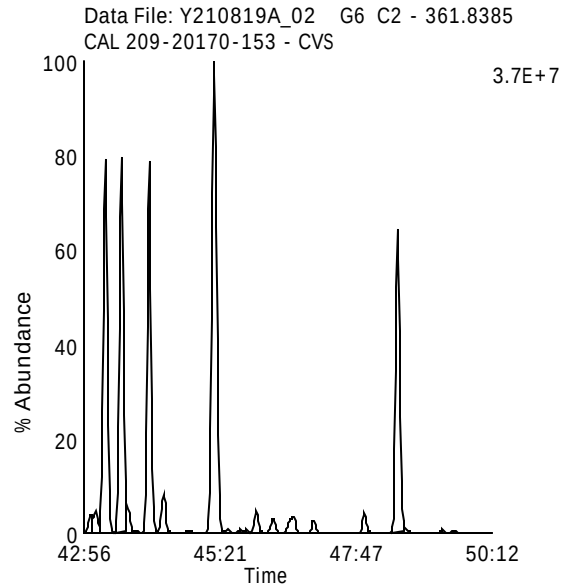








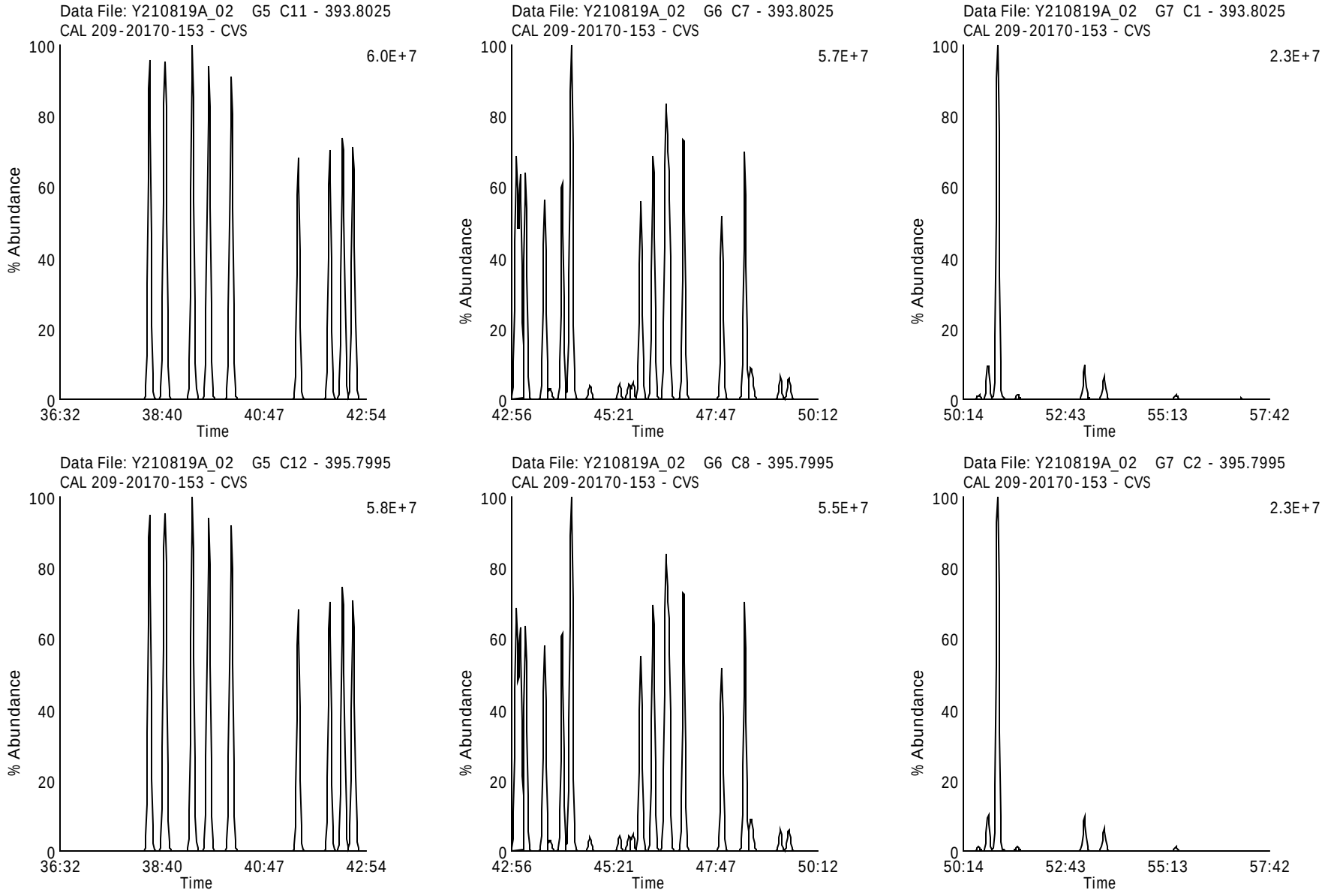




Hepta Chlorinated Biphenyls

Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

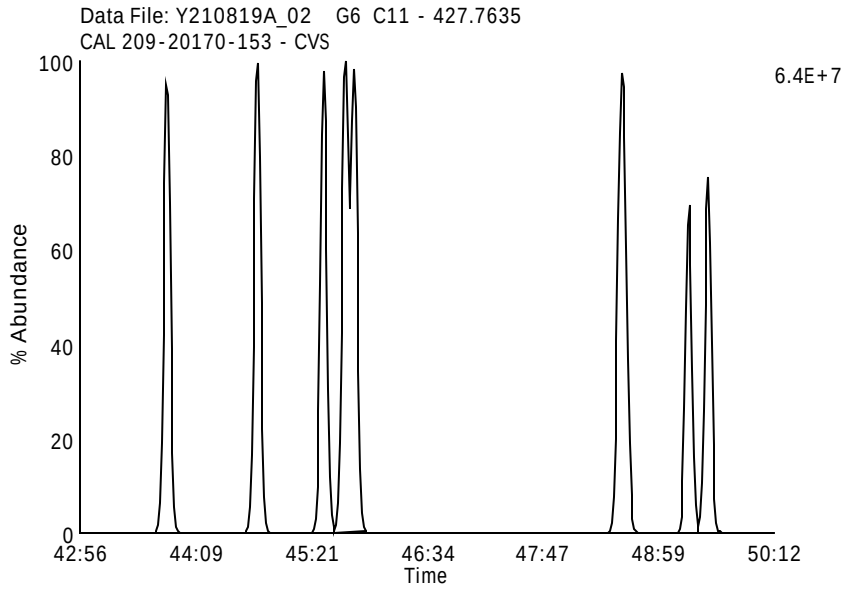
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

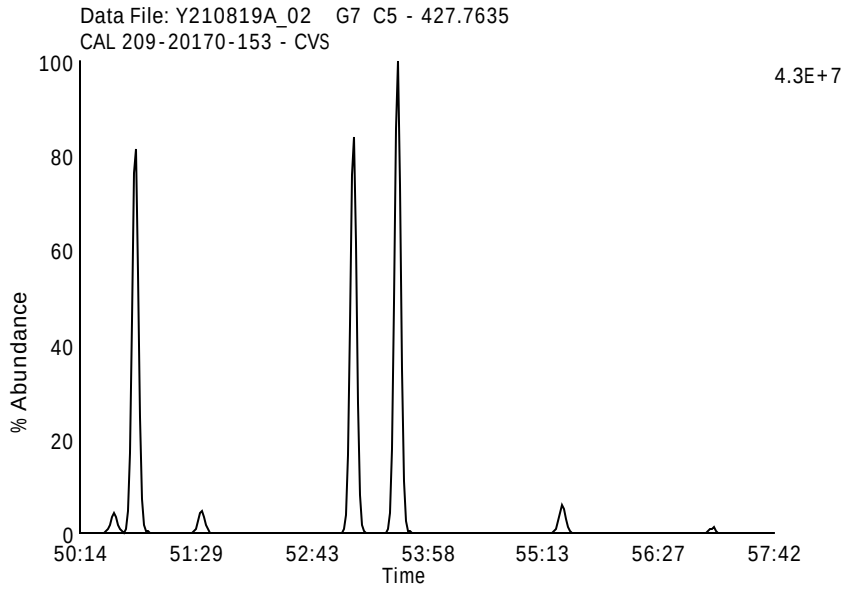


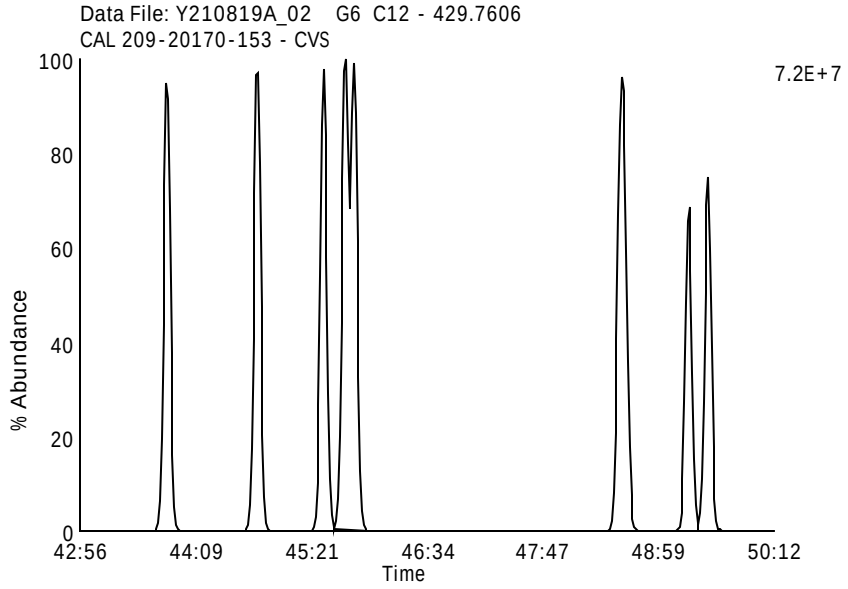
Octa Chlorinated Biphenyls

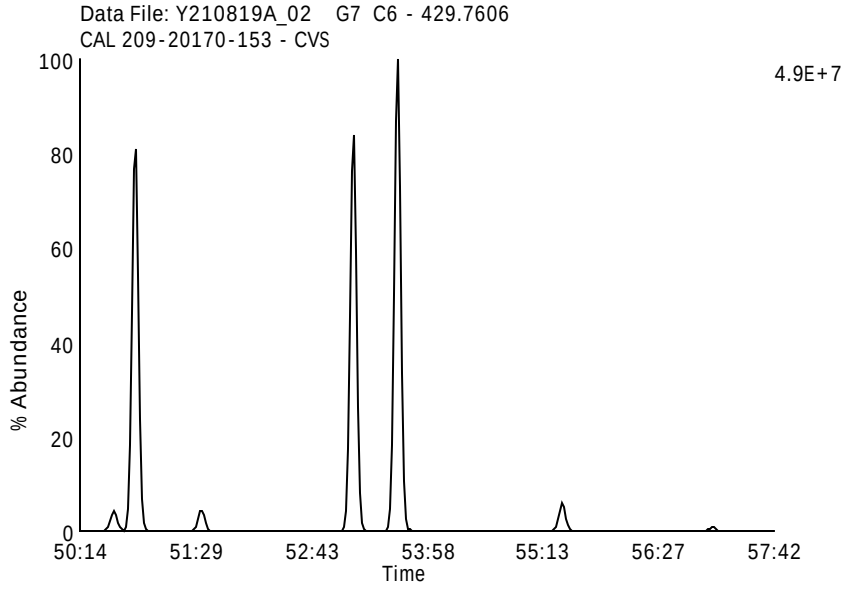
Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix



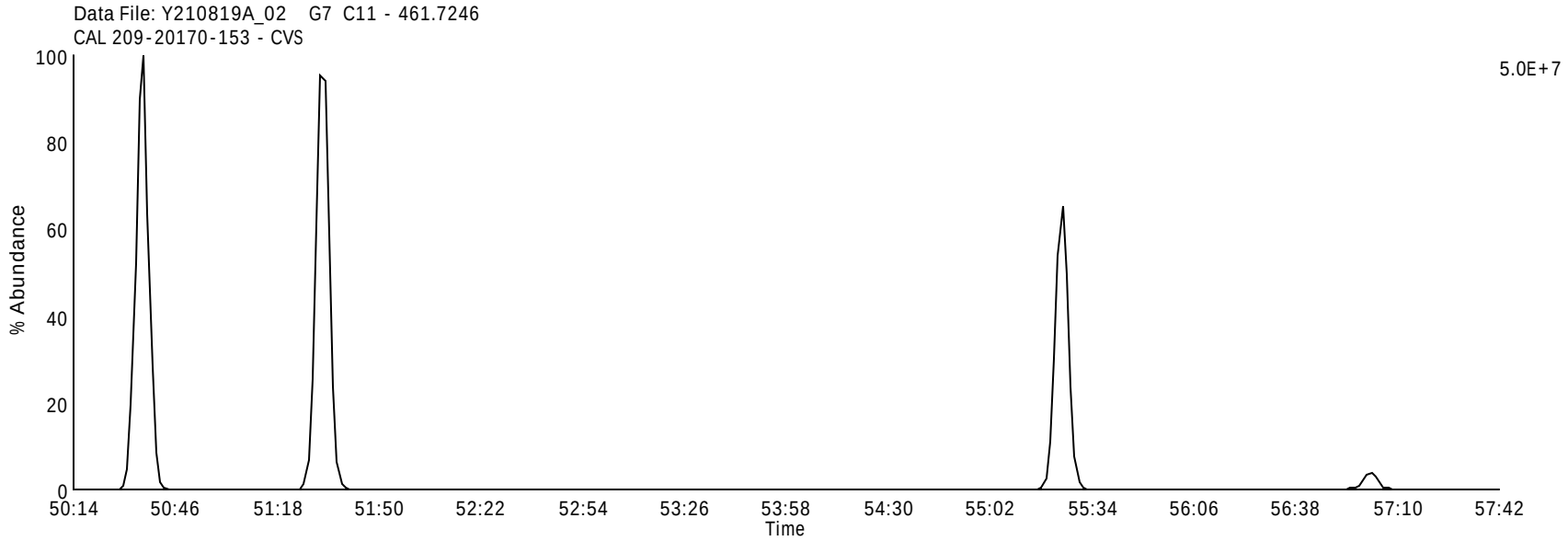


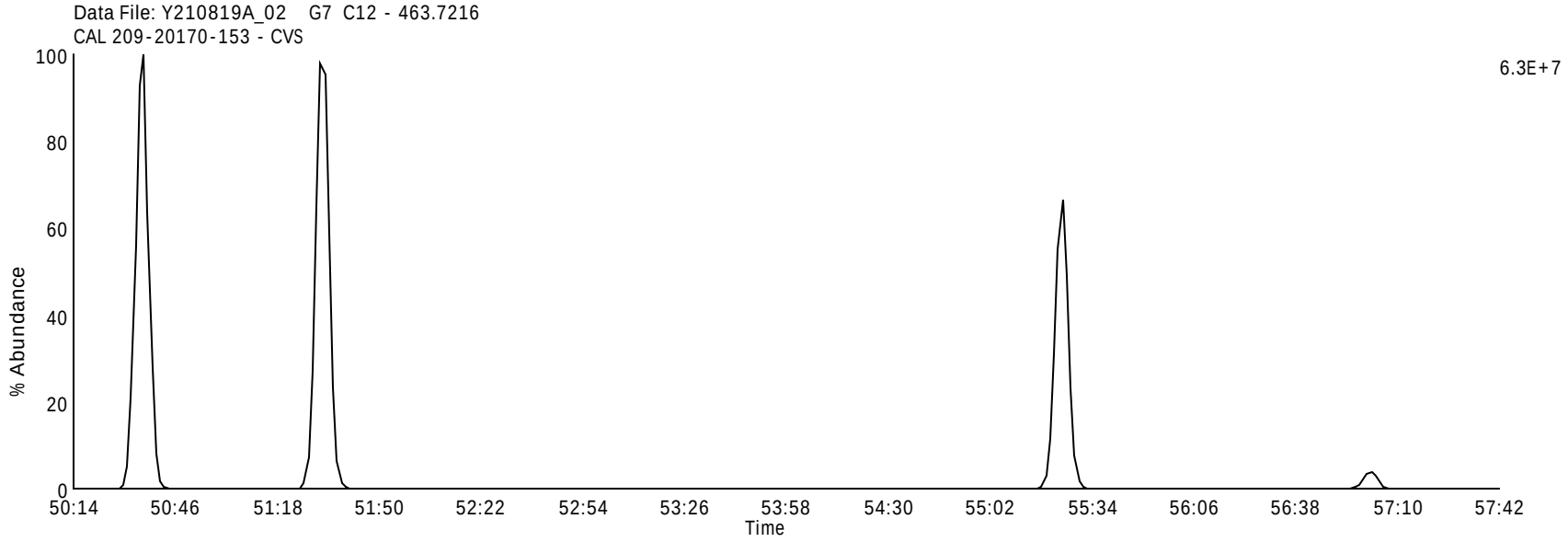




Nona Chlorinated Biphenyls

Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

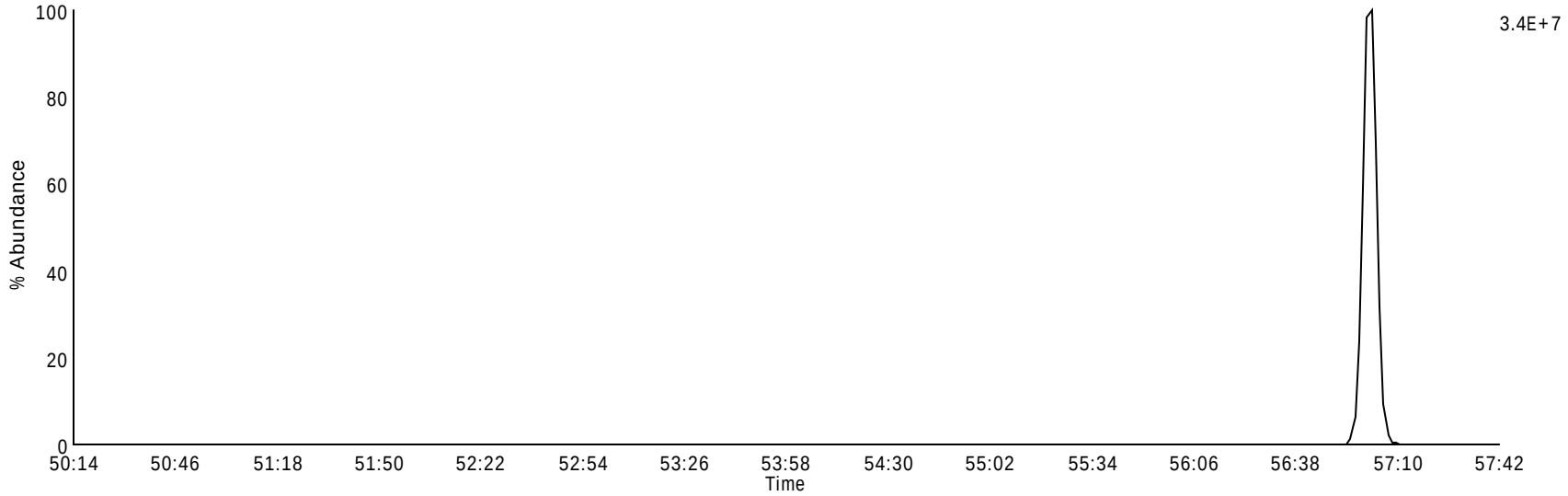




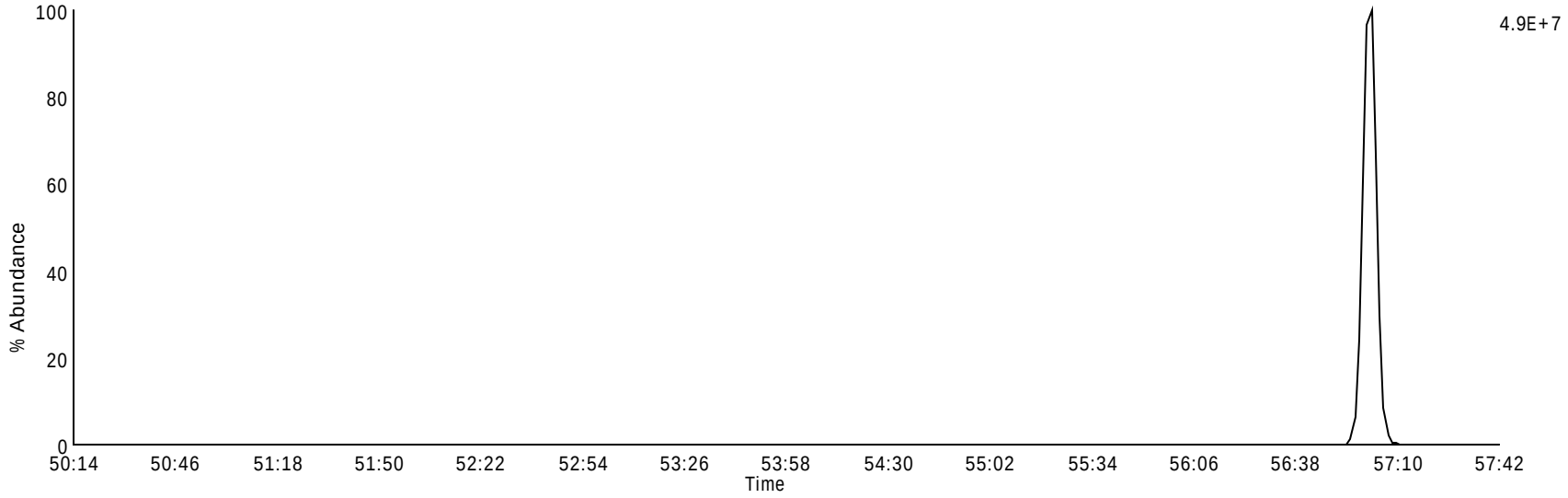
Deca Chlorinated Biphenyl

Data File Name: Y210819A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

Data File: Y210819A_02 G7 C15 - 495.6856
CAL 209-20170-153 - CVS

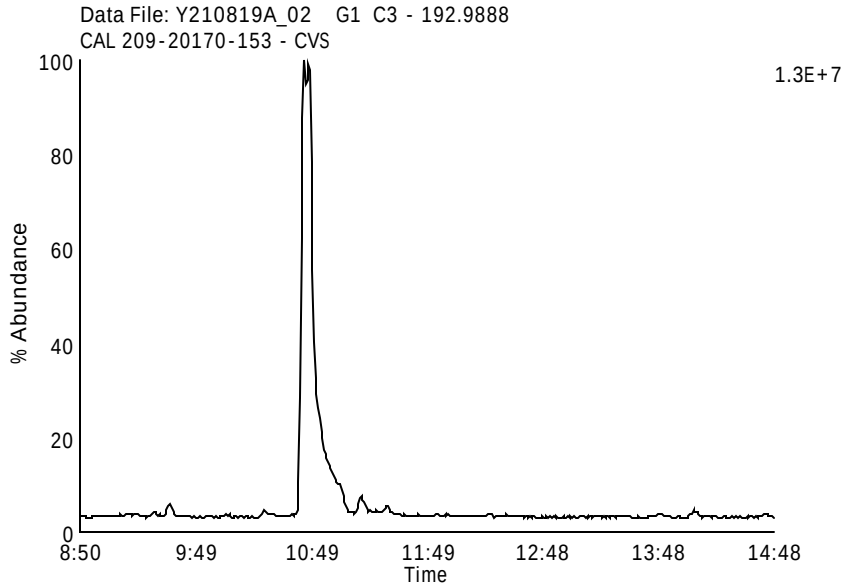


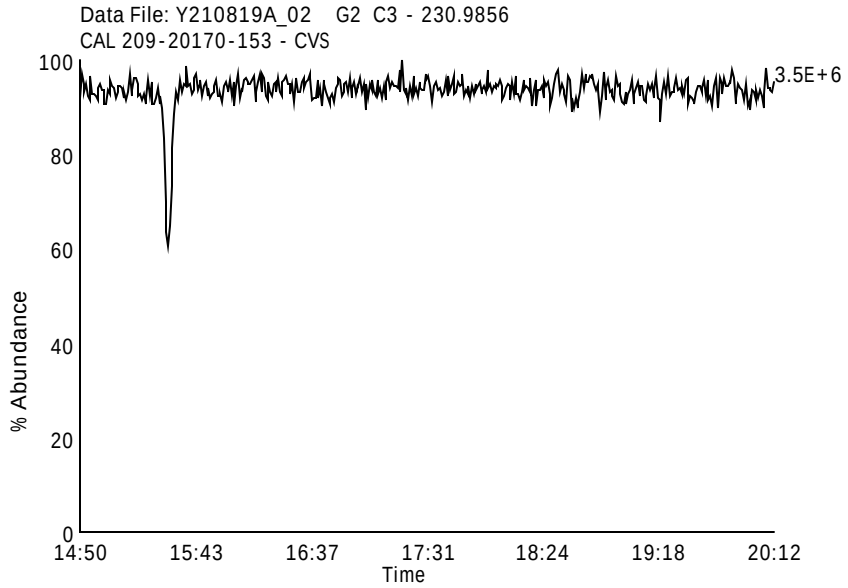
Data File: Y210819A_02 G7 C16 - 497.6826
CAL 209-20170-153 - CVS

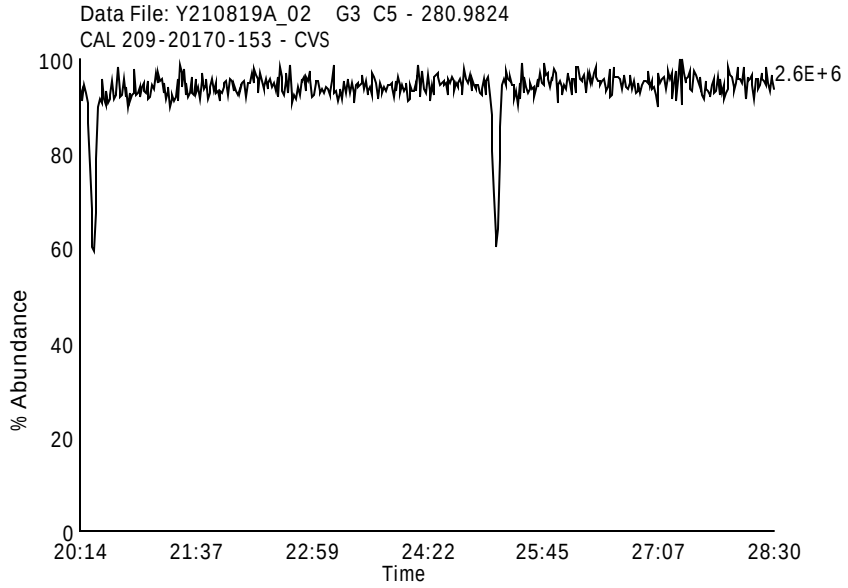


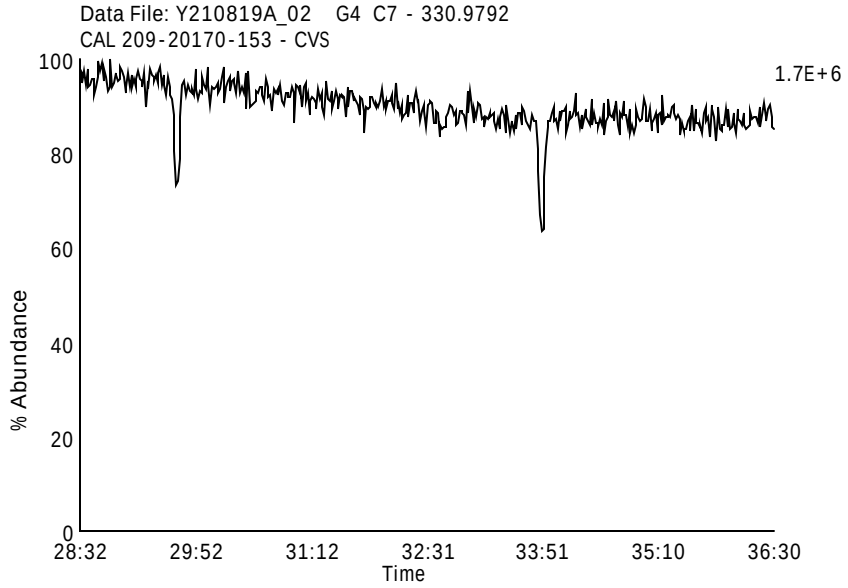
Group 1 - 4 Lock mass

Data File Name: Y210819A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





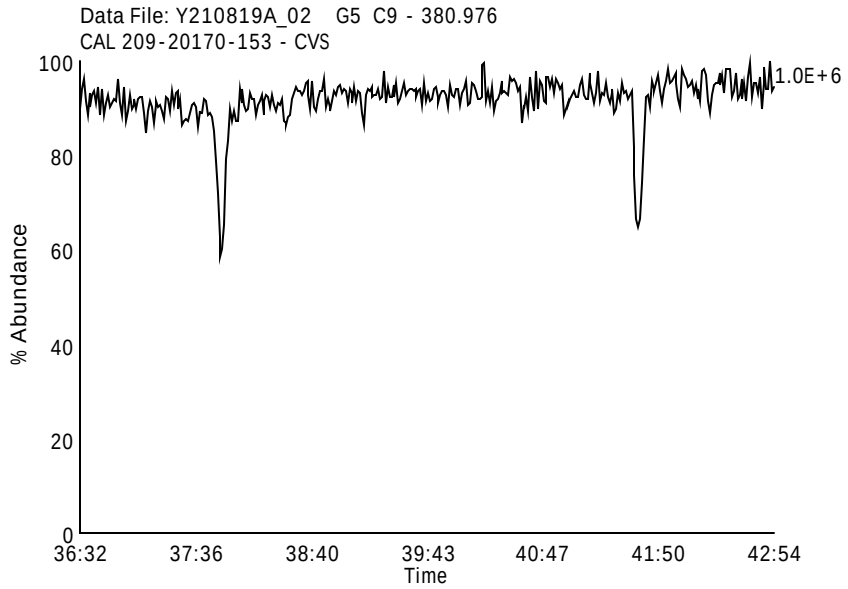


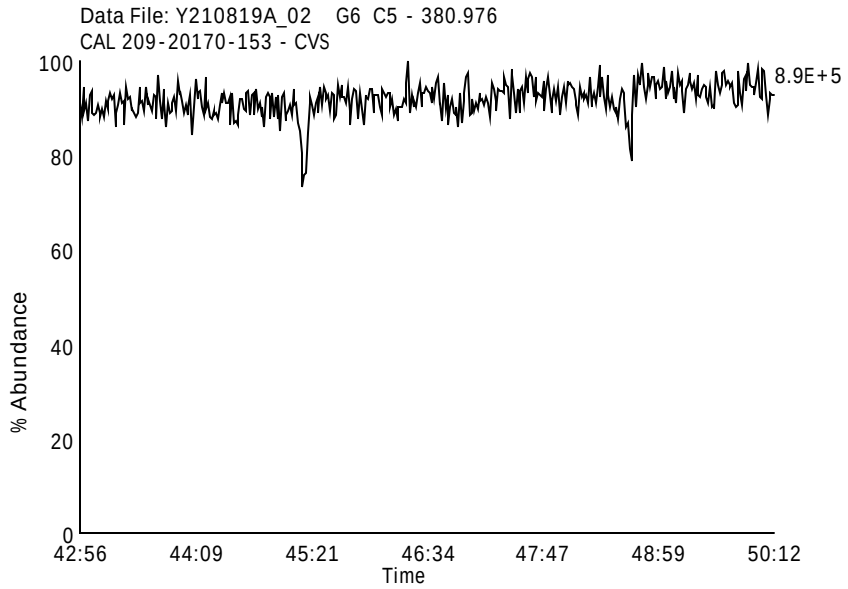


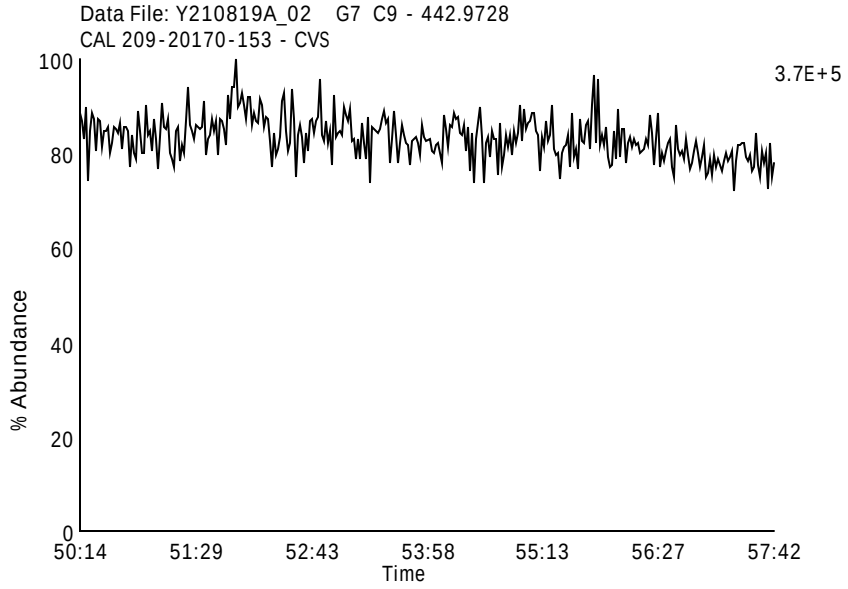
Group 5 - 7 Lock mass

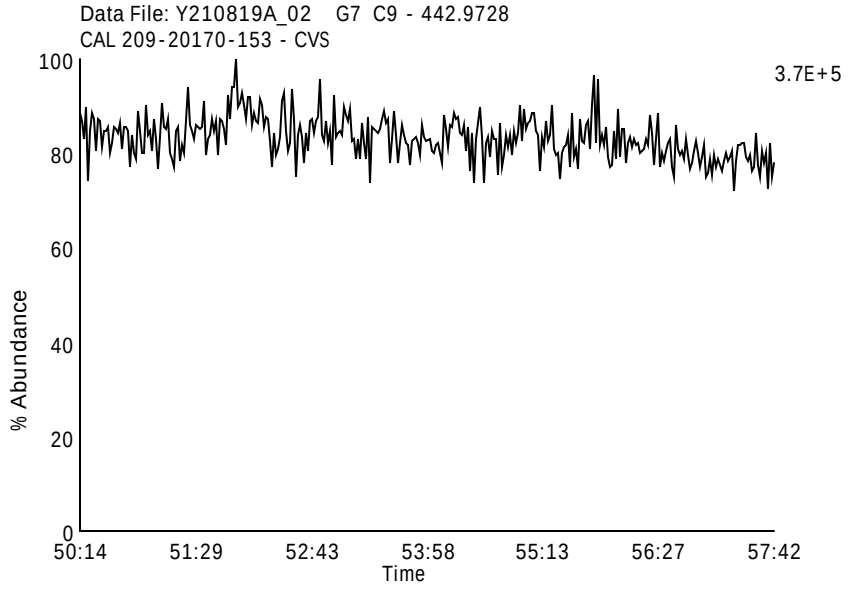
Data File Name: Y210819A_02
Date Acquired: 8/19/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix







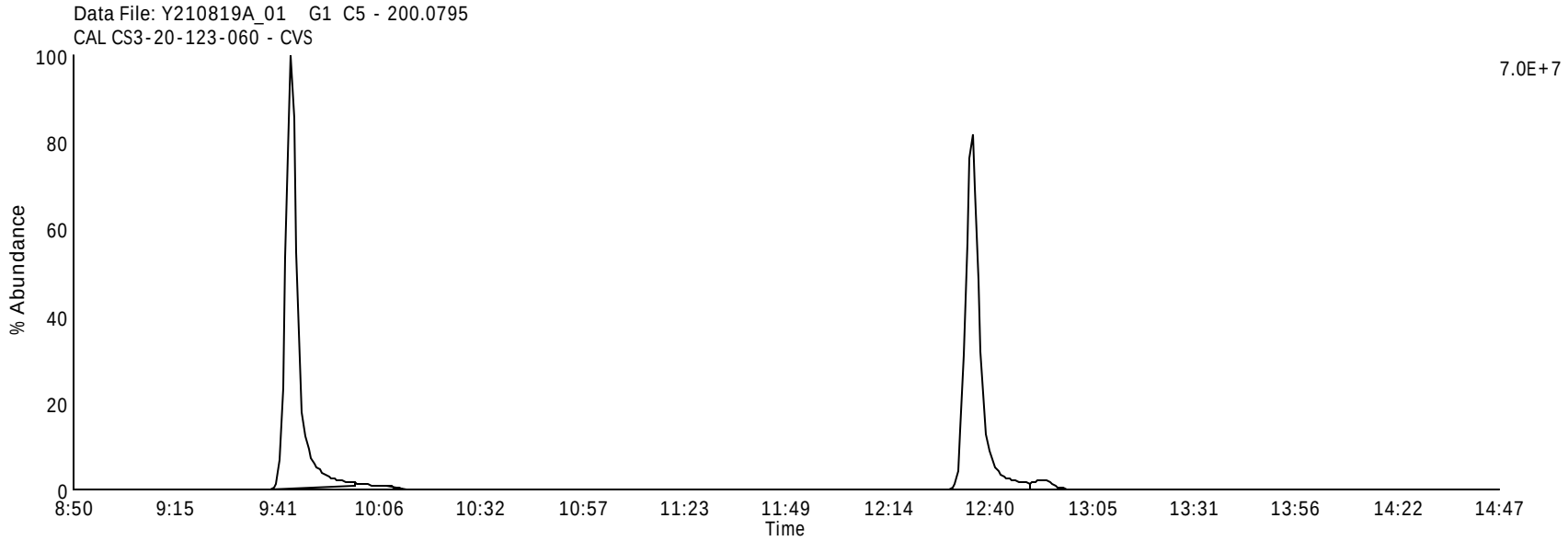


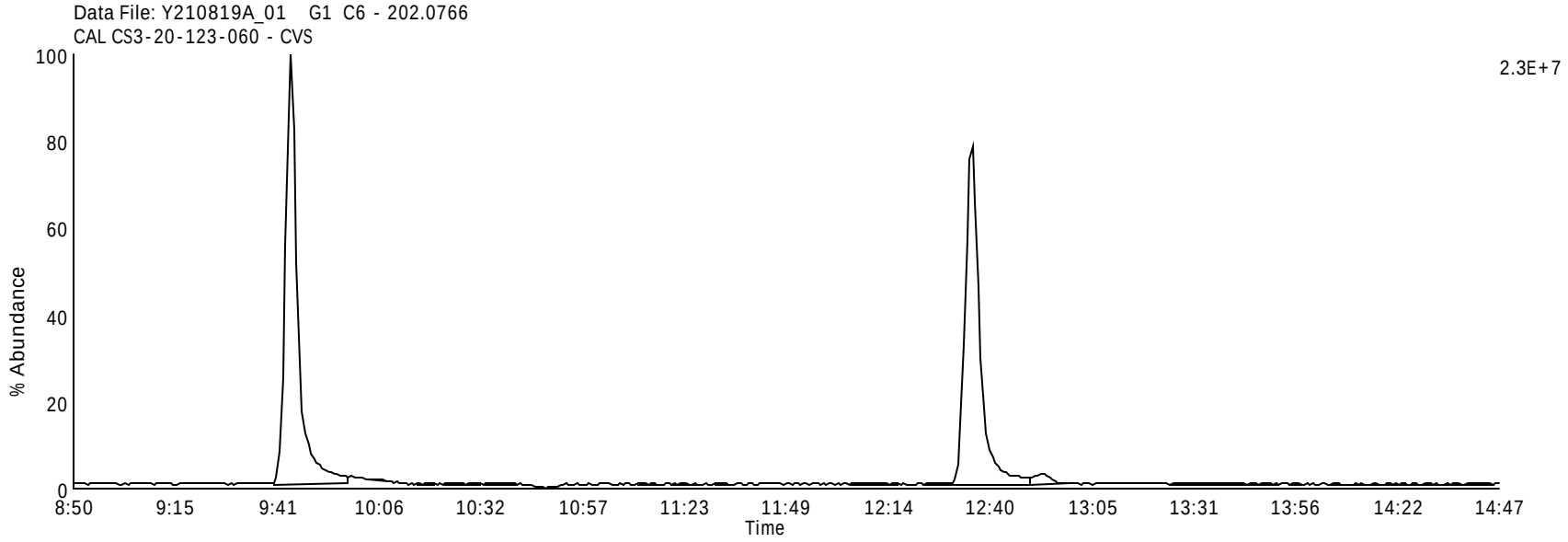
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

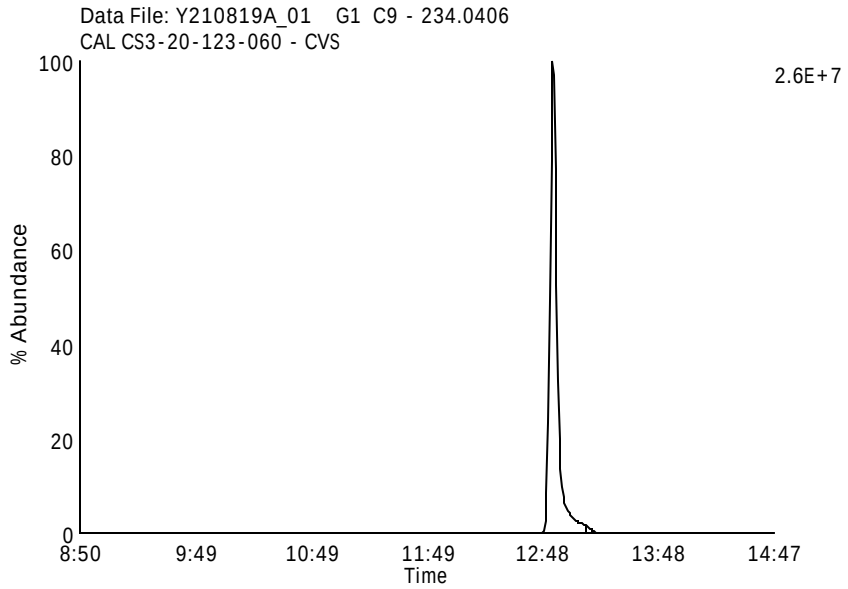
Sample Description: CAL CS3-20-123-060 - CVS

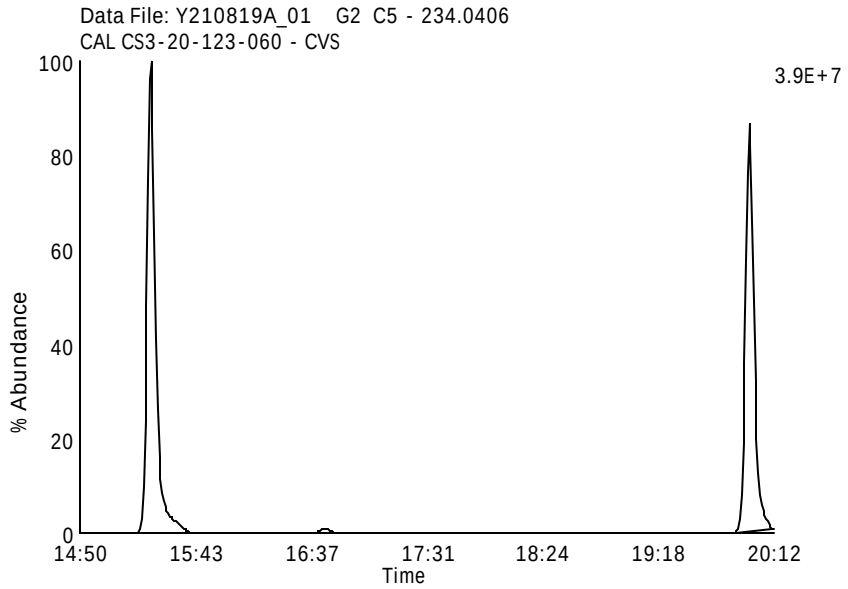


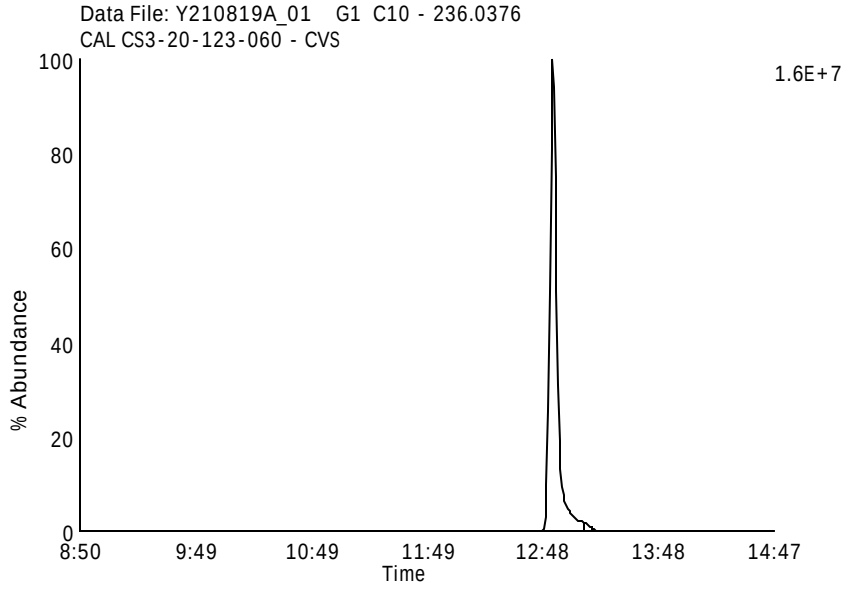


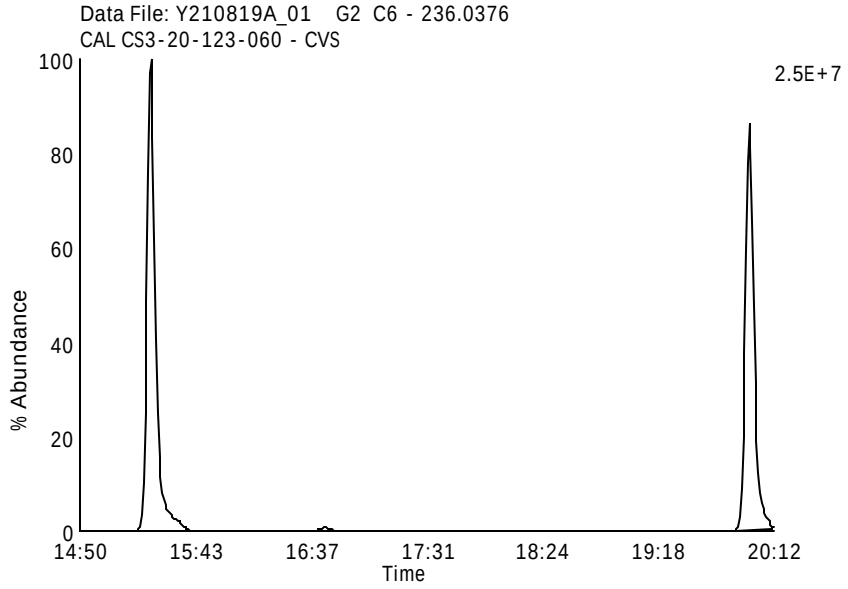
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



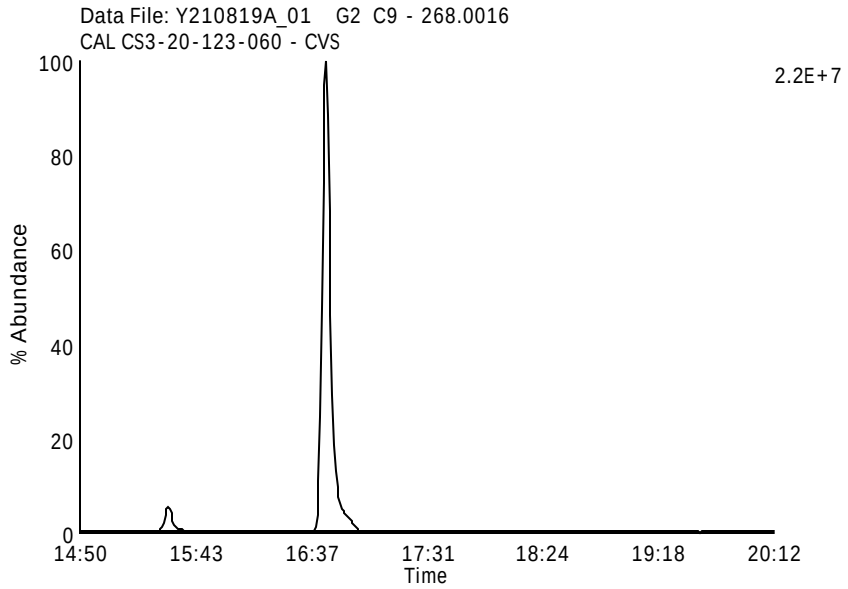


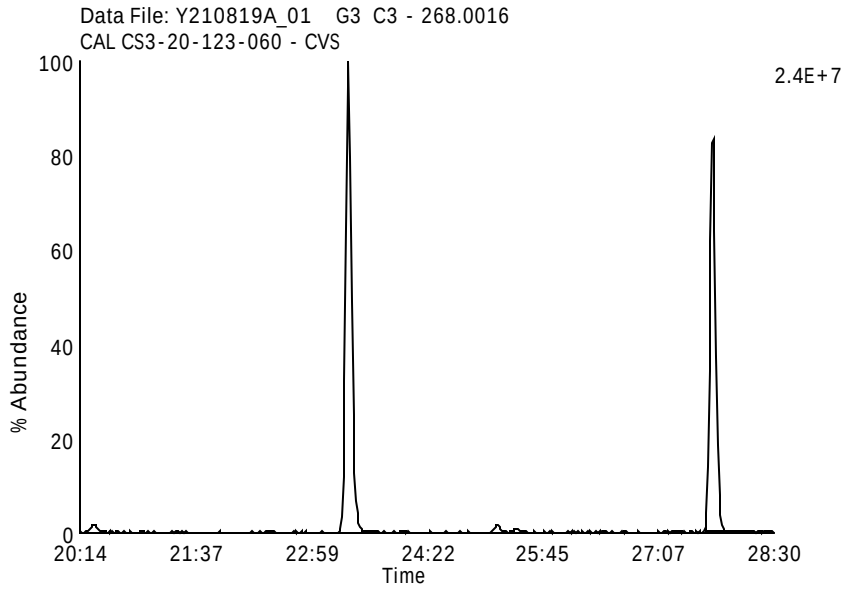


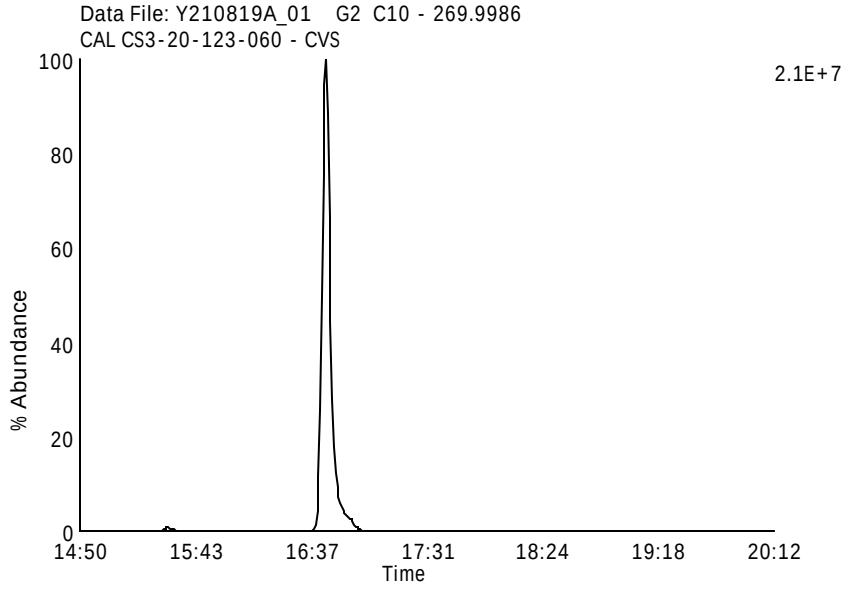


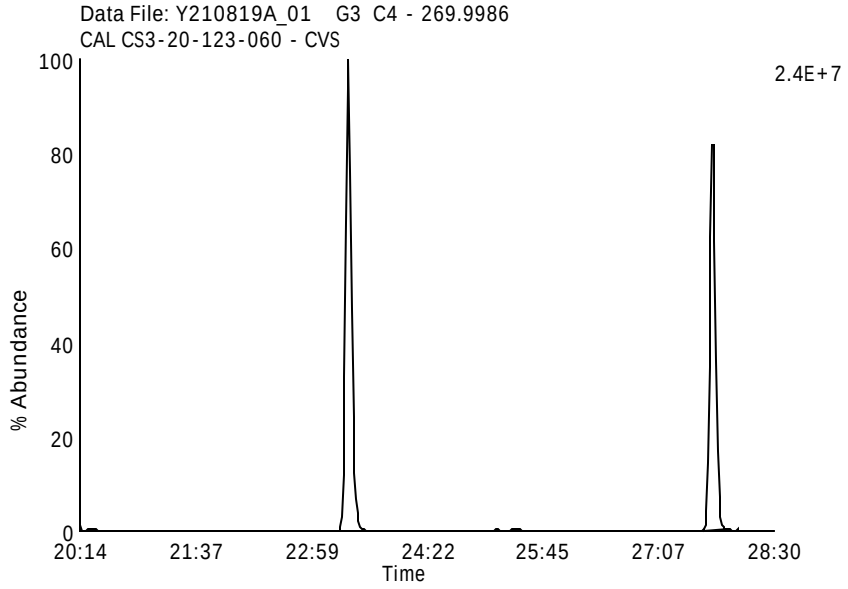
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



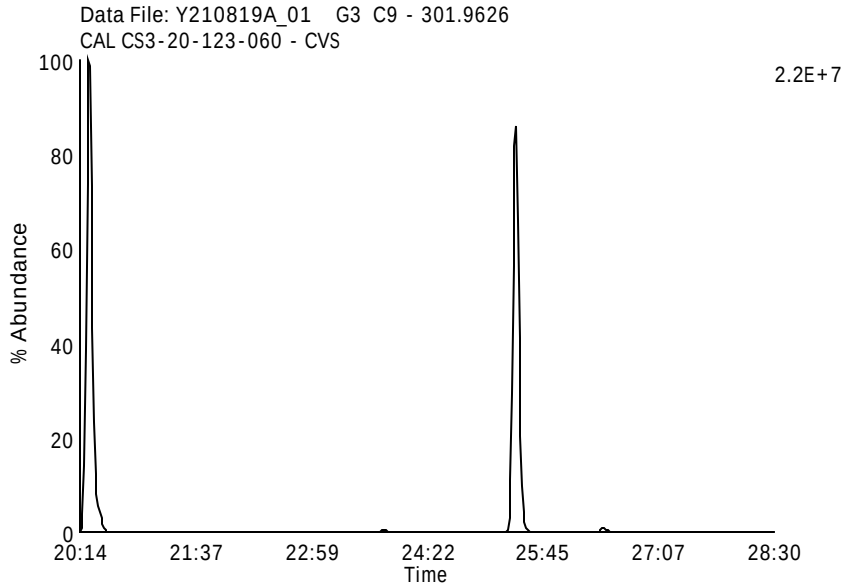


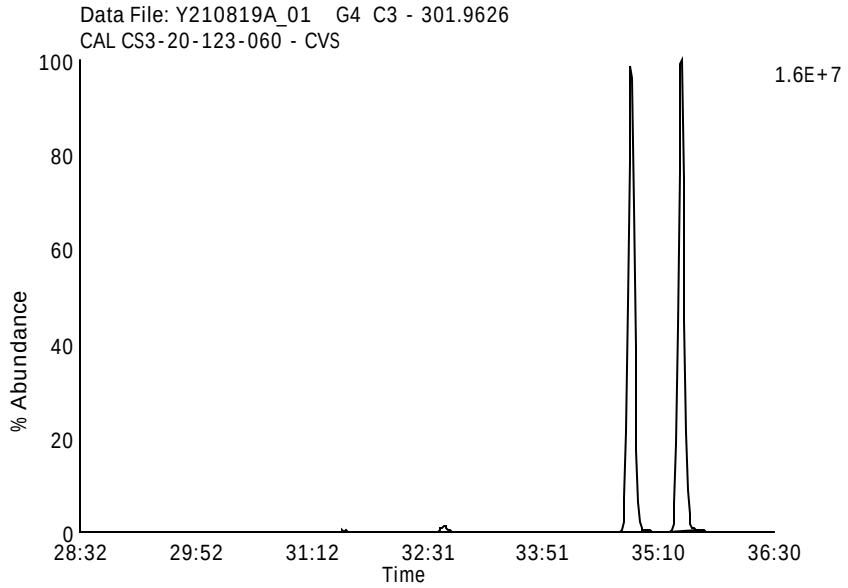


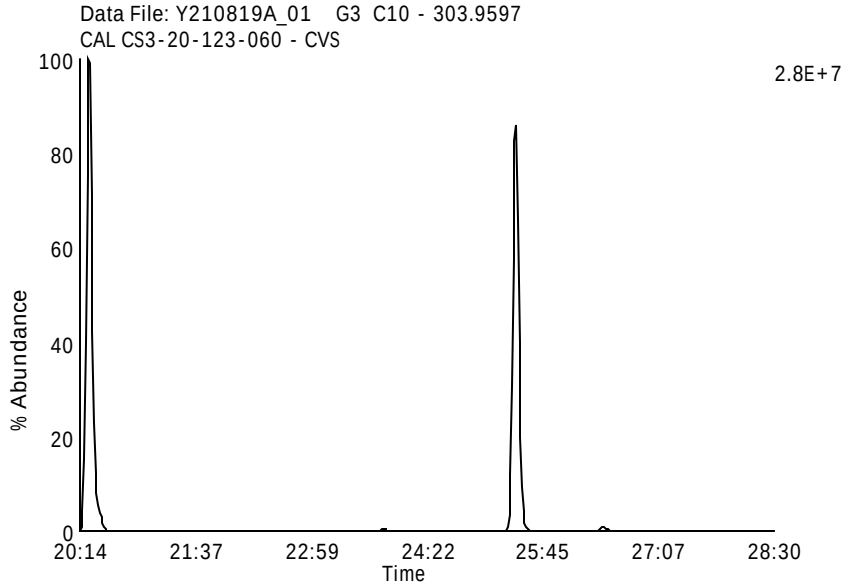


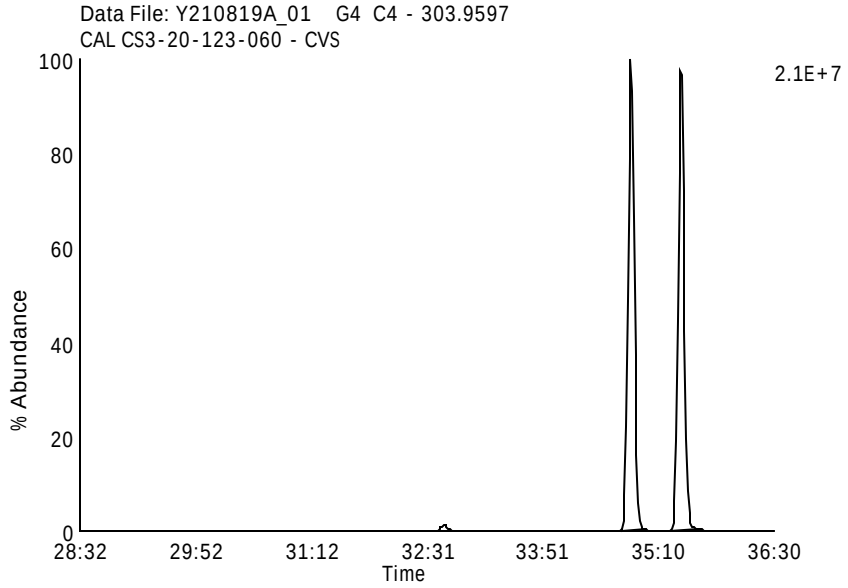
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







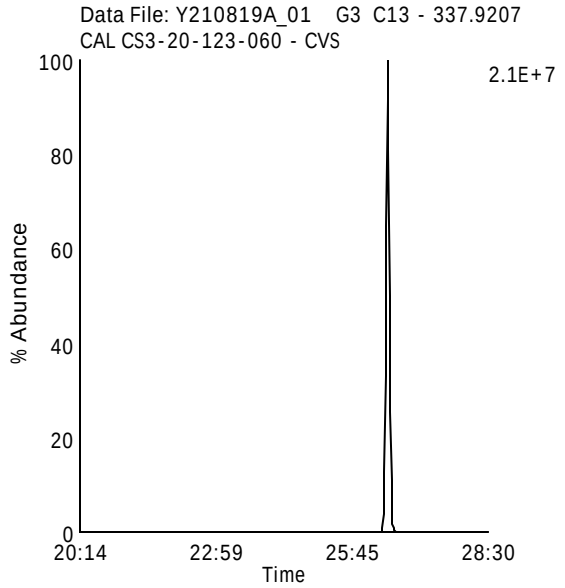


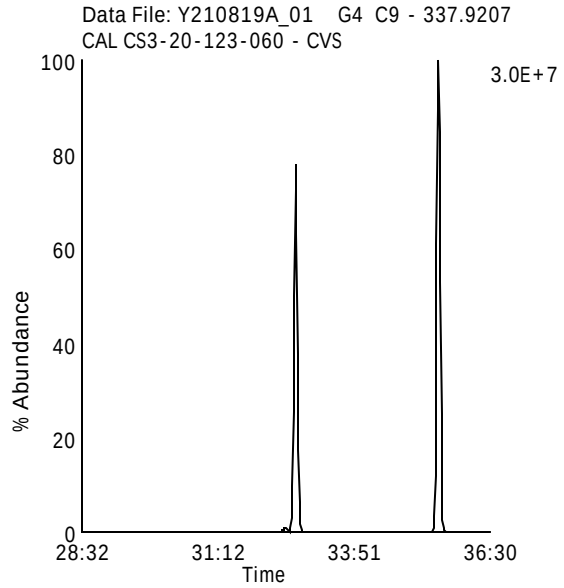
Labeled Penta Chlorinated Biphenyls

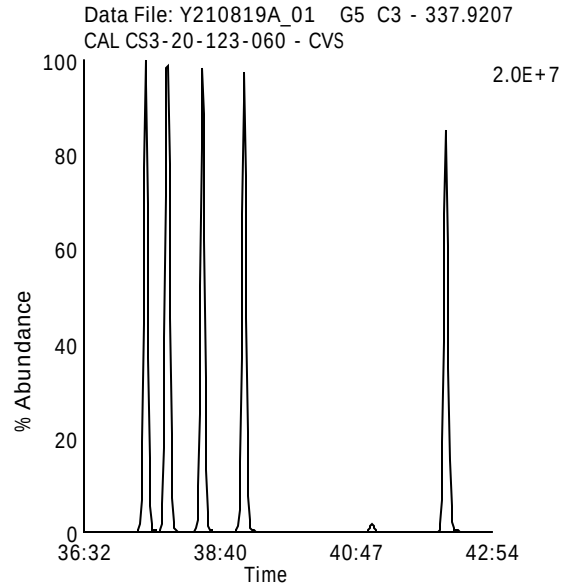
Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

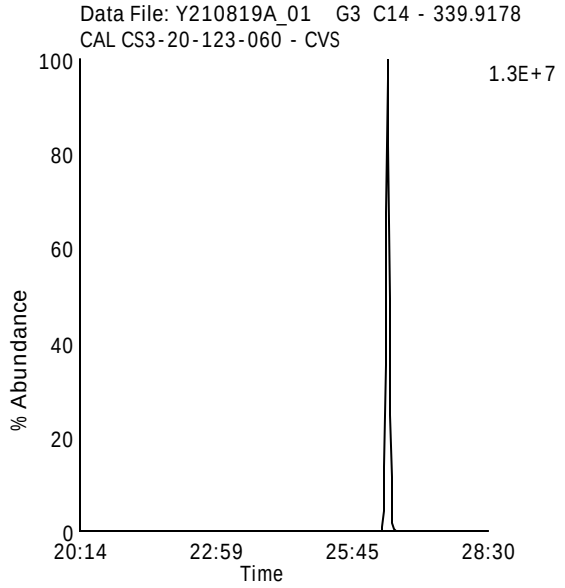
Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

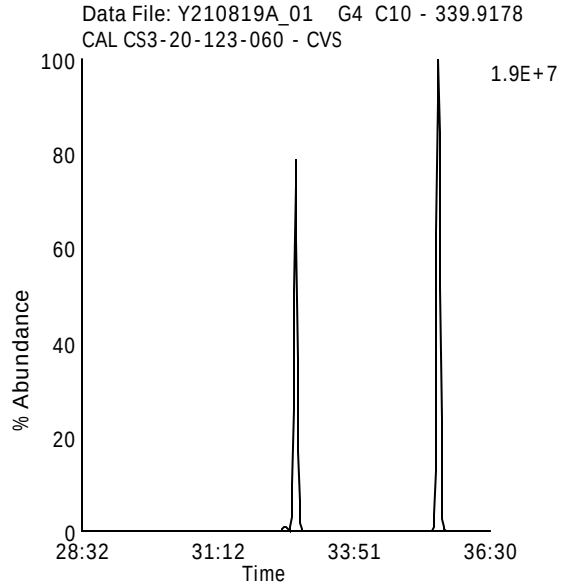
Sample Description: CAL CS3-20-123-060 - CVS

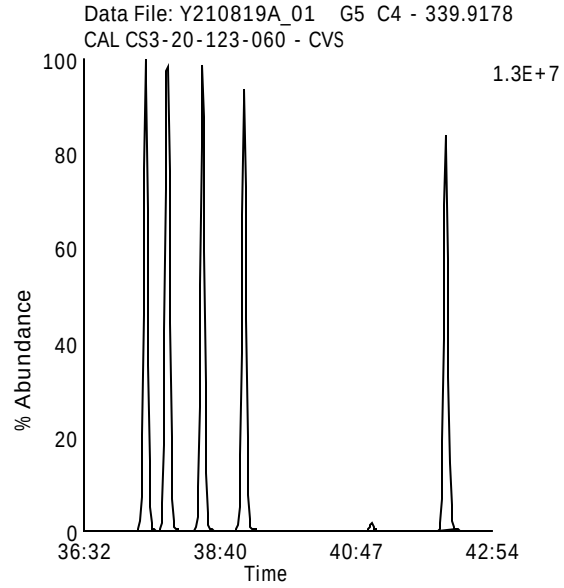










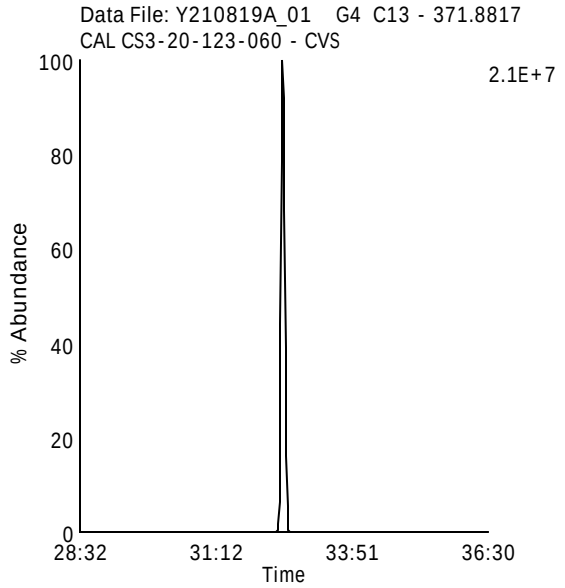


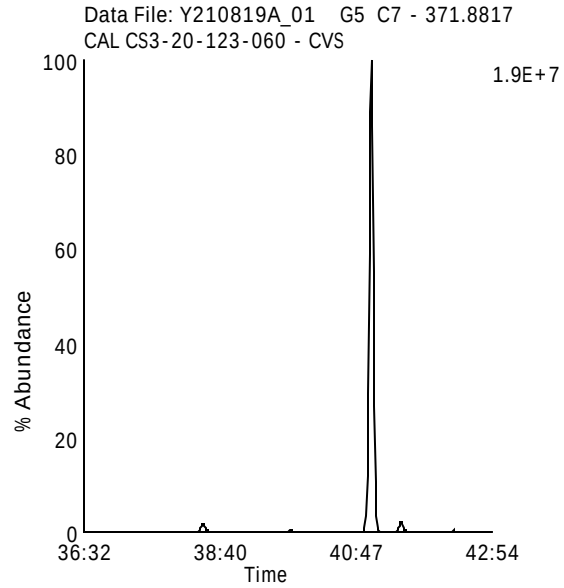
Labeled Hexa Chlorinated Biphenyls

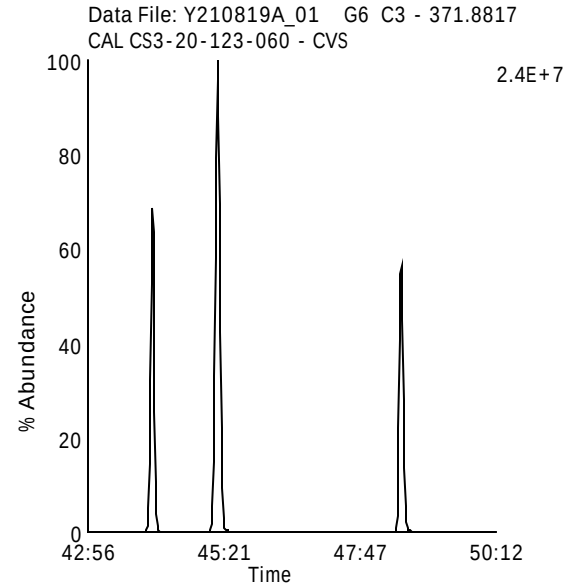
Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

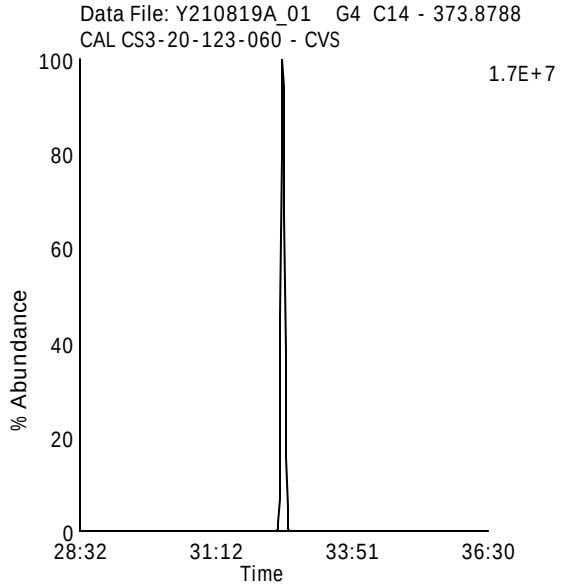
Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

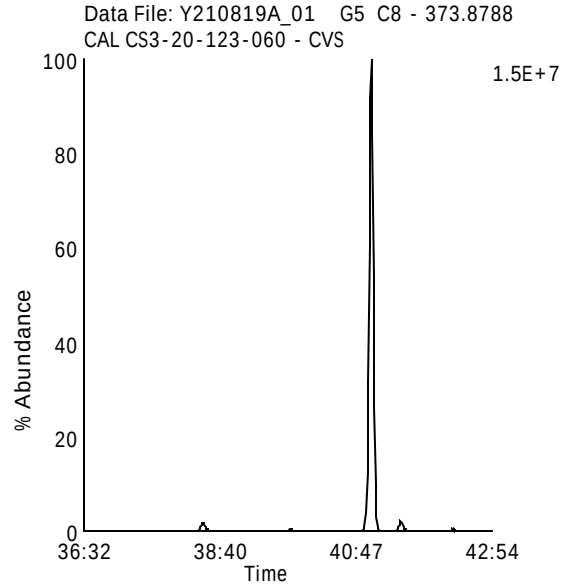
Sample Description: CAL CS3-20-123-060 - CVS

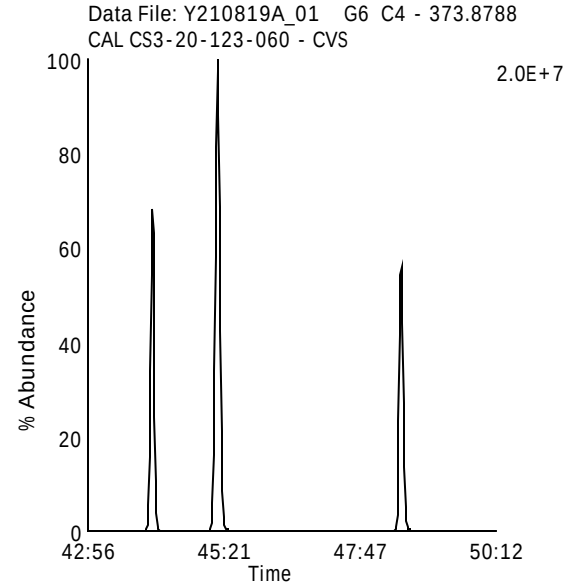






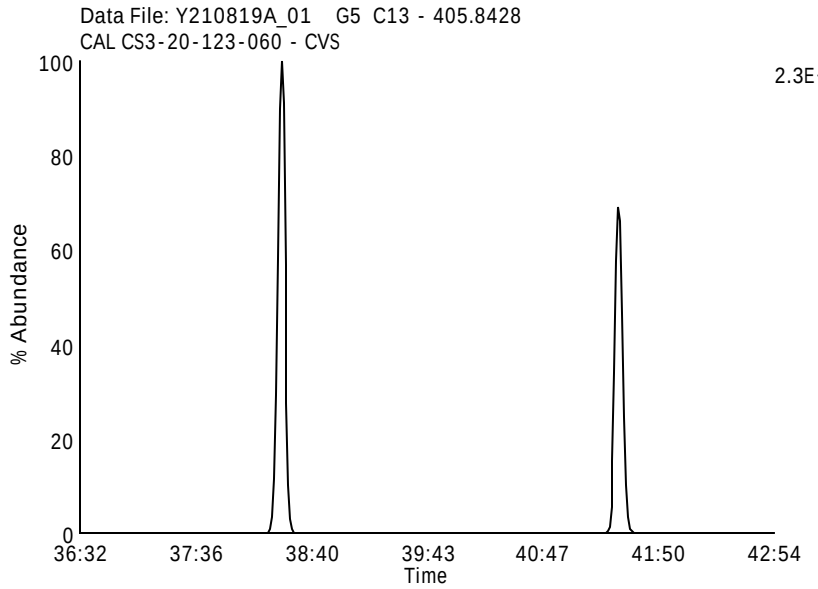


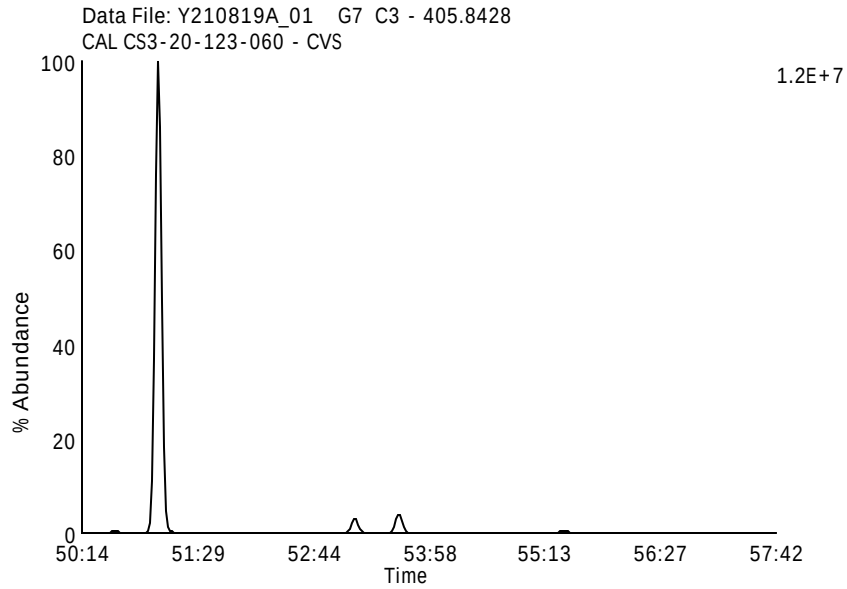


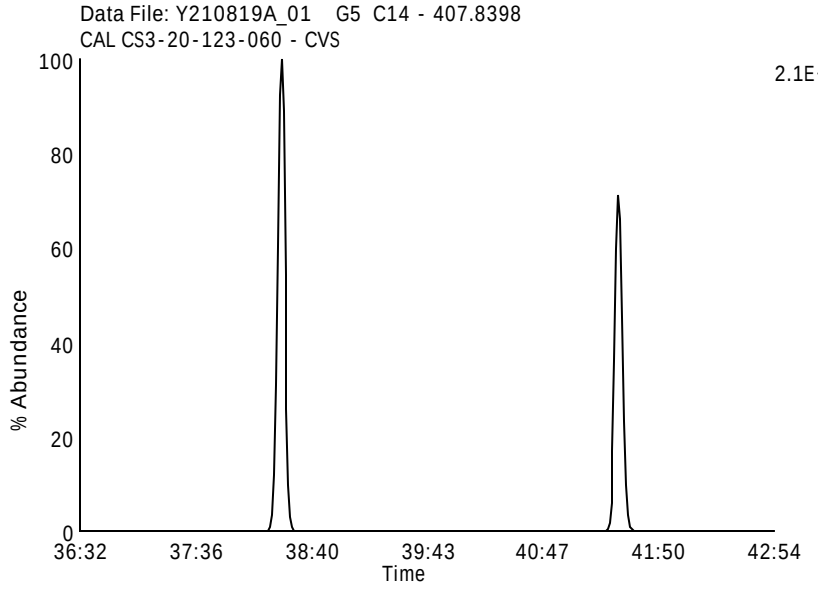


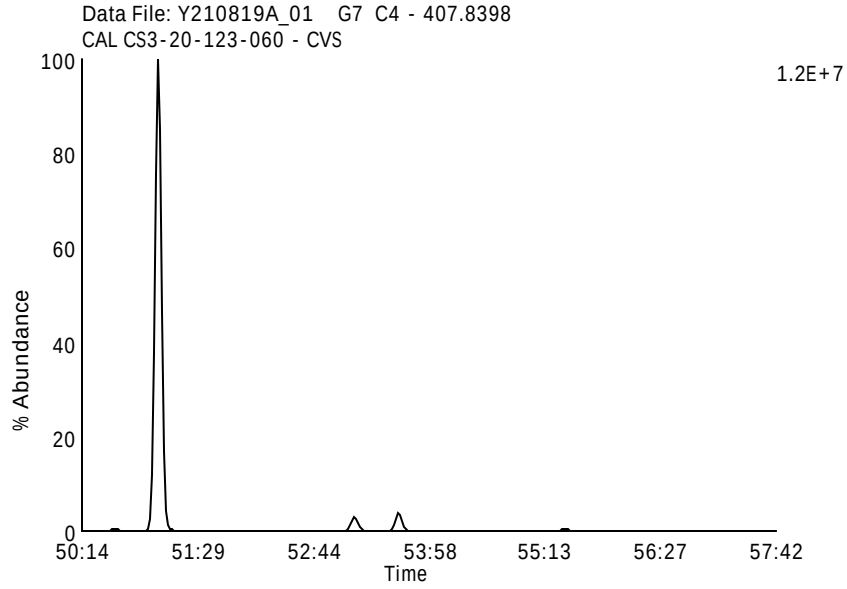
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





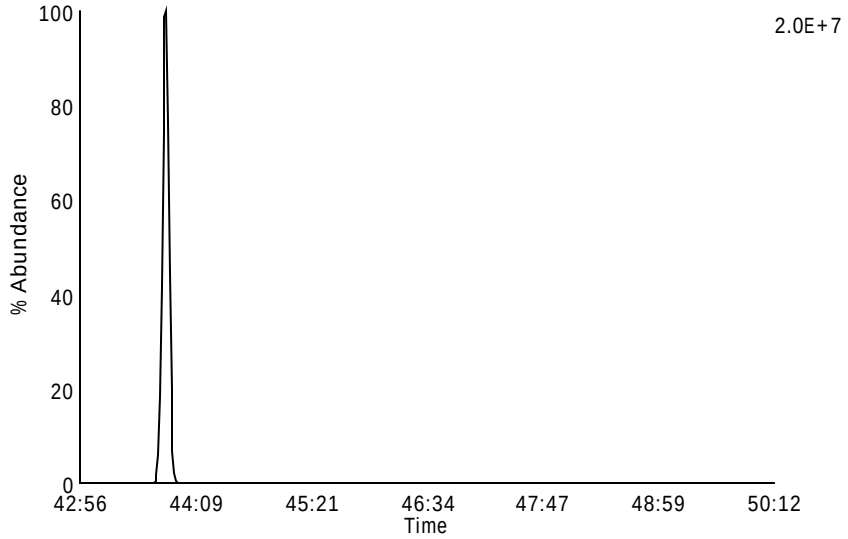




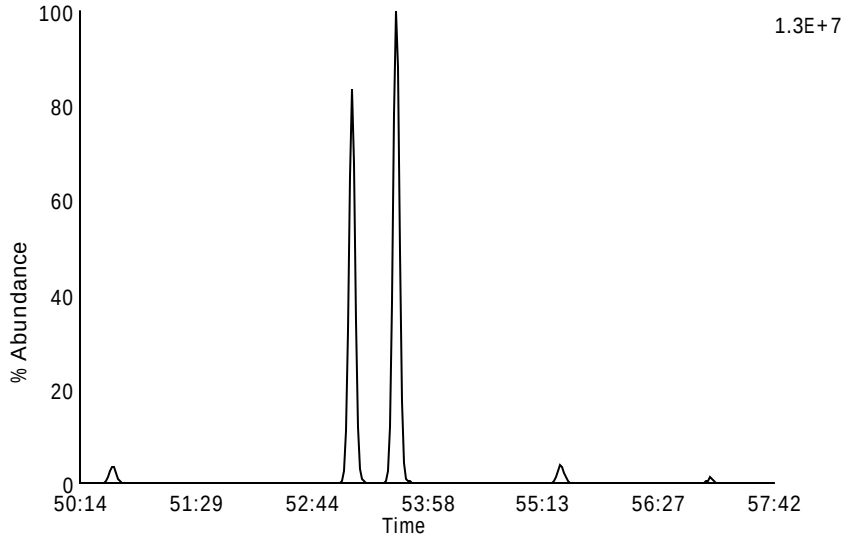
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

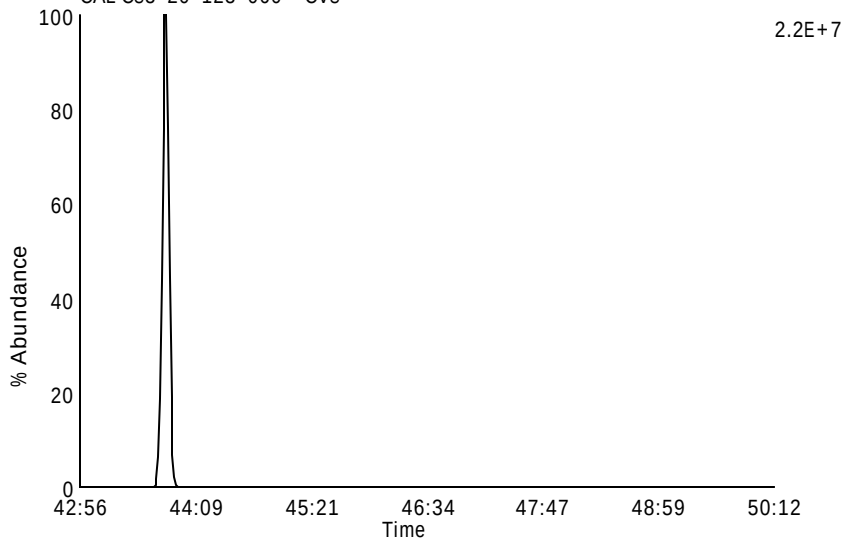
Data File: Y210819A_01 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



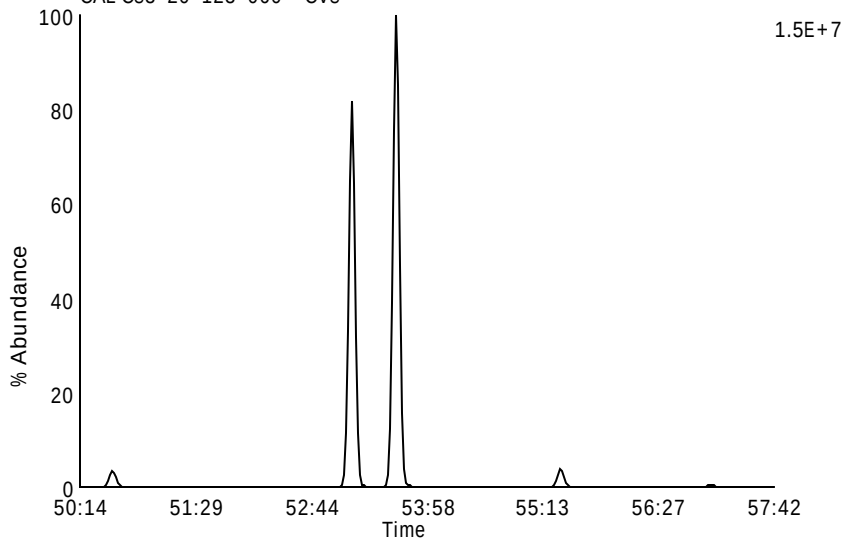
Data File: Y210819A_01 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G6 C14 - 441.8008
CAL CS3-20-123-060 - CVS



Data File: Y210819A_01 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

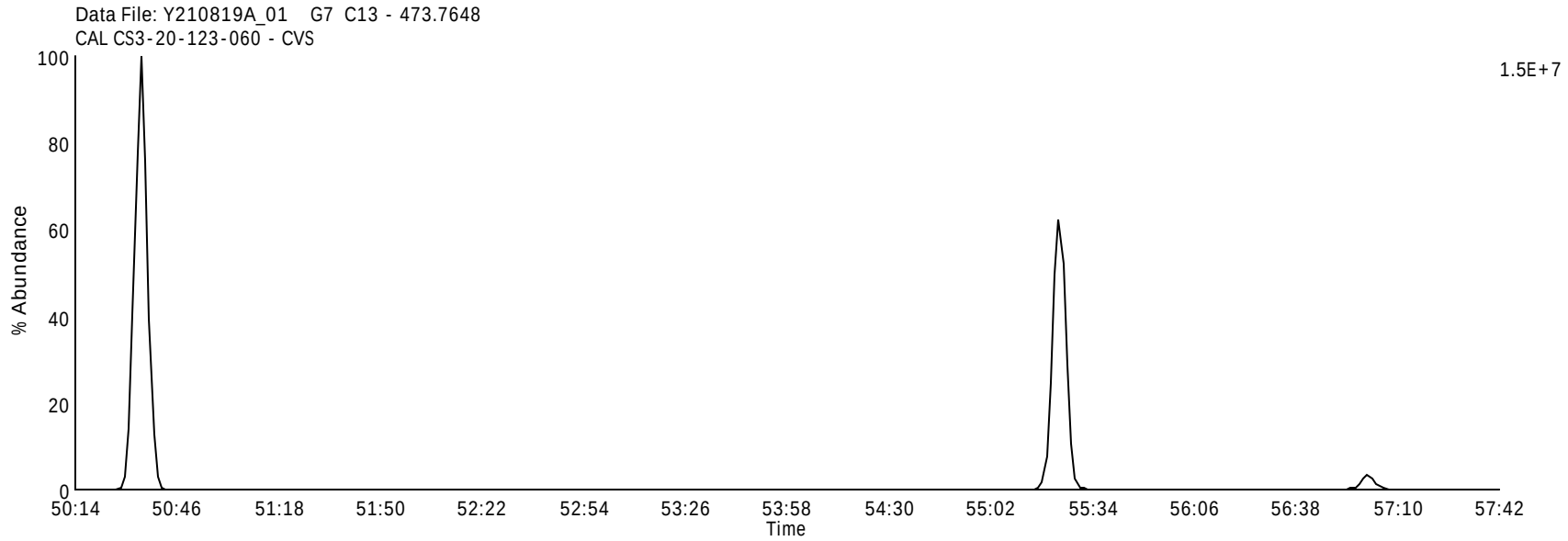


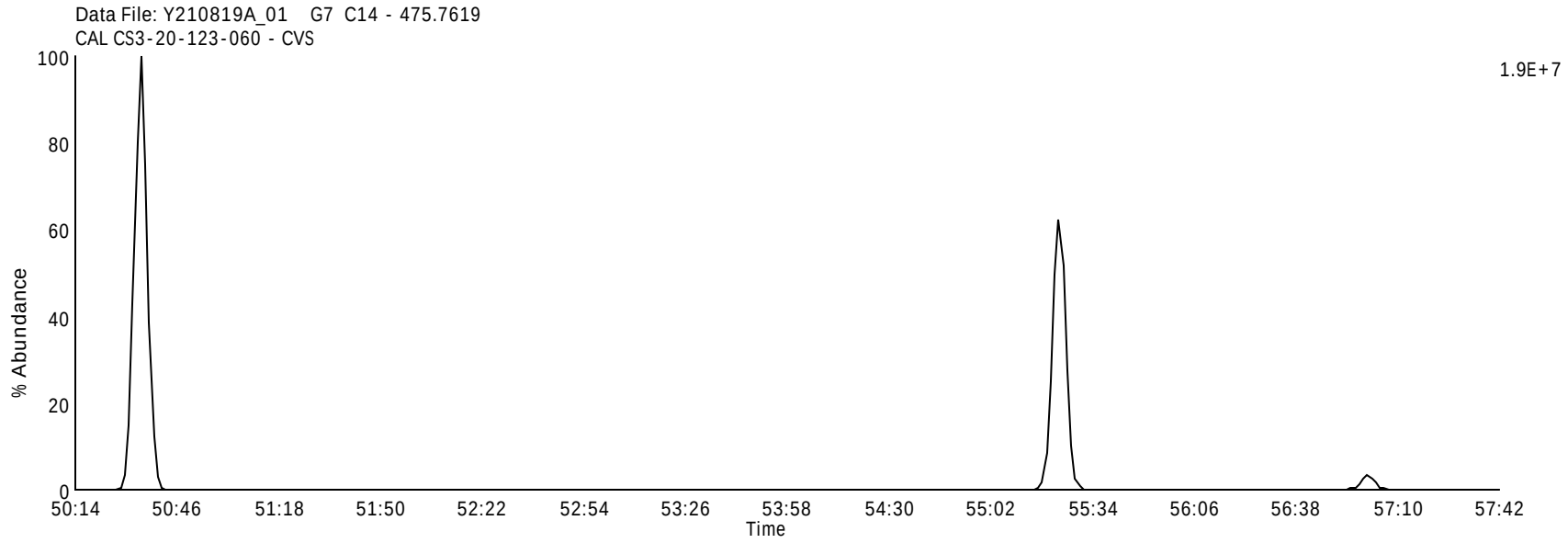
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



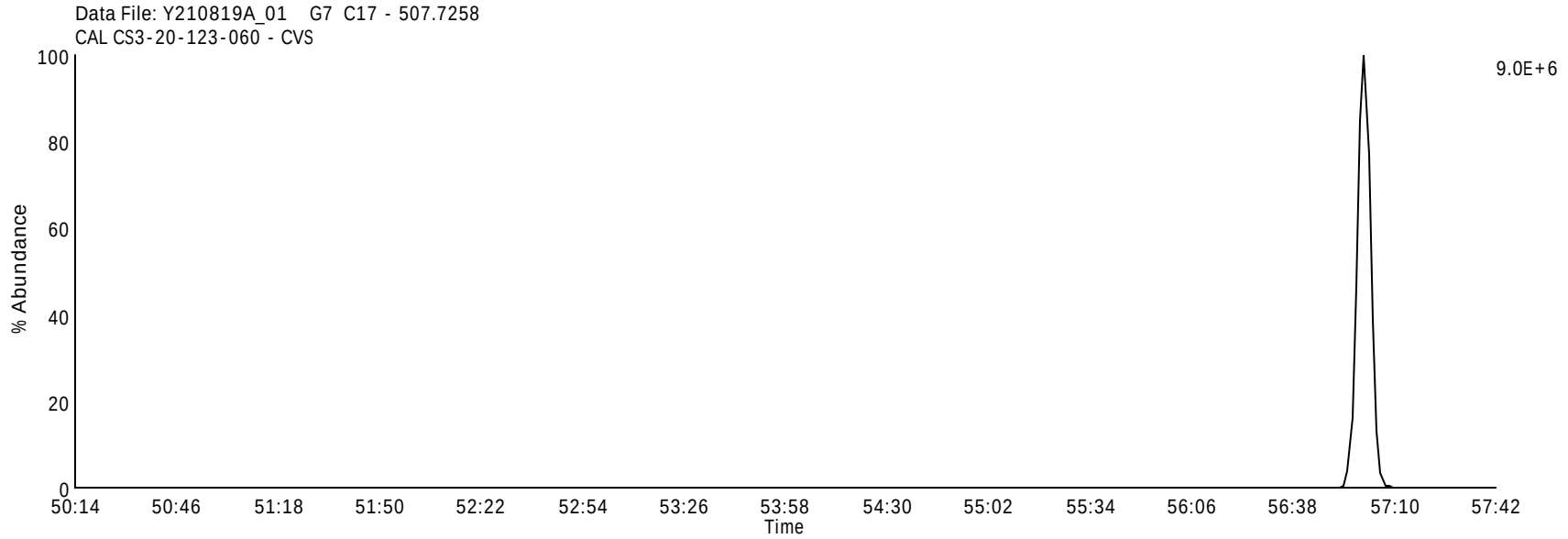


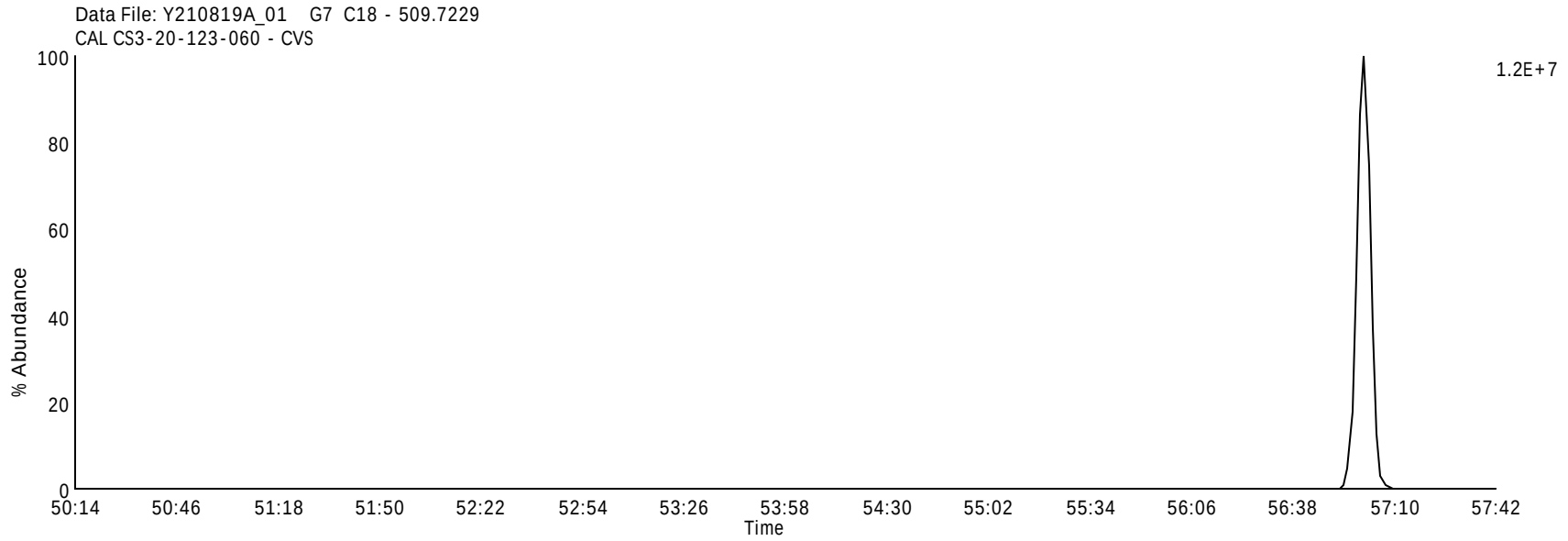
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



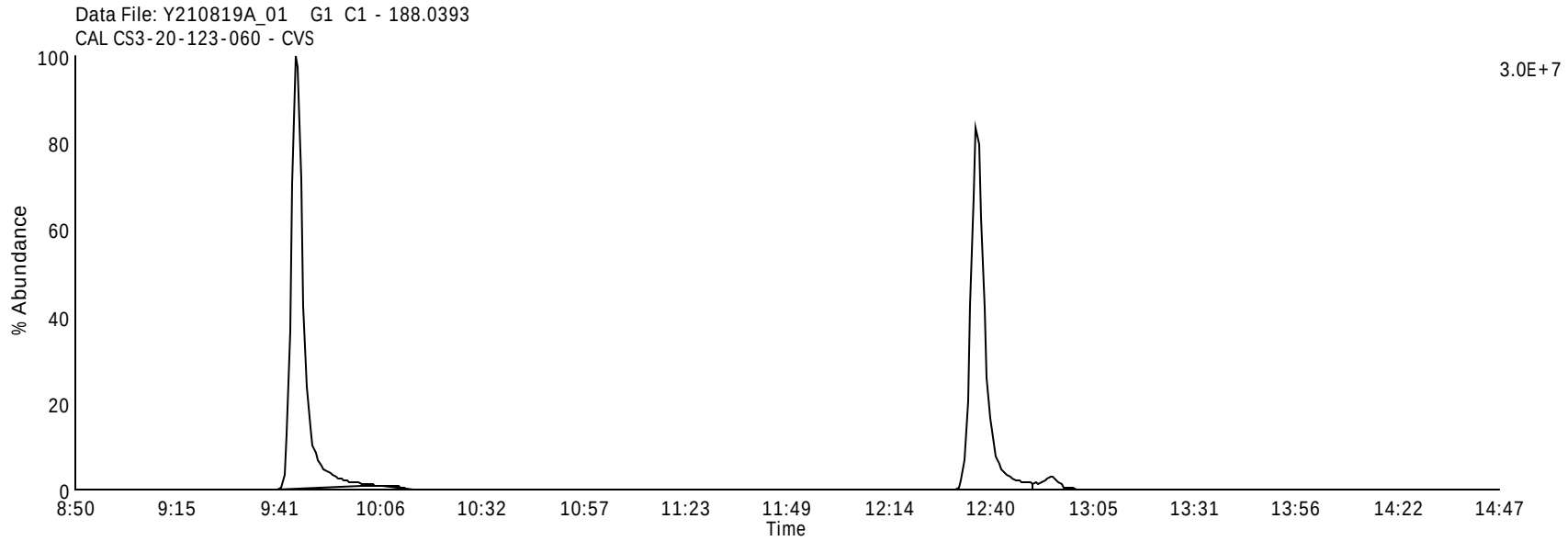


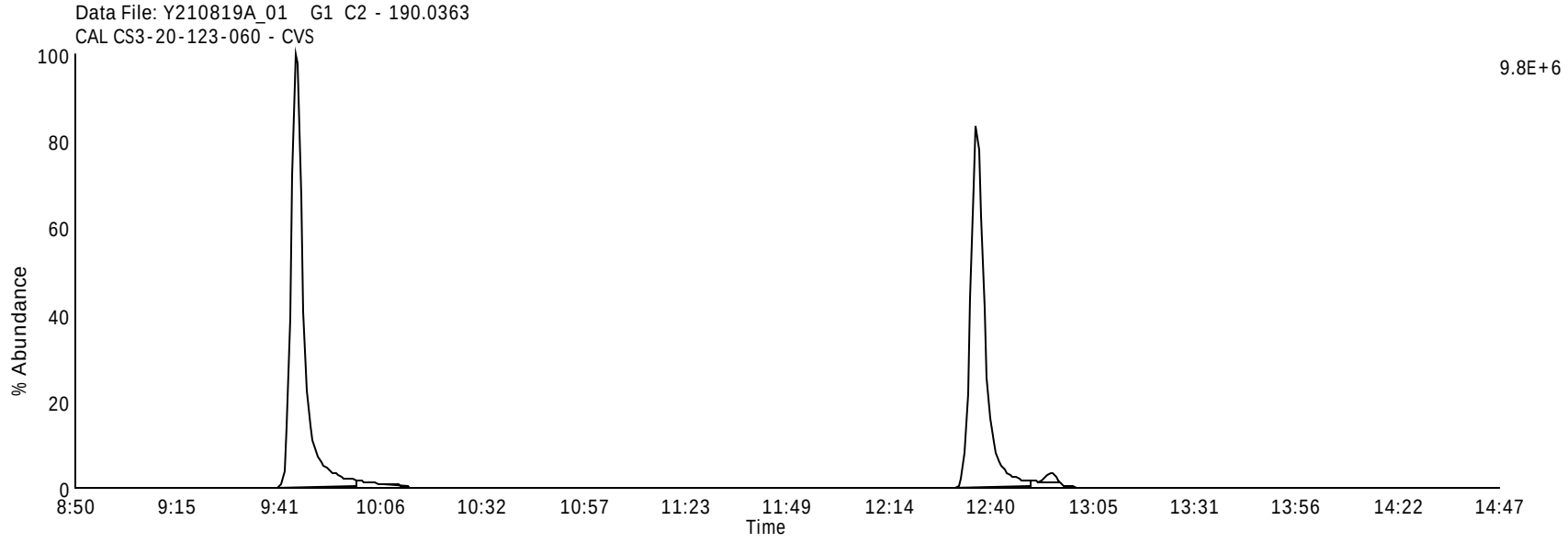
Mono Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

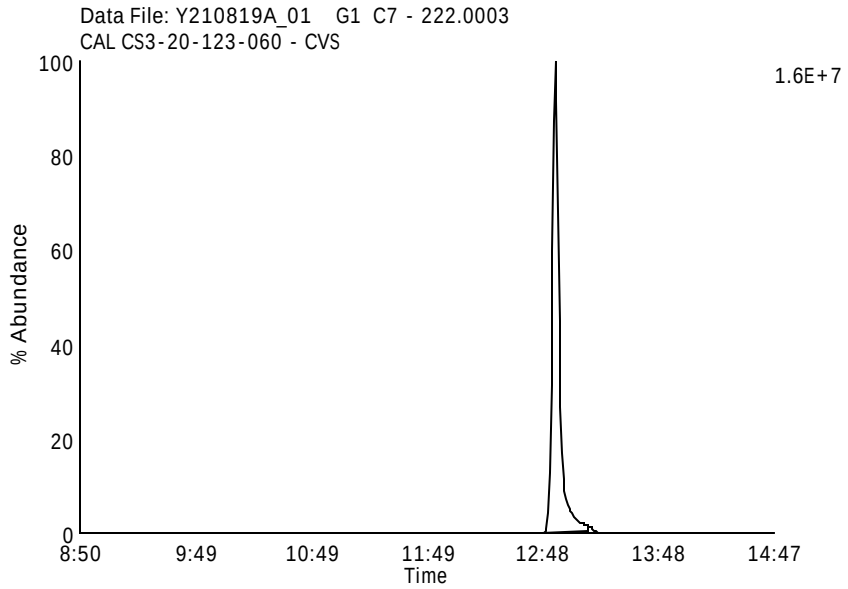
Sample Description: CAL CS3-20-123-060 - CVS

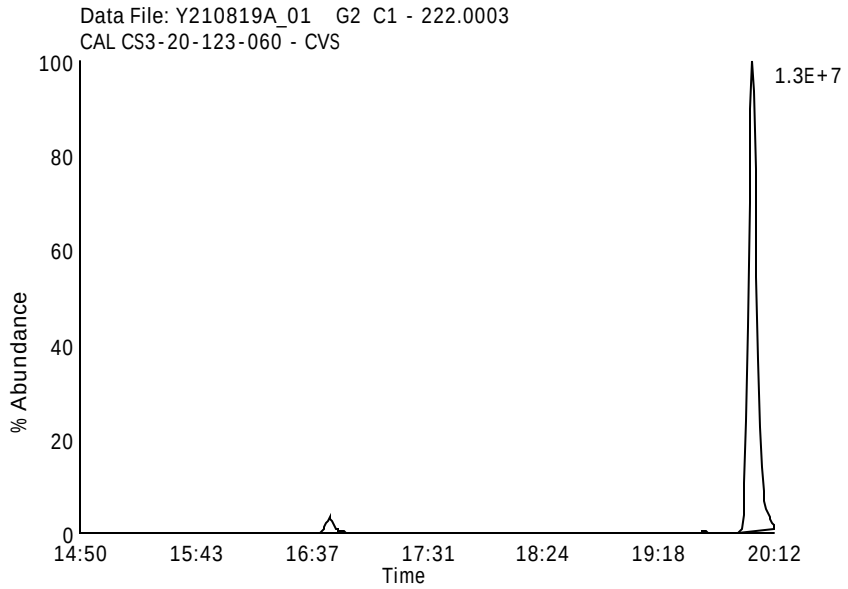


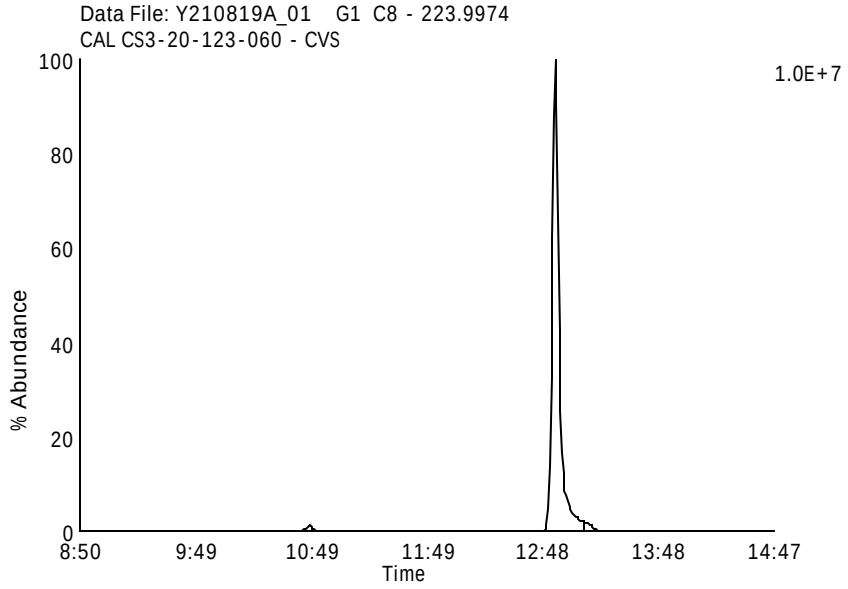


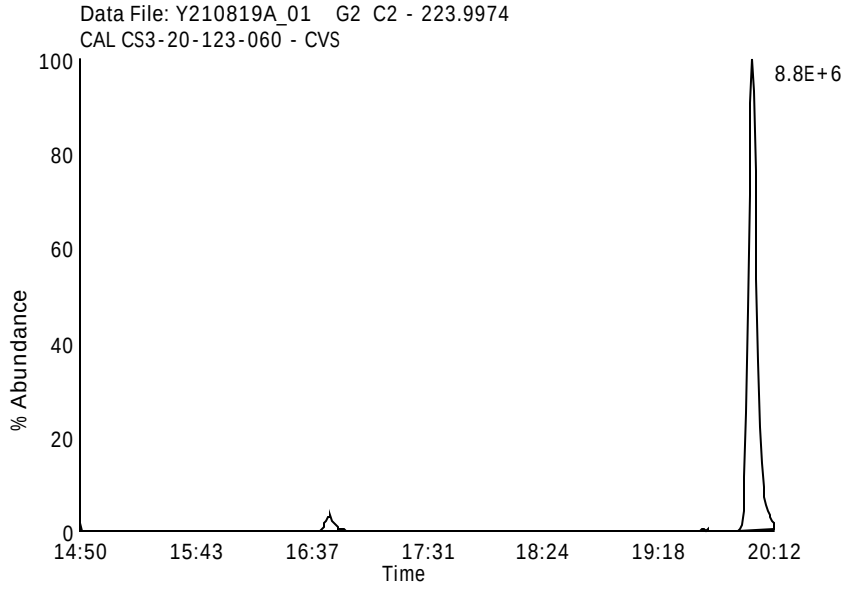
Di Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



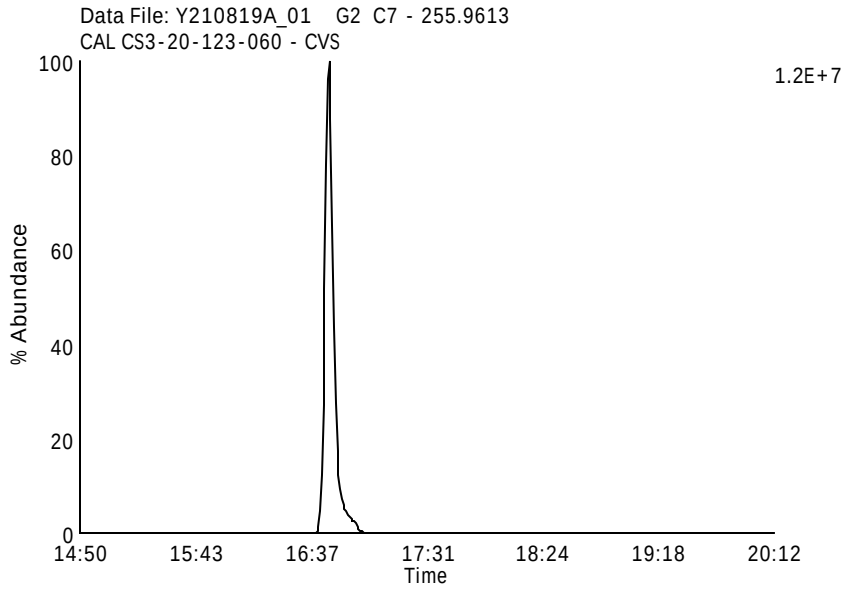


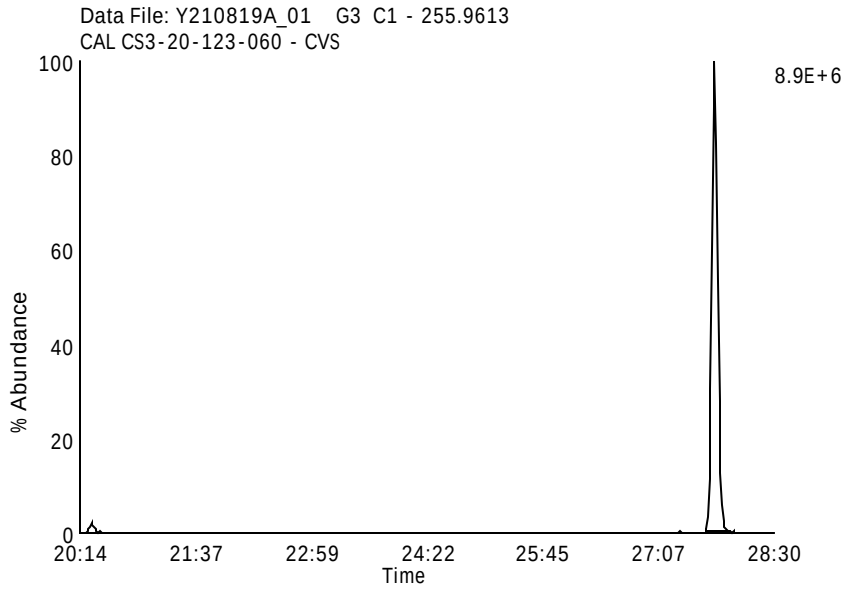


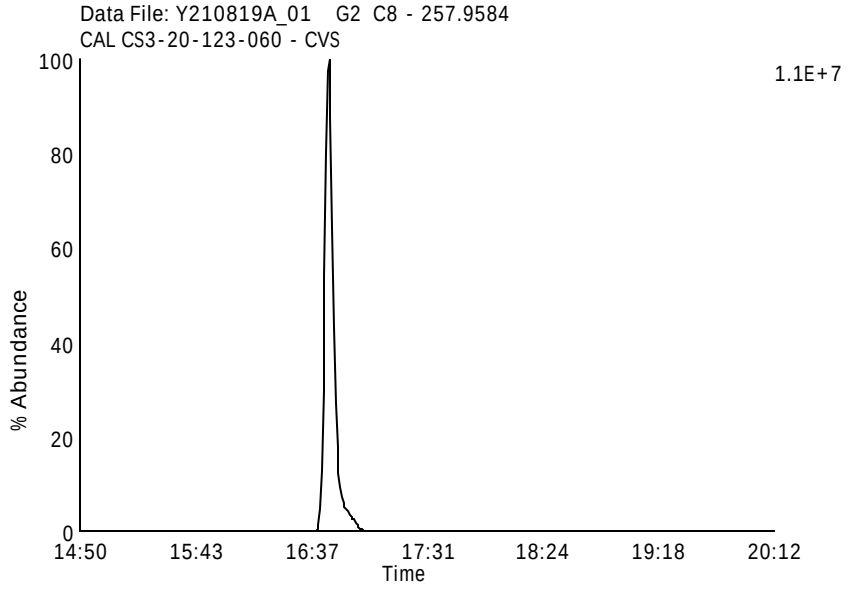


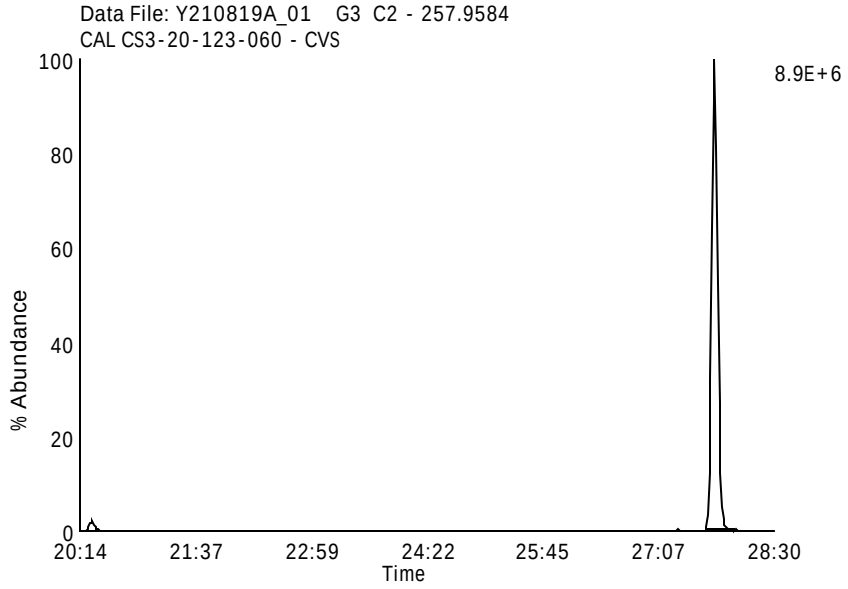
Tri Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



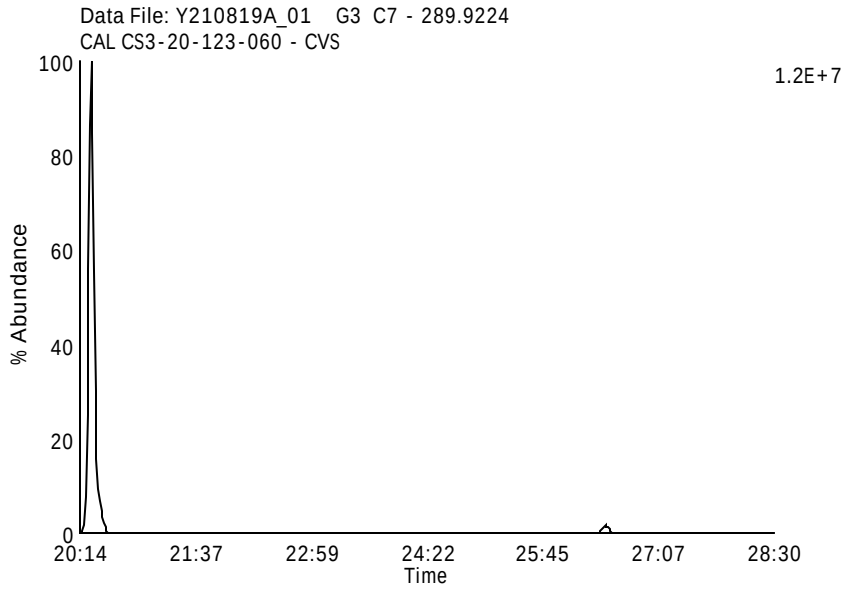


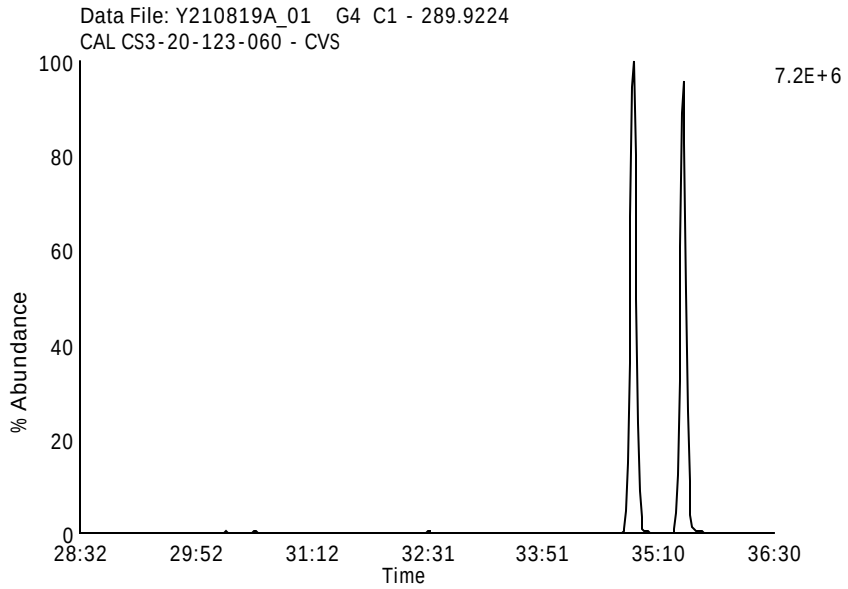


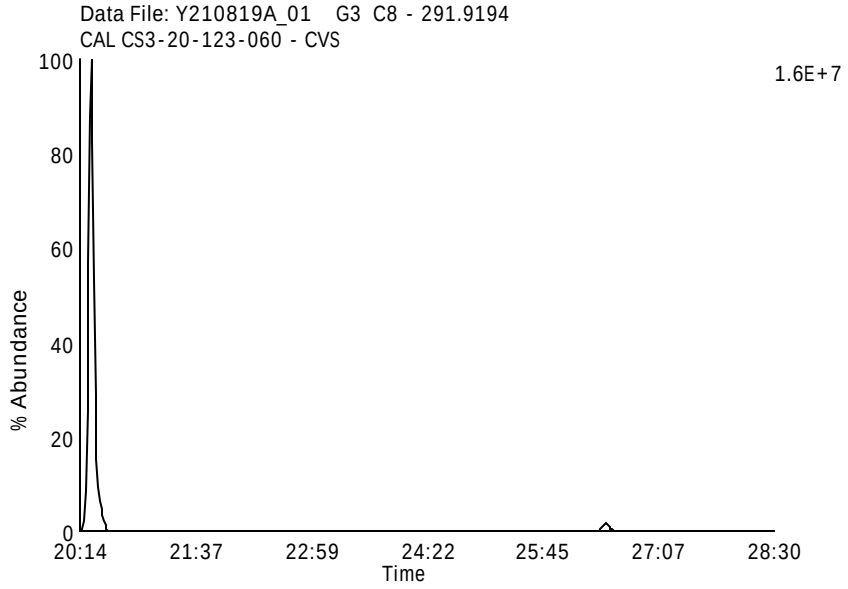


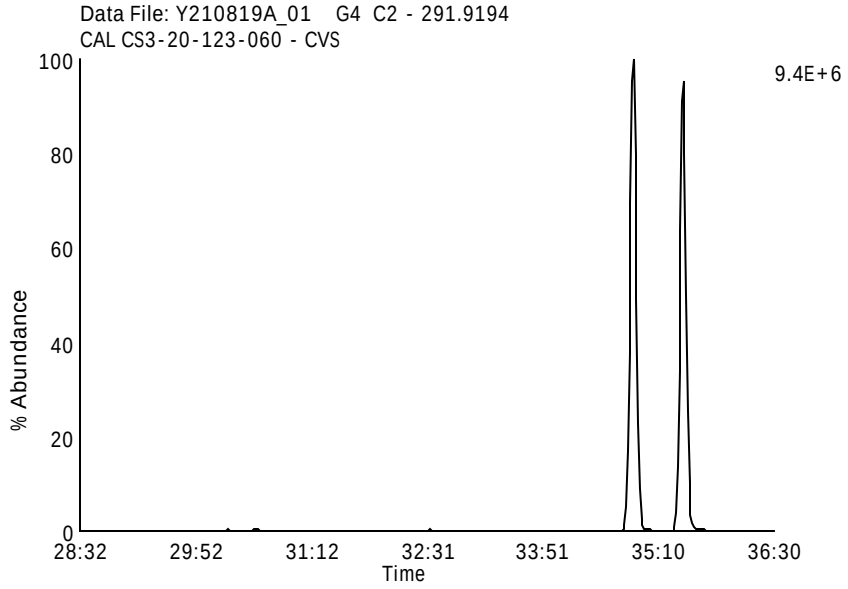
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



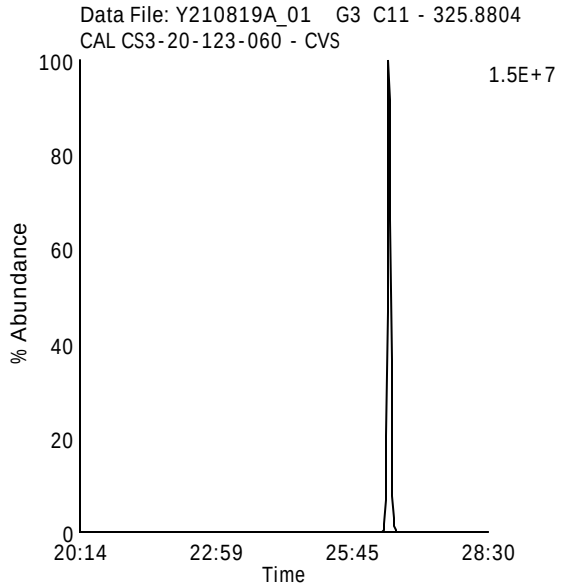


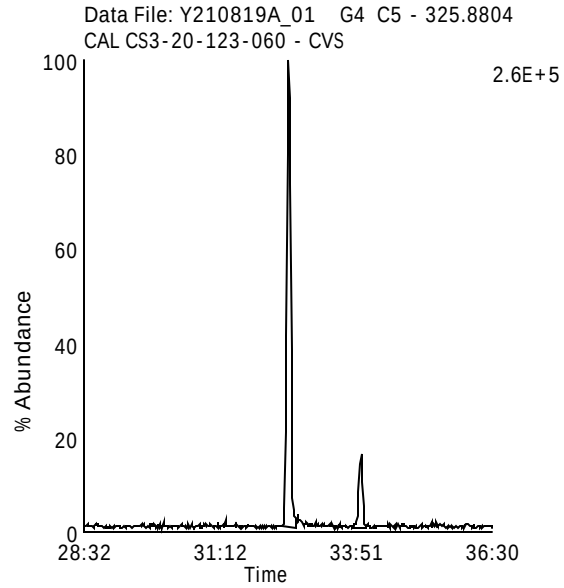


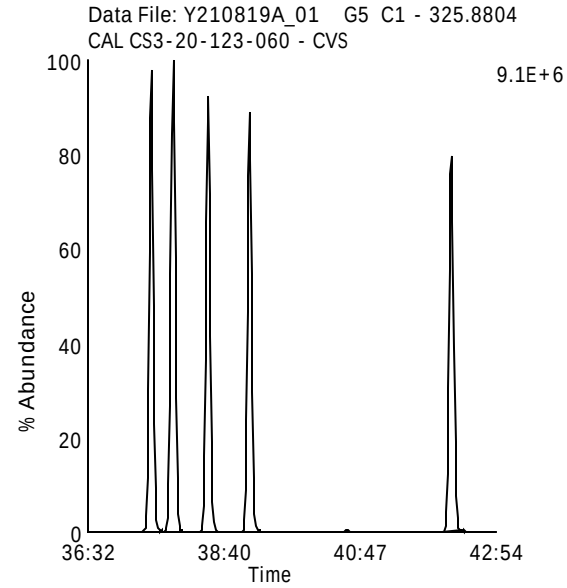


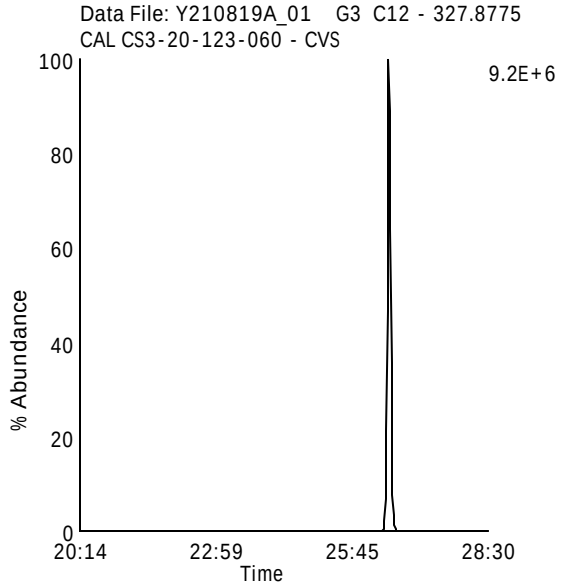
Penta Chlorinated Biphenyls

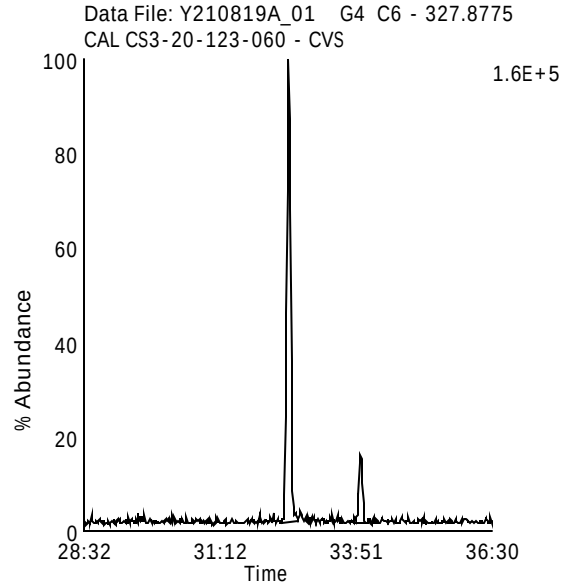
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

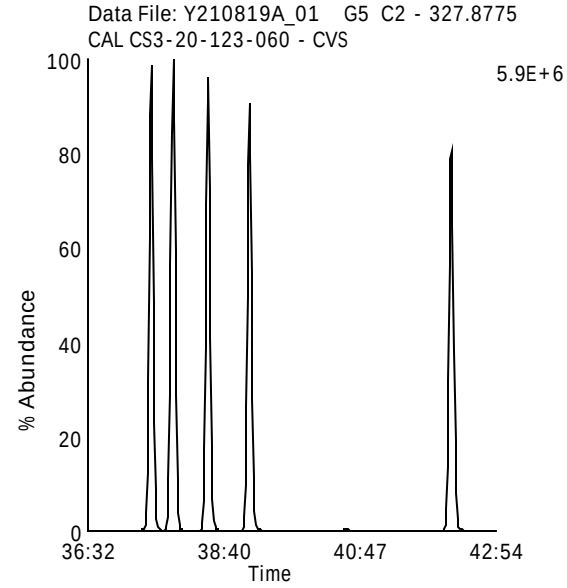






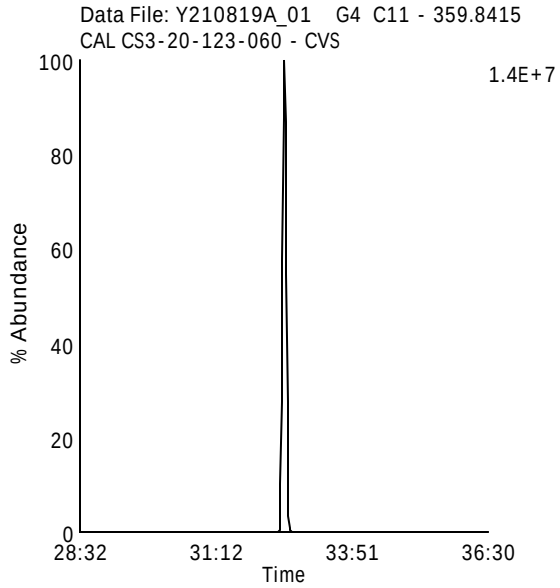


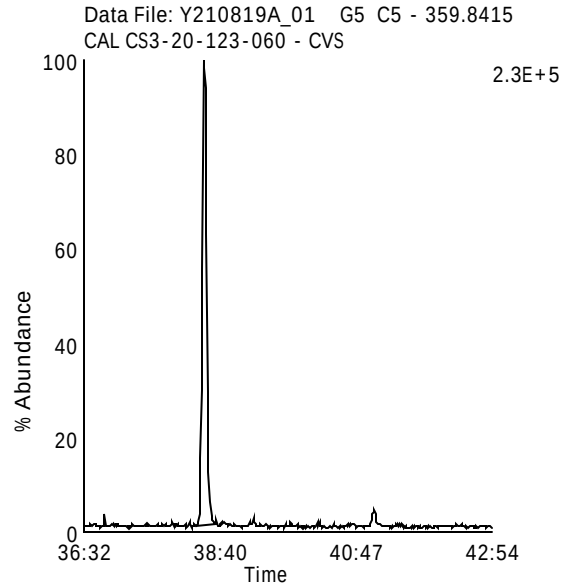


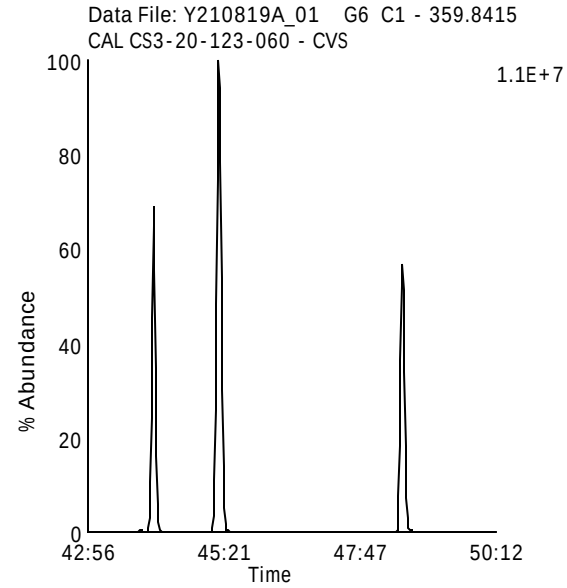


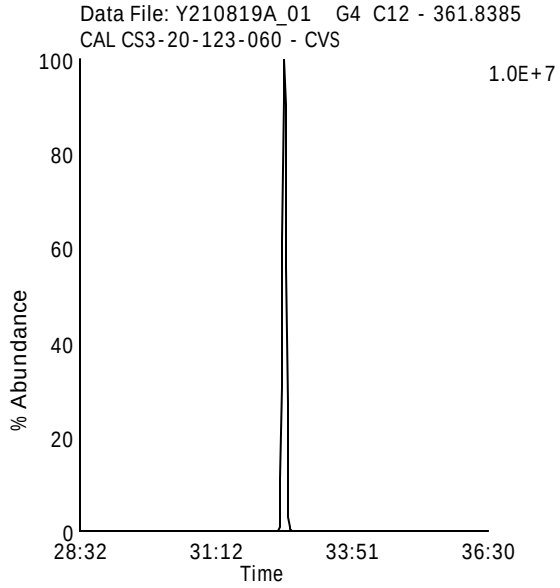
Hexa Chlorinated Biphenyls

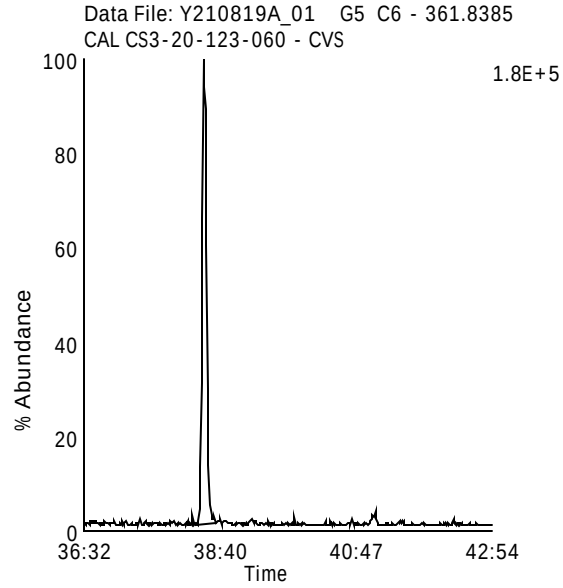
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

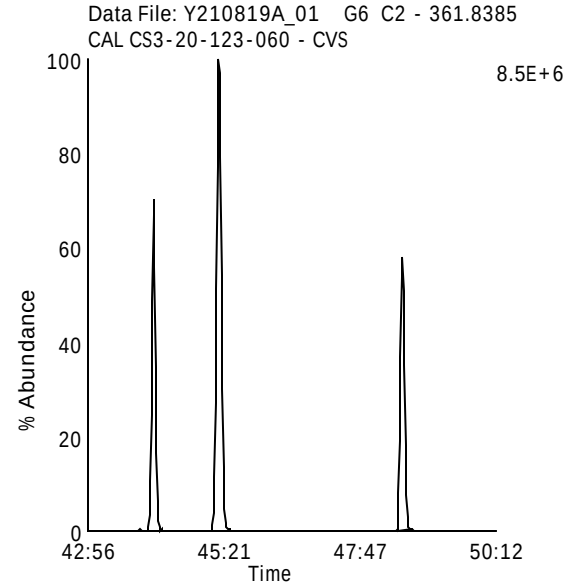






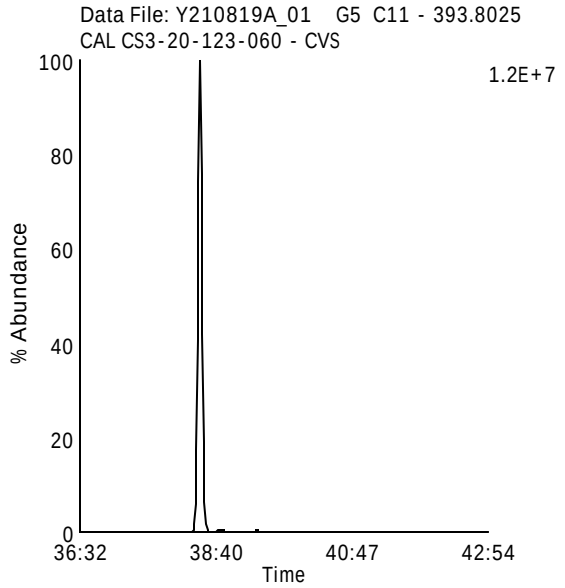


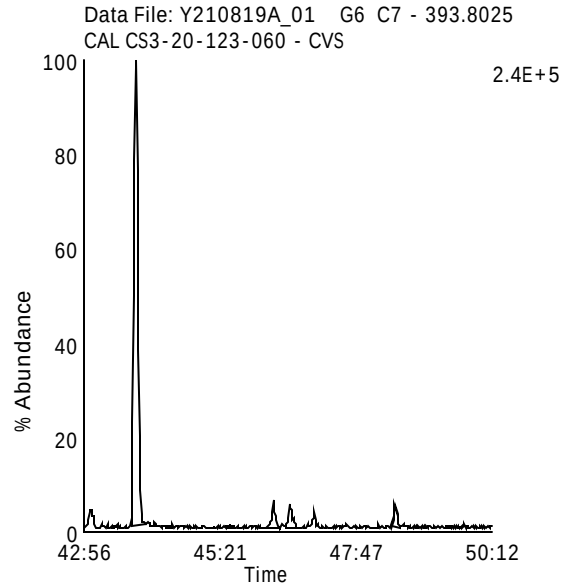


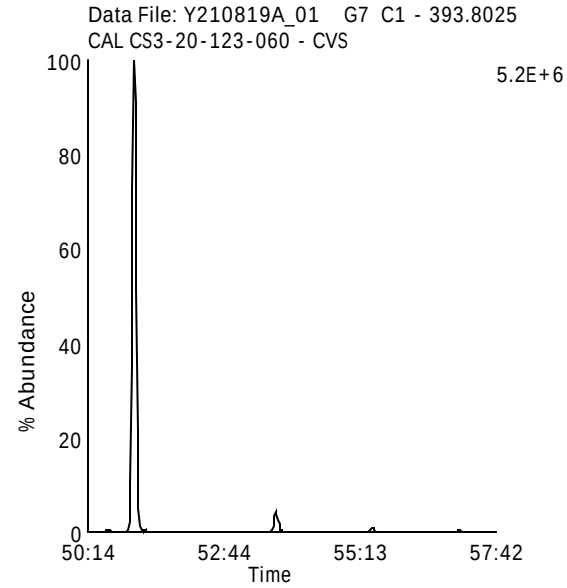


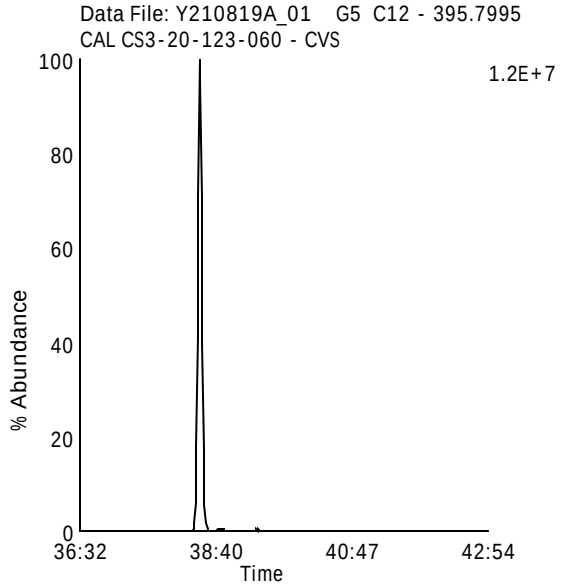
Hepta Chlorinated Biphenyls

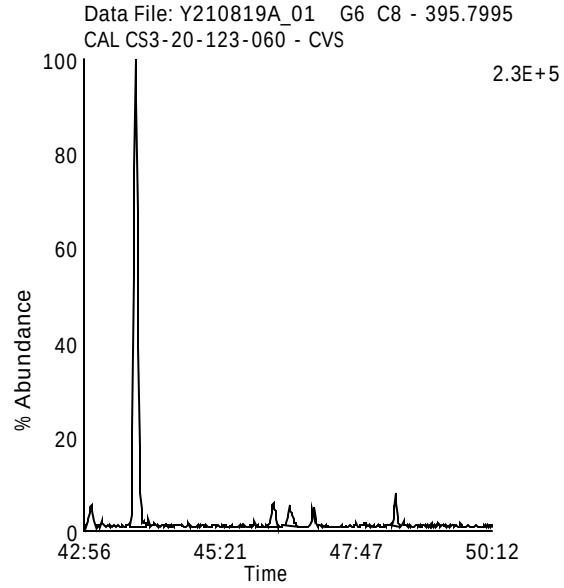
Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

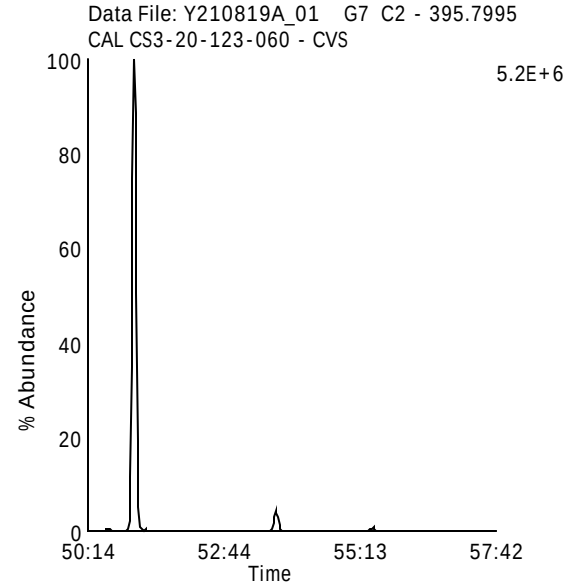










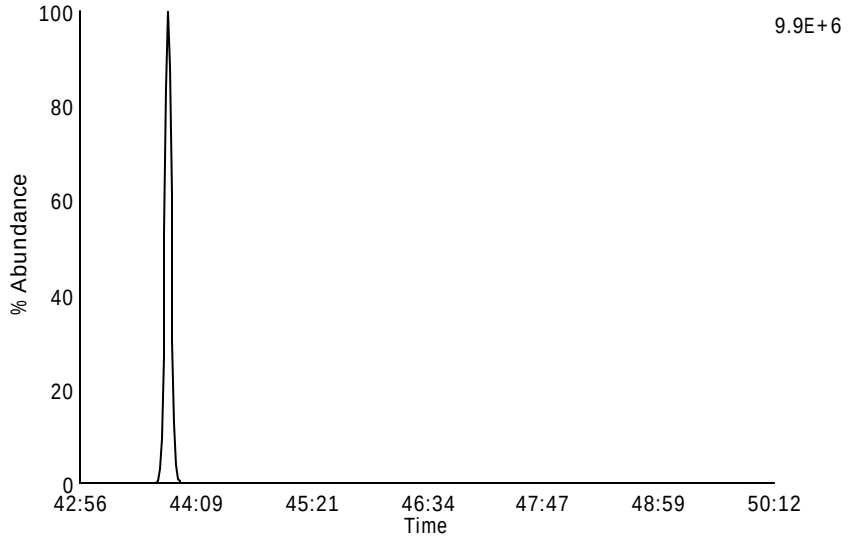


Octa Chlorinated Biphenyls

Data File Name: Y210819A_01
Date Acquired: 8/19/2021
Sample Description: CAL CS3-20-123-060 - CVS

Lab Sample ID: CS3-20-123-060
Instrument: 10MSHR12 (Y)

Data File: Y210819A_01 G6 C11 - 427.7635
CAL CS3-20-123-060 - CVS



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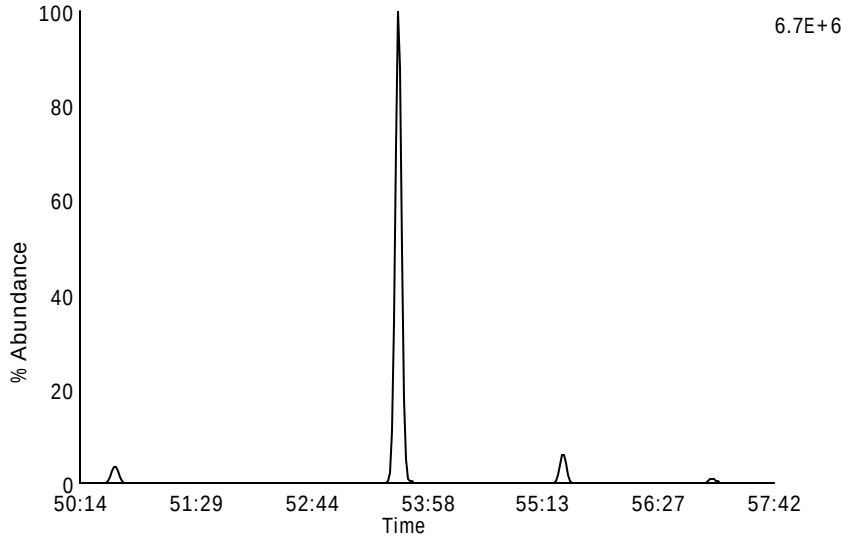
CAL CS3-20-123-060 - CVS



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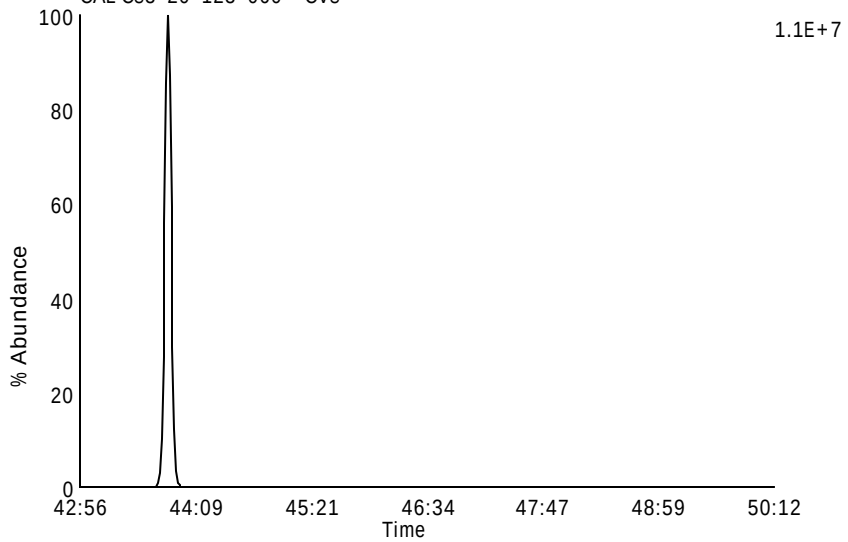
CAL CS3-20-123-060 - CVS



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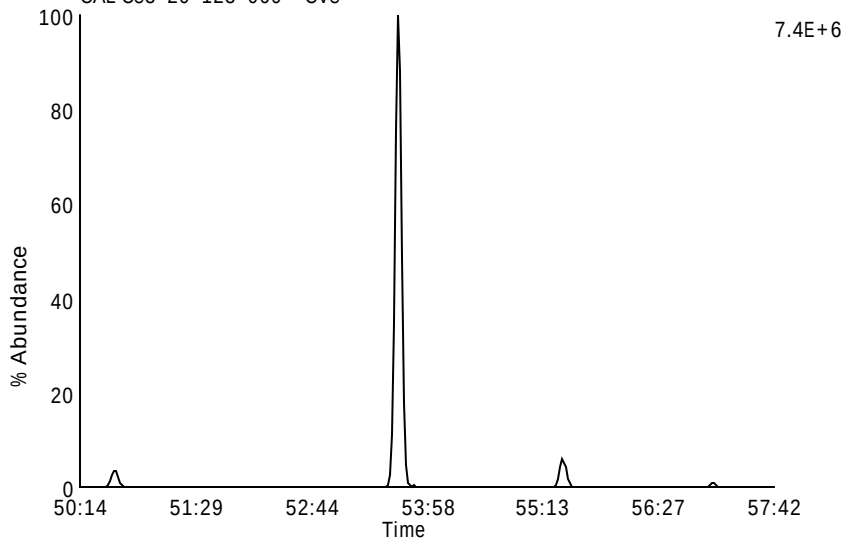
CAL CS3-20-123-060 - CVS

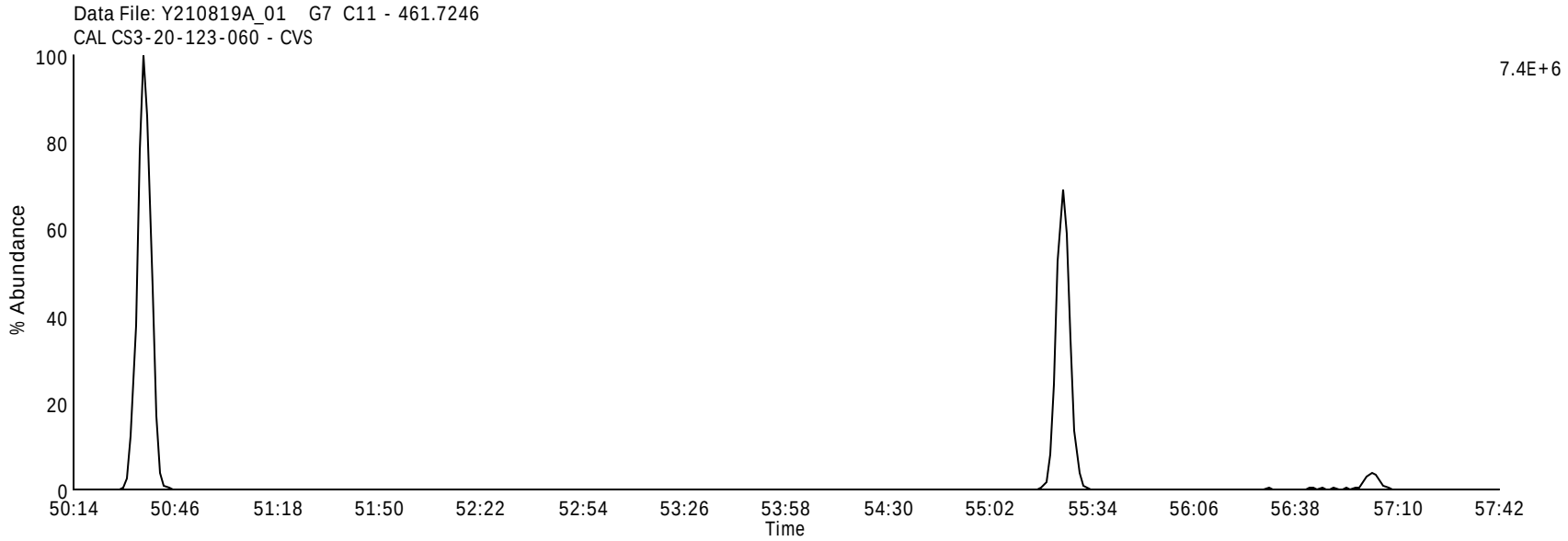


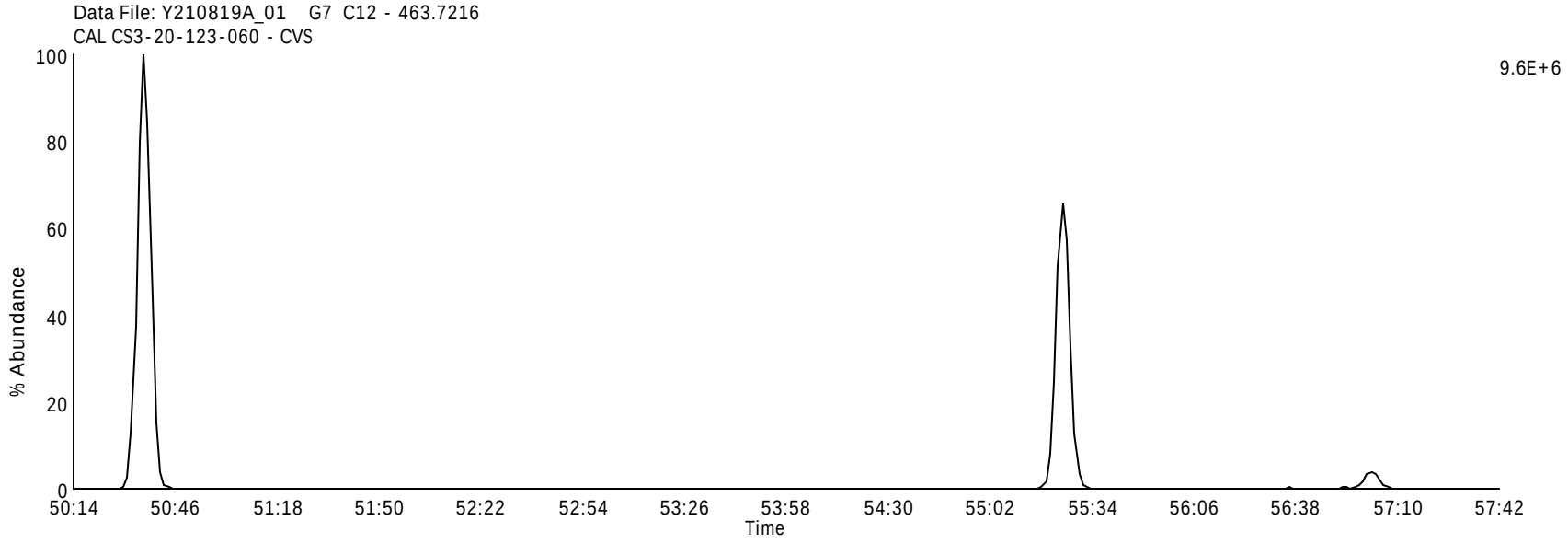
Nona Chlorinated Biphenyls

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



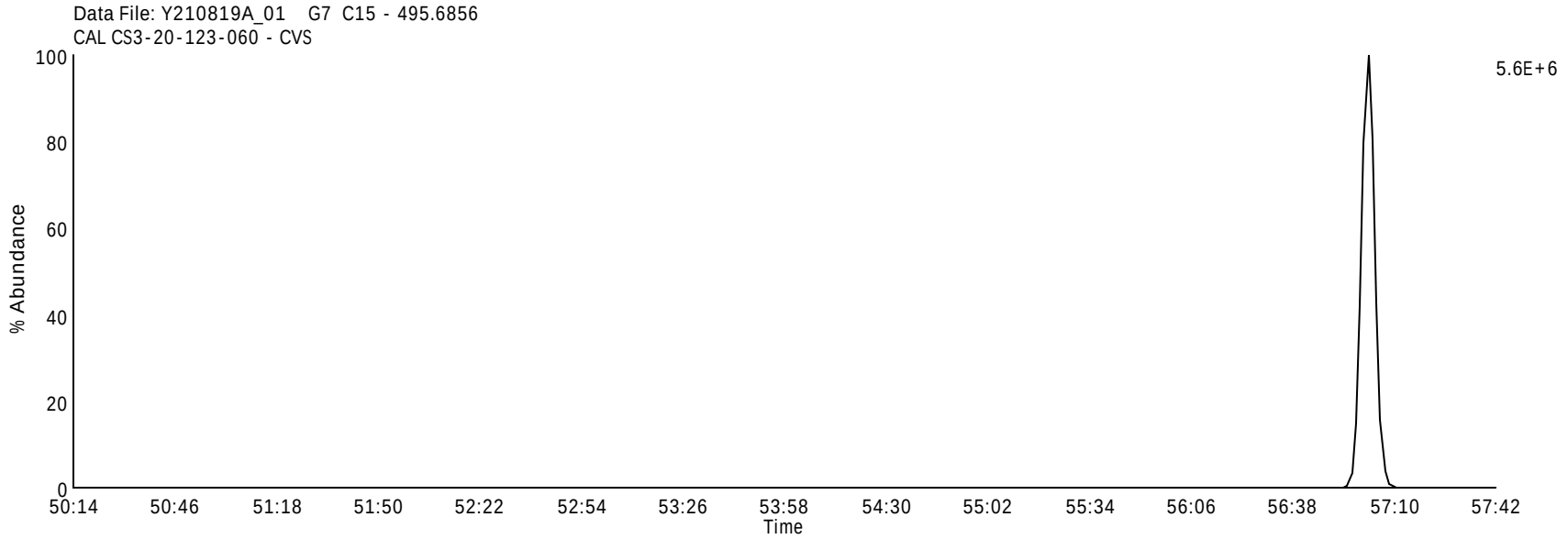


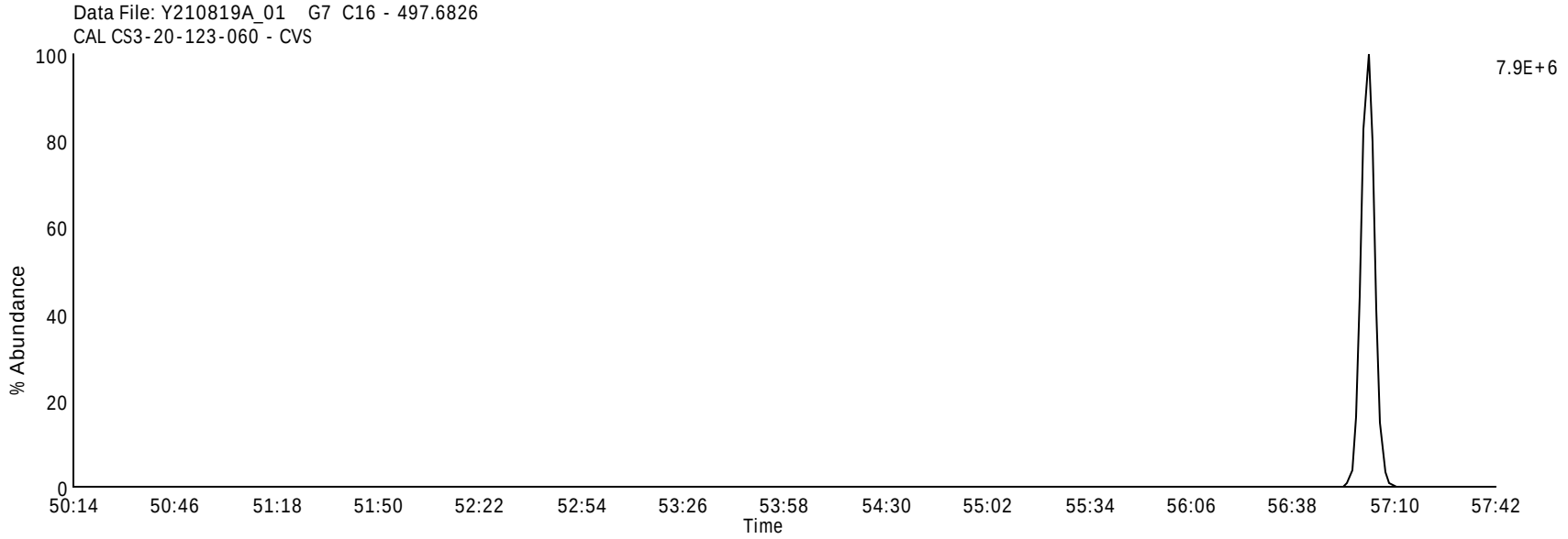
Deca Chlorinated Biphenyl

Data File Name: Y210819A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/19/2021 Instrument: 10MSHR12 (Y)

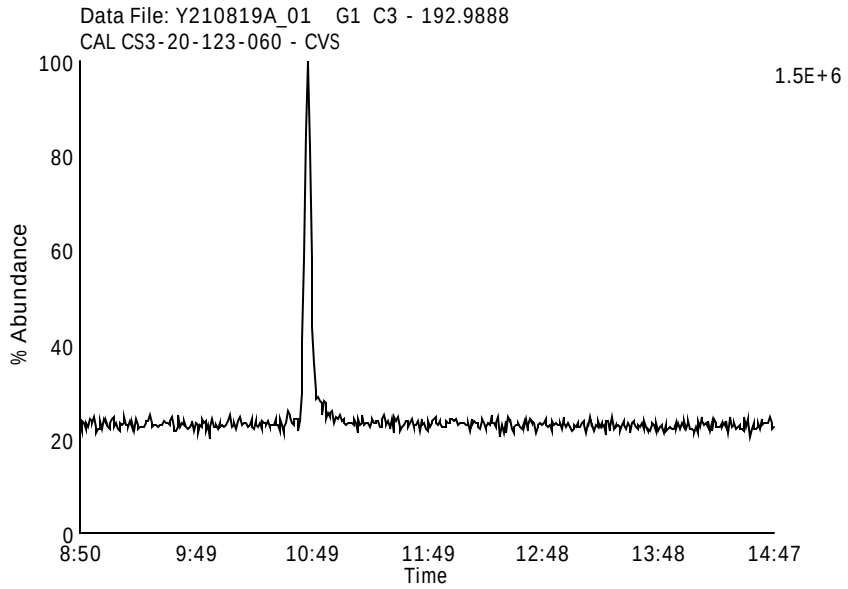
Sample Description: CAL CS3-20-123-060 - CVS

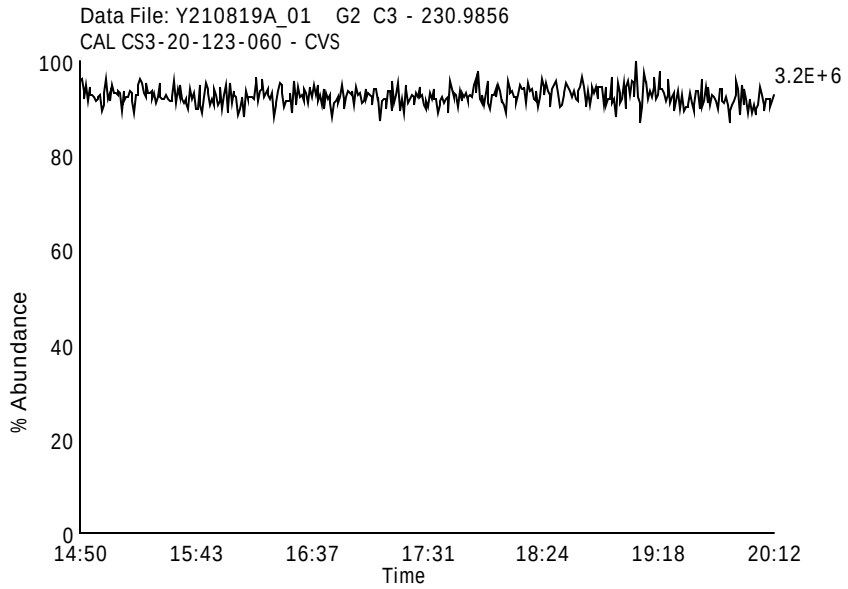


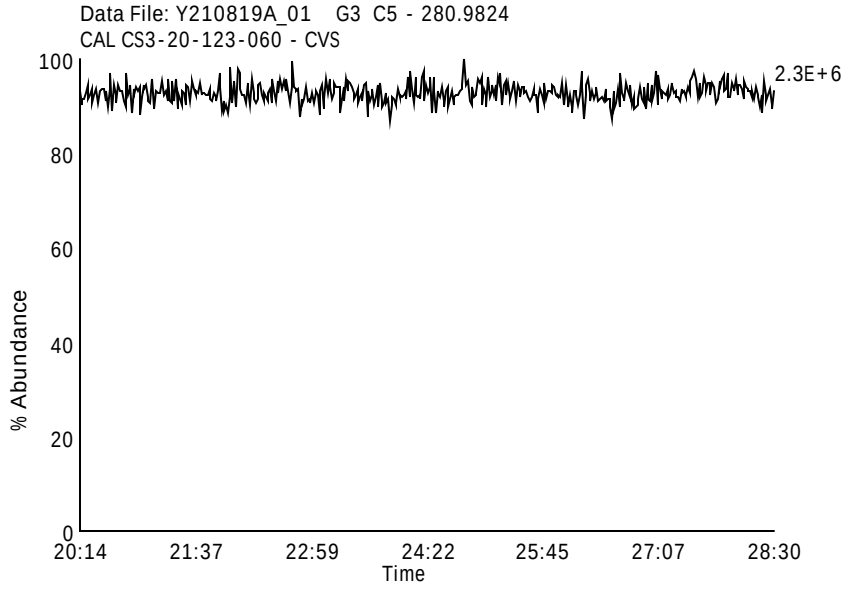


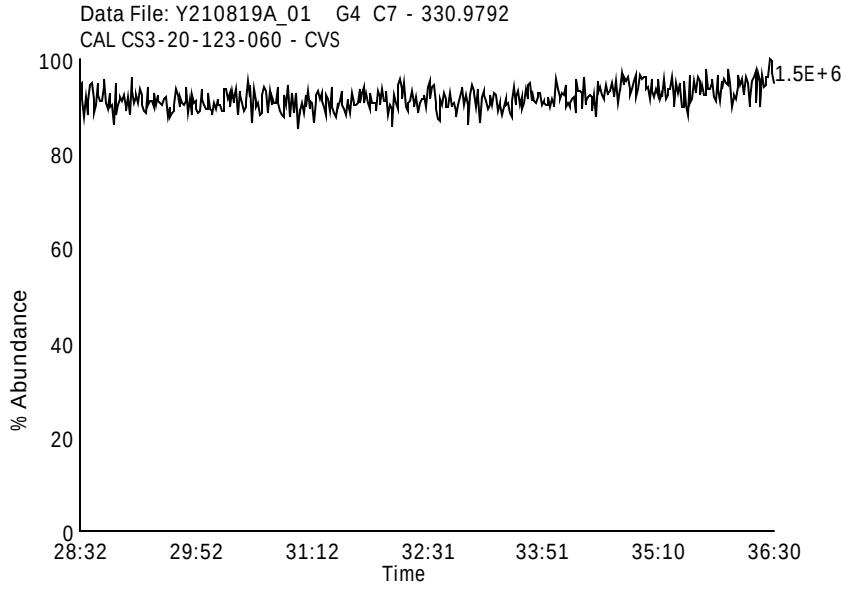
Group 1 - 4 Lock mass

Data File Name: Y210819A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





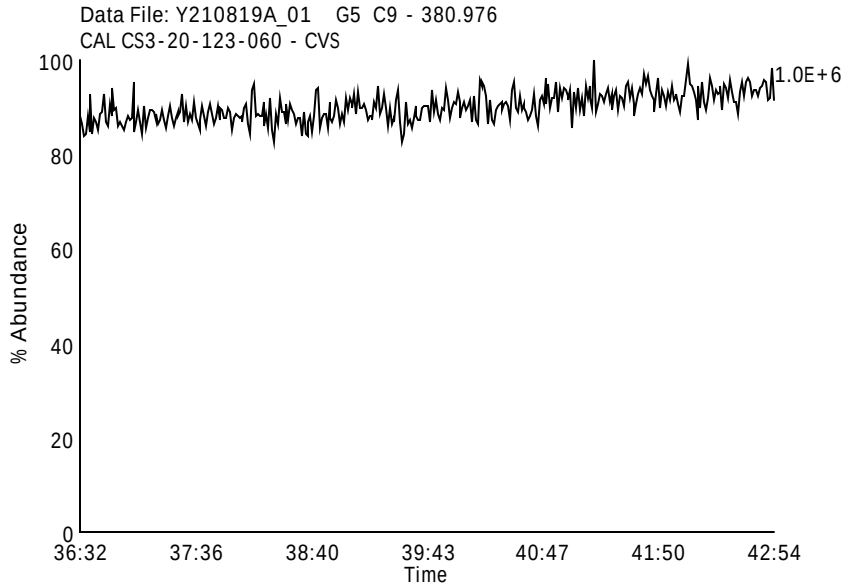


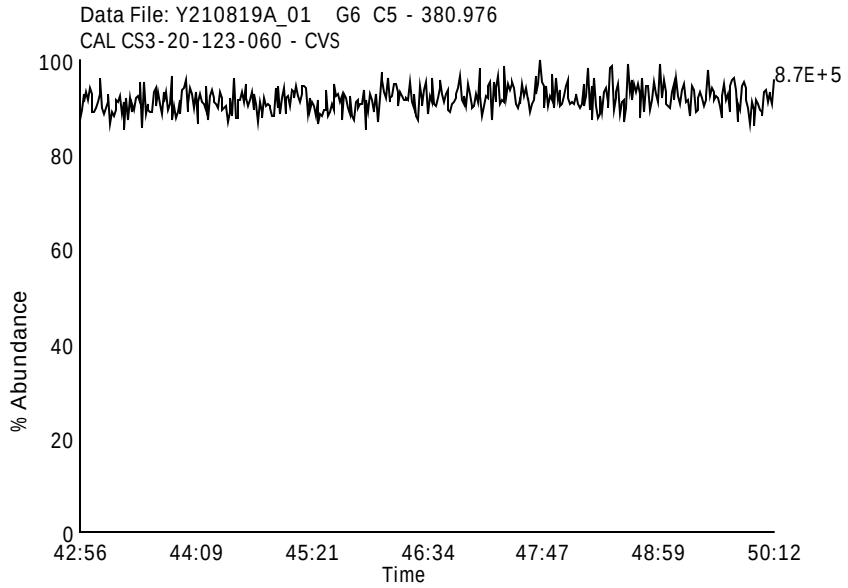


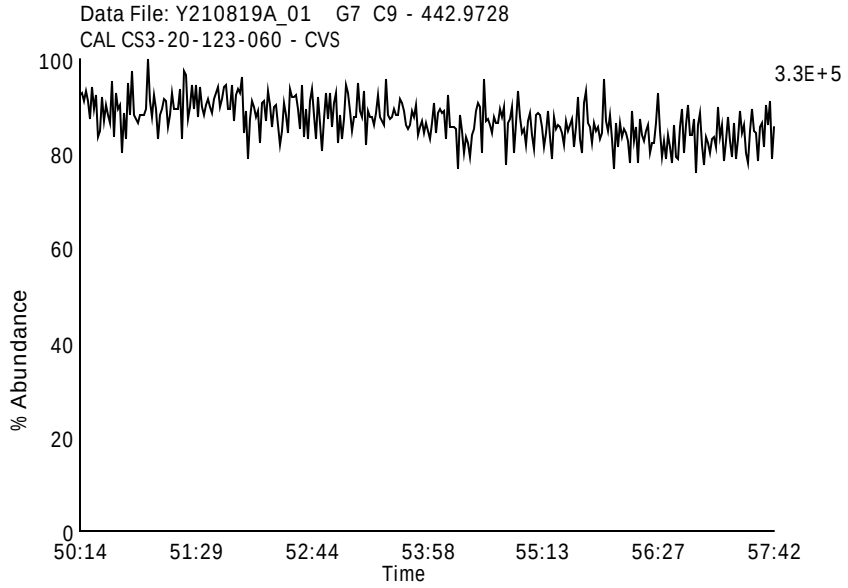
Group 5 - 7 Lock mass

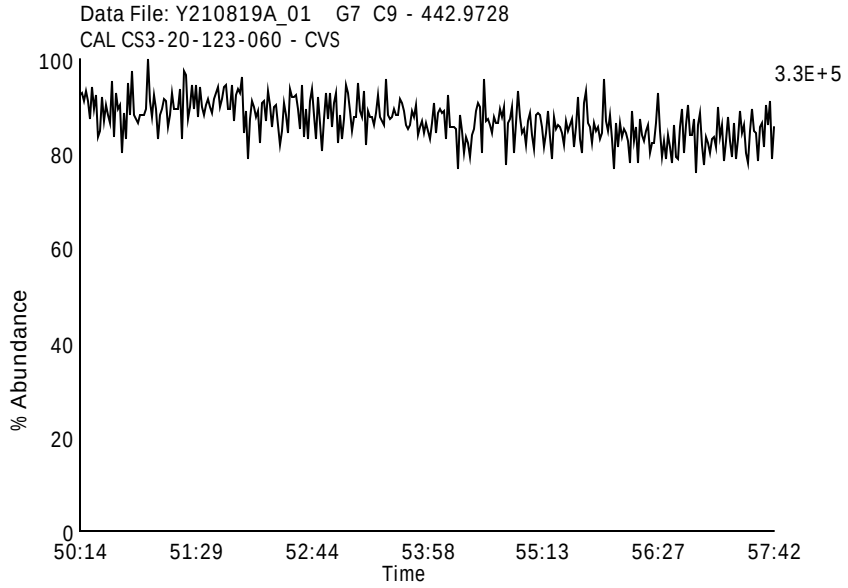
Data File Name: Y210819A_01
Date Acquired: 8/19/2021
Sample Description: CAL CS3-20-123-060 - CVS

Lab Sample ID: CS3-20-123-060
Instrument: 10MSHR12 (Y)









Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.834	0.77	51208204	66385842	
13C-3,3',4,4'-TeCB	77	35.404	0.78	51510819	65778826	
13C-2,3,3',4,4'-PeCB	105	38.998	1.54	62053684	40199072	
13C-2,3,4,4',5-PeCB	114	38.361	1.53	63364259	41331947	
13C-2,3',4,4',5-PeCB	118	37.808	1.53	66222064	43162719	
13C-2,3',4,4',5'-PeCB	123	37.472	1.53	63261741	41245986	
13C-3,3',4,4',5-PeCB	126	42.151	1.57	53825037	34264684	
13C-HxCB(156/157)	156/157	45.208	1.22	102568128	83923047	
13C-2,3',4,4',5,5'-HxCB	167	44.051	1.23	54766966	44508663	
13C-3,3',4,4',5,5'-HxCB	169	48.479	1.23	44916129	36397189	
13C-2,3,3',4,4',5,5'-HpCB	189	51.026	1.02	42127094	41118145	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.03	82906534	80731238	
13C-2,3,3',5,5'-PeCB	111	35.471	1.60	96770041	60487785	
13C-2,2',3,3',5,5',6-HpCB	178	41.447	1.08	54880980	50588888	
Recovery Standards						
13C-2,5-DiCB	9	15.349	1.54	127392779	82964986	
13C-2,2',5,5'-TeCB	52	25.405	0.80	64362200	80721712	
13C-2,2',4,5,5'-PeCB	101	32.687	1.61	76585881	47607767	
13C-2,2',3,4,4',5'-HxCB	138	40.994	1.27	64490799	50853483	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.160	0.92	38348105	41726961	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.438	0.83	501814	607875	
81		34.851	0.72	456320	635945	
105		39.032	1.61	566945	352117	
114		38.378	1.53	600972	392715	
118		37.825	1.59	644411	405832	
123		37.506	1.42	603428	424525	
126		42.168	1.49	487021	327868	
156	156/157	45.225	1.25	1035842	827301	
157	156/157	45.225	1.25	(1035842)	(827301)	
167		44.084	1.25	538218	431899	
169		48.495	1.14	427965	374978	
189		51.047	1.10	410825	372156	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.850	0.76	33891332	44310376	
13C-3,3',4,4'-TeCB	77	35.420	0.77	34260374	44451965	
13C-2,3,3',4,4'-PeCB	105	39.014	1.54	41448453	26867484	
13C-2,3,4,4',5-PeCB	114	38.360	1.53	41156130	26821258	
13C-2,3',4,4',5-PeCB	118	37.823	1.55	43913917	28293186	
13C-2,3',4,4',5'-PeCB	123	37.488	1.53	42068498	27527636	
13C-3,3',4,4',5-PeCB	126	42.166	1.53	36221472	23742934	
13C-HxCB(156/157)	156/157	45.223	1.22	67390123	55431577	
13C-2,3',4,4',5,5'-HxCB	167	44.066	1.21	35666666	29418827	
13C-3,3',4,4',5,5'-HxCB	169	48.493	1.24	30688196	24842885	
13C-2,3,3',4,4',5,5'-HpCB	189	51.044	1.02	28764321	28122685	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.01	53600329	52989259	
13C-2,3,3',5,5'-PeCB	111	35.470	1.60	63084152	39378340	
13C-2,2',3,3',5,5',6-HpCB	178	41.462	1.09	35842158	32832358	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.53	83452779	54466090	
13C-2,2',5,5'-TeCB	52	25.404	0.80	42121385	52745355	
13C-2,2',4,5,5'-PeCB	101	32.687	1.59	49762849	31201326	
13C-2,2',3,4,4',5'-HxCB	138	40.992	1.26	41685419	33048264	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.156	0.91	25528617	28012392	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

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Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.437	0.74	1519692	2060098	
81		34.867	0.74	1604994	2175256	
105		39.047	1.54	1922768	1250991	
114		38.393	1.41	1876437	1335265	
118		37.840	1.47	2033118	1378641	
123		37.505	1.47	1924699	1306566	
126		42.183	1.47	1609066	1094892	
156	156/157	45.240	1.19	3194335	2677855	
157	156/157	45.240	1.19	(3194335)	(2677855)	
167		44.083	1.18	1689220	1433831	
169		48.510	1.21	1514546	1248104	
189		51.066	1.00	1288821	1289718	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.848	0.76	15482827	20415180	
13C-3,3',4,4'-TeCB	77	35.419	0.80	16235531	20406222	
13C-2,3,3',4,4'-PeCB	105	39.029	1.50	17530979	11682823	
13C-2,3,4,4',5-PeCB	114	38.375	1.51	18054772	11978158	
13C-2,3',4,4',5-PeCB	118	37.822	1.52	19150985	12610753	
13C-2,3',4,4',5'-PeCB	123	37.486	1.55	18627896	12055363	
13C-3,3',4,4',5-PeCB	126	42.165	1.54	15761201	10258884	
13C-HxCB(156/157)	156/157	45.222	1.23	27885801	22733884	
13C-2,3',4,4',5,5'-HxCB	167	44.065	1.21	15205904	12550764	
13C-3,3',4,4',5,5'-HxCB	169	48.508	1.22	12578703	10327607	
13C-2,3,3',4,4',5,5'-HpCB	189	51.043	1.03	11578654	11263039	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.425	1.03	26265414	25481217	
13C-2,3,3',5,5'-PeCB	111	35.486	1.61	29126575	18044938	
13C-2,2',3,3',5,5',6-HpCB	178	41.460	1.07	16153584	15031324	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.55	40918082	26392839	
13C-2,2',5,5'-TeCB	52	25.403	0.82	20417393	24823362	
13C-2,2',4,5,5'-PeCB	101	32.685	1.59	23106412	14493249	
13C-2,2',3,4,4',5'-HxCB	138	41.008	1.25	18284670	14647807	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.155	0.90	10479666	11607480	

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Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.452	0.75	6908630	9157518	
81		34.865	0.76	7186537	9501154	
105		39.046	1.53	7946966	5189522	
114		38.392	1.50	8298330	5548139	
118		37.855	1.52	8853400	5831352	
123		37.520	1.49	8417688	5655194	
126		42.181	1.53	7036829	4607937	
156	156/157	45.255	1.22	13016131	10671543	
157	156/157	45.255	1.22	(13016131)	(10671543)	
167		44.098	1.25	7020713	5612988	
169		48.525	1.21	5836654	4837214	
189		51.064	0.99	4922715	4958579	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.832	0.77	34210797	44266996	
13C-3,3',4,4'-TeCB	77	35.402	0.79	35395450	44823730	
13C-2,3,3',4,4'-PeCB	105	38.995	1.51	40728648	26923537	
13C-2,3,4,4',5-PeCB	114	38.357	1.55	42745928	27575415	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44657518	28840602	
13C-2,3',4,4',5'-PeCB	123	37.469	1.53	43022555	28210031	
13C-3,3',4,4',5-PeCB	126	42.147	1.53	36577625	23922117	
13C-HxCB(156/157)	156/157	45.203	1.23	69653134	56819445	
13C-2,3',4,4',5,5'-HxCB	167	44.046	1.25	36559258	29211015	
13C-3,3',4,4',5,5'-HxCB	169	48.472	1.24	30651857	24792300	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.03	28316147	27496668	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	55689198	54423067	
13C-2,3,3',5,5'-PeCB	111	35.452	1.60	64883754	40430467	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.07	36247946	33766626	
Recovery Standards						
13C-2,5-DiCB	9	15.337	1.53	84686939	55315081	
13C-2,2',5,5'-TeCB	52	25.387	0.80	42416046	52980659	
13C-2,2',4,5,5'-PeCB	101	32.668	1.62	50281923	31100077	
13C-2,2',3,4,4',5'-HxCB	138	40.973	1.25	41920878	33447291	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.126	0.90	24833766	27679627	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.418	0.77	122699703	159707089	
81		34.848	0.75	125942207	167138424	
105		39.028	1.52	143263175	94554749	
114		38.374	1.51	154363717	102247755	
118		37.821	1.52	158518382	104050458	
123		37.486	1.51	153580769	101647751	
126		42.163	1.50	127752628	85082410	
156	156/157	45.220	1.23	254098813	207052129	
157	156/157	45.220	1.23	(254098813)	(207052129)	
167		44.063	1.22	131084207	107816581	
169		48.489	1.21	109583957	90325860	
189		51.057	1.01	98180269	97375448	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.831	0.77	34784792	45413028	
13C-3,3',4,4'-TeCB	77	35.401	0.79	35556353	44802460	
13C-2,3,3',4,4'-PeCB	105	39.011	1.54	42719780	27666457	
13C-2,3,4,4',5-PeCB	114	38.357	1.56	42911393	27511946	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44868121	28881141	
13C-2,3',4,4',5'-PeCB	123	37.468	1.51	42837264	28287898	
13C-3,3',4,4',5-PeCB	126	42.146	1.55	37305170	24073584	
13C-HxCB(156/157)	156/157	45.219	1.25	71784489	57574094	
13C-2,3',4,4',5,5'-HxCB	167	44.045	1.24	36763440	29578303	
13C-3,3',4,4',5,5'-HxCB	169	48.488	1.23	31756784	25737966	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.04	29222728	28169942	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	51908930	51091675	
13C-2,3,3',5,5'-PeCB	111	35.468	1.60	64649598	40423708	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.08	35851672	33086489	
Recovery Standards						
13C-2,5-DiCB	9	15.325	1.52	83143628	54673112	
13C-2,2',5,5'-TeCB	52	25.386	0.80	41733434	52403278	
13C-2,2',4,5,5'-PeCB	101	32.668	1.61	49712591	30937614	
13C-2,2',3,4,4',5'-HxCB	138	40.989	1.27	41161616	32464857	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.146	0.92	24949098	27236268	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.417	0.76	616806932	810414208	
81		34.847	0.76	639607623	840095356	
105		39.027	1.54	745301804	485163987	
114		38.374	1.52	780283922	512899091	
118		37.837	1.53	803499802	526013471	
123		37.502	1.52	785601740	516404877	
126		42.162	1.52	649914791	428105060	
156	156/157	45.236	1.22	1286847987	1051857892	
157	156/157	45.236	1.22	(1286847987)	(1051857892)	
167		44.079	1.22	653652175	535863549	
169		48.505	1.22	557599158	455624388	
189		51.056	1.01	503772747	500470805	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	209 Mix	Injected By	CVS
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_12	GC Column ID	261111-02
Analyzed	08/18/2021 22:46	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.847	0.77	261939892	340717538	
13C-3,3',4,4'-TeCB	77	35.417	0.78	263079957	337687425	
13C-2,3,3',4,4'-PeCB	105	39.027	1.54	301762200	195654754	
13C-2,3,4,4',5-PeCB	114	38.373	1.55	319273384	206446336	
13C-2,3',4,4',5-PeCB	118	37.820	1.55	285920586	183937225	
13C-2,3',4,4',5'-PeCB	123	37.485	1.53	313436211	205254716	
13C-3,3',4,4',5-PeCB	126	42.162	1.54	264403772	172198516	
13C-HxCB(156/157)	156/157	45.236	1.22	465580970	380670626	
13C-2,3',4,4',5,5'-HxCB	167	44.079	1.22	258717686	211356442	
13C-3,3',4,4',5,5'-HxCB	169	48.505	1.24	220535522	177818152	
13C-2,3,3',4,4',5,5'-HpCB	189	51.056	1.04	204725613	197053053	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.408	1.02	422954227	416691418	
13C-2,3,3',5,5'-PeCB	111	35.485	1.58	458291424	289581214	
13C-2,2',3,3',5,5',6-HpCB	178	41.475	1.10	279951616	254366604	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.54	635712772	412478384	
13C-2,2',5,5'-TeCB	52	25.403	0.80	336937561	422961206	
13C-2,2',4,5,5'-PeCB	101	32.701	1.60	391761849	245471967	
13C-2,2',3,4,4',5'-HxCB	138	41.006	1.24	331269487	267326199	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.167	0.90	186641000	208016820	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

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Client ID	209 Mix	Injected By	CVS
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_12	GC Column ID	261111-02
Analyzed	08/18/2021 22:46	ICAL ID	Y210818B12

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.451	0.77	123538736	160442709	
81		34.864	0.76	134870249	177996834	
105		39.044	1.52	153616365	101179020	
114		38.407	1.51	161398999	106639926	
118		37.854	1.53	141072744	92413810	
123		37.518	1.53	158852111	103945553	
126		42.196	1.53	131270293	85832237	
156	156/157	45.252	1.21	244127137	201294827	
157	156/157	45.252	1.21	(244127137)	(201294827)	
167		44.096	1.22	137613478	113097201	
169		48.521	1.22	112215927	92218459	
189		51.077	1.01	96188981	95113403	

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	209 Mix	Injected By	BAL
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_02	GC Column ID	261111-02
Analyzed	08/19/2021 12:34	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.78	350345770	451311493	
13C-3,3',4,4'-TeCB	77	35.437	0.78	358586273	458242779	
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	398629988	258944921	
13C-2,3,4,4',5-PeCB	114	38.377	1.55	419130683	270353368	
13C-2,3',4,4',5-PeCB	118	37.824	1.56	337445748	216941583	
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	410374649	269449681	
13C-3,3',4,4',5-PeCB	126	42.183	1.54	364322549	235855149	
13C-HxCB(156/157)	156/157	45.240	1.24	575112371	464923773	
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.23	339862330	276398261	
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.22	290428710	237778570	
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.04	253341233	243605827	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.02	541390962	530905480	
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	591983650	372433434	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	345763984	313264751	
Recovery Standards						
13C-2,5-DiCB	9	15.362	1.54	782172916	509269814	
13C-2,2',5,5'-TeCB	52	25.422	0.80	421169308	527768351	
13C-2,2',4,5,5'-PeCB	101	32.704	1.59	499361743	313509468	
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.26	421031924	334204391	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.178	0.91	218688168	240803952	

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	209 Mix	Injected By	BAL
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_02	GC Column ID	261111-02
Analyzed	08/19/2021 12:34	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.454	0.76	166566667	220048410	
81		34.884	0.76	181047236	236944635	
105		39.048	1.53	203070371	132300918	
114		38.410	1.51	210237379	139196253	
118		37.874	1.54	175160210	113880571	
123		37.522	1.51	203626798	134960104	
126		42.200	1.51	178649325	118163826	
156	156/157	45.257	1.21	301198333	248040417	
157	156/157	45.257	1.21	(301198333)	(248040417)	
167		44.100	1.22	181932165	148977128	
169		48.527	1.22	146914658	120346982	
189		51.088	1.01	117996108	116718149	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_01	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.78	76295120	98381686	
13C-3,3',4,4'-TeCB	77	35.454	0.78	78929962	101541891	
13C-2,3,3',4,4'-PeCB	105	39.048	1.56	92088980	58982498	
13C-2,3,4,4',5-PeCB	114	38.394	1.53	93027165	60623043	
13C-2,3',4,4',5-PeCB	118	37.857	1.53	96292104	62994671	
13C-2,3',4,4',5'-PeCB	123	37.505	1.52	92167858	60532760	
13C-3,3',4,4',5-PeCB	126	42.184	1.56	83517503	53704511	
13C-HxCB(156/157)	156/157	45.257	1.22	150827777	123193956	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.24	79681101	64499936	
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.25	69189892	55401415	
13C-2,3,3',4,4',5,5'-HpCB	189	51.067	1.03	60877189	59391133	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.442	1.02	118547740	116543315	
13C-2,3,3',5,5'-PeCB	111	35.504	1.57	142505463	90652009	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.09	78675916	72137599	
Recovery Standards						
13C-2,5-DiCB	9	15.385	1.54	183687824	119270059	
13C-2,2',5,5'-TeCB	52	25.438	0.80	93852330	116963618	
13C-2,2',4,5,5'-PeCB	101	32.721	1.59	110190624	69130827	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.26	92932325	73691738	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.90	52289833	57816048	

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_01	GC Column ID	261111-02
Analyzed	08/19/2021 11:35	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.471	0.76	34209870	44847202	
81		34.900	0.76	35137052	46445203	
105		39.064	1.51	38743046	25583524	
114		38.427	1.49	40374102	27105487	
118		37.874	1.54	43020795	27862576	
123		37.538	1.52	41321952	27158569	
126		42.217	1.51	35736156	23732630	
156	156/157	45.274	1.21	67597404	55647357	
157	156/157	45.274	1.21	(67597404)	(55647357)	
167		44.117	1.21	35422374	29210651	
169		48.544	1.22	30673526	25077221	
189		51.089	1.01	26406961	26266614	

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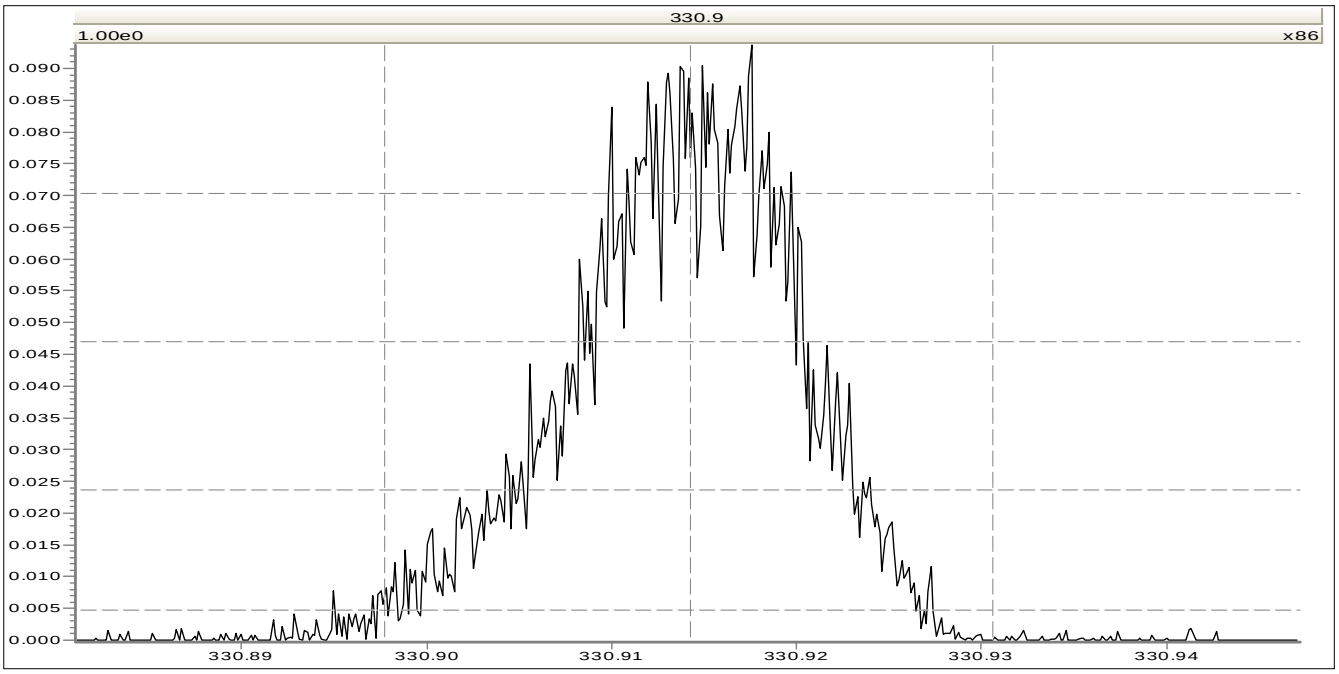

Source (EI+)

Ion Repeller (V)	-9.96
Focus 1	843
Beam Centre	37.3
Focus 2	4272
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-101.7
Z Deflect 1	-12.9
Z Deflect 2	-3.9
Z Focus 2	2338
Z Focus 3	0
Z Deflect 3	23.4
Y Focus	3492
Rotate 2	5.0
Curve 2	-4.1
Curve 3	0.8
Rotate 3	-40.5
Rotate 4	1.2
V Acc (V)	6495.96
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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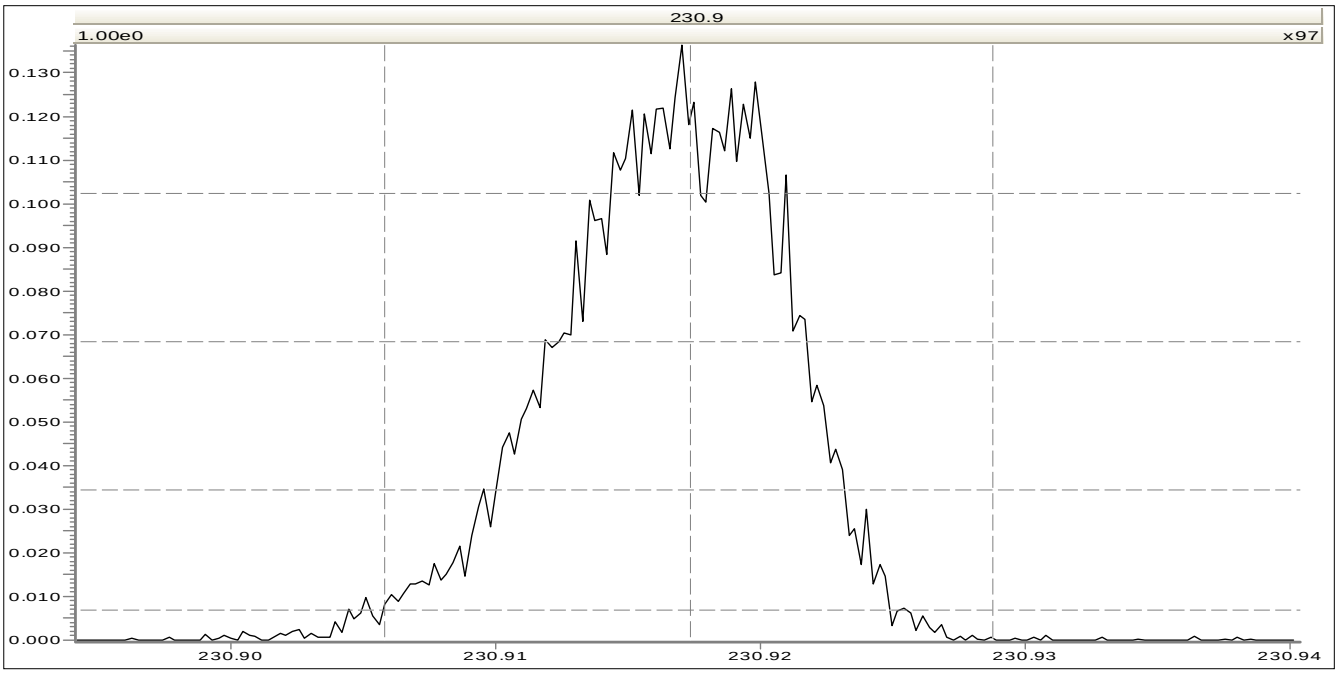

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.74
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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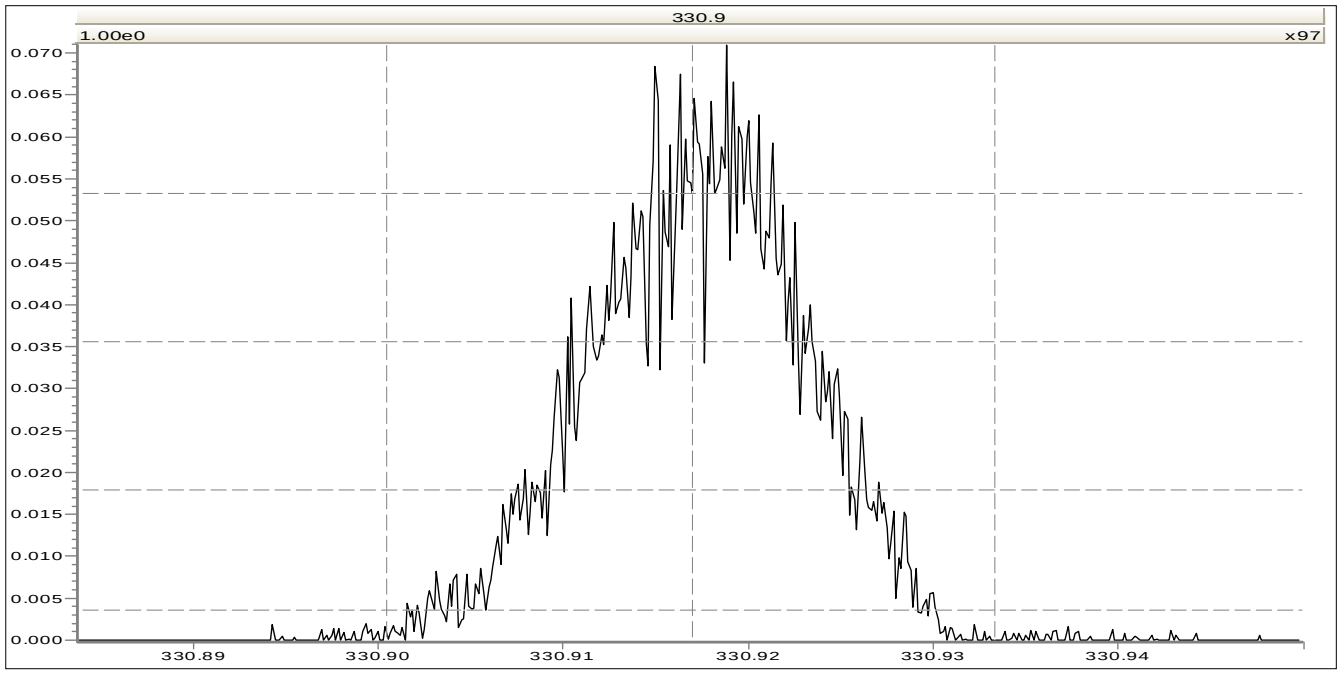

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.92
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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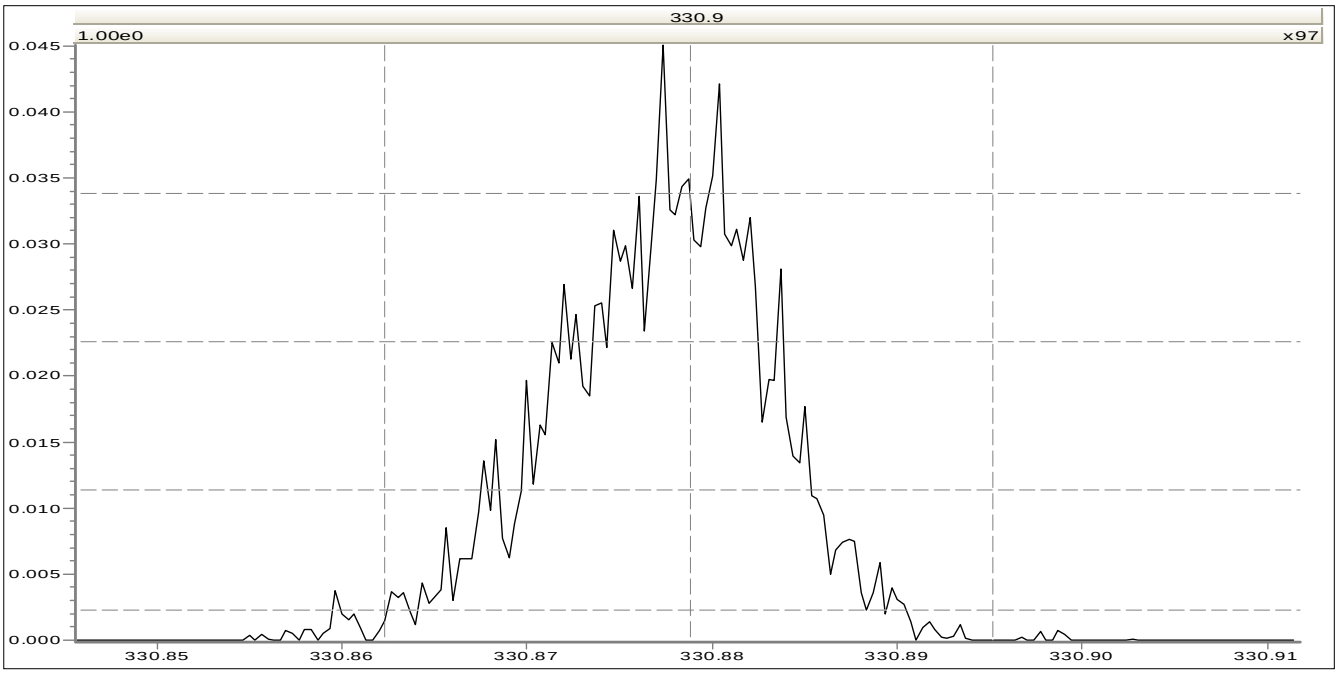


Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.92
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

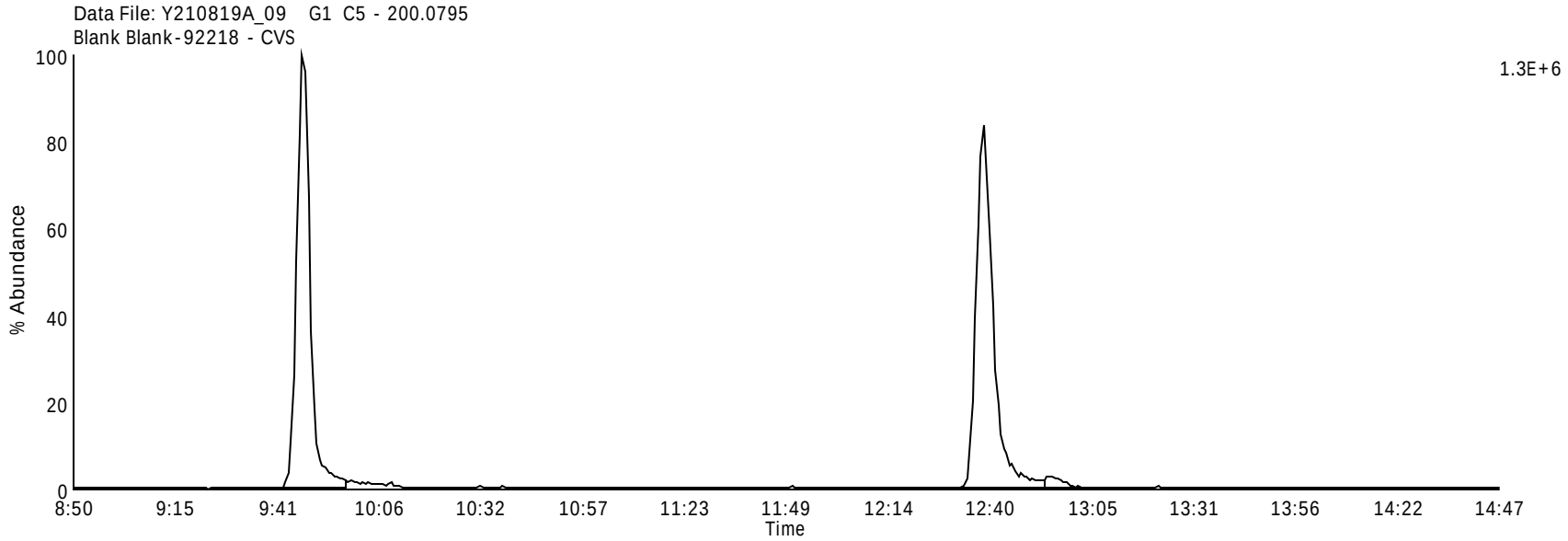
No information

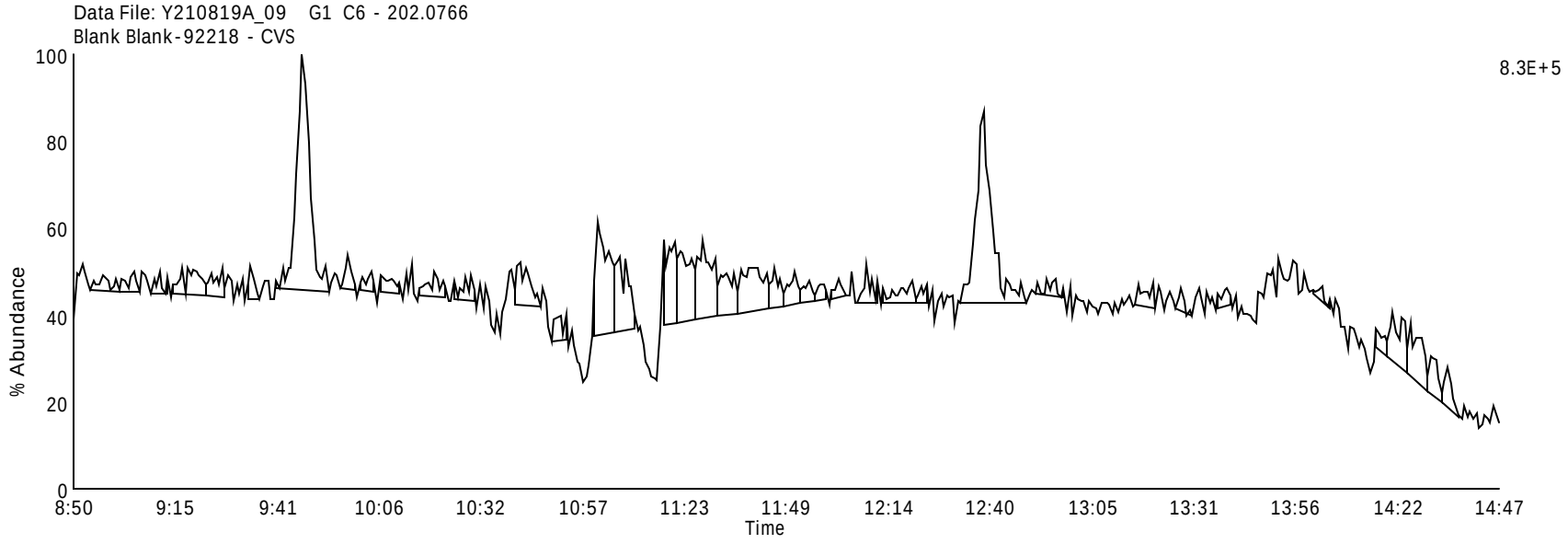
Appendix F

QC Raw Data

Labeled Mono Chlorinated Biphenyls

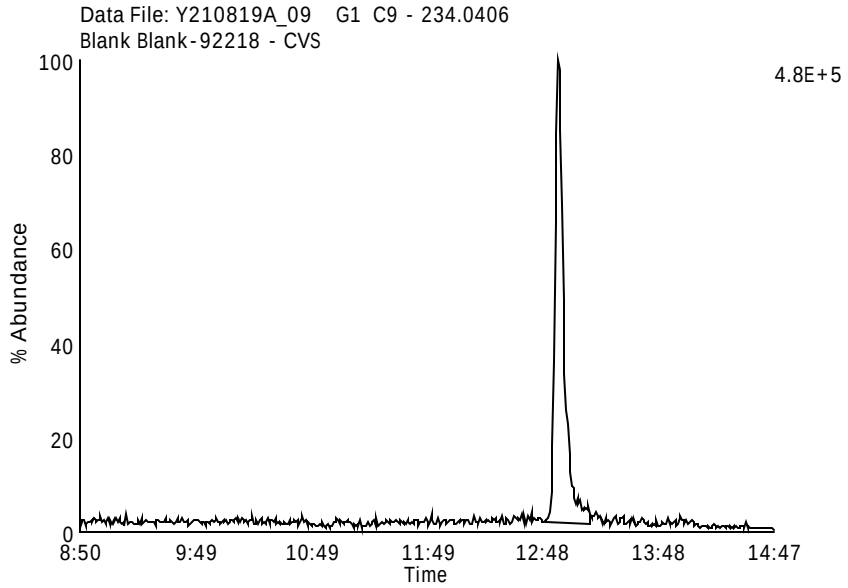
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

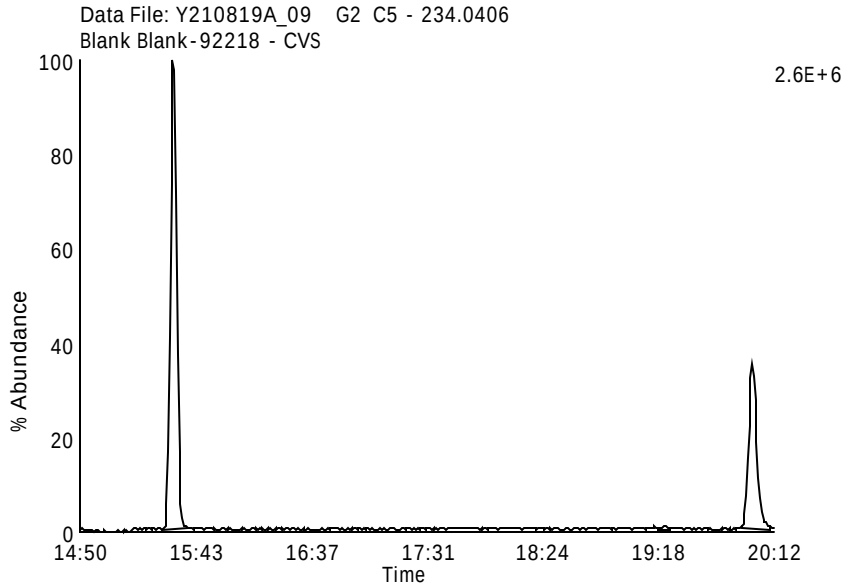


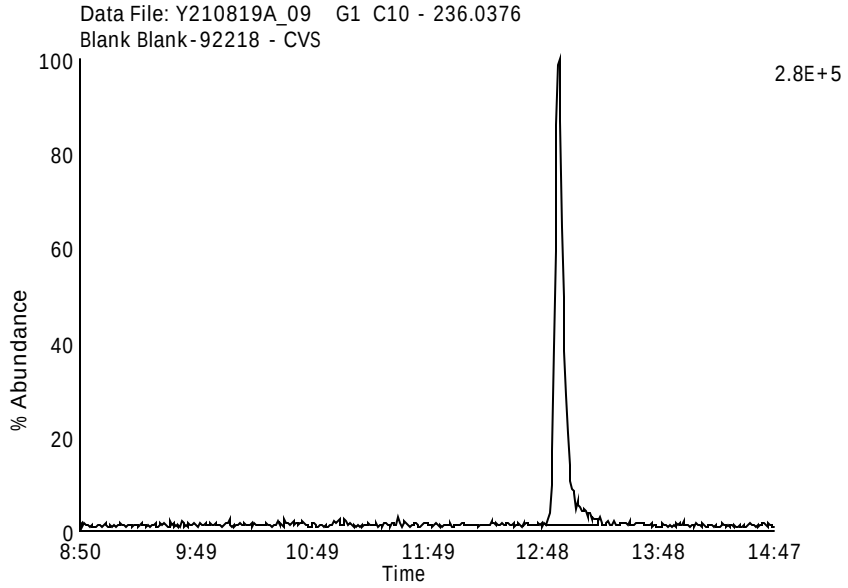


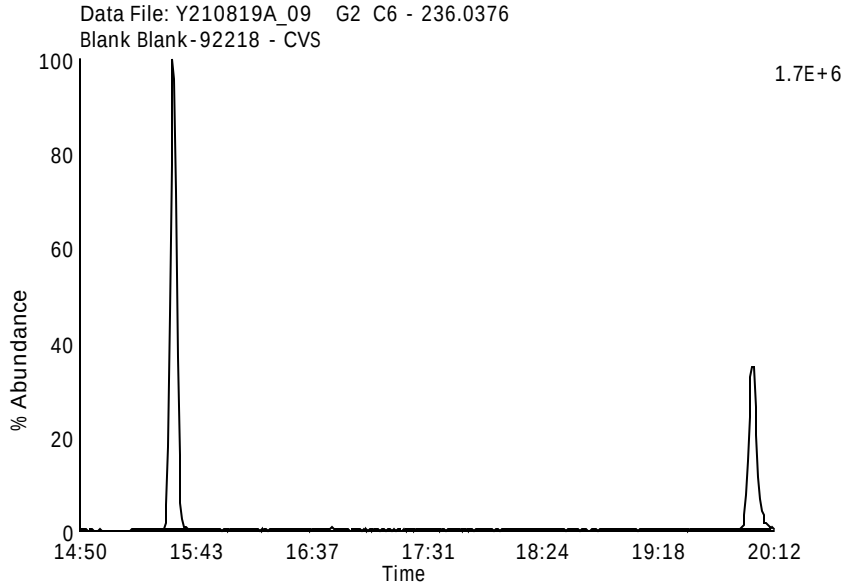
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



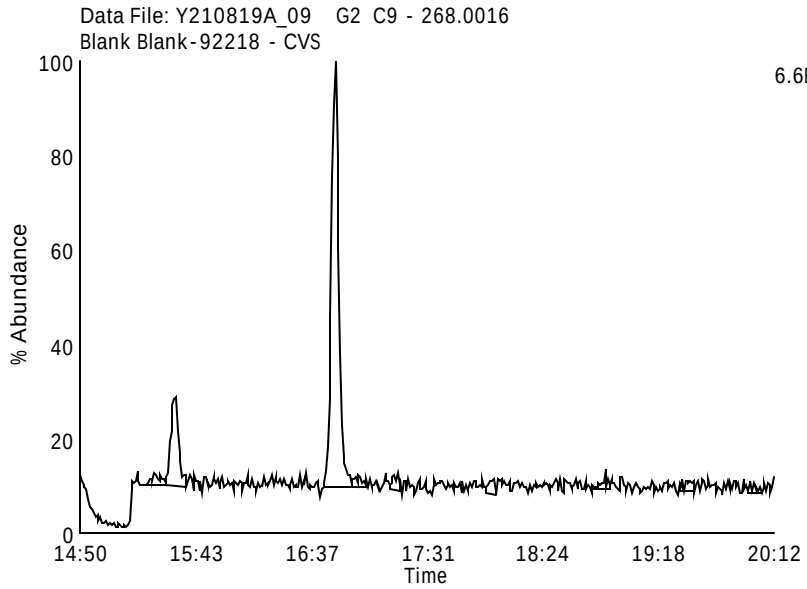


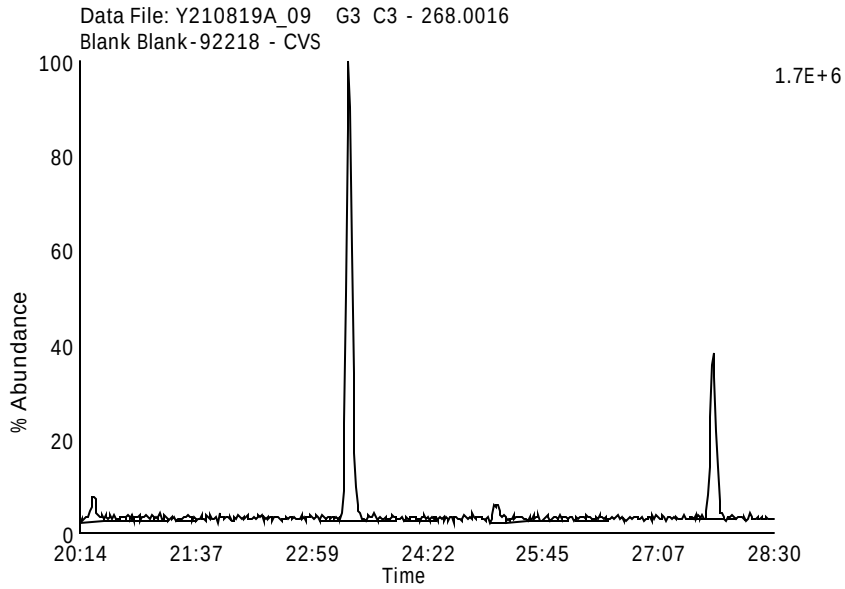


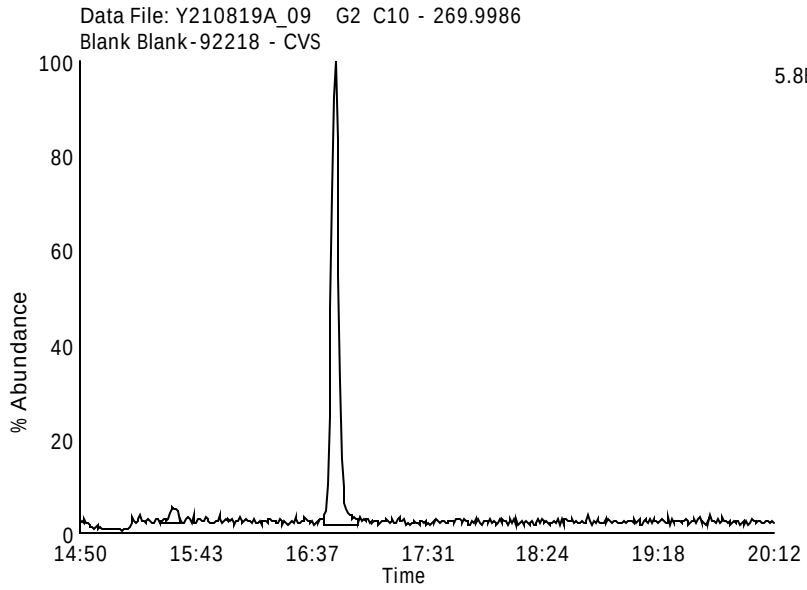


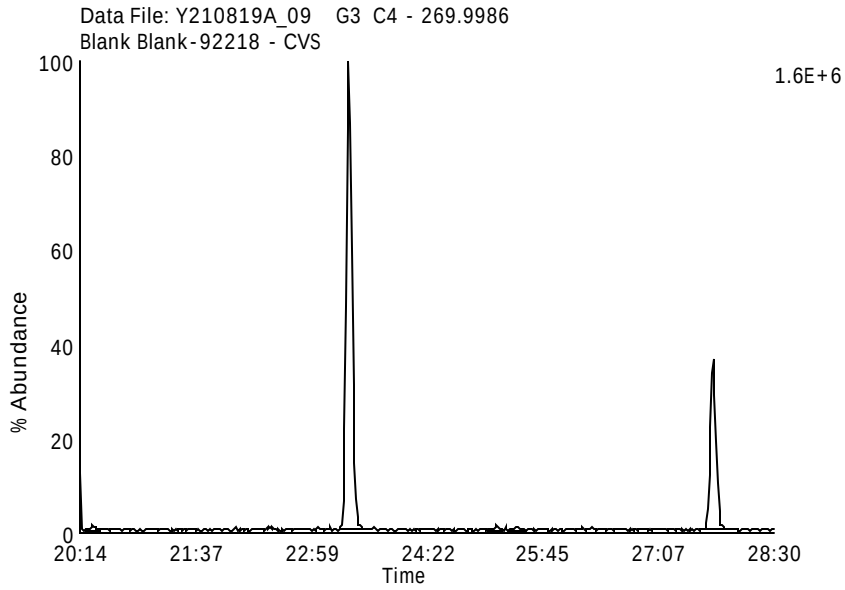
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



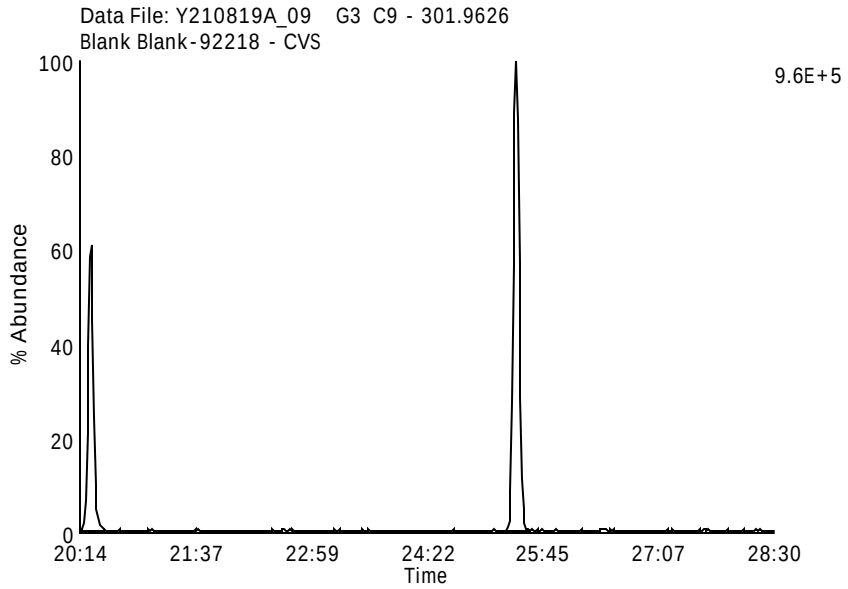


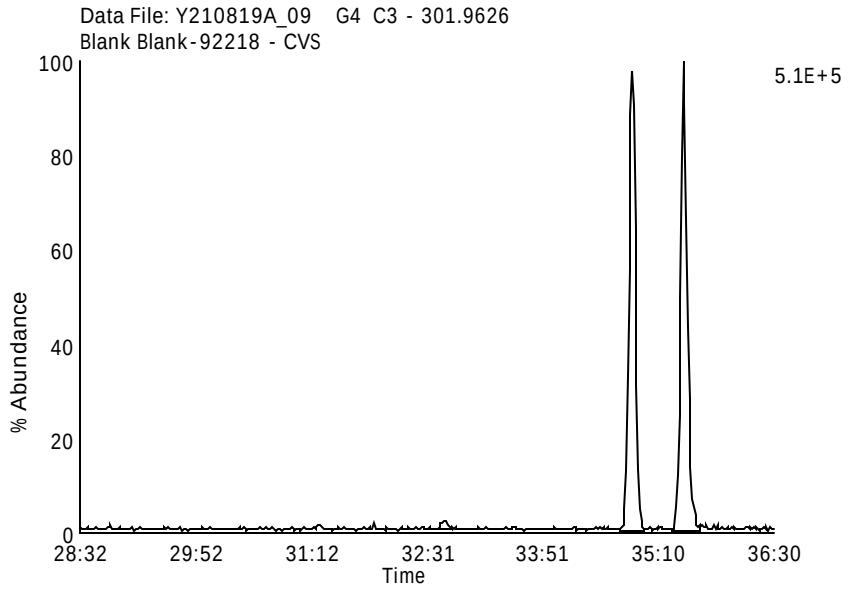


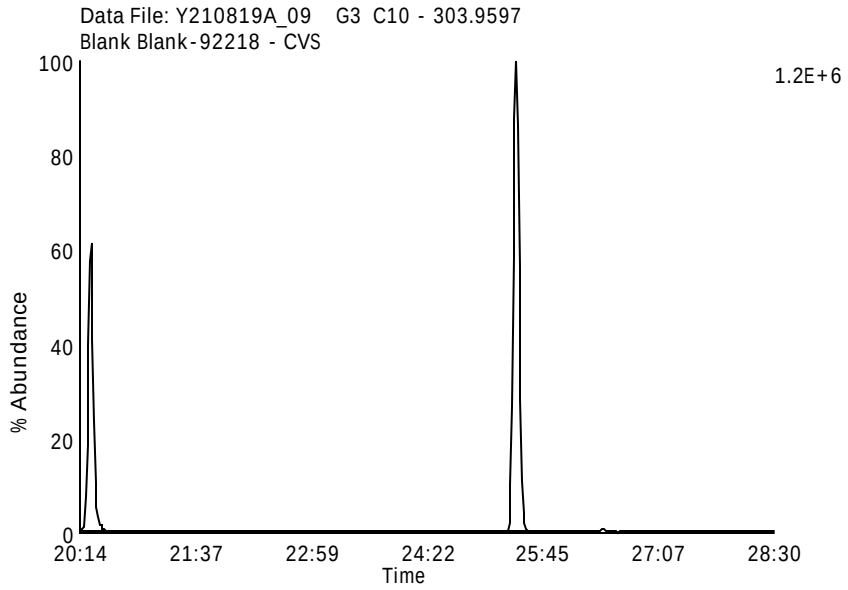


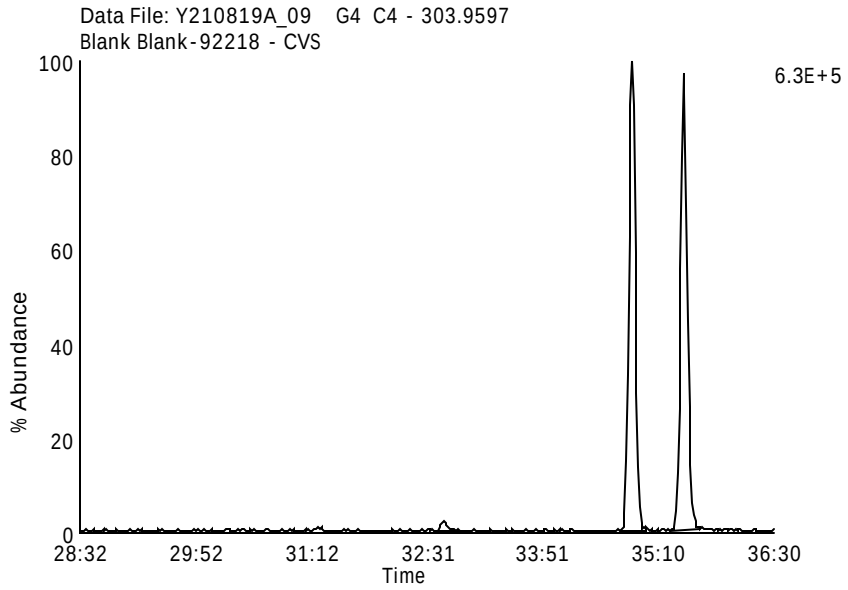
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



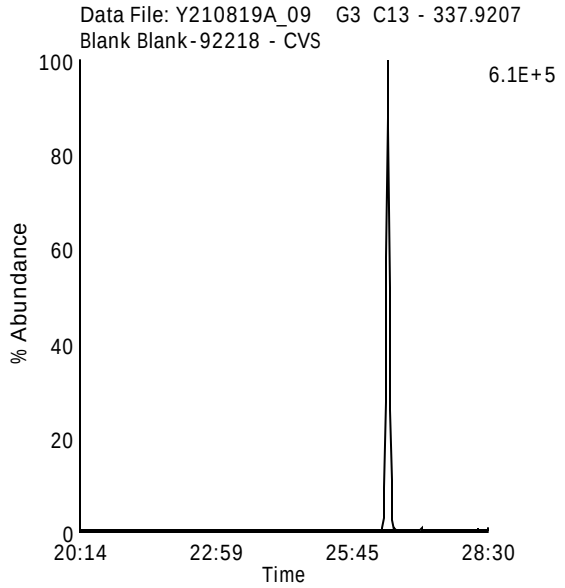


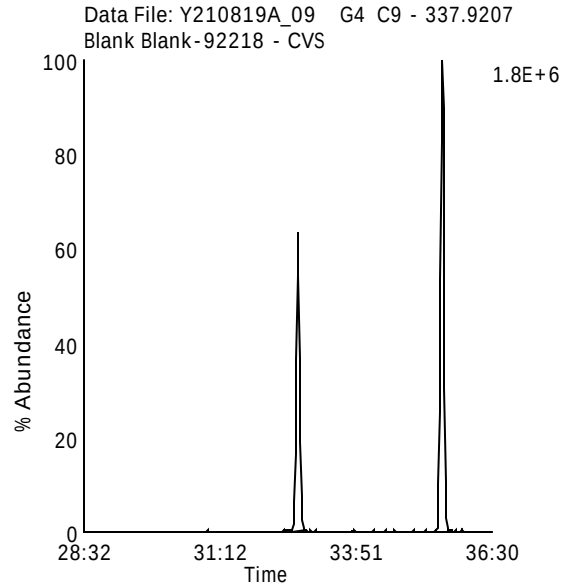


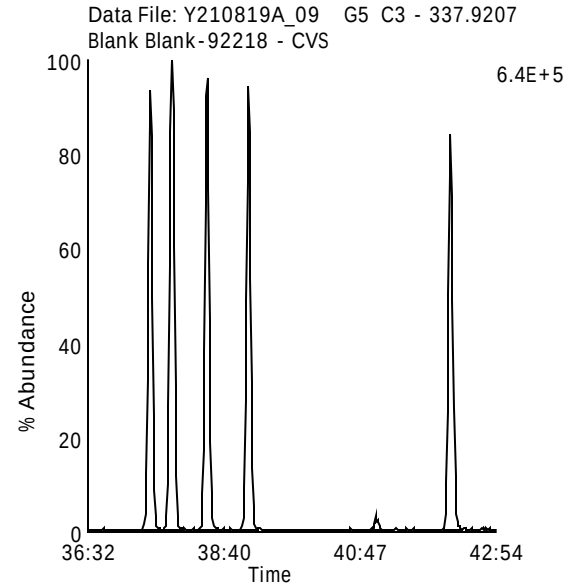


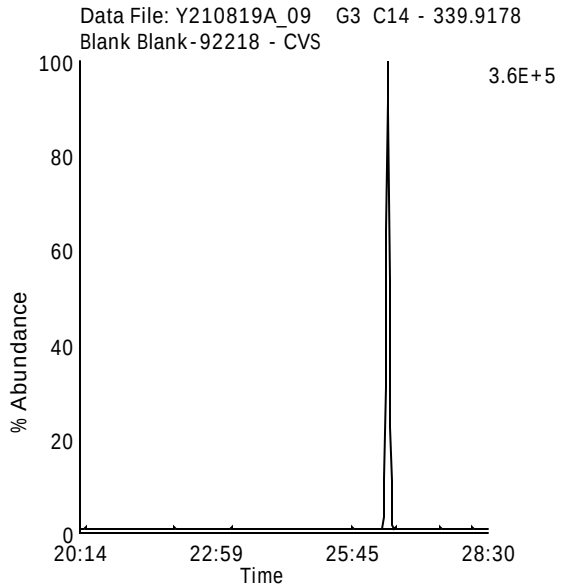
Labeled Penta Chlorinated Biphenyls

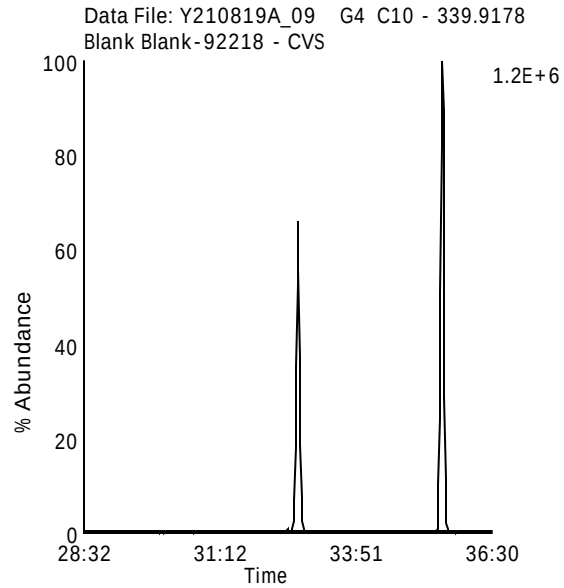
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

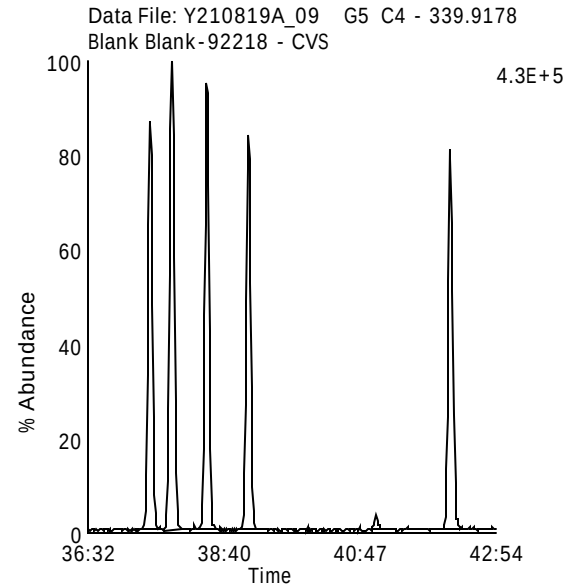






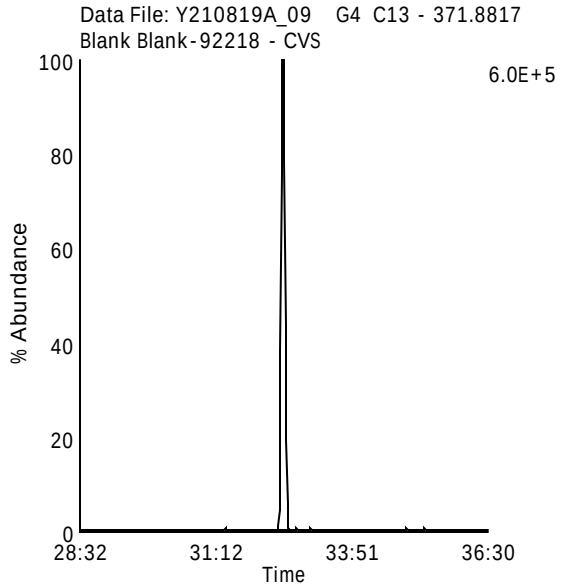


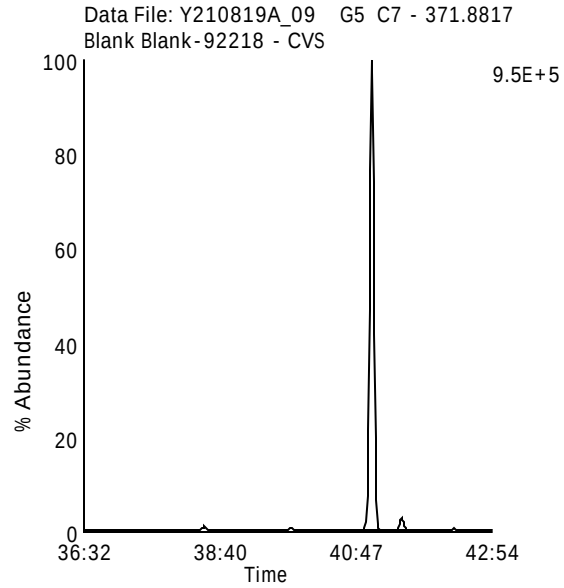


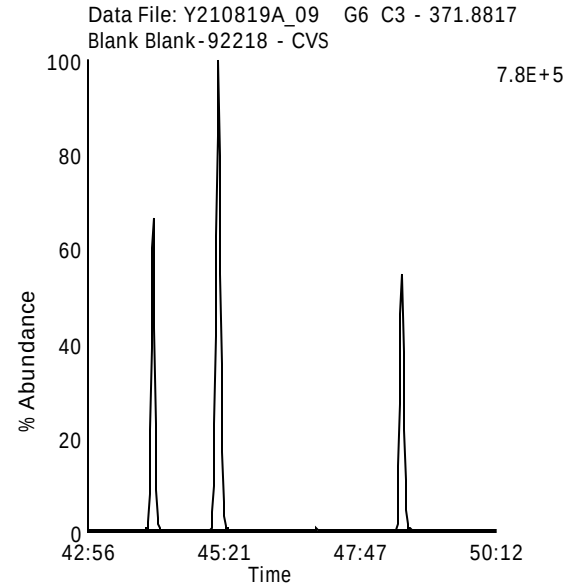


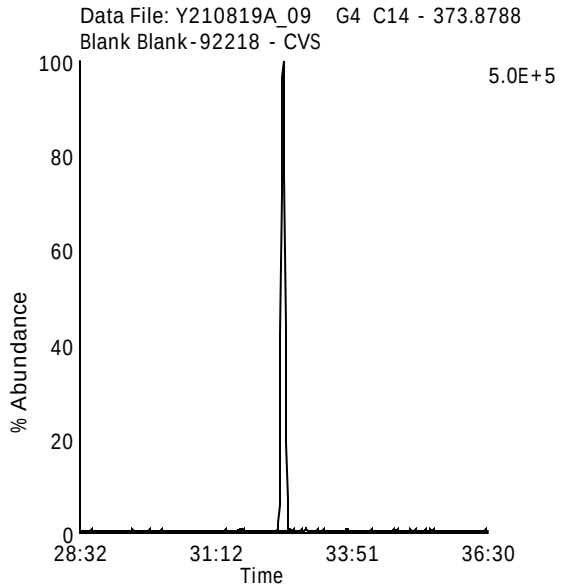
Labeled Hexa Chlorinated Biphenyls

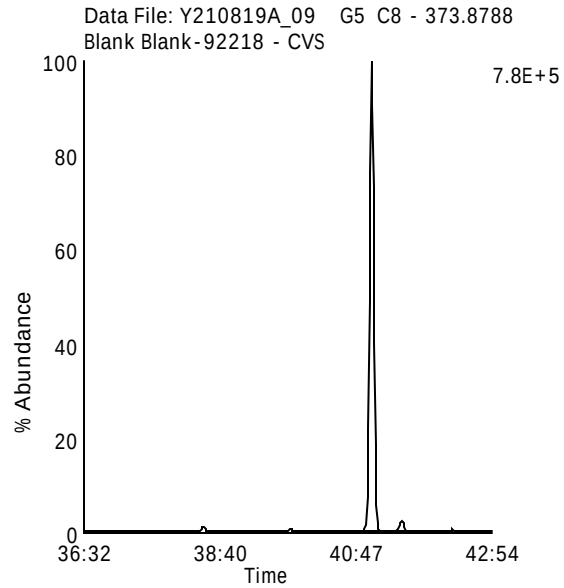
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

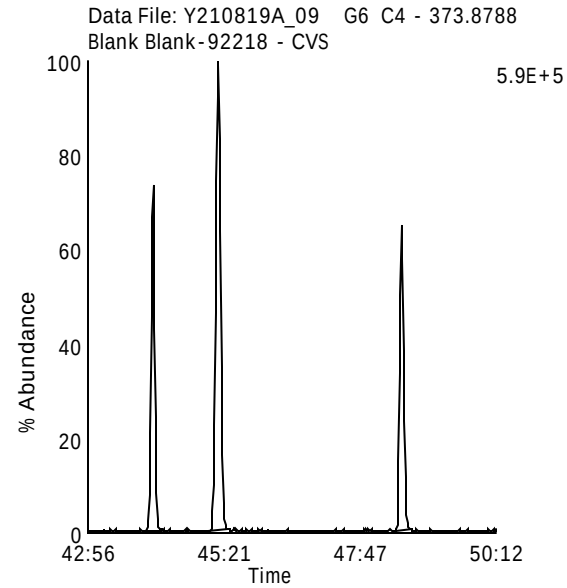






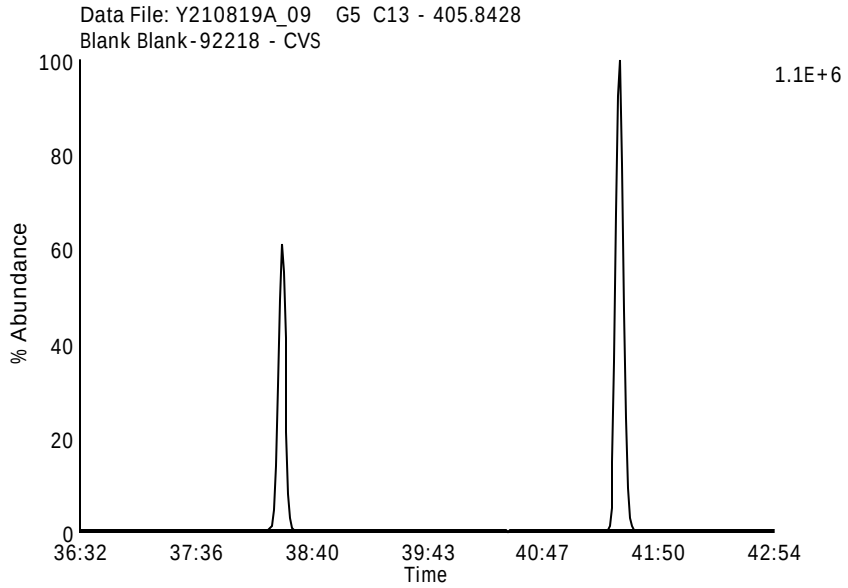


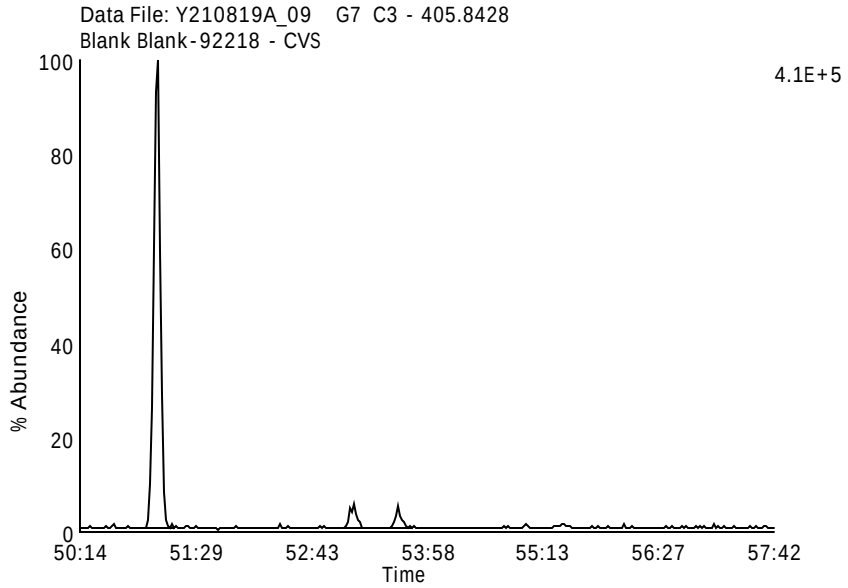


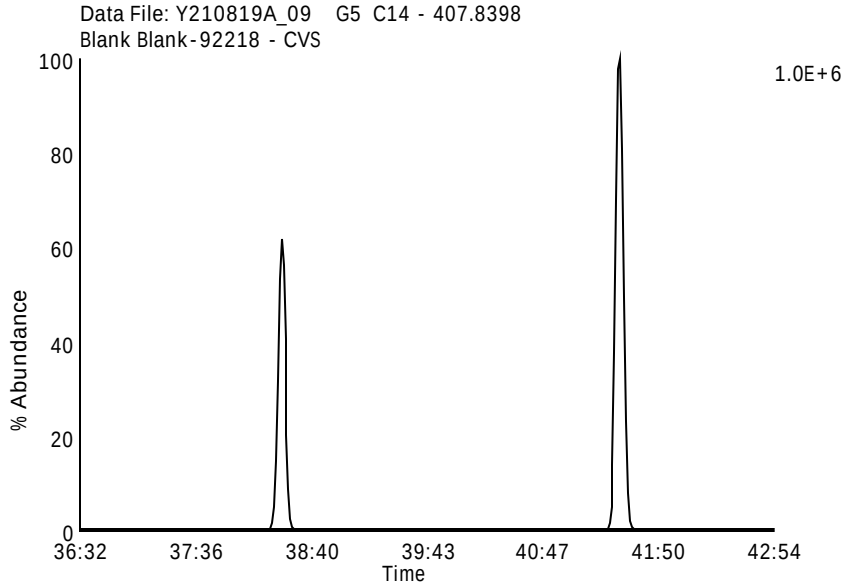


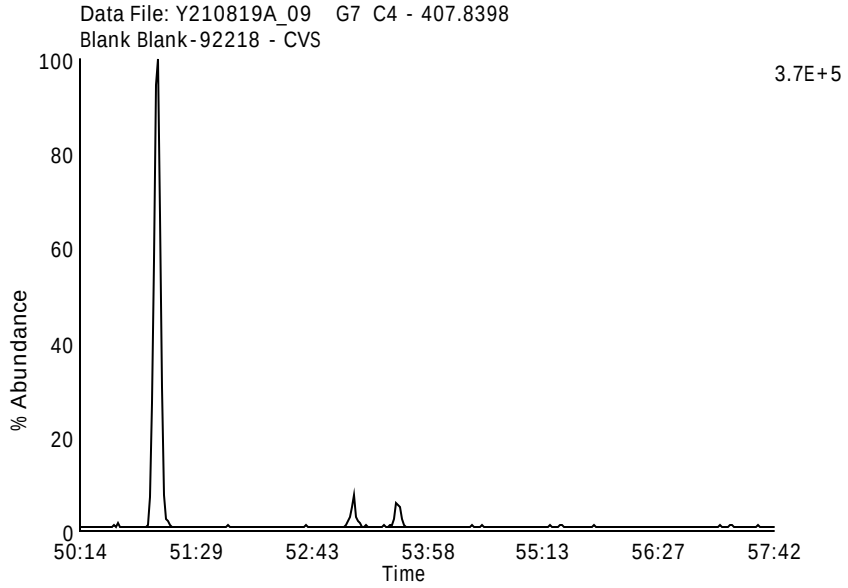
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



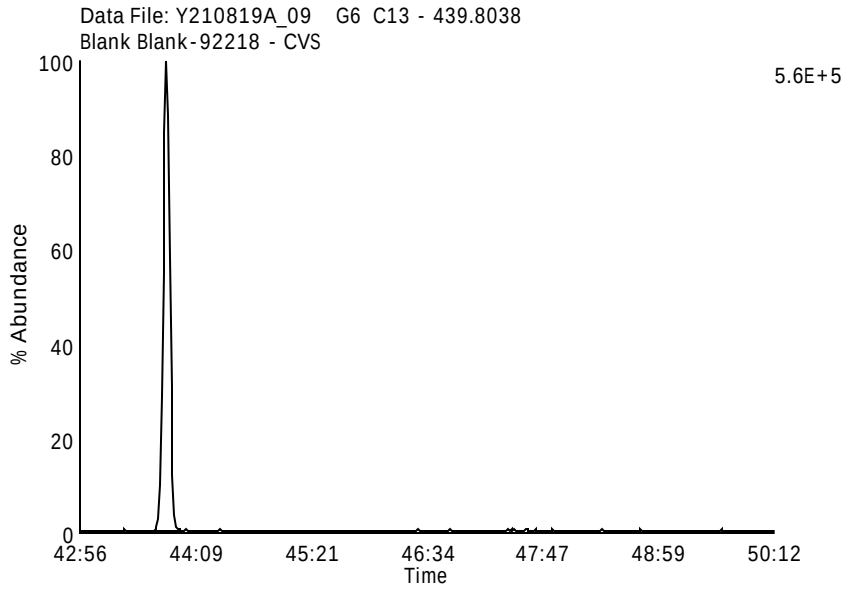


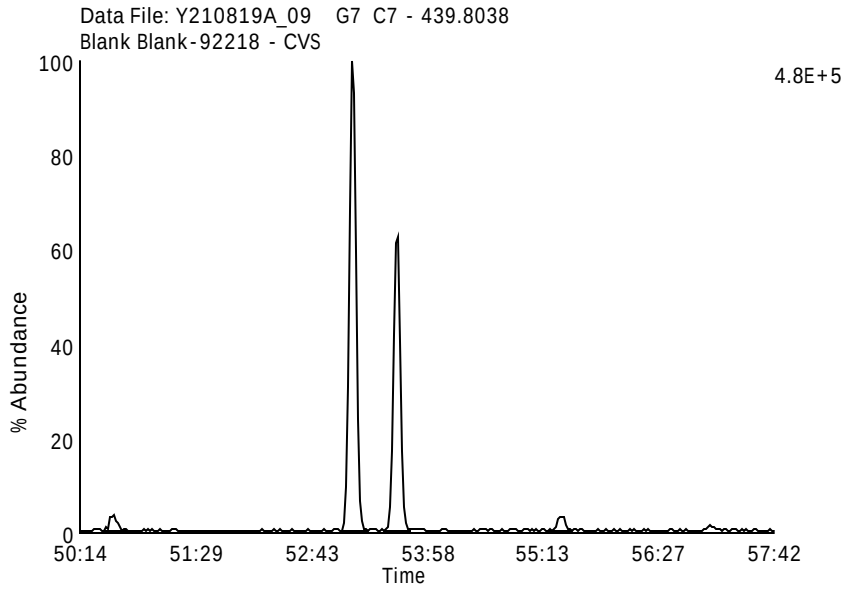


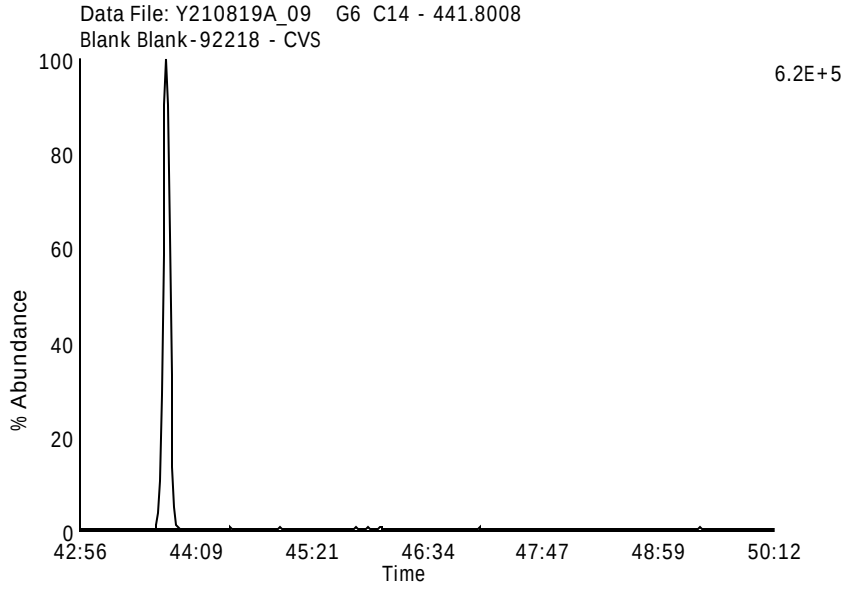


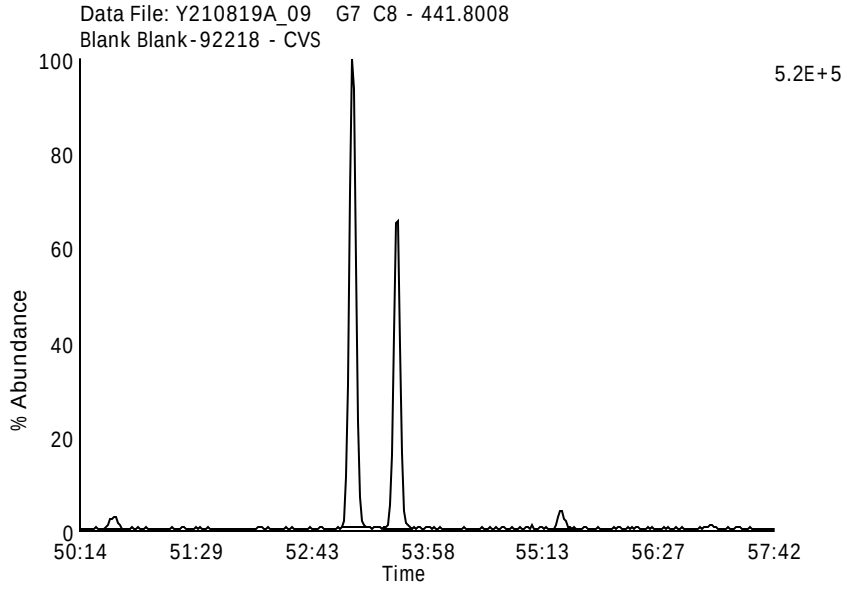
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



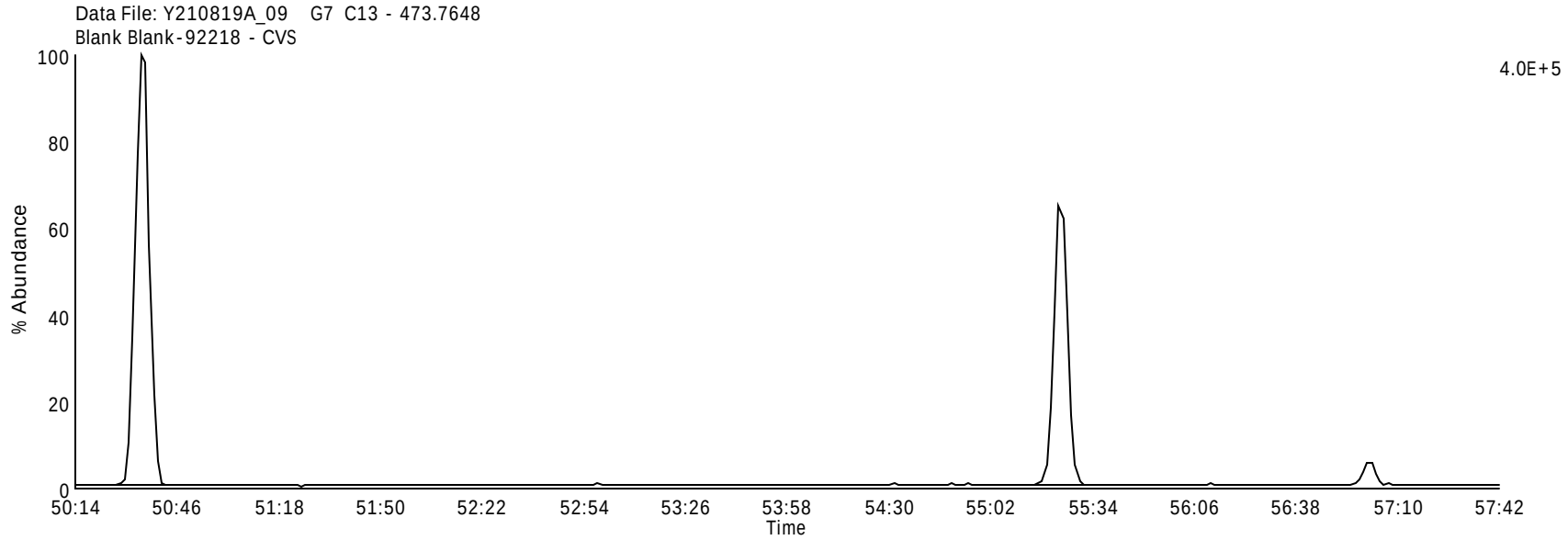


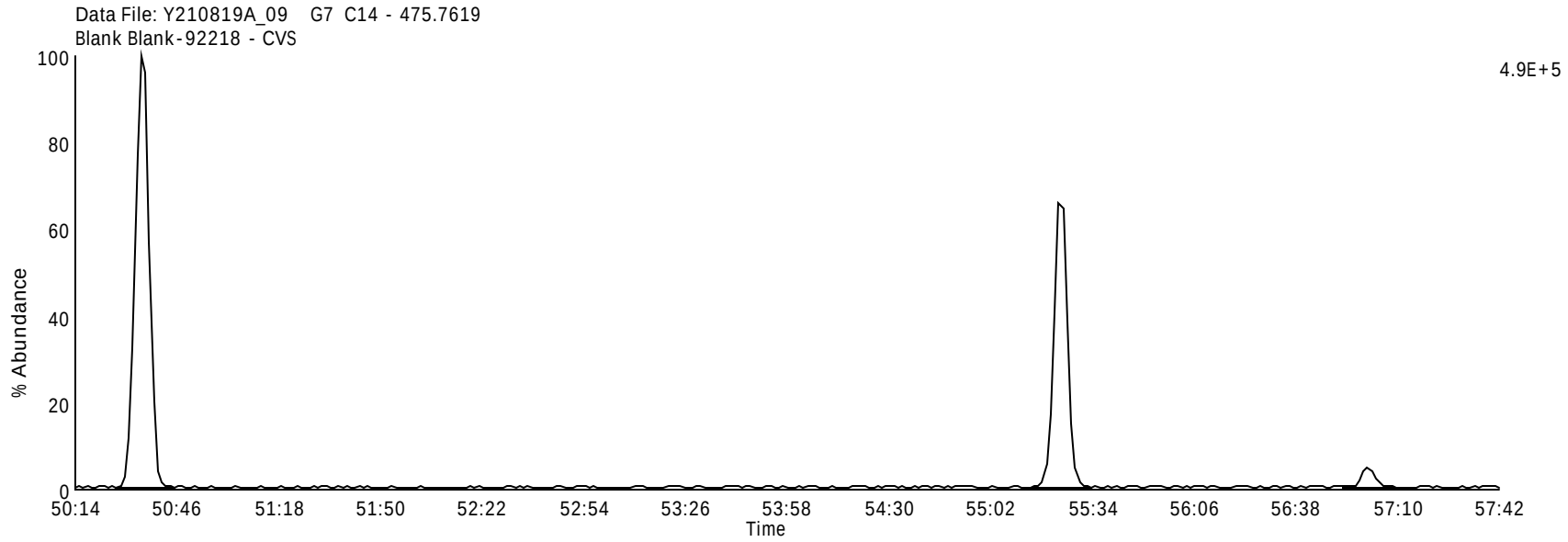




Labeled Nona Chlorinated Biphenyls

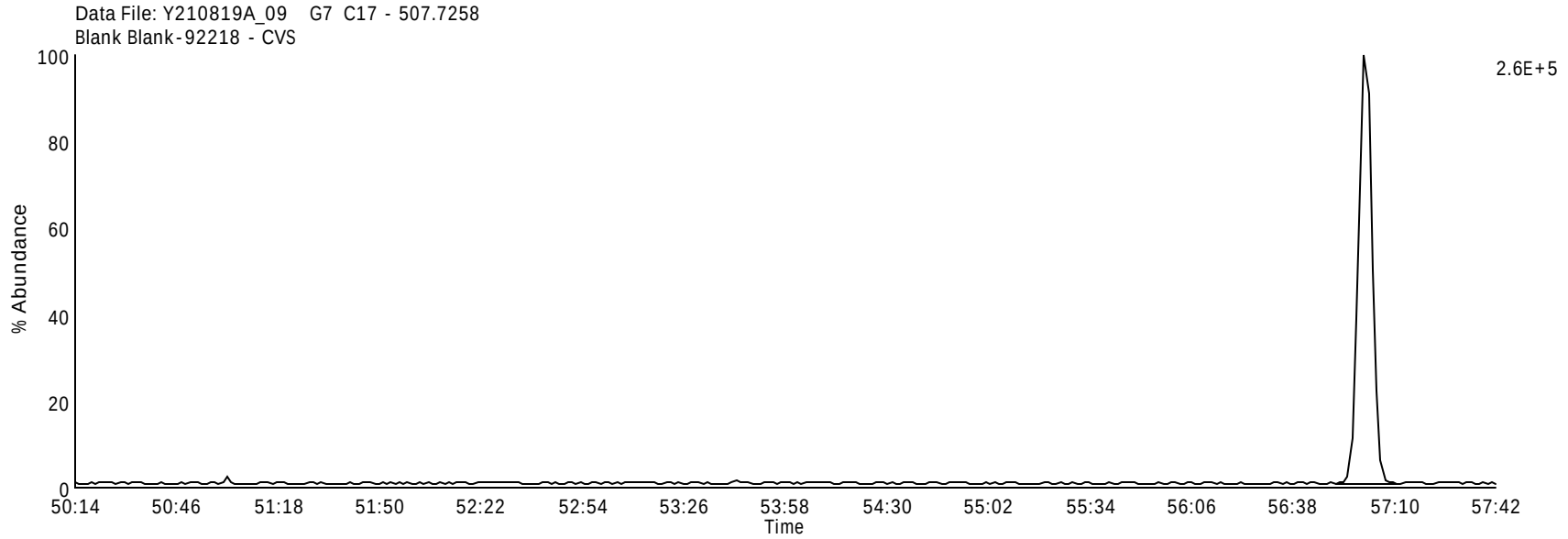
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

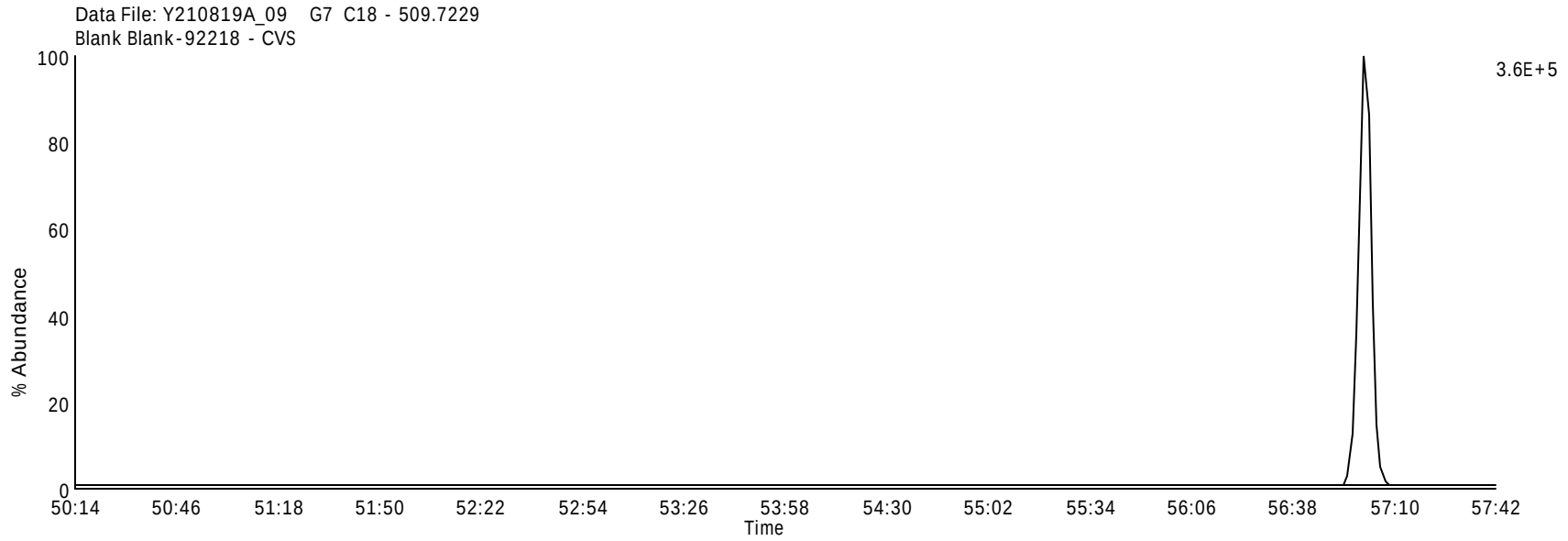




Labeled Deca Chlorinated Biphenyl

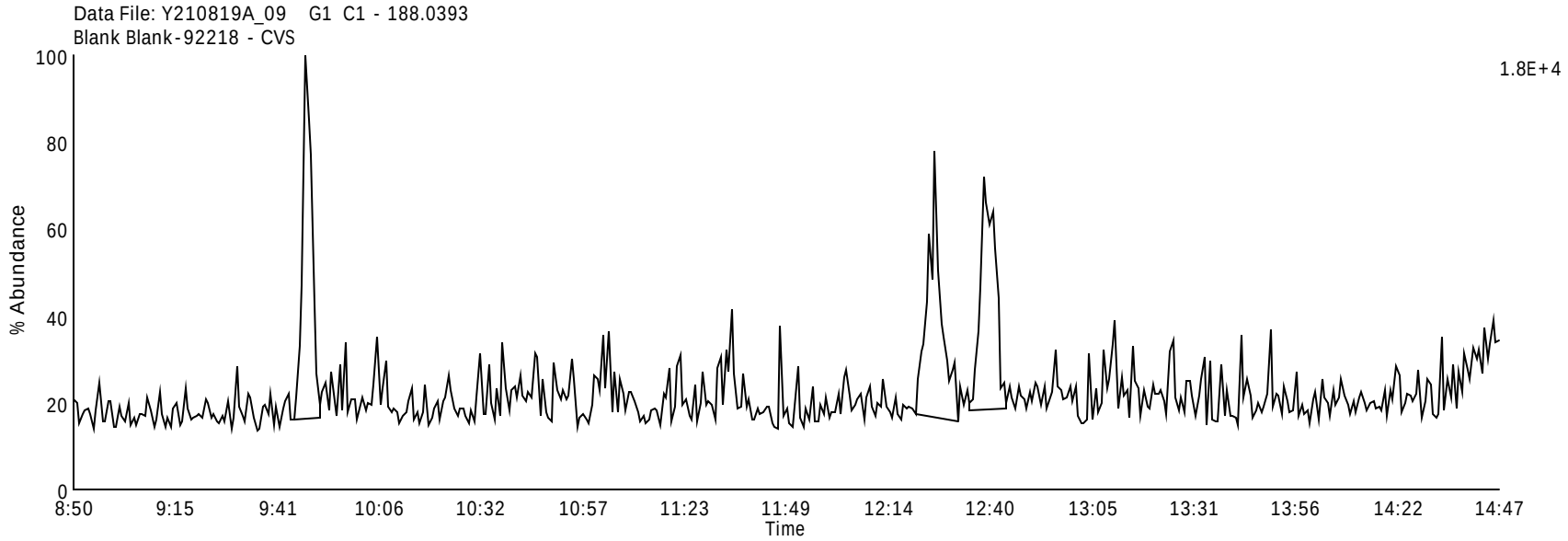
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

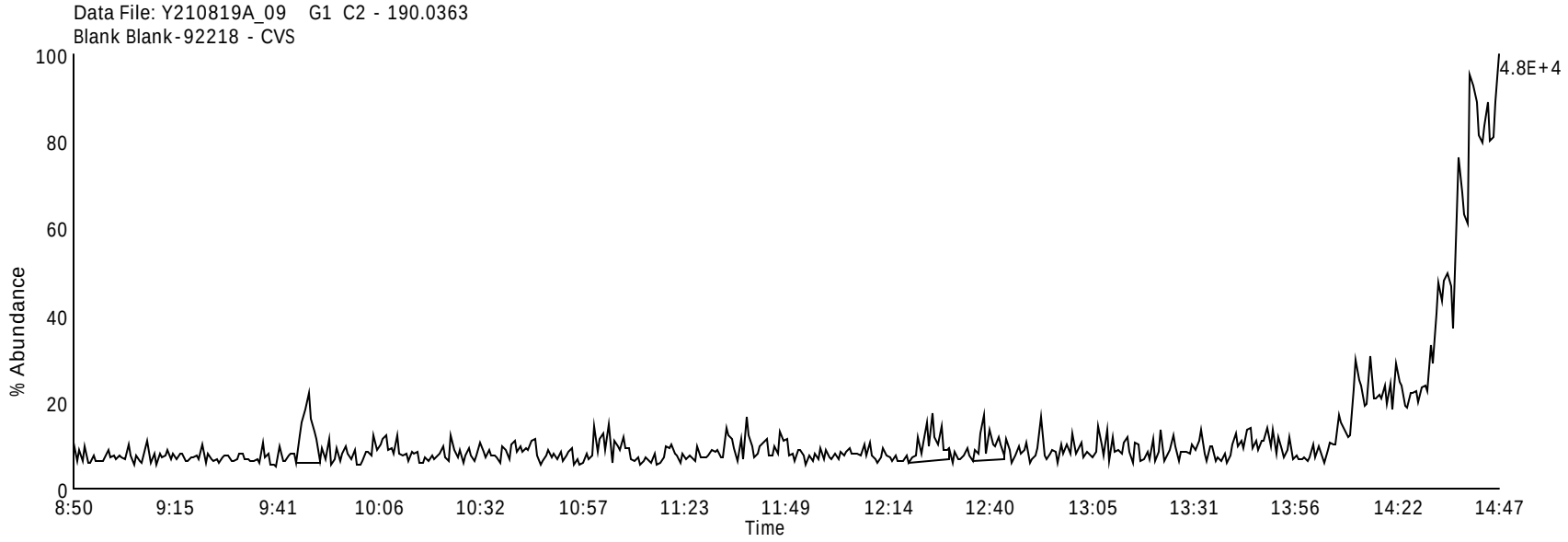




Mono Chlorinated Biphenyls

Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

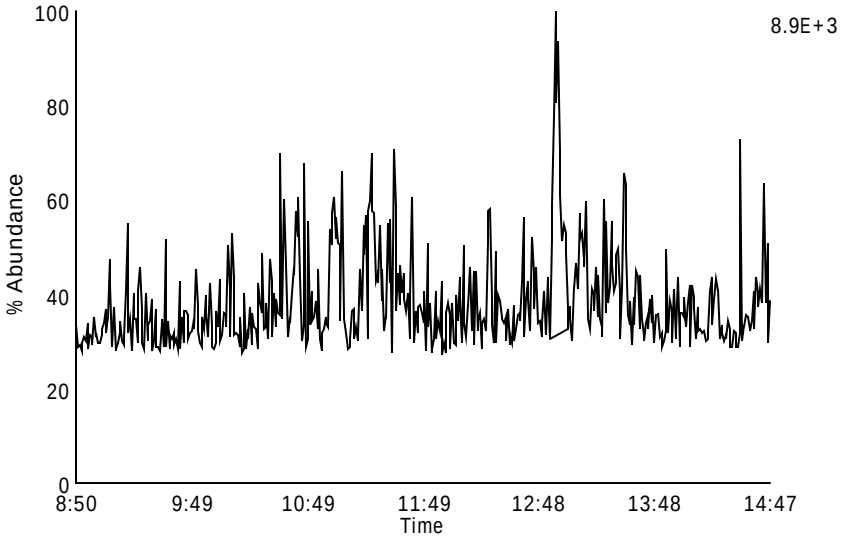




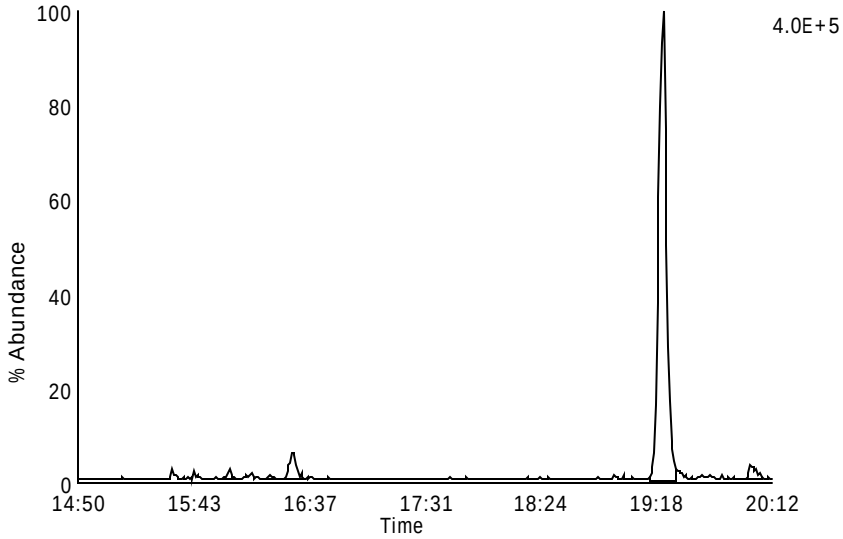
Di Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

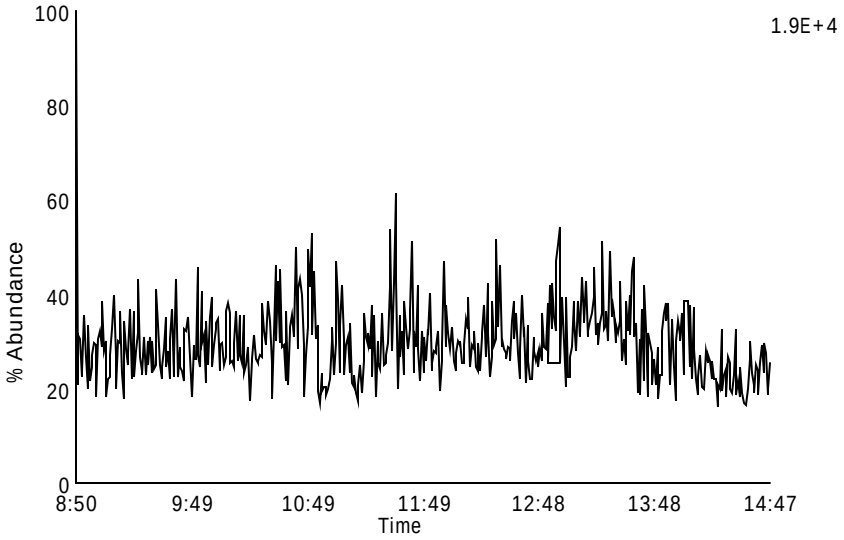
Data File: Y210819A_09 G1 C7 - 222.0003
Blank Blank-92218 - CVS



Data File: Y210819A_09 G2 C1 - 222.0003
Blank Blank-92218 - CVS



Data File: Y210819A_09 G1 C8 - 223.9974
Blank Blank-92218 - CVS



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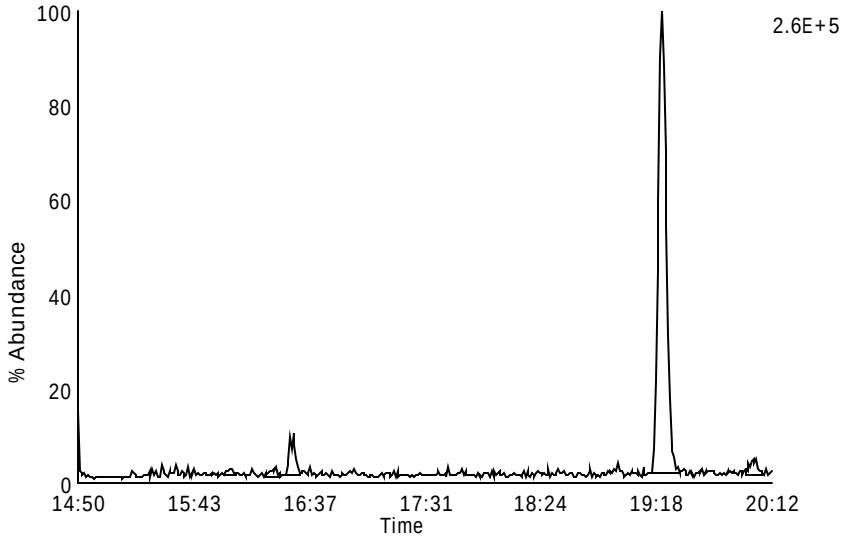
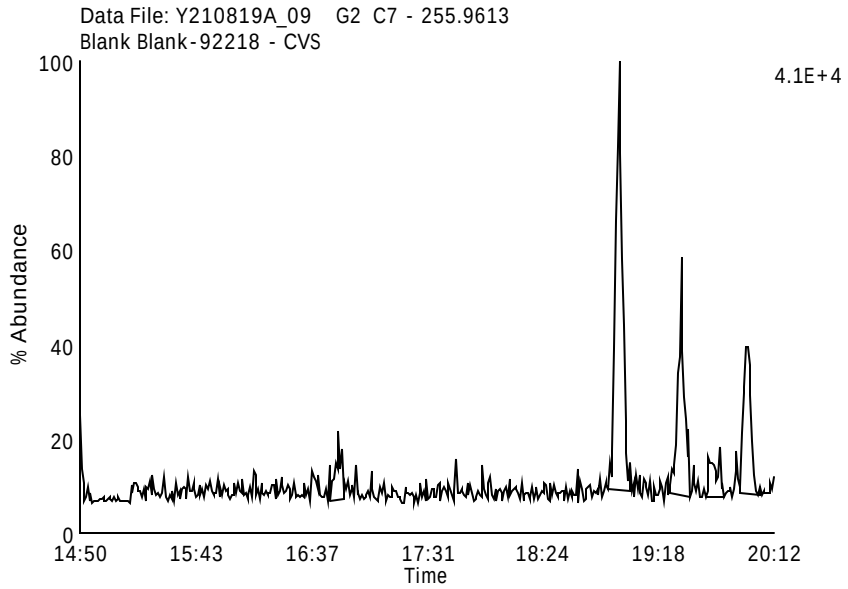
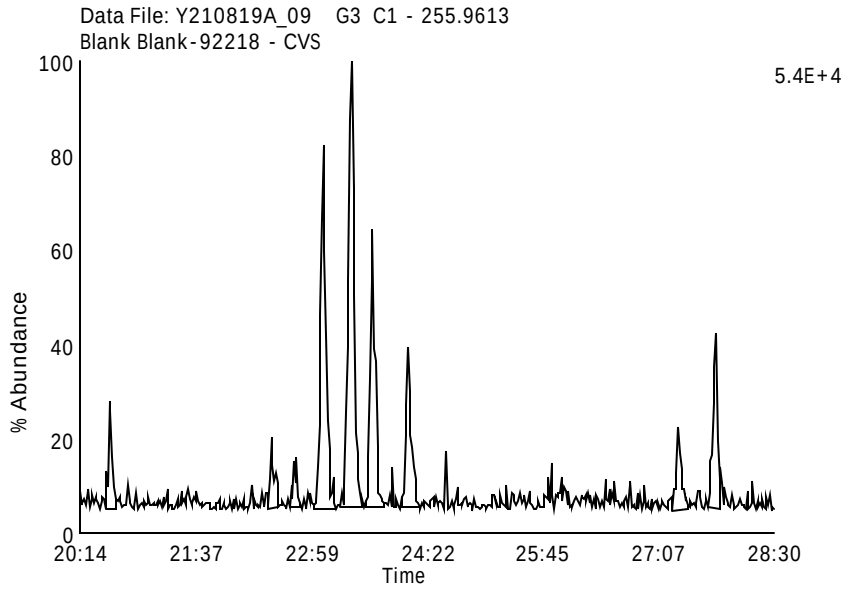


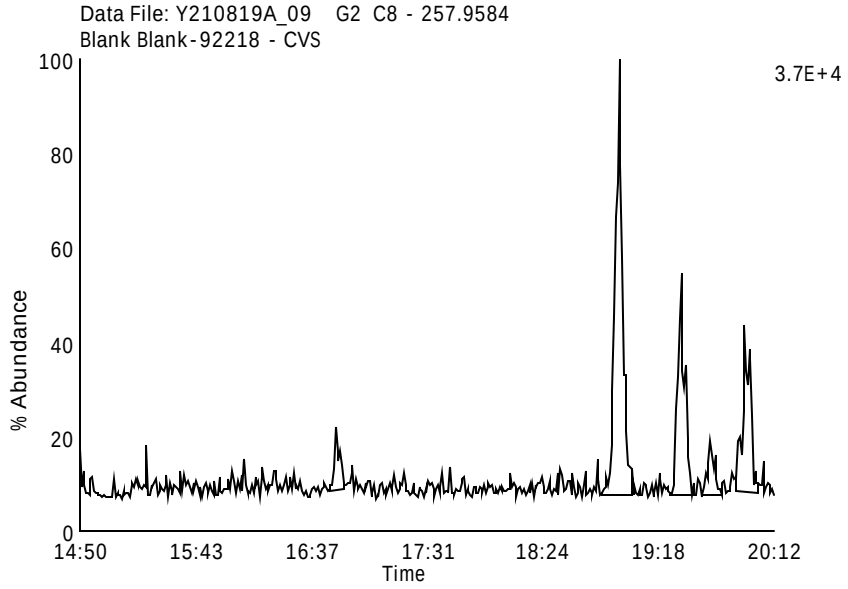
Tri Chlorinated Biphenyls

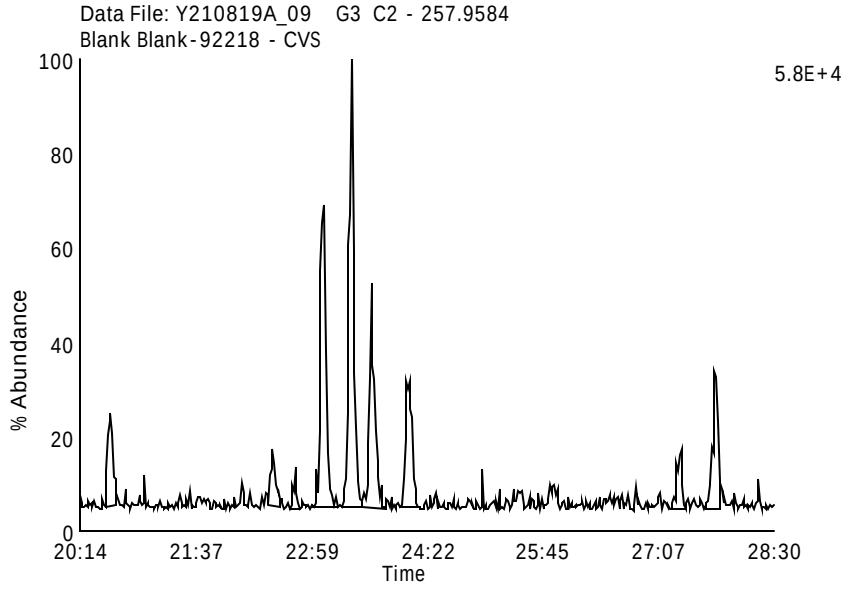
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX



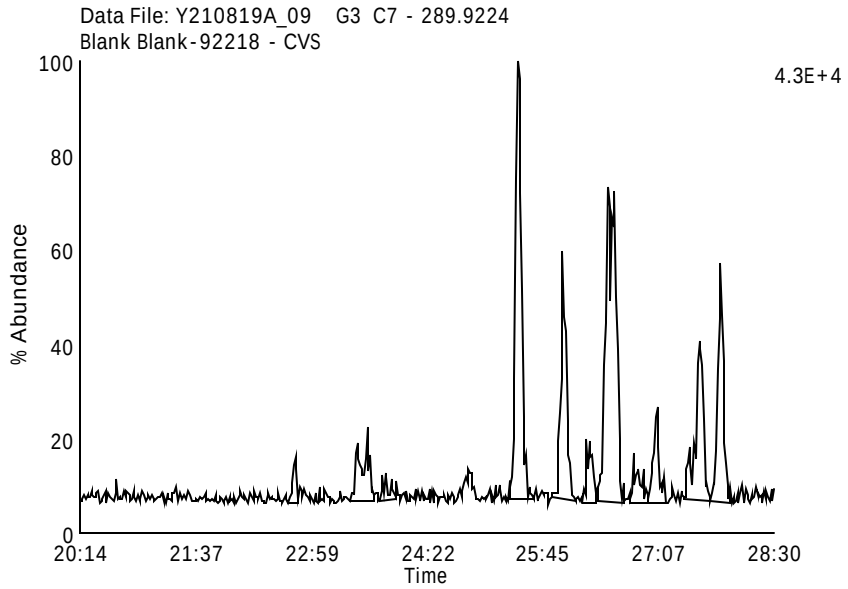


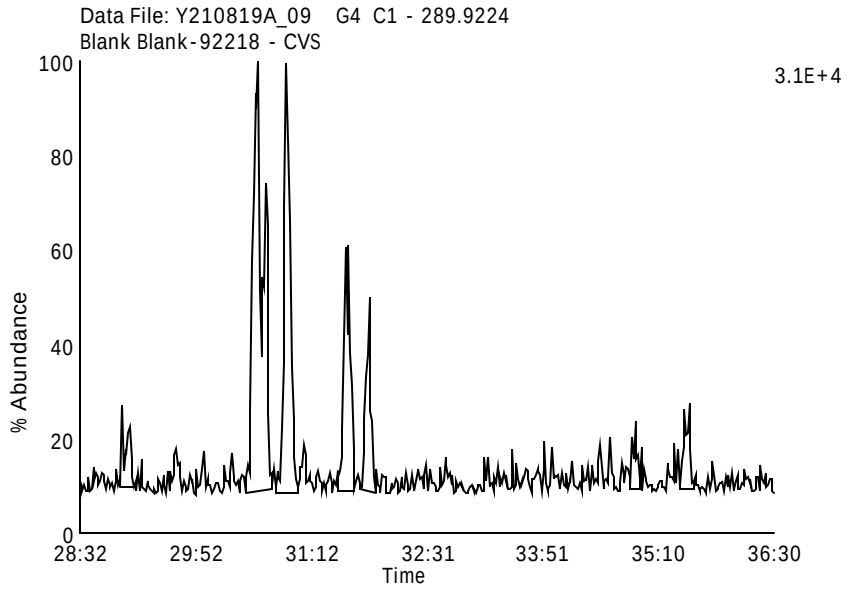


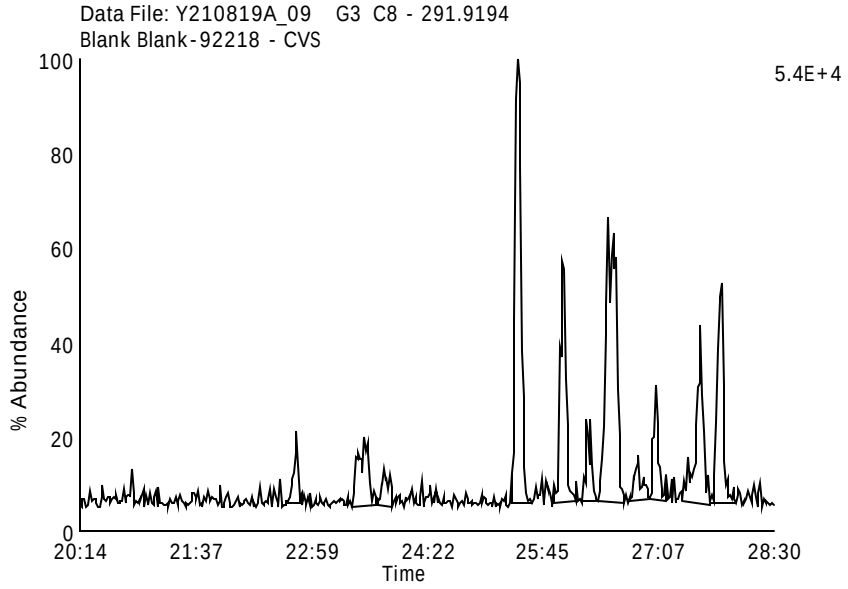


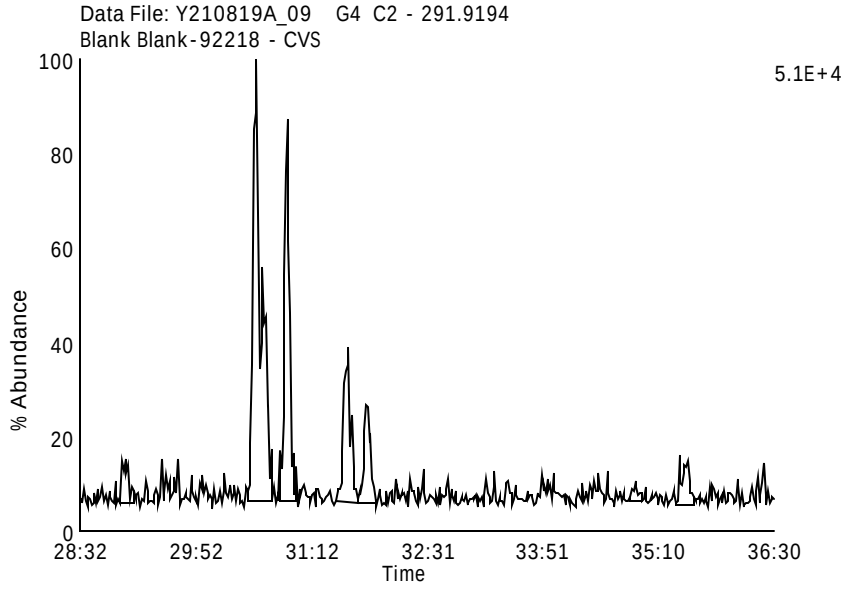
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



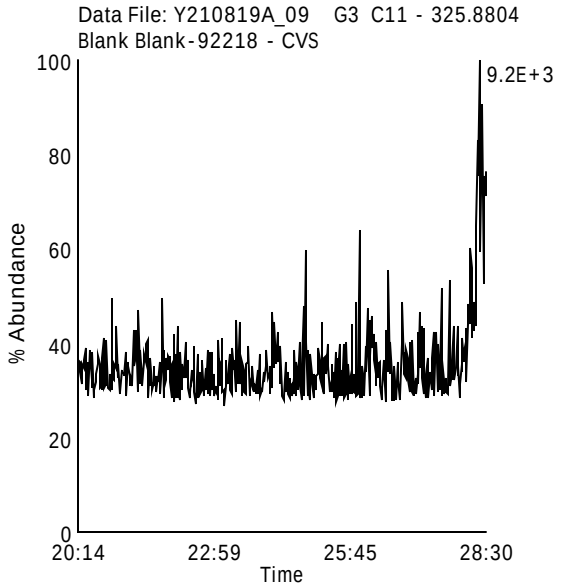


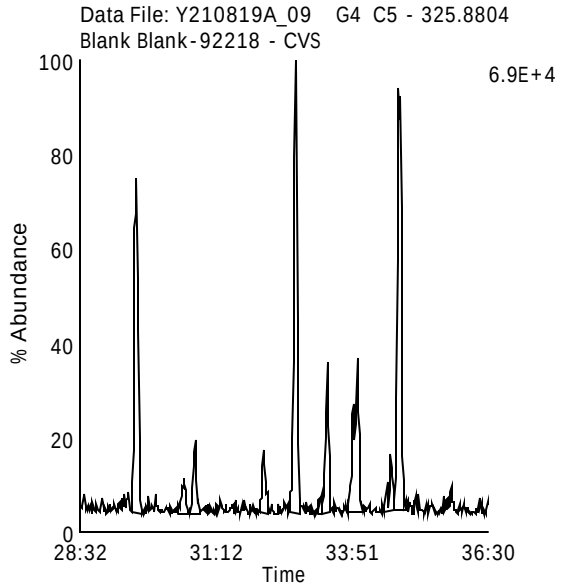


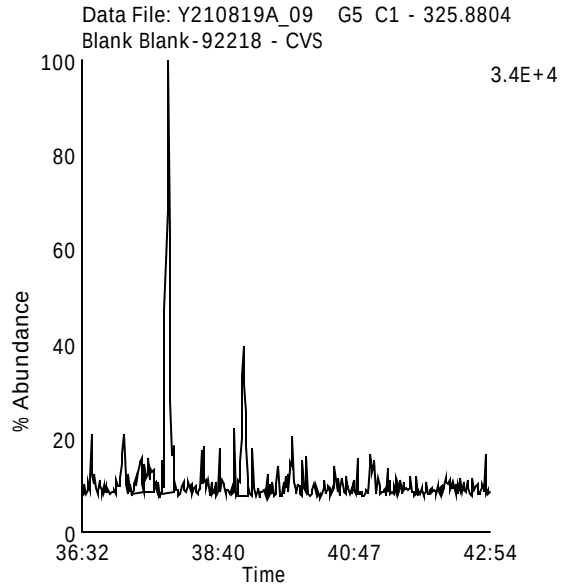


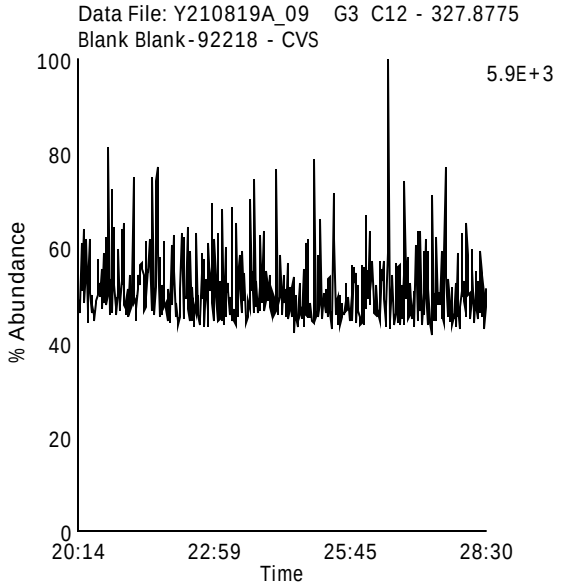
Penta Chlorinated Biphenyls

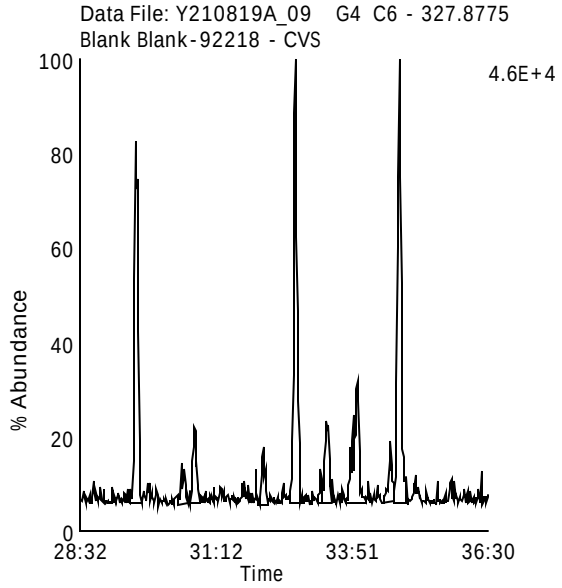
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

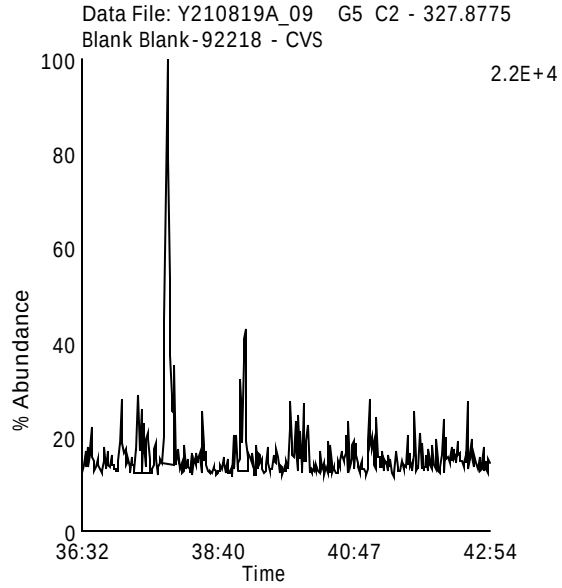






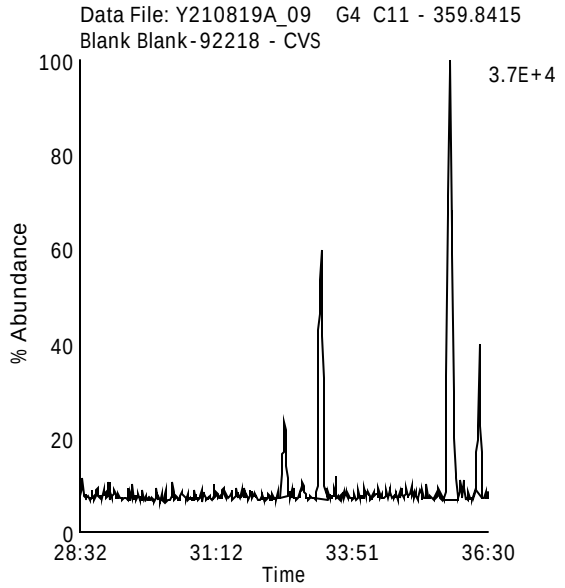


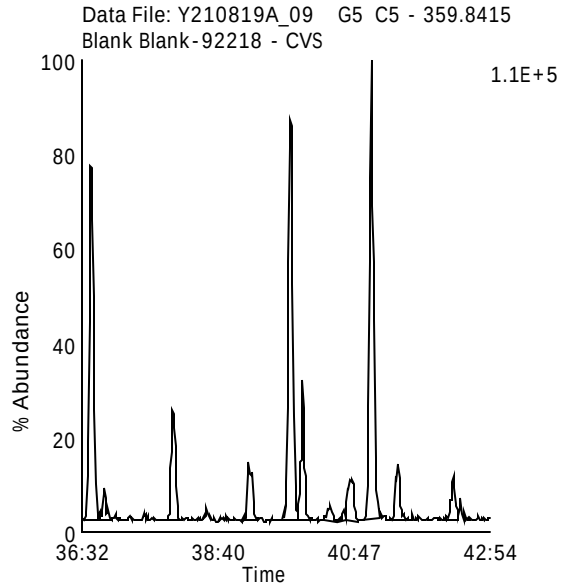


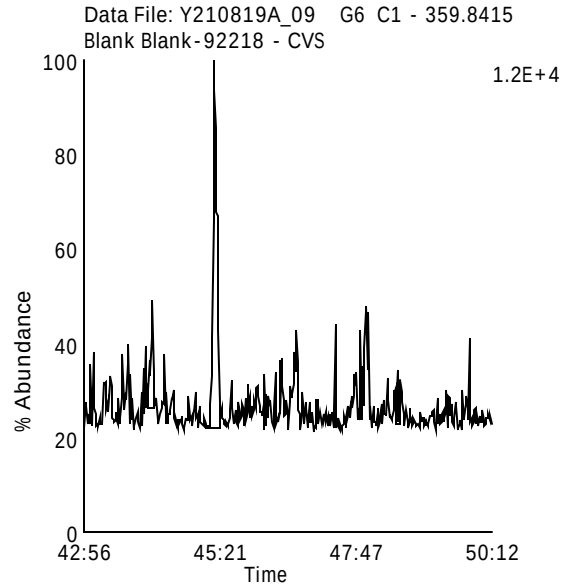


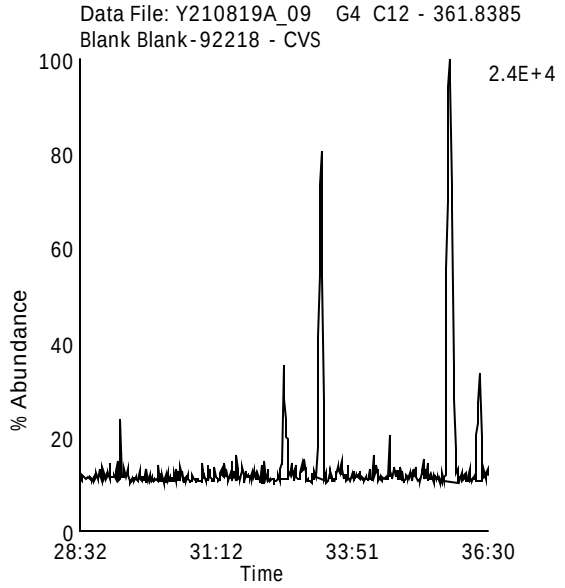
Hexa Chlorinated Biphenyls

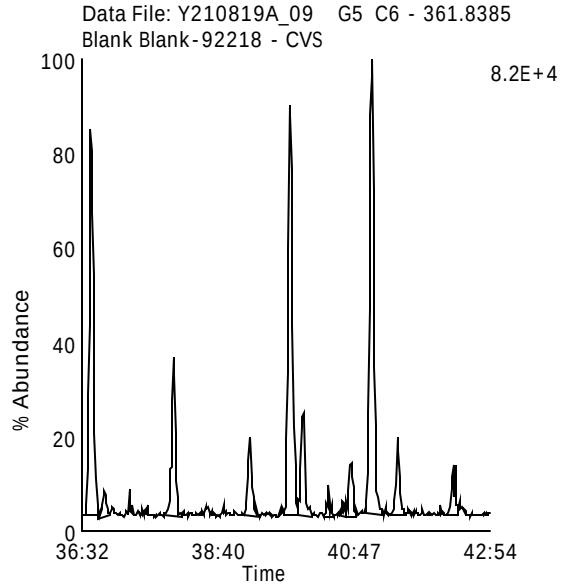
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

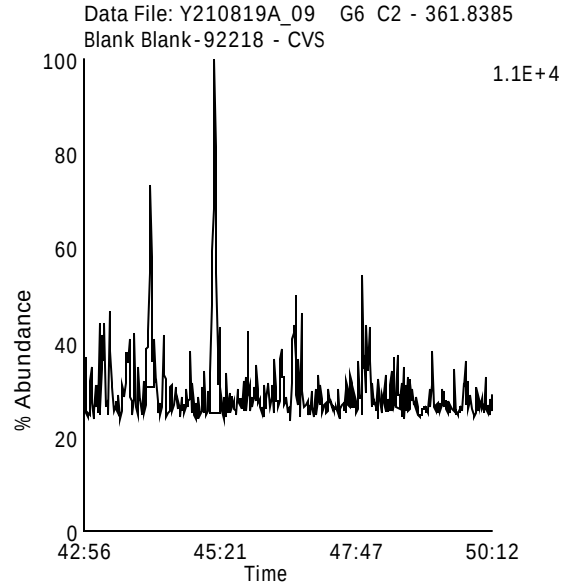






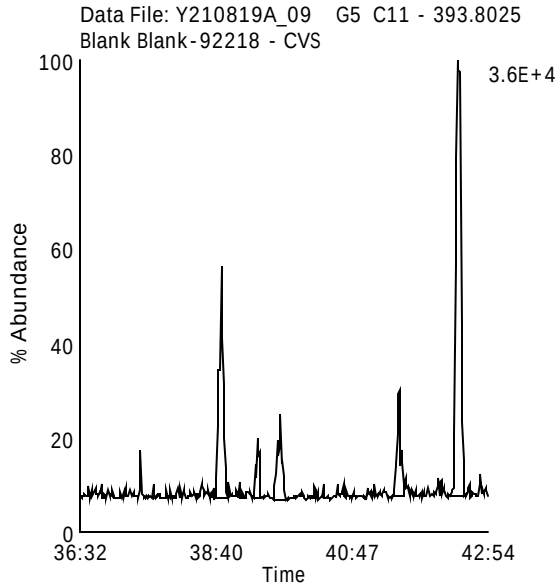


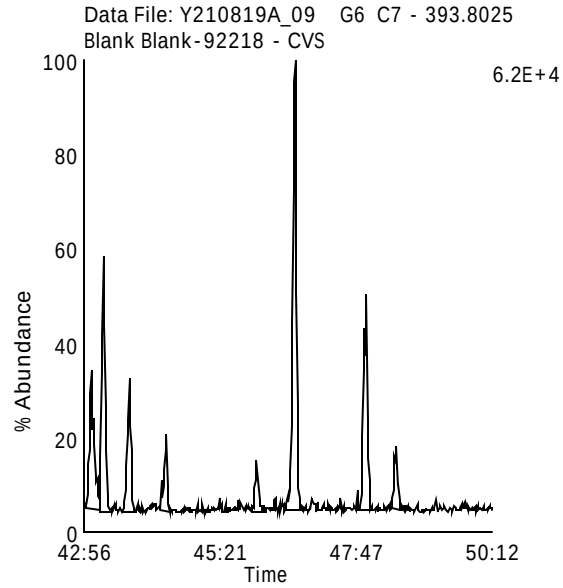


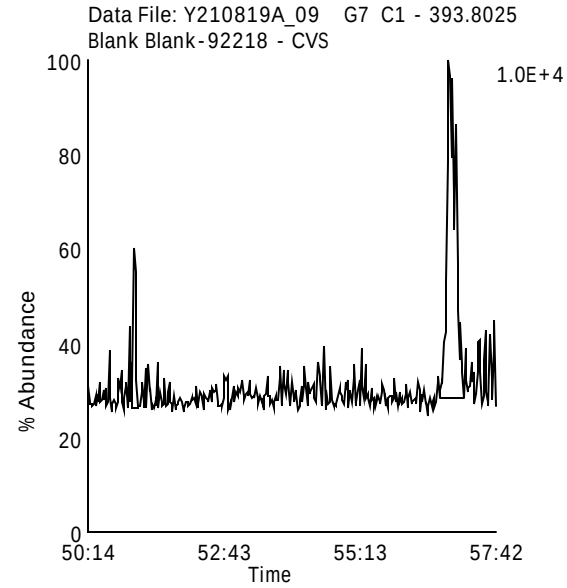


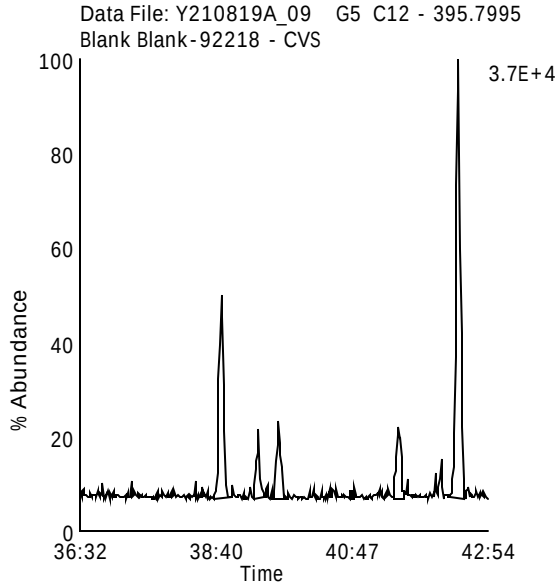
Hepta Chlorinated Biphenyls

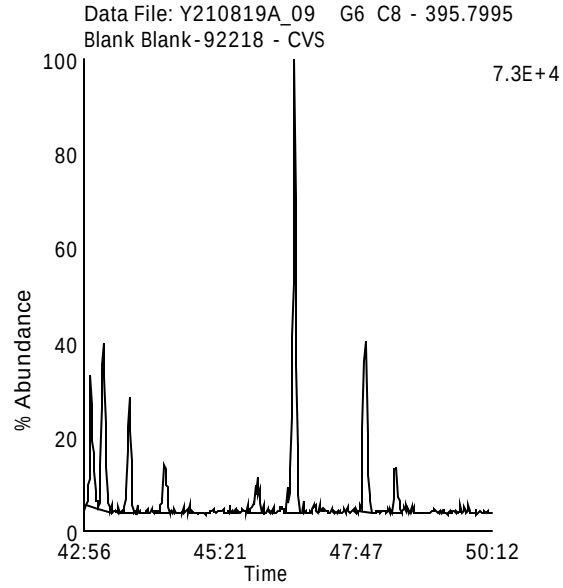
Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

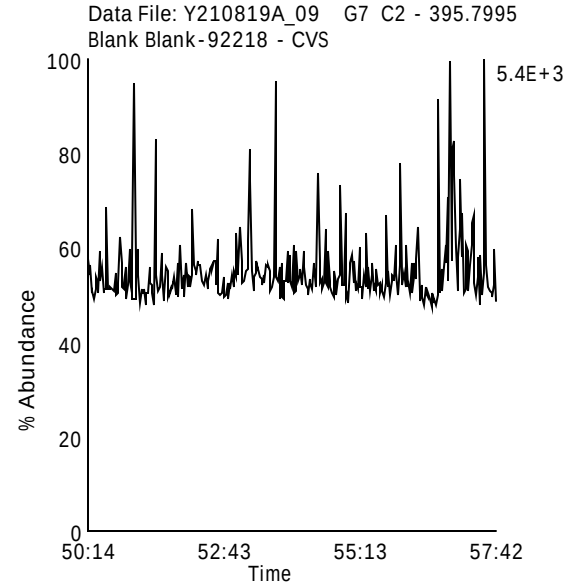






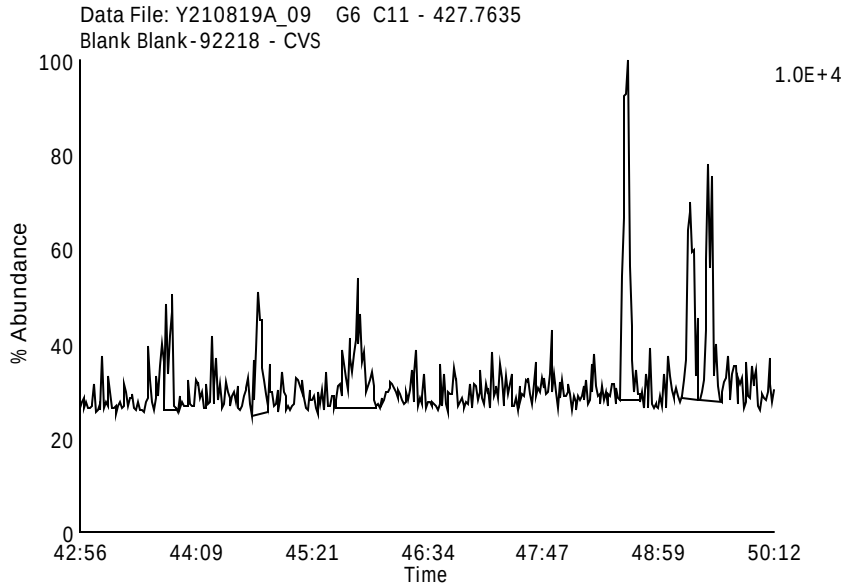


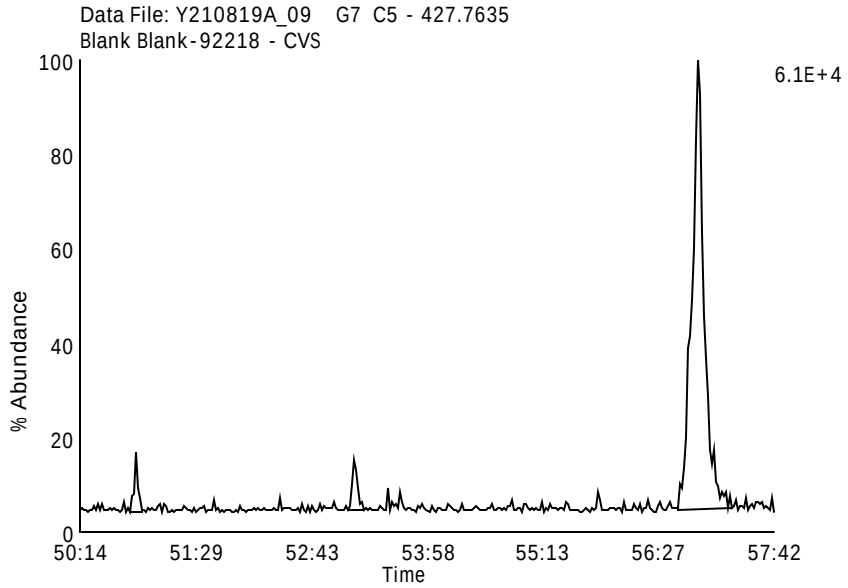


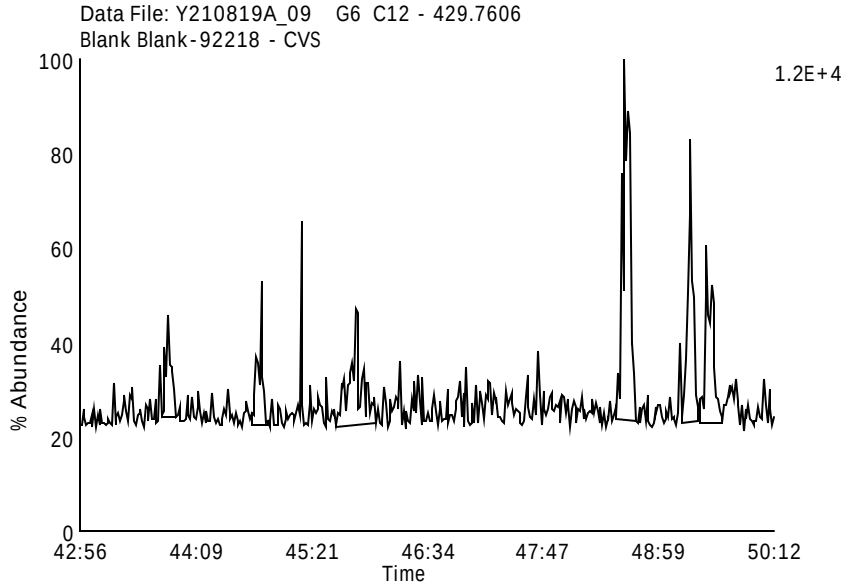


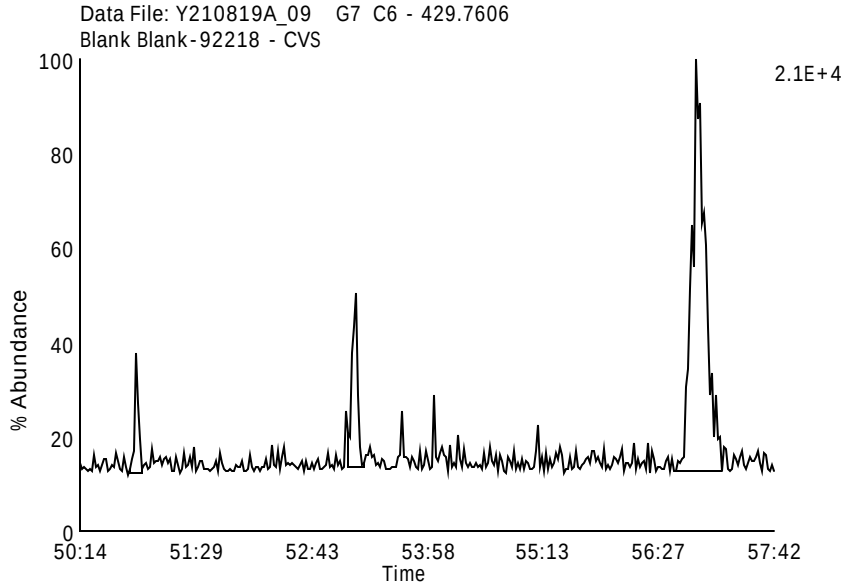
Octa Chlorinated Biphenyls

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX



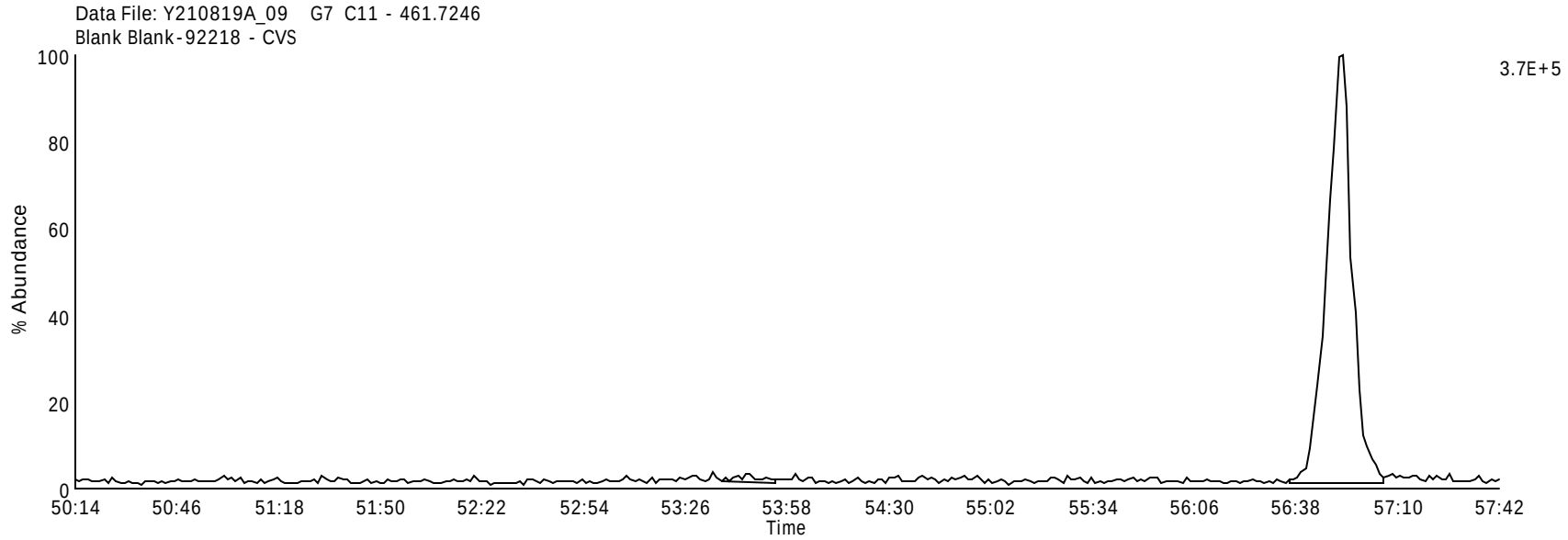


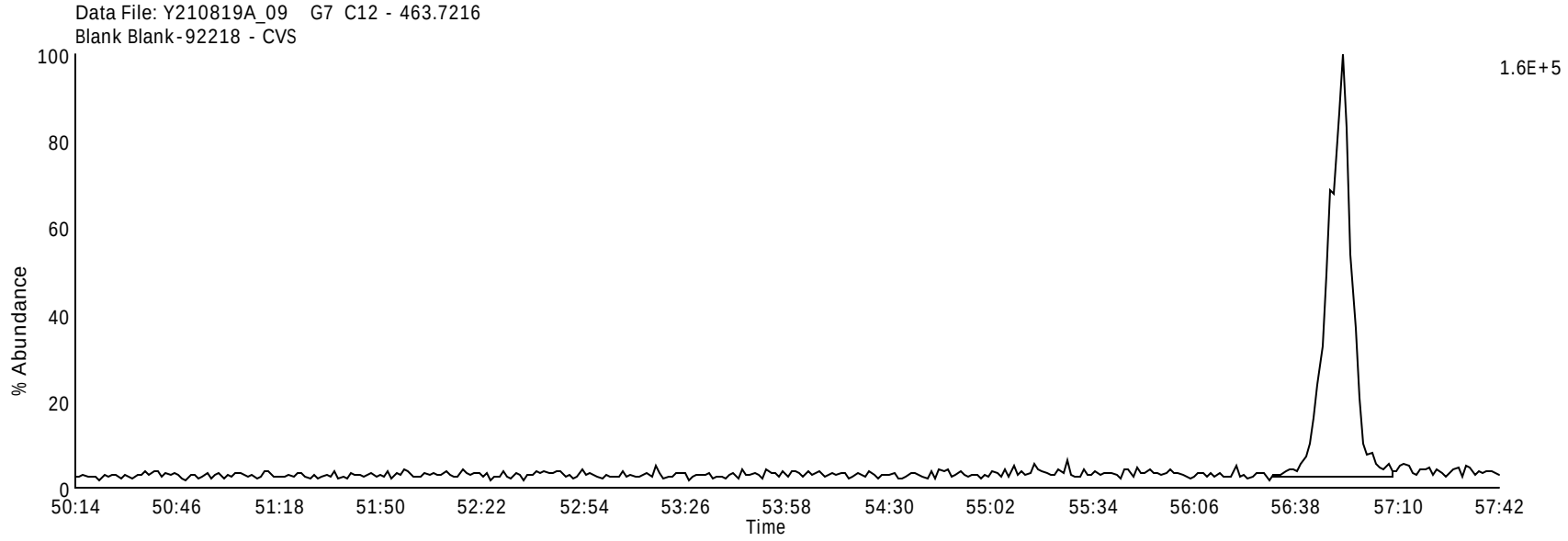




Nona Chlorinated Biphenyls

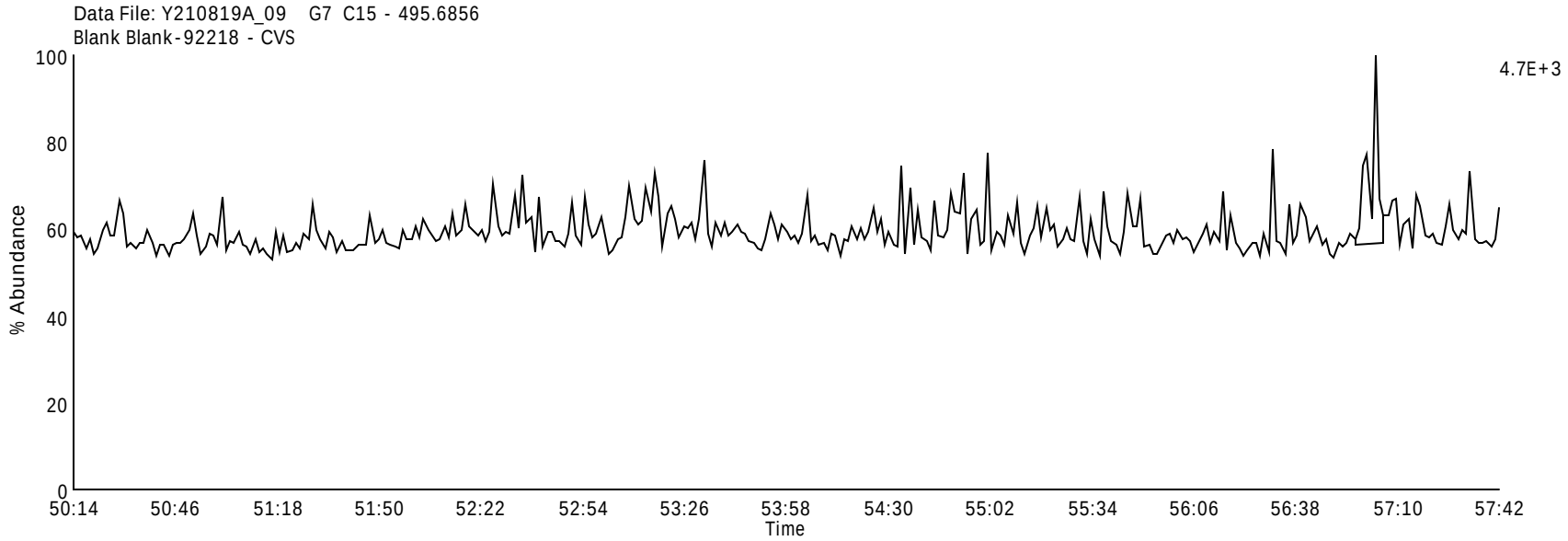
Data File Name: Y210819A_09	Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS	Client Sample ID: CBLKHX

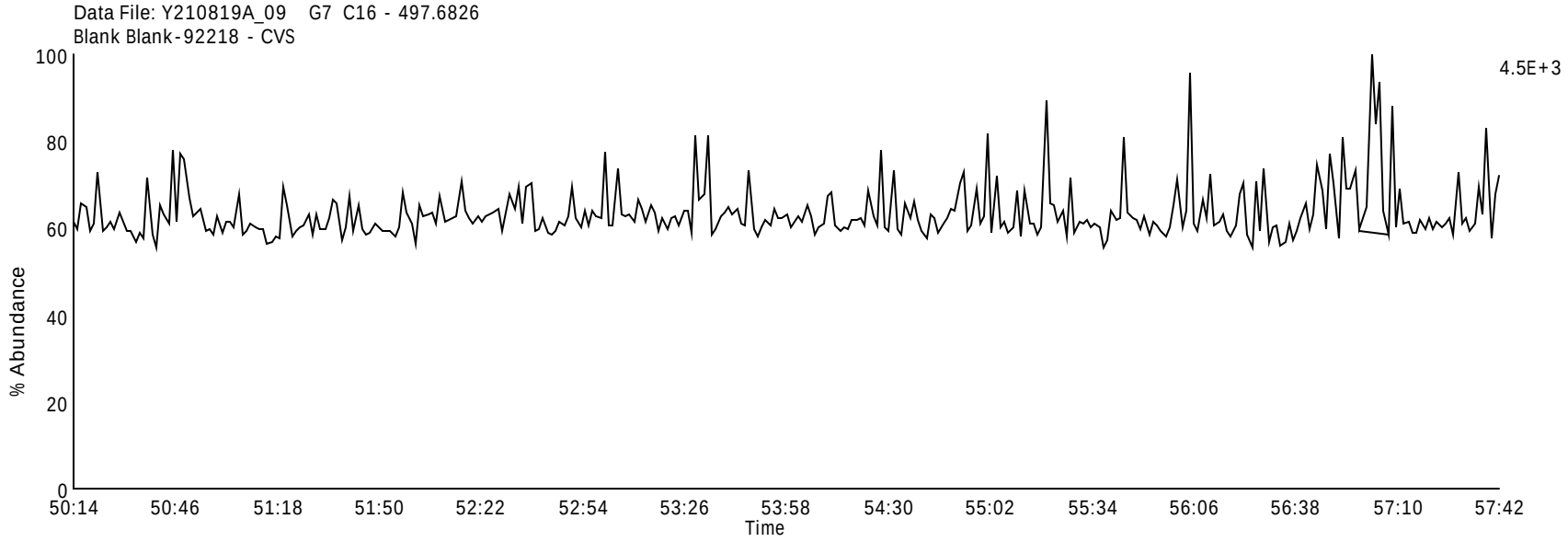




Deca Chlorinated Biphenyl

Data File Name: Y210819A_09
Lab Sample ID: BLANK-92218
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92218 - CVS
Client Sample ID: CBLKHX

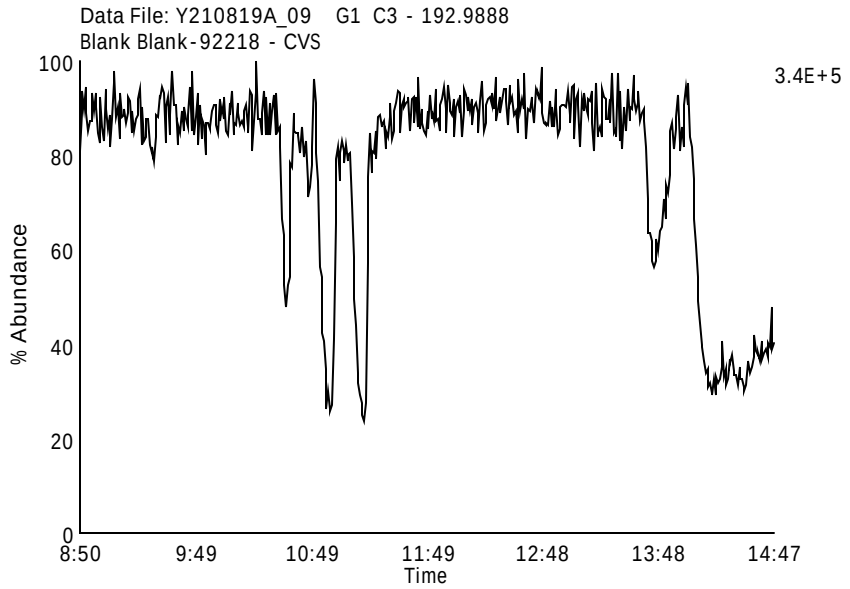


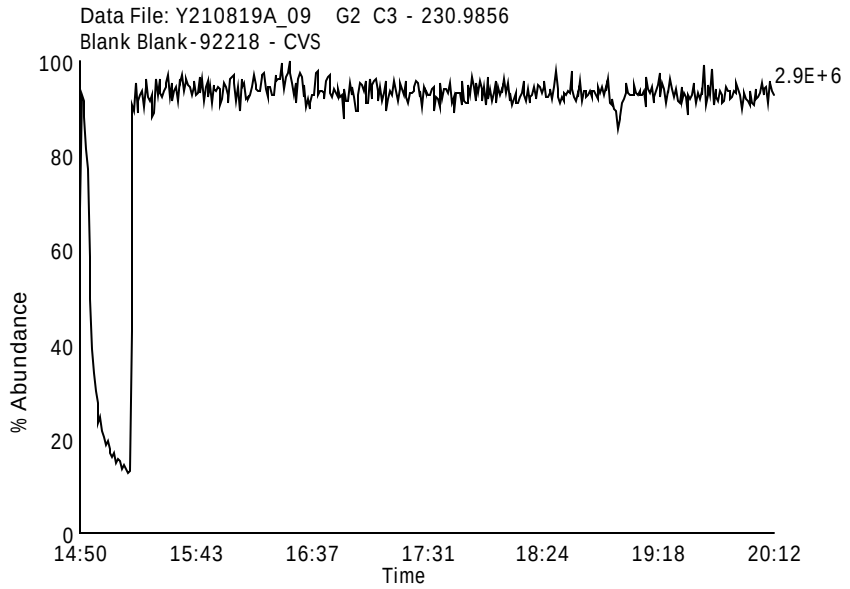


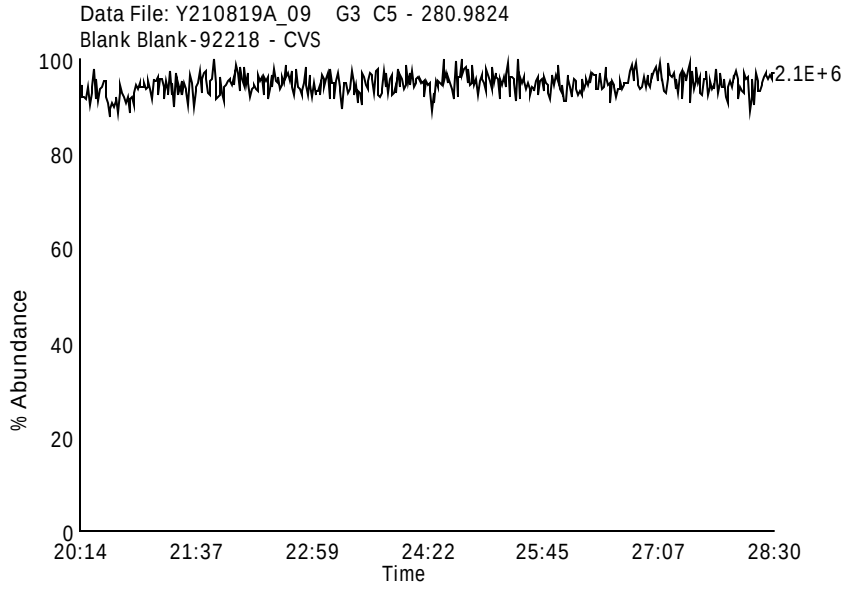
Group 1 - 4 Lock mass

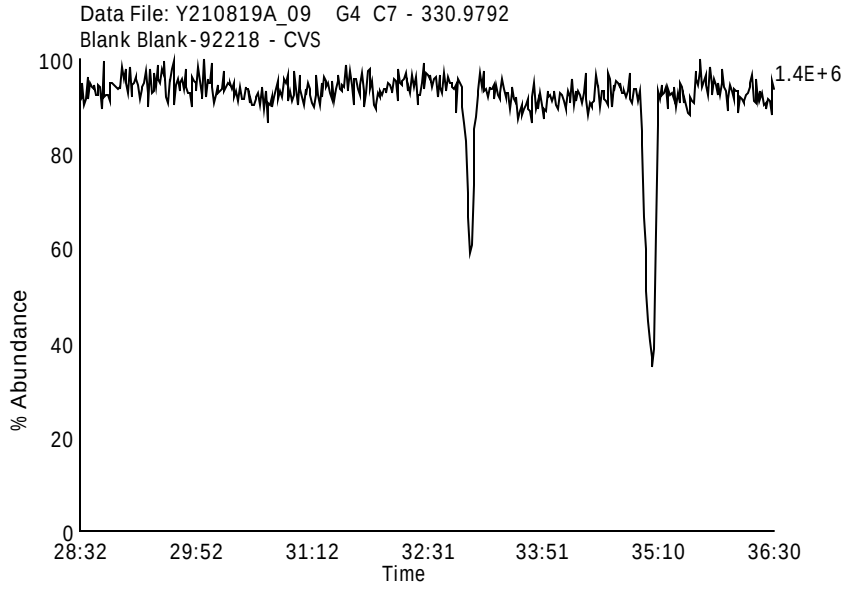
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX





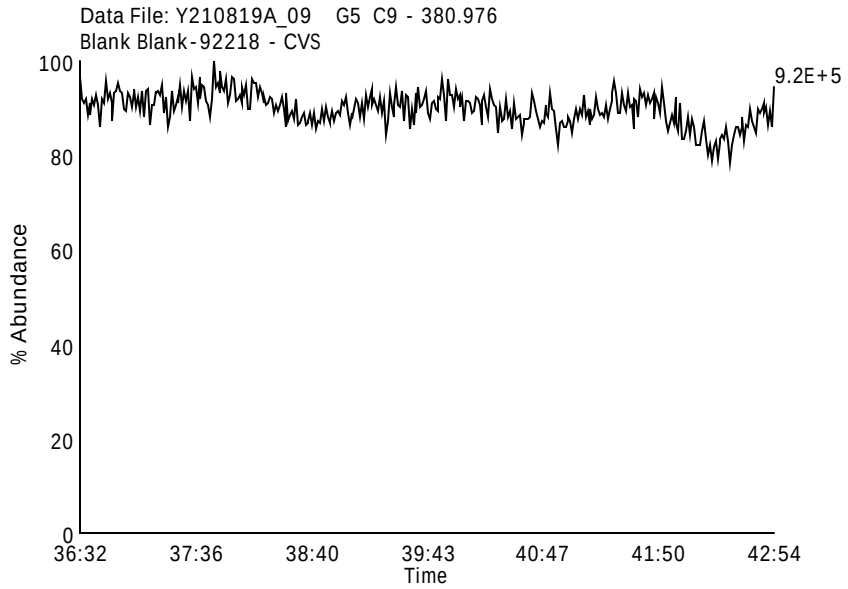


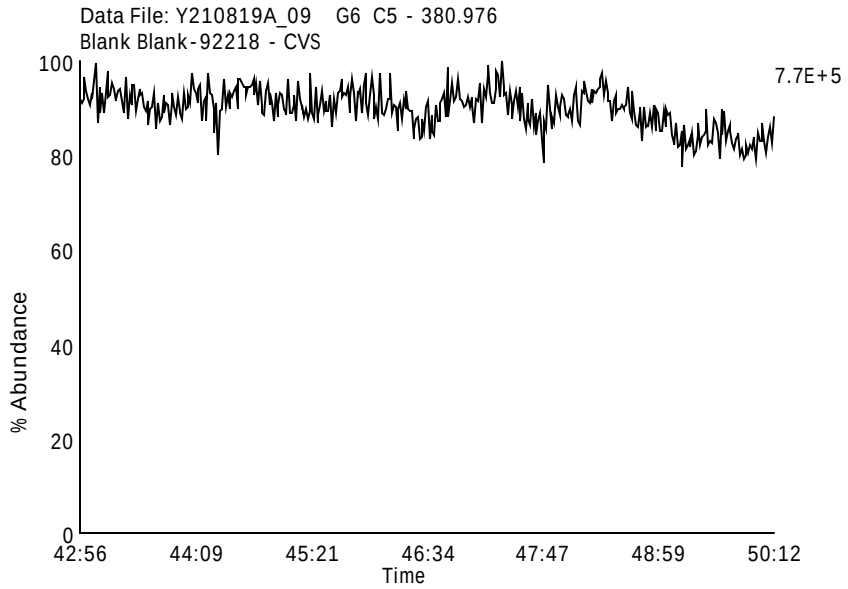


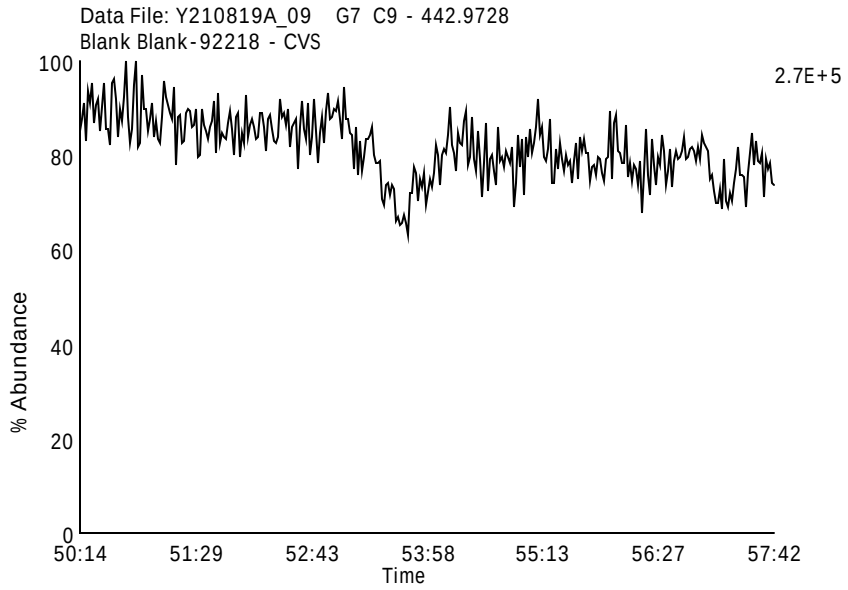
Group 5 - 7 Lock mass

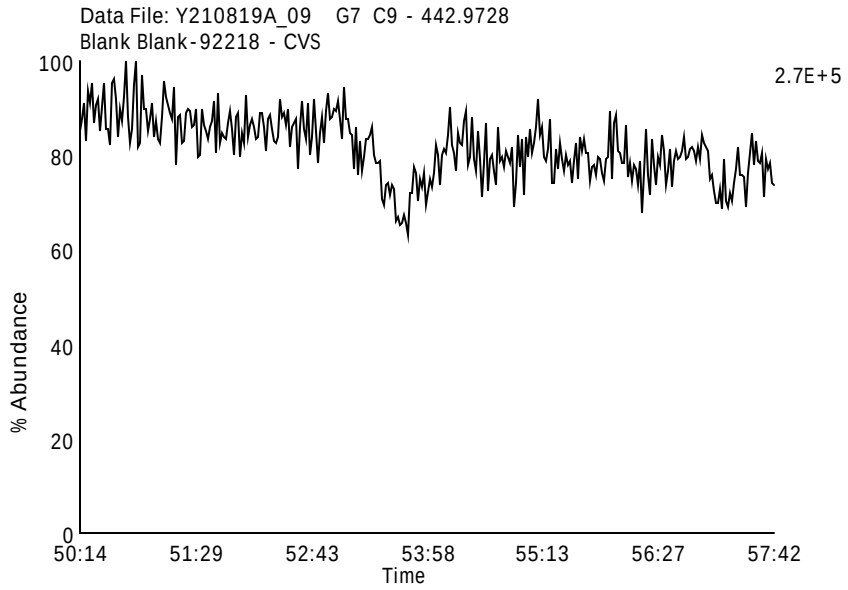
Data File Name: Y210819A_09
Date Acquired: 8/19/2021
Sample Description: Blank Blank-92218 - CVS

Lab Sample ID: BLANK-92218
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKHX



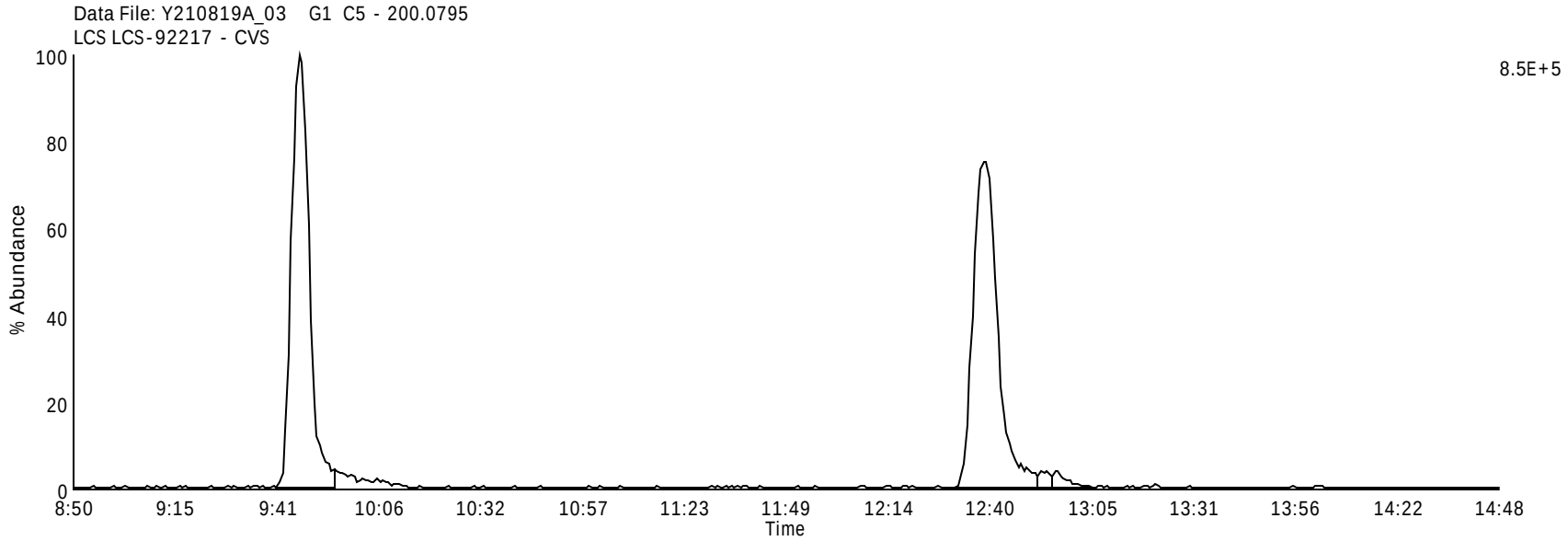


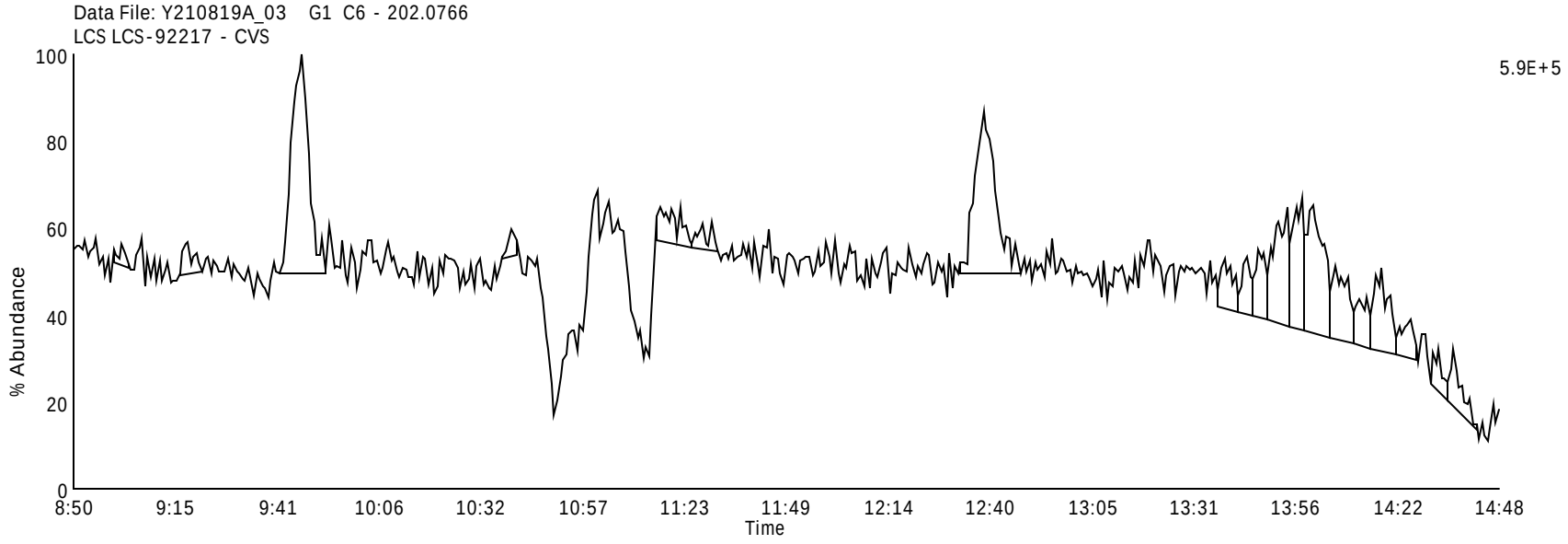




Labeled Mono Chlorinated Biphenyls

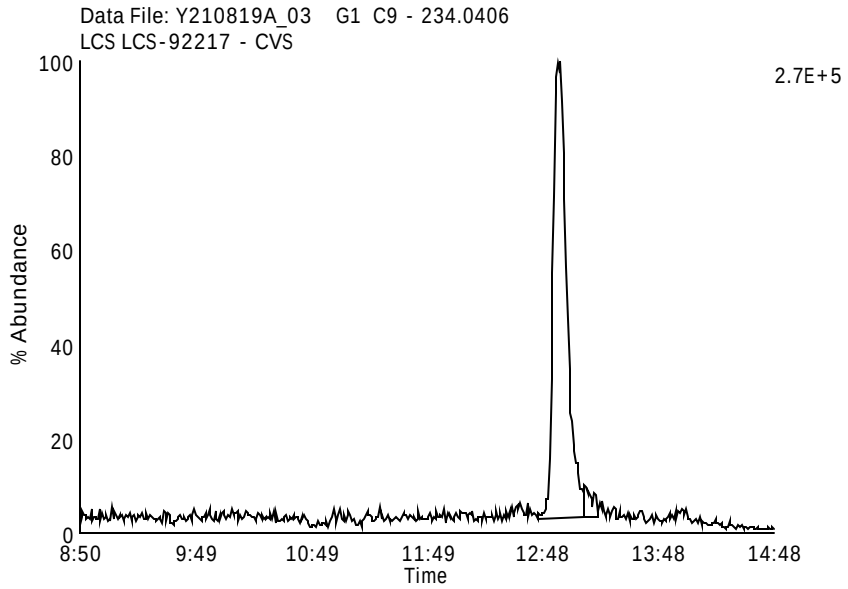
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

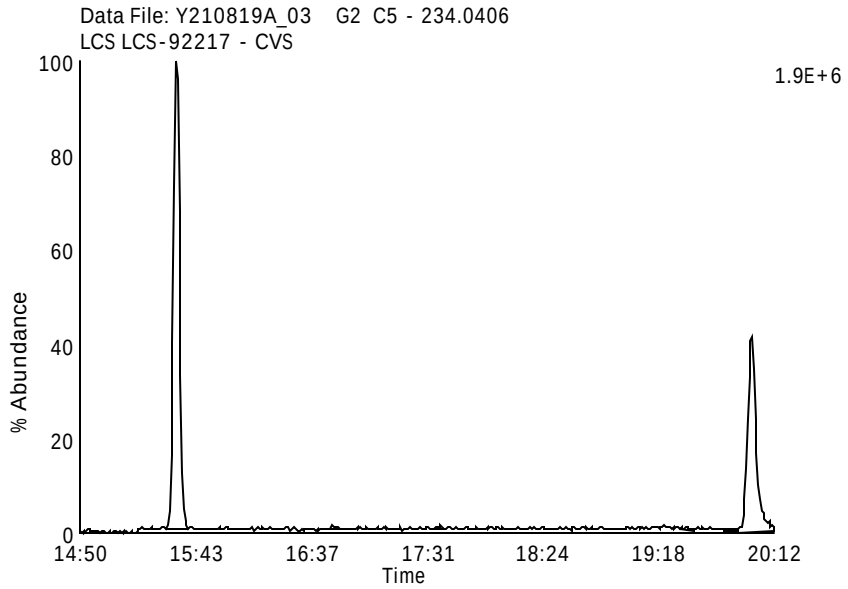


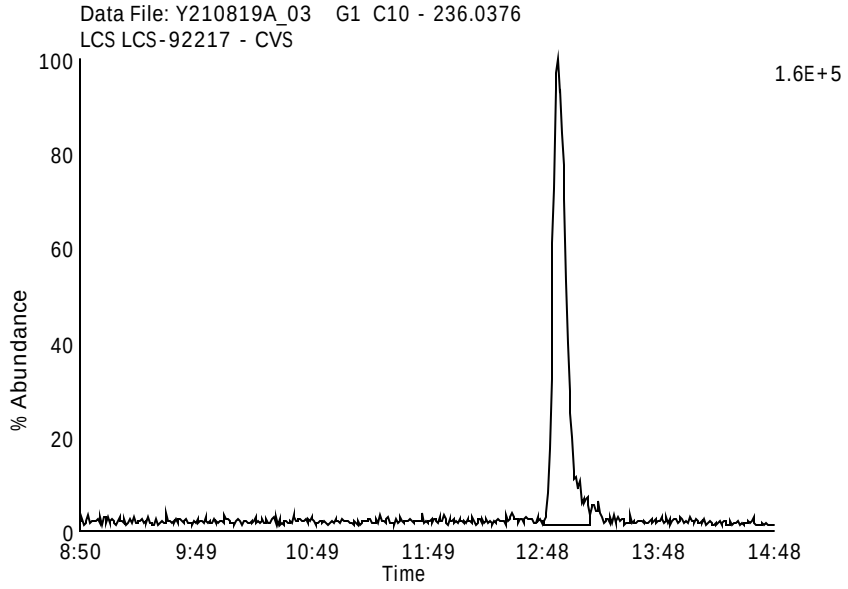


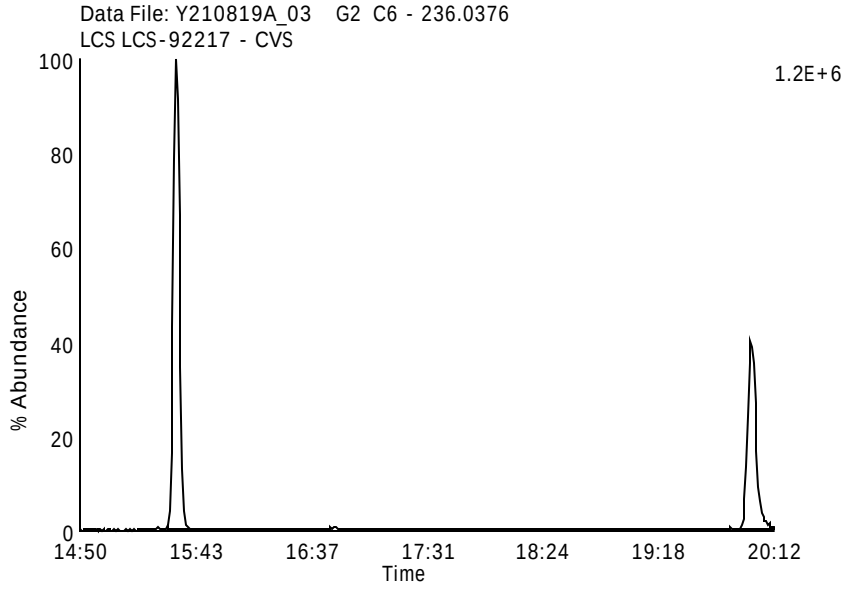
Labeled Di Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



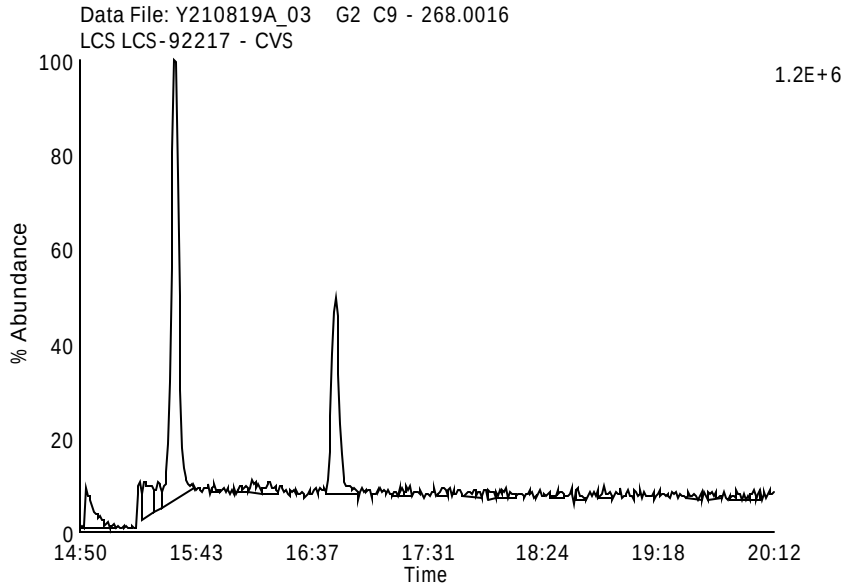


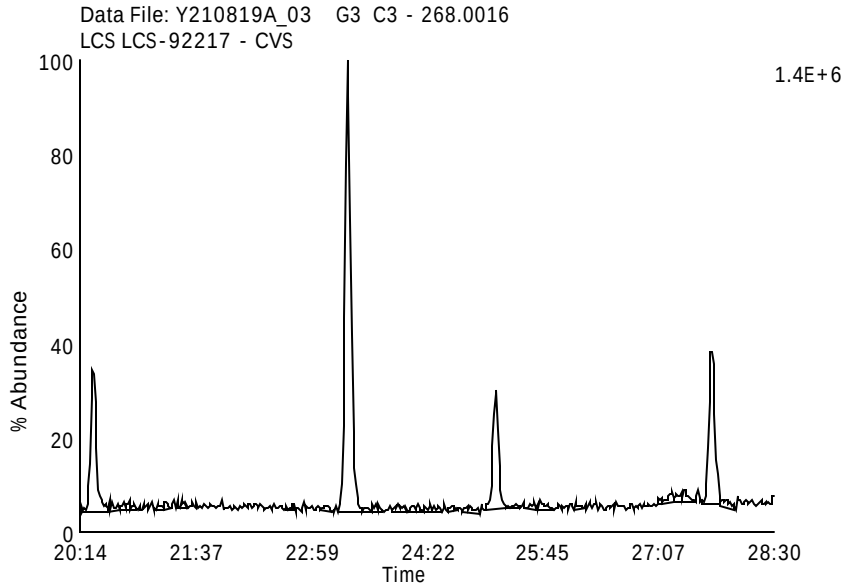


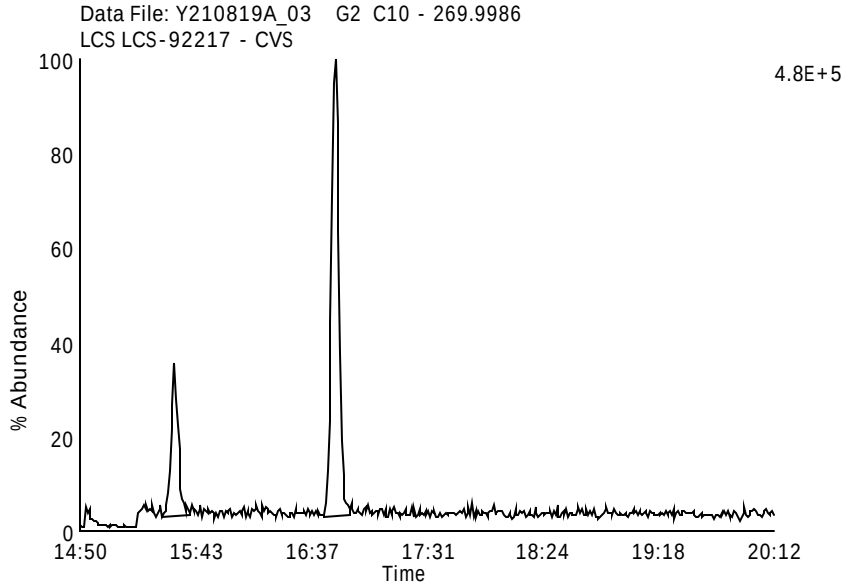


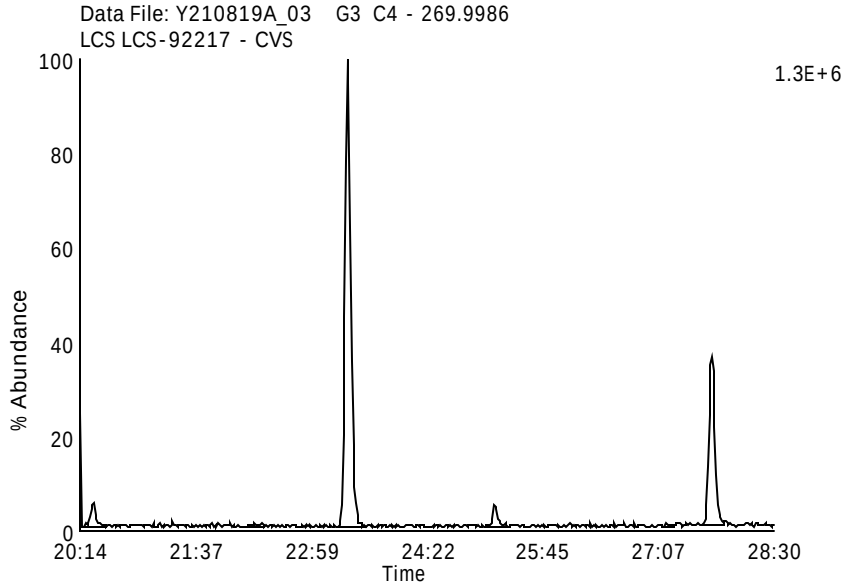
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



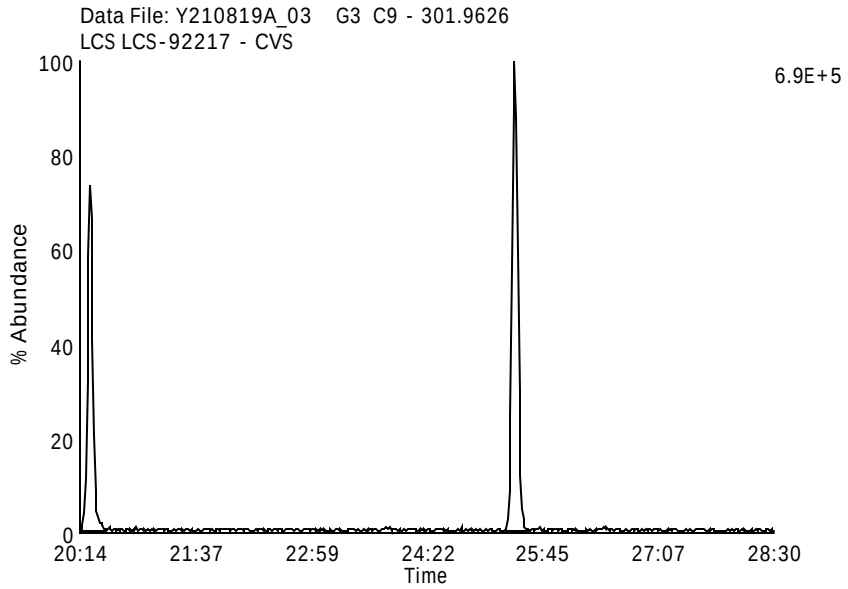


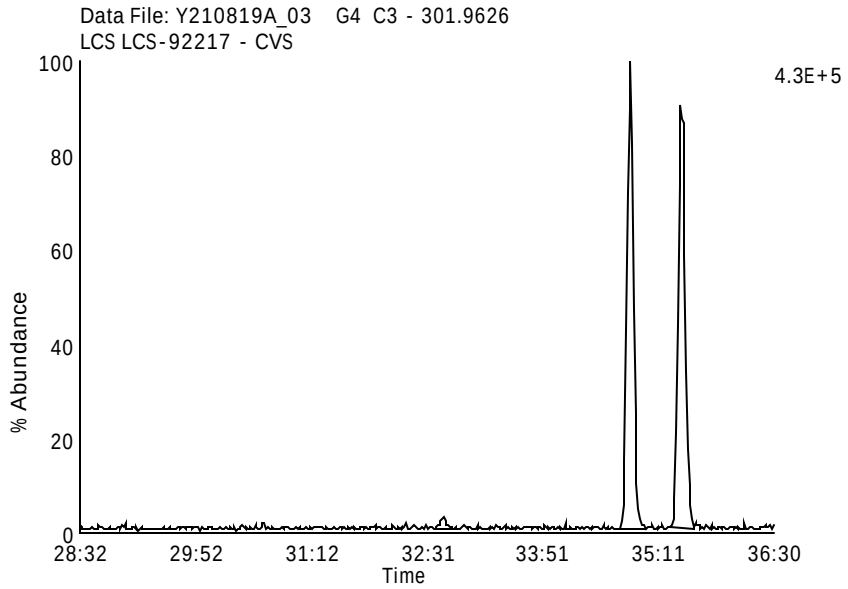


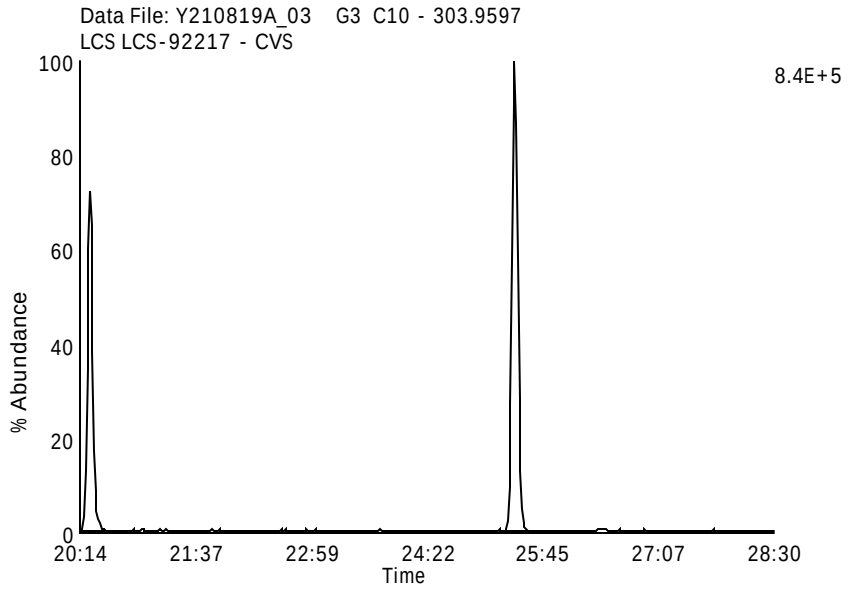


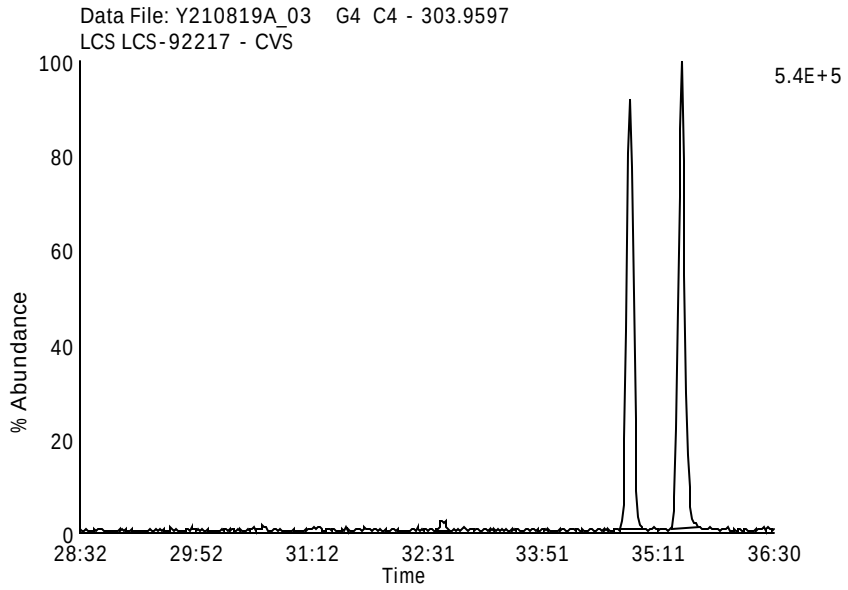
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



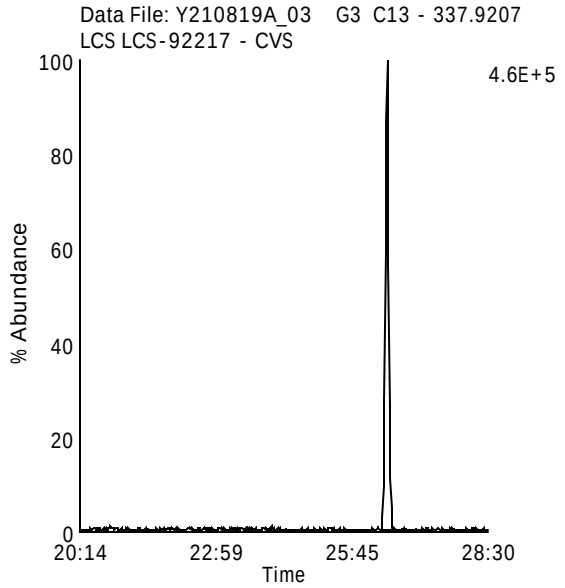


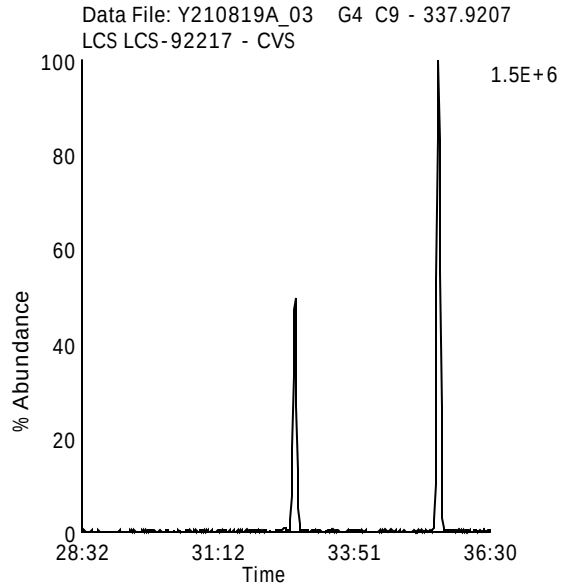


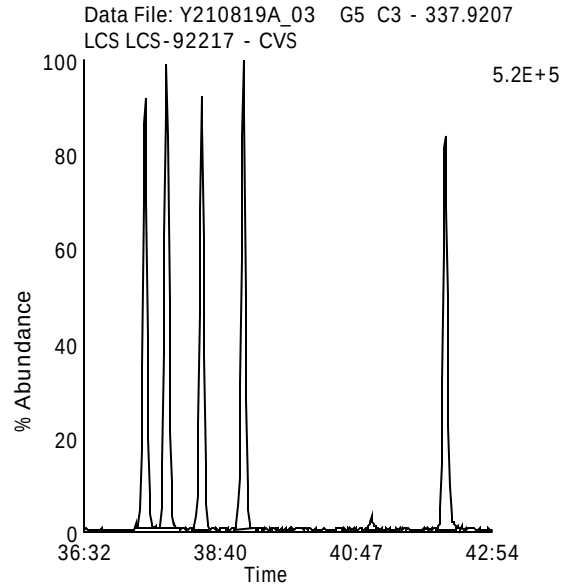


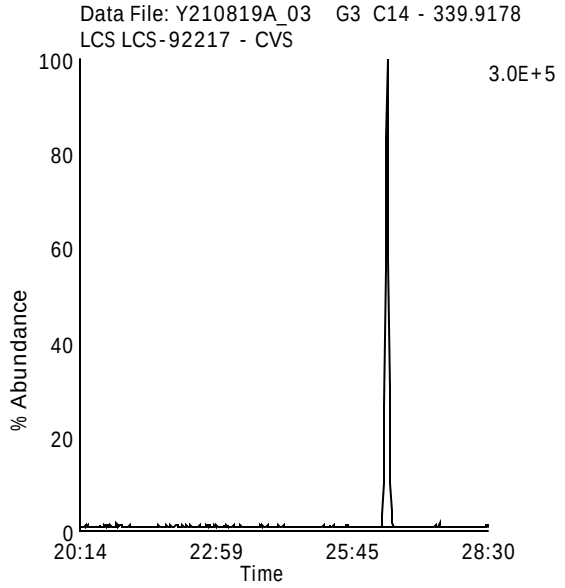
Labeled Penta Chlorinated Biphenyls

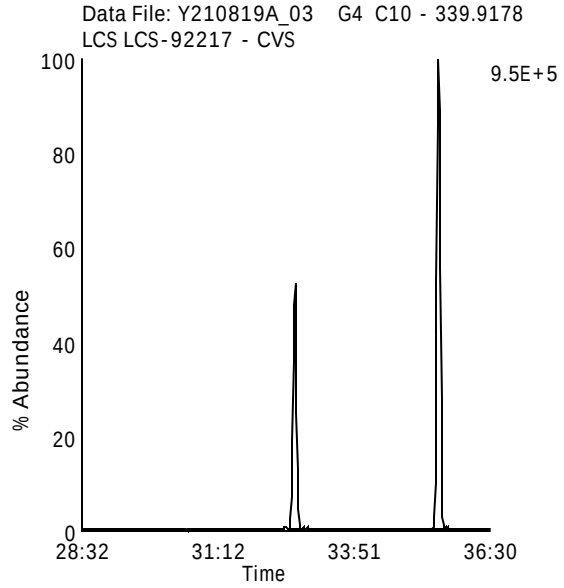
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

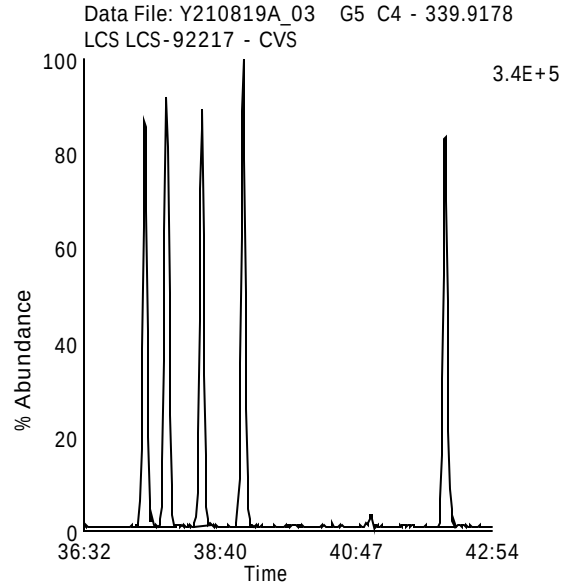






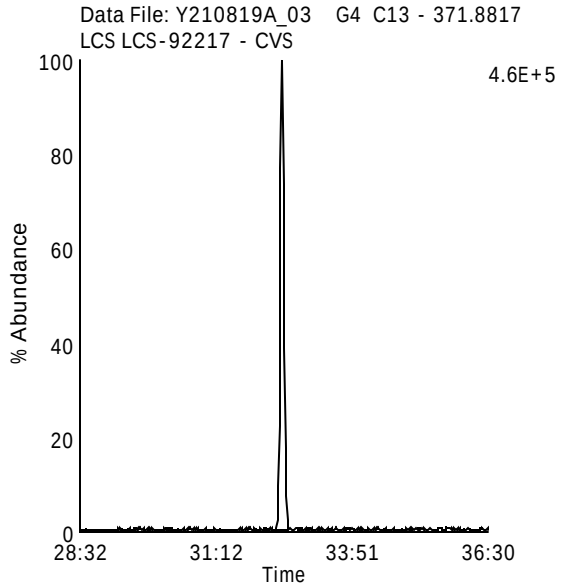


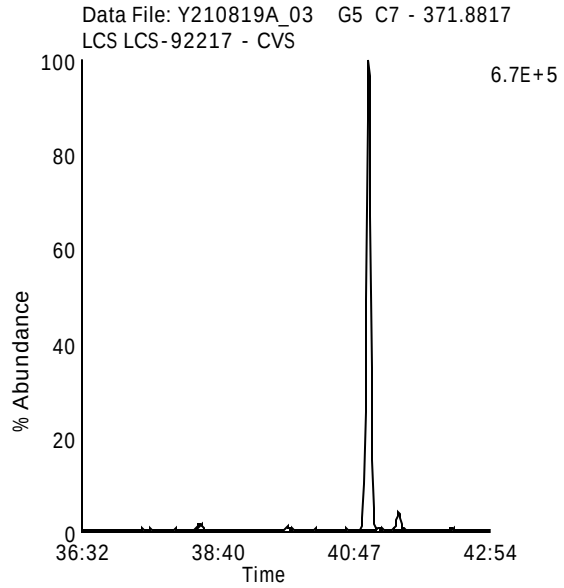


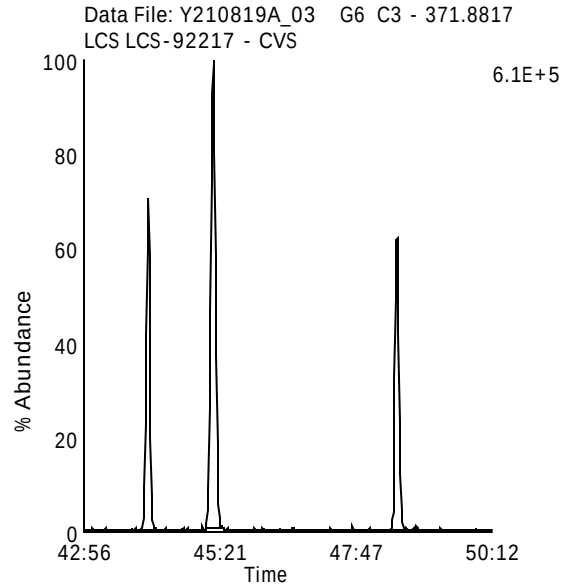


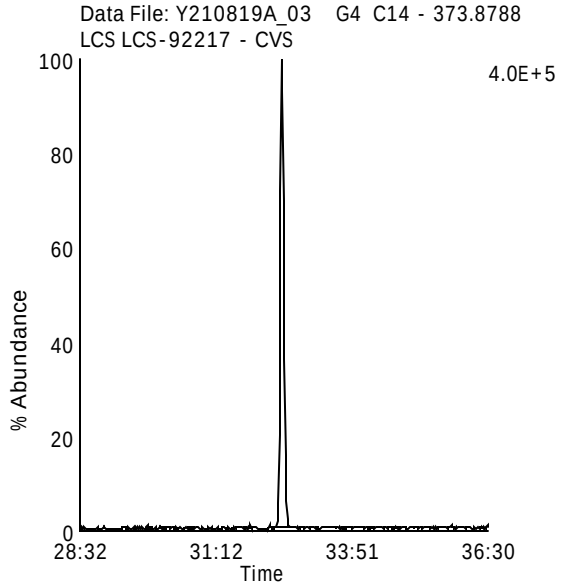
Labeled Hexa Chlorinated Biphenyls

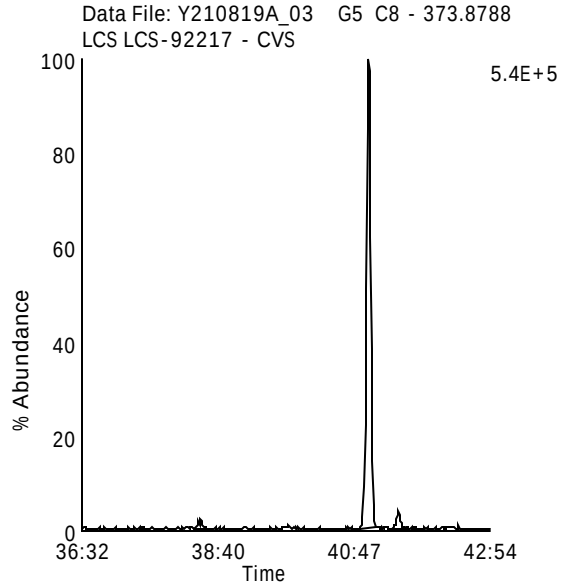
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

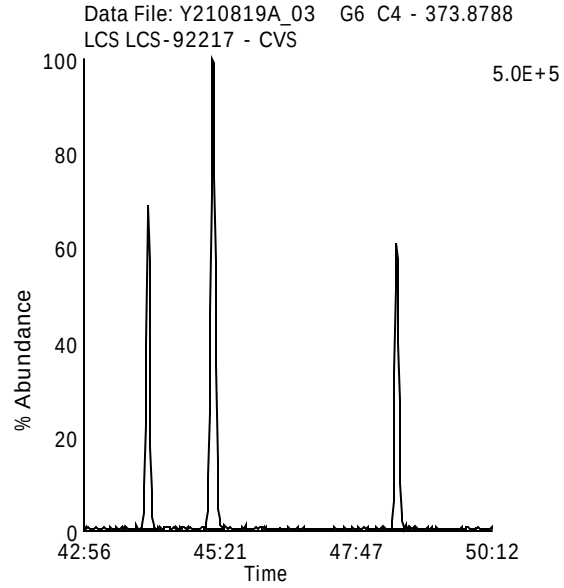






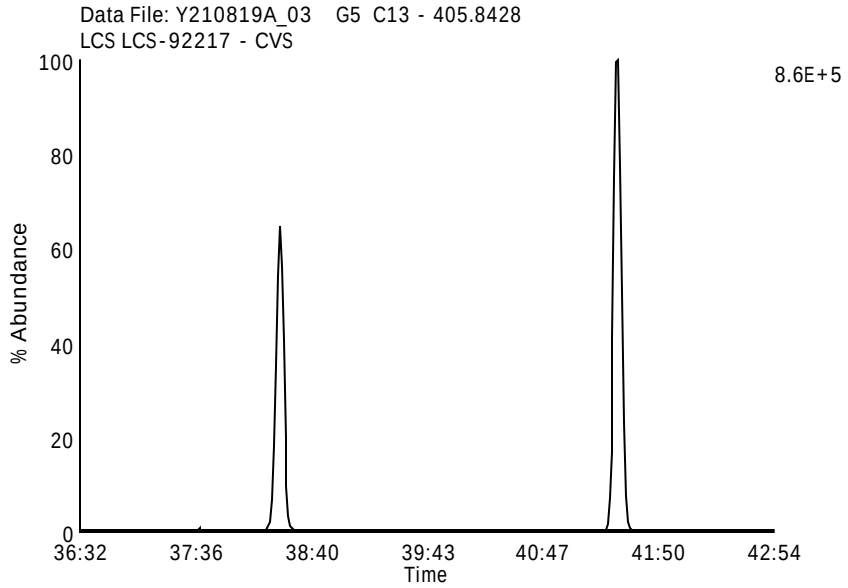


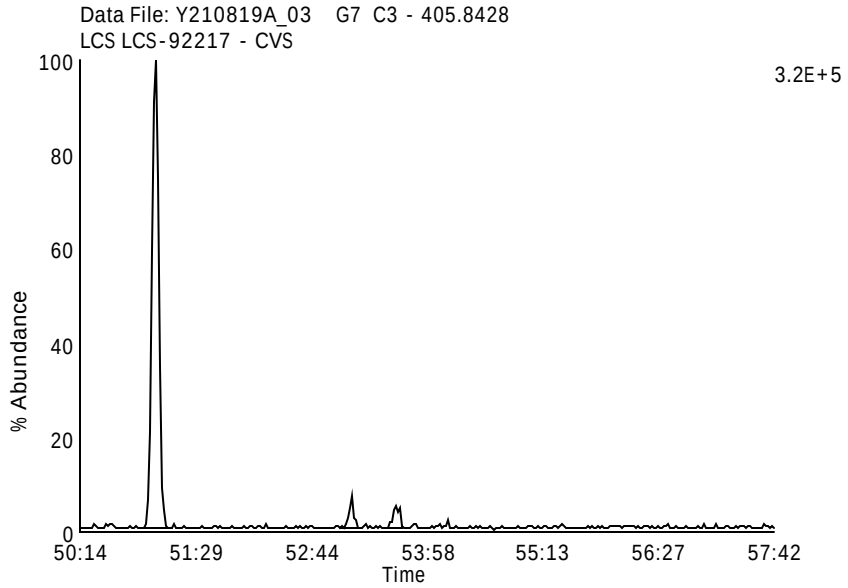


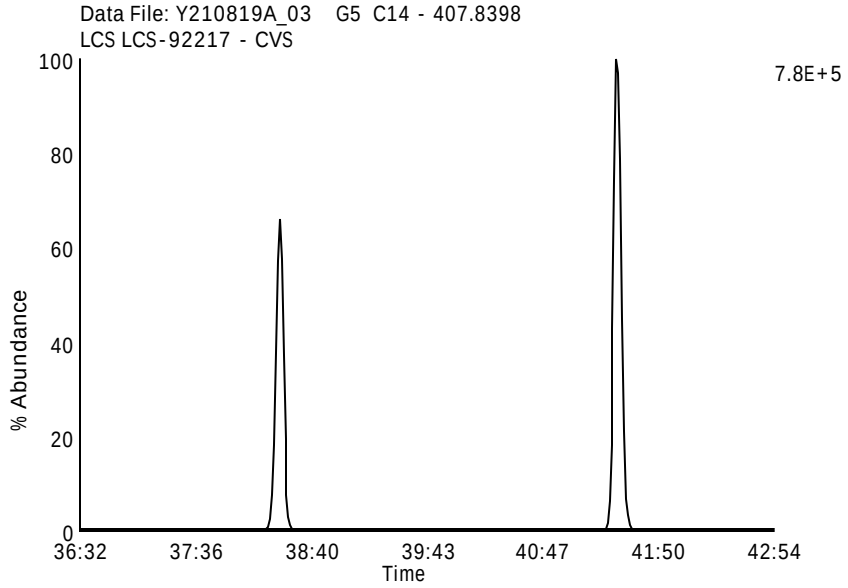


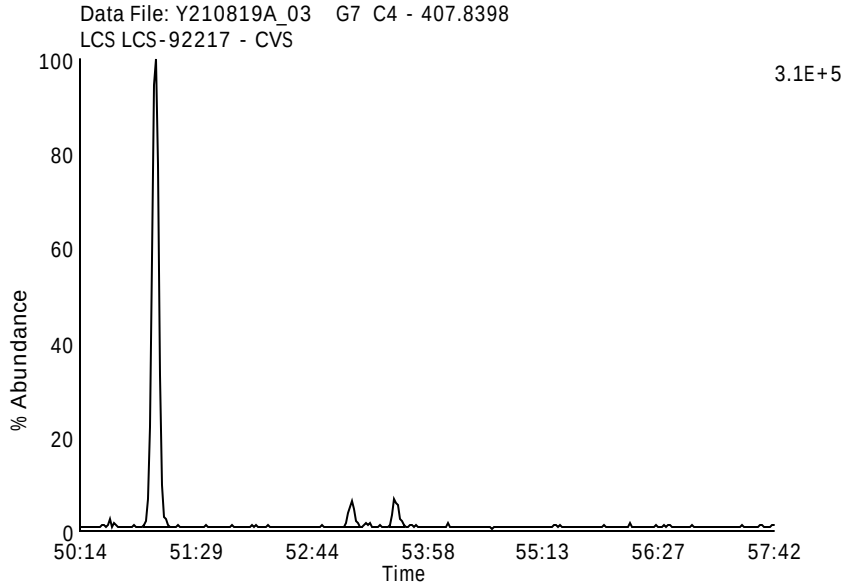
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



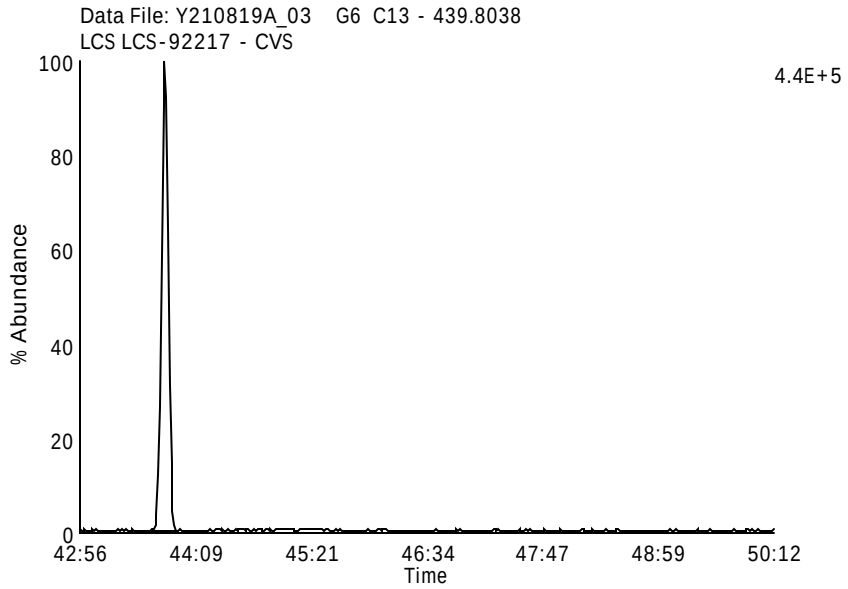


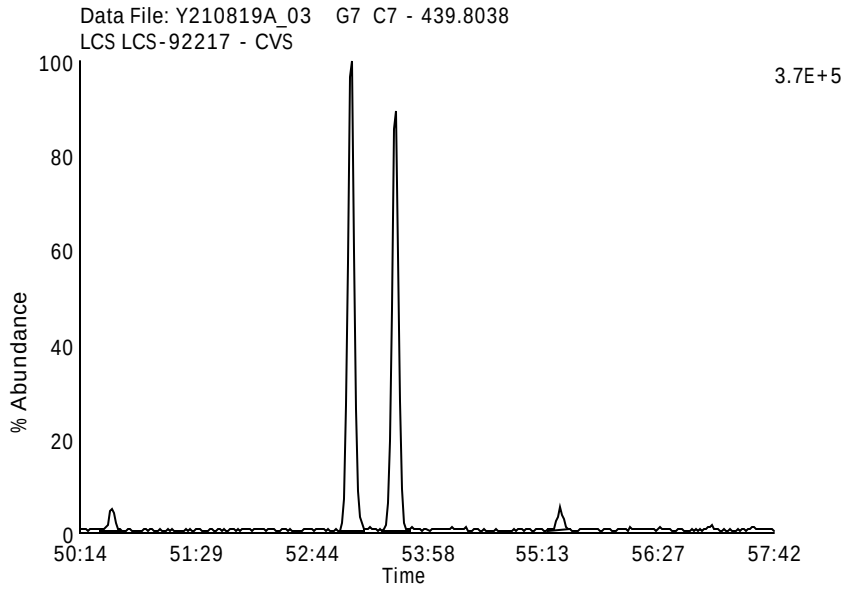


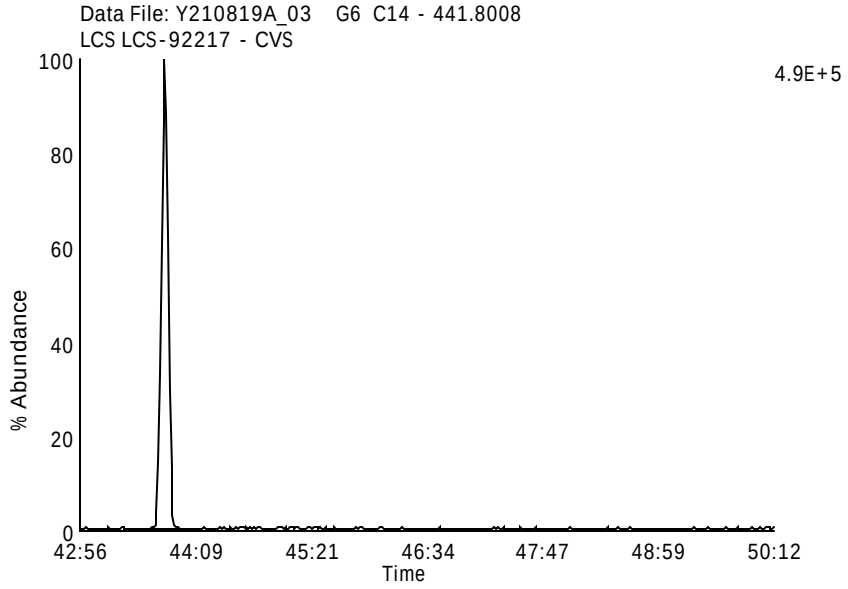


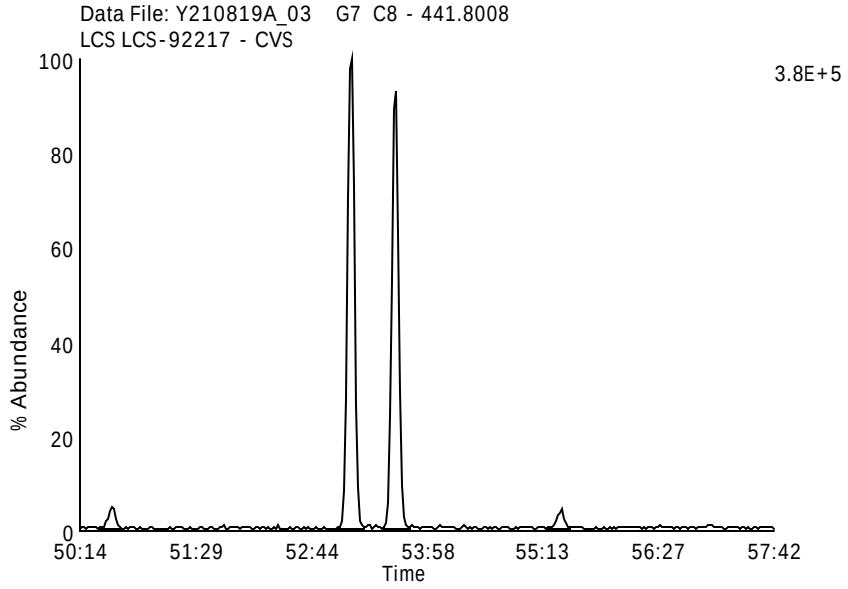
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



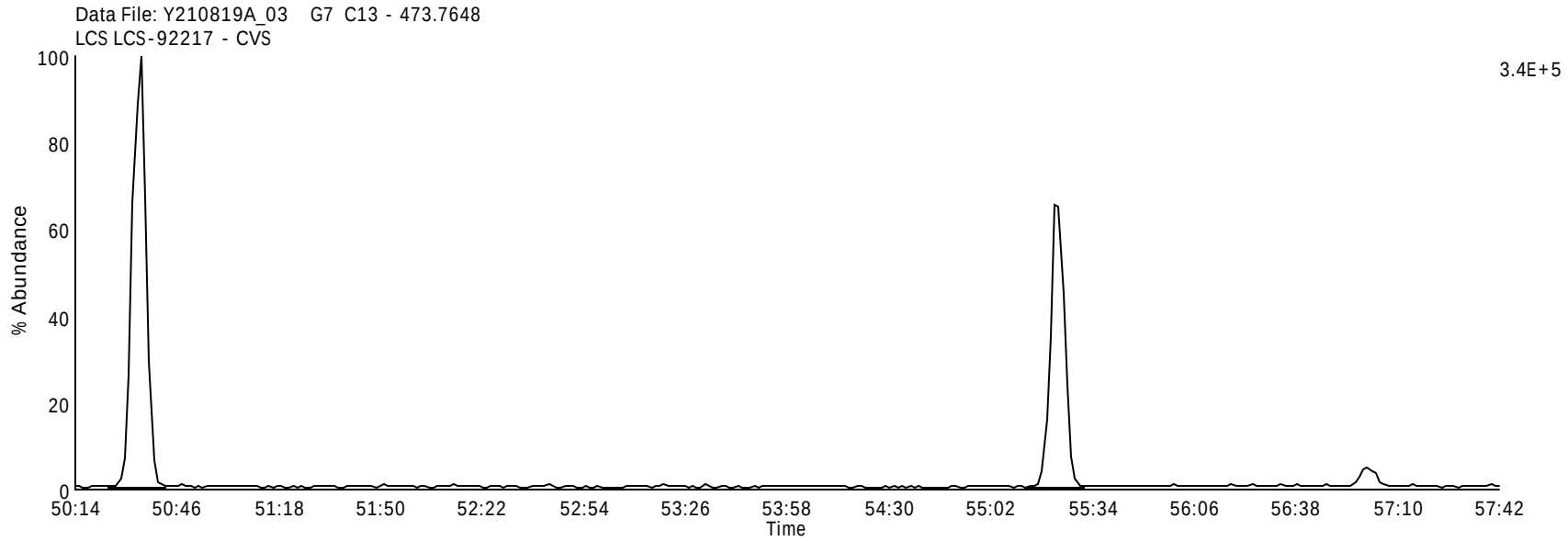


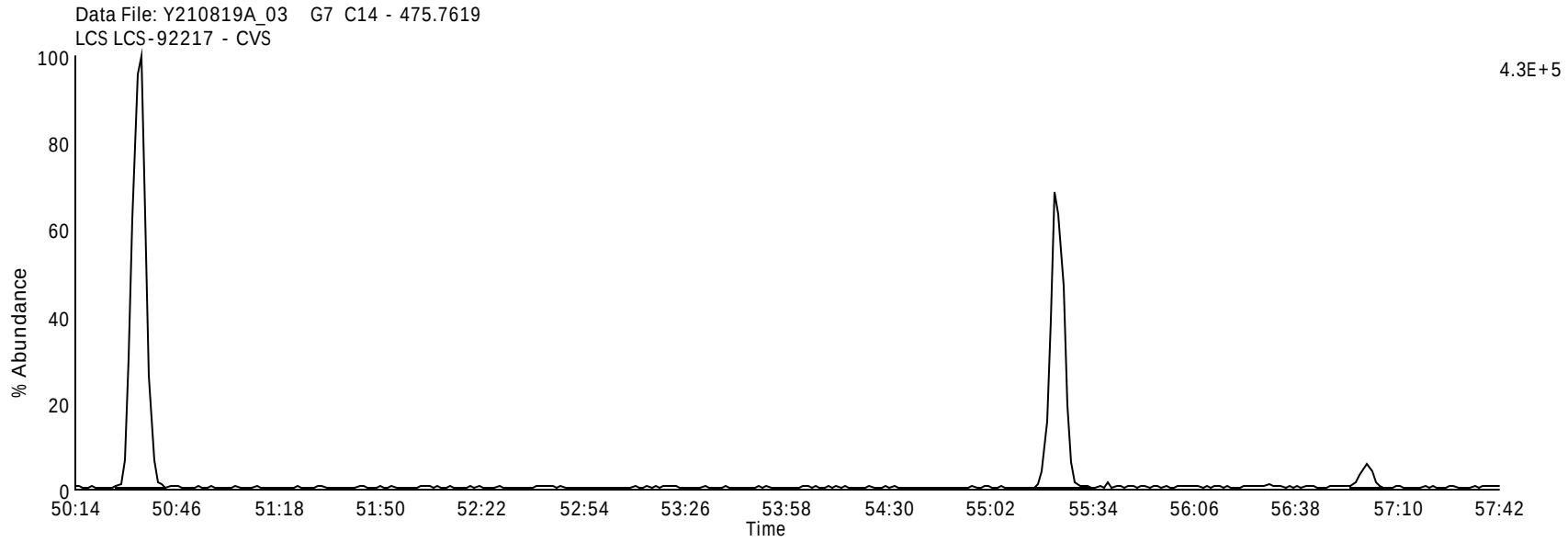




Labeled Nona Chlorinated Biphenyls

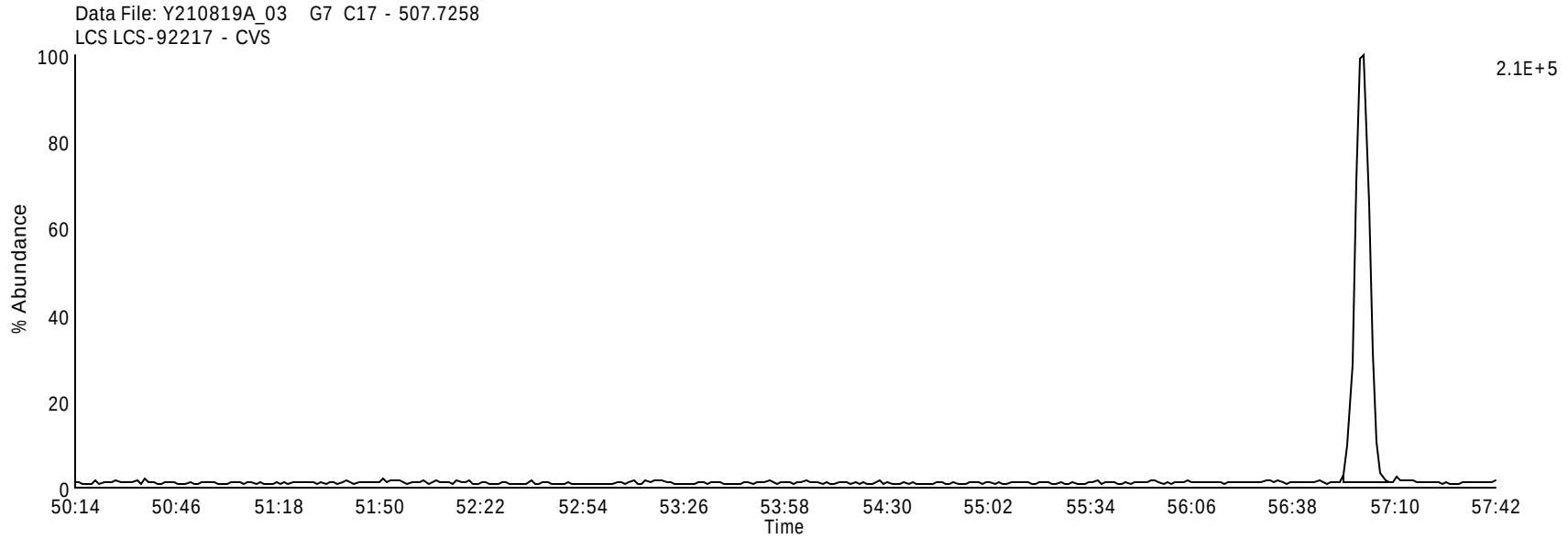
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

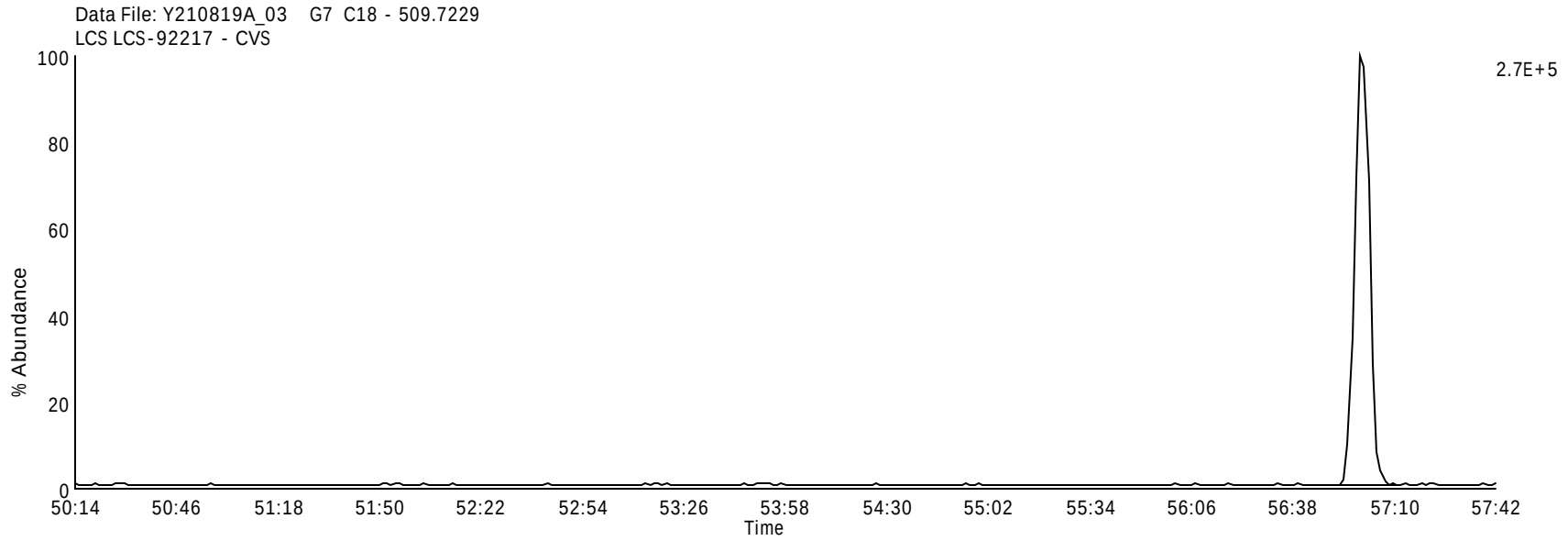




Labeled Deca Chlorinated Biphenyl

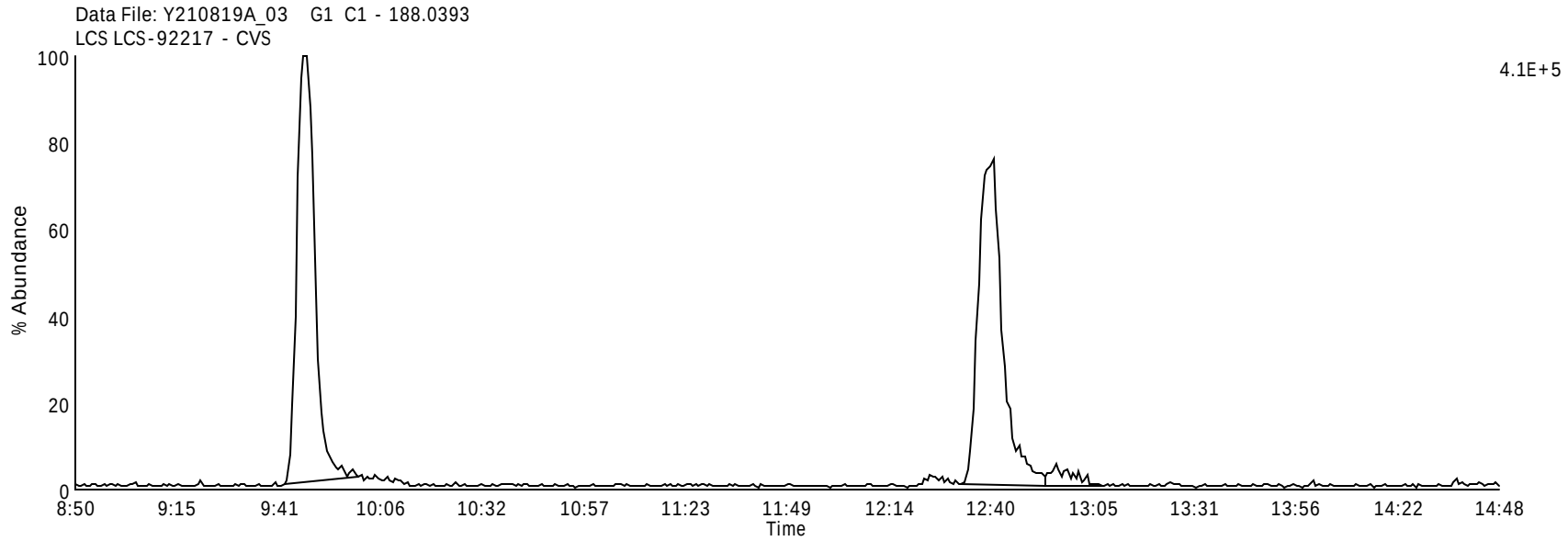
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

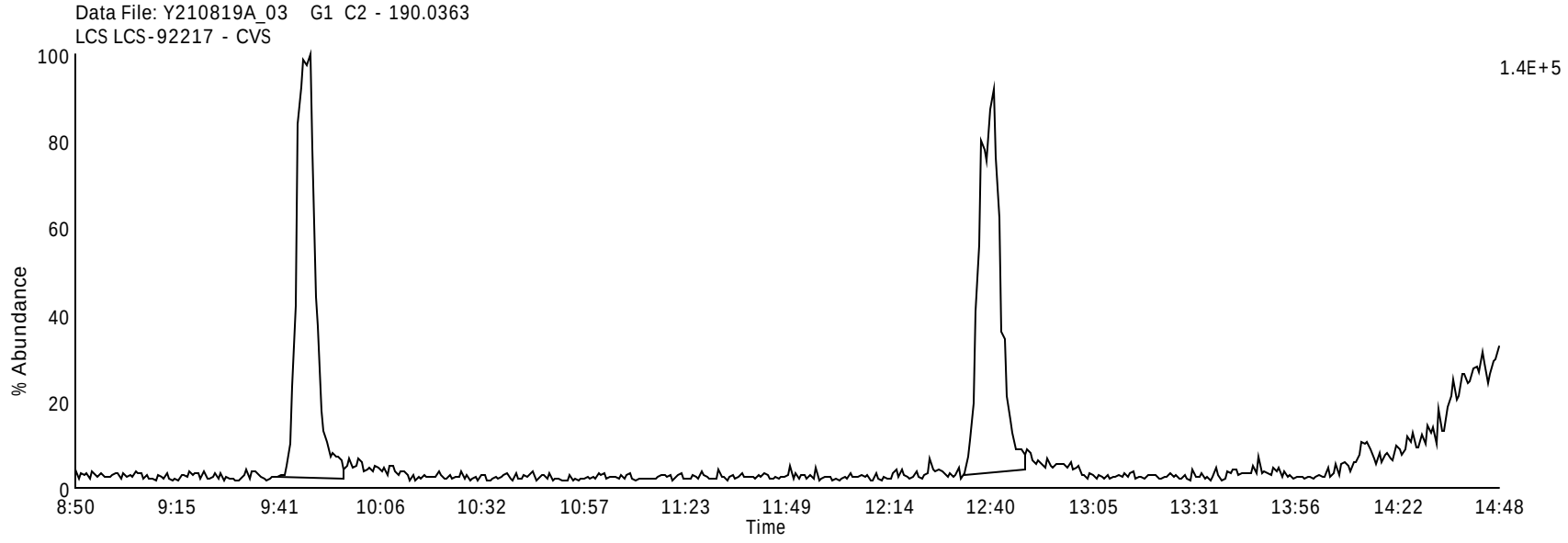




Mono Chlorinated Biphenyls

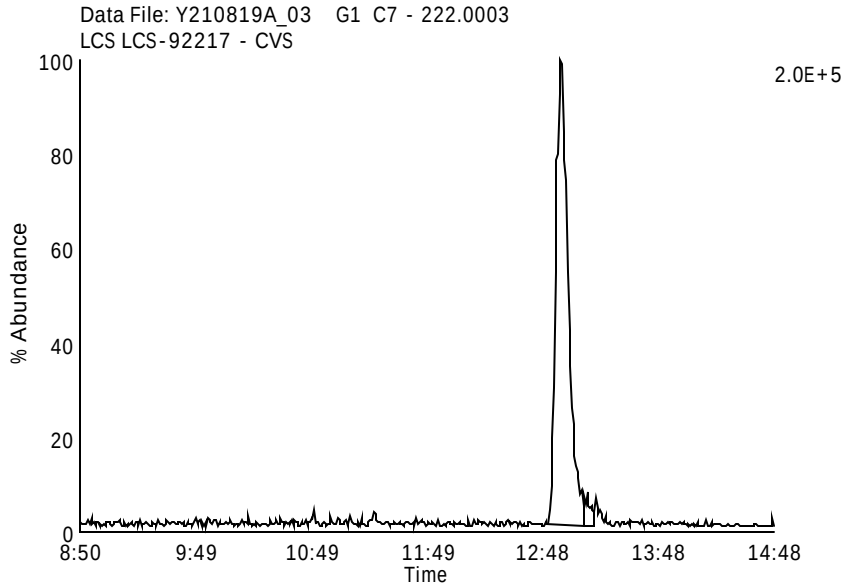
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

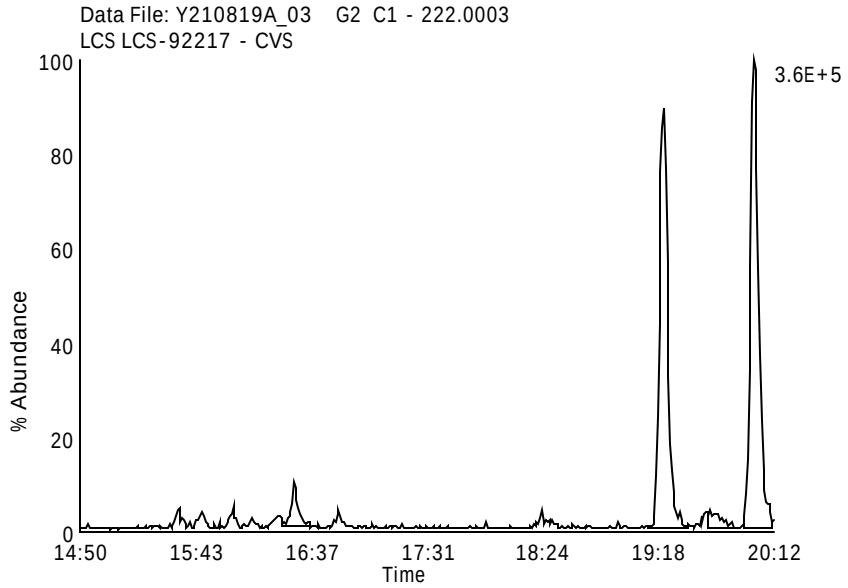


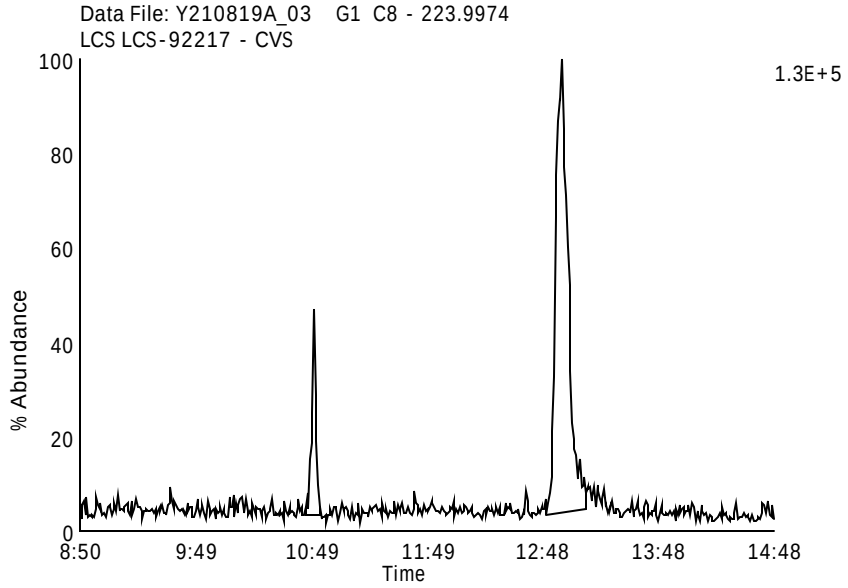


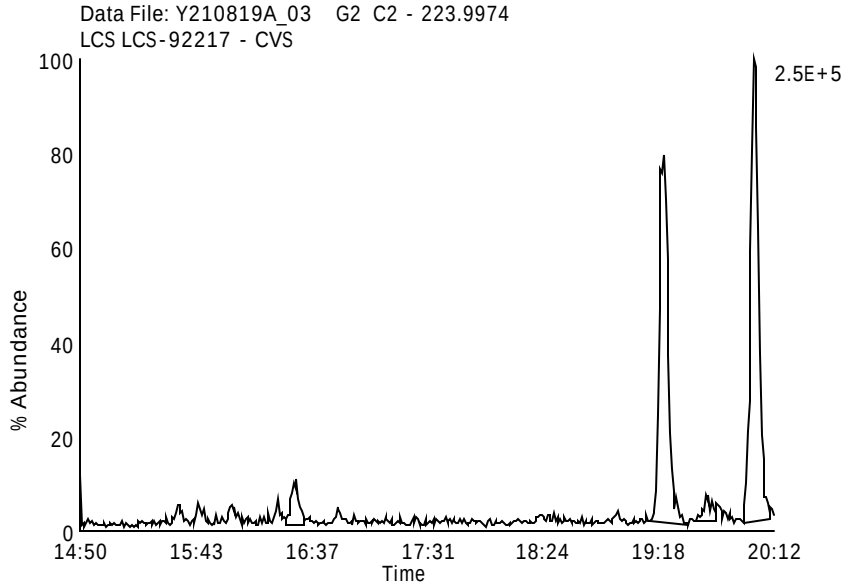
Di Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



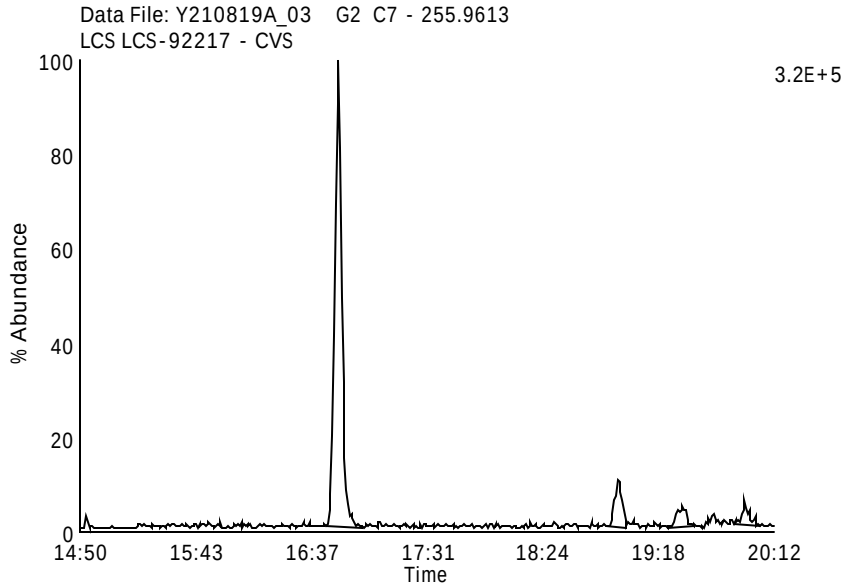


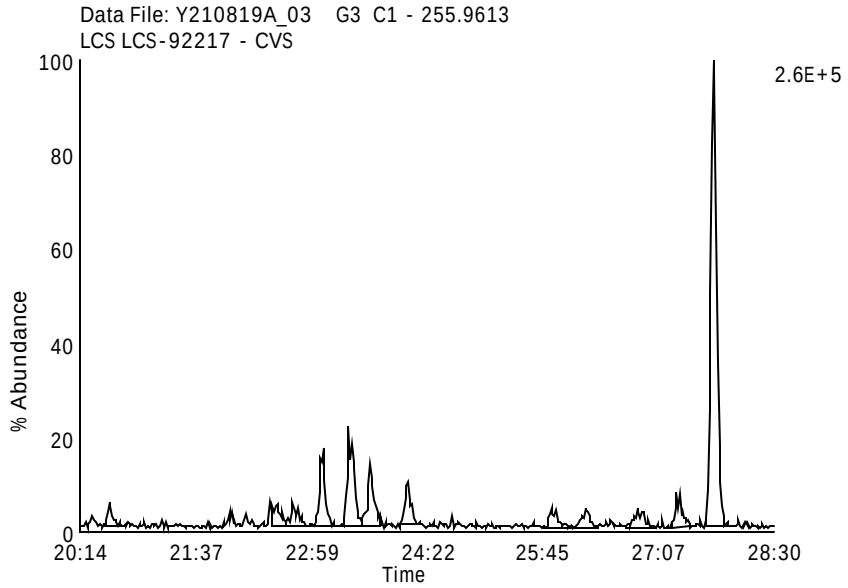


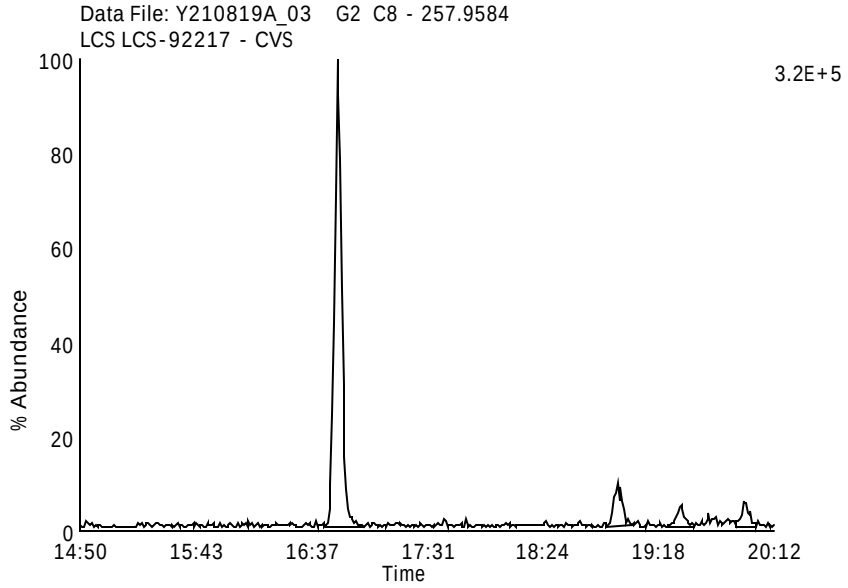


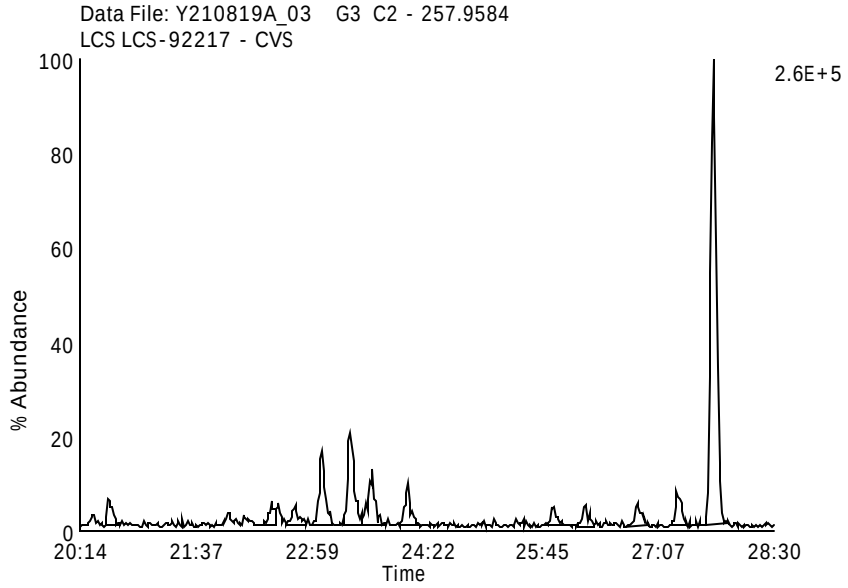
Tri Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



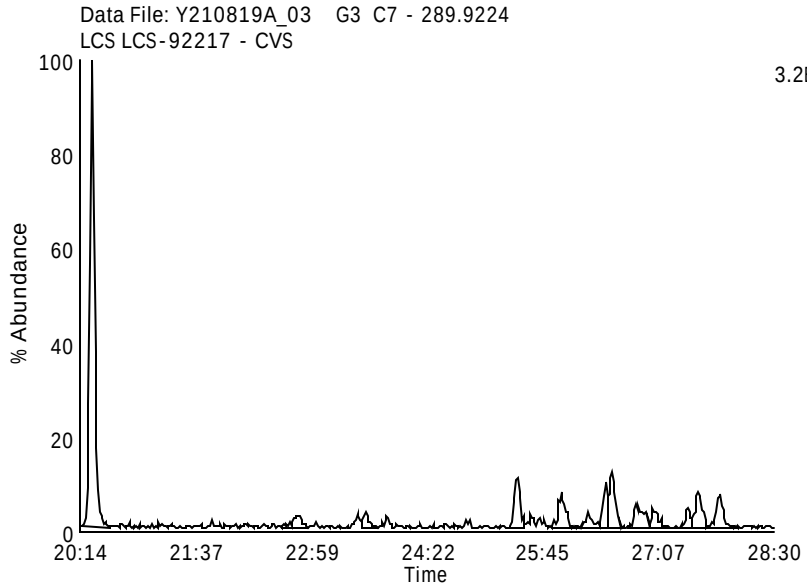


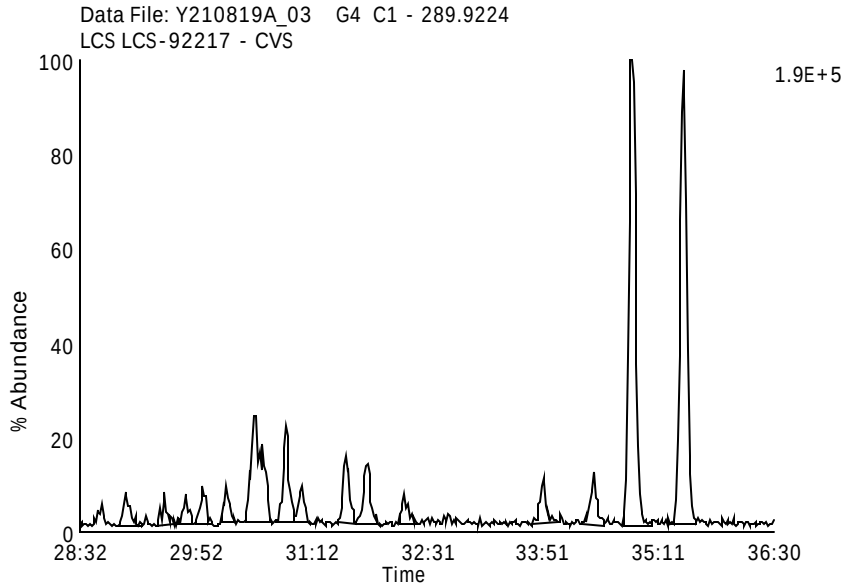


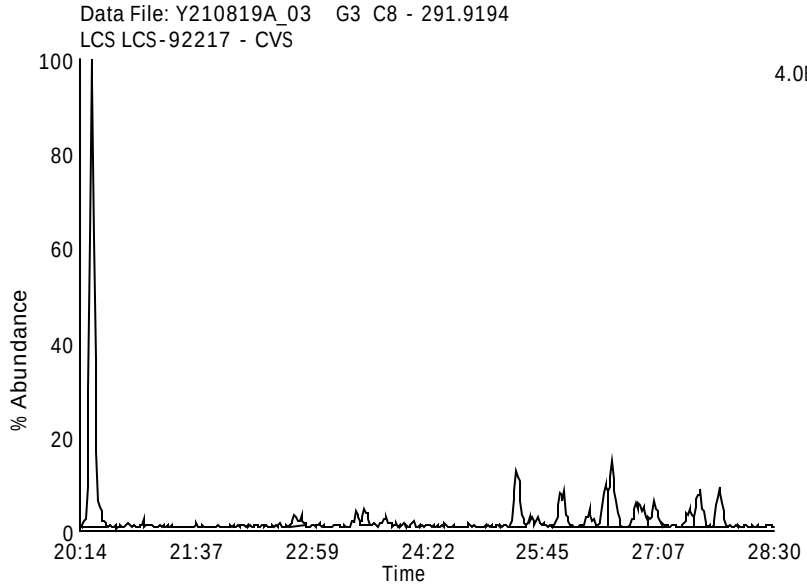


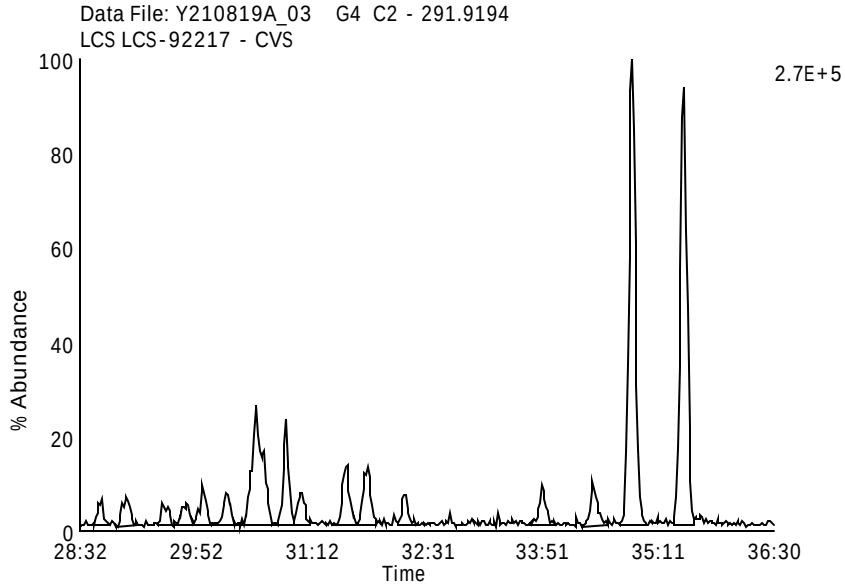
Tetra Chlorinated Biphenyls

Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV



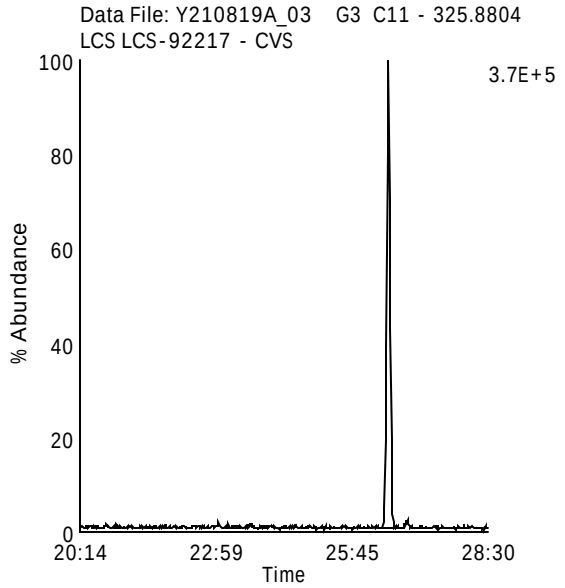


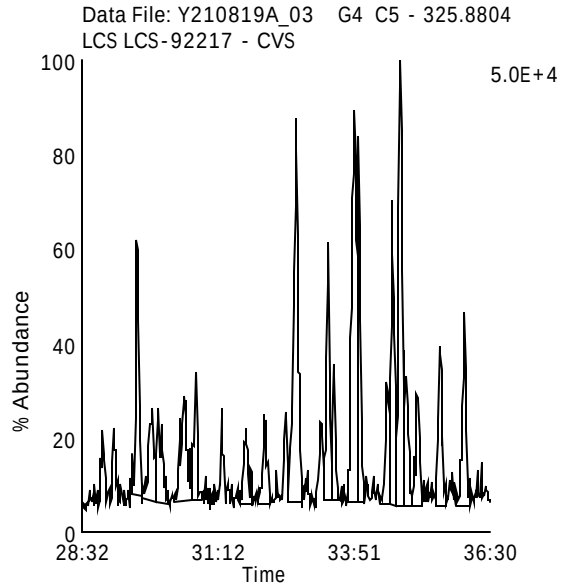


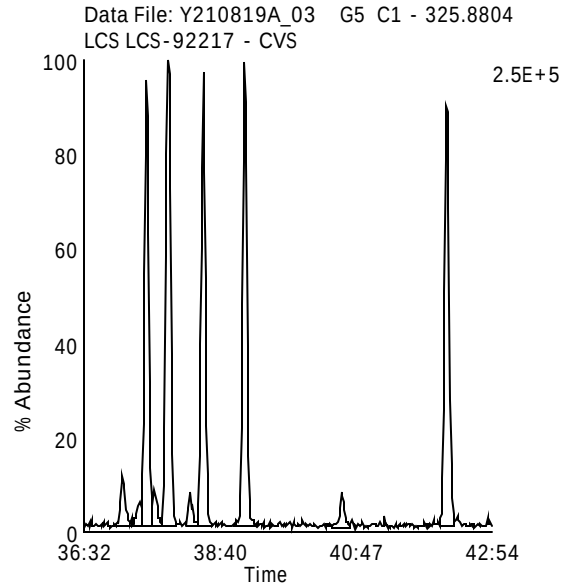


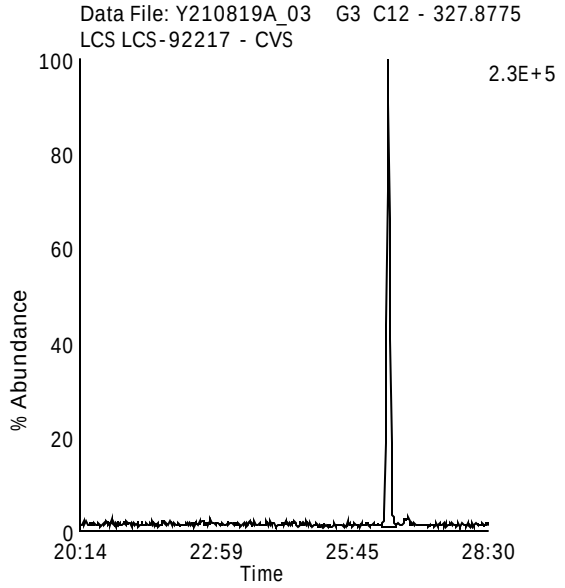
Penta Chlorinated Biphenyls

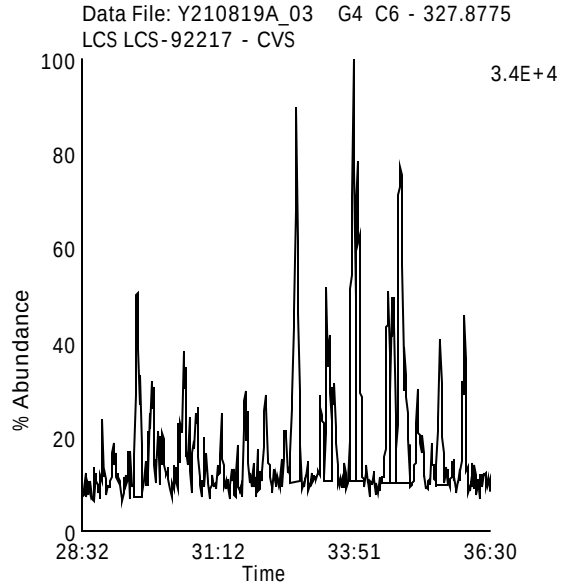
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

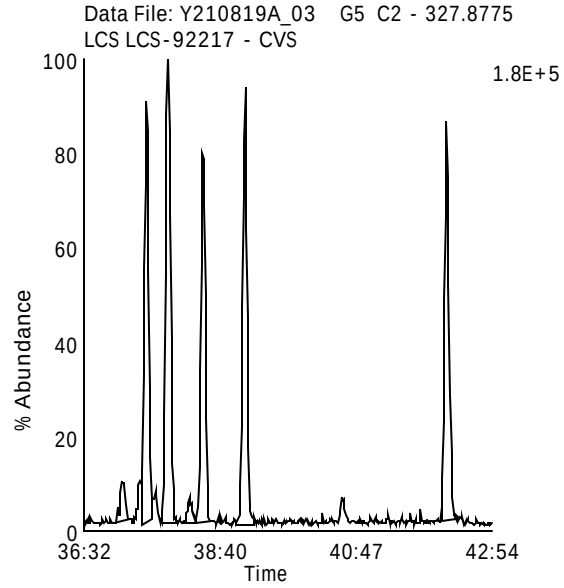






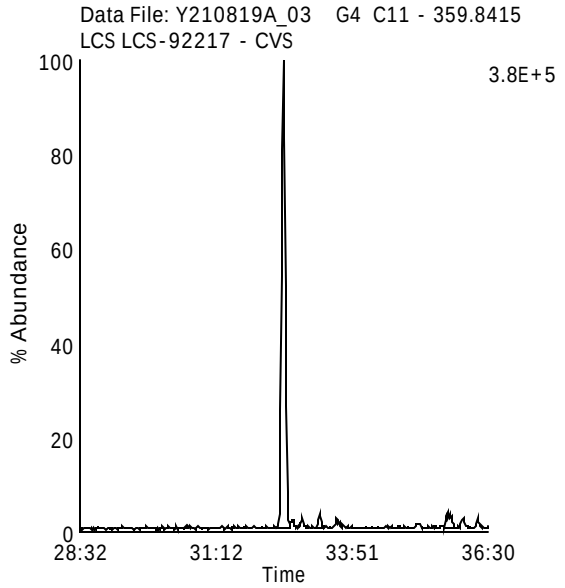


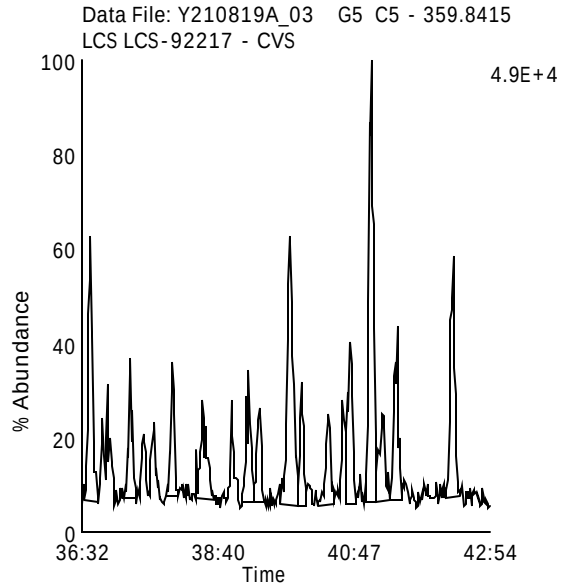


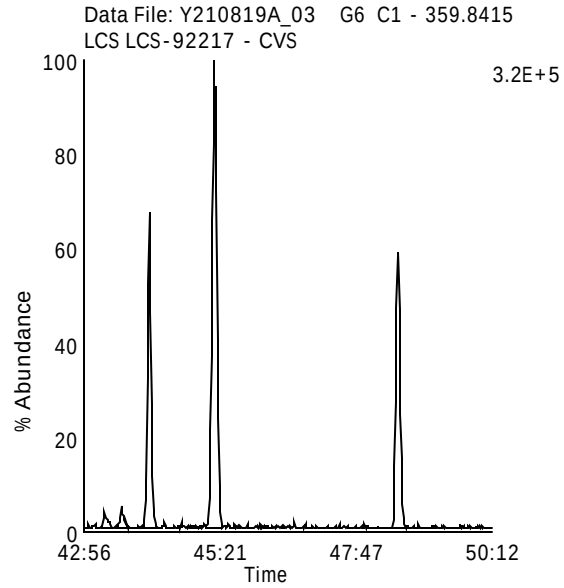


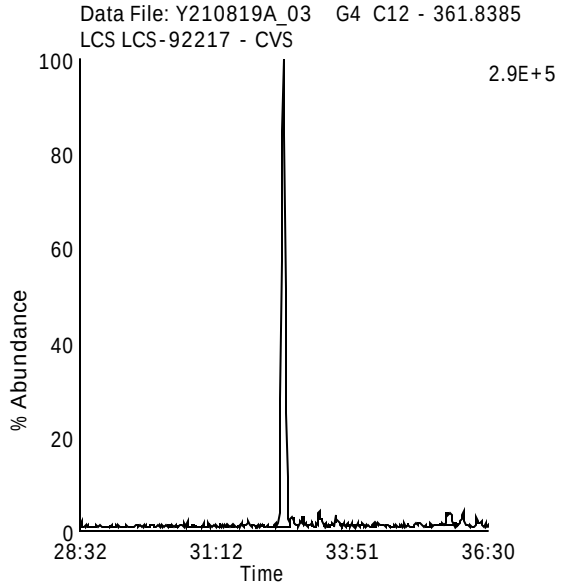
Hexa Chlorinated Biphenyls

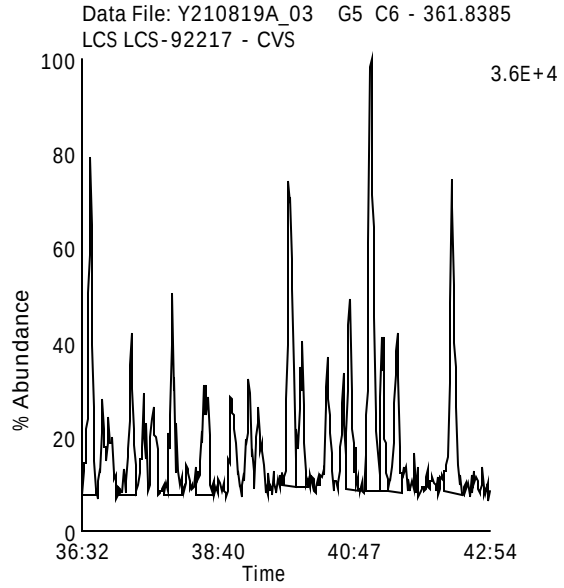
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

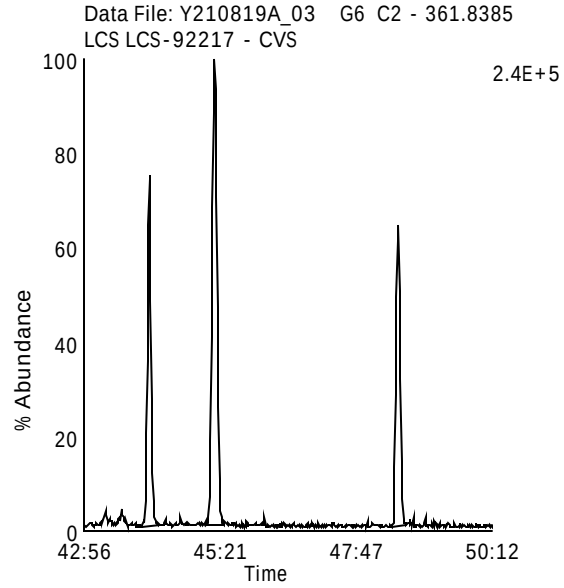






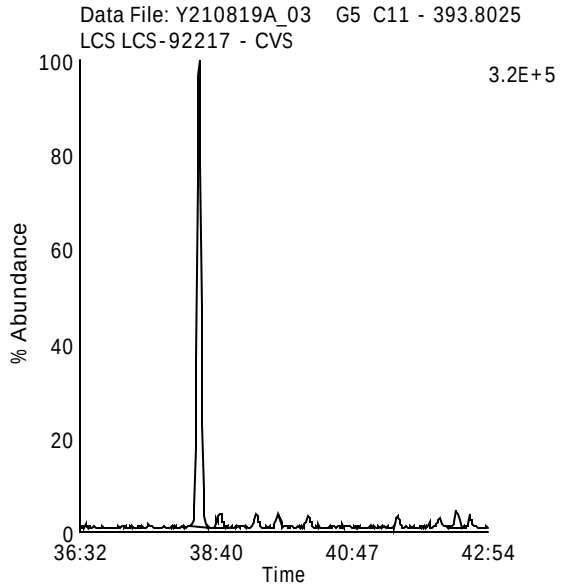


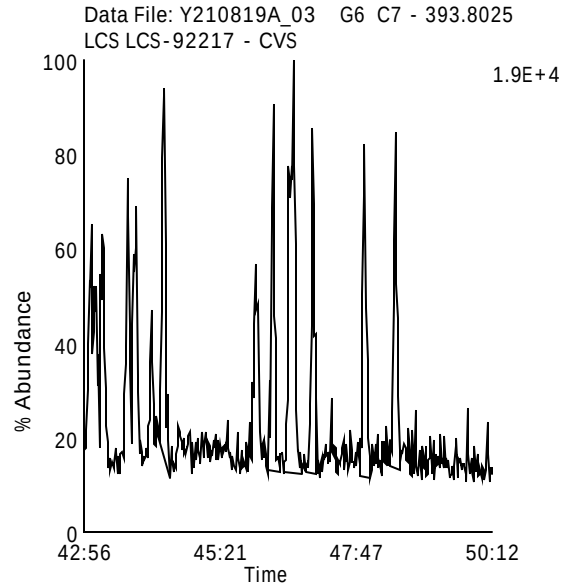


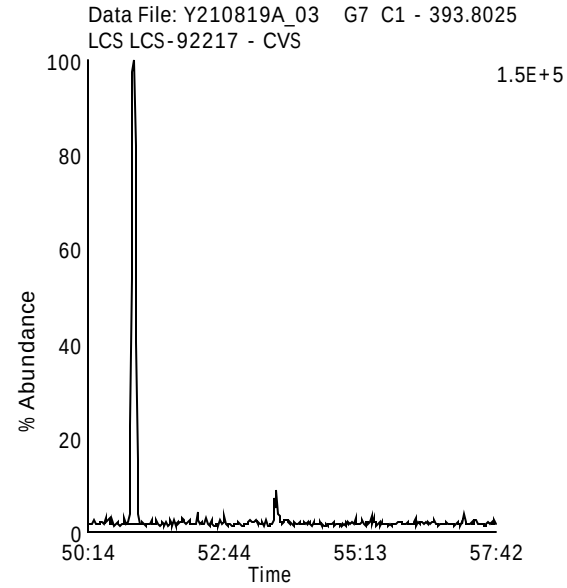


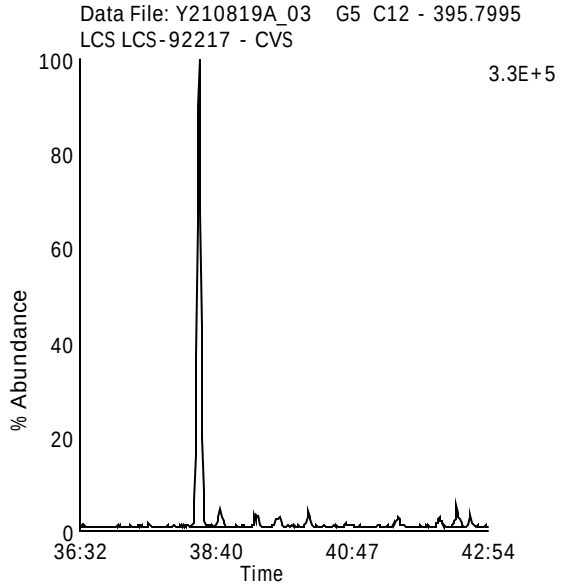
Hepta Chlorinated Biphenyls

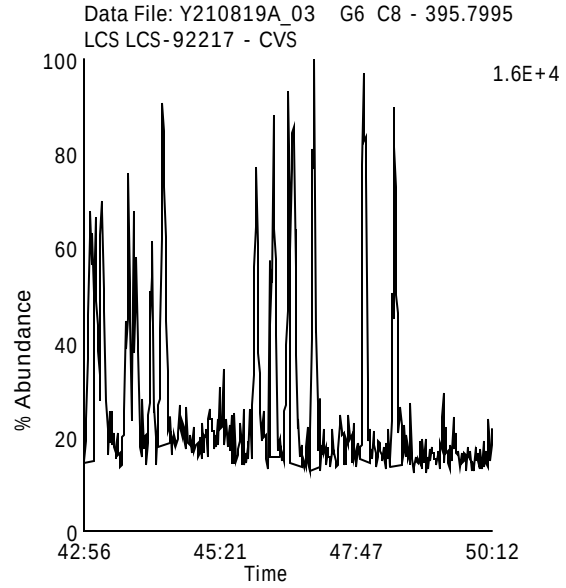
Data File Name: Y210819A_03
Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS
Client Sample ID: CLCSCV

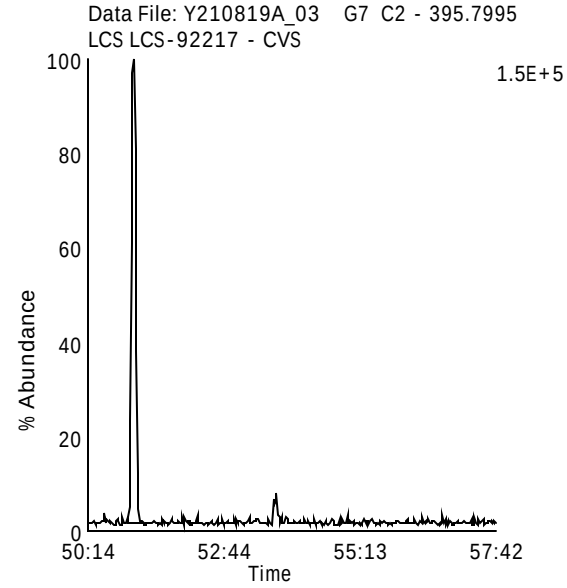








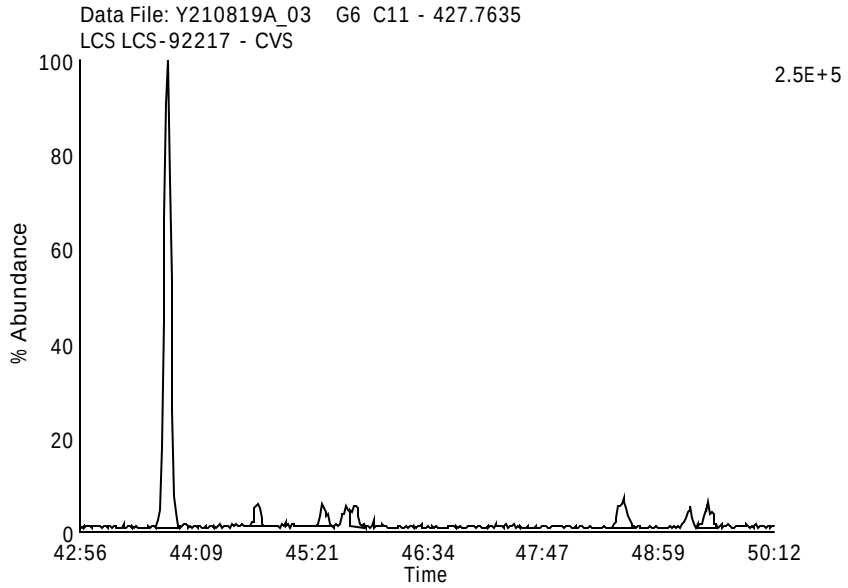


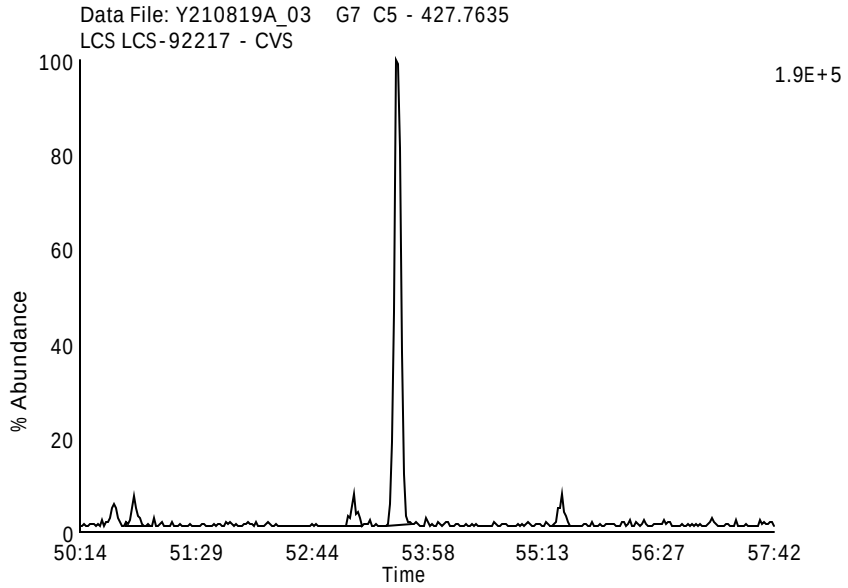


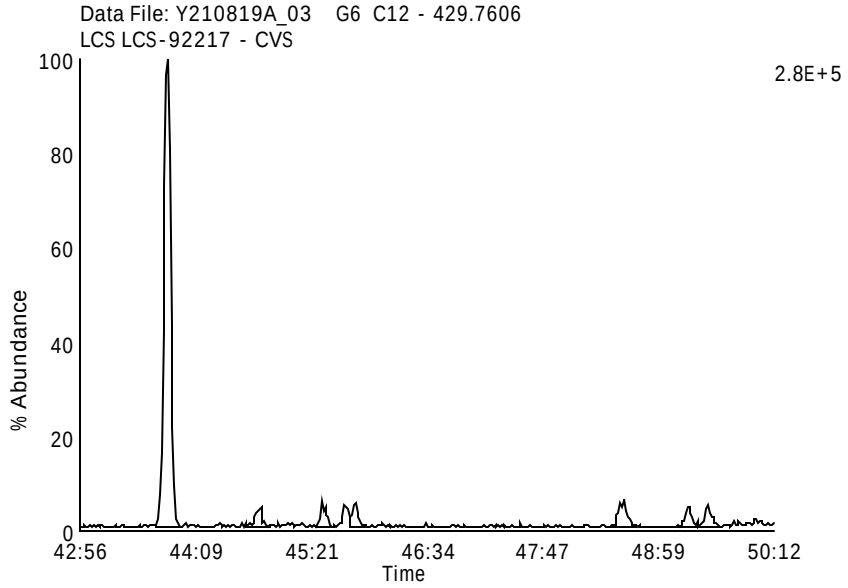
Octa Chlorinated Biphenyls

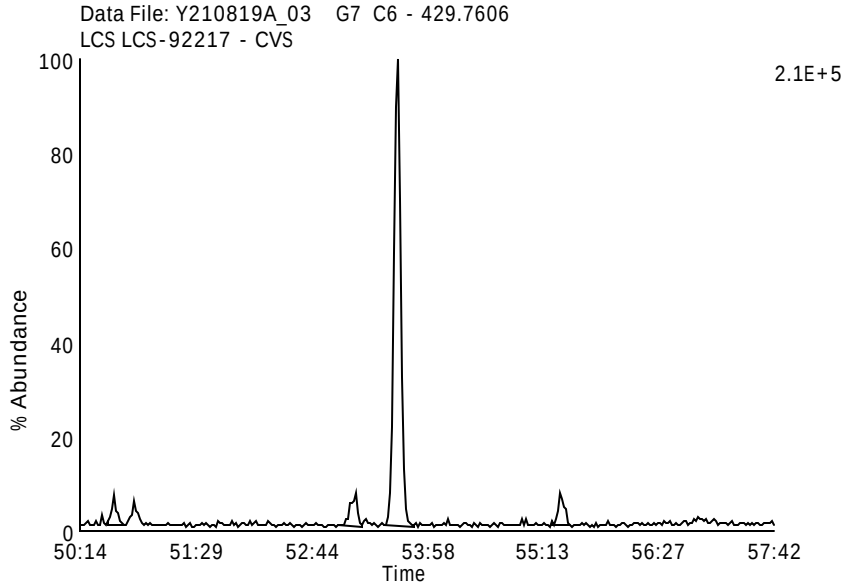
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV



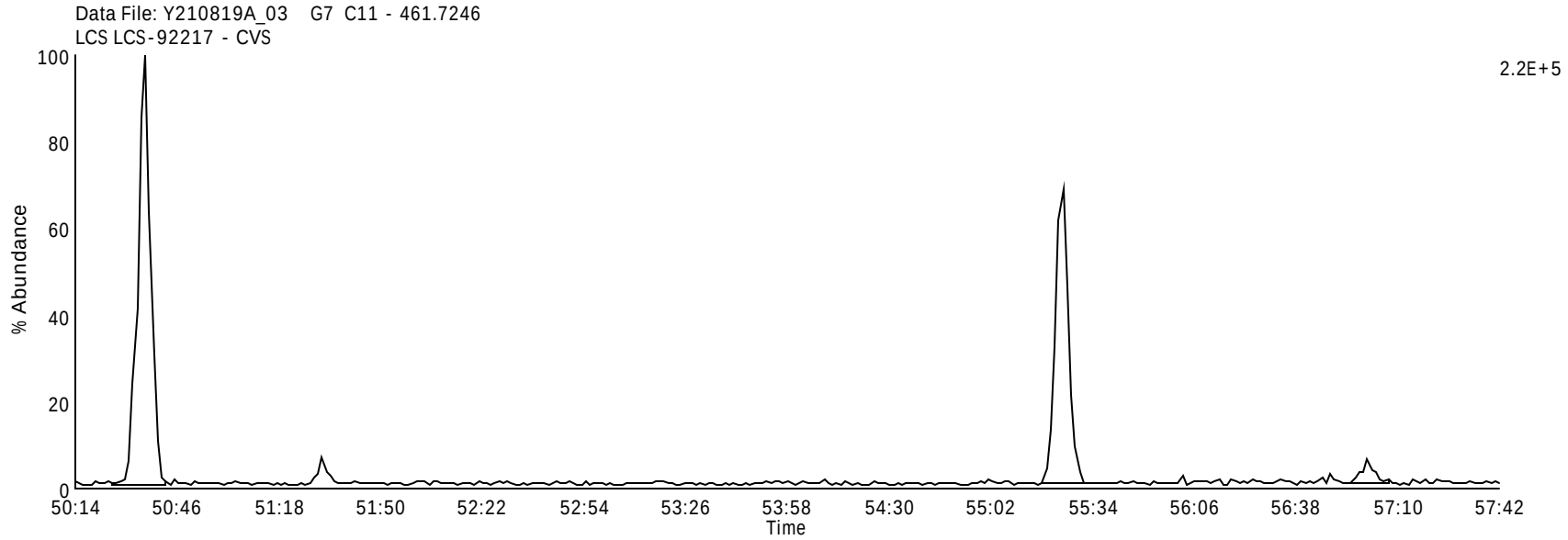


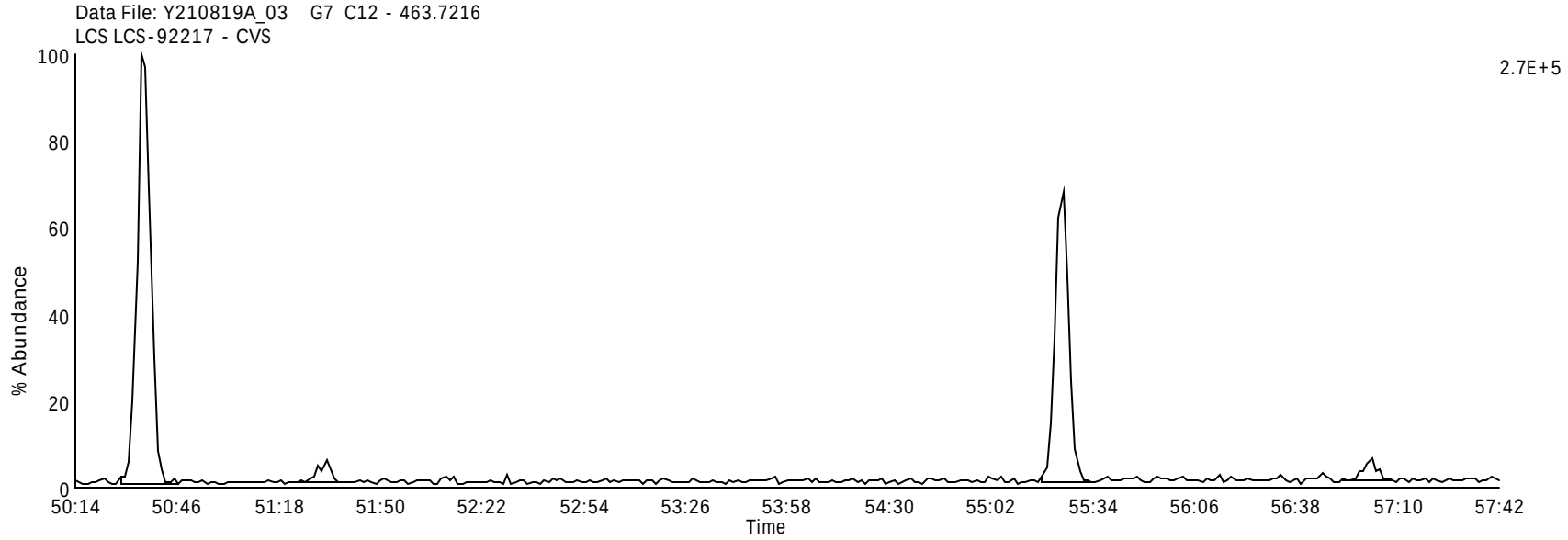




Nona Chlorinated Biphenyls

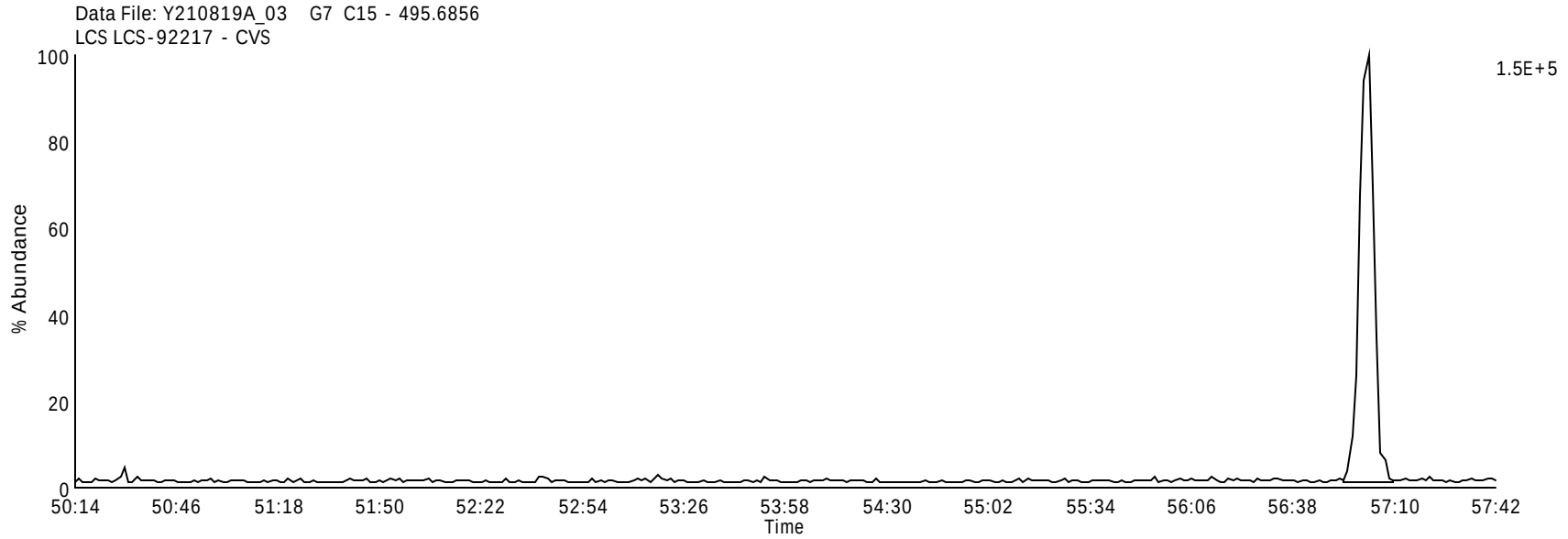
Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

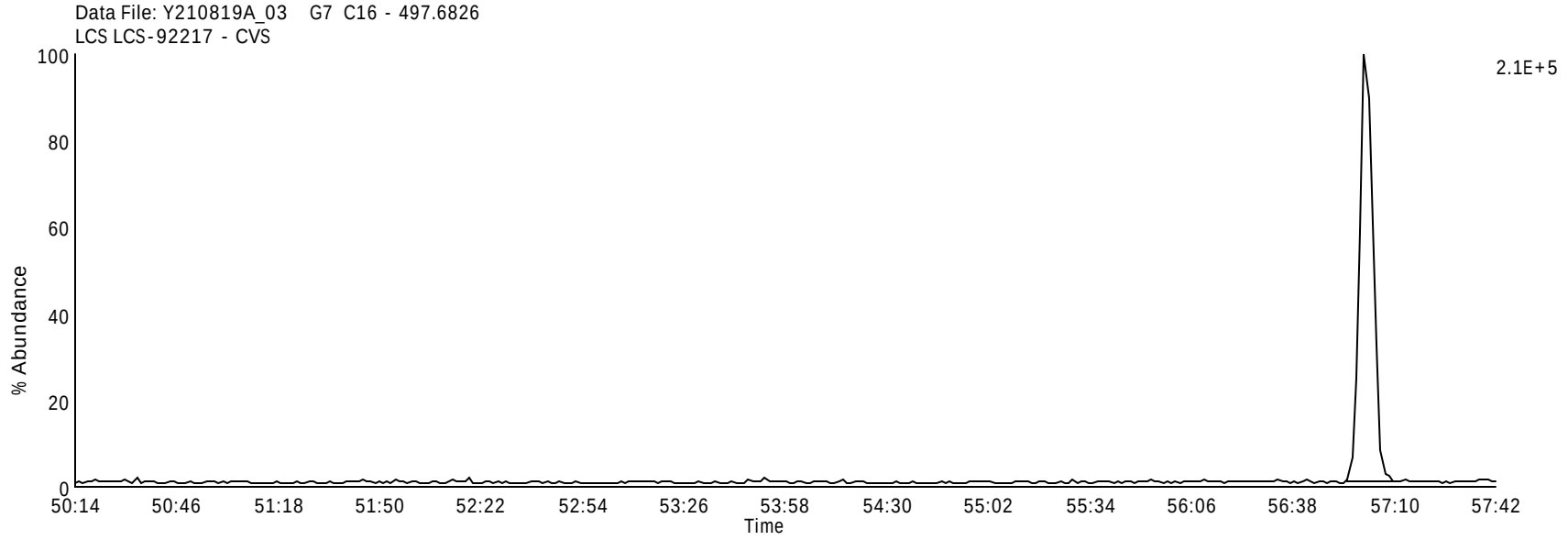




Deca Chlorinated Biphenyl

Data File Name: Y210819A_03	Lab Sample ID: LCS-92217
Date Acquired: 8/19/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92217 - CVS	Client Sample ID: CLCSCV

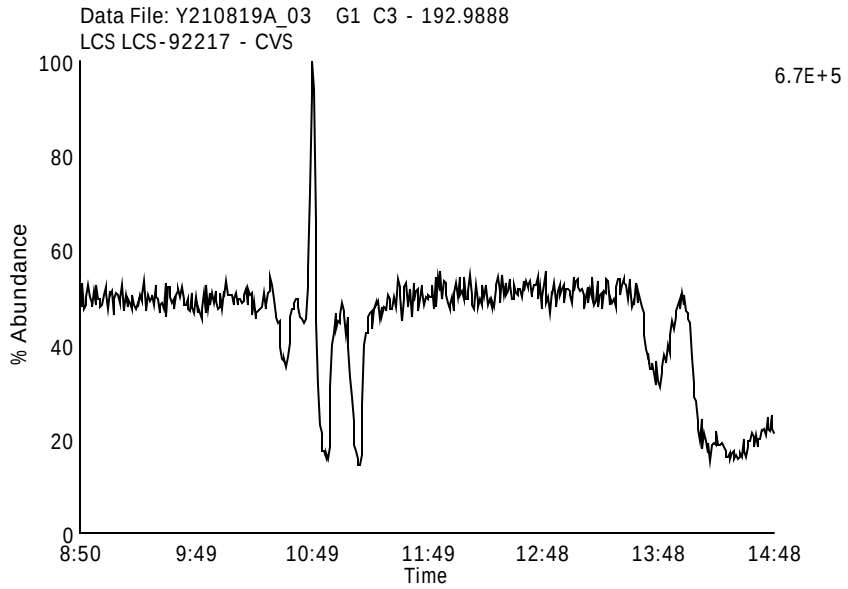


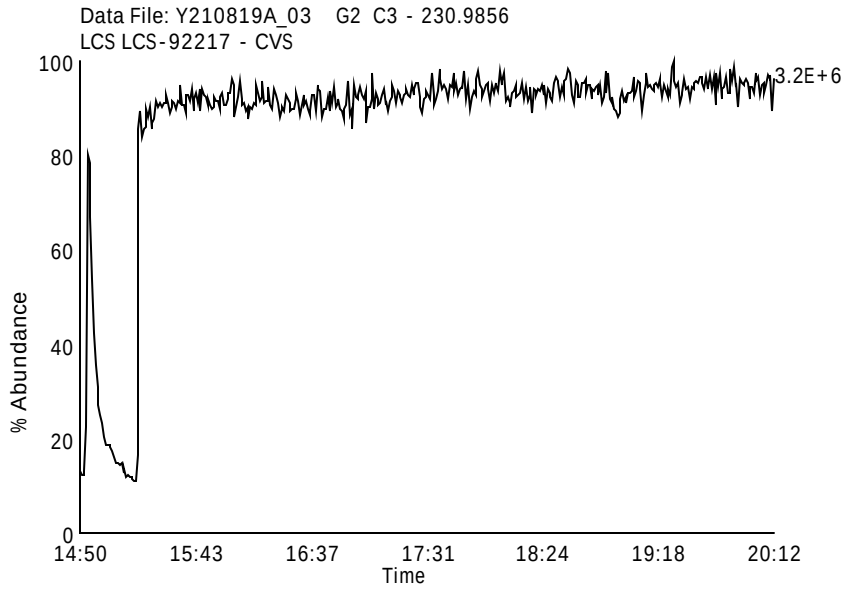


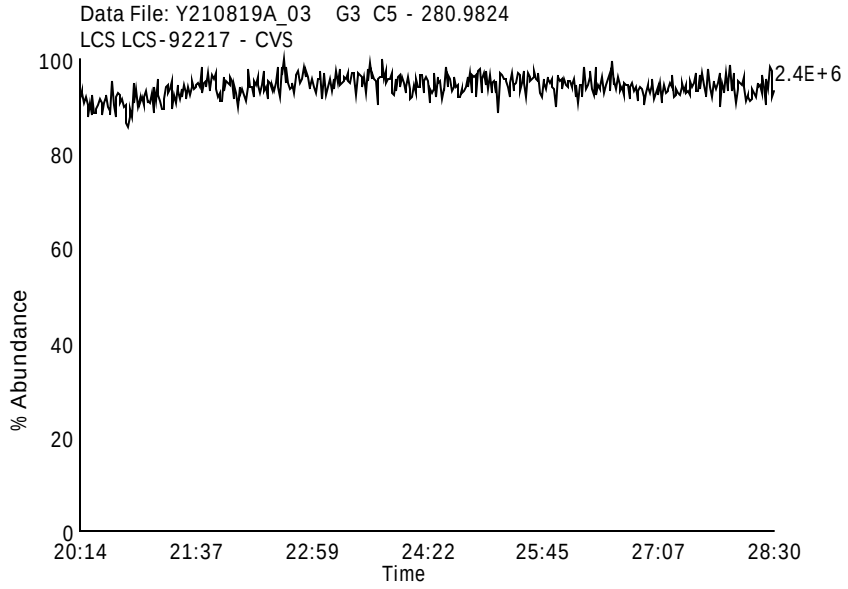
Group 1 - 4 Lock mass

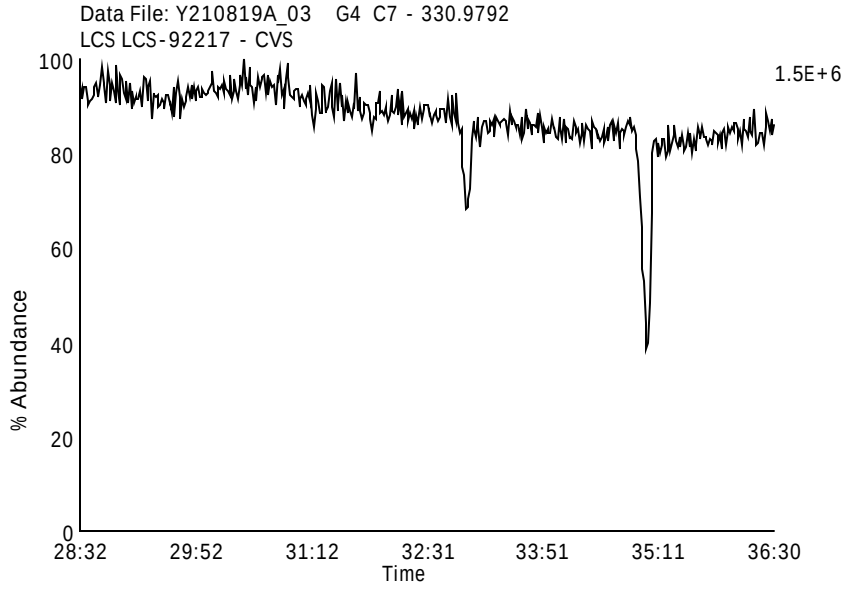
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV





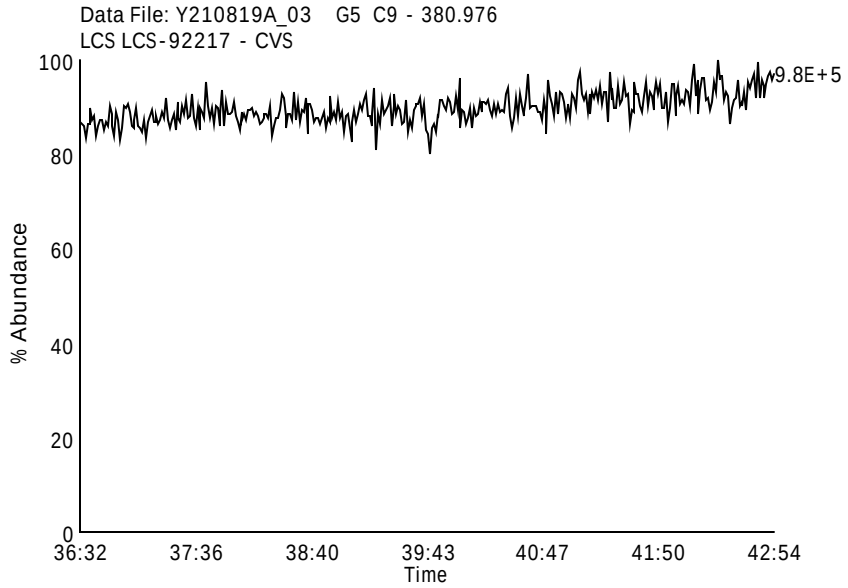


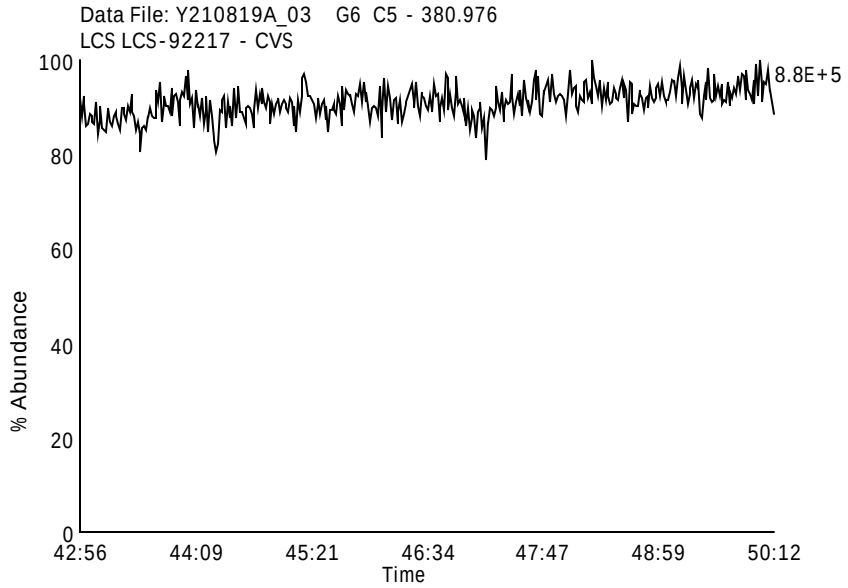


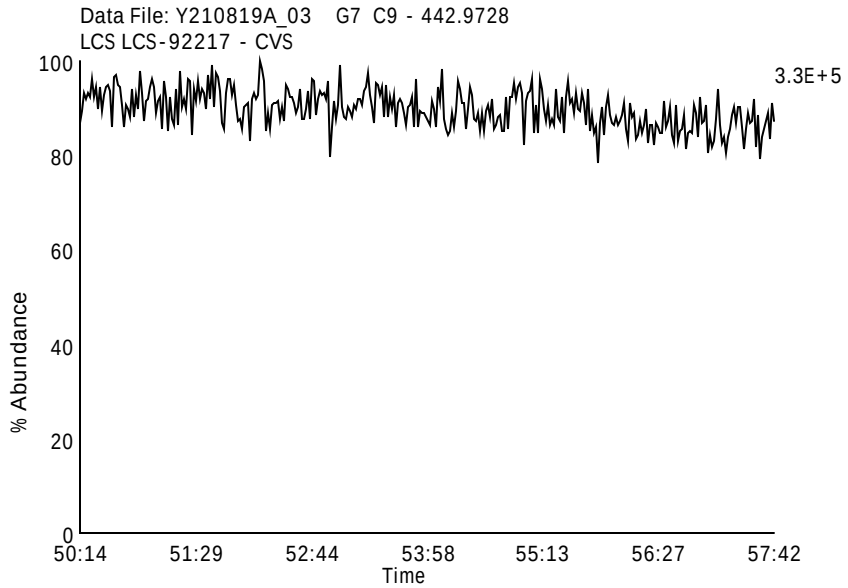
Group 5 - 7 Lock mass

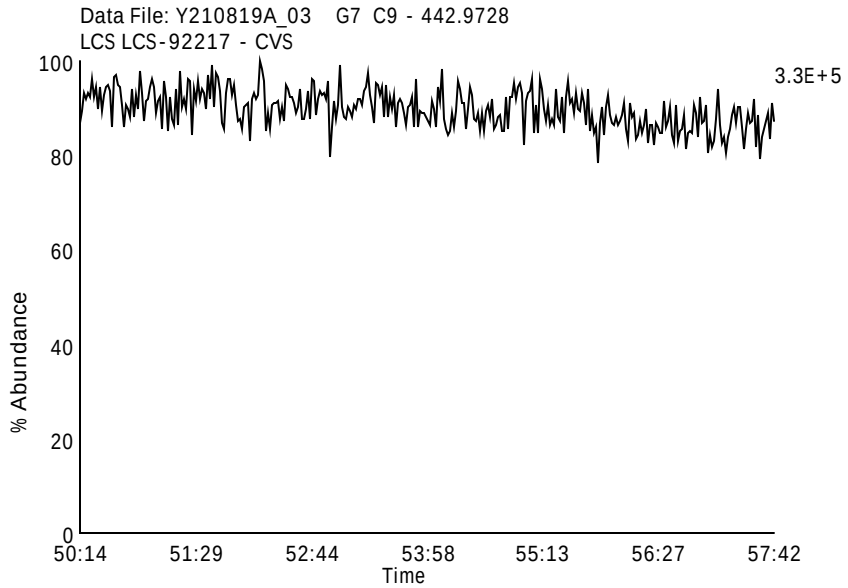
Data File Name: Y210819A_03
Date Acquired: 8/19/2021
Sample Description: LCS LCS-92217 - CVS

Lab Sample ID: LCS-92217
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSCV









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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CBLKHX	Injected By	CVS
Lab ID	BLANK-92218	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_09	GC Column ID	261111-02
Analyzed	08/19/2021 19:31	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.884	0.78	2518360	3210902	
13C-3,3',4,4'-TeCB	77	35.471	0.80	2697212	3391065	
13C-2,3,3',4,4'-PeCB	105	39.048	1.57	2894242	1847111	
13C-2,3,4,4',5-PeCB	114	38.411	1.52	3038823	1995677	
13C-2,3',4,4',5-PeCB	118	37.857	1.54	3060054	1989395	
13C-2,3',4,4',5'-PeCB	123	37.522	1.51	2939992	1945132	
13C-3,3',4,4',5-PeCB	126	42.200	1.53	2647592	1731898	
13C-HxCB(156/157)	156/157	45.274	1.24	4785122	3855351	
13C-2,3',4,4',5,5'-HxCB	167	44.100	1.23	2579704	2095511	
13C-3,3',4,4',5,5'-HxCB	169	48.527	1.22	2182551	1794490	
13C-2,3,3',4,4',5,5'-HpCB	189	51.088	1.10	2054367	1865289	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.04	7848974	7578425	
13C-2,3,3',5,5'-PeCB	111	35.538	1.61	8487907	5278023	
13C-2,2',3,3',5,5',6-HpCB	178	41.496	1.09	5491313	5018423	
Recovery Standards						
13C-2,5-DiCB	9	15.553	1.51	8593533	5691447	
13C-2,2',5,5'-TeCB	52	25.438	0.80	4575663	5744048	
13C-2,2',4,5,5'-PeCB	101	32.721	1.54	5387801	3503387	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.25	4742652	3796208	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.93	2466975	2651666	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CBLKHX	Injected By	CVS
Lab ID	BLANK-92218	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_09	GC Column ID	261111-02
Analyzed	08/19/2021 19:31	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.538	0.79	26909	33876	
81		34.917	1.78	14201	7977	
105		39.065	1.67	47302	28314	
118		37.891	1.62	119063	73586	
123		37.589	1.44	13424	9353	
156	156/157	45.257	1.17	49856	42453	
157	156/157	45.257	1.17	(49856)	(42453)	
167		44.151	0.52	9377	18130	
169		48.527	1.41	3356	2385	
189		51.088	2.08	9414	4534	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CLCSCV	Injected By	CVS
Lab ID	LCS-92217	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_03	GC Column ID	261111-02
Analyzed	08/19/2021 13:33	ICAL Date	08/19/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.868	0.78	2111435	2708284	
13C-3,3',4,4'-TeCB	77	35.438	0.80	2284176	2841357	
13C-2,3,3',4,4'-PeCB	105	39.032	1.52	2478408	1632856	
13C-2,3,4,4',5-PeCB	114	38.378	1.55	2330025	1504294	
13C-2,3',4,4',5-PeCB	118	37.841	1.54	2460960	1595257	
13C-2,3',4,4',5'-PeCB	123	37.506	1.55	2321195	1497794	
13C-3,3',4,4',5-PeCB	126	42.185	1.54	2254783	1466086	
13C-HxCB(156/157)	156/157	45.258	1.23	3974052	3233763	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.22	2045827	1679232	
13C-3,3',4,4',5,5'-HxCB	169	48.529	1.22	1888640	1554165	
13C-2,3,3',4,4',5,5'-HpCB	189	51.068	1.02	1625922	1589676	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.04	6699982	6439049	
13C-2,3,3',5,5'-PeCB	111	35.505	1.55	6791667	4385104	
13C-2,2',3,3',5,5',6-HpCB	178	41.480	1.12	4351948	3878605	
Recovery Standards						
13C-2,5-DiCB	9	15.577	1.53	6042244	3937903	
13C-2,2',5,5'-TeCB	52	25.422	0.81	3272855	4030592	
13C-2,2',4,5,5'-PeCB	101	32.705	1.58	3736156	2365416	
13C-2,2',3,4,4',5'-HxCB	138	41.011	1.27	3348889	2643728	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.90	1844790	2055772	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CLCSCV	Injected By	CVS
Lab ID	LCS-92217	Instrument ID	10MSHR12 (Y)
Filename	Y210819A_03	GC Column ID	261111-02
Analyzed	08/19/2021 13:33	ICAL ID	Y210819A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
81		34.885	0.79	1061766	1341581	
77		35.472	0.74	1047911	1408437	
105		39.049	1.46	1206307	823895	
114		38.411	1.56	1152202	737592	
118		37.858	1.43	1248369	873894	
123		37.523	1.44	1167558	811223	
126		42.201	1.63	1165474	714297	
156	156/157	45.258	1.24	2032908	1633070	
157	156/157	45.258	1.24	(2032908)	(1633070)	
167		44.101	1.15	1031393	894743	
169		48.545	1.23	970658	787410	
189		51.089	1.00	800418	802641	

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MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVD

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947718	2947718BLANK	100	100	98
2947719	2947719LCS	97	97	99
60375838027	RB-03	100	104	100
60375838028	RB-04	100	99	101
60375838029	RB-05	101	99	103

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSV8

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2950695	2950695BLANK	97	99	99
2950696	2950696LCS	95	98	100
60375838026	TB-3	101	100	100
60375838027	RB-03	102	101	102
60375838028	RB-04	100	98	99
60375838029	RB-05	101	99	101
60375838030	TB-4	100	98	99

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-1
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947592	2947592BLANK	102	103	100
2947594	2947594MS	100	98	101
2947595	2947595MSD	101	98	100
60375838010	GB-14/0-2	104	103	101
60375838011	GB-14/3-5	104	104	102
60375838012	GB-07/2.5-3.5	103	105	99
60375838013	GB-07/7-9	103	103	102

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-2
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947601	2947601LCS	98	96	100

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(69-133)
(TOL8) = Toluene-d8 (S)	(78-122)

* Values outside of QC Limits

MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947601LCS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072821AGRO.B\0728A_05.D
SDG No.: 60375838

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-GRO	4.0	3.3	82	61-140

Spike Recovery: 0 out of 1 outside limits.

MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2947593LCS

Date Extracted: 07/28/2021 | Date Analyzed (1): 07/28/2021

Instrument: 60MSVC | LCS Lot No:

Lab File ID: 072821A.B\0728A_03.D | SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acetone	500	591	118	50-150
Acrolein	500	506	101	10-180
Acrylonitrile	500	470	94	80-120
Benzene	100	99.3	99	80-120
Bromobenzene	100	96.3	96	80-120
Bromochloromethane	100	100	100	75-120
Bromodichloromethane	100	109	109	80-125
Bromoform	100	90.9	91	80-135
Bromomethane	100	98.4	98	35-135
2-Butanone (MEK)	500	570	114	60-135
n-Butylbenzene	100	104	104	80-135
sec-Butylbenzene	100	100	100	80-135
tert-Butylbenzene	100	101	101	80-125
Carbon disulfide	100	109	109	65-140
Carbon tetrachloride	100	113	113	75-140
Chlorobenzene	100	99.7	100	80-120
Chloroethane	100	87.7	88	50-135
Chloroform	100	101	101	80-120
Chloromethane	100	97.9	98	15-155
2-Chlorotoluene	100	97.7	98	80-120
4-Chlorotoluene	100	100	100	80-120
Cyclohexanone	500	499	100	80-120
1,2-Dibromo-3-chloropropane	100	103	103	75-135
Dibromochloromethane	100	113	113	80-130
1,2-Dibromoethane (EDB)	100	101	101	80-125
Dibromomethane	100	98.3	98	80-120
1,2-Dichlorobenzene	100	94.6	95	80-120
1,3-Dichlorobenzene	100	99.4	99	80-120
1,4-Dichlorobenzene	100	100	100	80-120
1,1-Dichloroethane	100	103	103	75-125
1,2-Dichloroethane	100	95.3	95	80-120
1,2-Dichloroethene (Total)	200	206	103	80-120
1,1-Dichloroethene	100	109	109	70-130
cis-1,2-Dichloroethene	100	101	101	80-120
trans-1,2-Dichloroethene	100	105	105	75-125
1,2-Dichloropropane	100	99.4	99	80-120
1,3-Dichloropropane	100	96.3	96	80-120
2,2-Dichloropropane	100	109	109	75-130
1,1-Dichloropropene	100	105	105	60-140
cis-1,3-Dichloropropene	100	109	109	80-125
trans-1,3-Dichloropropene	100	109	109	80-130
Diethyl ether (Ethyl ether)	100	99.5	99	80-120
Ethylbenzene	100	100	100	80-120
n-Heptane	100	111	111	80-120
Hexachloro-1,3-butadiene	100	110	110	80-135
n-Hexane	100	107	107	55-150
2-Hexanone	500	555	111	70-135

MSV - FORM III VOA-2

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2947593LCS

Date Extracted: 07/28/2021 | Date Analyzed (1): 07/28/2021

Instrument: 60MSVC | LCS Lot No:

Lab File ID: 072821A.B\0728A_03.D | SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Iodomethane	100	108	108	65-145
Isopropylbenzene (Cumene)	100	103	103	75-135
p-Isopropyltoluene	100	103	103	65-145
Methyl acetate	500	449	90	80-120
Methylene Chloride	100	90.4	90	65-120
4-Methyl-2-pentanone (MIBK)	500	460	92	75-130
Methyl-tert-butyl ether	100	96.7	97	75-130
Naphthalene	100	97.8	98	80-120
n-Propylbenzene	100	101	101	80-125
Styrene	100	101	101	85-125
1,1,1,2-Tetrachloroethane	100	104	104	80-130
1,1,2,2-Tetrachloroethane	100	93.5	94	75-120
Tetrachloroethene	100	105	105	80-130
Tetrahydrofuran	500	432	86	80-120
Toluene	100	99.3	99	80-120
1,2,3-Trichlorobenzene	100	101	101	80-125
1,2,4-Trichlorobenzene	100	97.4	97	80-125
1,1,1-Trichloroethane	100	103	103	75-130
1,1,2-Trichloroethane	100	98.3	98	80-120
Trichloroethene	100	105	105	80-125
Trichlorofluoromethane	100	113	113	65-135
1,2,3-Trichloropropane	100	92.8	93	80-120
1,1,2-Trichlorotrifluoroethane	100	112	112	80-120
1,2,3-Trimethylbenzene	100	98.0	98	80-120
1,2,4-Trimethylbenzene	100	98.3	98	80-125
1,3,5-Trimethylbenzene	100	101	101	80-125
Vinyl acetate	100	96.2J	96	80-120
Vinyl chloride	100	79.0	79	35-145
Xylene (Total)	300	300	100	80-120
m&p-Xylene	200	201	101	80-125
o-Xylene	100	98.9	99	80-125

Spike Recovery: 0 out of 78 outside limits.

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2950696LCS

Date Extracted: 08/03/2021 | Date Analyzed (1): 08/03/2021

Instrument: 60MSV8 | LCS Lot No: 45079

Lab File ID: 080321A.B\0803A_04LCS.D | SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	100	102	102	20-175
Acetonitrile	100	96.6	97	25-180
Acrolein	100	89.5	89	10-200
Acrylonitrile	100	96.9	97	70-135
Benzene	20.0	19.8	99	80-120
Bromobenzene	20.0	20.2	101	80-120
Bromochloromethane	20.0	21.4	107	80-125
Bromodichloromethane	20.0	20.4	102	80-125
Bromoform	20.0	18.6	93	60-135
Bromomethane	20.0	18.4	92	10-165
2-Butanone (MEK)	100	102	102	40-150
n-Butylbenzene	20.0	19.2	96	80-125
sec-Butylbenzene	20.0	19.9	100	80-120
tert-Butylbenzene	20.0	19.8	99	80-120
Carbon disulfide	20.0	21.1	106	75-135
Carbon tetrachloride	20.0	20.8	104	80-125
Chlorobenzene	20.0	20.6	103	80-120
Chloroethane	20.0	20.5	102	70-130
2-Chloroethylvinyl ether	100	93.0	93	30-165
Chloroform	20.0	20.7	104	80-120
Chloromethane	20.0	19.5	97	35-155
2-Chlorotoluene	20.0	19.4	97	80-120
4-Chlorotoluene	20.0	20.2	101	80-120
Cyclohexane	20.0	20.7	103	80-130
Cyclohexanone	100	89.3	89	10-180
1,2-Dibromo-3-chloropropane	20.0	18.3	91	70-120
Dibromochloromethane	20.0	19.3	97	70-120
1,2-Dibromoethane (EDB)	20.0	20.3	101	80-120
Dibromomethane	20.0	19.1	96	80-120
1,2-Dichlorobenzene	20.0	19.6	98	80-120
1,3-Dichlorobenzene	20.0	19.7	98	80-120
1,4-Dichlorobenzene	20.0	19.1	95	80-120
Dichlorodifluoromethane	20.0	20.9	104	50-150
1,1-Dichloroethane	20.0	20.4	102	75-125
1,2-Dichloroethane	20.0	20.2	101	75-120
1,2-Dichloroethene (Total)	40.0	41.3	103	80-120
1,1-Dichloroethene	20.0	21.1	105	80-120
cis-1,2-Dichloroethene	20.0	20.0	100	80-120
trans-1,2-Dichloroethene	20.0	21.3	106	80-120
1,2-Dichloropropane	20.0	19.8	99	80-125
1,3-Dichloropropane	20.0	19.0	95	80-120
2,2-Dichloropropane	20.0	20.5	102	60-130
1,1-Dichloropropene	20.0	20.2	101	80-125
cis-1,3-Dichloropropene	20.0	20.0	100	80-125
trans-1,3-Dichloropropene	20.0	19.8	99	75-120
Diethyl ether (Ethyl ether)	20.0	19.4	97	70-140
1,4-Dioxane (p-Dioxane)	100	122	122	10-180

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2950696LCS

Date Extracted: 08/03/2021 | Date Analyzed (1): 08/03/2021

Instrument: 60MSV8 | LCS Lot No: 45079

Lab File ID: 080321A.B\0803A_04LCS.D | SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Ethylbenzene	20.0	20.0	100	80-120
n-Heptane	20.0	20.9	105	10-180
Hexachloro-1,3-butadiene	20.0	20.0	100	65-135
n-Hexane	20.0	20.6	103	60-135
2-Hexanone	100	98.7	99	45-150
Isopropylbenzene (Cumene)	20.0	21.2	106	80-125
p-Isopropyltoluene	20.0	20.7	103	80-135
Methyl acetate	100	93.1	93	45-140
Methylcyclohexane	20.0	20.7	103	80-125
Methylene Chloride	20.0	18.2	91	75-120
1-Methylnaphthalene	20.0	20.9	105	40-160
2-Methylnaphthalene	20.0	20.9	104	55-150
4-Methyl-2-pentanone (MIBK)	100	88.2	88	65-140
Methyl-tert-butyl ether	20.0	19.3	96	65-130
Naphthalene	20.0	16.6	83	70-120
n-Propylbenzene	20.0	19.3	96	80-120
Styrene	20.0	20.2	101	80-120
1,1,1,2-Tetrachloroethane	20.0	19.4	97	80-120
1,1,2,2-Tetrachloroethane	20.0	18.1	91	75-125
Tetrachloroethene	20.0	21.4	107	80-120
Tetrahydrofuran	100	88.2	88	75-125
Toluene	20.0	19.9	100	80-120
1,2,3-Trichlorobenzene	20.0	17.8	89	75-125
1,2,4-Trichlorobenzene	20.0	18.6	93	75-120
1,1,1-Trichloroethane	20.0	20.5	103	80-120
1,1,2-Trichloroethane	20.0	18.9	94	80-120
Trichloroethene	20.0	19.8	99	80-120
Trichlorofluoromethane	20.0	23.3	116	80-130
1,2,3-Trichloropropane	20.0	19.1	95	80-125
1,2,3-Trimethylbenzene	20.0	20.5	103	80-125
1,2,4-Trimethylbenzene	20.0	19.8	99	80-125
1,3,5-Trimethylbenzene	20.0	19.5	98	80-125
Vinyl chloride	20.0	20.7	103	65-130
Xylene (Total)	60.0	59.3	99	80-120
m&p-Xylene	40.0	40.0	100	75-130
o-Xylene	20.0	19.4	97	75-130

Spike Recovery: 0 out of 83 outside limits.

10/13/2021 4:08

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947719LCS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVD
LCS Lot No: 44858
Lab File ID: 072821AGRO.B\0728A_06.D
SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
TPH-GRO	4000	3360	84	60-120

Spike Recovery: 0 out of 1 outside limits.

MSV - FORM III VOA-1

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947594MS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
Lab File ID: 072821A.B\0728A_18.D
Parent Sample ID: GB-07/7-9
SDG No.: 60375838

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	101	<1.1	57.7	57	25-130
1,1,1-Trichloroethane	101	<0.79	69.8	69	45-120
1,1,2,2-Tetrachloroethane	101	<1.1	1.7J	2	10-145
1,1,2-Trichloroethane	101	<0.67	39.1	39	25-130
1,1,2-Trichlorotrifluoroethane	101	<5.3	70.8	70	35-120
1,1-Dichloroethane	101	<0.41	73.2	72	40-120
1,1-Dichloroethene	101	<0.68	115	114	35-120
1,1-Dichloropropene	101	<0.95	70.4	70	40-125
1,2,3-Trichlorobenzene	101	<0.84	51.2	51	10-125
1,2,3-Trichloropropane	101	<2.3	79.4	79	25-135
1,2,3-Trimethylbenzene	101	<2.1	62.9	62	35-120
1,2,4-Trichlorobenzene	101	<0.84	49.9	49	10-125
1,2,4-Trimethylbenzene	101	<0.71	62.0	61	35-120
1,2-Dibromo-3-chloropropane	101	<1.9	37.0	37	10-145
1,2-Dibromoethane (EDB)	101	<0.57	80.5	80	30-140
1,2-Dichlorobenzene	101	<0.66	59.7	59	10-125
1,2-Dichloroethane	101	<0.42	74.9	74	35-120
1,2-Dichloroethene (Total)	202	<1.2	144	71	40-120
1,2-Dichloropropane	101	<1.0	72.5	72	35-120
1,3,5-Trimethylbenzene	101	<0.66	61.1	60	15-130
1,3-Dichlorobenzene	101	<0.76	59.2	59	10-125
1,3-Dichloropropane	101	<0.73	76.9	76	30-120
1,4-Dichlorobenzene	101	<0.86	59.0	58	10-125
2,2-Dichloropropane	101	<0.50	70.4	70	40-120
2-Butanone (MEK)	506	8.8J	513	100	20-145
2-Chlorotoluene	101	<0.77	62.2	61	15-125
2-Hexanone	506	<2.6	525	104	15-150
4-Chlorotoluene	101	<0.63	60.3	60	10-125
4-Methyl-2-pentanone (MIBK)	506	<3.2	480	95	30-140
Acetone	506	46.6	528	95	10-165
Acrolein	506	<79.9	488	96	10-200
Acrylonitrile	506	<3.4	312	62	10-145
Benzene	101	<0.52	69.6	69	35-120
Bromobenzene	101	<0.99	63.0	62	15-125
Bromochloromethane	101	<0.64	75.8	75	35-120
Bromodichloromethane	101	<0.64	49.1	49	30-130
Bromoform	101	<0.61	46.5	46	15-135
Bromomethane	101	<3.1	29.2	29	10-120
Carbon disulfide	101	5.2J	34.7	29	20-120
Carbon tetrachloride	101	<0.91	54.6	54	40-125
Chlorobenzene	101	<0.66	66.9	66	20-125
Chloroethane	101	<1.6	68.9	68	25-120
Chloroform	101	<0.52	76.8	76	40-125
Chloromethane	101	<0.84	49.2	49	10-120
Cyclohexanone	506	<13.4	458	91	35-120
Dibromochloromethane	101	<0.68	51.2	51	25-135
Dibromomethane	101	<0.63	77.8	77	30-125

MSV - FORM III VOA-2

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947594MS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
Lab File ID: 072821A.B\0728A_18.D
Parent Sample ID: GB-07/7-9
SDG No.: 60375838

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Diethyl ether (Ethyl ether)	101	<0.59	75.6	75	35-120
Ethylbenzene	101	<0.49	67.4	67	35-120
Hexachloro-1,3-butadiene	101	<0.90	50.2	50	10-125
Iodomethane	101	<1.6	27.6	27	30-120
Isopropylbenzene (Cumene)	101	<0.60	67.0	66	20-135
Methyl acetate	506	<1.1	<1.1	0	30-120
Methyl-tert-butyl ether	101	<0.51	78.9	78	35-140
Methylene Chloride	101	<2.9	66.4	65	10-135
Naphthalene	101	13.9	102	87	10-160
Styrene	101	<0.62	64.6	64	15-130
Tetrachloroethene	101	<0.44	82.9	82	30-125
Tetrahydrofuran	506	<0.83	462	91	35-120
Toluene	101	<0.37	68.5	68	35-120
Trichloroethene	101	<0.77	133	132	25-140
Trichlorofluoromethane	101	<0.65	65.5	65	35-120
Vinyl acetate	101	<0.60	31.5J	31	30-120
Vinyl chloride	101	<0.70	61.1	60	10-120
Xylene (Total)	303	<1.2	197	65	35-120
cis-1,2-Dichloroethene	101	<0.46	72.3	72	35-120
cis-1,3-Dichloropropene	101	<0.56	46.1	46	20-130
m&p-Xylene	202	<0.67	131	65	30-145
n-Butylbenzene	101	<0.69	58.0	57	10-130
n-Heptane	101	<4.8	57.6	57	35-120
n-Hexane	101	<0.73	59.0	58	10-150
n-Propylbenzene	101	<0.85	61.8	61	20-125
o-Xylene	101	<0.39	65.7	65	30-145
p-Isopropyltoluene	101	1.4J	62.8	61	10-135
sec-Butylbenzene	101	<0.77	60.3	60	15-135
tert-Butylbenzene	101	<0.93	62.4	62	15-135
trans-1,2-Dichloroethene	101	<0.72	71.7	71	40-120
trans-1,3-Dichloropropene	101	<0.48	50.6	50	20-135

Spike Recovery: 3 out of 78 outside limits.

10/13/2021 4:08

MSV - FORM III VOA-3

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSVC Matrix Spike Duplicate - Sample No: 2947595MSD

Lab File ID (2): 072821A.B\0728A_19.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	99.9	71.1	71	21	0-35	25-130
1,1,1-Trichloroethane	99.9	80.8	81	15	0-35	45-120
1,1,2,2-Tetrachloroethane	99.9	<1.0	0		0-35	10-145
1,1,2-Trichloroethane	99.9	47.8	48	20	0-35	25-130
1,1,2-Trichlorotrifluoroethane	99.9	83.0	83	16	0-35	35-120
1,1-Dichloroethane	99.9	82.3	82	12	0-35	40-120
1,1-Dichloroethene	99.9	128	128	11	0-35	35-120
1,1-Dichloropropene	99.9	81.0	81	14	0-35	40-125
1,2,3-Trichlorobenzene	99.9	63.5	64	21	0-50	10-125
1,2,3-Trichloropropane	99.9	91.8	92	15	0-35	25-135
1,2,3-Trimethylbenzene	99.9	72.6	72	14	0-35	35-120
1,2,4-Trichlorobenzene	99.9	60.2	60	19	0-50	10-125
1,2,4-Trimethylbenzene	99.9	70.1	70	12	0-35	35-120
1,2-Dibromo-3-chloropropane	99.9	48.9	49	28	0-35	10-145
1,2-Dibromoethane (EDB)	99.9	94.1	94	15	0-35	30-140
1,2-Dichlorobenzene	99.9	69.6	70	15	0-35	10-125
1,2-Dichloroethane	99.9	85.8	86	14	0-35	35-120
1,2-Dichloroethene (Total)	199	164	82	13	0-35	40-120
1,2-Dichloropropane	99.9	82.4	83	13	0-35	35-120
1,3,5-Trimethylbenzene	99.9	71.3	71	15	0-35	15-130
1,3-Dichlorobenzene	99.9	68.9	69	15	0-37	10-125
1,3-Dichloropropane	99.9	89.7	90	15	0-35	30-120
1,4-Dichlorobenzene	99.9	68.8	69	15	0-35	10-125
2,2-Dichloropropane	99.9	81.3	81	14	0-35	40-120
2-Butanone (MEK)	499	576	114	11	0-35	20-145
2-Chlorotoluene	99.9	72.0	72	15	0-35	15-125
2-Hexanone	499	601	120	13	0-35	15-150
4-Chlorotoluene	99.9	71.5	72	17	0-35	10-125
4-Methyl-2-pentanone (MIBK)	499	550	110	14	0-35	30-140
Acetone	499	549	101	4	0-35	10-165
Acrolein	499	542	109	11	0-60	10-200
Acrylonitrile	499	385	77	21	0-35	10-145
Benzene	99.9	79.2	79	13	0-35	35-120
Bromobenzene	99.9	73.1	73	15	0-35	15-125
Bromochloromethane	99.9	86.8	87	14	0-35	35-120
Bromodichloromethane	99.9	63.2	63	25	0-35	30-130
Bromoform	99.9	62.5	63	29	0-35	15-135
Bromomethane	99.9	36.0	36	21	0-35	10-120
Carbon disulfide	99.9	47.4	42	31	0-35	20-120
Carbon tetrachloride	99.9	71.9	72	27	0-35	40-125
Chlorobenzene	99.9	76.6	77	13	0-35	20-125
Chloroethane	99.9	76.5	77	10	0-35	25-120
Chloroform	99.9	87.2	87	13	0-35	40-125
Chloromethane	99.9	56.1	56	13	0-35	10-120
Cyclohexanone	499	534	107	15	0-35	35-120
Dibromochloromethane	99.9	67.2	67	27	0-35	25-135
Dibromomethane	99.9	92.0	92	17	0-35	30-125
Diethyl ether (Ethyl ether)	99.9	86.2	86	13	0-35	35-120
Ethylbenzene	99.9	76.4	77	13	0-35	35-120

MSV - FORM III VOA-4

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSVC Matrix Spike Duplicate - Sample No: 2947595MSD

Lab File ID (2): 072821A.B\0728A_19.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Hexachloro-1,3-butadiene	99.9	55.4	56	10	0-45	10-125
Iodomethane	99.9	40.2	40	37	0-35	30-120
Isopropylbenzene (Cumene)	99.9	75.8	76	12	0-35	20-135
Methyl acetate	499	<1.1	0		0-35	30-120
Methyl-tert-butyl ether	99.9	90.5	91	14	0-35	35-140
Methylene Chloride	99.9	75.9	76	13	0-35	10-135
Naphthalene	99.9	108	94	6	0-35	10-160
Styrene	99.9	75.3	75	15	0-35	15-130
Tetrachloroethene	99.9	85.6	86	3	0-35	30-125
Tetrahydrofuran	499	518	104	11	0-35	35-120
Toluene	99.9	77.6	78	12	0-35	35-120
Trichloroethene	99.9	153	154	14	0-35	25-140
Trichlorofluoromethane	99.9	78.6	79	18	0-35	35-120
Vinyl acetate	99.9	36.2J	36		0-35	30-120
Vinyl chloride	99.9	67.5	68	10	0-35	10-120
Xylene (Total)	299	228	76	15	0-35	35-120
cis-1,2-Dichloroethene	99.9	82.8	83	13	0-35	35-120
cis-1,3-Dichloropropene	99.9	58.6	59	24	0-35	20-130
m&p-Xylene	199	153	76	15	0-35	30-145
n-Butylbenzene	99.9	64.2	64	10	0-35	10-130
n-Heptane	99.9	62.7	63	8	0-35	35-120
n-Hexane	99.9	65.9	66	11	0-35	10-150
n-Propylbenzene	99.9	71.2	71	14	0-35	20-125
o-Xylene	99.9	75.0	75	13	0-35	30-145
p-Isopropyltoluene	99.9	68.8	68	9	0-35	10-135
sec-Butylbenzene	99.9	66.0	66	9	0-35	15-135
tert-Butylbenzene	99.9	71.9	72	14	0-35	15-135
trans-1,2-Dichloroethene	99.9	81.6	82	13	0-35	40-120
trans-1,3-Dichloropropene	99.9	63.6	64	23	0-35	20-135

RPD: 1 out of 75 outside limits.

Spike Recovery: 4 out of 78 outside limits.

10/13/2021 4:08

SAMPLE NO.

2947592BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2947592

Lab File ID: 072821A.B\0728A_07.D Date Analyzed: 07/28/2021 Time:09:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
GB-14/0-2	60375838010	072821A.B\0728A_14.D	07/28/2021 10:58
GB-14/3-5	60375838011	072821A.B\0728A_15.D	07/28/2021 11:14
GB-07/2.5-3.5	60375838012	072821A.B\0728A_16.D	07/28/2021 11:29
GB-07/7-9	60375838013	072821A.B\0728A_17.D	07/28/2021 11:45
2947594MS	2947594	072821A.B\0728A_18.D	07/28/2021 12:01
2947595MSD	2947595	072821A.B\0728A_19.D	07/28/2021 12:16

SAMPLE NO.

2947600BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2947600

Lab File ID: 072821AGRO.B\0728A_07.D Date Analyzed: 07/28/2021 Time:09:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947601LCS	2947601	072821A.B\0728A_03.D	07/28/2021 08:06
2947601LCS	2947601	072821AGRO.B\0728A_05.D	07/28/2021 08:38
GB-14/0-2	60375838010	072821AGRO.B\0728A_14.D	07/28/2021 10:58
GB-14/3-5	60375838011	072821AGRO.B\0728A_15.D	07/28/2021 11:14
GB-07/2.5-3.5	60375838012	072821AGRO.B\0728A_16.D	07/28/2021 11:29
GB-07/7-9	60375838013	072821AGRO.B\0728A_17.D	07/28/2021 11:45

SAMPLE NO.

2947718BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVD Matrix: Water Lab Sample ID: 2947718

Lab File ID (1): 072821A.B\0728A_08.D Date Analyzed (1): 07/28/2021 Time (1):11:28

Lab File ID (2): 072821AGRO.B\0728A_08.D Date Analyzed (2): 07/28/2021 Time (2):11:28

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947719LCS	2947719	072821A.B\0728A_04.D	07/28/2021 10:24
2947719LCS	2947719	072821AGRO.B\0728A_06.D	07/28/2021 10:56
RB-03	60375838027	072821A.B\0728A_15.D	07/28/2021 13:20
RB-03	60375838027	072821AGRO.B\0728A_15.D	07/28/2021 13:20
RB-04	60375838028	072821A.B\0728A_16.D	07/28/2021 13:36
RB-04	60375838028	072821AGRO.B\0728A_16.D	07/28/2021 13:36
RB-05	60375838029	072821A.B\0728A_17.D	07/28/2021 13:52
RB-05	60375838029	072821AGRO.B\0728A_17.D	07/28/2021 13:52

SAMPLE NO.

2950695BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSV8 Matrix: Water Lab Sample ID: 2950695

Lab File ID: 080321A.B\0803A_06BLK.D Date Analyzed: 08/03/2021 Time: 07:53

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2950696LCS	2950696	080321A.B\0803A_04LCS.D	08/03/2021 07:25
TB-3	60375838026	080321A.B\0803A_08.D	08/03/2021 08:21
TB-4	60375838030	080321A.B\0803A_09.D	08/03/2021 08:35
RB-03	60375838027	080321A.B\0803A_18.D	08/03/2021 10:43
RB-04	60375838028	080321A.B\0803A_19.D	08/03/2021 10:57
RB-05	60375838029	080321A.B\0803A_20.D	08/03/2021 11:11

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Lab File ID: 080221A.B\0802A_11BFB.D BFB Injection Date 08/02/2021

Instrument ID: 60MSV8 BFB Injection Time 09:16

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	18.59	
75	30.00 - 66.00% of mass 95	42.90	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.59	
173	Less than 2.00% of mass 174	1.01	(1.03)[1]
174	50.00 - 120.00% of mass 95	98.16	
175	4.00 - 9.00% of mass 174	7.38	(7.52)[1]
176	93.00 - 101.00% of mass 174	93.52	(95.28)[1]
177	5.00 - 9.00% of mass 176	6.07	(6.49)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19754653CAL1	19754653CAL1	080221A.B\0802A_12.D	08/02/2021	09:31
19754651CAL2	19754651CAL2	080221A.B\0802A_13.D	08/02/2021	09:45
19754658CAL3	19754658CAL3	080221A.B\0802A_14.D	08/02/2021	09:59
19754657CAL4	19754657CAL4	080221A.B\0802A_15.D	08/02/2021	10:13
19754659CAL5	19754659CAL5	080221A.B\0802A_16.D	08/02/2021	10:28
19754655CAL6	19754655CAL6	080221A.B\0802A_17.D	08/02/2021	10:42
19754656CAL7	19754656CAL7	080221A.B\0802A_18.D	08/02/2021	10:56
19754654CAL8	19754654CAL8	080221A.B\0802A_19.D	08/02/2021	11:10
19754652ICV	19754652ICV	080221A.B\0802A_22.D	08/02/2021	11:53

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Lab File ID: 080321A.B\0803A_01.D BFB Injection Date 08/03/2021

Instrument ID: 60MSV8 BFB Injection Time 06:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	19.82	
75	30.00 - 66.00% of mass 95	42.30	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.81	
173	Less than 2.00% of mass 174	1.15	(1.13)[1]
174	50.00 - 120.00% of mass 95	101.53	
175	4.00 - 9.00% of mass 174	7.59	(7.48)[1]
176	93.00 - 101.00% of mass 174	96.53	(95.08)[1]
177	5.00 - 9.00% of mass 176	6.10	(6.31)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19756796CCV	19756796CCV	080321A.B\0803A_03CCV.D	08/03/2021	07:10
2950696LCS	2950696LCS	080321A.B\0803A_04LCS.D	08/03/2021	07:25
2950695BLANK	2950695BLANK	080321A.B\0803A_06BLK.D	08/03/2021	07:53
TB-3	60375838026	080321A.B\0803A_08.D	08/03/2021	08:21
TB-4	60375838030	080321A.B\0803A_09.D	08/03/2021	08:35
RB-03	60375838027	080321A.B\0803A_18.D	08/03/2021	10:43
RB-04	60375838028	080321A.B\0803A_19.D	08/03/2021	10:57
RB-05	60375838029	080321A.B\0803A_20.D	08/03/2021	11:11

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Lab File ID: 071621B.B\0716B_01.D BFB Injection Date 07/16/2021

Instrument ID: 60MSVC BFB Injection Time 10:47

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.55	
75	30.00 - 66.00% of mass 95	44.16	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	7.08	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	102.97	
175	4.00 - 9.00% of mass 174	7.81	(7.58)[1]
176	93.00 - 101.00% of mass 174	100.39	(97.49)[1]
177	5.00 - 9.00% of mass 176	6.53	(6.50)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19684413CAL1	19684413CAL1	071621B.B\0716B_02.D	07/16/2021	11:02
19684462CAL2	19684462CAL2	071621B.B\0716B_03.D	07/16/2021	11:18
19684463CAL3	19684463CAL3	071621B.B\0716B_04.D	07/16/2021	11:33
19684464CAL4	19684464CAL4	071621B.B\0716B_05.D	07/16/2021	11:49
19684465CAL5	19684465CAL5	071621B.B\0716B_06.D	07/16/2021	12:05
19684466CAL6	19684466CAL6	071621B.B\0716B_07.D	07/16/2021	12:20
19684467CAL7	19684467CAL7	071621B.B\0716B_08.D	07/16/2021	12:36
19684415ICV	19684415ICV	071621B.B\0716B_09.D	07/16/2021	12:51

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Lab File ID: 072721A.B\0727A_01.D BFB Injection Date 07/27/2021

Instrument ID: 60MSVC BFB Injection Time 07:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.32	
75	30.00 - 66.00% of mass 95	43.89	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.89	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	108.19	
175	4.00 - 9.00% of mass 174	8.30	(7.67)[1]
176	93.00 - 101.00% of mass 174	105.44	(97.46)[1]
177	5.00 - 9.00% of mass 176	6.94	(6.58)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19727087CCV	19727087CCV	072721A.B\0727A_02.D	07/27/2021	08:11
19894442CAL1	19894442CAL1	072721AGRO.B\0727A_04.D	07/27/2021	08:42
19894441CAL2	19894441CAL2	072721AGRO.B\0727A_05.D	07/27/2021	08:57
19894443CAL3	19894443CAL3	072721AGRO.B\0727A_06.D	07/27/2021	09:13
19894440CAL4	19894440CAL4	072721AGRO.B\0727A_07.D	07/27/2021	09:29
19894444CAL5	19894444CAL5	072721AGRO.B\0727A_08.D	07/27/2021	09:44
19894439CAL6	19894439CAL6	072721AGRO.B\0727A_09.D	07/27/2021	10:00
19895948ICV	19895948ICV	072721AGRO.B\0727A_10.D	07/27/2021	10:16

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 072821A.B\0728A_01.D BFB Injection Date 07/28/2021
Instrument ID: 60MSVC BFB Injection Time 07:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.07	
75	30.00 - 66.00% of mass 95	44.85	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.86	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	107.72	
175	4.00 - 9.00% of mass 174	8.23	(7.64)[1]
176	93.00 - 101.00% of mass 174	104.45	(96.96)[1]
177	5.00 - 9.00% of mass 176	7.10	(6.79)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19752271CCV	19752271CCV	072821A.B\0728A_02.D	07/28/2021	07:51
2947601LCS	2947601LCS	072821A.B\0728A_03.D	07/28/2021	08:06
2947601LCS	2947601LCS	072821AGRO.B\0728A_05.D	07/28/2021	08:38
2947600BLANK	2947600BLANK	072821AGRO.B\0728A_07.D	07/28/2021	09:09
2947592BLANK	2947592BLANK	072821A.B\0728A_07.D	07/28/2021	09:09
GB-14/0-2	60375838010	072821A.B\0728A_14.D	07/28/2021	10:58
GB-14/0-2	60375838010	072821AGRO.B\0728A_14.D	07/28/2021	10:58
GB-14/3-5	60375838011	072821A.B\0728A_15.D	07/28/2021	11:14
GB-14/3-5	60375838011	072821AGRO.B\0728A_15.D	07/28/2021	11:14
GB-07/2.5-3.5	60375838012	072821AGRO.B\0728A_16.D	07/28/2021	11:29
GB-07/2.5-3.5	60375838012	072821A.B\0728A_16.D	07/28/2021	11:29
GB-07/7-9	60375838013	072821A.B\0728A_17.D	07/28/2021	11:45
GB-07/7-9	60375838013	072821AGRO.B\0728A_17.D	07/28/2021	11:45
2947594MS	2947594MS	072821A.B\0728A_18.D	07/28/2021	12:01
2947595MSD	2947595MSD	072821A.B\0728A_19.D	07/28/2021	12:16

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 072621B.B\0726B_01.D BFB Injection Date 07/26/2021
Instrument ID: 60MSVD BFB Injection Time 20:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	35.41	
75	30.00 - 66.00% of mass 95	49.67	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.64	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	95.23	
175	4.00 - 9.00% of mass 174	7.67	(8.05)[1]
176	93.00 - 101.00% of mass 174	90.43	(94.96)[1]
177	5.00 - 9.00% of mass 176	6.43	(7.12)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19725764CAL1	19725764CAL1	072621BGRO.B\0726B_06.D	07/26/2021	21:45
19725769CAL2	19725769CAL2	072621BGRO.B\0726B_07.D	07/26/2021	22:01
19725765CAL3	19725765CAL3	072621BGRO.B\0726B_08.D	07/26/2021	22:17
19725766CAL4	19725766CAL4	072621BGRO.B\0726B_09.D	07/26/2021	22:33
19725767CAL5	19725767CAL5	072621BGRO.B\0726B_10.D	07/26/2021	22:49
19725770CAL6	19725770CAL6	072621BGRO.B\0726B_11.D	07/26/2021	23:05
19725768ICV	19725768ICV	072621BGRO.B\0726B_13.D	07/26/2021	23:36

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 072821A.B\0728A_01.D BFB Injection Date 07/28/2021
Instrument ID: 60MSVD BFB Injection Time 09:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	35.12	
75	30.00 - 66.00% of mass 95	49.79	
95	100.00 - 100.00% of mass 95	100.00	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.32	
173	Less than 2.00% of mass 174	0.52	(0.56)[1]
174	50.00 - 120.00% of mass 95	93.43	
175	4.00 - 9.00% of mass 174	7.47	(7.99)[1]
176	93.00 - 101.00% of mass 174	89.74	(96.05)[1]
177	5.00 - 9.00% of mass 176	6.61	(7.36)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
20118209CCV	20118209CCV	072821A.B\0728A_03.D	07/28/2021	10:08
2947719LCS	2947719LCS	072821A.B\0728A_04.D	07/28/2021	10:24
2947719LCS	2947719LCS	072821AGRO.B\0728A_06.D	07/28/2021	10:56
2947718BLANK	2947718BLANK	072821A.B\0728A_08.D	07/28/2021	11:28
2947718BLANK	2947718BLANK	072821AGRO.B\0728A_08.D	07/28/2021	11:28
RB-03	60375838027	072821AGRO.B\0728A_15.D	07/28/2021	13:20
RB-03	60375838027	072821A.B\0728A_15.D	07/28/2021	13:20
RB-04	60375838028	072821A.B\0728A_16.D	07/28/2021	13:36
RB-04	60375838028	072821AGRO.B\0728A_16.D	07/28/2021	13:36
RB-05	60375838029	072821AGRO.B\0728A_17.D	07/28/2021	13:52
RB-05	60375838029	072821A.B\0728A_17.D	07/28/2021	13:52

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 19756796CCV Date Analyzed: 08/03/2021

Instrument ID: 60MSV8 GC Column: Col 1 Time Analyzed: 07:10

Lab File ID: 080321A.B\0803A_03CCV.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		298223	6.844	285885	5.284	893696	3.31
UPPER LIMIT		596446	7.344	571770	5.784	1787392	3.81
LOWER LIMIT		149111.5	6.344	142942.5	4.784	446848	2.81
LAB SAMPLE ID	SAMPLE NO.						
2950695	2950695BLANK	298812	6.844	287441	5.284	906286	3.307
2950696	2950696LCS	307800	6.844	289295	5.284	910116	3.307
60375838026	TB-3	301358	6.844	293038	5.281	925308	3.307
60375838027	RB-03	295715	6.844	284333	5.284	890951	3.31
60375838028	RB-04	298209	6.844	284738	5.284	885205	3.31
60375838029	RB-05	292525	6.844	283337	5.284	904349	3.31
60375838030	TB-4	306966	6.844	293874	5.284	923032	3.307

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 19752271CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSVC GC Column: Col 1 Time Analyzed: 07:51

Lab File ID: 072821A.B\0728A_02.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		172061	7.398	134698	5.82	318405	3.802
UPPER LIMIT		344122	7.898	269396	6.32	636810	4.302
LOWER LIMIT		86030.5	6.898	67349	5.32	159202.5	3.302
LAB SAMPLE ID	SAMPLE NO.						
2947592	2947592BLANK	161112	7.399	137020	5.821	316243	3.803
2947594	2947594MS	162791	7.398	128754	5.818	310716	3.802
2947595	2947595MSD	164796	7.399	128943	5.821	306458	3.803
2947601	2947601LCS	175672	7.399	135870	5.821	325275	3.802
60375838010	GB-14/0-2	152582	7.399	129970	5.821	304480	3.8
60375838011	GB-14/3-5	158648	7.396	132083	5.821	316079	3.803
60375838012	GB-07/2.5-3.5	151256	7.399	128283	5.821	299467	3.803
60375838013	GB-07/7-9	163975	7.398	133306	5.82	322336	3.802

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 20118209CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSVD GC Column: Col 1 Time Analyzed: 10:08

Lab File ID: 072821A.B\0728A_03.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		55402	7.804	51296	6.209	119017	4.202
UPPER LIMIT		110804	8.304	102592	6.709	238034	4.702
LOWER LIMIT		27701	7.304	25648	5.709	59508.5	3.702
LAB SAMPLE ID	SAMPLE NO.						
2947718	2947718BLANK	54126	7.807	51522	6.214	119695	4.205
2947719	2947719LCS	59897	7.807	54263	6.211	128434	4.205
60375838027	RB-03	54256	7.804	52472	6.214	123661	4.202
60375838028	RB-04	54626	7.804	51031	6.211	122328	4.202
60375838029	RB-05	51695	7.801	48625	6.214	115136	4.205

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-3

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 08:21 Lab Sample ID: 60375838026

Date Analyzed: 08/03/2021 08:21 Lab File ID: 080321A.B\0803A_08.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	<0.22	U
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-3

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 08:21 Lab Sample ID: 60375838026

Date Analyzed: 08/03/2021 08:21 Lab File ID: 080321A.B\0803A_08.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U

SAMPLE NO.

TB-3

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 08:21 Lab Sample ID: 60375838026

Date Analyzed: 08/03/2021 08:21 Lab File ID: 080321A.B\0803A_08.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	<0.21	U
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-4

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 08:35 Lab Sample ID: 60375838030

Date Analyzed: 08/03/2021 08:35 Lab File ID: 080321A.B\0803A_09.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	<0.22	U
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-4

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 08:35 Lab Sample ID: 60375838030

Date Analyzed: 08/03/2021 08:35 Lab File ID: 080321A.B\0803A_09.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U

SAMPLE NO.

TB-4

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 08:35 Lab Sample ID: 60375838030

Date Analyzed: 08/03/2021 08:35 Lab File ID: 080321A.B\0803A_09.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	<0.21	U
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-03

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Water SDG No.: 60375838
Date Extracted: 08/03/2021 10:43
Lab Sample ID: 60375838027
Date Analyzed: 08/03/2021 10:43
Lab File ID: 080321A.B\0803A_18.D
Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1
Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	0.67	J
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-03

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 10:43 Lab Sample ID: 60375838027

Date Analyzed: 08/03/2021 10:43 Lab File ID: 080321A.B\0803A_18.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U

SAMPLE NO.

RB-03

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 10:43 Lab Sample ID: 60375838027

Date Analyzed: 08/03/2021 10:43 Lab File ID: 080321A.B\0803A_18.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	<0.21	U
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-04

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 10:57 Lab Sample ID: 60375838028

Date Analyzed: 08/03/2021 10:57 Lab File ID: 080321A.B\0803A_19.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	4.8	J
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	0.44	J
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-04

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 10:57 Lab Sample ID: 60375838028

Date Analyzed: 08/03/2021 10:57 Lab File ID: 080321A.B\0803A_19.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U

SAMPLE NO.

RB-04

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 10:57 Lab Sample ID: 60375838028

Date Analyzed: 08/03/2021 10:57 Lab File ID: 080321A.B\0803A_19.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	<0.21	U
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

RB-05

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 11:11 Lab Sample ID: 60375838029

Date Analyzed: 08/03/2021 11:11 Lab File ID: 080321A.B\0803A_20.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	0.52	J
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-05

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 11:11 Lab Sample ID: 60375838029

Date Analyzed: 08/03/2021 11:11 Lab File ID: 080321A.B\0803A_20.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U

SAMPLE NO.

RB-05

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 11:11 Lab Sample ID: 60375838029

Date Analyzed: 08/03/2021 11:11 Lab File ID: 080321A.B\0803A_20.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	<0.21	U
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

GB-14/0-2

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838010

Date Analyzed: 07/28/2021 10:58 Lab File ID: 072821A.B\0728A_14.D

Initial wt/vol: 6.29 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	46.6	
107-02-8	Acrolein	<73.7	U
107-13-1	Acrylonitrile	<3.1	U
71-43-2	Benzene	<0.48	U
108-86-1	Bromobenzene	<0.91	U
74-97-5	Bromochloromethane	<0.59	U
75-27-4	Bromodichloromethane	<0.59	U
75-25-2	Bromoform	<0.56	U
74-83-9	Bromomethane	<2.9	U
78-93-3	2-Butanone (MEK)	8.4	J
104-51-8	n-Butylbenzene	<0.63	U
135-98-8	sec-Butylbenzene	<0.71	U
98-06-6	tert-Butylbenzene	<0.86	U
75-15-0	Carbon disulfide	<0.63	U
56-23-5	Carbon tetrachloride	<0.84	U
108-90-7	Chlorobenzene	<0.61	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.48	U
74-87-3	Chloromethane	<0.78	U
95-49-8	2-Chlorotoluene	<0.71	U
106-43-4	4-Chlorotoluene	<0.58	U
108-94-1	Cyclohexanone	<12.4	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.63	U
106-93-4	1,2-Dibromoethane (EDB)	<0.52	U
74-95-3	Dibromomethane	<0.58	U
95-50-1	1,2-Dichlorobenzene	<0.61	U
541-73-1	1,3-Dichlorobenzene	<0.70	U
106-46-7	1,4-Dichlorobenzene	<0.79	U
75-34-3	1,1-Dichloroethane	<0.38	U
107-06-2	1,2-Dichloroethane	<0.39	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.62	U
156-59-2	cis-1,2-Dichloroethene	<0.42	U
156-60-5	trans-1,2-Dichloroethene	<0.66	U
78-87-5	1,2-Dichloropropane	<0.95	U
142-28-9	1,3-Dichloropropane	<0.67	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

GB-14/0-2

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838010

Date Analyzed: 07/28/2021 10:58 Lab File ID: 072821A.B\0728A_14.D

Initial wt/vol: 6.29 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.46	U
563-58-6	1,1-Dichloropropene	<0.88	U
10061-01-5	cis-1,3-Dichloropropene	<0.52	U
10061-02-6	trans-1,3-Dichloropropene	<0.45	U
60-29-7	Diethyl ether (Ethyl ether)	<0.55	U
100-41-4	Ethylbenzene	<0.45	U
142-82-5	n-Heptane	<4.4	U
87-68-3	Hexachloro-1,3-butadiene	<0.83	U
110-54-3	n-Hexane	<0.67	U
591-78-6	2-Hexanone	<2.4	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.56	U
99-87-6	p-Isopropyltoluene	<0.67	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.0	U
1634-04-4	Methyl-tert-butyl ether	<0.47	U
91-20-3	Naphthalene	<0.80	U
103-65-1	n-Propylbenzene	<0.78	U
100-42-5	Styrene	<0.57	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.99	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.97	U
127-18-4	Tetrachloroethene	<0.40	U
109-99-9	Tetrahydrofuran	<0.76	U
108-88-3	Toluene	<0.34	U
87-61-6	1,2,3-Trichlorobenzene	<0.78	U
120-82-1	1,2,4-Trichlorobenzene	<0.78	U
71-55-6	1,1,1-Trichloroethane	<0.73	U
79-00-5	1,1,2-Trichloroethane	<0.61	U
79-01-6	Trichloroethene	<0.71	U
75-69-4	Trichlorofluoromethane	<0.60	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.9	U
526-73-8	1,2,3-Trimethylbenzene	<1.9	U
95-63-6	1,2,4-Trimethylbenzene	<0.65	U
108-67-8	1,3,5-Trimethylbenzene	<0.61	U
108-05-4	Vinyl acetate	<0.55	U

SAMPLE NO.

GB-14/0-2

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838010

Date Analyzed: 07/28/2021 10:58 Lab File ID: 072821A.B\0728A_14.D

Initial wt/vol: 6.29 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.65	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.62	U
95-47-6	o-Xylene	<0.36	U

SAMPLE NO.

GB-14/0-2

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838010

Date Analyzed: 07/28/2021 10:58 Lab File ID: 072821AGRO.B\0728A_14.D

Initial wt/vol: 6.29 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.053	U

SAMPLE NO.

GB-14/3-5

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838011

Date Analyzed: 07/28/2021 11:14 Lab File ID: 072821AGRO.B\0728A_15.D

Initial wt/vol: 6.31 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.054	U

SAMPLE NO.

GB-14/3-5

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838011

Date Analyzed: 07/28/2021 11:14 Lab File ID: 072821A.B\0728A_15.D

Initial wt/vol: 6.31 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<15.9	U
107-02-8	Acrolein	<74.2	U
107-13-1	Acrylonitrile	<3.1	U
71-43-2	Benzene	<0.48	U
108-86-1	Bromobenzene	<0.92	U
74-97-5	Bromochloromethane	<0.59	U
75-27-4	Bromodichloromethane	<0.59	U
75-25-2	Bromoform	<0.56	U
74-83-9	Bromomethane	<2.9	U
78-93-3	2-Butanone (MEK)	<3.3	U
104-51-8	n-Butylbenzene	<0.64	U
135-98-8	sec-Butylbenzene	<0.72	U
98-06-6	tert-Butylbenzene	<0.87	U
75-15-0	Carbon disulfide	<0.63	U
56-23-5	Carbon tetrachloride	<0.84	U
108-90-7	Chlorobenzene	<0.62	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.48	U
74-87-3	Chloromethane	<0.78	U
95-49-8	2-Chlorotoluene	<0.71	U
106-43-4	4-Chlorotoluene	<0.59	U
108-94-1	Cyclohexanone	<12.5	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.63	U
106-93-4	1,2-Dibromoethane (EDB)	<0.52	U
74-95-3	Dibromomethane	<0.59	U
95-50-1	1,2-Dichlorobenzene	<0.61	U
541-73-1	1,3-Dichlorobenzene	<0.71	U
106-46-7	1,4-Dichlorobenzene	<0.79	U
75-34-3	1,1-Dichloroethane	<0.38	U
107-06-2	1,2-Dichloroethane	<0.39	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.63	U
156-59-2	cis-1,2-Dichloroethene	<0.42	U
156-60-5	trans-1,2-Dichloroethene	<0.67	U
78-87-5	1,2-Dichloropropane	<0.96	U
142-28-9	1,3-Dichloropropane	<0.68	U

SAMPLE NO.

GB-14/3-5

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838011

Date Analyzed: 07/28/2021 11:14 Lab File ID: 072821A.B\0728A_15.D

Initial wt/vol: 6.31 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.47	U
563-58-6	1,1-Dichloropropene	<0.88	U
10061-01-5	cis-1,3-Dichloropropene	<0.52	U
10061-02-6	trans-1,3-Dichloropropene	<0.45	U
60-29-7	Diethyl ether (Ethyl ether)	<0.55	U
100-41-4	Ethylbenzene	<0.45	U
142-82-5	n-Heptane	<4.4	U
87-68-3	Hexachloro-1,3-butadiene	<0.83	U
110-54-3	n-Hexane	<0.68	U
591-78-6	2-Hexanone	<2.4	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.56	U
99-87-6	p-Isopropyltoluene	<0.67	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.0	U
1634-04-4	Methyl-tert-butyl ether	<0.47	U
91-20-3	Naphthalene	<0.81	U
103-65-1	n-Propylbenzene	<0.79	U
100-42-5	Styrene	<0.58	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.98	U
127-18-4	Tetrachloroethene	<0.41	U
109-99-9	Tetrahydrofuran	<0.77	U
108-88-3	Toluene	<0.35	U
87-61-6	1,2,3-Trichlorobenzene	<0.78	U
120-82-1	1,2,4-Trichlorobenzene	<0.78	U
71-55-6	1,1,1-Trichloroethane	<0.73	U
79-00-5	1,1,2-Trichloroethane	<0.62	U
79-01-6	Trichloroethene	<0.71	U
75-69-4	Trichlorofluoromethane	<0.60	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.9	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.66	U
108-67-8	1,3,5-Trimethylbenzene	<0.62	U
108-05-4	Vinyl acetate	<0.55	U

SAMPLE NO.

GB-14/3-5

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838011

Date Analyzed: 07/28/2021 11:14 Lab File ID: 072821A.B\0728A_15.D

Initial wt/vol: 6.31 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.65	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.62	U
95-47-6	o-Xylene	<0.37	U

SAMPLE NO.

GB-07/2.5-3.5

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838012

Date Analyzed: 07/28/2021 11:29 Lab File ID: 072821AGRO.B\0728A_16.D

Initial wt/vol: 7.04 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 20.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.049	U

SAMPLE NO.

GB-07/2.5-3.5

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 | Matrix: Solid | SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 60375838012

Date Analyzed: 07/28/2021 11:29 | Lab File ID: 072821A.B\0728A_16.D

Initial wt/vol: 7.04 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 20.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<14.6	U
107-02-8	Acrolein	<67.9	U
107-13-1	Acrylonitrile	<2.8	U
71-43-2	Benzene	<0.44	U
108-86-1	Bromobenzene	<0.84	U
74-97-5	Bromochloromethane	<0.54	U
75-27-4	Bromodichloromethane	<0.54	U
75-25-2	Bromoform	<0.52	U
74-83-9	Bromomethane	<2.6	U
78-93-3	2-Butanone (MEK)	<3.1	U
104-51-8	n-Butylbenzene	<0.58	U
135-98-8	sec-Butylbenzene	<0.66	U
98-06-6	tert-Butylbenzene	<0.79	U
75-15-0	Carbon disulfide	<0.58	U
56-23-5	Carbon tetrachloride	<0.77	U
108-90-7	Chlorobenzene	<0.56	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<0.44	U
74-87-3	Chloromethane	<0.72	U
95-49-8	2-Chlorotoluene	<0.65	U
106-43-4	4-Chlorotoluene	<0.54	U
108-94-1	Cyclohexanone	<11.4	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.6	U
124-48-1	Dibromochloromethane	<0.58	U
106-93-4	1,2-Dibromoethane (EDB)	<0.48	U
74-95-3	Dibromomethane	<0.54	U
95-50-1	1,2-Dichlorobenzene	<0.56	U
541-73-1	1,3-Dichlorobenzene	<0.65	U
106-46-7	1,4-Dichlorobenzene	<0.73	U
75-34-3	1,1-Dichloroethane	<0.35	U
107-06-2	1,2-Dichloroethane	<0.36	U
540-59-0	1,2-Dichloroethene (Total)	<1.0	U
75-35-4	1,1-Dichloroethene	<0.57	U
156-59-2	cis-1,2-Dichloroethene	<0.39	U
156-60-5	trans-1,2-Dichloroethene	<0.61	U
78-87-5	1,2-Dichloropropane	<0.88	U
142-28-9	1,3-Dichloropropane	<0.62	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

GB-07/2.5-3.5

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838012

Date Analyzed: 07/28/2021 11:29 Lab File ID: 072821A.B\0728A_16.D

Initial wt/vol: 7.04 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 20.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.43	U
563-58-6	1,1-Dichloropropene	<0.81	U
10061-01-5	cis-1,3-Dichloropropene	<0.48	U
10061-02-6	trans-1,3-Dichloropropene	<0.41	U
60-29-7	Diethyl ether (Ethyl ether)	<0.50	U
100-41-4	Ethylbenzene	<0.41	U
142-82-5	n-Heptane	<4.1	U
87-68-3	Hexachloro-1,3-butadiene	<0.76	U
110-54-3	n-Hexane	<0.62	U
591-78-6	2-Hexanone	<2.2	U
74-88-4	Iodomethane	<1.4	U
98-82-8	Isopropylbenzene (Cumene)	<0.51	U
99-87-6	p-Isopropyltoluene	<0.62	U
79-20-9	Methyl acetate	<0.97	U
75-09-2	Methylene Chloride	<2.5	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.7	U
1634-04-4	Methyl-tert-butyl ether	<0.43	U
91-20-3	Naphthalene	<0.74	U
103-65-1	n-Propylbenzene	<0.72	U
100-42-5	Styrene	<0.53	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.92	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.90	U
127-18-4	Tetrachloroethene	<0.37	U
109-99-9	Tetrahydrofuran	<0.70	U
108-88-3	Toluene	0.34	J
87-61-6	1,2,3-Trichlorobenzene	<0.72	U
120-82-1	1,2,4-Trichlorobenzene	<0.72	U
71-55-6	1,1,1-Trichloroethane	<0.67	U
79-00-5	1,1,2-Trichloroethane	<0.57	U
79-01-6	Trichloroethene	<0.65	U
75-69-4	Trichlorofluoromethane	<0.55	U
96-18-4	1,2,3-Trichloropropane	<1.9	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.5	U
526-73-8	1,2,3-Trimethylbenzene	<1.8	U
95-63-6	1,2,4-Trimethylbenzene	<0.60	U
108-67-8	1,3,5-Trimethylbenzene	<0.56	U
108-05-4	Vinyl acetate	<0.51	U

SAMPLE NO.

GB-07/2.5-3.5

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838012

Date Analyzed: 07/28/2021 11:29 Lab File ID: 072821A.B\0728A_16.D

Initial wt/vol: 7.04 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 20.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.60	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<0.57	U
95-47-6	o-Xylene	<0.34	U

SAMPLE NO.

GB-07/7-9

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838013

Date Analyzed: 07/28/2021 11:45 Lab File ID: 072821AGRO.B\0728A_17.D

Initial wt/vol: 6.12 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.058	U

SAMPLE NO.

GB-07/7-9

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 | Matrix: Solid | SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 60375838013

Date Analyzed: 07/28/2021 11:45 | Lab File ID: 072821A.B\0728A_17.D

Initial wt/vol: 6.12 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	46.6	
107-02-8	Acrolein	<79.9	U
107-13-1	Acrylonitrile	<3.4	U
71-43-2	Benzene	<0.52	U
108-86-1	Bromobenzene	<0.99	U
74-97-5	Bromochloromethane	<0.64	U
75-27-4	Bromodichloromethane	<0.64	U
75-25-2	Bromoform	<0.61	U
74-83-9	Bromomethane	<3.1	U
78-93-3	2-Butanone (MEK)	8.8	J
104-51-8	n-Butylbenzene	<0.69	U
135-98-8	sec-Butylbenzene	<0.77	U
98-06-6	tert-Butylbenzene	<0.93	U
75-15-0	Carbon disulfide	5.2	J
56-23-5	Carbon tetrachloride	<0.91	U
108-90-7	Chlorobenzene	<0.66	U
75-00-3	Chloroethane	<1.6	U
67-66-3	Chloroform	<0.52	U
74-87-3	Chloromethane	<0.84	U
95-49-8	2-Chlorotoluene	<0.77	U
106-43-4	4-Chlorotoluene	<0.63	U
108-94-1	Cyclohexanone	<13.4	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.9	U
124-48-1	Dibromochloromethane	<0.68	U
106-93-4	1,2-Dibromoethane (EDB)	<0.57	U
74-95-3	Dibromomethane	<0.63	U
95-50-1	1,2-Dichlorobenzene	<0.66	U
541-73-1	1,3-Dichlorobenzene	<0.76	U
106-46-7	1,4-Dichlorobenzene	<0.86	U
75-34-3	1,1-Dichloroethane	<0.41	U
107-06-2	1,2-Dichloroethane	<0.42	U
540-59-0	1,2-Dichloroethene (Total)	<1.2	U
75-35-4	1,1-Dichloroethene	<0.68	U
156-59-2	cis-1,2-Dichloroethene	<0.46	U
156-60-5	trans-1,2-Dichloroethene	<0.72	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<0.73	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

GB-07/7-9

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838013

Date Analyzed: 07/28/2021 11:45 Lab File ID: 072821A.B\0728A_17.D

Initial wt/vol: 6.12 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.50	U
563-58-6	1,1-Dichloropropene	<0.95	U
10061-01-5	cis-1,3-Dichloropropene	<0.56	U
10061-02-6	trans-1,3-Dichloropropene	<0.48	U
60-29-7	Diethyl ether (Ethyl ether)	<0.59	U
100-41-4	Ethylbenzene	<0.49	U
142-82-5	n-Heptane	<4.8	U
87-68-3	Hexachloro-1,3-butadiene	<0.90	U
110-54-3	n-Hexane	<0.73	U
591-78-6	2-Hexanone	<2.6	U
74-88-4	Iodomethane	<1.6	U
98-82-8	Isopropylbenzene (Cumene)	<0.60	U
99-87-6	p-Isopropyltoluene	1.4	J
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.9	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.2	U
1634-04-4	Methyl-tert-butyl ether	<0.51	U
91-20-3	Naphthalene	13.9	
103-65-1	n-Propylbenzene	<0.85	U
100-42-5	Styrene	<0.62	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.1	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.1	U
127-18-4	Tetrachloroethene	<0.44	U
109-99-9	Tetrahydrofuran	<0.83	U
108-88-3	Toluene	<0.37	U
87-61-6	1,2,3-Trichlorobenzene	<0.84	U
120-82-1	1,2,4-Trichlorobenzene	<0.84	U
71-55-6	1,1,1-Trichloroethane	<0.79	U
79-00-5	1,1,2-Trichloroethane	<0.67	U
79-01-6	Trichloroethene	<0.77	U
75-69-4	Trichlorofluoromethane	<0.65	U
96-18-4	1,2,3-Trichloropropane	<2.3	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.3	U
526-73-8	1,2,3-Trimethylbenzene	<2.1	U
95-63-6	1,2,4-Trimethylbenzene	<0.71	U
108-67-8	1,3,5-Trimethylbenzene	<0.66	U
108-05-4	Vinyl acetate	<0.60	U

SAMPLE NO.

GB-07/7-9

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375838013

Date Analyzed: 07/28/2021 11:45 Lab File ID: 072821A.B\0728A_17.D

Initial wt/vol: 6.12 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.70	U
1330-20-7	Xylene (Total)	<1.2	U
179601-23-1	m&p-Xylene	<0.67	U
95-47-6	o-Xylene	<0.39	U

SAMPLE NO.

RB-03

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 07/28/2021 13:20 Lab Sample ID: 60375838027

Date Analyzed: 07/28/2021 13:20 Lab File ID: 072821AGRO.B\0728A_15.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	<62.6	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-03

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 07/28/2021 13:20 Lab Sample ID: 60375838027

Date Analyzed: 07/28/2021 13:20 Lab File ID: 072821A.B\0728A_15.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	null	Q
	Preservation pH	1.0	

SAMPLE NO.

RB-04

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 07/28/2021 13:36 Lab Sample ID: 60375838028

Date Analyzed: 07/28/2021 13:36 Lab File ID: 072821AGRO.B\0728A_16.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	<62.6	U

SAMPLE NO.

RB-04

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 07/28/2021 13:36 Lab Sample ID: 60375838028

Date Analyzed: 07/28/2021 13:36 Lab File ID: 072821A.B\0728A_16.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	null	Q
	Preservation pH	1.0	

SAMPLE NO.

RB-05

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 07/28/2021 13:52 Lab Sample ID: 60375838029

Date Analyzed: 07/28/2021 13:52 Lab File ID: 072821AGRO.B\0728A_17.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	<62.6	U

SAMPLE NO.

RB-05

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Water SDG No.: 60375838

Date Extracted: 07/28/2021 13:52 Lab Sample ID: 60375838029

Date Analyzed: 07/28/2021 13:52 Lab File ID: 072821A.B\0728A_17.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	null	Q
	Preservation pH	1.0	

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Wt Linear	0.12770	0.14551	0.10241	0.10999	0.10882	0.09607
Acetonitrile	Averaged	0.20519	0.23879	0.19275	0.20970	0.19978	0.19106
Acrolein	Averaged	0.04180	0.04643	0.03211	0.03513	0.03486	0.03397
Acrylonitrile	Averaged	0.07366	0.09921	0.07704	0.08732	0.08346	0.07836
Benzene	Averaged	1.53521	1.92991	1.60481	1.72562	1.62126	1.58693
Bromobenzene	Wt Linear	1.20918	1.95997	1.31552	1.42983	1.36073	1.36722
Bromochloromethane	Averaged	0.22104	0.31134	0.23256	0.25800	0.24707	0.22443
Bromodichloromethane	Averaged	0.44293	0.57619	0.45370	0.51355	0.49633	0.48524
Bromoform	Wt Linear	0.24604	0.68222	0.46718	0.49434	0.49663	0.49824
Bromomethane	Wt Linear	0.29297	0.36742	0.22717	0.26171	0.25039	0.25972
2-Butanone (MEK)	Averaged	0.13649	0.16358	0.11876	0.14080	0.12308	0.11540
n-Butylbenzene	Averaged	2.86132	3.98042	3.04371	3.25647	2.98423	3.10441
sec-Butylbenzene	Averaged	3.67808	5.46856	4.69434	4.97766	4.60261	4.61503
tert-Butylbenzene	Averaged	2.84688	4.13358	3.35116	3.44384	3.25972	3.33365
Carbon disulfide	Averaged	1.04761	1.22830	1.10384	1.16928	1.05921	1.05340
Carbon tetrachloride	Averaged	0.52350	0.73052	0.61590	0.69214	0.63641	0.66014
Chlorobenzene	Averaged	2.87709	4.39024	3.31376	3.62303	3.48272	3.35387
Chloroethane	Wt Linear	0.19876	0.41947	0.28976	0.30279	0.28768	0.28386
2-Chloroethylvinyl ether	Averaged	0.08099	0.10619	0.08984	0.10326	0.10466	0.10142
Chloroform	Averaged	0.71691	0.93833	0.73171	0.78946	0.75254	0.72345
Chloromethane	Averaged	0.44305	0.53976	0.43568	0.48525	0.46252	0.43236
2-Chlorotoluene	Averaged	2.68543	4.15871	3.14069	3.35971	3.05176	3.09225
4-Chlorotoluene	Wt Linear	1.07015	1.80786	1.31716	1.36593	1.22310	1.30240
Cyclohexane	Averaged	0.74320	0.90910	0.89807	1.02673	0.84745	0.91037
Cyclohexanone	Wt Linear	0.06413	0.12386	0.07912	0.09053	0.09060	0.08453
1,2-Dibromo-3-chloropropane	Averaged		0.06710	0.06492	0.06890	0.06770	0.07475
Dibromochloromethane	Averaged	0.94475	1.43553	1.01990	1.12463	1.09684	1.10009
1,2-Dibromoethane (EDB)	Averaged	0.63060	1.07960	0.79161	0.88016	0.84520	0.82910
Dibromomethane	Averaged	0.19109	0.26576	0.21423	0.22178	0.21480	0.19942
1,2-Dichlorobenzene	Wt Linear	1.78586	2.99630	1.95595	2.03832	1.90924	1.93500
1,3-Dichlorobenzene	Averaged	1.95073	3.12283	2.43352	2.44542	2.30979	2.30798
1,4-Dichlorobenzene	Averaged	2.26717	3.20528	2.30940	2.35493	2.29589	2.27579
Dichlorodifluoromethane	Averaged	0.42905	0.52841	0.51733	0.55194	0.50397	0.50410
1,1-Dichloroethane	Averaged	0.79870	1.07172	0.84977	0.96581	0.89021	0.86960
1,2-Dichloroethane	Averaged	0.38791	0.54504	0.45921	0.50553	0.49412	0.48713

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1-Dichloroethene	Averaged	0.39387	0.50228	0.42020	0.43770	0.41490	0.39752
cis-1,2-Dichloroethene	Averaged	0.45595	0.61300	0.50165	0.53773	0.51379	0.49294
trans-1,2-Dichloroethene	Averaged	0.39278	0.60437	0.47193	0.52328	0.47601	0.46450
1,2-Dichloropropane	Averaged	0.40325	0.56397	0.44676	0.48799	0.47876	0.46334
1,3-Dichloropropane	Averaged	1.14563	1.69843	1.28703	1.39871	1.31268	1.26591
2,2-Dichloropropane	Averaged	0.62392	0.71667	0.60665	0.65458	0.59550	0.60699
1,1-Dichloropropene	Averaged	0.53080	0.61808	0.55862	0.61860	0.56906	0.57516
cis-1,3-Dichloropropene	Averaged	0.52703	0.71897	0.55451	0.64356	0.60648	0.60173
trans-1,3-Dichloropropene	Averaged	1.03926	1.81037	1.32575	1.43667	1.42334	1.40293
Diethyl ether (Ethyl ether)	Averaged	0.18282	0.18098	0.15164	0.17124	0.17466	0.16321
1,4-Dioxane (p-Dioxane)	Averaged			0.00091	0.00136	0.00128	0.00139
Ethylbenzene	Averaged	1.68593	2.10867	1.71706	1.88607	1.74957	1.77296
n-Heptane	Averaged		0.08014	0.08330	0.09507	0.08135	0.08812
Hexachloro-1,3-butadiene	Averaged	0.44523	0.65448	0.47608	0.51719	0.47413	0.48345
n-Hexane	Averaged	0.62611	0.74715	0.74112	0.81208	0.73303	0.72417
2-Hexanone	Wt Linear	0.45619	0.72451	0.47478	0.52297	0.52011	0.48578
Isopropylbenzene (Cumene)	Averaged	4.42297	6.11878	4.87800	5.27862	4.97873	4.88636
p-Isopropyltoluene	Averaged	3.19942	5.01991	3.89953	4.19402	3.94881	3.92301
Methyl acetate	Averaged	0.17138	0.19939	0.15364	0.16835	0.16659	0.15406
Methylcyclohexane	Averaged	0.55795	0.63437	0.62019	0.71445	0.63183	0.64535
Methylene Chloride	Averaged	0.43051	0.51513	0.35075	0.40829	0.39472	0.37658
1-Methylnaphthalene	Quadratic	0.53792	0.89490	0.57381	0.62588	0.61216	0.64550
2-Methylnaphthalene	Quadratic	0.81790	1.11818	0.65559	0.73077	0.75287	0.76836
4-Methyl-2-pentanone (MIBK)	Averaged	0.16281	0.26384	0.18766	0.20686	0.20468	0.19413
Methyl-tert-butyl ether	Averaged	0.58801	0.92654	0.69911	0.80449	0.76608	0.72490
Naphthalene	Wt Linear	1.42838	2.35009	1.54346	1.57339	1.66540	1.66703
n-Propylbenzene	Averaged	1.14194	1.62069	1.38942	1.42372	1.31705	1.34643
Styrene	Averaged	2.54266	4.18890	3.00039	3.30341	3.10257	3.08919
1,1,1,2-Tetrachloroethane	Averaged	1.24780	1.80674	1.31786	1.41849	1.35719	1.32847
1,1,2,2-Tetrachloroethane	Averaged	0.60554	0.92529	0.63552	0.72758	0.68400	0.66444
Tetrachloroethene	Averaged	1.41846	2.01504	1.67131	1.74447	1.64751	1.65953
Tetrahydrofuran	Averaged	0.06431	0.07513	0.05772	0.06186	0.06240	0.05649
Toluene	Averaged	2.93028	4.07621	3.10885	3.29540	3.09746	3.07841
1,2,3-Trichlorobenzene	Wt Linear	0.63707	1.09350	0.65456	0.71869	0.68920	0.68950
1,2,4-Trichlorobenzene	Averaged	1.04317	1.32580	0.86849	0.94670	0.89842	0.90220

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

10/13/2021 4:08

MSV - FORM VI VOA-3

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1,1-Trichloroethane	Averaged	0.57365	0.79148	0.68379	0.73925	0.69153	0.69171
1,1,2-Trichloroethane	Averaged	0.67498	0.91819	0.66918	0.74359	0.66357	0.66084
Trichloroethene	Averaged	0.47603	0.57672	0.47172	0.51846	0.47539	0.46694
Trichlorofluoromethane	Averaged	0.70766	0.69754	0.70524	0.79361	0.71818	0.72787
1,2,3-Trichloropropane	Wt Linear	0.27846	0.24584	0.18613	0.20244	0.18958	0.19316
1,2,3-Trimethylbenzene	Wt Linear	3.08279	4.96002	3.53365	3.71428	3.52324	3.44298
1,2,4-Trimethylbenzene	Averaged	3.09837	4.66453	3.70064	3.87666	3.56937	3.65611
1,3,5-Trimethylbenzene	Averaged	3.29553	4.83033	3.81499	3.99835	3.72579	3.77837
Vinyl chloride	Averaged	0.47749	0.61333	0.53867	0.58268	0.52902	0.52987
m&p-Xylene	Averaged	1.89829	2.83922	2.11951	2.24534	2.09679	2.07633
o-Xylene	Averaged	1.91628	2.70013	2.03598	2.17214	2.04795	1.95925
4-Bromofluorobenzene (S)	Averaged	0.80394	0.82690	0.82455	0.80808	0.80486	0.83639
1,2-Dichlorobenzene-d4 (S)	Averaged	0.82722	0.84669	0.84129	0.83878	0.83393	0.84298
Toluene-d8 (S)	Averaged	2.84213	2.78643	2.80885	2.80646	2.75183	2.76100

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acetone	Wt Linear	0.10199	0.09969
Acetonitrile	Averaged	0.18786	0.15809
Acrolein	Averaged	0.03809	0.04038
Acrylonitrile	Averaged	0.08074	0.08169
Benzene	Averaged	1.57163	1.48546
Bromobenzene	Wt Linear	1.41055	1.32710
Bromochloromethane	Averaged	0.21607	0.20683
Bromodichloromethane	Averaged	0.50161	0.50414
Bromoform	Wt Linear	0.54433	0.53711
Bromomethane	Wt Linear	0.28375	0.29890
2-Butanone (MEK)	Averaged	0.13082	0.11910
n-Butylbenzene	Averaged	3.03649	3.00180
sec-Butylbenzene	Averaged	4.52841	4.17448
tert-Butylbenzene	Averaged	3.22641	3.02448
Carbon disulfide	Averaged	1.06304	1.04303
Carbon tetrachloride	Averaged	0.67960	0.67769
Chlorobenzene	Averaged	3.45072	3.25653
Chloroethane	Wt Linear	0.29030	0.28333
2-Chloroethylvinyl ether	Averaged	0.10729	0.10847
Chloroform	Averaged	0.75122	0.72864
Chloromethane	Averaged	0.46144	0.51422
2-Chlorotoluene	Averaged	3.18261	2.91318
4-Chlorotoluene	Wt Linear	1.32644	1.24763
Cyclohexane	Averaged	0.85959	0.85694
Cyclohexanone	Wt Linear	0.08924	0.09300
1,2-Dibromo-3-chloropropane	Averaged	0.07356	0.08133
Dibromochloromethane	Averaged	1.20205	1.22060
1,2-Dibromoethane (EDB)	Averaged	0.87679	0.86279
Dibromomethane	Averaged	0.21047	0.20884
1,2-Dichlorobenzene	Wt Linear	1.95864	1.94238
1,3-Dichlorobenzene	Averaged	2.31958	2.25726
1,4-Dichlorobenzene	Averaged	2.31266	2.24684
Dichlorodifluoromethane	Averaged	0.51315	0.50246
1,1-Dichloroethane	Averaged	0.89066	0.86173
1,2-Dichloroethane	Averaged	0.50102	0.49363

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1-Dichloroethene	Averaged	0.40261	0.36665
cis-1,2-Dichloroethene	Averaged	0.50661	0.49411
trans-1,2-Dichloroethene	Averaged	0.48033	0.47162
1,2-Dichloropropane	Averaged	0.47391	0.46580
1,3-Dichloropropane	Averaged	1.34221	1.33608
2,2-Dichloropropane	Averaged	0.62497	0.61784
1,1-Dichloropropene	Averaged	0.57892	0.57735
cis-1,3-Dichloropropene	Averaged	0.61444	0.59400
trans-1,3-Dichloropropene	Averaged	1.49746	1.49294
Diethyl ether (Ethyl ether)	Averaged	0.17294	0.17715
1,4-Dioxane (p-Dioxane)	Averaged	0.00131	0.00128
Ethylbenzene	Averaged	1.83826	1.77503
n-Heptane	Averaged	0.08818	0.08898
Hexachloro-1,3-butadiene	Averaged	0.52482	0.59218
n-Hexane	Averaged	0.72563	0.72542
2-Hexanone	Wt Linear	0.51717	0.50373
Isopropylbenzene (Cumene)	Averaged	4.91675	4.35593
p-Isopropyltoluene	Averaged	3.95241	3.72915
Methyl acetate	Averaged	0.15643	0.14706
Methylcyclohexane	Averaged	0.63686	0.63839
Methylene Chloride	Averaged	0.35981	0.35266
1-Methylnaphthalene	Quadratic	0.72311	0.82259
2-Methylnaphthalene	Quadratic	0.89273	0.99422
4-Methyl-2-pentanone (MIBK)	Averaged	0.19849	0.18709
Methyl-tert-butyl ether	Averaged	0.77444	0.78054
Naphthalene	Wt Linear	1.87063	2.05476
n-Propylbenzene	Averaged	1.38495	1.28542
Styrene	Averaged	3.15112	2.90799
1,1,1,2-Tetrachloroethane	Averaged	1.40244	1.34858
1,1,2,2-Tetrachloroethane	Averaged	0.69239	0.60549
Tetrachloroethene	Averaged	1.70732	1.71723
Tetrahydrofuran	Averaged	0.06086	0.06025
Toluene	Averaged	3.19369	3.14294
1,2,3-Trichlorobenzene	Wt Linear	0.77923	0.85308
1,2,4-Trichlorobenzene	Averaged	0.97639	1.08187

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1,1-Trichloroethane	Averaged	0.71162	0.71685
1,1,2-Trichloroethane	Averaged	0.70423	0.70602
Trichloroethene	Averaged	0.48037	0.48245
Trichlorofluoromethane	Averaged	0.70603	0.63142
1,2,3-Trichloropropane	Wt Linear	0.19999	0.17875
1,2,3-Trimethylbenzene	Wt Linear	3.47352	3.33684
1,2,4-Trimethylbenzene	Averaged	3.68180	3.44255
1,3,5-Trimethylbenzene	Averaged	3.77294	3.48275
Vinyl chloride	Averaged	0.54235	0.52927
m&p-Xylene	Averaged	2.07799	1.95781
o-Xylene	Averaged	2.01620	1.90214
4-Bromofluorobenzene (S)	Averaged	0.83505	0.79237
1,2-Dichlorobenzene-d4 (S)	Averaged	0.84503	0.83610
Toluene-d8 (S)	Averaged	2.86879	3.00783

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-7
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Wt Linear		0.99894	0.00231930	0.10026	
Acetonitrile	Averaged	11.50044			0.19790	
Acrolein	Averaged	12.63209			0.03785	
Acrylonitrile	Averaged	9.50041			0.08268	
Benzene	Averaged	8.50266			1.63260	
Bromobenzene	Wt Linear		0.99878	0.00270400	1.35686	
Bromochloromethane	Averaged	13.92179			0.23967	
Bromodichloromethane	Averaged	8.17910			0.49671	
Bromoform	Wt Linear		0.99836	-0.0014693	0.53144	
Bromomethane	Wt Linear		0.99595	-0.0002335	0.28592	
2-Butanone (MEK)	Averaged	12.18948			0.13100	
n-Butylbenzene	Averaged	11.09296			3.15861	
sec-Butylbenzene	Averaged	11.46877			4.59240	
tert-Butylbenzene	Averaged	11.36759			3.32747	
Carbon disulfide	Averaged	6.20148			1.09596	
Carbon tetrachloride	Averaged	9.58226			0.65199	
Chlorobenzene	Averaged	12.45216			3.46849	
Chloroethane	Wt Linear		0.99914	0.00035330	0.28591	
2-Chloroethylvinyl ether	Averaged	9.69590			0.10026	
Chloroform	Averaged	9.54071			0.76653	
Chloromethane	Averaged	8.20135			0.47178	
2-Chlorotoluene	Averaged	13.62499			3.19804	
4-Chlorotoluene	Wt Linear		0.99860	0.00230200	1.27669	
Cyclohexane	Averaged	9.02853			0.88143	
Cyclohexanone	Wt Linear		0.99829	-0.0002662	0.09067	
1,2-Dibromo-3-chloropropane	Averaged	7.99863			0.07118	
Dibromochloromethane	Averaged	12.96984			1.14305	
1,2-Dibromoethane (EDB)	Averaged	14.52088			0.84948	
Dibromomethane	Averaged	10.34772			0.21580	
1,2-Dichlorobenzene	Wt Linear		0.99927	0.00499300	1.94397	
1,3-Dichlorobenzene	Averaged	13.86296			2.39339	
1,4-Dichlorobenzene	Averaged	13.43678			2.40850	
Dichlorodifluoromethane	Averaged	6.97607			0.50630	
1,1-Dichloroethane	Averaged	9.31497			0.89978	
1,2-Dichloroethane	Averaged	9.40973			0.48420	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-8
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1-Dichloroethene	Averaged	9.66686			0.41697	
cis-1,2-Dichloroethene	Averaged	8.93106			0.51447	
trans-1,2-Dichloroethene	Averaged	12.32872			0.48560	
1,2-Dichloropropane	Averaged	9.53372			0.47297	
1,3-Dichloropropane	Averaged	11.83352			1.34834	
2,2-Dichloropropane	Averaged	6.16341			0.63089	
1,1-Dichloropropene	Averaged	5.03957			0.57833	
cis-1,3-Dichloropropene	Averaged	9.48997			0.60759	
trans-1,3-Dichloropropene	Averaged	14.90897			1.42859	
Diethyl ether (Ethyl ether)	Averaged	5.91986			0.17183	
1,4-Dioxane (p-Dioxane)	Averaged	13.95999			0.00125	
Ethylbenzene	Averaged	7.37656			1.81669	
n-Heptane	Averaged	6.01764			0.08645	
Hexachloro-1,3-butadiene	Averaged	13.43268			0.52094	
n-Hexane	Averaged	6.95822			0.72934	
2-Hexanone	Wt Linear		0.99907	0.00414580	0.50552	
Isopropylbenzene (Cumene)	Averaged	11.02277			4.97952	
p-Isopropyltoluene	Averaged	12.76869			3.98328	
Methyl acetate	Averaged	9.95487			0.16461	
Methylcyclohexane	Averaged	6.68243			0.63492	
Methylene Chloride	Averaged	13.77431			0.39856	
1-Methylnaphthalene	Quadratic		0.99994	-0.0022598	0.61094	0.05320
2-Methylnaphthalene	Quadratic		0.99974	-0.0079680	0.76107	0.05915
4-Methyl-2-pentanone (MIBK)	Averaged	14.44114			0.20069	
Methyl-tert-butyl ether	Averaged	12.69989			0.75801	
Naphthalene	Wt Linear		0.99262	-0.0063960	1.92445	
n-Propylbenzene	Averaged	9.93687			1.36370	
Styrene	Averaged	14.92436			3.16078	
1,1,1,2-Tetrachloroethane	Averaged	12.19944			1.40345	
1,1,2,2-Tetrachloroethane	Averaged	14.91284			0.69253	
Tetrachloroethene	Averaged	9.60249			1.69761	
Tetrahydrofuran	Averaged	9.18876			0.06238	
Toluene	Averaged	10.90103			3.24040	
1,2,3-Trichlorobenzene	Wt Linear		0.99283	-0.0014762	0.80020	
1,2,4-Trichlorobenzene	Averaged	14.80361			1.00538	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-9

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1,1-Trichloroethane	Averaged	8.82242			0.69998	
1,1,2-Trichloroethane	Averaged	11.95652			0.71758	
Trichloroethene	Averaged	7.52564			0.49351	
Trichlorofluoromethane	Averaged	6.23281			0.71095	
1,2,3-Trichloropropane	Wt Linear		0.99741	0.00093070	0.18670	
1,2,3-Trimethylbenzene	Wt Linear		0.99898	0.00953150	3.40198	
1,2,4-Trimethylbenzene	Averaged	12.08492			3.71125	
1,3,5-Trimethylbenzene	Averaged	11.86786			3.83738	
Vinyl chloride	Averaged	7.43010			0.54284	
m&p-Xylene	Averaged	13.49839			2.16391	
o-Xylene	Averaged	12.39669			2.09376	
4-Bromofluorobenzene (S)	Averaged	1.99560			0.81652	
1,2-Dichlorobenzene-d4 (S)	Averaged	0.76646			0.83900	
Toluene-d8 (S)	Averaged	2.89751			2.82916	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Averaged	0.15923	0.14293	0.12603	0.13635	0.12235	0.11988
Acrolein	Averaged	0.05049	0.04990	0.05350	0.05490	0.05571	0.05649
Acrylonitrile	Averaged	0.09636	0.09689	0.10184	0.10239	0.10374	0.10225
Benzene	Averaged	1.08325	1.01715	0.99635	1.01610	1.05444	1.05031
Bromobenzene	Averaged	0.87511	0.80229	0.84068	0.81596	0.83768	0.85540
Bromochloromethane	Averaged	0.14232	0.14333	0.15095	0.14744	0.15615	0.15318
Bromodichloromethane	Averaged	0.30798	0.31054	0.32468	0.34262	0.36483	0.37931
Bromoform	Wt Linear	0.35231	0.38302	0.41012	0.44460	0.51032	0.56413
Bromomethane	Averaged		0.22512	0.23496	0.21211	0.20410	0.19757
2-Butanone (MEK)	Averaged	0.16636	0.15804	0.15809	0.16388	0.15910	0.16163
n-Butylbenzene	Averaged	2.32319	2.37338	2.45743	2.42033	2.58194	2.55226
sec-Butylbenzene	Averaged	3.16535	3.13988	3.04574	3.01605	3.13518	3.12433
tert-Butylbenzene	Averaged	2.14291	2.08224	2.00502	1.94892	2.03443	2.02846
Carbon disulfide	Averaged	0.71337	0.73815	0.71642	0.74090	0.80119	0.79916
Carbon tetrachloride	Averaged	0.35068	0.32782	0.33649	0.35145	0.38748	0.39165
Chlorobenzene	Averaged	1.96400	1.94490	1.96022	1.95701	2.05107	2.06169
Chloroethane	Averaged	0.15143	0.16121	0.16527	0.16321	0.17535	0.16595
Chloroform	Averaged	0.50170	0.48403	0.48569	0.48340	0.49980	0.50113
Chloromethane	Averaged	0.49368	0.47456	0.45102	0.43471	0.44797	0.42151
2-Chlorotoluene	Averaged	2.05291	1.91186	1.91326	1.87496	1.91053	1.89647
4-Chlorotoluene	Averaged	0.74633	0.72720	0.73282	0.71300	0.73812	0.74670
Cyclohexanone	Averaged	0.19231	0.20577	0.20295	0.20807	0.19700	0.20028
1,2-Dibromo-3-chloropropane	Averaged		0.07784	0.09498	0.10073	0.11146	0.11813
Dibromochloromethane	Averaged	0.55734	0.58065	0.61209	0.65856	0.73107	0.77400
1,2-Dibromoethane (EDB)	Averaged	0.52588	0.56669	0.61400	0.64343	0.67056	0.68434
Dibromomethane	Averaged	0.16622	0.17244	0.17741	0.18762	0.18942	0.19148
1,2-Dichlorobenzene	Averaged	1.65495	1.58339	1.58626	1.54101	1.56591	1.58910
1,3-Dichlorobenzene	Averaged	1.61507	1.55924	1.54813	1.53485	1.59023	1.59840
1,4-Dichlorobenzene	Averaged	1.60178	1.55364	1.57268	1.56302	1.61434	1.62072
1,1-Dichloroethane	Averaged	0.53306	0.49349	0.48440	0.49470	0.51096	0.51064
1,2-Dichloroethane	Averaged	0.38342	0.37147	0.37850	0.39082	0.40047	0.39489
1,1-Dichloroethene	Averaged	0.22867	0.22066	0.20403	0.21896	0.23696	0.23371
cis-1,2-Dichloroethene	Averaged	0.28850	0.28417	0.29350	0.29697	0.30845	0.31080
trans-1,2-Dichloroethene	Averaged	0.27385	0.25016	0.25023	0.25313	0.26852	0.26782
1,2-Dichloropropane	Averaged	0.32567	0.29733	0.30218	0.31208	0.31920	0.32452

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,3-Dichloropropane	Averaged	0.87527	0.87776	0.89381	0.92931	0.96923	0.97449
2,2-Dichloropropane	Averaged	0.38563	0.34786	0.34105	0.33614	0.36225	0.36747
1,1-Dichloropropene	Averaged	0.35302	0.33085	0.32449	0.33310	0.35183	0.35072
cis-1,3-Dichloropropene	Averaged	0.35468	0.34384	0.38196	0.42266	0.44080	0.46480
trans-1,3-Dichloropropene	Averaged	0.68873	0.71644	0.83309	0.85135	0.94252	0.97404
Diethyl ether (Ethyl ether)	Averaged	0.11330	0.12010	0.12513	0.12985	0.13386	0.13073
Ethylbenzene	Averaged	1.03975	0.96221	0.96300	1.00525	1.02750	1.02593
n-Heptane	Averaged	1.13824	1.13427	1.07511	1.11117	1.18296	1.18495
Hexachloro-1,3-butadiene	Averaged	0.70369	0.71995	0.73697	0.74532	0.81945	0.81229
n-Hexane	Averaged	0.44035	0.44258	0.39152	0.40217	0.42756	0.42712
2-Hexanone	Averaged	0.60977	0.62550	0.58885	0.62001	0.60096	0.60501
Iodomethane	Wt Linear	0.09299	0.12158	0.14590	0.20678	0.29807	0.31374
Isopropylbenzene (Cumene)	Averaged	3.24447	3.20342	3.12427	3.16525	3.34238	3.33538
p-Isopropyltoluene	Averaged	2.81087	2.74400	2.71815	2.72329	2.80552	2.77443
Methyl acetate	Averaged	0.20386	0.19567	0.20536	0.20837	0.20401	0.19908
Methylene Chloride	Averaged		0.35099	0.33064	0.31591	0.30508	0.29952
4-Methyl-2-pentanone (MIBK)	Averaged	0.32467	0.30636	0.31764	0.32279	0.31609	0.31614
Methyl-tert-butyl ether	Averaged	0.67455	0.65641	0.67417	0.69305	0.69729	0.69431
Naphthalene	Wt Linear	0.37414	0.47887	0.95469	1.66405	2.36863	2.51379
n-Propylbenzene	Averaged	0.77237	0.72028	0.74995	0.71132	0.73603	0.76035
Styrene	Averaged	2.04251	2.01818	2.02462	2.07699	2.19775	2.22949
1,1,1,2-Tetrachloroethane	Averaged	0.65629	0.64981	0.67413	0.70266	0.76604	0.78242
1,1,2,2-Tetrachloroethane	Averaged	0.61175	0.65189	0.69676	0.67563	0.68438	0.69844
Tetrachloroethene	Averaged	0.90090	0.87776	0.83105	0.84703	0.90156	0.89463
Tetrahydrofuran	Averaged	0.45154	0.44170	0.47239	0.45137	0.44459	0.43412
Toluene	Averaged	1.71680	1.69394	1.58938	1.62267	1.67118	1.65751
1,2,3-Trichlorobenzene	Wt Linear	0.30463	0.47371	0.76528	1.04612	1.23433	1.25892
1,2,4-Trichlorobenzene	Wt Linear	0.36361	0.53222	0.80658	1.08901	1.31898	1.34283
1,1,1-Trichloroethane	Averaged	0.41562	0.38930	0.38440	0.40395	0.42503	0.43144
1,1,2-Trichloroethane	Averaged	0.46716	0.49061	0.50586	0.51708	0.53297	0.53869
Trichloroethene	Averaged	0.29444	0.27344	0.27878	0.27958	0.29926	0.29988
Trichlorofluoromethane	Averaged	0.37347	0.39139	0.38699	0.41100	0.44913	0.44074
1,2,3-Trichloropropane	Averaged	0.17668	0.16654	0.17686	0.17010	0.17289	0.17750
1,1,2-Trichlorotrifluoroethane	Averaged	0.24954	0.25467	0.24477	0.25581	0.27739	0.27127
1,2,3-Trimethylbenzene	Averaged	2.60345	2.53092	2.53408	2.49963	2.54417	2.51573

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

10/13/2021 4:08

MSV - FORM VI VOA-3

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,2,4-Trimethylbenzene	Averaged	2.62920	2.49052	2.46845	2.37006	2.42797	2.47526
1,3,5-Trimethylbenzene	Averaged	2.54778	2.35944	2.37664	2.31198	2.37179	2.39605
Vinyl acetate	Averaged	1.08781	1.02843	1.07423	1.11056	1.10954	1.09981
Vinyl chloride	Averaged	0.33078	0.32760	0.31790	0.31063	0.34036	0.32315
m&p-Xylene	Averaged	1.30122	1.29263	1.23340	1.24768	1.32252	1.32196
o-Xylene	Averaged	1.31128	1.29656	1.25258	1.27944	1.33402	1.33148
4-Bromofluorobenzene (S)	Averaged	0.76768	0.76771	0.77495	0.73807	0.73102	0.73597
1,2-Dichlorobenzene-d4 (S)	Averaged	0.96851	0.94566	0.96152	0.93816	0.93436	0.92085
Toluene-d8 (S)	Averaged	2.35404	2.38810	2.36003	2.41419	2.37744	2.38276

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
Acetone	Averaged	0.11043	12.51767			0.13103	
Acrolein	Averaged	0.05346	4.69471			0.05349	
Acrylonitrile	Averaged	0.09643	3.26151			0.09999	
Benzene	Averaged	0.99199	3.26409			1.02994	
Bromobenzene	Averaged	0.80865	3.16553			0.83368	
Bromochloromethane	Averaged	0.14428	3.59066			0.14823	
Bromodichloromethane	Averaged	0.37152	8.60104			0.34307	
Bromoform	Wt Linear	0.61749		0.99898	-0.0291224	0.62253	
Bromomethane	Averaged	0.17477	10.22701			0.20810	
2-Butanone (MEK)	Averaged	0.15064	3.16513			0.15968	
n-Butylbenzene	Averaged	2.38143	3.91946			2.44142	
sec-Butylbenzene	Averaged	2.85278	3.56602			3.06847	
tert-Butylbenzene	Averaged	1.86876	4.40404			2.01582	
Carbon disulfide	Averaged	0.76833	4.83021			0.75393	
Carbon tetrachloride	Averaged	0.37562	6.94016			0.36017	
Chlorobenzene	Averaged	1.89924	2.96289			1.97688	
Chloroethane	Averaged	0.14801	5.72083			0.16149	
Chloroform	Averaged	0.47030	2.41804			0.48944	
Chloromethane	Averaged	0.38409	8.04271			0.44393	
2-Chlorotoluene	Averaged	1.78818	4.09689			1.90688	
4-Chlorotoluene	Averaged	0.70135	2.33111			0.72936	
Cyclohexanone	Averaged	0.19146	3.21568			0.19969	
1,2-Dibromo-3-chloropropane	Averaged	0.11550	14.77076			0.10311	
Dibromochloromethane	Averaged	0.77169	13.50690			0.66934	
1,2-Dibromoethane (EDB)	Averaged	0.65308	9.28072			0.62257	
Dibromomethane	Averaged	0.18416	5.22847			0.18125	
1,2-Dichlorobenzene	Averaged	1.43675	4.24453			1.56534	
1,3-Dichlorobenzene	Averaged	1.47729	2.98700			1.56046	
1,4-Dichlorobenzene	Averaged	1.49050	2.85233			1.57381	
1,1-Dichloroethane	Averaged	0.49890	3.18416			0.50374	
1,2-Dichloroethane	Averaged	0.36912	3.09015			0.38410	
1,1-Dichloroethene	Averaged	0.23021	4.98811			0.22474	
cis-1,2-Dichloroethene	Averaged	0.29127	3.37329			0.29624	
trans-1,2-Dichloroethene	Averaged	0.25250	3.91502			0.25946	
1,2-Dichloropropane	Averaged	0.31137	3.44252			0.31319	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
1,3-Dichloropropane	Averaged	0.90822	4.46103			0.91830	
2,2-Dichloropropane	Averaged	0.34804	4.86502			0.35549	
1,1-Dichloropropene	Averaged	0.33491	3.44440			0.33985	
cis-1,3-Dichloropropene	Averaged	0.44506	11.64700			0.40769	
trans-1,3-Dichloropropene	Averaged	0.94486	13.33198			0.85015	
Diethyl ether (Ethyl ether)	Averaged	0.12293	5.65115			0.12513	
Ethylbenzene	Averaged	0.98565	3.16518			1.00133	
n-Heptane	Averaged	1.11273	3.49939			1.13421	
Hexachloro-1,3-butadiene	Averaged	0.78120	5.94394			0.75984	
n-Hexane	Averaged	0.40856	4.65364			0.41998	
2-Hexanone	Averaged	0.55784	3.75932			0.60114	
Iodomethane	Wt Linear	0.29728		0.99896	-0.0073354	0.30182	
Isopropylbenzene (Cumene)	Averaged	3.27947	2.56348			3.24209	
p-Isopropyltoluene	Averaged	2.55970	3.11490			2.73371	
Methyl acetate	Averaged	0.17968	4.84374			0.19943	
Methylene Chloride	Averaged	0.28100	7.84016			0.31386	
4-Methyl-2-pentanone (MIBK)	Averaged	0.30150	2.65818			0.31503	
Methyl-tert-butyl ether	Averaged	0.65879	2.49967			0.67837	
Naphthalene	Wt Linear	2.35978		0.99869	-0.0652234	2.40117	
n-Propylbenzene	Averaged	0.71049	3.32523			0.73726	
Styrene	Averaged	2.13660	4.06020			2.10373	
1,1,1,2-Tetrachloroethane	Averaged	0.76859	7.98937			0.71428	
1,1,2,2-Tetrachloroethane	Averaged	0.68288	4.56113			0.67167	
Tetrachloroethene	Averaged	0.82930	3.73208			0.86889	
Tetrahydrofuran	Averaged	0.40860	4.38815			0.44347	
Toluene	Averaged	1.53704	3.81644			1.64122	
1,2,3-Trichlorobenzene	Wt Linear	1.16921		0.99880	-0.0084481	1.18242	
1,2,4-Trichlorobenzene	Wt Linear	1.24128		0.99865	-0.0080417	1.25561	
1,1,1-Trichloroethane	Averaged	0.41073	4.26780			0.40864	
1,1,2-Trichloroethane	Averaged	0.50819	4.82903			0.50865	
Trichloroethene	Averaged	0.28525	3.70828			0.28723	
Trichlorofluoromethane	Averaged	0.41859	6.86711			0.41019	
1,2,3-Trichloropropane	Averaged	0.17088	2.39817			0.17306	
1,1,2-Trichlorotrifluoroethane	Averaged	0.25433	4.54814			0.25825	
1,2,3-Trimethylbenzene	Averaged	2.30306	3.77627			2.50443	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
1,2,4-Trimethylbenzene	Averaged	2.27832	4.44490			2.44854	
1,3,5-Trimethylbenzene	Averaged	2.24133	3.93711			2.37214	
Vinyl acetate	Averaged	1.03396	3.17763			1.07776	
Vinyl chloride	Averaged	0.30428	3.81653			0.32210	
m&p-Xylene	Averaged	1.20812	3.56607			1.27536	
o-Xylene	Averaged	1.25232	2.63509			1.29395	
4-Bromofluorobenzene (S)	Averaged	0.74644	2.39291			0.75169	
1,2-Dichlorobenzene-d4 (S)	Averaged	0.91338	2.13470			0.94035	
Toluene-d8 (S)	Averaged	2.32551	1.19384			2.37172	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:42 10:00

LAB FILE ID

CAL1 = 072721AGRO.B\0727A_04.D CAL2 = 072721AGRO.B\0727A_05.D CAL3 = 072721AGRO.B\0727A_06.D

CAL4 = 072721AGRO.B\0727A_07.D CAL5 = 072721AGRO.B\0727A_08.D CAL6 = 072721AGRO.B\0727A_09.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
TPH-GRO	Averaged	4323.4560	4266.8680	4525.0160	4554.4482	4425.8042	4227.7011
4-Bromofluorobenzene (S)	Averaged	13231.2000	13606.0800	14589.4400	15457.5800	19007.6000	25940.5000
1,2-Dichlorobenzene-d4 (S)	Averaged	17904.6600	18553.6000	19687.4200	22181.3800	27551.8200	40489.2400
Toluene-d8 (S)	Averaged	17216.2800	17344.8800	17694.6000	17803.8000	19371.5200	19999.3600

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:42 10:00

LAB FILE ID

CAL1 = 072721AGRO.B\0727A_04.D CAL2 = 072721AGRO.B\0727A_05.D CAL3 = 072721AGRO.B\0727A_06.D

CAL4 = 072721AGRO.B\0727A_07.D CAL5 = 072721AGRO.B\0727A_08.D CAL6 = 072721AGRO.B\0727A_09.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
TPH-GRO	Averaged	3.09922			4387.21560	
4-Bromofluorobenzene (S)	Averaged	28.60772			16972.0666	
1,2-Dichlorobenzene-d4 (S)	Averaged	35.37245			24394.6866	
Toluene-d8 (S)	Averaged	6.35294			18238.4066	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVD GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/26/2021 07/26/2021 Calibration Time(s): 21:45 23:05

LAB FILE ID

CAL1 = 072621BGRO.B\0726B_06.D CAL2 = 072621BGRO.B\0726B_07.D CAL3 = 072621BGRO.B\0726B_08.D

CAL4 = 072621BGRO.B\0726B_09.D CAL5 = 072621BGRO.B\0726B_10.D CAL6 = 072621BGRO.B\0726B_11.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
TPH-GRO	Averaged	4992.3440	4641.6980	4270.6630	4485.9027	4618.3383	5100.3224
4-Bromofluorobenzene (S)	Averaged	5565.8400	5422.4200	5882.2200	7181.7600	10154.9000	12917.1200
1,2-Dichlorobenzene-d4 (S)	Averaged	6719.3000	6720.8000	7396.3200	9216.9000	12195.0000	21415.5600
Toluene-d8 (S)	Averaged	8099.4200	7999.9000	8656.9200	9371.4400	11471.1800	13827.9800

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVD GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/26/2021 07/26/2021 Calibration Time(s): 21:45 23:05

LAB FILE ID

CAL1 = 072621BGRO.B\0726B_06.D CAL2 = 072621BGRO.B\0726B_07.D CAL3 = 072621BGRO.B\0726B_08.D

CAL4 = 072621BGRO.B\0726B_09.D CAL5 = 072621BGRO.B\0726B_10.D CAL6 = 072621BGRO.B\0726B_11.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
TPH-GRO	Averaged	6.64511			4684.87809	
4-Bromofluorobenzene (S)	Averaged	38.79378			7854.04333	
1,2-Dichlorobenzene-d4 (S)	Averaged	53.61275			10610.6466	
Toluene-d8 (S)	Averaged	23.27646			9904.47333	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

19754652ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:53

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080221A.B\0802A_22.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	116.0200	0.0500	16.0201	20.0000
Acetonitrile	Averaged	0.19790	0.18992	0.0500	-4.0335	20.0000
Acrolein	Averaged	0.03785	0.03783	0.0500	-0.0356	20.0000
Acrylonitrile	Averaged	0.08268	0.08518	0.0500	3.0228	20.0000
Benzene	Averaged	1.63260	1.57226	0.3000	-3.6960	20.0000
Bromobenzene	Wt Linear	20	19.44843	0.0500	-2.7578	20.0000
Bromochloromethane	Averaged	0.23967	0.23481	0.0500	-2.0281	20.0000
Bromodichloromethane	Averaged	0.49671	0.49121	0.0500	-1.1074	20.0000
Bromoform	Wt Linear	20	19.46422	0.1000	-2.6789	20.0000
Bromomethane	Wt Linear	20	20.49057	0.0500	2.4529	20.0000
2-Butanone (MEK)	Averaged	0.13100	0.13960	0.0500	6.5597	20.0000
n-Butylbenzene	Averaged	3.15861	3.05460	0.0500	-3.2926	20.0000
sec-Butylbenzene	Averaged	4.59240	4.56501	0.0500	-0.5964	20.0000
tert-Butylbenzene	Averaged	3.32747	3.30011	0.0500	-0.8220	20.0000
Carbon disulfide	Averaged	1.09596	1.07041	0.0500	-2.3315	20.0000
Carbon tetrachloride	Averaged	0.65199	0.64231	0.1000	-1.4842	20.0000
Chlorobenzene	Averaged	3.46849	3.39464	0.3000	-2.1293	20.0000
Chloroethane	Wt Linear	20	20.08090	0.0500	0.4045	20.0000
2-Chloroethylvinyl ether	Averaged	0.10026	0.10353	0.0500	3.2619	20.0000
Chloroform	Averaged	0.76653	0.75393	0.0500	-1.6436	20.0000
Chloromethane	Averaged	0.47178	0.42145	0.1000	-10.6689	20.0000
2-Chlorotoluene	Averaged	3.19804	3.00885	0.0500	-5.9159	20.0000
4-Chlorotoluene	Wt Linear	20	20.21294	0.0500	1.0647	20.0000
Cyclohexane	Averaged	0.88143	0.93364	0.0500	5.9235	20.0000
Cyclohexanone	Wt Linear	100	94.50946	0.0500	-5.4905	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.07118	0.07000	0.0500	-1.6584	20.0000
Dibromochloromethane	Averaged	1.14305	1.12551	0.0500	-1.5347	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.84948	0.86278	0.0500	1.5661	20.0000
Dibromomethane	Averaged	0.21580	0.20335	0.0500	-5.7699	20.0000
1,2-Dichlorobenzene	Wt Linear	20	20.06916	0.0500	0.3458	20.0000
1,3-Dichlorobenzene	Averaged	2.39339	2.25246	0.0500	-5.8883	20.0000
1,4-Dichlorobenzene	Averaged	2.40850	2.26045	0.0500	-6.1470	20.0000
Dichlorodifluoromethane	Averaged	0.50630	0.49291	0.0500	-2.6453	20.0000
1,1-Dichloroethane	Averaged	0.89978	0.89342	0.1000	-0.7068	20.0000
1,2-Dichloroethane	Averaged	0.48420	0.47722	0.0500	-1.4408	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

19754652ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:53

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080221A.B\0802A_22.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41697	0.40147	0.1000	-3.7162	20.0000
cis-1,2-Dichloroethene	Averaged	0.51447	0.50511	0.1000	-1.8195	20.0000
trans-1,2-Dichloroethene	Averaged	0.48560	0.47539	0.1000	-2.1033	20.0000
1,2-Dichloropropane	Averaged	0.47297	0.46396	0.0500	-1.9053	20.0000
1,3-Dichloropropane	Averaged	1.34834	1.29598	0.0500	-3.8830	20.0000
2,2-Dichloropropane	Averaged	0.63089	0.58404	0.0500	-7.4263	20.0000
1,1-Dichloropropene	Averaged	0.57833	0.57122	0.0500	-1.2286	20.0000
cis-1,3-Dichloropropene	Averaged	0.60759	0.60648	0.0500	-0.1829	20.0000
trans-1,3-Dichloropropene	Averaged	1.42859	1.40020	0.0500	-1.9873	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.17183	0.16590	0.0500	-3.4519	20.0000
1,4-Dioxane (p-Dioxane)	Averaged	0.00125	0.00112	0.0500	-10.4951	20.0000
Ethylbenzene	Averaged	1.81669	1.74236	0.3000	-4.0915	20.0000
n-Heptane	Averaged	0.08645	0.08570	0.0500	-0.8688	20.0000
Hexachloro-1,3-butadiene	Averaged	0.52094	0.52966	0.0500	1.6734	20.0000
n-Hexane	Averaged	0.72934	0.74045	0.0500	1.5235	20.0000
2-Hexanone	Wt Linear	100	116.6083	0.0500	16.6084	20.0000
Isopropylbenzene (Cumene)	Averaged	4.97952	4.98169	0.0500	0.0435	20.0000
p-Isopropyltoluene	Averaged	3.98328	4.03996	0.0500	1.4228	20.0000
Methyl acetate	Averaged	0.16461	0.16077	0.0500	-2.3319	20.0000
Methylcyclohexane	Averaged	0.63492	0.64805	0.0500	2.0669	20.0000
Methylene Chloride	Averaged	0.39856	0.34169	0.0500	-14.2683	20.0000
1-Methylnaphthalene	Quadratic	20	21.65032	0.0500	8.2516	20.0000
2-Methylnaphthalene	Quadratic	20	21.65858	0.0500	8.2929	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.20069	0.20223	0.0500	0.7652	20.0000
Methyl-tert-butyl ether	Averaged	0.75801	0.77803	0.3000	2.6404	20.0000
Naphthalene	Wt Linear	20	17.57158	0.3000	-12.1421	20.0000
n-Propylbenzene	Averaged	1.36370	1.30738	0.0500	-4.1300	20.0000
Styrene	Averaged	3.16078	3.09736	0.0500	-2.0065	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.40345	1.29322	0.0500	-7.8542	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.69253	0.65316	0.3000	-5.6859	20.0000
Tetrachloroethene	Averaged	1.69761	1.65873	0.1000	-2.2899	20.0000
Tetrahydrofuran	Averaged	0.06238	0.06148	0.0500	-1.4369	20.0000
Toluene	Averaged	3.24040	3.05099	0.3000	-5.8455	20.0000
1,2,3-Trichlorobenzene	Wt Linear	20	18.55085	0.0500	-7.2457	20.0000
1,2,4-Trichlorobenzene	Averaged	1.00538	0.89241	0.0500	-11.2370	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

19754652ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:53

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080221A.B\0802A_22.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.69998	0.66571	0.0500	-4.8965	20.0000
1,1,2-Trichloroethane	Averaged	0.71758	0.68699	0.0500	-4.2621	20.0000
Trichloroethene	Averaged	0.49351	0.49319	0.1000	-0.0659	20.0000
Trichlorofluoromethane	Averaged	0.71095	0.73082	0.0500	2.7954	20.0000
1,2,3-Trichloropropane	Wt Linear	20	20.11857	0.0500	0.5929	20.0000
1,2,3-Trimethylbenzene	Wt Linear	20	20.47263	0.0500	2.3632	20.0000
1,2,4-Trimethylbenzene	Averaged	3.71125	3.61475	0.0500	-2.6004	20.0000
1,3,5-Trimethylbenzene	Averaged	3.83738	3.67129	0.0500	-4.3282	20.0000
Vinyl chloride	Averaged	0.54284	0.54583	0.0500	0.5518	20.0000
m&p-Xylene	Averaged	2.16391	2.05655	0.3000	-4.9613	20.0000
o-Xylene	Averaged	2.09376	1.98944	0.3000	-4.9823	20.0000
4-Bromofluorobenzene (S)	Averaged	0.81652	0.82851	0.3000	1.4684	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.83900	0.83060	0.2000	-1.0012	20.0000
Toluene-d8 (S)	Averaged	2.82916	2.81016	0.3000	-0.6719	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19756796CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/03/2021 Time: 07:10

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080321A.B\0803A_03CCV.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	85.77050	0.0500	-14.2295	20.0000
Acetonitrile	Averaged	0.19790	0.18940	0.0500	-4.2987	20.0000
Acrolein	Averaged	0.03785	0.03253	0.0500	-14.0571	20.0000
Acrylonitrile	Averaged	0.08268	0.07602	0.0500	-8.0583	20.0000
Benzene	Averaged	1.63260	1.54997	0.3000	-5.0615	20.0000
Bromobenzene	Wt Linear	20	19.60276	0.0500	-1.9862	20.0000
Bromochloromethane	Averaged	0.23967	0.24406	0.0500	1.8315	20.0000
Bromodichloromethane	Averaged	0.49671	0.46950	0.0500	-5.4776	20.0000
Bromoform	Wt Linear	20	17.19181	0.1000	-14.0409	20.0000
Bromomethane	Wt Linear	20	16.68879	0.0500	-16.5560	20.0000
2-Butanone (MEK)	Averaged	0.13100	0.11098	0.0500	-15.2864	20.0000
n-Butylbenzene	Averaged	3.15861	2.94227	0.0500	-6.8491	20.0000
sec-Butylbenzene	Averaged	4.59240	4.61141	0.0500	0.4141	20.0000
tert-Butylbenzene	Averaged	3.32747	3.23925	0.0500	-2.6510	20.0000
Carbon disulfide	Averaged	1.09596	1.12951	0.0500	3.0608	20.0000
Carbon tetrachloride	Averaged	0.65199	0.63539	0.1000	-2.5460	20.0000
Chlorobenzene	Averaged	3.46849	3.47089	0.3000	0.0690	20.0000
Chloroethane	Wt Linear	20	20.03967	0.0500	0.1984	20.0000
2-Chloroethylvinyl ether	Averaged	0.10026	0.09239	0.0500	-7.8561	20.0000
Chloroform	Averaged	0.76653	0.75204	0.0500	-1.8907	20.0000
Chloromethane	Averaged	0.47178	0.42738	0.1000	-9.4125	20.0000
2-Chlorotoluene	Averaged	3.19804	3.03241	0.0500	-5.1791	20.0000
4-Chlorotoluene	Wt Linear	20	19.79232	0.0500	-1.0384	20.0000
Cyclohexane	Averaged	0.88143	0.90130	0.0500	2.2548	20.0000
Cyclohexanone	Wt Linear	100	77.24890	0.0500	-22.7511	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.07118	0.06408	0.0500	-9.9763	20.0000
Dibromochloromethane	Averaged	1.14305	1.06317	0.0500	-6.9879	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.84948	0.84235	0.0500	-0.8396	20.0000
Dibromomethane	Averaged	0.21580	0.19962	0.0500	-7.4979	20.0000
1,2-Dichlorobenzene	Wt Linear	20	18.84290	0.0500	-5.7855	20.0000
1,3-Dichlorobenzene	Averaged	2.39339	2.29758	0.0500	-4.0031	20.0000
1,4-Dichlorobenzene	Averaged	2.40850	2.20922	0.0500	-8.2739	20.0000
Dichlorodifluoromethane	Averaged	0.50630	0.51577	0.0500	1.8711	20.0000
1,1-Dichloroethane	Averaged	0.89978	0.87108	0.1000	-3.1892	20.0000
1,2-Dichloroethane	Averaged	0.48420	0.48070	0.0500	-0.7218	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19756796CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/03/2021 Time: 07:10

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080321A.B\0803A_03CCV.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41697	0.42244	0.1000	1.3122	20.0000
cis-1,2-Dichloroethene	Averaged	0.51447	0.49658	0.1000	-3.4774	20.0000
trans-1,2-Dichloroethene	Averaged	0.48560	0.48927	0.1000	0.7548	20.0000
1,2-Dichloropropane	Averaged	0.47297	0.44131	0.0500	-6.6935	20.0000
1,3-Dichloropropane	Averaged	1.34834	1.28097	0.0500	-4.9962	20.0000
2,2-Dichloropropane	Averaged	0.63089	0.62814	0.0500	-0.4357	20.0000
1,1-Dichloropropene	Averaged	0.57833	0.56419	0.0500	-2.4450	20.0000
cis-1,3-Dichloropropene	Averaged	0.60759	0.58667	0.0500	-3.4437	20.0000
trans-1,3-Dichloropropene	Averaged	1.42859	1.36963	0.0500	-4.1269	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.17183	0.16068	0.0500	-6.4915	20.0000
1,4-Dioxane (p-Dioxane)	Averaged	0.00125	0.00111	0.0500	-11.2932	20.0000
Ethylbenzene	Averaged	1.81669	1.74754	0.3000	-3.8067	20.0000
n-Heptane	Averaged	0.08645	0.08444	0.0500	-2.3276	20.0000
Hexachloro-1,3-butadiene	Averaged	0.52094	0.46428	0.0500	-10.8766	20.0000
n-Hexane	Averaged	0.72934	0.70645	0.0500	-3.1377	20.0000
2-Hexanone	Wt Linear	100	82.53152	0.0500	-17.4685	20.0000
Isopropylbenzene (Cumene)	Averaged	4.97952	5.03672	0.0500	1.1487	20.0000
p-Isopropyltoluene	Averaged	3.98328	3.90558	0.0500	-1.9506	20.0000
Methyl acetate	Averaged	0.16461	0.14894	0.0500	-9.5199	20.0000
Methylcyclohexane	Averaged	0.63492	0.63201	0.0500	-0.4584	20.0000
Methylene Chloride	Averaged	0.39856	0.36338	0.0500	-8.8247	20.0000
1-Methylnaphthalene	Quadratic	20	16.1917	0.0500	-19.0415	20.0000
2-Methylnaphthalene	Quadratic	20	14.94820	0.0500	-25.2590	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.20069	0.17501	0.0500	-12.7967	20.0000
Methyl-tert-butyl ether	Averaged	0.75801	0.71904	0.3000	-5.1414	20.0000
Naphthalene	Wt Linear	20	14.99252	0.3000	-25.0374	20.0000
n-Propylbenzene	Averaged	1.36370	1.31229	0.0500	-3.7701	20.0000
Styrene	Averaged	3.16078	3.10827	0.0500	-1.6613	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.40345	1.30329	0.0500	-7.1367	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.69253	0.59666	0.3000	-13.8439	20.0000
Tetrachloroethene	Averaged	1.69761	1.72278	0.1000	1.4829	20.0000
Tetrahydrofuran	Averaged	0.06238	0.05327	0.0500	-14.6016	20.0000
Toluene	Averaged	3.24040	3.10683	0.3000	-4.1222	20.0000
1,2,3-Trichlorobenzene	Wt Linear	20	16.21503	0.0500	-18.9248	20.0000
1,2,4-Trichlorobenzene	Averaged	1.00538	0.83891	0.0500	-16.5579	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19756796CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/03/2021 Time: 07:10

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080321A.B\0803A_03CCV.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.69998	0.71196	0.0500	1.7111	20.0000
1,1,2-Trichloroethane	Averaged	0.71758	0.64755	0.0500	-9.7586	20.0000
Trichloroethene	Averaged	0.49351	0.46740	0.1000	-5.2904	20.0000
Trichlorofluoromethane	Averaged	0.71095	0.76783	0.0500	8.0010	20.0000
1,2,3-Trichloropropane	Wt Linear	20	19.11054	0.0500	-4.4473	20.0000
1,2,3-Trimethylbenzene	Wt Linear	20	19.49742	0.0500	-2.5129	20.0000
1,2,4-Trimethylbenzene	Averaged	3.71125	3.62873	0.0500	-2.2237	20.0000
1,3,5-Trimethylbenzene	Averaged	3.83738	3.71970	0.0500	-3.0667	20.0000
Vinyl chloride	Averaged	0.54284	0.52726	0.0500	-2.8701	20.0000
m&p-Xylene	Averaged	2.16391	2.11605	0.3000	-2.2119	20.0000
o-Xylene	Averaged	2.09376	1.99850	0.3000	-4.5498	20.0000
4-Bromofluorobenzene (S)	Averaged	0.81652	0.79494	0.3000	-2.6426	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.83900	0.82735	0.2000	-1.3885	20.0000
Toluene-d8 (S)	Averaged	2.82916	2.85113	0.3000	0.7762	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

19684415ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.12485	0.0500	-8.5178	20.0000
Acrolein	Averaged	0.05349	0.05996	0.0500	5.0774	20.0000
Acrylonitrile	Averaged	0.09999	0.10586	0.0500	1.8661	20.0000
Benzene	Averaged	1.02994	1.02173	0.3000	1.9652	20.0000
Bromobenzene	Averaged	0.83368	0.81534	0.0500	2.6050	20.0000
Bromochloromethane	Averaged	0.14823	0.15027	0.0500	3.3236	20.0000
Bromodichloromethane	Averaged	0.34307	0.38351	0.0500	10.5511	20.0000
Bromoform	Wt Linear	100	97.70592	0.1000	-2.2941	20.0000
Bromomethane	Averaged	0.20810	0.20208	0.0500	-11.8058	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.16815	0.0500	1.3869	20.0000
n-Butylbenzene	Averaged	2.44142	2.47154	0.0500	4.4561	20.0000
sec-Butylbenzene	Averaged	3.06847	3.02062	0.0500	1.8277	20.0000
tert-Butylbenzene	Averaged	2.01582	1.95828	0.0500	0.8114	20.0000
Carbon disulfide	Averaged	0.75393	0.83297	0.0500	6.0414	20.0000
Carbon tetrachloride	Averaged	0.36017	0.38992	0.1000	8.7303	20.0000
Chlorobenzene	Averaged	1.97688	2.00433	0.3000	4.3442	20.0000
Chloroethane	Averaged	0.16149	0.17752	0.0500	2.7473	20.0000
Chloroform	Averaged	0.48944	0.50463	0.0500	2.3773	20.0000
Chloromethane	Averaged	0.44393	0.52693	0.1000	-5.0634	20.0000
2-Chlorotoluene	Averaged	1.90688	1.83524	0.0500	-0.5178	20.0000
4-Chlorotoluene	Averaged	0.72936	0.71690	0.0500	2.3799	20.0000
Cyclohexanone	Averaged	0.19969	0.20256	0.0500	0.3432	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.12029	0.0500	31.2020*	20.0000
Dibromochloromethane	Averaged	0.66934	0.79515	0.0500	15.7023	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.69207	0.0500	9.9818	20.0000
Dibromomethane	Averaged	0.18125	0.18977	0.0500	5.6308	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.55132	0.0500	1.4983	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.55360	0.0500	2.4238	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.60568	0.0500	2.9807	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.51805	0.1000	1.3703	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.39385	0.0500	2.8276	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.24483	0.1000	3.6845	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.30226	0.1000	4.9060	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.26726	0.1000	3.2083	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.31865	0.0500	3.6076	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

10/13/2021 4:08

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

19684415ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.95571	0.0500	6.1729	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.35538	0.0500	3.3580	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.34512	0.0500	3.1905	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.45777	0.0500	13.8968	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	0.96825	0.0500	14.5672	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.13312	0.0500	4.4620	20.0000
Ethylbenzene	Averaged	1.00133	0.98494	0.3000	2.5055	20.0000
n-Heptane	Averaged	1.13421	1.22772	0.0500	4.4617	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.81386	0.0500	7.0436	20.0000
n-Hexane	Averaged	0.41998	0.43726	0.0500	1.6764	20.0000
2-Hexanone	Averaged	0.60114	0.62360	0.0500	0.7021	20.0000
Iodomethane	Wt Linear	100	109.9506	0.0500	9.9507	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.27448	0.0500	2.9305	20.0000
p-Isopropyltoluene	Averaged	2.73371	2.74222	0.0500	1.4539	20.0000
Methyl acetate	Averaged	0.19943	0.20591	0.0500	-0.1878	20.0000
Methylene Chloride	Averaged	0.31386	0.29665	0.0500	-10.1466	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.32341	0.0500	0.2928	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.70277	0.3000	2.3247	20.0000
Naphthalene	Wt Linear	100	112.3373	0.3000	12.3374	20.0000
n-Propylbenzene	Averaged	0.73726	0.71342	0.0500	3.1340	20.0000
Styrene	Averaged	2.10373	2.17583	0.0500	6.0334	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.75806	0.0500	9.6048	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.69887	0.3000	3.9845	20.0000
Tetrachloroethene	Averaged	0.86889	0.87133	0.1000	3.0156	20.0000
Tetrahydrofuran	Averaged	0.44347	0.44680	0.0001	-1.5163	20.0000
Toluene	Averaged	1.64122	1.61768	0.3000	1.0179	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	108.3593	0.0500	8.3593	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	108.2064	0.0500	8.2064	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.40394	0.0500	5.5658	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.53342	0.0500	5.9615	20.0000
Trichloroethene	Averaged	0.28723	0.29553	0.1000	4.3603	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.46689	0.0500	7.4371	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.17056	0.0500	2.5307	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.28128	0.0500	5.0218	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.51504	0.0500	0.4512	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

19684415ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.41767	0.0500	1.0732	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.30971	0.0500	1.0132	20.0000
Vinyl acetate	Averaged	1.07776	1.10424	0.0500	2.6775	20.0000
Vinyl chloride	Averaged	0.32210	0.36660	0.0500	0.3128	20.0000
m&p-Xylene	Averaged	1.27536	1.25417	0.3000	3.7060	20.0000
o-Xylene	Averaged	1.29395	1.28607	0.3000	2.9529	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.72921	0.3000	-2.0917	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.92090	0.0500	-2.0736	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.38714	0.3000	0.5153	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19727087CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 08:11

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072721A.B\0727A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.13271	0.0500	1.2860	20.0000
Acrolein	Averaged	0.05349	0.05241	0.0500	-2.0148	20.0000
Acrylonitrile	Averaged	0.09999	0.08786	0.0500	-12.1274	20.0000
Benzene	Averaged	1.02994	1.11383	0.3000	8.1447	20.0000
Bromobenzene	Averaged	0.83368	0.90702	0.0500	8.7967	20.0000
Bromochloromethane	Averaged	0.14823	0.15605	0.0500	5.2702	20.0000
Bromodichloromethane	Averaged	0.34307	0.39388	0.0500	14.8115	20.0000
Bromoform	Wt Linear	100	98.18541	0.1000	-1.8146	20.0000
Bromomethane	Averaged	0.20810	0.21492	0.0500	3.2735	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.17292	0.0500	8.2907	20.0000
n-Butylbenzene	Averaged	2.44142	2.83873	0.0500	16.2735	20.0000
sec-Butylbenzene	Averaged	3.06847	3.40396	0.0500	10.9334	20.0000
tert-Butylbenzene	Averaged	2.01582	2.28044	0.0500	13.1271	20.0000
Carbon disulfide	Averaged	0.75393	0.87640	0.0500	16.2441	20.0000
Carbon tetrachloride	Averaged	0.36017	0.43603	0.1000	21.0609*	20.0000
Chlorobenzene	Averaged	1.97688	2.14923	0.3000	8.7187	20.0000
Chloroethane	Averaged	0.16149	0.18148	0.0500	12.3757	20.0000
Chloroform	Averaged	0.48944	0.52509	0.0500	7.2843	20.0000
Chloromethane	Averaged	0.44393	0.41188	0.1000	-7.2210	20.0000
2-Chlorotoluene	Averaged	1.90688	2.08032	0.0500	9.0957	20.0000
4-Chlorotoluene	Averaged	0.72936	0.81599	0.0500	11.8776	20.0000
Cyclohexanone	Averaged	0.19969	0.21413	0.0500	7.2308	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.11968	0.0500	16.0684	20.0000
Dibromochloromethane	Averaged	0.66934	0.79069	0.0500	18.1301	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.67737	0.0500	8.8027	20.0000
Dibromomethane	Averaged	0.18125	0.19119	0.0500	5.4859	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.62729	0.0500	3.9577	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.68764	0.0500	8.1503	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.71272	0.0500	8.8264	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.54902	0.1000	8.9889	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.39242	0.0500	2.1656	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.25559	0.1000	13.7273	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.32398	0.1000	9.3663	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.29194	0.1000	12.5181	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.33411	0.0500	6.6778	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19727087CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 08:11

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072721A.B\0727A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.95163	0.0500	3.6298	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.42824	0.0500	20.4655*	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.38882	0.0500	14.4095	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.48110	0.0500	18.0076	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	1.01287	0.0500	19.1410	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.12631	0.0500	0.9429	20.0000
Ethylbenzene	Averaged	1.00133	1.11042	0.3000	10.8946	20.0000
n-Heptane	Averaged	1.13421	1.31275	0.0500	15.7422	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.91187	0.0500	20.0081*	20.0000
n-Hexane	Averaged	0.41998	0.48931	0.0500	16.5088	20.0000
2-Hexanone	Averaged	0.60114	0.68640	0.0500	14.1838	20.0000
Iodomethane	Wt Linear	100	113.7768	0.0500	13.7769	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.74416	0.0500	15.4860	20.0000
p-Isopropyltoluene	Averaged	2.73371	3.11165	0.0500	13.8251	20.0000
Methyl acetate	Averaged	0.19943	0.17906	0.0500	-10.2177	20.0000
Methylene Chloride	Averaged	0.31386	0.29504	0.0500	-5.9962	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.31121	0.0500	-1.2132	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.70389	0.3000	3.7630	20.0000
Naphthalene	Wt Linear	100	109.1489	0.3000	9.1489	20.0000
n-Propylbenzene	Averaged	0.73726	0.84186	0.0500	14.1880	20.0000
Styrene	Averaged	2.10373	2.32720	0.0500	10.6222	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.81651	0.0500	14.3132	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.71232	0.3000	6.0511	20.0000
Tetrachloroethene	Averaged	0.86889	0.98473	0.1000	13.3316	20.0000
Tetrahydrofuran	Averaged	0.44347	0.38428	0.0001	-13.3471	20.0000
Toluene	Averaged	1.64122	1.77433	0.3000	8.1104	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	110.7434	0.0500	10.7434	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	115.9593	0.0500	15.9594	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.47232	0.0500	15.5829	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.53151	0.0500	4.4947	20.0000
Trichloroethene	Averaged	0.28723	0.32665	0.1000	13.7216	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.47877	0.0500	16.7210	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.17530	0.0500	1.2930	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.29364	0.0500	13.7019	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.65851	0.0500	6.1522	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19727087CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 08:11

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072721A.B\0727A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.66801	0.0500	8.9631	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.64586	0.0500	11.5387	20.0000
Vinyl acetate	Averaged	1.07776	1.11161	0.0500	3.1403	20.0000
Vinyl chloride	Averaged	0.32210	0.34020	0.0500	5.6204	20.0000
m&p-Xylene	Averaged	1.27536	1.40697	0.3000	10.3189	20.0000
o-Xylene	Averaged	1.29395	1.39989	0.3000	8.1867	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.74972	0.3000	-0.2627	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.93014	0.0500	-1.0857	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.36087	0.3000	-0.4576	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19895948ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/27/2021 Time: 10:16

Instrument ID: 60MSVC GC Column: Col 2
Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721AGRO.B\0727A_10.D
Init. Calib. Time(s): 08:42 10:00

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	4387.215	3784.906	0.0100	-13.7287	20.0000
4-Bromofluorobenzene (S)	Averaged	16972.06	16140.74	0.0100	-4.8982	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	24394.68	22966.40	0.0100	-5.8549	20.0000
Toluene-d8 (S)	Averaged	18238.40	17670.56	0.0100	-3.1135	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19752271CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072821A.B\0728A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.15125	0.0500	15.4361	20.0000
Acrolein	Averaged	0.05349	0.05515	0.0500	3.1004	20.0000
Acrylonitrile	Averaged	0.09999	0.09645	0.0500	-3.5387	20.0000
Benzene	Averaged	1.02994	1.14043	0.3000	10.7275	20.0000
Bromobenzene	Averaged	0.83368	0.88833	0.0500	6.5554	20.0000
Bromochloromethane	Averaged	0.14823	0.15936	0.0500	7.5073	20.0000
Bromodichloromethane	Averaged	0.34307	0.40060	0.0500	16.7706	20.0000
Bromoform	Wt Linear	100	96.78708	0.1000	-3.2129	20.0000
Bromomethane	Averaged	0.20810	0.20693	0.0500	-0.5638	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.17464	0.0500	9.3678	20.0000
n-Butylbenzene	Averaged	2.44142	2.84610	0.0500	16.5754	20.0000
sec-Butylbenzene	Averaged	3.06847	3.46901	0.0500	13.0534	20.0000
tert-Butylbenzene	Averaged	2.01582	2.25723	0.0500	11.9760	20.0000
Carbon disulfide	Averaged	0.75393	0.90713	0.0500	20.3208*	20.0000
Carbon tetrachloride	Averaged	0.36017	0.45156	0.1000	25.3732*	20.0000
Chlorobenzene	Averaged	1.97688	2.15550	0.3000	9.0355	20.0000
Chloroethane	Averaged	0.16149	0.18344	0.0500	13.5920	20.0000
Chloroform	Averaged	0.48944	0.53659	0.0500	9.6339	20.0000
Chloromethane	Averaged	0.44393	0.42828	0.1000	-3.5267	20.0000
2-Chlorotoluene	Averaged	1.90688	2.08667	0.0500	9.4283	20.0000
4-Chlorotoluene	Averaged	0.72936	0.81104	0.0500	11.1984	20.0000
Cyclohexanone	Averaged	0.19969	0.20431	0.0500	2.3150	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.11230	0.0500	8.9182	20.0000
Dibromochloromethane	Averaged	0.66934	0.77318	0.0500	15.5136	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.66034	0.0500	6.0670	20.0000
Dibromomethane	Averaged	0.18125	0.19040	0.0500	5.0452	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.59352	0.0500	1.8005	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.70546	0.0500	9.2923	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.67574	0.0500	6.4763	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.55399	0.1000	9.9752	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.39621	0.0500	3.1519	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.26376	0.1000	17.3606	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.32919	0.1000	11.1251	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.30225	0.1000	16.4922	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.33861	0.0500	8.1165	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19752271CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072821A.B\0728A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.93950	0.0500	2.3090	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.43317	0.0500	21.8524*	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.39780	0.0500	17.0516	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.48210	0.0500	18.2527	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	0.98105	0.0500	15.3983	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.12725	0.0500	1.6961	20.0000
Ethylbenzene	Averaged	1.00133	1.12806	0.3000	12.6563	20.0000
n-Heptane	Averaged	1.13421	1.32347	0.0500	16.6869	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.92046	0.0500	21.1397*	20.0000
n-Hexane	Averaged	0.41998	0.48331	0.0500	15.0785	20.0000
2-Hexanone	Averaged	0.60114	0.64315	0.0500	6.9884	20.0000
Iodomethane	Wt Linear	100	118.8191	0.0500	18.8192	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.74372	0.0500	15.4723	20.0000
p-Isopropyltoluene	Averaged	2.73371	3.12593	0.0500	14.3475	20.0000
Methyl acetate	Averaged	0.19943	0.18488	0.0500	-7.2996	20.0000
Methylene Chloride	Averaged	0.31386	0.30159	0.0500	-3.9089	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.29769	0.0500	-5.5045	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.68627	0.3000	1.1656	20.0000
Naphthalene	Wt Linear	100	102.5109	0.3000	2.5110	20.0000
n-Propylbenzene	Averaged	0.73726	0.85288	0.0500	15.6829	20.0000
Styrene	Averaged	2.10373	2.37217	0.0500	12.7602	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.81487	0.0500	14.0837	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.67310	0.3000	0.2120	20.0000
Tetrachloroethene	Averaged	0.86889	0.99736	0.1000	14.7851	20.0000
Tetrahydrofuran	Averaged	0.08869	0.07956	0.0001	-10.2943	20.0000
Toluene	Averaged	1.64122	1.77760	0.3000	8.3098	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	109.7591	0.0500	9.7591	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	112.8988	0.0500	12.8988	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.48441	0.0500	18.5426	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.52206	0.0500	2.6370	20.0000
Trichloroethene	Averaged	0.28723	0.33164	0.1000	15.4591	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.49222	0.0500	19.9987	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.16710	0.0500	-3.4442	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.30891	0.0500	19.6169	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.67550	0.0500	6.8307	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19752271CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072821A.B\0728A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.63819	0.0500	7.7453	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.64230	0.0500	11.3885	20.0000
Vinyl acetate	Averaged	1.07776	1.11401	0.0500	3.3628	20.0000
Vinyl chloride	Averaged	0.32210	0.34819	0.0500	8.0986	20.0000
m&p-Xylene	Averaged	1.27536	1.41959	0.3000	11.3090	20.0000
o-Xylene	Averaged	1.29395	1.42233	0.3000	9.9213	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.73776	0.3000	-1.8539	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.91174	0.0500	-3.0425	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.36151	0.3000	-0.4305	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19725768ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/26/2021 Time: 23:36

Instrument ID: 60MSVD GC Column: Col 2
Init. Calib. Date(s): 07/26/2021 07/26/2021

Lab File ID: 072621BGRO.B\0726B_13.D
Init. Calib. Time(s): 21:45 23:05

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	4684.878	3850.012	0.0100	-17.8204	20.0000
4-Bromofluorobenzene (S)	Averaged	7854.043	7906.080	0.0100	0.6625	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	10610.64	10302.60	0.0100	-2.9032	20.0000
Toluene-d8 (S)	Averaged	9904.473	9597.860	0.0100	-3.0957	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20118209CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 10:08

Instrument ID: 60MSVD GC Column: Col 1 Init. Calib. Date(s): 07/23/2021 07/23/2021

Lab File ID: 072821A.B\0728A_03.D Init. Calib. Time(s): 14:31 16:23

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.24247	0.21604	0.0500	-10.8983	20.0000
Acetonitrile	Averaged	0.06594	0.05784	0.0500	-12.2882	20.0000
Acrolein	Averaged	0.06477	0.05824	0.0500	-10.0875	20.0000
Acrylonitrile	Averaged	0.19342	0.18485	0.0500	-4.4344	20.0000
Benzene	Averaged	1.36606	1.35012	0.3000	-1.1664	20.0000
Bromobenzene	Averaged	1.05251	0.98656	0.0500	-6.2656	20.0000
Bromochloromethane	Averaged	0.20800	0.20636	0.0500	-0.7901	20.0000
Bromodichloromethane	Averaged	0.52702	0.54043	0.0500	2.5438	20.0000
Bromoform	Averaged	0.61658	0.61350	0.1000	-0.4998	20.0000
Bromomethane	Wt Linear	20	18.22953	0.0500	-8.8523	20.0000
2-Butanone (MEK)	Averaged	0.31311	0.28726	0.0500	-8.2545	20.0000
n-Butylbenzene	Averaged	1.99969	1.91807	0.0500	-4.0815	20.0000
sec-Butylbenzene	Averaged	2.86596	2.77499	0.0500	-3.1741	20.0000
tert-Butylbenzene	Averaged	2.16243	2.11482	0.0500	-2.2019	20.0000
Carbon disulfide	Averaged	1.02263	1.00093	0.0500	-2.1222	20.0000
Carbon tetrachloride	Averaged	0.63307	0.68862	0.1000	8.7755	20.0000
Chlorobenzene	Averaged	2.44704	2.32752	0.3000	-4.8843	20.0000
Chloroethane	Averaged	0.27508	0.27080	0.0500	-1.5545	20.0000
2-Chloroethylvinyl ether	Averaged	0.24131	0.24632	0.0500	2.0770	20.0000
Chloroform	Averaged	0.73075	0.71582	0.0500	-2.0422	20.0000
Chloromethane	Averaged	0.87168	0.77386	0.1000	-11.2217	20.0000
2-Chlorotoluene	Averaged	2.33443	2.25664	0.0500	-3.3323	20.0000
4-Chlorotoluene	Averaged	0.90969	0.88467	0.0500	-2.7501	20.0000
Cyclohexane	Averaged	1.17090	1.23976	0.0500	5.8811	20.0000
Cyclohexanone	Averaged	0.24234	0.25085	0.0500	3.5099	20.0000
1,2-Dibromo-3-chloropropane	Wt Linear	20	18.25957	0.0500	-8.7022	20.0000
Dibromochloromethane	Averaged	0.94050	0.94330	0.0500	0.2977	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.72586	0.71906	0.0500	-0.9363	20.0000
Dibromomethane	Averaged	0.23382	0.22175	0.0500	-5.1585	20.0000
1,2-Dichlorobenzene	Averaged	1.58039	1.50978	0.0500	-4.4678	20.0000
1,3-Dichlorobenzene	Averaged	1.67810	1.66370	0.0500	-0.8580	20.0000
1,4-Dichlorobenzene	Averaged	1.77620	1.66533	0.0500	-6.2423	20.0000
Dichlorodifluoromethane	Averaged	0.44663	0.49543	0.0500	10.9274	20.0000
1,1-Dichloroethane	Averaged	0.94147	0.95701	0.1000	1.6504	20.0000
1,2-Dichloroethane	Averaged	0.73638	0.74067	0.0500	0.5823	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

20118209CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 10:08

Instrument ID: 60MSVD GC Column: Col 1 Init. Calib. Date(s): 07/23/2021 07/23/2021

Lab File ID: 072821A.B\0728A_03.D Init. Calib. Time(s): 14:31 16:23

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.30917	0.29109	0.1000	-5.8481	20.0000
cis-1,2-Dichloroethene	Averaged	0.40156	0.38948	0.1000	-3.0083	20.0000
trans-1,2-Dichloroethene	Averaged	0.37349	0.37310	0.1000	-0.1061	20.0000
1,2-Dichloropropane	Averaged	0.52407	0.49900	0.0500	-4.7826	20.0000
1,3-Dichloropropane	Averaged	1.09658	1.03478	0.0500	-5.6356	20.0000
2,2-Dichloropropane	Averaged	0.63478	0.63571	0.0500	0.1466	20.0000
1,1-Dichloropropene	Averaged	0.53054	0.52654	0.0500	-0.7542	20.0000
cis-1,3-Dichloropropene	Averaged	0.57244	0.55261	0.0500	-3.4639	20.0000
trans-1,3-Dichloropropene	Averaged	1.19728	1.13371	0.0500	-5.3095	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.13341	0.12813	0.0500	-3.9582	20.0000
1,4-Dioxane (p-Dioxane)	Averaged	0.00242	0.00247	0.0500	2.3750	20.0000
Ethylbenzene	Averaged	1.26832	1.24639	0.3000	-1.7290	20.0000
n-Heptane	Averaged	0.04886	0.05039	0.0500	3.1312	20.0000
Hexachloro-1,3-butadiene	Averaged	0.34512	0.33113	0.0500	-4.0538	20.0000
n-Hexane	Averaged	0.76077	0.80499	0.0500	5.8130	20.0000
2-Hexanone	Averaged	1.03743	0.95582	0.0500	-7.8666	20.0000
Isopropylbenzene (Cumene)	Averaged	3.66235	3.56690	0.0500	-2.6064	20.0000
p-Isopropyltoluene	Averaged	2.53917	2.49788	0.0500	-1.6261	20.0000
Methyl acetate	Averaged	0.36861	0.35708	0.0500	-3.1270	20.0000
Methylcyclohexane	Averaged	0.44870	0.43800	0.0500	-2.3829	20.0000
Methylene Chloride	Averaged	0.35024	0.33991	0.0500	-2.9506	20.0000
1-Methylnaphthalene	Averaged	0.61684	0.52954	0.0500	-14.1526	20.0000
2-Methylnaphthalene	Averaged	0.78636	0.64055	0.0500	-18.5425	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.51025	0.49533	0.0500	-2.9250	20.0000
Methyl-tert-butyl ether	Averaged	0.81302	0.78482	0.3000	-3.4678	20.0000
Naphthalene	Averaged	1.80190	1.67426	0.3000	-7.0836	20.0000
n-Propylbenzene	Averaged	0.89438	0.86761	0.0500	-2.9932	20.0000
Styrene	Averaged	2.49646	2.43216	0.0500	-2.5758	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.95916	0.95505	0.0500	-0.4290	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.71482	0.66708	0.3000	-6.6792	20.0000
Tetrachloroethene	Averaged	1.15785	1.11680	0.1000	-3.5448	20.0000
Tetrahydrofuran	Averaged	0.14759	0.14130	0.0500	-4.2624	20.0000
Toluene	Averaged	2.19292	2.10791	0.3000	-3.8766	20.0000
1,2,3-Trichlorobenzene	Averaged	0.71953	0.65539	0.0500	-8.9136	20.0000
1,2,4-Trichlorobenzene	Averaged	0.83271	0.77276	0.0500	-7.1996	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

20118209CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 10:08

Instrument ID: 60MSVD GC Column: Col 1 Init. Calib. Date(s): 07/23/2021 07/23/2021

Lab File ID: 072821A.B\0728A_03.D Init. Calib. Time(s): 14:31 16:23

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.73823	0.73924	0.0500	0.1369	20.0000
1,1,2-Trichloroethane	Averaged	0.56122	0.52913	0.0500	-5.7163	20.0000
Trichloroethene	Averaged	0.43306	0.42116	0.1000	-2.7474	20.0000
Trichlorofluoromethane	Averaged	0.71598	0.73473	0.0500	2.6188	20.0000
1,2,3-Trichloropropane	Averaged	0.22522	0.21655	0.0500	-3.8480	20.0000
1,2,3-Trimethylbenzene	Averaged	2.77206	2.66967	0.0500	-3.6938	20.0000
1,2,4-Trimethylbenzene	Averaged	2.74104	2.71367	0.0500	-0.9988	20.0000
1,3,5-Trimethylbenzene	Averaged	2.67033	2.62960	0.0500	-1.5253	20.0000
Vinyl chloride	Averaged	0.55740	0.52721	0.0500	-5.4156	20.0000
m&p-Xylene	Averaged	1.56798	1.54159	0.3000	-1.6829	20.0000
o-Xylene	Averaged	1.51498	1.44875	0.3000	-4.3715	20.0000
4-Bromofluorobenzene (S)	Averaged	0.84718	0.84930	0.3000	0.2498	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.87910	0.86908	0.2000	-1.1396	20.0000
Toluene-d8 (S)	Averaged	2.32102	2.34036	0.3000	0.8330	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 07:25 Lab Sample ID: 2950696

Date Analyzed: 08/03/2021 07:25 Lab File ID: 080321A.B\0803A_04LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	102	
75-05-8	Acetonitrile	96.6	
107-02-8	Acrolein	89.5	
107-13-1	Acrylonitrile	96.9	
71-43-2	Benzene	19.8	
108-86-1	Bromobenzene	20.2	
74-97-5	Bromochloromethane	21.4	
75-27-4	Bromodichloromethane	20.4	
75-25-2	Bromoform	18.6	
74-83-9	Bromomethane	18.4	
78-93-3	2-Butanone (MEK)	102	
104-51-8	n-Butylbenzene	19.2	
135-98-8	sec-Butylbenzene	19.9	
98-06-6	tert-Butylbenzene	19.8	
75-15-0	Carbon disulfide	21.1	
56-23-5	Carbon tetrachloride	20.8	
108-90-7	Chlorobenzene	20.6	
75-00-3	Chloroethane	20.5	
110-75-8	2-Chloroethylvinyl ether	93.0	
67-66-3	Chloroform	20.7	
74-87-3	Chloromethane	19.5	
95-49-8	2-Chlorotoluene	19.4	
106-43-4	4-Chlorotoluene	20.2	
110-82-7	Cyclohexane	20.7	
108-94-1	Cyclohexanone	89.3	
96-12-8	1,2-Dibromo-3-chloropropane	18.3	
124-48-1	Dibromochloromethane	19.3	
106-93-4	1,2-Dibromoethane (EDB)	20.3	
74-95-3	Dibromomethane	19.1	
95-50-1	1,2-Dichlorobenzene	19.6	
541-73-1	1,3-Dichlorobenzene	19.7	
106-46-7	1,4-Dichlorobenzene	19.1	
75-71-8	Dichlorodifluoromethane	20.9	
75-34-3	1,1-Dichloroethane	20.4	
107-06-2	1,2-Dichloroethane	20.2	
540-59-0	1,2-Dichloroethene (Total)	41.3	
75-35-4	1,1-Dichloroethene	21.1	

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

LCS

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 07:25 Lab Sample ID: 2950696

Date Analyzed: 08/03/2021 07:25 Lab File ID: 080321A.B\0803A_04LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	20.0	
156-60-5	trans-1,2-Dichloroethene	21.3	
78-87-5	1,2-Dichloropropane	19.8	
142-28-9	1,3-Dichloropropane	19.0	
594-20-7	2,2-Dichloropropane	20.5	
563-58-6	1,1-Dichloropropene	20.2	
10061-01-5	cis-1,3-Dichloropropene	20.0	
10061-02-6	trans-1,3-Dichloropropene	19.8	
60-29-7	Diethyl ether (Ethyl ether)	19.4	
123-91-1	1,4-Dioxane (p-Dioxane)	122	
100-41-4	Ethylbenzene	20.0	
142-82-5	n-Heptane	20.9	
87-68-3	Hexachloro-1,3-butadiene	20.0	
110-54-3	n-Hexane	20.6	
591-78-6	2-Hexanone	98.7	
98-82-8	Isopropylbenzene (Cumene)	21.2	
99-87-6	p-Isopropyltoluene	20.7	
79-20-9	Methyl acetate	93.1	
108-87-2	Methylcyclohexane	20.7	
75-09-2	Methylene Chloride	18.2	
90-12-0	1-Methylnaphthalene	20.9	
91-57-6	2-Methylnaphthalene	20.9	
108-10-1	4-Methyl-2-pentanone (MIBK)	88.2	
1634-04-4	Methyl-tert-butyl ether	19.3	
91-20-3	Naphthalene	16.6	
103-65-1	n-Propylbenzene	19.3	
100-42-5	Styrene	20.2	
630-20-6	1,1,1,2-Tetrachloroethane	19.4	
79-34-5	1,1,2,2-Tetrachloroethane	18.1	
127-18-4	Tetrachloroethene	21.4	
109-99-9	Tetrahydrofuran	88.2	
108-88-3	Toluene	19.9	
87-61-6	1,2,3-Trichlorobenzene	17.8	
120-82-1	1,2,4-Trichlorobenzene	18.6	
71-55-6	1,1,1-Trichloroethane	20.5	
79-00-5	1,1,2-Trichloroethane	18.9	
79-01-6	Trichloroethene	19.8	

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 07:25 Lab Sample ID: 2950696

Date Analyzed: 08/03/2021 07:25 Lab File ID: 080321A.B\0803A_04LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	23.3	
96-18-4	1,2,3-Trichloropropane	19.1	
526-73-8	1,2,3-Trimethylbenzene	20.5	
95-63-6	1,2,4-Trimethylbenzene	19.8	
108-67-8	1,3,5-Trimethylbenzene	19.5	
75-01-4	Vinyl chloride	20.7	
1330-20-7	Xylene (Total)	59.3	
179601-23-1	m&p-Xylene	40.0	
95-47-6	o-Xylene	19.4	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW

Date Received: | Matrix: Water | SDG No.: 60375838

Date Extracted: 08/03/2021 07:53 | Lab Sample ID: 2950695

Date Analyzed: 08/03/2021 07:53 | Lab File ID: 080321A.B\0803A_06BLK.D

Initial wt/vol: 10 mL | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60MSV8 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	<0.22	U
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 07:53 Lab Sample ID: 2950695

Date Analyzed: 08/03/2021 07:53 Lab File ID: 080321A.B\0803A_06BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	0.52	J
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U
79-01-6	Trichloroethene	<0.21	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375838

Date Extracted: 08/03/2021 07:53 Lab Sample ID: 2950695

Date Analyzed: 08/03/2021 07:53 Lab File ID: 080321A.B\0803A_06BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947601

Date Analyzed: 07/28/2021 08:38 Lab File ID: 072821AGRO.B\0728A_05.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	3.3	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947592

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821A.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.2	U
107-02-8	Acrolein	<75.6	U
107-13-1	Acrylonitrile	<3.2	U
71-43-2	Benzene	<0.49	U
108-86-1	Bromobenzene	<0.94	U
74-97-5	Bromochloromethane	<0.60	U
75-27-4	Bromodichloromethane	<0.60	U
75-25-2	Bromoform	<0.58	U
74-83-9	Bromomethane	<2.9	U
78-93-3	2-Butanone (MEK)	<3.4	U
104-51-8	n-Butylbenzene	<0.65	U
135-98-8	sec-Butylbenzene	<0.73	U
98-06-6	tert-Butylbenzene	<0.88	U
75-15-0	Carbon disulfide	<0.64	U
56-23-5	Carbon tetrachloride	<0.86	U
108-90-7	Chlorobenzene	<0.63	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.49	U
74-87-3	Chloromethane	<0.80	U
95-49-8	2-Chlorotoluene	<0.73	U
106-43-4	4-Chlorotoluene	<0.60	U
108-94-1	Cyclohexanone	<12.7	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.65	U
106-93-4	1,2-Dibromoethane (EDB)	<0.54	U
74-95-3	Dibromomethane	<0.60	U
95-50-1	1,2-Dichlorobenzene	<0.62	U
541-73-1	1,3-Dichlorobenzene	<0.72	U
106-46-7	1,4-Dichlorobenzene	<0.81	U
75-34-3	1,1-Dichloroethane	<0.39	U
107-06-2	1,2-Dichloroethane	<0.40	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.64	U
156-59-2	cis-1,2-Dichloroethene	<0.43	U
156-60-5	trans-1,2-Dichloroethene	<0.68	U
78-87-5	1,2-Dichloropropane	<0.98	U
142-28-9	1,3-Dichloropropane	<0.69	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

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Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947592

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821A.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.48	U
563-58-6	1,1-Dichloropropene	<0.90	U
10061-01-5	cis-1,3-Dichloropropene	<0.53	U
10061-02-6	trans-1,3-Dichloropropene	<0.46	U
60-29-7	Diethyl ether (Ethyl ether)	<0.56	U
100-41-4	Ethylbenzene	<0.46	U
142-82-5	n-Heptane	<4.5	U
87-68-3	Hexachloro-1,3-butadiene	<0.85	U
110-54-3	n-Hexane	<0.69	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.57	U
99-87-6	p-Isopropyltoluene	<0.69	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.0	U
1634-04-4	Methyl-tert-butyl ether	<0.48	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.80	U
100-42-5	Styrene	<0.59	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.41	U
109-99-9	Tetrahydrofuran	<0.78	U
108-88-3	Toluene	<0.35	U
87-61-6	1,2,3-Trichlorobenzene	<0.80	U
120-82-1	1,2,4-Trichlorobenzene	<0.80	U
71-55-6	1,1,1-Trichloroethane	<0.75	U
79-00-5	1,1,2-Trichloroethane	<0.63	U
79-01-6	Trichloroethene	<0.72	U
75-69-4	Trichlorofluoromethane	<0.61	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.0	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.67	U
108-67-8	1,3,5-Trimethylbenzene	<0.63	U
108-05-4	Vinyl acetate	<0.56	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947592

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821A.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.67	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.63	U
95-47-6	o-Xylene	<0.37	U

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947600

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821AGRO.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.055	U

SAMPLE NO.

MS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947594

Date Analyzed: 07/28/2021 12:01 Lab File ID: 072821A.B\0728A_18.D

Initial wt/vol: 6.4 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	528	
107-02-8	Acrolein	488	
107-13-1	Acrylonitrile	312	
71-43-2	Benzene	69.6	
108-86-1	Bromobenzene	63.0	
74-97-5	Bromochloromethane	75.8	
75-27-4	Bromodichloromethane	49.1	
75-25-2	Bromoform	46.5	
74-83-9	Bromomethane	29.2	
78-93-3	2-Butanone (MEK)	513	
104-51-8	n-Butylbenzene	58.0	
135-98-8	sec-Butylbenzene	60.3	
98-06-6	tert-Butylbenzene	62.4	
75-15-0	Carbon disulfide	34.7	
56-23-5	Carbon tetrachloride	54.6	
108-90-7	Chlorobenzene	66.9	
75-00-3	Chloroethane	68.9	
67-66-3	Chloroform	76.8	
74-87-3	Chloromethane	49.2	
95-49-8	2-Chlorotoluene	62.2	
106-43-4	4-Chlorotoluene	60.3	
108-94-1	Cyclohexanone	458	
96-12-8	1,2-Dibromo-3-chloropropane	37.0	
124-48-1	Dibromochloromethane	51.2	
106-93-4	1,2-Dibromoethane (EDB)	80.5	
74-95-3	Dibromomethane	77.8	
95-50-1	1,2-Dichlorobenzene	59.7	
541-73-1	1,3-Dichlorobenzene	59.2	
106-46-7	1,4-Dichlorobenzene	59.0	
75-34-3	1,1-Dichloroethane	73.2	
107-06-2	1,2-Dichloroethane	74.9	
540-59-0	1,2-Dichloroethene (Total)	144	
75-35-4	1,1-Dichloroethene	115	
156-59-2	cis-1,2-Dichloroethene	72.3	
156-60-5	trans-1,2-Dichloroethene	71.7	
78-87-5	1,2-Dichloropropane	72.5	
142-28-9	1,3-Dichloropropane	76.9	

SAMPLE NO.

MS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947594

Date Analyzed: 07/28/2021 12:01 Lab File ID: 072821A.B\0728A_18.D

Initial wt/vol: 6.4 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	70.4	
563-58-6	1,1-Dichloropropene	70.4	
10061-01-5	cis-1,3-Dichloropropene	46.1	
10061-02-6	trans-1,3-Dichloropropene	50.6	
60-29-7	Diethyl ether (Ethyl ether)	75.6	
100-41-4	Ethylbenzene	67.4	
142-82-5	n-Heptane	57.6	
87-68-3	Hexachloro-1,3-butadiene	50.2	
110-54-3	n-Hexane	59.0	
591-78-6	2-Hexanone	525	
74-88-4	Iodomethane	27.6	
98-82-8	Isopropylbenzene (Cumene)	67.0	
99-87-6	p-Isopropyltoluene	62.8	
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	66.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	480	
1634-04-4	Methyl-tert-butyl ether	78.9	
91-20-3	Naphthalene	102	
103-65-1	n-Propylbenzene	61.8	
100-42-5	Styrene	64.6	
630-20-6	1,1,1,2-Tetrachloroethane	57.7	
79-34-5	1,1,2,2-Tetrachloroethane	1.7	J
127-18-4	Tetrachloroethene	82.9	
109-99-9	Tetrahydrofuran	462	
108-88-3	Toluene	68.5	
87-61-6	1,2,3-Trichlorobenzene	51.2	
120-82-1	1,2,4-Trichlorobenzene	49.9	
71-55-6	1,1,1-Trichloroethane	69.8	
79-00-5	1,1,2-Trichloroethane	39.1	
79-01-6	Trichloroethene	133	
75-69-4	Trichlorofluoromethane	65.5	
96-18-4	1,2,3-Trichloropropane	79.4	
76-13-1	1,1,2-Trichlorotrifluoroethane	70.8	
526-73-8	1,2,3-Trimethylbenzene	62.9	
95-63-6	1,2,4-Trimethylbenzene	62.0	
108-67-8	1,3,5-Trimethylbenzene	61.1	
108-05-4	Vinyl acetate	31.5	J

SAMPLE NO.

MS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947594

Date Analyzed: 07/28/2021 12:01 Lab File ID: 072821A.B\0728A_18.D

Initial wt/vol: 6.4 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	61.1	
1330-20-7	Xylene (Total)	197	
179601-23-1	m&p-Xylene	131	
95-47-6	o-Xylene	65.7	

SAMPLE NO.

MSD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947595

Date Analyzed: 07/28/2021 12:16 Lab File ID: 072821A.B\0728A_19.D

Initial wt/vol: 6.48 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	549	
107-02-8	Acrolein	542	
107-13-1	Acrylonitrile	385	
71-43-2	Benzene	79.2	
108-86-1	Bromobenzene	73.1	
74-97-5	Bromochloromethane	86.8	
75-27-4	Bromodichloromethane	63.2	
75-25-2	Bromoform	62.5	
74-83-9	Bromomethane	36.0	
78-93-3	2-Butanone (MEK)	576	
104-51-8	n-Butylbenzene	64.2	
135-98-8	sec-Butylbenzene	66.0	
98-06-6	tert-Butylbenzene	71.9	
75-15-0	Carbon disulfide	47.4	
56-23-5	Carbon tetrachloride	71.9	
108-90-7	Chlorobenzene	76.6	
75-00-3	Chloroethane	76.5	
67-66-3	Chloroform	87.2	
74-87-3	Chloromethane	56.1	
95-49-8	2-Chlorotoluene	72.0	
106-43-4	4-Chlorotoluene	71.5	
108-94-1	Cyclohexanone	534	
96-12-8	1,2-Dibromo-3-chloropropane	48.9	
124-48-1	Dibromochloromethane	67.2	
106-93-4	1,2-Dibromoethane (EDB)	94.1	
74-95-3	Dibromomethane	92.0	
95-50-1	1,2-Dichlorobenzene	69.6	
541-73-1	1,3-Dichlorobenzene	68.9	
106-46-7	1,4-Dichlorobenzene	68.8	
75-34-3	1,1-Dichloroethane	82.3	
107-06-2	1,2-Dichloroethane	85.8	
540-59-0	1,2-Dichloroethene (Total)	164	
75-35-4	1,1-Dichloroethene	128	
156-59-2	cis-1,2-Dichloroethene	82.8	
156-60-5	trans-1,2-Dichloroethene	81.6	
78-87-5	1,2-Dichloropropane	82.4	
142-28-9	1,3-Dichloropropane	89.7	

SAMPLE NO.

MSD

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947595

Date Analyzed: 07/28/2021 12:16 Lab File ID: 072821A.B\0728A_19.D

Initial wt/vol: 6.48 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	81.3	
563-58-6	1,1-Dichloropropene	81.0	
10061-01-5	cis-1,3-Dichloropropene	58.6	
10061-02-6	trans-1,3-Dichloropropene	63.6	
60-29-7	Diethyl ether (Ethyl ether)	86.2	
100-41-4	Ethylbenzene	76.4	
142-82-5	n-Heptane	62.7	
87-68-3	Hexachloro-1,3-butadiene	55.4	
110-54-3	n-Hexane	65.9	
591-78-6	2-Hexanone	601	
74-88-4	Iodomethane	40.2	
98-82-8	Isopropylbenzene (Cumene)	75.8	
99-87-6	p-Isopropyltoluene	68.8	
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	75.9	
108-10-1	4-Methyl-2-pentanone (MIBK)	550	
1634-04-4	Methyl-tert-butyl ether	90.5	
91-20-3	Naphthalene	108	
103-65-1	n-Propylbenzene	71.2	
100-42-5	Styrene	75.3	
630-20-6	1,1,1,2-Tetrachloroethane	71.1	
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	85.6	
109-99-9	Tetrahydrofuran	518	
108-88-3	Toluene	77.6	
87-61-6	1,2,3-Trichlorobenzene	63.5	
120-82-1	1,2,4-Trichlorobenzene	60.2	
71-55-6	1,1,1-Trichloroethane	80.8	
79-00-5	1,1,2-Trichloroethane	47.8	
79-01-6	Trichloroethene	153	
75-69-4	Trichlorofluoromethane	78.6	
96-18-4	1,2,3-Trichloropropane	91.8	
76-13-1	1,1,2-Trichlorotrifluoroethane	83.0	
526-73-8	1,2,3-Trimethylbenzene	72.6	
95-63-6	1,2,4-Trimethylbenzene	70.1	
108-67-8	1,3,5-Trimethylbenzene	71.3	
108-05-4	Vinyl acetate	36.2	J

SAMPLE NO.

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

MSD

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947595

Date Analyzed: 07/28/2021 12:16 Lab File ID: 072821A.B\0728A_19.D

Initial wt/vol: 6.48 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	67.5	
1330-20-7	Xylene (Total)	228	
179601-23-1	m&p-Xylene	153	
95-47-6	o-Xylene	75.0	

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375838

Date Extracted: 07/28/2021 10:56 Lab Sample ID: 2947719

Date Analyzed: 07/28/2021 10:56 Lab File ID: 072821AGRO.B\0728A_06.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	3360	

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375838

Date Extracted: 07/28/2021 11:28 Lab Sample ID: 2947718

Date Analyzed: 07/28/2021 11:28 Lab File ID: 072821AGRO.B\0728A_08.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	<62.6	U

MSSV FULL SCAN - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS9

LAB SAMPLE ID	SAMPLE NAME	2FBP	NIT5	TD14
2946212	2946212BLANK	79	79	79
2946213	2946213LCS	79	86	70
2946214	2946214MS	71	64	60
2946215	2946215MSD	75	74	65
60375838010	GB-14/0-2	70	68	66
60375838011	GB-14/3-5	71	73	63
60375838012	GB-07/2.5-3.5	73	71	63
60375838013	GB-07/7-9	69	60	65

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(NIT5) = Nitrobenzene-d5 (S)	(30-120)
(TD14) = Terphenyl-d14 (S)	(45-120)

* Values outside of QC Limits

MSSV FULL SCAN - FORM III SVOA-1
SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2946213LCS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSS9
LCS Lot No: 44991
Lab File ID: 072821D.B\0728AM05.D
SDG No.: 60375838

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-DRO	321	280	87	40-120

Spike Recovery: 0 out of 1 outside limits.

MSSV FULL SCAN - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas

Matrix Spike - Sample No: 2946214MS

Date Extracted: 07/26/2021

Date Analyzed (1): 07/28/2021

Instrument: 60MSS9

Lab File ID: 072821D.B\0728AM20.D

Parent Sample ID: GB-07/7-9

SDG No.: 60375838

COMPOUND	SPIKE ADDED (mg/kg)	SAMPLE CONCENTRATION (mg/kg)	MS CONCENTRATION (mg/kg)	MS %REC	QC LIMITS REC.
TPH-DRO	423	21.7	350	78	10-145

Spike Recovery: 0 out of 1 outside limits.

MSSV FULL SCAN - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS9 Matrix Spike Duplicate - Sample No: 2946215MSD

Lab File ID (2): 072821D.B\0728AM21.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (mg/kg)	MSD CONCENTRATION (mg/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
TPH-DRO	415	347	78	1	0-38	10-145

RPD: 0 out of 1 outside limits.

Spike Recovery: 0 out of 1 outside limits.

10/13/2021 4:08

SAMPLE NO.

2946212BLANK

MSSV FULL SCAN - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS9 Matrix: Solid Lab Sample ID: 2946212

Lab File ID (1): 072821D.B\0728AM04.D Date Analyzed (1): 07/28/2021 Time (1): 14:48

Lab File ID (2): 072821S.B\0728AM04.D Date Analyzed (2): 07/28/2021 Time (2): 14:48

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2946213LCS	2946213	072821D.B\0728AM05.D	07/28/2021 15:08
2946213LCS	2946213	072821S.B\0728AM05.D	07/28/2021 15:08
GB-14/0-2	60375838010	072821D.B\0728AM16.D	07/28/2021 18:49
GB-14/0-2	60375838010	072821S.B\0728AM16.D	07/28/2021 18:49
GB-14/3-5	60375838011	072821D.B\0728AM17.D	07/28/2021 19:09
GB-14/3-5	60375838011	072821S.B\0728AM17.D	07/28/2021 19:09
GB-07/2.5-3.5	60375838012	072821S.B\0728AM18.D	07/28/2021 19:29
GB-07/2.5-3.5	60375838012	072821D.B\0728AM18.D	07/28/2021 19:29
GB-07/7-9	60375838013	072821S.B\0728AM19.D	07/28/2021 19:48
GB-07/7-9	60375838013	072821D.B\0728AM19.D	07/28/2021 19:48
2946214MS	2946214	072821S.B\0728AM20.D	07/28/2021 20:08
2946214MS	2946214	072821D.B\0728AM20.D	07/28/2021 20:08
2946215MSD	2946215	072821S.B\0728AM21.D	07/28/2021 20:28
2946215MSD	2946215	072821D.B\0728AM21.D	07/28/2021 20:28

MSSV Full Scan - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 072821S.B\0728ADFT.D DFTPP Injection Date: 07/28/2021
Instrument ID: 60MSS9 DFTPP Injection Time: 10:56

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.00 - 80.00% of mass 198	51.02	
68	Less than 2.00% of mass 69	0.69	(1.55)[1]
69	Mass 69 relative abundance	44.40	
70	Less than 2.00% of mass 69	0.30	(0.67)[1]
127	25.00 - 75.00% of mass 198	52.75	
197	Less than 1.00% of mass 198	0.00	
198	Base Peak, 100.00% relative	100.00	
199	5.00 - 9.00% of mass 198	7.10	
275	10.00 - 30.00% of mass 198	26.64	
365	Greater than 0.75% of mass 198	4.14	
441	Present, but less than mass 443	14.14	
442	40.00 - 110.00% of mass 198	102.74	
443	15.00 - 24.00% of mass 442	19.89	(19.36)[2]

1 - Value is % mass 69 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936220CAL5	19936220CAL5	072821D.B\0728AMI5.D	07/28/2021	11:08
19936171CAL5	19936171CAL5	072821S.B\0728AMI5.D	07/28/2021	11:08
19936223CAL1	19936223CAL1	072821D.B\0728AMI1.D	07/28/2021	11:29
19936172CAL1	19936172CAL1	072821S.B\0728AMI1.D	07/28/2021	11:29
19936173CAL2	19936173CAL2	072821S.B\0728AMI2.D	07/28/2021	11:49
19936225CAL2	19936225CAL2	072821D.B\0728AMI2.D	07/28/2021	11:49
19936174CAL3	19936174CAL3	072821S.B\0728AMI3.D	07/28/2021	12:09
19936221CAL3	19936221CAL3	072821D.B\0728AMI3.D	07/28/2021	12:09
19936224CAL4	19936224CAL4	072821D.B\0728AMI4.D	07/28/2021	12:28
19936175CAL4	19936175CAL4	072821S.B\0728AMI4.D	07/28/2021	12:28
19936226CAL6	19936226CAL6	072821D.B\0728AMI6.D	07/28/2021	12:48
19936176CAL6	19936176CAL6	072821S.B\0728AMI6.D	07/28/2021	12:48
19936177CAL7	19936177CAL7	072821S.B\0728AMI7.D	07/28/2021	13:08
19936227CAL7	19936227CAL7	072821D.B\0728AMI7.D	07/28/2021	13:08
19936222ICV	19936222ICV	072821D.B\0728AMICV.D	07/28/2021	13:28
2946212BLANK	2946212BLANK	072821D.B\0728AM04.D	07/28/2021	14:48
2946212BLANK	2946212BLANK	072821S.B\0728AM04.D	07/28/2021	14:48
2946213LCS	2946213LCS	072821D.B\0728AM05.D	07/28/2021	15:08
2946213LCS	2946213LCS	072821S.B\0728AM05.D	07/28/2021	15:08

MSSV Full Scan - FORM V SVOA-2
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 072821S.B\0728ADFT.D DFTPP Injection Date: 07/28/2021
Instrument ID: 60MSS9 DFTPP Injection Time: 10:56

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
GB-14/0-2	60375838010	072821D.B\0728AM16.D	07/28/2021	18:49
GB-14/0-2	60375838010	072821S.B\0728AM16.D	07/28/2021	18:49
GB-14/3-5	60375838011	072821D.B\0728AM17.D	07/28/2021	19:09
GB-14/3-5	60375838011	072821S.B\0728AM17.D	07/28/2021	19:09
GB-07/2.5-3.5	60375838012	072821S.B\0728AM18.D	07/28/2021	19:29
GB-07/2.5-3.5	60375838012	072821D.B\0728AM18.D	07/28/2021	19:29
GB-07/7-9	60375838013	072821D.B\0728AM19.D	07/28/2021	19:48
GB-07/7-9	60375838013	072821S.B\0728AM19.D	07/28/2021	19:48
2946214MS	2946214MS	072821D.B\0728AM20.D	07/28/2021	20:08
2946214MS	2946214MS	072821S.B\0728AM20.D	07/28/2021	20:08
2946215MSD	2946215MSD	072821S.B\0728AM21.D	07/28/2021	20:28
2946215MSD	2946215MSD	072821D.B\0728AM21.D	07/28/2021	20:28

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM04.D
Lab Smp Id: 2946212
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30043,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: MB
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1078173	4.98
5 Naphthalene-d8 (I	3476200	1738100	6952400	3835344	10.33
8 Acenaphthene-d10	2134361	1067181	4268722	2398449	12.37
9 Phenanthrene-d10	3506702	1753351	7013404	4139627	18.05
12 Chrysene-d12 (IS)	1950999	975500	3901998	2447483	25.45
14 Perylene-d12 (IS)	817263	408632	1634526	1142144	39.75

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.15	0.14
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.15	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM05.D
Lab Smp Id: 2946213
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30043,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: MBLCS
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1077418	4.91
5 Naphthalene-d8 (I	3476200	1738100	6952400	3689235	6.13
8 Acenaphthene-d10	2134361	1067181	4268722	2275620	6.62
9 Phenanthrene-d10	3506702	1753351	7013404	3976486	13.40
12 Chrysene-d12 (IS)	1950999	975500	3901998	2501986	28.24
14 Perylene-d12 (IS)	817263	408632	1634526	1144748	40.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.16	0.28
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.15	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM20.D
Lab Smp Id: 2946214
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30043,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-07/7-9MS
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1030437	0.33
5 Naphthalene-d8 (I	3476200	1738100	6952400	3635359	4.58
8 Acenaphthene-d10	2134361	1067181	4268722	2253449	5.58
9 Phenanthrene-d10	3506702	1753351	7013404	3930533	12.09
12 Chrysene-d12 (IS)	1950999	975500	3901998	2607633	33.66
14 Perylene-d12 (IS)	817263	408632	1634526	1243906	52.20

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.16	0.28
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.13	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM21.D
Lab Smp Id: 2946215
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30043,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-07/7-9MSD
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1022589	-0.43
5 Naphthalene-d8 (I	3476200	1738100	6952400	3568258	2.65
8 Acenaphthene-d10	2134361	1067181	4268722	2193118	2.75
9 Phenanthrene-d10	3506702	1753351	7013404	3812490	8.72
12 Chrysene-d12 (IS)	1950999	975500	3901998	2631435	34.88
14 Perylene-d12 (IS)	817263	408632	1634526	1245482	52.40

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.16	0.28
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	-0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.13	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM16.D
Lab Smp Id: 60375838010
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30043,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-14/0-2
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1096201	6.74
5 Naphthalene-d8 (I	3476200	1738100	6952400	3801246	9.35
8 Acenaphthene-d10	2134361	1067181	4268722	2376360	11.34
9 Phenanthrene-d10	3506702	1753351	7013404	4094213	16.75
12 Chrysene-d12 (IS)	1950999	975500	3901998	2722593	39.55
14 Perylene-d12 (IS)	817263	408632	1634526	1291804	58.06

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.15	0.14
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.14	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM17.D
Lab Smp Id: 60375838011
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30043,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-14/3-5
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1098058	6.92
5 Naphthalene-d8 (I	3476200	1738100	6952400	3763931	8.28
8 Acenaphthene-d10	2134361	1067181	4268722	2379398	11.48
9 Phenanthrene-d10	3506702	1753351	7013404	4145209	18.21
12 Chrysene-d12 (IS)	1950999	975500	3901998	2663809	36.54
14 Perylene-d12 (IS)	817263	408632	1634526	1273627	55.84

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.15	0.14
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.14	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM18.D
Lab Smp Id: 60375838012
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30043,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-07/2.5-3.5
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1103841	7.48
5 Naphthalene-d8 (I	3476200	1738100	6952400	3794244	9.15
8 Acenaphthene-d10	2134361	1067181	4268722	2363931	10.76
9 Phenanthrene-d10	3506702	1753351	7013404	4147973	18.29
12 Chrysene-d12 (IS)	1950999	975500	3901998	2768084	41.88
14 Perylene-d12 (IS)	817263	408632	1634526	1413730	72.98

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.15	0.14
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.13	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 60MSS9.i
Lab File ID: 0728AM19.D
Lab Smp Id: 60375838013
Analysis Type: SV
Quant Type: ISTD
Operator: NAW
Method File: \\192.168.60.5\chem\60MSS9.i\072821s.b\8270istdsur.m
Misc Info: 30043,

Calibration Date: 28-JUL-2021
Calibration Time: 11:08
Client Smp ID: GB-07/7-9
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	1027009	513505	2054018	1122314	9.28
5 Naphthalene-d8 (I	3476200	1738100	6952400	3865600	11.20
8 Acenaphthene-d10	2134361	1067181	4268722	2462080	15.35
9 Phenanthrene-d10	3506702	1753351	7013404	4184444	19.33
12 Chrysene-d12 (IS)	1950999	975500	3901998	2650134	35.83
14 Perylene-d12 (IS)	817263	408632	1634526	1267798	55.13

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
2 1,4-Dichlorobenze	4.15	3.65	4.65	4.15	0.14
5 Naphthalene-d8 (I	5.06	4.56	5.56	5.05	-0.11
8 Acenaphthene-d10	6.29	5.79	6.79	6.29	-0.09
9 Phenanthrene-d10	7.33	6.83	7.83	7.33	-0.08
12 Chrysene-d12 (IS)	9.18	8.68	9.68	9.18	-0.00
14 Perylene-d12 (IS)	10.14	9.64	10.64	10.13	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

SAMPLE NO.

GB-14/0-2

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 60375838010
Date Analyzed: 07/28/2021 18:49
Lab File ID: 072821D.B\0728AM16.D
Initial wt/vol: 31.05 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 18.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	23.0	
	TPH-DRO	9.5	J

SAMPLE NO.

GB-14/3-5

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 60375838011
Date Analyzed: 07/28/2021 19:09
Lab File ID: 072821D.B\0728AM17.D
Initial wt/vol: 31.53 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	8.5	J
	TPH-DRO	2.4	J

SAMPLE NO.

GB-07/2.5-3.5

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 60375838012
Date Analyzed: 07/28/2021 19:29
Lab File ID: 072821D.B\0728AM18.D
Initial wt/vol: 30.15 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 20.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	16.5	J
	TPH-DRO	8.0	J

SAMPLE NO.

GB-07/7-9

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 60375838013
Date Analyzed: 07/28/2021 19:48
Lab File ID: 072821D.B\0728AM19.D
Initial wt/vol: 30.86 g Final wt/vol: 2 mL Dilution: 1
Instrument: 60MSS9 Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	20.6	
	TPH-DRO	21.7	

MSSV FULL SCAN - FORM VI SVOA-1

MSSV FULL SCAN INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS9 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:08 13:08

LAB FILE ID

CAL1 =	072821S.B\0728AMI1.D	CAL1 =	072821D.B\0728AMI1.D	CAL2 =	072821S.B\0728AMI2.D
CAL2 =	072821D.B\0728AMI2.D	CAL3 =	072821D.B\0728AMI3.D	CAL3 =	072821S.B\0728AMI3.D
CAL4 =	072821D.B\0728AMI4.D	CAL4 =	072821S.B\0728AMI4.D	CAL5 =	072821S.B\0728AMI5.D
CAL5 =	072821D.B\0728AMI5.D	CAL6 =	072821D.B\0728AMI6.D	CAL6 =	072821S.B\0728AMI6.D
CAL7 =	072821D.B\0728AMI7.D	CAL7 =	072821S.B\0728AMI7.D		

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
TPH-ORO	Averaged	159810.236	160344.058	155585.571	150784.349	156076.452	141997.343
TPH-DRO	Averaged	159810.236	160344.058	155585.571	150784.349	156076.452	141997.343
2-Fluorobiphenyl (S)	Averaged	1.50456	1.48902	1.36570	1.24931	1.15579	1.02945
Nitrobenzene-d5 (S)	Averaged	0.43117	0.43985	0.40416	0.40397	0.39260	0.37977
Terphenyl-d14 (S)	Averaged	1.69629	1.65553	1.50419	1.48658	1.50540	1.21656

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV FULL SCAN - FORM VI SVOA-2

MSSV FULL SCAN INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS9 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:08 13:08

LAB FILE ID

CAL1 =	072821S.B\0728AMI1.D	CAL1 =	072821D.B\0728AMI1.D	CAL2 =	072821S.B\0728AMI2.D
CAL2 =	072821D.B\0728AMI2.D	CAL3 =	072821D.B\0728AMI3.D	CAL3 =	072821S.B\0728AMI3.D
CAL4 =	072821D.B\0728AMI4.D	CAL4 =	072821S.B\0728AMI4.D	CAL5 =	072821S.B\0728AMI5.D
CAL5 =	072821D.B\0728AMI5.D	CAL6 =	072821D.B\0728AMI6.D	CAL6 =	072821S.B\0728AMI6.D
CAL7 =	072821D.B\0728AMI7.D	CAL7 =	072821S.B\0728AMI7.D		

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
TPH-ORO	Averaged	134153.926	6.47896		0.00000000	151250.276	
TPH-DRO	Averaged	134153.926	6.47896		0.00000000	151250.276	
2-Fluorobiphenyl (S)	Averaged	1.04977	15.55372			1.26337	
Nitrobenzene-d5 (S)	Averaged	0.34582	7.90731			0.39962	
Terphenyl-d14 (S)	Averaged	1.14667	14.16596			1.45875	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN INITIAL CALIBRATION DATA

19936222ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 13:28

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821D.B\0728AMICV.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-ORO	Averaged	151250.2	106775.3	0.0100	-29.4048	20.0000
TPH-DRO	Averaged	151250.2	106775.3	0.0100	-29.4048	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

BLANK

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 2946212
Date Analyzed: 07/28/2021 14:48
Lab File ID: 072821D.B\0728AM04.D
Initial wt/vol: 30.27 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	<1.4	U
	TPH-DRO	<1.4	U

SAMPLE NO.

LCS

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 2946213
Date Analyzed: 07/28/2021 15:08
Lab File ID: 072821D.B\0728AM05.D
Initial wt/vol: 31.19 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	280	

SAMPLE NO.

MS

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 2946214
Date Analyzed: 07/28/2021 20:08
Lab File ID: 072821D.B\0728AM20.D
Initial wt/vol: 30.55 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	350	

SAMPLE NO.

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

MSD

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 2946215
Date Analyzed: 07/28/2021 20:28
Lab File ID: 072821D.B\0728AM21.D
Initial wt/vol: 31.18 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	347	

MSSV SIM - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2946220	2946220BLANK	91	102
2946221	2946221LCS	83	93
2946222	2946222MS	77	87
2946223	2946223MSD	84	96
60375838001	GB-42/2-3	85	90
60375838002	GB-42/3-5	83	88
60375838003	GB-35/2-3	89	110
60375838004	GB-35/3-5	89	104
60375838005	GB-35/3-5D	80	92
60375838006	GB-28/1.5-2.5	86	102
60375838007	GB-28/3-5	83	97
60375838008	GB-21/0.5-2.5	84	102
60375838009	GB-21/3-5	82	97
60375838014	GB-06/2-3	75	89
60375838015	GB-06/3-5	78	89
60375838016	GB-13/0-2	74	96
60375838017	GB-13/3-5	88	107
60375838020	GB-27/0.5-2	78	100
60375838021	GB-27/3-5	75	85
60375838022	GB-08/2.5-3.5	79	91
60375838023	GB-08/4-6	79	94
60375838024	GB-09/1.5-3	87	113
60375838025	GB-09/4-6	83	97

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM II SVOA-2
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2946216	2946216BLANK	73	79
2946217	2946217LCS	106	119
2946218	2946218MS	91	108
2946219	2946219MSD	94	109
60375838010	GB-14/0-2	66	75
60375838011	GB-14/3-5	66	71
60375838012	GB-07/2.5-3.5	65	72
60375838013	GB-07/7-9	64	71

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM II SVOA-1
WATER SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS8

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2946349	2946349BLANK	69	72
2946350	2946350LCS	66	85
60375838027	RB-03	69	81
60375838028	RB-04	63	79
60375838029	RB-05	72	84

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(37-109)
(TD14) = Terphenyl-d14 (S)	(34-120)

* Values outside of QC Limits

MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2946221LCS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 072821.B\0728AP37.D
SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	33.2	27.3	82	45-120
Acenaphthylene	33.2	26.7	80	50-120
Anthracene	33.2	29.1	87	50-120
Benzo(a)anthracene	33.2	28.6	86	55-125
Benzo(a)pyrene	33.2	27.2	82	45-120
Benzo(b)fluoranthene	33.2	30.0	90	50-125
Benzo(g,h,i)perylene	33.2	27.3	82	40-120
Benzo(k)fluoranthene	33.2	28.4	85	55-120
Chrysene	33.2	28.0	84	55-120
Dibenz(a,h)anthracene	33.2	27.5	83	40-125
Fluoranthene	33.2	30.7	92	50-125
Fluorene	33.2	28.1	84	50-120
Indeno(1,2,3-cd)pyrene	33.2	27.4	82	44-125
Naphthalene	33.2	27.2	82	45-120
Phenanthrene	33.2	29.8	90	50-125
Pyrene	33.2	30.8	93	50-125

Spike Recovery: 0 out of 16 outside limits.

MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2946217LCS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/29/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 072921.B\0729AP31.D
SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	32.0	30.1	94	45-120
Acenaphthylene	32.0	29.4	92	50-120
Anthracene	32.0	31.3	98	50-120
Benzo(a)anthracene	32.0	30.5	95	55-125
Benzo(a)pyrene	32.0	28.4	89	45-120
Benzo(b)fluoranthene	32.0	30.7	96	50-125
Benzo(g,h,i)perylene	32.0	30.1	94	40-120
Benzo(k)fluoranthene	32.0	31.7	99	55-120
Chrysene	32.0	30.0	94	55-120
Dibenz(a,h)anthracene	32.0	29.5	92	40-125
Fluoranthene	32.0	33.1	103	50-125
Fluorene	32.0	30.7	96	50-120
Indeno(1,2,3-cd)pyrene	32.0	29.0	91	44-125
Naphthalene	32.0	30.6	96	45-120
Phenanthrene	32.0	31.6	99	50-125
Pyrene	32.0	32.8	103	50-125

Spike Recovery: 0 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-1
WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2946350LCS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSS8
LCS Lot No: 44362
Lab File ID: 072721.B\0727AP25.D
SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acenaphthene	10.0	6.6	66	46-102
Acenaphthylene	10.0	7.1	71	48-112
Anthracene	10.0	8.0	80	50-114
Benzo(a)anthracene	10.0	8.6	86	52-124
Benzo(a)pyrene	10.0	7.9	79	56-119
Benzo(b)fluoranthene	10.0	8.6	86	49-116
Benzo(g,h,i)perylene	10.0	7.7	77	43-120
Benzo(k)fluoranthene	10.0	7.5	75	48-110
Chrysene	10.0	7.8	78	53-105
Dibenz(a,h)anthracene	10.0	7.8	78	39-127
Fluoranthene	10.0	9.0	90	54-122
Fluorene	10.0	7.2	72	47-109
Indeno(1,2,3-cd)pyrene	10.0	7.9	79	47-124
Naphthalene	10.0	6.3	63	42-103
Phenanthrene	10.0	7.5	75	47-107
Pyrene	10.0	8.0	80	44-104

Spike Recovery: 0 out of 16 outside limits.

MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2946222MS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSS5
Lab File ID: 072821.B\0728AP38.D
Parent Sample ID: GB-42/2-3
SDG No.: 60375838

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	41.1	<1.4	31.2	76	10-150
Acenaphthylene	41.1	<1.4	31.1	76	30-125
Anthracene	41.1	<1.6	33.6	82	10-160
Benzo(a)anthracene	41.1	<1.8	33.5	81	10-160
Benzo(a)pyrene	41.1	<1.4	30.8	75	10-150
Benzo(b)fluoranthene	41.1	<1.9	34.1	83	10-165
Benzo(g,h,i)perylene	41.1	<1.7	29.5	72	10-155
Benzo(k)fluoranthene	41.1	<2.2	33.6	82	10-165
Chrysene	41.1	<1.8	32.5	79	10-150
Dibenz(a,h)anthracene	41.1	<1.7	29.9	73	10-175
Fluoranthene	41.1	<2.9	35.8	81	10-180
Fluorene	41.1	<1.5	32.8	80	20-145
Indeno(1,2,3-cd)pyrene	41.1	<1.7	28.9	70	10-150
Naphthalene	41.1	<1.7	32.0	78	10-165
Phenanthrene	41.1	<3.2	34.4	78	10-170
Pyrene	41.1	<2.1	36.1	88	10-180

Spike Recovery: 0 out of 16 outside limits.

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2946223MSD

Lab File ID (2): 072821.B\0728AP39.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	39.4	32.9	83	5	0-42	10-150
Acenaphthylene	39.4	32.4	82	4	0-44	30-125
Anthracene	39.4	35.1	89	4	0-54	10-160
Benzo(a)anthracene	39.4	35.2	89	5	0-62	10-160
Benzo(a)pyrene	39.4	32.5	82	5	0-66	10-150
Benzo(b)fluoranthene	39.4	36.8	93	8	0-61	10-165
Benzo(g,h,i)perylene	39.4	29.5	75	0	0-58	10-155
Benzo(k)fluoranthene	39.4	36.2	92	7	0-53	10-165
Chrysene	39.4	34.5	87	6	0-57	10-150
Dibenz(a,h)anthracene	39.4	29.7	75	1	0-48	10-175
Fluoranthene	39.4	38.4	91	7	0-54	10-180
Fluorene	39.4	34.7	88	6	0-39	20-145
Indeno(1,2,3-cd)pyrene	39.4	28.8	73	0	0-59	10-150
Naphthalene	39.4	32.7	83	2	0-54	10-165
Phenanthrene	39.4	36.2	85	5	0-51	10-170
Pyrene	39.4	38.7	98	7	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas

Matrix Spike - Sample No: 2946218MS

Date Extracted: 07/26/2021

Date Analyzed (1): 07/29/2021

Instrument: 60MSS5

Lab File ID: 072921.B\0729AP36.D

Parent Sample ID: GB-07/7-9

SDG No.: 60375838

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	41.7	38.9	64.8	62	10-150
Acenaphthylene	41.7	<3.1	36.5	88	30-125
Anthracene	41.7	5.8J	48.8	103	10-160
Benzo(a)anthracene	41.7	8.0J	56.2	116	10-160
Benzo(a)pyrene	41.7	6.3J	50.5	106	10-150
Benzo(b)fluoranthene	41.7	13.4	63.1	119	10-165
Benzo(g,h,i)perylene	41.7	4.5J	49.2	107	10-155
Benzo(k)fluoranthene	41.7	4.9J	46.1	99	10-165
Chrysene	41.7	9.7	57.4	115	10-150
Dibenz(a,h)anthracene	41.7	<3.6	37.7	90	10-175
Fluoranthene	41.7	24.2	89.3	156	10-180
Fluorene	41.7	41.5	75.2	81	20-145
Indeno(1,2,3-cd)pyrene	41.7	<3.6	45.8	110	10-150
Naphthalene	41.7	111	95.9	-36	10-165
Phenanthrene	41.7	45.2	111	158	10-170
Pyrene	41.7	21.0	85.0	154	10-180

Spike Recovery: 1 out of 16 outside limits.

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2946219MSD

Lab File ID (2): 072921.B\0729AP37.D Date Analyzed (2): 07/29/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	40.9	154	283	82	0-42	10-150
Acenaphthylene	40.9	37.5	92	3	0-44	30-125
Anthracene	40.9	51.2	111	5	0-54	10-160
Benzo(a)anthracene	40.9	61.0	130	8	0-62	10-160
Benzo(a)pyrene	40.9	53.2	115	5	0-66	10-150
Benzo(b)fluoranthene	40.9	67.6	133	7	0-61	10-165
Benzo(g,h,i)perylene	40.9	46.4	103	6	0-58	10-155
Benzo(k)fluoranthene	40.9	52.9	117	14	0-53	10-165
Chrysene	40.9	63.7	132	10	0-57	10-150
Dibenz(a,h)anthracene	40.9	36.0	88	5	0-48	10-175
Fluoranthene	40.9	104	195	15	0-54	10-180
Fluorene	40.9	126	207	50	0-39	20-145
Indeno(1,2,3-cd)pyrene	40.9	44.7	109	2	0-59	10-150
Naphthalene	40.9	277	406	97	0-54	10-165
Phenanthrene	40.9	122	188	10	0-51	10-170
Pyrene	40.9	93.1	176	9	0-61	10-180

RPD: 3 out of 16 outside limits.

Spike Recovery: 5 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-1

WATER SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2946351MS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/27/2021
Instrument: 60MSS8
Lab File ID: 072721.B\0727AP36.D
Parent Sample ID: 60375802033
SDG No.: 60375838

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
Acenaphthene	9.5	<0.049	6.9	72	42-109
Acenaphthylene	9.5	<0.034	7.3	77	51-110
Anthracene	9.5	<0.069	7.8	81	50-118
Benzo(a)anthracene	9.5	<0.037	8.0	84	34-140
Benzo(a)pyrene	9.5	<0.074	7.3	77	34-133
Benzo(b)fluoranthene	9.5	<0.053	7.8	82	31-133
Benzo(g,h,i)perylene	9.5	<0.042	7.3	77	21-137
Benzo(k)fluoranthene	9.5	<0.044	7.1	74	30-121
Chrysene	9.5	<0.043	6.9	73	35-116
Dibenz(a,h)anthracene	9.5	<0.053	7.5	79	24-148
Fluoranthene	9.5	<0.20	8.1	85	44-133
Fluorene	9.5	<0.070	7.2	75	44-113
Indeno(1,2,3-cd)pyrene	9.5	<0.050	7.5	79	21-149
Naphthalene	9.5	<0.080	6.6	69	35-107
Phenanthrene	9.5	<0.41	7.3	75	41-110
Pyrene	9.5	<0.077	7.4	78	26-114

Spike Recovery: 0 out of 16 outside limits.

MSSV SIM - FORM III SVOA-2

WATER SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS8 Matrix Spike Duplicate - Sample No: 2946352MSD

Lab File ID (2): 072721.B\0727AP37.D Date Analyzed (2): 07/27/2021

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	10.5	7.4	70	7	0-42	42-109
Acenaphthylene	10.5	8.1	77	9	0-33	51-110
Anthracene	10.5	8.6	82	11	0-38	50-118
Benzo(a)anthracene	10.5	8.6	81	7	0-33	34-140
Benzo(a)pyrene	10.5	8.2	78	11	0-35	34-133
Benzo(b)fluoranthene	10.5	8.7	83	11	0-33	31-133
Benzo(g,h,i)perylene	10.5	8.2	78	11	0-37	21-137
Benzo(k)fluoranthene	10.5	7.7	73	8	0-42	30-121
Chrysene	10.5	7.7	73	10	0-33	35-116
Dibenz(a,h)anthracene	10.5	8.4	80	12	0-45	24-148
Fluoranthene	10.5	9.0	85	11	0-37	44-133
Fluorene	10.5	8.0	76	11	0-35	44-113
Indeno(1,2,3-cd)pyrene	10.5	8.4	80	12	0-50	21-149
Naphthalene	10.5	7.2	68	9	0-36	35-107
Phenanthrene	10.5	8.0	74	8	0-37	41-110
Pyrene	10.5	7.8	74	5	0-35	26-114

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

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SAMPLE NO.

2946349BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS8 Matrix: Water Lab Sample ID: 2946349

Lab File ID: 072721.B\0727AP24.D Date Analyzed: 07/27/2021 Time: 14:31

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2946350LCS	2946350	072721.B\0727AP25.D	07/27/2021 14:46
RB-03	60375838027	072721.B\0727AP38.D	07/27/2021 17:56
RB-04	60375838028	072721.B\0727AP39.D	07/27/2021 18:11
RB-05	60375838029	072721.B\0727AP40.D	07/27/2021 18:26

SAMPLE NO.

2946220BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2946220

Lab File ID: 072821.B\0728AP36.D Date Analyzed: 07/28/2021 Time:19:18

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2946221LCS	2946221	072821.B\0728AP37.D	07/28/2021 19:35
2946222MS	2946222	072821.B\0728AP38.D	07/28/2021 19:52
2946223MSD	2946223	072821.B\0728AP39.D	07/28/2021 20:09
GB-42/2-3	60375838001	072821.B\0728AP40.D	07/28/2021 20:27
GB-42/3-5	60375838002	072821.B\0728AP41.D	07/28/2021 20:44
GB-35/2-3	60375838003	072921.B\0729AP13.D	07/29/2021 12:18
GB-35/3-5	60375838004	072921.B\0729AP14.D	07/29/2021 12:35
GB-35/3-5D	60375838005	072921.B\0729AP15.D	07/29/2021 12:52
GB-28/1.5-2.5	60375838006	072921.B\0729AP16.D	07/29/2021 13:09
GB-28/3-5	60375838007	072921.B\0729AP17.D	07/29/2021 13:26
GB-21/0.5-2.5	60375838008	072921.B\0729AP18.D	07/29/2021 13:43
GB-21/3-5	60375838009	072921.B\0729AP19.D	07/29/2021 14:01
GB-06/2-3	60375838014	072921.B\0729AP20.D	07/29/2021 14:18
GB-06/3-5	60375838015	072921.B\0729AP21.D	07/29/2021 14:35
GB-13/0-2	60375838016	072921.B\0729AP22.D	07/29/2021 14:52
GB-13/3-5	60375838017	072921.B\0729AP23.D	07/29/2021 15:09
GB-27/0.5-2	60375838020	072921.B\0729AP24.D	07/29/2021 15:27
GB-27/3-5	60375838021	072921.B\0729AP25.D	07/29/2021 15:44
GB-08/2.5-3.5	60375838022	072921.B\0729AP26.D	07/29/2021 16:01
GB-08/4-6	60375838023	072921.B\0729AP27.D	07/29/2021 16:18
GB-09/1.5-3	60375838024	072921.B\0729AP28.D	07/29/2021 16:35
GB-09/4-6	60375838025	072921.B\0729AP29.D	07/29/2021 16:53
GB-13/3-5	60375838017	073021.B\0730AP11.D	07/30/2021 10:56
GB-09/1.5-3	60375838024	073021.B\0730AP12.D	07/30/2021 11:13

SAMPLE NO.

2946216BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2946216

Lab File ID: 072921.B\0729AP30.D Date Analyzed: 07/29/2021 Time:17:10

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2946217LCS	2946217	072921.B\0729AP31.D	07/29/2021 17:27
GB-14/0-2	60375838010	072921.B\0729AP32.D	07/29/2021 17:44
GB-14/3-5	60375838011	072921.B\0729AP33.D	07/29/2021 18:02
GB-07/2.5-3.5	60375838012	072921.B\0729AP34.D	07/29/2021 18:19
GB-07/7-9	60375838013	072921.B\0729AP35.D	07/29/2021 18:36
2946218MS	2946218	072921.B\0729AP36.D	07/29/2021 18:53
2946219MSD	2946219	072921.B\0729AP37.D	07/29/2021 19:10

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 072721.B\0727ADFT.D DFTPP Injection Date 07/27/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.22	(16.76)[1]
68	Less than 2.00% of mass 69	0.37	(1.34)[2]
69	Mass 69 relative abundance	27.19	(20.51)[2]
70	Less than 2.00% of mass 69	0.15	(0.57)[2]
127	10.00 - 80.00% of mass 442	42.09	(31.74)[2]
197	Less than 2.00% of mass 198	0.00	
198	Greater than 50.00% of mass 442	100.00	(75.42)[2]
199	5.00 - 9.00% of mass 198	6.80	
275	10.00 - 60.00% of mass 442	26.56	(20.03)[2]
365	Greater than 1.00% of mass 442	3.84	(2.90)[2]
441	Present, but less than mass 443	20.27	
442	Greater than 50.00% of mass 198	132.60	
443	15.00 - 24.00% of mass 442	26.31	(19.84)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936278CAL6	19936278CAL6	072721.B\0727API6.D	07/27/2021	08:37
19936283CAL1	19936283CAL1	072721.B\0727API1.D	07/27/2021	08:57
19936285CAL2	19936285CAL2	072721.B\0727API2.D	07/27/2021	09:14
19936279CAL3	19936279CAL3	072721.B\0727API3.D	07/27/2021	09:31
19936284CAL4	19936284CAL4	072721.B\0727API4.D	07/27/2021	09:48
19936286CAL5	19936286CAL5	072721.B\0727API5.D	07/27/2021	10:05
19936280CAL7	19936280CAL7	072721.B\0727API7.D	07/27/2021	10:22
19936276CAL8	19936276CAL8	072721.B\0727API8.D	07/27/2021	10:40
19936277ICV	19936277ICV	072721.B\0727APICV.D	07/27/2021	10:57

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 072821.B\0728ADFT.D DFTPP Injection Date 07/28/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	21.45	(15.55)[1]
68	Less than 2.00% of mass 69	0.37	(1.37)[2]
69	Mass 69 relative abundance	26.65	(19.32)[2]
70	Less than 2.00% of mass 69	0.14	(0.54)[2]
127	10.00 - 80.00% of mass 442	41.60	(30.15)[2]
197	Less than 2.00% of mass 198	0.46	
198	Greater than 50.00% of mass 442	100.00	(72.49)[2]
199	5.00 - 9.00% of mass 198	6.76	
275	10.00 - 60.00% of mass 442	27.03	(19.59)[2]
365	Greater than 1.00% of mass 442	3.94	(2.86)[2]
441	Present, but less than mass 443	21.39	
442	Greater than 50.00% of mass 198	137.96	
443	15.00 - 24.00% of mass 442	27.35	(19.83)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19736764CCV	19736764CCV	072821.B\0728API6.D	07/28/2021	08:58
2946220BLANK	2946220BLANK	072821.B\0728AP36.D	07/28/2021	19:18
2946221LCS	2946221LCS	072821.B\0728AP37.D	07/28/2021	19:35
2946222MS	2946222MS	072821.B\0728AP38.D	07/28/2021	19:52
2946223MSD	2946223MSD	072821.B\0728AP39.D	07/28/2021	20:09
GB-42/2-3	60375838001	072821.B\0728AP40.D	07/28/2021	20:27
GB-42/3-5	60375838002	072821.B\0728AP41.D	07/28/2021	20:44

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 072921.B\0729ADFT.D DFTPP Injection Date 07/29/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:18

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	21.18	(14.45)[1]
68	Less than 2.00% of mass 69	0.37	(1.40)[2]
69	Mass 69 relative abundance	26.43	(18.04)[2]
70	Less than 2.00% of mass 69	0.12	(0.46)[2]
127	10.00 - 80.00% of mass 442	41.29	(28.18)[2]
197	Less than 2.00% of mass 198	0.16	
198	Greater than 50.00% of mass 442	100.00	(68.24)[2]
199	5.00 - 9.00% of mass 198	6.73	
275	10.00 - 60.00% of mass 442	27.57	(18.82)[2]
365	Greater than 1.00% of mass 442	4.09	(2.79)[2]
441	Present, but less than mass 443	22.38	
442	Greater than 50.00% of mass 198	146.53	
443	15.00 - 24.00% of mass 442	28.41	(19.39)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936281CCV	19936281CCV	072921.B\0729API6.D	07/29/2021	08:29
GB-35/2-3	60375838003	072921.B\0729AP13.D	07/29/2021	12:18
GB-35/3-5	60375838004	072921.B\0729AP14.D	07/29/2021	12:35
GB-35/3-5D	60375838005	072921.B\0729AP15.D	07/29/2021	12:52
GB-28/1.5-2.5	60375838006	072921.B\0729AP16.D	07/29/2021	13:09
GB-28/3-5	60375838007	072921.B\0729AP17.D	07/29/2021	13:26
GB-21/0.5-2.5	60375838008	072921.B\0729AP18.D	07/29/2021	13:43
GB-21/3-5	60375838009	072921.B\0729AP19.D	07/29/2021	14:01
GB-06/2-3	60375838014	072921.B\0729AP20.D	07/29/2021	14:18
GB-06/3-5	60375838015	072921.B\0729AP21.D	07/29/2021	14:35
GB-13/0-2	60375838016	072921.B\0729AP22.D	07/29/2021	14:52
GB-13/3-5	60375838017	072921.B\0729AP23.D	07/29/2021	15:09
GB-27/0.5-2	60375838020	072921.B\0729AP24.D	07/29/2021	15:27
GB-27/3-5	60375838021	072921.B\0729AP25.D	07/29/2021	15:44
GB-08/2.5-3.5	60375838022	072921.B\0729AP26.D	07/29/2021	16:01
GB-08/4-6	60375838023	072921.B\0729AP27.D	07/29/2021	16:18
GB-09/1.5-3	60375838024	072921.B\0729AP28.D	07/29/2021	16:35
GB-09/4-6	60375838025	072921.B\0729AP29.D	07/29/2021	16:53
2946216BLANK	2946216BLANK	072921.B\0729AP30.D	07/29/2021	17:10

MSSV SIM - FORM V SVOA-2
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 072921.B\0729ADFT.D DFTPP Injection Date 07/29/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:18

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
2946217LCS	2946217LCS	072921.B\0729AP31.D	07/29/2021	17:27
GB-14/0-2	60375838010	072921.B\0729AP32.D	07/29/2021	17:44
GB-14/3-5	60375838011	072921.B\0729AP33.D	07/29/2021	18:02
GB-07/2.5-3.5	60375838012	072921.B\0729AP34.D	07/29/2021	18:19
GB-07/7-9	60375838013	072921.B\0729AP35.D	07/29/2021	18:36
2946218MS	2946218MS	072921.B\0729AP36.D	07/29/2021	18:53
2946219MSD	2946219MSD	072921.B\0729AP37.D	07/29/2021	19:10

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 073021.B\0730ADFT.D DFTPP Injection Date 07/30/2021
Instrument ID: 60MSS5 DFTPP Injection Time 07:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.42	(15.38)[1]
68	Less than 2.00% of mass 69	0.39	(1.42)[2]
69	Mass 69 relative abundance	27.63	(18.95)[2]
70	Less than 2.00% of mass 69	0.16	(0.58)[2]
127	10.00 - 80.00% of mass 442	42.33	(29.04)[2]
197	Less than 2.00% of mass 198	0.34	
198	Greater than 50.00% of mass 442	100.00	(68.60)[2]
199	5.00 - 9.00% of mass 198	6.88	
275	10.00 - 60.00% of mass 442	27.49	(18.86)[2]
365	Greater than 1.00% of mass 442	3.89	(2.67)[2]
441	Present, but less than mass 443	22.26	
442	Greater than 50.00% of mass 198	145.77	
443	15.00 - 24.00% of mass 442	28.94	(19.85)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936282CCV	19936282CCV	073021.B\0730API6.D	07/30/2021	07:43
GB-13/3-5	60375838017	073021.B\0730AP11.D	07/30/2021	10:56
GB-09/1.5-3	60375838024	073021.B\0730AP12.D	07/30/2021	11:13

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 071421.B\0714ADFT.D DFTPP Injection Date: 07/14/2021
Instrument ID: 60MSS8 DFTPP Injection Time: 11:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	32.83	(22.44)[1]
68	Less than 2.00% of mass 69	0.66	(1.88)[2]
69	Mass 69 relative abundance	35.41	(24.21)[2]
70	Less than 2.00% of mass 69	0.18	(0.52)[2]
127	10.00 - 80.00% of mass 442	47.06	(32.16)[2]
197	Less than 2.00% of mass 198	1.52	
198	Greater than 50.00% of mass 442	100.00	(68.35)[2]
199	5.00 - 9.00% of mass 198	7.04	
275	10.00 - 60.00% of mass 442	26.76	(18.29)[2]
365	Greater than 1.00% of mass 442	4.68	(3.20)[2]
441	Present, but less than mass 443	23.19	
442	Greater than 50.00% of mass 198	146.31	
443	15.00 - 24.00% of mass 442	29.06	(19.86)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19793869CAL6	19793869CAL6	071421.B\0714API6A.D	07/14/2021	12:26
19793870CAL2	19793870CAL2	071421.B\0714API2.D	07/14/2021	12:58
19793871CAL1	19793871CAL1	071421.B\0714API1A.D	07/14/2021	13:12
19793872CAL3	19793872CAL3	071421.B\0714API3.D	07/14/2021	13:27
19793873CAL4	19793873CAL4	071421.B\0714API4.D	07/14/2021	13:42
19793874CAL5	19793874CAL5	071421.B\0714API5.D	07/14/2021	13:56
19793875CAL7	19793875CAL7	071421.B\0714API7.D	07/14/2021	14:11
19793876CAL8	19793876CAL8	071421.B\0714API8.D	07/14/2021	14:26
19793877ICV	19793877ICV	071421.B\0714APICV.D	07/14/2021	14:42

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW
Lab File ID: 072721.B\0727ADFT.D DFTPP Injection Date 07/27/2021
Instrument ID: 60MSS8 DFTPP Injection Time 08:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	39.94	(26.93)[1]
68	Less than 2.00% of mass 69	0.79	(1.98)[2]
69	Mass 69 relative abundance	40.05	(27.00)[2]
70	Less than 2.00% of mass 69	0.21	(0.53)[2]
127	10.00 - 80.00% of mass 442	47.44	(31.98)[2]
197	Less than 2.00% of mass 198	2.09	
198	Greater than 50.00% of mass 442	100.00	(67.42)[2]
199	5.00 - 9.00% of mass 198	6.81	
275	10.00 - 60.00% of mass 442	26.72	(18.01)[2]
365	Greater than 1.00% of mass 442	4.74	(3.20)[2]
441	Present, but less than mass 443	23.70	
442	Greater than 50.00% of mass 198	148.33	
443	15.00 - 24.00% of mass 442	28.09	(18.94)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19812981CCV	19812981CCV	072721.B\0727API6.D	07/27/2021	08:34
2946349BLANK	2946349BLANK	072721.B\0727AP24.D	07/27/2021	14:31
2946350LCS	2946350LCS	072721.B\0727AP25.D	07/27/2021	14:46
RB-03	60375838027	072721.B\0727AP38.D	07/27/2021	17:56
RB-04	60375838028	072721.B\0727AP39.D	07/27/2021	18:11
RB-05	60375838029	072721.B\0727AP40.D	07/27/2021	18:26

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 19736764CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:58

Lab File ID: 072821.B\0728API6.D

		AREA 14DDIS	RT	AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				120000	6.408	165213	9.875	212728	4.362
UPPER LIMIT				240000	6.908	330426	10.375	425456	4.862
LOWER LIMIT				60000	5.908	82606.5	9.375	106364	3.862
LAB SAMPLE ID	SAMPLE NO.								
2946220	2946220BLANK			133714	6.408	203991	9.861	215402	4.357
2946221	2946221LCS			138043	6.408	200366	9.861	225036	4.356
2946222	2946222MS			141831	6.408	202223	9.861	231374	4.357
2946223	2946223MSD			134902	6.408	193598	9.864	219501	4.357
60375838001	GB-42/2-3			136122	6.408	205195	9.864	222467	4.357
60375838002	GB-42/3-5			139626	6.408	206579	9.865	226434	4.356

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 19736764CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:58

Lab File ID: 072821.B\0728API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		103173	11.209	215277	7.752
UPPER LIMIT		206346	11.709	430554	8.252
LOWER LIMIT		51586.5	10.709	107638.5	7.252
LAB SAMPLE ID	SAMPLE NO.				
2946220	2946220BLANK	125387	11.191	241843	7.752
2946221	2946221LCS	124618	11.192	246499	7.752
2946222	2946222MS	125596	11.192	250845	7.752
2946223	2946223MSD	117642	11.195	241747	7.752
60375838001	GB-42/2-3	130075	11.195	241273	7.752
60375838002	GB-42/3-5	129773	11.198	246187	7.753

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 19936281CCV Date Analyzed: 07/29/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:29

Lab File ID: 072921.B\0729API6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				119520	6.408	164584	9.874	215274	4.362
UPPER LIMIT				239040	6.908	329168	10.374	430548	4.862
LOWER LIMIT				59760	5.908	82292	9.374	107637	3.862
LAB SAMPLE ID	SAMPLE NO.								
2946216	2946216BLANK			134757	6.408	205882	9.866	212095	4.355
2946217	2946217LCS			134116	6.408	196798	9.864	219928	4.356
2946218	2946218MS			144356	6.407	201344	9.861	236768	4.355
2946219	2946219MSD			125508	6.408	183996	9.863	204067	4.357
60375838003	GB-35/2-3			121900	6.408	167220	9.875	190612	4.357
60375838004	GB-35/3-5			138501	6.408	192601	9.873	221767	4.356
60375838005	GB-35/3-5D			137127	6.408	192533	9.874	220763	4.358
60375838006	GB-28/1.5-2.5			137409	6.408	189229	9.874	220503	4.357
60375838007	GB-28/3-5			137809	6.408	192069	9.871	222269	4.357
60375838008	GB-21/0.5-2.5			146746	6.408	176604	9.874	233567	4.358
60375838009	GB-21/3-5			143799	6.408	192331	9.873	230088	4.358
60375838010	GB-14/0-2			134654	6.408	199505	9.865	223705	4.357
60375838011	GB-14/3-5			135132	6.407	197976	9.866	228573	4.355
60375838012	GB-07/2.5-3.5			133900	6.407	176490	9.866	224851	4.358
60375838013	GB-07/7-9			135893	6.407	184374	9.862	222104	4.357
60375838014	GB-06/2-3			151803	6.408	204282	9.873	245215	4.356
60375838015	GB-06/3-5			151426	6.408	217189	9.874	243020	4.356
60375838016	GB-13/0-2			157063	6.408	193971	9.874	246082	4.362
60375838017	GB-13/3-5			140898	6.408	167957	9.876	229768	4.357
60375838020	GB-27/0.5-2			144869	6.408	160232	9.875	238853	4.355
60375838021	GB-27/3-5			154562	6.408	221856	9.875	246985	4.355
60375838022	GB-08/2.5-3.5			148018	6.408	208932	9.867	239541	4.356
60375838023	GB-08/4-6			147704	6.408	207600	9.871	235340	4.358
60375838024	GB-09/1.5-3			136505	6.408	192091	9.872	224705	4.358
60375838025	GB-09/4-6			146386	6.407	202815	9.872	235743	4.356

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 19936281CCV Date Analyzed: 07/29/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:29

Lab File ID: 072921.B\0729API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		98288	11.209	215354	7.752
UPPER LIMIT		196576	11.709	430708	8.252
LOWER LIMIT		49144	10.709	107677	7.252
LAB SAMPLE ID	SAMPLE NO.				
2946216	2946216BLANK	117024	11.199	251851	7.752
2946217	2946217LCS	120397	11.196	238046	7.753
2946218	2946218MS	126810	11.192	253187	7.752
2946219	2946219MSD	110262	11.195	225463	7.753
60375838003	GB-35/2-3	109521	11.212	214660	7.753
60375838004	GB-35/3-5	127072	11.208	238587	7.753
60375838005	GB-35/3-5D	118378	11.21	241425	7.753
60375838006	GB-28/1.5-2.5	118101	11.211	237607	7.753
60375838007	GB-28/3-5	116257	11.204	239358	7.753
60375838008	GB-21/0.5-2.5	119003	11.208	260785	7.754
60375838009	GB-21/3-5	109554	11.208	255779	7.752
60375838010	GB-14/0-2	124025	11.197	247784	7.752
60375838011	GB-14/3-5	126394	11.2	248267	7.752
60375838012	GB-07/2.5-3.5	102976	11.197	247988	7.753
60375838013	GB-07/7-9	106946	11.194	244100	7.752
60375838014	GB-06/2-3	126214	11.211	254810	7.753
60375838015	GB-06/3-5	142196	11.21	266849	7.754
60375838016	GB-13/0-2	127885	11.21	273050	7.754
60375838017	GB-13/3-5	105353	11.211	245113	7.754
60375838020	GB-27/0.5-2	109519	11.212	250982	7.754
60375838021	GB-27/3-5	141647	11.211	273102	7.753
60375838022	GB-08/2.5-3.5	130768	11.2	256776	7.753
60375838023	GB-08/4-6	120762	11.205	262929	7.753
60375838024	GB-09/1.5-3	130314	11.202	237405	7.754
60375838025	GB-09/4-6	125050	11.208	255433	7.753

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 19936282CCV Date Analyzed: 07/30/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 07:43

Lab File ID: 073021.B\0730API6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				106074	6.409	147276	9.921	177549	4.362
UPPER LIMIT				212148	6.909	294552	10.421	355098	4.862
LOWER LIMIT				53037	5.909	73638	9.421	88774.5	3.862
LAB SAMPLE ID	SAMPLE NO.								
60375838017	GB-13/3-5			129574	6.408	168095	9.876	208067	4.361
60375838024	GB-09/1.5-3			126401	6.407	171920	9.875	204194	4.361

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 19936282CCV Date Analyzed: 07/30/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 07:43

Lab File ID: 073021.B\0730API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		85731	11.273	194529	7.757
UPPER LIMIT		171462	11.773	389058	8.257
LOWER LIMIT		42865.5	10.773	97264.5	7.257
LAB SAMPLE ID	SAMPLE NO.				
60375838017	GB-13/3-5	96509	11.212	225252	7.753
60375838024	GB-09/1.5-3	99680	11.213	223176	7.753

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 19812981CCV Date Analyzed: 07/27/2021

Instrument ID: 60MSS8 GC Column: Col 1 Time Analyzed: 08:34

Lab File ID: 072721.B\0727API6.D

		AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT	AREA PERYD12IS	RT
12 HOUR STD		5000	5.063	6596	8.038	12615	3.81	6328	9.309
UPPER LIMIT		10000	5.563	13192	8.538	25230	4.31	12656	9.809
LOWER LIMIT		2500	4.563	3298	7.538	6307.5	3.31	3164	8.809
LAB SAMPLE ID	SAMPLE NO.								
2946349	2946349BLANK	4608	5.063	10058	8.023	11176	3.808	10477	9.288
2946350	2946350LCS	4485	5.058	8435	8.023	10917	3.807	8574	9.288
60375838027	RB-03	4636	5.058	8252	8.02	11711	3.807	8560	9.284
60375838028	RB-04	4861	5.058	8231	8.02	12187	3.808	8420	9.284
60375838029	RB-05	5045	5.058	9590	8.02	12611	3.808	10008	9.284

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)
PERYD12IS = Perylene-d12 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Sample ID : 19812981CCV Date Analyzed: 07/27/2021

Instrument ID: 60MSS8 GC Column: Col 1 Time Analyzed: 08:34

Lab File ID: 072721.B\0727API6.D

		AREA PHENAD10IS	RT
12 HOUR STD		14441	6.127
UPPER LIMIT		28882	6.627
LOWER LIMIT		7220.5	5.627
LAB SAMPLE ID	SAMPLE NO.		
2946349	2946349BLANK	15392	6.122
2946350	2946350LCS	14704	6.122
60375838027	RB-03	14970	6.122
60375838028	RB-04	15658	6.122
60375838029	RB-05	16764	6.122

PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

GB-42/2-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838001
Date Analyzed: 07/28/2021 20:27
Lab File ID: 072821.B\0728AP40.D
Initial wt/vol: 31.87 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.4	U
208-96-8	Acenaphthylene	<1.4	U
120-12-7	Anthracene	<1.6	U
56-55-3	Benzo(a)anthracene	<1.8	U
50-32-8	Benzo(a)pyrene	<1.4	U
205-99-2	Benzo(b)fluoranthene	<1.9	U
191-24-2	Benzo(g,h,i)perylene	<1.7	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.8	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	<2.9	U
86-73-7	Fluorene	<1.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.2	U
129-00-0	Pyrene	<2.1	U

SAMPLE NO.

GB-42/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838002
Date Analyzed: 07/28/2021 20:44
Lab File ID: 072821.B\0728AP41.D
Initial wt/vol: 30.41 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	<2.0	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	<3.0	U
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.3	U
129-00-0	Pyrene	<2.2	U

SAMPLE NO.

GB-35/2-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838003
Date Analyzed: 07/29/2021 12:18
Lab File ID: 072921.B\0729AP13.D
Initial wt/vol: 30.61 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 17.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	7.7	
56-55-3	Benzo(a)anthracene	40.2	
50-32-8	Benzo(a)pyrene	35.0	
205-99-2	Benzo(b)fluoranthene	64.0	
191-24-2	Benzo(g,h,i)perylene	27.1	
207-08-9	Benzo(k)fluoranthene	19.6	
218-01-9	Chrysene	44.4	
53-70-3	Dibenz(a,h)anthracene	5.0	
206-44-0	Fluoranthene	105	
86-73-7	Fluorene	2.0	J
193-39-5	Indeno(1,2,3-cd)pyrene	22.3	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	40.6	
129-00-0	Pyrene	86.0	

SAMPLE NO.

GB-35/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838004
Date Analyzed: 07/29/2021 12:35
Lab File ID: 072921.B\0729AP14.D
Initial wt/vol: 30.05 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	2.3	J
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	<2.0	U
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	5.0	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.8	U
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	<3.4	U
129-00-0	Pyrene	3.9	J

SAMPLE NO.

GB-35/3-5D

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838005
Date Analyzed: 07/29/2021 12:52
Lab File ID: 072921.B\0729AP15.D
Initial wt/vol: 30.32 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	7.6	
50-32-8	Benzo(a)pyrene	6.1	
205-99-2	Benzo(b)fluoranthene	12.0	
191-24-2	Benzo(g,h,i)perylene	5.2	
207-08-9	Benzo(k)fluoranthene	3.5	J
218-01-9	Chrysene	8.8	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	24.8	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.1	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	11.0	
129-00-0	Pyrene	19.3	

SAMPLE NO.

GB-28/1.5-2.5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838006
Date Analyzed: 07/29/2021 13:09
Lab File ID: 072921.B\0729AP16.D
Initial wt/vol: 30.43 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	7.4	
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	14.0	
191-24-2	Benzo(g,h,i)perylene	6.1	
207-08-9	Benzo(k)fluoranthene	4.3	
218-01-9	Chrysene	9.9	
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	24.7	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.8	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	8.7	
129-00-0	Pyrene	19.6	

SAMPLE NO.

GB-28/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838007
Date Analyzed: 07/29/2021 13:26
Lab File ID: 072921.B\0729AP17.D
Initial wt/vol: 31.26 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.6	U
56-55-3	Benzo(a)anthracene	10.3	
50-32-8	Benzo(a)pyrene	9.7	
205-99-2	Benzo(b)fluoranthene	20.0	
191-24-2	Benzo(g,h,i)perylene	8.1	
207-08-9	Benzo(k)fluoranthene	6.2	
218-01-9	Chrysene	14.2	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	35.9	
86-73-7	Fluorene	<1.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.5	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	11.6	
129-00-0	Pyrene	27.9	

SAMPLE NO.

GB-21/0.5-2.5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838
Date Extracted: 07/26/2021 13:53 Lab Sample ID: 60375838008
Date Analyzed: 07/29/2021 13:43 Lab File ID: 072921.B\0729AP18.D
Initial wt/vol: 31.14 g Final wt/vol: 1 mL Dilution: 1 Instrument: 60MSS5 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	10.6	
208-96-8	Acenaphthylene	3.4	J
120-12-7	Anthracene	20.6	
56-55-3	Benzo(a)anthracene	243	
50-32-8	Benzo(a)pyrene	295	
205-99-2	Benzo(b)fluoranthene	566	
191-24-2	Benzo(g,h,i)perylene	255	
207-08-9	Benzo(k)fluoranthene	154	
218-01-9	Chrysene	407	
53-70-3	Dibenz(a,h)anthracene	49.4	
206-44-0	Fluoranthene	639	
86-73-7	Fluorene	14.0	
193-39-5	Indeno(1,2,3-cd)pyrene	216	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	288	
129-00-0	Pyrene	610	

SAMPLE NO.

GB-21/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838009
Date Analyzed: 07/29/2021 14:01
Lab File ID: 072921.B\0729AP19.D
Initial wt/vol: 31.57 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 17.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	2.4	J
208-96-8	Acenaphthylene	<1.4	U
120-12-7	Anthracene	5.6	
56-55-3	Benzo(a)anthracene	48.5	
50-32-8	Benzo(a)pyrene	56.9	
205-99-2	Benzo(b)fluoranthene	127	
191-24-2	Benzo(g,h,i)perylene	49.3	
207-08-9	Benzo(k)fluoranthene	43.6	
218-01-9	Chrysene	73.1	
53-70-3	Dibenz(a,h)anthracene	9.6	
206-44-0	Fluoranthene	147	
86-73-7	Fluorene	3.1	J
193-39-5	Indeno(1,2,3-cd)pyrene	42.3	
91-20-3	Naphthalene	<1.6	U
85-01-8	Phenanthrene	60.6	
129-00-0	Pyrene	119	

SAMPLE NO.

GB-06/2-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838014
Date Analyzed: 07/29/2021 14:18
Lab File ID: 072921.B\0729AP20.D
Initial wt/vol: 31.33 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 15.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	1.5	J
208-96-8	Acenaphthylene	<1.4	U
120-12-7	Anthracene	4.6	
56-55-3	Benzo(a)anthracene	7.2	
50-32-8	Benzo(a)pyrene	<1.4	U
205-99-2	Benzo(b)fluoranthene	13.1	
191-24-2	Benzo(g,h,i)perylene	4.4	
207-08-9	Benzo(k)fluoranthene	5.3	
218-01-9	Chrysene	9.2	
53-70-3	Dibenz(a,h)anthracene	<1.6	U
206-44-0	Fluoranthene	19.9	
86-73-7	Fluorene	2.5	J
193-39-5	Indeno(1,2,3-cd)pyrene	4.0	
91-20-3	Naphthalene	1.9	J
85-01-8	Phenanthrene	8.8	
129-00-0	Pyrene	24.7	

SAMPLE NO.

GB-06/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838015
Date Analyzed: 07/29/2021 14:35
Lab File ID: 072921.B\0729AP21.D
Initial wt/vol: 30.69 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	2.6	J
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	2.2	J
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	6.0	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.8	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	3.9	J
129-00-0	Pyrene	4.6	

SAMPLE NO.

GB-13/0-2

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838016
Date Analyzed: 07/29/2021 14:52
Lab File ID: 072921.B\0729AP22.D
Initial wt/vol: 30.23 g
Final wt/vol: 1 mL
Dilution: 10
Instrument: 60MSS5
Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	237	
208-96-8	Acenaphthylene	<15.0	U
120-12-7	Anthracene	645	
56-55-3	Benzo(a)anthracene	1860	
50-32-8	Benzo(a)pyrene	1520	
205-99-2	Benzo(b)fluoranthene	2730	
191-24-2	Benzo(g,h,i)perylene	1500	
207-08-9	Benzo(k)fluoranthene	768	
218-01-9	Chrysene	1940	
53-70-3	Dibenz(a,h)anthracene	299	
206-44-0	Fluoranthene	4270	
86-73-7	Fluorene	298	
193-39-5	Indeno(1,2,3-cd)pyrene	1180	
91-20-3	Naphthalene	40.9	
85-01-8	Phenanthrene	3520	
129-00-0	Pyrene	3680	

SAMPLE NO.

GB-13/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838017
Date Analyzed: 07/29/2021 15:09
Lab File ID: 072921.B\0729AP23.D
Initial wt/vol: 31.56 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 16.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	33.8	
208-96-8	Acenaphthylene	7.4	
120-12-7	Anthracene	110	
56-55-3	Benzo(a)anthracene	423	
50-32-8	Benzo(a)pyrene	361	
205-99-2	Benzo(b)fluoranthene	602	
191-24-2	Benzo(g,h,i)perylene	286	
207-08-9	Benzo(k)fluoranthene	305	
218-01-9	Chrysene	452	
53-70-3	Dibenz(a,h)anthracene	58.3	
86-73-7	Fluorene	38.6	
193-39-5	Indeno(1,2,3-cd)pyrene	235	
91-20-3	Naphthalene	6.4	
85-01-8	Phenanthrene	550	

SAMPLE NO.

GB-27/0.5-2

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838020
Date Analyzed: 07/29/2021 15:27
Lab File ID: 072921.B\0729AP24.D
Initial wt/vol: 31.23 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	14.8	
208-96-8	Acenaphthylene	9.3	
120-12-7	Anthracene	46.0	
56-55-3	Benzo(a)anthracene	216	
50-32-8	Benzo(a)pyrene	192	
205-99-2	Benzo(b)fluoranthene	316	
191-24-2	Benzo(g,h,i)perylene	167	
207-08-9	Benzo(k)fluoranthene	108	
218-01-9	Chrysene	219	
53-70-3	Dibenz(a,h)anthracene	29.8	
206-44-0	Fluoranthene	376	
86-73-7	Fluorene	9.9	
193-39-5	Indeno(1,2,3-cd)pyrene	132	
91-20-3	Naphthalene	7.4	
85-01-8	Phenanthrene	185	
129-00-0	Pyrene	401	

SAMPLE NO.

GB-27/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838021
Date Analyzed: 07/29/2021 15:44
Lab File ID: 072921.B\0729AP25.D
Initial wt/vol: 30.56 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	<1.9	U
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	<2.0	U
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.2	U
218-01-9	Chrysene	<1.9	U
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	<3.0	U
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.7	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	<3.3	U
129-00-0	Pyrene	2.3	J

SAMPLE NO.

GB-08/2.5-3.5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838
Date Extracted: 07/26/2021 13:53 Lab Sample ID: 60375838022
Date Analyzed: 07/29/2021 16:01 Lab File ID: 072921.B\0729AP26.D
Initial wt/vol: 31.02 g Final wt/vol: 1 mL Dilution: 1 Instrument: 60MSS5 Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	4.0	
50-32-8	Benzo(a)pyrene	3.1	J
205-99-2	Benzo(b)fluoranthene	6.6	
191-24-2	Benzo(g,h,i)perylene	3.2	J
207-08-9	Benzo(k)fluoranthene	2.3	J
218-01-9	Chrysene	4.5	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	10.9	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.3	J
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	5.1	
129-00-0	Pyrene	9.0	

SAMPLE NO.

GB-08/4-6

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838023
Date Analyzed: 07/29/2021 16:18
Lab File ID: 072921.B\0729AP27.D
Initial wt/vol: 30.48 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 22.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.6	U
208-96-8	Acenaphthylene	<1.6	U
120-12-7	Anthracene	3.4	J
56-55-3	Benzo(a)anthracene	16.8	
50-32-8	Benzo(a)pyrene	15.1	
205-99-2	Benzo(b)fluoranthene	29.1	
191-24-2	Benzo(g,h,i)perylene	11.5	
207-08-9	Benzo(k)fluoranthene	14.1	
218-01-9	Chrysene	21.8	
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	58.5	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	9.5	
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	21.7	
129-00-0	Pyrene	46.6	

SAMPLE NO.

GB-09/1.5-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838024
Date Analyzed: 07/29/2021 16:35
Lab File ID: 072921.B\0729AP28.D
Initial wt/vol: 30.21 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	64.5	
208-96-8	Acenaphthylene	7.6	
120-12-7	Anthracene	191	
56-55-3	Benzo(a)anthracene	752	
50-32-8	Benzo(a)pyrene	633	
191-24-2	Benzo(g,h,i)perylene	542	
207-08-9	Benzo(k)fluoranthene	494	
53-70-3	Dibenz(a,h)anthracene	96.4	
86-73-7	Fluorene	48.2	
193-39-5	Indeno(1,2,3-cd)pyrene	415	
91-20-3	Naphthalene	4.0	J

SAMPLE NO.

GB-09/4-6

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838025
Date Analyzed: 07/29/2021 16:53
Lab File ID: 072921.B\0729AP29.D
Initial wt/vol: 30.51 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	5.0	
50-32-8	Benzo(a)pyrene	4.2	
205-99-2	Benzo(b)fluoranthene	7.7	
191-24-2	Benzo(g,h,i)perylene	3.2	J
207-08-9	Benzo(k)fluoranthene	2.6	J
218-01-9	Chrysene	5.0	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	13.3	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.6	J
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	7.9	
129-00-0	Pyrene	11.1	

SAMPLE NO.

GB-14/0-2

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 60375838010
Date Analyzed: 07/29/2021 17:44
Lab File ID: 072921.B\0729AP32.D
Initial wt/vol: 31.05 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	7.1	J
208-96-8	Acenaphthylene	<2.9	U
120-12-7	Anthracene	15.5	
56-55-3	Benzo(a)anthracene	114	
50-32-8	Benzo(a)pyrene	128	
205-99-2	Benzo(b)fluoranthene	252	
191-24-2	Benzo(g,h,i)perylene	119	
207-08-9	Benzo(k)fluoranthene	78.0	
218-01-9	Chrysene	159	
53-70-3	Dibenz(a,h)anthracene	22.8	
206-44-0	Fluoranthene	309	
86-73-7	Fluorene	7.4	J
193-39-5	Indeno(1,2,3-cd)pyrene	94.6	
91-20-3	Naphthalene	<3.3	U
85-01-8	Phenanthrene	133	
129-00-0	Pyrene	248	

SAMPLE NO.

GB-14/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 60375838011
Date Analyzed: 07/29/2021 18:02
Lab File ID: 072921.B\0729AP33.D
Initial wt/vol: 31.53 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.9	U
208-96-8	Acenaphthylene	<2.9	U
120-12-7	Anthracene	<3.2	U
56-55-3	Benzo(a)anthracene	<3.7	U
50-32-8	Benzo(a)pyrene	<2.8	U
205-99-2	Benzo(b)fluoranthene	4.6	J
191-24-2	Benzo(g,h,i)perylene	<3.5	U
207-08-9	Benzo(k)fluoranthene	<4.3	U
218-01-9	Chrysene	<3.7	U
53-70-3	Dibenz(a,h)anthracene	<3.3	U
206-44-0	Fluoranthene	8.2	
86-73-7	Fluorene	<3.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	<3.3	U
91-20-3	Naphthalene	5.2	J
85-01-8	Phenanthrene	<6.4	U
129-00-0	Pyrene	6.5	J

SAMPLE NO.

GB-07/2.5-3.5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838
Date Extracted: 07/26/2021 15:31 Lab Sample ID: 60375838012
Date Analyzed: 07/29/2021 18:19 Lab File ID: 072921.B\0729AP34.D
Initial wt/vol: 30.15 g Final wt/vol: 2 mL Dilution: 1 Instrument: 60MSS5 Percent Moisture: 20.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	35.7	
208-96-8	Acenaphthylene	4.3	J
120-12-7	Anthracene	78.8	
56-55-3	Benzo(a)anthracene	163	
50-32-8	Benzo(a)pyrene	126	
205-99-2	Benzo(b)fluoranthene	203	
191-24-2	Benzo(g,h,i)perylene	73.1	
207-08-9	Benzo(k)fluoranthene	106	
218-01-9	Chrysene	153	
53-70-3	Dibenz(a,h)anthracene	17.3	
206-44-0	Fluoranthene	394	
86-73-7	Fluorene	20.5	
193-39-5	Indeno(1,2,3-cd)pyrene	63.5	
91-20-3	Naphthalene	4.8	J
85-01-8	Phenanthrene	365	
129-00-0	Pyrene	385	

SAMPLE NO.

GB-07/7-9

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 60375838013
Date Analyzed: 07/29/2021 18:36
Lab File ID: 072921.B\0729AP35.D
Initial wt/vol: 30.86 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	38.9	
208-96-8	Acenaphthylene	<3.1	U
120-12-7	Anthracene	5.8	J
56-55-3	Benzo(a)anthracene	8.0	J
50-32-8	Benzo(a)pyrene	6.3	J
205-99-2	Benzo(b)fluoranthene	13.4	
191-24-2	Benzo(g,h,i)perylene	4.5	J
207-08-9	Benzo(k)fluoranthene	4.9	J
218-01-9	Chrysene	9.7	
53-70-3	Dibenz(a,h)anthracene	<3.6	U
206-44-0	Fluoranthene	24.2	
86-73-7	Fluorene	41.5	
193-39-5	Indeno(1,2,3-cd)pyrene	<3.6	U
91-20-3	Naphthalene	111	
85-01-8	Phenanthrene	45.2	
129-00-0	Pyrene	21.0	

SAMPLE NO.

GB-13/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838017
Date Analyzed: 07/30/2021 10:56
Lab File ID: 073021.B\0730AP11.D
Initial wt/vol: 31.56 g Final wt/vol: 1 mL Dilution: 10
Instrument: 60MSS5 Percent Moisture: 16.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
206-44-0	Fluoranthene	931	
129-00-0	Pyrene	785	

SAMPLE NO.

GB-09/1.5-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 60375838024
Date Analyzed: 07/30/2021 11:13
Lab File ID: 073021.B\0730AP12.D
Initial wt/vol: 30.21 g
Final wt/vol: 1 mL
Dilution: 10
Instrument: 60MSS5
Percent Moisture: 19.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
205-99-2	Benzo(b)fluoranthene	1120	
218-01-9	Chrysene	810	
206-44-0	Fluoranthene	1940	
85-01-8	Phenanthrene	994	
129-00-0	Pyrene	1670	

SAMPLE NO.

RB-03

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Water
SDG No.: 60375838
Date Extracted: 07/26/2021 15:46
Lab Sample ID: 60375838027
Date Analyzed: 07/27/2021 17:56
Lab File ID: 072721.B\0727AP38.D
Initial wt/vol: 90 mL
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	<0.055	U
208-96-8	Acenaphthylene	<0.038	U
120-12-7	Anthracene	<0.076	U
56-55-3	Benzo(a)anthracene	<0.041	U
50-32-8	Benzo(a)pyrene	0.092	J
205-99-2	Benzo(b)fluoranthene	<0.059	U
191-24-2	Benzo(g,h,i)perylene	<0.047	U
207-08-9	Benzo(k)fluoranthene	<0.049	U
218-01-9	Chrysene	<0.048	U
53-70-3	Dibenz(a,h)anthracene	0.073	J
206-44-0	Fluoranthene	<0.22	U
86-73-7	Fluorene	<0.077	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.080	J
91-20-3	Naphthalene	0.12	J
85-01-8	Phenanthrene	<0.46	U
129-00-0	Pyrene	<0.086	U

SAMPLE NO.

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

RB-04

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Water SDG No.: 60375838
Date Extracted: 07/26/2021 15:46
Lab Sample ID: 60375838028
Date Analyzed: 07/27/2021 18:11
Lab File ID: 072721.B\0727AP39.D
Initial wt/vol: 105 mL Final wt/vol: 1 mL Dilution: 1
Instrument: 60MSS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	<0.047	U
208-96-8	Acenaphthylene	<0.033	U
120-12-7	Anthracene	<0.065	U
56-55-3	Benzo(a)anthracene	<0.035	U
50-32-8	Benzo(a)pyrene	<0.071	U
205-99-2	Benzo(b)fluoranthene	<0.051	U
191-24-2	Benzo(g,h,i)perylene	<0.040	U
207-08-9	Benzo(k)fluoranthene	<0.042	U
218-01-9	Chrysene	<0.041	U
53-70-3	Dibenz(a,h)anthracene	<0.050	U
206-44-0	Fluoranthene	<0.19	U
86-73-7	Fluorene	<0.066	U
193-39-5	Indeno(1,2,3-cd)pyrene	<0.048	U
91-20-3	Naphthalene	<0.076	U
85-01-8	Phenanthrene	<0.39	U
129-00-0	Pyrene	<0.074	U

SAMPLE NO.

RB-05

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Water
SDG No.: 60375838
Date Extracted: 07/26/2021 15:46
Lab Sample ID: 60375838029
Date Analyzed: 07/27/2021 18:26
Lab File ID: 072721.B\0727AP40.D
Initial wt/vol: 100 mL
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	<0.049	U
208-96-8	Acenaphthylene	<0.034	U
120-12-7	Anthracene	<0.069	U
56-55-3	Benzo(a)anthracene	<0.037	U
50-32-8	Benzo(a)pyrene	<0.074	U
205-99-2	Benzo(b)fluoranthene	<0.053	U
191-24-2	Benzo(g,h,i)perylene	<0.042	U
207-08-9	Benzo(k)fluoranthene	<0.044	U
218-01-9	Chrysene	<0.043	U
53-70-3	Dibenz(a,h)anthracene	<0.053	U
206-44-0	Fluoranthene	0.33	J
86-73-7	Fluorene	<0.070	U
193-39-5	Indeno(1,2,3-cd)pyrene	<0.050	U
91-20-3	Naphthalene	<0.080	U
85-01-8	Phenanthrene	0.45	J
129-00-0	Pyrene	0.17	

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.11894	1.09422	1.06549	1.09074	1.06233	1.07547
Acenaphthylene	Averaged	1.79964	1.76321	1.71369	1.75430	1.72876	1.79109
Anthracene	Averaged	0.95480	0.98971	0.96996	1.02024	0.95352	0.91919
Benzo(a)anthracene	Averaged	1.27227	1.27235	1.22018	1.25033	1.17391	1.19779
Benzo(a)pyrene	Averaged	1.16001	1.16178	1.11150	1.18053	1.10095	1.09725
Benzo(b)fluoranthene	Averaged	1.36990	1.36367	1.29770	1.32666	1.29133	1.28286
Benzo(g,h,i)perylene	Averaged	0.56259	0.56634	0.51596	0.56411	0.50102	0.54197
Benzo(k)fluoranthene	Averaged	1.36448	1.32831	1.25870	1.40703	1.23369	1.19632
Chrysene	Averaged	1.10282	1.12963	1.07868	1.12828	1.06358	1.06173
Dibenz(a,h)anthracene	Averaged	0.74399	0.74879	0.70296	0.75423	0.68003	0.70465
Fluoranthene	Averaged	1.14036	1.17220	1.14496	1.19523	1.12899	1.08856
Fluorene	Averaged	1.28712	1.25285	1.22613	1.25270	1.22477	1.24394
Indeno(1,2,3-cd)pyrene	Averaged	0.78877	0.80206	0.74322	0.79324	0.72210	0.77636
Naphthalene	Averaged	1.01672	0.97880	0.95885	0.97000	0.94927	0.92788
Phenanthrene	Averaged	0.96149	0.98305	0.95421	1.00263	0.93523	0.92065
Pyrene	Averaged	1.39709	1.43920	1.38165	1.44039	1.35084	1.32652
2-Fluorobiphenyl (S)	Averaged	1.43833	1.39109	1.34963	1.37522	1.30411	1.31850
Terphenyl-d14 (S)	Averaged	1.37860	1.11909	1.05333	1.07924	1.01676	0.97814

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.04529	0.97405
Acenaphthylene	Averaged	1.74049	1.61912
Anthracene	Averaged	0.89655	0.84396
Benzo(a)anthracene	Averaged	1.17451	1.07257
Benzo(a)pyrene	Averaged	1.07722	0.99775
Benzo(b)fluoranthene	Averaged	1.20236	1.15863
Benzo(g,h,i)perylene	Averaged	0.56424	0.45218
Benzo(k)fluoranthene	Averaged	1.13691	1.10135
Chrysene	Averaged	1.05875	1.00538
Dibenz(a,h)anthracene	Averaged	0.69301	0.59322
Fluoranthene	Averaged	1.03891	0.96136
Fluorene	Averaged	1.21855	1.12528
Indeno(1,2,3-cd)pyrene	Averaged	0.78171	0.64710
Naphthalene	Averaged	0.93595	0.88423
Phenanthrene	Averaged	0.88955	0.82761
Pyrene	Averaged	1.31974	1.20996
2-Fluorobiphenyl (S)	Averaged	1.28345	1.17304
Terphenyl-d14 (S)	Averaged	0.97497	0.91027

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	4.07400			1.06582	
Acenaphthylene	Averaged	3.24813			1.73879	
Anthracene	Averaged	5.89516			0.94349	
Benzo(a)anthracene	Averaged	5.51081			1.20424	
Benzo(a)pyrene	Averaged	5.27878			1.11087	
Benzo(b)fluoranthene	Averaged	5.73520			1.28664	
Benzo(g,h,i)perylene	Averaged	7.71237			0.53355	
Benzo(k)fluoranthene	Averaged	8.63097			1.25335	
Chrysene	Averaged	3.82632			1.07860	
Dibenz(a,h)anthracene	Averaged	7.43095			0.70261	
Fluoranthene	Averaged	6.92175			1.10882	
Fluorene	Averaged	3.84432			1.22892	
Indeno(1,2,3-cd)pyrene	Averaged	6.85201			0.75682	
Naphthalene	Averaged	4.10623			0.95271	
Phenanthrene	Averaged	5.96680			0.93430	
Pyrene	Averaged	5.55817			1.35818	
2-Fluorobiphenyl (S)	Averaged	6.06551			1.32917	
Terphenyl-d14 (S)	Averaged	13.46000			1.06380	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/14/2021 07/14/2021 Calibration Time(s): 12:26 14:26

LAB FILE ID

CAL1 = 071421.B\0714API1A.D CAL2 = 071421.B\0714API2.D CAL3 = 071421.B\0714API3.D

CAL4 = 071421.B\0714API4.D CAL5 = 071421.B\0714API5.D CAL6 = 071421.B\0714API6A.D

CAL7 = 071421.B\0714API7.D CAL8 = 071421.B\0714API8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.30574	1.45013	1.37486	1.41640	1.26168	1.27937
Acenaphthylene	Averaged	1.53979	1.72719	1.69319	1.72850	1.56419	1.66879
Anthracene	Averaged	0.63741	0.78851	0.73001	0.77263	0.68366	0.72173
Benzo(a)anthracene	Averaged	1.08231	1.06312	1.01903	0.97371	0.86221	0.92253
Benzo(a)pyrene	Averaged	1.15084	1.13219	0.99578	1.00665	0.88362	0.93515
Benzo(b)fluoranthene	Averaged	0.84684	1.00214	0.92430	0.95632	0.78881	0.88615
Benzo(g,h,i)perylene	Averaged	0.96989	1.03657	0.99578	0.98277	0.86971	0.87411
Benzo(k)fluoranthene	Averaged	1.02056	1.03274	1.05426	1.07831	1.01972	1.03342
Chrysene	Averaged	1.20336	1.30931	1.24002	1.29428	1.11847	1.07999
Dibenz(a,h)anthracene	Averaged	0.94094	0.93712	1.07050	0.99642	0.90511	0.90286
Fluoranthene	Averaged	0.83056	0.77165	0.77032	0.75713	0.67149	0.70764
Fluorene	Averaged	1.42892	1.67413	1.54095	1.56054	1.39879	1.44456
Indeno(1,2,3-cd)pyrene	Averaged	1.04951	1.10924	1.15984	1.11585	0.98390	1.00340
Naphthalene	Averaged	0.95637	1.09614	1.02610	1.04648	0.93160	0.93857
Phenanthrene	Averaged	0.78034	0.89901	0.87557	0.85904	0.75975	0.77753
Pyrene	Averaged	1.47394	1.55178	1.59761	1.57317	1.39789	1.44773
2-Fluorobiphenyl (S)	Averaged	2.68539	2.31078	2.91580	3.01454	2.70598	2.73750
Terphenyl-d14 (S)	Averaged		1.29812	1.31369	1.29588	1.15639	1.23773

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/14/2021 07/14/2021 Calibration Time(s): 12:26 14:26

LAB FILE ID

CAL1 = 071421.B\0714API1A.D CAL2 = 071421.B\0714API2.D CAL3 = 071421.B\0714API3.D

CAL4 = 071421.B\0714API4.D CAL5 = 071421.B\0714API5.D CAL6 = 071421.B\0714API6A.D

CAL7 = 071421.B\0714API7.D CAL8 = 071421.B\0714API8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.26749	1.29973
Acenaphthylene	Averaged	1.66682	1.75799
Anthracene	Averaged	0.72451	0.72522
Benzo(a)anthracene	Averaged	0.89694	0.88713
Benzo(a)pyrene	Averaged	0.91737	0.92715
Benzo(b)fluoranthene	Averaged	0.86233	0.84651
Benzo(g,h,i)perylene	Averaged	0.88467	0.87147
Benzo(k)fluoranthene	Averaged	0.97855	1.02472
Chrysene	Averaged	1.00768	0.98339
Dibenz(a,h)anthracene	Averaged	0.90376	0.88148
Fluoranthene	Averaged	0.72466	0.74897
Fluorene	Averaged	1.42590	1.45536
Indeno(1,2,3-cd)pyrene	Averaged	1.00311	0.98848
Naphthalene	Averaged	0.93165	0.98412
Phenanthrene	Averaged	0.77587	0.77212
Pyrene	Averaged	1.37292	1.35692
2-Fluorobiphenyl (S)	Averaged	2.71840	2.86236
Terphenyl-d14 (S)	Averaged	1.13614	1.11975

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/14/2021 07/14/2021 Calibration Time(s): 12:26 14:26

LAB FILE ID

CAL1 = 071421.B\0714API1A.D CAL2 = 071421.B\0714API2.D CAL3 = 071421.B\0714API3.D

CAL4 = 071421.B\0714API4.D CAL5 = 071421.B\0714API5.D CAL6 = 071421.B\0714API6A.D

CAL7 = 071421.B\0714API7.D CAL8 = 071421.B\0714API8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	5.42307			1.33192	
Acenaphthylene	Averaged	4.70412			1.66831	
Anthracene	Averaged	6.54762			0.72296	
Benzo(a)anthracene	Averaged	8.72261			0.96337	
Benzo(a)pyrene	Averaged	10.05344			0.99359	
Benzo(b)fluoranthene	Averaged	7.71239			0.88918	
Benzo(g,h,i)perylene	Averaged	7.23141			0.93562	
Benzo(k)fluoranthene	Averaged	2.79662			1.03028	
Chrysene	Averaged	10.90124			1.15456	
Dibenz(a,h)anthracene	Averaged	6.65381			0.94227	
Fluoranthene	Averaged	6.39044			0.74780	
Fluorene	Averaged	6.25461			1.49114	
Indeno(1,2,3-cd)pyrene	Averaged	6.47042			1.05167	
Naphthalene	Averaged	6.20728			0.98888	
Phenanthrene	Averaged	6.84370			0.81240	
Pyrene	Averaged	6.37079			1.47149	
2-Fluorobiphenyl (S)	Averaged	7.66933			2.74384	
Terphenyl-d14 (S)	Averaged	6.84658			1.22253	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19936277ICV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/27/2021 Time: 10:57

Instrument ID: 60MSS5 GC Column: Col 1
Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721.B\0727APICV.D
Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375838

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	0.22095	0.0500	0.9060	20.0000
Acenaphthylene	Averaged	1.73879	0.35133	0.0500	3.0080	20.0000
Anthracene	Averaged	0.94349	0.18059	0.0500	-2.5757	20.0000
Benzo(a)anthracene	Averaged	1.20424	0.22518	0.0500	-0.5352	20.0000
Benzo(a)pyrene	Averaged	1.11087	0.19714	0.0500	-1.2261	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	0.25506	0.0500	-0.2937	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.11115	0.0500	1.5775	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	0.25020	0.0500	-4.5498	20.0000
Chrysene	Averaged	1.07860	0.20717	0.0500	-1.5645	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.13678	0.0500	0.2906	20.0000
Fluoranthene	Averaged	1.10882	0.22009	0.0500	-1.8274	20.0000
Fluorene	Averaged	1.22892	0.24519	0.0500	1.2220	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.15867	0.0500	2.5815	20.0000
Naphthalene	Averaged	0.95271	0.18683	0.0500	-2.6064	20.0000
Phenanthrene	Averaged	0.93430	0.18236	0.0500	-1.4614	20.0000
Pyrene	Averaged	1.35818	0.26889	0.0500	-2.3305	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	0.00000	0.0500	-0.8029	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	0.00000	0.0500	-8.0523	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19736764CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 08:58

Instrument ID: 60MSS5 GC Column: Col 1
Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072821.B\0728API6.D
Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	1.06391	0.0500	-0.1793	20.0000
Acenaphthylene	Averaged	1.73879	1.77380	0.0500	2.0138	20.0000
Anthracene	Averaged	0.94349	0.91912	0.0500	-2.5832	20.0000
Benzo(a)anthracene	Averaged	1.20424	1.17702	0.0500	-2.2604	20.0000
Benzo(a)pyrene	Averaged	1.11087	1.07600	0.0500	-3.1391	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	1.32038	0.0500	2.6220	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.49315	0.0500	-7.5723	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	1.18442	0.0500	-5.4998	20.0000
Chrysene	Averaged	1.07860	1.06280	0.0500	-1.4653	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.66045	0.0500	-6.0001	20.0000
Fluoranthene	Averaged	1.10882	1.07122	0.0500	-3.3909	20.0000
Fluorene	Averaged	1.22892	1.23598	0.0500	0.5749	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.70906	0.0500	-6.3103	20.0000
Naphthalene	Averaged	0.95271	0.95405	0.0500	0.1402	20.0000
Phenanthrene	Averaged	0.93430	0.91713	0.0500	-1.8385	20.0000
Pyrene	Averaged	1.35818	1.40736	0.0500	3.6215	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	1.31314	0.0500	-1.2062	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	1.06237	0.0500	-0.1345	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19936281CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 08:29

Instrument ID: 60MSS5 GC Column: Col 1
Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072921.B\0729API6.D
Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	1.05371	0.0500	-1.1361	20.0000
Acenaphthylene	Averaged	1.73879	1.74542	0.0500	0.3813	20.0000
Anthracene	Averaged	0.94349	0.90438	0.0500	-4.1456	20.0000
Benzo(a)anthracene	Averaged	1.20424	1.17306	0.0500	-2.5894	20.0000
Benzo(a)pyrene	Averaged	1.11087	1.07828	0.0500	-2.9341	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	1.33219	0.0500	3.5403	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.47756	0.0500	-10.4940	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	1.17670	0.0500	-6.1155	20.0000
Chrysene	Averaged	1.07860	1.03779	0.0500	-3.7843	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.63333	0.0500	-9.8595	20.0000
Fluoranthene	Averaged	1.10882	1.07103	0.0500	-3.4083	20.0000
Fluorene	Averaged	1.22892	1.22710	0.0500	-0.1481	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.68211	0.0500	-9.8715	20.0000
Naphthalene	Averaged	0.95271	0.94469	0.0500	-0.8419	20.0000
Phenanthrene	Averaged	0.93430	0.90801	0.0500	-2.8139	20.0000
Pyrene	Averaged	1.35818	1.40336	0.0500	3.3269	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	1.29490	0.0500	-2.5788	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	1.08848	0.0500	2.3202	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19936282CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/30/2021 Time: 07:43

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 073021.B\0730API6.D Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	1.05837	0.0500	-0.6987	20.0000
Acenaphthylene	Averaged	1.73879	1.73884	0.0500	0.0027	20.0000
Anthracene	Averaged	0.94349	0.91583	0.0500	-2.9316	20.0000
Benzo(a)anthracene	Averaged	1.20424	1.16747	0.0500	-3.0537	20.0000
Benzo(a)pyrene	Averaged	1.11087	1.06404	0.0500	-4.2164	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	1.33380	0.0500	3.6649	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.49779	0.0500	-6.7025	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	1.20895	0.0500	-3.5426	20.0000
Chrysene	Averaged	1.07860	1.03285	0.0500	-4.2420	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.64997	0.0500	-7.4922	20.0000
Fluoranthene	Averaged	1.10882	1.08219	0.0500	-2.4015	20.0000
Fluorene	Averaged	1.22892	1.22040	0.0500	-0.6931	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.70439	0.0500	-6.9276	20.0000
Naphthalene	Averaged	0.95271	0.94642	0.0500	-0.6604	20.0000
Phenanthrene	Averaged	0.93430	0.90868	0.0500	-2.7427	20.0000
Pyrene	Averaged	1.35818	1.42600	0.0500	4.9938	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	1.28418	0.0500	-3.3854	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	1.13584	0.0500	6.7722	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19793877ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/14/2021 Time: 14:42

Instrument ID: 60MSS8 GC Column: Col 1 Init. Calib. Date(s): 07/14/2021 07/14/2021

Lab File ID: 071421.B\0714APICV.D Init. Calib. Time(s): 12:26 14:26

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.33192	1.40036	0.0500	5.1382	20.0000
Acenaphthylene	Averaged	1.66831	1.77331	0.0500	6.2938	20.0000
Anthracene	Averaged	0.72296	0.75782	0.0500	4.8218	20.0000
Benzo(a)anthracene	Averaged	0.96337	0.93468	0.0500	-2.9787	20.0000
Benzo(a)pyrene	Averaged	0.99359	0.97491	0.0500	-1.8806	20.0000
Benzo(b)fluoranthene	Averaged	0.88918	1.00369	0.0500	12.8782	20.0000
Benzo(g,h,i)perylene	Averaged	0.93562	1.01375	0.0500	8.3506	20.0000
Benzo(k)fluoranthene	Averaged	1.03028	1.14063	0.0500	10.7102	20.0000
Chrysene	Averaged	1.15456	1.13419	0.0500	-1.7650	20.0000
Dibenz(a,h)anthracene	Averaged	0.94227	0.97193	0.0500	3.1476	20.0000
Fluoranthene	Averaged	0.74780	0.77068	0.0500	3.0594	20.0000
Fluorene	Averaged	1.49114	1.57717	0.0500	5.7693	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	1.05167	1.15608	0.0500	9.9285	20.0000
Naphthalene	Averaged	0.98888	0.98045	0.0500	-0.8523	20.0000
Phenanthrene	Averaged	0.81240	0.83556	0.0500	2.8503	20.0000
Pyrene	Averaged	1.47149	1.53688	0.0500	4.4435	20.0000
2-Fluorobiphenyl (S)	Averaged	2.74384	0.00000	0.0500	0.0000	20.0000
Terphenyl-d14 (S)	Averaged	1.22253	0.00000	0.0500	0.0000	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19812981CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/27/2021 Time: 08:34

Instrument ID: 60MSS8 GC Column: Col 1
Init. Calib. Date(s): 07/14/2021 07/14/2021

Lab File ID: 072721.B\0727API6.D
Init. Calib. Time(s): 12:26 14:26

SDG No.: 60375838

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.33192	1.29000	0.0500	-3.1476	20.0000
Acenaphthylene	Averaged	1.66831	1.67820	0.0500	0.5929	20.0000
Anthracene	Averaged	0.72296	0.73797	0.0500	2.0758	20.0000
Benzo(a)anthracene	Averaged	0.96337	0.93466	0.0500	-2.9807	20.0000
Benzo(a)pyrene	Averaged	0.99359	0.92873	0.0500	-6.5282	20.0000
Benzo(b)fluoranthene	Averaged	0.88918	0.85493	0.0500	-3.8514	20.0000
Benzo(g,h,i)perylene	Averaged	0.93562	0.84592	0.0500	-9.5871	20.0000
Benzo(k)fluoranthene	Averaged	1.03028	1.01643	0.0500	-1.3442	20.0000
Chrysene	Averaged	1.15456	1.09309	0.0500	-5.3248	20.0000
Dibenz(a,h)anthracene	Averaged	0.94227	0.83281	0.0500	-11.6172	20.0000
Fluoranthene	Averaged	0.74780	0.68679	0.0500	-8.1583	20.0000
Fluorene	Averaged	1.49114	1.39240	0.0500	-6.6221	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	1.05167	0.95038	0.0500	-9.6312	20.0000
Naphthalene	Averaged	0.98888	0.94229	0.0500	-4.7110	20.0000
Phenanthrene	Averaged	0.81240	0.77647	0.0500	-4.4233	20.0000
Pyrene	Averaged	1.47149	1.53851	0.0500	4.5541	20.0000
2-Fluorobiphenyl (S)	Averaged	2.74384	2.73160	0.0500	-0.4462	20.0000
Terphenyl-d14 (S)	Averaged	1.22253	1.24576	0.0500	1.8998	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

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MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 2946220
Date Analyzed: 07/28/2021 19:18
Lab File ID: 072821.B\0728AP36.D
Initial wt/vol: 31.16 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.2	U
208-96-8	Acenaphthylene	<1.2	U
120-12-7	Anthracene	<1.3	U
56-55-3	Benzo(a)anthracene	<1.5	U
50-32-8	Benzo(a)pyrene	<1.2	U
205-99-2	Benzo(b)fluoranthene	<1.5	U
191-24-2	Benzo(g,h,i)perylene	<1.4	U
207-08-9	Benzo(k)fluoranthene	<1.8	U
218-01-9	Chrysene	<1.5	U
53-70-3	Dibenz(a,h)anthracene	<1.4	U
206-44-0	Fluoranthene	<2.4	U
86-73-7	Fluorene	<1.2	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.4	U
91-20-3	Naphthalene	<1.4	U
85-01-8	Phenanthrene	<2.6	U
129-00-0	Pyrene	<1.7	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 2946221
Date Analyzed: 07/28/2021 19:35
Lab File ID: 072821.B\0728AP37.D
Initial wt/vol: 30.09 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	27.3	
208-96-8	Acenaphthylene	26.7	
120-12-7	Anthracene	29.1	
56-55-3	Benzo(a)anthracene	28.6	
50-32-8	Benzo(a)pyrene	27.2	
205-99-2	Benzo(b)fluoranthene	30.0	
191-24-2	Benzo(g,h,i)perylene	27.3	
207-08-9	Benzo(k)fluoranthene	28.4	
218-01-9	Chrysene	28.0	
53-70-3	Dibenz(a,h)anthracene	27.5	
206-44-0	Fluoranthene	30.7	
86-73-7	Fluorene	28.1	
193-39-5	Indeno(1,2,3-cd)pyrene	27.4	
91-20-3	Naphthalene	27.2	
85-01-8	Phenanthrene	29.8	
129-00-0	Pyrene	30.8	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 2946222
Date Analyzed: 07/28/2021 19:52
Lab File ID: 072821.B\0728AP38.D
Initial wt/vol: 30.38 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	31.2	
208-96-8	Acenaphthylene	31.1	
120-12-7	Anthracene	33.6	
56-55-3	Benzo(a)anthracene	33.5	
50-32-8	Benzo(a)pyrene	30.8	
205-99-2	Benzo(b)fluoranthene	34.1	
191-24-2	Benzo(g,h,i)perylene	29.5	
207-08-9	Benzo(k)fluoranthene	33.6	
218-01-9	Chrysene	32.5	
53-70-3	Dibenz(a,h)anthracene	29.9	
206-44-0	Fluoranthene	35.8	
86-73-7	Fluorene	32.8	
193-39-5	Indeno(1,2,3-cd)pyrene	28.9	
91-20-3	Naphthalene	32.0	
85-01-8	Phenanthrene	34.4	
129-00-0	Pyrene	36.1	

SAMPLE NO.

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 13:53
Lab Sample ID: 2946223
Date Analyzed: 07/28/2021 20:09
Lab File ID: 072821.B\0728AP39.D
Initial wt/vol: 31.6 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	32.9	
208-96-8	Acenaphthylene	32.4	
120-12-7	Anthracene	35.1	
56-55-3	Benzo(a)anthracene	35.2	
50-32-8	Benzo(a)pyrene	32.5	
205-99-2	Benzo(b)fluoranthene	36.8	
191-24-2	Benzo(g,h,i)perylene	29.5	
207-08-9	Benzo(k)fluoranthene	36.2	
218-01-9	Chrysene	34.5	
53-70-3	Dibenz(a,h)anthracene	29.7	
206-44-0	Fluoranthene	38.4	
86-73-7	Fluorene	34.7	
193-39-5	Indeno(1,2,3-cd)pyrene	28.8	
91-20-3	Naphthalene	32.7	
85-01-8	Phenanthrene	36.2	
129-00-0	Pyrene	38.7	

SAMPLE NO.

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MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 2946216
Date Analyzed: 07/29/2021 17:10
Lab File ID: 072921.B\0729AP30.D
Initial wt/vol: 30.27 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.4	U
208-96-8	Acenaphthylene	<2.4	U
120-12-7	Anthracene	<2.7	U
56-55-3	Benzo(a)anthracene	<3.1	U
50-32-8	Benzo(a)pyrene	<2.4	U
205-99-2	Benzo(b)fluoranthene	<3.2	U
191-24-2	Benzo(g,h,i)perylene	<2.9	U
207-08-9	Benzo(k)fluoranthene	<3.6	U
218-01-9	Chrysene	<3.1	U
53-70-3	Dibenz(a,h)anthracene	<2.8	U
206-44-0	Fluoranthene	<4.9	U
86-73-7	Fluorene	<2.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<2.8	U
91-20-3	Naphthalene	<2.8	U
85-01-8	Phenanthrene	<5.4	U
129-00-0	Pyrene	<3.5	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 2946217
Date Analyzed: 07/29/2021 17:27
Lab File ID: 072921.B\0729AP31.D
Initial wt/vol: 31.28 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	30.1	
208-96-8	Acenaphthylene	29.4	
120-12-7	Anthracene	31.3	
56-55-3	Benzo(a)anthracene	30.5	
50-32-8	Benzo(a)pyrene	28.4	
205-99-2	Benzo(b)fluoranthene	30.7	
191-24-2	Benzo(g,h,i)perylene	30.1	
207-08-9	Benzo(k)fluoranthene	31.7	
218-01-9	Chrysene	30.0	
53-70-3	Dibenz(a,h)anthracene	29.5	
206-44-0	Fluoranthene	33.1	
86-73-7	Fluorene	30.7	
193-39-5	Indeno(1,2,3-cd)pyrene	29.0	
91-20-3	Naphthalene	30.6	
85-01-8	Phenanthrene	31.6	
129-00-0	Pyrene	32.8	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 2946218
Date Analyzed: 07/29/2021 18:53
Lab File ID: 072921.B\0729AP36.D
Initial wt/vol: 31.04 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	64.8	
208-96-8	Acenaphthylene	36.5	
120-12-7	Anthracene	48.8	
56-55-3	Benzo(a)anthracene	56.2	
50-32-8	Benzo(a)pyrene	50.5	
205-99-2	Benzo(b)fluoranthene	63.1	
191-24-2	Benzo(g,h,i)perylene	49.2	
207-08-9	Benzo(k)fluoranthene	46.1	
218-01-9	Chrysene	57.4	
53-70-3	Dibenz(a,h)anthracene	37.7	
206-44-0	Fluoranthene	89.3	
86-73-7	Fluorene	75.2	
193-39-5	Indeno(1,2,3-cd)pyrene	45.8	
91-20-3	Naphthalene	95.9	
85-01-8	Phenanthrene	111	
129-00-0	Pyrene	85.0	

SAMPLE NO.

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 15:31
Lab Sample ID: 2946219
Date Analyzed: 07/29/2021 19:10
Lab File ID: 072921.B\0729AP37.D
Initial wt/vol: 31.66 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	154	
208-96-8	Acenaphthylene	37.5	
120-12-7	Anthracene	51.2	
56-55-3	Benzo(a)anthracene	61.0	
50-32-8	Benzo(a)pyrene	53.2	
205-99-2	Benzo(b)fluoranthene	67.6	
191-24-2	Benzo(g,h,i)perylene	46.4	
207-08-9	Benzo(k)fluoranthene	52.9	
218-01-9	Chrysene	63.7	
53-70-3	Dibenz(a,h)anthracene	36.0	
206-44-0	Fluoranthene	104	
86-73-7	Fluorene	126	
193-39-5	Indeno(1,2,3-cd)pyrene	44.7	
91-20-3	Naphthalene	277	
85-01-8	Phenanthrene	122	
129-00-0	Pyrene	93.1	

SAMPLE NO.

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MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Water
SDG No.: 60375838
Date Extracted: 07/26/2021 15:46
Lab Sample ID: 2946349
Date Analyzed: 07/27/2021 14:31
Lab File ID: 072721.B\0727AP24.D
Initial wt/vol: 100 mL
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	<0.049	U
208-96-8	Acenaphthylene	<0.034	U
120-12-7	Anthracene	<0.069	U
56-55-3	Benzo(a)anthracene	<0.037	U
50-32-8	Benzo(a)pyrene	<0.074	U
205-99-2	Benzo(b)fluoranthene	<0.053	U
191-24-2	Benzo(g,h,i)perylene	<0.042	U
207-08-9	Benzo(k)fluoranthene	<0.044	U
218-01-9	Chrysene	<0.043	U
53-70-3	Dibenz(a,h)anthracene	<0.053	U
206-44-0	Fluoranthene	<0.20	U
86-73-7	Fluorene	<0.070	U
193-39-5	Indeno(1,2,3-cd)pyrene	<0.050	U
91-20-3	Naphthalene	<0.080	U
85-01-8	Phenanthrene	<0.41	U
129-00-0	Pyrene	<0.077	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Water SDG No.: 60375838
Date Extracted: 07/26/2021 15:46
Lab Sample ID: 2946350
Date Analyzed: 07/27/2021 14:46
Lab File ID: 072721.B\0727AP25.D
Initial wt/vol: 100 mL Final wt/vol: 1 mL Dilution: 1
Instrument: 60MSS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	6.6	
208-96-8	Acenaphthylene	7.1	
120-12-7	Anthracene	8.0	
56-55-3	Benzo(a)anthracene	8.6	
50-32-8	Benzo(a)pyrene	7.9	
205-99-2	Benzo(b)fluoranthene	8.6	
191-24-2	Benzo(g,h,i)perylene	7.7	
207-08-9	Benzo(k)fluoranthene	7.5	
218-01-9	Chrysene	7.8	
53-70-3	Dibenz(a,h)anthracene	7.8	
206-44-0	Fluoranthene	9.0	
86-73-7	Fluorene	7.2	
193-39-5	Indeno(1,2,3-cd)pyrene	7.9	
91-20-3	Naphthalene	6.3	
85-01-8	Phenanthrene	7.5	
129-00-0	Pyrene	8.0	

PCB - FORM II SVOA-1
WATER SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60GCSG

LAB SAMPLE ID	SAMPLE NAME	DCBP
2948685	2948685BLANK	59
2948686	2948686LCS	50
60375838027	RB-03	41
60375838028	RB-04	43
60375838029	RB-05	48

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(30-136)

* Values outside of QC Limits

PCB - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60GCS8

LAB SAMPLE ID	SAMPLE NAME	DCBP
2946226	2946226BLANK	110
2946227	2946227LCS	115
2946228	2946228MS	75
2946229	2946229MSD	78
60375838001	GB-42/2-3	91
60375838002	GB-42/3-5	86
60375838003	GB-35/2-3	93
60375838004	GB-35/3-5	89
60375838005	GB-35/3-5D	93
60375838006	GB-28/1.5-2.5	90
60375838007	GB-28/3-5	105
60375838008	GB-21/0.5-2.5	96
60375838009	GB-21/3-5	99
60375838010	GB-14/0-2	79
60375838011	GB-14/3-5	78
60375838012	GB-07/2.5-3.5	82
60375838013	GB-07/7-9	80
60375838014	GB-06/2-3	76
60375838015	GB-06/3-5	78
60375838016	GB-13/0-2	82
60375838017	GB-13/3-5	79
60375838018	GB-20/0-2	82
60375838019	GB-20/3-4	78

QC LIMITS

(DCBP) = Decachlorobiphenyl (S) (35-120)

* Values outside of QC Limits

PCB - FORM II SVOA-2
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60GCS8

LAB SAMPLE ID	SAMPLE NAME	DCBP
2946235	2946235BLANK	102
2946236	2946236LCS	103
2946237	2946237MS	82
2946238	2946238MSD	77
60375838020	GB-27/0.5-2	79
60375838021	GB-27/3-5	76
60375838022	GB-08/2.5-3.5	82
60375838023	GB-08/4-6	84
60375838024	GB-09/1.5-3	83
60375838025	GB-09/4-6	81

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(35-120)

* Values outside of QC Limits

PCB - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2946227LCS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/27/2021
Instrument: 60GCS8
LCS Lot No: 42472
Lab File ID: 072621-1.B\0726210133.D
SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	161	179	111	65-120
PCB-1260 (Aroclor 1260)	161	184	114	65-120

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2946236LCS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/28/2021
Instrument: 60GCS8
LCS Lot No: 42472
Lab File ID: 072621-1.B\0726210135.D
SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	162	171	106	65-120
PCB-1260 (Aroclor 1260)	162	173	107	65-120

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2948686LCS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/29/2021
Instrument: 60GCSG
LCS Lot No: 42472
Lab File ID: 072921-1.B\0729210000032.D
SDG No.: 60375838

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	5.0	3.0	61	40-120
PCB-1260 (Aroclor 1260)	5.0	3.8	77	55-120

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2946228MS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/30/2021
Instrument: 60GCS8
Lab File ID: 072821-1.B\0728210123.D
Parent Sample ID: GB-07/7-9
SDG No.: 60375838

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	208	<10.6	177	85	30-130
PCB-1260 (Aroclor 1260)	208	<8.4	183	88	15-155

Spike Recovery: 0 out of 2 outside limits.

10/13/2021 4:09

PCB - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60GCS8 Matrix Spike Duplicate - Sample No: 2946229MSD

Lab File ID (2): 072821-1.B\0728210124.D Date Analyzed (2): 07/30/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
PCB-1016 (Aroclor 1016)	203	169	83	5	0-40	30-130
PCB-1260 (Aroclor 1260)	203	174	86	5	0-40	15-155

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

10/13/2021 4:09

PCB - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2946237MS
Date Extracted: 07/26/2021
Date Analyzed (1): 07/30/2021
Instrument: 60GCS8
Lab File ID: 072821-1.B\0728210134.D
Parent Sample ID: GB-27/0.5-2
SDG No.: 60375838

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	194	<9.9	179	92	30-130
PCB-1260 (Aroclor 1260)	194	<7.9	169	87	15-155

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60GCS8 Matrix Spike Duplicate - Sample No: 2946238MSD

Lab File ID (2): 072821-1.B\0728210135.D Date Analyzed (2): 07/30/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
PCB-1016 (Aroclor 1016)	199	164	83	9	0-40	30-130
PCB-1260 (Aroclor 1260)	199	162	82	4	0-40	15-155

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

10/13/2021 4:09

SAMPLE NO.

2946226BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60GCS8 Matrix: Solid Lab Sample ID: 2946226

Lab File ID (1): 072621-1.B\0726210132.D Date Analyzed (1): 07/27/2021 Time (1):23:20

Lab File ID (2): 072621-2.B\0726210132.D Date Analyzed (2): 07/27/2021 Time (2):23:20

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2946227LCS	2946227	072621-1.B\0726210133.D	07/27/2021 23:38
2946227LCS	2946227	072621-2.B\0726210133.D	07/27/2021 23:38
GB-42/2-3	60375838001	072621-1.B\0726210149.D	07/28/2021 04:24
GB-42/3-5	60375838002	072621-1.B\0726210150.D	07/28/2021 04:42
GB-35/2-3	60375838003	072621-1.B\0726210151.D	07/28/2021 05:00
GB-35/3-5	60375838004	072621-1.B\0726210152.D	07/28/2021 05:17
GB-35/3-5D	60375838005	072621-1.B\0726210153.D	07/28/2021 05:35
GB-28/1.5-2.5	60375838006	072621-1.B\0726210154.D	07/28/2021 05:53
GB-28/3-5	60375838007	072621-1.B\0726210155.D	07/28/2021 06:11
GB-21/0.5-2.5	60375838008	072621-1.B\0726210156.D	07/28/2021 06:29
GB-21/3-5	60375838009	072621-1.B\0726210157.D	07/28/2021 06:47
GB-14/0-2	60375838010	072821-1.B\0728210119.D	07/29/2021 22:50
GB-14/3-5	60375838011	072821-1.B\0728210120.D	07/29/2021 23:08
GB-07/2.5-3.5	60375838012	072821-1.B\0728210121.D	07/29/2021 23:26
GB-07/7-9	60375838013	072821-1.B\0728210122.D	07/29/2021 23:44
2946228MS	2946228	072821-1.B\0728210123.D	07/30/2021 00:01
2946228MS	2946228	072821-2.B\0728210123.D	07/30/2021 00:01
2946229MSD	2946229	072821-1.B\0728210124.D	07/30/2021 00:19
2946229MSD	2946229	072821-2.B\0728210124.D	07/30/2021 00:19
GB-06/2-3	60375838014	072821-1.B\0728210125.D	07/30/2021 00:37
GB-06/3-5	60375838015	072821-1.B\0728210126.D	07/30/2021 00:55
GB-13/0-2	60375838016	072821-1.B\0728210127.D	07/30/2021 01:13
GB-13/3-5	60375838017	072821-1.B\0728210128.D	07/30/2021 01:31
GB-20/0-2	60375838018	072821-1.B\0728210129.D	07/30/2021 01:49
GB-20/3-4	60375838019	072821-1.B\0728210130.D	07/30/2021 02:07

SAMPLE NO.

2946235BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60GCS8 Matrix: Solid Lab Sample ID: 2946235

Lab File ID (1): 072621-1.B\0726210134.D Date Analyzed (1): 07/27/2021 Time (1): 23:56

Lab File ID (2): 072621-2.B\0726210134.D Date Analyzed (2): 07/27/2021 Time (2): 23:56

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2946236LCS	2946236	072621-1.B\0726210135.D	07/28/2021 00:14
2946236LCS	2946236	072621-2.B\0726210135.D	07/28/2021 00:14
GB-27/0.5-2	60375838020	072821-1.B\0728210133.D	07/30/2021 03:00
2946237MS	2946237	072821-1.B\0728210134.D	07/30/2021 03:18
2946237MS	2946237	072821-2.B\0728210134.D	07/30/2021 03:18
2946238MSD	2946238	072821-1.B\0728210135.D	07/30/2021 03:36
2946238MSD	2946238	072821-2.B\0728210135.D	07/30/2021 03:36
GB-27/3-5	60375838021	072821-1.B\0728210136.D	07/30/2021 03:54
GB-08/2.5-3.5	60375838022	072821-1.B\0728210137.D	07/30/2021 04:12
GB-08/4-6	60375838023	072821-1.B\0728210138.D	07/30/2021 04:29
GB-09/1.5-3	60375838024	072821-1.B\0728210139.D	07/30/2021 04:47
GB-09/4-6	60375838025	072821-1.B\0728210140.D	07/30/2021 05:05

SAMPLE NO.

2948685BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60GCSG Matrix: Water Lab Sample ID: 2948685

Lab File ID (1): 072921-1.B\0729210000031.D Date Analyzed (1): 07/29/2021 Time (1): 18:22

Lab File ID (2): 072921-2.B\0729210000031.D Date Analyzed (2): 07/29/2021 Time (2): 18:22

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2948686LCS	2948686	072921-1.B\0729210000032.D	07/29/2021 18:30
2948686LCS	2948686	072921-2.B\0729210000032.D	07/29/2021 18:30
RB-03	60375838027	072921-1.B\0729210000042.D	07/29/2021 19:43
RB-04	60375838028	072921-1.B\0729210000043.D	07/29/2021 19:51
RB-05	60375838029	072921-1.B\0729210000044.D	07/29/2021 19:58

SAMPLE NO.

GB-42/2-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838001

Date Analyzed: 07/28/2021 04:24 Lab File ID: 072621-1.B\0726210149.D

Initial wt/vol: 30.77 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-42/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838002

Date Analyzed: 07/28/2021 04:42 Lab File ID: 072621-1.B\0726210150.D

Initial wt/vol: 30.98 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-35/2-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838003

Date Analyzed: 07/28/2021 05:00 Lab File ID: 072621-1.B\0726210151.D

Initial wt/vol: 30.8 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 17.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.6	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.2	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.3	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.6	U

SAMPLE NO.

GB-35/3-5

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 12:05
Lab Sample ID: 60375838004
Date Analyzed: 07/28/2021 05:17
Lab File ID: 072621-1.B\0726210152.D
Initial wt/vol: 30.31 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-35/3-5D

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838005

Date Analyzed: 07/28/2021 05:35 Lab File ID: 072621-1.B\0726210153.D

Initial wt/vol: 30.51 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-28/1.5-2.5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838006

Date Analyzed: 07/28/2021 05:53 Lab File ID: 072621-1.B\0726210154.D

Initial wt/vol: 30.06 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-28/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838007

Date Analyzed: 07/28/2021 06:11 Lab File ID: 072621-1.B\0726210155.D

Initial wt/vol: 31.94 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.5	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.1	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.2	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.6	U

SAMPLE NO.

GB-21/0.5-2.5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838008

Date Analyzed: 07/28/2021 06:29 Lab File ID: 072621-1.B\0726210156.D

Initial wt/vol: 31.03 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-21/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838009

Date Analyzed: 07/28/2021 06:47 Lab File ID: 072621-1.B\0726210157.D

Initial wt/vol: 30.65 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 17.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.7	U

SAMPLE NO.

GB-14/0-2

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838010

Date Analyzed: 07/29/2021 22:50 Lab File ID: 072821-1.B\0728210119.D

Initial wt/vol: 30.29 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	43.3	

SAMPLE NO.

GB-14/3-5

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 12:05
Lab Sample ID: 60375838011
Date Analyzed: 07/29/2021 23:08
Lab File ID: 072821-1.B\0728210120.D
Initial wt/vol: 30.69 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 19.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-07/2.5-3.5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838012

Date Analyzed: 07/29/2021 23:26 Lab File ID: 072821-1.B\0728210121.D

Initial wt/vol: 31.59 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-07/7-9

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838013

Date Analyzed: 07/29/2021 23:44 Lab File ID: 072821-1.B\0728210122.D

Initial wt/vol: 30.16 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.6	U
11104-28-2	PCB-1221 (Aroclor 1221)	<10.1	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.2	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<4.0	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.4	U

SAMPLE NO.

GB-06/2-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838014

Date Analyzed: 07/30/2021 00:37 Lab File ID: 072821-1.B\0728210125.D

Initial wt/vol: 30.52 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 15.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.6	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.2	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.3	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.6	U

SAMPLE NO.

GB-06/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838015

Date Analyzed: 07/30/2021 00:55 Lab File ID: 072821-1.B\0728210126.D

Initial wt/vol: 30.76 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-13/0-2

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838016

Date Analyzed: 07/30/2021 01:13 Lab File ID: 072821-1.B\0728210127.D

Initial wt/vol: 30.76 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-13/3-5

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Solid
SDG No.: 60375838
Date Extracted: 07/26/2021 12:05
Lab Sample ID: 60375838017
Date Analyzed: 07/30/2021 01:31
Lab File ID: 072821-1.B\0728210128.D
Initial wt/vol: 30.85 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 16.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.5	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.1	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.2	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.5	U

SAMPLE NO.

GB-20/0-2

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838018

Date Analyzed: 07/30/2021 01:49 Lab File ID: 072821-1.B\0728210129.D

Initial wt/vol: 30.76 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.7	U

SAMPLE NO.

GB-20/3-4

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 60375838019

Date Analyzed: 07/30/2021 02:07 Lab File ID: 072821-1.B\0728210130.D

Initial wt/vol: 30.59 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 22.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.4	U
11104-28-2	PCB-1221 (Aroclor 1221)	<10	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.1	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.3	U

SAMPLE NO.

GB-27/0.5-2

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 13:31 Lab Sample ID: 60375838020

Date Analyzed: 07/30/2021 03:00 Lab File ID: 072821-1.B\0728210133.D

Initial wt/vol: 30.49 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-27/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 13:31 Lab Sample ID: 60375838021

Date Analyzed: 07/30/2021 03:54 Lab File ID: 072821-1.B\0728210136.D

Initial wt/vol: 30.89 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-08/2.5-3.5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 13:31 Lab Sample ID: 60375838022

Date Analyzed: 07/30/2021 04:12 Lab File ID: 072821-1.B\0728210137.D

Initial wt/vol: 31.01 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-08/4-6

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 13:31 Lab Sample ID: 60375838023

Date Analyzed: 07/30/2021 04:29 Lab File ID: 072821-1.B\0728210138.D

Initial wt/vol: 30.27 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 22.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.5	U
11104-28-2	PCB-1221 (Aroclor 1221)	<10.0	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.2	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.3	U

SAMPLE NO.

GB-09/1.5-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 13:31 Lab Sample ID: 60375838024

Date Analyzed: 07/30/2021 04:47 Lab File ID: 072821-1.B\0728210139.D

Initial wt/vol: 30.23 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	9.2	J

SAMPLE NO.

GB-09/4-6

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 13:31 Lab Sample ID: 60375838025

Date Analyzed: 07/30/2021 05:05 Lab File ID: 072821-1.B\0728210140.D

Initial wt/vol: 31.21 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

RB-03

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Water SDG No.: 60375838
Date Extracted: 07/29/2021 11:57
Lab Sample ID: 60375838027
Date Analyzed: 07/29/2021 19:43
Lab File ID: 072921-1.B\0729210000042.D
Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<0.15	U
11104-28-2	PCB-1221 (Aroclor 1221)	<0.17	U
11141-16-5	PCB-1232 (Aroclor 1232)	<0.17	U
53469-21-9	PCB-1242 (Aroclor 1242)	<0.17	U
12672-29-6	PCB-1248 (Aroclor 1248)	<0.17	U
11097-69-1	PCB-1254 (Aroclor 1254)	<0.17	U
11096-82-5	PCB-1260 (Aroclor 1260)	<0.19	U

SAMPLE NO.

RB-04

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Water SDG No.: 60375838
Date Extracted: 07/29/2021 11:57
Lab Sample ID: 60375838028
Date Analyzed: 07/29/2021 19:51
Lab File ID: 072921-1.B\0729210000043.D
Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<0.15	U
11104-28-2	PCB-1221 (Aroclor 1221)	<0.17	U
11141-16-5	PCB-1232 (Aroclor 1232)	<0.17	U
53469-21-9	PCB-1242 (Aroclor 1242)	<0.17	U
12672-29-6	PCB-1248 (Aroclor 1248)	<0.17	U
11097-69-1	PCB-1254 (Aroclor 1254)	<0.17	U
11096-82-5	PCB-1260 (Aroclor 1260)	<0.19	U

SAMPLE NO.

RB-05

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/24/2021 04:00
Matrix: Water SDG No.: 60375838
Date Extracted: 07/29/2021 11:57
Lab Sample ID: 60375838029
Date Analyzed: 07/29/2021 19:58
Lab File ID: 072921-1.B\0729210000044.D
Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<0.15	U
11104-28-2	PCB-1221 (Aroclor 1221)	<0.17	U
11141-16-5	PCB-1232 (Aroclor 1232)	<0.17	U
53469-21-9	PCB-1242 (Aroclor 1242)	<0.17	U
12672-29-6	PCB-1248 (Aroclor 1248)	<0.17	U
11097-69-1	PCB-1254 (Aroclor 1254)	<0.17	U
11096-82-5	PCB-1260 (Aroclor 1260)	<0.19	U

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 17:09 19:33

LAB FILE ID

CAL1A =	071921-1.B\0719210011.D	CAL1A =	071921-1.B\0719210011.D	CAL2A =	071921-1.B\0719210012.D
CAL2A =	071921-1.B\0719210012.D	CAL3A =	071921-1.B\0719210013.D	CAL3A =	071921-1.B\0719210013.D
CAL4A =	071921-1.B\0719210014.D	CAL4A =	071921-1.B\0719210014.D	CAL5A =	071921-1.B\0719210015.D
CAL5A =	071921-1.B\0719210015.D	CAL6A =	071921-1.B\0719210016.D	CAL6A =	071921-1.B\0719210016.D
CAL7A =	071921-1.B\0719210017.D	CAL7A =	071921-1.B\0719210017.D	CAL8A =	071921-1.B\0719210018.D
CAL8A =	071921-1.B\0719210018.D	CAL9A =	071921-1.B\0719210019.D	CAL9A =	071921-1.B\0719210019.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	701000.00000	617470.00000	623735.00000	472270.00000	556160.00000	536698.00000
Aroclor 1016	2	Averaged	1474020.00000	1256300.00000	1258035.00000	980363.33333	1159897.50000	1121734.00000
Aroclor 1016	3	Averaged	717320.00000	632120.00000	633300.00000	513313.33333	603912.50000	575502.00000
Aroclor 1016	4	Averaged	531720.00000	460970.00000	475440.00000	360343.33333	429565.00000	418728.00000
Aroclor 1016	5	Averaged	437060.00000	387660.00000	408455.00000	306180.00000	375727.50000	369180.00000
Aroclor 1260	1	Averaged	1078320.00000	883840.00000	903145.00000	655493.33333	771805.00000	759566.00000
Aroclor 1260	2	Averaged	1212460.00000	1021120.00000	1028500.00000	739066.66667	888230.00000	870096.00000
Aroclor 1260	3	Averaged	1116260.00000	929960.00000	962675.00000	694600.00000	847132.50000	828108.00000
Aroclor 1260	4	Averaged	803880.00000	702580.00000	719520.00000	524140.00000	611455.00000	615932.00000
Aroclor 1260	5	Averaged	753860.00000	653040.00000	673655.00000	496676.66667	600427.50000	588808.00000
Decachlorobiphenyl		Averaged		14101100.0000	13899150.0000	9711800.00000	11997950.0000	11973880.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 17:09 19:33

LAB FILE ID

CAL1A =	071921-1.B\0719210011.D	CAL1A =	071921-1.B\0719210011.D	CAL2A =	071921-1.B\0719210012.D
CAL2A =	071921-1.B\0719210012.D	CAL3A =	071921-1.B\0719210013.D	CAL3A =	071921-1.B\0719210013.D
CAL4A =	071921-1.B\0719210014.D	CAL4A =	071921-1.B\0719210014.D	CAL5A =	071921-1.B\0719210015.D
CAL5A =	071921-1.B\0719210015.D	CAL6A =	071921-1.B\0719210016.D	CAL6A =	071921-1.B\0719210016.D
CAL7A =	071921-1.B\0719210017.D	CAL7A =	071921-1.B\0719210017.D	CAL8A =	071921-1.B\0719210018.D
CAL8A =	071921-1.B\0719210018.D	CAL9A =	071921-1.B\0719210019.D	CAL9A =	071921-1.B\0719210019.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	551538.75000	577039.00000	426184.50000
Aroclor 1016	2	Averaged	1150250.00000	1219050.00000	908607.00000
Aroclor 1016	3	Averaged	590477.50000	627801.00000	467425.50000
Aroclor 1016	4	Averaged	435786.25000	464843.00000	338758.00000
Aroclor 1016	5	Averaged	391961.25000	422341.00000	314983.50000
Aroclor 1260	1	Averaged	790932.50000	823628.00000	600052.00000
Aroclor 1260	2	Averaged	916671.25000	956915.00000	701937.00000
Aroclor 1260	3	Averaged	916613.75000	957911.00000	723401.00000
Aroclor 1260	4	Averaged	664772.50000	699337.00000	516835.00000
Aroclor 1260	5	Averaged	652153.75000	683348.00000	506383.00000
Decachlorobiphenyl		Averaged	12475350.0000	13201590.0000	9881410.00000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 17:09 19:33

LAB FILE ID

CAL1A =	071921-1.B\0719210011.D	CAL1A =	071921-1.B\0719210011.D	CAL2A =	071921-1.B\0719210012.D
CAL2A =	071921-1.B\0719210012.D	CAL3A =	071921-1.B\0719210013.D	CAL3A =	071921-1.B\0719210013.D
CAL4A =	071921-1.B\0719210014.D	CAL4A =	071921-1.B\0719210014.D	CAL5A =	071921-1.B\0719210015.D
CAL5A =	071921-1.B\0719210015.D	CAL6A =	071921-1.B\0719210016.D	CAL6A =	071921-1.B\0719210016.D
CAL7A =	071921-1.B\0719210017.D	CAL7A =	071921-1.B\0719210017.D	CAL8A =	071921-1.B\0719210018.D
CAL8A =	071921-1.B\0719210018.D	CAL9A =	071921-1.B\0719210019.D	CAL9A =	071921-1.B\0719210019.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	14.56			562455.02	
Aroclor 1016	2	Averaged	14.08			1169806.31	
Aroclor 1016	3	Averaged	12.20			595685.75	
Aroclor 1016	4	Averaged	13.51			435128.17	
Aroclor 1016	5	Averaged	11.74			379283.13	
Aroclor 1260	1	Averaged	17.43			807420.20	
Aroclor 1260	2	Averaged	16.74			926110.65	
Aroclor 1260	3	Averaged	14.65			886295.69	
Aroclor 1260	4	Averaged	14.38			650939.05	
Aroclor 1260	5	Averaged	13.46			623150.21	
Decachlorobiphenyl		Averaged	13.63			12155278.75	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 17:09 19:33

LAB FILE ID

CAL1A =	071921-2.B\0719210011.D	CAL1A =	071921-2.B\0719210011.D	CAL2A =	071921-2.B\0719210012.D
CAL2A =	071921-2.B\0719210012.D	CAL3A =	071921-2.B\0719210013.D	CAL3A =	071921-2.B\0719210013.D
CAL4A =	071921-2.B\0719210014.D	CAL4A =	071921-2.B\0719210014.D	CAL5A =	071921-2.B\0719210015.D
CAL5A =	071921-2.B\0719210015.D	CAL6A =	071921-2.B\0719210016.D	CAL6A =	071921-2.B\0719210016.D
CAL7A =	071921-2.B\0719210017.D	CAL7A =	071921-2.B\0719210017.D	CAL8A =	071921-2.B\0719210018.D
CAL8A =	071921-2.B\0719210018.D	CAL9A =	071921-2.B\0719210019.D	CAL9A =	071921-2.B\0719210019.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	996700.00000	893740.00000	951545.00000	755626.66667	901882.50000	888710.00000
Aroclor 1016	2	Averaged	2006820.00000	1757760.00000	1855205.00000	1438296.66667	1723152.50000	1684282.00000
Aroclor 1016	3	Averaged	744880.00000	664970.00000	714820.00000	568070.00000	689230.00000	673498.00000
Aroclor 1016	4	Averaged	720720.00000	651250.00000	704805.00000	544383.33333	661495.00000	650810.00000
Aroclor 1016	5	Averaged	732360.00000	644920.00000	694625.00000	520613.33333	647357.50000	641362.00000
Aroclor 1260	1	Averaged	1495060.00000	1324320.00000	1383265.00000	1012713.33333	1245415.00000	1212336.00000
Aroclor 1260	2	Averaged	1934740.00000	1666190.00000	1759590.00000	1270663.33333	1591977.50000	1557984.00000
Aroclor 1260	3	Averaged	1294640.00000	1150380.00000	1238865.00000	908323.33333	1124700.00000	1131828.00000
Aroclor 1260	4	Averaged	1515380.00000	1294120.00000	1392920.00000	1001863.33333	1255762.50000	1249818.00000
Aroclor 1260	5	Averaged	1355060.00000	1166700.00000	1232845.00000	911380.00000	1142930.00000	1130968.00000
Decachlorobiphenyl		Averaged	30461200.0000	23346800.0000	23726300.0000	16360700.0000	20462550.0000	20659520.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 17:09 19:33

LAB FILE ID

CAL1A =	071921-2.B\0719210011.D	CAL1A =	071921-2.B\0719210011.D	CAL2A =	071921-2.B\0719210012.D
CAL2A =	071921-2.B\0719210012.D	CAL3A =	071921-2.B\0719210013.D	CAL3A =	071921-2.B\0719210013.D
CAL4A =	071921-2.B\0719210014.D	CAL4A =	071921-2.B\0719210014.D	CAL5A =	071921-2.B\0719210015.D
CAL5A =	071921-2.B\0719210015.D	CAL6A =	071921-2.B\0719210016.D	CAL6A =	071921-2.B\0719210016.D
CAL7A =	071921-2.B\0719210017.D	CAL7A =	071921-2.B\0719210017.D	CAL8A =	071921-2.B\0719210018.D
CAL8A =	071921-2.B\0719210018.D	CAL9A =	071921-2.B\0719210019.D	CAL9A =	071921-2.B\0719210019.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	914788.75000	984287.00000	738401.00000
Aroclor 1016	2	Averaged	1743626.25000	1871209.00000	1388983.50000
Aroclor 1016	3	Averaged	710758.75000	761491.00000	575438.50000
Aroclor 1016	4	Averaged	676705.00000	723377.00000	532480.50000
Aroclor 1016	5	Averaged	679450.00000	729886.00000	545340.00000
Aroclor 1260	1	Averaged	1290330.00000	1341149.00000	998356.00000
Aroclor 1260	2	Averaged	1663398.75000	1733074.00000	1288095.00000
Aroclor 1260	3	Averaged	1222590.00000	1284839.00000	983374.50000
Aroclor 1260	4	Averaged	1346568.75000	1426633.00000	1063935.00000
Aroclor 1260	5	Averaged	1233821.25000	1301609.00000	979691.00000
Decachlorobiphenyl		Averaged	21689325.0000	22715900.0000	16890525.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 17:09 19:33

LAB FILE ID

CAL1A =	071921-2.B\0719210011.D	CAL1A =	071921-2.B\0719210011.D	CAL2A =	071921-2.B\0719210012.D
CAL2A =	071921-2.B\0719210012.D	CAL3A =	071921-2.B\0719210013.D	CAL3A =	071921-2.B\0719210013.D
CAL4A =	071921-2.B\0719210014.D	CAL4A =	071921-2.B\0719210014.D	CAL5A =	071921-2.B\0719210015.D
CAL5A =	071921-2.B\0719210015.D	CAL6A =	071921-2.B\0719210016.D	CAL6A =	071921-2.B\0719210016.D
CAL7A =	071921-2.B\0719210017.D	CAL7A =	071921-2.B\0719210017.D	CAL8A =	071921-2.B\0719210018.D
CAL8A =	071921-2.B\0719210018.D	CAL9A =	071921-2.B\0719210019.D	CAL9A =	071921-2.B\0719210019.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	10.17			891742.32	
Aroclor 1016	2	Averaged	11.55			1718814.99	
Aroclor 1016	3	Averaged	10.00			678128.47	
Aroclor 1016	4	Averaged	10.73			651780.64	
Aroclor 1016	5	Averaged	11.41			648434.87	
Aroclor 1260	1	Averaged	13.02			1255882.70	
Aroclor 1260	2	Averaged	13.39			1607301.39	
Aroclor 1260	3	Averaged	11.49			1148837.75	
Aroclor 1260	4	Averaged	12.91			1283000.06	
Aroclor 1260	5	Averaged	12.33			1161667.13	
Decachlorobiphenyl		Averaged	19.09			21812535.55	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 17:09 19:33

LAB FILE ID

CAL1A =	071921-1.B\0719210011.D	CAL1A =	071921-1.B\0719210011.D	CAL2A =	071921-1.B\0719210012.D
CAL2A =	071921-1.B\0719210012.D	CAL3A =	071921-1.B\0719210013.D	CAL3A =	071921-1.B\0719210013.D
CAL4A =	071921-1.B\0719210014.D	CAL4A =	071921-1.B\0719210014.D	CAL5A =	071921-1.B\0719210015.D
CAL5A =	071921-1.B\0719210015.D	CAL6A =	071921-1.B\0719210016.D	CAL6A =	071921-1.B\0719210016.D
CAL7A =	071921-1.B\0719210017.D	CAL7A =	071921-1.B\0719210017.D	CAL8A =	071921-1.B\0719210018.D
CAL8A =	071921-1.B\0719210018.D	CAL9A =	071921-1.B\0719210019.D	CAL9A =	071921-1.B\0719210019.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	3.677	3.68	3.68	3.68	3.682	3.68	3.681	3.681
Aroclor 1016	2	4.347	4.348	4.348	4.352	4.354	4.351	4.351	4.353
Aroclor 1016	3	4.502	4.503	4.503	4.506	4.508	4.505	4.505	4.505
Aroclor 1016	4	5.222	5.222	5.223	5.225	5.226	5.224	5.224	5.224
Aroclor 1016	5	5.416	5.416	5.418	5.419	5.421	5.419	5.419	5.419
Aroclor 1260	1	7.35	7.35	7.35	7.353	7.353	7.351	7.352	7.352
Aroclor 1260	2	7.771	7.771	7.772	7.774	7.775	7.773	7.773	7.774
Aroclor 1260	3	8.231	8.231	8.23	8.232	8.233	8.233	8.233	8.233
Aroclor 1260	4	8.525	8.525	8.525	8.526	8.527	8.526	8.527	8.527
Aroclor 1260	5	8.915	8.914	8.915	8.916	8.917	8.917	8.917	8.917
Decachlorobiphenyl		12.056	12.055	12.055	12.056	12.056	12.057	12.058	12.057

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 17:09 19:33

LAB FILE ID

CAL1A =	071921-1.B\0719210011.D	CAL1A =	071921-1.B\0719210011.D	CAL2A =	071921-1.B\0719210012.D
CAL2A =	071921-1.B\0719210012.D	CAL3A =	071921-1.B\0719210013.D	CAL3A =	071921-1.B\0719210013.D
CAL4A =	071921-1.B\0719210014.D	CAL4A =	071921-1.B\0719210014.D	CAL5A =	071921-1.B\0719210015.D
CAL5A =	071921-1.B\0719210015.D	CAL6A =	071921-1.B\0719210016.D	CAL6A =	071921-1.B\0719210016.D
CAL7A =	071921-1.B\0719210017.D	CAL7A =	071921-1.B\0719210017.D	CAL8A =	071921-1.B\0719210018.D
CAL8A =	071921-1.B\0719210018.D	CAL9A =	071921-1.B\0719210019.D	CAL9A =	071921-1.B\0719210019.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	3.685	3.681	3.561	3.801
Aroclor 1016	2	4.354	4.35	4.23	4.47
Aroclor 1016	3	4.508	4.505	4.385	4.625
Aroclor 1016	4	5.227	5.224	5.104	5.344
Aroclor 1016	5	5.423	5.419	5.299	5.539
Aroclor 1260	1	7.354	7.351	7.231	7.471
Aroclor 1260	2	7.775	7.772	7.652	7.892
Aroclor 1260	3	8.235	8.232	8.112	8.352
Aroclor 1260	4	8.528	8.527	8.407	8.647
Aroclor 1260	5	8.919	8.917	8.797	9.037
Decachlorobiphenyl		12.058	12.058	11.938	12.178

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 17:09 19:33

LAB FILE ID

CAL1A =	071921-2.B\0719210011.D	CAL1A =	071921-2.B\0719210011.D	CAL2A =	071921-2.B\0719210012.D
CAL2A =	071921-2.B\0719210012.D	CAL3A =	071921-2.B\0719210013.D	CAL3A =	071921-2.B\0719210013.D
CAL4A =	071921-2.B\0719210014.D	CAL4A =	071921-2.B\0719210014.D	CAL5A =	071921-2.B\0719210015.D
CAL5A =	071921-2.B\0719210015.D	CAL6A =	071921-2.B\0719210016.D	CAL6A =	071921-2.B\0719210016.D
CAL7A =	071921-2.B\0719210017.D	CAL7A =	071921-2.B\0719210017.D	CAL8A =	071921-2.B\0719210018.D
CAL8A =	071921-2.B\0719210018.D	CAL9A =	071921-2.B\0719210019.D	CAL9A =	071921-2.B\0719210019.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	4.305	4.305	4.305	4.309	4.31	4.307	4.307	4.307
Aroclor 1016	2	4.972	4.974	4.973	4.976	4.978	4.975	4.975	4.975
Aroclor 1016	3	5.203	5.205	5.204	5.206	5.207	5.205	5.205	5.205
Aroclor 1016	4	5.54	5.541	5.54	5.542	5.544	5.542	5.541	5.542
Aroclor 1016	5	6.02	6.02	6.02	6.022	6.023	6.021	6.022	6.021
Aroclor 1260	1	8.128	8.129	8.128	8.129	8.13	8.129	8.13	8.13
Aroclor 1260	2	8.397	8.397	8.397	8.397	8.398	8.398	8.398	8.399
Aroclor 1260	3	9.069	9.07	9.07	9.071	9.071	9.071	9.072	9.073
Aroclor 1260	4	9.196	9.196	9.196	9.197	9.199	9.198	9.199	9.199
Aroclor 1260	5	9.75	9.75	9.751	9.752	9.753	9.751	9.753	9.754
Decachlorobiphenyl		12.812	12.812	12.812	12.812	12.812	12.813	12.813	12.813

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 07/19/2021 Calibration Time(s): 17:09 19:33

LAB FILE ID

CAL1A =	071921-2.B\0719210011.D	CAL1A =	071921-2.B\0719210011.D	CAL2A =	071921-2.B\0719210012.D
CAL2A =	071921-2.B\0719210012.D	CAL3A =	071921-2.B\0719210013.D	CAL3A =	071921-2.B\0719210013.D
CAL4A =	071921-2.B\0719210014.D	CAL4A =	071921-2.B\0719210014.D	CAL5A =	071921-2.B\0719210015.D
CAL5A =	071921-2.B\0719210015.D	CAL6A =	071921-2.B\0719210016.D	CAL6A =	071921-2.B\0719210016.D
CAL7A =	071921-2.B\0719210017.D	CAL7A =	071921-2.B\0719210017.D	CAL8A =	071921-2.B\0719210018.D
CAL8A =	071921-2.B\0719210018.D	CAL9A =	071921-2.B\0719210019.D	CAL9A =	071921-2.B\0719210019.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	4.31	4.308	4.188	4.428
Aroclor 1016	2	4.978	4.975	4.855	5.095
Aroclor 1016	3	5.207	5.206	5.086	5.326
Aroclor 1016	4	5.543	5.541	5.421	5.661
Aroclor 1016	5	6.024	6.021	5.901	6.141
Aroclor 1260	1	8.131	8.129	8.009	8.249
Aroclor 1260	2	8.4	8.398	8.278	8.518
Aroclor 1260	3	9.074	9.071	8.951	9.191
Aroclor 1260	4	9.199	9.198	9.078	9.318
Aroclor 1260	5	9.754	9.751	9.631	9.871
Decachlorobiphenyl		12.814	12.812	12.692	12.932

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 20:44

LAB FILE ID

CAL5B = 071921-1.B\0719210023.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	294310.00000	0.00			294310.00	
Aroclor 1221	2	Averaged	231047.50000	0.00			231047.50	
Aroclor 1221	3	Averaged	706612.50000	0.00			706612.50	
Aroclor 1254	1	Averaged	996327.50000	0.00			996327.50	
Aroclor 1254	2	Averaged	545155.00000	0.00			545155.00	
Aroclor 1254	3	Averaged	1411957.50000	0.00			1411957.50	
Aroclor 1254	4	Averaged	1253877.50000	0.00			1253877.50	
Aroclor 1254	5	Averaged	1144150.00000	0.00			1144150.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 20:44

LAB FILE ID

CAL5B = 071921-2.B\0719210023.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	380045.00000	0.00			380045.00	
Aroclor 1221	2	Averaged	263670.00000	0.00			263670.00	
Aroclor 1221	3	Averaged	851690.00000	0.00			851690.00	
Aroclor 1254	1	Averaged	1357715.00000	0.00			1357715.00	
Aroclor 1254	2	Averaged	1695887.50000	0.00			1695887.50	
Aroclor 1254	3	Averaged	2147212.50000	0.00			2147212.50	
Aroclor 1254	4	Averaged	2336995.00000	0.00			2336995.00	
Aroclor 1254	5	Averaged	1710737.50000	0.00			1710737.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 20:44

LAB FILE ID

CAL5B = 071921-1.B\0719210023.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	2.894	2.894	2.774	3.014
Aroclor 1221	2	3.024	3.025	2.905	3.145
Aroclor 1221	3	3.101	3.101	2.981	3.221
Aroclor 1254	1	5.939	5.939	5.819	6.059
Aroclor 1254	2	6.413	6.414	6.294	6.534
Aroclor 1254	3	6.937	6.937	6.817	7.057
Aroclor 1254	4	7.378	7.378	7.258	7.498
Aroclor 1254	5	8.233	8.233	8.113	8.353

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 20:44

LAB FILE ID

CAL5B = 071921-2.B\0719210023.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	3.347	3.346	3.226	3.466
Aroclor 1221	2	3.55	3.55	3.43	3.67
Aroclor 1221	3	3.646	3.647	3.527	3.767
Aroclor 1254	1	6.742	6.743	6.623	6.863
Aroclor 1254	2	6.969	6.969	6.849	7.089
Aroclor 1254	3	7.794	7.794	7.674	7.914
Aroclor 1254	4	8.115	8.116	7.996	8.236
Aroclor 1254	5	9.071	9.072	8.952	9.192

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:02

LAB FILE ID

CAL5C = 071921-1.B\0719210024.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	253720.00000	0.00			253720.00	
Aroclor 1232	2	Averaged	203417.50000	0.00			203417.50	
Aroclor 1232	3	Averaged	122595.00000	0.00			122595.00	
Aroclor 1232	4	Averaged	184537.50000	0.00			184537.50	
Aroclor 1232	5	Averaged	253582.50000	0.00			253582.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:02

LAB FILE ID

CAL5C = 071921-2.B\0719210024.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	191012.50000	0.00			191012.50	
Aroclor 1232	2	Averaged	266690.00000	0.00			266690.00	
Aroclor 1232	3	Averaged	233037.50000	0.00			233037.50	
Aroclor 1232	4	Averaged	195432.50000	0.00			195432.50	
Aroclor 1232	5	Averaged	367300.00000	0.00			367300.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:02

LAB FILE ID

CAL5C = 071921-1.B\0719210024.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	3.949	3.945	3.825	4.065
Aroclor 1232	2	4.622	4.619	4.499	4.739
Aroclor 1232	3	5.019	5.014	4.894	5.134
Aroclor 1232	4	5.279	5.275	5.155	5.395
Aroclor 1232	5	5.869	5.866	5.746	5.986

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:02

LAB FILE ID

CAL5C = 071921-2.B\0719210024.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	4.719	4.716	4.596	4.836
Aroclor 1232	2	5.404	5.401	5.281	5.521
Aroclor 1232	3	5.617	5.614	5.494	5.734
Aroclor 1232	4	6.237	6.236	6.116	6.356
Aroclor 1232	5	6.579	6.578	6.458	6.698

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:20

LAB FILE ID

CAL5D = 071921-1.B\0719210025.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	1330732.50000	0.00			1330732.50	
Aroclor 1242	2	Averaged	682247.50000	0.00			682247.50	
Aroclor 1242	3	Averaged	386737.50000	0.00			386737.50	
Aroclor 1242	4	Averaged	619705.00000	0.00			619705.00	
Aroclor 1242	5	Averaged	525020.00000	0.00			525020.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:20

LAB FILE ID

CAL5D = 071921-2.B\0719210025.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	806165.00000	0.00			806165.00	
Aroclor 1242	2	Averaged	600760.00000	0.00			600760.00	
Aroclor 1242	3	Averaged	436297.50000	0.00			436297.50	
Aroclor 1242	4	Averaged	846415.00000	0.00			846415.00	
Aroclor 1242	5	Averaged	891180.00000	0.00			891180.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:20

LAB FILE ID

CAL5D = 071921-1.B\0719210025.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	4.35	4.353	4.233	4.473
Aroclor 1242	2	4.505	4.507	4.387	4.627
Aroclor 1242	3	4.964	4.965	4.845	5.085
Aroclor 1242	4	5.927	5.929	5.809	6.049
Aroclor 1242	5	6.204	6.205	6.085	6.325

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:20

LAB FILE ID

CAL5D = 071921-2.B\0719210025.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	5.205	5.206	5.086	5.326
Aroclor 1242	2	5.402	5.404	5.284	5.524
Aroclor 1242	3	6.074	6.074	5.954	6.194
Aroclor 1242	4	6.664	6.664	6.544	6.784
Aroclor 1242	5	7.084	7.085	6.965	7.205

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:38

LAB FILE ID

CAL5E = 071921-1.B\0719210026.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	830557.50000	0.00			830557.50	
Aroclor 1248	2	Averaged	493200.00000	0.00			493200.00	
Aroclor 1248	3	Averaged	1191862.50000	0.00			1191862.50	
Aroclor 1248	4	Averaged	908805.00000	0.00			908805.00	
Aroclor 1248	5	Averaged	590705.00000	0.00			590705.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:38

LAB FILE ID

CAL5E = 071921-2.B\0719210026.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	1006062.50000	0.00			1006062.50	
Aroclor 1248	2	Averaged	1690327.50000	0.00			1690327.50	
Aroclor 1248	3	Averaged	1500160.00000	0.00			1500160.00	
Aroclor 1248	4	Averaged	1641465.00000	0.00			1641465.00	
Aroclor 1248	5	Averaged	899370.00000	0.00			899370.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:38

LAB FILE ID

CAL5E = 071921-1.B\0719210026.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	4.898	4.898	4.778	5.018
Aroclor 1248	2	5.277	5.277	5.157	5.397
Aroclor 1248	3	5.931	5.931	5.811	6.051
Aroclor 1248	4	6.207	6.207	6.087	6.327
Aroclor 1248	5	6.938	6.938	6.818	7.058

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/19/2021 Calibration Time(s): 21:38

LAB FILE ID

CAL5E = 071921-2.B\0719210026.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	5.616	4.974	4.854	5.094
Aroclor 1248	2	6.58	6.579	6.459	6.699
Aroclor 1248	3	6.665	6.664	6.544	6.784
Aroclor 1248	4	7.087	7.085	6.965	7.205
Aroclor 1248	5	7.794	7.793	7.673	7.913

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	970840.00000	897090.00000	848670.00000	775983.33333	751107.50000	730754.00000
Aroclor 1016	2	Averaged	2030800.00000	1870550.00000	1753495.00000	1609373.33333	1558385.00000	1526438.00000
Aroclor 1016	3	Averaged	1001540.00000	938820.00000	894895.00000	815493.33333	790935.00000	781846.00000
Aroclor 1016	4	Averaged	728080.00000	697890.00000	656465.00000	609860.00000	593575.00000	577708.00000
Aroclor 1016	5	Averaged	615720.00000	586330.00000	555330.00000	531306.66667	523252.50000	511044.00000
Aroclor 1260	1	Averaged	1407220.00000	1275040.00000	1167125.00000	1089186.66667	1059987.50000	1017992.00000
Aroclor 1260	2	Averaged	1601100.00000	1449940.00000	1347575.00000	1255346.66667	1224605.00000	1155912.00000
Aroclor 1260	3	Averaged	1440020.00000	1344870.00000	1260425.00000	1219733.33333	1187650.00000	1142266.00000
Aroclor 1260	4	Averaged	1077200.00000	993910.00000	953650.00000	913590.00000	872122.50000	822290.00000
Aroclor 1260	5	Averaged	1033420.00000	945000.00000	910125.00000	864850.00000	848505.00000	798406.00000
Decachlorobiphenyl		Averaged	22550600.0000	19414000.0000	18135700.0000	16997500.0000	16662850.0000	15891420.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	678037.50000	639431.00000	542441.00000
Aroclor 1016	2	Averaged	1428126.25000	1343964.00000	1166113.00000
Aroclor 1016	3	Averaged	729408.75000	684899.00000	581626.00000
Aroclor 1016	4	Averaged	533293.75000	506675.00000	439605.00000
Aroclor 1016	5	Averaged	488555.00000	459861.00000	413286.50000
Aroclor 1260	1	Averaged	955648.75000	902415.00000	783202.00000
Aroclor 1260	2	Averaged	1088666.25000	1037329.00000	918955.00000
Aroclor 1260	3	Averaged	1087676.25000	1056969.00000	946479.00000
Aroclor 1260	4	Averaged	807747.50000	764514.00000	683372.50000
Aroclor 1260	5	Averaged	782333.75000	730673.00000	673601.50000
Decachlorobiphenyl		Averaged	15345562.5000	14520250.0000	13227495.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	17.47			759372.70	
Aroclor 1016	2	Averaged	16.83			1587471.62	
Aroclor 1016	3	Averaged	16.21			802162.56	
Aroclor 1016	4	Averaged	15.56			593683.52	
Aroclor 1016	5	Averaged	11.96			520520.62	
Aroclor 1260	1	Averaged	17.79			1073090.76	
Aroclor 1260	2	Averaged	17.22			1231047.65	
Aroclor 1260	3	Averaged	12.70			1187343.17	
Aroclor 1260	4	Averaged	13.91			876488.50	
Aroclor 1260	5	Averaged	13.17			842990.47	
Decachlorobiphenyl		Averaged	16.45			16971708.61	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	1424340.00000	1387940.00000	1353655.00000	1268366.66667	1250982.50000	1214660.00000
Aroclor 1016	2	Averaged	2765480.00000	2624980.00000	2547520.00000	2366853.33333	2320287.50000	2252520.00000
Aroclor 1016	3	Averaged	1060340.00000	1001070.00000	1012590.00000	950720.00000	941760.00000	912578.00000
Aroclor 1016	4	Averaged	1023180.00000	1009120.00000	979085.00000	923663.33333	909462.50000	887270.00000
Aroclor 1016	5	Averaged	975340.00000	966030.00000	949390.00000	896156.66667	897797.50000	880792.00000
Aroclor 1260	1	Averaged	1986480.00000	1919180.00000	1856270.00000	1731980.00000	1714490.00000	1646706.00000
Aroclor 1260	2	Averaged	2611200.00000	2435340.00000	2348200.00000	2215843.33333	2188460.00000	2112124.00000
Aroclor 1260	3	Averaged	1788240.00000	1693920.00000	1664700.00000	1591370.00000	1557472.50000	1517404.00000
Aroclor 1260	4	Averaged	1977120.00000	1870610.00000	1828635.00000	1748463.33333	1754042.50000	1689950.00000
Aroclor 1260	5	Averaged	1838060.00000	1739710.00000	1709030.00000	1606620.00000	1592980.00000	1577298.00000
Decachlorobiphenyl		Averaged	37102600.0000	32197000.0000	30949950.0000	30231133.3333	28633675.0000	27983960.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	1146172.50000	1082018.00000	948775.00000
Aroclor 1016	2	Averaged	2117733.75000	1999484.00000	1775932.50000
Aroclor 1016	3	Averaged	879001.25000	811467.00000	743099.00000
Aroclor 1016	4	Averaged	835183.75000	783751.00000	691553.50000
Aroclor 1016	5	Averaged	838305.00000	798289.00000	712520.00000
Aroclor 1260	1	Averaged	1560540.00000	1420054.00000	1280849.50000
Aroclor 1260	2	Averaged	1996308.75000	1894627.00000	1696410.00000
Aroclor 1260	3	Averaged	1470232.50000	1372561.00000	1282513.00000
Aroclor 1260	4	Averaged	1629258.75000	1556540.00000	1387805.00000
Aroclor 1260	5	Averaged	1500142.50000	1416916.00000	1285497.00000
Decachlorobiphenyl		Averaged	26321800.0000	25331760.0000	22648670.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	12.46			1230767.74	
Aroclor 1016	2	Averaged	13.60			2307865.67	
Aroclor 1016	3	Averaged	10.89			923625.02	
Aroclor 1016	4	Averaged	12.19			893585.45	
Aroclor 1016	5	Averaged	9.71			879402.24	
Aroclor 1260	1	Averaged	13.77			1679616.61	
Aroclor 1260	2	Averaged	12.98			2166501.45	
Aroclor 1260	3	Averaged	10.28			1548712.55	
Aroclor 1260	4	Averaged	10.27			1715824.95	
Aroclor 1260	5	Averaged	10.67			1585139.27	
Decachlorobiphenyl		Averaged	14.57			29044505.37	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	3.679	3.68	3.681	3.681	3.681	3.681	3.684	3.683
Aroclor 1016	2	4.35	4.35	4.35	4.351	4.351	4.351	4.351	4.352
Aroclor 1016	3	4.504	4.505	4.505	4.505	4.505	4.505	4.505	4.506
Aroclor 1016	4	5.222	5.223	5.223	5.222	5.223	5.223	5.223	5.224
Aroclor 1016	5	5.417	5.417	5.417	5.417	5.418	5.418	5.418	5.418
Aroclor 1260	1	7.351	7.349	7.351	7.35	7.35	7.35	7.35	7.351
Aroclor 1260	2	7.769	7.768	7.77	7.77	7.77	7.77	7.771	7.771
Aroclor 1260	3	8.228	8.228	8.229	8.229	8.228	8.23	8.23	8.231
Aroclor 1260	4	8.522	8.523	8.522	8.523	8.523	8.524	8.524	8.525
Aroclor 1260	5	8.912	8.913	8.913	8.913	8.914	8.913	8.914	8.915
Decachlorobiphenyl		12.053	12.053	12.053	12.053	12.053	12.053	12.055	12.055

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	3.684	3.681	3.561	3.801
Aroclor 1016	2	4.353	4.35	4.23	4.47
Aroclor 1016	3	4.506	4.506	4.386	4.626
Aroclor 1016	4	5.224	5.222	5.102	5.342
Aroclor 1016	5	5.419	5.418	5.298	5.538
Aroclor 1260	1	7.351	7.35	7.23	7.47
Aroclor 1260	2	7.771	7.77	7.65	7.89
Aroclor 1260	3	8.231	8.229	8.109	8.349
Aroclor 1260	4	8.524	8.523	8.403	8.643
Aroclor 1260	5	8.915	8.913	8.793	9.033
Decachlorobiphenyl		12.054	12.053	11.933	12.173

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	4.307	4.306	4.307	4.307	4.307	4.307	4.306	4.307
Aroclor 1016	2	4.973	4.973	4.974	4.973	4.974	4.974	4.974	4.975
Aroclor 1016	3	5.205	5.204	5.204	5.203	5.203	5.203	5.204	5.204
Aroclor 1016	4	5.541	5.539	5.54	5.539	5.539	5.54	5.54	5.54
Aroclor 1016	5	6.018	6.018	6.019	6.018	6.018	6.018	6.019	6.019
Aroclor 1260	1	8.127	8.125	8.126	8.125	8.126	8.126	8.125	8.126
Aroclor 1260	2	8.393	8.393	8.394	8.393	8.393	8.394	8.395	8.394
Aroclor 1260	3	9.067	9.066	9.067	9.067	9.067	9.068	9.068	9.068
Aroclor 1260	4	9.192	9.192	9.193	9.192	9.193	9.193	9.194	9.194
Aroclor 1260	5	9.747	9.747	9.747	9.747	9.748	9.748	9.748	9.749
Decachlorobiphenyl		12.806	12.805	12.807	12.807	12.807	12.807	12.808	12.807

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	4.308	4.307	4.187	4.427
Aroclor 1016	2	4.974	4.973	4.853	5.093
Aroclor 1016	3	5.204	5.203	5.083	5.323
Aroclor 1016	4	5.54	5.54	5.42	5.66
Aroclor 1016	5	6.019	6.019	5.899	6.139
Aroclor 1260	1	8.127	8.127	8.007	8.247
Aroclor 1260	2	8.395	8.393	8.273	8.513
Aroclor 1260	3	9.068	9.068	8.948	9.188
Aroclor 1260	4	9.195	9.192	9.072	9.312
Aroclor 1260	5	9.748	9.748	9.628	9.868
Decachlorobiphenyl		12.808	12.808	12.688	12.928

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-1.B\0728210014.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	353695.00000	0.00			353695.00	
Aroclor 1221	2	Averaged	275622.50000	0.00			275622.50	
Aroclor 1221	3	Averaged	825162.50000	0.00			825162.50	
Aroclor 1254	1	Averaged	1094090.00000	0.00			1094090.00	
Aroclor 1254	2	Averaged	588712.50000	0.00			588712.50	
Aroclor 1254	3	Averaged	1530757.50000	0.00			1530757.50	
Aroclor 1254	4	Averaged	1336107.50000	0.00			1336107.50	
Aroclor 1254	5	Averaged	1226710.00000	0.00			1226710.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-2.B\0728210014.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	455120.00000	0.00			455120.00	
Aroclor 1221	2	Averaged	312310.00000	0.00			312310.00	
Aroclor 1221	3	Averaged	981785.00000	0.00			981785.00	
Aroclor 1254	1	Averaged	1476170.00000	0.00			1476170.00	
Aroclor 1254	2	Averaged	1834265.00000	0.00			1834265.00	
Aroclor 1254	3	Averaged	2354395.00000	0.00			2354395.00	
Aroclor 1254	4	Averaged	2517735.00000	0.00			2517735.00	
Aroclor 1254	5	Averaged	1867382.50000	0.00			1867382.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-1.B\0728210014.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	2.894	2.895	2.775	3.015
Aroclor 1221	2	3.023	3.025	2.905	3.145
Aroclor 1221	3	3.102	3.102	2.982	3.222
Aroclor 1254	1	5.937	5.937	5.817	6.057
Aroclor 1254	2	6.41	6.41	6.29	6.53
Aroclor 1254	3	6.935	6.933	6.813	7.053
Aroclor 1254	4	7.375	7.374	7.254	7.494
Aroclor 1254	5	8.23	8.23	8.11	8.35

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-2.B\0728210014.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	3.347	3.347	3.227	3.467
Aroclor 1221	2	3.551	3.551	3.431	3.671
Aroclor 1221	3	3.647	3.647	3.527	3.767
Aroclor 1254	1	6.739	6.739	6.619	6.859
Aroclor 1254	2	6.967	6.967	6.847	7.087
Aroclor 1254	3	7.791	7.791	7.671	7.911
Aroclor 1254	4	8.111	8.111	7.991	8.231
Aroclor 1254	5	9.067	9.067	8.947	9.187

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-1.B\0728210015.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	290970.00000	0.00			290970.00	
Aroclor 1232	2	Averaged	241032.50000	0.00			241032.50	
Aroclor 1232	3	Averaged	144622.50000	0.00			144622.50	
Aroclor 1232	4	Averaged	207037.50000	0.00			207037.50	
Aroclor 1232	5	Averaged	285862.50000	0.00			285862.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-2.B\0728210015.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	214850.00000	0.00			214850.00	
Aroclor 1232	2	Averaged	301147.50000	0.00			301147.50	
Aroclor 1232	3	Averaged	260002.50000	0.00			260002.50	
Aroclor 1232	4	Averaged	213185.00000	0.00			213185.00	
Aroclor 1232	5	Averaged	414137.50000	0.00			414137.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-1.B\0728210015.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	3.945	3.945	3.825	4.065
Aroclor 1232	2	4.618	4.62	4.5	4.74
Aroclor 1232	3	5.015	5.015	4.895	5.135
Aroclor 1232	4	5.275	5.275	5.155	5.395
Aroclor 1232	5	5.865	5.865	5.745	5.985

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-2.B\0728210015.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	4.713	4.713	4.593	4.833
Aroclor 1232	2	5.399	5.399	5.279	5.519
Aroclor 1232	3	5.611	5.611	5.491	5.731
Aroclor 1232	4	6.233	6.233	6.113	6.353
Aroclor 1232	5	6.574	6.574	6.454	6.694

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-1.B\0728210016.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	1486032.50000	0.00			1486032.50	
Aroclor 1242	2	Averaged	753562.50000	0.00			753562.50	
Aroclor 1242	3	Averaged	425075.00000	0.00			425075.00	
Aroclor 1242	4	Averaged	692697.50000	0.00			692697.50	
Aroclor 1242	5	Averaged	587032.50000	0.00			587032.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-2.B\0728210016.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	894672.50000	0.00			894672.50	
Aroclor 1242	2	Averaged	670042.50000	0.00			670042.50	
Aroclor 1242	3	Averaged	470497.50000	0.00			470497.50	
Aroclor 1242	4	Averaged	914435.00000	0.00			914435.00	
Aroclor 1242	5	Averaged	974090.00000	0.00			974090.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-1.B\0728210016.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	4.351	4.351	4.231	4.471
Aroclor 1242	2	4.505	4.504	4.384	4.624
Aroclor 1242	3	4.962	4.962	4.842	5.082
Aroclor 1242	4	5.925	5.926	5.806	6.046
Aroclor 1242	5	6.202	6.201	6.081	6.321

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-2.B\0728210016.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	5.203	5.203	5.083	5.323
Aroclor 1242	2	5.4	5.4	5.28	5.52
Aroclor 1242	3	6.071	6.071	5.951	6.191
Aroclor 1242	4	6.66	6.66	6.54	6.78
Aroclor 1242	5	7.081	7.081	6.961	7.201

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-1.B\0728210017.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	887470.00000	0.00			887470.00	
Aroclor 1248	2	Averaged	544552.50000	0.00			544552.50	
Aroclor 1248	3	Averaged	1272032.50000	0.00			1272032.50	
Aroclor 1248	4	Averaged	976775.00000	0.00			976775.00	
Aroclor 1248	5	Averaged	621375.00000	0.00			621375.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-2.B\0728210017.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	1060257.50000	0.00			1060257.50	
Aroclor 1248	2	Averaged	1789272.50000	0.00			1789272.50	
Aroclor 1248	3	Averaged	1587427.50000	0.00			1587427.50	
Aroclor 1248	4	Averaged	1757167.50000	0.00			1757167.50	
Aroclor 1248	5	Averaged	984897.50000	0.00			984897.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-1.B\0728210017.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	4.894	4.894	4.774	5.014
Aroclor 1248	2	5.271	5.271	5.151	5.391
Aroclor 1248	3	5.926	5.926	5.806	6.046
Aroclor 1248	4	6.202	6.201	6.081	6.321
Aroclor 1248	5	6.934	6.933	6.813	7.053

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-2.B\0728210017.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	5.611	5.611	5.491	5.731
Aroclor 1248	2	6.574	6.574	6.454	6.694
Aroclor 1248	3	6.66	6.66	6.54	6.78
Aroclor 1248	4	7.081	7.081	6.961	7.201
Aroclor 1248	5	7.789	7.789	7.669	7.909

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	8475000.00000	7984300.00000	7024750.00000	7480266.66667	6401450.00000	7702260.00000
Aroclor 1016	2	Averaged	21963200.0000	21315900.0000	18010650.0000	18321233.3333	16259350.0000	20017900.0000
Aroclor 1016	3	Averaged	14770000.0000	11952900.0000	9990950.00000	10237100.0000	8815725.00000	10717460.0000
Aroclor 1016	4	Averaged	11188000.0000	9278400.00000	7810750.00000	7967666.66667	7096125.00000	8704920.00000
Aroclor 1260	1	Averaged	14850000.0000	18429500.0000	15010550.0000	14513633.3333	13106475.0000	16256260.0000
Aroclor 1260	2	Averaged	22760200.0000	21779900.0000	17642950.0000	16629866.6666	15170350.0000	19084220.0000
Aroclor 1260	3	Averaged	27529800.0000	23075500.0000	18511550.0000	17267800.0000	16068375.0000	20021920.0000
Aroclor 1260	4	Averaged	20487200.0000	16322900.0000	13508950.0000	12386100.0000	11353200.0000	13955180.0000
Aroclor 1260	5	Averaged	18983600.0000	15133200.0000	12387150.0000	11838433.3333	10902075.0000	13534240.0000
Decachlorobiphenyl		Averaged		211868000.000	169425000.000	157968000.000	142147250.000	172693600.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	5398300.00000	5802530.00000	4788240.00000
Aroclor 1016	2	Averaged	14604412.5000	15664990.0000	13354950.0000
Aroclor 1016	3	Averaged	7577787.50000	8081940.00000	6836940.00000
Aroclor 1016	4	Averaged	6156062.50000	6514060.00000	5377130.00000
Aroclor 1260	1	Averaged	11738587.5000	11763180.0000	10578355.0000
Aroclor 1260	2	Averaged	13695600.0000	14039270.0000	12362160.0000
Aroclor 1260	3	Averaged	14990837.5000	15638600.0000	13230595.0000
Aroclor 1260	4	Averaged	10605725.0000	10748170.0000	8982850.00000
Aroclor 1260	5	Averaged	9959900.00000	10212120.0000	8669695.00000
Decachlorobiphenyl		Averaged	135044750.000	135919600.000	113984450.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	18.57			6784121.85	
Aroclor 1016	2	Averaged	16.90			17723620.64	
Aroclor 1016	3	Averaged	18.73			9276350.31	
Aroclor 1016	4	Averaged	17.94			7363139.27	
Aroclor 1260	1	Averaged	17.70			14027393.42	
Aroclor 1260	2	Averaged	19.17			16300539.58	
Aroclor 1260	3	Averaged	18.01			17350647.18	
Aroclor 1260	4	Averaged	18.92			12232884.37	
Aroclor 1260	5	Averaged	18.05			11579601.66	
Decachlorobiphenyl		Averaged	19.48			154881331.25	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	169106200.000	144128400.000	108464400.000	115064633.333	97005075.0000	119132660.000
Aroclor 1016	2	Averaged	230173600.000	215082200.000	170864650.000	177795000.000	160655225.000	202301040.000
Aroclor 1016	3	Averaged	109590200.000	91045800.0000	75996150.0000	75078300.0000	65097250.0000	81876140.0000
Aroclor 1016	4	Averaged	67456000.0000	61172700.0000	49261850.0000	52764566.6666	47079575.0000	56852060.0000
Aroclor 1016	5	Averaged	99023000.0000	76605200.0000	66370900.0000	70230033.3333	58018350.0000	76451260.0000
Aroclor 1260	1	Averaged	100392600.000	96223400.0000	82237200.0000	77742133.3333	72621550.0000	90370400.0000
Aroclor 1260	2	Averaged	64753000.0000	55856200.0000	44162050.0000	42637133.3333	39145950.0000	49799360.0000
Aroclor 1260	3	Averaged	68878000.0000	70738200.0000	55968050.0000	52936633.3333	46984650.0000	60365400.0000
Aroclor 1260	4	Averaged	89046800.0000	78892100.0000	64364400.0000	63531166.6666	57163250.0000	71304280.0000
Aroclor 1260	5	Averaged	169474200.000	150659900.000	122305150.000	120626733.333	112293125.000	141263400.000
Decachlorobiphenyl		Averaged	877434000.000	826675000.000	662854000.000	633834000.000	598170750.000	737774000.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	85984575.0000	93415700.0000	84063475.0000
Aroclor 1016	2	Averaged	147354137.500	166769690.000	230181010.000
Aroclor 1016	3	Averaged	58396262.5000	65209650.0000	57675075.0000
Aroclor 1016	4	Averaged	42341700.0000	45577230.0000	40265650.0000
Aroclor 1016	5	Averaged	55755512.5000	57183920.0000	50277135.0000
Aroclor 1260	1	Averaged	66686637.5000	70846240.0000	62604670.0000
Aroclor 1260	2	Averaged	35952312.5000	37822910.0000	32290745.0000
Aroclor 1260	3	Averaged	42320350.0000	51772010.0000	42689290.0000
Aroclor 1260	4	Averaged	55578062.5000	56103770.0000	49752935.0000
Aroclor 1260	5	Averaged	109792787.500	112605410.000	108078365.000
Decachlorobiphenyl		Averaged	575062000.000	583530100.000	496588250.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	19.00			105907364.79	
Aroclor 1016	2	Averaged	16.45			189019616.94	
Aroclor 1016	3	Averaged	16.47			71296828.43	
Aroclor 1016	4	Averaged	17.50			51419036.85	
Aroclor 1016	5	Averaged	15.62			63861538.85	
Aroclor 1260	1	Averaged	16.62			79969425.64	
Aroclor 1260	2	Averaged	18.22			42208332.60	
Aroclor 1260	3	Averaged	18.94			54739175.92	
Aroclor 1260	4	Averaged	19.39			65081862.68	
Aroclor 1260	5	Averaged	16.88			127455452.31	
Decachlorobiphenyl		Averaged	18.78			665769122.22	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	1.796	1.795	1.796	1.796	1.795	1.795	1.794	1.796
Aroclor 1016	2	1.91	1.909	1.909	1.911	1.909	1.908	1.907	1.909
Aroclor 1016	3	1.96	1.959	1.959	1.96	1.959	1.959	1.958	1.96
Aroclor 1016	4	2.176	2.175	2.176	2.176	2.175	2.175	2.175	2.176
Aroclor 1260	1	2.84	2.84	2.84	2.841	2.84	2.84	2.84	2.84
Aroclor 1260	2	2.966	2.965	2.966	2.966	2.965	2.965	2.965	2.966
Aroclor 1260	3	3.127	3.126	3.127	3.127	3.126	3.126	3.126	3.127
Aroclor 1260	4	3.217	3.217	3.217	3.217	3.217	3.217	3.217	3.217
Aroclor 1260	5	3.354	3.353	3.354	3.354	3.353	3.354	3.354	3.354
Decachlorobiphenyl		4.41	4.41	4.41	4.41	4.409	4.411	4.411	4.41

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	1.796	1.796	1.676	1.916
Aroclor 1016	2	1.91	1.909	1.789	2.029
Aroclor 1016	3	1.96	1.959	1.839	2.079
Aroclor 1016	4	2.176	2.176	2.056	2.296
Aroclor 1260	1	2.841	2.84	2.72	2.96
Aroclor 1260	2	2.966	2.966	2.846	3.086
Aroclor 1260	3	3.127	3.127	3.007	3.247
Aroclor 1260	4	3.217	3.217	3.097	3.337
Aroclor 1260	5	3.354	3.353	3.233	3.473
Decachlorobiphenyl		4.411	4.41	4.29	4.53

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	1.674	1.673	1.673	1.675	1.674	1.673	1.672	1.674
Aroclor 1016	2	1.859	1.86	1.86	1.862	1.86	1.861	1.86	1.861
Aroclor 1016	3	1.929	1.929	1.929	1.931	1.93	1.929	1.929	1.93
Aroclor 1016	4	2.015	2.015	2.015	2.015	2.014	2.014	2.013	2.014
Aroclor 1016	5	2.164	2.164	2.165	2.165	2.164	2.164	2.164	2.165
Aroclor 1260	1	2.813	2.813	2.814	2.813	2.813	2.813	2.813	2.813
Aroclor 1260	2	2.995	2.995	2.995	2.995	2.995	2.995	2.995	2.995
Aroclor 1260	3	3.151	3.15	3.153	3.152	3.151	3.152	3.152	3.152
Aroclor 1260	4	3.342	3.341	3.342	3.342	3.341	3.342	3.342	3.342
Aroclor 1260	5	3.446	3.446	3.447	3.447	3.446	3.447	3.447	3.447
Decachlorobiphenyl		4.367	4.368	4.368	4.368	4.367	4.369	4.369	4.369

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	1.675	1.673	1.553	1.793
Aroclor 1016	2	1.865	1.861	1.741	1.981
Aroclor 1016	3	1.93	1.929	1.809	2.049
Aroclor 1016	4	2.015	2.015	1.895	2.135
Aroclor 1016	5	2.165	2.164	2.044	2.284
Aroclor 1260	1	2.814	2.812	2.692	2.932
Aroclor 1260	2	2.996	2.996	2.876	3.116
Aroclor 1260	3	3.153	3.151	3.031	3.271
Aroclor 1260	4	3.342	3.341	3.221	3.461
Aroclor 1260	5	3.448	3.447	3.327	3.567
Decachlorobiphenyl		4.369	4.368	4.248	4.488

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-1.B\0721210000073.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	2131625.00000	0.00			2131625.00	
Aroclor 1221	2	Averaged	1608950.00000	0.00			1608950.00	
Aroclor 1221	3	Averaged	5273325.00000	0.00			5273325.00	
Aroclor 1254	1	Averaged	9077550.00000	0.00			9077550.00	
Aroclor 1254	2	Averaged	11510200.0000	0.00			11510200.00	
Aroclor 1254	3	Averaged	15443500.0000	0.00			15443500.00	
Aroclor 1254	4	Averaged	13237900.0000	0.00			13237900.00	
Aroclor 1254	5	Averaged	9272000.00000	0.00			9272000.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-2.B\0721210000073.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	36050100.0000	0.00			36050100.00	
Aroclor 1221	2	Averaged	25768525.0000	0.00			25768525.00	
Aroclor 1221	3	Averaged	63845600.0000	0.00			63845600.00	
Aroclor 1254	1	Averaged	62784150.0000	0.00			62784150.00	
Aroclor 1254	2	Averaged	78219700.0000	0.00			78219700.00	
Aroclor 1254	3	Averaged	50511200.0000	0.00			50511200.00	
Aroclor 1254	4	Averaged	90063100.0000	0.00			90063100.00	
Aroclor 1254	5	Averaged	56407875.0000	0.00			56407875.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-1.B\0721210000073.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	1.48	1.48	1.36	1.6
Aroclor 1221	2	1.521	1.521	1.401	1.641
Aroclor 1221	3	1.543	1.542	1.422	1.662
Aroclor 1254	1	2.396	2.395	2.275	2.515
Aroclor 1254	2	2.509	2.507	2.387	2.627
Aroclor 1254	3	2.712	2.711	2.591	2.831
Aroclor 1254	4	2.846	2.846	2.726	2.966
Aroclor 1254	5	3	3	2.88	3.12

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-2.B\0721210000073.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	1.417	1.417	1.297	1.537
Aroclor 1221	2	1.47	1.47	1.35	1.59
Aroclor 1221	3	1.497	1.497	1.377	1.617
Aroclor 1254	1	2.382	2.382	2.262	2.502
Aroclor 1254	2	2.442	2.442	2.322	2.562
Aroclor 1254	3	2.65	2.65	2.53	2.77
Aroclor 1254	4	2.71	2.71	2.59	2.83
Aroclor 1254	5	3.117	3.117	2.997	3.237

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1
PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-1.B\0721210000074.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	2529725.00000	0.00			2529725.00	
Aroclor 1232	2	Averaged	2364325.00000	0.00			2364325.00	
Aroclor 1232	3	Averaged	1992650.00000	0.00			1992650.00	
Aroclor 1232	4	Averaged	2017500.00000	0.00			2017500.00	
Aroclor 1232	5	Averaged	1665700.00000	0.00			1665700.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-2.B\0721210000074.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	22278500.0000	0.00			22278500.00	
Aroclor 1232	2	Averaged	15022950.0000	0.00			15022950.00	
Aroclor 1232	3	Averaged	18242400.0000	0.00			18242400.00	
Aroclor 1232	4	Averaged	13431300.0000	0.00			13431300.00	
Aroclor 1232	5	Averaged	21684000.0000	0.00			21684000.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-1.B\0721210000074.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	1.795	1.795	1.675	1.915
Aroclor 1232	2	1.996	1.997	1.877	2.117
Aroclor 1232	3	2.091	2.09	1.97	2.21
Aroclor 1232	4	2.195	2.195	2.075	2.315
Aroclor 1232	5	2.351	2.351	2.231	2.471

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-2.B\0721210000074.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	1.796	1.796	1.676	1.916
Aroclor 1232	2	2.015	2.015	1.895	2.135
Aroclor 1232	3	2.233	2.233	2.113	2.353
Aroclor 1232	4	2.301	2.301	2.181	2.421
Aroclor 1232	5	2.358	2.358	2.238	2.478

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-1.B\0721210000075.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	11322650.0000	0.00			11322650.00	
Aroclor 1242	2	Averaged	4326975.00000	0.00			4326975.00	
Aroclor 1242	3	Averaged	4894100.00000	0.00			4894100.00	
Aroclor 1242	4	Averaged	5741650.00000	0.00			5741650.00	
Aroclor 1242	5	Averaged	5110350.00000	0.00			5110350.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-2.B\0721210000075.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	112837775.000	0.00			112837775.00	
Aroclor 1242	2	Averaged	33153375.0000	0.00			33153375.00	
Aroclor 1242	3	Averaged	43495650.0000	0.00			43495650.00	
Aroclor 1242	4	Averaged	38677750.0000	0.00			38677750.00	
Aroclor 1242	5	Averaged	37639725.0000	0.00			37639725.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-1.B\0721210000075.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	1.91	1.91	1.79	2.03
Aroclor 1242	2	2.066	2.067	1.947	2.187
Aroclor 1242	3	2.24	2.239	2.119	2.359
Aroclor 1242	4	2.369	2.368	2.248	2.488
Aroclor 1242	5	2.485	2.485	2.365	2.605

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-2.B\0721210000075.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	1.861	1.861	1.741	1.981
Aroclor 1242	2	1.988	1.988	1.868	2.108
Aroclor 1242	3	2.165	2.165	2.045	2.285
Aroclor 1242	4	2.358	2.358	2.238	2.478
Aroclor 1242	5	2.494	2.494	2.374	2.614

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-1.B\0721210000076.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	7521200.00000	0.00			7521200.00	
Aroclor 1248	2	Averaged	8185225.00000	0.00			8185225.00	
Aroclor 1248	3	Averaged	9850050.00000	0.00			9850050.00	
Aroclor 1248	4	Averaged	7900500.00000	0.00			7900500.00	
Aroclor 1248	5	Averaged	5895125.00000	0.00			5895125.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-2.B\0721210000076.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	58058825.0000	0.00			58058825.00	
Aroclor 1248	2	Averaged	74406450.0000	0.00			74406450.00	
Aroclor 1248	3	Averaged	38664850.0000	0.00			38664850.00	
Aroclor 1248	4	Averaged	62073200.0000	0.00			62073200.00	
Aroclor 1248	5	Averaged	35133275.0000	0.00			35133275.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-1.B\0721210000076.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	2.066	2.066	1.946	2.186
Aroclor 1248	2	2.175	2.175	2.055	2.295
Aroclor 1248	3	2.391	2.391	2.271	2.511
Aroclor 1248	4	2.485	2.484	2.364	2.604
Aroclor 1248	5	2.711	2.711	2.591	2.831

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60375838

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-2.B\0721210000076.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	2.015	2.015	1.895	2.135
Aroclor 1248	2	2.165	2.165	2.045	2.285
Aroclor 1248	3	2.302	2.302	2.182	2.422
Aroclor 1248	4	2.358	2.358	2.238	2.478
Aroclor 1248	5	2.709	2.709	2.589	2.829

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975346ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/19/2021 Time: 20:08

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921-1.B\0719210021.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.681	3.561	3.801	562455.0277	493125.0000	-12.3263
Aroclor 1016	2	Averaged	4.352	4.23	4.47	1169806.314	999072.5000	-14.5950
Aroclor 1016	3	Averaged	4.506	4.385	4.625	595685.7592	521192.5000	-12.5055
Aroclor 1016	4	Averaged	5.224	5.103	5.343	435128.1759	376867.5000	-13.3893
Aroclor 1016	5	Averaged	5.42	5.299	5.539	379283.1388	358180.0000	-5.5640
Aroclor 1260	1	Averaged	7.352	7.231	7.471	807420.2037	723762.5000	-10.3611
Aroclor 1260	2	Averaged	7.773	7.652	7.892	926110.6574	821055.0000	-11.3437
Aroclor 1260	3	Averaged	8.232	8.111	8.351	886295.6944	749525.0000	-15.4317
Aroclor 1260	4	Averaged	8.526	8.408	8.648	650939.0555	569697.5000	-12.4807
Aroclor 1260	5	Averaged	8.915	8.797	9.037	623150.2129	565885.0000	-9.1896

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19975336ICV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/19/2021 Time: 20:08

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921-2.B\0719210021.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.309	4.188	4.428	891742.3240	792535.0000	-11.1251
Aroclor 1016	2	Averaged	4.976	4.855	5.095	1718814.990	1510110.000	-12.1424
Aroclor 1016	3	Averaged	5.206	5.086	5.326	678128.4722	598105.0000	-11.8006
Aroclor 1016	4	Averaged	5.542	5.421	5.661	651780.6481	555340.0000	-14.7965
Aroclor 1016	5	Averaged	6.022	5.901	6.141	648434.8703	567687.5000	-12.4527
Aroclor 1260	1	Averaged	8.131	8.009	8.249	1255882.703	1118745.000	-10.9196
Aroclor 1260	2	Averaged	8.399	8.278	8.518	1607301.398	1455192.500	-9.4636
Aroclor 1260	3	Averaged	9.072	8.951	9.191	1148837.759	977972.5000	-14.8729
Aroclor 1260	4	Averaged	9.198	9.078	9.318	1283000.064	1141875.000	-10.9996
Aroclor 1260	5	Averaged	9.752	9.631	9.871	1161667.138	1027422.500	-11.5562

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975443ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/19/2021 Time: 22:49

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921-1.B\0719210030.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	2.894	2.774	3.014	294310.0000	240302.5000	-18.3505
Aroclor 1221	2	Averaged	3.025	2.905	3.145	231047.5000	183310.0000	-20.6613
Aroclor 1221	3	Averaged	3.101	2.981	3.221	706612.5000	584127.5000	-17.3341
Aroclor 1254	1	Averaged	5.939	5.819	6.059	996327.5000	811400.0000	-18.5609
Aroclor 1254	2	Averaged	6.414	6.294	6.534	545155.0000	425042.5000	-22.0327
Aroclor 1254	3	Averaged	6.937	6.817	7.057	1411957.500	1077370.000	-23.6967
Aroclor 1254	4	Averaged	7.378	7.258	7.498	1253877.500	991560.0000	-20.9205
Aroclor 1254	5	Averaged	8.233	8.113	8.353	1144150.000	957480.0000	-16.3152

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975464ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/19/2021 Time: 22:49

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921-2.B\0719210030.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	3.346	3.226	3.466	380045.0000	286160.0000	-24.7037
Aroclor 1221	2	Averaged	3.55	3.43	3.67	263670.0000	213105.0000	-19.1774
Aroclor 1221	3	Averaged	3.647	3.527	3.767	851690.0000	698735.0000	-17.9590
Aroclor 1254	1	Averaged	6.743	6.623	6.863	1357715.000	1131010.000	-16.6975
Aroclor 1254	2	Averaged	6.969	6.849	7.089	1695887.500	1414795.000	-16.5749
Aroclor 1254	3	Averaged	7.794	7.674	7.914	2147212.500	1742635.000	-18.8420
Aroclor 1254	4	Averaged	8.116	7.996	8.236	2336995.000	1940457.500	-16.9678
Aroclor 1254	5	Averaged	9.072	8.952	9.192	1710737.500	1488270.000	-13.0042

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975474ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/19/2021 Time: 23:07

Instrument ID: 60GCS8 GC Column: Col 1 Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921-1.B\0719210031.D Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	3.945	3.825	4.065	253720.0000	219612.5000	-13.4430
Aroclor 1232	2	Averaged	4.619	4.499	4.739	203417.5000	164272.5000	-19.2437
Aroclor 1232	3	Averaged	5.014	4.894	5.134	122595.0000	92550.00000	-24.5075
Aroclor 1232	4	Averaged	5.275	5.155	5.395	184537.5000	166267.5000	-9.9004
Aroclor 1232	5	Averaged	5.866	5.746	5.986	253582.5000	226705.0000	-10.5991

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975466ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/19/2021 Time: 23:07

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921-2.B\0719210031.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	4.716	4.596	4.836	191012.5000	169877.5000	-11.0647
Aroclor 1232	2	Averaged	5.401	5.281	5.521	266690.0000	234840.0000	-11.9427
Aroclor 1232	3	Averaged	5.614	5.494	5.734	233037.5000	218855.0000	-6.0859
Aroclor 1232	4	Averaged	6.236	6.116	6.356	195432.5000	179790.0000	-8.0040
Aroclor 1232	5	Averaged	6.578	6.458	6.698	367300.0000	335447.5000	-8.6721

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975444ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/19/2021 Time: 23:25

Instrument ID: 60GCS8 GC Column: Col 1 Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921-1.B\0719210032.D Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	4.353	4.233	4.473	1330732.500	1302312.500	-2.1357
Aroclor 1242	2	Averaged	4.507	4.387	4.627	682247.5000	674512.5000	-1.1338
Aroclor 1242	3	Averaged	4.965	4.845	5.085	386737.5000	388212.5000	0.3814
Aroclor 1242	4	Averaged	5.929	5.809	6.049	619705.0000	608662.5000	-1.7819
Aroclor 1242	5	Averaged	6.205	6.085	6.325	525020.0000	491740.0000	-6.3388

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975469ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/19/2021 Time: 23:25

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921-2.B\0719210032.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	5.206	5.086	5.326	806165.0000	781932.5000	-3.0059
Aroclor 1242	2	Averaged	5.404	5.284	5.524	600760.0000	585610.0000	-2.5218
Aroclor 1242	3	Averaged	6.074	5.954	6.194	436297.5000	414237.5000	-5.0562
Aroclor 1242	4	Averaged	6.664	6.544	6.784	846415.0000	789330.0000	-6.7443
Aroclor 1242	5	Averaged	7.085	6.965	7.205	891180.0000	845377.5000	-5.1395

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975473ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/19/2021 Time: 23:43

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921-1.B\0719210033.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	4.897	4.778	5.018	830557.5000	535900.0000	-35.4771
Aroclor 1248	2	Averaged	5.869	5.157	5.397	493200.0000	713175.0000	44.6016
Aroclor 1248	3	Averaged	5.929	5.811	6.051	1191862.500	763642.5000	-35.9286
Aroclor 1248	4	Averaged	6.205	6.087	6.327	908805.0000	579775.0000	-36.2047
Aroclor 1248	5	Averaged	6.937	6.818	7.058	590705.0000	401405.0000	-32.0465

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975440ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/19/2021 Time: 23:43

Instrument ID: 60GCS8 GC Column: Col 2 Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 071921-2.B\0719210033.D Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	4.974	4.854	5.094	1006062.500	965945.0000	-3.9876
Aroclor 1248	2	Averaged	6.579	6.459	6.699	1690327.500	1052742.500	-37.7196
Aroclor 1248	3	Averaged	6.664	6.544	6.784	1500160.000	907952.5000	-39.4763
Aroclor 1248	4	Averaged	7.085	6.965	7.205	1641465.000	988672.5000	-39.7689
Aroclor 1248	5	Averaged	7.793	7.673	7.913	899370.0000	567210.0000	-36.9325

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975632CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/27/2021 Time: 21:33

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-1.B\0726210126.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.681	3.561	3.801	562455.0277	657350.0000	16.8716
Aroclor 1016	2	Averaged	4.352	4.23	4.47	1169806.314	1341992.500	14.7192
Aroclor 1016	3	Averaged	4.506	4.385	4.625	595685.7592	690327.5000	15.8879
Aroclor 1016	4	Averaged	5.224	5.103	5.343	435128.1759	508562.5000	16.8765
Aroclor 1016	5	Averaged	5.419	5.299	5.539	379283.1388	443332.5000	16.8870
Aroclor 1260	1	Averaged	7.351	7.231	7.471	807420.2037	914070.0000	13.2087
Aroclor 1260	2	Averaged	7.772	7.652	7.892	926110.6574	1056825.000	14.1143
Aroclor 1260	3	Averaged	8.231	8.111	8.351	886295.6944	1011690.000	14.1481
Aroclor 1260	4	Averaged	8.525	8.407	8.647	650939.0555	763825.0000	17.3420
Aroclor 1260	5	Averaged	8.915	8.797	9.037	623150.2129	731297.5000	17.3549
Decachlorobiphenyl		Averaged	12.054	11.938	12.178	12155278.75	14411250.00	18.5596

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975641CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/27/2021 Time: 21:33

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-2.B\0726210126.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.307	4.188	4.428	891742.3240	1075232.500	20.5766
Aroclor 1016	2	Averaged	4.974	4.855	5.095	1718814.990	2003095.000	16.5393
Aroclor 1016	3	Averaged	5.205	5.086	5.326	678128.4722	803837.5000	18.5376
Aroclor 1016	4	Averaged	5.541	5.421	5.661	651780.6481	781712.5000	19.9349
Aroclor 1016	5	Averaged	6.02	5.901	6.141	648434.8703	773450.0000	19.2795
Aroclor 1260	1	Averaged	8.127	8.009	8.249	1255882.703	1471715.000	17.1857
Aroclor 1260	2	Averaged	8.396	8.278	8.518	1607301.398	1871467.500	16.4354
Aroclor 1260	3	Averaged	9.068	8.95	9.19	1148837.759	1339117.500	16.5628
Aroclor 1260	4	Averaged	9.194	9.078	9.318	1283000.064	1496322.500	16.6268
Aroclor 1260	5	Averaged	9.749	9.631	9.871	1161667.138	1389230.000	19.5893
Decachlorobiphenyl		Averaged	12.81	12.691	12.931	21812535.55	25178875.00	15.4330

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19975637CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 00:32

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-1.B\0726210136.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.68	3.561	3.801	562455.0277	608360.0000	8.1615
Aroclor 1016	2	Averaged	4.35	4.23	4.47	1169806.314	1243482.500	6.2982
Aroclor 1016	3	Averaged	4.505	4.385	4.625	595685.7592	637235.0000	6.9750
Aroclor 1016	4	Averaged	5.223	5.103	5.343	435128.1759	465970.0000	7.0880
Aroclor 1016	5	Averaged	5.418	5.299	5.539	379283.1388	406607.5000	7.2042
Aroclor 1260	1	Averaged	7.351	7.231	7.471	807420.2037	854312.5000	5.8077
Aroclor 1260	2	Averaged	7.771	7.652	7.892	926110.6574	990215.0000	6.9219
Aroclor 1260	3	Averaged	8.23	8.111	8.351	886295.6944	960462.5000	8.3682
Aroclor 1260	4	Averaged	8.525	8.407	8.647	650939.0555	714052.5000	9.6958
Aroclor 1260	5	Averaged	8.915	8.797	9.037	623150.2129	684297.5000	9.8126
Decachlorobiphenyl		Averaged	12.055	11.938	12.178	12155278.75	13814050.00	13.6465

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

10/13/2021 4:23

SAMPLE NO.

19975617CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 00:32

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-2.B\0726210136.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.306	4.188	4.428	891742.3240	985462.5000	10.5098
Aroclor 1016	2	Averaged	4.974	4.855	5.095	1718814.990	1829632.500	6.4473
Aroclor 1016	3	Averaged	5.204	5.086	5.326	678128.4722	740685.0000	9.2249
Aroclor 1016	4	Averaged	5.54	5.421	5.661	651780.6481	725297.5000	11.2794
Aroclor 1016	5	Averaged	6.02	5.901	6.141	648434.8703	711735.0000	9.7620
Aroclor 1260	1	Averaged	8.127	8.009	8.249	1255882.703	1357727.500	8.1094
Aroclor 1260	2	Averaged	8.395	8.278	8.518	1607301.398	1770730.000	10.1679
Aroclor 1260	3	Averaged	9.069	8.95	9.19	1148837.759	1258062.500	9.5074
Aroclor 1260	4	Averaged	9.195	9.078	9.318	1283000.064	1407540.000	9.7069
Aroclor 1260	5	Averaged	9.75	9.631	9.871	1161667.138	1298915.000	11.8147
Decachlorobiphenyl		Averaged	12.809	12.691	12.931	21812535.55	24014250.00	10.0938

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

10/13/2021 4:23

SAMPLE NO.

19975642CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 03:30

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-1.B\0726210146.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.681	3.561	3.801	562455.0277	666430.0000	18.4859
Aroclor 1016	2	Averaged	4.351	4.23	4.47	1169806.314	1376345.000	17.6558
Aroclor 1016	3	Averaged	4.505	4.385	4.625	595685.7592	700815.0000	17.6484
Aroclor 1016	4	Averaged	5.223	5.103	5.343	435128.1759	519057.5000	19.2884
Aroclor 1016	5	Averaged	5.419	5.299	5.539	379283.1388	449945.0000	18.6304
Aroclor 1260	1	Averaged	7.351	7.231	7.471	807420.2037	929597.5000	15.1318
Aroclor 1260	2	Averaged	7.771	7.652	7.892	926110.6574	1064912.500	14.9876
Aroclor 1260	3	Averaged	8.231	8.111	8.351	886295.6944	1019100.000	14.9842
Aroclor 1260	4	Averaged	8.525	8.407	8.647	650939.0555	767810.0000	17.9542
Aroclor 1260	5	Averaged	8.916	8.797	9.037	623150.2129	728580.0000	16.9188
Decachlorobiphenyl		Averaged	12.056	11.938	12.178	12155278.75	13829475.00	13.7734

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975630CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 03:30

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-2.B\0726210146.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.306	4.188	4.428	891742.3240	1061220.000	19.0052
Aroclor 1016	2	Averaged	4.975	4.855	5.095	1718814.990	2018520.000	17.4367
Aroclor 1016	3	Averaged	5.204	5.086	5.326	678128.4722	809017.5000	19.3015
Aroclor 1016	4	Averaged	5.541	5.421	5.661	651780.6481	784040.0000	20.2920
Aroclor 1016	5	Averaged	6.02	5.901	6.141	648434.8703	770320.0000	18.7968
Aroclor 1260	1	Averaged	8.127	8.009	8.249	1255882.703	1452652.500	15.6678
Aroclor 1260	2	Averaged	8.396	8.278	8.518	1607301.398	1846485.000	14.8811
Aroclor 1260	3	Averaged	9.068	8.95	9.19	1148837.759	1328735.000	15.6591
Aroclor 1260	4	Averaged	9.195	9.078	9.318	1283000.064	1468680.000	14.4723
Aroclor 1260	5	Averaged	9.75	9.631	9.871	1161667.138	1319917.500	13.6227
Decachlorobiphenyl		Averaged	12.81	12.691	12.931	21812535.55	23730100.00	8.7911

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975625CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 07:27

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-1.B\0726210159.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.693	3.561	3.801	562455.0277	739942.5000	31.5559
Aroclor 1016	2	Averaged	4.363	4.23	4.47	1169806.314	1527050.000	30.5387
Aroclor 1016	3	Averaged	4.517	4.385	4.625	595685.7592	777675.0000	30.5512
Aroclor 1016	4	Averaged	5.235	5.103	5.343	435128.1759	569170.0000	30.8051
Aroclor 1016	5	Averaged	5.429	5.299	5.539	379283.1388	496565.0000	30.9220
Aroclor 1260	1	Averaged	7.36	7.231	7.471	807420.2037	1024620.000	26.9005
Aroclor 1260	2	Averaged	7.78	7.652	7.892	926110.6574	1179465.000	27.3568
Aroclor 1260	3	Averaged	8.24	8.111	8.351	886295.6944	1133047.500	27.8408
Aroclor 1260	4	Averaged	8.533	8.407	8.647	650939.0555	842127.5000	29.3712
Aroclor 1260	5	Averaged	8.924	8.797	9.037	623150.2129	812007.5000	30.3069
Decachlorobiphenyl		Averaged	12.061	11.938	12.178	12155278.75	16363650.00	34.6218

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975611CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 07:27

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-2.B\0726210159.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.308	4.188	4.428	891742.3240	1236445.000	38.6550
Aroclor 1016	2	Averaged	4.975	4.855	5.095	1718814.990	2281680.000	32.7473
Aroclor 1016	3	Averaged	5.205	5.086	5.326	678128.4722	918730.0000	35.4802
Aroclor 1016	4	Averaged	5.542	5.421	5.661	651780.6481	884682.5000	35.7332
Aroclor 1016	5	Averaged	6.02	5.901	6.141	648434.8703	880632.5000	35.8089
Aroclor 1260	1	Averaged	8.128	8.009	8.249	1255882.703	1648425.000	31.2563
Aroclor 1260	2	Averaged	8.397	8.278	8.518	1607301.398	2104507.500	30.9342
Aroclor 1260	3	Averaged	9.07	8.95	9.19	1148837.759	1516307.500	31.9862
Aroclor 1260	4	Averaged	9.196	9.078	9.318	1283000.064	1693725.000	32.0129
Aroclor 1260	5	Averaged	9.751	9.631	9.871	1161667.138	1564597.500	34.6855
Decachlorobiphenyl		Averaged	12.81	12.691	12.931	21812535.55	28505250.00	30.6829

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975636CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 10:45

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-1.B\0726210170.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.682	3.561	3.801	562455.0277	770717.5000	37.0274
Aroclor 1016	2	Averaged	4.352	4.23	4.47	1169806.314	1591920.000	36.0841
Aroclor 1016	3	Averaged	4.506	4.385	4.625	595685.7592	816542.5000	37.0760
Aroclor 1016	4	Averaged	5.223	5.103	5.343	435128.1759	606850.0000	39.4647
Aroclor 1016	5	Averaged	5.418	5.299	5.539	379283.1388	529617.5000	39.6364
Aroclor 1260	1	Averaged	7.351	7.231	7.471	807420.2037	1092325.000	35.2858
Aroclor 1260	2	Averaged	7.771	7.652	7.892	926110.6574	1237022.500	33.5718
Aroclor 1260	3	Averaged	8.231	8.111	8.351	886295.6944	1196157.500	34.9614
Aroclor 1260	4	Averaged	8.524	8.407	8.647	650939.0555	892275.0000	37.0750
Aroclor 1260	5	Averaged	8.914	8.797	9.037	623150.2129	858620.0000	37.7870
Decachlorobiphenyl		Averaged	12.056	11.938	12.178	12155278.75	16450600.00	35.3371

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19975626CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 10:45

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-2.B\0726210170.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.307	4.188	4.428	891742.3240	1270505.000	42.4745
Aroclor 1016	2	Averaged	4.975	4.855	5.095	1718814.990	2360675.000	37.3432
Aroclor 1016	3	Averaged	5.205	5.086	5.326	678128.4722	937020.0000	38.1774
Aroclor 1016	4	Averaged	5.541	5.421	5.661	651780.6481	916320.0000	40.5872
Aroclor 1016	5	Averaged	6.02	5.901	6.141	648434.8703	910867.5000	40.4717
Aroclor 1260	1	Averaged	8.127	8.009	8.249	1255882.703	1692275.000	34.7479
Aroclor 1260	2	Averaged	8.395	8.278	8.518	1607301.398	2162667.500	34.5527
Aroclor 1260	3	Averaged	9.067	8.95	9.19	1148837.759	1574232.500	37.0283
Aroclor 1260	4	Averaged	9.195	9.078	9.318	1283000.064	1749112.500	36.3299
Aroclor 1260	5	Averaged	9.749	9.631	9.871	1161667.138	1599802.500	37.7161
Decachlorobiphenyl		Averaged	12.808	12.691	12.931	21812535.55	29095050.00	33.3868

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20119116ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 14:38

Instrument ID: 60GCS8 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210012.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.68	3.561	3.801	759372.7037	740945.0000	-2.4267
Aroclor 1016	2	Averaged	4.35	4.23	4.47	1587471.620	1519610.000	-4.2748
Aroclor 1016	3	Averaged	4.504	4.386	4.626	802162.5648	781082.5000	-2.6279
Aroclor 1016	4	Averaged	5.222	5.102	5.342	593683.5277	572945.0000	-3.4932
Aroclor 1016	5	Averaged	5.417	5.298	5.538	520520.6296	553325.0000	6.3022
Aroclor 1260	1	Averaged	7.349	7.23	7.47	1073090.768	1059305.000	-1.2847
Aroclor 1260	2	Averaged	7.769	7.65	7.89	1231047.657	1245140.000	1.1447
Aroclor 1260	3	Averaged	8.229	8.109	8.349	1187343.175	1139552.500	-4.0250
Aroclor 1260	4	Averaged	8.523	8.403	8.643	876488.5000	873130.0000	-0.3832
Aroclor 1260	5	Averaged	8.913	8.793	9.033	842990.4722	841575.0000	-0.1679

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

20119094ICV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 14:38

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210012.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.307	4.187	4.427	1230767.740	1215962.500	-1.2029
Aroclor 1016	2	Averaged	4.973	4.853	5.093	2307865.675	2233027.500	-3.2427
Aroclor 1016	3	Averaged	5.202	5.083	5.323	923625.0277	903635.0000	-2.1643
Aroclor 1016	4	Averaged	5.539	5.42	5.66	893585.4537	842725.0000	-5.6917
Aroclor 1016	5	Averaged	6.018	5.899	6.139	879402.2407	869695.0000	-1.1038
Aroclor 1260	1	Averaged	8.126	8.007	8.247	1679616.611	1716337.500	2.1863
Aroclor 1260	2	Averaged	8.393	8.273	8.513	2166501.453	2195332.500	1.3308
Aroclor 1260	3	Averaged	9.066	8.948	9.188	1548712.555	1509407.500	-2.5379
Aroclor 1260	4	Averaged	9.192	9.073	9.313	1715824.953	1763470.000	2.7768
Aroclor 1260	5	Averaged	9.747	9.628	9.868	1585139.277	1594177.500	0.5702

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

20119091ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 17:20

Instrument ID: 60GCS8 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210021.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	2.895	2.775	3.015	353695.0000	349865.0000	-1.0829
Aroclor 1221	2	Averaged	3.025	2.905	3.145	275622.5000	262975.0000	-4.5887
Aroclor 1221	3	Averaged	3.102	2.982	3.222	825162.5000	814880.0000	-1.2461
Aroclor 1254	1	Averaged	5.937	5.817	6.057	1094090.000	1067360.000	-2.4431
Aroclor 1254	2	Averaged	6.41	6.29	6.53	588712.5000	549302.5000	-6.6943
Aroclor 1254	3	Averaged	6.933	6.813	7.053	1530757.500	1436950.000	-6.1282
Aroclor 1254	4	Averaged	7.374	7.254	7.494	1336107.500	1272957.500	-4.7264
Aroclor 1254	5	Averaged	8.23	8.11	8.35	1226710.000	1231277.500	0.3723

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20119081ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 17:20

Instrument ID: 60GCS8 GC Column: Col 2 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210021.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	3.346	3.227	3.467	455120.0000	424265.0000	-6.7795
Aroclor 1221	2	Averaged	3.55	3.431	3.671	312310.0000	310542.5000	-0.5659
Aroclor 1221	3	Averaged	3.646	3.527	3.767	981785.0000	969380.0000	-1.2635
Aroclor 1254	1	Averaged	6.739	6.619	6.859	1476170.000	1496557.500	1.3811
Aroclor 1254	2	Averaged	6.966	6.847	7.087	1834265.000	1840942.500	0.3640
Aroclor 1254	3	Averaged	7.791	7.671	7.911	2354395.000	2248335.000	-4.5048
Aroclor 1254	4	Averaged	8.113	7.991	8.231	2517735.000	2499730.000	-0.7151
Aroclor 1254	5	Averaged	9.067	8.947	9.187	1867382.500	1950202.500	4.4351

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20119083ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:38

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210022.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	3.945	3.825	4.065	290970.0000	320895.0000	10.2846
Aroclor 1232	2	Averaged	4.62	4.5	4.74	241032.5000	258955.0000	7.4357
Aroclor 1232	3	Averaged	5.015	4.895	5.135	144622.5000	164537.5000	13.7703
Aroclor 1232	4	Averaged	5.275	5.155	5.395	207037.5000	220715.0000	6.6063
Aroclor 1232	5	Averaged	5.865	5.745	5.985	285862.5000	319307.5000	11.6997

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20119117ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:38

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210022.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	4.715	4.593	4.833	214850.0000	245287.5000	14.1669
Aroclor 1232	2	Averaged	5.4	5.279	5.519	301147.5000	330345.0000	9.6954
Aroclor 1232	3	Averaged	5.612	5.491	5.731	260002.5000	301050.0000	15.7873
Aroclor 1232	4	Averaged	6.234	6.113	6.353	213185.0000	246542.5000	15.6472
Aroclor 1232	5	Averaged	6.575	6.454	6.694	414137.5000	454090.0000	9.6472

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

20119085ICV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:56

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210023.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	4.351	4.231	4.471	1486032.500	1527477.500	2.7890
Aroclor 1242	2	Averaged	4.504	4.384	4.624	753562.5000	781410.0000	3.6954
Aroclor 1242	3	Averaged	4.962	4.842	5.082	425075.0000	451510.0000	6.2189
Aroclor 1242	4	Averaged	5.926	5.806	6.046	692697.5000	726650.0000	4.9015
Aroclor 1242	5	Averaged	6.201	6.081	6.321	587032.5000	580830.0000	-1.0566

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20119086ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 17:56

Instrument ID: 60GCS8 GC Column: Col 2 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210023.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	5.203	5.083	5.323	894672.5000	918275.0000	2.6381
Aroclor 1242	2	Averaged	5.4	5.28	5.52	670042.5000	676130.0000	0.9085
Aroclor 1242	3	Averaged	6.071	5.951	6.191	470497.5000	481750.0000	2.3916
Aroclor 1242	4	Averaged	6.66	6.54	6.78	914435.0000	888932.5000	-2.7889
Aroclor 1242	5	Averaged	7.082	6.961	7.201	974090.0000	975145.0000	0.1083

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20119069ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 18:14

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210024.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	4.894	4.774	5.014	887470.0000	685120.0000	-22.8008
Aroclor 1248	2	Averaged	5.271	5.151	5.391	544552.5000	403610.0000	-25.8823
Aroclor 1248	3	Averaged	5.926	5.806	6.046	1272032.500	943562.5000	-25.8225
Aroclor 1248	4	Averaged	6.201	6.081	6.321	976775.0000	720072.5000	-26.2806
Aroclor 1248	5	Averaged	6.933	6.813	7.053	621375.0000	473077.5000	-23.8660

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

20119068ICV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 18:14

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210024.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	5.611	5.491	5.731	1060257.500	799555.0000	-24.5886
Aroclor 1248	2	Averaged	6.574	6.454	6.694	1789272.500	1322467.500	-26.0891
Aroclor 1248	3	Averaged	6.659	6.54	6.78	1587427.500	1142545.000	-28.0254
Aroclor 1248	4	Averaged	7.08	6.961	7.201	1757167.500	1277520.000	-27.2966
Aroclor 1248	5	Averaged	7.789	7.669	7.909	984897.5000	711990.0000	-27.7092

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20119169CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/29/2021 Time: 21:56

Instrument ID: 60GCS8 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210116.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.681	3.561	3.801	759372.7037	767015.0000	1.0064
Aroclor 1016	2	Averaged	4.351	4.231	4.471	1587471.620	1615950.000	1.7939
Aroclor 1016	3	Averaged	4.505	4.386	4.626	802162.5648	818705.0000	2.0622
Aroclor 1016	4	Averaged	5.223	5.102	5.342	593683.5277	600100.0000	1.0808
Aroclor 1016	5	Averaged	5.417	5.298	5.538	520520.6296	526710.0000	1.1891
Aroclor 1260	1	Averaged	7.351	7.23	7.47	1073090.768	1087717.500	1.3630
Aroclor 1260	2	Averaged	7.771	7.65	7.89	1231047.657	1241657.500	0.8619
Aroclor 1260	3	Averaged	8.231	8.11	8.35	1187343.175	1224455.000	3.1256
Aroclor 1260	4	Averaged	8.523	8.403	8.643	876488.5000	881680.0000	0.5923
Aroclor 1260	5	Averaged	8.914	8.793	9.033	842990.4722	853312.5000	1.2245
Decachlorobiphenyl		Averaged	12.055	11.933	12.173	16971708.61	16171150.00	-4.7170

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

20119170CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 21:56

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210116.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.306	4.187	4.427	1230767.740	1255690.000	2.0249
Aroclor 1016	2	Averaged	4.975	4.853	5.093	2307865.675	2367757.500	2.5951
Aroclor 1016	3	Averaged	5.205	5.083	5.323	923625.0277	945992.5000	2.4217
Aroclor 1016	4	Averaged	5.54	5.42	5.66	893585.4537	902087.5000	0.9515
Aroclor 1016	5	Averaged	6.019	5.899	6.139	879402.2407	902590.0000	2.6368
Aroclor 1260	1	Averaged	8.126	8.007	8.247	1679616.611	1691960.000	0.7349
Aroclor 1260	2	Averaged	8.394	8.273	8.513	2166501.453	2200977.500	1.5913
Aroclor 1260	3	Averaged	9.069	8.948	9.188	1548712.555	1539932.500	-0.5669
Aroclor 1260	4	Averaged	9.194	9.073	9.313	1715824.953	1753840.000	2.2156
Aroclor 1260	5	Averaged	9.749	9.628	9.868	1585139.277	1550855.000	-2.1629
Decachlorobiphenyl		Averaged	12.807	12.687	12.927	29044505.37	27935400.00	-1.4145

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20119171CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 02:24

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210131.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.683	3.561	3.801	759372.7037	759670.0000	0.0392
Aroclor 1016	2	Averaged	4.352	4.231	4.471	1587471.620	1599217.500	0.7399
Aroclor 1016	3	Averaged	4.506	4.386	4.626	802162.5648	797467.5000	-0.5853
Aroclor 1016	4	Averaged	5.224	5.102	5.342	593683.5277	588340.0000	-0.9001
Aroclor 1016	5	Averaged	5.419	5.298	5.538	520520.6296	524655.0000	0.7943
Aroclor 1260	1	Averaged	7.352	7.23	7.47	1073090.768	1076575.000	0.3247
Aroclor 1260	2	Averaged	7.771	7.65	7.89	1231047.657	1246915.000	1.2889
Aroclor 1260	3	Averaged	8.231	8.11	8.35	1187343.175	1219350.000	2.6957
Aroclor 1260	4	Averaged	8.525	8.403	8.643	876488.5000	882870.0000	0.7281
Aroclor 1260	5	Averaged	8.914	8.793	9.033	842990.4722	857682.5000	1.7428
Decachlorobiphenyl		Averaged	12.055	11.933	12.173	16971708.61	16518225.00	-2.6720

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20119172CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/30/2021 Time: 02:24

Instrument ID: 60GCS8 GC Column: Col 2 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210131.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.308	4.187	4.427	1230767.740	1250105.000	1.5712
Aroclor 1016	2	Averaged	4.974	4.853	5.093	2307865.675	2366315.000	2.5326
Aroclor 1016	3	Averaged	5.204	5.083	5.323	923625.0277	932792.5000	0.9926
Aroclor 1016	4	Averaged	5.54	5.42	5.66	893585.4537	902947.5000	1.0477
Aroclor 1016	5	Averaged	6.019	5.899	6.139	879402.2407	899447.5000	2.2794
Aroclor 1260	1	Averaged	8.127	8.007	8.247	1679616.611	1647792.500	-1.8947
Aroclor 1260	2	Averaged	8.395	8.273	8.513	2166501.453	2218282.500	2.3901
Aroclor 1260	3	Averaged	9.069	8.948	9.188	1548712.555	1565700.000	1.0969
Aroclor 1260	4	Averaged	9.195	9.073	9.313	1715824.953	1725662.500	0.5733
Aroclor 1260	5	Averaged	9.749	9.628	9.868	1585139.277	1568865.000	-1.0267
Decachlorobiphenyl		Averaged	12.809	12.687	12.927	29044505.37	27982275.00	-1.4145

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

10/13/2021 4:24

SAMPLE NO.

19943965CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 05:23

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210141.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.682	3.561	3.801	759372.7037	759132.5000	-0.0316
Aroclor 1016	2	Averaged	4.35	4.23	4.47	1587471.620	1619047.500	1.9891
Aroclor 1016	3	Averaged	4.504	4.386	4.626	802162.5648	809882.5000	0.9624
Aroclor 1016	4	Averaged	5.223	5.102	5.342	593683.5277	599340.0000	0.9528
Aroclor 1016	5	Averaged	5.418	5.298	5.538	520520.6296	530435.0000	1.9047
Aroclor 1260	1	Averaged	7.351	7.23	7.47	1073090.768	1078222.500	0.4782
Aroclor 1260	2	Averaged	7.771	7.65	7.89	1231047.657	1243660.000	1.0245
Aroclor 1260	3	Averaged	8.231	8.109	8.349	1187343.175	1224937.500	3.1663
Aroclor 1260	4	Averaged	8.524	8.402	8.642	876488.5000	913262.5000	4.1956
Aroclor 1260	5	Averaged	8.914	8.793	9.033	842990.4722	859552.5000	1.9647
Decachlorobiphenyl		Averaged	12.056	11.933	12.173	16971708.61	16959925.00	-0.0694

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19943959CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 05:23

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210141.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.306	4.187	4.427	1230767.740	1261312.500	2.4818
Aroclor 1016	2	Averaged	4.973	4.853	5.093	2307865.675	2387050.000	3.4311
Aroclor 1016	3	Averaged	5.203	5.083	5.323	923625.0277	958485.0000	3.7743
Aroclor 1016	4	Averaged	5.539	5.42	5.66	893585.4537	913647.5000	2.2451
Aroclor 1016	5	Averaged	6.018	5.899	6.139	879402.2407	911047.5000	3.5985
Aroclor 1260	1	Averaged	8.125	8.007	8.247	1679616.611	1722980.000	2.5817
Aroclor 1260	2	Averaged	8.394	8.273	8.513	2166501.453	2237330.000	3.2693
Aroclor 1260	3	Averaged	9.067	8.948	9.188	1548712.555	1584782.500	2.3290
Aroclor 1260	4	Averaged	9.194	9.072	9.312	1715824.953	1792827.500	4.4878
Aroclor 1260	5	Averaged	9.748	9.628	9.868	1585139.277	1629880.000	2.8225
Decachlorobiphenyl		Averaged	12.808	12.688	12.928	29044505.37	29607300.00	1.9377

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

10/13/2021 4:24

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

20129349ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/21/2021 Time: 23:19

Instrument ID: 60GCSG GC Column: Col 1 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000071.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	1.796	1.676	1.916	6784121.851	7961125.000	17.3494
Aroclor 1016	2	Averaged	1.91	1.789	2.029	17723620.64	20871925.00	17.7633
Aroclor 1016	3	Averaged	1.96	1.839	2.079	9276350.312	11221000.00	20.9635
Aroclor 1016	4	Averaged	2.176	2.056	2.296	7363139.270	8983550.000	22.0071
Aroclor 1260	1	Averaged	2.775	2.72	2.96	14027393.42	7806225.000	-44.3501
Aroclor 1260	2	Averaged	2.966	2.846	3.086	16300539.58	21185325.00	29.9670
Aroclor 1260	3	Averaged	3.126	3.007	3.247	17350647.18	21464300.00	23.7089
Aroclor 1260	4	Averaged	3.217	3.097	3.337	12232884.37	15521075.00	26.8799
Aroclor 1260	5	Averaged	3.354	3.233	3.473	11579601.66	14924825.00	28.8889

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

20129337ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/21/2021 Time: 23:19

Instrument ID: 60GCSG GC Column: Col 2 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000071.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	1.674	1.553	1.793	105907364.7	130077200.0	22.8217
Aroclor 1016	2	Averaged	1.861	1.741	1.981	189019616.9	208120775.0	10.1054
Aroclor 1016	3	Averaged	1.93	1.809	2.049	71296828.43	90076525.00	26.3402
Aroclor 1016	4	Averaged	2.014	1.895	2.135	51419036.85	61075800.00	18.7805
Aroclor 1016	5	Averaged	2.164	2.044	2.284	63861538.85	79965125.00	25.2164
Aroclor 1260	1	Averaged	2.813	2.692	2.932	79969425.64	107647650.0	34.6110
Aroclor 1260	2	Averaged	2.995	2.876	3.116	42208332.60	56078600.00	32.8614
Aroclor 1260	3	Averaged	3.152	3.031	3.271	54739175.92	67195700.00	22.7561
Aroclor 1260	4	Averaged	3.342	3.221	3.461	65081862.68	81572675.00	25.3386
Aroclor 1260	5	Averaged	3.447	3.327	3.567	127455452.3	160985525.0	26.3073

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

20129352ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/22/2021 Time: 00:26

Instrument ID: 60GCSG GC Column: Col 1 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000080.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	1.48	1.36	1.6	2131625.000	2108875.000	-1.0673
Aroclor 1221	2	Averaged	1.521	1.401	1.641	1608950.000	1591950.000	-1.0566
Aroclor 1221	3	Averaged	1.542	1.422	1.662	5273325.000	4963900.000	-5.8677
Aroclor 1254	1	Averaged	2.395	2.275	2.515	9077550.000	9158625.000	0.8931
Aroclor 1254	2	Averaged	2.507	2.387	2.627	11510200.00	12032250.00	4.5355
Aroclor 1254	3	Averaged	2.711	2.591	2.831	15443500.00	15226575.00	-1.4046
Aroclor 1254	4	Averaged	2.846	2.726	2.966	13237900.00	13612775.00	2.8318
Aroclor 1254	5	Averaged	3	2.88	3.12	9272000.000	9328900.000	0.6137

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

10/13/2021 4:24

SAMPLE NO.

20129346ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/22/2021 Time: 00:33

Instrument ID: 60GCSG GC Column: Col 1 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000081.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	1.795	1.675	1.915	2529725.000	2281525.000	-9.8113
Aroclor 1232	2	Averaged	1.997	1.877	2.117	2364325.000	2099850.000	-11.1861
Aroclor 1232	3	Averaged	2.09	1.97	2.21	1992650.000	1859325.000	-6.6908
Aroclor 1232	4	Averaged	2.195	2.075	2.315	2017500.000	1843625.000	-8.6183
Aroclor 1232	5	Averaged	2.351	2.231	2.471	1665700.000	1529475.000	-8.1782

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19709032ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:41

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000082.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	1.91	1.79	2.03	11322650.00	14554325.00	-7.1273
Aroclor 1242	2	Averaged	2.067	1.946	2.186	4326975.000	4208400.000	-0.0410
Aroclor 1242	3	Averaged	2.239	2.12	2.36	4894100.000	5940375.000	-6.4164
Aroclor 1242	4	Averaged	2.368	2.249	2.489	5741650.000	4728425.000	-7.5388
Aroclor 1242	5	Averaged	2.485	2.365	2.605	5110350.000	4791800.000	-10.9704

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19709043ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:48

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000083.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	2.066	1.946	2.186	7521200.000	6846200.000	-6.3271
Aroclor 1248	2	Averaged	2.175	2.055	2.295	8185225.000	7670475.000	-7.2695
Aroclor 1248	3	Averaged	2.391	2.271	2.511	9850050.000	10216025.00	-6.2591
Aroclor 1248	4	Averaged	2.484	2.365	2.605	7900500.000	7335900.000	-8.0118
Aroclor 1248	5	Averaged	2.711	2.591	2.831	5895125.000	5679375.000	-5.0720

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20129561CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 18:07

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072921-1.B\0729210000029.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	1.789	1.675	1.915	6784121.850	6596450.000	-2.7663
Aroclor 1016	2	Averaged	1.903	1.788	2.028	17723620.64	16947550.00	-4.3787
Aroclor 1016	3	Averaged	1.954	1.839	2.079	9276350.312	8975000.000	-3.2486
Aroclor 1016	4	Averaged	2.171	2.056	2.296	7363139.270	8732975.000	18.6040
Aroclor 1260	1	Averaged	2.84	2.72	2.96	14027393.42	13566700.00	-3.2842
Aroclor 1260	2	Averaged	2.964	2.846	3.086	16300539.58	16704750.00	2.4797
Aroclor 1260	3	Averaged	3.125	3.007	3.247	17350647.18	26185825.00	50.9213
Aroclor 1260	4	Averaged	3.216	3.097	3.337	12232884.37	13353275.00	9.1588
Aroclor 1260	5	Averaged	3.352	3.233	3.473	11579601.70	12182625.00	5.2076
Decachlorobiphenyl		Averaged	4.409	4.29	4.53	154881331.2	168271250.0	8.6453

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20129562CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 18:07

Instrument ID: 60GCSG GC Column: Col 2
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072921-2.B\0729210000029.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	1.666	1.552	1.792	105907364.7	134012925.0	26.5379
Aroclor 1016	2	Averaged	1.854	1.74	1.98	189019616.9	221617350.0	17.2457
Aroclor 1016	3	Averaged	1.924	1.809	2.049	71296828.43	88778625.00	24.5197
Aroclor 1016	4	Averaged	2.009	1.894	2.134	51419036.85	96240525.00	87.1691
Aroclor 1016	5	Averaged	2.16	2.044	2.284	63861538.85	102051350.0	59.8010
Aroclor 1260	1	Averaged	2.809	2.692	2.932	79969425.64	136438975.0	70.6139
Aroclor 1260	2	Averaged	2.992	2.876	3.116	42208332.60	65049575.00	54.1155
Aroclor 1260	3	Averaged	3.149	3.031	3.271	54739175.92	64393700.00	17.6373
Aroclor 1260	4	Averaged	3.34	3.221	3.461	65081862.68	91734700.00	40.9528
Aroclor 1260	5	Averaged	3.444	3.327	3.567	127455452.3	152257375.0	19.4593
Decachlorobiphenyl		Averaged	4.365	4.248	4.488	665769122.2	822481000.0	23.5385

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20129564CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 18:37

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072921-1.B\0729210000033.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	1.787	1.675	1.915	6784121.850	6945825.000	2.3836
Aroclor 1016	2	Averaged	1.903	1.788	2.028	17723620.64	18385775.00	3.7360
Aroclor 1016	3	Averaged	1.953	1.839	2.079	9276350.312	9733150.000	4.9243
Aroclor 1016	4	Averaged	2.171	2.056	2.296	7363139.270	9360425.000	27.1255
Aroclor 1260	1	Averaged	2.839	2.72	2.96	14027393.42	22395275.00	59.6539
Aroclor 1260	2	Averaged	2.964	2.846	3.086	16300539.58	21894625.00	34.3184
Aroclor 1260	3	Averaged	3.125	3.007	3.247	17350647.18	25959925.00	49.6193
Aroclor 1260	4	Averaged	3.216	3.097	3.337	12232884.37	13235725.00	8.1979
Aroclor 1260	5	Averaged	3.353	3.233	3.473	11579601.70	12179850.00	5.1837
Decachlorobiphenyl		Averaged	4.41	4.29	4.53	154881331.2	165014000.0	6.5422

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

20129565CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 18:37

Instrument ID: 60GCSG GC Column: Col 2
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072921-2.B\0729210000033.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60375838

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	1.665	1.553	1.793	105907364.7	144778475.0	36.7029
Aroclor 1016	2	Averaged	1.852	1.741	1.981	189019616.9	236615575.0	25.1804
Aroclor 1016	3	Averaged	1.922	1.809	2.049	71296828.43	96086050.00	34.7690
Aroclor 1016	4	Averaged	2.008	1.895	2.135	51419036.85	98662550.00	91.8794
Aroclor 1016	5	Averaged	2.159	2.044	2.284	63861538.85	104234400.0	63.2194
Aroclor 1260	1	Averaged	2.809	2.692	2.932	79969425.64	135986225.0	70.0478
Aroclor 1260	2	Averaged	2.993	2.876	3.116	42208332.60	67868000.00	60.7929
Aroclor 1260	3	Averaged	3.149	3.031	3.271	54739175.92	67743700.00	23.7573
Aroclor 1260	4	Averaged	3.339	3.221	3.461	65081862.68	95254000.00	46.3603
Aroclor 1260	5	Averaged	3.445	3.327	3.567	127455452.3	162989250.0	27.8794
Decachlorobiphenyl		Averaged	4.366	4.248	4.488	665769122.2	827562750.0	24.3018

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 2946226

Date Analyzed: 07/27/2021 23:20 Lab File ID: 072621-1.B\0726210132.D

Initial wt/vol: 30.49 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<8.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<7.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<3.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<7.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.1	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.0	U
11096-82-5	PCB-1260 (Aroclor 1260)	<6.4	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 2946227

Date Analyzed: 07/27/2021 23:38 Lab File ID: 072621-1.B\0726210133.D

Initial wt/vol: 30.99 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	179	
11096-82-5	PCB-1260 (Aroclor 1260)	184	

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 13:31 Lab Sample ID: 2946235

Date Analyzed: 07/27/2021 23:56 Lab File ID: 072621-1.B\0726210134.D

Initial wt/vol: 30.21 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<8.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<7.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<3.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<7.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.2	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.1	U
11096-82-5	PCB-1260 (Aroclor 1260)	<6.5	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 13:31 Lab Sample ID: 2946236

Date Analyzed: 07/28/2021 00:14 Lab File ID: 072621-1.B\0726210135.D

Initial wt/vol: 30.87 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	171	
11096-82-5	PCB-1260 (Aroclor 1260)	173	

SAMPLE NO.

MS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 2946228

Date Analyzed: 07/30/2021 00:01 Lab File ID: 072821-1.B\0728210123.D

Initial wt/vol: 31.05 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	177	
11096-82-5	PCB-1260 (Aroclor 1260)	183	

SAMPLE NO.

MSD

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 12:05 Lab Sample ID: 2946229

Date Analyzed: 07/30/2021 00:19 Lab File ID: 072821-1.B\0728210124.D

Initial wt/vol: 31.9 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 22.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	169	
11096-82-5	PCB-1260 (Aroclor 1260)	174	

SAMPLE NO.

MS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 13:31 Lab Sample ID: 2946237

Date Analyzed: 07/30/2021 03:18 Lab File ID: 072821-1.B\0728210134.D

Initial wt/vol: 31.62 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	179	
11096-82-5	PCB-1260 (Aroclor 1260)	169	

SAMPLE NO.

MSD

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/24/2021 04:00 Matrix: Solid SDG No.: 60375838

Date Extracted: 07/26/2021 13:31 Lab Sample ID: 2946238

Date Analyzed: 07/30/2021 03:36 Lab File ID: 072821-1.B\0728210135.D

Initial wt/vol: 30.95 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	164	
11096-82-5	PCB-1260 (Aroclor 1260)	162	

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW

Date Received: | Matrix: Water | SDG No.: 60375838

Date Extracted: 07/29/2021 11:57 | Lab Sample ID: 2948685

Date Analyzed: 07/29/2021 18:22 | Lab File ID: 072921-1.B\0729210000031.D

Initial wt/vol: 100 mL | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60GCSG | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<0.15	U
11104-28-2	PCB-1221 (Aroclor 1221)	<0.17	U
11141-16-5	PCB-1232 (Aroclor 1232)	<0.17	U
53469-21-9	PCB-1242 (Aroclor 1242)	<0.17	U
12672-29-6	PCB-1248 (Aroclor 1248)	<0.17	U
11097-69-1	PCB-1254 (Aroclor 1254)	<0.17	U
11096-82-5	PCB-1260 (Aroclor 1260)	<0.19	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375838

Date Extracted: 07/29/2021 11:57 Lab Sample ID: 2948686

Date Analyzed: 07/29/2021 18:30 Lab File ID: 072921-1.B\0729210000032.D

Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	3.0	
11096-82-5	PCB-1260 (Aroclor 1260)	3.8	

SAMPLE NO.

GB-42/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838001 Percent Moisture: 19.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.59	U	mg/kg	10	08/06/2021 13:50
7440-38-2	Arsenic	7.8		mg/kg	10	08/06/2021 13:50
7440-50-8	Copper	15.6		mg/kg	10	08/06/2021 13:50
7439-92-1	Lead	9.6		mg/kg	10	08/06/2021 13:50
7440-66-6	Zinc	48.9		mg/kg	10	08/06/2021 13:50

SAMPLE NO.

GB-42/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838002 Percent Moisture: 19.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.52	U	mg/kg	10	08/06/2021 13:52
7440-38-2	Arsenic	2.6		mg/kg	10	08/06/2021 13:52
7440-50-8	Copper	12.6		mg/kg	10	08/06/2021 13:52
7439-92-1	Lead	8.0		mg/kg	10	08/06/2021 13:52
7440-66-6	Zinc	42.3		mg/kg	10	08/06/2021 13:52

SAMPLE NO.

GB-35/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838003 Percent Moisture: 17.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.63	U	mg/kg	10	08/06/2021 13:53
7440-38-2	Arsenic	6.6		mg/kg	10	08/06/2021 13:53
7440-50-8	Copper	15.6		mg/kg	10	08/06/2021 13:53
7439-92-1	Lead	16.6		mg/kg	10	08/06/2021 13:53
7440-66-6	Zinc	46.0		mg/kg	10	08/06/2021 13:53

SAMPLE NO.

GB-35/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838004 Percent Moisture: 19.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/06/2021 14:00
7440-38-2	Arsenic	14.9		mg/kg	10	08/06/2021 14:00
7440-50-8	Copper	22.1		mg/kg	10	08/06/2021 14:00
7439-92-1	Lead	17.6		mg/kg	10	08/06/2021 14:00
7440-66-6	Zinc	57.0		mg/kg	10	08/06/2021 14:00

SAMPLE NO.

GB-35/3-5D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838005 Percent Moisture: 19.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.59	U	mg/kg	10	08/06/2021 14:02
7440-38-2	Arsenic	6.2		mg/kg	10	08/06/2021 14:02
7440-50-8	Copper	12.9		mg/kg	10	08/06/2021 14:02
7439-92-1	Lead	10.7		mg/kg	10	08/06/2021 14:02
7440-66-6	Zinc	47.3		mg/kg	10	08/06/2021 14:02

SAMPLE NO.

GB-28/1.5-2.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838006 Percent Moisture: 20.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/06/2021 14:03
7440-38-2	Arsenic	6.9		mg/kg	10	08/06/2021 14:03
7440-50-8	Copper	14.6		mg/kg	10	08/06/2021 14:03
7439-92-1	Lead	11.5		mg/kg	10	08/06/2021 14:03
7440-66-6	Zinc	46.0		mg/kg	10	08/06/2021 14:03

SAMPLE NO.

GB-28/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838007 Percent Moisture: 19.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.48	U	mg/kg	10	08/06/2021 14:05
7440-38-2	Arsenic	5.2		mg/kg	10	08/06/2021 14:05
7440-50-8	Copper	13.2		mg/kg	10	08/06/2021 14:05
7439-92-1	Lead	11.7		mg/kg	10	08/06/2021 14:05
7440-66-6	Zinc	31.8		mg/kg	10	08/06/2021 14:05

SAMPLE NO.

GB-21/0.5-2.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838008 Percent Moisture: 19.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.58	U	mg/kg	10	08/06/2021 14:07
7440-38-2	Arsenic	6.5		mg/kg	10	08/06/2021 14:07
7440-50-8	Copper	13.6		mg/kg	10	08/06/2021 14:07
7439-92-1	Lead	11.5		mg/kg	10	08/06/2021 14:07
7440-66-6	Zinc	33.9		mg/kg	10	08/06/2021 14:07

SAMPLE NO.

GB-21/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838009 Percent Moisture: 17.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.61	U	mg/kg	10	08/06/2021 14:08
7440-38-2	Arsenic	5.4		mg/kg	10	08/06/2021 14:08
7440-50-8	Copper	11.1		mg/kg	10	08/06/2021 14:08
7439-92-1	Lead	13.8		mg/kg	10	08/06/2021 14:08
7440-66-6	Zinc	30.7		mg/kg	10	08/06/2021 14:08

SAMPLE NO.

GB-14/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838010 Percent Moisture: 18.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.58	U	mg/kg	10	08/06/2021 14:10
7440-38-2	Arsenic	6.3		mg/kg	10	08/06/2021 14:10
7440-50-8	Copper	14.6		mg/kg	10	08/06/2021 14:10
7439-92-1	Lead	13.1		mg/kg	10	08/06/2021 14:10
7440-66-6	Zinc	39.0		mg/kg	10	08/06/2021 14:10

SAMPLE NO.

GB-14/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838011 Percent Moisture: 19.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.57	U	mg/kg	10	08/06/2021 14:12
7440-38-2	Arsenic	5.4		mg/kg	10	08/06/2021 14:12
7440-50-8	Copper	11.2		mg/kg	10	08/06/2021 14:12
7439-92-1	Lead	13.2		mg/kg	10	08/06/2021 14:12
7440-66-6	Zinc	35.8		mg/kg	10	08/06/2021 14:12

SAMPLE NO.

GB-07/2.5-3.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838012 Percent Moisture: 20.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.61	U	mg/kg	10	08/06/2021 14:13
7440-38-2	Arsenic	3.4		mg/kg	10	08/06/2021 14:13
7440-50-8	Copper	9.5		mg/kg	10	08/06/2021 14:13
7439-92-1	Lead	8.1		mg/kg	10	08/06/2021 14:13
7440-66-6	Zinc	36.0		mg/kg	10	08/06/2021 14:13

SAMPLE NO.

GB-07/7-9

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838013 Percent Moisture: 22.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.52	U	mg/kg	10	08/06/2021 14:28
7440-38-2	Arsenic	9.8		mg/kg	10	08/06/2021 14:28
7440-50-8	Copper	17.4		mg/kg	10	08/06/2021 14:28
7439-92-1	Lead	14.3		mg/kg	10	08/06/2021 14:28
7440-66-6	Zinc	55.1		mg/kg	10	08/06/2021 14:28

SAMPLE NO.

GB-06/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838014 Percent Moisture: 15.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.58	U	mg/kg	10	08/06/2021 14:33
7440-38-2	Arsenic	9.5		mg/kg	10	08/06/2021 14:33
7440-50-8	Copper	19.5		mg/kg	10	08/06/2021 14:33
7439-92-1	Lead	14.2		mg/kg	10	08/06/2021 14:33
7440-66-6	Zinc	58.8		mg/kg	10	08/06/2021 14:33

SAMPLE NO.

GB-06/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838015 Percent Moisture: 20.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.65	U	mg/kg	10	08/06/2021 14:35
7440-38-2	Arsenic	11.7		mg/kg	10	08/06/2021 14:35
7440-50-8	Copper	21.3		mg/kg	10	08/06/2021 14:35
7439-92-1	Lead	15.3		mg/kg	10	08/06/2021 14:35
7440-66-6	Zinc	66.6		mg/kg	10	08/06/2021 14:35

SAMPLE NO.

GB-13/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838016 Percent Moisture: 18.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.59	U	mg/kg	10	08/06/2021 14:36
7440-38-2	Arsenic	6.7		mg/kg	10	08/06/2021 14:36
7440-50-8	Copper	17.7		mg/kg	10	08/06/2021 14:36
7439-92-1	Lead	25.8		mg/kg	10	08/06/2021 14:36
7440-66-6	Zinc	54.3		mg/kg	10	08/06/2021 14:36

SAMPLE NO.

GB-13/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838017 Percent Moisture: 16.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.51	U	mg/kg	10	08/06/2021 14:43
7440-38-2	Arsenic	7.0		mg/kg	10	08/06/2021 14:43
7440-50-8	Copper	16.3		mg/kg	10	08/06/2021 14:43
7439-92-1	Lead	27.3		mg/kg	10	08/06/2021 14:43
7440-66-6	Zinc	44.1		mg/kg	10	08/06/2021 14:43

SAMPLE NO.

GB-20/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838018 Percent Moisture: 18.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.57	U	mg/kg	10	08/06/2021 14:45
7440-38-2	Arsenic	5.8		mg/kg	10	08/06/2021 14:45
7440-50-8	Copper	11.2		mg/kg	10	08/06/2021 14:45
7439-92-1	Lead	14.5		mg/kg	10	08/06/2021 14:45
7440-66-6	Zinc	34.0		mg/kg	10	08/06/2021 14:45

SAMPLE NO.

GB-20/3-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838019 Percent Moisture: 22.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/06/2021 14:46
7440-38-2	Arsenic	5.1		mg/kg	10	08/06/2021 14:46
7440-50-8	Copper	11.1		mg/kg	10	08/06/2021 14:46
7439-92-1	Lead	14.0		mg/kg	10	08/06/2021 14:46
7440-66-6	Zinc	42.8		mg/kg	10	08/06/2021 14:46

SAMPLE NO.

GB-27/0.5-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838020 Percent Moisture: 18.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.56	U	mg/kg	10	08/06/2021 14:48
7440-38-2	Arsenic	5.4		mg/kg	10	08/06/2021 14:48
7440-50-8	Copper	13.8		mg/kg	10	08/06/2021 14:48
7439-92-1	Lead	9.1		mg/kg	10	08/06/2021 14:48
7440-66-6	Zinc	41.6		mg/kg	10	08/06/2021 14:48

SAMPLE NO.

GB-27/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838021 Percent Moisture: 19.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.49	U	mg/kg	10	08/05/2021 10:43
7440-38-2	Arsenic	5.7		mg/kg	10	08/05/2021 10:43
7440-50-8	Copper	13.2		mg/kg	10	08/05/2021 10:43
7439-92-1	Lead	7.2		mg/kg	10	08/05/2021 10:43
7440-66-6	Zinc	36.7		mg/kg	10	08/05/2021 10:43

SAMPLE NO.

GB-08/2.5-3.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838022 Percent Moisture: 19.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.52	U	mg/kg	10	08/05/2021 10:48
7440-38-2	Arsenic	6.1		mg/kg	10	08/05/2021 10:48
7440-50-8	Copper	22.2		mg/kg	10	08/05/2021 10:48
7439-92-1	Lead	9.0		mg/kg	10	08/05/2021 10:48
7440-66-6	Zinc	46.4		mg/kg	10	08/05/2021 10:48

SAMPLE NO.

GB-08/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838023 Percent Moisture: 22.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.68	U	mg/kg	10	08/05/2021 10:49
7440-38-2	Arsenic	6.6		mg/kg	10	08/05/2021 10:49
7440-50-8	Copper	15.6		mg/kg	10	08/05/2021 10:49
7439-92-1	Lead	11.5		mg/kg	10	08/05/2021 10:49
7440-66-6	Zinc	45.6		mg/kg	10	08/05/2021 10:49

SAMPLE NO.

GB-09/1.5-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838024 Percent Moisture: 19.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.65	U	mg/kg	10	08/05/2021 10:51
7440-38-2	Arsenic	9.4		mg/kg	10	08/05/2021 10:51
7440-50-8	Copper	16.9		mg/kg	10	08/05/2021 10:51
7439-92-1	Lead	45.4		mg/kg	10	08/05/2021 10:51
7440-66-6	Zinc	59.6		mg/kg	10	08/05/2021 10:51

SAMPLE NO.

GB-09/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838025 Percent Moisture: 19.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.57	U	mg/kg	10	08/05/2021 10:52
7440-38-2	Arsenic	14.8		mg/kg	10	08/05/2021 10:52
7440-50-8	Copper	20.2		mg/kg	10	08/05/2021 10:52
7439-92-1	Lead	17.0		mg/kg	10	08/05/2021 10:52
7440-66-6	Zinc	65.3		mg/kg	10	08/05/2021 10:52

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Initial Calibration Verification				Continuing Calibration Verification						
	08/05/2021 09:48				08/05/2021 09:56			08/05/2021 10:36			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Antimony	50	49.1	98.3	90-110	40	40.4	101.0	40	41.2	103.0	90-110
Arsenic	50	49.8	99.5	90-110	40	40.1	100.3	40	41.1	102.7	90-110
Copper	50	50.7	101.5	90-110	40	40.4	101.0	40	41.1	102.8	90-110
Lead	50	49.0	97.9	90-110	40	38.6	96.5	40	39.2	98.0	90-110
Zinc	50	49.6	99.1	90-110	400	39.9	10.0	400	40.5	10.1	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification						
	08/05/2021 10:56			08/05/2021 11:00			Control Limit
Analyte	True	Found	%R	True	Found	%R	
Antimony	40	40.9	102.3	40	40.8	102.1	90-110
Arsenic	40	41.0	102.5	40	40.7	101.9	90-110
Copper	40	40.8	101.9	40	40.8	102.0	90-110
Lead	40	38.7	96.8	40	38.9	97.2	90-110
Zinc	400	40.1	10.0	400	40.1	10.0	90-110

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Initial Calibration Verification				Continuing Calibration Verification						
	08/06/2021 13:29				08/06/2021 13:37			08/06/2021 13:57			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Antimony	50	49.7	99.4	90-110	40	39.7	99.1	40	39.5	98.7	90-110
Arsenic	50	49.2	98.4	90-110	40	39.5	98.7	40	39.6	99.0	90-110
Copper	50	50.2	100.4	90-110	40	39.9	99.8	40	40.3	100.7	90-110
Lead	50	48.3	96.5	90-110	40	38.6	96.5	40	38.2	95.5	90-110
Zinc	50	49.4	98.8	90-110	400	39.3	9.8	400	39.1	9.8	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification									
	08/06/2021 14:17			08/06/2021 14:22			08/06/2021 14:40			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Antimony	40	39.5	98.6	40	39.1	97.8	40	39.2	97.9	90-110
Arsenic	40	38.9	97.2	40	39.0	97.4	40	39.6	99.1	90-110
Copper	40	39.7	99.3	40	39.6	99.0	40	40.3	100.6	90-110
Lead	40	38.1	95.2	40	37.9	94.7	40	38.0	95.0	90-110
Zinc	400	38.6	9.6	400	38.7	9.7	400	39.0	9.8	90-110

FORM II INORGANIC-3

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification			
	08/06/2021 14:58			Control Limit
Analyte	True	Found	%R	
Antimony	40	39.2	98.0	90-110
Arsenic	40	39.0	97.4	90-110
Copper	40	39.4	98.4	90-110
Lead	40	38.1	95.4	90-110
Zinc	400	38.6	9.7	90-110

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/05/2021 09:52

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	101.4	50-150
Arsenic	1.0	1.1	105.0	50-150
Copper	1.0	1.1	109.4	50-150
Lead	1.0	0.94	93.9	50-150
Zinc	10.0	10.1	101.0	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/05/2021 10:59

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.1	109.5	50-150
Arsenic	1.0	1.1	109.3	50-150
Copper	1.0	1.1	110.6	50-150
Lead	1.0	0.96	95.9	50-150
Zinc	10.0	10.4	103.9	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/06/2021 13:32

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	104.9	50-150
Arsenic	1.0	1.1	106.6	50-150
Copper	1.0	1.1	110.1	50-150
Lead	1.0	0.95	94.7	50-150
Zinc	10.0	10.7	107.4	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/06/2021 14:20

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.1	108.0	50-150
Arsenic	1.0	1.0	102.7	50-150
Copper	1.0	1.1	110.5	50-150
Lead	1.0	0.94	94.2	50-150
Zinc	10.0	10.6	106.1	50-150

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract : GSA-GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/05/2021 09:50	C	08/05/2021 09:58	C	08/05/2021 10:38	C	08/05/2021 10:57	C	2951047	C
Antimony	0.0096	U	0.0096	U	0.0096	U	0.0096	U	<0.54	U
Arsenic	0.011	J	0.0090	U	0.0093	J	0.011	J	<0.11	U
Copper	0.014	U	0.014	U	0.014	U	0.014	U	<0.31	U
Lead	0.017	J	0.014	J	0.013	J	0.017	J	<0.13	U
Zinc	0.11	U	0.11	U	0.11	U	0.11	U	<0.84	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract : GSA-GOODFELLOW

Method Blank Matrix: Instrument ID: 60ICM3

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	08/05/2021 11:02	C		C		C
Antimony			0.0096	U				
Arsenic			0.0090	U				
Copper			0.014	U				
Lead			0.014	J				
Zinc			0.11	U				

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract : GSA-GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/06/2021 13:30	C	08/06/2021 13:39	C	08/06/2021 13:58	C	08/06/2021 14:18	C	2952435	C
Antimony	0.0096	U	0.0096	U	0.0096	U	0.0096	U	<0.54	U
Arsenic	0.022	J	0.0090	U	0.0094	J	0.0090	U	<0.11	U
Copper	0.014	U	0.014	U	0.014	U	0.014	U	<0.31	U
Lead	0.019	J	0.013	J	0.014	J	0.012	J	<0.13	U
Zinc	0.11	U	0.11	U	0.11	U	0.11	U	<0.84	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract : GSA-GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)						Method Blank	
		C	08/06/2021 14:23	C	08/06/2021 14:41	C	08/06/2021 15:00	C	2952916	C
Antimony			0.0096	U	0.0096	U	0.0096	U	<0.54	U
Arsenic			0.0090	U	0.0095	J	0.0090	U	<0.11	U
Copper			0.014	U	0.014	U	0.014	U	<0.31	U
Lead			0.012	J	0.017	J	0.014	J	<0.13	U
Zinc			0.11	U	0.11	U	0.11	U	<0.84	U

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Solution A Run Date: 08/05/2021 09:53

ICS Source: 46286,46287 Solution AB Run Date: 08/05/2021 09:55

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.00462		51.89599	103.8	80-120
Arsenic	0	50	0.05899		52.44042	104.9	80-120
Copper	0	50	0.0934		46.6209	93.2	80-120
Lead	0	50	0.02151		50.87452	101.7	80-120
Zinc	0	500	0.36956		468.6161	93.7	80-120

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Solution A Run Date: 08/06/2021 13:34

ICS Source: 46286,46287 Solution AB Run Date: 08/06/2021 13:35

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.0111		52.66651	105.3	80-120
Arsenic	0	50	0.05947		52.00913	104	80-120
Copper	0	50	0.08433		46.47826	93	80-120
Lead	0	50	0.02249		50.78644	101.6	80-120
Zinc	0	500	0.29135		465.60618	93.1	80-120

SAMPLE NO.

2951049MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-27/3-5

Percent Moisture: 19.6

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	49.0	<0.49	102	48*
Arsenic	mg/kg	75-125	102	5.7	102	94
Copper	mg/kg	75-125	112	13.2	102	97
Lead	mg/kg	75-125	108	7.2	102	98
Zinc	mg/kg	75-125	138	36.7	102	99

* Spike Recovery outside QC Limits

SAMPLE NO.

2951050MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-27/3-5

Percent Moisture: 19.6

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	54.4	<0.49	115	47*
Arsenic	mg/kg	75-125	116	5.7	115	96
Copper	mg/kg	75-125	126	13.2	115	98
Lead	mg/kg	75-125	122	7.2	115	100
Zinc	mg/kg	75-125	150	36.7	115	98

* Spike Recovery outside QC Limits

SAMPLE NO.

2952437MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: 60375626032

Percent Moisture: 19.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	47.4	<0.60	120	39*
Arsenic	mg/kg	75-125	121	9.5	120	93
Copper	mg/kg	75-125	135	19.3	120	96
Lead	mg/kg	75-125	129	12.3	120	97
Zinc	mg/kg	75-125	172	59.5	120	93

* Spike Recovery outside QC Limits

SAMPLE NO.

2952438MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: 60375626032

Percent Moisture: 19.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	32.4	<0.60	93.1	35*
Arsenic	mg/kg	75-125	96.9	9.5	93.1	94
Copper	mg/kg	75-125	109	19.3	93.1	96
Lead	mg/kg	75-125	105	12.3	93.1	99
Zinc	mg/kg	75-125	146	59.5	93.1	92

* Spike Recovery outside QC Limits

SAMPLE NO.

2952918MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-07/7-9

Percent Moisture: 22.7

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	32.7	<0.52	92.4	35*
Arsenic	mg/kg	75-125	97.2	9.8	92.4	95
Copper	mg/kg	75-125	108	17.4	92.4	97
Lead	mg/kg	75-125	108	14.3	92.4	102
Zinc	mg/kg	75-125	143	55.1	92.4	95

* Spike Recovery outside QC Limits

SAMPLE NO.

2952919MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-07/7-9

Percent Moisture: 22.7

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	34.6	<0.52	103	34*
Arsenic	mg/kg	75-125	105	9.8	103	93
Copper	mg/kg	75-125	115	17.4	103	95
Lead	mg/kg	75-125	115	14.3	103	98
Zinc	mg/kg	75-125	148	55.1	103	91

* Spike Recovery outside QC Limits

SAMPLE NO.

2952920MS

FORM V INORGANIC-3

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: 60375692008

Percent Moisture: 18.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	43.3	ND	114	38*
Arsenic	mg/kg	75-125	113	6.8	114	93
Copper	mg/kg	75-125	129	15.6	114	99
Lead	mg/kg	75-125	125	11.7	114	99
Zinc	mg/kg	75-125	152	42.5	114	96

* Spike Recovery outside QC Limits

SAMPLE NO.

2952921MSD

FORM V INORGANIC-4

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: 60375692008

Percent Moisture: 18.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	35.1	ND	97.8	36*
Arsenic	mg/kg	75-125	95.4	6.8	97.8	91
Copper	mg/kg	75-125	110	15.6	97.8	96
Lead	mg/kg	75-125	105	11.7	97.8	95
Zinc	mg/kg	75-125	134	42.5	97.8	94

* Spike Recovery outside QC Limits

SAMPLE NO.

2951050MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 19.6 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	49.0	54.4	11
Arsenic	20	102	116	13
Copper	20	112	126	12
Lead	20	108	122	13
Zinc	20	138	150	8

SAMPLE NO.

2952438MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 19.8 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	47.4	32.4	38*
Arsenic	20	121	96.9	22*
Copper	20	135	109	21*
Lead	20	129	105	21*
Zinc	20	172	146	16

* RPD outside QC Limits

SAMPLE NO.

2952919MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 22.7 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	32.7	34.6	6
Arsenic	20	97.2	105	8
Copper	20	108	115	7
Lead	20	108	115	6
Zinc	20	143	148	4

SAMPLE NO.

2952921MSD

FORM VI INORGANIC-2
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 18.8 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	43.3	35.1	21*
Arsenic	20	113	95.4	17
Copper	20	129	110	16
Lead	20	125	105	17
Zinc	20	152	134	13

* RPD outside QC Limits

SAMPLE NO.

2951048LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	99.7	100	80	120
Arsenic	mg/kg	100	98.2	98	80	120
Copper	mg/kg	100	103	103	80	120
Lead	mg/kg	100	97.1	97	80	120
Zinc	mg/kg	100	96.0	96	80	120

SAMPLE NO.

2952436LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	95.1	95	80	120
Arsenic	mg/kg	100	95.5	95	80	120
Copper	mg/kg	100	103	103	80	120
Lead	mg/kg	100	97.8	98	80	120
Zinc	mg/kg	100	95.1	95	80	120

SAMPLE NO.

2952917LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	93.8	94	80	120
Arsenic	mg/kg	100	95.0	95	80	120
Copper	mg/kg	100	101	101	80	120
Lead	mg/kg	100	96.7	97	80	120
Zinc	mg/kg	100	93.8	94	80	120

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Preparation Method: None Instrument ID: 60ICM3

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Antimony	1.0	0.0096	01/10/2020
Arsenic	1.0	0.0090	01/10/2020
Copper	1.0	0.014	01/10/2020
Lead	1.0	0.0052	01/10/2020
Zinc	10.0	0.11	01/10/2020

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Preparation Method: EPA 3050 Instrument ID: 60ICM3

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Antimony	0.10	0.054	01/22/2021
Arsenic	0.10	0.011	01/22/2021
Copper	0.10	0.031	01/22/2021
Lead	0.050	0.013	01/22/2021
Zinc	0.50	0.084	01/22/2021

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract : GSA-GOODFELLOW

Instrument ID: 60ICM3 Effective Date:05/07/2019

Analyte	Concentration (ug/L)
Antimony	5000
Arsenic	5000
Copper	5000
Lead	5000
Zinc	50000

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65340

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2951047	2951047	08/04/2021	0.5	50
2951048	2951048	08/04/2021	0.5	50
2951049	2951049	08/04/2021	0.61	50
2951050	2951050	08/04/2021	0.54	50
60375838021	GB-27/3-5	08/04/2021	0.69	50
60375838022	GB-08/2.5-3.5	08/04/2021	0.65	50
60375838023	GB-08/4-6	08/04/2021	0.51	50
60375838024	GB-09/1.5-3	08/04/2021	0.51	50
60375838025	GB-09/4-6	08/04/2021	0.59	50

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65381

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2952435	2952435	08/05/2021	0.5	50
2952436	2952436	08/05/2021	0.5	50
2952437	2952437	08/05/2021	0.52	50
2952438	2952438	08/05/2021	0.67	50
60375838001	GB-42/2-3	08/05/2021	0.57	50
60375838002	GB-42/3-5	08/05/2021	0.65	50
60375838003	GB-35/2-3	08/05/2021	0.52	50
60375838004	GB-35/3-5	08/05/2021	0.54	50
60375838005	GB-35/3-5D	08/05/2021	0.57	50
60375838006	GB-28/1.5-2.5	08/05/2021	0.54	50
60375838007	GB-28/3-5	08/05/2021	0.7	50
60375838008	GB-21/0.5-2.5	08/05/2021	0.58	50
60375838009	GB-21/3-5	08/05/2021	0.54	50
60375838010	GB-14/0-2	08/05/2021	0.57	50
60375838011	GB-14/3-5	08/05/2021	0.59	50
60375838012	GB-07/2.5-3.5	08/05/2021	0.56	50

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65390

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2952916	2952916	08/05/2021	0.5	50
2952917	2952917	08/05/2021	0.5	50
2952918	2952918	08/05/2021	0.7	50
2952919	2952919	08/05/2021	0.63	50
2952920	2952920	08/05/2021	0.54	50
2952921	2952921	08/05/2021	0.63	50
60375838013	GB-07/7-9	08/05/2021	0.67	50
60375838014	GB-06/2-3	08/05/2021	0.55	50
60375838015	GB-06/3-5	08/05/2021	0.52	50
60375838016	GB-13/0-2	08/05/2021	0.56	50
60375838017	GB-13/3-5	08/05/2021	0.63	50
60375838018	GB-20/0-2	08/05/2021	0.58	50
60375838019	GB-20/3-4	08/05/2021	0.56	50
60375838020	GB-27/0.5-2	08/05/2021	0.59	50

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/05/2021 09:40 End Date: 08/05/2021 11:02

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19774634CAL0	19774634CAL0	1	08/05/2021	09:40	X	X	X	X	X
19774635CAL1	19774635CAL1	1	08/05/2021	09:42	X	X	X	X	X
19774636CAL2	19774636CAL2	1	08/05/2021	09:44	X	X	X	X	X
19774637CAL3	19774637CAL3	1	08/05/2021	09:45	X	X	X	X	X
19774638CAL4	19774638CAL4	1	08/05/2021	09:47	X	X	X	X	X
19774639ICV	19774639ICV	1	08/05/2021	09:48	X	X	X	X	X
19774640ICB	19774640ICB	1	08/05/2021	09:50	X	X	X	X	X
19774641CRDL	19774641CRDL	1	08/05/2021	09:52	X	X	X	X	X
19774642ICSA	19774642ICSA	1	08/05/2021	09:53	X	X	X	X	X
19774643ICSAB	19774643ICSAB	1	08/05/2021	09:55	X	X	X	X	X
19774644CCV	19774644CCV	1	08/05/2021	09:56	X	X	X	X	X
19774645CCB	19774645CCB	1	08/05/2021	09:58	X	X	X	X	X
19774652CCV	19774652CCV	1	08/05/2021	10:36	X	X	X	X	X
19774653CCB	19774653CCB	1	08/05/2021	10:38	X	X	X	X	X
2951047BLANK	2951047	10	08/05/2021	10:40	X	X	X	X	X
2951048LCS	2951048	10	08/05/2021	10:41	X	X	X	X	X
GB-27/3-5	60375838021	10	08/05/2021	10:43	X	X	X	X	X
2951049MS	2951049	10	08/05/2021	10:44	X	X	X	X	X
2951050MSD	2951050	10	08/05/2021	10:46	X	X	X	X	X
GB-08/2.5-3.5	60375838022	10	08/05/2021	10:48	X	X	X	X	X
GB-08/4-6	60375838023	10	08/05/2021	10:49	X	X	X	X	X
GB-09/1.5-3	60375838024	10	08/05/2021	10:51	X	X	X	X	X
GB-09/4-6	60375838025	10	08/05/2021	10:52	X	X	X	X	X
19774655CCV	19774655CCV	1	08/05/2021	10:56	X	X	X	X	X
19774656CCB	19774656CCB	1	08/05/2021	10:57	X	X	X	X	X
19774657CRDL	19774657CRDL	1	08/05/2021	10:59	X	X	X	X	X
19774658CCV	19774658CCV	1	08/05/2021	11:00	X	X	X	X	X
19774659CCB	19774659CCB	1	08/05/2021	11:02	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/06/2021 13:20 End Date: 08/06/2021 15:10

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19784824CAL0	19784824CAL0	1	08/06/2021	13:20	X	X	X	X	X
19784825CAL1	19784825CAL1	1	08/06/2021	13:22	X	X	X	X	X
19784826CAL2	19784826CAL2	1	08/06/2021	13:24	X	X	X	X	X
19784827CAL3	19784827CAL3	1	08/06/2021	13:25	X	X	X	X	X
19784828CAL4	19784828CAL4	1	08/06/2021	13:27	X	X	X	X	X
19784829ICV	19784829ICV	1	08/06/2021	13:29	X	X	X	X	X
19784830ICB	19784830ICB	1	08/06/2021	13:30	X	X	X	X	X
19784831CRDL	19784831CRDL	1	08/06/2021	13:32	X	X	X	X	X
19784832ICSA	19784832ICSA	1	08/06/2021	13:34	X	X	X	X	X
19784833ICSAB	19784833ICSAB	1	08/06/2021	13:35	X	X	X	X	X
19784834CCV	19784834CCV	1	08/06/2021	13:37	X	X	X	X	X
19784835CCB	19784835CCB	1	08/06/2021	13:39	X	X	X	X	X
2952435BLANK	2952435	10	08/06/2021	13:40	X	X	X	X	X
2952436LCS	2952436	10	08/06/2021	13:42	X	X	X	X	X
60375626032	60375626032	10	08/06/2021	13:45	X	X	X	X	X
2952437MS	2952437	10	08/06/2021	13:47	X	X	X	X	X
2952438MSD	2952438	10	08/06/2021	13:49	X	X	X	X	X
GB-42/2-3	60375838001	10	08/06/2021	13:50	X	X	X	X	X
GB-42/3-5	60375838002	10	08/06/2021	13:52	X	X	X	X	X
GB-35/2-3	60375838003	10	08/06/2021	13:53	X	X	X	X	X
19784836CCV	19784836CCV	1	08/06/2021	13:57	X	X	X	X	X
19784837CCB	19784837CCB	1	08/06/2021	13:58	X	X	X	X	X
GB-35/3-5	60375838004	10	08/06/2021	14:00	X	X	X	X	X
GB-35/3-5D	60375838005	10	08/06/2021	14:02	X	X	X	X	X
GB-28/1.5-2.5	60375838006	10	08/06/2021	14:03	X	X	X	X	X
GB-28/3-5	60375838007	10	08/06/2021	14:05	X	X	X	X	X
GB-21/0.5-2.5	60375838008	10	08/06/2021	14:07	X	X	X	X	X
GB-21/3-5	60375838009	10	08/06/2021	14:08	X	X	X	X	X
GB-14/0-2	60375838010	10	08/06/2021	14:10	X	X	X	X	X
GB-14/3-5	60375838011	10	08/06/2021	14:12	X	X	X	X	X
GB-07/2.5-3.5	60375838012	10	08/06/2021	14:13	X	X	X	X	X
19784839CCV	19784839CCV	1	08/06/2021	14:17	X	X	X	X	X
19784840CCB	19784840CCB	1	08/06/2021	14:18	X	X	X	X	X
19784841CRDL	19784841CRDL	1	08/06/2021	14:20	X	X	X	X	X
19784842CCV	19784842CCV	1	08/06/2021	14:22	X	X	X	X	X
19784843CCB	19784843CCB	1	08/06/2021	14:23	X	X	X	X	X
2952916BLANK	2952916	10	08/06/2021	14:25	X	X	X	X	X
2952917LCS	2952917	10	08/06/2021	14:27	X	X	X	X	X
GB-07/7-9	60375838013	10	08/06/2021	14:28	X	X	X	X	X
2952918MS	2952918	10	08/06/2021	14:30	X	X	X	X	X
2952919MSD	2952919	10	08/06/2021	14:32	X	X	X	X	X
GB-06/2-3	60375838014	10	08/06/2021	14:33	X	X	X	X	X
GB-06/3-5	60375838015	10	08/06/2021	14:35	X	X	X	X	X
GB-13/0-2	60375838016	10	08/06/2021	14:36	X	X	X	X	X
19784844CCV	19784844CCV	1	08/06/2021	14:40	X	X	X	X	X

FORM XIII INORGANIC-2
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/06/2021 13:20 End Date: 08/06/2021 15:10

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19784845CCB	19784845CCB	1	08/06/2021	14:41	X	X	X	X	X
GB-13/3-5	60375838017	10	08/06/2021	14:43	X	X	X	X	X
GB-20/0-2	60375838018	10	08/06/2021	14:45	X	X	X	X	X
GB-20/3-4	60375838019	10	08/06/2021	14:46	X	X	X	X	X
GB-27/0.5-2	60375838020	10	08/06/2021	14:48	X	X	X	X	X
19784846CCV	19784846CCV	1	08/06/2021	14:58	X	X	X	X	X
19784847CCB	19784847CCB	1	08/06/2021	15:00	X	X	X	X	X
60375692008	60375692008	10	08/06/2021	15:06	X	X	X	X	X
2952920MS	2952920	10	08/06/2021	15:08	X	X	X	X	X
2952921MSD	2952921	10	08/06/2021	15:10	X	X	X	X	X

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 09:40 End Date: 08/05/2021 11:02

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19774634CAL0	09:40	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19774635CAL1	09:42	98.8	99.6	99.8	99.5	98.9	98.7	98.7
19774636CAL2	09:44	94.6	96.2	98.8	97.3	97.1	97.3	94.8
19774637CAL3	09:45	92.9	95.1	97.7	94.7	96.2	97.6	92.0
19774638CAL4	09:47	90.7	93.1	96.5	93.7	94.7	98.3	90.2
19774639ICV	09:48	93.4	95.3	97.6	96.3	95.9	97.4	93.1
19774640ICB	09:50	99.3	98.5	99.7	99.7	99.4	99.3	98.4
19774641CRDL	09:52	100.2	100.3	100.4	100.4	100.4	100.6	99.2
19774642ICSA	09:53	77.3	82.5	83.9	84.0	84.1	81.4	72.1
19774643ICSAB	09:55	77.8	85.2	84.6	84.5	84.7	80.9	70.5
19774644CCV	09:56	93.2	92.8	96.3	94.2	94.9	91.2	90.7
19774645CCB	09:58	98.9	95.6	99.0	97.3	99.3	93.0	96.0
19774652CCV	10:36	93.6	96.6	96.3	95.8	95.1	100.0	92.6
19774653CCB	10:38	98.8	100.1	98.7	99.2	98.3	100.2	98.0
2951047	10:40	95.5	93.8	94.2	95.7	92.8	80.4	92.6
2951048	10:41	95.0	94.6	95.9	96.0	94.8	87.6	92.0
GB-27/3-5	10:43	93.7	100.5	99.2	99.9	93.8	87.8	94.2
2951049	10:44	91.4	97.8	96.3	96.0	92.7	91.5	90.5
2951050	10:46	91.9	98.0	96.8	96.2	92.5	93.2	90.8
GB-08/2.5-3.5	10:48	92.9	99.6	98.8	98.0	93.6	89.3	92.7
GB-08/4-6	10:49	94.3	101.0	98.0	99.3	94.0	90.7	94.0
GB-09/1.5-3	10:51	94.1	101.1	98.3	99.2	94.1	90.1	93.7
GB-09/4-6	10:52	92.6	100.9	96.6	98.5	92.9	90.1	92.8
19774655CCV	10:56	96.7	103.7	99.8	101.6	97.7	112.2	99.3
19774656CCB	10:57	102.0	106.4	102.5	104.0	101.8	108.7	103.4
19774657CRDL	10:59	101.1	106.2	102.2	104.7	100.9	107.3	103.3
19774658CCV	11:00	94.6	99.2	98.8	99.2	96.8	101.5	95.6
19774659CCB	11:02	100.0	102.4	100.3	101.4	99.2	104.1	100.5

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19774634CAL0	09:40	100.0	100.0	100.0
19774635CAL1	09:42	97.6	99.5	99.1
19774636CAL2	09:44	95.3	98.6	97.0
19774637CAL3	09:45	93.4	97.1	95.1
19774638CAL4	09:47	92.7	95.6	93.9
19774639ICV	09:48	93.3	97.3	95.2
19774640ICB	09:50	96.9	99.2	98.3
19774641CRDL	09:52	98.5	100.9	99.5
19774642ICSA	09:53	83.0	84.4	82.3

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 09:40 End Date: 08/05/2021 11:02

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19774643ICSAB	09:55	83.1	84.5	83.1
19774644CCV	09:56	90.0	95.7	93.4
19774645CCB	09:58	92.6	98.1	95.4
19774652CCV	10:36	95.9	95.8	96.7
19774653CCB	10:38	99.0	98.1	99.5
2951047	10:40	87.0	93.4	94.0
2951048	10:41	89.6	95.4	95.6
GB-27/3-5	10:43	95.9	98.9	182.8
2951049	10:44	93.8	96.1	169.4
2951050	10:46	93.4	96.9	165.3
GB-08/2.5-3.5	10:48	95.1	98.5	190.9
GB-08/4-6	10:49	97.2	98.1	174.6
GB-09/1.5-3	10:51	96.8	98.3	159.2
GB-09/4-6	10:52	97.1	96.7	156.5
19774655CCV	10:56	105.8	99.6	103.6
19774656CCB	10:57	107.7	102.7	105.2
19774657CRDL	10:59	106.9	101.5	105.6
19774658CCV	11:00	100.4	98.1	100.4
19774659CCB	11:02	103.1	99.9	102.5

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/06/2021 13:20 End Date: 08/06/2021 15:10

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19784824CAL0	13:20	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19784825CAL1	13:22	99.7	100.6	100.4	100.0	99.7	99.4	100.0
19784826CAL2	13:24	96.7	98.5	99.9	98.4	98.5	98.3	97.3
19784827CAL3	13:25	95.9	98.6	99.3	98.4	98.3	98.6	96.5
19784828CAL4	13:27	92.3	96.3	98.8	96.6	96.4	99.7	93.9
19784829ICV	13:29	96.1	99.9	101.3	97.8	99.2	101.0	96.8
19784830ICB	13:30	101.7	102.4	102.6	101.8	102.4	100.9	101.4
19784831CRDL	13:32	101.4	102.3	101.5	102.7	101.5	100.4	105.5
19784832ICSA	13:34	80.6	90.9	88.5	85.7	89.2	88.5	83.1
19784833ICSAB	13:35	81.3	92.1	88.2	86.6	88.6	89.1	84.2
19784834CCV	13:37	98.3	101.7	102.5	101.1	100.4	100.6	99.1
19784835CCB	13:39	103.0	102.5	102.1	102.8	102.8	98.7	102.9
2952435	13:40	101.4	100.4	100.5	101.4	99.5	88.3	102.3
2952436	13:42	99.7	101.3	102.1	103.3	99.3	94.3	103.2
60375626032	13:45	99.9	112.7	106.8	108.6	100.8	97.6	104.9
2952437	13:47	98.0	109.3	105.6	105.8	100.0	102.9	105.2
2952438	13:49	96.5	109.7	105.1	105.2	99.1	103.4	101.2
GB-42/2-3	13:50	101.1	115.6	107.1	108.6	102.1	100.9	111.8
GB-42/3-5	13:52	99.7	112.7	106.4	107.5	101.4	99.8	108.7
GB-35/2-3	13:53	101.4	115.3	107.3	109.8	103.7	101.2	112.9
19784836CCV	13:57	102.6	112.5	107.6	109.2	105.0	117.9	112.0
19784837CCB	13:58	106.4	111.8	107.0	109.8	106.6	112.3	121.4
GB-35/3-5	14:00	100.2	112.5	107.5	108.6	101.6	96.2	104.8
GB-35/3-5D	14:02	100.5	112.0	107.0	109.3	101.6	98.7	105.6
GB-28/1.5-2.5	14:03	100.1	113.3	107.4	109.4	101.8	100.9	110.0
GB-28/3-5	14:05	100.0	114.2	107.8	111.1	102.4	103.3	114.2
GB-21/0.5-2.5	14:07	100.1	116.9	106.7	110.8	101.6	104.0	111.0
GB-21/3-5	14:08	102.0	121.1	108.6	112.9	103.8	105.3	119.4
GB-14/0-2	14:10	102.1	120.6	108.8	111.9	103.4	105.3	118.9
GB-14/3-5	14:12	102.1	118.2	108.7	110.9	102.9	104.6	114.9
GB-07/2.5-3.5	14:13	103.4	117.8	109.2	112.6	104.3	104.4	119.8
19784839CCV	14:17	104.2	118.0	109.2	111.0	107.0	124.7	117.5
19784840CCB	14:18	108.2	118.7	110.0	113.4	108.8	120.4	123.9
19784841CRDL	14:20	107.8	116.3	109.8	110.5	108.7	116.8	121.6
19784842CCV	14:22	101.0	110.3	106.1	106.7	104.3	112.9	108.6
19784843CCB	14:23	106.1	111.1	107.5	109.2	107.4	110.8	116.9
2952916	14:25	102.9	104.1	102.7	105.3	101.1	92.7	105.7
2952917	14:27	101.3	106.4	103.8	106.4	101.7	99.0	102.8
GB-07/7-9	14:28	99.2	110.9	106.1	107.3	100.9	96.6	106.8
2952918	14:30	96.0	109.4	102.2	103.9	98.1	103.0	99.8

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/06/2021 13:20 End Date: 08/06/2021 15:10

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
2952919	14:32	97.0	110.1	103.8	106.3	99.4	105.9	101.9
GB-06/2-3	14:33	99.5	112.6	107.0	107.8	101.0	101.5	105.5
GB-06/3-5	14:35	100.8	115.4	107.8	109.9	101.7	102.9	110.0
GB-13/0-2	14:36	98.0	110.6	104.4	106.7	99.4	98.4	106.5
19784844CCV	14:40	101.9	112.8	108.2	109.2	105.8	120.6	114.6
19784845CCB	14:41	107.4	113.9	107.7	111.3	107.2	117.6	122.5
GB-13/3-5	14:43	95.3	105.9	101.8	103.3	97.6	92.4	99.1
GB-20/0-2	14:45	95.7	101.2	101.1	101.4	97.0	88.6	97.2
GB-20/3-4	14:46	99.4	119.2	108.4	109.8	100.5	99.5	105.9
GB-27/0.5-2	14:48	100.8	118.1	108.2	110.2	102.4	101.6	110.9
19784846CCV	14:58	101.7	111.7	107.1	107.5	104.8	118.1	113.0
19784847CCB	15:00	106.2	112.5	107.2	110.4	107.8	112.8	120.4
60375692008	15:06	101.5	118.6	108.5	112.1	103.0	103.2	114.9
2952920	15:08	97.6	111.0	104.5	106.8	99.2	104.9	102.4
2952921	15:10	98.0	113.5	105.8	107.2	100.4	106.9	103.7

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19784824CAL0	13:20	100.0	100.0	100.0
19784825CAL1	13:22	100.6	100.5	100.5
19784826CAL2	13:24	98.7	99.8	99.4
19784827CAL3	13:25	99.1	99.8	99.7
19784828CAL4	13:27	97.5	98.5	97.6
19784829ICV	13:29	100.2	100.5	99.5
19784830ICB	13:30	102.1	101.9	101.6
19784831CRDL	13:32	102.2	101.8	102.1
19784832ICSA	13:34	91.3	88.4	88.7
19784833ICSAB	13:35	92.5	89.1	89.3
19784834CCV	13:37	100.4	103.1	102.2
19784835CCB	13:39	101.9	102.9	103.1
2952435	13:40	95.5	100.4	99.2
2952436	13:42	97.0	101.8	101.4
60375626032	13:45	109.2	107.6	225.1
2952437	13:47	107.5	105.8	212.3
2952438	13:49	107.5	105.3	236.2
GB-42/2-3	13:50	110.8	107.8	203.6
GB-42/3-5	13:52	110.2	106.1	205.7
GB-35/2-3	13:53	110.5	107.8	181.9
19784836CCV	13:57	115.8	108.2	111.6
19784837CCB	13:58	114.0	106.8	111.0

FORM XV INORGANIC-3

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/06/2021 13:20 End Date: 08/06/2021 15:10

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
GB-35/3-5	14:00	108.6	107.4	238.5
GB-35/3-5D	14:02	110.6	107.9	220.1
GB-28/1.5-2.5	14:03	111.8	107.1	212.5
GB-28/3-5	14:05	114.0	108.0	211.1
GB-21/0.5-2.5	14:07	114.5	107.6	200.4
GB-21/3-5	14:08	116.5	108.5	206.9
GB-14/0-2	14:10	117.3	108.5	198.9
GB-14/3-5	14:12	115.4	109.0	210.5
GB-07/2.5-3.5	14:13	115.7	109.7	179.7
19784839CCV	14:17	120.2	109.1	114.7
19784840CCB	14:18	119.2	110.1	114.3
19784841CRDL	14:20	116.3	109.9	112.3
19784842CCV	14:22	111.4	106.1	108.6
19784843CCB	14:23	112.9	107.2	110.5
2952916	14:25	100.4	102.4	102.8
2952917	14:27	101.9	103.3	105.1
GB-07/7-9	14:28	109.2	105.9	183.3
2952918	14:30	107.1	102.6	185.2
2952919	14:32	107.9	103.9	179.6
GB-06/2-3	14:33	111.0	106.7	208.6
GB-06/3-5	14:35	113.1	107.5	218.8
GB-13/0-2	14:36	109.6	105.1	197.1
19784844CCV	14:40	117.3	107.9	111.9
19784845CCB	14:41	117.7	108.8	113.4
GB-13/3-5	14:43	103.8	101.6	191.1
GB-20/0-2	14:45	97.8	101.9	174.3
GB-20/3-4	14:46	112.8	108.6	280.5
GB-27/0.5-2	14:48	114.1	107.8	213.6
19784846CCV	14:58	114.9	106.3	110.6
19784847CCB	15:00	113.2	107.7	110.4
60375692008	15:06	114.6	108.9	212.7
2952920	15:08	110.1	104.8	201.7
2952921	15:10	110.5	106.2	212.7

SAMPLE NO.

GB-42/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.9		%	1	07/26/2021 13:31

SAMPLE NO.

GB-42/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.7		%	1	07/26/2021 13:31

SAMPLE NO.

GB-35/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	17.1		%	1	07/26/2021 13:31

SAMPLE NO.

GB-35/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.9		%	1	07/26/2021 13:31

SAMPLE NO.

GB-35/3-5D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.6		%	1	07/26/2021 13:31

SAMPLE NO.

GB-28/1.5-2.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.0		%	1	07/26/2021 13:31

SAMPLE NO.

GB-28/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.2		%	1	07/26/2021 13:31

SAMPLE NO.

GB-21/0.5-2.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.8		%	1	07/26/2021 13:31

SAMPLE NO.

GB-21/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	17.8		%	1	07/26/2021 13:31

SAMPLE NO.

GB-14/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.4		%	1	07/26/2021 13:31

SAMPLE NO.

GB-14/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.2		%	1	07/26/2021 13:31

SAMPLE NO.

GB-07/2.5-3.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838012 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.9		%	1	07/26/2021 13:31

SAMPLE NO.

GB-07/7-9

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838013 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	22.7		%	1	07/26/2021 13:31

SAMPLE NO.

GB-06/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	15.9		%	1	07/26/2021 13:32

SAMPLE NO.

GB-06/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.8		%	1	07/26/2021 14:13

SAMPLE NO.

GB-13/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.7		%	1	07/26/2021 14:14

SAMPLE NO.

GB-13/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	16.0		%	1	07/26/2021 14:14

SAMPLE NO.

GB-20/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.2		%	1	07/26/2021 14:14

SAMPLE NO.

GB-20/3-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	22.8		%	1	07/26/2021 14:14

SAMPLE NO.

GB-27/0.5-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.7		%	1	07/26/2021 14:14

SAMPLE NO.

GB-27/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838021 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.6		%	1	07/26/2021 14:14

SAMPLE NO.

GB-08/2.5-3.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838022 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.9		%	1	07/26/2021 14:14

SAMPLE NO.

GB-08/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838023 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	22.4		%	1	07/26/2021 14:14

SAMPLE NO.

GB-09/1.5-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838024 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.3		%	1	07/26/2021 14:14

SAMPLE NO.

GB-09/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375838025 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.9		%	1	07/26/2021 14:14

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract : GSA-GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2946128	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									<0.50	U
Wet weight w/dish weight										

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract : GSA-GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2946134	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									<0.50	U
Wet weight w/dish weight										

SAMPLE NO.

2946129DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	22.7	23.1	2

SAMPLE NO.

2946135DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	16.6	16.6	0

FORM IX INORGANIC-1
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Preparation Method: ASTM D2974 Instrument ID: 60BAL2

Concentration Units: %

Analyte	PQL	MDL	MDL Date
Percent Moisture	0.10	0.10	01/01/2021

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18386

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2946128	2946128	07/26/2021	1	1
2946129	2946129	07/26/2021	1	1
60375838001	GB-42/2-3	07/26/2021	1	1
60375838002	GB-42/3-5	07/26/2021	1	1
60375838003	GB-35/2-3	07/26/2021	1	1
60375838004	GB-35/3-5	07/26/2021	1	1
60375838005	GB-35/3-5D	07/26/2021	1	1
60375838006	GB-28/1.5-2.5	07/26/2021	1	1
60375838007	GB-28/3-5	07/26/2021	1	1
60375838008	GB-21/0.5-2.5	07/26/2021	1	1
60375838009	GB-21/3-5	07/26/2021	1	1
60375838010	GB-14/0-2	07/26/2021	1	1
60375838011	GB-14/3-5	07/26/2021	1	1
60375838012	GB-07/2.5-3.5	07/26/2021	1	1
60375838013	GB-07/7-9	07/26/2021	1	1
60375838014	GB-06/2-3	07/26/2021	1	1

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18387

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2946134	2946134	07/26/2021	1	1
2946135	2946135	07/26/2021	1	1
60375838015	GB-06/3-5	07/26/2021	1	1
60375838016	GB-13/0-2	07/26/2021	1	1
60375838017	GB-13/3-5	07/26/2021	1	1
60375838018	GB-20/0-2	07/26/2021	1	1
60375838019	GB-20/3-4	07/26/2021	1	1
60375838020	GB-27/0.5-2	07/26/2021	1	1
60375838021	GB-27/3-5	07/26/2021	1	1
60375838022	GB-08/2.5-3.5	07/26/2021	1	1
60375838023	GB-08/4-6	07/26/2021	1	1
60375838024	GB-09/1.5-3	07/26/2021	1	1
60375838025	GB-09/4-6	07/26/2021	1	1

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375838 Contract: GSA-GOODFELLOW

Instrument ID: 60BAL2 Analysis Method: ASTM D2974

Start Date: 07/26/2021 13:30 End Date: 07/26/2021 14:14

Sample Name	Lab Sample ID	D/F	Date	Time	MOIST
2946128BLANK	2946128	1	07/26/2021	13:30	X
2946129DUP	2946129	1	07/26/2021	13:30	X
GB-42/2-3	60375838001	1	07/26/2021	13:31	X
GB-42/3-5	60375838002	1	07/26/2021	13:31	X
GB-35/2-3	60375838003	1	07/26/2021	13:31	X
GB-35/3-5	60375838004	1	07/26/2021	13:31	X
GB-35/3-5D	60375838005	1	07/26/2021	13:31	X
GB-28/1.5-2.5	60375838006	1	07/26/2021	13:31	X
GB-28/3-5	60375838007	1	07/26/2021	13:31	X
GB-21/0.5-2.5	60375838008	1	07/26/2021	13:31	X
GB-21/3-5	60375838009	1	07/26/2021	13:31	X
GB-14/0-2	60375838010	1	07/26/2021	13:31	X
GB-14/3-5	60375838011	1	07/26/2021	13:31	X
GB-07/2.5-3.5	60375838012	1	07/26/2021	13:31	X
GB-07/7-9	60375838013	1	07/26/2021	13:31	X
GB-06/2-3	60375838014	1	07/26/2021	13:32	X
2946134BLANK	2946134	1	07/26/2021	14:13	X
2946135DUP	2946135	1	07/26/2021	14:13	X
60375711001	60375711001	1	07/26/2021	14:13	X
GB-06/3-5	60375838015	1	07/26/2021	14:13	X
GB-13/0-2	60375838016	1	07/26/2021	14:14	X
GB-13/3-5	60375838017	1	07/26/2021	14:14	X
GB-20/0-2	60375838018	1	07/26/2021	14:14	X
GB-20/3-4	60375838019	1	07/26/2021	14:14	X
GB-27/0.5-2	60375838020	1	07/26/2021	14:14	X
GB-27/3-5	60375838021	1	07/26/2021	14:14	X
GB-08/2.5-3.5	60375838022	1	07/26/2021	14:14	X
GB-08/4-6	60375838023	1	07/26/2021	14:14	X
GB-09/1.5-3	60375838024	1	07/26/2021	14:14	X
GB-09/4-6	60375838025	1	07/26/2021	14:14	X

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 60375923

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Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

August 25, 2021

Justin Carter
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on July 27, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Kansas City

Revised report_rev1

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

(b) (6)

Jeffrey Shopper
jeff.shopper@pacelabs.com
1(913)563-1408
Project Manager

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL
Jacquelin Lee, Burns & McDonnell

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CERTIFICATIONS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 20-020-0
Arkansas Drinking Water
Illinois Certification #: 2000302021-3
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212020-2
Oklahoma Certification #: 9205/9935
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-19-12
Utah Certification #: KS000212019-9
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

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SAMPLE SUMMARY

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60375923001	GB-15/2-3	Solid	07/23/21 14:09	07/27/21 05:45
60375923002	GB-15/3-5	Solid	07/23/21 14:12	07/27/21 05:45
60375923003	GB-22/1-3	Solid	07/23/21 14:32	07/27/21 05:45
60375923004	GB-22/3-5	Solid	07/23/21 14:36	07/27/21 05:45
60375923005	GB-29/1.5-2.5	Solid	07/26/21 08:12	07/27/21 05:45
60375923006	GB-29/3-5	Solid	07/26/21 08:17	07/27/21 05:45
60375923007	GB-36/0-2	Solid	07/26/21 08:46	07/27/21 05:45
60375923008	GB-36/2-4	Solid	07/26/21 08:50	07/27/21 05:45
60375923009	GB-43/3-5	Solid	07/26/21 09:20	07/27/21 05:45
60375923010	GB-43/5-7	Solid	07/26/21 09:25	07/27/21 05:45
60375923011	GB-01/8-10	Solid	07/26/21 10:27	07/27/21 05:45
60375923012	GB-01/11-13	Solid	07/26/21 10:32	07/27/21 05:45
60375923013	GB-03/1-3	Solid	07/26/21 10:56	07/27/21 05:45
60375923014	GB-03/4-6	Solid	07/26/21 11:18	07/27/21 05:45
60375923015	TB-5	Water	07/26/21 08:12	07/27/21 05:45
60375923016	GB-02/2-3	Solid	07/26/21 11:41	07/27/21 05:45
60375923017	GB-02/8-9	Solid	07/26/21 11:58	07/27/21 05:45

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SAMPLE ANALYTE COUNT

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60375923001	**GB-15/2-3**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923002	**GB-15/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923003	**GB-22/1-3**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923004	**GB-22/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923005	**GB-29/1.5-2.5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923006	**GB-29/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923007	**GB-36/0-2**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923008	**GB-36/2-4**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923009	**GB-43/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923010	**GB-43/5-7**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923011	**GB-01/8-10**	EPA 8082	AJA1	8	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923012	**GB-01/11-13**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923013	**GB-03/1-3**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923014	**GB-03/4-6**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923015	**TB-5**	EPA 5030B/8260	PGH	87	PASI-K
60375923016	**GB-02/2-3**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60375923017	**GB-02/8-9**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: August 25, 2021

General Information:
16 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BURNS & MCDONNELL
Date: August 25, 2021

General Information:
16 samples were analyzed for EPA 6020 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 735731

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375923016

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2951057)
  - Antimony
  - Lead
- MSD (Lab ID: 2951058)
  - Antimony

R1: RPD value was outside control limits.

- MSD (Lab ID: 2951058)
  - Lead

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 25, 2021

General Information:
12 samples were analyzed for EPA 8270 by SIM by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 734531

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375923016

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2947245)
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Chrysene
  - Fluoranthene
  - Phenanthrene
  - Pyrene

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 25, 2021

QC Batch: 734532

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375923003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2947249)
  - Benzo(b)fluoranthene
  - Chrysene
  - Fluoranthene
  - Pyrene

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Method: **EPA 8270**
Description: 8270 MSSV DRO/ORO
Client: BURNS & MCDONNELL
Date: August 25, 2021

General Information:
6 samples were analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: August 25, 2021

General Information:
6 samples were analyzed for EPA 8260B by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035A/5030 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 734679

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375838013

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2947594)
  - 1,1,2,2-Tetrachloroethane
  - Iodomethane
  - Methyl acetate
- MSD (Lab ID: 2947595)
  - 1,1,2,2-Tetrachloroethane
  - 1,1-Dichloroethene
  - Methyl acetate
  - Trichloroethene

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: August 25, 2021

QC Batch: 734679

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375838013

R1: RPD value was outside control limits.

- MSD (Lab ID: 2947595)
  - Iodomethane

QC Batch: 735024

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60375923016

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2948712)
  - 1,1,2,2-Tetrachloroethane
  - Methyl acetate
  - Vinyl acetate
- MSD (Lab ID: 2948713)
  - 1,1,2,2-Tetrachloroethane
  - Cyclohexanone
  - Methyl acetate
  - Trichloroethene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2948713)
  - 1,2,3-Trichloropropane
  - 1,2-Dibromo-3-chloropropane
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
  - Bromoform
  - Diethyl ether (Ethyl ether)
  - Naphthalene

Additional Comments:

Analyte Comments:

QC Batch: 734679

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 2947592)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-01/11-13 (Lab ID: 60375923012)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-01/8-10 (Lab ID: 60375923011)
  - Tetrahydrofuran

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: August 25, 2021

Analyte Comments:

QC Batch: 734679

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- GB-01/8-10 (Lab ID: 60375923011)
  - 1,1,2-Trichlorotrifluoroethane
- LCS (Lab ID: 2947593)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MS (Lab ID: 2947594)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MSD (Lab ID: 2947595)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

QC Batch: 735024

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 2948710)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-02/2-3 (Lab ID: 60375923016)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-02/8-9 (Lab ID: 60375923017)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-03/1-3 (Lab ID: 60375923013)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-03/4-6 (Lab ID: 60375923014)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- LCS (Lab ID: 2948711)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MS (Lab ID: 2948712)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MSD (Lab ID: 2948713)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: BURNS & MCDONNELL
Date: August 25, 2021

General Information:
1 sample was analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 735573

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Method: **EPA 8260**
Description: 8260 MSV GRO and Oxygenates
Client: BURNS & MCDONNELL
Date: August 25, 2021

General Information:
6 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-15/2-3 **Lab ID: 60375923001** Collected: 07/23/21 14:09 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.5	1	07/27/21 14:19	07/30/21 05:59	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.5	1	07/27/21 14:19	07/30/21 05:59	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.5	1	07/27/21 14:19	07/30/21 05:59	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.5	1	07/27/21 14:19	07/30/21 05:59	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.5	1	07/27/21 14:19	07/30/21 05:59	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.5	1	07/27/21 14:19	07/30/21 05:59	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.5	1	07/27/21 14:19	07/30/21 05:59	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	83	%	35-120	1	07/27/21 14:19	07/30/21 05:59	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.63**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 11:07	7440-36-0	
Arsenic	**10.6**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 11:07	7440-38-2	
Copper	**19.8**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 11:07	7440-50-8	
Lead	**19.8**	mg/kg	0.59	10	08/04/21 10:12	08/05/21 11:07	7439-92-1	
Zinc	**63.2**	mg/kg	5.9	10	08/04/21 10:12	08/05/21 11:07	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.5**	%	0.50	1		07/27/21 13:46		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-15/3-5 **Lab ID: 60375923002** Collected: 07/23/21 14:12 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.2**	ug/kg	41.1	1	07/27/21 14:19	07/30/21 06:17	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.8**	ug/kg	41.1	1	07/27/21 14:19	07/30/21 06:17	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.1	1	07/27/21 14:19	07/30/21 06:17	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.9**	ug/kg	41.1	1	07/27/21 14:19	07/30/21 06:17	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.1	1	07/27/21 14:19	07/30/21 06:17	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	41.1	1	07/27/21 14:19	07/30/21 06:17	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	41.1	1	07/27/21 14:19	07/30/21 06:17	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	81	%	35-120	1	07/27/21 14:19	07/30/21 06:17	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.52**	mg/kg	0.96	10	08/04/21 10:12	08/05/21 11:08	7440-36-0	
Arsenic	**6.6**	mg/kg	0.96	10	08/04/21 10:12	08/05/21 11:08	7440-38-2	
Copper	**14.9**	mg/kg	0.96	10	08/04/21 10:12	08/05/21 11:08	7440-50-8	
Lead	**8.9**	mg/kg	0.48	10	08/04/21 10:12	08/05/21 11:08	7439-92-1	
Zinc	**42.6**	mg/kg	4.8	10	08/04/21 10:12	08/05/21 11:08	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**21.2**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-22/1-3 **Lab ID: 60375923003** Collected: 07/23/21 14:32 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.7**	ug/kg	39.1	1	07/27/21 14:19	07/30/21 06:34	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.3**	ug/kg	39.1	1	07/27/21 14:19	07/30/21 06:34	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.1	1	07/27/21 14:19	07/30/21 06:34	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.4**	ug/kg	39.1	1	07/27/21 14:19	07/30/21 06:34	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.1	1	07/27/21 14:19	07/30/21 06:34	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.1	1	07/27/21 14:19	07/30/21 06:34	11097-69-1	
PCB-1260 (Aroclor 1260)	**26.5J**	ug/kg	39.1	1	07/27/21 14:19	07/30/21 06:34	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	85	%	35-120	1	07/27/21 14:19	07/30/21 06:34	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.55**	mg/kg	1.0	10	08/04/21 10:12	08/05/21 11:10	7440-36-0	
Arsenic	**5.2**	mg/kg	1.0	10	08/04/21 10:12	08/05/21 11:10	7440-38-2	
Copper	**11.3**	mg/kg	1.0	10	08/04/21 10:12	08/05/21 11:10	7440-50-8	
Lead	**9.1**	mg/kg	0.51	10	08/04/21 10:12	08/05/21 11:10	7439-92-1	
Zinc	**32.3**	mg/kg	5.1	10	08/04/21 10:12	08/05/21 11:10	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	208-96-8	
Anthracene	**3.5J**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	120-12-7	
Benzo(a)anthracene	**12.8**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	56-55-3	
Benzo(a)pyrene	**10.6**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	50-32-8	
Benzo(b)fluoranthene	**19.4**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	205-99-2	M1
Benzo(g,h,i)perylene	**8.4**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	191-24-2	
Benzo(k)fluoranthene	**9.7**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	207-08-9	
Chrysene	**14.3**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	218-01-9	M1
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	53-70-3	
Fluoranthene	**41.9**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	206-44-0	M1
Fluorene	**<1.6**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	86-73-7	
Indeno(1,2,3-cd)pyrene	**6.6**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	91-20-3	
Phenanthrene	**19.8**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	85-01-8	
Pyrene	**32.5**	ug/kg	4.0	1	07/27/21 15:28	07/29/21 19:28	129-00-0	M1
Surrogates								
2-Fluorobiphenyl (S)	82	%	40-120	1	07/27/21 15:28	07/29/21 19:28	321-60-8	
Terphenyl-d14 (S)	96	%	45-130	1	07/27/21 15:28	07/29/21 19:28	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**18.8**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-22/3-5 **Lab ID: 60375923004** Collected: 07/23/21 14:36 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.3	1	07/27/21 14:19	07/30/21 06:52	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.3	1	07/27/21 14:19	07/30/21 06:52	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.3	1	07/27/21 14:19	07/30/21 06:52	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.3	1	07/27/21 14:19	07/30/21 06:52	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.3	1	07/27/21 14:19	07/30/21 06:52	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.3	1	07/27/21 14:19	07/30/21 06:52	11097-69-1	
PCB-1260 (Aroclor 1260)	**71.9**	ug/kg	39.3	1	07/27/21 14:19	07/30/21 06:52	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	84	%	35-120	1	07/27/21 14:19	07/30/21 06:52	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.49**	mg/kg	0.91	10	08/04/21 10:12	08/05/21 11:12	7440-36-0	
Arsenic	**5.8**	mg/kg	0.91	10	08/04/21 10:12	08/05/21 11:12	7440-38-2	
Copper	**12.5**	mg/kg	0.91	10	08/04/21 10:12	08/05/21 11:12	7440-50-8	
Lead	**10.4**	mg/kg	0.45	10	08/04/21 10:12	08/05/21 11:12	7439-92-1	
Zinc	**31.8**	mg/kg	4.5	10	08/04/21 10:12	08/05/21 11:12	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	208-96-8	
Anthracene	**6.4**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	120-12-7	
Benzo(a)anthracene	**25.3**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	56-55-3	
Benzo(a)pyrene	**21.2**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	50-32-8	
Benzo(b)fluoranthene	**40.4**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	205-99-2	
Benzo(g,h,i)perylene	**15.1**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	191-24-2	
Benzo(k)fluoranthene	**13.7**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	207-08-9	
Chrysene	**30.7**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	218-01-9	
Dibenz(a,h)anthracene	**2.7J**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	53-70-3	
Fluoranthene	**81.0**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	86-73-7	
Indeno(1,2,3-cd)pyrene	**12.2**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	91-20-3	
Phenanthrene	**37.2**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	85-01-8	
Pyrene	**67.6**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 11:30	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	86	%	40-120	1	07/27/21 15:28	07/30/21 11:30	321-60-8	
Terphenyl-d14 (S)	106	%	45-130	1	07/27/21 15:28	07/30/21 11:30	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.0**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-29/1.5-2.5 **Lab ID: 60375923005** Collected: 07/26/21 08:12 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 07:10	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 07:10	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 07:10	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 07:10	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 07:10	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 07:10	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 07:10	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	80	%	35-120	1	07/27/21 14:19	07/30/21 07:10	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.61**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 11:13	7440-36-0	
Arsenic	**22.6**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 11:13	7440-38-2	
Copper	**15.6**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 11:13	7440-50-8	
Lead	**13.1**	mg/kg	0.56	10	08/04/21 10:12	08/05/21 11:13	7439-92-1	
Zinc	**53.0**	mg/kg	5.6	10	08/04/21 10:12	08/05/21 11:13	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	208-96-8	
Anthracene	**3.9J**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	120-12-7	
Benzo(a)anthracene	**23.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	56-55-3	
Benzo(a)pyrene	**27.8**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	50-32-8	
Benzo(b)fluoranthene	**60.9**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	205-99-2	
Benzo(g,h,i)perylene	**25.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	191-24-2	
Benzo(k)fluoranthene	**19.9**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	207-08-9	
Chrysene	**37.9**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	218-01-9	
Dibenz(a,h)anthracene	**4.1**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	53-70-3	
Fluoranthene	**65.6**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	86-73-7	
Indeno(1,2,3-cd)pyrene	**20.0**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	91-20-3	
Phenanthrene	**20.2**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	85-01-8	
Pyrene	**64.6**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 11:47	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	79	%	40-120	1	07/27/21 15:28	07/30/21 11:47	321-60-8	
Terphenyl-d14 (S)	99	%	45-130	1	07/27/21 15:28	07/30/21 11:47	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.6**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-29/3-5 **Lab ID: 60375923006** Collected: 07/26/21 08:17 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.9	1	07/27/21 14:19	07/30/21 07:28	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.9	1	07/27/21 14:19	07/30/21 07:28	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	39.9	1	07/27/21 14:19	07/30/21 07:28	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.9	1	07/27/21 14:19	07/30/21 07:28	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.9	1	07/27/21 14:19	07/30/21 07:28	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.9	1	07/27/21 14:19	07/30/21 07:28	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	39.9	1	07/27/21 14:19	07/30/21 07:28	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	82	%	35-120	1	07/27/21 14:19	07/30/21 07:28	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.50**	mg/kg	0.92	10	08/04/21 10:12	08/05/21 11:20	7440-36-0	
Arsenic	**7.5**	mg/kg	0.92	10	08/04/21 10:12	08/05/21 11:20	7440-38-2	
Copper	**11.6**	mg/kg	0.92	10	08/04/21 10:12	08/05/21 11:20	7440-50-8	
Lead	**10.1**	mg/kg	0.46	10	08/04/21 10:12	08/05/21 11:20	7439-92-1	
Zinc	**39.3**	mg/kg	4.6	10	08/04/21 10:12	08/05/21 11:20	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	208-96-8	
Anthracene	**<1.7**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	120-12-7	
Benzo(a)anthracene	**3.7J**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	50-32-8	
Benzo(b)fluoranthene	**8.0**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	205-99-2	
Benzo(g,h,i)perylene	**2.8J**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	207-08-9	
Chrysene	**5.9**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	218-01-9	
Dibenz(a,h)anthracene	**<1.7**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	53-70-3	
Fluoranthene	**11.3**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	206-44-0	
Fluorene	**<1.6**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	86-73-7	
Indeno(1,2,3-cd)pyrene	**2.3J**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	91-20-3	
Phenanthrene	**4.2**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	85-01-8	
Pyrene	**14.0**	ug/kg	4.0	1	07/27/21 15:28	07/30/21 12:04	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	84	%	40-120	1	07/27/21 15:28	07/30/21 12:04	321-60-8	
Terphenyl-d14 (S)	102	%	45-130	1	07/27/21 15:28	07/30/21 12:04	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.3**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-36/0-2 **Lab ID: 60375923007** Collected: 07/26/21 08:46 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.4**	ug/kg	37.7	1	07/27/21 14:19	07/30/21 07:46	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.0**	ug/kg	37.7	1	07/27/21 14:19	07/30/21 07:46	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.1**	ug/kg	37.7	1	07/27/21 14:19	07/30/21 07:46	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.1**	ug/kg	37.7	1	07/27/21 14:19	07/30/21 07:46	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	37.7	1	07/27/21 14:19	07/30/21 07:46	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.5**	ug/kg	37.7	1	07/27/21 14:19	07/30/21 07:46	11097-69-1	
PCB-1260 (Aroclor 1260)	**8.9J**	ug/kg	37.7	1	07/27/21 14:19	07/30/21 07:46	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	90	%	35-120	1	07/27/21 14:19	07/30/21 07:46	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.45**	mg/kg	0.83	10	08/04/21 10:12	08/05/21 11:21	7440-36-0	
Arsenic	**9.2**	mg/kg	0.83	10	08/04/21 10:12	08/05/21 11:21	7440-38-2	
Copper	**15.7**	mg/kg	0.83	10	08/04/21 10:12	08/05/21 11:21	7440-50-8	
Lead	**13.6**	mg/kg	0.42	10	08/04/21 10:12	08/05/21 11:21	7439-92-1	
Zinc	**53.7**	mg/kg	4.2	10	08/04/21 10:12	08/05/21 11:21	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**16.8**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-36/2-4 **Lab ID: 60375923008** Collected: 07/26/21 08:50 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 08:04	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 08:04	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 08:04	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 08:04	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 08:04	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 08:04	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.2	1	07/27/21 14:19	07/30/21 08:04	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	81	%	35-120	1	07/27/21 14:19	07/30/21 08:04	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.61**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 11:23	7440-36-0	
Arsenic	**5.6**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 11:23	7440-38-2	
Copper	**11.3**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 11:23	7440-50-8	
Lead	**10.3**	mg/kg	0.56	10	08/04/21 10:12	08/05/21 11:23	7439-92-1	
Zinc	**45.7**	mg/kg	5.6	10	08/04/21 10:12	08/05/21 11:23	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**17.9**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-43/3-5 **Lab ID: 60375923009** Collected: 07/26/21 09:20 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.3**	ug/kg	41.4	1	07/27/21 14:19	07/30/21 08:22	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.9**	ug/kg	41.4	1	07/27/21 14:19	07/30/21 08:22	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.4	1	07/27/21 14:19	07/30/21 08:22	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10**	ug/kg	41.4	1	07/27/21 14:19	07/30/21 08:22	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.4	1	07/27/21 14:19	07/30/21 08:22	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.4	1	07/27/21 14:19	07/30/21 08:22	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.2**	ug/kg	41.4	1	07/27/21 14:19	07/30/21 08:22	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	80	%	35-120	1	07/27/21 14:19	07/30/21 08:22	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.62**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 11:25	7440-36-0	
Arsenic	**12.7**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 11:25	7440-38-2	
Copper	**23.4**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 11:25	7440-50-8	
Lead	**14.8**	mg/kg	0.58	10	08/04/21 10:12	08/05/21 11:25	7439-92-1	
Zinc	**58.5**	mg/kg	5.8	10	08/04/21 10:12	08/05/21 11:25	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	120-12-7	
Benzo(a)anthracene	**3.5J**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	50-32-8	
Benzo(b)fluoranthene	**6.1**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	205-99-2	
Benzo(g,h,i)perylene	**2.2J**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	191-24-2	
Benzo(k)fluoranthene	**2.9J**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	207-08-9	
Chrysene	**4.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	53-70-3	
Fluoranthene	**11.8**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	91-20-3	
Phenanthrene	**5.2**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	85-01-8	
Pyrene	**9.9**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:22	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	85	%	40-120	1	07/27/21 15:28	07/30/21 12:22	321-60-8	
Terphenyl-d14 (S)	105	%	45-130	1	07/27/21 15:28	07/30/21 12:22	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**21.2**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-43/5-7 **Lab ID: 60375923010** Collected: 07/26/21 09:25 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.7**	ug/kg	39.2	1	07/27/21 14:19	07/30/21 08:39	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.3**	ug/kg	39.2	1	07/27/21 14:19	07/30/21 08:39	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.2	1	07/27/21 14:19	07/30/21 08:39	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.4**	ug/kg	39.2	1	07/27/21 14:19	07/30/21 08:39	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.2	1	07/27/21 14:19	07/30/21 08:39	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.2	1	07/27/21 14:19	07/30/21 08:39	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.7**	ug/kg	39.2	1	07/27/21 14:19	07/30/21 08:39	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	82	%	35-120	1	07/27/21 14:19	07/30/21 08:39	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.45**	mg/kg	0.84	10	08/04/21 10:12	08/05/21 11:26	7440-36-0	
Arsenic	**2.4**	mg/kg	0.84	10	08/04/21 10:12	08/05/21 11:26	7440-38-2	
Copper	**10.1**	mg/kg	0.84	10	08/04/21 10:12	08/05/21 11:26	7440-50-8	
Lead	**7.2**	mg/kg	0.42	10	08/04/21 10:12	08/05/21 11:26	7439-92-1	
Zinc	**46.9**	mg/kg	4.2	10	08/04/21 10:12	08/05/21 11:26	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	83-32-9	
Acenaphthylene	**<1.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	208-96-8	
Anthracene	**<1.7**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	120-12-7	
Benzo(a)anthracene	**2.5J**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	56-55-3	
Benzo(a)pyrene	**<1.5**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	50-32-8	
Benzo(b)fluoranthene	**3.5J**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	205-99-2	
Benzo(g,h,i)perylene	**<1.8**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	207-08-9	
Chrysene	**3.1J**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	53-70-3	
Fluoranthene	**8.3**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	206-44-0	
Fluorene	**<1.6**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	193-39-5	
Naphthalene	**<1.7**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	91-20-3	
Phenanthrene	**4.1**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	85-01-8	
Pyrene	**6.6**	ug/kg	4.1	1	07/27/21 15:28	07/30/21 12:39	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	40-120	1	07/27/21 15:28	07/30/21 12:39	321-60-8	
Terphenyl-d14 (S)	100	%	45-130	1	07/27/21 15:28	07/30/21 12:39	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.4**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-01/8-10 **Lab ID: 60375923011** Collected: 07/26/21 10:27 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.5	1	07/27/21 14:19	07/30/21 09:51	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.5	1	07/27/21 14:19	07/30/21 09:51	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.5	1	07/27/21 14:19	07/30/21 09:51	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.5	1	07/27/21 14:19	07/30/21 09:51	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.5	1	07/27/21 14:19	07/30/21 09:51	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.5	1	07/27/21 14:19	07/30/21 09:51	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.5	1	07/27/21 14:19	07/30/21 09:51	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	83	%	35-120	1	07/27/21 14:19	07/30/21 09:51	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.63**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 11:28	7440-36-0	
Arsenic	**6.0**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 11:28	7440-38-2	
Copper	**13.9**	mg/kg	1.2	10	08/04/21 10:12	08/05/21 11:28	7440-50-8	
Lead	**9.4**	mg/kg	0.58	10	08/04/21 10:12	08/05/21 11:28	7439-92-1	
Zinc	**42.9**	mg/kg	5.8	10	08/04/21 10:12	08/05/21 11:28	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<2.9**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	83-32-9	
Acenaphthylene	**<2.9**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	208-96-8	
Anthracene	**<3.2**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	120-12-7	
Benzo(a)anthracene	**7.3J**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	56-55-3	
Benzo(a)pyrene	**<2.8**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	50-32-8	
Benzo(b)fluoranthene	**11.3**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	205-99-2	
Benzo(g,h,i)perylene	**5.3J**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	191-24-2	
Benzo(k)fluoranthene	**4.9J**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	207-08-9	
Chrysene	**7.5J**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	218-01-9	
Dibenz(a,h)anthracene	**<3.3**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	53-70-3	
Fluoranthene	**18.9**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	206-44-0	
Fluorene	**<3.0**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.2J**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	193-39-5	
Naphthalene	**<3.3**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	91-20-3	
Phenanthrene	**7.9**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	85-01-8	
Pyrene	**15.2**	ug/kg	7.7	1	07/27/21 15:30	07/30/21 13:30	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	65	%	40-120	1	07/27/21 15:30	07/30/21 13:30	321-60-8	
Terphenyl-d14 (S)	75	%	45-130	1	07/27/21 15:30	07/30/21 13:30	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**6.6J**	mg/kg	17.6	1	07/27/21 15:30	08/02/21 17:33		
TPH-DRO	**3.2J**	mg/kg	17.6	1	07/27/21 15:30	08/02/21 17:33		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-01/8-10 **Lab ID: 60375923011** Collected: 07/26/21 10:27 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	70	%	30-120	1	07/27/21 15:30	08/02/21 17:33	4165-60-0	
2-Fluorobiphenyl (S)	73	%	40-120	1	07/27/21 15:30	08/02/21 17:33	321-60-8	
Terphenyl-d14 (S)	79	%	45-120	1	07/27/21 15:30	08/02/21 17:33	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**<15.6**	ug/kg	19.3	1	07/28/21 08:05	07/28/21 12:32	67-64-1	
Acrolein	**<72.9**	ug/kg	96.4	1	07/28/21 08:05	07/28/21 12:32	107-02-8	
Acrylonitrile	**<3.1**	ug/kg	96.4	1	07/28/21 08:05	07/28/21 12:32	107-13-1	
Benzene	**<0.48**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	71-43-2	
Bromobenzene	**<0.91**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	108-86-1	
Bromochloromethane	**<0.58**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	74-97-5	
Bromodichloromethane	**<0.58**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	75-27-4	
Bromoform	**<0.55**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	75-25-2	
Bromomethane	**<2.8**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	74-83-9	
2-Butanone (MEK)	**<3.3**	ug/kg	9.6	1	07/28/21 08:05	07/28/21 12:32	78-93-3	
n-Butylbenzene	**<0.63**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	104-51-8	
sec-Butylbenzene	**<0.70**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	135-98-8	
tert-Butylbenzene	**<0.85**	ug/kg	24.1	1	07/28/21 08:05	07/28/21 12:32	98-06-6	
Carbon disulfide	**<0.62**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	75-15-0	
Carbon tetrachloride	**<0.83**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	56-23-5	
Chlorobenzene	**<0.60**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	108-90-7	
Chloroethane	**<1.4**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	75-00-3	
Chloroform	**<0.48**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	67-66-3	
Chloromethane	**<0.77**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	74-87-3	
2-Chlorotoluene	**<0.70**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	95-49-8	
4-Chlorotoluene	**<0.58**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	106-43-4	
Cyclohexanone	**<12.2**	ug/kg	19.3	1	07/28/21 08:05	07/28/21 12:32	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/kg	9.6	1	07/28/21 08:05	07/28/21 12:32	96-12-8	
Dibromochloromethane	**<0.62**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	124-48-1	
1,2-Dibromoethane (EDB)	**<0.52**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	106-93-4	
Dibromomethane	**<0.58**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	74-95-3	
1,2-Dichlorobenzene	**<0.60**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	95-50-1	
1,3-Dichlorobenzene	**<0.69**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	541-73-1	
1,4-Dichlorobenzene	**<0.78**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	106-46-7	
1,1-Dichloroethane	**<0.38**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	75-34-3	
1,2-Dichloroethane	**<0.39**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	540-59-0	
1,1-Dichloroethene	**<0.62**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	75-35-4	
cis-1,2-Dichloroethene	**<0.42**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	156-59-2	
trans-1,2-Dichloroethene	**<0.65**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	156-60-5	
1,2-Dichloropropane	**<0.94**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	78-87-5	
1,3-Dichloropropane	**<0.67**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	142-28-9	
2,2-Dichloropropane	**<0.46**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	594-20-7	

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-01/8-10 **Lab ID: 60375923011** Collected: 07/26/21 10:27 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<0.87**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	563-58-6	
cis-1,3-Dichloropropene	**<0.51**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	10061-01-5	
trans-1,3-Dichloropropene	**<0.44**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.54**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	60-29-7	
Ethylbenzene	**<0.45**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	100-41-4	
n-Heptane	**<4.4**	ug/kg	9.6	1	07/28/21 08:05	07/28/21 12:32	142-82-5	
Hexachloro-1,3-butadiene	**<0.82**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	87-68-3	
n-Hexane	**<0.67**	ug/kg	9.6	1	07/28/21 08:05	07/28/21 12:32	110-54-3	
2-Hexanone	**<2.4**	ug/kg	19.3	1	07/28/21 08:05	07/28/21 12:32	591-78-6	
Iodomethane	**<1.5**	ug/kg	9.6	1	07/28/21 08:05	07/28/21 12:32	74-88-4	
Isopropylbenzene (Cumene)	**<0.55**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	98-82-8	
p-Isopropyltoluene	**<0.66**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	99-87-6	
Methyl acetate	**<1.0**	ug/kg	96.4	1	07/28/21 08:05	07/28/21 12:32	79-20-9	
Methylene Chloride	**<2.6**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.9**	ug/kg	9.6	1	07/28/21 08:05	07/28/21 12:32	108-10-1	
Methyl-tert-butyl ether	**<0.46**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	1634-04-4	
Naphthalene	**3.3J**	ug/kg	9.6	1	07/28/21 08:05	07/28/21 12:32	91-20-3	
n-Propylbenzene	**<0.77**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	103-65-1	
Styrene	**<0.57**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.98**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.96**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	79-34-5	
Tetrachloroethene	**<0.40**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	127-18-4	
Tetrahydrofuran	**<0.75**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	109-99-9	N2
Toluene	**<0.34**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	108-88-3	
1,2,3-Trichlorobenzene	**1.3J**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	87-61-6	
1,2,4-Trichlorobenzene	**0.92J**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	120-82-1	
1,1,1-Trichloroethane	**<0.72**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	71-55-6	
1,1,2-Trichloroethane	**<0.61**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	79-00-5	
Trichloroethene	**<0.70**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	79-01-6	
Trichlorofluoromethane	**<0.59**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	75-69-4	
1,2,3-Trichloropropane	**<2.1**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.8**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.9**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	526-73-8	
1,2,4-Trimethylbenzene	**<0.65**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	95-63-6	
1,3,5-Trimethylbenzene	**<0.60**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	108-67-8	
Vinyl acetate	**<0.54**	ug/kg	96.4	1	07/28/21 08:05	07/28/21 12:32	108-05-4	
Vinyl chloride	**<0.64**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	1330-20-7	
m&p-Xylene	**<0.61**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	179601-23-1	
o-Xylene	**<0.36**	ug/kg	4.8	1	07/28/21 08:05	07/28/21 12:32	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%	80-120	1	07/28/21 08:05	07/28/21 12:32	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120	1	07/28/21 08:05	07/28/21 12:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/28/21 08:05	07/28/21 12:32	2199-69-1	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-01/8-10 **Lab ID: 60375923011** Collected: 07/26/21 10:27 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035							
	Pace Analytical Services - Kansas City							
TPH-GRO	**<0.053**	mg/kg	0.48	1	07/28/21 08:05	07/28/21 12:32		
Surrogates								
Toluene-d8 (S)	98	%	78-122	1	07/28/21 08:05	07/28/21 12:32	2037-26-5	
4-Bromofluorobenzene (S)	103	%	69-133	1	07/28/21 08:05	07/28/21 12:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/28/21 08:05	07/28/21 12:32	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974							
	Pace Analytical Services - Kansas City							
Percent Moisture	**18.7**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-01/11-13 **Lab ID: 60375923012** Collected: 07/26/21 10:32 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.3**	ug/kg	41.6	1	07/27/21 14:19	07/30/21 10:09	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.9**	ug/kg	41.6	1	07/27/21 14:19	07/30/21 10:09	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.6	1	07/27/21 14:19	07/30/21 10:09	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.0**	ug/kg	41.6	1	07/27/21 14:19	07/30/21 10:09	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.6	1	07/27/21 14:19	07/30/21 10:09	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.6	1	07/27/21 14:19	07/30/21 10:09	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.2**	ug/kg	41.6	1	07/27/21 14:19	07/30/21 10:09	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	88	%	35-120	1	07/27/21 14:19	07/30/21 10:09	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.51**	mg/kg	0.95	10	08/04/21 10:12	08/05/21 11:29	7440-36-0	
Arsenic	**12.4**	mg/kg	0.95	10	08/04/21 10:12	08/05/21 11:29	7440-38-2	
Copper	**27.7**	mg/kg	0.95	10	08/04/21 10:12	08/05/21 11:29	7440-50-8	
Lead	**102**	mg/kg	0.48	10	08/04/21 10:12	08/05/21 11:29	7439-92-1	
Zinc	**102**	mg/kg	4.8	10	08/04/21 10:12	08/05/21 11:29	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<3.1**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	83-32-9	
Acenaphthylene	**<3.1**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	208-96-8	
Anthracene	**12.3**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	120-12-7	
Benzo(a)anthracene	**43.7**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	56-55-3	
Benzo(a)pyrene	**36.5**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	50-32-8	
Benzo(b)fluoranthene	**82.9**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	205-99-2	
Benzo(g,h,i)perylene	**29.9**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	191-24-2	
Benzo(k)fluoranthene	**33.5**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	207-08-9	
Chrysene	**61.3**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	218-01-9	
Dibenz(a,h)anthracene	**5.8J**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	53-70-3	
Fluoranthene	**137**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	206-44-0	
Fluorene	**5.5J**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	86-73-7	
Indeno(1,2,3-cd)pyrene	**23.9**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	193-39-5	
Naphthalene	**16.4**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	91-20-3	
Phenanthrene	**72.7**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	85-01-8	
Pyrene	**107**	ug/kg	8.3	1	07/27/21 15:30	07/30/21 13:47	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	70	%	40-120	1	07/27/21 15:30	07/30/21 13:47	321-60-8	
Terphenyl-d14 (S)	80	%	45-130	1	07/27/21 15:30	07/30/21 13:47	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**68.3**	mg/kg	19.0	1	07/27/21 15:30	08/02/21 17:53		
TPH-DRO	**18.3J**	mg/kg	19.0	1	07/27/21 15:30	08/02/21 17:53		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-01/11-13 **Lab ID: 60375923012** Collected: 07/26/21 10:32 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	74	%	30-120	1	07/27/21 15:30	08/02/21 17:53	4165-60-0	
2-Fluorobiphenyl (S)	79	%	40-120	1	07/27/21 15:30	08/02/21 17:53	321-60-8	
Terphenyl-d14 (S)	84	%	45-120	1	07/27/21 15:30	08/02/21 17:53	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**248**	ug/kg	23.2	1	07/28/21 08:05	07/28/21 12:51	67-64-1	
Acrolein	**<87.6**	ug/kg	116	1	07/28/21 08:05	07/28/21 12:51	107-02-8	
Acrylonitrile	**<3.7**	ug/kg	116	1	07/28/21 08:05	07/28/21 12:51	107-13-1	
Benzene	**<0.57**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	71-43-2	
Bromobenzene	**<1.1**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	108-86-1	
Bromochloromethane	**<0.70**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	74-97-5	
Bromodichloromethane	**<0.70**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	75-27-4	
Bromoform	**<0.67**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	75-25-2	
Bromomethane	**<3.4**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	74-83-9	
2-Butanone (MEK)	**44.8**	ug/kg	11.6	1	07/28/21 08:05	07/28/21 12:51	78-93-3	
n-Butylbenzene	**<0.75**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	104-51-8	
sec-Butylbenzene	**<0.85**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	135-98-8	
tert-Butylbenzene	**<1.0**	ug/kg	29.0	1	07/28/21 08:05	07/28/21 12:51	98-06-6	
Carbon disulfide	**5.7J**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	75-15-0	
Carbon tetrachloride	**<0.99**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	56-23-5	
Chlorobenzene	**<0.73**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	108-90-7	
Chloroethane	**<1.7**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	75-00-3	
Chloroform	**<0.57**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	67-66-3	
Chloromethane	**<0.92**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	74-87-3	
2-Chlorotoluene	**<0.84**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	95-49-8	
4-Chlorotoluene	**<0.69**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	106-43-4	
Cyclohexanone	**<14.7**	ug/kg	23.2	1	07/28/21 08:05	07/28/21 12:51	108-94-1	
1,2-Dibromo-3-chloropropane	**<2.1**	ug/kg	11.6	1	07/28/21 08:05	07/28/21 12:51	96-12-8	
Dibromochloromethane	**<0.75**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	124-48-1	
1,2-Dibromoethane (EDB)	**<0.62**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	106-93-4	
Dibromomethane	**<0.69**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	74-95-3	
1,2-Dichlorobenzene	**<0.72**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	95-50-1	
1,3-Dichlorobenzene	**<0.83**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	106-46-7	
1,1-Dichloroethane	**<0.45**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	75-34-3	
1,2-Dichloroethane	**<0.46**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	107-06-2	
1,2-Dichloroethene (Total)	**<1.3**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	540-59-0	
1,1-Dichloroethene	**<0.74**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	75-35-4	
cis-1,2-Dichloroethene	**<0.50**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	156-59-2	
trans-1,2-Dichloroethene	**<0.79**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	156-60-5	
1,2-Dichloropropane	**<1.1**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	78-87-5	
1,3-Dichloropropane	**<0.80**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	142-28-9	
2,2-Dichloropropane	**<0.55**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	594-20-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-01/11-13 **Lab ID: 60375923012** Collected: 07/26/21 10:32 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<1.0**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	563-58-6	
cis-1,3-Dichloropropene	**<0.62**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	10061-01-5	
trans-1,3-Dichloropropene	**<0.53**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.65**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	60-29-7	
Ethylbenzene	**<0.54**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	100-41-4	
n-Heptane	**<5.2**	ug/kg	11.6	1	07/28/21 08:05	07/28/21 12:51	142-82-5	
Hexachloro-1,3-butadiene	**<0.99**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	87-68-3	
n-Hexane	**<0.80**	ug/kg	11.6	1	07/28/21 08:05	07/28/21 12:51	110-54-3	
2-Hexanone	**<2.9**	ug/kg	23.2	1	07/28/21 08:05	07/28/21 12:51	591-78-6	
Iodomethane	**<1.7**	ug/kg	11.6	1	07/28/21 08:05	07/28/21 12:51	74-88-4	
Isopropylbenzene (Cumene)	**<0.66**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	99-87-6	
Methyl acetate	**<1.3**	ug/kg	116	1	07/28/21 08:05	07/28/21 12:51	79-20-9	
Methylene Chloride	**<3.2**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.5**	ug/kg	11.6	1	07/28/21 08:05	07/28/21 12:51	108-10-1	
Methyl-tert-butyl ether	**<0.56**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	1634-04-4	
Naphthalene	**<0.95**	ug/kg	11.6	1	07/28/21 08:05	07/28/21 12:51	91-20-3	
n-Propylbenzene	**<0.93**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	103-65-1	
Styrene	**<0.68**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.2**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.2**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	79-34-5	
Tetrachloroethene	**<0.48**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	127-18-4	
Tetrahydrofuran	**<0.91**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	109-99-9	N2
Toluene	**<0.41**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	108-88-3	
1,2,3-Trichlorobenzene	**<0.92**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	87-61-6	
1,2,4-Trichlorobenzene	**<0.92**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	120-82-1	
1,1,1-Trichloroethane	**<0.87**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	71-55-6	
1,1,2-Trichloroethane	**<0.73**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	79-00-5	
Trichloroethene	**<0.84**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	79-01-6	
Trichlorofluoromethane	**<0.71**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	75-69-4	
1,2,3-Trichloropropane	**<2.5**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<5.8**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	76-13-1	N2
1,2,3-Trimethylbenzene	**<2.3**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	526-73-8	
1,2,4-Trimethylbenzene	**<0.78**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	95-63-6	
1,3,5-Trimethylbenzene	**<0.73**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	108-67-8	
Vinyl acetate	**<0.65**	ug/kg	116	1	07/28/21 08:05	07/28/21 12:51	108-05-4	
Vinyl chloride	**<0.77**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	75-01-4	
Xylene (Total)	**<1.3**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	1330-20-7	
m&p-Xylene	**<0.73**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	179601-23-1	
o-Xylene	**<0.43**	ug/kg	5.8	1	07/28/21 08:05	07/28/21 12:51	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%	80-120	1	07/28/21 08:05	07/28/21 12:51	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-120	1	07/28/21 08:05	07/28/21 12:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1	07/28/21 08:05	07/28/21 12:51	2199-69-1	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-01/11-13 **Lab ID: 60375923012** Collected: 07/26/21 10:32 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035							
	Pace Analytical Services - Kansas City							
TPH-GRO	**<0.063**	mg/kg	0.58	1	07/28/21 08:05	07/28/21 12:51		
Surrogates								
Toluene-d8 (S)	101	%	78-122	1	07/28/21 08:05	07/28/21 12:51	2037-26-5	
4-Bromofluorobenzene (S)	107	%	69-133	1	07/28/21 08:05	07/28/21 12:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1	07/28/21 08:05	07/28/21 12:51	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974							
	Pace Analytical Services - Kansas City							
Percent Moisture	**21.5**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-03/1-3 **Lab ID: 60375923013** Collected: 07/26/21 10:56 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.5**	ug/kg	38.2	1	07/27/21 14:19	07/30/21 10:27	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.1**	ug/kg	38.2	1	07/27/21 14:19	07/30/21 10:27	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.2**	ug/kg	38.2	1	07/27/21 14:19	07/30/21 10:27	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.2**	ug/kg	38.2	1	07/27/21 14:19	07/30/21 10:27	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	38.2	1	07/27/21 14:19	07/30/21 10:27	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	38.2	1	07/27/21 14:19	07/30/21 10:27	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.5**	ug/kg	38.2	1	07/27/21 14:19	07/30/21 10:27	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	83	%	35-120	1	07/27/21 14:19	07/30/21 10:27	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.54**	mg/kg	1.0	10	08/04/21 10:12	08/05/21 11:36	7440-36-0	
Arsenic	**6.7**	mg/kg	1.0	10	08/04/21 10:12	08/05/21 11:36	7440-38-2	
Copper	**15.6**	mg/kg	1.0	10	08/04/21 10:12	08/05/21 11:36	7440-50-8	
Lead	**36.5**	mg/kg	0.50	10	08/04/21 10:12	08/05/21 11:36	7439-92-1	
Zinc	**45.2**	mg/kg	5.0	10	08/04/21 10:12	08/05/21 11:36	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**15.1**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	83-32-9	
Acenaphthylene	**4.7J**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	208-96-8	
Anthracene	**24.5**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	120-12-7	
Benzo(a)anthracene	**25.0**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	56-55-3	
Benzo(a)pyrene	**18.0**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	50-32-8	
Benzo(b)fluoranthene	**36.1**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	205-99-2	
Benzo(g,h,i)perylene	**14.5**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	191-24-2	
Benzo(k)fluoranthene	**14.9**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	207-08-9	
Chrysene	**29.6**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	218-01-9	
Dibenz(a,h)anthracene	**<3.2**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	53-70-3	
Fluoranthene	**83.5**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	206-44-0	
Fluorene	**26.0**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	86-73-7	
Indeno(1,2,3-cd)pyrene	**10.9**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	193-39-5	
Naphthalene	**92.3**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	91-20-3	
Phenanthrene	**264**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	85-01-8	
Pyrene	**77.8**	ug/kg	7.5	1	07/27/21 15:30	07/30/21 14:05	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	67	%	40-120	1	07/27/21 15:30	07/30/21 14:05	321-60-8	
Terphenyl-d14 (S)	76	%	45-130	1	07/27/21 15:30	07/30/21 14:05	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**46.8**	mg/kg	17.0	1	07/27/21 15:30	08/02/21 18:12		
TPH-DRO	**31.0**	mg/kg	17.0	1	07/27/21 15:30	08/02/21 18:12		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-03/1-3 **Lab ID: 60375923013** Collected: 07/26/21 10:56 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	71	%	30-120	1	07/27/21 15:30	08/02/21 18:12	4165-60-0	
2-Fluorobiphenyl (S)	72	%	40-120	1	07/27/21 15:30	08/02/21 18:12	321-60-8	
Terphenyl-d14 (S)	72	%	45-120	1	07/27/21 15:30	08/02/21 18:12	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**<13.9**	ug/kg	17.2	1	07/29/21 11:34	07/29/21 14:17	67-64-1	
Acrolein	**<64.9**	ug/kg	85.9	1	07/29/21 11:34	07/29/21 14:17	107-02-8	
Acrylonitrile	**<2.7**	ug/kg	85.9	1	07/29/21 11:34	07/29/21 14:17	107-13-1	
Benzene	**0.54J**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	71-43-2	
Bromobenzene	**<0.81**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	108-86-1	
Bromochloromethane	**<0.52**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	74-97-5	
Bromodichloromethane	**<0.52**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	75-27-4	
Bromoform	**<0.49**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	75-25-2	
Bromomethane	**<2.5**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	74-83-9	
2-Butanone (MEK)	**<2.9**	ug/kg	8.6	1	07/29/21 11:34	07/29/21 14:17	78-93-3	
n-Butylbenzene	**<0.56**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	104-51-8	
sec-Butylbenzene	**<0.63**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	135-98-8	
tert-Butylbenzene	**<0.76**	ug/kg	21.5	1	07/29/21 11:34	07/29/21 14:17	98-06-6	
Carbon disulfide	**1.6J**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	75-15-0	
Carbon tetrachloride	**<0.74**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	56-23-5	
Chlorobenzene	**<0.54**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	108-90-7	
Chloroethane	**<1.3**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	75-00-3	
Chloroform	**<0.42**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	67-66-3	
Chloromethane	**<0.69**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	74-87-3	
2-Chlorotoluene	**<0.63**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	95-49-8	
4-Chlorotoluene	**<0.52**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	106-43-4	
Cyclohexanone	**<10.9**	ug/kg	17.2	1	07/29/21 11:34	07/29/21 14:17	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.6**	ug/kg	8.6	1	07/29/21 11:34	07/29/21 14:17	96-12-8	
Dibromochloromethane	**<0.55**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	124-48-1	
1,2-Dibromoethane (EDB)	**<0.46**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	106-93-4	
Dibromomethane	**<0.52**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	74-95-3	
1,2-Dichlorobenzene	**<0.54**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	95-50-1	
1,3-Dichlorobenzene	**<0.62**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	541-73-1	
1,4-Dichlorobenzene	**<0.70**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	106-46-7	
1,1-Dichloroethane	**<0.33**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	75-34-3	
1,2-Dichloroethane	**<0.34**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	107-06-2	
1,2-Dichloroethene (Total)	**<0.95**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	540-59-0	
1,1-Dichloroethene	**<0.55**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	75-35-4	
cis-1,2-Dichloroethene	**<0.37**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	156-59-2	
trans-1,2-Dichloroethene	**<0.58**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	156-60-5	
1,2-Dichloropropane	**<0.84**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	78-87-5	
1,3-Dichloropropane	**<0.59**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	142-28-9	
2,2-Dichloropropane	**<0.41**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	594-20-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-03/1-3 **Lab ID: 60375923013** Collected: 07/26/21 10:56 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<0.77**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	563-58-6	
cis-1,3-Dichloropropene	**<0.46**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	10061-01-5	
trans-1,3-Dichloropropene	**<0.39**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.48**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	60-29-7	
Ethylbenzene	**<0.40**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	100-41-4	
n-Heptane	**<3.9**	ug/kg	8.6	1	07/29/21 11:34	07/29/21 14:17	142-82-5	
Hexachloro-1,3-butadiene	**<0.73**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	87-68-3	
n-Hexane	**<0.59**	ug/kg	8.6	1	07/29/21 11:34	07/29/21 14:17	110-54-3	
2-Hexanone	**<2.1**	ug/kg	17.2	1	07/29/21 11:34	07/29/21 14:17	591-78-6	
Iodomethane	**<1.3**	ug/kg	8.6	1	07/29/21 11:34	07/29/21 14:17	74-88-4	
Isopropylbenzene (Cumene)	**<0.49**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	98-82-8	
p-Isopropyltoluene	**<0.59**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	99-87-6	
Methyl acetate	**<0.93**	ug/kg	85.9	1	07/29/21 11:34	07/29/21 14:17	79-20-9	
Methylene Chloride	**<2.4**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.6**	ug/kg	8.6	1	07/29/21 11:34	07/29/21 14:17	108-10-1	
Methyl-tert-butyl ether	**<0.41**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	1634-04-4	
Naphthalene	**<0.70**	ug/kg	8.6	1	07/29/21 11:34	07/29/21 14:17	91-20-3	
n-Propylbenzene	**<0.69**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	103-65-1	
Styrene	**<0.51**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.88**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.86**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	79-34-5	
Tetrachloroethene	**<0.35**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	127-18-4	
Tetrahydrofuran	**<0.67**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	109-99-9	N2
Toluene	**0.30J**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	108-88-3	
1,2,3-Trichlorobenzene	**<0.68**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	87-61-6	
1,2,4-Trichlorobenzene	**<0.68**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	120-82-1	
1,1,1-Trichloroethane	**<0.64**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	71-55-6	
1,1,2-Trichloroethane	**<0.54**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	79-00-5	
Trichloroethene	**<0.62**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	79-01-6	
Trichlorofluoromethane	**<0.53**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	75-69-4	
1,2,3-Trichloropropane	**<1.8**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.3**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.7**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	526-73-8	
1,2,4-Trimethylbenzene	**<0.58**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	95-63-6	
1,3,5-Trimethylbenzene	**<0.54**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	108-67-8	
Vinyl acetate	**<0.48**	ug/kg	85.9	1	07/29/21 11:34	07/29/21 14:17	108-05-4	
Vinyl chloride	**<0.57**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	75-01-4	
Xylene (Total)	**<0.98**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	1330-20-7	
m&p-Xylene	**<0.54**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	179601-23-1	
o-Xylene	**<0.32**	ug/kg	4.3	1	07/29/21 11:34	07/29/21 14:17	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%	80-120	1	07/29/21 11:34	07/29/21 14:17	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-120	1	07/29/21 11:34	07/29/21 14:17	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/29/21 11:34	07/29/21 14:17	2199-69-1	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-03/1-3 **Lab ID: 60375923013** Collected: 07/26/21 10:56 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035							
	Pace Analytical Services - Kansas City							
TPH-GRO	**<0.047**	mg/kg	0.43	1	07/29/21 11:34	07/29/21 14:17		
Surrogates								
Toluene-d8 (S)	98	%	78-122	1	07/29/21 11:34	07/29/21 14:17	2037-26-5	
4-Bromofluorobenzene (S)	105	%	69-133	1	07/29/21 11:34	07/29/21 14:17	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/29/21 11:34	07/29/21 14:17	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974							
	Pace Analytical Services - Kansas City							
Percent Moisture	**15.2**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-03/4-6 **Lab ID: 60375923014** Collected: 07/26/21 11:18 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.0**	ug/kg	36.3	1	07/27/21 14:19	07/30/21 11:20	12674-11-2	
PCB-1221 (Aroclor 1221)	**<8.6**	ug/kg	36.3	1	07/27/21 14:19	07/30/21 11:20	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.0**	ug/kg	36.3	1	07/27/21 14:19	07/30/21 11:20	11141-16-5	
PCB-1242 (Aroclor 1242)	**<8.7**	ug/kg	36.3	1	07/27/21 14:19	07/30/21 11:20	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.4**	ug/kg	36.3	1	07/27/21 14:19	07/30/21 11:20	12672-29-6	
PCB-1254 (Aroclor 1254)	**9.0J**	ug/kg	36.3	1	07/27/21 14:19	07/30/21 11:20	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.1**	ug/kg	36.3	1	07/27/21 14:19	07/30/21 11:20	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	77	%	35-120	1	07/27/21 14:19	07/30/21 11:20	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.45**	mg/kg	0.84	10	08/04/21 10:12	08/05/21 11:37	7440-36-0	
Arsenic	**6.9**	mg/kg	0.84	10	08/04/21 10:12	08/05/21 11:37	7440-38-2	
Copper	**43.7**	mg/kg	0.84	10	08/04/21 10:12	08/05/21 11:37	7440-50-8	
Lead	**48.2**	mg/kg	0.42	10	08/04/21 10:12	08/05/21 11:37	7439-92-1	
Zinc	**96.3**	mg/kg	4.2	10	08/04/21 10:12	08/05/21 11:37	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**269**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	83-32-9	
Acenaphthylene	**91.3**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	208-96-8	
Anthracene	**575**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	120-12-7	
Benzo(a)anthracene	**1000**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	56-55-3	
Benzo(a)pyrene	**821**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	50-32-8	
Benzo(b)fluoranthene	**1360**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	205-99-2	
Benzo(g,h,i)perylene	**444**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	191-24-2	
Benzo(k)fluoranthene	**488**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	207-08-9	
Chrysene	**924**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	218-01-9	
Dibenz(a,h)anthracene	**110**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	53-70-3	
Fluoranthene	**2710**	ug/kg	69.2	10	07/27/21 15:30	08/02/21 15:41	206-44-0	
Fluorene	**249**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	86-73-7	
Indeno(1,2,3-cd)pyrene	**384**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	193-39-5	
Naphthalene	**211**	ug/kg	6.9	1	07/27/21 15:30	07/30/21 14:22	91-20-3	
Phenanthrene	**2400**	ug/kg	69.2	10	07/27/21 15:30	08/02/21 15:41	85-01-8	
Pyrene	**2080**	ug/kg	69.2	10	07/27/21 15:30	08/02/21 15:41	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	65	%	40-120	1	07/27/21 15:30	07/30/21 14:22	321-60-8	
Terphenyl-d14 (S)	88	%	45-130	1	07/27/21 15:30	07/30/21 14:22	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**298**	mg/kg	15.7	1	07/27/21 15:30	08/02/21 18:32		
TPH-DRO	**85.0**	mg/kg	15.7	1	07/27/21 15:30	08/02/21 18:32		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-03/4-6 **Lab ID: 60375923014** Collected: 07/26/21 11:18 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	72	%	30-120	1	07/27/21 15:30	08/02/21 18:32	4165-60-0	
2-Fluorobiphenyl (S)	75	%	40-120	1	07/27/21 15:30	08/02/21 18:32	321-60-8	
Terphenyl-d14 (S)	71	%	45-120	1	07/27/21 15:30	08/02/21 18:32	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**26.3**	ug/kg	18.8	1	07/29/21 11:34	07/29/21 14:32	67-64-1	
Acrolein	**<70.9**	ug/kg	93.8	1	07/29/21 11:34	07/29/21 14:32	107-02-8	
Acrylonitrile	**<3.0**	ug/kg	93.8	1	07/29/21 11:34	07/29/21 14:32	107-13-1	
Benzene	**0.72J**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	71-43-2	
Bromobenzene	**<0.88**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	108-86-1	
Bromochloromethane	**<0.56**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	74-97-5	
Bromodichloromethane	**<0.56**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	75-27-4	
Bromoform	**<0.54**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	75-25-2	
Bromomethane	**<2.8**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	74-83-9	
2-Butanone (MEK)	**5.9J**	ug/kg	9.4	1	07/29/21 11:34	07/29/21 14:32	78-93-3	
n-Butylbenzene	**<0.61**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	104-51-8	
sec-Butylbenzene	**<0.69**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	135-98-8	
tert-Butylbenzene	**<0.83**	ug/kg	23.5	1	07/29/21 11:34	07/29/21 14:32	98-06-6	
Carbon disulfide	**1.4J**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	75-15-0	
Carbon tetrachloride	**<0.80**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	56-23-5	
Chlorobenzene	**<0.59**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	108-90-7	
Chloroethane	**<1.4**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	75-00-3	
Chloroform	**<0.46**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	67-66-3	
Chloromethane	**<0.75**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	74-87-3	
2-Chlorotoluene	**<0.68**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	95-49-8	
4-Chlorotoluene	**<0.56**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	106-43-4	
Cyclohexanone	**<11.9**	ug/kg	18.8	1	07/29/21 11:34	07/29/21 14:32	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.7**	ug/kg	9.4	1	07/29/21 11:34	07/29/21 14:32	96-12-8	
Dibromochloromethane	**<0.61**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	124-48-1	
1,2-Dibromoethane (EDB)	**<0.50**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	106-93-4	
Dibromomethane	**<0.56**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	74-95-3	
1,2-Dichlorobenzene	**<0.59**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	95-50-1	
1,3-Dichlorobenzene	**<0.67**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	541-73-1	
1,4-Dichlorobenzene	**<0.76**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	106-46-7	
1,1-Dichloroethane	**<0.37**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	75-34-3	
1,2-Dichloroethane	**<0.38**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	107-06-2	
1,2-Dichloroethene (Total)	**<1.0**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	540-59-0	
1,1-Dichloroethene	**<0.60**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	75-35-4	
cis-1,2-Dichloroethene	**<0.40**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	156-59-2	
trans-1,2-Dichloroethene	**<0.64**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	156-60-5	
1,2-Dichloropropane	**<0.92**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	78-87-5	
1,3-Dichloropropane	**<0.65**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	142-28-9	
2,2-Dichloropropane	**<0.45**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	594-20-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-03/4-6 **Lab ID: 60375923014** Collected: 07/26/21 11:18 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<0.84**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	10061-01-5	
trans-1,3-Dichloropropene	**<0.43**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.53**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	60-29-7	
Ethylbenzene	**<0.43**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	100-41-4	
n-Heptane	**<4.3**	ug/kg	9.4	1	07/29/21 11:34	07/29/21 14:32	142-82-5	
Hexachloro-1,3-butadiene	**<0.80**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	87-68-3	
n-Hexane	**<0.65**	ug/kg	9.4	1	07/29/21 11:34	07/29/21 14:32	110-54-3	
2-Hexanone	**<2.3**	ug/kg	18.8	1	07/29/21 11:34	07/29/21 14:32	591-78-6	
Iodomethane	**<1.4**	ug/kg	9.4	1	07/29/21 11:34	07/29/21 14:32	74-88-4	
Isopropylbenzene (Cumene)	**<0.53**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	98-82-8	
p-Isopropyltoluene	**<0.65**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	99-87-6	
Methyl acetate	**<1.0**	ug/kg	93.8	1	07/29/21 11:34	07/29/21 14:32	79-20-9	
Methylene Chloride	**<2.6**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.8**	ug/kg	9.4	1	07/29/21 11:34	07/29/21 14:32	108-10-1	
Methyl-tert-butyl ether	**<0.45**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	1634-04-4	
Naphthalene	**<0.77**	ug/kg	9.4	1	07/29/21 11:34	07/29/21 14:32	91-20-3	
n-Propylbenzene	**<0.75**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	103-65-1	
Styrene	**<0.55**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.96**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.94**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	79-34-5	
Tetrachloroethene	**<0.39**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	127-18-4	
Tetrahydrofuran	**<0.73**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	109-99-9	N2
Toluene	**<0.33**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	108-88-3	
1,2,3-Trichlorobenzene	**<0.75**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	87-61-6	
1,2,4-Trichlorobenzene	**<0.75**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	120-82-1	
1,1,1-Trichloroethane	**<0.70**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	71-55-6	
1,1,2-Trichloroethane	**<0.59**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	79-00-5	
Trichloroethene	**<0.68**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	79-01-6	
Trichlorofluoromethane	**<0.58**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	75-69-4	
1,2,3-Trichloropropane	**<2.0**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.7**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.9**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	526-73-8	
1,2,4-Trimethylbenzene	**<0.63**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	95-63-6	
1,3,5-Trimethylbenzene	**<0.59**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	108-67-8	
Vinyl acetate	**<0.53**	ug/kg	93.8	1	07/29/21 11:34	07/29/21 14:32	108-05-4	
Vinyl chloride	**<0.62**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	1330-20-7	
m&p-Xylene	**<0.59**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	179601-23-1	
o-Xylene	**<0.35**	ug/kg	4.7	1	07/29/21 11:34	07/29/21 14:32	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	80-120	1	07/29/21 11:34	07/29/21 14:32	2037-26-5	
4-Bromofluorobenzene (S)	104	%	80-120	1	07/29/21 11:34	07/29/21 14:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120	1	07/29/21 11:34	07/29/21 14:32	2199-69-1	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-03/4-6 **Lab ID: 60375923014** Collected: 07/26/21 11:18 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035							
	Pace Analytical Services - Kansas City							
TPH-GRO	**<0.051**	mg/kg	0.47	1	07/29/21 11:34	07/29/21 14:32		
Surrogates								
Toluene-d8 (S)	99	%	78-122	1	07/29/21 11:34	07/29/21 14:32	2037-26-5	
4-Bromofluorobenzene (S)	104	%	69-133	1	07/29/21 11:34	07/29/21 14:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120	1	07/29/21 11:34	07/29/21 14:32	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974							
	Pace Analytical Services - Kansas City							
Percent Moisture	**9.7**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: TB-5 **Lab ID: 60375923015** Collected: 07/26/21 08:12 Received: 07/27/21 05:45 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	**<2.5**	ug/L	10.0	1		08/03/21 13:47	67-64-1	
Acetonitrile	**<1.1**	ug/L	10.0	1		08/03/21 13:47	75-05-8	
Acrolein	**<4.0**	ug/L	50.0	1		08/03/21 13:47	107-02-8	
Acrylonitrile	**<1.4**	ug/L	20.0	1		08/03/21 13:47	107-13-1	
Benzene	**<0.14**	ug/L	1.0	1		08/03/21 13:47	71-43-2	
Bromobenzene	**<0.088**	ug/L	1.0	1		08/03/21 13:47	108-86-1	
Bromochloromethane	**<0.20**	ug/L	1.0	1		08/03/21 13:47	74-97-5	
Bromodichloromethane	**<0.16**	ug/L	1.0	1		08/03/21 13:47	75-27-4	
Bromoform	**<0.68**	ug/L	1.0	1		08/03/21 13:47	75-25-2	
Bromomethane	**<0.46**	ug/L	5.0	1		08/03/21 13:47	74-83-9	
2-Butanone (MEK)	**<0.98**	ug/L	10.0	1		08/03/21 13:47	78-93-3	
n-Butylbenzene	**<0.15**	ug/L	1.0	1		08/03/21 13:47	104-51-8	
sec-Butylbenzene	**<0.11**	ug/L	1.0	1		08/03/21 13:47	135-98-8	
tert-Butylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 13:47	98-06-6	
Carbon disulfide	**<0.98**	ug/L	5.0	1		08/03/21 13:47	75-15-0	
Carbon tetrachloride	**<0.17**	ug/L	1.0	1		08/03/21 13:47	56-23-5	
Chlorobenzene	**<0.089**	ug/L	1.0	1		08/03/21 13:47	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	1		08/03/21 13:47	75-00-3	
2-Chloroethylvinyl ether	**<1.8**	ug/L	10.0	1		08/03/21 13:47	110-75-8	c2
Chloroform	**<0.22**	ug/L	1.0	1		08/03/21 13:47	67-66-3	
Chloromethane	**<0.28**	ug/L	1.0	1		08/03/21 13:47	74-87-3	
2-Chlorotoluene	**<0.11**	ug/L	1.0	1		08/03/21 13:47	95-49-8	
4-Chlorotoluene	**<0.15**	ug/L	1.0	1		08/03/21 13:47	106-43-4	
Cyclohexane	**<0.24**	ug/L	1.0	1		08/03/21 13:47	110-82-7	
Cyclohexanone	**<3.3**	ug/L	20.0	1		08/03/21 13:47	108-94-1	
1,2-Dibromo-3-chloropropane	**<0.78**	ug/L	2.5	1		08/03/21 13:47	96-12-8	
Dibromochloromethane	**<0.30**	ug/L	1.0	1		08/03/21 13:47	124-48-1	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	1		08/03/21 13:47	106-93-4	
Dibromomethane	**<0.11**	ug/L	1.0	1		08/03/21 13:47	74-95-3	
1,2-Dichlorobenzene	**<0.12**	ug/L	1.0	1		08/03/21 13:47	95-50-1	
1,3-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 13:47	541-73-1	
1,4-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/03/21 13:47	106-46-7	
Dichlorodifluoromethane	**<0.20**	ug/L	1.0	1		08/03/21 13:47	75-71-8	
1,1-Dichloroethane	**<0.12**	ug/L	1.0	1		08/03/21 13:47	75-34-3	
1,2-Dichloroethane	**<0.21**	ug/L	1.0	1		08/03/21 13:47	107-06-2	
1,2-Dichloroethene (Total)	**<0.22**	ug/L	1.0	1		08/03/21 13:47	540-59-0	
1,1-Dichloroethene	**<0.22**	ug/L	1.0	1		08/03/21 13:47	75-35-4	
cis-1,2-Dichloroethene	**<0.13**	ug/L	1.0	1		08/03/21 13:47	156-59-2	
trans-1,2-Dichloroethene	**<0.10**	ug/L	1.0	1		08/03/21 13:47	156-60-5	
1,2-Dichloropropane	**<0.14**	ug/L	1.0	1		08/03/21 13:47	78-87-5	
1,3-Dichloropropane	**<0.10**	ug/L	1.0	1		08/03/21 13:47	142-28-9	
2,2-Dichloropropane	**<0.16**	ug/L	1.0	1		08/03/21 13:47	594-20-7	
1,1-Dichloropropene	**<0.14**	ug/L	1.0	1		08/03/21 13:47	563-58-6	
cis-1,3-Dichloropropene	**<0.078**	ug/L	1.0	1		08/03/21 13:47	10061-01-5	
trans-1,3-Dichloropropene	**<0.18**	ug/L	1.0	1		08/03/21 13:47	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.23**	ug/L	1.0	1		08/03/21 13:47	60-29-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: TB-5 **Lab ID: 60375923015** Collected: 07/26/21 08:12 Received: 07/27/21 05:45 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Kansas City							
1,4-Dioxane (p-Dioxane)	**<4.4**	ug/L	100	1		08/03/21 13:47	123-91-1	
Ethylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 13:47	100-41-4	
n-Heptane	**<2.6**	ug/L	10.0	1		08/03/21 13:47	142-82-5	
Hexachloro-1,3-butadiene	**<0.42**	ug/L	1.0	1		08/03/21 13:47	87-68-3	
n-Hexane	**<0.22**	ug/L	10.0	1		08/03/21 13:47	110-54-3	
2-Hexanone	**<1.1**	ug/L	10.0	1		08/03/21 13:47	591-78-6	
Isopropylbenzene (Cumene)	**<0.097**	ug/L	1.0	1		08/03/21 13:47	98-82-8	
p-Isopropyltoluene	**<0.13**	ug/L	1.0	1		08/03/21 13:47	99-87-6	
Methyl acetate	**<0.87**	ug/L	1.0	1		08/03/21 13:47	79-20-9	
Methylcyclohexane	**<0.12**	ug/L	1.0	1		08/03/21 13:47	108-87-2	
Methylene Chloride	**<0.39**	ug/L	1.0	1		08/03/21 13:47	75-09-2	
1-Methylnaphthalene	**<2.6**	ug/L	10.0	1		08/03/21 13:47	90-12-0	
2-Methylnaphthalene	**<2.7**	ug/L	10.0	1		08/03/21 13:47	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<0.74**	ug/L	10.0	1		08/03/21 13:47	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/L	1.0	1		08/03/21 13:47	1634-04-4	
Naphthalene	**<0.82**	ug/L	10.0	1		08/03/21 13:47	91-20-3	
n-Propylbenzene	**<0.12**	ug/L	1.0	1		08/03/21 13:47	103-65-1	
Styrene	**<0.12**	ug/L	1.0	1		08/03/21 13:47	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.084**	ug/L	1.0	1		08/03/21 13:47	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.15**	ug/L	1.0	1		08/03/21 13:47	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.0	1		08/03/21 13:47	127-18-4	
Tetrahydrofuran	**<2.8**	ug/L	5.0	1		08/03/21 13:47	109-99-9	
Toluene	**<0.25**	ug/L	1.0	1		08/03/21 13:47	108-88-3	
1,2,3-Trichlorobenzene	**<0.93**	ug/L	1.0	1		08/03/21 13:47	87-61-6	
1,2,4-Trichlorobenzene	**<0.73**	ug/L	1.0	1		08/03/21 13:47	120-82-1	
1,1,1-Trichloroethane	**<0.11**	ug/L	1.0	1		08/03/21 13:47	71-55-6	
1,1,2-Trichloroethane	**<0.14**	ug/L	1.0	1		08/03/21 13:47	79-00-5	
Trichloroethene	**<0.21**	ug/L	1.0	1		08/03/21 13:47	79-01-6	
Trichlorofluoromethane	**<0.16**	ug/L	1.0	1		08/03/21 13:47	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	2.5	1		08/03/21 13:47	96-18-4	
1,2,3-Trimethylbenzene	**<0.93**	ug/L	1.0	1		08/03/21 13:47	526-73-8	
1,2,4-Trimethylbenzene	**<0.32**	ug/L	1.0	1		08/03/21 13:47	95-63-6	
1,3,5-Trimethylbenzene	**<0.090**	ug/L	1.0	1		08/03/21 13:47	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	1		08/03/21 13:47	75-01-4	
Xylene (Total)	**<0.28**	ug/L	3.0	1		08/03/21 13:47	1330-20-7	
m&p-Xylene	**<0.22**	ug/L	2.0	1		08/03/21 13:47	179601-23-1	
o-Xylene	**<0.082**	ug/L	1.0	1		08/03/21 13:47	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	80-120	1		08/03/21 13:47	460-00-4	
Toluene-d8 (S)	99	%	80-120	1		08/03/21 13:47	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1		08/03/21 13:47	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/03/21 13:47		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-02/2-3 **Lab ID: 60375923016** Collected: 07/26/21 11:41 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10**	ug/kg	40.1	1	07/27/21 14:19	07/30/21 11:38	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.1	1	07/27/21 14:19	07/30/21 11:38	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.1	1	07/27/21 14:19	07/30/21 11:38	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.1	1	07/27/21 14:19	07/30/21 11:38	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.1	1	07/27/21 14:19	07/30/21 11:38	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.1	1	07/27/21 14:19	07/30/21 11:38	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.1	1	07/27/21 14:19	07/30/21 11:38	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	78	%	35-120	1	07/27/21 14:19	07/30/21 11:38	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.55**	mg/kg	1.0	10	08/04/21 10:12	08/05/21 11:39	7440-36-0	M1
Arsenic	**9.4**	mg/kg	1.0	10	08/04/21 10:12	08/05/21 11:39	7440-38-2	
Copper	**16.6**	mg/kg	1.0	10	08/04/21 10:12	08/05/21 11:39	7440-50-8	
Lead	**14.8**	mg/kg	0.51	10	08/04/21 10:12	08/05/21 11:39	7439-92-1	M1,R1
Zinc	**56.8**	mg/kg	5.1	10	08/04/21 10:12	08/05/21 11:39	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**20.7**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	83-32-9	
Acenaphthylene	**5.4J**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	208-96-8	
Anthracene	**29.3**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	120-12-7	
Benzo(a)anthracene	**69.2**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	56-55-3	M1
Benzo(a)pyrene	**51.6**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	50-32-8	
Benzo(b)fluoranthene	**86.8**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	205-99-2	M1
Benzo(g,h,i)perylene	**33.4**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	191-24-2	
Benzo(k)fluoranthene	**46.6**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	207-08-9	
Chrysene	**63.3**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	218-01-9	M1
Dibenz(a,h)anthracene	**<3.5**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	53-70-3	
Fluoranthene	**175**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	206-44-0	M1
Fluorene	**20.0**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	86-73-7	
Indeno(1,2,3-cd)pyrene	**28.6**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	193-39-5	
Naphthalene	**8.7**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	91-20-3	
Phenanthrene	**94.1**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	85-01-8	M1
Pyrene	**149**	ug/kg	8.0	1	07/27/21 15:30	07/30/21 14:39	129-00-0	M1
Surrogates								
2-Fluorobiphenyl (S)	69	%	40-120	1	07/27/21 15:30	07/30/21 14:39	321-60-8	
Terphenyl-d14 (S)	78	%	45-130	1	07/27/21 15:30	07/30/21 14:39	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**11.2J**	mg/kg	18.3	1	07/27/21 15:30	08/03/21 09:43		
TPH-DRO	**5.1J**	mg/kg	18.3	1	07/27/21 15:30	08/03/21 09:43		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-02/2-3 **Lab ID: 60375923016** Collected: 07/26/21 11:41 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	71	%	30-120	1	07/27/21 15:30	08/03/21 09:43	4165-60-0	
2-Fluorobiphenyl (S)	77	%	40-120	1	07/27/21 15:30	08/03/21 09:43	321-60-8	
Terphenyl-d14 (S)	81	%	45-120	1	07/27/21 15:30	08/03/21 09:43	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**<16.1**	ug/kg	19.8	1	07/29/21 11:34	07/29/21 14:48	67-64-1	R1
Acrolein	**<74.9**	ug/kg	99.1	1	07/29/21 11:34	07/29/21 14:48	107-02-8	
Acrylonitrile	**<3.1**	ug/kg	99.1	1	07/29/21 11:34	07/29/21 14:48	107-13-1	R1
Benzene	**<0.49**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	71-43-2	
Bromobenzene	**<0.93**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	108-86-1	
Bromochloromethane	**<0.60**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	74-97-5	
Bromodichloromethane	**<0.60**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	75-27-4	
Bromoform	**<0.57**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	75-25-2	R1
Bromomethane	**<2.9**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	74-83-9	
2-Butanone (MEK)	**<3.4**	ug/kg	9.9	1	07/29/21 11:34	07/29/21 14:48	78-93-3	R1
n-Butylbenzene	**<0.64**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	104-51-8	
sec-Butylbenzene	**<0.72**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	135-98-8	
tert-Butylbenzene	**<0.88**	ug/kg	24.8	1	07/29/21 11:34	07/29/21 14:48	98-06-6	
Carbon disulfide	**<0.64**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	75-15-0	
Carbon tetrachloride	**<0.85**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	56-23-5	
Chlorobenzene	**<0.62**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	108-90-7	
Chloroethane	**<1.5**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	75-00-3	
Chloroform	**<0.49**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	67-66-3	
Chloromethane	**<0.79**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	74-87-3	
2-Chlorotoluene	**<0.72**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	95-49-8	
4-Chlorotoluene	**<0.59**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	106-43-4	
Cyclohexanone	**<12.6**	ug/kg	19.8	1	07/29/21 11:34	07/29/21 14:48	108-94-1	M1
1,2-Dibromo-3-chloropropane	**<1.8**	ug/kg	9.9	1	07/29/21 11:34	07/29/21 14:48	96-12-8	R1
Dibromochloromethane	**<0.64**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	124-48-1	
1,2-Dibromoethane (EDB)	**<0.53**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	106-93-4	
Dibromomethane	**<0.59**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	74-95-3	
1,2-Dichlorobenzene	**<0.62**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	95-50-1	
1,3-Dichlorobenzene	**<0.71**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	541-73-1	
1,4-Dichlorobenzene	**<0.80**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	106-46-7	
1,1-Dichloroethane	**<0.39**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	75-34-3	
1,2-Dichloroethane	**<0.40**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	540-59-0	
1,1-Dichloroethene	**<0.63**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	75-35-4	
cis-1,2-Dichloroethene	**<0.43**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	156-59-2	
trans-1,2-Dichloroethene	**<0.67**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	156-60-5	
1,2-Dichloropropane	**<0.97**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	78-87-5	
1,3-Dichloropropane	**<0.69**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	142-28-9	
2,2-Dichloropropane	**<0.47**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	594-20-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-02/2-3 **Lab ID: 60375923016** Collected: 07/26/21 11:41 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<0.89**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	563-58-6	
cis-1,3-Dichloropropene	**<0.53**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	10061-01-5	
trans-1,3-Dichloropropene	**<0.45**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.56**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	60-29-7	R1
Ethylbenzene	**<0.46**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	100-41-4	
n-Heptane	**<4.5**	ug/kg	9.9	1	07/29/21 11:34	07/29/21 14:48	142-82-5	
Hexachloro-1,3-butadiene	**<0.84**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	87-68-3	
n-Hexane	**<0.68**	ug/kg	9.9	1	07/29/21 11:34	07/29/21 14:48	110-54-3	
2-Hexanone	**<2.5**	ug/kg	19.8	1	07/29/21 11:34	07/29/21 14:48	591-78-6	R1
Iodomethane	**<1.5**	ug/kg	9.9	1	07/29/21 11:34	07/29/21 14:48	74-88-4	
Isopropylbenzene (Cumene)	**<0.57**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	98-82-8	
p-Isopropyltoluene	**<0.68**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	99-87-6	
Methyl acetate	**<1.1**	ug/kg	99.1	1	07/29/21 11:34	07/29/21 14:48	79-20-9	M1
Methylene Chloride	**<2.7**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.0**	ug/kg	9.9	1	07/29/21 11:34	07/29/21 14:48	108-10-1	R1
Methyl-tert-butyl ether	**<0.48**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	1634-04-4	
Naphthalene	**<0.81**	ug/kg	9.9	1	07/29/21 11:34	07/29/21 14:48	91-20-3	R1
n-Propylbenzene	**<0.80**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	103-65-1	
Styrene	**<0.58**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.99**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	79-34-5	M1
Tetrachloroethene	**<0.41**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	127-18-4	
Tetrahydrofuran	**<0.78**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	109-99-9	N2
Toluene	**<0.35**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	108-88-3	
1,2,3-Trichlorobenzene	**<0.79**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	87-61-6	
1,2,4-Trichlorobenzene	**<0.79**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	120-82-1	
1,1,1-Trichloroethane	**<0.74**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	71-55-6	
1,1,2-Trichloroethane	**<0.62**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	79-00-5	
Trichloroethene	**<0.72**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	79-01-6	M1
Trichlorofluoromethane	**<0.61**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	75-69-4	
1,2,3-Trichloropropane	**<2.1**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	96-18-4	R1
1,1,2-Trichlorotrifluoroethane	**<5.0**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	76-13-1	N2
1,2,3-Trimethylbenzene	**<2.0**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	526-73-8	
1,2,4-Trimethylbenzene	**<0.66**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	95-63-6	
1,3,5-Trimethylbenzene	**<0.62**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	108-67-8	
Vinyl acetate	**<0.56**	ug/kg	99.1	1	07/29/21 11:34	07/29/21 14:48	108-05-4	M1
Vinyl chloride	**<0.66**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	1330-20-7	
m&p-Xylene	**<0.63**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	179601-23-1	
o-Xylene	**<0.37**	ug/kg	5.0	1	07/29/21 11:34	07/29/21 14:48	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	80-120	1	07/29/21 11:34	07/29/21 14:48	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-120	1	07/29/21 11:34	07/29/21 14:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/29/21 11:34	07/29/21 14:48	2199-69-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-02/2-3 **Lab ID: 60375923016** Collected: 07/26/21 11:41 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035							
	Pace Analytical Services - Kansas City							
TPH-GRO	**<0.054**	mg/kg	0.50	1	07/29/21 11:34	07/29/21 14:48		
Surrogates								
Toluene-d8 (S)	99	%	78-122	1	07/29/21 11:34	07/29/21 14:48	2037-26-5	
4-Bromofluorobenzene (S)	105	%	69-133	1	07/29/21 11:34	07/29/21 14:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/29/21 11:34	07/29/21 14:48	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974							
	Pace Analytical Services - Kansas City							
Percent Moisture	**19.8**	%	0.50	1		07/27/21 13:46		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-02/8-9 **Lab ID: 60375923017** Collected: 07/26/21 11:58 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.4**	ug/kg	41.7	1	07/27/21 14:19	07/30/21 12:32	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.9**	ug/kg	41.7	1	07/27/21 14:19	07/30/21 12:32	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.6**	ug/kg	41.7	1	07/27/21 14:19	07/30/21 12:32	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.1**	ug/kg	41.7	1	07/27/21 14:19	07/30/21 12:32	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	41.7	1	07/27/21 14:19	07/30/21 12:32	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.7	1	07/27/21 14:19	07/30/21 12:32	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.2**	ug/kg	41.7	1	07/27/21 14:19	07/30/21 12:32	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	80	%	35-120	1	07/27/21 14:19	07/30/21 12:32	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.60**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 11:44	7440-36-0	
Arsenic	**5.3**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 11:44	7440-38-2	
Copper	**24.9**	mg/kg	1.1	10	08/04/21 10:12	08/05/21 11:44	7440-50-8	
Lead	**22.8**	mg/kg	0.56	10	08/04/21 10:12	08/05/21 11:44	7439-92-1	
Zinc	**78.6**	mg/kg	5.6	10	08/04/21 10:12	08/05/21 11:44	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**5.6J**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	83-32-9	
Acenaphthylene	**<3.2**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	208-96-8	
Anthracene	**6.2J**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	120-12-7	
Benzo(a)anthracene	**18.0**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	56-55-3	
Benzo(a)pyrene	**13.9**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	50-32-8	
Benzo(b)fluoranthene	**25.8**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	205-99-2	
Benzo(g,h,i)perylene	**11.8**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	191-24-2	
Benzo(k)fluoranthene	**8.7**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	207-08-9	
Chrysene	**18.5**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	218-01-9	
Dibenz(a,h)anthracene	**<3.7**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	53-70-3	
Fluoranthene	**47.6**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	206-44-0	
Fluorene	**5.6J**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	86-73-7	
Indeno(1,2,3-cd)pyrene	**9.1**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	193-39-5	
Naphthalene	**7.6J**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	91-20-3	
Phenanthrene	**24.7**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	85-01-8	
Pyrene	**41.6**	ug/kg	8.5	1	07/27/21 15:30	07/30/21 15:31	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	68	%	40-120	1	07/27/21 15:30	07/30/21 15:31	321-60-8	
Terphenyl-d14 (S)	76	%	45-130	1	07/27/21 15:30	07/30/21 15:31	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**13.7J**	mg/kg	19.3	1	07/27/21 15:30	08/02/21 19:49		
TPH-DRO	**9.1J**	mg/kg	19.3	1	07/27/21 15:30	08/02/21 19:49		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-02/8-9 **Lab ID: 60375923017** Collected: 07/26/21 11:58 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	63	%	30-120	1	07/27/21 15:30	08/02/21 19:49	4165-60-0	
2-Fluorobiphenyl (S)	76	%	40-120	1	07/27/21 15:30	08/02/21 19:49	321-60-8	
Terphenyl-d14 (S)	77	%	45-120	1	07/27/21 15:30	08/02/21 19:49	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**16.7J**	ug/kg	20.5	1	07/29/21 11:34	07/29/21 15:35	67-64-1	
Acrolein	**<77.4**	ug/kg	102	1	07/29/21 11:34	07/29/21 15:35	107-02-8	
Acrylonitrile	**<3.2**	ug/kg	102	1	07/29/21 11:34	07/29/21 15:35	107-13-1	
Benzene	**<0.50**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	71-43-2	
Bromobenzene	**<0.96**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	108-86-1	
Bromochloromethane	**<0.62**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	74-97-5	
Bromodichloromethane	**<0.62**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	75-27-4	
Bromoform	**<0.59**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	75-25-2	
Bromomethane	**<3.0**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	74-83-9	
2-Butanone (MEK)	**<3.5**	ug/kg	10.2	1	07/29/21 11:34	07/29/21 15:35	78-93-3	
n-Butylbenzene	**<0.67**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	104-51-8	
sec-Butylbenzene	**<0.75**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	135-98-8	
tert-Butylbenzene	**<0.90**	ug/kg	25.6	1	07/29/21 11:34	07/29/21 15:35	98-06-6	
Carbon disulfide	**3.5J**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	75-15-0	
Carbon tetrachloride	**<0.88**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	56-23-5	
Chlorobenzene	**<0.64**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	108-90-7	
Chloroethane	**<1.5**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	75-00-3	
Chloroform	**<0.50**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	67-66-3	
Chloromethane	**<0.82**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	74-87-3	
2-Chlorotoluene	**<0.75**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	95-49-8	
4-Chlorotoluene	**<0.61**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	106-43-4	
Cyclohexanone	**<13.0**	ug/kg	20.5	1	07/29/21 11:34	07/29/21 15:35	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.9**	ug/kg	10.2	1	07/29/21 11:34	07/29/21 15:35	96-12-8	
Dibromochloromethane	**<0.66**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	124-48-1	
1,2-Dibromoethane (EDB)	**<0.55**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	106-93-4	
Dibromomethane	**<0.61**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	74-95-3	
1,2-Dichlorobenzene	**<0.64**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	95-50-1	
1,3-Dichlorobenzene	**<0.74**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	541-73-1	
1,4-Dichlorobenzene	**<0.83**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	106-46-7	
1,1-Dichloroethane	**<0.40**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	75-34-3	
1,2-Dichloroethane	**<0.41**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	540-59-0	
1,1-Dichloroethene	**<0.65**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	75-35-4	
cis-1,2-Dichloroethene	**<0.44**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	156-59-2	
trans-1,2-Dichloroethene	**<0.69**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	78-87-5	
1,3-Dichloropropane	**<0.71**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	142-28-9	
2,2-Dichloropropane	**<0.49**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	594-20-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-02/8-9 **Lab ID: 60375923017** Collected: 07/26/21 11:58 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<0.92**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	563-58-6	
cis-1,3-Dichloropropene	**<0.54**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	10061-01-5	
trans-1,3-Dichloropropene	**<0.47**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.57**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	60-29-7	
Ethylbenzene	**<0.47**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	100-41-4	
n-Heptane	**<4.6**	ug/kg	10.2	1	07/29/21 11:34	07/29/21 15:35	142-82-5	
Hexachloro-1,3-butadiene	**<0.87**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	87-68-3	
n-Hexane	**<0.71**	ug/kg	10.2	1	07/29/21 11:34	07/29/21 15:35	110-54-3	
2-Hexanone	**<2.5**	ug/kg	20.5	1	07/29/21 11:34	07/29/21 15:35	591-78-6	
Iodomethane	**<1.5**	ug/kg	10.2	1	07/29/21 11:34	07/29/21 15:35	74-88-4	
Isopropylbenzene (Cumene)	**<0.58**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	98-82-8	
p-Isopropyltoluene	**0.77J**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	99-87-6	
Methyl acetate	**<1.1**	ug/kg	102	1	07/29/21 11:34	07/29/21 15:35	79-20-9	
Methylene Chloride	**<2.8**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<3.1**	ug/kg	10.2	1	07/29/21 11:34	07/29/21 15:35	108-10-1	
Methyl-tert-butyl ether	**<0.49**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	1634-04-4	
Naphthalene	**4.4J**	ug/kg	10.2	1	07/29/21 11:34	07/29/21 15:35	91-20-3	
n-Propylbenzene	**<0.82**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	103-65-1	
Styrene	**<0.60**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	79-34-5	
Tetrachloroethene	**<0.42**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	127-18-4	
Tetrahydrofuran	**<0.80**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	109-99-9	N2
Toluene	**<0.36**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	108-88-3	
1,2,3-Trichlorobenzene	**1.9J**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	87-61-6	
1,2,4-Trichlorobenzene	**1.4J**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	120-82-1	
1,1,1-Trichloroethane	**<0.77**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	71-55-6	
1,1,2-Trichloroethane	**<0.64**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	79-00-5	
Trichloroethene	**<0.74**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	79-01-6	
Trichlorofluoromethane	**<0.63**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	75-69-4	
1,2,3-Trichloropropane	**<2.2**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<5.1**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	76-13-1	N2
1,2,3-Trimethylbenzene	**<2.0**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	526-73-8	
1,2,4-Trimethylbenzene	**<0.69**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	95-63-6	
1,3,5-Trimethylbenzene	**<0.64**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	108-67-8	
Vinyl acetate	**<0.58**	ug/kg	102	1	07/29/21 11:34	07/29/21 15:35	108-05-4	
Vinyl chloride	**<0.68**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	75-01-4	
Xylene (Total)	**<1.2**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	1330-20-7	
m&p-Xylene	**<0.65**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	179601-23-1	
o-Xylene	**<0.38**	ug/kg	5.1	1	07/29/21 11:34	07/29/21 15:35	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%	80-120	1	07/29/21 11:34	07/29/21 15:35	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120	1	07/29/21 11:34	07/29/21 15:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/29/21 11:34	07/29/21 15:35	2199-69-1	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Sample: GB-02/8-9 **Lab ID: 60375923017** Collected: 07/26/21 11:58 Received: 07/27/21 05:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035 Pace Analytical Services - Kansas City							
TPH-GRO	**<0.056**	mg/kg	0.51	1	07/29/21 11:34	07/29/21 15:35		
Surrogates								
Toluene-d8 (S)	103	%	78-122	1	07/29/21 11:34	07/29/21 15:35	2037-26-5	
4-Bromofluorobenzene (S)	101	%	69-133	1	07/29/21 11:34	07/29/21 15:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120	1	07/29/21 11:34	07/29/21 15:35	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**25.3**	%	0.50	1		07/27/21 13:47		

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 735731
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923001, 60375923002, 60375923003, 60375923004, 60375923005, 60375923006, 60375923007, 60375923008, 60375923009, 60375923010, 60375923011, 60375923012, 60375923013, 60375923014, 60375923016, 60375923017

METHOD BLANK: 2951055 Matrix: Solid
Associated Lab Samples: 60375923001, 60375923002, 60375923003, 60375923004, 60375923005, 60375923006, 60375923007, 60375923008, 60375923009, 60375923010, 60375923011, 60375923012, 60375923013, 60375923014, 60375923016, 60375923017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	08/05/21 11:04	
Arsenic	mg/kg	<0.11	1.0	08/05/21 11:04	
Copper	mg/kg	<0.31	1.0	08/05/21 11:04	
Lead	mg/kg	<0.13	0.50	08/05/21 11:04	
Zinc	mg/kg	<0.84	5.0	08/05/21 11:04	

LABORATORY CONTROL SAMPLE: 2951056

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	98.4	98	80-120	
Arsenic	mg/kg	100	97.5	98	80-120	
Copper	mg/kg	100	101	101	80-120	
Lead	mg/kg	100	97.3	97	80-120	
Zinc	mg/kg	100	95.4	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2951057 2951058

Parameter	Units	60375923016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.55	107	113	48.0	51.3	45	45	75-125	7	20	M1
Arsenic	mg/kg	9.4	107	113	117	120	100	98	75-125	3	20	
Copper	mg/kg	16.6	107	113	126	128	102	98	75-125	2	20	
Lead	mg/kg	14.8	107	113	347	127	309	99	75-125	93	20	M1,R1
Zinc	mg/kg	56.8	107	113	171	165	106	95	75-125	4	20	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 734679
QC Batch Method: EPA 5035A/5030
Analysis Method: EPA 8260B
Analysis Description: 8260 MSV 5035A Volatile Organics
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923011, 60375923012

METHOD BLANK: 2947592 Matrix: Solid
Associated Lab Samples: 60375923011, 60375923012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<1.0	5.0	07/28/21 09:09	
1,1,1-Trichloroethane	ug/kg	<0.75	5.0	07/28/21 09:09	
1,1,2,2-Tetrachloroethane	ug/kg	<1.0	5.0	07/28/21 09:09	
1,1,2-Trichloroethane	ug/kg	<0.63	5.0	07/28/21 09:09	
1,1,2-Trichlorotrifluoroethane	ug/kg	<5.0	5.0	07/28/21 09:09	N2
1,1-Dichloroethane	ug/kg	<0.39	5.0	07/28/21 09:09	
1,1-Dichloroethene	ug/kg	<0.64	5.0	07/28/21 09:09	
1,1-Dichloropropene	ug/kg	<0.90	5.0	07/28/21 09:09	
1,2,3-Trichlorobenzene	ug/kg	<0.80	5.0	07/28/21 09:09	
1,2,3-Trichloropropane	ug/kg	<2.1	5.0	07/28/21 09:09	
1,2,3-Trimethylbenzene	ug/kg	<2.0	5.0	07/28/21 09:09	
1,2,4-Trichlorobenzene	ug/kg	<0.80	5.0	07/28/21 09:09	
1,2,4-Trimethylbenzene	ug/kg	<0.67	5.0	07/28/21 09:09	
1,2-Dibromo-3-chloropropane	ug/kg	<1.8	10.0	07/28/21 09:09	
1,2-Dibromoethane (EDB)	ug/kg	<0.54	5.0	07/28/21 09:09	
1,2-Dichlorobenzene	ug/kg	<0.62	5.0	07/28/21 09:09	
1,2-Dichloroethane	ug/kg	<0.40	5.0	07/28/21 09:09	
1,2-Dichloroethene (Total)	ug/kg	<1.1	5.0	07/28/21 09:09	
1,2-Dichloropropane	ug/kg	<0.98	5.0	07/28/21 09:09	
1,3,5-Trimethylbenzene	ug/kg	<0.63	5.0	07/28/21 09:09	
1,3-Dichlorobenzene	ug/kg	<0.72	5.0	07/28/21 09:09	
1,3-Dichloropropane	ug/kg	<0.69	5.0	07/28/21 09:09	
1,4-Dichlorobenzene	ug/kg	<0.81	5.0	07/28/21 09:09	
2,2-Dichloropropane	ug/kg	<0.48	5.0	07/28/21 09:09	
2-Butanone (MEK)	ug/kg	<3.4	10.0	07/28/21 09:09	
2-Chlorotoluene	ug/kg	<0.73	5.0	07/28/21 09:09	
2-Hexanone	ug/kg	<2.5	20.0	07/28/21 09:09	
4-Chlorotoluene	ug/kg	<0.60	5.0	07/28/21 09:09	
4-Methyl-2-pentanone (MIBK)	ug/kg	<3.0	10.0	07/28/21 09:09	
Acetone	ug/kg	<16.2	20.0	07/28/21 09:09	
Acrolein	ug/kg	<75.6	100	07/28/21 09:09	
Acrylonitrile	ug/kg	<3.2	100	07/28/21 09:09	
Benzene	ug/kg	<0.49	5.0	07/28/21 09:09	
Bromobenzene	ug/kg	<0.94	5.0	07/28/21 09:09	
Bromochloromethane	ug/kg	<0.60	5.0	07/28/21 09:09	
Bromodichloromethane	ug/kg	<0.60	5.0	07/28/21 09:09	
Bromoform	ug/kg	<0.58	5.0	07/28/21 09:09	
Bromomethane	ug/kg	<2.9	5.0	07/28/21 09:09	
Carbon disulfide	ug/kg	<0.64	5.0	07/28/21 09:09	
Carbon tetrachloride	ug/kg	<0.86	5.0	07/28/21 09:09	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

METHOD BLANK: 2947592 Matrix: Solid
Associated Lab Samples: 60375923011, 60375923012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlorobenzene	ug/kg	<0.63	5.0	07/28/21 09:09	
Chloroethane	ug/kg	<1.5	5.0	07/28/21 09:09	
Chloroform	ug/kg	<0.49	5.0	07/28/21 09:09	
Chloromethane	ug/kg	<0.80	5.0	07/28/21 09:09	
cis-1,2-Dichloroethene	ug/kg	<0.43	5.0	07/28/21 09:09	
cis-1,3-Dichloropropene	ug/kg	<0.53	5.0	07/28/21 09:09	
Cyclohexanone	ug/kg	<12.7	20.0	07/28/21 09:09	
Dibromochloromethane	ug/kg	<0.65	5.0	07/28/21 09:09	
Dibromomethane	ug/kg	<0.60	5.0	07/28/21 09:09	
Diethyl ether (Ethyl ether)	ug/kg	<0.56	5.0	07/28/21 09:09	
Ethylbenzene	ug/kg	<0.46	5.0	07/28/21 09:09	
Hexachloro-1,3-butadiene	ug/kg	<0.85	5.0	07/28/21 09:09	
Iodomethane	ug/kg	<1.5	10.0	07/28/21 09:09	
Isopropylbenzene (Cumene)	ug/kg	<0.57	5.0	07/28/21 09:09	
m&p-Xylene	ug/kg	<0.63	5.0	07/28/21 09:09	
Methyl acetate	ug/kg	<1.1	100	07/28/21 09:09	
Methyl-tert-butyl ether	ug/kg	<0.48	5.0	07/28/21 09:09	
Methylene Chloride	ug/kg	<2.7	5.0	07/28/21 09:09	
n-Butylbenzene	ug/kg	<0.65	5.0	07/28/21 09:09	
n-Heptane	ug/kg	<4.5	10.0	07/28/21 09:09	
n-Hexane	ug/kg	<0.69	10.0	07/28/21 09:09	
n-Propylbenzene	ug/kg	<0.80	5.0	07/28/21 09:09	
Naphthalene	ug/kg	<0.82	10.0	07/28/21 09:09	
o-Xylene	ug/kg	<0.37	5.0	07/28/21 09:09	
p-Isopropyltoluene	ug/kg	<0.69	5.0	07/28/21 09:09	
sec-Butylbenzene	ug/kg	<0.73	5.0	07/28/21 09:09	
Styrene	ug/kg	<0.59	5.0	07/28/21 09:09	
tert-Butylbenzene	ug/kg	<0.88	25.0	07/28/21 09:09	
Tetrachloroethene	ug/kg	<0.41	5.0	07/28/21 09:09	
Tetrahydrofuran	ug/kg	<0.78	5.0	07/28/21 09:09	N2
Toluene	ug/kg	<0.35	5.0	07/28/21 09:09	
trans-1,2-Dichloroethene	ug/kg	<0.68	5.0	07/28/21 09:09	
trans-1,3-Dichloropropene	ug/kg	<0.46	5.0	07/28/21 09:09	
Trichloroethene	ug/kg	<0.72	5.0	07/28/21 09:09	
Trichlorofluoromethane	ug/kg	<0.61	5.0	07/28/21 09:09	
Vinyl acetate	ug/kg	<0.56	100	07/28/21 09:09	
Vinyl chloride	ug/kg	<0.67	5.0	07/28/21 09:09	
Xylene (Total)	ug/kg	<1.1	5.0	07/28/21 09:09	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120	07/28/21 09:09	
4-Bromofluorobenzene (S)	%	103	80-120	07/28/21 09:09	
Toluene-d8 (S)	%	100	80-120	07/28/21 09:09	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

LABORATORY CONTROL SAMPLE: 2947593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	104	104	80-130	
1,1,1-Trichloroethane	ug/kg	100	103	103	75-130	
1,1,2,2-Tetrachloroethane	ug/kg	100	93.5	94	75-120	
1,1,2-Trichloroethane	ug/kg	100	98.3	98	80-120	
1,1,2-Trichlorotrifluoroethane	ug/kg	100	112	112	80-120	N2
1,1-Dichloroethane	ug/kg	100	103	103	75-125	
1,1-Dichloroethene	ug/kg	100	109	109	70-130	
1,1-Dichloropropene	ug/kg	100	105	105	60-140	
1,2,3-Trichlorobenzene	ug/kg	100	101	101	80-125	
1,2,3-Trichloropropane	ug/kg	100	92.8	93	80-120	
1,2,3-Trimethylbenzene	ug/kg	100	98.0	98	80-120	
1,2,4-Trichlorobenzene	ug/kg	100	97.4	97	80-125	
1,2,4-Trimethylbenzene	ug/kg	100	98.3	98	80-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	103	103	75-135	
1,2-Dibromoethane (EDB)	ug/kg	100	101	101	80-125	
1,2-Dichlorobenzene	ug/kg	100	94.6	95	80-120	
1,2-Dichloroethane	ug/kg	100	95.3	95	80-120	
1,2-Dichloroethene (Total)	ug/kg	200	206	103	80-120	
1,2-Dichloropropane	ug/kg	100	99.4	99	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	101	101	80-125	
1,3-Dichlorobenzene	ug/kg	100	99.4	99	80-120	
1,3-Dichloropropane	ug/kg	100	96.3	96	80-120	
1,4-Dichlorobenzene	ug/kg	100	100	100	80-120	
2,2-Dichloropropane	ug/kg	100	109	109	75-130	
2-Butanone (MEK)	ug/kg	500	570	114	60-135	
2-Chlorotoluene	ug/kg	100	97.7	98	80-120	
2-Hexanone	ug/kg	500	555	111	70-135	
4-Chlorotoluene	ug/kg	100	100	100	80-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	460	92	75-130	
Acetone	ug/kg	500	591	118	50-150	
Acrolein	ug/kg	500	506	101	10-180	
Acrylonitrile	ug/kg	500	470	94	80-120	
Benzene	ug/kg	100	99.3	99	80-120	
Bromobenzene	ug/kg	100	96.3	96	80-120	
Bromochloromethane	ug/kg	100	100	100	75-120	
Bromodichloromethane	ug/kg	100	109	109	80-125	
Bromoform	ug/kg	100	90.9	91	80-135	
Bromomethane	ug/kg	100	98.4	98	35-135	
Carbon disulfide	ug/kg	100	109	109	65-140	
Carbon tetrachloride	ug/kg	100	113	113	75-140	
Chlorobenzene	ug/kg	100	99.7	100	80-120	
Chloroethane	ug/kg	100	87.7	88	50-135	
Chloroform	ug/kg	100	101	101	80-120	
Chloromethane	ug/kg	100	97.9	98	15-155	
cis-1,2-Dichloroethene	ug/kg	100	101	101	80-120	
cis-1,3-Dichloropropene	ug/kg	100	109	109	80-125	
Cyclohexanone	ug/kg	500	499	100	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

LABORATORY CONTROL SAMPLE: 2947593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/kg	100	113	113	80-130	
Dibromomethane	ug/kg	100	98.3	98	80-120	
Diethyl ether (Ethyl ether)	ug/kg	100	99.5	99	80-120	
Ethylbenzene	ug/kg	100	100	100	80-120	
Hexachloro-1,3-butadiene	ug/kg	100	110	110	80-135	
Iodomethane	ug/kg	100	108	108	65-145	
Isopropylbenzene (Cumene)	ug/kg	100	103	103	75-135	
m&p-Xylene	ug/kg	200	201	101	80-125	
Methyl acetate	ug/kg	500	449	90	80-120	
Methyl-tert-butyl ether	ug/kg	100	96.7	97	75-130	
Methylene Chloride	ug/kg	100	90.4	90	65-120	
n-Butylbenzene	ug/kg	100	104	104	80-135	
n-Heptane	ug/kg	100	111	111	80-120	
n-Hexane	ug/kg	100	107	107	55-150	
n-Propylbenzene	ug/kg	100	101	101	80-125	
Naphthalene	ug/kg	100	97.8	98	80-120	
o-Xylene	ug/kg	100	98.9	99	80-125	
p-Isopropyltoluene	ug/kg	100	103	103	65-145	
sec-Butylbenzene	ug/kg	100	100	100	80-135	
Styrene	ug/kg	100	101	101	85-125	
tert-Butylbenzene	ug/kg	100	101	101	80-125	
Tetrachloroethene	ug/kg	100	105	105	80-130	
Tetrahydrofuran	ug/kg	500	432	86	80-120	N2
Toluene	ug/kg	100	99.3	99	80-120	
trans-1,2-Dichloroethene	ug/kg	100	105	105	75-125	
trans-1,3-Dichloropropene	ug/kg	100	109	109	80-130	
Trichloroethene	ug/kg	100	105	105	80-125	
Trichlorofluoromethane	ug/kg	100	113	113	65-135	
Vinyl acetate	ug/kg	100	96.2J	96	80-120	
Vinyl chloride	ug/kg	100	79.0	79	35-145	
Xylene (Total)	ug/kg	300	300	100	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947594 2947595

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	ND	101	99.9	57.7	71.1	57	71	25-130	21	35	
1,1,1-Trichloroethane	ug/kg	ND	101	99.9	69.8	80.8	69	81	45-120	15	35	
1,1,2,2-Tetrachloroethane	ug/kg	ND	101	99.9	1.7J	<1.0	2	0	10-145		35	M1
1,1,2-Trichloroethane	ug/kg	ND	101	99.9	39.1	47.8	39	48	25-130	20	35	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	101	99.9	70.8	83.0	70	83	35-120	16	35	N2

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947594 2947595

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/kg	ND	101	99.9	73.2	82.3	72	82	40-120	12	35	
1,1-Dichloroethene	ug/kg	ND	101	99.9	115	128	114	128	35-120	11	35	M1
1,1-Dichloropropene	ug/kg	ND	101	99.9	70.4	81.0	70	81	40-125	14	35	
1,2,3-Trichlorobenzene	ug/kg	ND	101	99.9	51.2	63.5	51	64	10-125	21	50	
1,2,3-Trichloropropane	ug/kg	ND	101	99.9	79.4	91.8	79	92	25-135	15	35	
1,2,3-Trimethylbenzene	ug/kg	ND	101	99.9	62.9	72.6	62	72	35-120	14	35	
1,2,4-Trichlorobenzene	ug/kg	ND	101	99.9	49.9	60.2	49	60	10-125	19	50	
1,2,4-Trimethylbenzene	ug/kg	ND	101	99.9	62.0	70.1	61	70	35-120	12	35	
1,2-Dibromo-3-chloropropane	ug/kg	ND	101	99.9	37.0	48.9	37	49	10-145	28	35	
1,2-Dibromoethane (EDB)	ug/kg	ND	101	99.9	80.5	94.1	80	94	30-140	15	35	
1,2-Dichlorobenzene	ug/kg	ND	101	99.9	59.7	69.6	59	70	10-125	15	35	
1,2-Dichloroethane	ug/kg	ND	101	99.9	74.9	85.8	74	86	35-120	14	35	
1,2-Dichloroethene (Total)	ug/kg	ND	202	199	144	164	71	82	40-120	13	35	
1,2-Dichloropropane	ug/kg	ND	101	99.9	72.5	82.4	72	83	35-120	13	35	
1,3,5-Trimethylbenzene	ug/kg	ND	101	99.9	61.1	71.3	60	71	15-130	15	35	
1,3-Dichlorobenzene	ug/kg	ND	101	99.9	59.2	68.9	59	69	10-125	15	37	
1,3-Dichloropropane	ug/kg	ND	101	99.9	76.9	89.7	76	90	30-120	15	35	
1,4-Dichlorobenzene	ug/kg	ND	101	99.9	59.0	68.8	58	69	10-125	15	35	
2,2-Dichloropropane	ug/kg	ND	101	99.9	70.4	81.3	70	81	40-120	14	35	
2-Butanone (MEK)	ug/kg	ND	506	499	513	576	100	114	20-145	11	35	
2-Chlorotoluene	ug/kg	ND	101	99.9	62.2	72.0	61	72	15-125	15	35	
2-Hexanone	ug/kg	ND	506	499	525	601	104	120	15-150	13	35	
4-Chlorotoluene	ug/kg	ND	101	99.9	60.3	71.5	60	72	10-125	17	35	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	506	499	480	550	95	110	30-140	14	35	
Acetone	ug/kg	46.6	506	499	528	549	95	101	10-165	4	35	
Acrolein	ug/kg	ND	506	499	488	542	96	109	10-200	11	60	
Acrylonitrile	ug/kg	ND	506	499	312	385	62	77	10-145	21	35	
Benzene	ug/kg	ND	101	99.9	69.6	79.2	69	79	35-120	13	35	
Bromobenzene	ug/kg	ND	101	99.9	63.0	73.1	62	73	15-125	15	35	
Bromochloromethane	ug/kg	ND	101	99.9	75.8	86.8	75	87	35-120	14	35	
Bromodichloromethane	ug/kg	ND	101	99.9	49.1	63.2	49	63	30-130	25	35	
Bromoform	ug/kg	ND	101	99.9	46.5	62.5	46	63	15-135	29	35	
Bromomethane	ug/kg	ND	101	99.9	29.2	36.0	29	36	10-120	21	35	
Carbon disulfide	ug/kg	ND	101	99.9	34.7	47.4	29	42	20-120	31	35	
Carbon tetrachloride	ug/kg	ND	101	99.9	54.6	71.9	54	72	40-125	27	35	
Chlorobenzene	ug/kg	ND	101	99.9	66.9	76.6	66	77	20-125	13	35	
Chloroethane	ug/kg	ND	101	99.9	68.9	76.5	68	77	25-120	10	35	
Chloroform	ug/kg	ND	101	99.9	76.8	87.2	76	87	40-125	13	35	
Chloromethane	ug/kg	ND	101	99.9	49.2	56.1	49	56	10-120	13	35	
cis-1,2-Dichloroethene	ug/kg	ND	101	99.9	72.3	82.8	72	83	35-120	13	35	
cis-1,3-Dichloropropene	ug/kg	ND	101	99.9	46.1	58.6	46	59	20-130	24	35	
Cyclohexanone	ug/kg	ND	506	499	458	534	91	107	35-120	15	35	
Dibromochloromethane	ug/kg	ND	101	99.9	51.2	67.2	51	67	25-135	27	35	
Dibromomethane	ug/kg	ND	101	99.9	77.8	92.0	77	92	30-125	17	35	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947594 2947595

Parameter	Units	60375838013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Diethyl ether (Ethyl ether)	ug/kg	ND	101	99.9	75.6	86.2	75	86	35-120	13	35	
Ethylbenzene	ug/kg	ND	101	99.9	67.4	76.4	67	77	35-120	13	35	
Hexachloro-1,3-butadiene	ug/kg	ND	101	99.9	50.2	55.4	50	56	10-125	10	45	
Iodomethane	ug/kg	ND	101	99.9	27.6	40.2	27	40	30-120	37	35	M1,R1
Isopropylbenzene (Cumene)	ug/kg	ND	101	99.9	67.0	75.8	66	76	20-135	12	35	
m&p-Xylene	ug/kg	ND	202	199	131	153	65	76	30-145	15	35	
Methyl acetate	ug/kg	ND	506	499	<1.1	<1.1	0	0	30-120		35	M1
Methyl-tert-butyl ether	ug/kg	ND	101	99.9	78.9	90.5	78	91	35-140	14	35	
Methylene Chloride	ug/kg	ND	101	99.9	66.4	75.9	65	76	10-135	13	35	
n-Butylbenzene	ug/kg	ND	101	99.9	58.0	64.2	57	64	10-130	10	35	
n-Heptane	ug/kg	ND	101	99.9	57.6	62.7	57	63	35-120	8	35	
n-Hexane	ug/kg	ND	101	99.9	59.0	65.9	58	66	10-150	11	35	
n-Propylbenzene	ug/kg	ND	101	99.9	61.8	71.2	61	71	20-125	14	35	
Naphthalene	ug/kg	13.9	101	99.9	102	108	87	94	10-160	6	35	
o-Xylene	ug/kg	ND	101	99.9	65.7	75.0	65	75	30-145	13	35	
p-Isopropyltoluene	ug/kg	ND	101	99.9	62.8	68.8	61	68	10-135	9	35	
sec-Butylbenzene	ug/kg	ND	101	99.9	60.3	66.0	60	66	15-135	9	35	
Styrene	ug/kg	ND	101	99.9	64.6	75.3	64	75	15-130	15	35	
tert-Butylbenzene	ug/kg	ND	101	99.9	62.4	71.9	62	72	15-135	14	35	
Tetrachloroethene	ug/kg	ND	101	99.9	82.9	85.6	82	86	30-125	3	35	
Tetrahydrofuran	ug/kg	ND	506	499	462	518	91	104	35-120	11	35	N2
Toluene	ug/kg	ND	101	99.9	68.5	77.6	68	78	35-120	12	35	
trans-1,2-Dichloroethene	ug/kg	ND	101	99.9	71.7	81.6	71	82	40-120	13	35	
trans-1,3-Dichloropropene	ug/kg	ND	101	99.9	50.6	63.6	50	64	20-135	23	35	
Trichloroethene	ug/kg	ND	101	99.9	133	153	132	154	25-140	14	35	M1
Trichlorofluoromethane	ug/kg	ND	101	99.9	65.5	78.6	65	79	35-120	18	35	
Vinyl acetate	ug/kg	ND	101	99.9	31.5J	36.2J	31	36	30-120		35	
Vinyl chloride	ug/kg	ND	101	99.9	61.1	67.5	60	68	10-120	10	35	
Xylene (Total)	ug/kg	ND	303	299	197	228	65	76	35-120	15	35	
1,2-Dichlorobenzene-d4 (S)	%						100	101	80-120			
4-Bromofluorobenzene (S)	%						98	98	80-120			
Toluene-d8 (S)	%						101	100	80-120			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 735024
QC Batch Method: EPA 5035A/5030
Analysis Method: EPA 8260B
Analysis Description: 8260 MSV 5035A Volatile Organics
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923013, 60375923014, 60375923016, 60375923017

METHOD BLANK: 2948710 Matrix: Solid
Associated Lab Samples: 60375923013, 60375923014, 60375923016, 60375923017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<1.0	5.0	07/29/21 12:51	
1,1,1-Trichloroethane	ug/kg	<0.75	5.0	07/29/21 12:51	
1,1,2,2-Tetrachloroethane	ug/kg	<1.0	5.0	07/29/21 12:51	
1,1,2-Trichloroethane	ug/kg	<0.63	5.0	07/29/21 12:51	
1,1,2-Trichlorotrifluoroethane	ug/kg	<5.0	5.0	07/29/21 12:51	N2
1,1-Dichloroethane	ug/kg	<0.39	5.0	07/29/21 12:51	
1,1-Dichloroethene	ug/kg	<0.64	5.0	07/29/21 12:51	
1,1-Dichloropropene	ug/kg	<0.90	5.0	07/29/21 12:51	
1,2,3-Trichlorobenzene	ug/kg	<0.80	5.0	07/29/21 12:51	
1,2,3-Trichloropropane	ug/kg	<2.1	5.0	07/29/21 12:51	
1,2,3-Trimethylbenzene	ug/kg	<2.0	5.0	07/29/21 12:51	
1,2,4-Trichlorobenzene	ug/kg	<0.80	5.0	07/29/21 12:51	
1,2,4-Trimethylbenzene	ug/kg	<0.67	5.0	07/29/21 12:51	
1,2-Dibromo-3-chloropropane	ug/kg	<1.8	10.0	07/29/21 12:51	
1,2-Dibromoethane (EDB)	ug/kg	<0.54	5.0	07/29/21 12:51	
1,2-Dichlorobenzene	ug/kg	<0.62	5.0	07/29/21 12:51	
1,2-Dichloroethane	ug/kg	<0.40	5.0	07/29/21 12:51	
1,2-Dichloroethene (Total)	ug/kg	<1.1	5.0	07/29/21 12:51	
1,2-Dichloropropane	ug/kg	<0.98	5.0	07/29/21 12:51	
1,3,5-Trimethylbenzene	ug/kg	<0.63	5.0	07/29/21 12:51	
1,3-Dichlorobenzene	ug/kg	<0.72	5.0	07/29/21 12:51	
1,3-Dichloropropane	ug/kg	<0.69	5.0	07/29/21 12:51	
1,4-Dichlorobenzene	ug/kg	<0.81	5.0	07/29/21 12:51	
2,2-Dichloropropane	ug/kg	<0.48	5.0	07/29/21 12:51	
2-Butanone (MEK)	ug/kg	<3.4	10.0	07/29/21 12:51	
2-Chlorotoluene	ug/kg	<0.73	5.0	07/29/21 12:51	
2-Hexanone	ug/kg	<2.5	20.0	07/29/21 12:51	
4-Chlorotoluene	ug/kg	<0.60	5.0	07/29/21 12:51	
4-Methyl-2-pentanone (MIBK)	ug/kg	<3.0	10.0	07/29/21 12:51	
Acetone	ug/kg	<16.2	20.0	07/29/21 12:51	
Acrolein	ug/kg	<75.6	100	07/29/21 12:51	
Acrylonitrile	ug/kg	<3.2	100	07/29/21 12:51	
Benzene	ug/kg	<0.49	5.0	07/29/21 12:51	
Bromobenzene	ug/kg	<0.94	5.0	07/29/21 12:51	
Bromochloromethane	ug/kg	<0.60	5.0	07/29/21 12:51	
Bromodichloromethane	ug/kg	<0.60	5.0	07/29/21 12:51	
Bromoform	ug/kg	<0.58	5.0	07/29/21 12:51	
Bromomethane	ug/kg	<2.9	5.0	07/29/21 12:51	
Carbon disulfide	ug/kg	<0.64	5.0	07/29/21 12:51	
Carbon tetrachloride	ug/kg	<0.86	5.0	07/29/21 12:51	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

METHOD BLANK: 2948710 Matrix: Solid
Associated Lab Samples: 60375923013, 60375923014, 60375923016, 60375923017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlorobenzene	ug/kg	<0.63	5.0	07/29/21 12:51	
Chloroethane	ug/kg	<1.5	5.0	07/29/21 12:51	
Chloroform	ug/kg	<0.49	5.0	07/29/21 12:51	
Chloromethane	ug/kg	<0.80	5.0	07/29/21 12:51	
cis-1,2-Dichloroethene	ug/kg	<0.43	5.0	07/29/21 12:51	
cis-1,3-Dichloropropene	ug/kg	<0.53	5.0	07/29/21 12:51	
Cyclohexanone	ug/kg	<12.7	20.0	07/29/21 12:51	
Dibromochloromethane	ug/kg	<0.65	5.0	07/29/21 12:51	
Dibromomethane	ug/kg	<0.60	5.0	07/29/21 12:51	
Diethyl ether (Ethyl ether)	ug/kg	<0.56	5.0	07/29/21 12:51	
Ethylbenzene	ug/kg	<0.46	5.0	07/29/21 12:51	
Hexachloro-1,3-butadiene	ug/kg	<0.85	5.0	07/29/21 12:51	
Iodomethane	ug/kg	<1.5	10.0	07/29/21 12:51	
Isopropylbenzene (Cumene)	ug/kg	<0.57	5.0	07/29/21 12:51	
m&p-Xylene	ug/kg	<0.63	5.0	07/29/21 12:51	
Methyl acetate	ug/kg	<1.1	100	07/29/21 12:51	
Methyl-tert-butyl ether	ug/kg	<0.48	5.0	07/29/21 12:51	
Methylene Chloride	ug/kg	<2.7	5.0	07/29/21 12:51	
n-Butylbenzene	ug/kg	<0.65	5.0	07/29/21 12:51	
n-Heptane	ug/kg	<4.5	10.0	07/29/21 12:51	
n-Hexane	ug/kg	<0.69	10.0	07/29/21 12:51	
n-Propylbenzene	ug/kg	<0.80	5.0	07/29/21 12:51	
Naphthalene	ug/kg	<0.82	10.0	07/29/21 12:51	
o-Xylene	ug/kg	<0.37	5.0	07/29/21 12:51	
p-Isopropyltoluene	ug/kg	<0.69	5.0	07/29/21 12:51	
sec-Butylbenzene	ug/kg	<0.73	5.0	07/29/21 12:51	
Styrene	ug/kg	<0.59	5.0	07/29/21 12:51	
tert-Butylbenzene	ug/kg	<0.88	25.0	07/29/21 12:51	
Tetrachloroethene	ug/kg	<0.41	5.0	07/29/21 12:51	
Tetrahydrofuran	ug/kg	<0.78	5.0	07/29/21 12:51	N2
Toluene	ug/kg	<0.35	5.0	07/29/21 12:51	
trans-1,2-Dichloroethene	ug/kg	<0.68	5.0	07/29/21 12:51	
trans-1,3-Dichloropropene	ug/kg	<0.46	5.0	07/29/21 12:51	
Trichloroethene	ug/kg	<0.72	5.0	07/29/21 12:51	
Trichlorofluoromethane	ug/kg	<0.61	5.0	07/29/21 12:51	
Vinyl acetate	ug/kg	<0.56	100	07/29/21 12:51	
Vinyl chloride	ug/kg	<0.67	5.0	07/29/21 12:51	
Xylene (Total)	ug/kg	<1.1	5.0	07/29/21 12:51	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120	07/29/21 12:51	
4-Bromofluorobenzene (S)	%	105	80-120	07/29/21 12:51	
Toluene-d8 (S)	%	100	80-120	07/29/21 12:51	

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(913)599-5665

QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

LABORATORY CONTROL SAMPLE: 2948711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	105	105	80-130	
1,1,1-Trichloroethane	ug/kg	100	99.2	99	75-130	
1,1,2,2-Tetrachloroethane	ug/kg	100	101	101	75-120	
1,1,2-Trichloroethane	ug/kg	100	102	102	80-120	
1,1,2-Trichlorotrifluoroethane	ug/kg	100	109	109	80-120	N2
1,1-Dichloroethane	ug/kg	100	102	102	75-125	
1,1-Dichloroethene	ug/kg	100	107	107	70-130	
1,1-Dichloropropene	ug/kg	100	102	102	60-140	
1,2,3-Trichlorobenzene	ug/kg	100	106	106	80-125	
1,2,3-Trichloropropane	ug/kg	100	98.3	98	80-120	
1,2,3-Trimethylbenzene	ug/kg	100	100	100	80-120	
1,2,4-Trichlorobenzene	ug/kg	100	109	109	80-125	
1,2,4-Trimethylbenzene	ug/kg	100	99.0	99	80-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	111	111	75-135	
1,2-Dibromoethane (EDB)	ug/kg	100	106	106	80-125	
1,2-Dichlorobenzene	ug/kg	100	98.4	98	80-120	
1,2-Dichloroethane	ug/kg	100	99.3	99	80-120	
1,2-Dichloroethene (Total)	ug/kg	200	205	103	80-120	
1,2-Dichloropropane	ug/kg	100	101	101	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	99.2	99	80-125	
1,3-Dichlorobenzene	ug/kg	100	101	101	80-120	
1,3-Dichloropropane	ug/kg	100	100	100	80-120	
1,4-Dichlorobenzene	ug/kg	100	102	102	80-120	
2,2-Dichloropropane	ug/kg	100	105	105	75-130	
2-Butanone (MEK)	ug/kg	500	612	122	60-135	
2-Chlorotoluene	ug/kg	100	97.6	98	80-120	
2-Hexanone	ug/kg	500	599	120	70-135	
4-Chlorotoluene	ug/kg	100	101	101	80-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	487	97	75-130	
Acetone	ug/kg	500	632	126	50-150	
Acrolein	ug/kg	500	535	107	10-180	
Acrylonitrile	ug/kg	500	486	97	80-120	
Benzene	ug/kg	100	99.6	100	80-120	
Bromobenzene	ug/kg	100	100	100	80-120	
Bromochloromethane	ug/kg	100	103	103	75-120	
Bromodichloromethane	ug/kg	100	109	109	80-125	
Bromoform	ug/kg	100	92.6	93	80-135	
Bromomethane	ug/kg	100	90.9	91	35-135	
Carbon disulfide	ug/kg	100	106	106	65-140	
Carbon tetrachloride	ug/kg	100	108	108	75-140	
Chlorobenzene	ug/kg	100	101	101	80-120	
Chloroethane	ug/kg	100	106	106	50-135	
Chloroform	ug/kg	100	101	101	80-120	
Chloromethane	ug/kg	100	94.6	95	15-155	
cis-1,2-Dichloroethene	ug/kg	100	102	102	80-120	
cis-1,3-Dichloropropene	ug/kg	100	110	110	80-125	
Cyclohexanone	ug/kg	500	575	115	80-120	

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(913)599-5665

QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

LABORATORY CONTROL SAMPLE: 2948711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/kg	100	113	113	80-130	
Dibromomethane	ug/kg	100	101	101	80-120	
Diethyl ether (Ethyl ether)	ug/kg	100	102	102	80-120	
Ethylbenzene	ug/kg	100	102	102	80-120	
Hexachloro-1,3-butadiene	ug/kg	100	109	109	80-135	
Iodomethane	ug/kg	100	105	105	65-145	
Isopropylbenzene (Cumene)	ug/kg	100	105	105	75-135	
m&p-Xylene	ug/kg	200	200	100	80-125	
Methyl acetate	ug/kg	500	473	95	80-120	
Methyl-tert-butyl ether	ug/kg	100	99.3	99	75-130	
Methylene Chloride	ug/kg	100	91.8	92	65-120	
n-Butylbenzene	ug/kg	100	104	104	80-135	
n-Heptane	ug/kg	100	108	108	80-120	
n-Hexane	ug/kg	100	103	103	55-150	
n-Propylbenzene	ug/kg	100	101	101	80-125	
Naphthalene	ug/kg	100	106	106	80-120	
o-Xylene	ug/kg	100	100	100	80-125	
p-Isopropyltoluene	ug/kg	100	103	103	65-145	
sec-Butylbenzene	ug/kg	100	99.5	100	80-135	
Styrene	ug/kg	100	103	103	85-125	
tert-Butylbenzene	ug/kg	100	100	100	80-125	
Tetrachloroethene	ug/kg	100	104	104	80-130	
Tetrahydrofuran	ug/kg	500	462	92	80-120	N2
Toluene	ug/kg	100	99.3	99	80-120	
trans-1,2-Dichloroethene	ug/kg	100	103	103	75-125	
trans-1,3-Dichloropropene	ug/kg	100	111	111	80-130	
Trichloroethene	ug/kg	100	104	104	80-125	
Trichlorofluoromethane	ug/kg	100	110	110	65-135	
Vinyl acetate	ug/kg	100	97.0J	97	80-120	
Vinyl chloride	ug/kg	100	103	103	35-145	
Xylene (Total)	ug/kg	300	300	100	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2948712 2948713

Parameter	Units	60375923016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	<1.0	98.6	92.4	66.1	87.6	67	95	25-130	28	35	
1,1,1-Trichloroethane	ug/kg	<0.74	98.6	92.4	68.5	86.4	69	93	45-120	23	35	
1,1,2,2-Tetrachloroethane	ug/kg	<0.99	98.6	92.4	<0.99	2.1J	0	2	10-145		35	M1
1,1,2-Trichloroethane	ug/kg	<0.62	98.6	92.4	59.6	75.9	60	82	25-130	24	35	
1,1,2-Trichlorotrifluoroethane	ug/kg	<5.0	98.6	92.4	72.9	88.7	74	96	35-120	20	35	N2

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2948712 2948713

Parameter	Units	60375923016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/kg	<0.39	98.6	92.4	67.8	85.6	69	93	40-120	23	35	
1,1-Dichloroethene	ug/kg	<0.63	98.6	92.4	77.8	105	79	113	35-120	30	35	
1,1-Dichloropropene	ug/kg	<0.89	98.6	92.4	70.9	86.6	72	94	40-125	20	35	
1,2,3-Trichlorobenzene	ug/kg	<0.79	98.6	92.4	60.1	80.1	61	87	10-125	29	50	
1,2,3-Trichloropropane	ug/kg	<2.1	98.6	92.4	64.6	94.8	65	103	25-135	38	35	R1
1,2,3-Trimethylbenzene	ug/kg	<2.0	98.6	92.4	60.9	82.0	62	89	35-120	30	35	
1,2,4-Trichlorobenzene	ug/kg	<0.79	98.6	92.4	59.3	80.4	60	87	10-125	30	50	
1,2,4-Trimethylbenzene	ug/kg	<0.66	98.6	92.4	60.7	79.7	62	86	35-120	27	35	
1,2-Dibromo-3-chloropropane	ug/kg	<1.8	98.6	92.4	60.1	90.0	61	97	10-145	40	35	R1
1,2-Dibromoethane (EDB)	ug/kg	<0.53	98.6	92.4	68.7	97.2	70	105	30-140	34	35	
1,2-Dichlorobenzene	ug/kg	<0.62	98.6	92.4	58.8	79.3	60	86	10-125	30	35	
1,2-Dichloroethane	ug/kg	<0.40	98.6	92.4	64.7	87.7	66	95	35-120	30	35	
1,2-Dichloroethene (Total)	ug/kg	<1.1	197	185	138	172	70	93	40-120	22	35	
1,2-Dichloropropane	ug/kg	<0.97	98.6	92.4	66.2	85.3	67	92	35-120	25	35	
1,3,5-Trimethylbenzene	ug/kg	<0.62	98.6	92.4	61.7	82.6	62	89	15-130	29	35	
1,3-Dichlorobenzene	ug/kg	<0.71	98.6	92.4	61.1	80.3	62	87	10-125	27	37	
1,3-Dichloropropane	ug/kg	<0.69	98.6	92.4	65.8	89.2	67	97	30-120	30	35	
1,4-Dichlorobenzene	ug/kg	<0.80	98.6	92.4	60.1	81.8	61	89	10-125	31	35	
2,2-Dichloropropane	ug/kg	<0.47	98.6	92.4	71.1	88.9	72	96	40-120	22	35	
2-Butanone (MEK)	ug/kg	<3.4	494	461	401	613	81	133	20-145	42	35	R1
2-Chlorotoluene	ug/kg	<0.72	98.6	92.4	61.6	81.0	62	88	15-125	27	35	
2-Hexanone	ug/kg	<2.5	494	461	393	599	80	130	15-150	42	35	R1
4-Chlorotoluene	ug/kg	<0.59	98.6	92.4	61.4	83.3	62	90	10-125	30	35	
4-Methyl-2-pentanone (MIBK)	ug/kg	<3.0	494	461	347	521	70	113	30-140	40	35	R1
Acetone	ug/kg	<16.1	494	461	437	660	86	141	10-165	41	35	R1
Acrolein	ug/kg	<74.9	494	461	385	596	78	129	10-200	43	60	
Acrylonitrile	ug/kg	<3.1	494	461	318	465	65	101	10-145	37	35	R1
Benzene	ug/kg	<0.49	98.6	92.4	66.2	83.1	67	90	35-120	23	35	
Bromobenzene	ug/kg	<0.93	98.6	92.4	61.2	82.5	62	89	15-125	30	35	
Bromochloromethane	ug/kg	<0.60	98.6	92.4	67.7	88.1	69	95	35-120	26	35	
Bromodichloromethane	ug/kg	<0.60	98.6	92.4	68.1	89.8	69	97	30-130	27	35	
Bromoform	ug/kg	<0.57	98.6	92.4	60.8	87.4	62	95	15-135	36	35	R1
Bromomethane	ug/kg	<2.9	98.6	92.4	49.7	59.4	50	64	10-120	18	35	
Carbon disulfide	ug/kg	<0.64	98.6	92.4	65.7	72.8	67	79	20-120	10	35	
Carbon tetrachloride	ug/kg	<0.85	98.6	92.4	75.9	93.2	77	101	40-125	21	35	
Chlorobenzene	ug/kg	<0.62	98.6	92.4	65.3	84.6	66	92	20-125	26	35	
Chloroethane	ug/kg	<1.5	98.6	92.4	66.5	80.8	67	88	25-120	20	35	
Chloroform	ug/kg	<0.49	98.6	92.4	67.6	87.0	69	94	40-125	25	35	
Chloromethane	ug/kg	<0.79	98.6	92.4	49.2	58.6	50	63	10-120	17	35	
cis-1,2-Dichloroethene	ug/kg	<0.43	98.6	92.4	67.6	86.0	69	93	35-120	24	35	
cis-1,3-Dichloropropene	ug/kg	<0.53	98.6	92.4	69.1	89.6	70	97	20-130	26	35	
Cyclohexanone	ug/kg	<12.6	494	461	410	646	83	140	35-120	45	35	M1
Dibromochloromethane	ug/kg	<0.64	98.6	92.4	69.5	97.0	70	105	25-135	33	35	
Dibromomethane	ug/kg	<0.59	98.6	92.4	66.8	91.9	68	99	30-125	32	35	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2948712 2948713

Parameter	Units	60375923016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Diethyl ether (Ethyl ether)	ug/kg	<0.56	98.6	92.4	64.9	86.6	66	94	35-120	29	35	R1
Ethylbenzene	ug/kg	<0.46	98.6	92.4	66.4	85.5	67	93	35-120	25	35	
Hexachloro-1,3-butadiene	ug/kg	<0.84	98.6	92.4	53.6	81.5	54	88	10-125	41	45	
Iodomethane	ug/kg	<1.5	98.6	92.4	55.2	72.5	56	79	30-120	27	35	
Isopropylbenzene (Cumene)	ug/kg	<0.57	98.6	92.4	69.4	88.8	70	96	20-135	25	35	
m&p-Xylene	ug/kg	<0.63	197	185	130	168	66	91	30-145	25	35	
Methyl acetate	ug/kg	<1.1	494	461	5.7J	<1.0	1	0	30-120		35	M1
Methyl-tert-butyl ether	ug/kg	<0.48	98.6	92.4	65.2	89.0	66	96	35-140	31	35	
Methylene Chloride	ug/kg	<2.7	98.6	92.4	59.5	77.5	60	84	10-135	26	35	
n-Butylbenzene	ug/kg	<0.64	98.6	92.4	60.3	83.0	61	90	10-130	32	35	
n-Heptane	ug/kg	<4.5	98.6	92.4	59.8	82.3	61	89	35-120	32	35	
n-Hexane	ug/kg	<0.68	98.6	92.4	63.2	77.5	64	84	10-150	20	35	
n-Propylbenzene	ug/kg	<0.80	98.6	92.4	63.5	84.9	64	92	20-125	29	35	
Naphthalene	ug/kg	<0.81	98.6	92.4	65.4	96.3	66	104	10-160	38	35	R1
o-Xylene	ug/kg	<0.37	98.6	92.4	66.6	83.6	67	91	30-145	23	35	
p-Isopropyltoluene	ug/kg	<0.68	98.6	92.4	62.0	82.6	63	89	10-135	29	35	
sec-Butylbenzene	ug/kg	<0.72	98.6	92.4	61.3	81.2	62	88	15-135	28	35	
Styrene	ug/kg	<0.58	98.6	92.4	66.5	84.9	67	92	15-130	24	35	
tert-Butylbenzene	ug/kg	<0.88	98.6	92.4	61.9	82.5	63	89	15-135	28	35	
Tetrachloroethene	ug/kg	<0.41	98.6	92.4	69.4	86.7	70	94	30-125	22	35	
Tetrahydrofuran	ug/kg	<0.78	494	461	315	487	64	106	35-120	43	35	N2
Toluene	ug/kg	<0.35	98.6	92.4	65.5	82.1	66	89	35-120	22	35	
trans-1,2-Dichloroethene	ug/kg	<0.67	98.6	92.4	70.7	86.3	72	93	40-120	20	35	
trans-1,3-Dichloropropene	ug/kg	<0.45	98.6	92.4	68.6	93.2	69	101	20-135	30	35	
Trichloroethene	ug/kg	<0.72	98.6	92.4	124	164	125	177	25-140	28	35	M1
Trichlorofluoromethane	ug/kg	<0.61	98.6	92.4	70.5	85.8	71	93	35-120	20	35	
Vinyl acetate	ug/kg	<0.56	98.6	92.4	28.8J	36.8J	29	40	30-120		35	M1
Vinyl chloride	ug/kg	<0.66	98.6	92.4	58.6	69.9	59	76	10-120	18	35	
Xylene (Total)	ug/kg	<1.1	296	277	197	251	67	91	35-120	24	35	
1,2-Dichlorobenzene-d4 (S)	%						100	100	80-120			
4-Bromofluorobenzene (S)	%						98	99	80-120			
Toluene-d8 (S)	%						99	99	80-120			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 735573
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923015

METHOD BLANK: 2950715 Matrix: Water
Associated Lab Samples: 60375923015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.084	1.0	08/03/21 13:33	
1,1,1-Trichloroethane	ug/L	<0.11	1.0	08/03/21 13:33	
1,1,2,2-Tetrachloroethane	ug/L	<0.15	1.0	08/03/21 13:33	
1,1,2-Trichloroethane	ug/L	<0.14	1.0	08/03/21 13:33	
1,1-Dichloroethane	ug/L	<0.12	1.0	08/03/21 13:33	
1,1-Dichloroethene	ug/L	<0.22	1.0	08/03/21 13:33	
1,1-Dichloropropene	ug/L	<0.14	1.0	08/03/21 13:33	
1,2,3-Trichlorobenzene	ug/L	<0.93	1.0	08/03/21 13:33	
1,2,3-Trichloropropane	ug/L	<0.41	2.5	08/03/21 13:33	
1,2,3-Trimethylbenzene	ug/L	<0.93	1.0	08/03/21 13:33	
1,2,4-Trichlorobenzene	ug/L	<0.73	1.0	08/03/21 13:33	
1,2,4-Trimethylbenzene	ug/L	<0.32	1.0	08/03/21 13:33	
1,2-Dibromo-3-chloropropane	ug/L	<0.78	2.5	08/03/21 13:33	
1,2-Dibromoethane (EDB)	ug/L	<0.20	1.0	08/03/21 13:33	
1,2-Dichlorobenzene	ug/L	<0.12	1.0	08/03/21 13:33	
1,2-Dichloroethane	ug/L	<0.21	1.0	08/03/21 13:33	
1,2-Dichloroethene (Total)	ug/L	<0.22	1.0	08/03/21 13:33	
1,2-Dichloropropane	ug/L	<0.14	1.0	08/03/21 13:33	
1,3,5-Trimethylbenzene	ug/L	<0.090	1.0	08/03/21 13:33	
1,3-Dichlorobenzene	ug/L	<0.13	1.0	08/03/21 13:33	
1,3-Dichloropropane	ug/L	<0.10	1.0	08/03/21 13:33	
1,4-Dichlorobenzene	ug/L	<0.13	1.0	08/03/21 13:33	
1,4-Dioxane (p-Dioxane)	ug/L	<4.4	100	08/03/21 13:33	
1-Methylnaphthalene	ug/L	<2.6	10.0	08/03/21 13:33	
2,2-Dichloropropane	ug/L	<0.16	1.0	08/03/21 13:33	
2-Butanone (MEK)	ug/L	<0.98	10.0	08/03/21 13:33	
2-Chloroethylvinyl ether	ug/L	<1.8	10.0	08/03/21 13:33	
2-Chlorotoluene	ug/L	<0.11	1.0	08/03/21 13:33	
2-Hexanone	ug/L	<1.1	10.0	08/03/21 13:33	
2-Methylnaphthalene	ug/L	<2.7	10.0	08/03/21 13:33	
4-Chlorotoluene	ug/L	<0.15	1.0	08/03/21 13:33	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	10.0	08/03/21 13:33	
Acetone	ug/L	<2.5	10.0	08/03/21 13:33	
Acetonitrile	ug/L	<1.1	10.0	08/03/21 13:33	
Acrolein	ug/L	<4.0	50.0	08/03/21 13:33	
Acrylonitrile	ug/L	<1.4	20.0	08/03/21 13:33	
Benzene	ug/L	<0.14	1.0	08/03/21 13:33	
Bromobenzene	ug/L	<0.088	1.0	08/03/21 13:33	
Bromochloromethane	ug/L	<0.20	1.0	08/03/21 13:33	
Bromodichloromethane	ug/L	<0.16	1.0	08/03/21 13:33	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

METHOD BLANK: 2950715 Matrix: Water
Associated Lab Samples: 60375923015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromoform	ug/L	<0.68	1.0	08/03/21 13:33	
Bromomethane	ug/L	<0.46	5.0	08/03/21 13:33	
Carbon disulfide	ug/L	<0.98	5.0	08/03/21 13:33	
Carbon tetrachloride	ug/L	<0.17	1.0	08/03/21 13:33	
Chlorobenzene	ug/L	<0.089	1.0	08/03/21 13:33	
Chloroethane	ug/L	<0.37	1.0	08/03/21 13:33	
Chloroform	ug/L	<0.22	1.0	08/03/21 13:33	
Chloromethane	ug/L	<0.28	1.0	08/03/21 13:33	
cis-1,2-Dichloroethene	ug/L	<0.13	1.0	08/03/21 13:33	
cis-1,3-Dichloropropene	ug/L	<0.078	1.0	08/03/21 13:33	
Cyclohexane	ug/L	<0.24	1.0	08/03/21 13:33	
Cyclohexanone	ug/L	<3.3	20.0	08/03/21 13:33	
Dibromochloromethane	ug/L	<0.30	1.0	08/03/21 13:33	
Dibromomethane	ug/L	<0.11	1.0	08/03/21 13:33	
Dichlorodifluoromethane	ug/L	<0.20	1.0	08/03/21 13:33	
Diethyl ether (Ethyl ether)	ug/L	<0.23	1.0	08/03/21 13:33	
Ethylbenzene	ug/L	<0.12	1.0	08/03/21 13:33	
Hexachloro-1,3-butadiene	ug/L	<0.42	1.0	08/03/21 13:33	
Isopropylbenzene (Cumene)	ug/L	<0.097	1.0	08/03/21 13:33	
m&p-Xylene	ug/L	<0.22	2.0	08/03/21 13:33	
Methyl acetate	ug/L	<0.87	1.0	08/03/21 13:33	
Methyl-tert-butyl ether	ug/L	<0.13	1.0	08/03/21 13:33	
Methylcyclohexane	ug/L	<0.12	1.0	08/03/21 13:33	
Methylene Chloride	ug/L	<0.39	1.0	08/03/21 13:33	
n-Butylbenzene	ug/L	<0.15	1.0	08/03/21 13:33	
n-Heptane	ug/L	<2.6	10.0	08/03/21 13:33	
n-Hexane	ug/L	<0.22	10.0	08/03/21 13:33	
n-Propylbenzene	ug/L	<0.12	1.0	08/03/21 13:33	
Naphthalene	ug/L	<0.82	10.0	08/03/21 13:33	
o-Xylene	ug/L	<0.082	1.0	08/03/21 13:33	
p-Isopropyltoluene	ug/L	<0.13	1.0	08/03/21 13:33	
sec-Butylbenzene	ug/L	<0.11	1.0	08/03/21 13:33	
Styrene	ug/L	<0.12	1.0	08/03/21 13:33	
tert-Butylbenzene	ug/L	<0.12	1.0	08/03/21 13:33	
Tetrachloroethene	ug/L	<0.33	1.0	08/03/21 13:33	
Tetrahydrofuran	ug/L	<2.8	5.0	08/03/21 13:33	
Toluene	ug/L	<0.25	1.0	08/03/21 13:33	
trans-1,2-Dichloroethene	ug/L	<0.10	1.0	08/03/21 13:33	
trans-1,3-Dichloropropene	ug/L	<0.18	1.0	08/03/21 13:33	
Trichloroethene	ug/L	<0.21	1.0	08/03/21 13:33	
Trichlorofluoromethane	ug/L	<0.16	1.0	08/03/21 13:33	
Vinyl chloride	ug/L	<0.17	1.0	08/03/21 13:33	
Xylene (Total)	ug/L	<0.28	3.0	08/03/21 13:33	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120	08/03/21 13:33	
4-Bromofluorobenzene (S)	%	98	80-120	08/03/21 13:33	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

METHOD BLANK: 2950715 Matrix: Water
Associated Lab Samples: 60375923015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene-d8 (S)	%	99	80-120	08/03/21 13:33	

LABORATORY CONTROL SAMPLE: 2950716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.5	92	80-120	
1,1,1-Trichloroethane	ug/L	20	19.1	96	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	15.9	79	75-125	
1,1,2-Trichloroethane	ug/L	20	17.8	89	80-120	
1,1-Dichloroethane	ug/L	20	18.8	94	75-125	
1,1-Dichloroethene	ug/L	20	20.1	100	80-120	
1,1-Dichloropropene	ug/L	20	19.3	96	80-125	
1,2,3-Trichlorobenzene	ug/L	20	15.9	80	75-125	
1,2,3-Trichloropropane	ug/L	20	18.9	94	80-125	
1,2,3-Trimethylbenzene	ug/L	20	19.5	98	80-125	
1,2,4-Trichlorobenzene	ug/L	20	16.6	83	75-120	
1,2,4-Trimethylbenzene	ug/L	20	18.4	92	80-125	
1,2-Dibromo-3-chloropropane	ug/L	20	17.5	87	70-120	
1,2-Dibromoethane (EDB)	ug/L	20	19.3	96	80-120	
1,2-Dichlorobenzene	ug/L	20	18.8	94	80-120	
1,2-Dichloroethane	ug/L	20	19.3	96	75-120	
1,2-Dichloroethene (Total)	ug/L	40	37.9	95	80-120	
1,2-Dichloropropane	ug/L	20	18.6	93	80-125	
1,3,5-Trimethylbenzene	ug/L	20	18.7	94	80-125	
1,3-Dichlorobenzene	ug/L	20	18.6	93	80-120	
1,3-Dichloropropane	ug/L	20	18.0	90	80-120	
1,4-Dichlorobenzene	ug/L	20	18.0	90	80-120	
1,4-Dioxane (p-Dioxane)	ug/L	100	83.2J	83	10-180	
1-Methylnaphthalene	ug/L	20	16.0	80	40-160	
2,2-Dichloropropane	ug/L	20	17.3	86	60-130	
2-Butanone (MEK)	ug/L	100	74.2	74	40-150	
2-Chloroethylvinyl ether	ug/L	100	91.2	91	30-165	
2-Chlorotoluene	ug/L	20	18.8	94	80-120	
2-Hexanone	ug/L	100	81.8	82	45-150	
2-Methylnaphthalene	ug/L	20	15.8	79	55-150	
4-Chlorotoluene	ug/L	20	19.0	95	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	85.4	85	65-140	
Acetone	ug/L	100	83.4	83	20-175	
Acetonitrile	ug/L	100	90.4	90	25-180	
Acrolein	ug/L	100	88.9	89	10-200	
Acrylonitrile	ug/L	100	91.5	91	70-135	
Benzene	ug/L	20	18.1	90	80-120	
Bromobenzene	ug/L	20	19.0	95	80-120	
Bromochloromethane	ug/L	20	20.0	100	80-125	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

LABORATORY CONTROL SAMPLE: 2950716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	20	19.5	97	80-125	
Bromoform	ug/L	20	17.3	87	60-135	
Bromomethane	ug/L	20	17.0	85	10-165	
Carbon disulfide	ug/L	20	19.5	97	75-135	
Carbon tetrachloride	ug/L	20	20.1	101	80-125	
Chlorobenzene	ug/L	20	18.8	94	80-120	
Chloroethane	ug/L	20	20.0	100	70-130	
Chloroform	ug/L	20	19.2	96	80-120	
Chloromethane	ug/L	20	17.0	85	35-155	
cis-1,2-Dichloroethene	ug/L	20	18.8	94	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.5	92	80-125	
Cyclohexane	ug/L	20	19.3	97	80-130	
Cyclohexanone	ug/L	100	75.1	75	10-180	
Dibromochloromethane	ug/L	20	18.9	94	70-120	
Dibromomethane	ug/L	20	18.7	93	80-120	
Dichlorodifluoromethane	ug/L	20	19.6	98	50-150	
Diethyl ether (Ethyl ether)	ug/L	20	18.5	92	70-140	
Ethylbenzene	ug/L	20	19.0	95	80-120	
Hexachloro-1,3-butadiene	ug/L	20	17.7	88	65-135	
Isopropylbenzene (Cumene)	ug/L	20	19.8	99	80-125	
m&p-Xylene	ug/L	40	37.9	95	75-130	
Methyl acetate	ug/L	100	87.9	88	45-140	
Methyl-tert-butyl ether	ug/L	20	19.2	96	65-130	
Methylcyclohexane	ug/L	20	19.3	97	80-125	
Methylene Chloride	ug/L	20	17.8	89	75-120	
n-Butylbenzene	ug/L	20	17.8	89	80-125	
n-Heptane	ug/L	20	18.3	92	10-180	
n-Hexane	ug/L	20	17.6	88	60-135	
n-Propylbenzene	ug/L	20	18.5	92	80-120	
Naphthalene	ug/L	20	15.5	78	70-120	
o-Xylene	ug/L	20	18.6	93	75-130	
p-Isopropyltoluene	ug/L	20	19.5	97	80-135	
sec-Butylbenzene	ug/L	20	18.9	94	80-120	
Styrene	ug/L	20	19.4	97	80-120	
tert-Butylbenzene	ug/L	20	19.1	95	80-120	
Tetrachloroethene	ug/L	20	20.3	102	80-120	
Tetrahydrofuran	ug/L	100	85.0	85	75-125	
Toluene	ug/L	20	18.3	91	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.0	95	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.7	94	75-120	
Trichloroethene	ug/L	20	20.3	101	80-120	
Trichlorofluoromethane	ug/L	20	21.9	110	80-130	
Vinyl chloride	ug/L	20	19.2	96	65-130	
Xylene (Total)	ug/L	60	56.6	94	80-120	
1,2-Dichlorobenzene-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 734681
QC Batch Method: EPA 5035
Analysis Method: EPA 8260
Analysis Description: 8260 MSV GRO and Oxygenates
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923011, 60375923012

METHOD BLANK: 2947600 Matrix: Solid
Associated Lab Samples: 60375923011, 60375923012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.055	0.50	07/28/21 09:09	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120	07/28/21 09:09	
4-Bromofluorobenzene (S)	%	103	69-133	07/28/21 09:09	
Toluene-d8 (S)	%	100	78-122	07/28/21 09:09	

LABORATORY CONTROL SAMPLE: 2947601

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.3	82	61-140	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			96	69-133	
Toluene-d8 (S)	%			100	78-122	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 735025
QC Batch Method: EPA 5035
Analysis Method: EPA 8260
Analysis Description: 8260 MSV GRO and Oxygenates
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923013, 60375923014, 60375923016, 60375923017

METHOD BLANK: 2948715 Matrix: Solid
Associated Lab Samples: 60375923013, 60375923014, 60375923016, 60375923017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.055	0.50	07/29/21 09:28	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120	07/29/21 12:51	
4-Bromofluorobenzene (S)	%	105	69-133	07/29/21 12:51	
Toluene-d8 (S)	%	100	78-122	07/29/21 12:51	

LABORATORY CONTROL SAMPLE: 2948716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.3	82	61-140	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			97	69-133	
Toluene-d8 (S)	%			100	78-122	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 734529
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923001, 60375923002, 60375923003, 60375923004, 60375923005, 60375923006, 60375923007, 60375923008, 60375923009, 60375923010, 60375923011, 60375923012, 60375923013, 60375923014, 60375923016, 60375923017

METHOD BLANK: 2947234 Matrix: Solid
Associated Lab Samples: 60375923001, 60375923002, 60375923003, 60375923004, 60375923005, 60375923006, 60375923007, 60375923008, 60375923009, 60375923010, 60375923011, 60375923012, 60375923013, 60375923014, 60375923016, 60375923017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<8.2	32.9	07/29/21 15:22	
PCB-1221 (Aroclor 1221)	ug/kg	<7.8	32.9	07/29/21 15:22	
PCB-1232 (Aroclor 1232)	ug/kg	<3.6	32.9	07/29/21 15:22	
PCB-1242 (Aroclor 1242)	ug/kg	<7.9	32.9	07/29/21 15:22	
PCB-1248 (Aroclor 1248)	ug/kg	<2.2	32.9	07/29/21 15:22	
PCB-1254 (Aroclor 1254)	ug/kg	<3.1	32.9	07/29/21 15:22	
PCB-1260 (Aroclor 1260)	ug/kg	<6.5	32.9	07/29/21 15:22	
Decachlorobiphenyl (S)	%	84	35-120	07/29/21 15:22	

LABORATORY CONTROL SAMPLE: 2947235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	163	147	90	65-120	
PCB-1260 (Aroclor 1260)	ug/kg	163	150	92	65-120	
Decachlorobiphenyl (S)	%			84	35-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947236 2947237

Parameter	Units	60375923016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<10	205	198	178	167	87	84	30-130	6	40	
PCB-1260 (Aroclor 1260)	ug/kg	<7.9	205	198	203	173	100	87	15-155	16	40	
Decachlorobiphenyl (S)	%						80	77	35-120		50	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 734531
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923011, 60375923012, 60375923013, 60375923014, 60375923016, 60375923017

METHOD BLANK: 2947243 Matrix: Solid
Associated Lab Samples: 60375923011, 60375923012, 60375923013, 60375923014, 60375923016, 60375923017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<2.4	6.5	07/30/21 12:56	
Acenaphthylene	ug/kg	<2.4	6.5	07/30/21 12:56	
Anthracene	ug/kg	<2.7	6.5	07/30/21 12:56	
Benzo(a)anthracene	ug/kg	<3.1	6.5	07/30/21 12:56	
Benzo(a)pyrene	ug/kg	<2.4	6.5	07/30/21 12:56	
Benzo(b)fluoranthene	ug/kg	<3.2	6.5	07/30/21 12:56	
Benzo(g,h,i)perylene	ug/kg	<2.9	6.5	07/30/21 12:56	
Benzo(k)fluoranthene	ug/kg	<3.6	6.5	07/30/21 12:56	
Chrysene	ug/kg	<3.1	6.5	07/30/21 12:56	
Dibenz(a,h)anthracene	ug/kg	<2.8	6.5	07/30/21 12:56	
Fluoranthene	ug/kg	<4.9	6.5	07/30/21 12:56	
Fluorene	ug/kg	<2.5	6.5	07/30/21 12:56	
Indeno(1,2,3-cd)pyrene	ug/kg	<2.8	6.5	07/30/21 12:56	
Naphthalene	ug/kg	<2.8	6.5	07/30/21 12:56	
Phenanthrene	ug/kg	<5.3	6.5	07/30/21 12:56	
Pyrene	ug/kg	<3.5	6.5	07/30/21 12:56	
2-Fluorobiphenyl (S)	%	75	40-120	07/30/21 12:56	
Terphenyl-d14 (S)	%	88	45-130	07/30/21 12:56	

LABORATORY CONTROL SAMPLE: 2947244

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	33.2	28.4	86	45-120	
Acenaphthylene	ug/kg	33.2	27.6	83	50-120	
Anthracene	ug/kg	33.2	30.8	93	50-120	
Benzo(a)anthracene	ug/kg	33.2	31.8	96	55-125	
Benzo(a)pyrene	ug/kg	33.2	30.0	90	45-120	
Benzo(b)fluoranthene	ug/kg	33.2	31.9	96	50-125	
Benzo(g,h,i)perylene	ug/kg	33.2	30.3	91	40-120	
Benzo(k)fluoranthene	ug/kg	33.2	34.4	104	55-120	
Chrysene	ug/kg	33.2	31.6	95	55-120	
Dibenz(a,h)anthracene	ug/kg	33.2	29.6	89	40-125	
Fluoranthene	ug/kg	33.2	35.0	105	50-125	
Fluorene	ug/kg	33.2	29.5	89	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	33.2	30.1	91	44-125	
Naphthalene	ug/kg	33.2	28.4	86	45-120	
Phenanthrene	ug/kg	33.2	32.6	98	50-125	
Pyrene	ug/kg	33.2	35.9	108	50-125	
2-Fluorobiphenyl (S)	%			95	40-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

LABORATORY CONTROL SAMPLE: 2947244

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			124	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947245 2947246

Parameter	Units	60375923016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	20.7	40.2	40.5	64.8	69.4	110	120	10-150	7	42	
Acenaphthylene	ug/kg	5.4J	40.2	40.5	34.9	50.1	73	110	30-125	36	44	
Anthracene	ug/kg	29.3	40.2	40.5	83.0	78.4	134	121	10-160	6	54	
Benzo(a)anthracene	ug/kg	69.2	40.2	40.5	139	111	175	102	10-160	23	62	M1
Benzo(a)pyrene	ug/kg	51.6	40.2	40.5	103	89.4	128	93	10-150	14	66	
Benzo(b)fluoranthene	ug/kg	86.8	40.2	40.5	160	120	182	83	10-165	28	61	M1
Benzo(g,h,i)perylene	ug/kg	33.4	40.2	40.5	80.1	77.1	116	108	10-155	4	58	
Benzo(k)fluoranthene	ug/kg	46.6	40.2	40.5	78.8	81.4	80	86	10-165	3	53	
Chrysene	ug/kg	63.3	40.2	40.5	131	106	170	106	10-150	21	57	M1
Dibenz(a,h)anthracene	ug/kg	<3.5	40.2	40.5	42.0	52.1	105	129	10-175	22	48	
Fluoranthene	ug/kg	175	40.2	40.5	307	221	328	112	10-180	33	54	M1
Fluorene	ug/kg	20.0	40.2	40.5	75.4	76.6	138	140	20-145	2	39	
Indeno(1,2,3-cd)pyrene	ug/kg	28.6	40.2	40.5	70.4	72.2	104	108	10-150	2	59	
Naphthalene	ug/kg	8.7	40.2	40.5	45.3	58.6	91	123	10-165	26	54	
Phenanthrene	ug/kg	94.1	40.2	40.5	163	133	172	96	10-170	20	51	M1
Pyrene	ug/kg	149	40.2	40.5	254	190	263	103	10-180	29	61	M1
2-Fluorobiphenyl (S)	%						93	92	40-120			
Terphenyl-d14 (S)	%						114	114	45-130			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 734532
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923003, 60375923004, 60375923005, 60375923006, 60375923009, 60375923010

METHOD BLANK: 2947247 Matrix: Solid
Associated Lab Samples: 60375923003, 60375923004, 60375923005, 60375923006, 60375923009, 60375923010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<1.2	3.3	07/29/21 11:26	
Acenaphthylene	ug/kg	<1.2	3.3	07/29/21 11:26	
Anthracene	ug/kg	<1.4	3.3	07/29/21 11:26	
Benzo(a)anthracene	ug/kg	<1.5	3.3	07/29/21 11:26	
Benzo(a)pyrene	ug/kg	<1.2	3.3	07/29/21 11:26	
Benzo(b)fluoranthene	ug/kg	<1.6	3.3	07/29/21 11:26	
Benzo(g,h,i)perylene	ug/kg	<1.5	3.3	07/29/21 11:26	
Benzo(k)fluoranthene	ug/kg	<1.8	3.3	07/29/21 11:26	
Chrysene	ug/kg	<1.6	3.3	07/29/21 11:26	
Dibenz(a,h)anthracene	ug/kg	<1.4	3.3	07/29/21 11:26	
Fluoranthene	ug/kg	<2.5	3.3	07/29/21 11:26	
Fluorene	ug/kg	<1.3	3.3	07/29/21 11:26	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.4	3.3	07/29/21 11:26	
Naphthalene	ug/kg	<1.4	3.3	07/29/21 11:26	
Phenanthrene	ug/kg	<2.7	3.3	07/29/21 11:26	
Pyrene	ug/kg	<1.8	3.3	07/29/21 11:26	
2-Fluorobiphenyl (S)	%	80	40-120	07/29/21 11:26	
Terphenyl-d14 (S)	%	96	45-130	07/29/21 11:26	

LABORATORY CONTROL SAMPLE: 2947248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	32.8	26.9	82	45-120	
Acenaphthylene	ug/kg	32.8	26.5	81	50-120	
Anthracene	ug/kg	32.8	28.4	87	50-120	
Benzo(a)anthracene	ug/kg	32.8	28.6	87	55-125	
Benzo(a)pyrene	ug/kg	32.8	28.0	85	45-120	
Benzo(b)fluoranthene	ug/kg	32.8	28.6	87	50-125	
Benzo(g,h,i)perylene	ug/kg	32.8	25.2	77	40-120	
Benzo(k)fluoranthene	ug/kg	32.8	31.5	96	55-120	
Chrysene	ug/kg	32.8	28.1	86	55-120	
Dibenz(a,h)anthracene	ug/kg	32.8	25.5	78	40-125	
Fluoranthene	ug/kg	32.8	29.8	91	50-125	
Fluorene	ug/kg	32.8	27.3	83	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	32.8	25.7	78	44-125	
Naphthalene	ug/kg	32.8	26.8	82	45-120	
Phenanthrene	ug/kg	32.8	28.4	87	50-125	
Pyrene	ug/kg	32.8	30.9	94	50-125	
2-Fluorobiphenyl (S)	%			84	40-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

LABORATORY CONTROL SAMPLE: 2947248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			98	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947249 2947250

Parameter	Units	60375923003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<1.5	40.4	41	32.4	33.0	80	81	10-150	2	42	
Acenaphthylene	ug/kg	<1.5	40.4	41	30.2	30.8	75	75	30-125	2	44	
Anthracene	ug/kg	3.5J	40.4	41	42.1	40.0	96	89	10-160	5	54	
Benzo(a)anthracene	ug/kg	12.8	40.4	41	77.2	60.2	159	115	10-160	25	62	
Benzo(a)pyrene	ug/kg	10.6	40.4	41	67.0	52.1	140	101	10-150	25	66	
Benzo(b)fluoranthene	ug/kg	19.4	40.4	41	96.9	69.8	192	123	10-165	33	61	M1
Benzo(g,h,i)perylene	ug/kg	8.4	40.4	41	63.2	50.7	136	103	10-155	22	58	
Benzo(k)fluoranthene	ug/kg	9.7	40.4	41	60.9	50.0	127	98	10-165	20	53	
Chrysene	ug/kg	14.3	40.4	41	78.5	61.4	159	115	10-150	25	57	M1
Dibenz(a,h)anthracene	ug/kg	<1.7	40.4	41	37.5	36.0	93	88	10-175	4	48	
Fluoranthene	ug/kg	41.9	40.4	41	157	114	284	176	10-180	31	54	M1
Fluorene	ug/kg	<1.6	40.4	41	34.6	35.0	86	85	20-145	1	39	
Indeno(1,2,3-cd)pyrene	ug/kg	6.6	40.4	41	55.6	47.0	121	98	10-150	17	59	
Naphthalene	ug/kg	<1.7	40.4	41	31.5	34.3	78	84	10-165	9	54	
Phenanthrene	ug/kg	19.8	40.4	41	86.0	70.4	164	123	10-170	20	51	
Pyrene	ug/kg	32.5	40.4	41	138	97.8	262	159	10-180	34	61	M1
2-Fluorobiphenyl (S)	%						79	81	40-120			
Terphenyl-d14 (S)	%						97	96	45-130			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 734530 | Analysis Method: EPA 8270
QC Batch Method: EPA 3546 | Analysis Description: 8270 MSSV TPH ORO
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923011, 60375923012, 60375923013, 60375923014, 60375923016, 60375923017

METHOD BLANK: 2947239 Matrix: Solid
Associated Lab Samples: 60375923011, 60375923012, 60375923013, 60375923014, 60375923016, 60375923017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO	mg/kg	1.5J	14.8	07/29/21 10:20	
TPH-ORO	mg/kg	2.1J	14.8	07/29/21 10:20	
2-Fluorobiphenyl (S)	%	75	40-120	07/29/21 10:20	
Nitrobenzene-d5 (S)	%	73	30-120	07/29/21 10:20	
Terphenyl-d14 (S)	%	76	45-120	07/29/21 10:20	

LABORATORY CONTROL SAMPLE: 2947240

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	332	274	83	40-120	
2-Fluorobiphenyl (S)	%			75	40-120	
Nitrobenzene-d5 (S)	%			84	30-120	
Terphenyl-d14 (S)	%			74	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2947241 2947242

Parameter	Units	60375923016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO	mg/kg	5.1J	402	397	332	322	81	80	10-145	3	38	
2-Fluorobiphenyl (S)	%						76	74	40-120			
Nitrobenzene-d5 (S)	%						80	78	30-120			
Terphenyl-d14 (S)	%						80	77	45-120			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

QC Batch: 734478
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60375923001, 60375923002, 60375923003, 60375923004, 60375923005, 60375923006, 60375923007, 60375923008, 60375923009, 60375923010, 60375923011, 60375923012, 60375923013, 60375923014, 60375923016, 60375923017

METHOD BLANK: 2947082
Matrix: Solid
Associated Lab Samples: 60375923001, 60375923002, 60375923003, 60375923004, 60375923005, 60375923006, 60375923007, 60375923008, 60375923009, 60375923010, 60375923011, 60375923012, 60375923013, 60375923014, 60375923016, 60375923017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	07/27/21 13:45	

SAMPLE DUPLICATE: 2947083

Parameter	Units	60375923016 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.8	20.5	3	20	

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QUALIFIERS

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 735573

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
c2	Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375923001	GB-15/2-3	EPA 3546	734529	EPA 8082	735077
60375923002	GB-15/3-5	EPA 3546	734529	EPA 8082	735077
60375923003	GB-22/1-3	EPA 3546	734529	EPA 8082	735077
60375923004	GB-22/3-5	EPA 3546	734529	EPA 8082	735077
60375923005	GB-29/1.5-2.5	EPA 3546	734529	EPA 8082	735077
60375923006	GB-29/3-5	EPA 3546	734529	EPA 8082	735077
60375923007	GB-36/0-2	EPA 3546	734529	EPA 8082	735077
60375923008	GB-36/2-4	EPA 3546	734529	EPA 8082	735077
60375923009	GB-43/3-5	EPA 3546	734529	EPA 8082	735077
60375923010	GB-43/5-7	EPA 3546	734529	EPA 8082	735077
60375923011	GB-01/8-10	EPA 3546	734529	EPA 8082	735077
60375923012	GB-01/11-13	EPA 3546	734529	EPA 8082	735077
60375923013	GB-03/1-3	EPA 3546	734529	EPA 8082	735077
60375923014	GB-03/4-6	EPA 3546	734529	EPA 8082	735077
60375923016	GB-02/2-3	EPA 3546	734529	EPA 8082	735077
60375923017	GB-02/8-9	EPA 3546	734529	EPA 8082	735077
60375923001	GB-15/2-3	EPA 3050	735731	EPA 6020	736182
60375923002	GB-15/3-5	EPA 3050	735731	EPA 6020	736182
60375923003	GB-22/1-3	EPA 3050	735731	EPA 6020	736182
60375923004	GB-22/3-5	EPA 3050	735731	EPA 6020	736182
60375923005	GB-29/1.5-2.5	EPA 3050	735731	EPA 6020	736182
60375923006	GB-29/3-5	EPA 3050	735731	EPA 6020	736182
60375923007	GB-36/0-2	EPA 3050	735731	EPA 6020	736182
60375923008	GB-36/2-4	EPA 3050	735731	EPA 6020	736182
60375923009	GB-43/3-5	EPA 3050	735731	EPA 6020	736182
60375923010	GB-43/5-7	EPA 3050	735731	EPA 6020	736182
60375923011	GB-01/8-10	EPA 3050	735731	EPA 6020	736182
60375923012	GB-01/11-13	EPA 3050	735731	EPA 6020	736182
60375923013	GB-03/1-3	EPA 3050	735731	EPA 6020	736182
60375923014	GB-03/4-6	EPA 3050	735731	EPA 6020	736182
60375923016	GB-02/2-3	EPA 3050	735731	EPA 6020	736182
60375923017	GB-02/8-9	EPA 3050	735731	EPA 6020	736182
60375923003	GB-22/1-3	EPA 3546	734532	EPA 8270 by SIM	735002
60375923004	GB-22/3-5	EPA 3546	734532	EPA 8270 by SIM	735002
60375923005	GB-29/1.5-2.5	EPA 3546	734532	EPA 8270 by SIM	735002
60375923006	GB-29/3-5	EPA 3546	734532	EPA 8270 by SIM	735002
60375923009	GB-43/3-5	EPA 3546	734532	EPA 8270 by SIM	735002
60375923010	GB-43/5-7	EPA 3546	734532	EPA 8270 by SIM	735002
60375923011	GB-01/8-10	EPA 3546	734531	EPA 8270 by SIM	735256
60375923012	GB-01/11-13	EPA 3546	734531	EPA 8270 by SIM	735256
60375923013	GB-03/1-3	EPA 3546	734531	EPA 8270 by SIM	735256
60375923014	GB-03/4-6	EPA 3546	734531	EPA 8270 by SIM	735256
60375923016	GB-02/2-3	EPA 3546	734531	EPA 8270 by SIM	735256
60375923017	GB-02/8-9	EPA 3546	734531	EPA 8270 by SIM	735256
60375923011	GB-01/8-10	EPA 3546	734530	EPA 8270	735006
60375923012	GB-01/11-13	EPA 3546	734530	EPA 8270	735006
60375923013	GB-03/1-3	EPA 3546	734530	EPA 8270	735006

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA-GOODFELLOW
Pace Project No.: 60375923

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60375923014	**GB-03/4-6**	EPA 3546	734530	EPA 8270	735006
60375923016	**GB-02/2-3**	EPA 3546	734530	EPA 8270	735006
60375923017	**GB-02/8-9**	EPA 3546	734530	EPA 8270	735006
60375923011	**GB-01/8-10**	EPA 5035A/5030	734679	EPA 8260B	734710
60375923012	**GB-01/11-13**	EPA 5035A/5030	734679	EPA 8260B	734710
60375923013	**GB-03/1-3**	EPA 5035A/5030	735024	EPA 8260B	735055
60375923014	**GB-03/4-6**	EPA 5035A/5030	735024	EPA 8260B	735055
60375923016	**GB-02/2-3**	EPA 5035A/5030	735024	EPA 8260B	735055
60375923017	**GB-02/8-9**	EPA 5035A/5030	735024	EPA 8260B	735055
60375923015	**TB-5**	EPA 5030B/8260	735573		
60375923011	**GB-01/8-10**	EPA 5035	734681	EPA 8260	734712
60375923012	**GB-01/11-13**	EPA 5035	734681	EPA 8260	734712
60375923013	**GB-03/1-3**	EPA 5035	735025	EPA 8260	735056
60375923014	**GB-03/4-6**	EPA 5035	735025	EPA 8260	735056
60375923016	**GB-02/2-3**	EPA 5035	735025	EPA 8260	735056
60375923017	**GB-02/8-9**	EPA 5035	735025	EPA 8260	735056
60375923001	**GB-15/2-3**	ASTM D2974	734478		
60375923002	**GB-15/3-5**	ASTM D2974	734478		
60375923003	**GB-22/1-3**	ASTM D2974	734478		
60375923004	**GB-22/3-5**	ASTM D2974	734478		
60375923005	**GB-29/1.5-2.5**	ASTM D2974	734478		
60375923006	**GB-29/3-5**	ASTM D2974	734478		
60375923007	**GB-36/0-2**	ASTM D2974	734478		
60375923008	**GB-36/2-4**	ASTM D2974	734478		
60375923009	**GB-43/3-5**	ASTM D2974	734478		
60375923010	**GB-43/5-7**	ASTM D2974	734478		
60375923011	**GB-01/8-10**	ASTM D2974	734478		
60375923012	**GB-01/11-13**	ASTM D2974	734478		
60375923013	**GB-03/1-3**	ASTM D2974	734478		
60375923014	**GB-03/4-6**	ASTM D2974	734478		
60375923016	**GB-02/2-3**	ASTM D2974	734478		
60375923017	**GB-02/8-9**	ASTM D2974	734478		

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Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60375923

60375923

Client Name: Burns & McDonnell

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☑ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☑ None ☐ Other ☑ Ziplo

Thermometer Used: T29e **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 2.4 / 1.4 Corr. Factor -0.3 Corrected 2.1 / 1.1

Temperature should be above freezing to 6°C

Date and initials of person examining contents: 7/27/21 (b)(6)

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: S	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#	☐Yes ☐No ☑N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☑Yes ☐No ☐N/A	Water trip blank
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State: MO	☐Yes ☑No ☐N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Jeffrey Shopper Date: _____

F-KS-C-003-Rev.11, February 28, 2018

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: (785) 827-1273

Document Control No: 133835-014
Lab. Reference No. or Episode No.:

Project Number: 133835
Client Name: GSA-Goodfellow

Sample Type: Matrix

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Matrix: Liquid	Matrix: Solid	Matrix: Gas	Number of Containers	Analysis: PAHs	Analysis: Metals	Analysis: PCB	Analysis: PCB Congeners	Analysis: VOCs	Analysis: GRO	Analysis: MO DRO/ORO	Remarks
GB-15/2-3					2.0	3.0	7/23/21	1409		X		1		X	X					1-JGFU
GB-15/3-5					3.0	5.0		1412		X		1		X	X					↓
GB-22/1-3					1.0	3.0		1432		X		3	X	X	X	X				3-JGFU
GB-22/3-5					3.0	5.0	↓	1436		X		2	X	X	X					2-JGFU
GB-29/1.5-2.5					1.5	2.5	7/26/21	812		X		2	X	X	X					↓
GB-29/3-5					3.0	5.0		817		X		2	X	X	X					
GB-36/0-2					0	2.0		846		X		1		X	X					1-JGFU
GB-36/2-4					2.0	4.0		850		X		1		X	X					↓
GB-43/3-5					3.0	5.0		920		X		2	X	X	X					2-JGFU
GB-43/5-7					5.0	7.0		925		X		2	X	X	X					↓
GB-01/8-10					8.0	10.0		1027		X		7	X	X	X	X	X	X	X	3-JGFU 1-AG5U 2-DG9Q 1-DG9M
GB-01/11-13					11.0	13.0		1032		X		6	X	X	X		X	X	X	2-JGFU 1-AG5U 2-DG9Q 1-DG9M
GB-03/1-3					1.0	3.0		1056		X		6	X	X	X		X	X	X	↓ ↓ ↓
GB-03/4-6					4.0	6.0	↓	1118		X		6	X	X	X		X	X	X	2-JGFU 2-DG9Q 1-DG9M 1-DG9M 7/27/21 SR2
TB-5					Lab Prepared				X			1					X			1-DG9H

60375923

[redacted] (b) (6)

Sampler (signature):

Special Instructions:
SEE WORK ORDER

Relinquished By (signature): [redacted] (b) (6) — Date/Time: 7/26/21 13:54

Received By (signature): [redacted] (b) (6) — Date/Time: 7/26/21 13:54

Relinquished By (signature): [redacted] (b) (6) — Date/Time:

Received By (signature): [redacted] (b) (6) — Date/Time: 7/27/21 8545

Ice Present in Container: Yes ☒ No ☐

Temperature Upon Receipt: 2.1, 1.1

Laboratory Comments:

BURNS McDONNELL

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: (785) 827-1273

Document Control No: 133835-015
Lab. Reference No. or Episode No.:

Project Number: 133835

Client Name: GSA - Goodfellow

Sample Type

Matrix

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Matrix			Number of Containers	Analysis							
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		PAHs	Metals	PCBs	PCB Congeners	VOCs	GRO	MO DRO/ORO	Remarks
GB-02	2-3				2.0	3.0	7/26/21	1141		X		6	X	X	X		X	X	X	60375923 JGFU 2 AGF 1 AG5U 1 DG9M 2 VOAA 7/27/21 SR
GB-02	2-3MS				2.0	3.0		1141		X		6	X	X	X		X	X	X	
GB-02	2-3MSD				2.0	3.0		1141		X		6	X	X	X		X	X	X	
GB-02	8-9				8.0	9.0		1158		X		6	X	X	X		X	X	X	

Sampler (signature): [redacted]

Special Instructions:
SEE WORK ORDER

Relinquished By (signature): [redacted] Date/Time 7/26/21 13:5[illegible]

Received By (signature): [redacted] Date/Time 7/26/21 13:5[illegible]

Relinquished By (signature): [redacted] Date/Time

Received By (signature): [redacted] Date/Time 7/27/21 0545

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt: 2.1, 1.1

Laboratory Comments:

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

www.pacelabs.com

Report Prepared for:

Jeffrey Shopper
PACE Kansas
9608 Loriet Blvd
Lenexa KS 66219

REPORT OF LABORATORY ANALYSIS FOR PCBs

Report Information:

Pace Project #: 10571939
Sample Receipt Date: 07/28/2021
Client Project #: 60375923 Burns & McDonnell
Client Sub PO #: N/A
State Cert #: N/A

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 4 PCB Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

(b) (6) [redacted]

August 25, 2021

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
August 25, 2021

Report of Laboratory Analysis

This report should not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

The results relate only to the samples included in this report.

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

This report presents the results from the analyses performed on two samples submitted by a representative of Pace Analytical Services, Kansas. The samples were analyzed for the presence or absence of the twelve dioxin-like polychlorinated biphenyl (PCB) congeners using USEPA Method 1668A. Reporting limits were set to signal-to-noised based estimated detection limits based on the amount of dry sample weight extracted. This report was revised to include all twelve dioxin-like PCB congeners.

The dilution levels noted on the data tables is being adjusted to allow the correct data flags to populate the electronic deliverables as well as the data tables. Samples and MDL extracts were analyzed at elevated volumes. That volume is being treated as a 1x dilution for calculation purposes, with larger dilutions being factored from that volume.

The recoveries of the isotopically-labeled PCB internal standards in the sample extracts ranged from 57-81%. All of the laboratory spike results tables, the isotopically-labeled PCB internal standards in the extracts were recovered within the target ranges for this method. Since the quantification of the native PCB congeners was based on internal standard and isotope dilution methodology, the data were automatically corrected for variation in recovery and accurate values were obtained.

Incorrect isotope ratios were obtained for selected PCB congeners. The affected congeners were flagged "I" on the results tables. Any associated target analyte detections were provided under the estimated maximum possible concentration (EMPC) column on the results tables.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to produce signal at the retention time of congeners 156/157 and to contain trace levels of several other PCB congeners. Congeners present in the sample extracts at levels similar to the method blank were flagged "B" and may have originated in the laboratory.

Laboratory spike samples were also prepared using reference matrix that had been fortified with native standard materials. The results show that the spiked native compounds were recovered at 97-118%, with relative percent differences of 1.9-15.7%. These results were within the target ranges for the method. Matrix spikes were not prepared with this sample set.

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
		Missouri	10100
A2LA	2926.01	Montana	CERT0092
Alabama	40770	Nebraska	NE-OS-18-06
Alaska-DW	MN00064	Nevada	MN00064
Alaska-UST	17-009	New Hampshire	2081
Arizona	AZ0014	New Jersey	MN002
Arkansas - WW	88-0680	New York	11647
Arkansas-DW	MN00064	North Carolina-	27700
California	2929	North Carolina-	530
Colorado	MN00064	North Dakota	R-036
Connecticut	PH-0256	Ohio-DW	41244
Florida	E87605	Ohio-VAP (170	CL101
Georgia	959	Ohio-VAP (180	CL110
Hawaii	MN00064	Oklahoma	9507
Idaho	MN00064	Oregon- rimary	MN300001
Illinois	200011	Oregon-Second	MN200001
Indiana	C-MN-01	Pennsylvania	68-00563
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003
Kentucky-DW	90062	Tennessee	TN02818
Kentucky-WW	90062	Texas	T104704192
Louisiana-DEQ	AI-84596	Utah	MN00064
Louisiana-DW	MN00064	Vermont	VT-027053137
Maine	MN00064	Virginia	460163
Maryland	322	Washington	C486
Michigan	9909	West Virginia-D	382
Minnesota	027-053-137	West Virginia-D	9952C
Minnesota-Ag	via MN 027-053	Wisconsin	999407970
Minnesota-Petr	1240	Wyoming-UST	via A2LA 2926.
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise (EDL)

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

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Appendix A

Sample Management

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Sample ID Cross Reference

Client Sample ID	Pace Sample ID	Date Received	Sample Type
GB-22/1-3	60375923003-R	07/28/2021	Solid
GB-01/8-10	60375923011-R	07/28/2021	Solid

REPORT OF LABORATORY ANALYSIS

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Internal Transfer Chain of Custody

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www.pacelabs.com

[X] Samples Pre-Logged into eCOC.

State Of Origin: MO
Cert. Needed: [ ] Yes [X] No
Owner Received Date: 7/27/2021 **Results Requested By:** 8/24/2021

Workorder: 60375923 **Workorder Name:** GSA-GOODFELLOW

Report To	Subcontract To
Jeffrey Shopper Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 1(913)563-1408	Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	1668A PCB Congeners	LAB USE ONLY
1	GB-22/1-3	PS	7/23/2021 14:32	60375923003	Solid	1	X	001
2	GB-01/8-10	PS	7/26/2021 10:27	60375923011	Solid	1	X	002
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1			[redacted] (6) (b) / Pace	7/28/21
2				
3				

Comments: 8:50

Cooler Temperature on Receipt 5.5°C **Custody Seal** Y or N **Received on Ice** (Y) or N **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

WO# : 10571939
10571939

Pace Analytical®	Document Name: Sample Condition Upon Receipt (SCUR) - MN	Document Revised: 14Apr2021 Page 1 of 1
	Document No.: ENV-FRM-MIN4-0150 Rev.02	Pace Analytical Services - Minneapolis

Sample Condition Upon Receipt

Client Name: Pace KS **Project #:**

WO#: 10571939

PM: RK1 **Due Date: 08/25/21**

CLIENT: PASI-KANS

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 5002 0651 5471 See Exceptions ☐ ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other:_____ **Temp Blank?** ☐ Yes ☒ No

Thermometer: ☐ T1(0461) ☐ T2(1336) ☒ T3(0459) ☐ OS418-LS ☐ T4(0254) ☐ T5(0489) ☐ 160285052 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Dry ☐ Melted

Did Samples Originate in West Virginia? ☐ Yes ☒ No **Were All Container Temps Taken?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:**_____ °C **Average Corrected Temp (no temp blank only):** 5.5 °C ☒ See Exceptions ENV-FRM-MIN4-0142 ☐ 1 Container

Correction Factor: True **Cooler Temp Corrected w/temp blank:**_____ °C

USDA Regulated Soil: (☐ N/A, water sample/Other:_____)
Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☒ No

Date/Initials of Person Examining Contents: (b) (6) 7/28/21
Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒ Yes	☐ No		1.
Chain of Custody Relinquished?	☐ Yes	☒ No		2.
Sampler Name and/or Signature on COC?	☐ Yes	☒ No	☐ N/A	3.
Samples Arrived within Hold Time?	☒ Yes	☐ No		4.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		5. ☐ Fecal Coliform ☐ HPC ☐ Total Coliform/E coli ☐ BOD/cBOD ☐ Hex Chrome ☐ Turbidity ☐ Nitrate ☐ Nitrite ☐ Orthophos ☐ Other_____
Rush Turn Around Time Requested?	☐ Yes	☒ No		6.
Sufficient Volume?	☒ Yes	☐ No		7.
Correct Containers Used?	☒ Yes	☐ No		8.
-Pace Containers Used?	☒ Yes	☐ No		
Containers Intact?	☒ Yes	☐ No		9.
Field Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	10. Is sediment visible in the dissolved container? ☐ Yes ☐ No
Is sufficient information available to reconcile the samples to the COC?	☒ Yes	☐ No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐ ENV-FRM-MIN4-0142
Matrix: ☐ Water ☒ Soil ☐ Oil ☐ Other_____				
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO3, H2SO4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☐ Yes	☐ No	☒ N/A	☐ NaOH ☐ HNO_3 ☐ H_2SO_4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐ Yes	☐ No	☒ N/A	Positive for Res. Chlorine? ☐ Yes ☐ No **pH Paper Lot#** **See Exception** ☐ ENV-FRM-MIN4-0142
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐ Yes	☐ No	☒ N/A	13. **See Exception** ☐ ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)?	☐ Yes	☐ No	☒ N/A	
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	Pace Trip Blank Lot # (if purchased):_____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted:_____ Date/Time:_____

Comments/Resolution:_____

Project Manager Review: (b) (6) **Date:** 07/28/2021

Note: Whenever there is a discrepancy affecting North Carolina compliance samples a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: (b) (6) 2

Pace Analytical®	Document Name: Sample Condition Upon Receipt (SCUR) Exception Form	Document Revised: 04Jun2020 Page 1 of 1
	Document No.: ENV-FRM-MIN4-0142 Rev.01	Pace Analytical Services - Minneapolis

SCUR Exceptions:

Workorder #:

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank		
Read Temp	Corrected Temp	Average Temp
6.0	T	5.5
5.0	T	

Tracking Number/Temperature	

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Comments:

1668A - 209 | Solid | Soxhlet | EB-31122

Extract Solvents:

Extraction On (Date/Time): 08/13/21 10:40

QC Matrix Lot #: SILICA 596 **Toluene Lot #** 206135

Time of Spiking: 08/13/21 09:30 **Hexane Lot #**

Extraction Off (Date/Time):

Balance: 10BALY **MeCl Lot #**

Standards	Name/ID	Amount	Initial	Witness	Expiration Date	Dispenser
Internal Std.	209-I-20170-172	100	AH	SJ	07/20/22	Q763
Native	209-N-20170-144	100	AH	SJ	01/13/22	Q763
Cl37 Std.	2029-CL-20170-174	100	SJ		07/29/22	Q678
Recovery	209-R-20170-164	10	MF		06/25/22	Q656
Tridecane	A0404617	10	MF			Q763
Others	NONANE A0402059	180	MF			Q768

#	Sample ID	Internal Standards	Native Standards	Extracted mL or g	Glassware Set	Location	Comments
1	BLANK-92295	x		10.5			
2	LCS-92296	x	x	10.1			
3	LCSD-92297	x	x	10.1			
4	60375923003-R	x		12.3		10-C16-066	
5	60375923011-R	x		12.3		10-C16-066	
6	60376093005-R	x		13.0		10-C16-073	
7	60376093011-R	x		12.7		10-C16-073	

Relinquished By: M Felea Received By: Date:

Batch Notes:

Silica		Alumina		Carbon		Florisil	
Initials	CW1 / PED	Initials		Initials		Initials	
Date	8/17/2021	Date		Date		Date	
Neutral Batch	600	Alumina Lot #		Hexane Lot #		Florisil Lot #	
Basic Batch	751	Hexane Lot #		Dispenser		Hexane Lot #	
Acid Batch	877	Dispenser		50% Batch		Dispenser	
Hexane Lot #	213846	60% Batch		Dispenser		6% Batch	
Dispenser	Q758	Dispenser		75% Batch		Dispenser	
				Dispenser			
				Toluene Lot #			
				Dispenser			
				Methanol Lot #			
				Dispenser			

Acid Base

Sulphuric Acid Lot #
Base Batch

1 fiind column ped / cw1 8/18/21

Pace Analytical™

Solid Sample Moisture Log

Sample ID	Client Sample ID		% Moisture	% Solids	Amount Extracted	Assayed
60375923003	GB-22/1-3		18.8323	81.1677	12.33	7/28/2021
60375923011	GB-01/8-10		18.7201	81.2799	12.34	7/28/2021

Note:
Total weight is the amount of wet sample required to give 10g dry weight

Page 1 of 1

Client names have been blacked out on notebook pages in order to preserve client confidentiality

Analysis Key Code List

- = Not used

✔ = Worked up

= See comment # below

Li = Liner, replace or clean

Ba = Baseplate, change

SyB = Syringe, replace – bent

SyP = Syringe, replace – plugged

SyO = Syringe, replace – other

IS = Injector Septum, replace

BS = Batch Septum, replace

Fi = Filament, replace

Co = Contacts, adjust

Ca = re-Calibrate

Tu = Tune

TC = Tune and Calibrate

CC () = Cut Column (length cut)

CO = Carry-Over possible

RRM = ReRun - Matrix

RRLM = ReRun – Lock Mass

RRBI = ReRun – Bad Injection

RRRT = ReRun – Retention Time shift

RR>S = Rerun – need better Sensitivity

Re = Re-extract

AS = Adjust Slits

LC = Leak Check

RB = Re-Boot system

CiS = Cleaned inner Source

CoS = Cleaned outer Source

AiS = Alternate inner Source

AoS = Alternate outer Source

<Y = Adjust Y focus down

>Y = Adjust Y focus up

Di () = Dilution needed (amount needed)

FE = Front End – liner, baseplate and septum

Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210818B.SPL
Last Modified: Wednesday, August 18, 2021 19:39:42 Central Daylight Time
Printed: Thursday, August 19, 2021 09:36:01 Central Daylight Time

10MSHR12 8/18/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210818B_01	CAL CS3/CPM-20-123-058 - CVS liner, TC	220717	8290/1613B	dioxfurY	DioxFur_Y	Tray1:1	1.000000	---
2	Y210818B_02	Blank Nonane - CVS	---	8290/1613B	dioxfurY	DioxFur_Y	Tray1:3	1.000000	---
3	Y210818B_03	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
4	Y210818B_04	CAL CS3-20-123-060 - CVS windows	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
5	Y210818B_05	CAL CS3-20-123-060 - CVS TC	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
6	Y210818B_06 ✓	CAL CS2-20-123-053 - CVS TC	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:15	1.000000	---
7	Y210818B_07	CAL CS1-20-123-041 - CVS bad inj	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
8	Y210818B_08 ✓	CAL CS1-20-123-041 - CVS	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
9	Y210818B_09 ✓	CAL CS5-20-123-044 - CVS	220331	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:17	1.000000	---
10	Y210818B_10 ✓	CAL CS4-20-123-055 - CVS	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:18	1.000000	---
11	Y210818B_11 ✓	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
12	Y210818B_12 ✓	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
13	Y210818B_13 ✓	LCS LCS-92213 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:19	1.000000	---
14	Y210818B_14 ✓	LCS LCSD-92214 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:20	1.000000	---
15	Y210818B_15 ✓	Samp 60375626032-MS-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:21	1.000000	---
16	Y210818B_16 ✓	Samp 60375626032-MSD-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:22	1.000000	---
17	Y210818B_17	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
18	Y210818B_18 ✓	Samp 60375626032-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:23	1.000000	---
19	Y210818B_19 ✓	Samp 60375626013-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:24	1.000000	---
20	Y210818B_20 ✓	Samp 60375626014-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:25	1.000000	---
21	Y210818B_21 ✓	Samp 60375838006-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:26	1.000000	---
22	Y210818B_22 ✓	Samp 60375838015-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:27	1.000000	---
23	Y210818B_23	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

ver 8/20/21 (b) (6)

[redacted] (b) (6) 8/20/21

Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210820A.SPL
Last Modified: Thursday, August 19, 2021 16:42:26 Central Daylight Time
Printed: Thursday, August 19, 2021 16:42:28 Central Daylight Time

10MSHB13 8/20/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210820A_01	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
2	Y210820A_02	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
3	Y210820A_03	LCS LCS-92296 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:36	1.000000	---
4	Y210820A_04	LCS LCSD-92297 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:37	1.000000	---
5	Y210820A_05	LCS LCS-92269 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:38	1.000000	---
6	Y210820A_06	LCS LCSD-92270 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:39	1.000000	---
7	Y210820A_07	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
8	Y210820A_08	Blank Blank-92295 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:40	1.000000	---
9	Y210820A_09	Samp 60375692020-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:41	1.000000	---
10	Y210820A_10	Samp 60375923003-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:42	1.000000	---
11	Y210820A_11	Samp 60375923011-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:43	1.000000	---
12	Y210820A_12	Samp 60376093005-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:44	1.000000	---
13	Y210820A_13	Samp 60376093011-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:45	1.000000	---
14	Y210820A_14	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

(b) (6)

ver 8/22/21

Bad inj or matrix? Document + reshoot BAL 8/20/21

(b) (6) 8/20/21

Appendix B

Sample Analysis Summary

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-22/1-3		
Lab Sample ID	60375923003-R		
Filename	Y210820A_10		
Injected By	CVS		
Total Amount Extracted	12.3 g	Matrix	Solid
% Moisture	18.8	Dilution	NA
Dry Weight Extracted	10.0 g	Collected	07/23/2021 14:32
ICAL ID	Y210820A02	Received	07/28/2021 10:29
CCal Filename(s)	Y210820A_01	Extracted	08/13/2021 10:40
Method Blank ID	BLANK-92295	Analyzed	08/20/2021 10:25

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.77	2.0	1.58	79
13C-3,3',4,4'-TeCB	77	35.471	0.78	2.0	1.62	81
13C-2,3,3',4,4'-PeCB	105	39.031	1.57	2.0	1.50	75
13C-2,3,4,4',5-PeCB	114	38.394	1.54	2.0	1.49	75
13C-2,3',4,4',5-PeCB	118	37.840	1.59	2.0	1.48	74
13C-2,3',4,4',5'-PeCB	123	37.505	1.55	2.0	1.52	76
13C-3,3',4,4',5-PeCB	126	42.184	1.57	2.0	1.60	80
13C-HxCB(156/157)	156/157	45.241	1.23	4.0	2.89	72
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.28	2.0	1.45	72
13C-3,3',4,4',5,5'-HxCB	169	48.528	1.27	2.0	1.52	76
13C-2,3,3',4,4',5,5'-HpCB	189	51.067	1.02	2.0	1.47	74
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.421	0.78	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.704	1.62	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.010	1.23	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.92	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-22/1-3
Lab Sample ID	60375923003-R
Filename	Y210820A_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg		EMPC ng/Kg	EML ng/Kg
77		35.487	0.78	2.09	BJ	---	1.48
81		---	---	ND		---	1.61
105		39.048	1.53	13.4	BJ	---	1.97
114		---	---	ND		---	1.79
118		37.857	1.51	267		---	2.14
123		---	---	ND		---	2.22
126		42.201	1.40	2.25	J	---	1.90
156	156/157	45.257	1.20	261		---	2.10
157	156/157	45.257	1.20	(261)		---	2.10
167		44.117	1.23	100		---	1.93
169		48.528	1.44	---	IJ	3.97	2.23
189		51.089	0.98	63.5		---	1.43

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-22/1-3			
Lab Sample ID	60375923003-R			
Filename	Y210820A_10			
Injected By	CVS			
Total Amount Extracted	12.3 g	Matrix	Solid	
% Moisture	18.8	Dilution	NA	
Dry Weight Extracted	10.0 g	Collected	07/23/2021	14:32
ICAL ID	Y210820A02	Received	07/28/2021	10:29
CCal Filename(s)	Y210820A_01	Extracted	08/13/2021	10:40
Method Blank ID	BLANK-92295	Analyzed	08/20/2021	10:25

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.1	1.5	0.00010	0.0002	0.0002	0.0002
81	ND	1.6	0.00030	0.0000	0.0002	0.0005
105	13	2.0	0.00003	0.0004	0.0004	0.0004
114	ND	1.8	0.00003	0.0000	0.0000	0.0001
118	270	2.1	0.00003	0.0080	0.0080	0.0080
123	ND	2.2	0.00003	0.0000	0.0000	0.0001
126	2.2	1.9	0.10000	0.2248	0.2248	0.2248
156/157	260	2.1	0.00003	0.0078	0.0078	0.0078
167	100	1.9	0.00003	0.0030	0.0030	0.0030
169	ND	2.2	0.03000	0.1191	0.1191	0.1191
189	63	1.4	0.00003	0.0019	0.0019	0.0019
				0.37 ng TEQ/Kg	**0.37 ng TEQ/Kg**	**0.37 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-01/8-10		
Lab Sample ID	60375923011-R		
Filename	Y210820A_11		
Injected By	CVS		
Total Amount Extracted	12.3 g	Matrix	Solid
% Moisture	18.7	Dilution	NA
Dry Weight Extracted	10.0 g	Collected	07/26/2021 10:27
ICAL ID	Y210820A02	Received	07/28/2021 10:29
CCal Filename(s)	Y210820A_01	Extracted	08/13/2021 10:40
Method Blank ID	BLANK-92295	Analyzed	08/20/2021 11:25

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.851	0.76	2.0	1.27	63
13C-3,3',4,4'-TeCB	77	35.454	0.82	2.0	1.29	65
13C-2,3,3',4,4'-PeCB	105	39.015	1.53	2.0	1.20	60
13C-2,3,4,4',5-PeCB	114	38.377	1.57	2.0	1.22	61
13C-2,3',4,4',5-PeCB	118	37.841	1.52	2.0	1.16	58
13C-2,3',4,4',5'-PeCB	123	37.489	1.48	2.0	1.20	60
13C-3,3',4,4',5-PeCB	126	42.167	1.55	2.0	1.23	61
13C-HxCB(156/157)	156/157	45.225	1.23	4.0	2.27	57
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.19	2.0	1.16	58
13C-3,3',4,4',5,5'-HxCB	169	48.512	1.23	2.0	1.19	59
13C-2,3,3',4,4',5,5'-HpCB	189	51.046	1.01	2.0	1.26	63
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.421	0.79	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.704	1.63	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.010	1.26	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.88	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
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ng's = Nanograms

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-01/8-10
Lab Sample ID	60375923011-R
Filename	Y210820A_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		35.471	0.88	2.01 BJ	---	1.81
81		---	---	ND	---	1.43
105		39.015	1.60	6.57 BJ	---	1.40
114		---	---	ND	---	1.24
118		37.841	1.61	11.6 BJ	---	0.970
123		---	---	ND	---	0.925
126		---	---	ND	---	1.17
156	156/157	45.258	1.39	2.05 J	---	0.884
157	156/157	45.258	1.39	(2.05) J	---	0.884
167		---	---	ND	---	0.720
169		---	---	ND	---	0.786
189		---	---	ND	---	0.842

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-01/8-10		
Lab Sample ID	60375923011-R		
Filename	Y210820A_11		
Injected By	CVS		
Total Amount Extracted	12.3 g	Matrix	Solid
% Moisture	18.7	Dilution	NA
Dry Weight Extracted	10.0 g	Collected	07/26/2021 10:27
ICAL ID	Y210820A02	Received	07/28/2021 10:29
CCal Filename(s)	Y210820A_01	Extracted	08/13/2021 10:40
Method Blank ID	BLANK-92295	Analyzed	08/20/2021 11:25

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.0	1.8	0.00010	0.0002	0.0002	0.0002
81	ND	1.4	0.00030	0.0000	0.0002	0.0004
105	6.6	1.4	0.00003	0.0002	0.0002	0.0002
114	ND	1.2	0.00003	0.0000	0.0000	0.0000
118	12	0.97	0.00003	0.0003	0.0003	0.0003
123	ND	0.92	0.00003	0.0000	0.0000	0.0000
126	ND	1.2	0.10000	0.0000	0.0583	0.1165
156/157	2.0	0.88	0.00003	0.0001	0.0001	0.0001
167	ND	0.72	0.00003	0.0000	0.0000	0.0000
169	ND	0.79	0.03000	0.0000	0.0118	0.0236
189	ND	0.84	0.00003	0.0000	0.0000	0.0000
				0.00081 ng TEQ/Kg	**0.071 ng TEQ/Kg**	**0.14 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Appendix C

QC and Calibration Results Summary

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID	BLANK-92295		
Filename	Y210820A_08		
Injected By	CVS	Matrix	Solid
Total Amount Extracted	10.5 g	Extracted	08/13/2021 10:40
ICAL ID	Y210820A02	Analyzed	08/20/2021 08:26
CCal Filename(s)	Y210820A_01	Dilution	NA

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.901	0.76	2.0	1.94	97
13C-3,3',4,4'-TeCB	77	35.589	0.80	2.0	2.06	103
13C-2,3,3',4,4'-PeCB	105	39.065	1.53	2.0	1.78	89
13C-2,3,4,4',5-PeCB	114	38.428	1.52	2.0	1.85	92
13C-2,3',4,4',5-PeCB	118	37.874	1.55	2.0	1.79	90
13C-2,3',4,4',5'-PeCB	123	37.539	1.49	2.0	1.80	90
13C-3,3',4,4',5-PeCB	126	42.201	1.56	2.0	1.97	98
13C-HxCB (156/157)	156/157	45.275	1.22	4.0	3.68	92
13C-2,3',4,4',5,5'-HxCB	167	44.118	1.21	2.0	1.83	92
13C-3,3',4,4',5,5'-HxCB	169	48.545	1.23	2.0	2.03	102
13C-2,3,3',4,4',5,5'-HpCB	189	51.089	1.01	2.0	1.79	89
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.455	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.738	1.55	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.044	1.29	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.87	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a total weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-92295
Filename Y210820A_08

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		35.572	0.67	2.12	---	1.13
81		---	---	ND	---	1.35
105		39.099	1.70	3.91	---	0.958
114		---	---	ND	---	0.830
118		37.891	1.42	6.59	---	0.852
123		---	---	ND	---	1.01
126		---	---	ND	---	0.744
156	156/157	45.275	0.81	---	0.894	0.666
157	156/157	45.275	0.81	---	(0.894)	0.666
167		---	---	ND	---	0.464
169		---	---	ND	---	0.544
189		---	---	ND	---	0.576

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

Results reported on a total weight basis

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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	CBLKIZ		
Lab Sample ID	BLANK-92295		
Filename	Y210820A_08		
Injected By	CVS		
Total Amount Extracted	10.5 g	Matrix	Solid
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	08/13/2021 07:07
ICAL ID	Y210820A02	Received	08/13/2021 07:07
CCal Filename(s)	Y210820A_01	Extracted	08/13/2021 10:40
Method Blank ID		Analyzed	08/20/2021 08:26

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.1	1.1	0.00010	0.0002	0.0002	0.0002
81	ND	1.4	0.00030	0.0000	0.0002	0.0004
105	3.9	0.96	0.00003	0.0001	0.0001	0.0001
114	ND	0.83	0.00003	0.0000	0.0000	0.0000
118	6.6	0.85	0.00003	0.0002	0.0002	0.0002
123	ND	1.0	0.00003	0.0000	0.0000	0.0000
126	ND	0.74	0.10000	0.0000	0.0372	0.0744
156/157	ND	0.67	0.00003	0.0000	0.0000	0.0000
167	ND	0.46	0.00003	0.0000	0.0000	0.0000
169	ND	0.54	0.03000	0.0000	0.0082	0.0163
189	ND	0.58	0.00003	0.0000	0.0000	0.0000
				0.00055 ng TEQ/Kg	**0.046 ng TEQ/Kg**	**0.092 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Method 1668A Polychlorobiphenyls
Laboratory Control Spike Analysis Results

Lab Sample ID	LCS-92296		
Filename	Y210820A_03	Matrix	Solid
Total Amount Extracted	10.1 g	Dilution	NA
ICAL ID	Y210820A02	Extracted	08/13/2021 10:40
CCal Filename(s)	Y210820A_01	Analyzed	08/20/2021 03:28
Method Blank ID	BLANK-92295	Injected By	CVS

	Native Analytes			Labeled Analytes		
PCB Isomer	**Spiked (ng)**	**Found (ng)**	**% Recovery**	**Spiked (ng)**	**Found (ng)**	**% Recovery**
81	1.0	1.000	100	2.0	1.67	83
77	1.0	1.03	103	2.0	1.76	88
105	1.0	1.09	109	2.0	1.59	79
114	1.0	0.971	97	2.0	1.63	81
118	1.0	1.08	108	2.0	1.56	78
123	1.0	1.02	102	2.0	1.56	78
126	1.0	1.05	105	2.0	1.74	87
156/157	2.0	2.08	104	4.0	3.10	78
167	1.0	1.04	104	2.0	1.53	77
169	1.0	1.05	105	2.0	1.65	82
189	1.0	1.00	100	2.0	1.64	82

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

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Method 1668A Polychlorobiphenyls
Laboratory Control Spike Analysis Results

Lab Sample ID	LCSD-92297		
Filename	Y210820A_04	Matrix	Solid
Total Amount Extracted	10.1 g	Dilution	NA
ICAL ID	Y210820A02	Extracted	08/13/2021 10:40
CCal Filename(s)	Y210820A_01	Analyzed	08/20/2021 04:28
Method Blank ID	BLANK-92295	Injected By	CVS

	Native Analytes			Labeled Analytes		
PCB Isomer	**Spiked (ng)**	**Found (ng)**	**% Recovery**	**Spiked (ng)**	**Found (ng)**	**% Recovery**
81	1.0	1.09	109	2.0	1.37	68
77	1.0	1.05	105	2.0	1.42	71
105	1.0	1.18	118	2.0	1.28	64
114	1.0	1.02	102	2.0	1.29	64
118	1.0	1.13	113	2.0	1.29	65
123	1.0	1.05	105	2.0	1.26	63
126	1.0	1.12	112	2.0	1.40	70
156/157	2.0	2.17	108	4.0	2.47	62
167	1.0	1.13	113	2.0	1.18	59
169	1.0	1.07	107	2.0	1.32	66
189	1.0	1.17	117	2.0	1.25	63

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

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Method 1668A

Spike Recovery Relative Percent Difference (RPD) Results

Client	PACE Kansas		
Spike 1 ID	LCS-92296	Spike 2 ID	LCSD-92297
Spike 1 Filename	Y210820A_03	Spike 2 Filename	Y210820A_04

Compound	IUPAC	Spike 1 %REC	Spike 2 %REC	%RPD
3,3',4,4'-TeCB	77	103	105	1.9
3,4,4',5-TeCB	81	100	109	8.6
2,3,3',4,4'-PeCB	105	109	118	7.9
2,3,4,4',5-PeCB	114	97	102	5.0
2,3',4,4',5-PeCB	118	108	113	4.5
2,3',4,4',5'-PeCB	123	102	105	2.9
3,3',4,4',5-PeCB	126	105	112	6.5
(156/157)	156/157	104	108	3.8
2,3',4,4',5,5'-HxCB	167	104	113	8.3
3,3',4,4',5,5'-HxCB	169	105	107	1.9
2,3,3',4,4',5,5'-HpCB	189	100	117	15.7

%REC = Percent Recovered
RPD = The difference between the two values divided by the mean value

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1668A Polychlorobiphenyl Initial Calibration
Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Labeled Analytes								
13C-2-MoCB	1	1.1281	1.1371	1.1947	1.1760	1.1630	1.1598	2.37
13C-4-MoCB	3	1.0640	1.0801	1.1344	1.0704	1.0791	1.0856	2.59
13C-2,2'-DiCB	4	0.5838	0.5905	0.6159	0.6016	0.6160	0.6016	2.42
13C-4,4'-DiCB	15	0.8671	0.8674	0.9026	0.8890	0.8838	0.8820	1.71
13C-2,2',6-TrCB	19	0.6518	0.6583	0.6793	0.6781	0.6675	0.6670	1.81
13C-3,4,4'-TrCB	37	0.9136	0.9078	0.9320	0.9281	0.9441	0.9251	1.57
13C-2,2',6,6'-TeCB	54	1.2015	1.1982	1.2367	1.2062	1.1969	1.2079	1.37
13C-3,4,4',5-TeCB	81	0.8105	0.8243	0.7935	0.8226	0.8519	0.8206	2.61
13C-3,3',4,4'-TeCB	77	0.8084	0.8297	0.8099	0.8409	0.8536	0.8285	2.36
13C-2,2',4,6,6'-PeCB	104	0.8928	0.8966	0.9380	0.9285	0.9345	0.9181	2.36
13C-2,3',4,4',5-PeCB	118	0.8808	0.8918	0.8447	0.9031	0.9144	0.8870	3.02
13C-2,3,4,4',5-PeCB	114	0.8430	0.8396	0.7988	0.8641	0.8732	0.8437	3.42
13C-2,3,3',4,4'-PeCB	105	0.8233	0.8438	0.7770	0.8313	0.8727	0.8296	4.21
13C-3,3',4,4',5-PeCB	126	0.7093	0.7406	0.6920	0.7434	0.7610	0.7293	3.83
13C-2,2',4,4',6,6'-HxCB	155	1.0410	1.0674	1.1567	1.0944	1.1268	1.0973	4.19
13C-2,3',4,4',5,5'-HxCB	167	0.8607	0.8709	0.8428	0.8727	0.9011	0.8696	2.44
13C-HxCB (156/157)	156/157	0.8084	0.8217	0.7685	0.8390	0.8785	0.8232	4.90
13C-3,3',4,4',5,5'-HxCB	169	0.7050	0.7431	0.6956	0.7356	0.7809	0.7320	4.63
13C-2,2',3,4',5,6,6'-HpCB	188	1.8461	1.8051	2.0332	1.9010	1.9439	1.9059	4.65
13C-2,3,3',4,4',5,5'-HpCB	189	1.0396	1.0625	1.0342	1.0628	1.0998	1.0598	2.44
13C-2,2',3,3',5,5',6,6'-OcCB	202	1.8555	1.8001	1.9524	1.8751	1.8944	1.8755	2.96
13C-2,3,3',4,4',5,5',6-OcCB	205	1.2295	1.2273	1.2103	1.2660	1.3073	1.2481	3.11
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	1.4825	1.4561	1.5068	1.4918	1.5154	1.4905	1.55
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.9735	0.9677	0.9782	0.9890	1.0198	0.9856	2.09
13C-DeCB	209	0.9807	0.9725	0.9894	1.0166	1.0325	0.9983	2.54
Cleanup Standards								
13C-2,4,4'-TrCB	28	1.1279	1.1236	1.1438	1.1543	1.0942	1.1287	2.03
13C-2,3,3',5,5'-PeCB	111	1.2662	1.2655	1.2546	1.2941	1.3028	1.2766	1.62
13C-2,2',3,3',5,5',6-HpCB	178	0.9144	0.9189	0.9469	0.9290	0.9363	0.9291	1.41
Recovery Standards								
13C-2,5-DiCB	9	1.9945	2.0083	2.1584	1.9996	1.9991	2.0320	3.49
13C-2,2',5,5'-TeCB	52	1.3756	1.3814	1.4507	1.3625	1.3655	1.3872	2.62
13C-2,2',4,5,5'-PeCB	101	1.1775	1.1790	1.2057	1.1624	1.1699	1.1789	1.39
13C-2,2',3,4,4',5'-HxCB	138	1.0936	1.0882	1.0560	1.0765	1.0680	1.0765	1.41
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.7592	0.7796	0.7083	0.7500	0.7570	0.7508	3.49

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Polychlorobiphenyl Initial Calibration Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Native Analytes								
3,3',4,4'-TeCB	77	0.9461	0.9096	0.8769	0.8801	0.8880	0.9002	3.19
3,4,4',5-TeCB	81	0.9288	0.9668	0.9297	0.9336	0.9225	0.9363	1.87
2,3,3',4,4'-PeCB	105	0.8988	0.9291	0.8993	0.8788	0.8741	0.8960	2.43
2,3,4,4',5-PeCB	114	0.9491	0.9449	0.9221	0.9123	0.9181	0.9293	1.79
2,3',4,4',5-PeCB	118	0.9601	0.9450	0.9247	0.8931	0.9014	0.9249	3.06
2,3',4,4',5'-PeCB	123	0.9836	0.9286	0.9173	0.8958	0.9153	0.9281	3.58
3,3',4,4',5-PeCB	126	0.9251	0.9019	0.8951	0.8795	0.8782	0.8959	2.14
(156/157)	156/157	0.9991	0.9562	0.9359	0.9116	0.9040	0.9413	4.07
2,3',4,4',5,5'-HxCB	167	0.9772	0.9597	0.9103	0.9081	0.8965	0.9304	3.84
3,3',4,4',5,5'-HxCB	169	0.9875	0.9950	0.9320	0.9014	0.8811	0.9394	5.40
2,3,3',4,4',5,5'-HpCB	189	0.9406	0.9065	0.8652	0.8759	0.8749	0.8926	3.47

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

		Data Files:		Time	Injected
ICAL ID	Y210818	CS-1	Y210818B_08	18:49	CVS
Calibration Date	08/18/2021	CS-2	Y210818B_06	16:45	CVS
Instrument	10MSHR12 (Y)	CS-3	Y210818B_11	21:47	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-4	Y210818B_10	20:47	CVS
Column ID No.	261111-02	CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Labeled Analytes							
13C-2-MoCB	1	3.14	3.09	3.16	3.11	3.19	2.66-3.60
13C-4-MoCB	3	3.15	3.11	3.02	3.15	3.11	2.66-3.60
13C-2,2'-DiCB	4	1.71	1.68	1.66	1.70	1.74	1.33-1.81
13C-4,4'-DiCB	15	1.53	1.54	1.55	1.54	1.53	1.33-1.81
13C-2,2',6-TrCB	19	1.03	1.05	1.03	1.04	1.04	0.88-1.20
13C-3,4,4'-TrCB	37	1.04	1.02	1.05	1.04	1.02	0.88-1.20
13C-2,2',6,6'-TeCB	54	0.80	0.79	0.80	0.80	0.81	0.65-0.89
13C-3,4,4',5-TeCB	81	0.77	0.76	0.76	0.77	0.77	0.65-0.89
13C-3,3',4,4'-TeCB	77	0.78	0.77	0.80	0.79	0.79	0.65-0.89
13C-2,2',4,6,6'-PeCB	104	1.58	1.57	1.60	1.59	1.58	1.32-1.78
13C-2,3',4,4',5-PeCB	118	1.53	1.55	1.52	1.55	1.55	1.32-1.78
13C-2,3,4,4',5-PeCB	114	1.53	1.53	1.51	1.55	1.56	1.32-1.78
13C-2,3,3',4,4'-PeCB	105	1.54	1.54	1.50	1.51	1.54	1.32-1.78
13C-3,3',4,4',5-PeCB	126	1.57	1.53	1.54	1.53	1.55	1.32-1.78
13C-2,2',4,4',6,6'-HxCB	155	1.26	1.26	1.26	1.27	1.26	1.05-1.43
13C-2,3',4,4',5,5'-HxCB	167	1.23	1.21	1.21	1.25	1.24	1.05-1.43
13C-HxCB (156/157)	156/157	1.22	1.22	1.23	1.23	1.25	1.05-1.43
13C-3,3',4,4',5,5'-HxCB	169	1.23	1.24	1.22	1.24	1.23	1.05-1.43
13C-2,2',3,4',5,6,6'-HpCB	188	1.09	1.08	1.09	1.10	1.10	0.88-1.20
13C-2,3,3',4,4',5,5'-HpCB	189	1.02	1.02	1.03	1.03	1.04	0.88-1.20
13C-2,2',3,3',5,5',6,6'-OcCB	202	0.90	0.90	0.91	0.89	0.88	0.76-1.02
13C-2,3,3',4,4',5,5',6-OcCB	205	0.89	0.90	0.90	0.90	0.88	0.76-1.02
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	0.80	0.79	0.80	0.80	0.80	0.66-0.90
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.79	0.79	0.80	0.81	0.81	0.66-0.90
13C-DeCB	209	0.74	0.74	0.73	0.74	0.73	0.59-0.79
Cleanup Standards							
13C-2,4,4'-TrCB	28	1.03	1.01	1.03	1.02	1.02	0.88-1.20
13C-2,3,3',5,5'-PeCB	111	1.60	1.60	1.61	1.60	1.60	1.32-1.78
13C-2,2',3,3',5,5',6-HpCB	178	1.08	1.09	1.07	1.07	1.08	0.88-1.20
Recovery Standards							
13C-2,5-DiCB	9	1.54	1.53	1.55	1.53	1.52	1.33-1.81
13C-2,2',5,5'-TeCB	52	0.80	0.80	0.82	0.80	0.80	0.65-0.89
13C-2,2',4,5,5'-PeCB	101	1.61	1.59	1.59	1.62	1.61	1.32-1.78
13C-2,2',3,4,4',5'-HxCB	138	1.27	1.26	1.25	1.25	1.27	1.05-1.43
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.92	0.91	0.90	0.90	0.92	0.76-1.02

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Native Analytes							
3,3',4,4'-TeCB	77	0.83	0.74	0.75	0.77	0.76	0.65-0.89
3,4,4',5-TeCB	81	0.72	0.74	0.76	0.75	0.76	0.65-0.89
2,3,3',4,4'-PeCB	105	1.61	1.54	1.53	1.52	1.54	1.32-1.78
2,3,4,4',5-PeCB	114	1.53	1.41	1.50	1.51	1.52	1.32-1.78
2,3',4,4',5-PeCB	118	1.59	1.47	1.52	1.52	1.53	1.32-1.78
2,3',4,4',5'-PeCB	123	1.42	1.47	1.49	1.51	1.52	1.32-1.78
3,3',4,4',5-PeCB	126	1.49	1.47	1.53	1.50	1.52	1.32-1.78
(156/157)	156/157	1.25	1.19	1.22	1.23	1.22	1.05-1.43
2,3',4,4',5,5'-HxCB	167	1.25	1.18	1.25	1.22	1.22	1.05-1.43
3,3',4,4',5,5'-HxCB	169	1.14	1.21	1.21	1.21	1.22	1.05-1.43
2,3,3',4,4',5,5'-HpCB	189	1.10	1.00	0.99	1.01	1.01	0.88-1.20

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210820A02	Data File	Y210820A_02
Calibration Date	08/20/2021	Injected By	CVS
Initial Calibration	Y210820A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

PCB Isomer	IUPAC	RT	Ratio	209 RF	Ical RF	%RSD	RFc
Internal Standards							
13C-3,4,4',5-TeCB	81	34.867	0.77	0.7563	0.8206	-7.83	0.8206
13C-3,3',4,4'-TeCB	77	35.437	0.78	0.7878	0.8285	-4.91	0.8285
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	0.7284	0.8296	-12.20	0.8296
13C-2,3,4,4',5-PeCB	114	38.393	1.53	0.7748	0.8437	-8.16	0.8437
13C-2,3',4,4',5-PeCB	118	37.840	1.53	0.7967	0.8870	-10.18	0.8870
13C-2,3',4,4',5'-PeCB	123	37.505	1.51	0.7647	0.8549	-10.55	0.8549
13C-3,3',4,4',5-PeCB	126	42.183	1.52	0.6660	0.7293	-8.67	0.7293
13C-HxCB (156/157)	156/157	45.240	1.23	0.7387	0.8232	-10.26	0.8232
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.21	0.7558	0.8696	-13.09	0.8696
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.20	0.6713	0.7320	-8.30	0.7320
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.03	0.9969	1.0598	-5.93	1.0598
Cleanup Standards							
13C-2,4,4'-TrCB	28	23.426	1.02	1.0451	1.1287	-7.41	1.1287
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	1.1762	1.2766	-7.87	1.2766
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	0.9408	0.9291	1.26	0.9291
RecoveryStandards							
13C-2,5-DiCB	9	15.373	1.53	1.8905	2.0320	-6.96	2.0320
13C-2,2',5,5'-TeCB	52	25.421	0.80	1.3486	1.3872	-2.78	1.3872
13C-2,2',4,5,5'-PeCB	101	32.704	1.61	1.1404	1.1789	-3.27	1.1789
13C-2,2',3,4,4',5'-HxCB	138	41.026	1.27	1.0629	1.0765	-1.26	1.0765
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.90	0.7097	0.7508	-5.48	0.7508

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210820A02	Data File	Y210820A_02
Calibration Date	08/20/2021	Injected By	CVS
Initial Calibration	Y210820A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

IUPAC	Co-elutions	RT	Ratio	209 RF	Ical RF	%RSD	RFc
81		34.883	0.77	1.0273	0.9363	9.72	0.9363
77		35.454	0.75	0.9043	0.9002	0.46	0.9002
104		26.478	1.61	1.4950	1.4564	2.65	1.4564
105		39.064	1.50	1.0189	0.8960	13.71	0.8960
114		38.410	1.52	0.9978	0.9293	7.37	0.9293
118		37.857	1.52	0.9772	0.9249	5.66	0.9249
123		37.521	1.49	0.9027	0.9281	-2.74	0.9281
126		42.200	1.50	0.9686	0.8959	8.11	0.8959
155		32.519	1.32	1.3786	1.3520	1.97	1.3520
156	156/157	45.257	1.19	1.0081	0.9413	7.09	0.9413
167		44.100	1.20	1.0670	0.9304	14.69	0.9304
169		48.544	1.23	1.0381	0.9394	10.51	0.9394
188		38.410	1.03	1.1211	1.0887	2.97	1.0887
189		51.088	1.03	0.9386	0.8926	5.15	0.8926

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210820A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/20/2021 01:29	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
Labeled Analytes						
13C-2,2',6-TrCB	19	16:42	1.03	0.7304	0.6670	9.50
13C-3,4,4'-TrCB	37	27:45	1.02	0.8992	0.9251	-2.80
13C-2,2',6,6'-TeCB	54	20:19	0.80	1.2104	1.2079	0.21
13C-3,4,4',5-TeCB	81	34:51	0.76	0.7978	0.8206	-2.78
13C-3,3',4,4'-TeCB	77	35:25	0.77	0.8180	0.8285	-1.27
13C-2,3,3',4,4'-PeCB	105	39:00	1.53	0.7364	0.8296	-11.24
13C-2,3,4,4',5-PeCB	114	38:22	1.54	0.7518	0.8437	-10.90
13C-2,3',4,4',5-PeCB	118	37:49	1.54	0.7876	0.8870	-11.21
13C-2,3',4,4',5'-PeCB	123	37:29	1.51	0.7544	0.8549	-11.75
13C-3,3',4,4',5-PeCB	126	42:09	1.53	0.6821	0.7293	-6.46
13C-HxCB (156/157)	156/157	45:14	1.22	0.7887	0.8232	-4.19
13C-2,3',4,4',5,5'-HxCB	167	44:03	1.23	0.8133	0.8696	-6.48
13C-3,3',4,4',5,5'-HxCB	169	48:30	1.22	0.7317	0.7320	-0.05
13C-2,3,3',4,4',5,5'-HpCB	189	51:02	1.03	1.0201	1.0598	-3.75
Cleanup Standards						
13C-2,4,4'-TrCB	28	23:24	1.01	1.0831	1.1287	-4.05
13C-2,3,3',5,5'-PeCB	111	35:29	1.58	1.2531	1.2766	-1.84
13C-2,2',3,3',5,5',6-HpCB	178	41:27	1.09	1.0068	0.9291	8.36
Recovery Standards						
13C-2,5-DiCB	9	15:21	1.53	1.8425	2.0320	-9.32
13C-2,2',5,5'-TeCB	52	25:24	0.80	1.3001	1.3872	-6.27
13C-2,2',4,5,5'-PeCB	101	32:41	1.61	1.1631	1.1789	-1.33
13C-2,2',3,4,4',5'-HxCB	138	41:00	1.25	0.9933	1.0765	-7.73
13C-2,2',3,3',4,4',5,5'-OcCB	194	53:09	0.89	0.6951	0.7508	-7.43

X = Outside Quality Control limits

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Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210820A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/20/2021 01:29	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
3,3',4,4'-TeCB	77	35:27	0.75	0.8479	0.9002	-5.80
3,4,4',5-TeCB	81	34:52	0.75	0.8973	0.9363	-4.17
2,2',4,6,6'-PeCB	104	26:28	1.64	1.4040	1.4564	-3.60
2,3,3',4,4'-PeCB	105	39:02	1.52	0.8421	0.8960	-6.02
2,3,4,4',5-PeCB	114	38:23	1.50	0.8749	0.9293	-5.86
2,3',4,4',5-PeCB	118	37:51	1.53	0.8558	0.9249	-7.46
2,3',4,4',5'-PeCB	123	37:31	1.52	0.8689	0.9281	-6.38
3,3',4,4',5-PeCB	126	42:12	1.51	0.8510	0.8959	-5.01
2,2',4,4',6,6'-HxCB	155	32:31	1.31	1.3026	1.3520	-3.65
HxCB (156/157)	156/157	45:15	1.21	0.8812	0.9413	-6.39
2,3',4,4',5,5'-HxCB	167	44:05	1.20	0.8767	0.9304	-5.77
3,3',4,4',5,5'-HxCB	169	48:31	1.20	0.8816	0.9394	-6.15
2,2',3,4',5,6,6'-HpCB	188	38:23	1.03	1.0605	1.0887	-2.59
2,3,3',4,4',5,5'-HpCB	189	51:05	1.01	0.8591	0.8926	-3.75

X = Outside Quality Control limits

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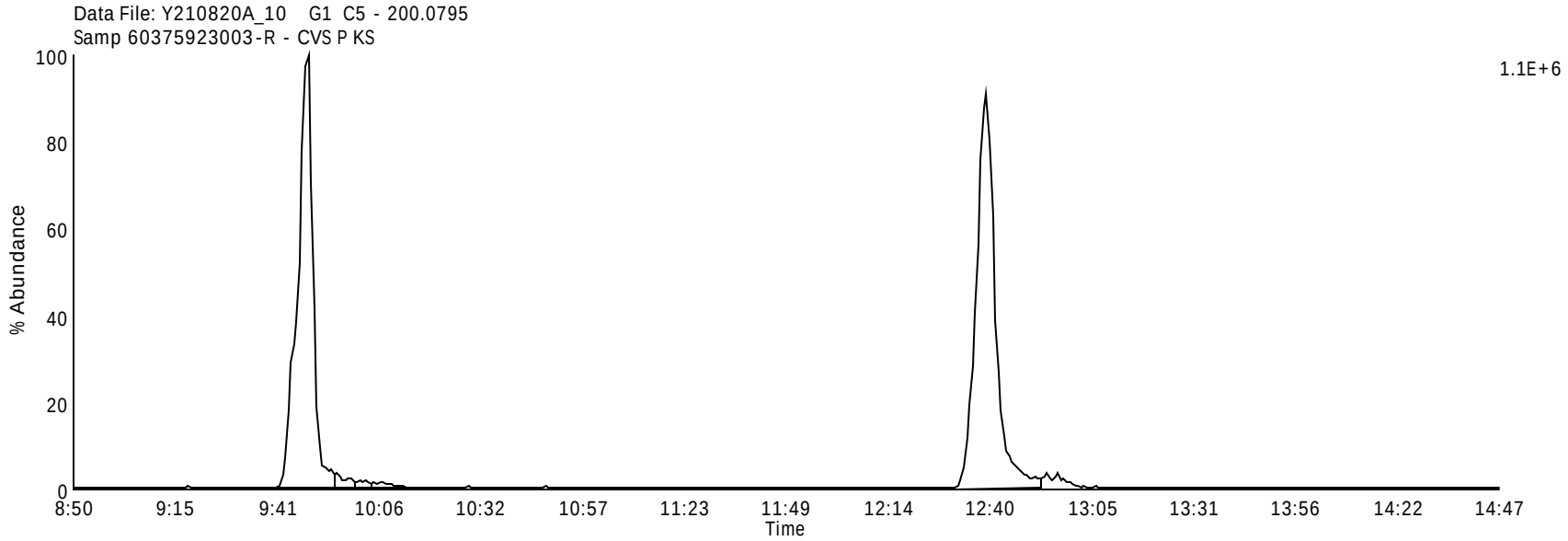
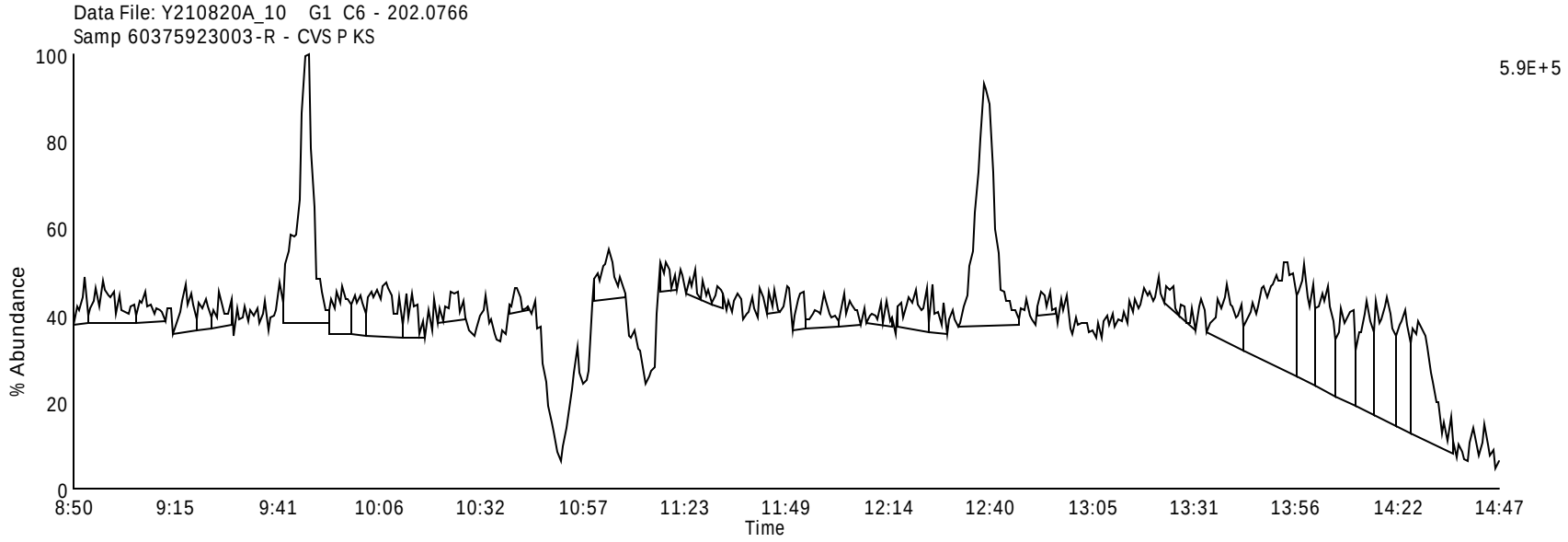
Appendix D

Sample Raw Data

Labeled Mono Chlorinated Biphenyls

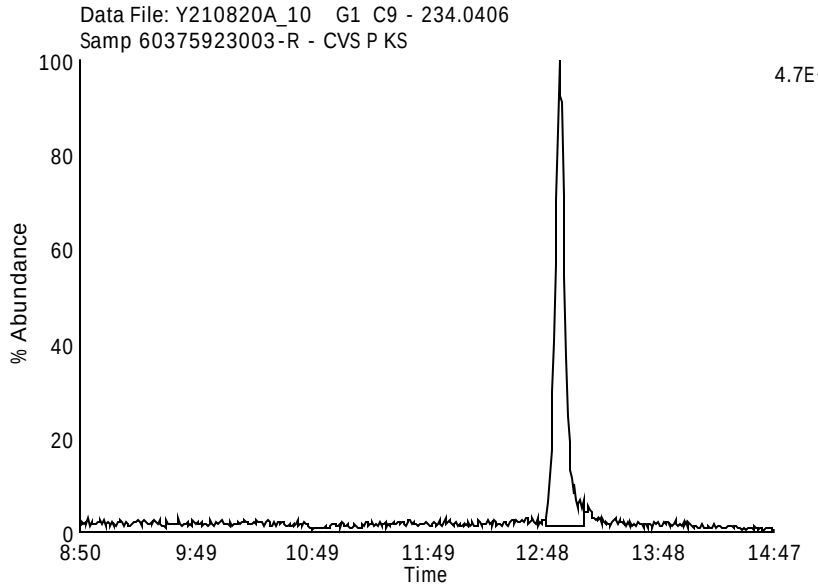
Data File Name: Y210820A_10	Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS	Client Sample ID: GB-22/1-3

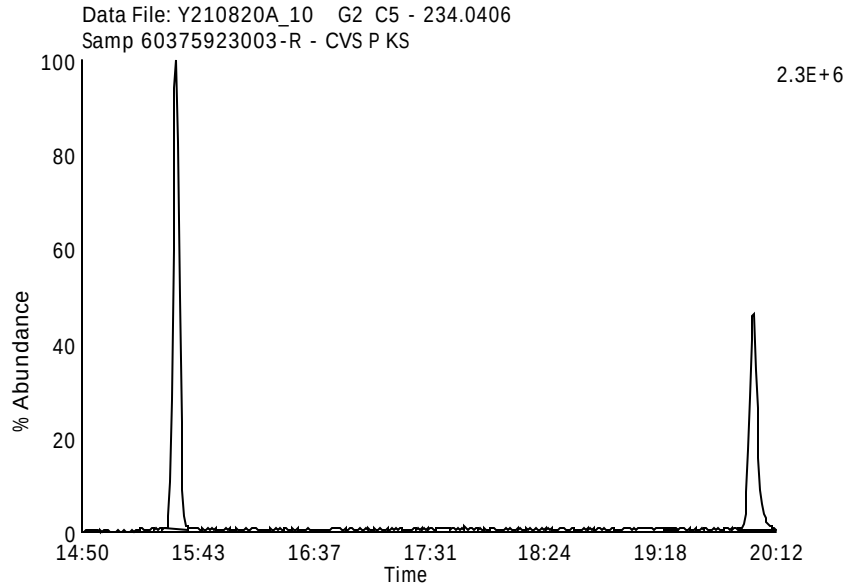


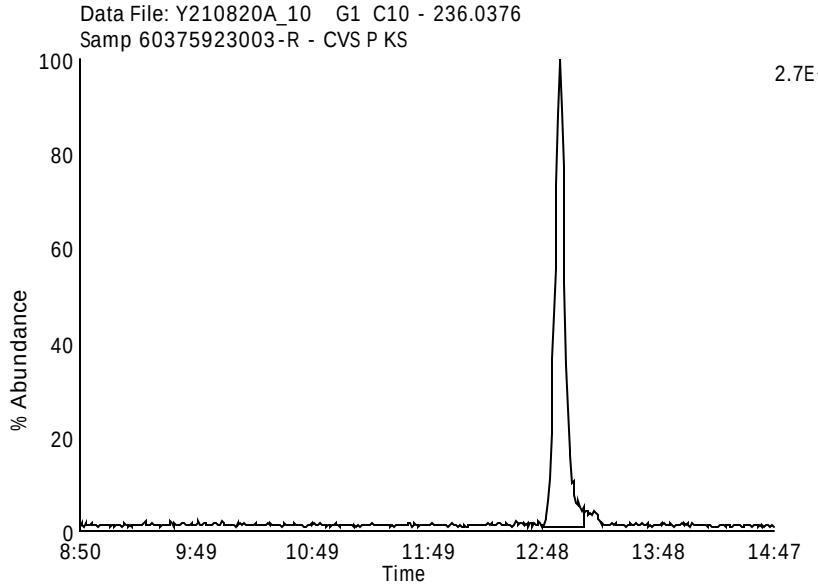


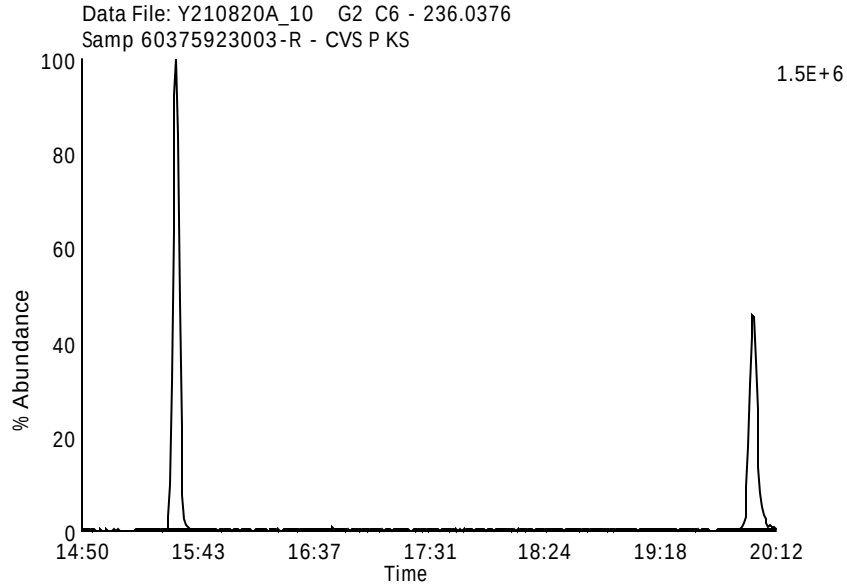
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3



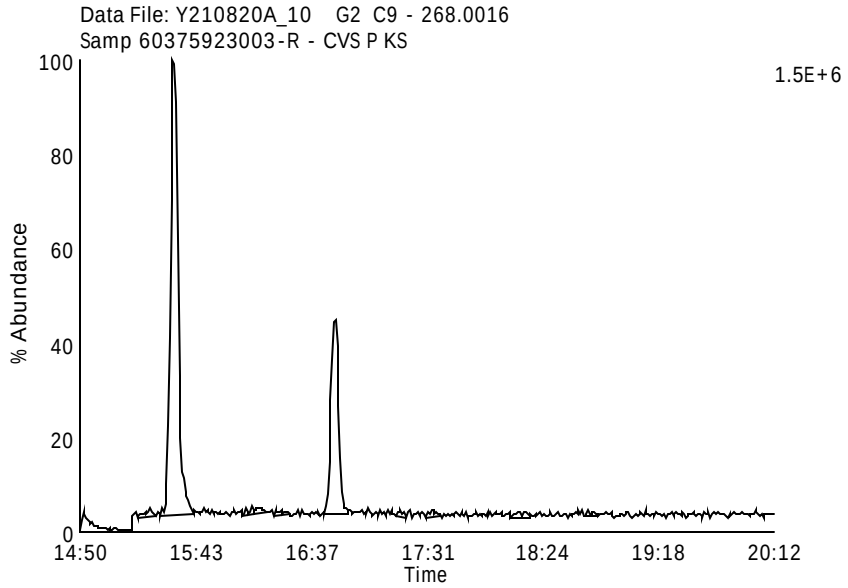


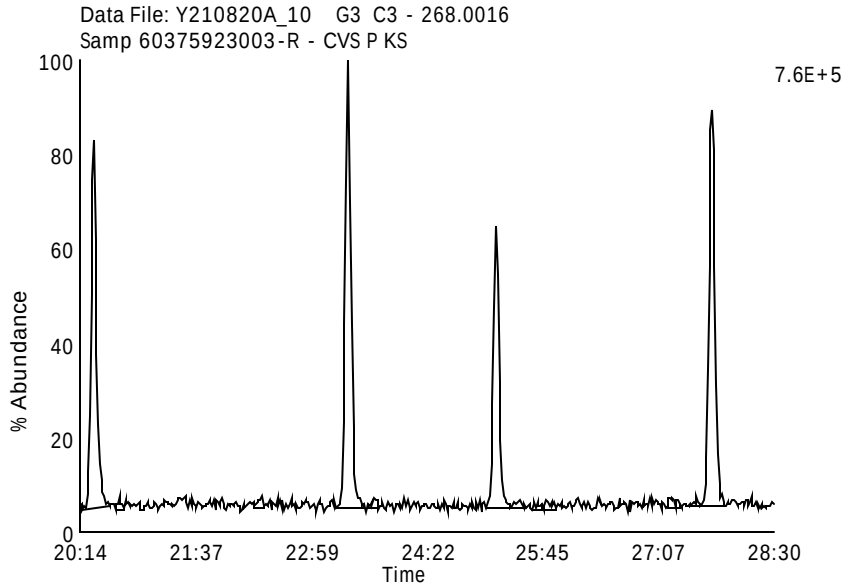


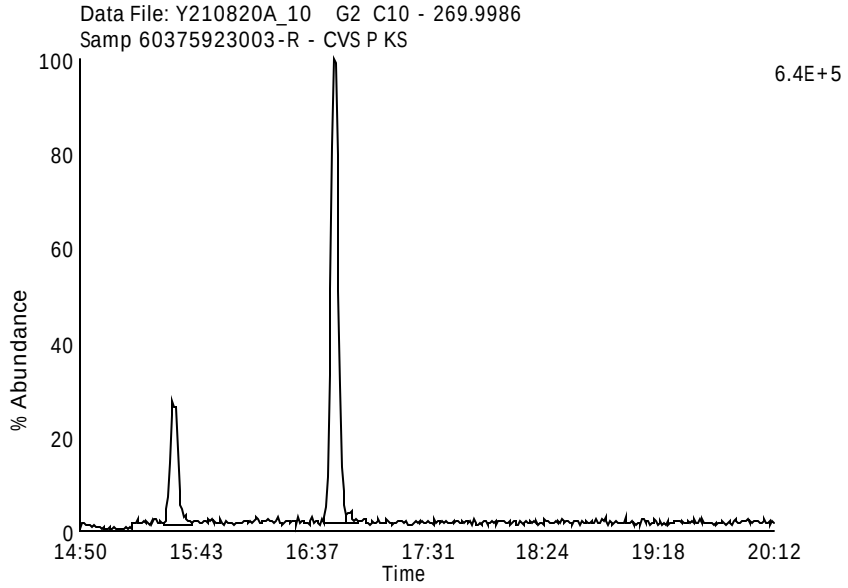


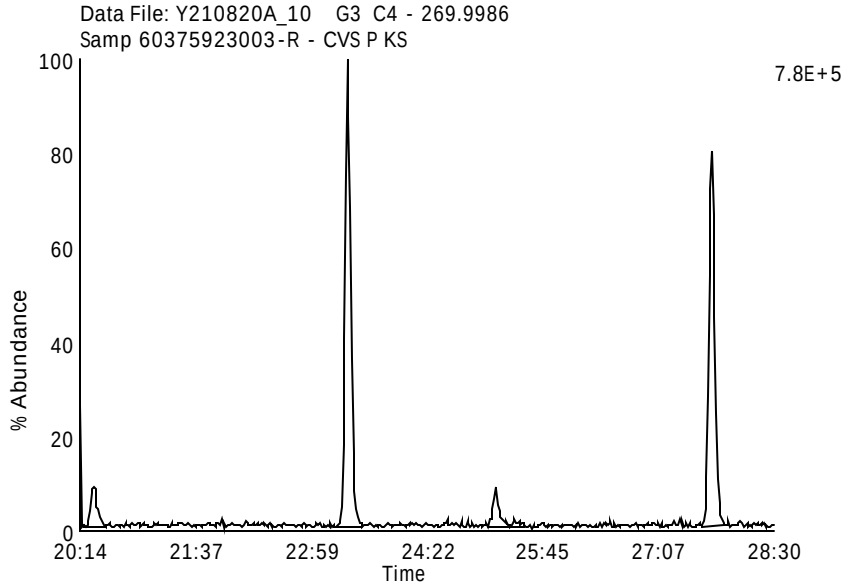
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3



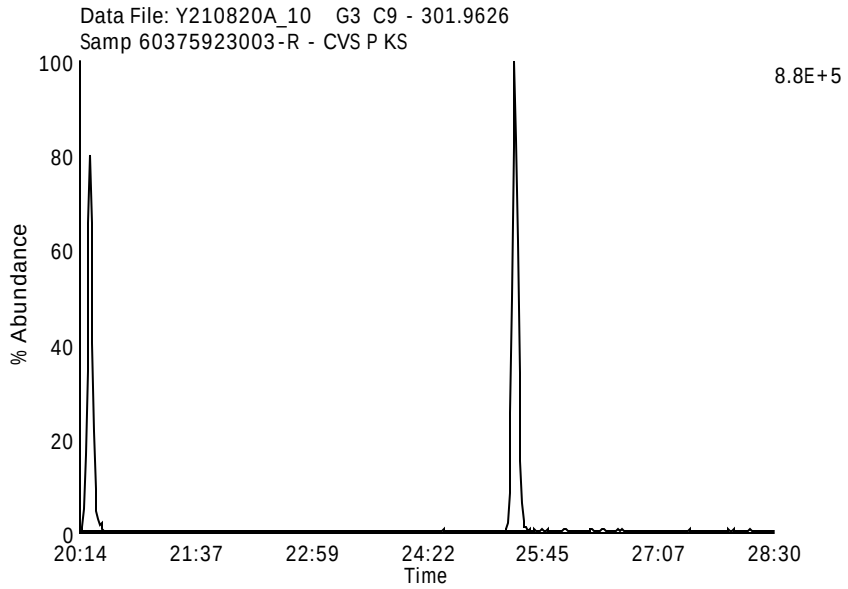


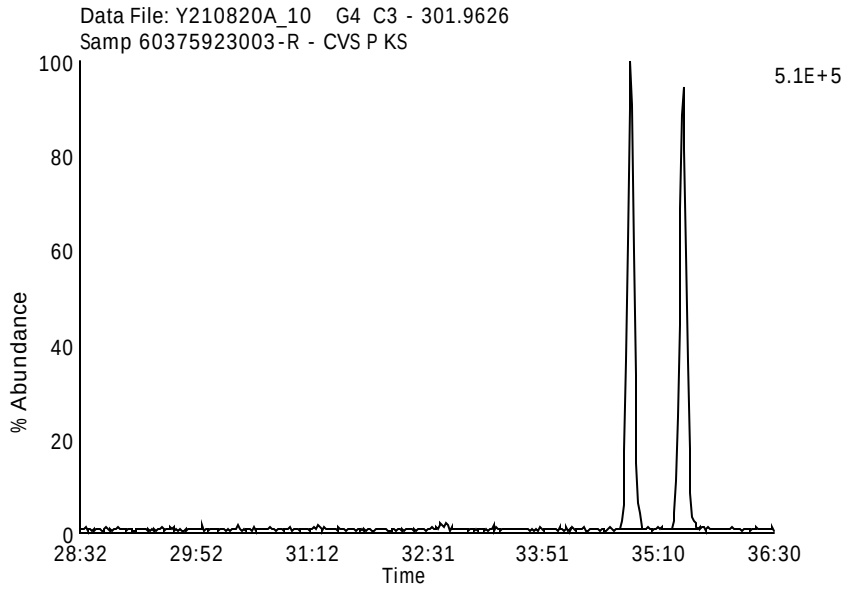


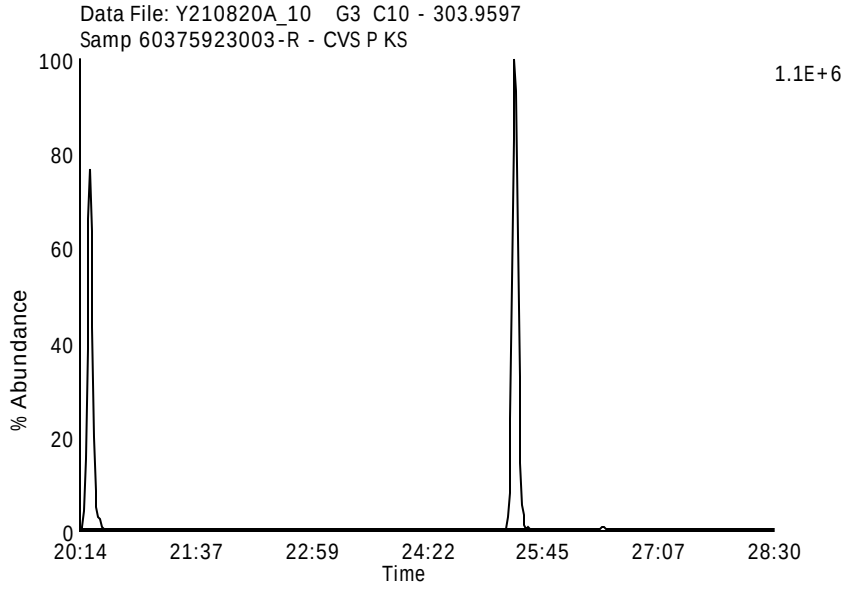


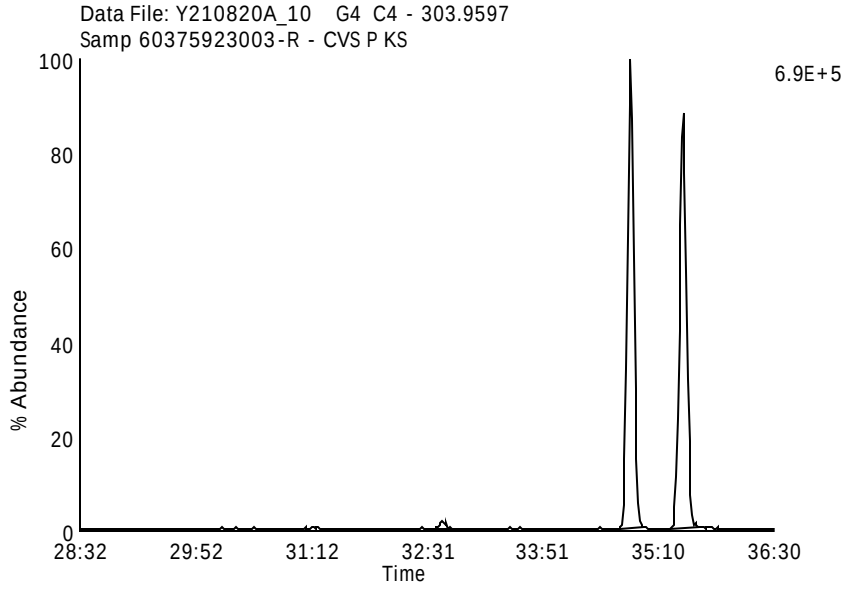
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_10 | Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS | Client Sample ID: GB-22/1-3



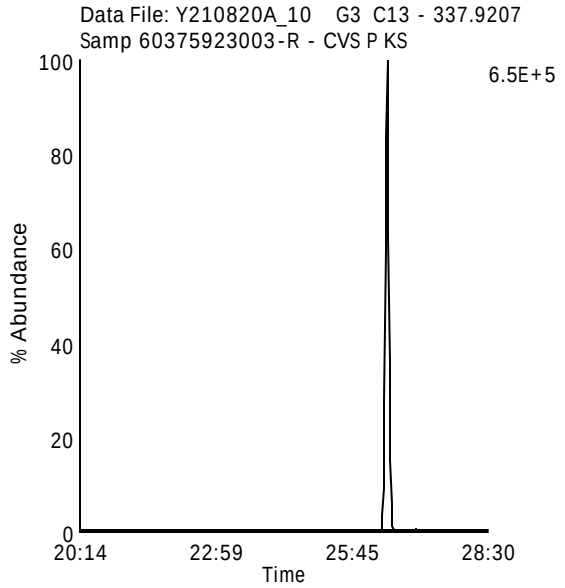


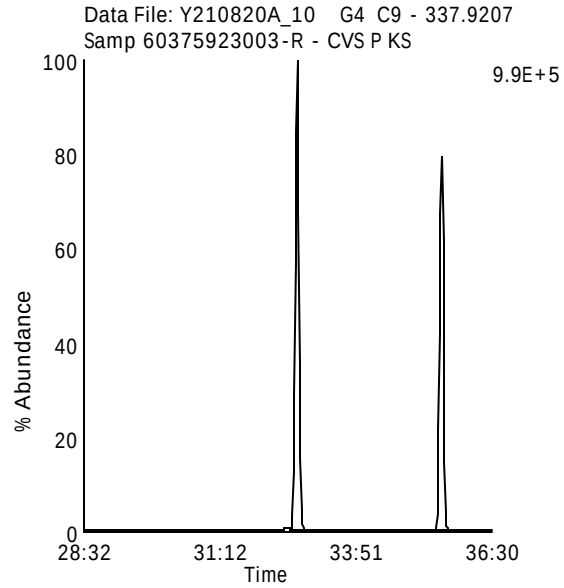


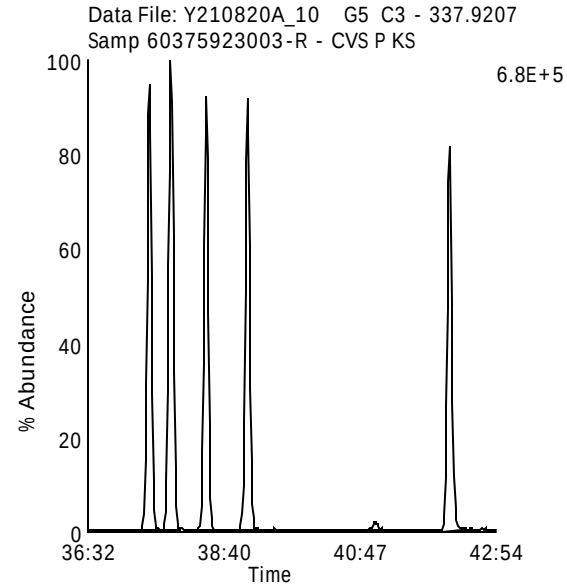


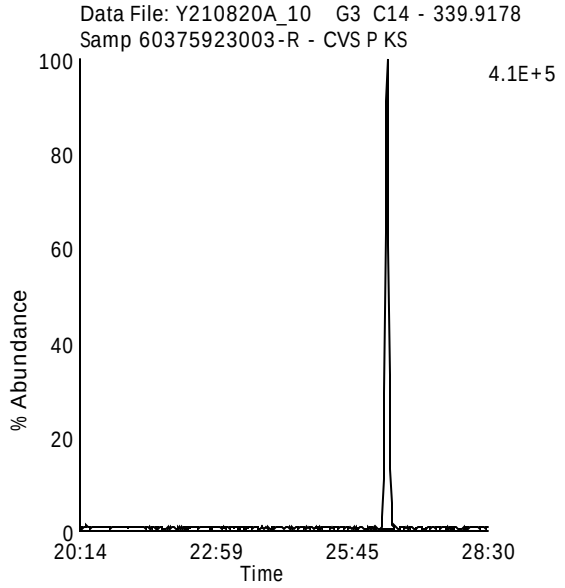
Labeled Penta Chlorinated Biphenyls

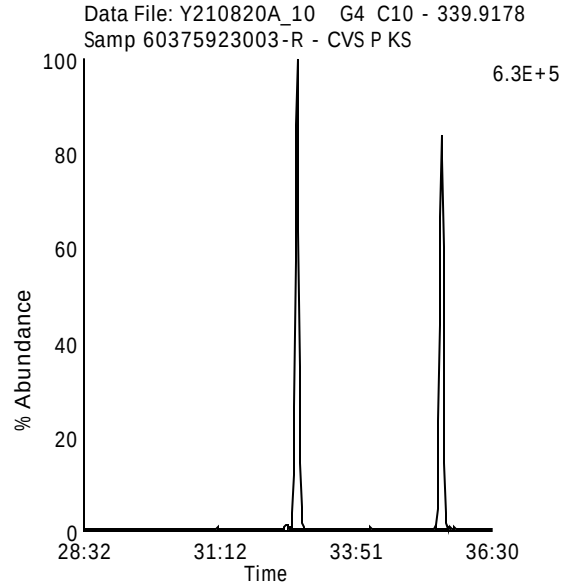
Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3

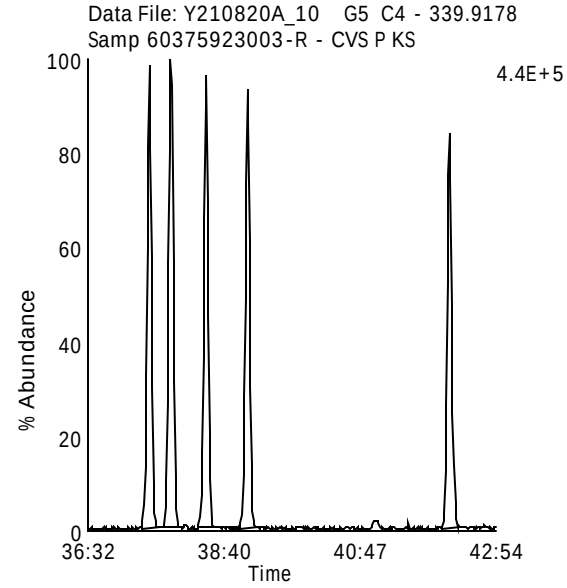






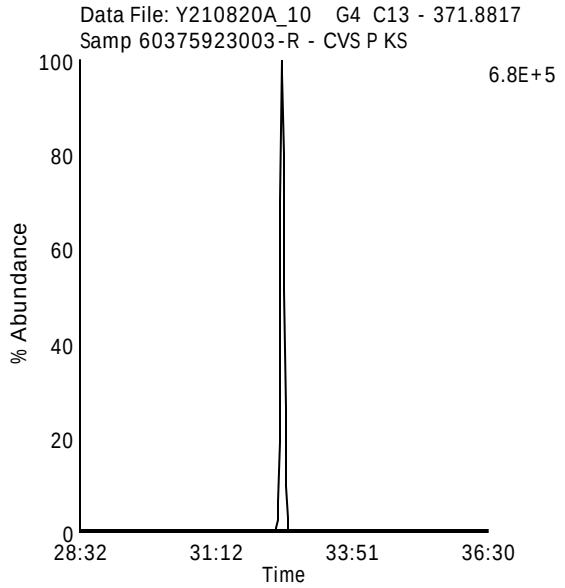


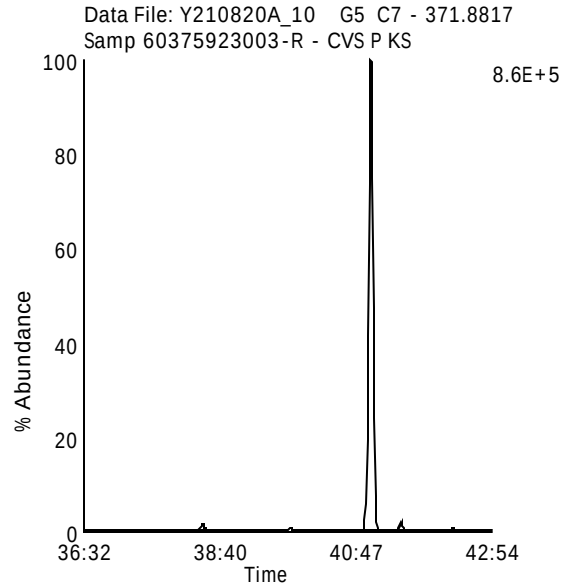


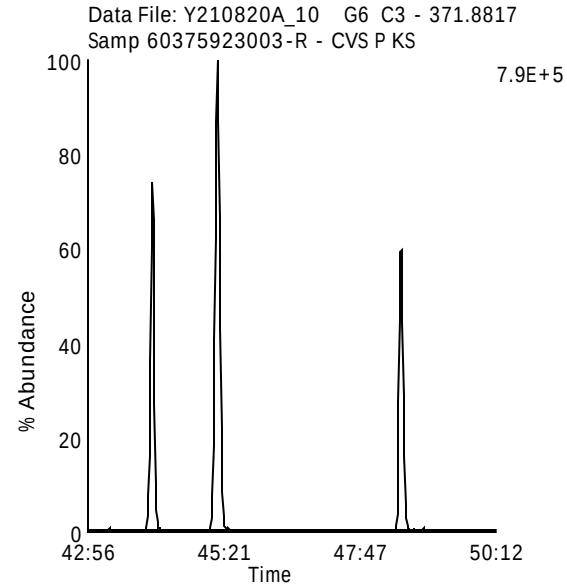


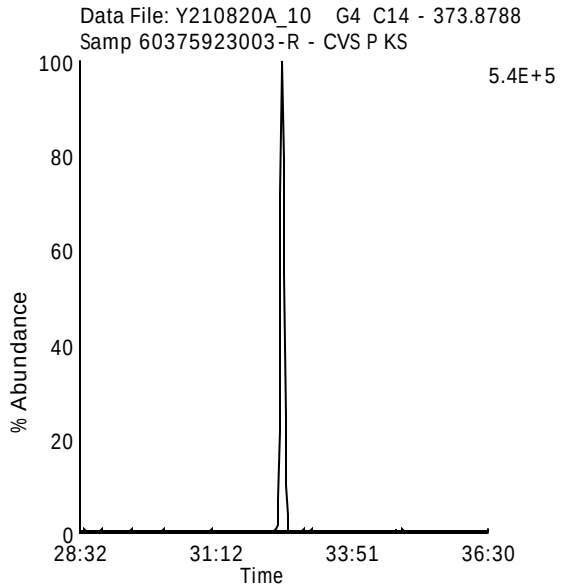
Labeled Hexa Chlorinated Biphenyls

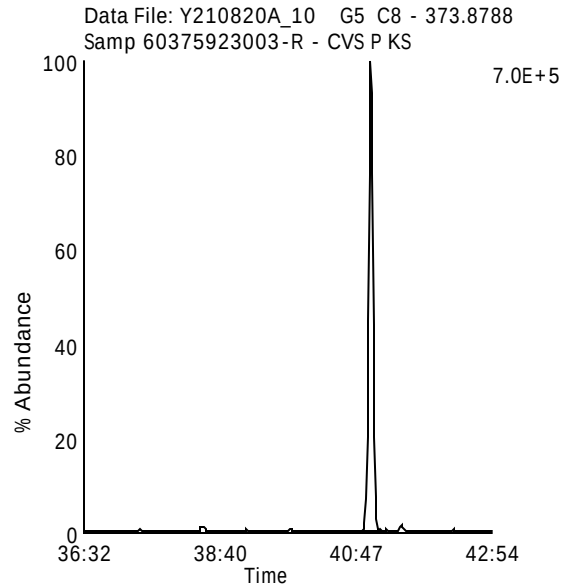
Data File Name: Y210820A_10 | Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS | Client Sample ID: GB-22/1-3

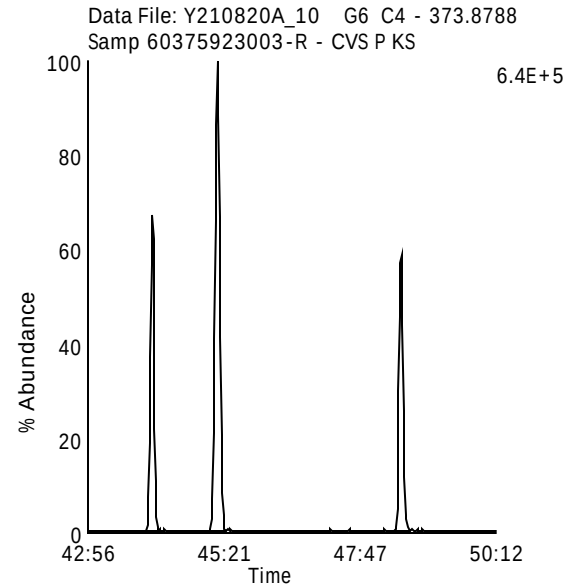






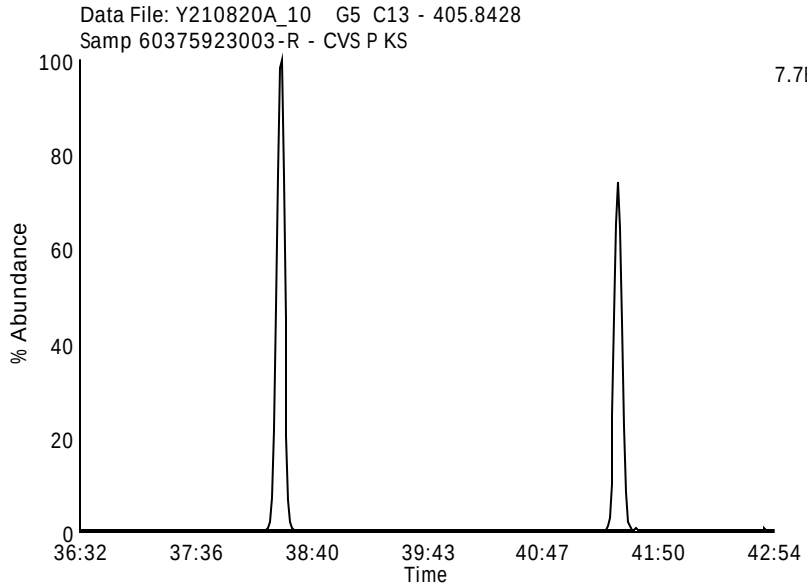


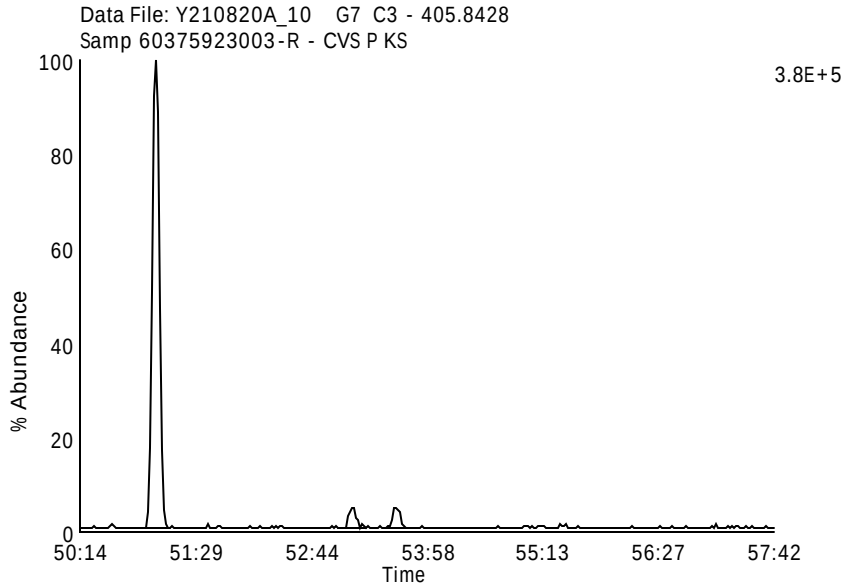


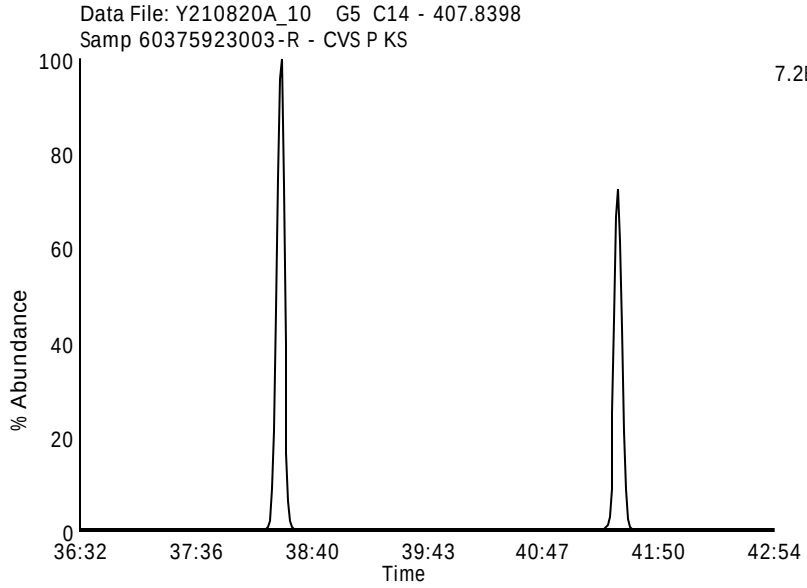


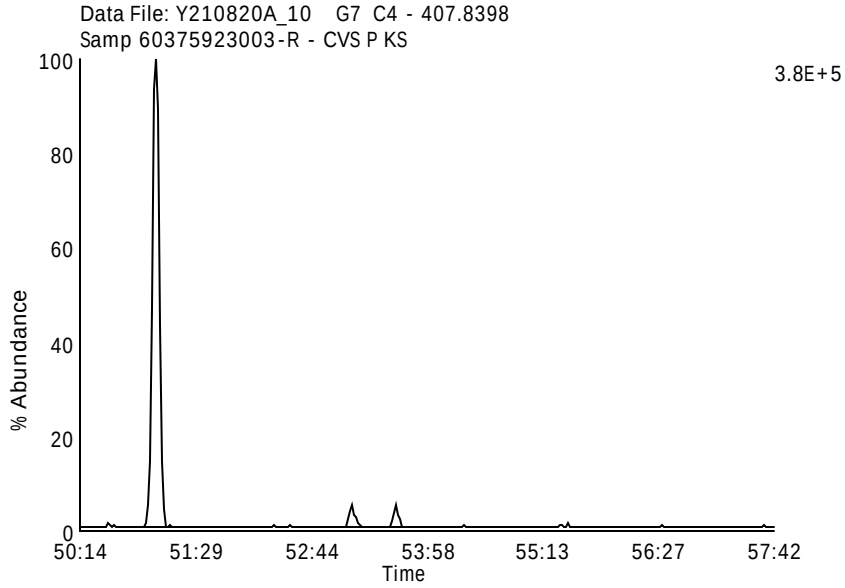
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3



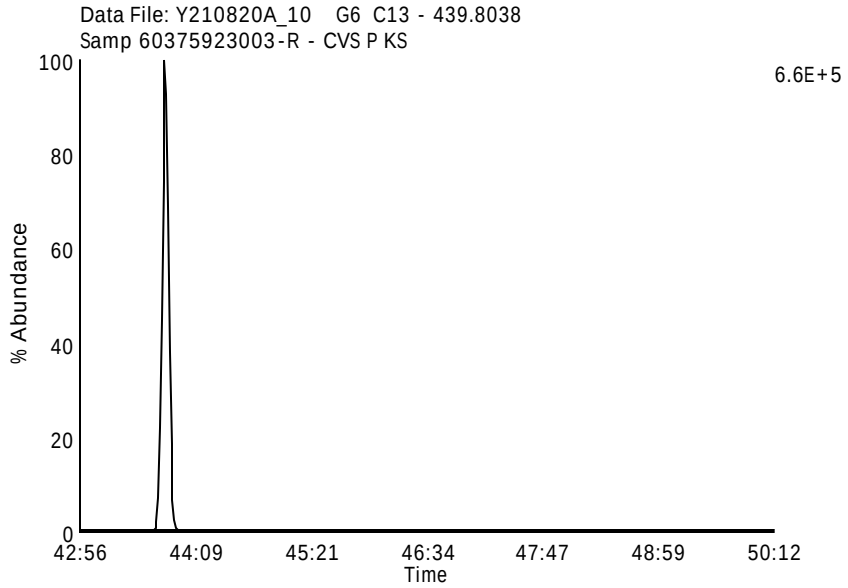


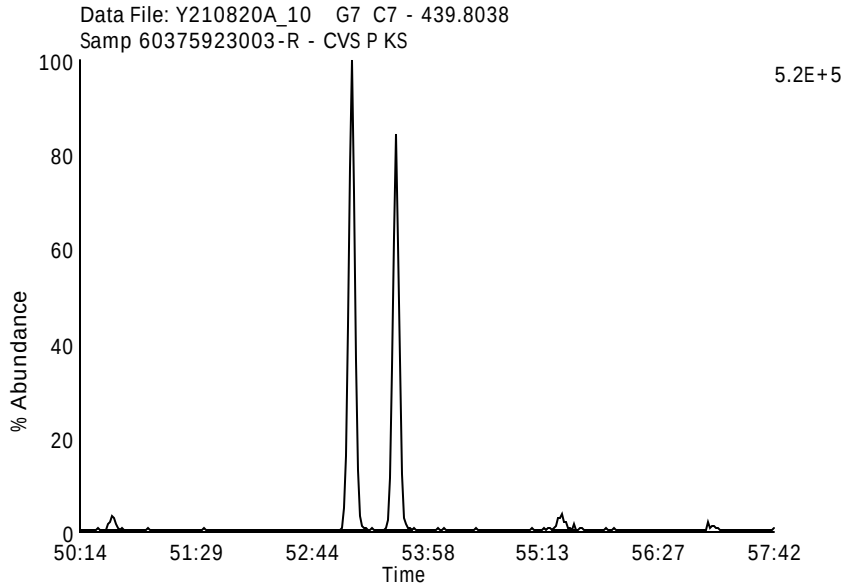


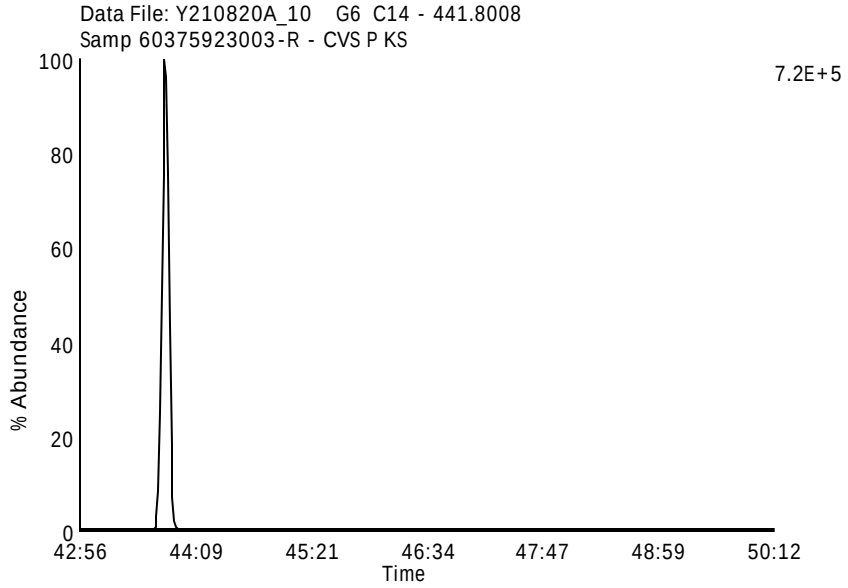


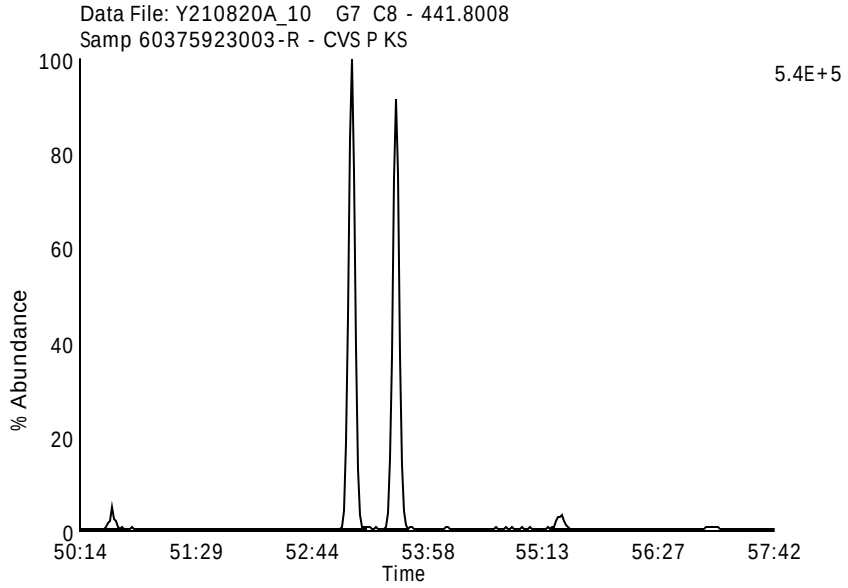
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3



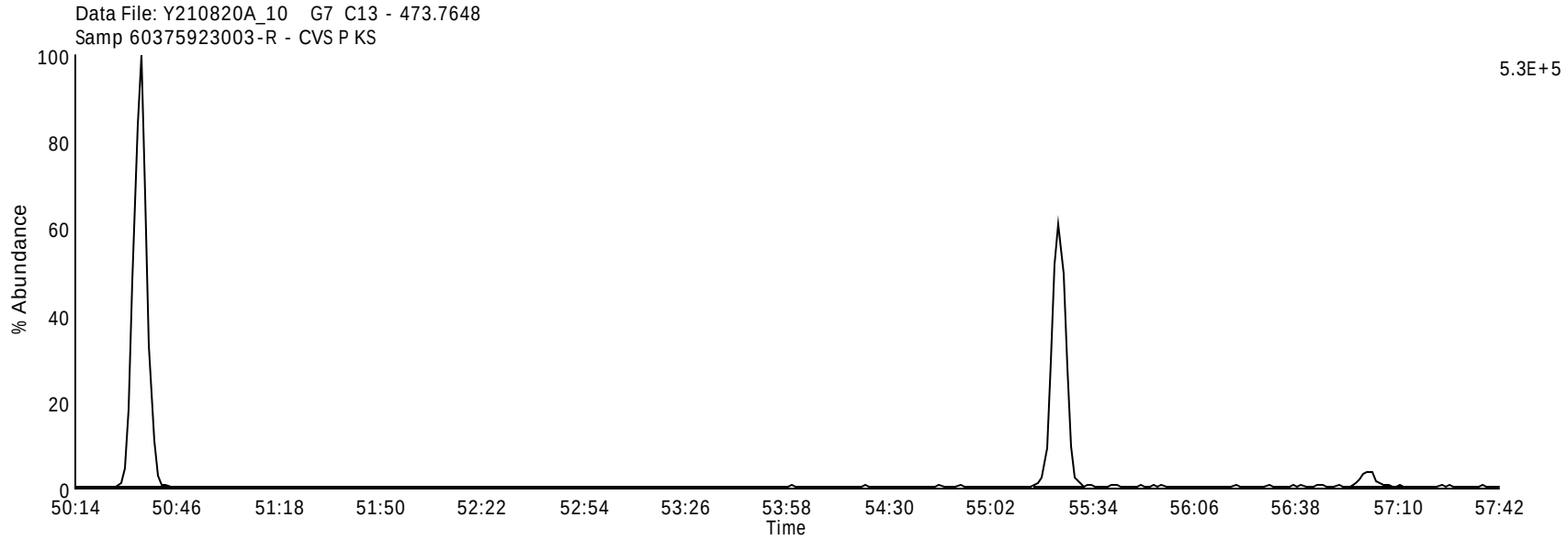


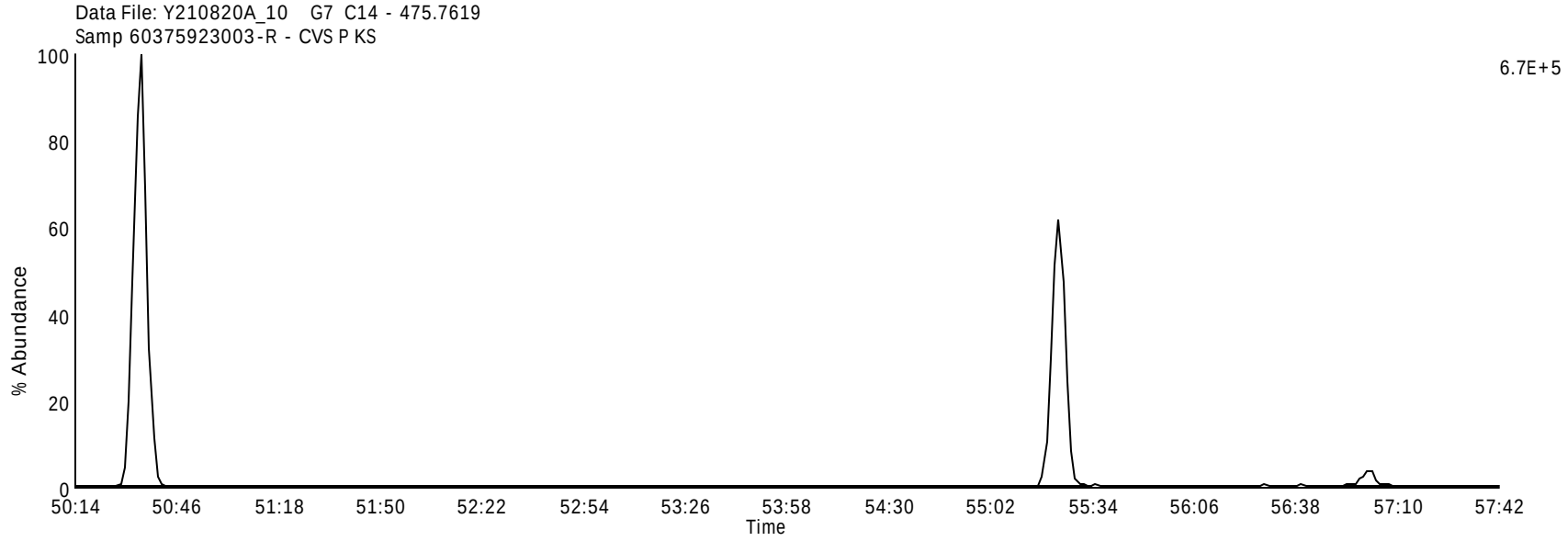




Labeled Nona Chlorinated Biphenyls

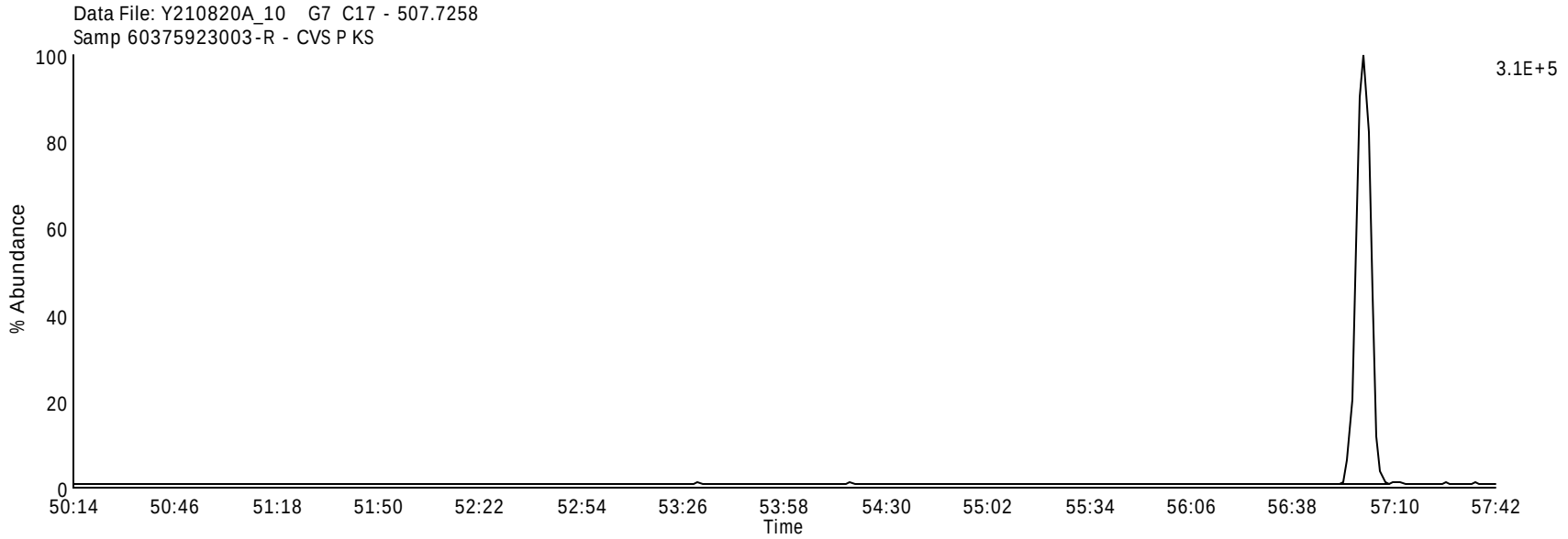
Data File Name: Y210820A_10	Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS	Client Sample ID: GB-22/1-3

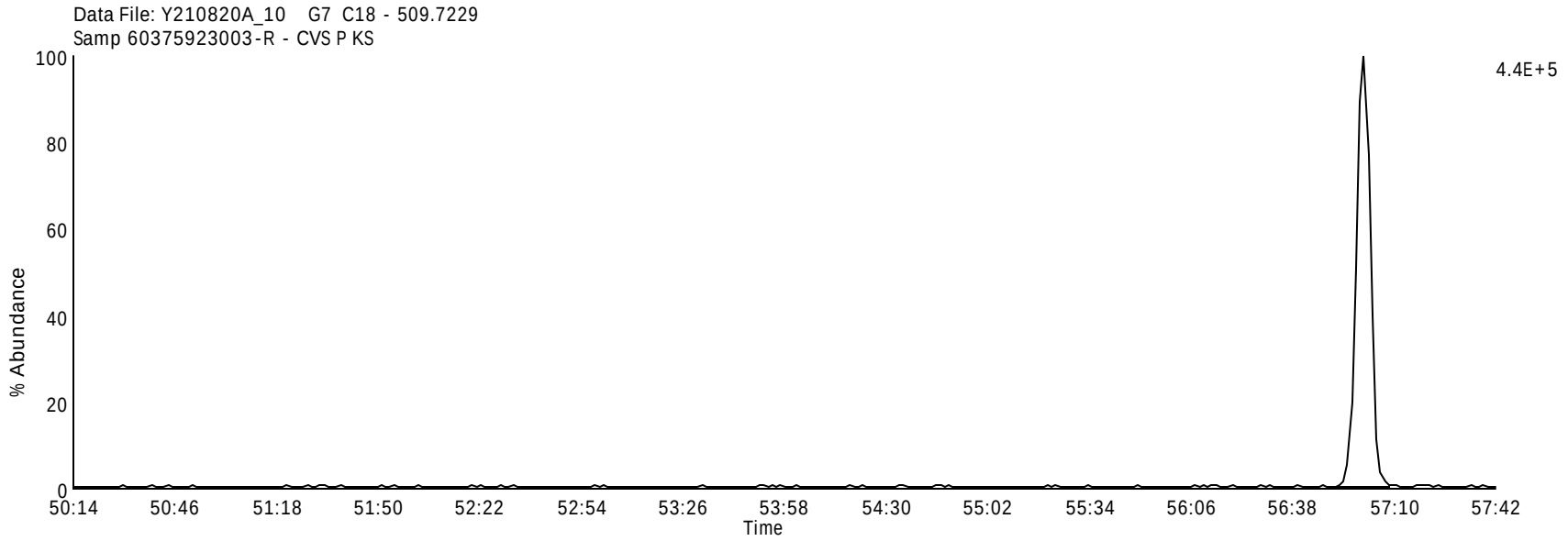




Labeled Deca Chlorinated Biphenyl

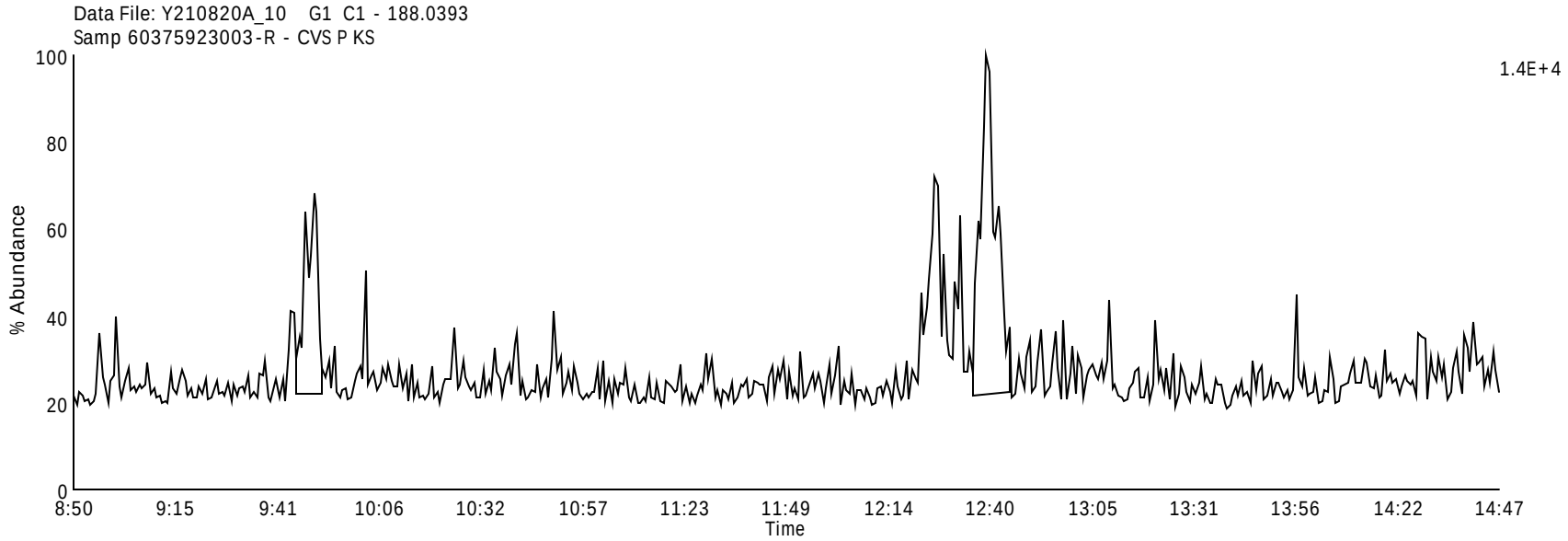
Data File Name: Y210820A_10	Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS	Client Sample ID: GB-22/1-3

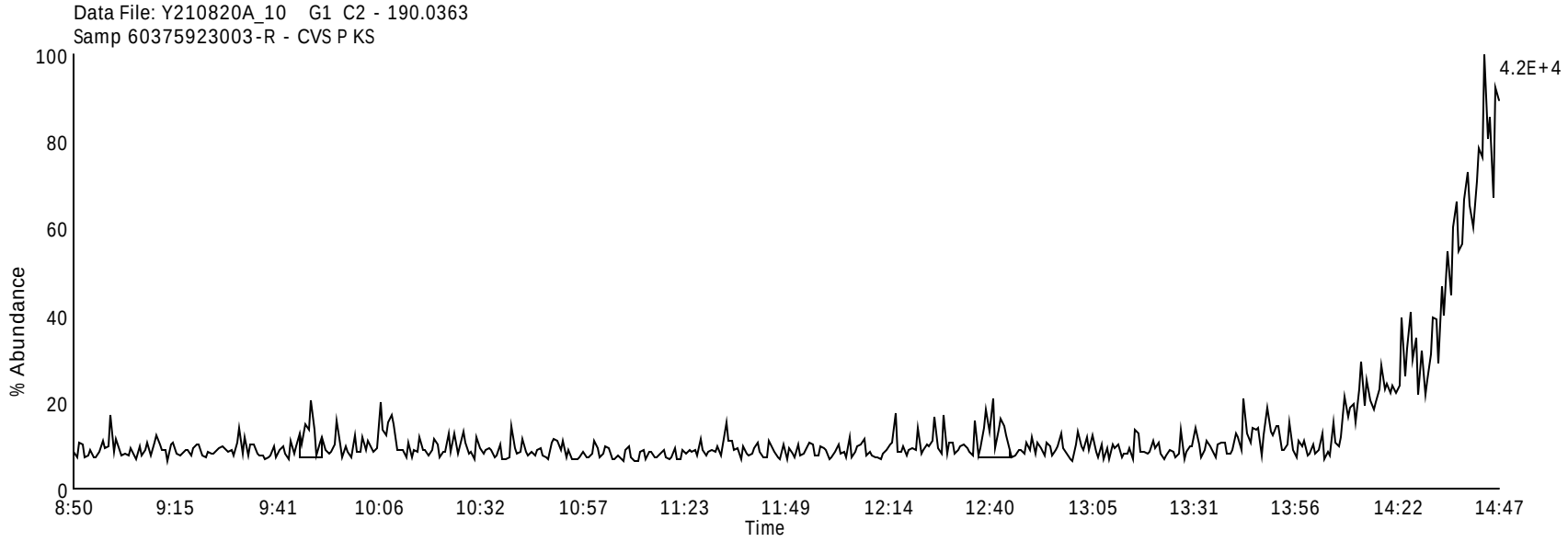




Mono Chlorinated Biphenyls

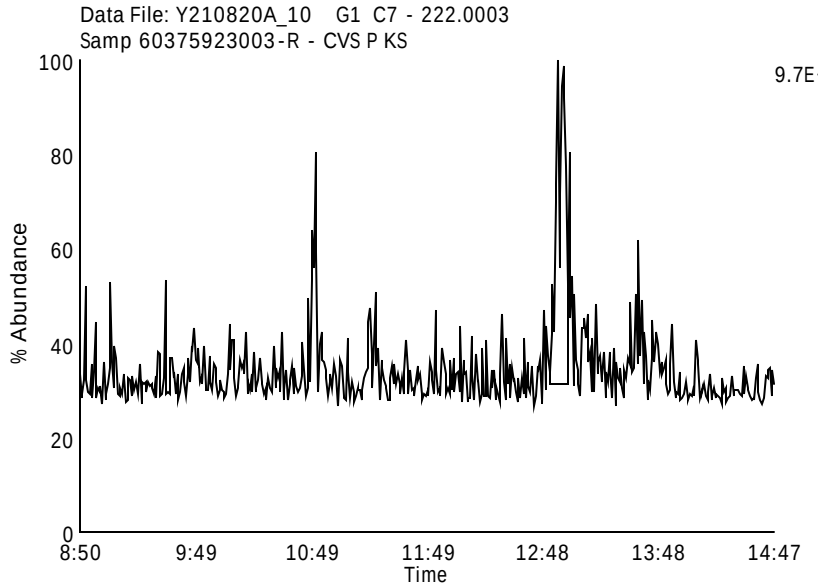
Data File Name: Y210820A_10	Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS	Client Sample ID: GB-22/1-3

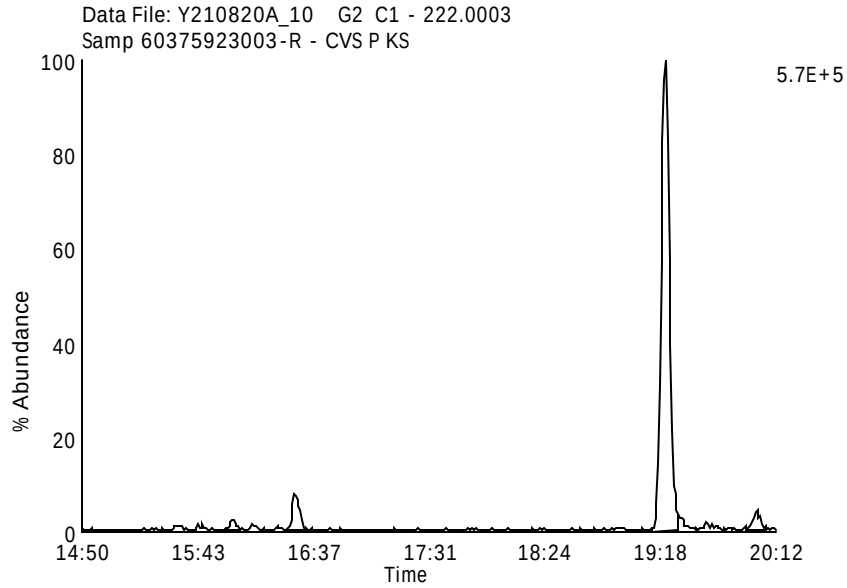


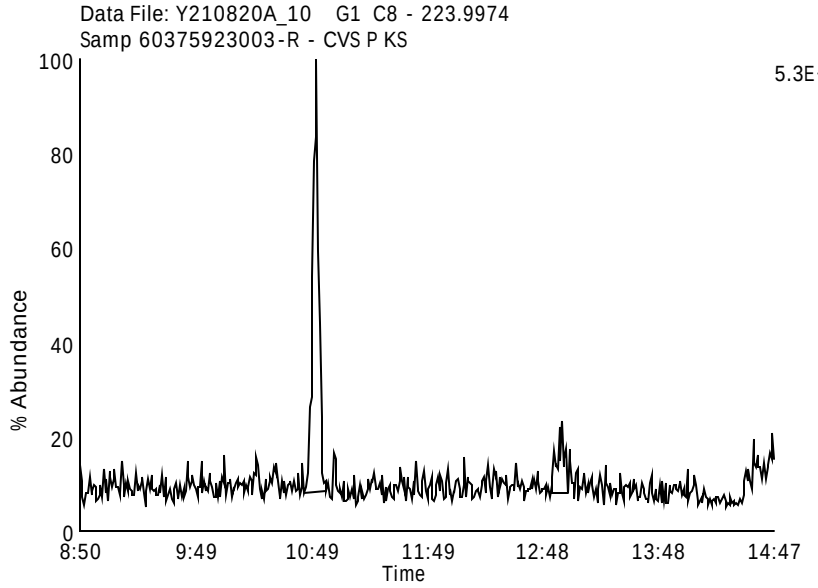


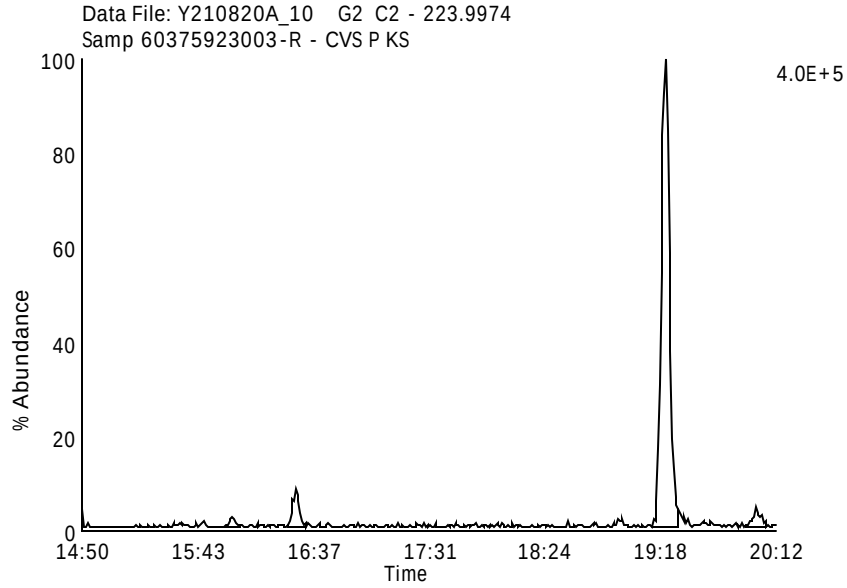
Di Chlorinated Biphenyls

Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3



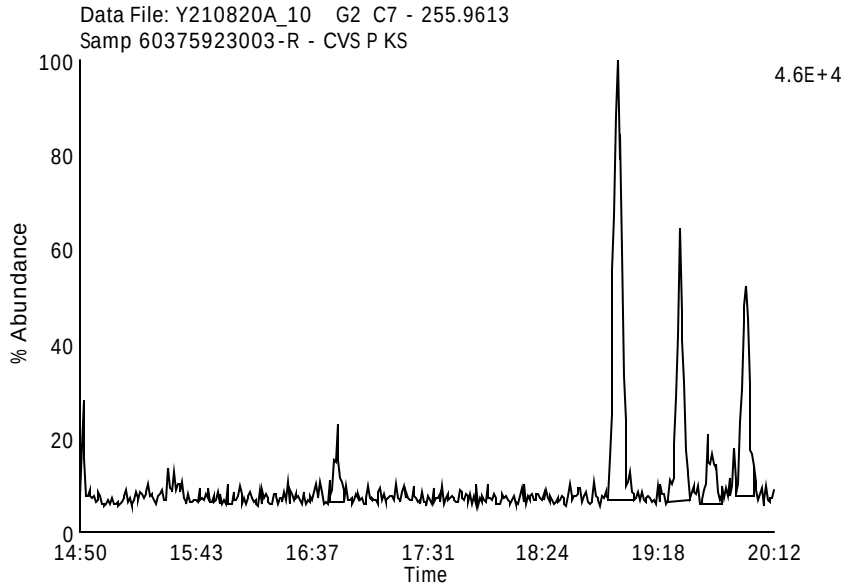


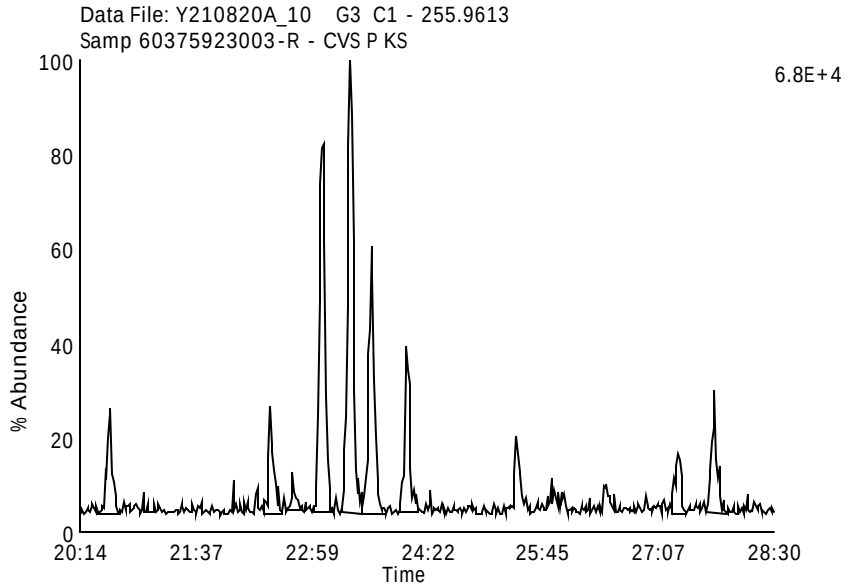


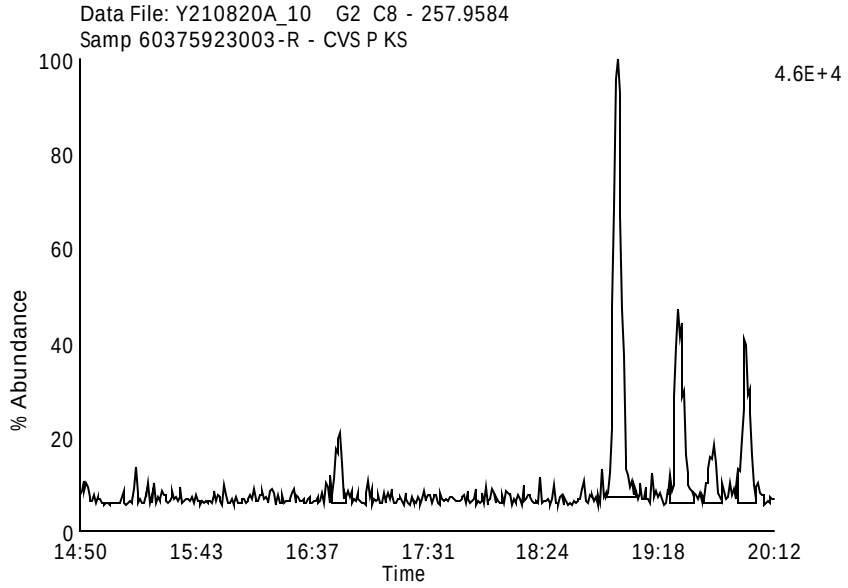


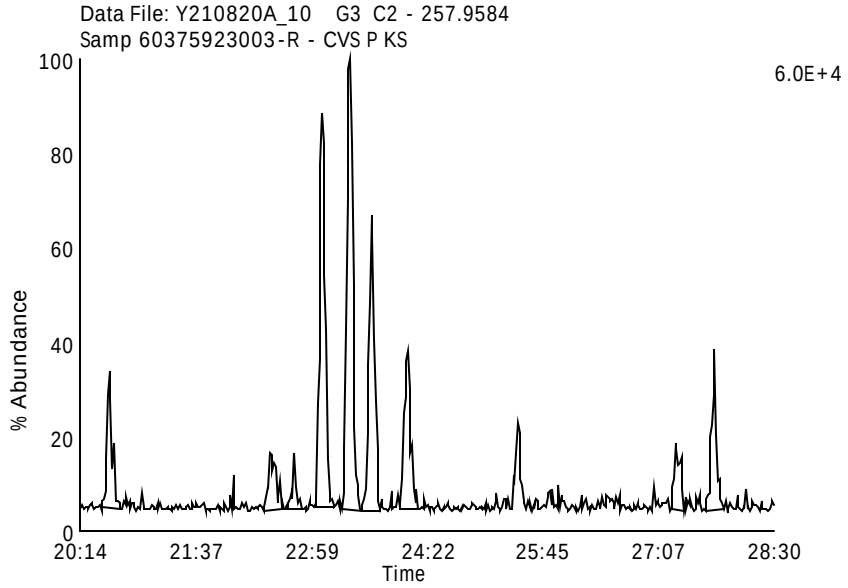
Tri Chlorinated Biphenyls

Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3



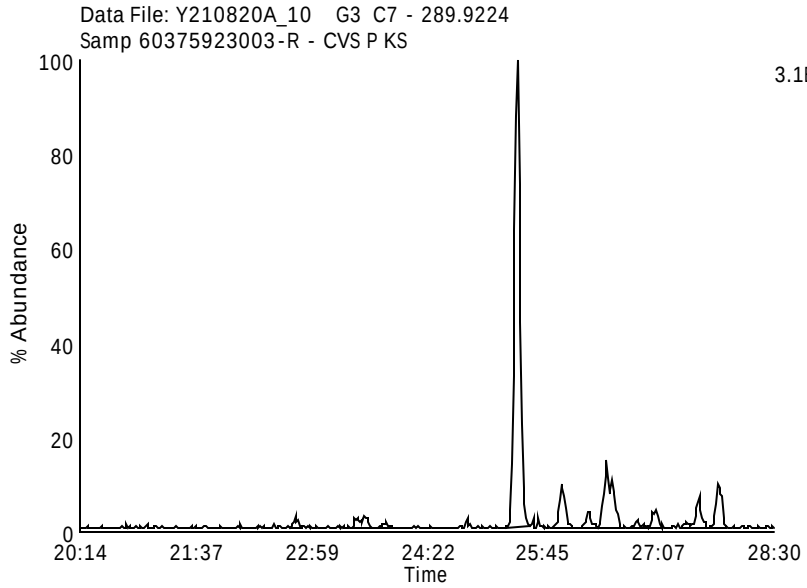


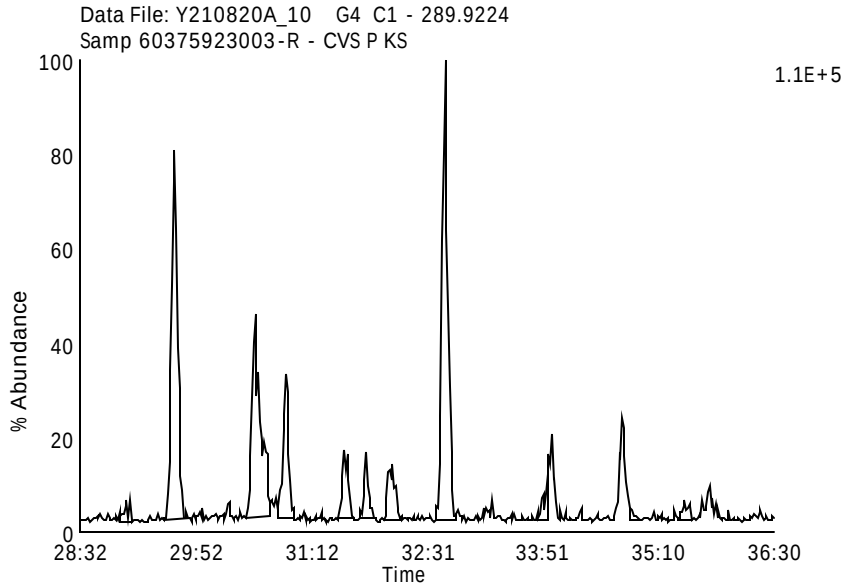


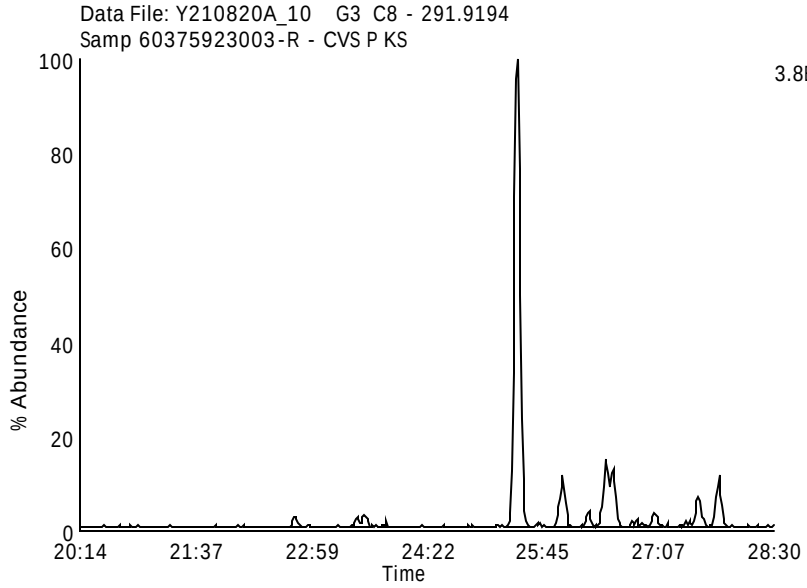


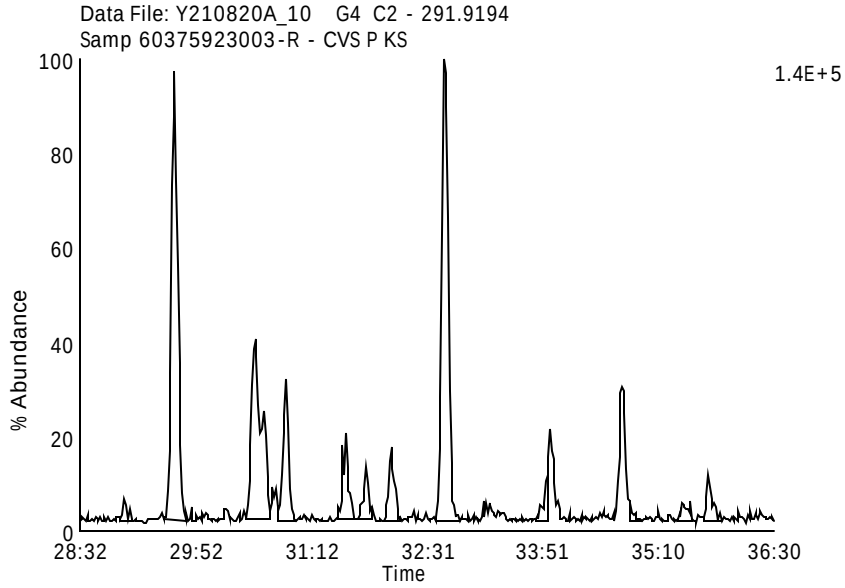
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3



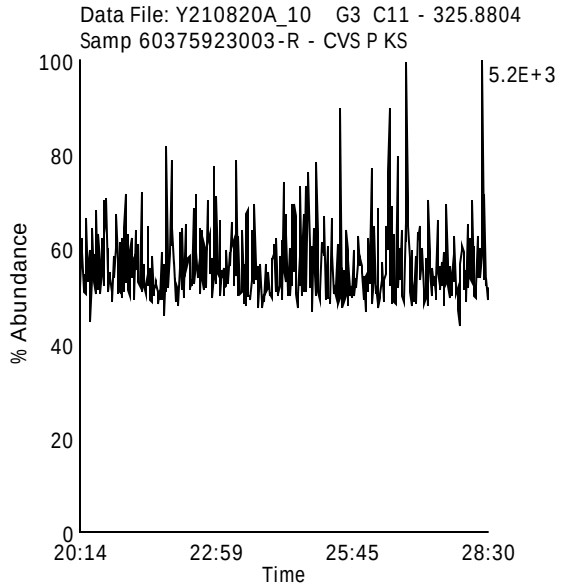


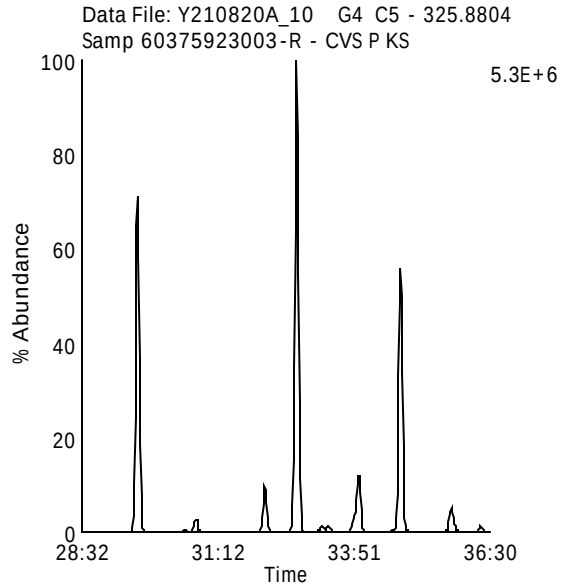


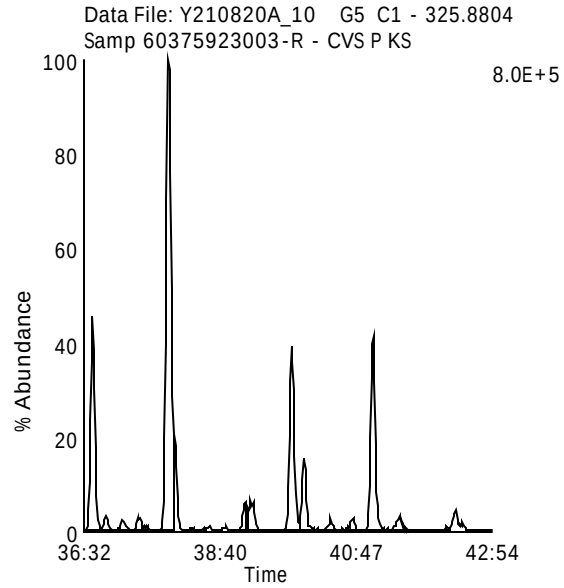


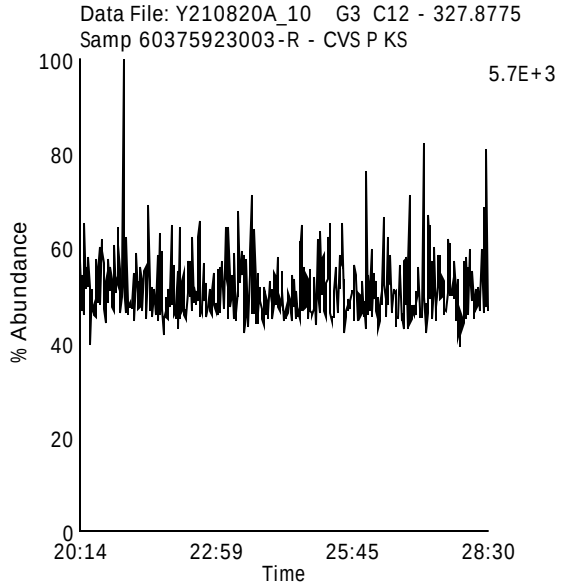
Penta Chlorinated Biphenyls

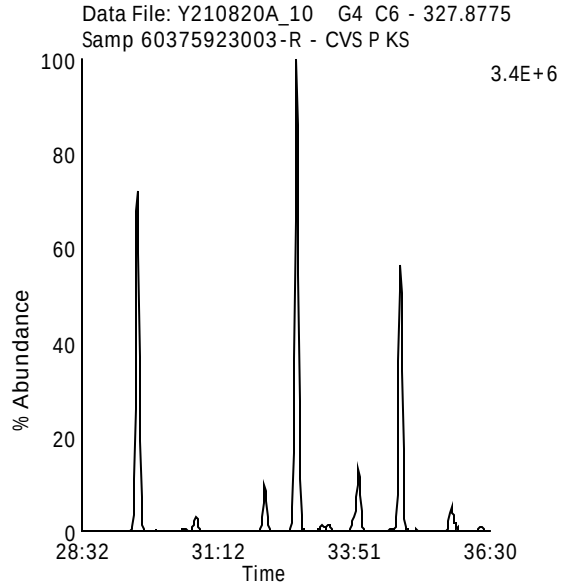
Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3

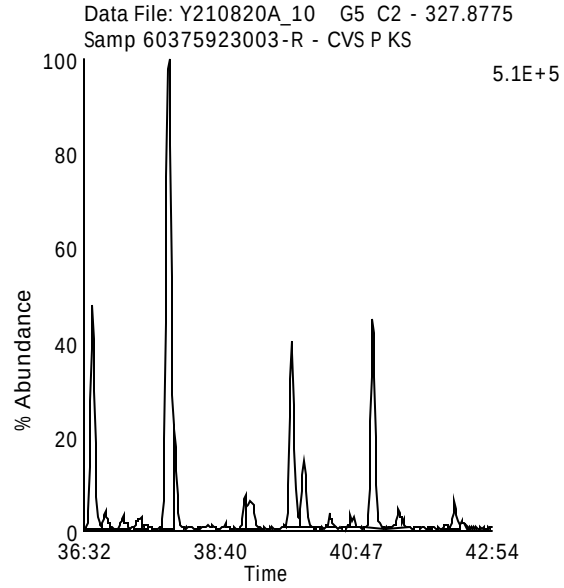






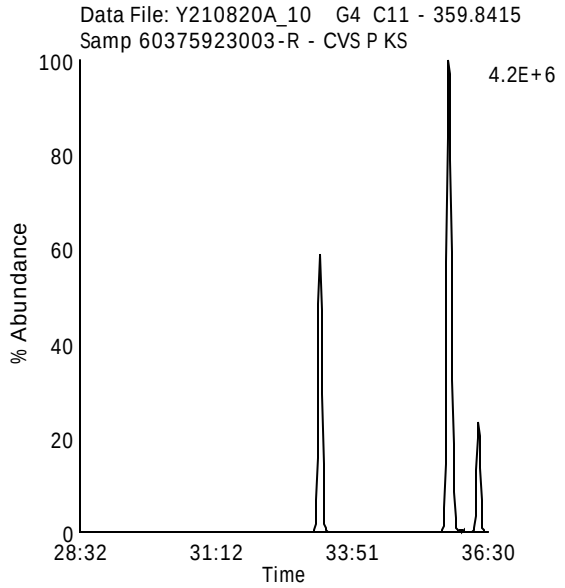


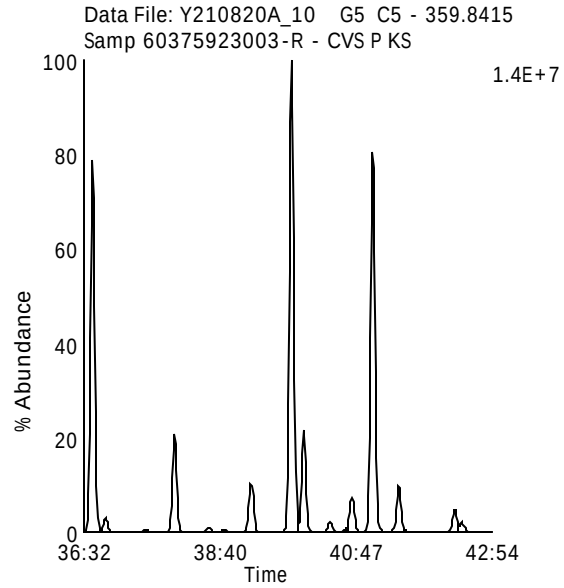


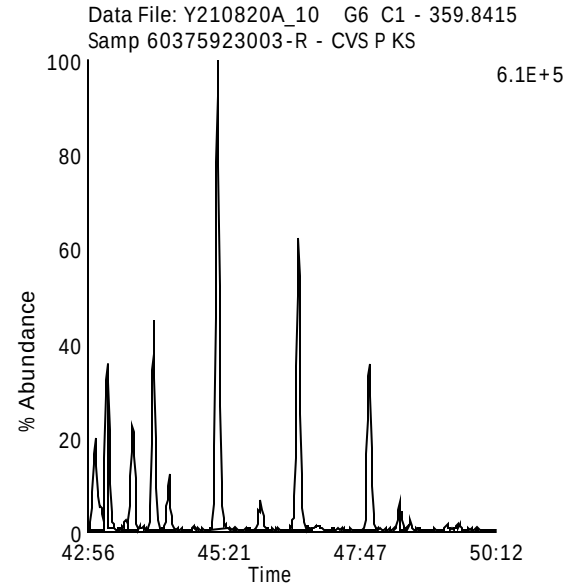


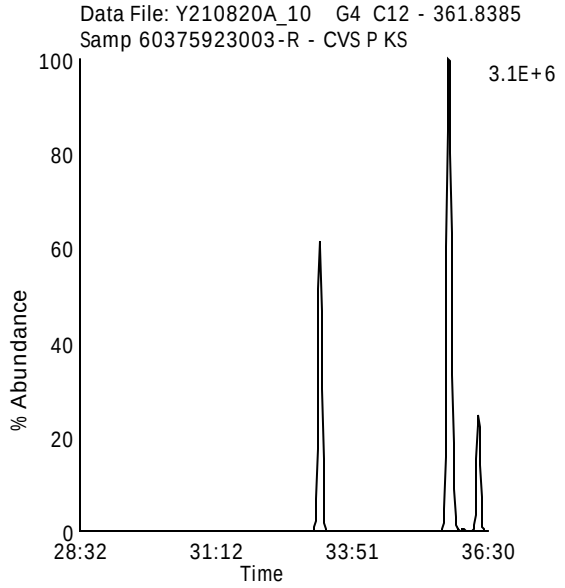
Hexa Chlorinated Biphenyls

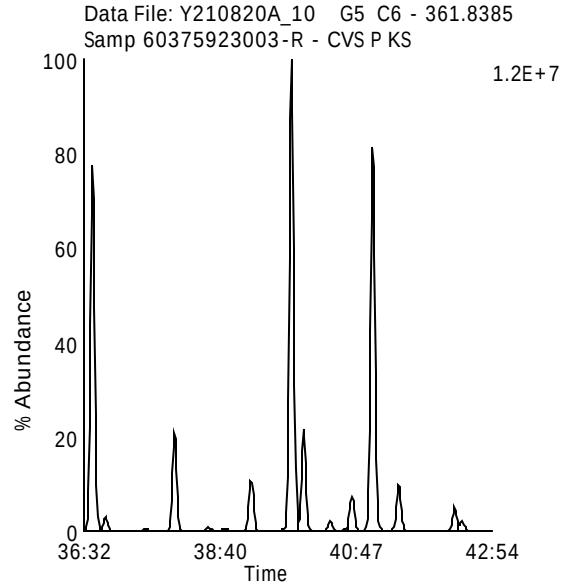
Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3

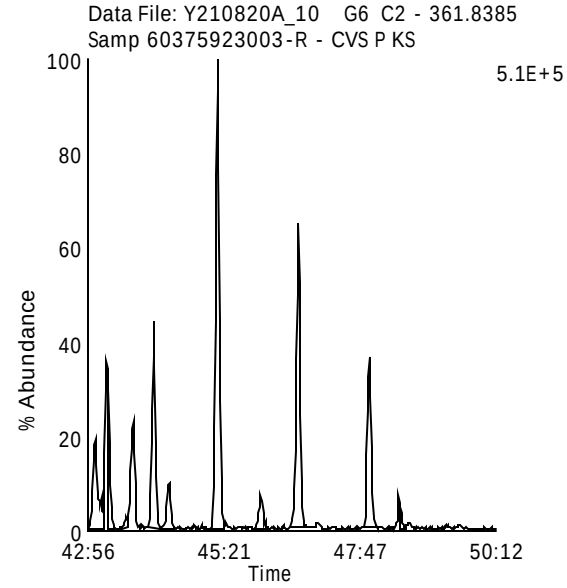






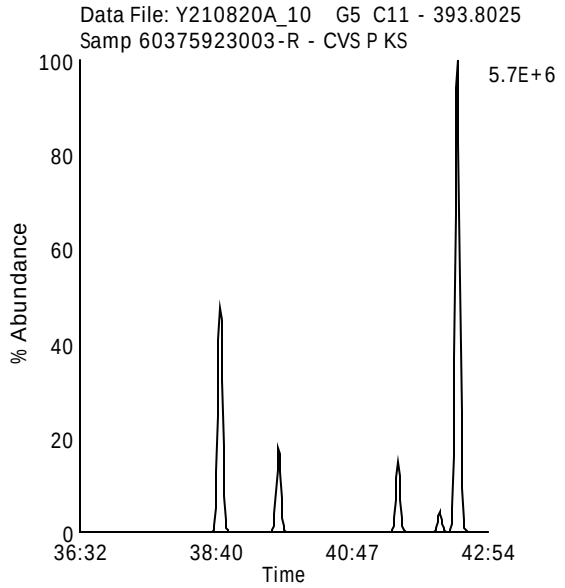


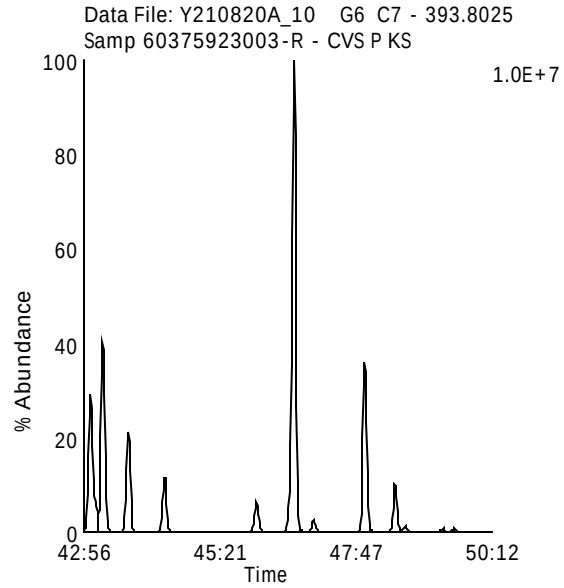


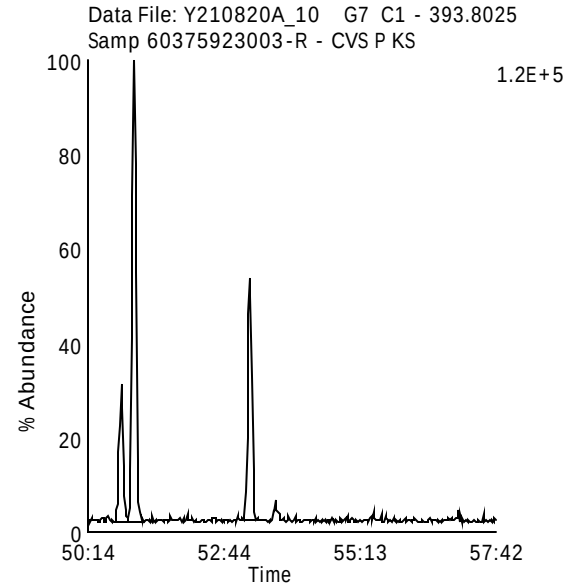


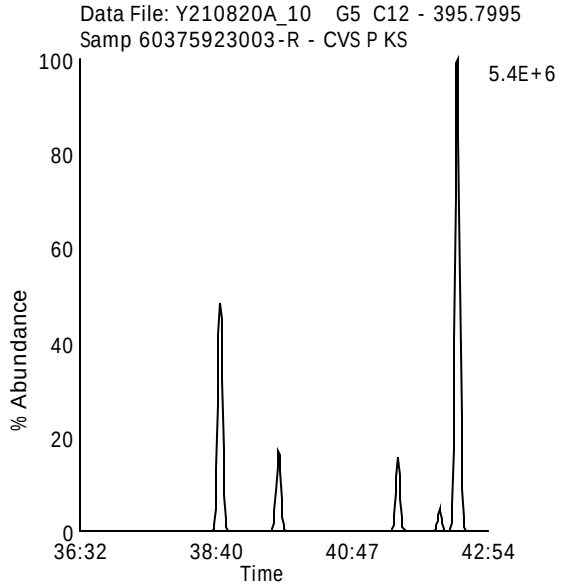
Hepta Chlorinated Biphenyls

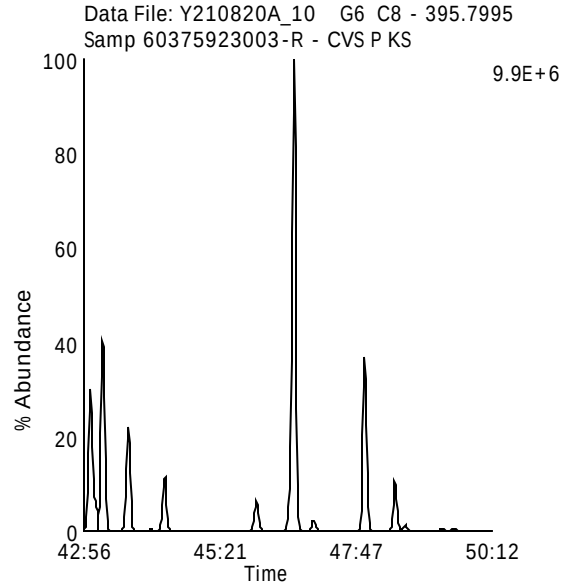
Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3

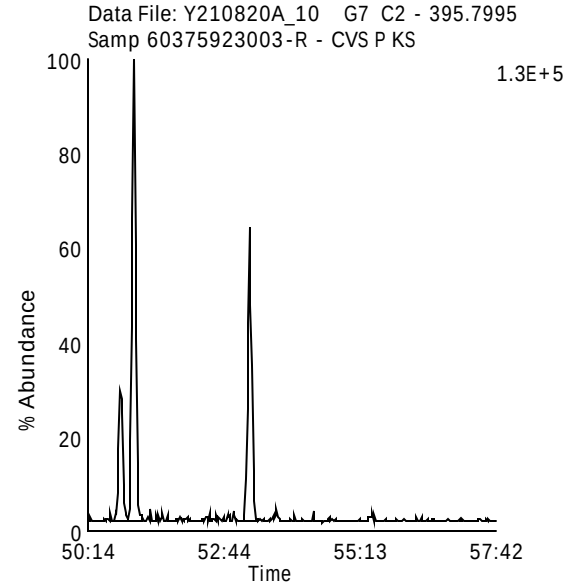






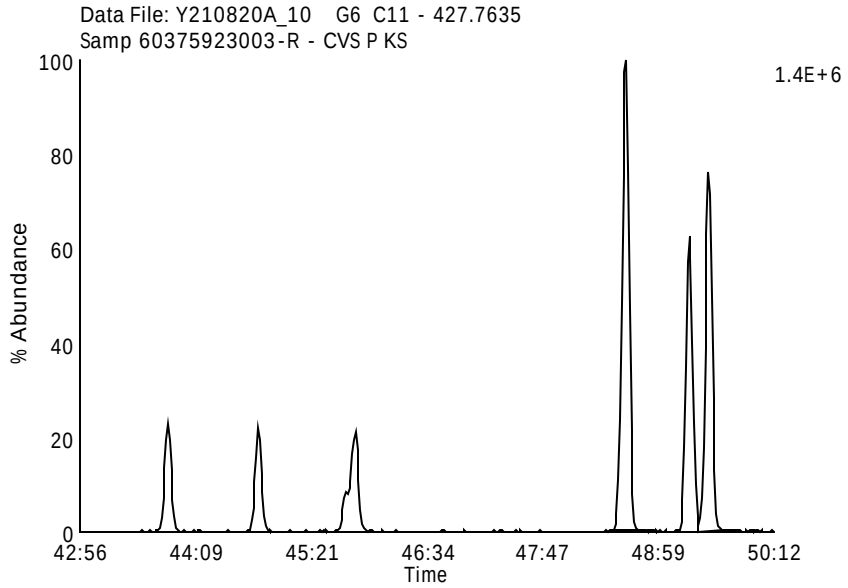


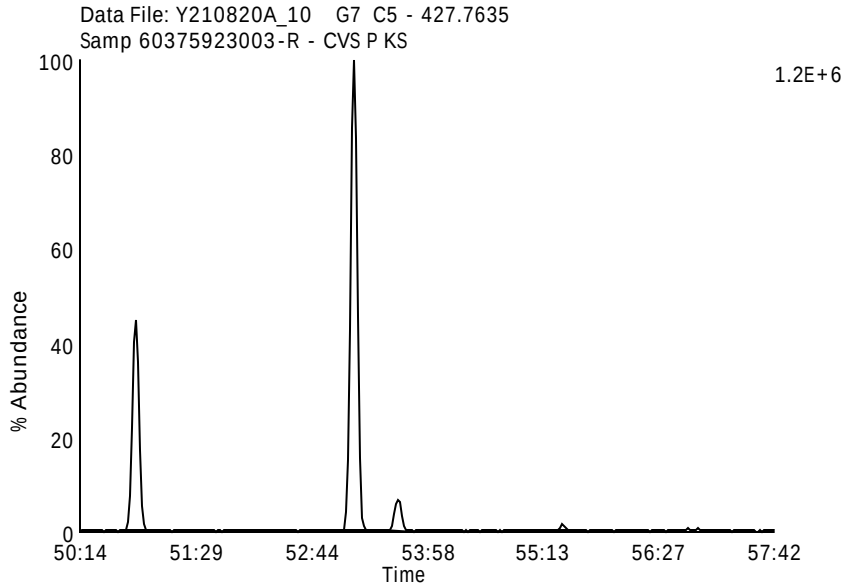


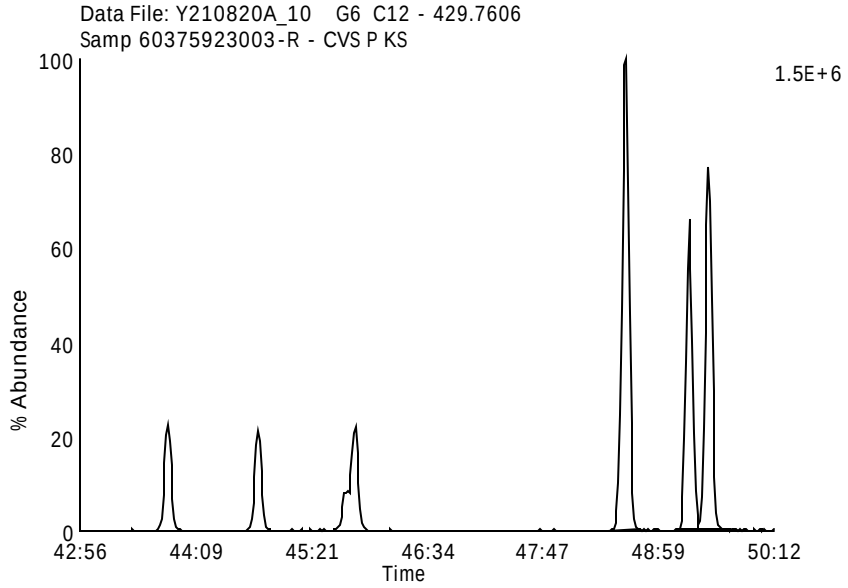


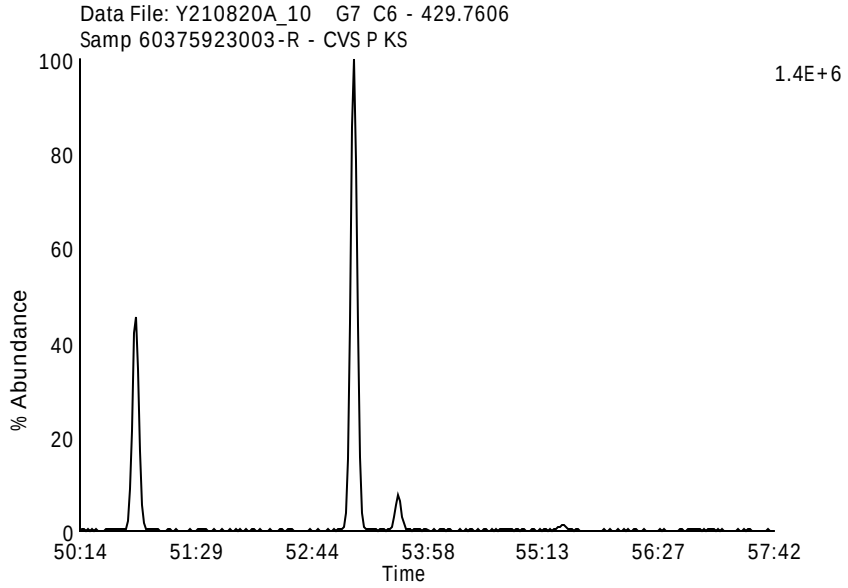
Octa Chlorinated Biphenyls

Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3



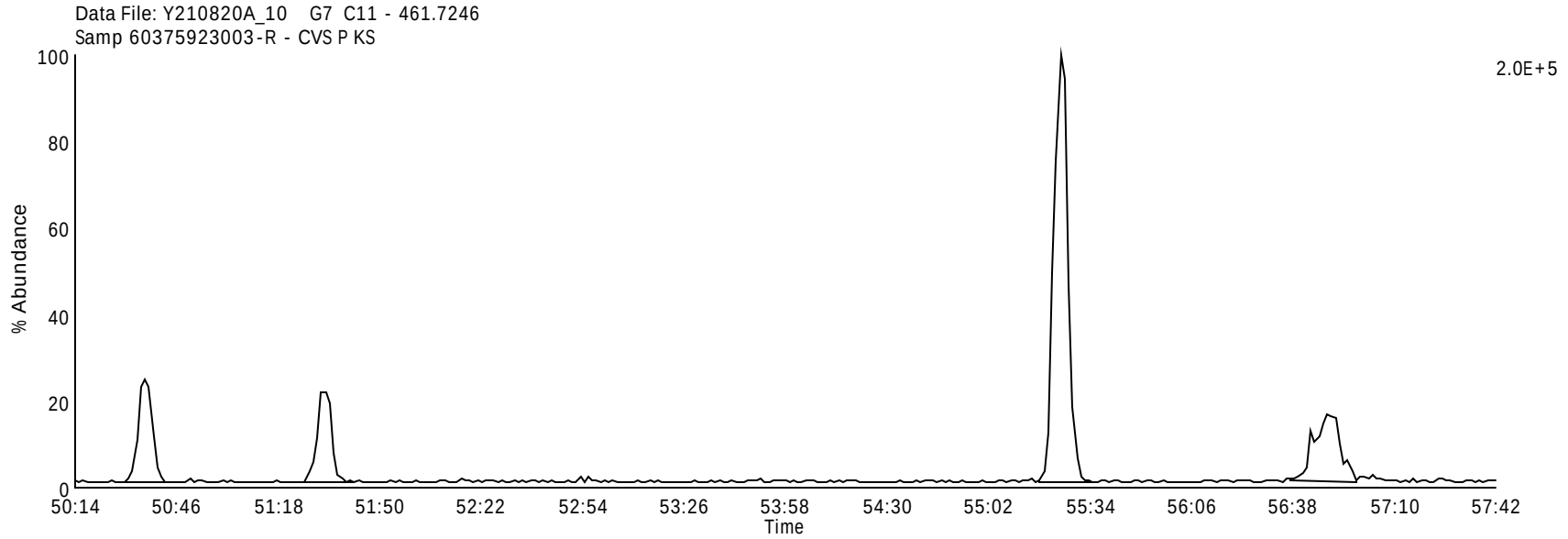


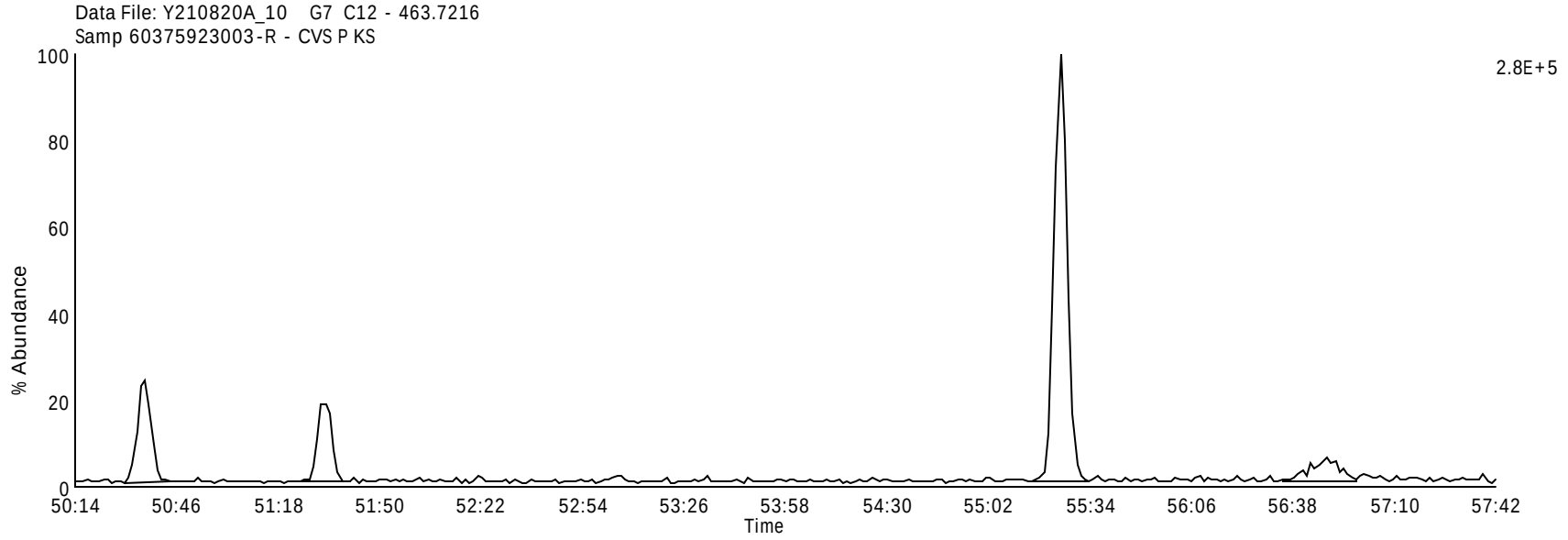




Nona Chlorinated Biphenyls

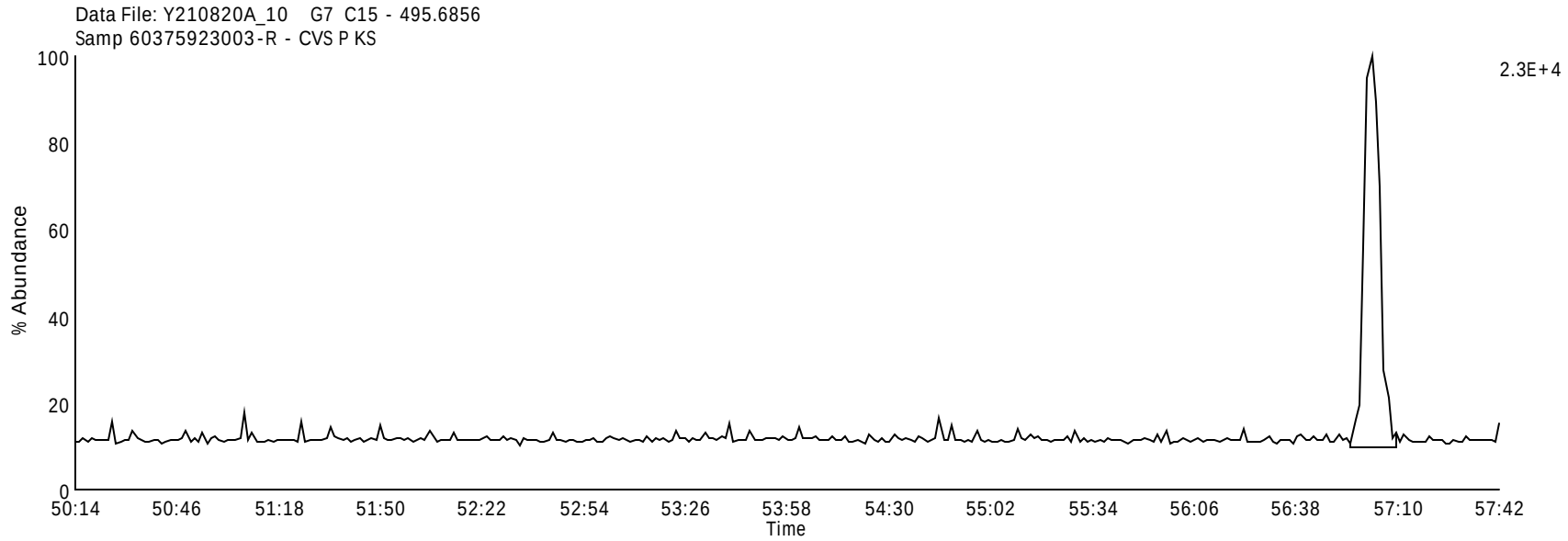
Data File Name: Y210820A_10	Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS	Client Sample ID: GB-22/1-3

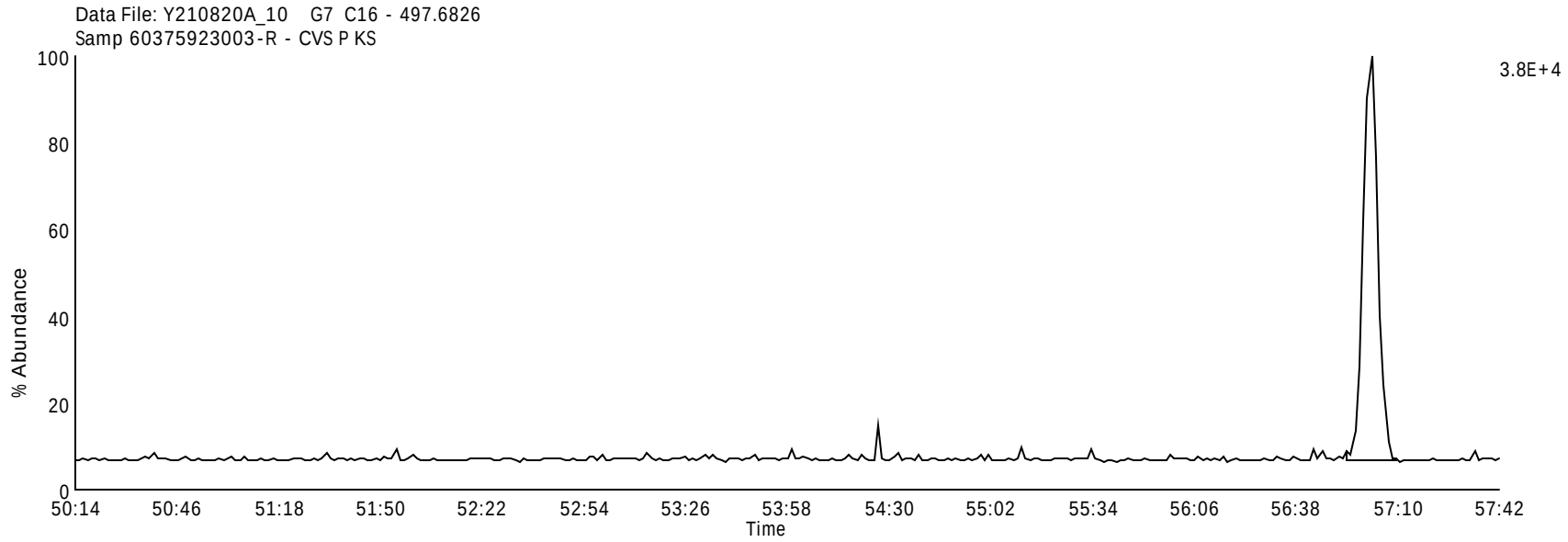




Deca Chlorinated Biphenyl

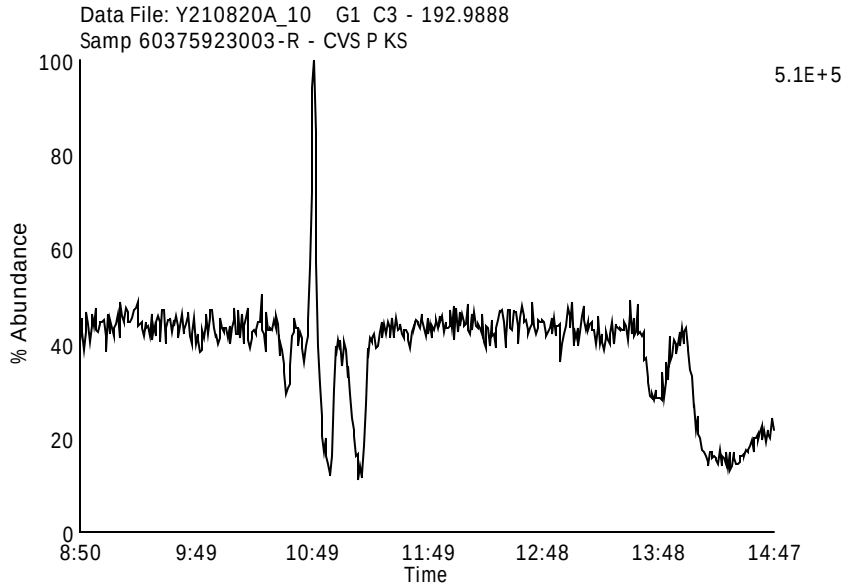
Data File Name: Y210820A_10	Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS	Client Sample ID: GB-22/1-3

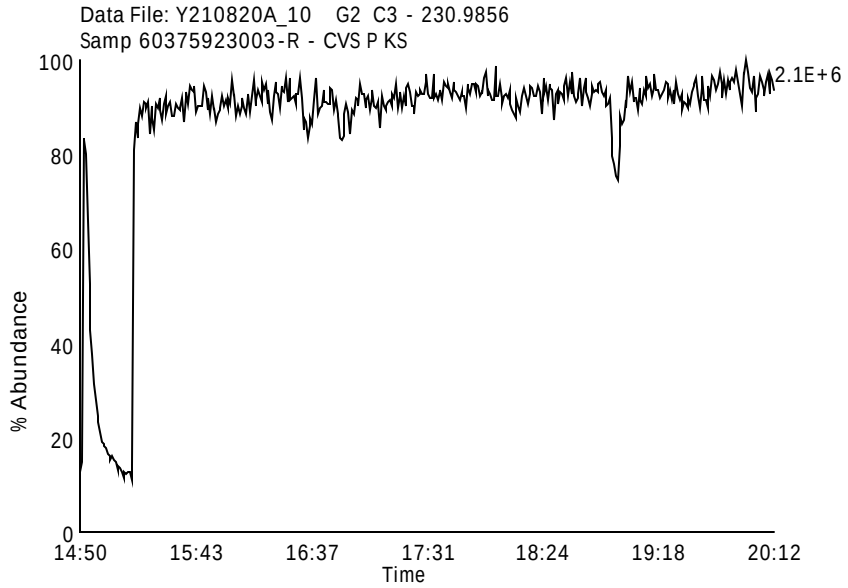


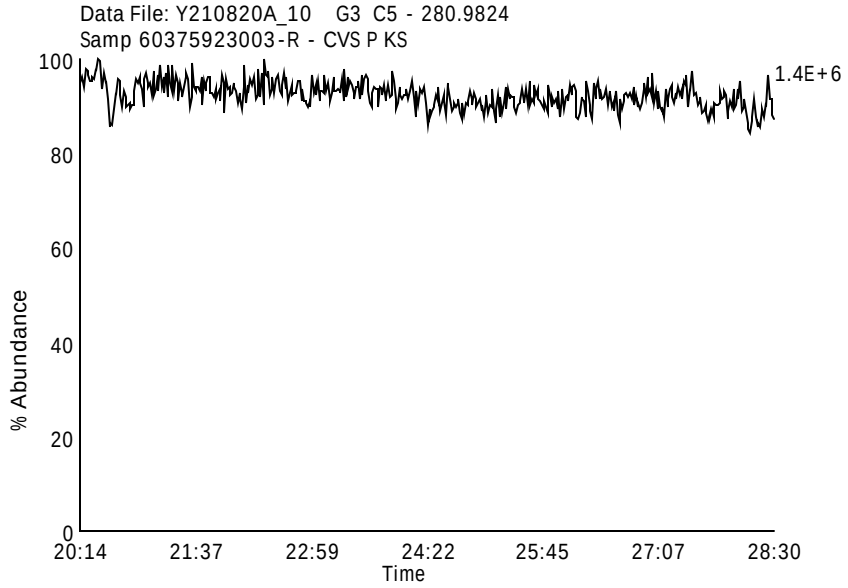


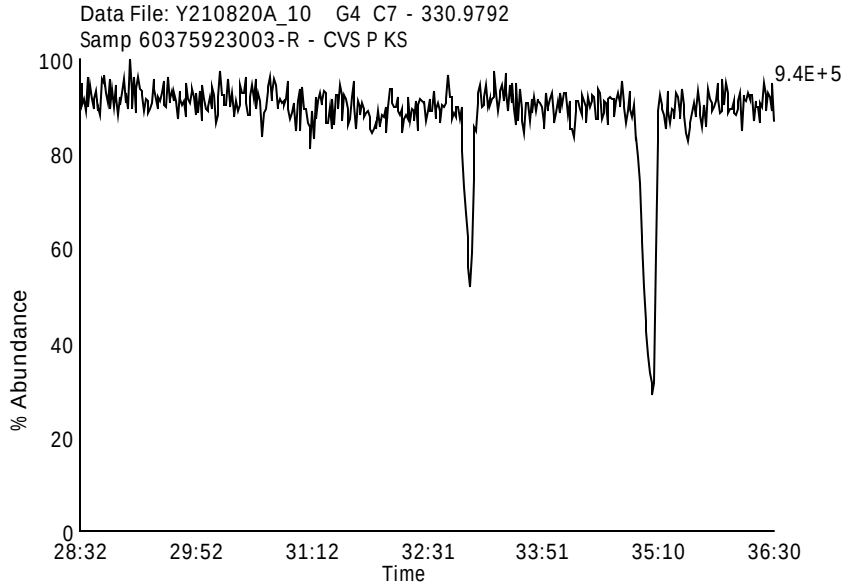
Group 1 - 4 Lock mass

Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3



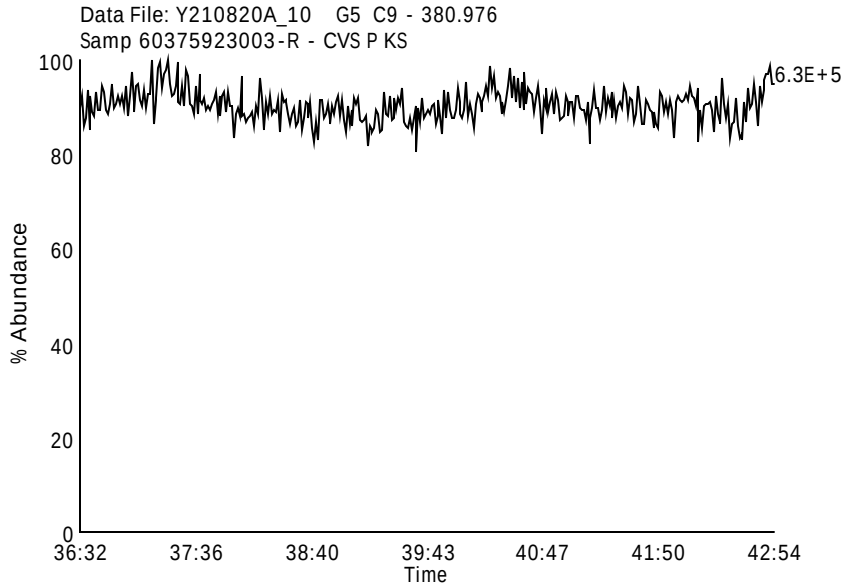


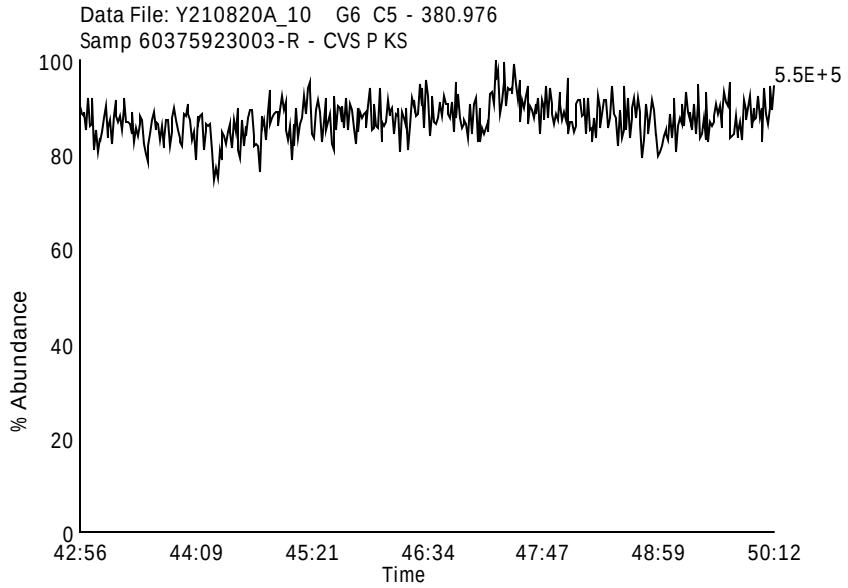


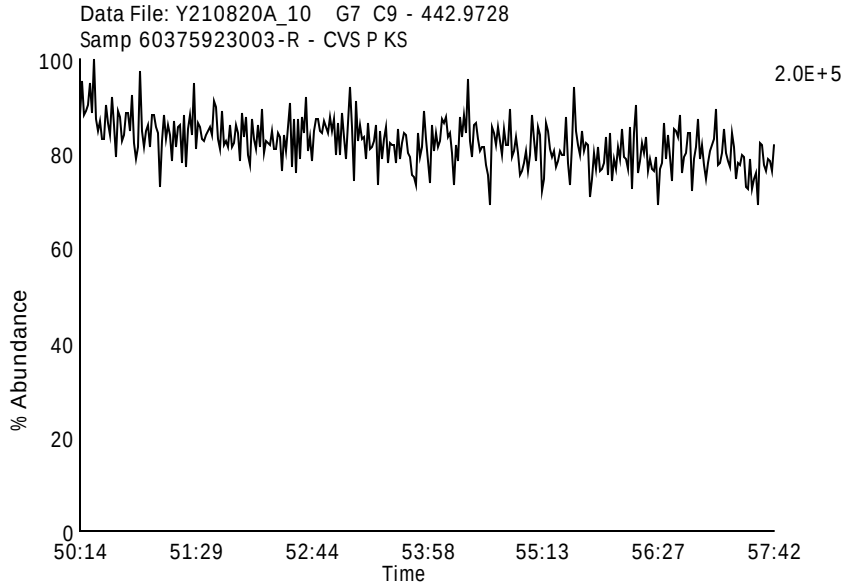


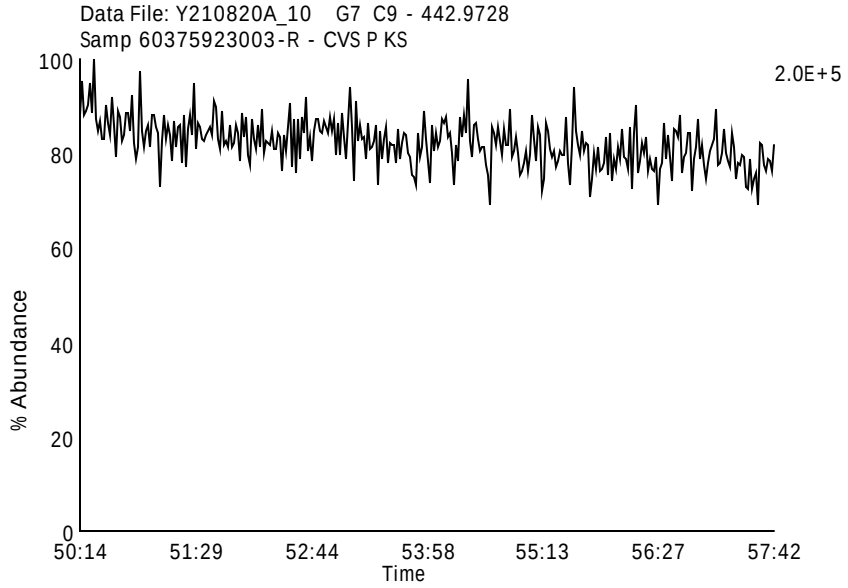
Group 5 - 7 Lock mass

Data File Name: Y210820A_10
Lab Sample ID: 60375923003-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923003-R - CVS P KS
Client Sample ID: GB-22/1-3



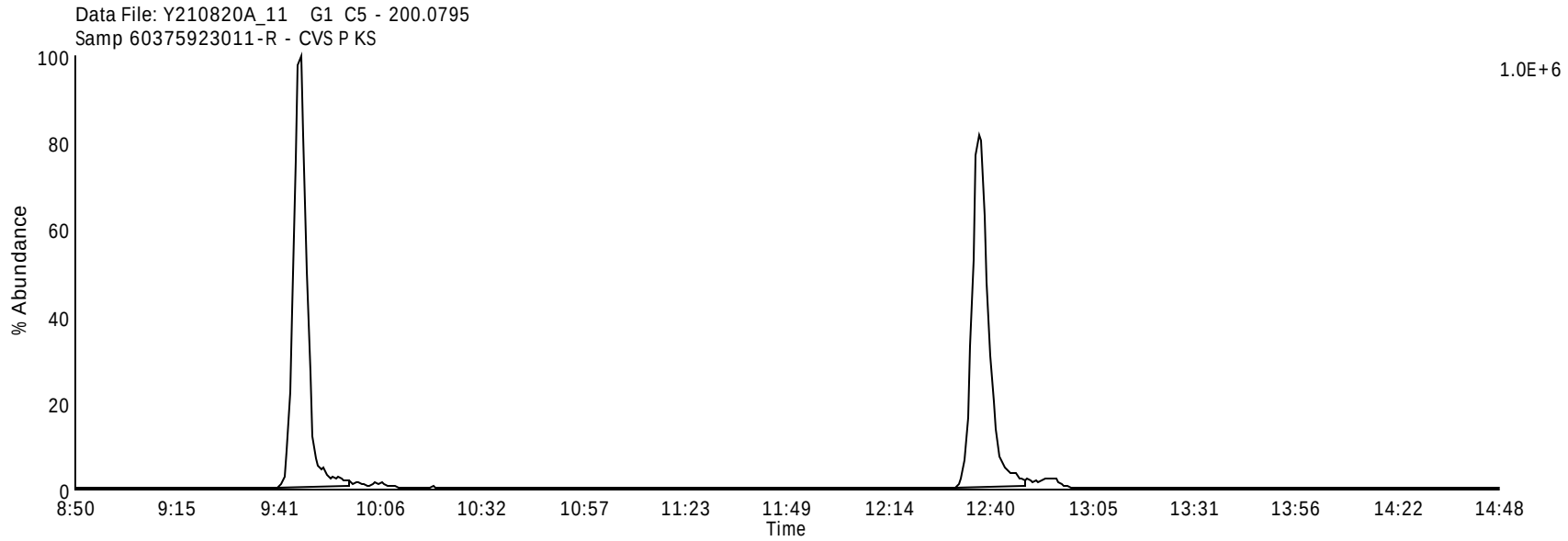


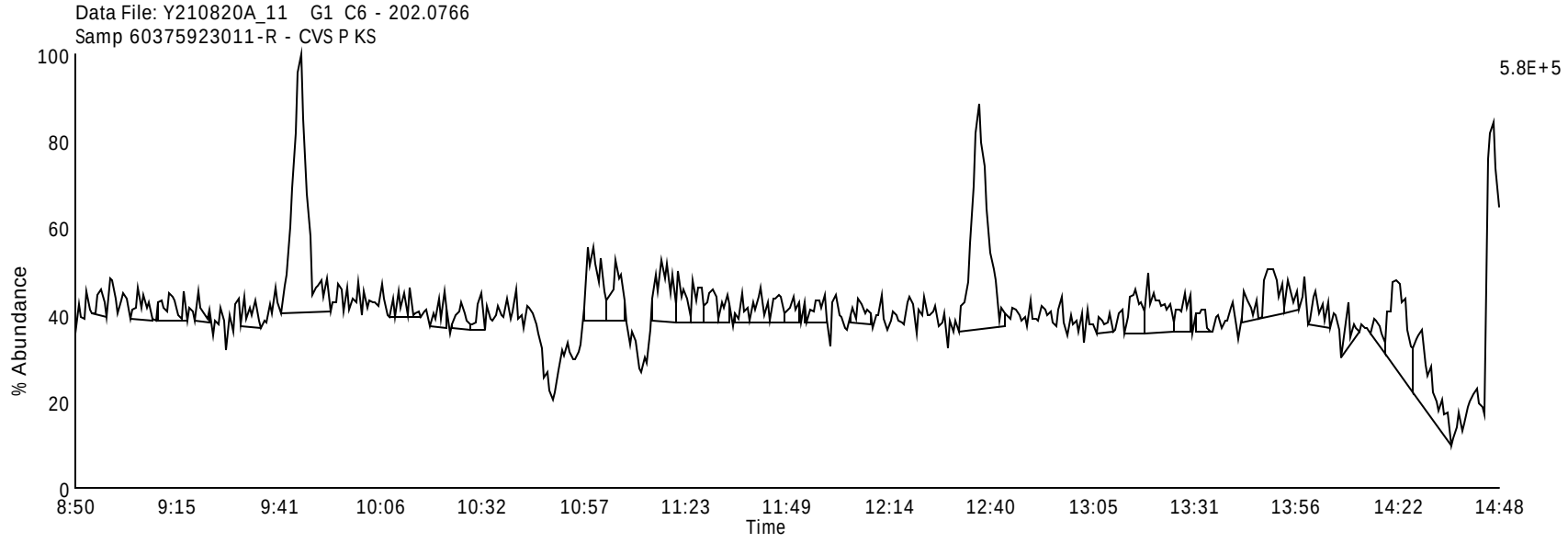




Labeled Mono Chlorinated Biphenyls

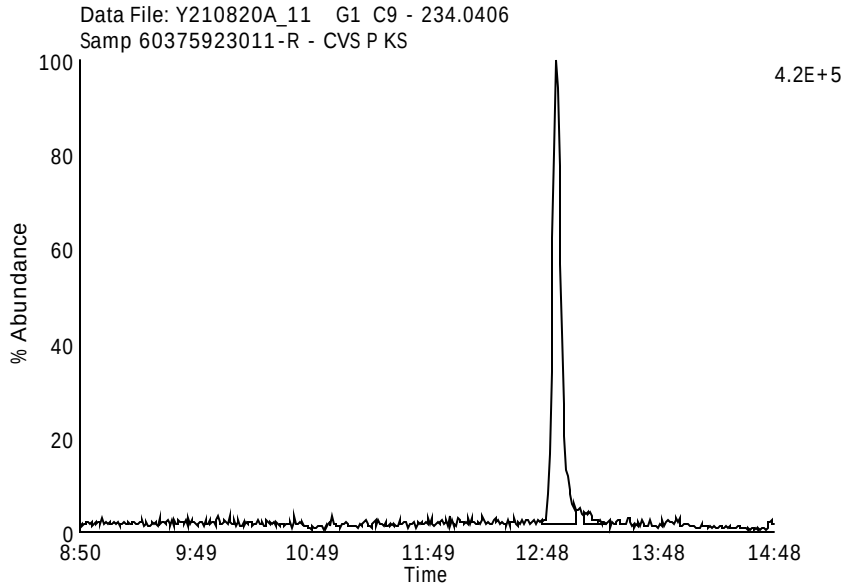
Data File Name: Y210820A_11	Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS	Client Sample ID: GB-01/8-10

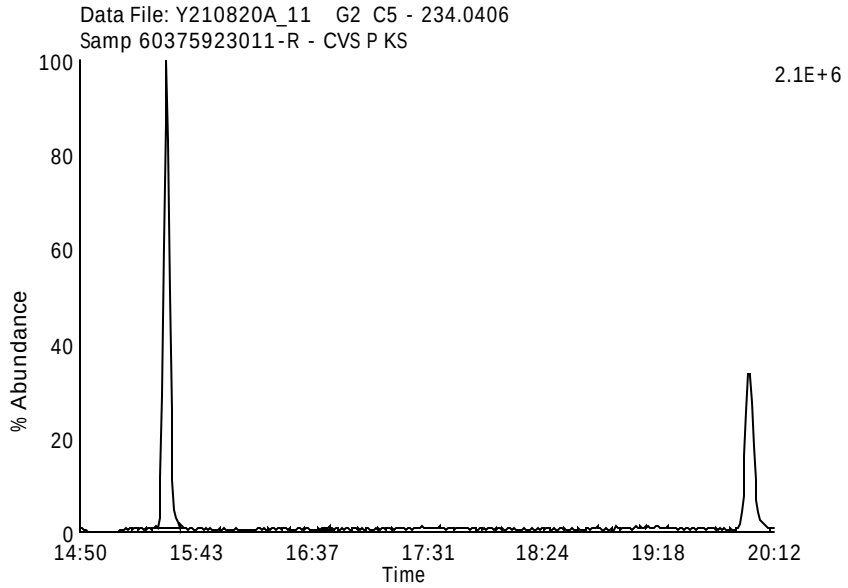


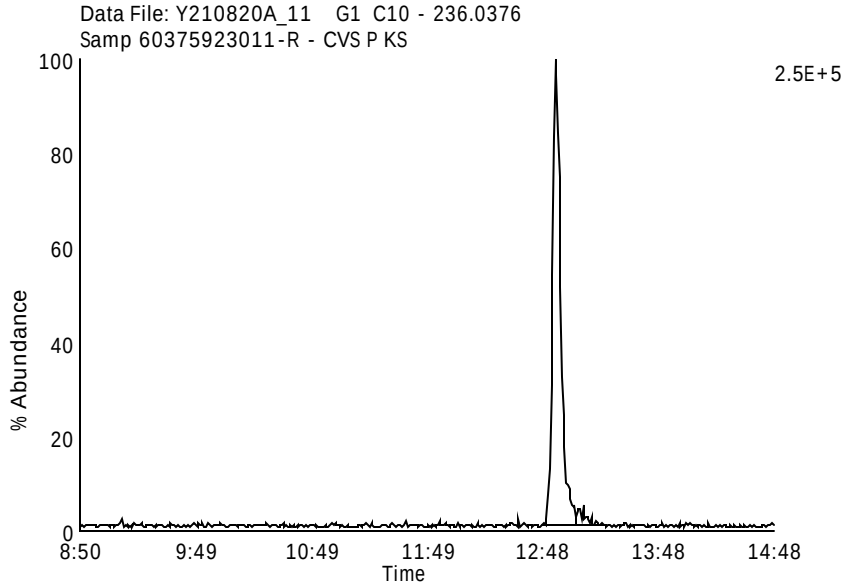


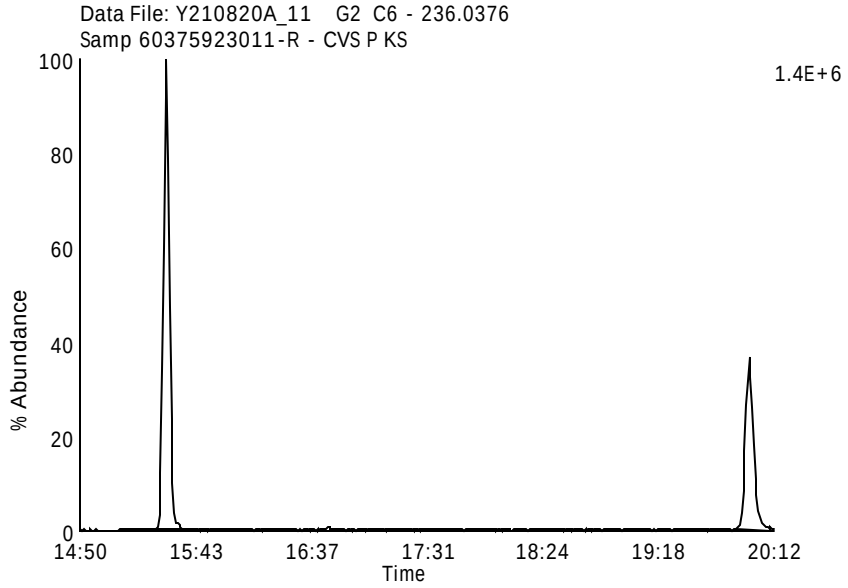
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_11
Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS
Client Sample ID: GB-01/8-10



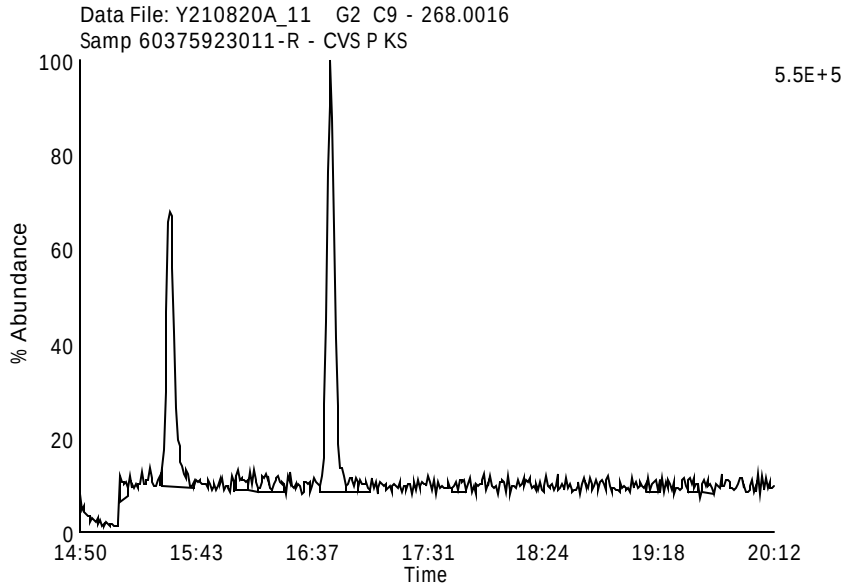


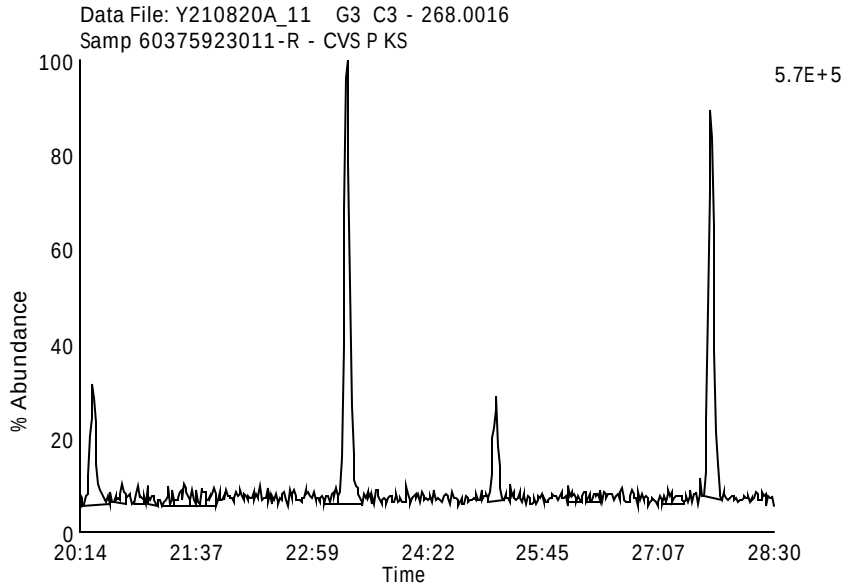


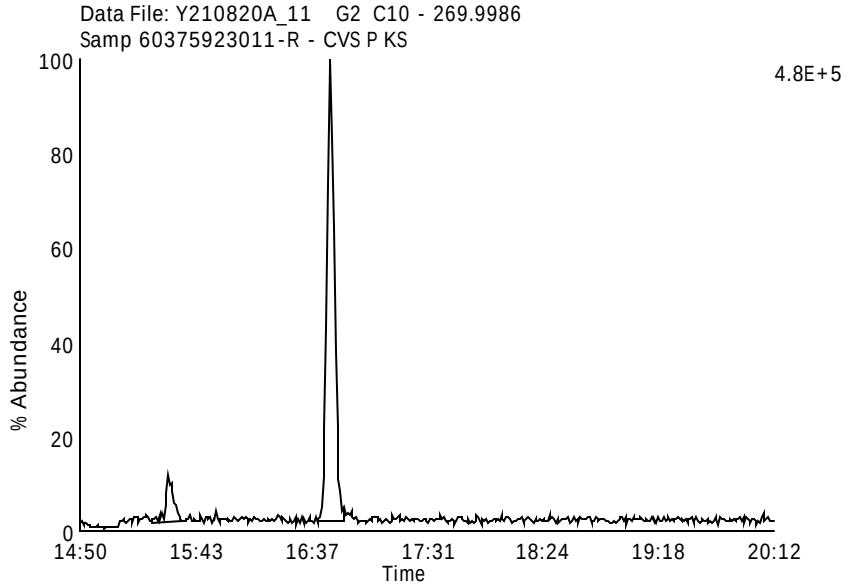


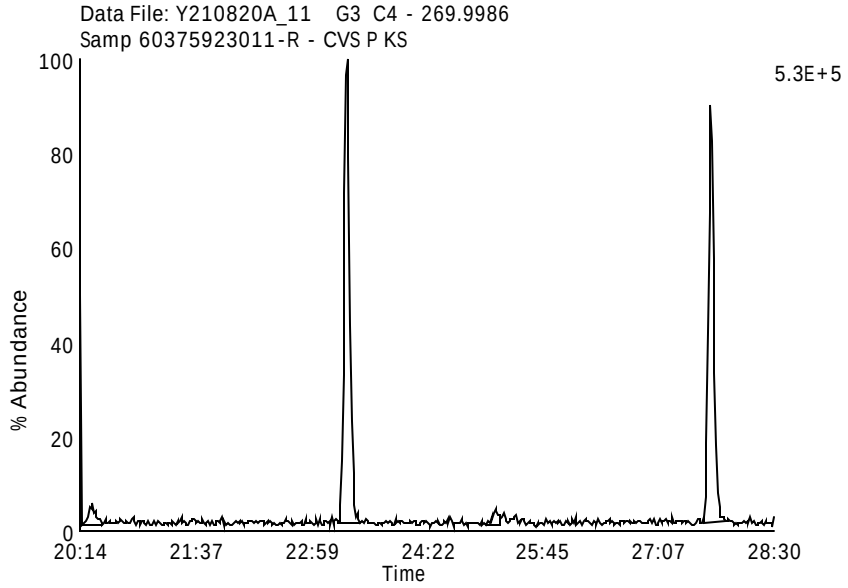
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_11
Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS
Client Sample ID: GB-01/8-10



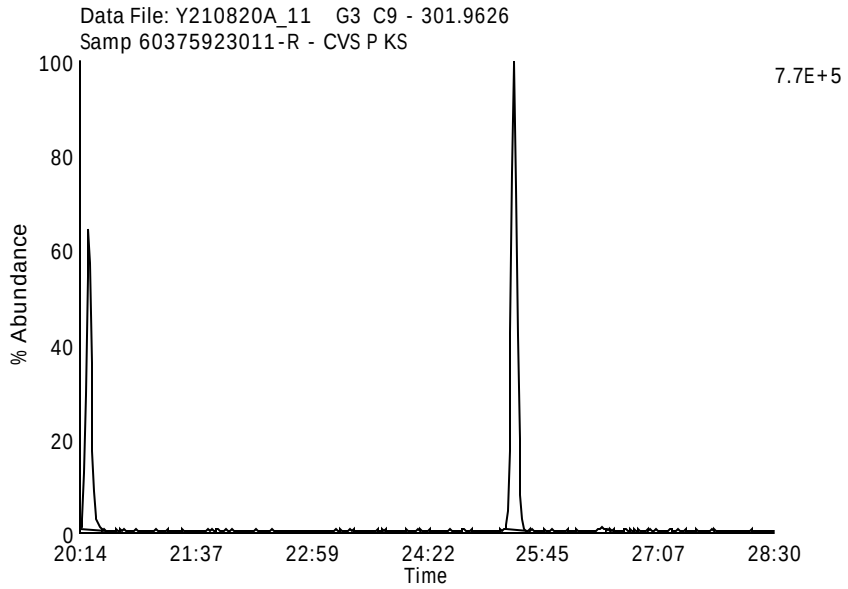


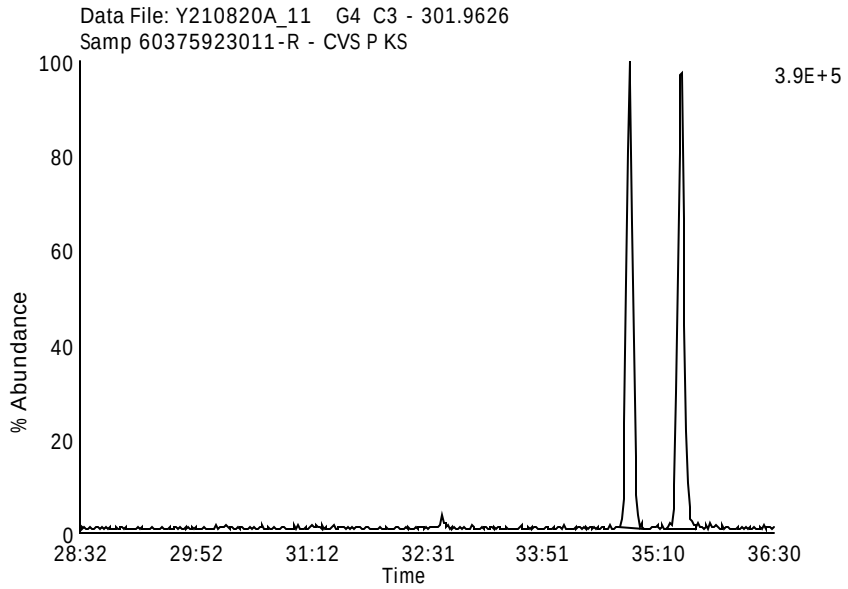


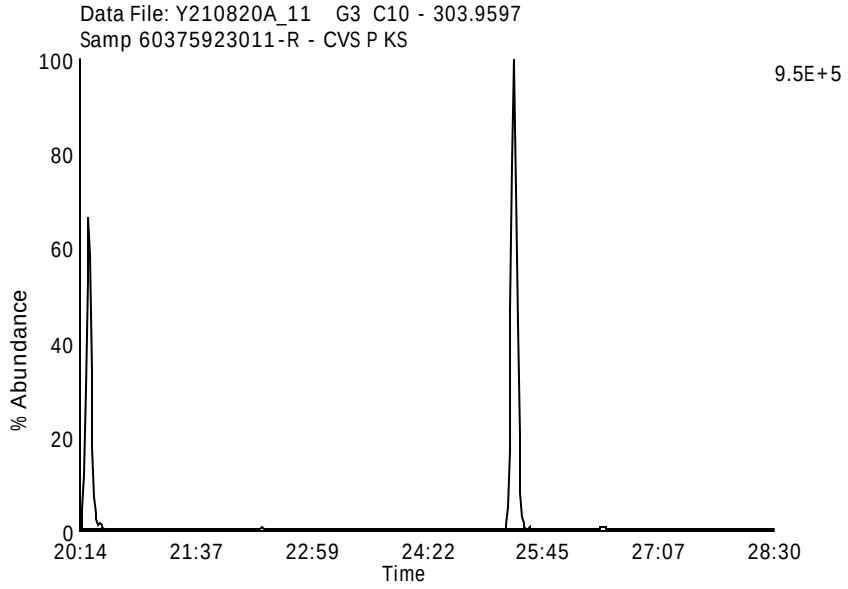


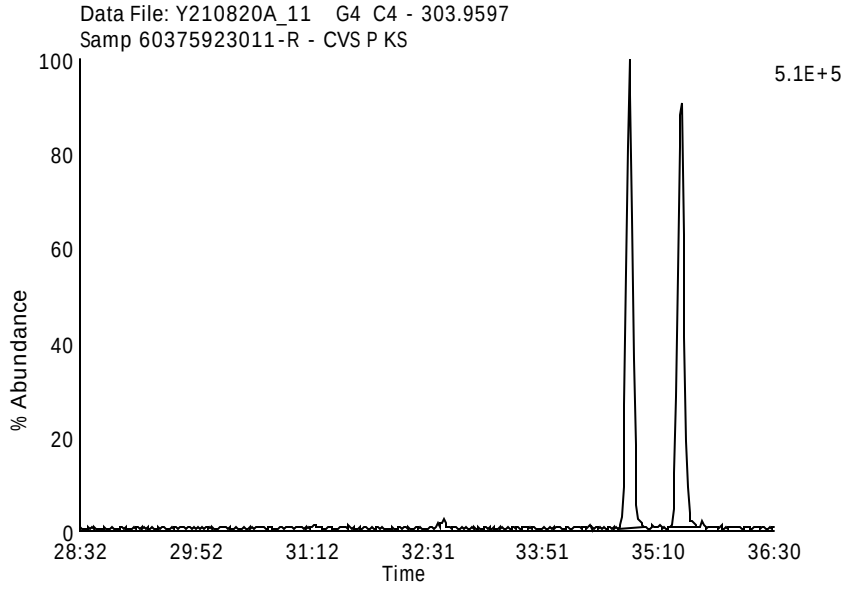
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_11 | Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS | Client Sample ID: GB-01/8-10



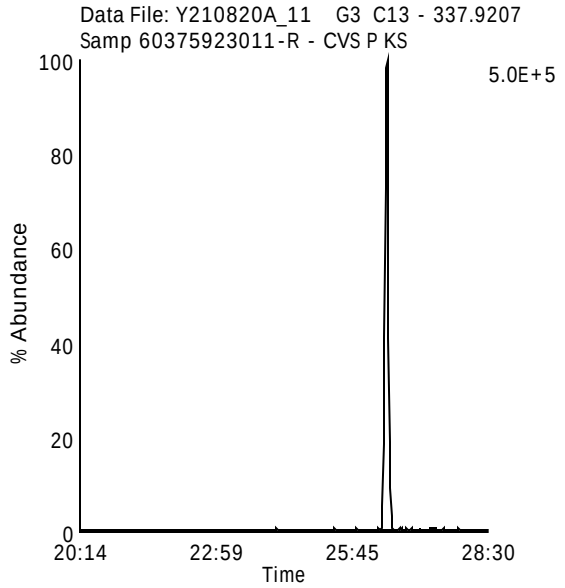


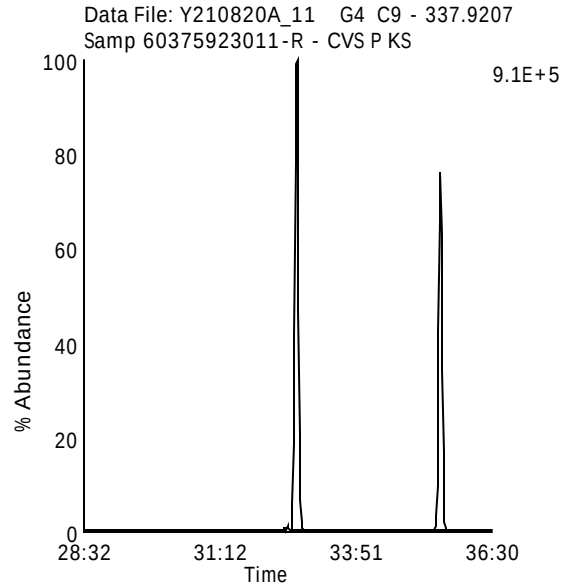


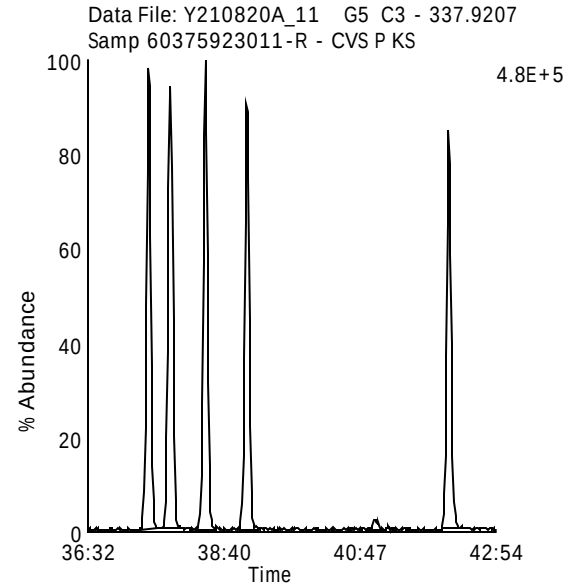


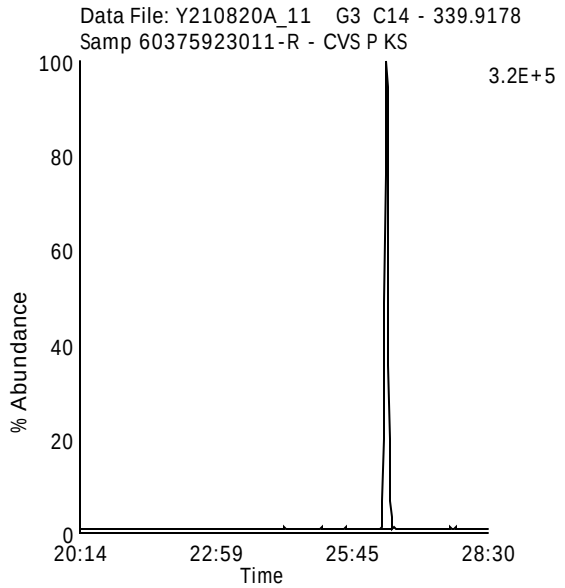
Labeled Penta Chlorinated Biphenyls

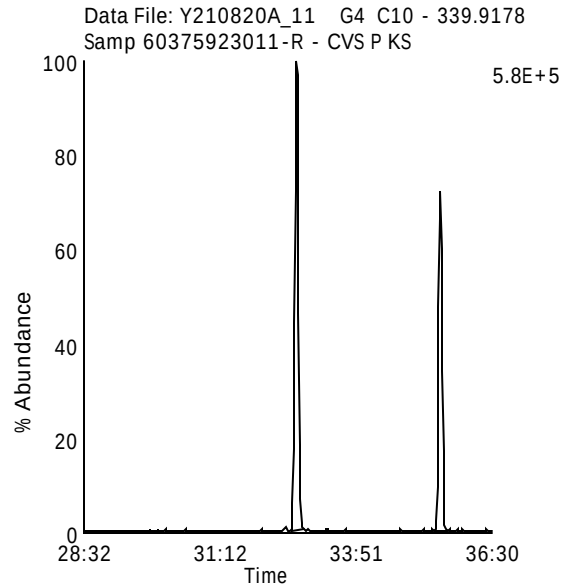
Data File Name: Y210820A_11 | Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS | Client Sample ID: GB-01/8-10

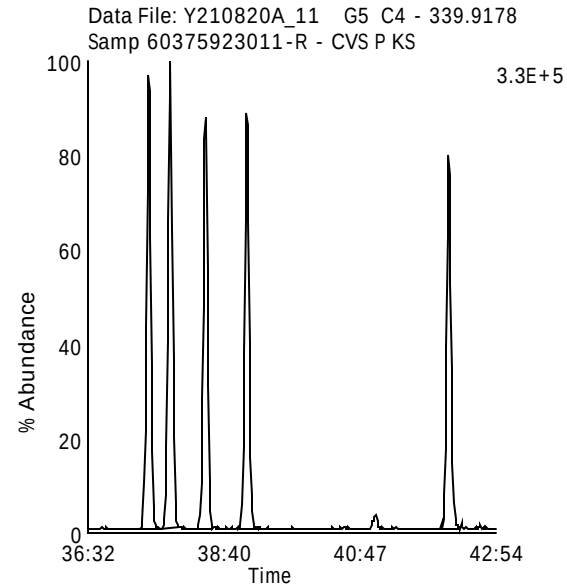






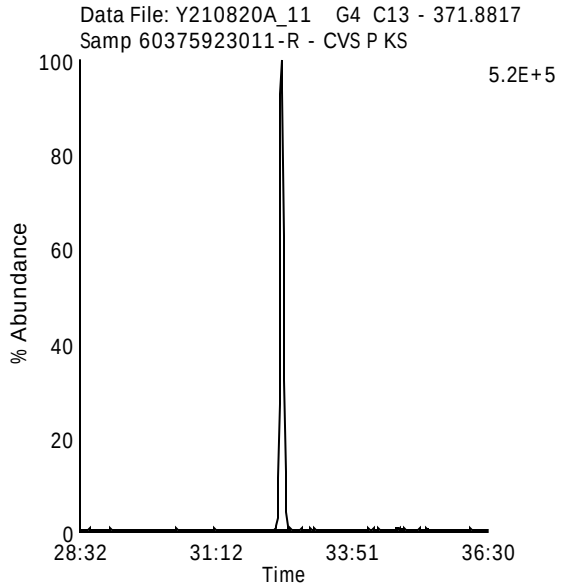


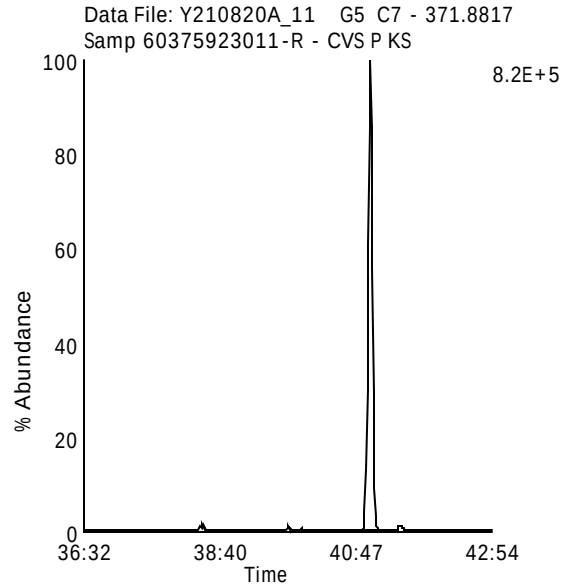


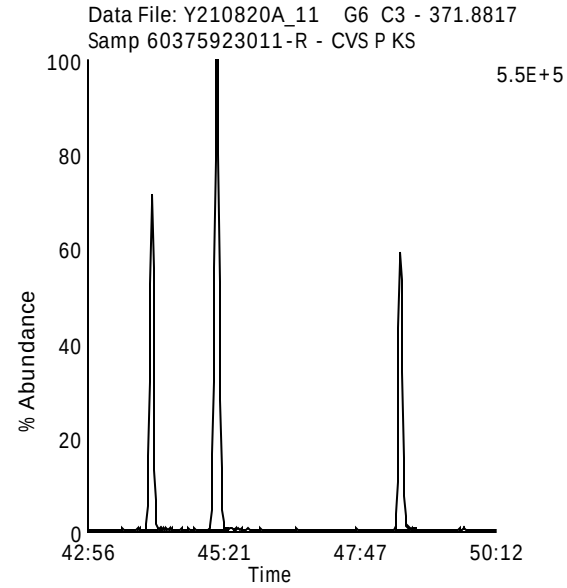


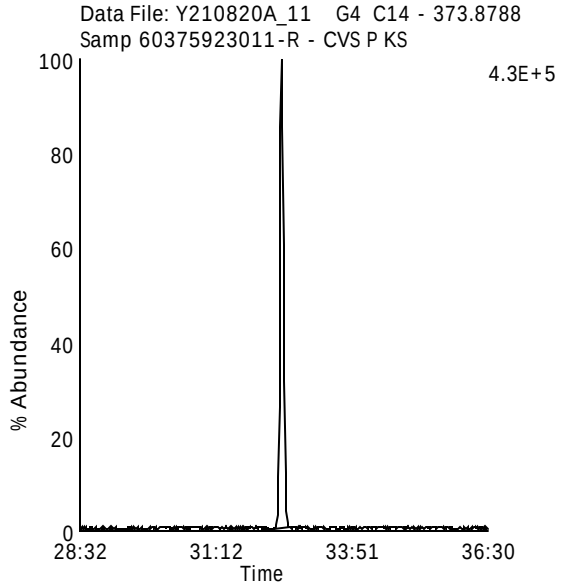
Labeled Hexa Chlorinated Biphenyls

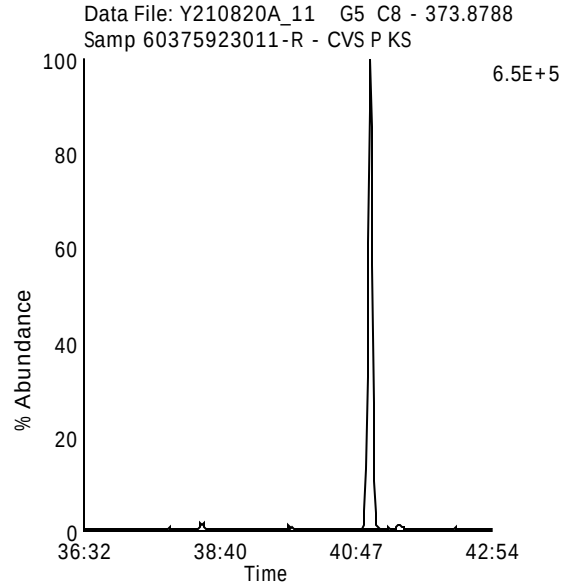
Data File Name: Y210820A_11 | Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS | Client Sample ID: GB-01/8-10

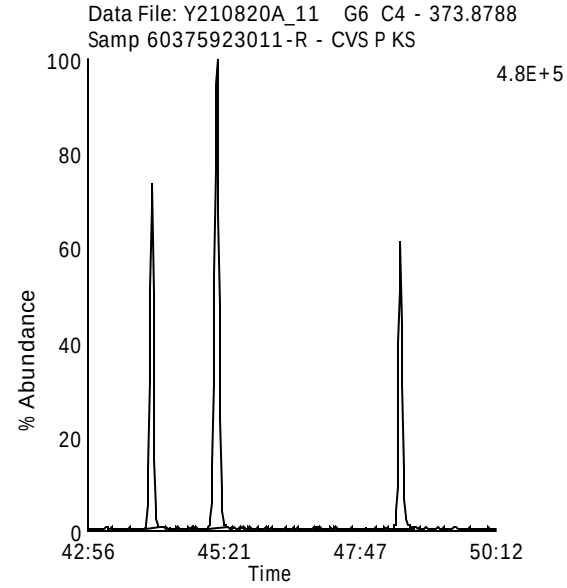






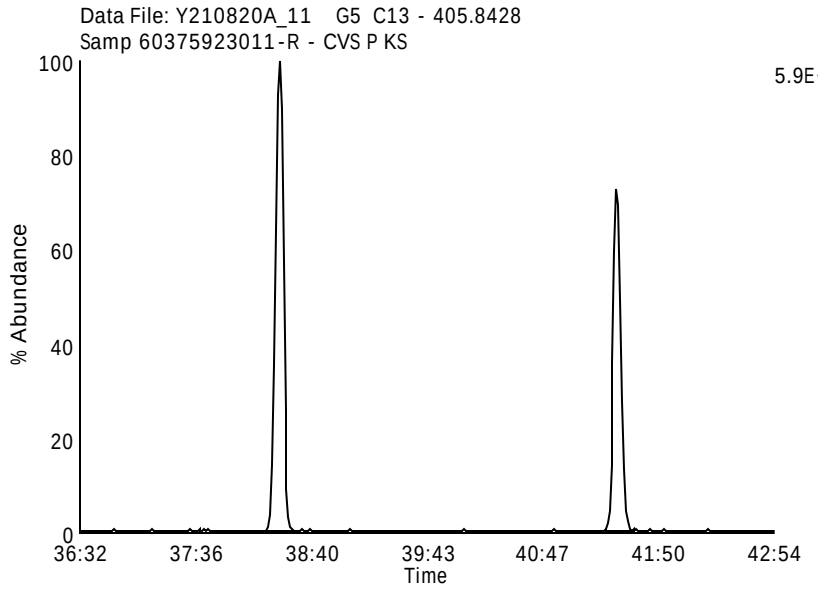


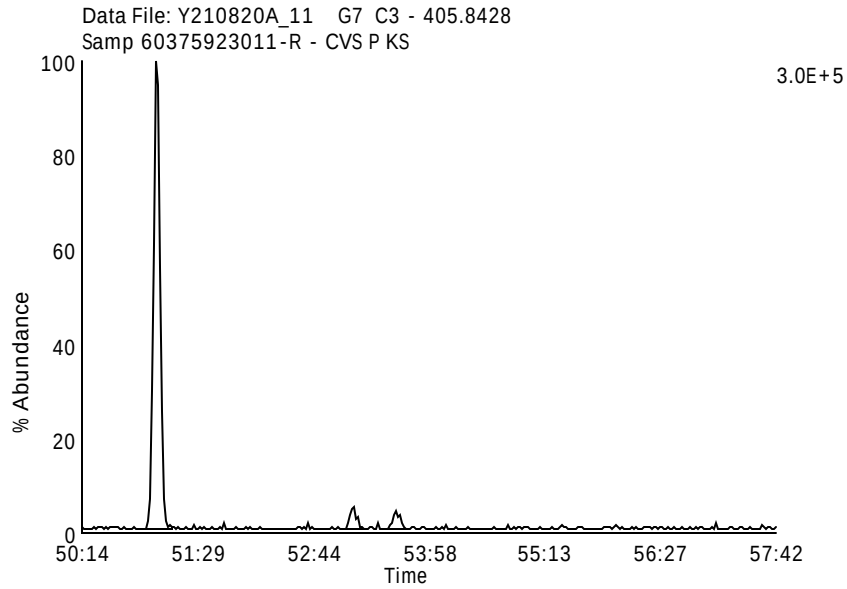


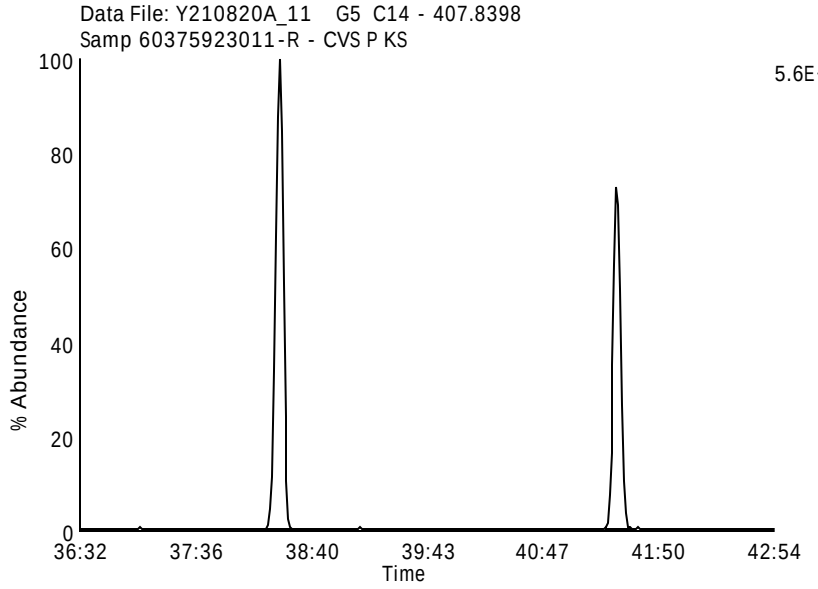


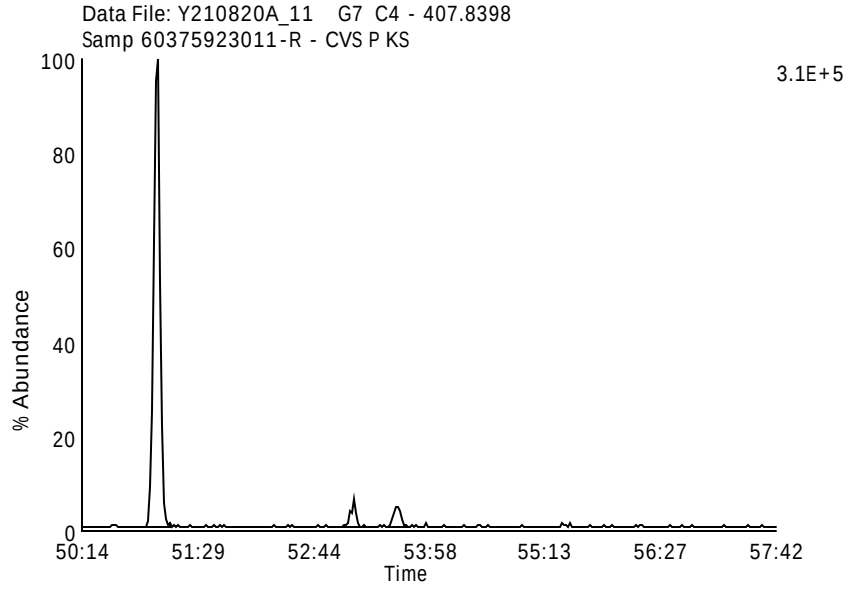
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_11
Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS
Client Sample ID: GB-01/8-10



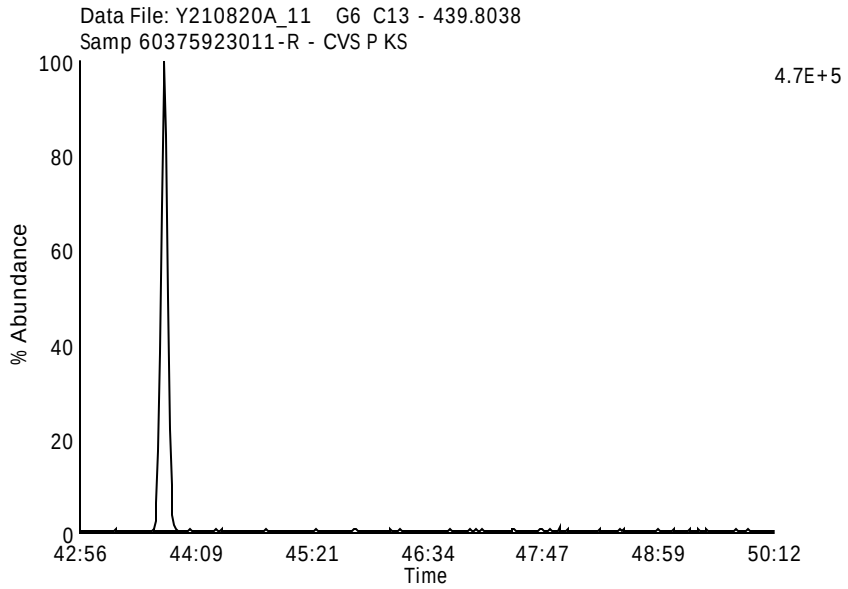


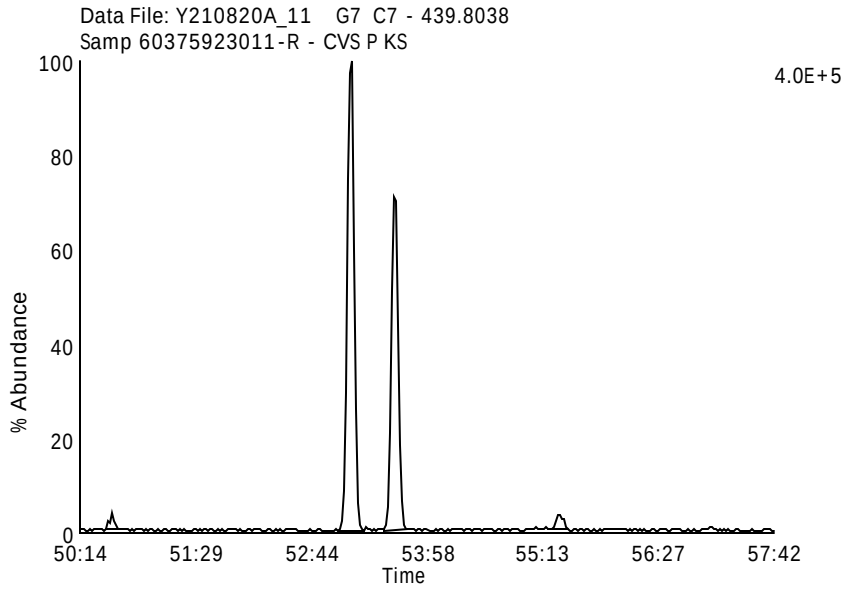


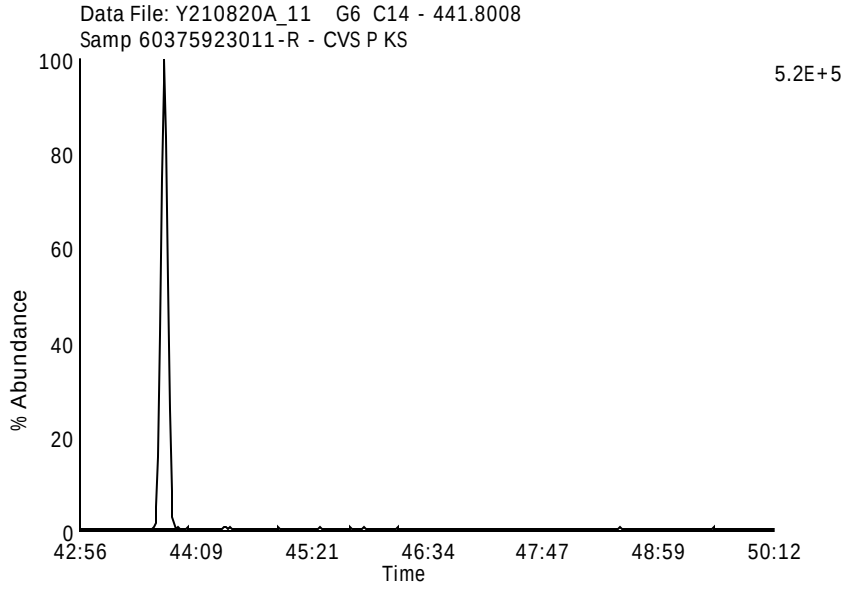


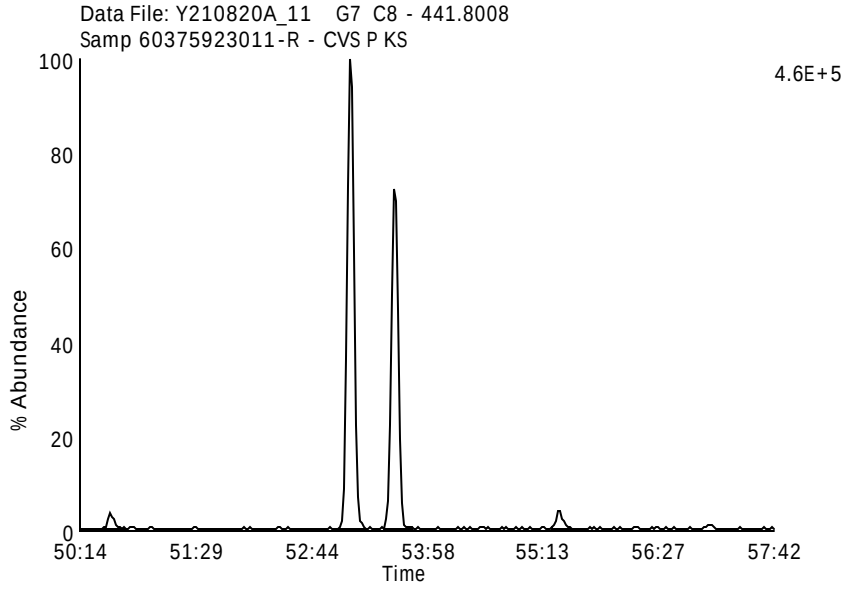
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_11
Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS
Client Sample ID: GB-01/8-10



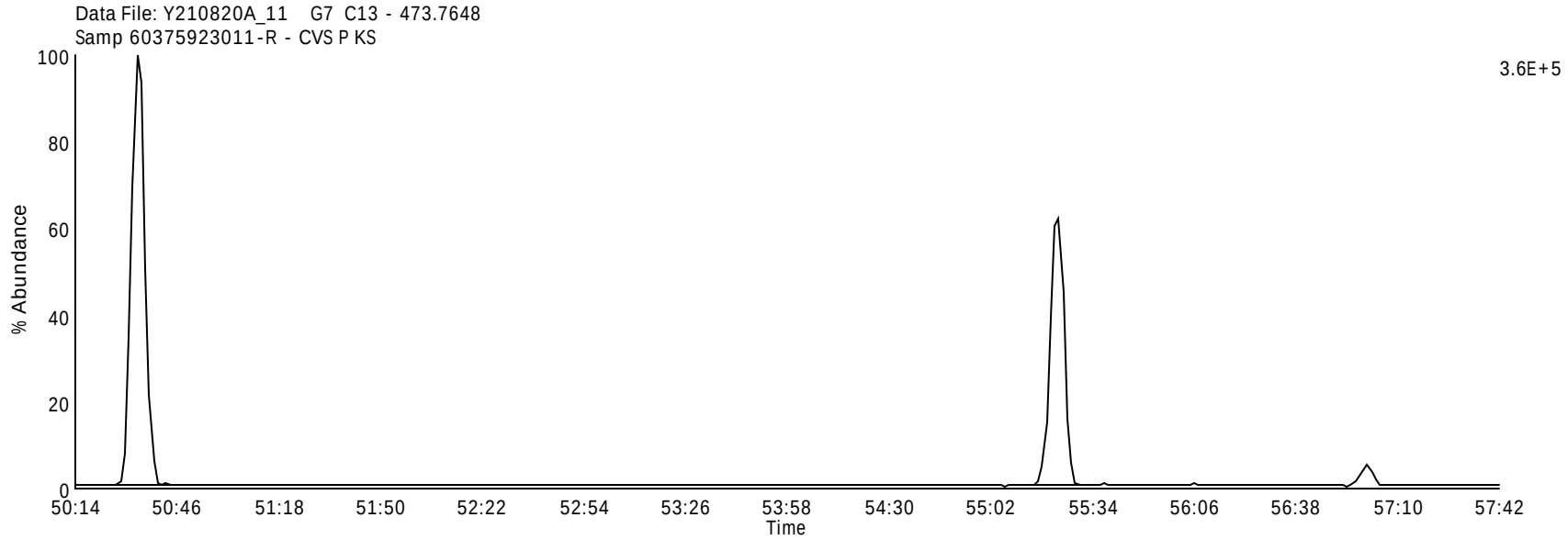


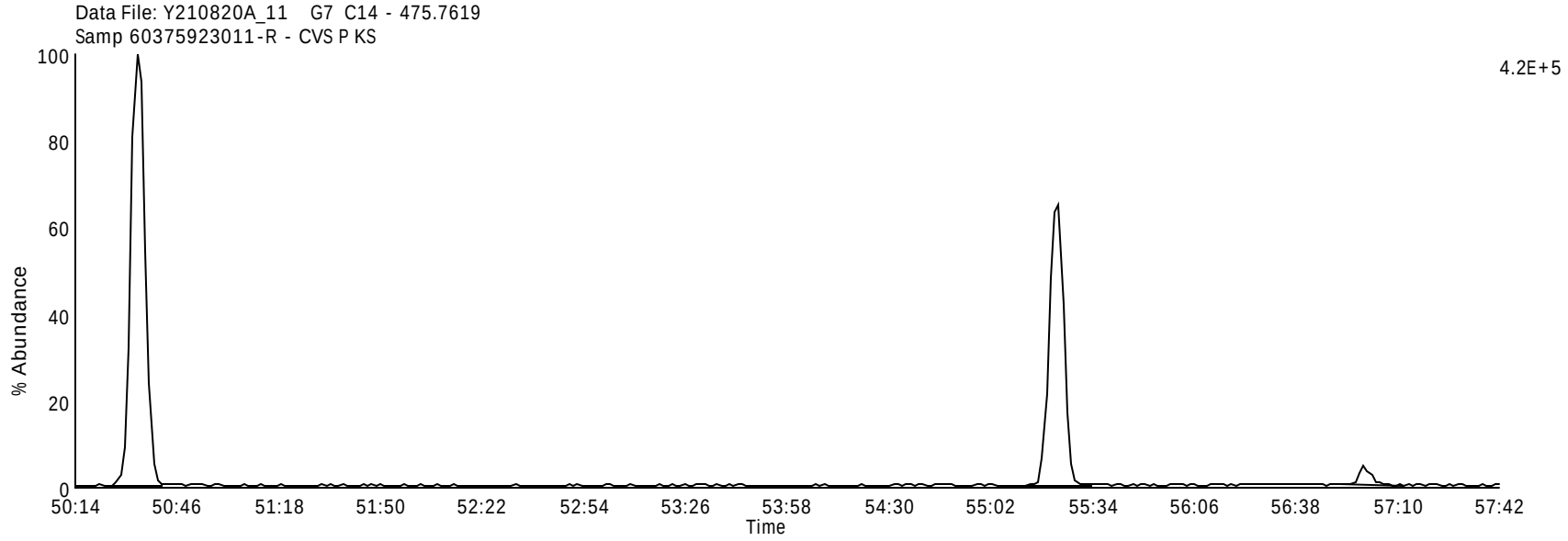




Labeled Nona Chlorinated Biphenyls

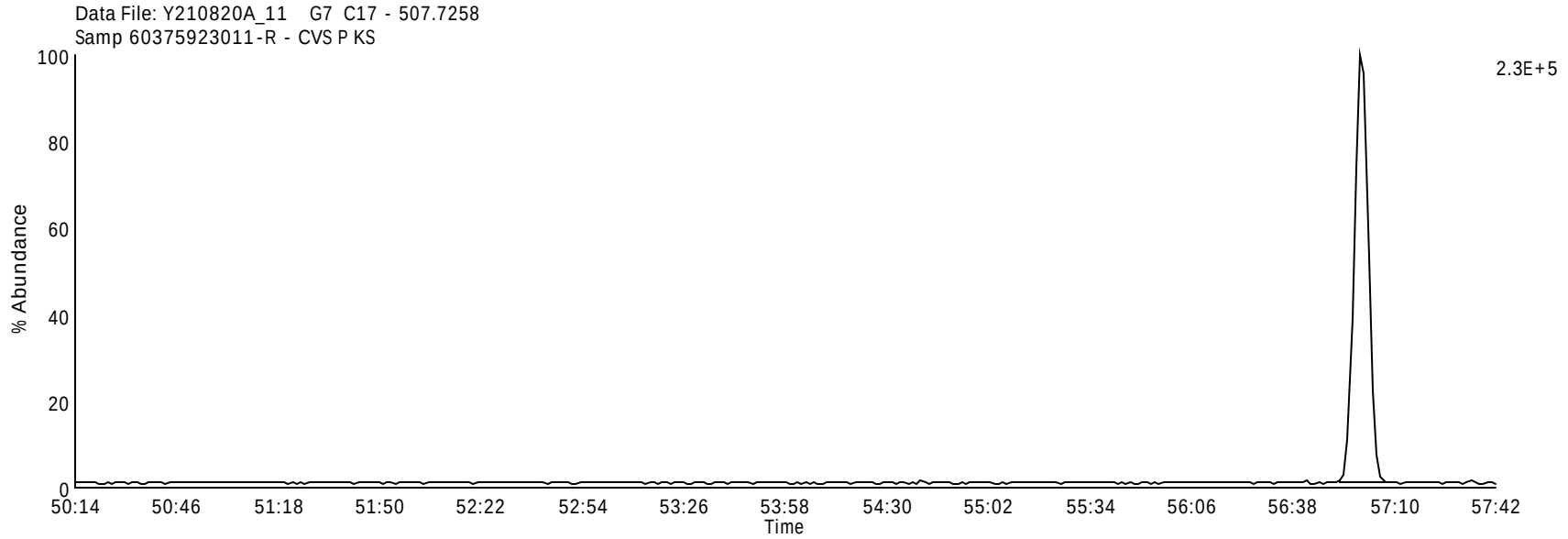
Data File Name: Y210820A_11	Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS	Client Sample ID: GB-01/8-10

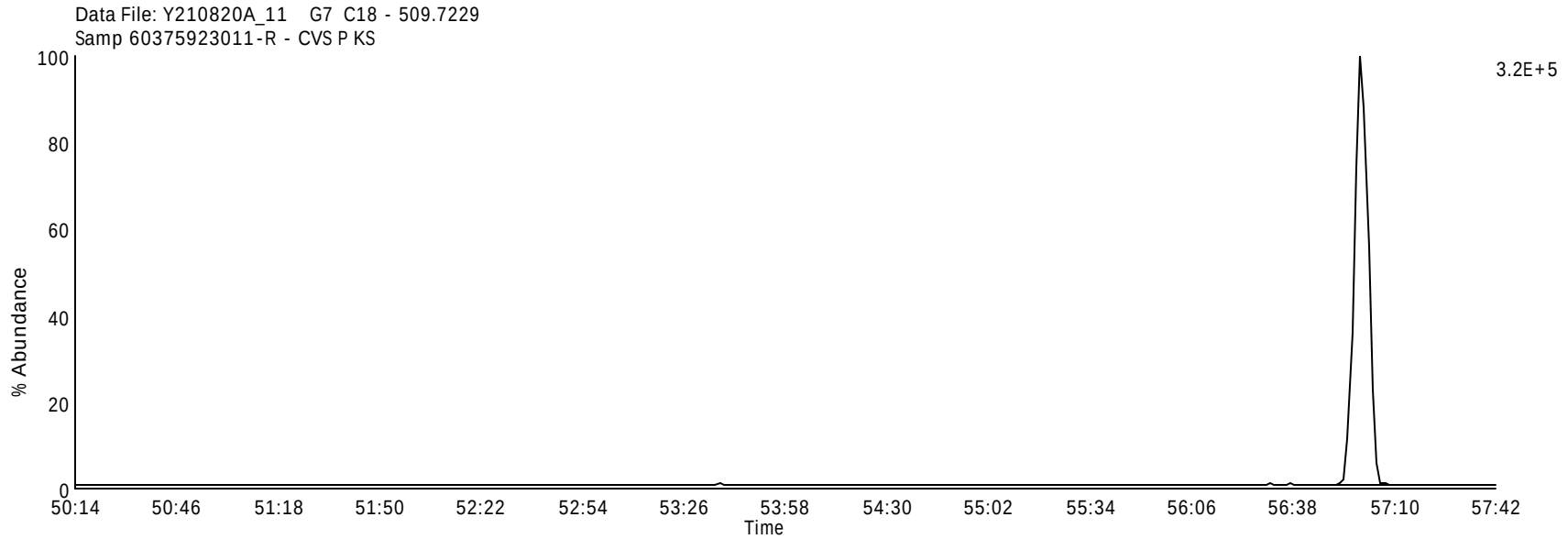




Labeled Deca Chlorinated Biphenyl

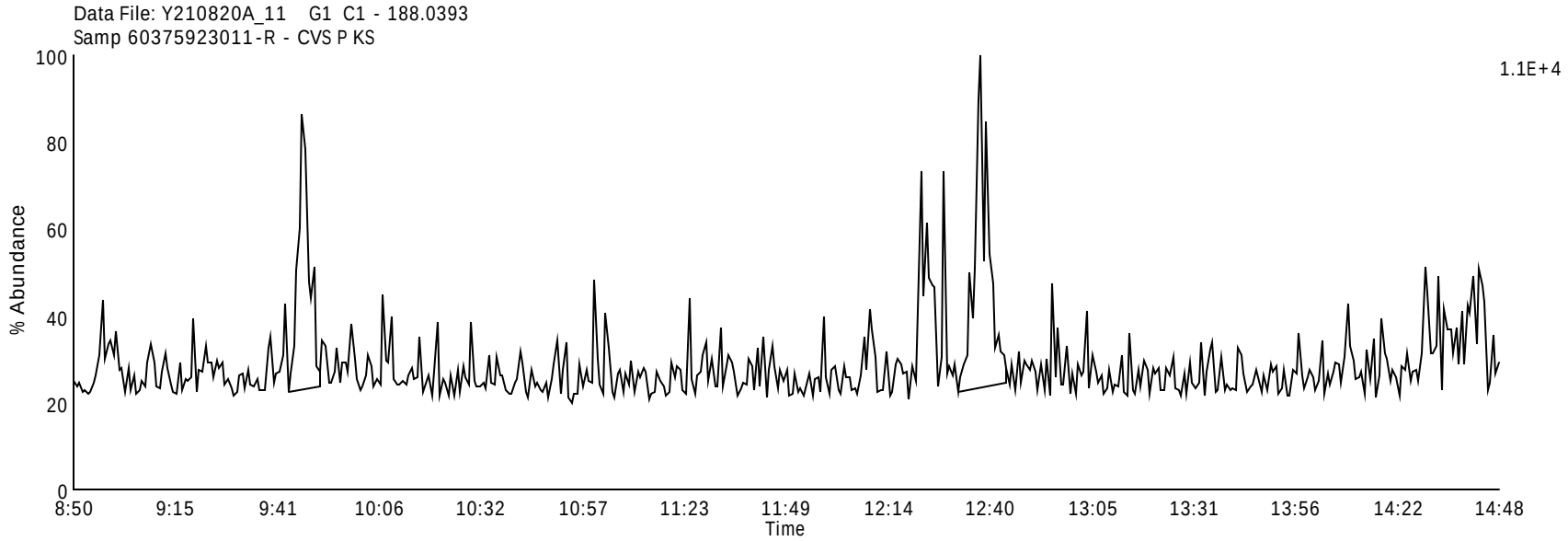
Data File Name: Y210820A_11	Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS	Client Sample ID: GB-01/8-10

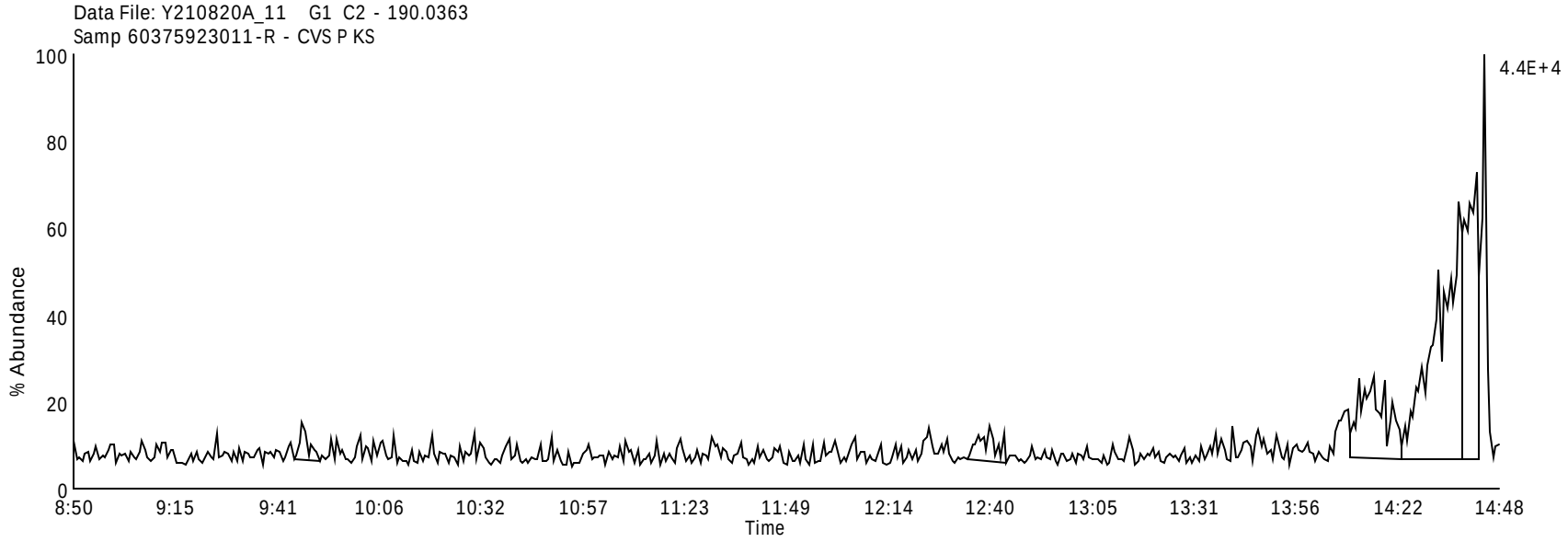




Mono Chlorinated Biphenyls

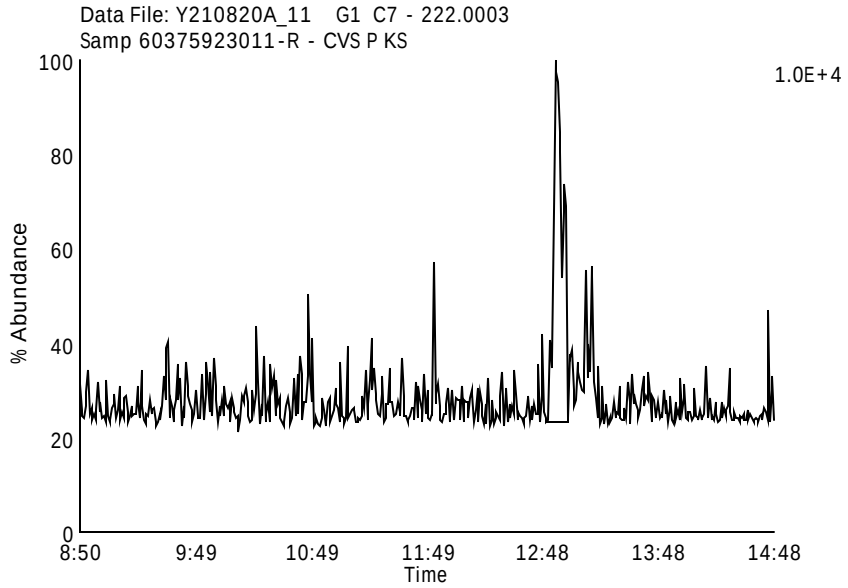
Data File Name: Y210820A_11	Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS	Client Sample ID: GB-01/8-10

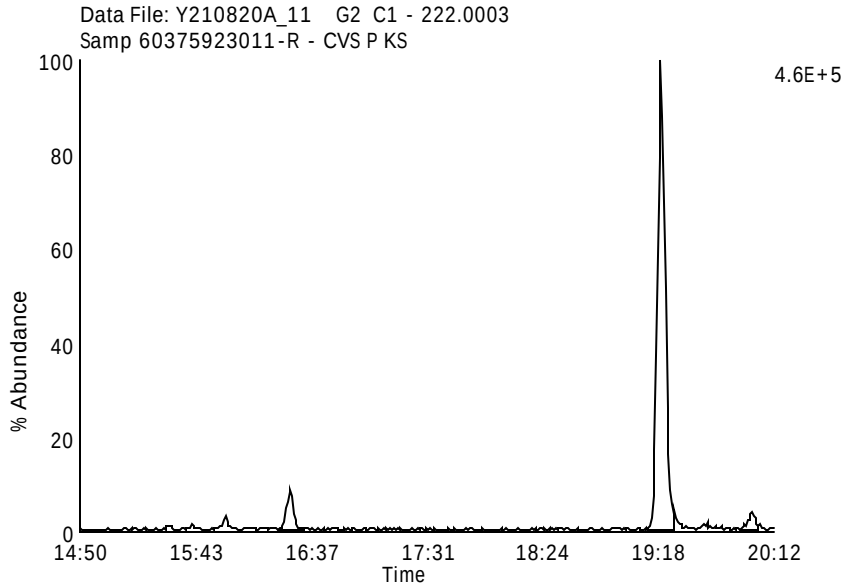


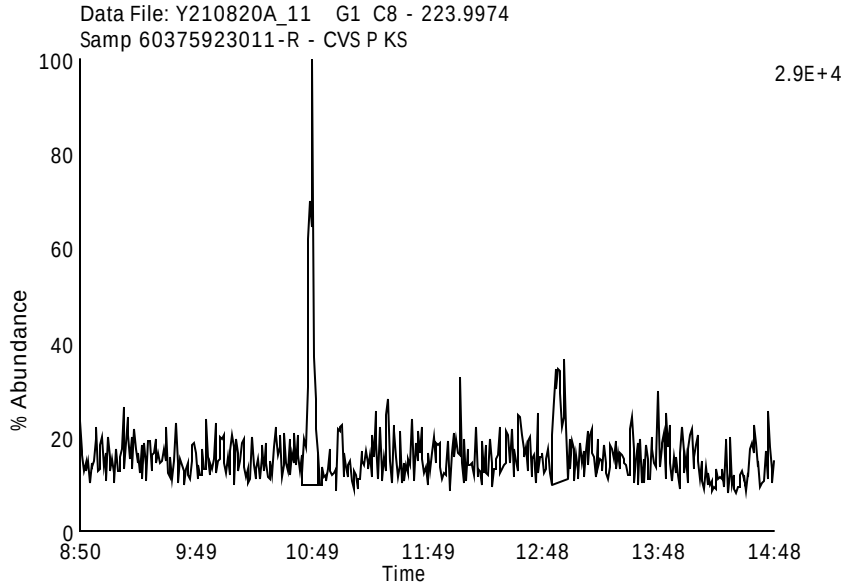


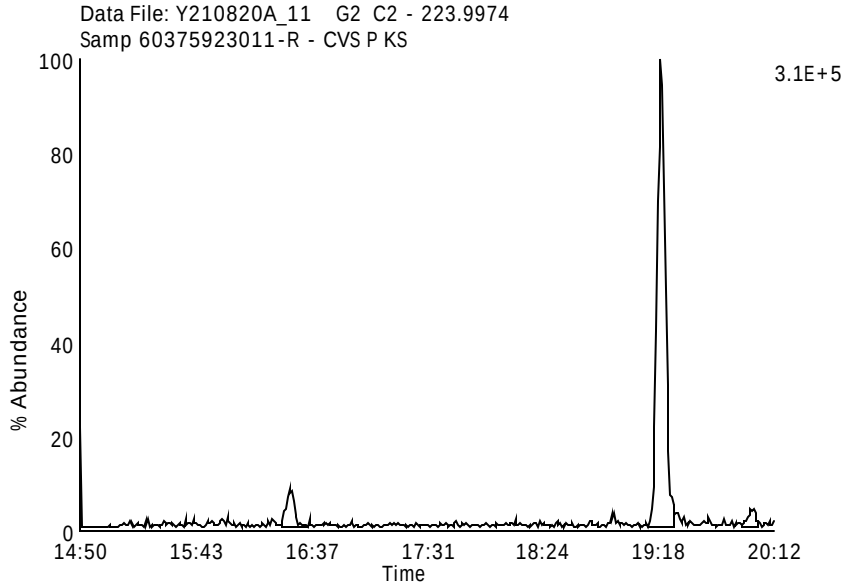
Di Chlorinated Biphenyls

Data File Name: Y210820A_11
Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS
Client Sample ID: GB-01/8-10



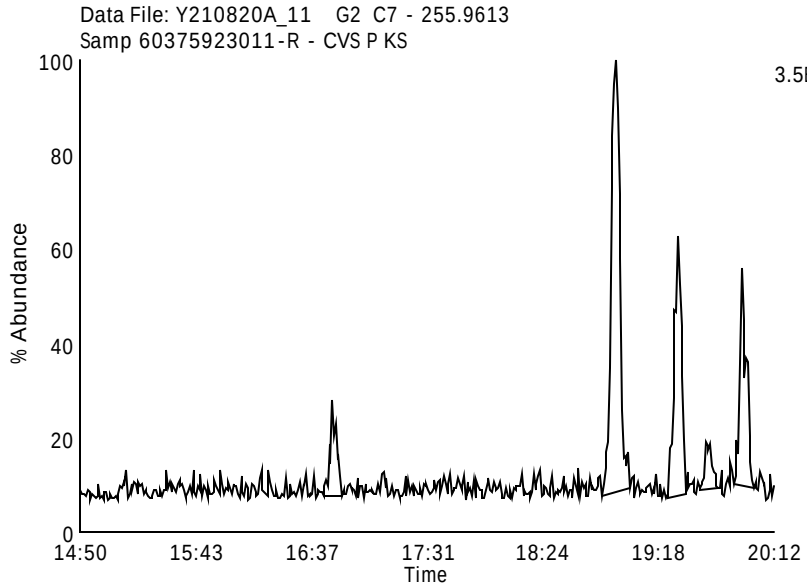


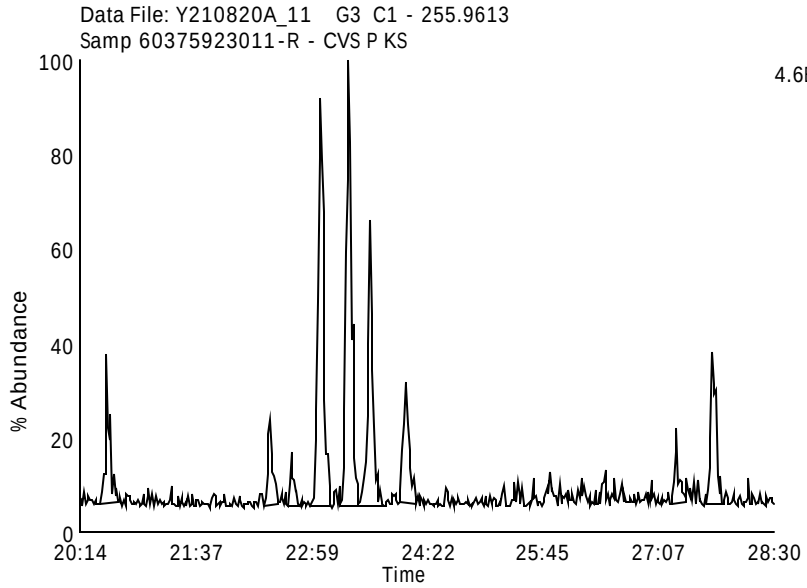


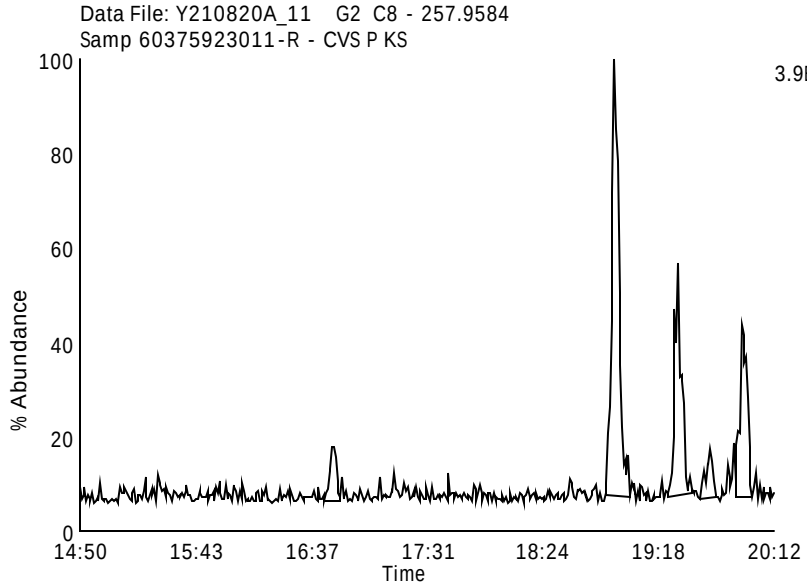


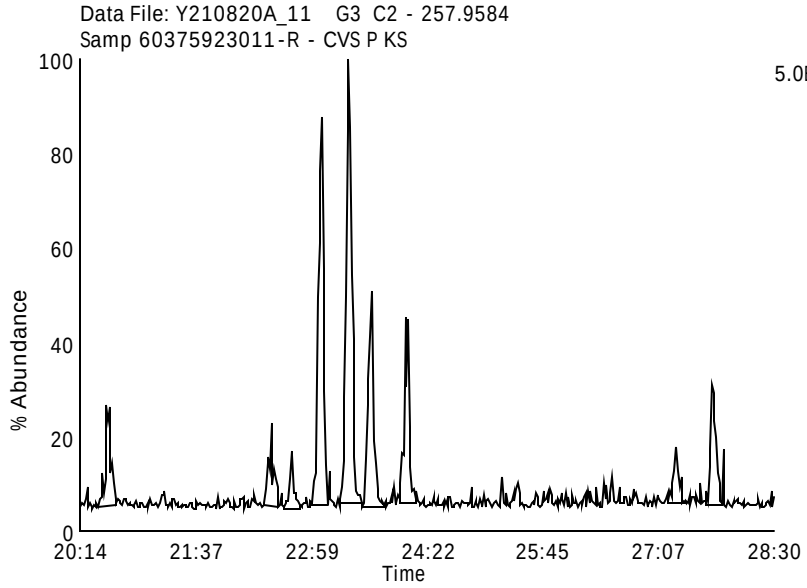
Tri Chlorinated Biphenyls

Data File Name: Y210820A_11
Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS
Client Sample ID: GB-01/8-10



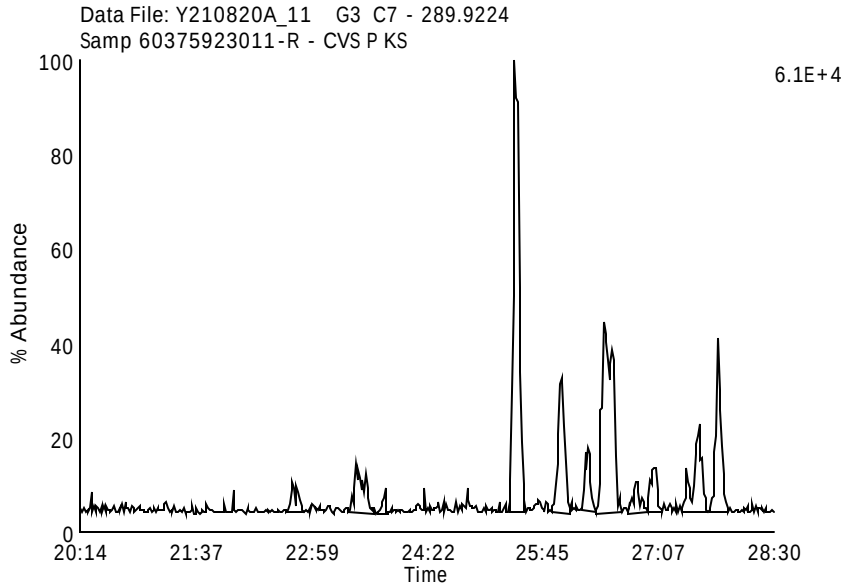


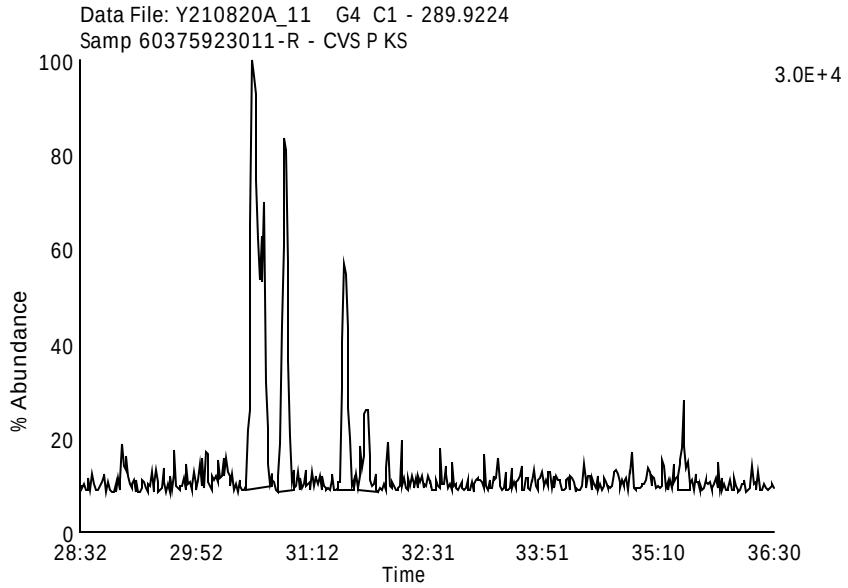


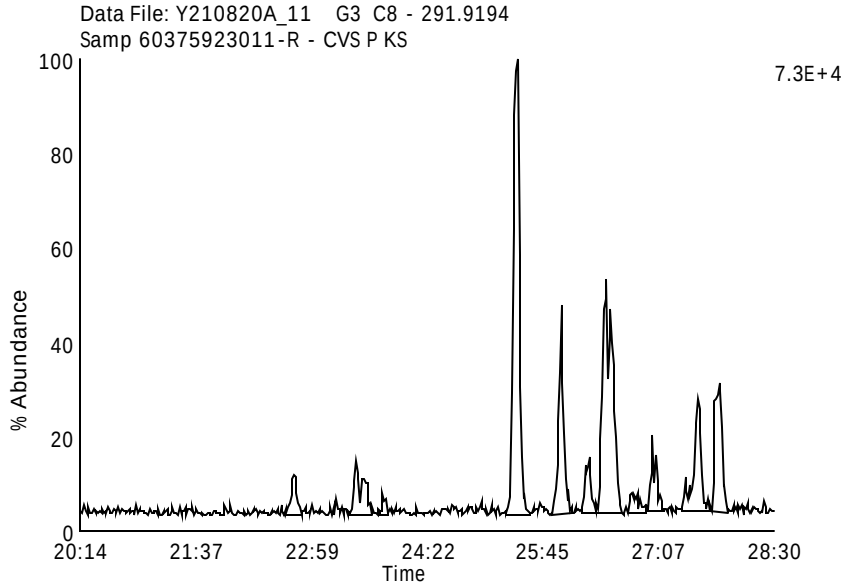


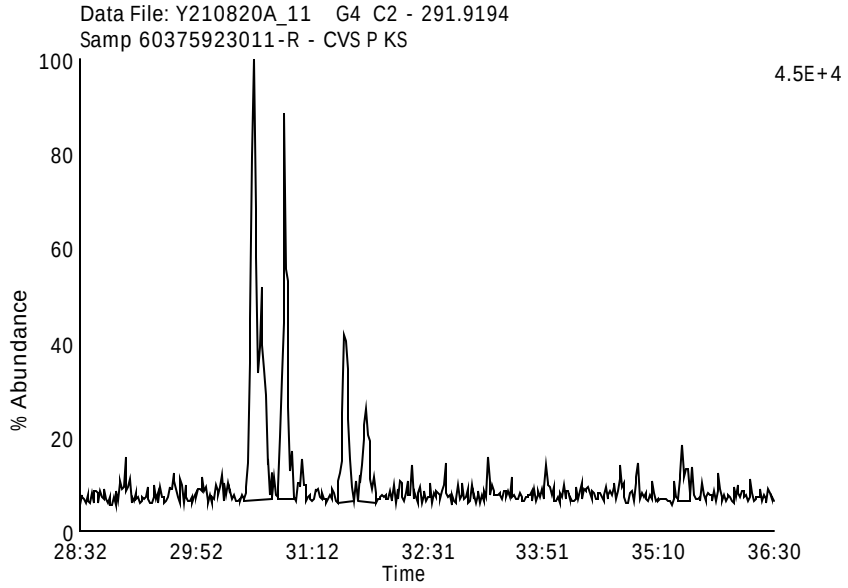
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_11
Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS
Client Sample ID: GB-01/8-10



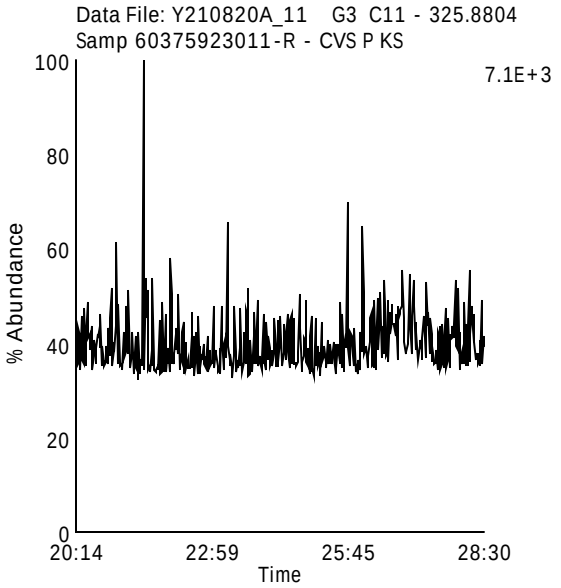


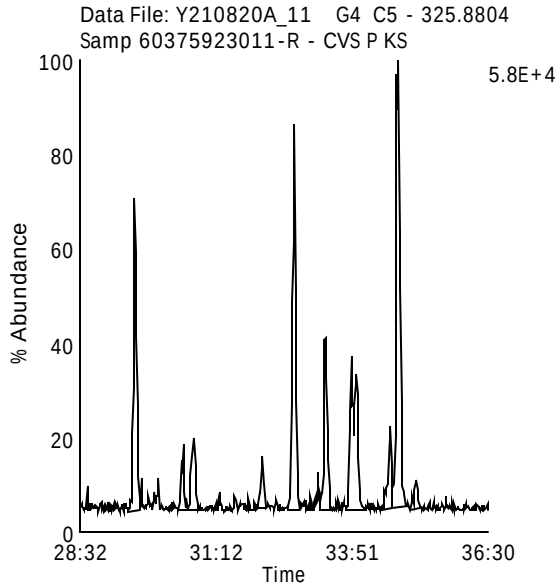


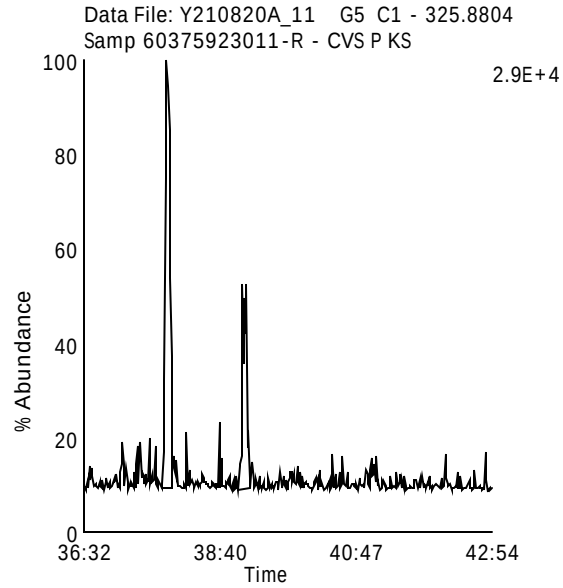


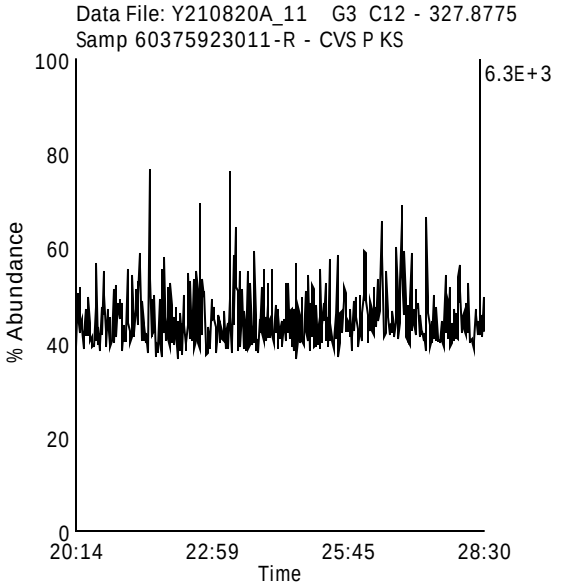
Penta Chlorinated Biphenyls

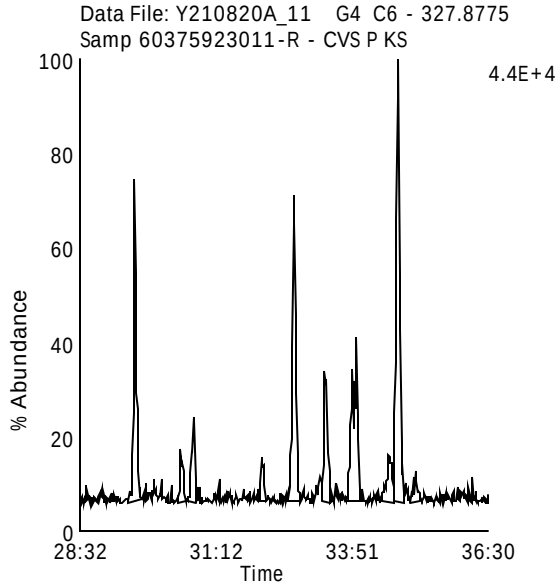
Data File Name: Y210820A_11
Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS
Client Sample ID: GB-01/8-10

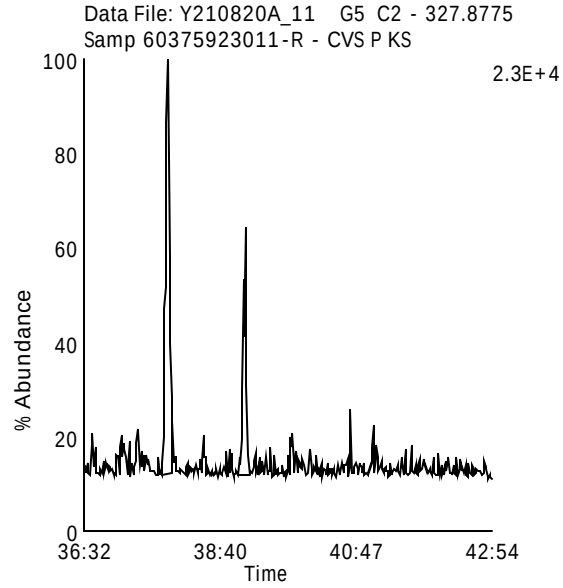






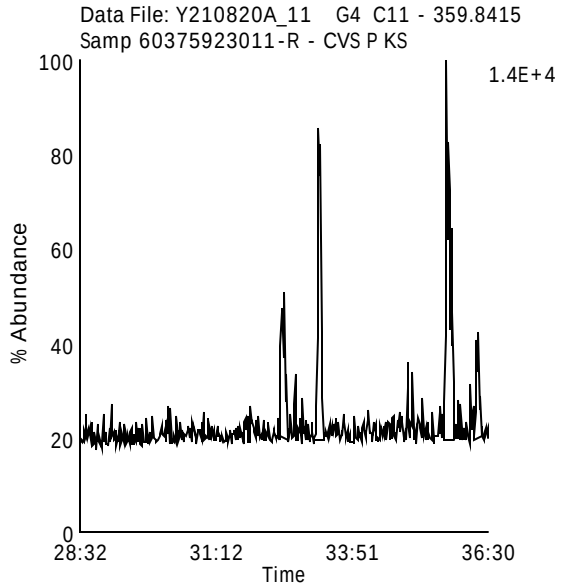


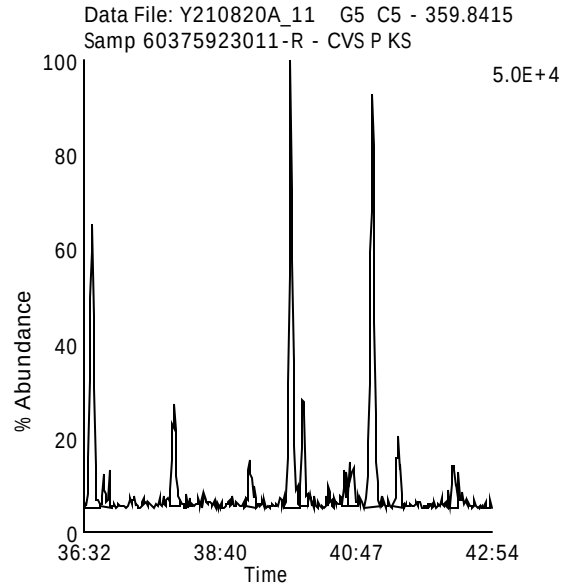


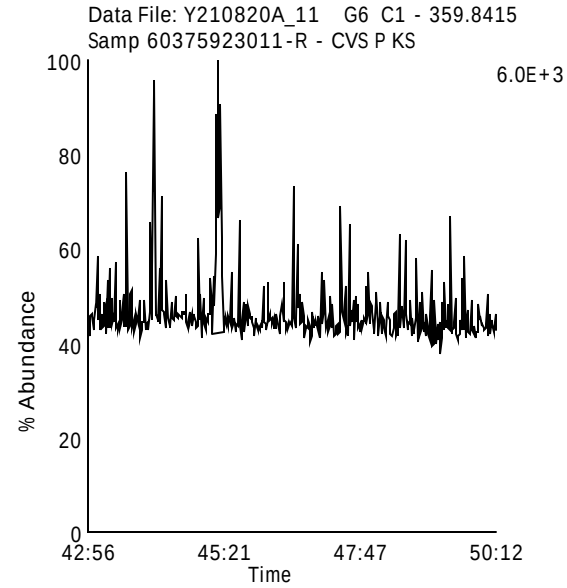


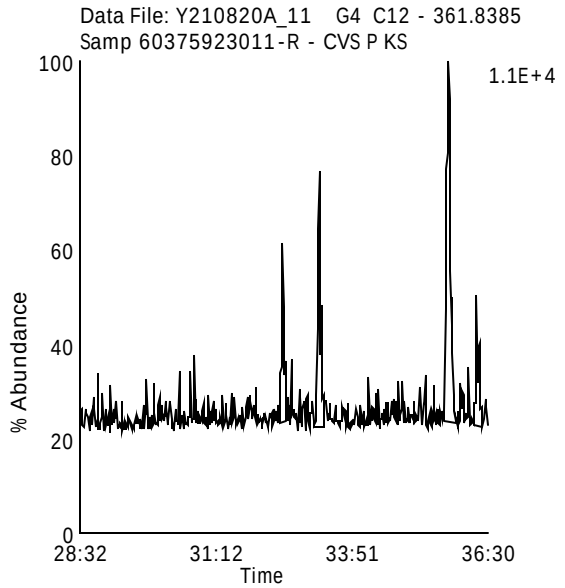
Hexa Chlorinated Biphenyls

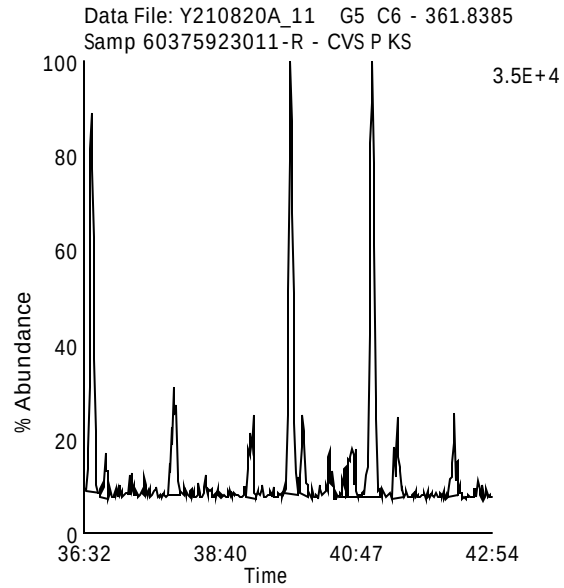
Data File Name: Y210820A_11 | Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS | Client Sample ID: GB-01/8-10

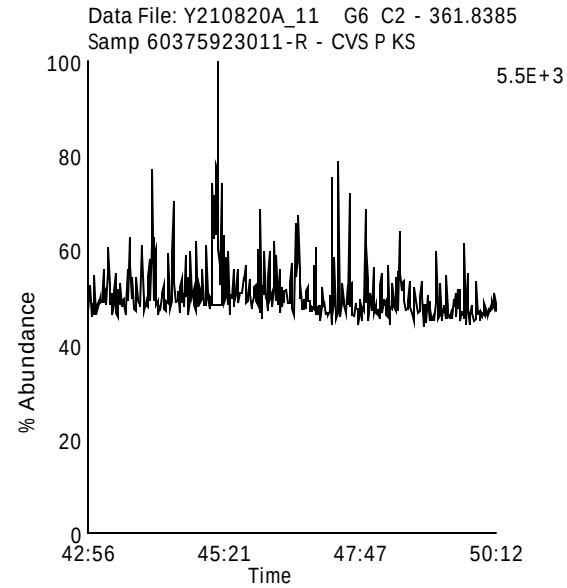






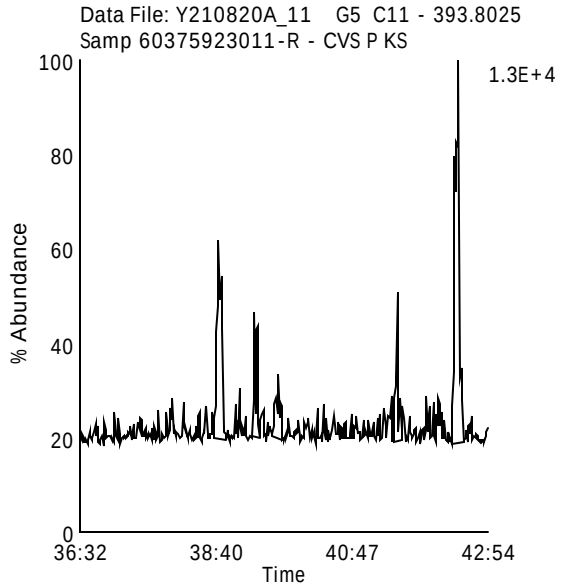


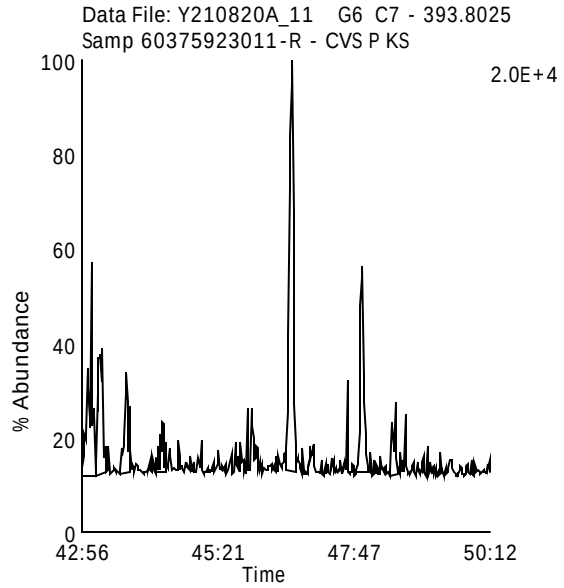


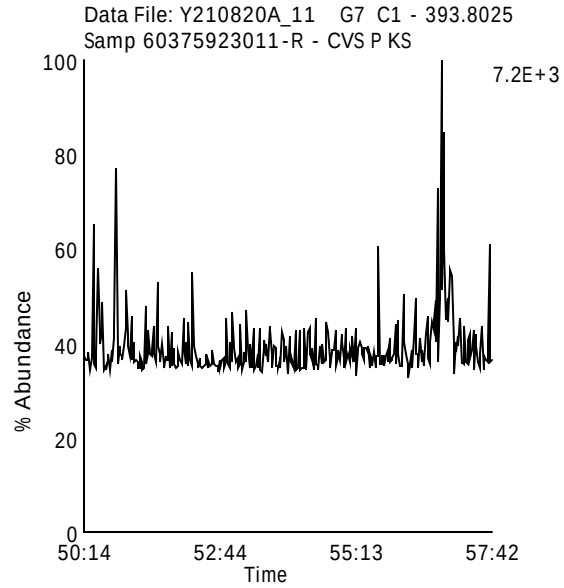


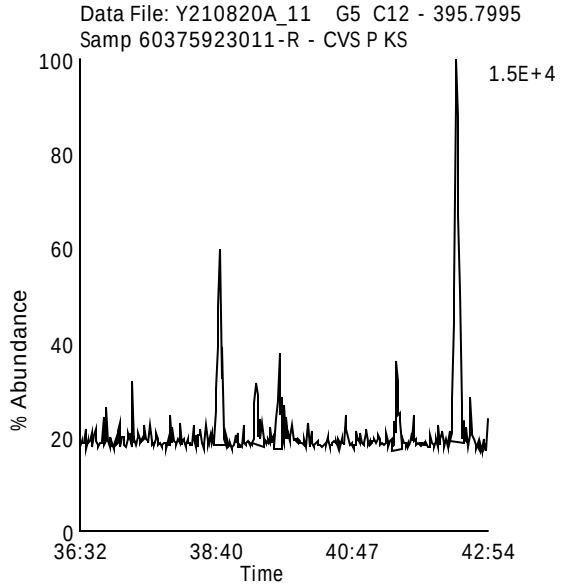
Hepta Chlorinated Biphenyls

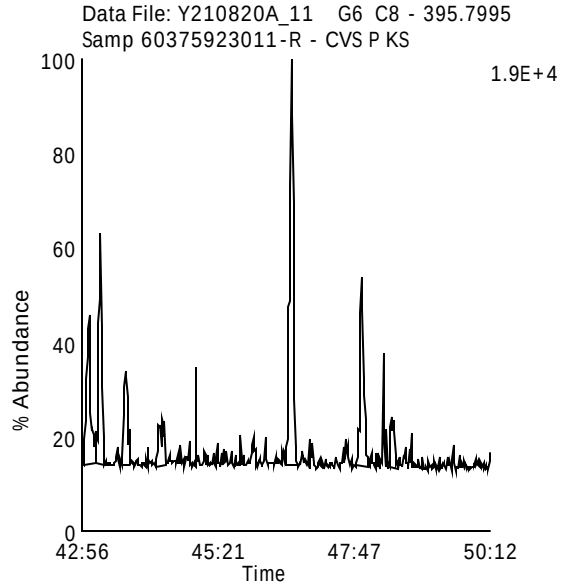
Data File Name: Y210820A_11 | Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS | Client Sample ID: GB-01/8-10

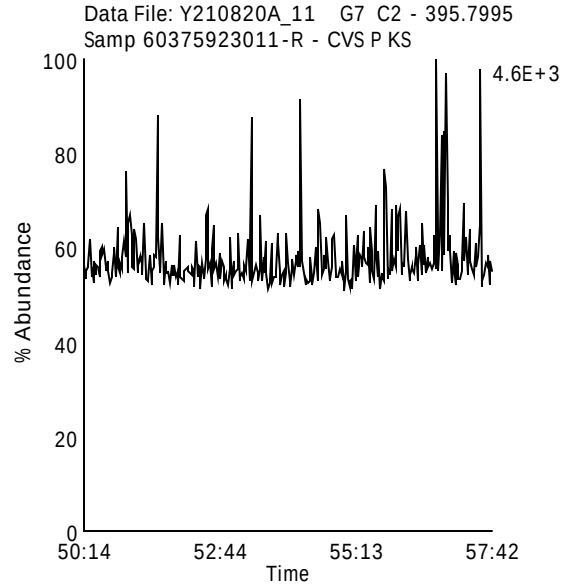








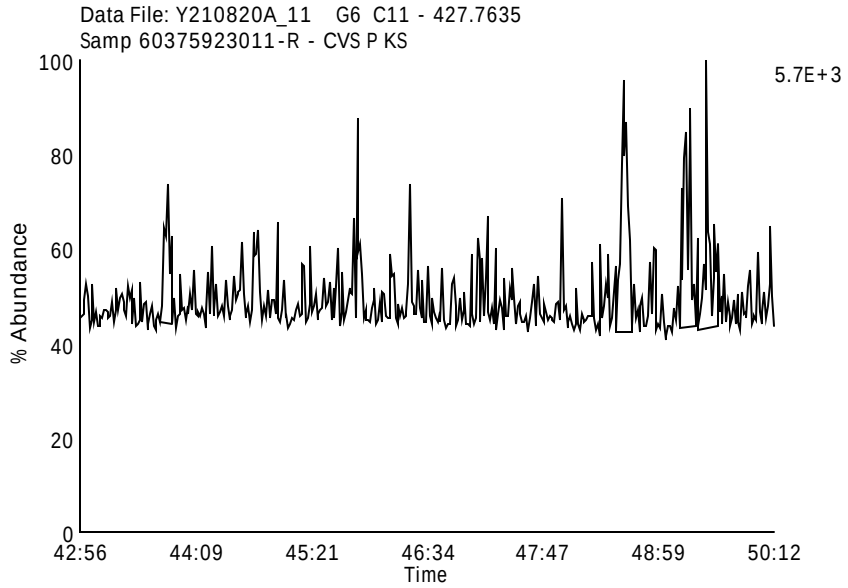


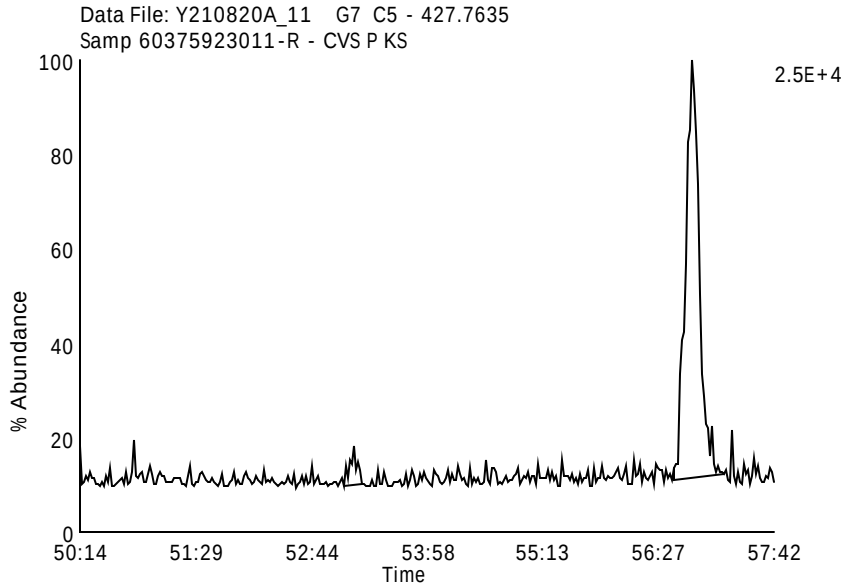


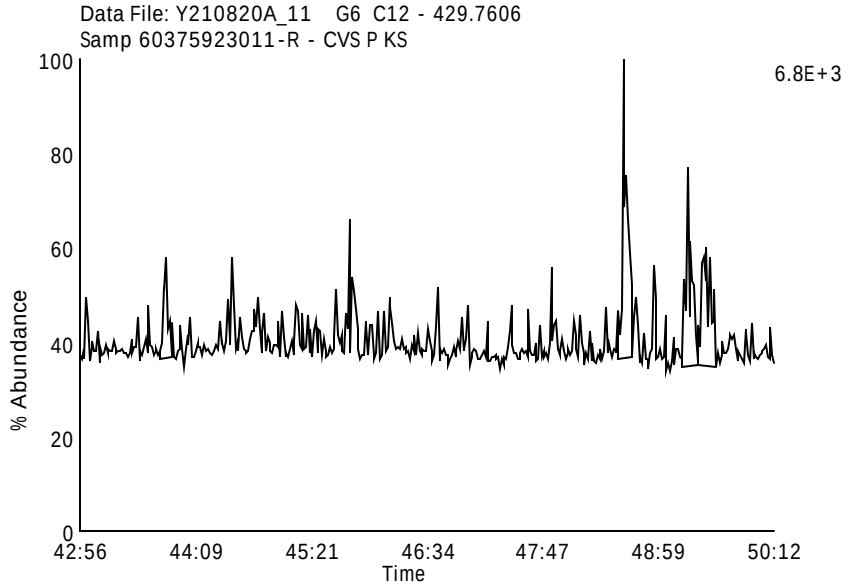
Octa Chlorinated Biphenyls

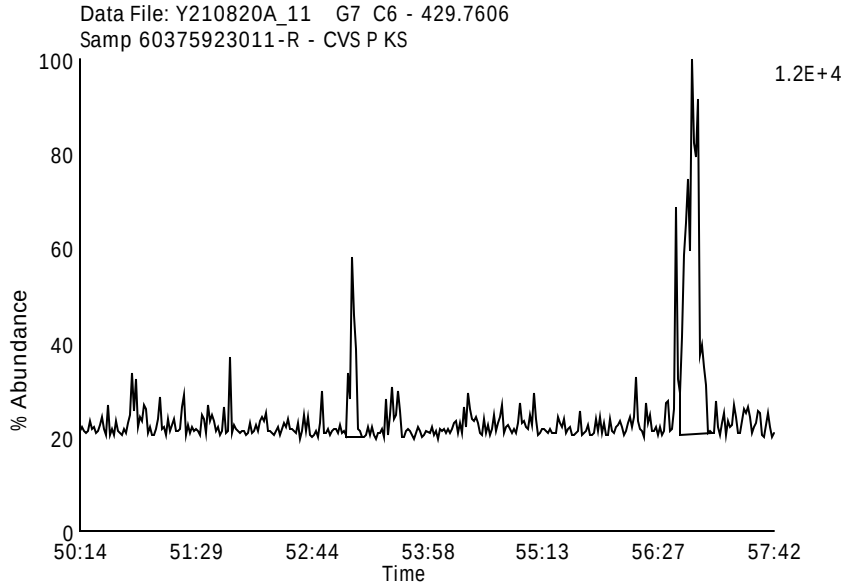
Data File Name: Y210820A_11
Date Acquired: 8/20/2021
Sample Description: Samp 60375923011-R - CVS P KS

Lab Sample ID: 60375923011-R
Instrument: 10MSHR12 (Y)
Client Sample ID: GB-01/8-10



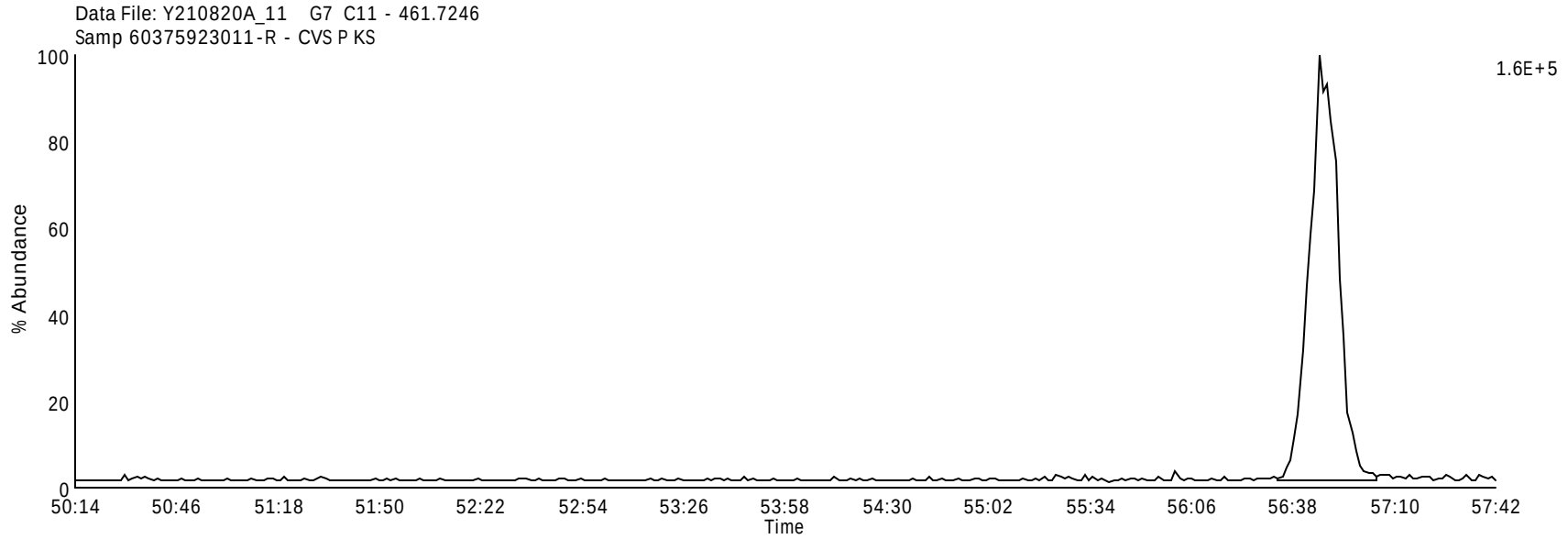


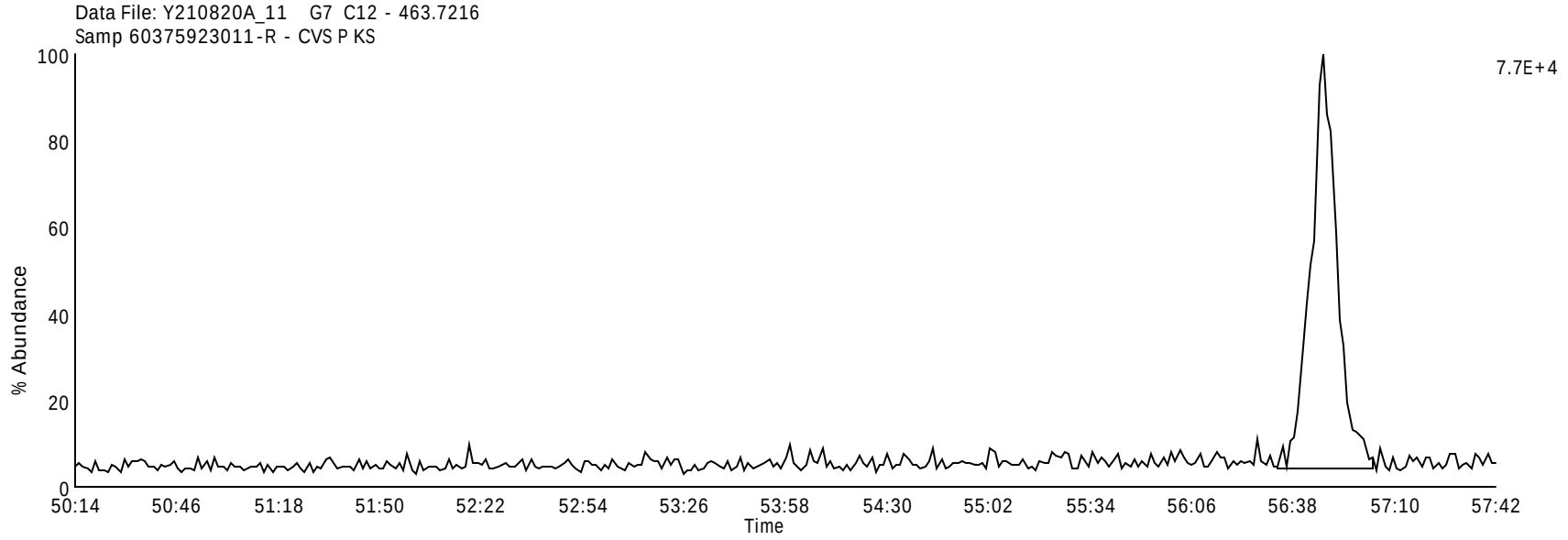




Nona Chlorinated Biphenyls

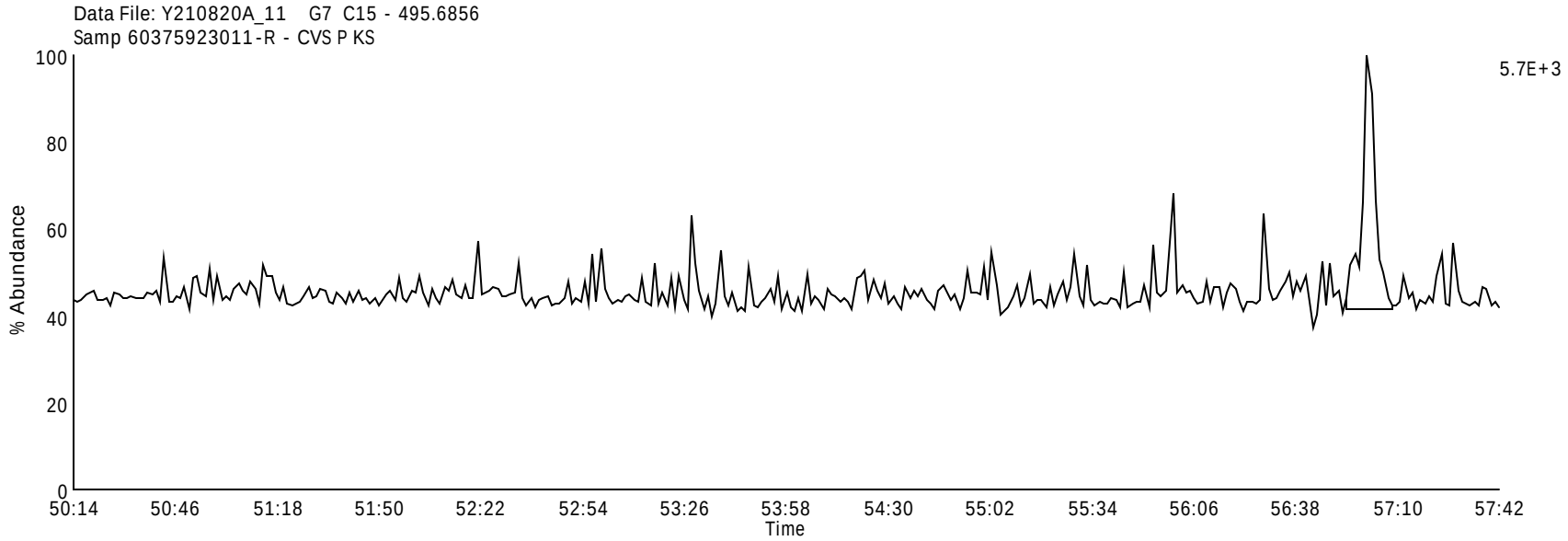
Data File Name: Y210820A_11	Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS	Client Sample ID: GB-01/8-10

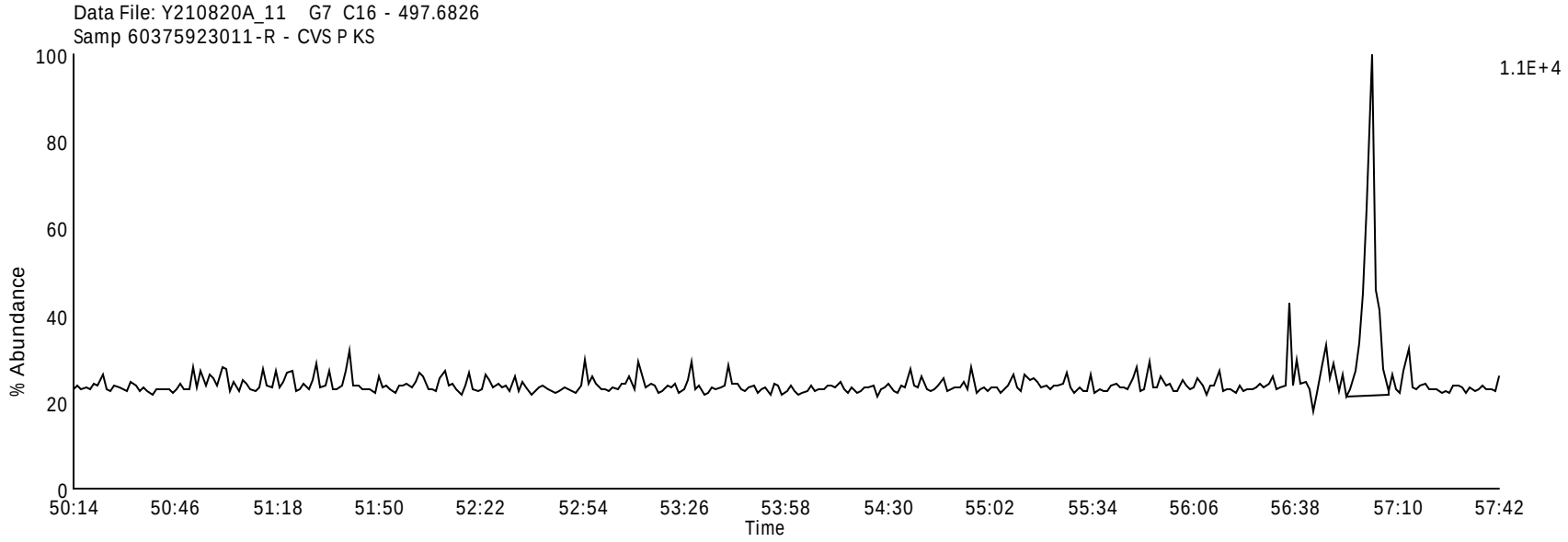




Deca Chlorinated Biphenyl

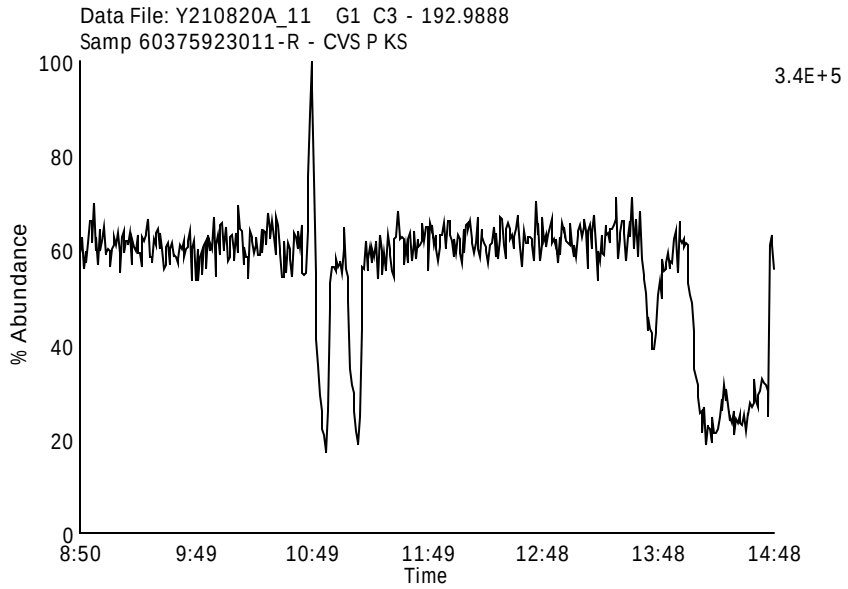
Data File Name: Y210820A_11	Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS	Client Sample ID: GB-01/8-10

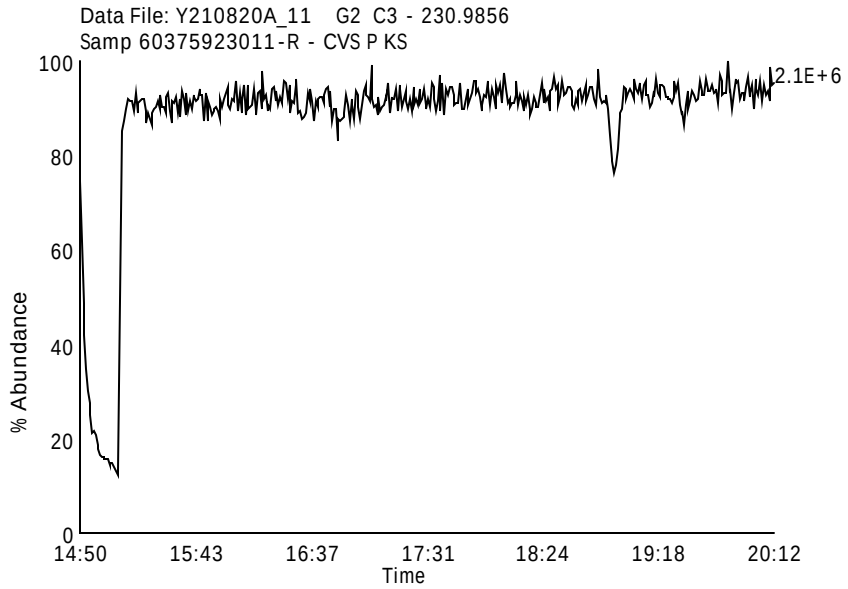


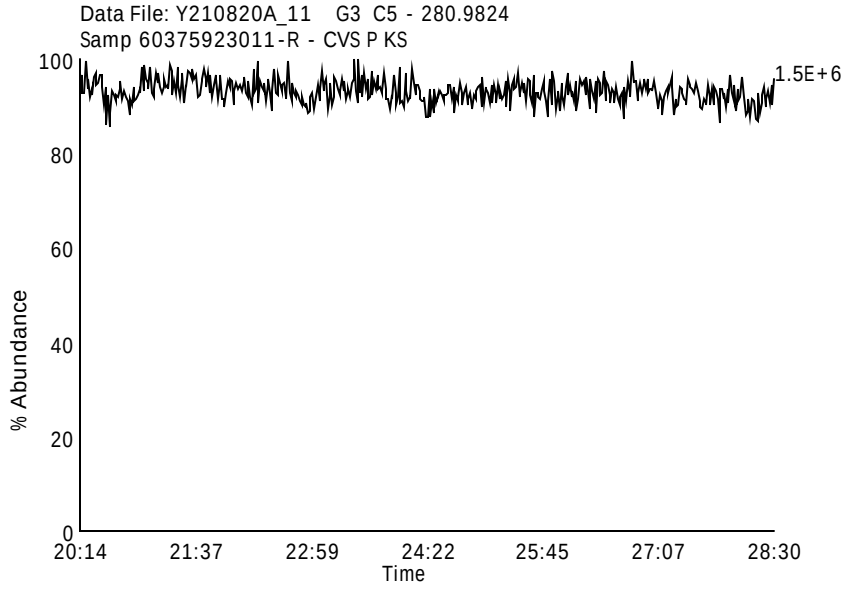


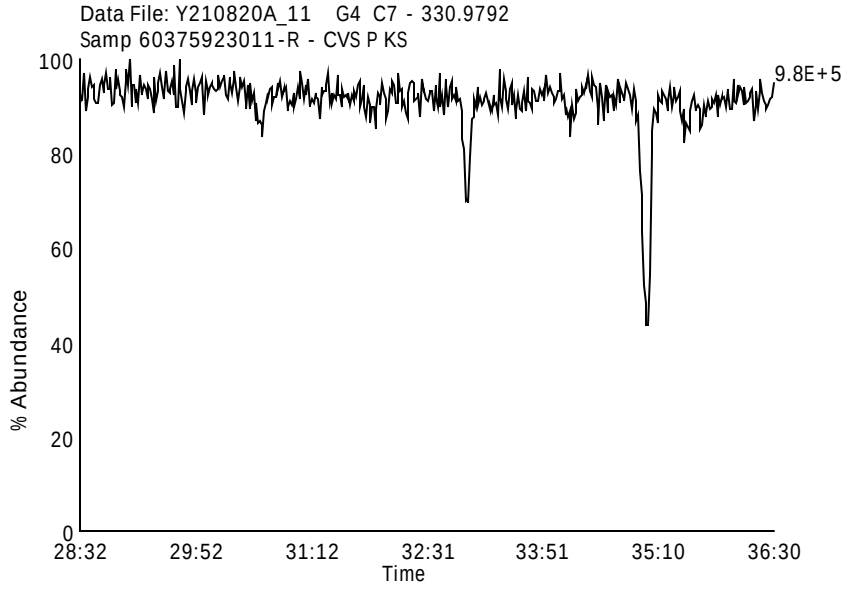
Group 1 - 4 Lock mass

Data File Name: Y210820A_11
Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS
Client Sample ID: GB-01/8-10



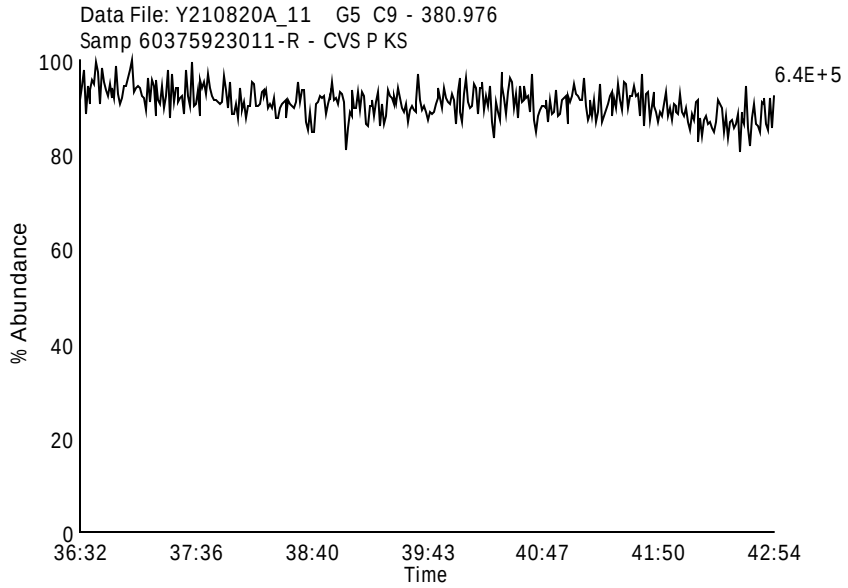


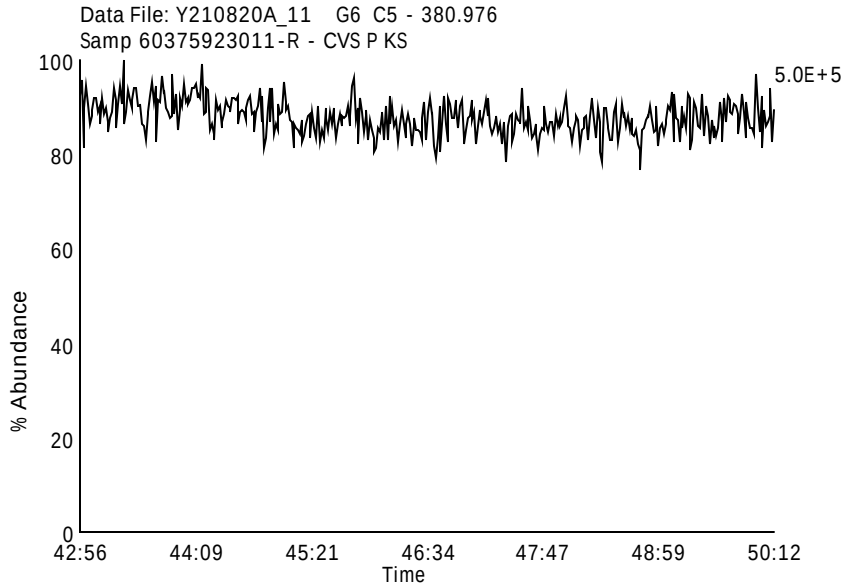


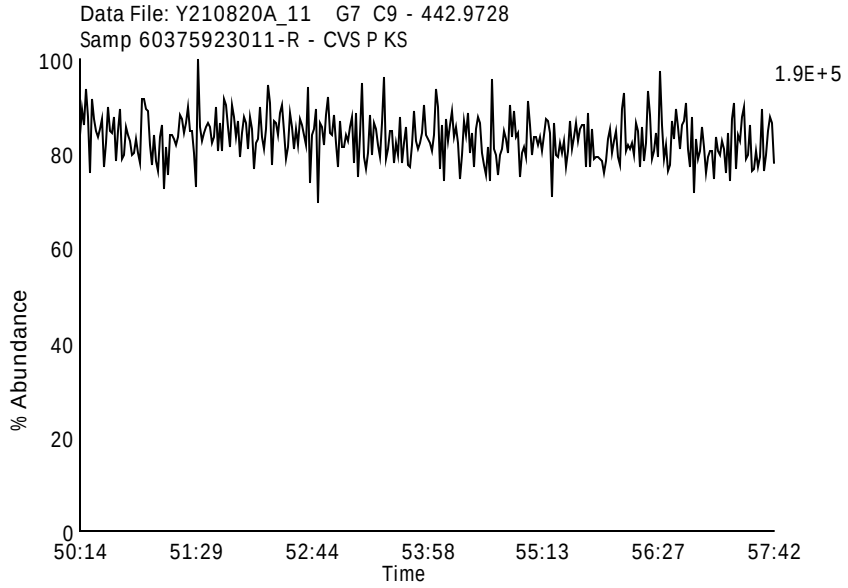


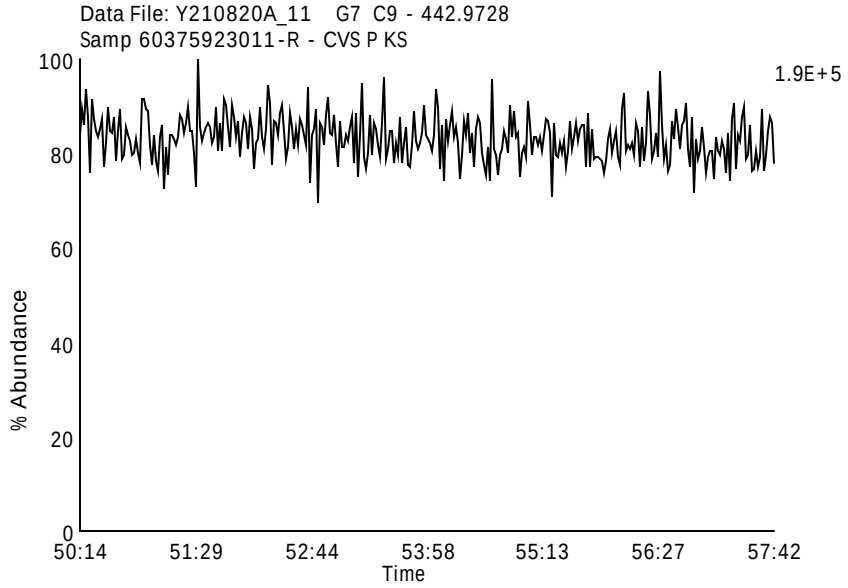
Group 5 - 7 Lock mass

Data File Name: Y210820A_11
Lab Sample ID: 60375923011-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60375923011-R - CVS P KS
Client Sample ID: GB-01/8-10









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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-22/1-3	Injected By	CVS
Lab ID	60375923003-R	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_10	GC Column ID	261111-02
Analyzed	08/20/2021 10:25	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.77	2653883	3452525	
13C-3,3',4,4'-TeCB	77	35.471	0.78	2769216	3552198	
13C-2,3,3',4,4'-PeCB	105	39.031	1.57	3110714	1976630	
13C-2,3,4,4',5-PeCB	114	38.394	1.54	3119219	2028186	
13C-2,3',4,4',5-PeCB	118	37.840	1.59	3288331	2072029	
13C-2,3',4,4',5'-PeCB	123	37.505	1.55	3230577	2082248	
13C-3,3',4,4',5-PeCB	126	42.184	1.57	2907422	1856280	
13C-HxCB(156/157)	156/157	45.241	1.23	5117696	4173791	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.28	2765123	2154328	
13C-3,3',4,4',5,5'-HxCB	169	48.528	1.27	2426746	1916917	
13C-2,3,3',4,4',5,5'-HpCB	189	51.067	1.02	2031981	1986936	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	0.96	3496560	3624377	
13C-2,3,3',5,5'-PeCB	111	35.538	1.55	4140939	2678703	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.11	2826824	2552732	
Recovery Standards						
13C-2,5-DiCB	9	15.565	1.53	7693051	5037933	
13C-2,2',5,5'-TeCB	52	25.421	0.78	4134285	5283539	
13C-2,2',4,5,5'-PeCB	101	32.704	1.62	5047330	3123987	
13C-2,2',3,4,4',5'-HxCB	138	41.010	1.23	4315464	3495909	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.92	2463808	2687928	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-22/1-3	Injected By	CVS
Lab ID	60375923003-R	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_10	GC Column ID	261111-02
Analyzed	08/20/2021 10:25	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.487	0.78	26126	33491	
81		34.867	0.67	10421	15668	
105		39.048	1.53	185309	120764	
118		37.857	1.51	3981545	2629743	
123		37.505	1.83	30286	16564	
126		42.201	1.40	28030	19985	
156	156/157	45.257	1.20	3105363	2596613	
157	156/157	45.257	1.20	(3105363)	(2596613)	
167		44.117	1.23	1266088	1027648	
169		48.528	1.44	52265	36182	
189		51.089	0.98	564579	574575	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-01/8-10	Injected By	CVS
Lab ID	60375923011-R	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_11	GC Column ID	261111-02
Analyzed	08/20/2021 11:25	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.851	0.76	1883256	2482853	
13C-3,3',4,4'-TeCB	77	35.454	0.82	2016405	2473618	
13C-2,3,3',4,4'-PeCB	105	39.015	1.53	2207284	1445821	
13C-2,3,4,4',5-PeCB	114	38.377	1.57	2305712	1468749	
13C-2,3',4,4',5-PeCB	118	37.841	1.52	2282580	1499241	
13C-2,3',4,4',5'-PeCB	123	37.489	1.48	2257742	1522064	
13C-3,3',4,4',5-PeCB	126	42.167	1.55	1999750	1292975	
13C-HxCB(156/157)	156/157	45.225	1.23	3658540	2982080	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.19	1954653	1639771	
13C-3,3',4,4',5,5'-HxCB	169	48.512	1.23	1706125	1382621	
13C-2,3,3',4,4',5,5'-HpCB	189	51.046	1.01	1496619	1487761	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.05	2646116	2522544	
13C-2,3,3',5,5'-PeCB	111	35.505	1.60	3125379	1956882	
13C-2,2',3,3',5,5',6-HpCB	178	41.463	1.09	2099111	1931986	
Recovery Standards						
13C-2,5-DiCB	9	15.505	1.51	6967789	4612943	
13C-2,2',5,5'-TeCB	52	25.421	0.79	3706689	4680504	
13C-2,2',4,5,5'-PeCB	101	32.704	1.63	4555789	2797280	
13C-2,2',3,4,4',5'-HxCB	138	41.010	1.26	3958715	3148430	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.88	2088586	2367625	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-01/8-10	Injected By	CVS
Lab ID	60375923011-R	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_11	GC Column ID	261111-02
Analyzed	08/20/2021 11:25	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.471	0.88	19065	21626	
105		39.015	1.60	66354	41533	
118		37.841	1.61	125287	77748	
156	156/157	45.258	1.39	18655	13403	
157	156/157	45.258	1.39	(18655)	(13403)	

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Appendix E

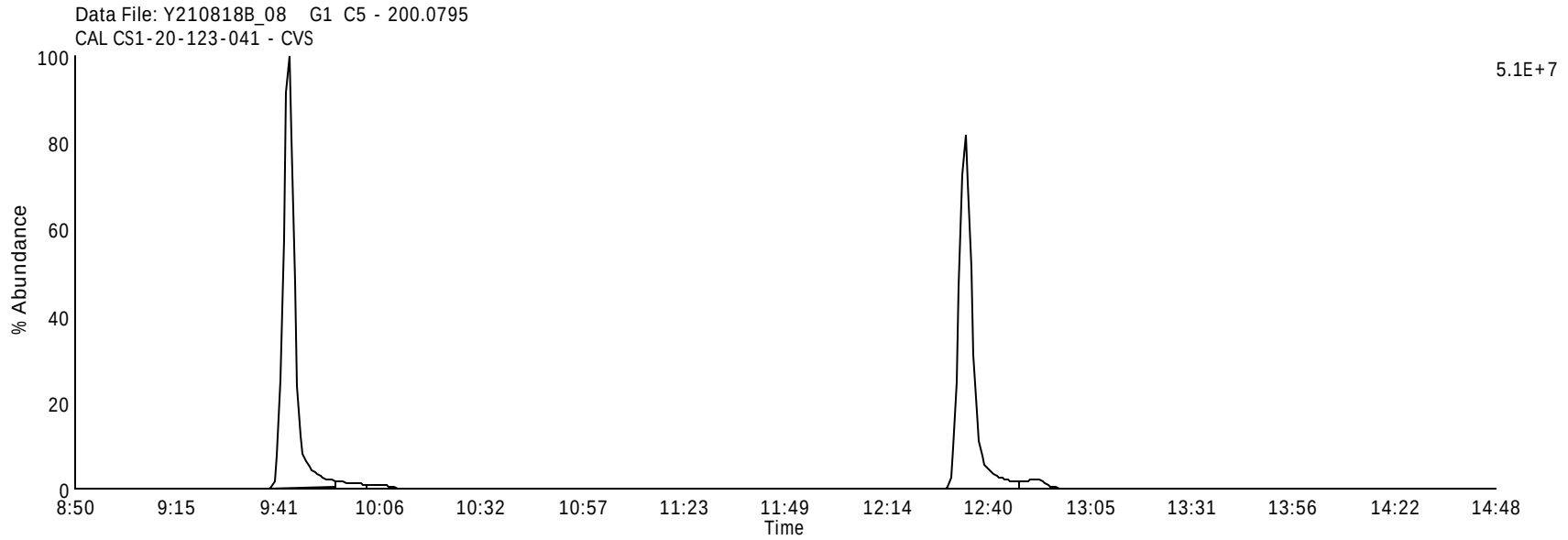
Calibration Raw Data

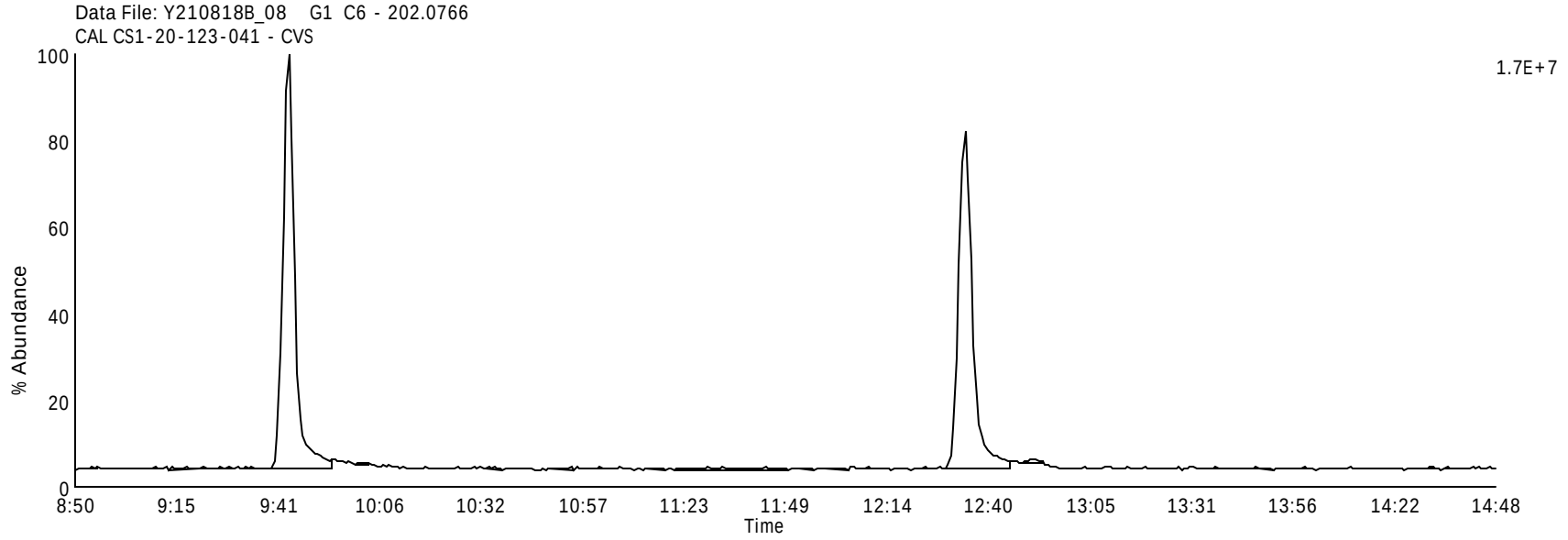
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

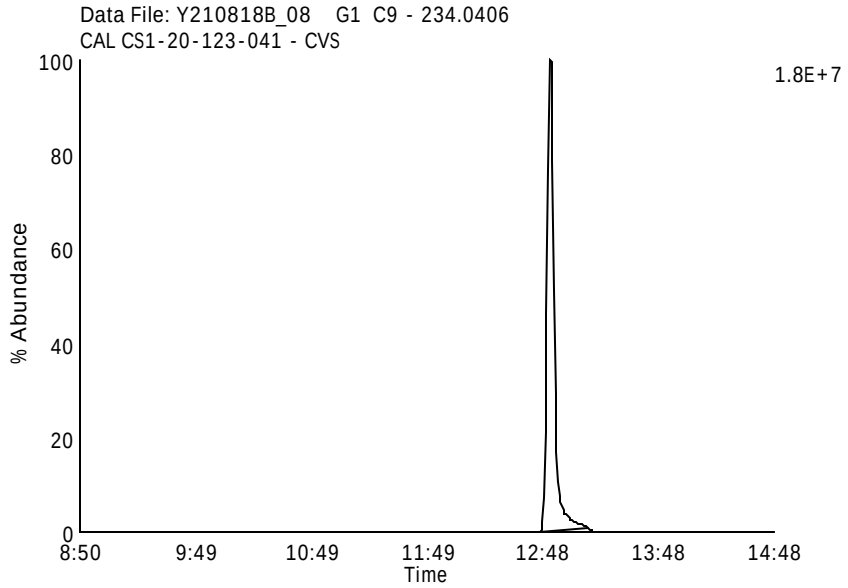
Sample Description: CAL CS1-20-123-041 - CVS

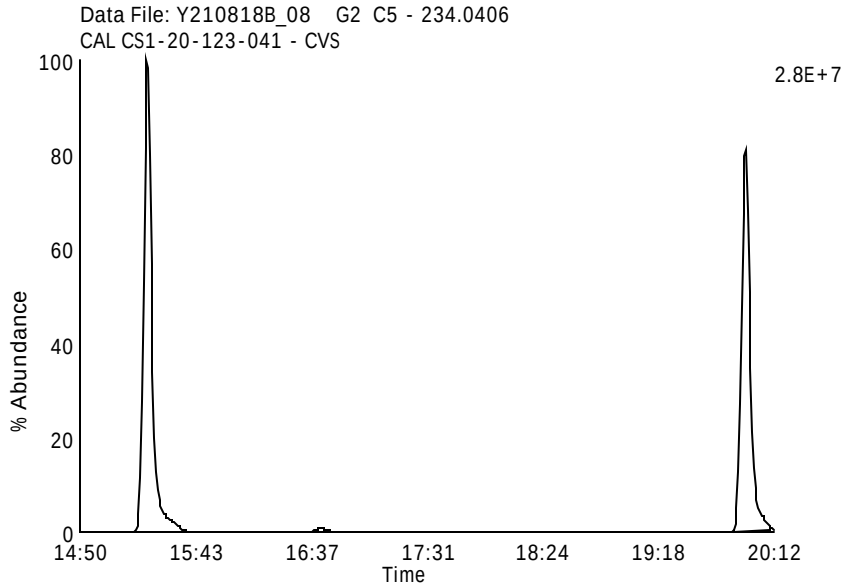


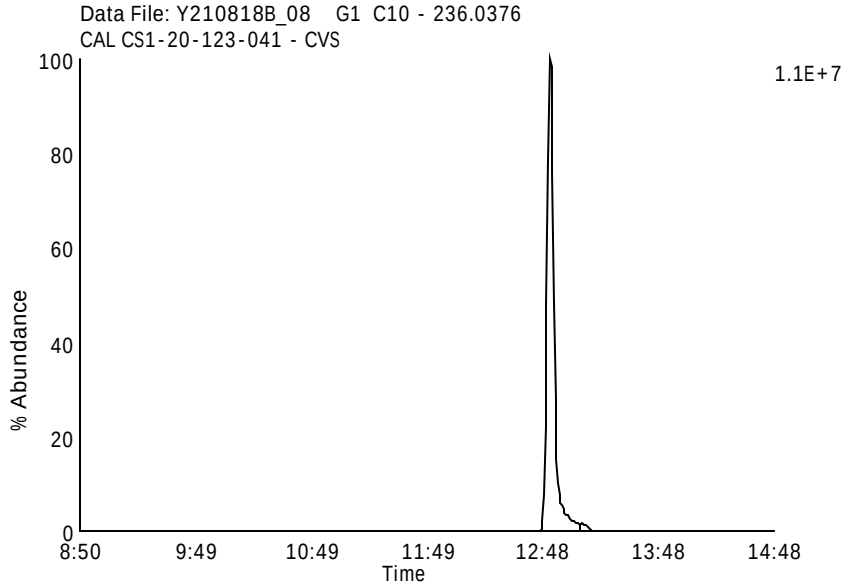


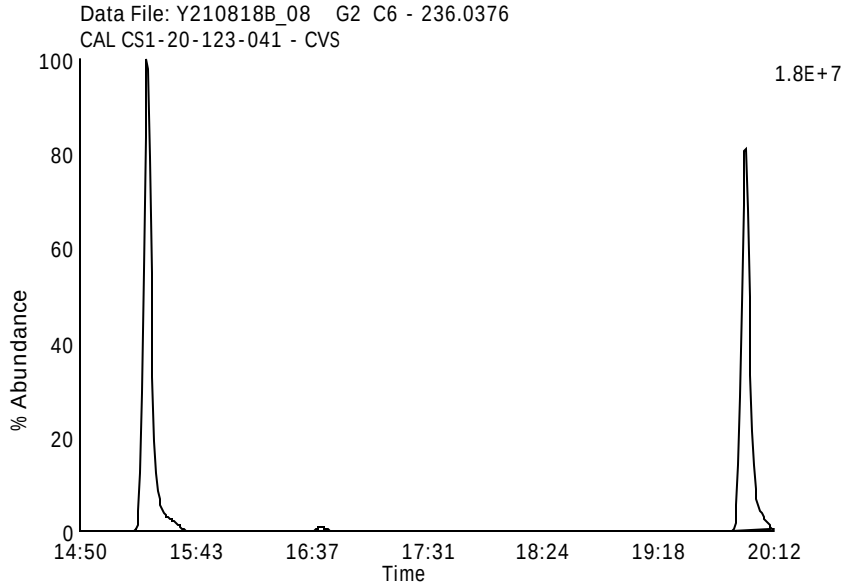
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



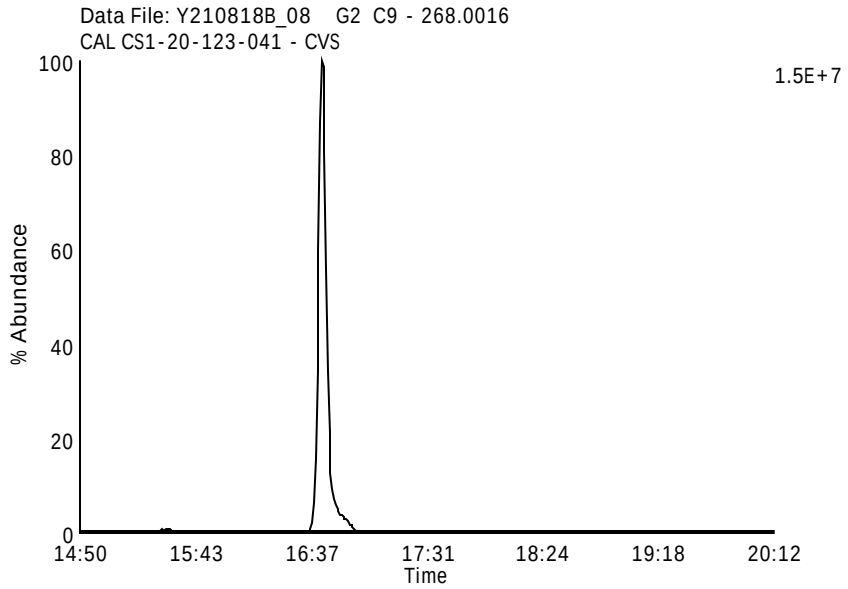


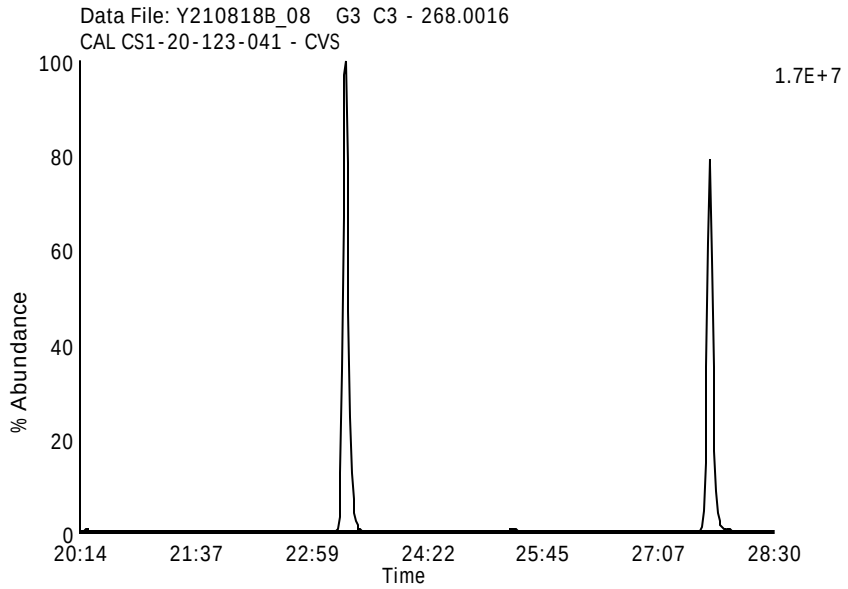


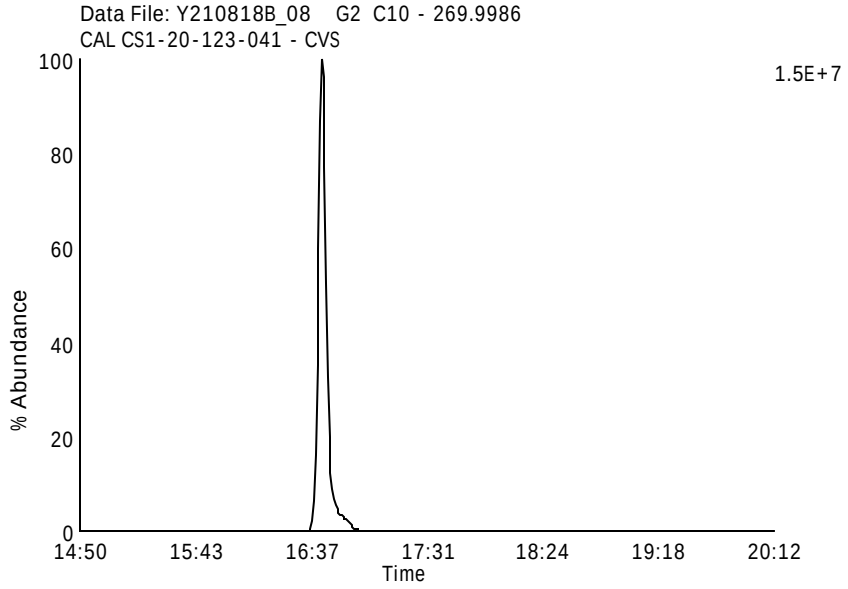


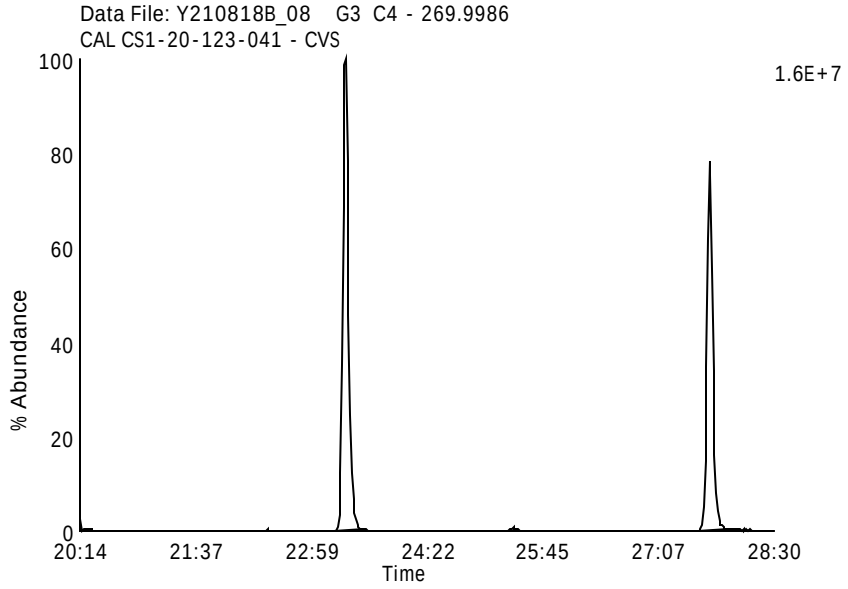
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



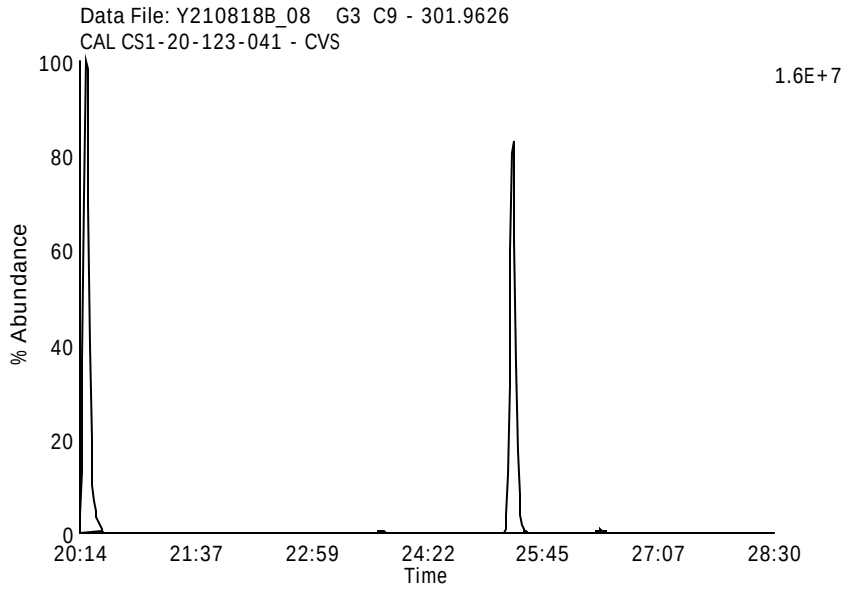


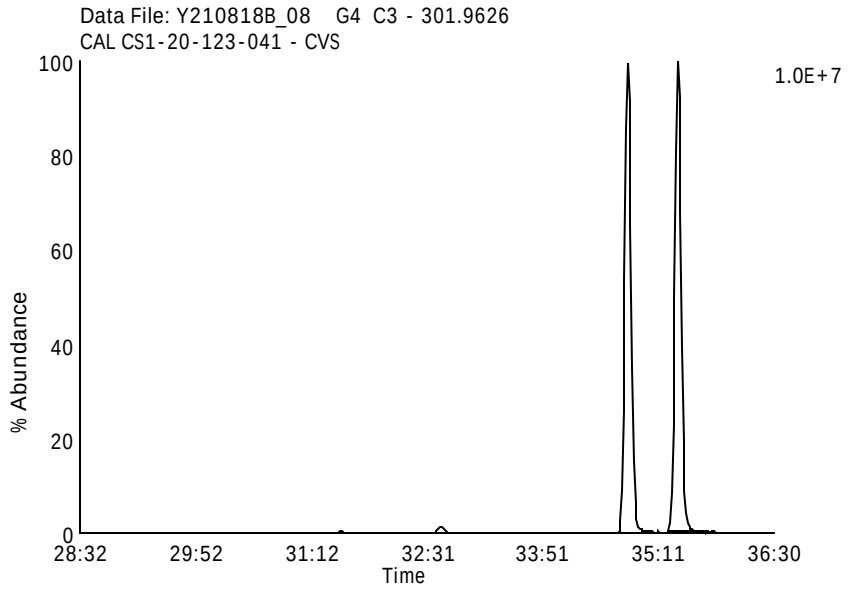


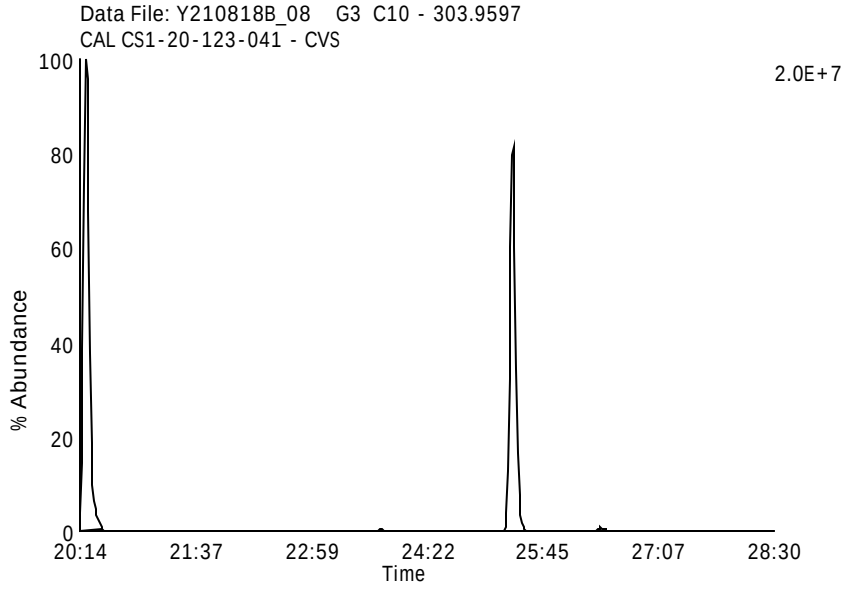


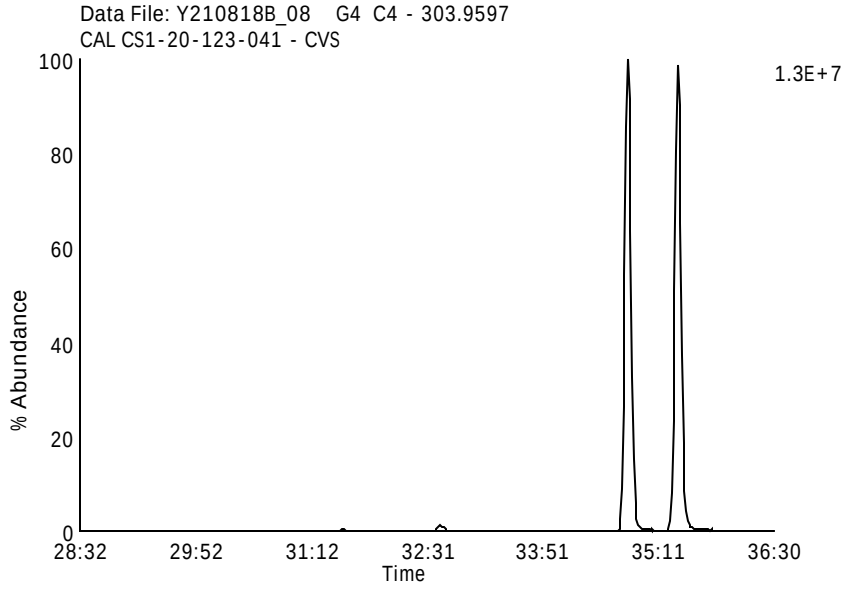
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS









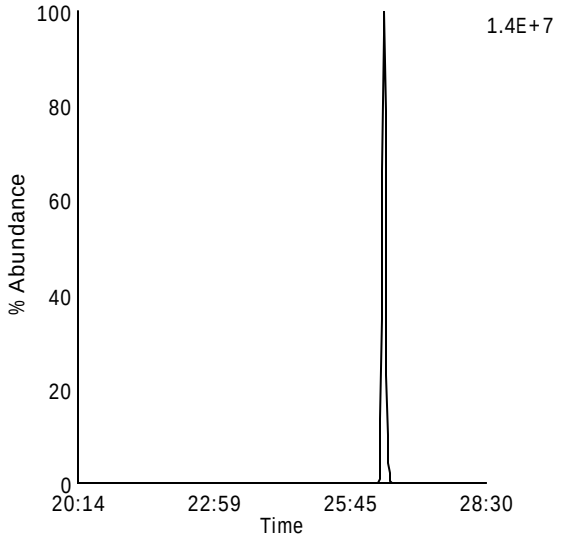
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

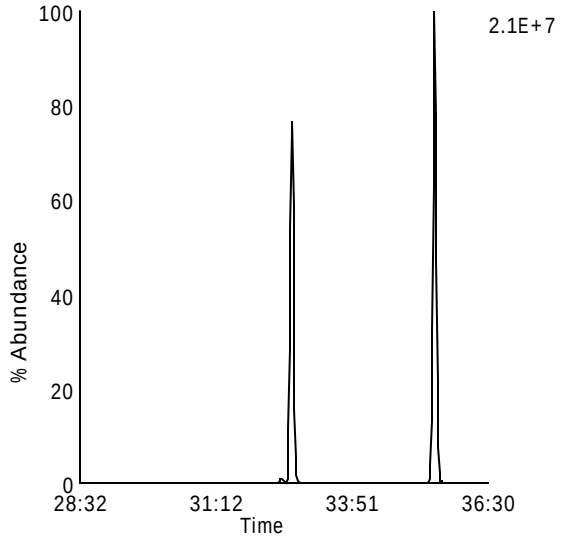
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

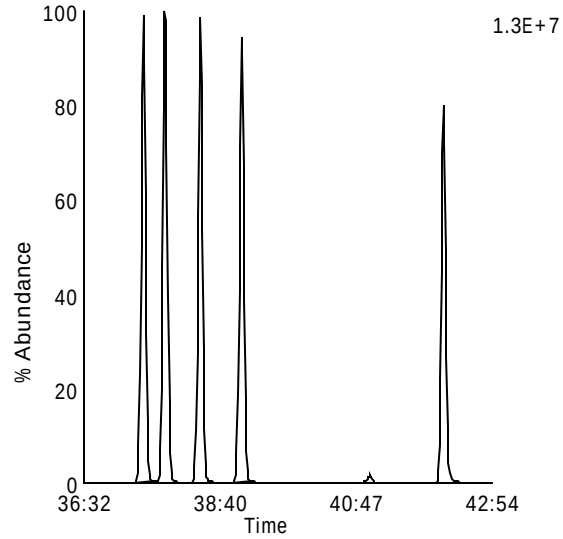
Data File: Y210818B_08 G3 C13 - 337.9207
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C9 - 337.9207
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C3 - 337.9207
CAL CS1-20-123-041 - CVS



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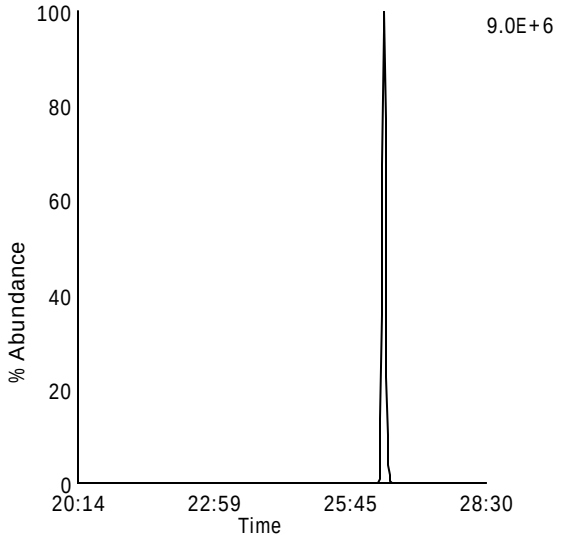
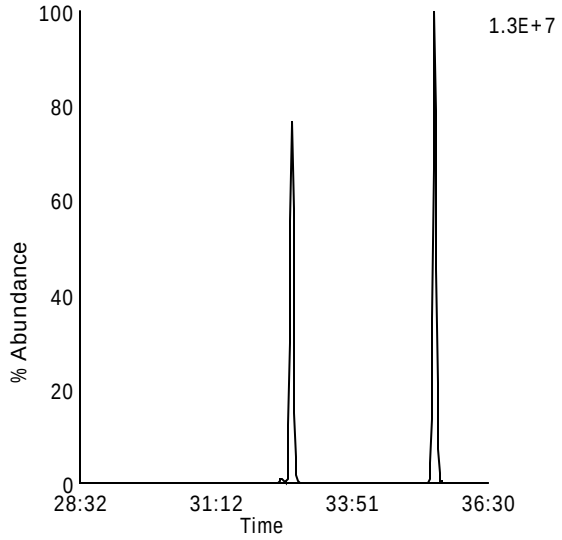
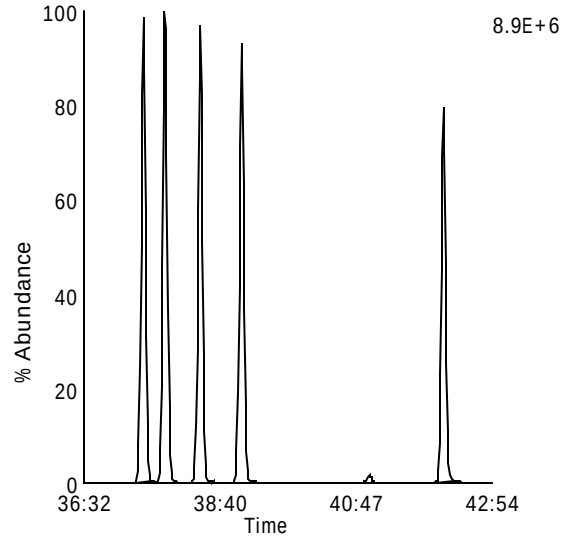
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C10 - 339.9178
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C4 - 339.9178
CAL CS1-20-123-041 - CVS

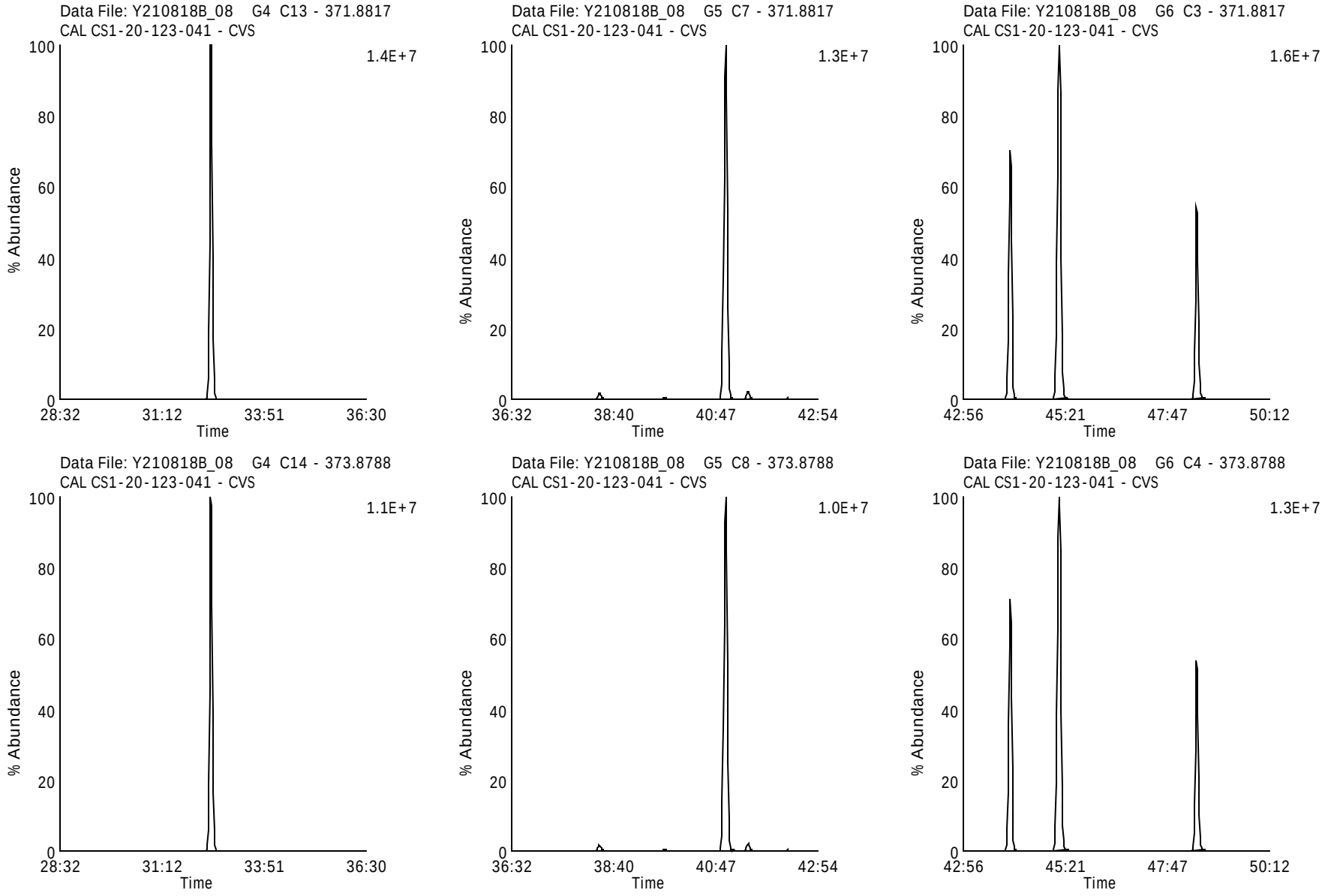


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

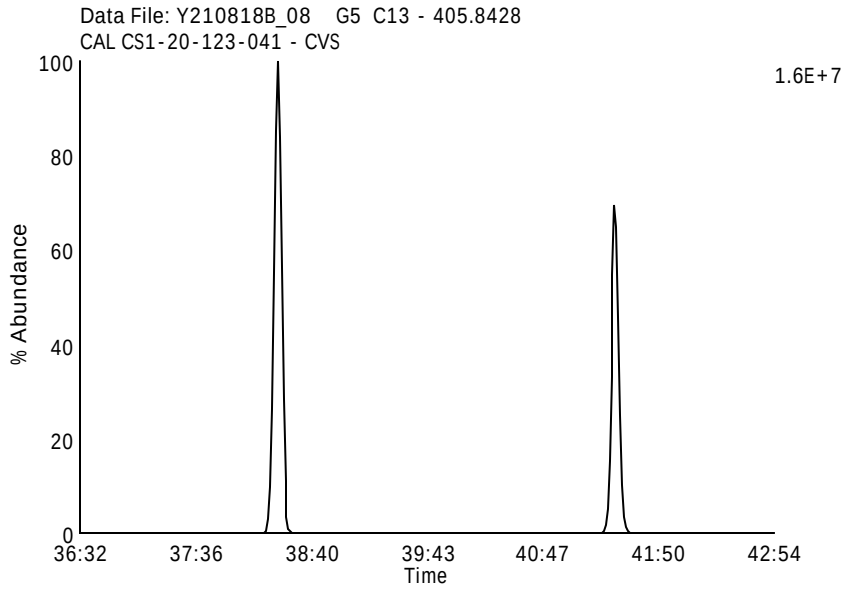
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

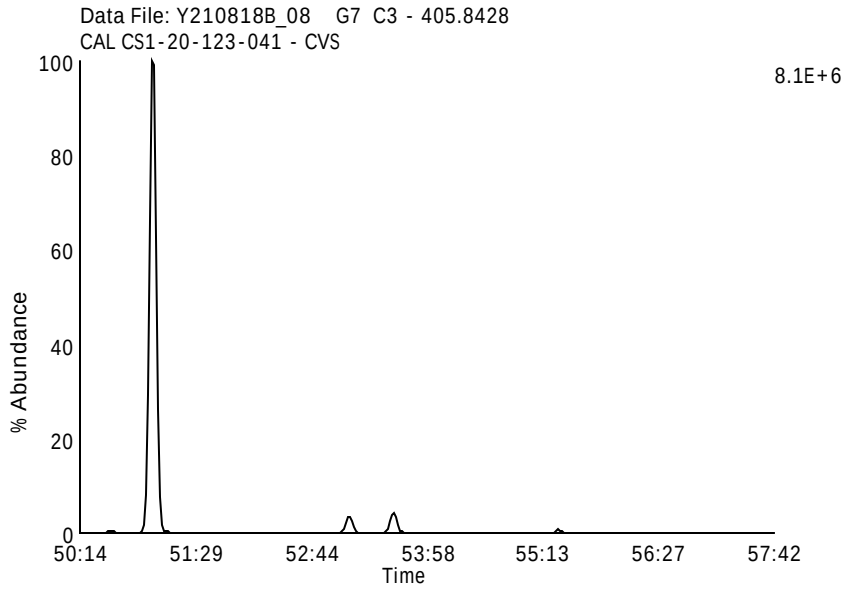
Sample Description: CAL CS1-20-123-041 - CVS

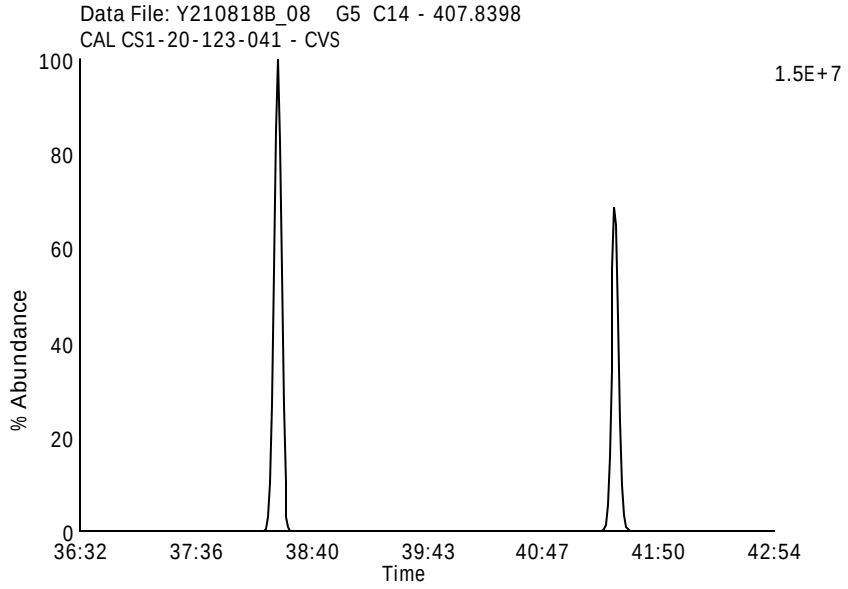


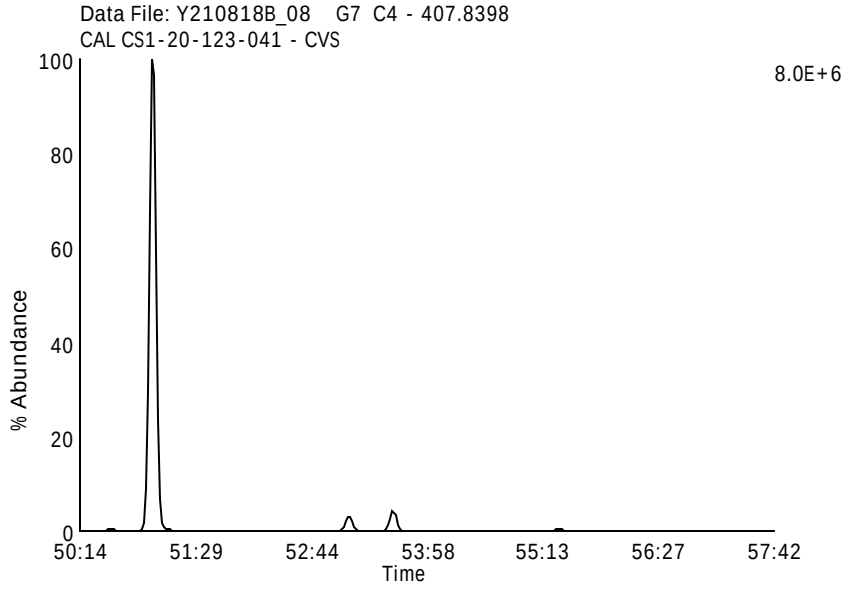
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS





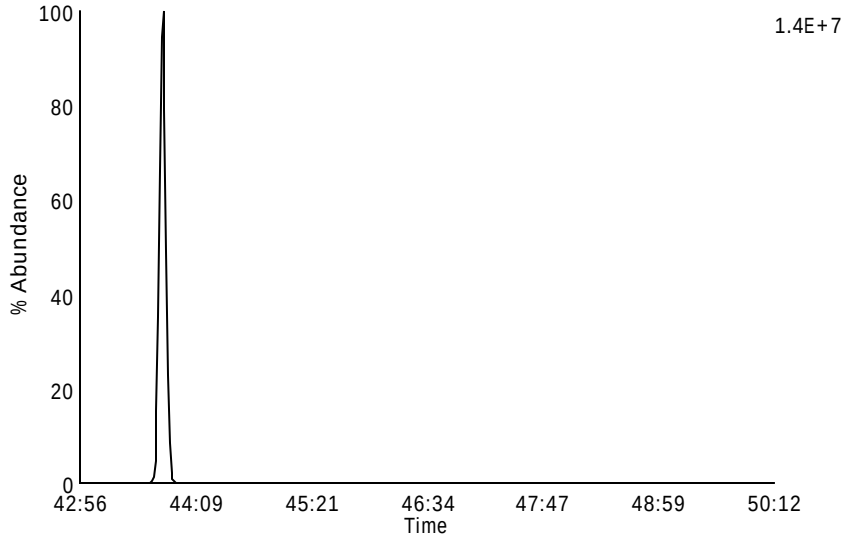




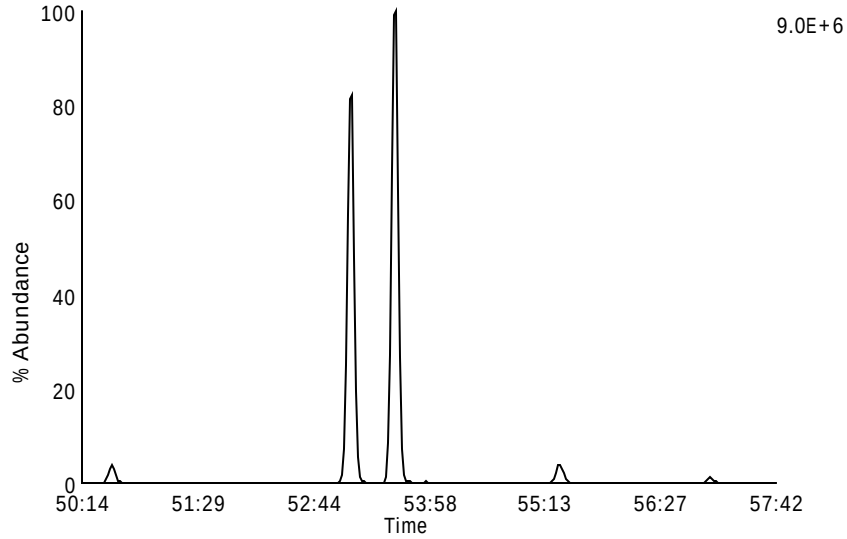
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

Data File: Y210818B_08 G6 C13 - 439.8038
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G7 C7 - 439.8038
CAL CS1-20-123-041 - CVS



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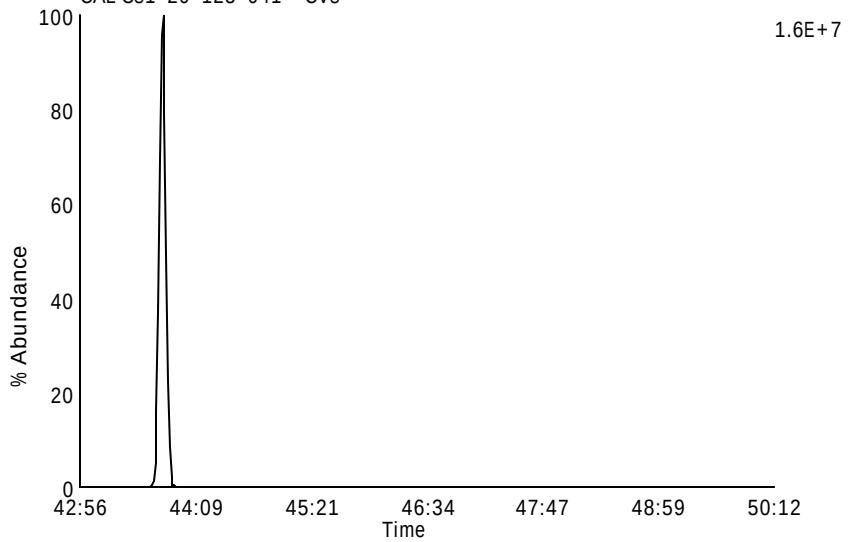
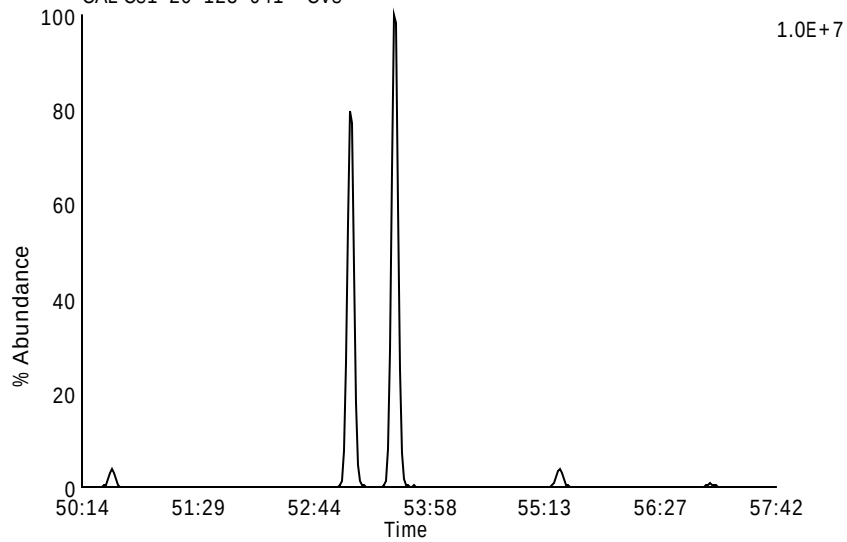
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G7 C8 - 441.8008
CAL CS1-20-123-041 - CVS

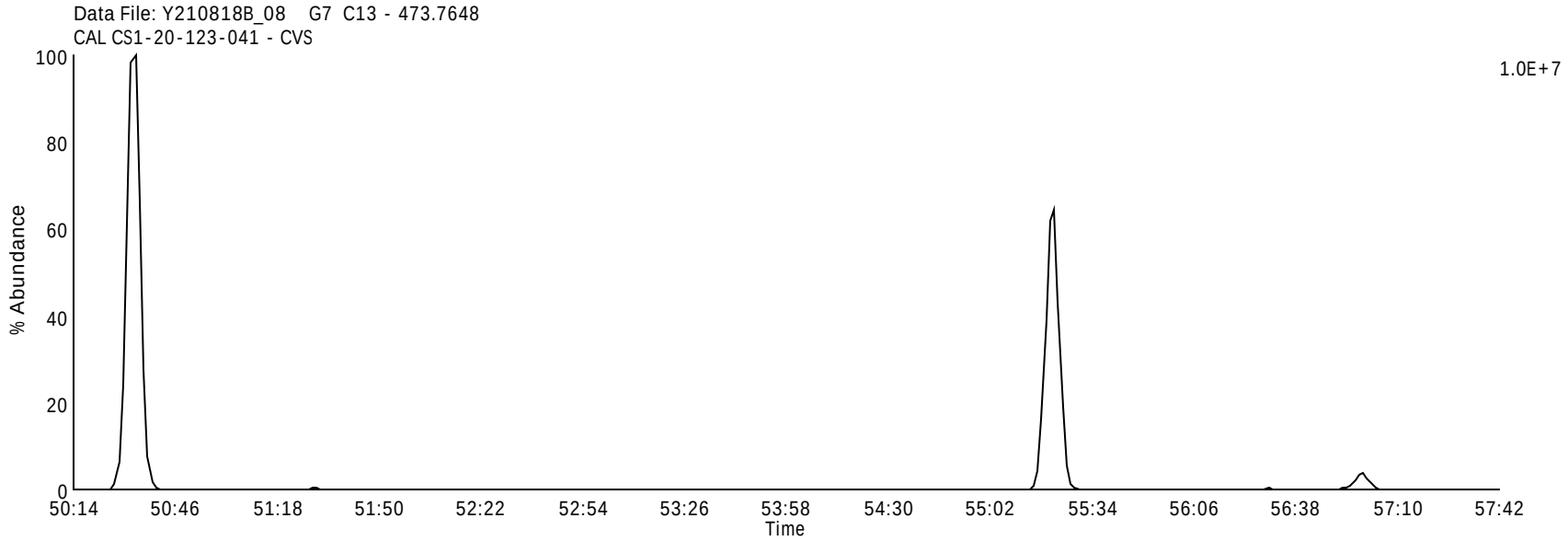


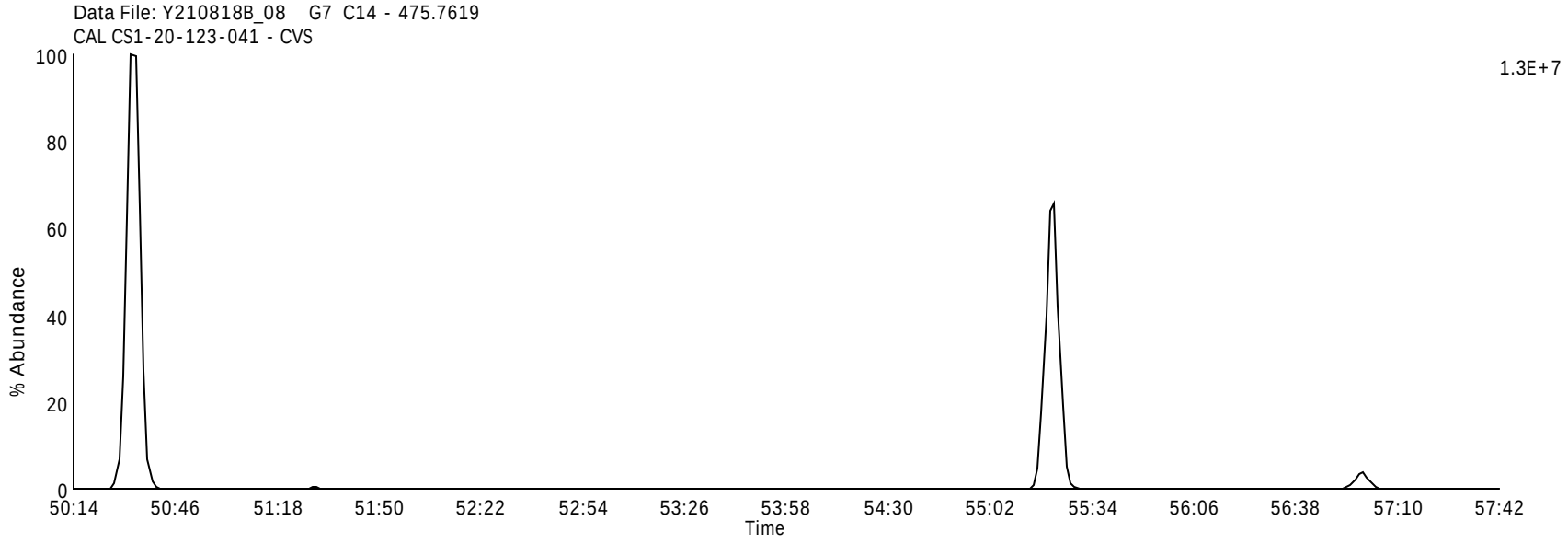
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



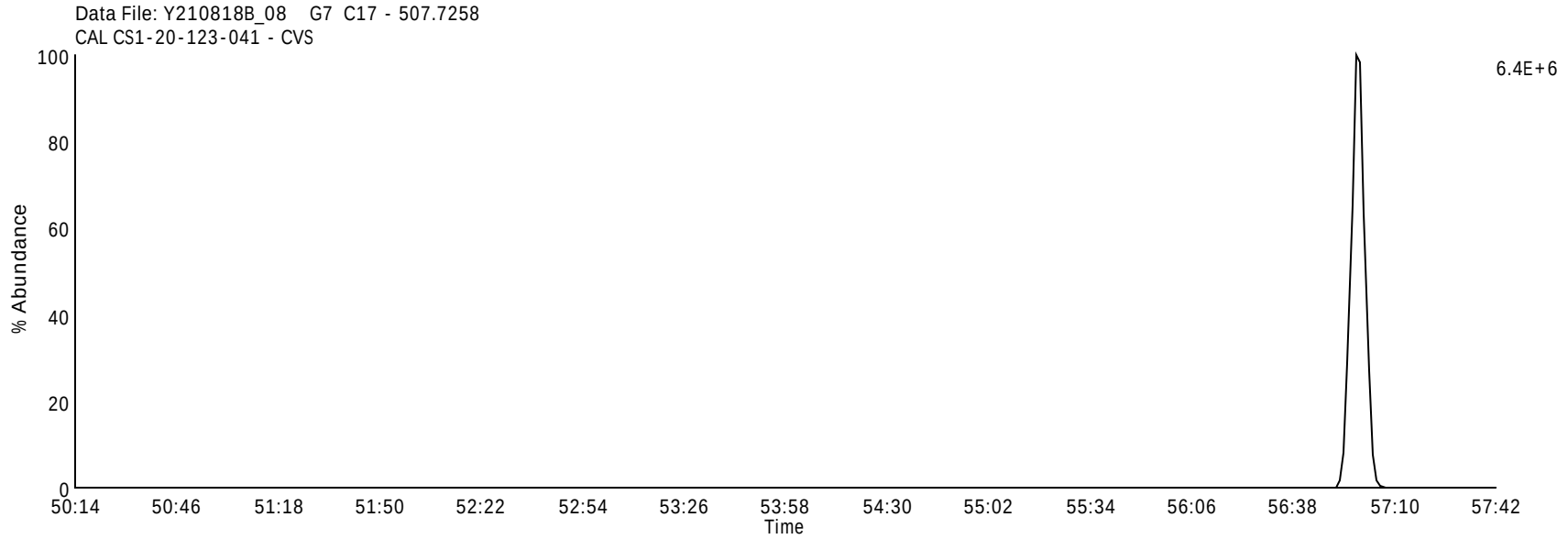


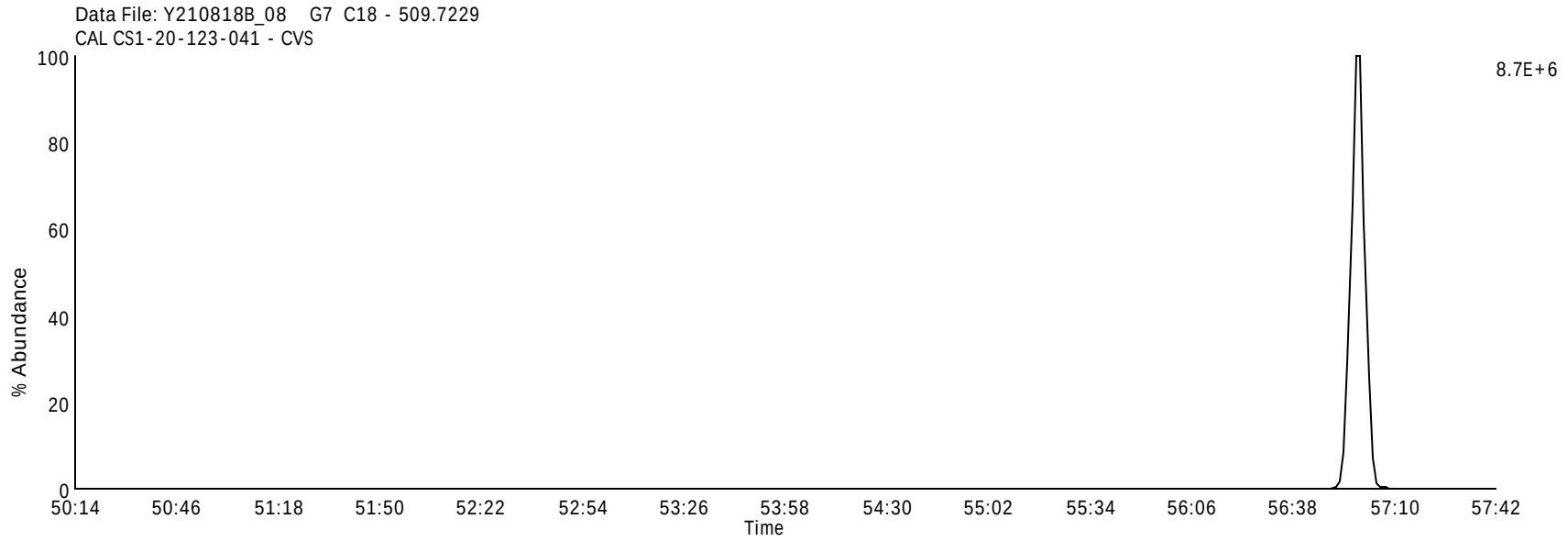
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



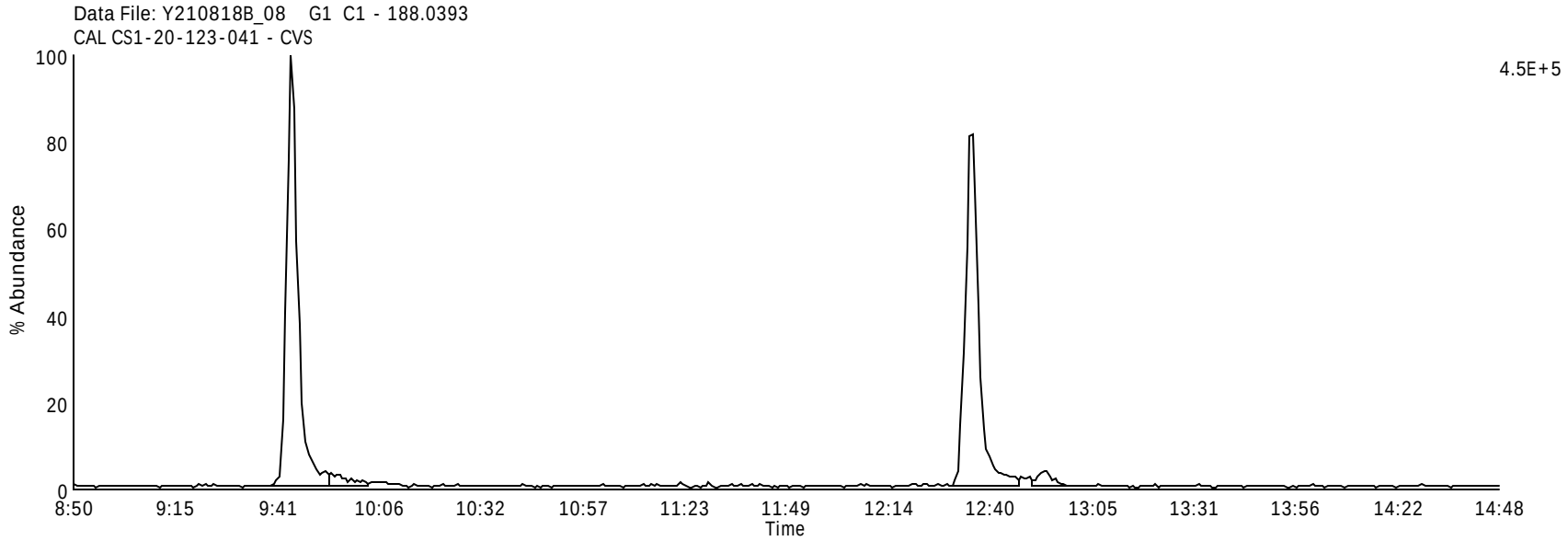


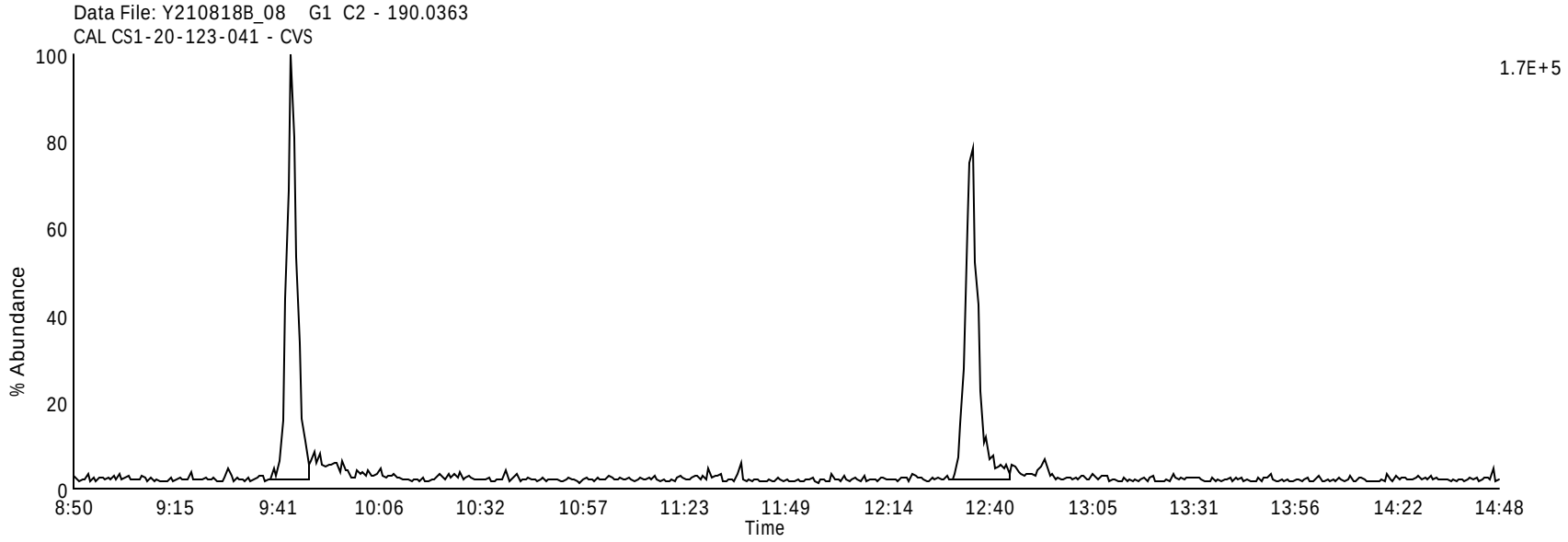
Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

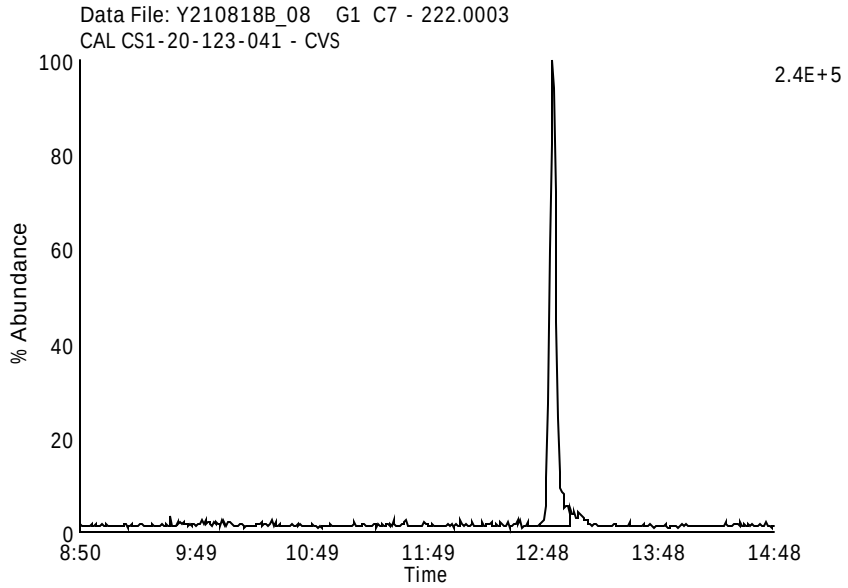
Sample Description: CAL CS1-20-123-041 - CVS

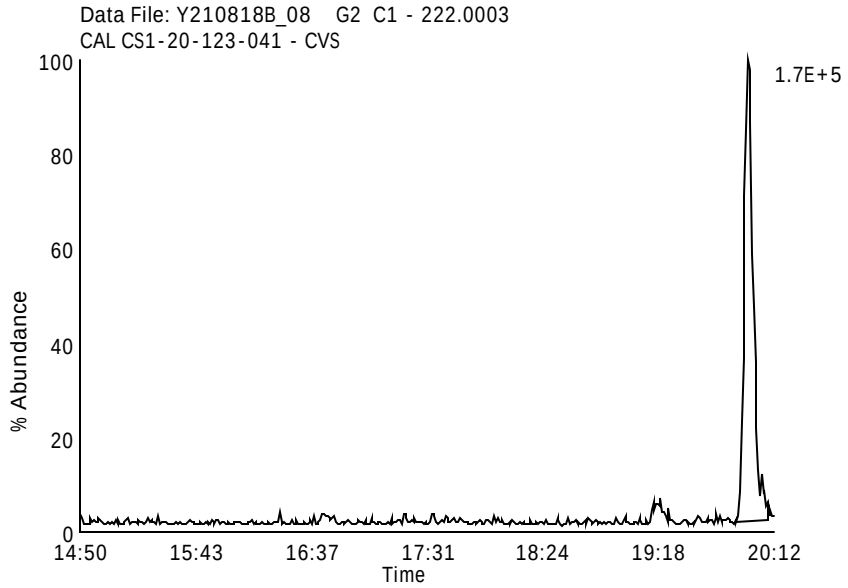


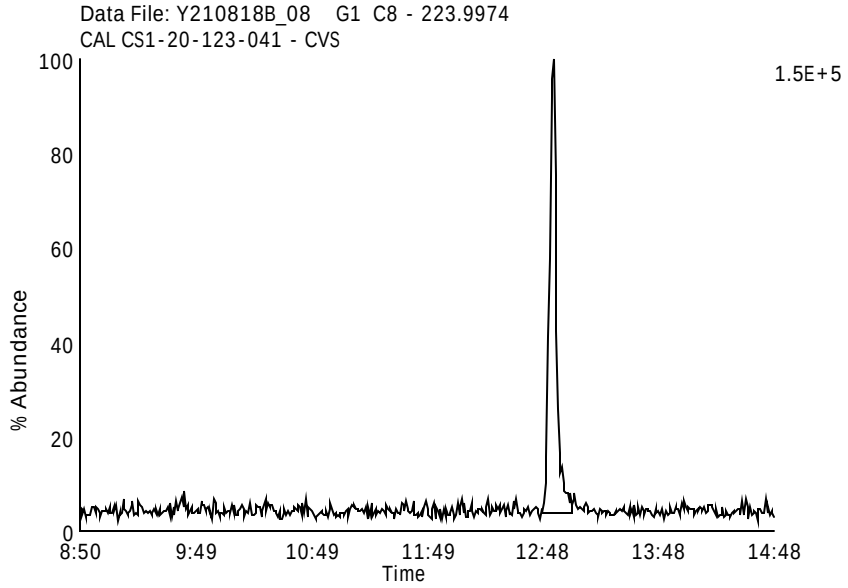


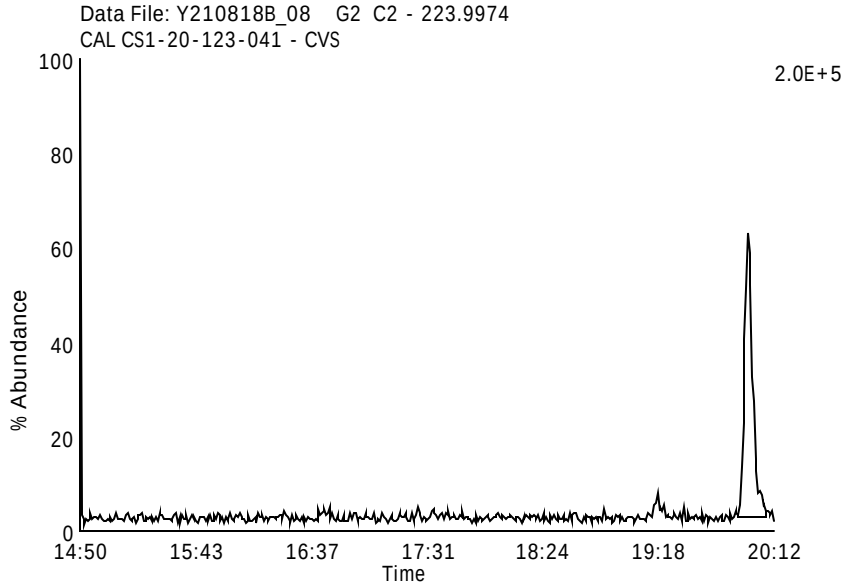
Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



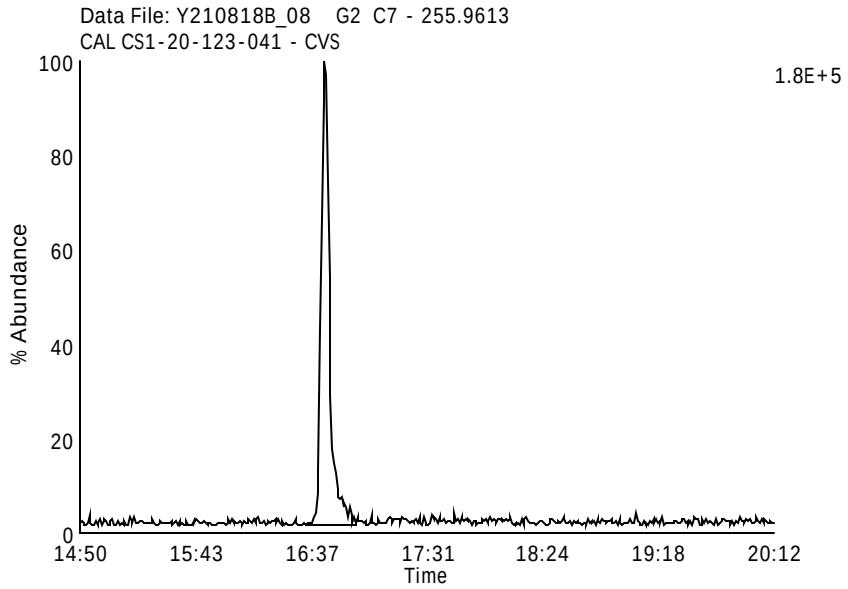


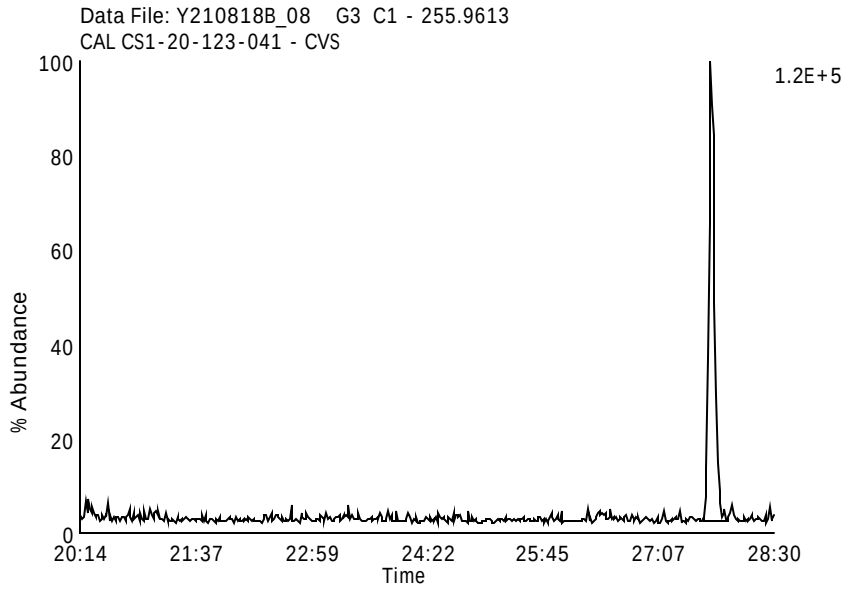


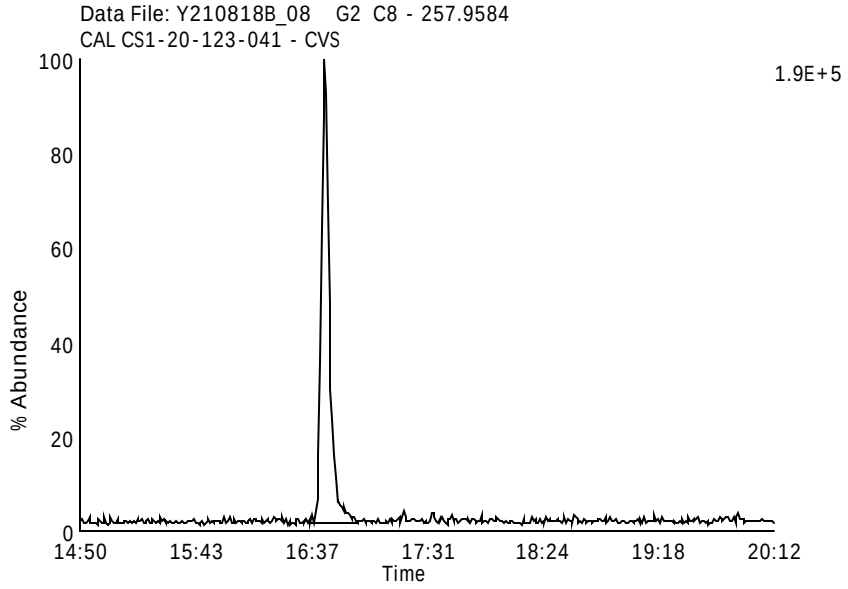


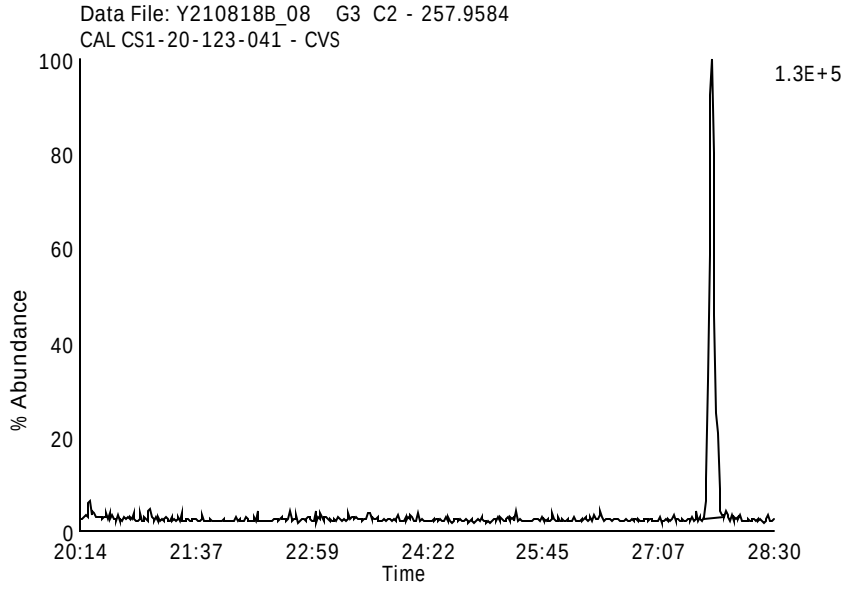
Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



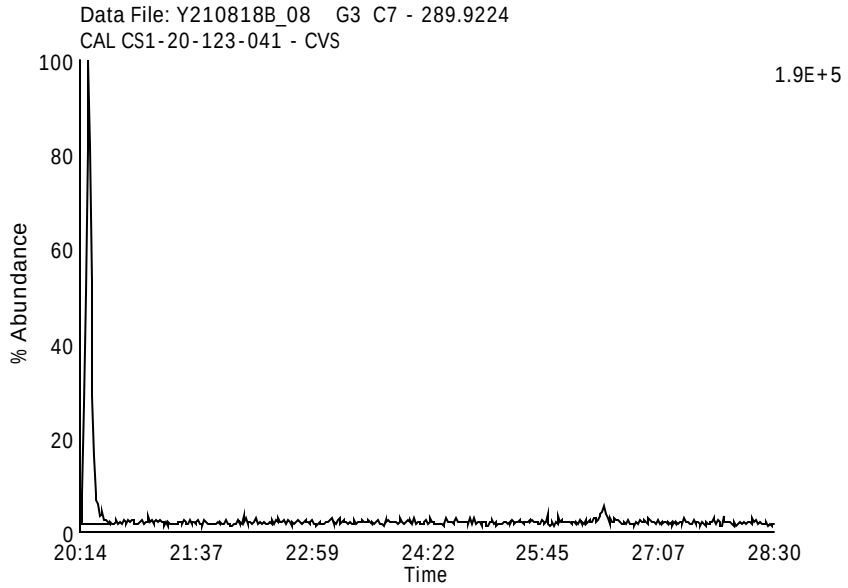


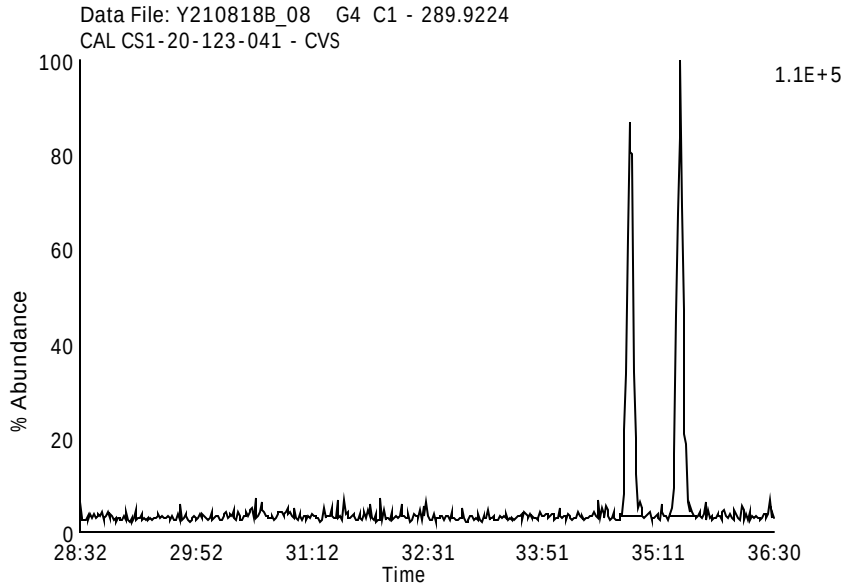


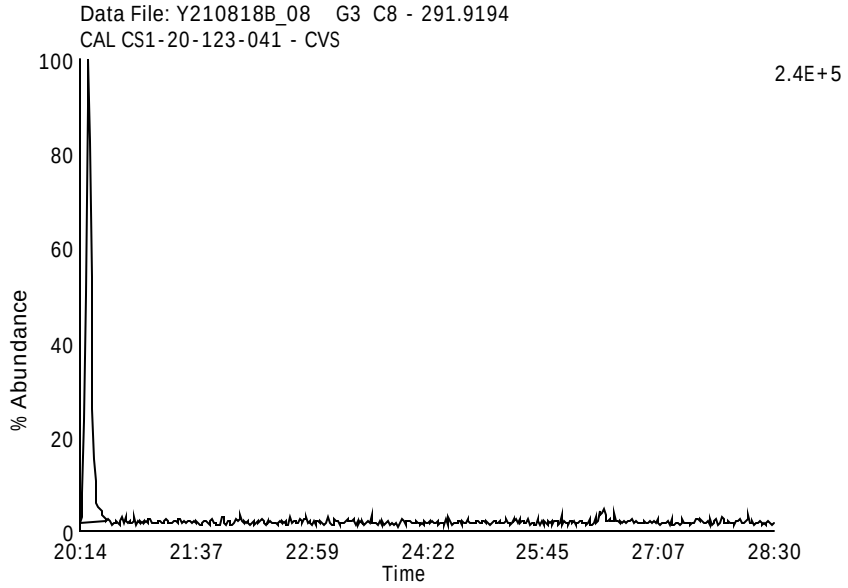


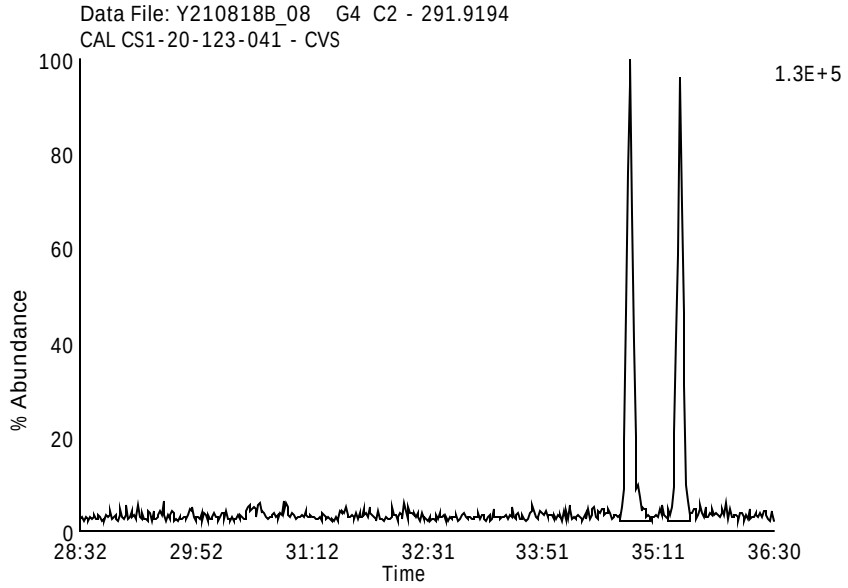
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







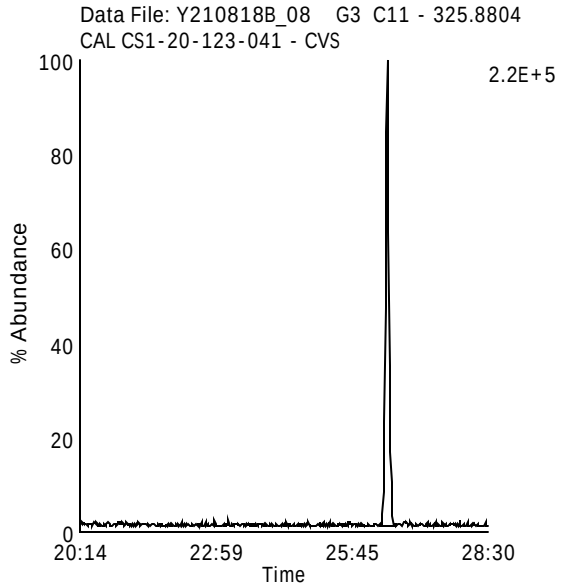


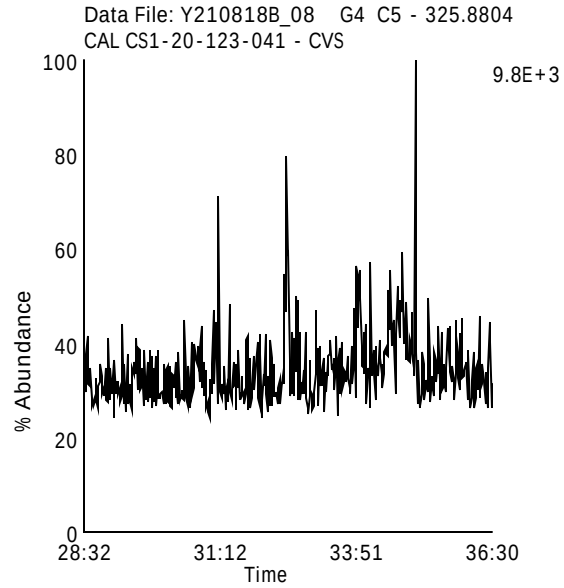
Penta Chlorinated Biphenyls

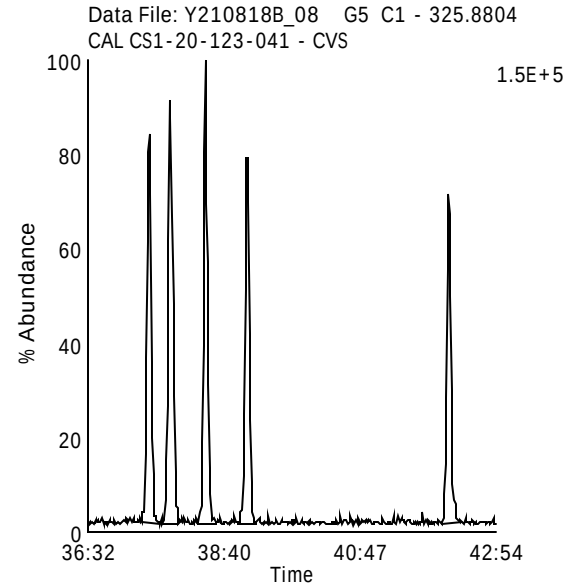
Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

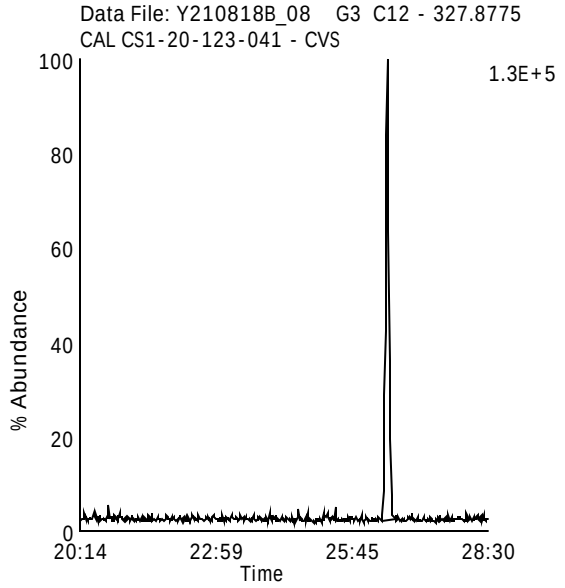
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

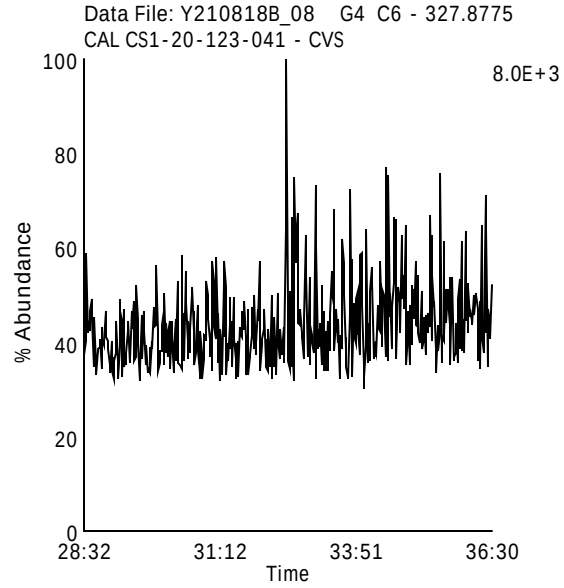
Sample Description: CAL CS1-20-123-041 - CVS

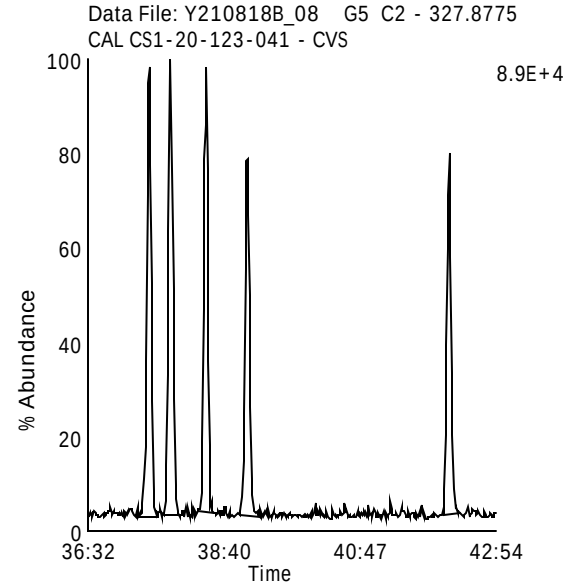








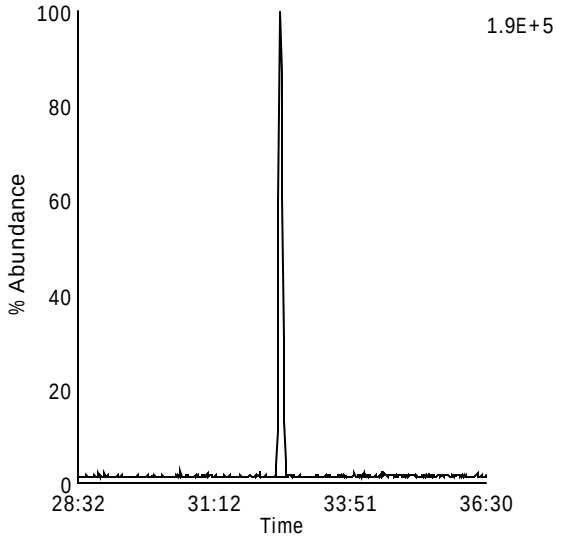




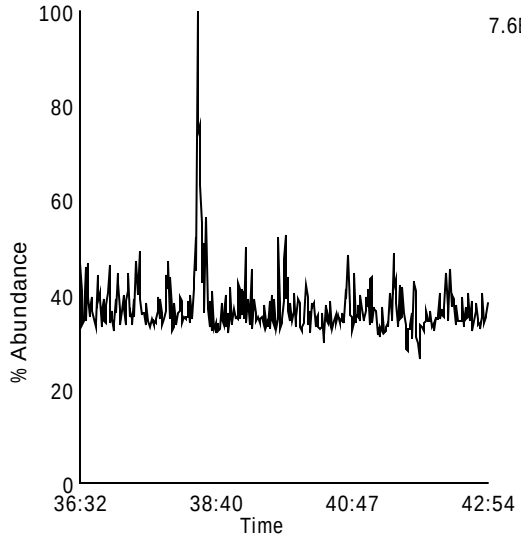
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

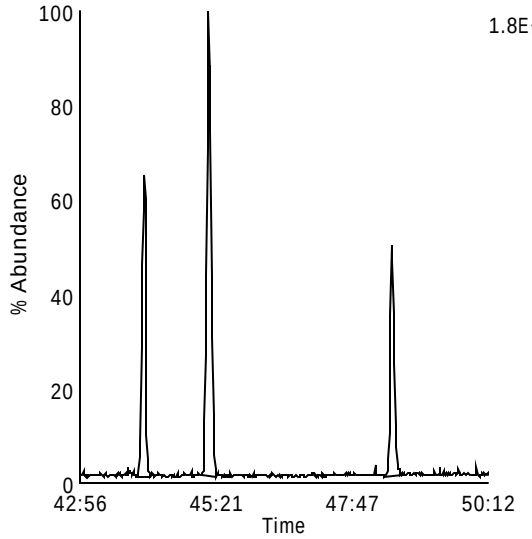
Data File: Y210818B_08 G4 C11 - 359.8415
CAL CS1-20-123-041 - CVS



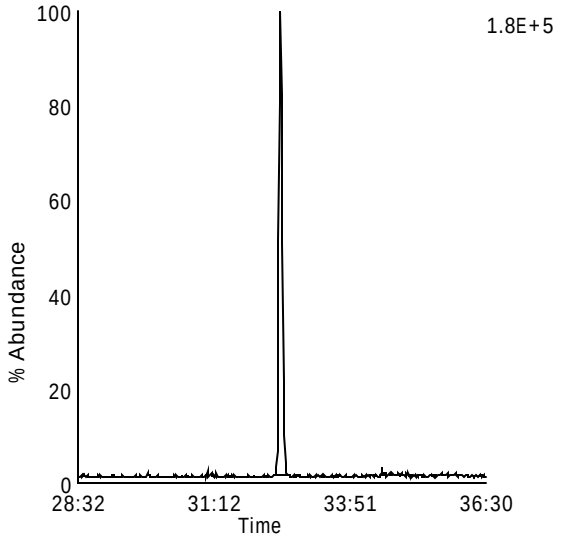
Data File: Y210818B_08 G5 C5 - 359.8415
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G6 C1 - 359.8415
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C12 - 361.8385
CAL CS1-20-123-041 - CVS



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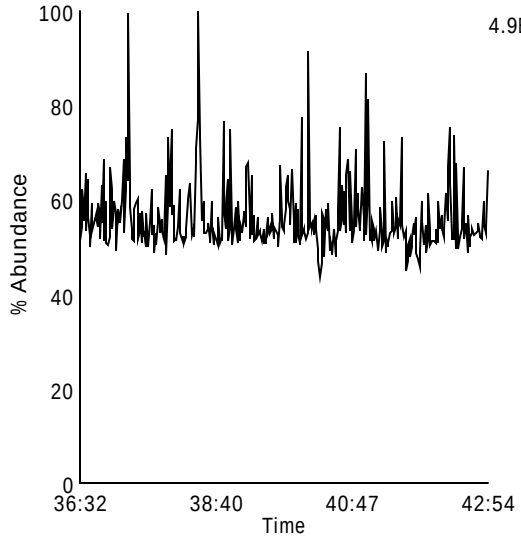
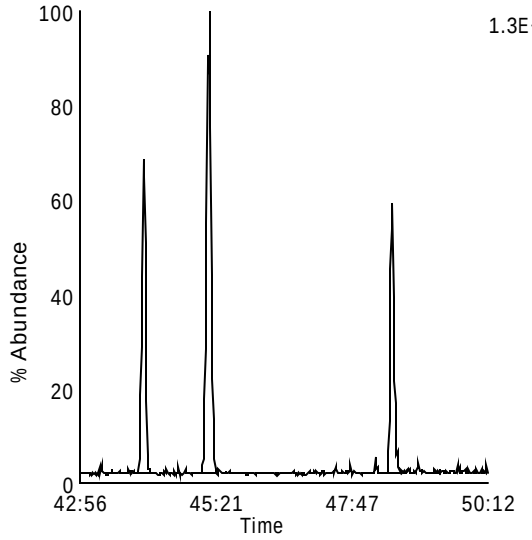
CAL CS1-20-123-041 - CVS

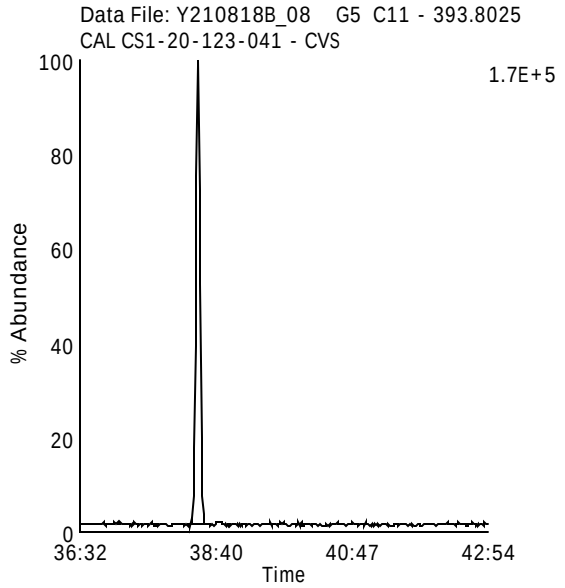


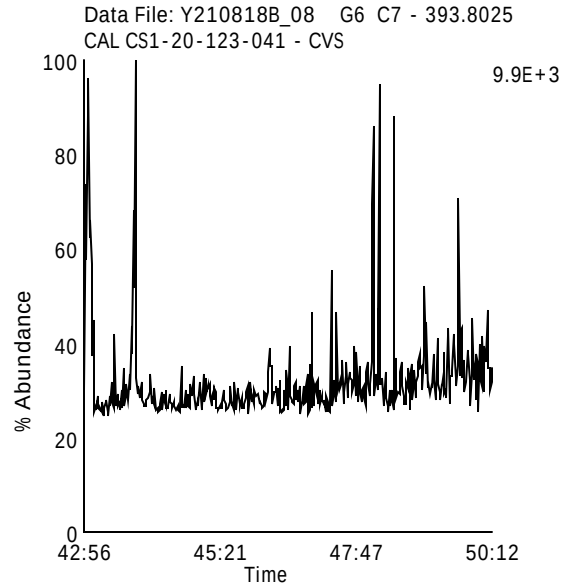
Data File: Y210818B_08 G6 C2 - 361.8385
CAL CS1-20-123-041 - CVS

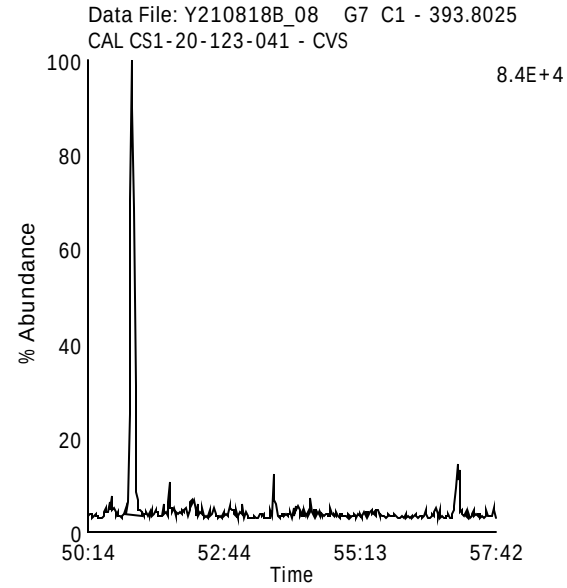


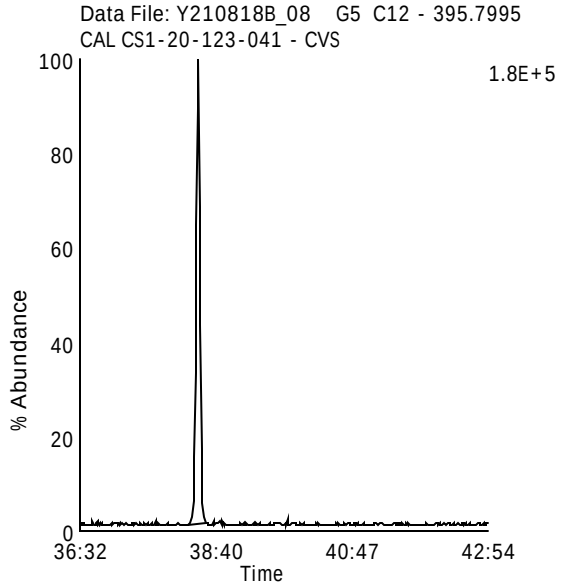
Hepta Chlorinated Biphenyls

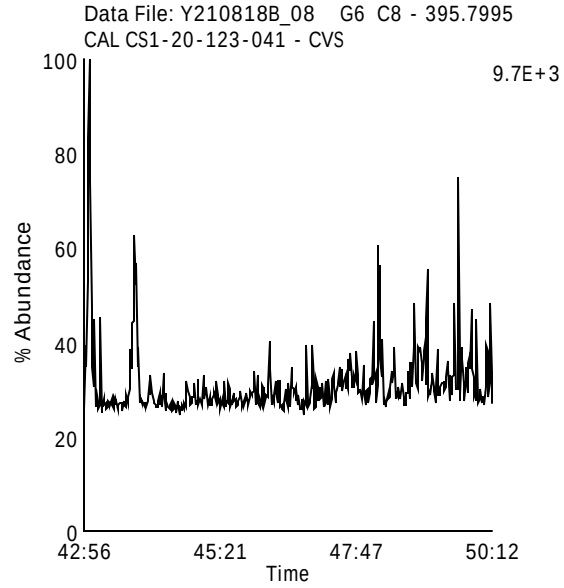
Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

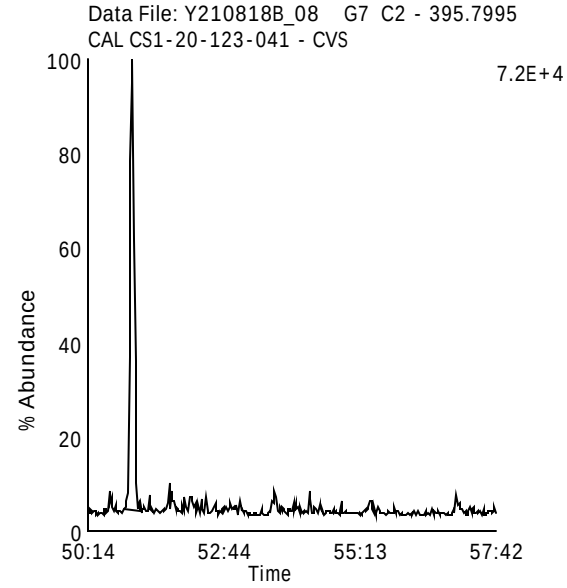






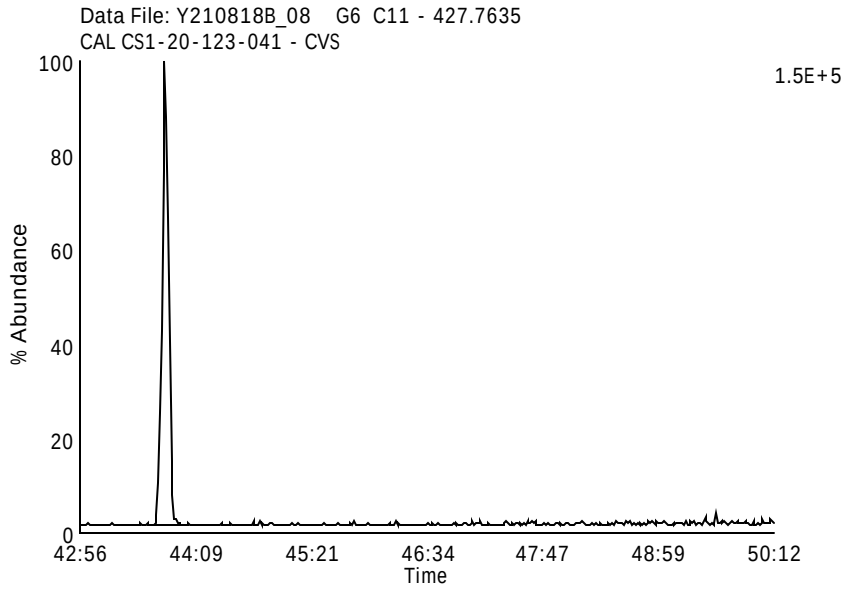


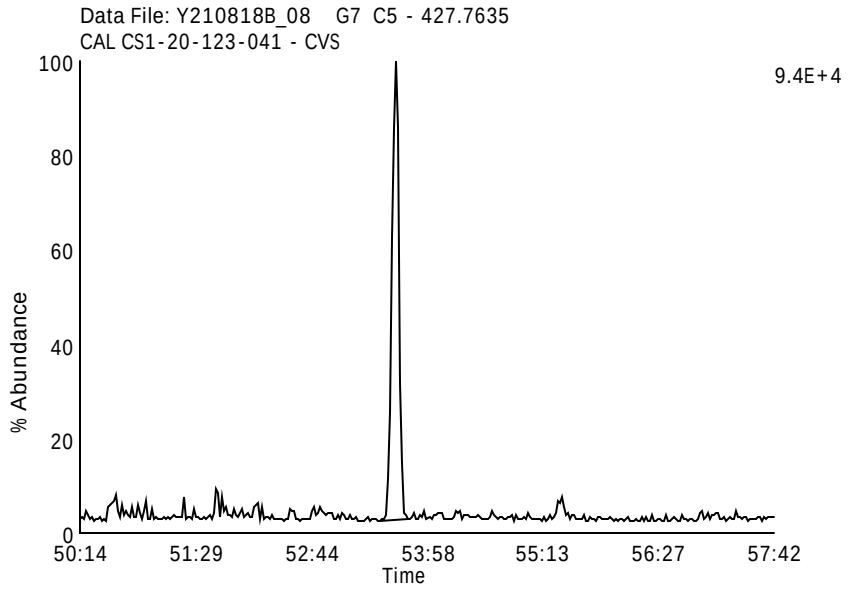


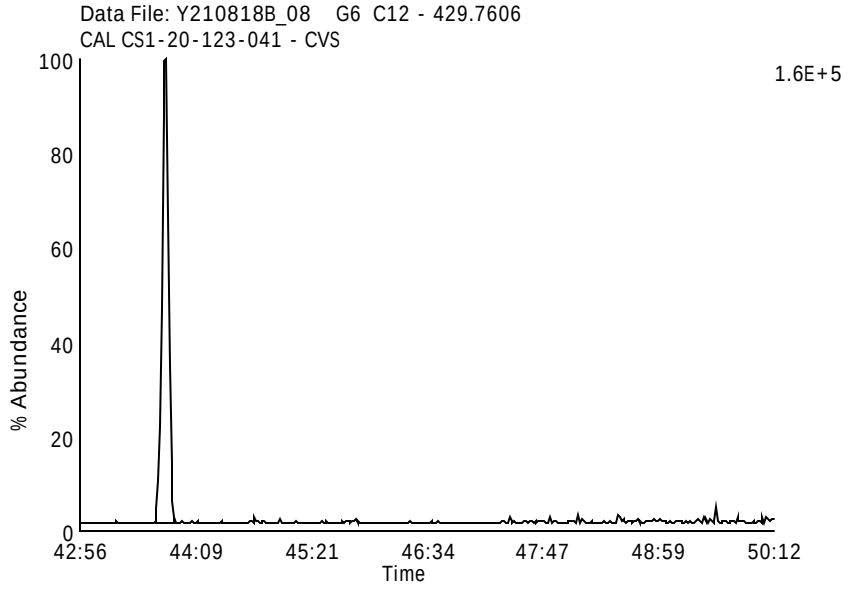


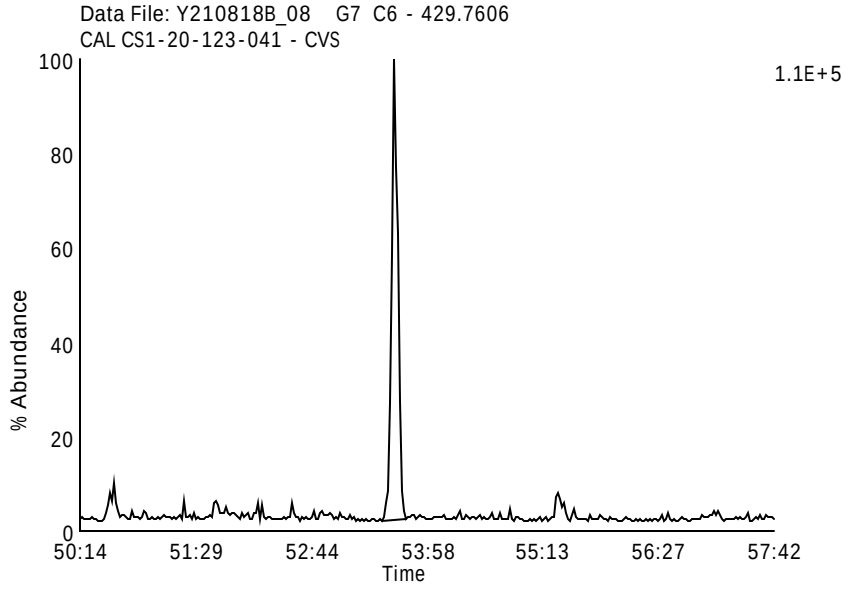
Octa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







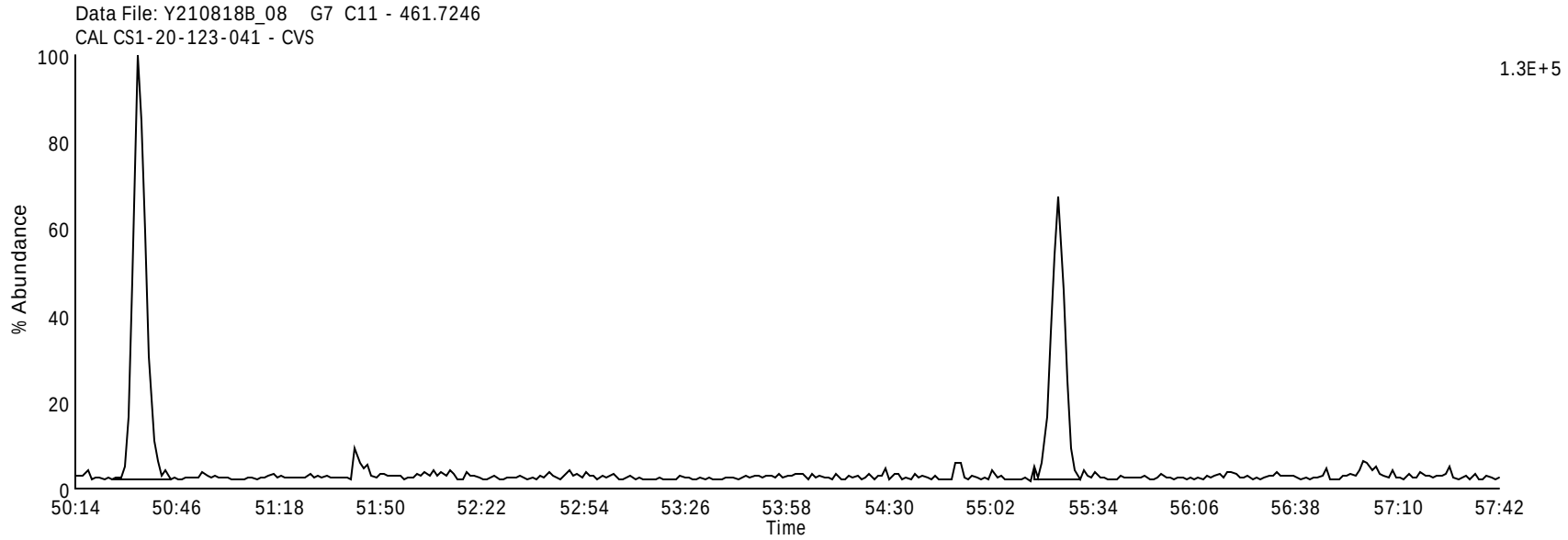


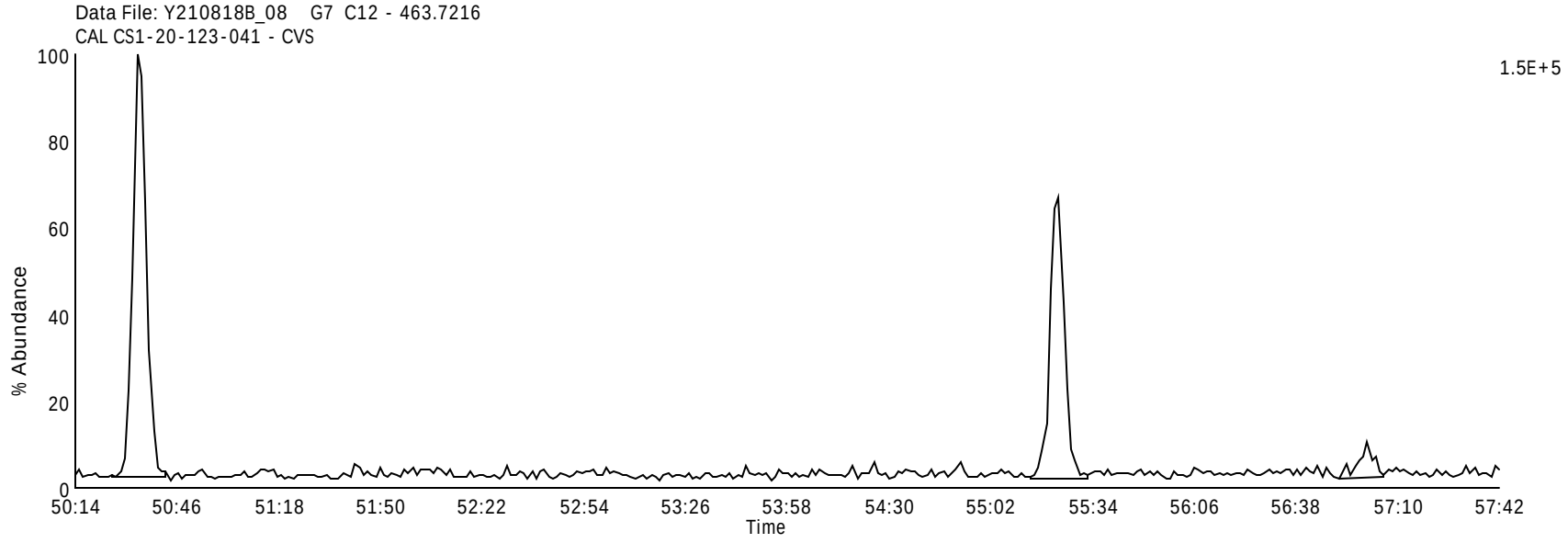
Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



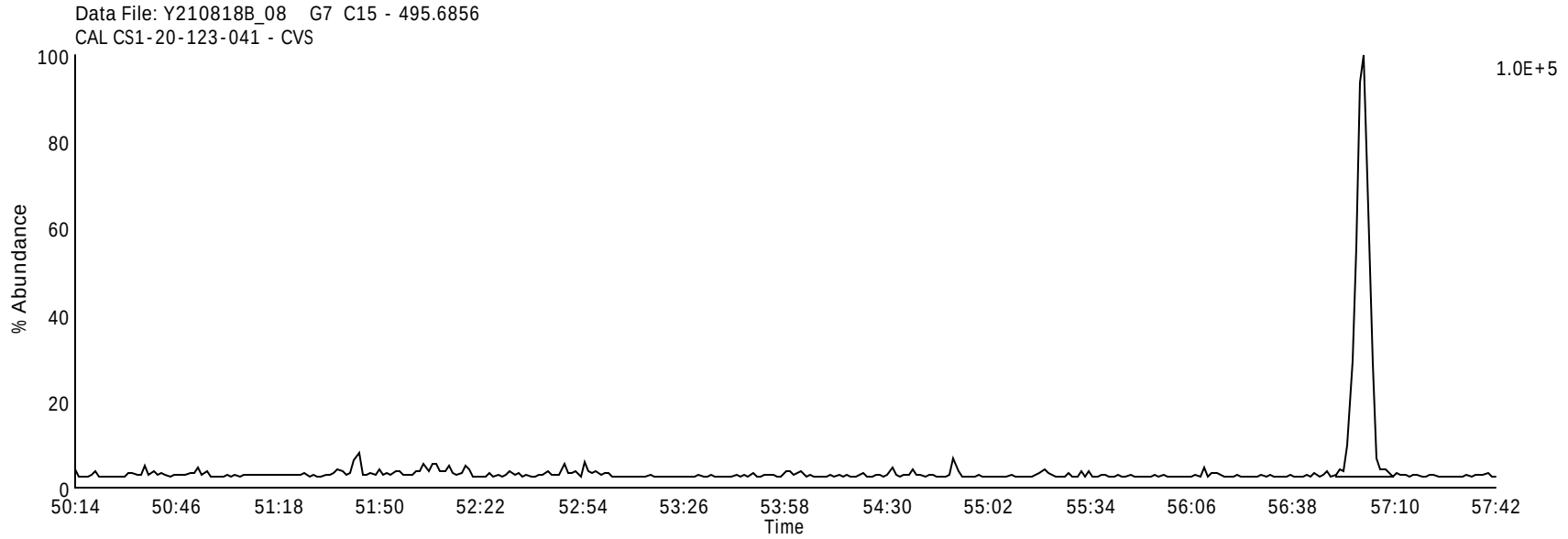


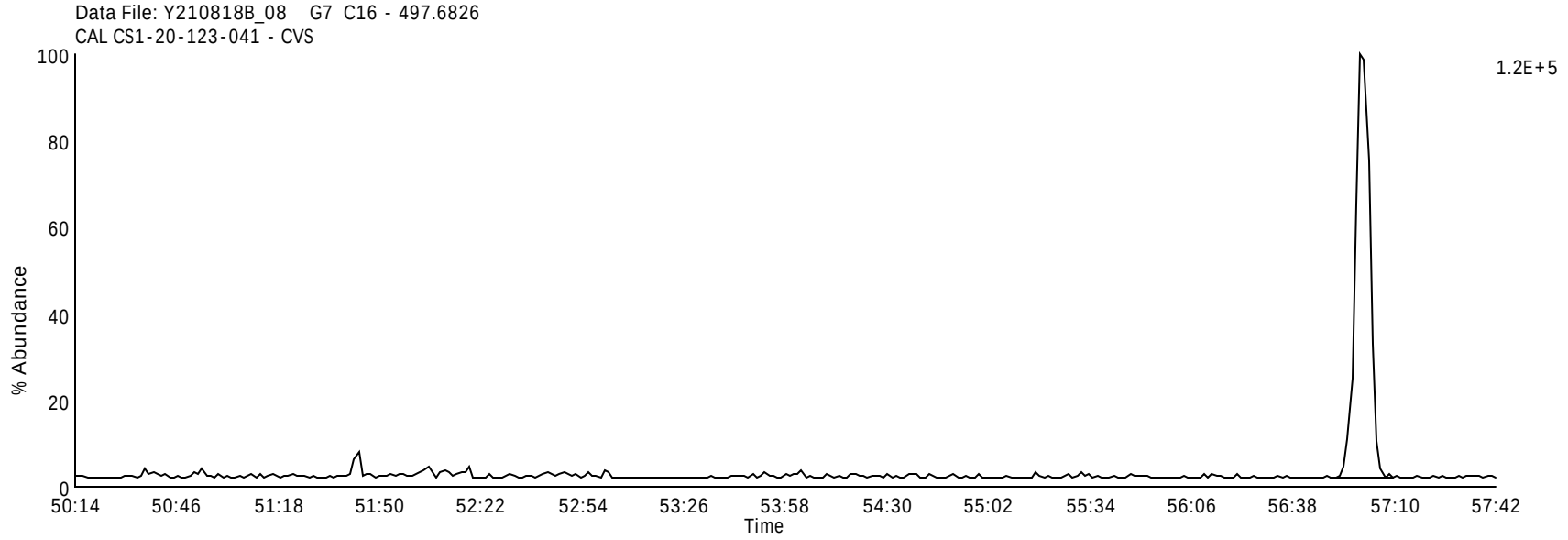
Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

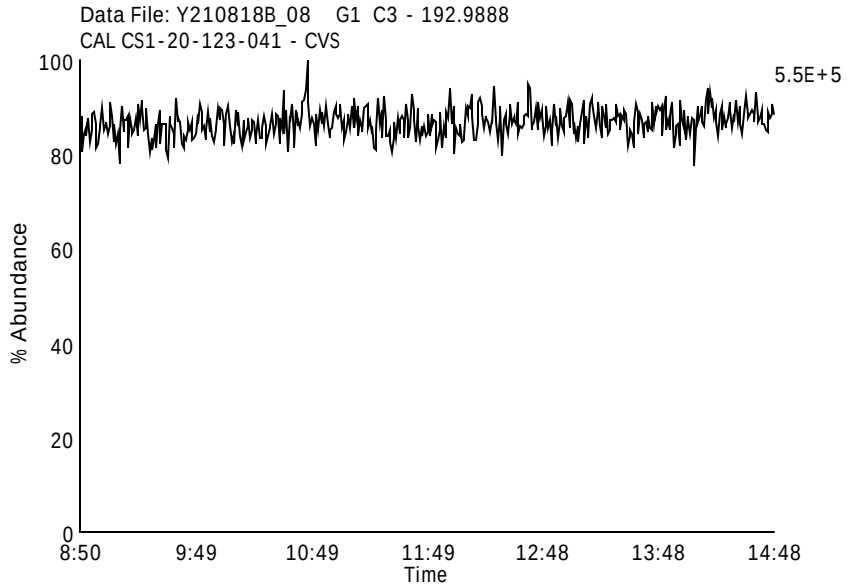
Sample Description: CAL CS1-20-123-041 - CVS

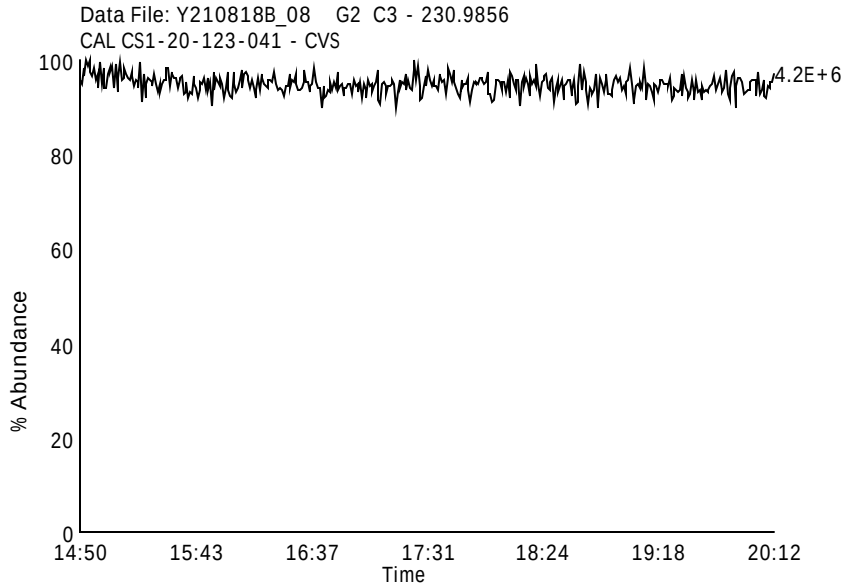


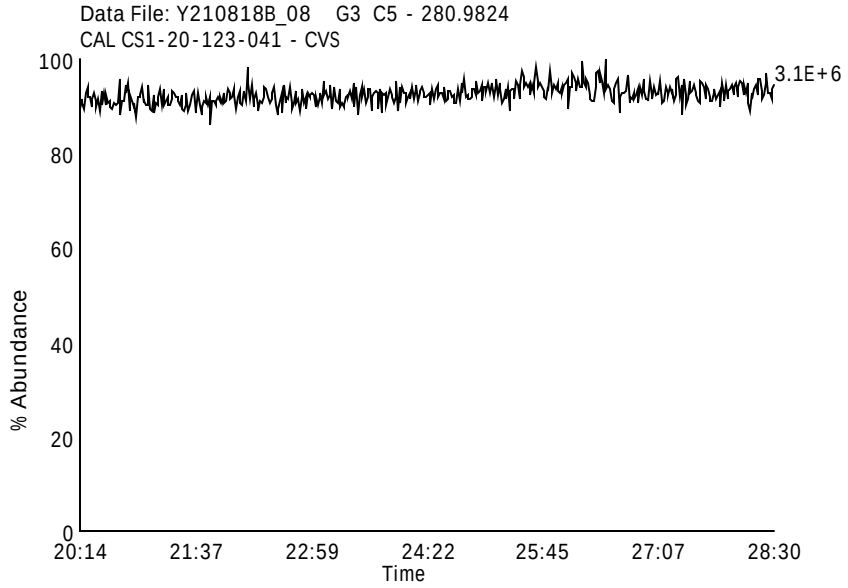


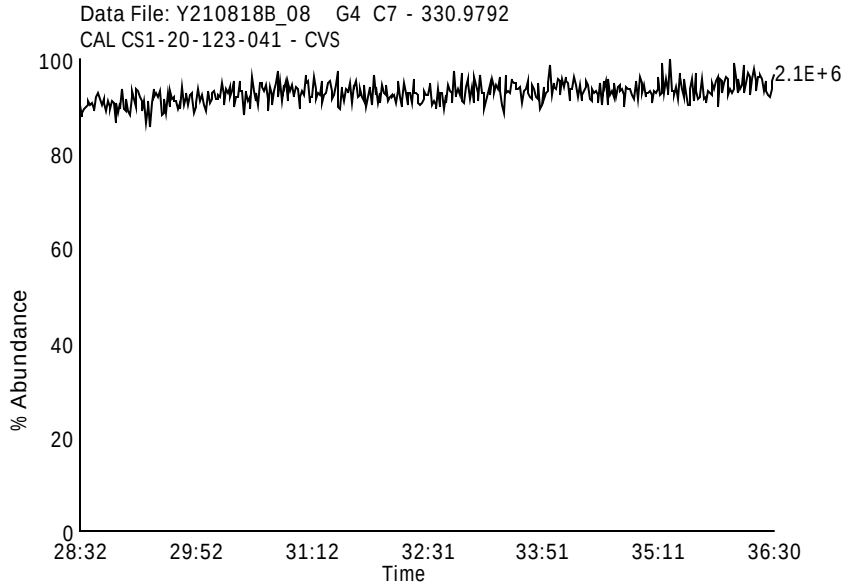
Group 1 - 4 Lock mass

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



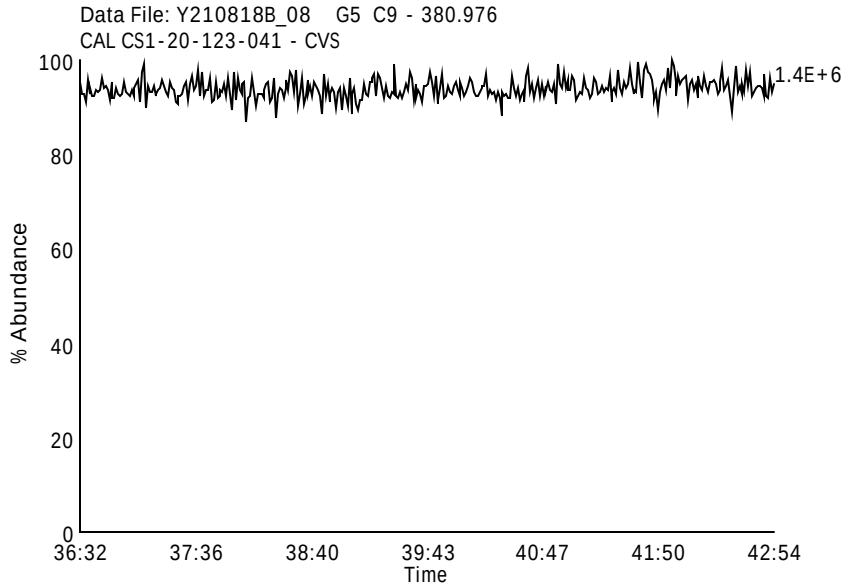


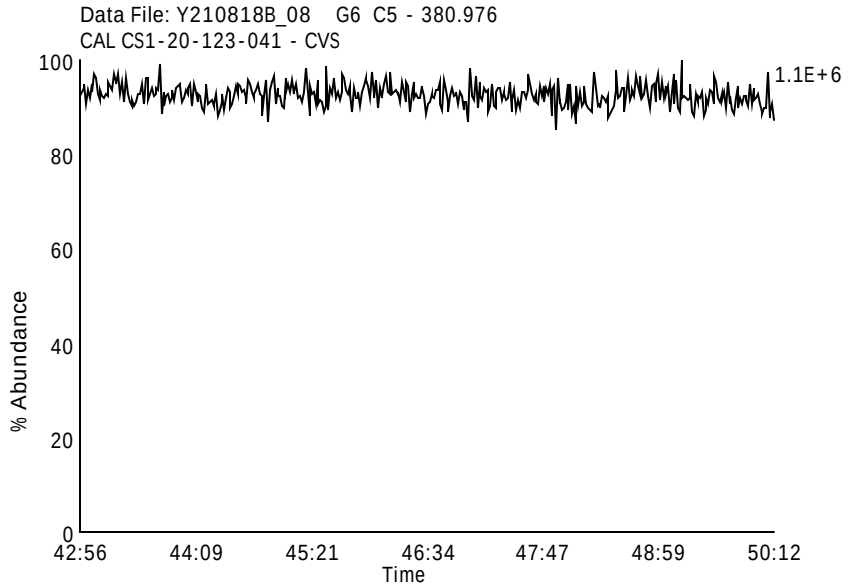


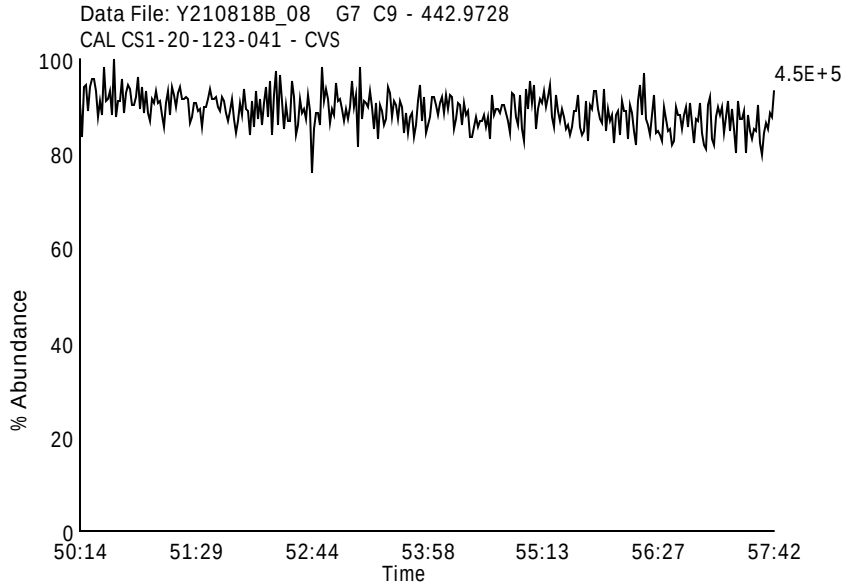


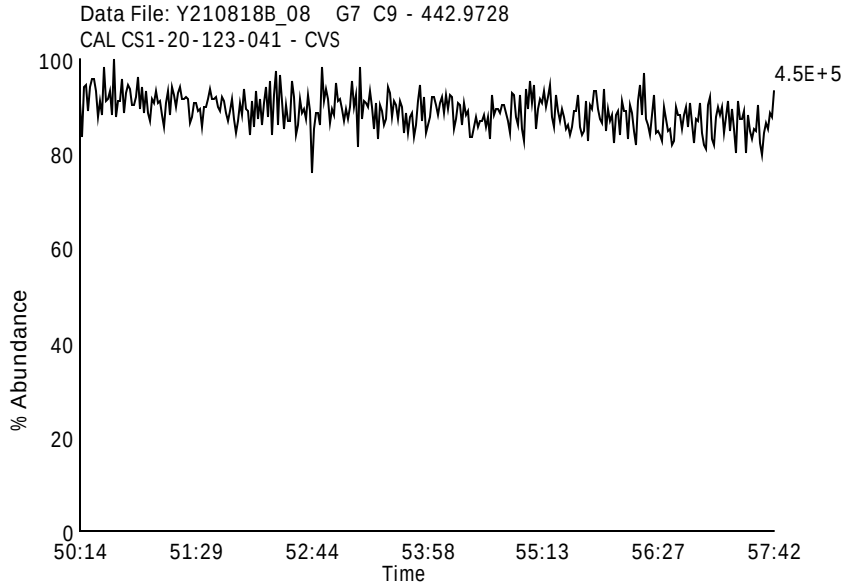
Group 5 - 7 Lock mass

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







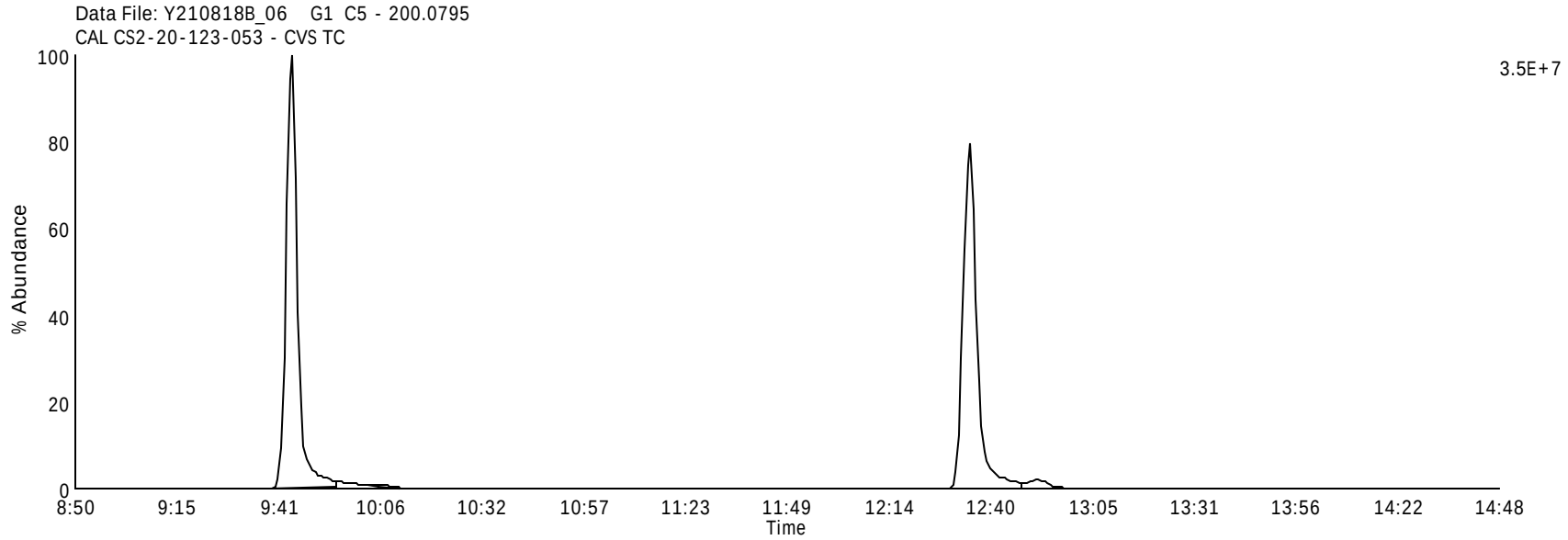


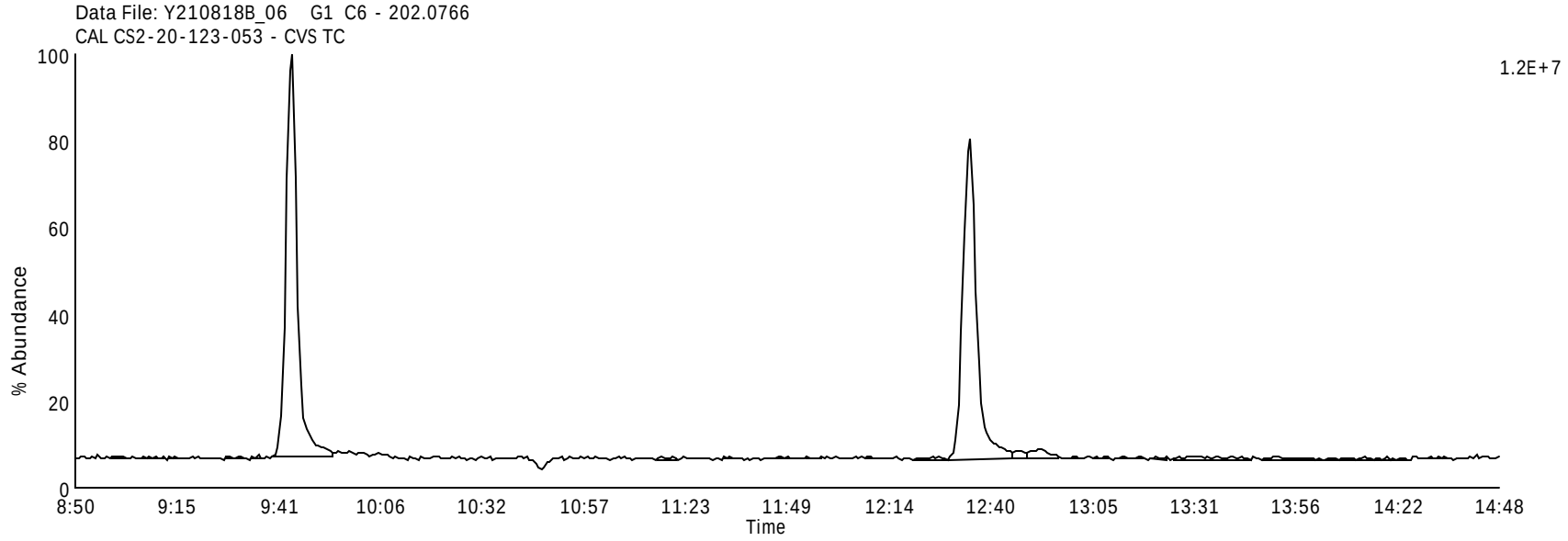
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

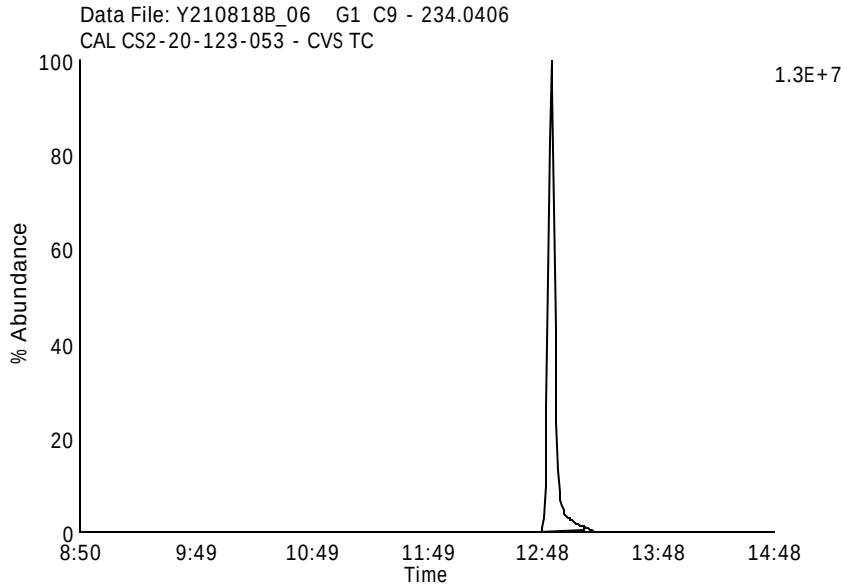
Sample Description: CAL CS2-20-123-053 - CVS TC

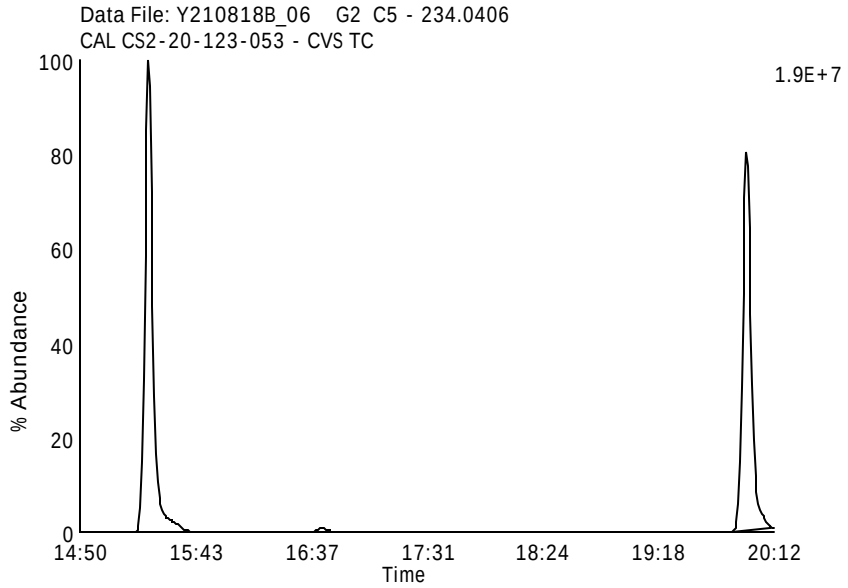


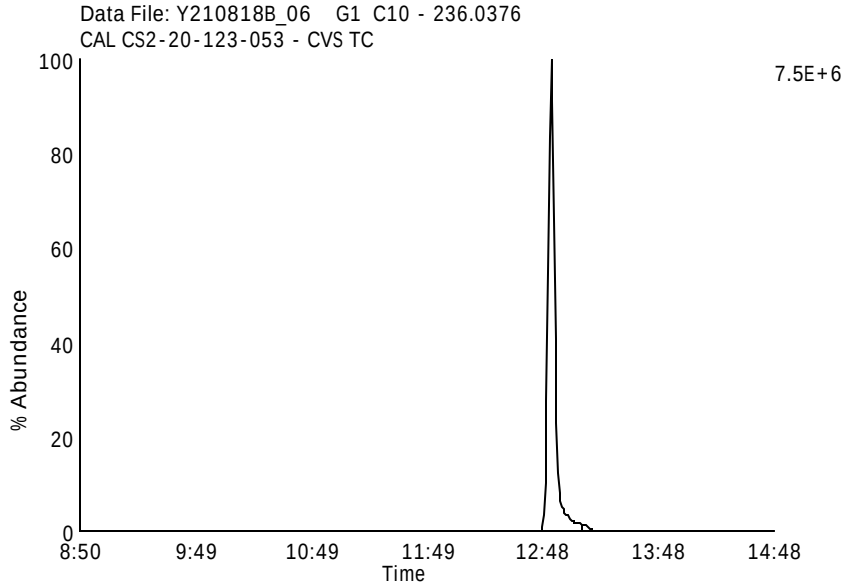


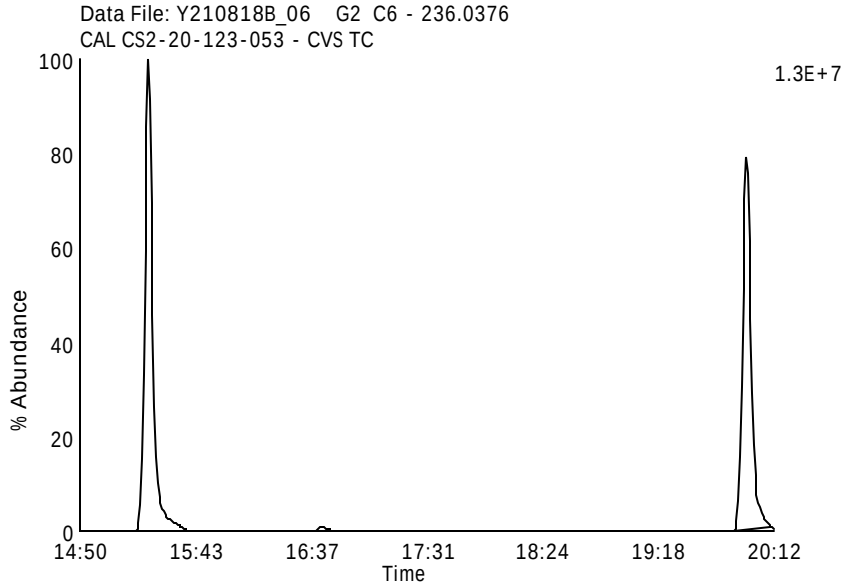
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







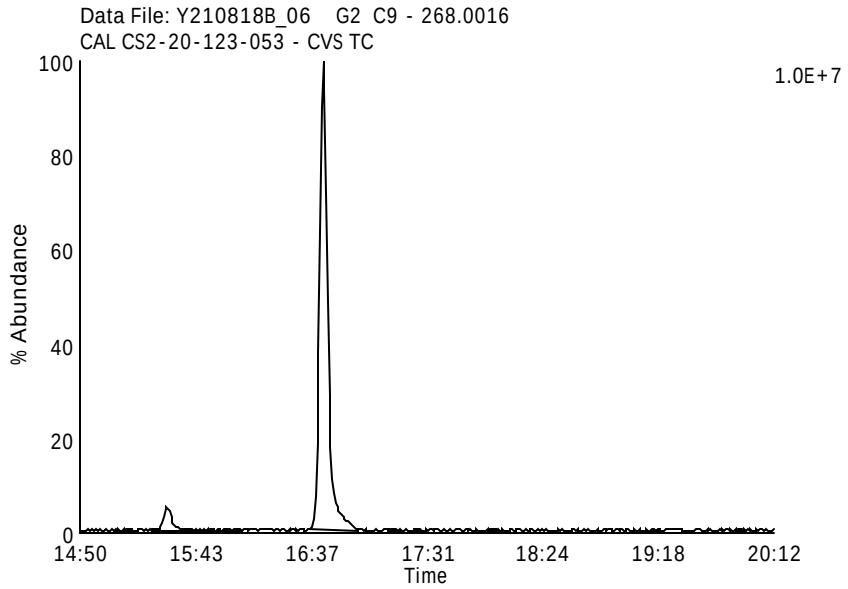


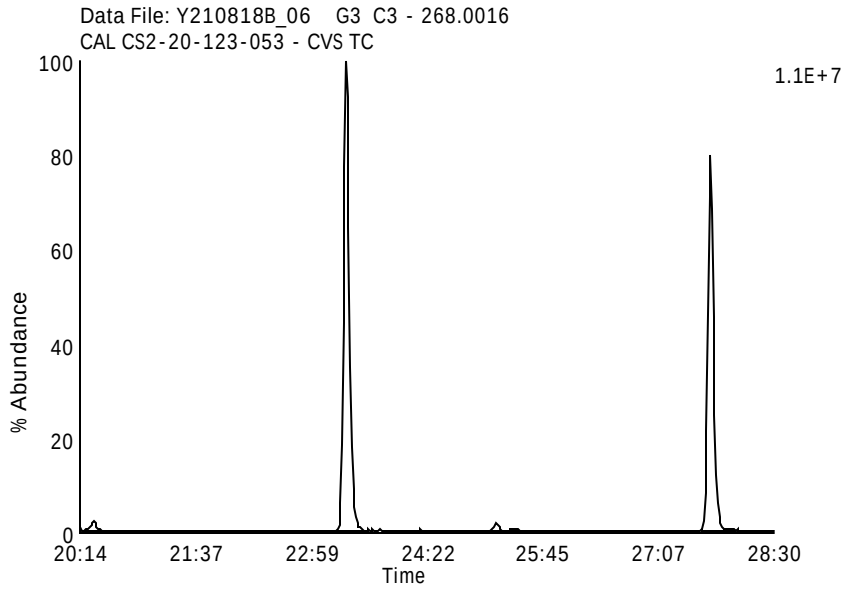
Labeled Tri Chlorinated Biphenyls

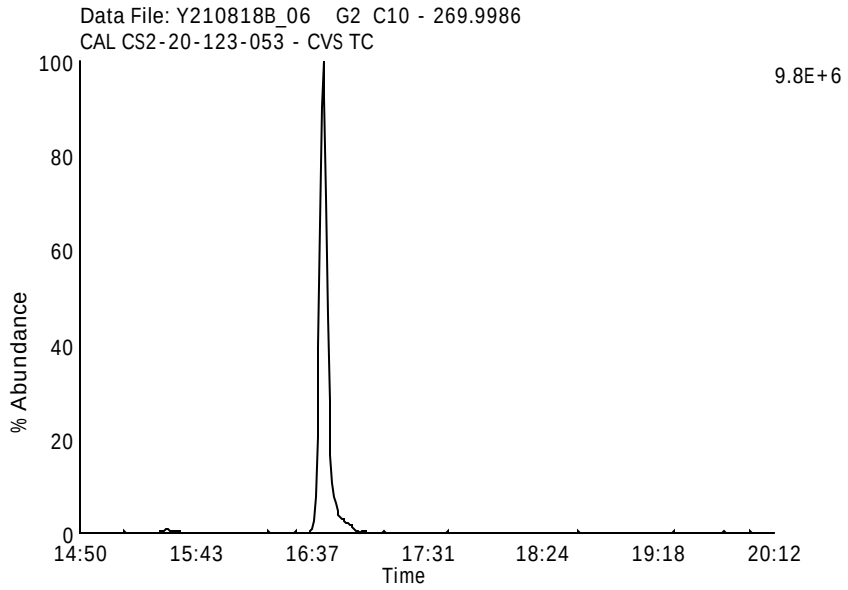
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

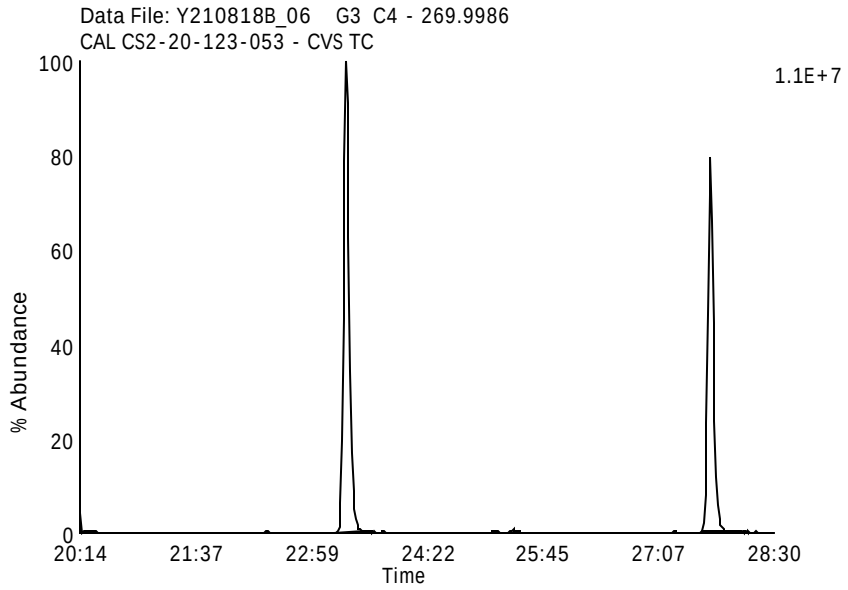
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC







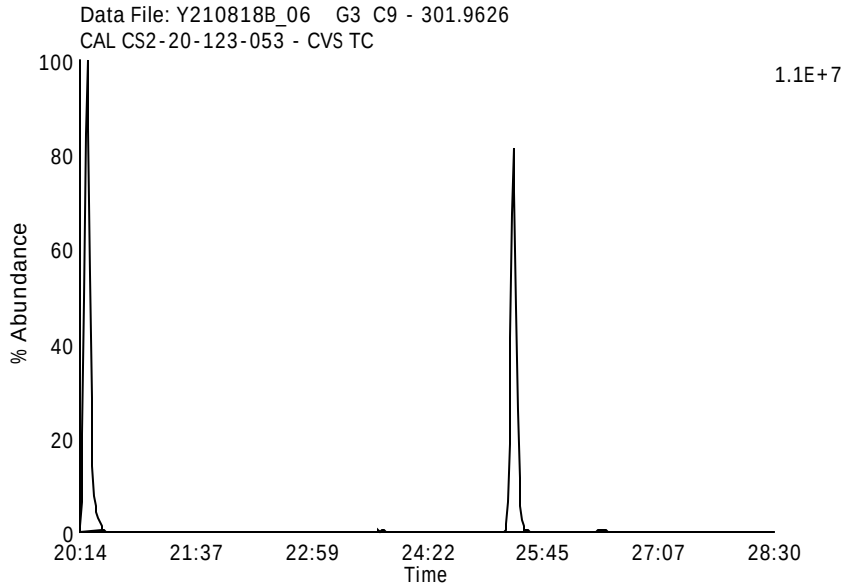


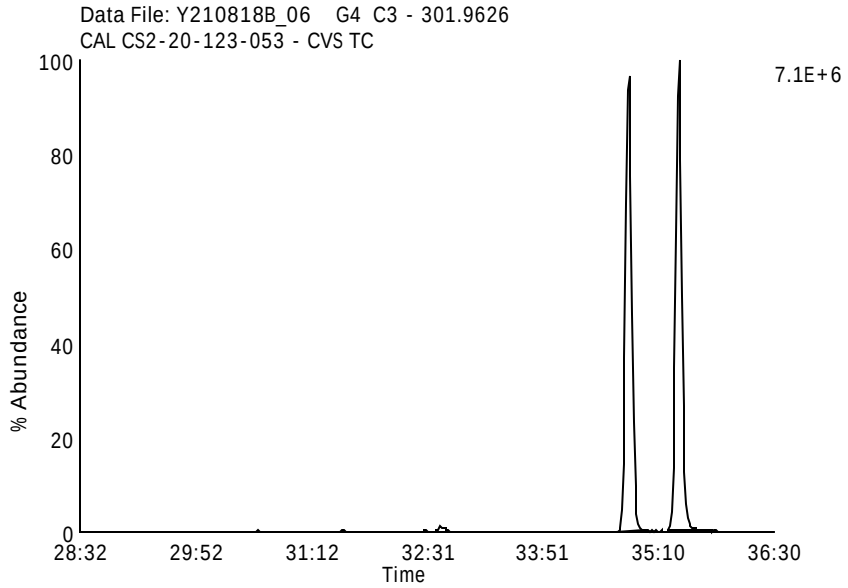
Labeled Tetra Chlorinated Biphenyls

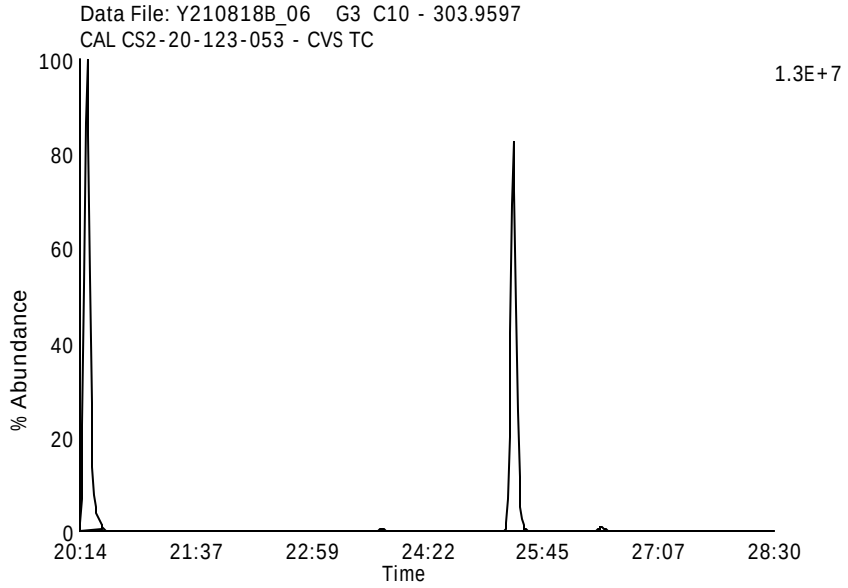
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

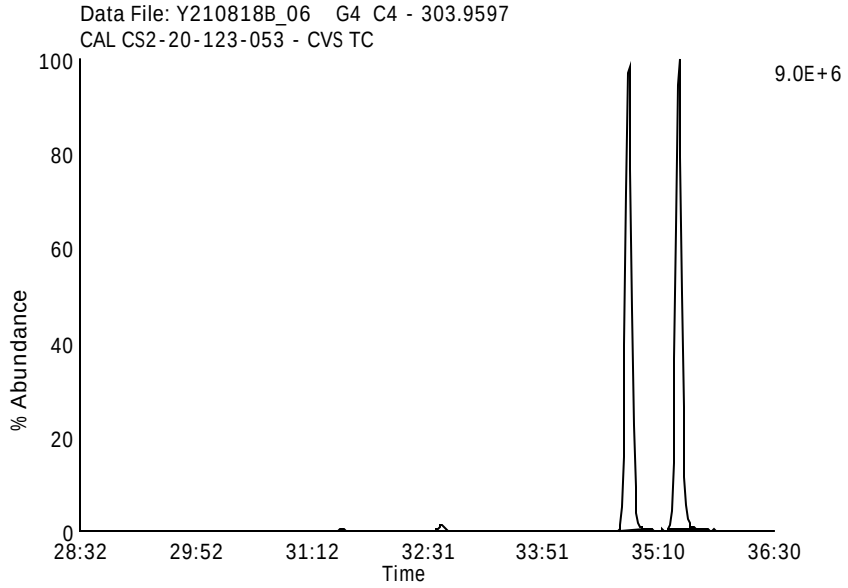
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC









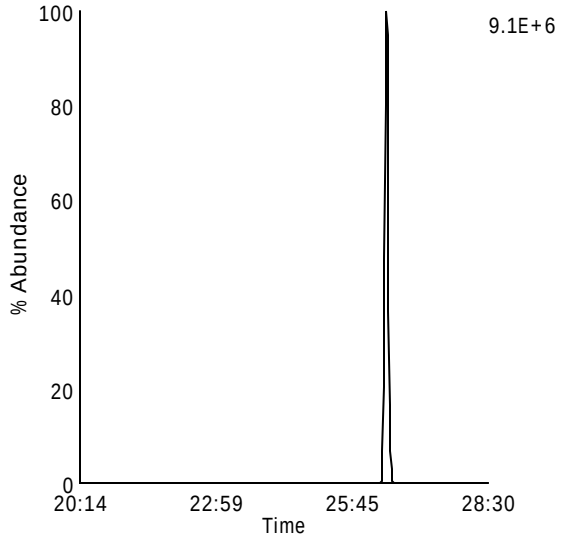
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

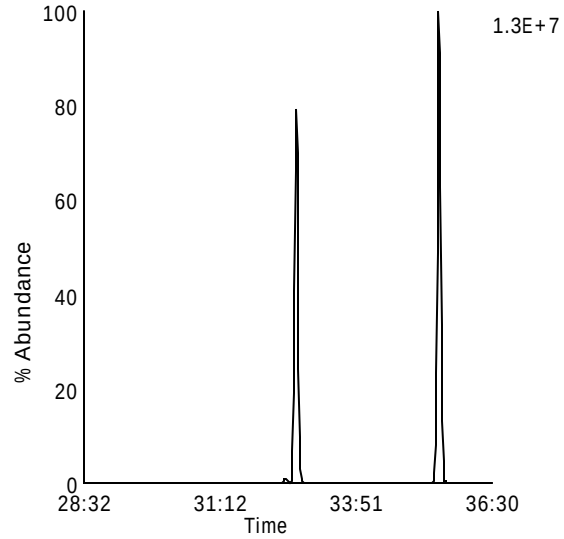
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

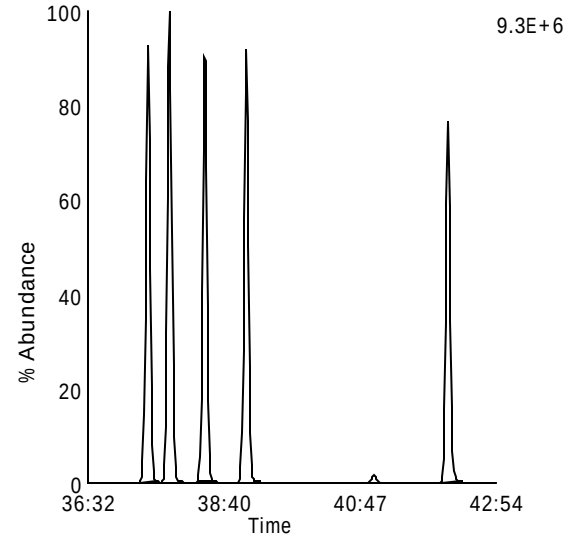
Data File: Y210818B_06 G3 C13 - 337.9207
CAL CS2-20-123-053 - CVS TC



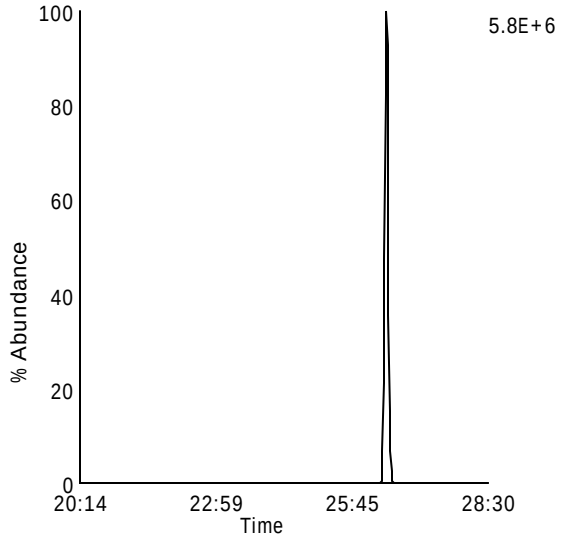
Data File: Y210818B_06 G4 C9 - 337.9207
CAL CS2-20-123-053 - CVS TC



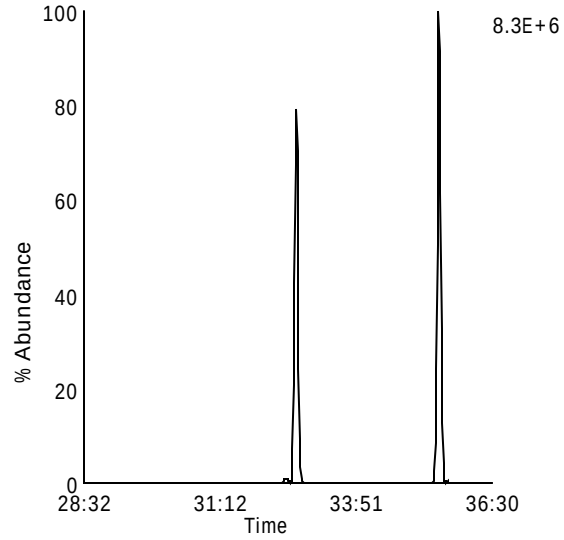
Data File: Y210818B_06 G5 C3 - 337.9207
CAL CS2-20-123-053 - CVS TC



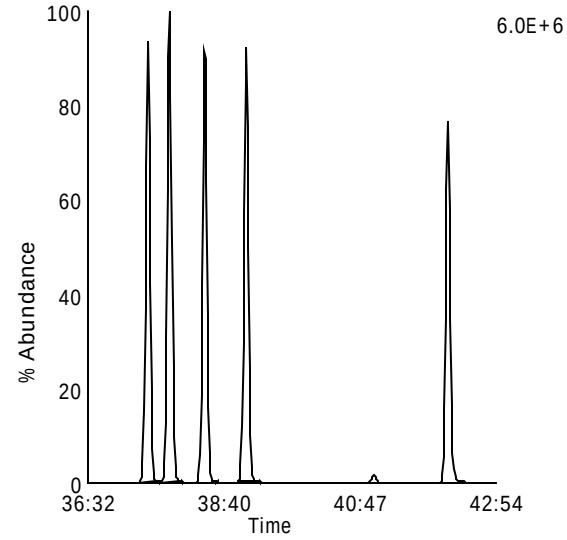
Data File: Y210818B_06 G3 C14 - 339.9178
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C10 - 339.9178
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C4 - 339.9178
CAL CS2-20-123-053 - CVS TC

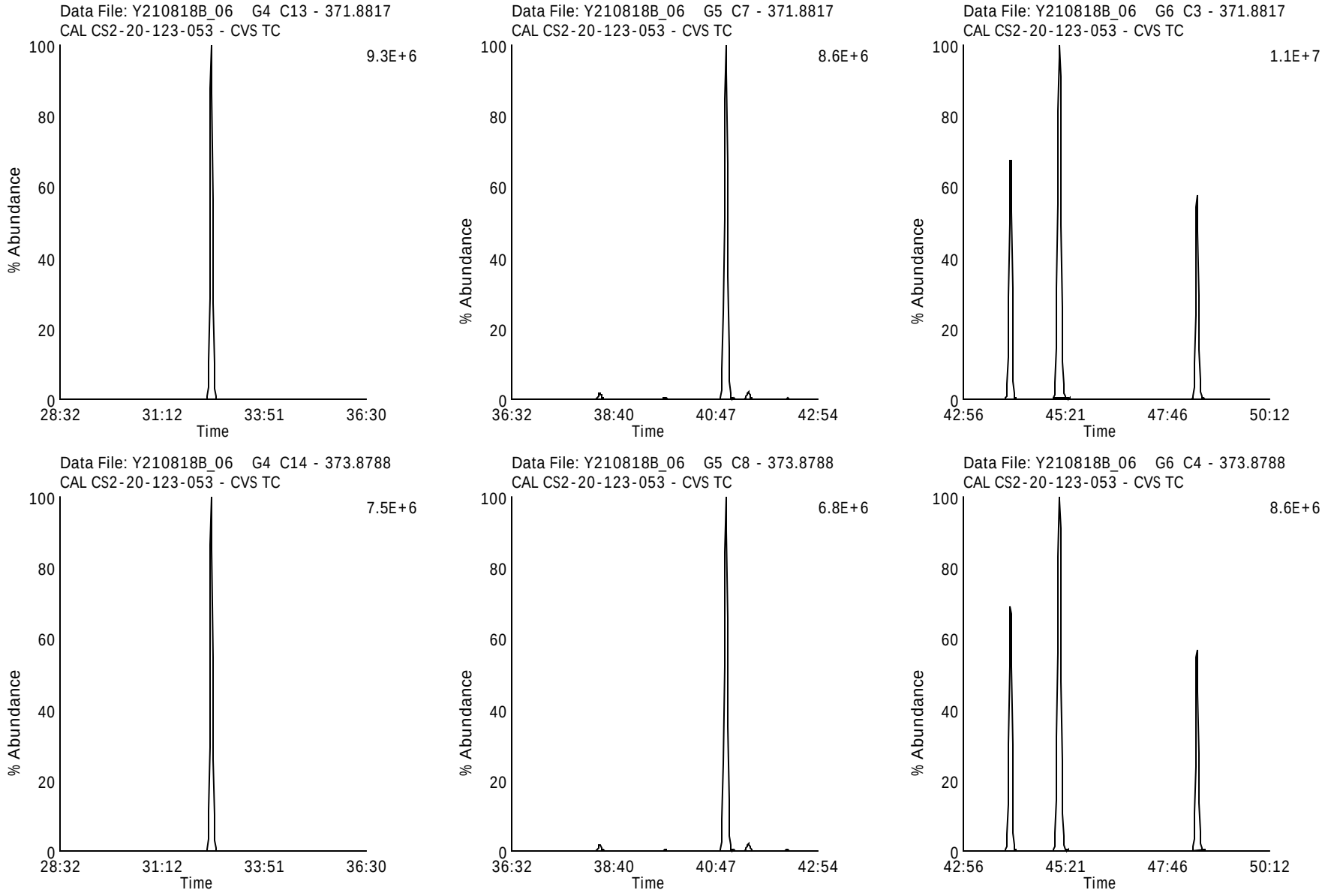


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

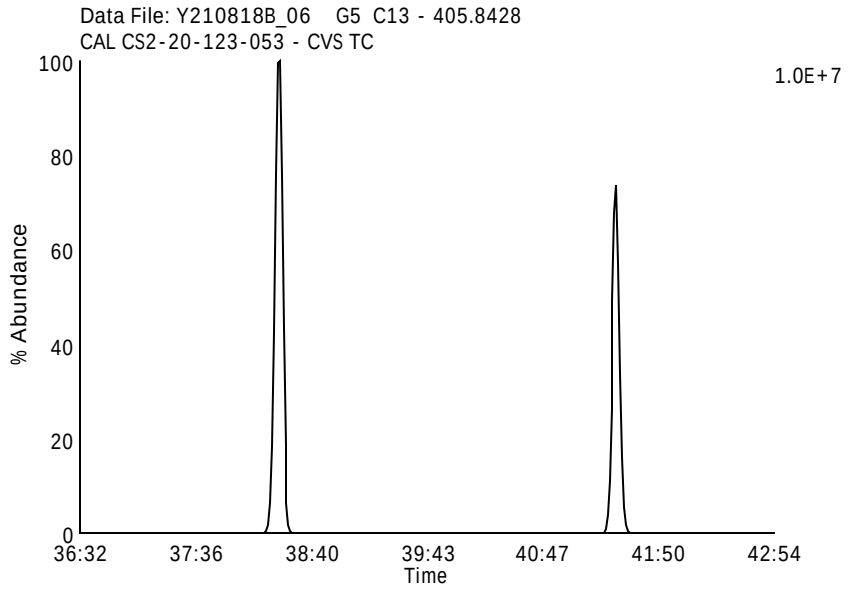
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

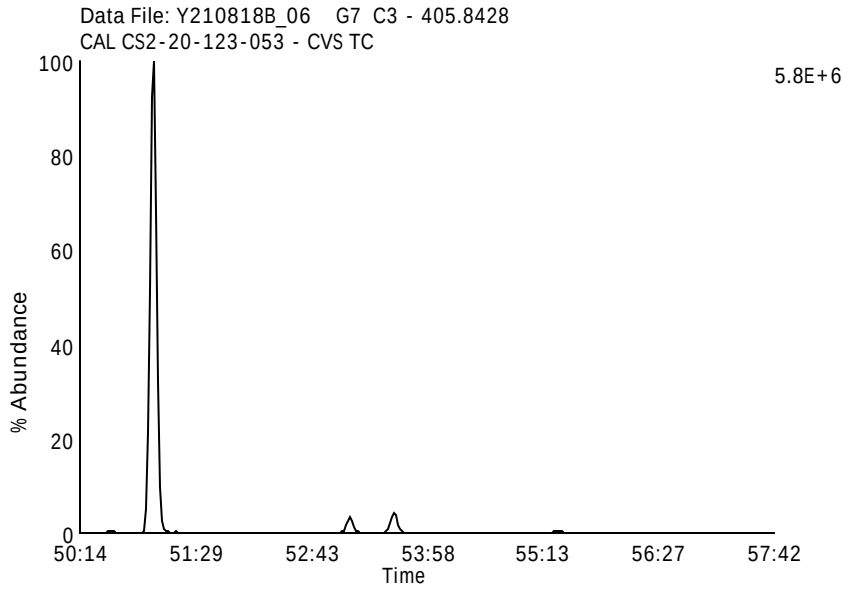
Sample Description: CAL CS2-20-123-053 - CVS TC

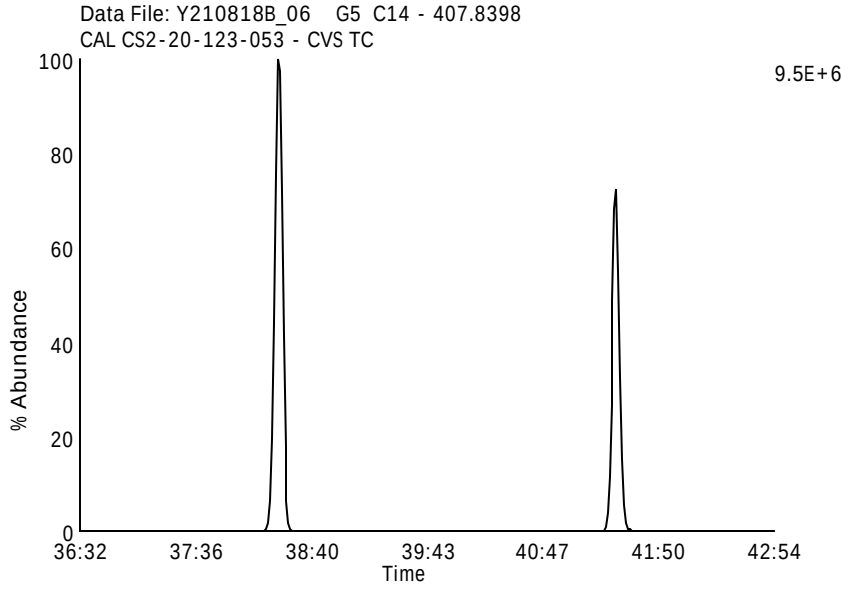


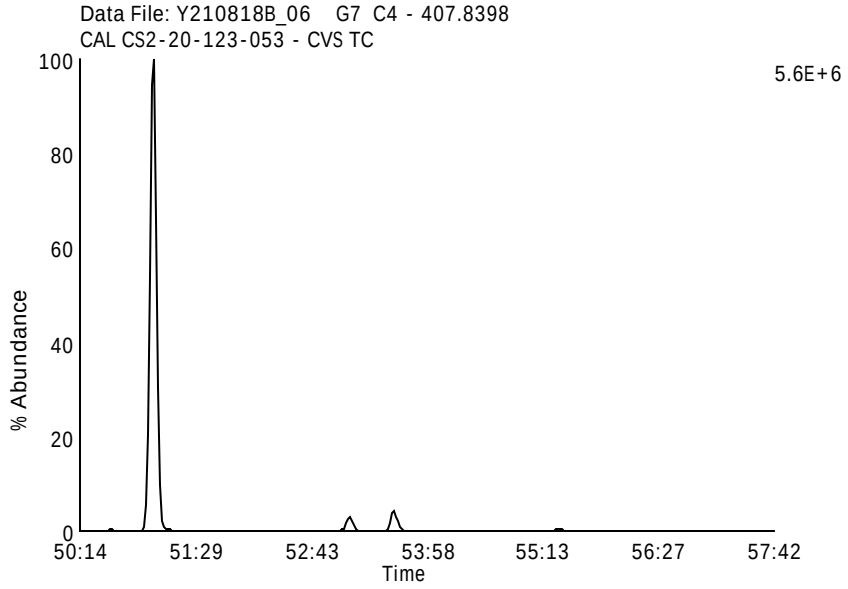
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC









Labeled Octa Chlorinated Biphenyls

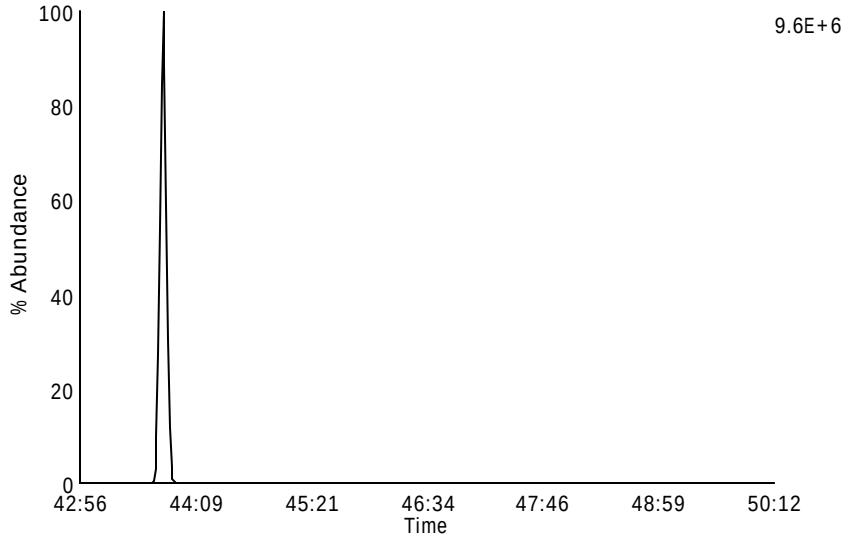
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

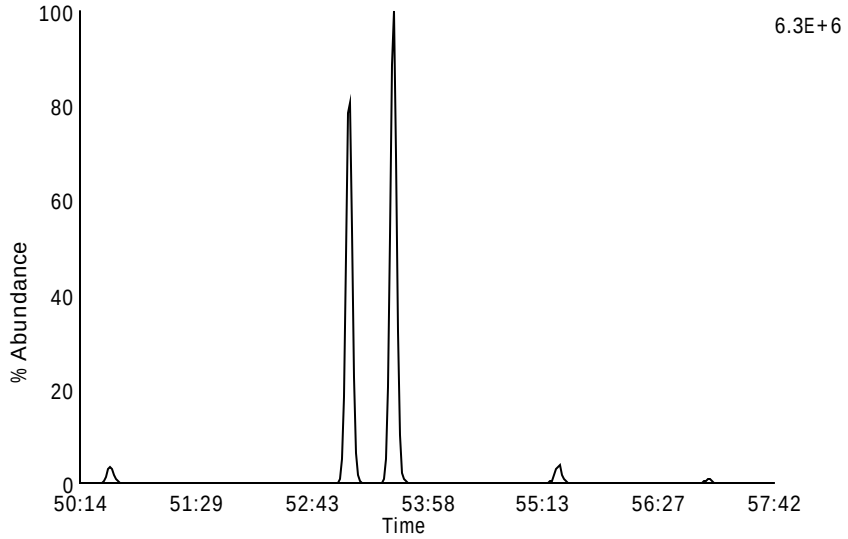
Data File: Y210818B_06 G6 C13 - 439.8038

CAL CS2-20-123-053 - CVS TC



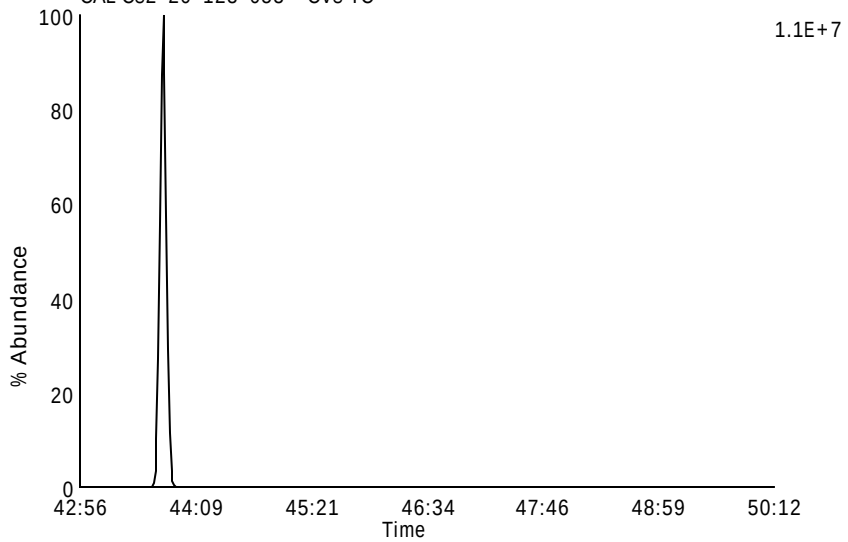
Data File: Y210818B_06 G7 C7 - 439.8038

CAL CS2-20-123-053 - CVS TC



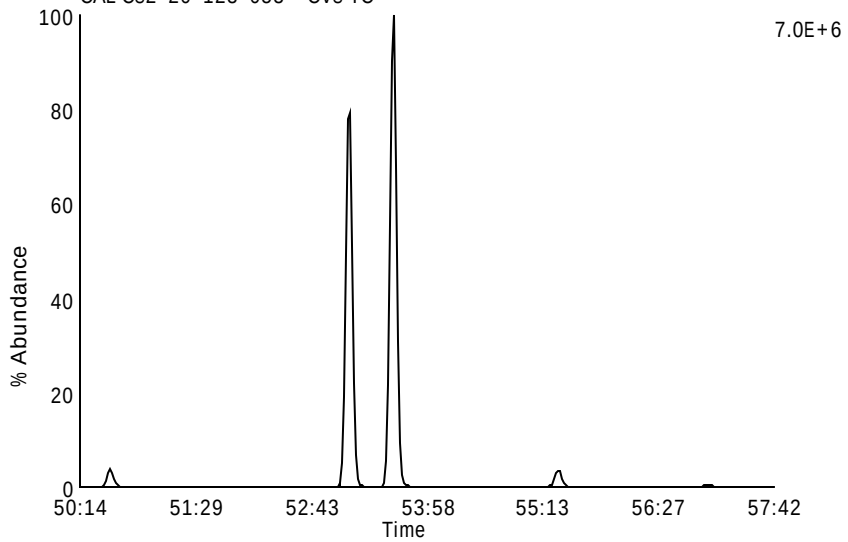
Data File: Y210818B_06 G6 C14 - 441.8008

CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G7 C8 - 441.8008

CAL CS2-20-123-053 - CVS TC

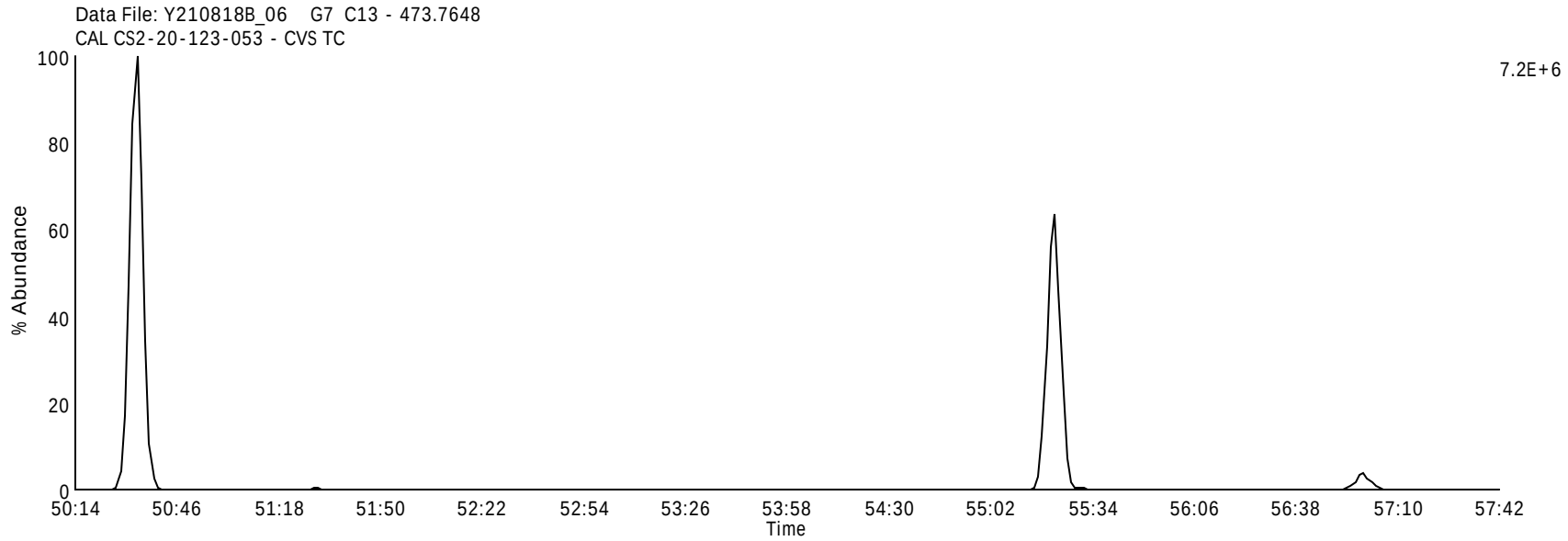


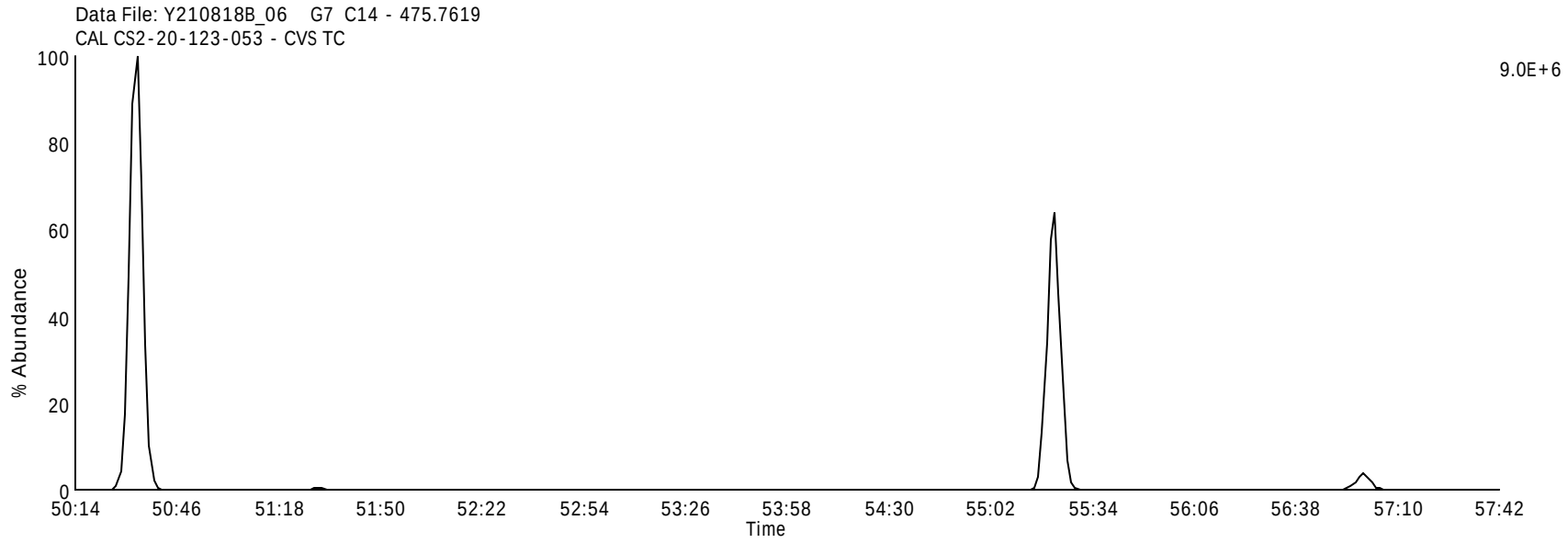
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



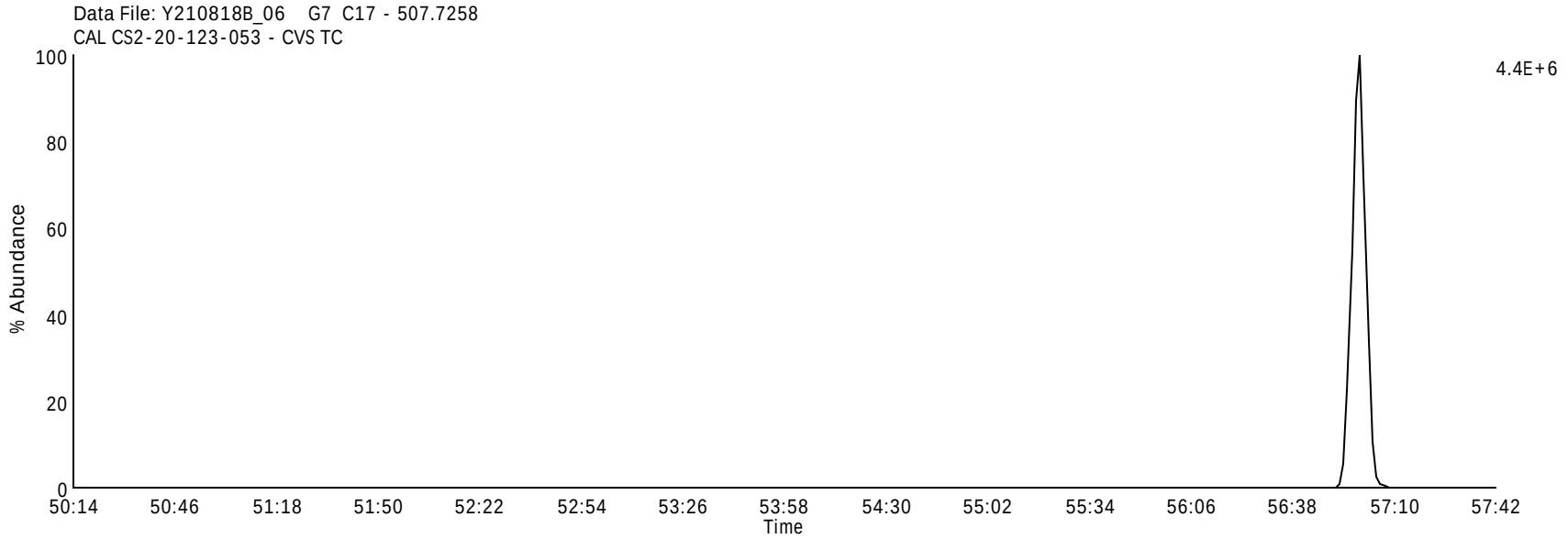


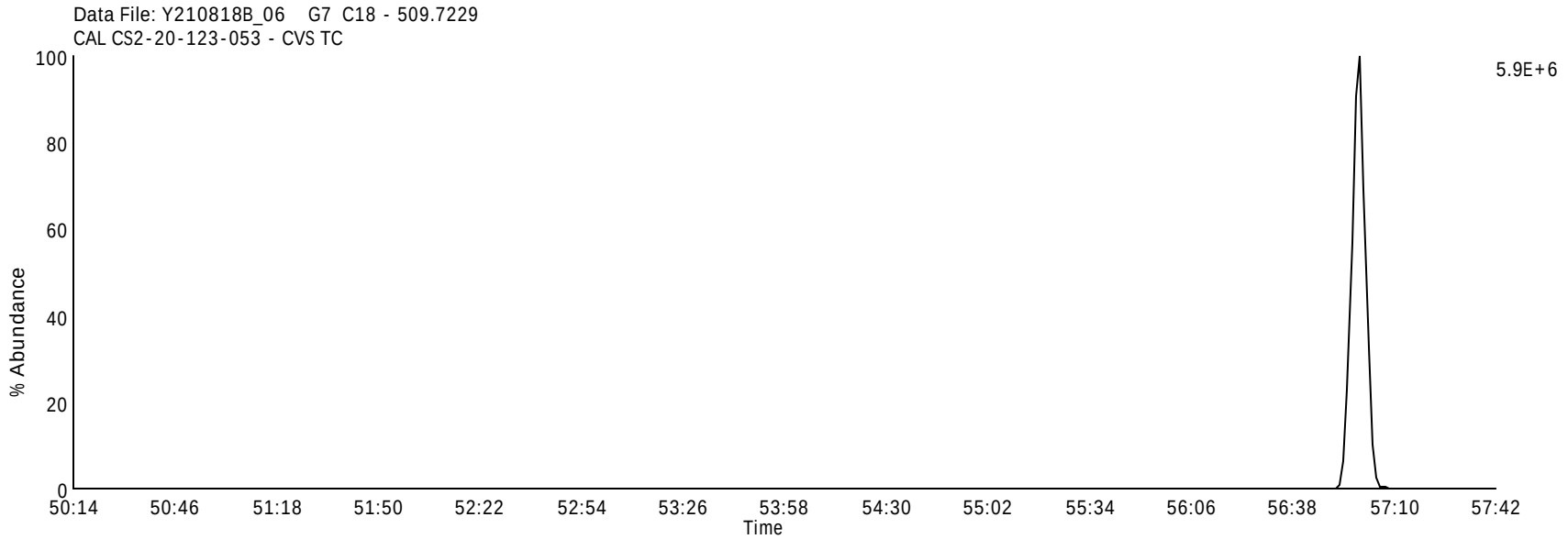
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



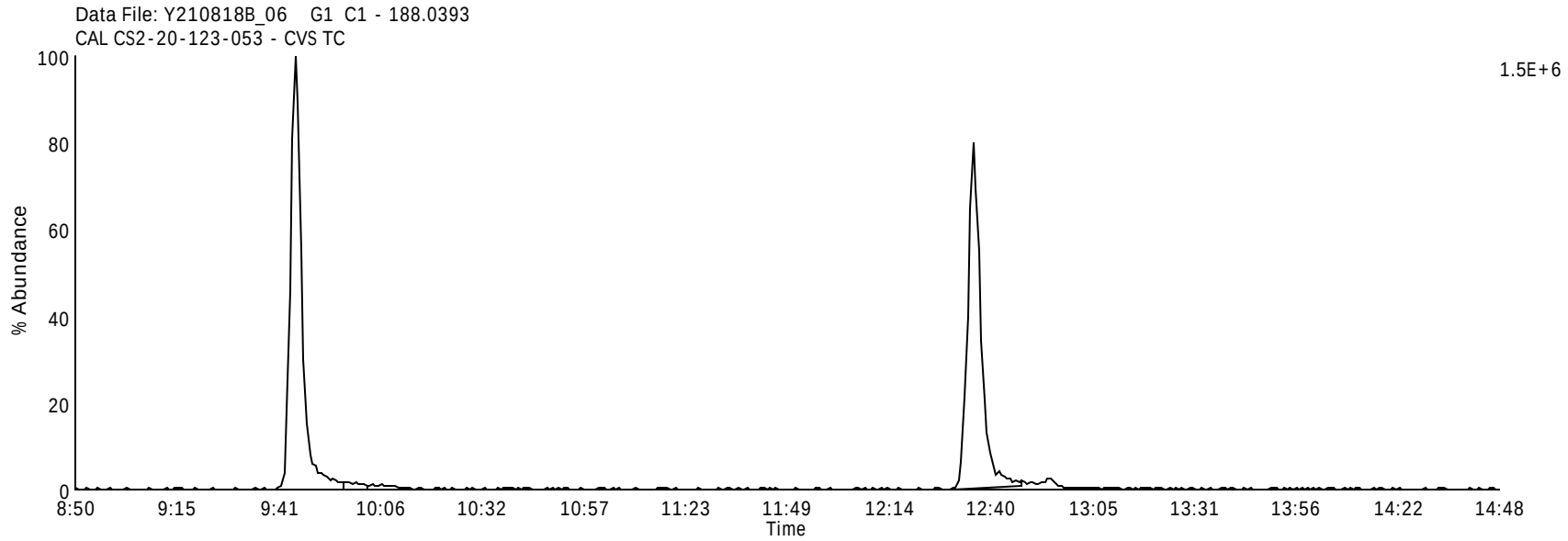


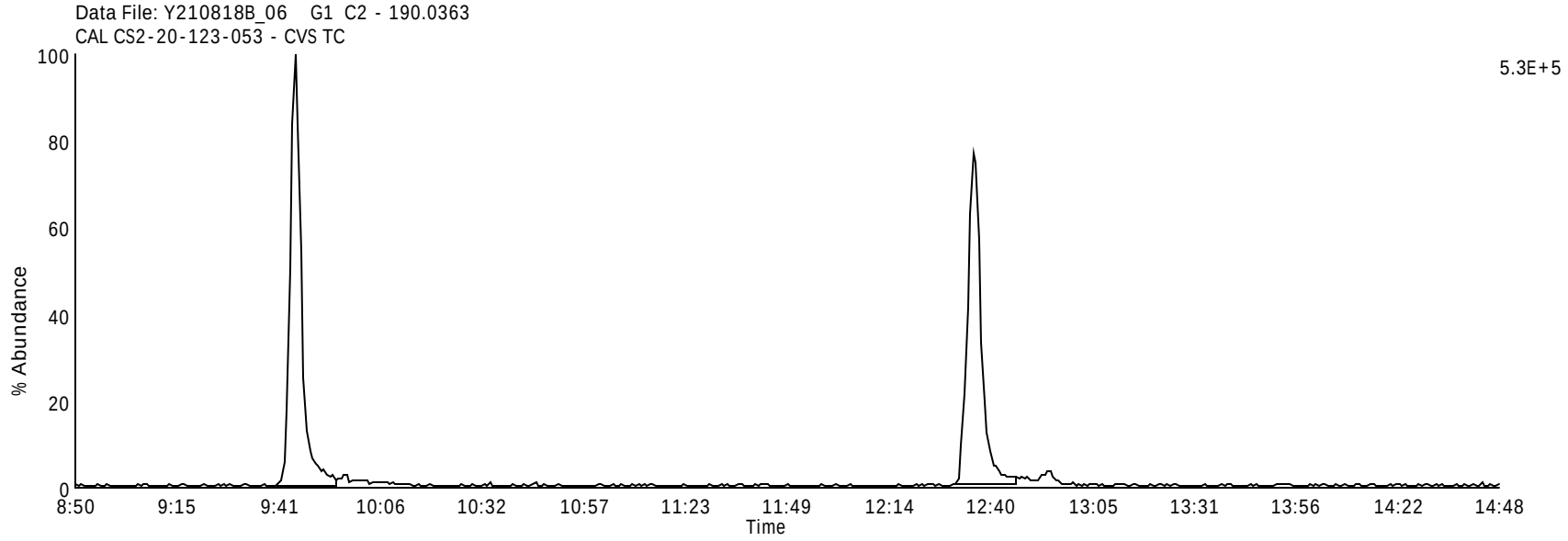
Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

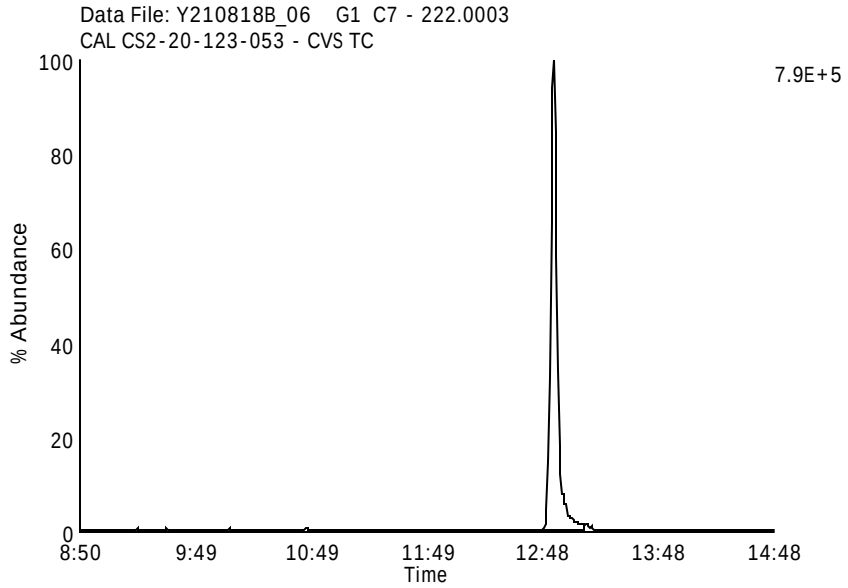
Sample Description: CAL CS2-20-123-053 - CVS TC

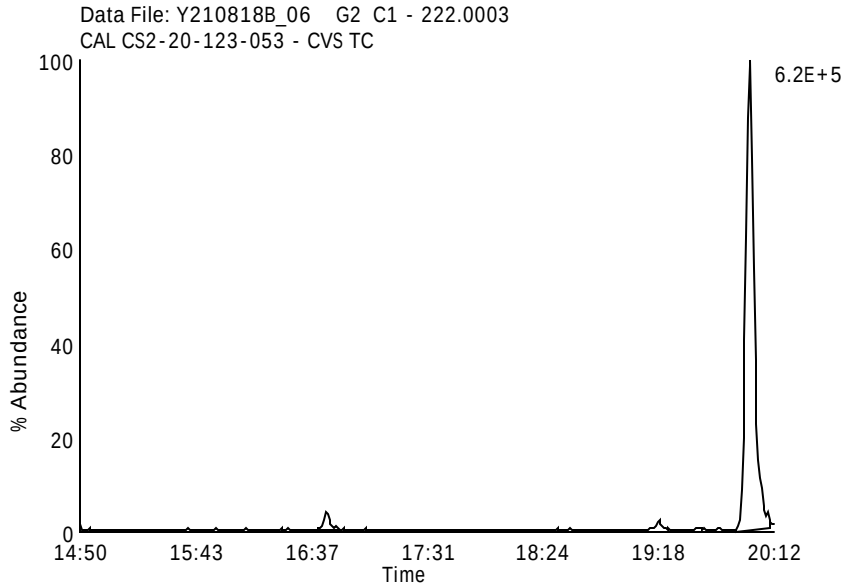


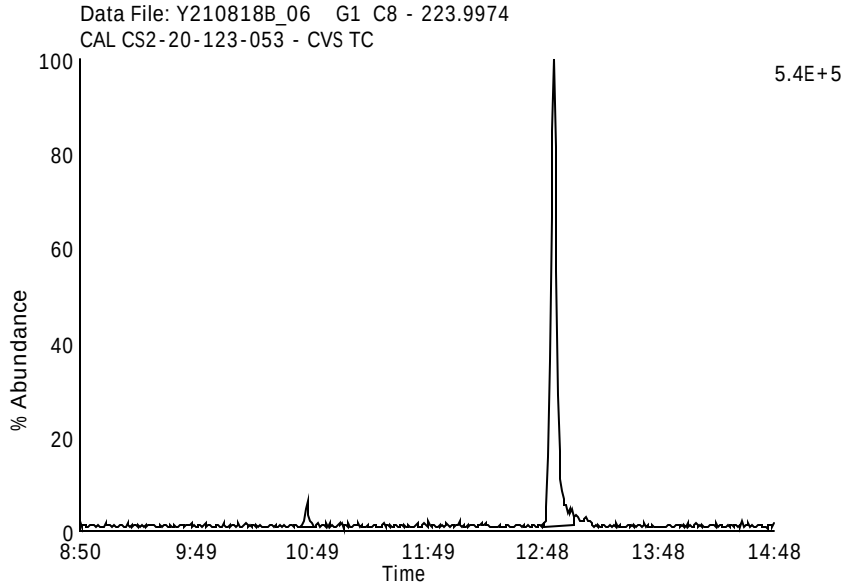


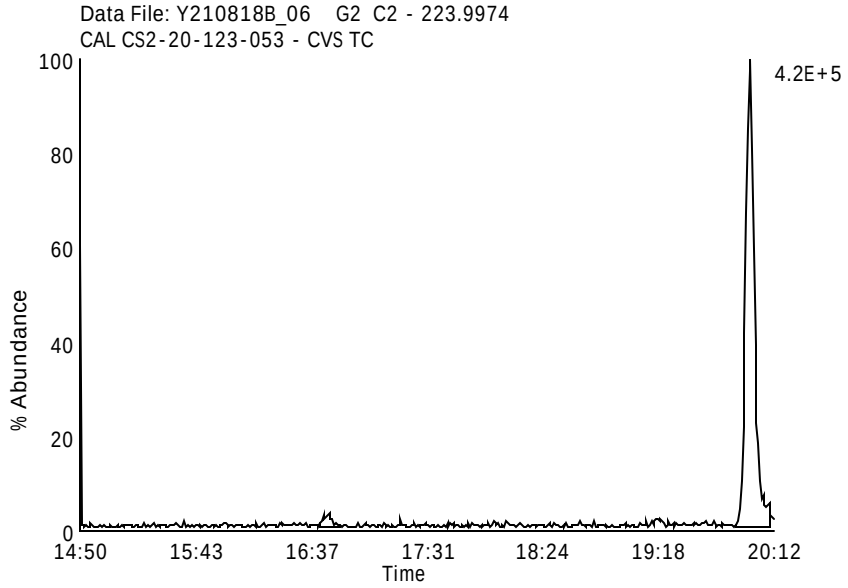
Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



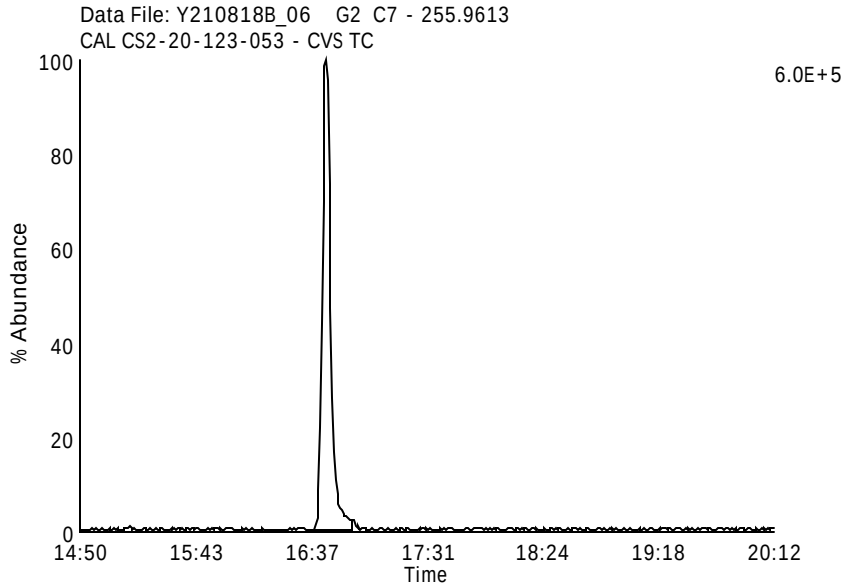


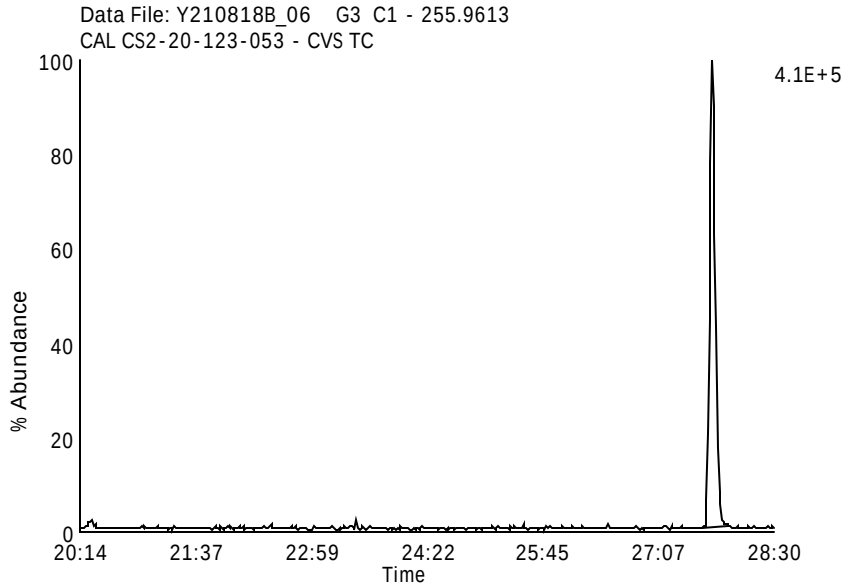


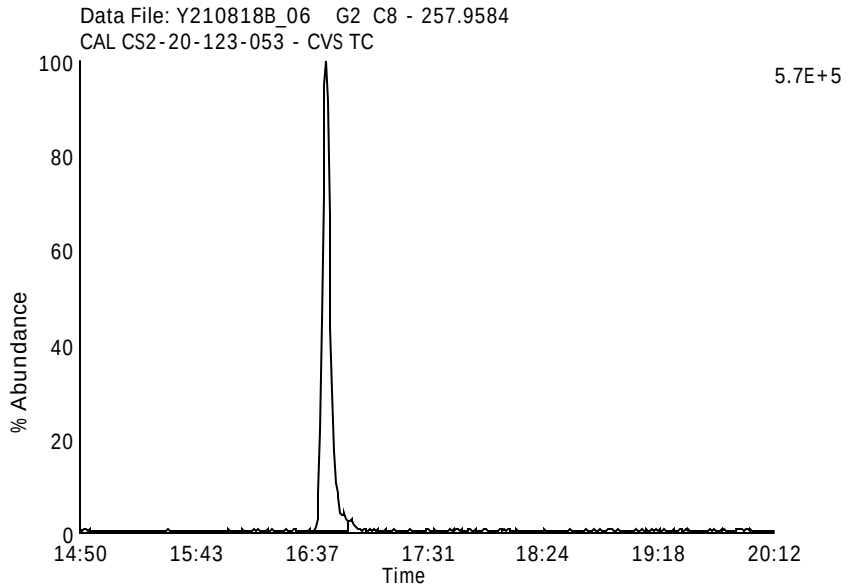


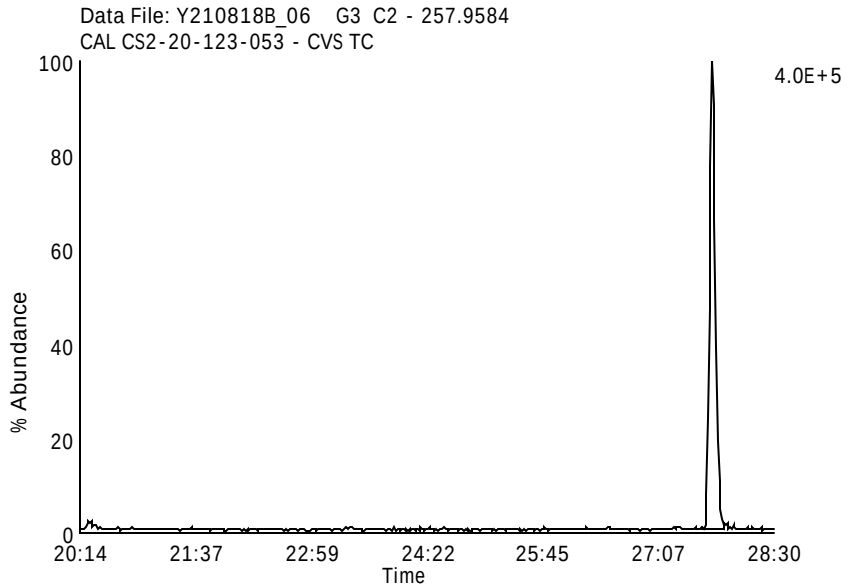
Tri Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC









Tetra Chlorinated Biphenyls

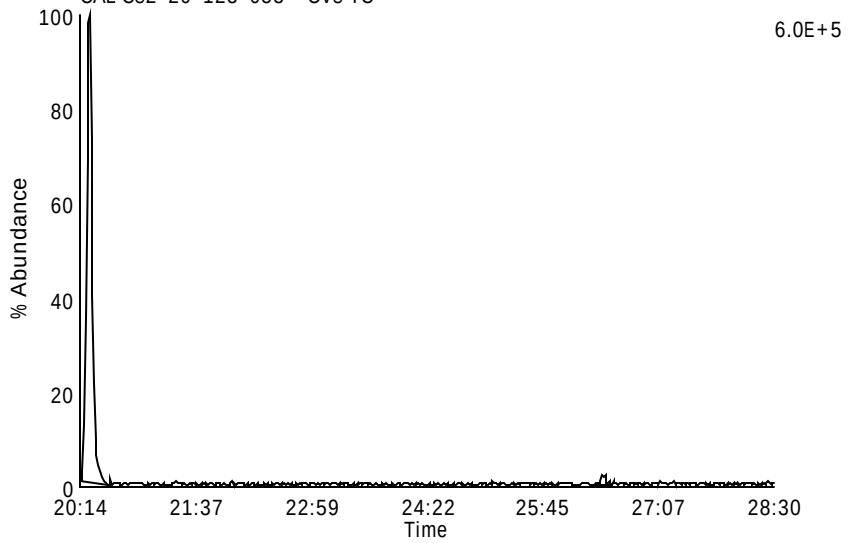
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

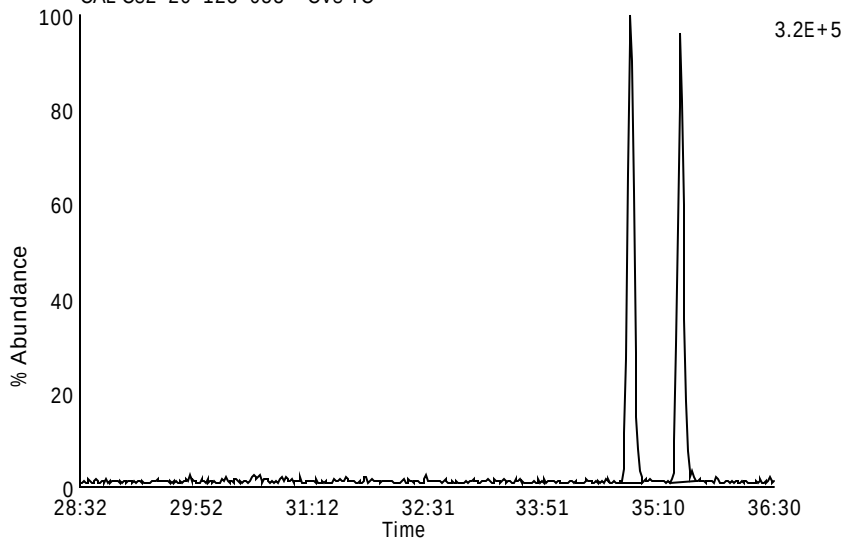
Data File: Y210818B_06 G3 C7 - 289.9224

CAL CS2-20-123-053 - CVS TC



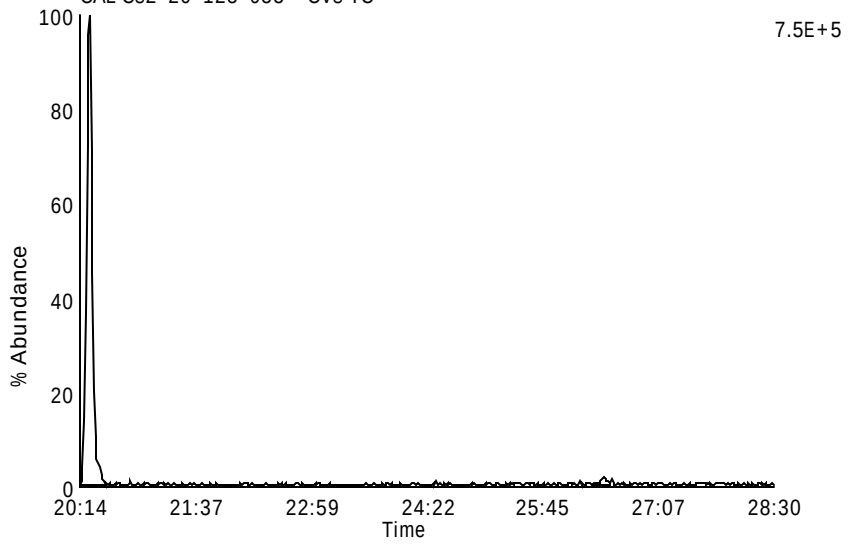
Data File: Y210818B_06 G4 C1 - 289.9224

CAL CS2-20-123-053 - CVS TC



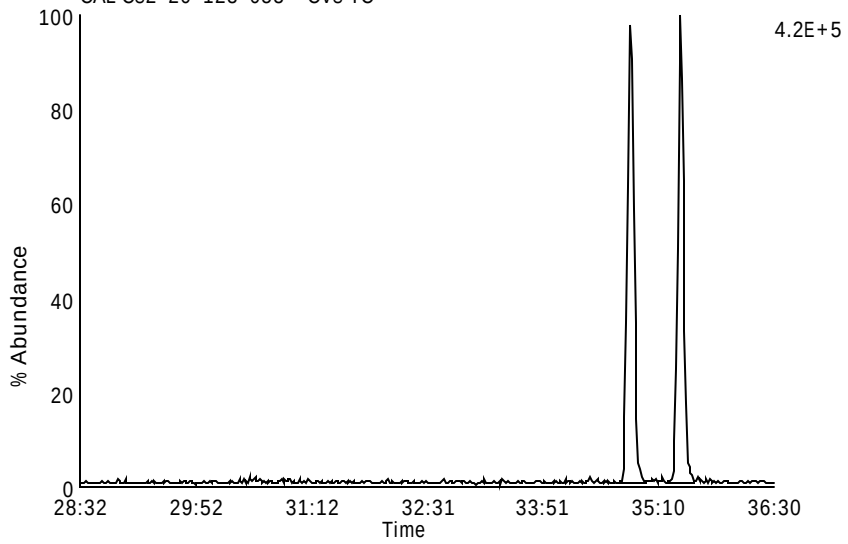
Data File: Y210818B_06 G3 C8 - 291.9194

CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C2 - 291.9194

CAL CS2-20-123-053 - CVS TC

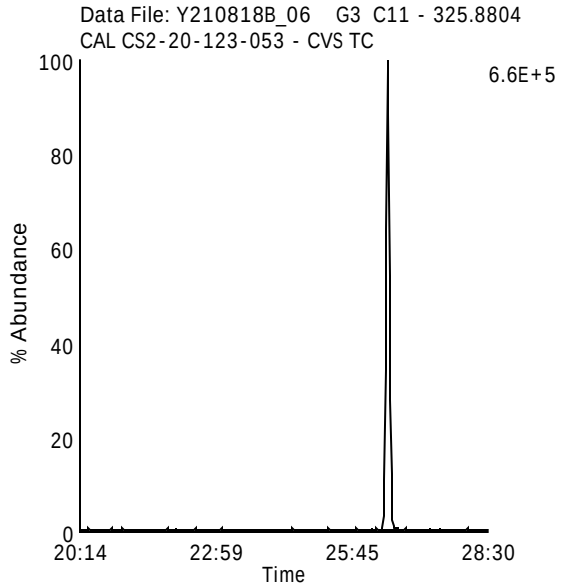


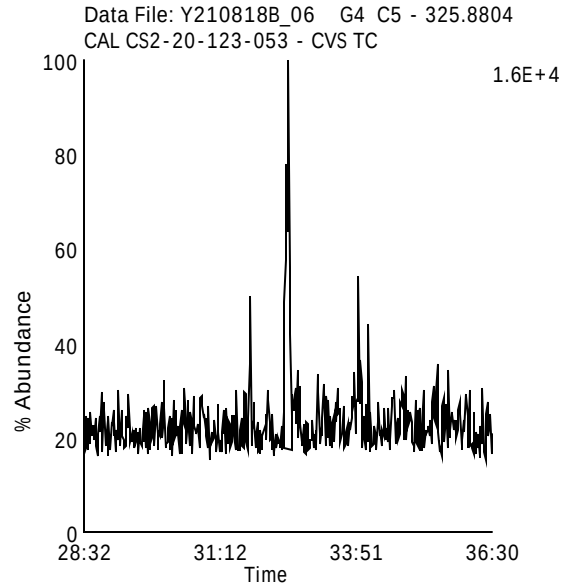
Penta Chlorinated Biphenyls

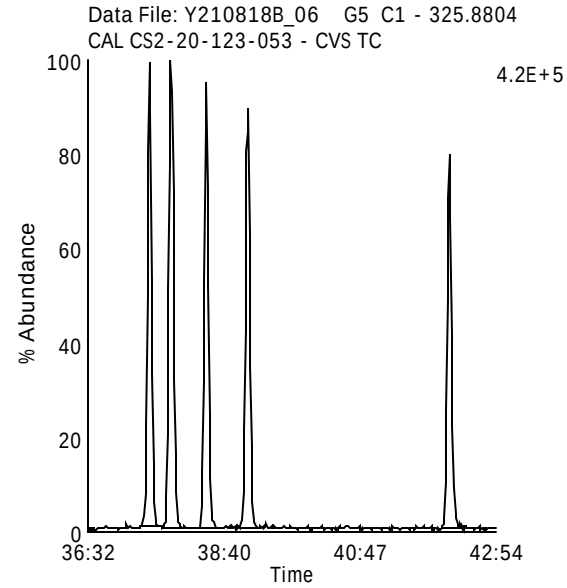
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

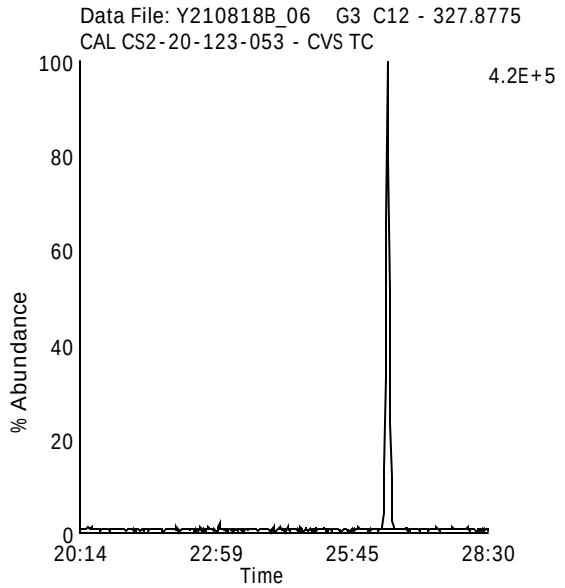
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

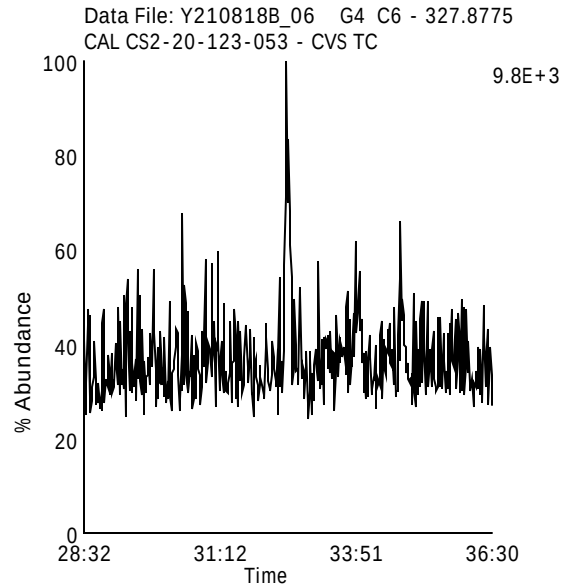
Sample Description: CAL CS2-20-123-053 - CVS TC

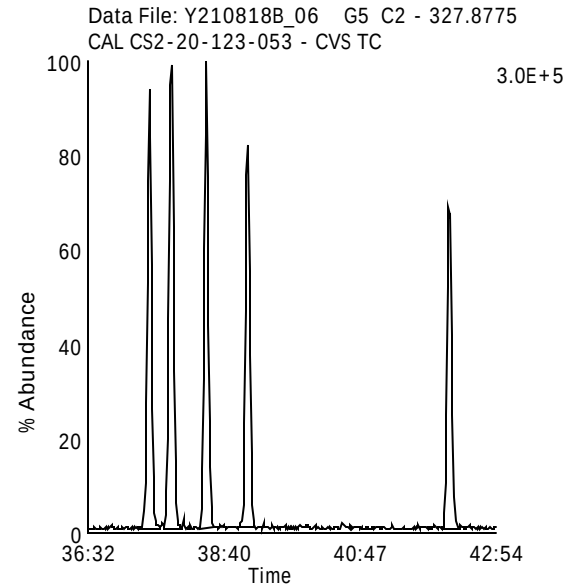












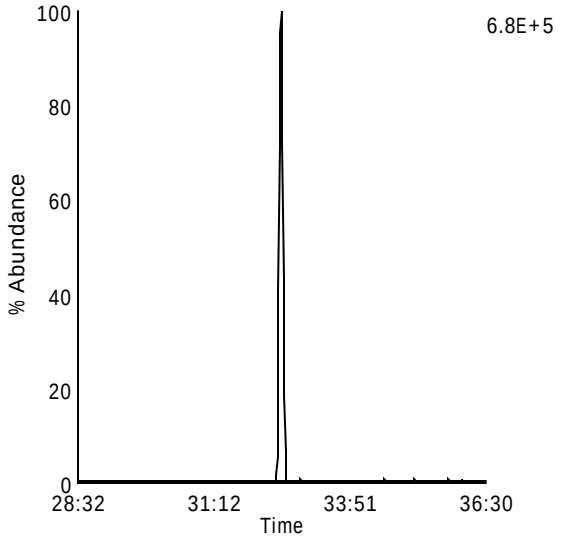
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

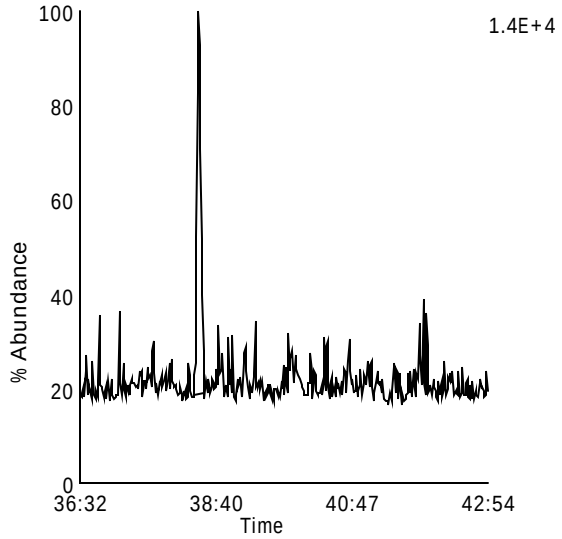
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

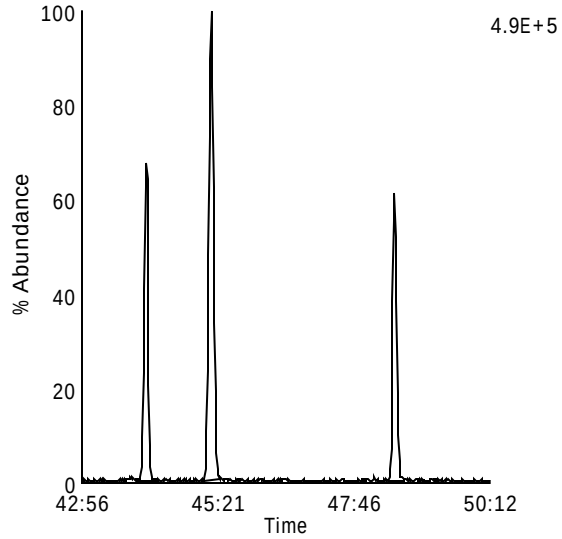
Data File: Y210818B_06 G4 C11 - 359.8415
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C5 - 359.8415
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G6 C1 - 359.8415
CAL CS2-20-123-053 - CVS TC



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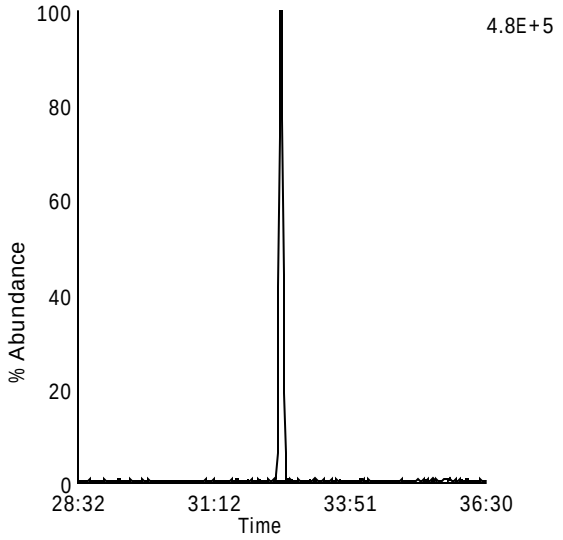
CAL CS2-20-123-053 - CVS TC



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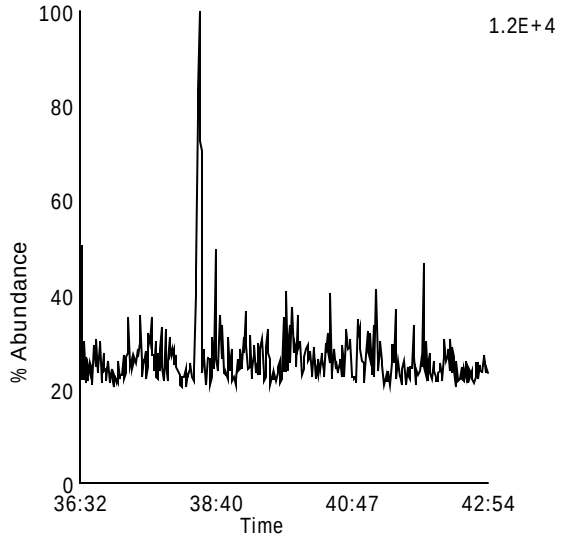
CAL CS2-20-123-053 - CVS TC



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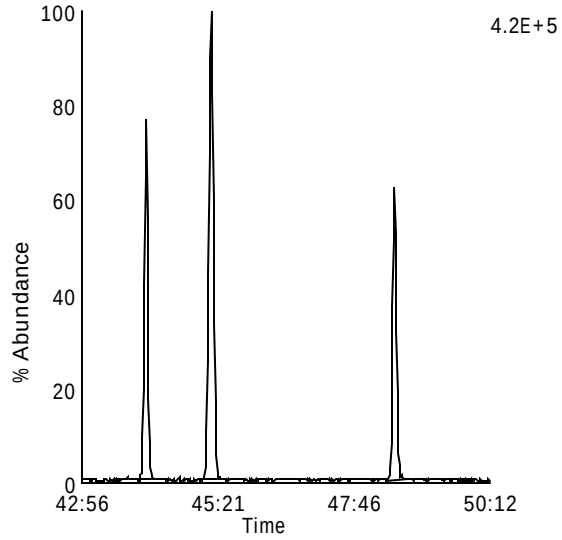
CAL CS2-20-123-053 - CVS TC

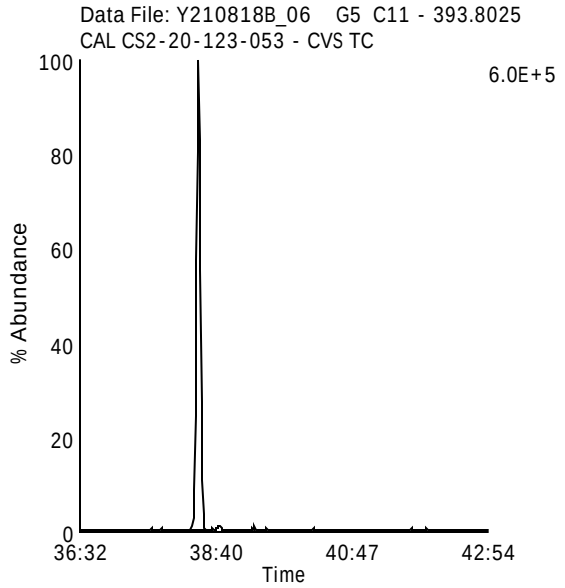


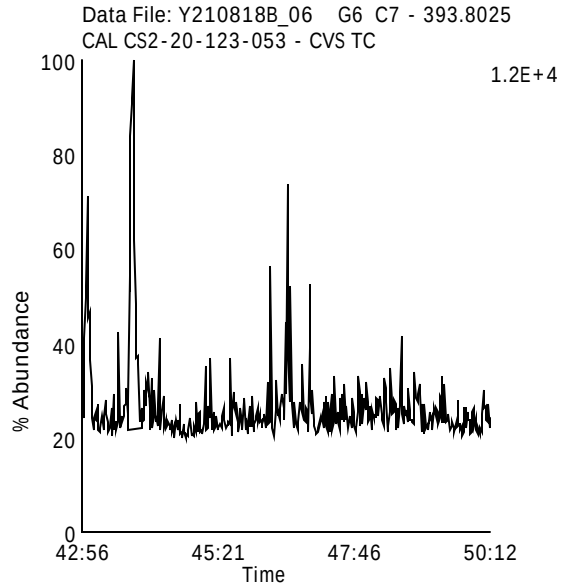
Hepta Chlorinated Biphenyls

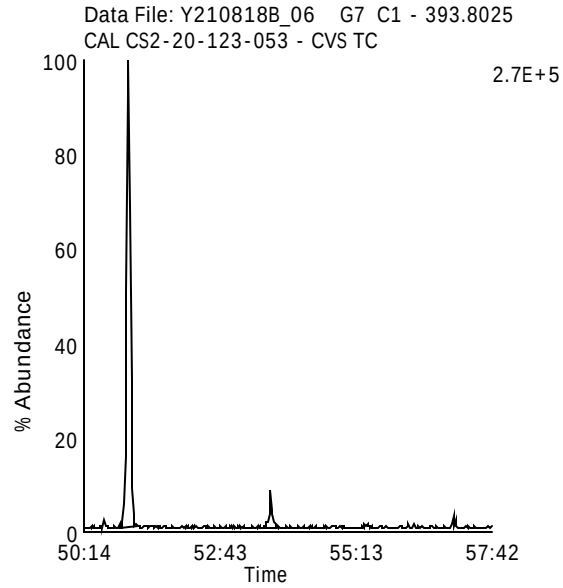
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

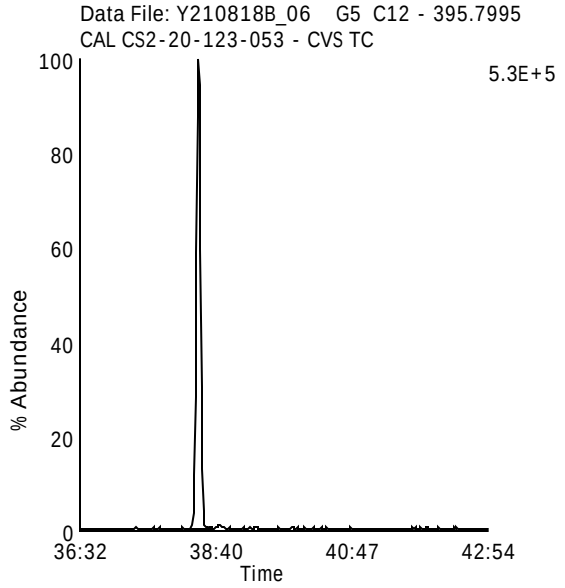
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

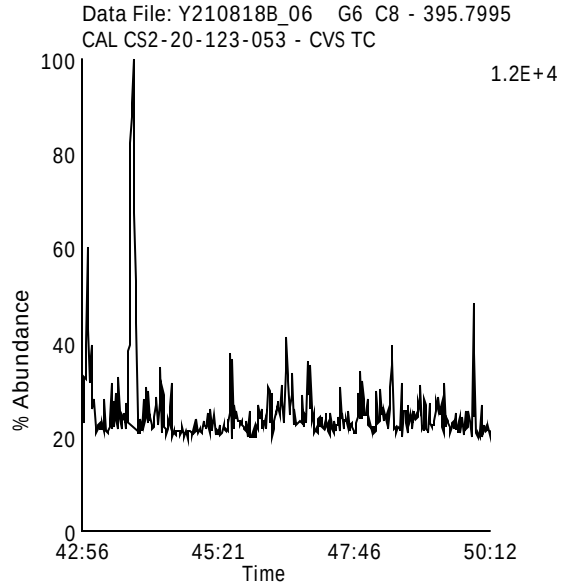
Sample Description: CAL CS2-20-123-053 - CVS TC

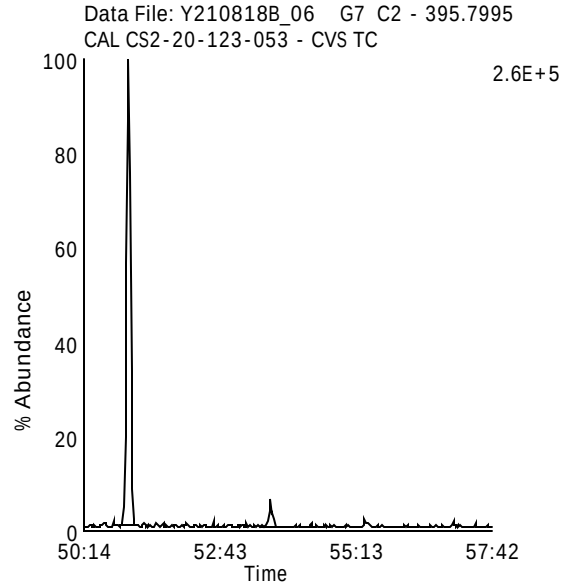






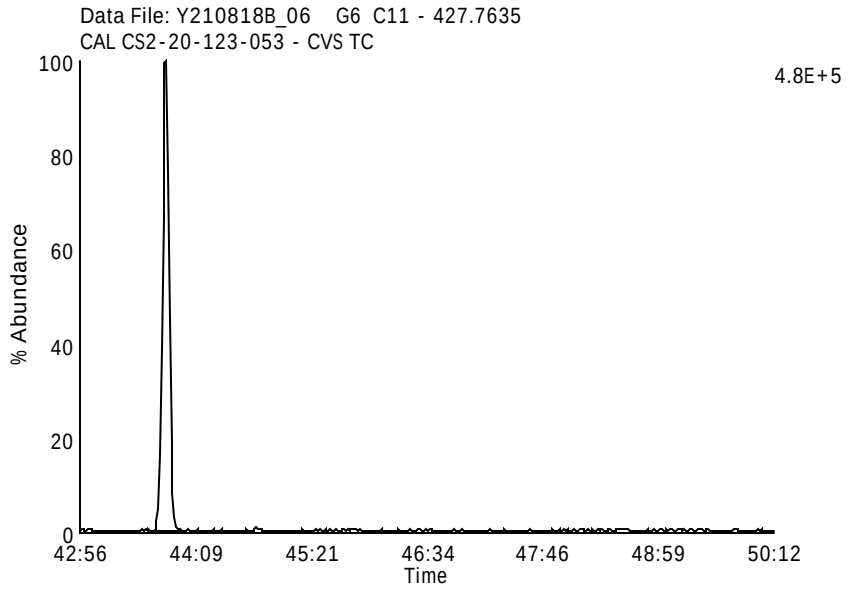


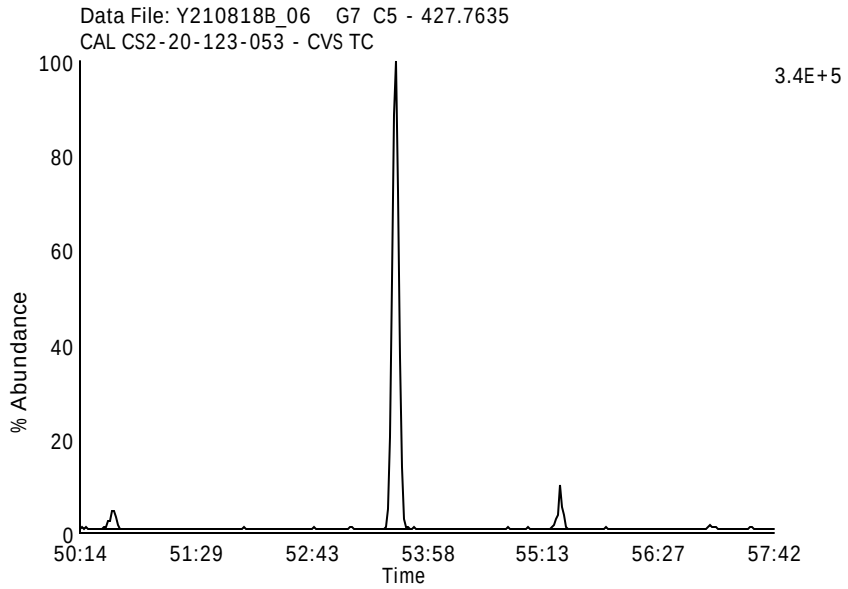


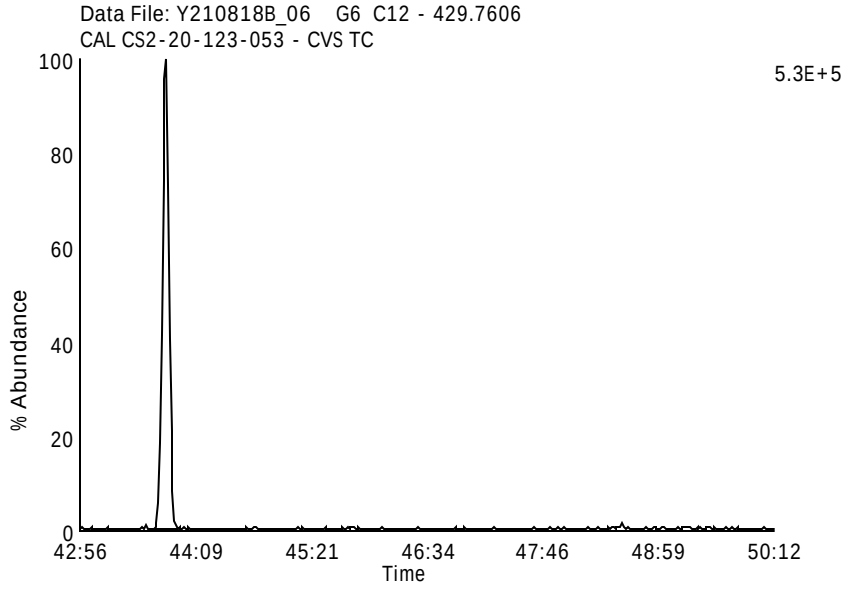


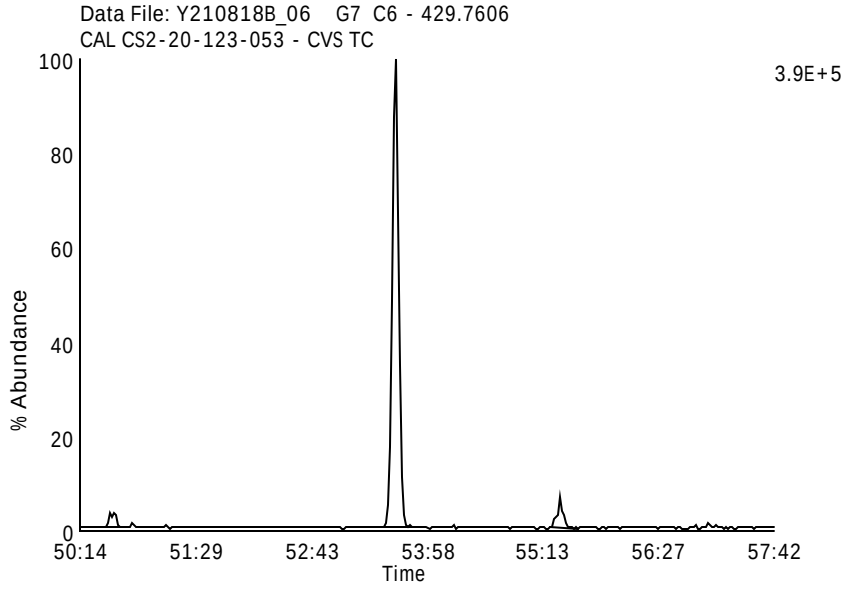
Octa Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







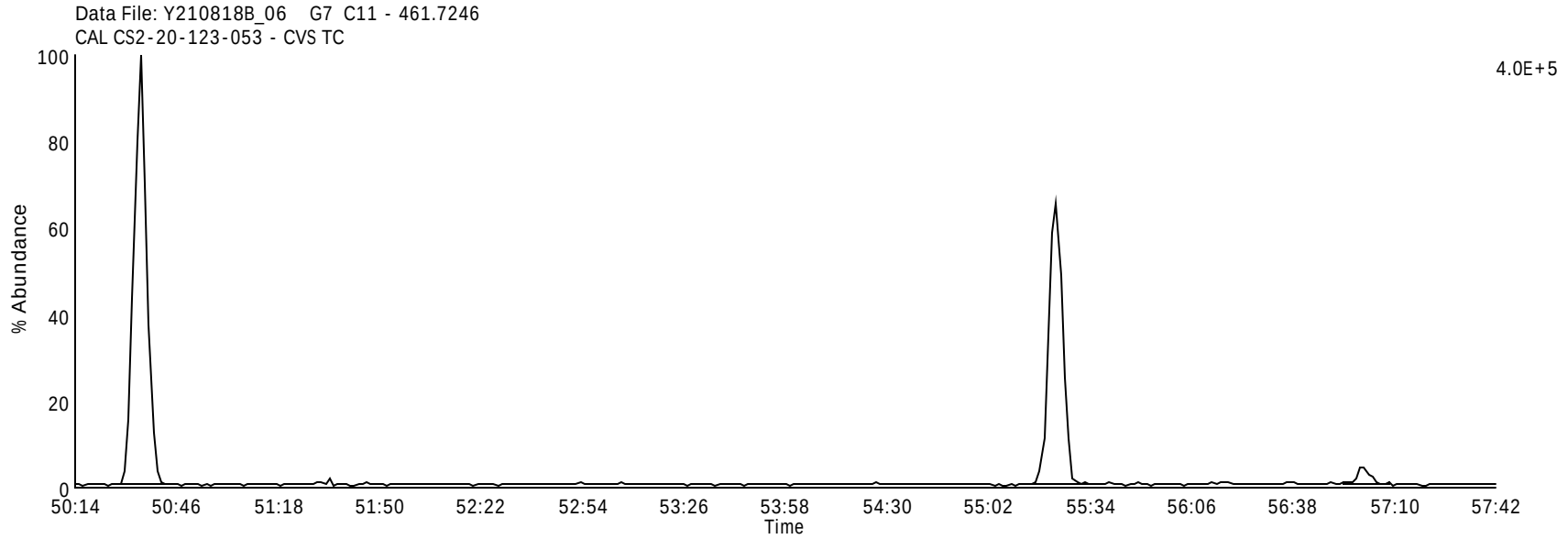


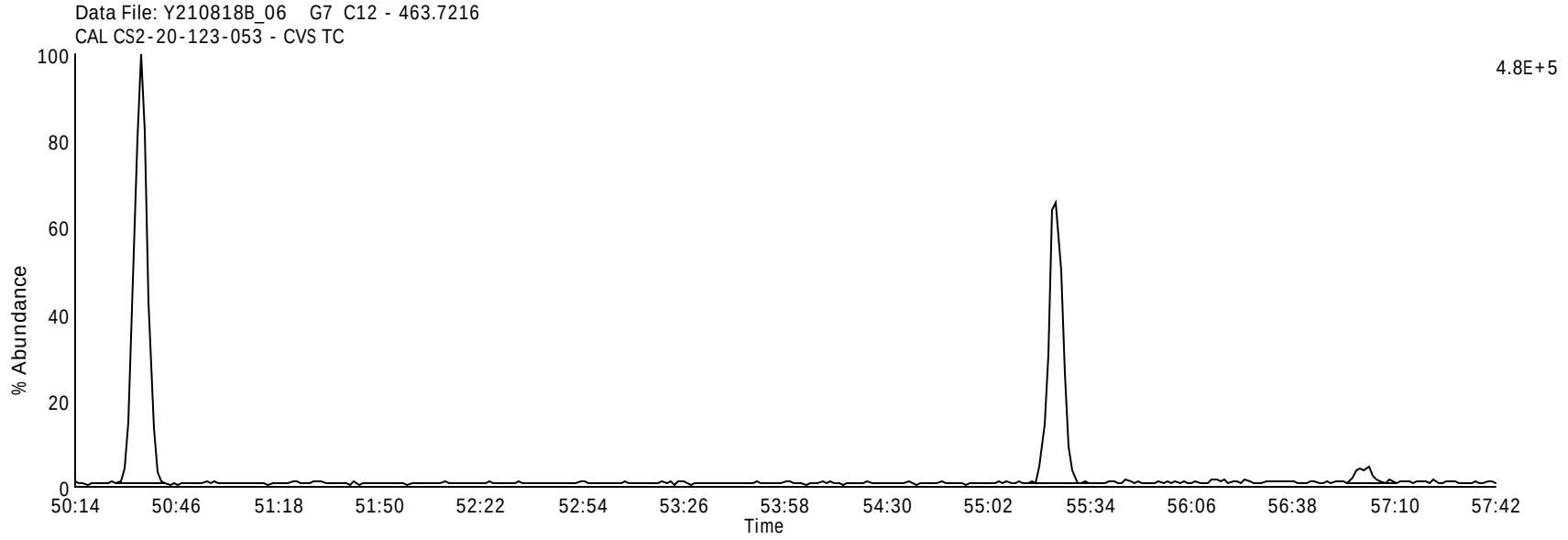
Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



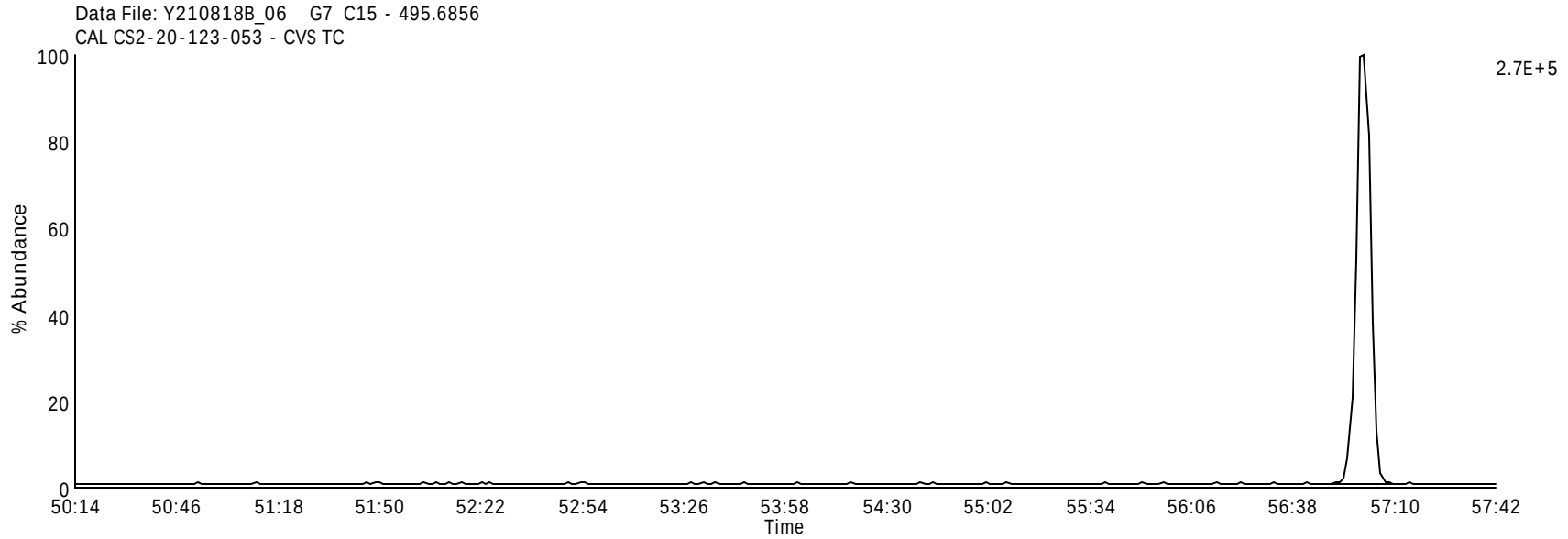


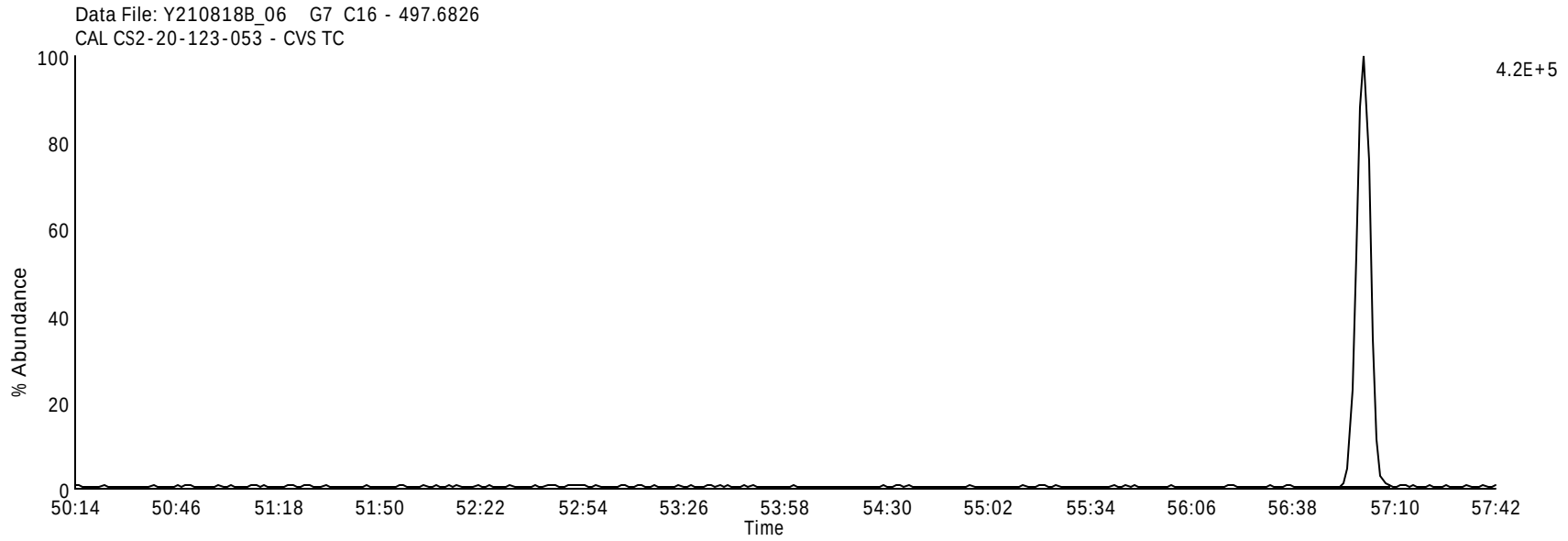
Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

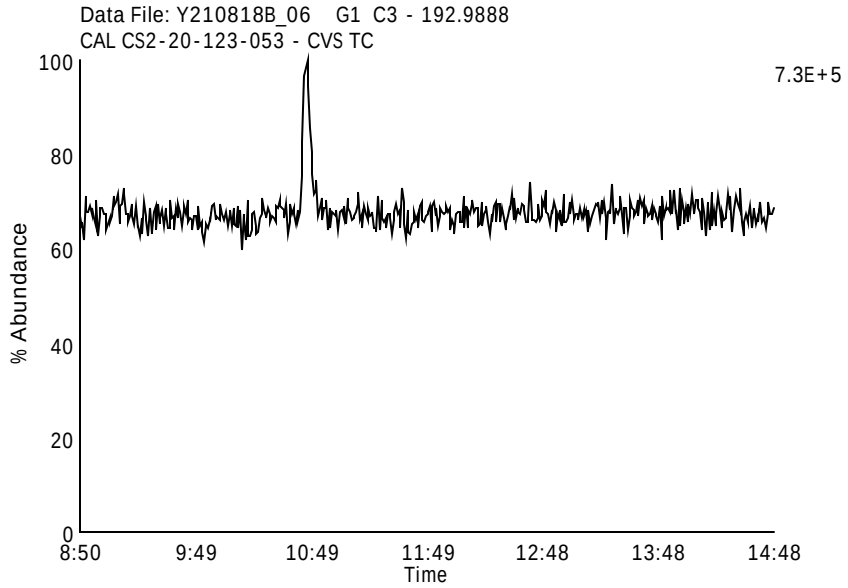
Sample Description: CAL CS2-20-123-053 - CVS TC

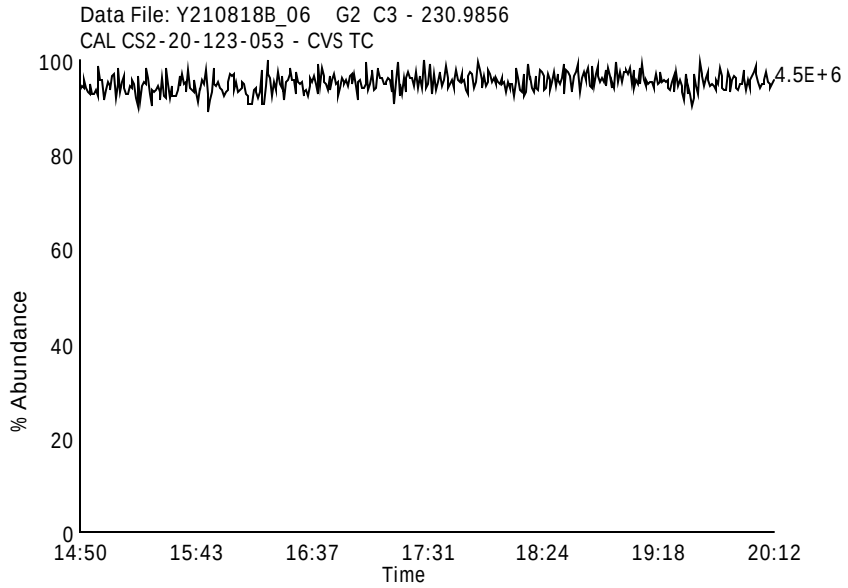


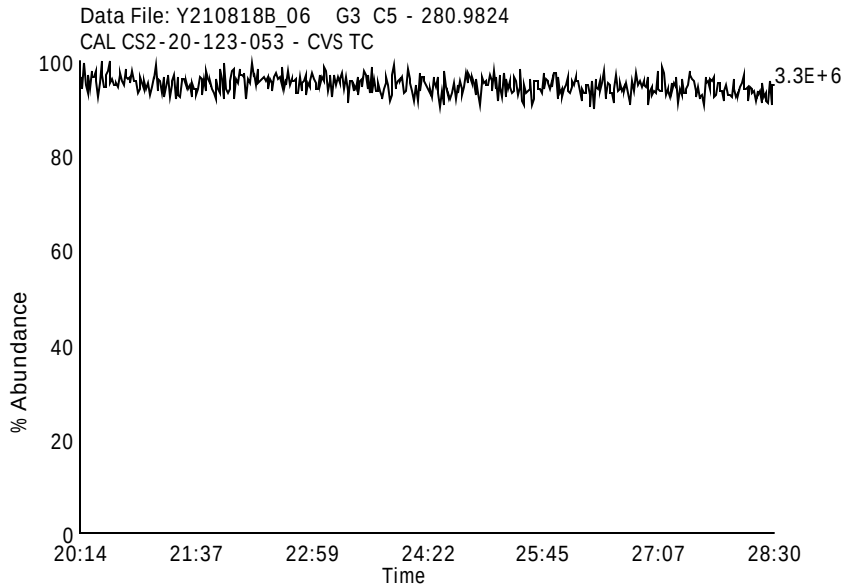


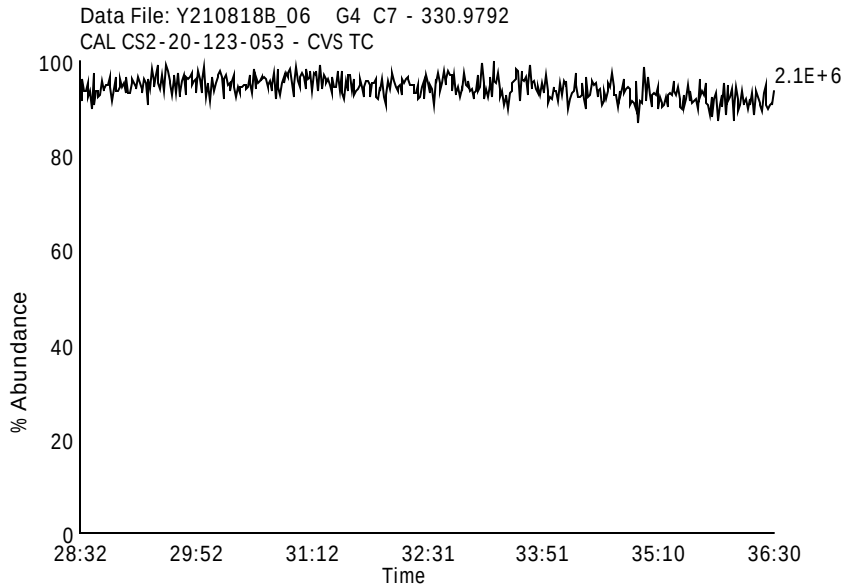
Group 1 - 4 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



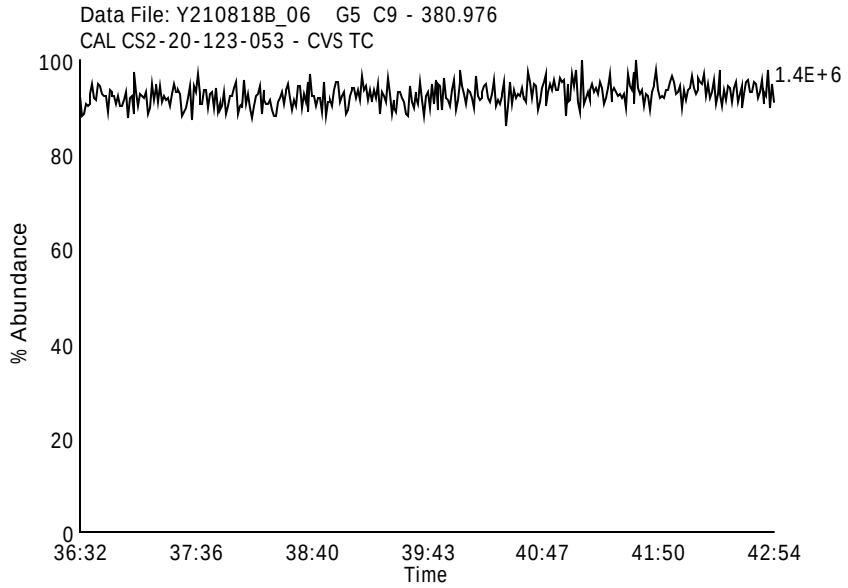


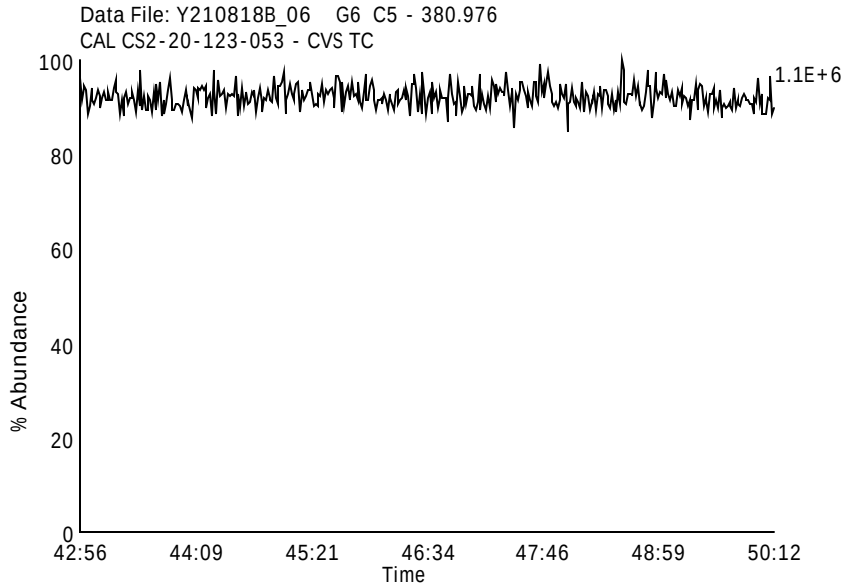


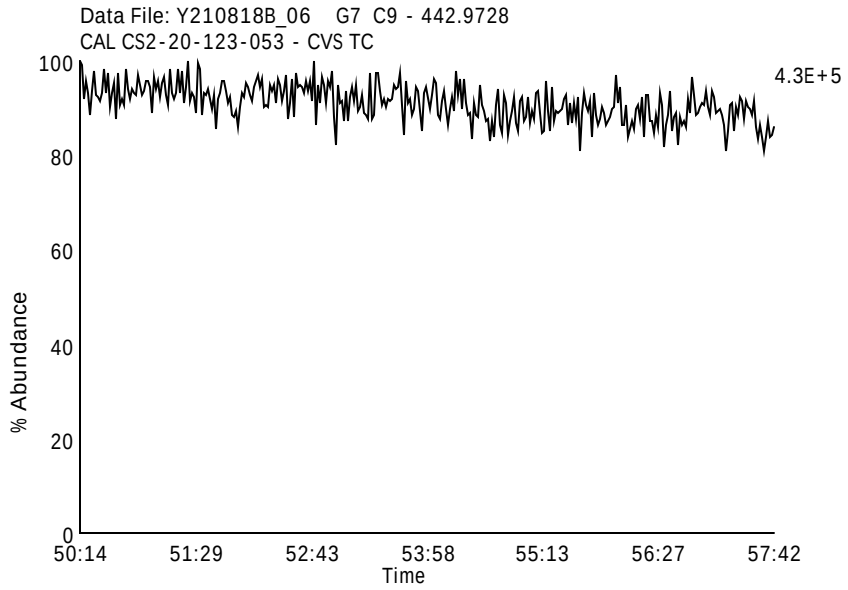


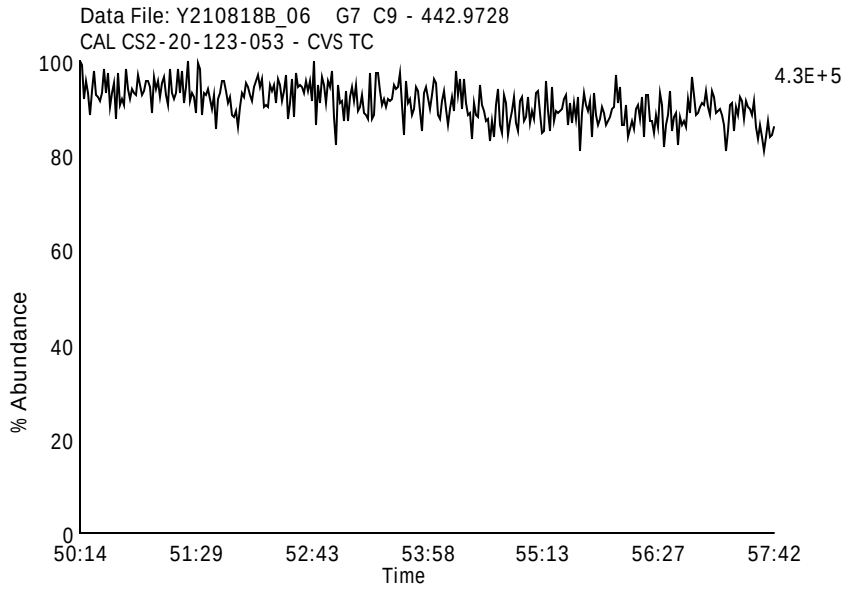
Group 5 - 7 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







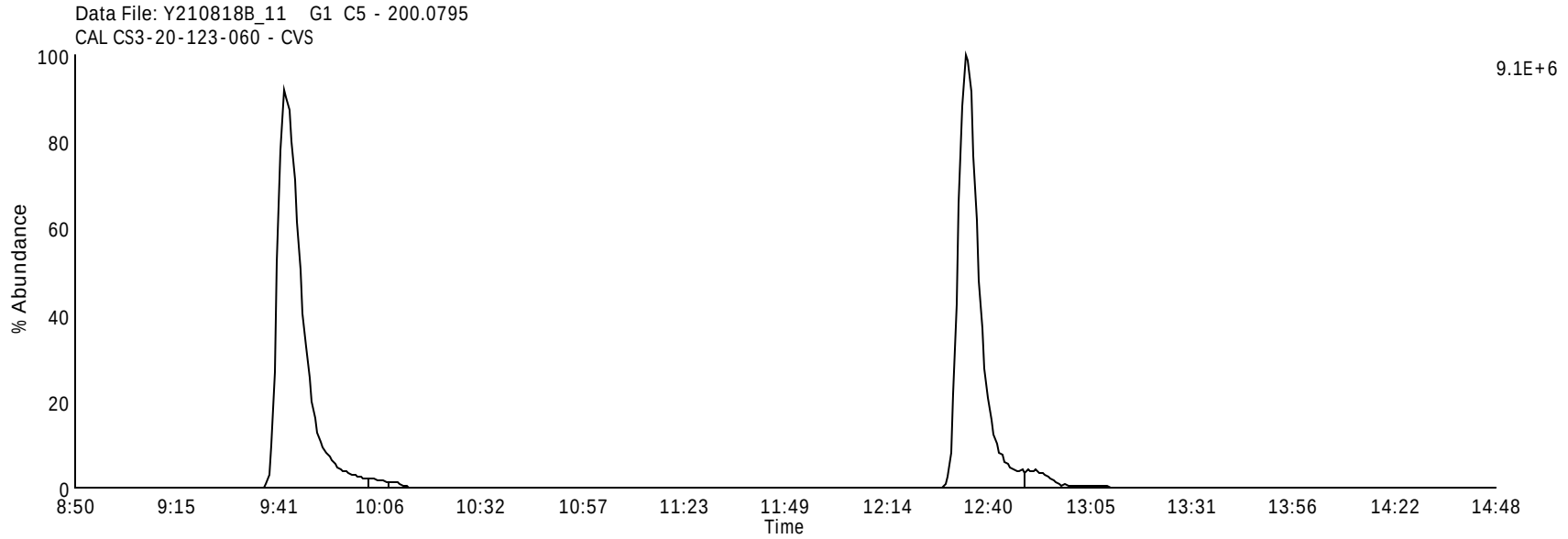


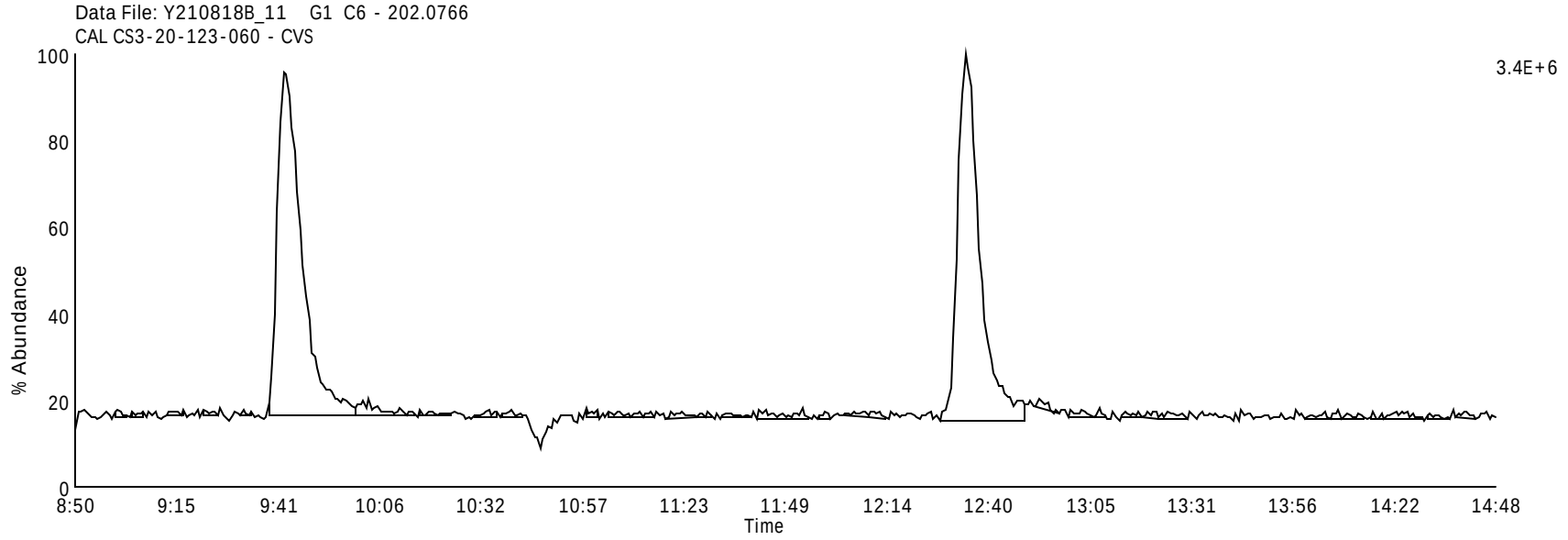
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

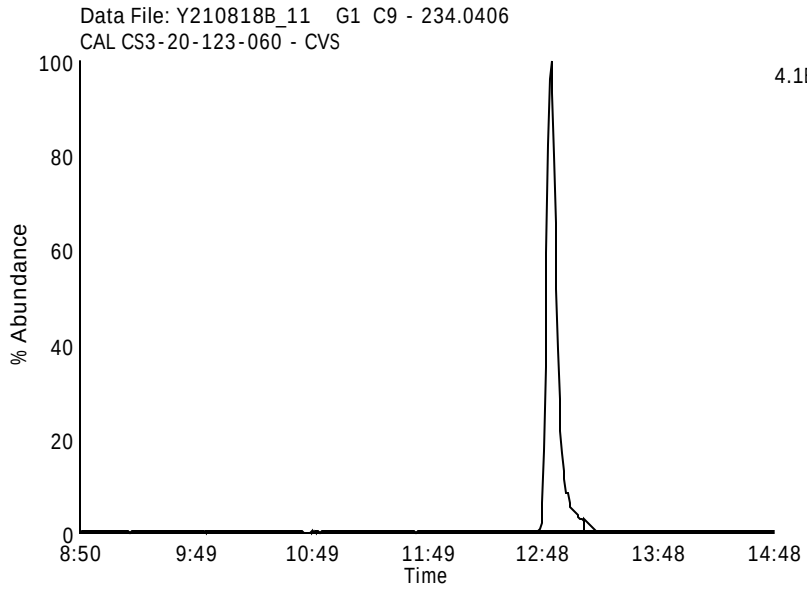
Sample Description: CAL CS3-20-123-060 - CVS

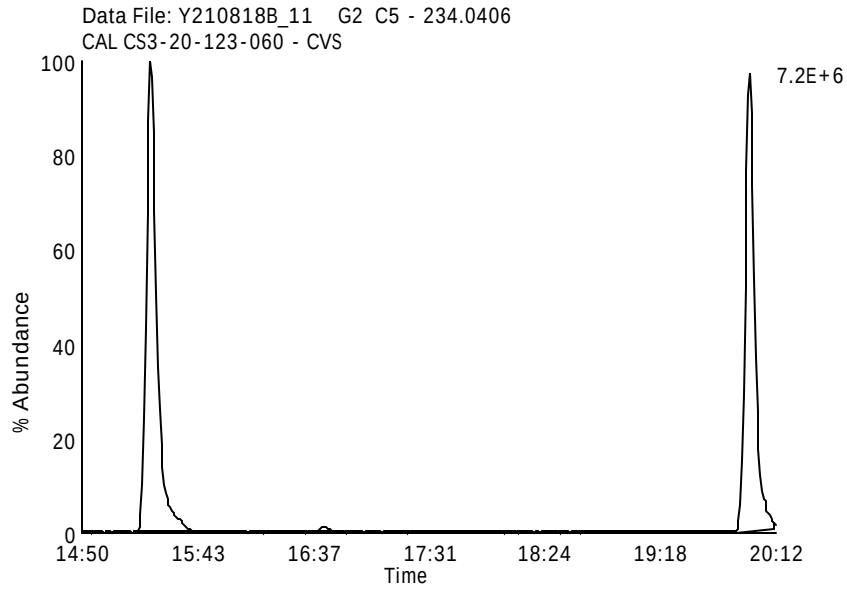


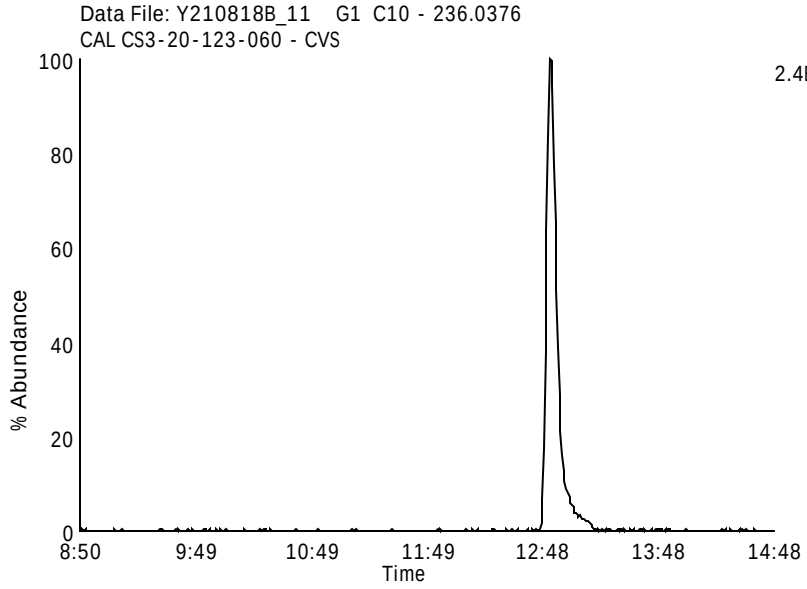


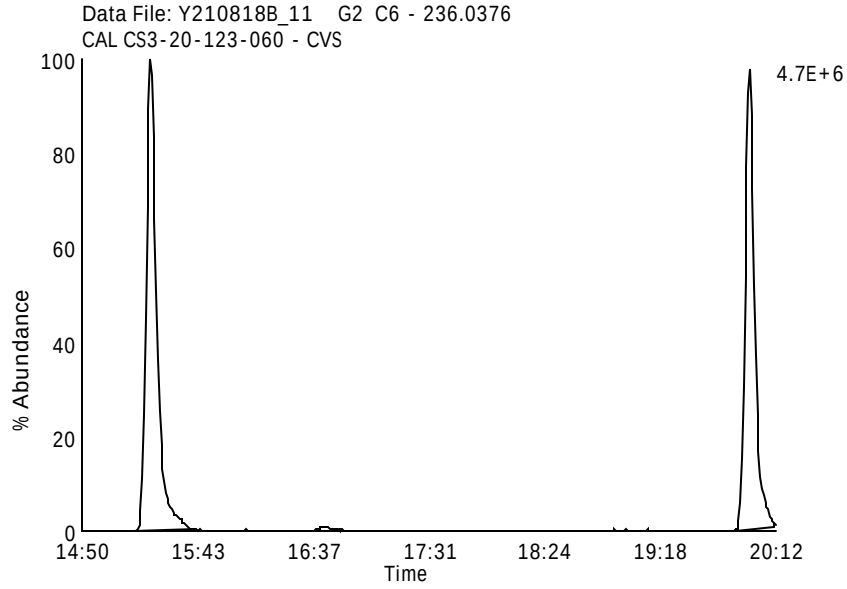
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





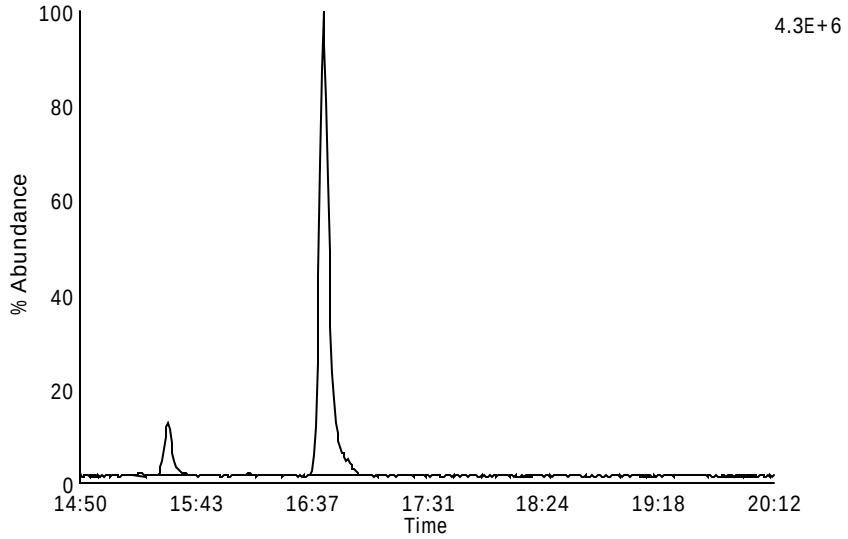




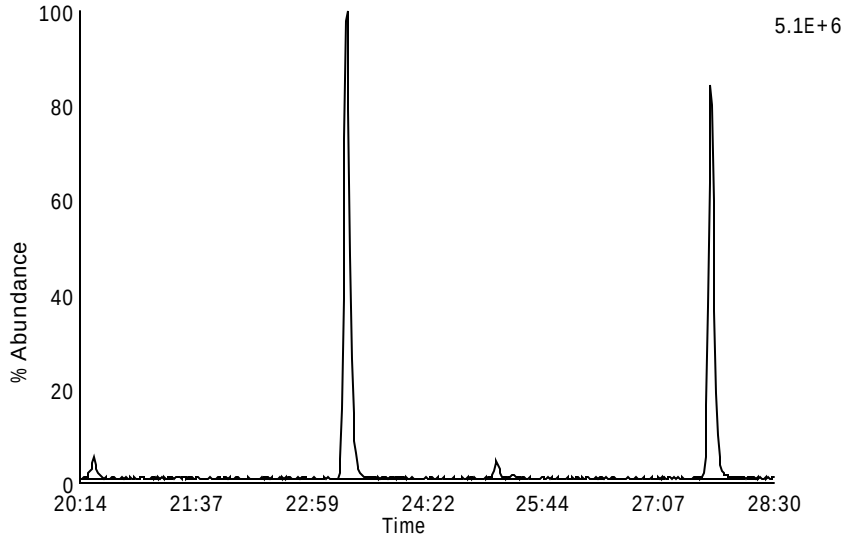
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

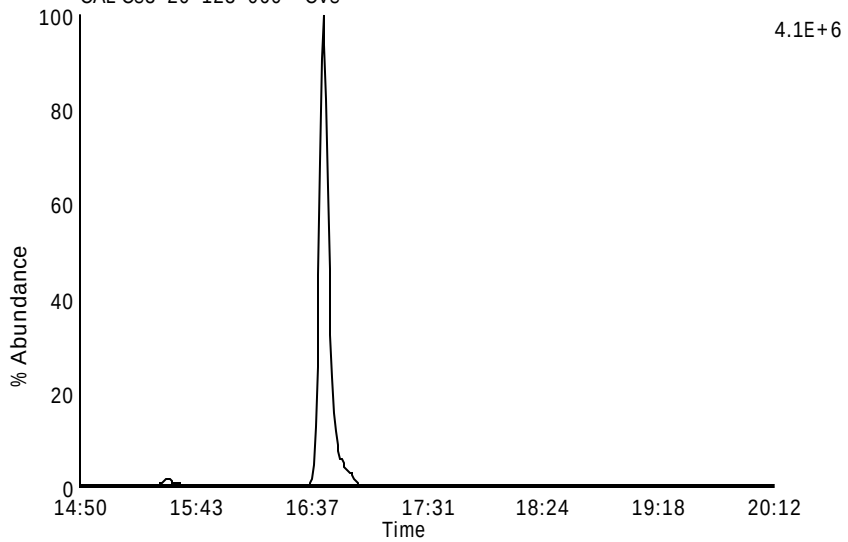
Data File: Y210818B_11 G2 C9 - 268.0016
CAL CS3-20-123-060 - CVS



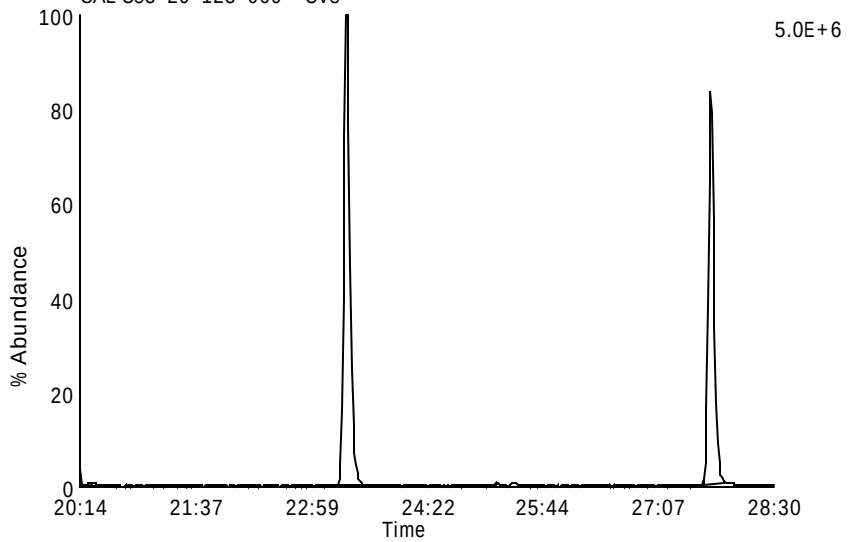
Data File: Y210818B_11 G3 C3 - 268.0016
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G2 C10 - 269.9986
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G3 C4 - 269.9986
CAL CS3-20-123-060 - CVS

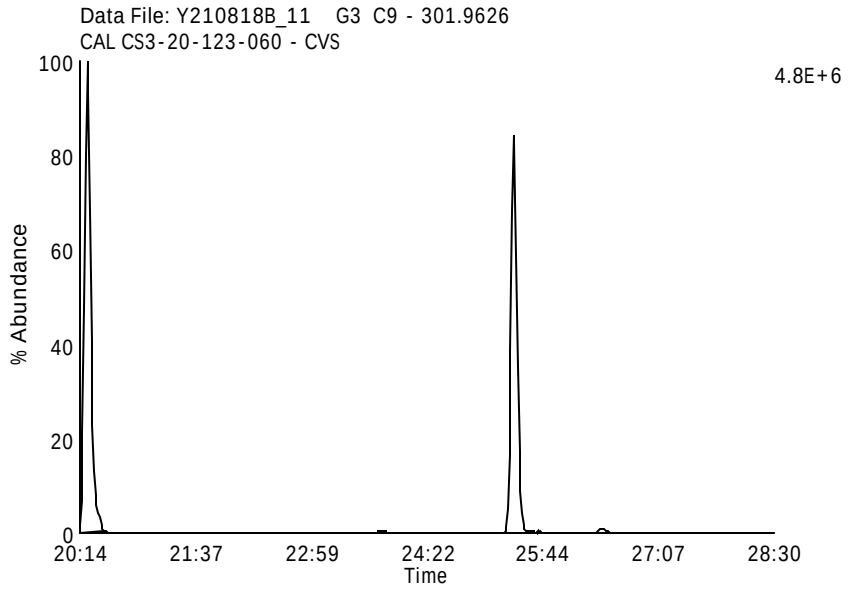


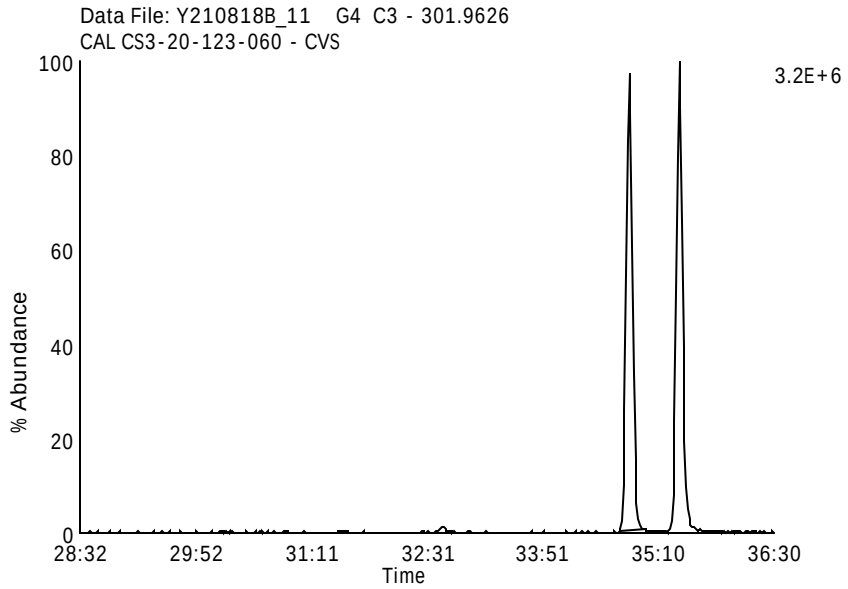
Labeled Tetra Chlorinated Biphenyls

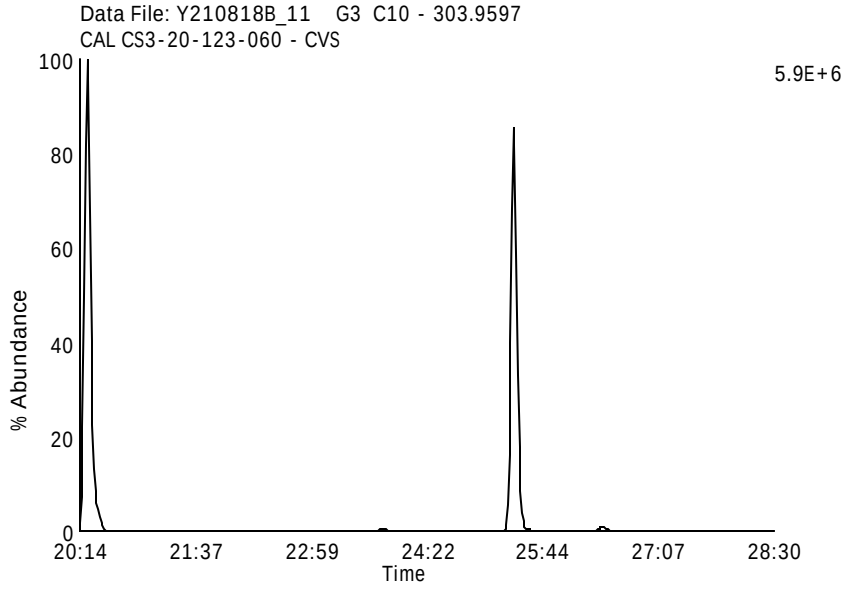
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

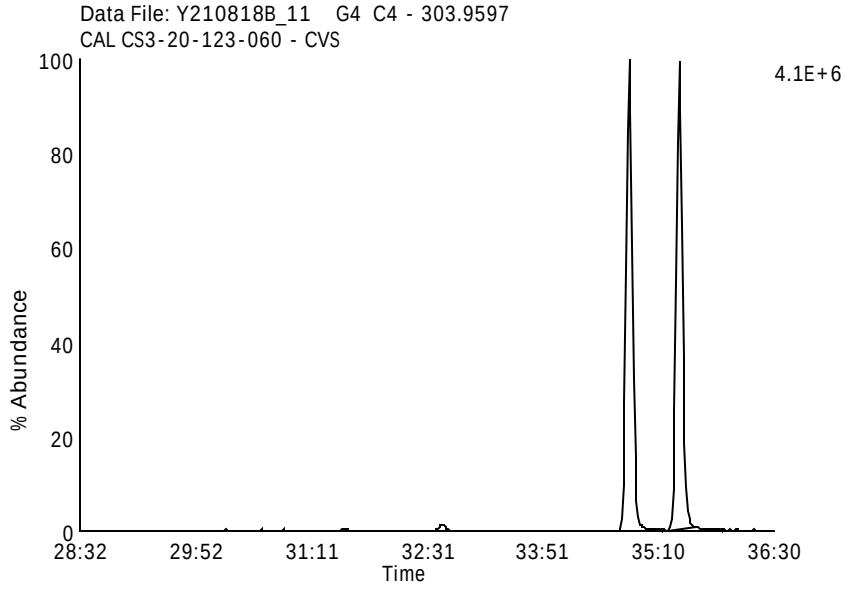
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS







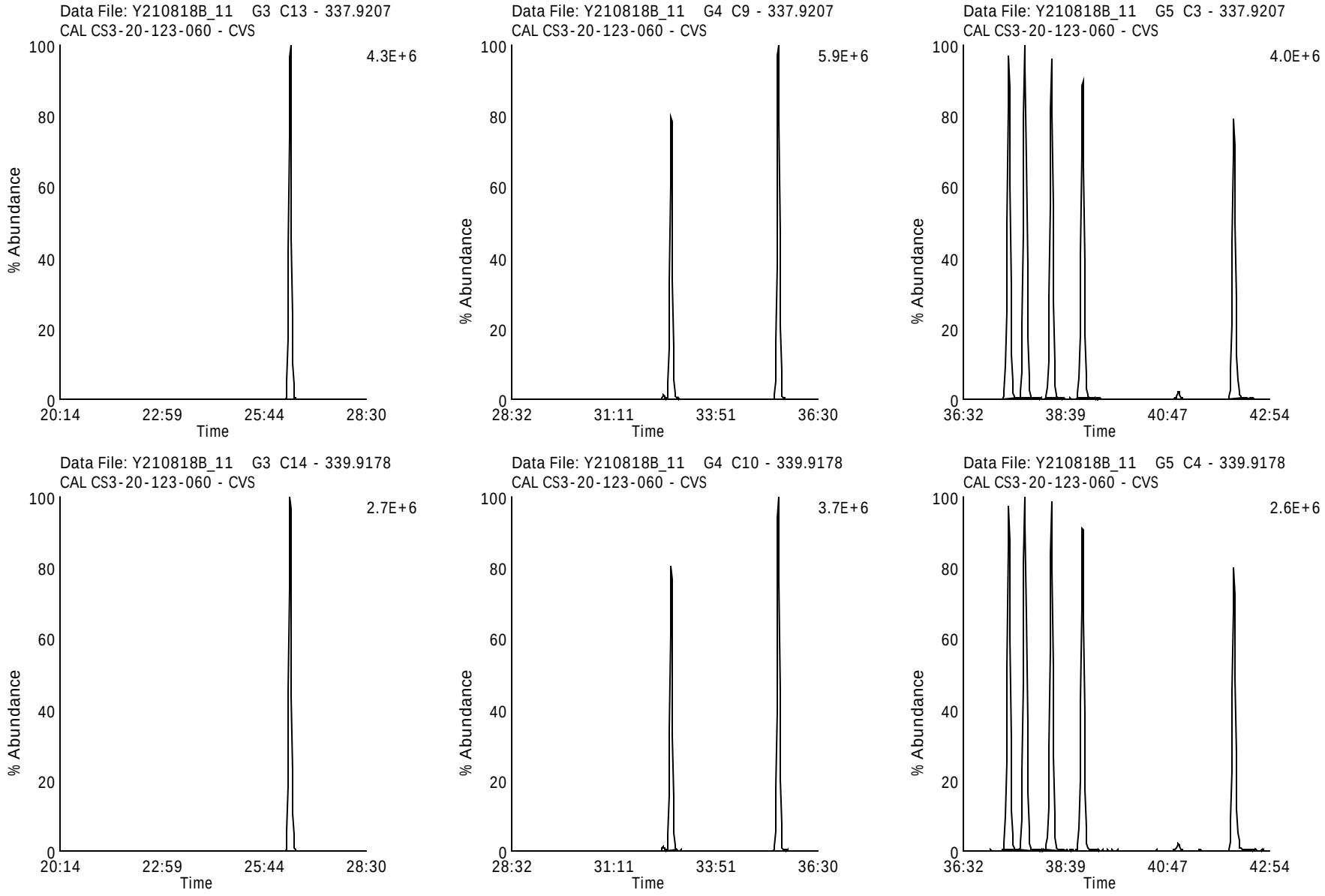


Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS

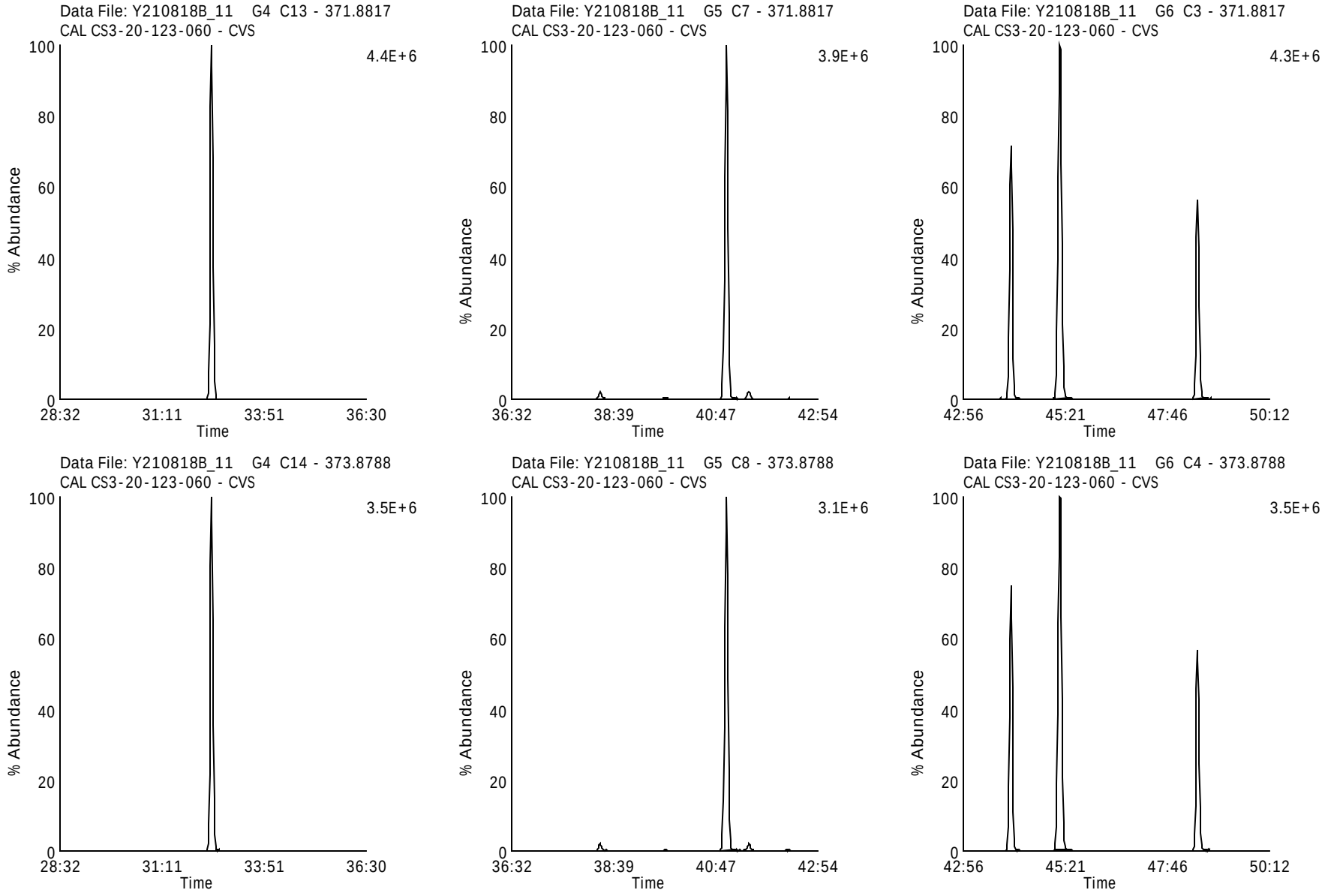


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

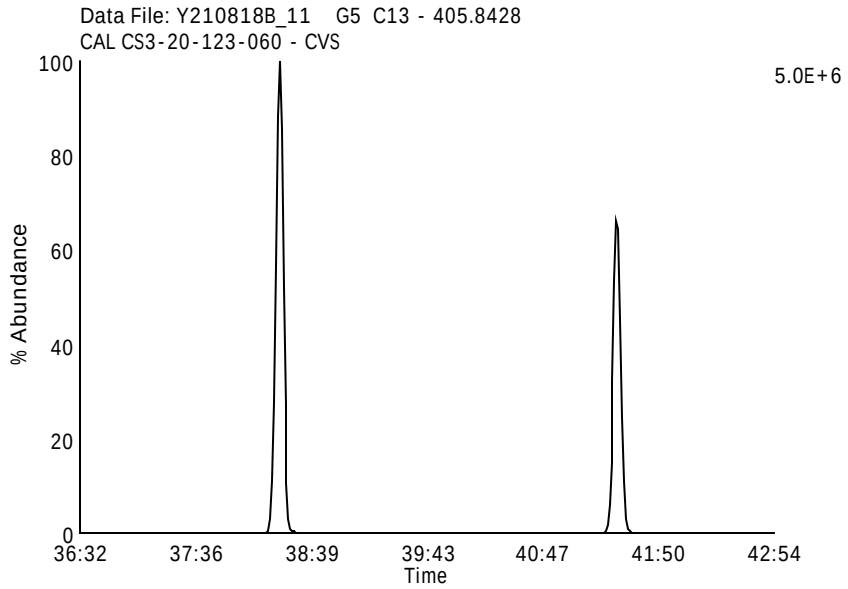
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

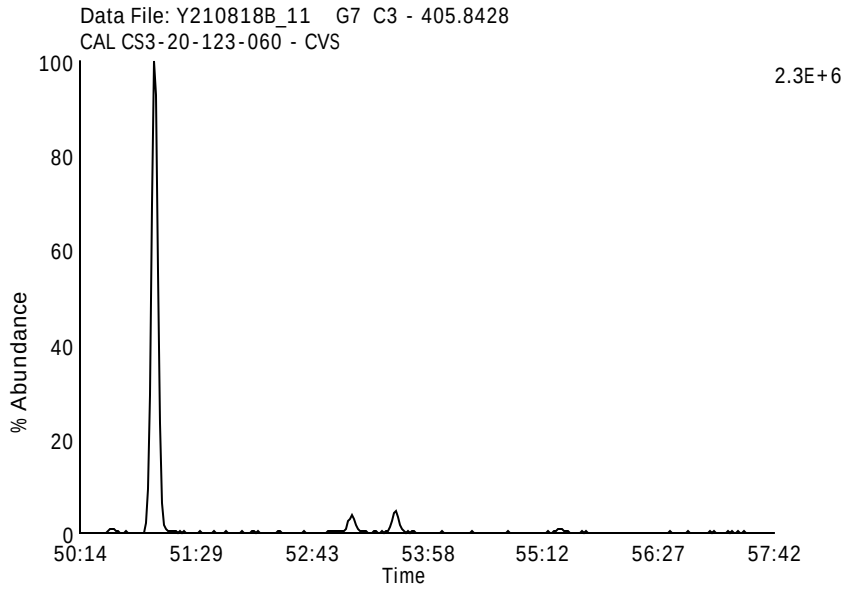
Sample Description: CAL CS3-20-123-060 - CVS

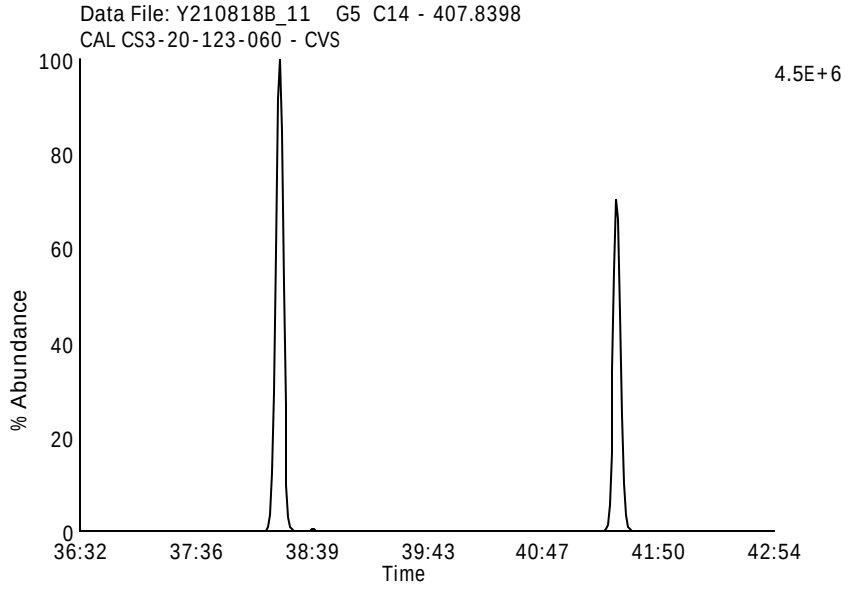


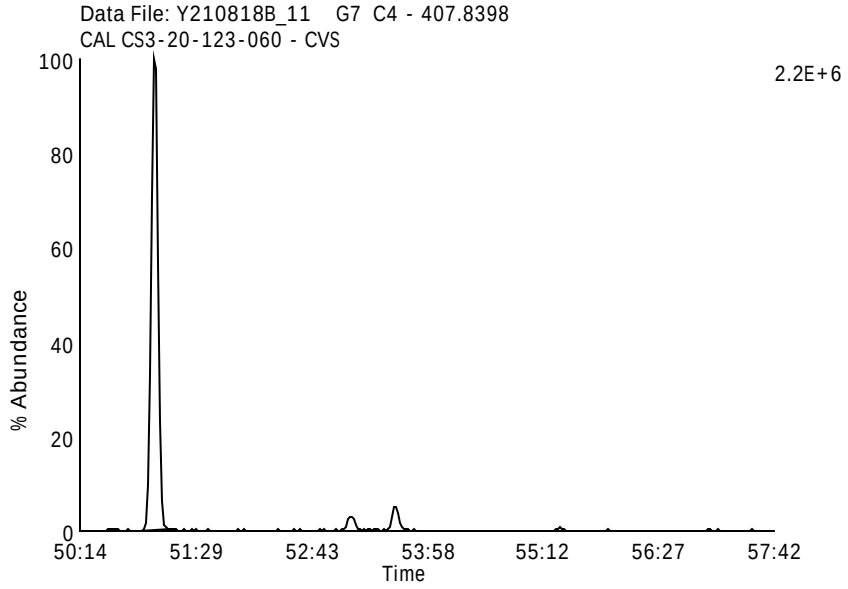
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





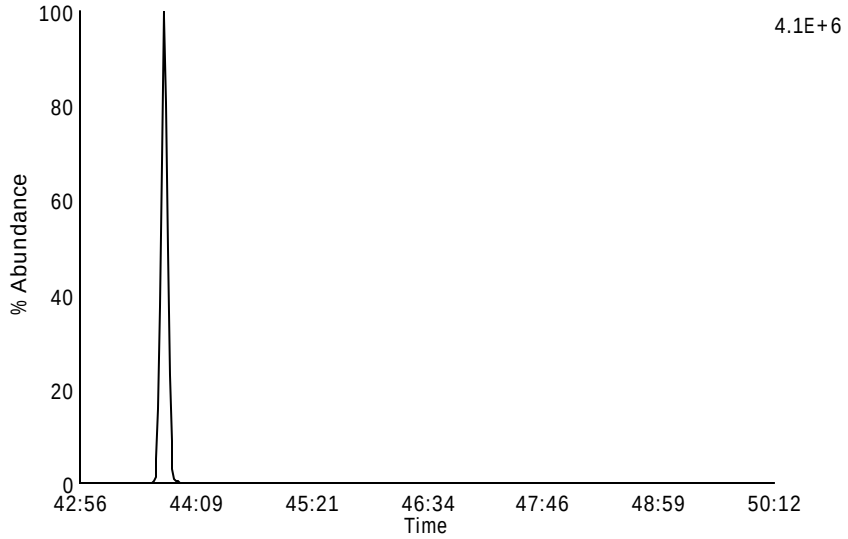




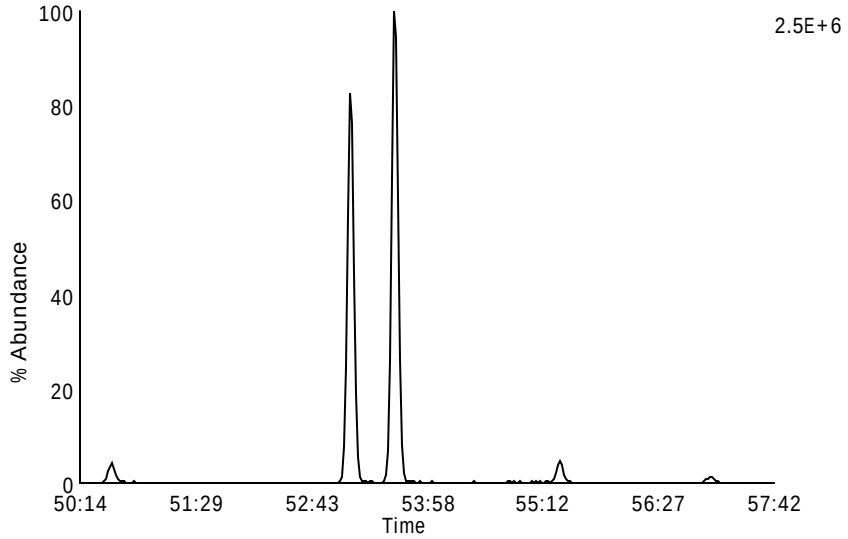
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

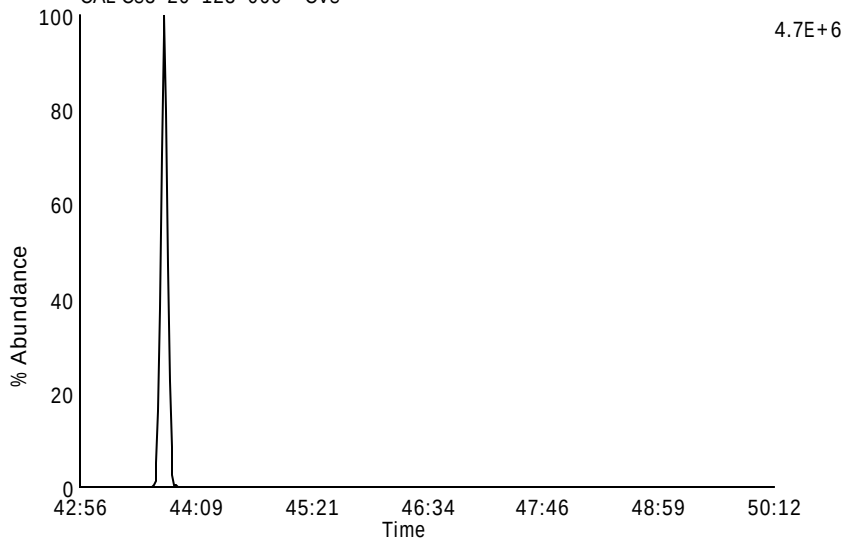
Data File: Y210818B_11 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G6 C14 - 441.8008
CAL CS3-20-123-060 - CVS



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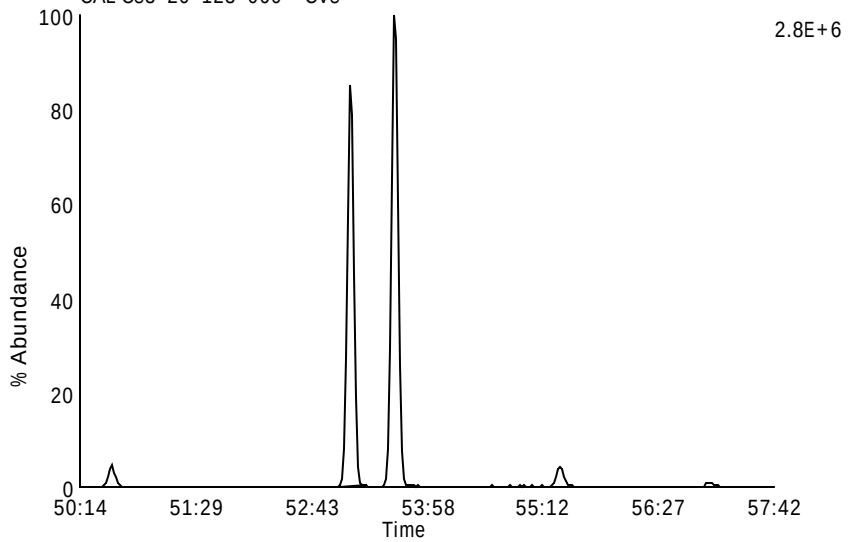
CAL CS3-20-123-060 - CVS

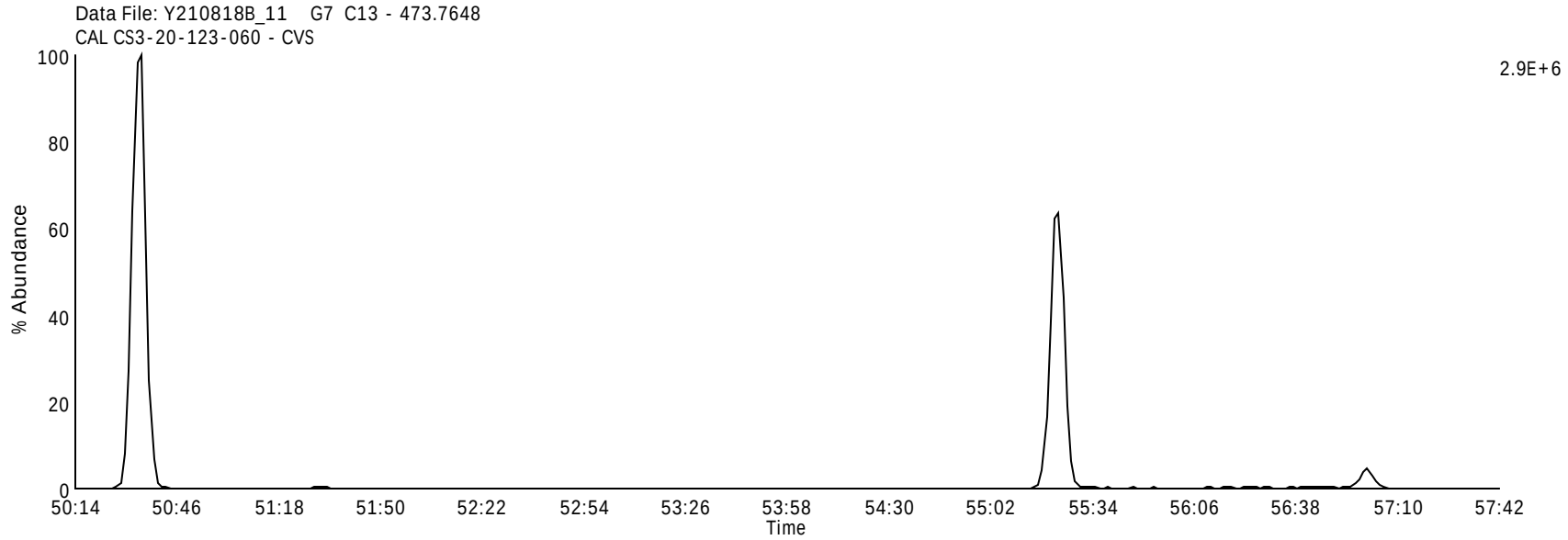


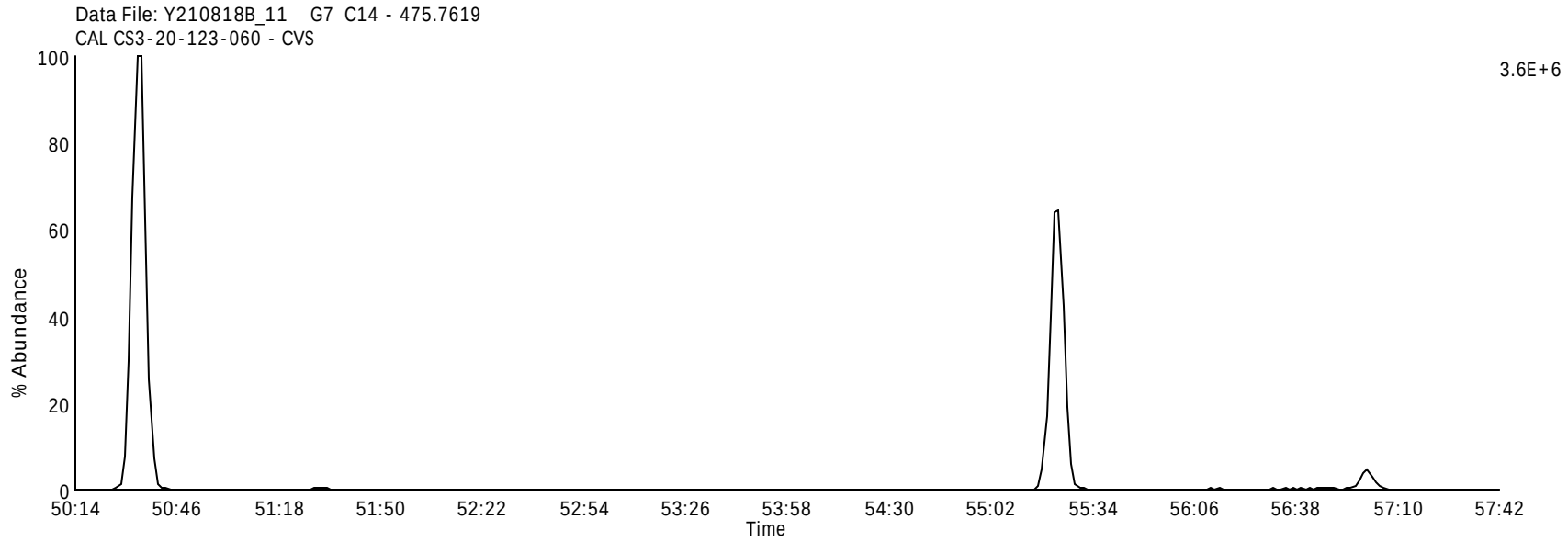
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



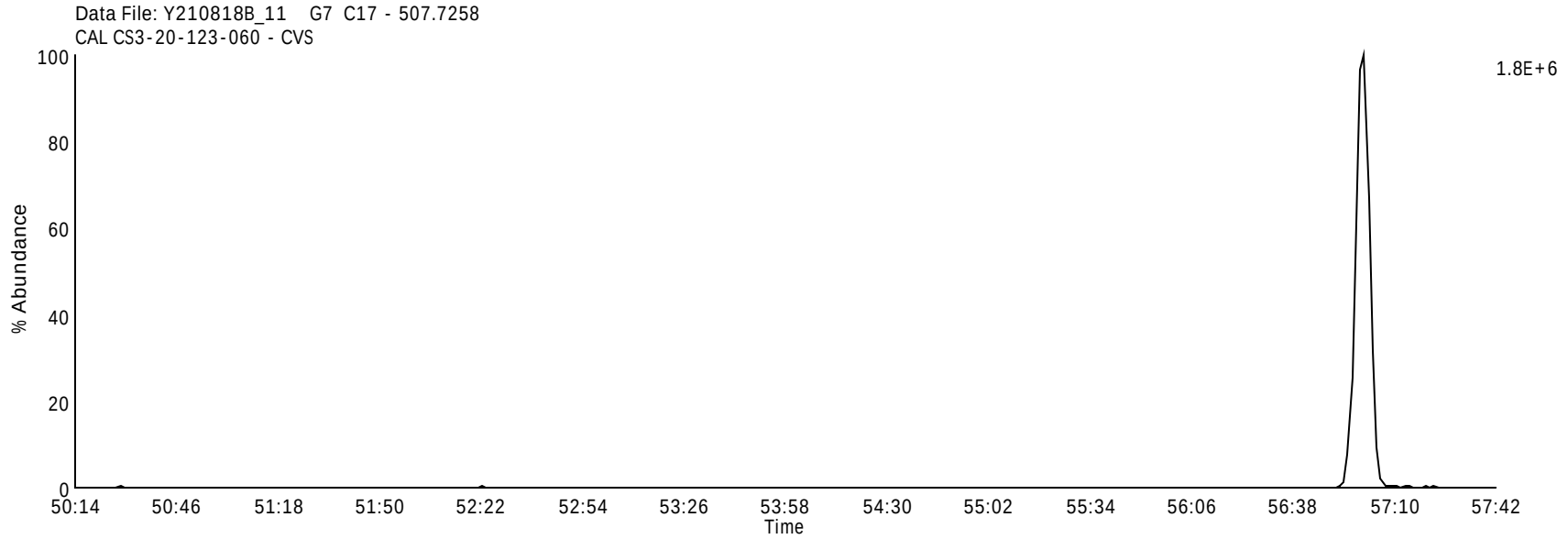


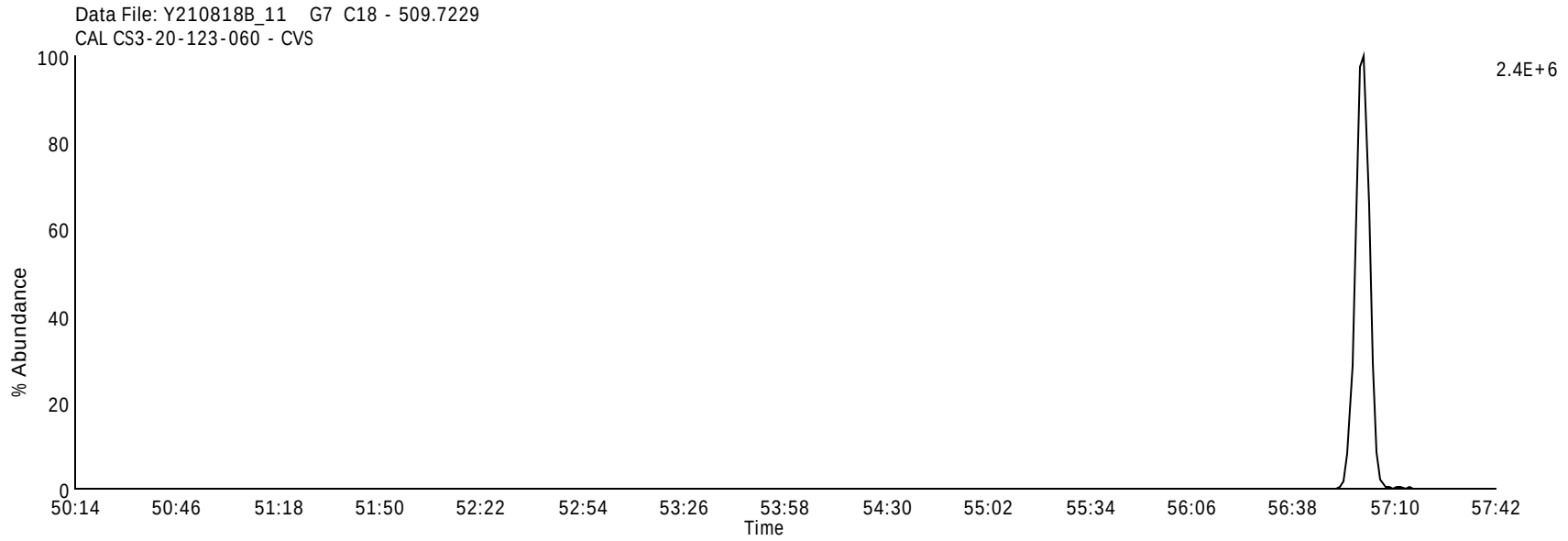
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



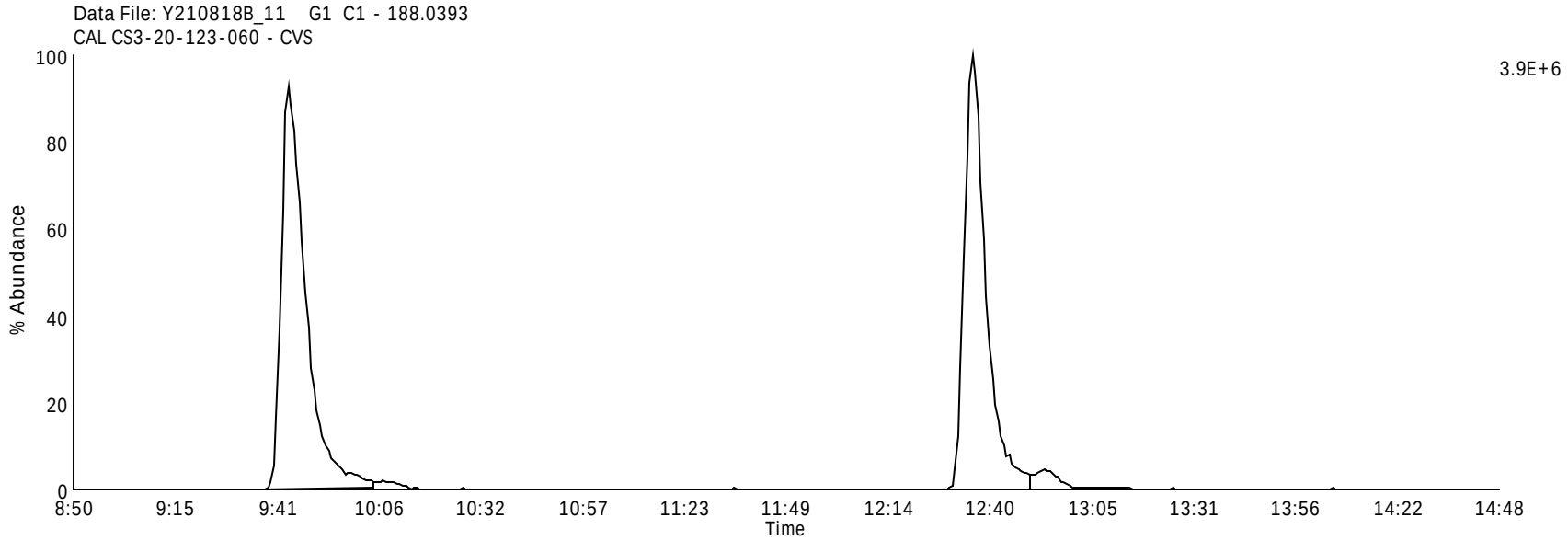


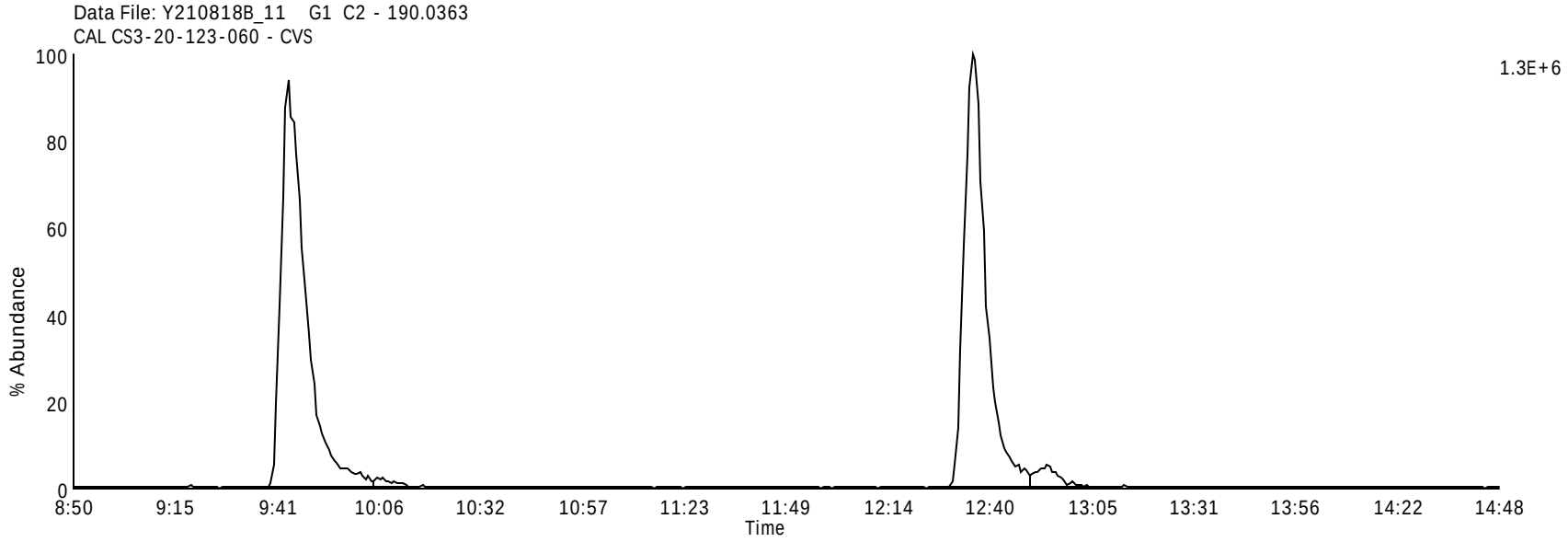
Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

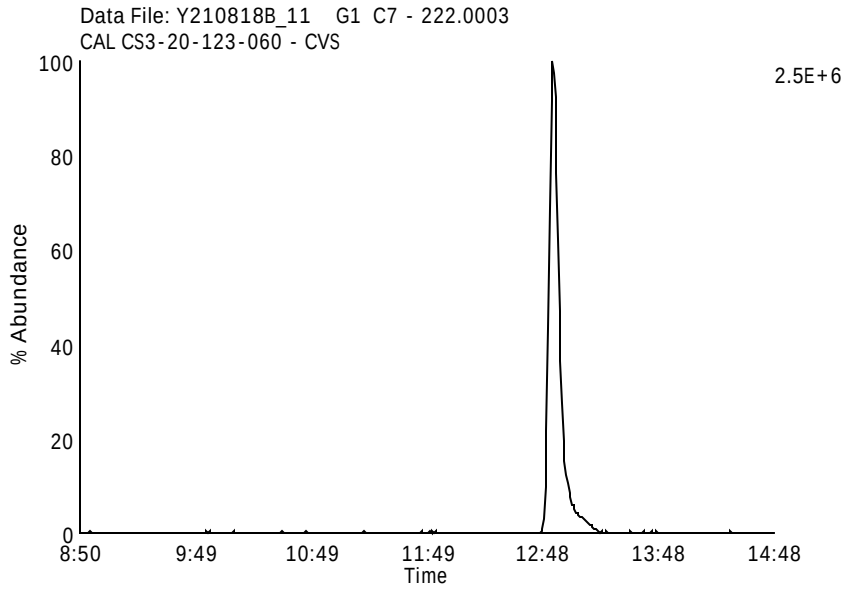
Sample Description: CAL CS3-20-123-060 - CVS

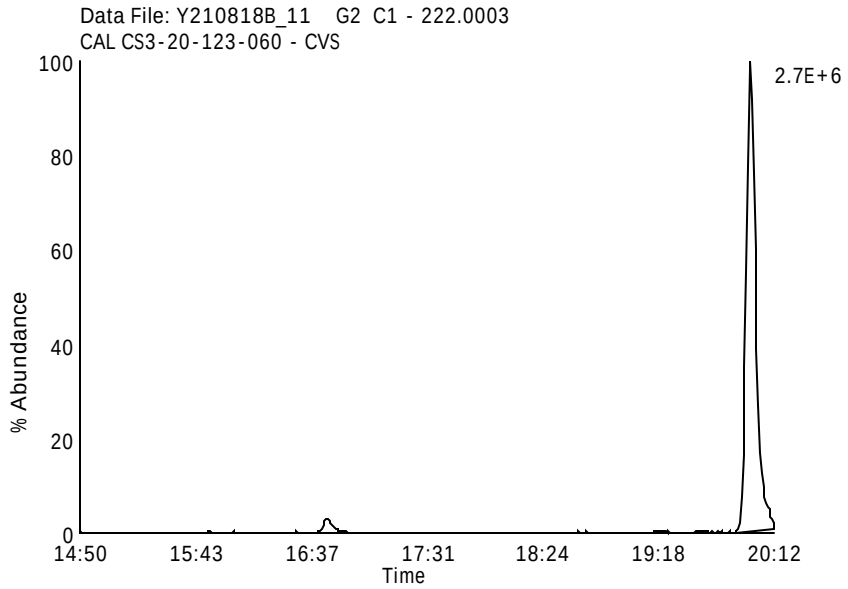


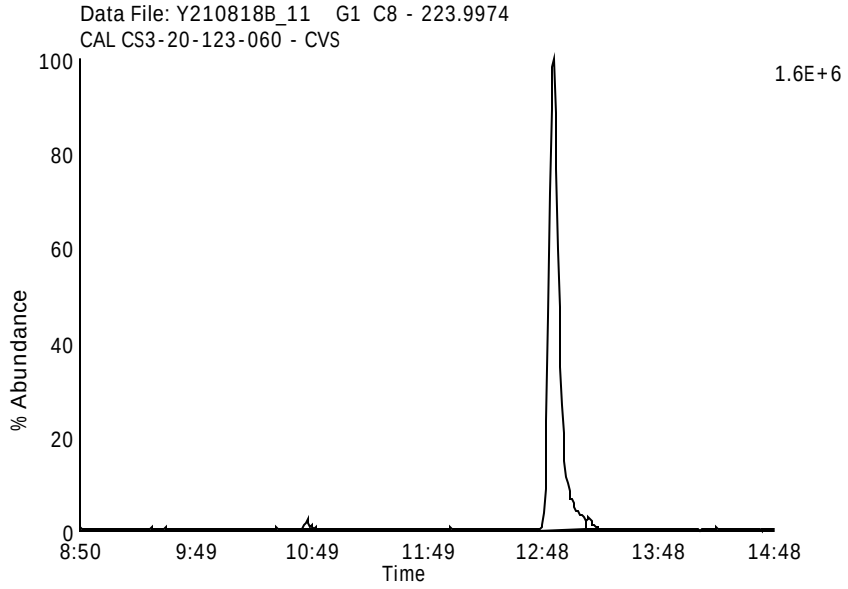


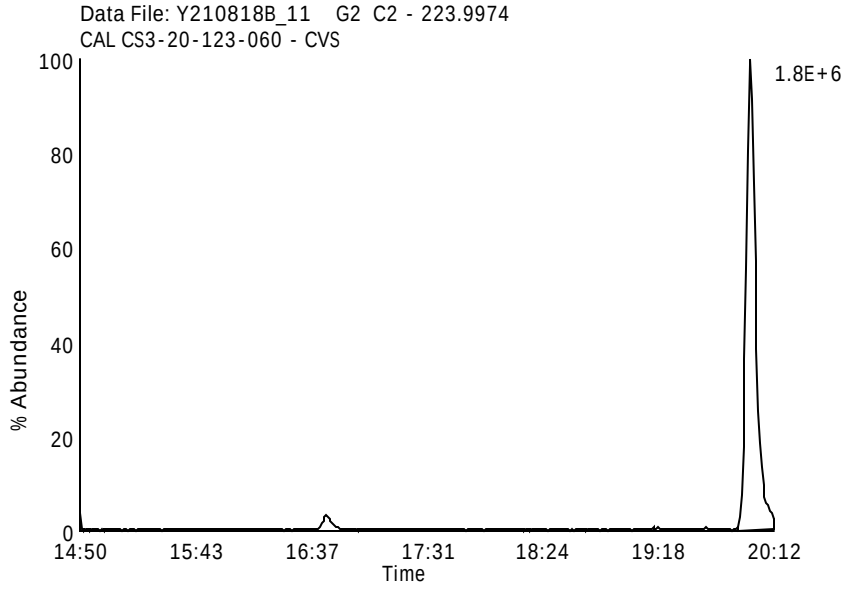
Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



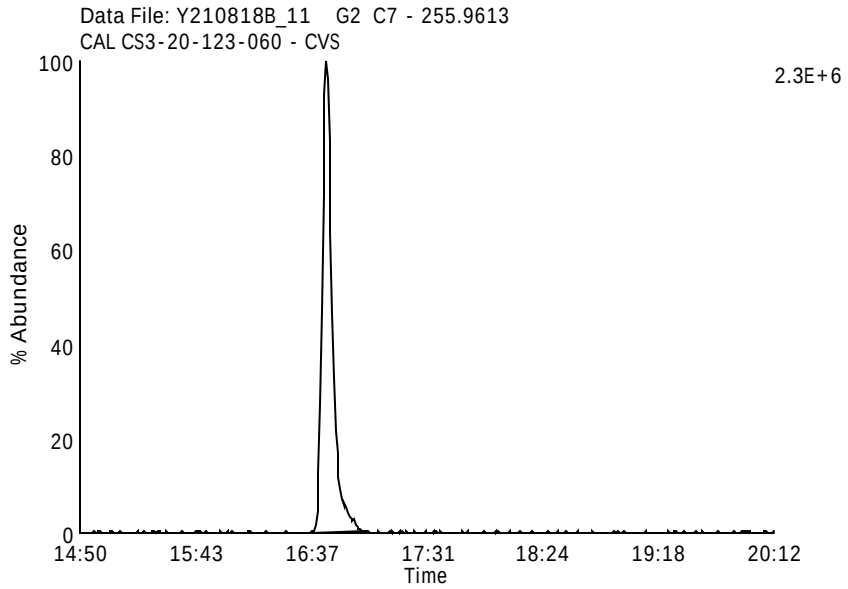


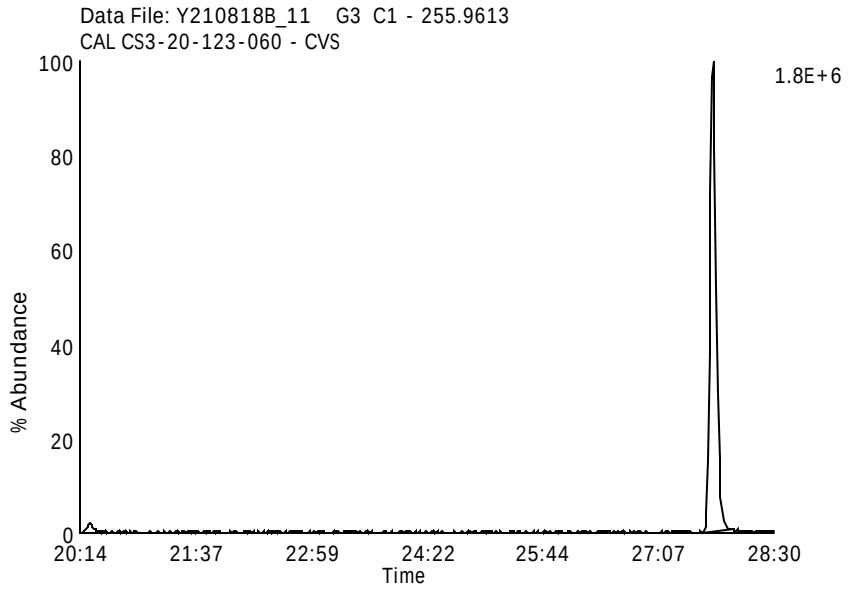


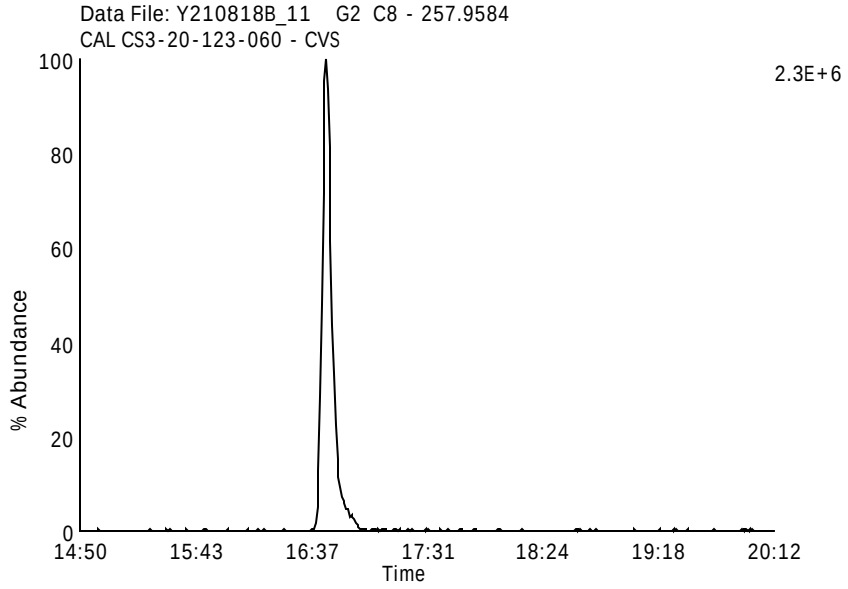


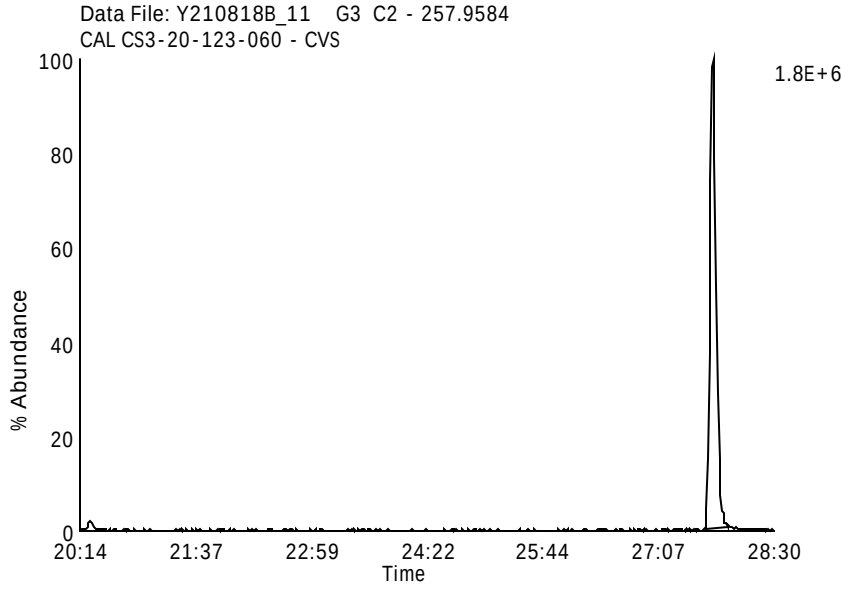
Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



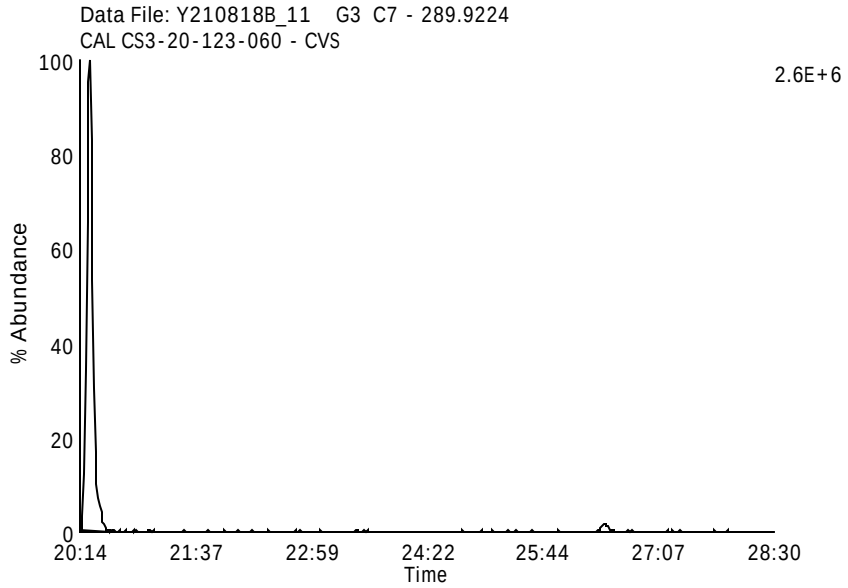


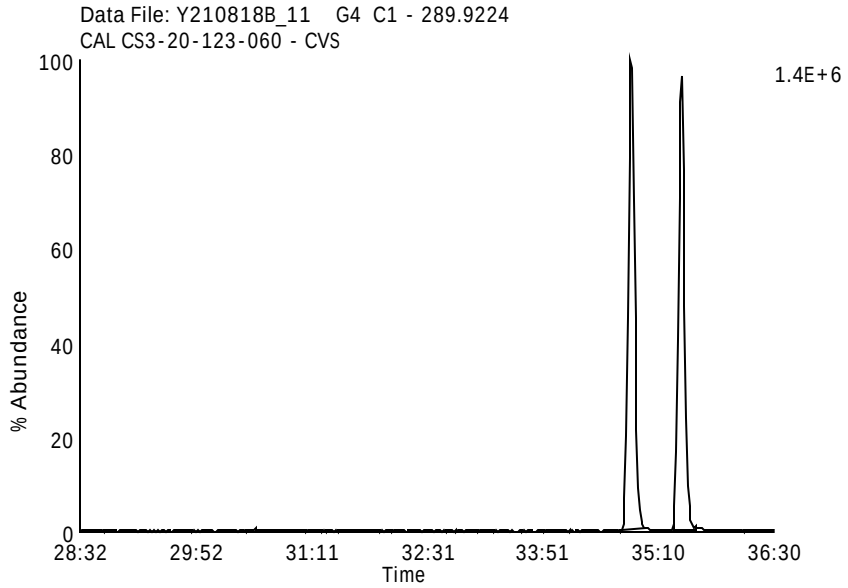


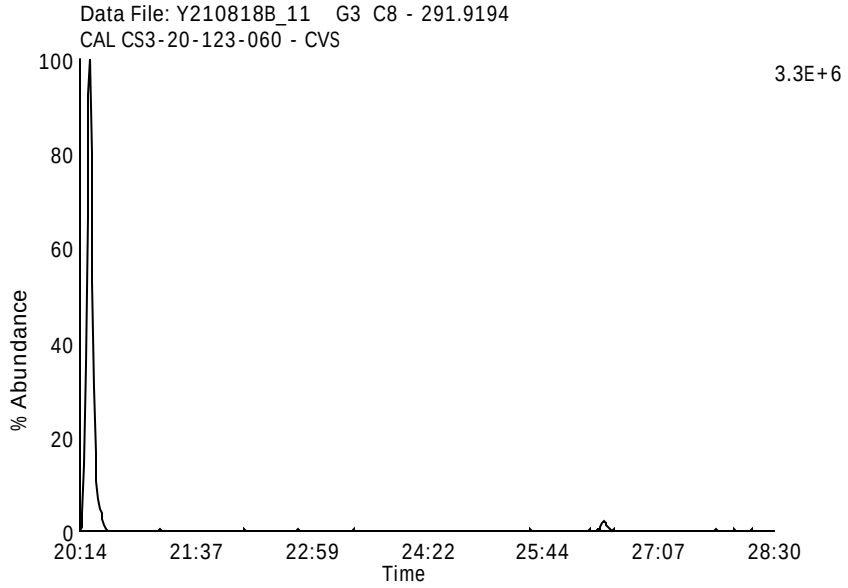


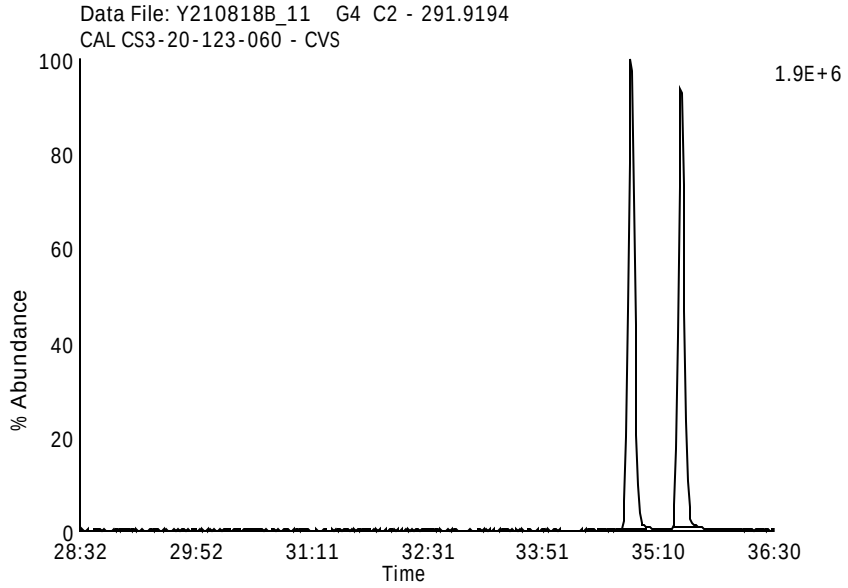
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



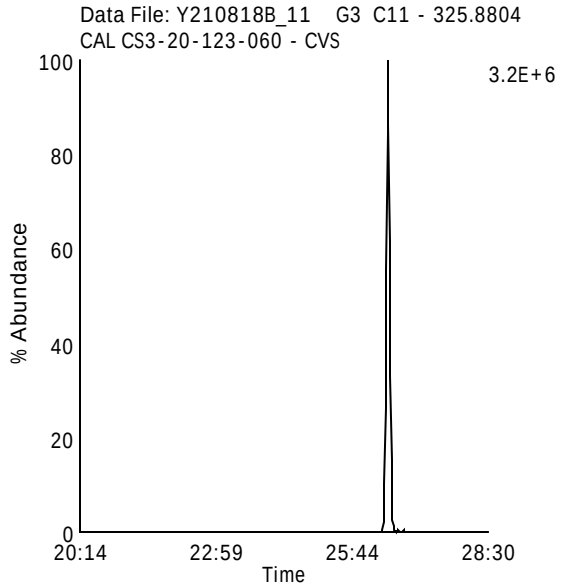


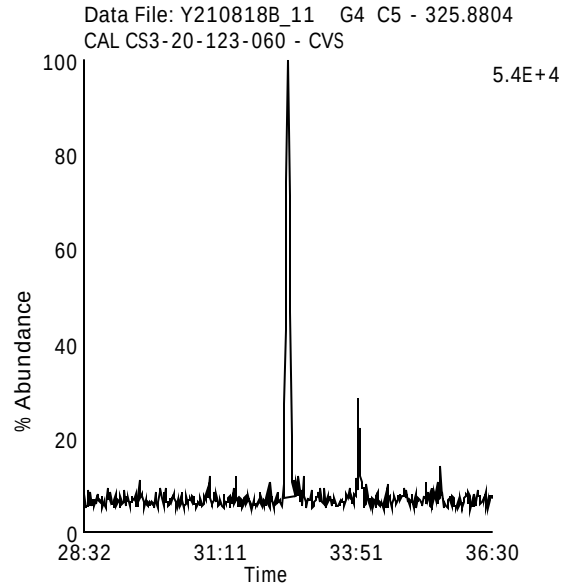


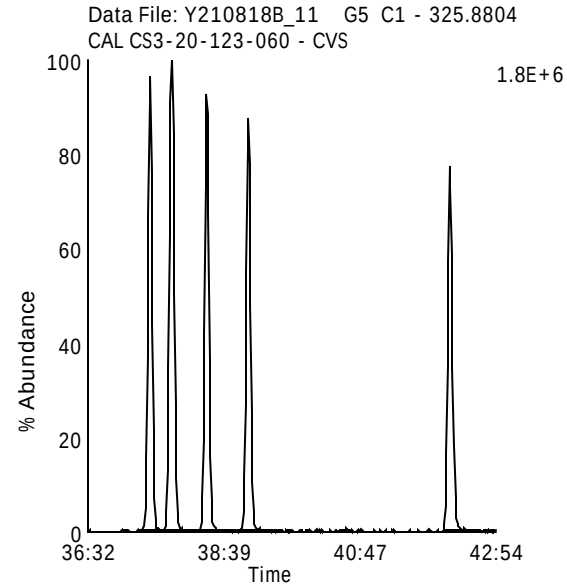


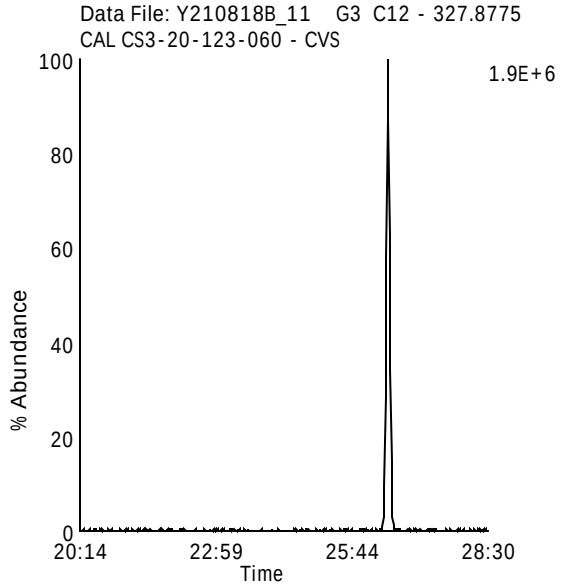
Penta Chlorinated Biphenyls

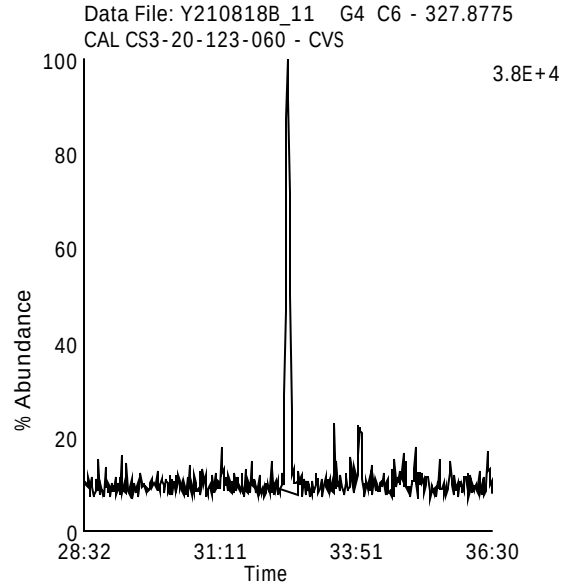
Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

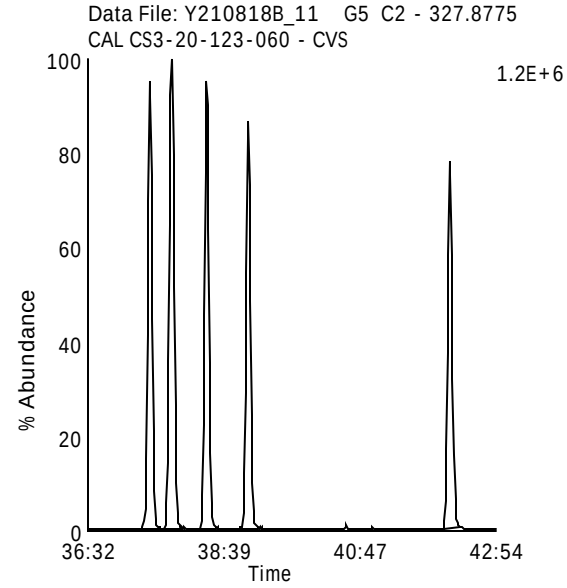












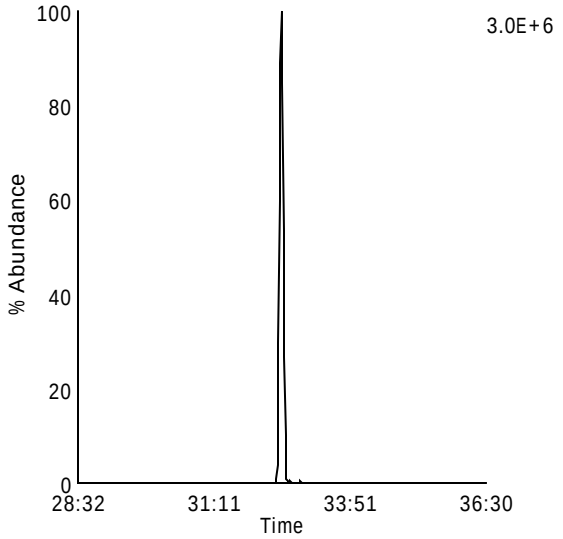
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

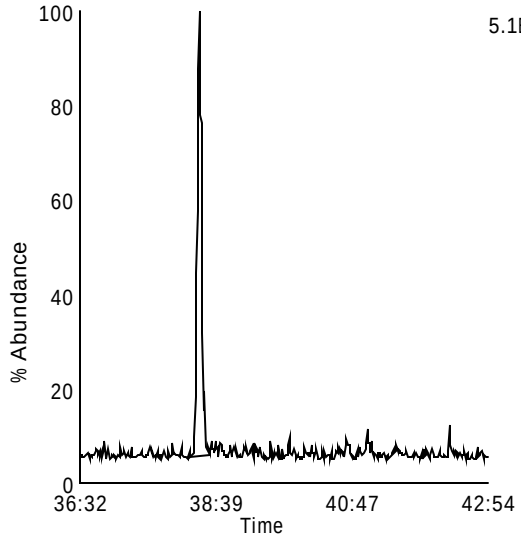
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS

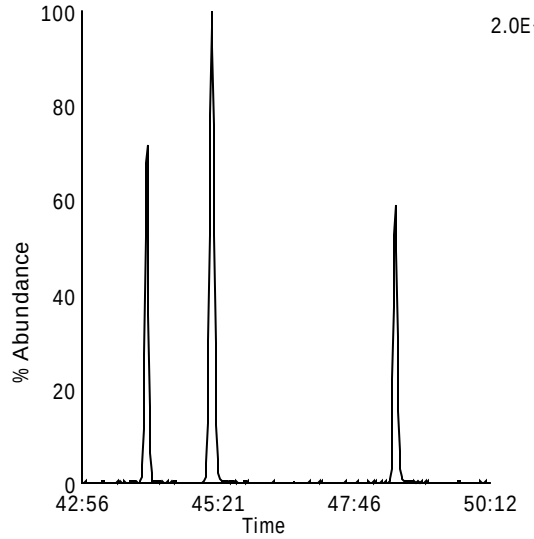
Data File: Y210818B_11 G4 C11 - 359.8415
CAL CS3-20-123-060 - CVS



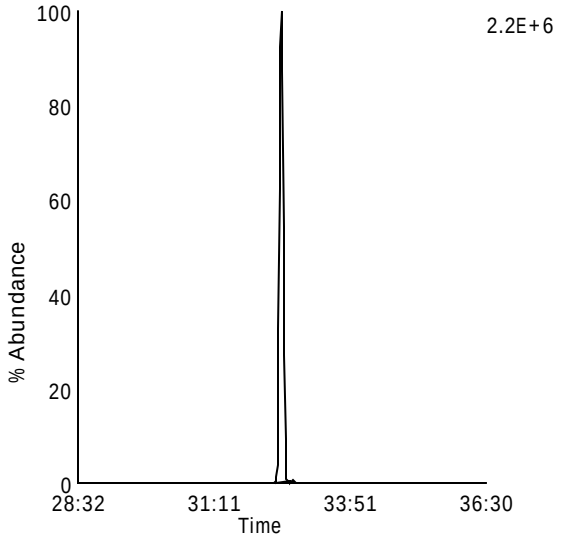
Data File: Y210818B_11 G5 C5 - 359.8415
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G6 C1 - 359.8415
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G4 C12 - 361.8385
CAL CS3-20-123-060 - CVS



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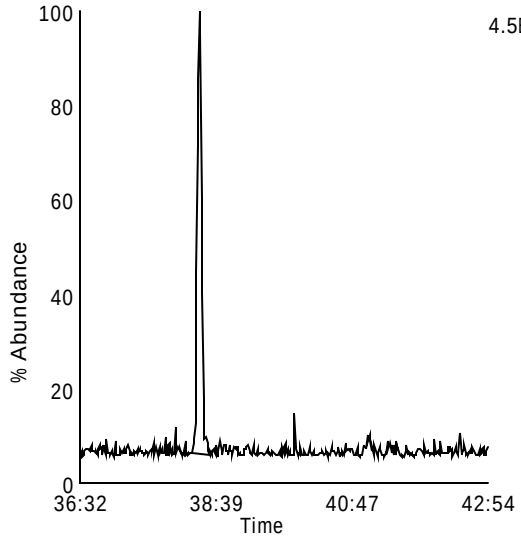
CAL CS3-20-123-060 - CVS



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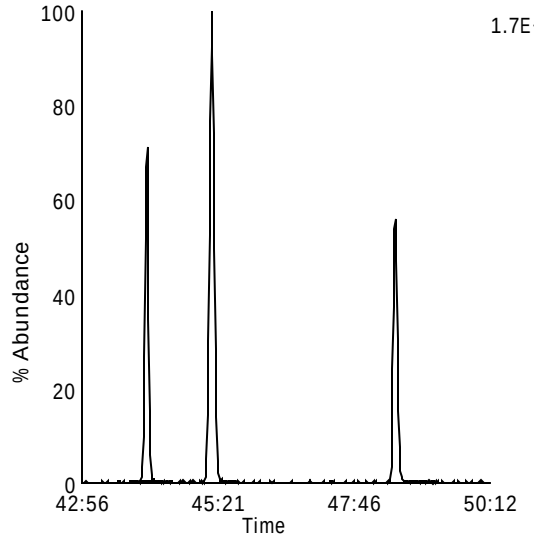
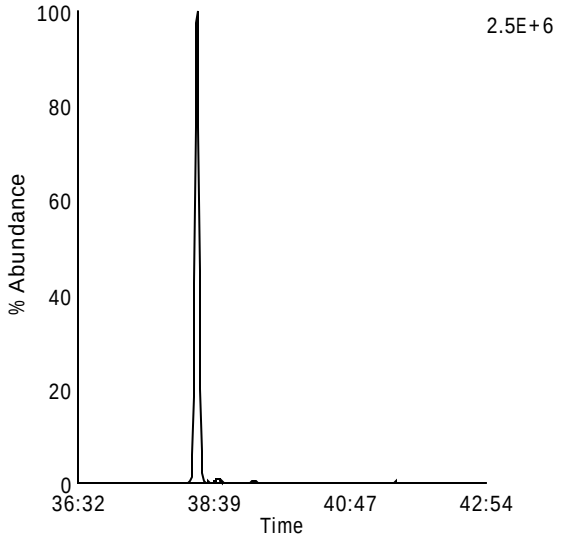
CAL CS3-20-123-060 - CVS



Hepta Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

Data File: Y210818B_11 G5 C11 - 393.8025
CAL CS3-20-123-060 - CVS



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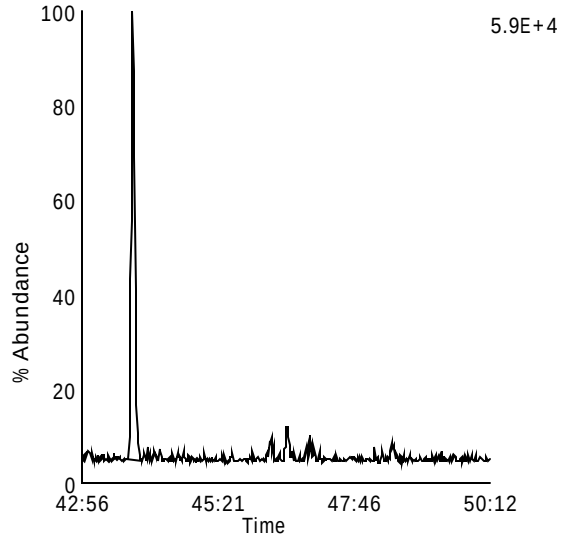
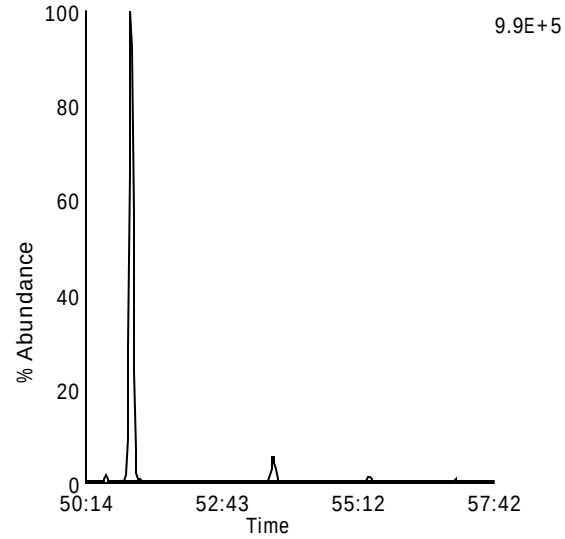
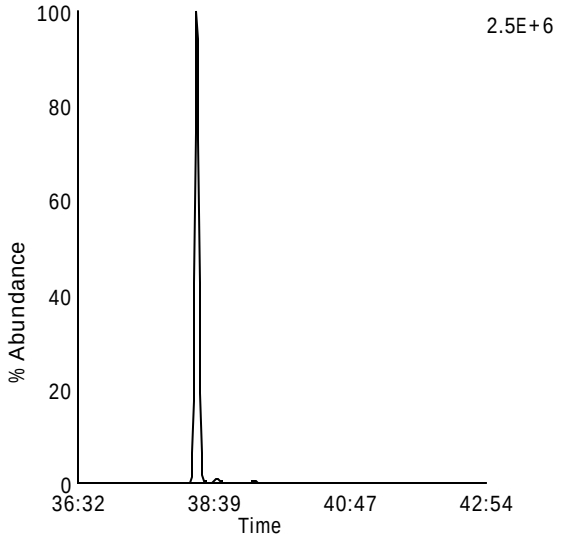
CAL CS3-20-123-060 - CVS



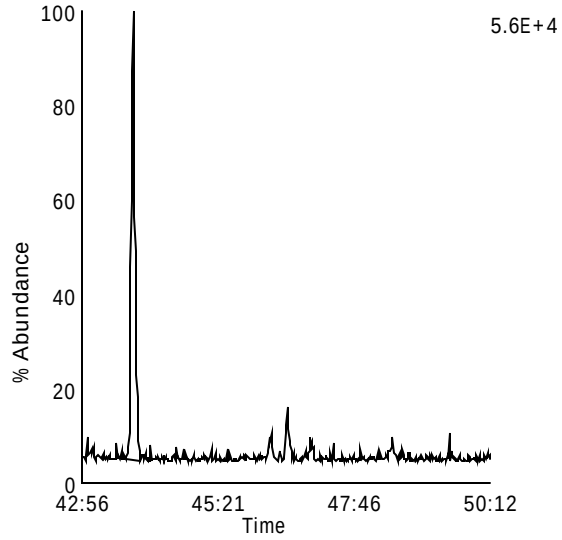
Data File: Y210818B_11 G7 C1 - 393.8025
CAL CS3-20-123-060 - CVS



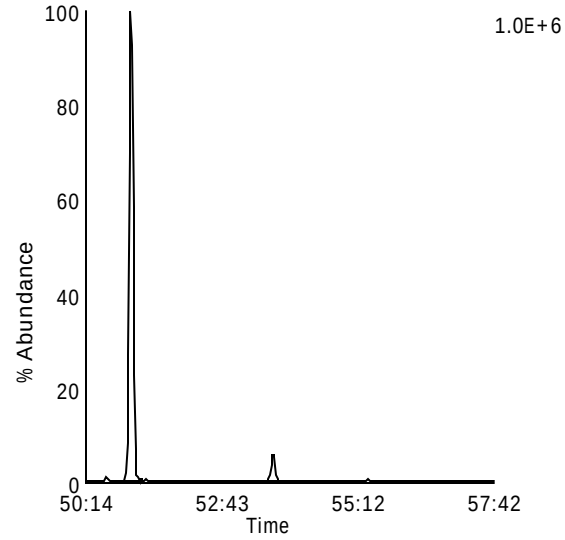
Data File: Y210818B_11 G5 C12 - 395.7995
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G6 C8 - 395.7995
CAL CS3-20-123-060 - CVS

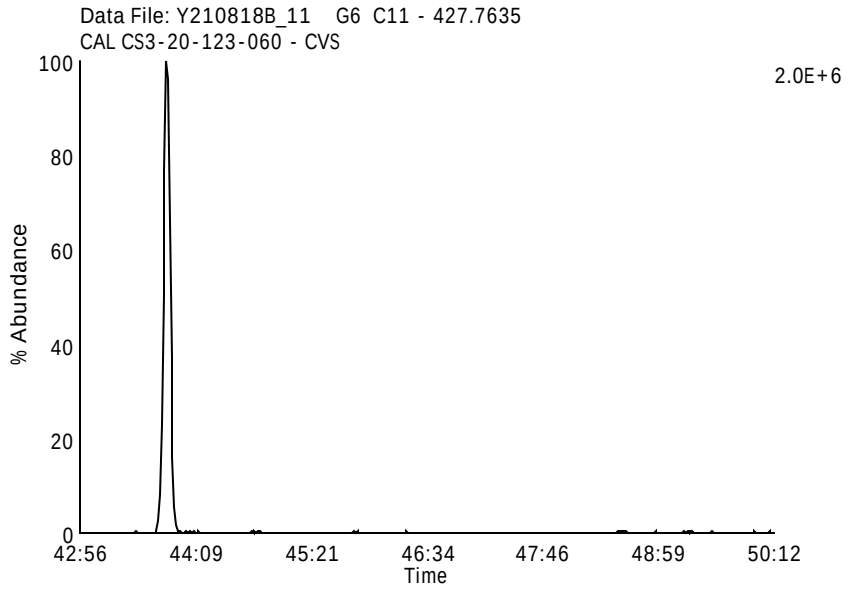


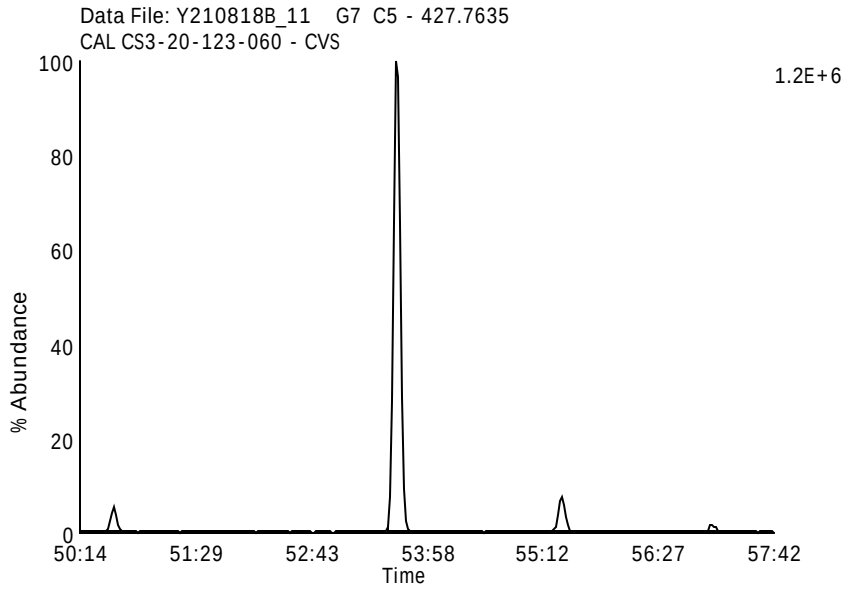
Data File: Y210818B_11 G7 C2 - 395.7995
CAL CS3-20-123-060 - CVS

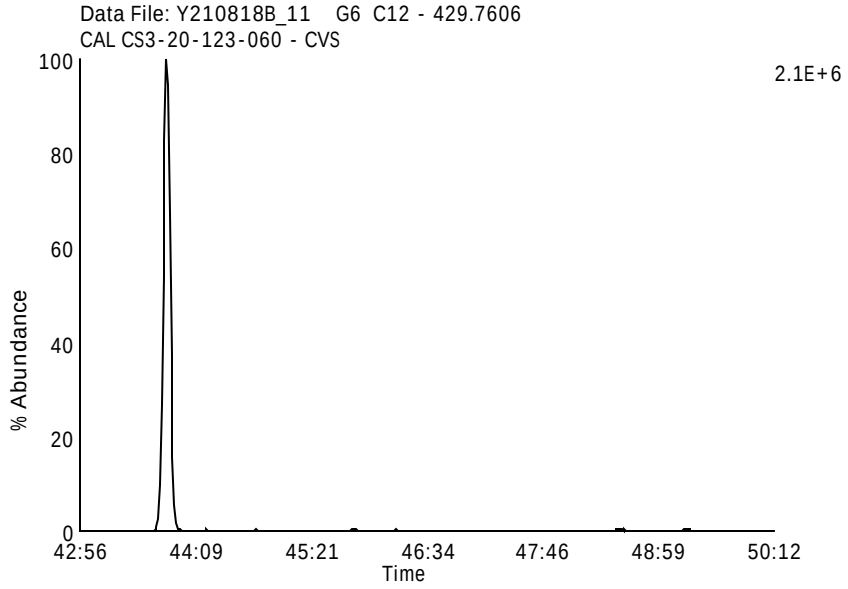


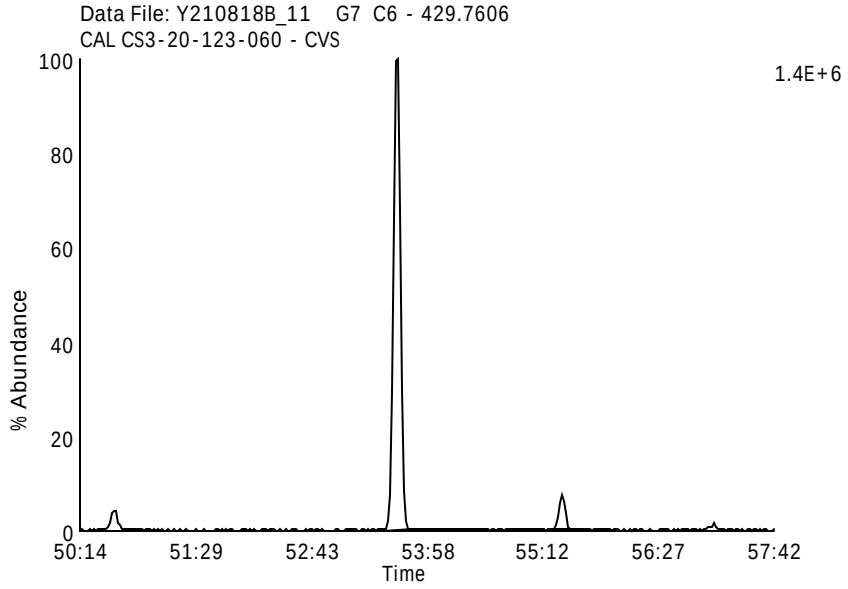
Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







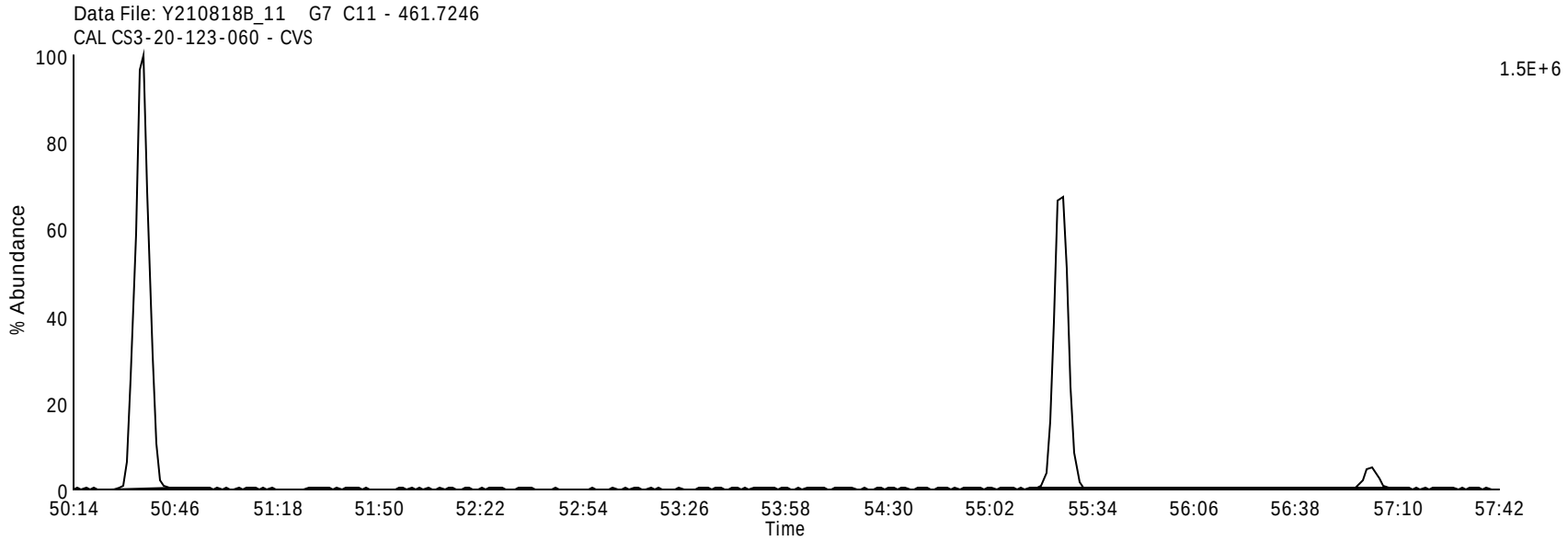


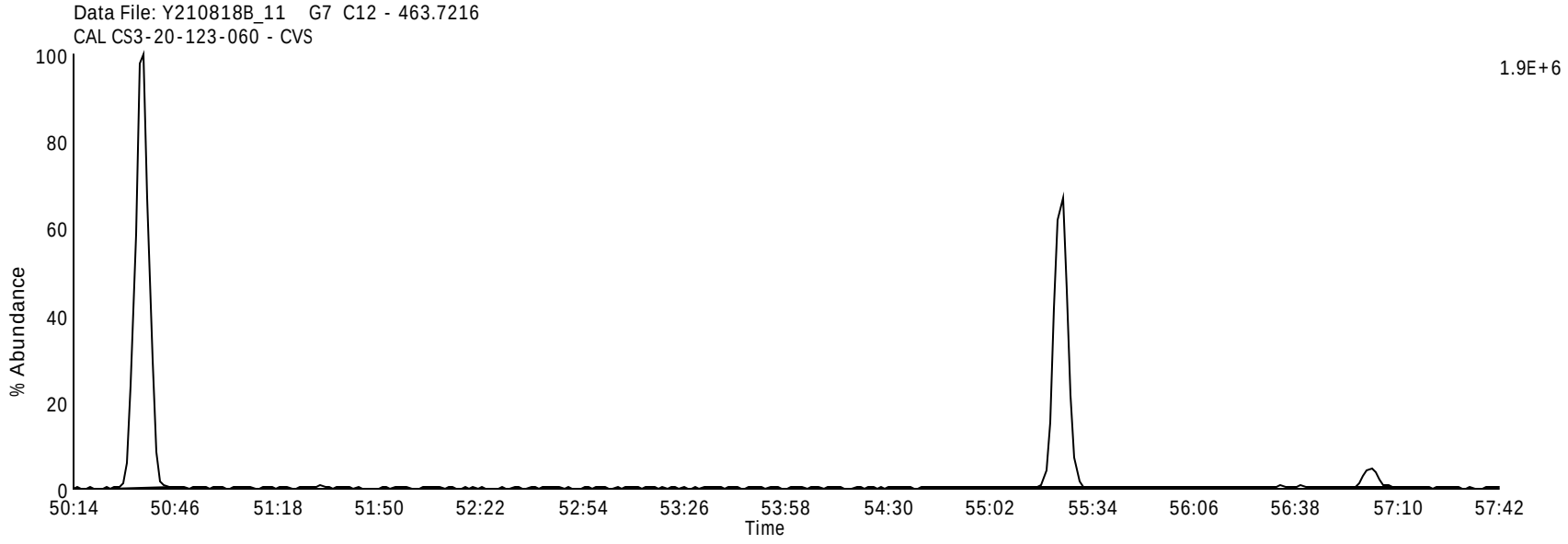
Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



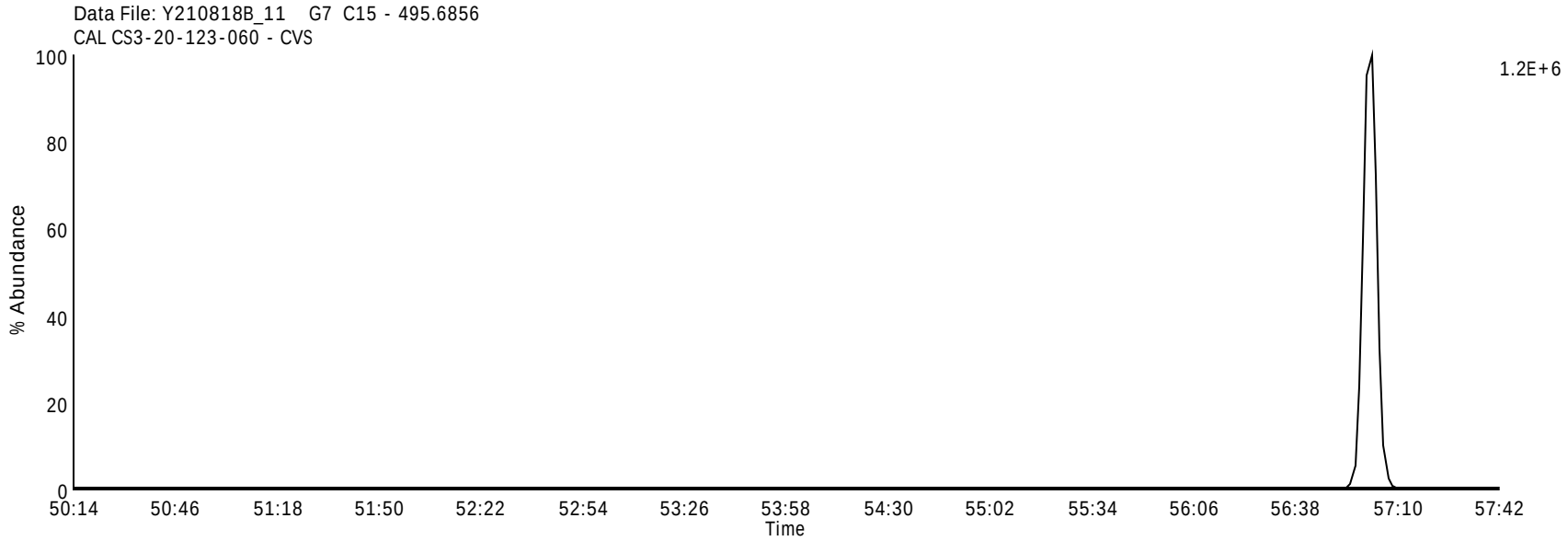


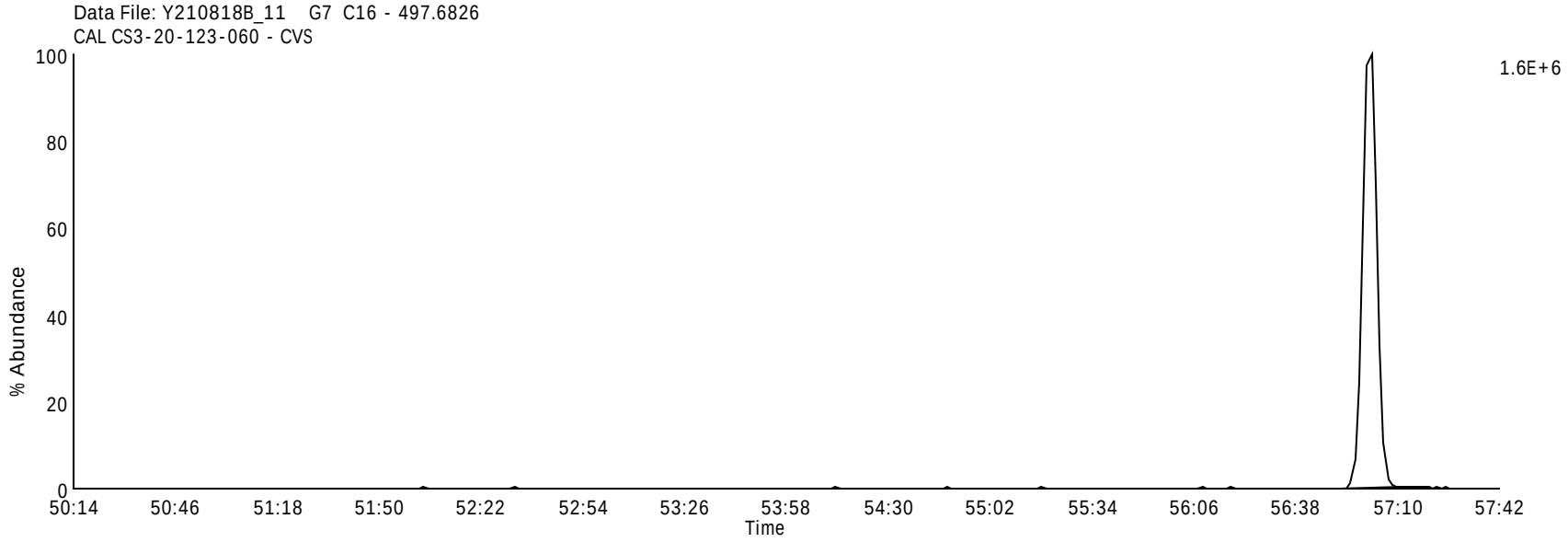
Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

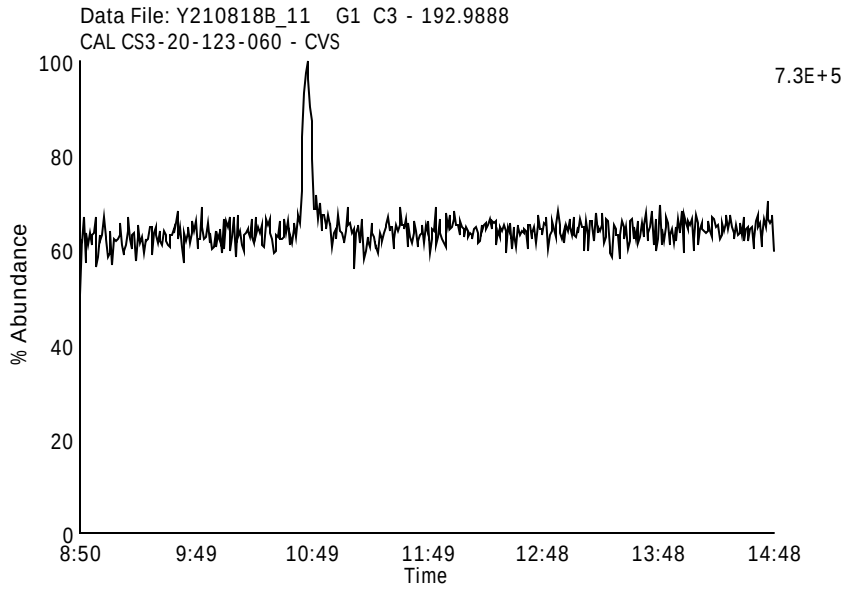
Sample Description: CAL CS3-20-123-060 - CVS

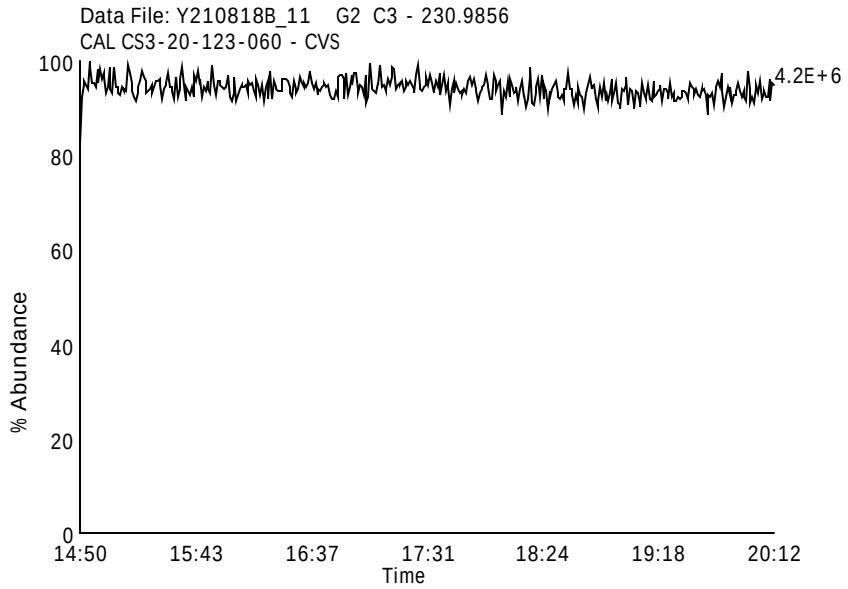


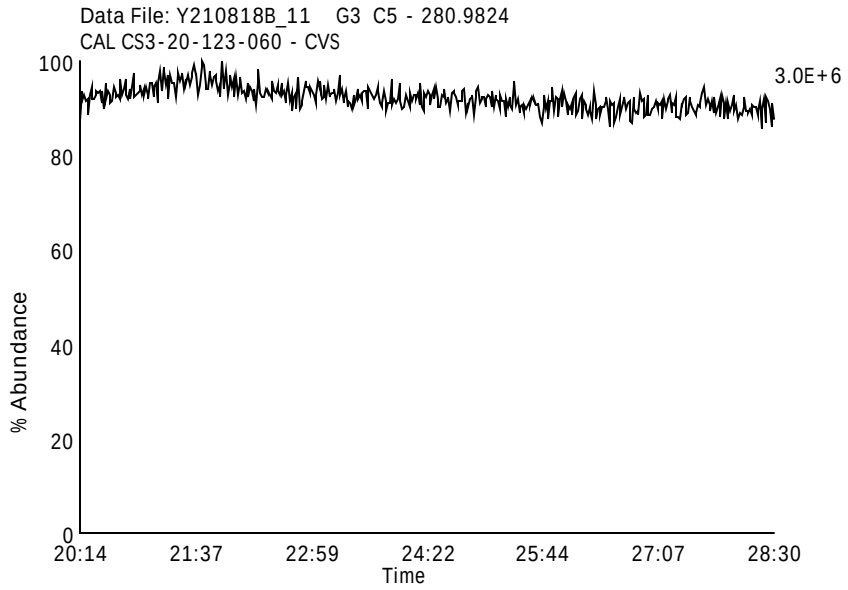


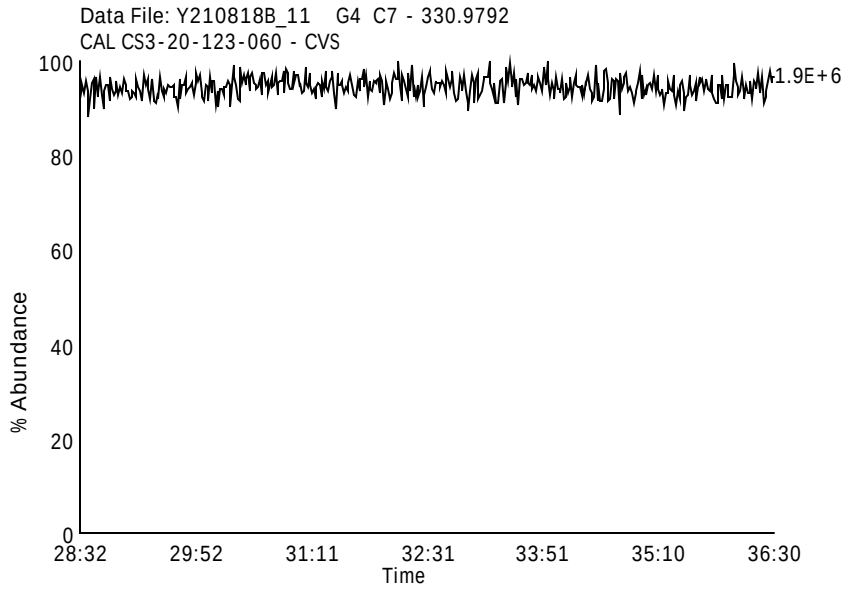
Group 1 - 4 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



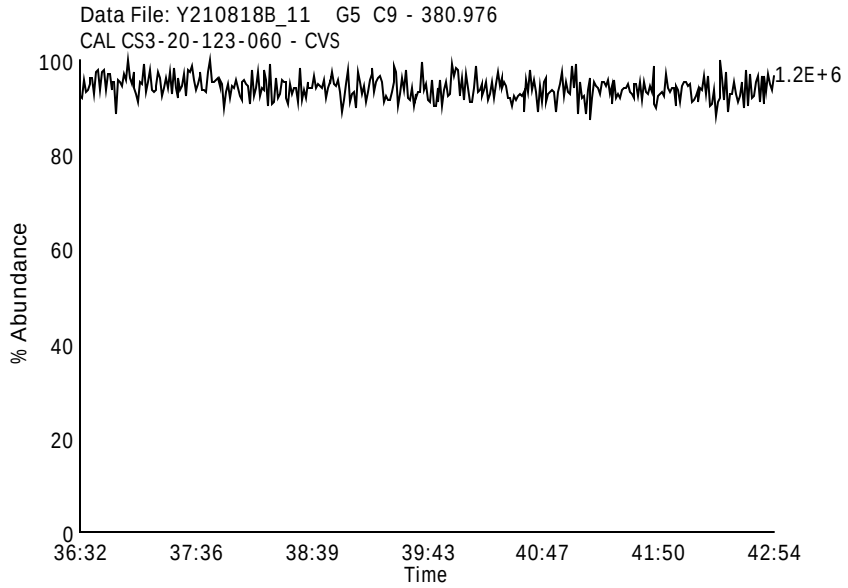


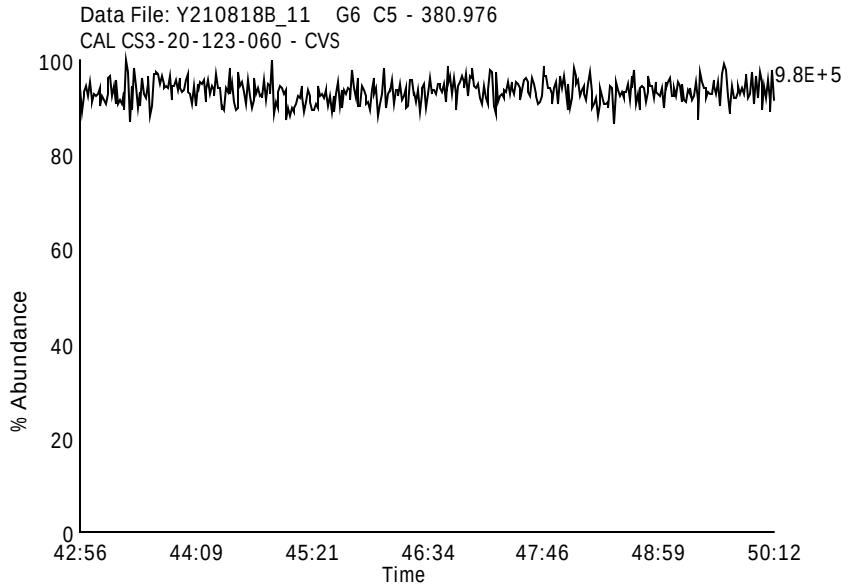


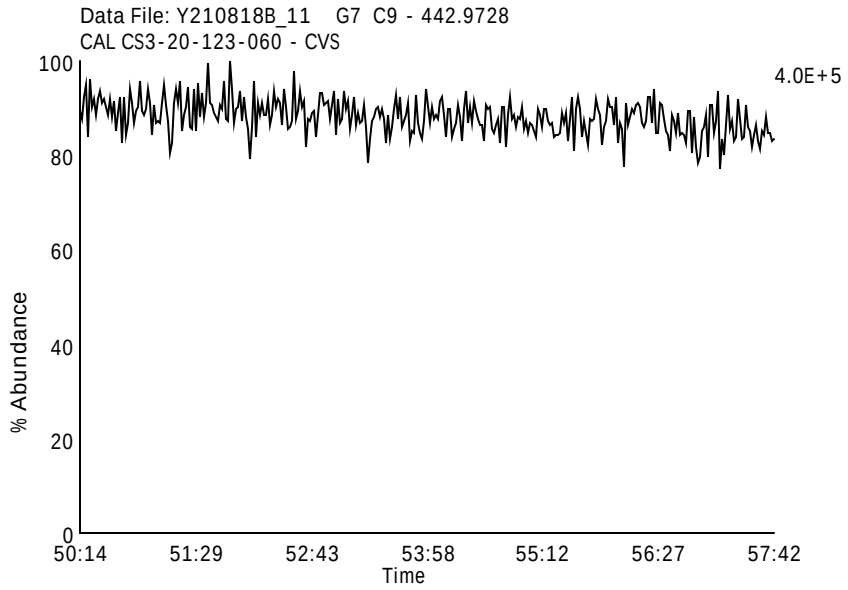


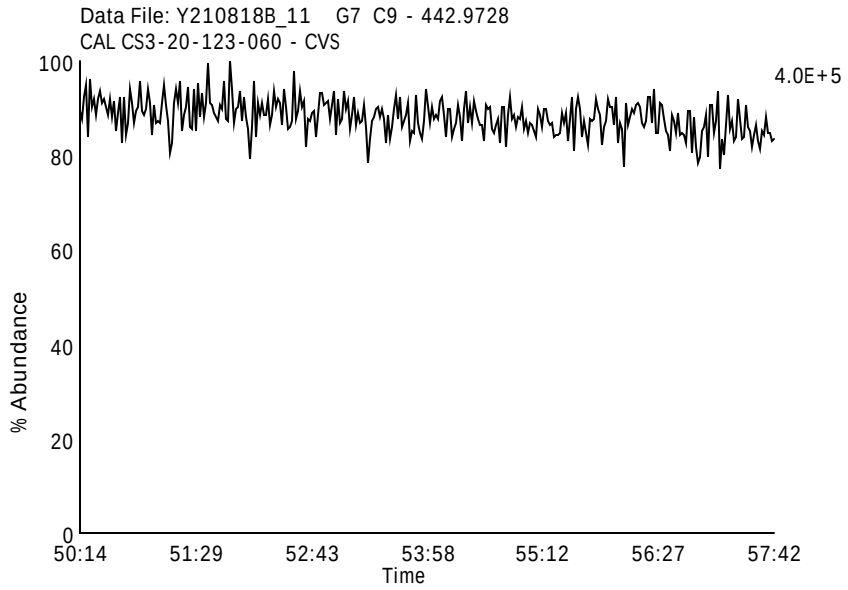
Group 5 - 7 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







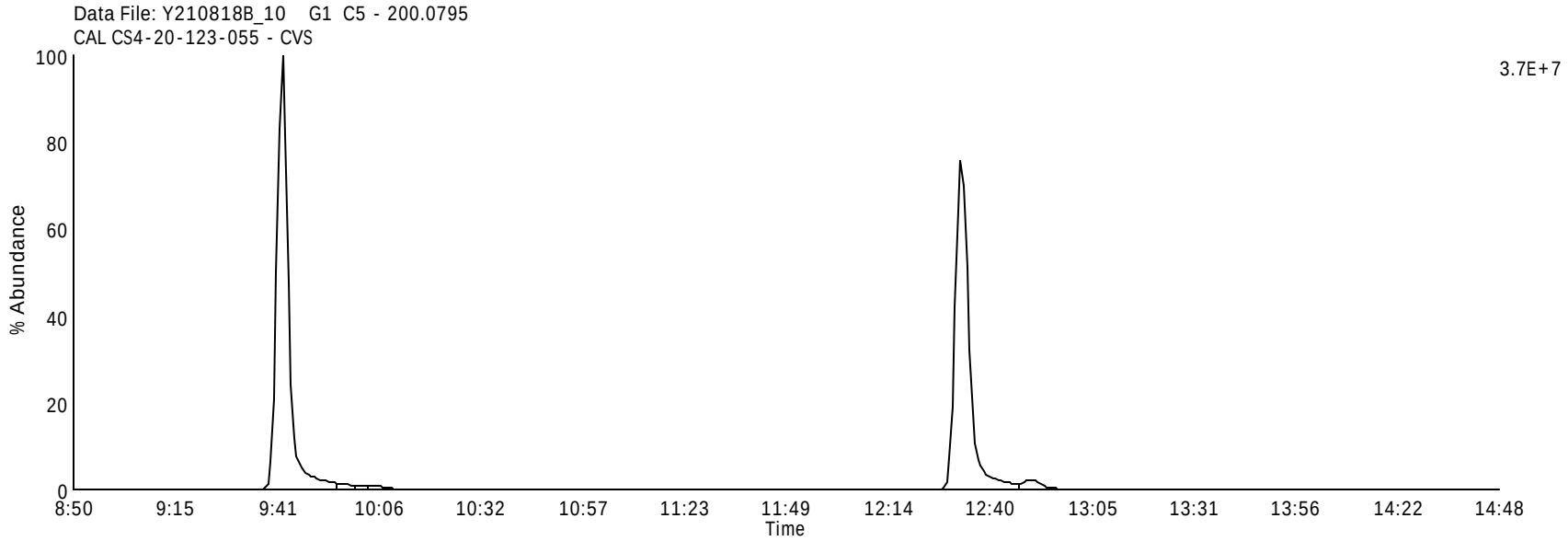


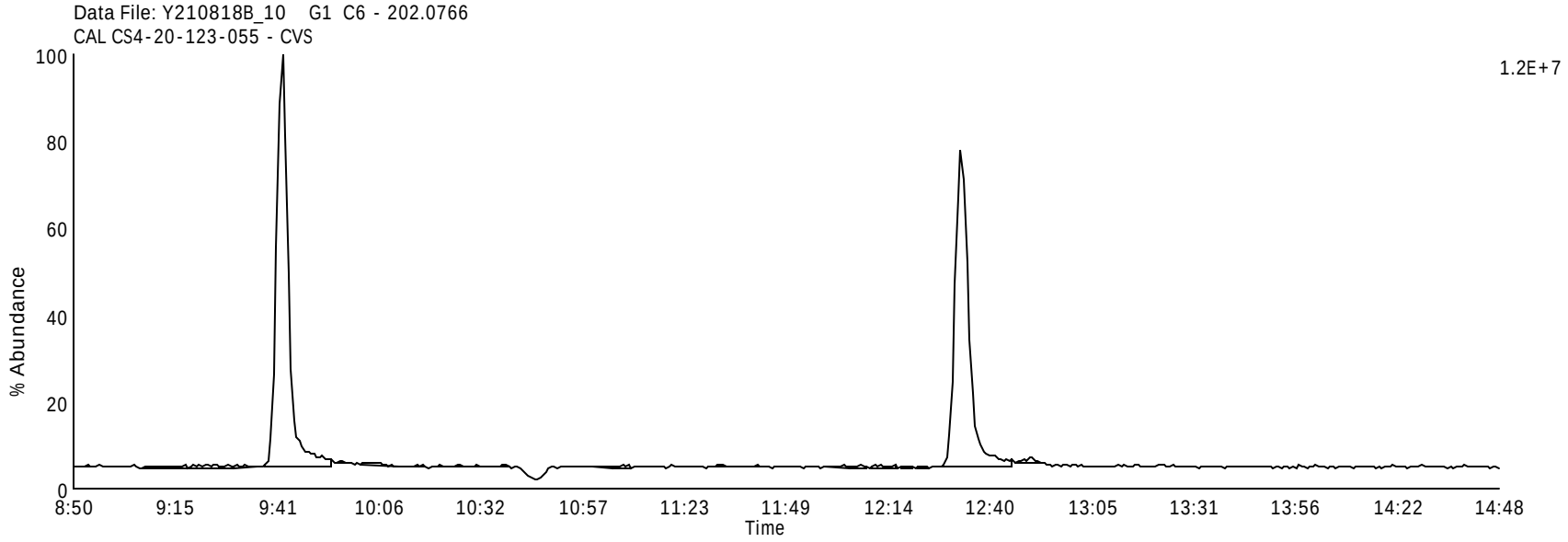
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

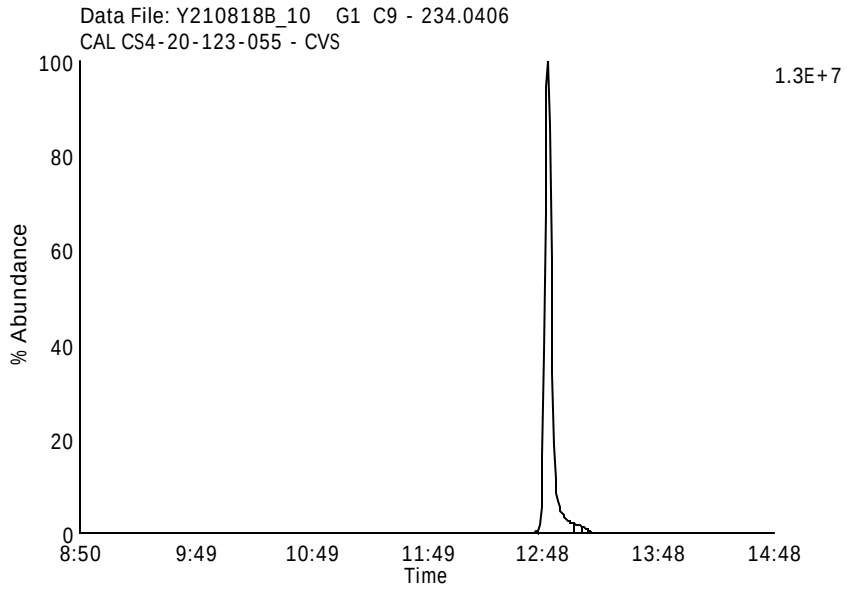
Sample Description: CAL CS4-20-123-055 - CVS

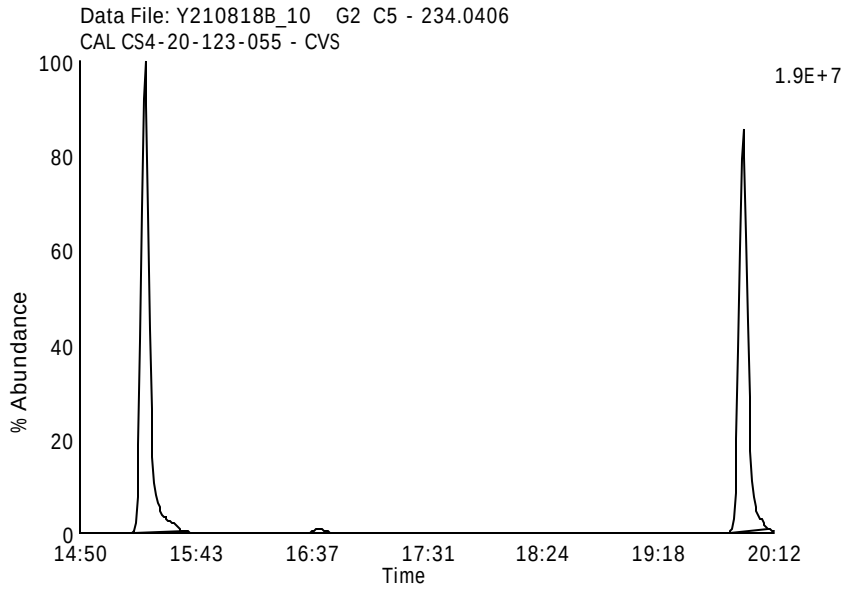


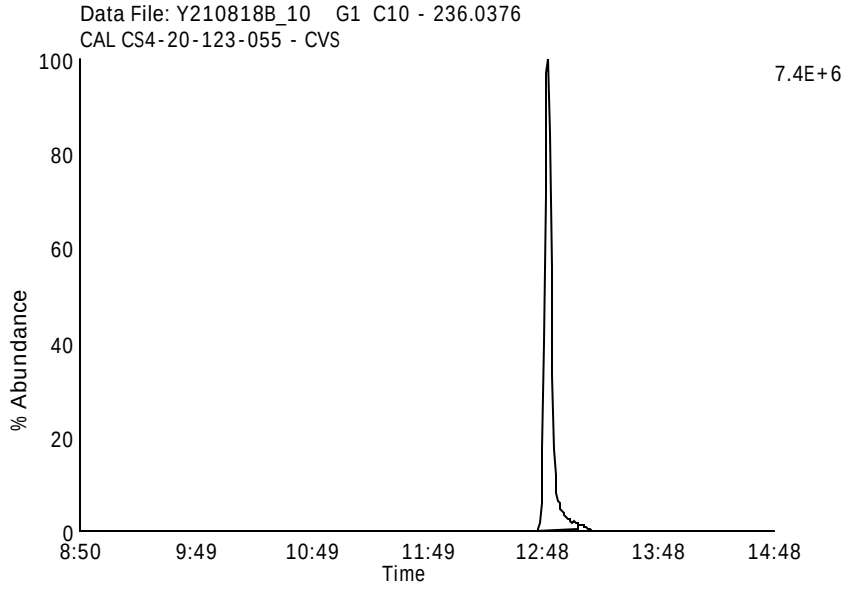


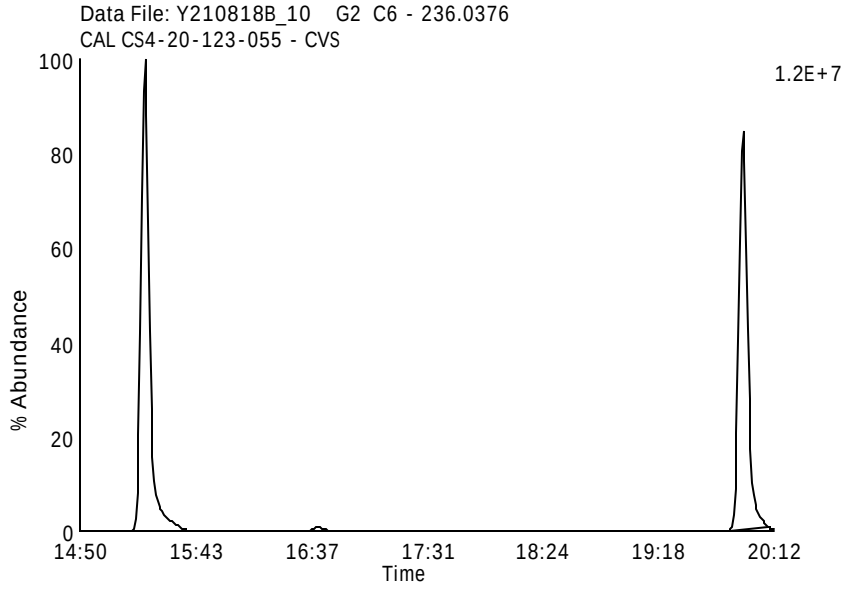
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS





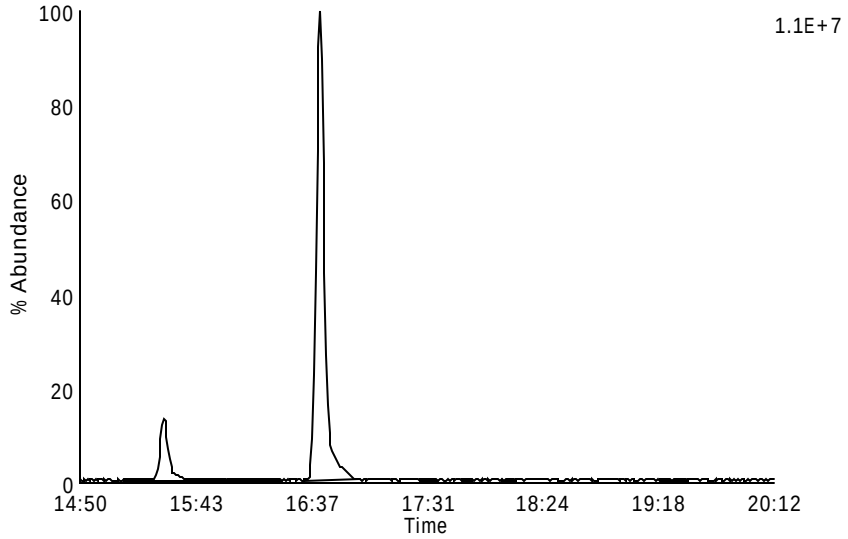




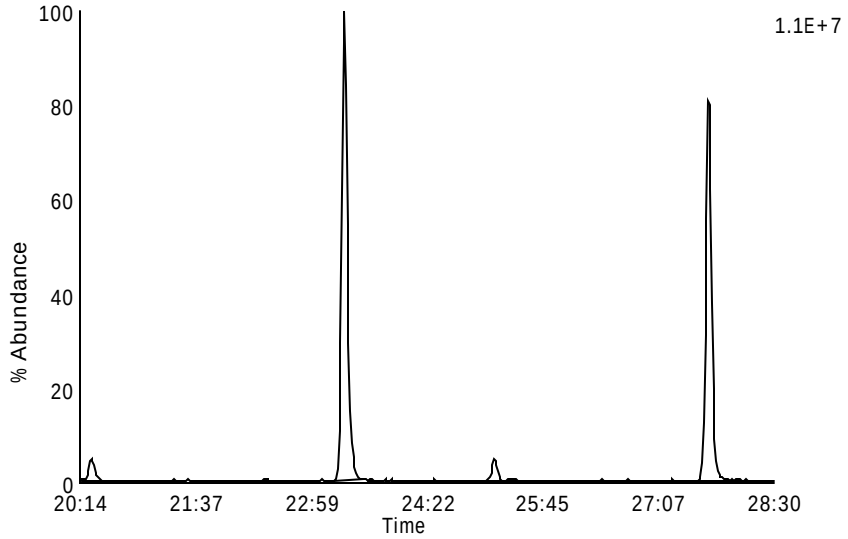
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

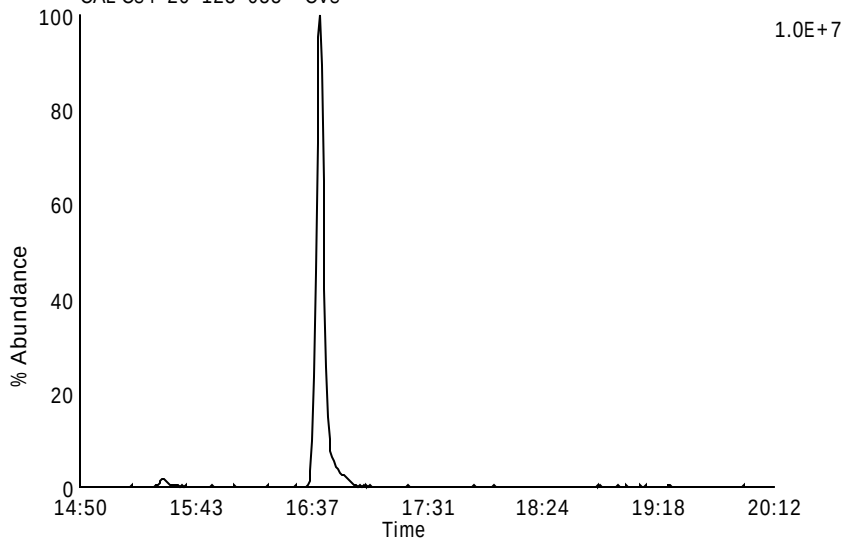
Data File: Y210818B_10 G2 C9 - 268.0016
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G3 C3 - 268.0016
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G2 C10 - 269.9986
CAL CS4-20-123-055 - CVS



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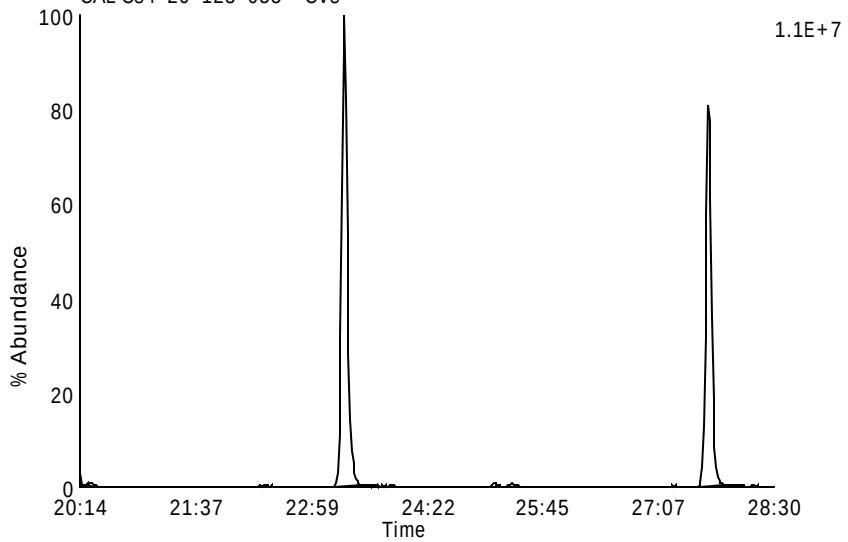
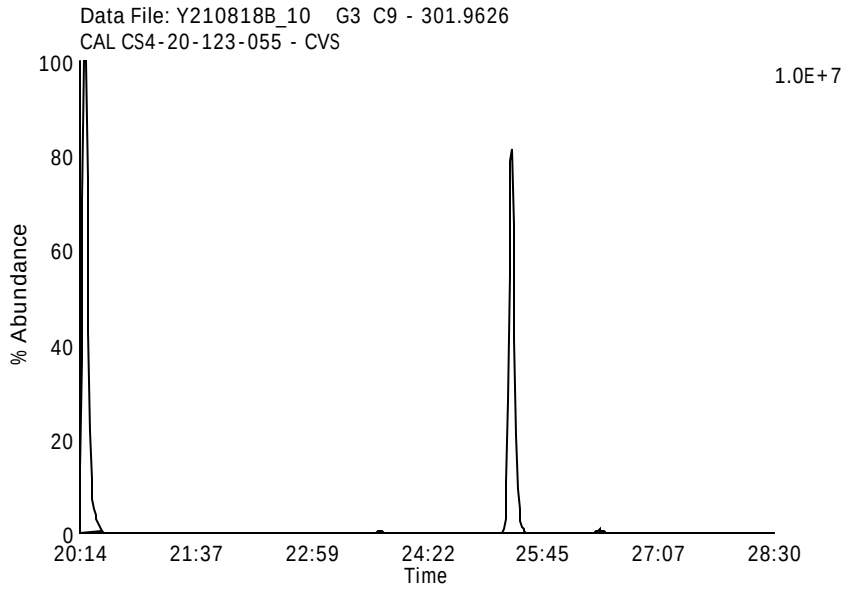
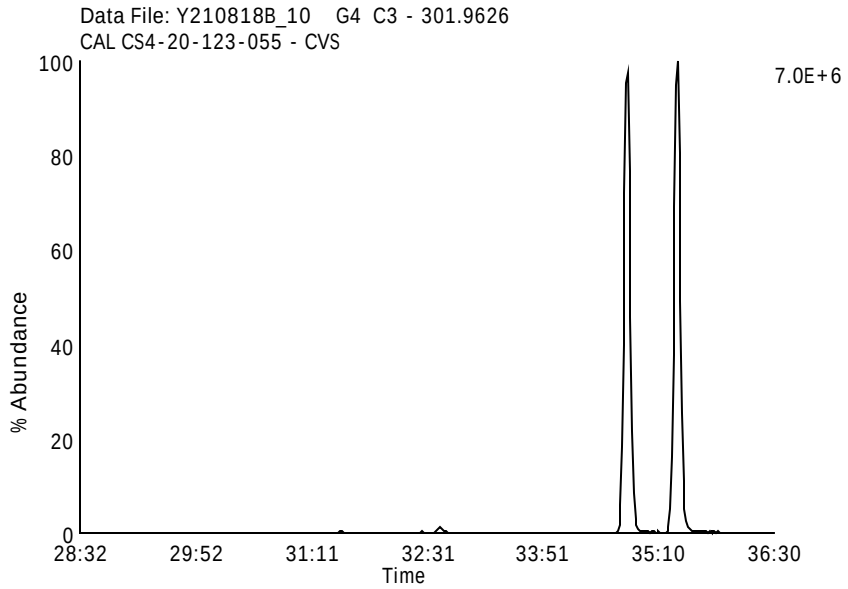
CAL CS4-20-123-055 - CVS

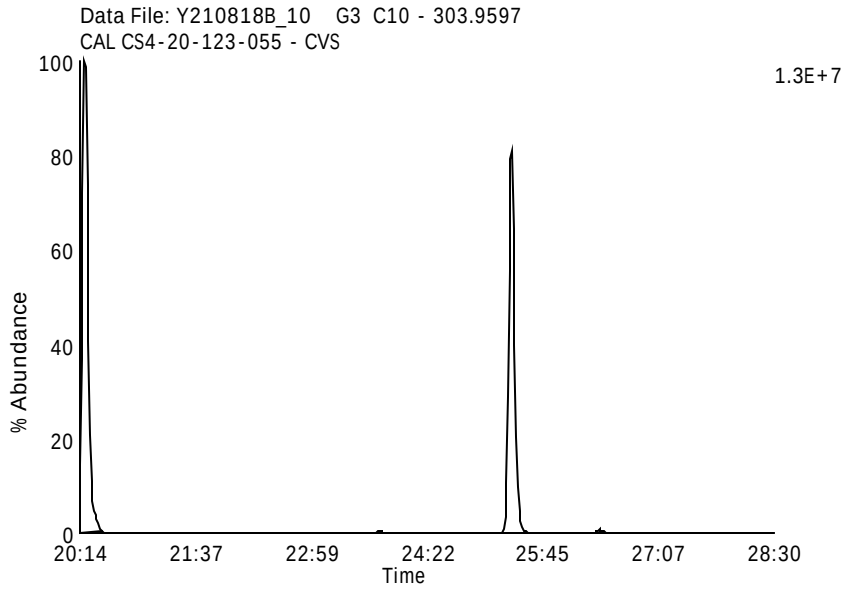


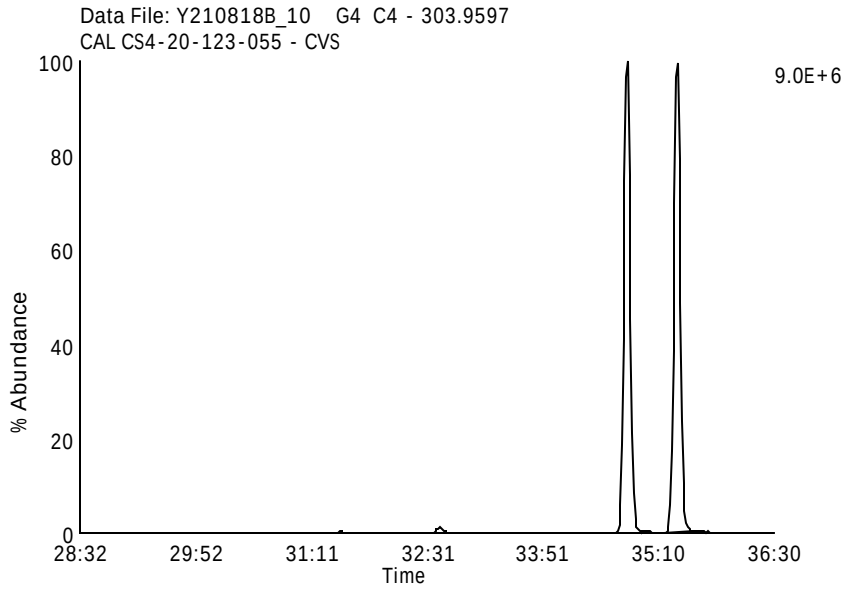
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS







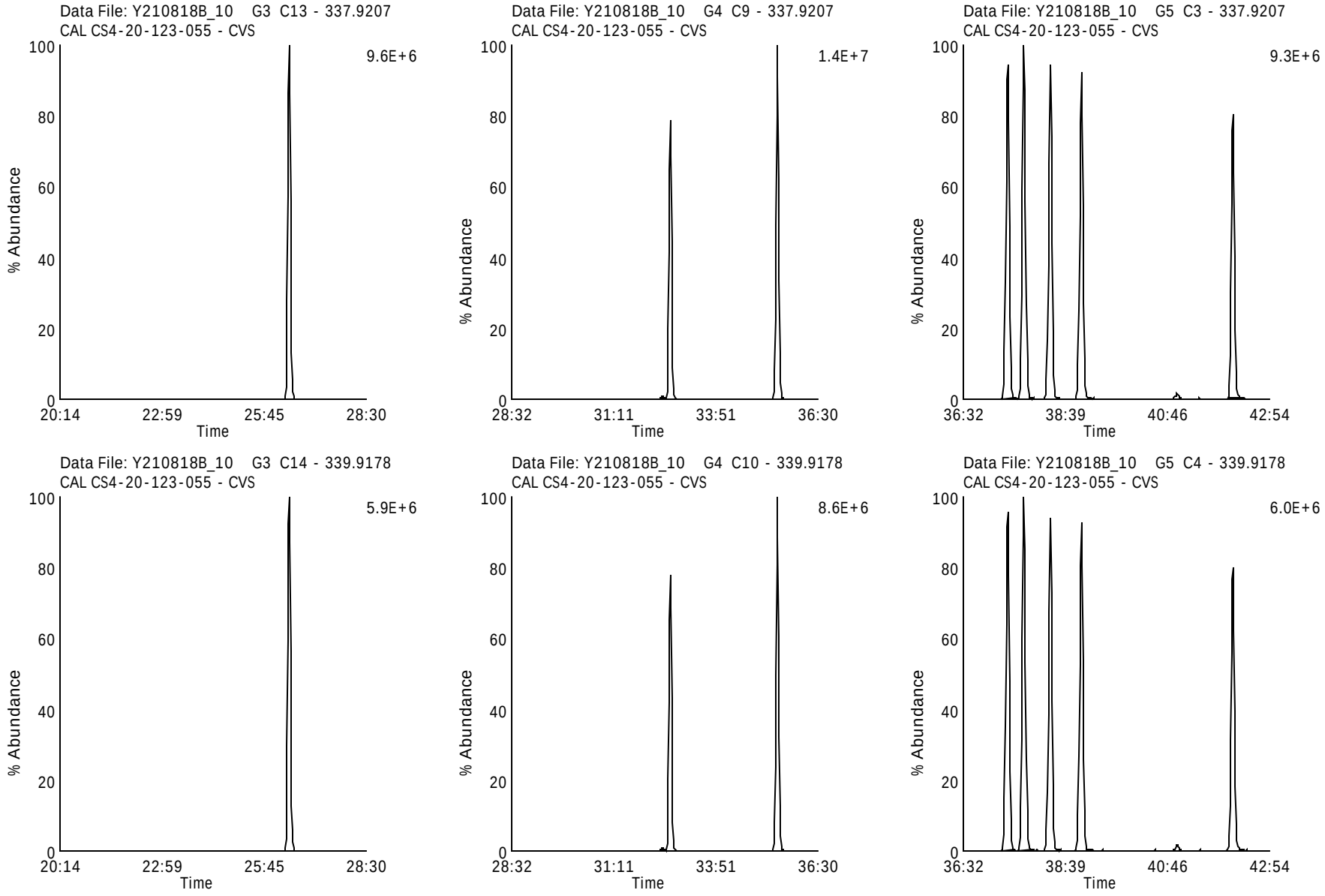


Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

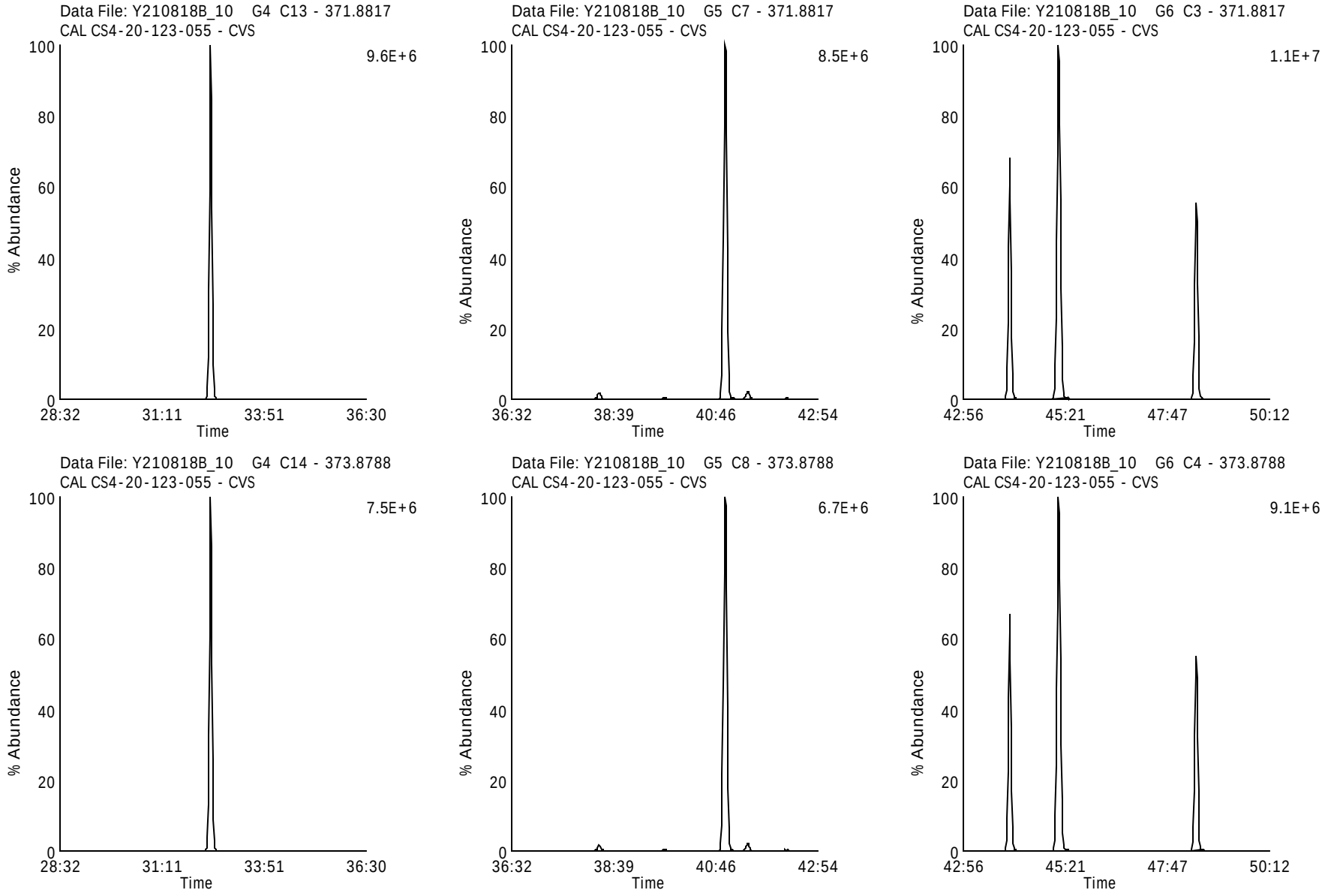


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

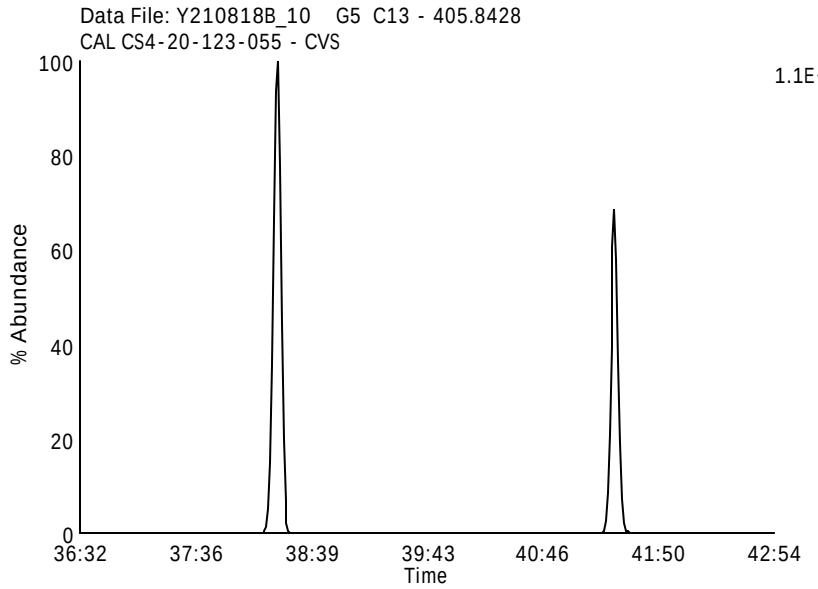


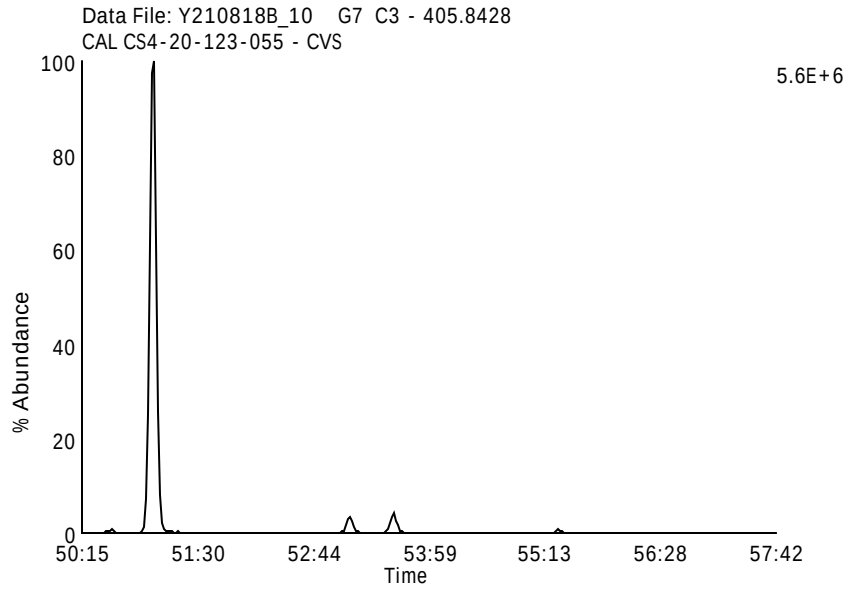
Labeled Hepta Chlorinated Biphenyls

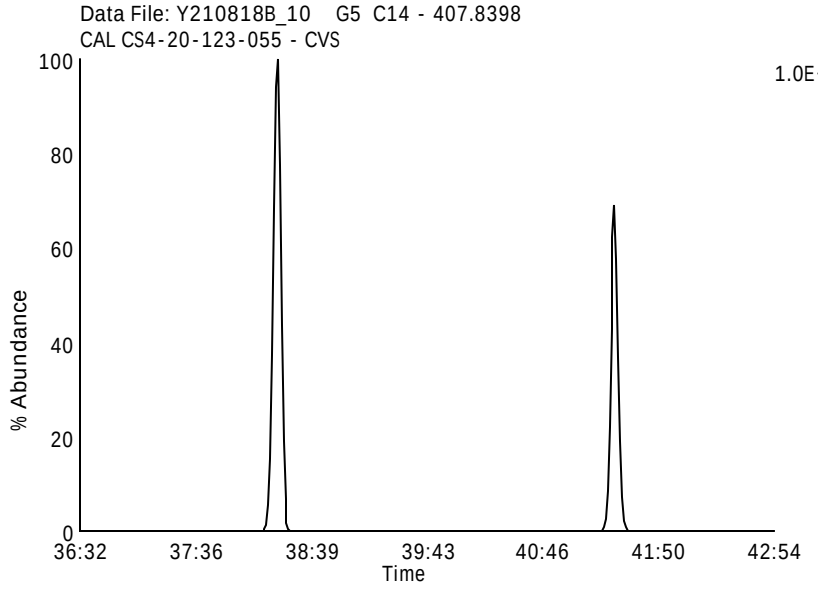
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

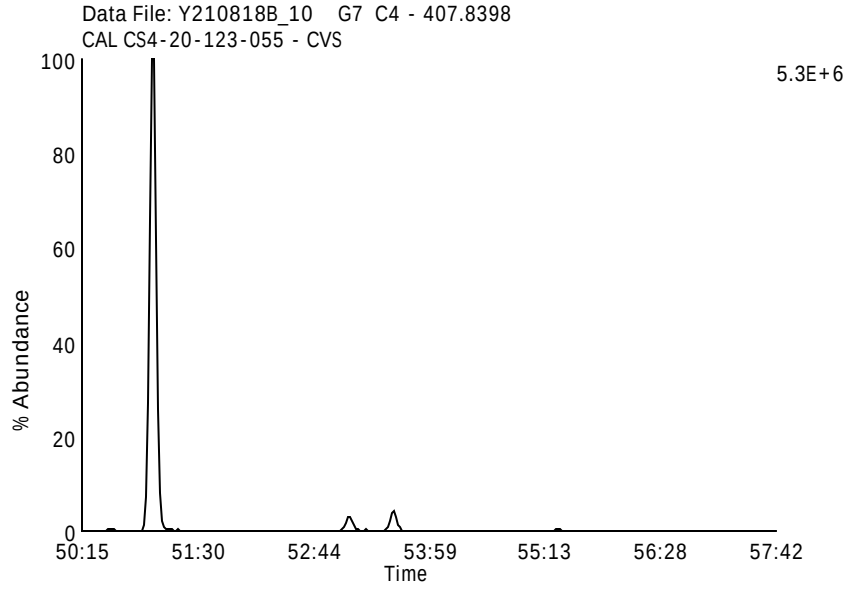
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS





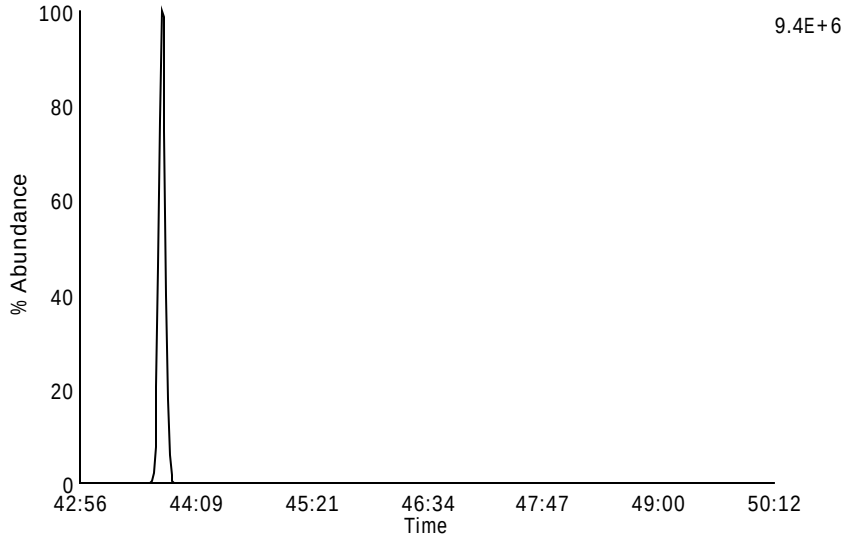




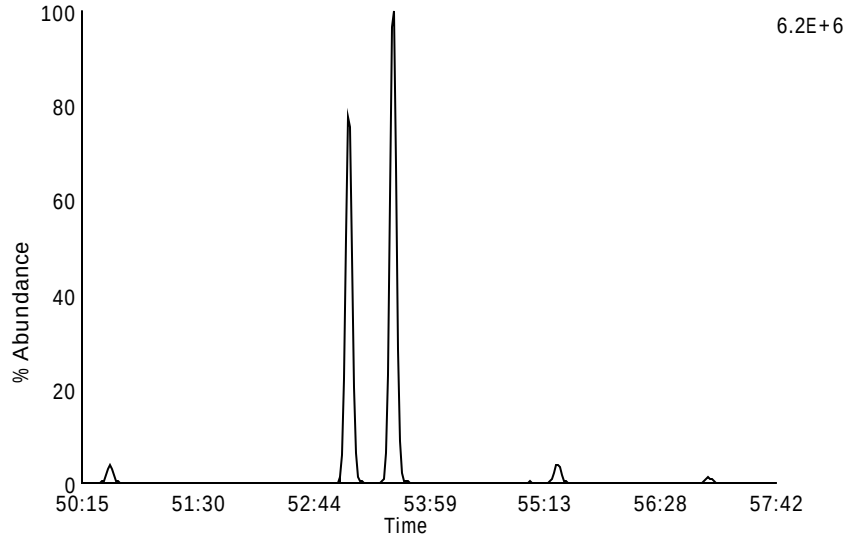
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

Data File: Y210818B_10 G6 C13 - 439.8038
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G7 C7 - 439.8038
CAL CS4-20-123-055 - CVS



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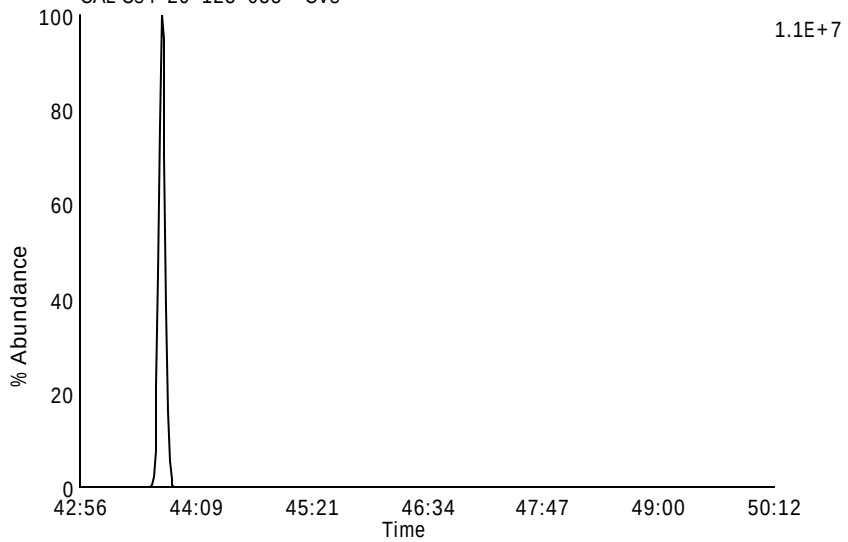
CAL CS4-20-123-055 - CVS



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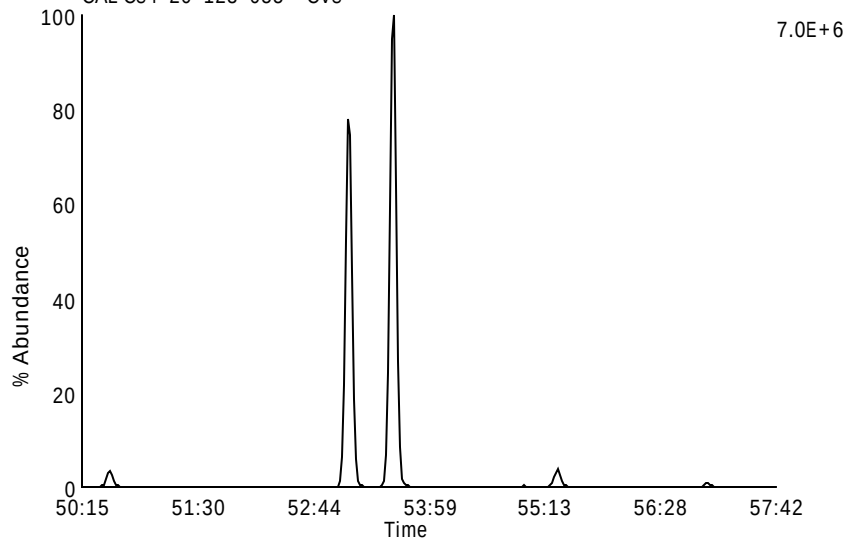
CAL CS4-20-123-055 - CVS



Labeled Nona Chlorinated Biphenyls

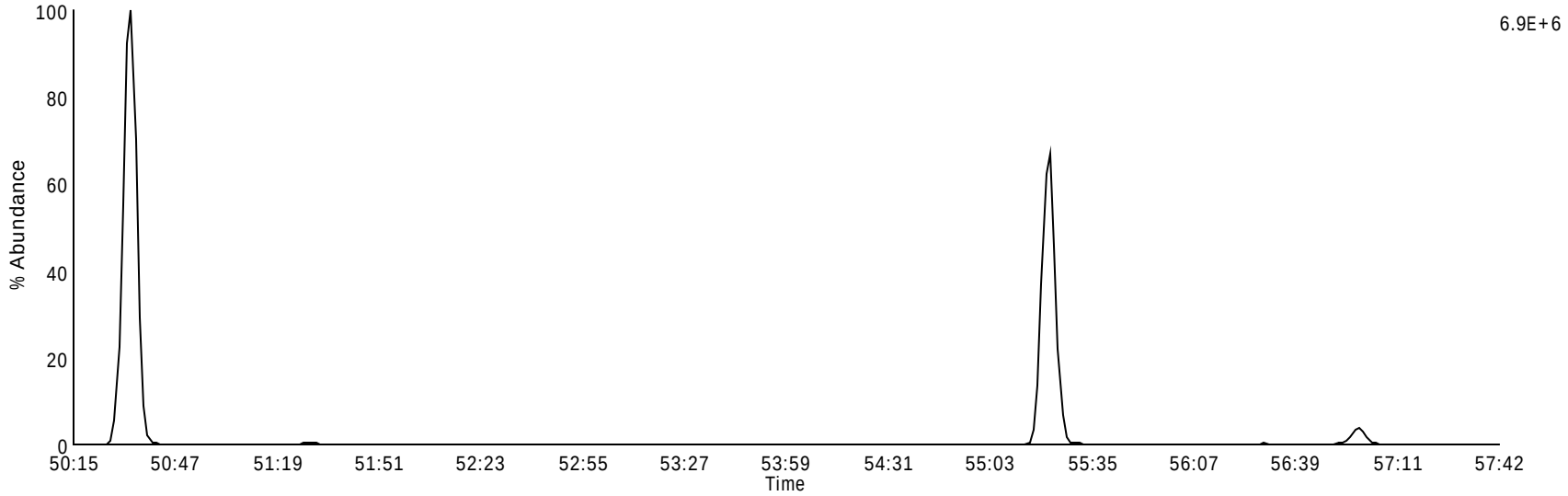
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

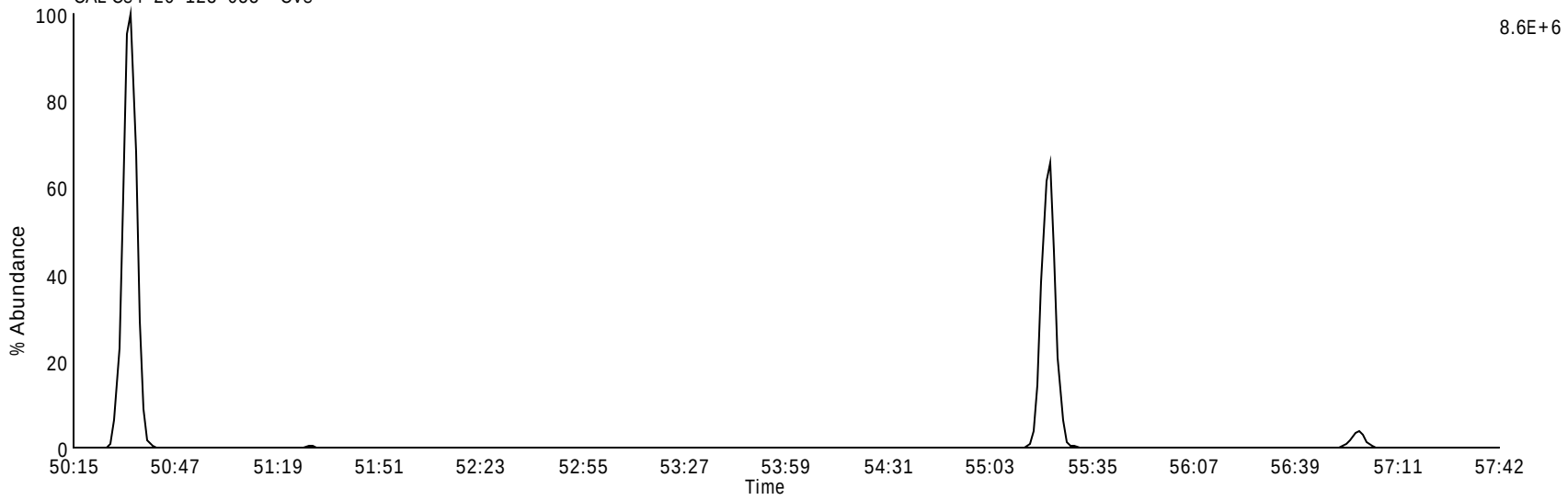
Data File: Y210818B_10 G7 C13 - 473.7648

CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G7 C14 - 475.7619

CAL CS4-20-123-055 - CVS

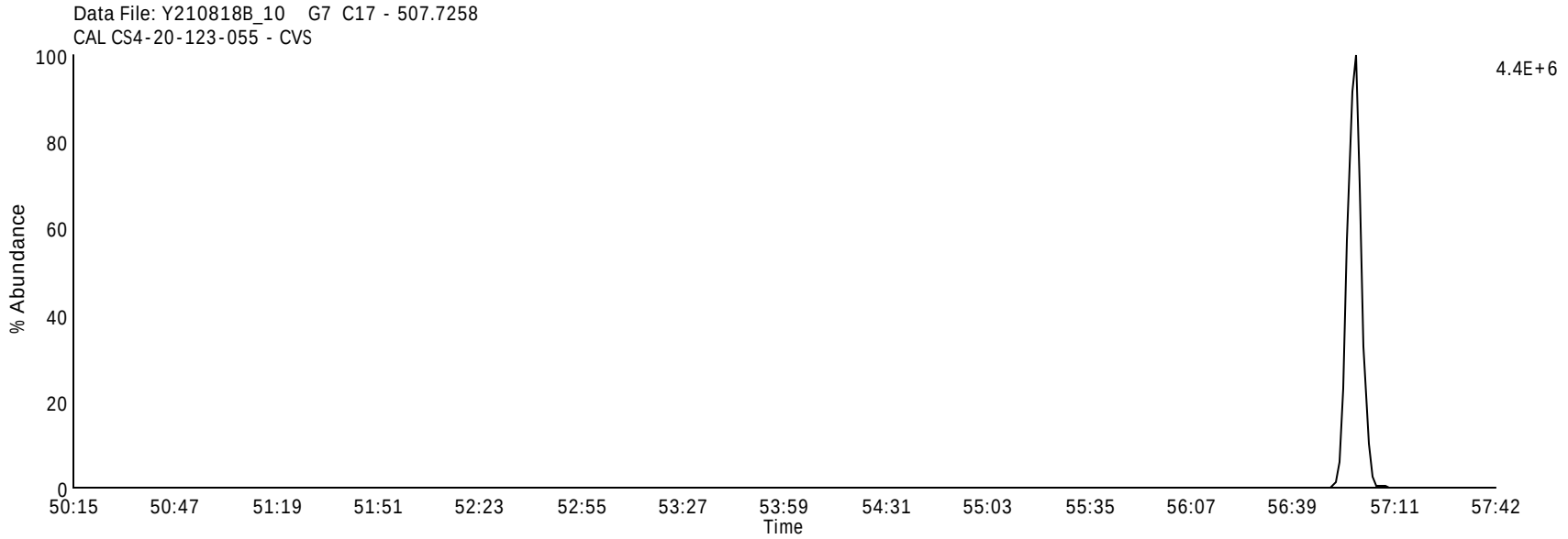


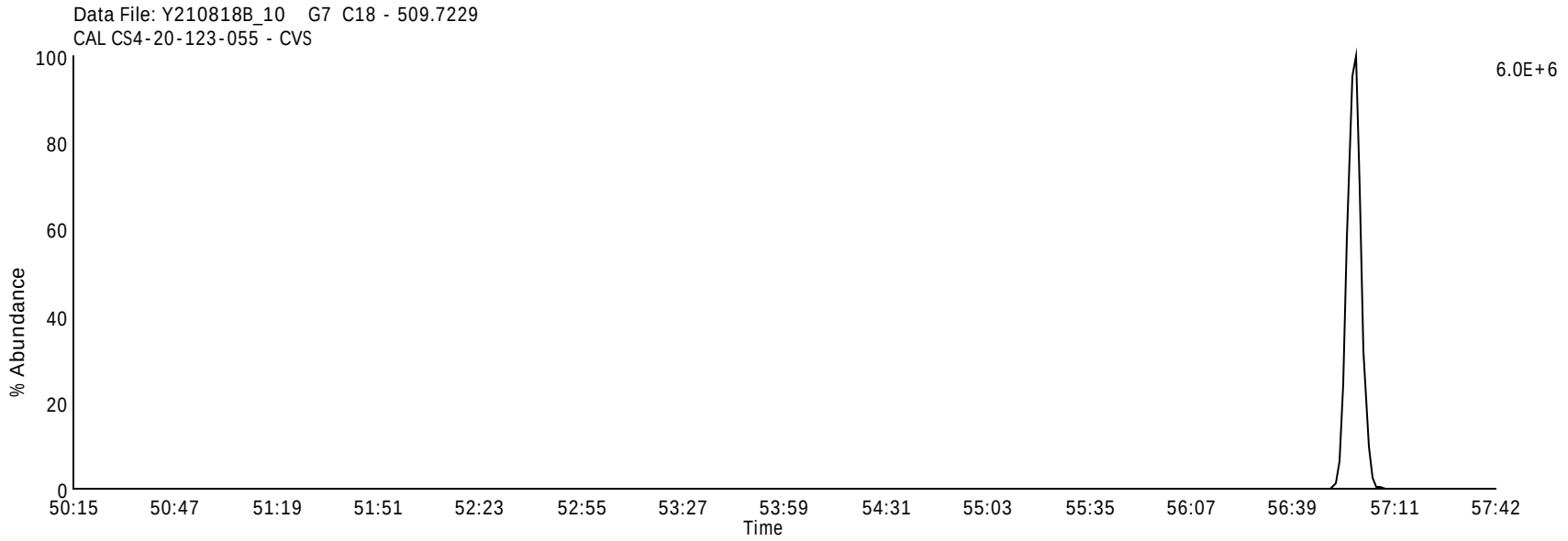
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



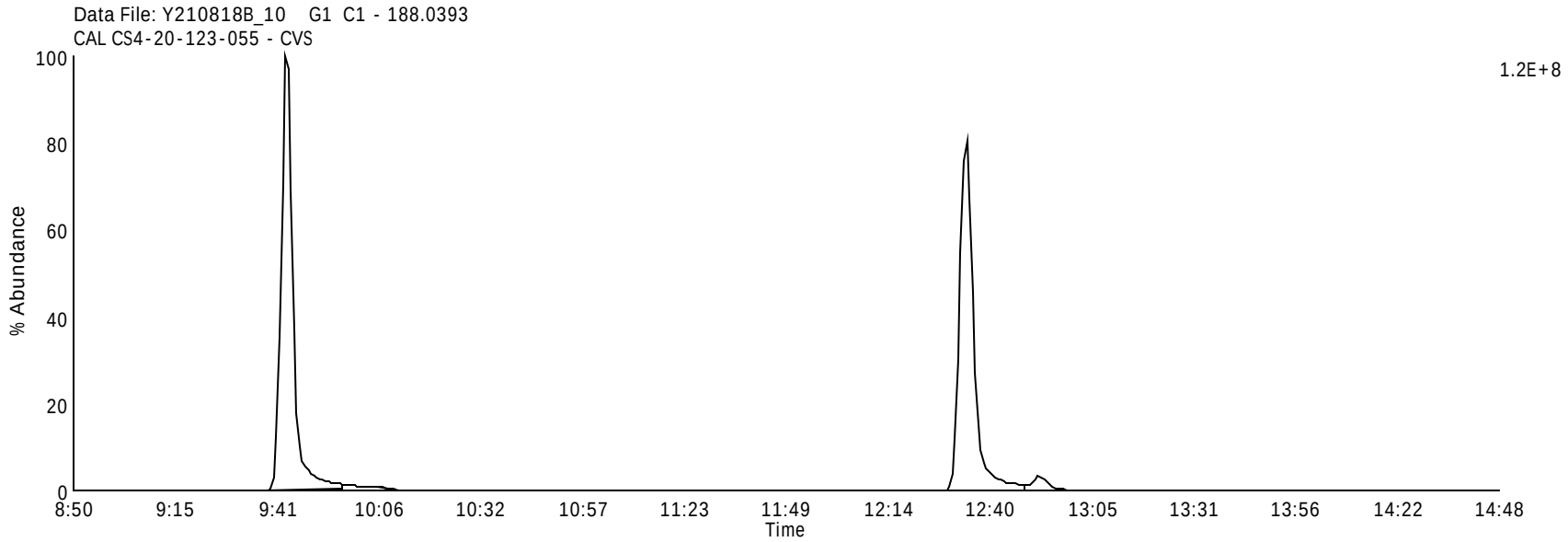


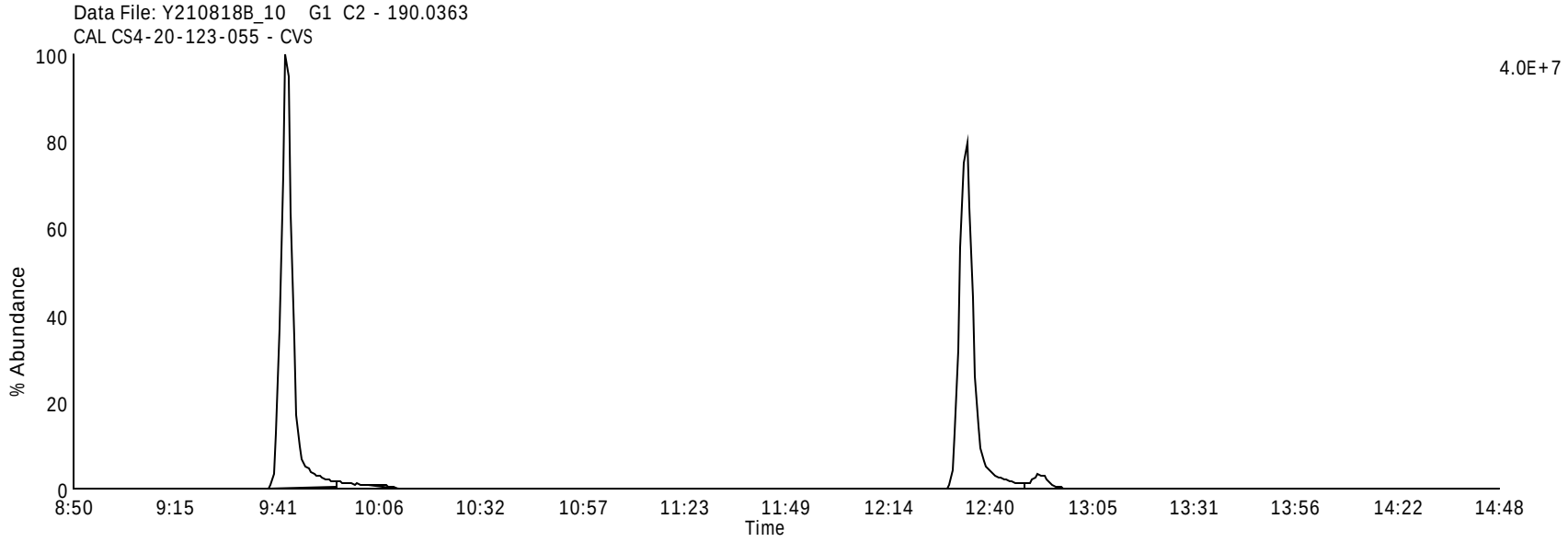
Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

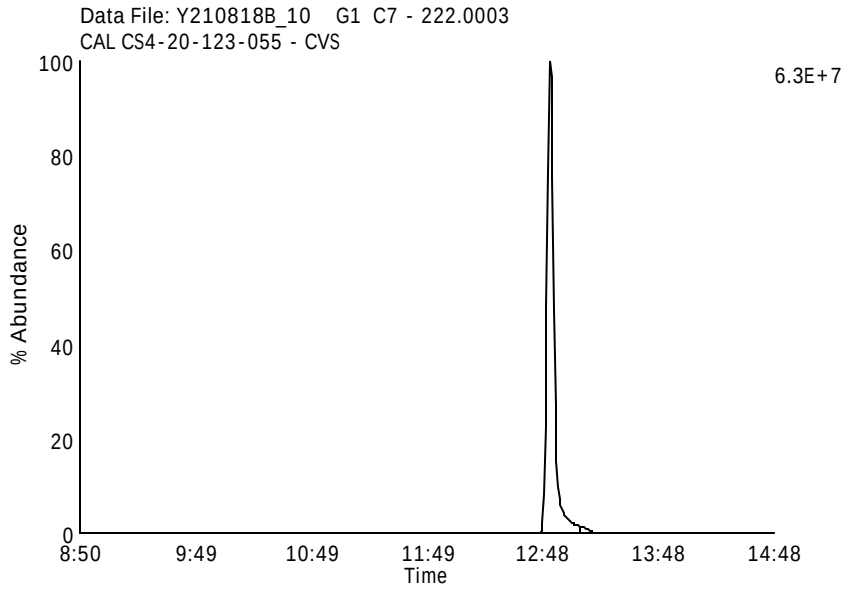
Sample Description: CAL CS4-20-123-055 - CVS

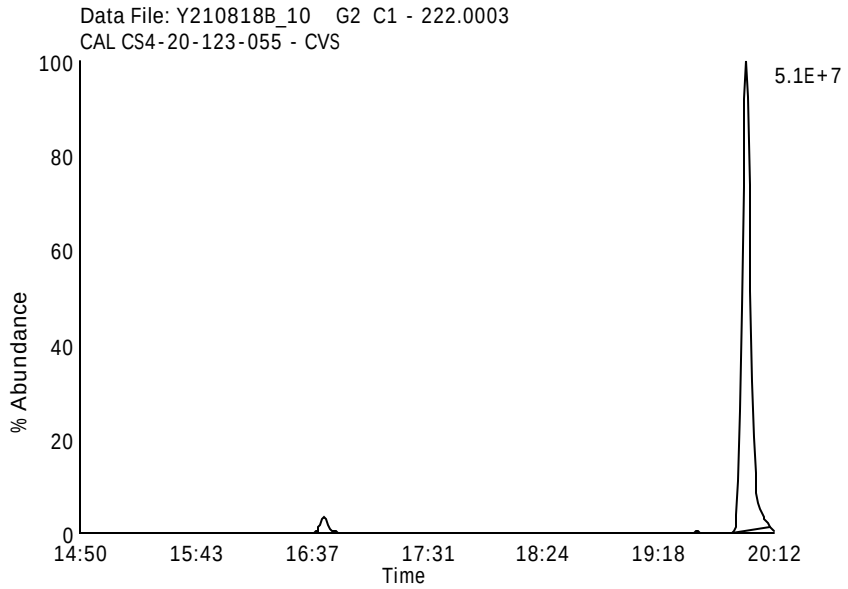


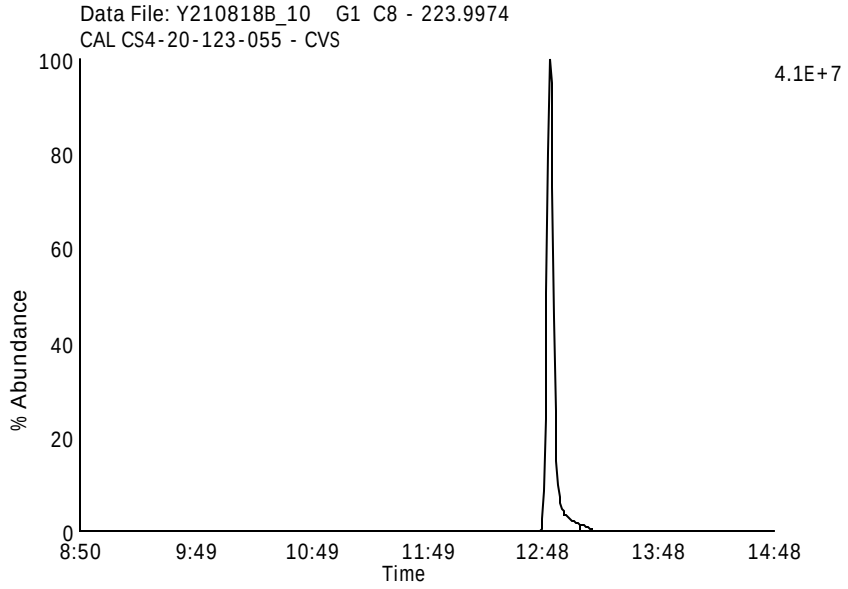


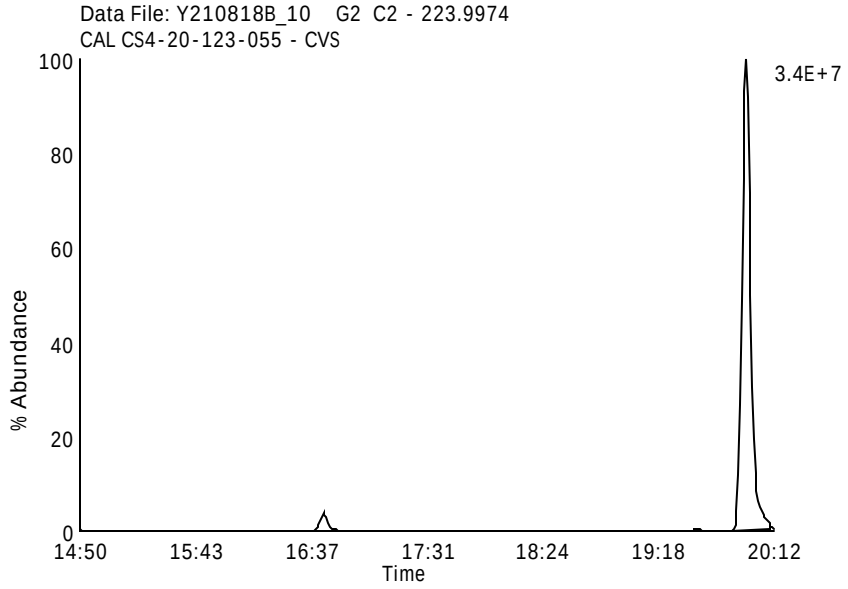
Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



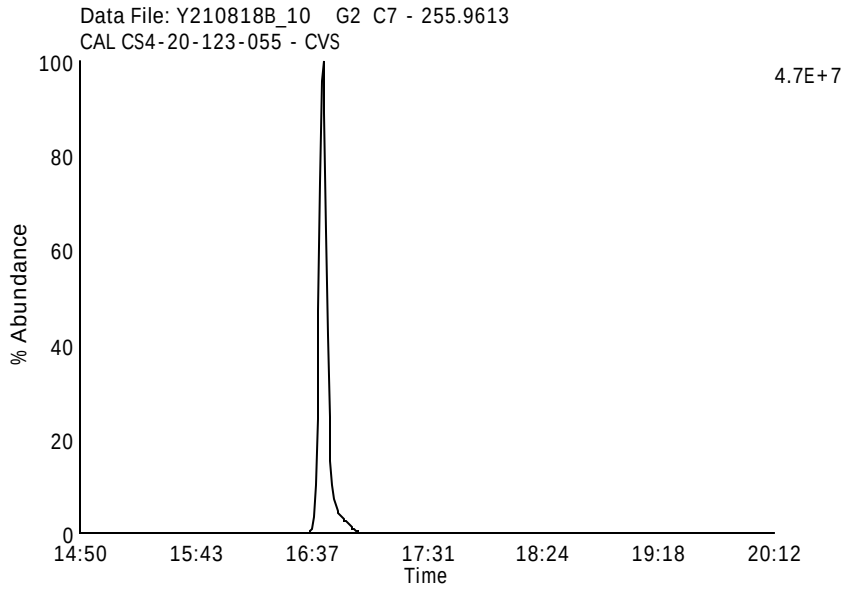


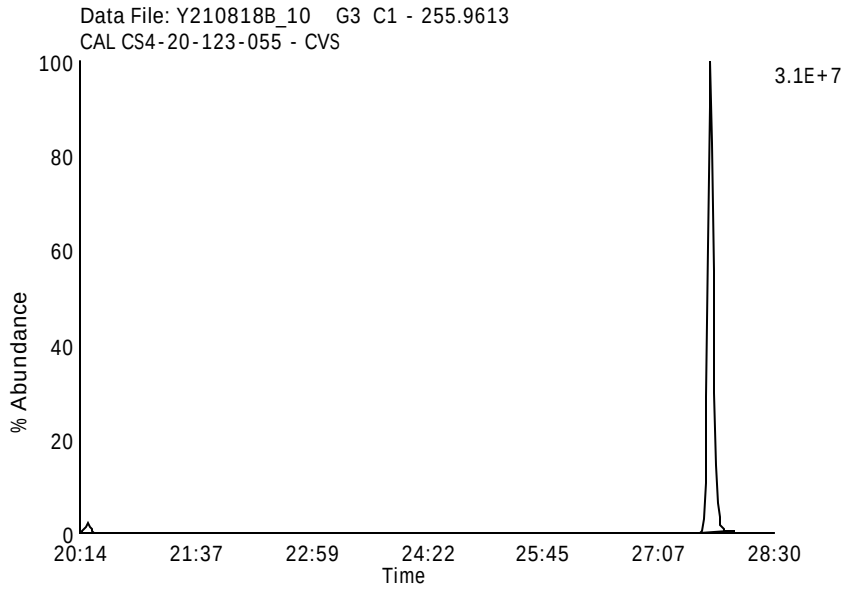


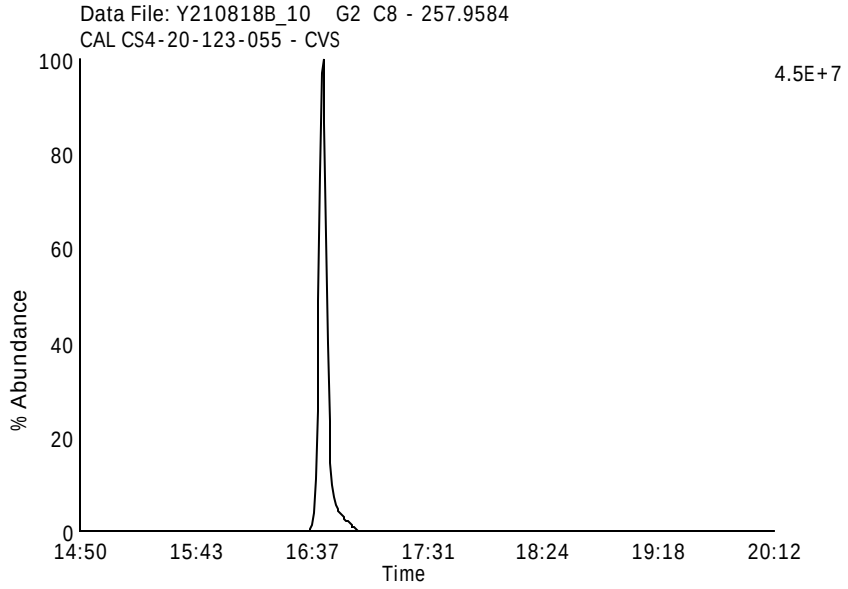


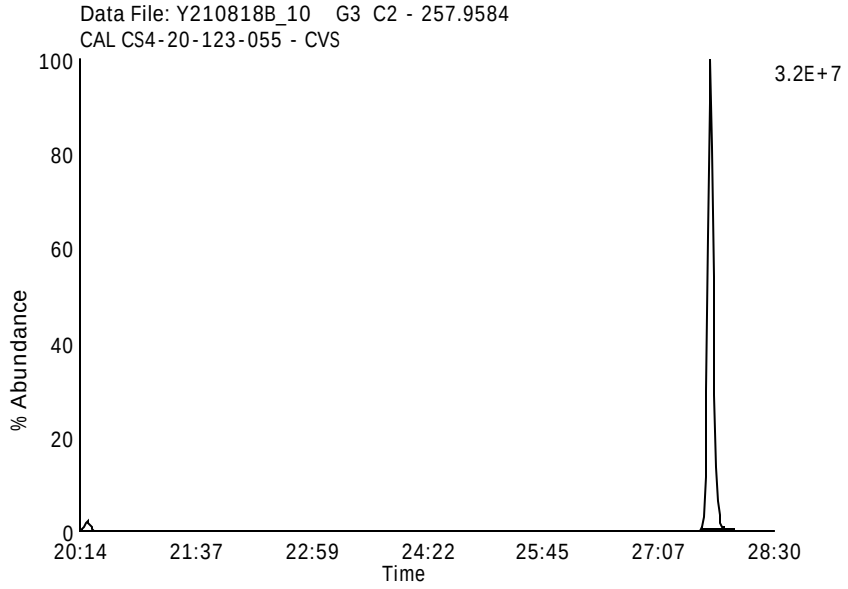
Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



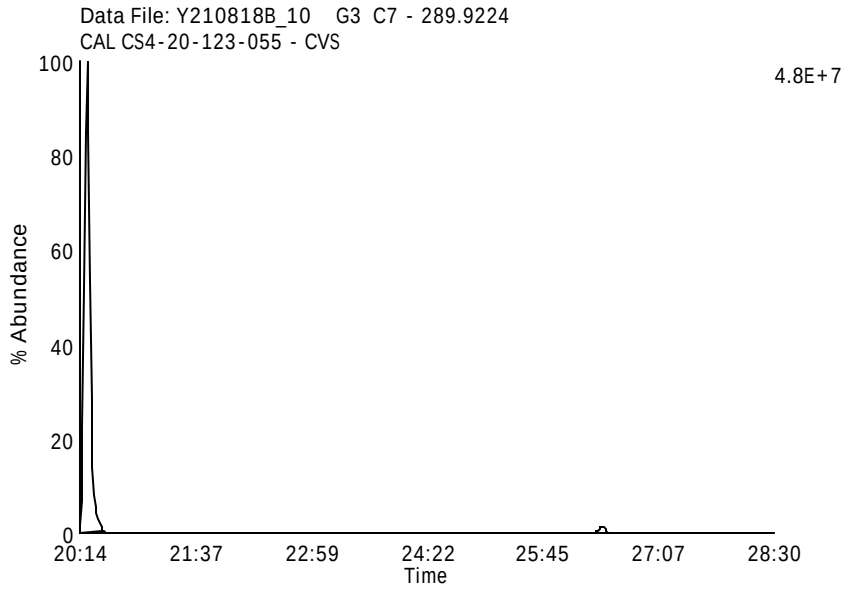


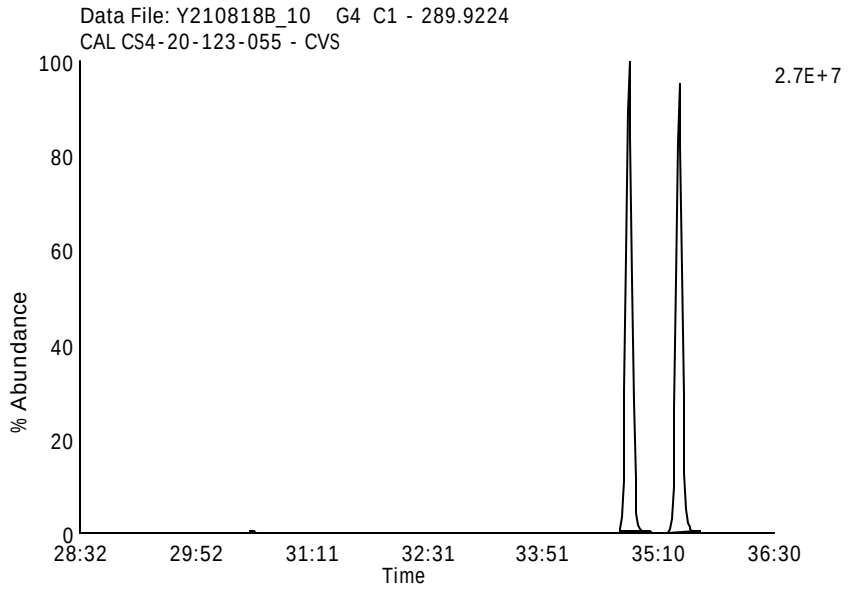


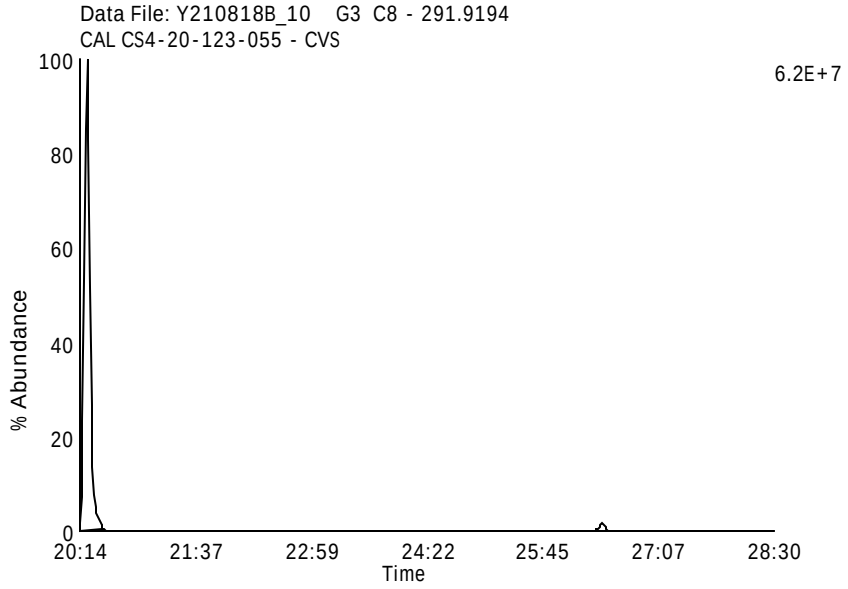


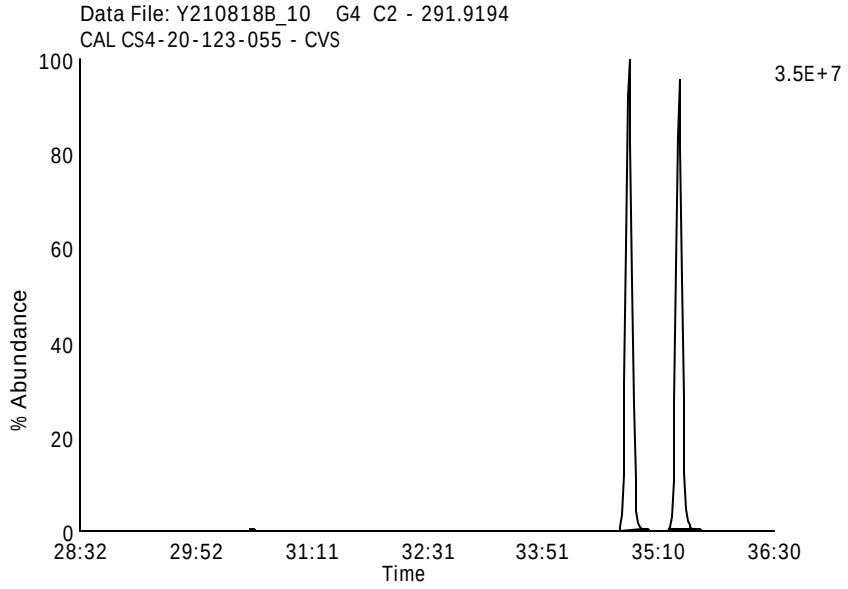
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



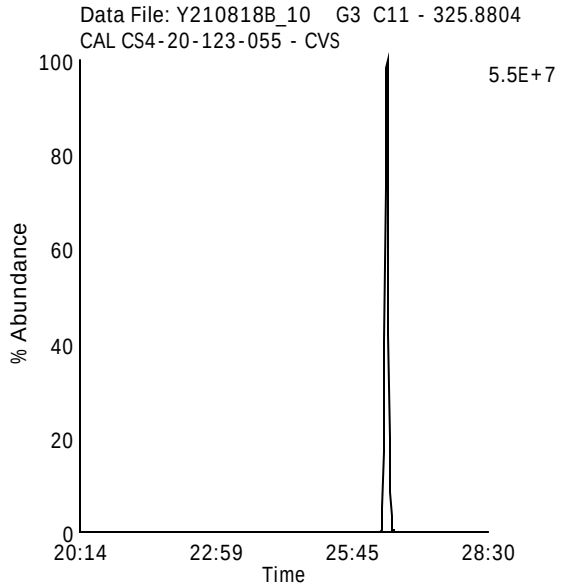


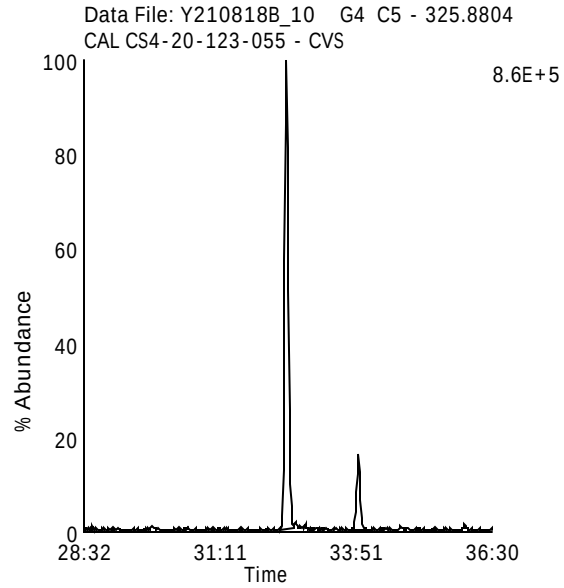


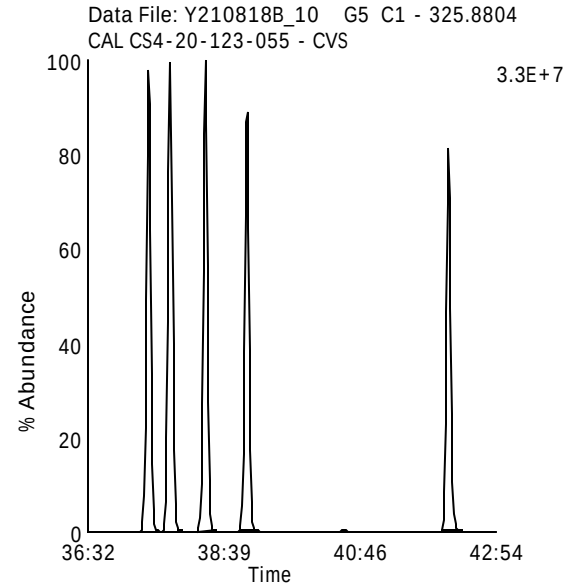


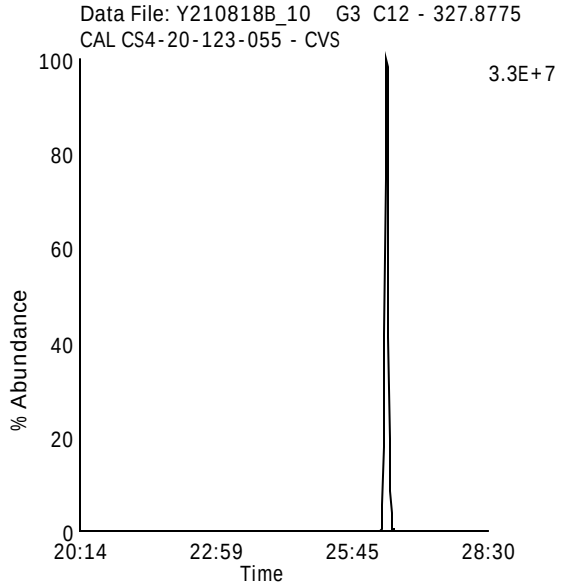
Penta Chlorinated Biphenyls

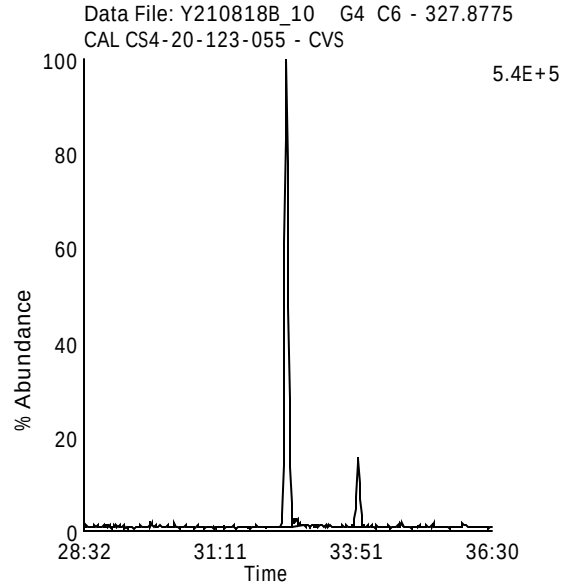
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

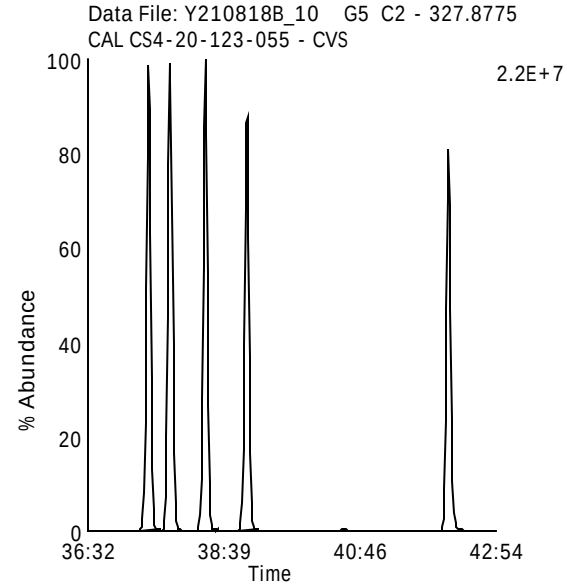












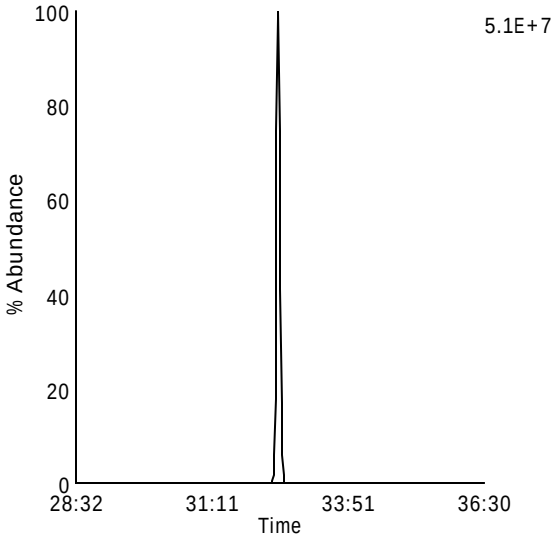
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

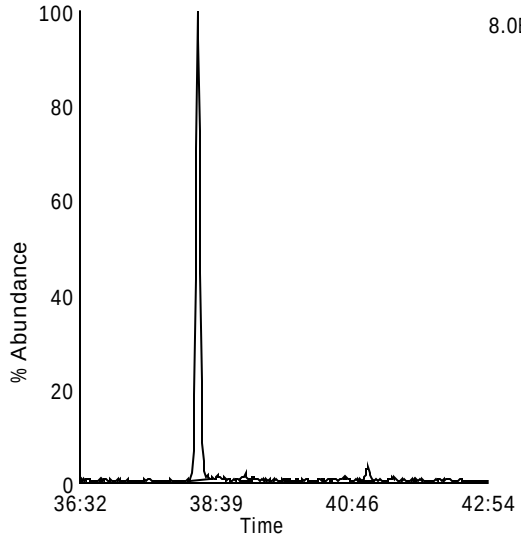
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

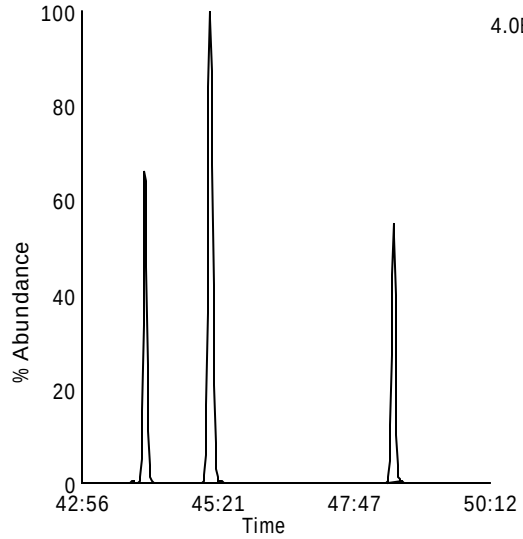
Data File: Y210818B_10 G4 C11 - 359.8415
CAL CS4-20-123-055 - CVS



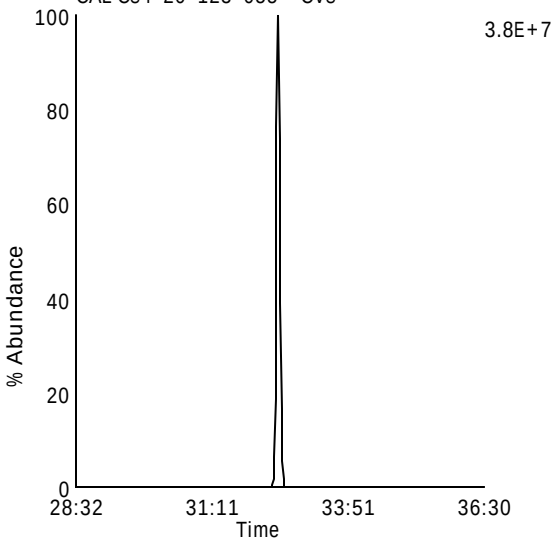
Data File: Y210818B_10 G5 C5 - 359.8415
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G6 C1 - 359.8415
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G4 C12 - 361.8385
CAL CS4-20-123-055 - CVS



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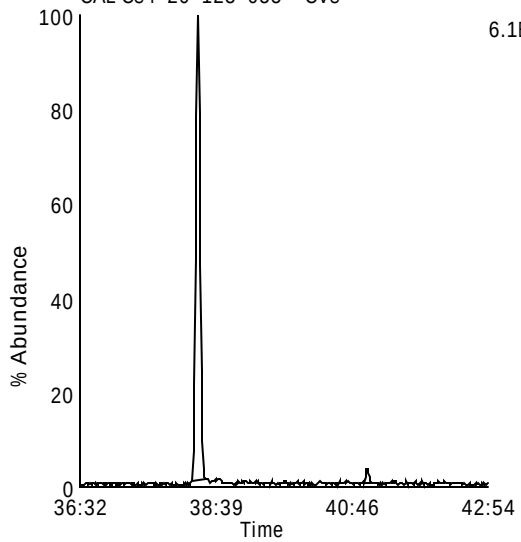
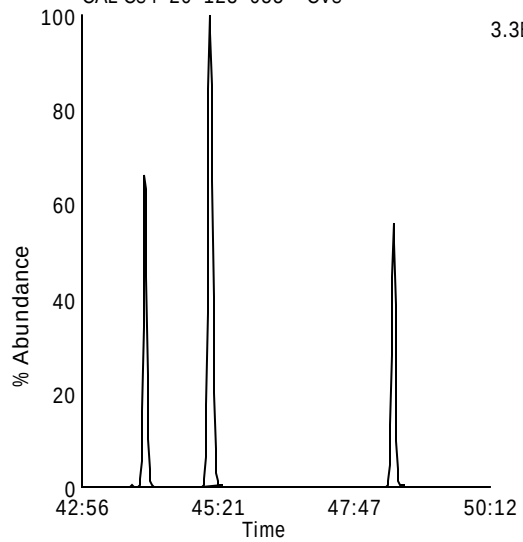
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G6 C2 - 361.8385
CAL CS4-20-123-055 - CVS

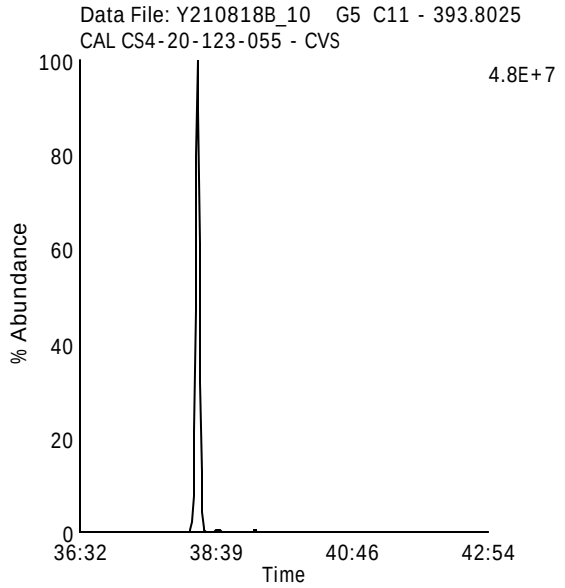


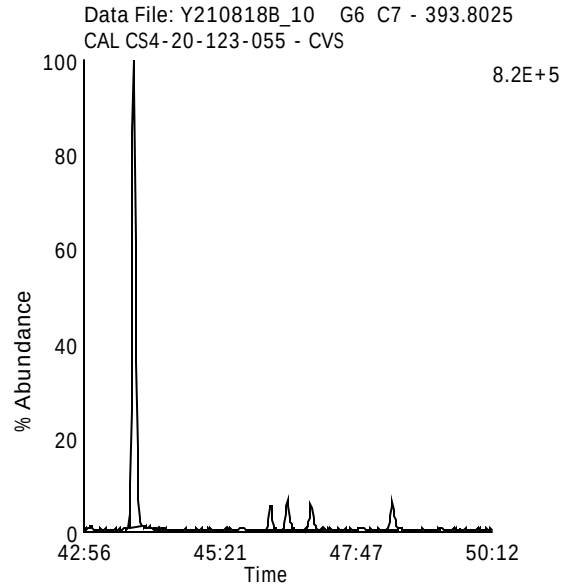
Hepta Chlorinated Biphenyls

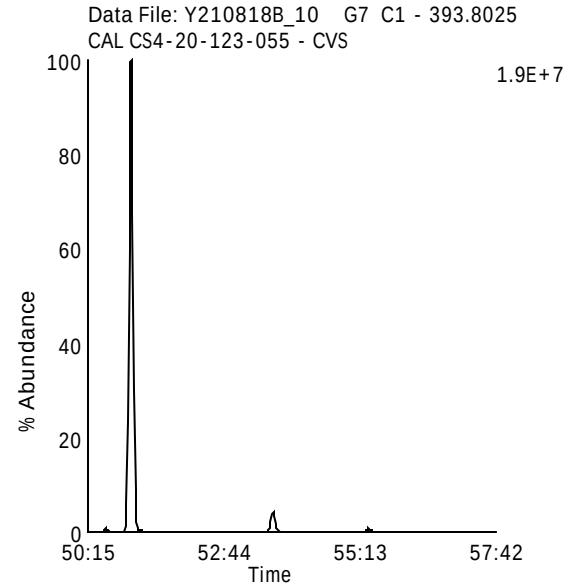
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

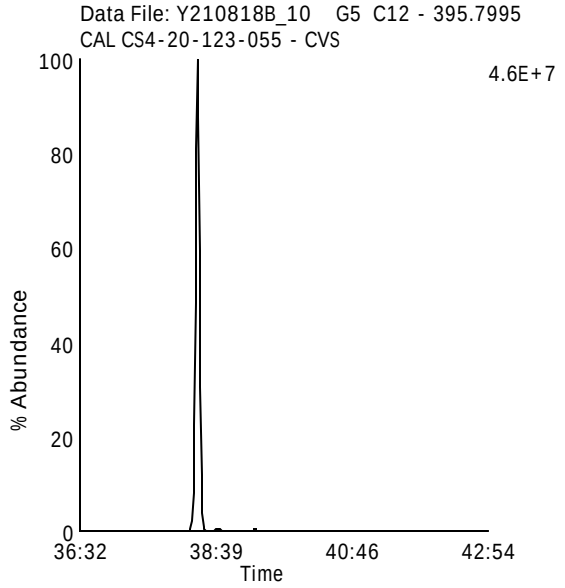
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

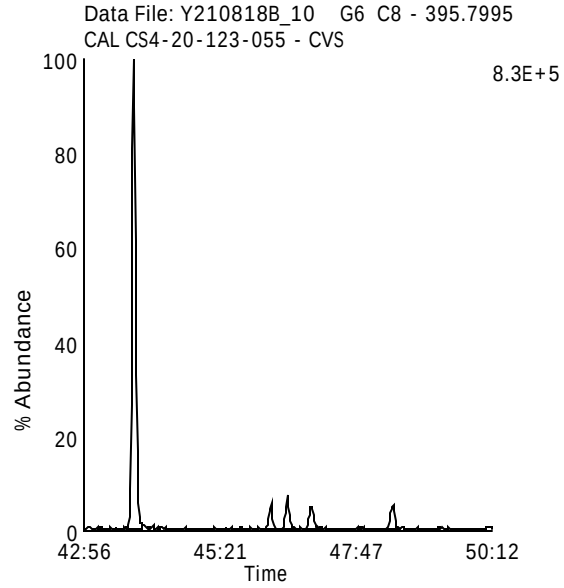
Sample Description: CAL CS4-20-123-055 - CVS

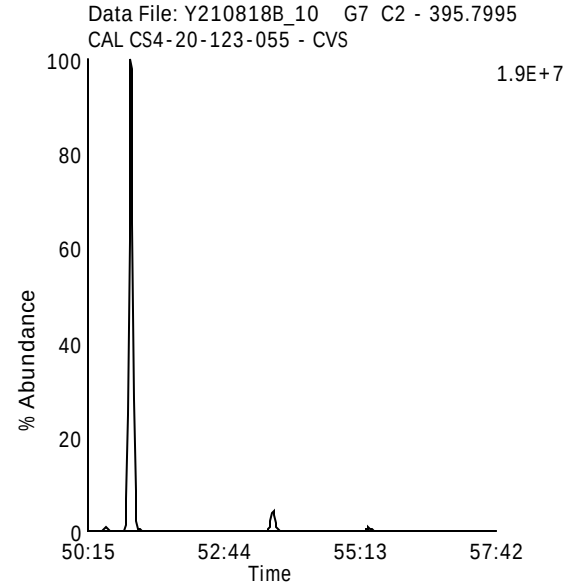






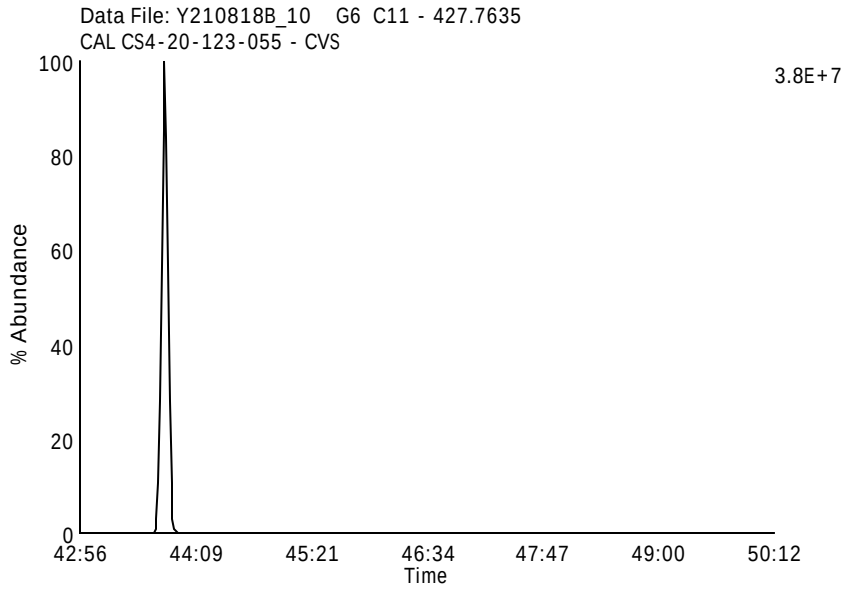


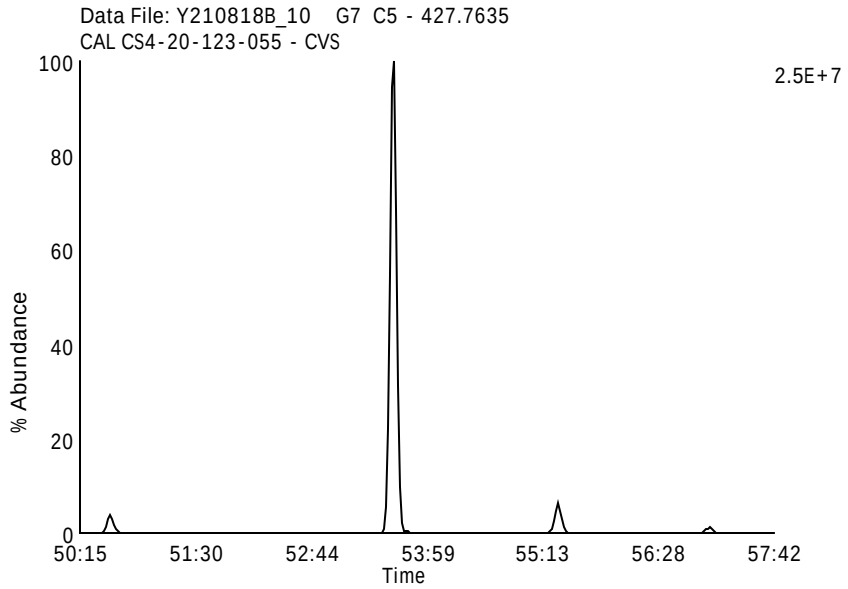


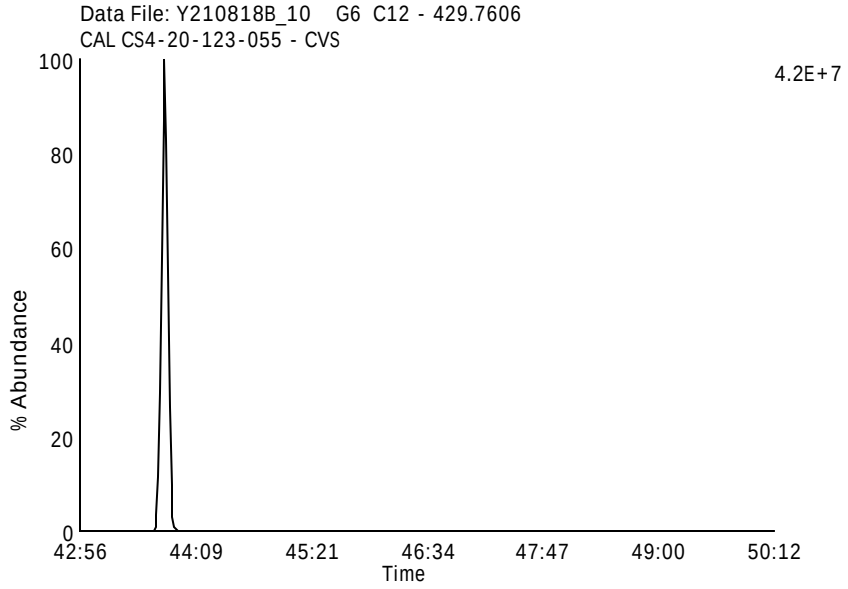


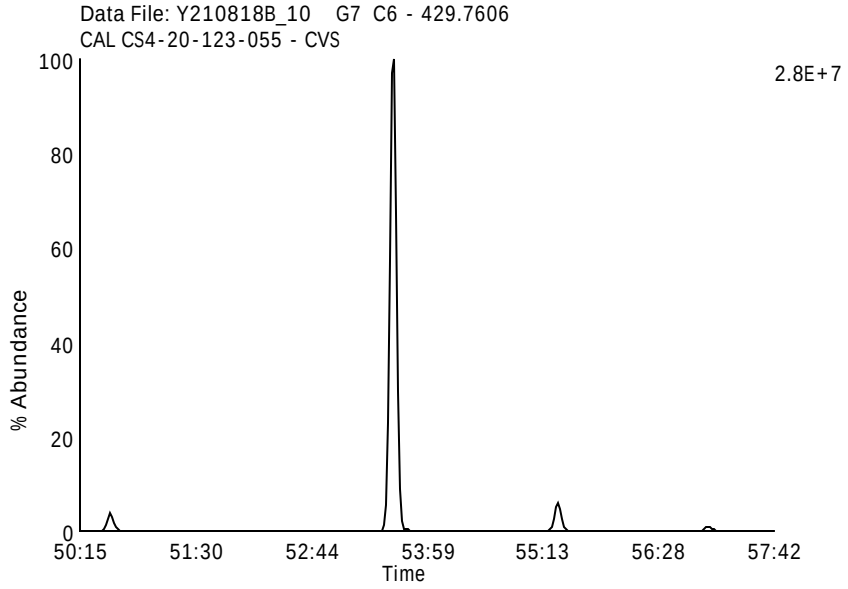
Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS







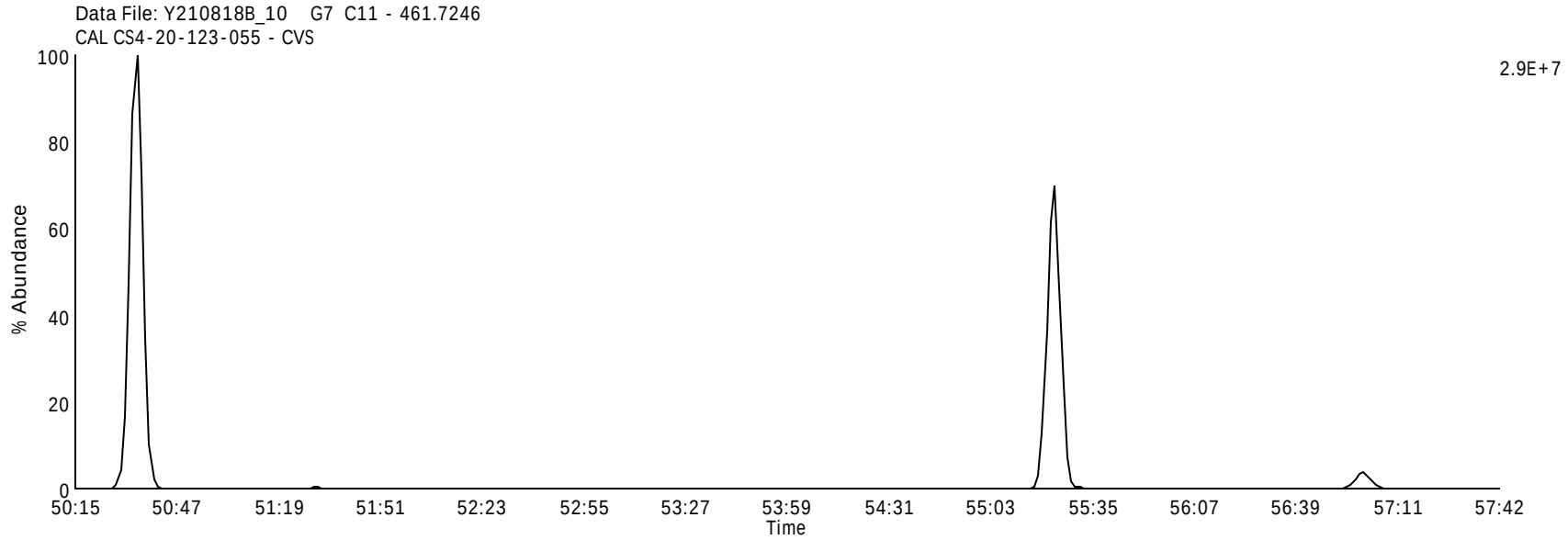


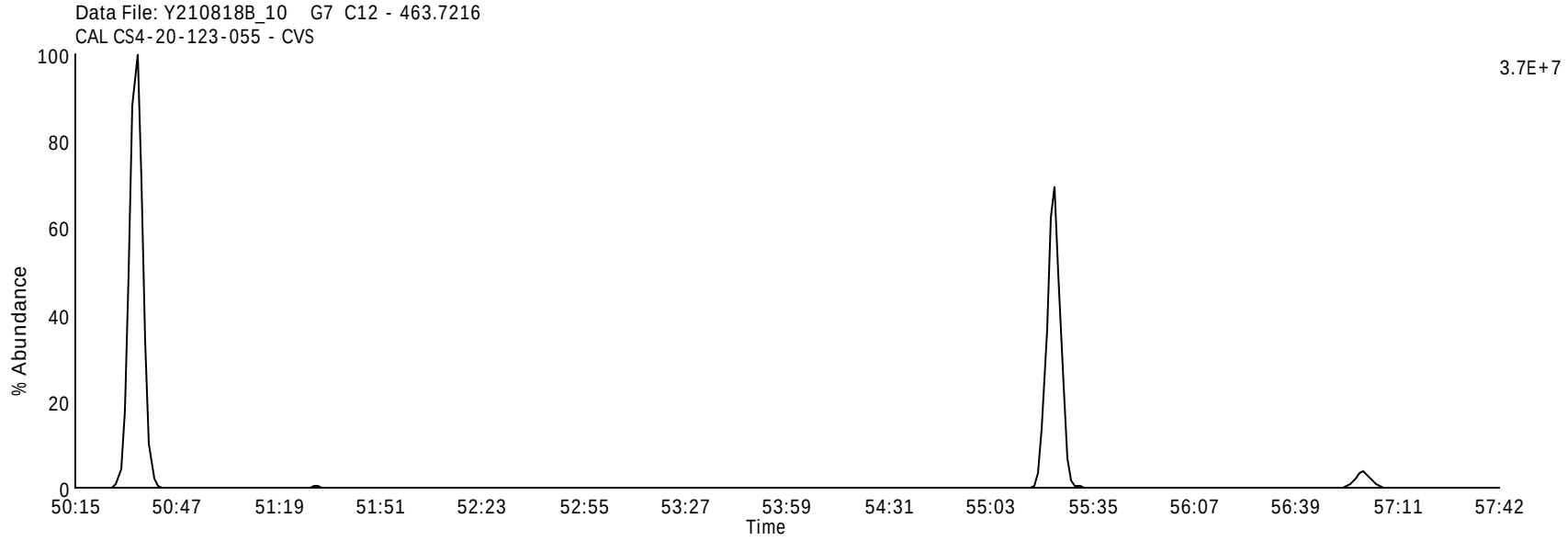
Nona Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



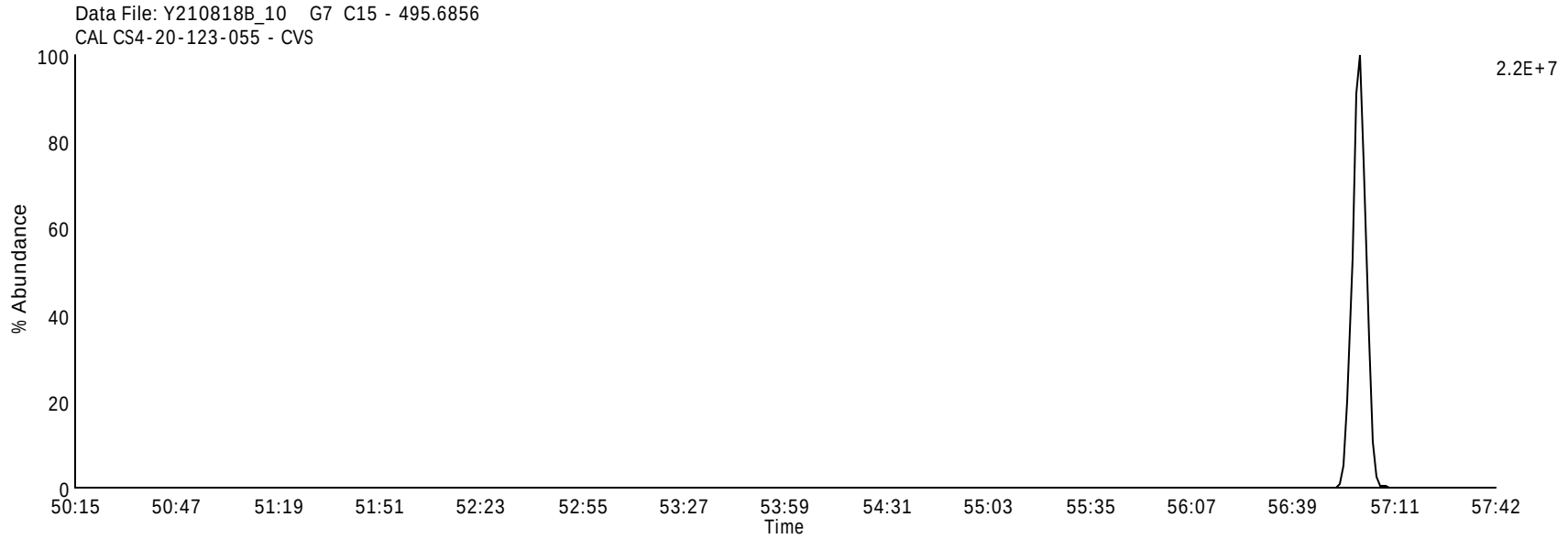


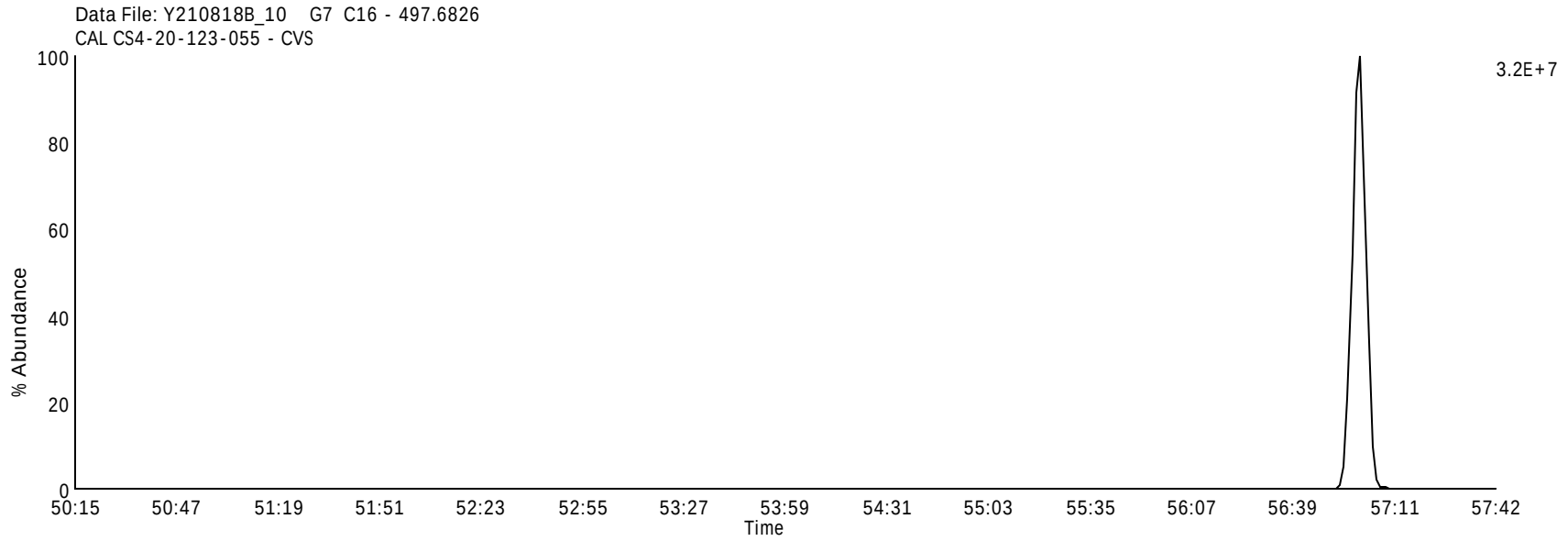
Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

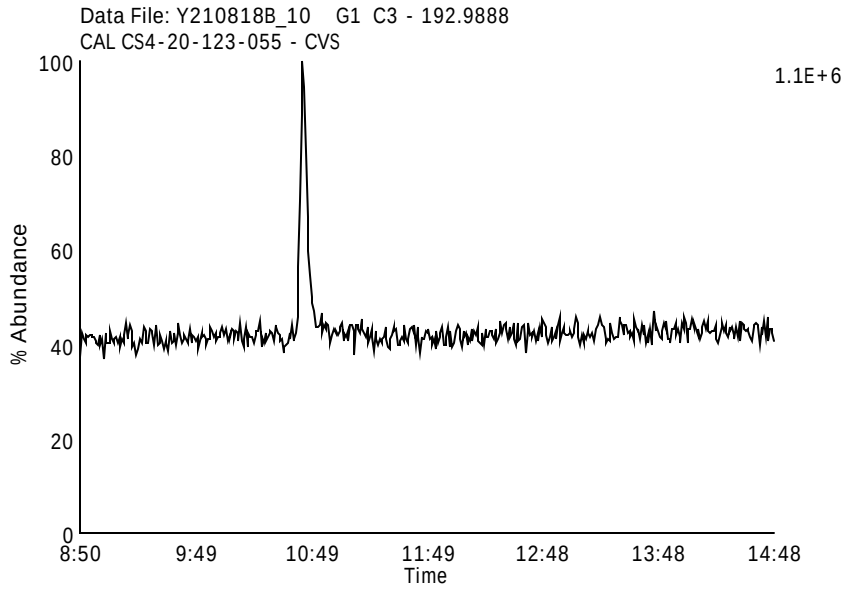
Sample Description: CAL CS4-20-123-055 - CVS

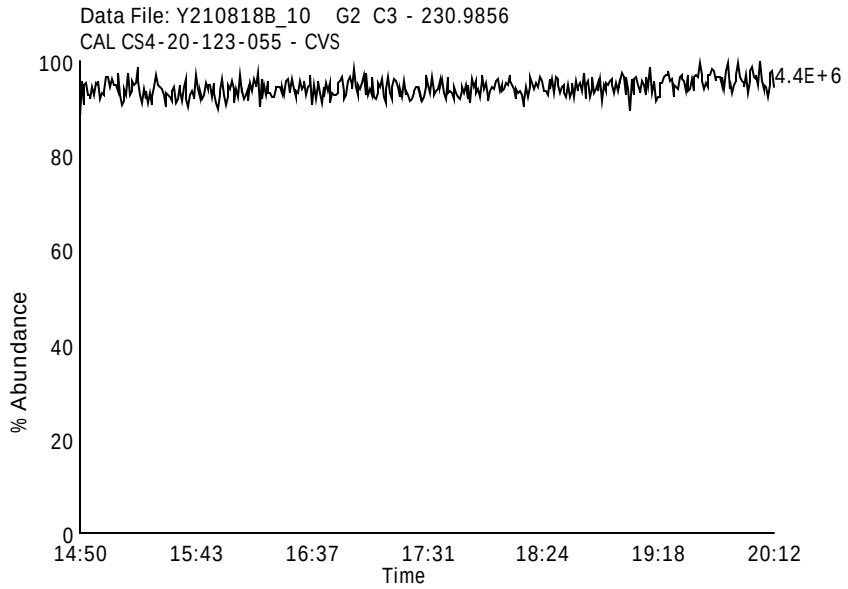


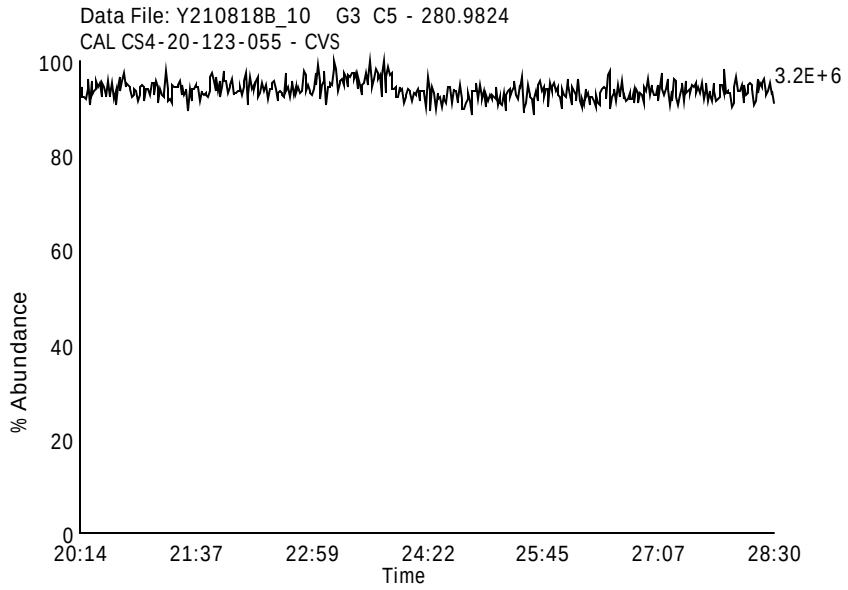


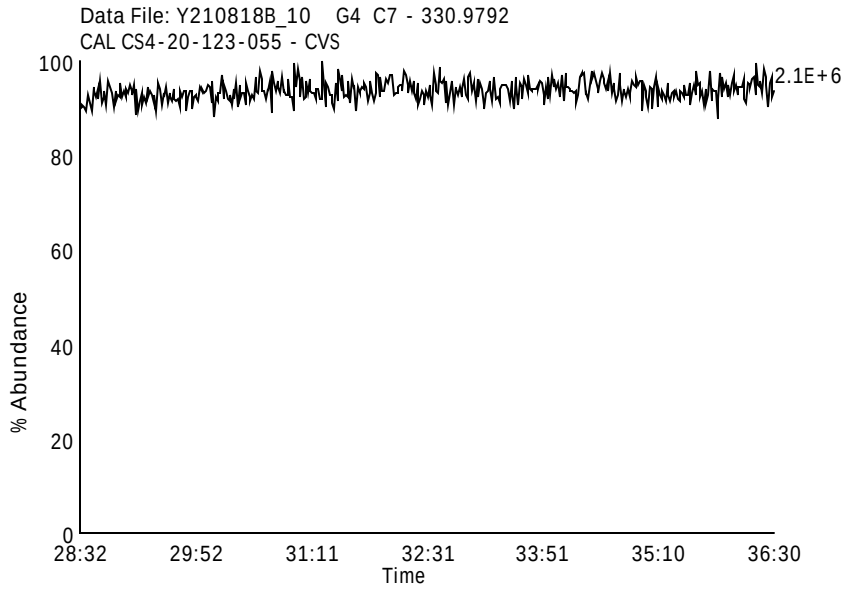
Group 1 - 4 Lock mass

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS





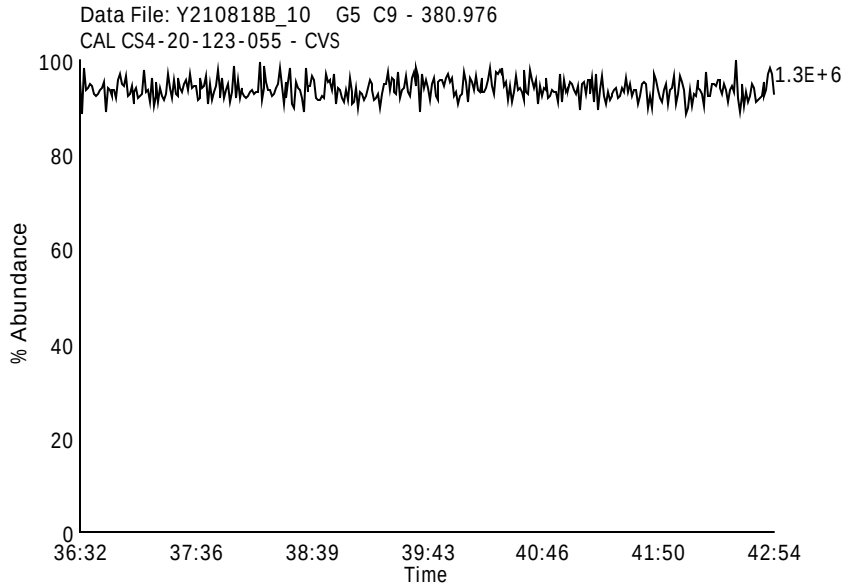


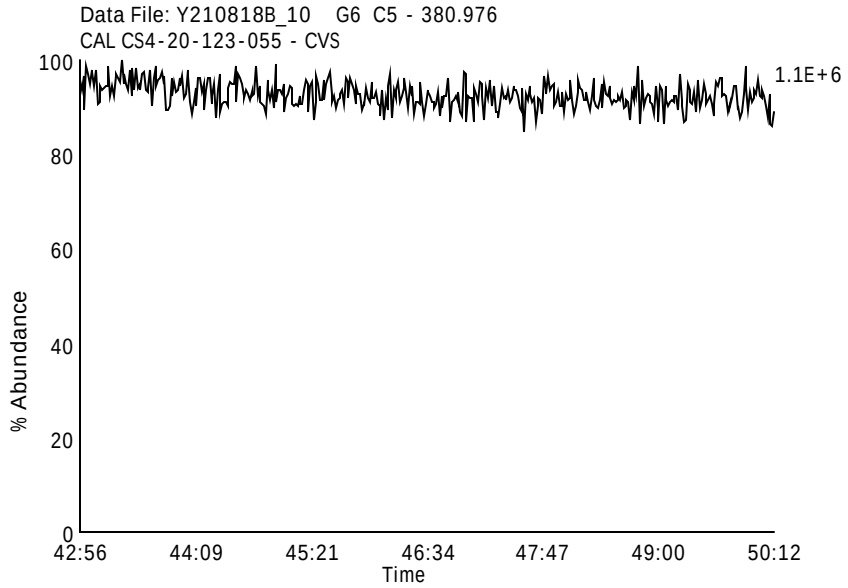


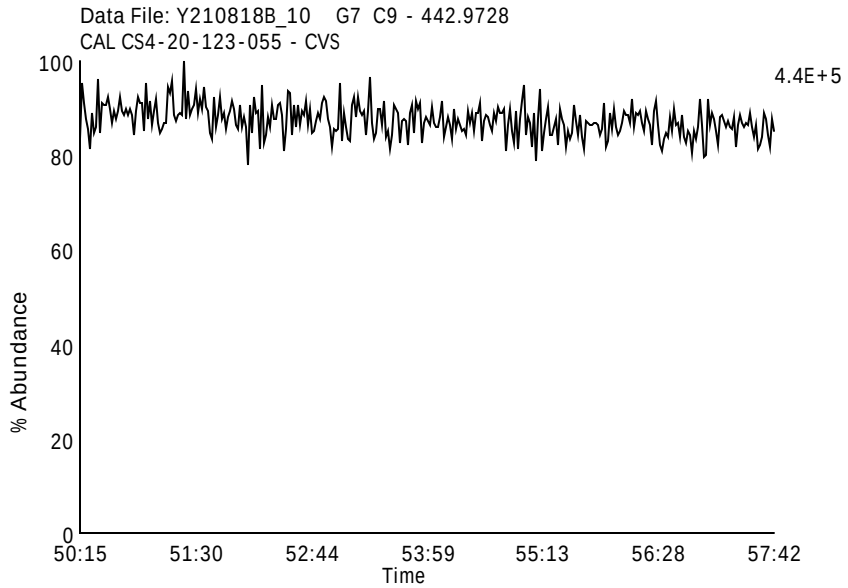
Group 5 - 7 Lock mass

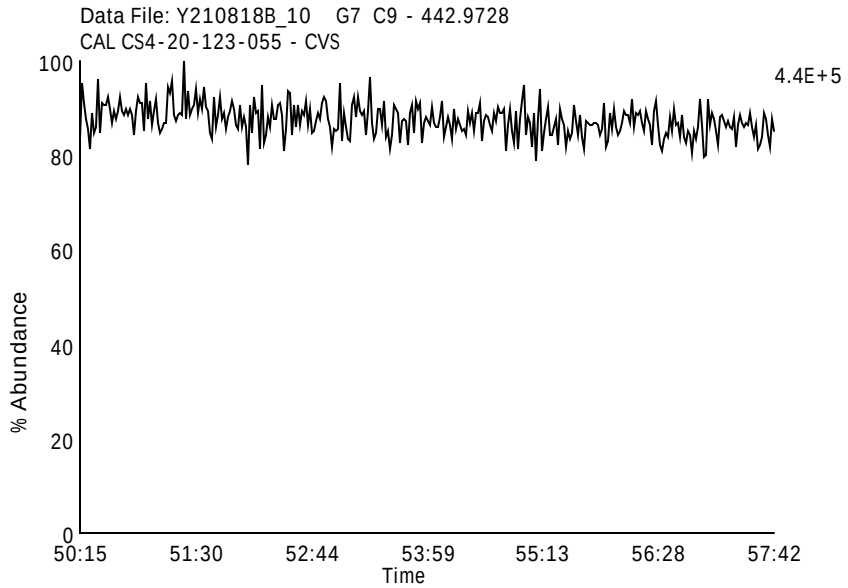
Data File Name: Y210818B_10
Date Acquired: 8/18/2021
Sample Description: CAL CS4-20-123-055 - CVS

Lab Sample ID: CS4-20-123-055
Instrument: 10MSHR12 (Y)







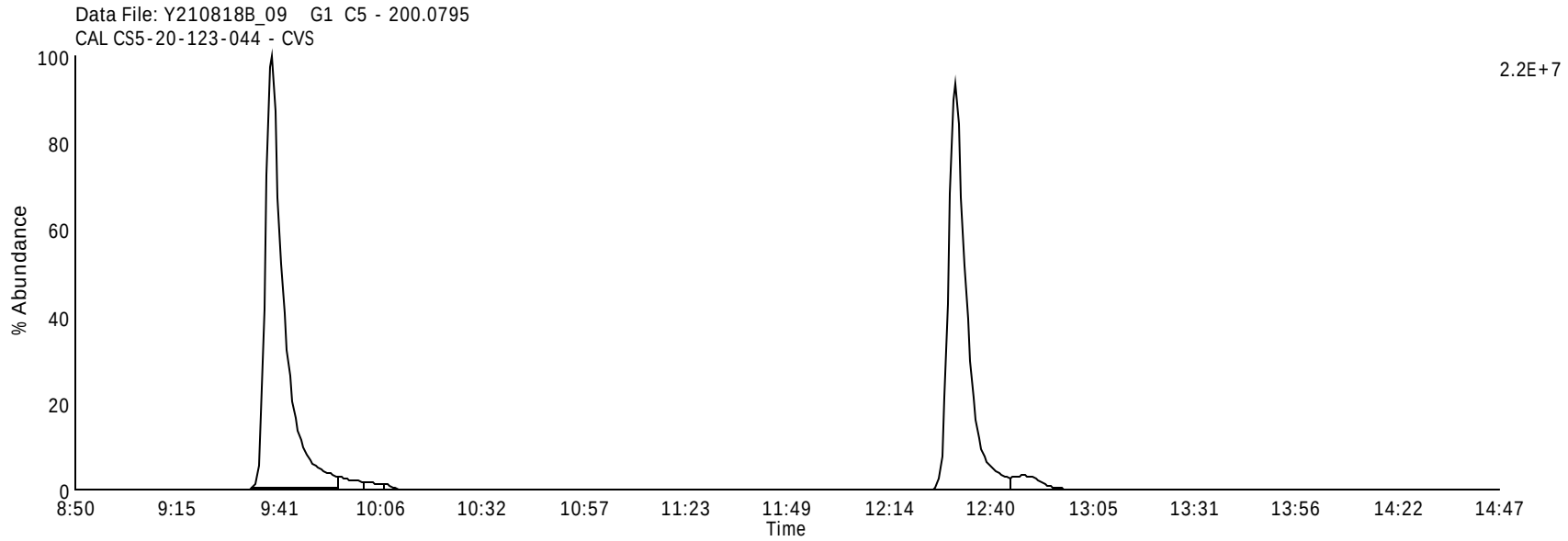


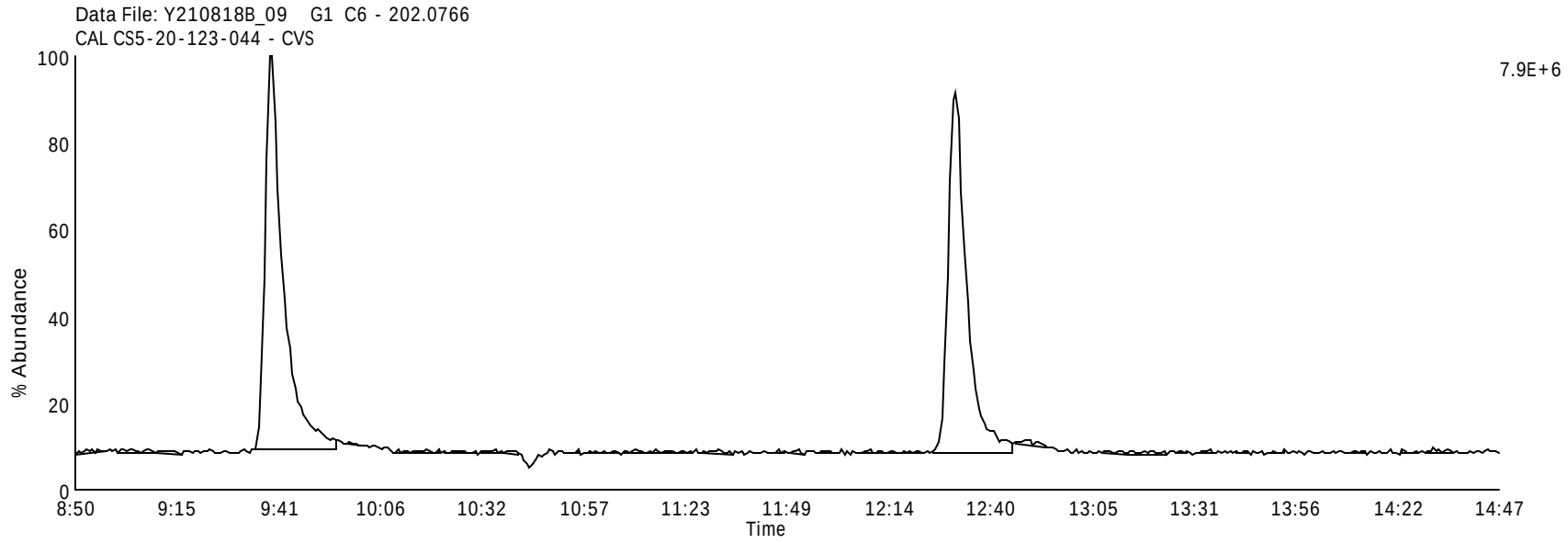
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

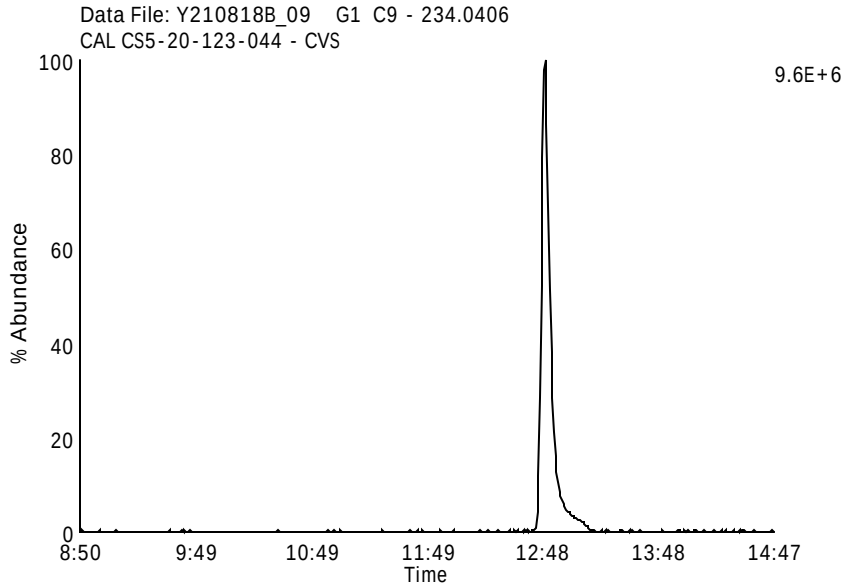
Sample Description: CAL CS5-20-123-044 - CVS

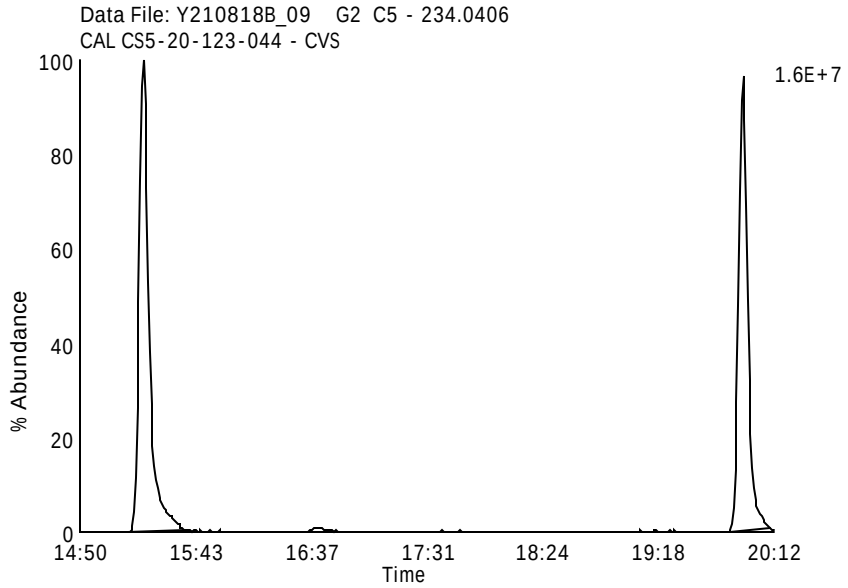


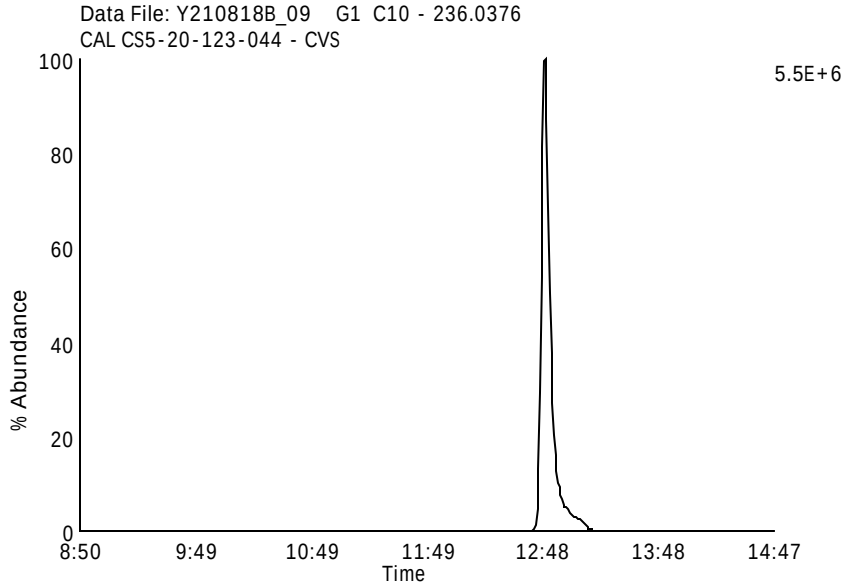


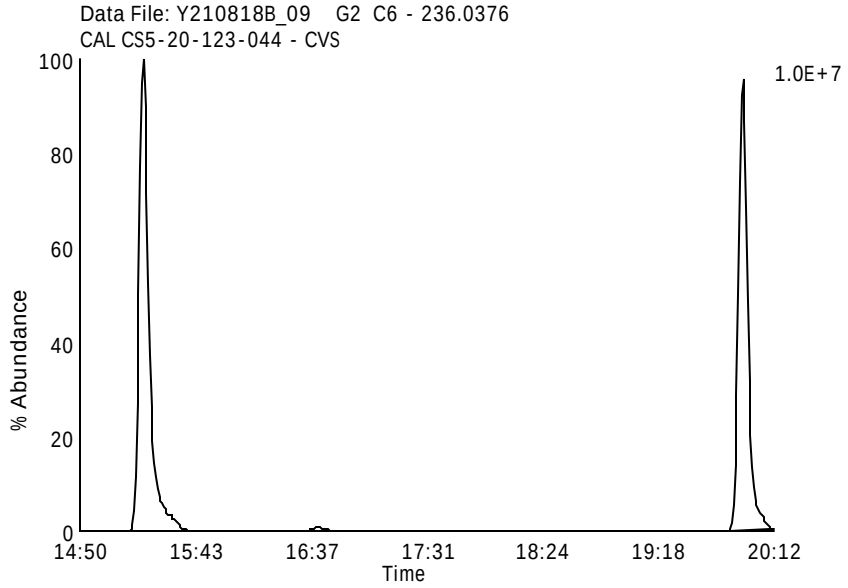
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS





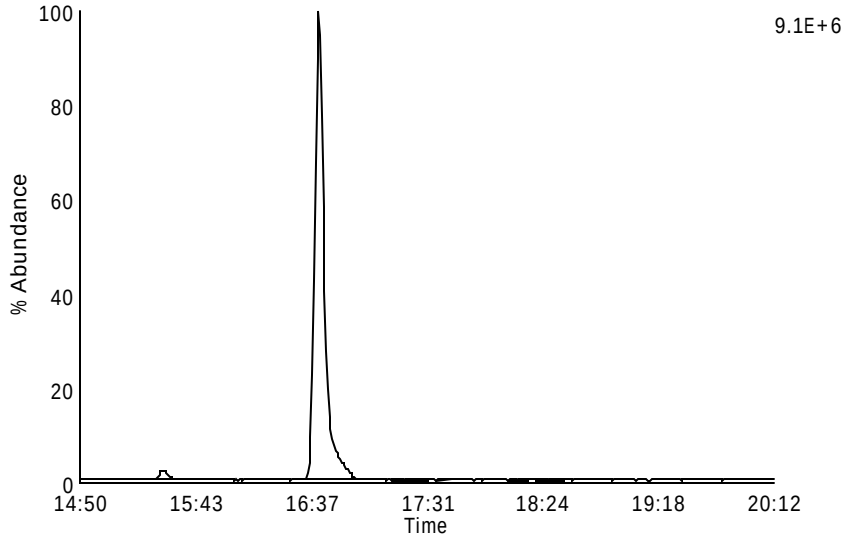




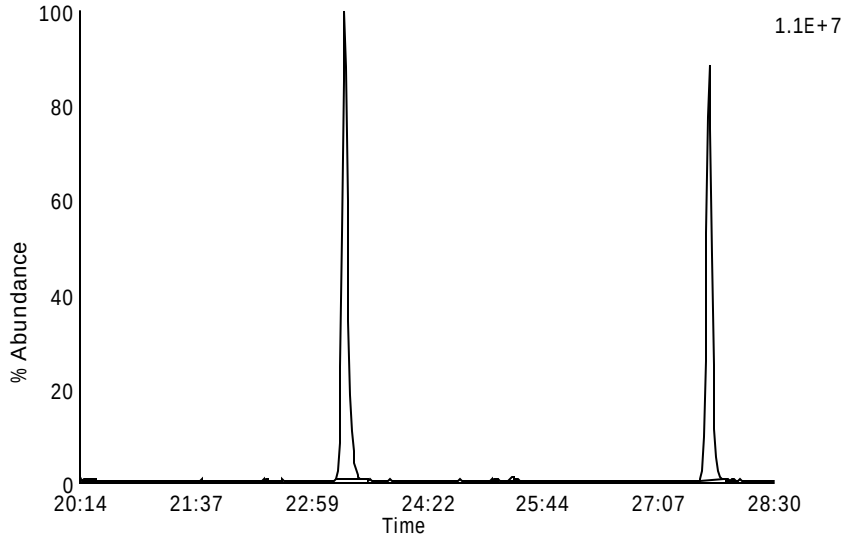
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

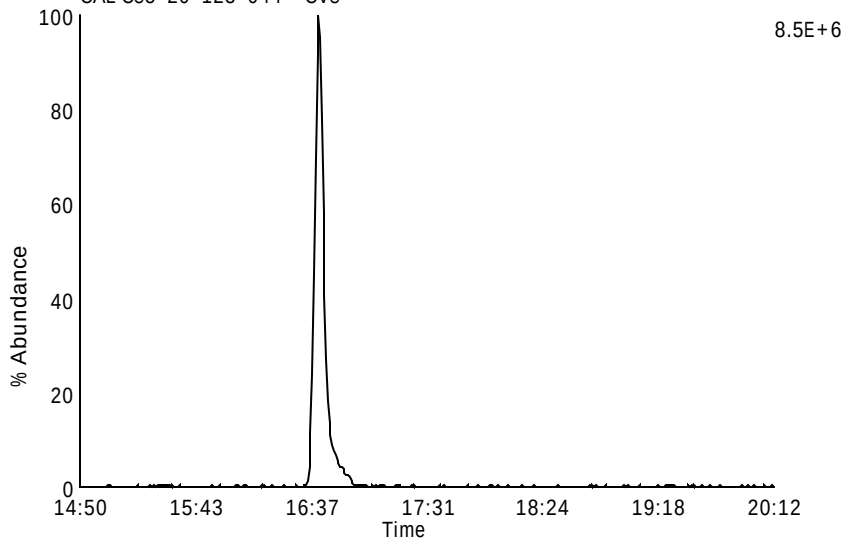
Data File: Y210818B_09 G2 C9 - 268.0016
CAL CS5-20-123-044 - CVS



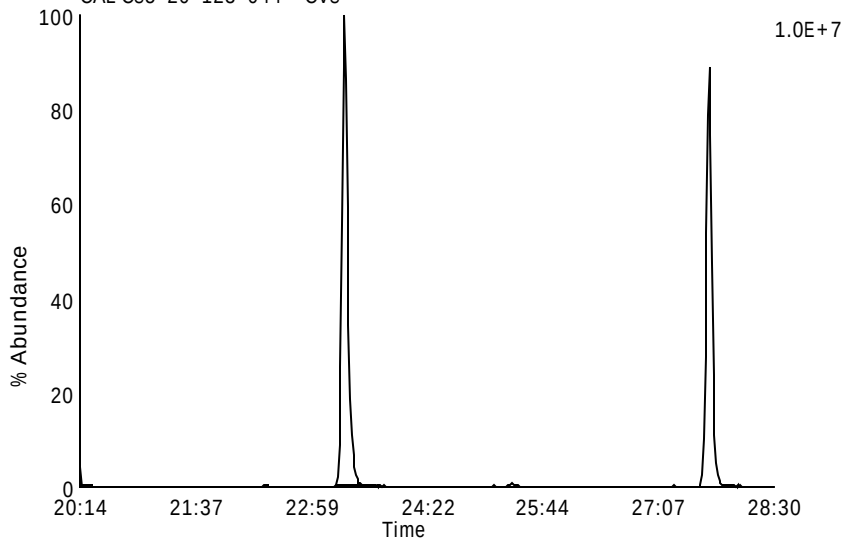
Data File: Y210818B_09 G3 C3 - 268.0016
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G2 C10 - 269.9986
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G3 C4 - 269.9986
CAL CS5-20-123-044 - CVS

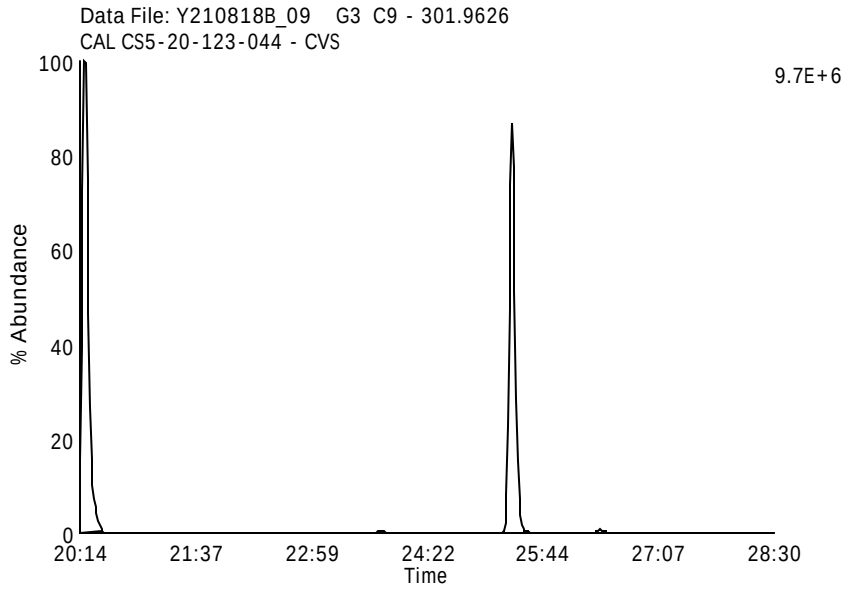


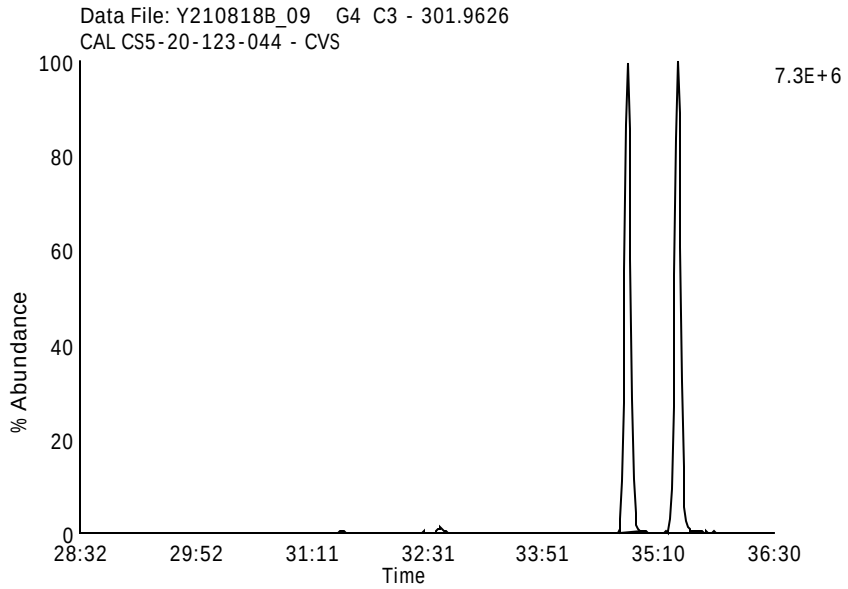
Labeled Tetra Chlorinated Biphenyls

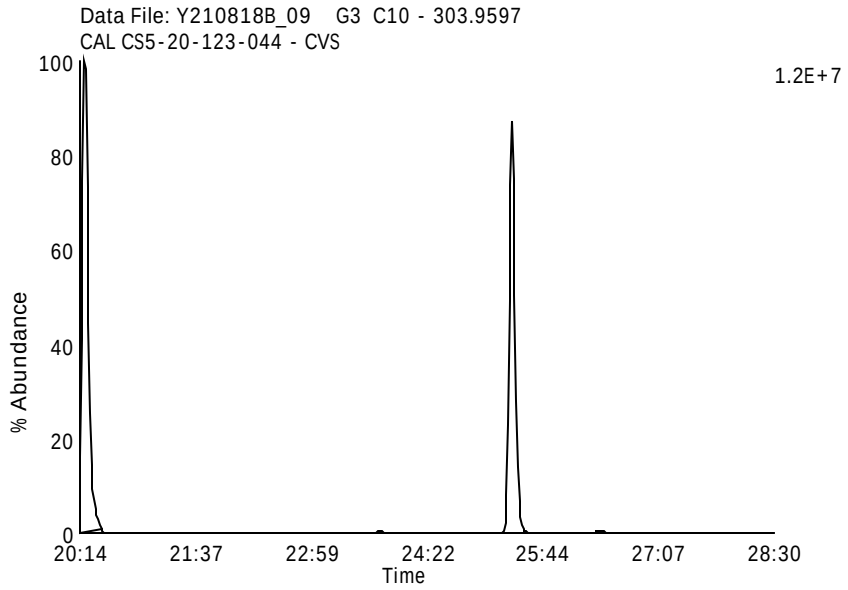
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

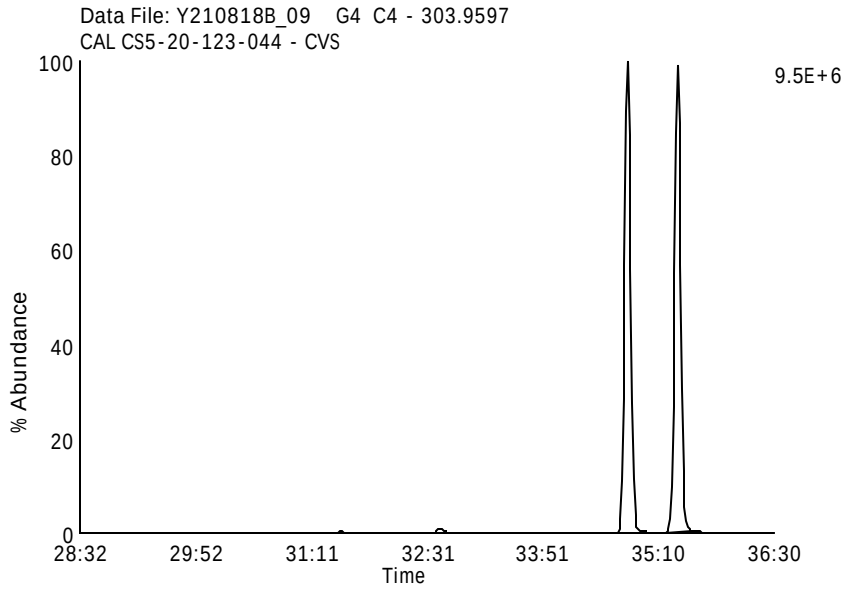
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS







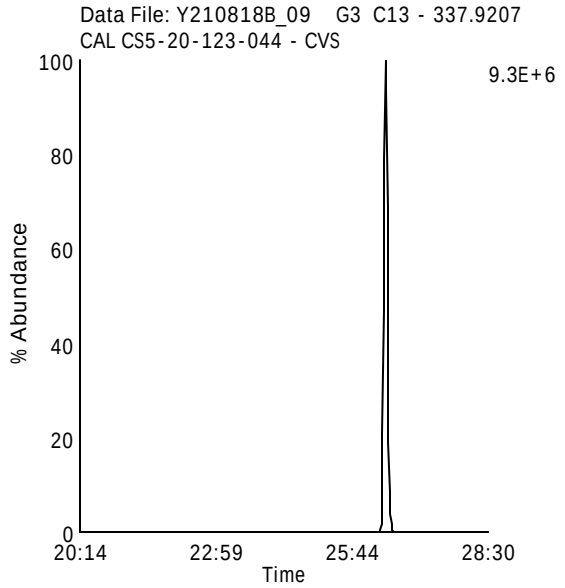


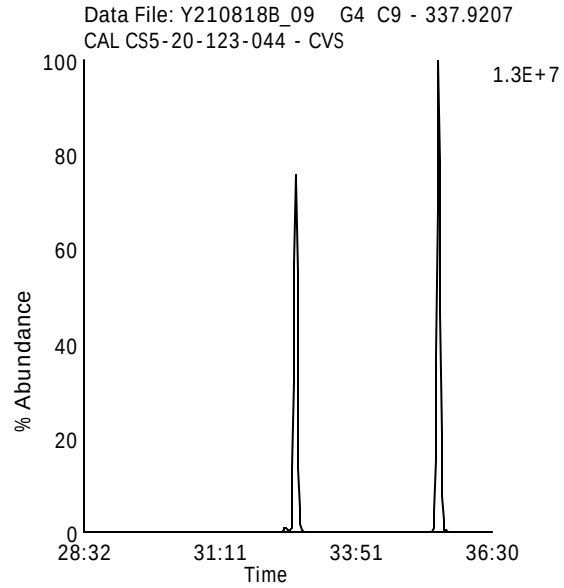
Labeled Penta Chlorinated Biphenyls

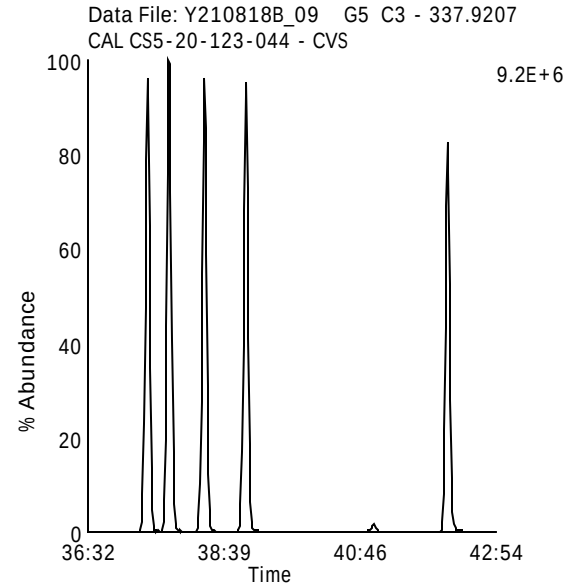
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

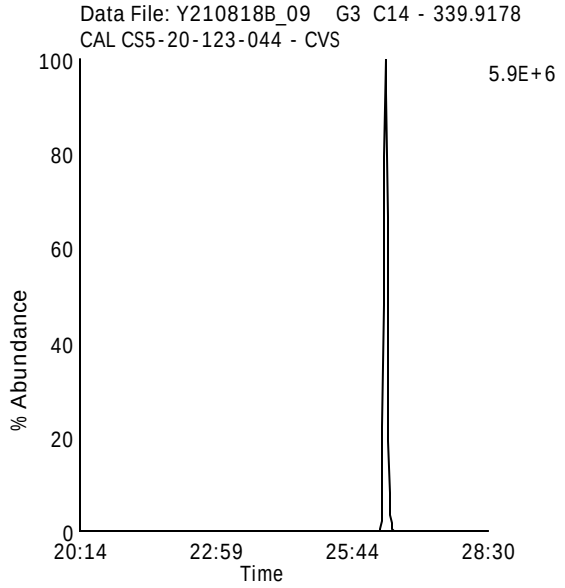
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

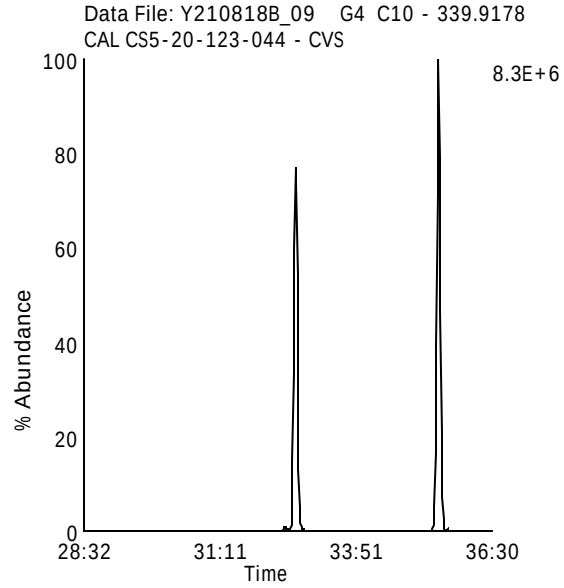
Sample Description: CAL CS5-20-123-044 - CVS

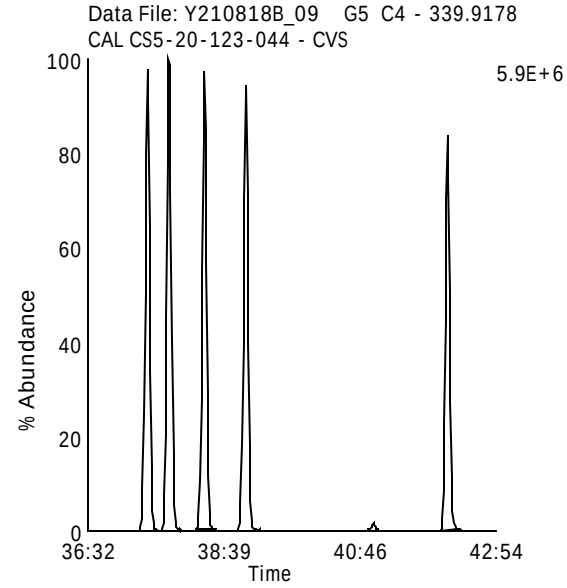










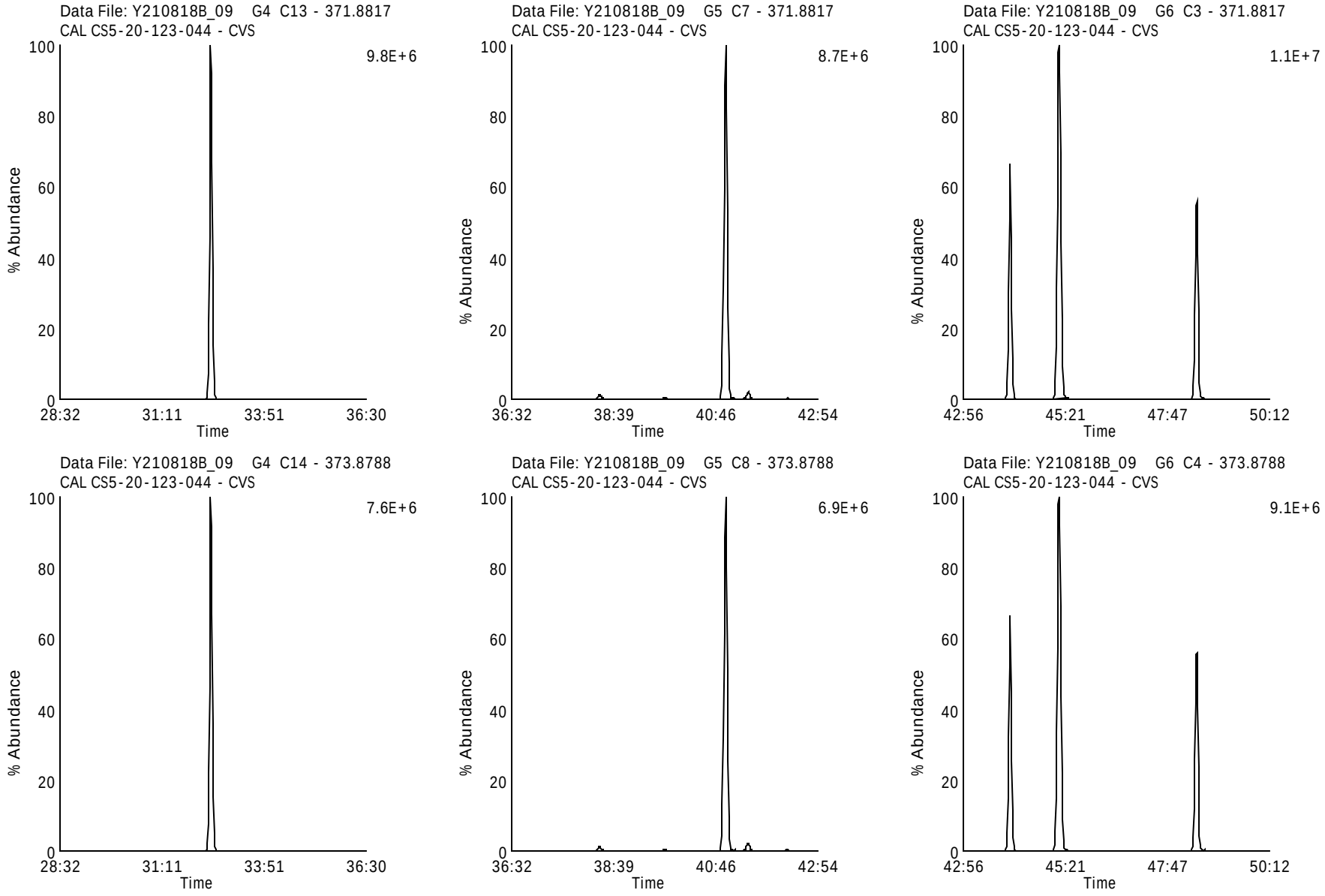


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

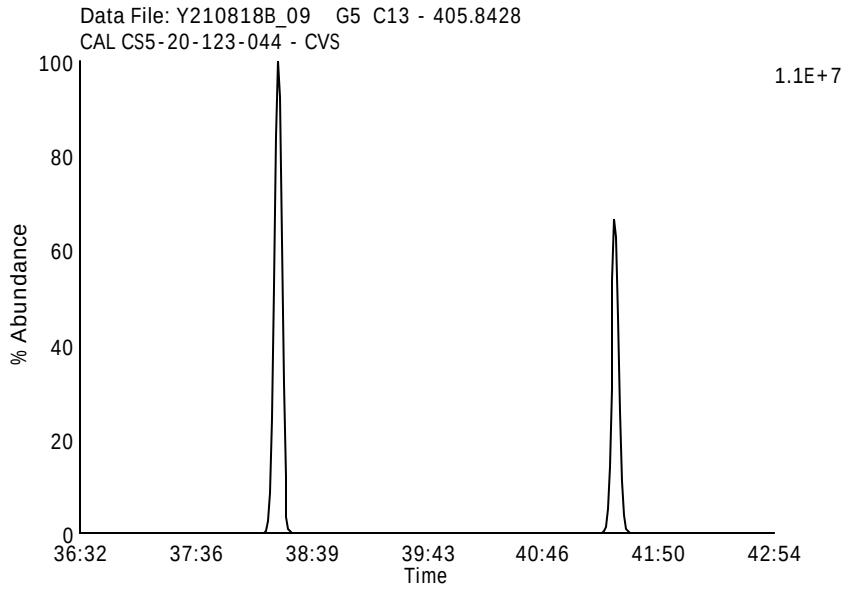


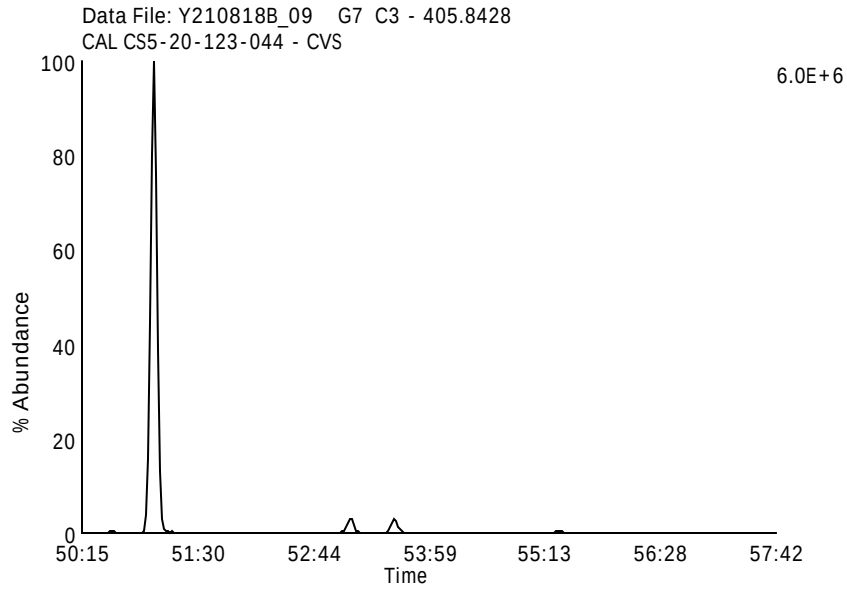
Labeled Hepta Chlorinated Biphenyls

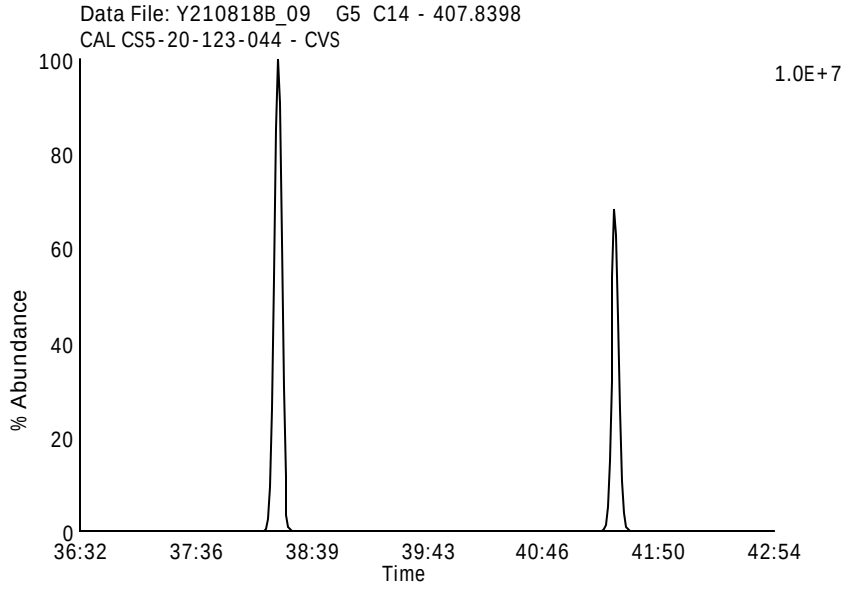
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

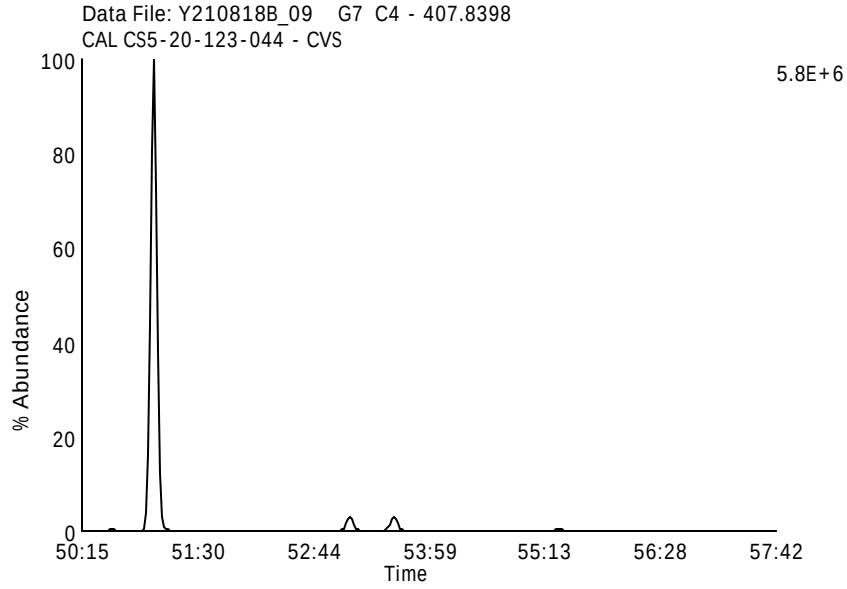
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS





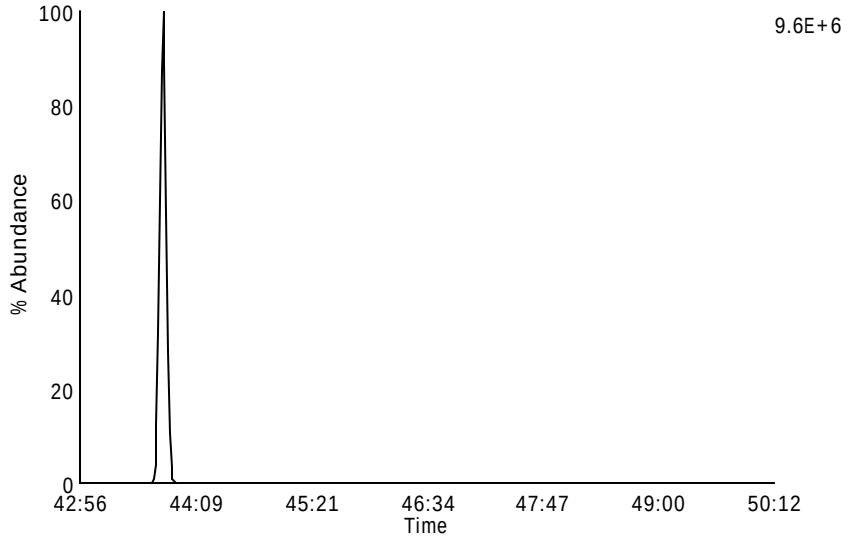




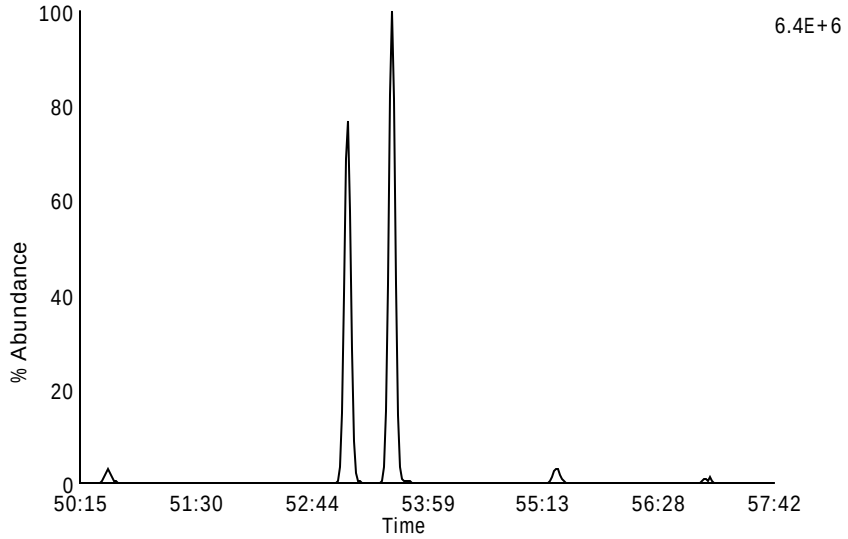
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

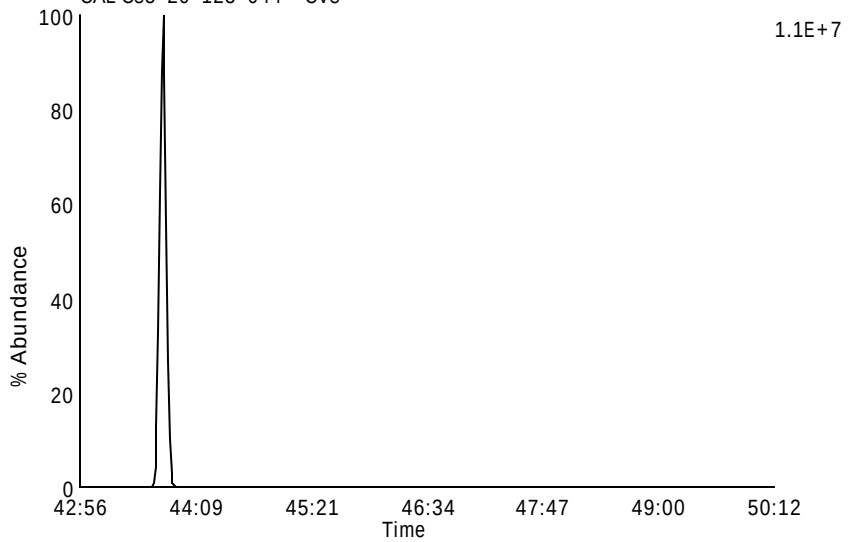
Data File: Y210818B_09 G6 C13 - 439.8038
CAL CS5-20-123-044 - CVS



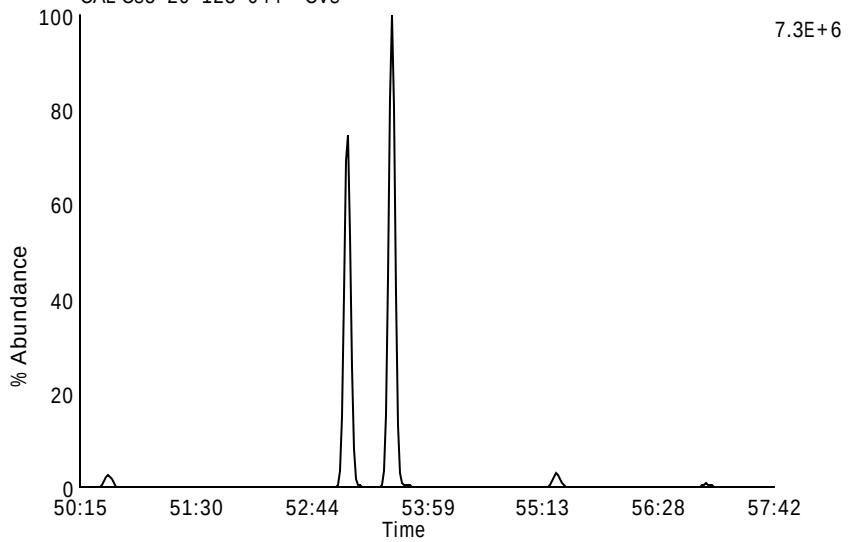
Data File: Y210818B_09 G7 C7 - 439.8038
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G6 C14 - 441.8008
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G7 C8 - 441.8008
CAL CS5-20-123-044 - CVS

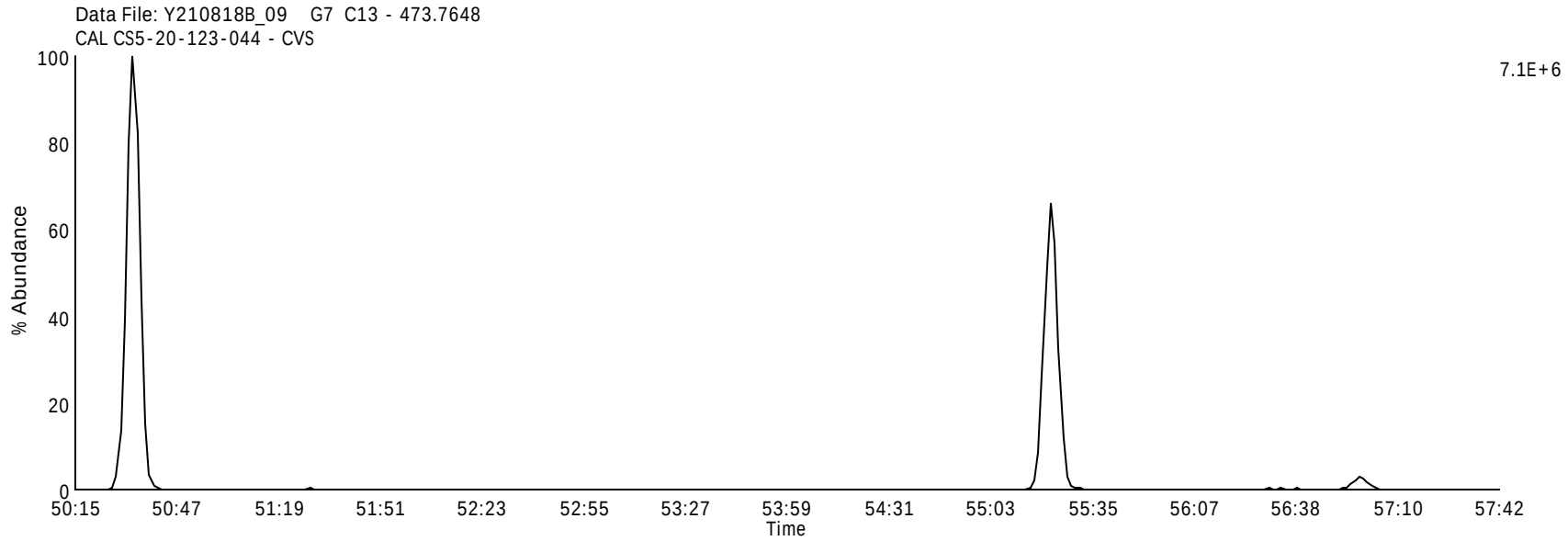


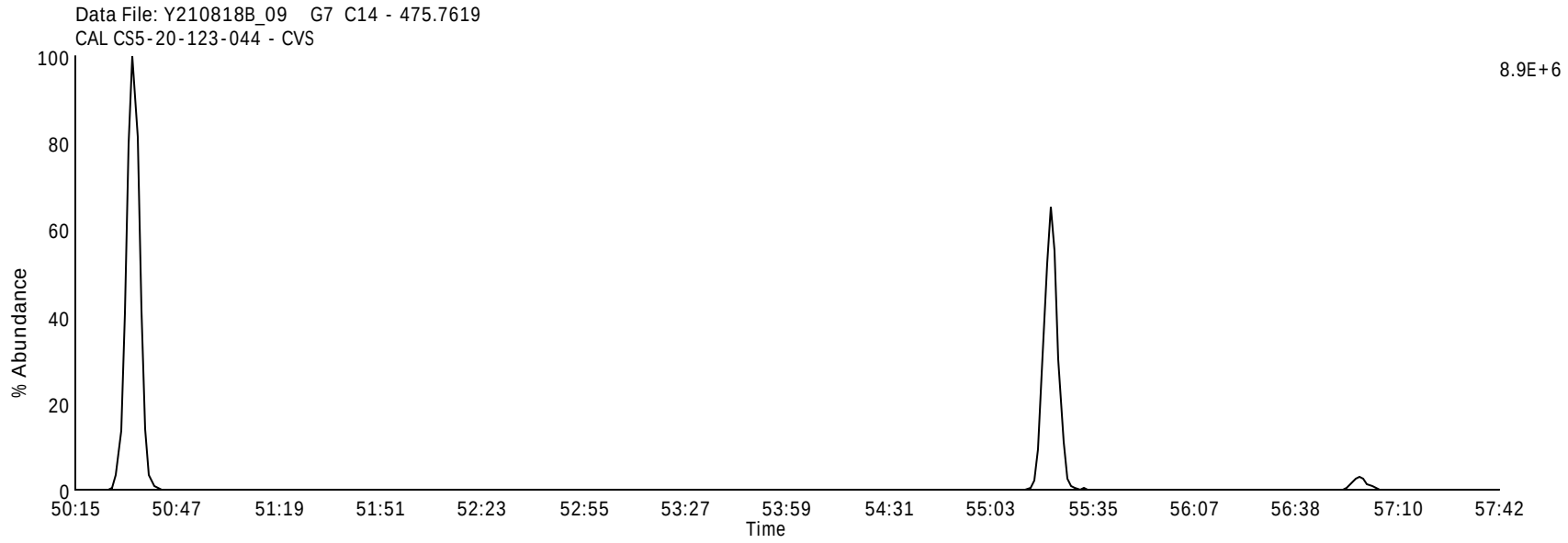
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



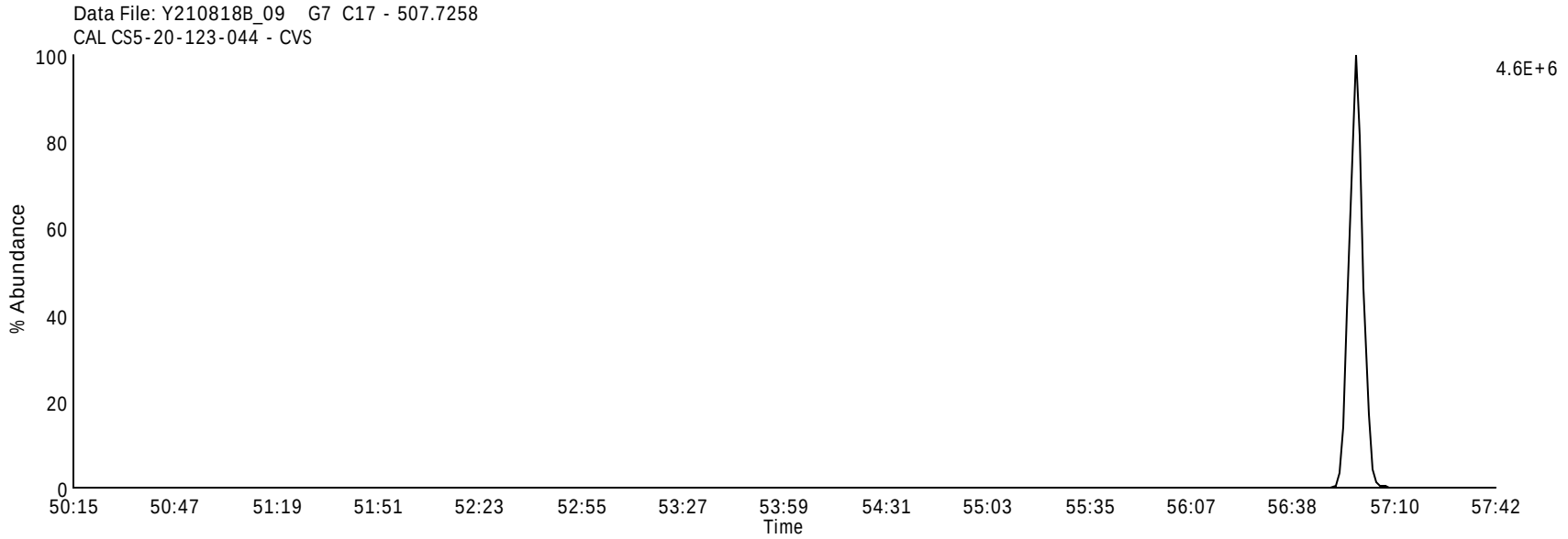


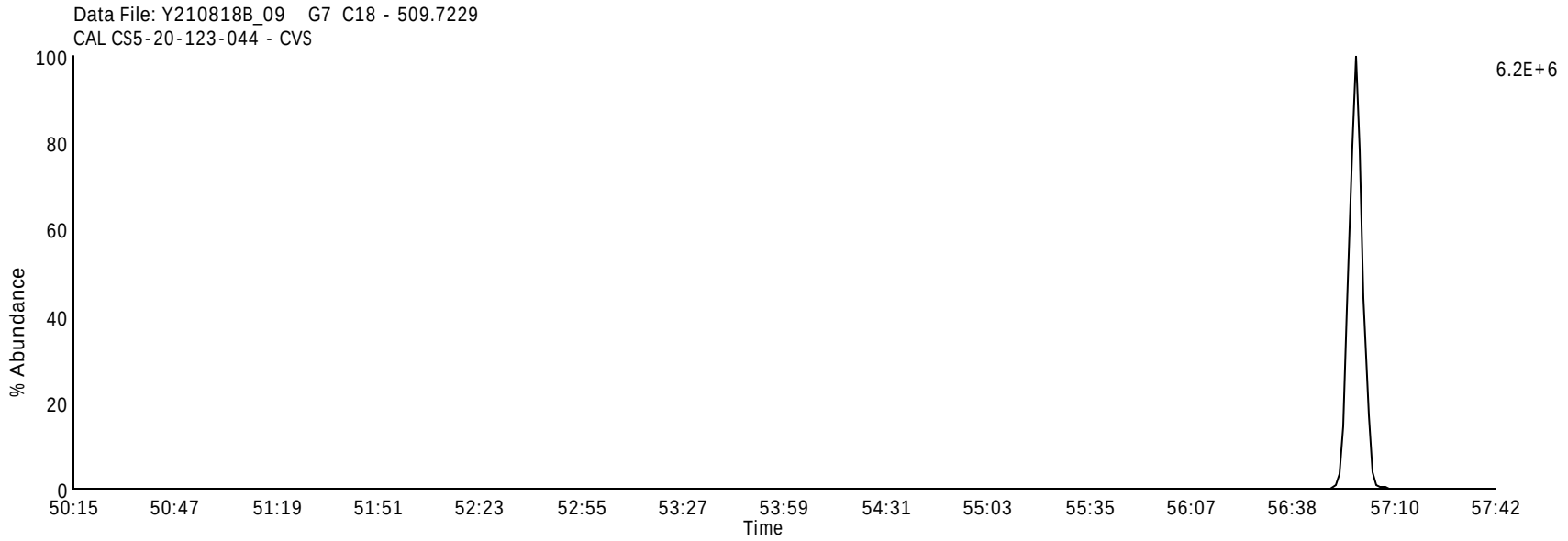
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

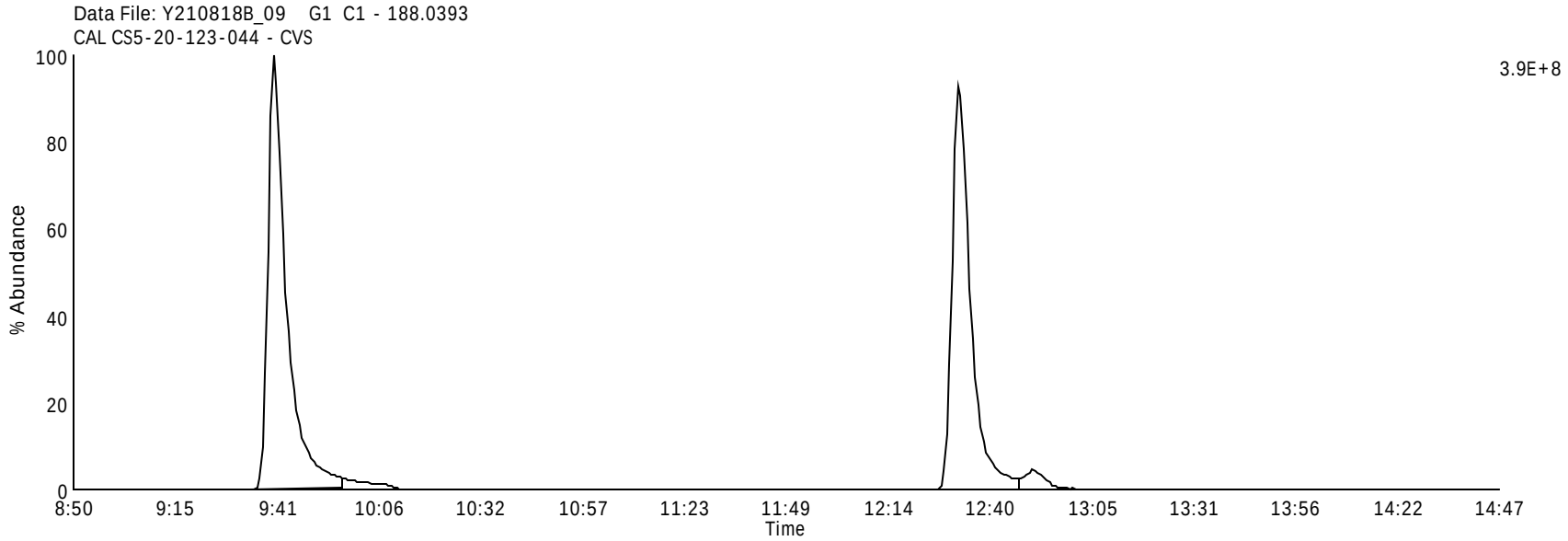
Sample Description: CAL CS5-20-123-044 - CVS

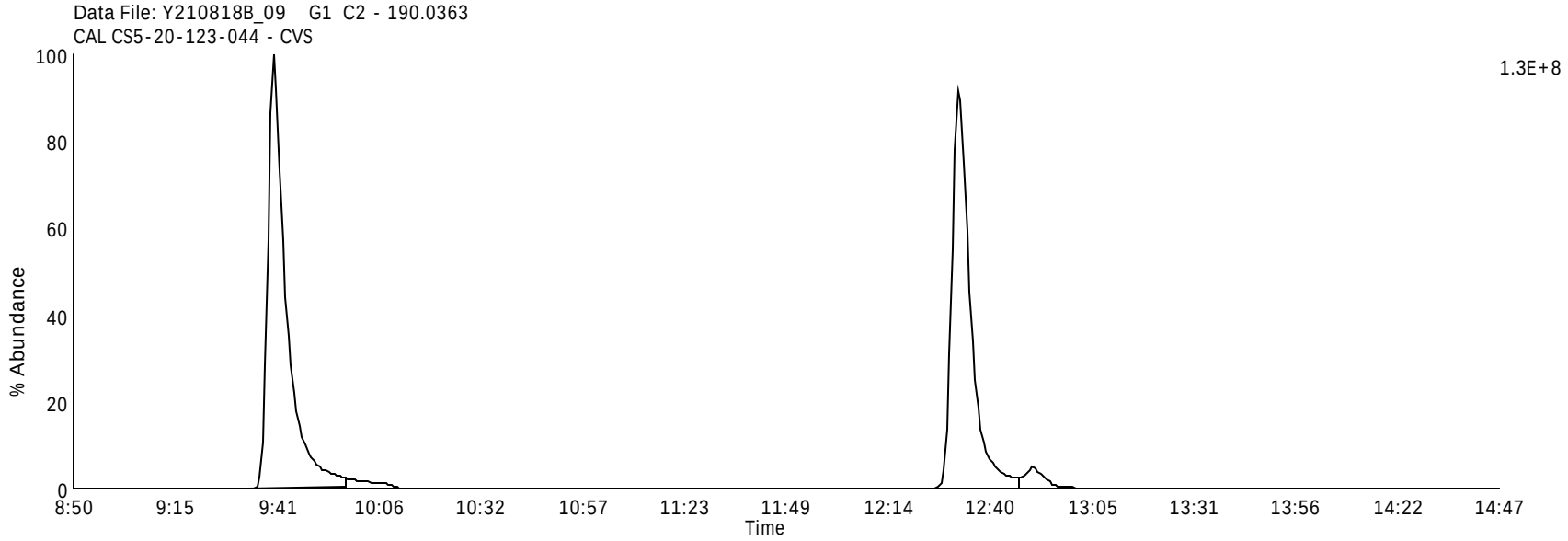




Mono Chlorinated Biphenyls

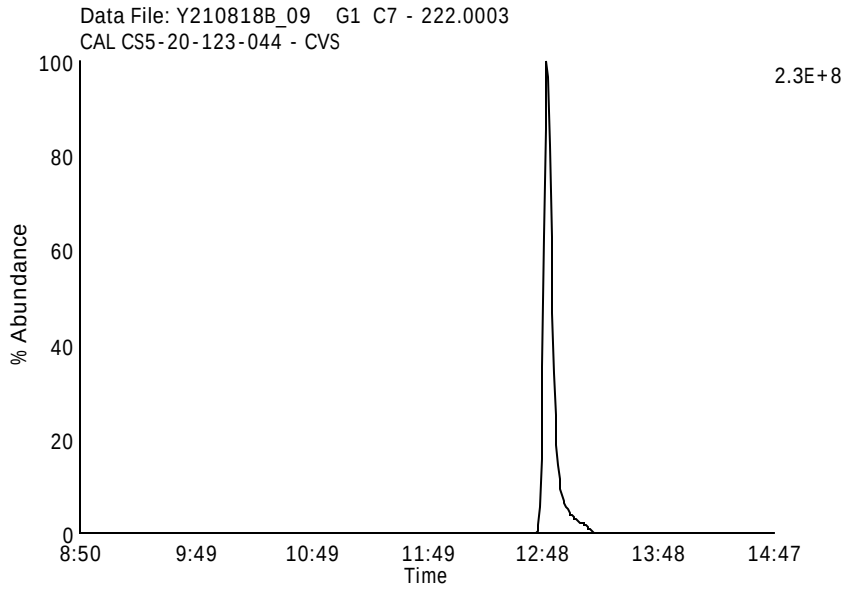
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

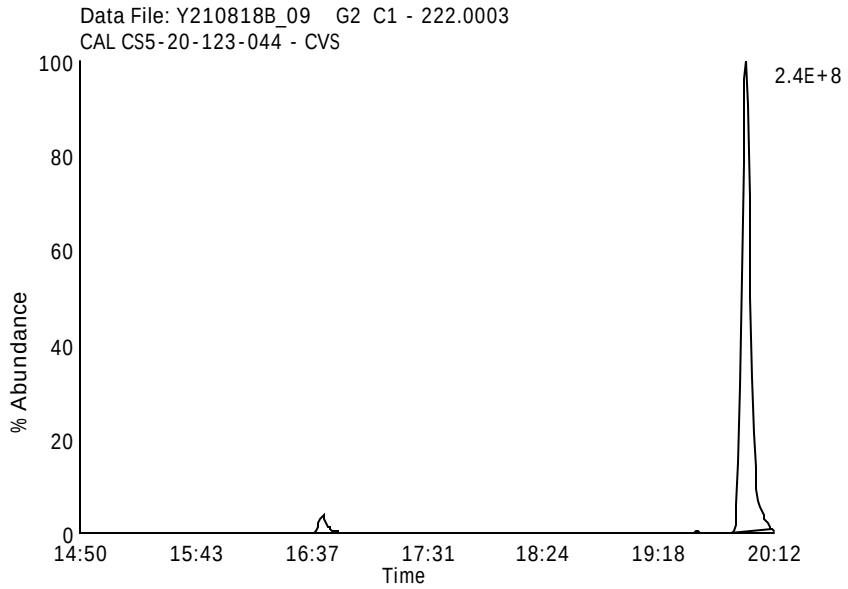


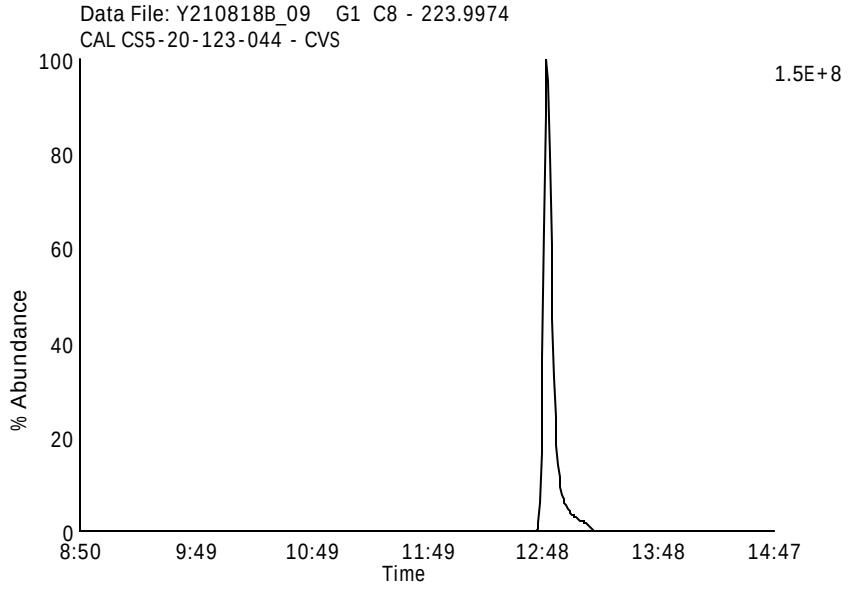


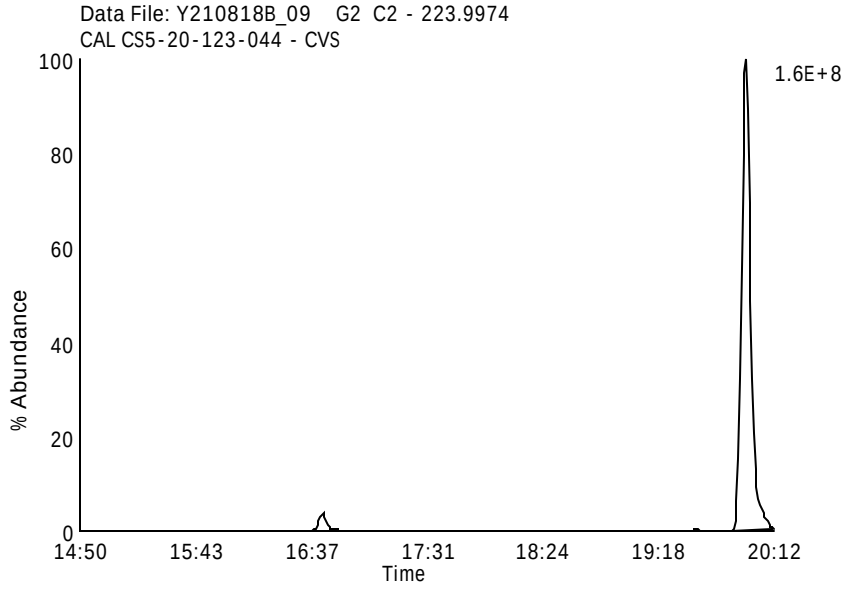
Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



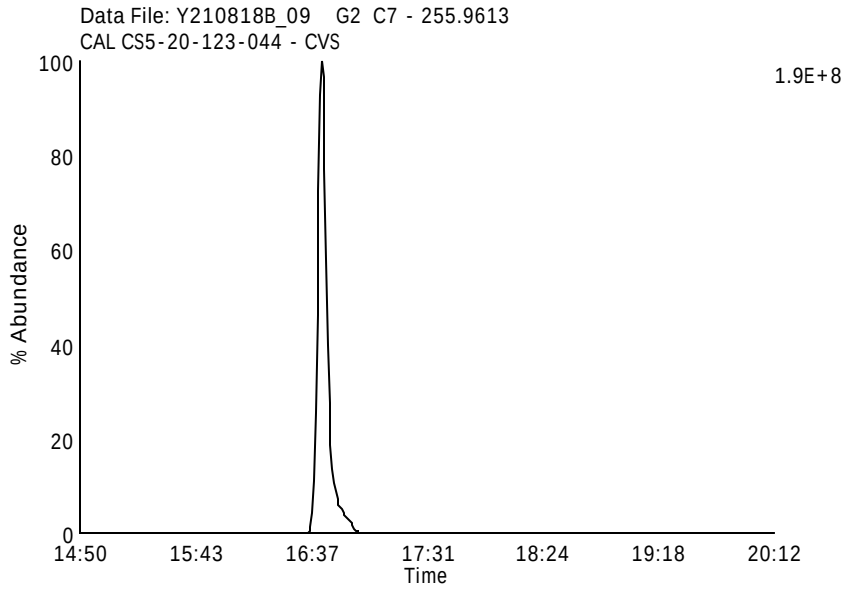


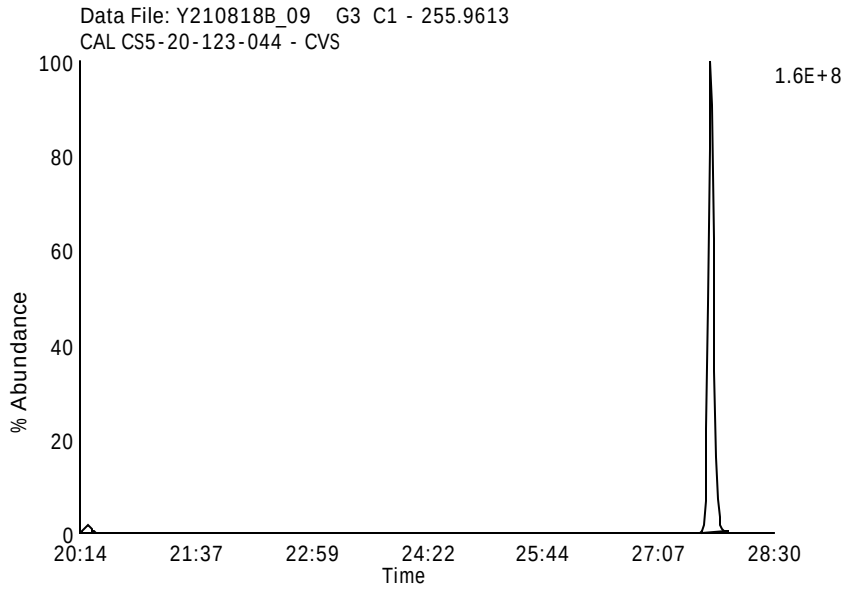


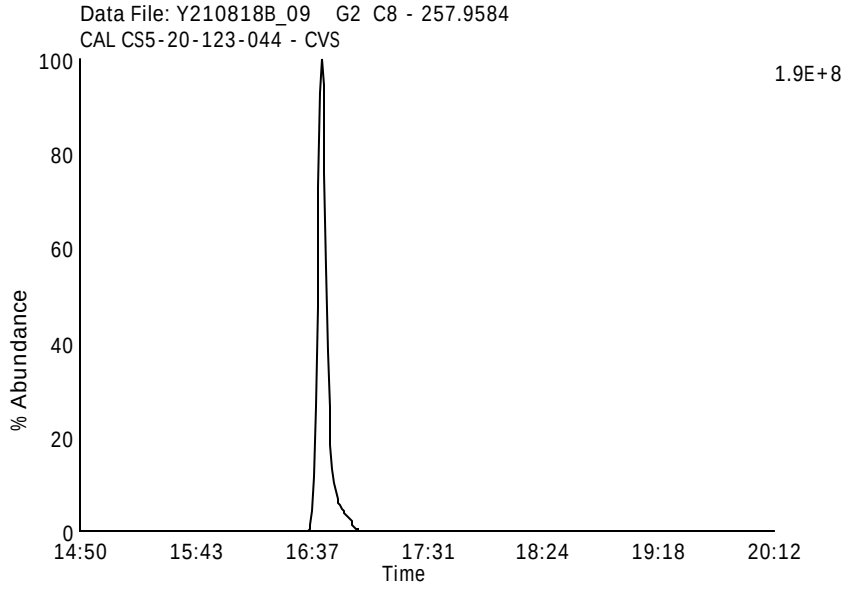


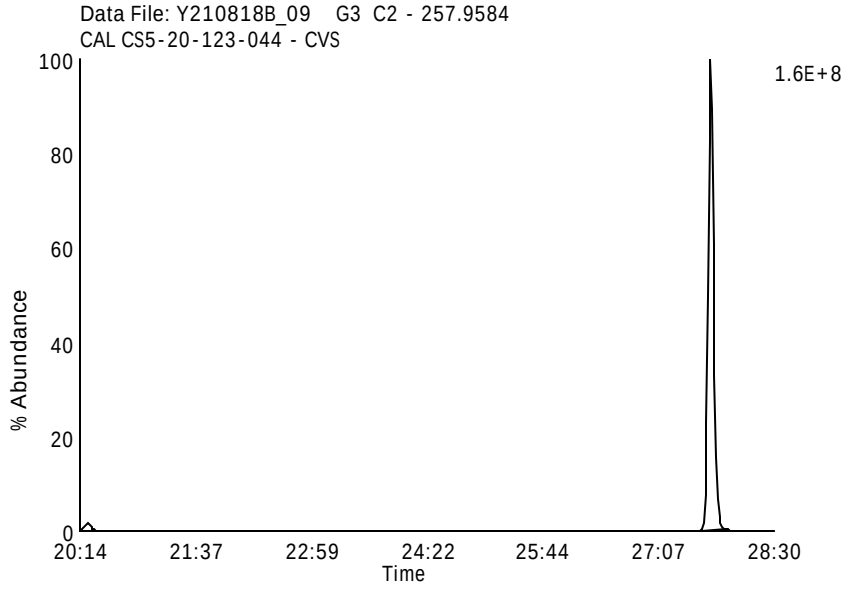
Tri Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



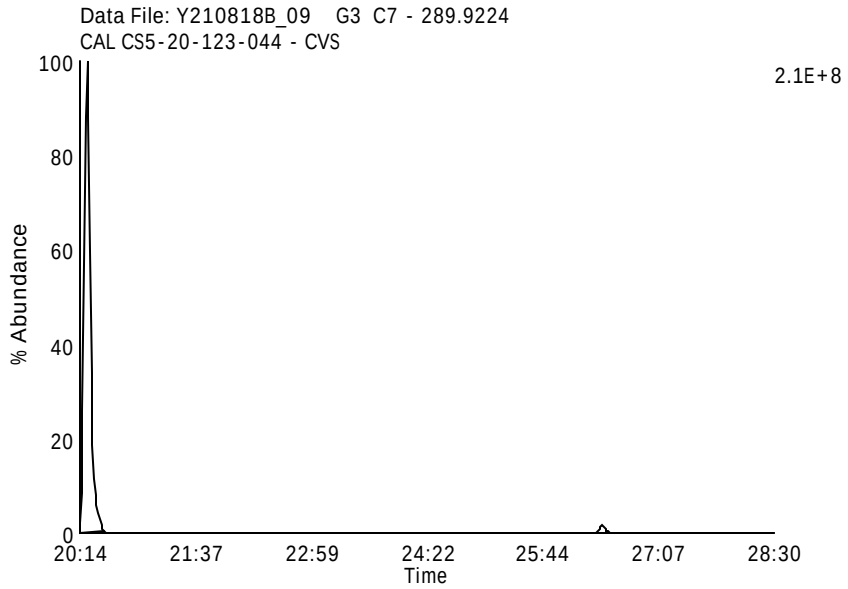


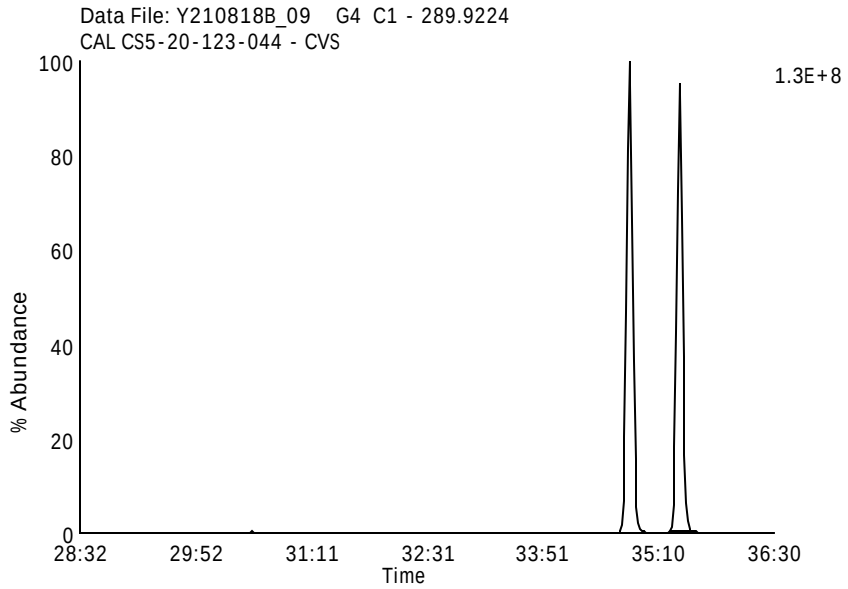


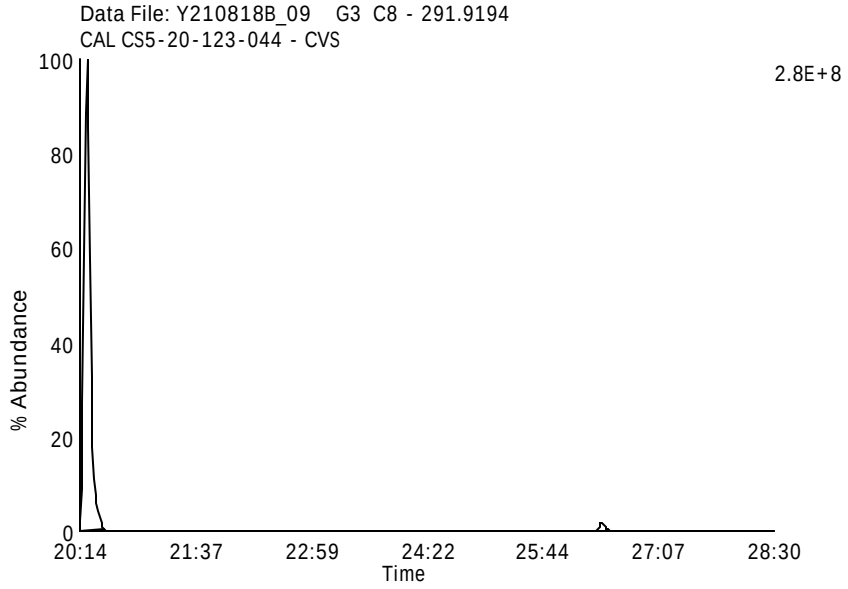


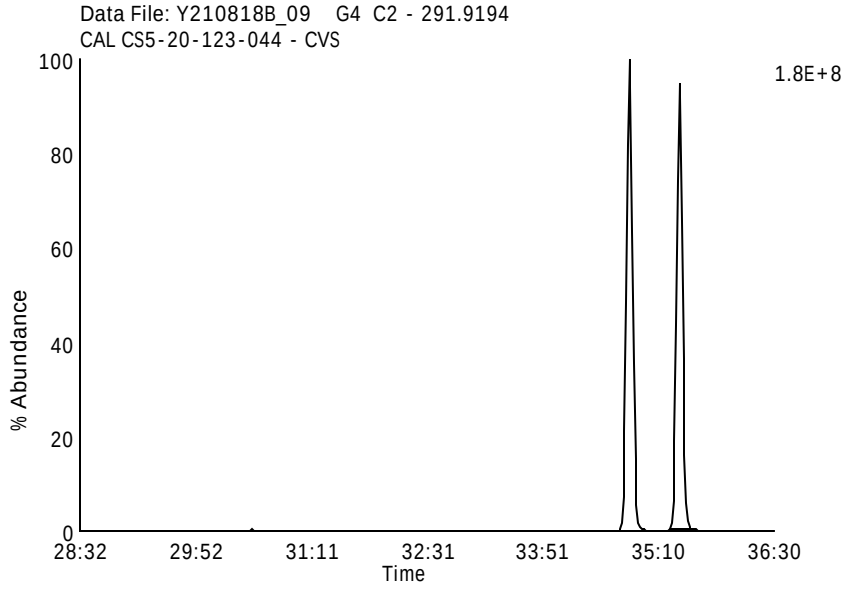
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



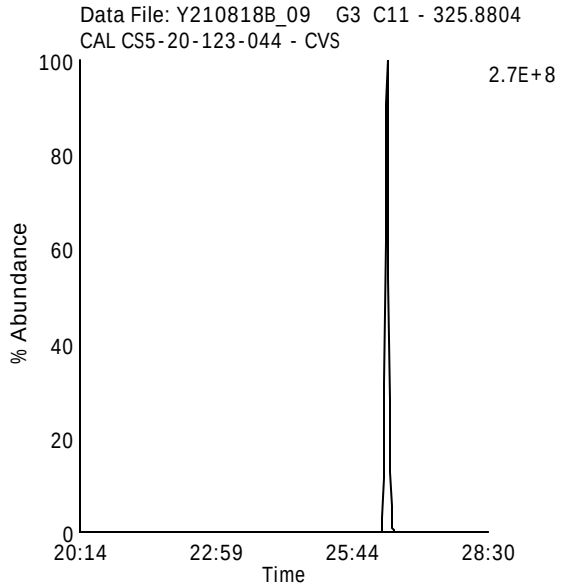


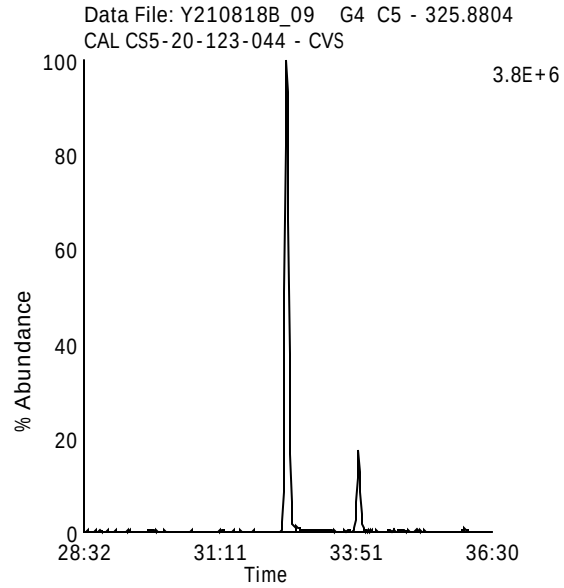


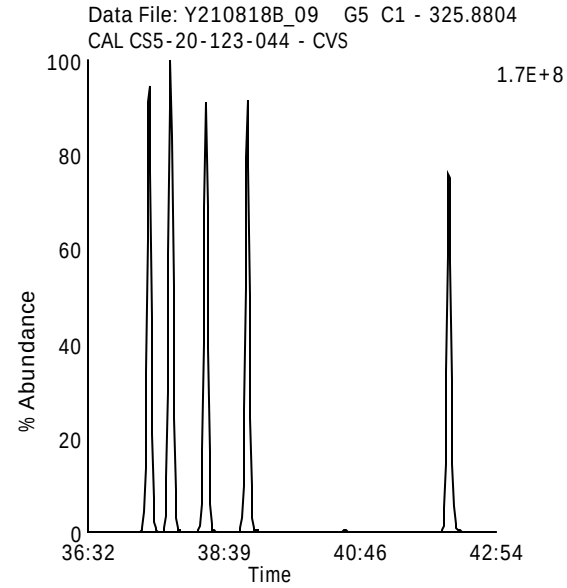


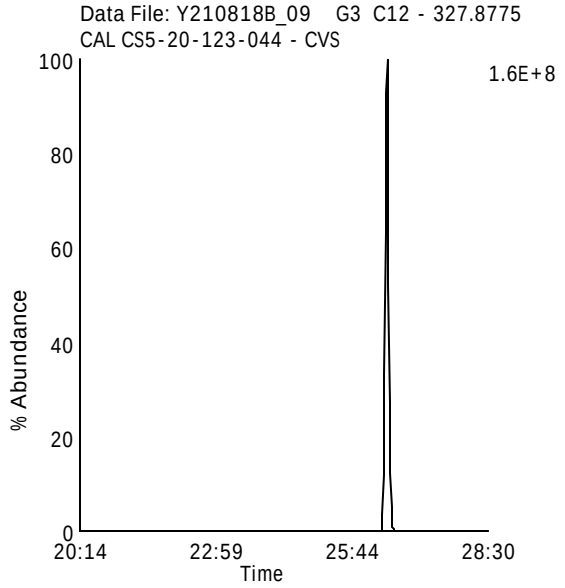
Penta Chlorinated Biphenyls

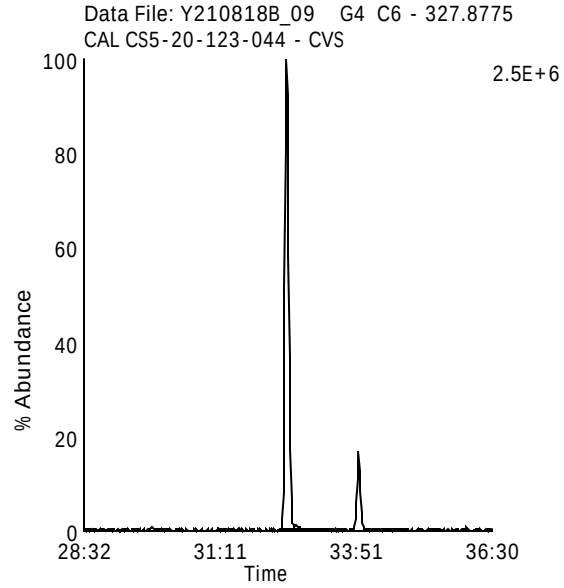
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

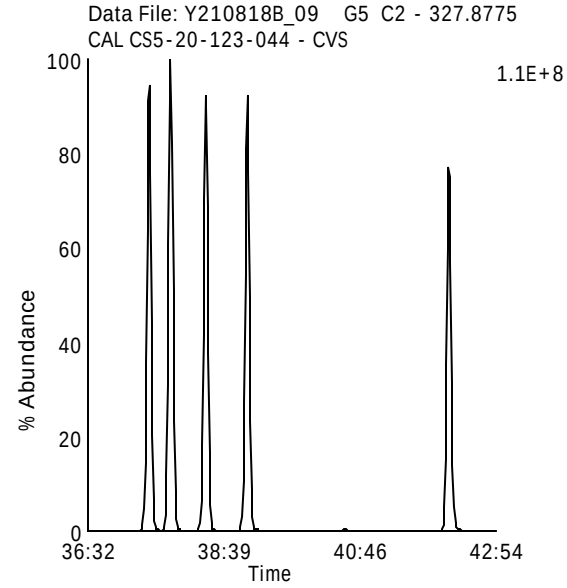








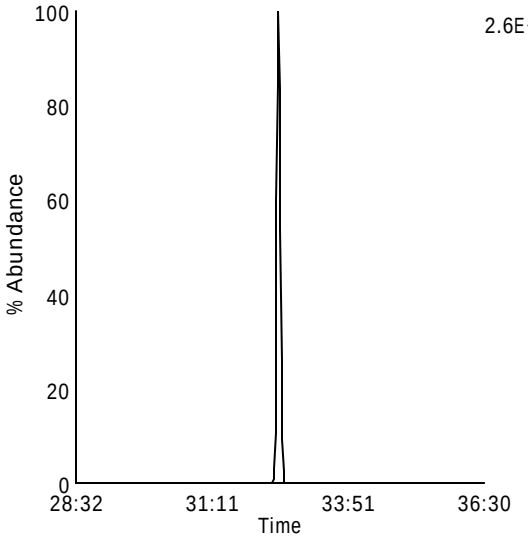




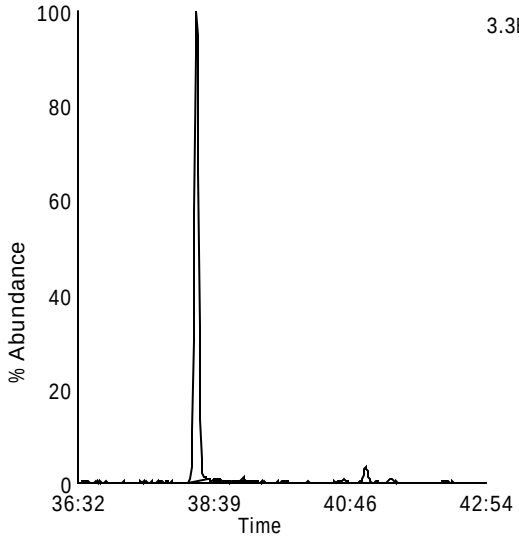
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

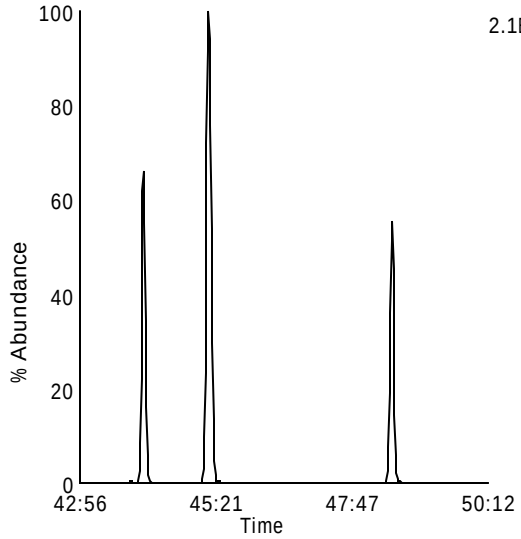
Data File: Y210818B_09 G4 C11 - 359.8415
CAL CS5-20-123-044 - CVS



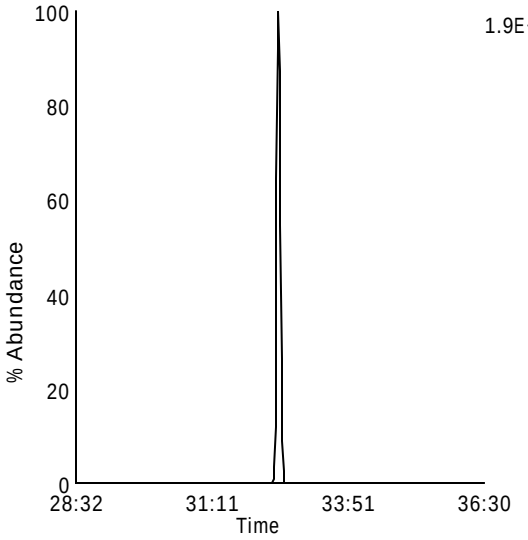
Data File: Y210818B_09 G5 C5 - 359.8415
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G6 C1 - 359.8415
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G4 C12 - 361.8385
CAL CS5-20-123-044 - CVS



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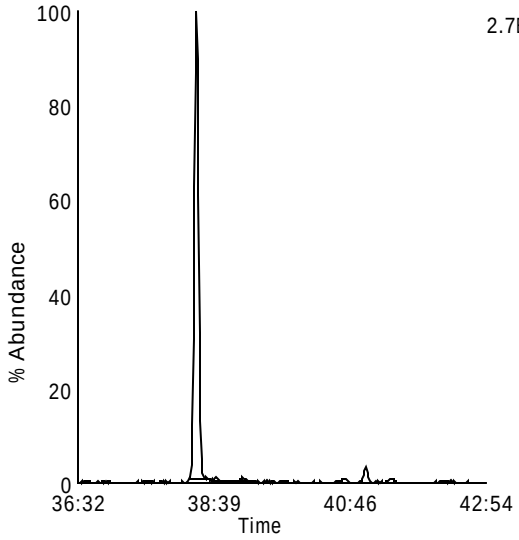
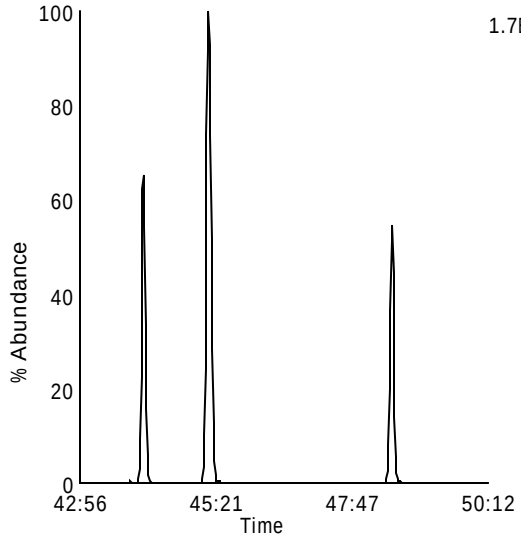
CAL CS5-20-123-044 - CVS

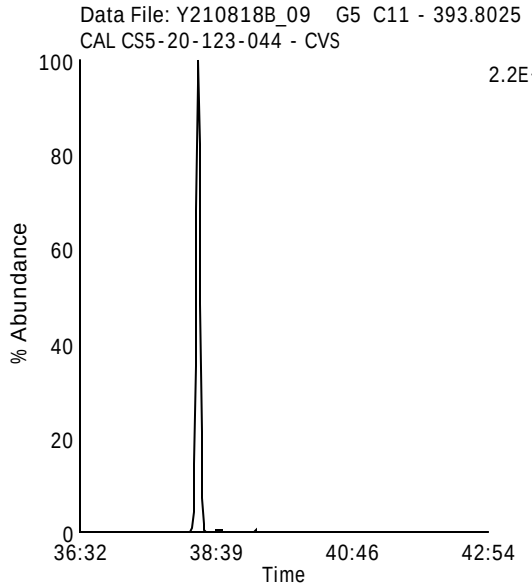


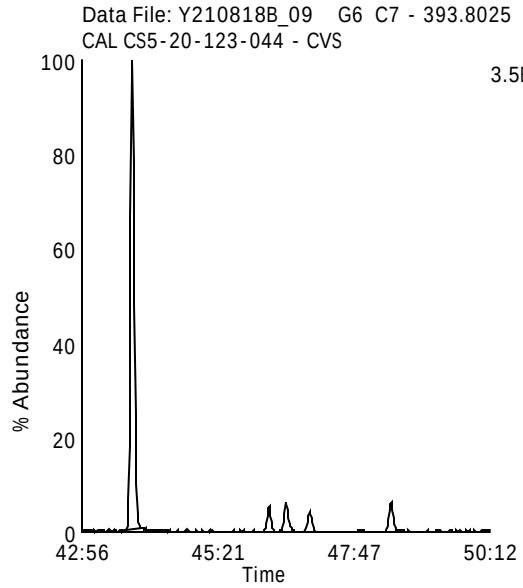
Data File: Y210818B_09 G6 C2 - 361.8385
CAL CS5-20-123-044 - CVS

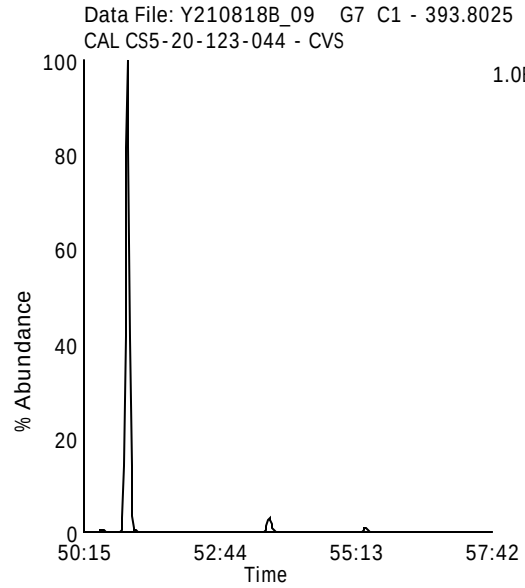


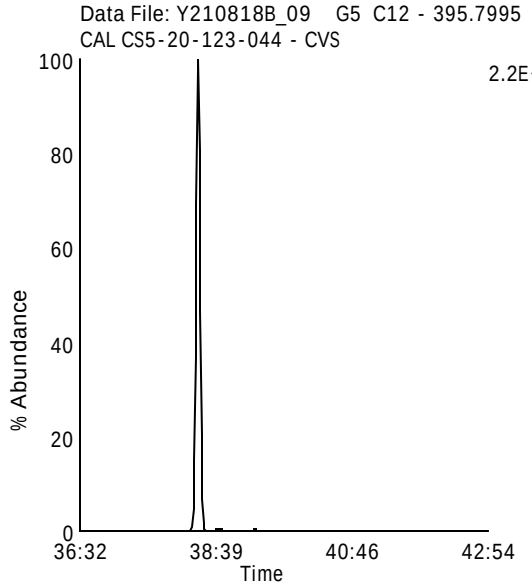
Hepta Chlorinated Biphenyls

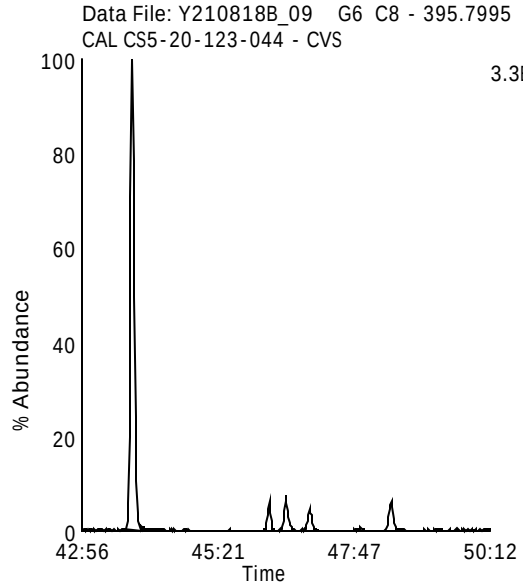
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

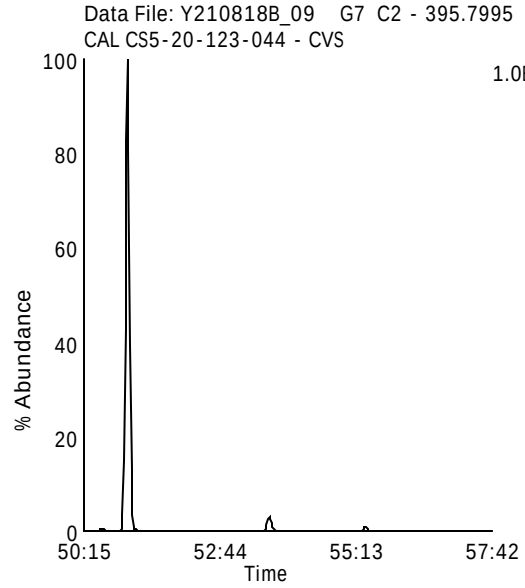






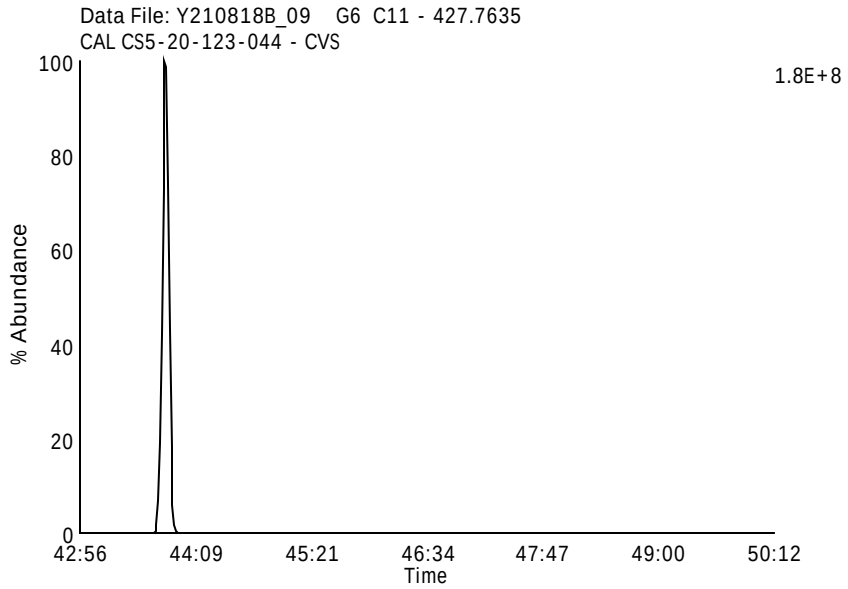


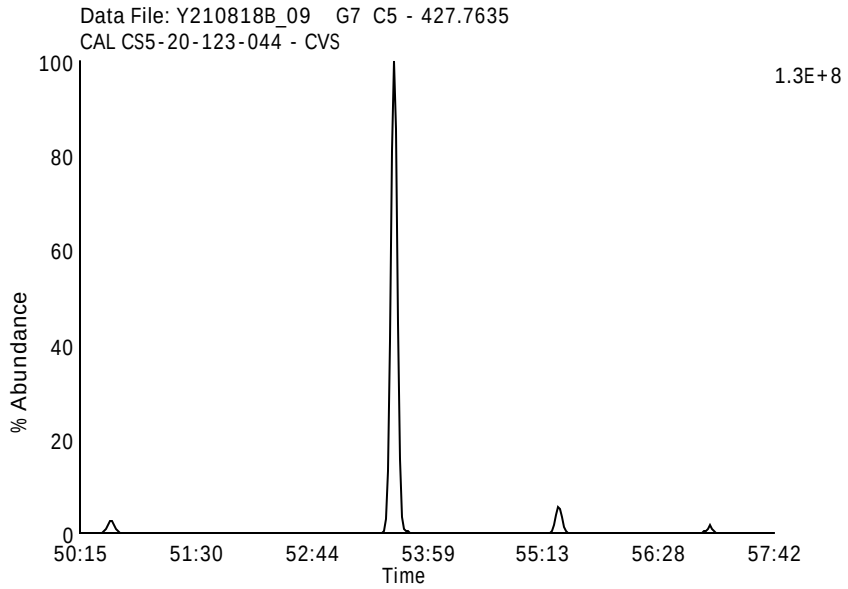


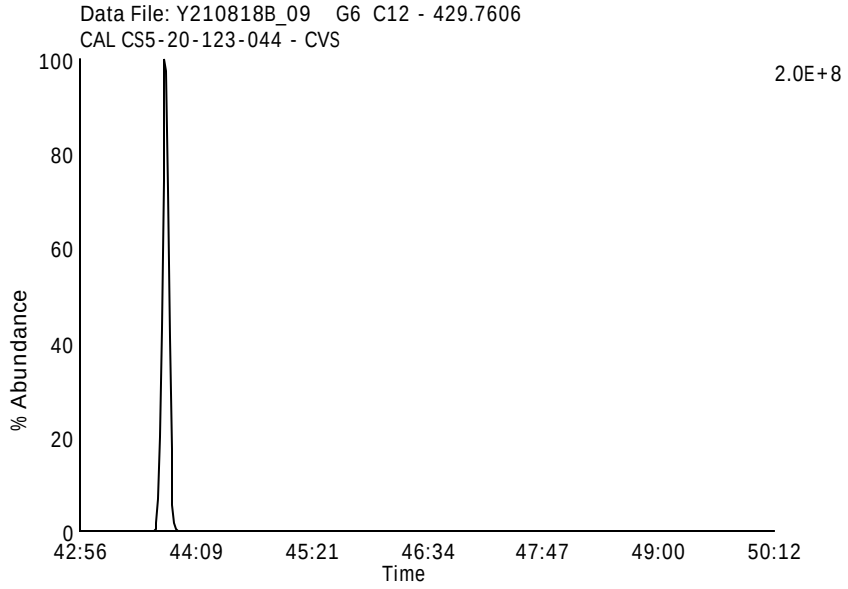


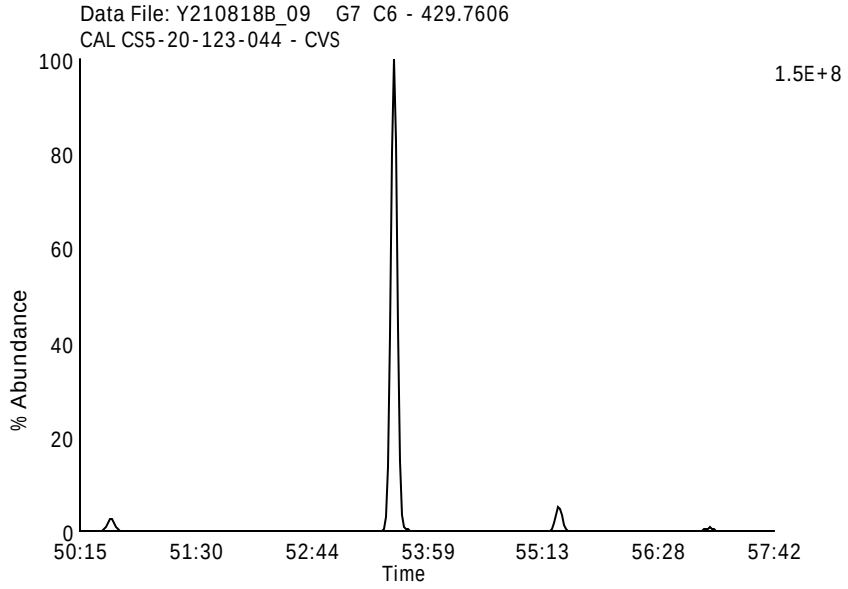
Octa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS







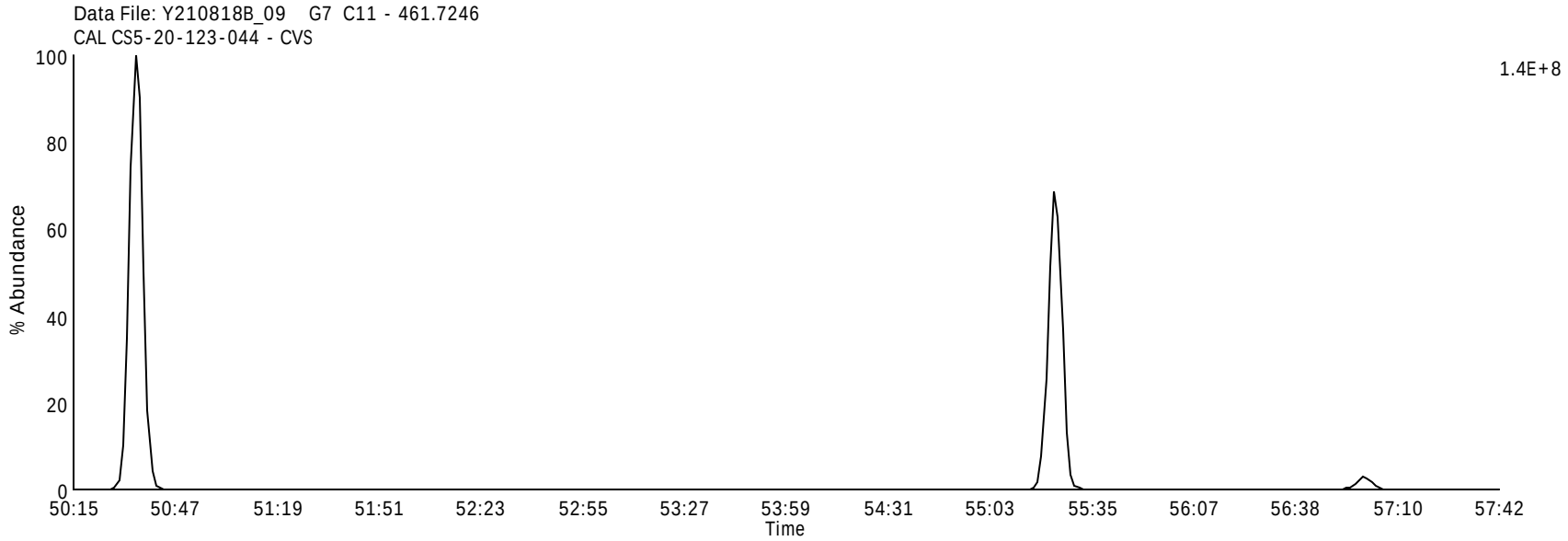


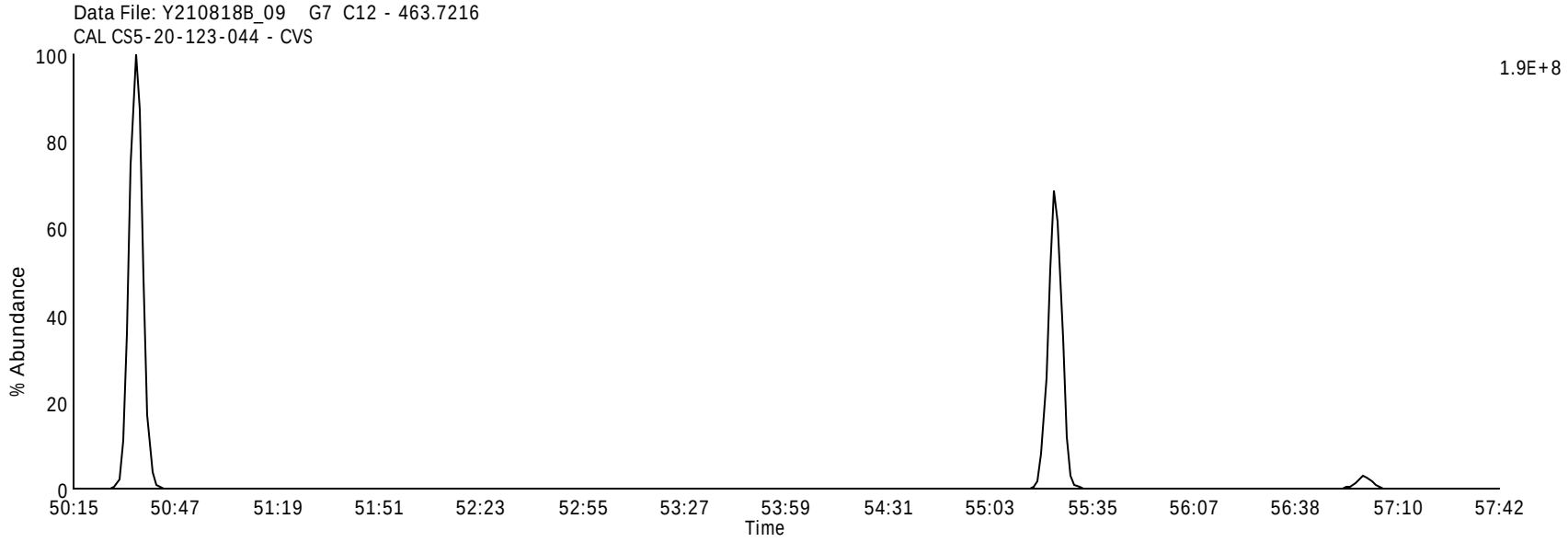
Nona Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



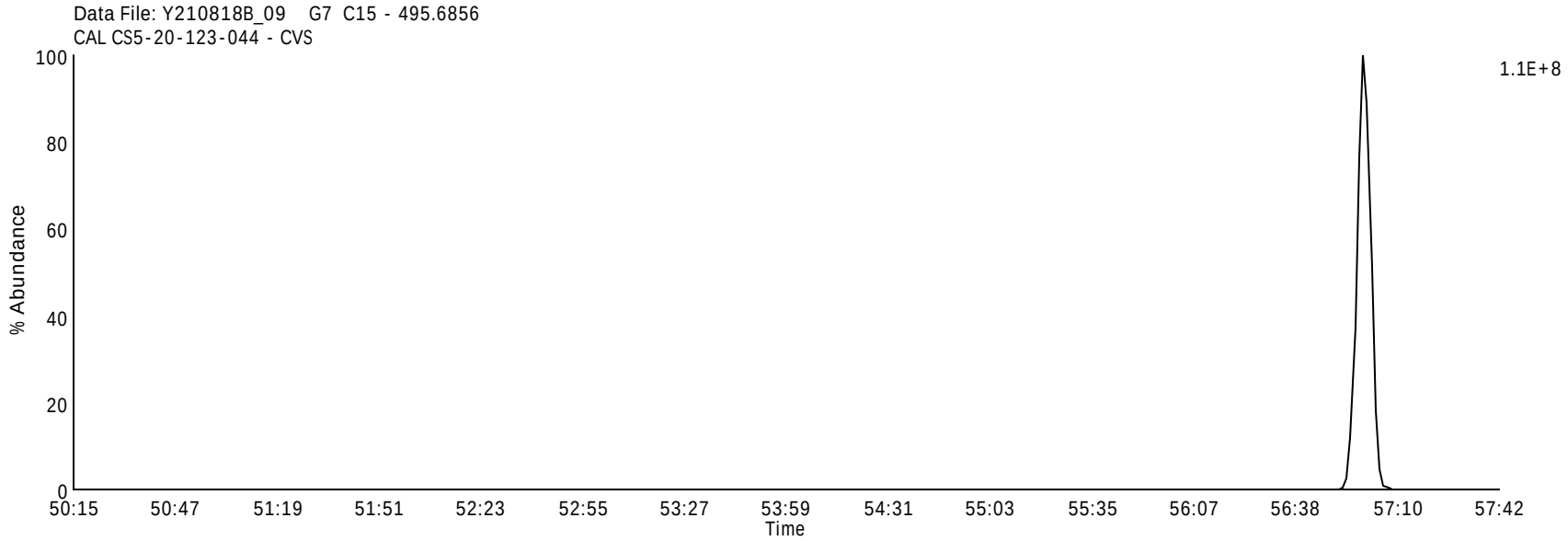


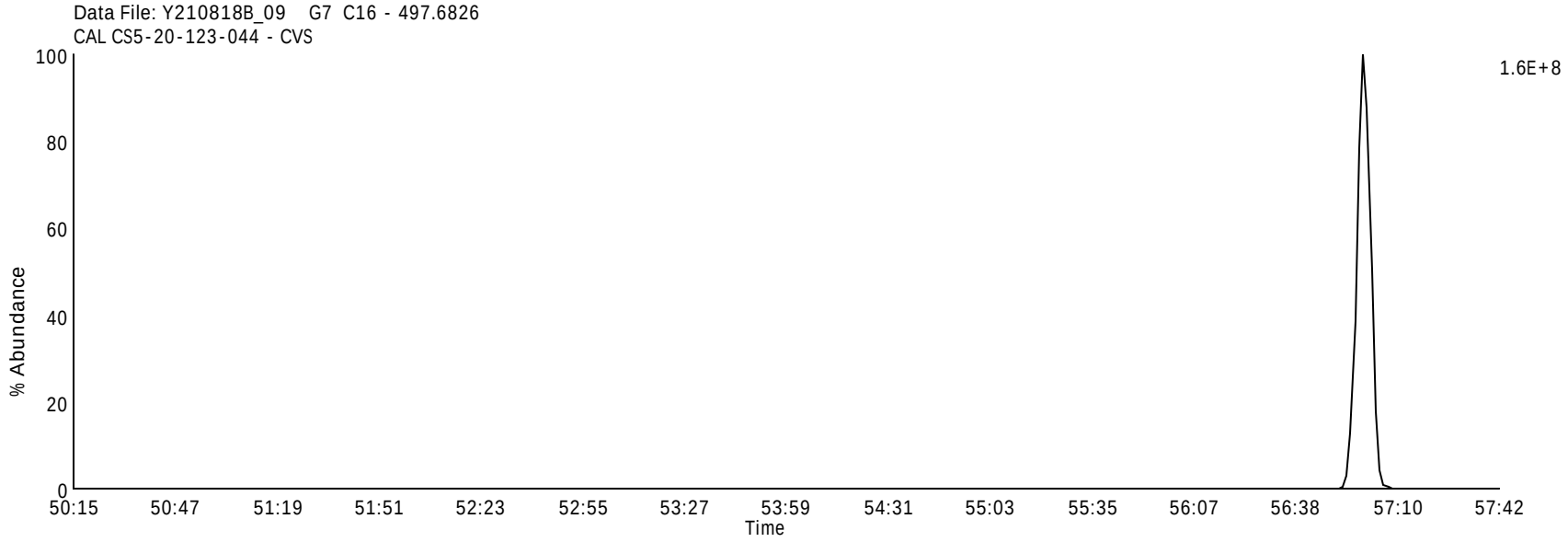
Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

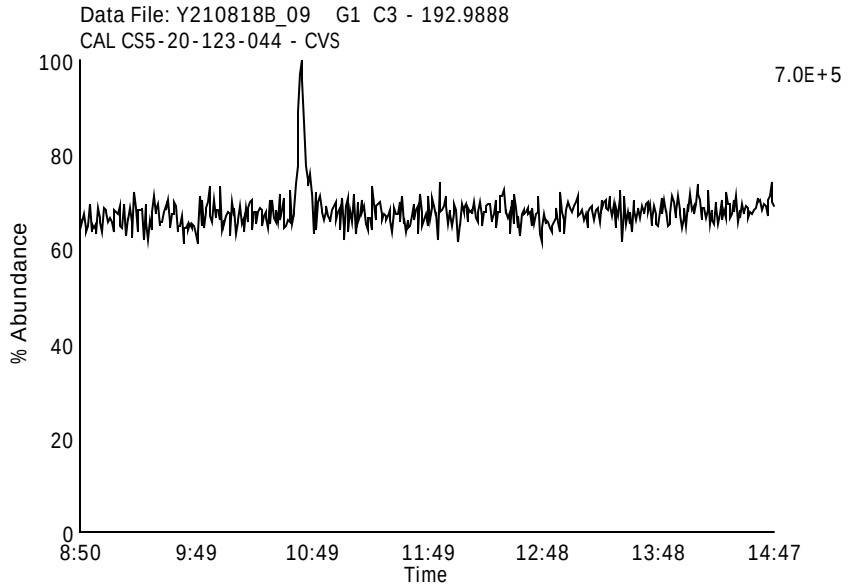


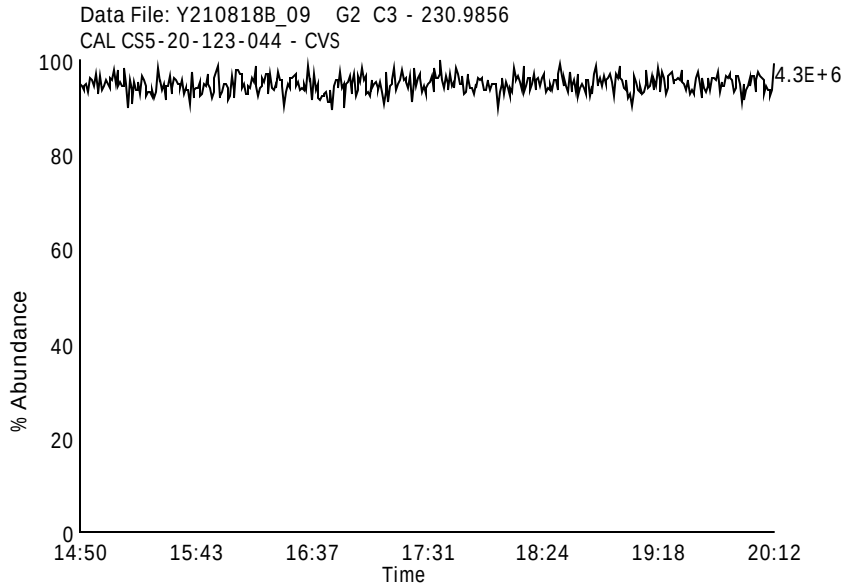


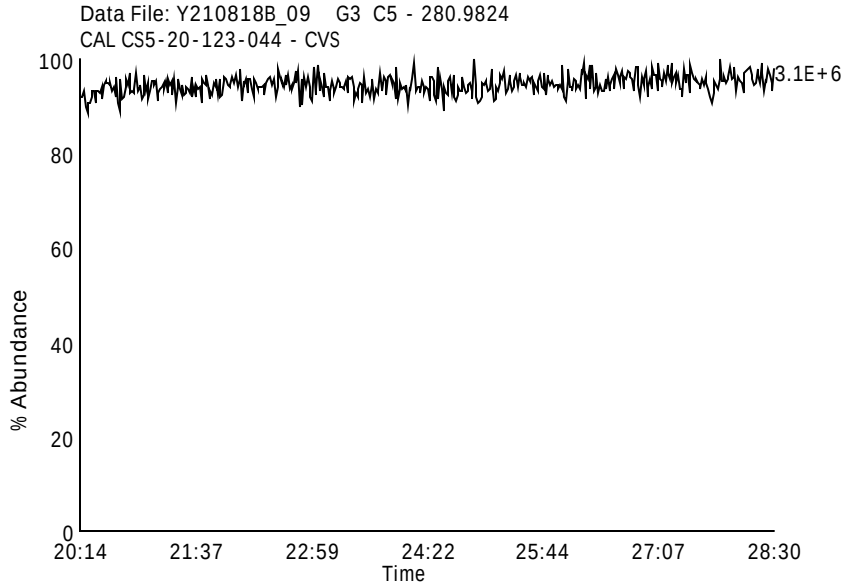
Group 1 - 4 Lock mass

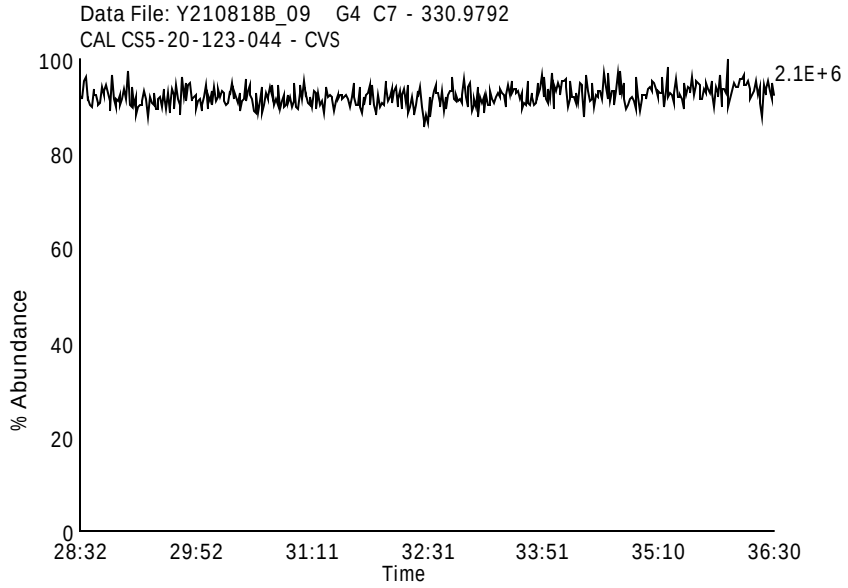
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)





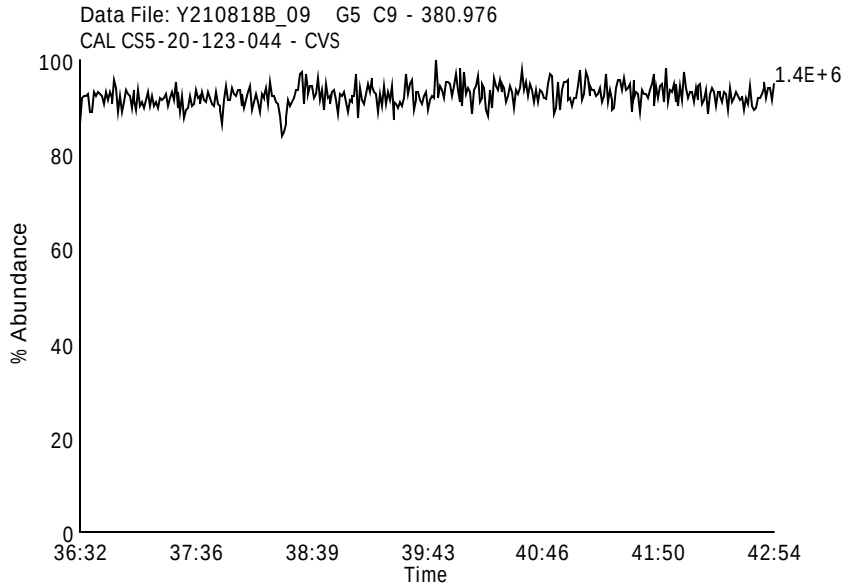


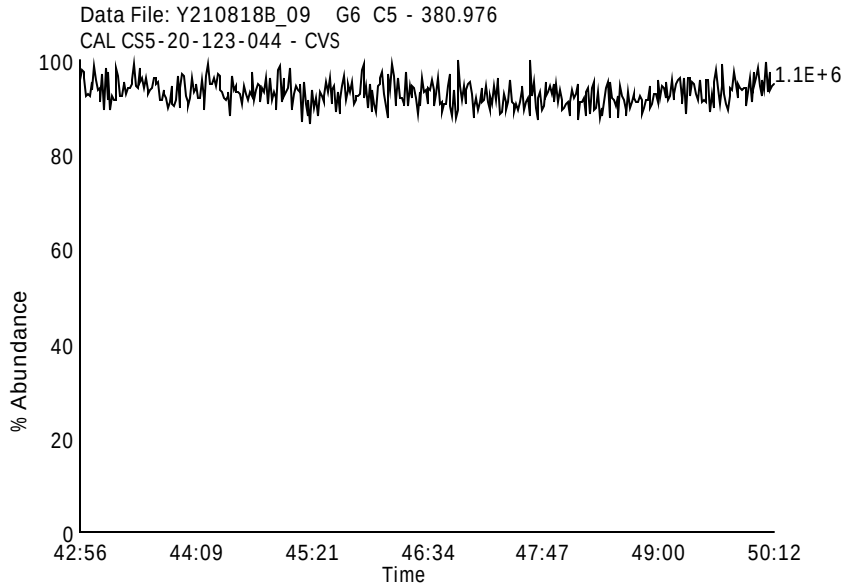


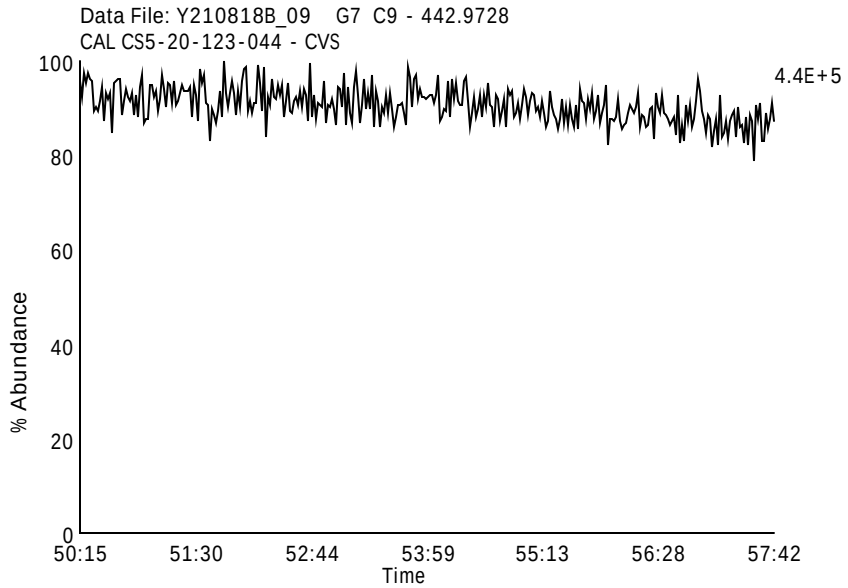
Group 5 - 7 Lock mass

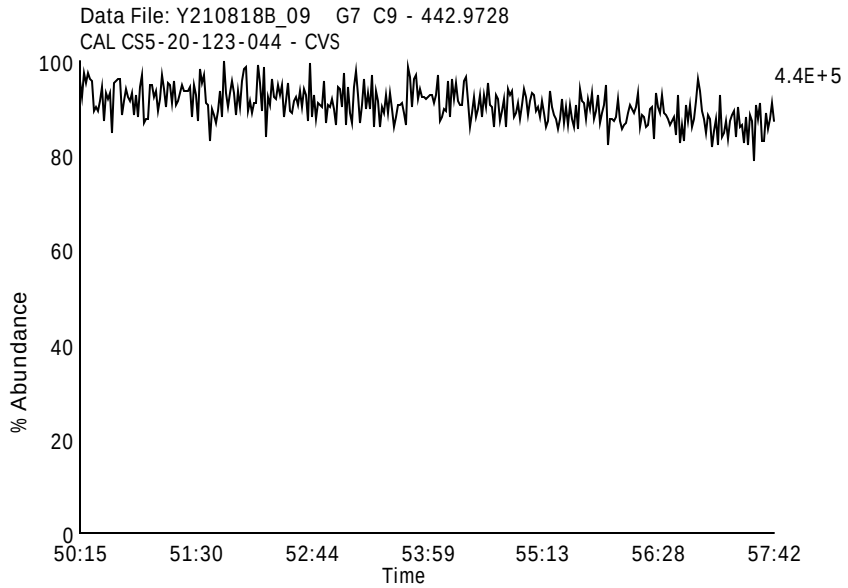
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)



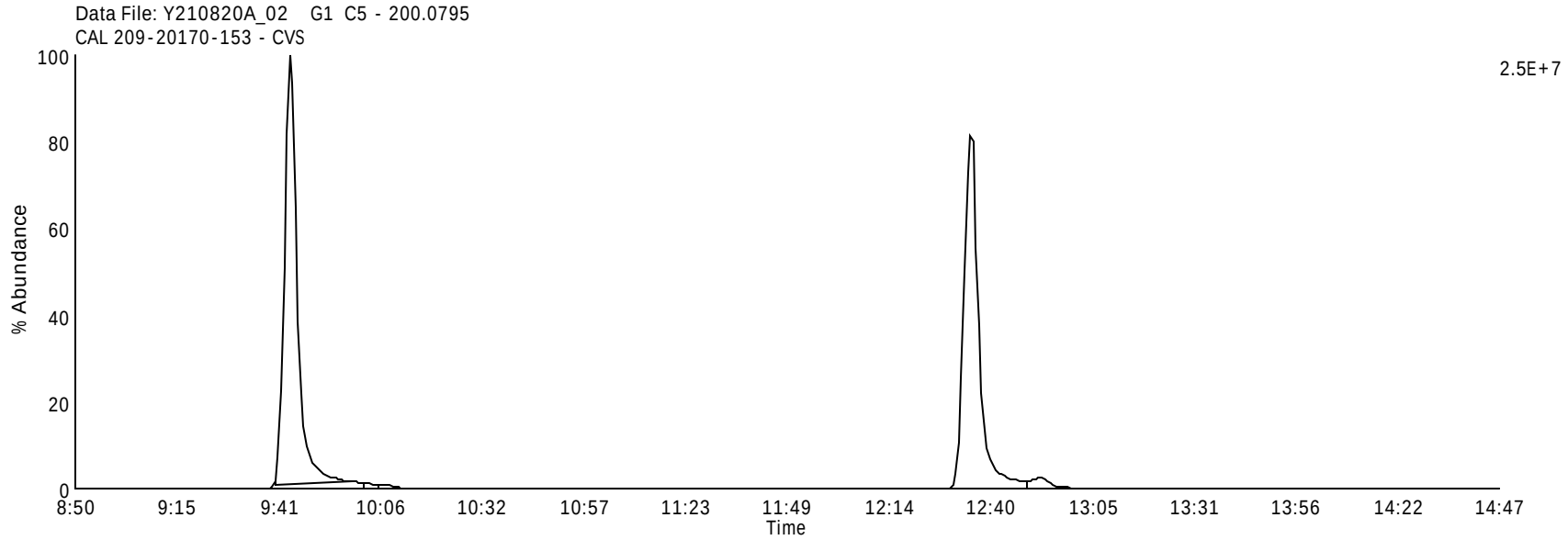


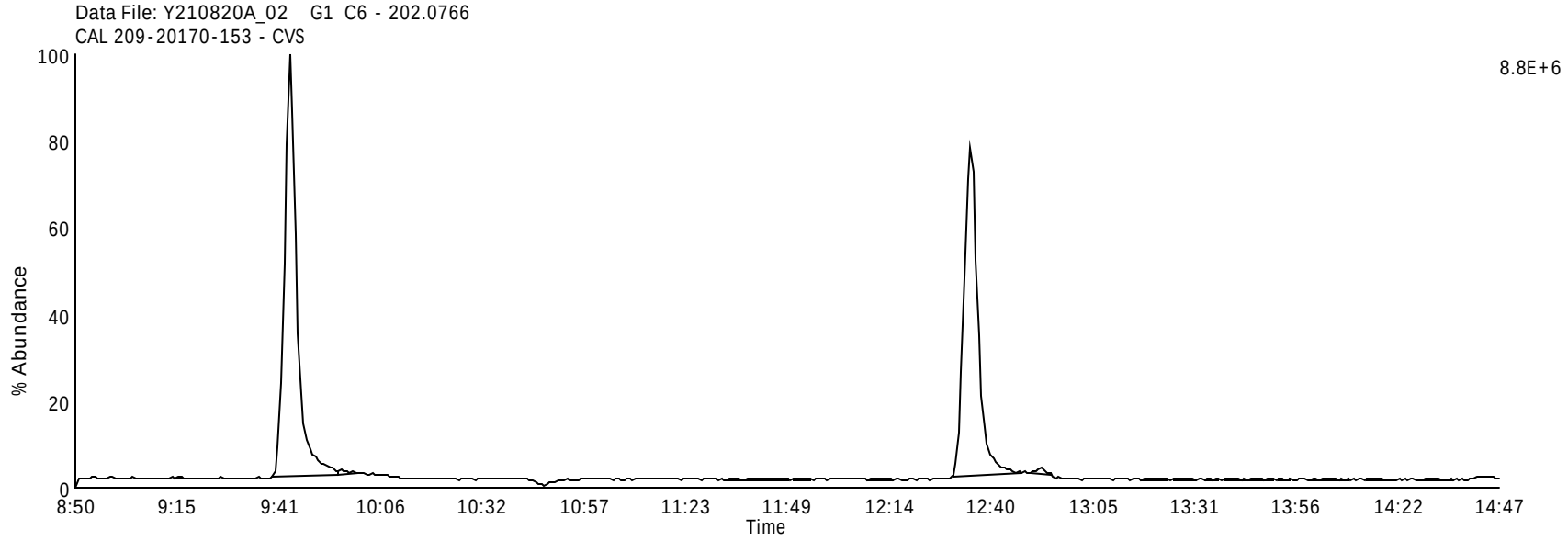




Labeled Mono Chlorinated Biphenyls

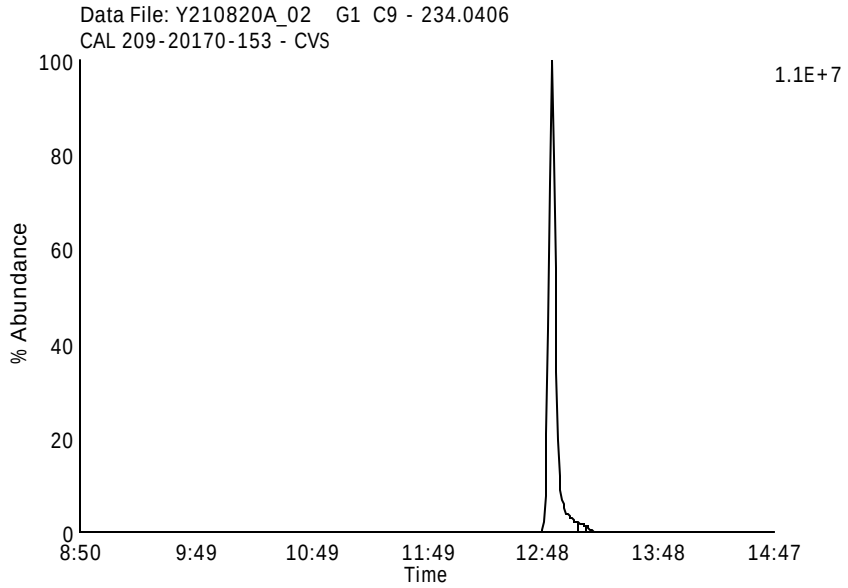
Data File Name: Y210820A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

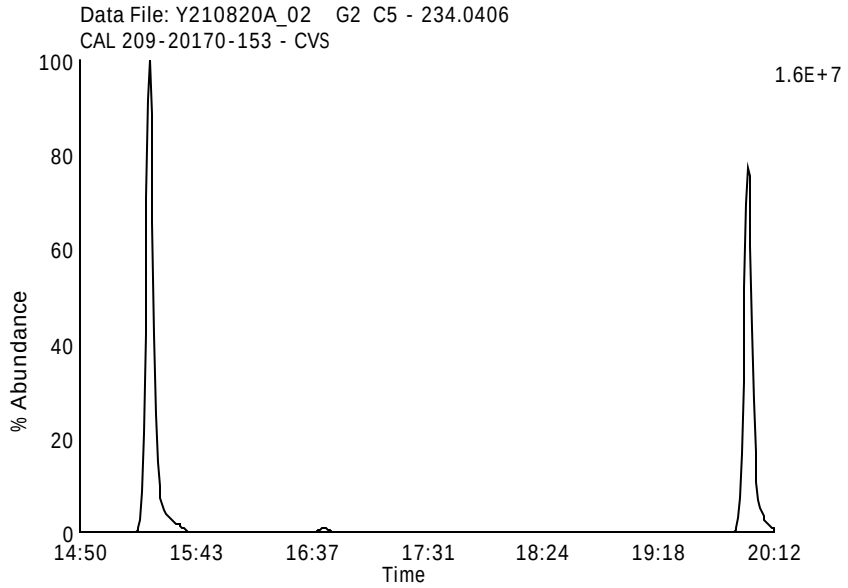


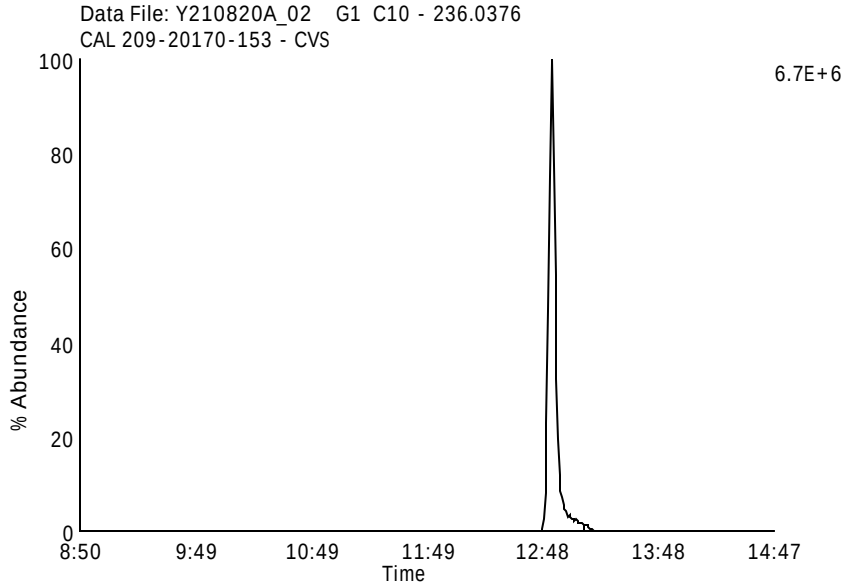


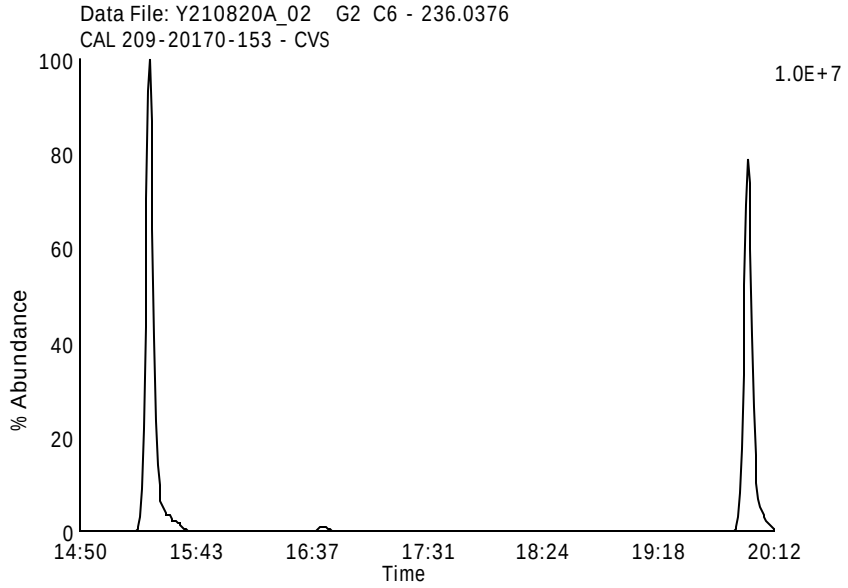
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



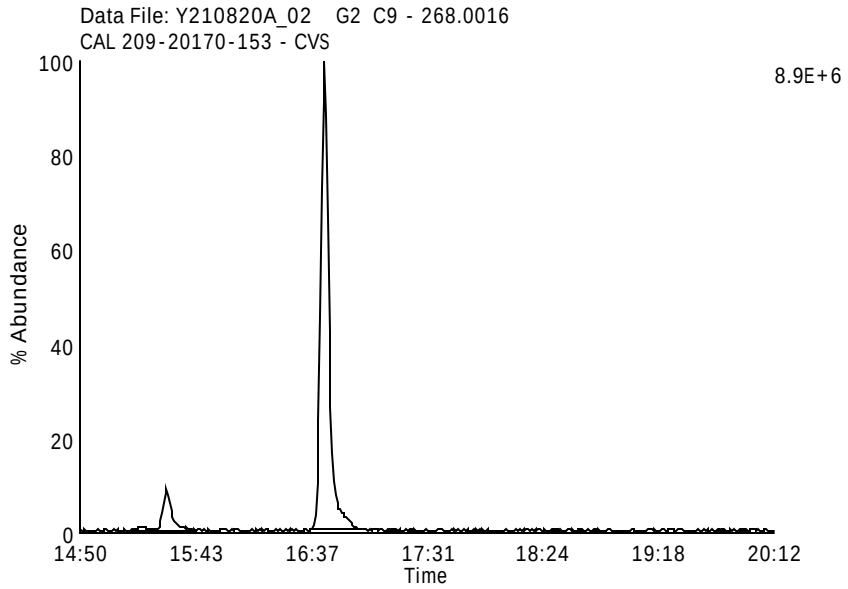


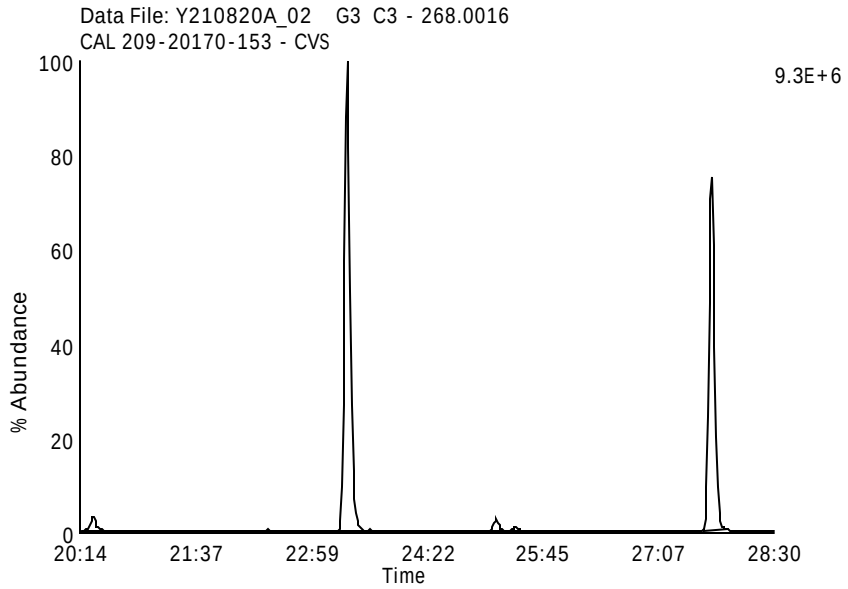


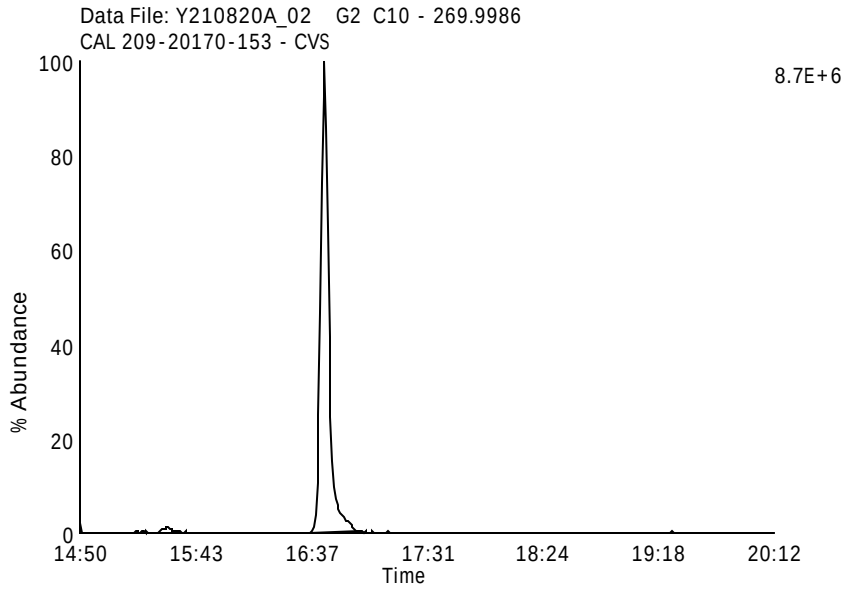


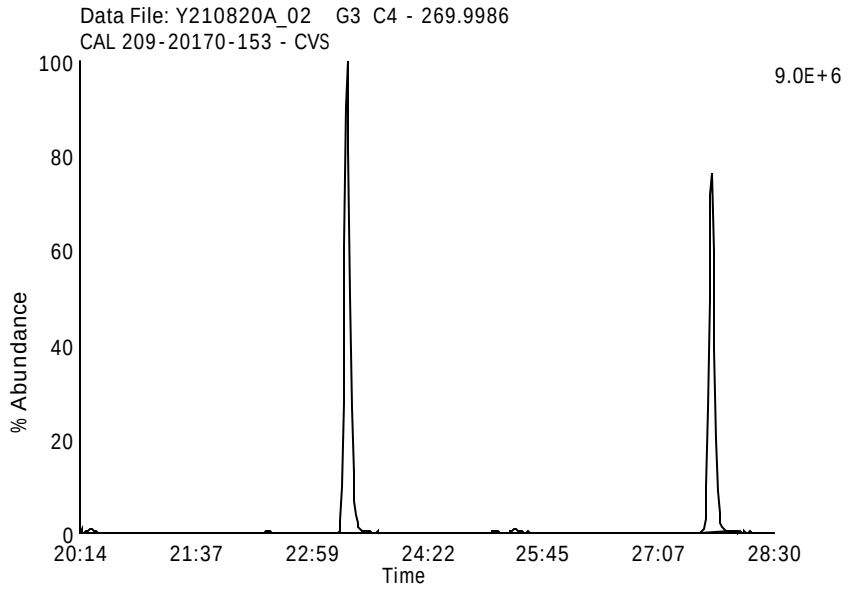
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





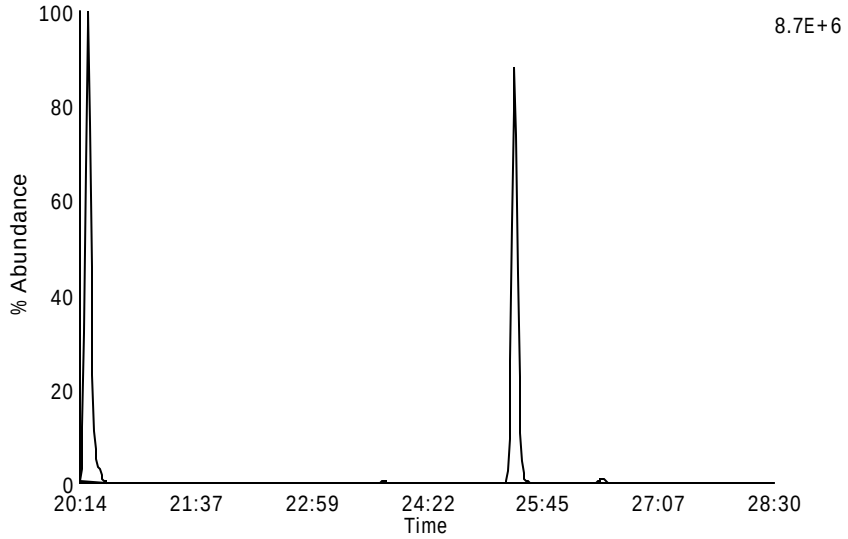




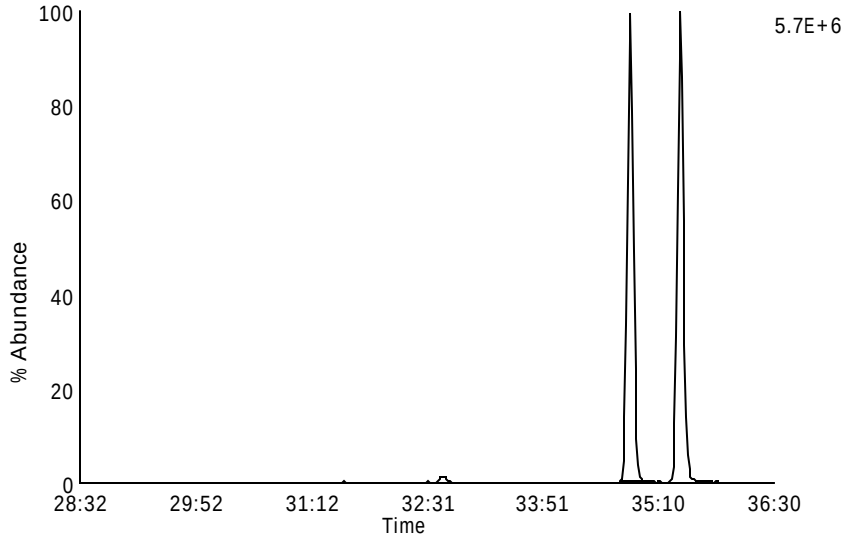
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

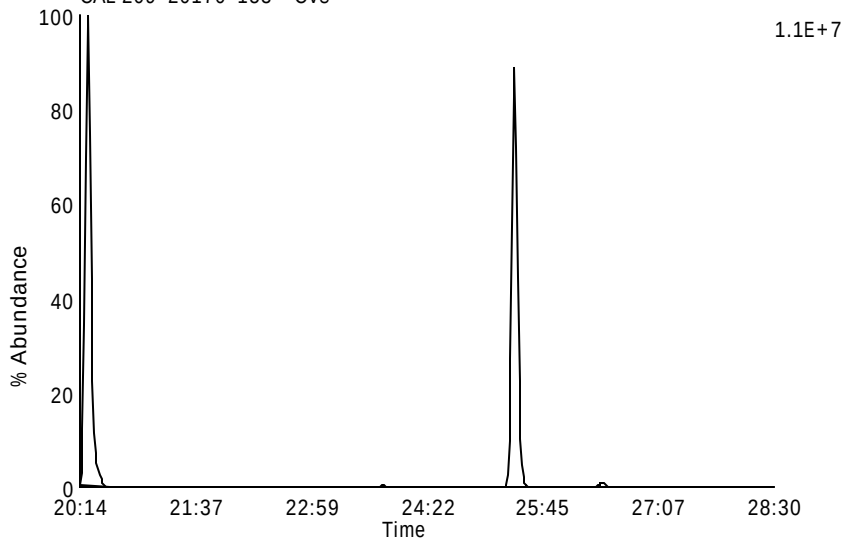
Data File: Y210820A_02 G3 C9 - 301.9626
CAL 209-20170-153 - CVS



Data File: Y210820A_02 G4 C3 - 301.9626
CAL 209-20170-153 - CVS



Data File: Y210820A_02 G3 C10 - 303.9597
CAL 209-20170-153 - CVS



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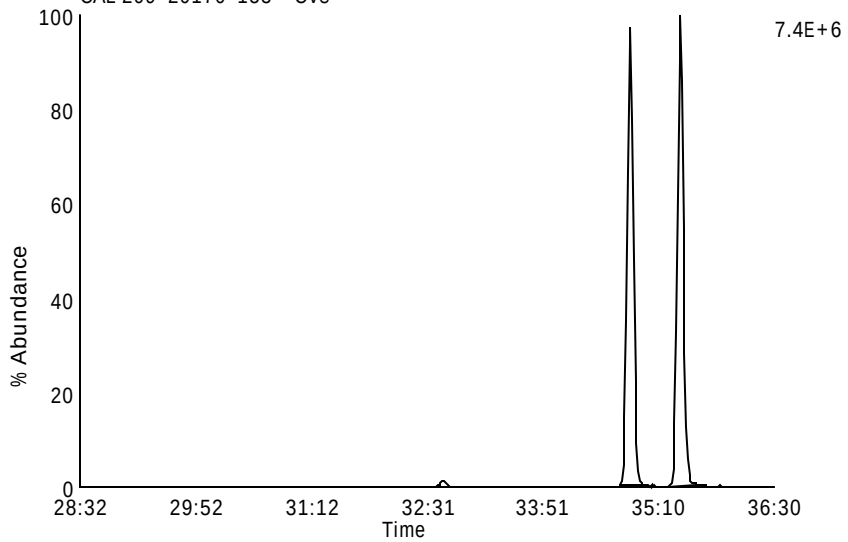
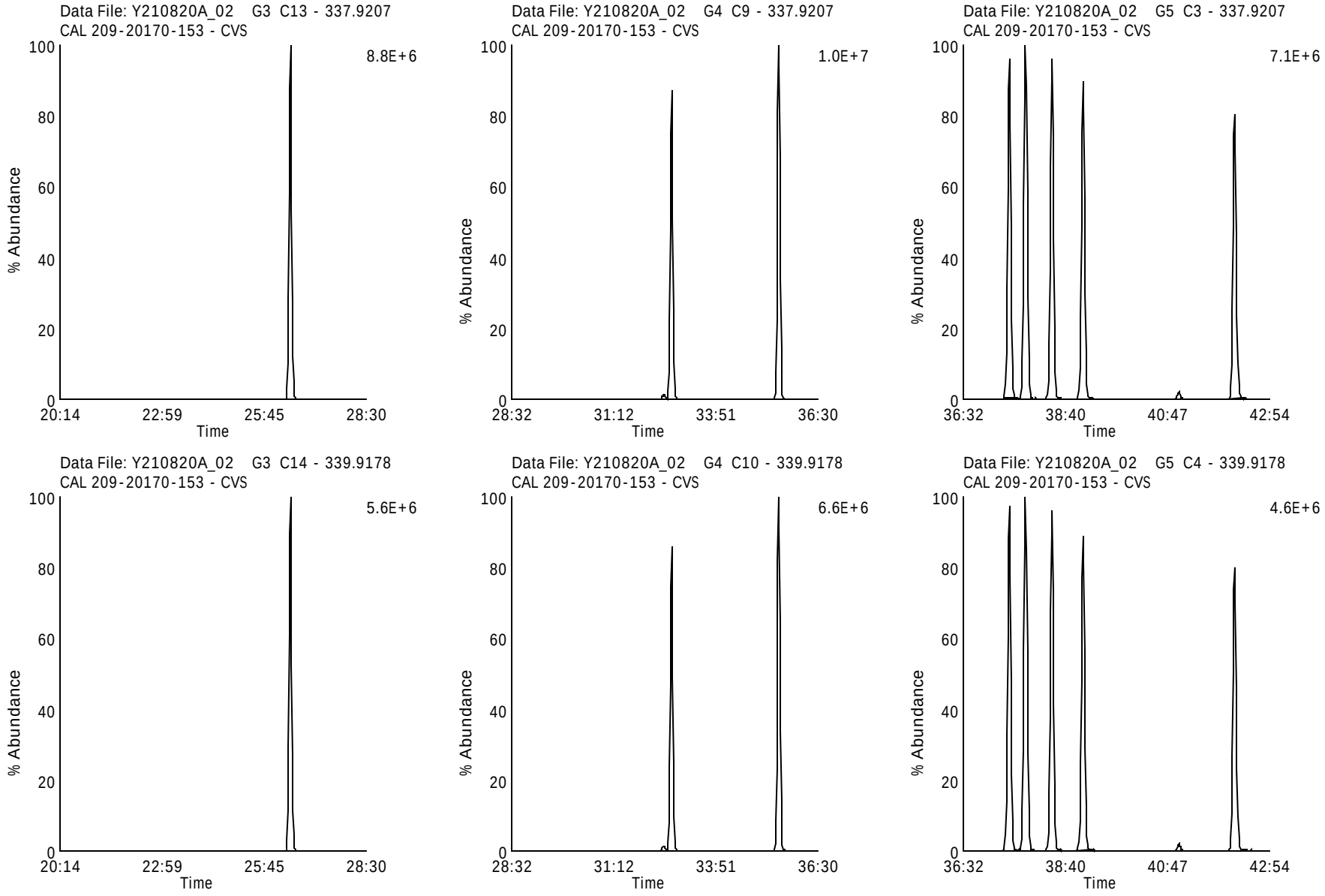
CAL 209-20170-153 - CVS



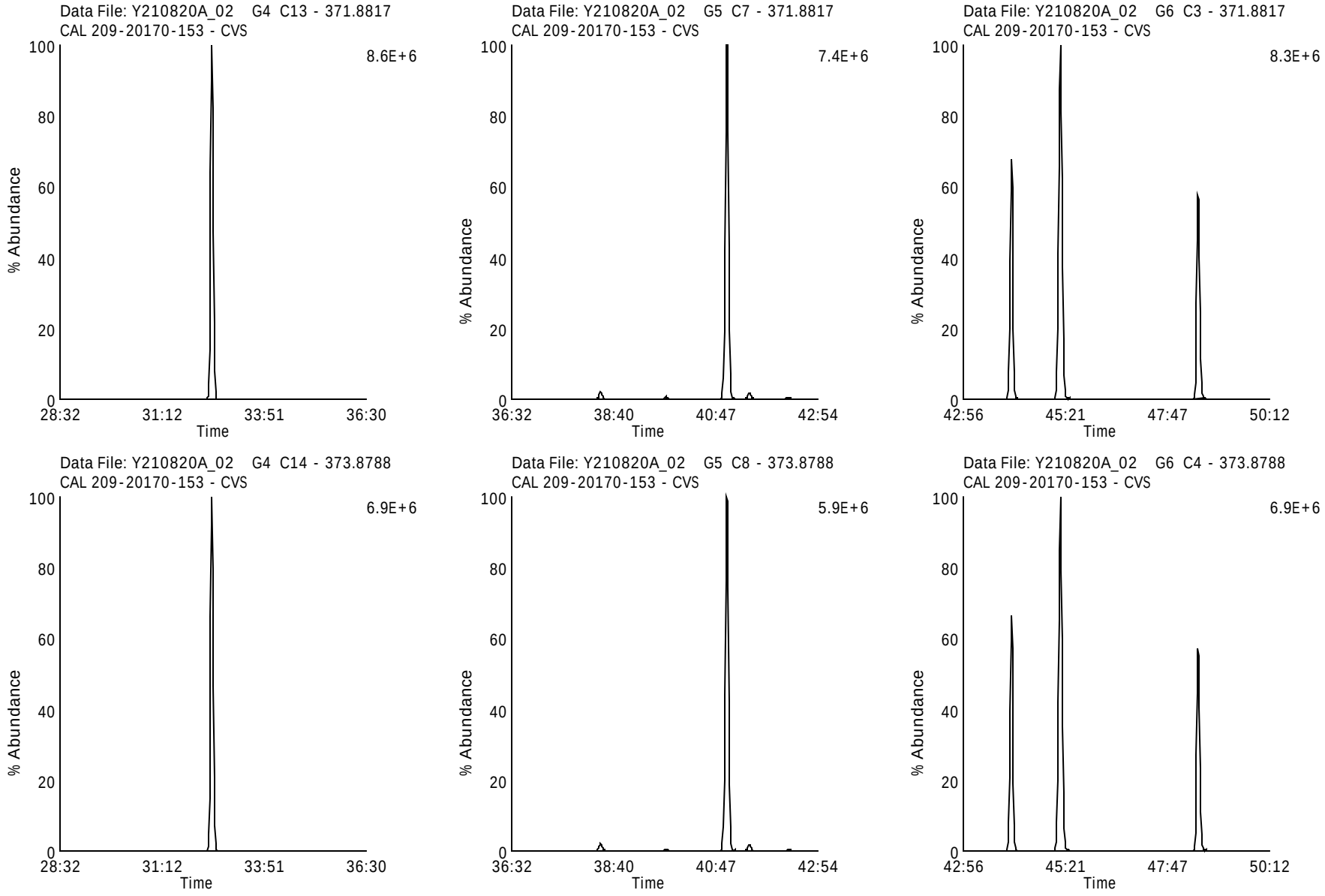
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



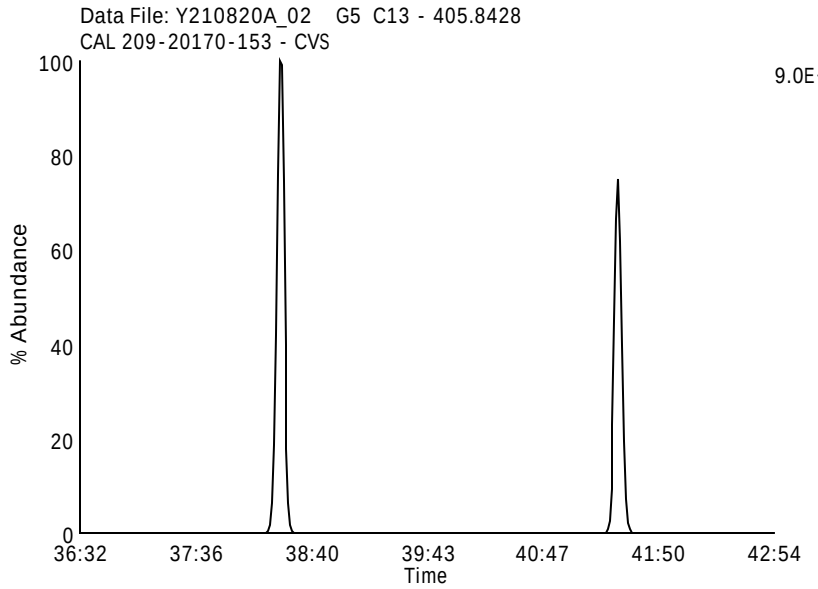
Labeled Hexa Chlorinated Biphenyls

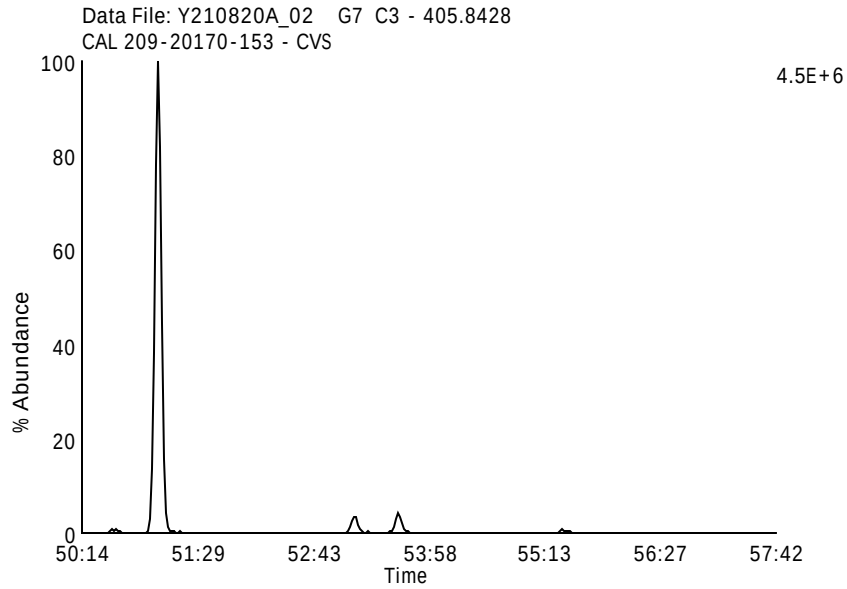
Data File Name: Y210820A_02 | Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

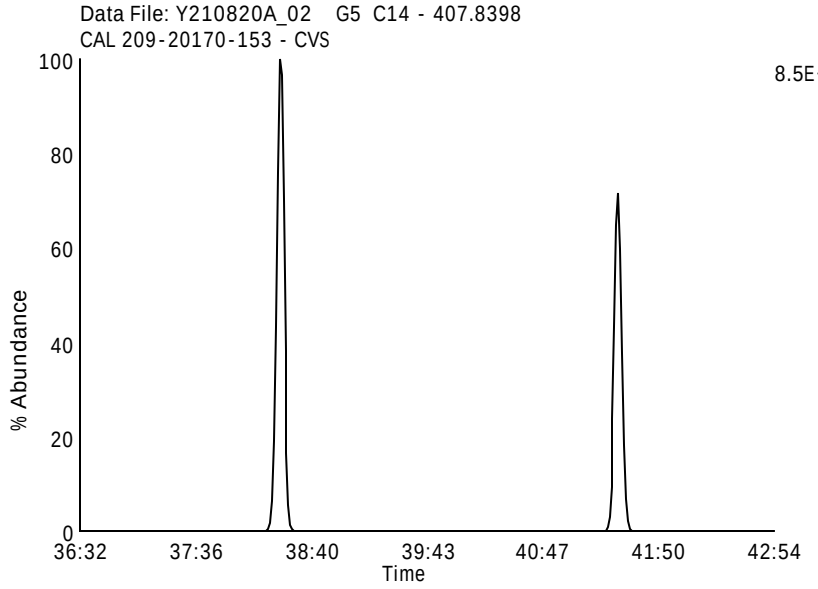


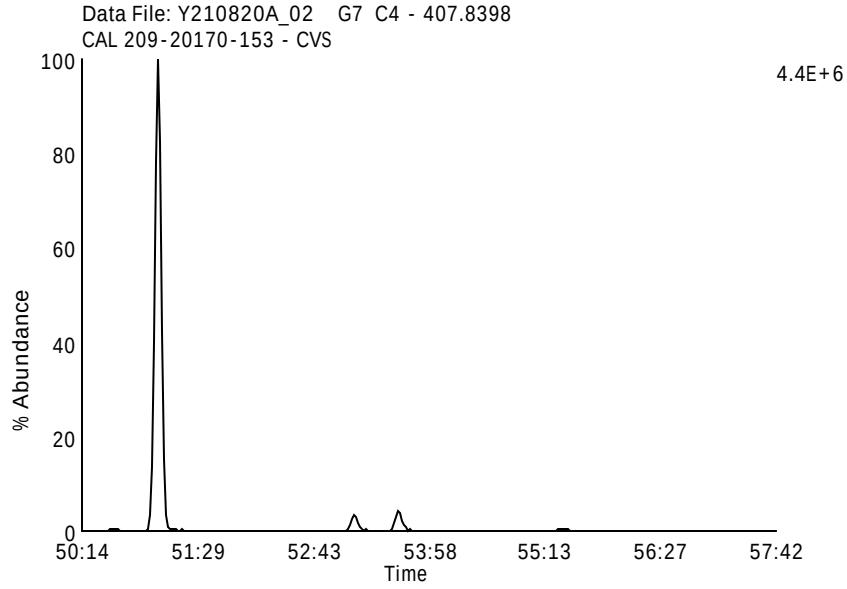
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





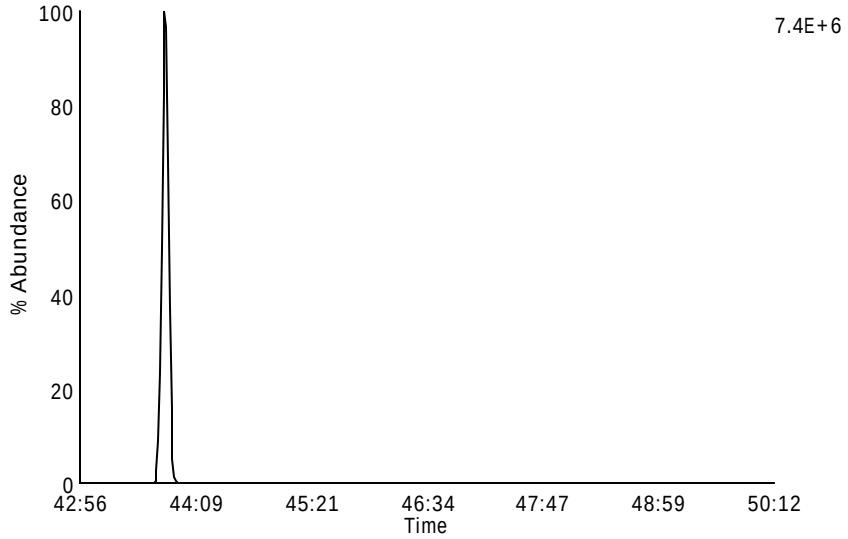




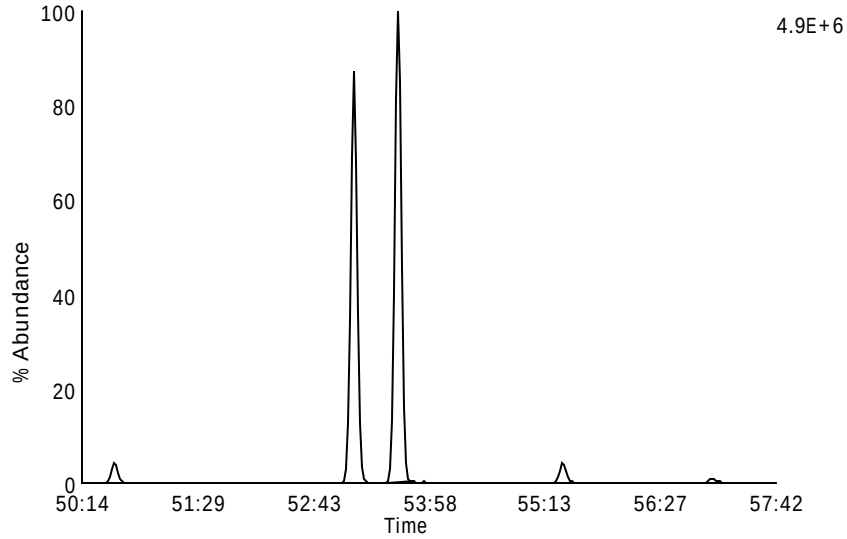
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

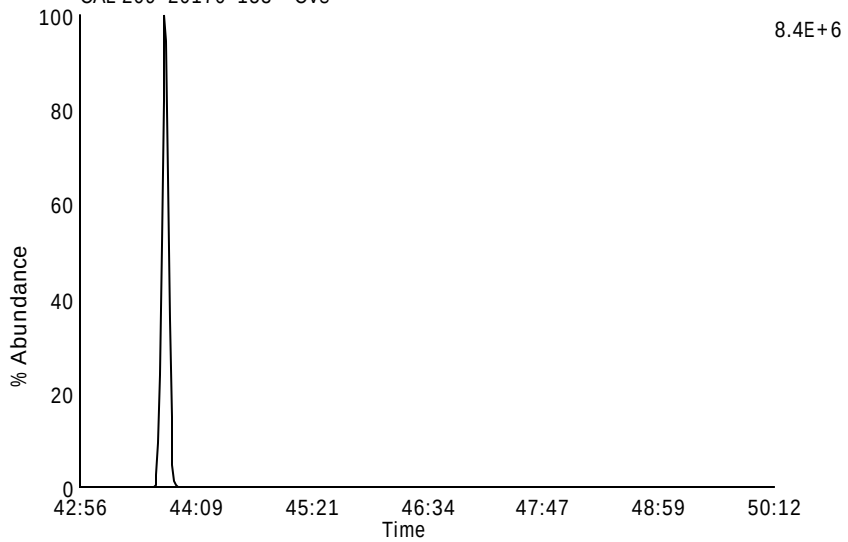
Data File: Y210820A_02 G6 C13 - 439.8038
CAL 209-20170-153 - CVS



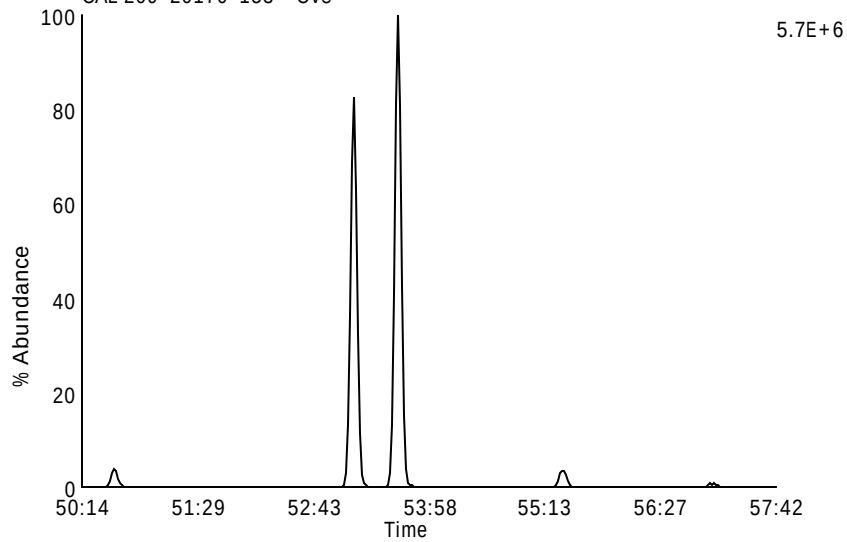
Data File: Y210820A_02 G7 C7 - 439.8038
CAL 209-20170-153 - CVS



Data File: Y210820A_02 G6 C14 - 441.8008
CAL 209-20170-153 - CVS

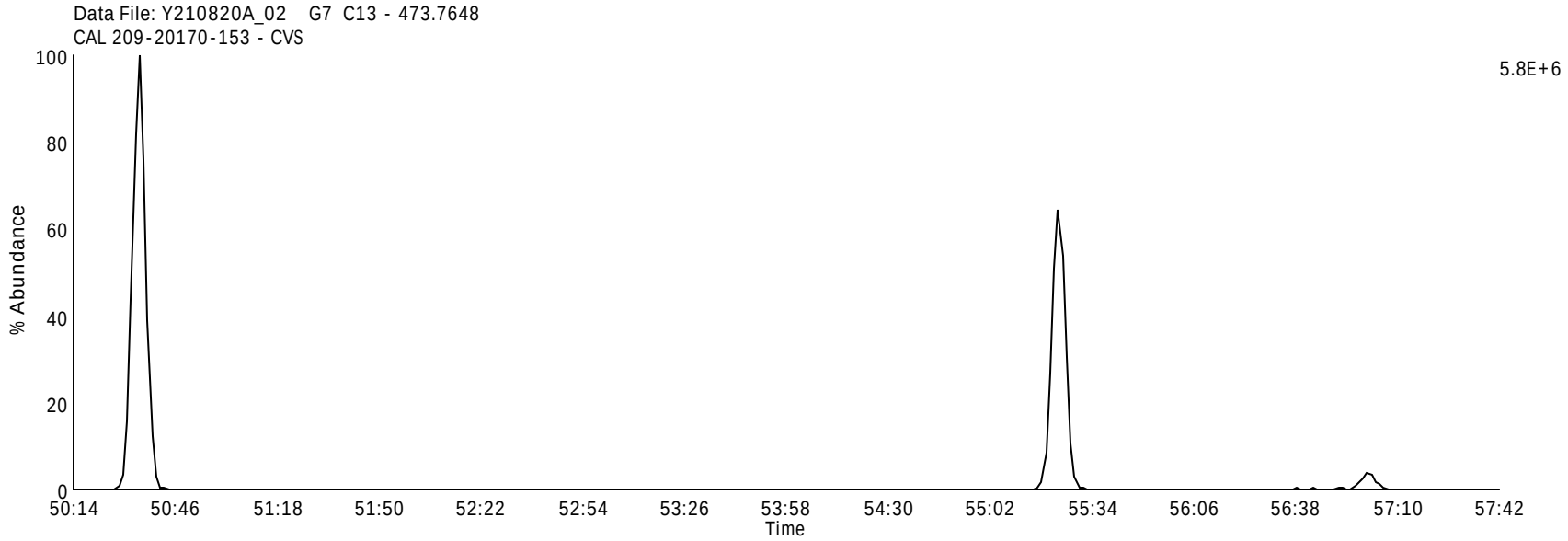


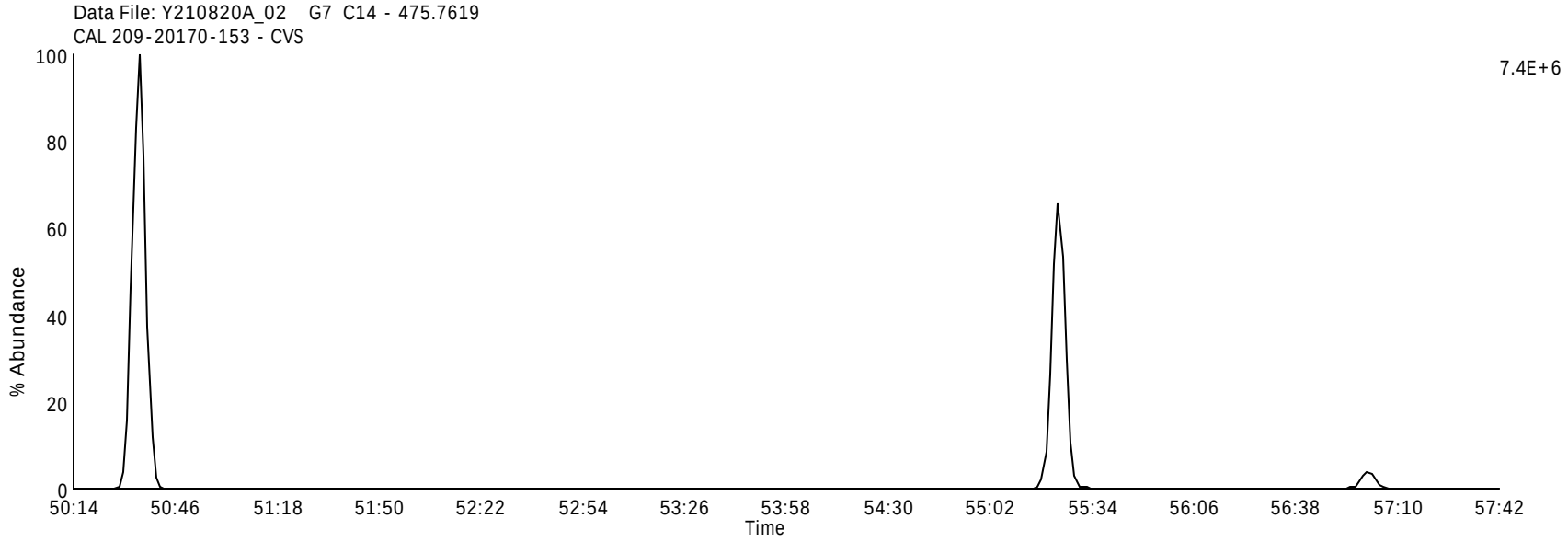
Data File: Y210820A_02 G7 C8 - 441.8008
CAL 209-20170-153 - CVS



Labeled Nona Chlorinated Biphenyls

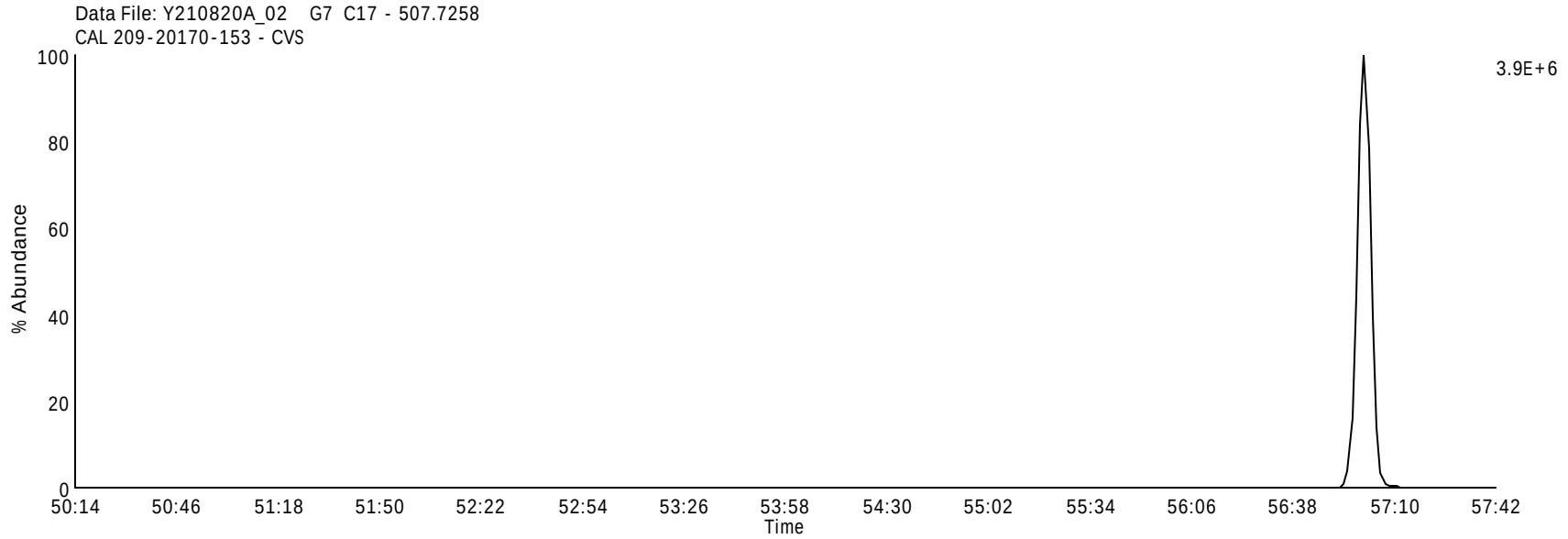
Data File Name: Y210820A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

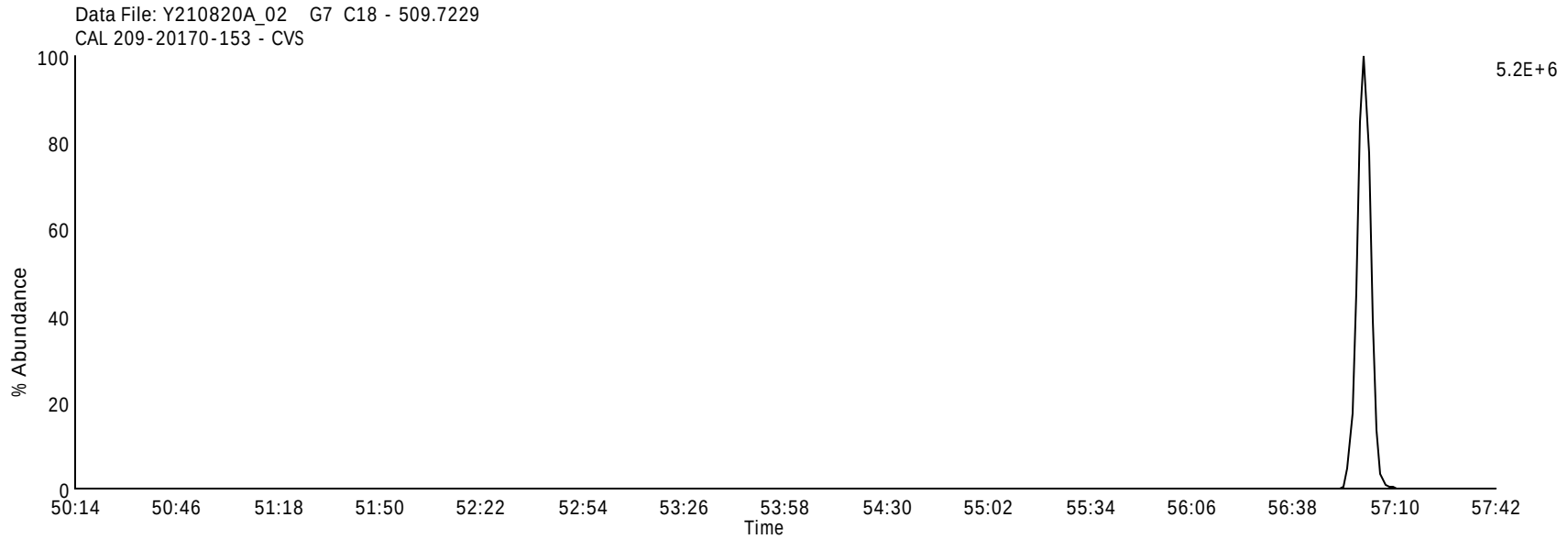




Labeled Deca Chlorinated Biphenyl

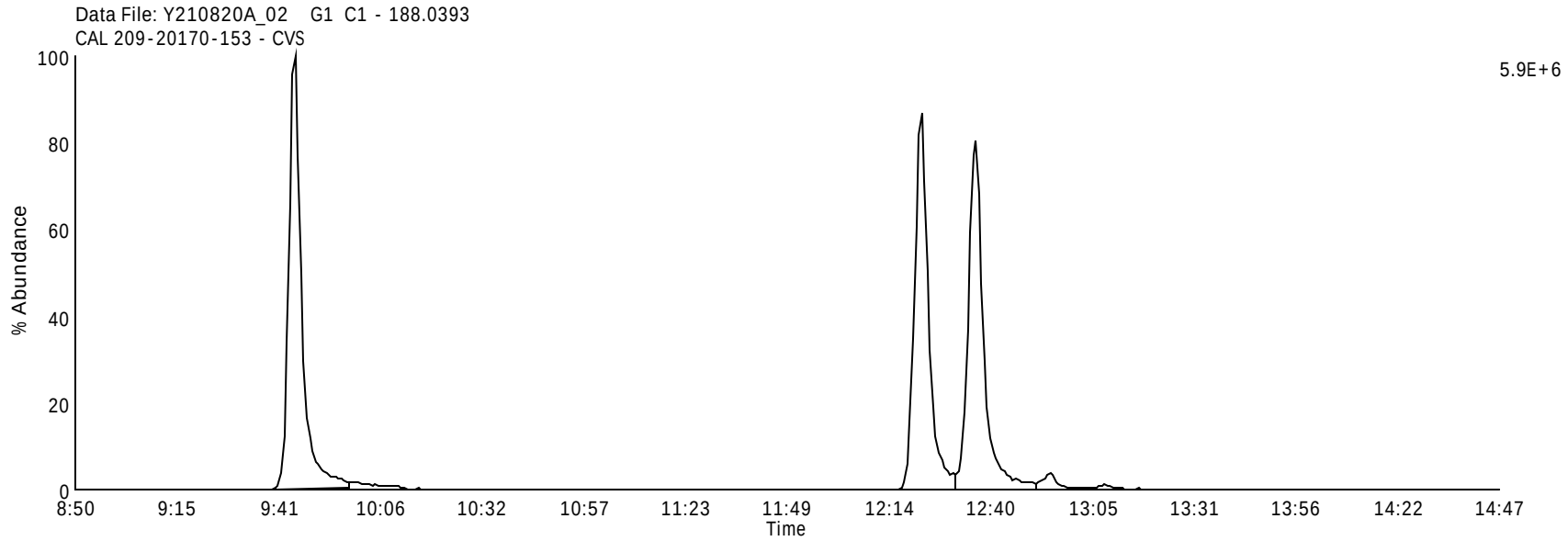
Data File Name: Y210820A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

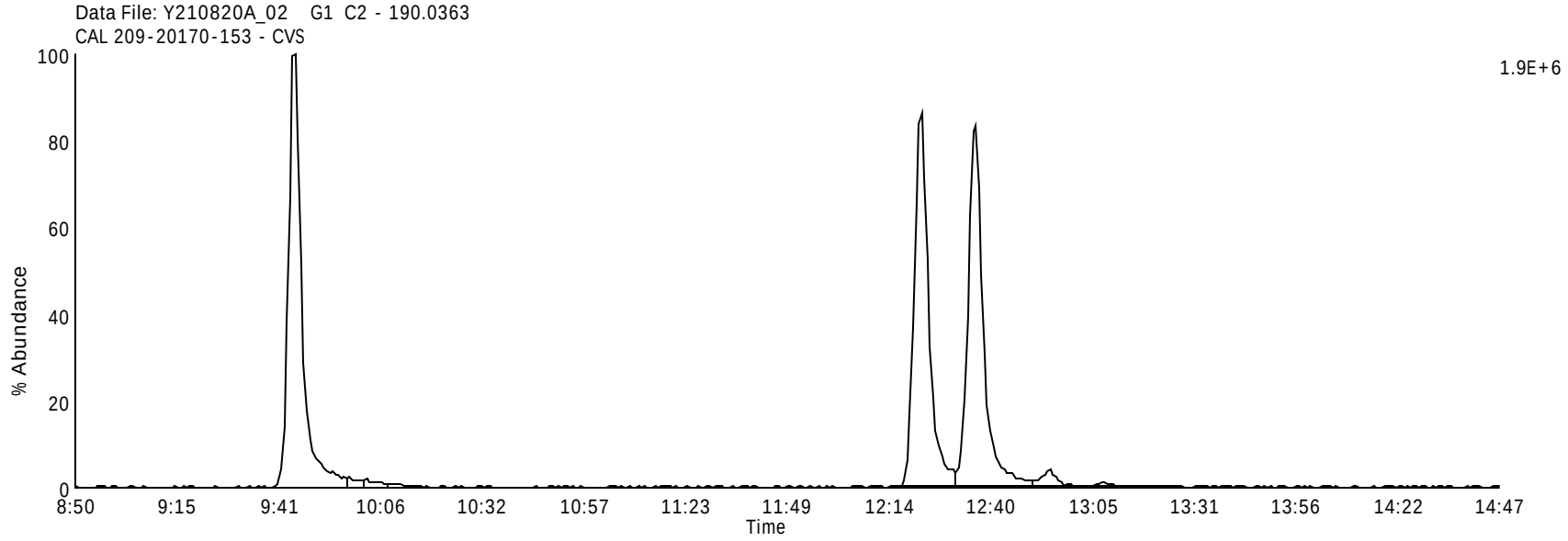




Mono Chlorinated Biphenyls

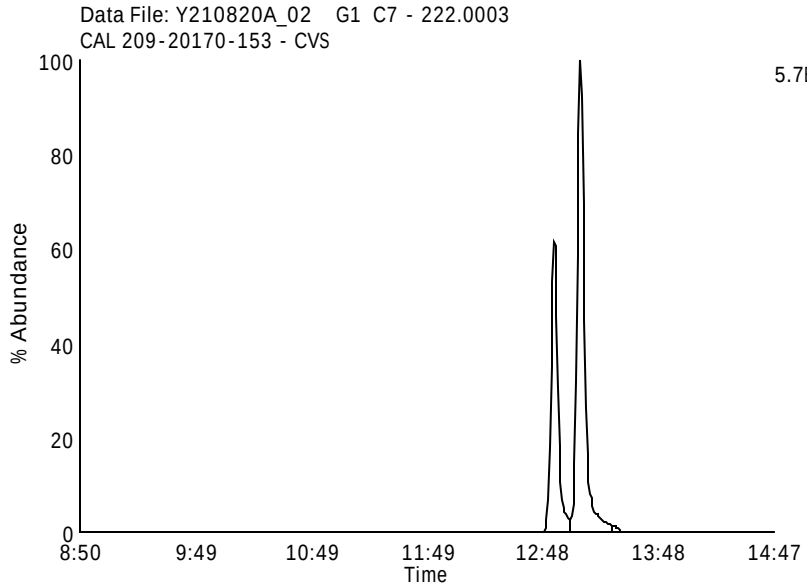
Data File Name: Y210820A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

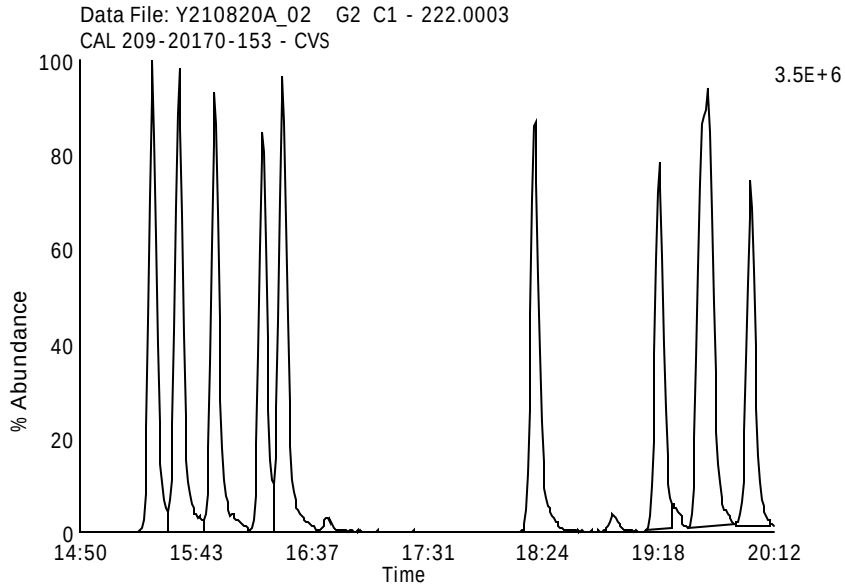


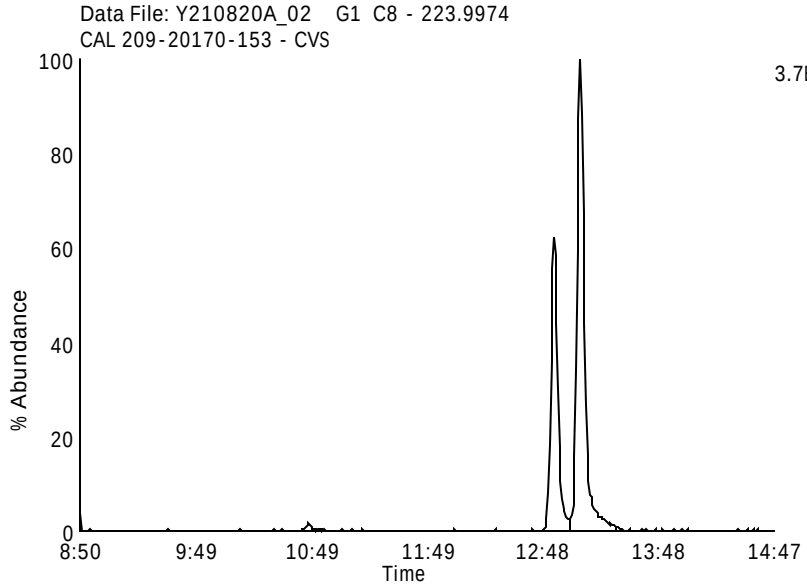


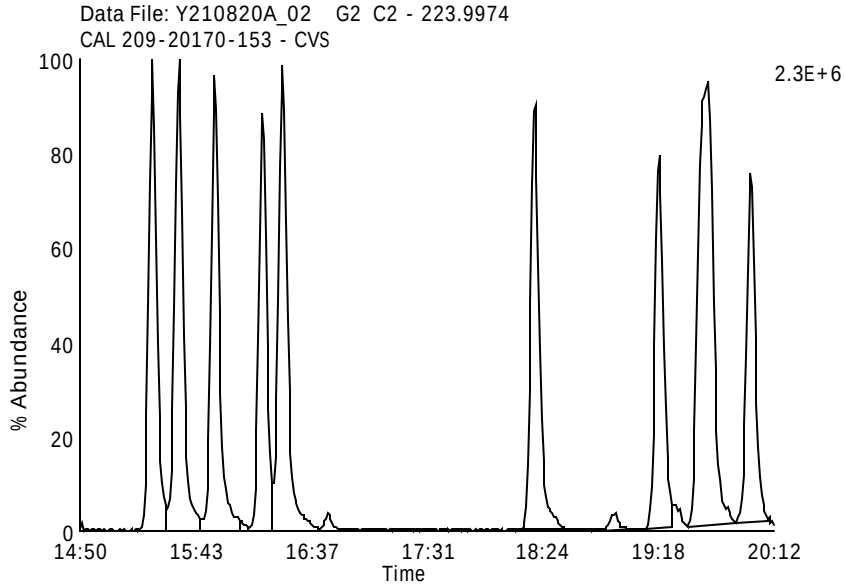
Di Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



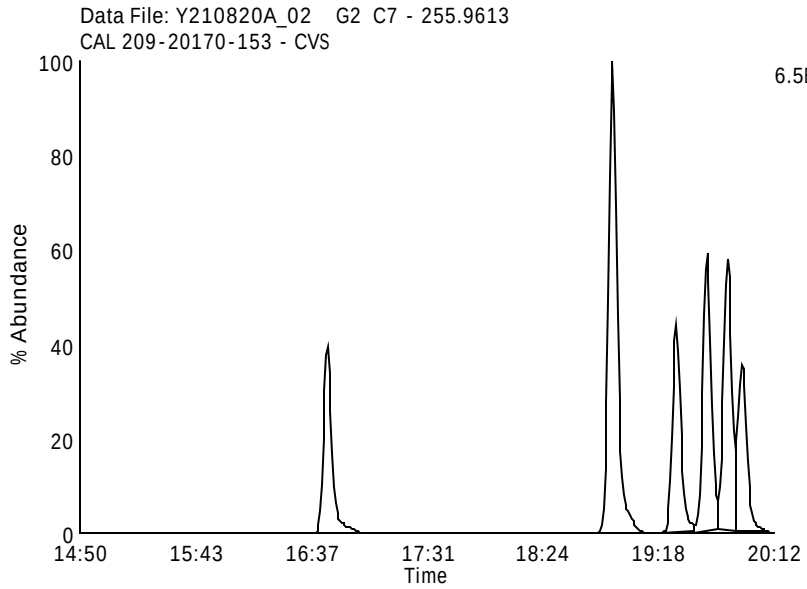


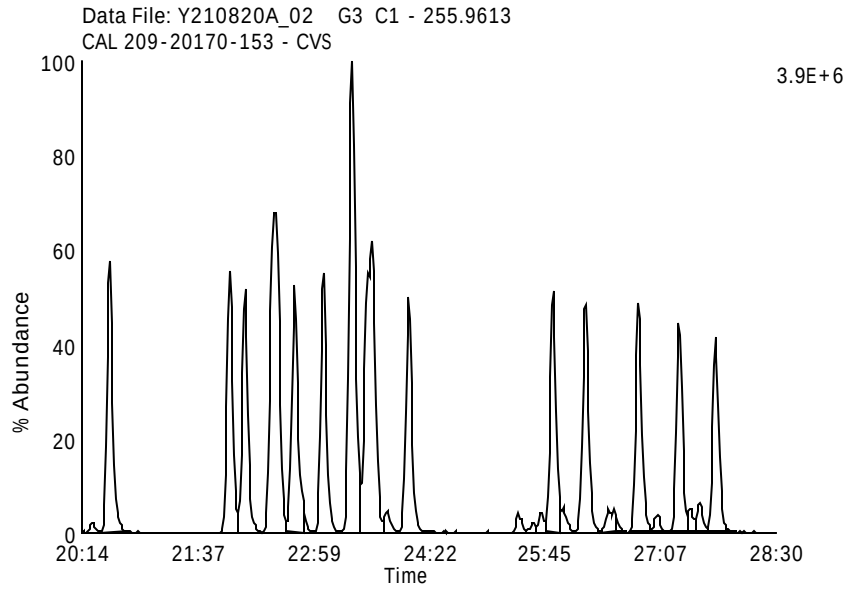


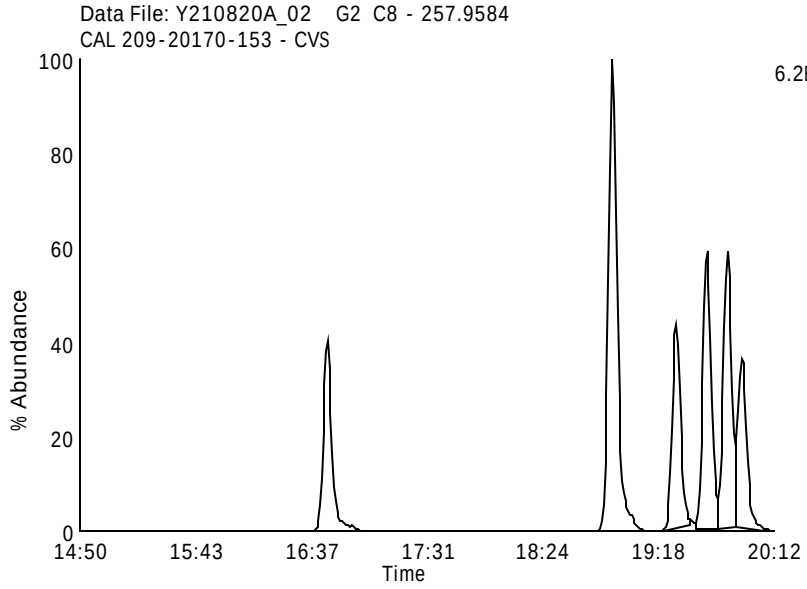


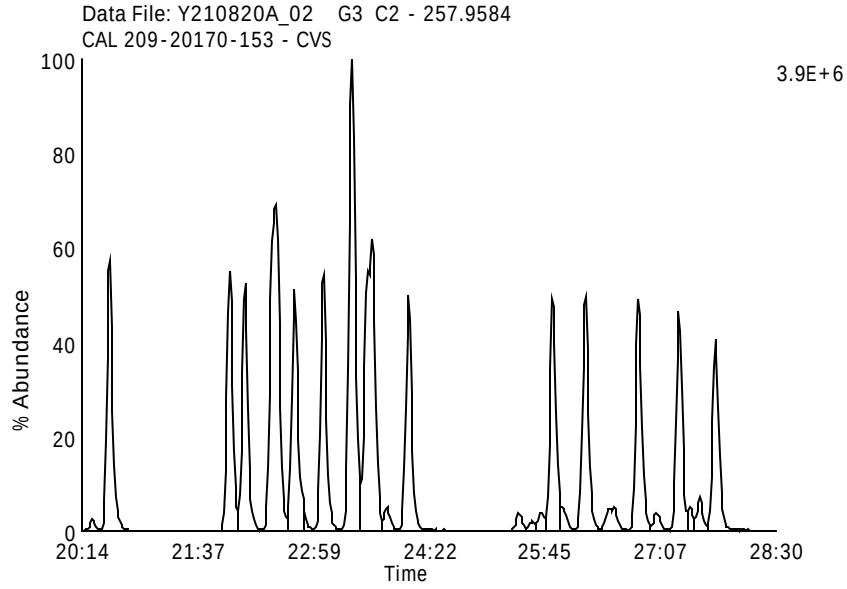
Tri Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



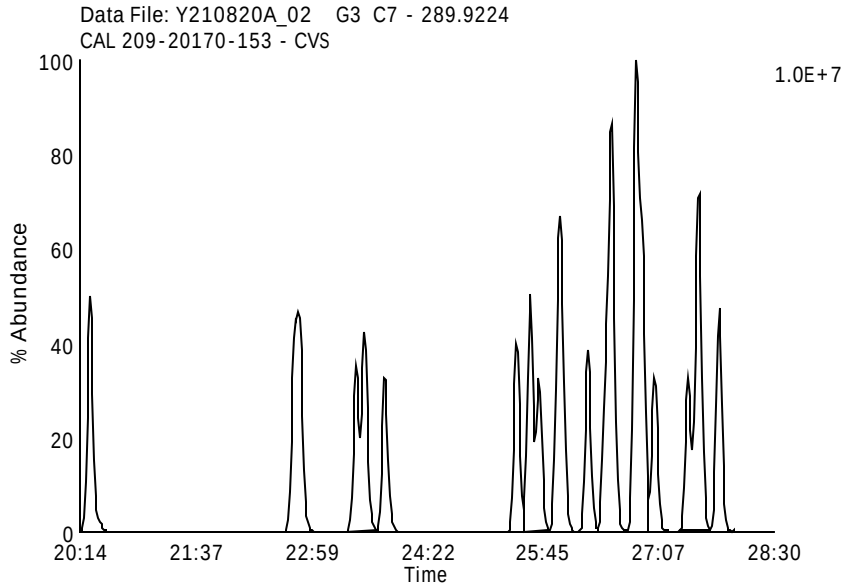


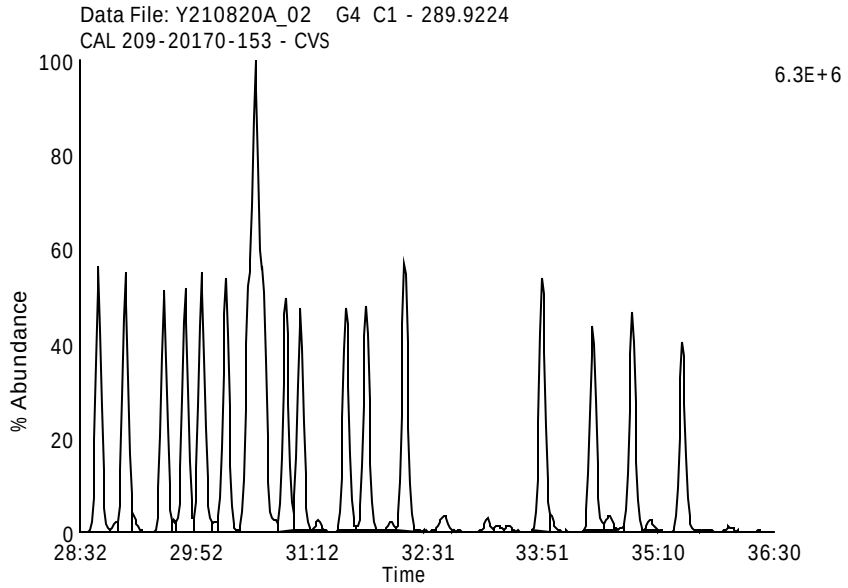


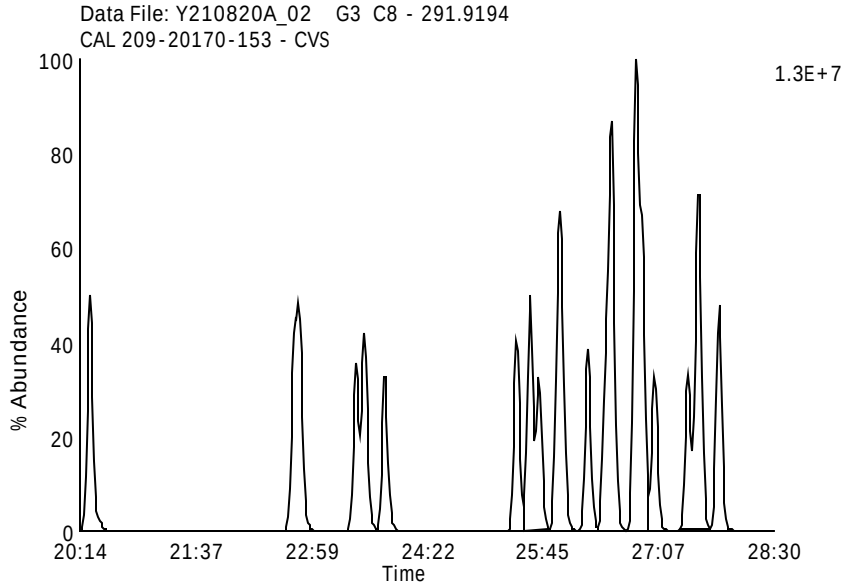


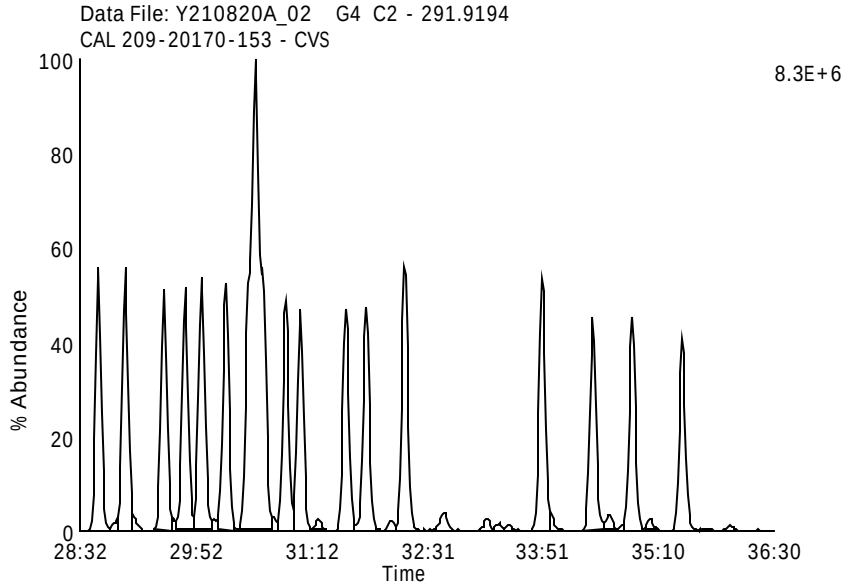
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





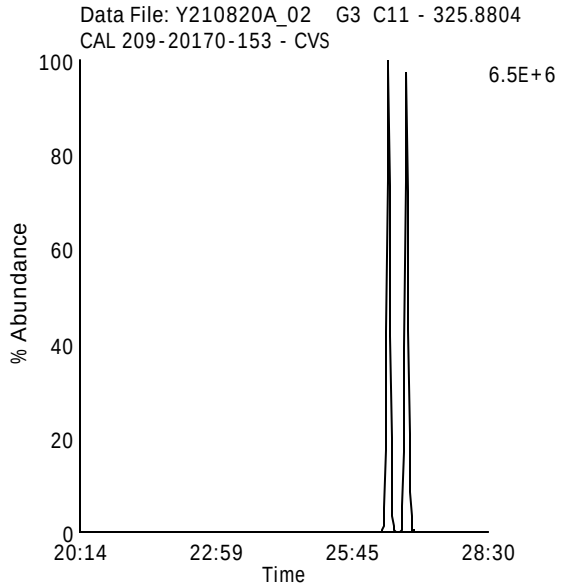


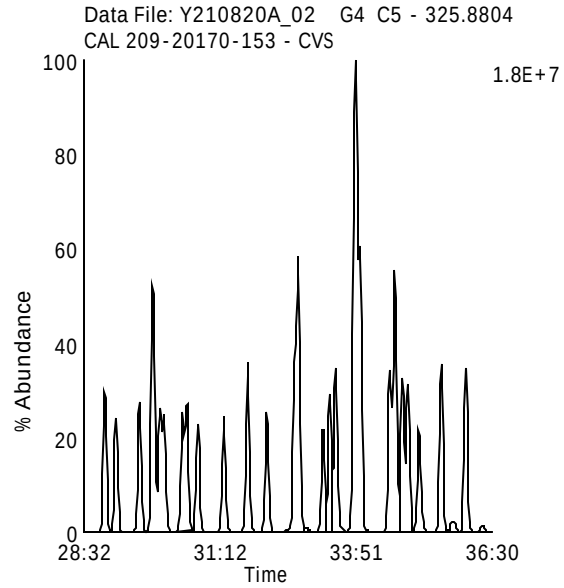


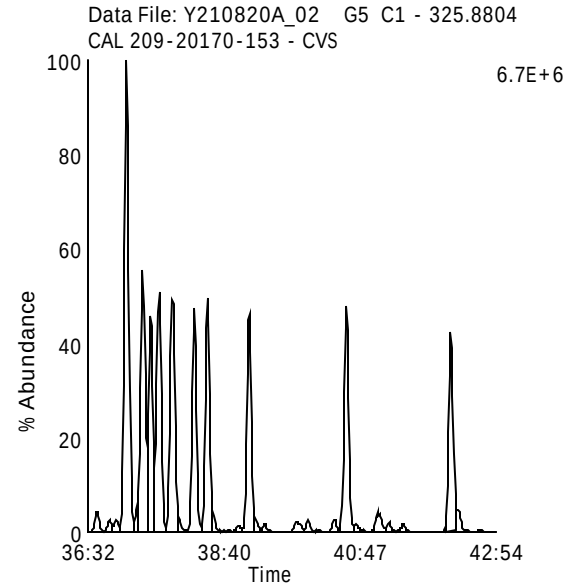
Penta Chlorinated Biphenyls

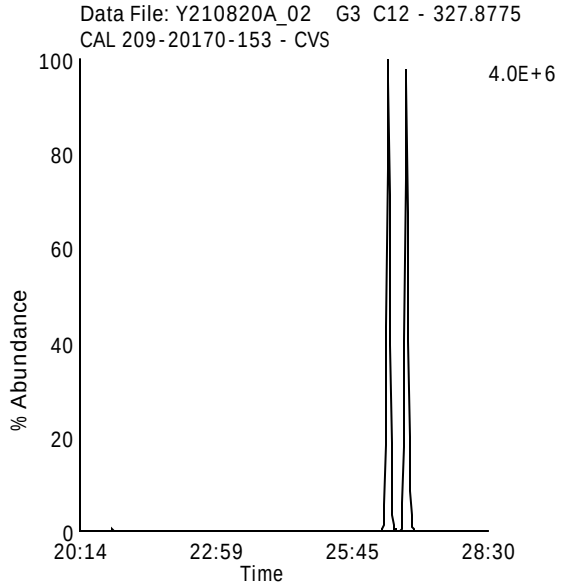
Data File Name: Y210820A_02
Date Acquired: 8/20/2021
Sample Description: CAL 209-20170-153 - CVS

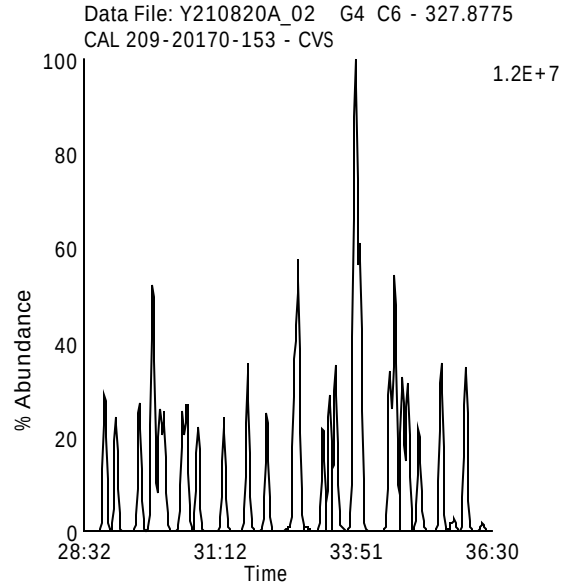
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

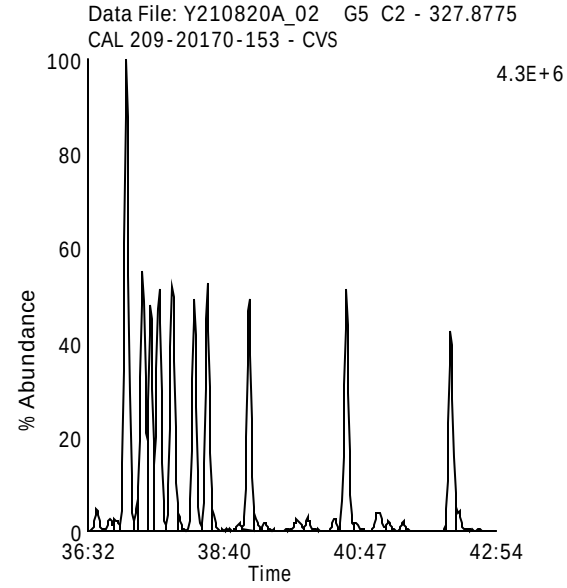






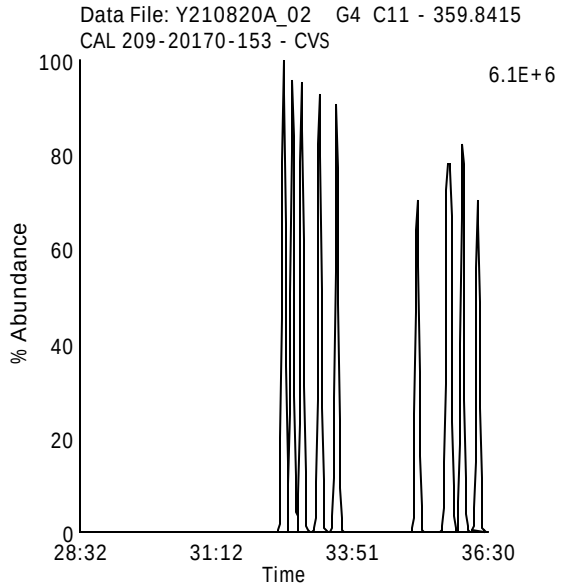


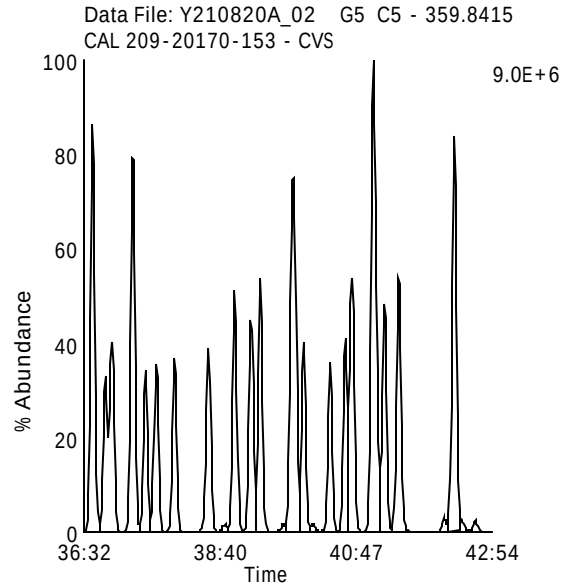


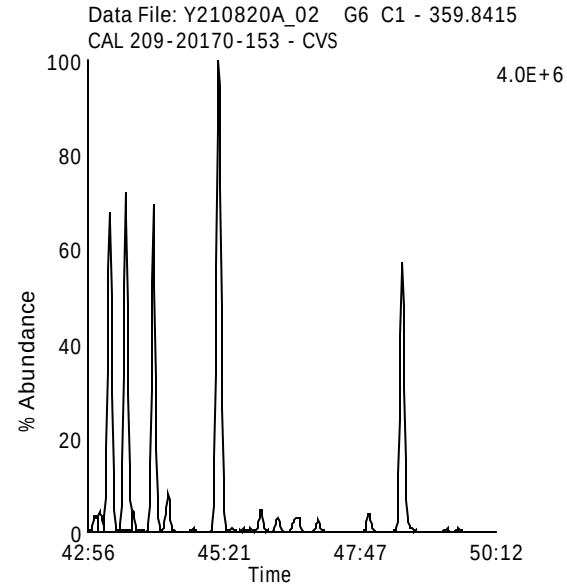


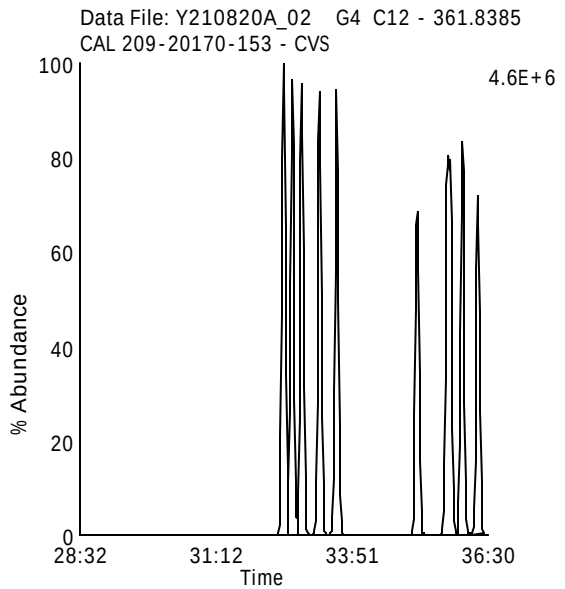
Hexa Chlorinated Biphenyls

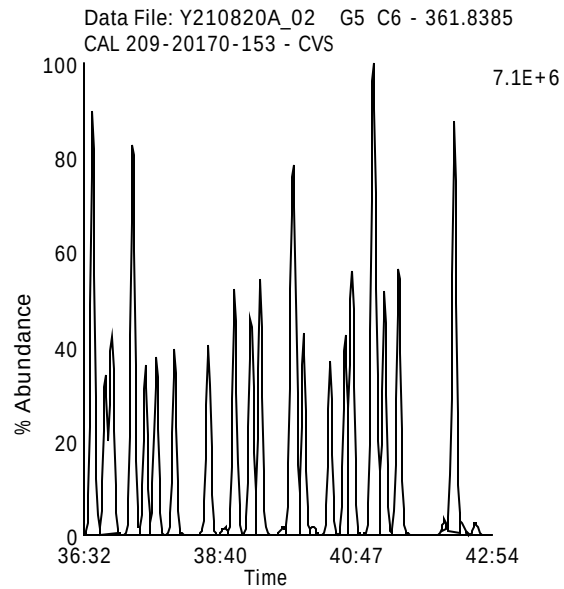
Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

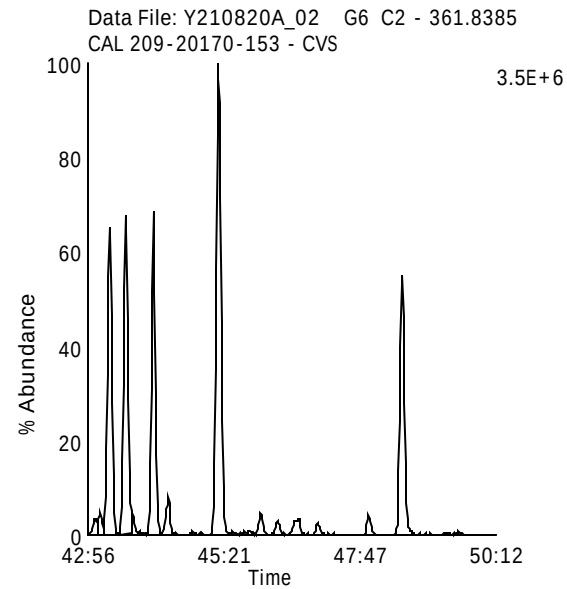






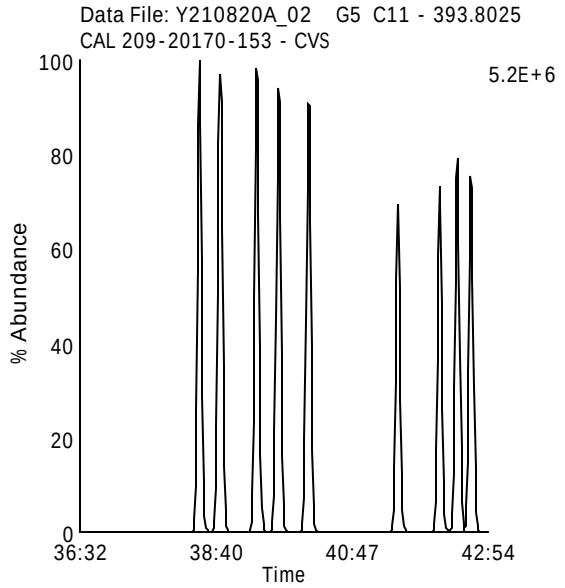


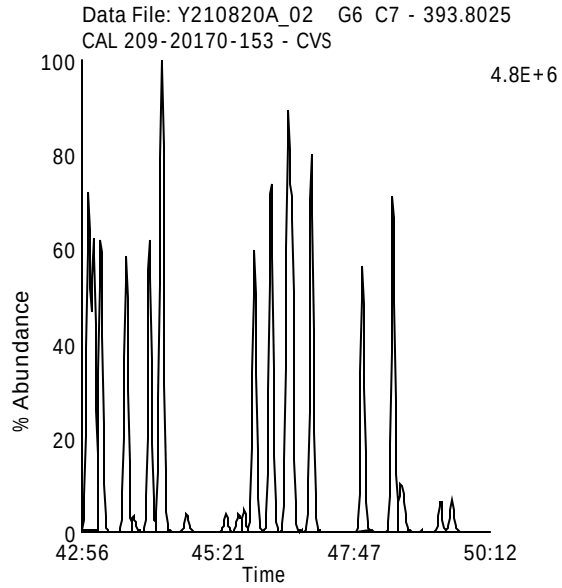


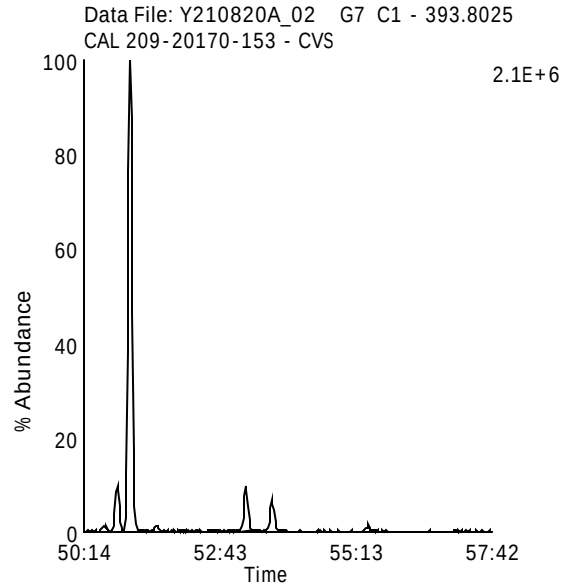


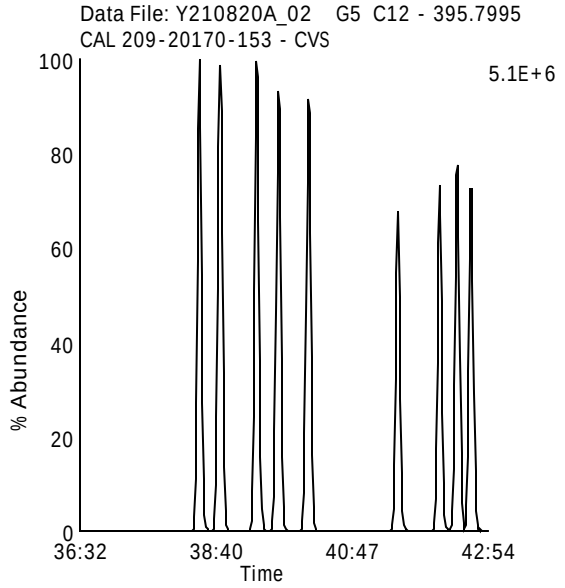
Hepta Chlorinated Biphenyls

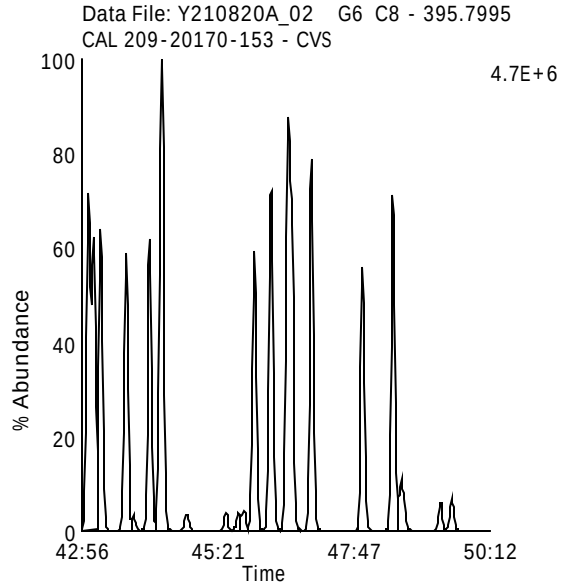
Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

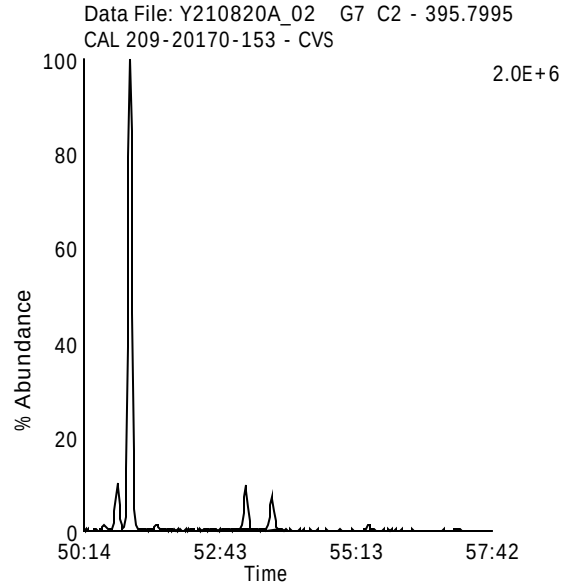






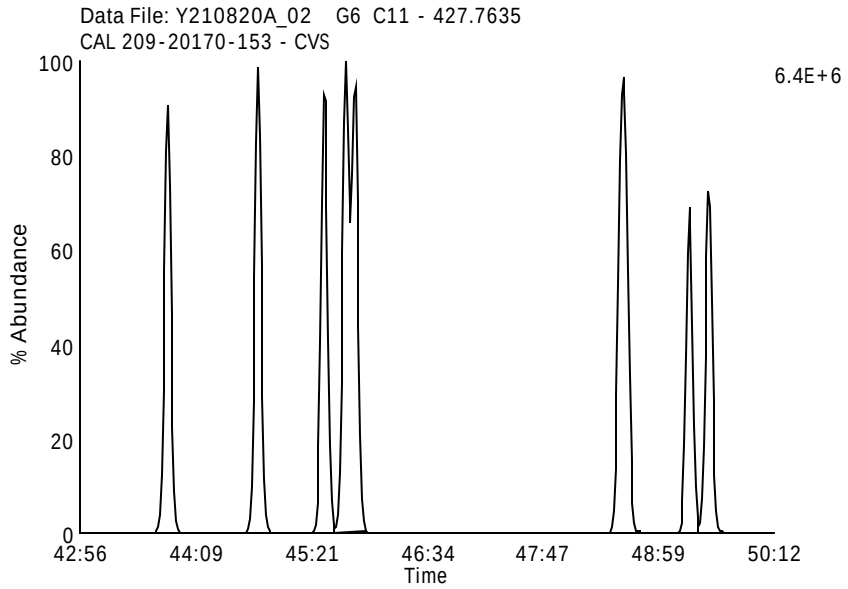


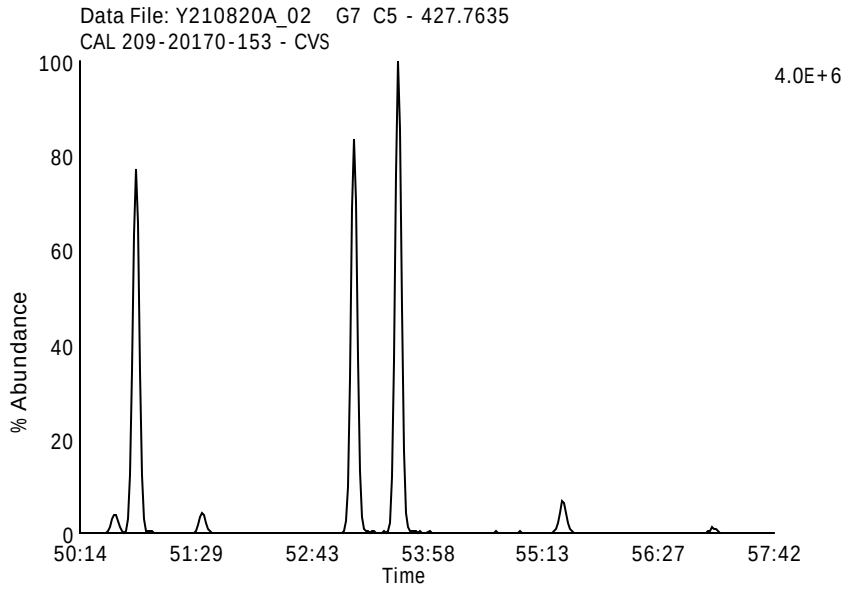


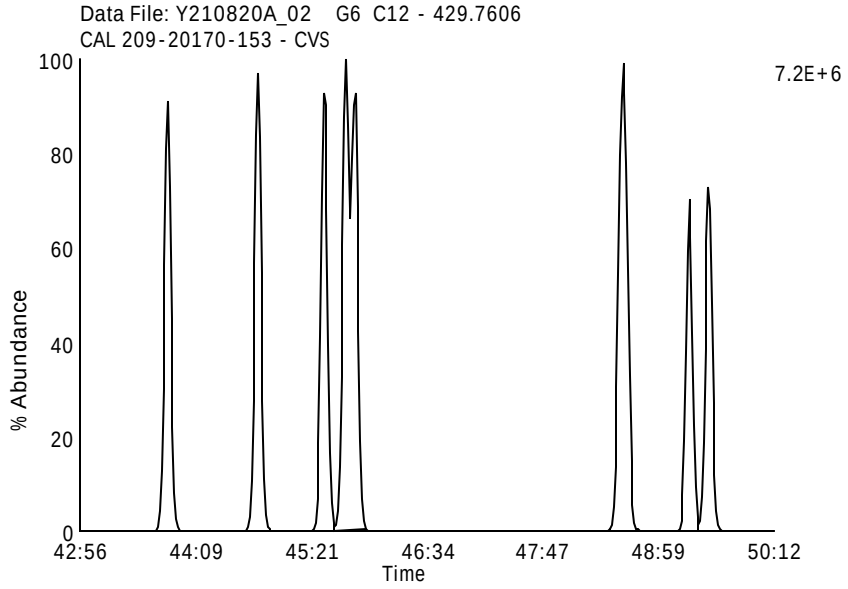


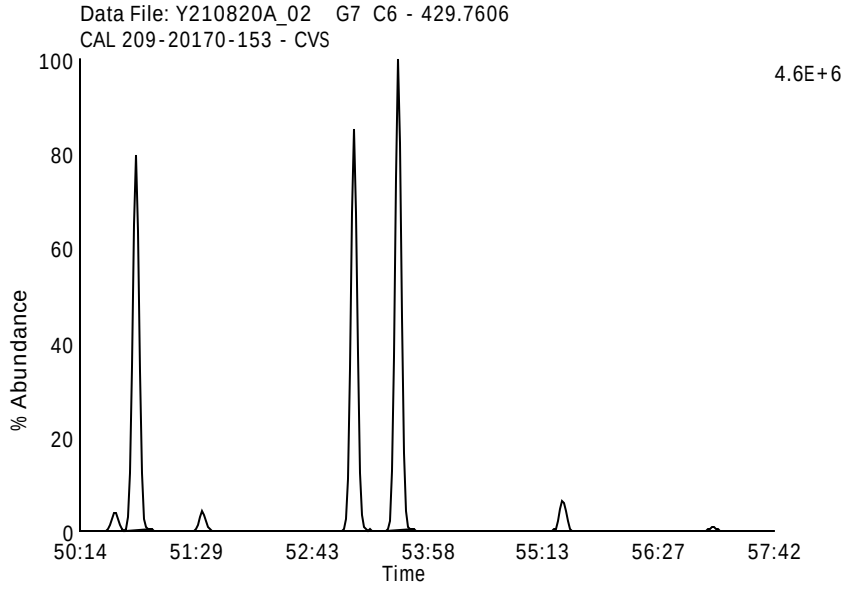
Octa Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



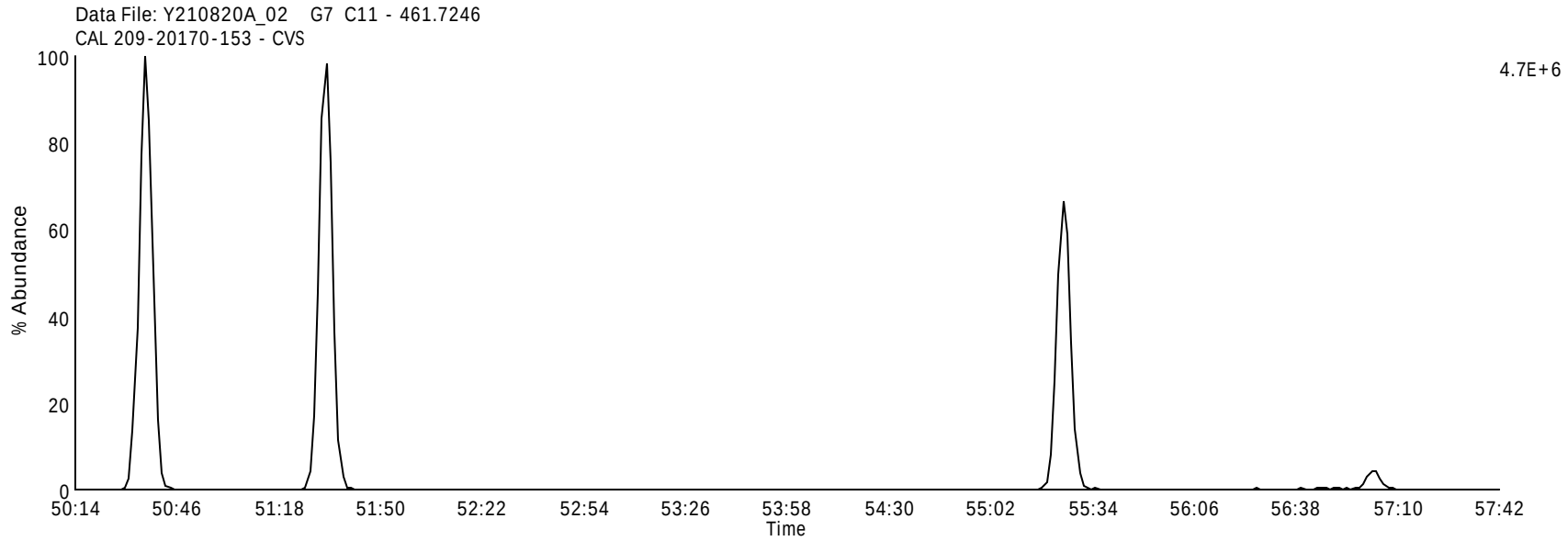


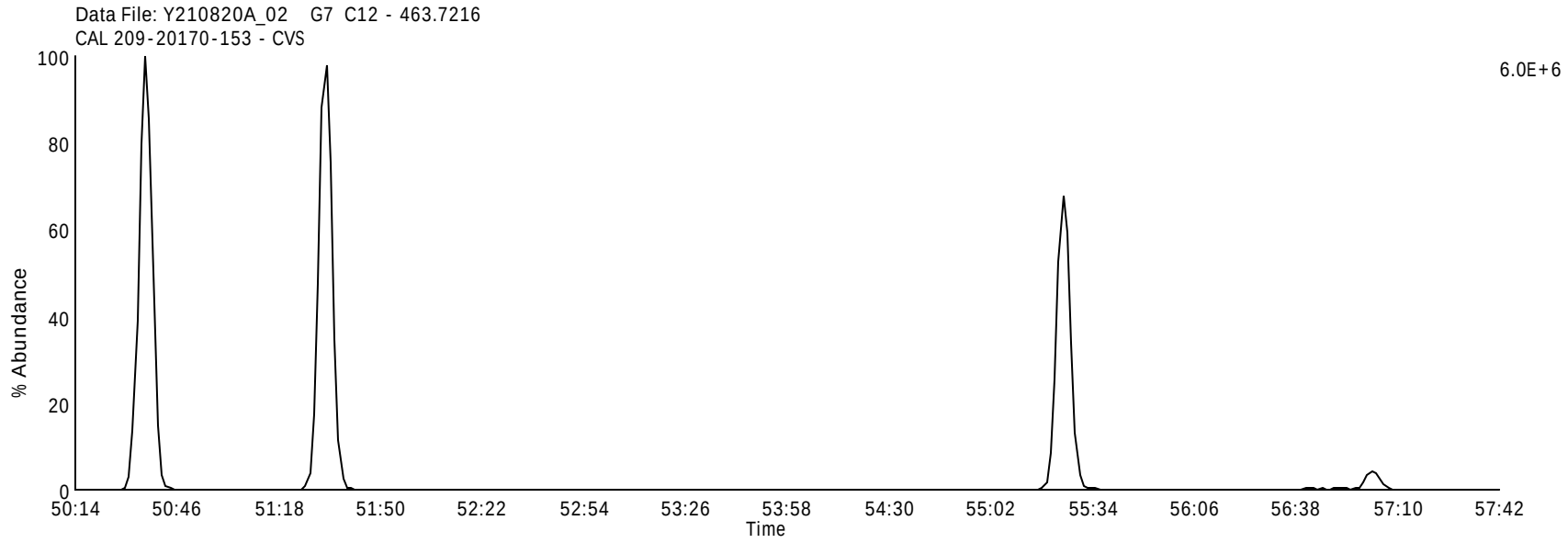




Nona Chlorinated Biphenyls

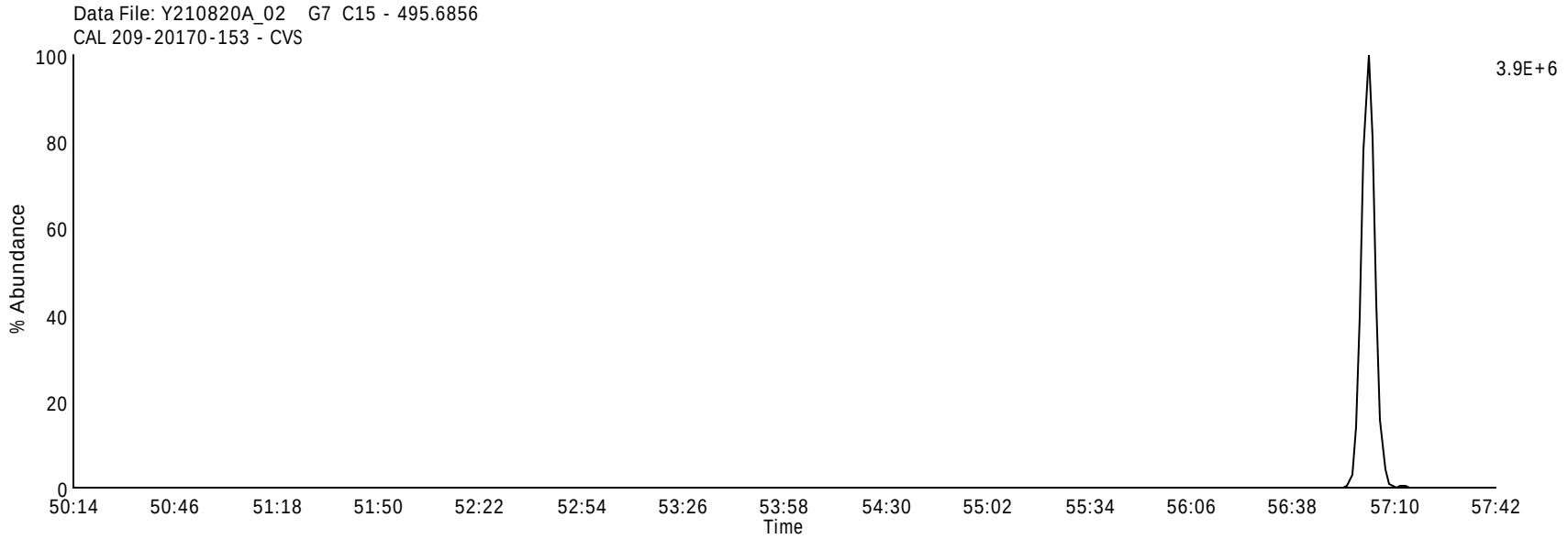
Data File Name: Y210820A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

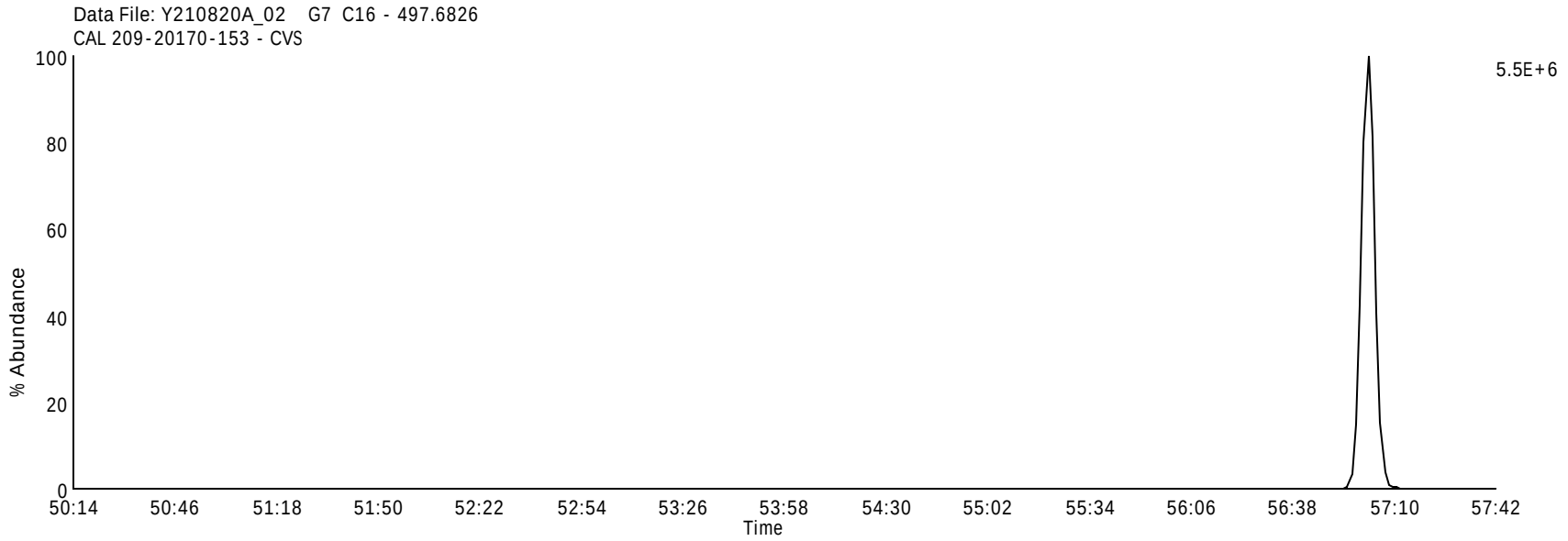




Deca Chlorinated Biphenyl

Data File Name: Y210820A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

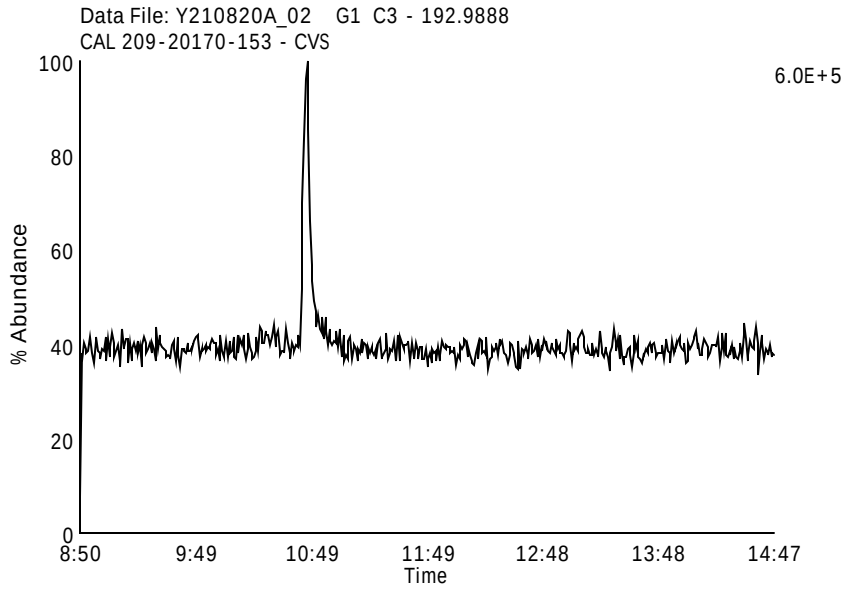


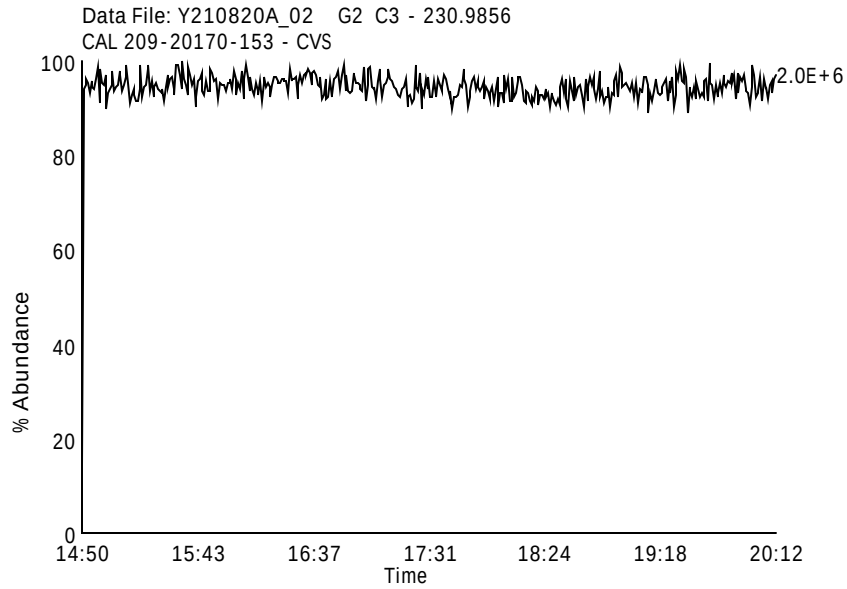


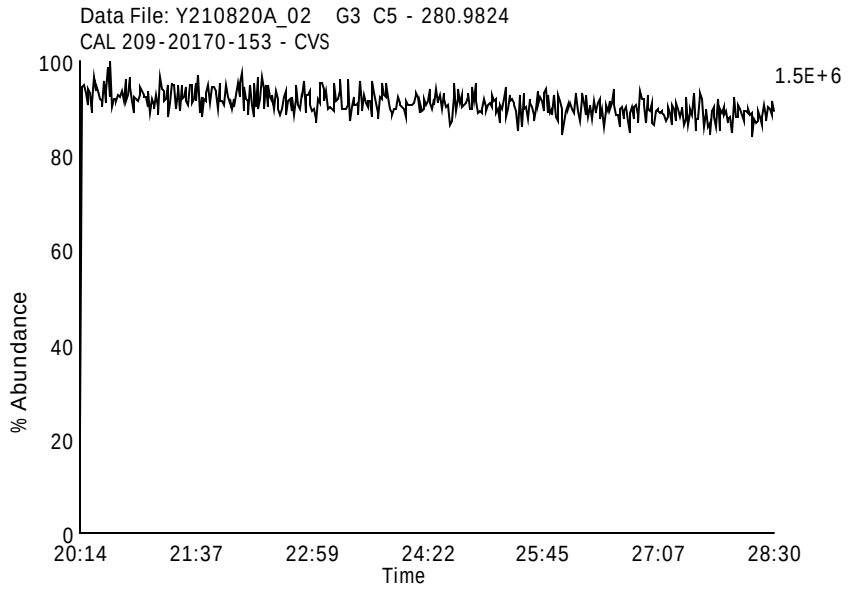
Group 1 - 4 Lock mass

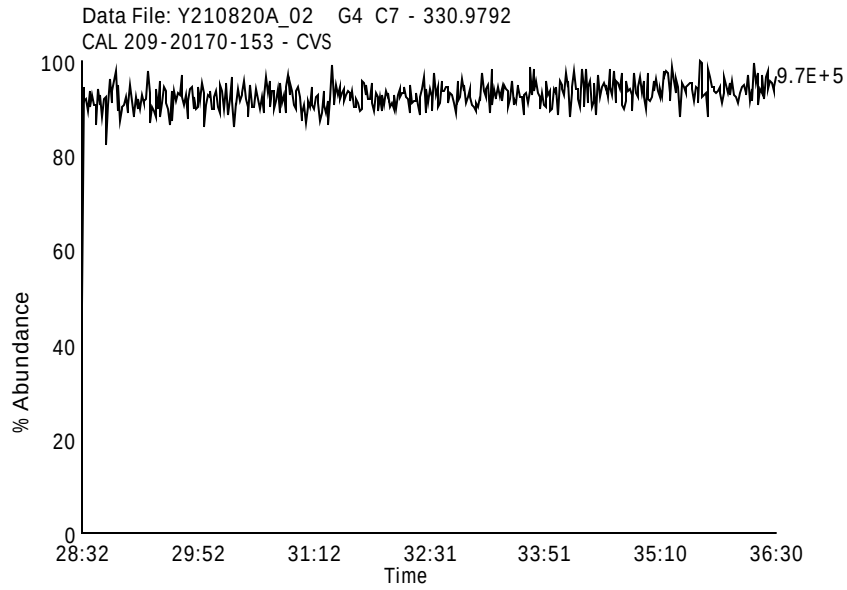
Data File Name: Y210820A_02
Date Acquired: 8/20/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix





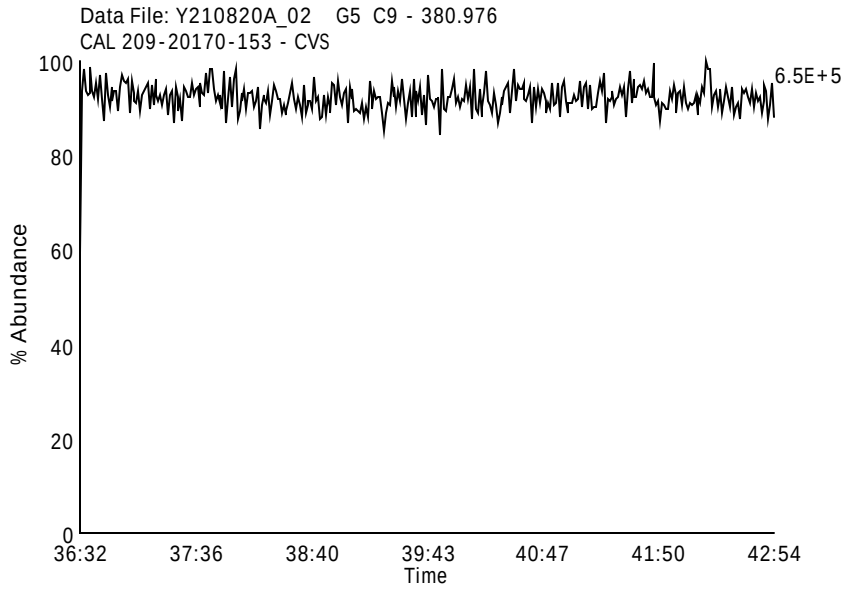


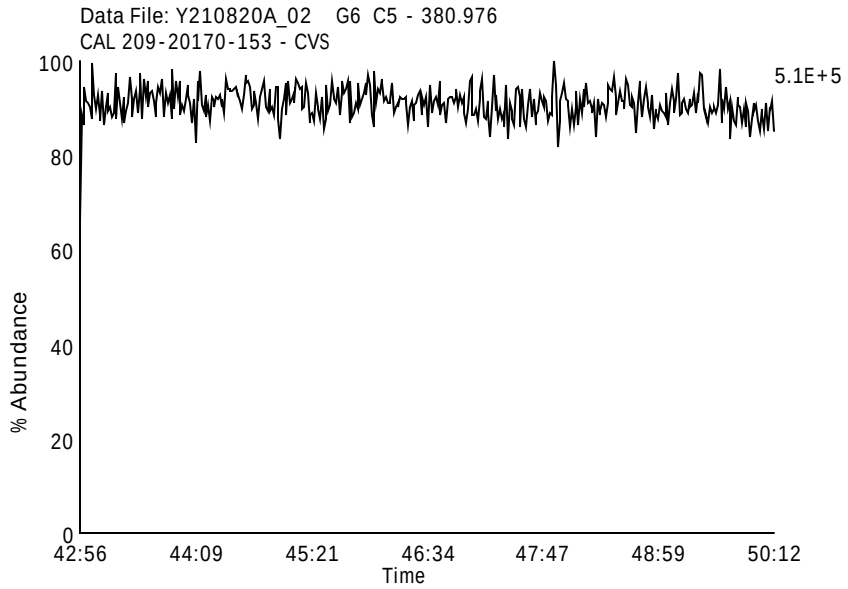


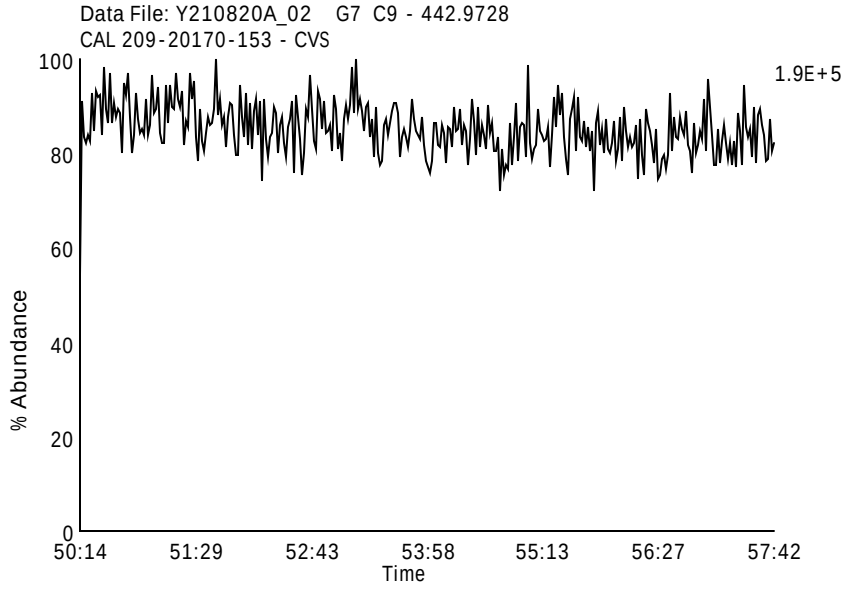
Group 5 - 7 Lock mass

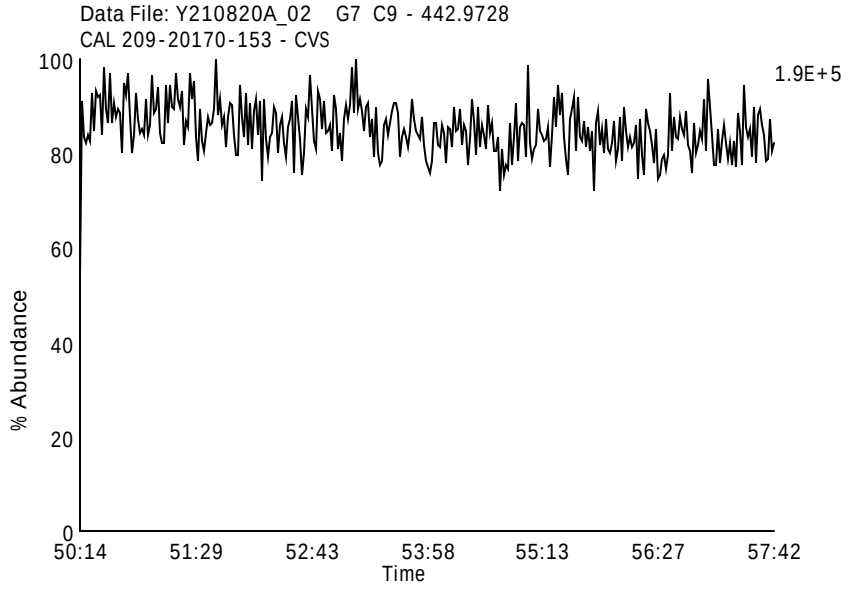
Data File Name: Y210820A_02
Date Acquired: 8/20/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix







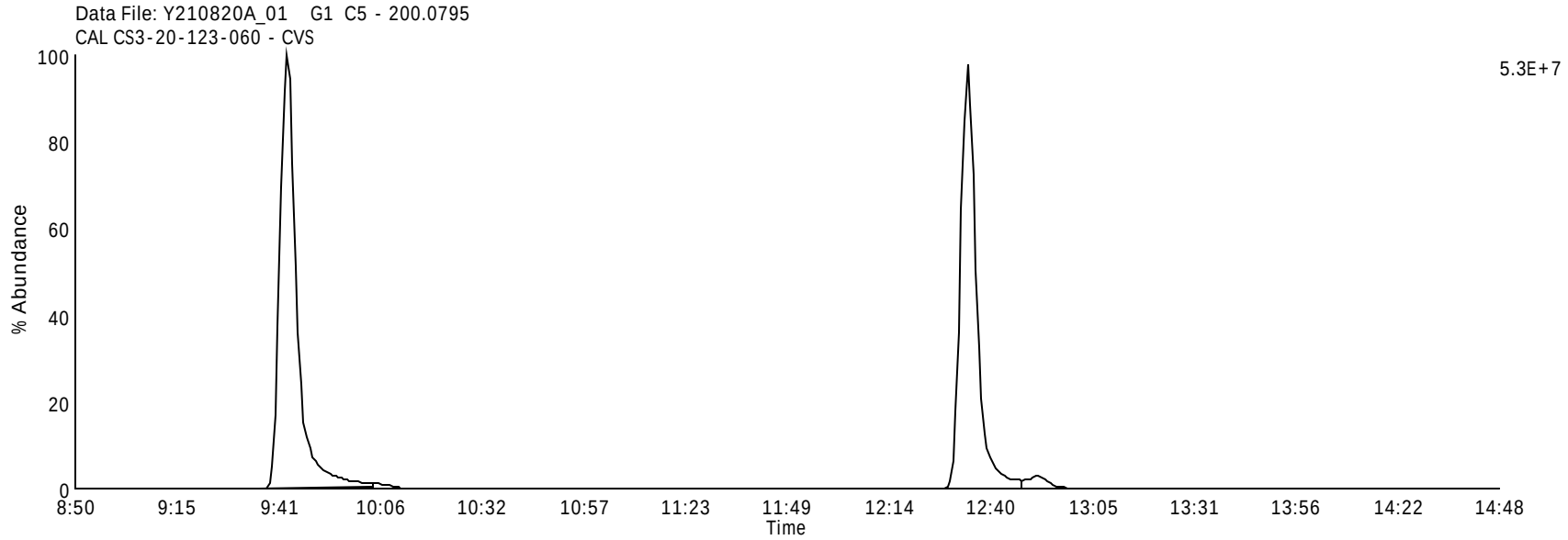


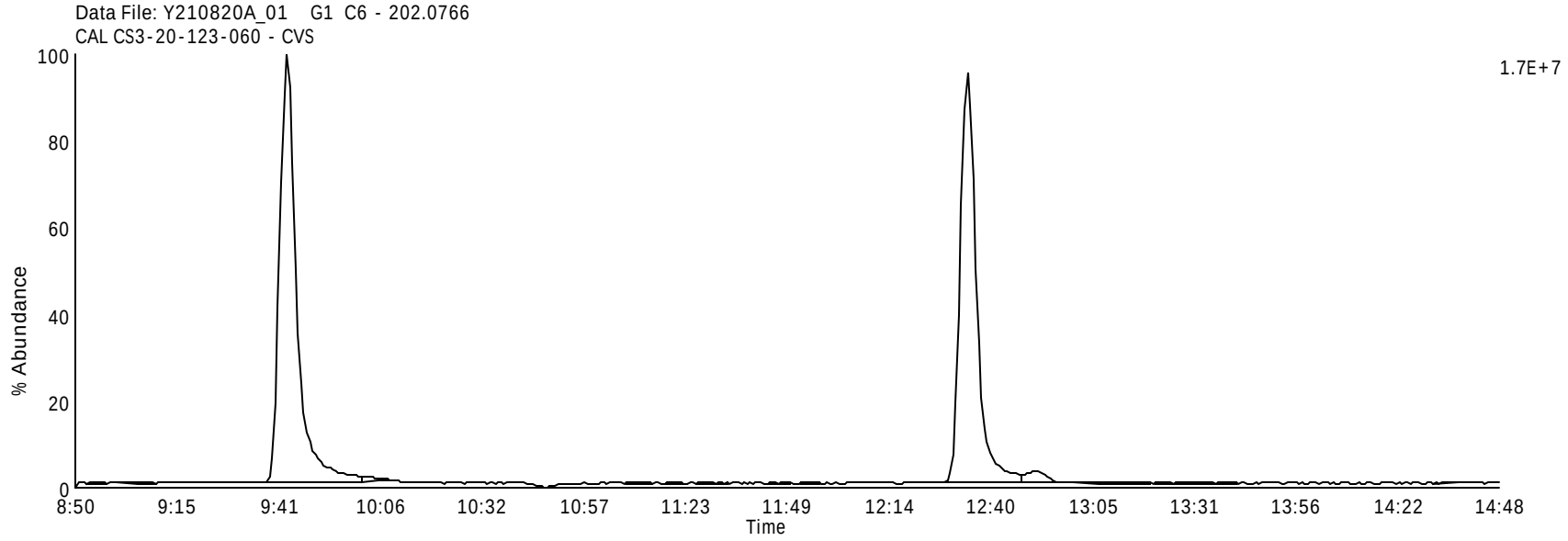
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

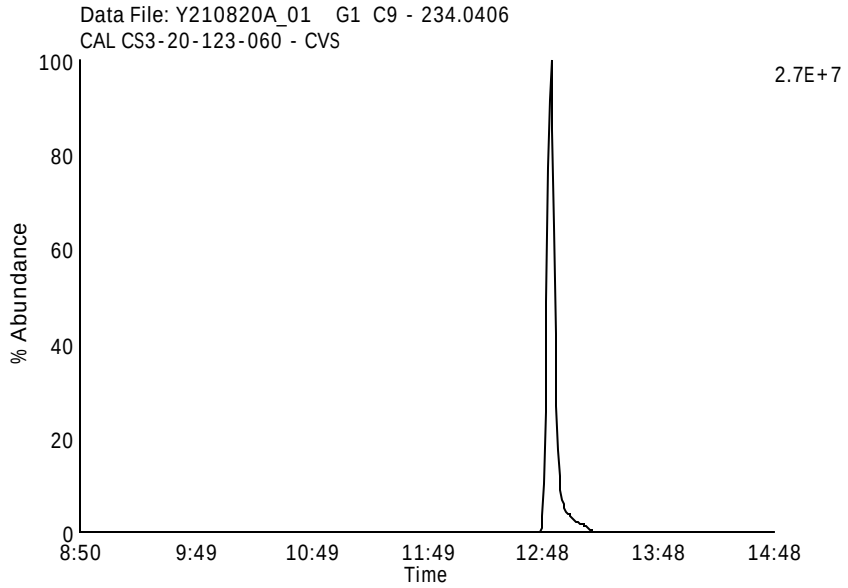
Sample Description: CAL CS3-20-123-060 - CVS

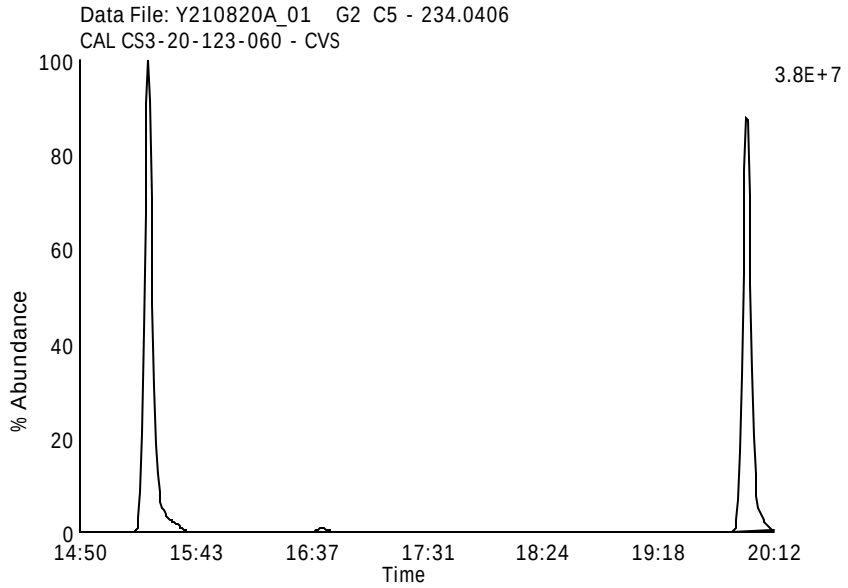


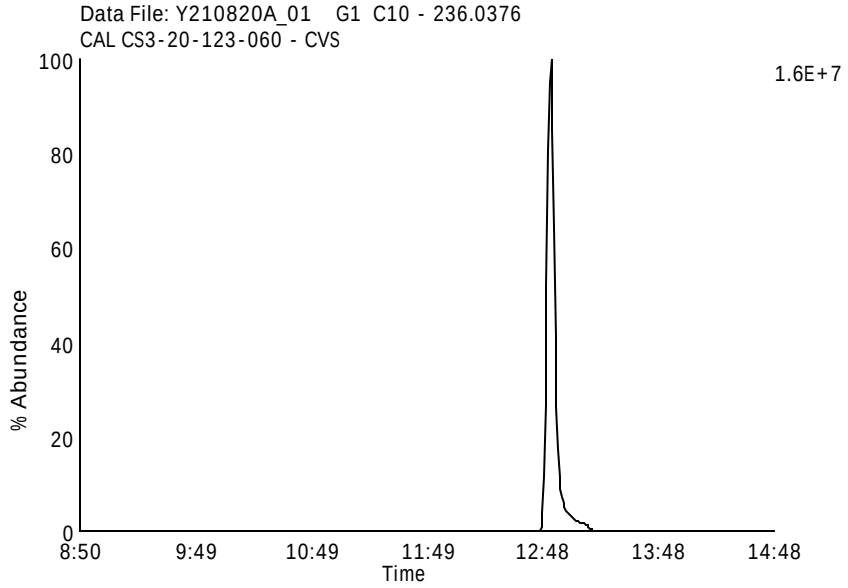


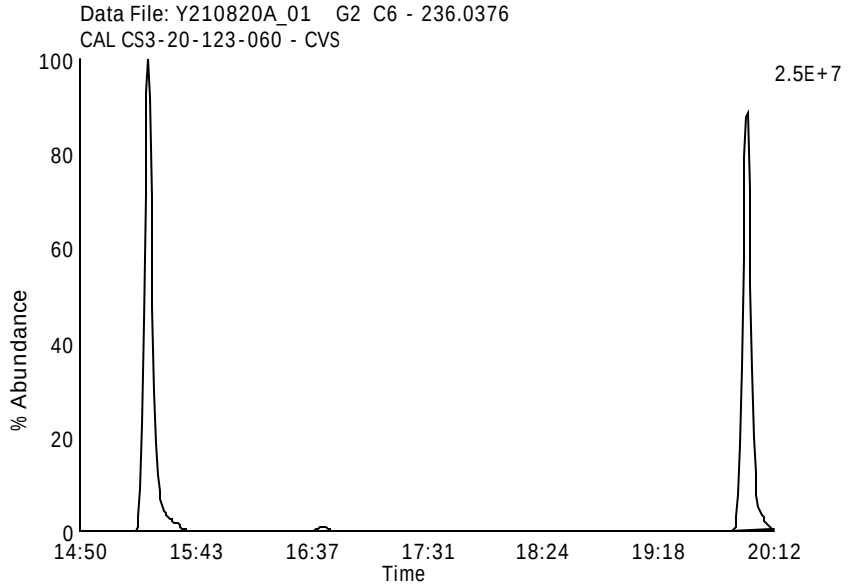
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



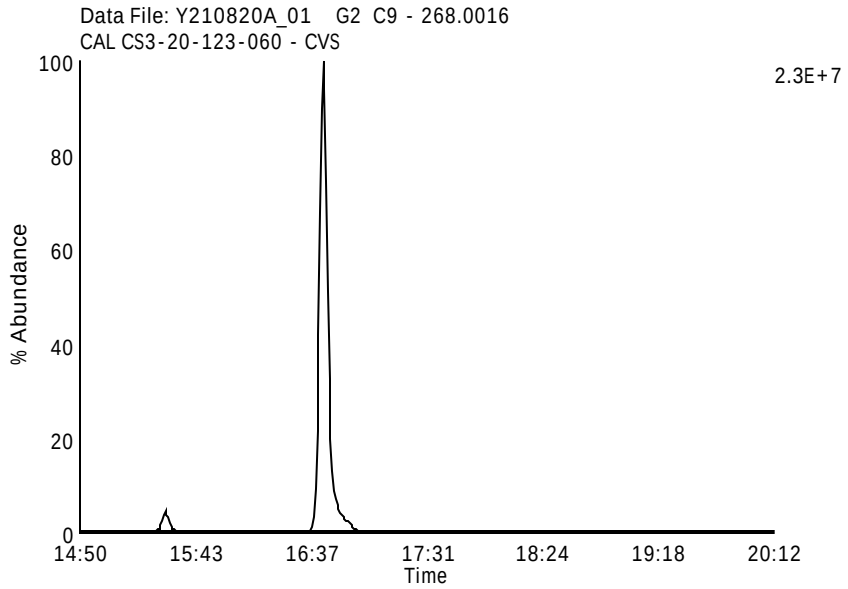


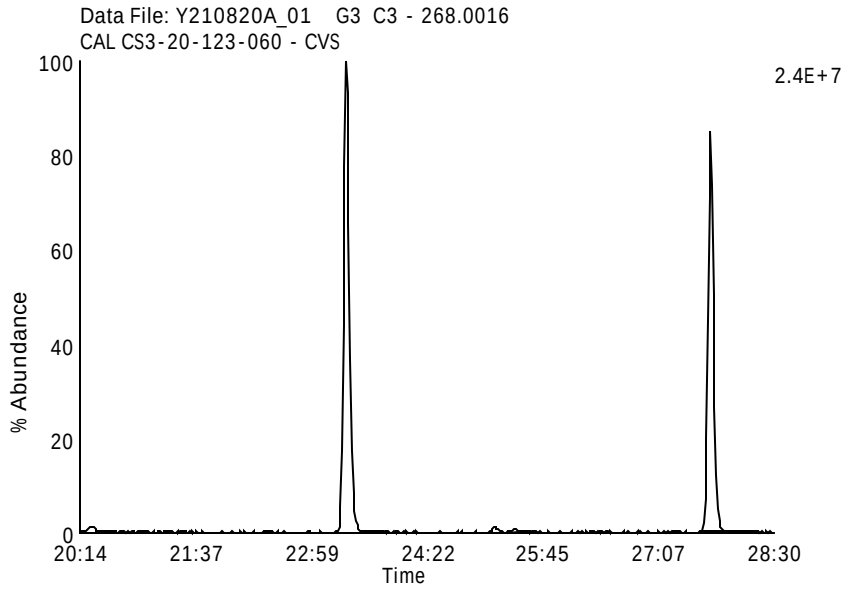


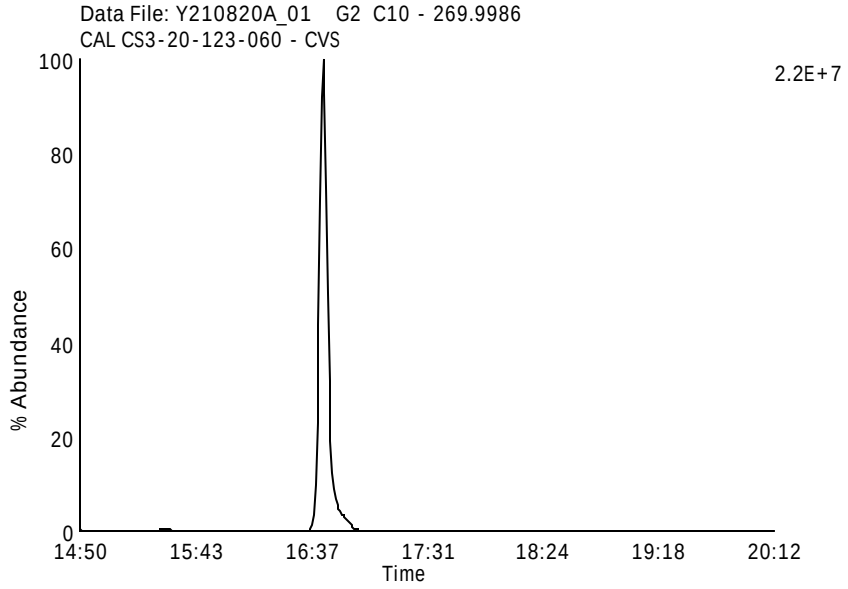


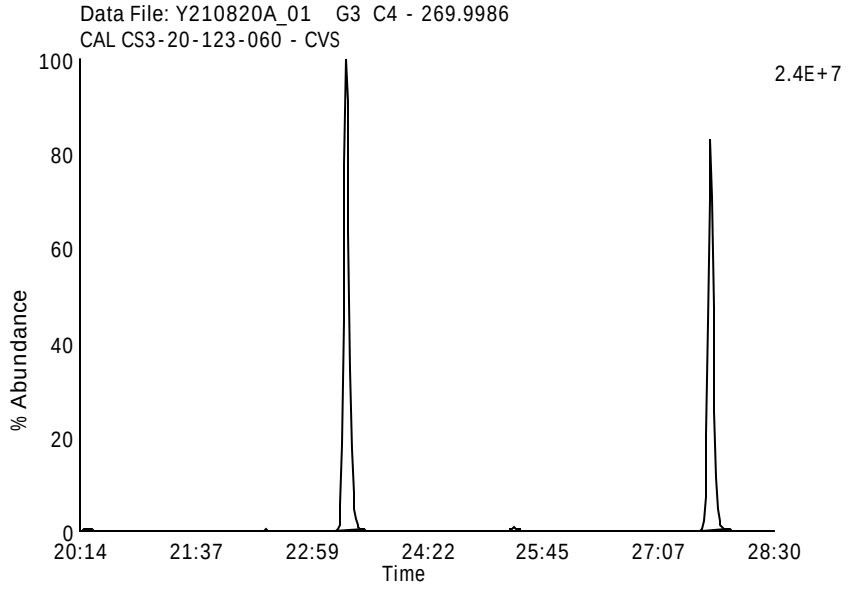
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







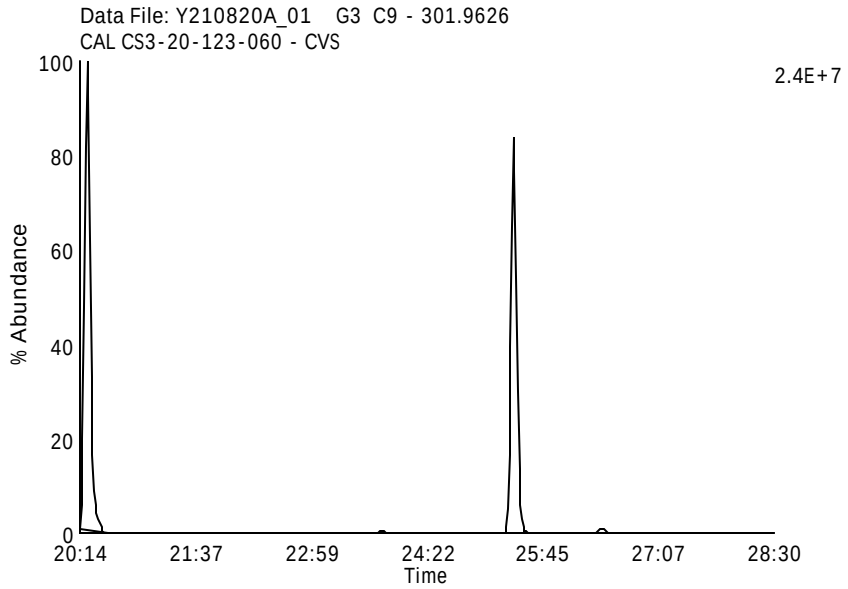


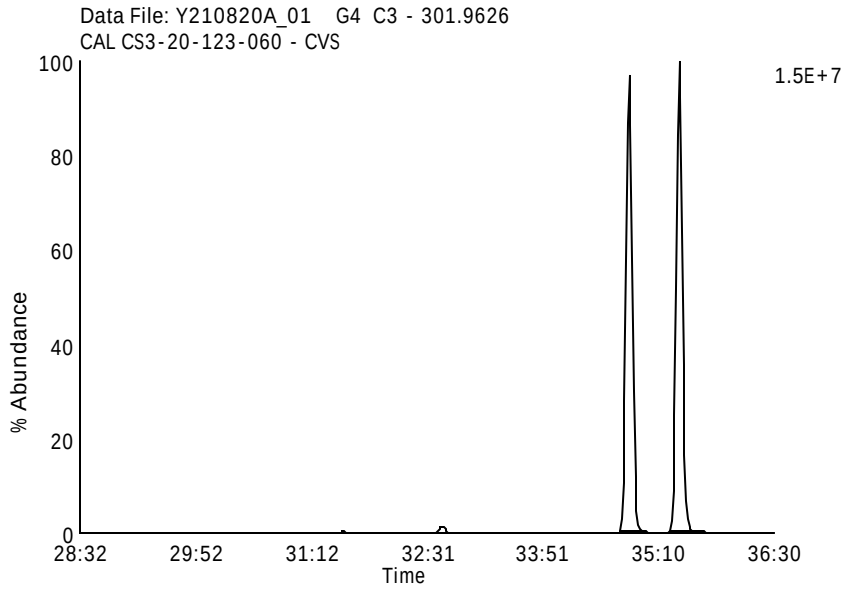
Labeled Tetra Chlorinated Biphenyls

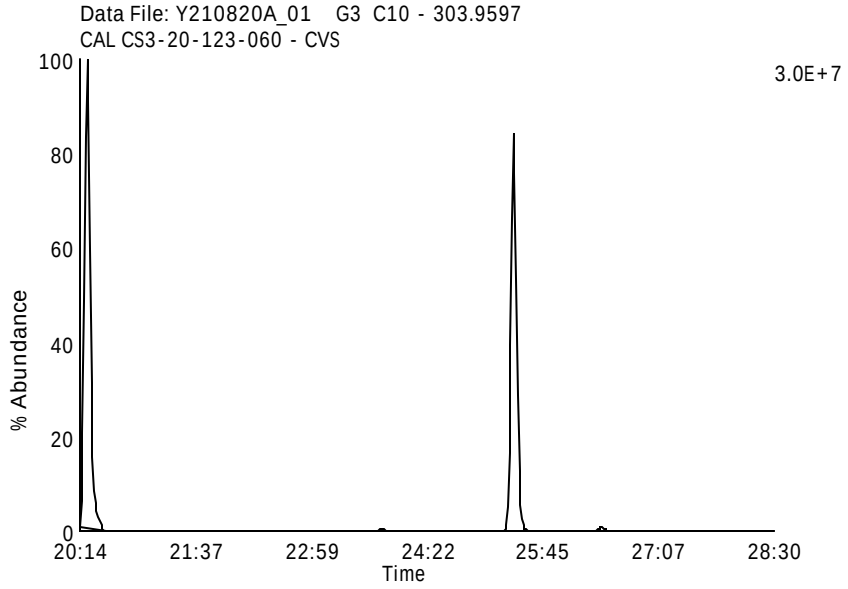
Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

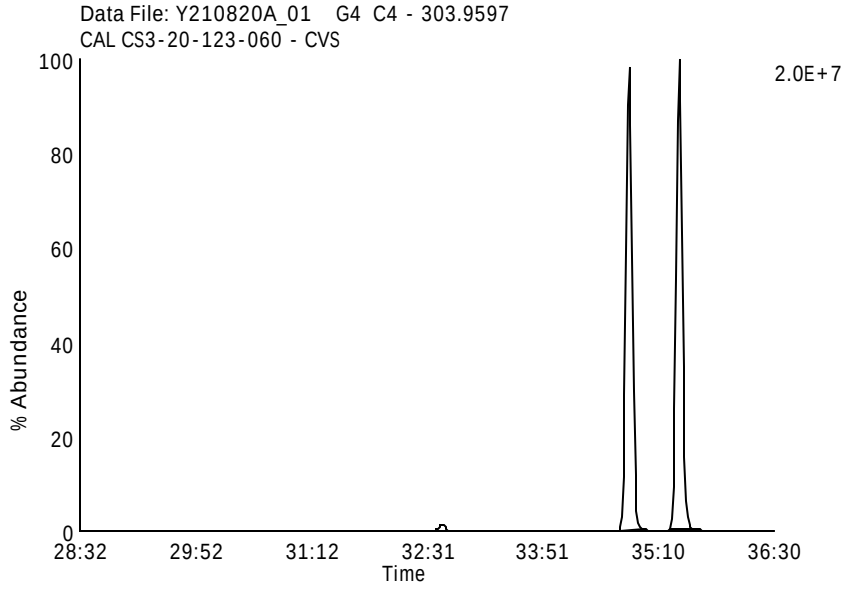
Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS







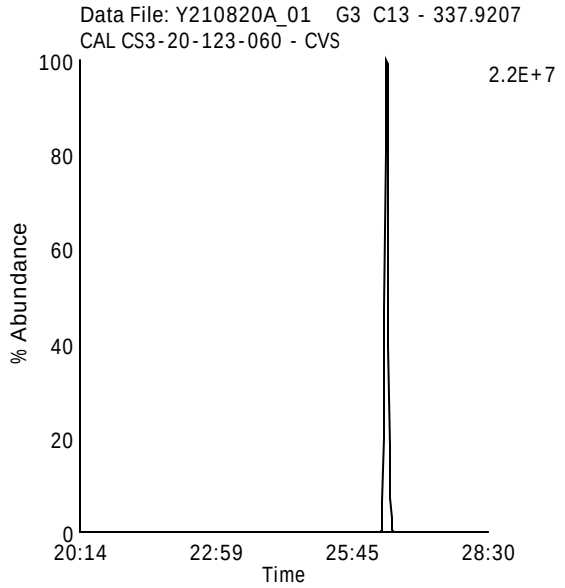


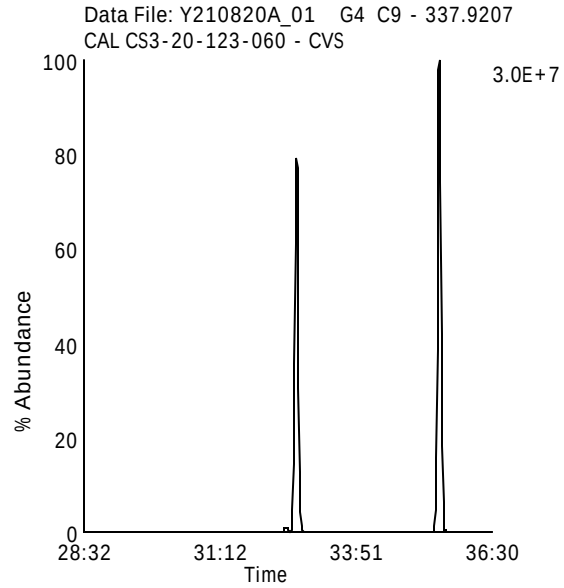
Labeled Penta Chlorinated Biphenyls

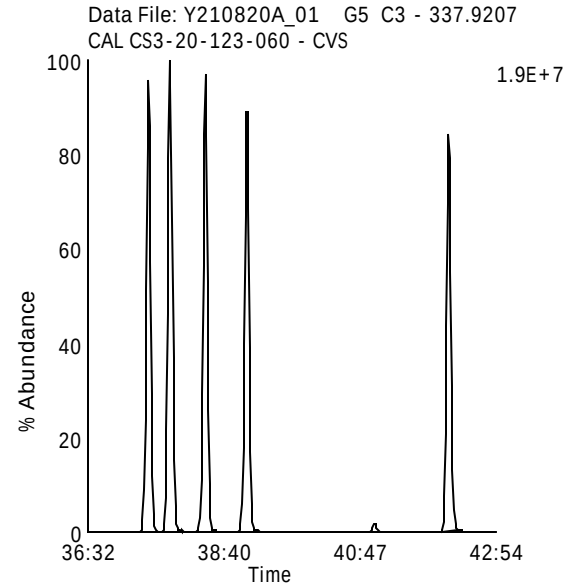
Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

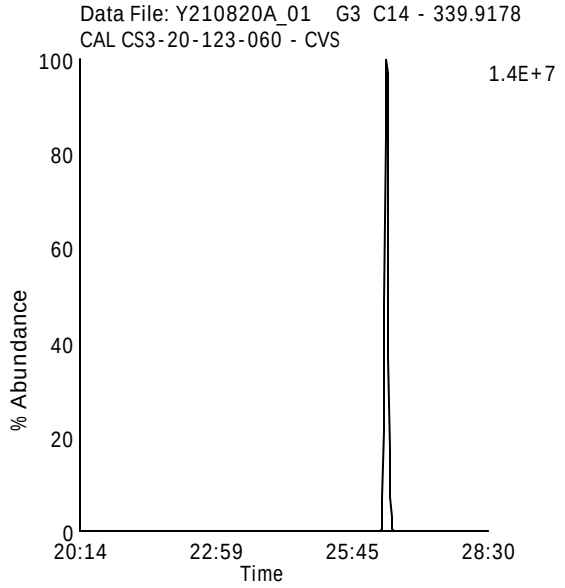
Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

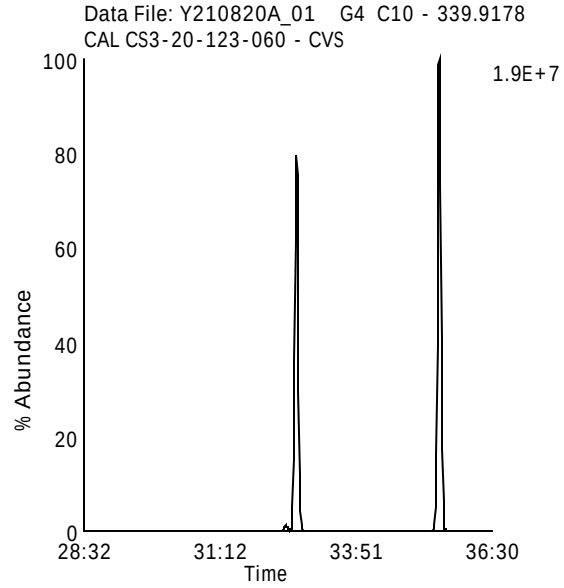
Sample Description: CAL CS3-20-123-060 - CVS

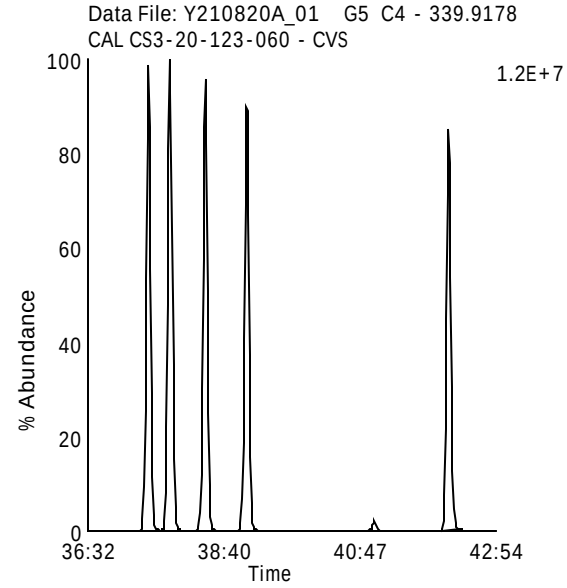










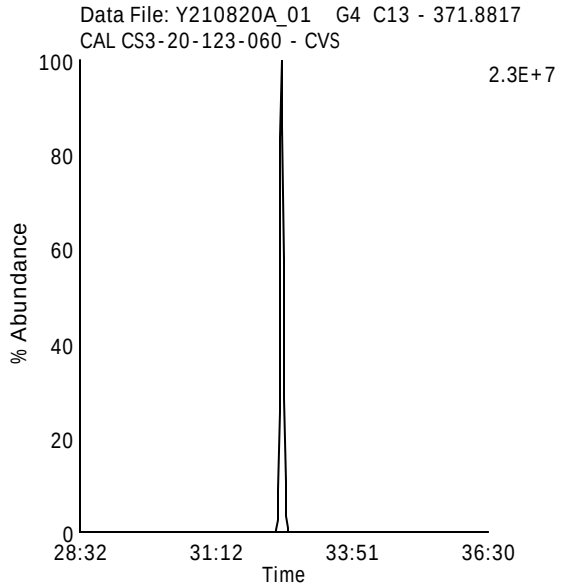


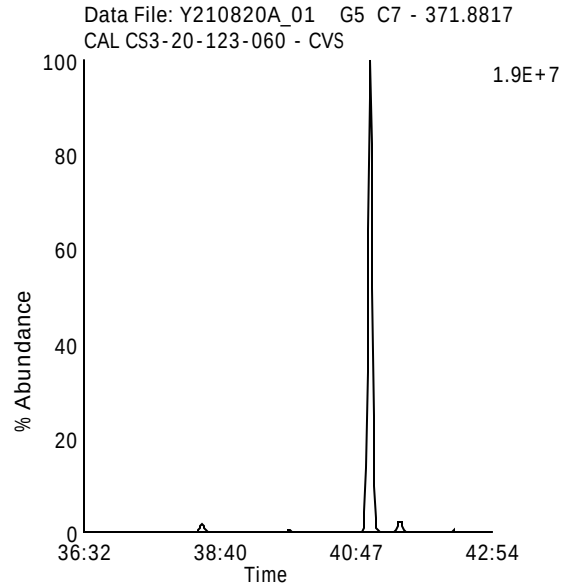
Labeled Hexa Chlorinated Biphenyls

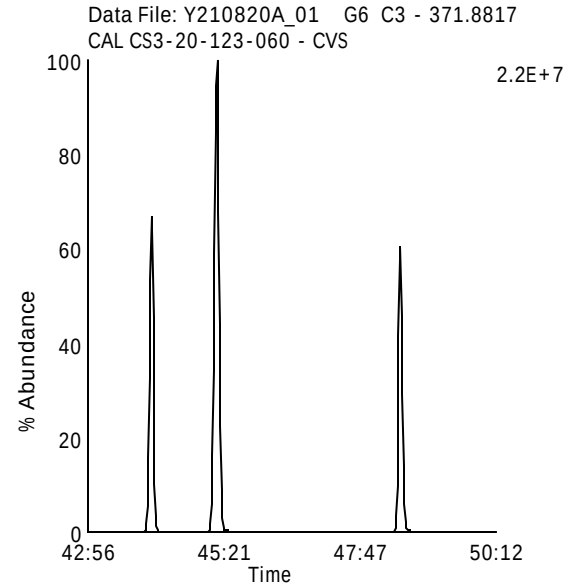
Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

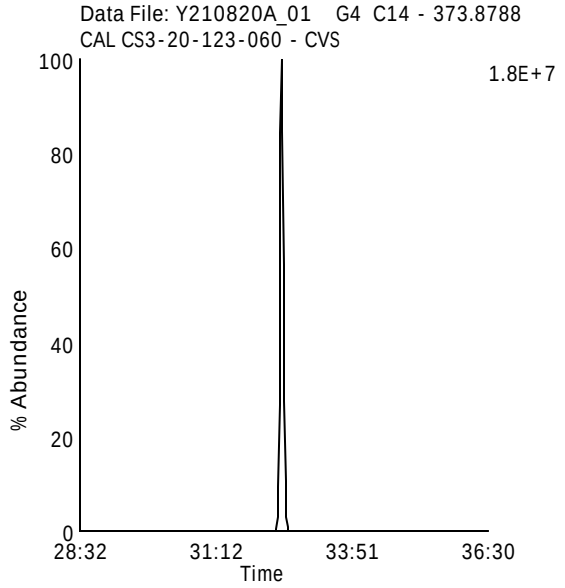
Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

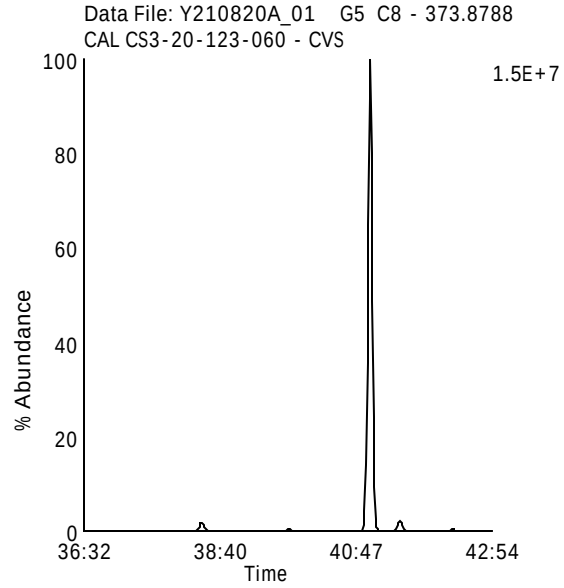
Sample Description: CAL CS3-20-123-060 - CVS

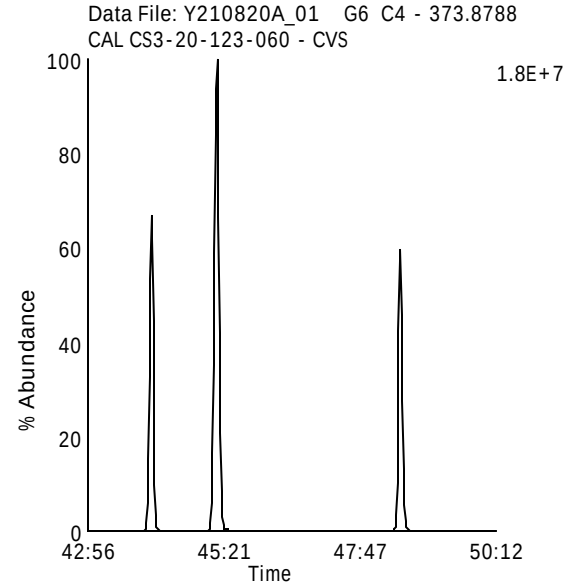






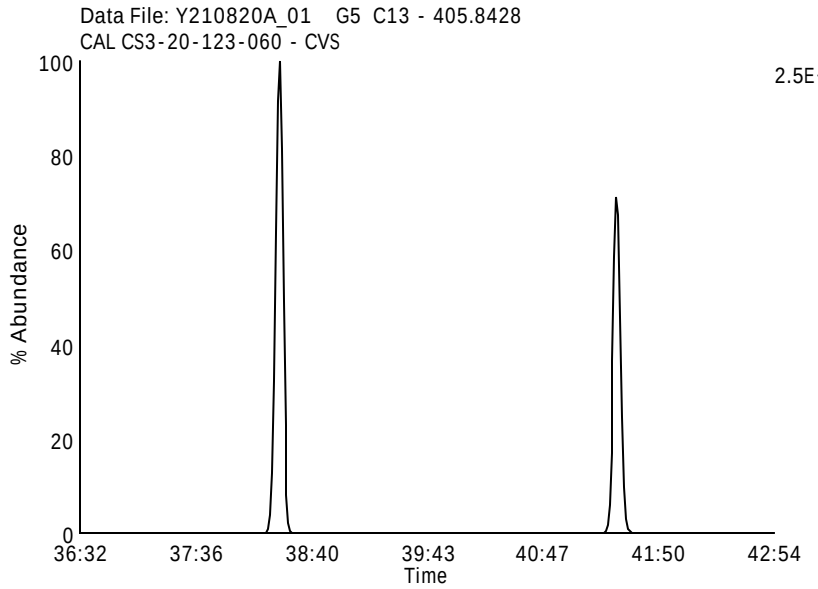


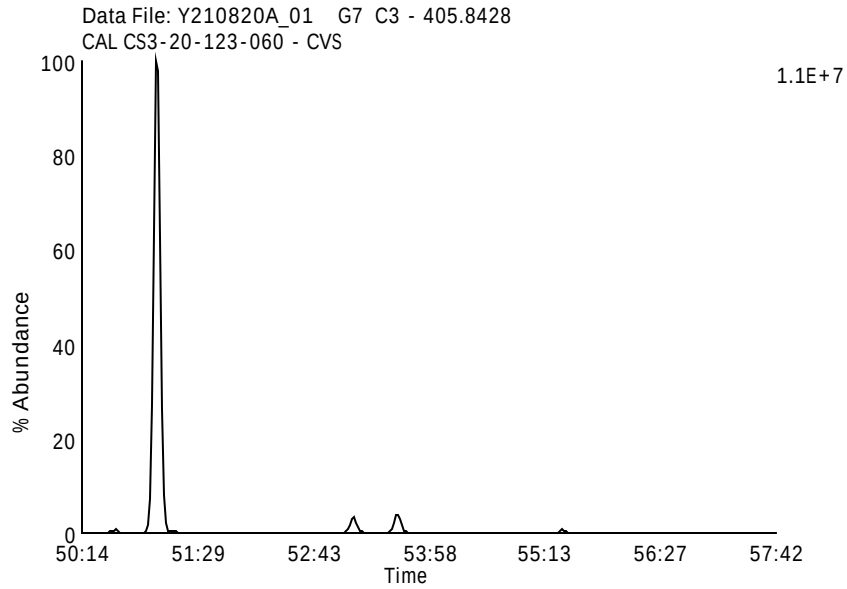


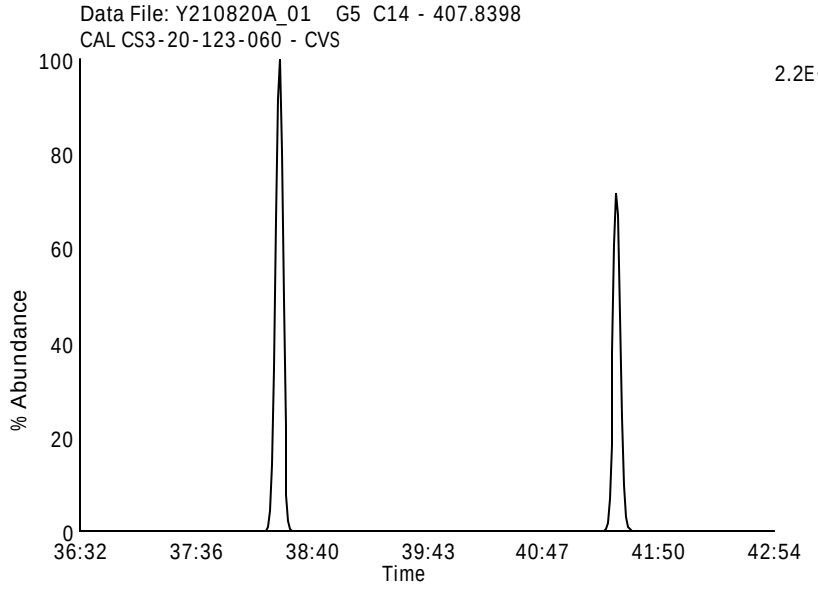


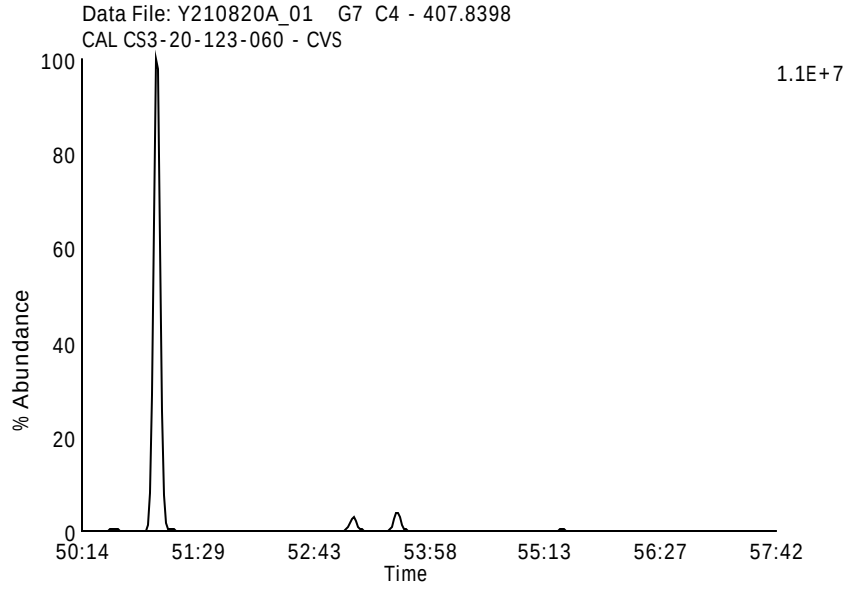
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





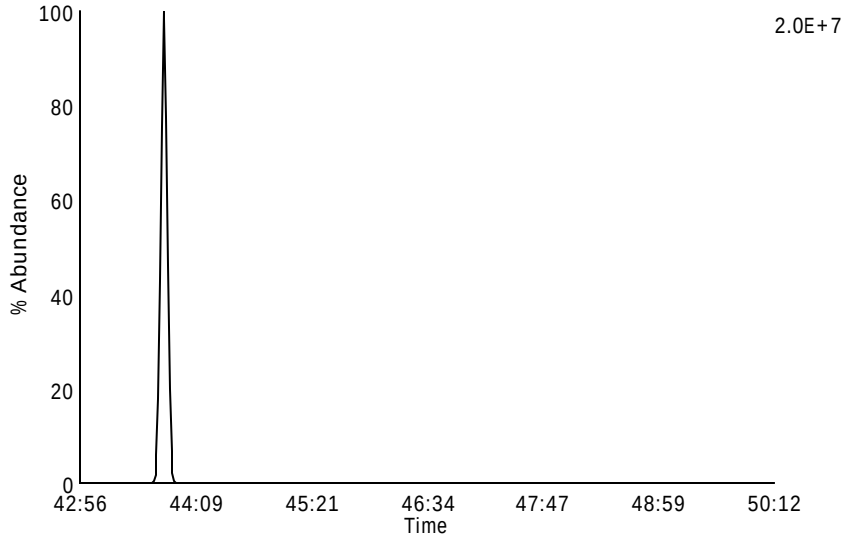




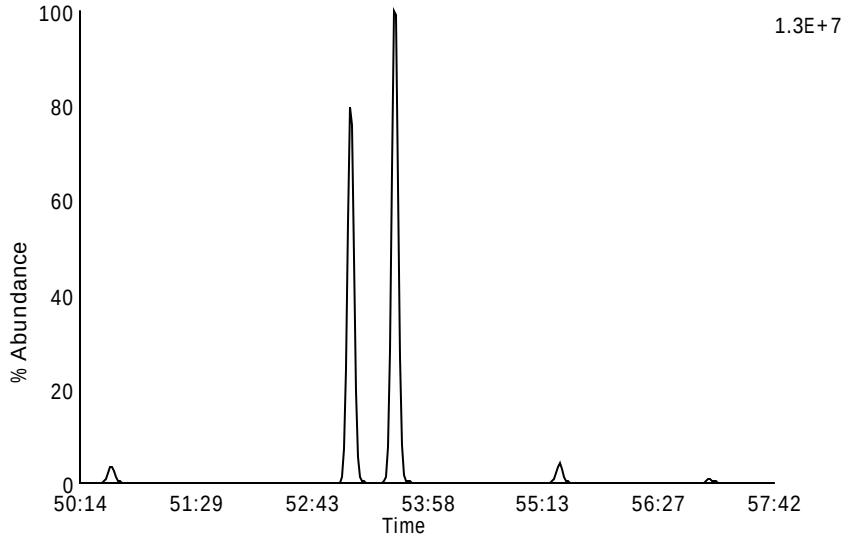
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

Data File: Y210820A_01 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210820A_01 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



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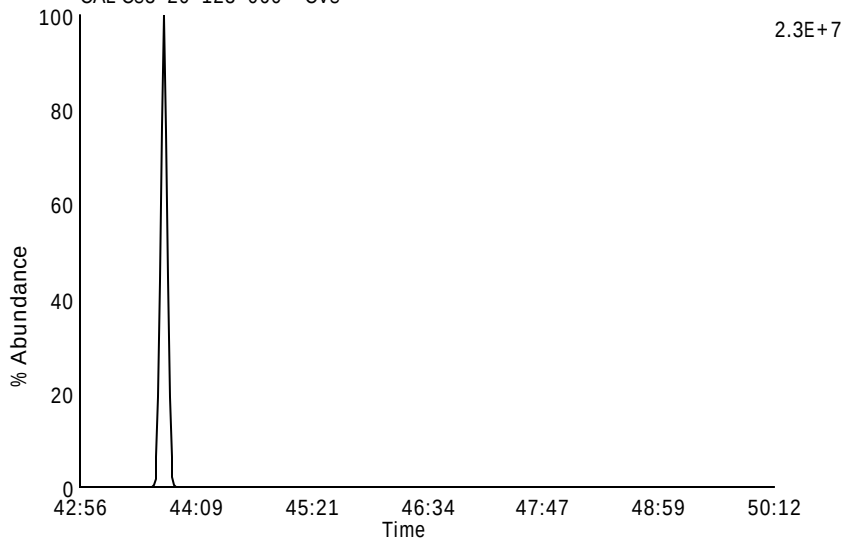
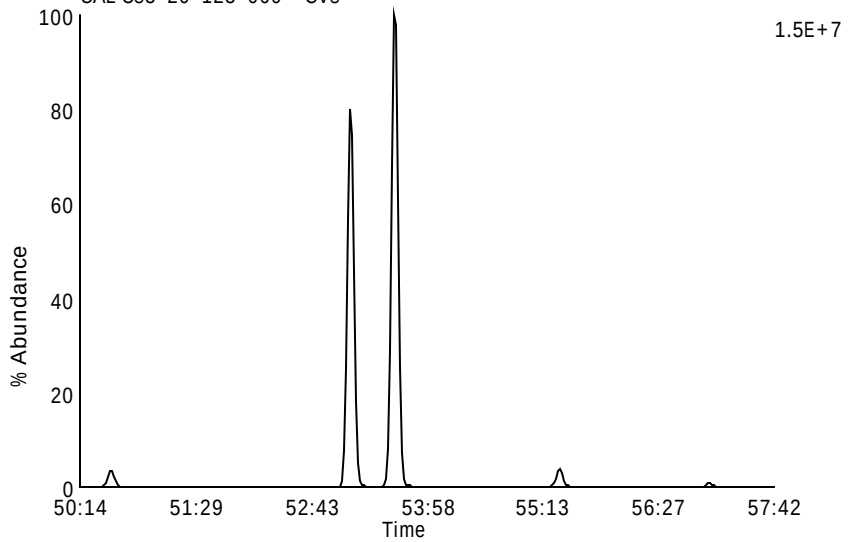
CAL CS3-20-123-060 - CVS



Data File: Y210820A_01 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

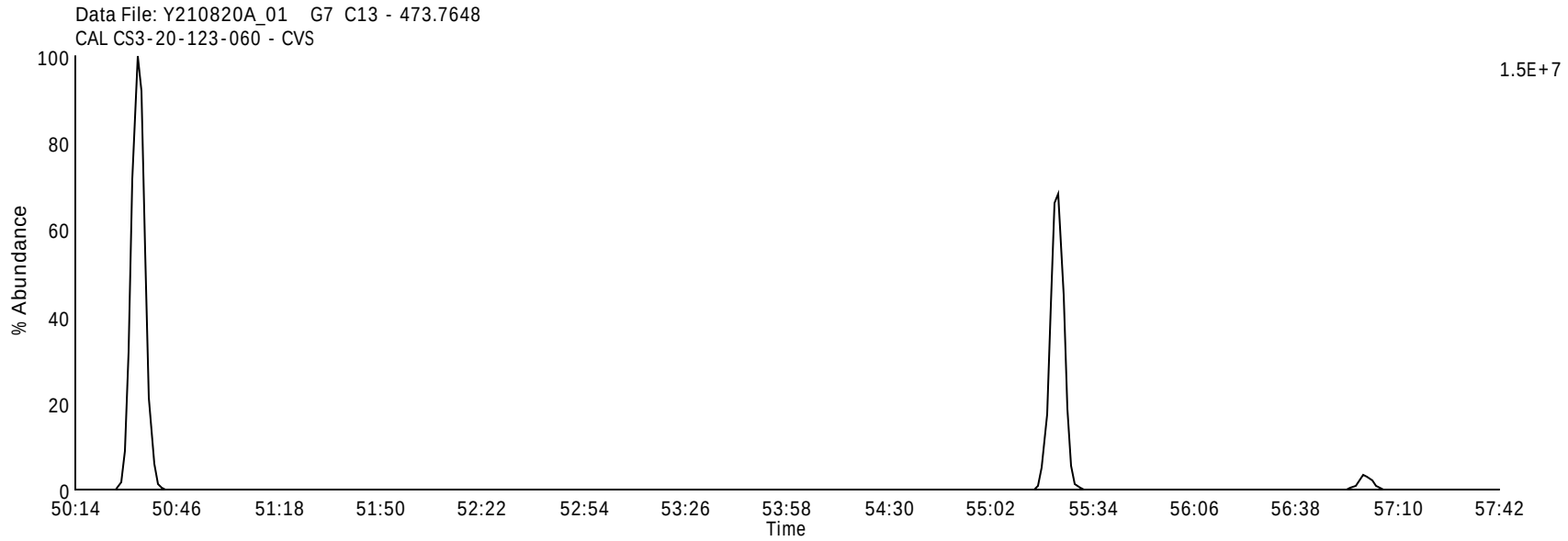


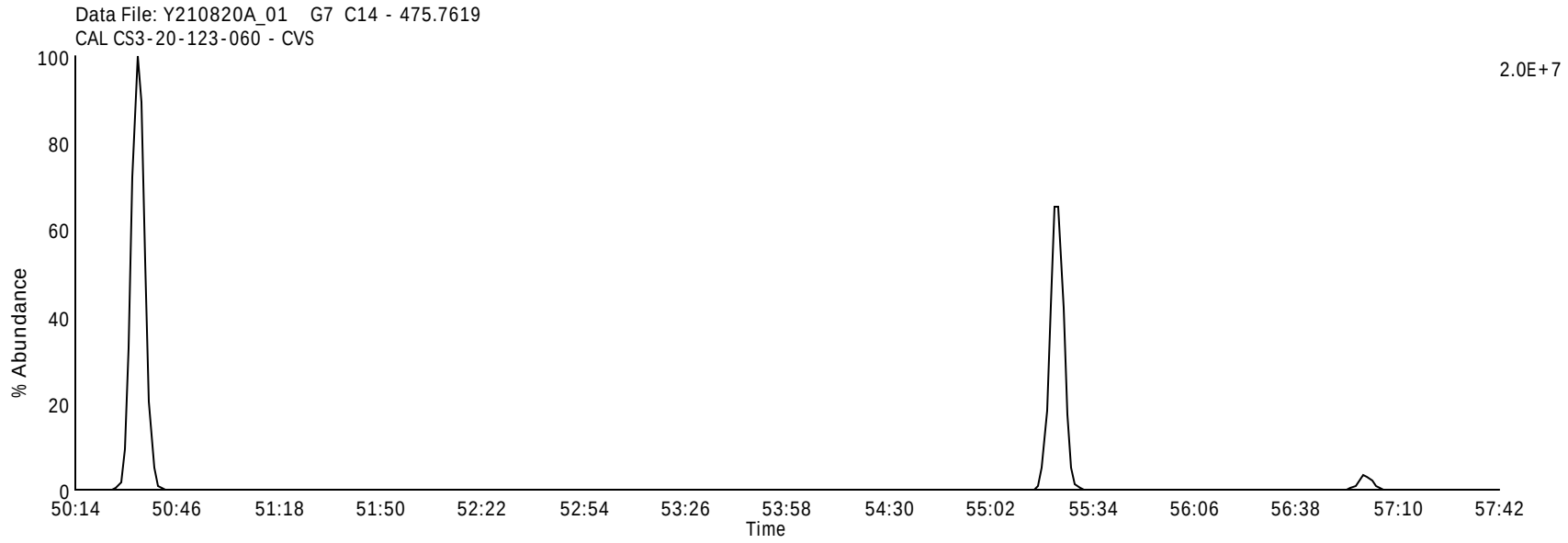
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



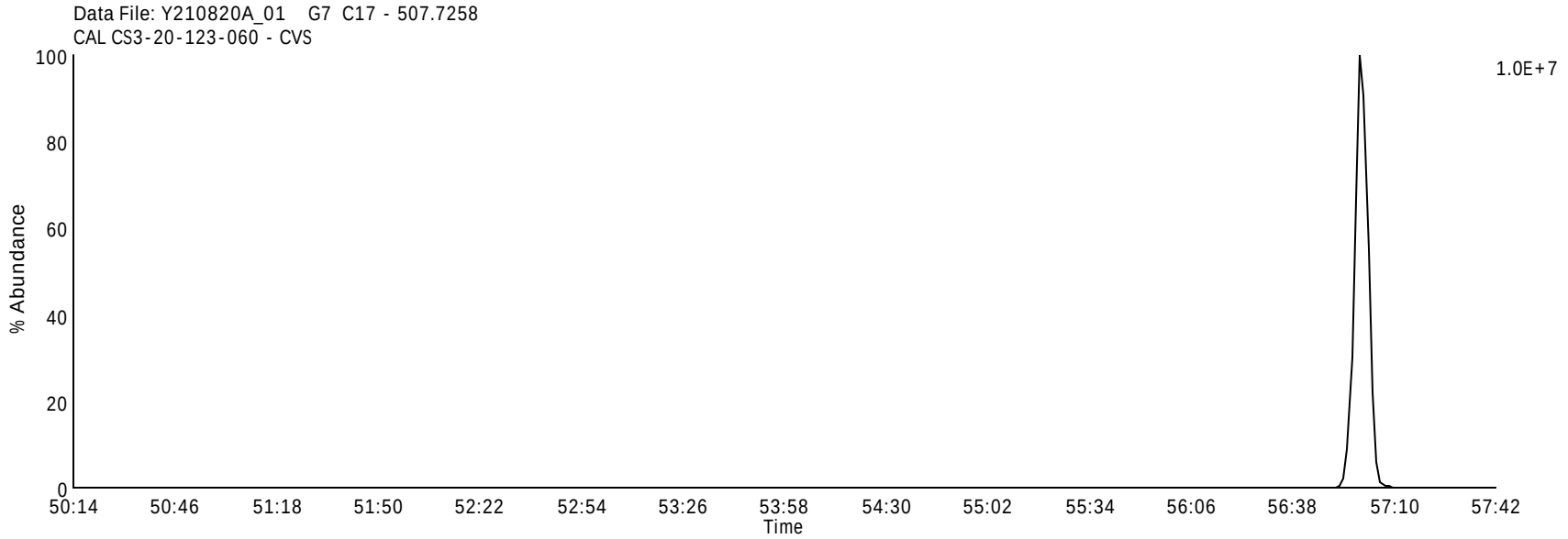


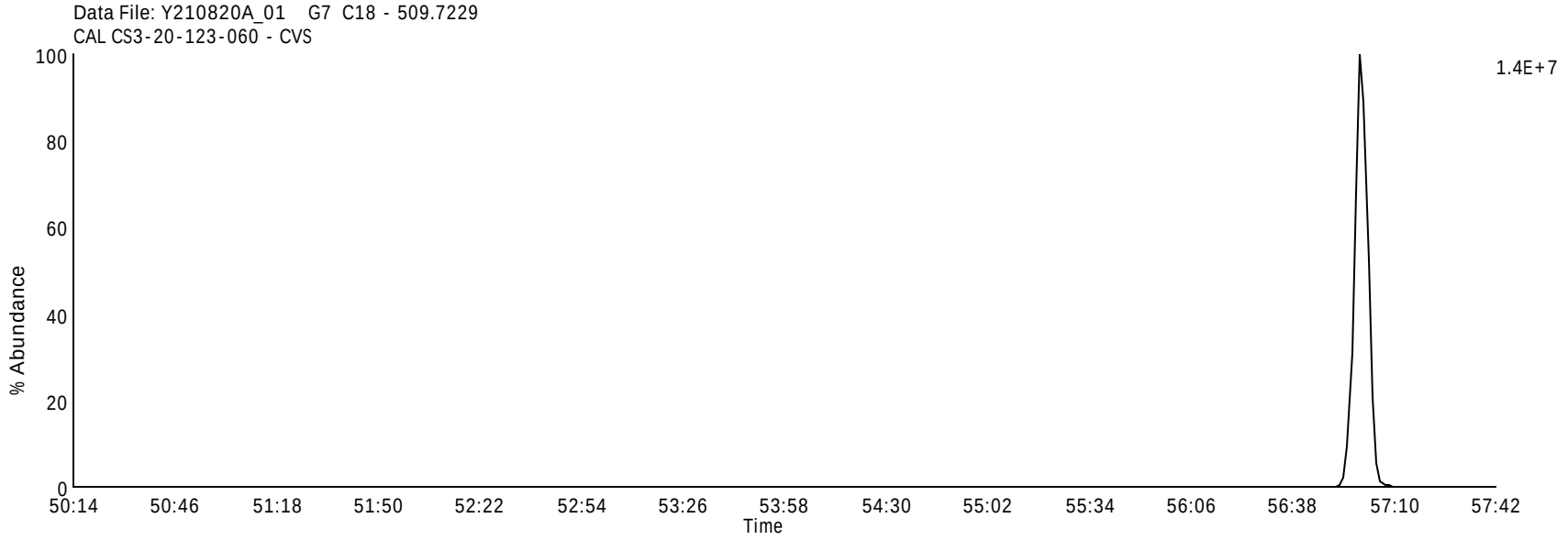
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



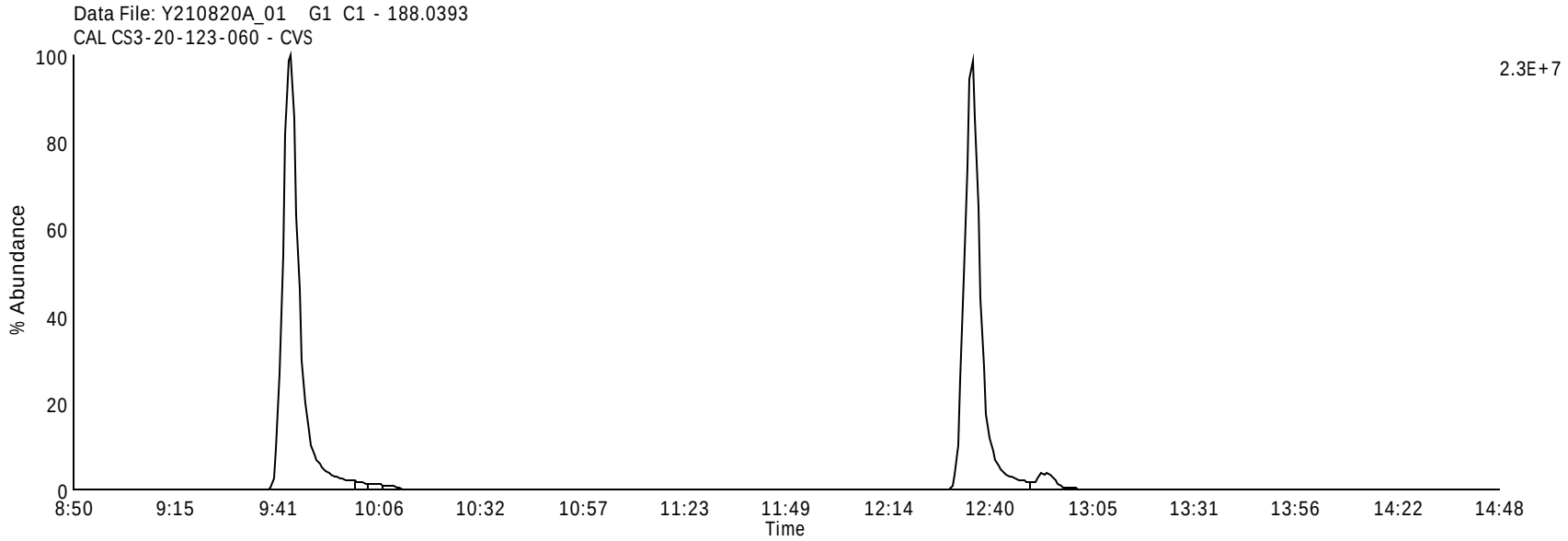


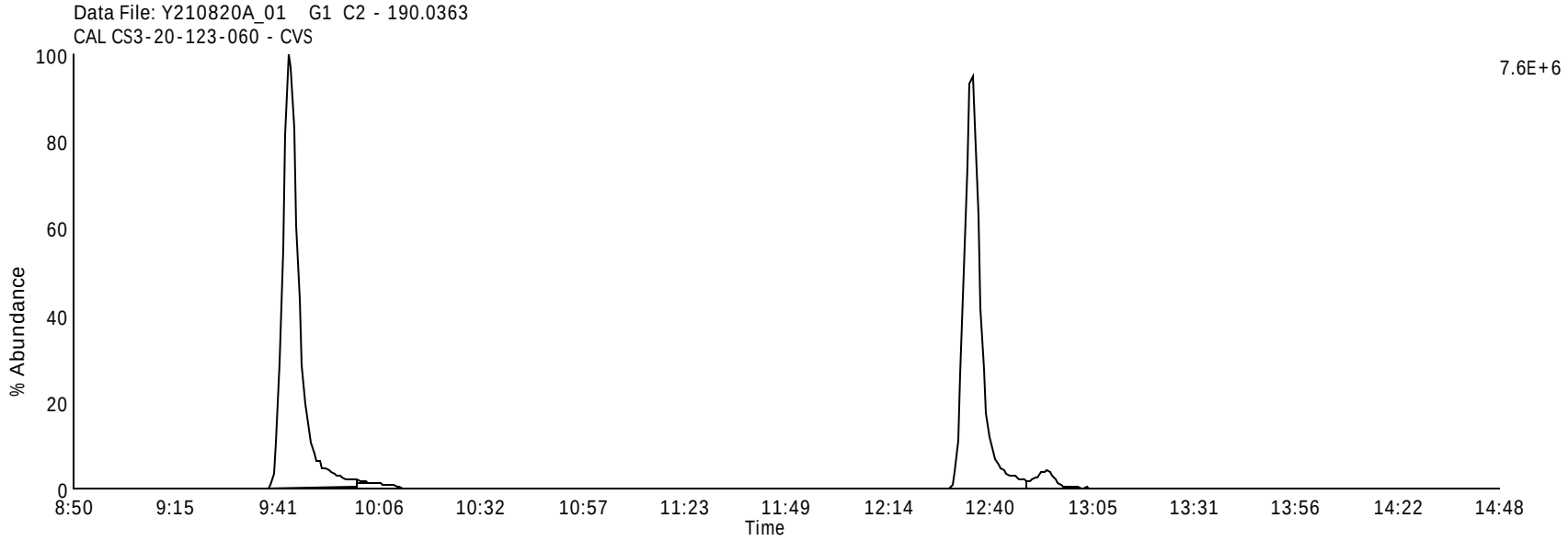
Mono Chlorinated Biphenyls

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

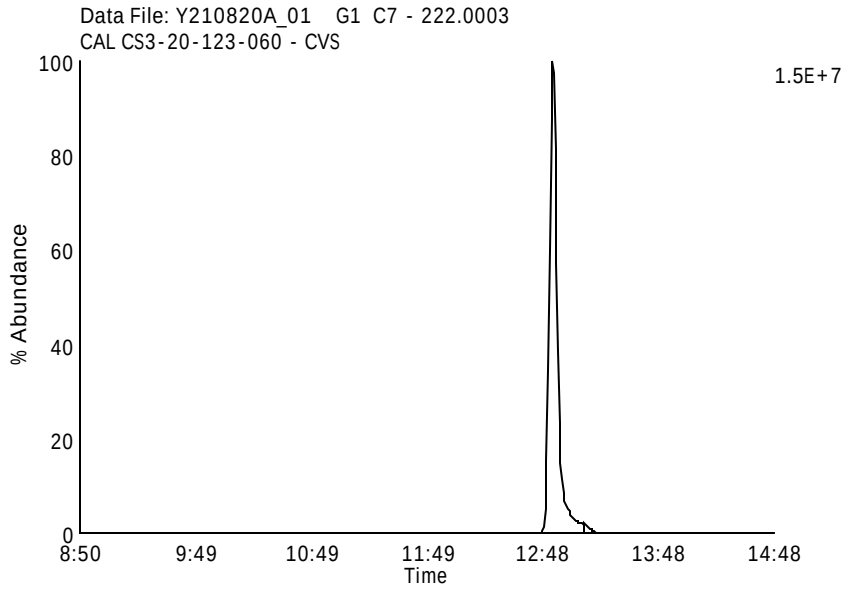
Sample Description: CAL CS3-20-123-060 - CVS

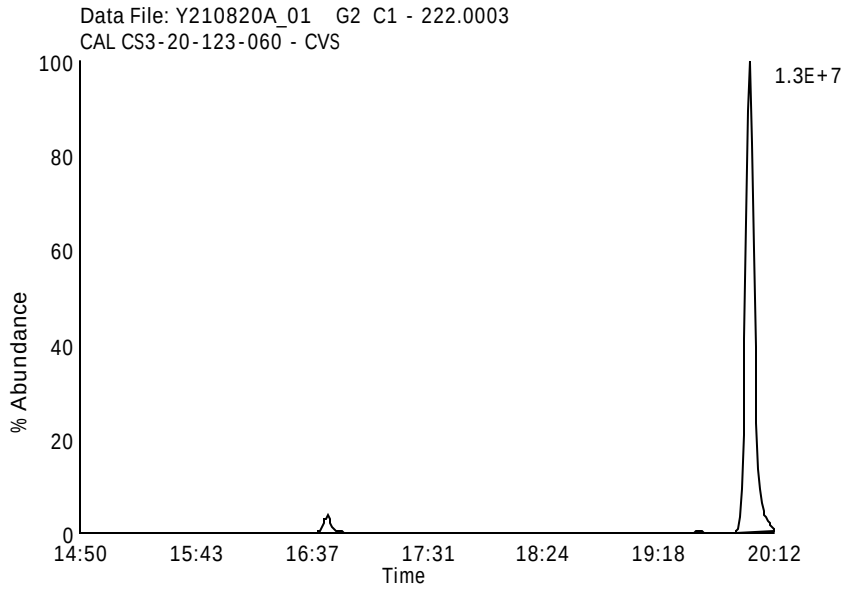


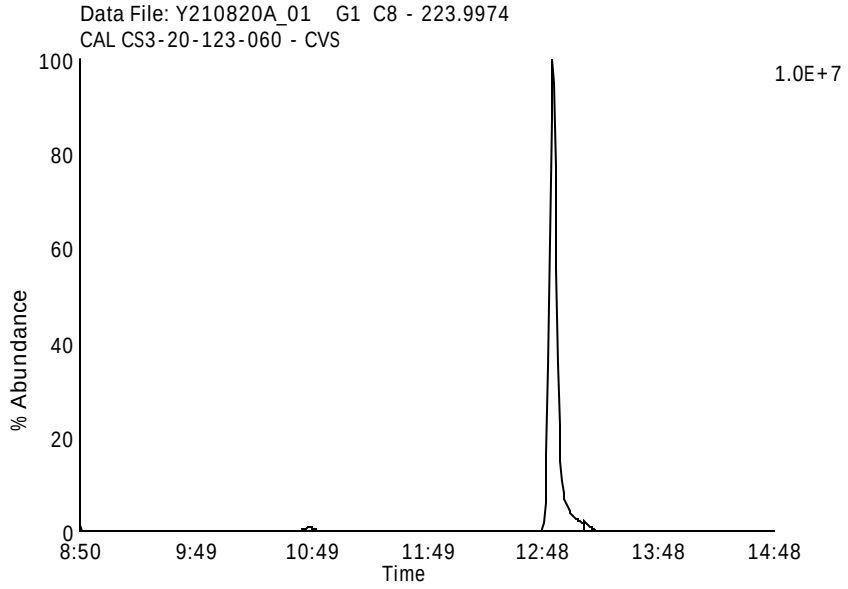


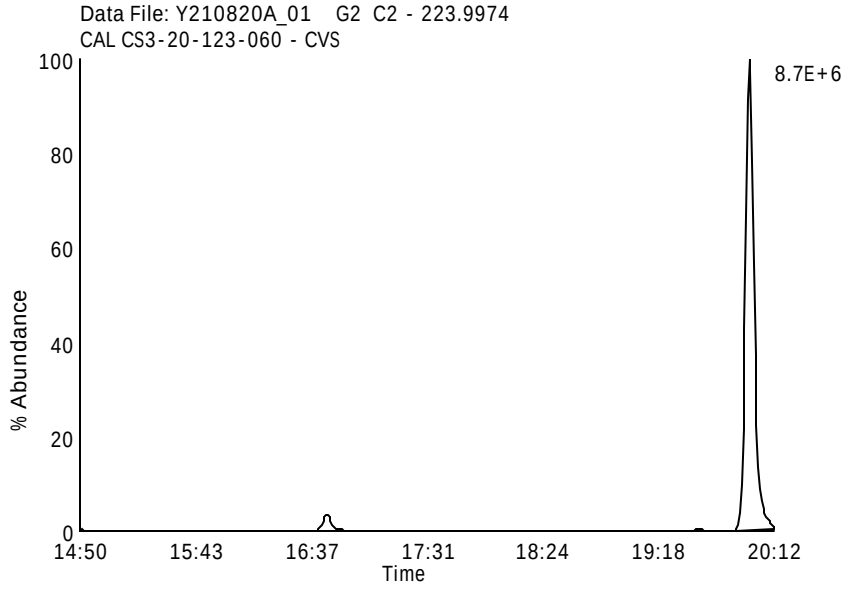
Di Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



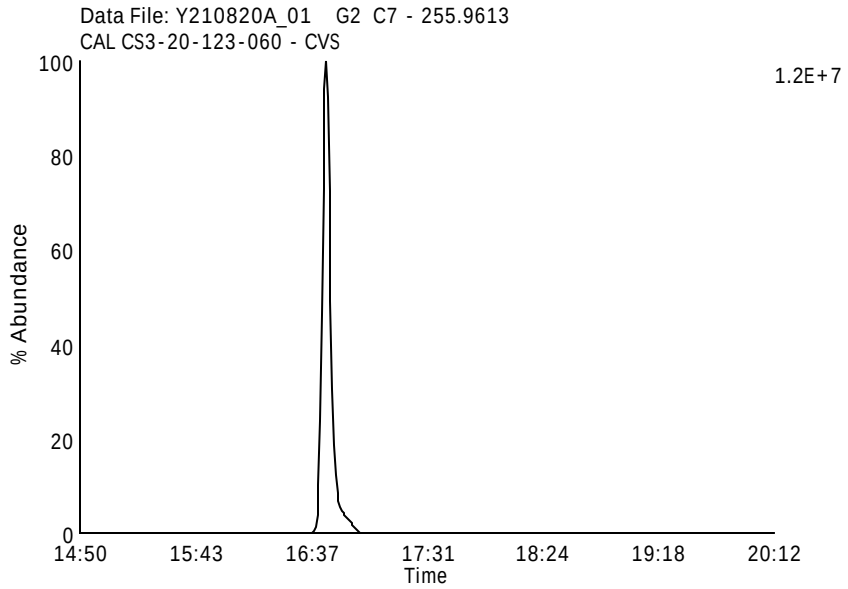


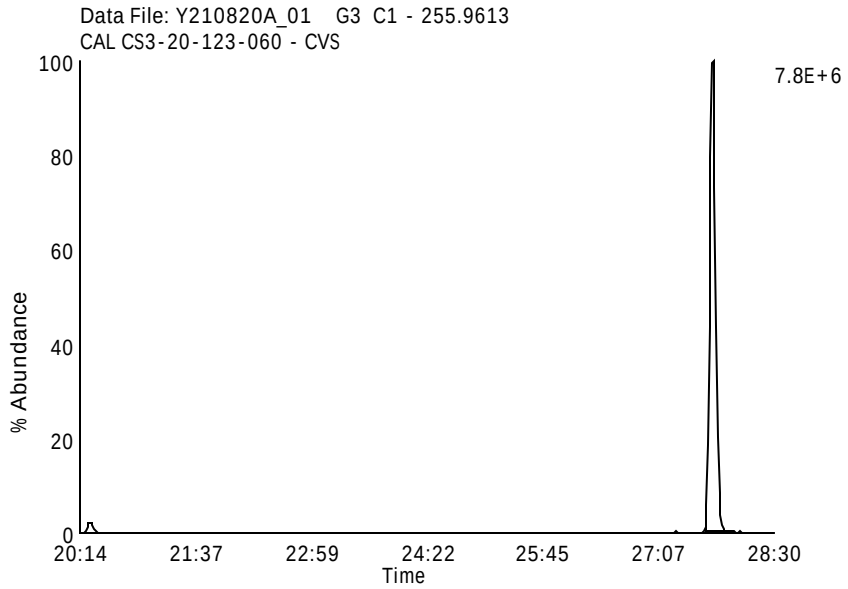


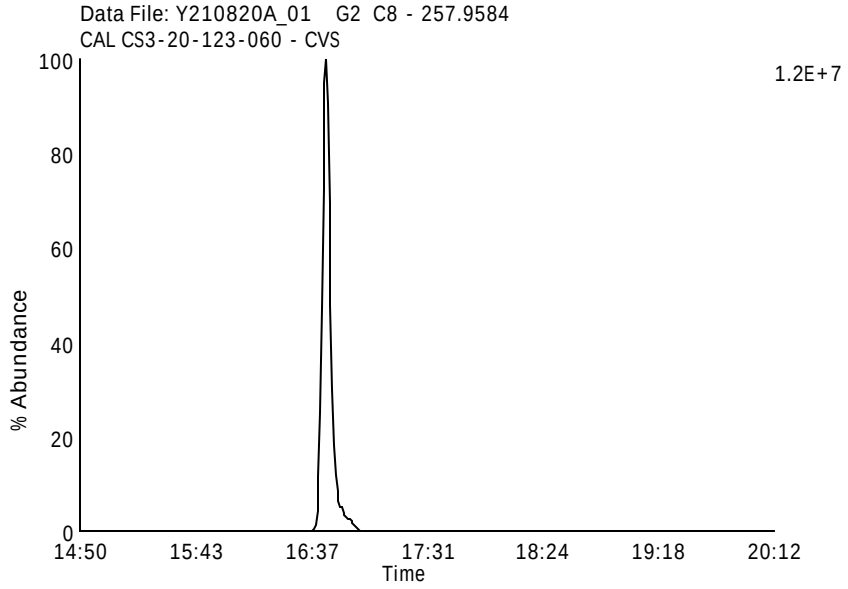


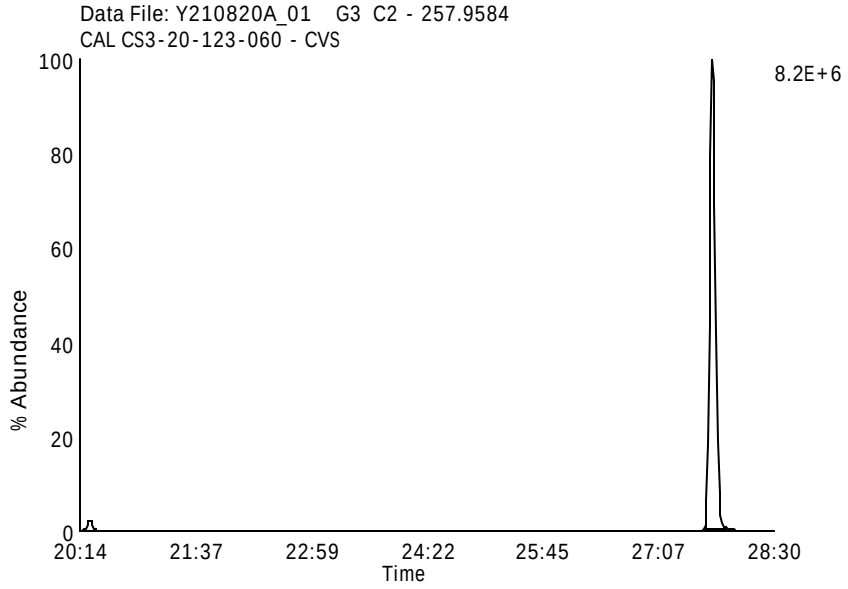
Tri Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



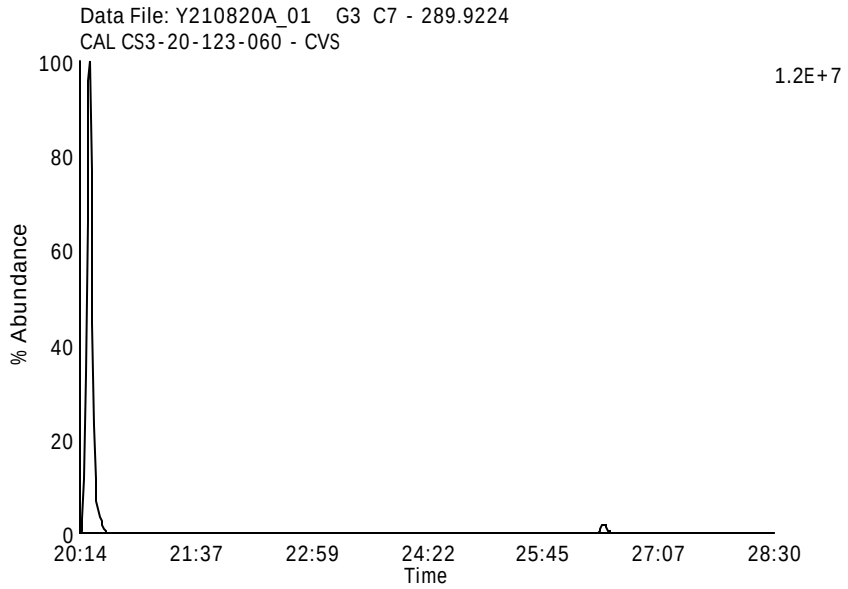


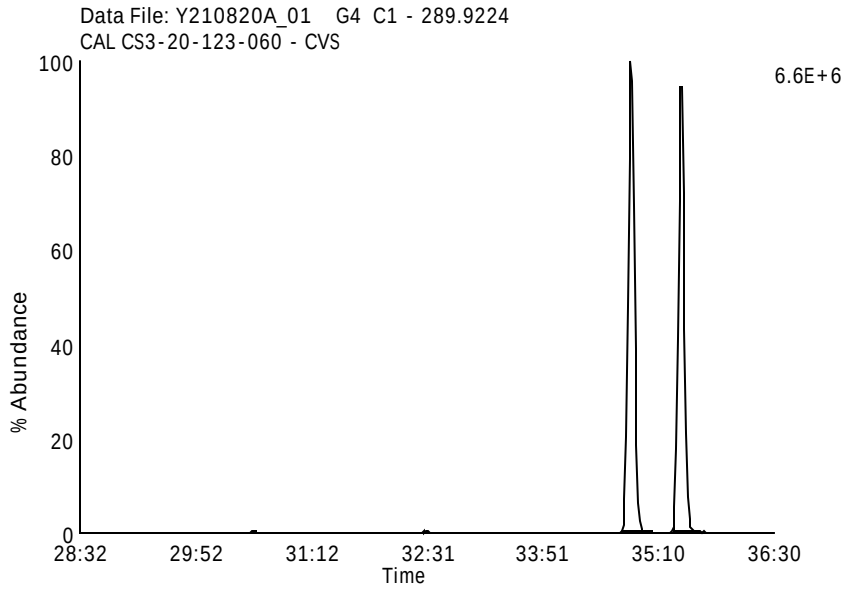


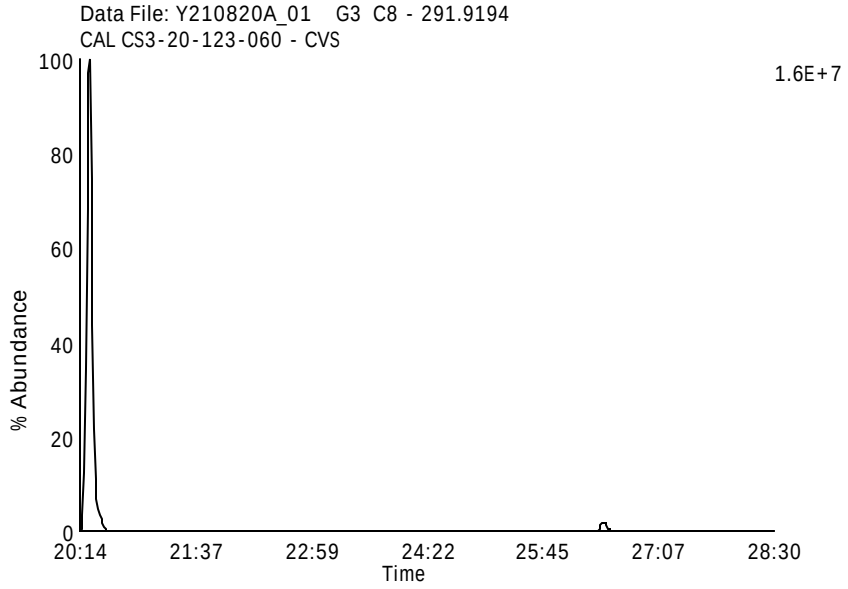


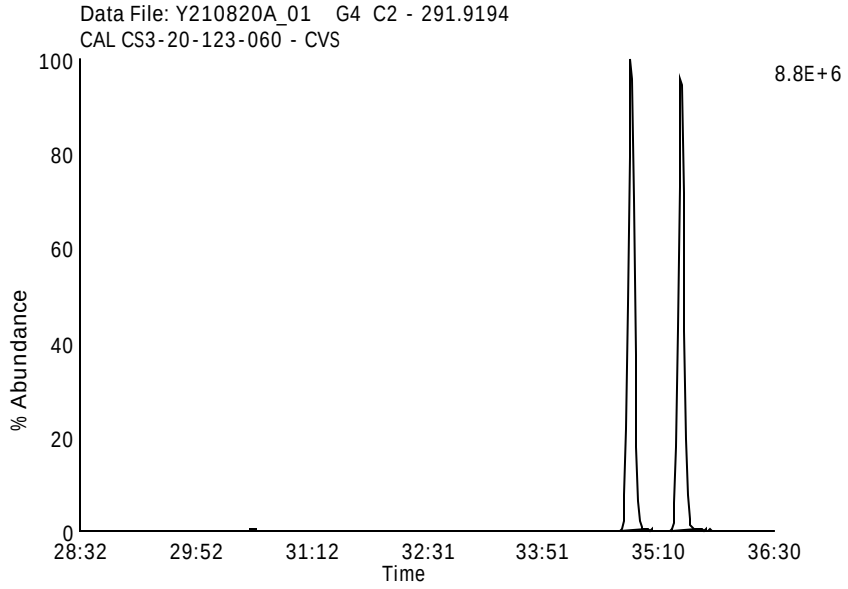
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



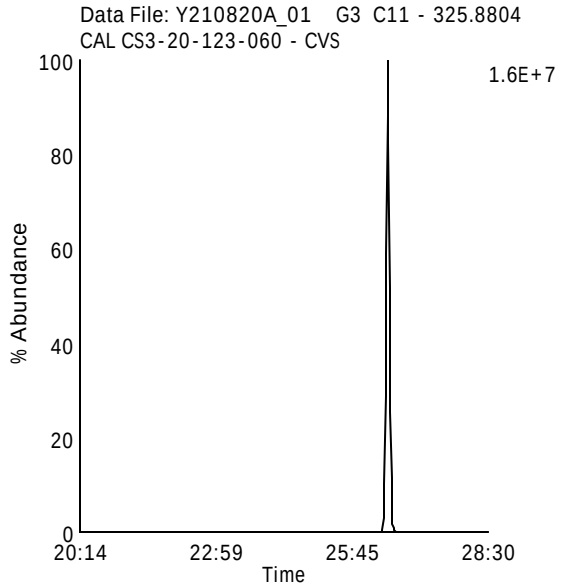


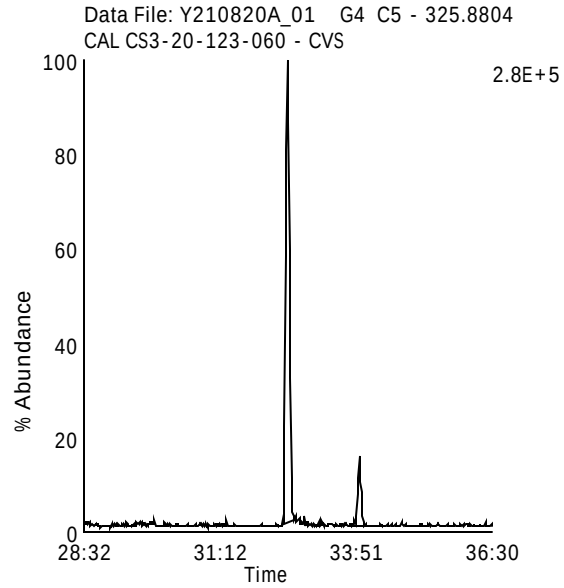


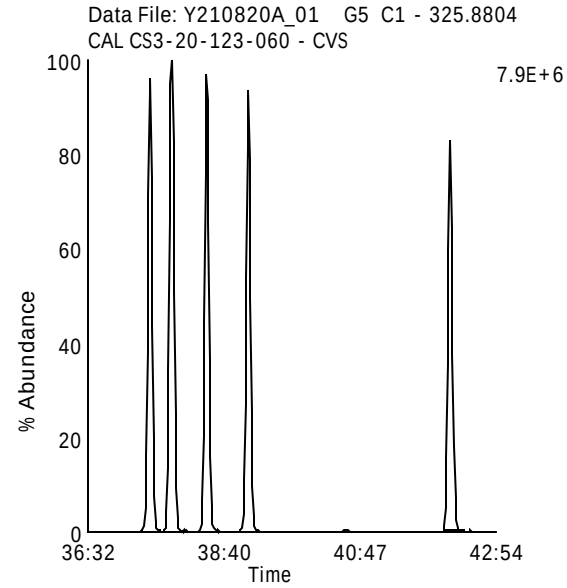


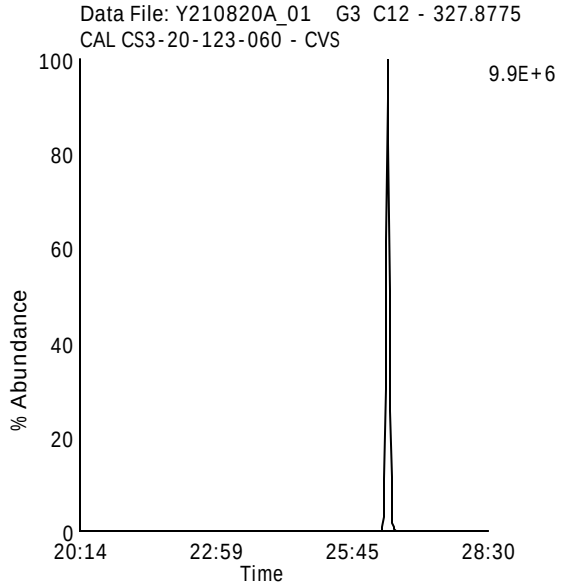
Penta Chlorinated Biphenyls

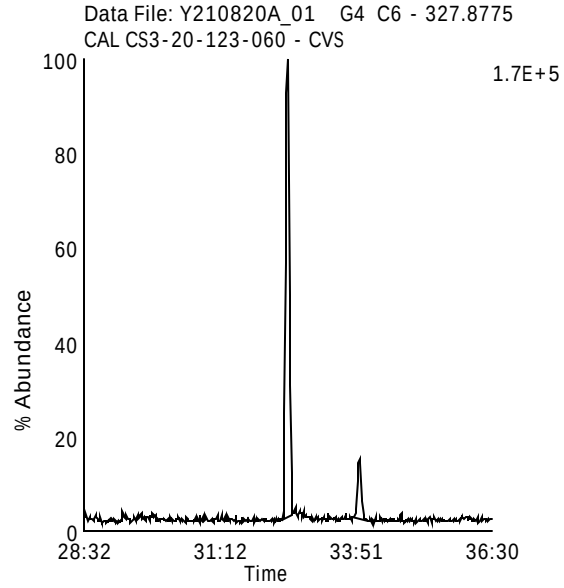
Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

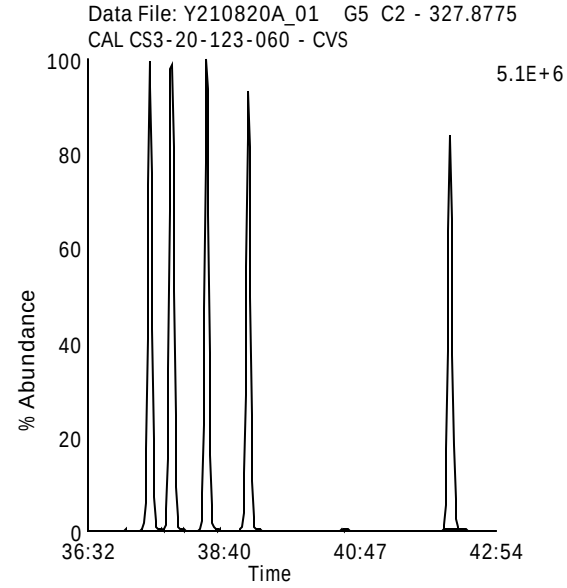










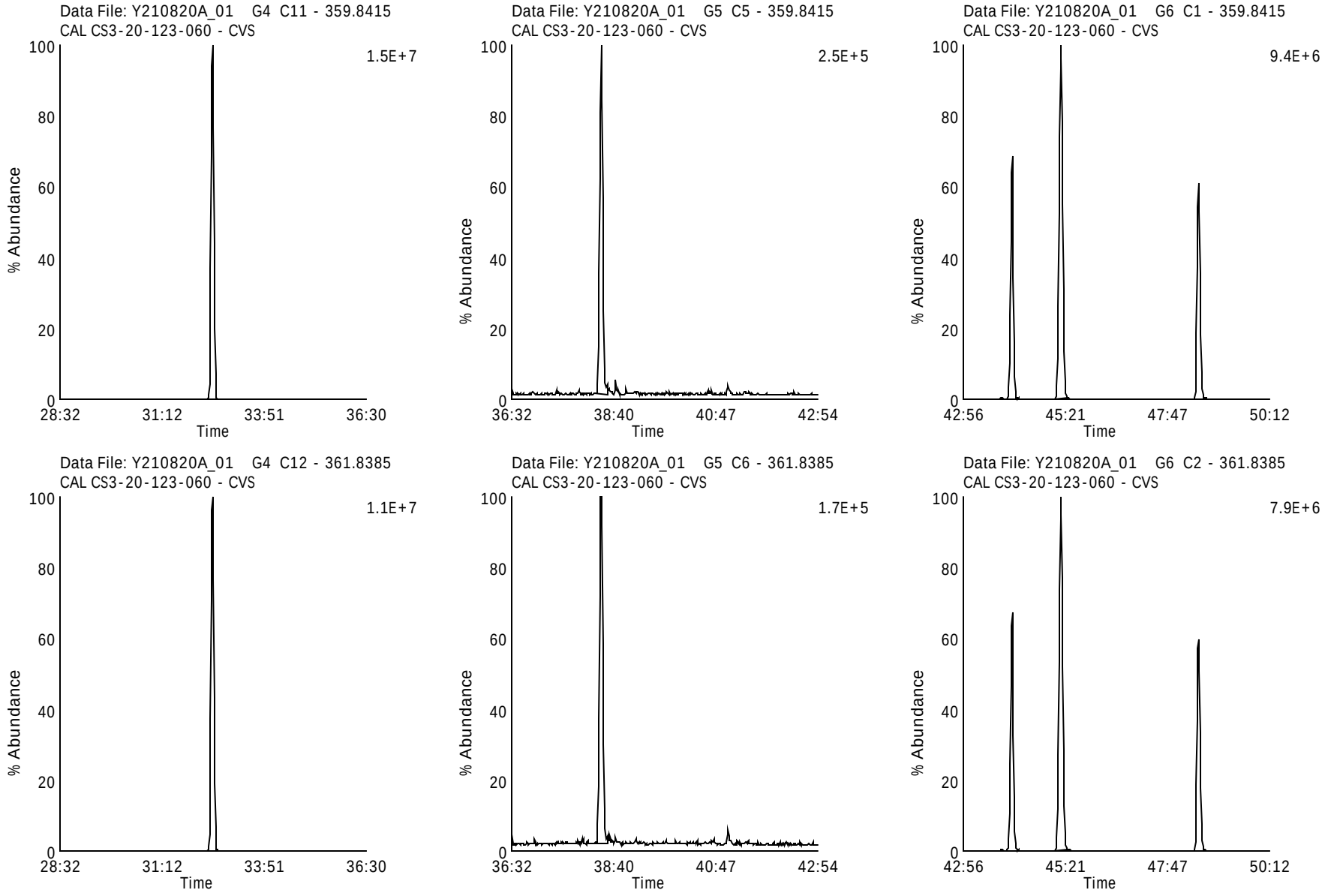


Hexa Chlorinated Biphenyls

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

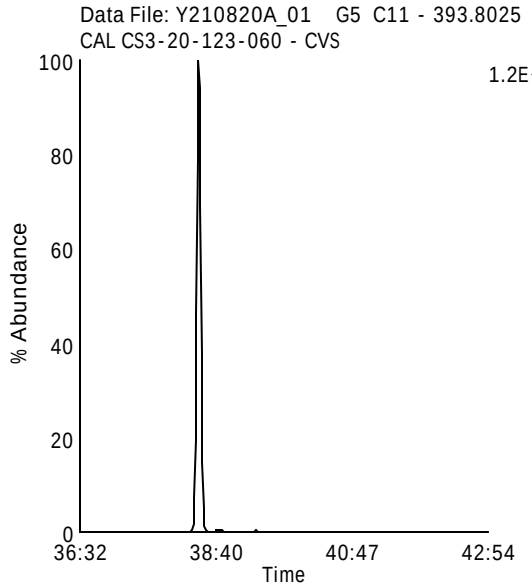
Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

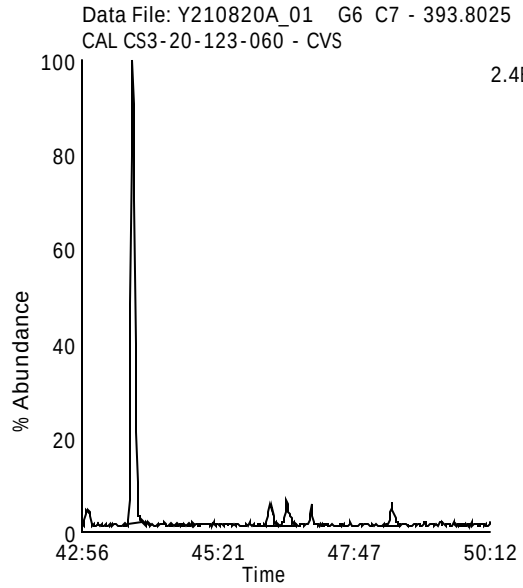
Sample Description: CAL CS3-20-123-060 - CVS

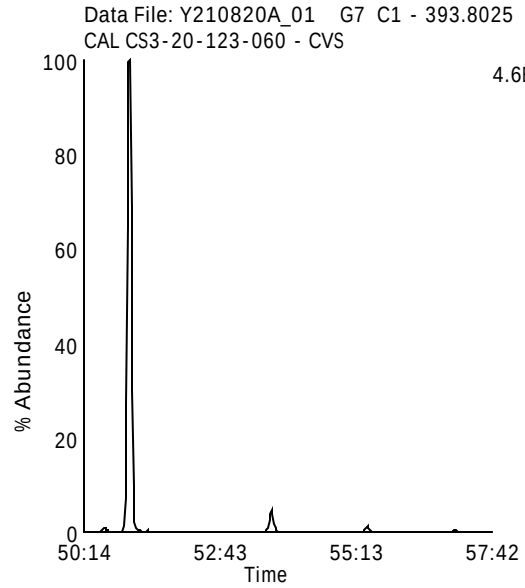


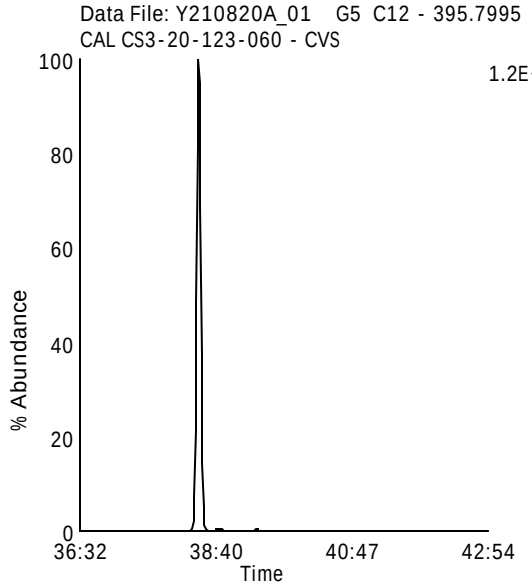
Hepta Chlorinated Biphenyls

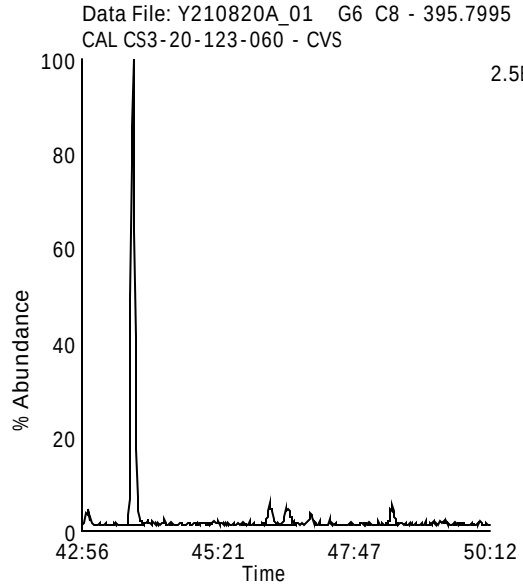
Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

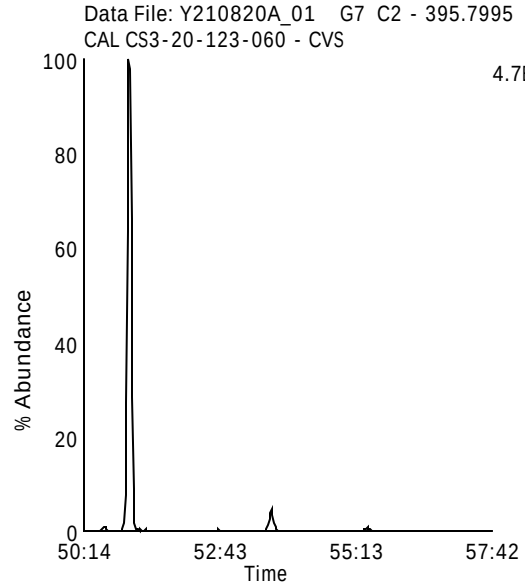






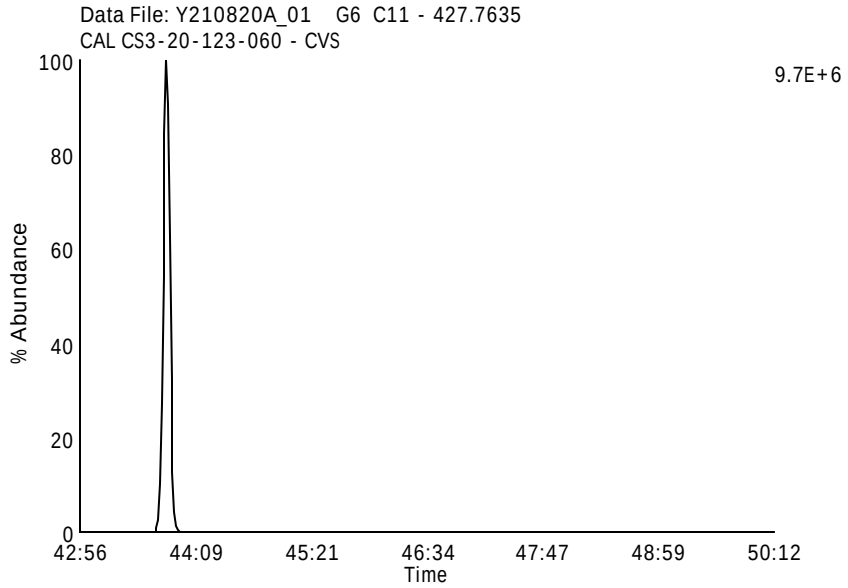


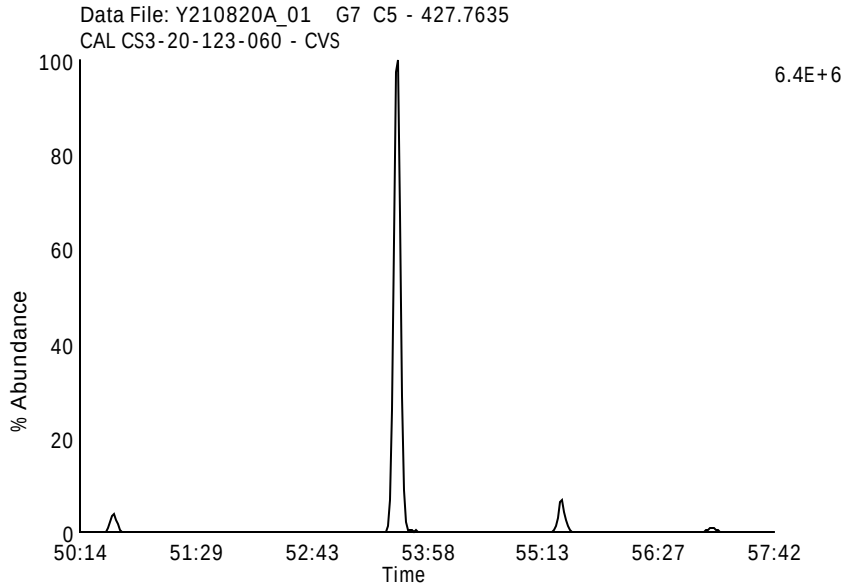


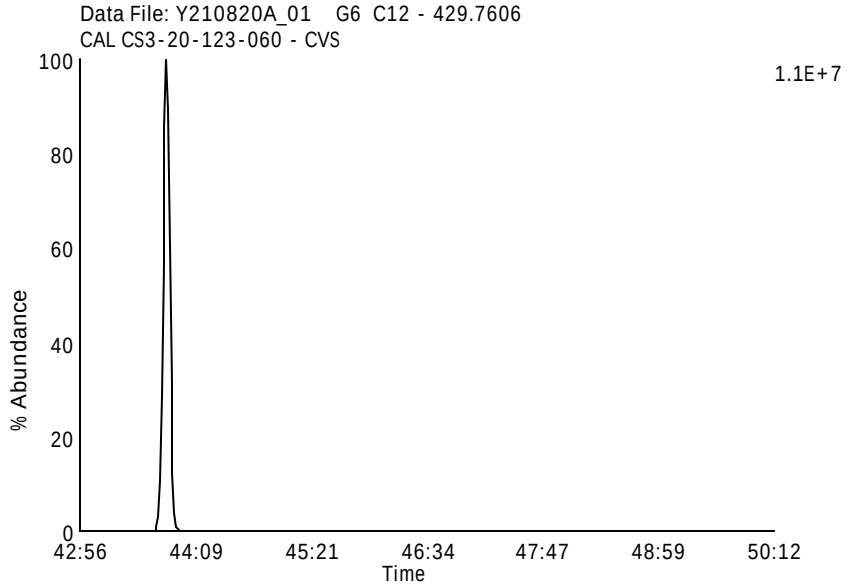


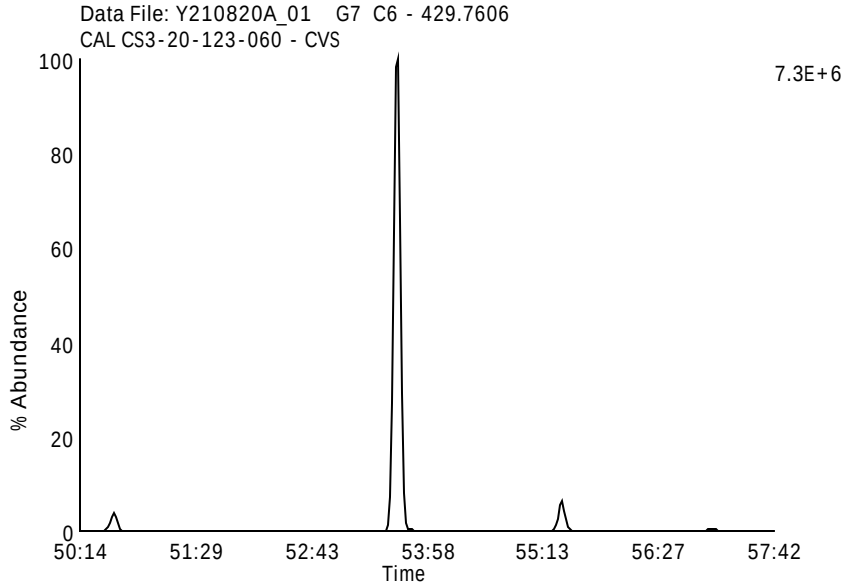
Octa Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







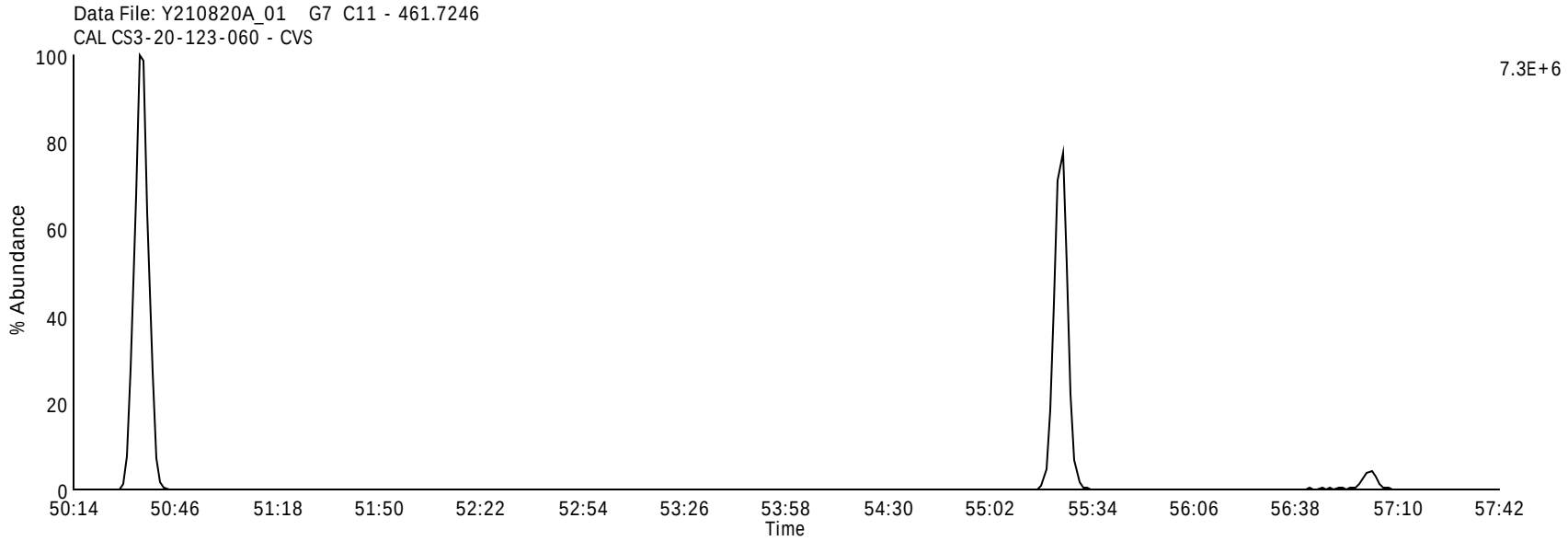


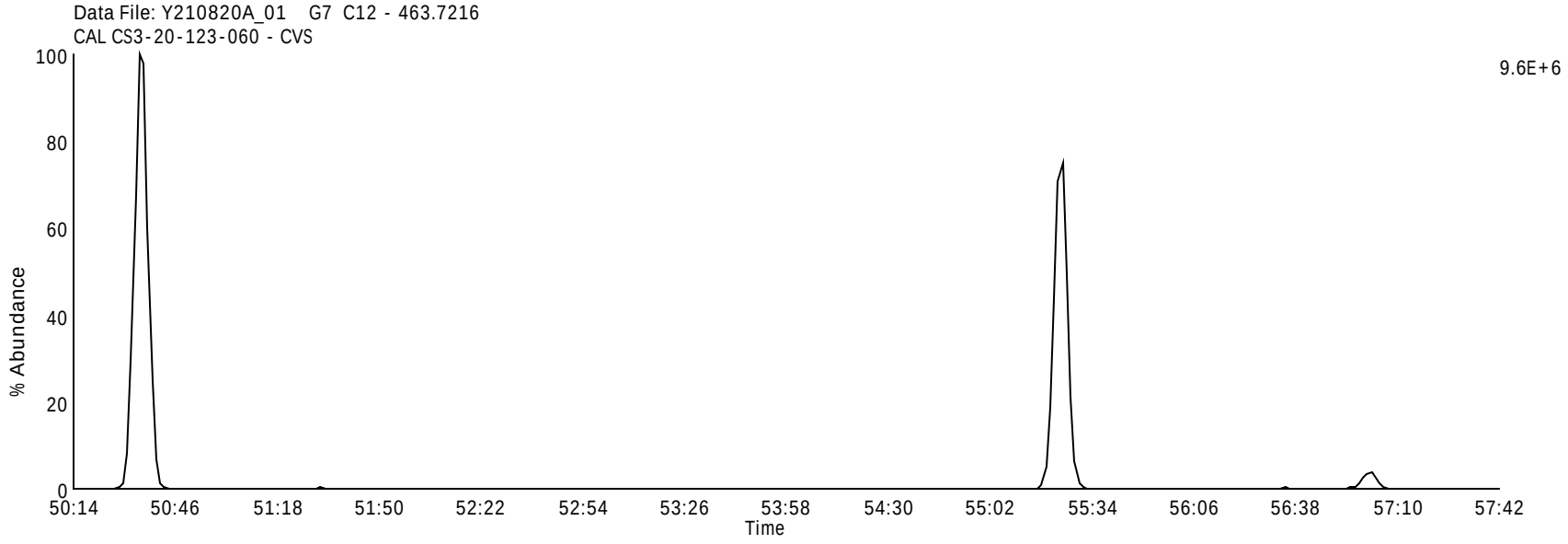
Nona Chlorinated Biphenyls

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



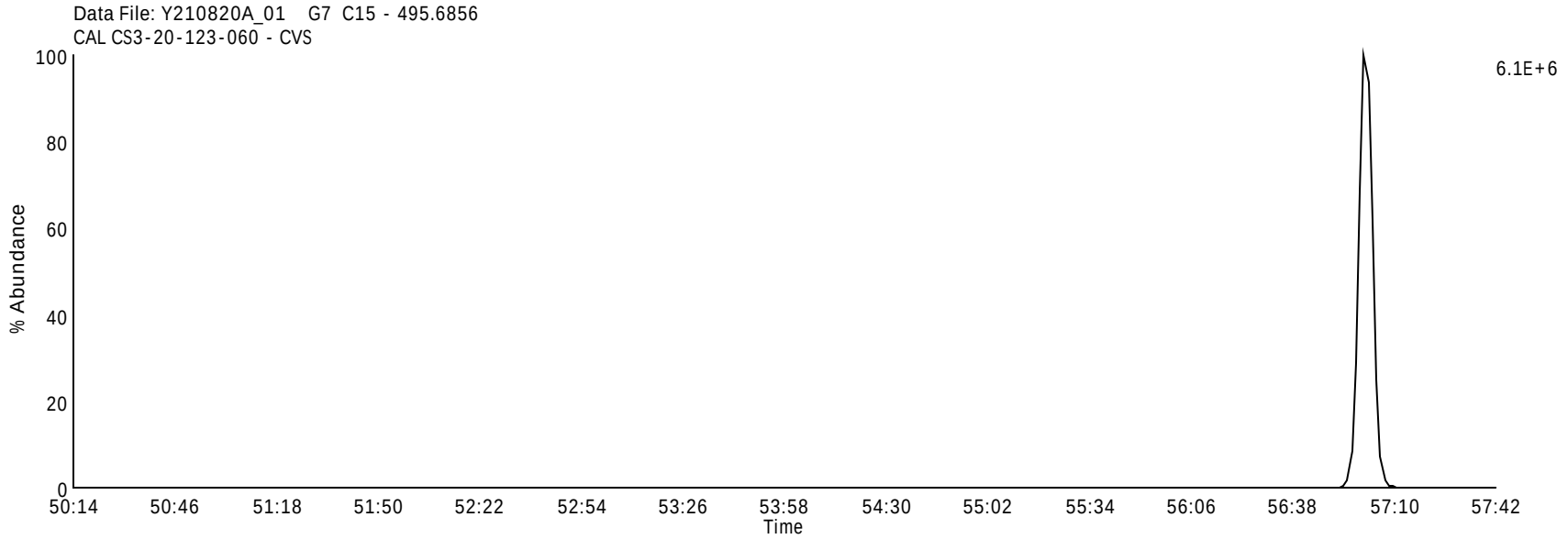


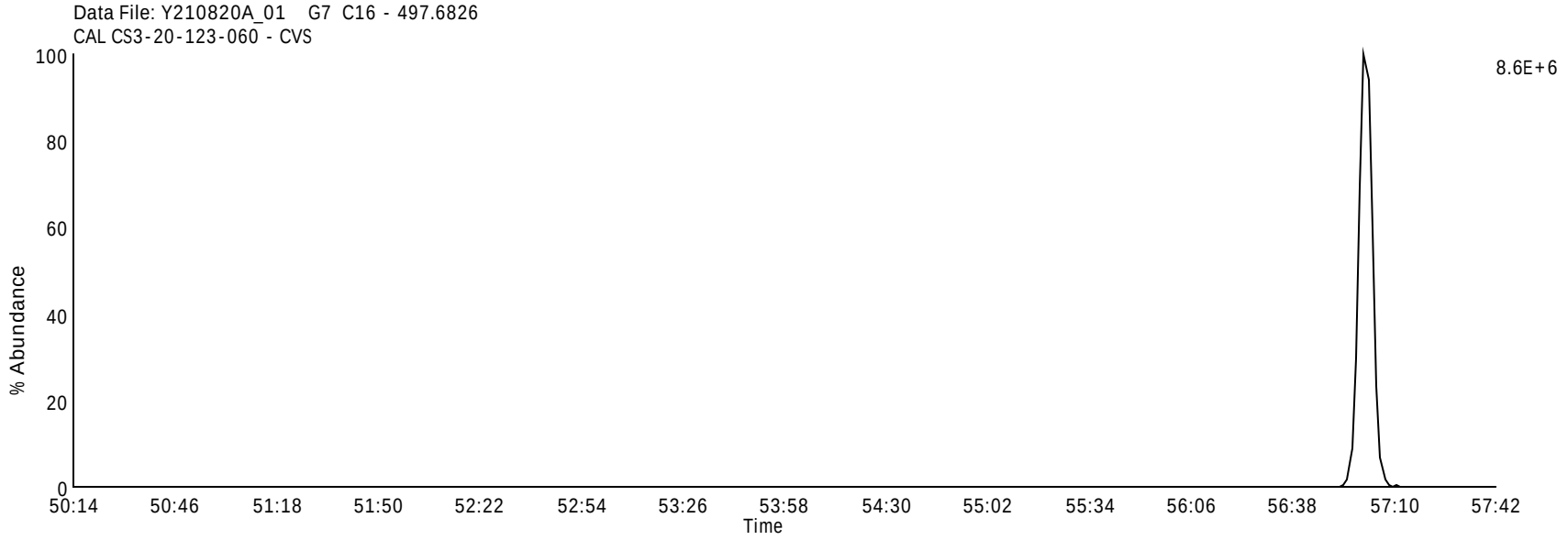
Deca Chlorinated Biphenyl

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

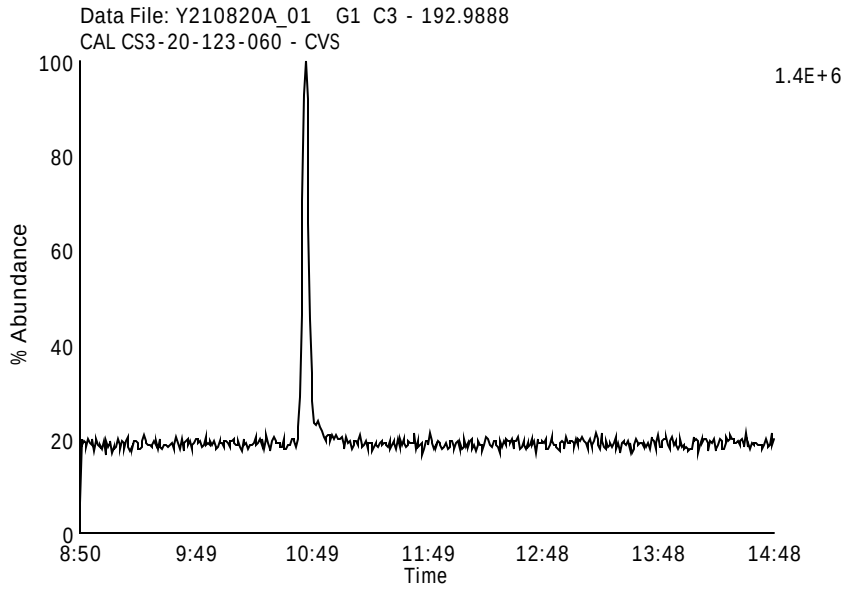
Sample Description: CAL CS3-20-123-060 - CVS

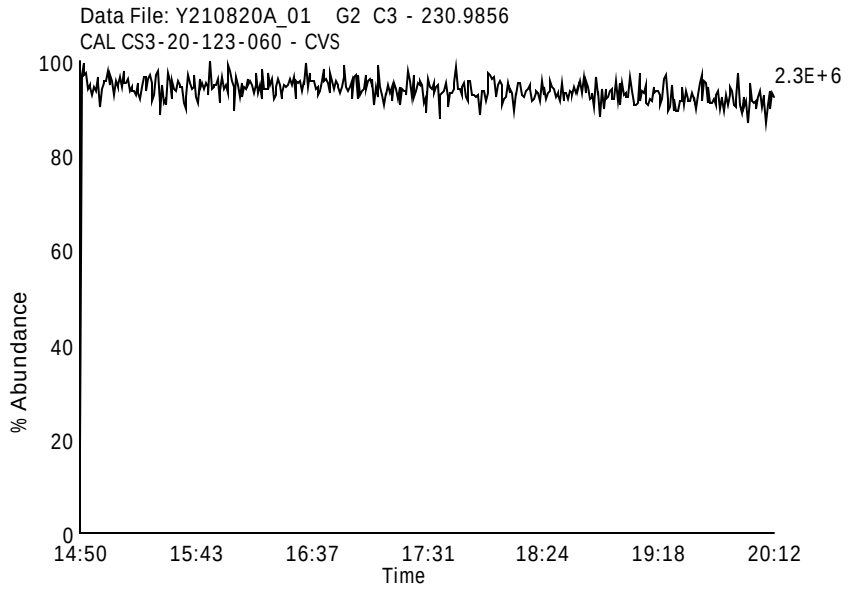


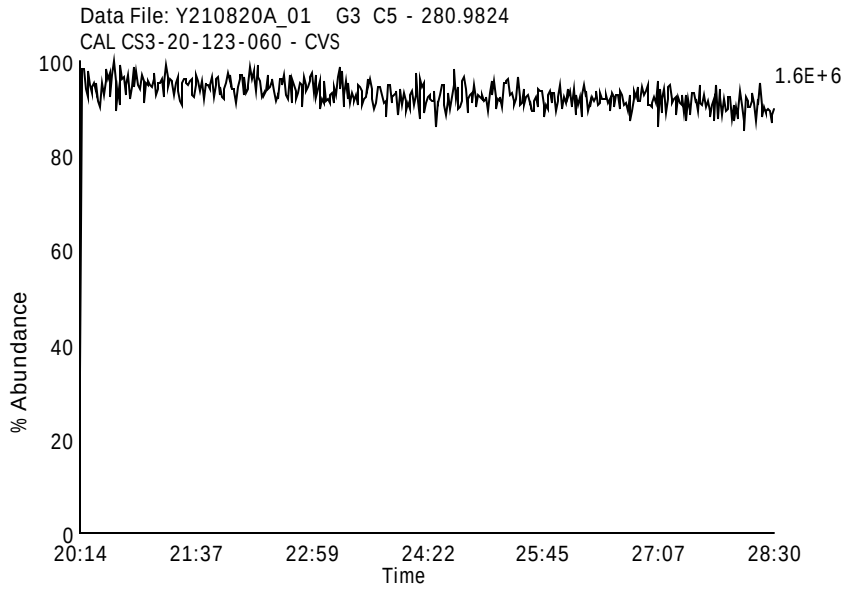


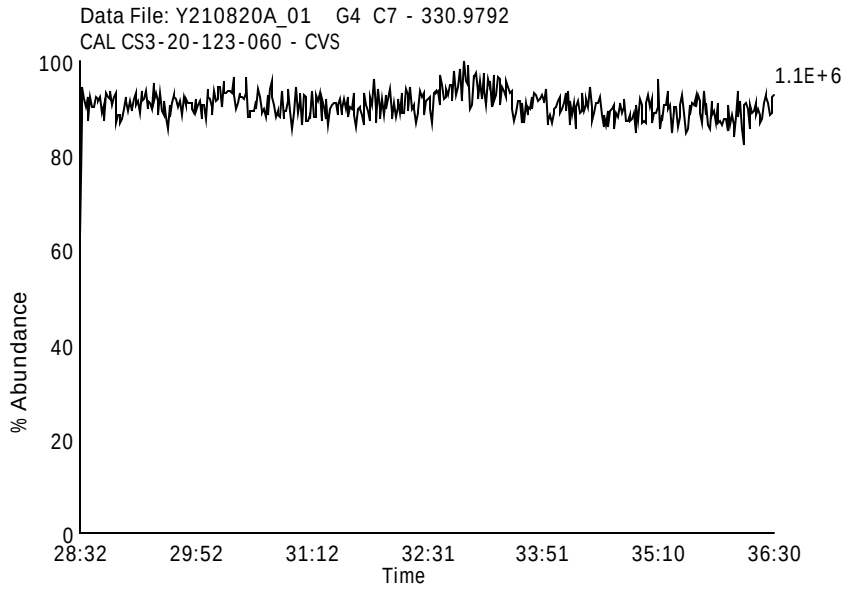
Group 1 - 4 Lock mass

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





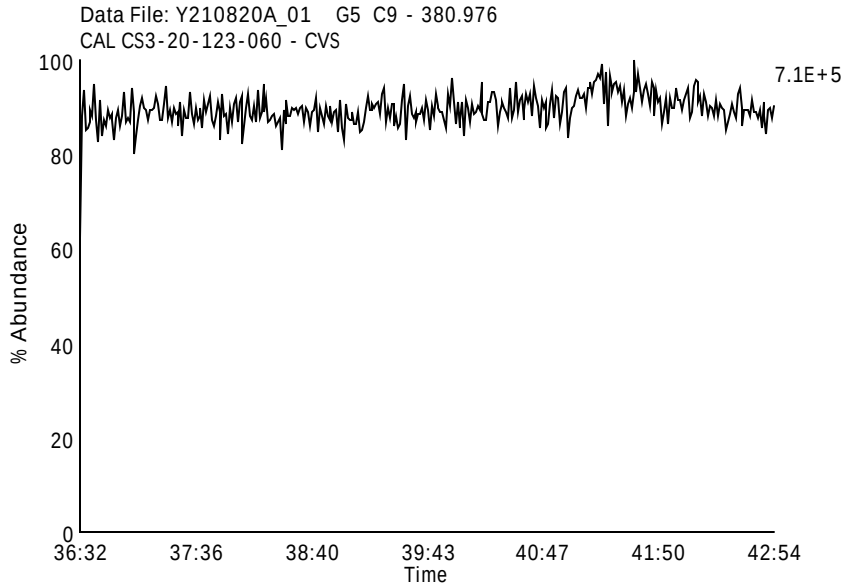


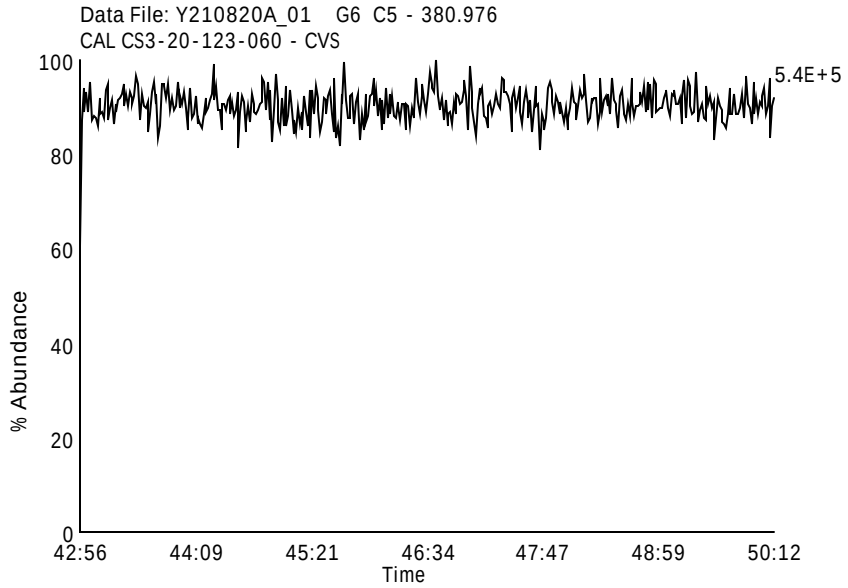


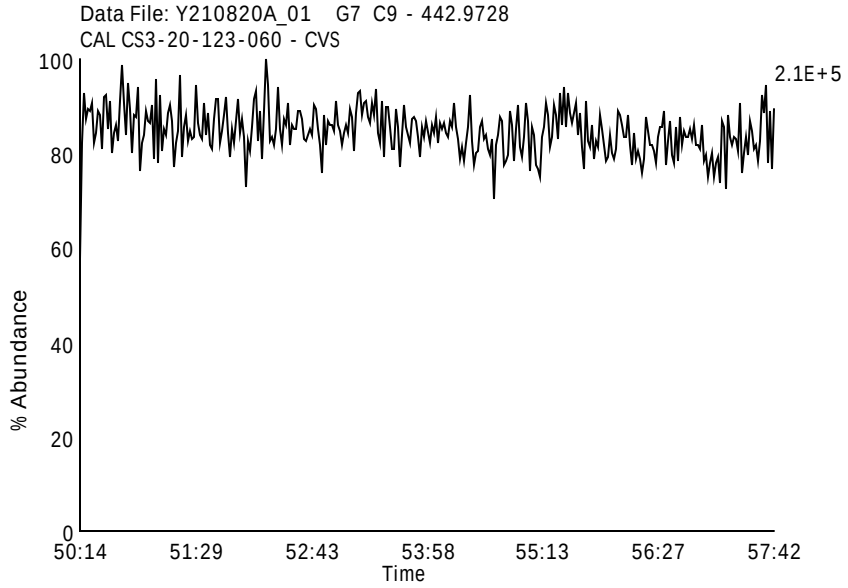
Group 5 - 7 Lock mass

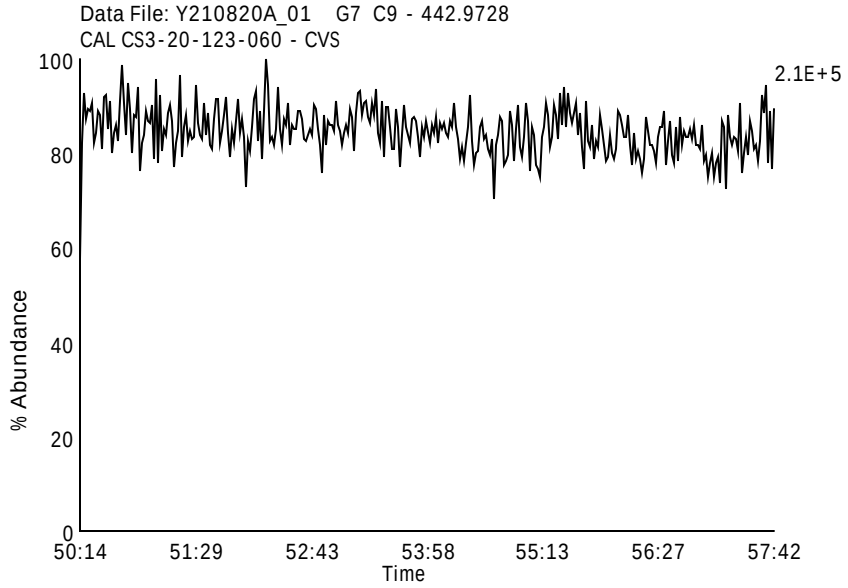
Data File Name: Y210820A_01
Date Acquired: 8/20/2021
Sample Description: CAL CS3-20-123-060 - CVS

Lab Sample ID: CS3-20-123-060
Instrument: 10MSHR12 (Y)









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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.834	0.77	51208204	66385842	
13C-3,3',4,4'-TeCB	77	35.404	0.78	51510819	65778826	
13C-2,3,3',4,4'-PeCB	105	38.998	1.54	62053684	40199072	
13C-2,3,4,4',5-PeCB	114	38.361	1.53	63364259	41331947	
13C-2,3',4,4',5-PeCB	118	37.808	1.53	66222064	43162719	
13C-2,3',4,4',5'-PeCB	123	37.472	1.53	63261741	41245986	
13C-3,3',4,4',5-PeCB	126	42.151	1.57	53825037	34264684	
13C-HxCB(156/157)	156/157	45.208	1.22	102568128	83923047	
13C-2,3',4,4',5,5'-HxCB	167	44.051	1.23	54766966	44508663	
13C-3,3',4,4',5,5'-HxCB	169	48.479	1.23	44916129	36397189	
13C-2,3,3',4,4',5,5'-HpCB	189	51.026	1.02	42127094	41118145	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.03	82906534	80731238	
13C-2,3,3',5,5'-PeCB	111	35.471	1.60	96770041	60487785	
13C-2,2',3,3',5,5',6-HpCB	178	41.447	1.08	54880980	50588888	
Recovery Standards						
13C-2,5-DiCB	9	15.349	1.54	127392779	82964986	
13C-2,2',5,5'-TeCB	52	25.405	0.80	64362200	80721712	
13C-2,2',4,5,5'-PeCB	101	32.687	1.61	76585881	47607767	
13C-2,2',3,4,4',5'-HxCB	138	40.994	1.27	64490799	50853483	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.160	0.92	38348105	41726961	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.438	0.83	501814	607875	
81		34.851	0.72	456320	635945	
105		39.032	1.61	566945	352117	
114		38.378	1.53	600972	392715	
118		37.825	1.59	644411	405832	
123		37.506	1.42	603428	424525	
126		42.168	1.49	487021	327868	
156	156/157	45.225	1.25	1035842	827301	
157	156/157	45.225	1.25	(1035842)	(827301)	
167		44.084	1.25	538218	431899	
169		48.495	1.14	427965	374978	
189		51.047	1.10	410825	372156	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.850	0.76	33891332	44310376	
13C-3,3',4,4'-TeCB	77	35.420	0.77	34260374	44451965	
13C-2,3,3',4,4'-PeCB	105	39.014	1.54	41448453	26867484	
13C-2,3,4,4',5-PeCB	114	38.360	1.53	41156130	26821258	
13C-2,3',4,4',5-PeCB	118	37.823	1.55	43913917	28293186	
13C-2,3',4,4',5'-PeCB	123	37.488	1.53	42068498	27527636	
13C-3,3',4,4',5-PeCB	126	42.166	1.53	36221472	23742934	
13C-HxCB(156/157)	156/157	45.223	1.22	67390123	55431577	
13C-2,3',4,4',5,5'-HxCB	167	44.066	1.21	35666666	29418827	
13C-3,3',4,4',5,5'-HxCB	169	48.493	1.24	30688196	24842885	
13C-2,3,3',4,4',5,5'-HpCB	189	51.044	1.02	28764321	28122685	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.01	53600329	52989259	
13C-2,3,3',5,5'-PeCB	111	35.470	1.60	63084152	39378340	
13C-2,2',3,3',5,5',6-HpCB	178	41.462	1.09	35842158	32832358	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.53	83452779	54466090	
13C-2,2',5,5'-TeCB	52	25.404	0.80	42121385	52745355	
13C-2,2',4,5,5'-PeCB	101	32.687	1.59	49762849	31201326	
13C-2,2',3,4,4',5'-HxCB	138	40.992	1.26	41685419	33048264	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.156	0.91	25528617	28012392	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.437	0.74	1519692	2060098	
81		34.867	0.74	1604994	2175256	
105		39.047	1.54	1922768	1250991	
114		38.393	1.41	1876437	1335265	
118		37.840	1.47	2033118	1378641	
123		37.505	1.47	1924699	1306566	
126		42.183	1.47	1609066	1094892	
156	156/157	45.240	1.19	3194335	2677855	
157	156/157	45.240	1.19	(3194335)	(2677855)	
167		44.083	1.18	1689220	1433831	
169		48.510	1.21	1514546	1248104	
189		51.066	1.00	1288821	1289718	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.848	0.76	15482827	20415180	
13C-3,3',4,4'-TeCB	77	35.419	0.80	16235531	20406222	
13C-2,3,3',4,4'-PeCB	105	39.029	1.50	17530979	11682823	
13C-2,3,4,4',5-PeCB	114	38.375	1.51	18054772	11978158	
13C-2,3',4,4',5-PeCB	118	37.822	1.52	19150985	12610753	
13C-2,3',4,4',5'-PeCB	123	37.486	1.55	18627896	12055363	
13C-3,3',4,4',5-PeCB	126	42.165	1.54	15761201	10258884	
13C-HxCB(156/157)	156/157	45.222	1.23	27885801	22733884	
13C-2,3',4,4',5,5'-HxCB	167	44.065	1.21	15205904	12550764	
13C-3,3',4,4',5,5'-HxCB	169	48.508	1.22	12578703	10327607	
13C-2,3,3',4,4',5,5'-HpCB	189	51.043	1.03	11578654	11263039	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.425	1.03	26265414	25481217	
13C-2,3,3',5,5'-PeCB	111	35.486	1.61	29126575	18044938	
13C-2,2',3,3',5,5',6-HpCB	178	41.460	1.07	16153584	15031324	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.55	40918082	26392839	
13C-2,2',5,5'-TeCB	52	25.403	0.82	20417393	24823362	
13C-2,2',4,5,5'-PeCB	101	32.685	1.59	23106412	14493249	
13C-2,2',3,4,4',5'-HxCB	138	41.008	1.25	18284670	14647807	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.155	0.90	10479666	11607480	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

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Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.452	0.75	6908630	9157518	
81		34.865	0.76	7186537	9501154	
105		39.046	1.53	7946966	5189522	
114		38.392	1.50	8298330	5548139	
118		37.855	1.52	8853400	5831352	
123		37.520	1.49	8417688	5655194	
126		42.181	1.53	7036829	4607937	
156	156/157	45.255	1.22	13016131	10671543	
157	156/157	45.255	1.22	(13016131)	(10671543)	
167		44.098	1.25	7020713	5612988	
169		48.525	1.21	5836654	4837214	
189		51.064	0.99	4922715	4958579	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.832	0.77	34210797	44266996	
13C-3,3',4,4'-TeCB	77	35.402	0.79	35395450	44823730	
13C-2,3,3',4,4'-PeCB	105	38.995	1.51	40728648	26923537	
13C-2,3,4,4',5-PeCB	114	38.357	1.55	42745928	27575415	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44657518	28840602	
13C-2,3',4,4',5'-PeCB	123	37.469	1.53	43022555	28210031	
13C-3,3',4,4',5-PeCB	126	42.147	1.53	36577625	23922117	
13C-HxCB(156/157)	156/157	45.203	1.23	69653134	56819445	
13C-2,3',4,4',5,5'-HxCB	167	44.046	1.25	36559258	29211015	
13C-3,3',4,4',5,5'-HxCB	169	48.472	1.24	30651857	24792300	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.03	28316147	27496668	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	55689198	54423067	
13C-2,3,3',5,5'-PeCB	111	35.452	1.60	64883754	40430467	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.07	36247946	33766626	
Recovery Standards						
13C-2,5-DiCB	9	15.337	1.53	84686939	55315081	
13C-2,2',5,5'-TeCB	52	25.387	0.80	42416046	52980659	
13C-2,2',4,5,5'-PeCB	101	32.668	1.62	50281923	31100077	
13C-2,2',3,4,4',5'-HxCB	138	40.973	1.25	41920878	33447291	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.126	0.90	24833766	27679627	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.418	0.77	122699703	159707089	
81		34.848	0.75	125942207	167138424	
105		39.028	1.52	143263175	94554749	
114		38.374	1.51	154363717	102247755	
118		37.821	1.52	158518382	104050458	
123		37.486	1.51	153580769	101647751	
126		42.163	1.50	127752628	85082410	
156	156/157	45.220	1.23	254098813	207052129	
157	156/157	45.220	1.23	(254098813)	(207052129)	
167		44.063	1.22	131084207	107816581	
169		48.489	1.21	109583957	90325860	
189		51.057	1.01	98180269	97375448	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.831	0.77	34784792	45413028	
13C-3,3',4,4'-TeCB	77	35.401	0.79	35556353	44802460	
13C-2,3,3',4,4'-PeCB	105	39.011	1.54	42719780	27666457	
13C-2,3,4,4',5-PeCB	114	38.357	1.56	42911393	27511946	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44868121	28881141	
13C-2,3',4,4',5'-PeCB	123	37.468	1.51	42837264	28287898	
13C-3,3',4,4',5-PeCB	126	42.146	1.55	37305170	24073584	
13C-HxCB(156/157)	156/157	45.219	1.25	71784489	57574094	
13C-2,3',4,4',5,5'-HxCB	167	44.045	1.24	36763440	29578303	
13C-3,3',4,4',5,5'-HxCB	169	48.488	1.23	31756784	25737966	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.04	29222728	28169942	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	51908930	51091675	
13C-2,3,3',5,5'-PeCB	111	35.468	1.60	64649598	40423708	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.08	35851672	33086489	
Recovery Standards						
13C-2,5-DiCB	9	15.325	1.52	83143628	54673112	
13C-2,2',5,5'-TeCB	52	25.386	0.80	41733434	52403278	
13C-2,2',4,5,5'-PeCB	101	32.668	1.61	49712591	30937614	
13C-2,2',3,4,4',5'-HxCB	138	40.989	1.27	41161616	32464857	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.146	0.92	24949098	27236268	

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.417	0.76	616806932	810414208	
81		34.847	0.76	639607623	840095356	
105		39.027	1.54	745301804	485163987	
114		38.374	1.52	780283922	512899091	
118		37.837	1.53	803499802	526013471	
123		37.502	1.52	785601740	516404877	
126		42.162	1.52	649914791	428105060	
156	156/157	45.236	1.22	1286847987	1051857892	
157	156/157	45.236	1.22	(1286847987)	(1051857892)	
167		44.079	1.22	653652175	535863549	
169		48.505	1.22	557599158	455624388	
189		51.056	1.01	503772747	500470805	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	209 Mix	Injected By	
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_02	GC Column ID	261111-02
Analyzed	08/20/2021 02:28	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.77	27388399	35459246	
13C-3,3',4,4'-TeCB	77	35.437	0.78	28673312	36791379	
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	31003663	20178219	
13C-2,3,4,4',5-PeCB	114	38.393	1.53	32934160	21510584	
13C-2,3',4,4',5-PeCB	118	37.840	1.53	33874353	22103326	
13C-2,3',4,4',5'-PeCB	123	37.505	1.51	32317667	21413559	
13C-3,3',4,4',5-PeCB	126	42.183	1.52	28241493	18556574	
13C-HxCB(156/157)	156/157	45.240	1.23	53282920	43476260	
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.21	27120979	22377641	
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.20	23954861	20005266	
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.03	22070617	21524436	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.02	43792180	43049957	
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	50722765	31920193	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	32251963	29363461	
Recovery Standards						
13C-2,5-DiCB	9	15.373	1.53	70433685	46050062	
13C-2,2',5,5'-TeCB	52	25.421	0.80	36850449	46243831	
13C-2,2',4,5,5'-PeCB	101	32.704	1.61	43369674	26895943	
13C-2,2',3,4,4',5'-HxCB	138	41.026	1.27	36671841	28817325	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.90	20679855	23049402	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	209 Mix	Injected By	
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_02	GC Column ID	261111-02
Analyzed	08/20/2021 02:28	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.454	0.75	12702171	16896524	
81		34.883	0.77	13999102	18283601	
105		39.064	1.50	15647775	10427207	
114		38.410	1.52	16377594	10784769	
118		37.857	1.52	16508769	10841392	
123		37.521	1.49	14510832	9741275	
126		42.200	1.50	13595892	9068762	
156	156/157	45.257	1.19	26531613	22239074	
157	156/157	45.257	1.19	(26531613)	(22239074)	
167		44.100	1.20	14390320	12017694	
169		48.544	1.23	12565403	10252781	
189		51.088	1.03	10369758	10088459	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_01	GC Column ID	261111-02
Analyzed	08/20/2021 01:29	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.850	0.76	72771551	95397382	
13C-3,3',4,4'-TeCB	77	35.421	0.77	75201157	97229019	
13C-2,3,3',4,4'-PeCB	105	39.014	1.53	84006159	54867531	
13C-2,3,4,4',5-PeCB	114	38.377	1.54	85964262	55816573	
13C-2,3',4,4',5-PeCB	118	37.824	1.54	90003577	58529307	
13C-2,3',4,4',5'-PeCB	123	37.488	1.51	85642759	56633481	
13C-3,3',4,4',5-PeCB	126	42.167	1.53	77817184	50830120	
13C-HxCB(156/157)	156/157	45.240	1.22	139846337	114211546	
13C-2,3',4,4',5,5'-HxCB	167	44.067	1.23	72135101	58843477	
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.22	64871448	52967655	
13C-2,3,3',4,4',5,5'-HpCB	189	51.045	1.03	58266830	56696453	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.01	114751036	113560823	
13C-2,3,3',5,5'-PeCB	111	35.487	1.58	144813545	91512703	
13C-2,2',3,3',5,5',6-HpCB	178	41.462	1.09	84499191	77640712	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.53	180519682	118225495	
13C-2,2',5,5'-TeCB	52	25.405	0.80	93868601	116934252	
13C-2,2',4,5,5'-PeCB	101	32.687	1.61	116377826	72214984	
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.25	89463146	71588051	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.157	0.89	53203600	59496271	

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Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_01	GC Column ID	261111-02
Analyzed	08/20/2021 01:29	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.454	0.75	31243535	41861511	
81		34.867	0.75	32419641	43026817	
105		39.048	1.52	35234157	23238211	
114		38.394	1.50	37203351	24817323	
118		37.857	1.53	38472725	25088191	
123		37.522	1.52	37235907	24573774	
126		42.200	1.51	32940808	21801753	
156	156/157	45.257	1.21	61176841	50760771	
157	156/157	45.257	1.21	(61176841)	(50760771)	
167		44.100	1.20	31375207	26039119	
169		48.527	1.20	28291481	23652894	
189		51.088	1.01	24843113	24540052	

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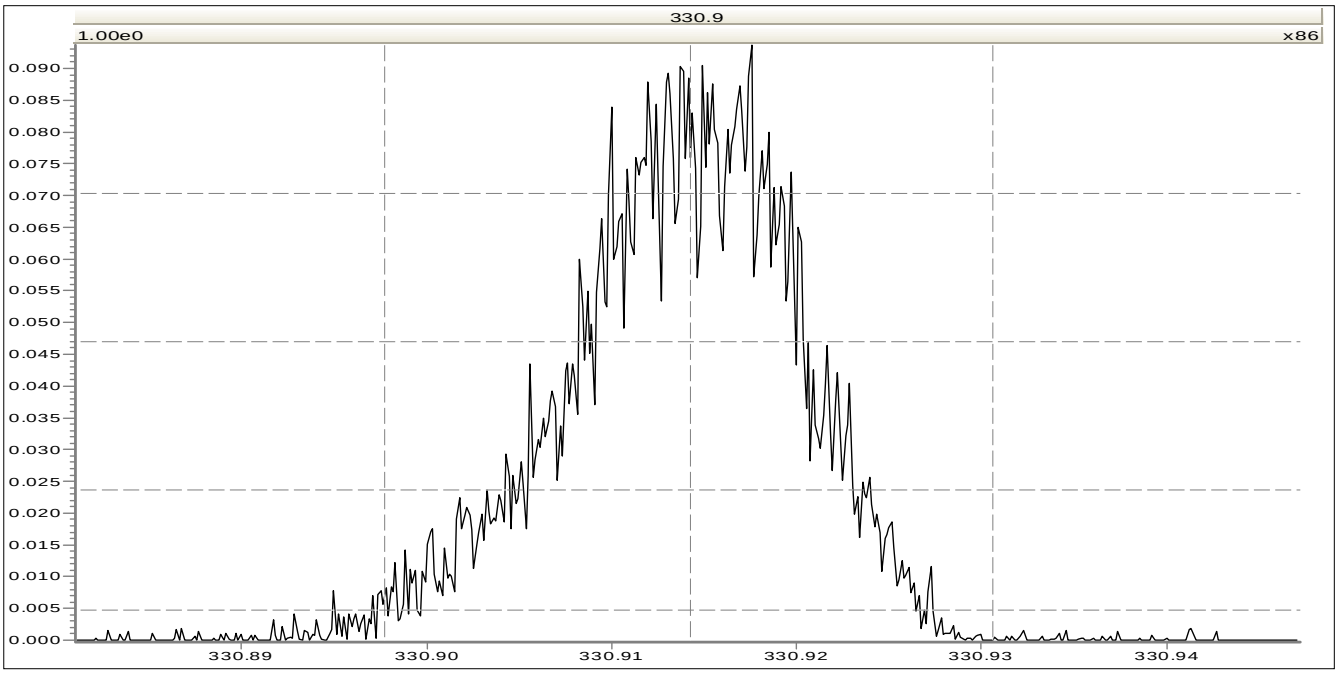

Source (EI+)

Ion Repeller (V)	-9.96
Focus 1	843
Beam Centre	37.3
Focus 2	4272
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-101.7
Z Deflect 1	-12.9
Z Deflect 2	-3.9
Z Focus 2	2338
Z Focus 3	0
Z Deflect 3	23.4
Y Focus	3492
Rotate 2	5.0
Curve 2	-4.1
Curve 3	0.8
Rotate 3	-40.5
Rotate 4	1.2
V Acc (V)	6495.96
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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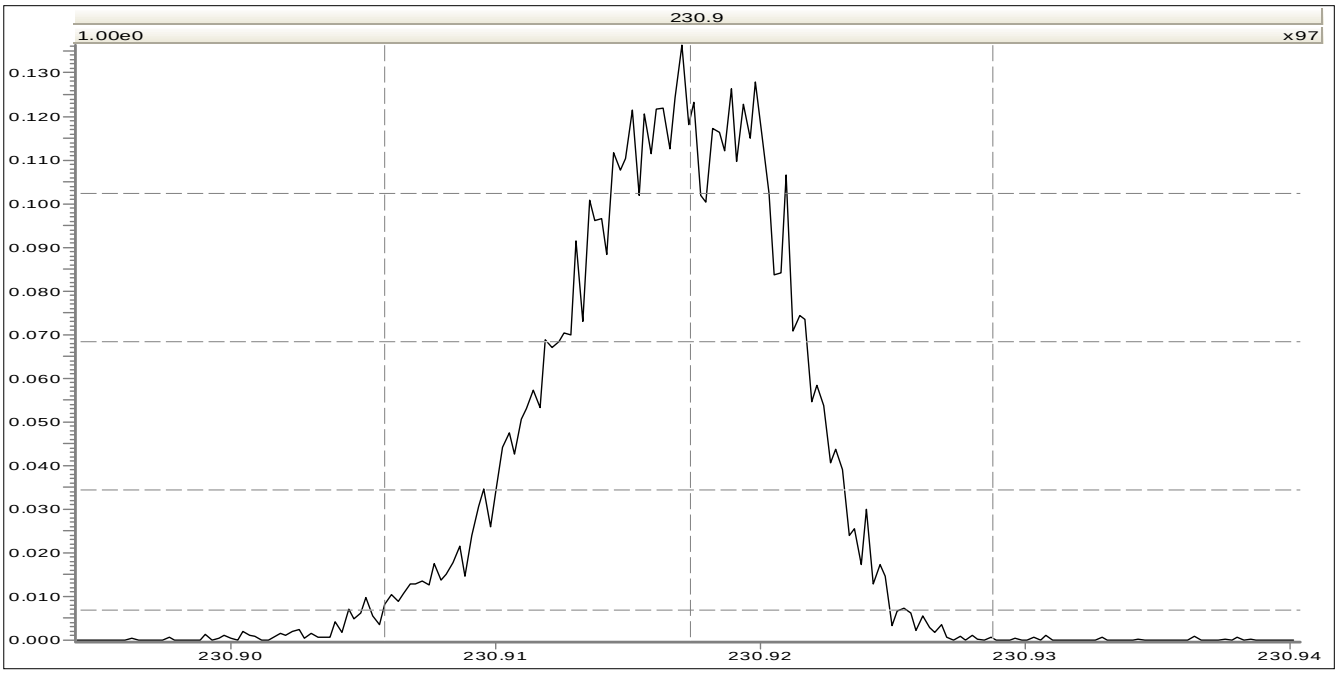

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.74
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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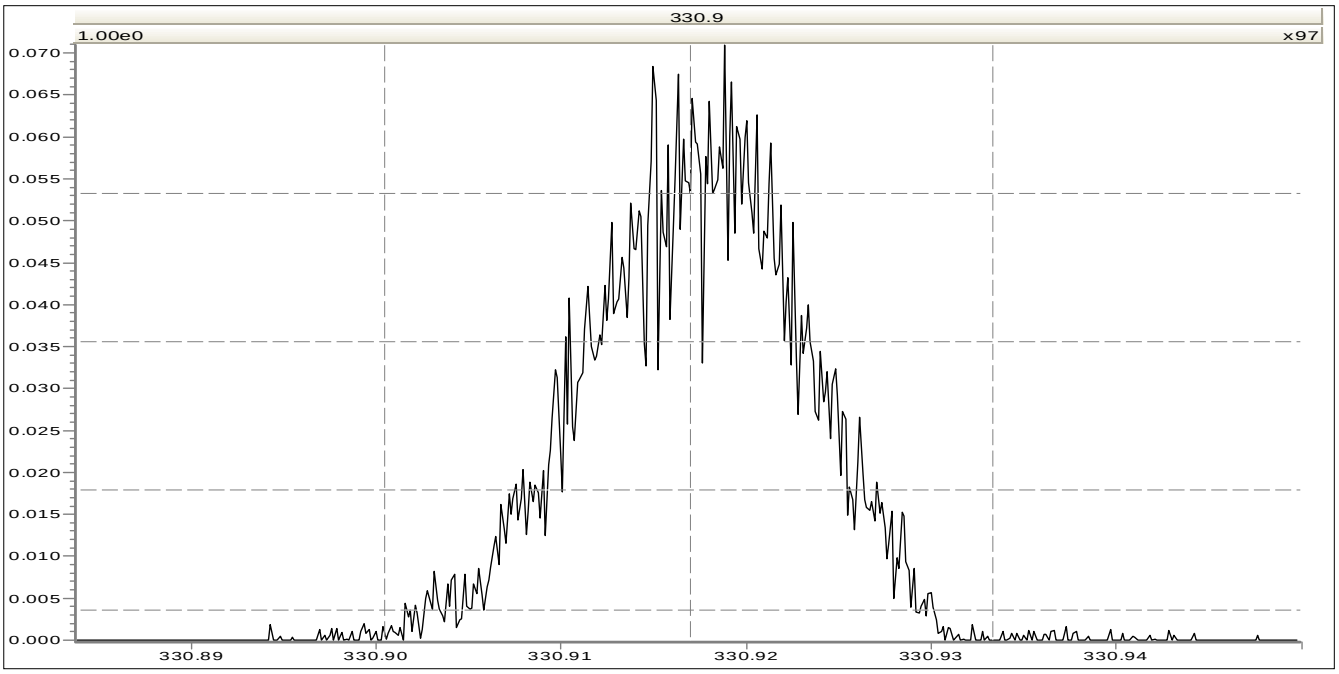

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.92
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

No information

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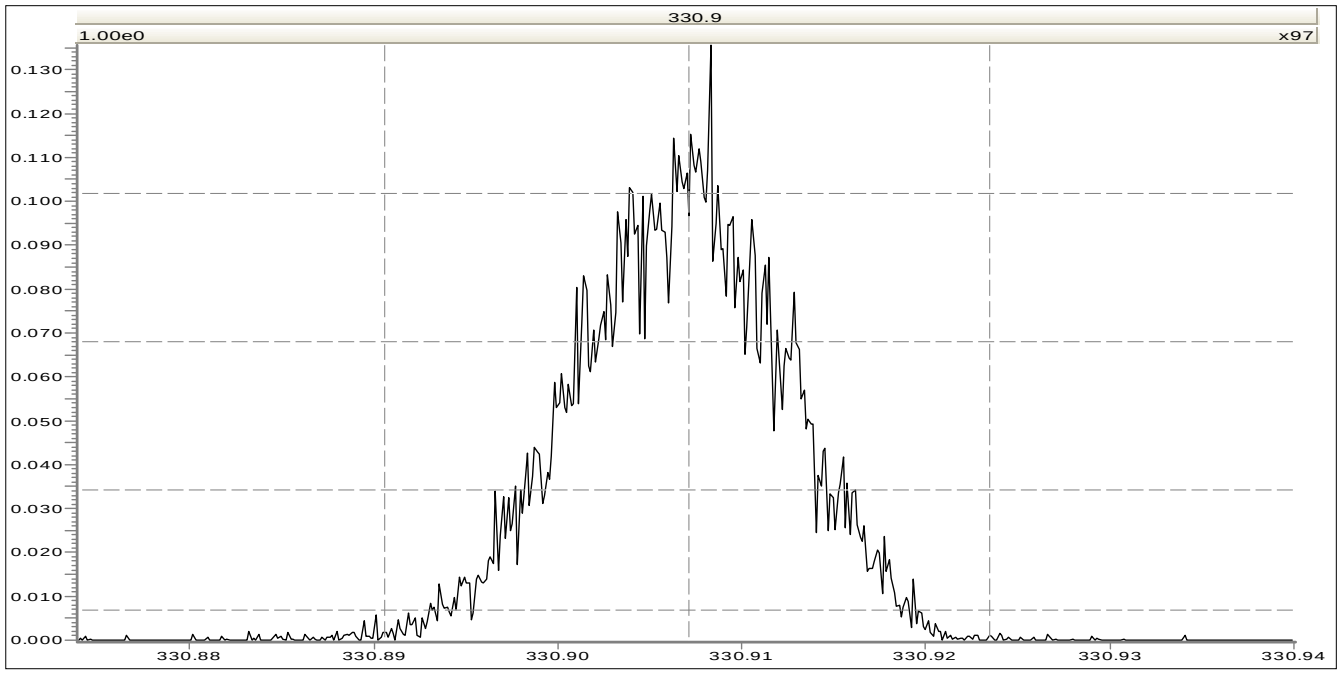


Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6496.11
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

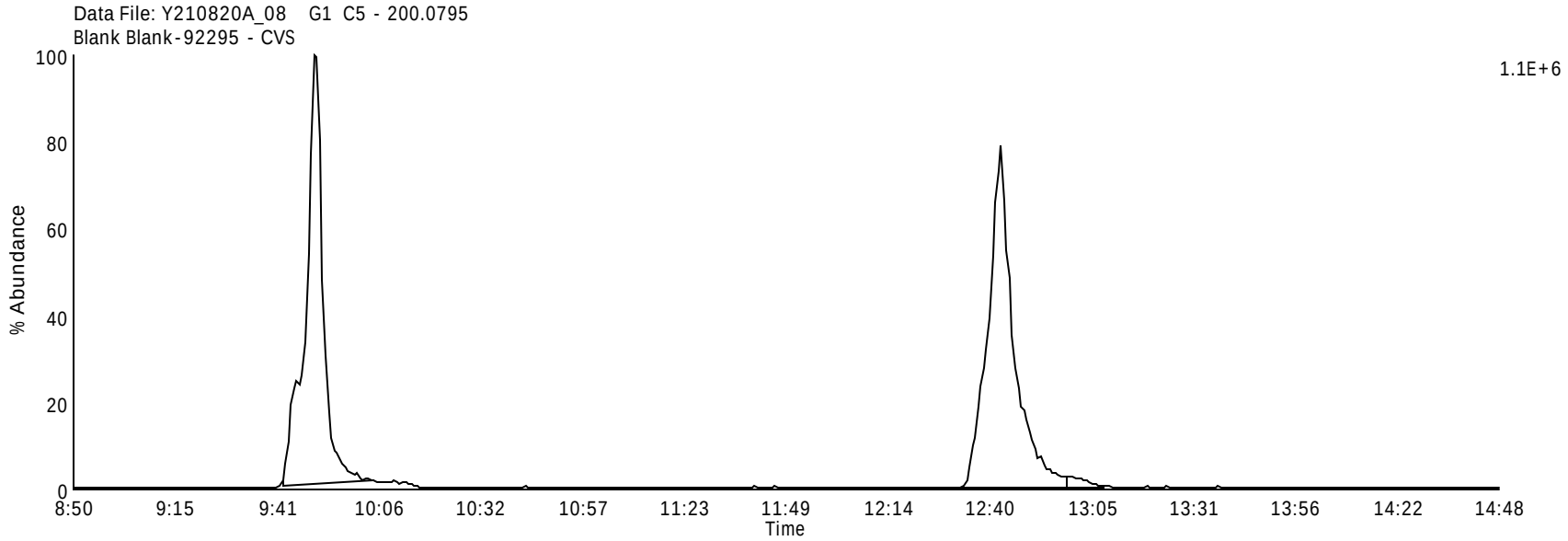
No information

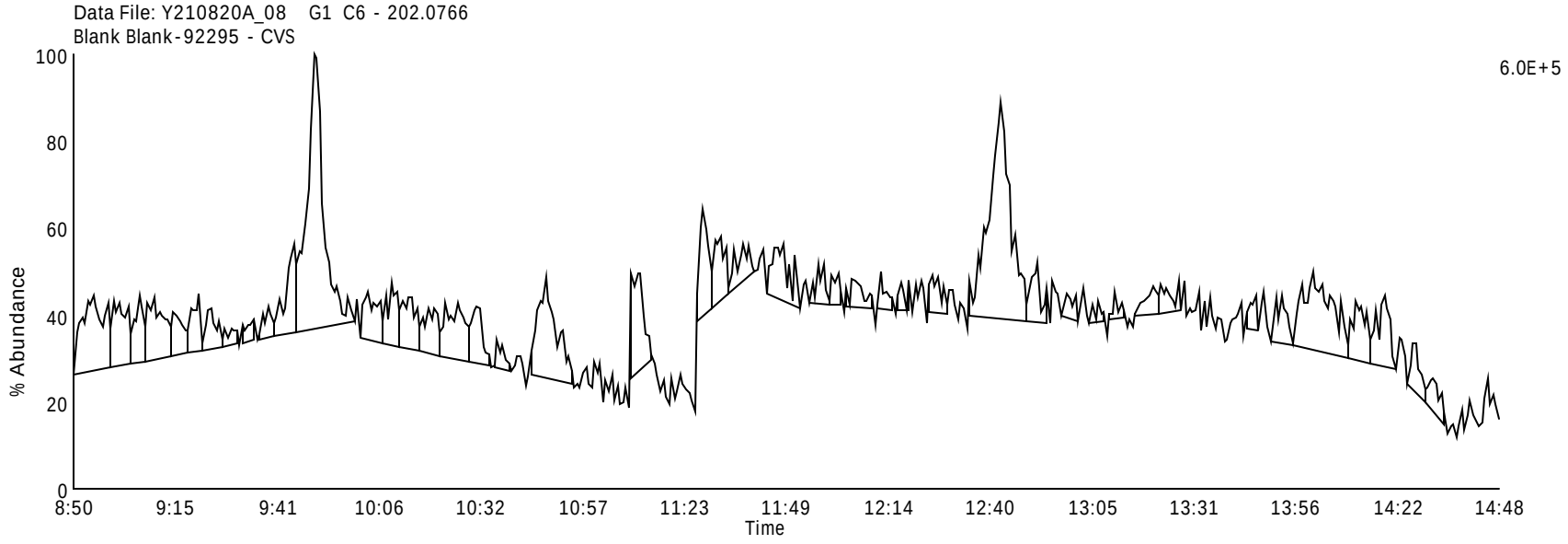
Appendix F

QC Raw Data

Labeled Mono Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ

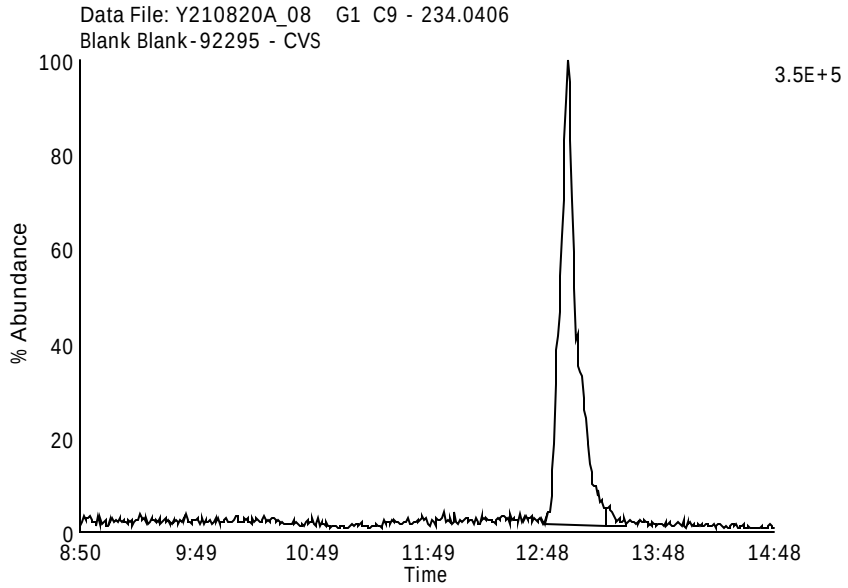


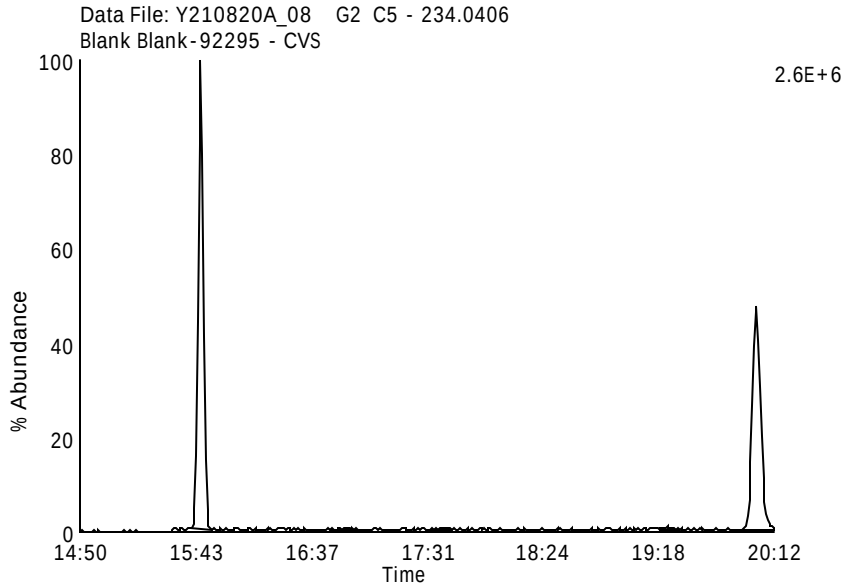


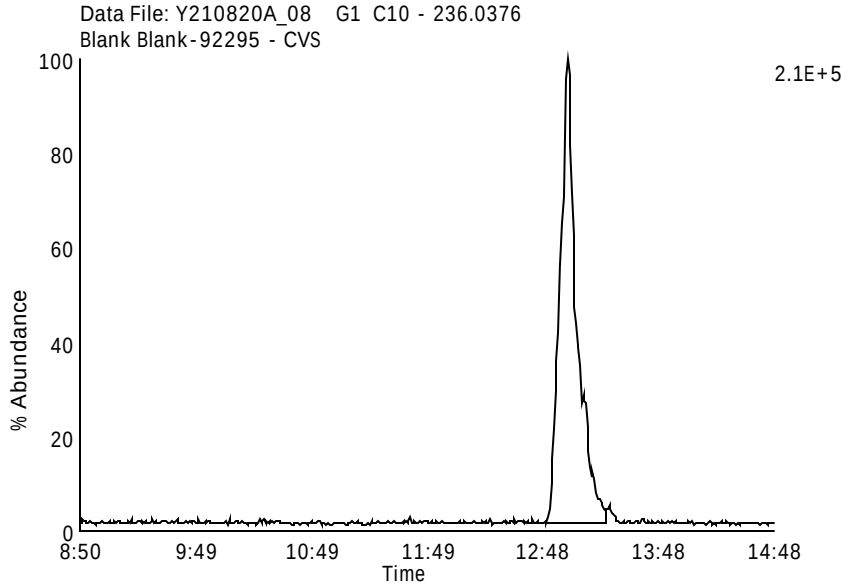
Labeled Di Chlorinated Biphenyls

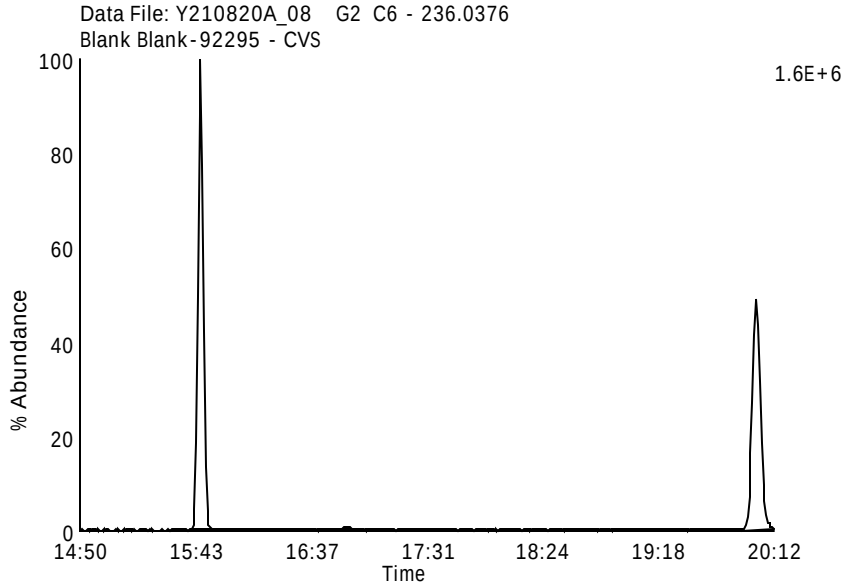
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ



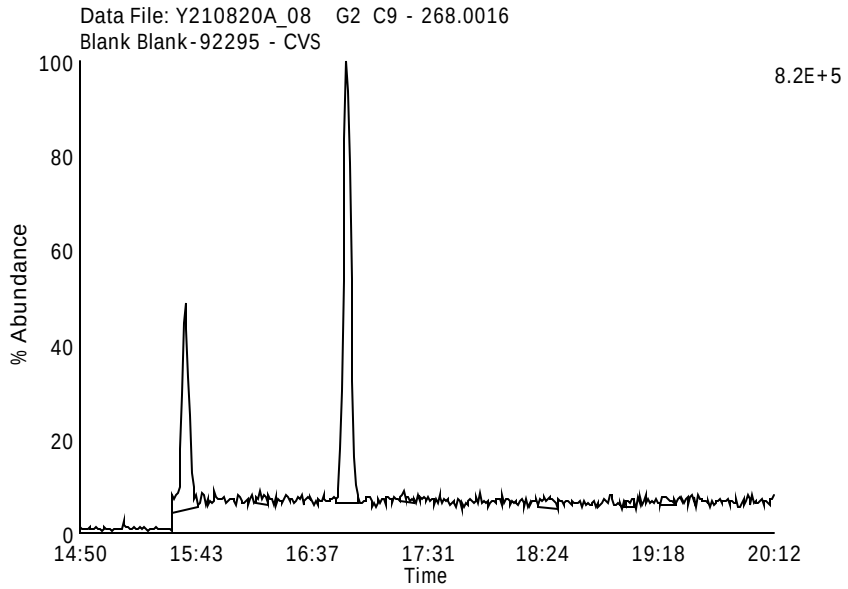


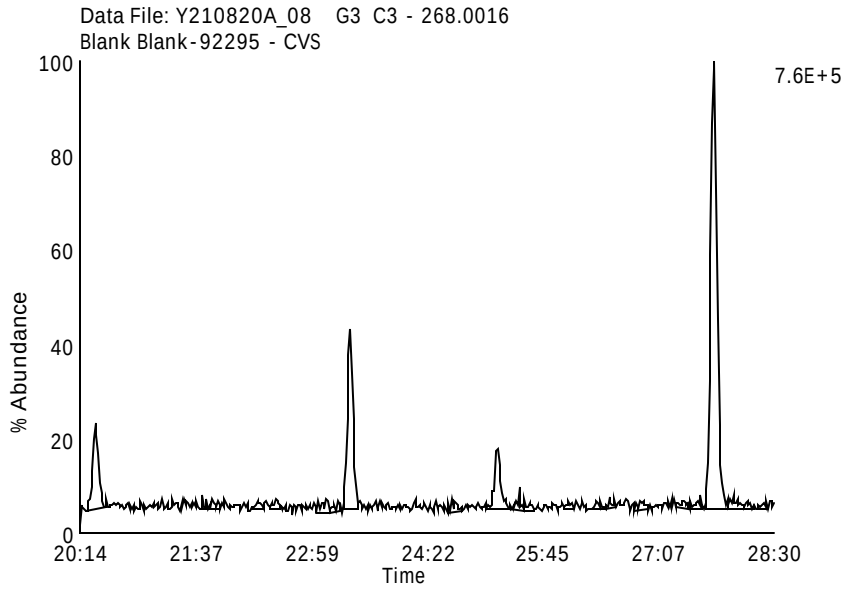


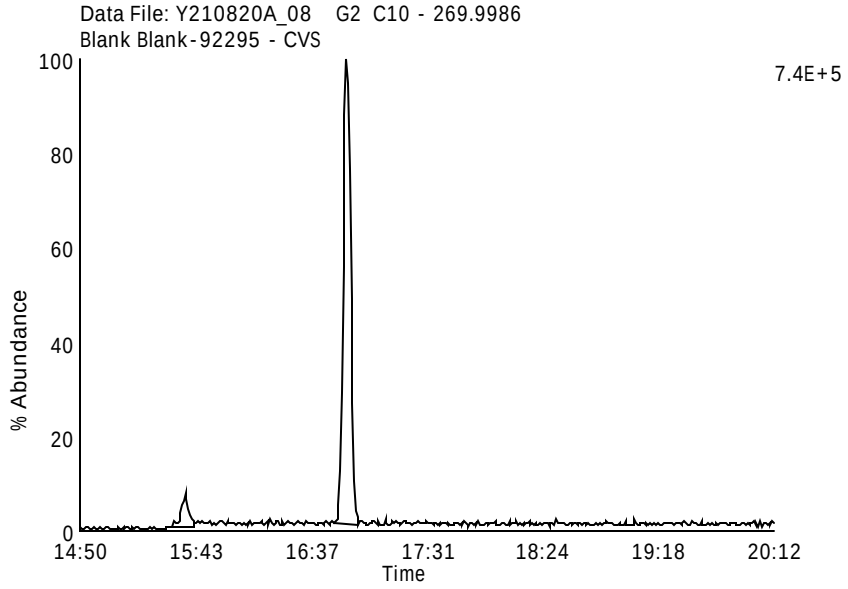


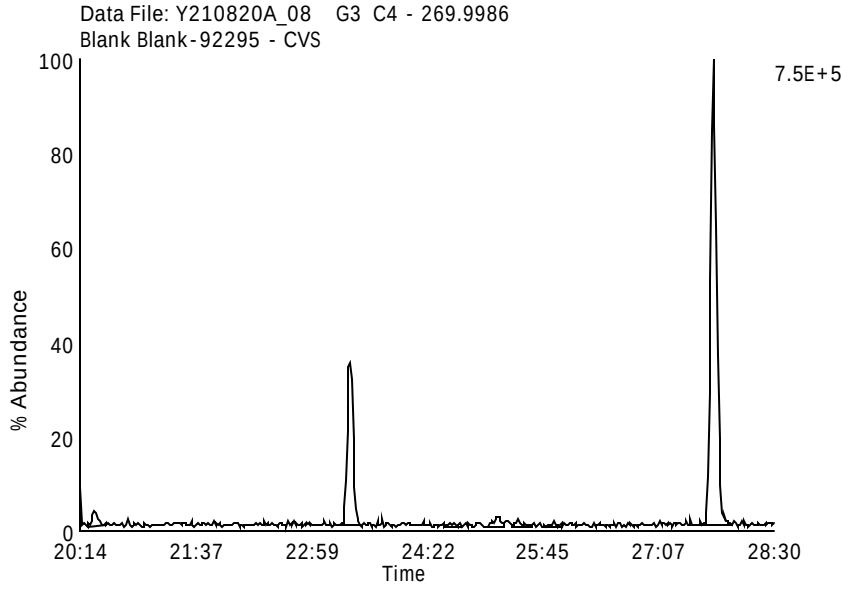
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ





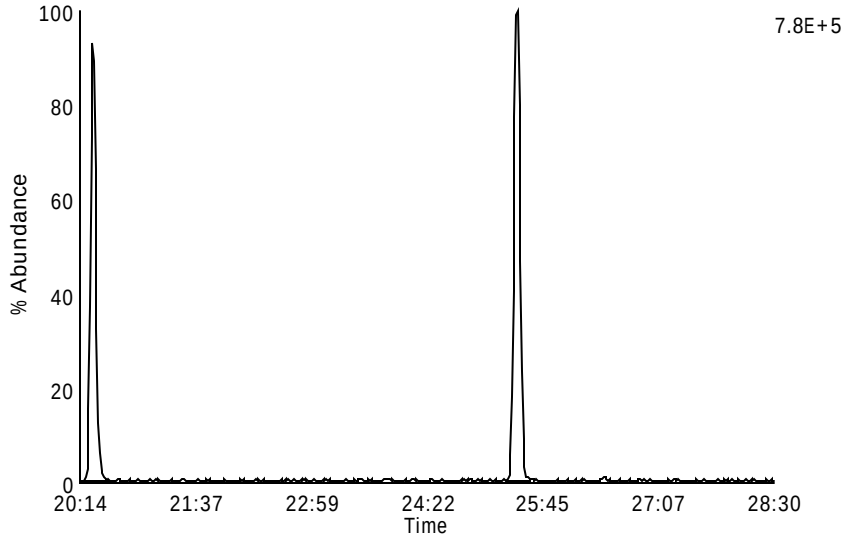




Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ

Data File: Y210820A_08 G3 C9 - 301.9626
Blank Blank-92295 - CVS



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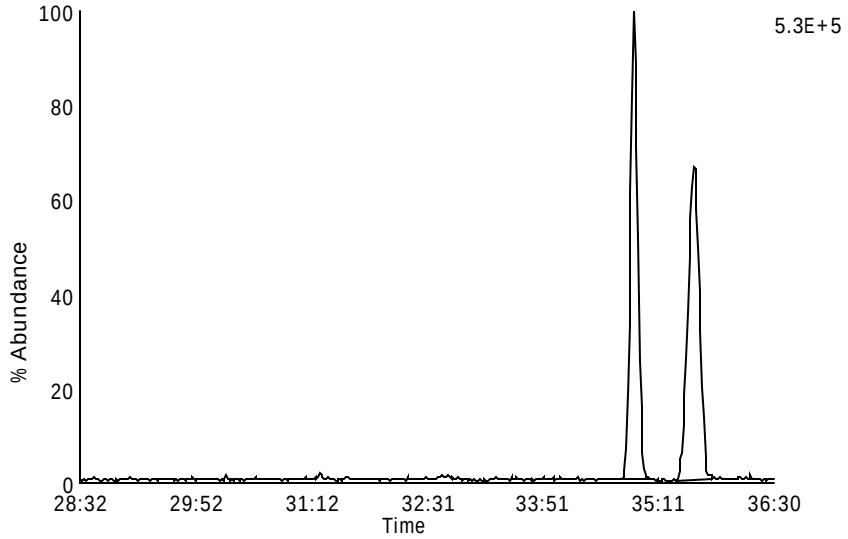

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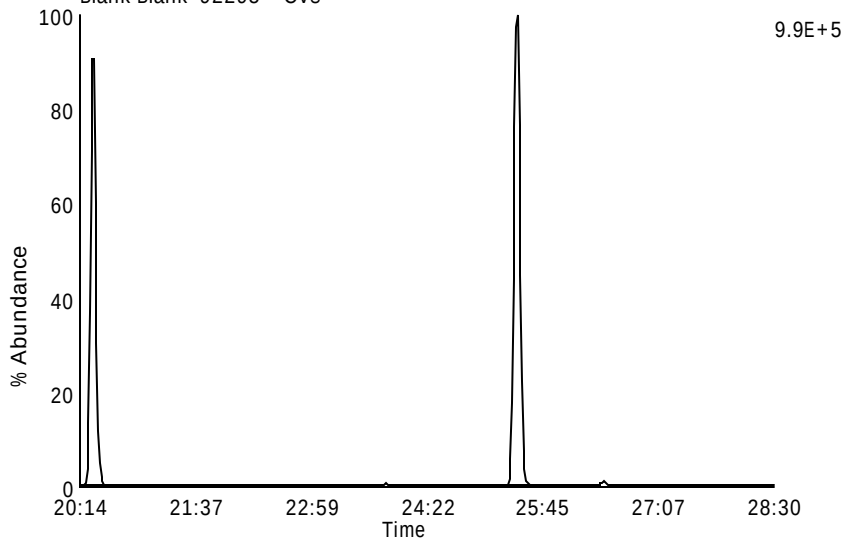
Blank Blank-92295 - CVS



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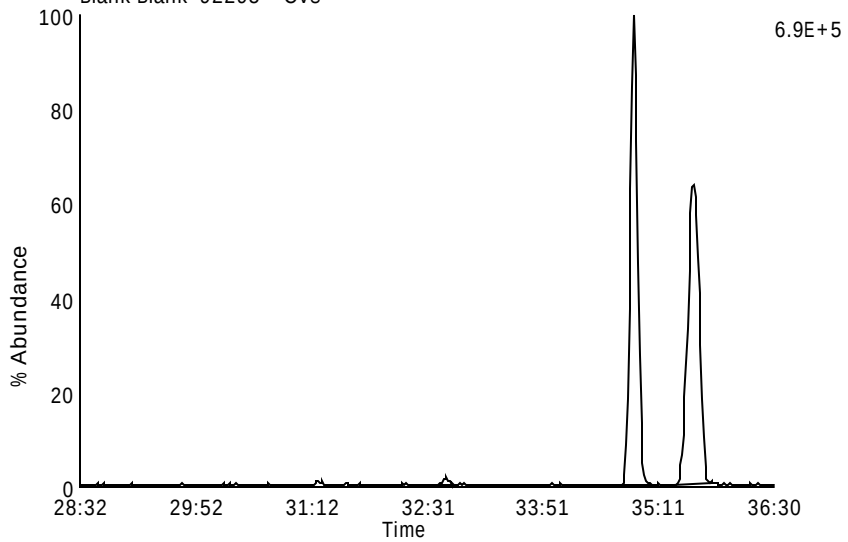
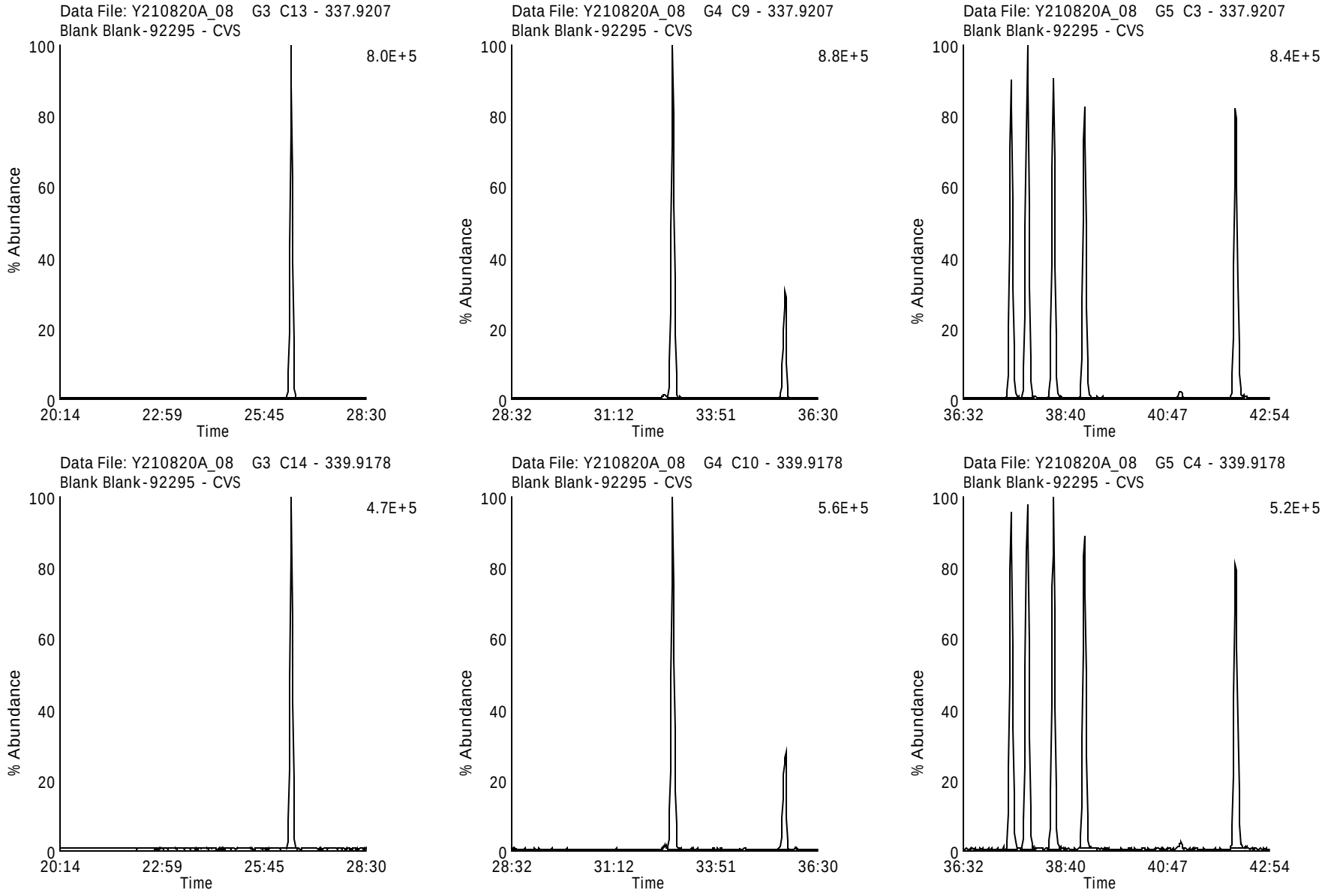


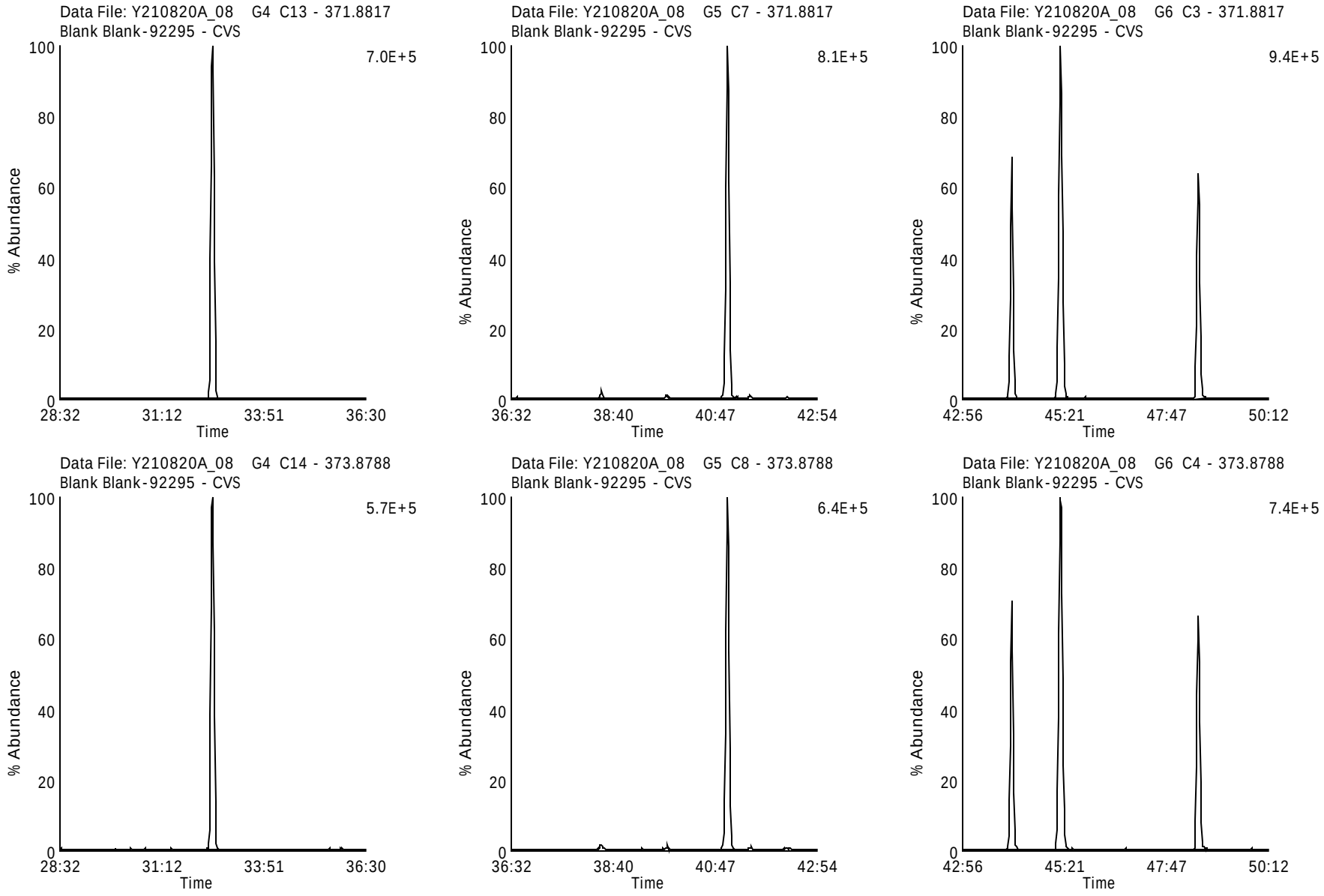
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ



Labeled Hexa Chlorinated Biphenyls

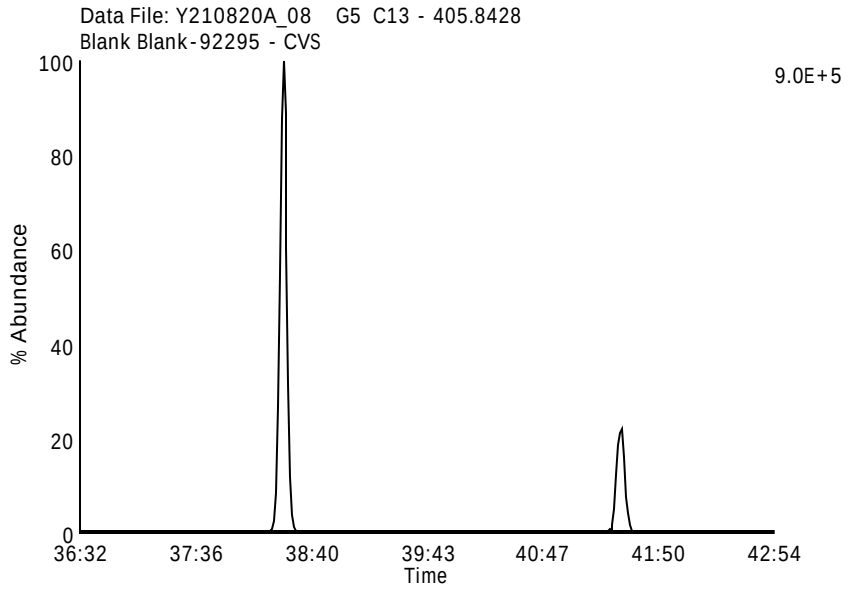
Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ

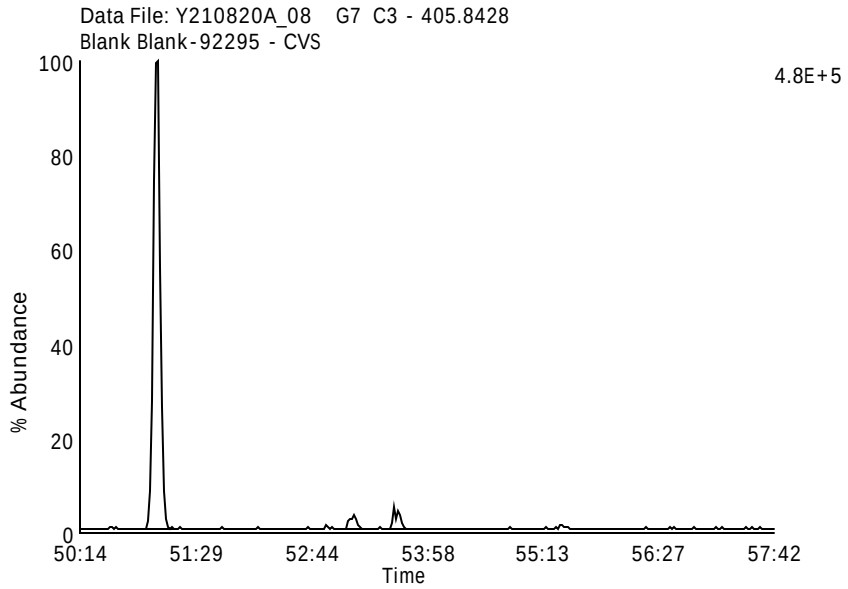


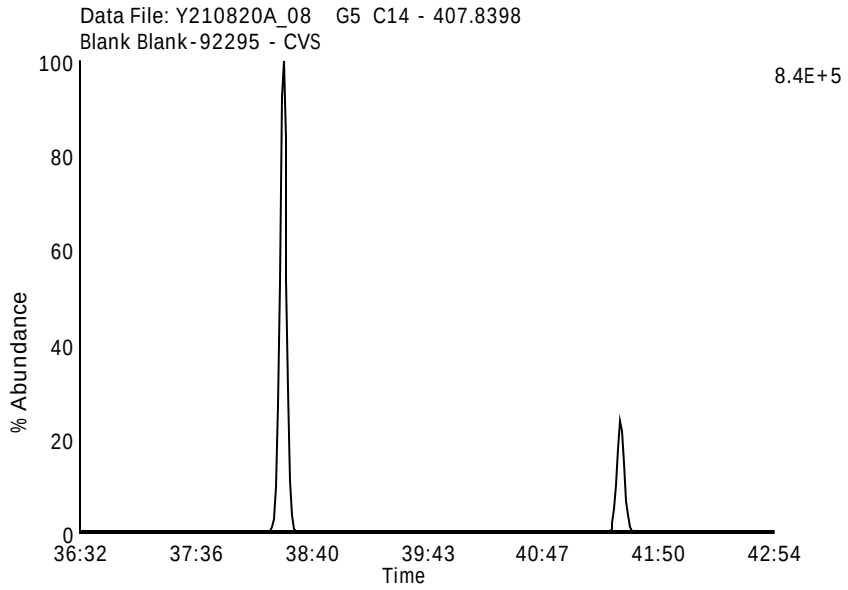
Labeled Hepta Chlorinated Biphenyls

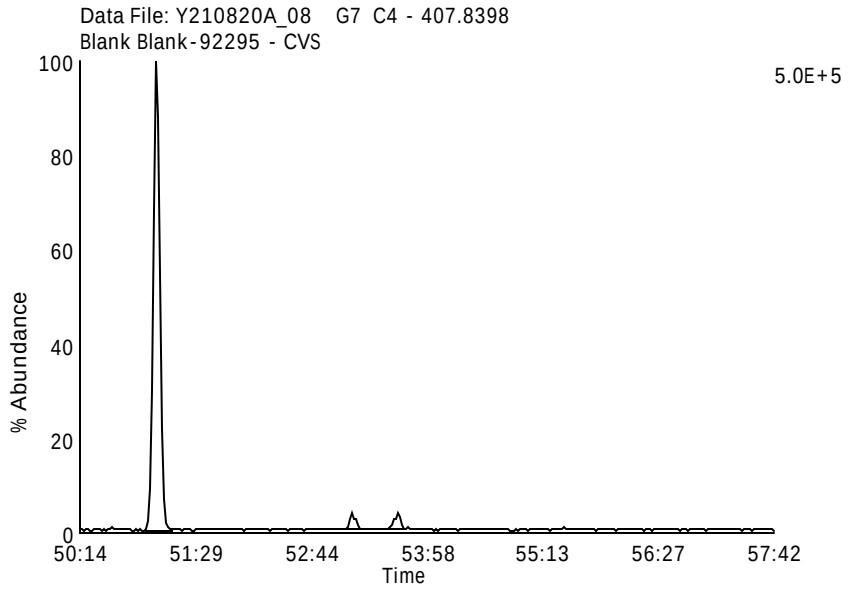
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ



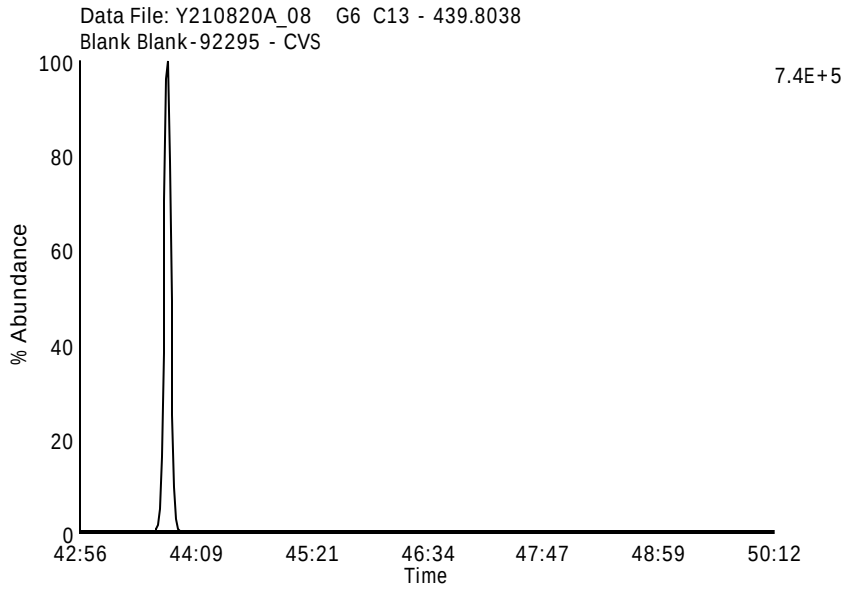


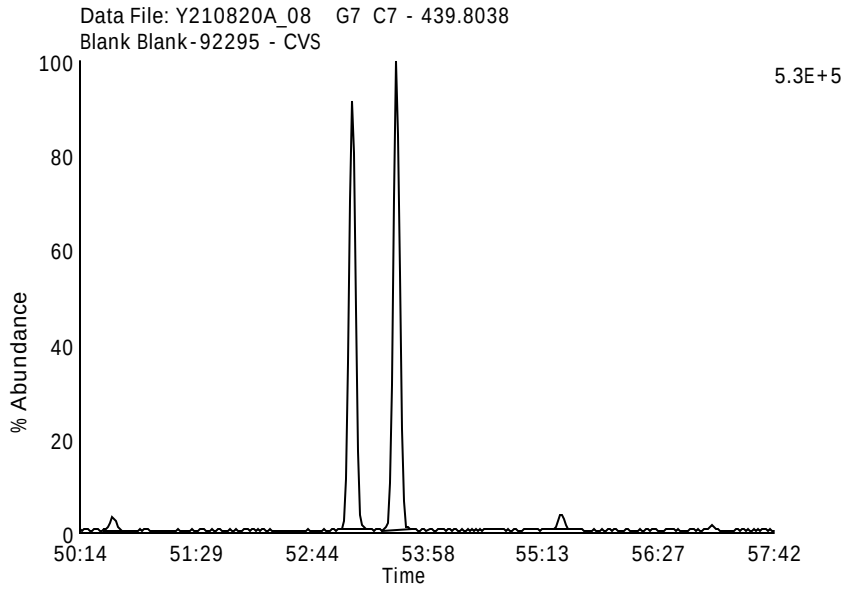


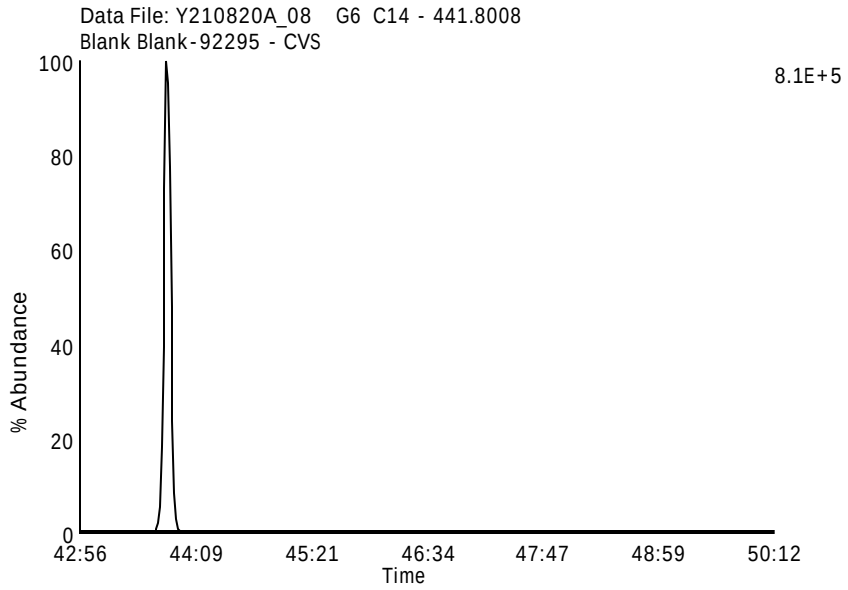


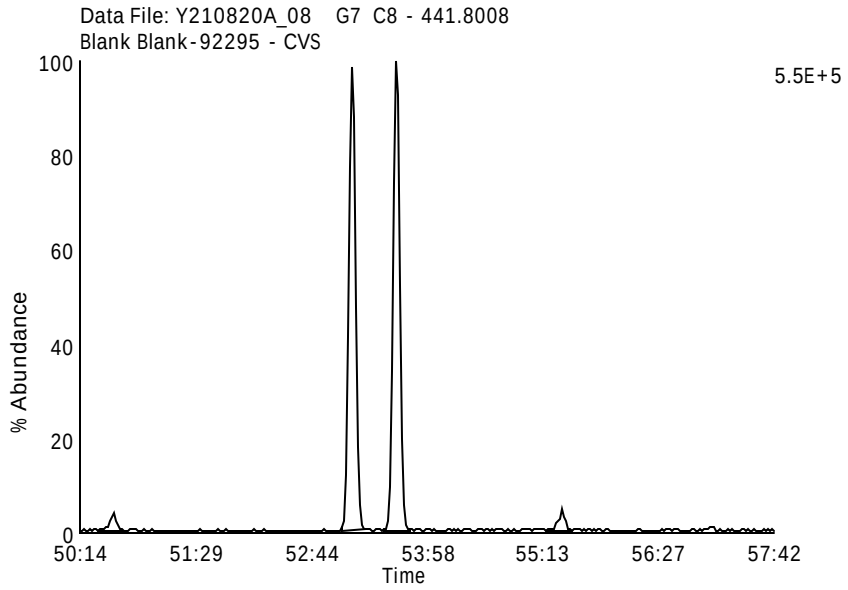
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ



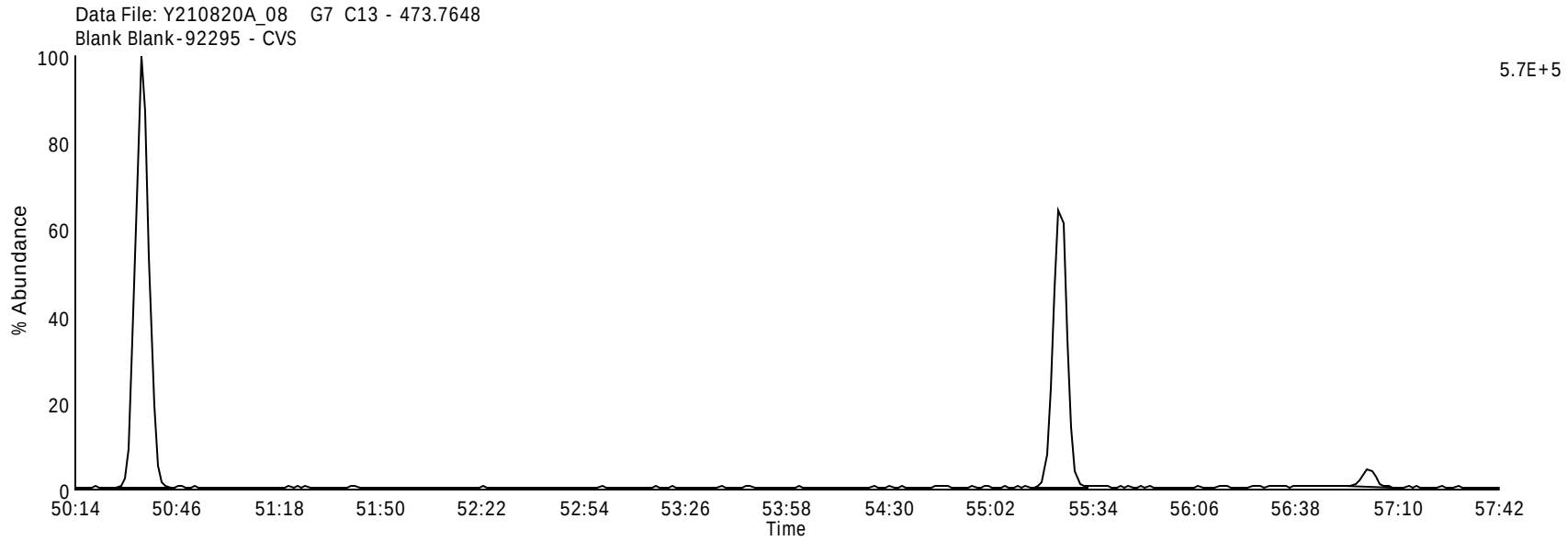


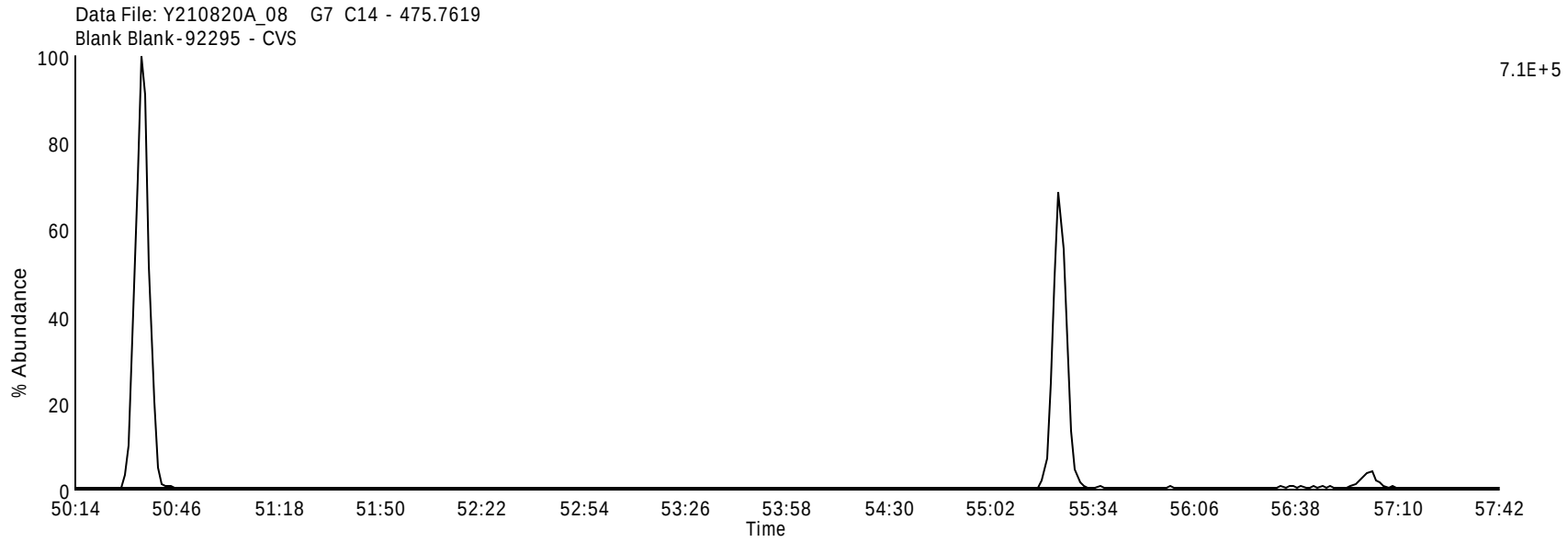




Labeled Nona Chlorinated Biphenyls

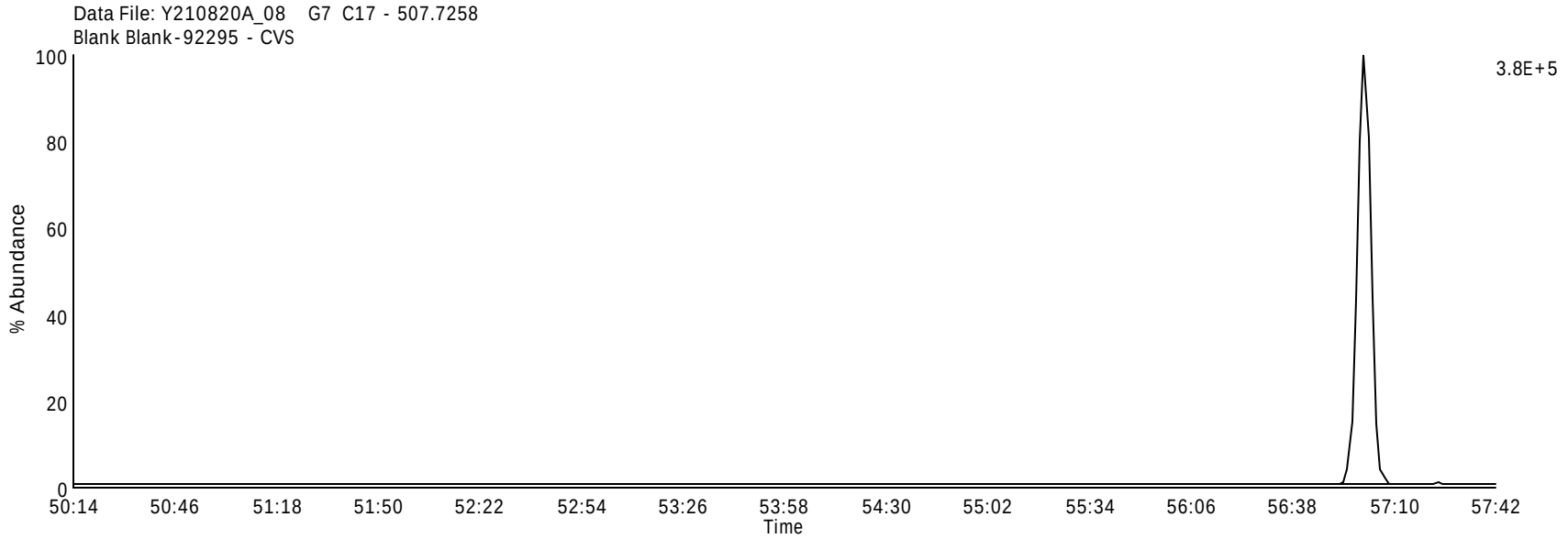
Data File Name: Y210820A_08	Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS	Client Sample ID: CBLKIZ

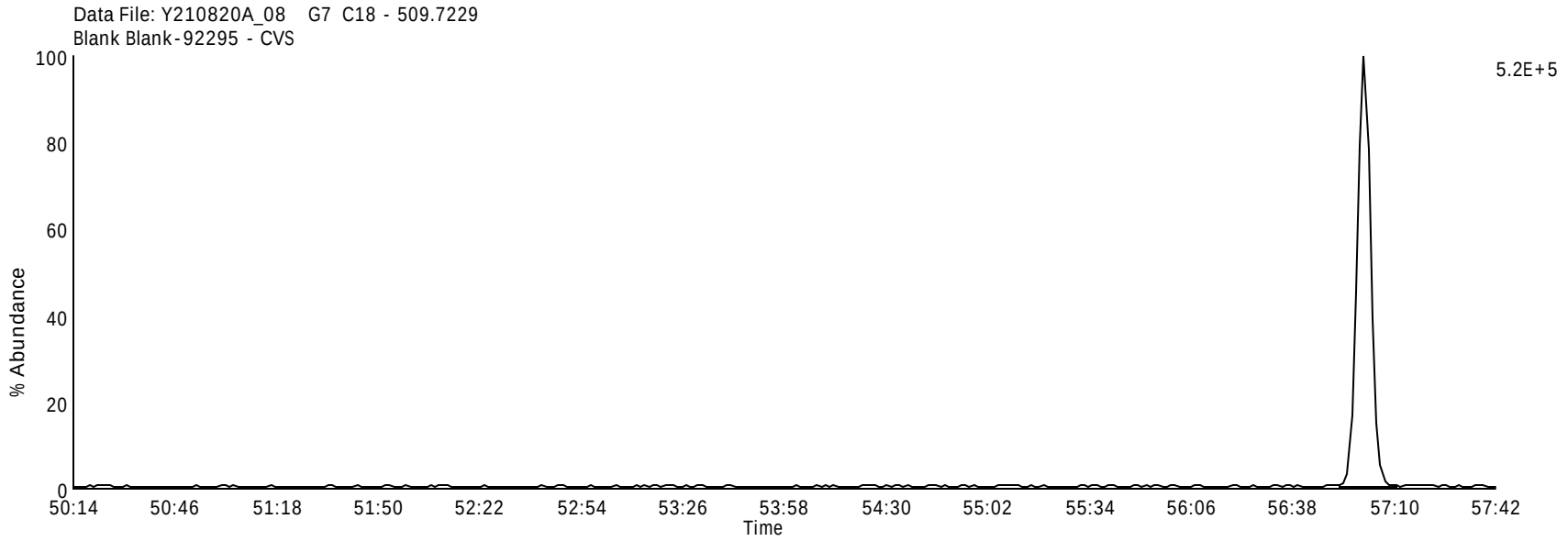




Labeled Deca Chlorinated Biphenyl

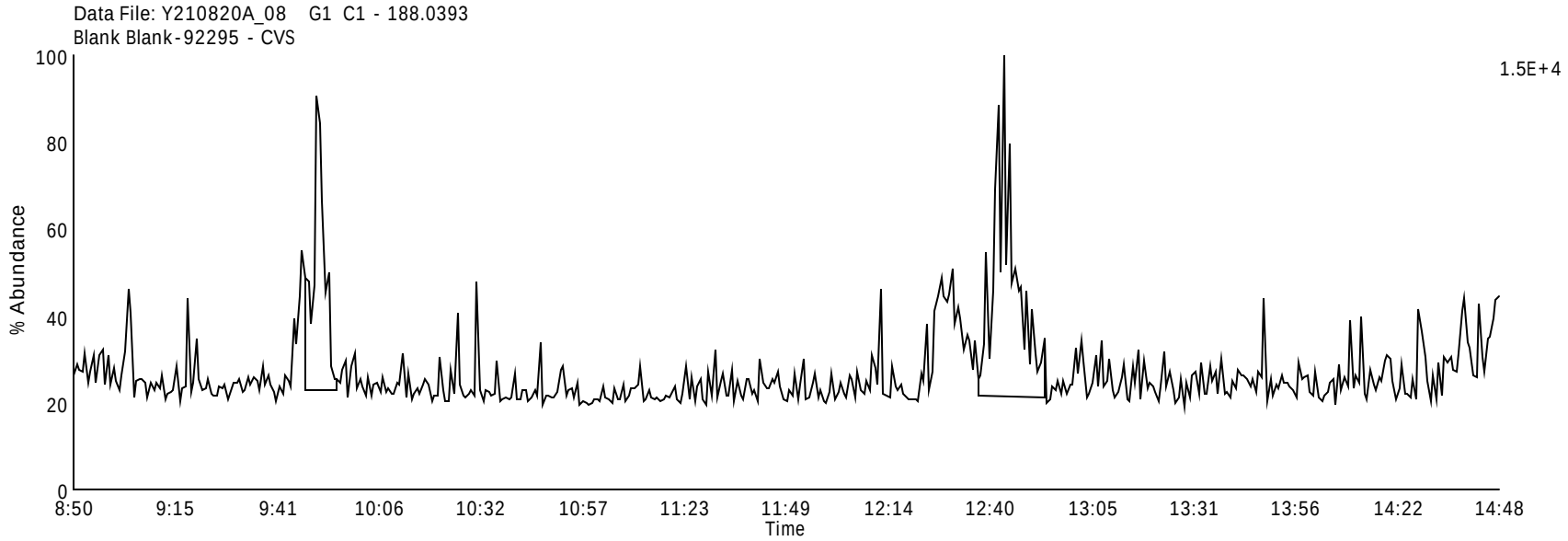
Data File Name: Y210820A_08	Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS	Client Sample ID: CBLKIZ

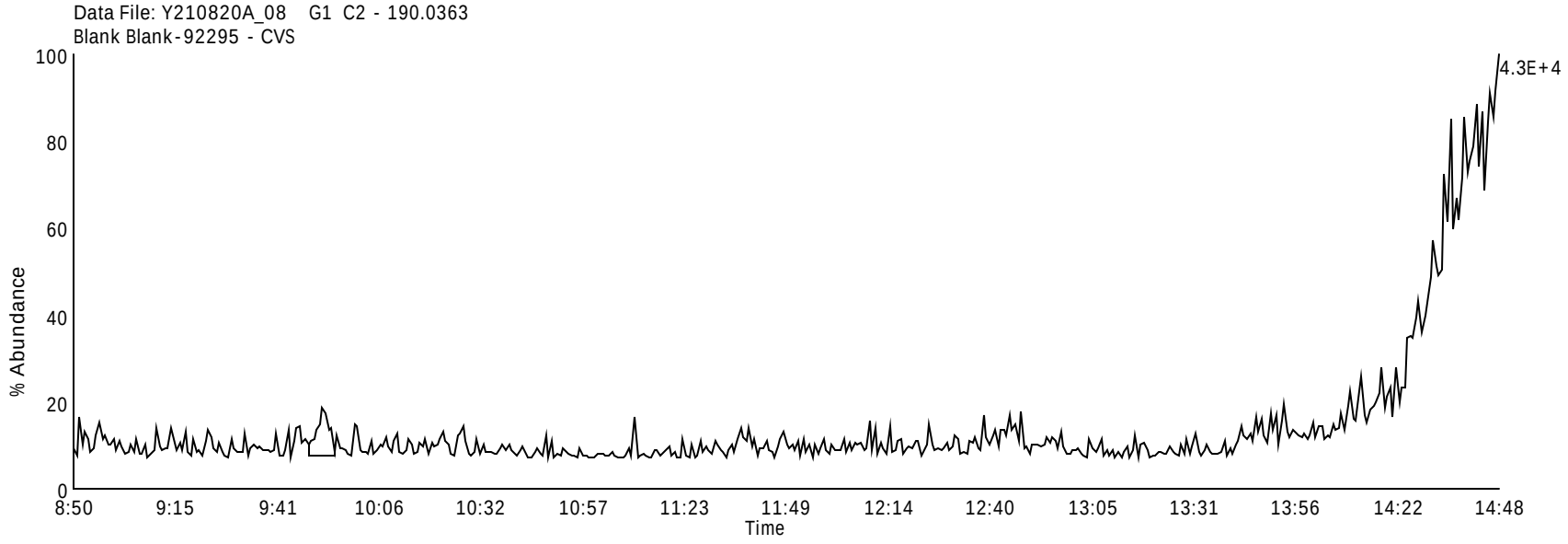




Mono Chlorinated Biphenyls

Data File Name: Y210820A_08	Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS	Client Sample ID: CBLKIZ



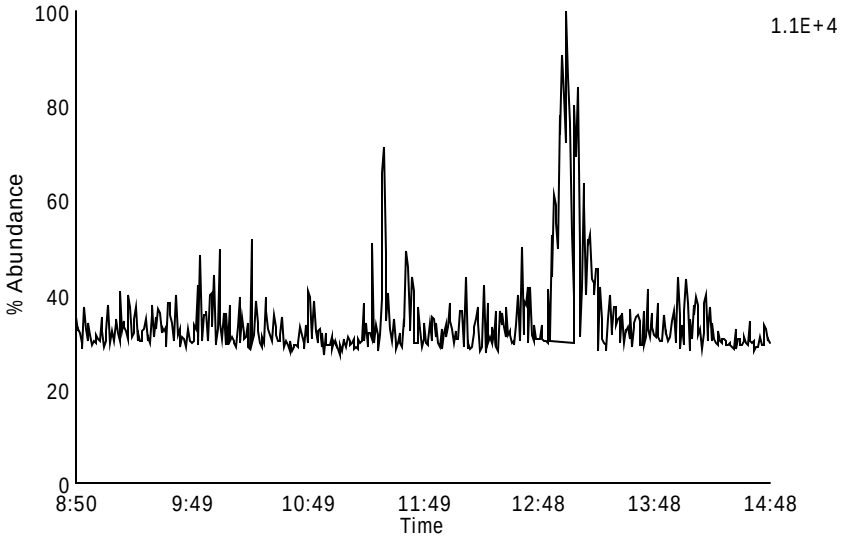


Di Chlorinated Biphenyls

Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ

Data File: Y210820A_08 G1 C7 - 222.0003
Blank Blank-92295 - CVS



Data File: Y210820A_08 G2 C1 - 222.0003
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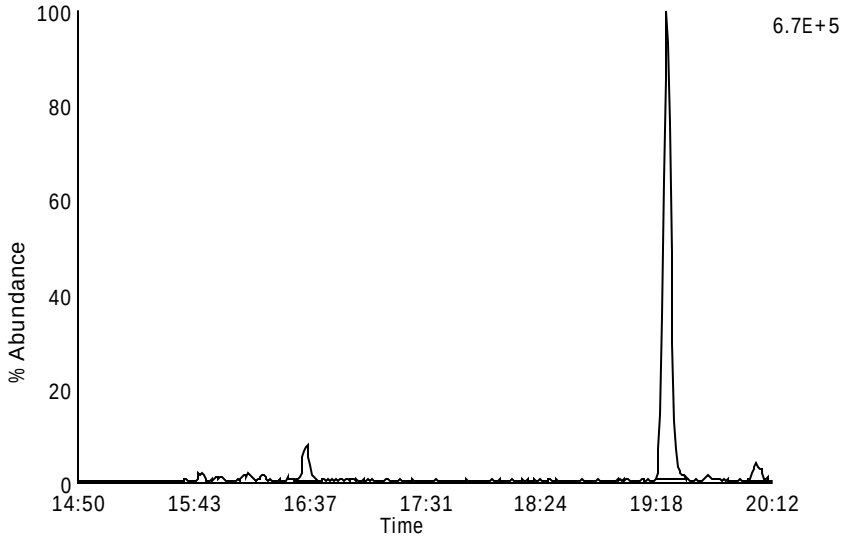

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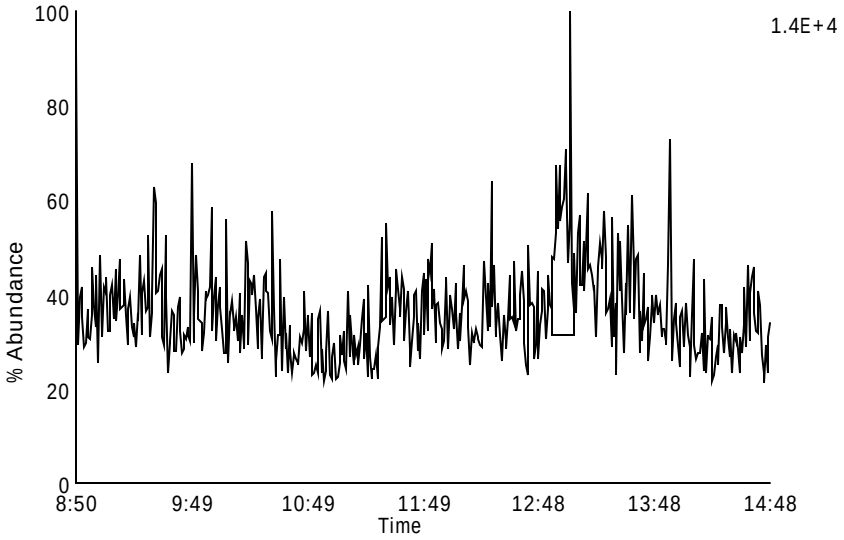
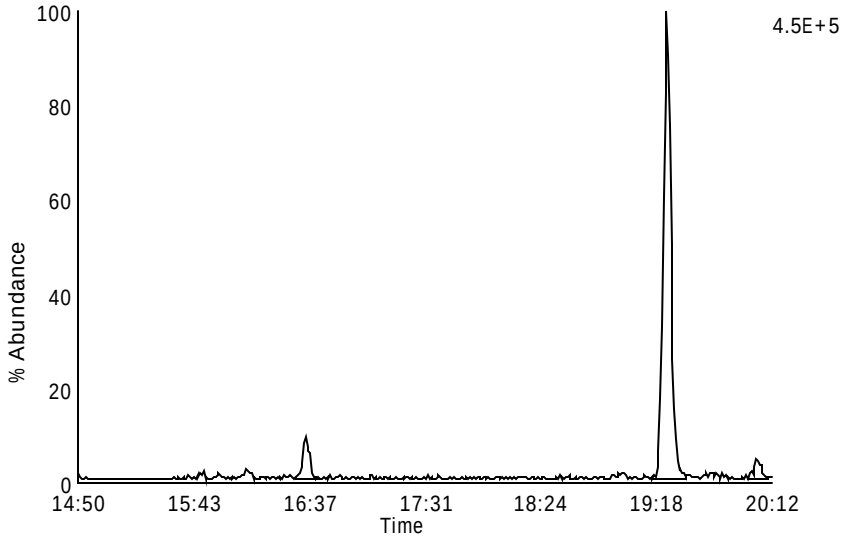


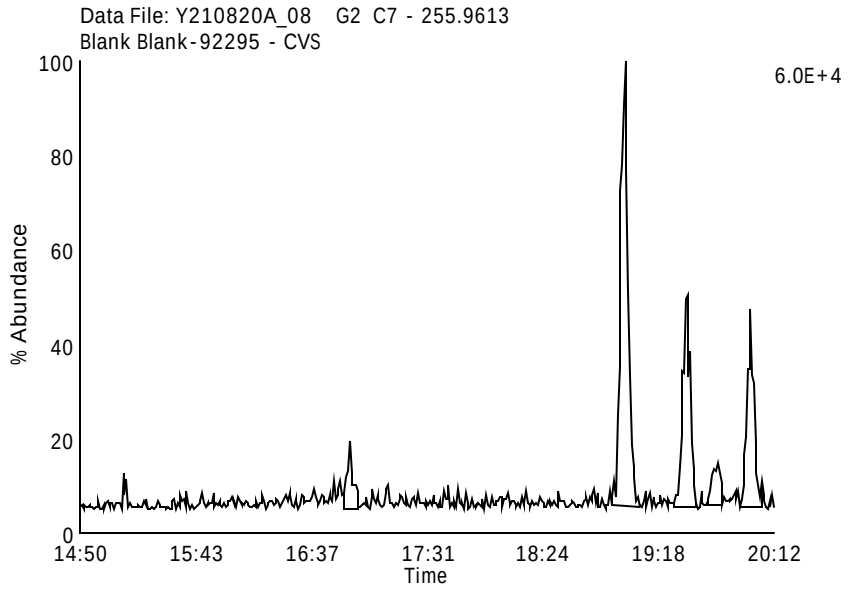
Data File: Y210820A_08 G2 C2 - 223.9974
Blank Blank-92295 - CVS

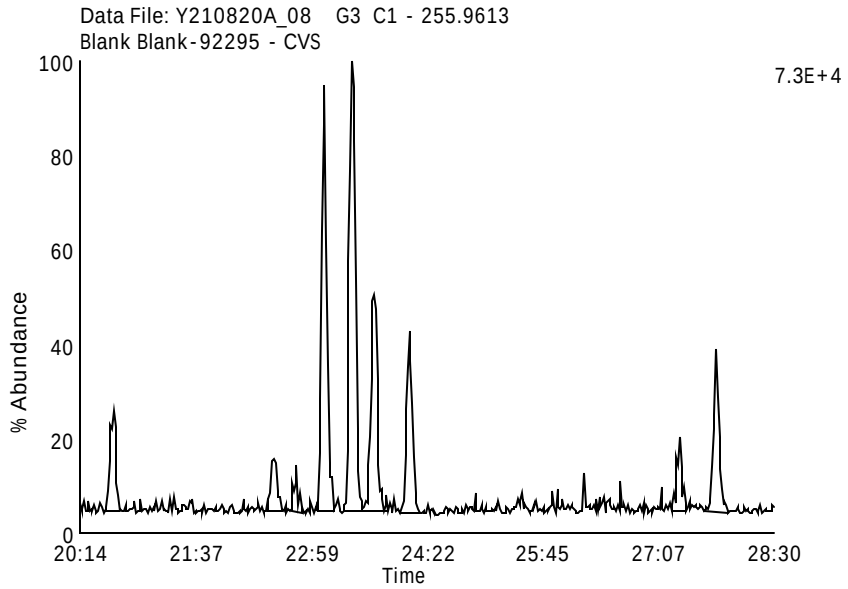


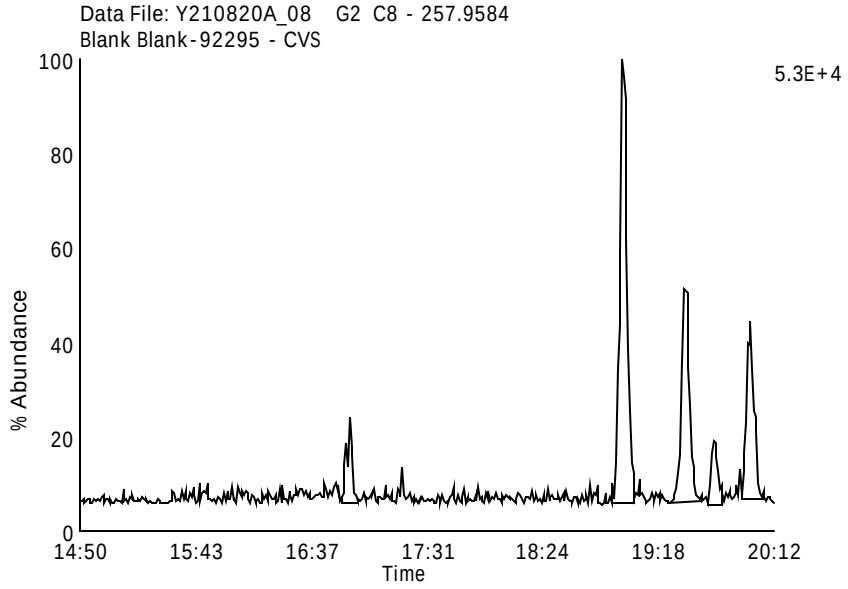
Tri Chlorinated Biphenyls

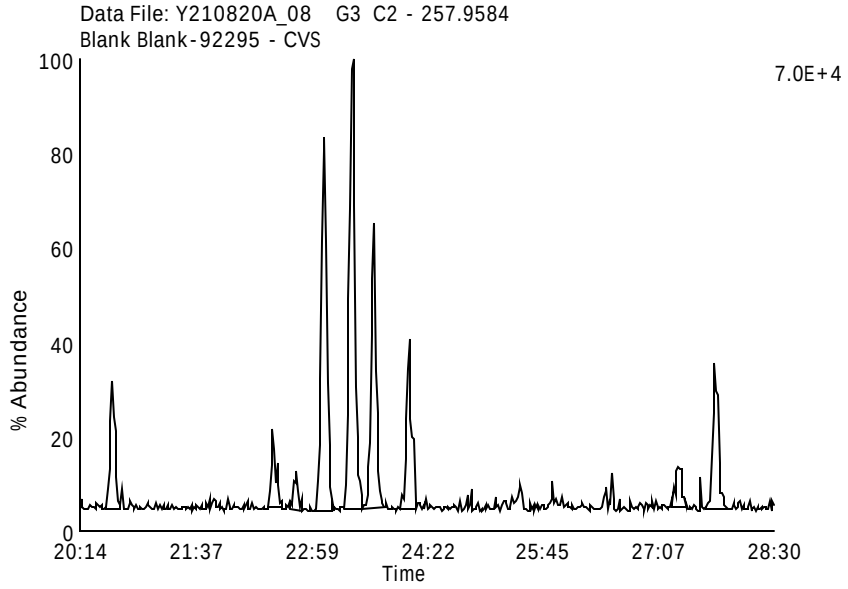
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ



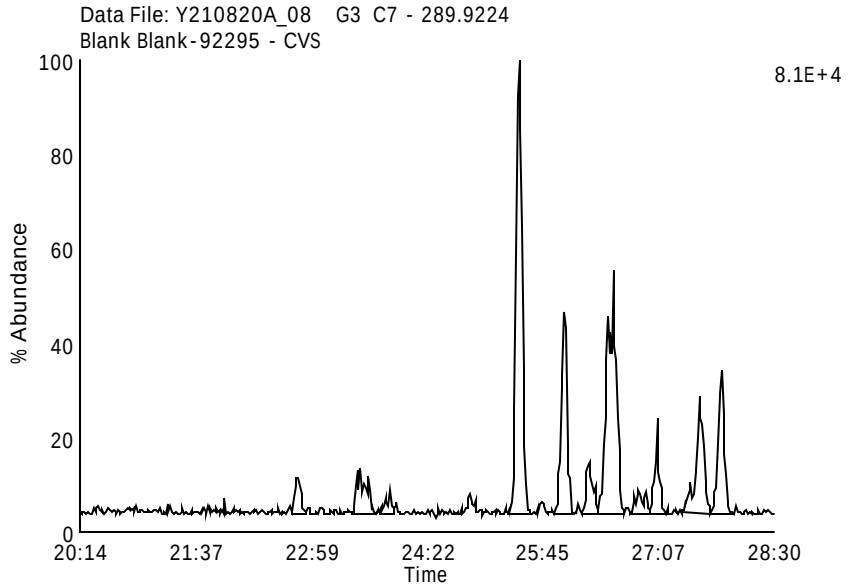


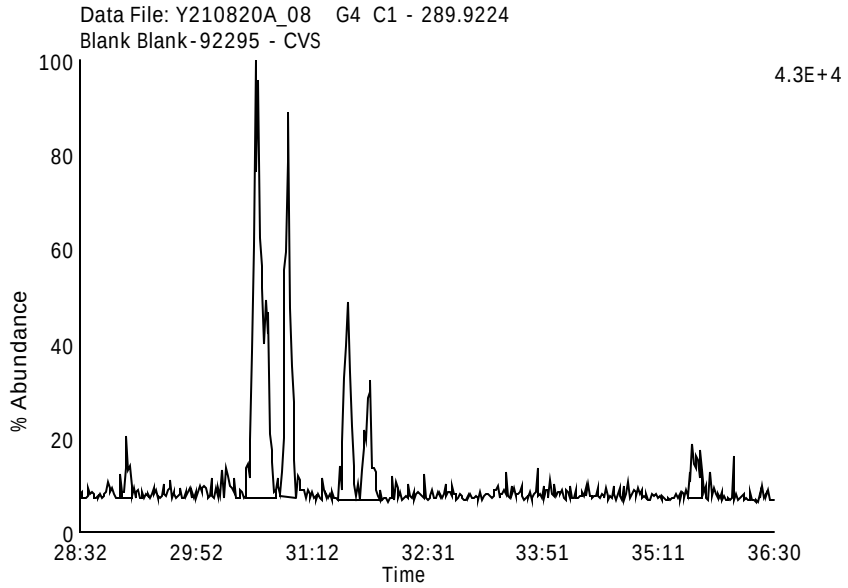


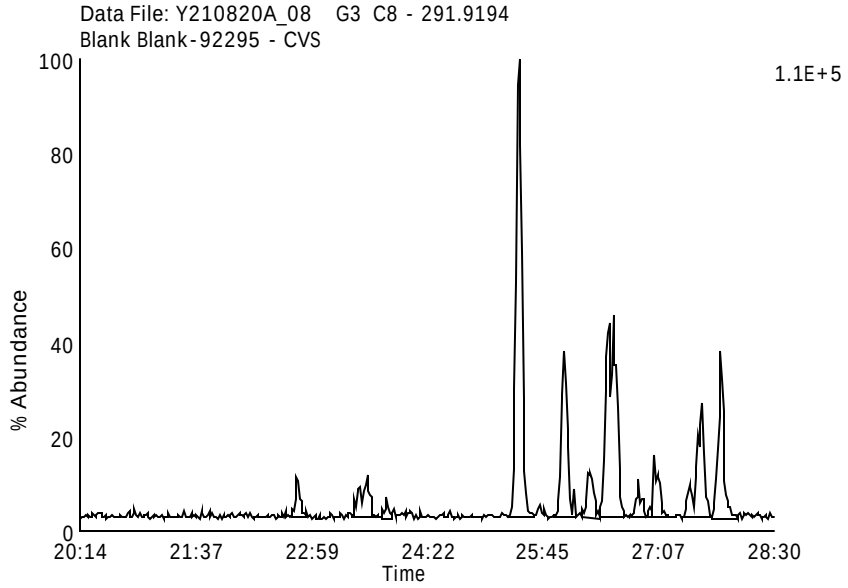


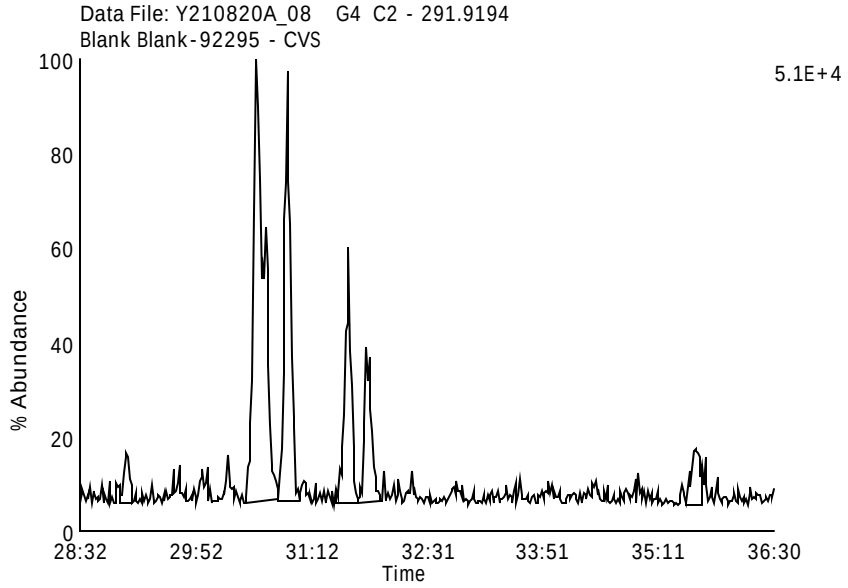
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ





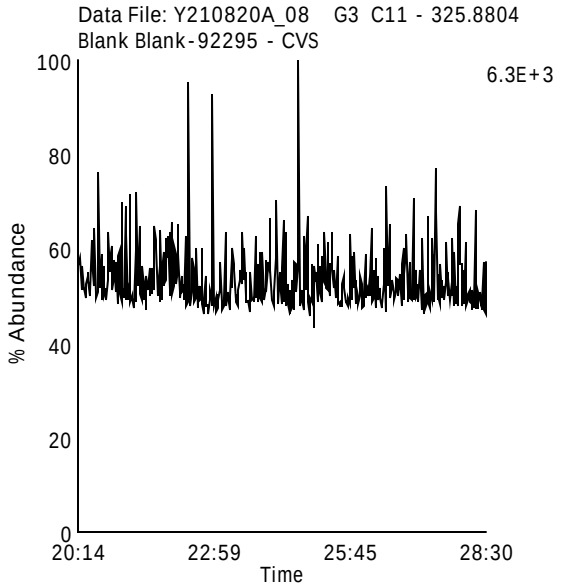


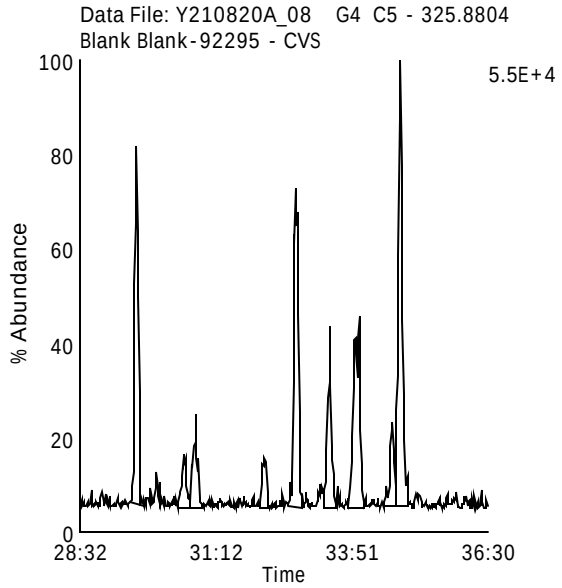


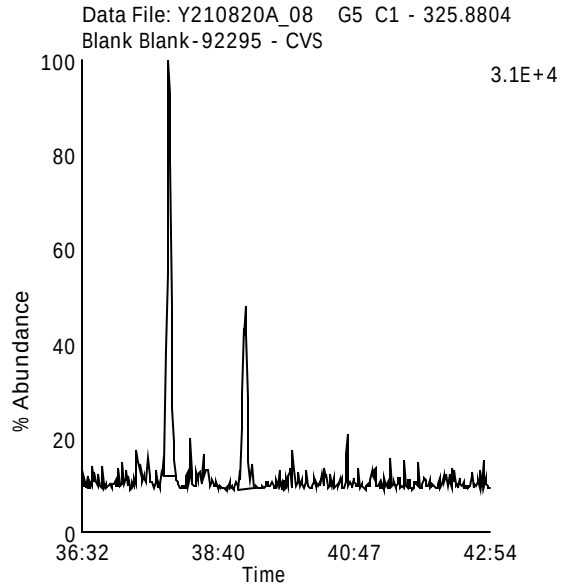
Penta Chlorinated Biphenyls

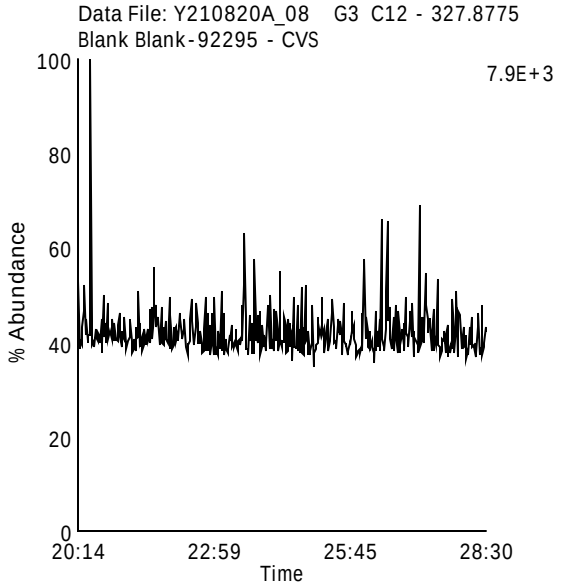
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

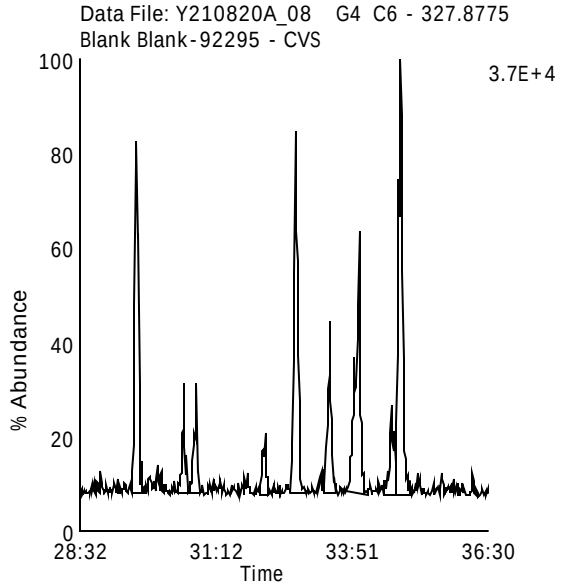
Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ

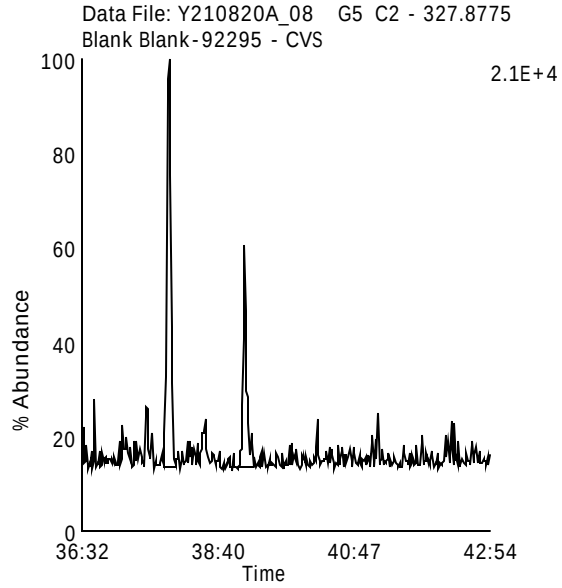








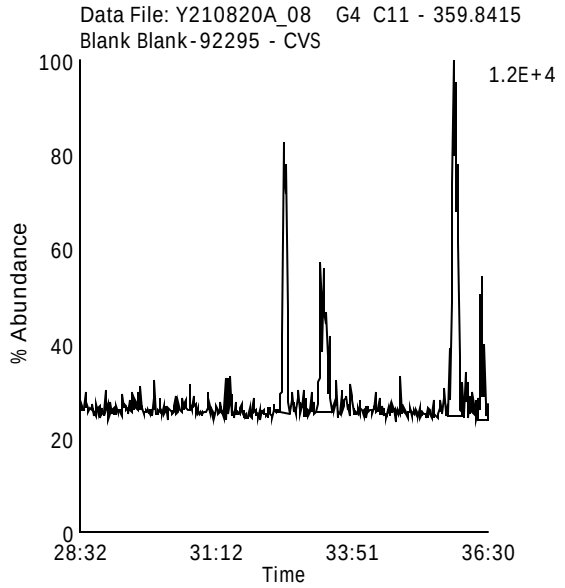


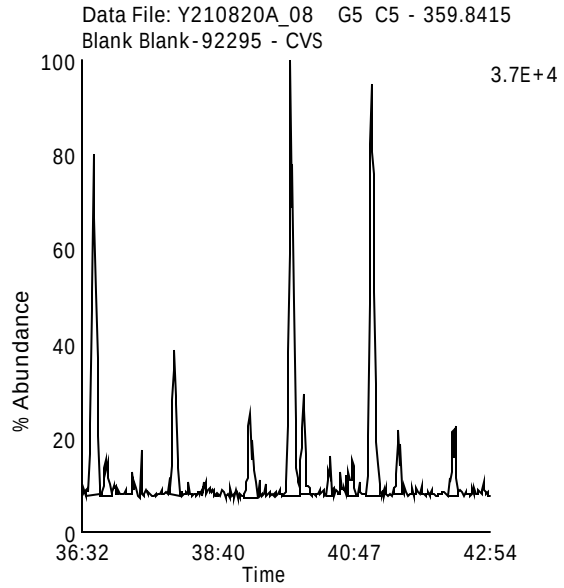


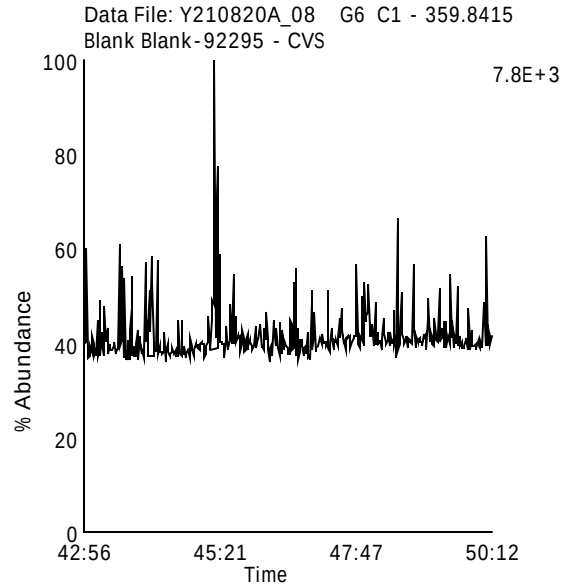
Hexa Chlorinated Biphenyls

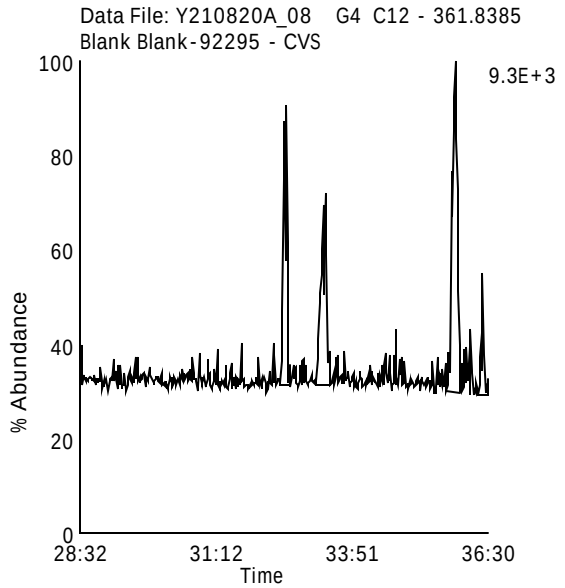
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

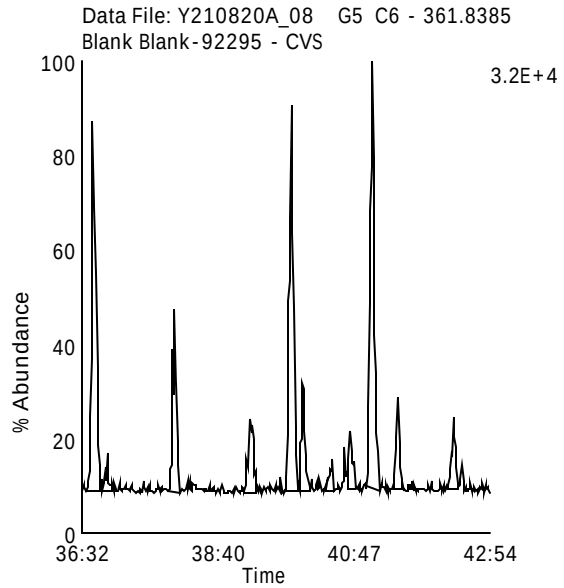
Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ

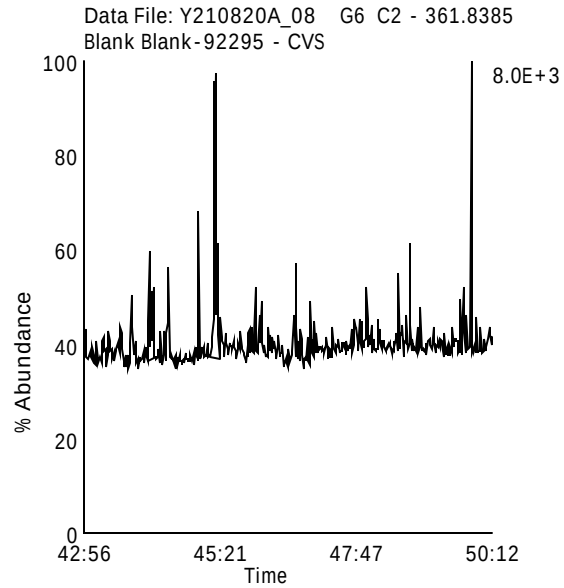








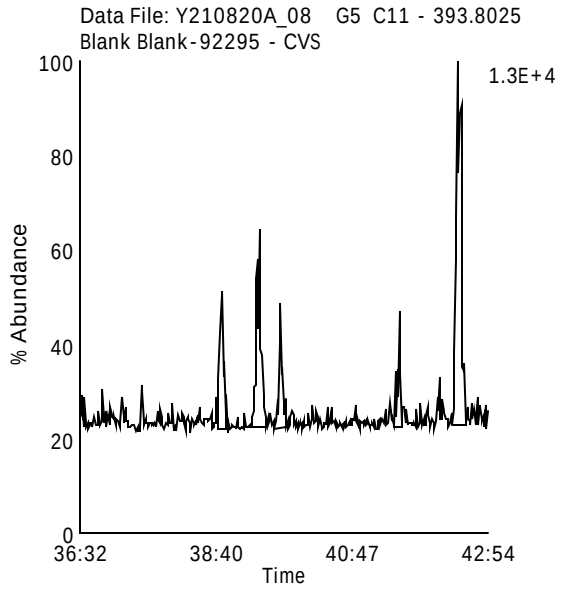


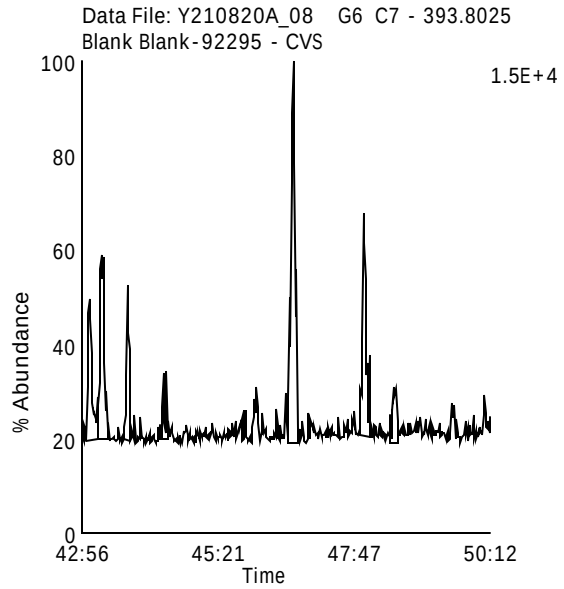


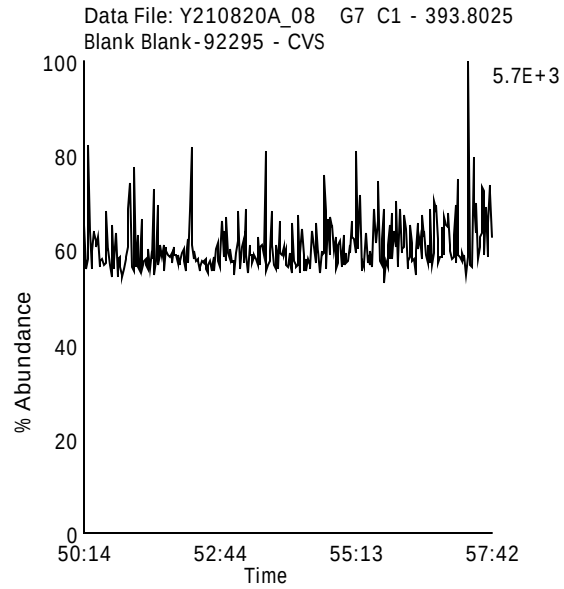
Hepta Chlorinated Biphenyls

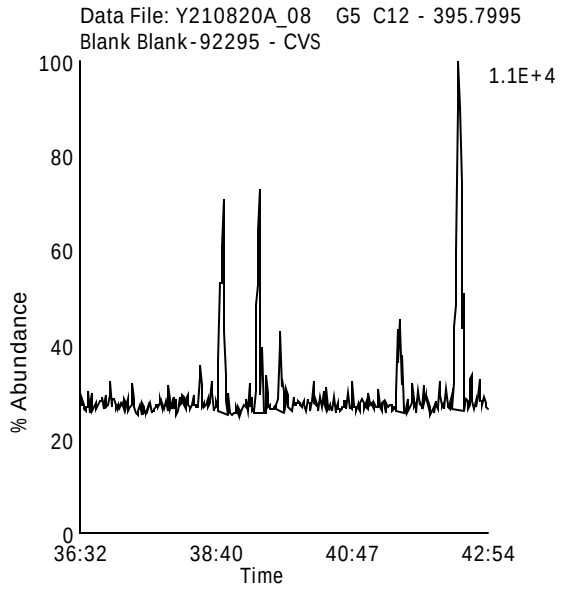
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

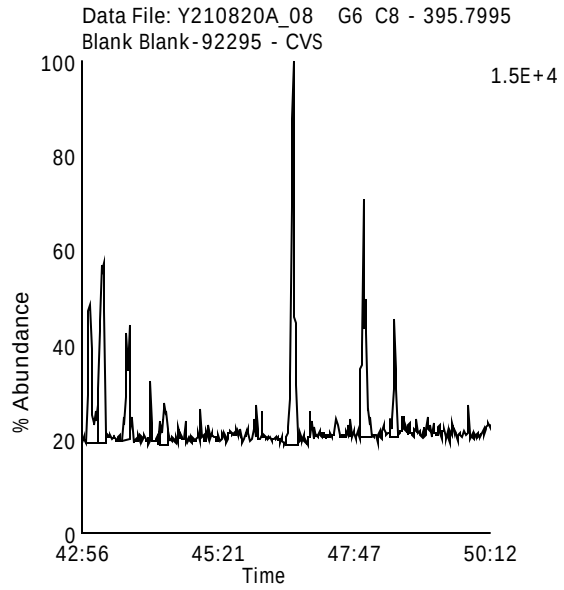
Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ

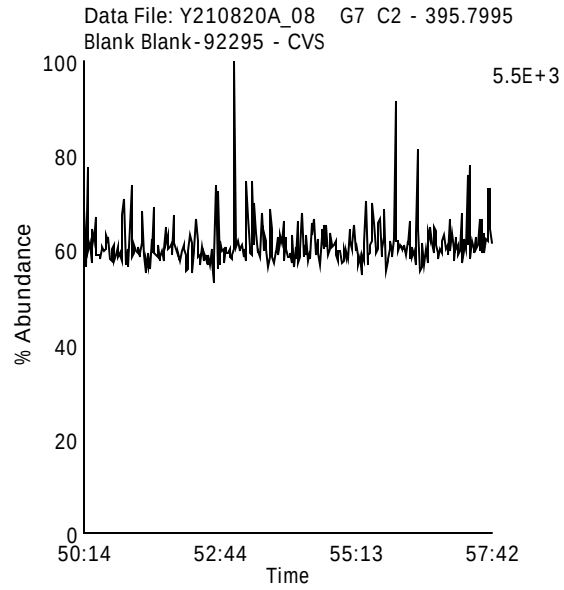










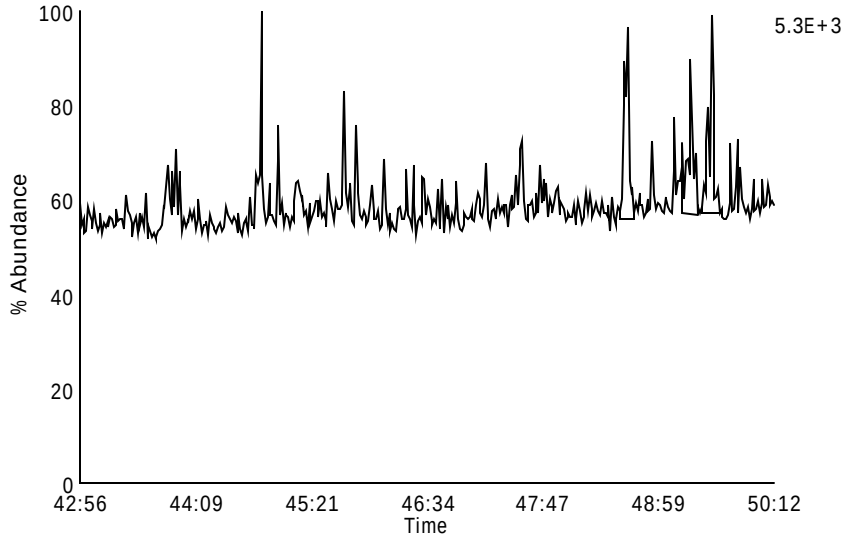


Octa Chlorinated Biphenyls

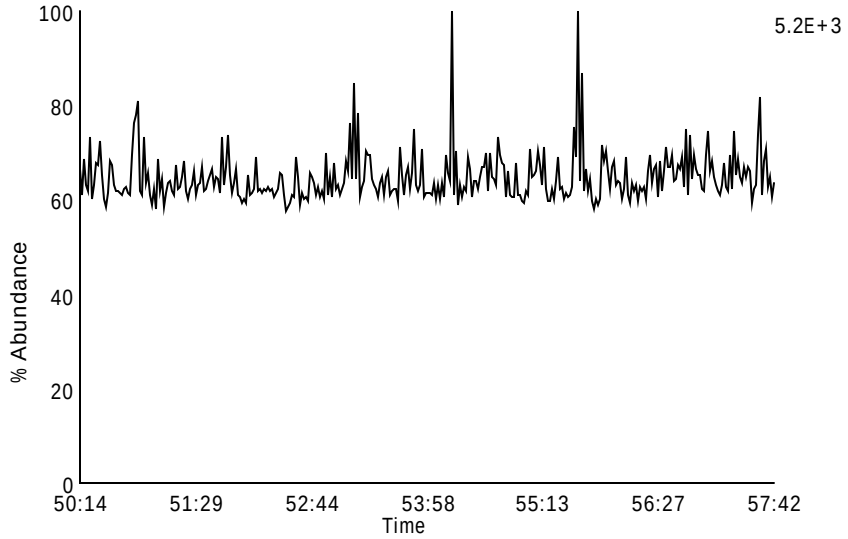
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ

Data File: Y210820A_08 G6 C11 - 427.7635
Blank Blank-92295 - CVS



Data File: Y210820A_08 G7 C5 - 427.7635
Blank Blank-92295 - CVS



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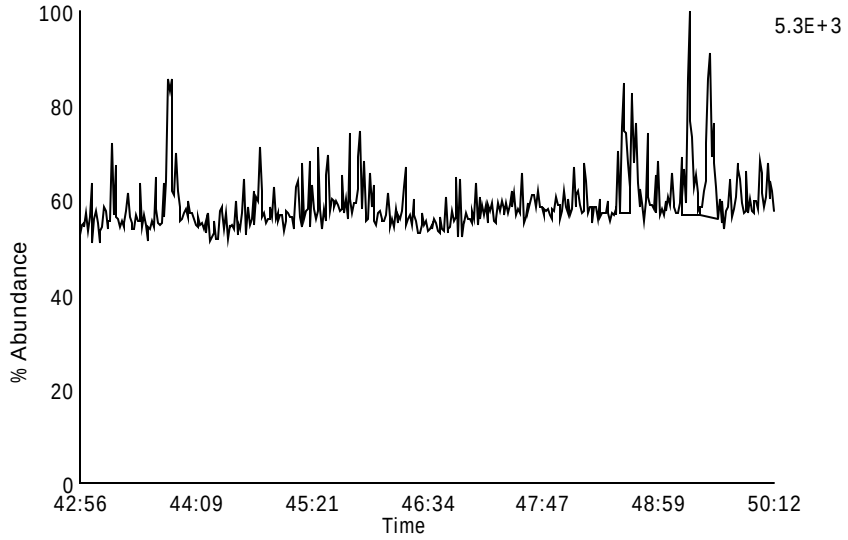
Blank Blank-92295 - CVS



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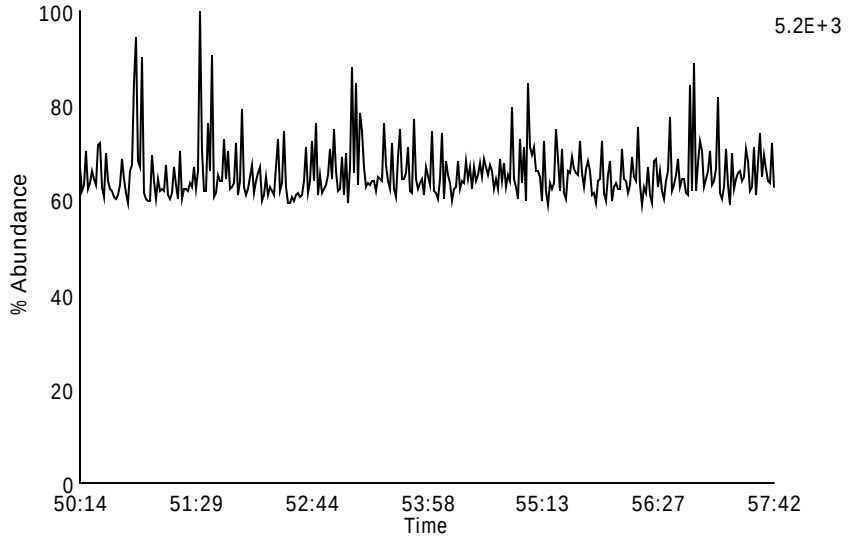
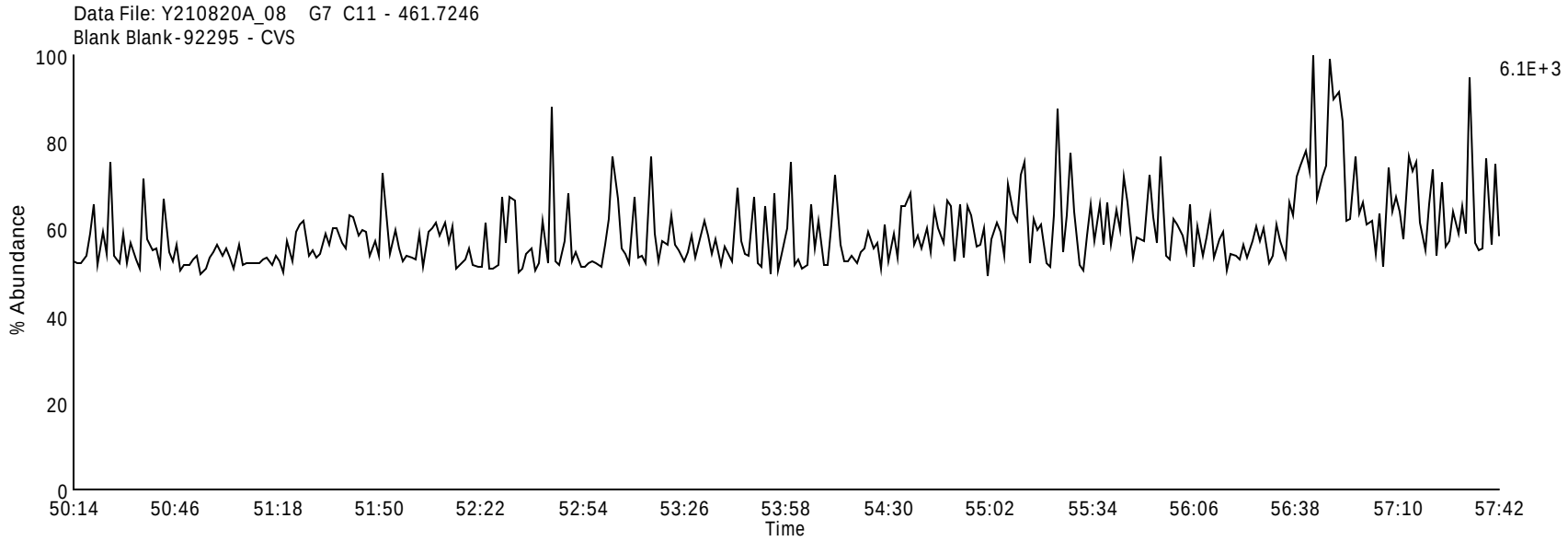
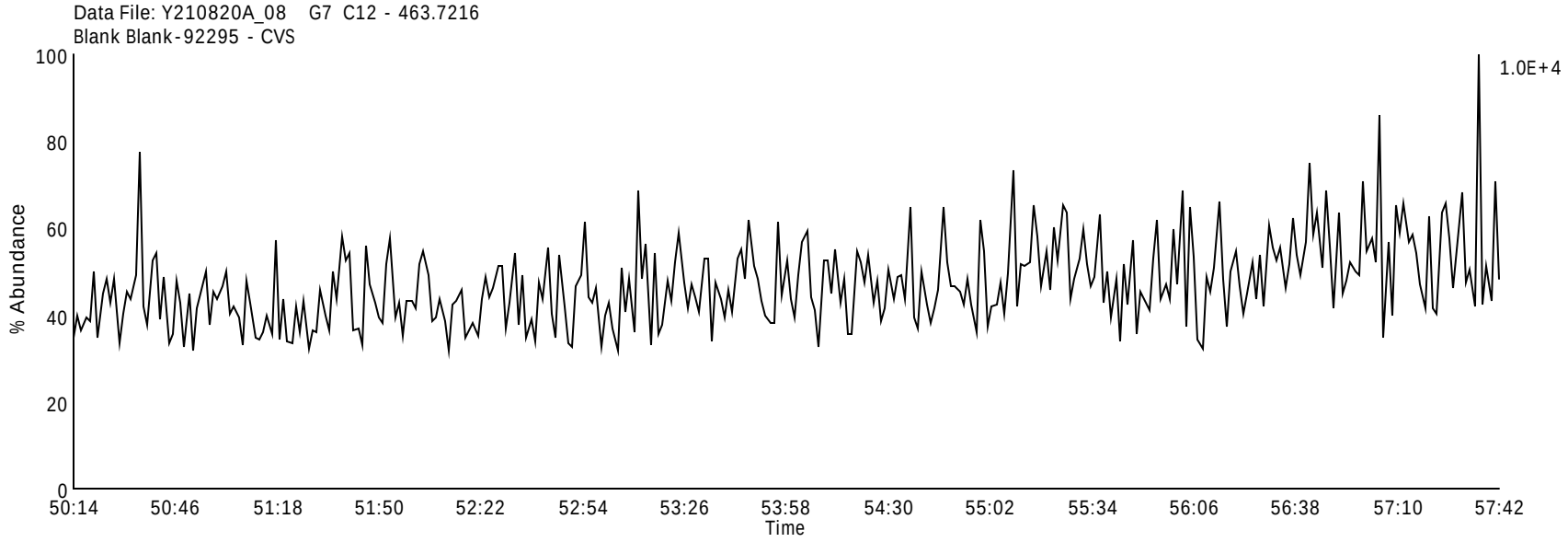
Blank Blank-92295 - CVS



Nona Chlorinated Biphenyls

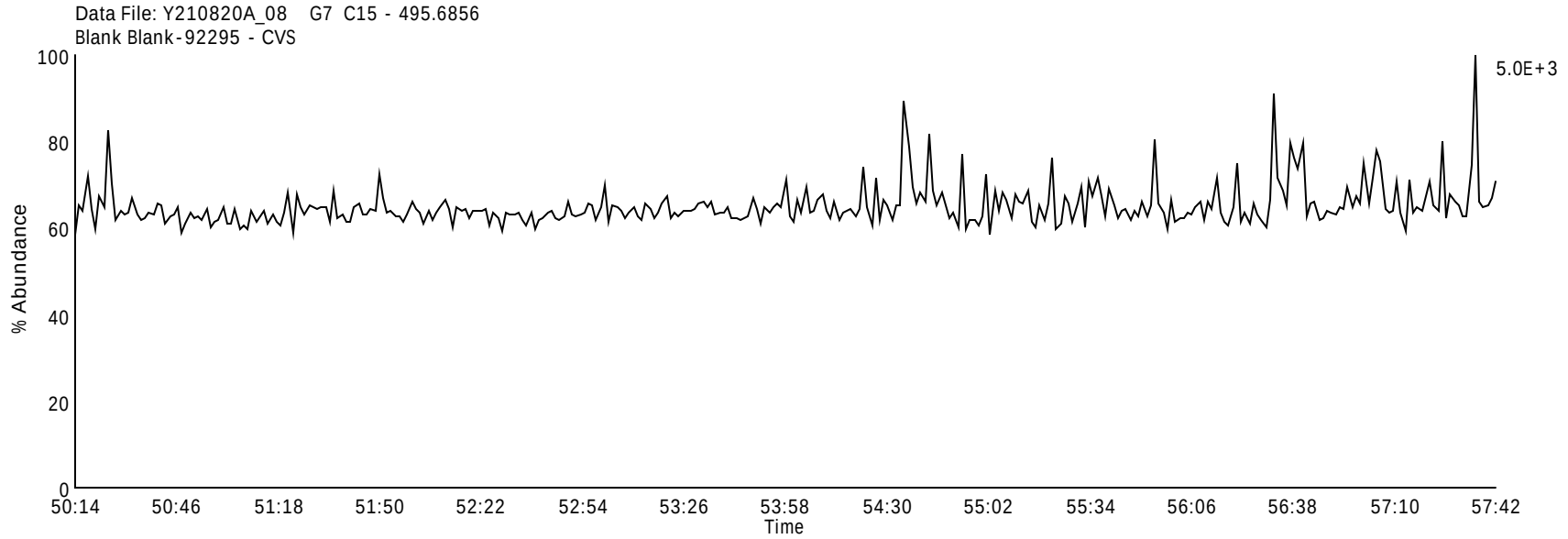
Data File Name: Y210820A_08	Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS	Client Sample ID: CBLKIZ

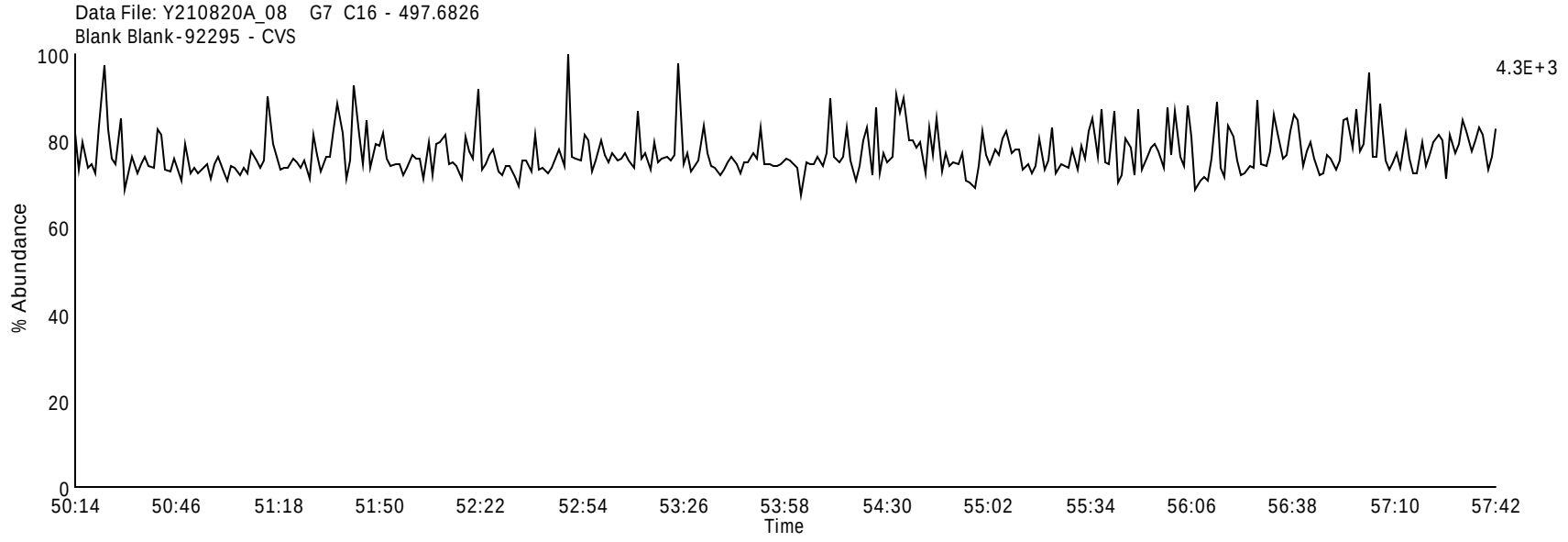




Deca Chlorinated Biphenyl

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ

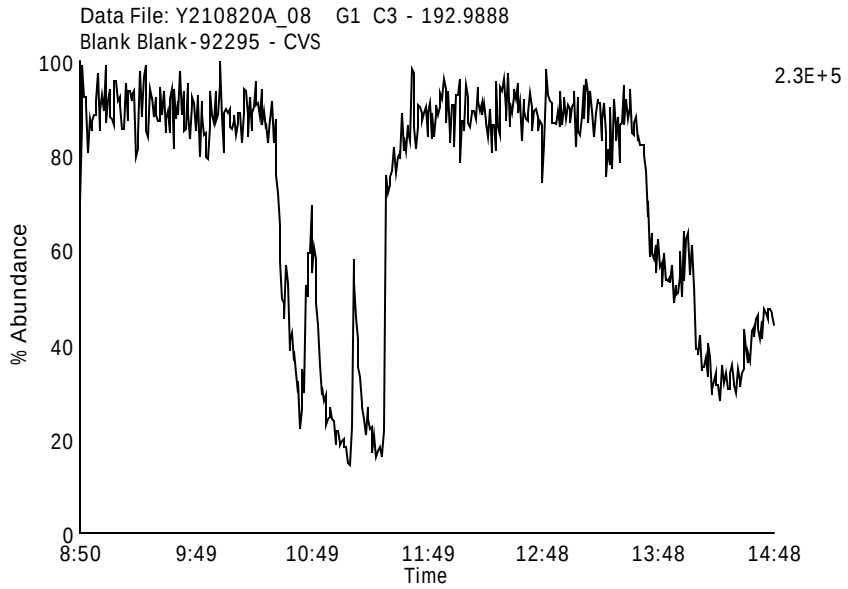


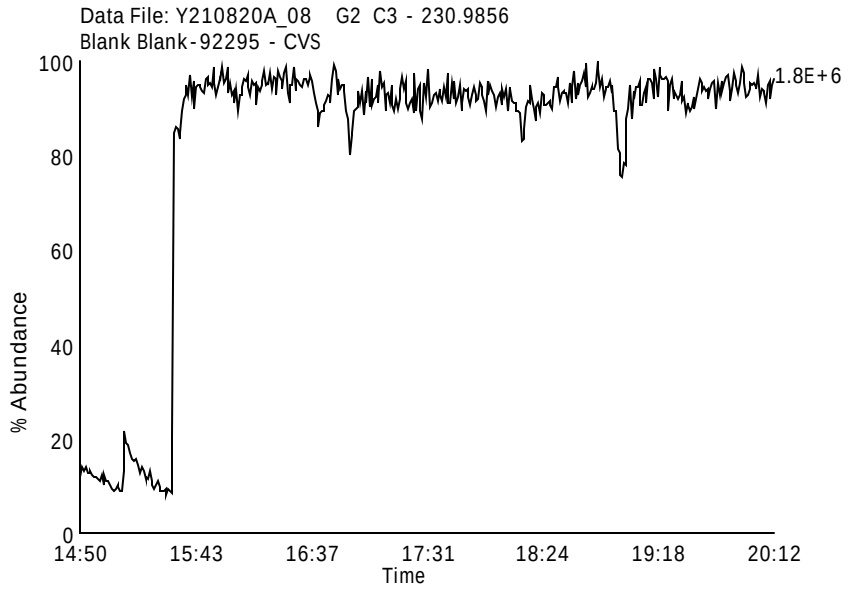


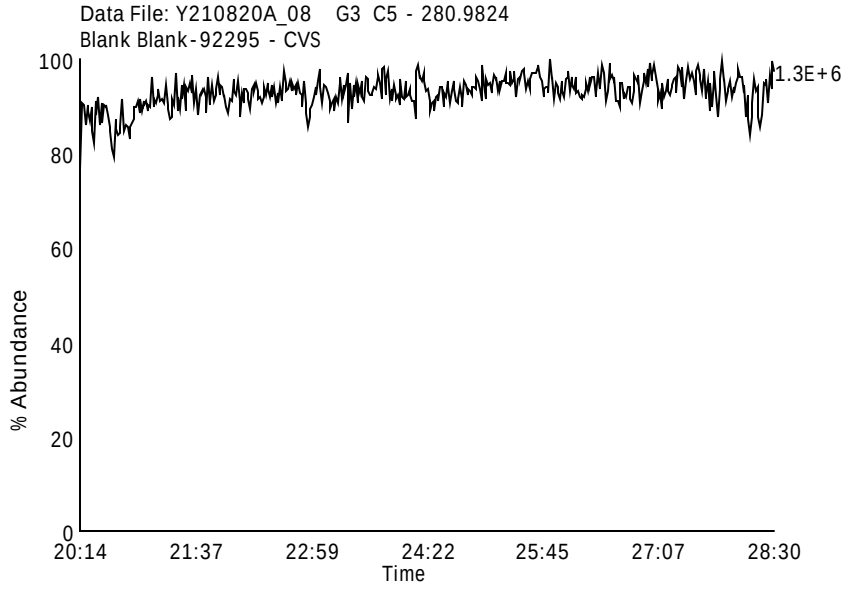
Group 1 - 4 Lock mass

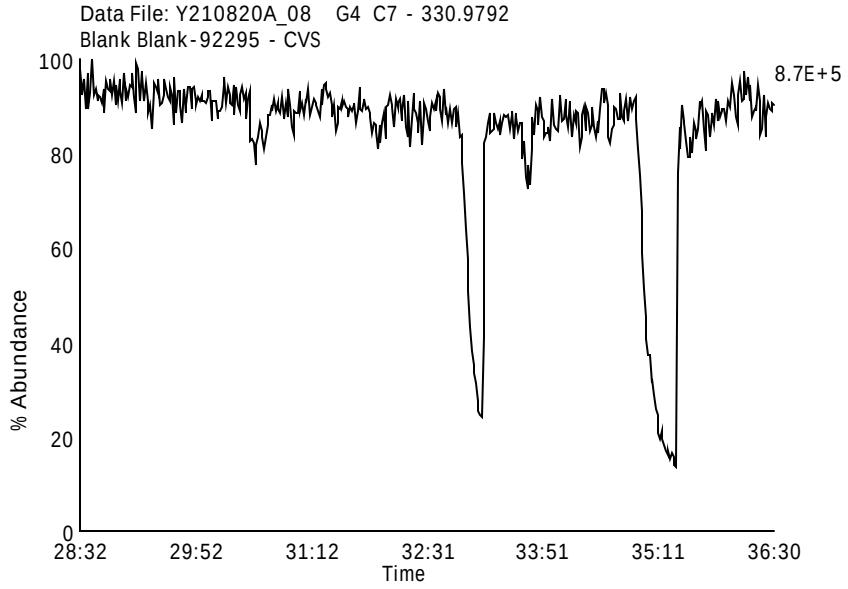
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ





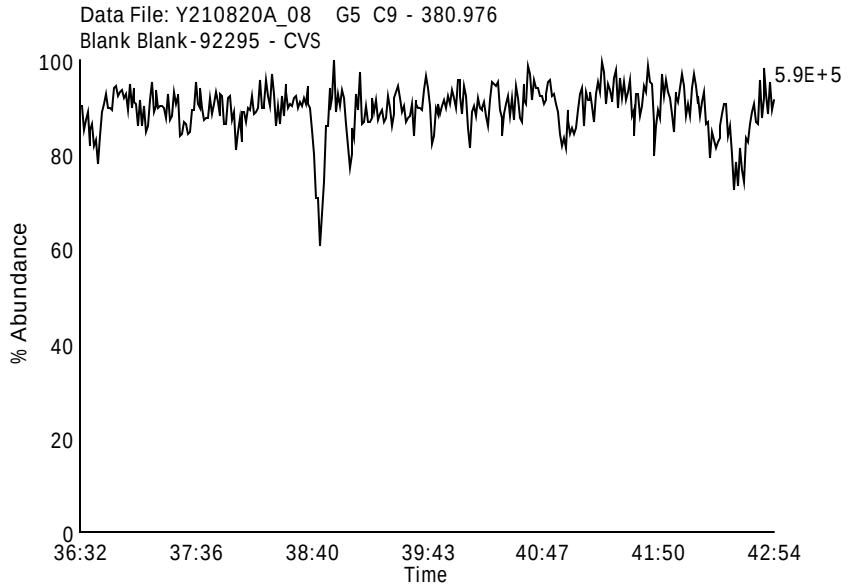


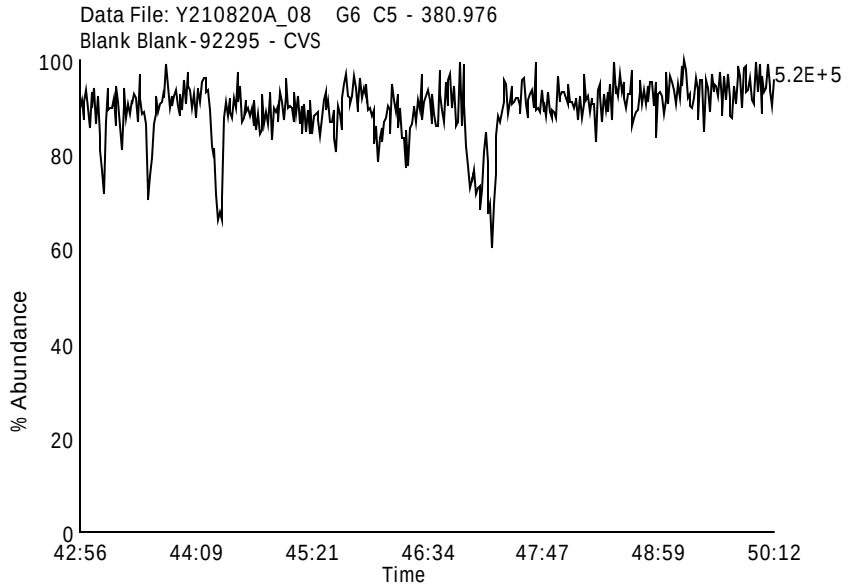


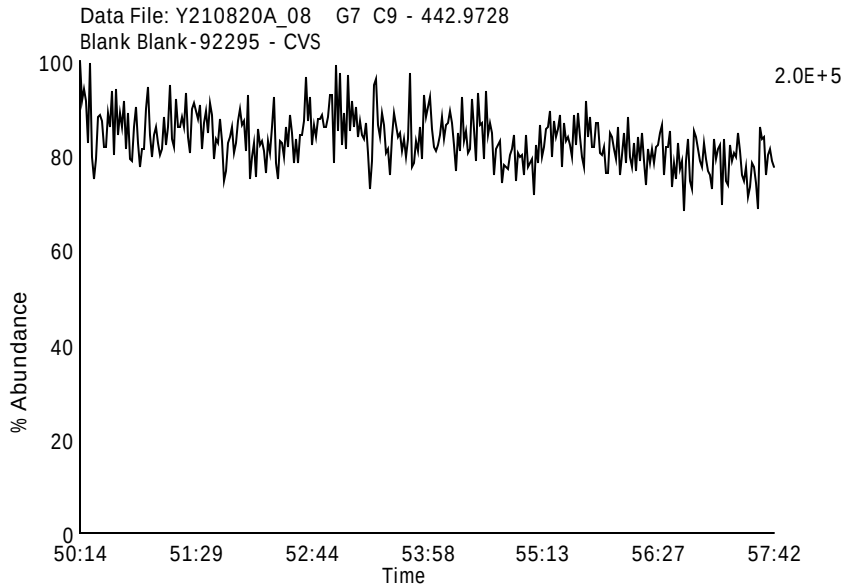
Group 5 - 7 Lock mass

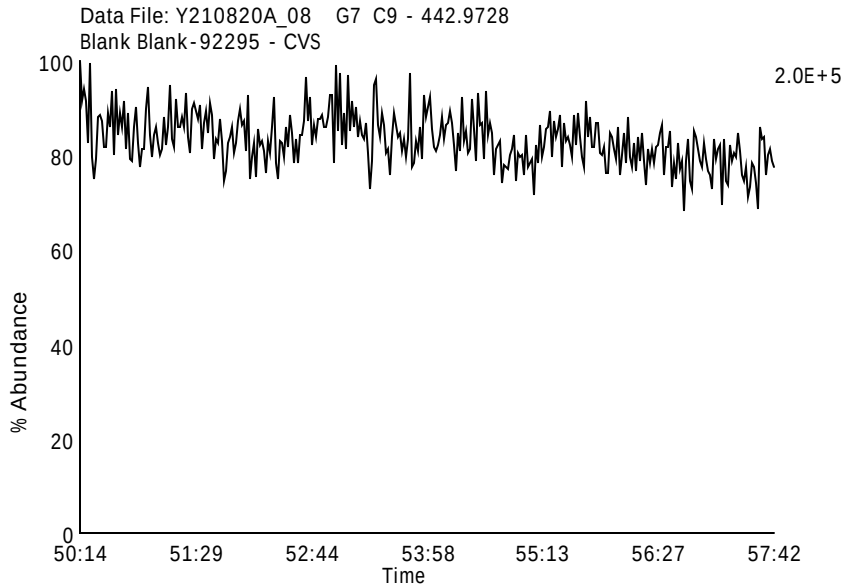
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ



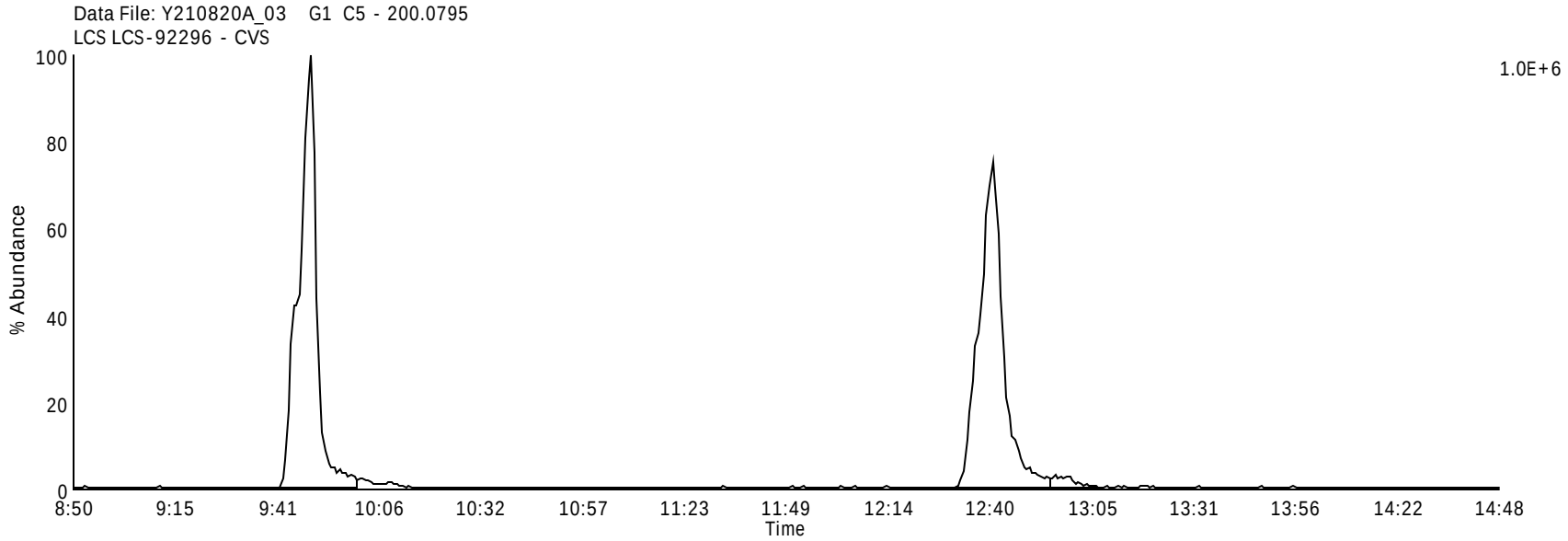


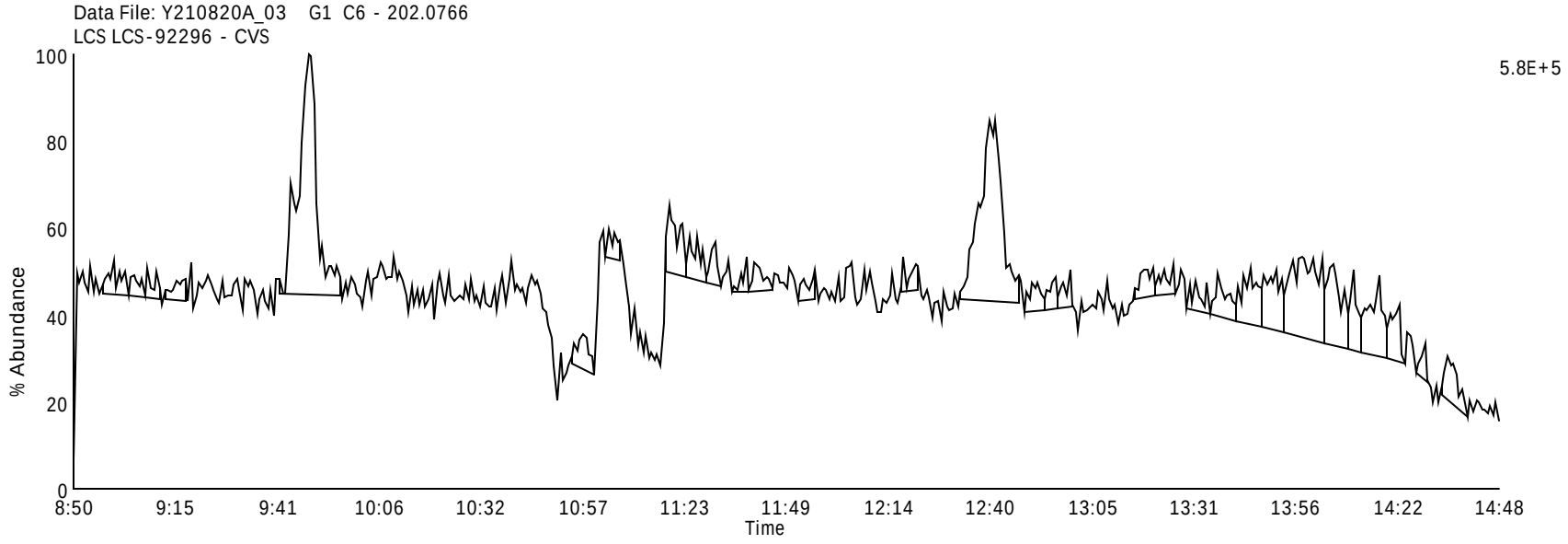




Labeled Mono Chlorinated Biphenyls

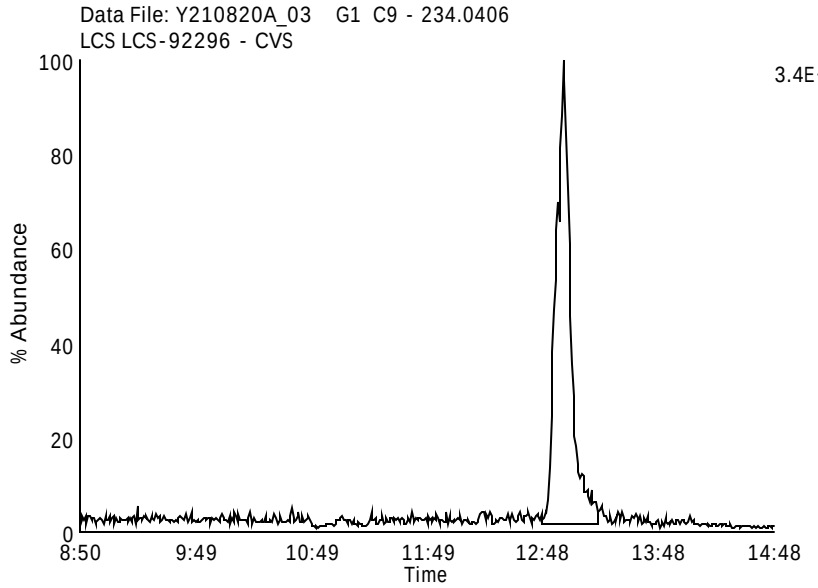
Data File Name: Y210820A_03 | Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS | Client Sample ID: CLCSET

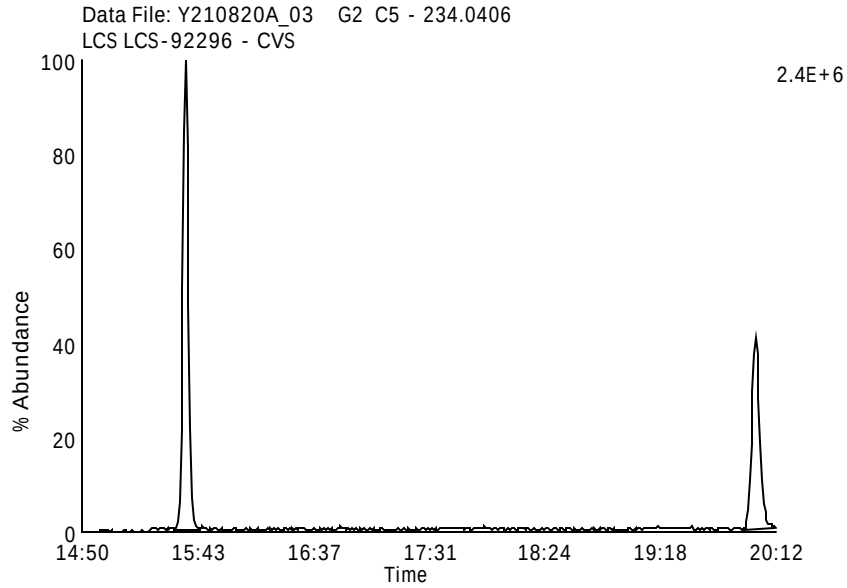


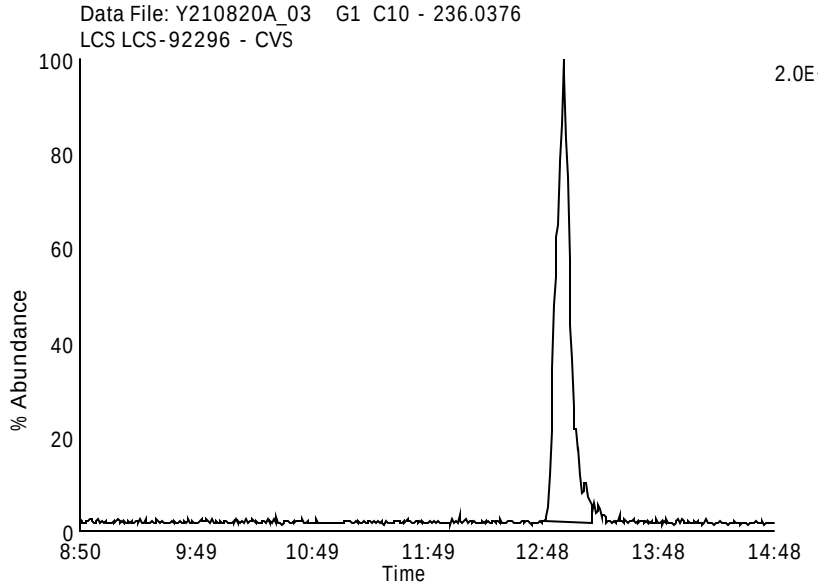


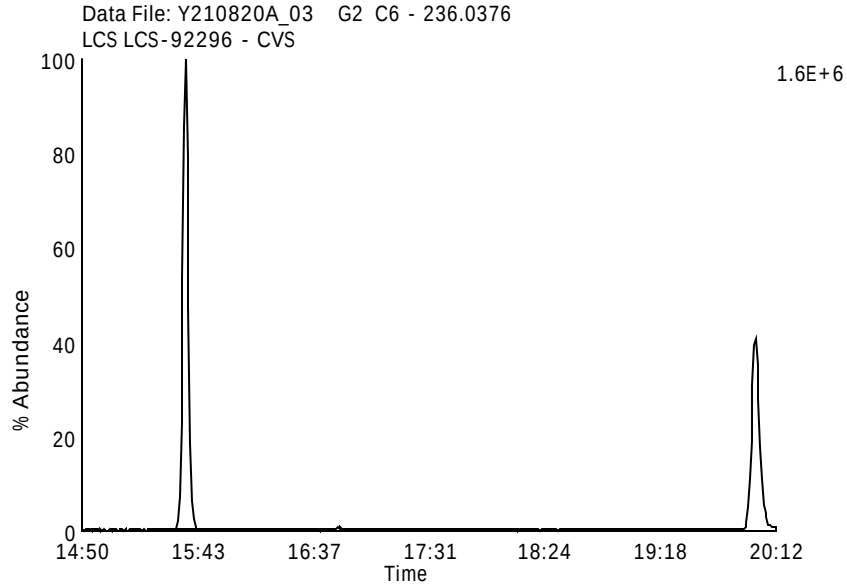
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET



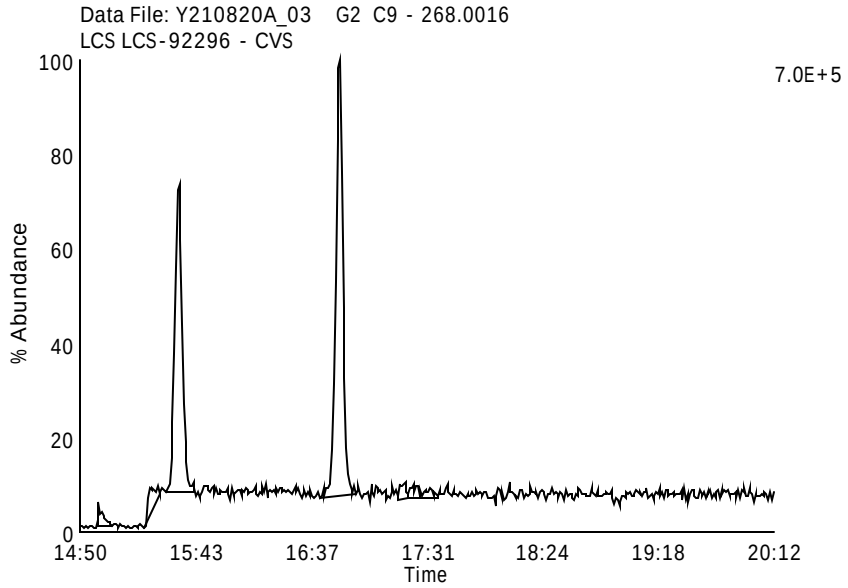


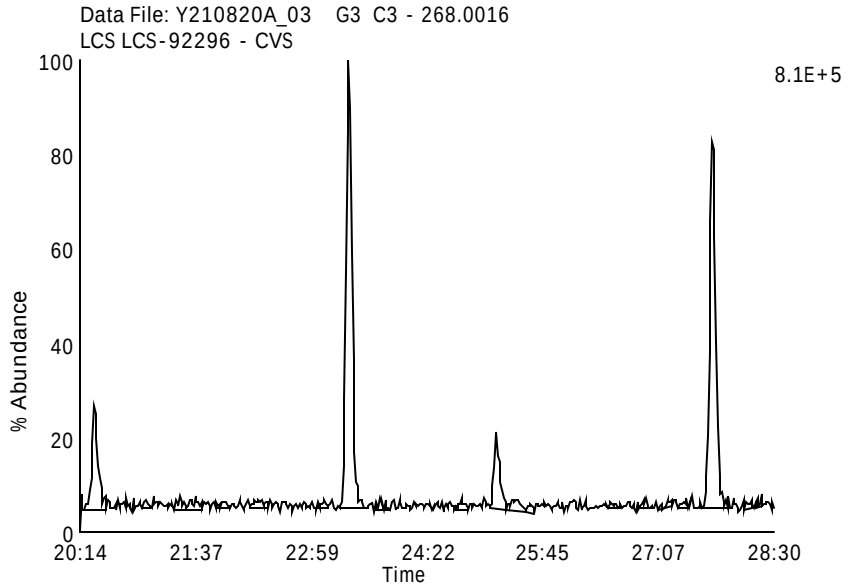


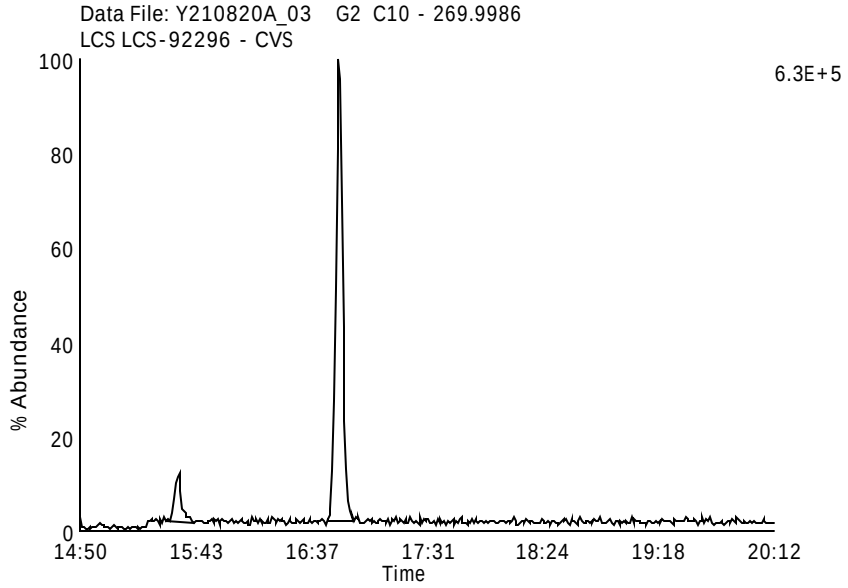


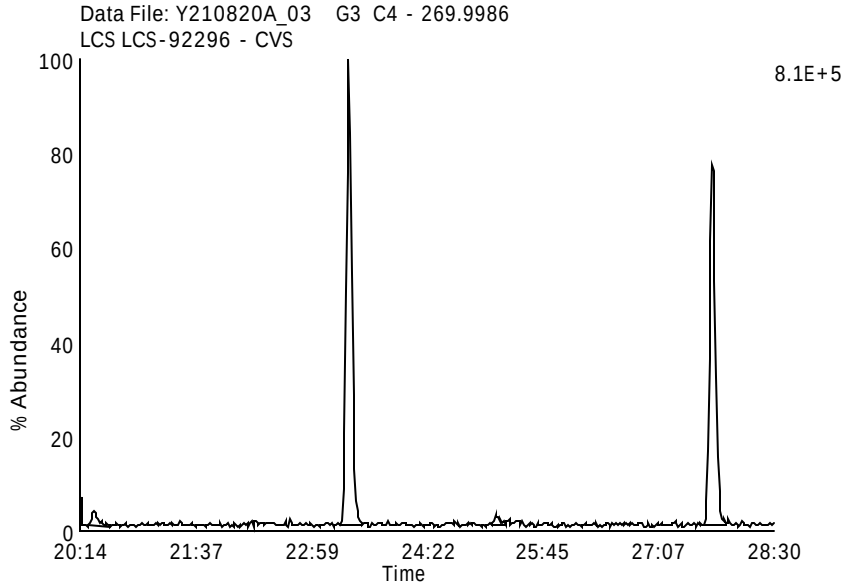
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET



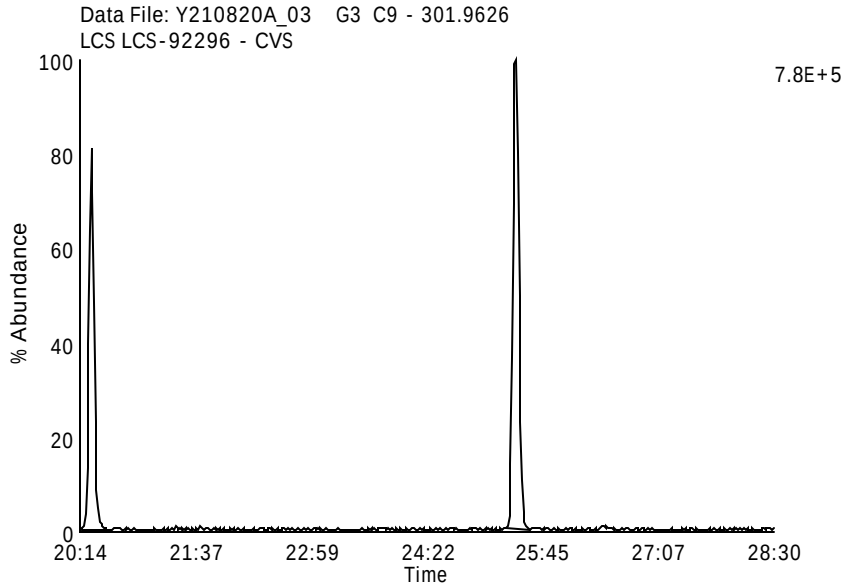


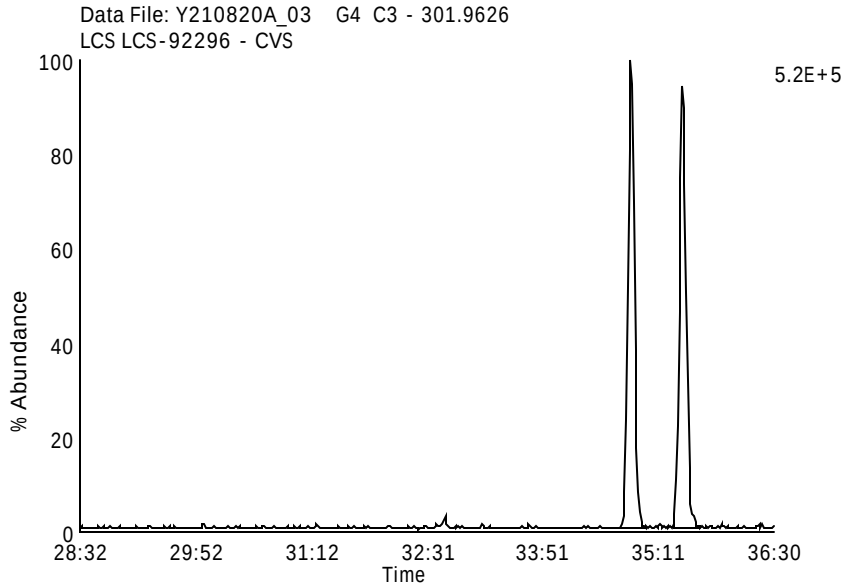


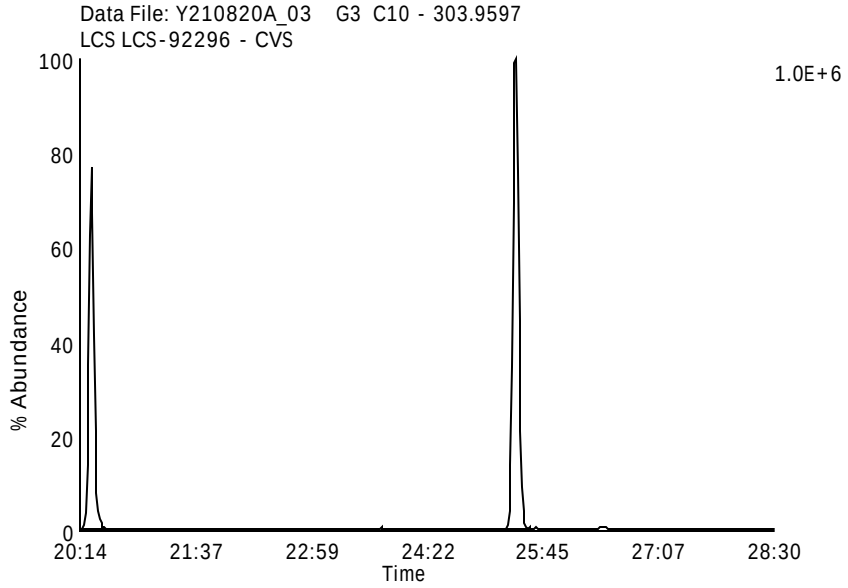


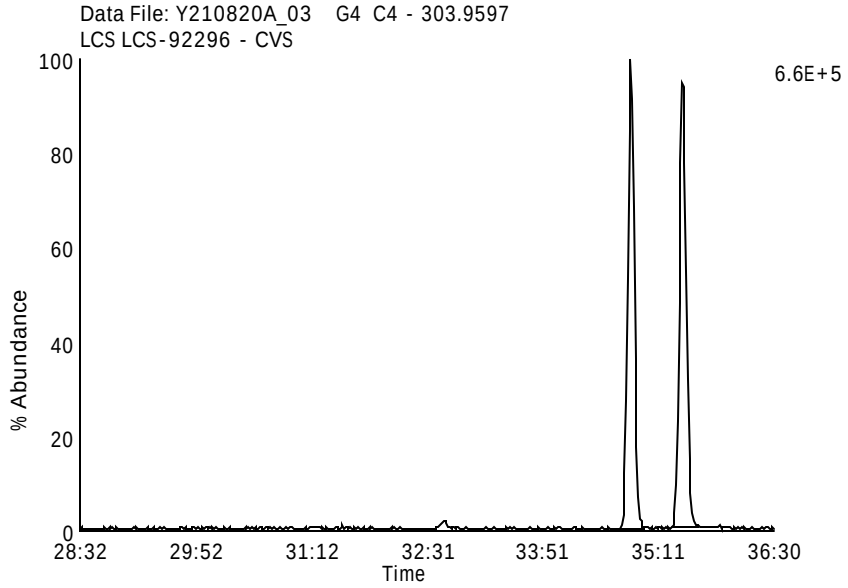
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET



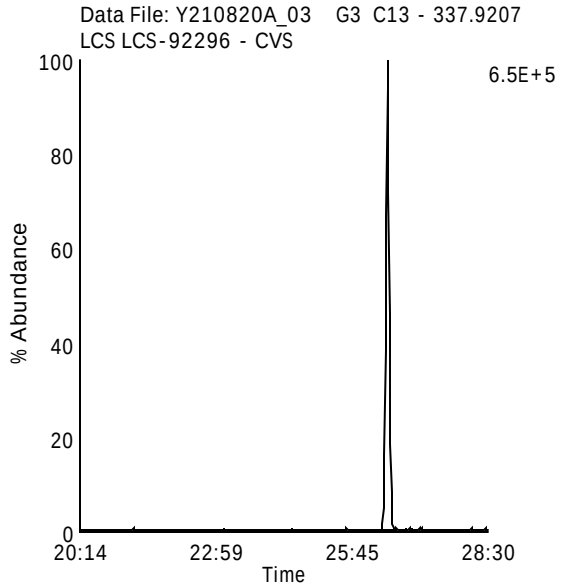


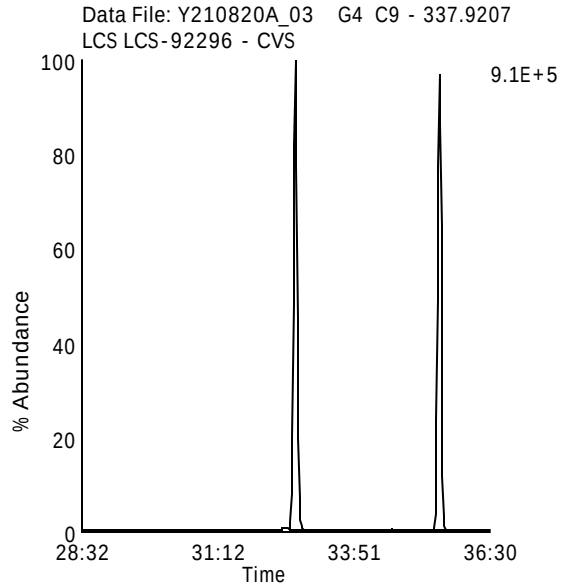


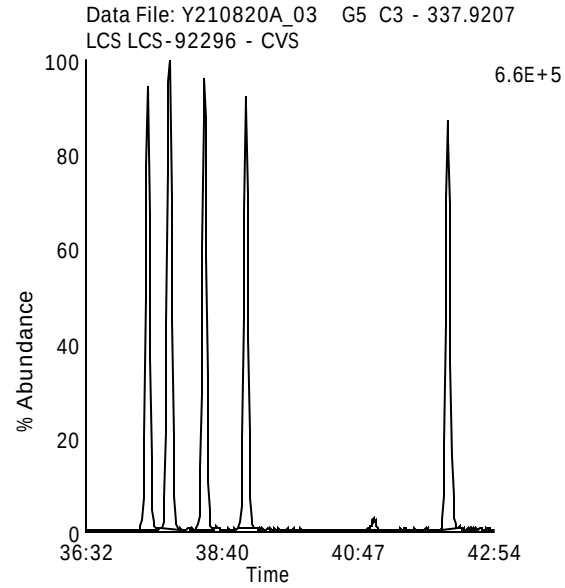


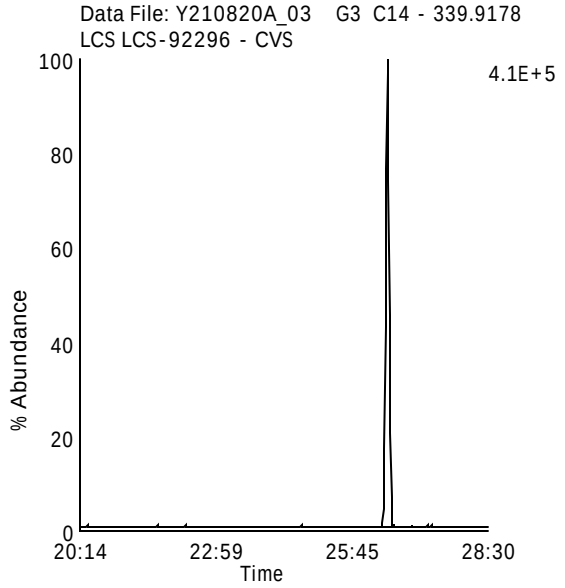
Labeled Penta Chlorinated Biphenyls

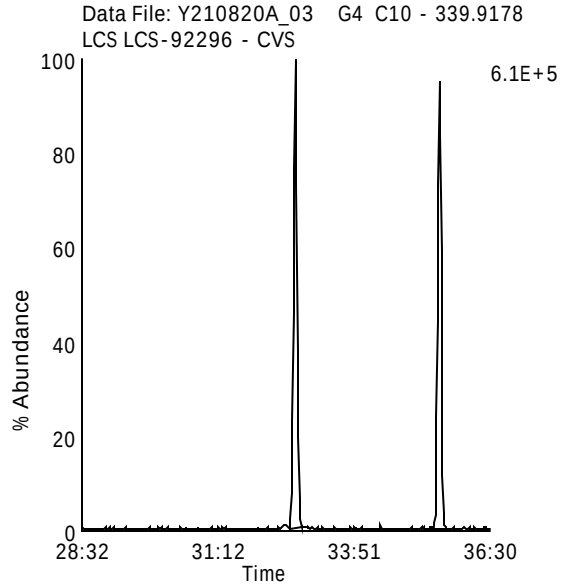
Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET

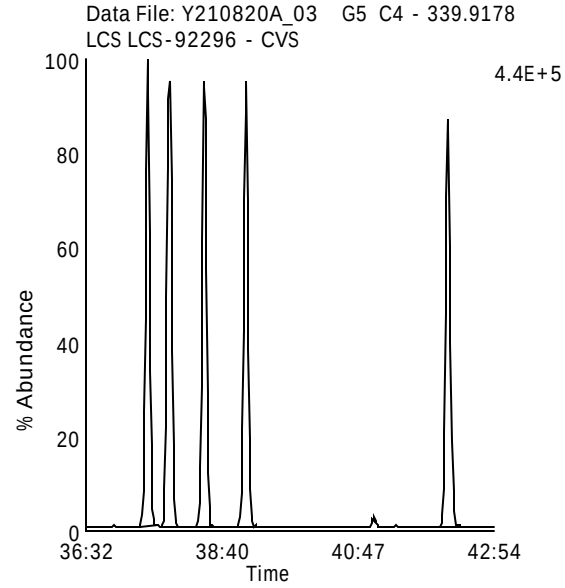






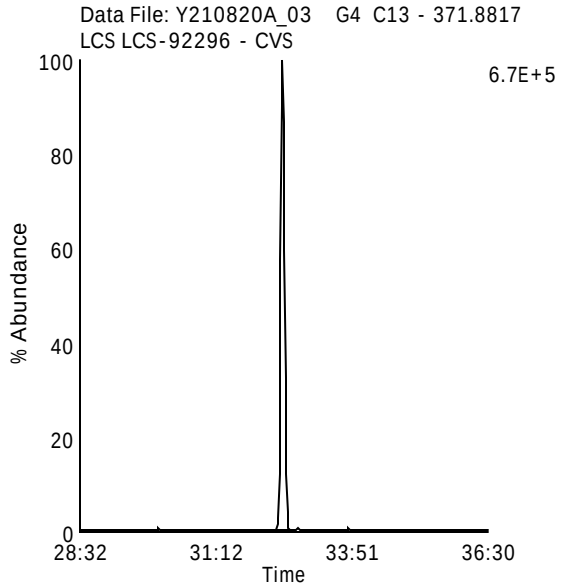


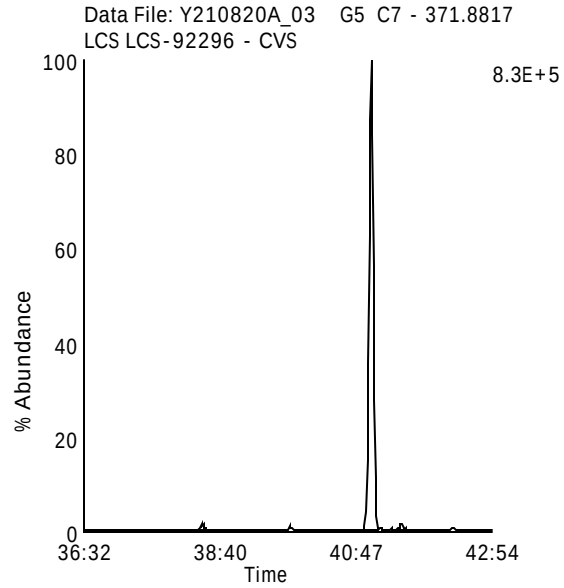


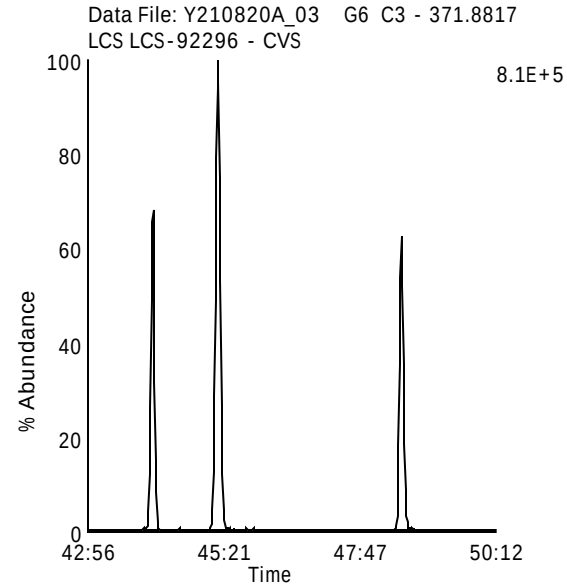


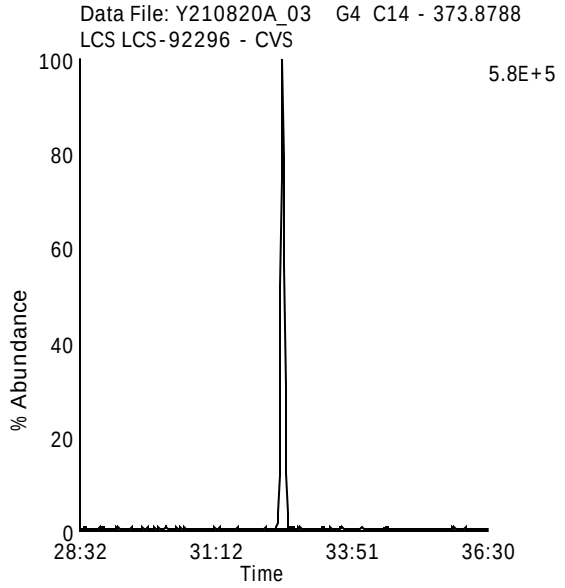
Labeled Hexa Chlorinated Biphenyls

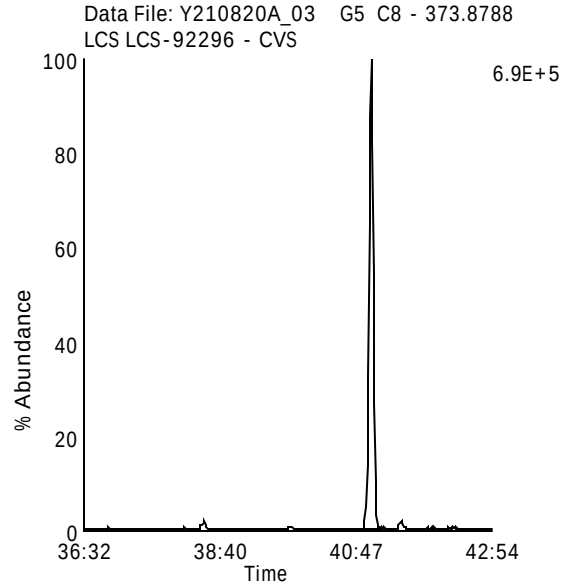
Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET

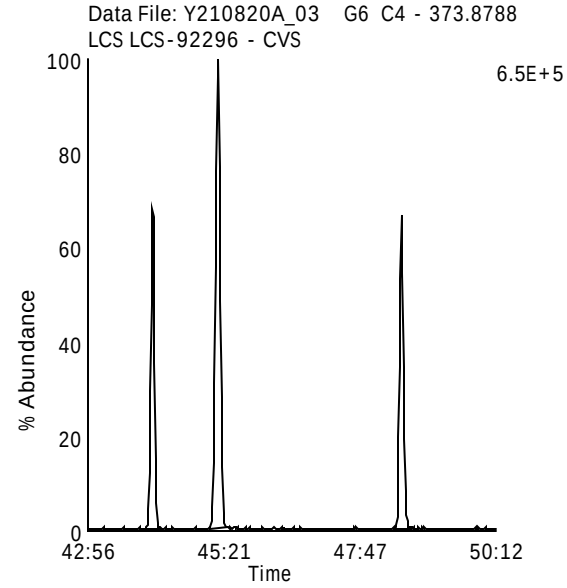






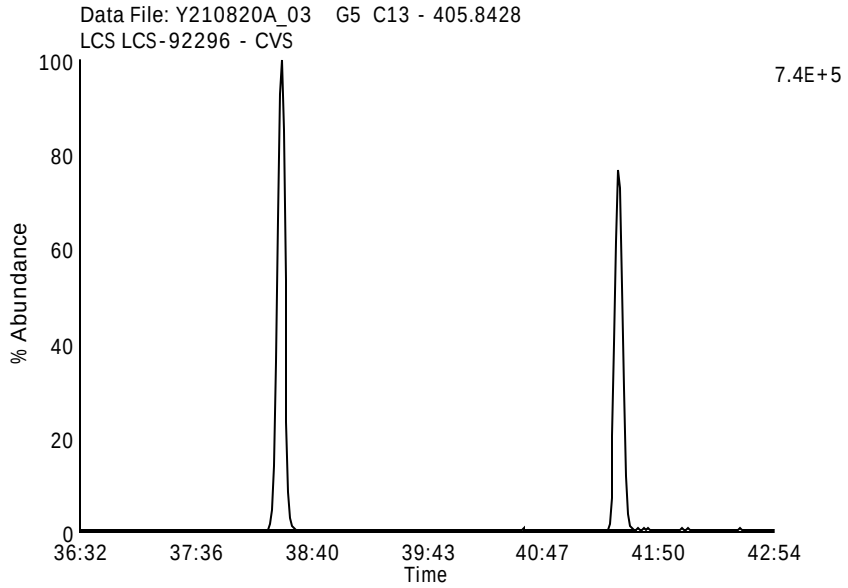


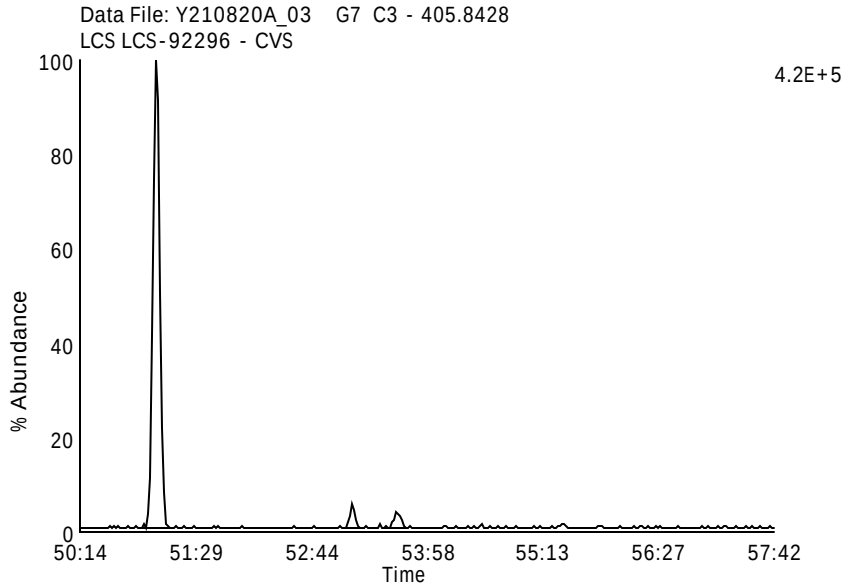


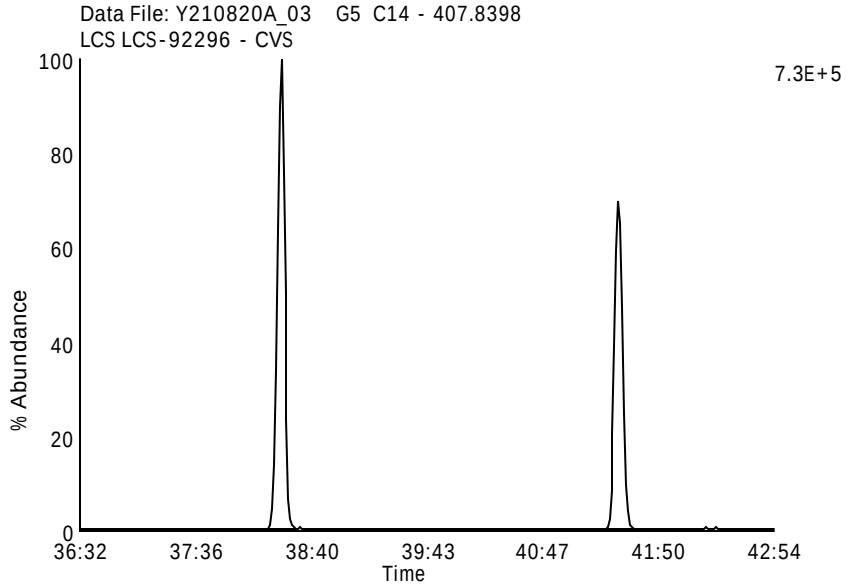


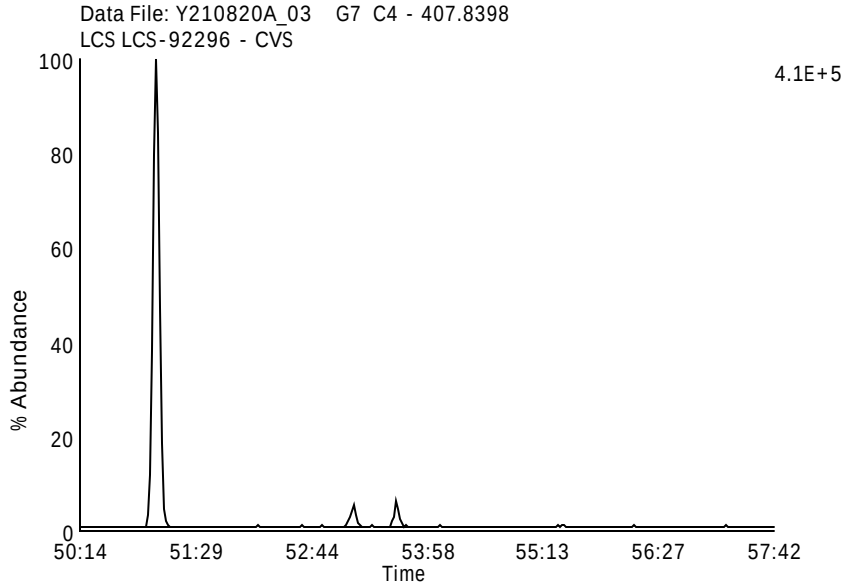
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET





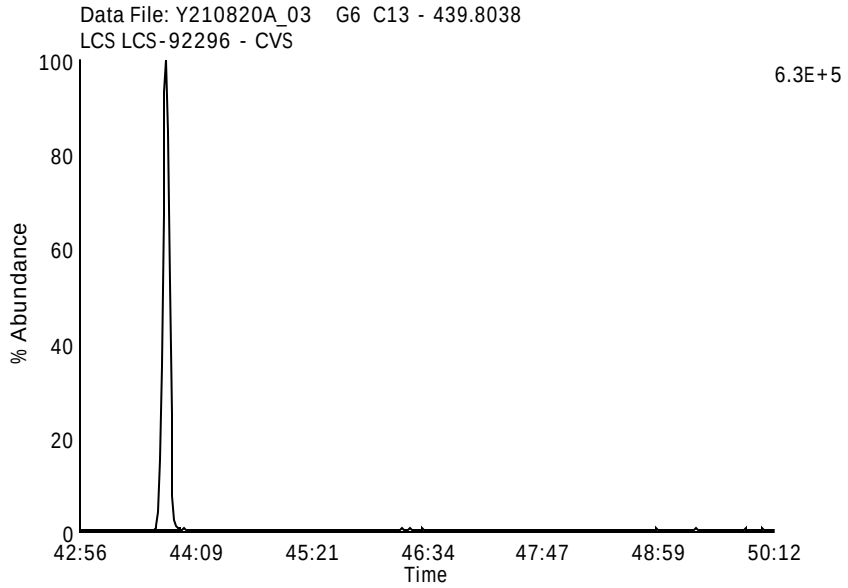


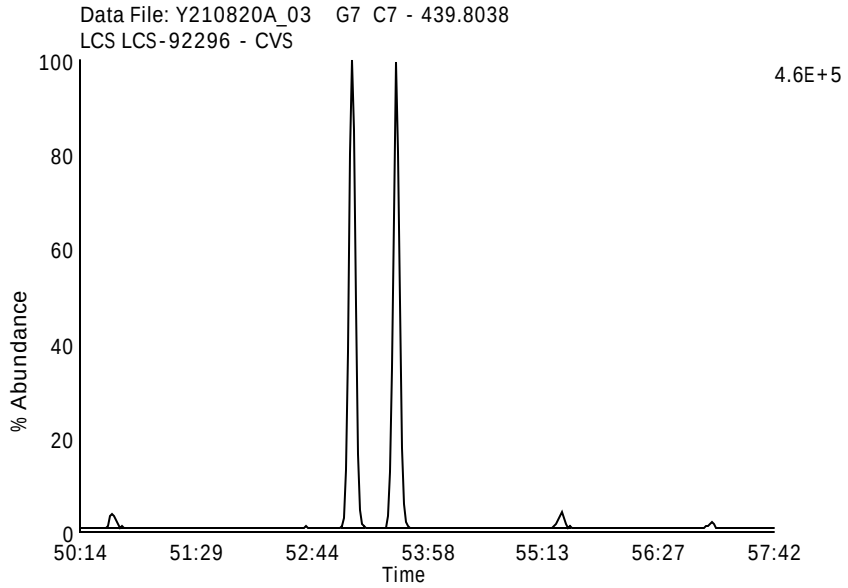


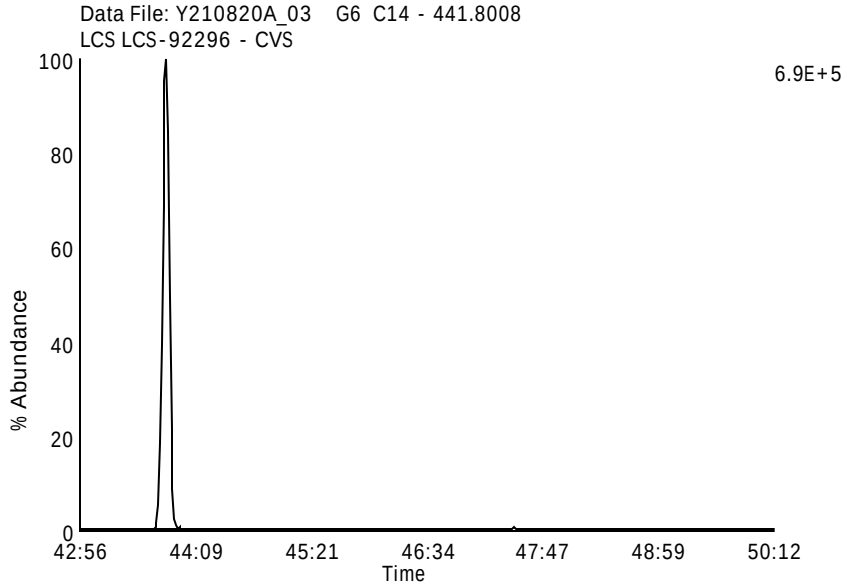
Labeled Octa Chlorinated Biphenyls

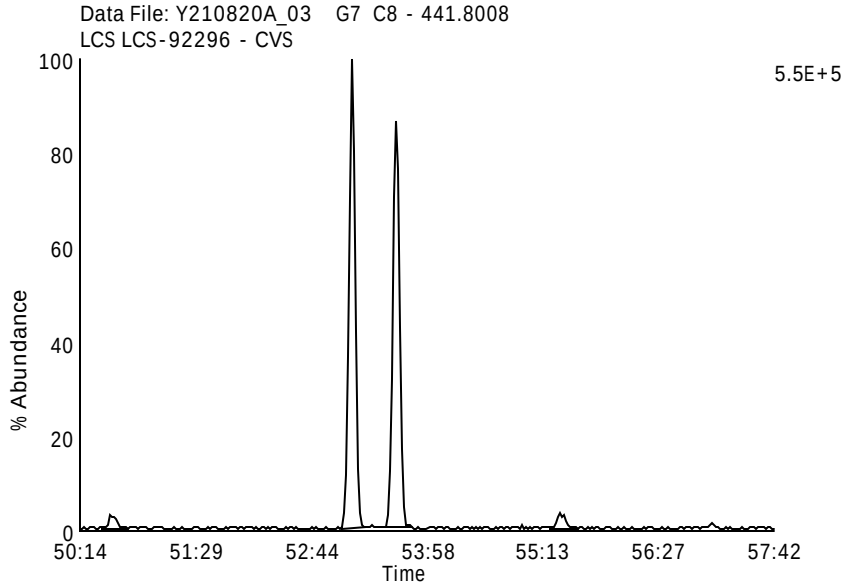
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET



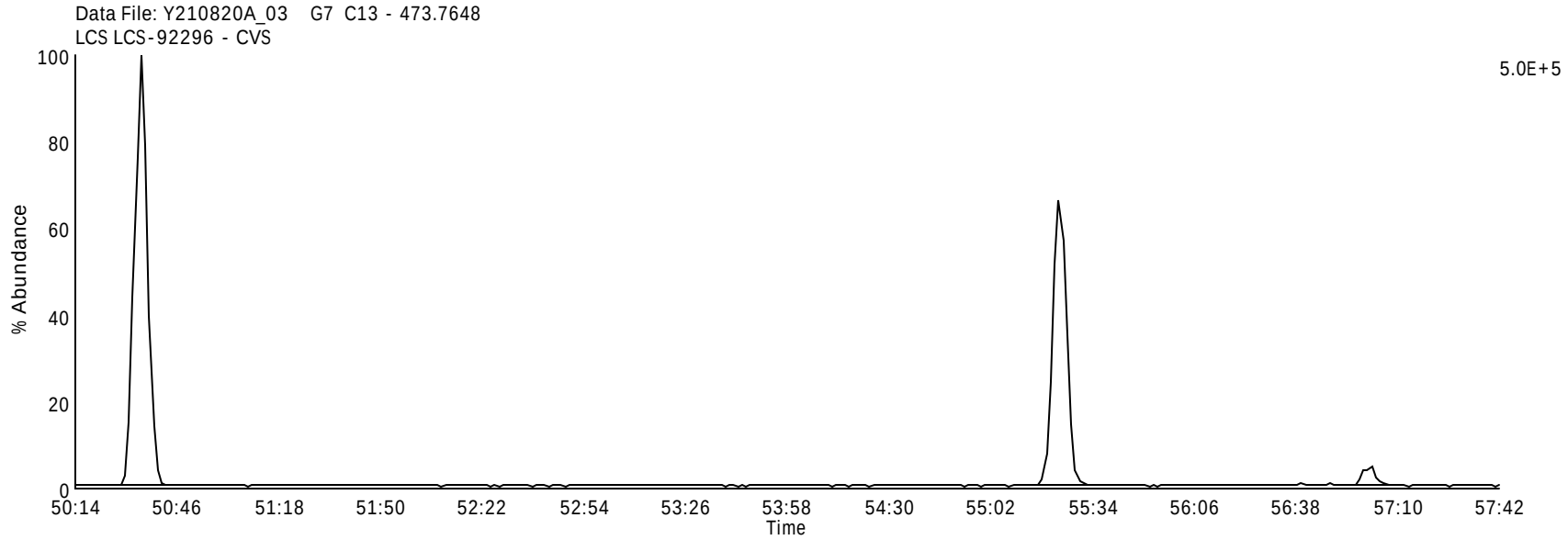


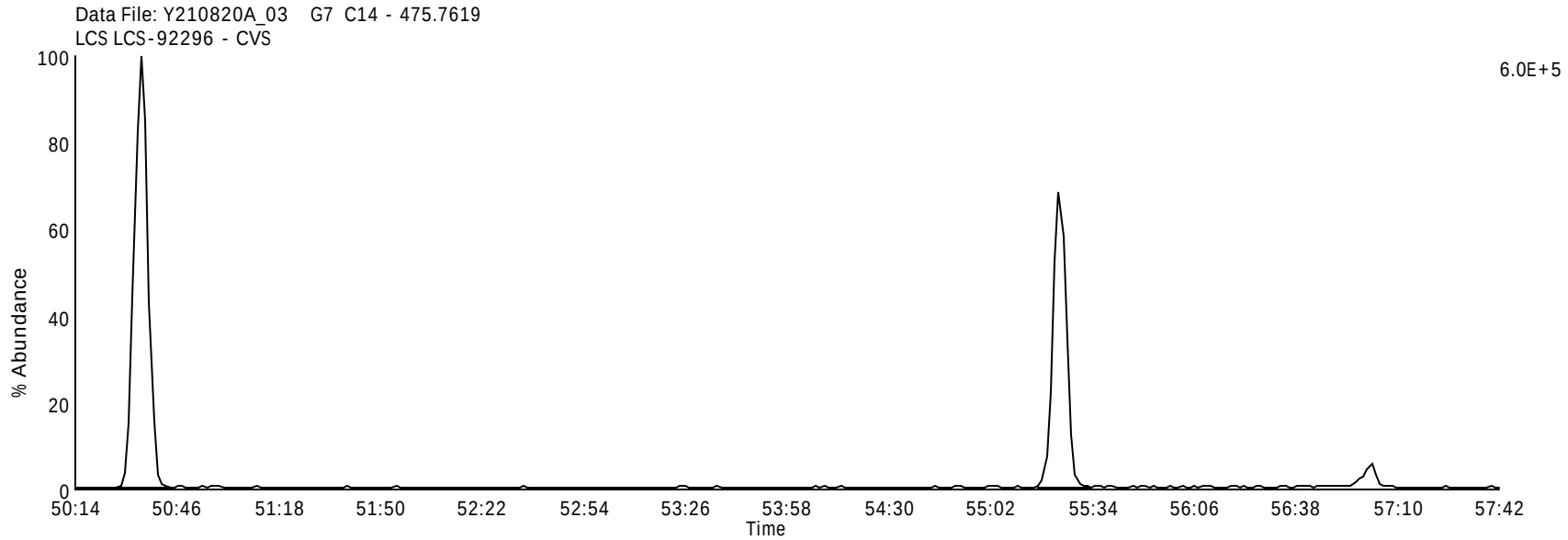




Labeled Nona Chlorinated Biphenyls

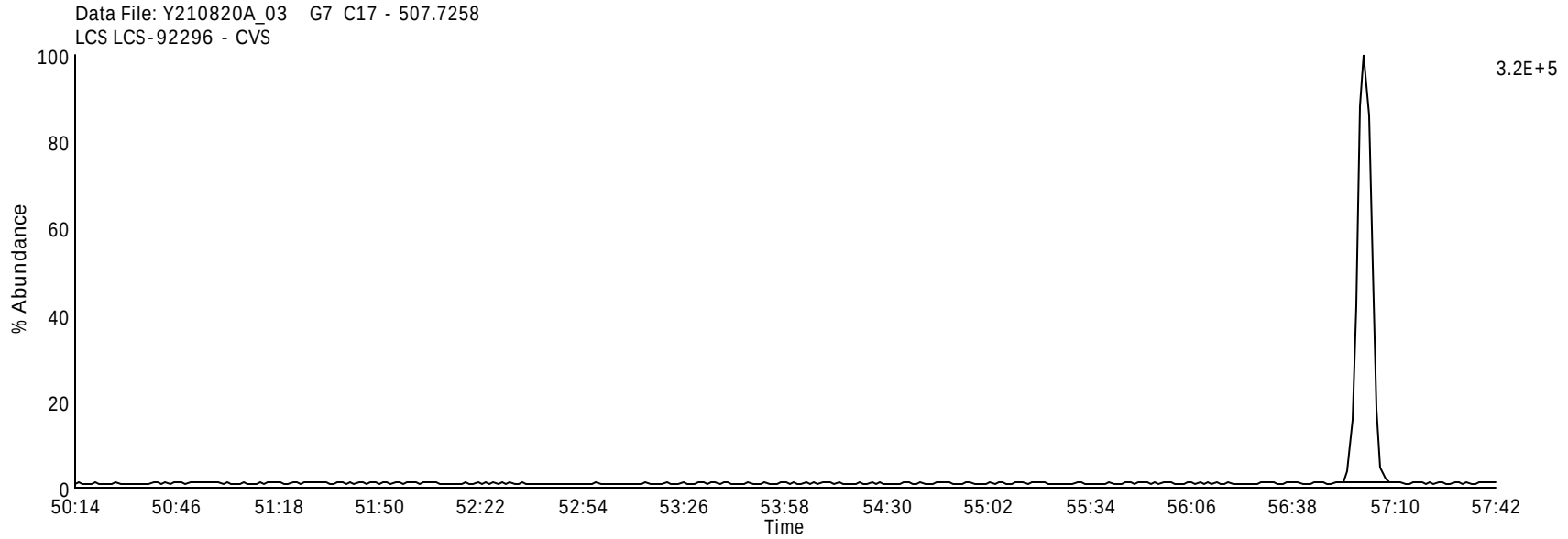
Data File Name: Y210820A_03	Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS	Client Sample ID: CLCSET

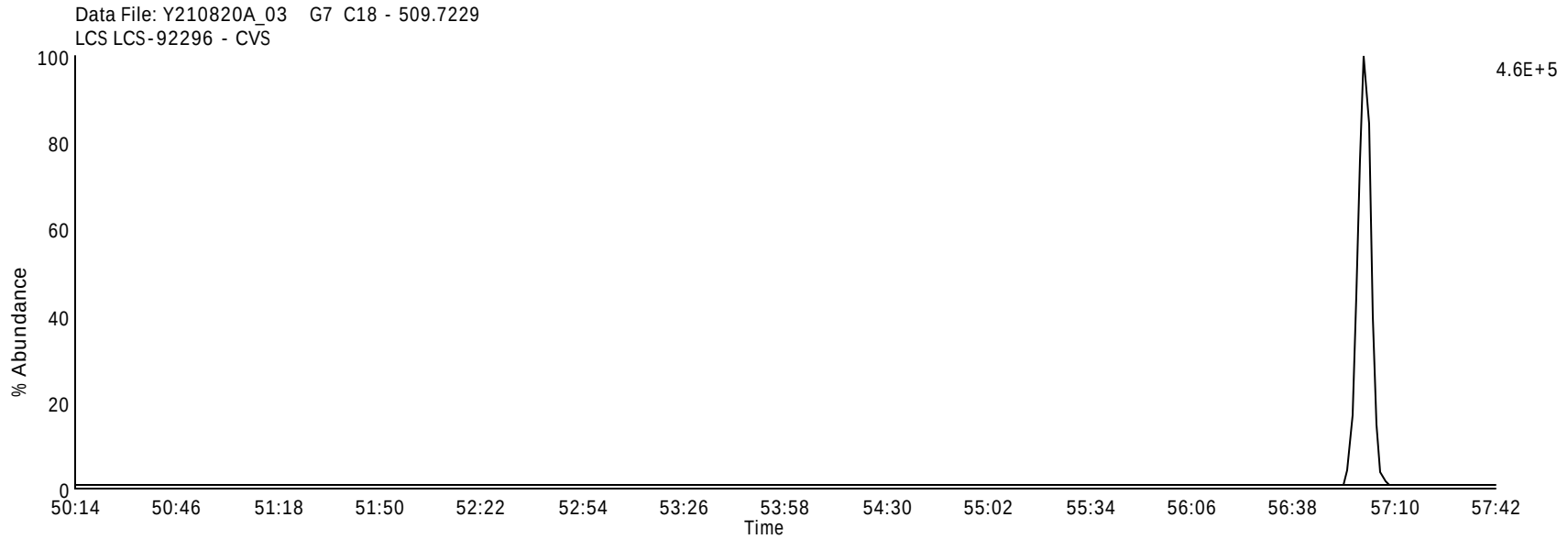




Labeled Deca Chlorinated Biphenyl

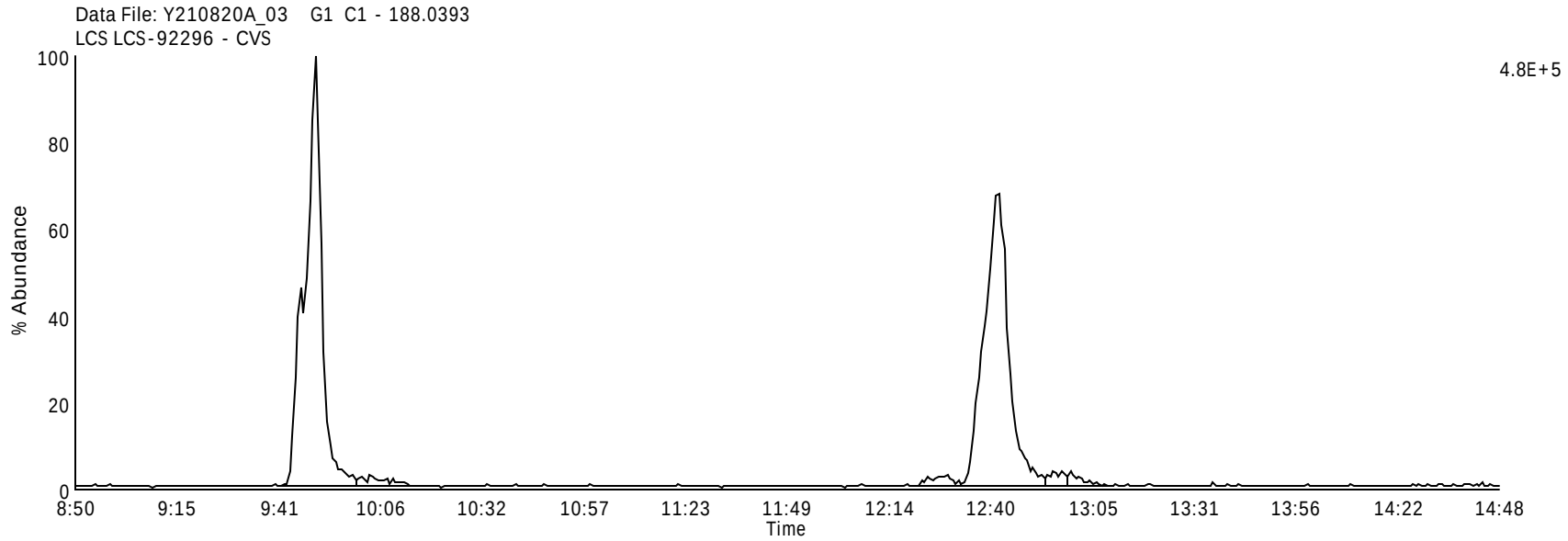
Data File Name: Y210820A_03	Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS	Client Sample ID: CLCSET

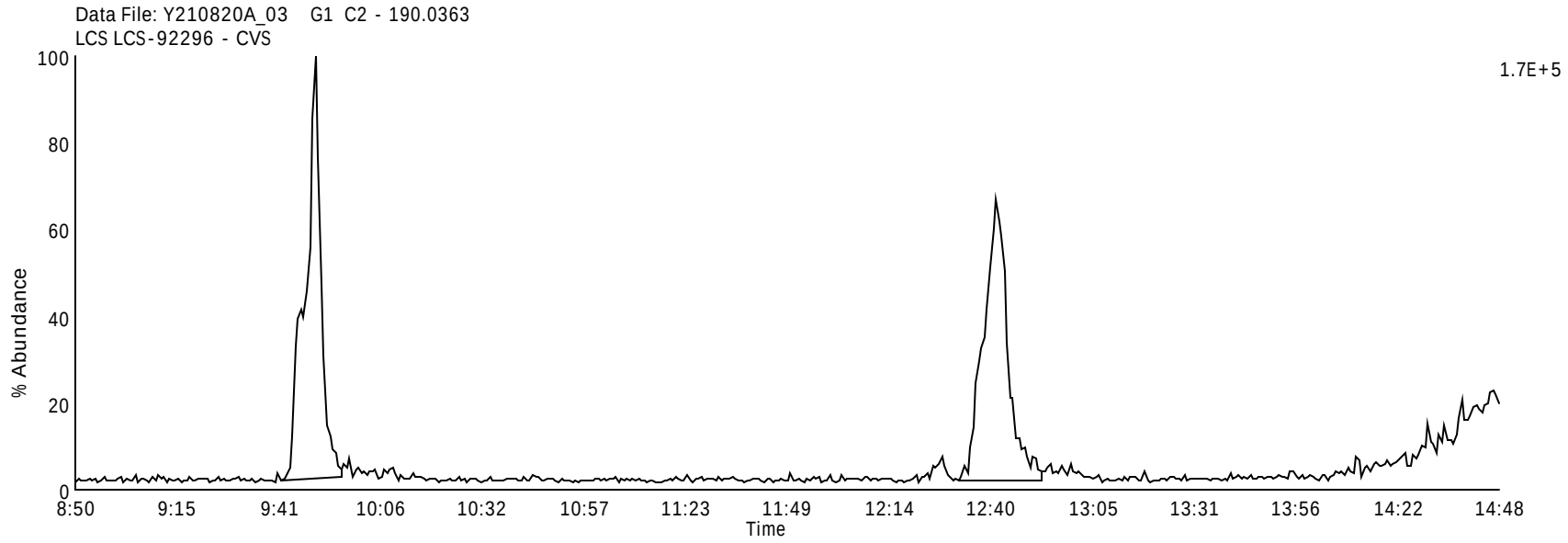




Mono Chlorinated Biphenyls

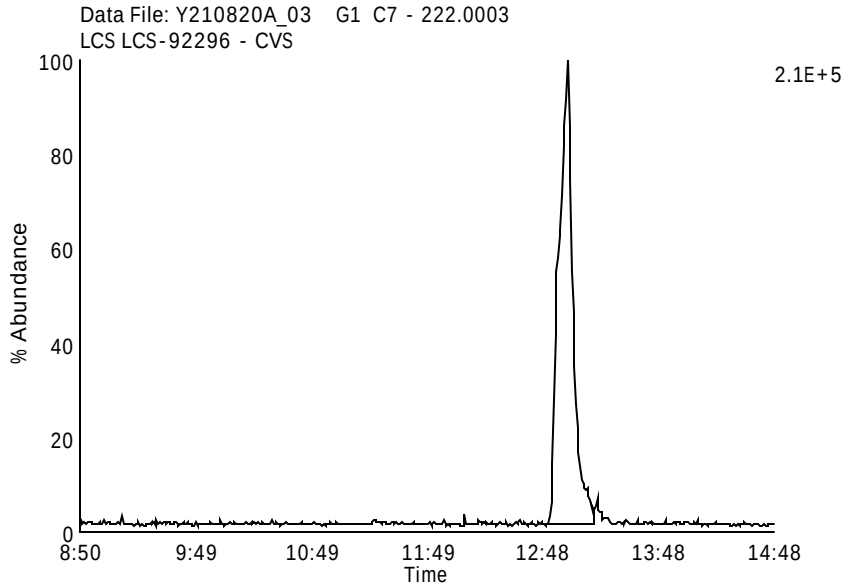
Data File Name: Y210820A_03 | Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS | Client Sample ID: CLCSET

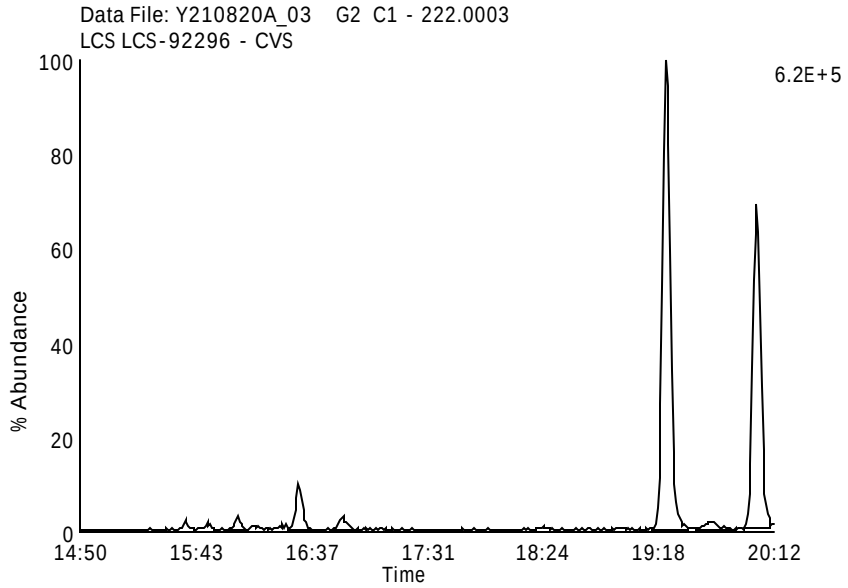


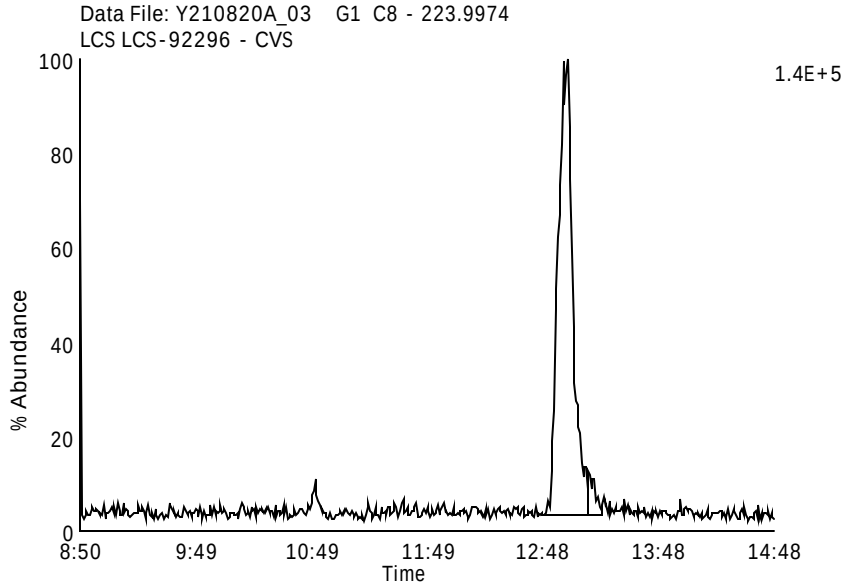


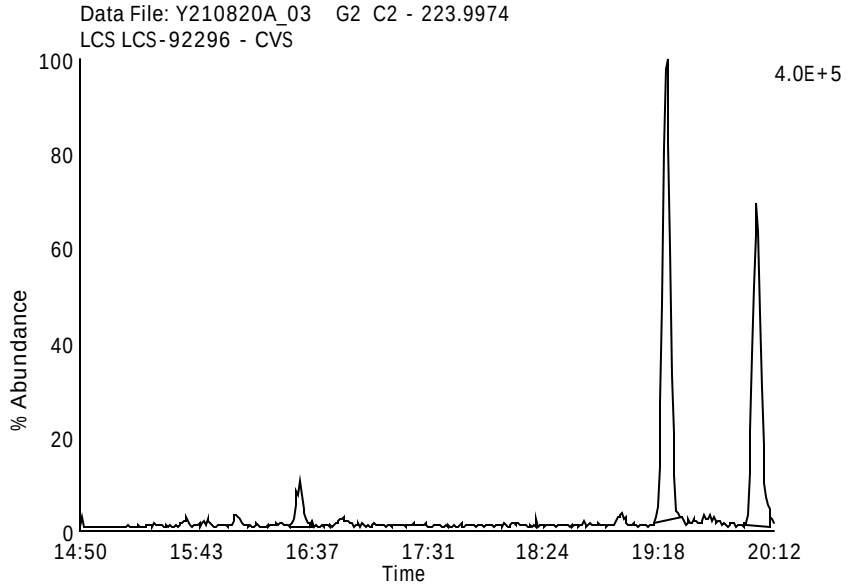
Di Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET





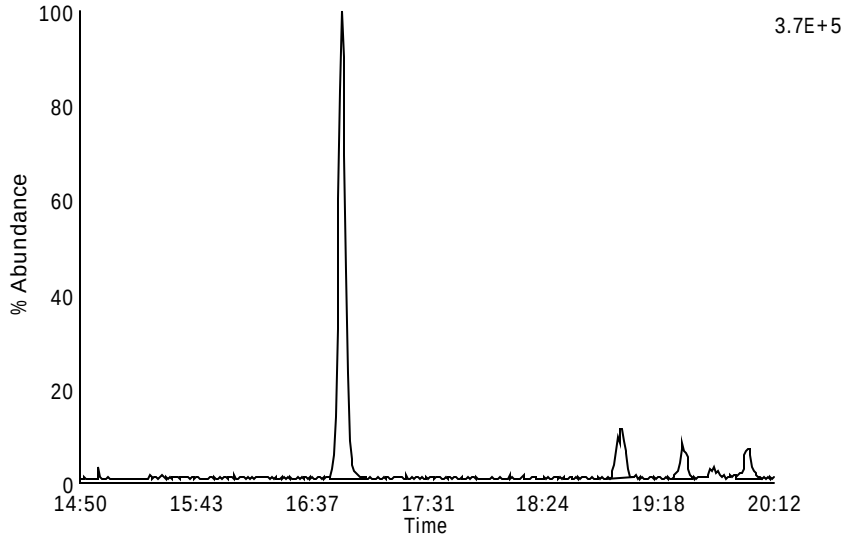




Tri Chlorinated Biphenyls

Data File Name: Y210820A_03	Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS	Client Sample ID: CLCSET

Data File: Y210820A_03 G2 C7 - 255.9613
LCS LCS-92296 - CVS



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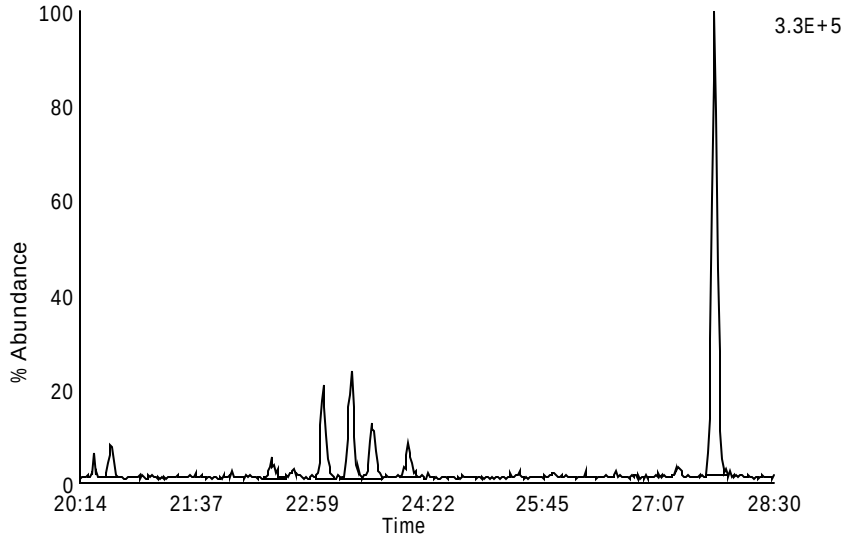
LCS LCS-92296 - CVS



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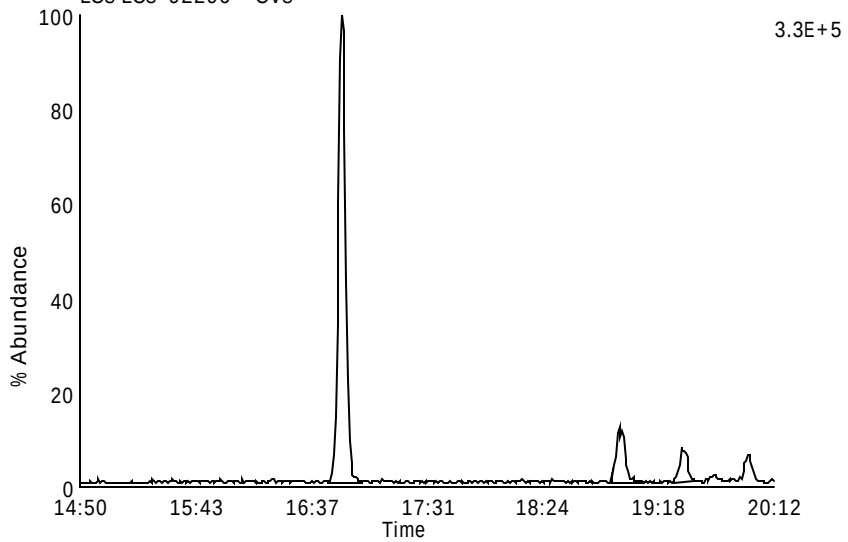
LCS LCS-92296 - CVS



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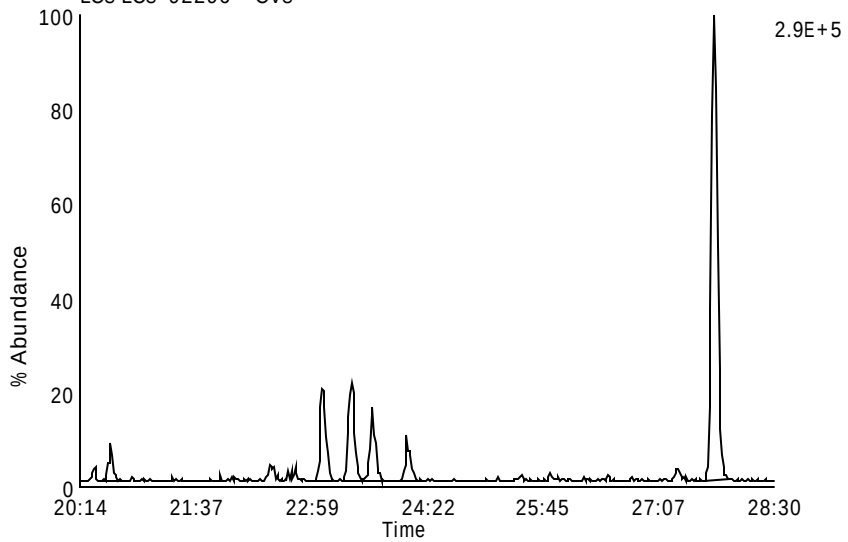
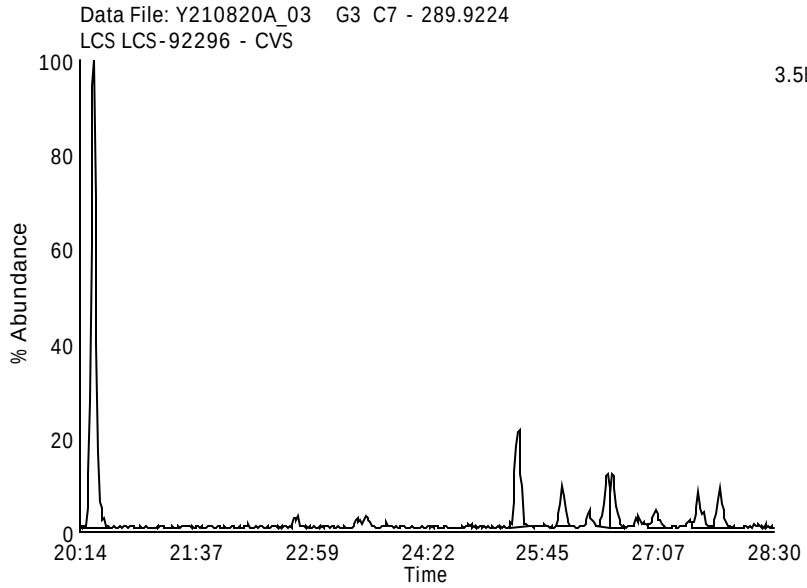
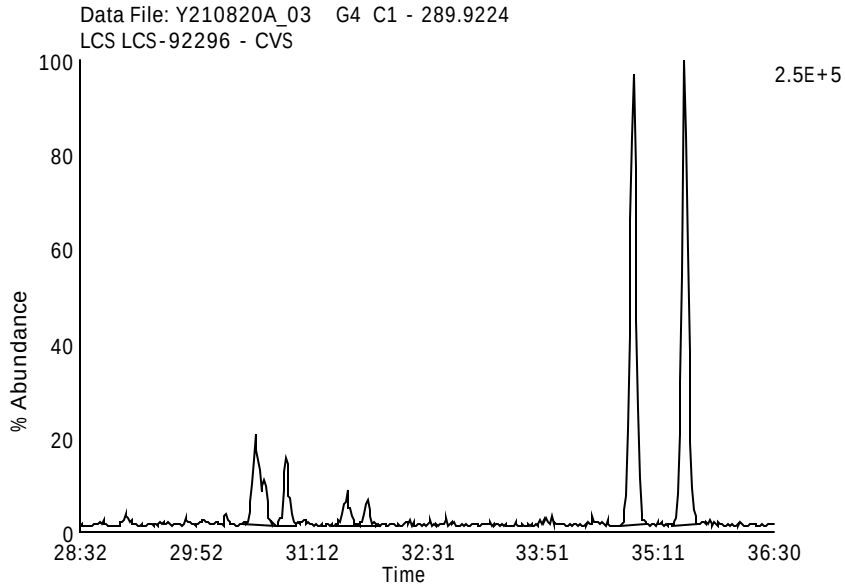
LCS LCS-92296 - CVS

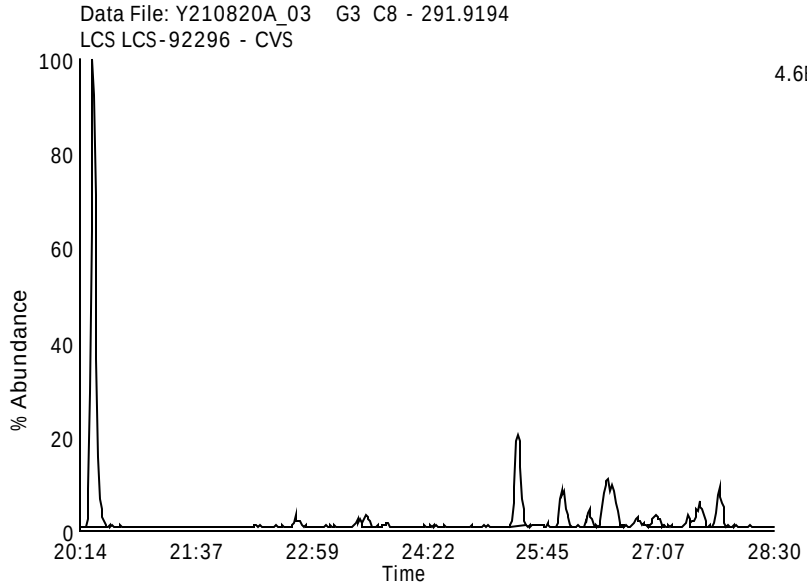


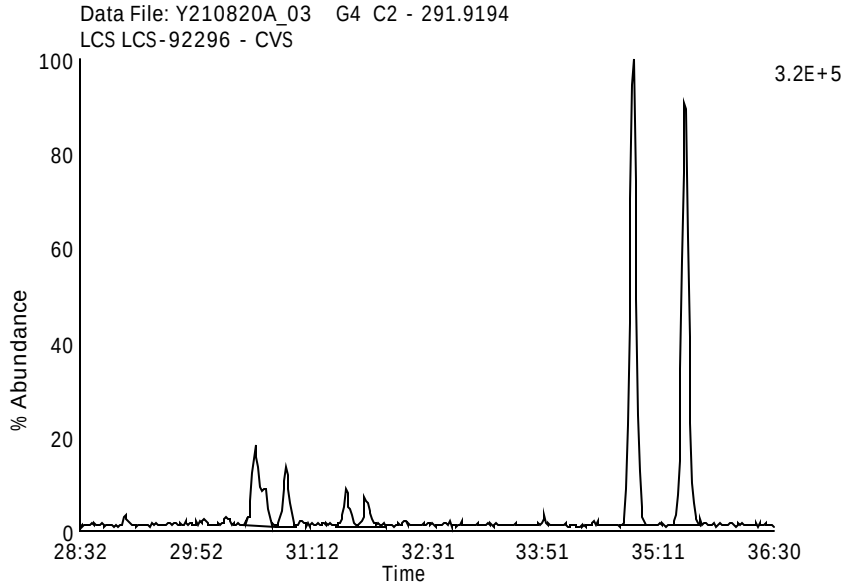
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET





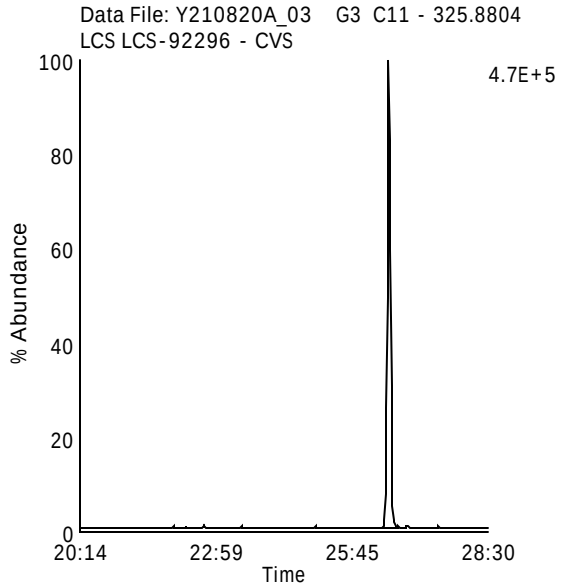


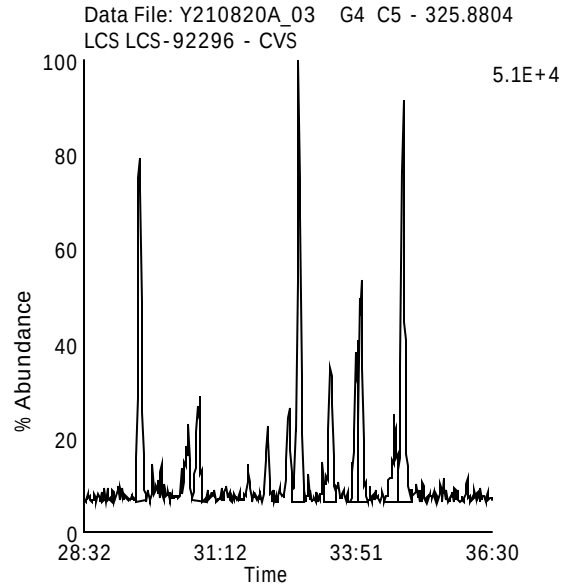


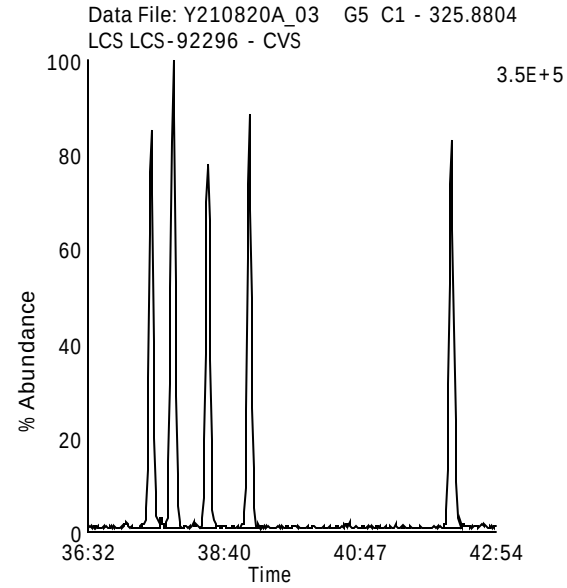
Penta Chlorinated Biphenyls

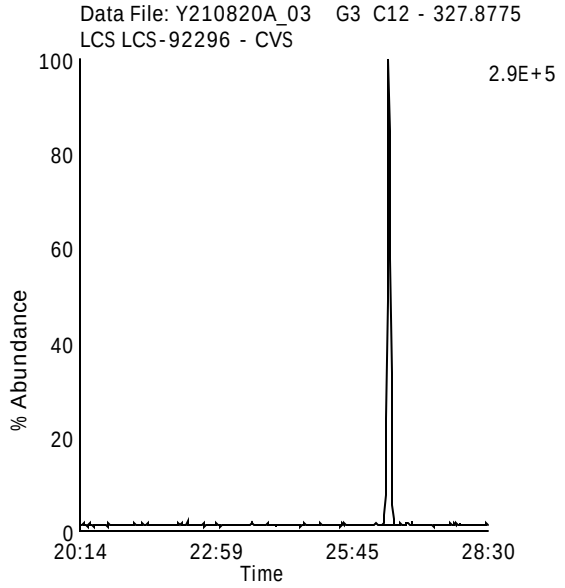
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

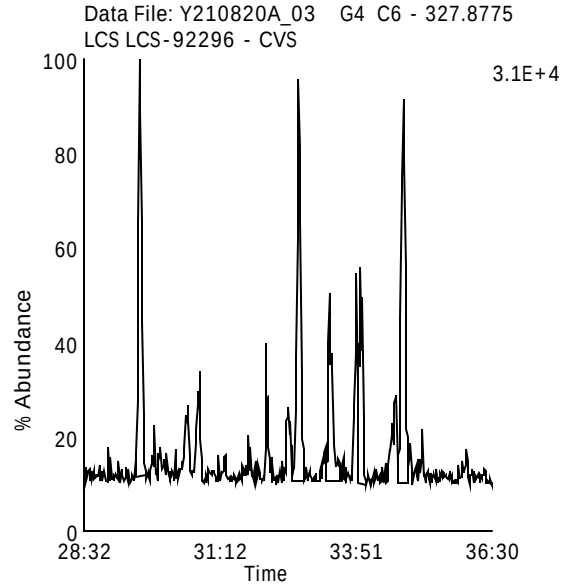
Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET

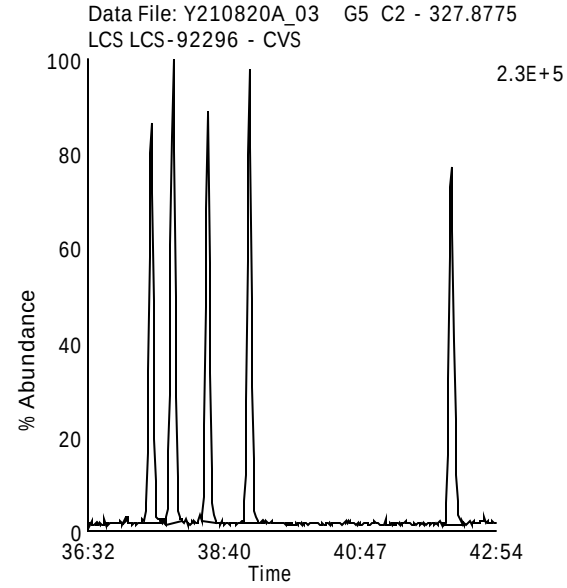








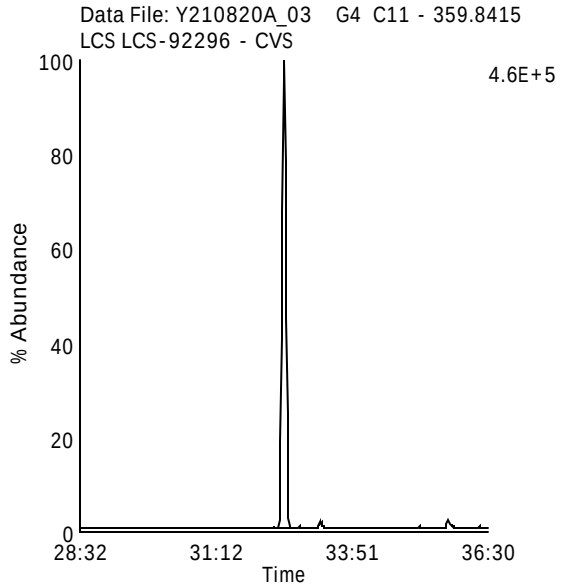


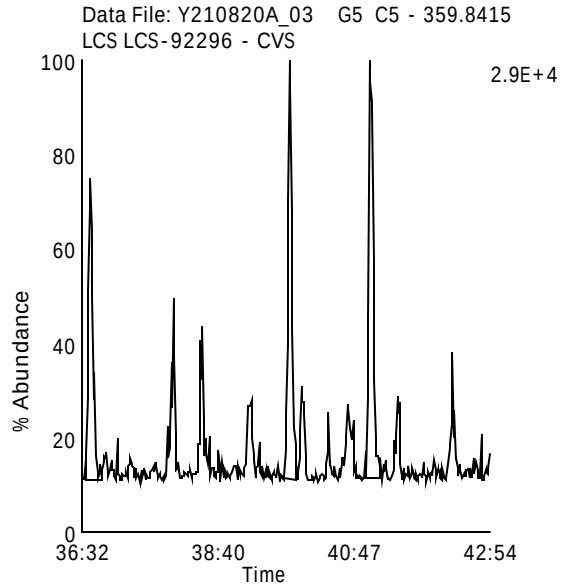


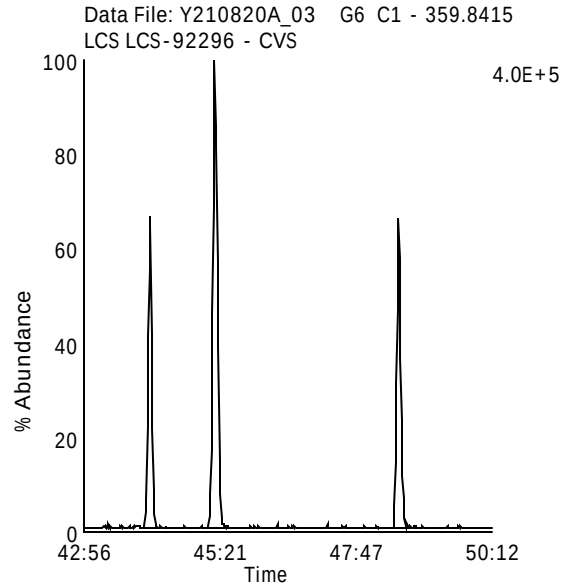
Hexa Chlorinated Biphenyls

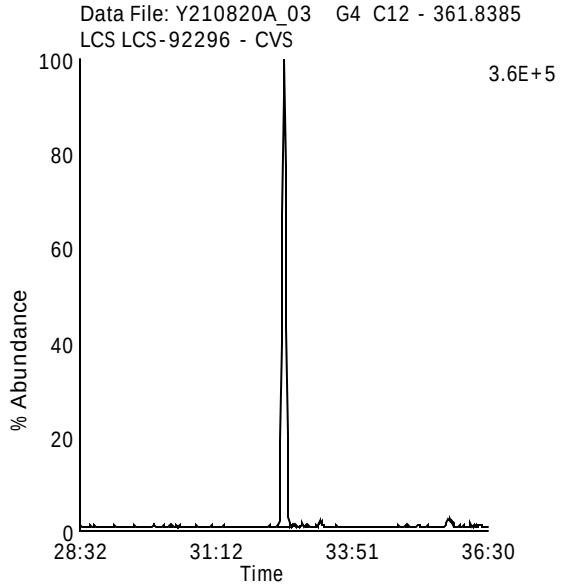
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

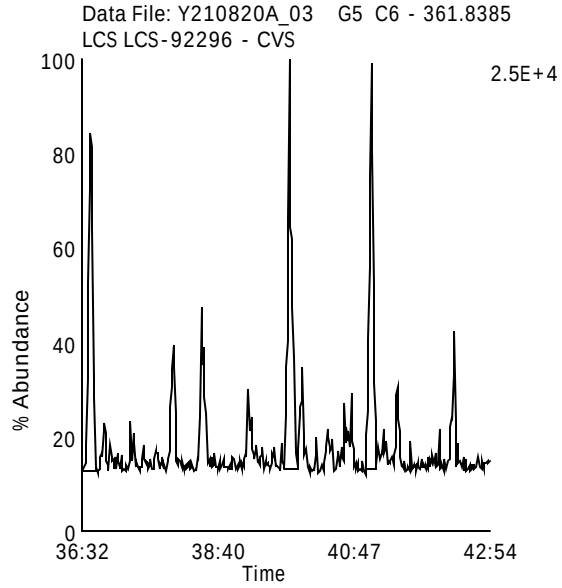
Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET

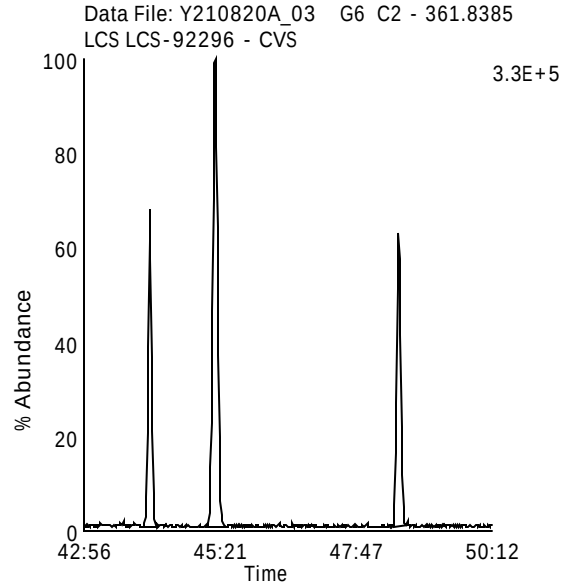








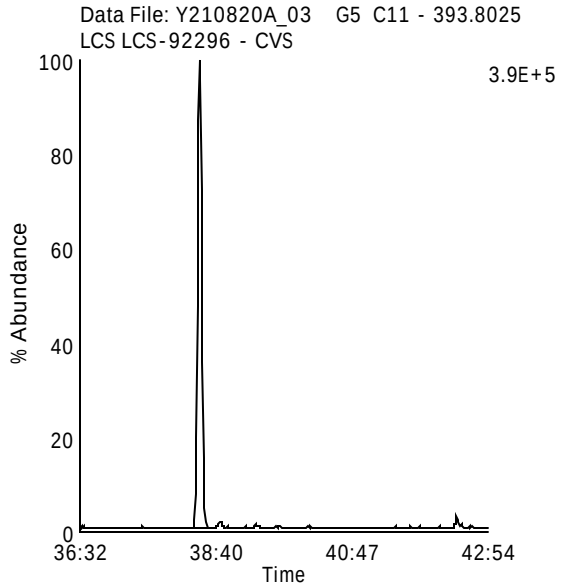


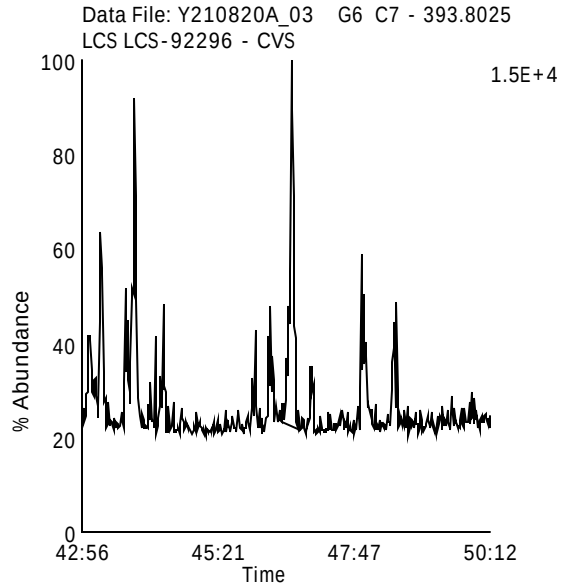


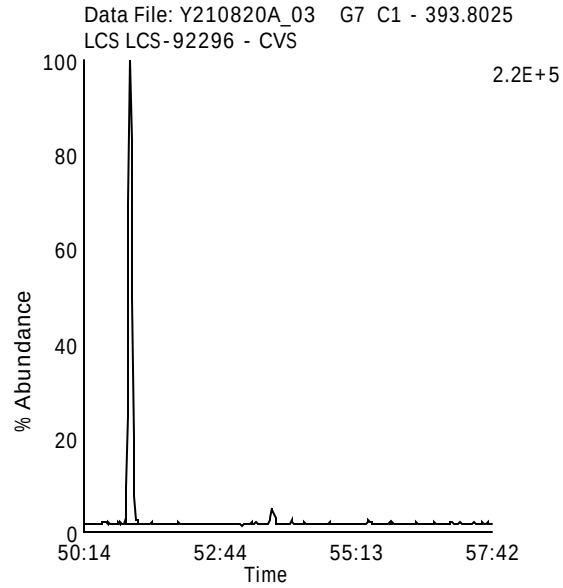
Hepta Chlorinated Biphenyls

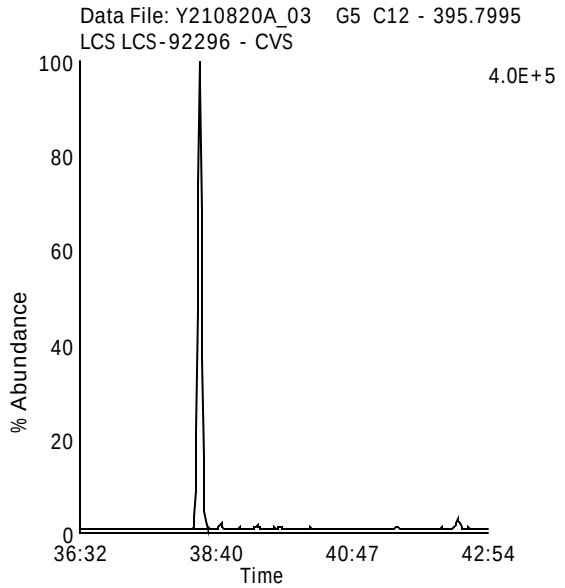
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

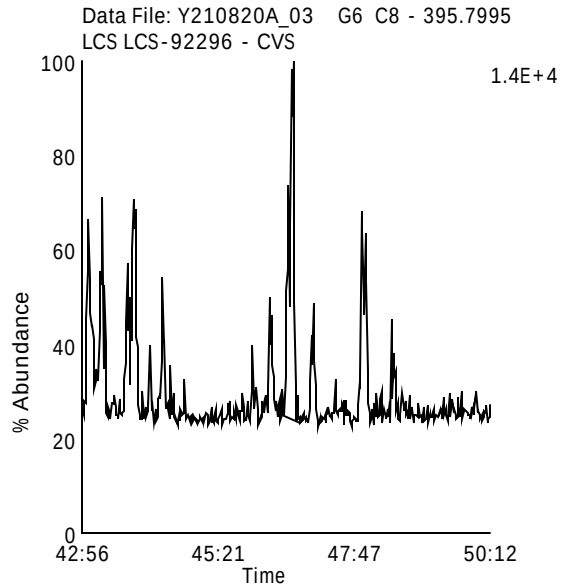
Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET

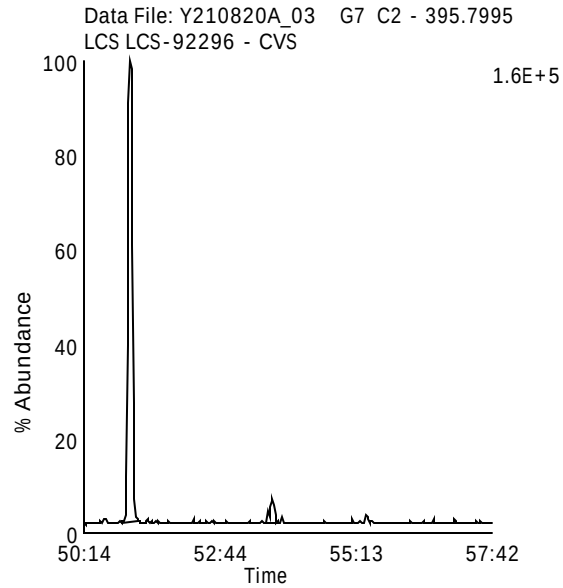








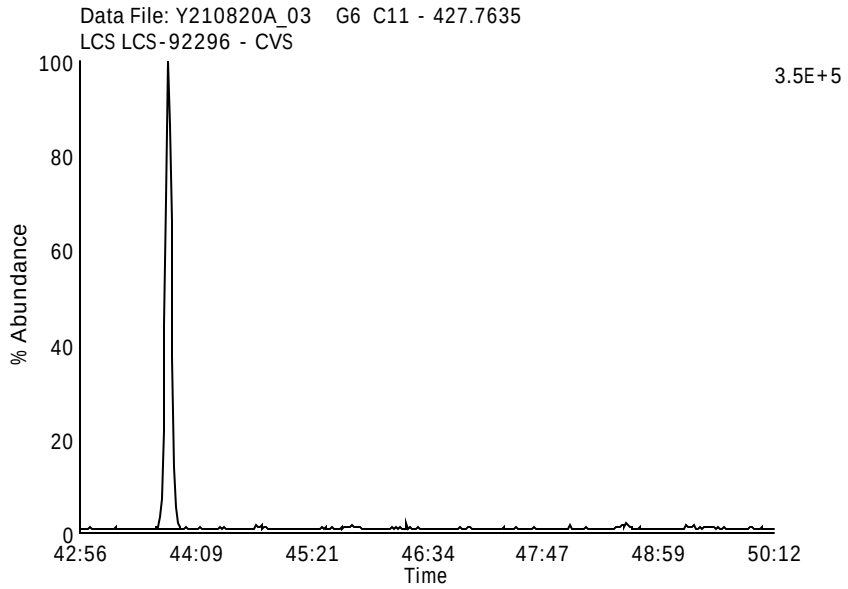


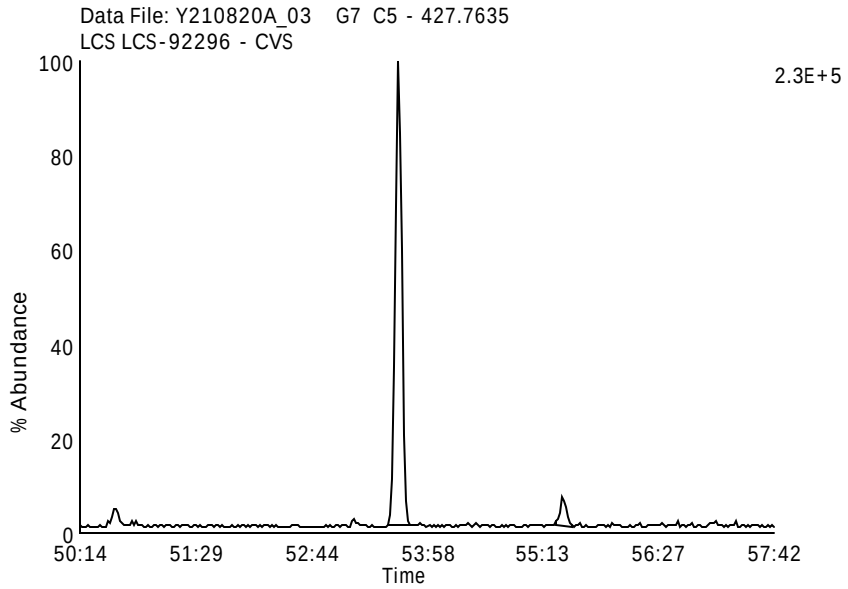


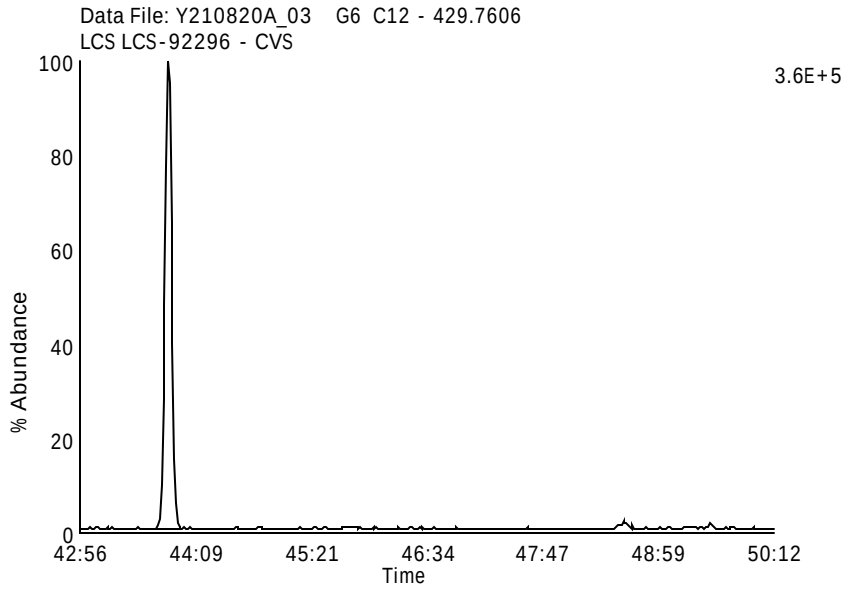
Octa Chlorinated Biphenyls

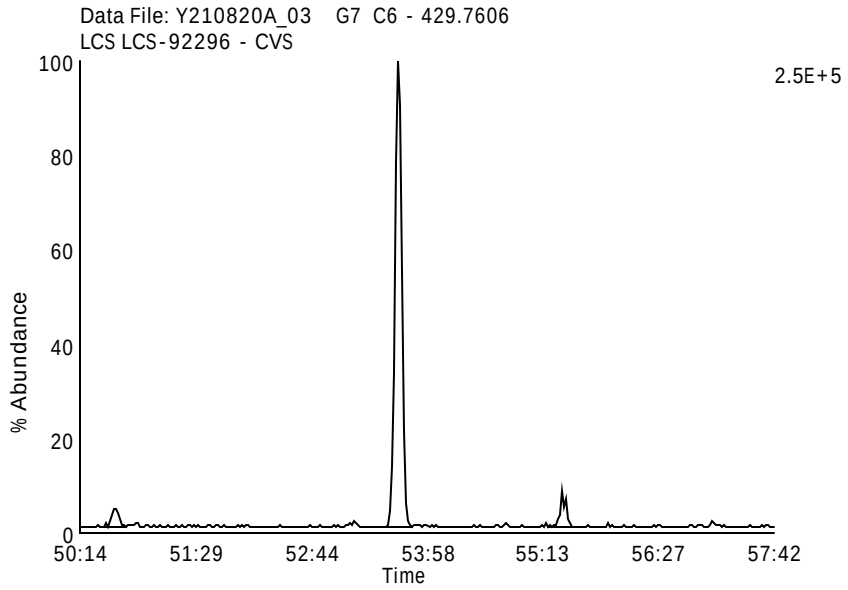
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET



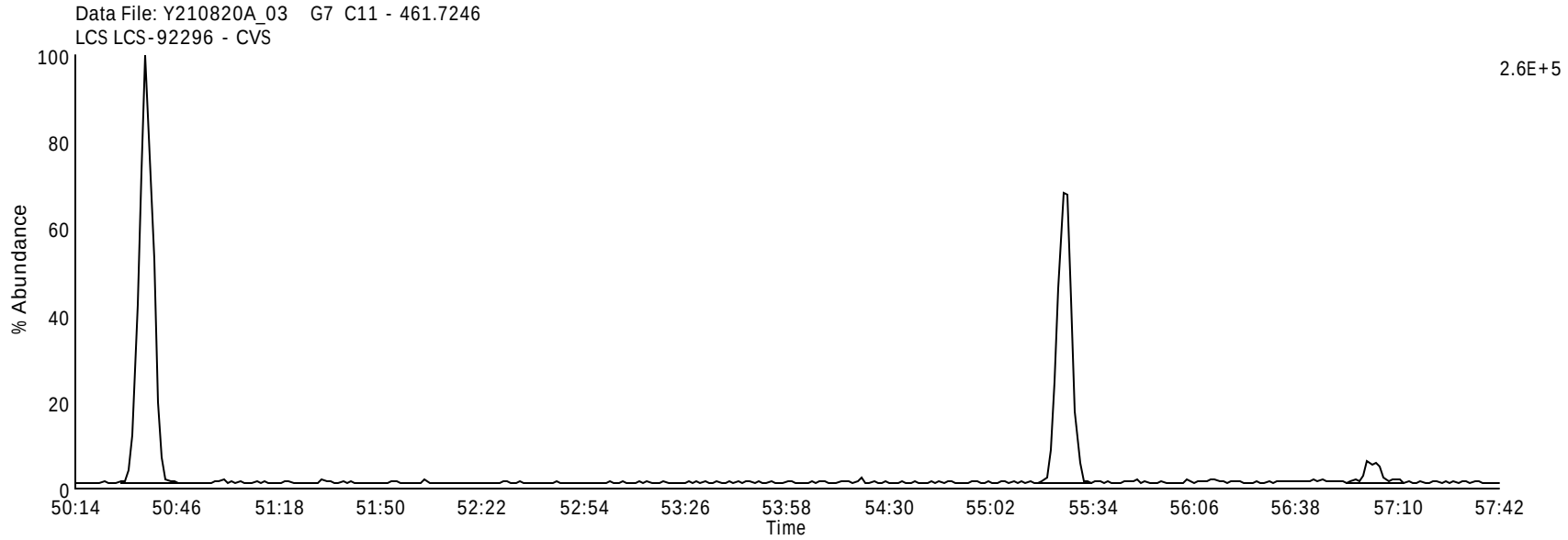


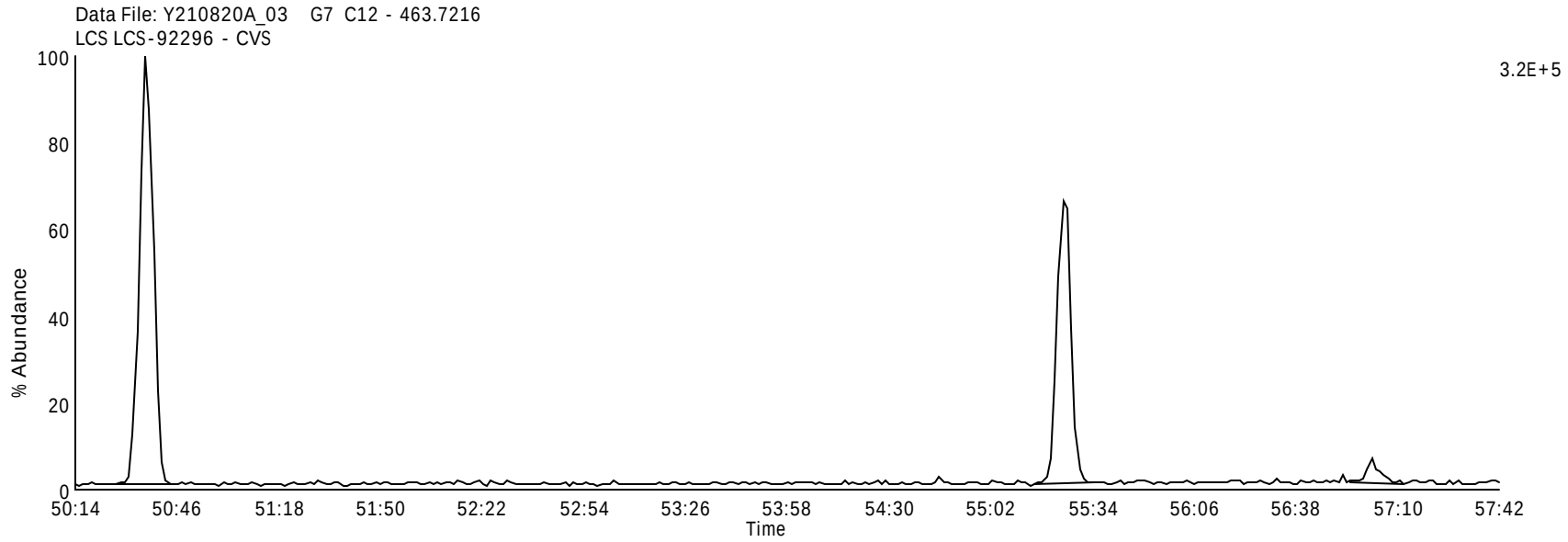




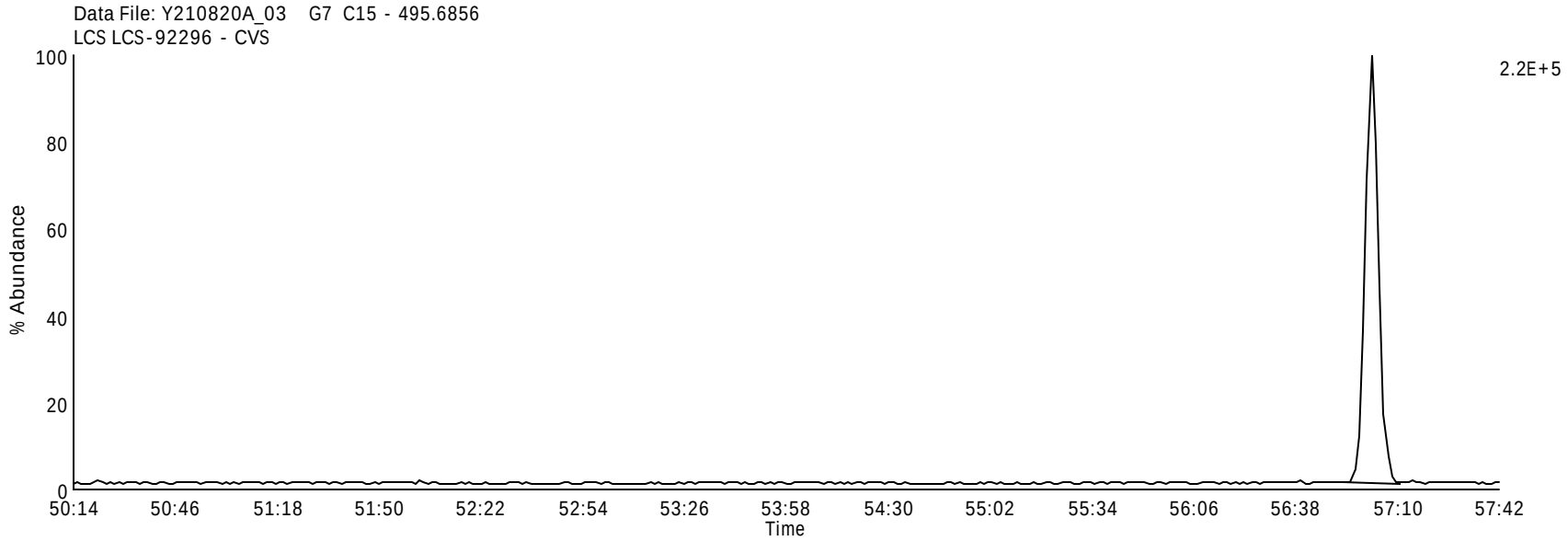
Nona Chlorinated Biphenyls

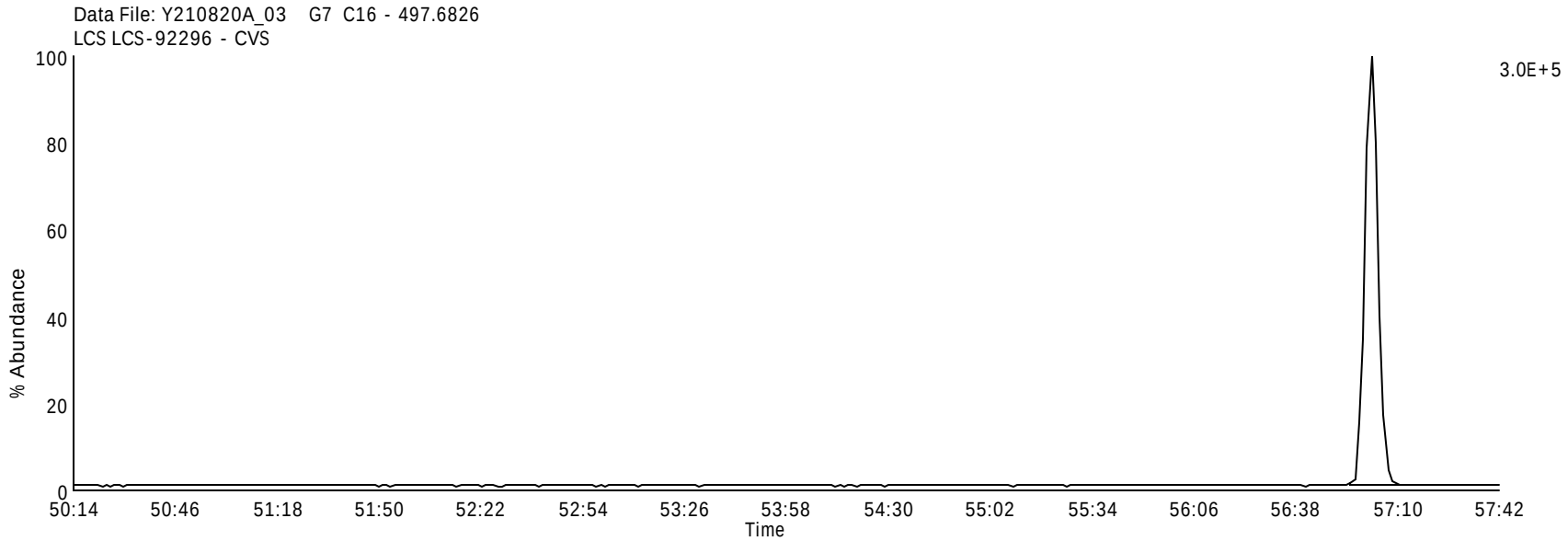
Data File Name: Y210820A_03	Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS	Client Sample ID: CLCSET





Deca Chlorinated Biphenyl	
Data File Name: Y210820A_03	Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS	Client Sample ID: CLCSET

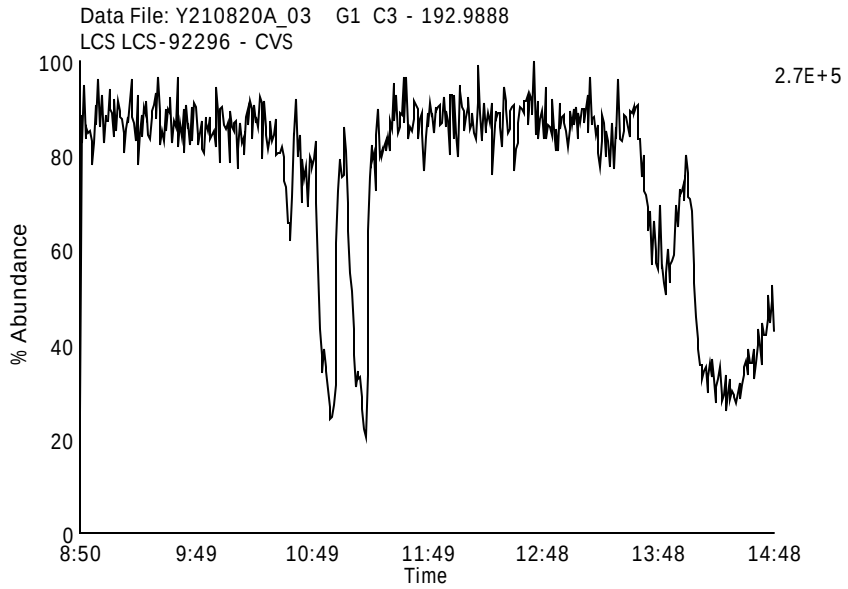


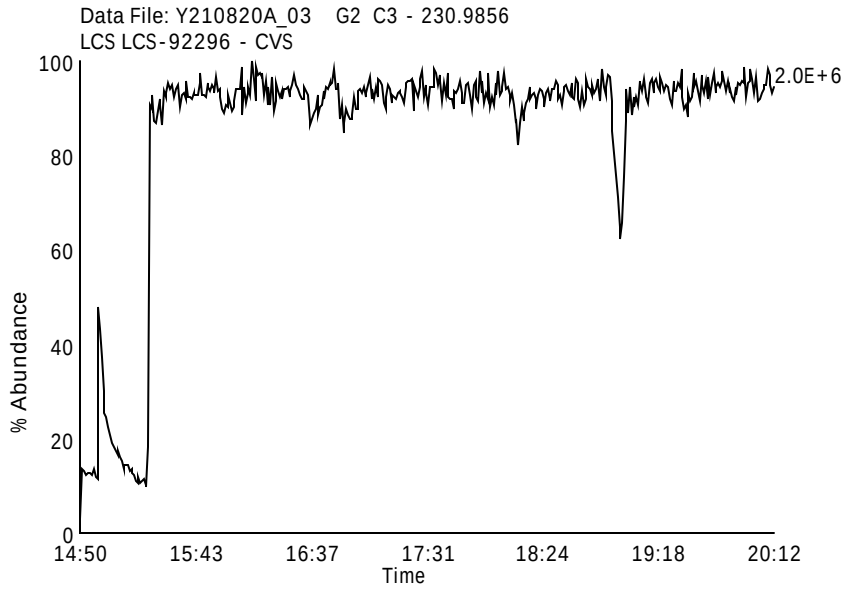


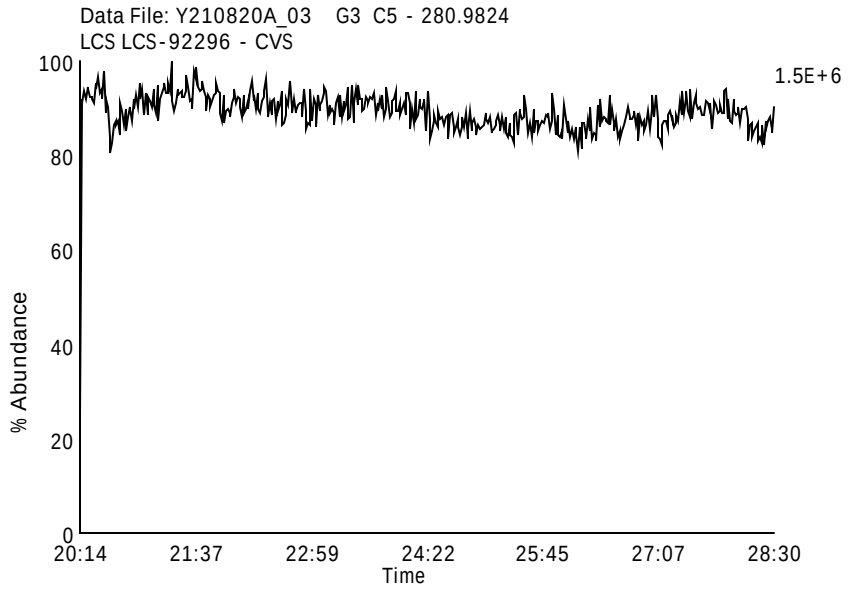
Group 1 - 4 Lock mass

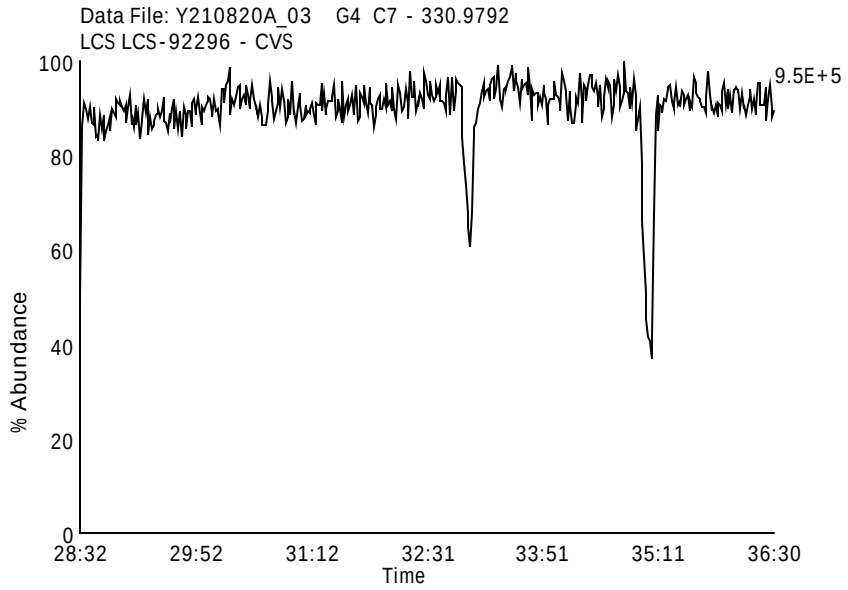
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET





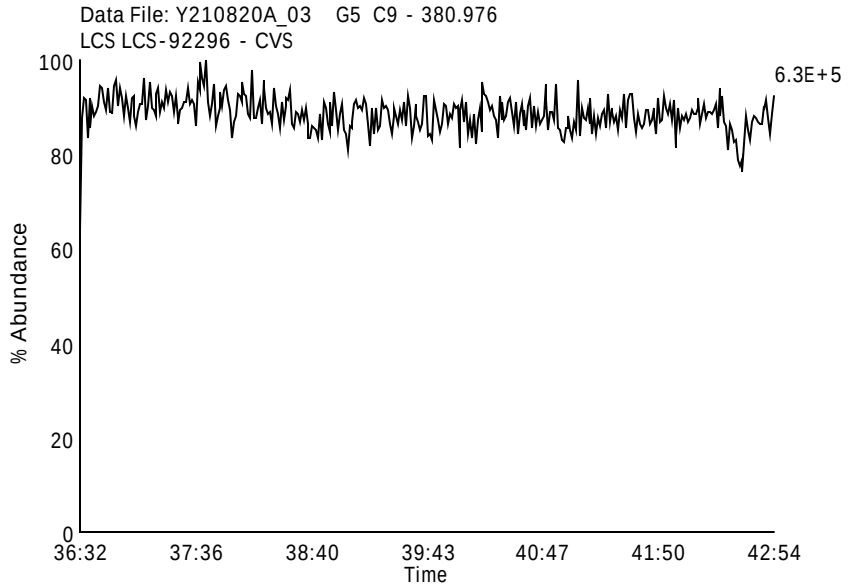


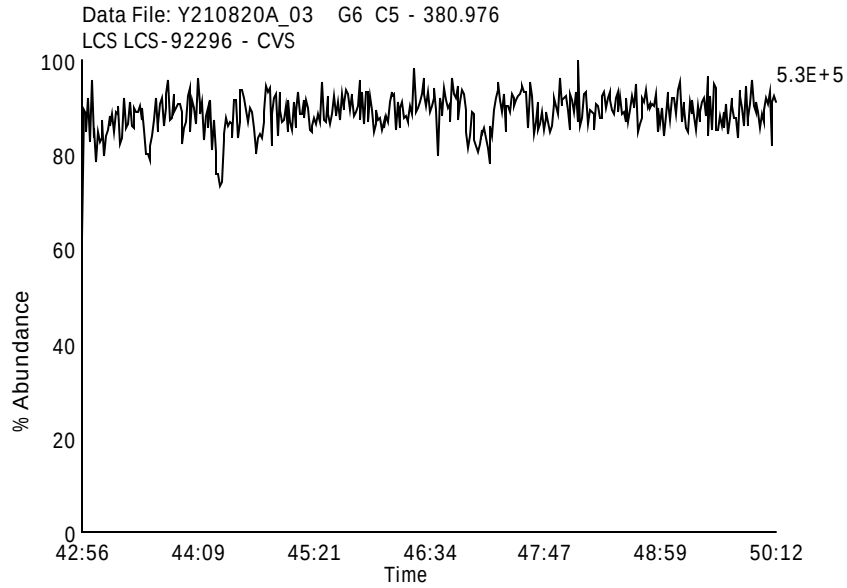


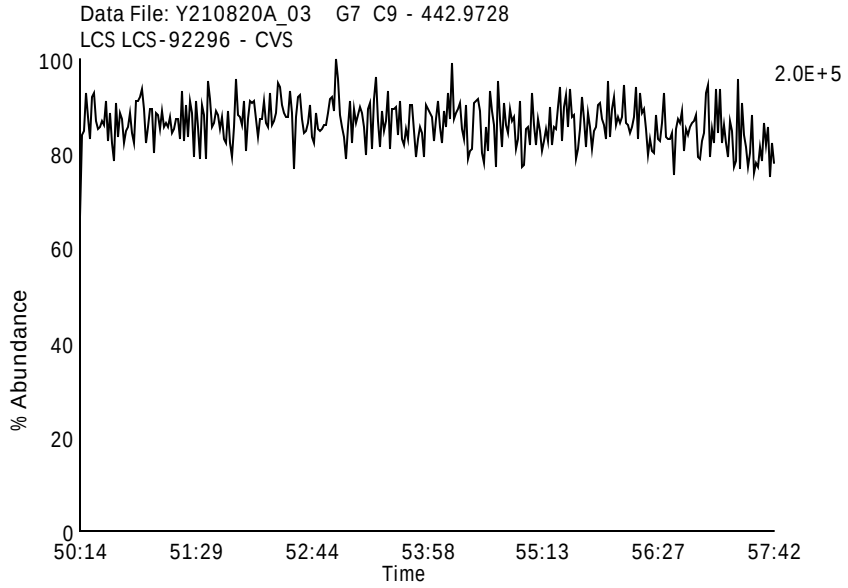
Group 5 - 7 Lock mass

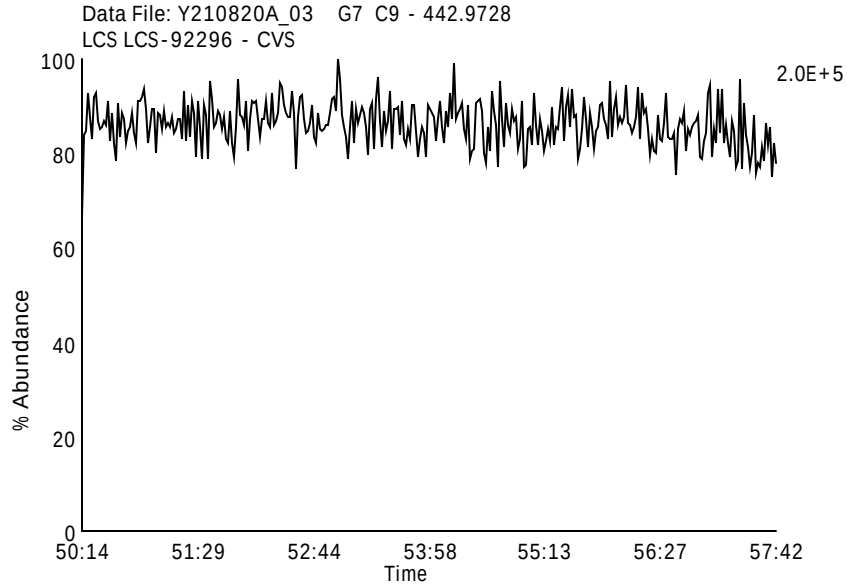
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET



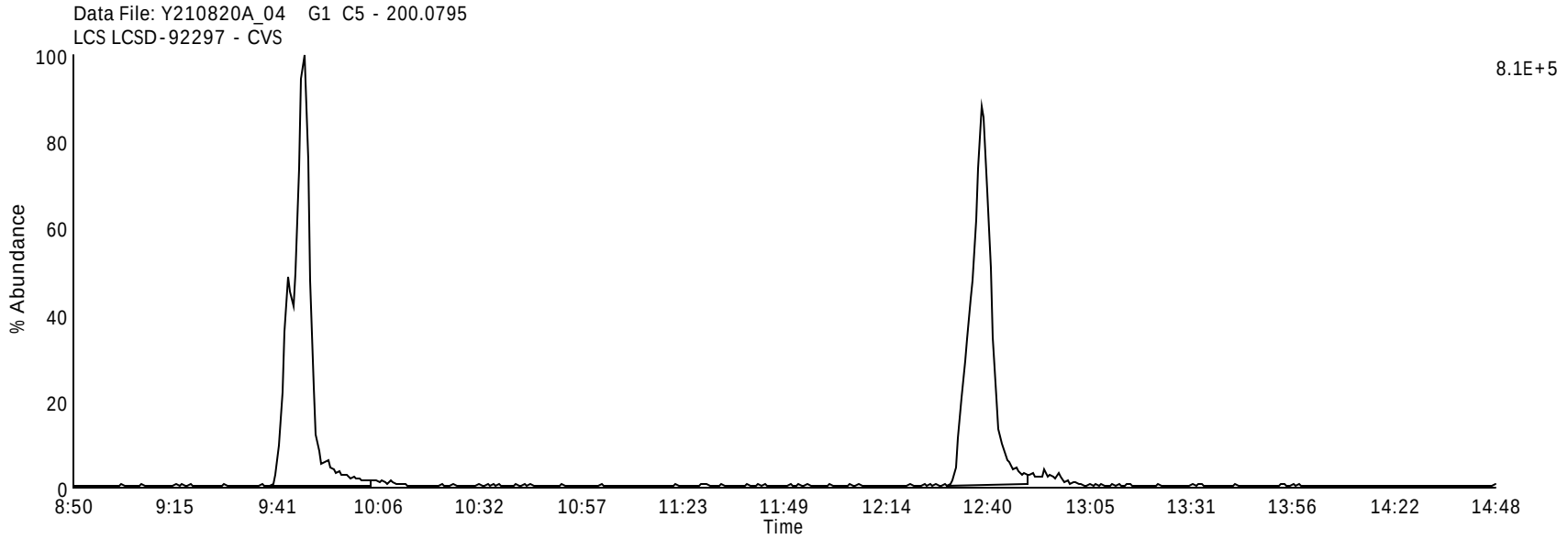


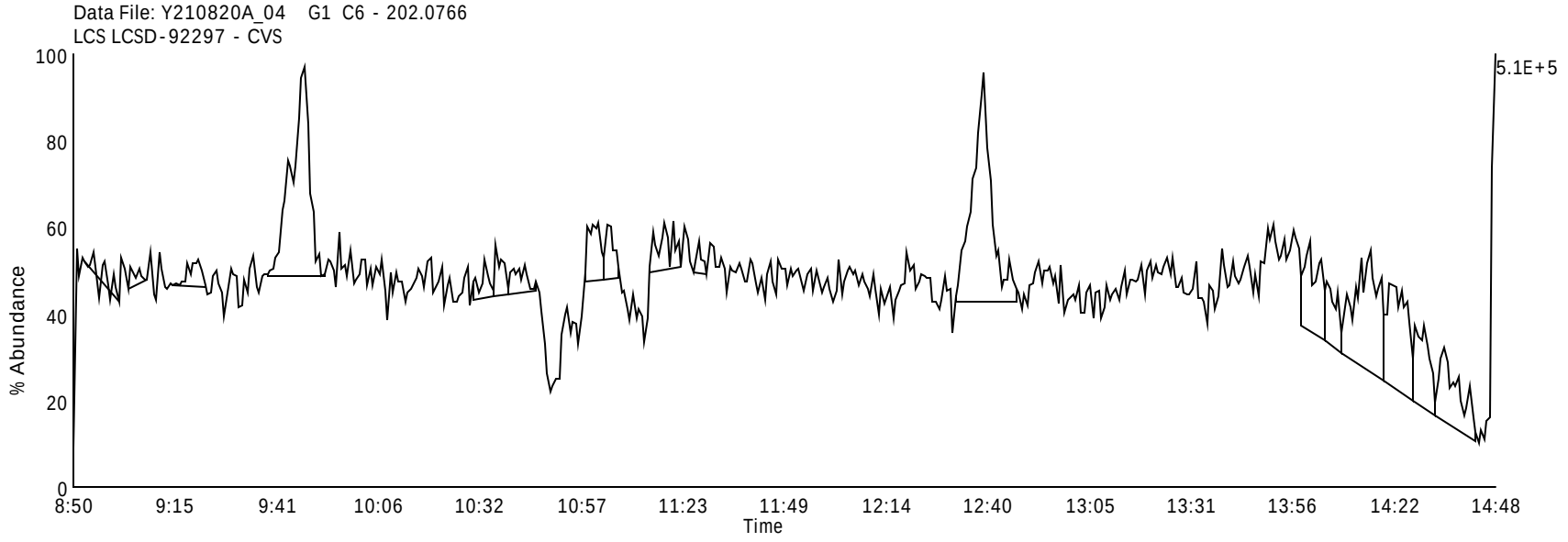




Labeled Mono Chlorinated Biphenyls

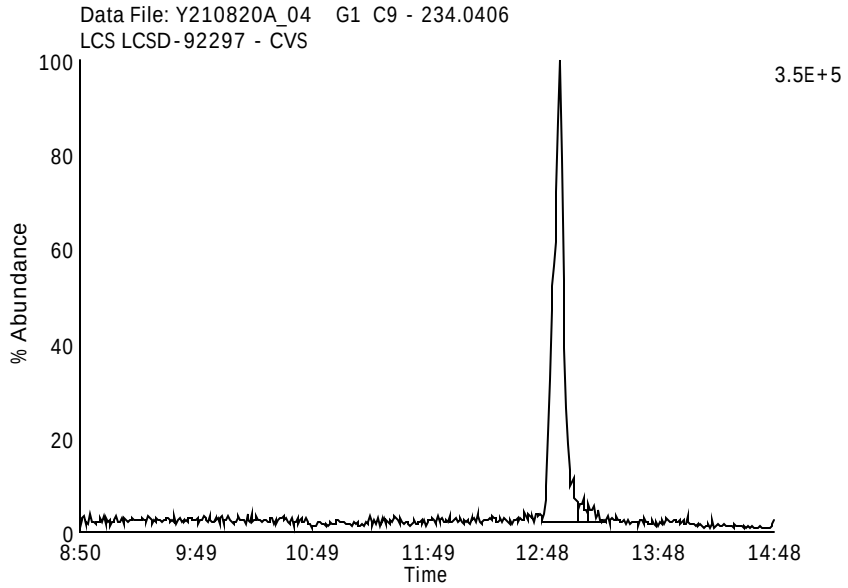
Data File Name: Y210820A_04 | Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS | Client Sample ID: CLCSEU

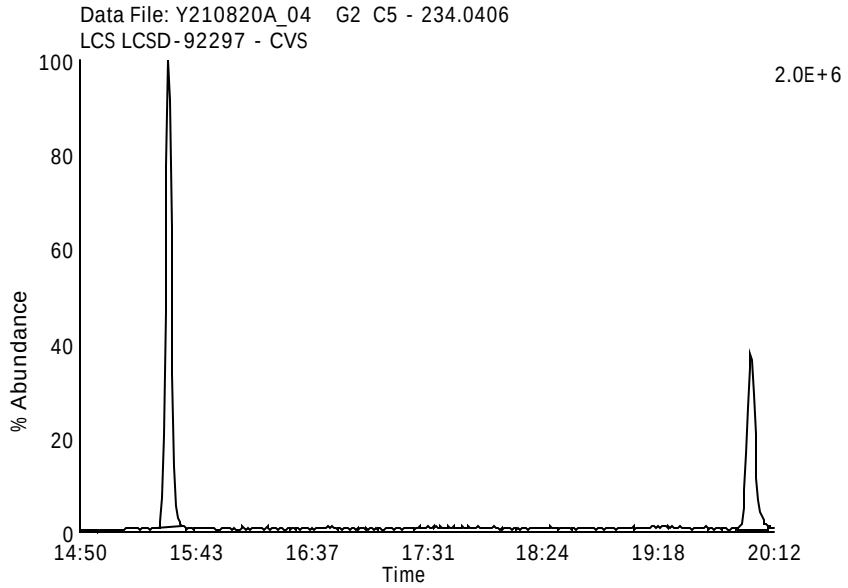


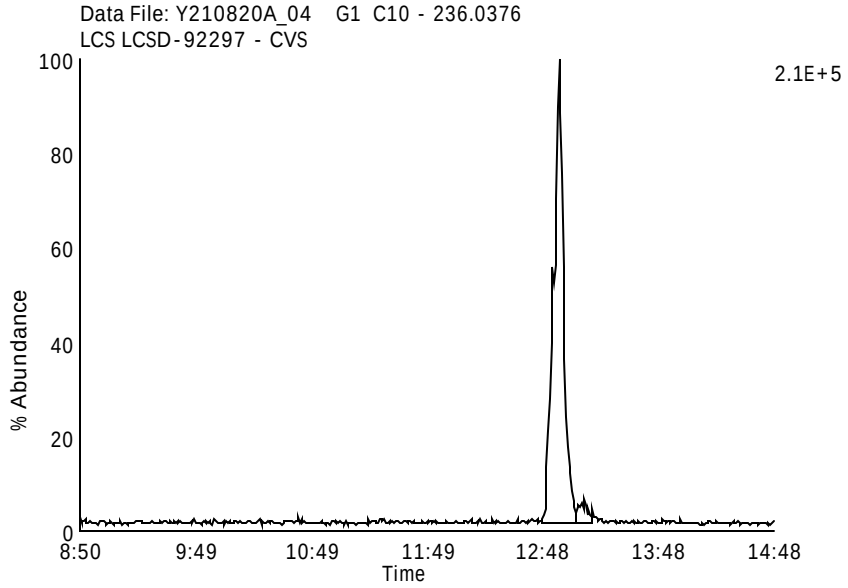


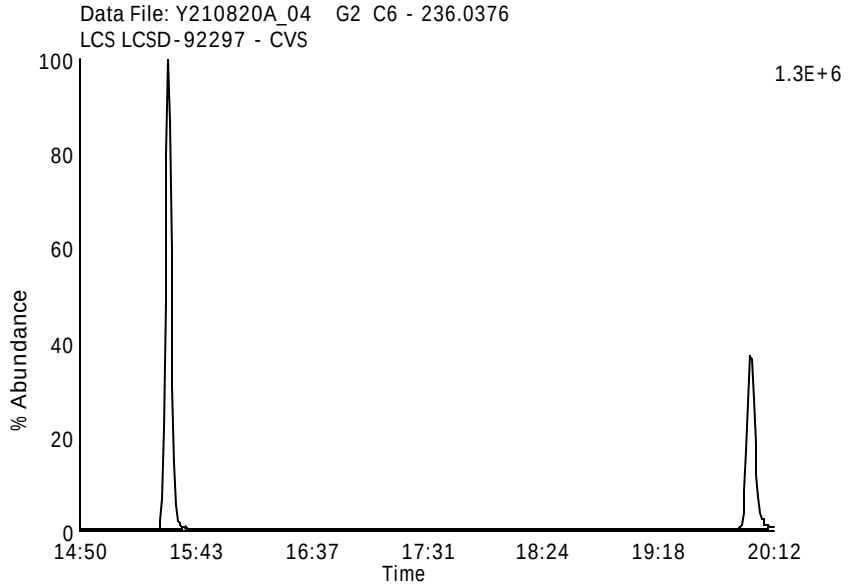
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



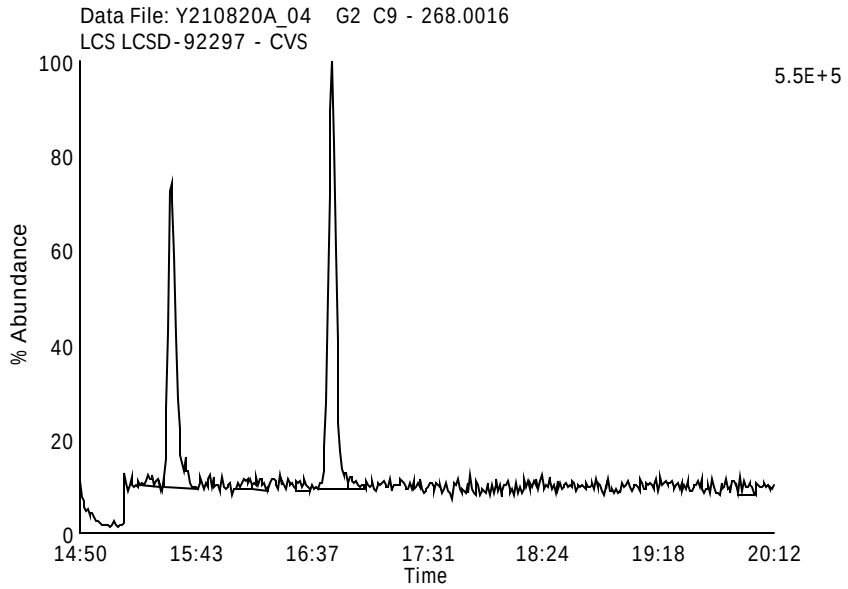


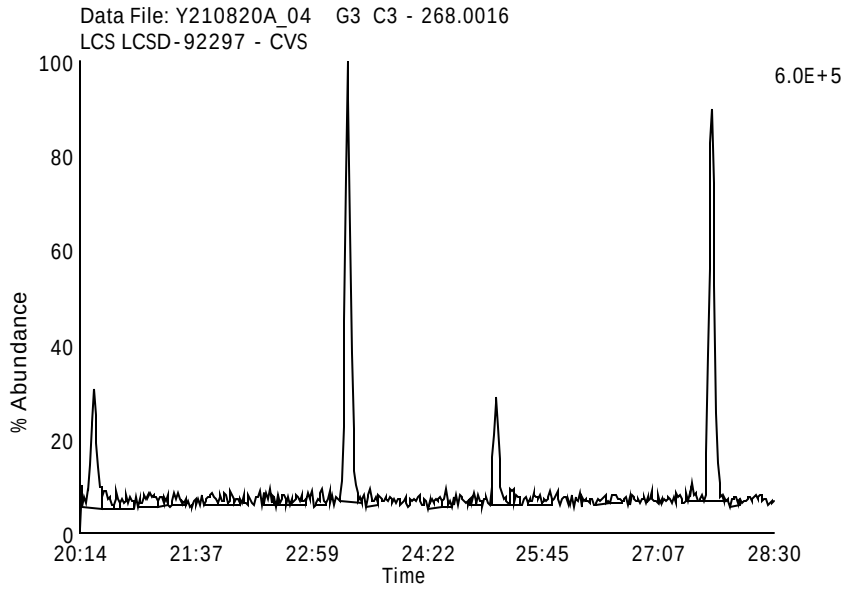


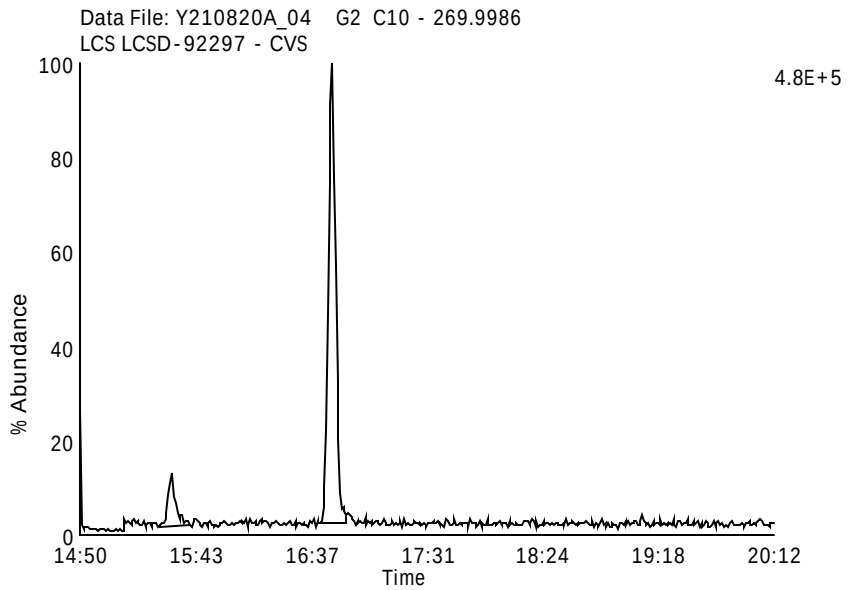


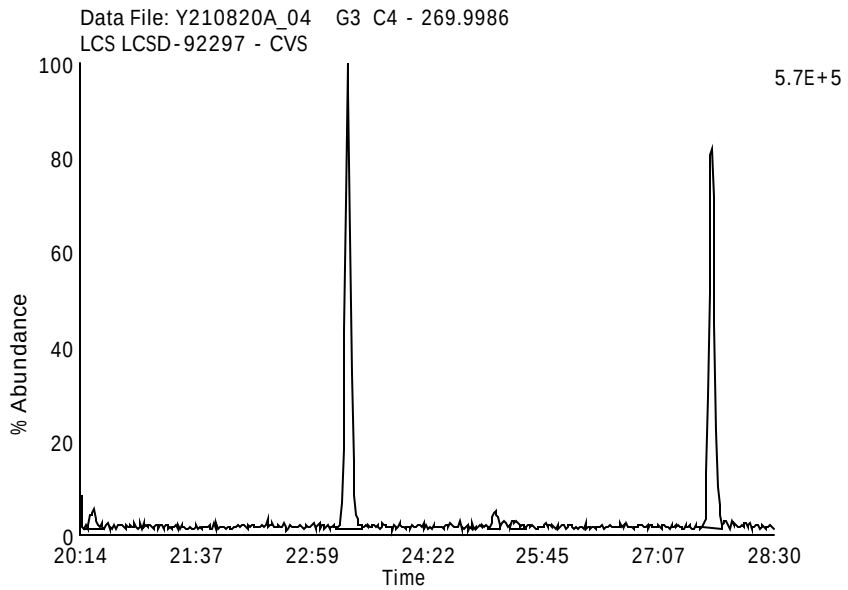
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



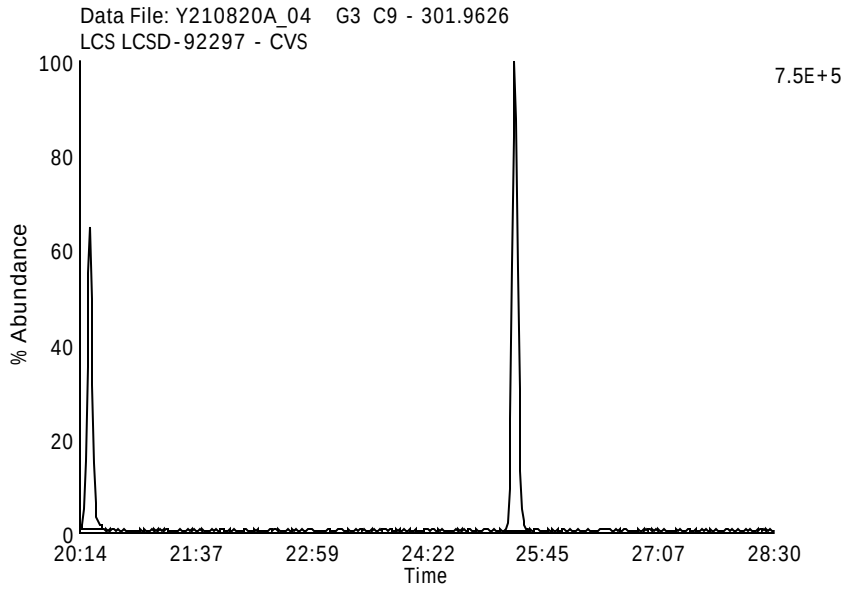


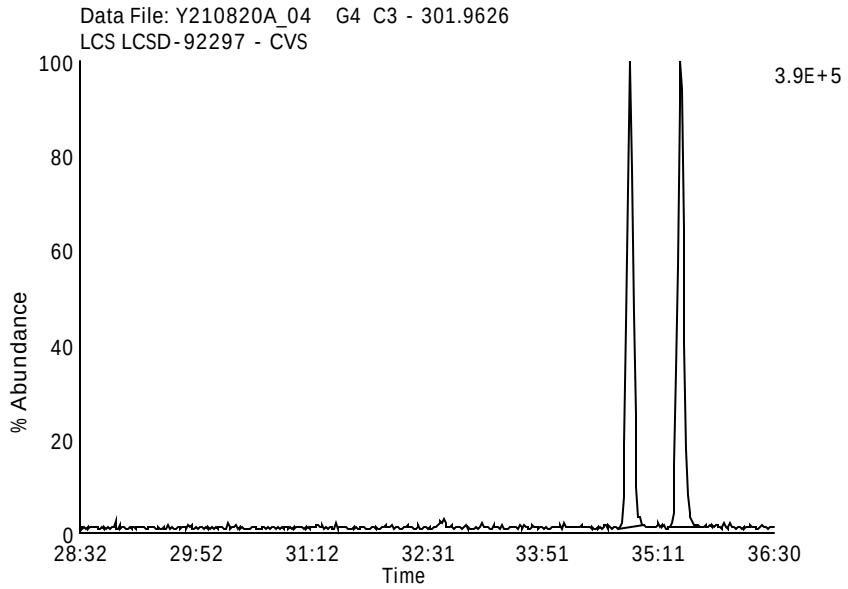


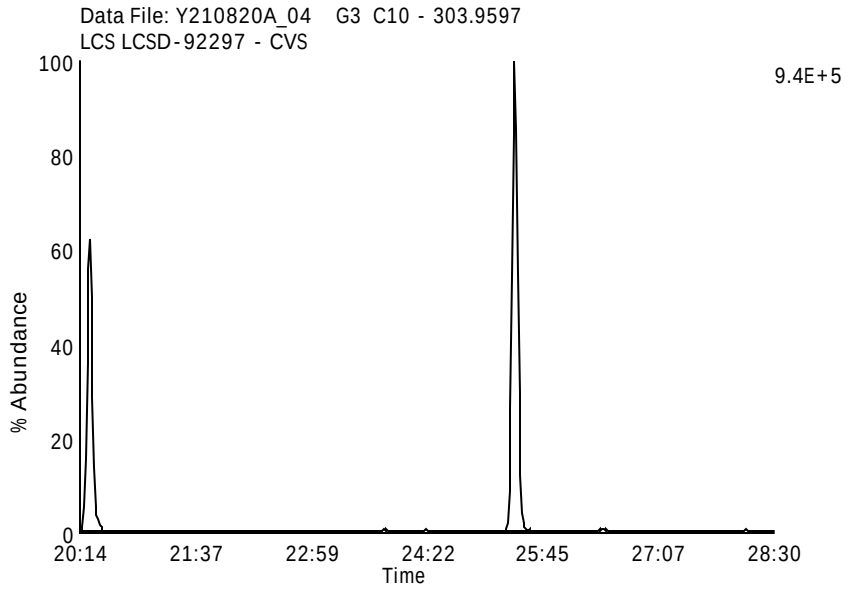


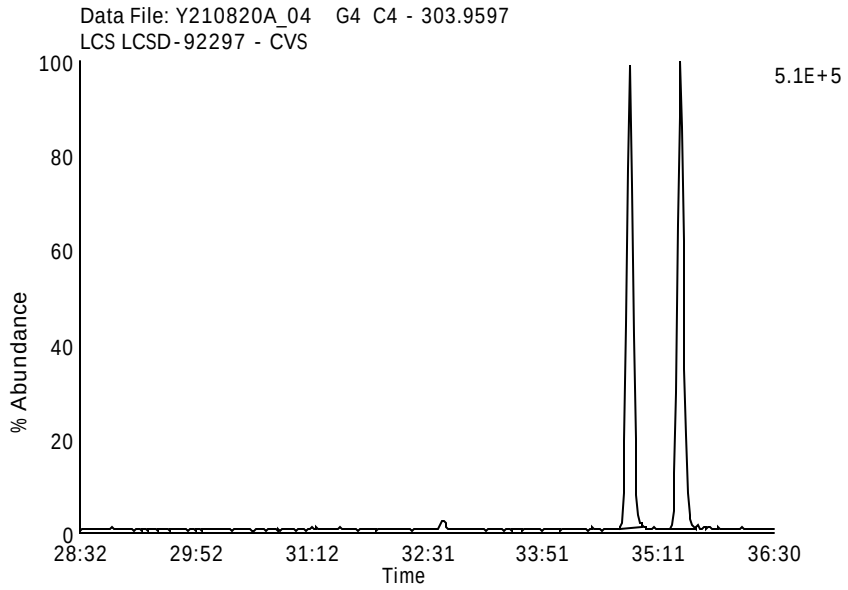
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



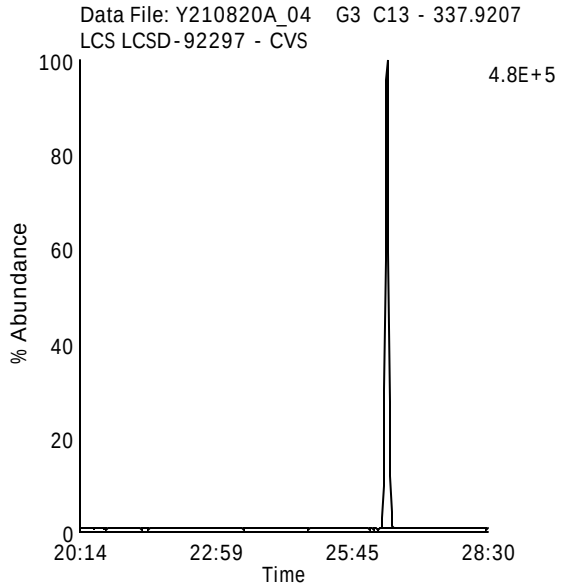


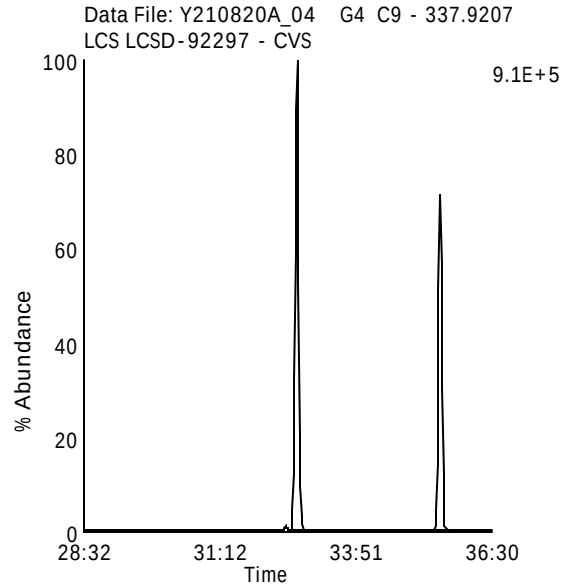


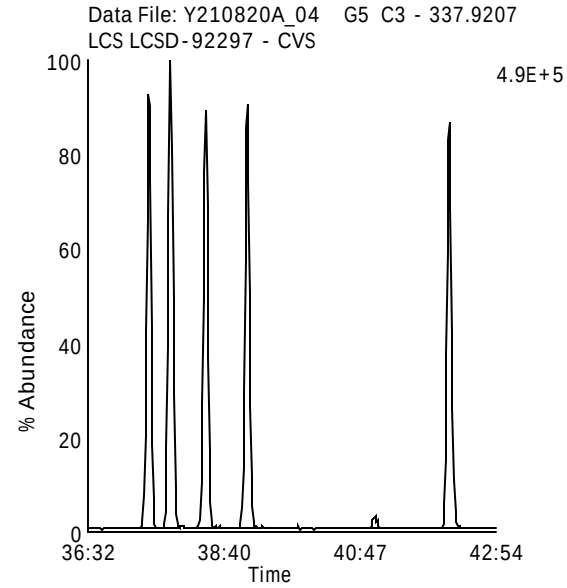


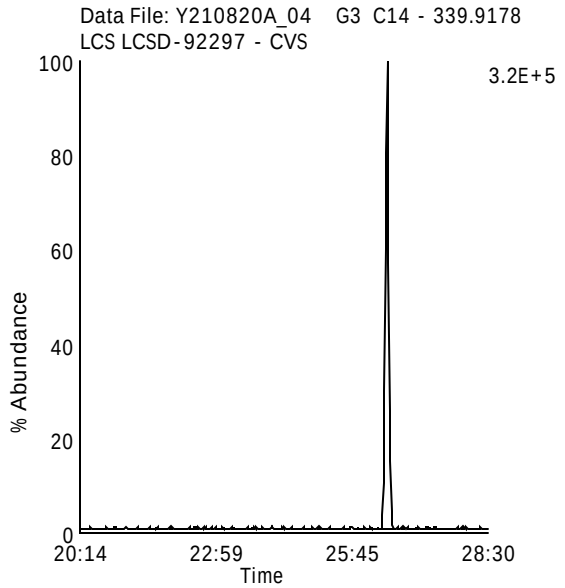
Labeled Penta Chlorinated Biphenyls

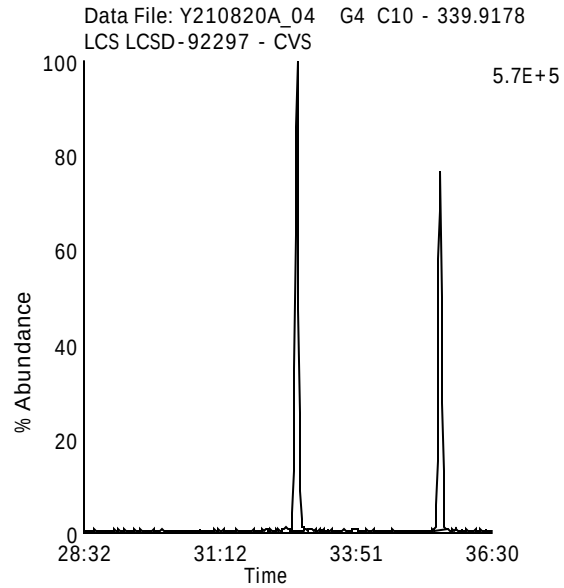
Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU

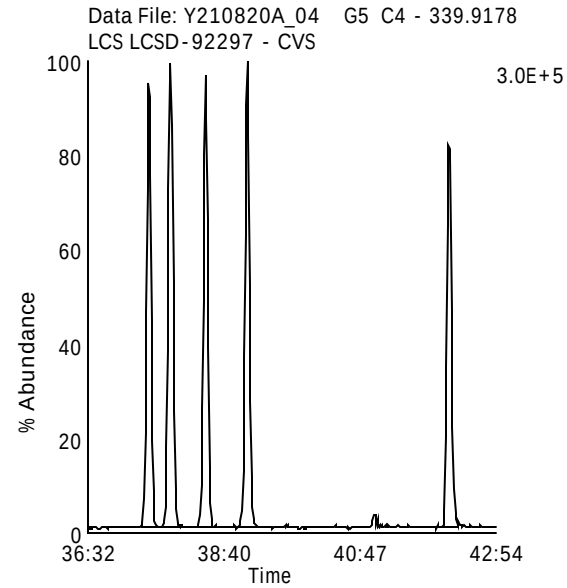








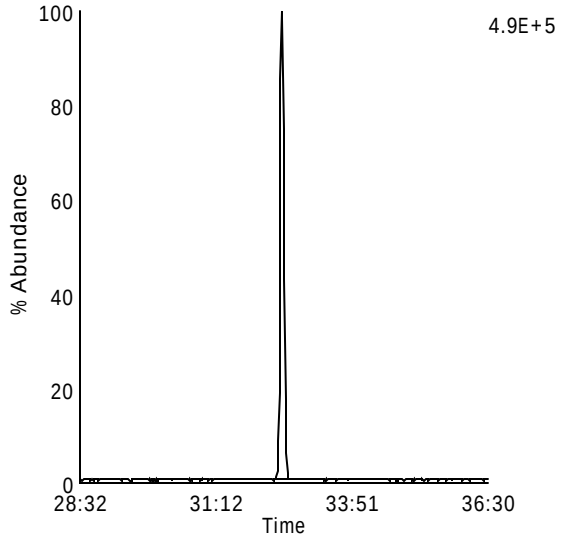




Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210820A_04 | Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS | Client Sample ID: CLCSEU

Data File: Y210820A_04 G4 C13 - 371.8817
LCS LCSD-92297 - CVS



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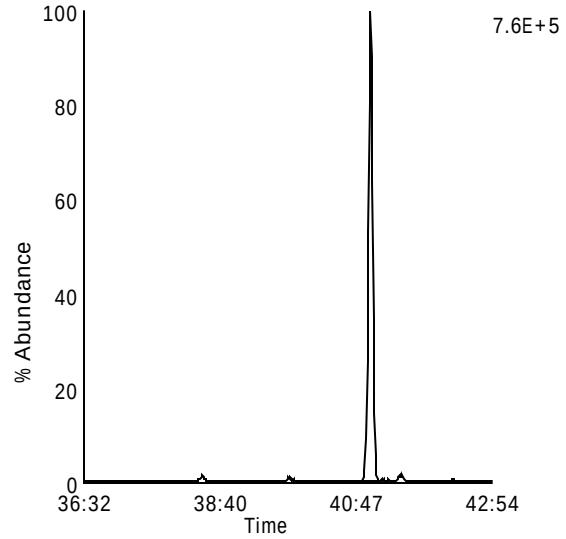
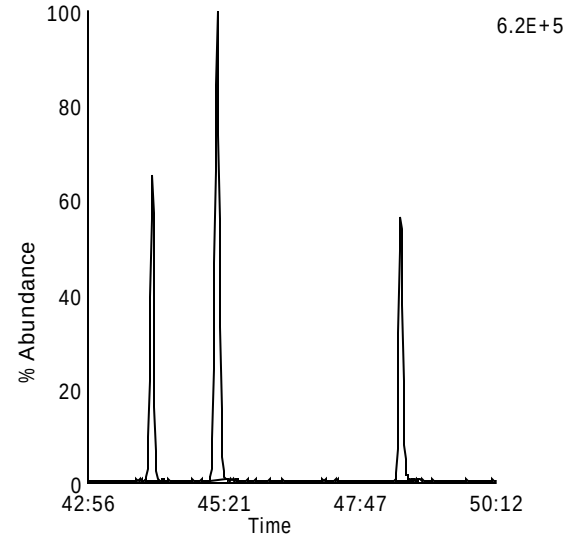
LCS LCSD-92297 - CVS



Data File: Y210820A_04 G6 C3 - 371.8817
LCS LCSD-92297 - CVS



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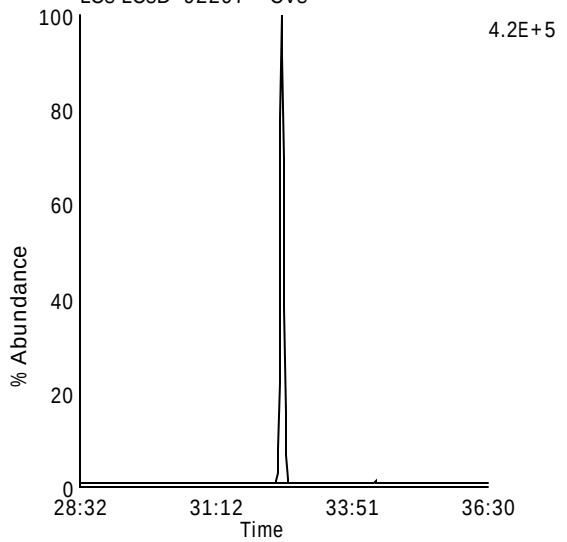
LCS LCSD-92297 - CVS



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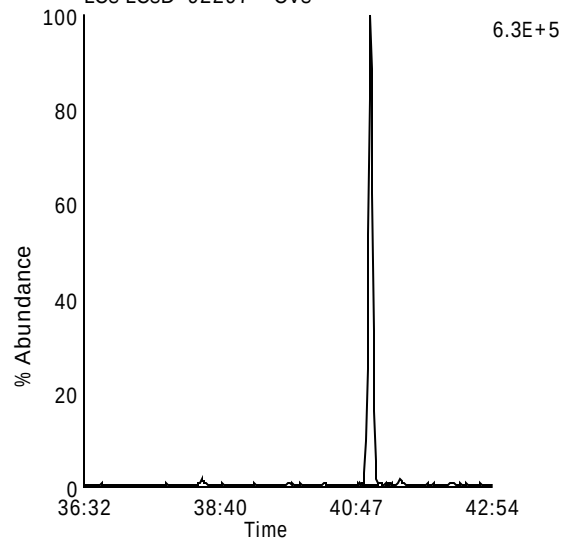
LCS LCSD-92297 - CVS



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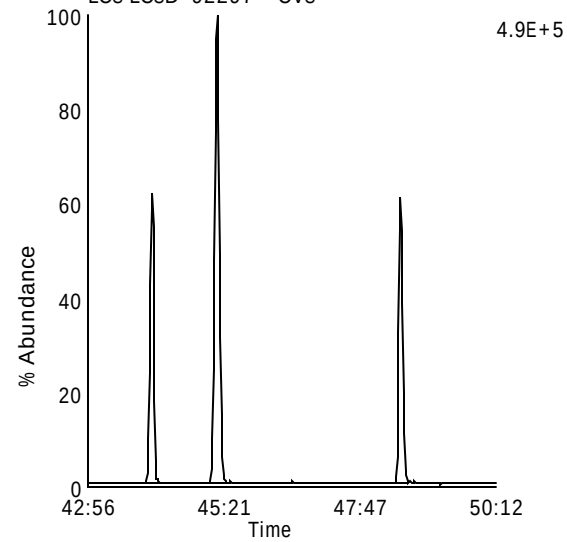
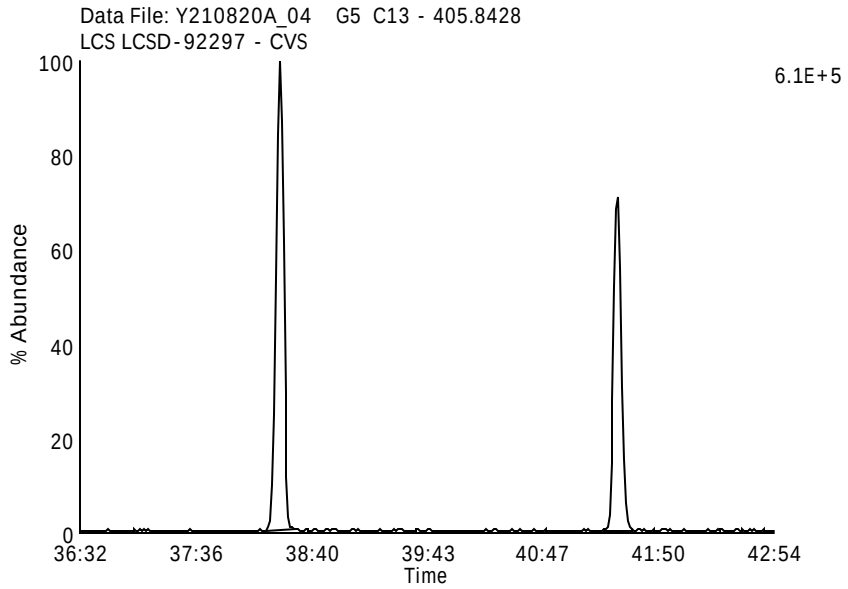
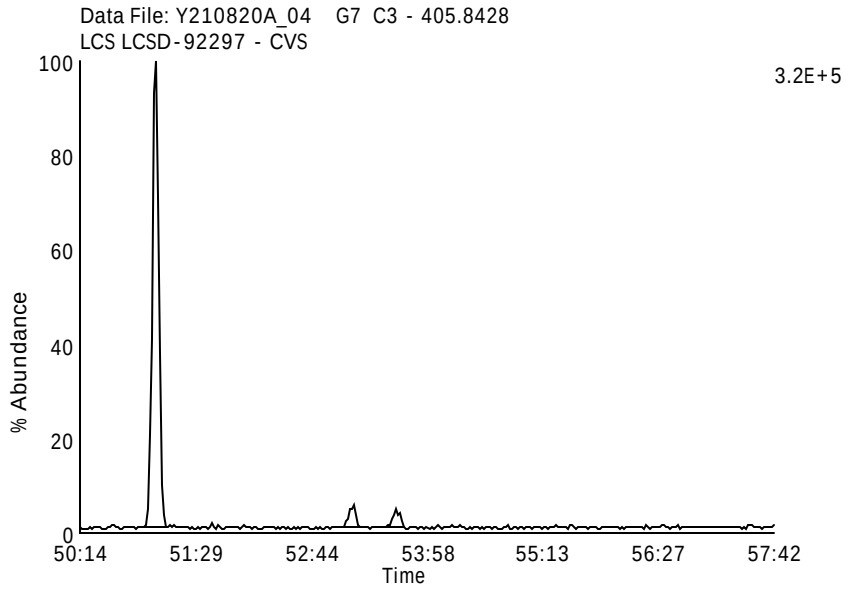
LCS LCSD-92297 - CVS

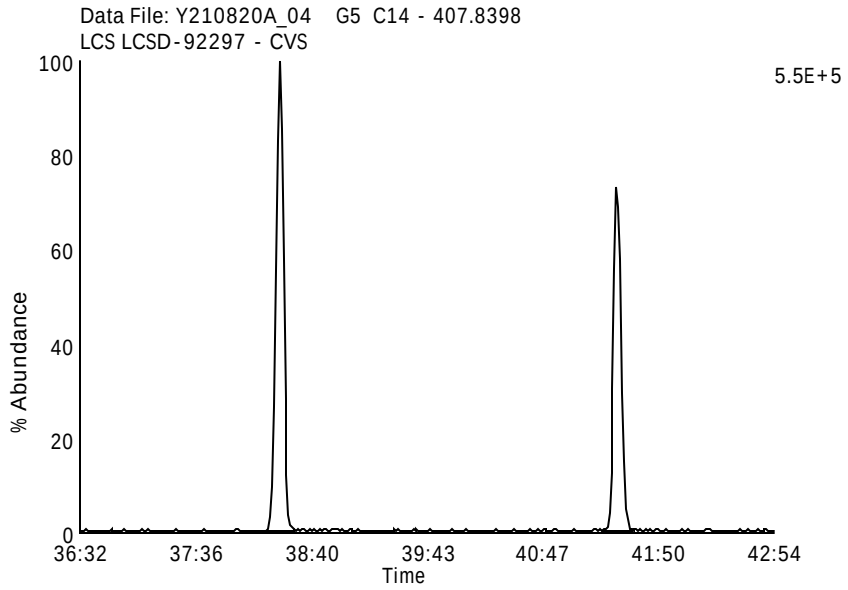


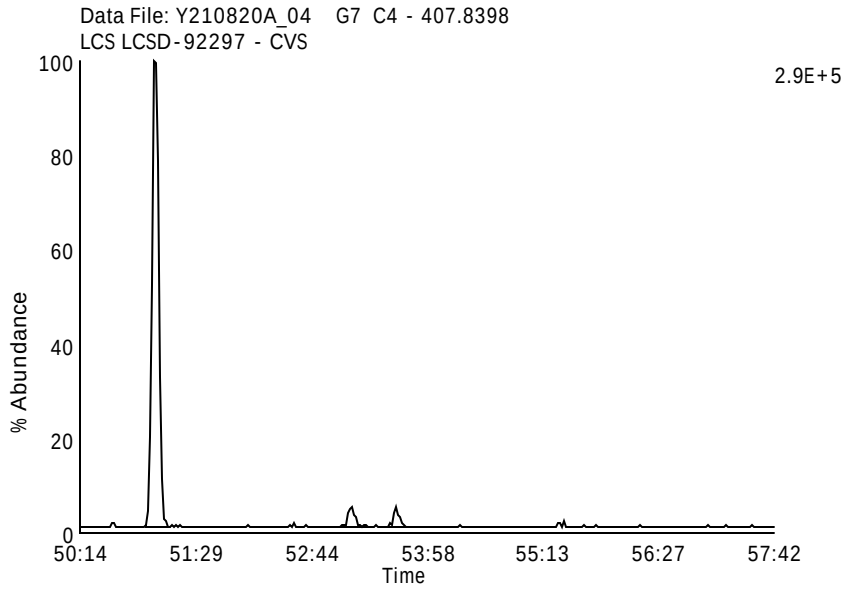
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



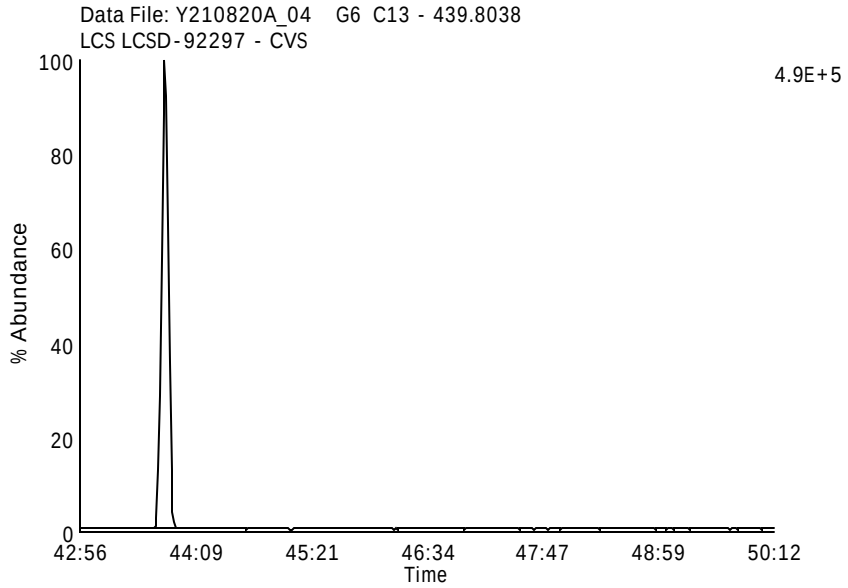


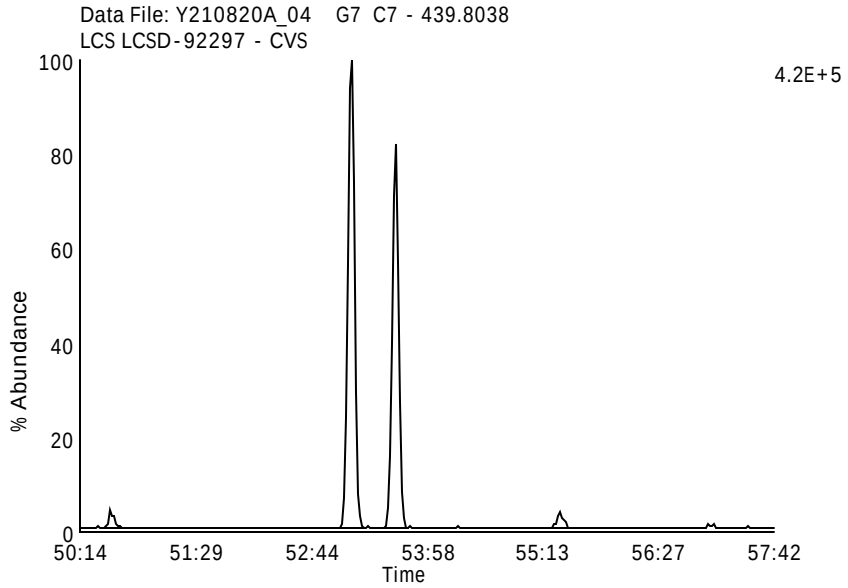


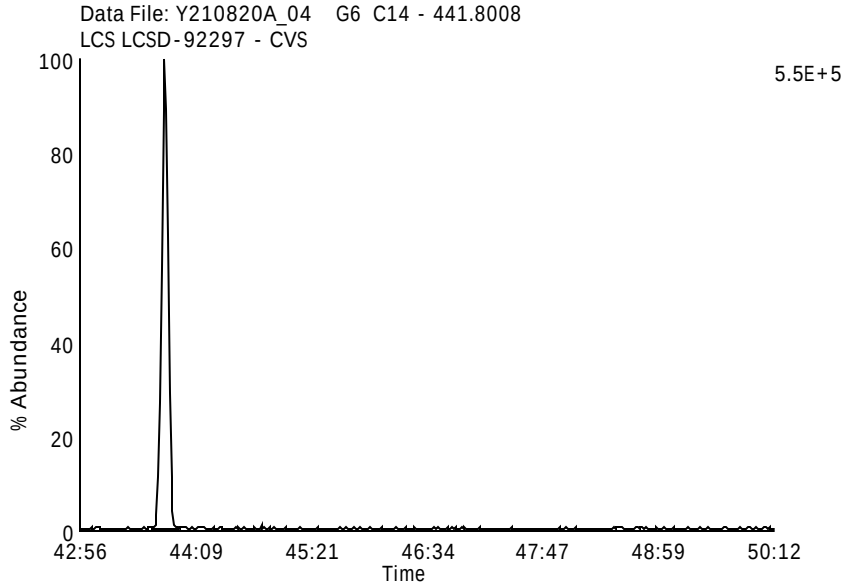


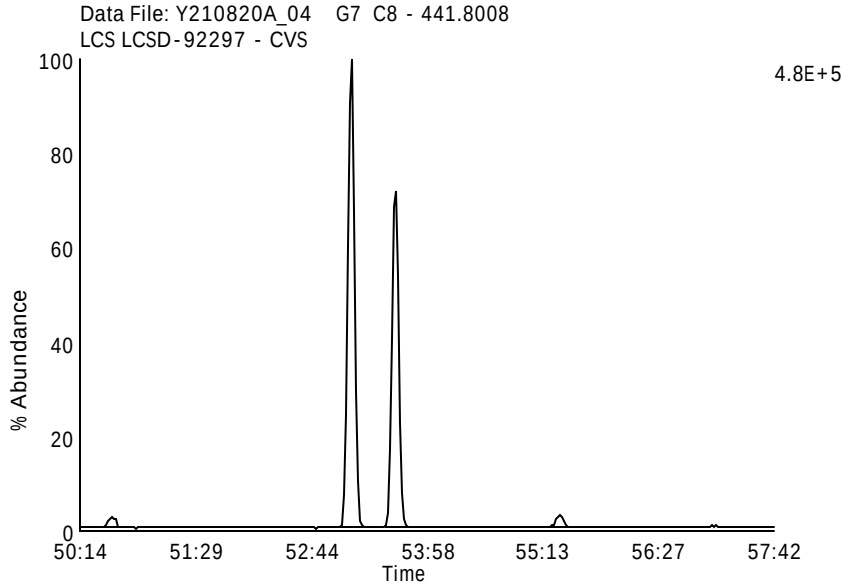
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



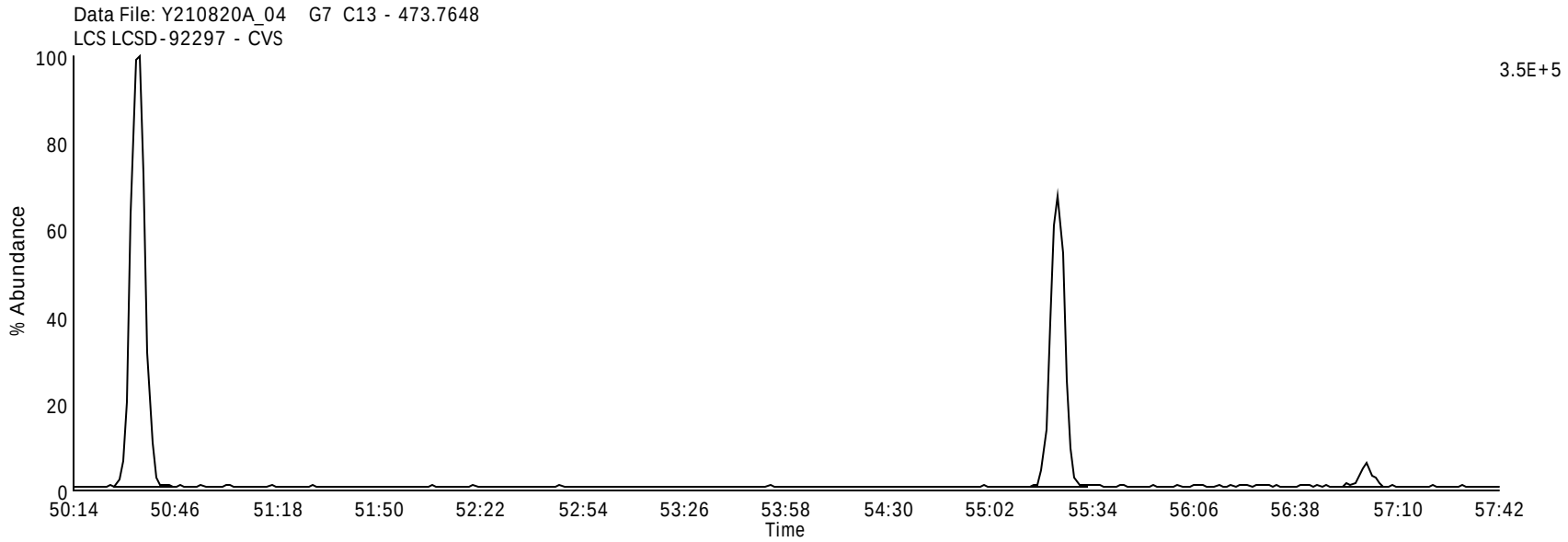


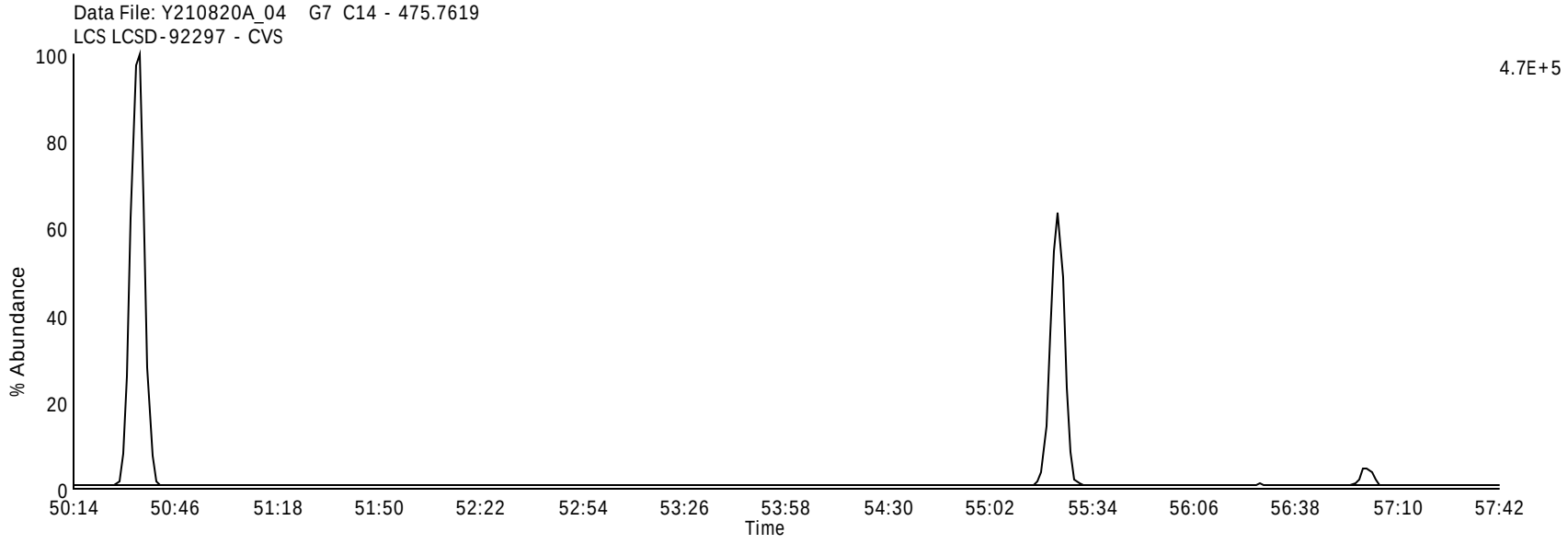




Labeled Nona Chlorinated Biphenyls

Data File Name: Y210820A_04	Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS	Client Sample ID: CLCSEU



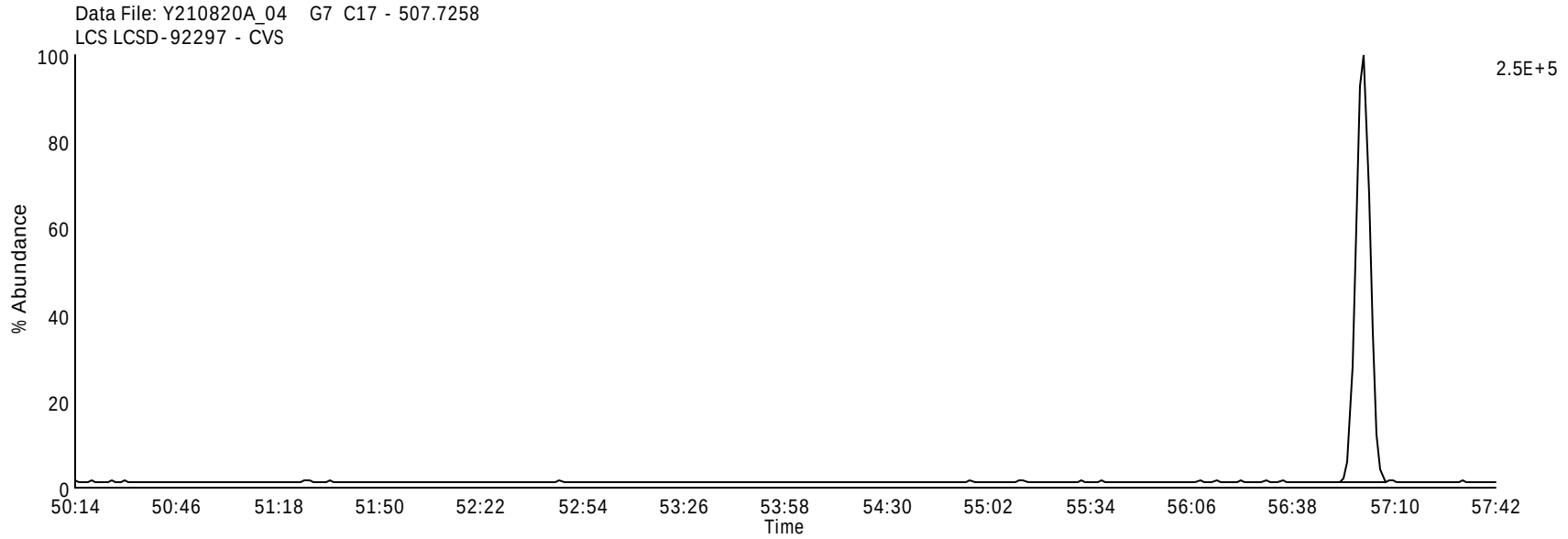


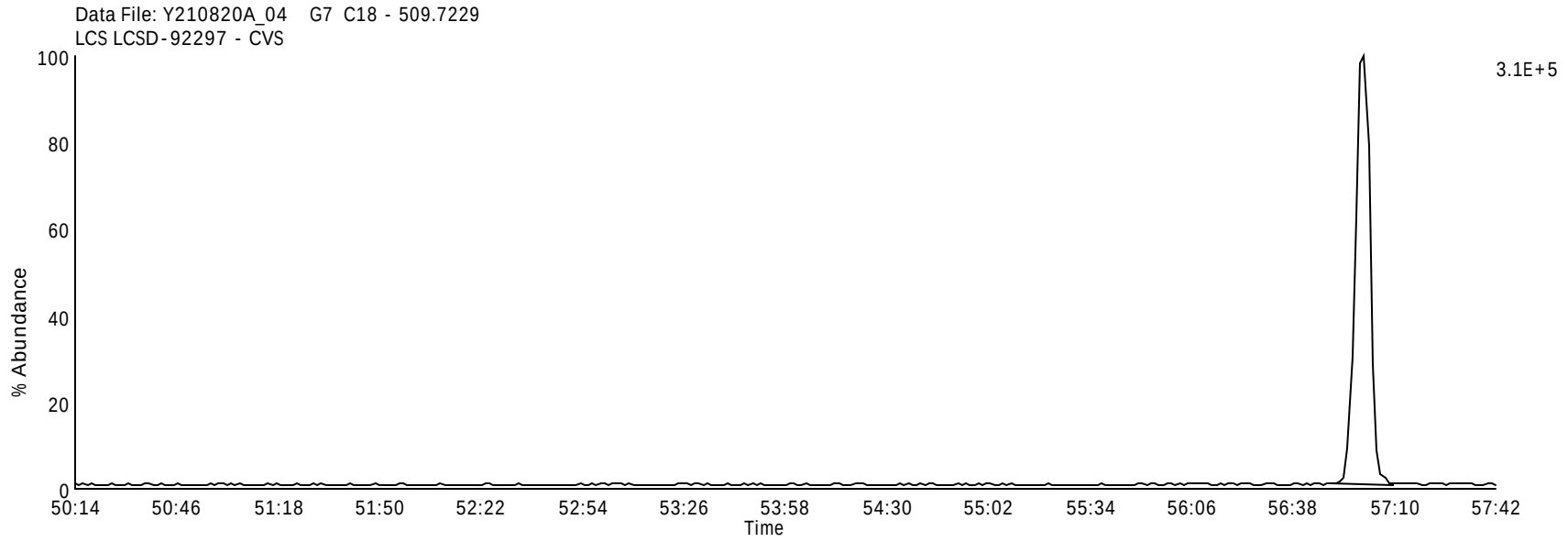
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210820A_04 | Lab Sample ID: LCSD-92297

Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)

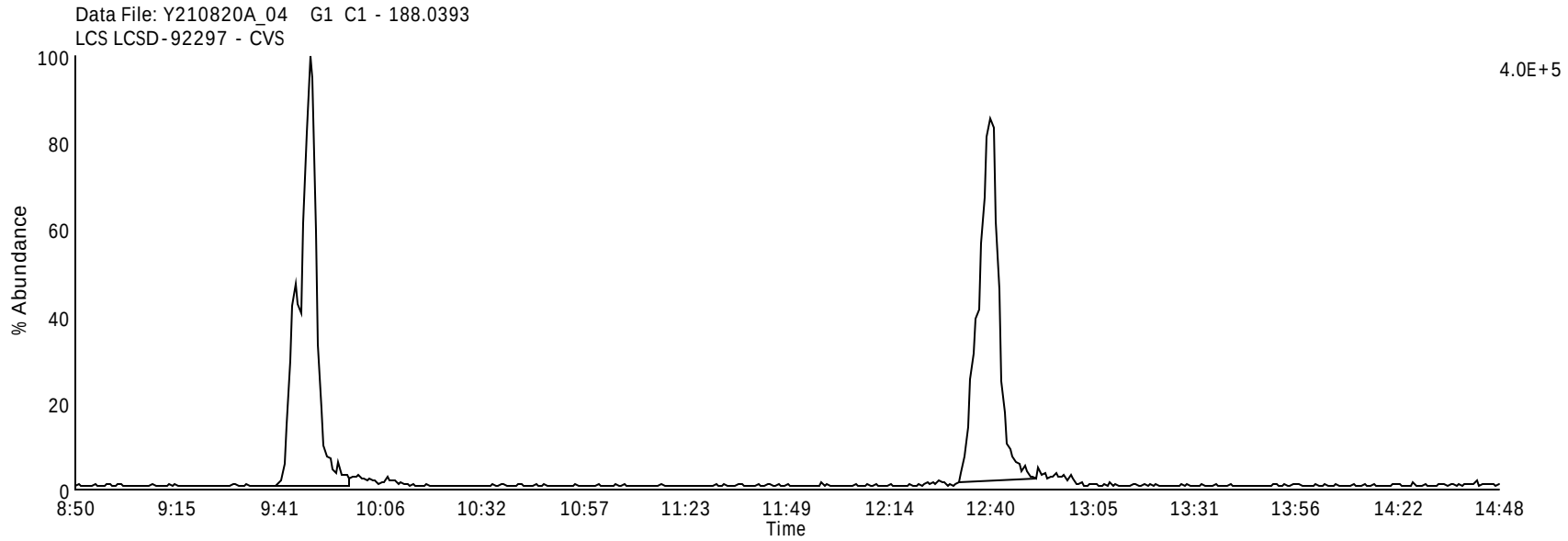
Sample Description: LCS LCSD-92297 - CVS | Client Sample ID: CLCSEU

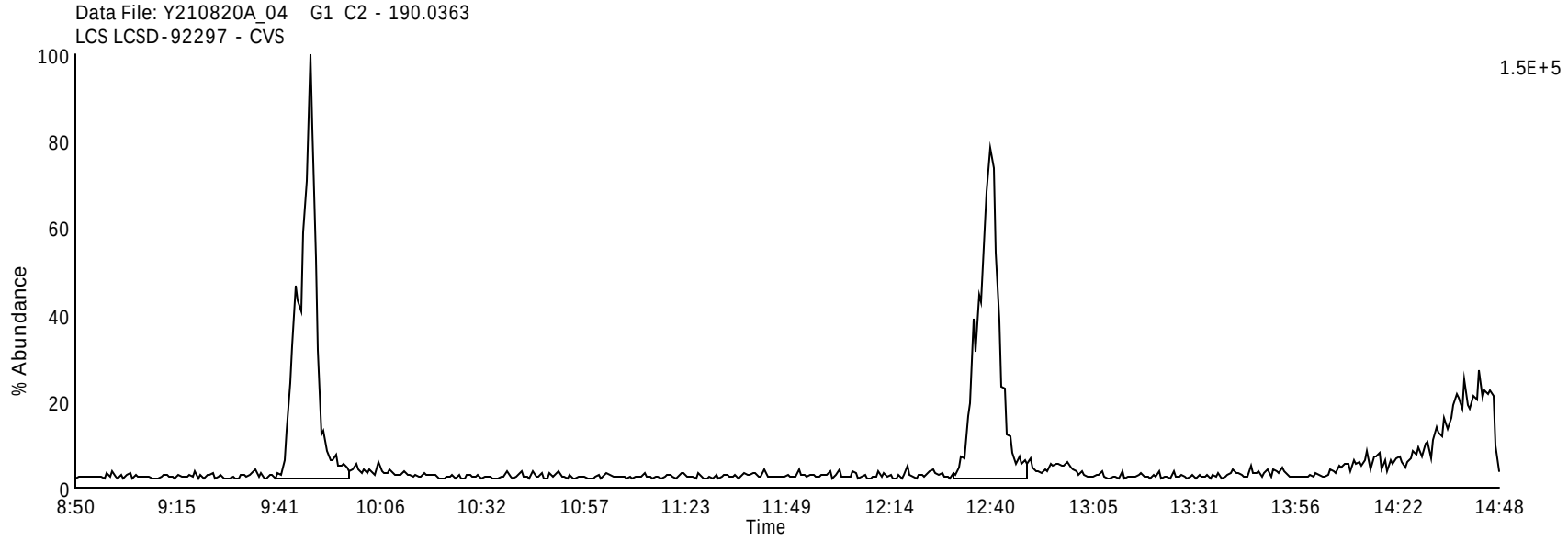




Mono Chlorinated Biphenyls

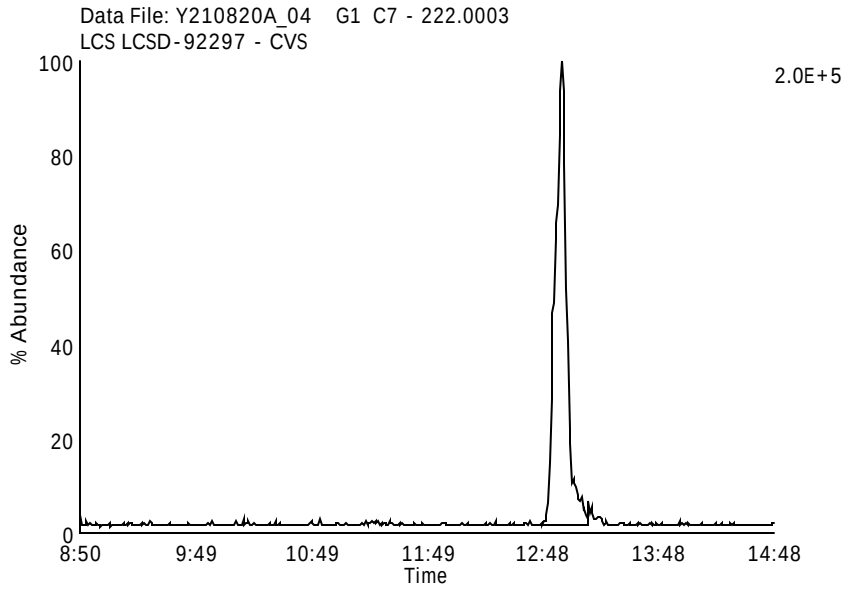
Data File Name: Y210820A_04	Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS	Client Sample ID: CLCSEU

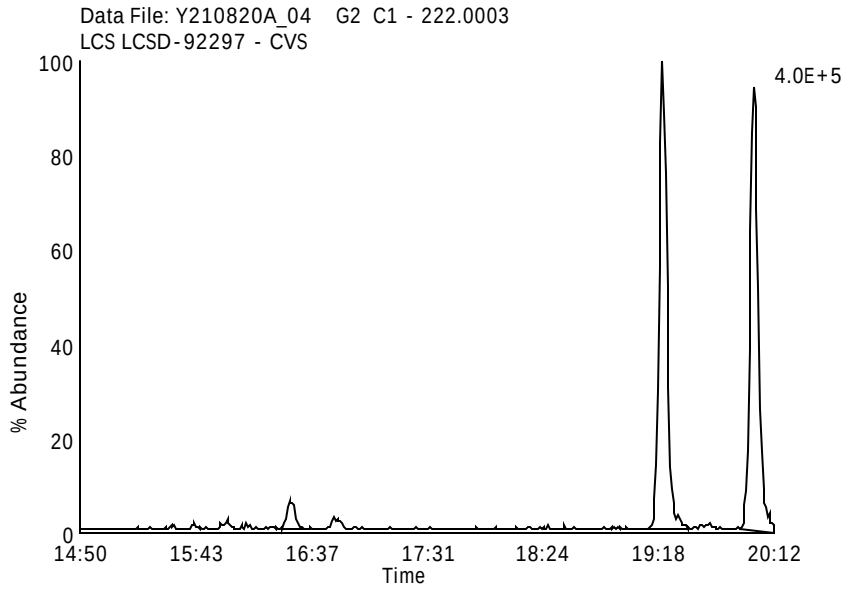


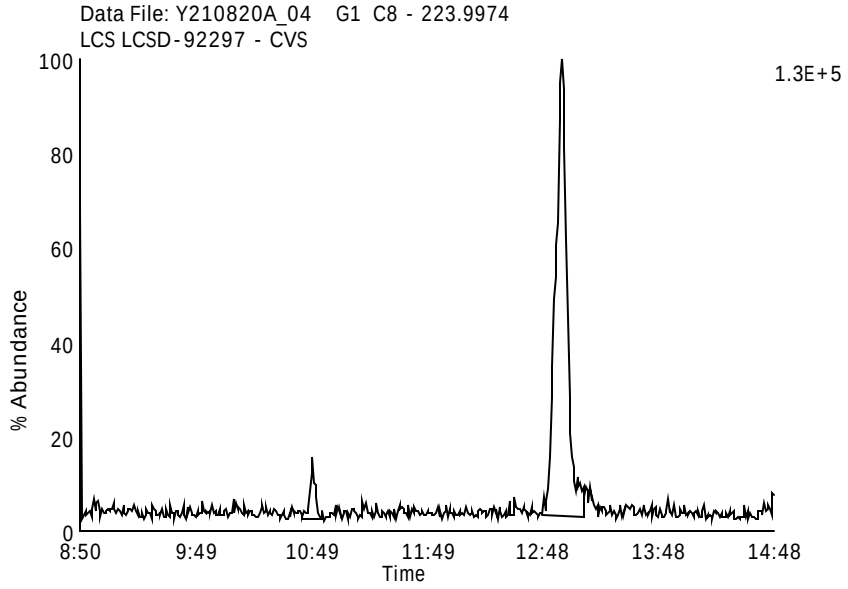


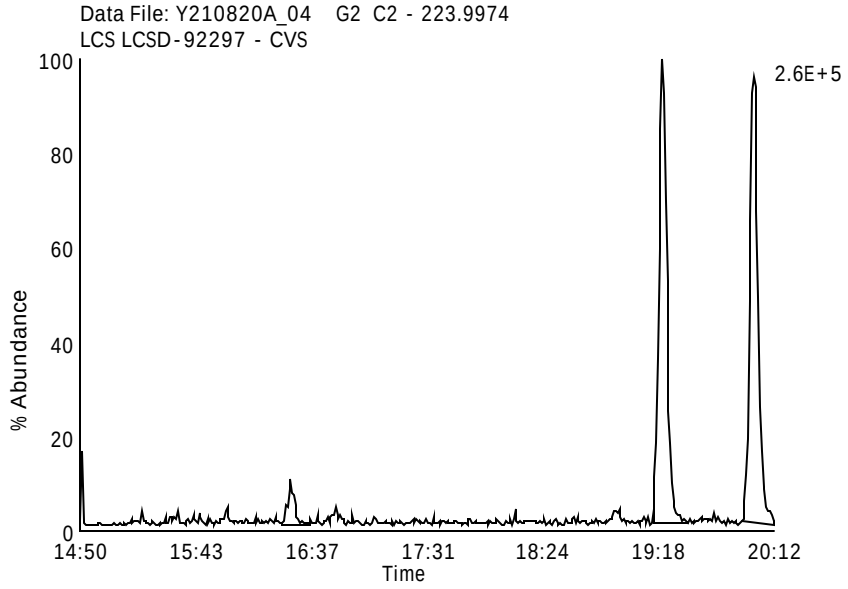
Di Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



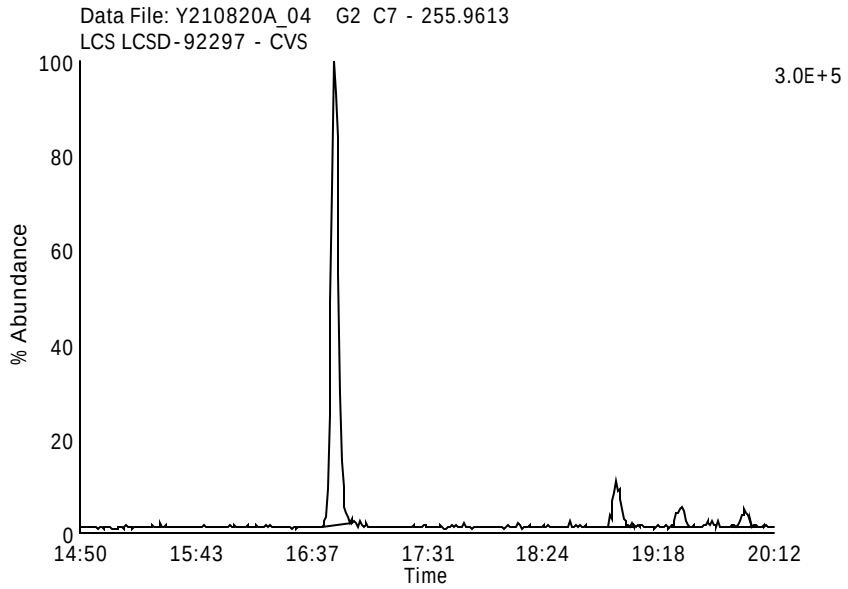


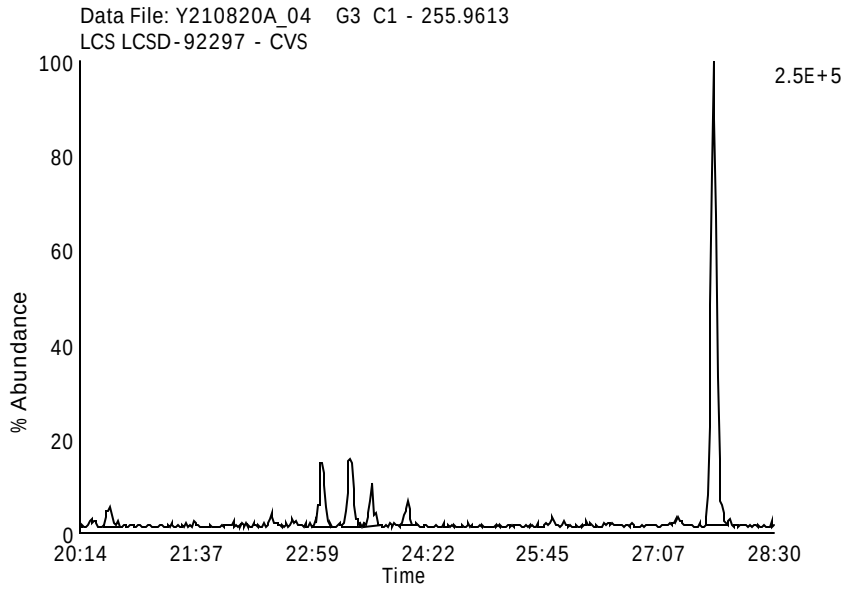


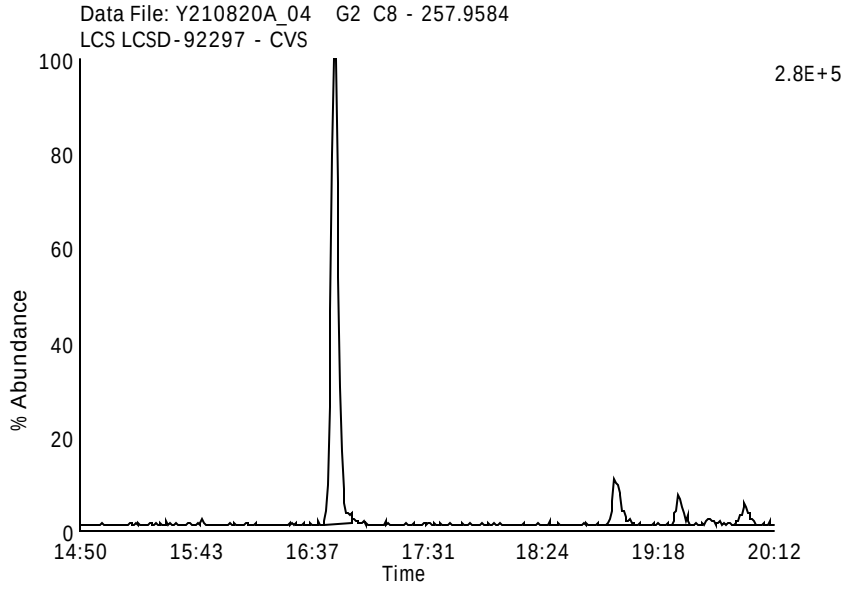


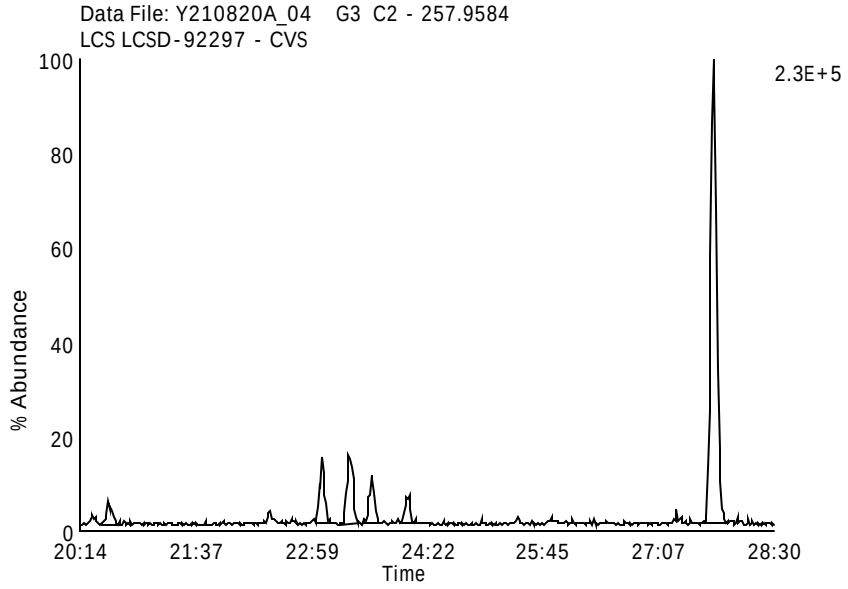
Tri Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



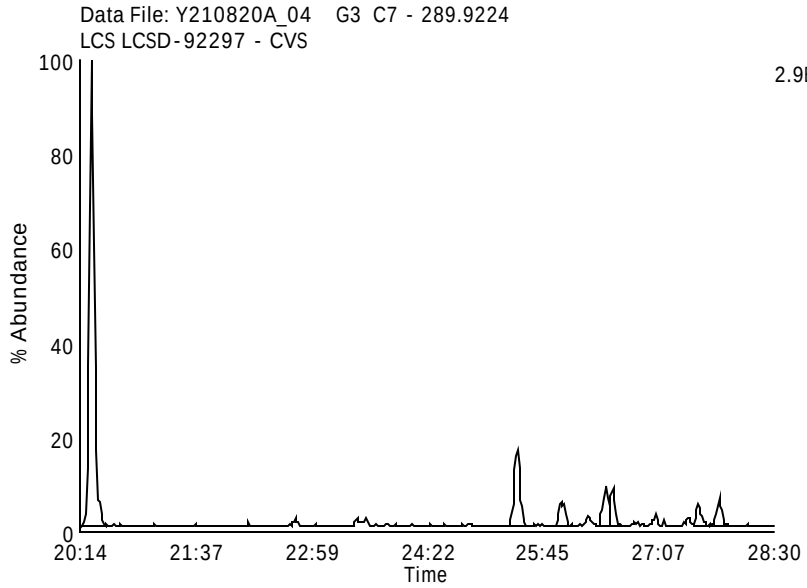


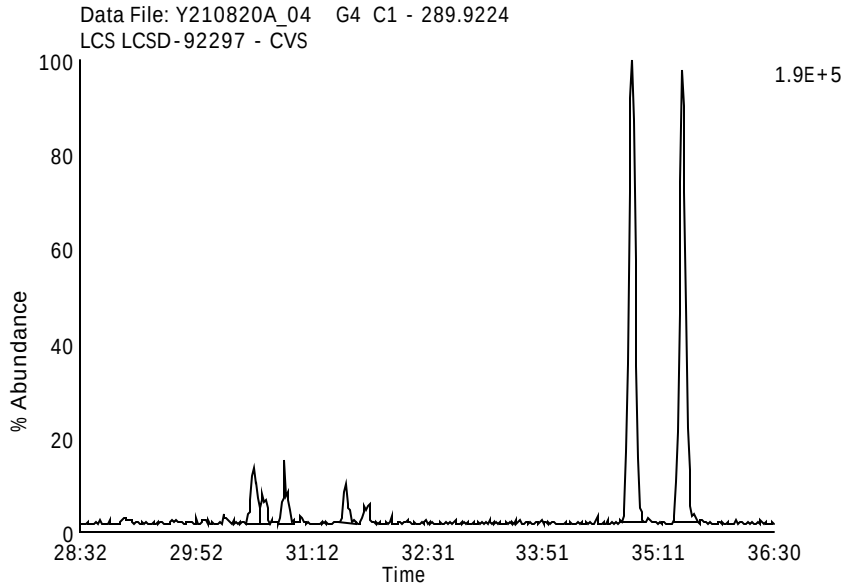


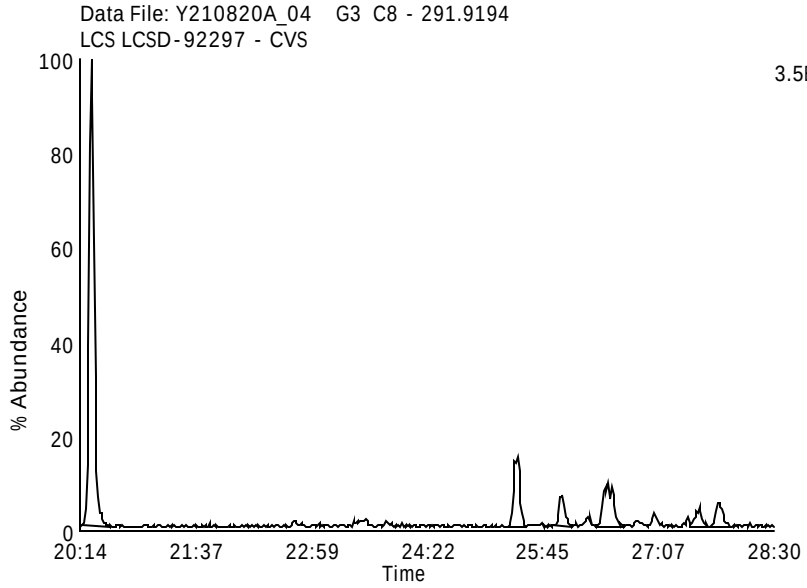


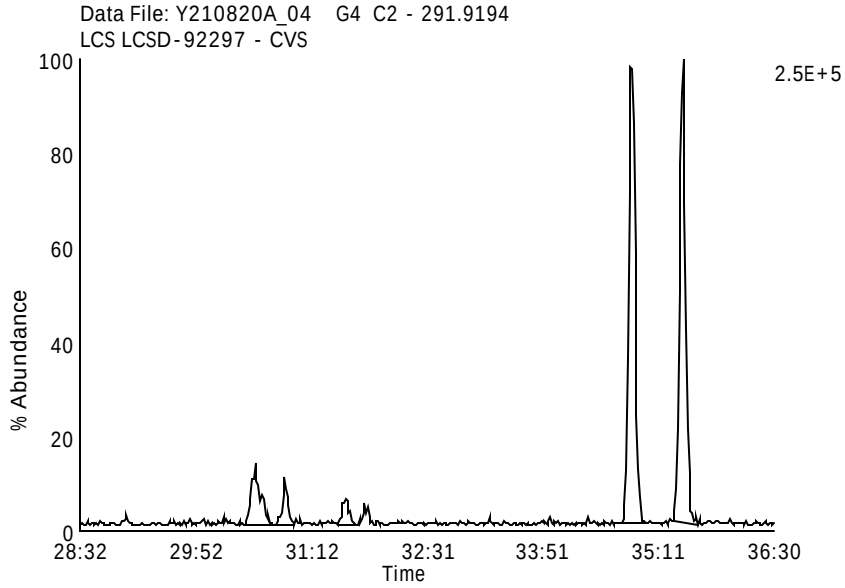
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



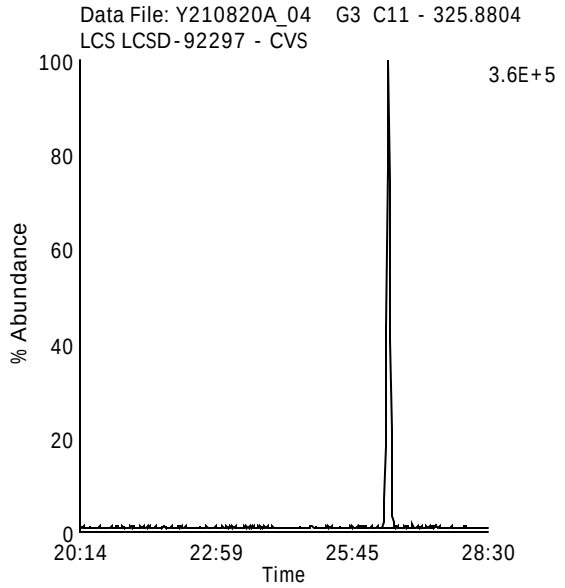


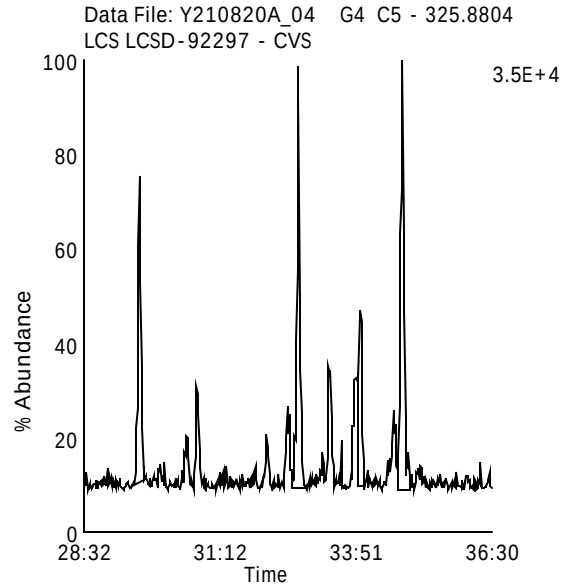


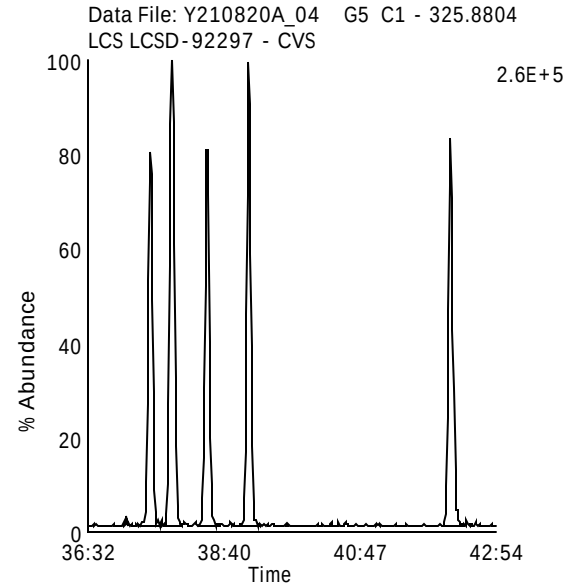


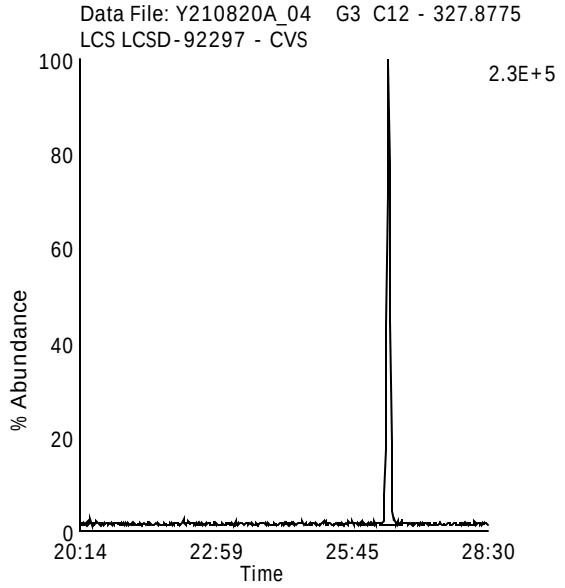
Penta Chlorinated Biphenyls

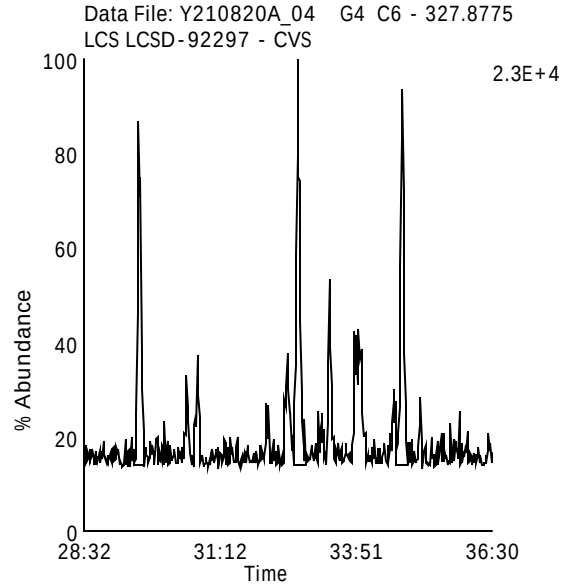
Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU

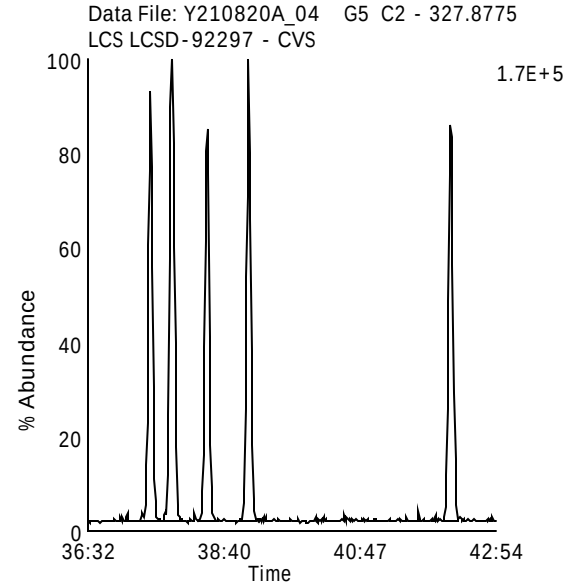






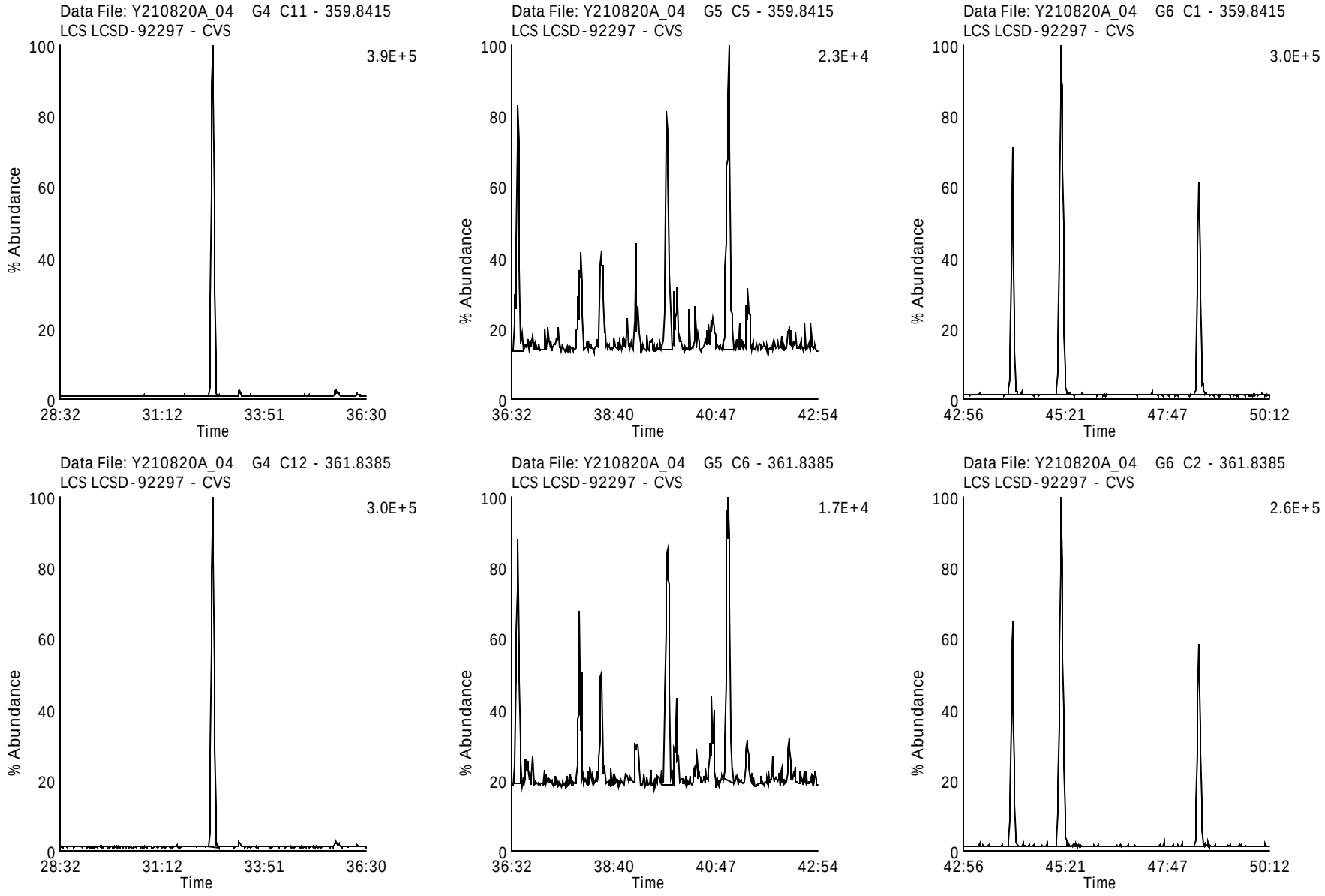






Hexa Chlorinated Biphenyls

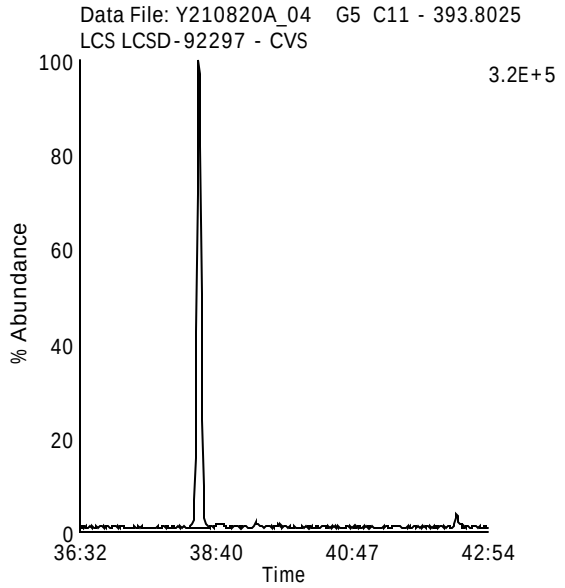
Data File Name: Y210820A_04 | Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS | Client Sample ID: CLCSEU

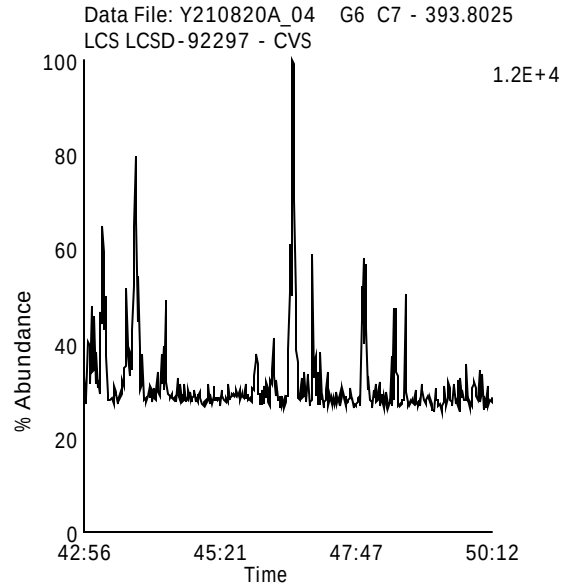


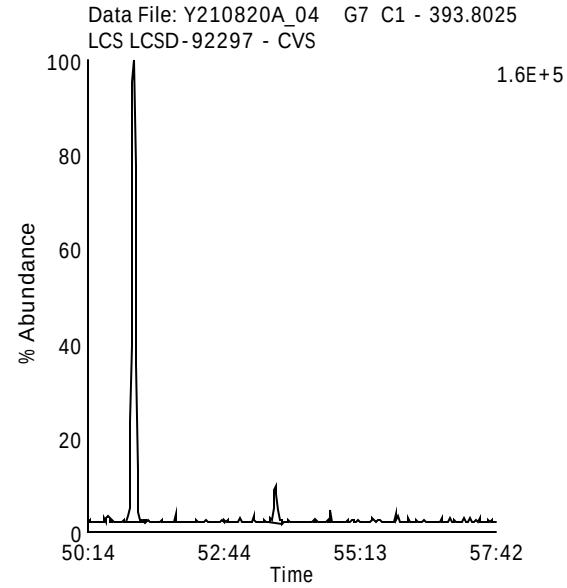
Hepta Chlorinated Biphenyls

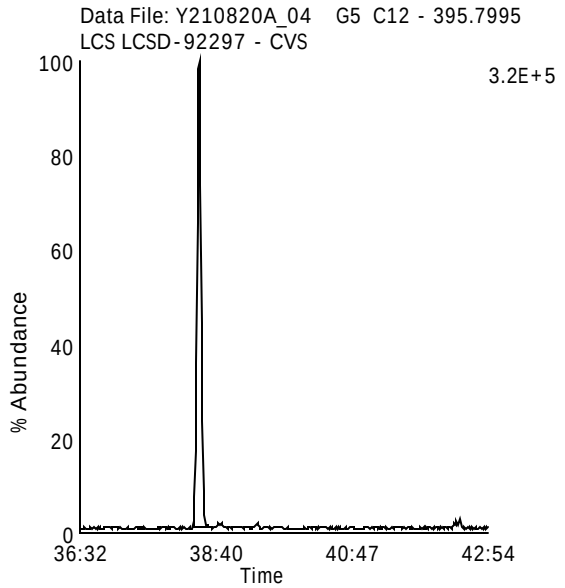
Data File Name: Y210820A_04
Date Acquired: 8/20/2021
Sample Description: LCS LCSD-92297 - CVS

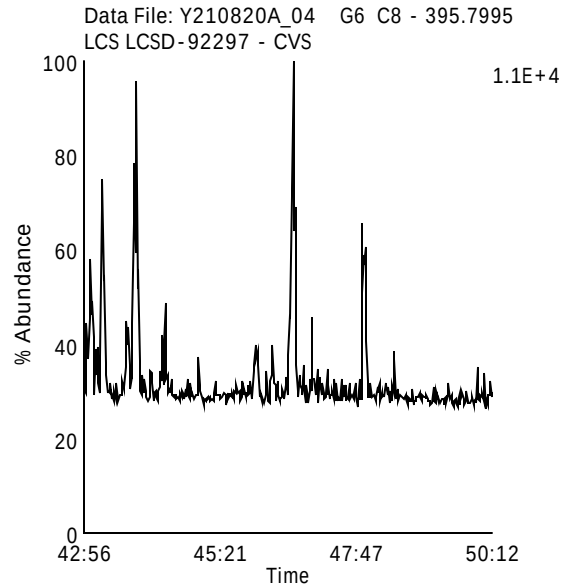
Lab Sample ID: LCSD-92297
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSEU

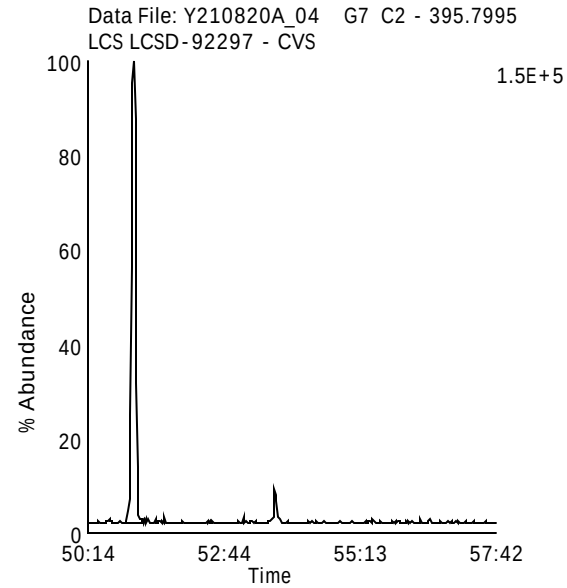






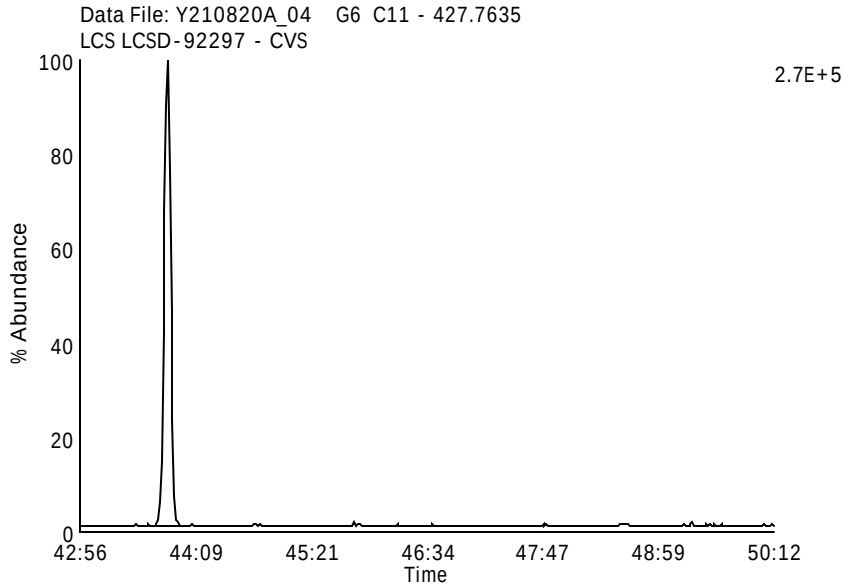


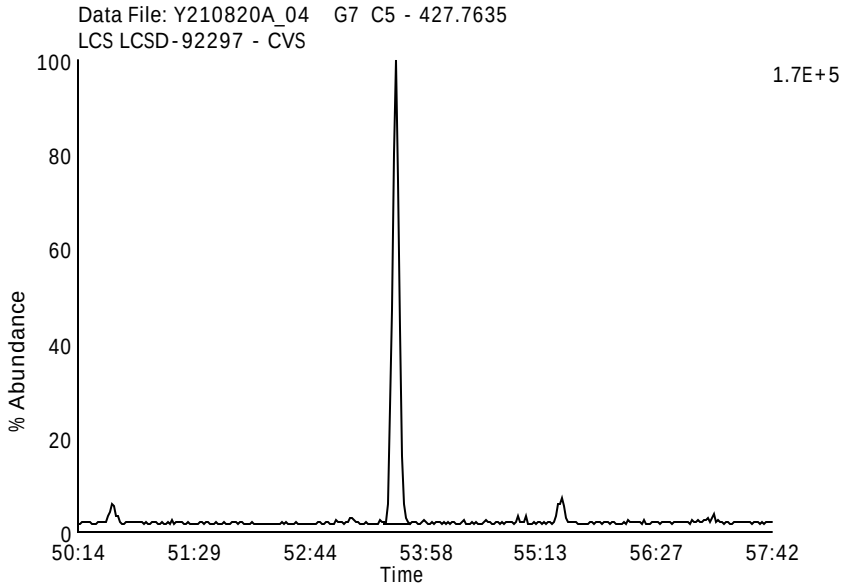


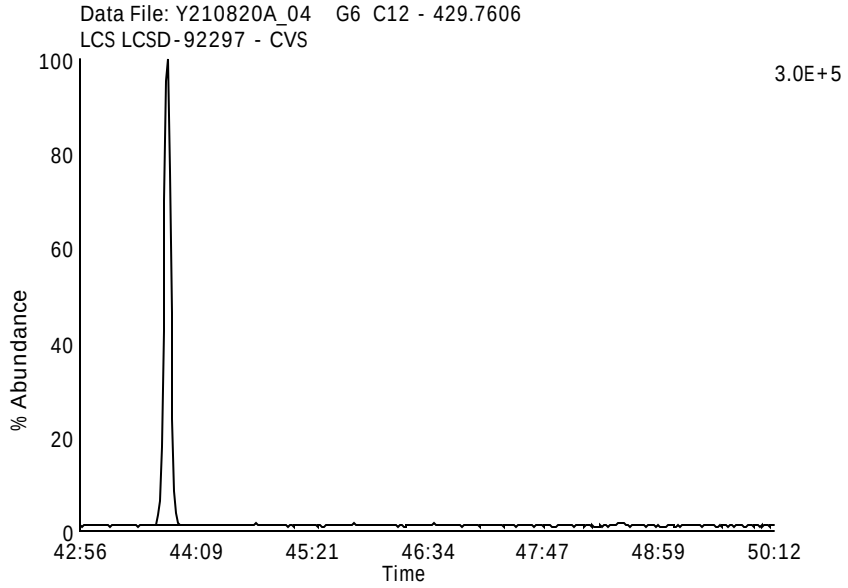


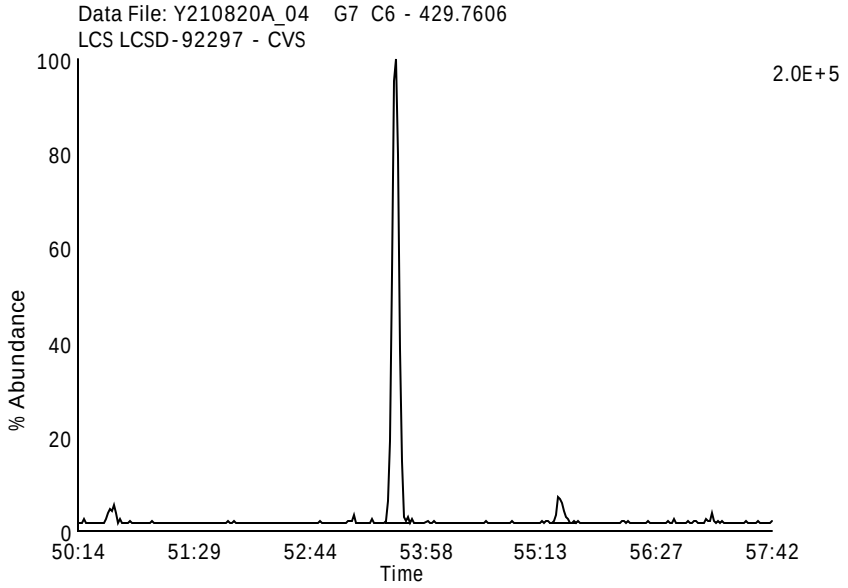
Octa Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



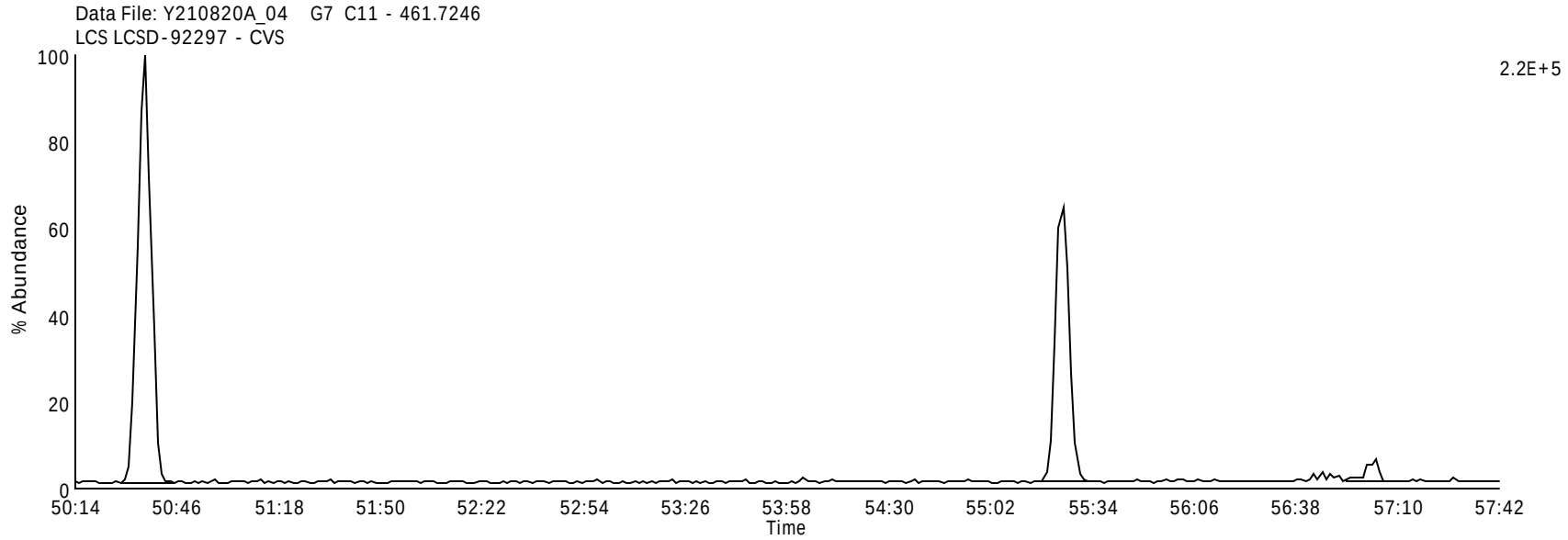


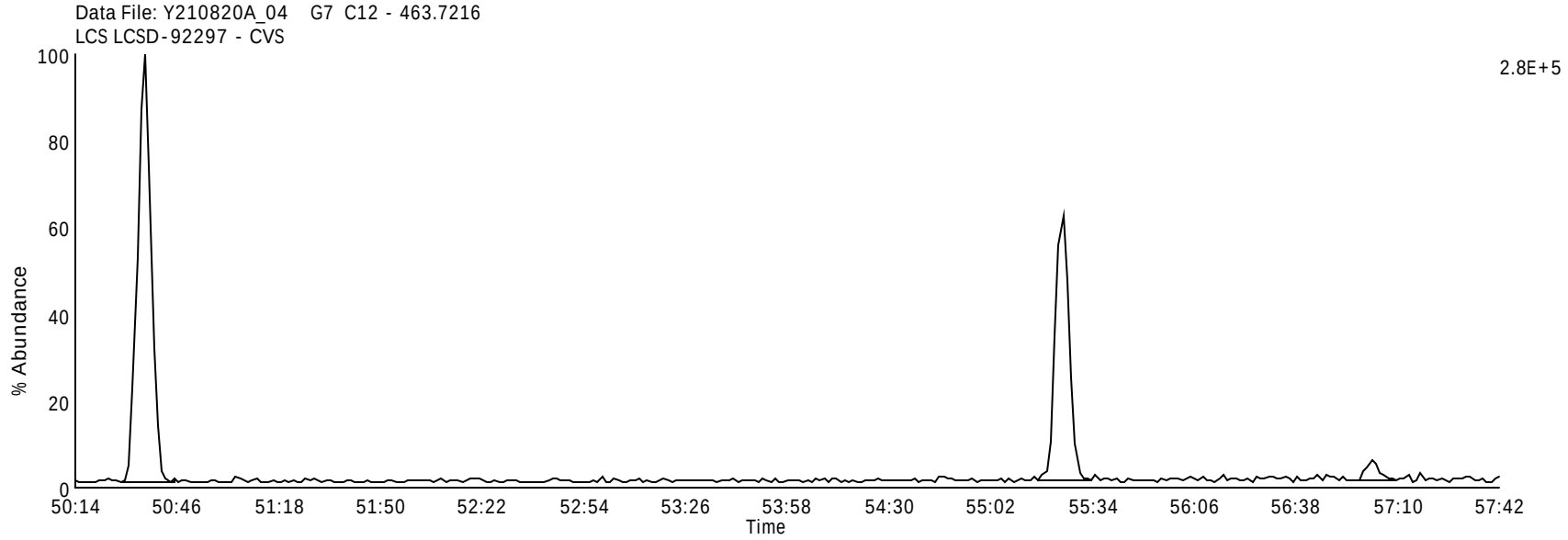




Nona Chlorinated Biphenyls

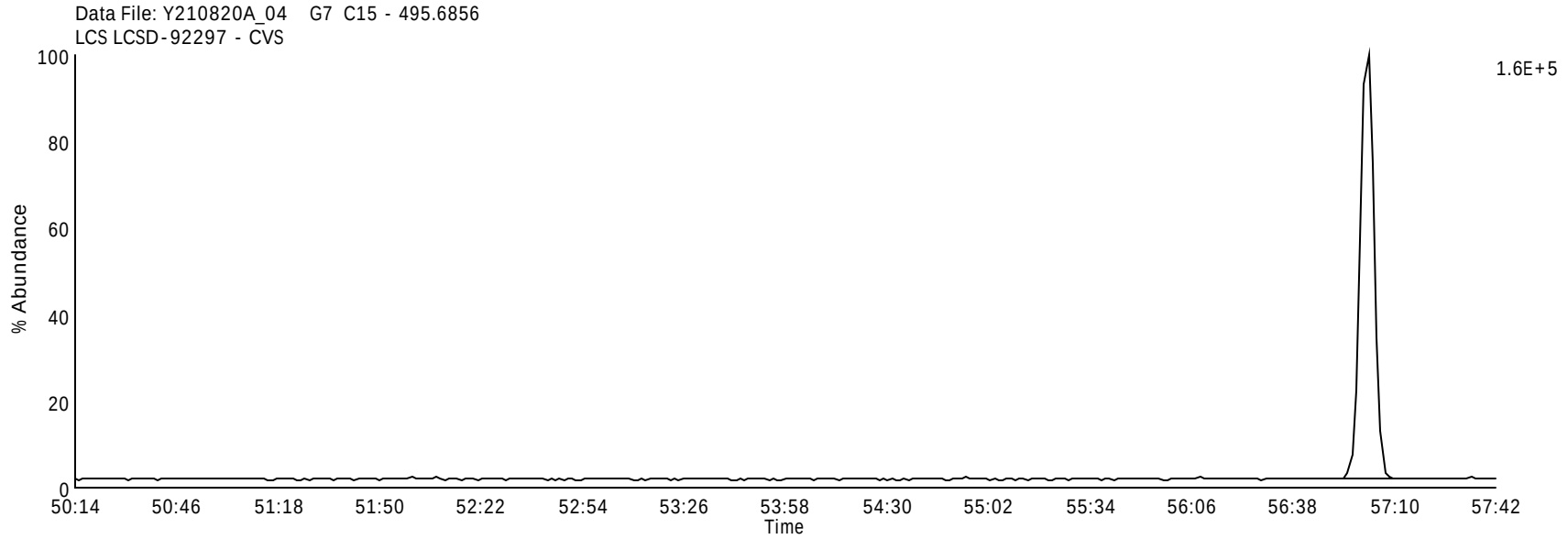
Data File Name: Y210820A_04	Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS	Client Sample ID: CLCSEU

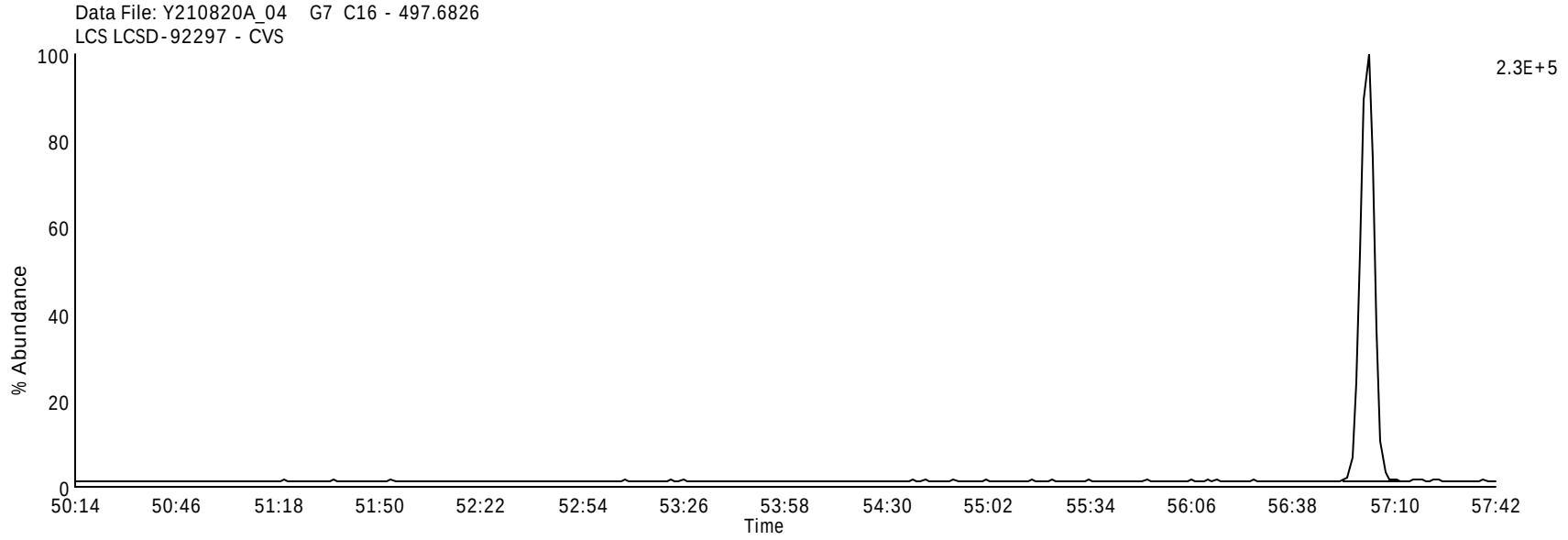




Deca Chlorinated Biphenyl

Data File Name: Y210820A_04	Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS	Client Sample ID: CLCSEU

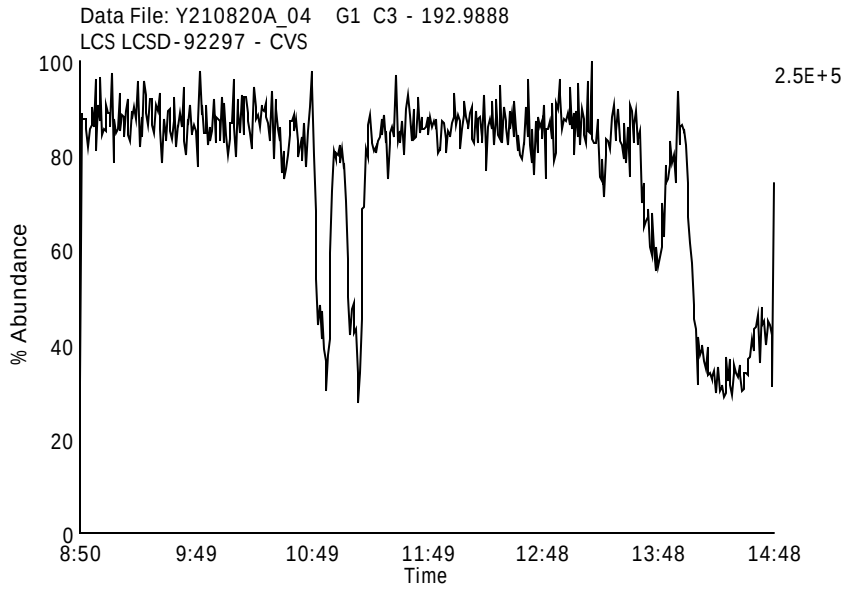


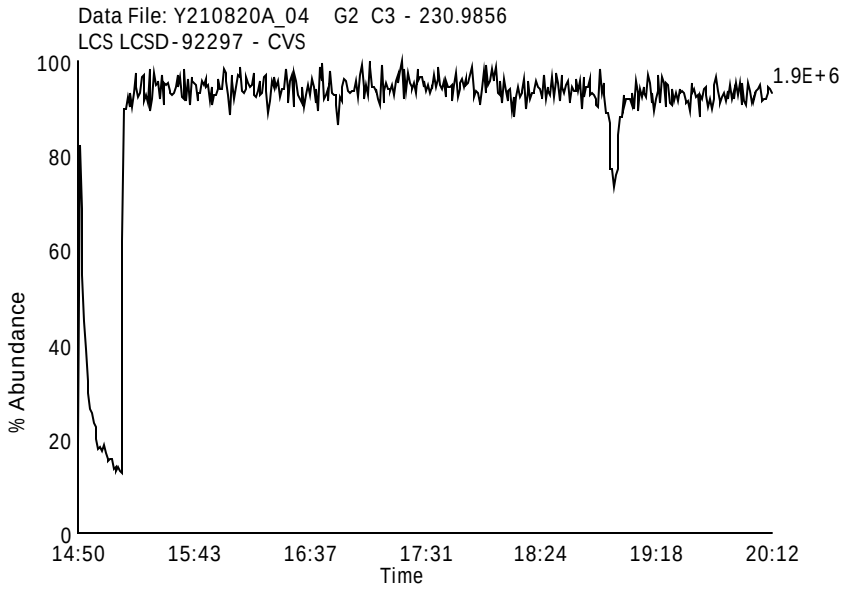


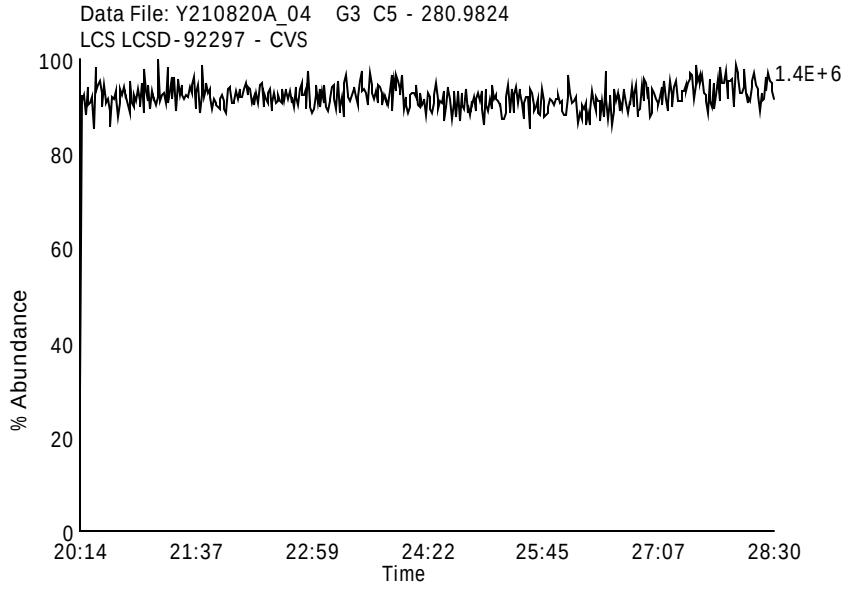
Group 1 - 4 Lock mass

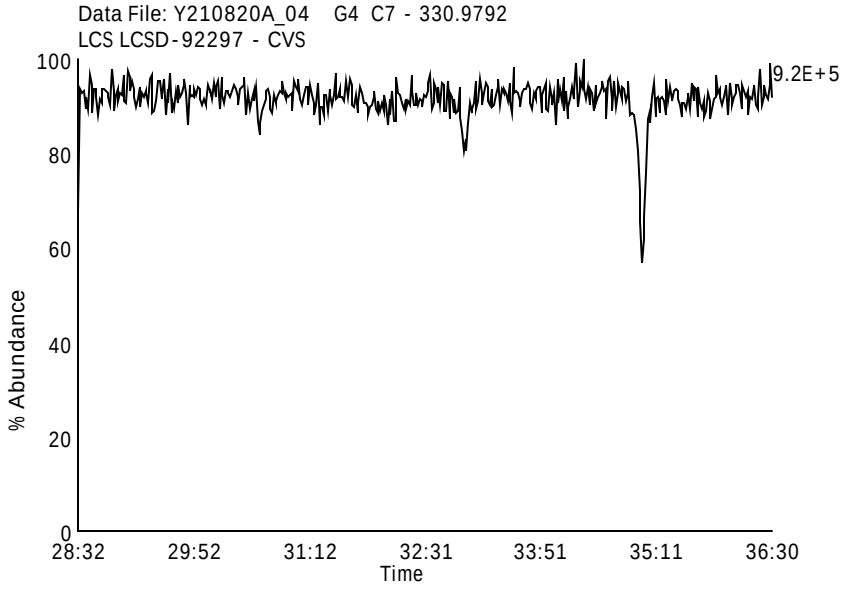
Data File Name: Y210820A_04
Date Acquired: 8/20/2021
Sample Description: LCS LCSD-92297 - CVS

Lab Sample ID: LCSD-92297
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSEU





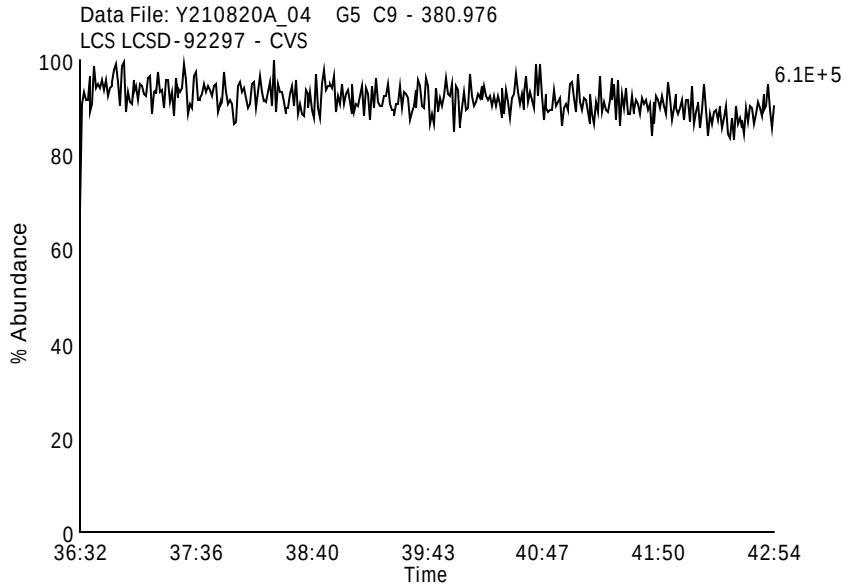


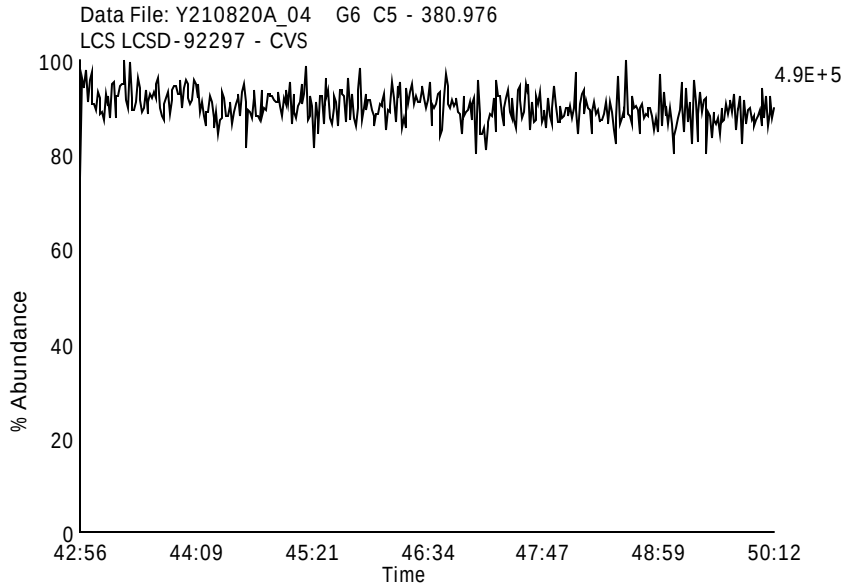


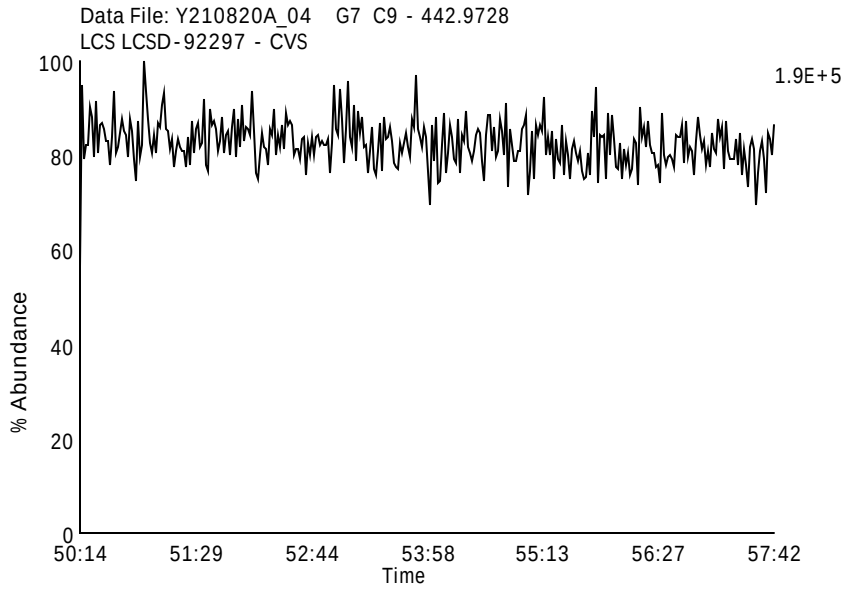
Group 5 - 7 Lock mass

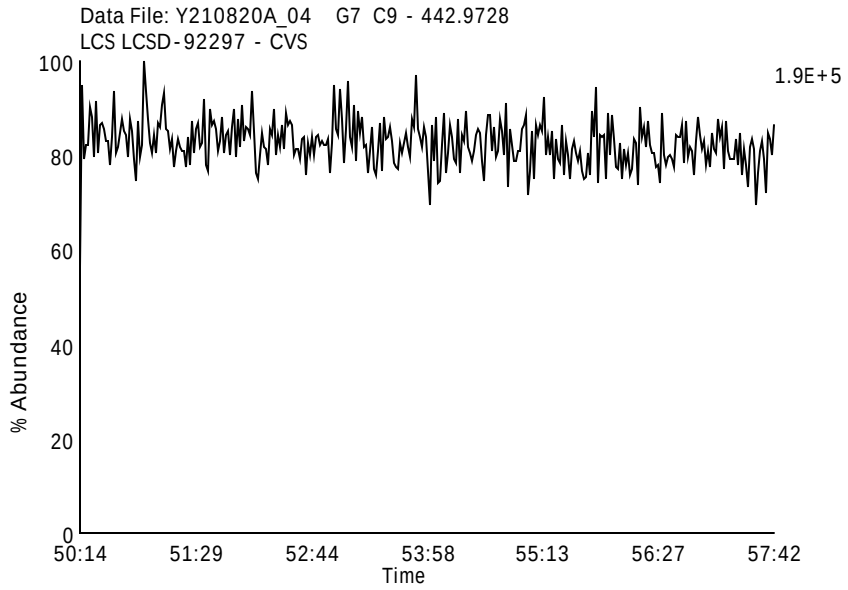
Data File Name: Y210820A_04
Date Acquired: 8/20/2021
Sample Description: LCS LCSD-92297 - CVS

Lab Sample ID: LCSD-92297
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSEU









Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CBLKIZ	Injected By	CVS
Lab ID	BLANK-92295	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_08	GC Column ID	261111-02
Analyzed	08/20/2021 08:26	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.901	0.76	3029519	4001173	
13C-3,3',4,4'-TeCB	77	35.589	0.80	3355052	4180622	
13C-2,3,3',4,4'-PeCB	105	39.065	1.53	3502328	2292685	
13C-2,3,4,4',5-PeCB	114	38.428	1.52	3683529	2420217	
13C-2,3',4,4',5-PeCB	118	37.874	1.55	3784288	2433675	
13C-2,3',4,4',5'-PeCB	123	37.539	1.49	3607980	2427603	
13C-3,3',4,4',5-PeCB	126	42.201	1.56	3421062	2191453	
13C-HxCB(156/157)	156/157	45.275	1.22	6020952	4937726	
13C-2,3',4,4',5,5'-HxCB	167	44.118	1.21	3165203	2608072	
13C-3,3',4,4',5,5'-HxCB	169	48.545	1.23	2973708	2415130	
13C-2,3,3',4,4',5,5'-HpCB	189	51.089	1.01	2486295	2463599	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.459	1.04	1293729	1249947	
13C-2,3,3',5,5'-PeCB	111	35.656	1.61	1500106	932636	
13C-2,2',3,3',5,5',6-HpCB	178	41.513	1.10	975773	888340	
Recovery Standards						
13C-2,5-DiCB	9	15.769	1.54	7228969	4702768	
13C-2,2',5,5'-TeCB	52	25.455	0.80	3926135	4916649	
13C-2,2',4,5,5'-PeCB	101	32.738	1.55	4757401	3070492	
13C-2,2',3,4,4',5'-HxCB	138	41.044	1.29	4071674	3167002	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.87	2434899	2787063	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CBLKIZ	Injected By	CVS
Lab ID	BLANK-92295	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_08	GC Column ID	261111-02
Analyzed	08/20/2021 08:26	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.572	0.67	30210	45341	
105		39.099	1.70	66997	39514	
118		37.891	1.42	116740	82371	
156	156/157	45.275	0.81	13407	16543	
157	156/157	45.275	0.81	(13407)	(16543)	
167		44.151	1.11	6537	5909	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CLCSET	Injected By	CVS
Lab ID	LCS-92296	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_03	GC Column ID	261111-02
Analyzed	08/20/2021 03:28	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.77	2587173	3346487	
13C-3,3',4,4'-TeCB	77	35.454	0.77	2738833	3575623	
13C-2,3,3',4,4'-PeCB	105	39.032	1.48	3024238	2042936	
13C-2,3,4,4',5-PeCB	114	38.394	1.47	3146103	2138526	
13C-2,3',4,4',5-PeCB	118	37.857	1.53	3220877	2104302	
13C-2,3',4,4',5'-PeCB	123	37.505	1.50	3068639	2048539	
13C-3,3',4,4',5-PeCB	126	42.184	1.48	2915852	1974102	
13C-HxCB(156/157)	156/157	45.258	1.22	5154682	4224713	
13C-2,3',4,4',5,5'-HxCB	167	44.101	1.23	2694089	2199082	
13C-3,3',4,4',5,5'-HxCB	169	48.528	1.22	2429338	1999155	
13C-2,3,3',4,4',5,5'-HpCB	189	51.068	1.07	2161450	2026404	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.05	3769073	3600641	
13C-2,3,3',5,5'-PeCB	111	35.521	1.58	4235872	2674432	
13C-2,2',3,3',5,5',6-HpCB	178	41.480	1.10	2815892	2569659	
Recovery Standards						
13C-2,5-DiCB	9	15.637	1.56	7407505	4750731	
13C-2,2',5,5'-TeCB	52	25.438	0.79	3822422	4839829	
13C-2,2',4,5,5'-PeCB	101	32.704	1.53	4654587	3034438	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.21	4015597	3332199	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.91	2289983	2524990	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CLCSET	Injected By	CVS
Lab ID	LCS-92296	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_03	GC Column ID	261111-02
Analyzed	08/20/2021 03:28	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
81		34.901	0.73	1171444	1605817	
77		35.488	0.79	1287592	1630403	
105		39.065	1.42	1453639	1021700	
114		38.428	1.54	1447047	938038	
118		37.874	1.56	1615818	1034767	
123		37.539	1.50	1451145	966620	
126		42.218	1.54	1399974	907402	
156	156/157	45.275	1.15	2455111	2133129	
157	156/157	45.275	1.15	(2455111)	(2133129)	
167		44.118	1.27	1326666	1043472	
169		48.545	1.23	1202153	979076	
189		51.089	1.10	981749	891771	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CLCSEU	Injected By	CVS
Lab ID	LCSD-92297	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_04	GC Column ID	261111-02
Analyzed	08/20/2021 04:28	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.851	0.78	1939335	2487299	
13C-3,3',4,4'-TeCB	77	35.438	0.78	2038909	2608894	
13C-2,3,3',4,4'-PeCB	105	39.032	1.50	2206591	1467517	
13C-2,3,4,4',5-PeCB	114	38.394	1.63	2323739	1425388	
13C-2,3',4,4',5-PeCB	118	37.841	1.60	2430358	1521664	
13C-2,3',4,4',5'-PeCB	123	37.488	1.57	2275935	1450685	
13C-3,3',4,4',5-PeCB	126	42.184	1.59	2164015	1358238	
13C-HxCB(156/157)	156/157	45.241	1.25	3771433	3029042	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.25	1917935	1531494	
13C-3,3',4,4',5,5'-HxCB	169	48.511	1.21	1768910	1460998	
13C-2,3,3',4,4',5,5'-HpCB	189	51.067	1.07	1554417	1458020	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	0.99	2559876	2587927	
13C-2,3,3',5,5'-PeCB	111	35.505	1.60	3180800	1993565	
13C-2,2',3,3',5,5',6-HpCB	178	41.480	1.08	2110090	1957763	
Recovery Standards						
13C-2,5-DiCB	9	15.517	1.49	6352702	4251416	
13C-2,2',5,5'-TeCB	52	25.421	0.81	3530550	4361277	
13C-2,2',4,5,5'-PeCB	101	32.704	1.57	4220750	2683112	
13C-2,2',3,4,4',5'-HxCB	138	41.010	1.20	3657117	3041023	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.88	2123014	2423254	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CLCSEU	Injected By	CVS
Lab ID	LCSD-92297	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_04	GC Column ID	261111-02
Analyzed	08/20/2021 04:28	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
81		34.884	0.77	984844	1273312	
77		35.454	0.75	942336	1252795	
105		39.048	1.53	1176047	770912	
114		38.394	1.50	1063312	707732	
118		37.857	1.56	1254674	805789	
123		37.522	1.47	1077916	733927	
126		42.201	1.46	1051139	718121	
156	156/157	45.258	1.22	1908362	1559032	
157	156/157	45.258	1.22	(1908362)	(1559032)	
167		44.101	1.19	981777	827418	
169		48.528	1.23	896078	725798	
189		51.089	0.97	775711	796980	

REPORT OF LABORATORY ANALYSIS

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MSV - FORM II VOA-1
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947592	2947592BLANK	102	103	100
2947593	2947593LCS	98	96	100
60375923011	GB-01/8-10	104	103	98
60375923012	GB-01/11-13	100	107	101

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-2
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2947600	2947600BLANK	102	103	100
2947601	2947601LCS	98	96	100
60375923011	GB-01/8-10	104	103	98
60375923012	GB-01/11-13	100	107	101

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(69-133)
(TOL8) = Toluene-d8 (S)	(78-122)

* Values outside of QC Limits

MSV - FORM II VOA-3
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2948710	2948710BLANK	100	105	100
2948711	2948711LCS	99	98	101
2948712	2948712MS	100	98	99
2948713	2948713MSD	100	99	99
60375923013	GB-03/1-3	104	105	98
60375923014	GB-03/4-6	103	104	99
60375923016	GB-02/2-3	104	105	99
60375923017	GB-02/8-9	104	101	103

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-4
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2948715	2948715BLANK	100	105	100
2948716	2948716LCS	101	101	102
60375923013	GB-03/1-3	104	105	98
60375923014	GB-03/4-6	103	104	99
60375923016	GB-02/2-3	104	105	99
60375923017	GB-02/8-9	104	101	103

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(69-133)
(TOL8) = Toluene-d8 (S)	(78-122)

* Values outside of QC Limits

MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSV8

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2950715	2950715BLANK	102	98	99
2950716	2950716LCS	101	97	100
60375923015	TB-5	100	99	99

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947601LCS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072821AGRO.B\0728A_05.D
SDG No.: 60375923

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-GRO	4.0	3.3	82	61-140

Spike Recovery: 0 out of 1 outside limits.

MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947593LCS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072821A.B\0728A_03.D
SDG No.: 60375923

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acetone	500	591	118	50-150
Acrolein	500	506	101	10-180
Acrylonitrile	500	470	94	80-120
Benzene	100	99.3	99	80-120
Bromobenzene	100	96.3	96	80-120
Bromochloromethane	100	100	100	75-120
Bromodichloromethane	100	109	109	80-125
Bromoform	100	90.9	91	80-135
Bromomethane	100	98.4	98	35-135
2-Butanone (MEK)	500	570	114	60-135
n-Butylbenzene	100	104	104	80-135
sec-Butylbenzene	100	100	100	80-135
tert-Butylbenzene	100	101	101	80-125
Carbon disulfide	100	109	109	65-140
Carbon tetrachloride	100	113	113	75-140
Chlorobenzene	100	99.7	100	80-120
Chloroethane	100	87.7	88	50-135
Chloroform	100	101	101	80-120
Chloromethane	100	97.9	98	15-155
2-Chlorotoluene	100	97.7	98	80-120
4-Chlorotoluene	100	100	100	80-120
Cyclohexanone	500	499	100	80-120
1,2-Dibromo-3-chloropropane	100	103	103	75-135
Dibromochloromethane	100	113	113	80-130
1,2-Dibromoethane (EDB)	100	101	101	80-125
Dibromomethane	100	98.3	98	80-120
1,2-Dichlorobenzene	100	94.6	95	80-120
1,3-Dichlorobenzene	100	99.4	99	80-120
1,4-Dichlorobenzene	100	100	100	80-120
1,1-Dichloroethane	100	103	103	75-125
1,2-Dichloroethane	100	95.3	95	80-120
1,2-Dichloroethene (Total)	200	206	103	80-120
1,1-Dichloroethene	100	109	109	70-130
cis-1,2-Dichloroethene	100	101	101	80-120
trans-1,2-Dichloroethene	100	105	105	75-125
1,2-Dichloropropane	100	99.4	99	80-120
1,3-Dichloropropane	100	96.3	96	80-120
2,2-Dichloropropane	100	109	109	75-130
1,1-Dichloropropene	100	105	105	60-140
cis-1,3-Dichloropropene	100	109	109	80-125
trans-1,3-Dichloropropene	100	109	109	80-130
Diethyl ether (Ethyl ether)	100	99.5	99	80-120
Ethylbenzene	100	100	100	80-120
n-Heptane	100	111	111	80-120
Hexachloro-1,3-butadiene	100	110	110	80-135
n-Hexane	100	107	107	55-150
2-Hexanone	500	555	111	70-135

MSV - FORM III VOA-2

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2947593LCS

Date Extracted: 07/28/2021 | Date Analyzed (1): 07/28/2021

Instrument: 60MSVC | LCS Lot No:

Lab File ID: 072821A.B\0728A_03.D | SDG No.: 60375923

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Iodomethane	100	108	108	65-145
Isopropylbenzene (Cumene)	100	103	103	75-135
p-Isopropyltoluene	100	103	103	65-145
Methyl acetate	500	449	90	80-120
Methylene Chloride	100	90.4	90	65-120
4-Methyl-2-pentanone (MIBK)	500	460	92	75-130
Methyl-tert-butyl ether	100	96.7	97	75-130
Naphthalene	100	97.8	98	80-120
n-Propylbenzene	100	101	101	80-125
Styrene	100	101	101	85-125
1,1,1,2-Tetrachloroethane	100	104	104	80-130
1,1,2,2-Tetrachloroethane	100	93.5	94	75-120
Tetrachloroethene	100	105	105	80-130
Tetrahydrofuran	500	432	86	80-120
Toluene	100	99.3	99	80-120
1,2,3-Trichlorobenzene	100	101	101	80-125
1,2,4-Trichlorobenzene	100	97.4	97	80-125
1,1,1-Trichloroethane	100	103	103	75-130
1,1,2-Trichloroethane	100	98.3	98	80-120
Trichloroethene	100	105	105	80-125
Trichlorofluoromethane	100	113	113	65-135
1,2,3-Trichloropropane	100	92.8	93	80-120
1,1,2-Trichlorotrifluoroethane	100	112	112	80-120
1,2,3-Trimethylbenzene	100	98.0	98	80-120
1,2,4-Trimethylbenzene	100	98.3	98	80-125
1,3,5-Trimethylbenzene	100	101	101	80-125
Vinyl acetate	100	96.2J	96	80-120
Vinyl chloride	100	79.0	79	35-145
Xylene (Total)	300	300	100	80-120
m&p-Xylene	200	201	101	80-125
o-Xylene	100	98.9	99	80-125

Spike Recovery: 0 out of 78 outside limits.

MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2948716LCS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/29/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072921AGRO.B\0729A_05.D
SDG No.: 60375923

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-GRO	4.0	3.3	82	61-140

Spike Recovery: 0 out of 1 outside limits.

MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2948711LCS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/29/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 072921A.B\0729A_17.D
SDG No.: 60375923

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acetone	500	632	126	50-150
Acrolein	500	535	107	10-180
Acrylonitrile	500	486	97	80-120
Benzene	100	99.6	100	80-120
Bromobenzene	100	100	100	80-120
Bromochloromethane	100	103	103	75-120
Bromodichloromethane	100	109	109	80-125
Bromoform	100	92.6	93	80-135
Bromomethane	100	90.9	91	35-135
2-Butanone (MEK)	500	612	122	60-135
n-Butylbenzene	100	104	104	80-135
sec-Butylbenzene	100	99.5	100	80-135
tert-Butylbenzene	100	100	100	80-125
Carbon disulfide	100	106	106	65-140
Carbon tetrachloride	100	108	108	75-140
Chlorobenzene	100	101	101	80-120
Chloroethane	100	106	106	50-135
Chloroform	100	101	101	80-120
Chloromethane	100	94.6	95	15-155
2-Chlorotoluene	100	97.6	98	80-120
4-Chlorotoluene	100	101	101	80-120
Cyclohexanone	500	575	115	80-120
1,2-Dibromo-3-chloropropane	100	111	111	75-135
Dibromochloromethane	100	113	113	80-130
1,2-Dibromoethane (EDB)	100	106	106	80-125
Dibromomethane	100	101	101	80-120
1,2-Dichlorobenzene	100	98.4	98	80-120
1,3-Dichlorobenzene	100	101	101	80-120
1,4-Dichlorobenzene	100	102	102	80-120
1,1-Dichloroethane	100	102	102	75-125
1,2-Dichloroethane	100	99.3	99	80-120
1,2-Dichloroethene (Total)	200	205	103	80-120
1,1-Dichloroethene	100	107	107	70-130
cis-1,2-Dichloroethene	100	102	102	80-120
trans-1,2-Dichloroethene	100	103	103	75-125
1,2-Dichloropropane	100	101	101	80-120
1,3-Dichloropropane	100	100	100	80-120
2,2-Dichloropropane	100	105	105	75-130
1,1-Dichloropropene	100	102	102	60-140
cis-1,3-Dichloropropene	100	110	110	80-125
trans-1,3-Dichloropropene	100	111	111	80-130
Diethyl ether (Ethyl ether)	100	102	102	80-120
Ethylbenzene	100	102	102	80-120
n-Heptane	100	108	108	80-120
Hexachloro-1,3-butadiene	100	109	109	80-135
n-Hexane	100	103	103	55-150
2-Hexanone	500	599	120	70-135

MSV - FORM III VOA-2

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2948711LCS

Date Extracted: 07/29/2021 | Date Analyzed (1): 07/29/2021

Instrument: 60MSVC | LCS Lot No:

Lab File ID: 072921A.B\0729A_17.D | SDG No.: 60375923

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Iodomethane	100	105	105	65-145
Isopropylbenzene (Cumene)	100	105	105	75-135
p-Isopropyltoluene	100	103	103	65-145
Methyl acetate	500	473	95	80-120
Methylene Chloride	100	91.8	92	65-120
4-Methyl-2-pentanone (MIBK)	500	487	97	75-130
Methyl-tert-butyl ether	100	99.3	99	75-130
Naphthalene	100	106	106	80-120
n-Propylbenzene	100	101	101	80-125
Styrene	100	103	103	85-125
1,1,1,2-Tetrachloroethane	100	105	105	80-130
1,1,2,2-Tetrachloroethane	100	101	101	75-120
Tetrachloroethene	100	104	104	80-130
Tetrahydrofuran	500	462	92	80-120
Toluene	100	99.3	99	80-120
1,2,3-Trichlorobenzene	100	106	106	80-125
1,2,4-Trichlorobenzene	100	109	109	80-125
1,1,1-Trichloroethane	100	99.2	99	75-130
1,1,2-Trichloroethane	100	102	102	80-120
Trichloroethene	100	104	104	80-125
Trichlorofluoromethane	100	110	110	65-135
1,2,3-Trichloropropane	100	98.3	98	80-120
1,1,2-Trichlorotrifluoroethane	100	109	109	80-120
1,2,3-Trimethylbenzene	100	100	100	80-120
1,2,4-Trimethylbenzene	100	99.0	99	80-125
1,3,5-Trimethylbenzene	100	99.2	99	80-125
Vinyl acetate	100	97.0J	97	80-120
Vinyl chloride	100	103	103	35-145
Xylene (Total)	300	300	100	80-120
m&p-Xylene	200	200	100	80-125
o-Xylene	100	100	100	80-125

Spike Recovery: 0 out of 78 outside limits.

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2950716LCS

Date Extracted: 08/03/2021 | Date Analyzed (1): 08/03/2021

Instrument: 60MSV8 | LCS Lot No: 45079

Lab File ID: 080321A.B\0803A_28LCS.D | SDG No.: 60375923

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	100	83.4	83	20-175
Acetonitrile	100	90.4	90	25-180
Acrolein	100	88.9	89	10-200
Acrylonitrile	100	91.5	91	70-135
Benzene	20.0	18.1	90	80-120
Bromobenzene	20.0	19.0	95	80-120
Bromochloromethane	20.0	20.0	100	80-125
Bromodichloromethane	20.0	19.5	97	80-125
Bromoform	20.0	17.3	87	60-135
Bromomethane	20.0	17.0	85	10-165
2-Butanone (MEK)	100	74.2	74	40-150
n-Butylbenzene	20.0	17.8	89	80-125
sec-Butylbenzene	20.0	18.9	94	80-120
tert-Butylbenzene	20.0	19.1	95	80-120
Carbon disulfide	20.0	19.5	97	75-135
Carbon tetrachloride	20.0	20.1	101	80-125
Chlorobenzene	20.0	18.8	94	80-120
Chloroethane	20.0	20.0	100	70-130
2-Chloroethylvinyl ether	100	91.2	91	30-165
Chloroform	20.0	19.2	96	80-120
Chloromethane	20.0	17.0	85	35-155
2-Chlorotoluene	20.0	18.8	94	80-120
4-Chlorotoluene	20.0	19.0	95	80-120
Cyclohexane	20.0	19.3	97	80-130
Cyclohexanone	100	75.1	75	10-180
1,2-Dibromo-3-chloropropane	20.0	17.5	87	70-120
Dibromochloromethane	20.0	18.9	94	70-120
1,2-Dibromoethane (EDB)	20.0	19.3	96	80-120
Dibromomethane	20.0	18.7	93	80-120
1,2-Dichlorobenzene	20.0	18.8	94	80-120
1,3-Dichlorobenzene	20.0	18.6	93	80-120
1,4-Dichlorobenzene	20.0	18.0	90	80-120
Dichlorodifluoromethane	20.0	19.6	98	50-150
1,1-Dichloroethane	20.0	18.8	94	75-125
1,2-Dichloroethane	20.0	19.3	96	75-120
1,2-Dichloroethene (Total)	40.0	37.9	95	80-120
1,1-Dichloroethene	20.0	20.1	100	80-120
cis-1,2-Dichloroethene	20.0	18.8	94	80-120
trans-1,2-Dichloroethene	20.0	19.0	95	80-120
1,2-Dichloropropane	20.0	18.6	93	80-125
1,3-Dichloropropane	20.0	18.0	90	80-120
2,2-Dichloropropane	20.0	17.3	86	60-130
1,1-Dichloropropene	20.0	19.3	96	80-125
cis-1,3-Dichloropropene	20.0	18.5	92	80-125
trans-1,3-Dichloropropene	20.0	18.7	94	75-120
Diethyl ether (Ethyl ether)	20.0	18.5	92	70-140
1,4-Dioxane (p-Dioxane)	100	83.2J	83	10-180

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2950716LCS

Date Extracted: 08/03/2021 | Date Analyzed (1): 08/03/2021

Instrument: 60MSV8 | LCS Lot No: 45079

Lab File ID: 080321A.B\0803A_28LCS.D | SDG No.: 60375923

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Ethylbenzene	20.0	19.0	95	80-120
n-Heptane	20.0	18.3	92	10-180
Hexachloro-1,3-butadiene	20.0	17.7	88	65-135
n-Hexane	20.0	17.6	88	60-135
2-Hexanone	100	81.8	82	45-150
Isopropylbenzene (Cumene)	20.0	19.8	99	80-125
p-Isopropyltoluene	20.0	19.5	97	80-135
Methyl acetate	100	87.9	88	45-140
Methylcyclohexane	20.0	19.3	97	80-125
Methylene Chloride	20.0	17.8	89	75-120
1-Methylnaphthalene	20.0	16.0	80	40-160
2-Methylnaphthalene	20.0	15.8	79	55-150
4-Methyl-2-pentanone (MIBK)	100	85.4	85	65-140
Methyl-tert-butyl ether	20.0	19.2	96	65-130
Naphthalene	20.0	15.5	78	70-120
n-Propylbenzene	20.0	18.5	92	80-120
Styrene	20.0	19.4	97	80-120
1,1,1,2-Tetrachloroethane	20.0	18.5	92	80-120
1,1,2,2-Tetrachloroethane	20.0	15.9	79	75-125
Tetrachloroethene	20.0	20.3	102	80-120
Tetrahydrofuran	100	85.0	85	75-125
Toluene	20.0	18.3	91	80-120
1,2,3-Trichlorobenzene	20.0	15.9	80	75-125
1,2,4-Trichlorobenzene	20.0	16.6	83	75-120
1,1,1-Trichloroethane	20.0	19.1	96	80-120
1,1,2-Trichloroethane	20.0	17.8	89	80-120
Trichloroethene	20.0	20.3	101	80-120
Trichlorofluoromethane	20.0	21.9	110	80-130
1,2,3-Trichloropropane	20.0	18.9	94	80-125
1,2,3-Trimethylbenzene	20.0	19.5	98	80-125
1,2,4-Trimethylbenzene	20.0	18.4	92	80-125
1,3,5-Trimethylbenzene	20.0	18.7	94	80-125
Vinyl chloride	20.0	19.2	96	65-130
Xylene (Total)	60.0	56.6	94	80-120
m&p-Xylene	40.0	37.9	95	75-130
o-Xylene	20.0	18.6	93	75-130

Spike Recovery: 0 out of 83 outside limits.

MSV - FORM III VOA-1

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947594MS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
Lab File ID: 072821A.B\0728A_18.D
Parent Sample ID: 60375838013
SDG No.: 60375923

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	101	<1.1	57.7	57	25-130
1,1,1-Trichloroethane	101	<0.79	69.8	69	45-120
1,1,2,2-Tetrachloroethane	101	<1.1	1.7J	2	10-145
1,1,2-Trichloroethane	101	<0.67	39.1	39	25-130
1,1,2-Trichlorotrifluoroethane	101	<5.3	70.8	70	35-120
1,1-Dichloroethane	101	<0.41	73.2	72	40-120
1,1-Dichloroethene	101	<0.68	115	114	35-120
1,1-Dichloropropene	101	<0.95	70.4	70	40-125
1,2,3-Trichlorobenzene	101	<0.84	51.2	51	10-125
1,2,3-Trichloropropane	101	<2.3	79.4	79	25-135
1,2,3-Trimethylbenzene	101	<2.1	62.9	62	35-120
1,2,4-Trichlorobenzene	101	<0.84	49.9	49	10-125
1,2,4-Trimethylbenzene	101	<0.71	62.0	61	35-120
1,2-Dibromo-3-chloropropane	101	<1.9	37.0	37	10-145
1,2-Dibromoethane (EDB)	101	<0.57	80.5	80	30-140
1,2-Dichlorobenzene	101	<0.66	59.7	59	10-125
1,2-Dichloroethane	101	<0.42	74.9	74	35-120
1,2-Dichloroethene (Total)	202	<1.2	144	71	40-120
1,2-Dichloropropane	101	<1.0	72.5	72	35-120
1,3,5-Trimethylbenzene	101	<0.66	61.1	60	15-130
1,3-Dichlorobenzene	101	<0.76	59.2	59	10-125
1,3-Dichloropropane	101	<0.73	76.9	76	30-120
1,4-Dichlorobenzene	101	<0.86	59.0	58	10-125
2,2-Dichloropropane	101	<0.50	70.4	70	40-120
2-Butanone (MEK)	506	8.8J	513	100	20-145
2-Chlorotoluene	101	<0.77	62.2	61	15-125
2-Hexanone	506	<2.6	525	104	15-150
4-Chlorotoluene	101	<0.63	60.3	60	10-125
4-Methyl-2-pentanone (MIBK)	506	<3.2	480	95	30-140
Acetone	506	46.6	528	95	10-165
Acrolein	506	<79.9	488	96	10-200
Acrylonitrile	506	<3.4	312	62	10-145
Benzene	101	<0.52	69.6	69	35-120
Bromobenzene	101	<0.99	63.0	62	15-125
Bromochloromethane	101	<0.64	75.8	75	35-120
Bromodichloromethane	101	<0.64	49.1	49	30-130
Bromoform	101	<0.61	46.5	46	15-135
Bromomethane	101	<3.1	29.2	29	10-120
Carbon disulfide	101	5.2J	34.7	29	20-120
Carbon tetrachloride	101	<0.91	54.6	54	40-125
Chlorobenzene	101	<0.66	66.9	66	20-125
Chloroethane	101	<1.6	68.9	68	25-120
Chloroform	101	<0.52	76.8	76	40-125
Chloromethane	101	<0.84	49.2	49	10-120
Cyclohexanone	506	<13.4	458	91	35-120
Dibromochloromethane	101	<0.68	51.2	51	25-135
Dibromomethane	101	<0.63	77.8	77	30-125

MSV - FORM III VOA-2

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947594MS
Date Extracted: 07/28/2021
Date Analyzed (1): 07/28/2021
Instrument: 60MSVC
Lab File ID: 072821A.B\0728A_18.D
Parent Sample ID: 60375838013
SDG No.: 60375923

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Diethyl ether (Ethyl ether)	101	<0.59	75.6	75	35-120
Ethylbenzene	101	<0.49	67.4	67	35-120
Hexachloro-1,3-butadiene	101	<0.90	50.2	50	10-125
Iodomethane	101	<1.6	27.6	27	30-120
Isopropylbenzene (Cumene)	101	<0.60	67.0	66	20-135
Methyl acetate	506	<1.1	<1.1	0	30-120
Methyl-tert-butyl ether	101	<0.51	78.9	78	35-140
Methylene Chloride	101	<2.9	66.4	65	10-135
Naphthalene	101	13.9	102	87	10-160
Styrene	101	<0.62	64.6	64	15-130
Tetrachloroethene	101	<0.44	82.9	82	30-125
Tetrahydrofuran	506	<0.83	462	91	35-120
Toluene	101	<0.37	68.5	68	35-120
Trichloroethene	101	<0.77	133	132	25-140
Trichlorofluoromethane	101	<0.65	65.5	65	35-120
Vinyl acetate	101	<0.60	31.5J	31	30-120
Vinyl chloride	101	<0.70	61.1	60	10-120
Xylene (Total)	303	<1.2	197	65	35-120
cis-1,2-Dichloroethene	101	<0.46	72.3	72	35-120
cis-1,3-Dichloropropene	101	<0.56	46.1	46	20-130
m&p-Xylene	202	<0.67	131	65	30-145
n-Butylbenzene	101	<0.69	58.0	57	10-130
n-Heptane	101	<4.8	57.6	57	35-120
n-Hexane	101	<0.73	59.0	58	10-150
n-Propylbenzene	101	<0.85	61.8	61	20-125
o-Xylene	101	<0.39	65.7	65	30-145
p-Isopropyltoluene	101	1.4J	62.8	61	10-135
sec-Butylbenzene	101	<0.77	60.3	60	15-135
tert-Butylbenzene	101	<0.93	62.4	62	15-135
trans-1,2-Dichloroethene	101	<0.72	71.7	71	40-120
trans-1,3-Dichloropropene	101	<0.48	50.6	50	20-135

Spike Recovery: 3 out of 78 outside limits.

MSV - FORM III VOA-3

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSVC Matrix Spike Duplicate - Sample No: 2947595MSD

Lab File ID (2): 072821A.B\0728A_19.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	99.9	71.1	71	21	0-35	25-130
1,1,1-Trichloroethane	99.9	80.8	81	15	0-35	45-120
1,1,2,2-Tetrachloroethane	99.9	<1.0	0		0-35	10-145
1,1,2-Trichloroethane	99.9	47.8	48	20	0-35	25-130
1,1,2-Trichlorotrifluoroethane	99.9	83.0	83	16	0-35	35-120
1,1-Dichloroethane	99.9	82.3	82	12	0-35	40-120
1,1-Dichloroethene	99.9	128	128	11	0-35	35-120
1,1-Dichloropropene	99.9	81.0	81	14	0-35	40-125
1,2,3-Trichlorobenzene	99.9	63.5	64	21	0-50	10-125
1,2,3-Trichloropropane	99.9	91.8	92	15	0-35	25-135
1,2,3-Trimethylbenzene	99.9	72.6	72	14	0-35	35-120
1,2,4-Trichlorobenzene	99.9	60.2	60	19	0-50	10-125
1,2,4-Trimethylbenzene	99.9	70.1	70	12	0-35	35-120
1,2-Dibromo-3-chloropropane	99.9	48.9	49	28	0-35	10-145
1,2-Dibromoethane (EDB)	99.9	94.1	94	15	0-35	30-140
1,2-Dichlorobenzene	99.9	69.6	70	15	0-35	10-125
1,2-Dichloroethane	99.9	85.8	86	14	0-35	35-120
1,2-Dichloroethene (Total)	199	164	82	13	0-35	40-120
1,2-Dichloropropane	99.9	82.4	83	13	0-35	35-120
1,3,5-Trimethylbenzene	99.9	71.3	71	15	0-35	15-130
1,3-Dichlorobenzene	99.9	68.9	69	15	0-37	10-125
1,3-Dichloropropane	99.9	89.7	90	15	0-35	30-120
1,4-Dichlorobenzene	99.9	68.8	69	15	0-35	10-125
2,2-Dichloropropane	99.9	81.3	81	14	0-35	40-120
2-Butanone (MEK)	499	576	114	11	0-35	20-145
2-Chlorotoluene	99.9	72.0	72	15	0-35	15-125
2-Hexanone	499	601	120	13	0-35	15-150
4-Chlorotoluene	99.9	71.5	72	17	0-35	10-125
4-Methyl-2-pentanone (MIBK)	499	550	110	14	0-35	30-140
Acetone	499	549	101	4	0-35	10-165
Acrolein	499	542	109	11	0-60	10-200
Acrylonitrile	499	385	77	21	0-35	10-145
Benzene	99.9	79.2	79	13	0-35	35-120
Bromobenzene	99.9	73.1	73	15	0-35	15-125
Bromochloromethane	99.9	86.8	87	14	0-35	35-120
Bromodichloromethane	99.9	63.2	63	25	0-35	30-130
Bromoform	99.9	62.5	63	29	0-35	15-135
Bromomethane	99.9	36.0	36	21	0-35	10-120
Carbon disulfide	99.9	47.4	42	31	0-35	20-120
Carbon tetrachloride	99.9	71.9	72	27	0-35	40-125
Chlorobenzene	99.9	76.6	77	13	0-35	20-125
Chloroethane	99.9	76.5	77	10	0-35	25-120
Chloroform	99.9	87.2	87	13	0-35	40-125
Chloromethane	99.9	56.1	56	13	0-35	10-120
Cyclohexanone	499	534	107	15	0-35	35-120
Dibromochloromethane	99.9	67.2	67	27	0-35	25-135
Dibromomethane	99.9	92.0	92	17	0-35	30-125
Diethyl ether (Ethyl ether)	99.9	86.2	86	13	0-35	35-120
Ethylbenzene	99.9	76.4	77	13	0-35	35-120

MSV - FORM III VOA-4

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSVC Matrix Spike Duplicate - Sample No: 2947595MSD

Lab File ID (2): 072821A.B\0728A_19.D Date Analyzed (2): 07/28/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Hexachloro-1,3-butadiene	99.9	55.4	56	10	0-45	10-125
Iodomethane	99.9	40.2	40	37	0-35	30-120
Isopropylbenzene (Cumene)	99.9	75.8	76	12	0-35	20-135
Methyl acetate	499	<1.1	0		0-35	30-120
Methyl-tert-butyl ether	99.9	90.5	91	14	0-35	35-140
Methylene Chloride	99.9	75.9	76	13	0-35	10-135
Naphthalene	99.9	108	94	6	0-35	10-160
Styrene	99.9	75.3	75	15	0-35	15-130
Tetrachloroethene	99.9	85.6	86	3	0-35	30-125
Tetrahydrofuran	499	518	104	11	0-35	35-120
Toluene	99.9	77.6	78	12	0-35	35-120
Trichloroethene	99.9	153	154	14	0-35	25-140
Trichlorofluoromethane	99.9	78.6	79	18	0-35	35-120
Vinyl acetate	99.9	36.2J	36		0-35	30-120
Vinyl chloride	99.9	67.5	68	10	0-35	10-120
Xylene (Total)	299	228	76	15	0-35	35-120
cis-1,2-Dichloroethene	99.9	82.8	83	13	0-35	35-120
cis-1,3-Dichloropropene	99.9	58.6	59	24	0-35	20-130
m&p-Xylene	199	153	76	15	0-35	30-145
n-Butylbenzene	99.9	64.2	64	10	0-35	10-130
n-Heptane	99.9	62.7	63	8	0-35	35-120
n-Hexane	99.9	65.9	66	11	0-35	10-150
n-Propylbenzene	99.9	71.2	71	14	0-35	20-125
o-Xylene	99.9	75.0	75	13	0-35	30-145
p-Isopropyltoluene	99.9	68.8	68	9	0-35	10-135
sec-Butylbenzene	99.9	66.0	66	9	0-35	15-135
tert-Butylbenzene	99.9	71.9	72	14	0-35	15-135
trans-1,2-Dichloroethene	99.9	81.6	82	13	0-35	40-120
trans-1,3-Dichloropropene	99.9	63.6	64	23	0-35	20-135

RPD: 1 out of 75 outside limits.

Spike Recovery: 4 out of 78 outside limits.

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MSV - FORM III VOA-1

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas | Matrix Spike - Sample No: 2948712MS

Date Extracted: 07/29/2021 | Date Analyzed (1): 07/29/2021

Instrument: 60MSVC | Lab File ID: 072921A.B\0729A_27.D

Parent Sample ID: GB-02/2-3 | SDG No.: 60375923

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	98.6	<1.0	66.1	67	25-130
1,1,1-Trichloroethane	98.6	<0.74	68.5	69	45-120
1,1,2,2-Tetrachloroethane	98.6	<0.99	<0.99	0	10-145
1,1,2-Trichloroethane	98.6	<0.62	59.6	60	25-130
1,1,2-Trichlorotrifluoroethane	98.6	<5.0	72.9	74	35-120
1,1-Dichloroethane	98.6	<0.39	67.8	69	40-120
1,1-Dichloroethene	98.6	<0.63	77.8	79	35-120
1,1-Dichloropropene	98.6	<0.89	70.9	72	40-125
1,2,3-Trichlorobenzene	98.6	<0.79	60.1	61	10-125
1,2,3-Trichloropropane	98.6	<2.1	64.6	65	25-135
1,2,3-Trimethylbenzene	98.6	<2.0	60.9	62	35-120
1,2,4-Trichlorobenzene	98.6	<0.79	59.3	60	10-125
1,2,4-Trimethylbenzene	98.6	<0.66	60.7	62	35-120
1,2-Dibromo-3-chloropropane	98.6	<1.8	60.1	61	10-145
1,2-Dibromoethane (EDB)	98.6	<0.53	68.7	70	30-140
1,2-Dichlorobenzene	98.6	<0.62	58.8	60	10-125
1,2-Dichloroethane	98.6	<0.40	64.7	66	35-120
1,2-Dichloroethene (Total)	197	<1.1	138	70	40-120
1,2-Dichloropropane	98.6	<0.97	66.2	67	35-120
1,3,5-Trimethylbenzene	98.6	<0.62	61.7	62	15-130
1,3-Dichlorobenzene	98.6	<0.71	61.1	62	10-125
1,3-Dichloropropane	98.6	<0.69	65.8	67	30-120
1,4-Dichlorobenzene	98.6	<0.80	60.1	61	10-125
2,2-Dichloropropane	98.6	<0.47	71.1	72	40-120
2-Butanone (MEK)	494	<3.4	401	81	20-145
2-Chlorotoluene	98.6	<0.72	61.6	62	15-125
2-Hexanone	494	<2.5	393	80	15-150
4-Chlorotoluene	98.6	<0.59	61.4	62	10-125
4-Methyl-2-pentanone (MIBK)	494	<3.0	347	70	30-140
Acetone	494	<16.1	437	86	10-165
Acrolein	494	<74.9	385	78	10-200
Acrylonitrile	494	<3.1	318	65	10-145
Benzene	98.6	<0.49	66.2	67	35-120
Bromobenzene	98.6	<0.93	61.2	62	15-125
Bromochloromethane	98.6	<0.60	67.7	69	35-120
Bromodichloromethane	98.6	<0.60	68.1	69	30-130
Bromoform	98.6	<0.57	60.8	62	15-135
Bromomethane	98.6	<2.9	49.7	50	10-120
Carbon disulfide	98.6	<0.64	65.7	67	20-120
Carbon tetrachloride	98.6	<0.85	75.9	77	40-125
Chlorobenzene	98.6	<0.62	65.3	66	20-125
Chloroethane	98.6	<1.5	66.5	67	25-120
Chloroform	98.6	<0.49	67.6	69	40-125
Chloromethane	98.6	<0.79	49.2	50	10-120
Cyclohexanone	494	<12.6	410	83	35-120
Dibromochloromethane	98.6	<0.64	69.5	70	25-135
Dibromomethane	98.6	<0.59	66.8	68	30-125

MSV - FORM III VOA-2

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2948712MS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/29/2021
Instrument: 60MSVC
Lab File ID: 072921A.B\0729A_27.D
Parent Sample ID: GB-02/2-3
SDG No.: 60375923

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Diethyl ether (Ethyl ether)	98.6	<0.56	64.9	66	35-120
Ethylbenzene	98.6	<0.46	66.4	67	35-120
Hexachloro-1,3-butadiene	98.6	<0.84	53.6	54	10-125
Iodomethane	98.6	<1.5	55.2	56	30-120
Isopropylbenzene (Cumene)	98.6	<0.57	69.4	70	20-135
Methyl acetate	494	<1.1	5.7J	1	30-120
Methyl-tert-butyl ether	98.6	<0.48	65.2	66	35-140
Methylene Chloride	98.6	<2.7	59.5	60	10-135
Naphthalene	98.6	<0.81	65.4	66	10-160
Styrene	98.6	<0.58	66.5	67	15-130
Tetrachloroethene	98.6	<0.41	69.4	70	30-125
Tetrahydrofuran	494	<0.78	315	64	35-120
Toluene	98.6	<0.35	65.5	66	35-120
Trichloroethene	98.6	<0.72	124	125	25-140
Trichlorofluoromethane	98.6	<0.61	70.5	71	35-120
Vinyl acetate	98.6	<0.56	28.8J	29	30-120
Vinyl chloride	98.6	<0.66	58.6	59	10-120
Xylene (Total)	296	<1.1	197	67	35-120
cis-1,2-Dichloroethene	98.6	<0.43	67.6	69	35-120
cis-1,3-Dichloropropene	98.6	<0.53	69.1	70	20-130
m&p-Xylene	197	<0.63	130	66	30-145
n-Butylbenzene	98.6	<0.64	60.3	61	10-130
n-Heptane	98.6	<4.5	59.8	61	35-120
n-Hexane	98.6	<0.68	63.2	64	10-150
n-Propylbenzene	98.6	<0.80	63.5	64	20-125
o-Xylene	98.6	<0.37	66.6	67	30-145
p-Isopropyltoluene	98.6	<0.68	62.0	63	10-135
sec-Butylbenzene	98.6	<0.72	61.3	62	15-135
tert-Butylbenzene	98.6	<0.88	61.9	63	15-135
trans-1,2-Dichloroethene	98.6	<0.67	70.7	72	40-120
trans-1,3-Dichloropropene	98.6	<0.45	68.6	69	20-135

Spike Recovery: 3 out of 78 outside limits.

MSV - FORM III VOA-3

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSVC Matrix Spike Duplicate - Sample No: 2948713MSD

Lab File ID (2): 072921A.B\0729A_28.D Date Analyzed (2): 07/29/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	92.4	87.6	95	28	0-35	25-130
1,1,1-Trichloroethane	92.4	86.4	93	23	0-35	45-120
1,1,2,2-Tetrachloroethane	92.4	2.1J	2		0-35	10-145
1,1,2-Trichloroethane	92.4	75.9	82	24	0-35	25-130
1,1,2-Trichlorotrifluoroethane	92.4	88.7	96	20	0-35	35-120
1,1-Dichloroethane	92.4	85.6	93	23	0-35	40-120
1,1-Dichloroethene	92.4	105	113	30	0-35	35-120
1,1-Dichloropropene	92.4	86.6	94	20	0-35	40-125
1,2,3-Trichlorobenzene	92.4	80.1	87	29	0-50	10-125
1,2,3-Trichloropropane	92.4	94.8	103	38	0-35	25-135
1,2,3-Trimethylbenzene	92.4	82.0	89	30	0-35	35-120
1,2,4-Trichlorobenzene	92.4	80.4	87	30	0-50	10-125
1,2,4-Trimethylbenzene	92.4	79.7	86	27	0-35	35-120
1,2-Dibromo-3-chloropropane	92.4	90.0	97	40	0-35	10-145
1,2-Dibromoethane (EDB)	92.4	97.2	105	34	0-35	30-140
1,2-Dichlorobenzene	92.4	79.3	86	30	0-35	10-125
1,2-Dichloroethane	92.4	87.7	95	30	0-35	35-120
1,2-Dichloroethene (Total)	185	172	93	22	0-35	40-120
1,2-Dichloropropane	92.4	85.3	92	25	0-35	35-120
1,3,5-Trimethylbenzene	92.4	82.6	89	29	0-35	15-130
1,3-Dichlorobenzene	92.4	80.3	87	27	0-37	10-125
1,3-Dichloropropane	92.4	89.2	97	30	0-35	30-120
1,4-Dichlorobenzene	92.4	81.8	89	31	0-35	10-125
2,2-Dichloropropane	92.4	88.9	96	22	0-35	40-120
2-Butanone (MEK)	461	613	133	42	0-35	20-145
2-Chlorotoluene	92.4	81.0	88	27	0-35	15-125
2-Hexanone	461	599	130	42	0-35	15-150
4-Chlorotoluene	92.4	83.3	90	30	0-35	10-125
4-Methyl-2-pentanone (MIBK)	461	521	113	40	0-35	30-140
Acetone	461	660	141	41	0-35	10-165
Acrolein	461	596	129	43	0-60	10-200
Acrylonitrile	461	465	101	37	0-35	10-145
Benzene	92.4	83.1	90	23	0-35	35-120
Bromobenzene	92.4	82.5	89	30	0-35	15-125
Bromochloromethane	92.4	88.1	95	26	0-35	35-120
Bromodichloromethane	92.4	89.8	97	27	0-35	30-130
Bromoform	92.4	87.4	95	36	0-35	15-135
Bromomethane	92.4	59.4	64	18	0-35	10-120
Carbon disulfide	92.4	72.8	79	10	0-35	20-120
Carbon tetrachloride	92.4	93.2	101	21	0-35	40-125
Chlorobenzene	92.4	84.6	92	26	0-35	20-125
Chloroethane	92.4	80.8	88	20	0-35	25-120
Chloroform	92.4	87.0	94	25	0-35	40-125
Chloromethane	92.4	58.6	63	17	0-35	10-120
Cyclohexanone	461	646	140	45	0-35	35-120
Dibromochloromethane	92.4	97.0	105	33	0-35	25-135
Dibromomethane	92.4	91.9	99	32	0-35	30-125
Diethyl ether (Ethyl ether)	92.4	86.6	94	29	0-35	35-120
Ethylbenzene	92.4	85.5	93	25	0-35	35-120

MSV - FORM III VOA-4

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSVC Matrix Spike Duplicate - Sample No: 2948713MSD

Lab File ID (2): 072921A.B\0729A_28.D Date Analyzed (2): 07/29/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Hexachloro-1,3-butadiene	92.4	81.5	88	41	0-45	10-125
Iodomethane	92.4	72.5	79	27	0-35	30-120
Isopropylbenzene (Cumene)	92.4	88.8	96	25	0-35	20-135
Methyl acetate	461	<1.0	0		0-35	30-120
Methyl-tert-butyl ether	92.4	89.0	96	31	0-35	35-140
Methylene Chloride	92.4	77.5	84	26	0-35	10-135
Naphthalene	92.4	96.3	104	38	0-35	10-160
Styrene	92.4	84.9	92	24	0-35	15-130
Tetrachloroethene	92.4	86.7	94	22	0-35	30-125
Tetrahydrofuran	461	487	106	43	0-35	35-120
Toluene	92.4	82.1	89	22	0-35	35-120
Trichloroethene	92.4	164	177	28	0-35	25-140
Trichlorofluoromethane	92.4	85.8	93	20	0-35	35-120
Vinyl acetate	92.4	36.8J	40		0-35	30-120
Vinyl chloride	92.4	69.9	76	18	0-35	10-120
Xylene (Total)	277	251	91	24	0-35	35-120
cis-1,2-Dichloroethene	92.4	86.0	93	24	0-35	35-120
cis-1,3-Dichloropropene	92.4	89.6	97	26	0-35	20-130
m&p-Xylene	185	168	91	25	0-35	30-145
n-Butylbenzene	92.4	83.0	90	32	0-35	10-130
n-Heptane	92.4	82.3	89	32	0-35	35-120
n-Hexane	92.4	77.5	84	20	0-35	10-150
n-Propylbenzene	92.4	84.9	92	29	0-35	20-125
o-Xylene	92.4	83.6	91	23	0-35	30-145
p-Isopropyltoluene	92.4	82.6	89	29	0-35	10-135
sec-Butylbenzene	92.4	81.2	88	28	0-35	15-135
tert-Butylbenzene	92.4	82.5	89	28	0-35	15-135
trans-1,2-Dichloroethene	92.4	86.3	93	20	0-35	40-120
trans-1,3-Dichloropropene	92.4	93.2	101	30	0-35	20-135

RPD: 11 out of 75 outside limits.

Spike Recovery: 4 out of 78 outside limits.

10/14/2021 1:54

SAMPLE NO.

2947592BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2947592

Lab File ID: 072821A.B\0728A_07.D Date Analyzed: 07/28/2021 Time:09:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947593LCS	2947593	072821A.B\0728A_03.D	07/28/2021 08:06
GB-01/8-10	60375923011	072821A.B\0728A_20.D	07/28/2021 12:32
GB-01/11-13	60375923012	072821A.B\0728A_21.D	07/28/2021 12:51

SAMPLE NO.

2947600BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2947600

Lab File ID (1): 072821A.B\0728A_07.D Date Analyzed (1): 07/28/2021 Time (1):09:09

Lab File ID (2): 072821AGRO.B\0728A_07.D Date Analyzed (2): 07/28/2021 Time (2):09:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947601LCS	2947601	072821A.B\0728A_03.D	07/28/2021 08:06
2947601LCS	2947601	072821AGRO.B\0728A_05.D	07/28/2021 08:38
GB-01/8-10	60375923011	072821A.B\0728A_20.D	07/28/2021 12:32
GB-01/8-10	60375923011	072821AGRO.B\0728A_20.D	07/28/2021 12:32
GB-01/11-13	60375923012	072821A.B\0728A_21.D	07/28/2021 12:51
GB-01/11-13	60375923012	072821AGRO.B\0728A_21.D	07/28/2021 12:51

SAMPLE NO.

2948710BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2948710

Lab File ID: 072921A.B\0729A_20.D Date Analyzed: 07/29/2021 Time: 12:51

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2948711LCS	2948711	072921A.B\0729A_17.D	07/29/2021 12:04
GB-03/1-3	60375923013	072921A.B\0729A_24.D	07/29/2021 14:17
GB-03/4-6	60375923014	072921A.B\0729A_25.D	07/29/2021 14:32
GB-02/2-3	60375923016	072921A.B\0729A_26.D	07/29/2021 14:48
2948712MS	2948712	072921A.B\0729A_27.D	07/29/2021 15:04
2948713MSD	2948713	072921A.B\0729A_28.D	07/29/2021 15:19
GB-02/8-9	60375923017	072921A.B\0729A_29.D	07/29/2021 15:35

SAMPLE NO.

2948715BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2948715

Lab File ID (1): 072921AGRO.B\0729A_07.D Date Analyzed (1): 07/29/2021 Time (1):09:28

Lab File ID (2): 072921A.B\0729A_20.D Date Analyzed (2): 07/29/2021 Time (2):12:51

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2948716LCS	2948716	072921A.B\0729A_05.D	07/29/2021 08:56
2948716LCS	2948716	072921AGRO.B\0729A_05.D	07/29/2021 08:56
GB-03/1-3	60375923013	072921A.B\0729A_24.D	07/29/2021 14:17
GB-03/1-3	60375923013	072921AGRO.B\0729A_24.D	07/29/2021 14:17
GB-03/4-6	60375923014	072921A.B\0729A_25.D	07/29/2021 14:32
GB-03/4-6	60375923014	072921AGRO.B\0729A_25.D	07/29/2021 14:32
GB-02/2-3	60375923016	072921A.B\0729A_26.D	07/29/2021 14:48
GB-02/2-3	60375923016	072921AGRO.B\0729A_26.D	07/29/2021 14:48
GB-02/8-9	60375923017	072921A.B\0729A_29.D	07/29/2021 15:35
GB-02/8-9	60375923017	072921AGRO.B\0729A_29.D	07/29/2021 15:35

SAMPLE NO.

2950715BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSV8 Matrix: Water Lab Sample ID: 2950715

Lab File ID: 080321A.B\0803A_30BLK.D Date Analyzed: 08/03/2021 Time:13:33

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2950716LCS	2950716	080321A.B\0803A_28LCS.D	08/03/2021 13:05
TB-5	60375923015	080321A.B\0803A_31.D	08/03/2021 13:47

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 080221A.B\0802A_11BFB.D BFB Injection Date 08/02/2021
Instrument ID: 60MSV8 BFB Injection Time 09:16

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.00 - 40.00% of mass 95	18.59
75	30.00 - 66.00% of mass 95	42.90
95	100.00 - 100.00% of mass 95	100.00
96	5.00 - 9.00% of mass 95	6.59
173	Less than 2.00% of mass 174	1.01 (1.03)[1]
174	50.00 - 120.00% of mass 95	98.16
175	4.00 - 9.00% of mass 174	7.38 (7.52)[1]
176	93.00 - 101.00% of mass 174	93.52 (95.28)[1]
177	5.00 - 9.00% of mass 176	6.07 (6.49)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19754653CAL1	19754653CAL1	080221A.B\0802A_12.D	08/02/2021	09:31
19754651CAL2	19754651CAL2	080221A.B\0802A_13.D	08/02/2021	09:45
19754658CAL3	19754658CAL3	080221A.B\0802A_14.D	08/02/2021	09:59
19754657CAL4	19754657CAL4	080221A.B\0802A_15.D	08/02/2021	10:13
19754659CAL5	19754659CAL5	080221A.B\0802A_16.D	08/02/2021	10:28
19754655CAL6	19754655CAL6	080221A.B\0802A_17.D	08/02/2021	10:42
19754656CAL7	19754656CAL7	080221A.B\0802A_18.D	08/02/2021	10:56
19754654CAL8	19754654CAL8	080221A.B\0802A_19.D	08/02/2021	11:10
19754652ICV	19754652ICV	080221A.B\0802A_22.D	08/02/2021	11:53

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Lab File ID: 080321A.B\0803A_01.D BFB Injection Date 08/03/2021

Instrument ID: 60MSV8 BFB Injection Time 06:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	19.82	
75	30.00 - 66.00% of mass 95	42.30	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.81	
173	Less than 2.00% of mass 174	1.15	(1.13)[1]
174	50.00 - 120.00% of mass 95	101.53	
175	4.00 - 9.00% of mass 174	7.59	(7.48)[1]
176	93.00 - 101.00% of mass 174	96.53	(95.08)[1]
177	5.00 - 9.00% of mass 176	6.10	(6.31)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19756796CCV	19756796CCV	080321A.B\0803A_03CCV.D	08/03/2021	07:10
2950716LCS	2950716LCS	080321A.B\0803A_28LCS.D	08/03/2021	13:05
2950715BLANK	2950715BLANK	080321A.B\0803A_30BLK.D	08/03/2021	13:33
TB-5	60375923015	080321A.B\0803A_31.D	08/03/2021	13:47

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 071621B.B\0716B_01.D BFB Injection Date 07/16/2021
Instrument ID: 60MSVC BFB Injection Time 10:47

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.55	
75	30.00 - 66.00% of mass 95	44.16	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	7.08	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	102.97	
175	4.00 - 9.00% of mass 174	7.81	(7.58)[1]
176	93.00 - 101.00% of mass 174	100.39	(97.49)[1]
177	5.00 - 9.00% of mass 176	6.53	(6.50)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19684413CAL1	19684413CAL1	071621B.B\0716B_02.D	07/16/2021	11:02
19684462CAL2	19684462CAL2	071621B.B\0716B_03.D	07/16/2021	11:18
19684463CAL3	19684463CAL3	071621B.B\0716B_04.D	07/16/2021	11:33
19684464CAL4	19684464CAL4	071621B.B\0716B_05.D	07/16/2021	11:49
19684465CAL5	19684465CAL5	071621B.B\0716B_06.D	07/16/2021	12:05
19684466CAL6	19684466CAL6	071621B.B\0716B_07.D	07/16/2021	12:20
19684467CAL7	19684467CAL7	071621B.B\0716B_08.D	07/16/2021	12:36
19684415ICV	19684415ICV	071621B.B\0716B_09.D	07/16/2021	12:51

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 072721A.B\0727A_01.D BFB Injection Date 07/27/2021
Instrument ID: 60MSVC BFB Injection Time 07:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.32	
75	30.00 - 66.00% of mass 95	43.89	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.89	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	108.19	
175	4.00 - 9.00% of mass 174	8.30	(7.67)[1]
176	93.00 - 101.00% of mass 174	105.44	(97.46)[1]
177	5.00 - 9.00% of mass 176	6.94	(6.58)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19894442CAL1	19894442CAL1	072721AGRO.B\0727A_04.D	07/27/2021	08:42
19894441CAL2	19894441CAL2	072721AGRO.B\0727A_05.D	07/27/2021	08:57
19894443CAL3	19894443CAL3	072721AGRO.B\0727A_06.D	07/27/2021	09:13
19894440CAL4	19894440CAL4	072721AGRO.B\0727A_07.D	07/27/2021	09:29
19894444CAL5	19894444CAL5	072721AGRO.B\0727A_08.D	07/27/2021	09:44
19894439CAL6	19894439CAL6	072721AGRO.B\0727A_09.D	07/27/2021	10:00
19895948ICV	19895948ICV	072721AGRO.B\0727A_10.D	07/27/2021	10:16

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 072821A.B\0728A_01.D BFB Injection Date 07/28/2021
Instrument ID: 60MSVC BFB Injection Time 07:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.07	
75	30.00 - 66.00% of mass 95	44.85	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.86	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	107.72	
175	4.00 - 9.00% of mass 174	8.23	(7.64)[1]
176	93.00 - 101.00% of mass 174	104.45	(96.96)[1]
177	5.00 - 9.00% of mass 176	7.10	(6.79)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19752271CCV	19752271CCV	072821A.B\0728A_02.D	07/28/2021	07:51
2947593LCS	2947593LCS	072821A.B\0728A_03.D	07/28/2021	08:06
2947601LCS	2947601LCS	072821A.B\0728A_03.D	07/28/2021	08:06
2947601LCS	2947601LCS	072821AGRO.B\0728A_05.D	07/28/2021	08:38
2947600BLANK	2947600BLANK	072821A.B\0728A_07.D	07/28/2021	09:09
2947600BLANK	2947600BLANK	072821AGRO.B\0728A_07.D	07/28/2021	09:09
2947592BLANK	2947592BLANK	072821A.B\0728A_07.D	07/28/2021	09:09
GB-01/8-10	60375923011	072821A.B\0728A_20.D	07/28/2021	12:32
GB-01/8-10	60375923011	072821A.B\0728A_20.D	07/28/2021	12:32
GB-01/8-10	60375923011	072821AGRO.B\0728A_20.D	07/28/2021	12:32
GB-01/11-13	60375923012	072821AGRO.B\0728A_21.D	07/28/2021	12:51
GB-01/11-13	60375923012	072821A.B\0728A_21.D	07/28/2021	12:51
GB-01/11-13	60375923012	072821A.B\0728A_21.D	07/28/2021	12:51

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 072921A.B\0729A_01.D BFB Injection Date 07/29/2021
Instrument ID: 60MSVC BFB Injection Time 07:54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.28	
75	30.00 - 66.00% of mass 95	43.89	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.73	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	104.59	
175	4.00 - 9.00% of mass 174	7.91	(7.56)[1]
176	93.00 - 101.00% of mass 174	102.99	(98.47)[1]
177	5.00 - 9.00% of mass 176	6.67	(6.48)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19752320CCV	19752320CCV	072921A.B\0729A_02.D	07/29/2021	08:10
20134264CCV	20134264CCV	072921AGRO.B\0729A_04.D	07/29/2021	08:41
2948716LCS	2948716LCS	072921AGRO.B\0729A_05.D	07/29/2021	08:56
2948716LCS	2948716LCS	072921A.B\0729A_05.D	07/29/2021	08:56
2948715BLANK	2948715BLANK	072921AGRO.B\0729A_07.D	07/29/2021	09:28
2948711LCS	2948711LCS	072921A.B\0729A_17.D	07/29/2021	12:04
2948710BLANK	2948710BLANK	072921A.B\0729A_20.D	07/29/2021	12:51
2948715BLANK	2948715BLANK	072921A.B\0729A_20.D	07/29/2021	12:51
GB-03/1-3	60375923013	072921A.B\0729A_24.D	07/29/2021	14:17
GB-03/1-3	60375923013	072921A.B\0729A_24.D	07/29/2021	14:17
GB-03/1-3	60375923013	072921AGRO.B\0729A_24.D	07/29/2021	14:17
GB-03/4-6	60375923014	072921AGRO.B\0729A_25.D	07/29/2021	14:32
GB-03/4-6	60375923014	072921A.B\0729A_25.D	07/29/2021	14:32
GB-03/4-6	60375923014	072921A.B\0729A_25.D	07/29/2021	14:32
GB-02/2-3	60375923016	072921AGRO.B\0729A_26.D	07/29/2021	14:48
GB-02/2-3	60375923016	072921A.B\0729A_26.D	07/29/2021	14:48
GB-02/2-3	60375923016	072921A.B\0729A_26.D	07/29/2021	14:48
2948712MS	2948712MS	072921A.B\0729A_27.D	07/29/2021	15:04
2948713MSD	2948713MSD	072921A.B\0729A_28.D	07/29/2021	15:19
GB-02/8-9	60375923017	072921A.B\0729A_29.D	07/29/2021	15:35
GB-02/8-9	60375923017	072921A.B\0729A_29.D	07/29/2021	15:35
GB-02/8-9	60375923017	072921AGRO.B\0729A_29.D	07/29/2021	15:35

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19756796CCV Date Analyzed: 08/03/2021

Instrument ID: 60MSV8 GC Column: Col 1 Time Analyzed: 07:10

Lab File ID: 080321A.B\0803A_03CCV.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		298223	6.844	285885	5.284	893696	3.31
UPPER LIMIT		596446	7.344	571770	5.784	1787392	3.81
LOWER LIMIT		149111.5	6.344	142942.5	4.784	446848	2.81
LAB SAMPLE ID	SAMPLE NO.						
2950715	2950715BLANK	303511	6.844	288790	5.284	895085	3.31
2950716	2950716LCS	296748	6.844	286863	5.284	892341	3.31
60375923015	TB-5	295935	6.844	282666	5.284	881364	3.31

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19752271CCV Date Analyzed: 07/28/2021

Instrument ID: 60MSVC GC Column: Col 1 Time Analyzed: 07:51

Lab File ID: 072821A.B\0728A_02.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		172061	7.398	134698	5.82	318405	3.802
UPPER LIMIT		344122	7.898	269396	6.32	636810	4.302
LOWER LIMIT		86030.5	6.898	67349	5.32	159202.5	3.302
LAB SAMPLE ID	SAMPLE NO.						
2947592	2947592BLANK	161112	7.399	137020	5.821	316243	3.803
2947593	2947593LCS	175672	7.399	135870	5.821	325275	3.802
2947600	2947600BLANK	161112	7.399	137020	5.821	316243	3.803
2947601	2947601LCS	175672	7.399	135870	5.821	325275	3.802
60375923011	GB-01/8-10	159165	7.399	135138	5.818	310562	3.803
60375923012	GB-01/11-13	153538	7.398	131857	5.82	317775	3.797

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT
* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19752320CCV Date Analyzed: 07/29/2021

Instrument ID: 60MSVC GC Column: Col 1 Time Analyzed: 08:10

Lab File ID: 072921A.B\0729A_02.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		164230	7.398	131577	5.821	312236	3.802
UPPER LIMIT		328460	7.898	263154	6.321	624472	4.302
LOWER LIMIT		82115	6.898	65788.5	5.321	156118	3.302
LAB SAMPLE ID	SAMPLE NO.						
2948710	2948710BLANK	156573	7.398	132302	5.82	310039	3.802
2948711	2948711LCS	169191	7.399	129716	5.821	313210	3.802
2948712	2948712MS	164748	7.399	124352	5.821	293513	3.803
2948713	2948713MSD	166969	7.398	129030	5.821	308678	3.802
2948715	2948715BLANK	156573	7.398	132302	5.82	310039	3.802
2948716	2948716LCS	155452	7.398	124529	5.821	304136	3.802
60375923013	GB-03/1-3	155389	7.399	130804	5.821	308109	3.803
60375923014	GB-03/4-6	164255	7.399	136726	5.821	320710	3.803
60375923016	GB-02/2-3	151731	7.399	123587	5.821	292459	3.802
60375923017	GB-02/8-9	152377	7.399	122023	5.821	295862	3.803

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

TB-5

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Water SDG No.: 60375923

Date Extracted: 08/03/2021 13:47 Lab Sample ID: 60375923015

Date Analyzed: 08/03/2021 13:47 Lab File ID: 080321A.B\0803A_31.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	<0.22	U
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-5

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Water SDG No.: 60375923

Date Extracted: 08/03/2021 13:47 Lab Sample ID: 60375923015

Date Analyzed: 08/03/2021 13:47 Lab File ID: 080321A.B\0803A_31.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U

SAMPLE NO.

TB-5

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Water SDG No.: 60375923

Date Extracted: 08/03/2021 13:47 Lab Sample ID: 60375923015

Date Analyzed: 08/03/2021 13:47 Lab File ID: 080321A.B\0803A_31.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	<0.21	U
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

GB-01/8-10

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375923011

Date Analyzed: 07/28/2021 12:32 Lab File ID: 072821AGRO.B\0728A_20.D

Initial wt/vol: 6.38 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.053	U

SAMPLE NO.

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

GB-01/8-10

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45 | Matrix: Solid | SDG No.: 60375923
Date Extracted: 07/28/2021 08:05 | Lab Sample ID: 60375923011
Date Analyzed: 07/28/2021 12:32 | Lab File ID: 072821A.B\0728A_20.D
Initial wt/vol: 6.38 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<15.6	U
107-02-8	Acrolein	<72.9	U
107-13-1	Acrylonitrile	<3.1	U
71-43-2	Benzene	<0.48	U
108-86-1	Bromobenzene	<0.91	U
74-97-5	Bromochloromethane	<0.58	U
75-27-4	Bromodichloromethane	<0.58	U
75-25-2	Bromoform	<0.55	U
74-83-9	Bromomethane	<2.8	U
78-93-3	2-Butanone (MEK)	<3.3	U
104-51-8	n-Butylbenzene	<0.63	U
135-98-8	sec-Butylbenzene	<0.70	U
98-06-6	tert-Butylbenzene	<0.85	U
75-15-0	Carbon disulfide	<0.62	U
56-23-5	Carbon tetrachloride	<0.83	U
108-90-7	Chlorobenzene	<0.60	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.48	U
74-87-3	Chloromethane	<0.77	U
95-49-8	2-Chlorotoluene	<0.70	U
106-43-4	4-Chlorotoluene	<0.58	U
108-94-1	Cyclohexanone	<12.2	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.62	U
106-93-4	1,2-Dibromoethane (EDB)	<0.52	U
74-95-3	Dibromomethane	<0.58	U
95-50-1	1,2-Dichlorobenzene	<0.60	U
541-73-1	1,3-Dichlorobenzene	<0.69	U
106-46-7	1,4-Dichlorobenzene	<0.78	U
75-34-3	1,1-Dichloroethane	<0.38	U
107-06-2	1,2-Dichloroethane	<0.39	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.62	U
156-59-2	cis-1,2-Dichloroethene	<0.42	U
156-60-5	trans-1,2-Dichloroethene	<0.65	U
78-87-5	1,2-Dichloropropane	<0.94	U
142-28-9	1,3-Dichloropropane	<0.67	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

GB-01/8-10

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375923011

Date Analyzed: 07/28/2021 12:32 Lab File ID: 072821A.B\0728A_20.D

Initial wt/vol: 6.38 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.46	U
563-58-6	1,1-Dichloropropene	<0.87	U
10061-01-5	cis-1,3-Dichloropropene	<0.51	U
10061-02-6	trans-1,3-Dichloropropene	<0.44	U
60-29-7	Diethyl ether (Ethyl ether)	<0.54	U
100-41-4	Ethylbenzene	<0.45	U
142-82-5	n-Heptane	<4.4	U
87-68-3	Hexachloro-1,3-butadiene	<0.82	U
110-54-3	n-Hexane	<0.67	U
591-78-6	2-Hexanone	<2.4	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.55	U
99-87-6	p-Isopropyltoluene	<0.66	U
79-20-9	Methyl acetate	<1.0	U
75-09-2	Methylene Chloride	<2.6	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.9	U
1634-04-4	Methyl-tert-butyl ether	<0.46	U
91-20-3	Naphthalene	3.3	J
103-65-1	n-Propylbenzene	<0.77	U
100-42-5	Styrene	<0.57	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.98	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.96	U
127-18-4	Tetrachloroethene	<0.40	U
109-99-9	Tetrahydrofuran	<0.75	U
108-88-3	Toluene	<0.34	U
87-61-6	1,2,3-Trichlorobenzene	1.3	J
120-82-1	1,2,4-Trichlorobenzene	0.92	J
71-55-6	1,1,1-Trichloroethane	<0.72	U
79-00-5	1,1,2-Trichloroethane	<0.61	U
79-01-6	Trichloroethene	<0.70	U
75-69-4	Trichlorofluoromethane	<0.59	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.8	U
526-73-8	1,2,3-Trimethylbenzene	<1.9	U
95-63-6	1,2,4-Trimethylbenzene	<0.65	U
108-67-8	1,3,5-Trimethylbenzene	<0.60	U
108-05-4	Vinyl acetate	<0.54	U

SAMPLE NO.

GB-01/8-10

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375923011

Date Analyzed: 07/28/2021 12:32 Lab File ID: 072821A.B\0728A_20.D

Initial wt/vol: 6.38 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.64	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.61	U
95-47-6	o-Xylene	<0.36	U

SAMPLE NO.

GB-01/11-13

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375923012

Date Analyzed: 07/28/2021 12:51 Lab File ID: 072821AGRO.B\0728A_21.D

Initial wt/vol: 5.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 21.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.063	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

GB-01/11-13

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375923012

Date Analyzed: 07/28/2021 12:51 Lab File ID: 072821A.B\0728A_21.D

Initial wt/vol: 5.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 21.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	248	
107-02-8	Acrolein	<87.6	U
107-13-1	Acrylonitrile	<3.7	U
71-43-2	Benzene	<0.57	U
108-86-1	Bromobenzene	<1.1	U
74-97-5	Bromochloromethane	<0.70	U
75-27-4	Bromodichloromethane	<0.70	U
75-25-2	Bromoform	<0.67	U
74-83-9	Bromomethane	<3.4	U
78-93-3	2-Butanone (MEK)	44.8	
104-51-8	n-Butylbenzene	<0.75	U
135-98-8	sec-Butylbenzene	<0.85	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	5.7	J
56-23-5	Carbon tetrachloride	<0.99	U
108-90-7	Chlorobenzene	<0.73	U
75-00-3	Chloroethane	<1.7	U
67-66-3	Chloroform	<0.57	U
74-87-3	Chloromethane	<0.92	U
95-49-8	2-Chlorotoluene	<0.84	U
106-43-4	4-Chlorotoluene	<0.69	U
108-94-1	Cyclohexanone	<14.7	U
96-12-8	1,2-Dibromo-3-chloropropane	<2.1	U
124-48-1	Dibromochloromethane	<0.75	U
106-93-4	1,2-Dibromoethane (EDB)	<0.62	U
74-95-3	Dibromomethane	<0.69	U
95-50-1	1,2-Dichlorobenzene	<0.72	U
541-73-1	1,3-Dichlorobenzene	<0.83	U
106-46-7	1,4-Dichlorobenzene	<0.94	U
75-34-3	1,1-Dichloroethane	<0.45	U
107-06-2	1,2-Dichloroethane	<0.46	U
540-59-0	1,2-Dichloroethene (Total)	<1.3	U
75-35-4	1,1-Dichloroethene	<0.74	U
156-59-2	cis-1,2-Dichloroethene	<0.50	U
156-60-5	trans-1,2-Dichloroethene	<0.79	U
78-87-5	1,2-Dichloropropane	<1.1	U
142-28-9	1,3-Dichloropropane	<0.80	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

GB-01/11-13

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375923012

Date Analyzed: 07/28/2021 12:51 Lab File ID: 072821A.B\0728A_21.D

Initial wt/vol: 5.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 21.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.55	U
563-58-6	1,1-Dichloropropene	<1.0	U
10061-01-5	cis-1,3-Dichloropropene	<0.62	U
10061-02-6	trans-1,3-Dichloropropene	<0.53	U
60-29-7	Diethyl ether (Ethyl ether)	<0.65	U
100-41-4	Ethylbenzene	<0.54	U
142-82-5	n-Heptane	<5.2	U
87-68-3	Hexachloro-1,3-butadiene	<0.99	U
110-54-3	n-Hexane	<0.80	U
591-78-6	2-Hexanone	<2.9	U
74-88-4	Iodomethane	<1.7	U
98-82-8	Isopropylbenzene (Cumene)	<0.66	U
99-87-6	p-Isopropyltoluene	<0.80	U
79-20-9	Methyl acetate	<1.3	U
75-09-2	Methylene Chloride	<3.2	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.5	U
1634-04-4	Methyl-tert-butyl ether	<0.56	U
91-20-3	Naphthalene	<0.95	U
103-65-1	n-Propylbenzene	<0.93	U
100-42-5	Styrene	<0.68	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.2	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.2	U
127-18-4	Tetrachloroethene	<0.48	U
109-99-9	Tetrahydrofuran	<0.91	U
108-88-3	Toluene	<0.41	U
87-61-6	1,2,3-Trichlorobenzene	<0.92	U
120-82-1	1,2,4-Trichlorobenzene	<0.92	U
71-55-6	1,1,1-Trichloroethane	<0.87	U
79-00-5	1,1,2-Trichloroethane	<0.73	U
79-01-6	Trichloroethene	<0.84	U
75-69-4	Trichlorofluoromethane	<0.71	U
96-18-4	1,2,3-Trichloropropane	<2.5	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.8	U
526-73-8	1,2,3-Trimethylbenzene	<2.3	U
95-63-6	1,2,4-Trimethylbenzene	<0.78	U
108-67-8	1,3,5-Trimethylbenzene	<0.73	U
108-05-4	Vinyl acetate	<0.65	U

SAMPLE NO.

GB-01/11-13

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 60375923012

Date Analyzed: 07/28/2021 12:51 Lab File ID: 072821A.B\0728A_21.D

Initial wt/vol: 5.5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 21.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.77	U
1330-20-7	Xylene (Total)	<1.3	U
179601-23-1	m&p-Xylene	<0.73	U
95-47-6	o-Xylene	<0.43	U

SAMPLE NO.

GB-03/1-3

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923013

Date Analyzed: 07/29/2021 14:17 Lab File ID: 072921AGRO.B\0729A_24.D

Initial wt/vol: 6.87 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 15.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.047	U

SAMPLE NO.

GB-03/1-3

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 | Matrix: Solid | SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 | Lab Sample ID: 60375923013

Date Analyzed: 07/29/2021 14:17 | Lab File ID: 072921A.B\0729A_24.D

Initial wt/vol: 6.87 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 15.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<13.9	U
107-02-8	Acrolein	<64.9	U
107-13-1	Acrylonitrile	<2.7	U
71-43-2	Benzene	0.54	J
108-86-1	Bromobenzene	<0.81	U
74-97-5	Bromochloromethane	<0.52	U
75-27-4	Bromodichloromethane	<0.52	U
75-25-2	Bromoform	<0.49	U
74-83-9	Bromomethane	<2.5	U
78-93-3	2-Butanone (MEK)	<2.9	U
104-51-8	n-Butylbenzene	<0.56	U
135-98-8	sec-Butylbenzene	<0.63	U
98-06-6	tert-Butylbenzene	<0.76	U
75-15-0	Carbon disulfide	1.6	J
56-23-5	Carbon tetrachloride	<0.74	U
108-90-7	Chlorobenzene	<0.54	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<0.42	U
74-87-3	Chloromethane	<0.69	U
95-49-8	2-Chlorotoluene	<0.63	U
106-43-4	4-Chlorotoluene	<0.52	U
108-94-1	Cyclohexanone	<10.9	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.6	U
124-48-1	Dibromochloromethane	<0.55	U
106-93-4	1,2-Dibromoethane (EDB)	<0.46	U
74-95-3	Dibromomethane	<0.52	U
95-50-1	1,2-Dichlorobenzene	<0.54	U
541-73-1	1,3-Dichlorobenzene	<0.62	U
106-46-7	1,4-Dichlorobenzene	<0.70	U
75-34-3	1,1-Dichloroethane	<0.33	U
107-06-2	1,2-Dichloroethane	<0.34	U
540-59-0	1,2-Dichloroethene (Total)	<0.95	U
75-35-4	1,1-Dichloroethene	<0.55	U
156-59-2	cis-1,2-Dichloroethene	<0.37	U
156-60-5	trans-1,2-Dichloroethene	<0.58	U
78-87-5	1,2-Dichloropropane	<0.84	U
142-28-9	1,3-Dichloropropane	<0.59	U

SAMPLE NO.

GB-03/1-3

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923013

Date Analyzed: 07/29/2021 14:17 Lab File ID: 072921A.B\0729A_24.D

Initial wt/vol: 6.87 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 15.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.41	U
563-58-6	1,1-Dichloropropene	<0.77	U
10061-01-5	cis-1,3-Dichloropropene	<0.46	U
10061-02-6	trans-1,3-Dichloropropene	<0.39	U
60-29-7	Diethyl ether (Ethyl ether)	<0.48	U
100-41-4	Ethylbenzene	<0.40	U
142-82-5	n-Heptane	<3.9	U
87-68-3	Hexachloro-1,3-butadiene	<0.73	U
110-54-3	n-Hexane	<0.59	U
591-78-6	2-Hexanone	<2.1	U
74-88-4	Iodomethane	<1.3	U
98-82-8	Isopropylbenzene (Cumene)	<0.49	U
99-87-6	p-Isopropyltoluene	<0.59	U
79-20-9	Methyl acetate	<0.93	U
75-09-2	Methylene Chloride	<2.4	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.6	U
1634-04-4	Methyl-tert-butyl ether	<0.41	U
91-20-3	Naphthalene	<0.70	U
103-65-1	n-Propylbenzene	<0.69	U
100-42-5	Styrene	<0.51	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.88	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.86	U
127-18-4	Tetrachloroethene	<0.35	U
109-99-9	Tetrahydrofuran	<0.67	U
108-88-3	Toluene	0.30	J
87-61-6	1,2,3-Trichlorobenzene	<0.68	U
120-82-1	1,2,4-Trichlorobenzene	<0.68	U
71-55-6	1,1,1-Trichloroethane	<0.64	U
79-00-5	1,1,2-Trichloroethane	<0.54	U
79-01-6	Trichloroethene	<0.62	U
75-69-4	Trichlorofluoromethane	<0.53	U
96-18-4	1,2,3-Trichloropropane	<1.8	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.3	U
526-73-8	1,2,3-Trimethylbenzene	<1.7	U
95-63-6	1,2,4-Trimethylbenzene	<0.58	U
108-67-8	1,3,5-Trimethylbenzene	<0.54	U
108-05-4	Vinyl acetate	<0.48	U

SAMPLE NO.

GB-03/1-3

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923013

Date Analyzed: 07/29/2021 14:17 Lab File ID: 072921A.B\0729A_24.D

Initial wt/vol: 6.87 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 15.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.57	U
1330-20-7	Xylene (Total)	<0.98	U
179601-23-1	m&p-Xylene	<0.54	U
95-47-6	o-Xylene	<0.32	U

SAMPLE NO.

GB-03/4-6

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923014

Date Analyzed: 07/29/2021 14:32 Lab File ID: 072921A.B\0729A_25.D

Initial wt/vol: 5.9 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 9.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	26.3	
107-02-8	Acrolein	<70.9	U
107-13-1	Acrylonitrile	<3.0	U
71-43-2	Benzene	0.72	J
108-86-1	Bromobenzene	<0.88	U
74-97-5	Bromochloromethane	<0.56	U
75-27-4	Bromodichloromethane	<0.56	U
75-25-2	Bromoform	<0.54	U
74-83-9	Bromomethane	<2.8	U
78-93-3	2-Butanone (MEK)	5.9	J
104-51-8	n-Butylbenzene	<0.61	U
135-98-8	sec-Butylbenzene	<0.69	U
98-06-6	tert-Butylbenzene	<0.83	U
75-15-0	Carbon disulfide	1.4	J
56-23-5	Carbon tetrachloride	<0.80	U
108-90-7	Chlorobenzene	<0.59	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.46	U
74-87-3	Chloromethane	<0.75	U
95-49-8	2-Chlorotoluene	<0.68	U
106-43-4	4-Chlorotoluene	<0.56	U
108-94-1	Cyclohexanone	<11.9	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.7	U
124-48-1	Dibromochloromethane	<0.61	U
106-93-4	1,2-Dibromoethane (EDB)	<0.50	U
74-95-3	Dibromomethane	<0.56	U
95-50-1	1,2-Dichlorobenzene	<0.59	U
541-73-1	1,3-Dichlorobenzene	<0.67	U
106-46-7	1,4-Dichlorobenzene	<0.76	U
75-34-3	1,1-Dichloroethane	<0.37	U
107-06-2	1,2-Dichloroethane	<0.38	U
540-59-0	1,2-Dichloroethene (Total)	<1.0	U
75-35-4	1,1-Dichloroethene	<0.60	U
156-59-2	cis-1,2-Dichloroethene	<0.40	U
156-60-5	trans-1,2-Dichloroethene	<0.64	U
78-87-5	1,2-Dichloropropane	<0.92	U
142-28-9	1,3-Dichloropropane	<0.65	U

SAMPLE NO.

GB-03/4-6

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923014

Date Analyzed: 07/29/2021 14:32 Lab File ID: 072921A.B\0729A_25.D

Initial wt/vol: 5.9 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 9.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.45	U
563-58-6	1,1-Dichloropropene	<0.84	U
10061-01-5	cis-1,3-Dichloropropene	<0.50	U
10061-02-6	trans-1,3-Dichloropropene	<0.43	U
60-29-7	Diethyl ether (Ethyl ether)	<0.53	U
100-41-4	Ethylbenzene	<0.43	U
142-82-5	n-Heptane	<4.3	U
87-68-3	Hexachloro-1,3-butadiene	<0.80	U
110-54-3	n-Hexane	<0.65	U
591-78-6	2-Hexanone	<2.3	U
74-88-4	Iodomethane	<1.4	U
98-82-8	Isopropylbenzene (Cumene)	<0.53	U
99-87-6	p-Isopropyltoluene	<0.65	U
79-20-9	Methyl acetate	<1.0	U
75-09-2	Methylene Chloride	<2.6	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.8	U
1634-04-4	Methyl-tert-butyl ether	<0.45	U
91-20-3	Naphthalene	<0.77	U
103-65-1	n-Propylbenzene	<0.75	U
100-42-5	Styrene	<0.55	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.96	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.94	U
127-18-4	Tetrachloroethene	<0.39	U
109-99-9	Tetrahydrofuran	<0.73	U
108-88-3	Toluene	<0.33	U
87-61-6	1,2,3-Trichlorobenzene	<0.75	U
120-82-1	1,2,4-Trichlorobenzene	<0.75	U
71-55-6	1,1,1-Trichloroethane	<0.70	U
79-00-5	1,1,2-Trichloroethane	<0.59	U
79-01-6	Trichloroethene	<0.68	U
75-69-4	Trichlorofluoromethane	<0.58	U
96-18-4	1,2,3-Trichloropropane	<2.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.7	U
526-73-8	1,2,3-Trimethylbenzene	<1.9	U
95-63-6	1,2,4-Trimethylbenzene	<0.63	U
108-67-8	1,3,5-Trimethylbenzene	<0.59	U
108-05-4	Vinyl acetate	<0.53	U

SAMPLE NO.

GB-03/4-6

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923014

Date Analyzed: 07/29/2021 14:32 Lab File ID: 072921A.B\0729A_25.D

Initial wt/vol: 5.9 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 9.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.62	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.59	U
95-47-6	o-Xylene	<0.35	U

SAMPLE NO.

GB-03/4-6

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923014

Date Analyzed: 07/29/2021 14:32 Lab File ID: 072921AGRO.B\0729A_25.D

Initial wt/vol: 5.9 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 9.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.051	U

SAMPLE NO.

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

GB-02/2-3

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45 | Matrix: Solid | SDG No.: 60375923
Date Extracted: 07/29/2021 11:34 | Lab Sample ID: 60375923016
Date Analyzed: 07/29/2021 14:48 | Lab File ID: 072921A.B\0729A_26.D
Initial wt/vol: 6.29 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.1	U
107-02-8	Acrolein	<74.9	U
107-13-1	Acrylonitrile	<3.1	U
71-43-2	Benzene	<0.49	U
108-86-1	Bromobenzene	<0.93	U
74-97-5	Bromochloromethane	<0.60	U
75-27-4	Bromodichloromethane	<0.60	U
75-25-2	Bromoform	<0.57	U
74-83-9	Bromomethane	<2.9	U
78-93-3	2-Butanone (MEK)	<3.4	U
104-51-8	n-Butylbenzene	<0.64	U
135-98-8	sec-Butylbenzene	<0.72	U
98-06-6	tert-Butylbenzene	<0.88	U
75-15-0	Carbon disulfide	<0.64	U
56-23-5	Carbon tetrachloride	<0.85	U
108-90-7	Chlorobenzene	<0.62	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.49	U
74-87-3	Chloromethane	<0.79	U
95-49-8	2-Chlorotoluene	<0.72	U
106-43-4	4-Chlorotoluene	<0.59	U
108-94-1	Cyclohexanone	<12.6	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.64	U
106-93-4	1,2-Dibromoethane (EDB)	<0.53	U
74-95-3	Dibromomethane	<0.59	U
95-50-1	1,2-Dichlorobenzene	<0.62	U
541-73-1	1,3-Dichlorobenzene	<0.71	U
106-46-7	1,4-Dichlorobenzene	<0.80	U
75-34-3	1,1-Dichloroethane	<0.39	U
107-06-2	1,2-Dichloroethane	<0.40	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.63	U
156-59-2	cis-1,2-Dichloroethene	<0.43	U
156-60-5	trans-1,2-Dichloroethene	<0.67	U
78-87-5	1,2-Dichloropropane	<0.97	U
142-28-9	1,3-Dichloropropane	<0.69	U

SAMPLE NO.

GB-02/2-3

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923016

Date Analyzed: 07/29/2021 14:48 Lab File ID: 072921A.B\0729A_26.D

Initial wt/vol: 6.29 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.47	U
563-58-6	1,1-Dichloropropene	<0.89	U
10061-01-5	cis-1,3-Dichloropropene	<0.53	U
10061-02-6	trans-1,3-Dichloropropene	<0.45	U
60-29-7	Diethyl ether (Ethyl ether)	<0.56	U
100-41-4	Ethylbenzene	<0.46	U
142-82-5	n-Heptane	<4.5	U
87-68-3	Hexachloro-1,3-butadiene	<0.84	U
110-54-3	n-Hexane	<0.68	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.57	U
99-87-6	p-Isopropyltoluene	<0.68	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.0	U
1634-04-4	Methyl-tert-butyl ether	<0.48	U
91-20-3	Naphthalene	<0.81	U
103-65-1	n-Propylbenzene	<0.80	U
100-42-5	Styrene	<0.58	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.99	U
127-18-4	Tetrachloroethene	<0.41	U
109-99-9	Tetrahydrofuran	<0.78	U
108-88-3	Toluene	<0.35	U
87-61-6	1,2,3-Trichlorobenzene	<0.79	U
120-82-1	1,2,4-Trichlorobenzene	<0.79	U
71-55-6	1,1,1-Trichloroethane	<0.74	U
79-00-5	1,1,2-Trichloroethane	<0.62	U
79-01-6	Trichloroethene	<0.72	U
75-69-4	Trichlorofluoromethane	<0.61	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.0	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.66	U
108-67-8	1,3,5-Trimethylbenzene	<0.62	U
108-05-4	Vinyl acetate	<0.56	U

SAMPLE NO.

GB-02/2-3

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923016

Date Analyzed: 07/29/2021 14:48 Lab File ID: 072921A.B\0729A_26.D

Initial wt/vol: 6.29 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.66	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.63	U
95-47-6	o-Xylene	<0.37	U

SAMPLE NO.

GB-02/2-3

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923016

Date Analyzed: 07/29/2021 14:48 Lab File ID: 072921AGRO.B\0729A_26.D

Initial wt/vol: 6.29 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.054	U

SAMPLE NO.

GB-02/8-9

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923017

Date Analyzed: 07/29/2021 15:35 Lab File ID: 072921A.B\0729A_29.D

Initial wt/vol: 6.54 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 25.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	16.7	J
107-02-8	Acrolein	<77.4	U
107-13-1	Acrylonitrile	<3.2	U
71-43-2	Benzene	<0.50	U
108-86-1	Bromobenzene	<0.96	U
74-97-5	Bromochloromethane	<0.62	U
75-27-4	Bromodichloromethane	<0.62	U
75-25-2	Bromoform	<0.59	U
74-83-9	Bromomethane	<3.0	U
78-93-3	2-Butanone (MEK)	<3.5	U
104-51-8	n-Butylbenzene	<0.67	U
135-98-8	sec-Butylbenzene	<0.75	U
98-06-6	tert-Butylbenzene	<0.90	U
75-15-0	Carbon disulfide	3.5	J
56-23-5	Carbon tetrachloride	<0.88	U
108-90-7	Chlorobenzene	<0.64	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<0.82	U
95-49-8	2-Chlorotoluene	<0.75	U
106-43-4	4-Chlorotoluene	<0.61	U
108-94-1	Cyclohexanone	<13.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.9	U
124-48-1	Dibromochloromethane	<0.66	U
106-93-4	1,2-Dibromoethane (EDB)	<0.55	U
74-95-3	Dibromomethane	<0.61	U
95-50-1	1,2-Dichlorobenzene	<0.64	U
541-73-1	1,3-Dichlorobenzene	<0.74	U
106-46-7	1,4-Dichlorobenzene	<0.83	U
75-34-3	1,1-Dichloroethane	<0.40	U
107-06-2	1,2-Dichloroethane	<0.41	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.65	U
156-59-2	cis-1,2-Dichloroethene	<0.44	U
156-60-5	trans-1,2-Dichloroethene	<0.69	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<0.71	U

SAMPLE NO.

GB-02/8-9

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923017

Date Analyzed: 07/29/2021 15:35 Lab File ID: 072921A.B\0729A_29.D

Initial wt/vol: 6.54 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 25.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.49	U
563-58-6	1,1-Dichloropropene	<0.92	U
10061-01-5	cis-1,3-Dichloropropene	<0.54	U
10061-02-6	trans-1,3-Dichloropropene	<0.47	U
60-29-7	Diethyl ether (Ethyl ether)	<0.57	U
100-41-4	Ethylbenzene	<0.47	U
142-82-5	n-Heptane	<4.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.87	U
110-54-3	n-Hexane	<0.71	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.58	U
99-87-6	p-Isopropyltoluene	0.77	J
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.8	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.1	U
1634-04-4	Methyl-tert-butyl ether	<0.49	U
91-20-3	Naphthalene	4.4	J
103-65-1	n-Propylbenzene	<0.82	U
100-42-5	Styrene	<0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.42	U
109-99-9	Tetrahydrofuran	<0.80	U
108-88-3	Toluene	<0.36	U
87-61-6	1,2,3-Trichlorobenzene	1.9	J
120-82-1	1,2,4-Trichlorobenzene	1.4	J
71-55-6	1,1,1-Trichloroethane	<0.77	U
79-00-5	1,1,2-Trichloroethane	<0.64	U
79-01-6	Trichloroethene	<0.74	U
75-69-4	Trichlorofluoromethane	<0.63	U
96-18-4	1,2,3-Trichloropropane	<2.2	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.1	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.69	U
108-67-8	1,3,5-Trimethylbenzene	<0.64	U
108-05-4	Vinyl acetate	<0.58	U

SAMPLE NO.

GB-02/8-9

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923017

Date Analyzed: 07/29/2021 15:35 Lab File ID: 072921A.B\0729A_29.D

Initial wt/vol: 6.54 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 25.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.68	U
1330-20-7	Xylene (Total)	<1.2	U
179601-23-1	m&p-Xylene	<0.65	U
95-47-6	o-Xylene	<0.38	U

SAMPLE NO.

GB-02/8-9

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 60375923017

Date Analyzed: 07/29/2021 15:35 Lab File ID: 072921AGRO.B\0729A_29.D

Initial wt/vol: 6.54 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 25.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.056	U

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Wt Linear	0.12770	0.14551	0.10241	0.10999	0.10882	0.09607
Acetonitrile	Averaged	0.20519	0.23879	0.19275	0.20970	0.19978	0.19106
Acrolein	Averaged	0.04180	0.04643	0.03211	0.03513	0.03486	0.03397
Acrylonitrile	Averaged	0.07366	0.09921	0.07704	0.08732	0.08346	0.07836
Benzene	Averaged	1.53521	1.92991	1.60481	1.72562	1.62126	1.58693
Bromobenzene	Wt Linear	1.20918	1.95997	1.31552	1.42983	1.36073	1.36722
Bromochloromethane	Averaged	0.22104	0.31134	0.23256	0.25800	0.24707	0.22443
Bromodichloromethane	Averaged	0.44293	0.57619	0.45370	0.51355	0.49633	0.48524
Bromoform	Wt Linear	0.24604	0.68222	0.46718	0.49434	0.49663	0.49824
Bromomethane	Wt Linear	0.29297	0.36742	0.22717	0.26171	0.25039	0.25972
2-Butanone (MEK)	Averaged	0.13649	0.16358	0.11876	0.14080	0.12308	0.11540
n-Butylbenzene	Averaged	2.86132	3.98042	3.04371	3.25647	2.98423	3.10441
sec-Butylbenzene	Averaged	3.67808	5.46856	4.69434	4.97766	4.60261	4.61503
tert-Butylbenzene	Averaged	2.84688	4.13358	3.35116	3.44384	3.25972	3.33365
Carbon disulfide	Averaged	1.04761	1.22830	1.10384	1.16928	1.05921	1.05340
Carbon tetrachloride	Averaged	0.52350	0.73052	0.61590	0.69214	0.63641	0.66014
Chlorobenzene	Averaged	2.87709	4.39024	3.31376	3.62303	3.48272	3.35387
Chloroethane	Wt Linear	0.19876	0.41947	0.28976	0.30279	0.28768	0.28386
2-Chloroethylvinyl ether	Averaged	0.08099	0.10619	0.08984	0.10326	0.10466	0.10142
Chloroform	Averaged	0.71691	0.93833	0.73171	0.78946	0.75254	0.72345
Chloromethane	Averaged	0.44305	0.53976	0.43568	0.48525	0.46252	0.43236
2-Chlorotoluene	Averaged	2.68543	4.15871	3.14069	3.35971	3.05176	3.09225
4-Chlorotoluene	Wt Linear	1.07015	1.80786	1.31716	1.36593	1.22310	1.30240
Cyclohexane	Averaged	0.74320	0.90910	0.89807	1.02673	0.84745	0.91037
Cyclohexanone	Wt Linear	0.06413	0.12386	0.07912	0.09053	0.09060	0.08453
1,2-Dibromo-3-chloropropane	Averaged		0.06710	0.06492	0.06890	0.06770	0.07475
Dibromochloromethane	Averaged	0.94475	1.43553	1.01990	1.12463	1.09684	1.10009
1,2-Dibromoethane (EDB)	Averaged	0.63060	1.07960	0.79161	0.88016	0.84520	0.82910
Dibromomethane	Averaged	0.19109	0.26576	0.21423	0.22178	0.21480	0.19942
1,2-Dichlorobenzene	Wt Linear	1.78586	2.99630	1.95595	2.03832	1.90924	1.93500
1,3-Dichlorobenzene	Averaged	1.95073	3.12283	2.43352	2.44542	2.30979	2.30798
1,4-Dichlorobenzene	Averaged	2.26717	3.20528	2.30940	2.35493	2.29589	2.27579
Dichlorodifluoromethane	Averaged	0.42905	0.52841	0.51733	0.55194	0.50397	0.50410
1,1-Dichloroethane	Averaged	0.79870	1.07172	0.84977	0.96581	0.89021	0.86960
1,2-Dichloroethane	Averaged	0.38791	0.54504	0.45921	0.50553	0.49412	0.48713

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1-Dichloroethene	Averaged	0.39387	0.50228	0.42020	0.43770	0.41490	0.39752
cis-1,2-Dichloroethene	Averaged	0.45595	0.61300	0.50165	0.53773	0.51379	0.49294
trans-1,2-Dichloroethene	Averaged	0.39278	0.60437	0.47193	0.52328	0.47601	0.46450
1,2-Dichloropropane	Averaged	0.40325	0.56397	0.44676	0.48799	0.47876	0.46334
1,3-Dichloropropane	Averaged	1.14563	1.69843	1.28703	1.39871	1.31268	1.26591
2,2-Dichloropropane	Averaged	0.62392	0.71667	0.60665	0.65458	0.59550	0.60699
1,1-Dichloropropene	Averaged	0.53080	0.61808	0.55862	0.61860	0.56906	0.57516
cis-1,3-Dichloropropene	Averaged	0.52703	0.71897	0.55451	0.64356	0.60648	0.60173
trans-1,3-Dichloropropene	Averaged	1.03926	1.81037	1.32575	1.43667	1.42334	1.40293
Diethyl ether (Ethyl ether)	Averaged	0.18282	0.18098	0.15164	0.17124	0.17466	0.16321
1,4-Dioxane (p-Dioxane)	Averaged			0.00091	0.00136	0.00128	0.00139
Ethylbenzene	Averaged	1.68593	2.10867	1.71706	1.88607	1.74957	1.77296
n-Heptane	Averaged		0.08014	0.08330	0.09507	0.08135	0.08812
Hexachloro-1,3-butadiene	Averaged	0.44523	0.65448	0.47608	0.51719	0.47413	0.48345
n-Hexane	Averaged	0.62611	0.74715	0.74112	0.81208	0.73303	0.72417
2-Hexanone	Wt Linear	0.45619	0.72451	0.47478	0.52297	0.52011	0.48578
Isopropylbenzene (Cumene)	Averaged	4.42297	6.11878	4.87800	5.27862	4.97873	4.88636
p-Isopropyltoluene	Averaged	3.19942	5.01991	3.89953	4.19402	3.94881	3.92301
Methyl acetate	Averaged	0.17138	0.19939	0.15364	0.16835	0.16659	0.15406
Methylcyclohexane	Averaged	0.55795	0.63437	0.62019	0.71445	0.63183	0.64535
Methylene Chloride	Averaged	0.43051	0.51513	0.35075	0.40829	0.39472	0.37658
1-Methylnaphthalene	Quadratic	0.53792	0.89490	0.57381	0.62588	0.61216	0.64550
2-Methylnaphthalene	Quadratic	0.81790	1.11818	0.65559	0.73077	0.75287	0.76836
4-Methyl-2-pentanone (MIBK)	Averaged	0.16281	0.26384	0.18766	0.20686	0.20468	0.19413
Methyl-tert-butyl ether	Averaged	0.58801	0.92654	0.69911	0.80449	0.76608	0.72490
Naphthalene	Wt Linear	1.42838	2.35009	1.54346	1.57339	1.66540	1.66703
n-Propylbenzene	Averaged	1.14194	1.62069	1.38942	1.42372	1.31705	1.34643
Styrene	Averaged	2.54266	4.18890	3.00039	3.30341	3.10257	3.08919
1,1,1,2-Tetrachloroethane	Averaged	1.24780	1.80674	1.31786	1.41849	1.35719	1.32847
1,1,2,2-Tetrachloroethane	Averaged	0.60554	0.92529	0.63552	0.72758	0.68400	0.66444
Tetrachloroethene	Averaged	1.41846	2.01504	1.67131	1.74447	1.64751	1.65953
Tetrahydrofuran	Averaged	0.06431	0.07513	0.05772	0.06186	0.06240	0.05649
Toluene	Averaged	2.93028	4.07621	3.10885	3.29540	3.09746	3.07841
1,2,3-Trichlorobenzene	Wt Linear	0.63707	1.09350	0.65456	0.71869	0.68920	0.68950
1,2,4-Trichlorobenzene	Averaged	1.04317	1.32580	0.86849	0.94670	0.89842	0.90220

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-3

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1,1-Trichloroethane	Averaged	0.57365	0.79148	0.68379	0.73925	0.69153	0.69171
1,1,2-Trichloroethane	Averaged	0.67498	0.91819	0.66918	0.74359	0.66357	0.66084
Trichloroethene	Averaged	0.47603	0.57672	0.47172	0.51846	0.47539	0.46694
Trichlorofluoromethane	Averaged	0.70766	0.69754	0.70524	0.79361	0.71818	0.72787
1,2,3-Trichloropropane	Wt Linear	0.27846	0.24584	0.18613	0.20244	0.18958	0.19316
1,2,3-Trimethylbenzene	Wt Linear	3.08279	4.96002	3.53365	3.71428	3.52324	3.44298
1,2,4-Trimethylbenzene	Averaged	3.09837	4.66453	3.70064	3.87666	3.56937	3.65611
1,3,5-Trimethylbenzene	Averaged	3.29553	4.83033	3.81499	3.99835	3.72579	3.77837
Vinyl chloride	Averaged	0.47749	0.61333	0.53867	0.58268	0.52902	0.52987
m&p-Xylene	Averaged	1.89829	2.83922	2.11951	2.24534	2.09679	2.07633
o-Xylene	Averaged	1.91628	2.70013	2.03598	2.17214	2.04795	1.95925
4-Bromofluorobenzene (S)	Averaged	0.80394	0.82690	0.82455	0.80808	0.80486	0.83639
1,2-Dichlorobenzene-d4 (S)	Averaged	0.82722	0.84669	0.84129	0.83878	0.83393	0.84298
Toluene-d8 (S)	Averaged	2.84213	2.78643	2.80885	2.80646	2.75183	2.76100

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acetone	Wt Linear	0.10199	0.09969
Acetonitrile	Averaged	0.18786	0.15809
Acrolein	Averaged	0.03809	0.04038
Acrylonitrile	Averaged	0.08074	0.08169
Benzene	Averaged	1.57163	1.48546
Bromobenzene	Wt Linear	1.41055	1.32710
Bromochloromethane	Averaged	0.21607	0.20683
Bromodichloromethane	Averaged	0.50161	0.50414
Bromoform	Wt Linear	0.54433	0.53711
Bromomethane	Wt Linear	0.28375	0.29890
2-Butanone (MEK)	Averaged	0.13082	0.11910
n-Butylbenzene	Averaged	3.03649	3.00180
sec-Butylbenzene	Averaged	4.52841	4.17448
tert-Butylbenzene	Averaged	3.22641	3.02448
Carbon disulfide	Averaged	1.06304	1.04303
Carbon tetrachloride	Averaged	0.67960	0.67769
Chlorobenzene	Averaged	3.45072	3.25653
Chloroethane	Wt Linear	0.29030	0.28333
2-Chloroethylvinyl ether	Averaged	0.10729	0.10847
Chloroform	Averaged	0.75122	0.72864
Chloromethane	Averaged	0.46144	0.51422
2-Chlorotoluene	Averaged	3.18261	2.91318
4-Chlorotoluene	Wt Linear	1.32644	1.24763
Cyclohexane	Averaged	0.85959	0.85694
Cyclohexanone	Wt Linear	0.08924	0.09300
1,2-Dibromo-3-chloropropane	Averaged	0.07356	0.08133
Dibromochloromethane	Averaged	1.20205	1.22060
1,2-Dibromoethane (EDB)	Averaged	0.87679	0.86279
Dibromomethane	Averaged	0.21047	0.20884
1,2-Dichlorobenzene	Wt Linear	1.95864	1.94238
1,3-Dichlorobenzene	Averaged	2.31958	2.25726
1,4-Dichlorobenzene	Averaged	2.31266	2.24684
Dichlorodifluoromethane	Averaged	0.51315	0.50246
1,1-Dichloroethane	Averaged	0.89066	0.86173
1,2-Dichloroethane	Averaged	0.50102	0.49363

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1-Dichloroethene	Averaged	0.40261	0.36665
cis-1,2-Dichloroethene	Averaged	0.50661	0.49411
trans-1,2-Dichloroethene	Averaged	0.48033	0.47162
1,2-Dichloropropane	Averaged	0.47391	0.46580
1,3-Dichloropropane	Averaged	1.34221	1.33608
2,2-Dichloropropane	Averaged	0.62497	0.61784
1,1-Dichloropropene	Averaged	0.57892	0.57735
cis-1,3-Dichloropropene	Averaged	0.61444	0.59400
trans-1,3-Dichloropropene	Averaged	1.49746	1.49294
Diethyl ether (Ethyl ether)	Averaged	0.17294	0.17715
1,4-Dioxane (p-Dioxane)	Averaged	0.00131	0.00128
Ethylbenzene	Averaged	1.83826	1.77503
n-Heptane	Averaged	0.08818	0.08898
Hexachloro-1,3-butadiene	Averaged	0.52482	0.59218
n-Hexane	Averaged	0.72563	0.72542
2-Hexanone	Wt Linear	0.51717	0.50373
Isopropylbenzene (Cumene)	Averaged	4.91675	4.35593
p-Isopropyltoluene	Averaged	3.95241	3.72915
Methyl acetate	Averaged	0.15643	0.14706
Methylcyclohexane	Averaged	0.63686	0.63839
Methylene Chloride	Averaged	0.35981	0.35266
1-Methylnaphthalene	Quadratic	0.72311	0.82259
2-Methylnaphthalene	Quadratic	0.89273	0.99422
4-Methyl-2-pentanone (MIBK)	Averaged	0.19849	0.18709
Methyl-tert-butyl ether	Averaged	0.77444	0.78054
Naphthalene	Wt Linear	1.87063	2.05476
n-Propylbenzene	Averaged	1.38495	1.28542
Styrene	Averaged	3.15112	2.90799
1,1,1,2-Tetrachloroethane	Averaged	1.40244	1.34858
1,1,2,2-Tetrachloroethane	Averaged	0.69239	0.60549
Tetrachloroethene	Averaged	1.70732	1.71723
Tetrahydrofuran	Averaged	0.06086	0.06025
Toluene	Averaged	3.19369	3.14294
1,2,3-Trichlorobenzene	Wt Linear	0.77923	0.85308
1,2,4-Trichlorobenzene	Averaged	0.97639	1.08187

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1,1-Trichloroethane	Averaged	0.71162	0.71685
1,1,2-Trichloroethane	Averaged	0.70423	0.70602
Trichloroethene	Averaged	0.48037	0.48245
Trichlorofluoromethane	Averaged	0.70603	0.63142
1,2,3-Trichloropropane	Wt Linear	0.19999	0.17875
1,2,3-Trimethylbenzene	Wt Linear	3.47352	3.33684
1,2,4-Trimethylbenzene	Averaged	3.68180	3.44255
1,3,5-Trimethylbenzene	Averaged	3.77294	3.48275
Vinyl chloride	Averaged	0.54235	0.52927
m&p-Xylene	Averaged	2.07799	1.95781
o-Xylene	Averaged	2.01620	1.90214
4-Bromofluorobenzene (S)	Averaged	0.83505	0.79237
1,2-Dichlorobenzene-d4 (S)	Averaged	0.84503	0.83610
Toluene-d8 (S)	Averaged	2.86879	3.00783

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-7
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Wt Linear		0.99894	0.00231930	0.10026	
Acetonitrile	Averaged	11.50044			0.19790	
Acrolein	Averaged	12.63209			0.03785	
Acrylonitrile	Averaged	9.50041			0.08268	
Benzene	Averaged	8.50266			1.63260	
Bromobenzene	Wt Linear		0.99878	0.00270400	1.35686	
Bromochloromethane	Averaged	13.92179			0.23967	
Bromodichloromethane	Averaged	8.17910			0.49671	
Bromoform	Wt Linear		0.99836	-0.0014693	0.53144	
Bromomethane	Wt Linear		0.99595	-0.0002335	0.28592	
2-Butanone (MEK)	Averaged	12.18948			0.13100	
n-Butylbenzene	Averaged	11.09296			3.15861	
sec-Butylbenzene	Averaged	11.46877			4.59240	
tert-Butylbenzene	Averaged	11.36759			3.32747	
Carbon disulfide	Averaged	6.20148			1.09596	
Carbon tetrachloride	Averaged	9.58226			0.65199	
Chlorobenzene	Averaged	12.45216			3.46849	
Chloroethane	Wt Linear		0.99914	0.00035330	0.28591	
2-Chloroethylvinyl ether	Averaged	9.69590			0.10026	
Chloroform	Averaged	9.54071			0.76653	
Chloromethane	Averaged	8.20135			0.47178	
2-Chlorotoluene	Averaged	13.62499			3.19804	
4-Chlorotoluene	Wt Linear		0.99860	0.00230200	1.27669	
Cyclohexane	Averaged	9.02853			0.88143	
Cyclohexanone	Wt Linear		0.99829	-0.0002662	0.09067	
1,2-Dibromo-3-chloropropane	Averaged	7.99863			0.07118	
Dibromochloromethane	Averaged	12.96984			1.14305	
1,2-Dibromoethane (EDB)	Averaged	14.52088			0.84948	
Dibromomethane	Averaged	10.34772			0.21580	
1,2-Dichlorobenzene	Wt Linear		0.99927	0.00499300	1.94397	
1,3-Dichlorobenzene	Averaged	13.86296			2.39339	
1,4-Dichlorobenzene	Averaged	13.43678			2.40850	
Dichlorodifluoromethane	Averaged	6.97607			0.50630	
1,1-Dichloroethane	Averaged	9.31497			0.89978	
1,2-Dichloroethane	Averaged	9.40973			0.48420	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-8
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1-Dichloroethene	Averaged	9.66686			0.41697	
cis-1,2-Dichloroethene	Averaged	8.93106			0.51447	
trans-1,2-Dichloroethene	Averaged	12.32872			0.48560	
1,2-Dichloropropane	Averaged	9.53372			0.47297	
1,3-Dichloropropane	Averaged	11.83352			1.34834	
2,2-Dichloropropane	Averaged	6.16341			0.63089	
1,1-Dichloropropene	Averaged	5.03957			0.57833	
cis-1,3-Dichloropropene	Averaged	9.48997			0.60759	
trans-1,3-Dichloropropene	Averaged	14.90897			1.42859	
Diethyl ether (Ethyl ether)	Averaged	5.91986			0.17183	
1,4-Dioxane (p-Dioxane)	Averaged	13.95999			0.00125	
Ethylbenzene	Averaged	7.37656			1.81669	
n-Heptane	Averaged	6.01764			0.08645	
Hexachloro-1,3-butadiene	Averaged	13.43268			0.52094	
n-Hexane	Averaged	6.95822			0.72934	
2-Hexanone	Wt Linear		0.99907	0.00414580	0.50552	
Isopropylbenzene (Cumene)	Averaged	11.02277			4.97952	
p-Isopropyltoluene	Averaged	12.76869			3.98328	
Methyl acetate	Averaged	9.95487			0.16461	
Methylcyclohexane	Averaged	6.68243			0.63492	
Methylene Chloride	Averaged	13.77431			0.39856	
1-Methylnaphthalene	Quadratic		0.99994	-0.0022598	0.61094	0.05320
2-Methylnaphthalene	Quadratic		0.99974	-0.0079680	0.76107	0.05915
4-Methyl-2-pentanone (MIBK)	Averaged	14.44114			0.20069	
Methyl-tert-butyl ether	Averaged	12.69989			0.75801	
Naphthalene	Wt Linear		0.99262	-0.0063960	1.92445	
n-Propylbenzene	Averaged	9.93687			1.36370	
Styrene	Averaged	14.92436			3.16078	
1,1,1,2-Tetrachloroethane	Averaged	12.19944			1.40345	
1,1,2,2-Tetrachloroethane	Averaged	14.91284			0.69253	
Tetrachloroethene	Averaged	9.60249			1.69761	
Tetrahydrofuran	Averaged	9.18876			0.06238	
Toluene	Averaged	10.90103			3.24040	
1,2,3-Trichlorobenzene	Wt Linear		0.99283	-0.0014762	0.80020	
1,2,4-Trichlorobenzene	Averaged	14.80361			1.00538	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-9

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1,1-Trichloroethane	Averaged	8.82242			0.69998	
1,1,2-Trichloroethane	Averaged	11.95652			0.71758	
Trichloroethene	Averaged	7.52564			0.49351	
Trichlorofluoromethane	Averaged	6.23281			0.71095	
1,2,3-Trichloropropane	Wt Linear		0.99741	0.00093070	0.18670	
1,2,3-Trimethylbenzene	Wt Linear		0.99898	0.00953150	3.40198	
1,2,4-Trimethylbenzene	Averaged	12.08492			3.71125	
1,3,5-Trimethylbenzene	Averaged	11.86786			3.83738	
Vinyl chloride	Averaged	7.43010			0.54284	
m&p-Xylene	Averaged	13.49839			2.16391	
o-Xylene	Averaged	12.39669			2.09376	
4-Bromofluorobenzene (S)	Averaged	1.99560			0.81652	
1,2-Dichlorobenzene-d4 (S)	Averaged	0.76646			0.83900	
Toluene-d8 (S)	Averaged	2.89751			2.82916	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Averaged	0.15923	0.14293	0.12603	0.13635	0.12235	0.11988
Acrolein	Averaged	0.05049	0.04990	0.05350	0.05490	0.05571	0.05649
Acrylonitrile	Averaged	0.09636	0.09689	0.10184	0.10239	0.10374	0.10225
Benzene	Averaged	1.08325	1.01715	0.99635	1.01610	1.05444	1.05031
Bromobenzene	Averaged	0.87511	0.80229	0.84068	0.81596	0.83768	0.85540
Bromochloromethane	Averaged	0.14232	0.14333	0.15095	0.14744	0.15615	0.15318
Bromodichloromethane	Averaged	0.30798	0.31054	0.32468	0.34262	0.36483	0.37931
Bromoform	Wt Linear	0.35231	0.38302	0.41012	0.44460	0.51032	0.56413
Bromomethane	Averaged		0.22512	0.23496	0.21211	0.20410	0.19757
2-Butanone (MEK)	Averaged	0.16636	0.15804	0.15809	0.16388	0.15910	0.16163
n-Butylbenzene	Averaged	2.32319	2.37338	2.45743	2.42033	2.58194	2.55226
sec-Butylbenzene	Averaged	3.16535	3.13988	3.04574	3.01605	3.13518	3.12433
tert-Butylbenzene	Averaged	2.14291	2.08224	2.00502	1.94892	2.03443	2.02846
Carbon disulfide	Averaged	0.71337	0.73815	0.71642	0.74090	0.80119	0.79916
Carbon tetrachloride	Averaged	0.35068	0.32782	0.33649	0.35145	0.38748	0.39165
Chlorobenzene	Averaged	1.96400	1.94490	1.96022	1.95701	2.05107	2.06169
Chloroethane	Averaged	0.15143	0.16121	0.16527	0.16321	0.17535	0.16595
Chloroform	Averaged	0.50170	0.48403	0.48569	0.48340	0.49980	0.50113
Chloromethane	Averaged	0.49368	0.47456	0.45102	0.43471	0.44797	0.42151
2-Chlorotoluene	Averaged	2.05291	1.91186	1.91326	1.87496	1.91053	1.89647
4-Chlorotoluene	Averaged	0.74633	0.72720	0.73282	0.71300	0.73812	0.74670
Cyclohexanone	Averaged	0.19231	0.20577	0.20295	0.20807	0.19700	0.20028
1,2-Dibromo-3-chloropropane	Averaged		0.07784	0.09498	0.10073	0.11146	0.11813
Dibromochloromethane	Averaged	0.55734	0.58065	0.61209	0.65856	0.73107	0.77400
1,2-Dibromoethane (EDB)	Averaged	0.52588	0.56669	0.61400	0.64343	0.67056	0.68434
Dibromomethane	Averaged	0.16622	0.17244	0.17741	0.18762	0.18942	0.19148
1,2-Dichlorobenzene	Averaged	1.65495	1.58339	1.58626	1.54101	1.56591	1.58910
1,3-Dichlorobenzene	Averaged	1.61507	1.55924	1.54813	1.53485	1.59023	1.59840
1,4-Dichlorobenzene	Averaged	1.60178	1.55364	1.57268	1.56302	1.61434	1.62072
1,1-Dichloroethane	Averaged	0.53306	0.49349	0.48440	0.49470	0.51096	0.51064
1,2-Dichloroethane	Averaged	0.38342	0.37147	0.37850	0.39082	0.40047	0.39489
1,1-Dichloroethene	Averaged	0.22867	0.22066	0.20403	0.21896	0.23696	0.23371
cis-1,2-Dichloroethene	Averaged	0.28850	0.28417	0.29350	0.29697	0.30845	0.31080
trans-1,2-Dichloroethene	Averaged	0.27385	0.25016	0.25023	0.25313	0.26852	0.26782
1,2-Dichloropropane	Averaged	0.32567	0.29733	0.30218	0.31208	0.31920	0.32452

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,3-Dichloropropane	Averaged	0.87527	0.87776	0.89381	0.92931	0.96923	0.97449
2,2-Dichloropropane	Averaged	0.38563	0.34786	0.34105	0.33614	0.36225	0.36747
1,1-Dichloropropene	Averaged	0.35302	0.33085	0.32449	0.33310	0.35183	0.35072
cis-1,3-Dichloropropene	Averaged	0.35468	0.34384	0.38196	0.42266	0.44080	0.46480
trans-1,3-Dichloropropene	Averaged	0.68873	0.71644	0.83309	0.85135	0.94252	0.97404
Diethyl ether (Ethyl ether)	Averaged	0.11330	0.12010	0.12513	0.12985	0.13386	0.13073
Ethylbenzene	Averaged	1.03975	0.96221	0.96300	1.00525	1.02750	1.02593
n-Heptane	Averaged	1.13824	1.13427	1.07511	1.11117	1.18296	1.18495
Hexachloro-1,3-butadiene	Averaged	0.70369	0.71995	0.73697	0.74532	0.81945	0.81229
n-Hexane	Averaged	0.44035	0.44258	0.39152	0.40217	0.42756	0.42712
2-Hexanone	Averaged	0.60977	0.62550	0.58885	0.62001	0.60096	0.60501
Iodomethane	Wt Linear	0.09299	0.12158	0.14590	0.20678	0.29807	0.31374
Isopropylbenzene (Cumene)	Averaged	3.24447	3.20342	3.12427	3.16525	3.34238	3.33538
p-Isopropyltoluene	Averaged	2.81087	2.74400	2.71815	2.72329	2.80552	2.77443
Methyl acetate	Averaged	0.20386	0.19567	0.20536	0.20837	0.20401	0.19908
Methylene Chloride	Averaged		0.35099	0.33064	0.31591	0.30508	0.29952
4-Methyl-2-pentanone (MIBK)	Averaged	0.32467	0.30636	0.31764	0.32279	0.31609	0.31614
Methyl-tert-butyl ether	Averaged	0.67455	0.65641	0.67417	0.69305	0.69729	0.69431
Naphthalene	Wt Linear	0.37414	0.47887	0.95469	1.66405	2.36863	2.51379
n-Propylbenzene	Averaged	0.77237	0.72028	0.74995	0.71132	0.73603	0.76035
Styrene	Averaged	2.04251	2.01818	2.02462	2.07699	2.19775	2.22949
1,1,1,2-Tetrachloroethane	Averaged	0.65629	0.64981	0.67413	0.70266	0.76604	0.78242
1,1,2,2-Tetrachloroethane	Averaged	0.61175	0.65189	0.69676	0.67563	0.68438	0.69844
Tetrachloroethene	Averaged	0.90090	0.87776	0.83105	0.84703	0.90156	0.89463
Tetrahydrofuran	Averaged	0.45154	0.44170	0.47239	0.45137	0.44459	0.43412
Toluene	Averaged	1.71680	1.69394	1.58938	1.62267	1.67118	1.65751
1,2,3-Trichlorobenzene	Wt Linear	0.30463	0.47371	0.76528	1.04612	1.23433	1.25892
1,2,4-Trichlorobenzene	Wt Linear	0.36361	0.53222	0.80658	1.08901	1.31898	1.34283
1,1,1-Trichloroethane	Averaged	0.41562	0.38930	0.38440	0.40395	0.42503	0.43144
1,1,2-Trichloroethane	Averaged	0.46716	0.49061	0.50586	0.51708	0.53297	0.53869
Trichloroethene	Averaged	0.29444	0.27344	0.27878	0.27958	0.29926	0.29988
Trichlorofluoromethane	Averaged	0.37347	0.39139	0.38699	0.41100	0.44913	0.44074
1,2,3-Trichloropropane	Averaged	0.17668	0.16654	0.17686	0.17010	0.17289	0.17750
1,1,2-Trichlorotrifluoroethane	Averaged	0.24954	0.25467	0.24477	0.25581	0.27739	0.27127
1,2,3-Trimethylbenzene	Averaged	2.60345	2.53092	2.53408	2.49963	2.54417	2.51573

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-3

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,2,4-Trimethylbenzene	Averaged	2.62920	2.49052	2.46845	2.37006	2.42797	2.47526
1,3,5-Trimethylbenzene	Averaged	2.54778	2.35944	2.37664	2.31198	2.37179	2.39605
Vinyl acetate	Averaged	1.08781	1.02843	1.07423	1.11056	1.10954	1.09981
Vinyl chloride	Averaged	0.33078	0.32760	0.31790	0.31063	0.34036	0.32315
m&p-Xylene	Averaged	1.30122	1.29263	1.23340	1.24768	1.32252	1.32196
o-Xylene	Averaged	1.31128	1.29656	1.25258	1.27944	1.33402	1.33148
4-Bromofluorobenzene (S)	Averaged	0.76768	0.76771	0.77495	0.73807	0.73102	0.73597
1,2-Dichlorobenzene-d4 (S)	Averaged	0.96851	0.94566	0.96152	0.93816	0.93436	0.92085
Toluene-d8 (S)	Averaged	2.35404	2.38810	2.36003	2.41419	2.37744	2.38276

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
Acetone	Averaged	0.11043	12.51767			0.13103	
Acrolein	Averaged	0.05346	4.69471			0.05349	
Acrylonitrile	Averaged	0.09643	3.26151			0.09999	
Benzene	Averaged	0.99199	3.26409			1.02994	
Bromobenzene	Averaged	0.80865	3.16553			0.83368	
Bromochloromethane	Averaged	0.14428	3.59066			0.14823	
Bromodichloromethane	Averaged	0.37152	8.60104			0.34307	
Bromoform	Wt Linear	0.61749		0.99898	-0.0291224	0.62253	
Bromomethane	Averaged	0.17477	10.22701			0.20810	
2-Butanone (MEK)	Averaged	0.15064	3.16513			0.15968	
n-Butylbenzene	Averaged	2.38143	3.91946			2.44142	
sec-Butylbenzene	Averaged	2.85278	3.56602			3.06847	
tert-Butylbenzene	Averaged	1.86876	4.40404			2.01582	
Carbon disulfide	Averaged	0.76833	4.83021			0.75393	
Carbon tetrachloride	Averaged	0.37562	6.94016			0.36017	
Chlorobenzene	Averaged	1.89924	2.96289			1.97688	
Chloroethane	Averaged	0.14801	5.72083			0.16149	
Chloroform	Averaged	0.47030	2.41804			0.48944	
Chloromethane	Averaged	0.38409	8.04271			0.44393	
2-Chlorotoluene	Averaged	1.78818	4.09689			1.90688	
4-Chlorotoluene	Averaged	0.70135	2.33111			0.72936	
Cyclohexanone	Averaged	0.19146	3.21568			0.19969	
1,2-Dibromo-3-chloropropane	Averaged	0.11550	14.77076			0.10311	
Dibromochloromethane	Averaged	0.77169	13.50690			0.66934	
1,2-Dibromoethane (EDB)	Averaged	0.65308	9.28072			0.62257	
Dibromomethane	Averaged	0.18416	5.22847			0.18125	
1,2-Dichlorobenzene	Averaged	1.43675	4.24453			1.56534	
1,3-Dichlorobenzene	Averaged	1.47729	2.98700			1.56046	
1,4-Dichlorobenzene	Averaged	1.49050	2.85233			1.57381	
1,1-Dichloroethane	Averaged	0.49890	3.18416			0.50374	
1,2-Dichloroethane	Averaged	0.36912	3.09015			0.38410	
1,1-Dichloroethene	Averaged	0.23021	4.98811			0.22474	
cis-1,2-Dichloroethene	Averaged	0.29127	3.37329			0.29624	
trans-1,2-Dichloroethene	Averaged	0.25250	3.91502			0.25946	
1,2-Dichloropropane	Averaged	0.31137	3.44252			0.31319	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
1,3-Dichloropropane	Averaged	0.90822	4.46103			0.91830	
2,2-Dichloropropane	Averaged	0.34804	4.86502			0.35549	
1,1-Dichloropropene	Averaged	0.33491	3.44440			0.33985	
cis-1,3-Dichloropropene	Averaged	0.44506	11.64700			0.40769	
trans-1,3-Dichloropropene	Averaged	0.94486	13.33198			0.85015	
Diethyl ether (Ethyl ether)	Averaged	0.12293	5.65115			0.12513	
Ethylbenzene	Averaged	0.98565	3.16518			1.00133	
n-Heptane	Averaged	1.11273	3.49939			1.13421	
Hexachloro-1,3-butadiene	Averaged	0.78120	5.94394			0.75984	
n-Hexane	Averaged	0.40856	4.65364			0.41998	
2-Hexanone	Averaged	0.55784	3.75932			0.60114	
Iodomethane	Wt Linear	0.29728		0.99896	-0.0073354	0.30182	
Isopropylbenzene (Cumene)	Averaged	3.27947	2.56348			3.24209	
p-Isopropyltoluene	Averaged	2.55970	3.11490			2.73371	
Methyl acetate	Averaged	0.17968	4.84374			0.19943	
Methylene Chloride	Averaged	0.28100	7.84016			0.31386	
4-Methyl-2-pentanone (MIBK)	Averaged	0.30150	2.65818			0.31503	
Methyl-tert-butyl ether	Averaged	0.65879	2.49967			0.67837	
Naphthalene	Wt Linear	2.35978		0.99869	-0.0652234	2.40117	
n-Propylbenzene	Averaged	0.71049	3.32523			0.73726	
Styrene	Averaged	2.13660	4.06020			2.10373	
1,1,1,2-Tetrachloroethane	Averaged	0.76859	7.98937			0.71428	
1,1,2,2-Tetrachloroethane	Averaged	0.68288	4.56113			0.67167	
Tetrachloroethene	Averaged	0.82930	3.73208			0.86889	
Tetrahydrofuran	Averaged	0.40860	4.38815			0.44347	
Toluene	Averaged	1.53704	3.81644			1.64122	
1,2,3-Trichlorobenzene	Wt Linear	1.16921		0.99880	-0.0084481	1.18242	
1,2,4-Trichlorobenzene	Wt Linear	1.24128		0.99865	-0.0080417	1.25561	
1,1,1-Trichloroethane	Averaged	0.41073	4.26780			0.40864	
1,1,2-Trichloroethane	Averaged	0.50819	4.82903			0.50865	
Trichloroethene	Averaged	0.28525	3.70828			0.28723	
Trichlorofluoromethane	Averaged	0.41859	6.86711			0.41019	
1,2,3-Trichloropropane	Averaged	0.17088	2.39817			0.17306	
1,1,2-Trichlorotrifluoroethane	Averaged	0.25433	4.54814			0.25825	
1,2,3-Trimethylbenzene	Averaged	2.30306	3.77627			2.50443	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
1,2,4-Trimethylbenzene	Averaged	2.27832	4.44490			2.44854	
1,3,5-Trimethylbenzene	Averaged	2.24133	3.93711			2.37214	
Vinyl acetate	Averaged	1.03396	3.17763			1.07776	
Vinyl chloride	Averaged	0.30428	3.81653			0.32210	
m&p-Xylene	Averaged	1.20812	3.56607			1.27536	
o-Xylene	Averaged	1.25232	2.63509			1.29395	
4-Bromofluorobenzene (S)	Averaged	0.74644	2.39291			0.75169	
1,2-Dichlorobenzene-d4 (S)	Averaged	0.91338	2.13470			0.94035	
Toluene-d8 (S)	Averaged	2.32551	1.19384			2.37172	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:42 10:00

LAB FILE ID

CAL1 = 072721AGRO.B\0727A_04.D CAL2 = 072721AGRO.B\0727A_05.D CAL3 = 072721AGRO.B\0727A_06.D

CAL4 = 072721AGRO.B\0727A_07.D CAL5 = 072721AGRO.B\0727A_08.D CAL6 = 072721AGRO.B\0727A_09.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
TPH-GRO	Averaged	4323.4560	4266.8680	4525.0160	4554.4482	4425.8042	4227.7011
4-Bromofluorobenzene (S)	Averaged	13231.2000	13606.0800	14589.4400	15457.5800	19007.6000	25940.5000
1,2-Dichlorobenzene-d4 (S)	Averaged	17904.6600	18553.6000	19687.4200	22181.3800	27551.8200	40489.2400
Toluene-d8 (S)	Averaged	17216.2800	17344.8800	17694.6000	17803.8000	19371.5200	19999.3600

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:42 10:00

LAB FILE ID

CAL1 = 072721AGRO.B\0727A_04.D CAL2 = 072721AGRO.B\0727A_05.D CAL3 = 072721AGRO.B\0727A_06.D

CAL4 = 072721AGRO.B\0727A_07.D CAL5 = 072721AGRO.B\0727A_08.D CAL6 = 072721AGRO.B\0727A_09.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
TPH-GRO	Averaged	3.09922			4387.21560	
4-Bromofluorobenzene (S)	Averaged	28.60772			16972.0666	
1,2-Dichlorobenzene-d4 (S)	Averaged	35.37245			24394.6866	
Toluene-d8 (S)	Averaged	6.35294			18238.4066	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

19754652ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:53

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080221A.B\0802A_22.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	116.0200	0.0500	16.0201	20.0000
Acetonitrile	Averaged	0.19790	0.18992	0.0500	-4.0335	20.0000
Acrolein	Averaged	0.03785	0.03783	0.0500	-0.0356	20.0000
Acrylonitrile	Averaged	0.08268	0.08518	0.0500	3.0228	20.0000
Benzene	Averaged	1.63260	1.57226	0.3000	-3.6960	20.0000
Bromobenzene	Wt Linear	20	19.44843	0.0500	-2.7578	20.0000
Bromochloromethane	Averaged	0.23967	0.23481	0.0500	-2.0281	20.0000
Bromodichloromethane	Averaged	0.49671	0.49121	0.0500	-1.1074	20.0000
Bromoform	Wt Linear	20	19.46422	0.1000	-2.6789	20.0000
Bromomethane	Wt Linear	20	20.49057	0.0500	2.4529	20.0000
2-Butanone (MEK)	Averaged	0.13100	0.13960	0.0500	6.5597	20.0000
n-Butylbenzene	Averaged	3.15861	3.05460	0.0500	-3.2926	20.0000
sec-Butylbenzene	Averaged	4.59240	4.56501	0.0500	-0.5964	20.0000
tert-Butylbenzene	Averaged	3.32747	3.30011	0.0500	-0.8220	20.0000
Carbon disulfide	Averaged	1.09596	1.07041	0.0500	-2.3315	20.0000
Carbon tetrachloride	Averaged	0.65199	0.64231	0.1000	-1.4842	20.0000
Chlorobenzene	Averaged	3.46849	3.39464	0.3000	-2.1293	20.0000
Chloroethane	Wt Linear	20	20.08090	0.0500	0.4045	20.0000
2-Chloroethylvinyl ether	Averaged	0.10026	0.10353	0.0500	3.2619	20.0000
Chloroform	Averaged	0.76653	0.75393	0.0500	-1.6436	20.0000
Chloromethane	Averaged	0.47178	0.42145	0.1000	-10.6689	20.0000
2-Chlorotoluene	Averaged	3.19804	3.00885	0.0500	-5.9159	20.0000
4-Chlorotoluene	Wt Linear	20	20.21294	0.0500	1.0647	20.0000
Cyclohexane	Averaged	0.88143	0.93364	0.0500	5.9235	20.0000
Cyclohexanone	Wt Linear	100	94.50946	0.0500	-5.4905	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.07118	0.07000	0.0500	-1.6584	20.0000
Dibromochloromethane	Averaged	1.14305	1.12551	0.0500	-1.5347	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.84948	0.86278	0.0500	1.5661	20.0000
Dibromomethane	Averaged	0.21580	0.20335	0.0500	-5.7699	20.0000
1,2-Dichlorobenzene	Wt Linear	20	20.06916	0.0500	0.3458	20.0000
1,3-Dichlorobenzene	Averaged	2.39339	2.25246	0.0500	-5.8883	20.0000
1,4-Dichlorobenzene	Averaged	2.40850	2.26045	0.0500	-6.1470	20.0000
Dichlorodifluoromethane	Averaged	0.50630	0.49291	0.0500	-2.6453	20.0000
1,1-Dichloroethane	Averaged	0.89978	0.89342	0.1000	-0.7068	20.0000
1,2-Dichloroethane	Averaged	0.48420	0.47722	0.0500	-1.4408	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

19754652ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:53

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080221A.B\0802A_22.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41697	0.40147	0.1000	-3.7162	20.0000
cis-1,2-Dichloroethene	Averaged	0.51447	0.50511	0.1000	-1.8195	20.0000
trans-1,2-Dichloroethene	Averaged	0.48560	0.47539	0.1000	-2.1033	20.0000
1,2-Dichloropropane	Averaged	0.47297	0.46396	0.0500	-1.9053	20.0000
1,3-Dichloropropane	Averaged	1.34834	1.29598	0.0500	-3.8830	20.0000
2,2-Dichloropropane	Averaged	0.63089	0.58404	0.0500	-7.4263	20.0000
1,1-Dichloropropene	Averaged	0.57833	0.57122	0.0500	-1.2286	20.0000
cis-1,3-Dichloropropene	Averaged	0.60759	0.60648	0.0500	-0.1829	20.0000
trans-1,3-Dichloropropene	Averaged	1.42859	1.40020	0.0500	-1.9873	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.17183	0.16590	0.0500	-3.4519	20.0000
1,4-Dioxane (p-Dioxane)	Averaged	0.00125	0.00112	0.0500	-10.4951	20.0000
Ethylbenzene	Averaged	1.81669	1.74236	0.3000	-4.0915	20.0000
n-Heptane	Averaged	0.08645	0.08570	0.0500	-0.8688	20.0000
Hexachloro-1,3-butadiene	Averaged	0.52094	0.52966	0.0500	1.6734	20.0000
n-Hexane	Averaged	0.72934	0.74045	0.0500	1.5235	20.0000
2-Hexanone	Wt Linear	100	116.6083	0.0500	16.6084	20.0000
Isopropylbenzene (Cumene)	Averaged	4.97952	4.98169	0.0500	0.0435	20.0000
p-Isopropyltoluene	Averaged	3.98328	4.03996	0.0500	1.4228	20.0000
Methyl acetate	Averaged	0.16461	0.16077	0.0500	-2.3319	20.0000
Methylcyclohexane	Averaged	0.63492	0.64805	0.0500	2.0669	20.0000
Methylene Chloride	Averaged	0.39856	0.34169	0.0500	-14.2683	20.0000
1-Methylnaphthalene	Quadratic	20	21.65032	0.0500	8.2516	20.0000
2-Methylnaphthalene	Quadratic	20	21.65858	0.0500	8.2929	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.20069	0.20223	0.0500	0.7652	20.0000
Methyl-tert-butyl ether	Averaged	0.75801	0.77803	0.3000	2.6404	20.0000
Naphthalene	Wt Linear	20	17.57158	0.3000	-12.1421	20.0000
n-Propylbenzene	Averaged	1.36370	1.30738	0.0500	-4.1300	20.0000
Styrene	Averaged	3.16078	3.09736	0.0500	-2.0065	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.40345	1.29322	0.0500	-7.8542	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.69253	0.65316	0.3000	-5.6859	20.0000
Tetrachloroethene	Averaged	1.69761	1.65873	0.1000	-2.2899	20.0000
Tetrahydrofuran	Averaged	0.06238	0.06148	0.0500	-1.4369	20.0000
Toluene	Averaged	3.24040	3.05099	0.3000	-5.8455	20.0000
1,2,3-Trichlorobenzene	Wt Linear	20	18.55085	0.0500	-7.2457	20.0000
1,2,4-Trichlorobenzene	Averaged	1.00538	0.89241	0.0500	-11.2370	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

19754652ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:53

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080221A.B\0802A_22.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.69998	0.66571	0.0500	-4.8965	20.0000
1,1,2-Trichloroethane	Averaged	0.71758	0.68699	0.0500	-4.2621	20.0000
Trichloroethene	Averaged	0.49351	0.49319	0.1000	-0.0659	20.0000
Trichlorofluoromethane	Averaged	0.71095	0.73082	0.0500	2.7954	20.0000
1,2,3-Trichloropropane	Wt Linear	20	20.11857	0.0500	0.5929	20.0000
1,2,3-Trimethylbenzene	Wt Linear	20	20.47263	0.0500	2.3632	20.0000
1,2,4-Trimethylbenzene	Averaged	3.71125	3.61475	0.0500	-2.6004	20.0000
1,3,5-Trimethylbenzene	Averaged	3.83738	3.67129	0.0500	-4.3282	20.0000
Vinyl chloride	Averaged	0.54284	0.54583	0.0500	0.5518	20.0000
m&p-Xylene	Averaged	2.16391	2.05655	0.3000	-4.9613	20.0000
o-Xylene	Averaged	2.09376	1.98944	0.3000	-4.9823	20.0000
4-Bromofluorobenzene (S)	Averaged	0.81652	0.82851	0.3000	1.4684	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.83900	0.83060	0.2000	-1.0012	20.0000
Toluene-d8 (S)	Averaged	2.82916	2.81016	0.3000	-0.6719	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19756796CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/03/2021 Time: 07:10

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080321A.B\0803A_03CCV.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	85.77050	0.0500	-14.2295	20.0000
Acetonitrile	Averaged	0.19790	0.18940	0.0500	-4.2987	20.0000
Acrolein	Averaged	0.03785	0.03253	0.0500	-14.0571	20.0000
Acrylonitrile	Averaged	0.08268	0.07602	0.0500	-8.0583	20.0000
Benzene	Averaged	1.63260	1.54997	0.3000	-5.0615	20.0000
Bromobenzene	Wt Linear	20	19.60276	0.0500	-1.9862	20.0000
Bromochloromethane	Averaged	0.23967	0.24406	0.0500	1.8315	20.0000
Bromodichloromethane	Averaged	0.49671	0.46950	0.0500	-5.4776	20.0000
Bromoform	Wt Linear	20	17.19181	0.1000	-14.0409	20.0000
Bromomethane	Wt Linear	20	16.68879	0.0500	-16.5560	20.0000
2-Butanone (MEK)	Averaged	0.13100	0.11098	0.0500	-15.2864	20.0000
n-Butylbenzene	Averaged	3.15861	2.94227	0.0500	-6.8491	20.0000
sec-Butylbenzene	Averaged	4.59240	4.61141	0.0500	0.4141	20.0000
tert-Butylbenzene	Averaged	3.32747	3.23925	0.0500	-2.6510	20.0000
Carbon disulfide	Averaged	1.09596	1.12951	0.0500	3.0608	20.0000
Carbon tetrachloride	Averaged	0.65199	0.63539	0.1000	-2.5460	20.0000
Chlorobenzene	Averaged	3.46849	3.47089	0.3000	0.0690	20.0000
Chloroethane	Wt Linear	20	20.03967	0.0500	0.1984	20.0000
2-Chloroethylvinyl ether	Averaged	0.10026	0.09239	0.0500	-7.8561	20.0000
Chloroform	Averaged	0.76653	0.75204	0.0500	-1.8907	20.0000
Chloromethane	Averaged	0.47178	0.42738	0.1000	-9.4125	20.0000
2-Chlorotoluene	Averaged	3.19804	3.03241	0.0500	-5.1791	20.0000
4-Chlorotoluene	Wt Linear	20	19.79232	0.0500	-1.0384	20.0000
Cyclohexane	Averaged	0.88143	0.90130	0.0500	2.2548	20.0000
Cyclohexanone	Wt Linear	100	77.24890	0.0500	-22.7511	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.07118	0.06408	0.0500	-9.9763	20.0000
Dibromochloromethane	Averaged	1.14305	1.06317	0.0500	-6.9879	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.84948	0.84235	0.0500	-0.8396	20.0000
Dibromomethane	Averaged	0.21580	0.19962	0.0500	-7.4979	20.0000
1,2-Dichlorobenzene	Wt Linear	20	18.84290	0.0500	-5.7855	20.0000
1,3-Dichlorobenzene	Averaged	2.39339	2.29758	0.0500	-4.0031	20.0000
1,4-Dichlorobenzene	Averaged	2.40850	2.20922	0.0500	-8.2739	20.0000
Dichlorodifluoromethane	Averaged	0.50630	0.51577	0.0500	1.8711	20.0000
1,1-Dichloroethane	Averaged	0.89978	0.87108	0.1000	-3.1892	20.0000
1,2-Dichloroethane	Averaged	0.48420	0.48070	0.0500	-0.7218	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19756796CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/03/2021 Time: 07:10

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080321A.B\0803A_03CCV.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41697	0.42244	0.1000	1.3122	20.0000
cis-1,2-Dichloroethene	Averaged	0.51447	0.49658	0.1000	-3.4774	20.0000
trans-1,2-Dichloroethene	Averaged	0.48560	0.48927	0.1000	0.7548	20.0000
1,2-Dichloropropane	Averaged	0.47297	0.44131	0.0500	-6.6935	20.0000
1,3-Dichloropropane	Averaged	1.34834	1.28097	0.0500	-4.9962	20.0000
2,2-Dichloropropane	Averaged	0.63089	0.62814	0.0500	-0.4357	20.0000
1,1-Dichloropropene	Averaged	0.57833	0.56419	0.0500	-2.4450	20.0000
cis-1,3-Dichloropropene	Averaged	0.60759	0.58667	0.0500	-3.4437	20.0000
trans-1,3-Dichloropropene	Averaged	1.42859	1.36963	0.0500	-4.1269	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.17183	0.16068	0.0500	-6.4915	20.0000
1,4-Dioxane (p-Dioxane)	Averaged	0.00125	0.00111	0.0500	-11.2932	20.0000
Ethylbenzene	Averaged	1.81669	1.74754	0.3000	-3.8067	20.0000
n-Heptane	Averaged	0.08645	0.08444	0.0500	-2.3276	20.0000
Hexachloro-1,3-butadiene	Averaged	0.52094	0.46428	0.0500	-10.8766	20.0000
n-Hexane	Averaged	0.72934	0.70645	0.0500	-3.1377	20.0000
2-Hexanone	Wt Linear	100	82.53152	0.0500	-17.4685	20.0000
Isopropylbenzene (Cumene)	Averaged	4.97952	5.03672	0.0500	1.1487	20.0000
p-Isopropyltoluene	Averaged	3.98328	3.90558	0.0500	-1.9506	20.0000
Methyl acetate	Averaged	0.16461	0.14894	0.0500	-9.5199	20.0000
Methylcyclohexane	Averaged	0.63492	0.63201	0.0500	-0.4584	20.0000
Methylene Chloride	Averaged	0.39856	0.36338	0.0500	-8.8247	20.0000
1-Methylnaphthalene	Quadratic	20	16.1917	0.0500	-19.0415	20.0000
2-Methylnaphthalene	Quadratic	20	14.94820	0.0500	-25.2590	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.20069	0.17501	0.0500	-12.7967	20.0000
Methyl-tert-butyl ether	Averaged	0.75801	0.71904	0.3000	-5.1414	20.0000
Naphthalene	Wt Linear	20	14.99252	0.3000	-25.0374	20.0000
n-Propylbenzene	Averaged	1.36370	1.31229	0.0500	-3.7701	20.0000
Styrene	Averaged	3.16078	3.10827	0.0500	-1.6613	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.40345	1.30329	0.0500	-7.1367	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.69253	0.59666	0.3000	-13.8439	20.0000
Tetrachloroethene	Averaged	1.69761	1.72278	0.1000	1.4829	20.0000
Tetrahydrofuran	Averaged	0.06238	0.05327	0.0500	-14.6016	20.0000
Toluene	Averaged	3.24040	3.10683	0.3000	-4.1222	20.0000
1,2,3-Trichlorobenzene	Wt Linear	20	16.21503	0.0500	-18.9248	20.0000
1,2,4-Trichlorobenzene	Averaged	1.00538	0.83891	0.0500	-16.5579	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19756796CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/03/2021 Time: 07:10

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080321A.B\0803A_03CCV.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.69998	0.71196	0.0500	1.7111	20.0000
1,1,2-Trichloroethane	Averaged	0.71758	0.64755	0.0500	-9.7586	20.0000
Trichloroethene	Averaged	0.49351	0.46740	0.1000	-5.2904	20.0000
Trichlorofluoromethane	Averaged	0.71095	0.76783	0.0500	8.0010	20.0000
1,2,3-Trichloropropane	Wt Linear	20	19.11054	0.0500	-4.4473	20.0000
1,2,3-Trimethylbenzene	Wt Linear	20	19.49742	0.0500	-2.5129	20.0000
1,2,4-Trimethylbenzene	Averaged	3.71125	3.62873	0.0500	-2.2237	20.0000
1,3,5-Trimethylbenzene	Averaged	3.83738	3.71970	0.0500	-3.0667	20.0000
Vinyl chloride	Averaged	0.54284	0.52726	0.0500	-2.8701	20.0000
m&p-Xylene	Averaged	2.16391	2.11605	0.3000	-2.2119	20.0000
o-Xylene	Averaged	2.09376	1.99850	0.3000	-4.5498	20.0000
4-Bromofluorobenzene (S)	Averaged	0.81652	0.79494	0.3000	-2.6426	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.83900	0.82735	0.2000	-1.3885	20.0000
Toluene-d8 (S)	Averaged	2.82916	2.85113	0.3000	0.7762	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

19684415ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.12485	0.0500	-8.5178	20.0000
Acrolein	Averaged	0.05349	0.05996	0.0500	5.0774	20.0000
Acrylonitrile	Averaged	0.09999	0.10586	0.0500	1.8661	20.0000
Benzene	Averaged	1.02994	1.02173	0.3000	1.9652	20.0000
Bromobenzene	Averaged	0.83368	0.81534	0.0500	2.6050	20.0000
Bromochloromethane	Averaged	0.14823	0.15027	0.0500	3.3236	20.0000
Bromodichloromethane	Averaged	0.34307	0.38351	0.0500	10.5511	20.0000
Bromoform	Wt Linear	100	97.70592	0.1000	-2.2941	20.0000
Bromomethane	Averaged	0.20810	0.20208	0.0500	-11.8058	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.16815	0.0500	1.3869	20.0000
n-Butylbenzene	Averaged	2.44142	2.47154	0.0500	4.4561	20.0000
sec-Butylbenzene	Averaged	3.06847	3.02062	0.0500	1.8277	20.0000
tert-Butylbenzene	Averaged	2.01582	1.95828	0.0500	0.8114	20.0000
Carbon disulfide	Averaged	0.75393	0.83297	0.0500	6.0414	20.0000
Carbon tetrachloride	Averaged	0.36017	0.38992	0.1000	8.7303	20.0000
Chlorobenzene	Averaged	1.97688	2.00433	0.3000	4.3442	20.0000
Chloroethane	Averaged	0.16149	0.17752	0.0500	2.7473	20.0000
Chloroform	Averaged	0.48944	0.50463	0.0500	2.3773	20.0000
Chloromethane	Averaged	0.44393	0.52693	0.1000	-5.0634	20.0000
2-Chlorotoluene	Averaged	1.90688	1.83524	0.0500	-0.5178	20.0000
4-Chlorotoluene	Averaged	0.72936	0.71690	0.0500	2.3799	20.0000
Cyclohexanone	Averaged	0.19969	0.20256	0.0500	0.3432	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.12029	0.0500	31.2020*	20.0000
Dibromochloromethane	Averaged	0.66934	0.79515	0.0500	15.7023	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.69207	0.0500	9.9818	20.0000
Dibromomethane	Averaged	0.18125	0.18977	0.0500	5.6308	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.55132	0.0500	1.4983	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.55360	0.0500	2.4238	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.60568	0.0500	2.9807	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.51805	0.1000	1.3703	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.39385	0.0500	2.8276	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.24483	0.1000	3.6845	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.30226	0.1000	4.9060	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.26726	0.1000	3.2083	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.31865	0.0500	3.6076	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

19684415ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.95571	0.0500	6.1729	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.35538	0.0500	3.3580	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.34512	0.0500	3.1905	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.45777	0.0500	13.8968	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	0.96825	0.0500	14.5672	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.13312	0.0500	4.4620	20.0000
Ethylbenzene	Averaged	1.00133	0.98494	0.3000	2.5055	20.0000
n-Heptane	Averaged	1.13421	1.22772	0.0500	4.4617	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.81386	0.0500	7.0436	20.0000
n-Hexane	Averaged	0.41998	0.43726	0.0500	1.6764	20.0000
2-Hexanone	Averaged	0.60114	0.62360	0.0500	0.7021	20.0000
Iodomethane	Wt Linear	100	109.9506	0.0500	9.9507	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.27448	0.0500	2.9305	20.0000
p-Isopropyltoluene	Averaged	2.73371	2.74222	0.0500	1.4539	20.0000
Methyl acetate	Averaged	0.19943	0.20591	0.0500	-0.1878	20.0000
Methylene Chloride	Averaged	0.31386	0.29665	0.0500	-10.1466	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.32341	0.0500	0.2928	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.70277	0.3000	2.3247	20.0000
Naphthalene	Wt Linear	100	112.3373	0.3000	12.3374	20.0000
n-Propylbenzene	Averaged	0.73726	0.71342	0.0500	3.1340	20.0000
Styrene	Averaged	2.10373	2.17583	0.0500	6.0334	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.75806	0.0500	9.6048	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.69887	0.3000	3.9845	20.0000
Tetrachloroethene	Averaged	0.86889	0.87133	0.1000	3.0156	20.0000
Tetrahydrofuran	Averaged	0.44347	0.44680	0.0001	-1.5163	20.0000
Toluene	Averaged	1.64122	1.61768	0.3000	1.0179	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	108.3593	0.0500	8.3593	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	108.2064	0.0500	8.2064	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.40394	0.0500	5.5658	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.53342	0.0500	5.9615	20.0000
Trichloroethene	Averaged	0.28723	0.29553	0.1000	4.3603	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.46689	0.0500	7.4371	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.17056	0.0500	2.5307	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.28128	0.0500	5.0218	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.51504	0.0500	0.4512	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

19684415ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.41767	0.0500	1.0732	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.30971	0.0500	1.0132	20.0000
Vinyl acetate	Averaged	1.07776	1.10424	0.0500	2.6775	20.0000
Vinyl chloride	Averaged	0.32210	0.36660	0.0500	0.3128	20.0000
m&p-Xylene	Averaged	1.27536	1.25417	0.3000	3.7060	20.0000
o-Xylene	Averaged	1.29395	1.28607	0.3000	2.9529	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.72921	0.3000	-2.0917	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.92090	0.0500	-2.0736	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.38714	0.3000	0.5153	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19895948ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:16

Instrument ID: 60MSVC GC Column: Col 2 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721AGRO.B\0727A_10.D Init. Calib. Time(s): 08:42 10:00

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	4387.215	3784.906	0.0100	-13.7287	20.0000
4-Bromofluorobenzene (S)	Averaged	16972.06	16140.74	0.0100	-4.8982	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	24394.68	22966.40	0.0100	-5.8549	20.0000
Toluene-d8 (S)	Averaged	18238.40	17670.56	0.0100	-3.1135	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19752271CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072821A.B\0728A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.15125	0.0500	15.4361	20.0000
Acrolein	Averaged	0.05349	0.05515	0.0500	3.1004	20.0000
Acrylonitrile	Averaged	0.09999	0.09645	0.0500	-3.5387	20.0000
Benzene	Averaged	1.02994	1.14043	0.3000	10.7275	20.0000
Bromobenzene	Averaged	0.83368	0.88833	0.0500	6.5554	20.0000
Bromochloromethane	Averaged	0.14823	0.15936	0.0500	7.5073	20.0000
Bromodichloromethane	Averaged	0.34307	0.40060	0.0500	16.7706	20.0000
Bromoform	Wt Linear	100	96.78708	0.1000	-3.2129	20.0000
Bromomethane	Averaged	0.20810	0.20693	0.0500	-0.5638	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.17464	0.0500	9.3678	20.0000
n-Butylbenzene	Averaged	2.44142	2.84610	0.0500	16.5754	20.0000
sec-Butylbenzene	Averaged	3.06847	3.46901	0.0500	13.0534	20.0000
tert-Butylbenzene	Averaged	2.01582	2.25723	0.0500	11.9760	20.0000
Carbon disulfide	Averaged	0.75393	0.90713	0.0500	20.3208*	20.0000
Carbon tetrachloride	Averaged	0.36017	0.45156	0.1000	25.3732*	20.0000
Chlorobenzene	Averaged	1.97688	2.15550	0.3000	9.0355	20.0000
Chloroethane	Averaged	0.16149	0.18344	0.0500	13.5920	20.0000
Chloroform	Averaged	0.48944	0.53659	0.0500	9.6339	20.0000
Chloromethane	Averaged	0.44393	0.42828	0.1000	-3.5267	20.0000
2-Chlorotoluene	Averaged	1.90688	2.08667	0.0500	9.4283	20.0000
4-Chlorotoluene	Averaged	0.72936	0.81104	0.0500	11.1984	20.0000
Cyclohexanone	Averaged	0.19969	0.20431	0.0500	2.3150	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.11230	0.0500	8.9182	20.0000
Dibromochloromethane	Averaged	0.66934	0.77318	0.0500	15.5136	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.66034	0.0500	6.0670	20.0000
Dibromomethane	Averaged	0.18125	0.19040	0.0500	5.0452	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.59352	0.0500	1.8005	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.70546	0.0500	9.2923	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.67574	0.0500	6.4763	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.55399	0.1000	9.9752	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.39621	0.0500	3.1519	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.26376	0.1000	17.3606	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.32919	0.1000	11.1251	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.30225	0.1000	16.4922	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.33861	0.0500	8.1165	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19752271CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072821A.B\0728A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.93950	0.0500	2.3090	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.43317	0.0500	21.8524*	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.39780	0.0500	17.0516	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.48210	0.0500	18.2527	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	0.98105	0.0500	15.3983	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.12725	0.0500	1.6961	20.0000
Ethylbenzene	Averaged	1.00133	1.12806	0.3000	12.6563	20.0000
n-Heptane	Averaged	1.13421	1.32347	0.0500	16.6869	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.92046	0.0500	21.1397*	20.0000
n-Hexane	Averaged	0.41998	0.48331	0.0500	15.0785	20.0000
2-Hexanone	Averaged	0.60114	0.64315	0.0500	6.9884	20.0000
Iodomethane	Wt Linear	100	118.8191	0.0500	18.8192	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.74372	0.0500	15.4723	20.0000
p-Isopropyltoluene	Averaged	2.73371	3.12593	0.0500	14.3475	20.0000
Methyl acetate	Averaged	0.19943	0.18488	0.0500	-7.2996	20.0000
Methylene Chloride	Averaged	0.31386	0.30159	0.0500	-3.9089	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.29769	0.0500	-5.5045	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.68627	0.3000	1.1656	20.0000
Naphthalene	Wt Linear	100	102.5109	0.3000	2.5110	20.0000
n-Propylbenzene	Averaged	0.73726	0.85288	0.0500	15.6829	20.0000
Styrene	Averaged	2.10373	2.37217	0.0500	12.7602	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.81487	0.0500	14.0837	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.67310	0.3000	0.2120	20.0000
Tetrachloroethene	Averaged	0.86889	0.99736	0.1000	14.7851	20.0000
Tetrahydrofuran	Averaged	0.08869	0.07956	0.0001	-10.2943	20.0000
Toluene	Averaged	1.64122	1.77760	0.3000	8.3098	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	109.7591	0.0500	9.7591	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	112.8988	0.0500	12.8988	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.48441	0.0500	18.5426	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.52206	0.0500	2.6370	20.0000
Trichloroethene	Averaged	0.28723	0.33164	0.1000	15.4591	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.49222	0.0500	19.9987	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.16710	0.0500	-3.4442	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.30891	0.0500	19.6169	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.67550	0.0500	6.8307	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19752271CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 07:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072821A.B\0728A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.63819	0.0500	7.7453	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.64230	0.0500	11.3885	20.0000
Vinyl acetate	Averaged	1.07776	1.11401	0.0500	3.3628	20.0000
Vinyl chloride	Averaged	0.32210	0.34819	0.0500	8.0986	20.0000
m&p-Xylene	Averaged	1.27536	1.41959	0.3000	11.3090	20.0000
o-Xylene	Averaged	1.29395	1.42233	0.3000	9.9213	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.73776	0.3000	-1.8539	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.91174	0.0500	-3.0425	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.36151	0.3000	-0.4305	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19752320CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/29/2021 Time: 08:10

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072921A.B\0729A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.15392	0.0500	17.4729	20.0000
Acrolein	Averaged	0.05349	0.05681	0.0500	6.2031	20.0000
Acrylonitrile	Averaged	0.09999	0.09723	0.0500	-2.7565	20.0000
Benzene	Averaged	1.02994	1.11633	0.3000	8.3873	20.0000
Bromobenzene	Averaged	0.83368	0.90185	0.0500	8.1772	20.0000
Bromochloromethane	Averaged	0.14823	0.15782	0.0500	6.4684	20.0000
Bromodichloromethane	Averaged	0.34307	0.39157	0.0500	14.1364	20.0000
Bromoform	Wt Linear	100	99.05981	0.1000	-0.9402	20.0000
Bromomethane	Averaged	0.20810	0.20886	0.0500	0.3650	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.17896	0.0500	12.0742	20.0000
n-Butylbenzene	Averaged	2.44142	2.91165	0.0500	19.2602	20.0000
sec-Butylbenzene	Averaged	3.06847	3.54841	0.0500	15.6408	20.0000
tert-Butylbenzene	Averaged	2.01582	2.29954	0.0500	14.0746	20.0000
Carbon disulfide	Averaged	0.75393	0.88819	0.0500	17.8085	20.0000
Carbon tetrachloride	Averaged	0.36017	0.44721	0.1000	24.1654*	20.0000
Chlorobenzene	Averaged	1.97688	2.21413	0.3000	12.0012	20.0000
Chloroethane	Averaged	0.16149	0.15048	0.0500	-6.8201	20.0000
Chloroform	Averaged	0.48944	0.52722	0.0500	7.7193	20.0000
Chloromethane	Averaged	0.44393	0.42248	0.1000	-4.8324	20.0000
2-Chlorotoluene	Averaged	1.90688	2.03684	0.0500	6.8156	20.0000
4-Chlorotoluene	Averaged	0.72936	0.81433	0.0500	11.6502	20.0000
Cyclohexanone	Averaged	0.19969	0.21613	0.0500	8.2342	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.11609	0.0500	12.5941	20.0000
Dibromochloromethane	Averaged	0.66934	0.77045	0.0500	15.1061	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.66025	0.0500	6.0535	20.0000
Dibromomethane	Averaged	0.18125	0.18902	0.0500	4.2864	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.63382	0.0500	4.3752	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.69767	0.0500	8.7930	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.73590	0.0500	10.2992	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.54343	0.1000	7.8794	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.39000	0.0500	1.5353	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.26440	0.1000	17.6473	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.32368	0.1000	9.2621	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.29283	0.1000	12.8601	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.33222	0.0500	6.0742	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19752320CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/29/2021 Time: 08:10

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072921A.B\0729A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.94083	0.0500	2.4532	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.42197	0.0500	18.6994	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.39769	0.0500	17.0196	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.47467	0.0500	16.4302	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	0.97450	0.0500	14.6275	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.12765	0.0500	2.0186	20.0000
Ethylbenzene	Averaged	1.00133	1.16194	0.3000	16.0404	20.0000
n-Heptane	Averaged	1.13421	1.34131	0.0500	18.2601	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.98059	0.0500	29.0524*	20.0000
n-Hexane	Averaged	0.41998	0.47817	0.0500	13.8565	20.0000
2-Hexanone	Averaged	0.60114	0.66437	0.0500	10.5194	20.0000
Iodomethane	Wt Linear	100	124.2862	0.0500	24.2862*	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.75503	0.0500	15.8211	20.0000
p-Isopropyltoluene	Averaged	2.73371	3.16319	0.0500	15.7104	20.0000
Methyl acetate	Averaged	0.19943	0.18473	0.0500	-7.3717	20.0000
Methylene Chloride	Averaged	0.31386	0.30025	0.0500	-4.3349	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.30118	0.0500	-4.3968	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.67653	0.3000	-0.2712	20.0000
Naphthalene	Wt Linear	100	103.7875	0.3000	3.7875	20.0000
n-Propylbenzene	Averaged	0.73726	0.85988	0.0500	16.6326	20.0000
Styrene	Averaged	2.10373	2.34734	0.0500	11.5797	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.84360	0.0500	18.1049	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.69356	0.3000	3.2589	20.0000
Tetrachloroethene	Averaged	0.86889	1.00689	0.1000	15.8826	20.0000
Tetrahydrofuran	Averaged	0.08869	0.08091	0.0001	-8.7797	20.0000
Toluene	Averaged	1.64122	1.77306	0.3000	8.0333	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	112.4297	0.0500	12.4297	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	115.6212	0.0500	15.6213	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.47961	0.0500	17.3680	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.52198	0.0500	2.6196	20.0000
Trichloroethene	Averaged	0.28723	0.33191	0.1000	15.5548	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.48583	0.0500	18.4415	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.17201	0.0500	-0.6098	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.30434	0.0500	17.8469	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.70893	0.0500	8.1654	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19752320CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/29/2021 Time: 08:10

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 072921A.B\0729A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.68945	0.0500	9.8388	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.65927	0.0500	12.1041	20.0000
Vinyl acetate	Averaged	1.07776	1.09080	0.0500	1.2100	20.0000
Vinyl chloride	Averaged	0.32210	0.26097	0.0500	-18.9798	20.0000
m&p-Xylene	Averaged	1.27536	1.43422	0.3000	12.4556	20.0000
o-Xylene	Averaged	1.29395	1.41836	0.3000	9.6147	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.74321	0.3000	-1.1286	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.93002	0.0500	-1.0987	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.33992	0.3000	-1.3408	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

20134264CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/29/2021 Time: 08:41

Instrument ID: 60MSVC GC Column: Col 2 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072921AGRO.B\0729A_04.D Init. Calib. Time(s): 08:42 10:00

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	4387.215	4490.427	0.0100	2.3526	20.0000
4-Bromofluorobenzene (S)	Averaged	16972.06	15638.90	0.0100	-7.8551	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	24394.68	21649.44	0.0100	-11.2535	20.0000
Toluene-d8 (S)	Averaged	18238.40	17259.50	0.0100	-5.3673	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375923

Date Extracted: 08/03/2021 13:05 Lab Sample ID: 2950716

Date Analyzed: 08/03/2021 13:05 Lab File ID: 080321A.B\0803A_28LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	83.4	
75-05-8	Acetonitrile	90.4	
107-02-8	Acrolein	88.9	
107-13-1	Acrylonitrile	91.5	
71-43-2	Benzene	18.1	
108-86-1	Bromobenzene	19.0	
74-97-5	Bromochloromethane	20.0	
75-27-4	Bromodichloromethane	19.5	
75-25-2	Bromoform	17.3	
74-83-9	Bromomethane	17.0	
78-93-3	2-Butanone (MEK)	74.2	
104-51-8	n-Butylbenzene	17.8	
135-98-8	sec-Butylbenzene	18.9	
98-06-6	tert-Butylbenzene	19.1	
75-15-0	Carbon disulfide	19.5	
56-23-5	Carbon tetrachloride	20.1	
108-90-7	Chlorobenzene	18.8	
75-00-3	Chloroethane	20.0	
110-75-8	2-Chloroethylvinyl ether	91.2	
67-66-3	Chloroform	19.2	
74-87-3	Chloromethane	17.0	
95-49-8	2-Chlorotoluene	18.8	
106-43-4	4-Chlorotoluene	19.0	
110-82-7	Cyclohexane	19.3	
108-94-1	Cyclohexanone	75.1	
96-12-8	1,2-Dibromo-3-chloropropane	17.5	
124-48-1	Dibromochloromethane	18.9	
106-93-4	1,2-Dibromoethane (EDB)	19.3	
74-95-3	Dibromomethane	18.7	
95-50-1	1,2-Dichlorobenzene	18.8	
541-73-1	1,3-Dichlorobenzene	18.6	
106-46-7	1,4-Dichlorobenzene	18.0	
75-71-8	Dichlorodifluoromethane	19.6	
75-34-3	1,1-Dichloroethane	18.8	
107-06-2	1,2-Dichloroethane	19.3	
540-59-0	1,2-Dichloroethene (Total)	37.9	
75-35-4	1,1-Dichloroethene	20.1	

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

LCS

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375923

Date Extracted: 08/03/2021 13:05 Lab Sample ID: 2950716

Date Analyzed: 08/03/2021 13:05 Lab File ID: 080321A.B\0803A_28LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	18.8	
156-60-5	trans-1,2-Dichloroethene	19.0	
78-87-5	1,2-Dichloropropane	18.6	
142-28-9	1,3-Dichloropropane	18.0	
594-20-7	2,2-Dichloropropane	17.3	
563-58-6	1,1-Dichloropropene	19.3	
10061-01-5	cis-1,3-Dichloropropene	18.5	
10061-02-6	trans-1,3-Dichloropropene	18.7	
60-29-7	Diethyl ether (Ethyl ether)	18.5	
123-91-1	1,4-Dioxane (p-Dioxane)	83.2	J
100-41-4	Ethylbenzene	19.0	
142-82-5	n-Heptane	18.3	
87-68-3	Hexachloro-1,3-butadiene	17.7	
110-54-3	n-Hexane	17.6	
591-78-6	2-Hexanone	81.8	
98-82-8	Isopropylbenzene (Cumene)	19.8	
99-87-6	p-Isopropyltoluene	19.5	
79-20-9	Methyl acetate	87.9	
108-87-2	Methylcyclohexane	19.3	
75-09-2	Methylene Chloride	17.8	
90-12-0	1-Methylnaphthalene	16.0	
91-57-6	2-Methylnaphthalene	15.8	
108-10-1	4-Methyl-2-pentanone (MIBK)	85.4	
1634-04-4	Methyl-tert-butyl ether	19.2	
91-20-3	Naphthalene	15.5	
103-65-1	n-Propylbenzene	18.5	
100-42-5	Styrene	19.4	
630-20-6	1,1,1,2-Tetrachloroethane	18.5	
79-34-5	1,1,2,2-Tetrachloroethane	15.9	
127-18-4	Tetrachloroethene	20.3	
109-99-9	Tetrahydrofuran	85.0	
108-88-3	Toluene	18.3	
87-61-6	1,2,3-Trichlorobenzene	15.9	
120-82-1	1,2,4-Trichlorobenzene	16.6	
71-55-6	1,1,1-Trichloroethane	19.1	
79-00-5	1,1,2-Trichloroethane	17.8	
79-01-6	Trichloroethene	20.3	

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375923

Date Extracted: 08/03/2021 13:05 Lab Sample ID: 2950716

Date Analyzed: 08/03/2021 13:05 Lab File ID: 080321A.B\0803A_28LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	21.9	
96-18-4	1,2,3-Trichloropropane	18.9	
526-73-8	1,2,3-Trimethylbenzene	19.5	
95-63-6	1,2,4-Trimethylbenzene	18.4	
108-67-8	1,3,5-Trimethylbenzene	18.7	
75-01-4	Vinyl chloride	19.2	
1330-20-7	Xylene (Total)	56.6	
179601-23-1	m&p-Xylene	37.9	
95-47-6	o-Xylene	18.6	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375923

Date Extracted: 08/03/2021 13:33 Lab Sample ID: 2950715

Date Analyzed: 08/03/2021 13:33 Lab File ID: 080321A.B\0803A_30BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	<0.22	U
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375923

Date Extracted: 08/03/2021 13:33 Lab Sample ID: 2950715

Date Analyzed: 08/03/2021 13:33 Lab File ID: 080321A.B\0803A_30BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U
79-01-6	Trichloroethene	<0.21	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60375923

Date Extracted: 08/03/2021 13:33 Lab Sample ID: 2950715

Date Analyzed: 08/03/2021 13:33 Lab File ID: 080321A.B\0803A_30BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947593

Date Analyzed: 07/28/2021 08:06 Lab File ID: 072821A.B\0728A_03.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	591	
107-02-8	Acrolein	506	
107-13-1	Acrylonitrile	470	
71-43-2	Benzene	99.3	
108-86-1	Bromobenzene	96.3	
74-97-5	Bromochloromethane	100	
75-27-4	Bromodichloromethane	109	
75-25-2	Bromoform	90.9	
74-83-9	Bromomethane	98.4	
78-93-3	2-Butanone (MEK)	570	
104-51-8	n-Butylbenzene	104	
135-98-8	sec-Butylbenzene	100	
98-06-6	tert-Butylbenzene	101	
75-15-0	Carbon disulfide	109	
56-23-5	Carbon tetrachloride	113	
108-90-7	Chlorobenzene	99.7	
75-00-3	Chloroethane	87.7	
67-66-3	Chloroform	101	
74-87-3	Chloromethane	97.9	
95-49-8	2-Chlorotoluene	97.7	
106-43-4	4-Chlorotoluene	100	
108-94-1	Cyclohexanone	499	
96-12-8	1,2-Dibromo-3-chloropropane	103	
124-48-1	Dibromochloromethane	113	
106-93-4	1,2-Dibromoethane (EDB)	101	
74-95-3	Dibromomethane	98.3	
95-50-1	1,2-Dichlorobenzene	94.6	
541-73-1	1,3-Dichlorobenzene	99.4	
106-46-7	1,4-Dichlorobenzene	100	
75-34-3	1,1-Dichloroethane	103	
107-06-2	1,2-Dichloroethane	95.3	
540-59-0	1,2-Dichloroethene (Total)	206	
75-35-4	1,1-Dichloroethene	109	
156-59-2	cis-1,2-Dichloroethene	101	
156-60-5	trans-1,2-Dichloroethene	105	
78-87-5	1,2-Dichloropropane	99.4	
142-28-9	1,3-Dichloropropane	96.3	

SAMPLE NO.

LCS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947593

Date Analyzed: 07/28/2021 08:06 Lab File ID: 072821A.B\0728A_03.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	109	
563-58-6	1,1-Dichloropropene	105	
10061-01-5	cis-1,3-Dichloropropene	109	
10061-02-6	trans-1,3-Dichloropropene	109	
60-29-7	Diethyl ether (Ethyl ether)	99.5	
100-41-4	Ethylbenzene	100	
142-82-5	n-Heptane	111	
87-68-3	Hexachloro-1,3-butadiene	110	
110-54-3	n-Hexane	107	
591-78-6	2-Hexanone	555	
74-88-4	Iodomethane	108	
98-82-8	Isopropylbenzene (Cumene)	103	
99-87-6	p-Isopropyltoluene	103	
79-20-9	Methyl acetate	449	
75-09-2	Methylene Chloride	90.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	460	
1634-04-4	Methyl-tert-butyl ether	96.7	
91-20-3	Naphthalene	97.8	
103-65-1	n-Propylbenzene	101	
100-42-5	Styrene	101	
630-20-6	1,1,1,2-Tetrachloroethane	104	
79-34-5	1,1,2,2-Tetrachloroethane	93.5	
127-18-4	Tetrachloroethene	105	
109-99-9	Tetrahydrofuran	432	
108-88-3	Toluene	99.3	
87-61-6	1,2,3-Trichlorobenzene	101	
120-82-1	1,2,4-Trichlorobenzene	97.4	
71-55-6	1,1,1-Trichloroethane	103	
79-00-5	1,1,2-Trichloroethane	98.3	
79-01-6	Trichloroethene	105	
75-69-4	Trichlorofluoromethane	113	
96-18-4	1,2,3-Trichloropropane	92.8	
76-13-1	1,1,2-Trichlorotrifluoroethane	112	
526-73-8	1,2,3-Trimethylbenzene	98.0	
95-63-6	1,2,4-Trimethylbenzene	98.3	
108-67-8	1,3,5-Trimethylbenzene	101	
108-05-4	Vinyl acetate	96.2	J

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947593

Date Analyzed: 07/28/2021 08:06 Lab File ID: 072821A.B\0728A_03.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	79.0	
1330-20-7	Xylene (Total)	300	
179601-23-1	m&p-Xylene	201	
95-47-6	o-Xylene	98.9	

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947601

Date Analyzed: 07/28/2021 08:38 Lab File ID: 072821AGRO.B\0728A_05.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	3.3	

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947600

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821AGRO.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.055	U

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947592

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821A.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.2	U
107-02-8	Acrolein	<75.6	U
107-13-1	Acrylonitrile	<3.2	U
71-43-2	Benzene	<0.49	U
108-86-1	Bromobenzene	<0.94	U
74-97-5	Bromochloromethane	<0.60	U
75-27-4	Bromodichloromethane	<0.60	U
75-25-2	Bromoform	<0.58	U
74-83-9	Bromomethane	<2.9	U
78-93-3	2-Butanone (MEK)	<3.4	U
104-51-8	n-Butylbenzene	<0.65	U
135-98-8	sec-Butylbenzene	<0.73	U
98-06-6	tert-Butylbenzene	<0.88	U
75-15-0	Carbon disulfide	<0.64	U
56-23-5	Carbon tetrachloride	<0.86	U
108-90-7	Chlorobenzene	<0.63	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.49	U
74-87-3	Chloromethane	<0.80	U
95-49-8	2-Chlorotoluene	<0.73	U
106-43-4	4-Chlorotoluene	<0.60	U
108-94-1	Cyclohexanone	<12.7	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.65	U
106-93-4	1,2-Dibromoethane (EDB)	<0.54	U
74-95-3	Dibromomethane	<0.60	U
95-50-1	1,2-Dichlorobenzene	<0.62	U
541-73-1	1,3-Dichlorobenzene	<0.72	U
106-46-7	1,4-Dichlorobenzene	<0.81	U
75-34-3	1,1-Dichloroethane	<0.39	U
107-06-2	1,2-Dichloroethane	<0.40	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.64	U
156-59-2	cis-1,2-Dichloroethene	<0.43	U
156-60-5	trans-1,2-Dichloroethene	<0.68	U
78-87-5	1,2-Dichloropropane	<0.98	U
142-28-9	1,3-Dichloropropane	<0.69	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947592

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821A.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.48	U
563-58-6	1,1-Dichloropropene	<0.90	U
10061-01-5	cis-1,3-Dichloropropene	<0.53	U
10061-02-6	trans-1,3-Dichloropropene	<0.46	U
60-29-7	Diethyl ether (Ethyl ether)	<0.56	U
100-41-4	Ethylbenzene	<0.46	U
142-82-5	n-Heptane	<4.5	U
87-68-3	Hexachloro-1,3-butadiene	<0.85	U
110-54-3	n-Hexane	<0.69	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.57	U
99-87-6	p-Isopropyltoluene	<0.69	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.0	U
1634-04-4	Methyl-tert-butyl ether	<0.48	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.80	U
100-42-5	Styrene	<0.59	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.41	U
109-99-9	Tetrahydrofuran	<0.78	U
108-88-3	Toluene	<0.35	U
87-61-6	1,2,3-Trichlorobenzene	<0.80	U
120-82-1	1,2,4-Trichlorobenzene	<0.80	U
71-55-6	1,1,1-Trichloroethane	<0.75	U
79-00-5	1,1,2-Trichloroethane	<0.63	U
79-01-6	Trichloroethene	<0.72	U
75-69-4	Trichlorofluoromethane	<0.61	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.0	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.67	U
108-67-8	1,3,5-Trimethylbenzene	<0.63	U
108-05-4	Vinyl acetate	<0.56	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/28/2021 08:05 Lab Sample ID: 2947592

Date Analyzed: 07/28/2021 09:09 Lab File ID: 072821A.B\0728A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.67	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.63	U
95-47-6	o-Xylene	<0.37	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948716

Date Analyzed: 07/29/2021 08:56 Lab File ID: 072921AGRO.B\0729A_05.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	3.3	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948715

Date Analyzed: 07/29/2021 09:28 Lab File ID: 072921AGRO.B\0729A_07.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.055	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948711

Date Analyzed: 07/29/2021 12:04 Lab File ID: 072921A.B\0729A_17.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	632	
107-02-8	Acrolein	535	
107-13-1	Acrylonitrile	486	
71-43-2	Benzene	99.6	
108-86-1	Bromobenzene	100	
74-97-5	Bromochloromethane	103	
75-27-4	Bromodichloromethane	109	
75-25-2	Bromoform	92.6	
74-83-9	Bromomethane	90.9	
78-93-3	2-Butanone (MEK)	612	
104-51-8	n-Butylbenzene	104	
135-98-8	sec-Butylbenzene	99.5	
98-06-6	tert-Butylbenzene	100	
75-15-0	Carbon disulfide	106	
56-23-5	Carbon tetrachloride	108	
108-90-7	Chlorobenzene	101	
75-00-3	Chloroethane	106	
67-66-3	Chloroform	101	
74-87-3	Chloromethane	94.6	
95-49-8	2-Chlorotoluene	97.6	
106-43-4	4-Chlorotoluene	101	
108-94-1	Cyclohexanone	575	
96-12-8	1,2-Dibromo-3-chloropropane	111	
124-48-1	Dibromochloromethane	113	
106-93-4	1,2-Dibromoethane (EDB)	106	
74-95-3	Dibromomethane	101	
95-50-1	1,2-Dichlorobenzene	98.4	
541-73-1	1,3-Dichlorobenzene	101	
106-46-7	1,4-Dichlorobenzene	102	
75-34-3	1,1-Dichloroethane	102	
107-06-2	1,2-Dichloroethane	99.3	
540-59-0	1,2-Dichloroethene (Total)	205	
75-35-4	1,1-Dichloroethene	107	
156-59-2	cis-1,2-Dichloroethene	102	
156-60-5	trans-1,2-Dichloroethene	103	
78-87-5	1,2-Dichloropropane	101	
142-28-9	1,3-Dichloropropane	100	

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

LCS

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948711

Date Analyzed: 07/29/2021 12:04 Lab File ID: 072921A.B\0729A_17.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	105	
563-58-6	1,1-Dichloropropene	102	
10061-01-5	cis-1,3-Dichloropropene	110	
10061-02-6	trans-1,3-Dichloropropene	111	
60-29-7	Diethyl ether (Ethyl ether)	102	
100-41-4	Ethylbenzene	102	
142-82-5	n-Heptane	108	
87-68-3	Hexachloro-1,3-butadiene	109	
110-54-3	n-Hexane	103	
591-78-6	2-Hexanone	599	
74-88-4	Iodomethane	105	
98-82-8	Isopropylbenzene (Cumene)	105	
99-87-6	p-Isopropyltoluene	103	
79-20-9	Methyl acetate	473	
75-09-2	Methylene Chloride	91.8	
108-10-1	4-Methyl-2-pentanone (MIBK)	487	
1634-04-4	Methyl-tert-butyl ether	99.3	
91-20-3	Naphthalene	106	
103-65-1	n-Propylbenzene	101	
100-42-5	Styrene	103	
630-20-6	1,1,1,2-Tetrachloroethane	105	
79-34-5	1,1,2,2-Tetrachloroethane	101	
127-18-4	Tetrachloroethene	104	
109-99-9	Tetrahydrofuran	462	
108-88-3	Toluene	99.3	
87-61-6	1,2,3-Trichlorobenzene	106	
120-82-1	1,2,4-Trichlorobenzene	109	
71-55-6	1,1,1-Trichloroethane	99.2	
79-00-5	1,1,2-Trichloroethane	102	
79-01-6	Trichloroethene	104	
75-69-4	Trichlorofluoromethane	110	
96-18-4	1,2,3-Trichloropropane	98.3	
76-13-1	1,1,2-Trichlorotrifluoroethane	109	
526-73-8	1,2,3-Trimethylbenzene	100	
95-63-6	1,2,4-Trimethylbenzene	99.0	
108-67-8	1,3,5-Trimethylbenzene	99.2	
108-05-4	Vinyl acetate	97.0	J

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948711

Date Analyzed: 07/29/2021 12:04 Lab File ID: 072921A.B\0729A_17.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	103	
1330-20-7	Xylene (Total)	300	
179601-23-1	m&p-Xylene	200	
95-47-6	o-Xylene	100	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW

Date Received: | Matrix: Solid | SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 | Lab Sample ID: 2948710

Date Analyzed: 07/29/2021 12:51 | Lab File ID: 072921A.B\0729A_20.D

Initial wt/vol: 5 g | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 60MSVC | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.2	U
107-02-8	Acrolein	<75.6	U
107-13-1	Acrylonitrile	<3.2	U
71-43-2	Benzene	<0.49	U
108-86-1	Bromobenzene	<0.94	U
74-97-5	Bromochloromethane	<0.60	U
75-27-4	Bromodichloromethane	<0.60	U
75-25-2	Bromoform	<0.58	U
74-83-9	Bromomethane	<2.9	U
78-93-3	2-Butanone (MEK)	<3.4	U
104-51-8	n-Butylbenzene	<0.65	U
135-98-8	sec-Butylbenzene	<0.73	U
98-06-6	tert-Butylbenzene	<0.88	U
75-15-0	Carbon disulfide	<0.64	U
56-23-5	Carbon tetrachloride	<0.86	U
108-90-7	Chlorobenzene	<0.63	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.49	U
74-87-3	Chloromethane	<0.80	U
95-49-8	2-Chlorotoluene	<0.73	U
106-43-4	4-Chlorotoluene	<0.60	U
108-94-1	Cyclohexanone	<12.7	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.65	U
106-93-4	1,2-Dibromoethane (EDB)	<0.54	U
74-95-3	Dibromomethane	<0.60	U
95-50-1	1,2-Dichlorobenzene	<0.62	U
541-73-1	1,3-Dichlorobenzene	<0.72	U
106-46-7	1,4-Dichlorobenzene	<0.81	U
75-34-3	1,1-Dichloroethane	<0.39	U
107-06-2	1,2-Dichloroethane	<0.40	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.64	U
156-59-2	cis-1,2-Dichloroethene	<0.43	U
156-60-5	trans-1,2-Dichloroethene	<0.68	U
78-87-5	1,2-Dichloropropane	<0.98	U
142-28-9	1,3-Dichloropropane	<0.69	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948710

Date Analyzed: 07/29/2021 12:51 Lab File ID: 072921A.B\0729A_20.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.48	U
563-58-6	1,1-Dichloropropene	<0.90	U
10061-01-5	cis-1,3-Dichloropropene	<0.53	U
10061-02-6	trans-1,3-Dichloropropene	<0.46	U
60-29-7	Diethyl ether (Ethyl ether)	<0.56	U
100-41-4	Ethylbenzene	<0.46	U
142-82-5	n-Heptane	<4.5	U
87-68-3	Hexachloro-1,3-butadiene	<0.85	U
110-54-3	n-Hexane	<0.69	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.57	U
99-87-6	p-Isopropyltoluene	<0.69	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.0	U
1634-04-4	Methyl-tert-butyl ether	<0.48	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.80	U
100-42-5	Styrene	<0.59	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.41	U
109-99-9	Tetrahydrofuran	<0.78	U
108-88-3	Toluene	<0.35	U
87-61-6	1,2,3-Trichlorobenzene	<0.80	U
120-82-1	1,2,4-Trichlorobenzene	<0.80	U
71-55-6	1,1,1-Trichloroethane	<0.75	U
79-00-5	1,1,2-Trichloroethane	<0.63	U
79-01-6	Trichloroethene	<0.72	U
75-69-4	Trichlorofluoromethane	<0.61	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.0	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.67	U
108-67-8	1,3,5-Trimethylbenzene	<0.63	U
108-05-4	Vinyl acetate	<0.56	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948710

Date Analyzed: 07/29/2021 12:51 Lab File ID: 072921A.B\0729A_20.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.67	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.63	U
95-47-6	o-Xylene	<0.37	U

SAMPLE NO.

MS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948712

Date Analyzed: 07/29/2021 15:04 Lab File ID: 072921A.B\0729A_27.D

Initial wt/vol: 6.32 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	437	
107-02-8	Acrolein	385	
107-13-1	Acrylonitrile	318	
71-43-2	Benzene	66.2	
108-86-1	Bromobenzene	61.2	
74-97-5	Bromochloromethane	67.7	
75-27-4	Bromodichloromethane	68.1	
75-25-2	Bromoform	60.8	
74-83-9	Bromomethane	49.7	
78-93-3	2-Butanone (MEK)	401	
104-51-8	n-Butylbenzene	60.3	
135-98-8	sec-Butylbenzene	61.3	
98-06-6	tert-Butylbenzene	61.9	
75-15-0	Carbon disulfide	65.7	
56-23-5	Carbon tetrachloride	75.9	
108-90-7	Chlorobenzene	65.3	
75-00-3	Chloroethane	66.5	
67-66-3	Chloroform	67.6	
74-87-3	Chloromethane	49.2	
95-49-8	2-Chlorotoluene	61.6	
106-43-4	4-Chlorotoluene	61.4	
108-94-1	Cyclohexanone	410	
96-12-8	1,2-Dibromo-3-chloropropane	60.1	
124-48-1	Dibromochloromethane	69.5	
106-93-4	1,2-Dibromoethane (EDB)	68.7	
74-95-3	Dibromomethane	66.8	
95-50-1	1,2-Dichlorobenzene	58.8	
541-73-1	1,3-Dichlorobenzene	61.1	
106-46-7	1,4-Dichlorobenzene	60.1	
75-34-3	1,1-Dichloroethane	67.8	
107-06-2	1,2-Dichloroethane	64.7	
540-59-0	1,2-Dichloroethene (Total)	138	
75-35-4	1,1-Dichloroethene	77.8	
156-59-2	cis-1,2-Dichloroethene	67.6	
156-60-5	trans-1,2-Dichloroethene	70.7	
78-87-5	1,2-Dichloropropane	66.2	
142-28-9	1,3-Dichloropropane	65.8	

SAMPLE NO.

MS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948712

Date Analyzed: 07/29/2021 15:04 Lab File ID: 072921A.B\0729A_27.D

Initial wt/vol: 6.32 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	71.1	
563-58-6	1,1-Dichloropropene	70.9	
10061-01-5	cis-1,3-Dichloropropene	69.1	
10061-02-6	trans-1,3-Dichloropropene	68.6	
60-29-7	Diethyl ether (Ethyl ether)	64.9	
100-41-4	Ethylbenzene	66.4	
142-82-5	n-Heptane	59.8	
87-68-3	Hexachloro-1,3-butadiene	53.6	
110-54-3	n-Hexane	63.2	
591-78-6	2-Hexanone	393	
74-88-4	Iodomethane	55.2	
98-82-8	Isopropylbenzene (Cumene)	69.4	
99-87-6	p-Isopropyltoluene	62.0	
79-20-9	Methyl acetate	5.7	J
75-09-2	Methylene Chloride	59.5	
108-10-1	4-Methyl-2-pentanone (MIBK)	347	
1634-04-4	Methyl-tert-butyl ether	65.2	
91-20-3	Naphthalene	65.4	
103-65-1	n-Propylbenzene	63.5	
100-42-5	Styrene	66.5	
630-20-6	1,1,1,2-Tetrachloroethane	66.1	
79-34-5	1,1,2,2-Tetrachloroethane	<0.99	U
127-18-4	Tetrachloroethene	69.4	
109-99-9	Tetrahydrofuran	315	
108-88-3	Toluene	65.5	
87-61-6	1,2,3-Trichlorobenzene	60.1	
120-82-1	1,2,4-Trichlorobenzene	59.3	
71-55-6	1,1,1-Trichloroethane	68.5	
79-00-5	1,1,2-Trichloroethane	59.6	
79-01-6	Trichloroethene	124	
75-69-4	Trichlorofluoromethane	70.5	
96-18-4	1,2,3-Trichloropropane	64.6	
76-13-1	1,1,2-Trichlorotrifluoroethane	72.9	
526-73-8	1,2,3-Trimethylbenzene	60.9	
95-63-6	1,2,4-Trimethylbenzene	60.7	
108-67-8	1,3,5-Trimethylbenzene	61.7	
108-05-4	Vinyl acetate	28.8	J

SAMPLE NO.

MS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948712

Date Analyzed: 07/29/2021 15:04 Lab File ID: 072921A.B\0729A_27.D

Initial wt/vol: 6.32 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	58.6	
1330-20-7	Xylene (Total)	197	
179601-23-1	m&p-Xylene	130	
95-47-6	o-Xylene	66.6	

SAMPLE NO.

MSD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948713

Date Analyzed: 07/29/2021 15:19 Lab File ID: 072921A.B\0729A_28.D

Initial wt/vol: 6.75 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	660	
107-02-8	Acrolein	596	
107-13-1	Acrylonitrile	465	
71-43-2	Benzene	83.1	
108-86-1	Bromobenzene	82.5	
74-97-5	Bromochloromethane	88.1	
75-27-4	Bromodichloromethane	89.8	
75-25-2	Bromoform	87.4	
74-83-9	Bromomethane	59.4	
78-93-3	2-Butanone (MEK)	613	
104-51-8	n-Butylbenzene	83.0	
135-98-8	sec-Butylbenzene	81.2	
98-06-6	tert-Butylbenzene	82.5	
75-15-0	Carbon disulfide	72.8	
56-23-5	Carbon tetrachloride	93.2	
108-90-7	Chlorobenzene	84.6	
75-00-3	Chloroethane	80.8	
67-66-3	Chloroform	87.0	
74-87-3	Chloromethane	58.6	
95-49-8	2-Chlorotoluene	81.0	
106-43-4	4-Chlorotoluene	83.3	
108-94-1	Cyclohexanone	646	
96-12-8	1,2-Dibromo-3-chloropropane	90.0	
124-48-1	Dibromochloromethane	97.0	
106-93-4	1,2-Dibromoethane (EDB)	97.2	
74-95-3	Dibromomethane	91.9	
95-50-1	1,2-Dichlorobenzene	79.3	
541-73-1	1,3-Dichlorobenzene	80.3	
106-46-7	1,4-Dichlorobenzene	81.8	
75-34-3	1,1-Dichloroethane	85.6	
107-06-2	1,2-Dichloroethane	87.7	
540-59-0	1,2-Dichloroethene (Total)	172	
75-35-4	1,1-Dichloroethene	105	
156-59-2	cis-1,2-Dichloroethene	86.0	
156-60-5	trans-1,2-Dichloroethene	86.3	
78-87-5	1,2-Dichloropropane	85.3	
142-28-9	1,3-Dichloropropane	89.2	

SAMPLE NO.

MSD

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948713

Date Analyzed: 07/29/2021 15:19 Lab File ID: 072921A.B\0729A_28.D

Initial wt/vol: 6.75 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	88.9	
563-58-6	1,1-Dichloropropene	86.6	
10061-01-5	cis-1,3-Dichloropropene	89.6	
10061-02-6	trans-1,3-Dichloropropene	93.2	
60-29-7	Diethyl ether (Ethyl ether)	86.6	
100-41-4	Ethylbenzene	85.5	
142-82-5	n-Heptane	82.3	
87-68-3	Hexachloro-1,3-butadiene	81.5	
110-54-3	n-Hexane	77.5	
591-78-6	2-Hexanone	599	
74-88-4	Iodomethane	72.5	
98-82-8	Isopropylbenzene (Cumene)	88.8	
99-87-6	p-Isopropyltoluene	82.6	
79-20-9	Methyl acetate	<1.0	U
75-09-2	Methylene Chloride	77.5	
108-10-1	4-Methyl-2-pentanone (MIBK)	521	
1634-04-4	Methyl-tert-butyl ether	89.0	
91-20-3	Naphthalene	96.3	
103-65-1	n-Propylbenzene	84.9	
100-42-5	Styrene	84.9	
630-20-6	1,1,1,2-Tetrachloroethane	87.6	
79-34-5	1,1,2,2-Tetrachloroethane	2.1	J
127-18-4	Tetrachloroethene	86.7	
109-99-9	Tetrahydrofuran	487	
108-88-3	Toluene	82.1	
87-61-6	1,2,3-Trichlorobenzene	80.1	
120-82-1	1,2,4-Trichlorobenzene	80.4	
71-55-6	1,1,1-Trichloroethane	86.4	
79-00-5	1,1,2-Trichloroethane	75.9	
79-01-6	Trichloroethene	164	
75-69-4	Trichlorofluoromethane	85.8	
96-18-4	1,2,3-Trichloropropane	94.8	
76-13-1	1,1,2-Trichlorotrifluoroethane	88.7	
526-73-8	1,2,3-Trimethylbenzene	82.0	
95-63-6	1,2,4-Trimethylbenzene	79.7	
108-67-8	1,3,5-Trimethylbenzene	82.6	
108-05-4	Vinyl acetate	36.8	J

SAMPLE NO.

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

MSD

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/29/2021 11:34 Lab Sample ID: 2948713

Date Analyzed: 07/29/2021 15:19 Lab File ID: 072921A.B\0729A_28.D

Initial wt/vol: 6.75 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	69.9	
1330-20-7	Xylene (Total)	251	
179601-23-1	m&p-Xylene	168	
95-47-6	o-Xylene	83.6	

MSSV FULL SCAN - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS9

LAB SAMPLE ID	SAMPLE NAME	2FBP	NIT5	TD14
2947239	2947239BLANK	75	73	76
2947240	2947240LCS	75	84	74
2947241	2947241MS	76	80	80
2947242	2947242MSD	74	78	77
60375923011	GB-01/8-10	73	70	79
60375923012	GB-01/11-13	79	74	84
60375923013	GB-03/1-3	72	71	72
60375923014	GB-03/4-6	75	72	71
60375923016	GB-02/2-3	77	71	81
60375923017	GB-02/8-9	76	63	77

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(NIT5) = Nitrobenzene-d5 (S)	(30-120)
(TD14) = Terphenyl-d14 (S)	(45-120)

* Values outside of QC Limits

MSSV FULL SCAN - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947240LCS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/29/2021
Instrument: 60MSS9
LCS Lot No: 44991
Lab File ID: 072921D.B\0729AM02.D
SDG No.: 60375923

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-DRO	332	274	83	40-120

Spike Recovery: 0 out of 1 outside limits.

MSSV FULL SCAN - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947241MS

Date Extracted: 07/27/2021
Date Analyzed (1): 08/02/2021

Instrument: 60MSS9
Lab File ID: 080221D.B\0802AM24.D

Parent Sample ID: GB-02/2-3
SDG No.: 60375923

COMPOUND	SPIKE ADDED (mg/kg)	SAMPLE CONCENTRATION (mg/kg)	MS CONCENTRATION (mg/kg)	MS %REC	QC LIMITS REC.
TPH-DRO	402	5.1J	332	81	10-145

Spike Recovery: 0 out of 1 outside limits.

09/08/2021 2:31

MSSV FULL SCAN - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS9 Matrix Spike Duplicate - Sample No: 2947242MSD

Lab File ID (2): 080221D.B\0802AM25.D Date Analyzed (2): 08/02/2021

COMPOUND	SPIKE ADDED (mg/kg)	MSD CONCENTRATION (mg/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
TPH-DRO	397	322	80	3	0-38	10-145

RPD: 0 out of 1 outside limits.

Spike Recovery: 0 out of 1 outside limits.

09/08/2021 2:31

SAMPLE NO.

2947239BLANK

MSSV FULL SCAN - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS9 Matrix: Solid Lab Sample ID: 2947239

Lab File ID (1): 072921S.B\0729AM01.D Date Analyzed (1): 07/29/2021 Time (1):10:20

Lab File ID (2): 072921D.B\0729AM01.D Date Analyzed (2): 07/29/2021 Time (2):10:20

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947240LCS	2947240	072921D.B\0729AM02.D	07/29/2021 10:40
2947240LCS	2947240	072921S.B\0729AM02.D	07/29/2021 10:40
GB-01/8-10	60375923011	080221S.B\0802AM19.D	08/02/2021 17:33
GB-01/8-10	60375923011	080221D.B\0802AM19.D	08/02/2021 17:33
GB-01/11-13	60375923012	080221D.B\0802AM20.D	08/02/2021 17:53
GB-01/11-13	60375923012	080221S.B\0802AM20.D	08/02/2021 17:53
GB-03/1-3	60375923013	080221S.B\0802AM21.D	08/02/2021 18:12
GB-03/1-3	60375923013	080221D.B\0802AM21.D	08/02/2021 18:12
GB-03/4-6	60375923014	080221S.B\0802AM22.D	08/02/2021 18:32
GB-03/4-6	60375923014	080221D.B\0802AM22.D	08/02/2021 18:32
2947241MS	2947241	080221D.B\0802AM24.D	08/02/2021 19:11
2947241MS	2947241	080221S.B\0802AM24.D	08/02/2021 19:11
2947242MSD	2947242	080221D.B\0802AM25.D	08/02/2021 19:30
2947242MSD	2947242	080221S.B\0802AM25.D	08/02/2021 19:30
GB-02/8-9	60375923017	080221D.B\0802AM26.D	08/02/2021 19:49
GB-02/8-9	60375923017	080221S.B\0802AM26.D	08/02/2021 19:49
GB-02/2-3	60375923016	080321D.B\0803AM01.D	08/03/2021 09:43
GB-02/2-3	60375923016	080321S.B\0803AM01.D	08/03/2021 09:43

MSSV Full Scan - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 072821S.B\0728ADFT.D DFTPP Injection Date: 07/28/2021
Instrument ID: 60MSS9 DFTPP Injection Time: 10:56

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.00 - 80.00% of mass 198	51.02	
68	Less than 2.00% of mass 69	0.69	(1.55)[1]
69	Mass 69 relative abundance	44.40	
70	Less than 2.00% of mass 69	0.30	(0.67)[1]
127	25.00 - 75.00% of mass 198	52.75	
197	Less than 1.00% of mass 198	0.00	
198	Base Peak, 100.00% relative	100.00	
199	5.00 - 9.00% of mass 198	7.10	
275	10.00 - 30.00% of mass 198	26.64	
365	Greater than 0.75% of mass 198	4.14	
441	Present, but less than mass 443	14.14	
442	40.00 - 110.00% of mass 198	102.74	
443	15.00 - 24.00% of mass 442	19.89	(19.36)[2]

1 - Value is % mass 69 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936171CAL5	19936171CAL5	072821S.B\0728AMI5.D	07/28/2021	11:08
19936220CAL5	19936220CAL5	072821D.B\0728AMI5.D	07/28/2021	11:08
19936223CAL1	19936223CAL1	072821D.B\0728AMI1.D	07/28/2021	11:29
19936172CAL1	19936172CAL1	072821S.B\0728AMI1.D	07/28/2021	11:29
19936173CAL2	19936173CAL2	072821S.B\0728AMI2.D	07/28/2021	11:49
19936225CAL2	19936225CAL2	072821D.B\0728AMI2.D	07/28/2021	11:49
19936221CAL3	19936221CAL3	072821D.B\0728AMI3.D	07/28/2021	12:09
19936174CAL3	19936174CAL3	072821S.B\0728AMI3.D	07/28/2021	12:09
19936175CAL4	19936175CAL4	072821S.B\0728AMI4.D	07/28/2021	12:28
19936224CAL4	19936224CAL4	072821D.B\0728AMI4.D	07/28/2021	12:28
19936176CAL6	19936176CAL6	072821S.B\0728AMI6.D	07/28/2021	12:48
19936226CAL6	19936226CAL6	072821D.B\0728AMI6.D	07/28/2021	12:48
19936227CAL7	19936227CAL7	072821D.B\0728AMI7.D	07/28/2021	13:08
19936177CAL7	19936177CAL7	072821S.B\0728AMI7.D	07/28/2021	13:08
19936222ICV	19936222ICV	072821D.B\0728AMICV.D	07/28/2021	13:28
19936178ICV	19936178ICV	072821S.B\0728AMICV.D	07/28/2021	13:28

MSSV Full Scan - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 072921S.B\0729ADFT.D DFTPP Injection Date 07/29/2021
Instrument ID: 60MSS9 DFTPP Injection Time 09:48

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.00 - 80.00% of mass 198	50.68	
68	Less than 2.00% of mass 69	0.72	(1.63)[1]
69	Mass 69 relative abundance	43.99	
70	Less than 2.00% of mass 69	0.28	(0.64)[1]
127	25.00 - 75.00% of mass 198	51.06	
197	Less than 1.00% of mass 198	0.00	
198	Base Peak, 100.00% relative	100.00	
199	5.00 - 9.00% of mass 198	6.70	
275	10.00 - 30.00% of mass 198	26.61	
365	Greater than 0.75% of mass 198	3.95	
441	Present, but less than mass 443	15.11	
442	40.00 - 110.00% of mass 198	101.77	
443	15.00 - 24.00% of mass 442	19.04	(18.71)[2]

1 - Value is % mass 69 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19740008CCV	19740008CCV	072921D.B\0729AMI5.D	07/29/2021	10:00
19936526CCV	19936526CCV	072921S.B\0729AMI5.D	07/29/2021	10:00
2947239BLANK	2947239BLANK	072921D.B\0729AM01.D	07/29/2021	10:20
2947239BLANK	2947239BLANK	072921S.B\0729AM01.D	07/29/2021	10:20
2947240LCS	2947240LCS	072921D.B\0729AM02.D	07/29/2021	10:40
2947240LCS	2947240LCS	072921S.B\0729AM02.D	07/29/2021	10:40

MSSV Full Scan - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 080221S.B\0802ADFT.D DFTPP Injection Date: 08/02/2021
Instrument ID: 60MSS9 DFTPP Injection Time: 11:11

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.00 - 80.00% of mass 198	51.73	
68	Less than 2.00% of mass 69	0.80	(1.76)[1]
69	Mass 69 relative abundance	45.25	
70	Less than 2.00% of mass 69	0.28	(0.63)[1]
127	25.00 - 75.00% of mass 198	53.95	
197	Less than 1.00% of mass 198	0.00	
198	Base Peak, 100.00% relative	100.00	
199	5.00 - 9.00% of mass 198	7.07	
275	10.00 - 30.00% of mass 198	26.98	
365	Greater than 0.75% of mass 198	4.11	
441	Present, but less than mass 443	16.52	
442	40.00 - 110.00% of mass 198	99.95	
443	15.00 - 24.00% of mass 442	20.28	(20.29)[2]

1 - Value is % mass 69 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19753984CCV	19753984CCV	080221D.B\0802AMI5.D	08/02/2021	11:23
19936525CCV	19936525CCV	080221S.B\0802AMI5.D	08/02/2021	11:23
GB-01/8-10	60375923011	080221S.B\0802AM19.D	08/02/2021	17:33
GB-01/8-10	60375923011	080221D.B\0802AM19.D	08/02/2021	17:33
GB-01/11-13	60375923012	080221S.B\0802AM20.D	08/02/2021	17:53
GB-01/11-13	60375923012	080221D.B\0802AM20.D	08/02/2021	17:53
GB-03/1-3	60375923013	080221D.B\0802AM21.D	08/02/2021	18:12
GB-03/1-3	60375923013	080221S.B\0802AM21.D	08/02/2021	18:12
GB-03/4-6	60375923014	080221D.B\0802AM22.D	08/02/2021	18:32
GB-03/4-6	60375923014	080221S.B\0802AM22.D	08/02/2021	18:32
2947241MS	2947241MS	080221S.B\0802AM24.D	08/02/2021	19:11
2947241MS	2947241MS	080221D.B\0802AM24.D	08/02/2021	19:11
2947242MSD	2947242MSD	080221S.B\0802AM25.D	08/02/2021	19:30
2947242MSD	2947242MSD	080221D.B\0802AM25.D	08/02/2021	19:30
GB-02/8-9	60375923017	080221D.B\0802AM26.D	08/02/2021	19:49
GB-02/8-9	60375923017	080221S.B\0802AM26.D	08/02/2021	19:49

MSSV Full Scan - FORM V SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Lab File ID: 080321S.B\0803ADFT.D DFTPP Injection Date: 08/03/2021

Instrument ID: 60MSS9 DFTPP Injection Time: 09:09

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.00 - 80.00% of mass 198	51.07	
68	Less than 2.00% of mass 69	0.74	(1.67)[1]
69	Mass 69 relative abundance	44.39	
70	Less than 2.00% of mass 69	0.26	(0.59)[1]
127	25.00 - 75.00% of mass 198	50.61	
197	Less than 1.00% of mass 198	0.00	
198	Base Peak, 100.00% relative	100.00	
199	5.00 - 9.00% of mass 198	6.96	
275	10.00 - 30.00% of mass 198	25.58	
365	Greater than 0.75% of mass 198	3.61	
441	Present, but less than mass 443	12.84	
442	40.00 - 110.00% of mass 198	91.31	
443	15.00 - 24.00% of mass 442	16.60	(18.18)[2]

1 - Value is % mass 69 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19757321CCV	19757321CCV	080321D.B\0803AMI5.D	08/03/2021	09:22
19936597CCV	19936597CCV	080321S.B\0803AMI5.D	08/03/2021	09:22
GB-02/2-3	60375923016	080321D.B\0803AM01.D	08/03/2021	09:43
GB-02/2-3	60375923016	080321S.B\0803AM01.D	08/03/2021	09:43

MSSV FULL SCAN - FORM VIII SVOA-1
MSSV FULL SCAN INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19936526CCV Date Analyzed: 07/29/2021

Instrument ID: 60MSS9 GC Column: Col 1 Time Analyzed: 10:00

Lab File ID: 072921S.B\0729AMI5.D

		AREA 14DDIS	RT	AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD		1005146	4.148	2067775	6.293	2127979	9.183	3351714	5.057
UPPER LIMIT		2010292	4.648	4135550	6.793	4255958	9.683	6703428	5.557
LOWER LIMIT		502573	3.648	1033887.5	5.793	1063989.5	8.683	1675857	4.557
LAB SAMPLE ID	SAMPLE NO.								
2947239	2947239BLANK	1058799	4.147	2250075	6.287	2437083	9.183	3626181	5.051
2947240	2947240LCS	1028173	4.153	2197185	6.288	2384827	9.183	3512605	5.057

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV FULL SCAN - FORM VIII SVOA-1
MSSV FULL SCAN INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19936526CCV Date Analyzed: 07/29/2021

Instrument ID: 60MSS9 GC Column: Col 1 Time Analyzed: 10:00

Lab File ID: 072921S.B\0729AMI5.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		961477	10.144	3477810	7.329
UPPER LIMIT		1922954	10.644	6955620	7.829
LOWER LIMIT		480738.5	9.644	1738905	6.829
LAB SAMPLE ID	SAMPLE NO.				
2947239	2947239BLANK	1095292	10.144	3965490	7.329
2947240	2947240LCS	1084354	10.15	3736858	7.329

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV FULL SCAN - FORM VIII SVOA-1
MSSV FULL SCAN INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19936525CCV Date Analyzed: 08/02/2021

Instrument ID: 60MSS9 GC Column: Col 1 Time Analyzed: 11:23

Lab File ID: 080221S.B\0802AMI5.D

		AREA 14DDIS	RT	AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD		952365	4.148	1999606	6.293	1730195	9.183	3232308	5.057
UPPER LIMIT		1904730	4.648	3999212	6.793	3460390	9.683	6464616	5.557
LOWER LIMIT		476182.5	3.648	999803	5.793	865097.5	8.683	1616154	4.557
LAB SAMPLE ID	SAMPLE NO.								
2947241	2947241MS	946054	4.153	2157420	6.287	2178324	9.183	3361411	5.057
2947242	2947242MSD	953386	4.153	2155164	6.287	2195818	9.183	3428162	5.051
60375923011	GB-01/8-10	1049621	4.153	2321931	6.287	2166070	9.177	3627964	5.052
60375923012	GB-01/11-13	1041551	4.153	2291281	6.288	2196354	9.183	3629347	5.052
60375923013	GB-03/1-3	1004552	4.148	2216070	6.288	2218424	9.183	3530634	5.052
60375923014	GB-03/4-6	987525	4.153	2177607	6.288	2510189	9.194	3426317	5.052
60375923017	GB-02/8-9	974560	4.153	2194293	6.288	2301969	9.183	3454882	5.052

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV FULL SCAN - FORM VIII SVOA-1
MSSV FULL SCAN INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19936525CCV Date Analyzed: 08/02/2021

Instrument ID: 60MSS9 GC Column: Col 1 Time Analyzed: 11:23

Lab File ID: 080221S.B\0802AMI5.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		694191	10.139	3392269	7.329
UPPER LIMIT		1388382	10.639	6784538	7.829
LOWER LIMIT		347095.5	9.639	1696134.5	6.829
LAB SAMPLE ID	SAMPLE NO.				
2947241	2947241MS	903368	10.133	3692347	7.329
2947242	2947242MSD	928887	10.127	3862803	7.329
60375923011	GB-01/8-10	842494	10.133	3996319	7.323
60375923012	GB-01/11-13	905838	10.144	3965746	7.329
60375923013	GB-03/1-3	934354	10.133	3873411	7.329
60375923014	GB-03/4-6	1134238	10.144	3846135	7.329
60375923017	GB-02/8-9	946039	10.127	3904746	7.329

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV FULL SCAN - FORM VIII SVOA-1
MSSV FULL SCAN INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19936597CCV Date Analyzed: 08/03/2021

Instrument ID: 60MSS9 GC Column: Col 1 Time Analyzed: 09:22

Lab File ID: 080321S.B\0803AMI5.D

		AREA 14DDIS	RT	AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD		901028	4.148	1963721	6.293	1651334	9.183	3181360	5.058
UPPER LIMIT		1802056	4.648	3927442	6.793	3302668	9.683	6362720	5.558
LOWER LIMIT		450514	3.648	981860.5	5.793	825667	8.683	1590680	4.558
LAB SAMPLE ID	SAMPLE NO.								
60375923016	GB-02/2-3	957347	4.148	2107738	6.282	1991221	9.183	3357048	5.052

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV FULL SCAN - FORM VIII SVOA-1
MSSV FULL SCAN INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19936597CCV Date Analyzed: 08/03/2021

Instrument ID: 60MSS9 GC Column: Col 1 Time Analyzed: 09:22

Lab File ID: 080321S.B\0803AMI5.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		684730	10.144	3242070	7.329
UPPER LIMIT		1369460	10.644	6484140	7.829
LOWER LIMIT		342365	9.644	1621035	6.829
LAB SAMPLE ID	SAMPLE NO.				
60375923016	GB-02/2-3	778929	10.144	3735069	7.323

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

GB-01/8-10

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923011
Date Analyzed: 08/02/2021 17:33
Lab File ID: 080221D.B\0802AM19.D
Initial wt/vol: 31.48 g Final wt/vol: 2 mL Dilution: 1
Instrument: 60MSS9 Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	6.6	J
	TPH-DRO	3.2	J

SAMPLE NO.

GB-01/11-13

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923012
Date Analyzed: 08/02/2021 17:53
Lab File ID: 080221D.B\0802AM20.D
Initial wt/vol: 30.25 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 21.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	68.3	
	TPH-DRO	18.3	J

SAMPLE NO.

GB-03/1-3

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923013
Date Analyzed: 08/02/2021 18:12
Lab File ID: 080221D.B\0802AM21.D
Initial wt/vol: 31.2 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 15.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	46.8	
	TPH-DRO	31.0	

SAMPLE NO.

GB-03/4-6

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923014
Date Analyzed: 08/02/2021 18:32
Lab File ID: 080221D.B\0802AM22.D
Initial wt/vol: 31.66 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 9.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	298	
	TPH-DRO	85.0	

SAMPLE NO.

GB-02/8-9

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923017
Date Analyzed: 08/02/2021 19:49
Lab File ID: 080221D.B\0802AM26.D
Initial wt/vol: 31.21 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 25.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	13.7	J
	TPH-DRO	9.1	J

SAMPLE NO.

GB-02/2-3

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923016
Date Analyzed: 08/03/2021 09:43
Lab File ID: 080321D.B\0803AM01.D
Initial wt/vol: 30.72 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	11.2	J
	TPH-DRO	5.1	J

MSSV FULL SCAN - FORM VI SVOA-1

MSSV FULL SCAN INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS9 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:29 13:08

LAB FILE ID

CAL1 =	072821D.B\0728AMI1.D	CAL1 =	072821S.B\0728AMI1.D	CAL2 =	072821D.B\0728AMI2.D
CAL2 =	072821S.B\0728AMI2.D	CAL3 =	072821D.B\0728AMI3.D	CAL3 =	072821S.B\0728AMI3.D
CAL4 =	072821D.B\0728AMI4.D	CAL4 =	072821S.B\0728AMI4.D	CAL6 =	072821S.B\0728AMI6.D
CAL6 =	072821D.B\0728AMI6.D	CAL7 =	072821S.B\0728AMI7.D	CAL7 =	072821D.B\0728AMI7.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL6	CAL7
TPH-ORO	Averaged	159810.236	160344.058	155585.571	150784.349	141997.343	134153.926
TPH-DRO	Averaged	159810.236	160344.058	155585.571	150784.349	141997.343	134153.926
2-Fluorobiphenyl (S)	Averaged	1.50456	1.48902	1.36570	1.24931	1.02945	1.04977
Nitrobenzene-d5 (S)	Averaged	0.43117	0.43985	0.40416	0.40397	0.37977	0.34582
Terphenyl-d14 (S)	Averaged	1.69629	1.65553	1.50419	1.48658	1.21656	1.14667

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV FULL SCAN - FORM VI SVOA-2

MSSV FULL SCAN INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS9 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:29 13:08

LAB FILE ID

CAL1 =	072821D.B\0728AMI1.D	CAL1 =	072821S.B\0728AMI1.D	CAL2 =	072821D.B\0728AMI2.D
CAL2 =	072821S.B\0728AMI2.D	CAL3 =	072821D.B\0728AMI3.D	CAL3 =	072821S.B\0728AMI3.D
CAL4 =	072821D.B\0728AMI4.D	CAL4 =	072821S.B\0728AMI4.D	CAL6 =	072821S.B\0728AMI6.D
CAL6 =	072821D.B\0728AMI6.D	CAL7 =	072821S.B\0728AMI7.D	CAL7 =	072821D.B\0728AMI7.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
TPH-ORO	Averaged	6.47896		0.00000000	151250.276	
TPH-DRO	Averaged	6.47896		0.00000000	151250.276	
2-Fluorobiphenyl (S)	Averaged	15.55372			1.26337	
Nitrobenzene-d5 (S)	Averaged	7.90731			0.39962	
Terphenyl-d14 (S)	Averaged	14.16596			1.45875	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN INITIAL CALIBRATION DATA

19936178ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 13:28

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821S.B\0728AMICV.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
2-Fluorobiphenyl (S)	Averaged	1.26337	0.00000	0.0100	-8.5155	20.0000
Nitrobenzene-d5 (S)	Averaged	0.39962	0.01065	0.0100	-1.7567	20.0000
Terphenyl-d14 (S)	Averaged	1.45875	0.00000	0.0100	3.1982	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN INITIAL CALIBRATION DATA

19936222ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 13:28

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821D.B\0728AMICV.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-ORO	Averaged	151250.2	106775.3	0.0100	-29.4048	20.0000
TPH-DRO	Averaged	151250.2	106775.3	0.0100	-29.4048	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN CONTINUING CALIBRATION DATA

19740008CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/29/2021 Time: 10:00

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072921D.B\0729AMI5.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-ORO	Averaged	151250.2	152803.6	0.0100	1.0270	20.0000
TPH-DRO	Averaged	151250.2	152803.6	0.0100	1.0270	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN CONTINUING CALIBRATION DATA

19936526CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/29/2021 Time: 10:00

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072921S.B\0729AMI5.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
2-Fluorobiphenyl (S)	Averaged	1.26337	1.16412	0.0100	-7.8560	20.0000
Nitrobenzene-d5 (S)	Averaged	0.39962	0.39287	0.0100	-1.6895	20.0000
Terphenyl-d14 (S)	Averaged	1.45875	1.38634	0.0100	-4.9636	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN CONTINUING CALIBRATION DATA

19753984CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:23

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 080221D.B\0802AMI5.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-ORO	Averaged	151250.2	147008.2	0.0100	-2.8046	20.0000
TPH-DRO	Averaged	151250.2	147008.2	0.0100	-2.8046	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN CONTINUING CALIBRATION DATA

19936525CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:23

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 080221S.B\0802AMI5.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375923

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
2-Fluorobiphenyl (S)	Averaged	1.26337	1.18479	0.0100	-6.2196	20.0000
Nitrobenzene-d5 (S)	Averaged	0.39962	0.37060	0.0100	-7.2607	20.0000
Terphenyl-d14 (S)	Averaged	1.45875	1.58463	0.0100	8.6297	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN CONTINUING CALIBRATION DATA

19757321CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/03/2021 Time: 09:22

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 080321D.B\0803AMI5.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-ORO	Averaged	151250.2	139030.4	0.0100	-8.0792	20.0000
TPH-DRO	Averaged	151250.2	139030.4	0.0100	-8.0792	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/09/2021 3:10

SAMPLE NO.

BLANK

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 2947239
Date Analyzed: 07/29/2021 10:20
Lab File ID: 072921D.B\0729AM01.D
Initial wt/vol: 30.36 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	2.1	J
	TPH-DRO	1.5	J

SAMPLE NO.

LCS

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 2947240
Date Analyzed: 07/29/2021 10:40
Lab File ID: 072921D.B\0729AM02.D
Initial wt/vol: 30.12 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	274	

SAMPLE NO.

MS

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923
Date Extracted: 07/27/2021 15:30 Lab Sample ID: 2947241
Date Analyzed: 08/02/2021 19:11 Lab File ID: 080221D.B\0802AM24.D
Initial wt/vol: 31.02 g Final wt/vol: 2 mL Dilution: 1 Instrument: 60MSS9 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	332	

SAMPLE NO.

MSD

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 2947242
Date Analyzed: 08/02/2021 19:30
Lab File ID: 080221D.B\0802AM25.D
Initial wt/vol: 31.48 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	322	

MSSV SIM - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2947247	2947247BLANK	80	96
2947248	2947248LCS	84	98
2947249	2947249MS	79	97
2947250	2947250MSD	81	96
60375923003	GB-22/1-3	82	96
60375923004	GB-22/3-5	86	106
60375923005	GB-29/1.5-2.5	79	99
60375923006	GB-29/3-5	84	102
60375923009	GB-43/3-5	85	105
60375923010	GB-43/5-7	83	100

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM II SVOA-2
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2947243	2947243BLANK	75	88
2947244	2947244LCS	95	124
2947245	2947245MS	93	114
2947246	2947246MSD	92	114
60375923011	GB-01/8-10	65	75
60375923012	GB-01/11-13	70	80
60375923013	GB-03/1-3	67	76
60375923014	GB-03/4-6	65	88
60375923016	GB-02/2-3	69	78
60375923017	GB-02/8-9	68	76

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947248LCS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/29/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 072921.B\0729AP11.D
SDG No.: 60375923

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	32.8	26.9	82	45-120
Acenaphthylene	32.8	26.5	81	50-120
Anthracene	32.8	28.4	87	50-120
Benzo(a)anthracene	32.8	28.6	87	55-125
Benzo(a)pyrene	32.8	28.0	85	45-120
Benzo(b)fluoranthene	32.8	28.6	87	50-125
Benzo(g,h,i)perylene	32.8	25.2	77	40-120
Benzo(k)fluoranthene	32.8	31.5	96	55-120
Chrysene	32.8	28.1	86	55-120
Dibenz(a,h)anthracene	32.8	25.5	78	40-125
Fluoranthene	32.8	29.8	91	50-125
Fluorene	32.8	27.3	83	50-120
Indeno(1,2,3-cd)pyrene	32.8	25.7	78	44-125
Naphthalene	32.8	26.8	82	45-120
Phenanthrene	32.8	28.4	87	50-125
Pyrene	32.8	30.9	94	50-125

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 2:31

MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947244LCS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/30/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 073021.B\0730AP19.D
SDG No.: 60375923

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	33.2	28.4	86	45-120
Acenaphthylene	33.2	27.6	83	50-120
Anthracene	33.2	30.8	93	50-120
Benzo(a)anthracene	33.2	31.8	96	55-125
Benzo(a)pyrene	33.2	30.0	90	45-120
Benzo(b)fluoranthene	33.2	31.9	96	50-125
Benzo(g,h,i)perylene	33.2	30.3	91	40-120
Benzo(k)fluoranthene	33.2	34.4	104	55-120
Chrysene	33.2	31.6	95	55-120
Dibenz(a,h)anthracene	33.2	29.6	89	40-125
Fluoranthene	33.2	35.0	105	50-125
Fluorene	33.2	29.5	89	50-120
Indeno(1,2,3-cd)pyrene	33.2	30.1	91	44-125
Naphthalene	33.2	28.4	86	45-120
Phenanthrene	33.2	32.6	98	50-125
Pyrene	33.2	35.9	108	50-125

Spike Recovery: 0 out of 16 outside limits.

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MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947249MS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/29/2021
Instrument: 60MSS5
Lab File ID: 072921.B\0729AP39.D
Parent Sample ID: GB-22/1-3
SDG No.: 60375923

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	40.4	<1.5	32.4	80	10-150
Acenaphthylene	40.4	<1.5	30.2	75	30-125
Anthracene	40.4	3.5J	42.1	96	10-160
Benzo(a)anthracene	40.4	12.8	77.2	159	10-160
Benzo(a)pyrene	40.4	10.6	67.0	140	10-150
Benzo(b)fluoranthene	40.4	19.4	96.9	192	10-165
Benzo(g,h,i)perylene	40.4	8.4	63.2	136	10-155
Benzo(k)fluoranthene	40.4	9.7	60.9	127	10-165
Chrysene	40.4	14.3	78.5	159	10-150
Dibenz(a,h)anthracene	40.4	<1.7	37.5	93	10-175
Fluoranthene	40.4	41.9	157	284	10-180
Fluorene	40.4	<1.6	34.6	86	20-145
Indeno(1,2,3-cd)pyrene	40.4	6.6	55.6	121	10-150
Naphthalene	40.4	<1.7	31.5	78	10-165
Phenanthrene	40.4	19.8	86.0	164	10-170
Pyrene	40.4	32.5	138	262	10-180

Spike Recovery: 4 out of 16 outside limits.

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2947250MSD

Lab File ID (2): 072921.B\0729AP40.D Date Analyzed (2): 07/29/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	41.0	33.0	81	2	0-42	10-150
Acenaphthylene	41.0	30.8	75	2	0-44	30-125
Anthracene	41.0	40.0	89	5	0-54	10-160
Benzo(a)anthracene	41.0	60.2	115	25	0-62	10-160
Benzo(a)pyrene	41.0	52.1	101	25	0-66	10-150
Benzo(b)fluoranthene	41.0	69.8	123	33	0-61	10-165
Benzo(g,h,i)perylene	41.0	50.7	103	22	0-58	10-155
Benzo(k)fluoranthene	41.0	50.0	98	20	0-53	10-165
Chrysene	41.0	61.4	115	25	0-57	10-150
Dibenz(a,h)anthracene	41.0	36.0	88	4	0-48	10-175
Fluoranthene	41.0	114	176	31	0-54	10-180
Fluorene	41.0	35.0	85	1	0-39	20-145
Indeno(1,2,3-cd)pyrene	41.0	47.0	98	17	0-59	10-150
Naphthalene	41.0	34.3	84	9	0-54	10-165
Phenanthrene	41.0	70.4	123	20	0-51	10-170
Pyrene	41.0	97.8	159	34	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 2:31

MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947245MS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/30/2021
Instrument: 60MSS5
Lab File ID: 073021.B\0730AP25.D
Parent Sample ID: GB-02/2-3
SDG No.: 60375923

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	40.2	20.7	64.8	110	10-150
Acenaphthylene	40.2	5.4J	34.9	73	30-125
Anthracene	40.2	29.3	83.0	134	10-160
Benzo(a)anthracene	40.2	69.2	139	175	10-160
Benzo(a)pyrene	40.2	51.6	103	128	10-150
Benzo(b)fluoranthene	40.2	86.8	160	182	10-165
Benzo(g,h,i)perylene	40.2	33.4	80.1	116	10-155
Benzo(k)fluoranthene	40.2	46.6	78.8	80	10-165
Chrysene	40.2	63.3	131	170	10-150
Dibenz(a,h)anthracene	40.2	<3.5	42.0	105	10-175
Fluoranthene	40.2	175	307	328	10-180
Fluorene	40.2	20.0	75.4	138	20-145
Indeno(1,2,3-cd)pyrene	40.2	28.6	70.4	104	10-150
Naphthalene	40.2	8.7	45.3	91	10-165
Phenanthrene	40.2	94.1	163	172	10-170
Pyrene	40.2	149	254	263	10-180

Spike Recovery: 6 out of 16 outside limits.

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2947246MSD

Lab File ID (2): 073021.B\0730AP26.D Date Analyzed (2): 07/30/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	40.5	69.4	120	7	0-42	10-150
Acenaphthylene	40.5	50.1	110	36	0-44	30-125
Anthracene	40.5	78.4	121	6	0-54	10-160
Benzo(a)anthracene	40.5	111	102	23	0-62	10-160
Benzo(a)pyrene	40.5	89.4	93	14	0-66	10-150
Benzo(b)fluoranthene	40.5	120	83	28	0-61	10-165
Benzo(g,h,i)perylene	40.5	77.1	108	4	0-58	10-155
Benzo(k)fluoranthene	40.5	81.4	86	3	0-53	10-165
Chrysene	40.5	106	106	21	0-57	10-150
Dibenz(a,h)anthracene	40.5	52.1	129	22	0-48	10-175
Fluoranthene	40.5	221	112	33	0-54	10-180
Fluorene	40.5	76.6	140	2	0-39	20-145
Indeno(1,2,3-cd)pyrene	40.5	72.2	108	2	0-59	10-150
Naphthalene	40.5	58.6	123	26	0-54	10-165
Phenanthrene	40.5	133	96	20	0-51	10-170
Pyrene	40.5	190	103	29	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 2:31

SAMPLE NO.

2947247BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2947247

Lab File ID: 072921.B\0729AP10.D Date Analyzed: 07/29/2021 Time: 11:26

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947248LCS	2947248	072921.B\0729AP11.D	07/29/2021 11:43
GB-22/1-3	60375923003	072921.B\0729AP38.D	07/29/2021 19:28
2947249MS	2947249	072921.B\0729AP39.D	07/29/2021 19:45
2947250MSD	2947250	072921.B\0729AP40.D	07/29/2021 20:02
GB-22/3-5	60375923004	073021.B\0730AP13.D	07/30/2021 11:30
GB-29/1.5-2.5	60375923005	073021.B\0730AP14.D	07/30/2021 11:47
GB-29/3-5	60375923006	073021.B\0730AP15.D	07/30/2021 12:04
GB-43/3-5	60375923009	073021.B\0730AP16.D	07/30/2021 12:22
GB-43/5-7	60375923010	073021.B\0730AP17.D	07/30/2021 12:39

SAMPLE NO.

2947243BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2947243

Lab File ID: 073021.B\0730AP18.D Date Analyzed: 07/30/2021 Time: 12:56

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947244LCS	2947244	073021.B\0730AP19.D	07/30/2021 13:13
GB-01/8-10	60375923011	073021.B\0730AP20.D	07/30/2021 13:30
GB-01/11-13	60375923012	073021.B\0730AP21.D	07/30/2021 13:47
GB-03/1-3	60375923013	073021.B\0730AP22.D	07/30/2021 14:05
GB-03/4-6	60375923014	073021.B\0730AP23.D	07/30/2021 14:22
GB-02/2-3	60375923016	073021.B\0730AP24.D	07/30/2021 14:39
2947245MS	2947245	073021.B\0730AP25.D	07/30/2021 14:56
2947246MSD	2947246	073021.B\0730AP26.D	07/30/2021 15:14
GB-02/8-9	60375923017	073021.B\0730AP27.D	07/30/2021 15:31
GB-03/4-6	60375923014	080221.B\0802BP09.D	08/02/2021 15:41

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 072721.B\0727ADFT.D DFTPP Injection Date 07/27/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.22	(16.76)[1]
68	Less than 2.00% of mass 69	0.37	(1.34)[2]
69	Mass 69 relative abundance	27.19	(20.51)[2]
70	Less than 2.00% of mass 69	0.15	(0.57)[2]
127	10.00 - 80.00% of mass 442	42.09	(31.74)[2]
197	Less than 2.00% of mass 198	0.00	
198	Greater than 50.00% of mass 442	100.00	(75.42)[2]
199	5.00 - 9.00% of mass 198	6.80	
275	10.00 - 60.00% of mass 442	26.56	(20.03)[2]
365	Greater than 1.00% of mass 442	3.84	(2.90)[2]
441	Present, but less than mass 443	20.27	
442	Greater than 50.00% of mass 198	132.60	
443	15.00 - 24.00% of mass 442	26.31	(19.84)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936278CAL6	19936278CAL6	072721.B\0727API6.D	07/27/2021	08:37
19936283CAL1	19936283CAL1	072721.B\0727API1.D	07/27/2021	08:57
19936285CAL2	19936285CAL2	072721.B\0727API2.D	07/27/2021	09:14
19936279CAL3	19936279CAL3	072721.B\0727API3.D	07/27/2021	09:31
19936284CAL4	19936284CAL4	072721.B\0727API4.D	07/27/2021	09:48
19936286CAL5	19936286CAL5	072721.B\0727API5.D	07/27/2021	10:05
19936280CAL7	19936280CAL7	072721.B\0727API7.D	07/27/2021	10:22
19936276CAL8	19936276CAL8	072721.B\0727API8.D	07/27/2021	10:40
19936277ICV	19936277ICV	072721.B\0727APICV.D	07/27/2021	10:57

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 072921.B\0729ADFT.D DFTPP Injection Date 07/29/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:18

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	21.18	(14.45)[1]
68	Less than 2.00% of mass 69	0.37	(1.40)[2]
69	Mass 69 relative abundance	26.43	(18.04)[2]
70	Less than 2.00% of mass 69	0.12	(0.46)[2]
127	10.00 - 80.00% of mass 442	41.29	(28.18)[2]
197	Less than 2.00% of mass 198	0.16	
198	Greater than 50.00% of mass 442	100.00	(68.24)[2]
199	5.00 - 9.00% of mass 198	6.73	
275	10.00 - 60.00% of mass 442	27.57	(18.82)[2]
365	Greater than 1.00% of mass 442	4.09	(2.79)[2]
441	Present, but less than mass 443	22.38	
442	Greater than 50.00% of mass 198	146.53	
443	15.00 - 24.00% of mass 442	28.41	(19.39)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936281CCV	19936281CCV	072921.B\0729API6.D	07/29/2021	08:29
2947247BLANK	2947247BLANK	072921.B\0729AP10.D	07/29/2021	11:26
2947248LCS	2947248LCS	072921.B\0729AP11.D	07/29/2021	11:43
GB-22/1-3	60375923003	072921.B\0729AP38.D	07/29/2021	19:28
2947249MS	2947249MS	072921.B\0729AP39.D	07/29/2021	19:45
2947250MSD	2947250MSD	072921.B\0729AP40.D	07/29/2021	20:02

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 073021.B\0730ADFT.D DFTPP Injection Date 07/30/2021
Instrument ID: 60MSS5 DFTPP Injection Time 07:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.42	(15.38)[1]
68	Less than 2.00% of mass 69	0.39	(1.42)[2]
69	Mass 69 relative abundance	27.63	(18.95)[2]
70	Less than 2.00% of mass 69	0.16	(0.58)[2]
127	10.00 - 80.00% of mass 442	42.33	(29.04)[2]
197	Less than 2.00% of mass 198	0.34	
198	Greater than 50.00% of mass 442	100.00	(68.60)[2]
199	5.00 - 9.00% of mass 198	6.88	
275	10.00 - 60.00% of mass 442	27.49	(18.86)[2]
365	Greater than 1.00% of mass 442	3.89	(2.67)[2]
441	Present, but less than mass 443	22.26	
442	Greater than 50.00% of mass 198	145.77	
443	15.00 - 24.00% of mass 442	28.94	(19.85)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936282CCV	19936282CCV	073021.B\0730API6.D	07/30/2021	07:43
GB-22/3-5	60375923004	073021.B\0730AP13.D	07/30/2021	11:30
GB-29/1.5-2.5	60375923005	073021.B\0730AP14.D	07/30/2021	11:47
GB-29/3-5	60375923006	073021.B\0730AP15.D	07/30/2021	12:04
GB-43/3-5	60375923009	073021.B\0730AP16.D	07/30/2021	12:22
GB-43/5-7	60375923010	073021.B\0730AP17.D	07/30/2021	12:39
2947243BLANK	2947243BLANK	073021.B\0730AP18.D	07/30/2021	12:56
2947244LCS	2947244LCS	073021.B\0730AP19.D	07/30/2021	13:13
GB-01/8-10	60375923011	073021.B\0730AP20.D	07/30/2021	13:30
GB-01/11-13	60375923012	073021.B\0730AP21.D	07/30/2021	13:47
GB-03/1-3	60375923013	073021.B\0730AP22.D	07/30/2021	14:05
GB-03/4-6	60375923014	073021.B\0730AP23.D	07/30/2021	14:22
GB-02/2-3	60375923016	073021.B\0730AP24.D	07/30/2021	14:39
2947245MS	2947245MS	073021.B\0730AP25.D	07/30/2021	14:56
2947246MSD	2947246MSD	073021.B\0730AP26.D	07/30/2021	15:14
GB-02/8-9	60375923017	073021.B\0730AP27.D	07/30/2021	15:31

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW
Lab File ID: 080221.B\0802BDFT.D DFTPP Injection Date: 08/02/2021
Instrument ID: 60MSS5 DFTPP Injection Time: 10:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	24.13	(19.22)[1]
68	Less than 2.00% of mass 69	0.39	(1.31)[2]
69	Mass 69 relative abundance	29.78	(23.72)[2]
70	Less than 2.00% of mass 69	0.15	(0.52)[2]
127	10.00 - 80.00% of mass 442	43.74	(34.85)[2]
197	Less than 2.00% of mass 198	0.16	
198	Greater than 50.00% of mass 442	100.00	(79.67)[2]
199	5.00 - 9.00% of mass 198	6.71	
275	10.00 - 60.00% of mass 442	26.20	(20.87)[2]
365	Greater than 1.00% of mass 442	3.56	(2.84)[2]
441	Present, but less than mass 443	19.39	
442	Greater than 50.00% of mass 198	125.52	
443	15.00 - 24.00% of mass 442	24.69	(19.67)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19941257CAL6	19941257CAL6	080221.B\0802BPI6.D	08/02/2021	10:50
19941258CAL1	19941258CAL1	080221.B\0802BPI1.D	08/02/2021	11:07
19941259CAL2	19941259CAL2	080221.B\0802BPI2.D	08/02/2021	11:24
19941260CAL3	19941260CAL3	080221.B\0802BPI3.D	08/02/2021	11:41
19941261CAL4	19941261CAL4	080221.B\0802BPI4.D	08/02/2021	11:58
19941262CAL5	19941262CAL5	080221.B\0802BPI5.D	08/02/2021	12:15
19941263CAL7	19941263CAL7	080221.B\0802BPI7.D	08/02/2021	12:32
19941264CAL8	19941264CAL8	080221.B\0802BPI8.D	08/02/2021	12:49
19941265ICV	19941265ICV	080221.B\0802BPICV.D	08/02/2021	13:06
GB-03/4-6	60375923014	080221.B\0802BP09.D	08/02/2021	15:41

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19739373CCV Date Analyzed: 07/29/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:29

Lab File ID: 072921.B\0729API6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				119520	6.408	164584	9.874	215274	4.362
UPPER LIMIT				239040	6.908	329168	10.374	430548	4.862
LOWER LIMIT				59760	5.908	82292	9.374	107637	3.862
LAB SAMPLE ID	SAMPLE NO.								
2947247	2947247BLANK			141352	6.407	200992	9.875	227937	4.358
2947248	2947248LCS			139203	6.408	192395	9.87	228145	4.358
2947249	2947249MS			137741	6.408	182903	9.859	225784	4.356
2947250	2947250MSD			140133	6.408	198660	9.859	231458	4.358
60375923003	GB-22/1-3			136528	6.407	194956	9.86	222184	4.355

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19739373CCV Date Analyzed: 07/29/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 08:29

Lab File ID: 072921.B\0729API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		98288	11.209	215354	7.752
UPPER LIMIT		196576	11.709	430708	8.252
LOWER LIMIT		49144	10.709	107677	7.252
LAB SAMPLE ID	SAMPLE NO.				
2947247	2947247BLANK	119825	11.213	250441	7.752
2947248	2947248LCS	113306	11.205	246105	7.752
2947249	2947249MS	106757	11.188	246892	7.753
2947250	2947250MSD	122554	11.187	251802	7.752
60375923003	GB-22/1-3	114738	11.191	243028	7.752

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19745925CCV Date Analyzed: 07/30/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 07:43

Lab File ID: 073021.B\0730API6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				106074	6.409	147276	9.921	177549	4.362
UPPER LIMIT				212148	6.909	294552	10.421	355098	4.862
LOWER LIMIT				53037	5.909	73638	9.421	88774.5	3.862
LAB SAMPLE ID	SAMPLE NO.								
2947243	2947243BLANK			120478	6.407	178668	9.875	202083	4.359
2947244	2947244LCS			135709	6.407	191542	9.875	223983	4.358
2947245	2947245MS			145295	6.407	207847	9.866	236944	4.359
2947246	2947246MSD			143312	6.407	201982	9.863	231842	4.359
60375923004	GB-22/3-5			130051	6.407	174473	9.875	208523	4.358
60375923005	GB-29/1.5-2.5			138880	6.407	185415	9.875	221140	4.357
60375923006	GB-29/3-5			131934	6.407	176915	9.88	216360	4.357
60375923009	GB-43/3-5			145287	6.407	193105	9.88	234511	4.356
60375923010	GB-43/5-7			138452	6.407	189646	9.87	225777	4.356
60375923011	GB-01/8-10			138544	6.407	199846	9.875	230001	4.358
60375923012	GB-01/11-13			142662	6.407	200925	9.874	235900	4.358
60375923013	GB-03/1-3			126949	6.407	169172	9.874	210576	4.359
60375923014	GB-03/4-6			143314	6.408	190456	9.882	229139	4.358
60375923016	GB-02/2-3			136216	6.408	183138	9.866	225253	4.36
60375923017	GB-02/8-9			132385	6.408	198090	9.865	218558	4.358

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19745925CCV Date Analyzed: 07/30/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 07:43

Lab File ID: 073021.B\0730API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		85731	11.273	194529	7.757
UPPER LIMIT		171462	11.773	389058	8.257
LOWER LIMIT		42865.5	10.773	97264.5	7.257
LAB SAMPLE ID	SAMPLE NO.				
2947243	2947243BLANK	105606	11.213	226467	7.752
2947244	2947244LCS	107328	11.212	243700	7.753
2947245	2947245MS	123399	11.199	263922	7.752
2947246	2947246MSD	117018	11.193	260335	7.752
60375923004	GB-22/3-5	96214	11.212	236239	7.753
60375923005	GB-29/1.5-2.5	102820	11.213	247786	7.753
60375923006	GB-29/3-5	94898	11.218	225242	7.753
60375923009	GB-43/3-5	102869	11.22	251598	7.753
60375923010	GB-43/5-7	108063	11.205	244401	7.752
60375923011	GB-01/8-10	117884	11.211	256803	7.752
60375923012	GB-01/11-13	111896	11.211	260560	7.753
60375923013	GB-03/1-3	97366	11.211	212001	7.753
60375923014	GB-03/4-6	100542	11.221	249228	7.755
60375923016	GB-02/2-3	103477	11.199	252002	7.752
60375923017	GB-02/8-9	114887	11.198	252619	7.752

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19754488CAL6 Date Analyzed: 08/02/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 10:50

Lab File ID: 080221.B\0802BPI6.D

		AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD		143048	6.376	204735	9.863	251433	4.326
UPPER LIMIT		286096	6.876	409470	10.363	502866	4.826
LOWER LIMIT		71524	5.876	102367.5	9.363	125716.5	3.826
LAB SAMPLE ID	SAMPLE NO.						
60375923014	GB-03/4-6	139579	6.376	234543	9.849	234071	4.326

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Sample ID : 19754488CAL6 Date Analyzed: 08/02/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 10:50

Lab File ID: 080221.B\0802BPI6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		235831	11.19	231538	7.726
UPPER LIMIT		471662	11.69	463076	8.226
LOWER LIMIT		117915.5	10.69	115769	7.226
LAB SAMPLE ID	SAMPLE NO.				
60375923014	GB-03/4-6	262942	11.173	247455	7.725

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

GB-22/1-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:28
Lab Sample ID: 60375923003
Date Analyzed: 07/29/2021 19:28
Lab File ID: 072921.B\0729AP38.D
Initial wt/vol: 30.53 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	3.5	J
56-55-3	Benzo(a)anthracene	12.8	
50-32-8	Benzo(a)pyrene	10.6	
205-99-2	Benzo(b)fluoranthene	19.4	
191-24-2	Benzo(g,h,i)perylene	8.4	
207-08-9	Benzo(k)fluoranthene	9.7	
218-01-9	Chrysene	14.3	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	41.9	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.6	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	19.8	
129-00-0	Pyrene	32.5	

SAMPLE NO.

GB-22/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:28
Lab Sample ID: 60375923004
Date Analyzed: 07/30/2021 11:30
Lab File ID: 073021.B\0730AP13.D
Initial wt/vol: 30.59 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	6.4	
56-55-3	Benzo(a)anthracene	25.3	
50-32-8	Benzo(a)pyrene	21.2	
205-99-2	Benzo(b)fluoranthene	40.4	
191-24-2	Benzo(g,h,i)perylene	15.1	
207-08-9	Benzo(k)fluoranthene	13.7	
218-01-9	Chrysene	30.7	
53-70-3	Dibenz(a,h)anthracene	2.7	J
206-44-0	Fluoranthene	81.0	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	12.2	
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	37.2	
129-00-0	Pyrene	67.6	

SAMPLE NO.

GB-29/1.5-2.5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:28
Lab Sample ID: 60375923005
Date Analyzed: 07/30/2021 11:47
Lab File ID: 073021.B\0730AP14.D
Initial wt/vol: 30.21 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	3.9	J
56-55-3	Benzo(a)anthracene	23.5	
50-32-8	Benzo(a)pyrene	27.8	
205-99-2	Benzo(b)fluoranthene	60.9	
191-24-2	Benzo(g,h,i)perylene	25.5	
207-08-9	Benzo(k)fluoranthene	19.9	
218-01-9	Chrysene	37.9	
53-70-3	Dibenz(a,h)anthracene	4.1	
206-44-0	Fluoranthene	65.6	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	20.0	
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	20.2	
129-00-0	Pyrene	64.6	

SAMPLE NO.

GB-29/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:28
Lab Sample ID: 60375923006
Date Analyzed: 07/30/2021 12:04
Lab File ID: 073021.B\0730AP15.D
Initial wt/vol: 30.76 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	3.7	J
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	8.0	
191-24-2	Benzo(g,h,i)perylene	2.8	J
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	5.9	
53-70-3	Dibenz(a,h)anthracene	<1.7	U
206-44-0	Fluoranthene	11.3	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.3	J
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	4.2	
129-00-0	Pyrene	14.0	

SAMPLE NO.

GB-43/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:28
Lab Sample ID: 60375923009
Date Analyzed: 07/30/2021 12:22
Lab File ID: 073021.B\0730AP16.D
Initial wt/vol: 30.29 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	3.5	J
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	6.1	
191-24-2	Benzo(g,h,i)perylene	2.2	J
207-08-9	Benzo(k)fluoranthene	2.9	J
218-01-9	Chrysene	4.5	
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	11.8	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.8	U
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	5.2	
129-00-0	Pyrene	9.9	

SAMPLE NO.

GB-43/5-7

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:28
Lab Sample ID: 60375923010
Date Analyzed: 07/30/2021 12:39
Lab File ID: 073021.B\0730AP17.D
Initial wt/vol: 30.46 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 20.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.5	U
208-96-8	Acenaphthylene	<1.5	U
120-12-7	Anthracene	<1.7	U
56-55-3	Benzo(a)anthracene	2.5	J
50-32-8	Benzo(a)pyrene	<1.5	U
205-99-2	Benzo(b)fluoranthene	3.5	J
191-24-2	Benzo(g,h,i)perylene	<1.8	U
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	3.1	J
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	8.3	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.8	U
91-20-3	Naphthalene	<1.7	U
85-01-8	Phenanthrene	4.1	
129-00-0	Pyrene	6.6	

SAMPLE NO.

GB-01/8-10

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923011
Date Analyzed: 07/30/2021 13:30
Lab File ID: 073021.B\0730AP20.D
Initial wt/vol: 31.48 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.9	U
208-96-8	Acenaphthylene	<2.9	U
120-12-7	Anthracene	<3.2	U
56-55-3	Benzo(a)anthracene	7.3	J
50-32-8	Benzo(a)pyrene	<2.8	U
205-99-2	Benzo(b)fluoranthene	11.3	
191-24-2	Benzo(g,h,i)perylene	5.3	J
207-08-9	Benzo(k)fluoranthene	4.9	J
218-01-9	Chrysene	7.5	J
53-70-3	Dibenz(a,h)anthracene	<3.3	U
206-44-0	Fluoranthene	18.9	
86-73-7	Fluorene	<3.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.2	J
91-20-3	Naphthalene	<3.3	U
85-01-8	Phenanthrene	7.9	
129-00-0	Pyrene	15.2	

SAMPLE NO.

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

GB-01/11-13

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923
Date Extracted: 07/27/2021 15:30 Lab Sample ID: 60375923012
Date Analyzed: 07/30/2021 13:47 Lab File ID: 073021.B\0730AP21.D
Initial wt/vol: 30.25 g Final wt/vol: 2 mL Dilution: 1 Instrument: 60MSS5 Percent Moisture: 21.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<3.1	U
208-96-8	Acenaphthylene	<3.1	U
120-12-7	Anthracene	12.3	
56-55-3	Benzo(a)anthracene	43.7	
50-32-8	Benzo(a)pyrene	36.5	
205-99-2	Benzo(b)fluoranthene	82.9	
191-24-2	Benzo(g,h,i)perylene	29.9	
207-08-9	Benzo(k)fluoranthene	33.5	
218-01-9	Chrysene	61.3	
53-70-3	Dibenz(a,h)anthracene	5.8	J
206-44-0	Fluoranthene	137	
86-73-7	Fluorene	5.5	J
193-39-5	Indeno(1,2,3-cd)pyrene	23.9	
91-20-3	Naphthalene	16.4	
85-01-8	Phenanthrene	72.7	
129-00-0	Pyrene	107	

SAMPLE NO.

GB-03/1-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923013
Date Analyzed: 07/30/2021 14:05
Lab File ID: 073021.B\0730AP22.D
Initial wt/vol: 31.2 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 15.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	15.1	
208-96-8	Acenaphthylene	4.7	J
120-12-7	Anthracene	24.5	
56-55-3	Benzo(a)anthracene	25.0	
50-32-8	Benzo(a)pyrene	18.0	
205-99-2	Benzo(b)fluoranthene	36.1	
191-24-2	Benzo(g,h,i)perylene	14.5	
207-08-9	Benzo(k)fluoranthene	14.9	
218-01-9	Chrysene	29.6	
53-70-3	Dibenz(a,h)anthracene	<3.2	U
206-44-0	Fluoranthene	83.5	
86-73-7	Fluorene	26.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.9	
91-20-3	Naphthalene	92.3	
85-01-8	Phenanthrene	264	
129-00-0	Pyrene	77.8	

SAMPLE NO.

GB-03/4-6

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923014
Date Analyzed: 07/30/2021 14:22
Lab File ID: 073021.B\0730AP23.D
Initial wt/vol: 31.66 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 9.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	269	
208-96-8	Acenaphthylene	91.3	
120-12-7	Anthracene	575	
56-55-3	Benzo(a)anthracene	1000	
50-32-8	Benzo(a)pyrene	821	
205-99-2	Benzo(b)fluoranthene	1360	
191-24-2	Benzo(g,h,i)perylene	444	
207-08-9	Benzo(k)fluoranthene	488	
218-01-9	Chrysene	924	
53-70-3	Dibenz(a,h)anthracene	110	
86-73-7	Fluorene	249	
193-39-5	Indeno(1,2,3-cd)pyrene	384	
91-20-3	Naphthalene	211	

SAMPLE NO.

GB-02/2-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923016
Date Analyzed: 07/30/2021 14:39
Lab File ID: 073021.B\0730AP24.D
Initial wt/vol: 30.72 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	20.7	
208-96-8	Acenaphthylene	5.4	J
120-12-7	Anthracene	29.3	
56-55-3	Benzo(a)anthracene	69.2	
50-32-8	Benzo(a)pyrene	51.6	
205-99-2	Benzo(b)fluoranthene	86.8	
191-24-2	Benzo(g,h,i)perylene	33.4	
207-08-9	Benzo(k)fluoranthene	46.6	
218-01-9	Chrysene	63.3	
53-70-3	Dibenz(a,h)anthracene	<3.5	U
206-44-0	Fluoranthene	175	
86-73-7	Fluorene	20.0	
193-39-5	Indeno(1,2,3-cd)pyrene	28.6	
91-20-3	Naphthalene	8.7	
85-01-8	Phenanthrene	94.1	
129-00-0	Pyrene	149	

SAMPLE NO.

GB-02/8-9

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923017
Date Analyzed: 07/30/2021 15:31
Lab File ID: 073021.B\0730AP27.D
Initial wt/vol: 31.21 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 25.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	5.6	J
208-96-8	Acenaphthylene	<3.2	U
120-12-7	Anthracene	6.2	J
56-55-3	Benzo(a)anthracene	18.0	
50-32-8	Benzo(a)pyrene	13.9	
205-99-2	Benzo(b)fluoranthene	25.8	
191-24-2	Benzo(g,h,i)perylene	11.8	
207-08-9	Benzo(k)fluoranthene	8.7	
218-01-9	Chrysene	18.5	
53-70-3	Dibenz(a,h)anthracene	<3.7	U
206-44-0	Fluoranthene	47.6	
86-73-7	Fluorene	5.6	J
193-39-5	Indeno(1,2,3-cd)pyrene	9.1	
91-20-3	Naphthalene	7.6	J
85-01-8	Phenanthrene	24.7	
129-00-0	Pyrene	41.6	

SAMPLE NO.

GB-03/4-6

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 60375923014
Date Analyzed: 08/02/2021 15:41
Lab File ID: 080221.B\0802BP09.D
Initial wt/vol: 31.66 g
Final wt/vol: 2 mL
Dilution: 10
Instrument: 60MSS5
Percent Moisture: 9.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
206-44-0	Fluoranthene	2710	
85-01-8	Phenanthrene	2400	
129-00-0	Pyrene	2080	

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.11894	1.09422	1.06549	1.09074	1.06233	1.07547
Acenaphthylene	Averaged	1.79964	1.76321	1.71369	1.75430	1.72876	1.79109
Anthracene	Averaged	0.95480	0.98971	0.96996	1.02024	0.95352	0.91919
Benzo(a)anthracene	Averaged	1.27227	1.27235	1.22018	1.25033	1.17391	1.19779
Benzo(a)pyrene	Averaged	1.16001	1.16178	1.11150	1.18053	1.10095	1.09725
Benzo(b)fluoranthene	Averaged	1.36990	1.36367	1.29770	1.32666	1.29133	1.28286
Benzo(g,h,i)perylene	Averaged	0.56259	0.56634	0.51596	0.56411	0.50102	0.54197
Benzo(k)fluoranthene	Averaged	1.36448	1.32831	1.25870	1.40703	1.23369	1.19632
Chrysene	Averaged	1.10282	1.12963	1.07868	1.12828	1.06358	1.06173
Dibenz(a,h)anthracene	Averaged	0.74399	0.74879	0.70296	0.75423	0.68003	0.70465
Fluoranthene	Averaged	1.14036	1.17220	1.14496	1.19523	1.12899	1.08856
Fluorene	Averaged	1.28712	1.25285	1.22613	1.25270	1.22477	1.24394
Indeno(1,2,3-cd)pyrene	Averaged	0.78877	0.80206	0.74322	0.79324	0.72210	0.77636
Naphthalene	Averaged	1.01672	0.97880	0.95885	0.97000	0.94927	0.92788
Phenanthrene	Averaged	0.96149	0.98305	0.95421	1.00263	0.93523	0.92065
Pyrene	Averaged	1.39709	1.43920	1.38165	1.44039	1.35084	1.32652
2-Fluorobiphenyl (S)	Averaged	1.43833	1.39109	1.34963	1.37522	1.30411	1.31850
Terphenyl-d14 (S)	Averaged	1.37860	1.11909	1.05333	1.07924	1.01676	0.97814

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.04529	0.97405
Acenaphthylene	Averaged	1.74049	1.61912
Anthracene	Averaged	0.89655	0.84396
Benzo(a)anthracene	Averaged	1.17451	1.07257
Benzo(a)pyrene	Averaged	1.07722	0.99775
Benzo(b)fluoranthene	Averaged	1.20236	1.15863
Benzo(g,h,i)perylene	Averaged	0.56424	0.45218
Benzo(k)fluoranthene	Averaged	1.13691	1.10135
Chrysene	Averaged	1.05875	1.00538
Dibenz(a,h)anthracene	Averaged	0.69301	0.59322
Fluoranthene	Averaged	1.03891	0.96136
Fluorene	Averaged	1.21855	1.12528
Indeno(1,2,3-cd)pyrene	Averaged	0.78171	0.64710
Naphthalene	Averaged	0.93595	0.88423
Phenanthrene	Averaged	0.88955	0.82761
Pyrene	Averaged	1.31974	1.20996
2-Fluorobiphenyl (S)	Averaged	1.28345	1.17304
Terphenyl-d14 (S)	Averaged	0.97497	0.91027

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	4.07400			1.06582	
Acenaphthylene	Averaged	3.24813			1.73879	
Anthracene	Averaged	5.89516			0.94349	
Benzo(a)anthracene	Averaged	5.51081			1.20424	
Benzo(a)pyrene	Averaged	5.27878			1.11087	
Benzo(b)fluoranthene	Averaged	5.73520			1.28664	
Benzo(g,h,i)perylene	Averaged	7.71237			0.53355	
Benzo(k)fluoranthene	Averaged	8.63097			1.25335	
Chrysene	Averaged	3.82632			1.07860	
Dibenz(a,h)anthracene	Averaged	7.43095			0.70261	
Fluoranthene	Averaged	6.92175			1.10882	
Fluorene	Averaged	3.84432			1.22892	
Indeno(1,2,3-cd)pyrene	Averaged	6.85201			0.75682	
Naphthalene	Averaged	4.10623			0.95271	
Phenanthrene	Averaged	5.96680			0.93430	
Pyrene	Averaged	5.55817			1.35818	
2-Fluorobiphenyl (S)	Averaged	6.06551			1.32917	
Terphenyl-d14 (S)	Averaged	13.46000			1.06380	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 10:50 12:49

LAB FILE ID

CAL1 = 080221.B\0802BPI1.D CAL2 = 080221.B\0802BPI2.D CAL3 = 080221.B\0802BPI3.D

CAL4 = 080221.B\0802BPI4.D CAL5 = 080221.B\0802BPI5.D CAL6 = 080221.B\0802BPI6.D

CAL7 = 080221.B\0802BPI7.D CAL8 = 080221.B\0802BPI8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.14658	1.10765	1.08068	1.09943	1.06820	1.08103
Acenaphthylene	Averaged	1.84027	1.77017	1.70424	1.75609	1.72784	1.77353
Anthracene	Averaged	0.94629	0.97704	0.96599	1.01656	0.95853	0.94359
Benzo(a)anthracene	Averaged	1.21364	1.22585	1.16412	1.23743	1.13707	1.13743
Benzo(a)pyrene	Averaged	1.14531	1.10802	1.06165	1.11348	1.04164	1.05046
Benzo(b)fluoranthene	Averaged	1.11190	1.12735	1.01645	1.08532	1.02019	1.05635
Benzo(g,h,i)perylene	Averaged	1.28467	1.20171	1.12745	1.17792	1.09927	1.10518
Benzo(k)fluoranthene	Averaged	1.16552	1.13328	1.04790	1.12031	1.02784	1.00826
Chrysene	Averaged	1.10914	1.13977	1.09090	1.15928	1.06887	1.05944
Dibenz(a,h)anthracene	Averaged	1.29281	1.22914	1.15596	1.19283	1.08585	1.10729
Fluoranthene	Averaged	1.04711	1.07638	1.07401	1.11623	1.06096	1.04274
Fluorene	Averaged	1.25750	1.20193	1.20772	1.23262	1.20688	1.19477
Indeno(1,2,3-cd)pyrene	Averaged	1.48604	1.40868	1.30298	1.35395	1.27110	1.28897
Naphthalene	Averaged	1.02336	0.98526	0.96910	0.97614	0.96159	0.97343
Phenanthrene	Averaged	0.97402	0.99360	0.96655	1.01399	0.94748	0.93950
Pyrene	Averaged	1.25804	1.30830	1.23637	1.32915	1.20914	1.21265
2-Fluorobiphenyl (S)	Averaged	1.50168	1.44753	1.40169	1.42215	1.36294	1.36256
Terphenyl-d14 (S)	Averaged	1.29662	1.05565	0.99524	1.05348	0.95651	0.92844

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 10:50 12:49

LAB FILE ID

CAL1 = 080221.B\0802BPI1.D CAL2 = 080221.B\0802BPI2.D CAL3 = 080221.B\0802BPI3.D

CAL4 = 080221.B\0802BPI4.D CAL5 = 080221.B\0802BPI5.D CAL6 = 080221.B\0802BPI6.D

CAL7 = 080221.B\0802BPI7.D CAL8 = 080221.B\0802BPI8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.04331	0.97571
Acenaphthylene	Averaged	1.71786	1.61956
Anthracene	Averaged	0.91723	0.86933
Benzo(a)anthracene	Averaged	1.13887	1.03969
Benzo(a)pyrene	Averaged	0.99139	0.91958
Benzo(b)fluoranthene	Averaged	0.96174	0.89111
Benzo(g,h,i)perylene	Averaged	1.04311	0.97058
Benzo(k)fluoranthene	Averaged	0.98994	0.91170
Chrysene	Averaged	1.06874	1.00976
Dibenz(a,h)anthracene	Averaged	1.04460	0.99438
Fluoranthene	Averaged	1.00208	0.93972
Fluorene	Averaged	1.18014	1.11126
Indeno(1,2,3-cd)pyrene	Averaged	1.21564	1.12905
Naphthalene	Averaged	0.96156	0.93846
Phenanthrene	Averaged	0.90040	0.84344
Pyrene	Averaged	1.21607	1.11308
2-Fluorobiphenyl (S)	Averaged	1.30321	1.23877
Terphenyl-d14 (S)	Averaged	0.93387	0.85490

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 10:50 12:49

LAB FILE ID

CAL1 = 080221.B\0802BPI1.D CAL2 = 080221.B\0802BPI2.D CAL3 = 080221.B\0802BPI3.D

CAL4 = 080221.B\0802BPI4.D CAL5 = 080221.B\0802BPI5.D CAL6 = 080221.B\0802BPI6.D

CAL7 = 080221.B\0802BPI7.D CAL8 = 080221.B\0802BPI8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	4.68476			1.07532	
Acenaphthylene	Averaged	3.68636			1.73870	
Anthracene	Averaged	4.56082			0.94932	
Benzo(a)anthracene	Averaged	5.55535			1.16176	
Benzo(a)pyrene	Averaged	6.89872			1.05394	
Benzo(b)fluoranthene	Averaged	7.67360			1.03380	
Benzo(g,h,i)perylene	Averaged	8.60724			1.12624	
Benzo(k)fluoranthene	Averaged	8.05994			1.05059	
Chrysene	Averaged	4.37789			1.08824	
Dibenz(a,h)anthracene	Averaged	8.70120			1.13786	
Fluoranthene	Averaged	5.12707			1.04491	
Fluorene	Averaged	3.56213			1.19910	
Indeno(1,2,3-cd)pyrene	Averaged	8.49211			1.30705	
Naphthalene	Averaged	2.50477			0.97361	
Phenanthrene	Averaged	5.74316			0.94737	
Pyrene	Averaged	5.40068			1.23535	
2-Fluorobiphenyl (S)	Averaged	6.00336			1.38006	
Terphenyl-d14 (S)	Averaged	13.27665			1.00934	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19936277ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:57

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721.B\0727APICV.D Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	0.22095	0.0500	0.9060	20.0000
Acenaphthylene	Averaged	1.73879	0.35133	0.0500	3.0080	20.0000
Anthracene	Averaged	0.94349	0.18059	0.0500	-2.5757	20.0000
Benzo(a)anthracene	Averaged	1.20424	0.22518	0.0500	-0.5352	20.0000
Benzo(a)pyrene	Averaged	1.11087	0.19714	0.0500	-1.2261	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	0.25506	0.0500	-0.2937	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.11115	0.0500	1.5775	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	0.25020	0.0500	-4.5498	20.0000
Chrysene	Averaged	1.07860	0.20717	0.0500	-1.5645	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.13678	0.0500	0.2906	20.0000
Fluoranthene	Averaged	1.10882	0.22009	0.0500	-1.8274	20.0000
Fluorene	Averaged	1.22892	0.24519	0.0500	1.2220	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.15867	0.0500	2.5815	20.0000
Naphthalene	Averaged	0.95271	0.18683	0.0500	-2.6064	20.0000
Phenanthrene	Averaged	0.93430	0.18236	0.0500	-1.4614	20.0000
Pyrene	Averaged	1.35818	0.26889	0.0500	-2.3305	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	0.00000	0.0500	-0.8029	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	0.00000	0.0500	-8.0523	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19936281CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 08:29

Instrument ID: 60MSS5 GC Column: Col 1
Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072921.B\0729API6.D
Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	1.05371	0.0500	-1.1361	20.0000
Acenaphthylene	Averaged	1.73879	1.74542	0.0500	0.3813	20.0000
Anthracene	Averaged	0.94349	0.90438	0.0500	-4.1456	20.0000
Benzo(a)anthracene	Averaged	1.20424	1.17306	0.0500	-2.5894	20.0000
Benzo(a)pyrene	Averaged	1.11087	1.07828	0.0500	-2.9341	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	1.33219	0.0500	3.5403	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.47756	0.0500	-10.4940	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	1.17670	0.0500	-6.1155	20.0000
Chrysene	Averaged	1.07860	1.03779	0.0500	-3.7843	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.63333	0.0500	-9.8595	20.0000
Fluoranthene	Averaged	1.10882	1.07103	0.0500	-3.4083	20.0000
Fluorene	Averaged	1.22892	1.22710	0.0500	-0.1481	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.68211	0.0500	-9.8715	20.0000
Naphthalene	Averaged	0.95271	0.94469	0.0500	-0.8419	20.0000
Phenanthrene	Averaged	0.93430	0.90801	0.0500	-2.8139	20.0000
Pyrene	Averaged	1.35818	1.40336	0.0500	3.3269	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	1.29490	0.0500	-2.5788	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	1.08848	0.0500	2.3202	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19936282CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 07:43

Instrument ID: 60MSS5 GC Column: Col 1
Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 073021.B\0730API6.D
Init. Calib. Time(s): 08:37 10:40

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	1.05837	0.0500	-0.6987	20.0000
Acenaphthylene	Averaged	1.73879	1.73884	0.0500	0.0027	20.0000
Anthracene	Averaged	0.94349	0.91583	0.0500	-2.9316	20.0000
Benzo(a)anthracene	Averaged	1.20424	1.16747	0.0500	-3.0537	20.0000
Benzo(a)pyrene	Averaged	1.11087	1.06404	0.0500	-4.2164	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	1.33380	0.0500	3.6649	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.49779	0.0500	-6.7025	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	1.20895	0.0500	-3.5426	20.0000
Chrysene	Averaged	1.07860	1.03285	0.0500	-4.2420	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.64997	0.0500	-7.4922	20.0000
Fluoranthene	Averaged	1.10882	1.08219	0.0500	-2.4015	20.0000
Fluorene	Averaged	1.22892	1.22040	0.0500	-0.6931	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.70439	0.0500	-6.9276	20.0000
Naphthalene	Averaged	0.95271	0.94642	0.0500	-0.6604	20.0000
Phenanthrene	Averaged	0.93430	0.90868	0.0500	-2.7427	20.0000
Pyrene	Averaged	1.35818	1.42600	0.0500	4.9938	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	1.28418	0.0500	-3.3854	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	1.13584	0.0500	6.7722	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19941265ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 13:06

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080221.B\0802BPICV.D Init. Calib. Time(s): 10:50 12:49

SDG No.: 60375923

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.07532	0.22456	0.0500	0.5307	20.0000
Acenaphthylene	Averaged	1.73870	0.35877	0.0500	2.0037	20.0000
Anthracene	Averaged	0.94932	0.18264	0.0500	-0.6036	20.0000
Benzo(a)anthracene	Averaged	1.16176	0.21673	0.0500	-2.0948	20.0000
Benzo(a)pyrene	Averaged	1.05394	0.20377	0.0500	-0.3301	20.0000
Benzo(b)fluoranthene	Averaged	1.03380	0.21027	0.0500	2.1810	20.0000
Benzo(g,h,i)perylene	Averaged	1.12624	0.22742	0.0500	-1.8694	20.0000
Benzo(k)fluoranthene	Averaged	1.05059	0.21282	0.0500	-4.0291	20.0000
Chrysene	Averaged	1.08824	0.20890	0.0500	-2.6465	20.0000
Dibenz(a,h)anthracene	Averaged	1.13786	0.21133	0.0500	-2.6861	20.0000
Fluoranthene	Averaged	1.04491	0.20923	0.0500	-0.2070	20.0000
Fluorene	Averaged	1.19910	0.24475	0.0500	-0.3610	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	1.30705	0.26870	0.0500	-1.3831	20.0000
Naphthalene	Averaged	0.97361	0.19033	0.0500	-0.0190	20.0000
Phenanthrene	Averaged	0.94737	0.18524	0.0500	-0.8311	20.0000
Pyrene	Averaged	1.23535	0.24581	0.0500	-1.8377	20.0000
2-Fluorobiphenyl (S)	Averaged	1.38006	0.00000	0.0500	-1.2681	20.0000
Terphenyl-d14 (S)	Averaged	1.00934	0.00000	0.0500	-8.0151	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

BLANK

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:28
Lab Sample ID: 2947247
Date Analyzed: 07/29/2021 11:26
Lab File ID: 072921.B\0729AP10.D
Initial wt/vol: 30.2 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.2	U
208-96-8	Acenaphthylene	<1.2	U
120-12-7	Anthracene	<1.4	U
56-55-3	Benzo(a)anthracene	<1.5	U
50-32-8	Benzo(a)pyrene	<1.2	U
205-99-2	Benzo(b)fluoranthene	<1.6	U
191-24-2	Benzo(g,h,i)perylene	<1.5	U
207-08-9	Benzo(k)fluoranthene	<1.8	U
218-01-9	Chrysene	<1.6	U
53-70-3	Dibenz(a,h)anthracene	<1.4	U
206-44-0	Fluoranthene	<2.5	U
86-73-7	Fluorene	<1.3	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.4	U
91-20-3	Naphthalene	<1.4	U
85-01-8	Phenanthrene	<2.7	U
129-00-0	Pyrene	<1.8	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:28
Lab Sample ID: 2947248
Date Analyzed: 07/29/2021 11:43
Lab File ID: 072921.B\0729AP11.D
Initial wt/vol: 30.48 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	26.9	
208-96-8	Acenaphthylene	26.5	
120-12-7	Anthracene	28.4	
56-55-3	Benzo(a)anthracene	28.6	
50-32-8	Benzo(a)pyrene	28.0	
205-99-2	Benzo(b)fluoranthene	28.6	
191-24-2	Benzo(g,h,i)perylene	25.2	
207-08-9	Benzo(k)fluoranthene	31.5	
218-01-9	Chrysene	28.1	
53-70-3	Dibenz(a,h)anthracene	25.5	
206-44-0	Fluoranthene	29.8	
86-73-7	Fluorene	27.3	
193-39-5	Indeno(1,2,3-cd)pyrene	25.7	
91-20-3	Naphthalene	26.8	
85-01-8	Phenanthrene	28.4	
129-00-0	Pyrene	30.9	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:28
Lab Sample ID: 2947249
Date Analyzed: 07/29/2021 19:45
Lab File ID: 072921.B\0729AP39.D
Initial wt/vol: 30.49 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 18.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	32.4	
208-96-8	Acenaphthylene	30.2	
120-12-7	Anthracene	42.1	
56-55-3	Benzo(a)anthracene	77.2	
50-32-8	Benzo(a)pyrene	67.0	
205-99-2	Benzo(b)fluoranthene	96.9	
191-24-2	Benzo(g,h,i)perylene	63.2	
207-08-9	Benzo(k)fluoranthene	60.9	
218-01-9	Chrysene	78.5	
53-70-3	Dibenz(a,h)anthracene	37.5	
206-44-0	Fluoranthene	157	
86-73-7	Fluorene	34.6	
193-39-5	Indeno(1,2,3-cd)pyrene	55.6	
91-20-3	Naphthalene	31.5	
85-01-8	Phenanthrene	86.0	
129-00-0	Pyrene	138	

SAMPLE NO.

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923
Date Extracted: 07/27/2021 15:28 Lab Sample ID: 2947250
Date Analyzed: 07/29/2021 20:02 Lab File ID: 072921.B\0729AP40.D
Initial wt/vol: 30.04 g Final wt/vol: 1 mL Dilution: 1 Instrument: 60MSS5 Percent Moisture: 18.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	33.0	
208-96-8	Acenaphthylene	30.8	
120-12-7	Anthracene	40.0	
56-55-3	Benzo(a)anthracene	60.2	
50-32-8	Benzo(a)pyrene	52.1	
205-99-2	Benzo(b)fluoranthene	69.8	
191-24-2	Benzo(g,h,i)perylene	50.7	
207-08-9	Benzo(k)fluoranthene	50.0	
218-01-9	Chrysene	61.4	
53-70-3	Dibenz(a,h)anthracene	36.0	
206-44-0	Fluoranthene	114	
86-73-7	Fluorene	35.0	
193-39-5	Indeno(1,2,3-cd)pyrene	47.0	
91-20-3	Naphthalene	34.3	
85-01-8	Phenanthrene	70.4	
129-00-0	Pyrene	97.8	

SAMPLE NO.

BLANK

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 2947243
Date Analyzed: 07/30/2021 12:56
Lab File ID: 073021.B\0730AP18.D
Initial wt/vol: 30.36 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.4	U
208-96-8	Acenaphthylene	<2.4	U
120-12-7	Anthracene	<2.7	U
56-55-3	Benzo(a)anthracene	<3.1	U
50-32-8	Benzo(a)pyrene	<2.4	U
205-99-2	Benzo(b)fluoranthene	<3.2	U
191-24-2	Benzo(g,h,i)perylene	<2.9	U
207-08-9	Benzo(k)fluoranthene	<3.6	U
218-01-9	Chrysene	<3.1	U
53-70-3	Dibenz(a,h)anthracene	<2.8	U
206-44-0	Fluoranthene	<4.9	U
86-73-7	Fluorene	<2.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	<2.8	U
91-20-3	Naphthalene	<2.8	U
85-01-8	Phenanthrene	<5.3	U
129-00-0	Pyrene	<3.5	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 2947244
Date Analyzed: 07/30/2021 13:13
Lab File ID: 073021.B\0730AP19.D
Initial wt/vol: 30.12 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	28.4	
208-96-8	Acenaphthylene	27.6	
120-12-7	Anthracene	30.8	
56-55-3	Benzo(a)anthracene	31.8	
50-32-8	Benzo(a)pyrene	30.0	
205-99-2	Benzo(b)fluoranthene	31.9	
191-24-2	Benzo(g,h,i)perylene	30.3	
207-08-9	Benzo(k)fluoranthene	34.4	
218-01-9	Chrysene	31.6	
53-70-3	Dibenz(a,h)anthracene	29.6	
206-44-0	Fluoranthene	35.0	
86-73-7	Fluorene	29.5	
193-39-5	Indeno(1,2,3-cd)pyrene	30.1	
91-20-3	Naphthalene	28.4	
85-01-8	Phenanthrene	32.6	
129-00-0	Pyrene	35.9	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 2947245
Date Analyzed: 07/30/2021 14:56
Lab File ID: 073021.B\0730AP25.D
Initial wt/vol: 31.08 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	64.8	
208-96-8	Acenaphthylene	34.9	
120-12-7	Anthracene	83.0	
56-55-3	Benzo(a)anthracene	139	
50-32-8	Benzo(a)pyrene	103	
205-99-2	Benzo(b)fluoranthene	160	
191-24-2	Benzo(g,h,i)perylene	80.1	
207-08-9	Benzo(k)fluoranthene	78.8	
218-01-9	Chrysene	131	
53-70-3	Dibenz(a,h)anthracene	42.0	
206-44-0	Fluoranthene	307	
86-73-7	Fluorene	75.4	
193-39-5	Indeno(1,2,3-cd)pyrene	70.4	
91-20-3	Naphthalene	45.3	
85-01-8	Phenanthrene	163	
129-00-0	Pyrene	254	

SAMPLE NO.

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 15:30
Lab Sample ID: 2947246
Date Analyzed: 07/30/2021 15:14
Lab File ID: 073021.B\0730AP26.D
Initial wt/vol: 30.79 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	69.4	
208-96-8	Acenaphthylene	50.1	
120-12-7	Anthracene	78.4	
56-55-3	Benzo(a)anthracene	111	
50-32-8	Benzo(a)pyrene	89.4	
205-99-2	Benzo(b)fluoranthene	120	
191-24-2	Benzo(g,h,i)perylene	77.1	
207-08-9	Benzo(k)fluoranthene	81.4	
218-01-9	Chrysene	106	
53-70-3	Dibenz(a,h)anthracene	52.1	
206-44-0	Fluoranthene	221	
86-73-7	Fluorene	76.6	
193-39-5	Indeno(1,2,3-cd)pyrene	72.2	
91-20-3	Naphthalene	58.6	
85-01-8	Phenanthrene	133	
129-00-0	Pyrene	190	

PCB - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60GCS8

LAB SAMPLE ID	SAMPLE NAME	DCBP
2947234	2947234BLANK	84
2947235	2947235LCS	84
2947236	2947236MS	80
2947237	2947237MSD	77
60375923001	GB-15/2-3	83
60375923002	GB-15/3-5	81
60375923003	GB-22/1-3	85
60375923004	GB-22/3-5	84
60375923005	GB-29/1.5-2.5	80
60375923006	GB-29/3-5	82
60375923007	GB-36/0-2	90
60375923008	GB-36/2-4	81
60375923009	GB-43/3-5	80
60375923010	GB-43/5-7	82
60375923011	GB-01/8-10	83
60375923012	GB-01/11-13	88
60375923013	GB-03/1-3	83
60375923014	GB-03/4-6	77
60375923016	GB-02/2-3	78
60375923017	GB-02/8-9	80

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(35-120)

* Values outside of QC Limits

PCB - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2947235LCS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/29/2021
Instrument: 60GCS8
LCS Lot No: 42472
Lab File ID: 072821-1.B\0728210095.D
SDG No.: 60375923

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	163	147	90	65-120
PCB-1260 (Aroclor 1260)	163	150	92	65-120

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2947236MS
Date Extracted: 07/27/2021
Date Analyzed (1): 07/30/2021
Instrument: 60GCS8
Lab File ID: 072821-1.B\0728210163.D
Parent Sample ID: GB-02/2-3
SDG No.: 60375923

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	205	<10	178	87	30-130
PCB-1260 (Aroclor 1260)	205	<7.9	203	100	15-155

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60GCS8 Matrix Spike Duplicate - Sample No: 2947237MSD

Lab File ID (2): 072821-1.B\0728210164.D Date Analyzed (2): 07/30/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
PCB-1016 (Aroclor 1016)	198	167	84	6	0-40	30-130
PCB-1260 (Aroclor 1260)	198	173	87	16	0-40	15-155

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

09/10/2021 10:18

SAMPLE NO.

2947234BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60GCS8 Matrix: Solid Lab Sample ID: 2947234

Lab File ID (1): 072821-1.B\0728210094.D Date Analyzed (1): 07/29/2021 Time (1):15:22

Lab File ID (2): 072821-2.B\0728210094.D Date Analyzed (2): 07/29/2021 Time (2):15:22

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2947235LCS	2947235	072821-1.B\0728210095.D	07/29/2021 15:40
2947235LCS	2947235	072821-2.B\0728210095.D	07/29/2021 15:40
GB-15/2-3	60375923001	072821-1.B\0728210143.D	07/30/2021 05:59
GB-15/3-5	60375923002	072821-1.B\0728210144.D	07/30/2021 06:17
GB-22/1-3	60375923003	072821-1.B\0728210145.D	07/30/2021 06:34
GB-22/3-5	60375923004	072821-1.B\0728210146.D	07/30/2021 06:52
GB-29/1.5-2.5	60375923005	072821-1.B\0728210147.D	07/30/2021 07:10
GB-29/3-5	60375923006	072821-1.B\0728210148.D	07/30/2021 07:28
GB-36/0-2	60375923007	072821-1.B\0728210149.D	07/30/2021 07:46
GB-36/2-4	60375923008	072821-1.B\0728210150.D	07/30/2021 08:04
GB-43/3-5	60375923009	072821-1.B\0728210151.D	07/30/2021 08:22
GB-43/5-7	60375923010	072821-1.B\0728210152.D	07/30/2021 08:39
GB-01/8-10	60375923011	072821-1.B\0728210156.D	07/30/2021 09:51
GB-01/11-13	60375923012	072821-1.B\0728210157.D	07/30/2021 10:09
GB-03/1-3	60375923013	072821-1.B\0728210158.D	07/30/2021 10:27
GB-03/4-6	60375923014	072821-1.B\0728210161.D	07/30/2021 11:20
GB-02/2-3	60375923016	072821-1.B\0728210162.D	07/30/2021 11:38
2947236MS	2947236	072821-1.B\0728210163.D	07/30/2021 11:56
2947236MS	2947236	072821-2.B\0728210163.D	07/30/2021 11:56
2947237MSD	2947237	072821-1.B\0728210164.D	07/30/2021 12:14
2947237MSD	2947237	072821-2.B\0728210164.D	07/30/2021 12:14
GB-02/8-9	60375923017	072821-1.B\0728210165.D	07/30/2021 12:32

SAMPLE NO.

GB-15/2-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923001

Date Analyzed: 07/30/2021 05:59 Lab File ID: 072821-1.B\0728210143.D

Initial wt/vol: 30.38 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-15/3-5

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 14:19
Lab Sample ID: 60375923002
Date Analyzed: 07/30/2021 06:17
Lab File ID: 072821-1.B\0728210144.D
Initial wt/vol: 30.57 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 21.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-22/1-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923003

Date Analyzed: 07/30/2021 06:34 Lab File ID: 072821-1.B\0728210145.D

Initial wt/vol: 31.2 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.7	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.3	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.4	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	26.5	J

SAMPLE NO.

GB-22/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923004

Date Analyzed: 07/30/2021 06:52 Lab File ID: 072821-1.B\0728210146.D

Initial wt/vol: 31.12 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	71.9	

SAMPLE NO.

GB-29/1.5-2.5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923005

Date Analyzed: 07/30/2021 07:10 Lab File ID: 072821-1.B\0728210147.D

Initial wt/vol: 31.01 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-29/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923006

Date Analyzed: 07/30/2021 07:28 Lab File ID: 072821-1.B\0728210148.D

Initial wt/vol: 31.13 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-36/0-2

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923007

Date Analyzed: 07/30/2021 07:46 Lab File ID: 072821-1.B\0728210149.D

Initial wt/vol: 31.56 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 16.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.4	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.0	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.1	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.1	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.5	U
11096-82-5	PCB-1260 (Aroclor 1260)	8.9	J

SAMPLE NO.

GB-36/2-4

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/27/2021 05:45
Matrix: Solid
SDG No.: 60375923
Date Extracted: 07/27/2021 14:19
Lab Sample ID: 60375923008
Date Analyzed: 07/30/2021 08:04
Lab File ID: 072821-1.B\0728210150.D
Initial wt/vol: 30.03 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 17.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-43/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923009

Date Analyzed: 07/30/2021 08:22 Lab File ID: 072821-1.B\0728210151.D

Initial wt/vol: 30.3 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.3	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.9	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.2	U

SAMPLE NO.

GB-43/5-7

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923010

Date Analyzed: 07/30/2021 08:39 Lab File ID: 072821-1.B\0728210152.D

Initial wt/vol: 31.7 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.7	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.3	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.4	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.7	U

SAMPLE NO.

GB-01/8-10

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923011

Date Analyzed: 07/30/2021 09:51 Lab File ID: 072821-1.B\0728210156.D

Initial wt/vol: 30.85 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-01/11-13

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923012

Date Analyzed: 07/30/2021 10:09 Lab File ID: 072821-1.B\0728210157.D

Initial wt/vol: 30.34 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.3	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.9	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.0	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.2	U

SAMPLE NO.

GB-03/1-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923013

Date Analyzed: 07/30/2021 10:27 Lab File ID: 072821-1.B\0728210158.D

Initial wt/vol: 30.61 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 15.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.5	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.1	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.2	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.2	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.5	U

SAMPLE NO.

GB-03/4-6

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923014

Date Analyzed: 07/30/2021 11:20 Lab File ID: 072821-1.B\0728210161.D

Initial wt/vol: 30.23 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 9.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<8.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.0	U
53469-21-9	PCB-1242 (Aroclor 1242)	<8.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.4	U
11097-69-1	PCB-1254 (Aroclor 1254)	9.0	J
11096-82-5	PCB-1260 (Aroclor 1260)	<7.1	U

SAMPLE NO.

GB-02/2-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923016

Date Analyzed: 07/30/2021 11:38 Lab File ID: 072821-1.B\0728210162.D

Initial wt/vol: 30.78 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-02/8-9

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 60375923017

Date Analyzed: 07/30/2021 12:32 Lab File ID: 072821-1.B\0728210165.D

Initial wt/vol: 31.76 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 25.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.4	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.9	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.1	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.2	U

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	970840.00000	897090.00000	848670.00000	775983.33333	751107.50000	730754.00000
Aroclor 1016	2	Averaged	2030800.00000	1870550.00000	1753495.00000	1609373.33333	1558385.00000	1526438.00000
Aroclor 1016	3	Averaged	1001540.00000	938820.00000	894895.00000	815493.33333	790935.00000	781846.00000
Aroclor 1016	4	Averaged	728080.00000	697890.00000	656465.00000	609860.00000	593575.00000	577708.00000
Aroclor 1016	5	Averaged	615720.00000	586330.00000	555330.00000	531306.66667	523252.50000	511044.00000
Aroclor 1260	1	Averaged	1407220.00000	1275040.00000	1167125.00000	1089186.66667	1059987.50000	1017992.00000
Aroclor 1260	2	Averaged	1601100.00000	1449940.00000	1347575.00000	1255346.66667	1224605.00000	1155912.00000
Aroclor 1260	3	Averaged	1440020.00000	1344870.00000	1260425.00000	1219733.33333	1187650.00000	1142266.00000
Aroclor 1260	4	Averaged	1077200.00000	993910.00000	953650.00000	913590.00000	872122.50000	822290.00000
Aroclor 1260	5	Averaged	1033420.00000	945000.00000	910125.00000	864850.00000	848505.00000	798406.00000
Decachlorobiphenyl		Averaged	22550600.0000	19414000.0000	18135700.0000	16997500.0000	16662850.0000	15891420.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	678037.50000	639431.00000	542441.00000
Aroclor 1016	2	Averaged	1428126.25000	1343964.00000	1166113.00000
Aroclor 1016	3	Averaged	729408.75000	684899.00000	581626.00000
Aroclor 1016	4	Averaged	533293.75000	506675.00000	439605.00000
Aroclor 1016	5	Averaged	488555.00000	459861.00000	413286.50000
Aroclor 1260	1	Averaged	955648.75000	902415.00000	783202.00000
Aroclor 1260	2	Averaged	1088666.25000	1037329.00000	918955.00000
Aroclor 1260	3	Averaged	1087676.25000	1056969.00000	946479.00000
Aroclor 1260	4	Averaged	807747.50000	764514.00000	683372.50000
Aroclor 1260	5	Averaged	782333.75000	730673.00000	673601.50000
Decachlorobiphenyl		Averaged	15345562.5000	14520250.0000	13227495.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	17.47			759372.70	
Aroclor 1016	2	Averaged	16.83			1587471.62	
Aroclor 1016	3	Averaged	16.21			802162.56	
Aroclor 1016	4	Averaged	15.56			593683.52	
Aroclor 1016	5	Averaged	11.96			520520.62	
Aroclor 1260	1	Averaged	17.79			1073090.76	
Aroclor 1260	2	Averaged	17.22			1231047.65	
Aroclor 1260	3	Averaged	12.70			1187343.17	
Aroclor 1260	4	Averaged	13.91			876488.50	
Aroclor 1260	5	Averaged	13.17			842990.47	
Decachlorobiphenyl		Averaged	16.45			16971708.61	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	1424340.00000	1387940.00000	1353655.00000	1268366.66667	1250982.50000	1214660.00000
Aroclor 1016	2	Averaged	2765480.00000	2624980.00000	2547520.00000	2366853.33333	2320287.50000	2252520.00000
Aroclor 1016	3	Averaged	1060340.00000	1001070.00000	1012590.00000	950720.00000	941760.00000	912578.00000
Aroclor 1016	4	Averaged	1023180.00000	1009120.00000	979085.00000	923663.33333	909462.50000	887270.00000
Aroclor 1016	5	Averaged	975340.00000	966030.00000	949390.00000	896156.66667	897797.50000	880792.00000
Aroclor 1260	1	Averaged	1986480.00000	1919180.00000	1856270.00000	1731980.00000	1714490.00000	1646706.00000
Aroclor 1260	2	Averaged	2611200.00000	2435340.00000	2348200.00000	2215843.33333	2188460.00000	2112124.00000
Aroclor 1260	3	Averaged	1788240.00000	1693920.00000	1664700.00000	1591370.00000	1557472.50000	1517404.00000
Aroclor 1260	4	Averaged	1977120.00000	1870610.00000	1828635.00000	1748463.33333	1754042.50000	1689950.00000
Aroclor 1260	5	Averaged	1838060.00000	1739710.00000	1709030.00000	1606620.00000	1592980.00000	1577298.00000
Decachlorobiphenyl		Averaged	37102600.0000	32197000.0000	30949950.0000	30231133.3333	28633675.0000	27983960.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	1146172.50000	1082018.00000	948775.00000
Aroclor 1016	2	Averaged	2117733.75000	1999484.00000	1775932.50000
Aroclor 1016	3	Averaged	879001.25000	811467.00000	743099.00000
Aroclor 1016	4	Averaged	835183.75000	783751.00000	691553.50000
Aroclor 1016	5	Averaged	838305.00000	798289.00000	712520.00000
Aroclor 1260	1	Averaged	1560540.00000	1420054.00000	1280849.50000
Aroclor 1260	2	Averaged	1996308.75000	1894627.00000	1696410.00000
Aroclor 1260	3	Averaged	1470232.50000	1372561.00000	1282513.00000
Aroclor 1260	4	Averaged	1629258.75000	1556540.00000	1387805.00000
Aroclor 1260	5	Averaged	1500142.50000	1416916.00000	1285497.00000
Decachlorobiphenyl		Averaged	26321800.0000	25331760.0000	22648670.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	12.46			1230767.74	
Aroclor 1016	2	Averaged	13.60			2307865.67	
Aroclor 1016	3	Averaged	10.89			923625.02	
Aroclor 1016	4	Averaged	12.19			893585.45	
Aroclor 1016	5	Averaged	9.71			879402.24	
Aroclor 1260	1	Averaged	13.77			1679616.61	
Aroclor 1260	2	Averaged	12.98			2166501.45	
Aroclor 1260	3	Averaged	10.28			1548712.55	
Aroclor 1260	4	Averaged	10.27			1715824.95	
Aroclor 1260	5	Averaged	10.67			1585139.27	
Decachlorobiphenyl		Averaged	14.57			29044505.37	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	3.679	3.68	3.681	3.681	3.681	3.681	3.684	3.683
Aroclor 1016	2	4.35	4.35	4.35	4.351	4.351	4.351	4.351	4.352
Aroclor 1016	3	4.504	4.505	4.505	4.505	4.505	4.505	4.505	4.506
Aroclor 1016	4	5.222	5.223	5.223	5.222	5.223	5.223	5.223	5.224
Aroclor 1016	5	5.417	5.417	5.417	5.417	5.418	5.418	5.418	5.418
Aroclor 1260	1	7.351	7.349	7.351	7.35	7.35	7.35	7.35	7.351
Aroclor 1260	2	7.769	7.768	7.77	7.77	7.77	7.77	7.771	7.771
Aroclor 1260	3	8.228	8.228	8.229	8.229	8.228	8.23	8.23	8.231
Aroclor 1260	4	8.522	8.523	8.522	8.523	8.523	8.524	8.524	8.525
Aroclor 1260	5	8.912	8.913	8.913	8.913	8.914	8.913	8.914	8.915
Decachlorobiphenyl		12.053	12.053	12.053	12.053	12.053	12.053	12.055	12.055

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	3.684	3.681	3.561	3.801
Aroclor 1016	2	4.353	4.35	4.23	4.47
Aroclor 1016	3	4.506	4.506	4.386	4.626
Aroclor 1016	4	5.224	5.222	5.102	5.342
Aroclor 1016	5	5.419	5.418	5.298	5.538
Aroclor 1260	1	7.351	7.35	7.23	7.47
Aroclor 1260	2	7.771	7.77	7.65	7.89
Aroclor 1260	3	8.231	8.229	8.109	8.349
Aroclor 1260	4	8.524	8.523	8.403	8.643
Aroclor 1260	5	8.915	8.913	8.793	9.033
Decachlorobiphenyl		12.054	12.053	11.933	12.173

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	4.307	4.306	4.307	4.307	4.307	4.307	4.306	4.307
Aroclor 1016	2	4.973	4.973	4.974	4.973	4.974	4.974	4.974	4.975
Aroclor 1016	3	5.205	5.204	5.204	5.203	5.203	5.203	5.204	5.204
Aroclor 1016	4	5.541	5.539	5.54	5.539	5.539	5.54	5.54	5.54
Aroclor 1016	5	6.018	6.018	6.019	6.018	6.018	6.018	6.019	6.019
Aroclor 1260	1	8.127	8.125	8.126	8.125	8.126	8.126	8.125	8.126
Aroclor 1260	2	8.393	8.393	8.394	8.393	8.393	8.394	8.395	8.394
Aroclor 1260	3	9.067	9.066	9.067	9.067	9.067	9.068	9.068	9.068
Aroclor 1260	4	9.192	9.192	9.193	9.192	9.193	9.193	9.194	9.194
Aroclor 1260	5	9.747	9.747	9.747	9.747	9.748	9.748	9.748	9.749
Decachlorobiphenyl		12.806	12.805	12.807	12.807	12.807	12.807	12.808	12.807

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	4.308	4.307	4.187	4.427
Aroclor 1016	2	4.974	4.973	4.853	5.093
Aroclor 1016	3	5.204	5.203	5.083	5.323
Aroclor 1016	4	5.54	5.54	5.42	5.66
Aroclor 1016	5	6.019	6.019	5.899	6.139
Aroclor 1260	1	8.127	8.127	8.007	8.247
Aroclor 1260	2	8.395	8.393	8.273	8.513
Aroclor 1260	3	9.068	9.068	8.948	9.188
Aroclor 1260	4	9.195	9.192	9.072	9.312
Aroclor 1260	5	9.748	9.748	9.628	9.868
Decachlorobiphenyl		12.808	12.808	12.688	12.928

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-1.B\0728210014.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	353695.00000	0.00			353695.00	
Aroclor 1221	2	Averaged	275622.50000	0.00			275622.50	
Aroclor 1221	3	Averaged	825162.50000	0.00			825162.50	
Aroclor 1254	1	Averaged	1094090.00000	0.00			1094090.00	
Aroclor 1254	2	Averaged	588712.50000	0.00			588712.50	
Aroclor 1254	3	Averaged	1530757.50000	0.00			1530757.50	
Aroclor 1254	4	Averaged	1336107.50000	0.00			1336107.50	
Aroclor 1254	5	Averaged	1226710.00000	0.00			1226710.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-2.B\0728210014.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	455120.00000	0.00			455120.00	
Aroclor 1221	2	Averaged	312310.00000	0.00			312310.00	
Aroclor 1221	3	Averaged	981785.00000	0.00			981785.00	
Aroclor 1254	1	Averaged	1476170.00000	0.00			1476170.00	
Aroclor 1254	2	Averaged	1834265.00000	0.00			1834265.00	
Aroclor 1254	3	Averaged	2354395.00000	0.00			2354395.00	
Aroclor 1254	4	Averaged	2517735.00000	0.00			2517735.00	
Aroclor 1254	5	Averaged	1867382.50000	0.00			1867382.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-1.B\0728210014.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	2.894	2.894	2.774	3.014
Aroclor 1221	2	3.023	3.023	2.903	3.143
Aroclor 1221	3	3.102	3.102	2.982	3.222
Aroclor 1254	1	5.937	5.937	5.817	6.057
Aroclor 1254	2	6.41	6.41	6.29	6.53
Aroclor 1254	3	6.935	6.935	6.815	7.055
Aroclor 1254	4	7.375	7.375	7.255	7.495
Aroclor 1254	5	8.23	8.23	8.11	8.35

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-2.B\0728210014.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	3.347	3.347	3.227	3.467
Aroclor 1221	2	3.551	3.551	3.431	3.671
Aroclor 1221	3	3.647	3.647	3.527	3.767
Aroclor 1254	1	6.739	6.739	6.619	6.859
Aroclor 1254	2	6.967	6.967	6.847	7.087
Aroclor 1254	3	7.791	7.791	7.671	7.911
Aroclor 1254	4	8.111	8.111	7.991	8.231
Aroclor 1254	5	9.067	9.067	8.947	9.187

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-1.B\0728210015.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	290970.00000	0.00			290970.00	
Aroclor 1232	2	Averaged	241032.50000	0.00			241032.50	
Aroclor 1232	3	Averaged	144622.50000	0.00			144622.50	
Aroclor 1232	4	Averaged	207037.50000	0.00			207037.50	
Aroclor 1232	5	Averaged	285862.50000	0.00			285862.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-2.B\0728210015.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	214850.00000	0.00			214850.00	
Aroclor 1232	2	Averaged	301147.50000	0.00			301147.50	
Aroclor 1232	3	Averaged	260002.50000	0.00			260002.50	
Aroclor 1232	4	Averaged	213185.00000	0.00			213185.00	
Aroclor 1232	5	Averaged	414137.50000	0.00			414137.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-1.B\0728210015.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	3.945	3.945	3.825	4.065
Aroclor 1232	2	4.618	4.618	4.498	4.738
Aroclor 1232	3	5.015	5.015	4.895	5.135
Aroclor 1232	4	5.275	5.275	5.155	5.395
Aroclor 1232	5	5.865	5.865	5.745	5.985

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-2.B\0728210015.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	4.713	4.713	4.593	4.833
Aroclor 1232	2	5.399	5.399	5.279	5.519
Aroclor 1232	3	5.611	5.611	5.491	5.731
Aroclor 1232	4	6.233	6.233	6.113	6.353
Aroclor 1232	5	6.574	6.574	6.454	6.694

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-1.B\0728210016.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	1486032.50000	0.00			1486032.50	
Aroclor 1242	2	Averaged	753562.50000	0.00			753562.50	
Aroclor 1242	3	Averaged	425075.00000	0.00			425075.00	
Aroclor 1242	4	Averaged	692697.50000	0.00			692697.50	
Aroclor 1242	5	Averaged	587032.50000	0.00			587032.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-2.B\0728210016.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	894672.50000	0.00			894672.50	
Aroclor 1242	2	Averaged	670042.50000	0.00			670042.50	
Aroclor 1242	3	Averaged	470497.50000	0.00			470497.50	
Aroclor 1242	4	Averaged	914435.00000	0.00			914435.00	
Aroclor 1242	5	Averaged	974090.00000	0.00			974090.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-1.B\0728210016.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	4.351	4.351	4.231	4.471
Aroclor 1242	2	4.505	4.505	4.385	4.625
Aroclor 1242	3	4.962	4.962	4.842	5.082
Aroclor 1242	4	5.925	5.925	5.805	6.045
Aroclor 1242	5	6.202	6.202	6.082	6.322

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-2.B\0728210016.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	5.203	5.203	5.083	5.323
Aroclor 1242	2	5.4	5.4	5.28	5.52
Aroclor 1242	3	6.071	6.071	5.951	6.191
Aroclor 1242	4	6.66	6.66	6.54	6.78
Aroclor 1242	5	7.081	7.081	6.961	7.201

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-1.B\0728210017.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	887470.00000	0.00			887470.00	
Aroclor 1248	2	Averaged	544552.50000	0.00			544552.50	
Aroclor 1248	3	Averaged	1272032.50000	0.00			1272032.50	
Aroclor 1248	4	Averaged	976775.00000	0.00			976775.00	
Aroclor 1248	5	Averaged	621375.00000	0.00			621375.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-2.B\0728210017.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	1060257.50000	0.00			1060257.50	
Aroclor 1248	2	Averaged	1789272.50000	0.00			1789272.50	
Aroclor 1248	3	Averaged	1587427.50000	0.00			1587427.50	
Aroclor 1248	4	Averaged	1757167.50000	0.00			1757167.50	
Aroclor 1248	5	Averaged	984897.50000	0.00			984897.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-1.B\0728210017.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	4.894	4.894	4.774	5.014
Aroclor 1248	2	5.271	5.271	5.151	5.391
Aroclor 1248	3	5.926	5.926	5.806	6.046
Aroclor 1248	4	6.202	6.202	6.082	6.322
Aroclor 1248	5	6.934	6.934	6.814	7.054

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60375923

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-2.B\0728210017.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	5.611	5.611	5.491	5.731
Aroclor 1248	2	6.574	6.574	6.454	6.694
Aroclor 1248	3	6.66	6.66	6.54	6.78
Aroclor 1248	4	7.081	7.081	6.961	7.201
Aroclor 1248	5	7.789	7.789	7.669	7.909

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19943828ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 14:38

Instrument ID: 60GCS8 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210012.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.68	3.561	3.801	759372.7037	740945.0000	-2.4267
Aroclor 1016	2	Averaged	4.35	4.23	4.47	1587471.620	1519610.000	-4.2748
Aroclor 1016	3	Averaged	4.504	4.386	4.626	802162.5648	781082.5000	-2.6279
Aroclor 1016	4	Averaged	5.222	5.102	5.342	593683.5277	572945.0000	-3.4932
Aroclor 1016	5	Averaged	5.417	5.298	5.538	520520.6296	553325.0000	6.3022
Aroclor 1260	1	Averaged	7.349	7.23	7.47	1073090.768	1059305.000	-1.2847
Aroclor 1260	2	Averaged	7.769	7.65	7.89	1231047.657	1245140.000	1.1447
Aroclor 1260	3	Averaged	8.229	8.109	8.349	1187343.175	1139552.500	-4.0250
Aroclor 1260	4	Averaged	8.523	8.403	8.643	876488.5000	873130.0000	-0.3832
Aroclor 1260	5	Averaged	8.913	8.793	9.033	842990.4722	841575.0000	-0.1679

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19943827ICV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 14:38

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210012.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.307	4.187	4.427	1230767.740	1215962.500	-1.2029
Aroclor 1016	2	Averaged	4.973	4.853	5.093	2307865.675	2233027.500	-3.2427
Aroclor 1016	3	Averaged	5.202	5.083	5.323	923625.0277	903635.0000	-2.1643
Aroclor 1016	4	Averaged	5.539	5.42	5.66	893585.4537	842725.0000	-5.6917
Aroclor 1016	5	Averaged	6.018	5.899	6.139	879402.2407	869695.0000	-1.1038
Aroclor 1260	1	Averaged	8.126	8.007	8.247	1679616.611	1716337.500	2.1863
Aroclor 1260	2	Averaged	8.393	8.273	8.513	2166501.453	2195332.500	1.3308
Aroclor 1260	3	Averaged	9.066	8.948	9.188	1548712.555	1509407.500	-2.5379
Aroclor 1260	4	Averaged	9.192	9.072	9.312	1715824.953	1763470.000	2.7768
Aroclor 1260	5	Averaged	9.747	9.628	9.868	1585139.277	1594177.500	0.5702

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943474ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:20

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210021.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	2.895	2.774	3.014	353695.0000	349865.0000	-1.0829
Aroclor 1221	2	Averaged	3.025	2.903	3.143	275622.5000	262975.0000	-4.5887
Aroclor 1221	3	Averaged	3.102	2.982	3.222	825162.5000	814880.0000	-1.2461
Aroclor 1254	1	Averaged	5.937	5.817	6.057	1094090.000	1067360.000	-2.4431
Aroclor 1254	2	Averaged	6.41	6.29	6.53	588712.5000	549302.5000	-6.6943
Aroclor 1254	3	Averaged	6.933	6.815	7.055	1530757.500	1436950.000	-6.1282
Aroclor 1254	4	Averaged	7.374	7.255	7.495	1336107.500	1272957.500	-4.7264
Aroclor 1254	5	Averaged	8.23	8.11	8.35	1226710.000	1231277.500	0.3723

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943475ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:20

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210021.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	3.346	3.227	3.467	455120.0000	424265.0000	-6.7795
Aroclor 1221	2	Averaged	3.55	3.431	3.671	312310.0000	310542.5000	-0.5659
Aroclor 1221	3	Averaged	3.646	3.527	3.767	981785.0000	969380.0000	-1.2635
Aroclor 1254	1	Averaged	6.739	6.619	6.859	1476170.000	1496557.500	1.3811
Aroclor 1254	2	Averaged	6.966	6.847	7.087	1834265.000	1840942.500	0.3640
Aroclor 1254	3	Averaged	7.791	7.671	7.911	2354395.000	2248335.000	-4.5048
Aroclor 1254	4	Averaged	8.113	7.991	8.231	2517735.000	2499730.000	-0.7151
Aroclor 1254	5	Averaged	9.067	8.947	9.187	1867382.500	1950202.500	4.4351

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943497ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 17:38

Instrument ID: 60GCS8 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210022.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	3.945	3.825	4.065	290970.0000	320895.0000	10.2846
Aroclor 1232	2	Averaged	4.62	4.498	4.738	241032.5000	258955.0000	7.4357
Aroclor 1232	3	Averaged	5.015	4.895	5.135	144622.5000	164537.5000	13.7703
Aroclor 1232	4	Averaged	5.275	5.155	5.395	207037.5000	220715.0000	6.6063
Aroclor 1232	5	Averaged	5.865	5.745	5.985	285862.5000	319307.5000	11.6997

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19943482ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 17:38

Instrument ID: 60GCS8 GC Column: Col 2 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210022.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	4.715	4.593	4.833	214850.0000	245287.5000	14.1669
Aroclor 1232	2	Averaged	5.4	5.279	5.519	301147.5000	330345.0000	9.6954
Aroclor 1232	3	Averaged	5.612	5.491	5.731	260002.5000	301050.0000	15.7873
Aroclor 1232	4	Averaged	6.234	6.113	6.353	213185.0000	246542.5000	15.6472
Aroclor 1232	5	Averaged	6.575	6.454	6.694	414137.5000	454090.0000	9.6472

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19943495ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 17:56

Instrument ID: 60GCS8 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210023.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	4.351	4.231	4.471	1486032.500	1527477.500	2.7890
Aroclor 1242	2	Averaged	4.504	4.385	4.625	753562.5000	781410.0000	3.6954
Aroclor 1242	3	Averaged	4.962	4.842	5.082	425075.0000	451510.0000	6.2189
Aroclor 1242	4	Averaged	5.926	5.805	6.045	692697.5000	726650.0000	4.9015
Aroclor 1242	5	Averaged	6.201	6.082	6.322	587032.5000	580830.0000	-1.0566

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19943494ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:56

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210023.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	5.203	5.083	5.323	894672.5000	918275.0000	2.6381
Aroclor 1242	2	Averaged	5.4	5.28	5.52	670042.5000	676130.0000	0.9085
Aroclor 1242	3	Averaged	6.071	5.951	6.191	470497.5000	481750.0000	2.3916
Aroclor 1242	4	Averaged	6.66	6.54	6.78	914435.0000	888932.5000	-2.7889
Aroclor 1242	5	Averaged	7.082	6.961	7.201	974090.0000	975145.0000	0.1083

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943486ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 18:14

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210024.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	4.894	4.774	5.014	887470.0000	685120.0000	-22.8008
Aroclor 1248	2	Averaged	5.271	5.151	5.391	544552.5000	403610.0000	-25.8823
Aroclor 1248	3	Averaged	5.926	5.806	6.046	1272032.500	943562.5000	-25.8225
Aroclor 1248	4	Averaged	6.201	6.082	6.322	976775.0000	720072.5000	-26.2806
Aroclor 1248	5	Averaged	6.933	6.814	7.054	621375.0000	473077.5000	-23.8660

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943483ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 18:14

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210024.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	5.611	5.491	5.731	1060257.500	799555.0000	-24.5886
Aroclor 1248	2	Averaged	6.574	6.454	6.694	1789272.500	1322467.500	-26.0891
Aroclor 1248	3	Averaged	6.659	6.54	6.78	1587427.500	1142545.000	-28.0254
Aroclor 1248	4	Averaged	7.08	6.961	7.201	1757167.500	1277520.000	-27.2966
Aroclor 1248	5	Averaged	7.789	7.669	7.909	984897.5000	711990.0000	-27.7092

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943964CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 14:46

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210092.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.681	3.561	3.801	759372.7037	727625.0000	-4.1808
Aroclor 1016	2	Averaged	4.351	4.23	4.47	1587471.620	1604947.500	1.1009
Aroclor 1016	3	Averaged	4.504	4.386	4.626	802162.5648	812737.5000	1.3183
Aroclor 1016	4	Averaged	5.222	5.102	5.342	593683.5277	596015.0000	0.3927
Aroclor 1016	5	Averaged	5.417	5.298	5.538	520520.6296	522947.5000	0.4662
Aroclor 1260	1	Averaged	7.349	7.23	7.47	1073090.768	1056980.000	-1.5013
Aroclor 1260	2	Averaged	7.77	7.65	7.89	1231047.657	1231552.500	0.0410
Aroclor 1260	3	Averaged	8.229	8.109	8.349	1187343.175	1184672.500	-0.2249
Aroclor 1260	4	Averaged	8.523	8.402	8.642	876488.5000	879047.5000	0.2920
Aroclor 1260	5	Averaged	8.913	8.793	9.033	842990.4722	840185.0000	-0.3328
Decachlorobiphenyl		Averaged	12.054	11.933	12.173	16971708.61	16149650.00	-4.8437

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943967CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 14:46

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210092.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.306	4.187	4.427	1230767.740	1233170.000	0.1952
Aroclor 1016	2	Averaged	4.973	4.853	5.093	2307865.675	2346717.500	1.6835
Aroclor 1016	3	Averaged	5.202	5.083	5.323	923625.0277	924785.0000	0.1256
Aroclor 1016	4	Averaged	5.539	5.42	5.66	893585.4537	887555.0000	-0.6749
Aroclor 1016	5	Averaged	6.018	5.899	6.139	879402.2407	886822.5000	0.8438
Aroclor 1260	1	Averaged	8.125	8.007	8.247	1679616.611	1629450.000	-2.9868
Aroclor 1260	2	Averaged	8.394	8.273	8.513	2166501.453	2093652.500	-3.3625
Aroclor 1260	3	Averaged	9.067	8.948	9.188	1548712.555	1507700.000	-2.6482
Aroclor 1260	4	Averaged	9.193	9.072	9.312	1715824.953	1660745.000	-3.2101
Aroclor 1260	5	Averaged	9.748	9.628	9.868	1585139.277	1471207.500	-7.1875
Decachlorobiphenyl		Averaged	12.807	12.688	12.928	29044505.37	30696575.00	5.6881

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943961CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 18:21

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210104.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.68	3.561	3.801	759372.7037	750360.0000	-1.1869
Aroclor 1016	2	Averaged	4.35	4.23	4.47	1587471.620	1593775.000	0.3971
Aroclor 1016	3	Averaged	4.504	4.386	4.626	802162.5648	797857.5000	-0.5367
Aroclor 1016	4	Averaged	5.222	5.102	5.342	593683.5277	581322.5000	-2.0821
Aroclor 1016	5	Averaged	5.417	5.298	5.538	520520.6296	514300.0000	-1.1951
Aroclor 1260	1	Averaged	7.349	7.23	7.47	1073090.768	1056235.000	-1.5708
Aroclor 1260	2	Averaged	7.77	7.65	7.89	1231047.657	1202700.000	-2.3027
Aroclor 1260	3	Averaged	8.23	8.109	8.349	1187343.175	1163325.000	-2.0229
Aroclor 1260	4	Averaged	8.523	8.402	8.642	876488.5000	833105.0000	-4.9497
Aroclor 1260	5	Averaged	8.913	8.793	9.033	842990.4722	814732.5000	-3.3521
Decachlorobiphenyl		Averaged	12.054	11.933	12.173	16971708.61	15667950.00	-7.6820

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943960CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/29/2021 Time: 18:21

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210104.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.306	4.187	4.427	1230767.740	1223815.000	-0.5649
Aroclor 1016	2	Averaged	4.973	4.853	5.093	2307865.675	2303205.000	-0.2019
Aroclor 1016	3	Averaged	5.203	5.083	5.323	923625.0277	915375.0000	-0.8932
Aroclor 1016	4	Averaged	5.539	5.42	5.66	893585.4537	869080.0000	-2.7424
Aroclor 1016	5	Averaged	6.018	5.899	6.139	879402.2407	872512.5000	-0.7835
Aroclor 1260	1	Averaged	8.126	8.007	8.247	1679616.611	1632370.000	-2.8129
Aroclor 1260	2	Averaged	8.394	8.273	8.513	2166501.453	2097905.000	-3.1662
Aroclor 1260	3	Averaged	9.067	8.948	9.188	1548712.555	1484257.500	-4.1618
Aroclor 1260	4	Averaged	9.193	9.072	9.312	1715824.953	1636600.000	-4.6173
Aroclor 1260	5	Averaged	9.747	9.628	9.868	1585139.277	1498407.500	-5.4716
Decachlorobiphenyl		Averaged	12.808	12.688	12.928	29044505.37	26308050.00	-9.4216

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943965CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 05:23

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210141.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.682	3.561	3.801	759372.7037	759132.5000	-0.0316
Aroclor 1016	2	Averaged	4.35	4.23	4.47	1587471.620	1619047.500	1.9891
Aroclor 1016	3	Averaged	4.504	4.386	4.626	802162.5648	809882.5000	0.9624
Aroclor 1016	4	Averaged	5.223	5.102	5.342	593683.5277	599340.0000	0.9528
Aroclor 1016	5	Averaged	5.418	5.298	5.538	520520.6296	530435.0000	1.9047
Aroclor 1260	1	Averaged	7.351	7.23	7.47	1073090.768	1078222.500	0.4782
Aroclor 1260	2	Averaged	7.771	7.65	7.89	1231047.657	1243660.000	1.0245
Aroclor 1260	3	Averaged	8.231	8.109	8.349	1187343.175	1224937.500	3.1663
Aroclor 1260	4	Averaged	8.524	8.402	8.642	876488.5000	913262.5000	4.1956
Aroclor 1260	5	Averaged	8.914	8.793	9.033	842990.4722	859552.5000	1.9647
Decachlorobiphenyl		Averaged	12.056	11.933	12.173	16971708.61	16959925.00	-0.0694

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943959CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 05:23

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210141.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.306	4.187	4.427	1230767.740	1261312.500	2.4818
Aroclor 1016	2	Averaged	4.973	4.853	5.093	2307865.675	2387050.000	3.4311
Aroclor 1016	3	Averaged	5.203	5.083	5.323	923625.0277	958485.0000	3.7743
Aroclor 1016	4	Averaged	5.539	5.42	5.66	893585.4537	913647.5000	2.2451
Aroclor 1016	5	Averaged	6.018	5.899	6.139	879402.2407	911047.5000	3.5985
Aroclor 1260	1	Averaged	8.125	8.007	8.247	1679616.611	1722980.000	2.5817
Aroclor 1260	2	Averaged	8.394	8.273	8.513	2166501.453	2237330.000	3.2693
Aroclor 1260	3	Averaged	9.067	8.948	9.188	1548712.555	1584782.500	2.3290
Aroclor 1260	4	Averaged	9.194	9.072	9.312	1715824.953	1792827.500	4.4878
Aroclor 1260	5	Averaged	9.748	9.628	9.868	1585139.277	1629880.000	2.8225
Decachlorobiphenyl		Averaged	12.808	12.688	12.928	29044505.37	29607300.00	1.9377

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943958CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 09:15

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210154.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.68	3.561	3.801	759372.7037	742412.5000	-2.2334
Aroclor 1016	2	Averaged	4.351	4.23	4.47	1587471.620	1551457.500	-2.2686
Aroclor 1016	3	Averaged	4.504	4.386	4.626	802162.5648	777857.5000	-3.0299
Aroclor 1016	4	Averaged	5.224	5.102	5.342	593683.5277	576822.5000	-2.8401
Aroclor 1016	5	Averaged	5.418	5.298	5.538	520520.6296	508752.5000	-2.2608
Aroclor 1260	1	Averaged	7.351	7.23	7.47	1073090.768	1031637.500	-3.8630
Aroclor 1260	2	Averaged	7.771	7.65	7.89	1231047.657	1182857.500	-3.9146
Aroclor 1260	3	Averaged	8.23	8.109	8.349	1187343.175	1153572.500	-2.8442
Aroclor 1260	4	Averaged	8.524	8.402	8.642	876488.5000	854835.0000	-2.4705
Aroclor 1260	5	Averaged	8.914	8.793	9.033	842990.4722	822232.5000	-2.4624
Decachlorobiphenyl		Averaged	12.055	11.933	12.173	16971708.61	15988250.00	-5.7947

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943962CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 09:15

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210154.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.307	4.187	4.427	1230767.740	1226487.500	-0.3478
Aroclor 1016	2	Averaged	4.974	4.853	5.093	2307865.675	2312290.000	0.1917
Aroclor 1016	3	Averaged	5.204	5.083	5.323	923625.0277	930302.5000	0.7230
Aroclor 1016	4	Averaged	5.539	5.42	5.66	893585.4537	891092.5000	-0.2790
Aroclor 1016	5	Averaged	6.019	5.899	6.139	879402.2407	881302.5000	0.2161
Aroclor 1260	1	Averaged	8.125	8.007	8.247	1679616.611	1655652.500	-1.4268
Aroclor 1260	2	Averaged	8.394	8.273	8.513	2166501.453	2113245.000	-2.4582
Aroclor 1260	3	Averaged	9.067	8.948	9.188	1548712.555	1485665.000	-4.0710
Aroclor 1260	4	Averaged	9.194	9.072	9.312	1715824.953	1663037.500	-3.0765
Aroclor 1260	5	Averaged	9.748	9.628	9.868	1585139.277	1529732.500	-3.4954
Decachlorobiphenyl		Averaged	12.807	12.688	12.928	29044505.37	28161775.00	-3.0392

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943966CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 12:49

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210166.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.681	3.561	3.801	759372.7037	755500.0000	-0.5100
Aroclor 1016	2	Averaged	4.349	4.23	4.47	1587471.620	1577072.500	-0.6551
Aroclor 1016	3	Averaged	4.503	4.386	4.626	802162.5648	797342.5000	-0.6009
Aroclor 1016	4	Averaged	5.222	5.102	5.342	593683.5277	594017.5000	0.0563
Aroclor 1016	5	Averaged	5.417	5.298	5.538	520520.6296	518802.5000	-0.3301
Aroclor 1260	1	Averaged	7.35	7.23	7.47	1073090.768	1068425.000	-0.4348
Aroclor 1260	2	Averaged	7.769	7.65	7.89	1231047.657	1223997.500	-0.5727
Aroclor 1260	3	Averaged	8.229	8.109	8.349	1187343.175	1201942.500	1.2296
Aroclor 1260	4	Averaged	8.523	8.402	8.642	876488.5000	878705.0000	0.2529
Aroclor 1260	5	Averaged	8.913	8.793	9.033	842990.4722	850637.5000	0.9071
Decachlorobiphenyl		Averaged	12.052	11.933	12.173	16971708.61	16431400.00	-3.1836

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

19943963CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 12:49

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210166.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60375923

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.305	4.187	4.427	1230767.740	1255407.500	2.0020
Aroclor 1016	2	Averaged	4.973	4.853	5.093	2307865.675	2337800.000	1.2971
Aroclor 1016	3	Averaged	5.203	5.083	5.323	923625.0277	944082.5000	2.2149
Aroclor 1016	4	Averaged	5.538	5.42	5.66	893585.4537	908695.0000	1.6909
Aroclor 1016	5	Averaged	6.018	5.899	6.139	879402.2407	910212.5000	3.5035
Aroclor 1260	1	Averaged	8.125	8.007	8.247	1679616.611	1699190.000	1.1653
Aroclor 1260	2	Averaged	8.393	8.273	8.513	2166501.453	2200732.500	1.5800
Aroclor 1260	3	Averaged	9.066	8.948	9.188	1548712.555	1577292.500	1.8454
Aroclor 1260	4	Averaged	9.193	9.072	9.312	1715824.953	1748395.000	1.8982
Aroclor 1260	5	Averaged	9.747	9.628	9.868	1585139.277	1604245.000	1.2053
Decachlorobiphenyl		Averaged	12.806	12.688	12.928	29044505.37	29203450.00	0.5472

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/10/2021 10:18

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 2947234

Date Analyzed: 07/29/2021 15:22 Lab File ID: 072821-1.B\0728210094.D

Initial wt/vol: 30.09 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<8.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<7.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<3.6	U
53469-21-9	PCB-1242 (Aroclor 1242)	<7.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.2	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.1	U
11096-82-5	PCB-1260 (Aroclor 1260)	<6.5	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 2947235

Date Analyzed: 07/29/2021 15:40 Lab File ID: 072821-1.B\0728210095.D

Initial wt/vol: 30.59 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	147	
11096-82-5	PCB-1260 (Aroclor 1260)	150	

SAMPLE NO.

MS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 | Matrix: Solid | SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 | Lab Sample ID: 2947236

Date Analyzed: 07/30/2021 11:56 | Lab File ID: 072821-1.B\0728210163.D

Initial wt/vol: 30.55 g | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60GCS8 | Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	178	
11096-82-5	PCB-1260 (Aroclor 1260)	203	

SAMPLE NO.

MSD

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/27/2021 05:45 Matrix: Solid SDG No.: 60375923

Date Extracted: 07/27/2021 14:19 Lab Sample ID: 2947237

Date Analyzed: 07/30/2021 12:14 Lab File ID: 072821-1.B\0728210164.D

Initial wt/vol: 31.42 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	167	
11096-82-5	PCB-1260 (Aroclor 1260)	173	

SAMPLE NO.

GB-15/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923001 Percent Moisture: 19.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.63	U	mg/kg	10	08/05/2021 11:07
7440-38-2	Arsenic	10.6		mg/kg	10	08/05/2021 11:07
7440-50-8	Copper	19.8		mg/kg	10	08/05/2021 11:07
7439-92-1	Lead	19.8		mg/kg	10	08/05/2021 11:07
7440-66-6	Zinc	63.2		mg/kg	10	08/05/2021 11:07

SAMPLE NO.

GB-15/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923002 Percent Moisture: 21.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.52	U	mg/kg	10	08/05/2021 11:08
7440-38-2	Arsenic	6.6		mg/kg	10	08/05/2021 11:08
7440-50-8	Copper	14.9		mg/kg	10	08/05/2021 11:08
7439-92-1	Lead	8.9		mg/kg	10	08/05/2021 11:08
7440-66-6	Zinc	42.6		mg/kg	10	08/05/2021 11:08

SAMPLE NO.

GB-22/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923003 Percent Moisture: 18.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.55	U	mg/kg	10	08/05/2021 11:10
7440-38-2	Arsenic	5.2		mg/kg	10	08/05/2021 11:10
7440-50-8	Copper	11.3		mg/kg	10	08/05/2021 11:10
7439-92-1	Lead	9.1		mg/kg	10	08/05/2021 11:10
7440-66-6	Zinc	32.3		mg/kg	10	08/05/2021 11:10

SAMPLE NO.

GB-22/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923004 Percent Moisture: 19.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.49	U	mg/kg	10	08/05/2021 11:12
7440-38-2	Arsenic	5.8		mg/kg	10	08/05/2021 11:12
7440-50-8	Copper	12.5		mg/kg	10	08/05/2021 11:12
7439-92-1	Lead	10.4		mg/kg	10	08/05/2021 11:12
7440-66-6	Zinc	31.8		mg/kg	10	08/05/2021 11:12

SAMPLE NO.

GB-29/1.5-2.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923005 Percent Moisture: 20.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.61	U	mg/kg	10	08/05/2021 11:13
7440-38-2	Arsenic	22.6		mg/kg	10	08/05/2021 11:13
7440-50-8	Copper	15.6		mg/kg	10	08/05/2021 11:13
7439-92-1	Lead	13.1		mg/kg	10	08/05/2021 11:13
7440-66-6	Zinc	53.0		mg/kg	10	08/05/2021 11:13

SAMPLE NO.

GB-29/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923006 Percent Moisture: 20.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.50	U	mg/kg	10	08/05/2021 11:20
7440-38-2	Arsenic	7.5		mg/kg	10	08/05/2021 11:20
7440-50-8	Copper	11.6		mg/kg	10	08/05/2021 11:20
7439-92-1	Lead	10.1		mg/kg	10	08/05/2021 11:20
7440-66-6	Zinc	39.3		mg/kg	10	08/05/2021 11:20

SAMPLE NO.

GB-36/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923007 Percent Moisture: 16.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.45	U	mg/kg	10	08/05/2021 11:21
7440-38-2	Arsenic	9.2		mg/kg	10	08/05/2021 11:21
7440-50-8	Copper	15.7		mg/kg	10	08/05/2021 11:21
7439-92-1	Lead	13.6		mg/kg	10	08/05/2021 11:21
7440-66-6	Zinc	53.7		mg/kg	10	08/05/2021 11:21

SAMPLE NO.

GB-36/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923008 Percent Moisture: 17.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.61	U	mg/kg	10	08/05/2021 11:23
7440-38-2	Arsenic	5.6		mg/kg	10	08/05/2021 11:23
7440-50-8	Copper	11.3		mg/kg	10	08/05/2021 11:23
7439-92-1	Lead	10.3		mg/kg	10	08/05/2021 11:23
7440-66-6	Zinc	45.7		mg/kg	10	08/05/2021 11:23

SAMPLE NO.

GB-43/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923009 Percent Moisture: 21.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/05/2021 11:25
7440-38-2	Arsenic	12.7		mg/kg	10	08/05/2021 11:25
7440-50-8	Copper	23.4		mg/kg	10	08/05/2021 11:25
7439-92-1	Lead	14.8		mg/kg	10	08/05/2021 11:25
7440-66-6	Zinc	58.5		mg/kg	10	08/05/2021 11:25

SAMPLE NO.

GB-43/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923010 Percent Moisture: 20.4

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.45	U	mg/kg	10	08/05/2021 11:26
7440-38-2	Arsenic	2.4		mg/kg	10	08/05/2021 11:26
7440-50-8	Copper	10.1		mg/kg	10	08/05/2021 11:26
7439-92-1	Lead	7.2		mg/kg	10	08/05/2021 11:26
7440-66-6	Zinc	46.9		mg/kg	10	08/05/2021 11:26

SAMPLE NO.

GB-01/8-10

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923011 Percent Moisture: 18.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.63	U	mg/kg	10	08/05/2021 11:28
7440-38-2	Arsenic	6.0		mg/kg	10	08/05/2021 11:28
7440-50-8	Copper	13.9		mg/kg	10	08/05/2021 11:28
7439-92-1	Lead	9.4		mg/kg	10	08/05/2021 11:28
7440-66-6	Zinc	42.9		mg/kg	10	08/05/2021 11:28

SAMPLE NO.

GB-01/11-13

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923012 Percent Moisture: 21.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.51	U	mg/kg	10	08/05/2021 11:29
7440-38-2	Arsenic	12.4		mg/kg	10	08/05/2021 11:29
7440-50-8	Copper	27.7		mg/kg	10	08/05/2021 11:29
7439-92-1	Lead	102		mg/kg	10	08/05/2021 11:29
7440-66-6	Zinc	102		mg/kg	10	08/05/2021 11:29

SAMPLE NO.

GB-03/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923013 Percent Moisture: 15.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.54	U	mg/kg	10	08/05/2021 11:36
7440-38-2	Arsenic	6.7		mg/kg	10	08/05/2021 11:36
7440-50-8	Copper	15.6		mg/kg	10	08/05/2021 11:36
7439-92-1	Lead	36.5		mg/kg	10	08/05/2021 11:36
7440-66-6	Zinc	45.2		mg/kg	10	08/05/2021 11:36

SAMPLE NO.

GB-03/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923014 Percent Moisture: 9.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.45	U	mg/kg	10	08/05/2021 11:37
7440-38-2	Arsenic	6.9		mg/kg	10	08/05/2021 11:37
7440-50-8	Copper	43.7		mg/kg	10	08/05/2021 11:37
7439-92-1	Lead	48.2		mg/kg	10	08/05/2021 11:37
7440-66-6	Zinc	96.3		mg/kg	10	08/05/2021 11:37

SAMPLE NO.

GB-02/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923016 Percent Moisture: 19.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.55	U	mg/kg	10	08/05/2021 11:39
7440-38-2	Arsenic	9.4		mg/kg	10	08/05/2021 11:39
7440-50-8	Copper	16.6		mg/kg	10	08/05/2021 11:39
7439-92-1	Lead	14.8		mg/kg	10	08/05/2021 11:39
7440-66-6	Zinc	56.8		mg/kg	10	08/05/2021 11:39

SAMPLE NO.

GB-02/8-9

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923017 Percent Moisture: 25.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.60	U	mg/kg	10	08/05/2021 11:44
7440-38-2	Arsenic	5.3		mg/kg	10	08/05/2021 11:44
7440-50-8	Copper	24.9		mg/kg	10	08/05/2021 11:44
7439-92-1	Lead	22.8		mg/kg	10	08/05/2021 11:44
7440-66-6	Zinc	78.6		mg/kg	10	08/05/2021 11:44

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Initial Calibration Verification				Continuing Calibration Verification						
	08/05/2021 09:48				08/05/2021 09:56			08/05/2021 11:00			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Antimony	50	49.1	98.3	90-110	40	40.4	101.0	40	40.8	102.1	90-110
Arsenic	50	49.8	99.5	90-110	40	40.1	100.3	40	40.7	101.9	90-110
Copper	50	50.7	101.5	90-110	40	40.4	101.0	40	40.8	102.0	90-110
Lead	50	49.0	97.9	90-110	40	38.6	96.5	40	38.9	97.2	90-110
Zinc	50	49.6	99.1	90-110	400	39.9	10.0	400	40.1	10.0	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification									
	08/05/2021 11:17			08/05/2021 11:33			08/05/2021 11:47			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Antimony	40	41.2	103.1	40	41.3	103.2	40	41.2	103.1	90-110
Arsenic	40	41.3	103.2	40	40.6	101.5	40	41.0	102.5	90-110
Copper	40	41.0	102.4	40	40.3	100.7	40	40.7	101.7	90-110
Lead	40	39.0	97.5	40	39.0	97.4	40	39.2	98.1	90-110
Zinc	400	40.2	10.0	400	39.9	10.0	400	39.8	10.0	90-110

FORM II INORGANIC-3

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification			
	08/05/2021 11:52			Control Limit
Analyte	True	Found	%R	
Antimony	40	41.7	104.3	90-110
Arsenic	40	41.2	102.9	90-110
Copper	40	40.7	101.8	90-110
Lead	40	39.1	97.9	90-110
Zinc	400	40.4	10.1	90-110

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/05/2021 09:52

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	101.4	50-150
Arsenic	1.0	1.1	105.0	50-150
Copper	1.0	1.1	109.4	50-150
Lead	1.0	0.94	93.9	50-150
Zinc	10.0	10.1	101.0	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

CRDL Check Standard Source: 45989 Analysis Date/Time: 08/05/2021 11:50

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.1	109.0	50-150
Arsenic	1.0	1.1	112.0	50-150
Copper	1.0	1.1	111.0	50-150
Lead	1.0	0.98	97.6	50-150
Zinc	10.0	10.5	105.1	50-150

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract : GSA-GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/05/2021 09:50	C	08/05/2021 09:58	C	08/05/2021 11:02	C	08/05/2021 11:18	C	2951055	C
Antimony	0.0096	U	0.0096	U	0.0096	U	0.0096	U	<0.54	U
Arsenic	0.011	J	0.0090	U	0.0090	U	0.0090	U	<0.11	U
Copper	0.014	U	0.014	U	0.014	U	0.014	U	<0.31	U
Lead	0.017	J	0.014	J	0.014	J	0.015	J	<0.13	U
Zinc	0.11	U	0.11	U	0.11	U	0.11	U	<0.84	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract : GSA-GOODFELLOW

Method Blank Matrix: Instrument ID: 60ICM3

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	08/05/2021 11:34	C	08/05/2021 11:49	C	08/05/2021 11:53	C
Antimony			0.0096	U	0.0096	U	0.0096	U
Arsenic			0.0090	U	0.012	J	0.0090	U
Copper			0.014	U	0.014	U	0.014	U
Lead			0.019	J	0.025	J	0.019	J
Zinc			0.11	U	0.11	U	0.11	U

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Solution A Run Date: 08/05/2021 09:53

ICS Source: 46286,46287 Solution AB Run Date: 08/05/2021 09:55

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.00462		51.89599	103.8	80-120
Arsenic	0	50	0.05899		52.44042	104.9	80-120
Copper	0	50	0.0934		46.6209	93.2	80-120
Lead	0	50	0.02151		50.87452	101.7	80-120
Zinc	0	500	0.36956		468.6161	93.7	80-120

SAMPLE NO.

2951057MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-02/2-3

Percent Moisture: 19.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	48.0	<0.55	107	45*
Arsenic	mg/kg	75-125	117	9.4	107	100
Copper	mg/kg	75-125	126	16.6	107	102
Lead	mg/kg	75-125	347	14.8	107	309*
Zinc	mg/kg	75-125	171	56.8	107	106

* Spike Recovery outside QC Limits

SAMPLE NO.

2951058MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-02/2-3

Percent Moisture: 19.8

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	51.3	<0.55	113	45*
Arsenic	mg/kg	75-125	120	9.4	113	98
Copper	mg/kg	75-125	128	16.6	113	98
Lead	mg/kg	75-125	127	14.8	113	99
Zinc	mg/kg	75-125	165	56.8	113	95

* Spike Recovery outside QC Limits

SAMPLE NO.

2951058MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 19.8 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	48.0	51.3	7
Arsenic	20	117	120	3
Copper	20	126	128	2
Lead	20	347	127	93*
Zinc	20	171	165	4

* RPD outside QC Limits

SAMPLE NO.

2951056LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	98.4	98	80	120
Arsenic	mg/kg	100	97.5	98	80	120
Copper	mg/kg	100	101	101	80	120
Lead	mg/kg	100	97.3	97	80	120
Zinc	mg/kg	100	95.4	95	80	120

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Preparation Method: None Instrument ID: 60ICM3

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Antimony	1.0	0.0096	01/10/2020
Arsenic	1.0	0.0090	01/10/2020
Copper	1.0	0.014	01/10/2020
Lead	1.0	0.0052	01/10/2020
Zinc	10.0	0.11	01/10/2020

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Preparation Method: EPA 3050 Instrument ID: 60ICM3

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Antimony	0.10	0.054	01/22/2021
Arsenic	0.10	0.011	01/22/2021
Copper	0.10	0.031	01/22/2021
Lead	0.050	0.013	01/22/2021
Zinc	0.50	0.084	01/22/2021

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract : GSA-GOODFELLOW

Instrument ID: 60ICM3 Effective Date:05/07/2019

Analyte	Concentration (ug/L)
Antimony	5000
Arsenic	5000
Copper	5000
Lead	5000
Zinc	50000

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65342

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2951055	2951055	08/04/2021	0.5	50
2951056	2951056	08/04/2021	0.5	50
2951057	2951057	08/04/2021	0.58	50
2951058	2951058	08/04/2021	0.55	50
60375923001	GB-15/2-3	08/04/2021	0.53	50
60375923002	GB-15/3-5	08/04/2021	0.66	50
60375923003	GB-22/1-3	08/04/2021	0.6	50
60375923004	GB-22/3-5	08/04/2021	0.68	50
60375923005	GB-29/1.5-2.5	08/04/2021	0.56	50
60375923006	GB-29/3-5	08/04/2021	0.68	50
60375923007	GB-36/0-2	08/04/2021	0.72	50
60375923008	GB-36/2-4	08/04/2021	0.54	50
60375923009	GB-43/3-5	08/04/2021	0.55	50
60375923010	GB-43/5-7	08/04/2021	0.75	50
60375923011	GB-01/8-10	08/04/2021	0.53	50
60375923012	GB-01/11-13	08/04/2021	0.67	50
60375923013	GB-03/1-3	08/04/2021	0.59	50
60375923014	GB-03/4-6	08/04/2021	0.66	50
60375923016	GB-02/2-3	08/04/2021	0.61	50
60375923017	GB-02/8-9	08/04/2021	0.6	50

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/05/2021 09:40 End Date: 08/05/2021 11:53

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19774634CAL0	19774634CAL0	1	08/05/2021	09:40	X	X	X	X	X
19774635CAL1	19774635CAL1	1	08/05/2021	09:42	X	X	X	X	X
19774636CAL2	19774636CAL2	1	08/05/2021	09:44	X	X	X	X	X
19774637CAL3	19774637CAL3	1	08/05/2021	09:45	X	X	X	X	X
19774638CAL4	19774638CAL4	1	08/05/2021	09:47	X	X	X	X	X
19774639ICV	19774639ICV	1	08/05/2021	09:48	X	X	X	X	X
19774640ICB	19774640ICB	1	08/05/2021	09:50	X	X	X	X	X
19774641CRDL	19774641CRDL	1	08/05/2021	09:52	X	X	X	X	X
19774642ICSA	19774642ICSA	1	08/05/2021	09:53	X	X	X	X	X
19774643ICSAB	19774643ICSAB	1	08/05/2021	09:55	X	X	X	X	X
19774644CCV	19774644CCV	1	08/05/2021	09:56	X	X	X	X	X
19774645CCB	19774645CCB	1	08/05/2021	09:58	X	X	X	X	X
19774658CCV	19774658CCV	1	08/05/2021	11:00	X	X	X	X	X
19774659CCB	19774659CCB	1	08/05/2021	11:02	X	X	X	X	X
2951055BLANK	2951055	10	08/05/2021	11:04	X	X	X	X	X
2951056LCS	2951056	10	08/05/2021	11:05	X	X	X	X	X
GB-15/2-3	60375923001	10	08/05/2021	11:07	X	X	X	X	X
GB-15/3-5	60375923002	10	08/05/2021	11:08	X	X	X	X	X
GB-22/1-3	60375923003	10	08/05/2021	11:10	X	X	X	X	X
GB-22/3-5	60375923004	10	08/05/2021	11:12	X	X	X	X	X
GB-29/1.5-2.5	60375923005	10	08/05/2021	11:13	X	X	X	X	X
19774660CCV	19774660CCV	1	08/05/2021	11:17	X	X	X	X	X
19774661CCB	19774661CCB	1	08/05/2021	11:18	X	X	X	X	X
GB-29/3-5	60375923006	10	08/05/2021	11:20	X	X	X	X	X
GB-36/0-2	60375923007	10	08/05/2021	11:21	X	X	X	X	X
GB-36/2-4	60375923008	10	08/05/2021	11:23	X	X	X	X	X
GB-43/3-5	60375923009	10	08/05/2021	11:25	X	X	X	X	X
GB-43/5-7	60375923010	10	08/05/2021	11:26	X	X	X	X	X
GB-01/8-10	60375923011	10	08/05/2021	11:28	X	X	X	X	X
GB-01/11-13	60375923012	10	08/05/2021	11:29	X	X	X	X	X
19774662CCV	19774662CCV	1	08/05/2021	11:33	X	X	X	X	X
19774663CCB	19774663CCB	1	08/05/2021	11:34	X	X	X	X	X
GB-03/1-3	60375923013	10	08/05/2021	11:36	X	X	X	X	X
GB-03/4-6	60375923014	10	08/05/2021	11:37	X	X	X	X	X
GB-02/2-3	60375923016	10	08/05/2021	11:39	X	X	X	X	X
2951057MS	2951057	10	08/05/2021	11:41	X	X	X	X	X
2951058MSD	2951058	10	08/05/2021	11:42	X	X	X	X	X
GB-02/8-9	60375923017	10	08/05/2021	11:44	X	X	X	X	X
19774665CCV	19774665CCV	1	08/05/2021	11:47	X	X	X	X	X
19774666CCB	19774666CCB	1	08/05/2021	11:49	X	X	X	X	X
19774667CRDL	19774667CRDL	1	08/05/2021	11:50	X	X	X	X	X
19774668CCV	19774668CCV	1	08/05/2021	11:52	X	X	X	X	X
19774669CCB	19774669CCB	1	08/05/2021	11:53	X	X	X	X	X

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 09:40 End Date: 08/05/2021 11:53

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19774634CAL0	09:40	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19774635CAL1	09:42	98.8	99.6	99.8	99.5	98.9	98.7	98.7
19774636CAL2	09:44	94.6	96.2	98.8	97.3	97.1	97.3	94.8
19774637CAL3	09:45	92.9	95.1	97.7	94.7	96.2	97.6	92.0
19774638CAL4	09:47	90.7	93.1	96.5	93.7	94.7	98.3	90.2
19774639ICV	09:48	93.4	95.3	97.6	96.3	95.9	97.4	93.1
19774640ICB	09:50	99.3	98.5	99.7	99.7	99.4	99.3	98.4
19774641CRDL	09:52	100.2	100.3	100.4	100.4	100.4	100.6	99.2
19774642ICSA	09:53	77.3	82.5	83.9	84.0	84.1	81.4	72.1
19774643ICSAB	09:55	77.8	85.2	84.6	84.5	84.7	80.9	70.5
19774644CCV	09:56	93.2	92.8	96.3	94.2	94.9	91.2	90.7
19774645CCB	09:58	98.9	95.6	99.0	97.3	99.3	93.0	96.0
19774658CCV	11:00	94.6	99.2	98.8	99.2	96.8	101.5	95.6
19774659CCB	11:02	100.0	102.4	100.3	101.4	99.2	104.1	100.5
2951055	11:04	96.8	95.5	95.3	97.5	95.0	83.9	93.9
2951056	11:05	94.8	95.5	96.0	97.4	93.6	87.7	92.5
GB-15/2-3	11:07	94.3	99.9	98.2	100.1	94.0	87.1	93.7
GB-15/3-5	11:08	93.9	99.0	98.1	98.5	93.3	87.6	93.1
GB-22/1-3	11:10	95.1	101.7	99.3	100.1	94.5	89.3	94.8
GB-22/3-5	11:12	93.5	102.3	98.6	99.6	94.6	91.1	93.8
GB-29/1.5-2.5	11:13	94.5	102.4	100.0	99.9	94.6	93.3	94.7
19774660CCV	11:17	96.5	102.7	100.2	101.1	97.6	111.2	98.1
19774661CCB	11:18	101.6	106.6	102.3	105.0	101.3	109.6	103.6
GB-29/3-5	11:20	93.3	100.1	98.6	98.1	93.4	88.9	92.5
GB-36/0-2	11:21	89.4	92.9	93.9	93.3	89.5	78.8	86.2
GB-36/2-4	11:23	92.6	99.6	95.8	98.7	92.3	87.1	92.6
GB-43/3-5	11:25	85.3	83.7	89.0	87.4	85.8	71.6	77.6
GB-43/5-7	11:26	92.6	98.1	97.8	97.0	92.7	83.8	91.6
GB-01/8-10	11:28	94.9	102.3	98.6	100.0	93.5	89.6	94.5
GB-01/11-13	11:29	94.8	100.8	98.2	99.8	93.6	88.6	93.7
19774662CCV	11:33	95.0	99.1	98.2	97.9	96.3	102.5	94.6
19774663CCB	11:34	99.5	100.9	98.9	98.5	98.8	101.4	97.6
GB-03/1-3	11:36	92.9	97.7	97.3	97.6	92.1	83.7	91.7
GB-03/4-6	11:37	84.2	90.8	91.1	91.1	86.4	77.9	85.1
GB-02/2-3	11:39	90.5	97.7	95.8	95.8	91.0	85.6	90.2
2951057	11:41	89.5	96.1	94.3	93.7	89.5	90.2	87.9
2951058	11:42	90.3	97.5	95.4	95.2	90.9	91.9	89.2
GB-02/8-9	11:44	91.0	98.9	96.0	97.7	91.5	85.8	90.4
19774665CCV	11:47	94.6	101.0	98.1	99.8	96.1	105.7	95.5
19774666CCB	11:49	100.1	103.2	100.1	102.4	99.5	105.1	100.6

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 09:40 End Date: 08/05/2021 11:53

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19774667CRDL	11:50	99.2	103.8	100.0	102.3	98.4	105.0	100.8
19774668CCV	11:52	93.5	96.4	96.2	95.9	94.2	98.3	91.5
19774669CCB	11:53	98.5	100.0	98.0	99.7	97.8	100.2	97.9

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19774634CAL0	09:40	100.0	100.0	100.0
19774635CAL1	09:42	97.6	99.5	99.1
19774636CAL2	09:44	95.3	98.6	97.0
19774637CAL3	09:45	93.4	97.1	95.1
19774638CAL4	09:47	92.7	95.6	93.9
19774639ICV	09:48	93.3	97.3	95.2
19774640ICB	09:50	96.9	99.2	98.3
19774641CRDL	09:52	98.5	100.9	99.5
19774642ICSA	09:53	83.0	84.4	82.3
19774643ICSAB	09:55	83.1	84.5	83.1
19774644CCV	09:56	90.0	95.7	93.4
19774645CCB	09:58	92.6	98.1	95.4
19774658CCV	11:00	100.4	98.1	100.4
19774659CCB	11:02	103.1	99.9	102.5
2951055	11:04	90.3	95.5	96.4
2951056	11:05	90.4	95.4	96.4
GB-15/2-3	11:07	95.4	98.7	165.6
GB-15/3-5	11:08	95.4	98.0	192.3
GB-22/1-3	11:10	97.7	99.0	169.9
GB-22/3-5	11:12	98.2	98.2	175.6
GB-29/1.5-2.5	11:13	99.4	99.1	192.8
19774660CCV	11:17	105.8	100.0	103.4
19774661CCB	11:18	107.8	102.4	106.9
GB-29/3-5	11:20	96.8	98.5	180.9
GB-36/0-2	11:21	88.2	94.0	193.1
GB-36/2-4	11:23	95.0	96.4	134.9
GB-43/3-5	11:25	79.5	88.6	156.1
GB-43/5-7	11:26	93.6	97.2	172.7
GB-01/8-10	11:28	98.1	98.4	179.0
GB-01/11-13	11:29	96.7	97.9	168.3
19774662CCV	11:33	99.7	98.0	99.5
19774663CCB	11:34	100.2	98.7	101.2
GB-03/1-3	11:36	94.1	97.4	181.5
GB-03/4-6	11:37	88.3	90.4	114.5

FORM XV INORGANIC-3

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/05/2021 09:40 End Date: 08/05/2021 11:53

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
GB-02/2-3	11:39	93.5	95.1	177.9
2951057	11:41	92.2	94.2	173.3
2951058	11:42	94.0	94.9	167.1
GB-02/8-9	11:44	94.2	95.9	176.2
19774665CCV	11:47	103.5	98.7	101.8
19774666CCB	11:49	104.5	101.2	103.4
19774667CRDL	11:50	104.3	100.3	104.1
19774668CCV	11:52	96.1	96.1	97.3
19774669CCB	11:53	100.3	97.6	101.0

SAMPLE NO.

GB-15/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.5		%	1	07/27/2021 13:46

SAMPLE NO.

GB-15/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.2		%	1	07/27/2021 13:46

SAMPLE NO.

GB-22/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.8		%	1	07/27/2021 13:46

SAMPLE NO.

GB-22/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.0		%	1	07/27/2021 13:46

SAMPLE NO.

GB-29/1.5-2.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.6		%	1	07/27/2021 13:46

SAMPLE NO.

GB-29/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.3		%	1	07/27/2021 13:46

SAMPLE NO.

GB-36/0-2

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	16.8		%	1	07/27/2021 13:46

SAMPLE NO.

GB-36/2-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	17.9		%	1	07/27/2021 13:46

SAMPLE NO.

GB-43/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.2		%	1	07/27/2021 13:46

SAMPLE NO.

GB-43/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.4		%	1	07/27/2021 13:46

SAMPLE NO.

GB-01/8-10

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.7		%	1	07/27/2021 13:46

SAMPLE NO.

GB-01/11-13

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923012 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.5		%	1	07/27/2021 13:46

SAMPLE NO.

GB-03/1-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923013 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	15.2		%	1	07/27/2021 13:46

SAMPLE NO.

GB-03/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	9.7		%	1	07/27/2021 13:46

SAMPLE NO.

GB-02/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.8		%	1	07/27/2021 13:46

SAMPLE NO.

GB-02/8-9

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Lab Sample ID: 60375923017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	25.3		%	1	07/27/2021 13:47

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract : GSA-GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2947082	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									<0.50	U
Wet weight w/dish weight										

SAMPLE NO.

2947083DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	19.8	20.5	3

FORM IX INORGANIC-1
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Preparation Method: ASTM D2974 Instrument ID: 60BAL2

Concentration Units: %

Analyte	PQL	MDL	MDL Date
Percent Moisture	0.10	0.10	01/01/2021

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18393

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2947082	2947082	07/27/2021	1	1
2947083	2947083	07/27/2021	1	1
60375923001	GB-15/2-3	07/27/2021	1	1
60375923002	GB-15/3-5	07/27/2021	1	1
60375923003	GB-22/1-3	07/27/2021	1	1
60375923004	GB-22/3-5	07/27/2021	1	1
60375923005	GB-29/1.5-2.5	07/27/2021	1	1
60375923006	GB-29/3-5	07/27/2021	1	1
60375923007	GB-36/0-2	07/27/2021	1	1
60375923008	GB-36/2-4	07/27/2021	1	1
60375923009	GB-43/3-5	07/27/2021	1	1
60375923010	GB-43/5-7	07/27/2021	1	1
60375923011	GB-01/8-10	07/27/2021	1	1
60375923012	GB-01/11-13	07/27/2021	1	1
60375923013	GB-03/1-3	07/27/2021	1	1
60375923014	GB-03/4-6	07/27/2021	1	1
60375923016	GB-02/2-3	07/27/2021	1	1
60375923017	GB-02/8-9	07/27/2021	1	1

FORM XIII INORGANIC-1

ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60375923 Contract: GSA-GOODFELLOW

Instrument ID: 60BAL2 Analysis Method: ASTM D2974

Start Date: 07/27/2021 13:45 End Date: 07/27/2021 13:47

Sample Name	Lab Sample ID	D/F	Date	Time	MOIST
2947082BLANK	2947082	1	07/27/2021	13:45	X
GB-15/2-3	60375923001	1	07/27/2021	13:46	X
2947083DUP	2947083	1	07/27/2021	13:46	X
GB-15/3-5	60375923002	1	07/27/2021	13:46	X
GB-22/1-3	60375923003	1	07/27/2021	13:46	X
GB-22/3-5	60375923004	1	07/27/2021	13:46	X
GB-29/1.5-2.5	60375923005	1	07/27/2021	13:46	X
GB-29/3-5	60375923006	1	07/27/2021	13:46	X
GB-36/0-2	60375923007	1	07/27/2021	13:46	X
GB-36/2-4	60375923008	1	07/27/2021	13:46	X
GB-43/3-5	60375923009	1	07/27/2021	13:46	X
GB-43/5-7	60375923010	1	07/27/2021	13:46	X
GB-01/8-10	60375923011	1	07/27/2021	13:46	X
GB-01/11-13	60375923012	1	07/27/2021	13:46	X
GB-03/1-3	60375923013	1	07/27/2021	13:46	X
GB-03/4-6	60375923014	1	07/27/2021	13:46	X
GB-02/2-3	60375923016	1	07/27/2021	13:46	X
GB-02/8-9	60375923017	1	07/27/2021	13:47	X

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 60376093

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Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

August 30, 2021

Justin Carter
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on July 28, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

(b) (6)

Jeffrey Shopper
jeff.shopper@pacelabs.com
1(913)563-1408
Project Manager

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL
Jacquelin Lee, Burns & McDonnell

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CERTIFICATIONS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 20-020-0
Arkansas Drinking Water
Illinois Certification #: 2000302021-3
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212020-2
Oklahoma Certification #: 9205/9935
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-19-12
Utah Certification #: KS000212019-9
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

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SAMPLE SUMMARY

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60376093001	GB-44/3-5	Solid	07/26/21 13:25	07/28/21 04:25
60376093002	GB-44/5-7	Solid	07/26/21 13:28	07/28/21 04:25
60376093003	GB-37/3-5	Solid	07/26/21 14:12	07/28/21 04:25
60376093004	GB-37/5-7	Solid	07/26/21 14:16	07/28/21 04:25
60376093005	GB-30/3-4	Solid	07/26/21 14:52	07/28/21 04:25
60376093006	GB-30/4-5	Solid	07/26/21 14:55	07/28/21 04:25
60376093007	GB-23/2.5-3.5	Solid	07/26/21 15:16	07/28/21 04:25
60376093008	GB-23/4-6	Solid	07/26/21 15:20	07/28/21 04:25
60376093009	GB-16/3-4	Solid	07/26/21 15:38	07/28/21 04:25
60376093010	GB-16/4-5	Solid	07/26/21 15:42	07/28/21 04:25
60376093011	GB-10/1.5-2.5	Solid	07/26/21 16:00	07/28/21 04:25
60376093012	GB-10/3-5	Solid	07/26/21 16:05	07/28/21 04:25
60376093013	GB-01/2-3	Solid	07/27/21 12:00	07/28/21 04:25
60376093014	TB-72721	Water	07/27/21 08:00	07/28/21 04:25

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SAMPLE ANALYTE COUNT

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60376093001	**GB-44/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093002	**GB-44/5-7**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093003	**GB-37/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093004	**GB-37/5-7**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093005	**GB-30/3-4**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093006	**GB-30/4-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093007	**GB-23/2.5-3.5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093008	**GB-23/4-6**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093009	**GB-16/3-4**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093010	**GB-16/4-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093011	**GB-10/1.5-2.5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60376093012	**GB-10/3-5**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093013	**GB-01/2-3**	EPA 8082	AJA1	8	PASI-K
		EPA 6020	JGP	5	PASI-K
		EPA 8270 by SIM	JMT	18	PASI-K
		EPA 8270	NAW	5	PASI-K
		EPA 8260B	RAD	81	PASI-K
		EPA 8260	RAD	4	PASI-K
		ASTM D2974	DWC	1	PASI-K
60376093014	**TB-72721**	EPA 5030B/8260	PGH	87	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Method: **EPA 8082**
Description: 8082 GCS PCB SW
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
13 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
13 samples were analyzed for EPA 6020 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 736513

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60376093012

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2953703)
  - Antimony
- MSD (Lab ID: 2953704)
  - Antimony

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
5 samples were analyzed for EPA 8270 by SIM by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

QC Batch: 734956

P3: Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
- GB-44/3-5 (Lab ID: 60376093001)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 734956

S4: Surrogate recovery not evaluated against control limits due to sample dilution.
- GB-44/3-5 (Lab ID: 60376093001)
  - 2-Fluorobiphenyl (S)
  - Terphenyl-d14 (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 30, 2021

Analyte Comments:

QC Batch: 734956

D4: Sample was diluted due to the presence of high levels of target analytes.

- GB-44/3-5 (Lab ID: 60376093001)
  - 2-Fluorobiphenyl (S)

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Method: **EPA 8270**
Description: 8270 MSSV DRO/ORO
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
1 sample was analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
1 sample was analyzed for EPA 8260B by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035A/5030 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 735258

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 2949515)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- GB-01/2-3 (Lab ID: 60376093013)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Method: **EPA 8260B**
Description: 8260 MSV 5035A VOA
Client: BURNS & MCDONNELL
Date: August 30, 2021

Analyte Comments:

QC Batch: 735258

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- LCS (Lab ID: 2949516)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
1 sample was analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 736890

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Method: **EPA 8260**
Description: 8260 MSV GRO and Oxygenates
Client: BURNS & MCDONNELL
Date: August 30, 2021

General Information:
1 sample was analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-44/3-5 **Lab ID: 60376093001** Collected: 07/26/21 13:25 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	40.0	1	07/29/21 07:25	07/30/21 18:58	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	40.0	1	07/29/21 07:25	07/30/21 18:58	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.0	1	07/29/21 07:25	07/30/21 18:58	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	40.0	1	07/29/21 07:25	07/30/21 18:58	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	40.0	1	07/29/21 07:25	07/30/21 18:58	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	40.0	1	07/29/21 07:25	07/30/21 18:58	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.0	1	07/29/21 07:25	07/30/21 18:58	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	80	%	35-120	1	07/29/21 07:25	07/30/21 18:58	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.62**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:03	7440-36-0	
Arsenic	**5.4**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:03	7440-38-2	
Copper	**18.2**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:03	7440-50-8	
Lead	**26.8**	mg/kg	0.57	10	08/06/21 09:55	08/09/21 15:03	7439-92-1	
Zinc	**54.2**	mg/kg	5.7	10	08/06/21 09:55	08/09/21 15:03	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**88.6**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	83-32-9	
Acenaphthylene	**42.3J**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	208-96-8	
Anthracene	**290**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	120-12-7	
Benzo(a)anthracene	**799**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	56-55-3	
Benzo(a)pyrene	**657**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	50-32-8	
Benzo(b)fluoranthene	**894**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	205-99-2	
Benzo(g,h,i)perylene	**422**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	191-24-2	
Benzo(k)fluoranthene	**516**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	207-08-9	
Chrysene	**707**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	218-01-9	
Dibenz(a,h)anthracene	**89.8**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	53-70-3	
Fluoranthene	**1560**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	206-44-0	
Fluorene	**76.5J**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	86-73-7	
Indeno(1,2,3-cd)pyrene	**322**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	193-39-5	
Naphthalene	**<34.3**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	91-20-3	
Phenanthrene	**691**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	85-01-8	
Pyrene	**1620**	ug/kg	80.3	10	07/29/21 08:17	07/30/21 16:22	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	0	%	40-120	10	07/29/21 08:17	07/30/21 16:22	321-60-8	D4,P3, S4
Terphenyl-d14 (S)	0	%	45-130	10	07/29/21 08:17	07/30/21 16:22	1718-51-0	S4
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.1**	%	0.50	1		07/29/21 11:13		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-44/5-7 **Lab ID: 60376093002** Collected: 07/26/21 13:28 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.9	1	07/29/21 07:25	07/30/21 19:52	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.9	1	07/29/21 07:25	07/30/21 19:52	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.9	1	07/29/21 07:25	07/30/21 19:52	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.9	1	07/29/21 07:25	07/30/21 19:52	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.9	1	07/29/21 07:25	07/30/21 19:52	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.9	1	07/29/21 07:25	07/30/21 19:52	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	39.9	1	07/29/21 07:25	07/30/21 19:52	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	83	%	35-120	1	07/29/21 07:25	07/30/21 19:52	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.59**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:05	7440-36-0	
Arsenic	**8.6**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:05	7440-38-2	
Copper	**17.4**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:05	7440-50-8	
Lead	**28.7**	mg/kg	0.55	10	08/06/21 09:55	08/09/21 15:05	7439-92-1	
Zinc	**62.7**	mg/kg	5.5	10	08/06/21 09:55	08/09/21 15:05	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**3.1J**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	83-32-9	
Acenaphthylene	**3.0J**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	208-96-8	
Anthracene	**9.5**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	120-12-7	
Benzo(a)anthracene	**31.2**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	56-55-3	
Benzo(a)pyrene	**25.6**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	50-32-8	
Benzo(b)fluoranthene	**52.4**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	205-99-2	
Benzo(g,h,i)perylene	**17.9**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	191-24-2	
Benzo(k)fluoranthene	**18.8**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	207-08-9	
Chrysene	**39.3**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	218-01-9	
Dibenz(a,h)anthracene	**3.9**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	53-70-3	
Fluoranthene	**86.9**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	206-44-0	
Fluorene	**5.7**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	86-73-7	
Indeno(1,2,3-cd)pyrene	**14.3**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	193-39-5	
Naphthalene	**17.2**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	91-20-3	
Phenanthrene	**52.7**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	85-01-8	
Pyrene	**70.2**	ug/kg	3.8	1	07/29/21 08:17	07/30/21 16:40	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	88	%	40-120	1	07/29/21 08:17	07/30/21 16:40	321-60-8	
Terphenyl-d14 (S)	106	%	45-130	1	07/29/21 08:17	07/30/21 16:40	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**17.5**	%	0.50	1		07/29/21 11:13		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-37/3-5 **Lab ID: 60376093003** Collected: 07/26/21 14:12 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.0**	ug/kg	40.3	1	07/29/21 07:25	07/30/21 20:10	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.6**	ug/kg	40.3	1	07/29/21 07:25	07/30/21 20:10	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.3	1	07/29/21 07:25	07/30/21 20:10	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.7**	ug/kg	40.3	1	07/29/21 07:25	07/30/21 20:10	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.3	1	07/29/21 07:25	07/30/21 20:10	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.3	1	07/29/21 07:25	07/30/21 20:10	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.9**	ug/kg	40.3	1	07/29/21 07:25	07/30/21 20:10	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	80	%	35-120	1	07/29/21 07:25	07/30/21 20:10	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.61**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:07	7440-36-0	
Arsenic	**6.5**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:07	7440-38-2	
Copper	**15.5**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:07	7440-50-8	
Lead	**9.9**	mg/kg	0.56	10	08/06/21 09:55	08/09/21 15:07	7439-92-1	
Zinc	**43.7**	mg/kg	5.6	10	08/06/21 09:55	08/09/21 15:07	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**17.2**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	83-32-9	
Acenaphthylene	**13.3**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	208-96-8	
Anthracene	**48.8**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	120-12-7	
Benzo(a)anthracene	**152**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	56-55-3	
Benzo(a)pyrene	**133**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	50-32-8	
Benzo(b)fluoranthene	**202**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	205-99-2	
Benzo(g,h,i)perylene	**100**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	191-24-2	
Benzo(k)fluoranthene	**115**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	207-08-9	
Chrysene	**154**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	218-01-9	
Dibenz(a,h)anthracene	**21.4**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	53-70-3	
Fluoranthene	**289**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	206-44-0	
Fluorene	**15.2**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	86-73-7	
Indeno(1,2,3-cd)pyrene	**82.7**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	193-39-5	
Naphthalene	**8.2**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	91-20-3	
Phenanthrene	**218**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	85-01-8	
Pyrene	**307**	ug/kg	3.9	1	07/29/21 08:17	07/30/21 17:31	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	40-120	1	07/29/21 08:17	07/30/21 17:31	321-60-8	
Terphenyl-d14 (S)	107	%	45-130	1	07/29/21 08:17	07/30/21 17:31	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**19.3**	%	0.50	1		07/29/21 11:13		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-37/5-7 **Lab ID: 60376093004** Collected: 07/26/21 14:16 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.1**	ug/kg	40.6	1	07/29/21 07:25	07/30/21 20:28	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.7**	ug/kg	40.6	1	07/29/21 07:25	07/30/21 20:28	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.4**	ug/kg	40.6	1	07/29/21 07:25	07/30/21 20:28	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.8**	ug/kg	40.6	1	07/29/21 07:25	07/30/21 20:28	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	40.6	1	07/29/21 07:25	07/30/21 20:28	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	40.6	1	07/29/21 07:25	07/30/21 20:28	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.0**	ug/kg	40.6	1	07/29/21 07:25	07/30/21 20:28	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	68	%	35-120	1	07/29/21 07:25	07/30/21 20:28	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.51**	mg/kg	0.95	10	08/06/21 09:55	08/09/21 15:08	7440-36-0	
Arsenic	**9.9**	mg/kg	0.95	10	08/06/21 09:55	08/09/21 15:08	7440-38-2	
Copper	**18.1**	mg/kg	0.95	10	08/06/21 09:55	08/09/21 15:08	7440-50-8	
Lead	**11.4**	mg/kg	0.48	10	08/06/21 09:55	08/09/21 15:08	7439-92-1	
Zinc	**55.7**	mg/kg	4.8	10	08/06/21 09:55	08/09/21 15:08	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<1.6**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	83-32-9	
Acenaphthylene	**<1.6**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	208-96-8	
Anthracene	**4.1J**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	120-12-7	
Benzo(a)anthracene	**6.6**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	56-55-3	
Benzo(a)pyrene	**4.5**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	50-32-8	
Benzo(b)fluoranthene	**8.5**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	205-99-2	
Benzo(g,h,i)perylene	**2.9J**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	191-24-2	
Benzo(k)fluoranthene	**<2.3**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	207-08-9	
Chrysene	**6.3**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	53-70-3	
Fluoranthene	**18.9**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	206-44-0	
Fluorene	**<1.6**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	86-73-7	
Indeno(1,2,3-cd)pyrene	**2.4J**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	193-39-5	
Naphthalene	**<1.8**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	91-20-3	
Phenanthrene	**15.2**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	85-01-8	
Pyrene	**15.9**	ug/kg	4.2	1	07/29/21 08:17	07/30/21 17:48	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%	40-120	1	07/29/21 08:17	07/30/21 17:48	321-60-8	
Terphenyl-d14 (S)	100	%	45-130	1	07/29/21 08:17	07/30/21 17:48	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**21.8**	%	0.50	1		07/29/21 11:13		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-30/3-4 **Lab ID: 60376093005** Collected: 07/26/21 14:52 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.9**	ug/kg	39.8	1	07/29/21 07:25	07/30/21 20:46	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.5**	ug/kg	39.8	1	07/29/21 07:25	07/30/21 20:46	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.8	1	07/29/21 07:25	07/30/21 20:46	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.6**	ug/kg	39.8	1	07/29/21 07:25	07/30/21 20:46	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.8	1	07/29/21 07:25	07/30/21 20:46	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.8	1	07/29/21 07:25	07/30/21 20:46	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.8	1	07/29/21 07:25	07/30/21 20:46	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	80	%	35-120	1	07/29/21 07:25	07/30/21 20:46	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.53**	mg/kg	0.99	10	08/06/21 09:55	08/09/21 15:10	7440-36-0	
Arsenic	**9.8**	mg/kg	0.99	10	08/06/21 09:55	08/09/21 15:10	7440-38-2	
Copper	**19.1**	mg/kg	0.99	10	08/06/21 09:55	08/09/21 15:10	7440-50-8	
Lead	**18.2**	mg/kg	0.49	10	08/06/21 09:55	08/09/21 15:10	7439-92-1	
Zinc	**58.4**	mg/kg	4.9	10	08/06/21 09:55	08/09/21 15:10	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**22.0**	%	0.50	1		07/29/21 11:13		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-30/4-5 **Lab ID: 60376093006** Collected: 07/26/21 14:55 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.3**	ug/kg	41.6	1	07/29/21 07:25	07/30/21 21:04	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.9**	ug/kg	41.6	1	07/29/21 07:25	07/30/21 21:04	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.6	1	07/29/21 07:25	07/30/21 21:04	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10.0**	ug/kg	41.6	1	07/29/21 07:25	07/30/21 21:04	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.8**	ug/kg	41.6	1	07/29/21 07:25	07/30/21 21:04	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.6	1	07/29/21 07:25	07/30/21 21:04	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.2**	ug/kg	41.6	1	07/29/21 07:25	07/30/21 21:04	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	71	%	35-120	1	07/29/21 07:25	07/30/21 21:04	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.67**	mg/kg	1.2	10	08/06/21 09:55	08/09/21 15:11	7440-36-0	
Arsenic	**17.7**	mg/kg	1.2	10	08/06/21 09:55	08/09/21 15:11	7440-38-2	
Copper	**23.2**	mg/kg	1.2	10	08/06/21 09:55	08/09/21 15:11	7440-50-8	
Lead	**20.7**	mg/kg	0.62	10	08/06/21 09:55	08/09/21 15:11	7439-92-1	
Zinc	**63.4**	mg/kg	6.2	10	08/06/21 09:55	08/09/21 15:11	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**22.3**	%	0.50	1		07/29/21 11:13		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-23/2.5-3.5 **Lab ID: 60376093007** Collected: 07/26/21 15:16 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.6	1	07/29/21 07:25	07/30/21 21:21	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.6	1	07/29/21 07:25	07/30/21 21:21	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.6	1	07/29/21 07:25	07/30/21 21:21	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.6	1	07/29/21 07:25	07/30/21 21:21	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.6	1	07/29/21 07:25	07/30/21 21:21	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.6	1	07/29/21 07:25	07/30/21 21:21	11097-69-1	
PCB-1260 (Aroclor 1260)	**52.5**	ug/kg	39.6	1	07/29/21 07:25	07/30/21 21:21	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	77	%	35-120	1	07/29/21 07:25	07/30/21 21:21	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.60**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:18	7440-36-0	
Arsenic	**10.2**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:18	7440-38-2	
Copper	**17.7**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:18	7440-50-8	
Lead	**22.6**	mg/kg	0.55	10	08/06/21 09:55	08/09/21 15:18	7439-92-1	
Zinc	**53.9**	mg/kg	5.5	10	08/06/21 09:55	08/09/21 15:18	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**18.0**	%	0.50	1		07/29/21 11:13		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-23/4-6 **Lab ID: 60376093008** Collected: 07/26/21 15:20 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.3**	ug/kg	41.3	1	07/29/21 07:25	07/30/21 21:39	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.8**	ug/kg	41.3	1	07/29/21 07:25	07/30/21 21:39	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.3	1	07/29/21 07:25	07/30/21 21:39	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.9**	ug/kg	41.3	1	07/29/21 07:25	07/30/21 21:39	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.3	1	07/29/21 07:25	07/30/21 21:39	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.3	1	07/29/21 07:25	07/30/21 21:39	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	41.3	1	07/29/21 07:25	07/30/21 21:39	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	76	%	35-120	1	07/29/21 07:25	07/30/21 21:39	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.47**	mg/kg	0.87	10	08/06/21 09:55	08/09/21 15:19	7440-36-0	
Arsenic	**6.9**	mg/kg	0.87	10	08/06/21 09:55	08/09/21 15:19	7440-38-2	
Copper	**15.1**	mg/kg	0.87	10	08/06/21 09:55	08/09/21 15:19	7440-50-8	
Lead	**11.0**	mg/kg	0.43	10	08/06/21 09:55	08/09/21 15:19	7439-92-1	
Zinc	**46.6**	mg/kg	4.3	10	08/06/21 09:55	08/09/21 15:19	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**21.0**	%	0.50	1		07/29/21 11:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-16/3-4 **Lab ID: 60376093009** Collected: 07/26/21 15:38 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.7**	ug/kg	39.0	1	07/29/21 07:25	07/30/21 21:57	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.3**	ug/kg	39.0	1	07/29/21 07:25	07/30/21 21:57	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.0	1	07/29/21 07:25	07/30/21 21:57	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.4**	ug/kg	39.0	1	07/29/21 07:25	07/30/21 21:57	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.0	1	07/29/21 07:25	07/30/21 21:57	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.0	1	07/29/21 07:25	07/30/21 21:57	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.7**	ug/kg	39.0	1	07/29/21 07:25	07/30/21 21:57	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	79	%	35-120	1	07/29/21 07:25	07/30/21 21:57	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.56**	mg/kg	1.0	10	08/06/21 09:55	08/09/21 15:21	7440-36-0	
Arsenic	**12.6**	mg/kg	1.0	10	08/06/21 09:55	08/09/21 15:21	7440-38-2	
Copper	**22.6**	mg/kg	1.0	10	08/06/21 09:55	08/09/21 15:21	7440-50-8	
Lead	**17.2**	mg/kg	0.52	10	08/06/21 09:55	08/09/21 15:21	7439-92-1	
Zinc	**67.3**	mg/kg	5.2	10	08/06/21 09:55	08/09/21 15:21	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.2**	%	0.50	1		07/29/21 11:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-16/4-5 **Lab ID: 60376093010** Collected: 07/26/21 15:42 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.3**	ug/kg	41.4	1	07/29/21 07:25	07/30/21 22:15	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.9**	ug/kg	41.4	1	07/29/21 07:25	07/30/21 22:15	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.4	1	07/29/21 07:25	07/30/21 22:15	11141-16-5	
PCB-1242 (Aroclor 1242)	**<10**	ug/kg	41.4	1	07/29/21 07:25	07/30/21 22:15	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.4	1	07/29/21 07:25	07/30/21 22:15	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.9**	ug/kg	41.4	1	07/29/21 07:25	07/30/21 22:15	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.2**	ug/kg	41.4	1	07/29/21 07:25	07/30/21 22:15	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	75	%	35-120	1	07/29/21 07:25	07/30/21 22:15	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.56**	mg/kg	1.0	10	08/06/21 09:55	08/09/21 15:23	7440-36-0	
Arsenic	**12.7**	mg/kg	1.0	10	08/06/21 09:55	08/09/21 15:23	7440-38-2	
Copper	**21.4**	mg/kg	1.0	10	08/06/21 09:55	08/09/21 15:23	7440-50-8	
Lead	**13.8**	mg/kg	0.52	10	08/06/21 09:55	08/09/21 15:23	7439-92-1	
Zinc	**54.0**	mg/kg	5.2	10	08/06/21 09:55	08/09/21 15:23	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.5**	%	0.50	1		07/29/21 11:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-10/1.5-2.5 **Lab ID: 60376093011** Collected: 07/26/21 16:00 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.8**	ug/kg	39.5	1	07/29/21 07:25	07/30/21 22:33	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.4**	ug/kg	39.5	1	07/29/21 07:25	07/30/21 22:33	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.3**	ug/kg	39.5	1	07/29/21 07:25	07/30/21 22:33	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.5**	ug/kg	39.5	1	07/29/21 07:25	07/30/21 22:33	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.6**	ug/kg	39.5	1	07/29/21 07:25	07/30/21 22:33	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.7**	ug/kg	39.5	1	07/29/21 07:25	07/30/21 22:33	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.8**	ug/kg	39.5	1	07/29/21 07:25	07/30/21 22:33	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	82	%	35-120	1	07/29/21 07:25	07/30/21 22:33	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.53**	mg/kg	0.98	10	08/06/21 09:55	08/09/21 15:24	7440-36-0	
Arsenic	**13.1**	mg/kg	0.98	10	08/06/21 09:55	08/09/21 15:24	7440-38-2	
Copper	**11.7**	mg/kg	0.98	10	08/06/21 09:55	08/09/21 15:24	7440-50-8	
Lead	**158**	mg/kg	0.49	10	08/06/21 09:55	08/09/21 15:24	7439-92-1	
Zinc	**66.3**	mg/kg	4.9	10	08/06/21 09:55	08/09/21 15:24	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**17.6**	%	0.50	1		07/29/21 11:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-10/3-5 **Lab ID: 60376093012** Collected: 07/26/21 16:05 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<10.2**	ug/kg	41.0	1	07/29/21 07:25	07/30/21 22:51	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.8**	ug/kg	41.0	1	07/29/21 07:25	07/30/21 22:51	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.5**	ug/kg	41.0	1	07/29/21 07:25	07/30/21 22:51	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.9**	ug/kg	41.0	1	07/29/21 07:25	07/30/21 22:51	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.7**	ug/kg	41.0	1	07/29/21 07:25	07/30/21 22:51	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.8**	ug/kg	41.0	1	07/29/21 07:25	07/30/21 22:51	11097-69-1	
PCB-1260 (Aroclor 1260)	**<8.1**	ug/kg	41.0	1	07/29/21 07:25	07/30/21 22:51	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	80	%	35-120	1	07/29/21 07:25	07/30/21 22:51	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.63**	mg/kg	1.2	10	08/06/21 09:55	08/09/21 15:26	7440-36-0	M1
Arsenic	**10.9**	mg/kg	1.2	10	08/06/21 09:55	08/09/21 15:26	7440-38-2	
Copper	**19.4**	mg/kg	1.2	10	08/06/21 09:55	08/09/21 15:26	7440-50-8	
Lead	**15.2**	mg/kg	0.58	10	08/06/21 09:55	08/09/21 15:26	7439-92-1	
Zinc	**61.5**	mg/kg	5.8	10	08/06/21 09:55	08/09/21 15:26	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**20.3**	%	0.50	1		07/29/21 11:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-01/2-3 **Lab ID: 60376093013** Collected: 07/27/21 12:00 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB SW	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	**<9.4**	ug/kg	37.9	1	07/29/21 07:25	07/30/21 23:09	12674-11-2	
PCB-1221 (Aroclor 1221)	**<9.0**	ug/kg	37.9	1	07/29/21 07:25	07/30/21 23:09	11104-28-2	
PCB-1232 (Aroclor 1232)	**<4.1**	ug/kg	37.9	1	07/29/21 07:25	07/30/21 23:09	11141-16-5	
PCB-1242 (Aroclor 1242)	**<9.1**	ug/kg	37.9	1	07/29/21 07:25	07/30/21 23:09	53469-21-9	
PCB-1248 (Aroclor 1248)	**<2.5**	ug/kg	37.9	1	07/29/21 07:25	07/30/21 23:09	12672-29-6	
PCB-1254 (Aroclor 1254)	**<3.6**	ug/kg	37.9	1	07/29/21 07:25	07/30/21 23:09	11097-69-1	
PCB-1260 (Aroclor 1260)	**<7.5**	ug/kg	37.9	1	07/29/21 07:25	07/30/21 23:09	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	79	%	35-120	1	07/29/21 07:25	07/30/21 23:09	2051-24-3	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Antimony	**<0.57**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:31	7440-36-0	
Arsenic	**8.5**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:31	7440-38-2	
Copper	**16.1**	mg/kg	1.1	10	08/06/21 09:55	08/09/21 15:31	7440-50-8	
Lead	**12.2**	mg/kg	0.53	10	08/06/21 09:55	08/09/21 15:31	7439-92-1	
Zinc	**50.4**	mg/kg	5.3	10	08/06/21 09:55	08/09/21 15:31	7440-66-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Acenaphthene	**<2.9**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	83-32-9	
Acenaphthylene	**<2.9**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	208-96-8	
Anthracene	**6.9J**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	120-12-7	
Benzo(a)anthracene	**26.6**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	56-55-3	
Benzo(a)pyrene	**22.5**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	50-32-8	
Benzo(b)fluoranthene	**42.8**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	205-99-2	
Benzo(g,h,i)perylene	**18.3**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	191-24-2	
Benzo(k)fluoranthene	**21.1**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	207-08-9	
Chrysene	**29.9**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	218-01-9	
Dibenz(a,h)anthracene	**<3.4**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	53-70-3	
Fluoranthene	**73.0**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	206-44-0	
Fluorene	**<3.0**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	86-73-7	
Indeno(1,2,3-cd)pyrene	**13.6**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	193-39-5	
Naphthalene	**<3.3**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	91-20-3	
Phenanthrene	**34.7**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	85-01-8	
Pyrene	**61.1**	ug/kg	7.8	1	07/29/21 07:57	07/30/21 19:14	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	69	%	40-120	1	07/29/21 07:57	07/30/21 19:14	321-60-8	
Terphenyl-d14 (S)	80	%	45-130	1	07/29/21 07:57	07/30/21 19:14	1718-51-0	
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
TPH-ORO	**19.1**	mg/kg	17.7	1	07/29/21 07:57	08/02/21 20:47		
TPH-DRO	**4.5J**	mg/kg	17.7	1	07/29/21 07:57	08/02/21 20:47		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-01/2-3 **Lab ID: 60376093013** Collected: 07/27/21 12:00 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV DRO/ORO	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Kansas City							
Surrogates								
Nitrobenzene-d5 (S)	74	%	30-120	1	07/29/21 07:57	08/02/21 20:47	4165-60-0	
2-Fluorobiphenyl (S)	75	%	40-120	1	07/29/21 07:57	08/02/21 20:47	321-60-8	
Terphenyl-d14 (S)	78	%	45-120	1	07/29/21 07:57	08/02/21 20:47	1718-51-0	
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
Acetone	**<15.6**	ug/kg	19.2	1	07/30/21 11:30	07/30/21 13:56	67-64-1	
Acrolein	**<72.6**	ug/kg	96.1	1	07/30/21 11:30	07/30/21 13:56	107-02-8	
Acrylonitrile	**<3.0**	ug/kg	96.1	1	07/30/21 11:30	07/30/21 13:56	107-13-1	
Benzene	**<0.47**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	71-43-2	
Bromobenzene	**<0.90**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	108-86-1	
Bromochloromethane	**<0.58**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	74-97-5	
Bromodichloromethane	**<0.58**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	75-27-4	
Bromoform	**<0.55**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	75-25-2	
Bromomethane	**<2.8**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	74-83-9	
2-Butanone (MEK)	**<3.3**	ug/kg	9.6	1	07/30/21 11:30	07/30/21 13:56	78-93-3	
n-Butylbenzene	**<0.62**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	104-51-8	
sec-Butylbenzene	**<0.70**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	135-98-8	
tert-Butylbenzene	**<0.85**	ug/kg	24.0	1	07/30/21 11:30	07/30/21 13:56	98-06-6	
Carbon disulfide	**<0.62**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	75-15-0	
Carbon tetrachloride	**<0.82**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	56-23-5	
Chlorobenzene	**<0.60**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	108-90-7	
Chloroethane	**<1.4**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	75-00-3	
Chloroform	**<0.47**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	67-66-3	
Chloromethane	**<0.77**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	74-87-3	
2-Chlorotoluene	**<0.70**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	95-49-8	
4-Chlorotoluene	**<0.58**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	106-43-4	
Cyclohexanone	**<12.2**	ug/kg	19.2	1	07/30/21 11:30	07/30/21 13:56	108-94-1	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/kg	9.6	1	07/30/21 11:30	07/30/21 13:56	96-12-8	
Dibromochloromethane	**<0.62**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	124-48-1	
1,2-Dibromoethane (EDB)	**<0.51**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	106-93-4	
Dibromomethane	**<0.58**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	74-95-3	
1,2-Dichlorobenzene	**<0.60**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	95-50-1	
1,3-Dichlorobenzene	**<0.69**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	541-73-1	
1,4-Dichlorobenzene	**<0.78**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	106-46-7	
1,1-Dichloroethane	**<0.37**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	75-34-3	
1,2-Dichloroethane	**<0.38**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	107-06-2	
1,2-Dichloroethene (Total)	**<1.1**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	540-59-0	
1,1-Dichloroethene	**<0.61**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	75-35-4	
cis-1,2-Dichloroethene	**<0.41**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	156-59-2	
trans-1,2-Dichloroethene	**<0.65**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	156-60-5	
1,2-Dichloropropane	**<0.94**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	78-87-5	
1,3-Dichloropropane	**<0.66**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	142-28-9	
2,2-Dichloropropane	**<0.46**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	594-20-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-01/2-3 **Lab ID: 60376093013** Collected: 07/27/21 12:00 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260B Preparation Method: EPA 5035A/5030 Pace Analytical Services - Kansas City							
1,1-Dichloropropene	**<0.86**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	563-58-6	
cis-1,3-Dichloropropene	**<0.51**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	10061-01-5	
trans-1,3-Dichloropropene	**<0.44**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.54**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	60-29-7	
Ethylbenzene	**<0.44**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	100-41-4	
n-Heptane	**<4.4**	ug/kg	9.6	1	07/30/21 11:30	07/30/21 13:56	142-82-5	
Hexachloro-1,3-butadiene	**<0.82**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	87-68-3	
n-Hexane	**<0.66**	ug/kg	9.6	1	07/30/21 11:30	07/30/21 13:56	110-54-3	
2-Hexanone	**<2.4**	ug/kg	19.2	1	07/30/21 11:30	07/30/21 13:56	591-78-6	
Iodomethane	**<1.5**	ug/kg	9.6	1	07/30/21 11:30	07/30/21 13:56	74-88-4	
Isopropylbenzene (Cumene)	**<0.55**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	98-82-8	
p-Isopropyltoluene	**<0.66**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	99-87-6	
Methyl acetate	**<1.0**	ug/kg	96.1	1	07/30/21 11:30	07/30/21 13:56	79-20-9	
Methylene Chloride	**<2.6**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<2.9**	ug/kg	9.6	1	07/30/21 11:30	07/30/21 13:56	108-10-1	
Methyl-tert-butyl ether	**<0.46**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	1634-04-4	
Naphthalene	**<0.79**	ug/kg	9.6	1	07/30/21 11:30	07/30/21 13:56	91-20-3	
n-Propylbenzene	**<0.77**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	103-65-1	
Styrene	**<0.57**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.98**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.96**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	79-34-5	
Tetrachloroethene	**<0.40**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	127-18-4	
Tetrahydrofuran	**<0.75**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	109-99-9	N2
Toluene	**<0.34**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	108-88-3	
1,2,3-Trichlorobenzene	**<0.77**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	87-61-6	
1,2,4-Trichlorobenzene	**<0.77**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	120-82-1	
1,1,1-Trichloroethane	**<0.72**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	71-55-6	
1,1,2-Trichloroethane	**<0.61**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	79-00-5	
Trichloroethene	**<0.70**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	79-01-6	
Trichlorofluoromethane	**<0.59**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	75-69-4	
1,2,3-Trichloropropane	**<2.1**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	96-18-4	
1,1,2-Trichlorotrifluoroethane	**<4.8**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	76-13-1	N2
1,2,3-Trimethylbenzene	**<1.9**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	526-73-8	
1,2,4-Trimethylbenzene	**<0.64**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	95-63-6	
1,3,5-Trimethylbenzene	**<0.60**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	108-67-8	
Vinyl acetate	**<0.54**	ug/kg	96.1	1	07/30/21 11:30	07/30/21 13:56	108-05-4	
Vinyl chloride	**<0.64**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	75-01-4	
Xylene (Total)	**<1.1**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	1330-20-7	
m&p-Xylene	**<0.61**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	179601-23-1	
o-Xylene	**<0.36**	ug/kg	4.8	1	07/30/21 11:30	07/30/21 13:56	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%	80-120	1	07/30/21 11:30	07/30/21 13:56	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120	1	07/30/21 11:30	07/30/21 13:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120	1	07/30/21 11:30	07/30/21 13:56	2199-69-1	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: GB-01/2-3 **Lab ID: 60376093013** Collected: 07/27/21 12:00 Received: 07/28/21 04:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Preparation Method: EPA 5035							
	Pace Analytical Services - Kansas City							
TPH-GRO	**<0.052**	mg/kg	0.48	1	07/30/21 11:31	07/30/21 13:56		
Surrogates								
Toluene-d8 (S)	100	%	78-122	1	07/30/21 11:31	07/30/21 13:56	2037-26-5	
4-Bromofluorobenzene (S)	101	%	69-133	1	07/30/21 11:31	07/30/21 13:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120	1	07/30/21 11:31	07/30/21 13:56	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974							
	Pace Analytical Services - Kansas City							
Percent Moisture	**15.6**	%	0.50	1		07/29/21 11:14		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: TB-72721 **Lab ID: 60376093014** Collected: 07/27/21 08:00 Received: 07/28/21 04:25 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	**<2.5**	ug/L	10.0	1		08/10/21 11:18	67-64-1	
Acetonitrile	**<1.1**	ug/L	10.0	1		08/10/21 11:18	75-05-8	
Acrolein	**<4.0**	ug/L	50.0	1		08/10/21 11:18	107-02-8	
Acrylonitrile	**<1.4**	ug/L	20.0	1		08/10/21 11:18	107-13-1	
Benzene	**<0.14**	ug/L	1.0	1		08/10/21 11:18	71-43-2	
Bromobenzene	**<0.088**	ug/L	1.0	1		08/10/21 11:18	108-86-1	
Bromochloromethane	**<0.20**	ug/L	1.0	1		08/10/21 11:18	74-97-5	
Bromodichloromethane	**<0.16**	ug/L	1.0	1		08/10/21 11:18	75-27-4	
Bromoform	**<0.68**	ug/L	1.0	1		08/10/21 11:18	75-25-2	
Bromomethane	**<0.46**	ug/L	5.0	1		08/10/21 11:18	74-83-9	
2-Butanone (MEK)	**<0.98**	ug/L	10.0	1		08/10/21 11:18	78-93-3	
n-Butylbenzene	**<0.15**	ug/L	1.0	1		08/10/21 11:18	104-51-8	
sec-Butylbenzene	**<0.11**	ug/L	1.0	1		08/10/21 11:18	135-98-8	
tert-Butylbenzene	**<0.12**	ug/L	1.0	1		08/10/21 11:18	98-06-6	
Carbon disulfide	**<0.98**	ug/L	5.0	1		08/10/21 11:18	75-15-0	
Carbon tetrachloride	**<0.17**	ug/L	1.0	1		08/10/21 11:18	56-23-5	
Chlorobenzene	**<0.089**	ug/L	1.0	1		08/10/21 11:18	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	1		08/10/21 11:18	75-00-3	
2-Chloroethylvinyl ether	**<1.8**	ug/L	10.0	1		08/10/21 11:18	110-75-8	c2
Chloroform	**<0.22**	ug/L	1.0	1		08/10/21 11:18	67-66-3	
Chloromethane	**<0.28**	ug/L	1.0	1		08/10/21 11:18	74-87-3	
2-Chlorotoluene	**<0.11**	ug/L	1.0	1		08/10/21 11:18	95-49-8	
4-Chlorotoluene	**<0.15**	ug/L	1.0	1		08/10/21 11:18	106-43-4	
Cyclohexane	**<0.24**	ug/L	1.0	1		08/10/21 11:18	110-82-7	
Cyclohexanone	**<3.3**	ug/L	20.0	1		08/10/21 11:18	108-94-1	
1,2-Dibromo-3-chloropropane	**<0.78**	ug/L	2.5	1		08/10/21 11:18	96-12-8	
Dibromochloromethane	**<0.30**	ug/L	1.0	1		08/10/21 11:18	124-48-1	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	1		08/10/21 11:18	106-93-4	
Dibromomethane	**<0.11**	ug/L	1.0	1		08/10/21 11:18	74-95-3	
1,2-Dichlorobenzene	**<0.12**	ug/L	1.0	1		08/10/21 11:18	95-50-1	
1,3-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/10/21 11:18	541-73-1	
1,4-Dichlorobenzene	**<0.13**	ug/L	1.0	1		08/10/21 11:18	106-46-7	
Dichlorodifluoromethane	**<0.20**	ug/L	1.0	1		08/10/21 11:18	75-71-8	
1,1-Dichloroethane	**<0.12**	ug/L	1.0	1		08/10/21 11:18	75-34-3	
1,2-Dichloroethane	**<0.21**	ug/L	1.0	1		08/10/21 11:18	107-06-2	
1,2-Dichloroethene (Total)	**<0.22**	ug/L	1.0	1		08/10/21 11:18	540-59-0	
1,1-Dichloroethene	**<0.22**	ug/L	1.0	1		08/10/21 11:18	75-35-4	
cis-1,2-Dichloroethene	**<0.13**	ug/L	1.0	1		08/10/21 11:18	156-59-2	
trans-1,2-Dichloroethene	**<0.10**	ug/L	1.0	1		08/10/21 11:18	156-60-5	
1,2-Dichloropropane	**<0.14**	ug/L	1.0	1		08/10/21 11:18	78-87-5	
1,3-Dichloropropane	**<0.10**	ug/L	1.0	1		08/10/21 11:18	142-28-9	
2,2-Dichloropropane	**<0.16**	ug/L	1.0	1		08/10/21 11:18	594-20-7	
1,1-Dichloropropene	**<0.14**	ug/L	1.0	1		08/10/21 11:18	563-58-6	
cis-1,3-Dichloropropene	**<0.078**	ug/L	1.0	1		08/10/21 11:18	10061-01-5	
trans-1,3-Dichloropropene	**<0.18**	ug/L	1.0	1		08/10/21 11:18	10061-02-6	
Diethyl ether (Ethyl ether)	**<0.23**	ug/L	1.0	1		08/10/21 11:18	60-29-7	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Sample: TB-72721 **Lab ID: 60376093014** Collected: 07/27/21 08:00 Received: 07/28/21 04:25 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Kansas City							
1,4-Dioxane (p-Dioxane)	**<4.4**	ug/L	100	1		08/10/21 11:18	123-91-1	
Ethylbenzene	**<0.12**	ug/L	1.0	1		08/10/21 11:18	100-41-4	
n-Heptane	**<2.6**	ug/L	10.0	1		08/10/21 11:18	142-82-5	
Hexachloro-1,3-butadiene	**<0.42**	ug/L	1.0	1		08/10/21 11:18	87-68-3	
n-Hexane	**<0.22**	ug/L	10.0	1		08/10/21 11:18	110-54-3	
2-Hexanone	**<1.1**	ug/L	10.0	1		08/10/21 11:18	591-78-6	
Isopropylbenzene (Cumene)	**<0.097**	ug/L	1.0	1		08/10/21 11:18	98-82-8	
p-Isopropyltoluene	**<0.13**	ug/L	1.0	1		08/10/21 11:18	99-87-6	
Methyl acetate	**<0.87**	ug/L	1.0	1		08/10/21 11:18	79-20-9	
Methylcyclohexane	**<0.12**	ug/L	1.0	1		08/10/21 11:18	108-87-2	
Methylene Chloride	**<0.39**	ug/L	1.0	1		08/10/21 11:18	75-09-2	
1-Methylnaphthalene	**<2.6**	ug/L	10.0	1		08/10/21 11:18	90-12-0	
2-Methylnaphthalene	**<2.7**	ug/L	10.0	1		08/10/21 11:18	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<0.74**	ug/L	10.0	1		08/10/21 11:18	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/L	1.0	1		08/10/21 11:18	1634-04-4	
Naphthalene	**<0.82**	ug/L	10.0	1		08/10/21 11:18	91-20-3	
n-Propylbenzene	**<0.12**	ug/L	1.0	1		08/10/21 11:18	103-65-1	
Styrene	**<0.12**	ug/L	1.0	1		08/10/21 11:18	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.084**	ug/L	1.0	1		08/10/21 11:18	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.15**	ug/L	1.0	1		08/10/21 11:18	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.0	1		08/10/21 11:18	127-18-4	
Tetrahydrofuran	**<2.8**	ug/L	5.0	1		08/10/21 11:18	109-99-9	
Toluene	**<0.25**	ug/L	1.0	1		08/10/21 11:18	108-88-3	
1,2,3-Trichlorobenzene	**<0.93**	ug/L	1.0	1		08/10/21 11:18	87-61-6	
1,2,4-Trichlorobenzene	**<0.73**	ug/L	1.0	1		08/10/21 11:18	120-82-1	
1,1,1-Trichloroethane	**<0.11**	ug/L	1.0	1		08/10/21 11:18	71-55-6	
1,1,2-Trichloroethane	**<0.14**	ug/L	1.0	1		08/10/21 11:18	79-00-5	
Trichloroethene	**<0.21**	ug/L	1.0	1		08/10/21 11:18	79-01-6	
Trichlorofluoromethane	**<0.16**	ug/L	1.0	1		08/10/21 11:18	75-69-4	
1,2,3-Trichloropropane	**<0.41**	ug/L	2.5	1		08/10/21 11:18	96-18-4	
1,2,3-Trimethylbenzene	**<0.93**	ug/L	1.0	1		08/10/21 11:18	526-73-8	
1,2,4-Trimethylbenzene	**<0.32**	ug/L	1.0	1		08/10/21 11:18	95-63-6	
1,3,5-Trimethylbenzene	**<0.090**	ug/L	1.0	1		08/10/21 11:18	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	1		08/10/21 11:18	75-01-4	
Xylene (Total)	**<0.28**	ug/L	3.0	1		08/10/21 11:18	1330-20-7	
m&p-Xylene	**<0.22**	ug/L	2.0	1		08/10/21 11:18	179601-23-1	
o-Xylene	**<0.082**	ug/L	1.0	1		08/10/21 11:18	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	80-120	1		08/10/21 11:18	460-00-4	
Toluene-d8 (S)	99	%	80-120	1		08/10/21 11:18	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120	1		08/10/21 11:18	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/10/21 11:18		

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

QC Batch: 736513
QC Batch Method: EPA 3050
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376093001, 60376093002, 60376093003, 60376093004, 60376093005, 60376093006, 60376093007, 60376093008, 60376093009, 60376093010, 60376093011, 60376093012, 60376093013

METHOD BLANK: 2953701 Matrix: Solid
Associated Lab Samples: 60376093001, 60376093002, 60376093003, 60376093004, 60376093005, 60376093006, 60376093007, 60376093008, 60376093009, 60376093010, 60376093011, 60376093012, 60376093013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/kg	<0.54	1.0	08/09/21 14:59	
Arsenic	mg/kg	<0.11	1.0	08/09/21 14:59	
Copper	mg/kg	<0.31	1.0	08/09/21 14:59	
Lead	mg/kg	<0.13	0.50	08/09/21 14:59	
Zinc	mg/kg	<0.84	5.0	08/09/21 14:59	

LABORATORY CONTROL SAMPLE: 2953702

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	100	95.6	96	80-120	
Arsenic	mg/kg	100	98.4	98	80-120	
Copper	mg/kg	100	105	105	80-120	
Lead	mg/kg	100	99.0	99	80-120	
Zinc	mg/kg	100	96.4	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2953703 2953704

Parameter	Units	60376093012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.63	101	95.1	34.9	34.5	34	36	75-125	1	20	M1
Arsenic	mg/kg	10.9	101	95.1	109	102	97	96	75-125	7	20	
Copper	mg/kg	19.4	101	95.1	120	113	99	98	75-125	6	20	
Lead	mg/kg	15.2	101	95.1	124	113	107	103	75-125	9	20	
Zinc	mg/kg	61.5	101	95.1	160	153	98	96	75-125	5	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

QC Batch: 735258
QC Batch Method: EPA 5035A/5030
Analysis Method: EPA 8260B
Analysis Description: 8260 MSV 5035A Volatile Organics
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376093013

METHOD BLANK: 2949515 Matrix: Solid
Associated Lab Samples: 60376093013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<1.0	5.0	07/30/21 13:09	
1,1,1-Trichloroethane	ug/kg	<0.75	5.0	07/30/21 13:09	
1,1,2,2-Tetrachloroethane	ug/kg	<1.0	5.0	07/30/21 13:09	
1,1,2-Trichloroethane	ug/kg	<0.63	5.0	07/30/21 13:09	
1,1,2-Trichlorotrifluoroethane	ug/kg	<5.0	5.0	07/30/21 13:09	N2
1,1-Dichloroethane	ug/kg	<0.39	5.0	07/30/21 13:09	
1,1-Dichloroethene	ug/kg	<0.64	5.0	07/30/21 13:09	
1,1-Dichloropropene	ug/kg	<0.90	5.0	07/30/21 13:09	
1,2,3-Trichlorobenzene	ug/kg	<0.80	5.0	07/30/21 13:09	
1,2,3-Trichloropropane	ug/kg	<2.1	5.0	07/30/21 13:09	
1,2,3-Trimethylbenzene	ug/kg	<2.0	5.0	07/30/21 13:09	
1,2,4-Trichlorobenzene	ug/kg	<0.80	5.0	07/30/21 13:09	
1,2,4-Trimethylbenzene	ug/kg	<0.67	5.0	07/30/21 13:09	
1,2-Dibromo-3-chloropropane	ug/kg	<1.8	10.0	07/30/21 13:09	
1,2-Dibromoethane (EDB)	ug/kg	<0.54	5.0	07/30/21 13:09	
1,2-Dichlorobenzene	ug/kg	<0.62	5.0	07/30/21 13:09	
1,2-Dichloroethane	ug/kg	<0.40	5.0	07/30/21 13:09	
1,2-Dichloroethene (Total)	ug/kg	<1.1	5.0	07/30/21 13:09	
1,2-Dichloropropane	ug/kg	<0.98	5.0	07/30/21 13:09	
1,3,5-Trimethylbenzene	ug/kg	<0.63	5.0	07/30/21 13:09	
1,3-Dichlorobenzene	ug/kg	<0.72	5.0	07/30/21 13:09	
1,3-Dichloropropane	ug/kg	<0.69	5.0	07/30/21 13:09	
1,4-Dichlorobenzene	ug/kg	<0.81	5.0	07/30/21 13:09	
2,2-Dichloropropane	ug/kg	<0.48	5.0	07/30/21 13:09	
2-Butanone (MEK)	ug/kg	<3.4	10.0	07/30/21 13:09	
2-Chlorotoluene	ug/kg	<0.73	5.0	07/30/21 13:09	
2-Hexanone	ug/kg	<2.5	20.0	07/30/21 13:09	
4-Chlorotoluene	ug/kg	<0.60	5.0	07/30/21 13:09	
4-Methyl-2-pentanone (MIBK)	ug/kg	<3.0	10.0	07/30/21 13:09	
Acetone	ug/kg	<16.2	20.0	07/30/21 13:09	
Acrolein	ug/kg	<75.6	100	07/30/21 13:09	
Acrylonitrile	ug/kg	<3.2	100	07/30/21 13:09	
Benzene	ug/kg	<0.49	5.0	07/30/21 13:09	
Bromobenzene	ug/kg	<0.94	5.0	07/30/21 13:09	
Bromochloromethane	ug/kg	<0.60	5.0	07/30/21 13:09	
Bromodichloromethane	ug/kg	<0.60	5.0	07/30/21 13:09	
Bromoform	ug/kg	<0.58	5.0	07/30/21 13:09	
Bromomethane	ug/kg	<2.9	5.0	07/30/21 13:09	
Carbon disulfide	ug/kg	<0.64	5.0	07/30/21 13:09	
Carbon tetrachloride	ug/kg	<0.86	5.0	07/30/21 13:09	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

METHOD BLANK: 2949515 Matrix: Solid
Associated Lab Samples: 60376093013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlorobenzene	ug/kg	<0.63	5.0	07/30/21 13:09	
Chloroethane	ug/kg	<1.5	5.0	07/30/21 13:09	
Chloroform	ug/kg	<0.49	5.0	07/30/21 13:09	
Chloromethane	ug/kg	<0.80	5.0	07/30/21 13:09	
cis-1,2-Dichloroethene	ug/kg	<0.43	5.0	07/30/21 13:09	
cis-1,3-Dichloropropene	ug/kg	<0.53	5.0	07/30/21 13:09	
Cyclohexanone	ug/kg	<12.7	20.0	07/30/21 13:09	
Dibromochloromethane	ug/kg	<0.65	5.0	07/30/21 13:09	
Dibromomethane	ug/kg	<0.60	5.0	07/30/21 13:09	
Diethyl ether (Ethyl ether)	ug/kg	<0.56	5.0	07/30/21 13:09	
Ethylbenzene	ug/kg	<0.46	5.0	07/30/21 13:09	
Hexachloro-1,3-butadiene	ug/kg	<0.85	5.0	07/30/21 13:09	
Iodomethane	ug/kg	<1.5	10.0	07/30/21 13:09	
Isopropylbenzene (Cumene)	ug/kg	<0.57	5.0	07/30/21 13:09	
m&p-Xylene	ug/kg	<0.63	5.0	07/30/21 13:09	
Methyl acetate	ug/kg	<1.1	100	07/30/21 13:09	
Methyl-tert-butyl ether	ug/kg	<0.48	5.0	07/30/21 13:09	
Methylene Chloride	ug/kg	<2.7	5.0	07/30/21 13:09	
n-Butylbenzene	ug/kg	<0.65	5.0	07/30/21 13:09	
n-Heptane	ug/kg	<4.5	10.0	07/30/21 13:09	
n-Hexane	ug/kg	<0.69	10.0	07/30/21 13:09	
n-Propylbenzene	ug/kg	<0.80	5.0	07/30/21 13:09	
Naphthalene	ug/kg	<0.82	10.0	07/30/21 13:09	
o-Xylene	ug/kg	<0.37	5.0	07/30/21 13:09	
p-Isopropyltoluene	ug/kg	<0.69	5.0	07/30/21 13:09	
sec-Butylbenzene	ug/kg	<0.73	5.0	07/30/21 13:09	
Styrene	ug/kg	<0.59	5.0	07/30/21 13:09	
tert-Butylbenzene	ug/kg	<0.88	25.0	07/30/21 13:09	
Tetrachloroethene	ug/kg	<0.41	5.0	07/30/21 13:09	
Tetrahydrofuran	ug/kg	<0.78	5.0	07/30/21 13:09	N2
Toluene	ug/kg	0.47J	5.0	07/30/21 13:09	
trans-1,2-Dichloroethene	ug/kg	<0.68	5.0	07/30/21 13:09	
trans-1,3-Dichloropropene	ug/kg	<0.46	5.0	07/30/21 13:09	
Trichloroethene	ug/kg	<0.72	5.0	07/30/21 13:09	
Trichlorofluoromethane	ug/kg	<0.61	5.0	07/30/21 13:09	
Vinyl acetate	ug/kg	<0.56	100	07/30/21 13:09	
Vinyl chloride	ug/kg	<0.67	5.0	07/30/21 13:09	
Xylene (Total)	ug/kg	<1.1	5.0	07/30/21 13:09	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120	07/30/21 13:09	
4-Bromofluorobenzene (S)	%	102	80-120	07/30/21 13:09	
Toluene-d8 (S)	%	101	80-120	07/30/21 13:09	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

LABORATORY CONTROL SAMPLE: 2949516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	111	111	80-130	
1,1,1-Trichloroethane	ug/kg	100	106	106	75-130	
1,1,2,2-Tetrachloroethane	ug/kg	100	105	105	75-120	
1,1,2-Trichloroethane	ug/kg	100	108	108	80-120	
1,1,2-Trichlorotrifluoroethane	ug/kg	100	116	116	80-120	N2
1,1-Dichloroethane	ug/kg	100	109	109	75-125	
1,1-Dichloroethene	ug/kg	100	114	114	70-130	
1,1-Dichloropropene	ug/kg	100	110	110	60-140	
1,2,3-Trichlorobenzene	ug/kg	100	110	110	80-125	
1,2,3-Trichloropropane	ug/kg	100	102	102	80-120	
1,2,3-Trimethylbenzene	ug/kg	100	104	104	80-120	
1,2,4-Trichlorobenzene	ug/kg	100	115	115	80-125	
1,2,4-Trimethylbenzene	ug/kg	100	102	102	80-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	114	114	75-135	
1,2-Dibromoethane (EDB)	ug/kg	100	113	113	80-125	
1,2-Dichlorobenzene	ug/kg	100	102	102	80-120	
1,2-Dichloroethane	ug/kg	100	104	104	80-120	
1,2-Dichloroethene (Total)	ug/kg	200	218	109	80-120	
1,2-Dichloropropane	ug/kg	100	106	106	80-120	
1,3,5-Trimethylbenzene	ug/kg	100	105	105	80-125	
1,3-Dichlorobenzene	ug/kg	100	105	105	80-120	
1,3-Dichloropropane	ug/kg	100	105	105	80-120	
1,4-Dichlorobenzene	ug/kg	100	106	106	80-120	
2,2-Dichloropropane	ug/kg	100	113	113	75-130	
2-Butanone (MEK)	ug/kg	500	642	128	60-135	
2-Chlorotoluene	ug/kg	100	103	103	80-120	
2-Hexanone	ug/kg	500	624	125	70-135	
4-Chlorotoluene	ug/kg	100	106	106	80-120	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	516	103	75-130	
Acetone	ug/kg	500	643	129	50-150	
Acrolein	ug/kg	500	574	115	10-180	
Acrylonitrile	ug/kg	500	534	107	80-120	
Benzene	ug/kg	100	105	105	80-120	
Bromobenzene	ug/kg	100	103	103	80-120	
Bromochloromethane	ug/kg	100	107	107	75-120	
Bromodichloromethane	ug/kg	100	115	115	80-125	
Bromoform	ug/kg	100	98.9	99	80-135	
Bromomethane	ug/kg	100	93.4	93	35-135	
Carbon disulfide	ug/kg	100	112	112	65-140	
Carbon tetrachloride	ug/kg	100	115	115	75-140	
Chlorobenzene	ug/kg	100	106	106	80-120	
Chloroethane	ug/kg	100	112	112	50-135	
Chloroform	ug/kg	100	108	108	80-120	
Chloromethane	ug/kg	100	101	101	15-155	
cis-1,2-Dichloroethene	ug/kg	100	109	109	80-120	
cis-1,3-Dichloropropene	ug/kg	100	115	115	80-125	
Cyclohexanone	ug/kg	500	581	116	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

LABORATORY CONTROL SAMPLE: 2949516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/kg	100	119	119	80-130	
Dibromomethane	ug/kg	100	107	107	80-120	
Diethyl ether (Ethyl ether)	ug/kg	100	107	107	80-120	
Ethylbenzene	ug/kg	100	107	107	80-120	
Hexachloro-1,3-butadiene	ug/kg	100	113	113	80-135	
Iodomethane	ug/kg	100	109	109	65-145	
Isopropylbenzene (Cumene)	ug/kg	100	111	111	75-135	
m&p-Xylene	ug/kg	200	211	106	80-125	
Methyl acetate	ug/kg	500	516	103	80-120	
Methyl-tert-butyl ether	ug/kg	100	105	105	75-130	
Methylene Chloride	ug/kg	100	96.1	96	65-120	
n-Butylbenzene	ug/kg	100	108	108	80-135	
n-Heptane	ug/kg	100	115	115	80-120	
n-Hexane	ug/kg	100	110	110	55-150	
n-Propylbenzene	ug/kg	100	106	106	80-125	
Naphthalene	ug/kg	100	113	113	80-120	
o-Xylene	ug/kg	100	105	105	80-125	
p-Isopropyltoluene	ug/kg	100	107	107	65-145	
sec-Butylbenzene	ug/kg	100	104	104	80-135	
Styrene	ug/kg	100	108	108	85-125	
tert-Butylbenzene	ug/kg	100	104	104	80-125	
Tetrachloroethene	ug/kg	100	109	109	80-130	
Tetrahydrofuran	ug/kg	500	506	101	80-120	N2
Toluene	ug/kg	100	105	105	80-120	
trans-1,2-Dichloroethene	ug/kg	100	110	110	75-125	
trans-1,3-Dichloropropene	ug/kg	100	117	117	80-130	
Trichloroethene	ug/kg	100	109	109	80-125	
Trichlorofluoromethane	ug/kg	100	117	117	65-135	
Vinyl acetate	ug/kg	100	104	104	80-120	
Vinyl chloride	ug/kg	100	109	109	35-145	
Xylene (Total)	ug/kg	300	316	105	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

QC Batch: 736890
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60376093014

METHOD BLANK: 2955103 Matrix: Water
Associated Lab Samples: 60376093014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.084	1.0	08/10/21 07:59	
1,1,1-Trichloroethane	ug/L	<0.11	1.0	08/10/21 07:59	
1,1,2,2-Tetrachloroethane	ug/L	<0.15	1.0	08/10/21 07:59	
1,1,2-Trichloroethane	ug/L	<0.14	1.0	08/10/21 07:59	
1,1-Dichloroethane	ug/L	<0.12	1.0	08/10/21 07:59	
1,1-Dichloroethene	ug/L	<0.22	1.0	08/10/21 07:59	
1,1-Dichloropropene	ug/L	<0.14	1.0	08/10/21 07:59	
1,2,3-Trichlorobenzene	ug/L	<0.93	1.0	08/10/21 07:59	
1,2,3-Trichloropropane	ug/L	<0.41	2.5	08/10/21 07:59	
1,2,3-Trimethylbenzene	ug/L	<0.93	1.0	08/10/21 07:59	
1,2,4-Trichlorobenzene	ug/L	<0.73	1.0	08/10/21 07:59	
1,2,4-Trimethylbenzene	ug/L	<0.32	1.0	08/10/21 07:59	
1,2-Dibromo-3-chloropropane	ug/L	<0.78	2.5	08/10/21 07:59	
1,2-Dibromoethane (EDB)	ug/L	<0.20	1.0	08/10/21 07:59	
1,2-Dichlorobenzene	ug/L	<0.12	1.0	08/10/21 07:59	
1,2-Dichloroethane	ug/L	<0.21	1.0	08/10/21 07:59	
1,2-Dichloroethene (Total)	ug/L	<0.22	1.0	08/10/21 07:59	
1,2-Dichloropropane	ug/L	<0.14	1.0	08/10/21 07:59	
1,3,5-Trimethylbenzene	ug/L	<0.090	1.0	08/10/21 07:59	
1,3-Dichlorobenzene	ug/L	<0.13	1.0	08/10/21 07:59	
1,3-Dichloropropane	ug/L	<0.10	1.0	08/10/21 07:59	
1,4-Dichlorobenzene	ug/L	<0.13	1.0	08/10/21 07:59	
1,4-Dioxane (p-Dioxane)	ug/L	<4.4	100	08/10/21 07:59	
1-Methylnaphthalene	ug/L	<2.6	10.0	08/10/21 07:59	
2,2-Dichloropropane	ug/L	<0.16	1.0	08/10/21 07:59	
2-Butanone (MEK)	ug/L	<0.98	10.0	08/10/21 07:59	
2-Chloroethylvinyl ether	ug/L	<1.8	10.0	08/10/21 07:59	
2-Chlorotoluene	ug/L	<0.11	1.0	08/10/21 07:59	
2-Hexanone	ug/L	<1.1	10.0	08/10/21 07:59	
2-Methylnaphthalene	ug/L	<2.7	10.0	08/10/21 07:59	
4-Chlorotoluene	ug/L	<0.15	1.0	08/10/21 07:59	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	10.0	08/10/21 07:59	
Acetone	ug/L	<2.5	10.0	08/10/21 07:59	
Acetonitrile	ug/L	<1.1	10.0	08/10/21 07:59	
Acrolein	ug/L	<4.0	50.0	08/10/21 07:59	
Acrylonitrile	ug/L	<1.4	20.0	08/10/21 07:59	
Benzene	ug/L	<0.14	1.0	08/10/21 07:59	
Bromobenzene	ug/L	<0.088	1.0	08/10/21 07:59	
Bromochloromethane	ug/L	<0.20	1.0	08/10/21 07:59	
Bromodichloromethane	ug/L	<0.16	1.0	08/10/21 07:59	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

METHOD BLANK: 2955103 Matrix: Water
Associated Lab Samples: 60376093014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromoform	ug/L	<0.68	1.0	08/10/21 07:59	
Bromomethane	ug/L	<0.46	5.0	08/10/21 07:59	
Carbon disulfide	ug/L	<0.98	5.0	08/10/21 07:59	
Carbon tetrachloride	ug/L	<0.17	1.0	08/10/21 07:59	
Chlorobenzene	ug/L	<0.089	1.0	08/10/21 07:59	
Chloroethane	ug/L	<0.37	1.0	08/10/21 07:59	
Chloroform	ug/L	<0.22	1.0	08/10/21 07:59	
Chloromethane	ug/L	<0.28	1.0	08/10/21 07:59	
cis-1,2-Dichloroethene	ug/L	<0.13	1.0	08/10/21 07:59	
cis-1,3-Dichloropropene	ug/L	<0.078	1.0	08/10/21 07:59	
Cyclohexane	ug/L	<0.24	1.0	08/10/21 07:59	
Cyclohexanone	ug/L	<3.3	20.0	08/10/21 07:59	
Dibromochloromethane	ug/L	<0.30	1.0	08/10/21 07:59	
Dibromomethane	ug/L	<0.11	1.0	08/10/21 07:59	
Dichlorodifluoromethane	ug/L	<0.20	1.0	08/10/21 07:59	
Diethyl ether (Ethyl ether)	ug/L	<0.23	1.0	08/10/21 07:59	
Ethylbenzene	ug/L	<0.12	1.0	08/10/21 07:59	
Hexachloro-1,3-butadiene	ug/L	0.47J	1.0	08/10/21 07:59	
Isopropylbenzene (Cumene)	ug/L	<0.097	1.0	08/10/21 07:59	
m&p-Xylene	ug/L	<0.22	2.0	08/10/21 07:59	
Methyl acetate	ug/L	<0.87	1.0	08/10/21 07:59	
Methyl-tert-butyl ether	ug/L	<0.13	1.0	08/10/21 07:59	
Methylcyclohexane	ug/L	<0.12	1.0	08/10/21 07:59	
Methylene Chloride	ug/L	<0.39	1.0	08/10/21 07:59	
n-Butylbenzene	ug/L	<0.15	1.0	08/10/21 07:59	
n-Heptane	ug/L	<2.6	10.0	08/10/21 07:59	
n-Hexane	ug/L	<0.22	10.0	08/10/21 07:59	
n-Propylbenzene	ug/L	<0.12	1.0	08/10/21 07:59	
Naphthalene	ug/L	<0.82	10.0	08/10/21 07:59	
o-Xylene	ug/L	<0.082	1.0	08/10/21 07:59	
p-Isopropyltoluene	ug/L	<0.13	1.0	08/10/21 07:59	
sec-Butylbenzene	ug/L	<0.11	1.0	08/10/21 07:59	
Styrene	ug/L	<0.12	1.0	08/10/21 07:59	
tert-Butylbenzene	ug/L	<0.12	1.0	08/10/21 07:59	
Tetrachloroethene	ug/L	<0.33	1.0	08/10/21 07:59	
Tetrahydrofuran	ug/L	<2.8	5.0	08/10/21 07:59	
Toluene	ug/L	<0.25	1.0	08/10/21 07:59	
trans-1,2-Dichloroethene	ug/L	<0.10	1.0	08/10/21 07:59	
trans-1,3-Dichloropropene	ug/L	<0.18	1.0	08/10/21 07:59	
Trichloroethene	ug/L	<0.21	1.0	08/10/21 07:59	
Trichlorofluoromethane	ug/L	<0.16	1.0	08/10/21 07:59	
Vinyl chloride	ug/L	<0.17	1.0	08/10/21 07:59	
Xylene (Total)	ug/L	<0.28	3.0	08/10/21 07:59	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120	08/10/21 07:59	
4-Bromofluorobenzene (S)	%	105	80-120	08/10/21 07:59	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

METHOD BLANK: 2955103 Matrix: Water
Associated Lab Samples: 60376093014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene-d8 (S)	%	98	80-120	08/10/21 07:59	

LABORATORY CONTROL SAMPLE: 2955104

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.3	97	80-120	
1,1,1-Trichloroethane	ug/L	20	18.8	94	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.4	102	75-125	
1,1,2-Trichloroethane	ug/L	20	17.8	89	80-120	
1,1-Dichloroethane	ug/L	20	19.8	99	75-125	
1,1-Dichloroethene	ug/L	20	19.1	96	80-120	
1,1-Dichloropropene	ug/L	20	19.3	96	80-125	
1,2,3-Trichlorobenzene	ug/L	20	18.7	94	75-125	
1,2,3-Trichloropropane	ug/L	20	19.3	96	80-125	
1,2,3-Trimethylbenzene	ug/L	20	20.2	101	80-125	
1,2,4-Trichlorobenzene	ug/L	20	18.6	93	75-120	
1,2,4-Trimethylbenzene	ug/L	20	20.1	100	80-125	
1,2-Dibromo-3-chloropropane	ug/L	20	19.7	99	70-120	
1,2-Dibromoethane (EDB)	ug/L	20	18.1	91	80-120	
1,2-Dichlorobenzene	ug/L	20	19.0	95	80-120	
1,2-Dichloroethane	ug/L	20	19.3	97	75-120	
1,2-Dichloroethene (Total)	ug/L	40	37.5	94	80-120	
1,2-Dichloropropane	ug/L	20	18.9	94	80-125	
1,3,5-Trimethylbenzene	ug/L	20	20.5	103	80-125	
1,3-Dichlorobenzene	ug/L	20	19.6	98	80-120	
1,3-Dichloropropane	ug/L	20	18.8	94	80-120	
1,4-Dichlorobenzene	ug/L	20	19.9	100	80-120	
1,4-Dioxane (p-Dioxane)	ug/L	100	109	109	10-180	
1-Methylnaphthalene	ug/L	20	18.9	94	40-160	
2,2-Dichloropropane	ug/L	20	19.8	99	60-130	
2-Butanone (MEK)	ug/L	100	112	112	40-150	
2-Chloroethylvinyl ether	ug/L	100	94.2	94	30-165	
2-Chlorotoluene	ug/L	20	19.5	97	80-120	
2-Hexanone	ug/L	100	105	105	45-150	
2-Methylnaphthalene	ug/L	20	19.0	95	55-150	
4-Chlorotoluene	ug/L	20	20.8	104	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	92.1	92	65-140	
Acetone	ug/L	100	96.2	96	20-175	
Acetonitrile	ug/L	100	106	106	25-180	
Acrolein	ug/L	100	98.6	99	10-200	
Acrylonitrile	ug/L	100	91.0	91	70-135	
Benzene	ug/L	20	19.2	96	80-120	
Bromobenzene	ug/L	20	19.9	99	80-120	
Bromochloromethane	ug/L	20	18.6	93	80-125	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

LABORATORY CONTROL SAMPLE: 2955104

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	20	19.4	97	80-125	
Bromoform	ug/L	20	18.9	94	60-135	
Bromomethane	ug/L	20	19.1	96	10-165	
Carbon disulfide	ug/L	20	19.3	97	75-135	
Carbon tetrachloride	ug/L	20	19.3	96	80-125	
Chlorobenzene	ug/L	20	19.6	98	80-120	
Chloroethane	ug/L	20	20.9	105	70-130	
Chloroform	ug/L	20	18.9	94	80-120	
Chloromethane	ug/L	20	19.9	100	35-155	
cis-1,2-Dichloroethene	ug/L	20	18.8	94	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.7	99	80-125	
Cyclohexane	ug/L	20	20.0	100	80-130	
Cyclohexanone	ug/L	100	98.0	98	10-180	
Dibromochloromethane	ug/L	20	18.9	95	70-120	
Dibromomethane	ug/L	20	18.4	92	80-120	
Dichlorodifluoromethane	ug/L	20	20.3	101	50-150	
Diethyl ether (Ethyl ether)	ug/L	20	18.3	92	70-140	
Ethylbenzene	ug/L	20	19.6	98	80-120	
Hexachloro-1,3-butadiene	ug/L	20	18.0	90	65-135	
Isopropylbenzene (Cumene)	ug/L	20	20.0	100	80-125	
m&p-Xylene	ug/L	40	39.8	99	75-130	
Methyl acetate	ug/L	100	99.0	99	45-140	
Methyl-tert-butyl ether	ug/L	20	18.7	94	65-130	
Methylcyclohexane	ug/L	20	19.3	97	80-125	
Methylene Chloride	ug/L	20	18.3	91	75-120	
n-Butylbenzene	ug/L	20	19.8	99	80-125	
n-Heptane	ug/L	20	21.1	105	10-180	
n-Hexane	ug/L	20	19.6	98	60-135	
n-Propylbenzene	ug/L	20	19.4	97	80-120	
Naphthalene	ug/L	20	18.3	91	70-120	
o-Xylene	ug/L	20	18.9	95	75-130	
p-Isopropyltoluene	ug/L	20	20.4	102	80-135	
sec-Butylbenzene	ug/L	20	20.2	101	80-120	
Styrene	ug/L	20	19.2	96	80-120	
tert-Butylbenzene	ug/L	20	20.4	102	80-120	
Tetrachloroethene	ug/L	20	19.0	95	80-120	
Tetrahydrofuran	ug/L	100	90.9	91	75-125	
Toluene	ug/L	20	18.7	94	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.7	93	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.5	97	75-120	
Trichloroethene	ug/L	20	18.7	94	80-120	
Trichlorofluoromethane	ug/L	20	20.1	100	80-130	
Vinyl chloride	ug/L	20	19.1	95	65-130	
Xylene (Total)	ug/L	60	58.7	98	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

QC Batch: 735292
QC Batch Method: EPA 5035
Analysis Method: EPA 8260
Analysis Description: 8260 MSV GRO and Oxygenates
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376093013

METHOD BLANK: 2949659 Matrix: Solid
Associated Lab Samples: 60376093013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	<0.055	0.50	07/30/21 13:09	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120	07/30/21 13:09	
4-Bromofluorobenzene (S)	%	102	69-133	07/30/21 13:09	
Toluene-d8 (S)	%	101	78-122	07/30/21 13:09	

LABORATORY CONTROL SAMPLE: 2949660

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.9	98	61-140	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	69-133	
Toluene-d8 (S)	%			99	78-122	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

QC Batch: 734953
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376093001, 60376093002, 60376093003, 60376093004, 60376093005, 60376093006, 60376093007, 60376093008, 60376093009, 60376093010, 60376093011, 60376093012, 60376093013

METHOD BLANK: 2948397 Matrix: Solid
Associated Lab Samples: 60376093001, 60376093002, 60376093003, 60376093004, 60376093005, 60376093006, 60376093007, 60376093008, 60376093009, 60376093010, 60376093011, 60376093012, 60376093013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<7.8	31.5	07/30/21 17:47	
PCB-1221 (Aroclor 1221)	ug/kg	<7.5	31.5	07/30/21 17:47	
PCB-1232 (Aroclor 1232)	ug/kg	<3.4	31.5	07/30/21 17:47	
PCB-1242 (Aroclor 1242)	ug/kg	<7.6	31.5	07/30/21 17:47	
PCB-1248 (Aroclor 1248)	ug/kg	<2.1	31.5	07/30/21 17:47	
PCB-1254 (Aroclor 1254)	ug/kg	<3.0	31.5	07/30/21 17:47	
PCB-1260 (Aroclor 1260)	ug/kg	<6.2	31.5	07/30/21 17:47	
Decachlorobiphenyl (S)	%	80	35-120	07/30/21 17:47	

LABORATORY CONTROL SAMPLE: 2948398

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	162	141	87	65-120	
PCB-1260 (Aroclor 1260)	ug/kg	162	137	84	65-120	
Decachlorobiphenyl (S)	%			81	35-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2948399 2948400

Parameter	Units	60376093001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<9.9	199	203	143	160	72	79	30-130	11	40	
PCB-1260 (Aroclor 1260)	ug/kg	<7.9	199	203	145	156	73	77	15-155	7	40	
Decachlorobiphenyl (S)	%						71	73	35-120		50	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

QC Batch: 734955
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60376093013

METHOD BLANK: 2948405 Matrix: Solid
Associated Lab Samples: 60376093013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<2.3	6.3	07/30/21 18:05	
Acenaphthylene	ug/kg	<2.3	6.3	07/30/21 18:05	
Anthracene	ug/kg	<2.6	6.3	07/30/21 18:05	
Benzo(a)anthracene	ug/kg	<3.0	6.3	07/30/21 18:05	
Benzo(a)pyrene	ug/kg	<2.3	6.3	07/30/21 18:05	
Benzo(b)fluoranthene	ug/kg	<3.1	6.3	07/30/21 18:05	
Benzo(g,h,i)perylene	ug/kg	<2.8	6.3	07/30/21 18:05	
Benzo(k)fluoranthene	ug/kg	<3.5	6.3	07/30/21 18:05	
Chrysene	ug/kg	<3.0	6.3	07/30/21 18:05	
Dibenz(a,h)anthracene	ug/kg	<2.7	6.3	07/30/21 18:05	
Fluoranthene	ug/kg	<4.7	6.3	07/30/21 18:05	
Fluorene	ug/kg	<2.5	6.3	07/30/21 18:05	
Indeno(1,2,3-cd)pyrene	ug/kg	<2.7	6.3	07/30/21 18:05	
Naphthalene	ug/kg	<2.7	6.3	07/30/21 18:05	
Phenanthrene	ug/kg	<5.2	6.3	07/30/21 18:05	
Pyrene	ug/kg	<3.4	6.3	07/30/21 18:05	
2-Fluorobiphenyl (S)	%	66	40-120	07/30/21 18:05	
Terphenyl-d14 (S)	%	76	45-130	07/30/21 18:05	

LABORATORY CONTROL SAMPLE: 2948406

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	31.3	26.5	85	45-120	
Acenaphthylene	ug/kg	31.3	25.8	82	50-120	
Anthracene	ug/kg	31.3	28.1	90	50-120	
Benzo(a)anthracene	ug/kg	31.3	27.3	87	55-125	
Benzo(a)pyrene	ug/kg	31.3	25.4	81	45-120	
Benzo(b)fluoranthene	ug/kg	31.3	28.8	92	50-125	
Benzo(g,h,i)perylene	ug/kg	31.3	23.3	74	40-120	
Benzo(k)fluoranthene	ug/kg	31.3	29.5	94	55-120	
Chrysene	ug/kg	31.3	26.7	85	55-120	
Dibenz(a,h)anthracene	ug/kg	31.3	23.4	75	40-125	
Fluoranthene	ug/kg	31.3	30.1	96	50-125	
Fluorene	ug/kg	31.3	26.9	86	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	31.3	22.9	73	44-125	
Naphthalene	ug/kg	31.3	26.4	84	45-120	
Phenanthrene	ug/kg	31.3	29.1	93	50-125	
Pyrene	ug/kg	31.3	31.9	102	50-125	
2-Fluorobiphenyl (S)	%			92	40-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

LABORATORY CONTROL SAMPLE: 2948406

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			114	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2948407 2948408

Parameter	Units	60376093013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<2.9	39.2	37.3	35.9	33.1	91	89	10-150	8	42	
Acenaphthylene	ug/kg	<2.9	39.2	37.3	33.1	31.4	84	84	30-125	5	44	
Anthracene	ug/kg	6.9J	39.2	37.3	42.4	38.1	91	84	10-160	11	54	
Benzo(a)anthracene	ug/kg	26.6	39.2	37.3	70.0	56.7	111	81	10-160	21	62	
Benzo(a)pyrene	ug/kg	22.5	39.2	37.3	61.7	48.5	100	70	10-150	24	66	
Benzo(b)fluoranthene	ug/kg	42.8	39.2	37.3	90.9	67.3	122	65	10-165	30	61	
Benzo(g,h,i)perylene	ug/kg	18.3	39.2	37.3	50.6	43.5	82	68	10-155	15	58	
Benzo(k)fluoranthene	ug/kg	21.1	39.2	37.3	62.1	47.0	104	69	10-165	28	53	
Chrysene	ug/kg	29.9	39.2	37.3	72.4	55.6	108	69	10-150	26	57	
Dibenz(a,h)anthracene	ug/kg	<3.4	39.2	37.3	32.1	30.6	82	82	10-175	5	48	
Fluoranthene	ug/kg	73.0	39.2	37.3	122	92.9	126	53	10-180	27	54	
Fluorene	ug/kg	<3.0	39.2	37.3	36.6	33.9	93	91	20-145	8	39	
Indeno(1,2,3-cd)pyrene	ug/kg	13.6	39.2	37.3	47.2	40.0	86	71	10-150	16	59	
Naphthalene	ug/kg	<3.3	39.2	37.3	35.5	33.0	90	88	10-165	7	54	
Phenanthrene	ug/kg	34.7	39.2	37.3	71.0	58.3	93	63	10-170	20	51	
Pyrene	ug/kg	61.1	39.2	37.3	116	86.5	141	68	10-180	29	61	
2-Fluorobiphenyl (S)	%						90	89	40-120			
Terphenyl-d14 (S)	%						117	110	45-130			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

QC Batch: 734956
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376093001, 60376093002, 60376093003, 60376093004

METHOD BLANK: 2948409 Matrix: Solid
Associated Lab Samples: 60376093001, 60376093002, 60376093003, 60376093004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<1.2	3.2	07/30/21 15:48	
Acenaphthylene	ug/kg	<1.2	3.2	07/30/21 15:48	
Anthracene	ug/kg	<1.3	3.2	07/30/21 15:48	
Benzo(a)anthracene	ug/kg	<1.5	3.2	07/30/21 15:48	
Benzo(a)pyrene	ug/kg	<1.2	3.2	07/30/21 15:48	
Benzo(b)fluoranthene	ug/kg	<1.6	3.2	07/30/21 15:48	
Benzo(g,h,i)perylene	ug/kg	<1.4	3.2	07/30/21 15:48	
Benzo(k)fluoranthene	ug/kg	<1.8	3.2	07/30/21 15:48	
Chrysene	ug/kg	<1.5	3.2	07/30/21 15:48	
Dibenz(a,h)anthracene	ug/kg	<1.4	3.2	07/30/21 15:48	
Fluoranthene	ug/kg	<2.4	3.2	07/30/21 15:48	
Fluorene	ug/kg	<1.3	3.2	07/30/21 15:48	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.4	3.2	07/30/21 15:48	
Naphthalene	ug/kg	<1.4	3.2	07/30/21 15:48	
Phenanthrene	ug/kg	<2.6	3.2	07/30/21 15:48	
Pyrene	ug/kg	<1.7	3.2	07/30/21 15:48	
2-Fluorobiphenyl (S)	%	91	40-120	07/30/21 15:48	
Terphenyl-d14 (S)	%	115	45-130	07/30/21 15:48	

LABORATORY CONTROL SAMPLE: 2948410

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	32.1	26.2	82	45-120	
Acenaphthylene	ug/kg	32.1	25.9	81	50-120	
Anthracene	ug/kg	32.1	27.5	85	50-120	
Benzo(a)anthracene	ug/kg	32.1	27.5	85	55-125	
Benzo(a)pyrene	ug/kg	32.1	26.5	82	45-120	
Benzo(b)fluoranthene	ug/kg	32.1	29.9	93	50-125	
Benzo(g,h,i)perylene	ug/kg	32.1	24.1	75	40-120	
Benzo(k)fluoranthene	ug/kg	32.1	30.4	95	55-120	
Chrysene	ug/kg	32.1	26.8	83	55-120	
Dibenz(a,h)anthracene	ug/kg	32.1	24.7	77	40-125	
Fluoranthene	ug/kg	32.1	28.5	89	50-125	
Fluorene	ug/kg	32.1	26.7	83	50-120	
Indeno(1,2,3-cd)pyrene	ug/kg	32.1	23.8	74	44-125	
Naphthalene	ug/kg	32.1	26.4	82	45-120	
Phenanthrene	ug/kg	32.1	27.6	86	50-125	
Pyrene	ug/kg	32.1	30.6	95	50-125	
2-Fluorobiphenyl (S)	%			83	40-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

LABORATORY CONTROL SAMPLE: 2948410

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			102	45-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2948413 2948414

Parameter	Units	60376093002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	3.1J	40.2	39.4	33.1	38.0	75	89	10-150	14	42	
Acenaphthylene	ug/kg	3.0J	40.2	39.4	33.1	35.0	75	81	30-125	6	44	
Anthracene	ug/kg	9.5	40.2	39.4	40.1	42.5	76	84	10-160	6	54	
Benzo(a)anthracene	ug/kg	31.2	40.2	39.4	54.5	59.5	58	72	10-160	9	62	
Benzo(a)pyrene	ug/kg	25.6	40.2	39.4	47.4	50.0	54	62	10-150	5	66	
Benzo(b)fluoranthene	ug/kg	52.4	40.2	39.4	65.7	74.9	33	57	10-165	13	61	
Benzo(g,h,i)perylene	ug/kg	17.9	40.2	39.4	43.3	46.7	63	73	10-155	8	58	
Benzo(k)fluoranthene	ug/kg	18.8	40.2	39.4	49.8	49.6	77	78	10-165	0	53	
Chrysene	ug/kg	39.3	40.2	39.4	58.9	69.5	49	76	10-150	17	57	
Dibenz(a,h)anthracene	ug/kg	3.9	40.2	39.4	33.4	32.1	73	72	10-175	4	48	
Fluoranthene	ug/kg	86.9	40.2	39.4	95.5	120	21	84	10-180	23	54	
Fluorene	ug/kg	5.7	40.2	39.4	36.7	38.0	77	82	20-145	4	39	
Indeno(1,2,3-cd)pyrene	ug/kg	14.3	40.2	39.4	42.8	45.6	71	79	10-150	6	59	
Naphthalene	ug/kg	17.2	40.2	39.4	39.3	48.2	55	78	10-165	20	54	
Phenanthrene	ug/kg	52.7	40.2	39.4	69.4	85.1	42	82	10-170	20	51	
Pyrene	ug/kg	70.2	40.2	39.4	91.2	104	52	86	10-180	13	61	
2-Fluorobiphenyl (S)	%						77	84	40-120			
Terphenyl-d14 (S)	%						110	104	45-130			

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

QC Batch: 734954
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 MSSV TPH ORO
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376093013

METHOD BLANK: 2948401 Matrix: Solid
Associated Lab Samples: 60376093013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO	mg/kg	<1.4	14.3	08/02/21 20:09	
TPH-ORO	mg/kg	2.5J	14.3	08/02/21 20:09	
2-Fluorobiphenyl (S)	%	71	40-120	08/02/21 20:09	
Nitrobenzene-d5 (S)	%	70	30-120	08/02/21 20:09	
Terphenyl-d14 (S)	%	76	45-120	08/02/21 20:09	

LABORATORY CONTROL SAMPLE: 2948402

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	314	246	78	40-120	
2-Fluorobiphenyl (S)	%			71	40-120	
Nitrobenzene-d5 (S)	%			77	30-120	
Terphenyl-d14 (S)	%			73	45-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2948403 2948404

Parameter	Units	60376093013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO	mg/kg	4.5J	376	375	300	290	79	76	10-145	3	38	
2-Fluorobiphenyl (S)	%						73	73	40-120			
Nitrobenzene-d5 (S)	%						75	74	30-120			
Terphenyl-d14 (S)	%						72	73	45-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

QC Batch: 735040
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376093001, 60376093002, 60376093003, 60376093004, 60376093005, 60376093006, 60376093007, 60376093008, 60376093009, 60376093010, 60376093011, 60376093012, 60376093013

METHOD BLANK: 2948776
Matrix: Solid
Associated Lab Samples: 60376093001, 60376093002, 60376093003, 60376093004, 60376093005, 60376093006, 60376093007, 60376093008, 60376093009, 60376093010, 60376093011, 60376093012, 60376093013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	<0.50	0.50	07/29/21 11:12	

SAMPLE DUPLICATE: 2948777

Parameter	Units	60375889001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.2	23.1	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 736890

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

D4	Sample was diluted due to the presence of high levels of target analytes.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P3	Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
c2	Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60376093001	GB-44/3-5	EPA 3546	734953	EPA 8082	735352
60376093002	GB-44/5-7	EPA 3546	734953	EPA 8082	735352
60376093003	GB-37/3-5	EPA 3546	734953	EPA 8082	735352
60376093004	GB-37/5-7	EPA 3546	734953	EPA 8082	735352
60376093005	GB-30/3-4	EPA 3546	734953	EPA 8082	735352
60376093006	GB-30/4-5	EPA 3546	734953	EPA 8082	735352
60376093007	GB-23/2.5-3.5	EPA 3546	734953	EPA 8082	735352
60376093008	GB-23/4-6	EPA 3546	734953	EPA 8082	735352
60376093009	GB-16/3-4	EPA 3546	734953	EPA 8082	735352
60376093010	GB-16/4-5	EPA 3546	734953	EPA 8082	735352
60376093011	GB-10/1.5-2.5	EPA 3546	734953	EPA 8082	735352
60376093012	GB-10/3-5	EPA 3546	734953	EPA 8082	735352
60376093013	GB-01/2-3	EPA 3546	734953	EPA 8082	735352
60376093001	GB-44/3-5	EPA 3050	736513	EPA 6020	736679
60376093002	GB-44/5-7	EPA 3050	736513	EPA 6020	736679
60376093003	GB-37/3-5	EPA 3050	736513	EPA 6020	736679
60376093004	GB-37/5-7	EPA 3050	736513	EPA 6020	736679
60376093005	GB-30/3-4	EPA 3050	736513	EPA 6020	736679
60376093006	GB-30/4-5	EPA 3050	736513	EPA 6020	736679
60376093007	GB-23/2.5-3.5	EPA 3050	736513	EPA 6020	736679
60376093008	GB-23/4-6	EPA 3050	736513	EPA 6020	736679
60376093009	GB-16/3-4	EPA 3050	736513	EPA 6020	736679
60376093010	GB-16/4-5	EPA 3050	736513	EPA 6020	736679
60376093011	GB-10/1.5-2.5	EPA 3050	736513	EPA 6020	736679
60376093012	GB-10/3-5	EPA 3050	736513	EPA 6020	736679
60376093013	GB-01/2-3	EPA 3050	736513	EPA 6020	736679
60376093001	GB-44/3-5	EPA 3546	734956	EPA 8270 by SIM	735264
60376093002	GB-44/5-7	EPA 3546	734956	EPA 8270 by SIM	735264
60376093003	GB-37/3-5	EPA 3546	734956	EPA 8270 by SIM	735264
60376093004	GB-37/5-7	EPA 3546	734956	EPA 8270 by SIM	735264
60376093013	GB-01/2-3	EPA 3546	734955	EPA 8270 by SIM	735265
60376093013	GB-01/2-3	EPA 3546	734954	EPA 8270	735542
60376093013	GB-01/2-3	EPA 5035A/5030	735258	EPA 8260B	735305
60376093014	TB-72721	EPA 5030B/8260	736890		
60376093013	GB-01/2-3	EPA 5035	735292	EPA 8260	735306
60376093001	GB-44/3-5	ASTM D2974	735040		
60376093002	GB-44/5-7	ASTM D2974	735040		
60376093003	GB-37/3-5	ASTM D2974	735040		
60376093004	GB-37/5-7	ASTM D2974	735040		
60376093005	GB-30/3-4	ASTM D2974	735040		
60376093006	GB-30/4-5	ASTM D2974	735040		
60376093007	GB-23/2.5-3.5	ASTM D2974	735040		
60376093008	GB-23/4-6	ASTM D2974	735040		
60376093009	GB-16/3-4	ASTM D2974	735040		
60376093010	GB-16/4-5	ASTM D2974	735040		

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA-GOODFELLOW
Pace Project No.: 60376093

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60376093011	**GB-10/1.5-2.5**	ASTM D2974	735040		
60376093012	**GB-10/3-5**	ASTM D2974	735040		
60376093013	**GB-01/2-3**	ASTM D2974	735040		

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Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60376093

60376093

Client Name: Burns & McDonnell

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☑ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T-296 **Type of Ice:** (We) Blue None

Cooler Temperature (°C): **As-read** 1.4 **Corr. Factor** -0.3 **Corrected** 1.1 °C

Date and initials of person examining contents: 7-28-21 (b) (6)

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: SL	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#	☐Yes ☐No ☑N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☑Yes ☐No ☐N/A	1DG9H
Headspace in VOA vials (>6mm):	☐Yes ☑No ☑N/A	
Samples from USDA Regulated Area: State: KS	☐Yes ☑No ☐N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☑Yes ☐No ☐N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

BURNS McDONNELL

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: (785) 827-1273

Document Control No: 133835-016
Lab. Reference No. or Episode No.:

Project Number: 133835
Client Name: GSA - Goodfellow

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Matrix			Number of Containers	Analysis							
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		PAHs	Metals	PCBs	PCB Congeners	VOCs	MNO DAG/DAO	GRO	Remarks
GB-44	3-5				3.0	5.0	7/26/21	1325		X		2	X	X	X					2 JGFV
GB-44	5-7				5.0	7.0		1328		X		2	X	X	X					
GB-37	3-5				3.0	5.0		1412		X		2	X	X	X					
GB-37	5-7				5.0	7.0		1416		X		2	X	X	X					
GB-30	3-4				3.0	4.0		1452		X		2		X	X	X				
GB-30	4.5				4.0	5.0		1455		X		1		X	X					1 JGFV
GB-23	2.5-3.5				2.5	3.5		1516		X		1		X	X					
GB-23	4-6				4.0	6.0		1520		X		1		X	X					
GB-16	3-4				3.0	4.0		1538		X		1		X	X					
GB-16	4-5				4.0	5.0		1542		X		1		X	X					
GB-10	1.5-2.5				1.5	2.5		1600		X		2		X	X	X				2 JGFV
GB-10	3-5				3.0	5.0		1605		X		1		X	X					1 JGFV
GB-01	2-3				2.0	3.0	7/27/21	1200		X		6	X	X	X		X	X		+2DG9B, 1DG9M, 2JGFV, 1AG5U
TB-7272021									X			2					X			1 DG9H

Sampler (signature): [redacted] (6) (b)

Relinquished By (signature): [redacted] (6) (b) Date/Time 7/27/21 17:0

Relinquished By (signature): 2. Date/Time

Sampler (signature): [redacted] (6) (b)

Received By (signature): [redacted] (6) (b) Date/Time 7/27/21 17:06

Received By (signature): [redacted] (6) (b) Date/Time 7/28/21 0405

Special Instructions: SEE WORK ORDER

Ice Present in Container: Yes ☑ No ☐

Temperature Upon Receipt: 1.1 °C

Laboratory Comments:

60376093

Pace Analytical™
www.pacelabs.com

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Report Prepared for:

Jeffrey Shopper
PACE Kansas
9608 Loriet Blvd
Lenexa KS 66219

REPORT OF LABORATORY ANALYSIS FOR PCBs

Report Information:

Pace Project #: 10572172
Sample Receipt Date: 07/29/2021
Client Project #: 60376093 Burns & McDonnell
Client Sub PO #: N/A
State Cert #: N/A

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 4 PCB Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

(b) (6) [redacted]

August 30, 2021

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
August 26, 2021

Report of Laboratory Analysis

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The results relate only to the samples included in this report.

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

This report presents the results from the analyses performed on two samples submitted by a representative of Pace Analytical Services, Kansas. The samples were analyzed for the presence or absence of the twelve dioxin-like polychlorinated biphenyl (PCB) congeners using USEPA Method 1668A. Reporting limits were set to signal-to-noised based estimated detection limits based on the amount of dry sample weight extracted.

The dilution levels noted on the data tables is being adjusted to allow the correct data flags to populate the electronic deliverables as well as the data tables. Samples and MDL extracts were analyzed at elevated volumes. That volume is being treated as a 1x dilution for calculation purposes, with larger dilutions being factored from that volume.

The recoveries of the isotopically-labeled PCB internal standards in the sample extracts ranged from 51-75%. All of the laboratory spike results tables, the isotopically-labeled PCB internal standards in the extracts were recovered within the target ranges for this method. Since the quantification of the native PCB congeners was based on internal standard and isotope dilution methodology, the data were automatically corrected for variation in recovery and accurate values were obtained.

Incorrect isotope ratios were obtained for selected PCB congeners. The affected congeners were flagged "I" on the results tables. Any associated target analyte detections were provided under the estimated maximum possible concentration (EMPC) column on the results tables.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to produce signal at the retention time of congeners 156/157 and to contain trace levels of several other PCB congeners. Congeners present in the sample extracts at levels similar to the method blank were flagged "B" and may have originated in the laboratory.

Laboratory spike samples were also prepared using reference matrix that had been fortified with native standard materials. The results show that the spiked native compounds were recovered at 97-118%, with relative percent differences of 1.9-15.7%. These results were within the target ranges for the method. Matrix spikes were not prepared with this sample set.

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
		Missouri	10100
A2LA	2926.01	Montana	CERT0092
Alabama	40770	Nebraska	NE-OS-18-06
Alaska-DW	MN00064	Nevada	MN00064
Alaska-UST	17-009	New Hampshire	2081
Arizona	AZ0014	New Jersey	MN002
Arkansas - WW	88-0680	New York	11647
Arkansas-DW	MN00064	North Carolina-	27700
California	2929	North Carolina-	530
Colorado	MN00064	North Dakota	R-036
Connecticut	PH-0256	Ohio-DW	41244
Florida	E87605	Ohio-VAP (170	CL101
Georgia	959	Ohio-VAP (180	CL110
Hawaii	MN00064	Oklahoma	9507
Idaho	MN00064	Oregon- rimary	MN300001
Illinois	200011	Oregon-Second	MN200001
Indiana	C-MN-01	Pennsylvania	68-00563
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003
Kentucky-DW	90062	Tennessee	TN02818
Kentucky-WW	90062	Texas	T104704192
Louisiana-DEQ	AI-84596	Utah	MN00064
Louisiana-DW	MN00064	Vermont	VT-027053137
Maine	MN00064	Virginia	460163
Maryland	322	Washington	C486
Michigan	9909	West Virginia-D	382
Minnesota	027-053-137	West Virginia-D	9952C
Minnesota-Ag	via MN 027-053	Wisconsin	999407970
Minnesota-Petr	1240	Wyoming-UST	via A2LA 2926.
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise (EDL)

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

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Appendix A

Sample Management

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Sample ID Cross Reference

Client Sample ID	Pace Sample ID	Date Received	Sample Type
GB-30/3-4	60376093005-R	07/29/2021	Solid
GB-10/1.5-2.5	60376093011-R	07/29/2021	Solid

REPORT OF LABORATORY ANALYSIS

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Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

[X] Samples Pre-Logged into eCOC.

State Of Origin: MO
Cert. Needed: [ ] Yes [X] No
Owner Received Date: 7/28/2021 Results Requested By: 8/11/2021

Workorder: 60376093 **Workorder Name:** GSA-GOODFELLOW

Report To	Subcontract To
Jeffrey Shopper Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 1(913)563-1408	Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

WO#:10572172

10572172

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	1668A PCB Congeners	LAB USE ONLY
1	GB-30/3-4	PS	7/26/2021 14:52	60376093005	Solid	1	X	001
2	GB-10/1.5-2.5	PS	7/26/2021 16:00	60376093011	Solid	1	X	002
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[redacted] (6) (6) Pace	7.28.21 1800	[redacted] (6) (6) -PACE	7/29/21 8:4
2				
3				

Comments

Cooler Temperature on Receipt 1.7 °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR) - MN	Document Revised: 14Apr2021 Page 1 of 1
	Document No.: ENV-FRM-MIN4-0150 Rev.02	Pace Analytical Services - Minneapolis

Sample Condition Upon Receipt

Client Name: Pace-KS

Project #:

WO#: 10572172

PM: SCU **Due Date: 08/26/21**

CLIENT: PASI-KANS

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 8062 0651 6807 See Exceptions ☐ ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No **Biological Tissue Frozen?** ☐ Yes ☐ No ☑ N/A

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other: _____ **Temp Blank?** ☑ Yes ☐ No

Thermometer: ☐ T1(0461) ☐ T2(1336) ☐ T3(0459) ☐ OS418-LS ☑ T4(0254) ☐ T5(0489) ☐ 160285052 **Type of Ice:** ☑ Wet ☐ Blue ☐ None ☐ Dry ☐ Melted

Did Samples Originate in West Virginia? ☐ Yes ☑ No **Were All Container Temps Taken?** ☐ Yes ☐ No ☑ N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** 1.7 °C **Average Corrected Temp (no temp blank only):** _____ °C ☐ See Exceptions ENV-FRM-MIN4-0142 ☐ 1 Container

Correction Factor: 0.0 **Cooler Temp Corrected w/temp blank:** 1.7 °C

USDA Regulated Soil: (☐ N/A, water sample/Other: _____) **Date/Initials of Person Examining Contents:** 7/29/21 (b)(6)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☑ Yes	☐ No		1.
Chain of Custody Relinquished?	☑ Yes	☐ No		2.
Sampler Name and/or Signature on COC?	☐ Yes	☐ No	☑ N/A	3.
Samples Arrived within Hold Time?	☑ Yes	☐ No		4.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No		5. ☐ Fecal Coliform ☐ HPC ☐ Total Coliform/E coli ☐ BOD/cBOD ☐ Hex Chrome ☐ Turbidity ☐ Nitrate ☐ Nitrite ☐ Orthophos ☐ Other _____
Rush Turn Around Time Requested?	☐ Yes	☑ No		6.
Sufficient Volume?	☑ Yes	☐ No		7.
Correct Containers Used?	☑ Yes	☐ No		8.
-Pace Containers Used?	☑ Yes	☐ No		
Containers Intact?	☑ Yes	☐ No		9.
Field Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☑ N/A	10. Is sediment visible in the dissolved container? ☐ Yes ☐ No
Is sufficient information available to reconcile the samples to the COC? Matrix: ☐ Water ☑ Soil ☐ Oil ☐ Other _____	☑ Yes	☐ No		11. If no, write ID/ Date/Time on Container Below: See Exception ☐ ENV-FRM-MIN4-0142
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☑ N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☐ Yes	☐ No	☑ N/A	☐ NaOH ☐ HNO_3 ☐ H_2SO_4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐ Yes	☐ No	☑ N/A	Positive for Res. Chlorine? ☐ Yes ☐ No pH Paper Lot# See Exception ☐ ENV-FRM-MIN4-0142
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐ Yes	☐ No	☑ N/A	13. See Exception ☐ ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)?	☐ Yes	☐ No	☑ N/A	
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	14.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	Pace Trip Blank Lot # (if purchased): _____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: (b)(6) **Date:** 07/29/21

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: (b)(6) (2)

1668A - 209 | Solid | Soxhlet | EB-31122

Extract Solvents:

Extraction On (Date/Time): 08/13/21 10:40

QC Matrix Lot #: SILICA 596 **Toluene Lot #** 206135

Time of Spiking: 08/13/21 09:30 **Hexane Lot #**

Extraction Off (Date/Time):

Balance: 10BALY **MeCl Lot #**

Standards	Name/ID	Amount	Initial	Witness	Expiration Date	Dispenser
Internal Std.	209-I-20170-172	100	AH	SJ	07/20/22	Q763
Native	209-N-20170-144	100	AH	SJ	01/13/22	Q763
Cl37 Std.	2029-CL-20170-174	100	SJ		07/29/22	Q678
Recovery	209-R-20170-164	10	MF		06/25/22	Q656
Tridecane	A0404617	10	MF			Q763
Others	NONANE A0402059	180	MF			Q768

#	Sample ID	Internal Standards	Native Standards	Extracted mL or g	Glassware Set	Location	Comments
1	BLANK-92295	x		10.5			
2	LCS-92296	x	x	10.1			
3	LCSD-92297	x	x	10.1			
4	60375923003-R	x		12.3		10-C16-066	
5	60375923011-R	x		12.3		10-C16-066	
6	60376093005-R	x		13.0		10-C16-073	
7	60376093011-R	x		12.7		10-C16-073	

Relinquished By: M Felea Received By: Date:

Batch Notes:

Silica		Alumina		Carbon		Florisil	
Initials	CW1 / PED	Initials		Initials		Initials	
Date	8/17/2021	Date		Date		Date	
Neutral Batch	600	Alumina Lot #		Hexane Lot #		Florisil Lot #	
Basic Batch	751	Hexane Lot #		Dispenser		Hexane Lot #	
Acid Batch	877	Dispenser		50% Batch		Dispenser	
Hexane Lot #	213846	60% Batch		Dispenser		6% Batch	
Dispenser	Q758	Dispenser		75% Batch		Dispenser	
				Dispenser			
				Toluene Lot #			
				Dispenser			
				Methanol Lot #			
				Dispenser			

Acid Base

Sulphuric Acid Lot #
Base Batch

1 fiind column ped / cw1 8/18/21

Pace Analytical™

Solid Sample Moisture Log

Sample ID	Client Sample ID		% Moisture	% Solids	Amount Extracted	Assayed
60376093005	GB-30/3-4		22.0183	77.9817	12.98	7/30/2021
60376093011	GB-10/1.5-2.5		17.5992	82.4008	12.69	7/30/2021

Note:
Total weight is the amount of wet sample required to give 10g dry weight

Client names have been blacked out on notebook pages in order to preserve client confidentiality

Analysis Key Code List

- = Not used

✔ = Worked up

= See comment # below

Li = Liner, replace or clean

Ba = Baseplate, change

SyB = Syringe, replace – bent

SyP = Syringe, replace – plugged

SyO = Syringe, replace – other

IS = Injector Septum, replace

BS = Batch Septum, replace

Fi = Filament, replace

Co = Contacts, adjust

Ca = re-Calibrate

Tu = Tune

TC = Tune and Calibrate

CC () = Cut Column (length cut)

CO = Carry-Over possible

RRM = ReRun - Matrix

RRLM = ReRun – Lock Mass

RRBI = ReRun – Bad Injection

RRRT = ReRun – Retention Time shift

RR>S = Rerun – need better Sensitivity

Re = Re-extract

AS = Adjust Slits

LC = Leak Check

RB = Re-Boot system

CiS = Cleaned inner Source

CoS = Cleaned outer Source

AiS = Alternate inner Source

AoS = Alternate outer Source

<Y = Adjust Y focus down

>Y = Adjust Y focus up

Di () = Dilution needed (amount needed)

FE = Front End – liner, baseplate and septum

Sample List Report **MassLynx 4.1** 10 MSHR 09 5/24/21

Sample List: C:\MassLynx\Default.pro\Sampledb\P210529C.SPL

Last Modified: Saturday, May 29, 2021 17:13:16 Central Daylight Time

Printed: Friday, June 04, 2021 15:10:56 Central Daylight Time

	File Name	File Text	Method	MS File	Inlet File	Bottle	Vol
1	P210529C_01	✓CAL CS1-20-123-041 - BAL 03/05/22 AS TC	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:6	1.0
2	P210529C_02	✓CAL CS2-20-123-042 - BAL 03/05/22	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:5	1.0
3	P210529C_03	✓CAL CS3-20-123-048 - BAL 04/25/22	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:4	1.0
4	P210529C_04	✓CAL CS5-20-123-044 - BAL 03/31/22	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:7	1.0
5	P210529C_05	✓CAL CS4-20-123-027 - BAL 12/01/21	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:8	1.0
6	P210529C_06	✓CAL 209-20170-153 - BAL 05/25/22	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:2	1.0
7	P210529C_07	✓LCS LCS-90243 - CVS	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:16	1.0
8	P210529C_08	✓LCS LCSD-90244 - CVS	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:17	1.0
9	P210529C_09	Blank Nonane - CVS	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:3	1.0
10	P210529C_10	✓Blank Blank-90242 - CVS	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:18	1.0
11	P210529C_11	✓Samp 10561042001 - CVS[redacted]	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:19	1.0
12	P210529C_12	Blank Nonane - CVS	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:3	1.0
13	P210529C_13	✓Samp 10560243001 - CVS[redacted]	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:20	1.0
14	P210529C_14	✓Samp 60369065001 - CVS [redacted]TMDL	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:21	1.0
15	P210529C_15	✓Samp 60369065002 - CVS [redacted]TMDL	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:22	1.0
16	P210529C_16	✓Samp 60369065003 - CVS [redacted]TMDL	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:23	1.0
17	P210529C_17	Blank Nonane - CVS	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:3	1.0

[redacted] (b) (6) 6/4/21

Sample List Report **MassLynx 4.1** 10MSHR09 8/21/21

Sample List: C:\MassLynx\Default.pro\Sampledb\P210821A.SPL
Last Modified: Saturday, August 21, 2021 17:30:08 Central Daylight Time
Printed: Saturday, August 21, 2021 17:30:13 Central Daylight Time

	File Name	File Text	Method	MS File	Inlet File	Bottle	Vol
1	P210821A_01	CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:4	1.0
2	P210821A_02	CAL 209-20170-153 - BAL 05/25/22	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:2	1.0
3	P210821A_03	Blank Nonane - BAL	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:3	1.0
4	P210821A_04	Samp 10570498009 - BAL [redacted] 15cut	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:58	1.0
5	P210821A_05	Samp 10570498010 - BAL [redacted]	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:59	1.0
6	P210821A_06	Samp 10570498011 - BAL [redacted]	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:60	1.0
7	P210821A_07	Blank Nonane - BAL	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:3	1.0
8	P210821A_08	BLANK BLANK-92023 - BAL	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:51	1.0
9	P210821A_09	SAMP 10571376002 - BAL [redacted] 2X	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:52	1.0
10	P210821A_10	SAMP 10571376006 - BAL [redacted] xcln 2X	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:53	1.0
11	P210821A_11	SAMP 7382014002 - BAL [redacted]	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:54	1.0
12	P210821A_12	SAMP 60376093011-R - BAL KS 2X dec	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:55	1.0
13	P210821A_13	Blank Nonane - BAL	1668A	1668A_Octyl_Mod_N	1668A_SPB_OCTYL	Tray01:3	1.0

ver 8/22/21 (b) (6)

(b) (6) 8/22/21

Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210818B.SPL
Last Modified: Wednesday, August 18, 2021 19:39:42 Central Daylight Time
Printed: Thursday, August 19, 2021 09:36:01 Central Daylight Time

10MSHR12 8/18/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210818B_01	CAL CS3/CPM-20-123-058 - CVS liner, TC	220717	8290/1613B	dioxfurY	DioxFur_Y	Tray1:1	1.000000	---
2	Y210818B_02	Blank Nonane - CVS	---	8290/1613B	dioxfurY	DioxFur_Y	Tray1:3	1.000000	---
3	Y210818B_03	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
4	Y210818B_04	CAL CS3-20-123-060 - CVS windows	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
5	Y210818B_05	CAL CS3-20-123-060 - CVS TC	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
6	Y210818B_06	CAL CS2-20-123-053 - CVS TC	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:15	1.000000	---
7	Y210818B_07	CAL CS1-20-123-041 - CVS bad inj	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
8	Y210818B_08	CAL CS1-20-123-041 - CVS	220305	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:16	1.000000	---
9	Y210818B_09	CAL CS5-20-123-044 - CVS	220331	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:17	1.000000	---
10	Y210818B_10	CAL CS4-20-123-055 - CVS	220609	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:18	1.000000	---
11	Y210818B_11	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
12	Y210818B_12	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
13	Y210818B_13	LCS LCS-92213 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:19	1.000000	---
14	Y210818B_14	LCS LCSD-92214 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:20	1.000000	---
15	Y210818B_15	Samp 60375626032-MS-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:21	1.000000	---
16	Y210818B_16	Samp 60375626032-MSD-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:22	1.000000	---
17	Y210818B_17	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
18	Y210818B_18	Samp 60375626032-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:23	1.000000	---
19	Y210818B_19	Samp 60375626013-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:24	1.000000	---
20	Y210818B_20	Samp 60375626014-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:25	1.000000	---
21	Y210818B_21	Samp 60375838006-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:26	1.000000	---
22	Y210818B_22	Samp 60375838015-R - CVS [redacted]	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:27	1.000000	---
23	Y210818B_23	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

ver 8/20/21

(b) (6)

(b) (6) 8/20/21

Sample List Report **MassLynx 4.1 SCN815**

Sample List: C:\MassLynx\UseThisOne.PRO\SampleDB\Y210820A.SPL
Last Modified: Thursday, August 19, 2021 16:42:26 Central Daylight Time
Printed: Thursday, August 19, 2021 16:42:28 Central Daylight Time

10M5MB12 8/20/21

	File Name	File Text	stnd exp	Method	MS File	Inlet File	vial	Vol	Control
1	Y210820A_01	CAL CS3-20-123-060 - CVS	220730	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:7	1.000000	---
2	Y210820A_02	CAL 209-20170-153 - CVS	220524	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:6	1.000000	---
3	Y210820A_03	LCS LCS-92296 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:36	1.000000	---
4	Y210820A_04	LCS LCSD-92297 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:37	1.000000	---
5	Y210820A_05	LCS LCS-92269 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:38	1.000000	---
6	Y210820A_06	LCS LCSD-92270 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:39	1.000000	---
7	Y210820A_07	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---
8	Y210820A_08	Blank Blank-92295 - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:40	1.000000	---
9	Y210820A_09	Samp 60375692020-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:41	1.000000	---
10	Y210820A_10	Samp 60375923003-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:42	1.000000	---
11	Y210820A_11	Samp 60375923011-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:43	1.000000	---
12	Y210820A_12	Samp 60376093005-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:44	1.000000	---
13	Y210820A_13	Samp 60376093011-R - CVS P KS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:45	1.000000	---
14	Y210820A_14	Blank Nonane - CVS	---	1668A/C	1668A_Octyl_Mod_Y	1668A_Octyl_Y	Tray1:2	1.000000	---

(6) (b)

ver 8/22/21

Bad inj or matrix? Decant + reshoot BAC 8/21/20

(6) (b) 8/20/21

Appendix B

Sample Analysis Summary

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-30/3-4		
Lab Sample ID	60376093005-R		
Filename	Y210820A_12		
Injected By	CVS		
Total Amount Extracted	13.0 g	Matrix	Solid
% Moisture	22.0	Dilution	NA
Dry Weight Extracted	10.1 g	Collected	07/26/2021 14:52
ICAL ID	Y210820A02	Received	07/29/2021 08:50
CCal Filename(s)	Y210820A_01	Extracted	08/13/2021 10:40
Method Blank ID	BLANK-92295	Analyzed	08/20/2021 12:25

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.850	0.79	2.0	1.08	54
13C-3,3',4,4'-TeCB	77	35.454	0.77	2.0	1.10	55
13C-2,3,3',4,4'-PeCB	105	39.031	1.45	2.0	1.04	52
13C-2,3,4,4',5-PeCB	114	38.393	1.52	2.0	1.11	55
13C-2,3',4,4',5-PeCB	118	37.840	1.62	2.0	1.05	53
13C-2,3',4,4',5'-PeCB	123	37.505	1.51	2.0	1.15	58
13C-3,3',4,4',5-PeCB	126	42.183	1.45	2.0	1.15	57
13C-HxCB(156/157)	156/157	45.257	1.26	4.0	2.05	51
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.21	2.0	1.08	54
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.14	2.0	1.07	53
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.04	2.0	1.14	57
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.421	0.81	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.704	1.56	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.23	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.96	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-30/3-4
Lab Sample ID	60376093005-R
Filename	Y210820A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg		EMPC ng/Kg	EML ng/Kg
77		---	---	ND		---	1.93
81		---	---	ND		---	2.05
105		39.098	2.27	---	IJ	2.21	1.49
114		---	---	ND		---	1.59
118		37.857	1.62	6.88	BJ	---	1.21
123		---	---	ND		---	1.18
126		---	---	ND		---	1.87
156	156/157	---	---	ND		---	1.34
157	156/157	---	---	ND		---	1.34
167		---	---	ND		---	0.960
169		---	---	ND		---	1.30
189		---	---	ND		---	1.66

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
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ng's = Nanograms

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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-30/3-4		
Lab Sample ID	60376093005-R		
Filename	Y210820A_12		
Injected By	CVS		
Total Amount Extracted	13.0 g	Matrix	Solid
% Moisture	22.0	Dilution	NA
Dry Weight Extracted	10.1 g	Collected	07/26/2021 14:52
ICAL ID	Y210820A02	Received	07/29/2021 08:50
CCal Filename(s)	Y210820A_01	Extracted	08/13/2021 10:40
Method Blank ID	BLANK-92295	Analyzed	08/20/2021 12:25

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	ND	1.9	0.00010	0.0000	0.0001	0.0002
81	ND	2.1	0.00030	0.0000	0.0003	0.0006
105	ND	1.5	0.00003	0.0001	0.0001	0.0001
114	ND	1.6	0.00003	0.0000	0.0000	0.0000
118	6.9	1.2	0.00003	0.0002	0.0002	0.0002
123	ND	1.2	0.00003	0.0000	0.0000	0.0000
126	ND	1.9	0.10000	0.0000	0.0936	0.1871
156/157	ND	1.3	0.00003	0.0000	0.0000	0.0000
167	ND	0.96	0.00003	0.0000	0.0000	0.0000
169	ND	1.3	0.03000	0.0000	0.0195	0.0391
189	ND	1.7	0.00003	0.0000	0.0000	0.0000
				0.00027 ng TEQ/Kg	**0.11 ng TEQ/Kg**	**0.23 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - PACE Kansas

Client's Sample ID	GB-10/1.5-2.5		
Lab Sample ID	60376093011-R		
Filename	P210821A_12		
Injected By	BAL		
Total Amount Extracted	12.7 g	Matrix	Solid
% Moisture	17.6	Dilution	NA
Dry Weight Extracted	10.5 g	Collected	07/26/2021 16:00
ICAL ID	P210821A02	Received	07/29/2021 08:50
CCal Filename(s)	P210821A_01	Extracted	08/13/2021 10:40
Method Blank ID	BLANK-92295	Analyzed	08/22/2021 00:58

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	33.559	0.79	2.0	1.22	61
13C-3,3',4,4'-TeCB	77	34.131	0.67	2.0	1.15	57
13C-2,3,3',4,4'-PeCB	105	37.693	1.53	2.0	1.36	68
13C-2,3,4,4',5-PeCB	114	37.022	1.57	2.0	1.33	67
13C-2,3',4,4',5-PeCB	118	36.486	1.62	2.0	1.50	75
13C-2,3',4,4',5'-PeCB	123	36.167	1.65	2.0	1.46	73
13C-3,3',4,4',5-PeCB	126	40.863	1.52	2.0	1.36	68
13C-HxCB(156/157)	156/157	43.903	1.27	4.0	2.56	64
13C-2,3',4,4',5,5'-HxCB	167	42.780	1.17	2.0	1.31	65
13C-3,3',4,4',5,5'-HxCB	169	47.223	1.28	2.0	1.21	61
13C-2,3,3',4,4',5,5'-HpCB	189	49.736	1.18	2.0	1.41	70
Recovery Standards						
13C-2,2',5,5'-TeCB	52	24.115	0.84	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	31.377	1.55	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	39.655	1.25	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	51.827	0.87	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

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Method 1668A Polychlorobiphenyl Sample Analysis Results

Client Sample ID	GB-10/1.5-2.5
Lab Sample ID	60376093011-R
Filename	P210821A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg		EMPC ng/Kg	EML ng/Kg
77		---	---	ND		---	5.04
81		---	---	ND		---	5.26
105		37.710	1.90	---	IJ	10.3	4.29
114		---	---	ND		---	4.73
118		36.536	1.39	17.9	BJ	---	4.17
123		---	---	ND		---	3.82
126		---	---	ND		---	5.47
156	156/157	---	---	ND		---	2.89
157	156/157	---	---	ND		---	2.89
167		---	---	ND		---	2.31
169		---	---	ND		---	3.03
189		---	---	ND		---	4.48

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
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ng's = Nanograms

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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	GB-10/1.5-2.5		
Lab Sample ID	60376093011-R		
Filename	P210821A_12		
Injected By	BAL		
Total Amount Extracted	12.7 g	Matrix	Solid
% Moisture	17.6	Dilution	NA
Dry Weight Extracted	10.5 g	Collected	07/26/2021 16:00
ICAL ID	P210821A02	Received	07/29/2021 08:50
CCal Filename(s)	P210821A_01	Extracted	08/13/2021 10:40
Method Blank ID	BLANK-92295	Analyzed	08/22/2021 00:58

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	ND	5.0	0.00010	0.0000	0.0003	0.0005
81	ND	5.3	0.00030	0.0000	0.0008	0.0016
105	ND	4.3	0.00003	0.0003	0.0003	0.0003
114	ND	4.7	0.00003	0.0000	0.0001	0.0001
118	18	4.2	0.00003	0.0005	0.0005	0.0005
123	ND	3.8	0.00003	0.0000	0.0001	0.0001
126	ND	5.5	0.10000	0.0000	0.2737	0.5474
156/157	ND	2.9	0.00003	0.0000	0.0000	0.0001
167	ND	2.3	0.00003	0.0000	0.0000	0.0001
169	ND	3.0	0.03000	0.0000	0.0454	0.0909
189	ND	4.5	0.00003	0.0000	0.0001	0.0001
				0.00085 ng TEQ/Kg	**0.32 ng TEQ/Kg**	**0.64 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Appendix C

QC and Calibration Results Summary

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Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID	BLANK-92295		
Filename	Y210820A_08		
Injected By	CVS	Matrix	Solid
Total Amount Extracted	10.5 g	Extracted	08/13/2021 10:40
ICAL ID	Y210820A02	Analyzed	08/20/2021 08:26
CCal Filename(s)	Y210820A_01	Dilution	NA

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.901	0.76	2.0	1.94	97
13C-3,3',4,4'-TeCB	77	35.589	0.80	2.0	2.06	103
13C-2,3,3',4,4'-PeCB	105	39.065	1.53	2.0	1.78	89
13C-2,3,4,4',5-PeCB	114	38.428	1.52	2.0	1.85	92
13C-2,3',4,4',5-PeCB	118	37.874	1.55	2.0	1.79	90
13C-2,3',4,4',5'-PeCB	123	37.539	1.49	2.0	1.80	90
13C-3,3',4,4',5-PeCB	126	42.201	1.56	2.0	1.97	98
13C-HxCB (156/157)	156/157	45.275	1.22	4.0	3.68	92
13C-2,3',4,4',5,5'-HxCB	167	44.118	1.21	2.0	1.83	92
13C-3,3',4,4',5,5'-HxCB	169	48.545	1.23	2.0	2.03	102
13C-2,3,3',4,4',5,5'-HpCB	189	51.089	1.01	2.0	1.79	89
Recovery Standards						
13C-2,2',5,5'-TeCB	52	25.455	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	32.738	1.55	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	41.044	1.29	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.87	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a total weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-92295
Filename Y210820A_08

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
77		35.572	0.67	2.12	---	1.13
81		---	---	ND	---	1.35
105		39.099	1.70	3.91	---	0.958
114		---	---	ND	---	0.830
118		37.891	1.42	6.59	---	0.852
123		---	---	ND	---	1.01
126		---	---	ND	---	0.744
156	156/157	45.275	0.81	---	0.894	0.666
157	156/157	45.275	0.81	---	(0.894)	0.666
167		---	---	ND	---	0.464
169		---	---	ND	---	0.544
189		---	---	ND	---	0.576

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

Results reported on a total weight basis

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Method 1668A Toxic Equivalency (TEQ) Calculations

PACE Kansas

Client's Sample ID	CBLKIZ		
Lab Sample ID	BLANK-92295		
Filename	Y210820A_08		
Injected By	CVS		
Total Amount Extracted	10.5 g	Matrix	Solid
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	08/13/2021 07:07
ICAL ID	Y210820A02	Received	08/13/2021 07:07
CCal Filename(s)	Y210820A_01	Extracted	08/13/2021 10:40
Method Blank ID		Analyzed	08/20/2021 08:26

Parameter	Conc ng/Kg	RL ng/Kg	WHO2005	LB	MB	UB
77	2.1	1.1	0.00010	0.0002	0.0002	0.0002
81	ND	1.4	0.00030	0.0000	0.0002	0.0004
105	3.9	0.96	0.00003	0.0001	0.0001	0.0001
114	ND	0.83	0.00003	0.0000	0.0000	0.0000
118	6.6	0.85	0.00003	0.0002	0.0002	0.0002
123	ND	1.0	0.00003	0.0000	0.0000	0.0000
126	ND	0.74	0.10000	0.0000	0.0372	0.0744
156/157	ND	0.67	0.00003	0.0000	0.0000	0.0000
167	ND	0.46	0.00003	0.0000	0.0000	0.0000
169	ND	0.54	0.03000	0.0000	0.0082	0.0163
189	ND	0.58	0.00003	0.0000	0.0000	0.0000
				0.00055 ng TEQ/Kg	**0.046 ng TEQ/Kg**	**0.092 ng TEQ/Kg**

Final values are valid to only 3 significant figures
LB = Lower Bound, Where "ND", TEQ Conc = 0
MB = Medium Bound, Where "ND", TEQ Conc = (LOD/2) * (TEF Factor)
UB = Upper Bound, Where "ND", TEQ Conc = LOD * (TEF Factor)
RL = Reporting Limit

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Method 1668A Polychlorobiphenyls
Laboratory Control Spike Analysis Results

Lab Sample ID	LCS-92296		
Filename	Y210820A_03	Matrix	Solid
Total Amount Extracted	10.1 g	Dilution	NA
ICAL ID	Y210820A02	Extracted	08/13/2021 10:40
CCal Filename(s)	Y210820A_01	Analyzed	08/20/2021 03:28
Method Blank ID	BLANK-92295	Injected By	CVS

	Native Analytes			Labeled Analytes		
PCB Isomer	**Spiked (ng)**	**Found (ng)**	**% Recovery**	**Spiked (ng)**	**Found (ng)**	**% Recovery**
81	1.0	1.000	100	2.0	1.67	83
77	1.0	1.03	103	2.0	1.76	88
105	1.0	1.09	109	2.0	1.59	79
114	1.0	0.971	97	2.0	1.63	81
118	1.0	1.08	108	2.0	1.56	78
123	1.0	1.02	102	2.0	1.56	78
126	1.0	1.05	105	2.0	1.74	87
156/157	2.0	2.08	104	4.0	3.10	78
167	1.0	1.04	104	2.0	1.53	77
169	1.0	1.05	105	2.0	1.65	82
189	1.0	1.00	100	2.0	1.64	82

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

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Method 1668A Polychlorobiphenyls
Laboratory Control Spike Analysis Results

Lab Sample ID	LCSD-92297		
Filename	Y210820A_04	Matrix	Solid
Total Amount Extracted	10.1 g	Dilution	NA
ICAL ID	Y210820A02	Extracted	08/13/2021 10:40
CCal Filename(s)	Y210820A_01	Analyzed	08/20/2021 04:28
Method Blank ID	BLANK-92295	Injected By	CVS

	Native Analytes			Labeled Analytes		
PCB Isomer	**Spiked (ng)**	**Found (ng)**	**% Recovery**	**Spiked (ng)**	**Found (ng)**	**% Recovery**
81	1.0	1.09	109	2.0	1.37	68
77	1.0	1.05	105	2.0	1.42	71
105	1.0	1.18	118	2.0	1.28	64
114	1.0	1.02	102	2.0	1.29	64
118	1.0	1.13	113	2.0	1.29	65
123	1.0	1.05	105	2.0	1.26	63
126	1.0	1.12	112	2.0	1.40	70
156/157	2.0	2.17	108	4.0	2.47	62
167	1.0	1.13	113	2.0	1.18	59
169	1.0	1.07	107	2.0	1.32	66
189	1.0	1.17	117	2.0	1.25	63

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

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Method 1668A

Spike Recovery Relative Percent Difference (RPD) Results

Client	PACE Kansas		
Spike 1 ID	LCS-92296	Spike 2 ID	LCSD-92297
Spike 1 Filename	Y210820A_03	Spike 2 Filename	Y210820A_04

Compound	IUPAC	Spike 1 %REC	Spike 2 %REC	%RPD
3,3',4,4'-TeCB	77	103	105	1.9
3,4,4',5-TeCB	81	100	109	8.6
2,3,3',4,4'-PeCB	105	109	118	7.9
2,3,4,4',5-PeCB	114	97	102	5.0
2,3',4,4',5-PeCB	118	108	113	4.5
2,3',4,4',5'-PeCB	123	102	105	2.9
3,3',4,4',5-PeCB	126	105	112	6.5
(156/157)	156/157	104	108	3.8
2,3',4,4',5,5'-HxCB	167	104	113	8.3
3,3',4,4',5,5'-HxCB	169	105	107	1.9
2,3,3',4,4',5,5'-HpCB	189	100	117	15.7

%REC = Percent Recovered
RPD = The difference between the two values divided by the mean value

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1668A Polychlorobiphenyl Initial Calibration
Response Factor Summary

ICAL ID	P210529	Data Files:		Time	Injected
Calibration Date	05/29/2021	CS-1	P210529C_01	17:08	BAL
Instrument	10MSHR09 (P)	CS-2	P210529C_02	18:15	BAL
Column Phase	SPB-OCTYL 0.25mm	CS-3	P210529C_03	19:13	BAL
Column ID No.	261111-01	CS-4	P210529C_05	21:14	BAL
		CS-5	P210529C_04	20:14	BAL

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Labeled Analytes								
13C-2-MoCB	1	1.1062	1.0226	1.0897	1.0407	1.1154	1.0749	3.82
13C-4-MoCB	3	1.1234	1.0812	1.1210	1.0812	1.1739	1.1161	3.43
13C-2,2'-DiCB	4	0.8630	0.8321	0.8361	0.8392	0.8557	0.8452	1.58
13C-4,4'-DiCB	15	1.0672	1.1062	1.0915	1.0899	1.0801	1.0870	1.33
13C-2,2',6-TrCB	19	0.7272	0.7242	0.7191	0.7409	0.7389	0.7301	1.30
13C-3,4,4'-TrCB	37	1.2089	1.2369	1.2218	1.2012	1.2876	1.2313	2.79
13C-2,2',6,6'-TeCB	54	1.1726	1.1702	1.1701	1.2081	1.2116	1.1865	1.80
13C-3,4,4',5-TeCB	81	1.0790	1.0333	1.0627	1.0336	1.1031	1.0623	2.83
13C-3,3',4,4'-TeCB	77	1.1338	1.1245	1.1092	1.0948	1.1634	1.1251	2.31
13C-2,2',4,6,6'-PeCB	104	1.2864	1.3180	1.3244	1.4055	1.3916	1.3452	3.79
13C-2,3',4,4',5-PeCB	118	1.0559	1.0628	1.0585	1.0713	1.1179	1.0733	2.39
13C-2,3,4,4',5-PeCB	114	1.0364	1.0343	1.0325	1.0360	1.0916	1.0462	2.43
13C-2,3,3',4,4'-PeCB	105	1.0317	1.0498	1.0255	1.0323	1.0796	1.0438	2.11
13C-3,3',4,4',5-PeCB	126	1.0424	1.0584	1.0195	1.0399	1.0868	1.0494	2.39
13C-2,2',4,4',6,6'-HxCB	155	1.5606	1.5991	1.6200	1.6761	1.6575	1.6227	2.84
13C-2,3',4,4',5,5'-HxCB	167	1.1334	1.1259	1.1852	1.1492	1.1928	1.1573	2.62
13C-HxCB (156/157)	156/157	1.1144	1.1251	1.1669	1.1344	1.1941	1.1470	2.87
13C-3,3',4,4',5,5'-HxCB	169	1.1017	1.1388	1.1469	1.1391	1.2000	1.1453	3.08
13C-2,2',3,4',5,6,6'-HpCB	188	1.7487	1.7411	1.7538	1.7695	1.7298	1.7486	0.85
13C-2,3,3',4,4',5,5'-HpCB	189	1.3049	1.3079	1.2935	1.2546	1.3281	1.2978	2.09
13C-2,2',3,3',5,5',6,6'-OcCB	202	1.6691	1.6528	1.6650	1.6228	1.6149	1.6449	1.50
13C-2,3,3',4,4',5,5',6-OcCB	205	1.2460	1.2656	1.2737	1.2648	1.3175	1.2735	2.09
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	1.3547	1.3493	1.3555	1.3542	1.3654	1.3558	0.43
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.9509	0.9539	0.9802	0.9558	1.0069	0.9696	2.47
13C-DeCB	209	1.1999	1.2084	1.2181	1.2238	1.2813	1.2263	2.62
Cleanup Standards								
13C-2,4,4'-TrCB	28	1.2856	1.2993	1.2836	1.2864	1.2810	1.2872	0.55
13C-2,3,3',5,5'-PeCB	111	1.3182	1.3151	1.2929	1.3414	1.3635	1.3262	2.04
13C-2,2',3,3',5,5',6-HpCB	178	1.0396	1.0162	1.0363	1.0273	1.0492	1.0337	1.21
Recovery Standards								
13C-2,5-DiCB	9	1.5995	1.6733	1.6914	1.7709	1.7431	1.6956	3.92
13C-2,2',5,5'-TeCB	52	1.1212	1.1926	1.1940	1.2458	1.1750	1.1857	3.77
13C-2,2',4,5,5'-PeCB	101	1.0457	1.0774	1.0886	1.0853	1.0419	1.0678	2.09
13C-2,2',3,4,4',5'-HxCB	138	0.9619	0.9841	0.9650	0.9734	0.9531	0.9675	1.22
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.7738	0.8028	0.8037	0.8235	0.8243	0.8056	2.55

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Response Factor Summary

ICAL ID	P210529	Data Files:		Time	Injected
Calibration Date	05/29/2021	CS-1	P210529C_01	17:08	BAL
Instrument	10MSHR09 (P)	CS-2	P210529C_02	18:15	BAL
Column Phase	SPB-OCTYL 0.25mm	CS-3	P210529C_03	19:13	BAL
Column ID No.	261111-01	CS-4	P210529C_05	21:14	BAL
		CS-5	P210529C_04	20:14	BAL

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Native Analytes								
3,3',4,4'-TeCB	77	1.0475	0.9901	0.9731	0.9649	0.9524	0.9856	3.77
3,4,4',5-TeCB	81	1.0995	1.0422	1.0162	1.0048	1.0063	1.0338	3.84
2,3,3',4,4'-PeCB	105	1.0072	0.9560	0.9554	0.9761	0.9605	0.9710	2.25
2,3,4,4',5-PeCB	114	1.0465	0.9887	0.9630	0.9677	0.9788	0.9889	3.41
2,3',4,4',5-PeCB	118	1.0075	0.9948	0.9672	0.9811	0.9892	0.9880	1.53
2,3',4,4',5'-PeCB	123	1.0886	1.0110	0.9640	0.9931	0.9708	1.0055	4.98
3,3',4,4',5-PeCB	126	0.9755	0.9657	0.9758	0.9343	0.9545	0.9612	1.81
(156/157)	156/157	1.0319	0.9993	0.9914	0.9927	0.9836	0.9998	1.88
2,3',4,4',5,5'-HxCB	167	1.0747	1.0021	0.9870	0.9902	0.9870	1.0082	3.74
3,3',4,4',5,5'-HxCB	169	1.0328	0.9958	0.9875	0.9805	1.0024	0.9998	2.02
2,3,3',4,4',5,5'-HpCB	189	1.0193	0.9814	0.9963	0.9902	0.9900	0.9955	1.44

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

		Data Files:		Time	Injected
ICAL ID	P210529	CS-1	P210529C_01	17:08	BAL
Calibration Date	05/29/2021	CS-2	P210529C_02	18:15	BAL
Instrument	10MSHR09 (P)	CS-3	P210529C_03	19:13	BAL
Column Phase	SPB-OCTYL 0.25mm	CS-4	P210529C_05	21:14	BAL
Column ID No.	261111-01	CS-5	P210529C_04	20:14	BAL

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Labeled Analytes							
13C-2-MoCB	1	3.09	3.07	3.15	2.98	3.07	2.66-3.60
13C-4-MoCB	3	3.06	3.22	3.10	3.11	3.13	2.66-3.60
13C-2,2'-DiCB	4	1.58	1.55	1.56	1.52	1.66	1.33-1.81
13C-4,4'-DiCB	15	1.54	1.54	1.56	1.55	1.54	1.33-1.81
13C-2,2',6-TrCB	19	1.03	1.04	1.04	1.01	1.04	0.88-1.20
13C-3,4,4'-TrCB	37	1.03	1.04	1.05	1.01	1.03	0.88-1.20
13C-2,2',6,6'-TeCB	54	0.79	0.80	0.78	0.78	0.79	0.65-0.89
13C-3,4,4',5-TeCB	81	0.81	0.77	0.80	0.80	0.79	0.65-0.89
13C-3,3',4,4'-TeCB	77	0.79	0.78	0.82	0.80	0.79	0.65-0.89
13C-2,2',4,6,6'-PeCB	104	1.59	1.58	1.57	1.58	1.58	1.32-1.78
13C-2,3',4,4',5-PeCB	118	1.52	1.56	1.59	1.54	1.57	1.32-1.78
13C-2,3,4,4',5-PeCB	114	1.57	1.56	1.58	1.56	1.56	1.32-1.78
13C-2,3,3',4,4'-PeCB	105	1.57	1.57	1.58	1.56	1.60	1.32-1.78
13C-3,3',4,4',5-PeCB	126	1.59	1.56	1.58	1.60	1.55	1.32-1.78
13C-2,2',4,4',6,6'-HxCB	155	1.25	1.25	1.26	1.30	1.28	1.05-1.43
13C-2,3',4,4',5,5'-HxCB	167	1.26	1.26	1.26	1.29	1.26	1.05-1.43
13C-HxCB (156/157)	156/157	1.26	1.25	1.26	1.26	1.26	1.05-1.43
13C-3,3',4,4',5,5'-HxCB	169	1.25	1.25	1.24	1.27	1.26	1.05-1.43
13C-2,2',3,4',5,6,6'-HpCB	188	1.05	1.05	1.05	1.05	1.04	0.88-1.20
13C-2,3,3',4,4',5,5'-HpCB	189	1.04	1.06	1.04	1.06	1.04	0.88-1.20
13C-2,2',3,3',5,5',6,6'-OcCB	202	0.92	0.90	0.90	0.90	0.88	0.76-1.02
13C-2,3,3',4,4',5,5',6-OcCB	205	0.91	0.90	0.90	0.89	0.90	0.76-1.02
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	0.79	0.79	0.79	0.79	0.78	0.66-0.90
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.79	0.80	0.81	0.79	0.80	0.66-0.90
13C-DeCB	209	0.71	0.71	0.71	0.71	0.71	0.59-0.79
Cleanup Standards							
13C-2,4,4'-TrCB	28	1.03	1.03	1.01	1.03	1.01	0.88-1.20
13C-2,3,3',5,5'-PeCB	111	1.55	1.53	1.51	1.58	1.55	1.32-1.78
13C-2,2',3,3',5,5',6-HpCB	178	1.04	1.06	1.06	1.04	1.06	0.88-1.20
Recovery Standards							
13C-2,5-DiCB	9	1.57	1.54	1.54	1.55	1.57	1.33-1.81
13C-2,2',5,5'-TeCB	52	0.79	0.78	0.78	0.78	0.77	0.65-0.89
13C-2,2',4,5,5'-PeCB	101	1.58	1.55	1.54	1.61	1.55	1.32-1.78
13C-2,2',3,4,4',5'-HxCB	138	1.26	1.28	1.26	1.25	1.30	1.05-1.43
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.93	0.90	0.92	0.90	0.90	0.76-1.02

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

ICAL ID	P210529	Data Files:		Time	Injected
Calibration Date	05/29/2021	CS-1	P210529C_01	17:08	BAL
Instrument	10MSHR09 (P)	CS-2	P210529C_02	18:15	BAL
Column Phase	SPB-OCTYL 0.25mm	CS-3	P210529C_03	19:13	BAL
Column ID No.	261111-01	CS-4	P210529C_05	21:14	BAL
		CS-5	P210529C_04	20:14	BAL

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Native Analytes							
3,3',4,4'-TeCB	77	0.80	0.78	0.79	0.77	0.76	0.65-0.89
3,4,4',5-TeCB	81	0.76	0.77	0.79	0.79	0.77	0.65-0.89
2,3,3',4,4'-PeCB	105	1.39	1.50	1.55	1.55	1.50	1.32-1.78
2,3,4,4',5-PeCB	114	1.51	1.52	1.53	1.50	1.52	1.32-1.78
2,3',4,4',5-PeCB	118	1.53	1.57	1.49	1.53	1.52	1.32-1.78
2,3',4,4',5'-PeCB	123	1.60	1.51	1.50	1.54	1.54	1.32-1.78
3,3',4,4',5-PeCB	126	1.56	1.53	1.54	1.53	1.53	1.32-1.78
(156/157)	156/157	1.27	1.27	1.25	1.24	1.24	1.05-1.43
2,3',4,4',5,5'-HxCB	167	1.25	1.21	1.26	1.24	1.23	1.05-1.43
3,3',4,4',5,5'-HxCB	169	1.26	1.25	1.24	1.24	1.23	1.05-1.43
2,3,3',4,4',5,5'-HpCB	189	1.07	1.03	1.03	1.03	1.03	0.88-1.20

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	P210821A02	Data File	P210821A_02
Calibration Date	08/21/2021	Injected By	BAL
Initial Calibration	P210821A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR09 (P)	Column ID No.	261111-01

PCB Isomer	IUPAC	RT	Ratio	209 RF	Ical RF	%RSD	RFc
Internal Standards							
13C-3,4,4',5-TeCB	81	33.523	0.78	1.0512	1.0623	-1.05	1.0623
13C-3,3',4,4'-TeCB	77	34.111	0.79	1.1055	1.1251	-1.75	1.1251
13C-2,3,3',4,4'-PeCB	105	37.688	1.54	0.9954	1.0438	-4.64	1.0438
13C-2,3,4,4',5-PeCB	114	37.035	1.59	1.0296	1.0462	-1.59	1.0462
13C-2,3',4,4',5-PeCB	118	36.498	1.58	1.0516	1.0733	-2.03	1.0733
13C-2,3',4,4',5'-PeCB	123	36.146	1.56	1.0024	1.0292	-2.60	1.0292
13C-3,3',4,4',5-PeCB	126	40.858	1.58	0.9737	1.0494	-7.21	1.0494
13C-HxCB (156/157)	156/157	43.915	1.25	1.0582	1.1470	-7.74	1.1470
13C-2,3',4,4',5,5'-HxCB	167	42.742	1.30	1.0590	1.1573	-8.49	1.1573
13C-3,3',4,4',5,5'-HxCB	169	47.202	1.29	0.9945	1.1453	-13.17	1.1453
13C-2,3,3',4,4',5,5'-HpCB	189	49.732	1.04	1.3822	1.2978	6.50	1.2978
Cleanup Standards							
13C-2,4,4'-TrCB	28	22.113	1.05	1.2609	1.2872	-2.04	1.2872
13C-2,3,3',5,5'-PeCB	111	34.142	1.58	1.2251	1.3262	-7.63	1.3262
13C-2,2',3,3',5,5',6-HpCB	178	40.104	1.08	0.9998	1.0337	-3.28	1.0337
RecoveryStandards							
13C-2,5-DiCB	9	14.205	1.59	1.6110	1.6956	-4.99	1.6956
13C-2,2',5,5'-TeCB	52	24.109	0.78	1.2156	1.1857	2.52	1.1857
13C-2,2',4,5,5'-PeCB	101	31.357	1.61	1.0958	1.0678	2.62	1.0678
13C-2,2',3,4,4',5'-HxCB	138	39.651	1.25	1.0002	0.9675	3.38	0.9675
13C-2,2',3,3',4,4',5,5'-OcCB	194	51.823	0.92	0.7036	0.8056	-12.66	0.8056

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	P210821A02	Data File	P210821A_02
Calibration Date	08/21/2021	Injected By	BAL
Initial Calibration	P210821A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR09 (P)	Column ID No.	261111-01

IUPAC	Co-elutions	RT	Ratio	209 RF	Ical RF	%RSD	RFc
81		33.554	0.80	1.1546	1.0338	11.69	1.0338
77		34.142	0.80	1.0575	0.9856	7.29	0.9856
104		25.130	1.57	1.1935	1.1107	7.45	1.1107
105		37.705	1.52	1.1740	0.9710	20.90	0.9710
114		37.051	1.55	1.1538	0.9889	16.67	0.9889
118		36.515	1.53	1.1953	0.9880	20.98	0.9880
123		36.179	1.52	0.9880	1.0055	-1.74	1.0055
126		40.892	1.51	1.1766	0.9612	22.41	0.9612
155		31.124	1.25	1.1011	1.0403	5.85	1.0403
156	156/157	43.915	1.24	1.2017	0.9998	20.20	0.9998
167		42.775	1.21	1.2298	1.0082	21.98	1.0082
169		47.236	1.24	1.1862	0.9998	18.65	0.9998
188		37.001	1.03	1.0667	1.0045	6.19	1.0045
189		49.754	1.05	1.1207	0.9955	12.58	0.9955

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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1668A Polychlorobiphenyl Initial Calibration
Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Labeled Analytes								
13C-2-MoCB	1	1.1281	1.1371	1.1947	1.1760	1.1630	1.1598	2.37
13C-4-MoCB	3	1.0640	1.0801	1.1344	1.0704	1.0791	1.0856	2.59
13C-2,2'-DiCB	4	0.5838	0.5905	0.6159	0.6016	0.6160	0.6016	2.42
13C-4,4'-DiCB	15	0.8671	0.8674	0.9026	0.8890	0.8838	0.8820	1.71
13C-2,2',6-TrCB	19	0.6518	0.6583	0.6793	0.6781	0.6675	0.6670	1.81
13C-3,4,4'-TrCB	37	0.9136	0.9078	0.9320	0.9281	0.9441	0.9251	1.57
13C-2,2',6,6'-TeCB	54	1.2015	1.1982	1.2367	1.2062	1.1969	1.2079	1.37
13C-3,4,4',5-TeCB	81	0.8105	0.8243	0.7935	0.8226	0.8519	0.8206	2.61
13C-3,3',4,4'-TeCB	77	0.8084	0.8297	0.8099	0.8409	0.8536	0.8285	2.36
13C-2,2',4,6,6'-PeCB	104	0.8928	0.8966	0.9380	0.9285	0.9345	0.9181	2.36
13C-2,3',4,4',5-PeCB	118	0.8808	0.8918	0.8447	0.9031	0.9144	0.8870	3.02
13C-2,3,4,4',5-PeCB	114	0.8430	0.8396	0.7988	0.8641	0.8732	0.8437	3.42
13C-2,3,3',4,4'-PeCB	105	0.8233	0.8438	0.7770	0.8313	0.8727	0.8296	4.21
13C-3,3',4,4',5-PeCB	126	0.7093	0.7406	0.6920	0.7434	0.7610	0.7293	3.83
13C-2,2',4,4',6,6'-HxCB	155	1.0410	1.0674	1.1567	1.0944	1.1268	1.0973	4.19
13C-2,3',4,4',5,5'-HxCB	167	0.8607	0.8709	0.8428	0.8727	0.9011	0.8696	2.44
13C-HxCB (156/157)	156/157	0.8084	0.8217	0.7685	0.8390	0.8785	0.8232	4.90
13C-3,3',4,4',5,5'-HxCB	169	0.7050	0.7431	0.6956	0.7356	0.7809	0.7320	4.63
13C-2,2',3,4',5,6,6'-HpCB	188	1.8461	1.8051	2.0332	1.9010	1.9439	1.9059	4.65
13C-2,3,3',4,4',5,5'-HpCB	189	1.0396	1.0625	1.0342	1.0628	1.0998	1.0598	2.44
13C-2,2',3,3',5,5',6,6'-OcCB	202	1.8555	1.8001	1.9524	1.8751	1.8944	1.8755	2.96
13C-2,3,3',4,4',5,5',6-OcCB	205	1.2295	1.2273	1.2103	1.2660	1.3073	1.2481	3.11
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	1.4825	1.4561	1.5068	1.4918	1.5154	1.4905	1.55
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.9735	0.9677	0.9782	0.9890	1.0198	0.9856	2.09
13C-DeCB	209	0.9807	0.9725	0.9894	1.0166	1.0325	0.9983	2.54
Cleanup Standards								
13C-2,4,4'-TrCB	28	1.1279	1.1236	1.1438	1.1543	1.0942	1.1287	2.03
13C-2,3,3',5,5'-PeCB	111	1.2662	1.2655	1.2546	1.2941	1.3028	1.2766	1.62
13C-2,2',3,3',5,5',6-HpCB	178	0.9144	0.9189	0.9469	0.9290	0.9363	0.9291	1.41
Recovery Standards								
13C-2,5-DiCB	9	1.9945	2.0083	2.1584	1.9996	1.9991	2.0320	3.49
13C-2,2',5,5'-TeCB	52	1.3756	1.3814	1.4507	1.3625	1.3655	1.3872	2.62
13C-2,2',4,5,5'-PeCB	101	1.1775	1.1790	1.2057	1.1624	1.1699	1.1789	1.39
13C-2,2',3,4,4',5'-HxCB	138	1.0936	1.0882	1.0560	1.0765	1.0680	1.0765	1.41
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.7592	0.7796	0.7083	0.7500	0.7570	0.7508	3.49

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Response Factor Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Ave RF	%RSD
Native Analytes								
3,3',4,4'-TeCB	77	0.9461	0.9096	0.8769	0.8801	0.8880	0.9002	3.19
3,4,4',5-TeCB	81	0.9288	0.9668	0.9297	0.9336	0.9225	0.9363	1.87
2,3,3',4,4'-PeCB	105	0.8988	0.9291	0.8993	0.8788	0.8741	0.8960	2.43
2,3,4,4',5-PeCB	114	0.9491	0.9449	0.9221	0.9123	0.9181	0.9293	1.79
2,3',4,4',5-PeCB	118	0.9601	0.9450	0.9247	0.8931	0.9014	0.9249	3.06
2,3',4,4',5'-PeCB	123	0.9836	0.9286	0.9173	0.8958	0.9153	0.9281	3.58
3,3',4,4',5-PeCB	126	0.9251	0.9019	0.8951	0.8795	0.8782	0.8959	2.14
(156/157)	156/157	0.9991	0.9562	0.9359	0.9116	0.9040	0.9413	4.07
2,3',4,4',5,5'-HxCB	167	0.9772	0.9597	0.9103	0.9081	0.8965	0.9304	3.84
3,3',4,4',5,5'-HxCB	169	0.9875	0.9950	0.9320	0.9014	0.8811	0.9394	5.40
2,3,3',4,4',5,5'-HpCB	189	0.9406	0.9065	0.8652	0.8759	0.8749	0.8926	3.47

Ave RF = Mean Response Factor %RSD = Percent Relative Standard Deviation

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

		Data Files:		Time	Injected
ICAL ID	Y210818	CS-1	Y210818B_08	18:49	CVS
Calibration Date	08/18/2021	CS-2	Y210818B_06	16:45	CVS
Instrument	10MSHR12 (Y)	CS-3	Y210818B_11	21:47	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-4	Y210818B_10	20:47	CVS
Column ID No.	261111-02	CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Labeled Analytes							
13C-2-MoCB	1	3.14	3.09	3.16	3.11	3.19	2.66-3.60
13C-4-MoCB	3	3.15	3.11	3.02	3.15	3.11	2.66-3.60
13C-2,2'-DiCB	4	1.71	1.68	1.66	1.70	1.74	1.33-1.81
13C-4,4'-DiCB	15	1.53	1.54	1.55	1.54	1.53	1.33-1.81
13C-2,2',6-TrCB	19	1.03	1.05	1.03	1.04	1.04	0.88-1.20
13C-3,4,4'-TrCB	37	1.04	1.02	1.05	1.04	1.02	0.88-1.20
13C-2,2',6,6'-TeCB	54	0.80	0.79	0.80	0.80	0.81	0.65-0.89
13C-3,4,4',5-TeCB	81	0.77	0.76	0.76	0.77	0.77	0.65-0.89
13C-3,3',4,4'-TeCB	77	0.78	0.77	0.80	0.79	0.79	0.65-0.89
13C-2,2',4,6,6'-PeCB	104	1.58	1.57	1.60	1.59	1.58	1.32-1.78
13C-2,3',4,4',5-PeCB	118	1.53	1.55	1.52	1.55	1.55	1.32-1.78
13C-2,3,4,4',5-PeCB	114	1.53	1.53	1.51	1.55	1.56	1.32-1.78
13C-2,3,3',4,4'-PeCB	105	1.54	1.54	1.50	1.51	1.54	1.32-1.78
13C-3,3',4,4',5-PeCB	126	1.57	1.53	1.54	1.53	1.55	1.32-1.78
13C-2,2',4,4',6,6'-HxCB	155	1.26	1.26	1.26	1.27	1.26	1.05-1.43
13C-2,3',4,4',5,5'-HxCB	167	1.23	1.21	1.21	1.25	1.24	1.05-1.43
13C-HxCB (156/157)	156/157	1.22	1.22	1.23	1.23	1.25	1.05-1.43
13C-3,3',4,4',5,5'-HxCB	169	1.23	1.24	1.22	1.24	1.23	1.05-1.43
13C-2,2',3,4',5,6,6'-HpCB	188	1.09	1.08	1.09	1.10	1.10	0.88-1.20
13C-2,3,3',4,4',5,5'-HpCB	189	1.02	1.02	1.03	1.03	1.04	0.88-1.20
13C-2,2',3,3',5,5',6,6'-OcCB	202	0.90	0.90	0.91	0.89	0.88	0.76-1.02
13C-2,3,3',4,4',5,5',6-OcCB	205	0.89	0.90	0.90	0.90	0.88	0.76-1.02
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	0.80	0.79	0.80	0.80	0.80	0.66-0.90
13C-2,2',3,3',4,4',5,5',6-NoCB	206	0.79	0.79	0.80	0.81	0.81	0.66-0.90
13C-DeCB	209	0.74	0.74	0.73	0.74	0.73	0.59-0.79
Cleanup Standards							
13C-2,4,4'-TrCB	28	1.03	1.01	1.03	1.02	1.02	0.88-1.20
13C-2,3,3',5,5'-PeCB	111	1.60	1.60	1.61	1.60	1.60	1.32-1.78
13C-2,2',3,3',5,5',6-HpCB	178	1.08	1.09	1.07	1.07	1.08	0.88-1.20
Recovery Standards							
13C-2,5-DiCB	9	1.54	1.53	1.55	1.53	1.52	1.33-1.81
13C-2,2',5,5'-TeCB	52	0.80	0.80	0.82	0.80	0.80	0.65-0.89
13C-2,2',4,5,5'-PeCB	101	1.61	1.59	1.59	1.62	1.61	1.32-1.78
13C-2,2',3,4,4',5'-HxCB	138	1.27	1.26	1.25	1.25	1.27	1.05-1.43
13C-2,2',3,3',4,4',5,5'-OcCB	194	0.92	0.91	0.90	0.90	0.92	0.76-1.02

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Initial Calibration
Isotope Ratio Summary

ICAL ID	Y210818	Data Files:		Time	Injected
Calibration Date	08/18/2021	CS-1	Y210818B_08	18:49	CVS
Instrument	10MSHR12 (Y)	CS-2	Y210818B_06	16:45	CVS
Column Phase	SPB-OCTYL 0.25mm	CS-3	Y210818B_11	21:47	CVS
Column ID No.	261111-02	CS-4	Y210818B_10	20:47	CVS
		CS-5	Y210818B_09	19:47	CVS

Isomer	IUPAC	CS-1	CS-2	CS-3	CS-4	CS-5	Limits(1)
Native Analytes							
3,3',4,4'-TeCB	77	0.83	0.74	0.75	0.77	0.76	0.65-0.89
3,4,4',5-TeCB	81	0.72	0.74	0.76	0.75	0.76	0.65-0.89
2,3,3',4,4'-PeCB	105	1.61	1.54	1.53	1.52	1.54	1.32-1.78
2,3,4,4',5-PeCB	114	1.53	1.41	1.50	1.51	1.52	1.32-1.78
2,3',4,4',5-PeCB	118	1.59	1.47	1.52	1.52	1.53	1.32-1.78
2,3',4,4',5'-PeCB	123	1.42	1.47	1.49	1.51	1.52	1.32-1.78
3,3',4,4',5-PeCB	126	1.49	1.47	1.53	1.50	1.52	1.32-1.78
(156/157)	156/157	1.25	1.19	1.22	1.23	1.22	1.05-1.43
2,3',4,4',5,5'-HxCB	167	1.25	1.18	1.25	1.22	1.22	1.05-1.43
3,3',4,4',5,5'-HxCB	169	1.14	1.21	1.21	1.21	1.22	1.05-1.43
2,3,3',4,4',5,5'-HpCB	189	1.10	1.00	0.99	1.01	1.01	0.88-1.20

Limits(1) Isotope ratio range based on +/- 15% of theoretical values

* = Isotope ratio falls outside of specified range

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210820A02	Data File	Y210820A_02
Calibration Date	08/20/2021	Injected By	CVS
Initial Calibration	Y210820A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

PCB Isomer	IUPAC	RT	Ratio	209 RF	Ical RF	%RSD	RFc
Internal Standards							
13C-3,4,4',5-TeCB	81	34.867	0.77	0.7563	0.8206	-7.83	0.8206
13C-3,3',4,4'-TeCB	77	35.437	0.78	0.7878	0.8285	-4.91	0.8285
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	0.7284	0.8296	-12.20	0.8296
13C-2,3,4,4',5-PeCB	114	38.393	1.53	0.7748	0.8437	-8.16	0.8437
13C-2,3',4,4',5-PeCB	118	37.840	1.53	0.7967	0.8870	-10.18	0.8870
13C-2,3',4,4',5'-PeCB	123	37.505	1.51	0.7647	0.8549	-10.55	0.8549
13C-3,3',4,4',5-PeCB	126	42.183	1.52	0.6660	0.7293	-8.67	0.7293
13C-HxCB (156/157)	156/157	45.240	1.23	0.7387	0.8232	-10.26	0.8232
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.21	0.7558	0.8696	-13.09	0.8696
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.20	0.6713	0.7320	-8.30	0.7320
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.03	0.9969	1.0598	-5.93	1.0598
Cleanup Standards							
13C-2,4,4'-TrCB	28	23.426	1.02	1.0451	1.1287	-7.41	1.1287
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	1.1762	1.2766	-7.87	1.2766
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	0.9408	0.9291	1.26	0.9291
RecoveryStandards							
13C-2,5-DiCB	9	15.373	1.53	1.8905	2.0320	-6.96	2.0320
13C-2,2',5,5'-TeCB	52	25.421	0.80	1.3486	1.3872	-2.78	1.3872
13C-2,2',4,5,5'-PeCB	101	32.704	1.61	1.1404	1.1789	-3.27	1.1789
13C-2,2',3,4,4',5'-HxCB	138	41.026	1.27	1.0629	1.0765	-1.26	1.0765
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.90	0.7097	0.7508	-5.48	0.7508

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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1668A Polychlorobiphenyl Single Point Calibration

Calibration ID	Y210820A02	Data File	Y210820A_02
Calibration Date	08/20/2021	Injected By	CVS
Initial Calibration	Y210820A02	Column Phase	SPB-OCTYL 0.25mm
Instrument	10MSHR12 (Y)	Column ID No.	261111-02

IUPAC	Co-elutions	RT	Ratio	209 RF	Ical RF	%RSD	RFc
81		34.883	0.77	1.0273	0.9363	9.72	0.9363
77		35.454	0.75	0.9043	0.9002	0.46	0.9002
104		26.478	1.61	1.4950	1.4564	2.65	1.4564
105		39.064	1.50	1.0189	0.8960	13.71	0.8960
114		38.410	1.52	0.9978	0.9293	7.37	0.9293
118		37.857	1.52	0.9772	0.9249	5.66	0.9249
123		37.521	1.49	0.9027	0.9281	-2.74	0.9281
126		42.200	1.50	0.9686	0.8959	8.11	0.8959
155		32.519	1.32	1.3786	1.3520	1.97	1.3520
156	156/157	45.257	1.19	1.0081	0.9413	7.09	0.9413
167		44.100	1.20	1.0670	0.9304	14.69	0.9304
169		48.544	1.23	1.0381	0.9394	10.51	0.9394
188		38.410	1.03	1.1211	1.0887	2.97	1.0887
189		51.088	1.03	0.9386	0.8926	5.15	0.8926

RT = Retention Time
209 RF = Response factor from 209 Mix
Ical RF = Response factor from Ical

% RSD = Relative Percent Difference in RF betwen 209 Mix and Ical
RFc = Response Factor used for quantitation

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Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210820A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/20/2021 01:29	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
Labeled Analytes						
13C-2,2',6-TrCB	19	16:42	1.03	0.7304	0.6670	9.50
13C-3,4,4'-TrCB	37	27:45	1.02	0.8992	0.9251	-2.80
13C-2,2',6,6'-TeCB	54	20:19	0.80	1.2104	1.2079	0.21
13C-3,4,4',5-TeCB	81	34:51	0.76	0.7978	0.8206	-2.78
13C-3,3',4,4'-TeCB	77	35:25	0.77	0.8180	0.8285	-1.27
13C-2,3,3',4,4'-PeCB	105	39:00	1.53	0.7364	0.8296	-11.24
13C-2,3,4,4',5-PeCB	114	38:22	1.54	0.7518	0.8437	-10.90
13C-2,3',4,4',5-PeCB	118	37:49	1.54	0.7876	0.8870	-11.21
13C-2,3',4,4',5'-PeCB	123	37:29	1.51	0.7544	0.8549	-11.75
13C-3,3',4,4',5-PeCB	126	42:09	1.53	0.6821	0.7293	-6.46
13C-HxCB (156/157)	156/157	45:14	1.22	0.7887	0.8232	-4.19
13C-2,3',4,4',5,5'-HxCB	167	44:03	1.23	0.8133	0.8696	-6.48
13C-3,3',4,4',5,5'-HxCB	169	48:30	1.22	0.7317	0.7320	-0.05
13C-2,3,3',4,4',5,5'-HpCB	189	51:02	1.03	1.0201	1.0598	-3.75
Cleanup Standards						
13C-2,4,4'-TrCB	28	23:24	1.01	1.0831	1.1287	-4.05
13C-2,3,3',5,5'-PeCB	111	35:29	1.58	1.2531	1.2766	-1.84
13C-2,2',3,3',5,5',6-HpCB	178	41:27	1.09	1.0068	0.9291	8.36
Recovery Standards						
13C-2,5-DiCB	9	15:21	1.53	1.8425	2.0320	-9.32
13C-2,2',5,5'-TeCB	52	25:24	0.80	1.3001	1.3872	-6.27
13C-2,2',4,5,5'-PeCB	101	32:41	1.61	1.1631	1.1789	-1.33
13C-2,2',3,4,4',5'-HxCB	138	41:00	1.25	0.9933	1.0765	-7.73
13C-2,2',3,3',4,4',5,5'-OcCB	194	53:09	0.89	0.6951	0.7508	-7.43

X = Outside Quality Control limits

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Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	Y210820A_01	Instrument ID	10MSHR12 (Y)
Standard	CS3-20-123-060	GC Column ID	261111-02
Analyzed	08/20/2021 01:29	ICAL ID	Y210818
Injected By	CVS		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
3,3',4,4'-TeCB	77	35:27	0.75	0.8479	0.9002	-5.80
3,4,4',5-TeCB	81	34:52	0.75	0.8973	0.9363	-4.17
2,2',4,6,6'-PeCB	104	26:28	1.64	1.4040	1.4564	-3.60
2,3,3',4,4'-PeCB	105	39:02	1.52	0.8421	0.8960	-6.02
2,3,4,4',5-PeCB	114	38:23	1.50	0.8749	0.9293	-5.86
2,3',4,4',5-PeCB	118	37:51	1.53	0.8558	0.9249	-7.46
2,3',4,4',5'-PeCB	123	37:31	1.52	0.8689	0.9281	-6.38
3,3',4,4',5-PeCB	126	42:12	1.51	0.8510	0.8959	-5.01
2,2',4,4',6,6'-HxCB	155	32:31	1.31	1.3026	1.3520	-3.65
HxCB (156/157)	156/157	45:15	1.21	0.8812	0.9413	-6.39
2,3',4,4',5,5'-HxCB	167	44:05	1.20	0.8767	0.9304	-5.77
3,3',4,4',5,5'-HxCB	169	48:31	1.20	0.8816	0.9394	-6.15
2,2',3,4',5,6,6'-HpCB	188	38:23	1.03	1.0605	1.0887	-2.59
2,3,3',4,4',5,5'-HpCB	189	51:05	1.01	0.8591	0.8926	-3.75

X = Outside Quality Control limits

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	P210821A_01	Instrument ID	10MSHR09 (P)
Standard	CS3-20-123-054	GC Column ID	261111-01
Analyzed	08/21/2021 13:53	ICAL ID	P210529
Injected By	BAL		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
Labeled Analytes						
13C-2,2',6-TrCB	19	15:31	1.03	0.7731	0.7301	5.90
13C-3,4,4'-TrCB	37	26:27	1.06	1.1991	1.2313	-2.61
13C-2,2',6,6'-TeCB	54	19:03	0.79	1.2128	1.1865	2.22
13C-3,4,4',5-TeCB	81	33:33	0.80	1.0234	1.0623	-3.67
13C-3,3',4,4'-TeCB	77	34:07	0.78	1.0341	1.1251	-8.09
13C-2,3,3',4,4'-PeCB	105	37:42	1.59	0.9449	1.0438	-9.47
13C-2,3,4,4',5-PeCB	114	37:02	1.58	0.9684	1.0462	-7.43
13C-2,3',4,4',5-PeCB	118	36:30	1.58	0.9781	1.0733	-8.87
13C-2,3',4,4',5'-PeCB	123	36:10	1.57	0.9527	1.0292	-7.43
13C-3,3',4,4',5-PeCB	126	40:52	1.57	0.9518	1.0494	-9.30
13C-HxCB (156/157)	156/157	43:55	1.28	1.0468	1.1470	-8.73
13C-2,3',4,4',5,5'-HxCB	167	42:45	1.24	1.0779	1.1573	-6.86
13C-3,3',4,4',5,5'-HxCB	169	47:13	1.27	1.0448	1.1453	-8.78
13C-2,3,3',4,4',5,5'-HpCB	189	49:44	1.07	1.3859	1.2978	6.79
Cleanup Standards						
13C-2,4,4'-TrCB	28	22:07	1.03	1.2769	1.2872	-0.80
13C-2,3,3',5,5'-PeCB	111	34:09	1.54	1.3099	1.3262	-1.23
13C-2,2',3,3',5,5',6-HpCB	178	40:06	1.05	1.0626	1.0337	2.79
Recovery Standards						
13C-2,5-DiCB	9	14:12	1.56	1.8412	1.6956	8.58
13C-2,2',5,5'-TeCB	52	24:06	0.78	1.2508	1.1857	5.49
13C-2,2',4,5,5'-PeCB	101	31:22	1.55	1.1240	1.0678	5.26
13C-2,2',3,4,4',5'-HxCB	138	39:39	1.26	0.9411	0.9675	-2.73
13C-2,2',3,3',4,4',5,5'-OcCB	194	51:50	0.92	0.6520	0.8056	-19.06

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668A
Polychlorobiphenyl Continuing Calibration

Run Name:	P210821A_01	Instrument ID	10MSHR09 (P)
Standard	CS3-20-123-054	GC Column ID	261111-01
Analyzed	08/21/2021 13:53	ICAL ID	P210529
Injected By	BAL		

Compound	IUPAC	RT	Ion Abund. Ratio	Daily RF	Average RF	Deviation (%)
3,3',4,4'-TeCB	77	34:09	0.78	1.0141	0.9856	2.89
3,4,4',5-TeCB	81	33:34	0.77	1.0348	1.0338	0.09
2,2',4,6,6'-PeCB	104	25:07	1.55	1.0562	1.1107	-4.91
2,3,3',4,4'-PeCB	105	37:43	1.54	0.9926	0.9710	2.23
2,3,4,4',5-PeCB	114	37:03	1.57	1.0041	0.9889	1.53
2,3',4,4',5-PeCB	118	36:31	1.55	1.0492	0.9880	6.20
2,3',4,4',5'-PeCB	123	36:11	1.53	1.0192	1.0055	1.37
3,3',4,4',5-PeCB	126	40:54	1.54	0.9960	0.9612	3.62
2,2',4,4',6,6'-HxCB	155	31:08	1.26	1.0086	1.0403	-3.05
HxCB (156/157)	156/157	43:56	1.25	1.0648	0.9998	6.50
2,3',4,4',5,5'-HxCB	167	42:47	1.26	1.0278	1.0082	1.94
3,3',4,4',5,5'-HxCB	169	47:14	1.26	1.0162	0.9998	1.64
2,2',3,4',5,6,6'-HpCB	188	37:01	1.03	0.9915	1.0045	-1.29
2,3,3',4,4',5,5'-HpCB	189	49:46	1.04	1.0301	0.9955	3.48

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REPORT OF LABORATORY ANALYSIS

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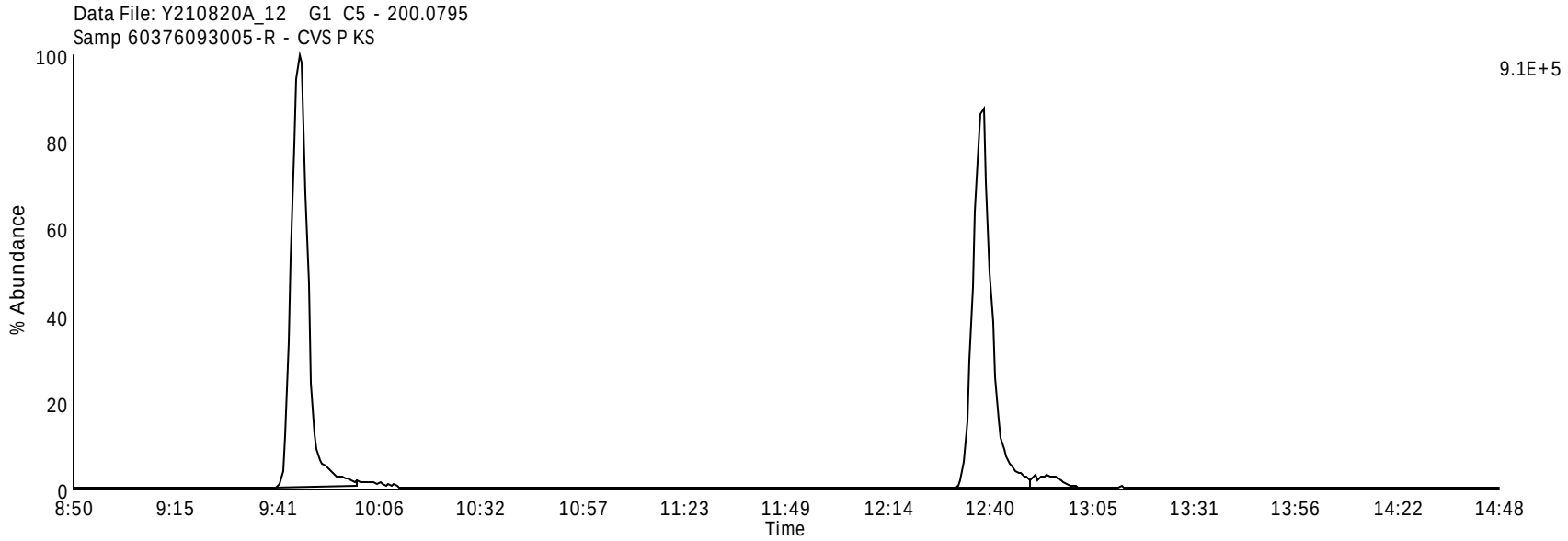
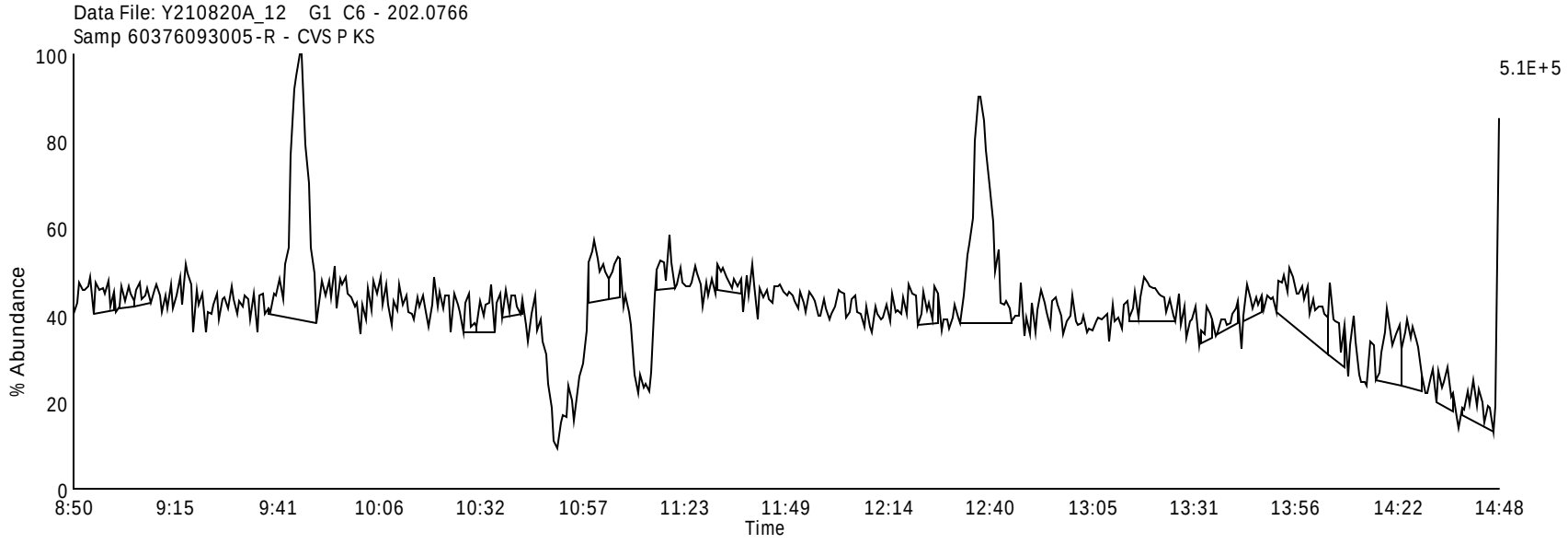
Appendix D

Sample Raw Data

Labeled Mono Chlorinated Biphenyls

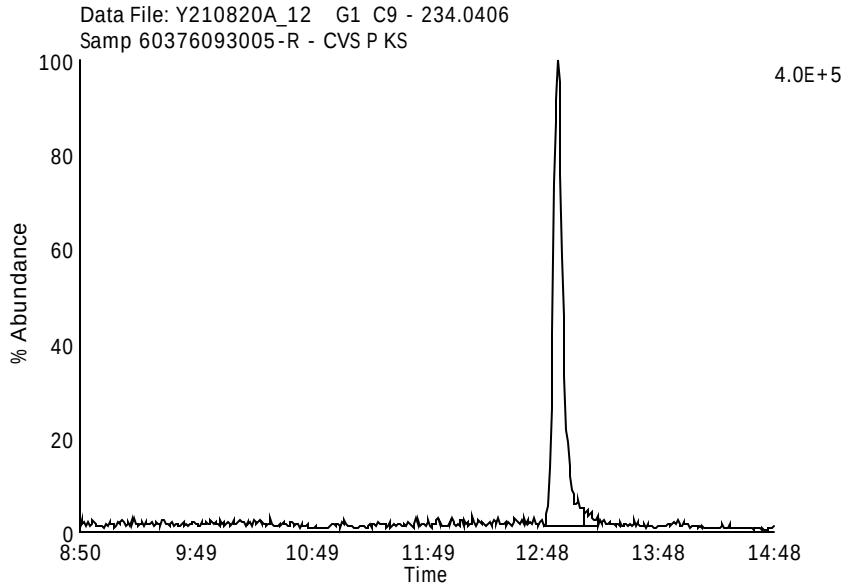
Data File Name: Y210820A_12	Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS	Client Sample ID: GB-30/3-4

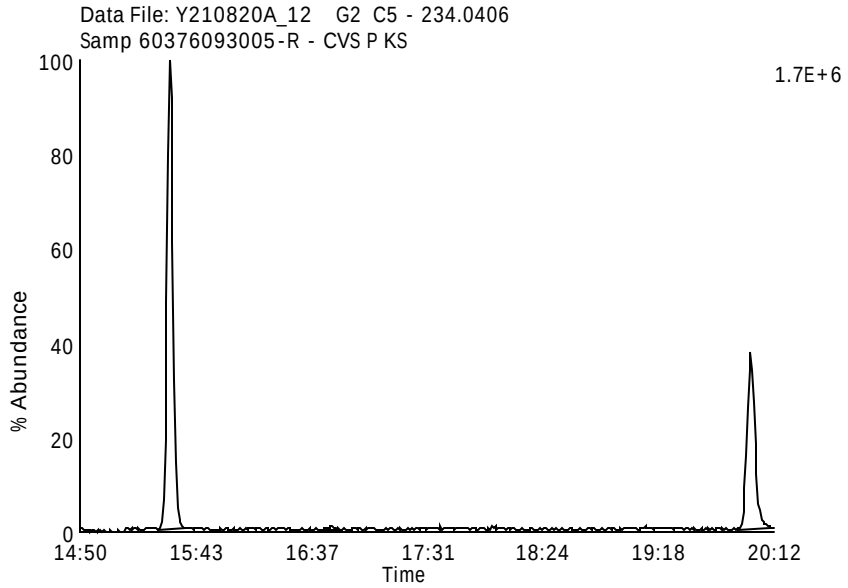


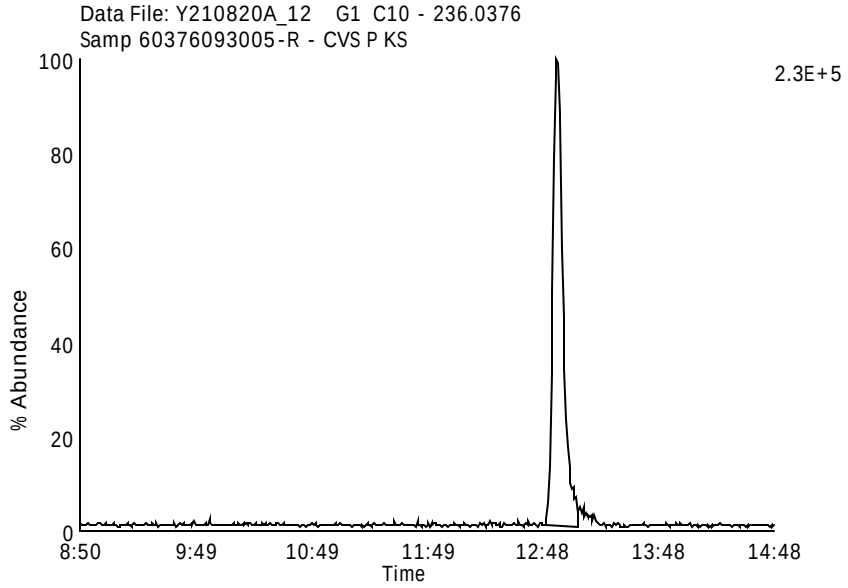


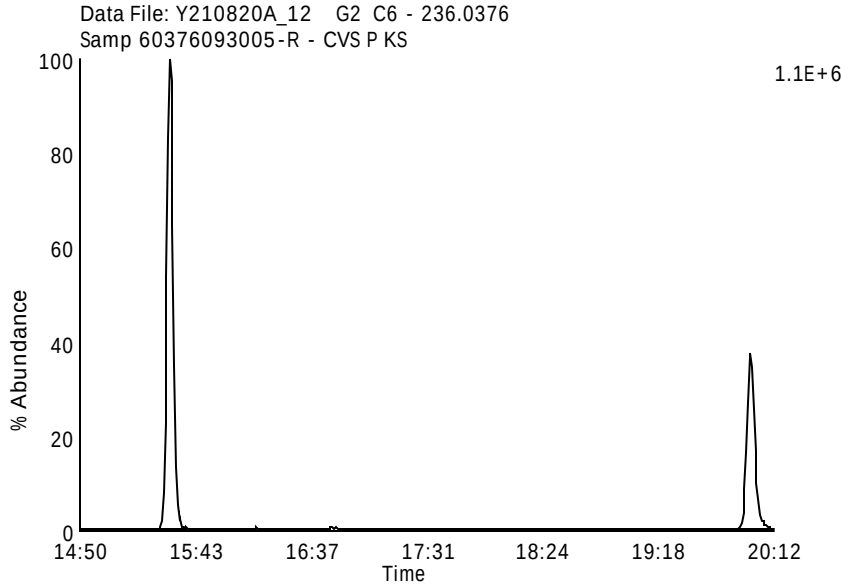
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4



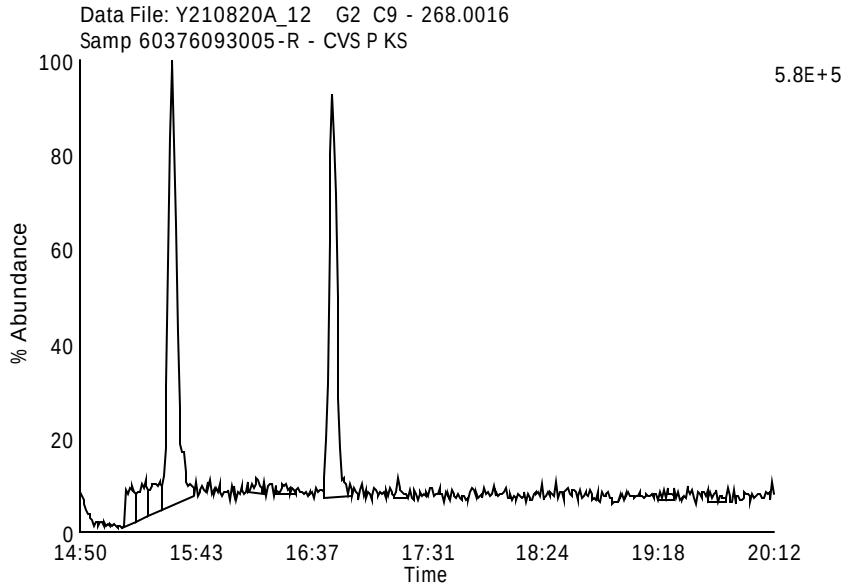


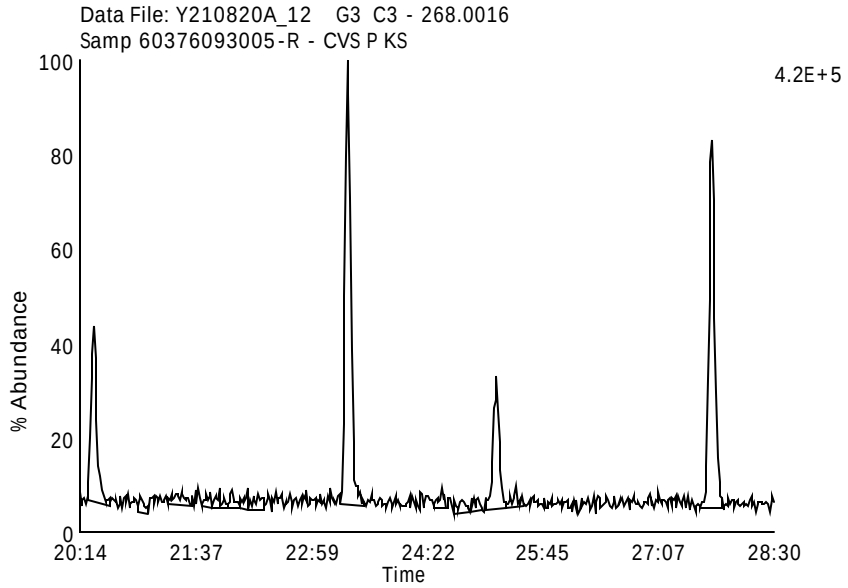


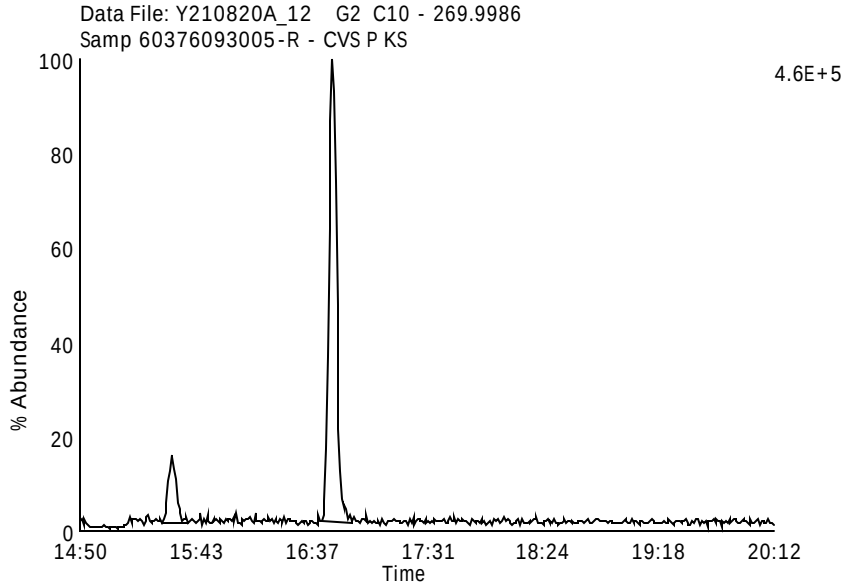


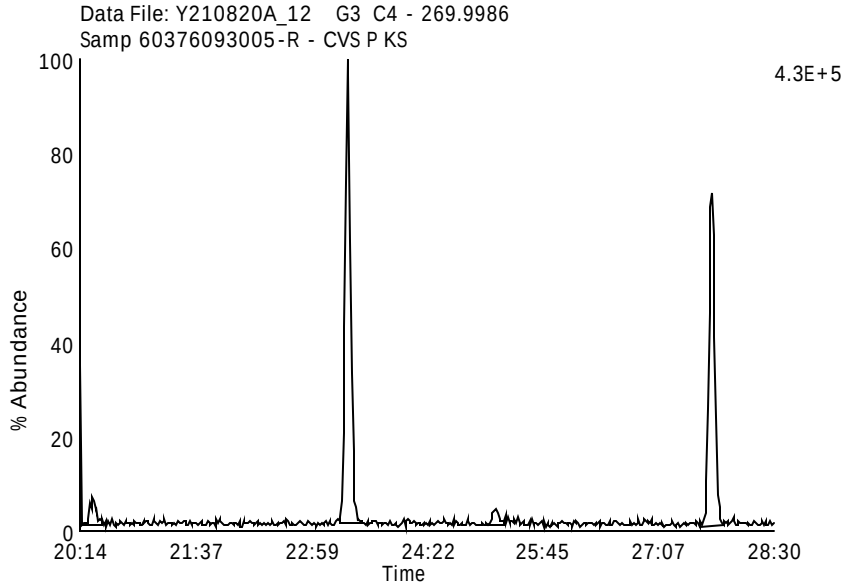
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4



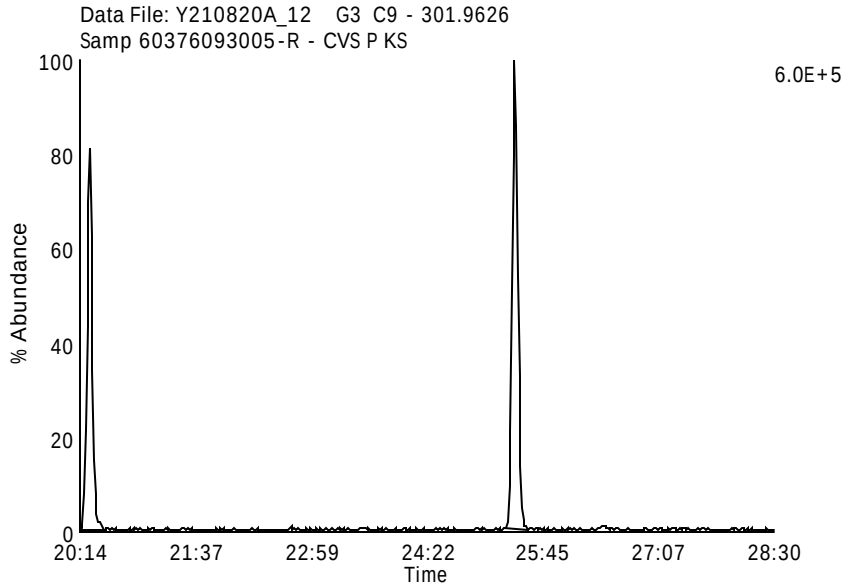


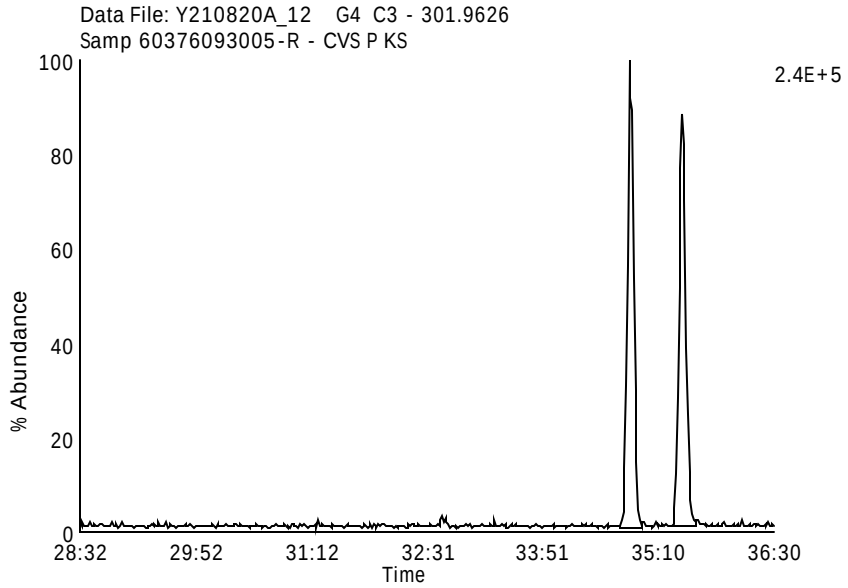


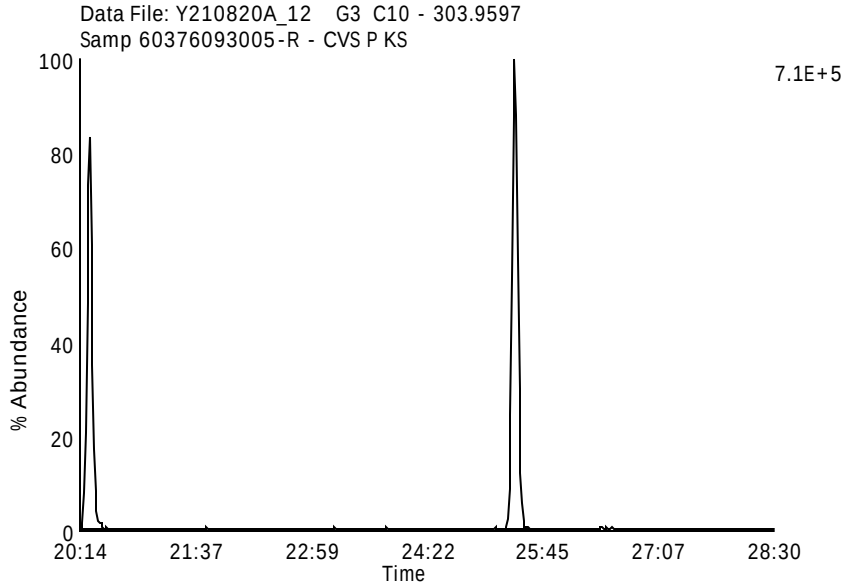


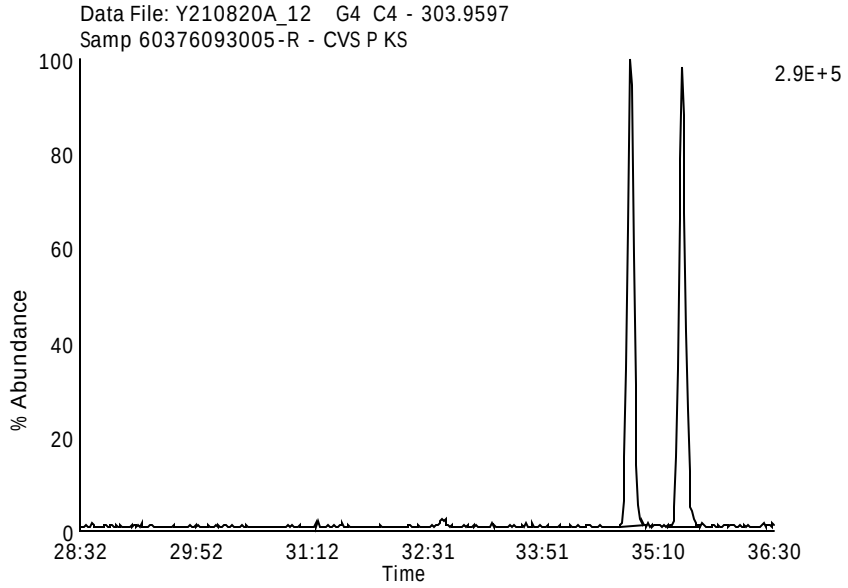
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4







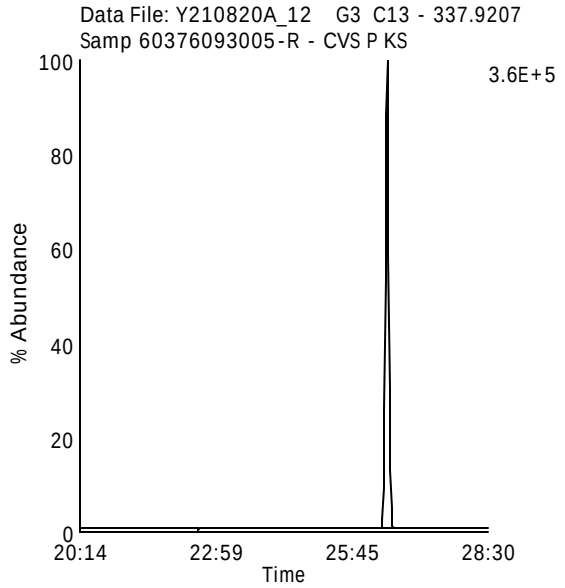


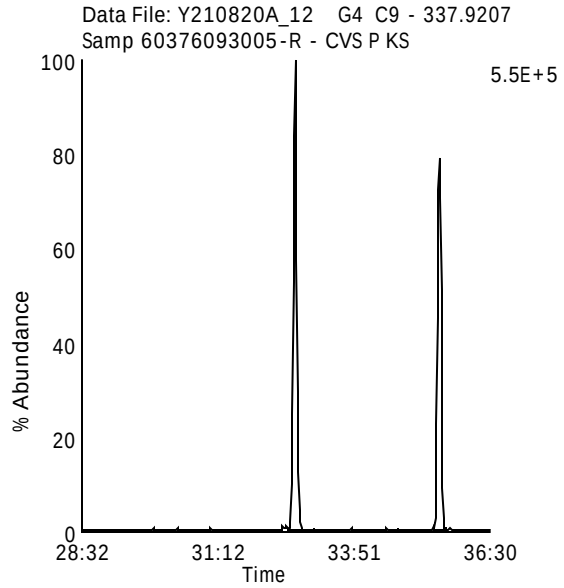
Labeled Penta Chlorinated Biphenyls

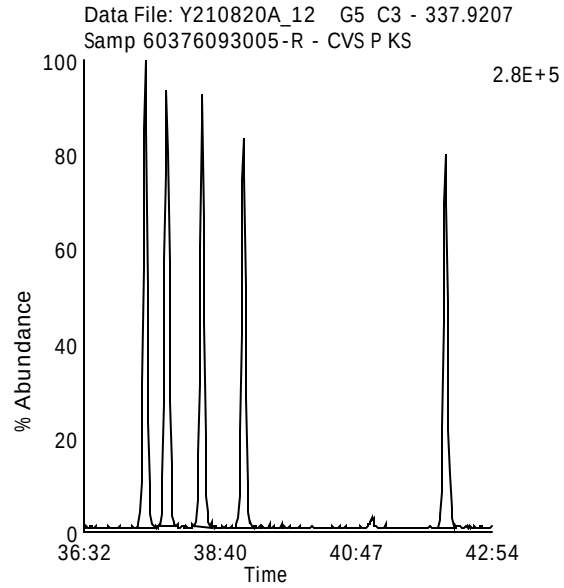
Data File Name: Y210820A_12 | Lab Sample ID: 60376093005-R

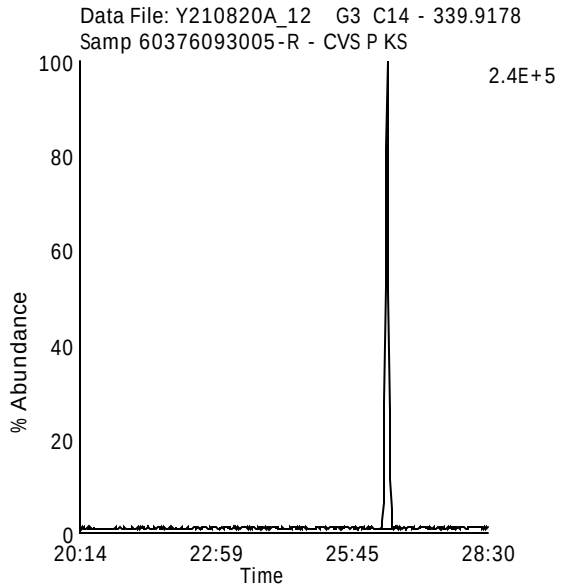
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)

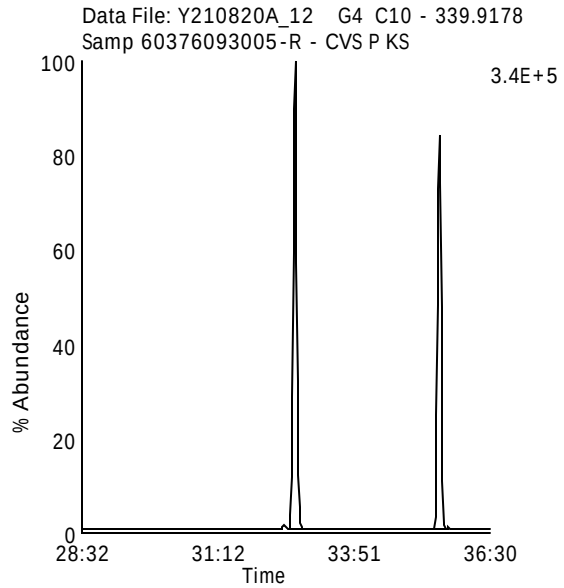
Sample Description: Samp 60376093005-R - CVS P KS | Client Sample ID: GB-30/3-4

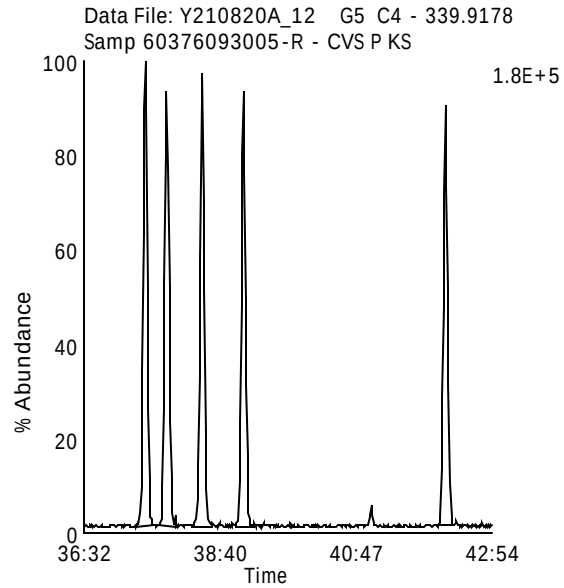






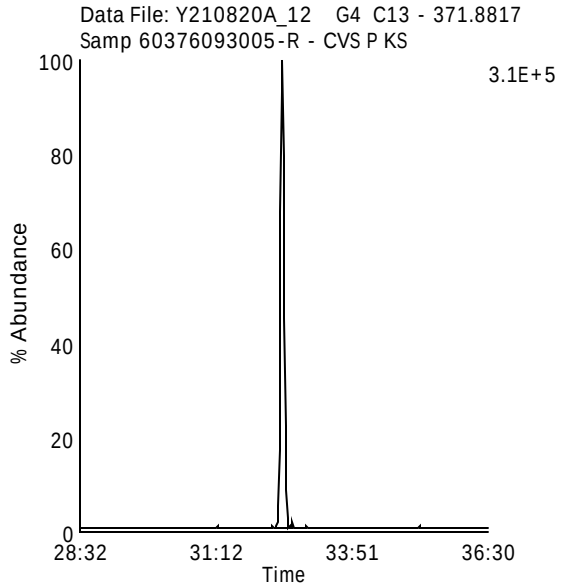


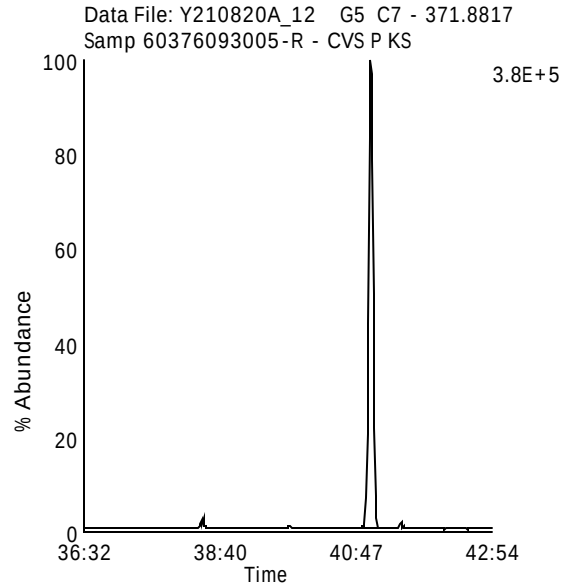


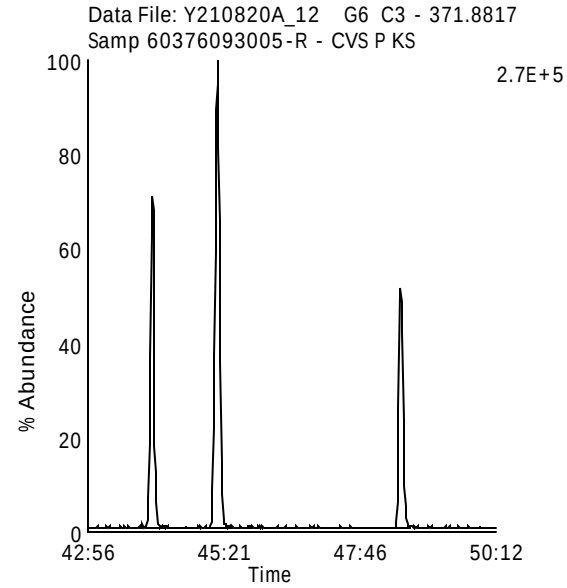


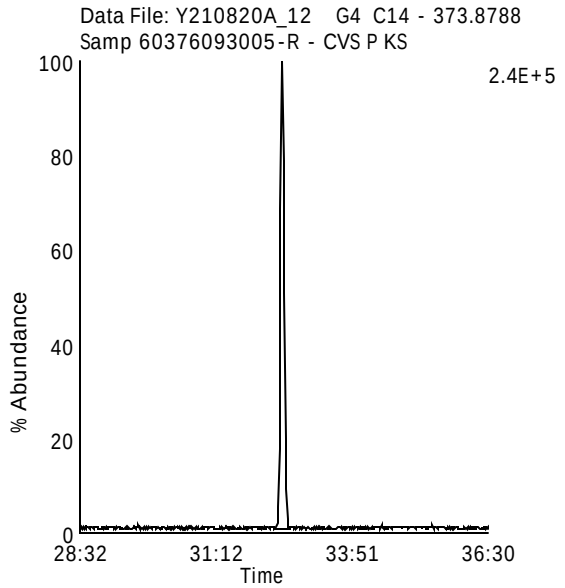
Labeled Hexa Chlorinated Biphenyls

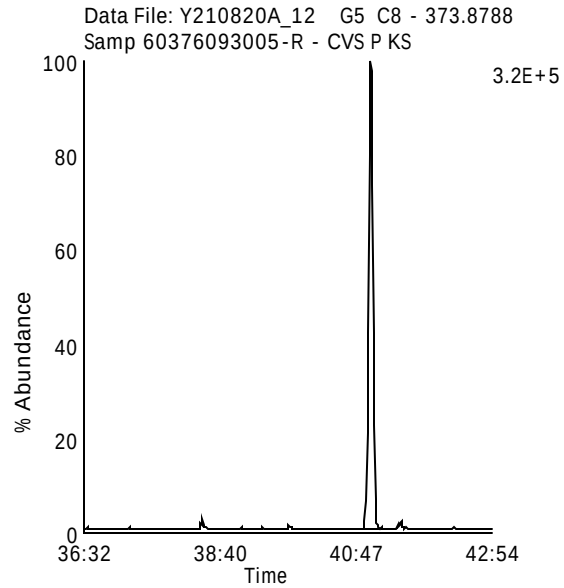
Data File Name: Y210820A_12 | Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS | Client Sample ID: GB-30/3-4

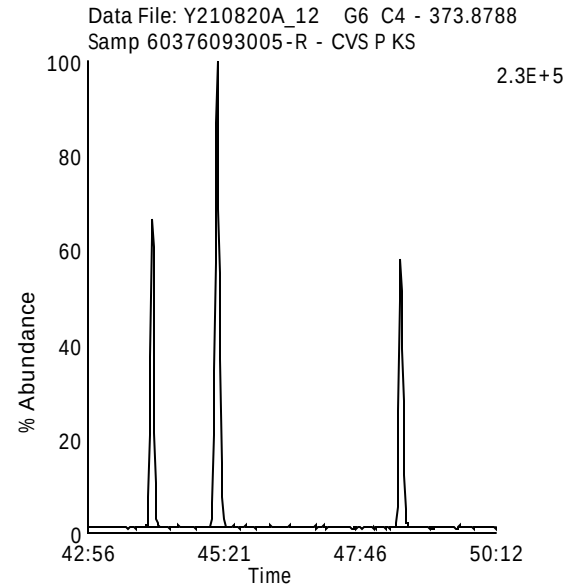






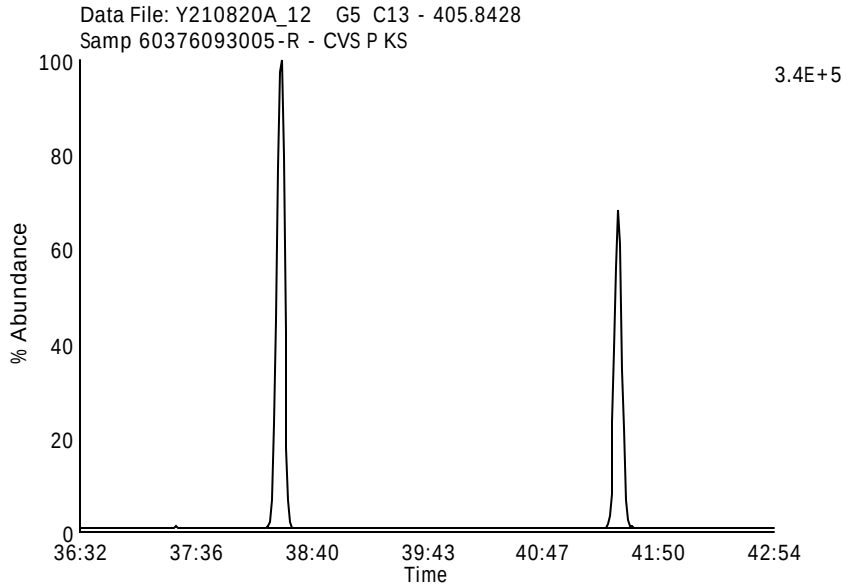


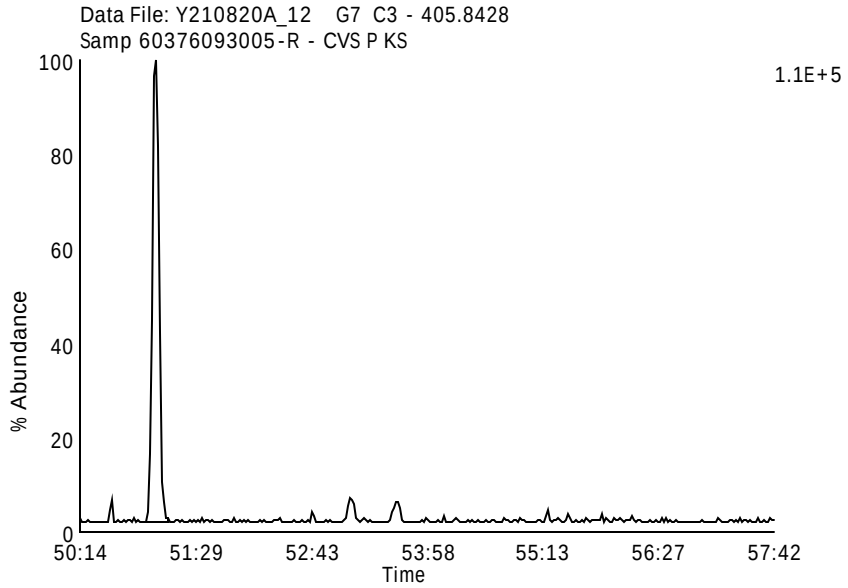


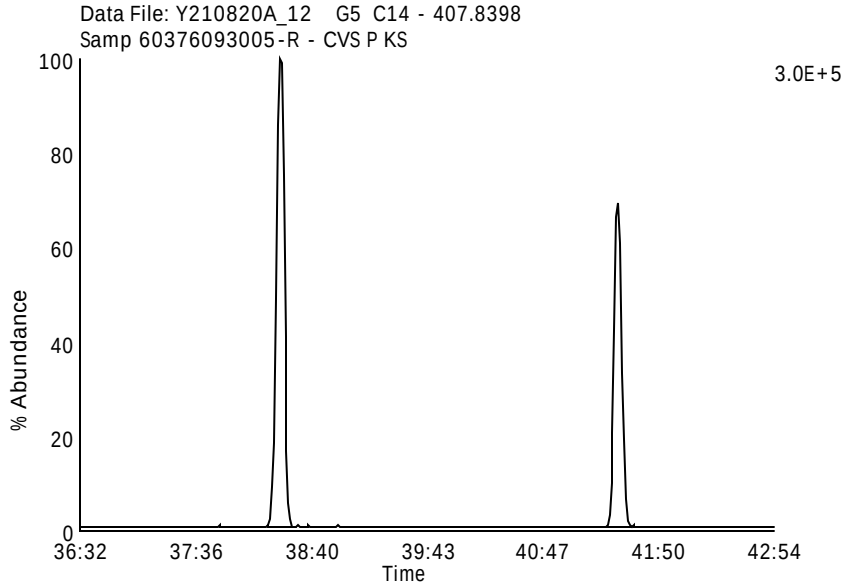


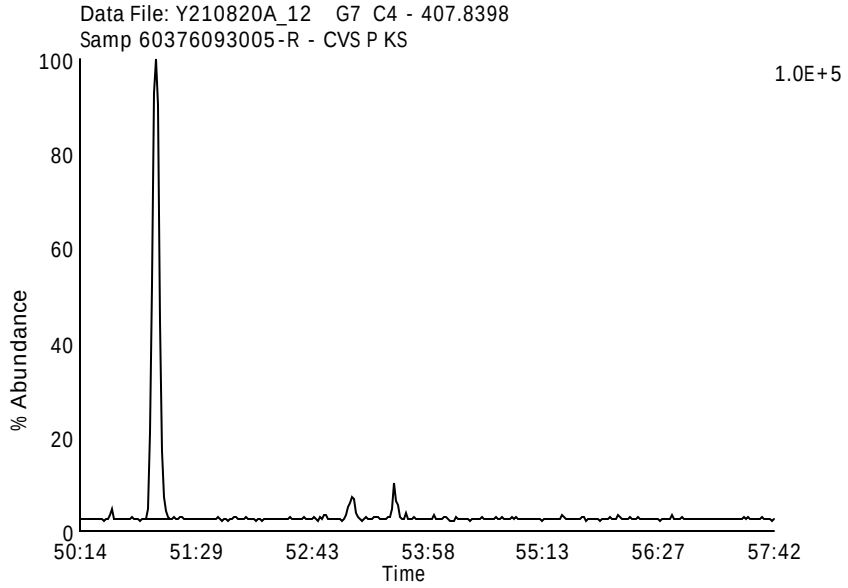
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4







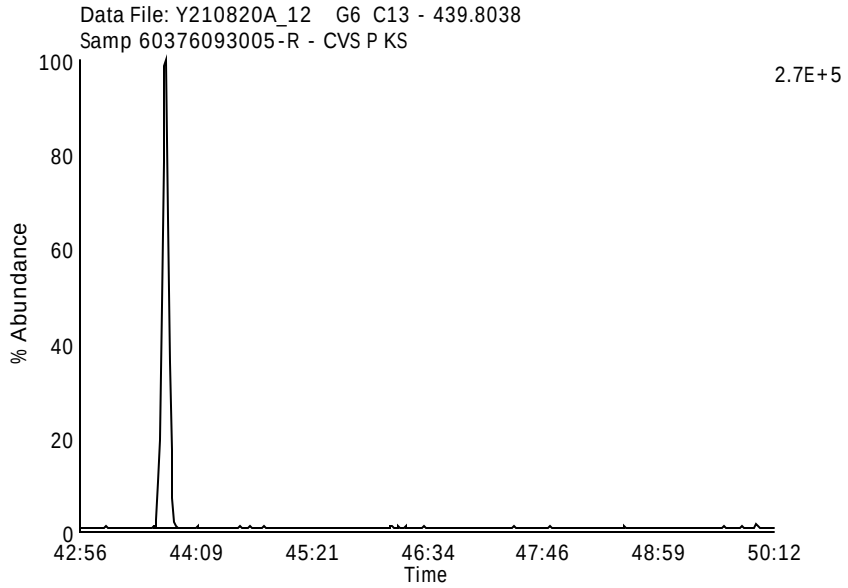


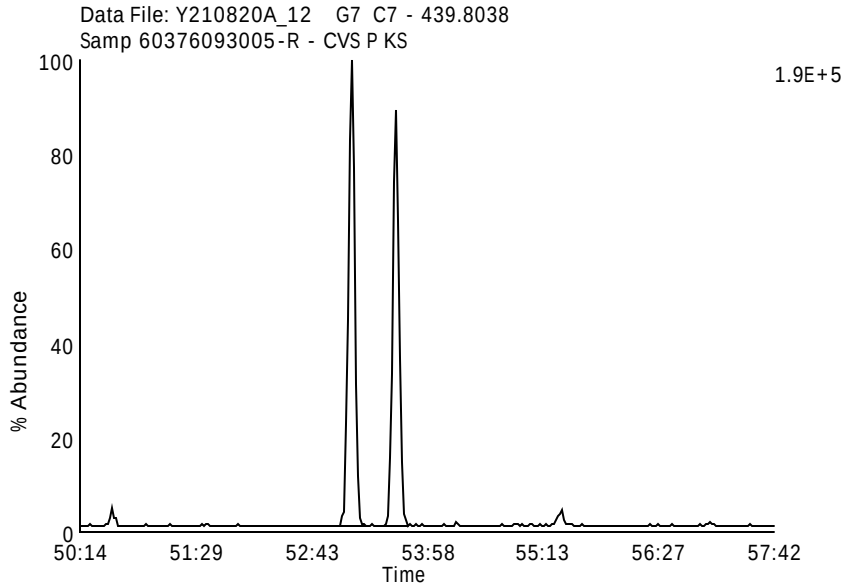
Labeled Octa Chlorinated Biphenyls

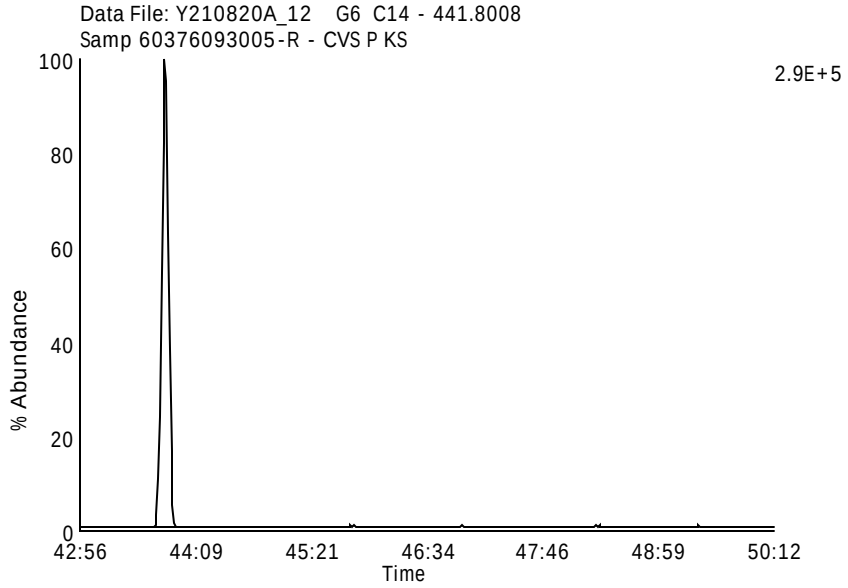
Data File Name: Y210820A_12 | Lab Sample ID: 60376093005-R

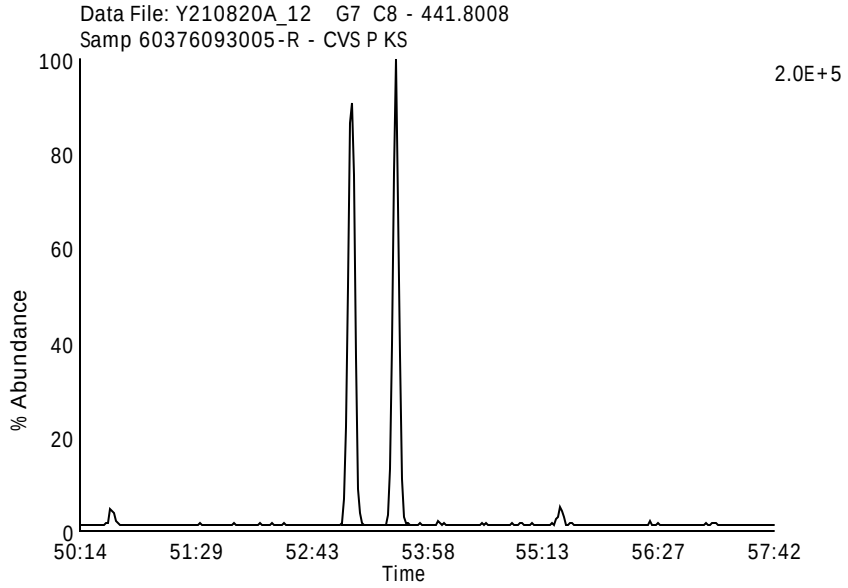
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)

Sample Description: Samp 60376093005-R - CVS P KS | Client Sample ID: GB-30/3-4



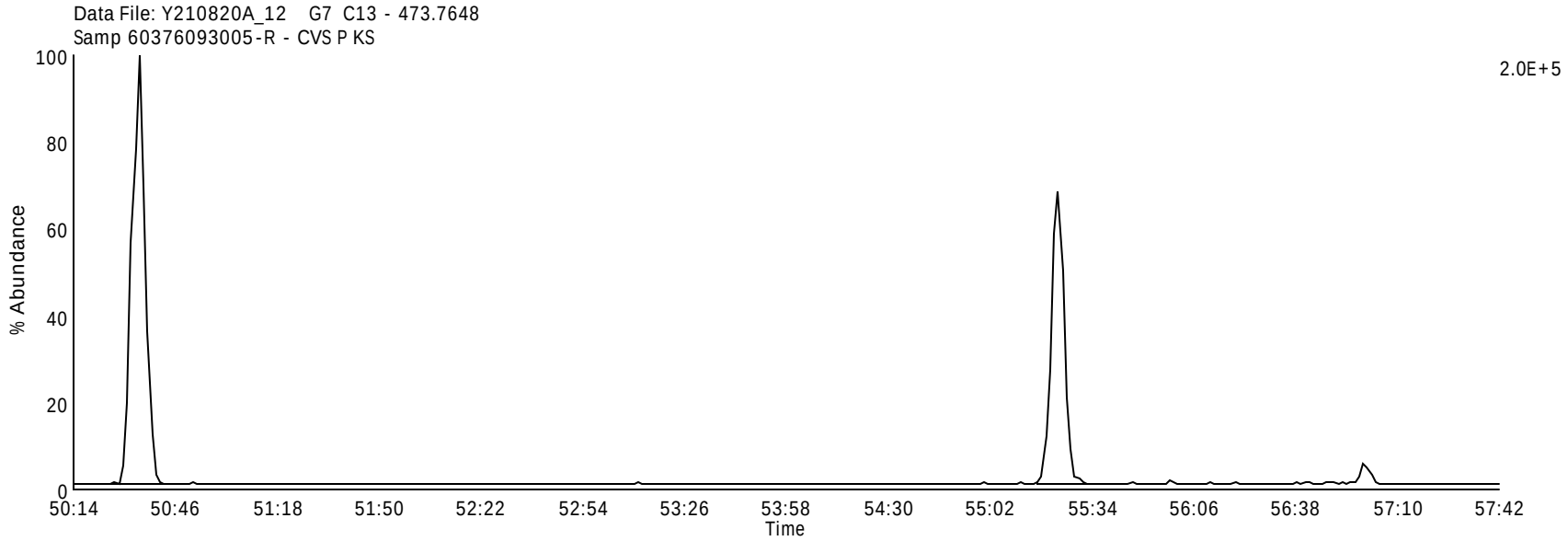


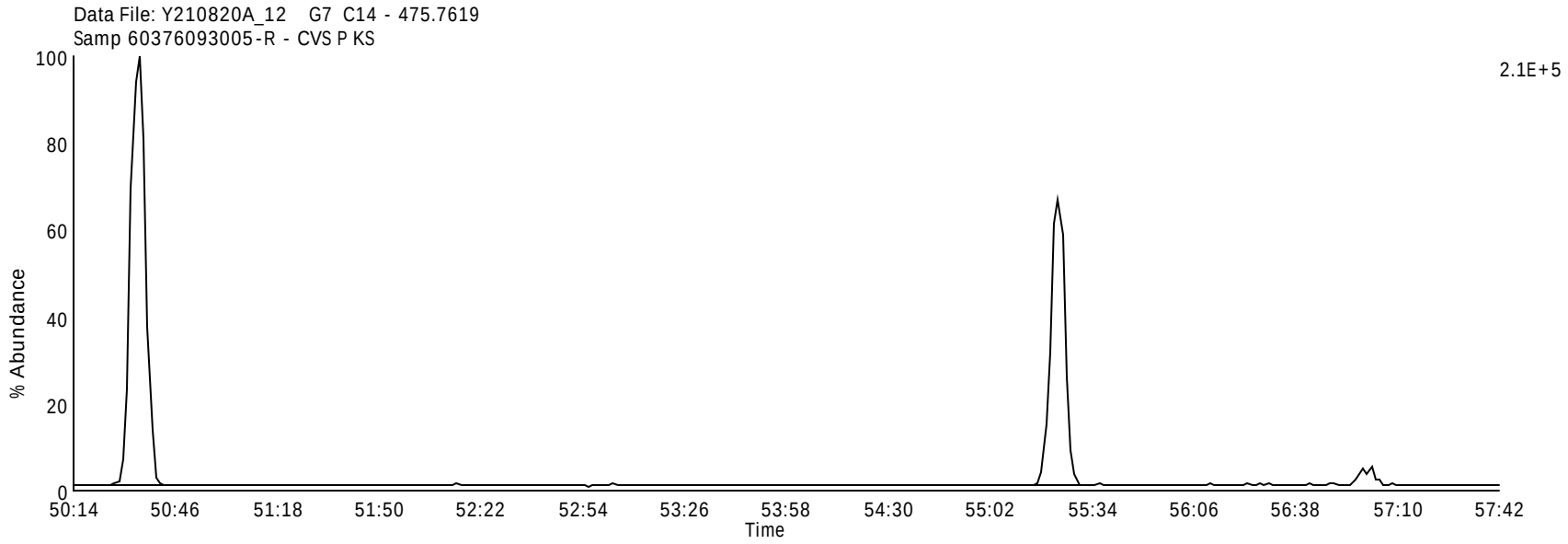




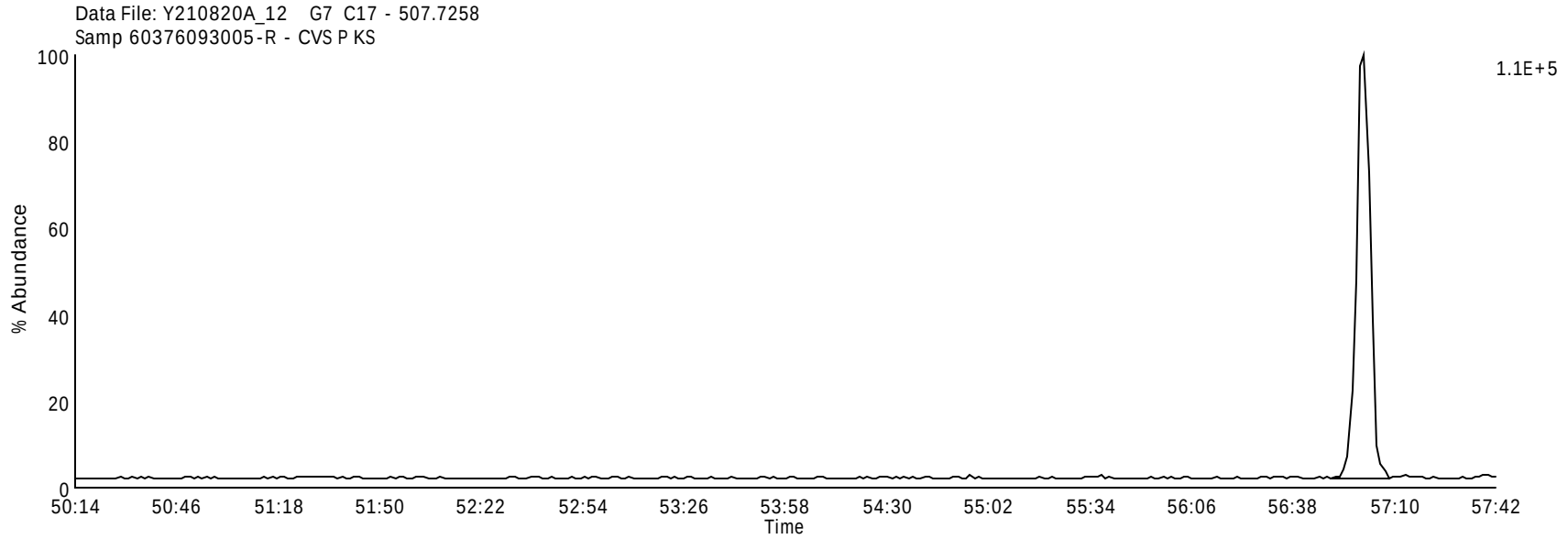
Labeled Nona Chlorinated Biphenyls

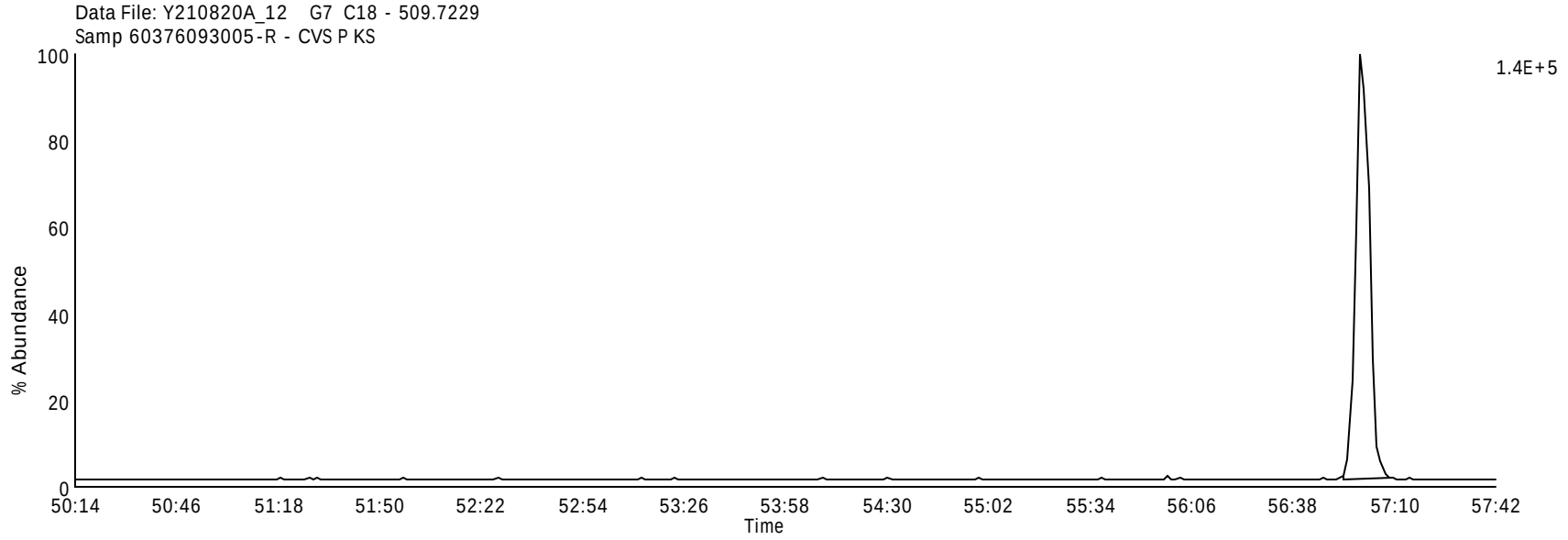
Data File Name: Y210820A_12	Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS	Client Sample ID: GB-30/3-4





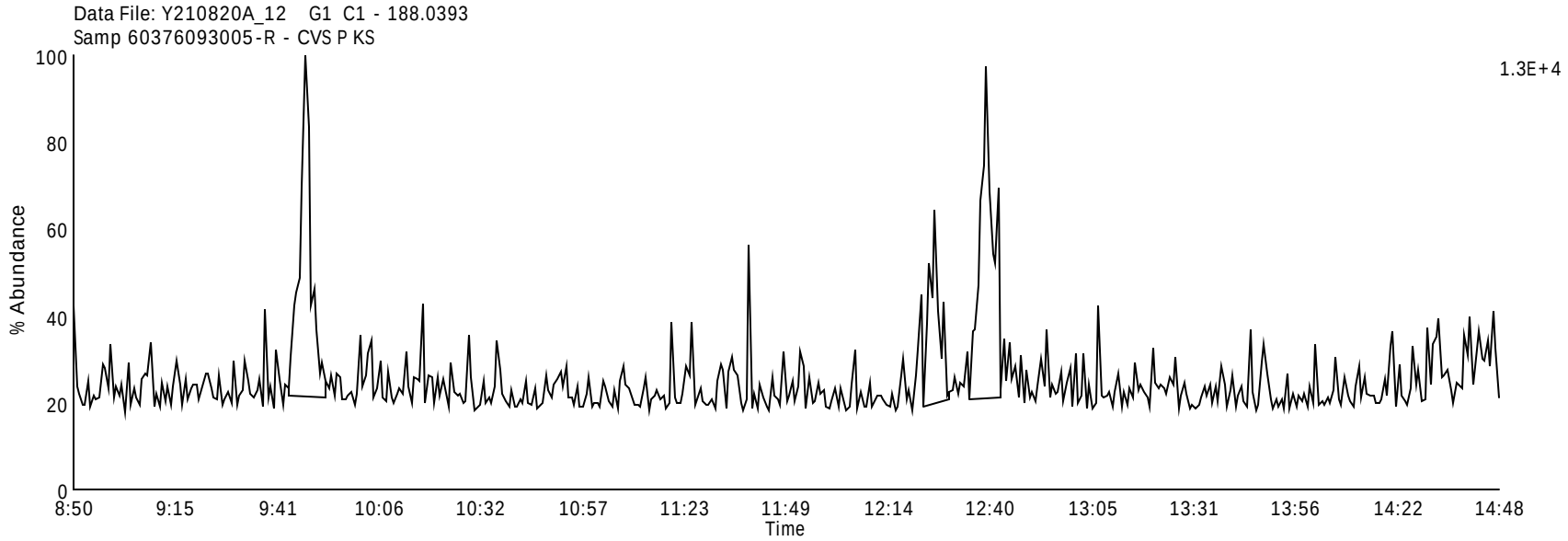
Labeled Deca Chlorinated Biphenyl	
Data File Name: Y210820A_12	Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS	Client Sample ID: GB-30/3-4

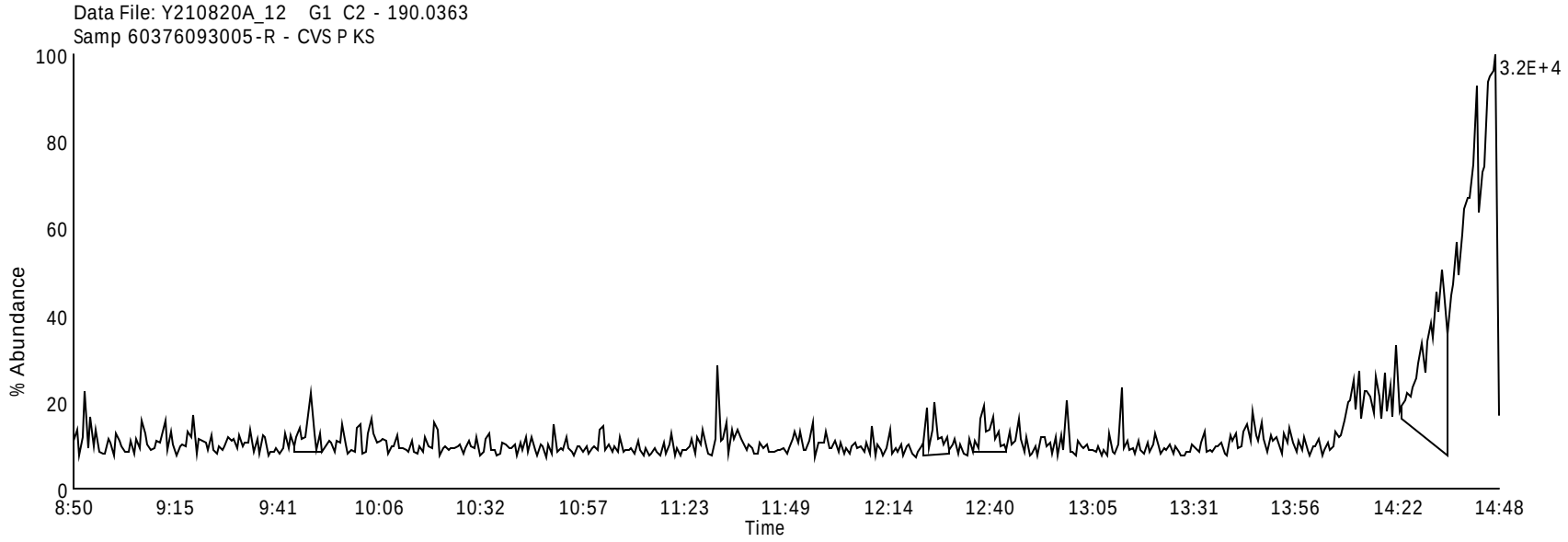




Mono Chlorinated Biphenyls

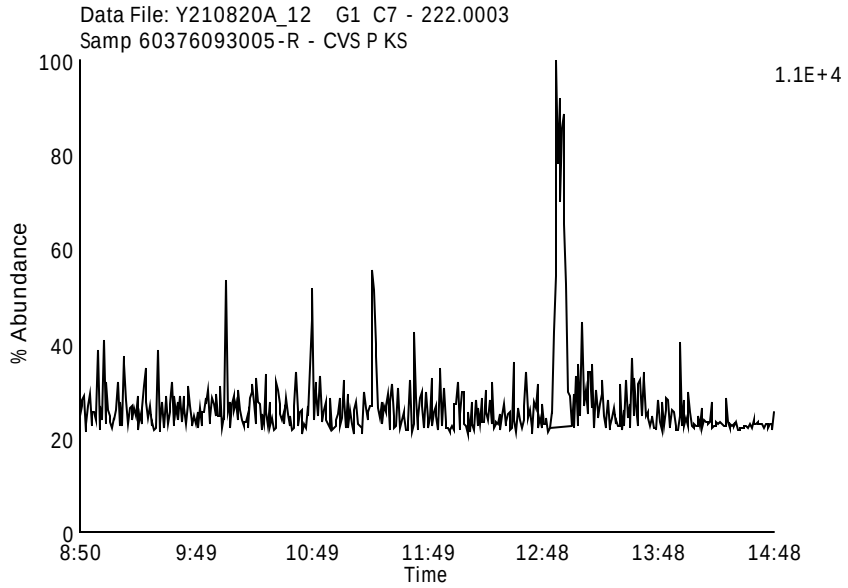
Data File Name: Y210820A_12	Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS	Client Sample ID: GB-30/3-4

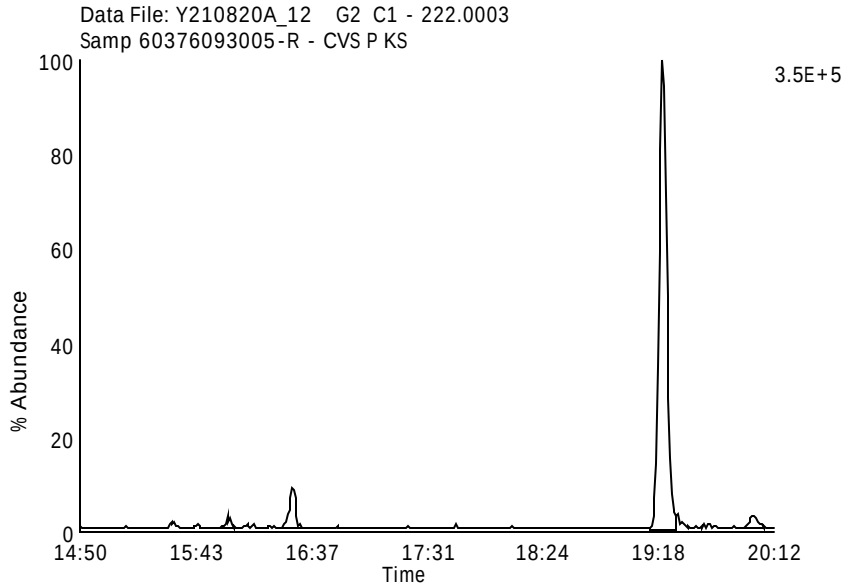


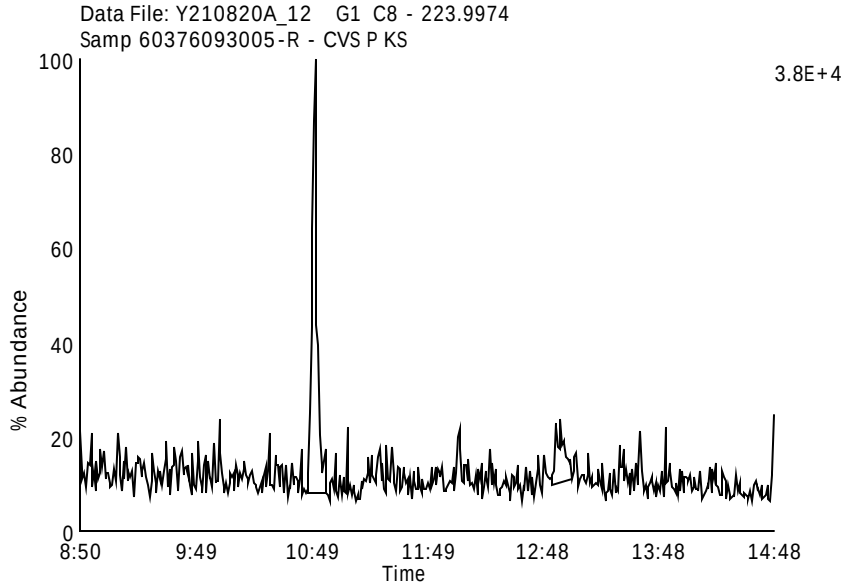


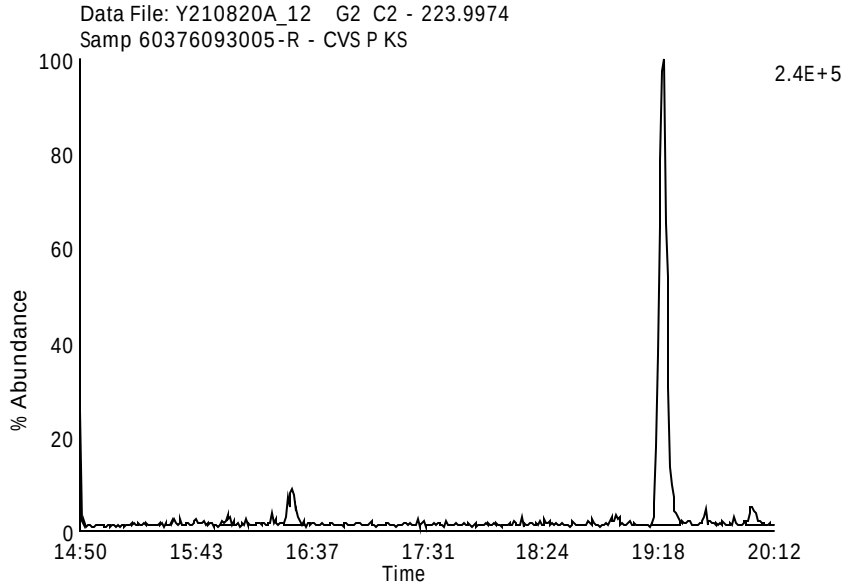
Di Chlorinated Biphenyls

Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4



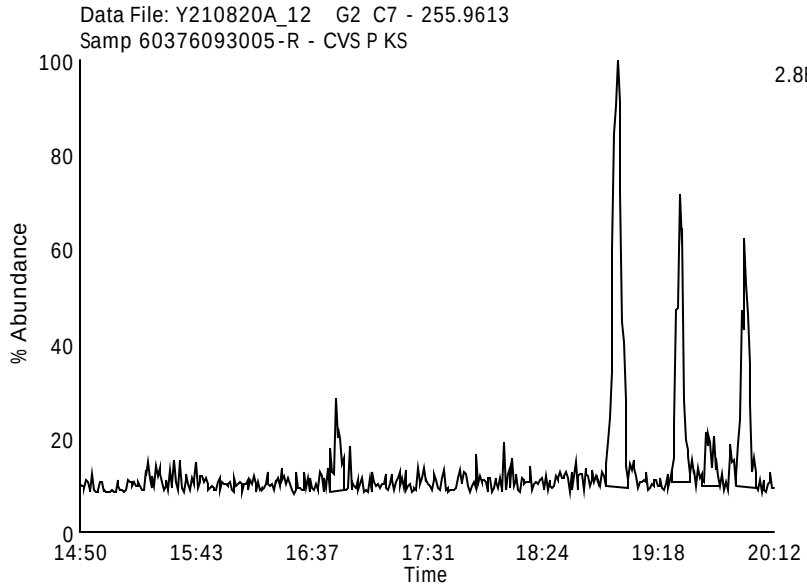


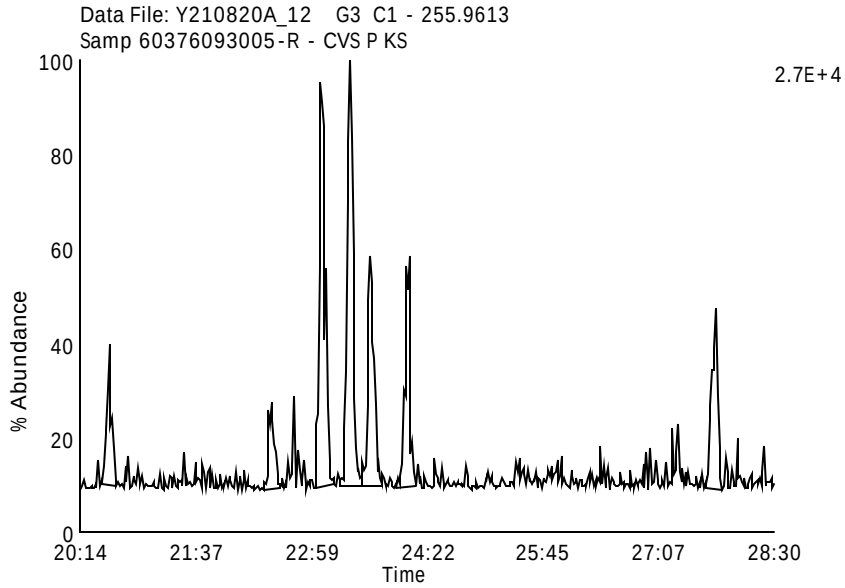


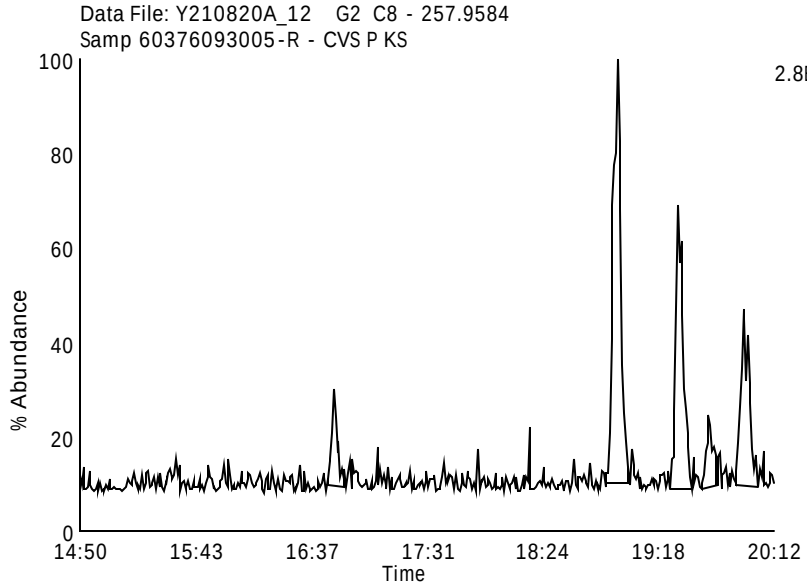


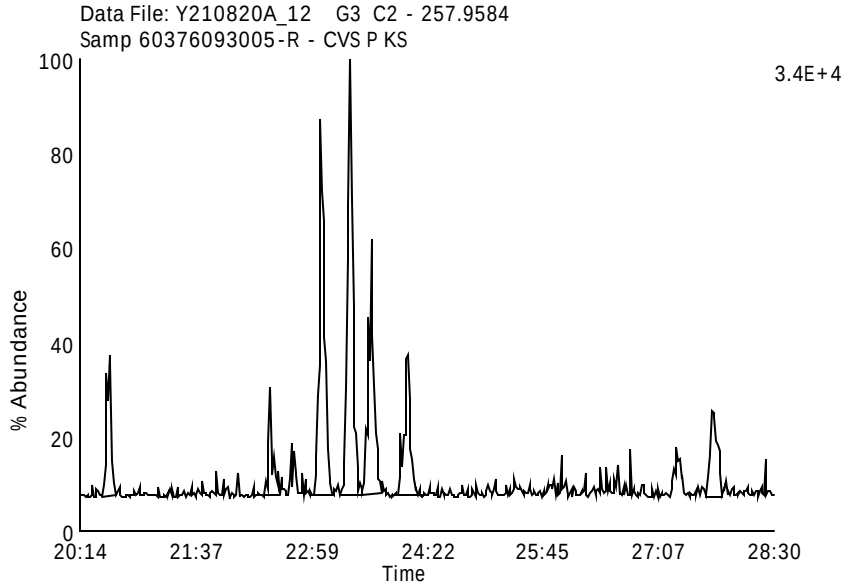
Tri Chlorinated Biphenyls

Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4



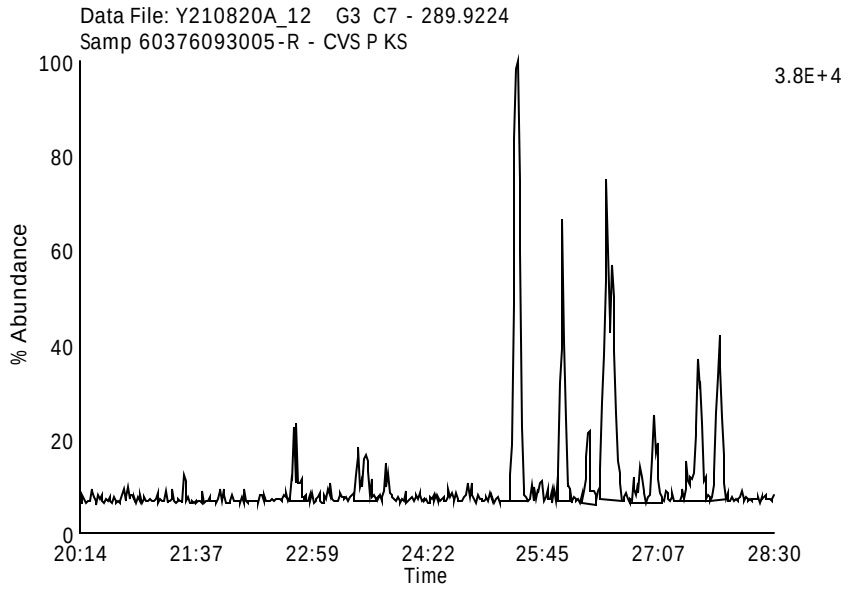


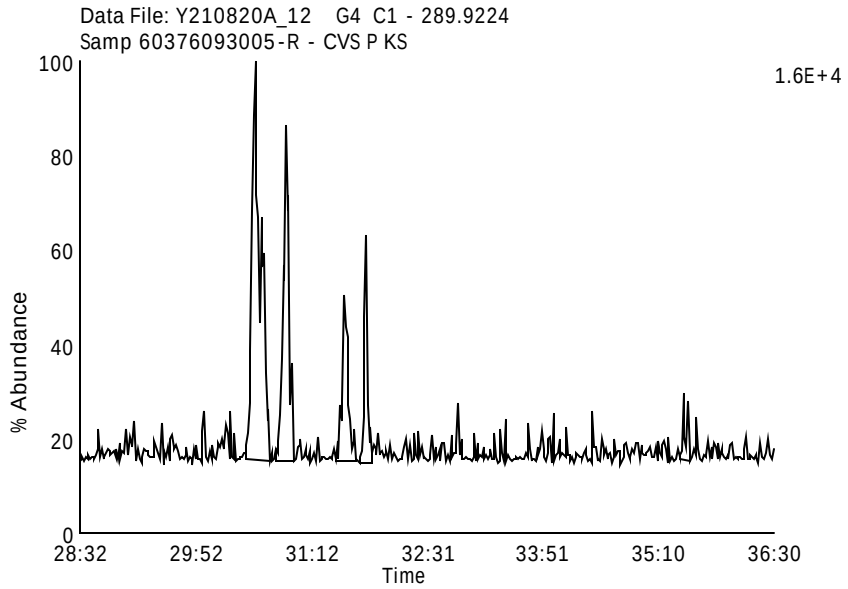


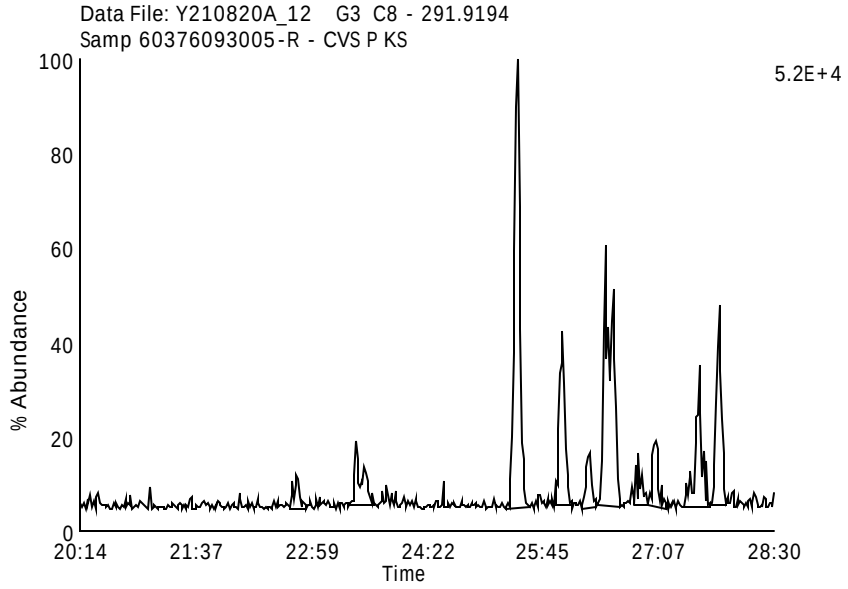


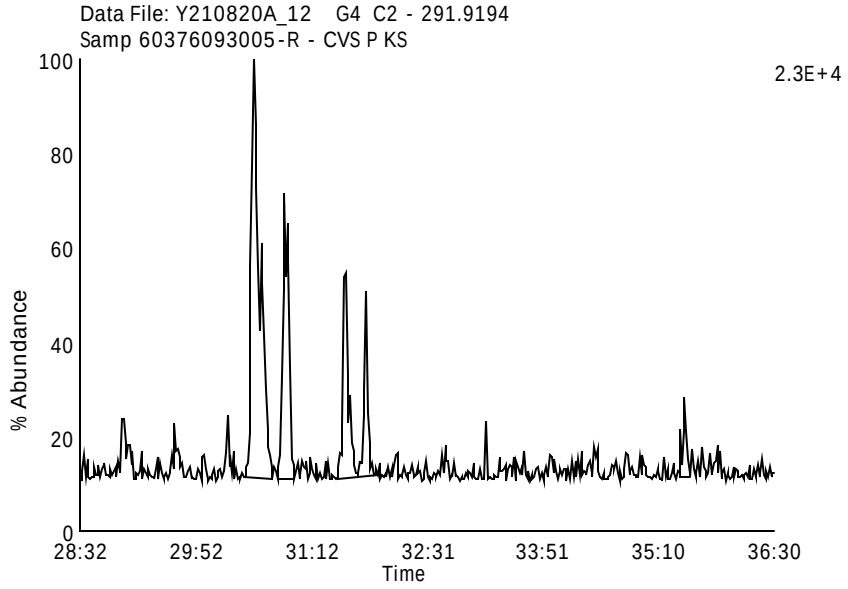
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4



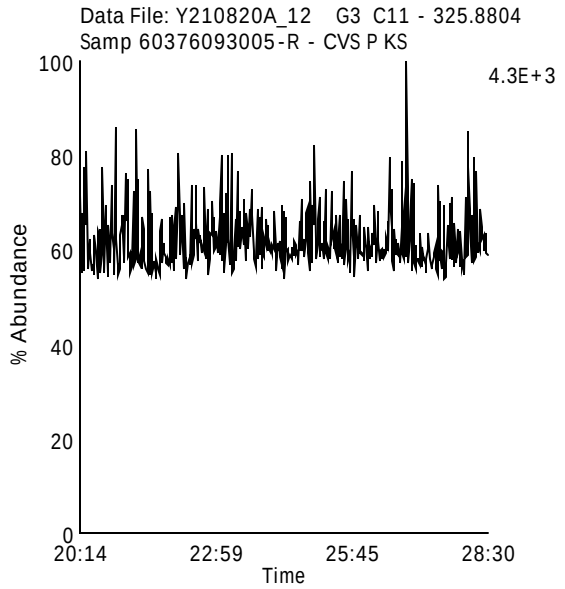


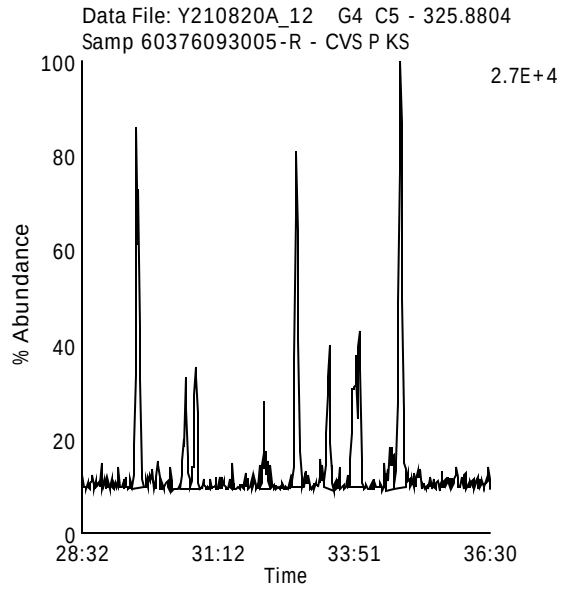


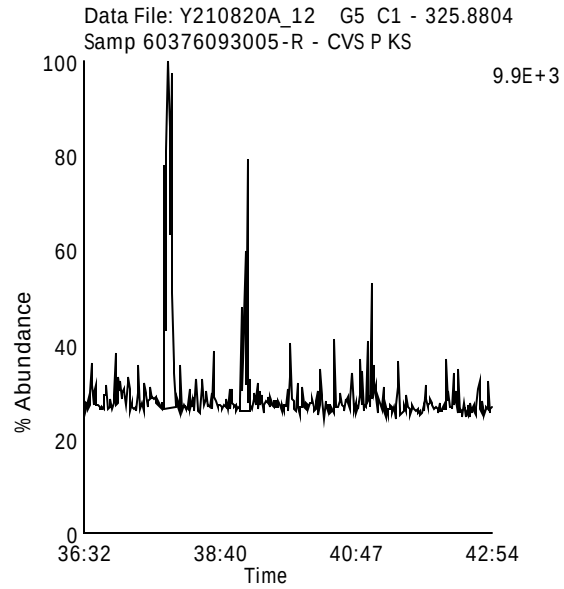


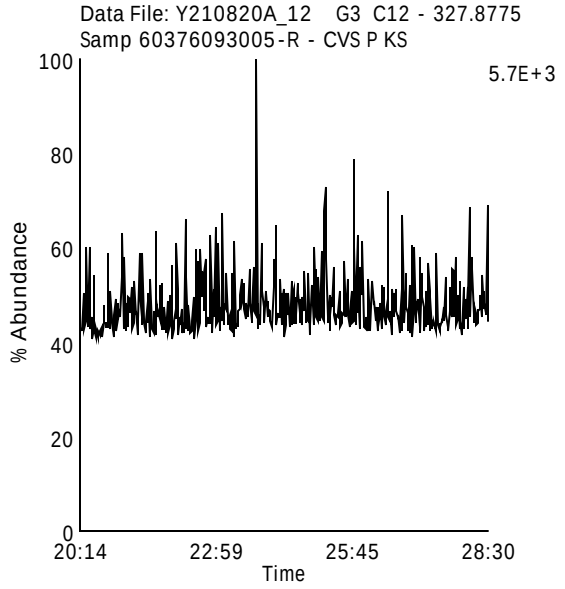
Penta Chlorinated Biphenyls

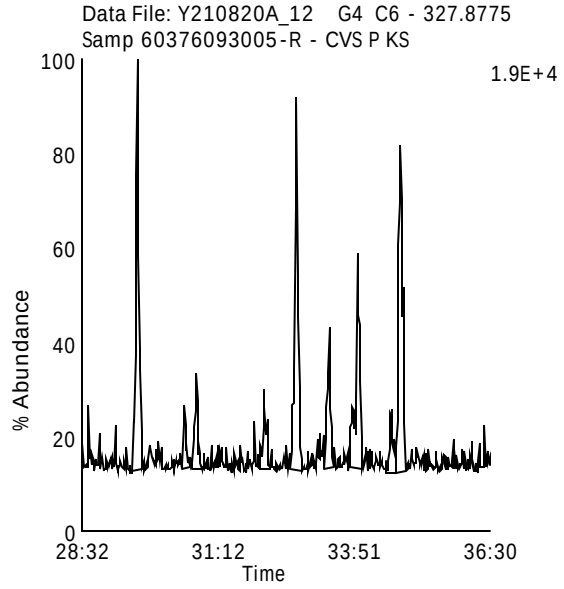
Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4

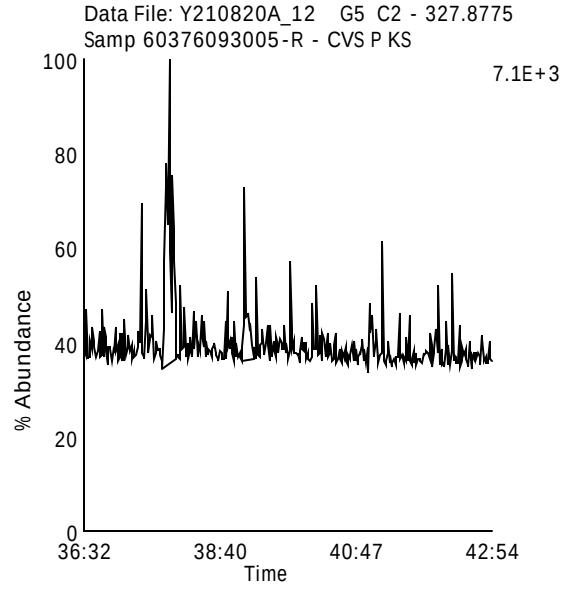






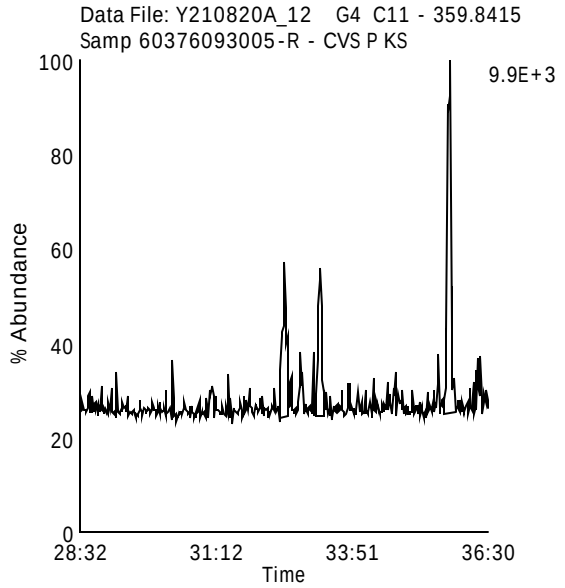


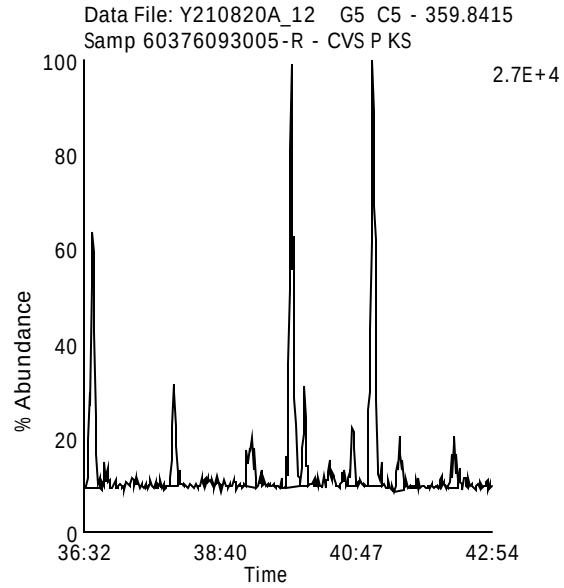


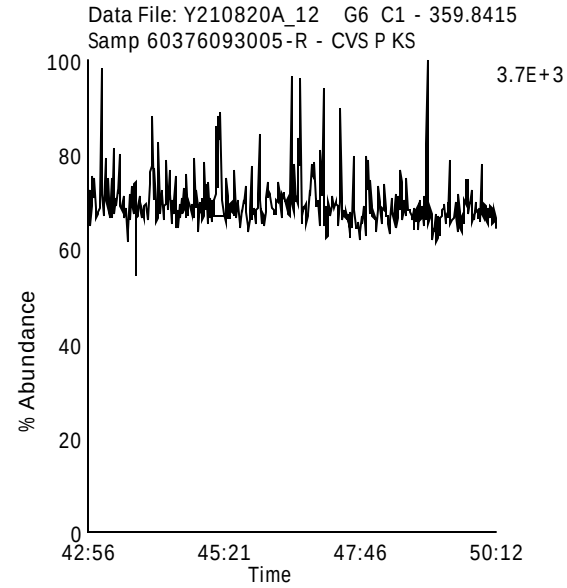


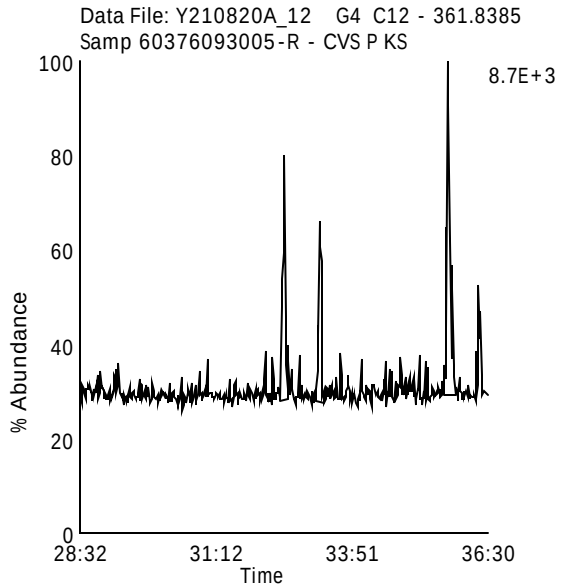
Hexa Chlorinated Biphenyls

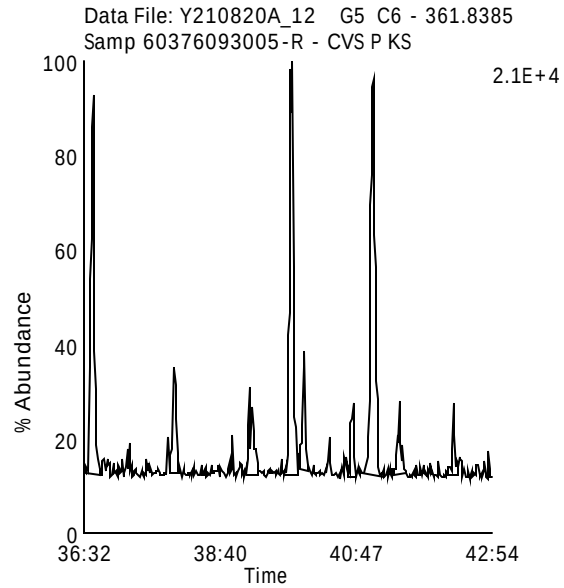
Data File Name: Y210820A_12 | Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS | Client Sample ID: GB-30/3-4

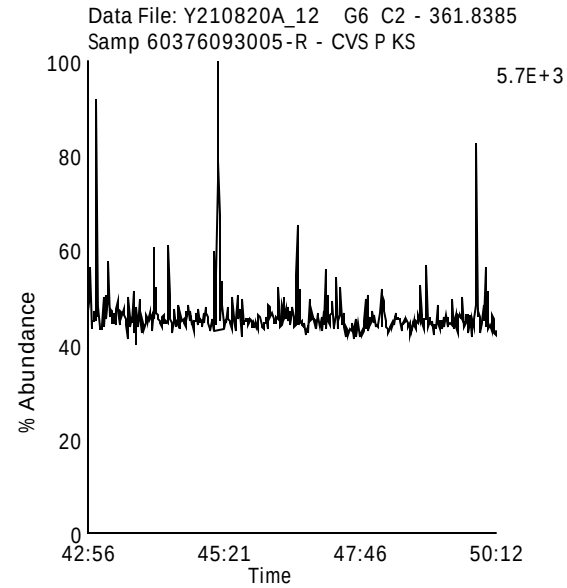






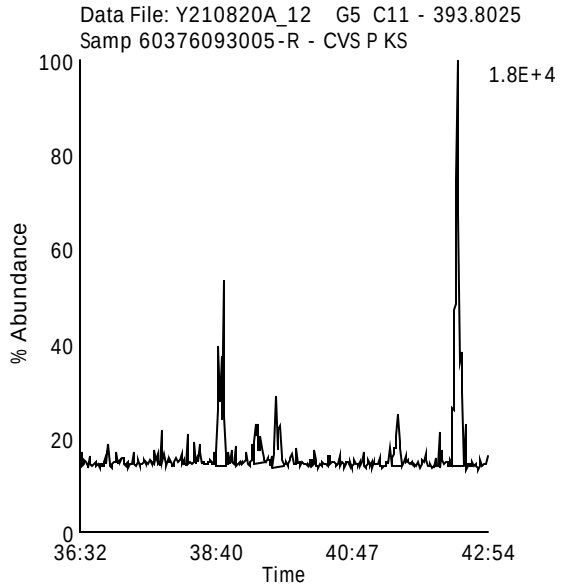


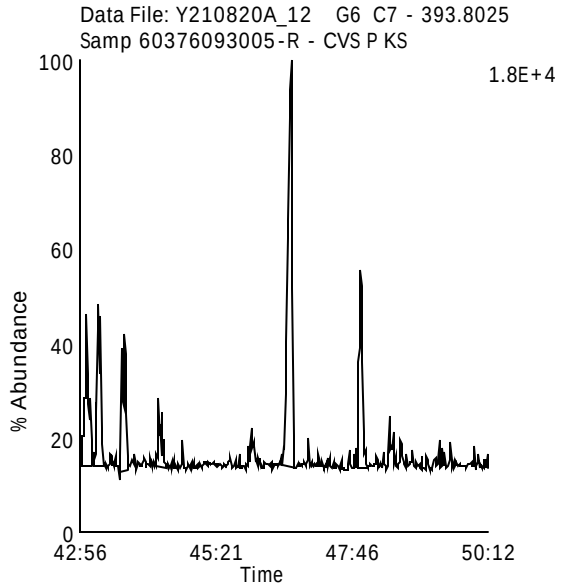


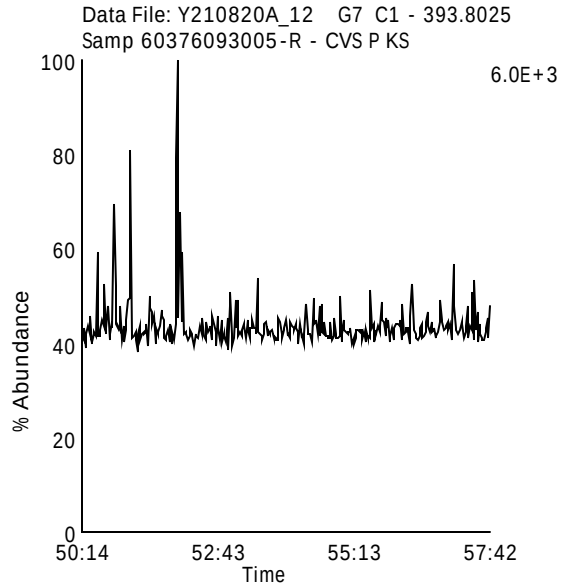


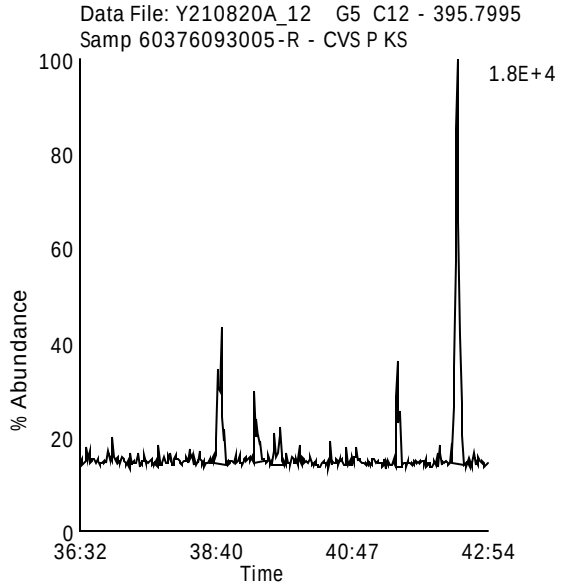
Hepta Chlorinated Biphenyls

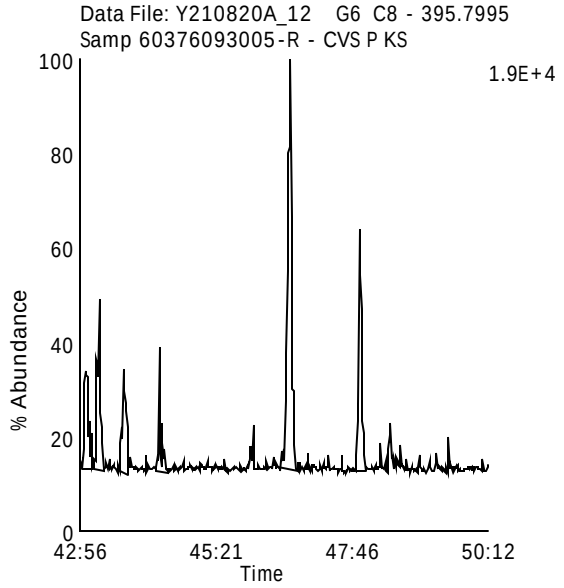
Data File Name: Y210820A_12 | Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS | Client Sample ID: GB-30/3-4

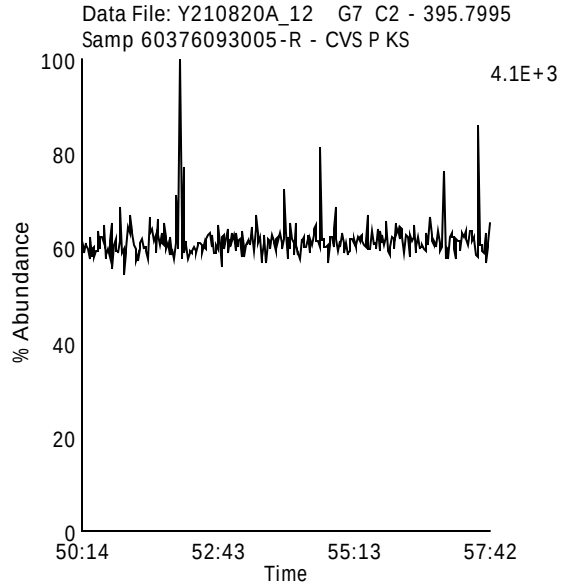






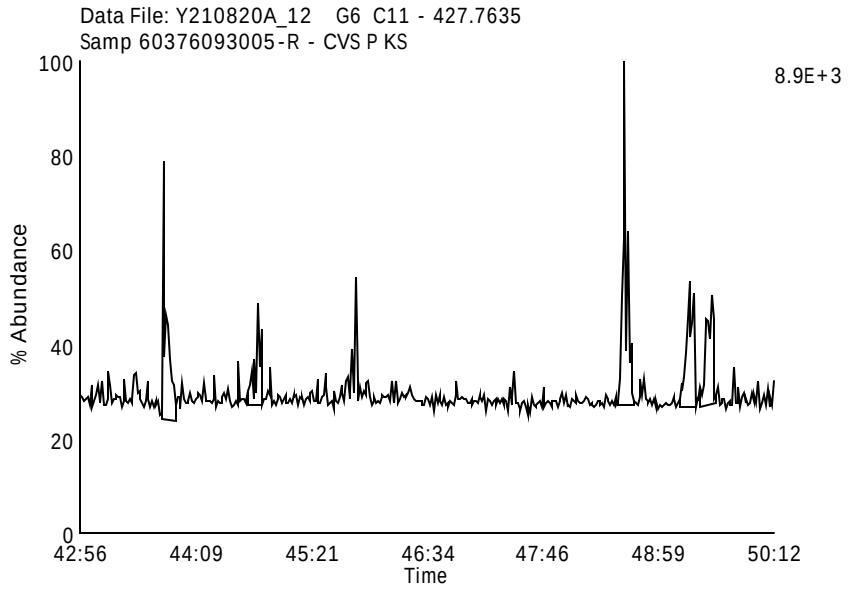


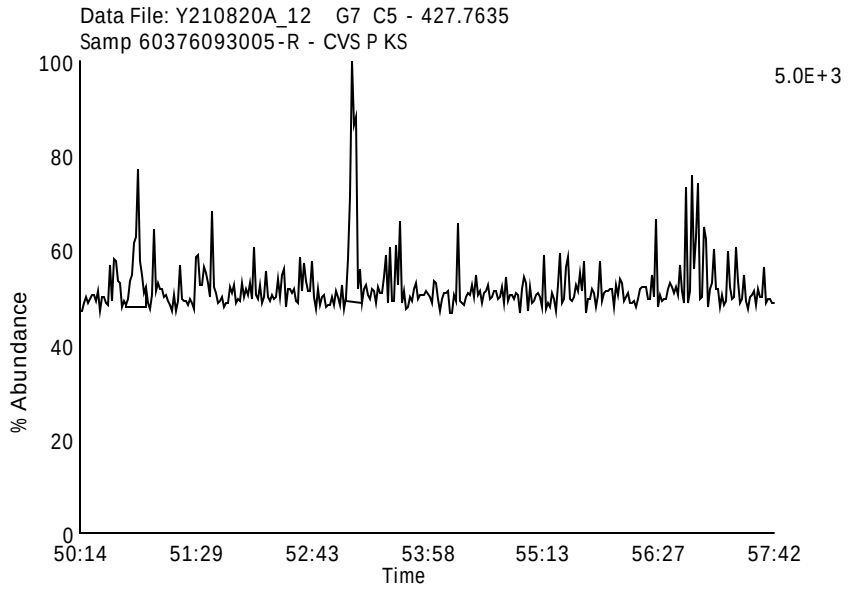


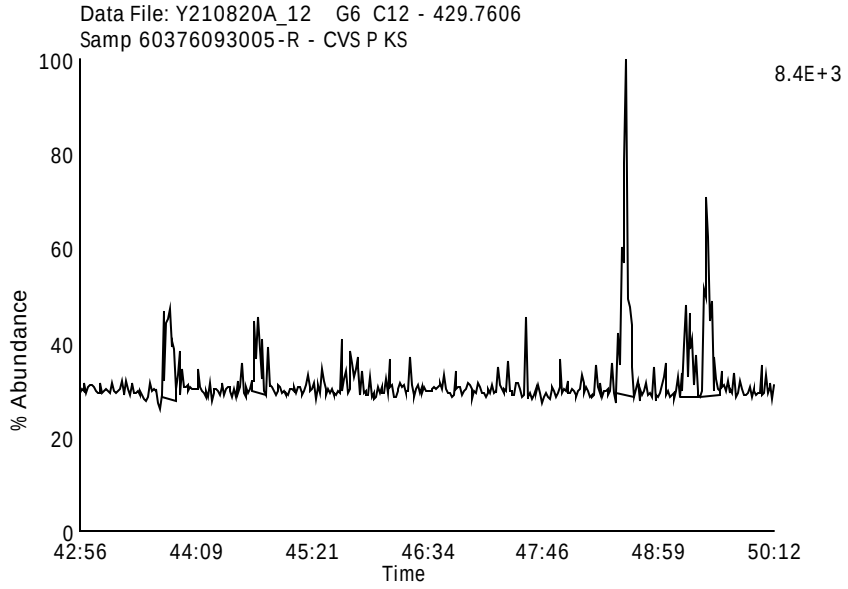


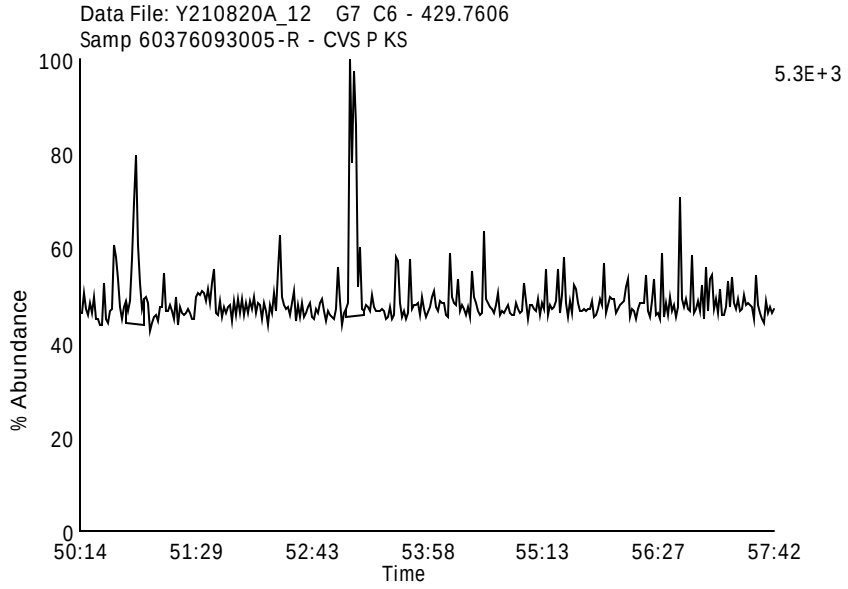
Octa Chlorinated Biphenyls

Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4



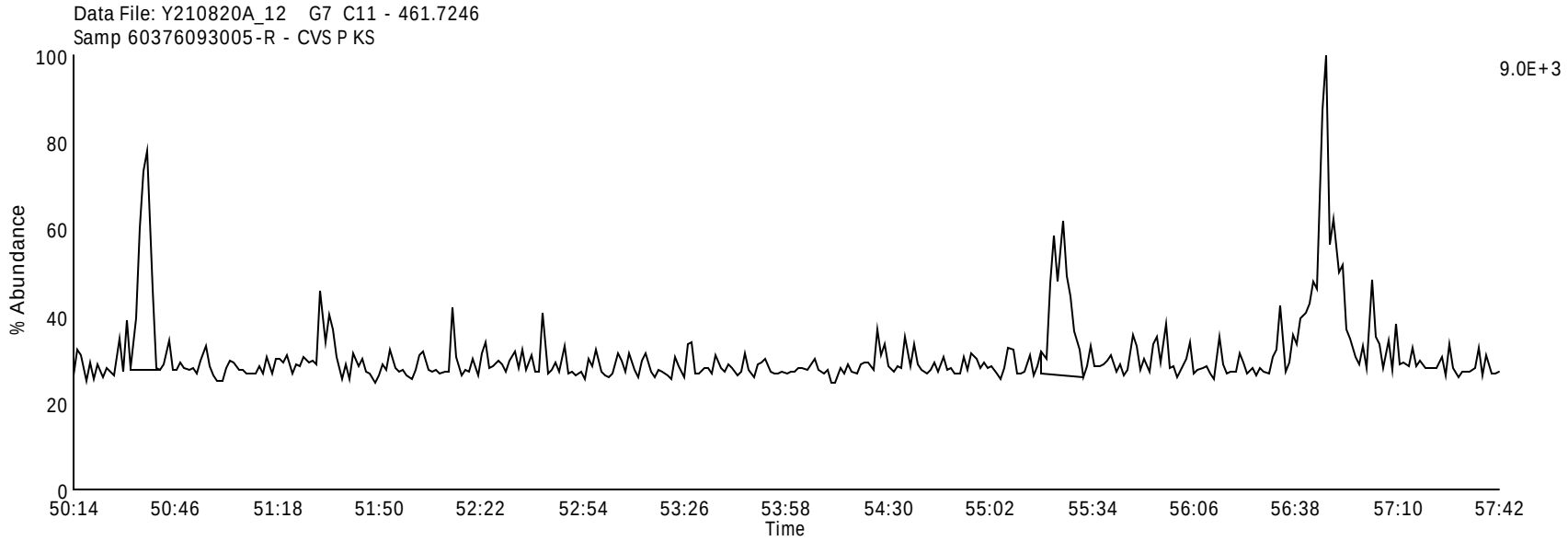


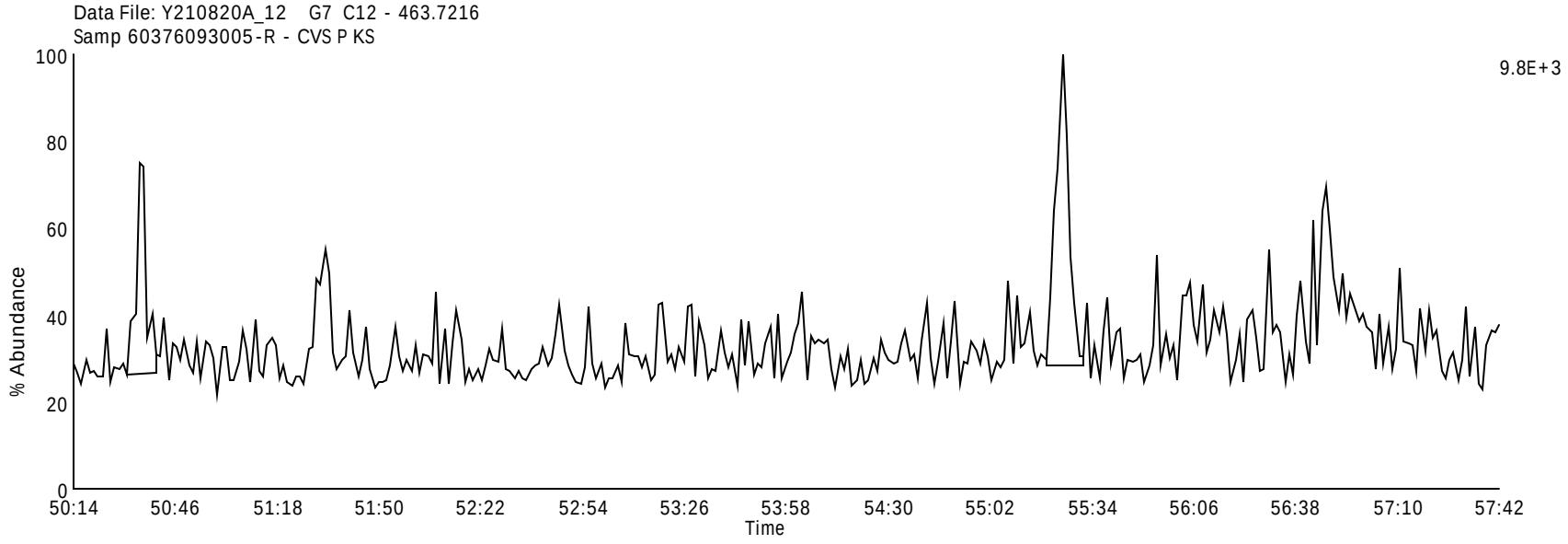




Nona Chlorinated Biphenyls

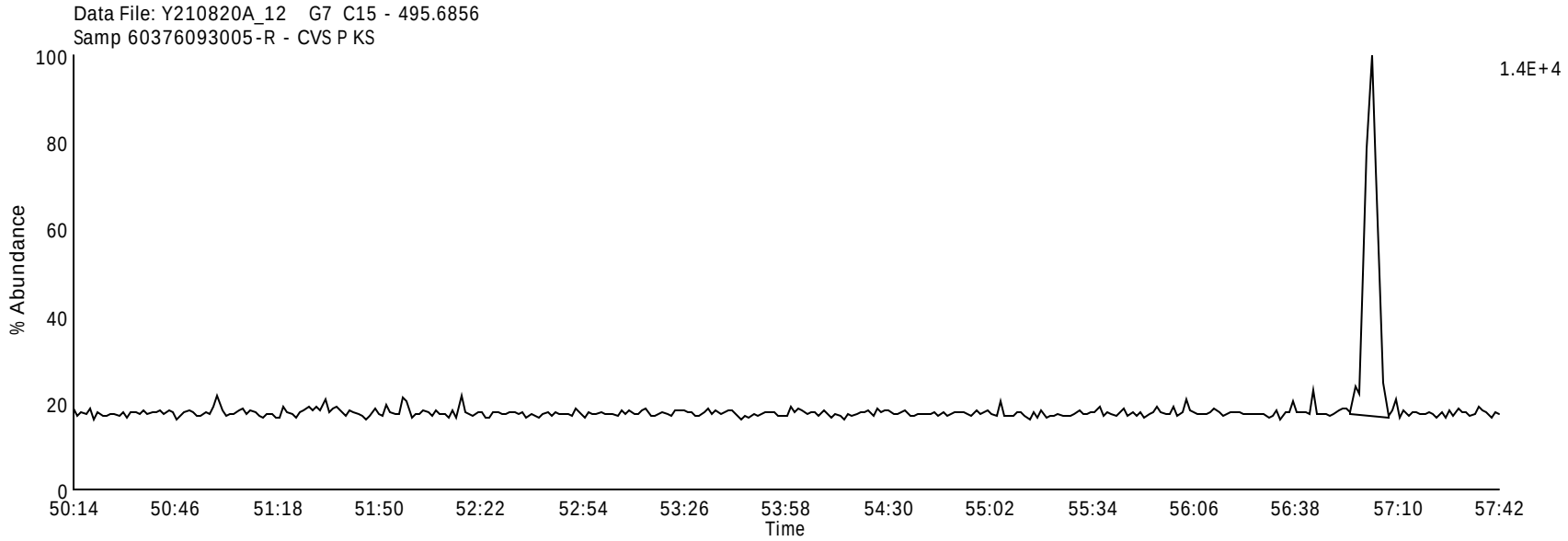
Data File Name: Y210820A_12	Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS	Client Sample ID: GB-30/3-4

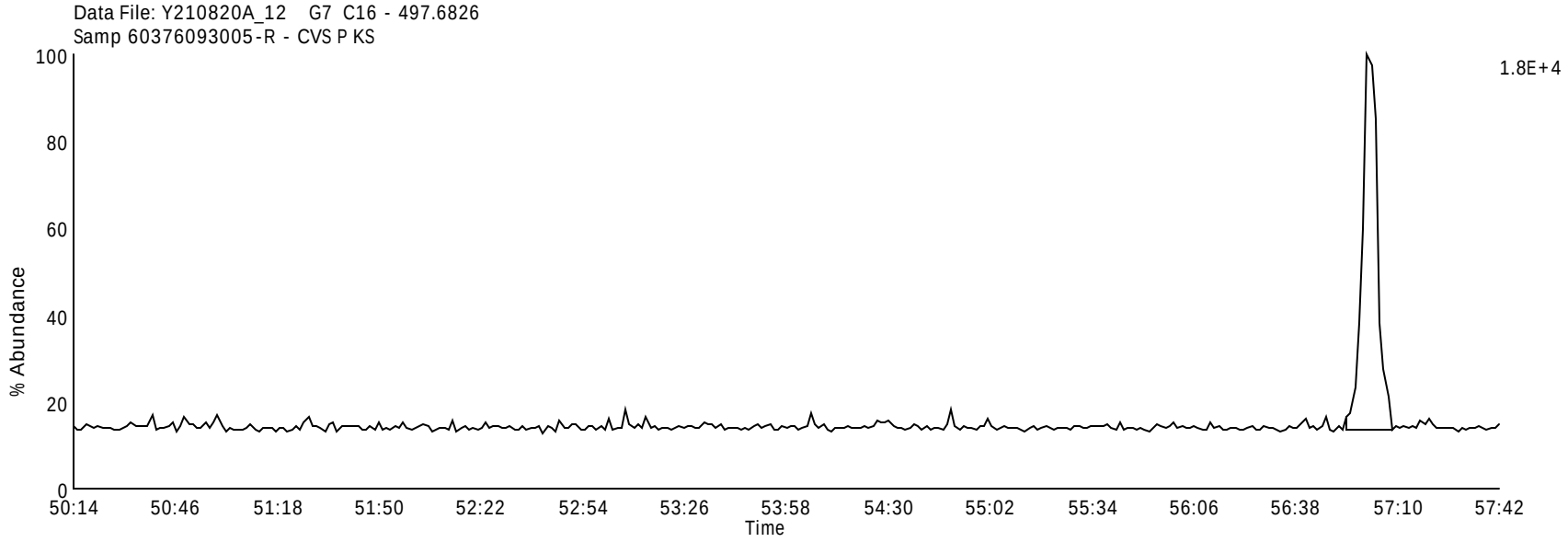




Deca Chlorinated Biphenyl

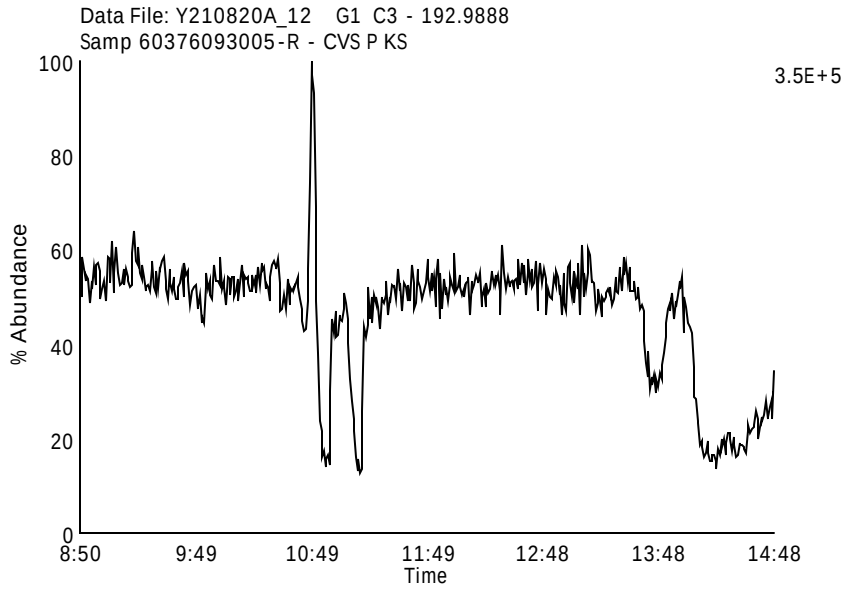
Data File Name: Y210820A_12	Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS	Client Sample ID: GB-30/3-4

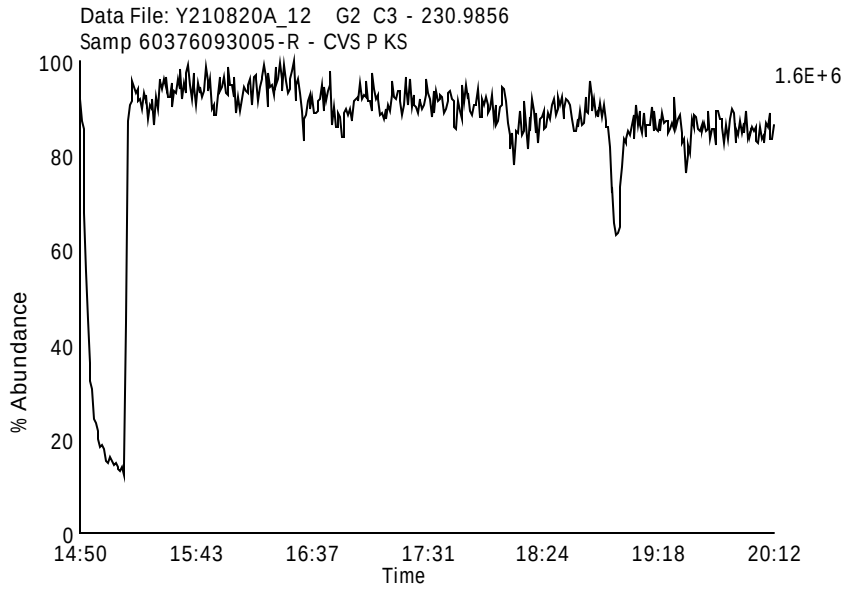


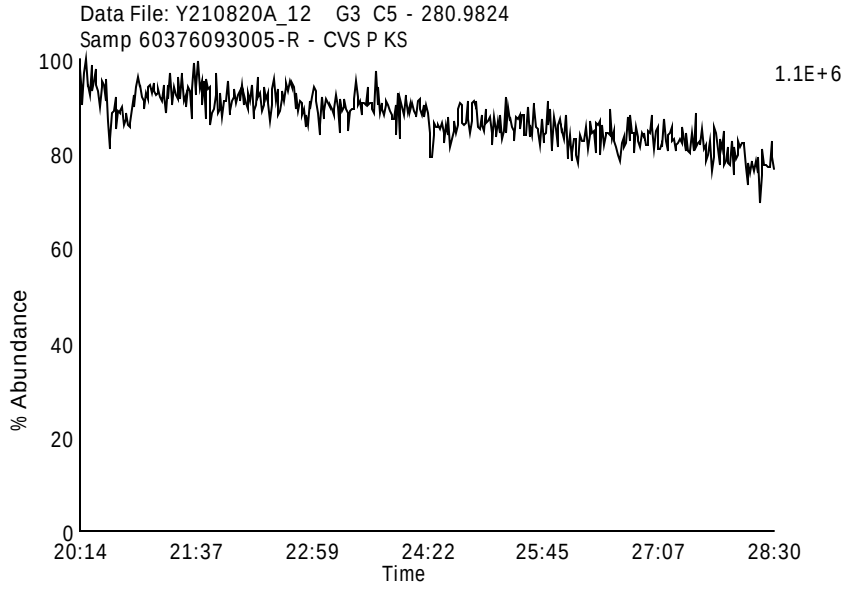


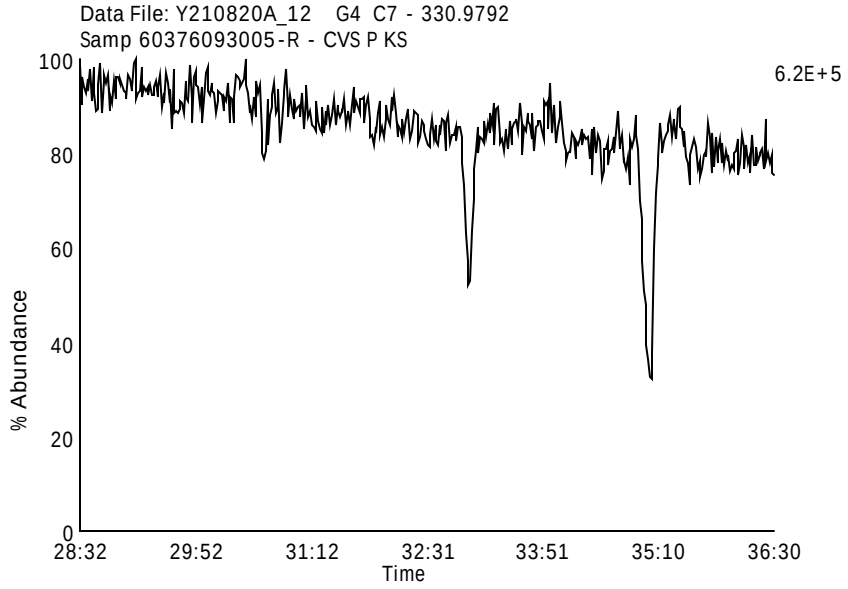
Group 1 - 4 Lock mass

Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4



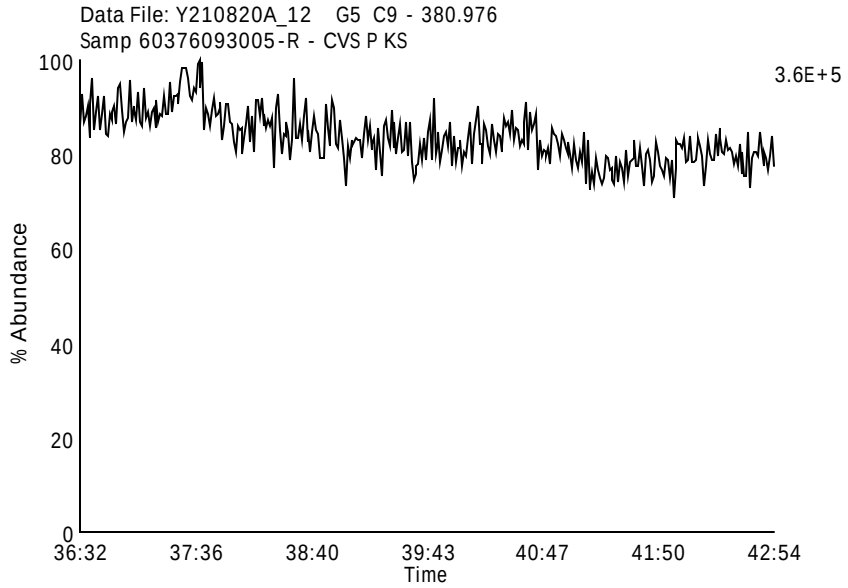


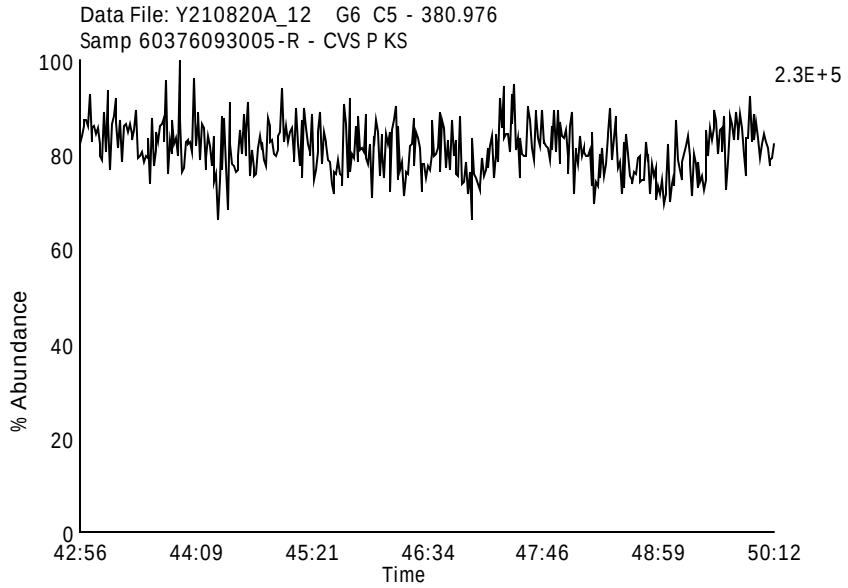


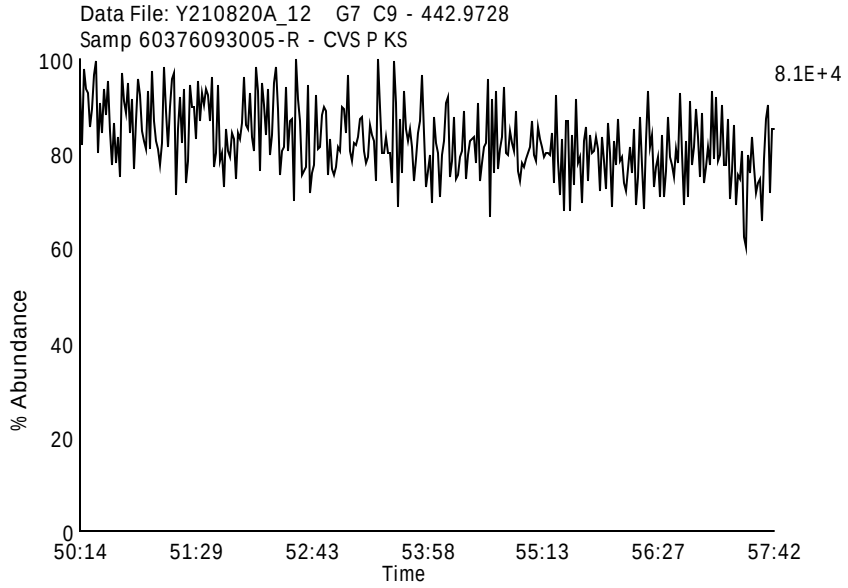


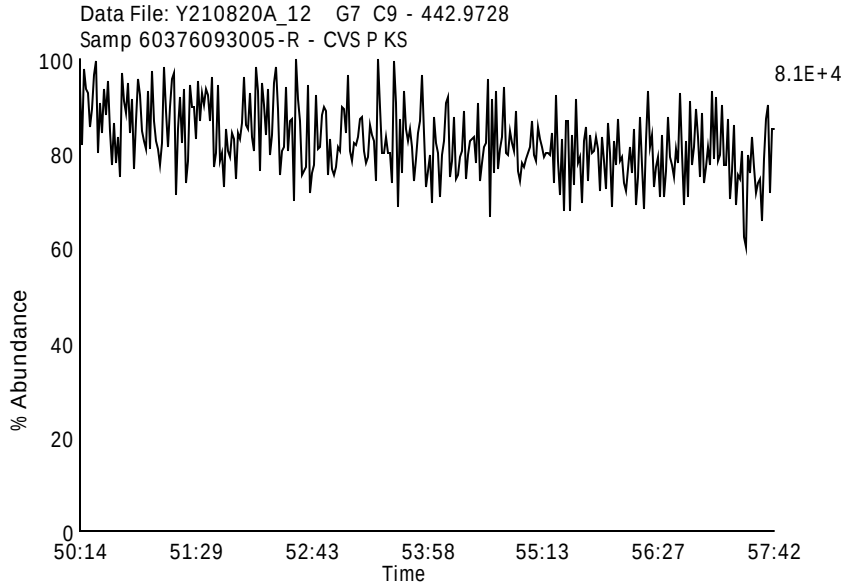
Group 5 - 7 Lock mass

Data File Name: Y210820A_12
Lab Sample ID: 60376093005-R
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Samp 60376093005-R - CVS P KS
Client Sample ID: GB-30/3-4



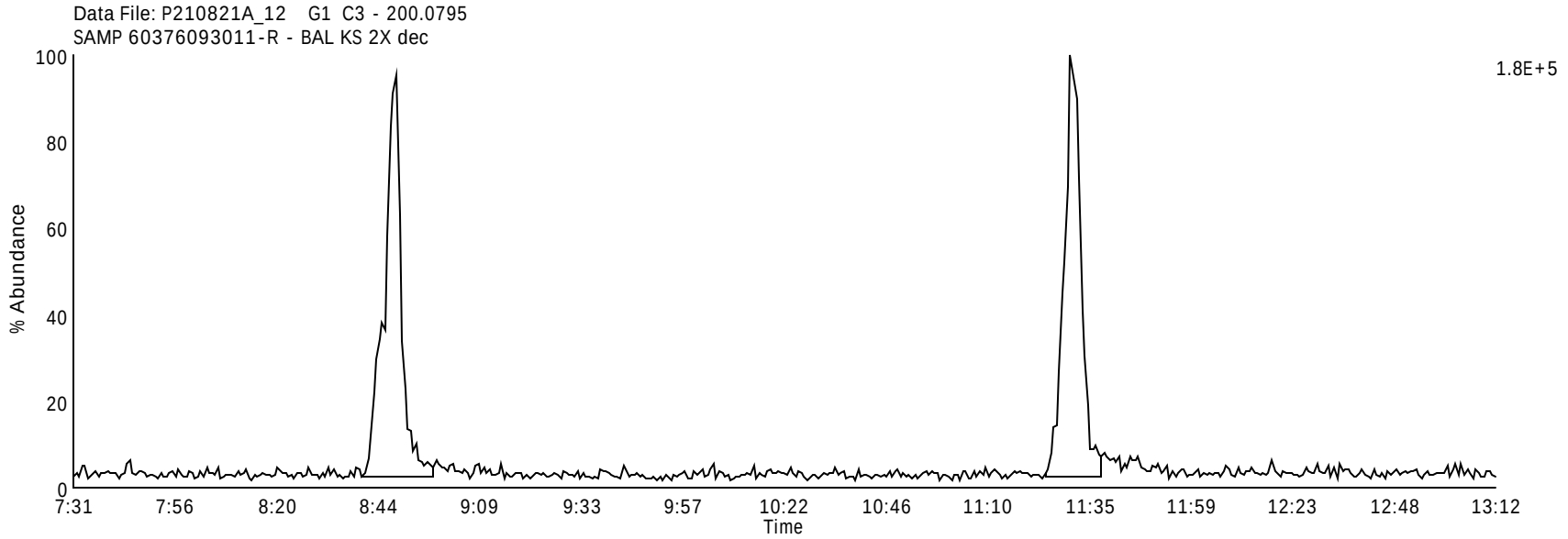


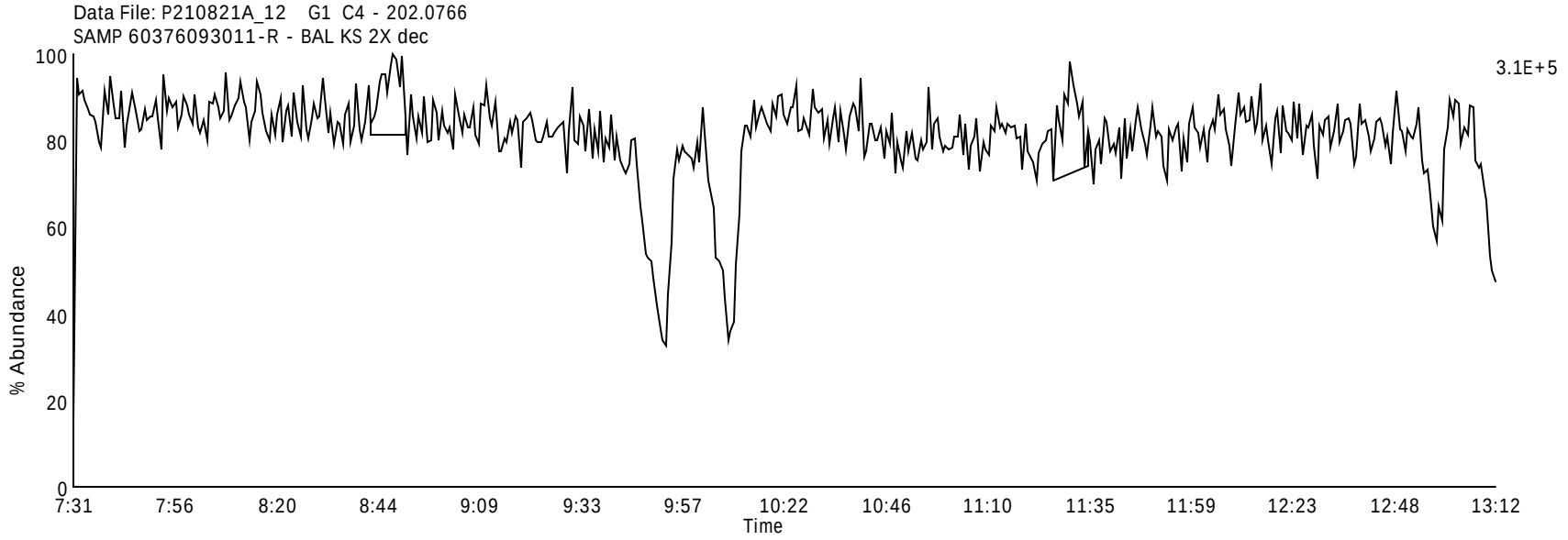




Labeled Mono Chlorinated Biphenyls

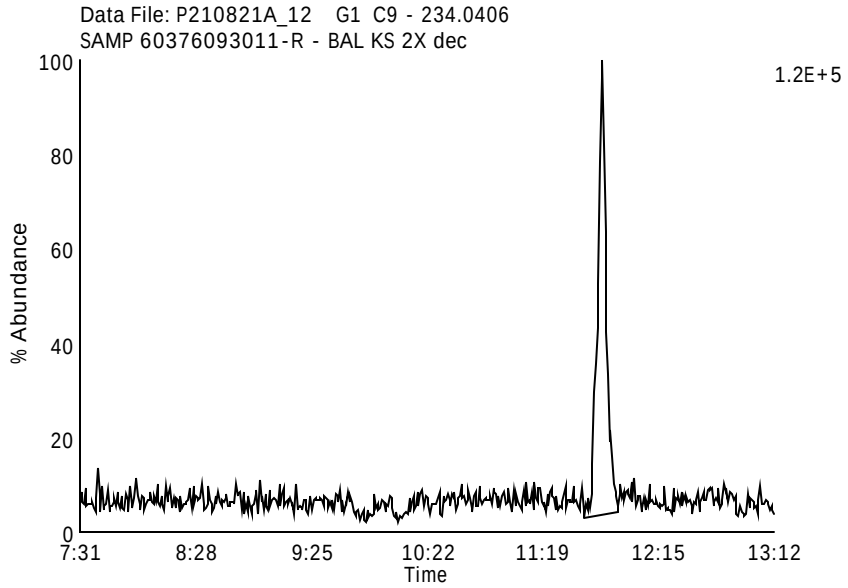
Data File Name: P210821A_12	Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021	Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec	Client Sample ID: GB-10/1.5-2.5

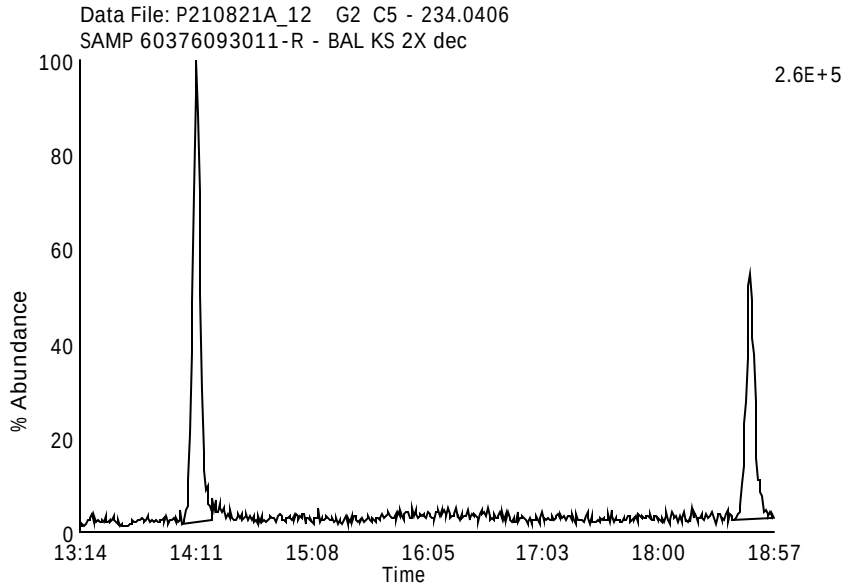


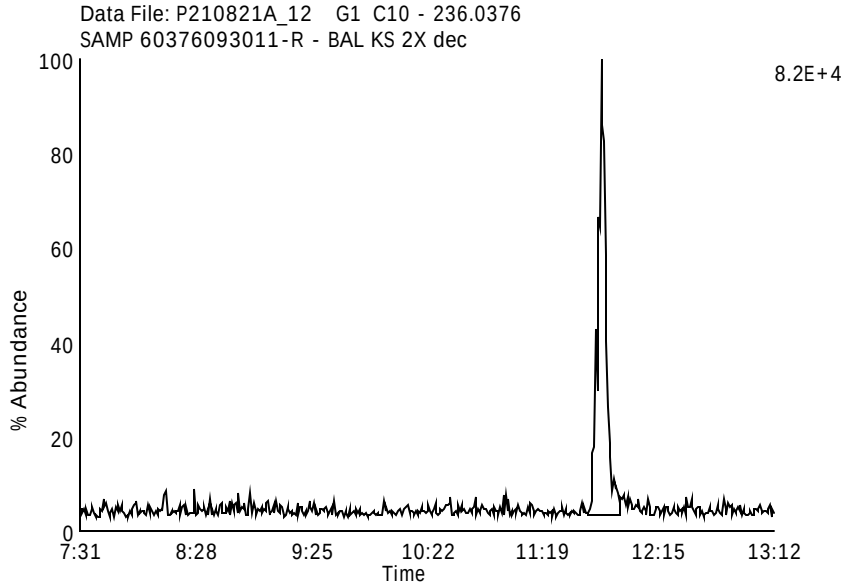


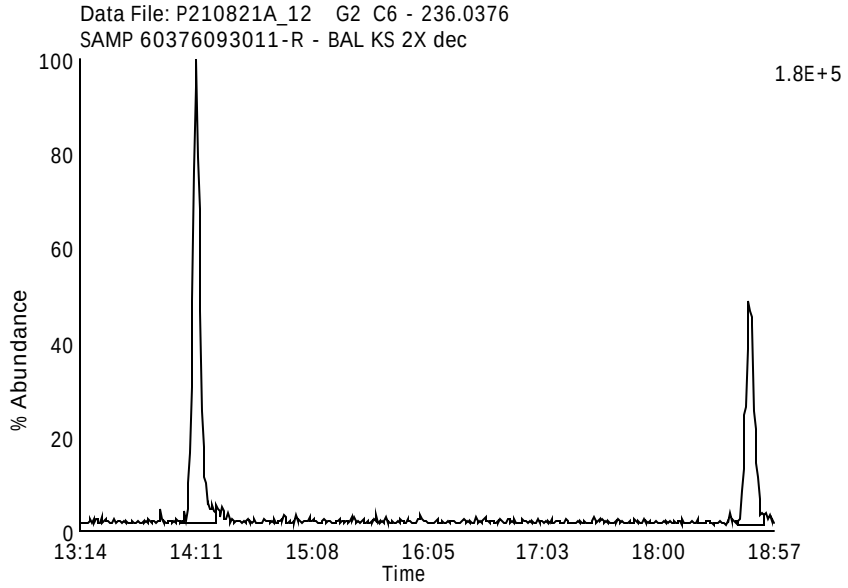
Labeled Di Chlorinated Biphenyls

Data File Name: P210821A_12
Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021
Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec
Client Sample ID: GB-10/1.5-2.5



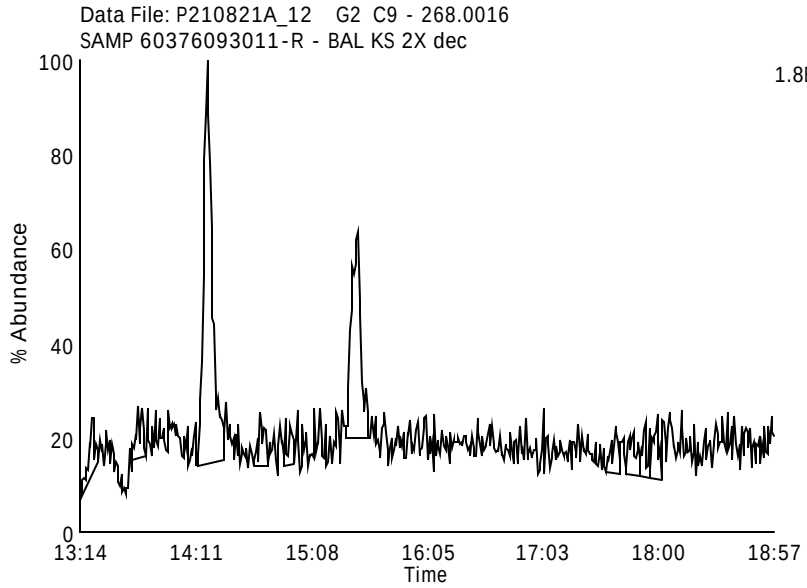


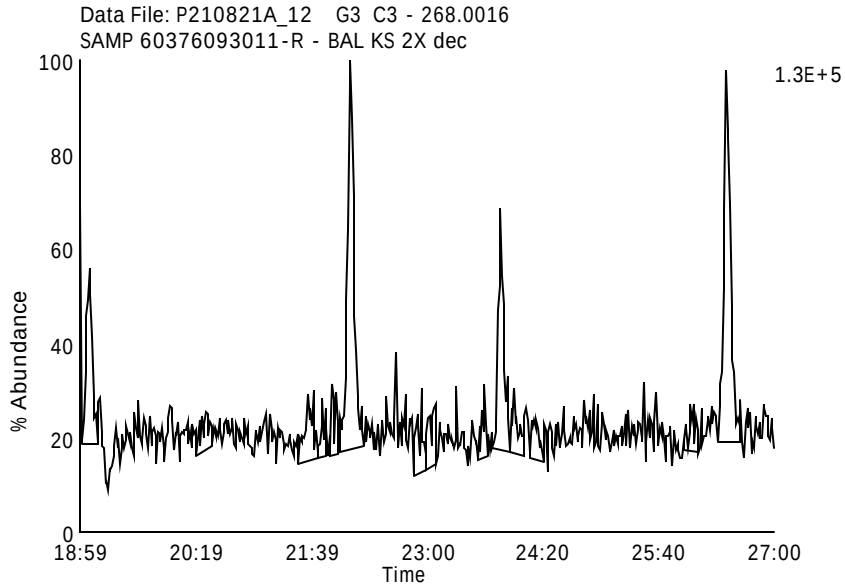


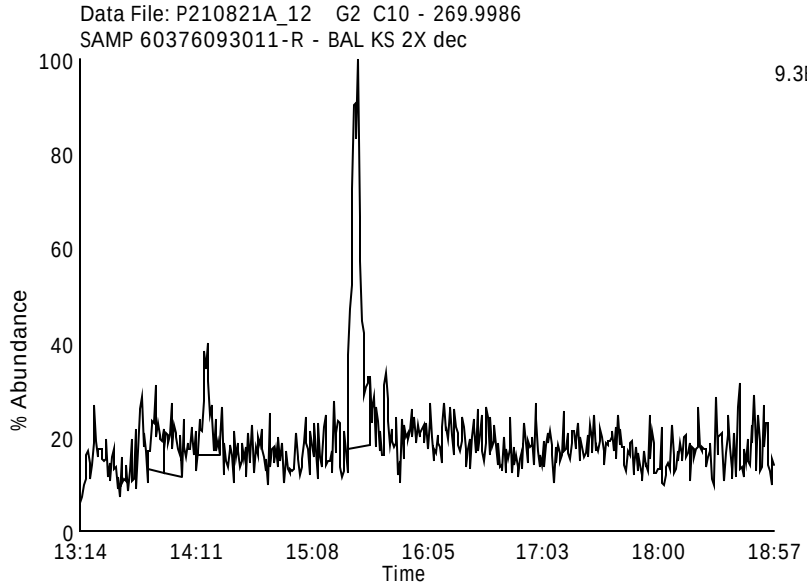


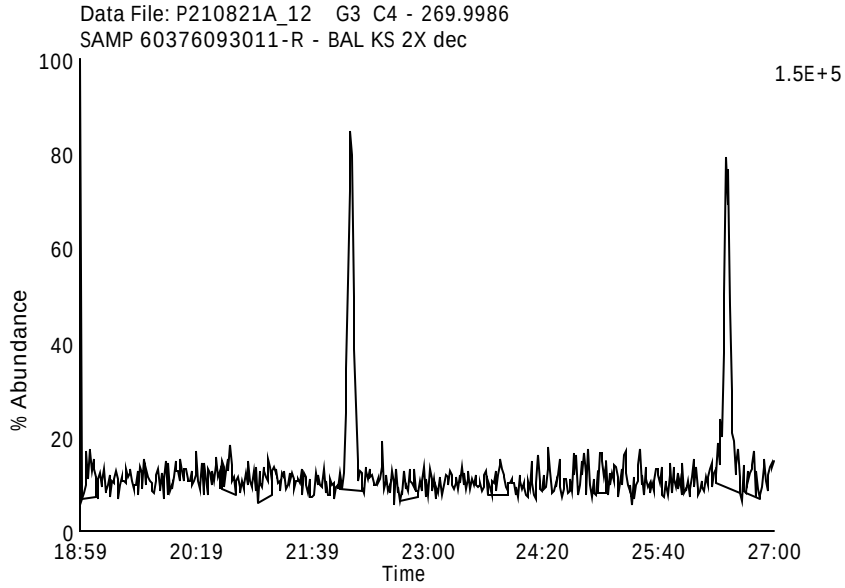
Labeled Tri Chlorinated Biphenyls

Data File Name: P210821A_12
Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021
Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec
Client Sample ID: GB-10/1.5-2.5



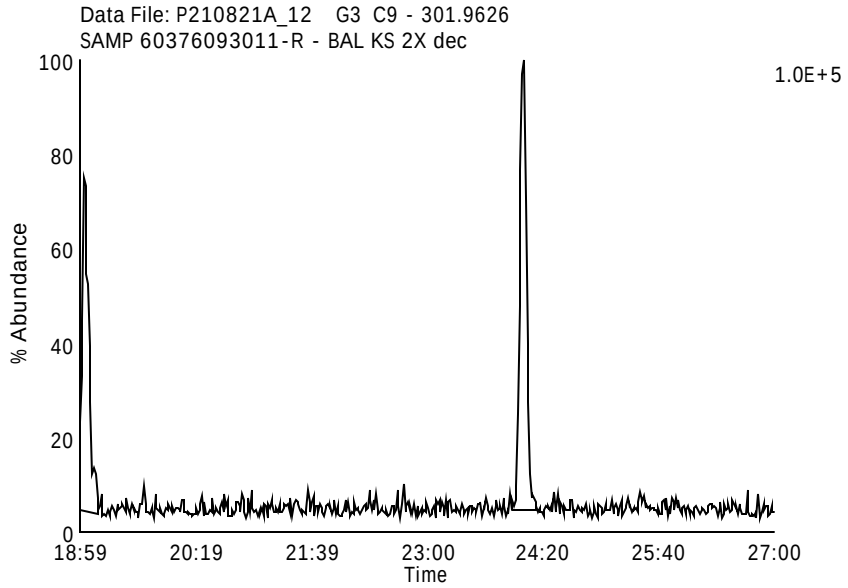


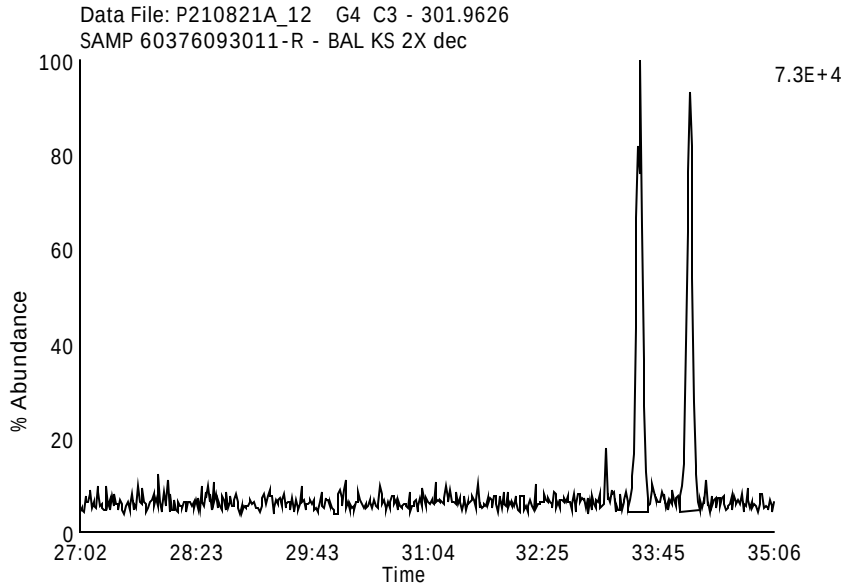


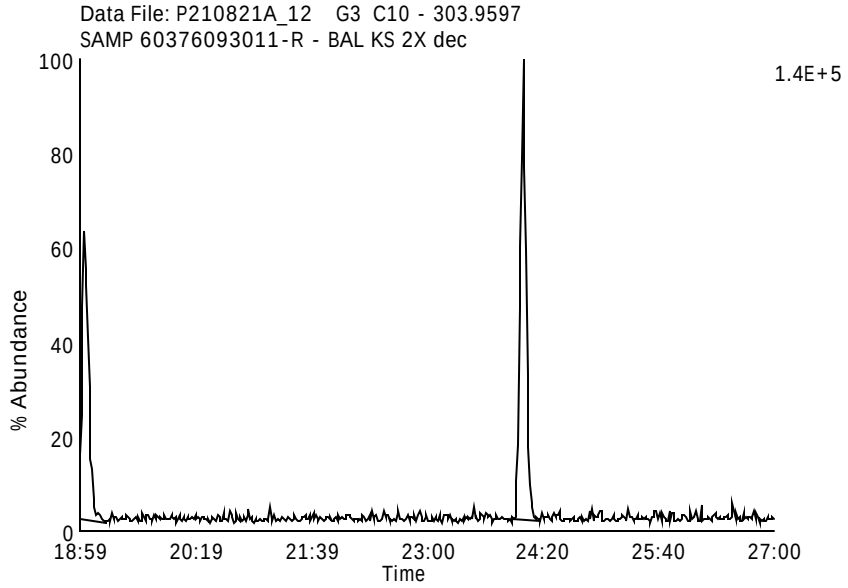


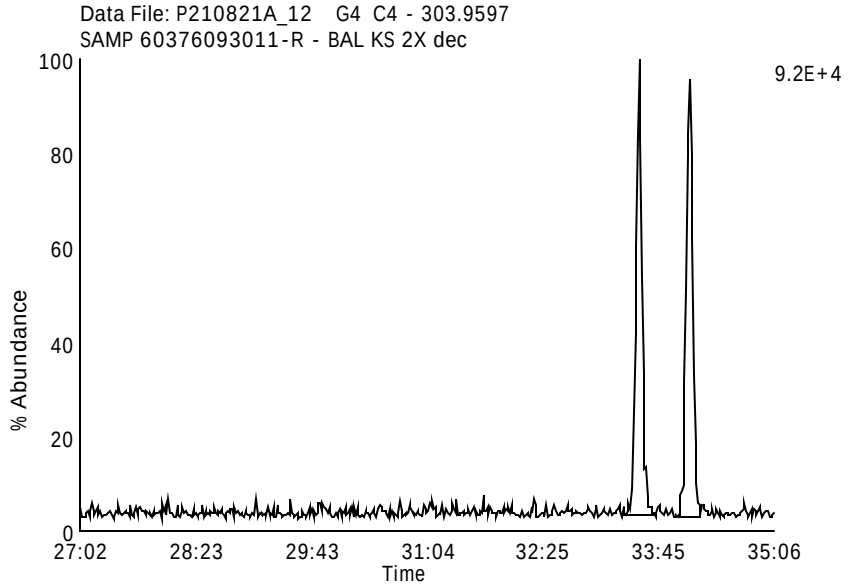
Labeled Tetra Chlorinated Biphenyls

Data File Name: P210821A_12 | Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021 | Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec | Client Sample ID: GB-10/1.5-2.5



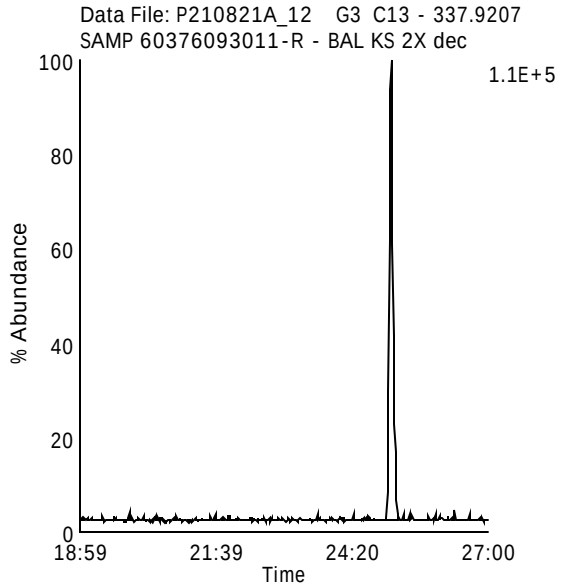


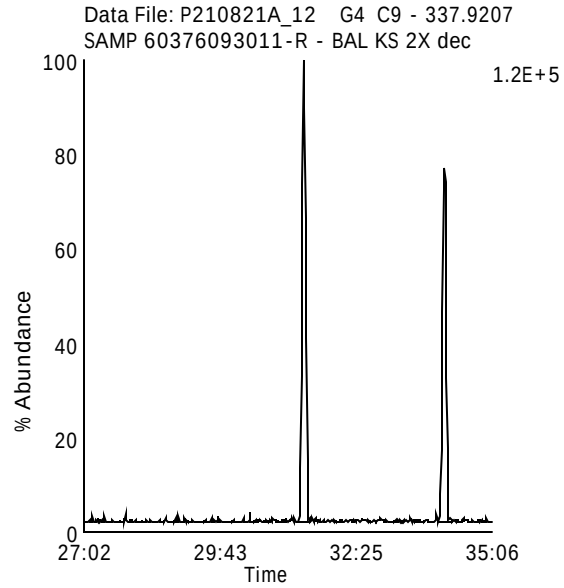


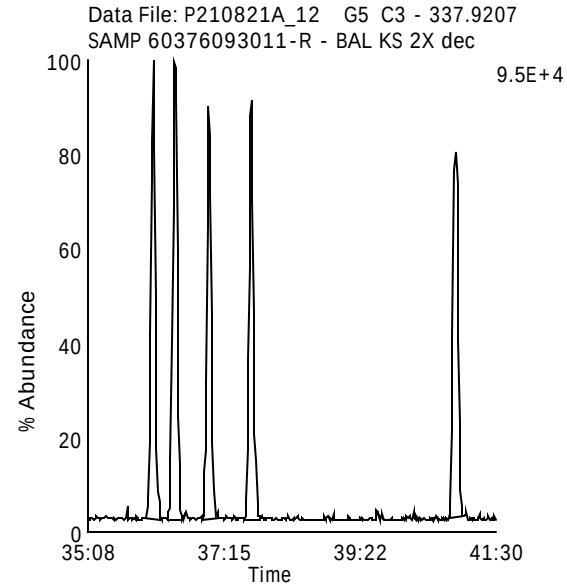


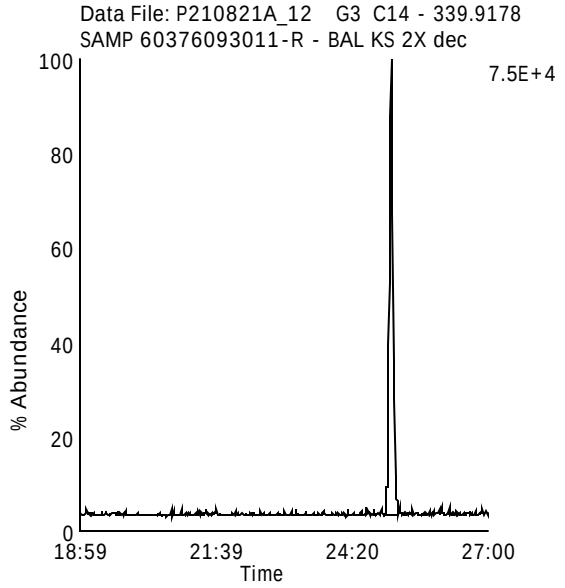
Labeled Penta Chlorinated Biphenyls

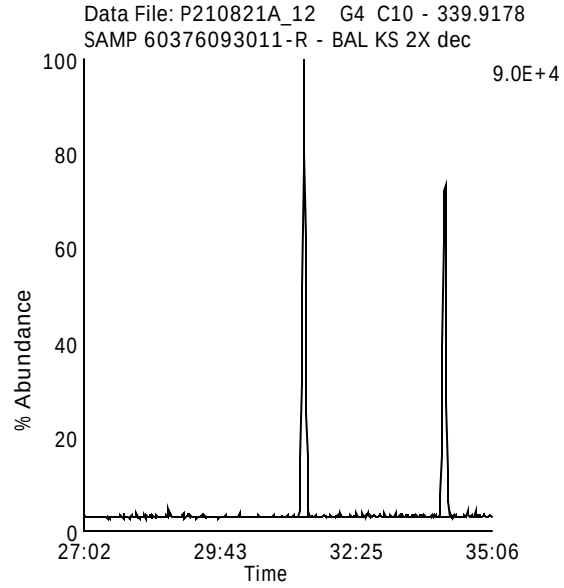
Data File Name: P210821A_12
Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021
Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec
Client Sample ID: GB-10/1.5-2.5

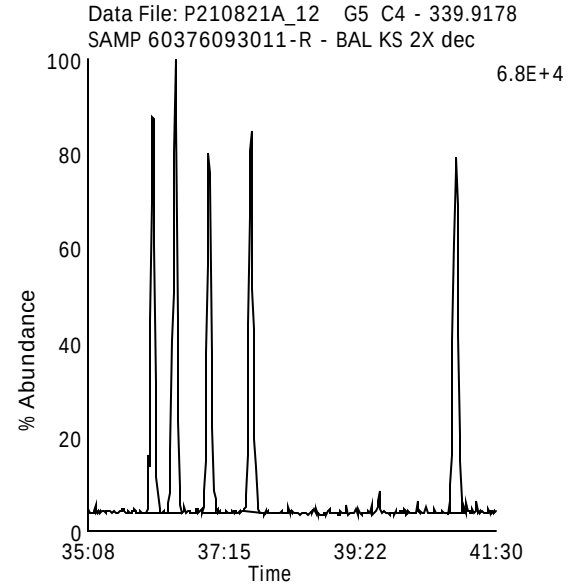








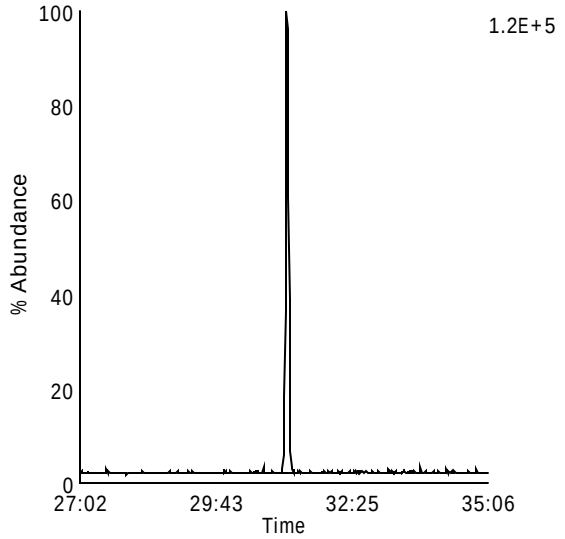




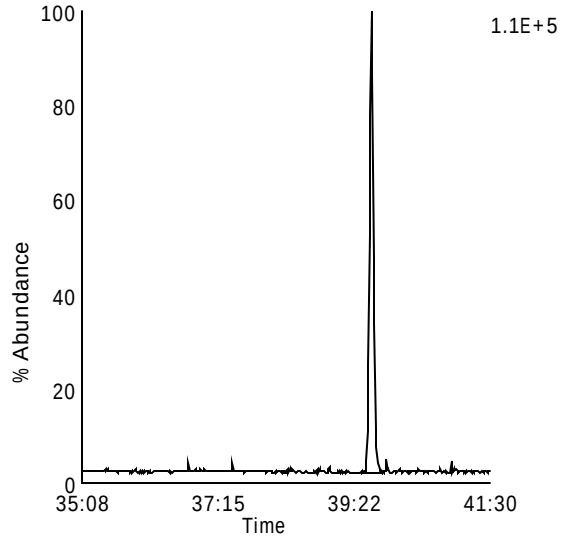
Labeled Hexa Chlorinated Biphenyls

Data File Name: P210821A_12 | Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021 | Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec | Client Sample ID: GB-10/1.5-2.5

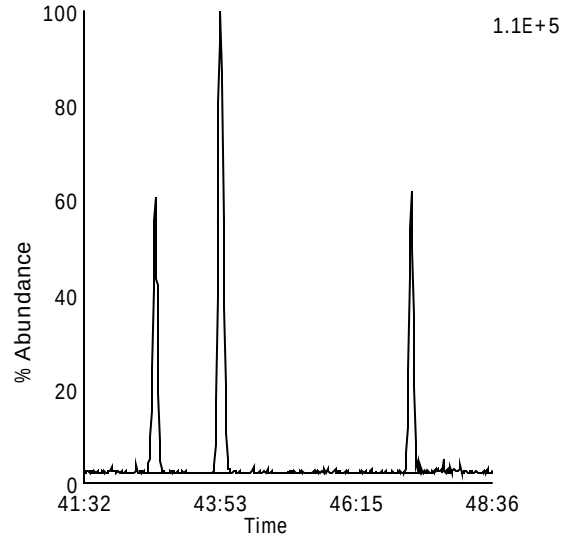
Data File: P210821A_12 G4 C13 - 371.8817
SAMP 60376093011-R - BAL KS 2X dec



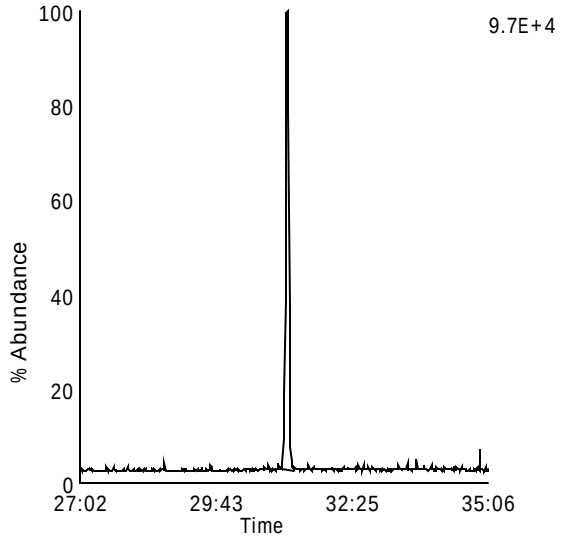
Data File: P210821A_12 G5 C7 - 371.8817
SAMP 60376093011-R - BAL KS 2X dec



Data File: P210821A_12 G6 C3 - 371.8817
SAMP 60376093011-R - BAL KS 2X dec



Data File: P210821A_12 G4 C14 - 373.8788
SAMP 60376093011-R - BAL KS 2X dec



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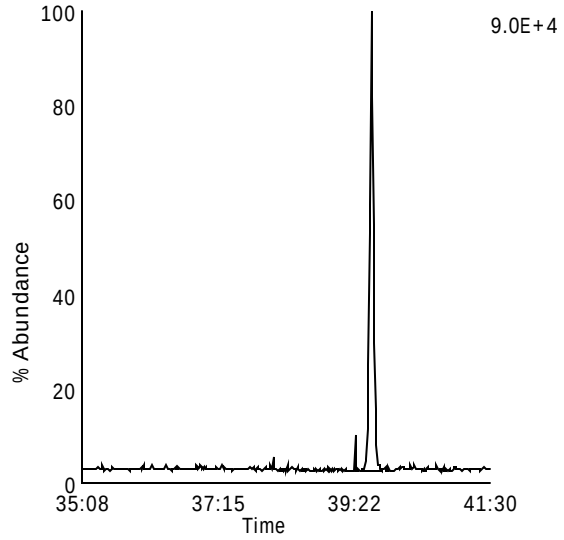
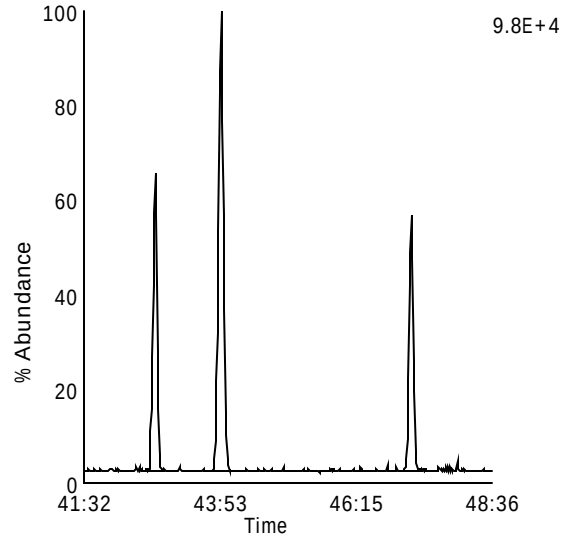
SAMP 60376093011-R - BAL KS 2X dec



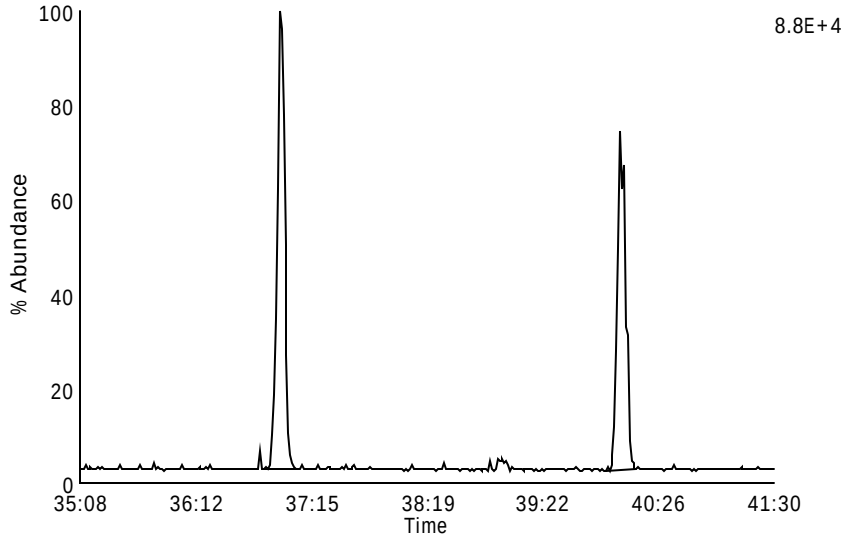
Data File: P210821A_12 G6 C4 - 373.8788
SAMP 60376093011-R - BAL KS 2X dec



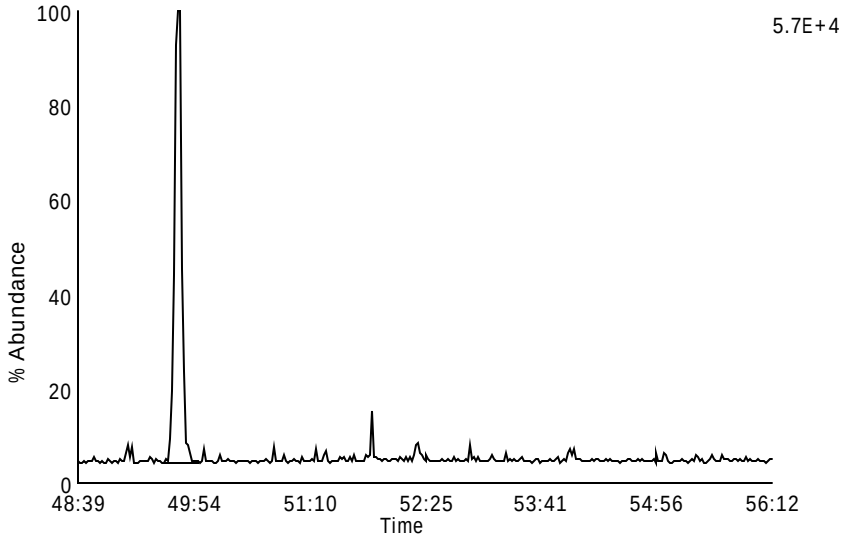
Labeled Hepta Chlorinated Biphenyls

Data File Name: P210821A_12 | Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021 | Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec | Client Sample ID: GB-10/1.5-2.5

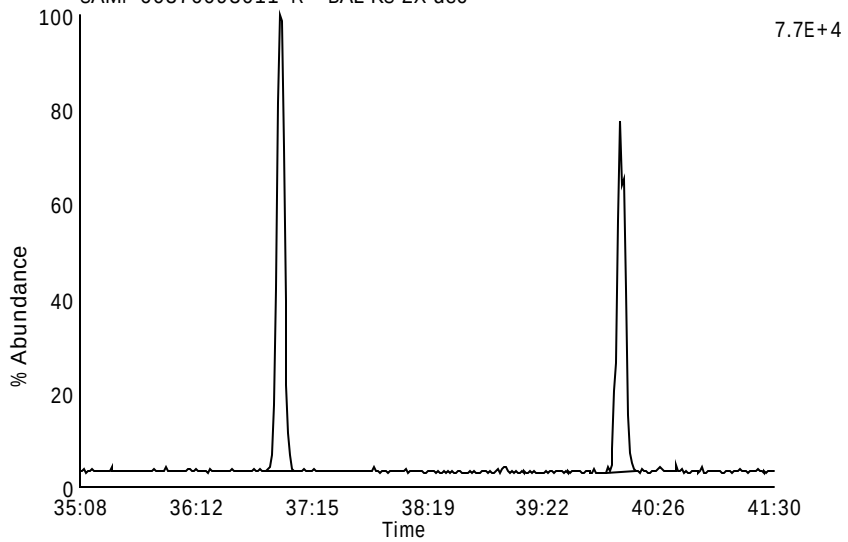
Data File: P210821A_12 G5 C13 - 405.8428
SAMP 60376093011-R - BAL KS 2X dec



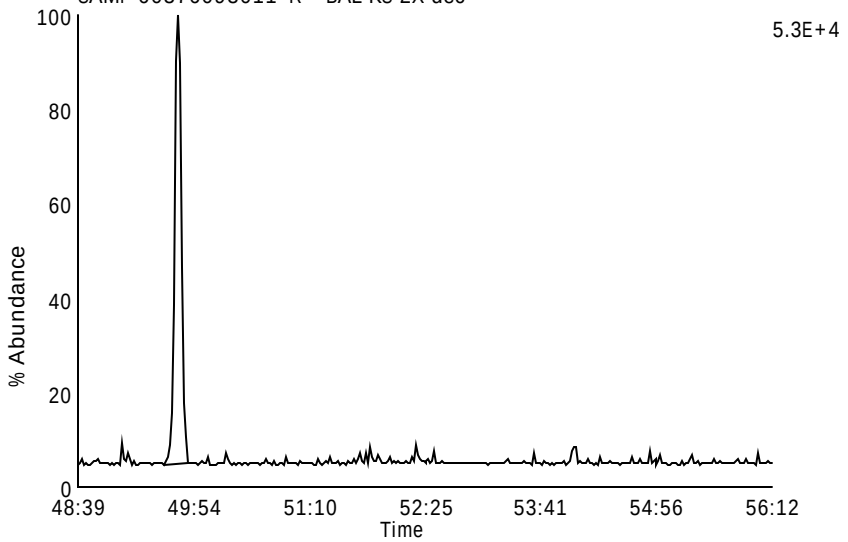
Data File: P210821A_12 G7 C3 - 405.8428
SAMP 60376093011-R - BAL KS 2X dec



Data File: P210821A_12 G5 C14 - 407.8398
SAMP 60376093011-R - BAL KS 2X dec

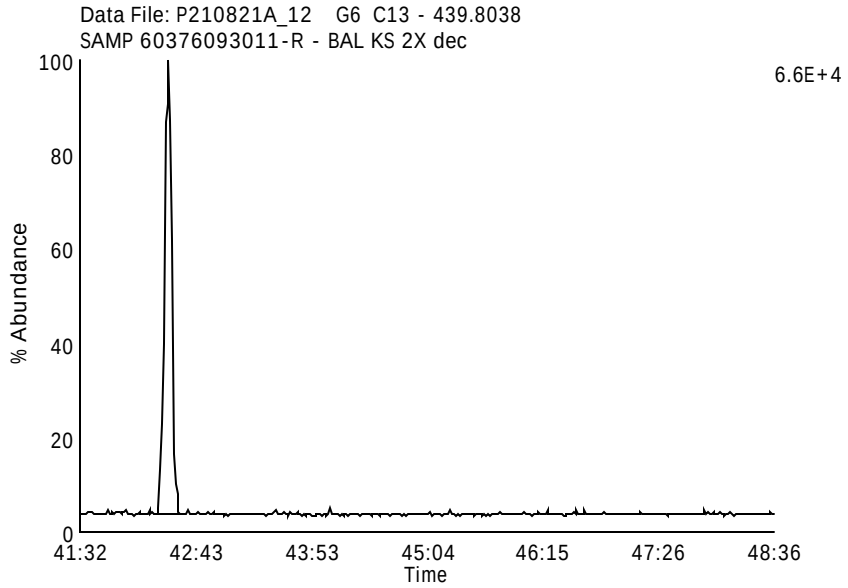


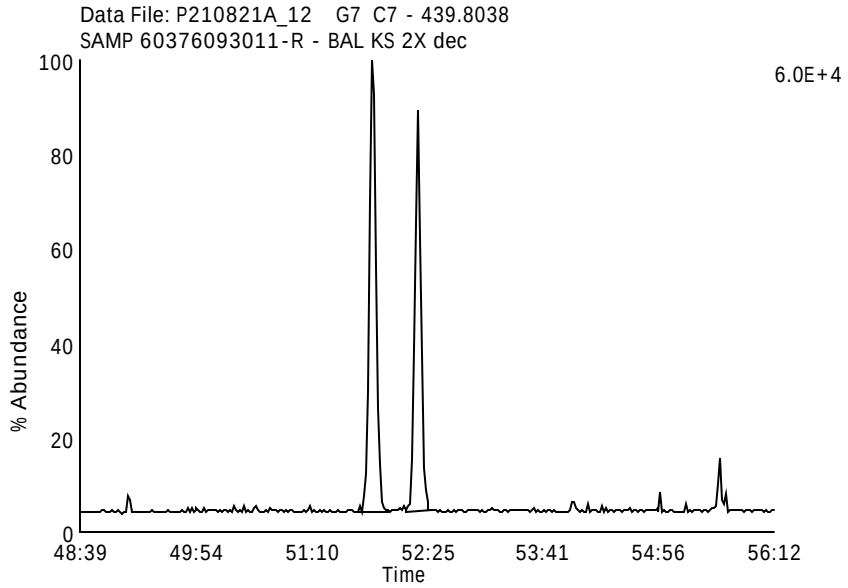
Data File: P210821A_12 G7 C4 - 407.8398
SAMP 60376093011-R - BAL KS 2X dec

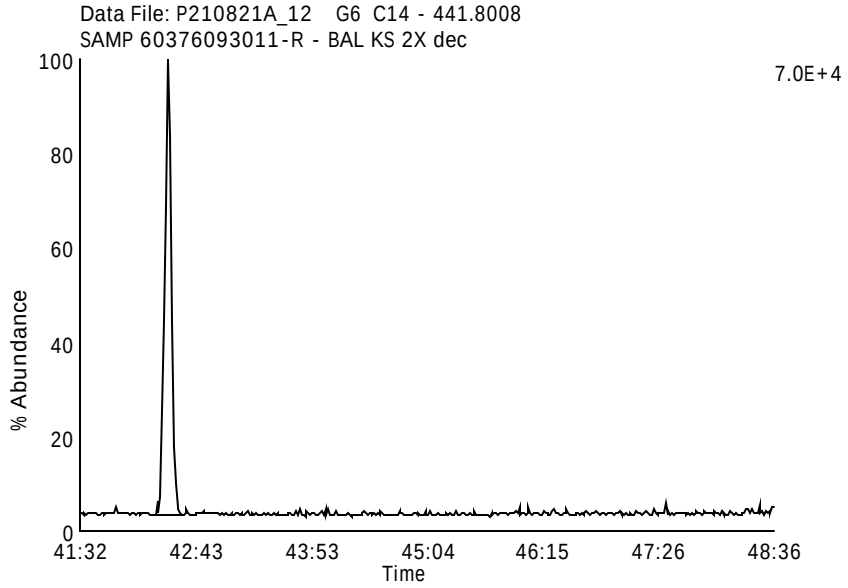


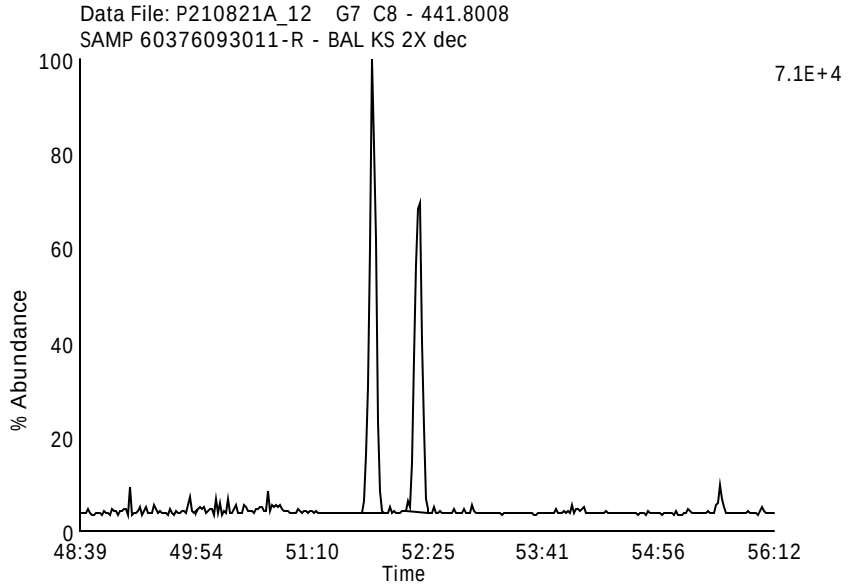
Labeled Octa Chlorinated Biphenyls

Data File Name: P210821A_12 | Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021 | Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec | Client Sample ID: GB-10/1.5-2.5



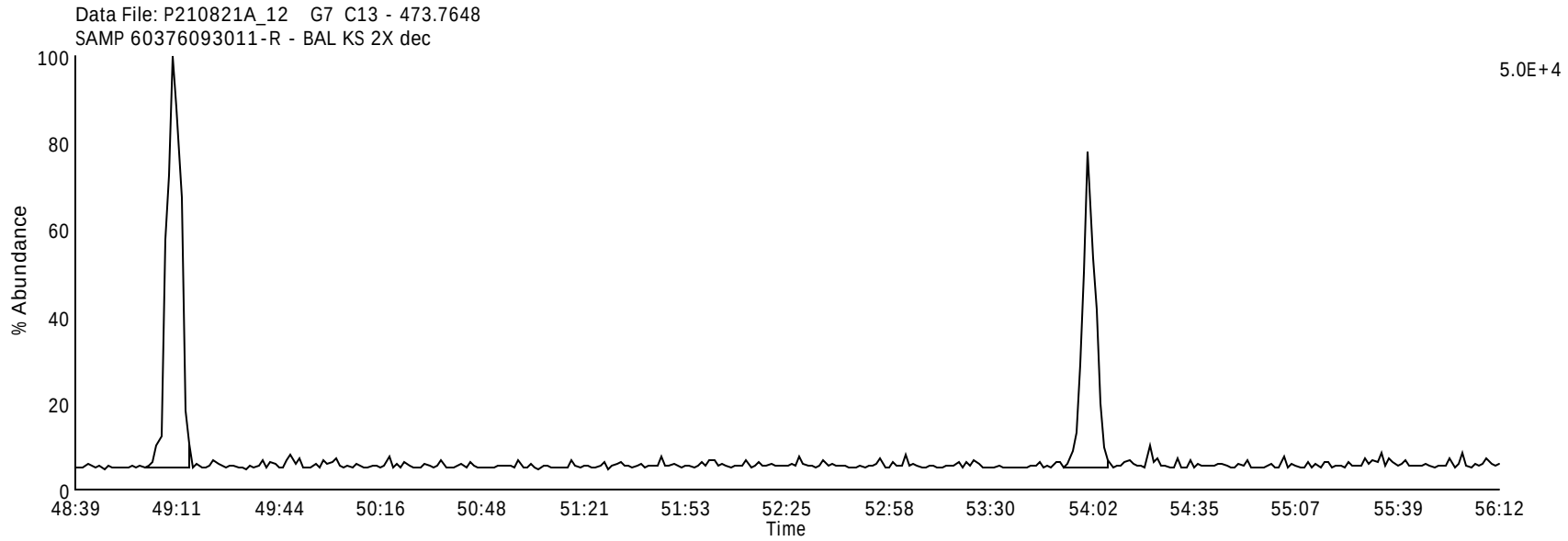


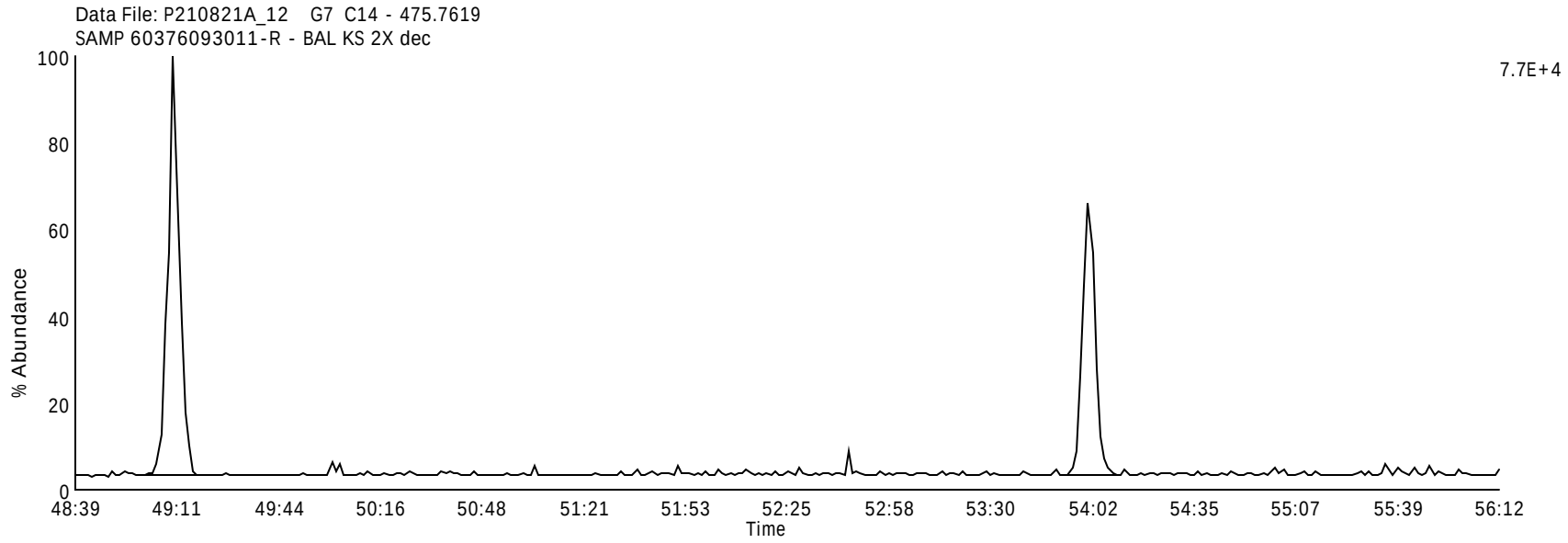




Labeled Nona Chlorinated Biphenyls

Data File Name: P210821A_12	Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021	Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec	Client Sample ID: GB-10/1.5-2.5



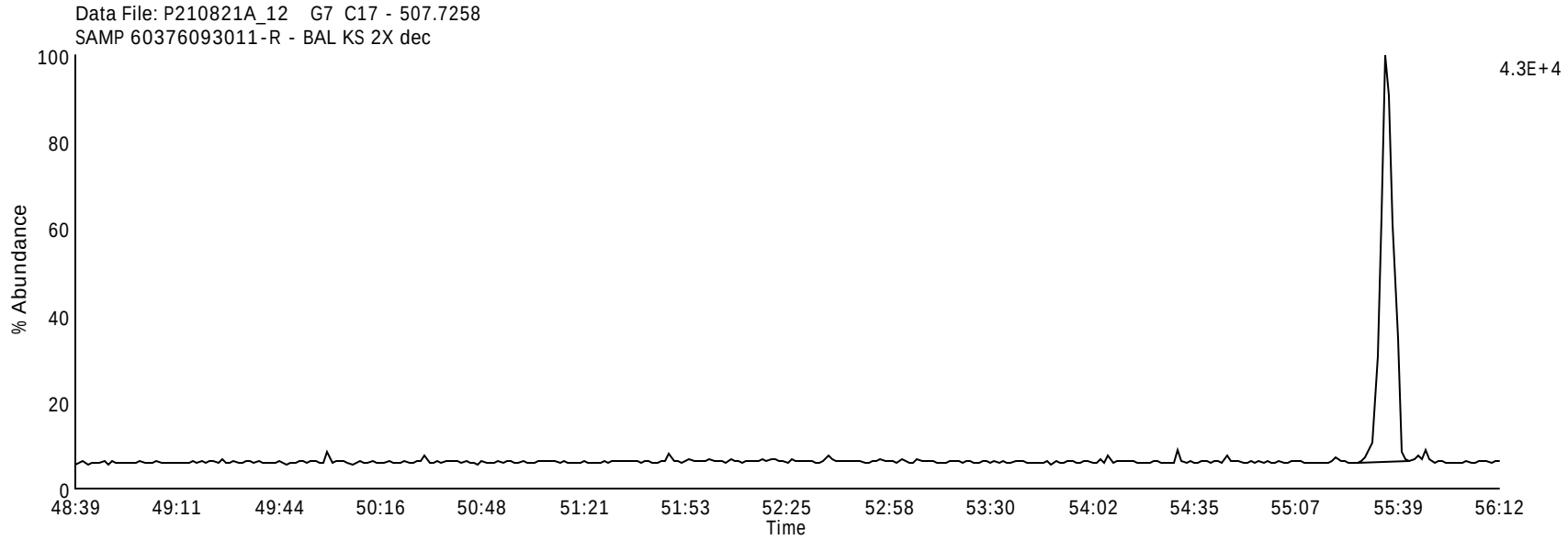


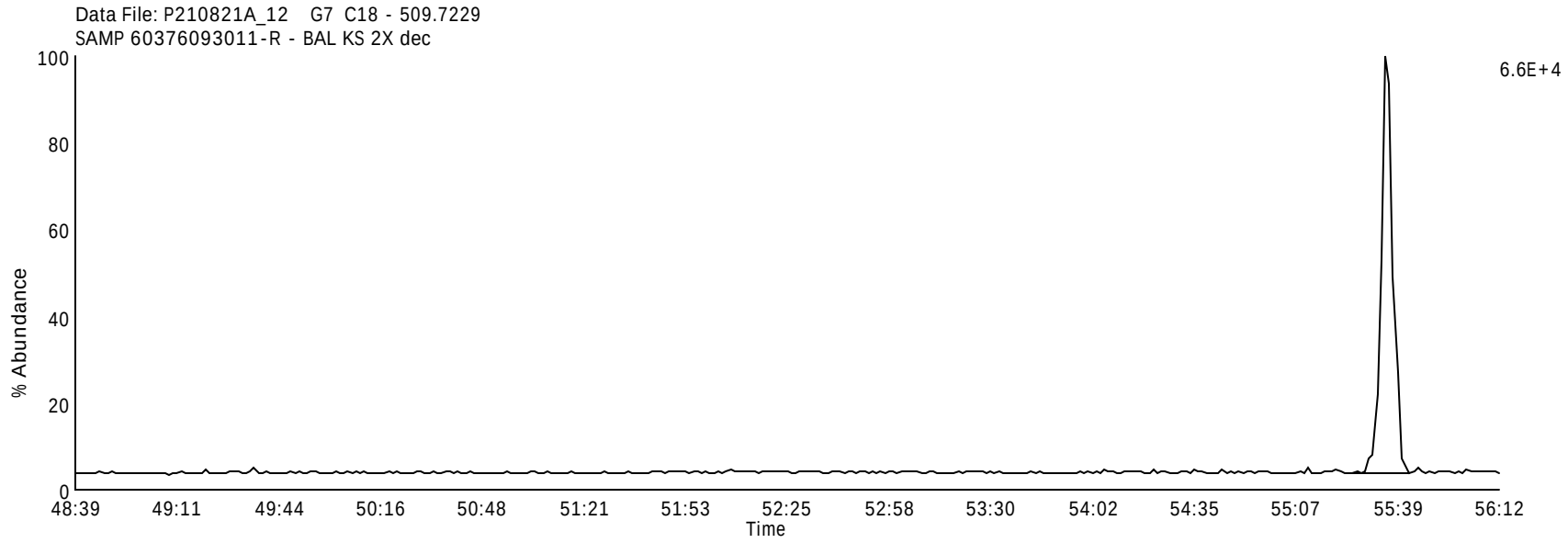
Labeled Deca Chlorinated Biphenyl

Data File Name: P210821A_12 | Lab Sample ID: 60376093011-R

Date Acquired: 8/22/2021 | Instrument: 10MSHR09 (P)

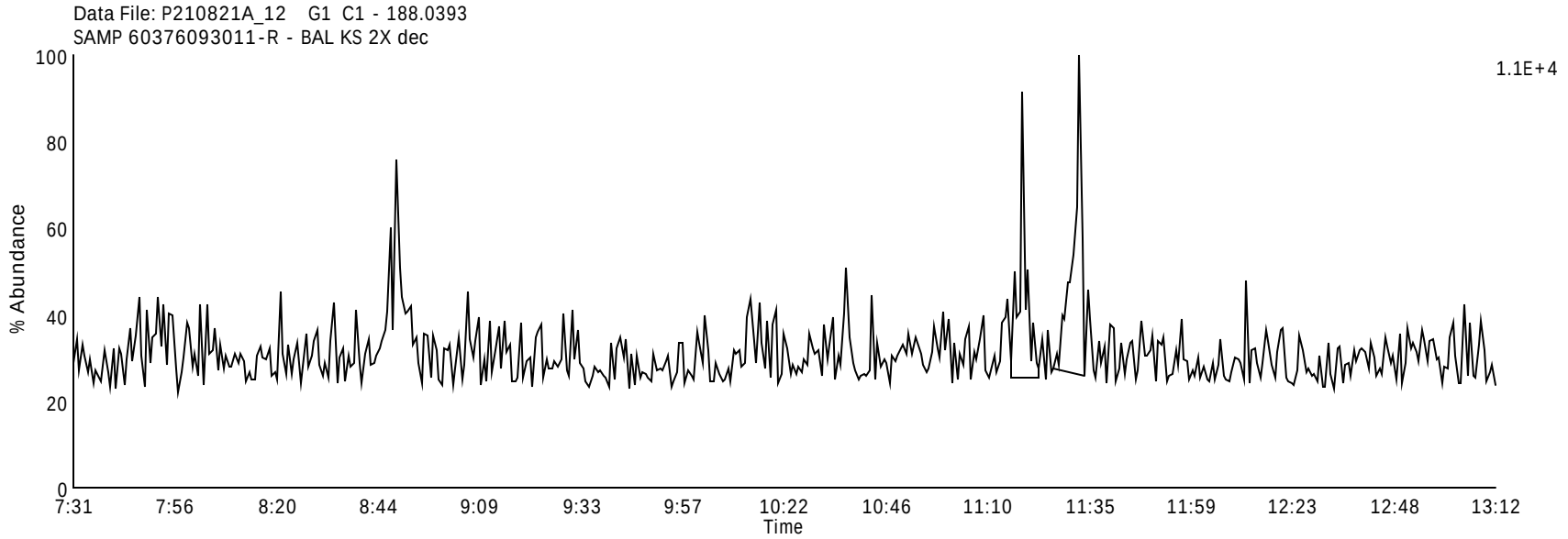
Sample Description: SAMP 60376093011-R - BAL KS 2X dec | Client Sample ID: GB-10/1.5-2.5

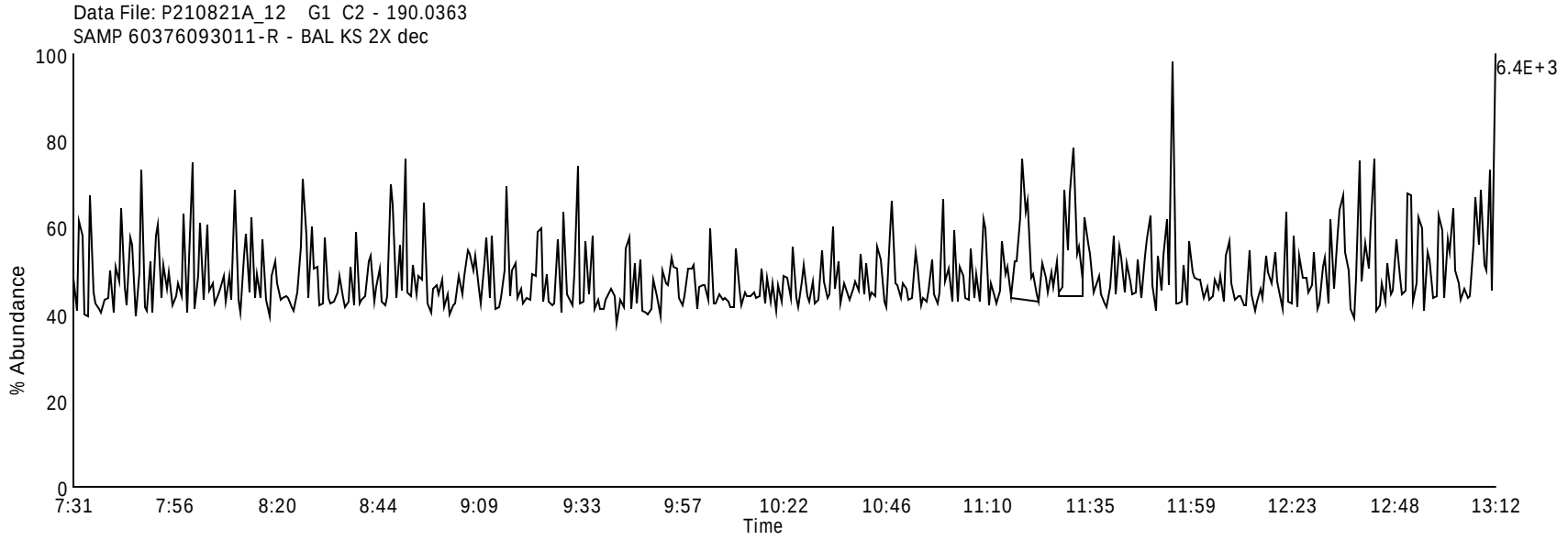




Mono Chlorinated Biphenyls

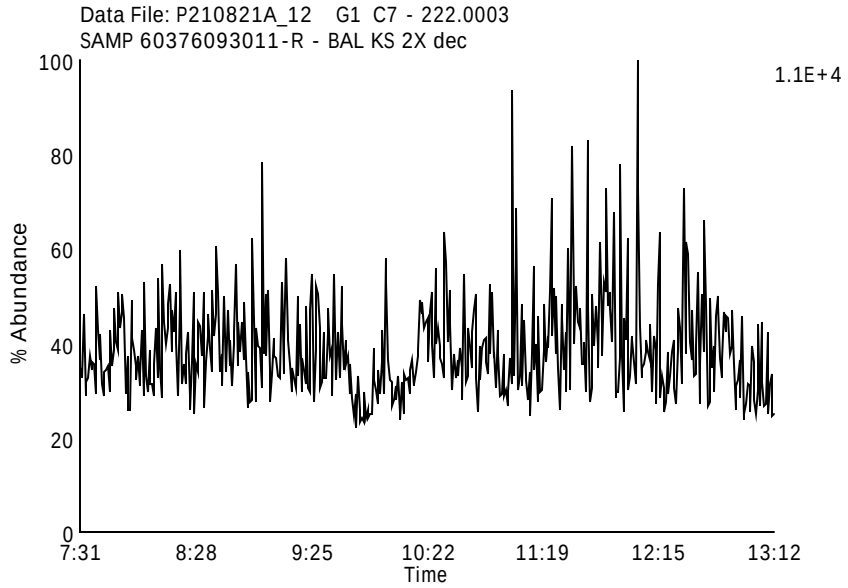
Data File Name: P210821A_12	Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021	Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec	Client Sample ID: GB-10/1.5-2.5

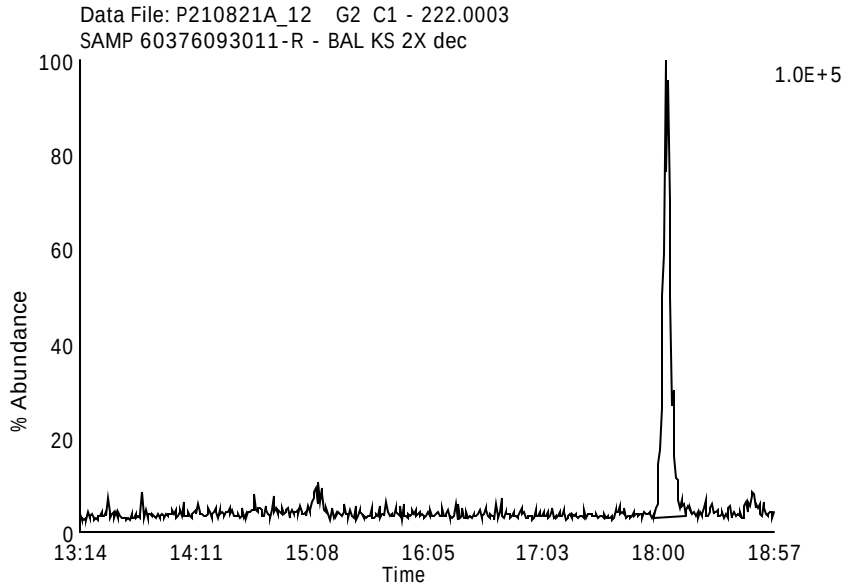


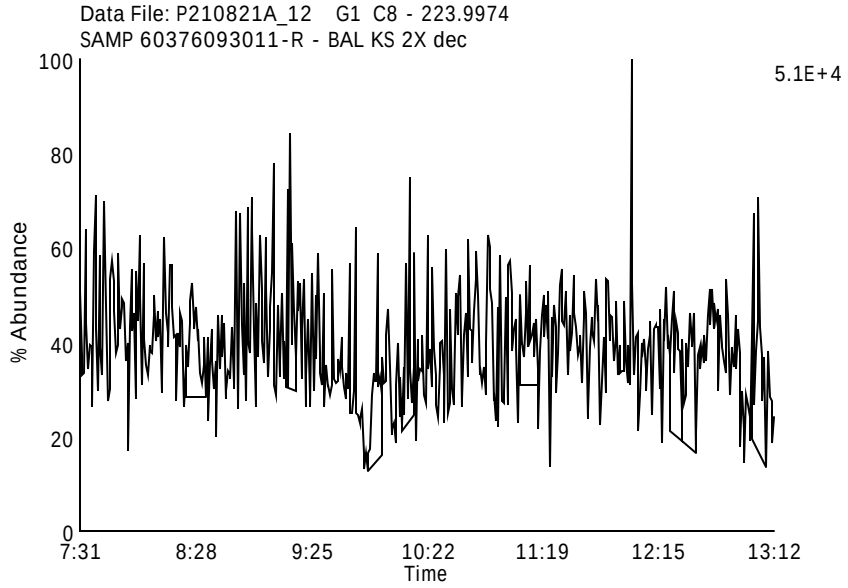


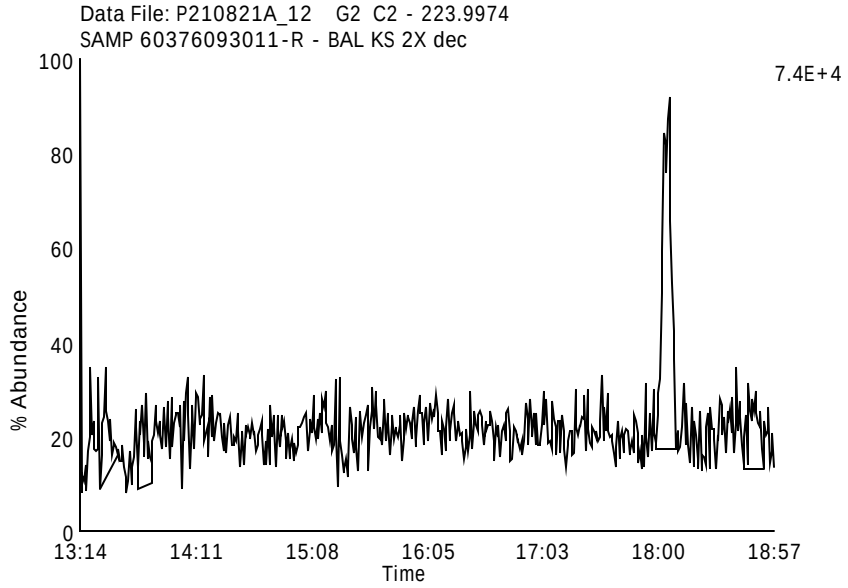
Di Chlorinated Biphenyls

Data File Name: P210821A_12
Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021
Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec
Client Sample ID: GB-10/1.5-2.5



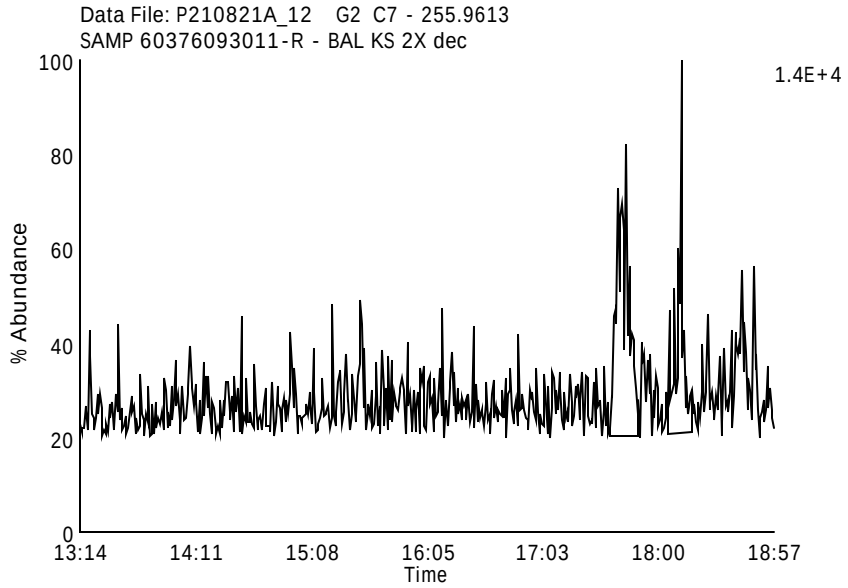


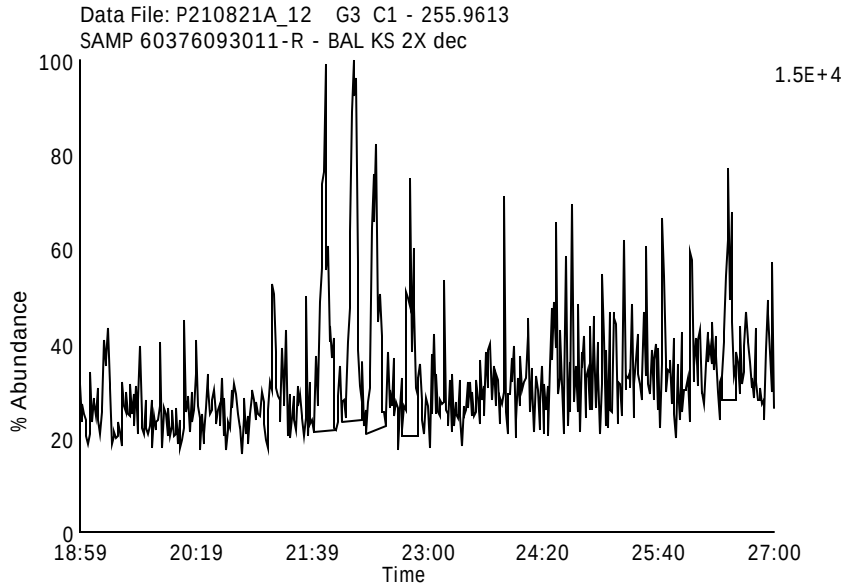


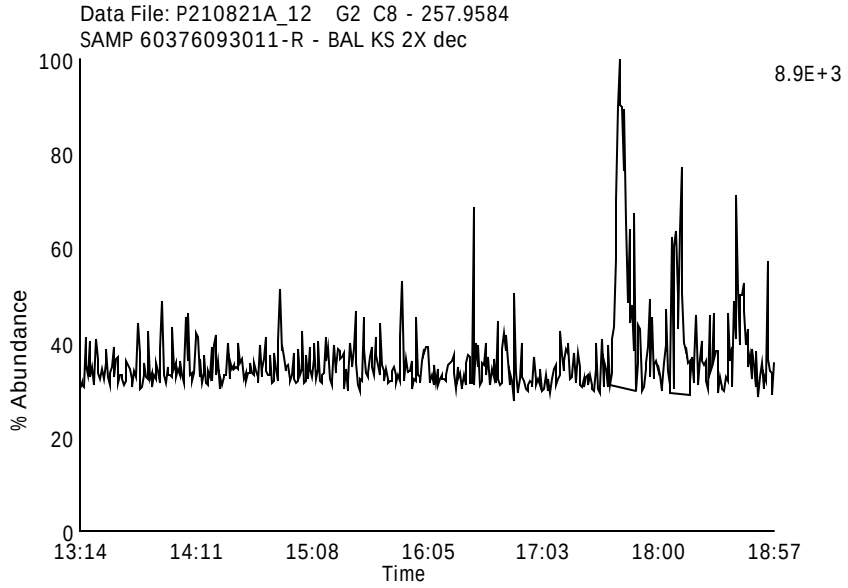


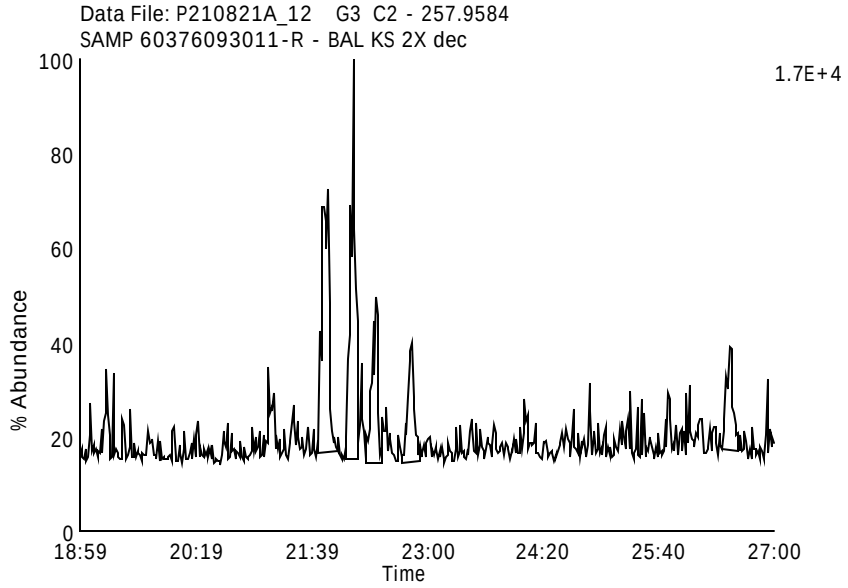
Tri Chlorinated Biphenyls

Data File Name: P210821A_12
Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021
Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec
Client Sample ID: GB-10/1.5-2.5



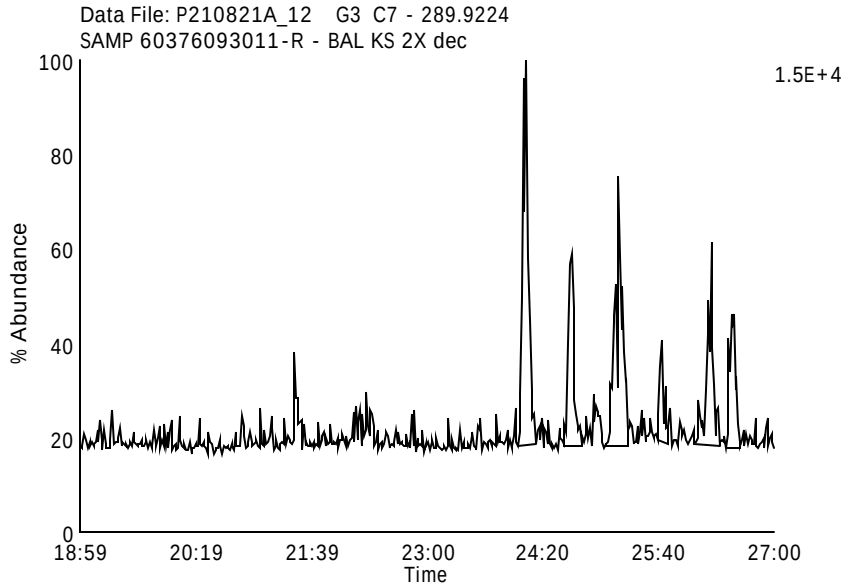


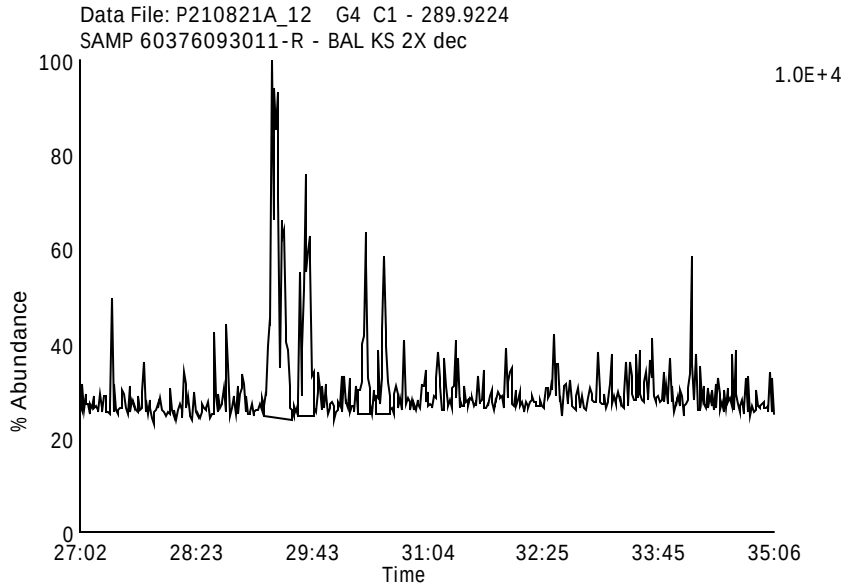


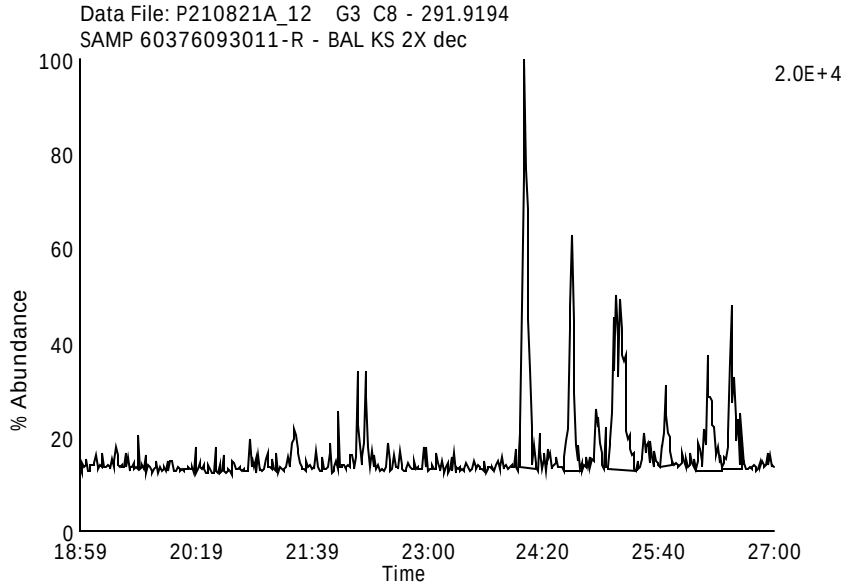


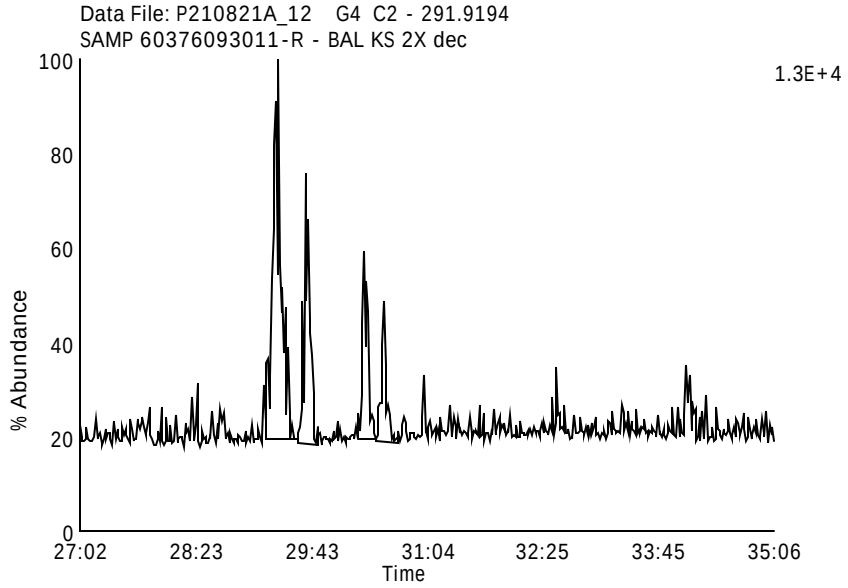
Tetra Chlorinated Biphenyls

Data File Name: P210821A_12
Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021
Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec
Client Sample ID: GB-10/1.5-2.5



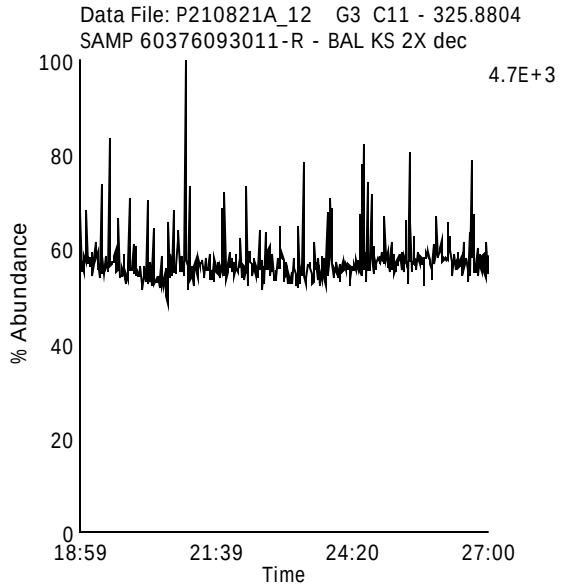


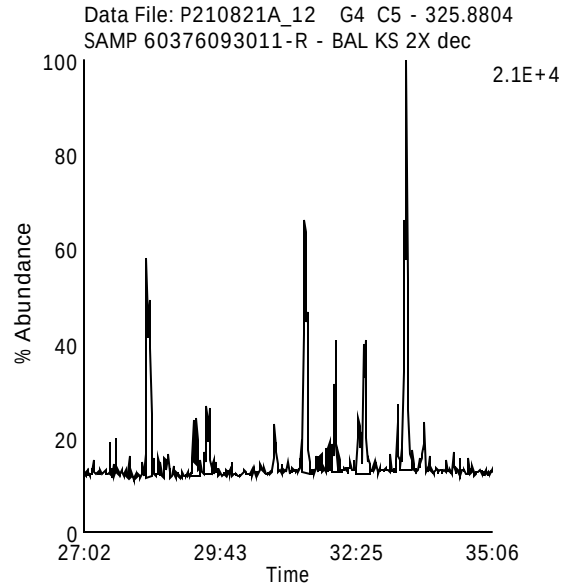


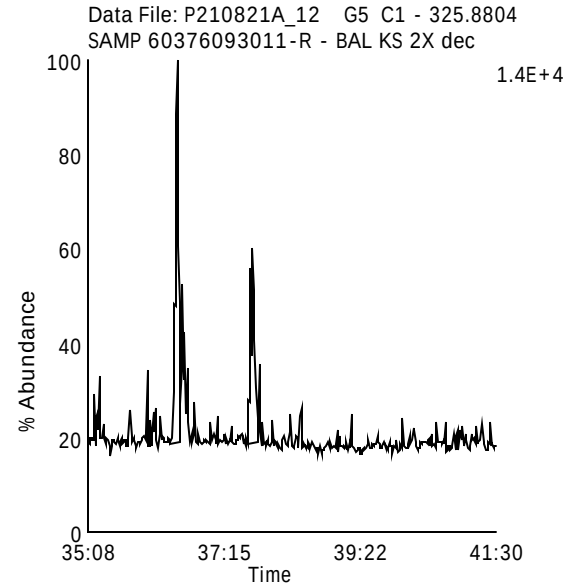


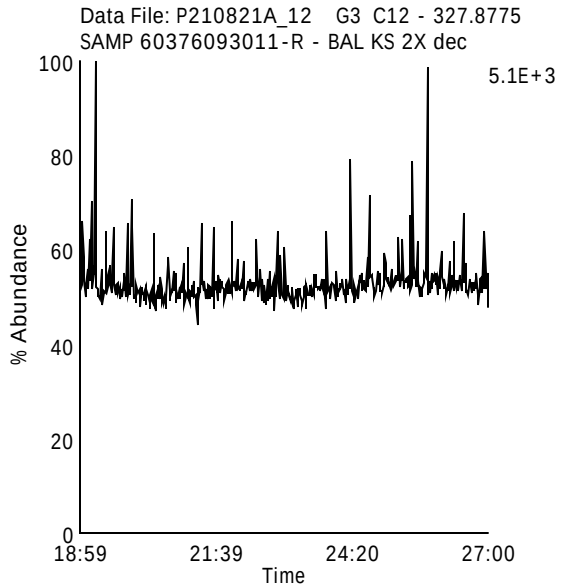
Penta Chlorinated Biphenyls

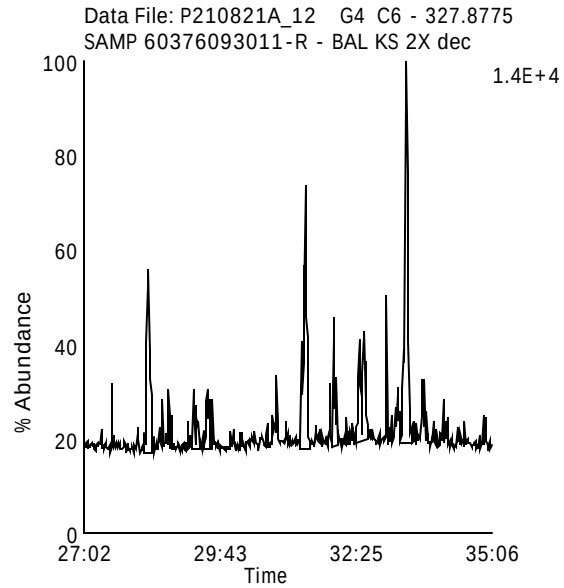
Data File Name: P210821A_12
Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021
Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec
Client Sample ID: GB-10/1.5-2.5

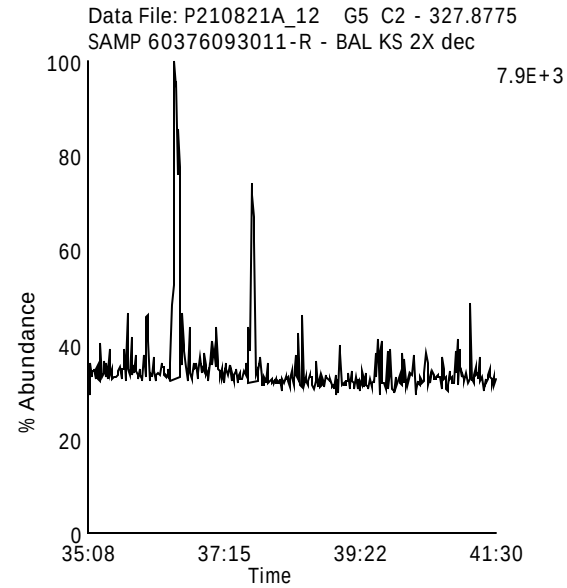






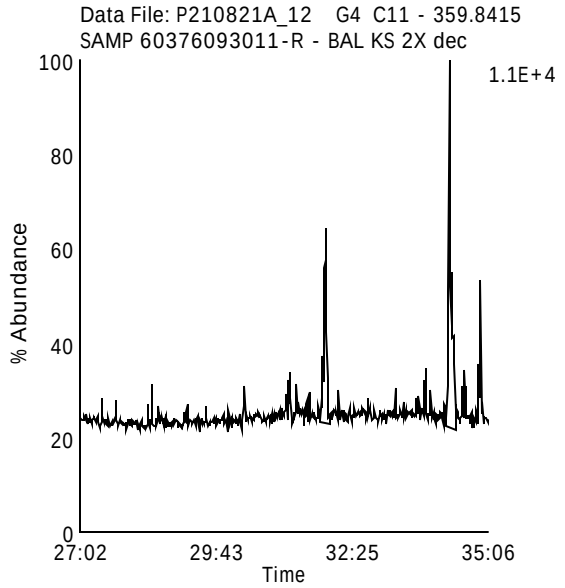


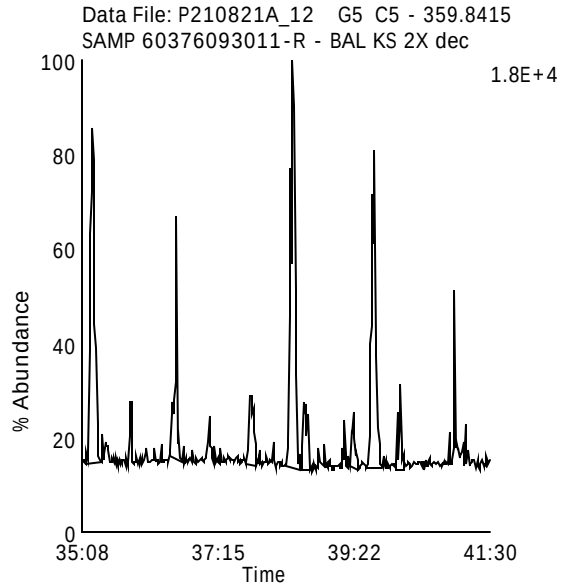


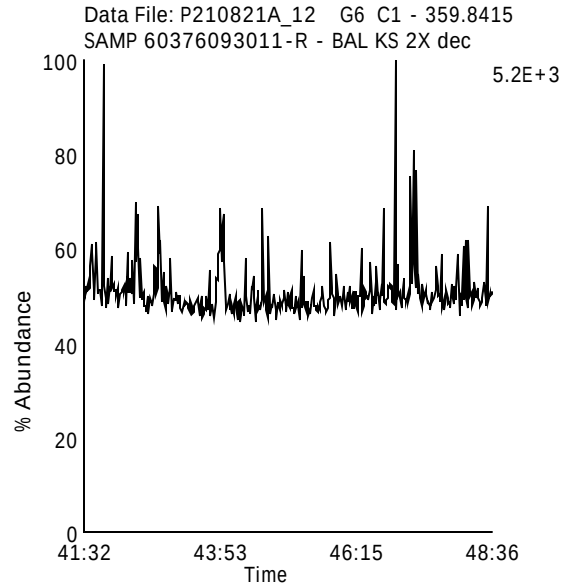


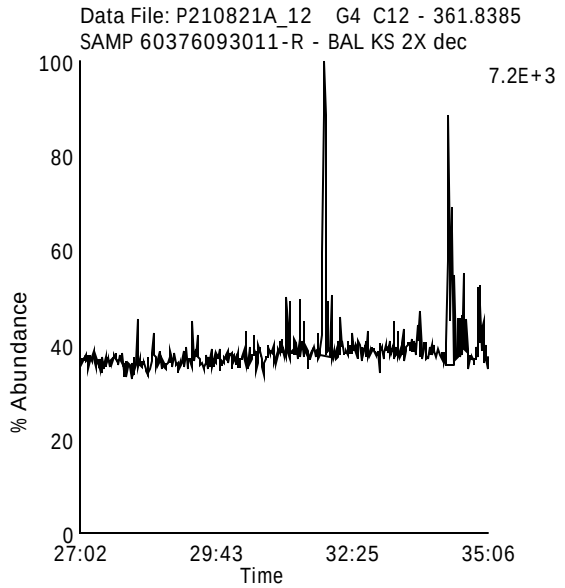
Hexa Chlorinated Biphenyls

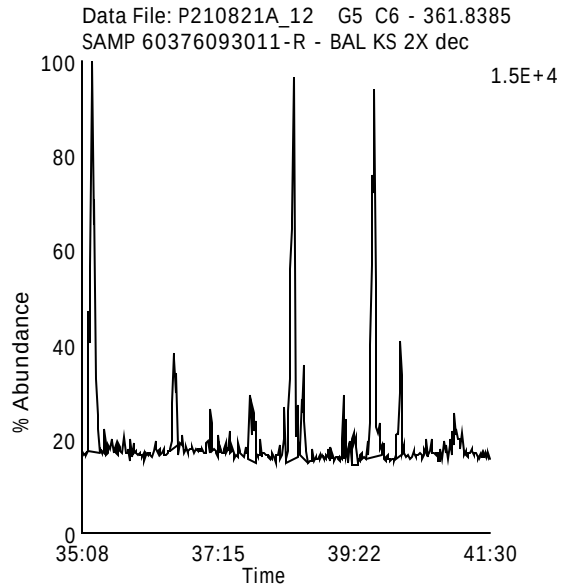
Data File Name: P210821A_12 | Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021 | Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec | Client Sample ID: GB-10/1.5-2.5

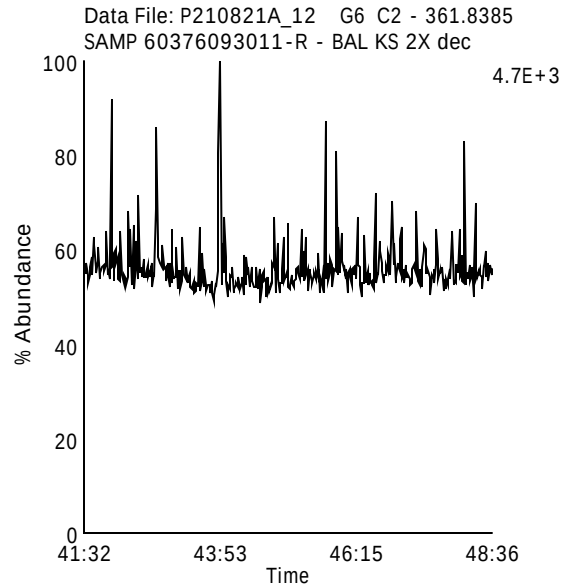






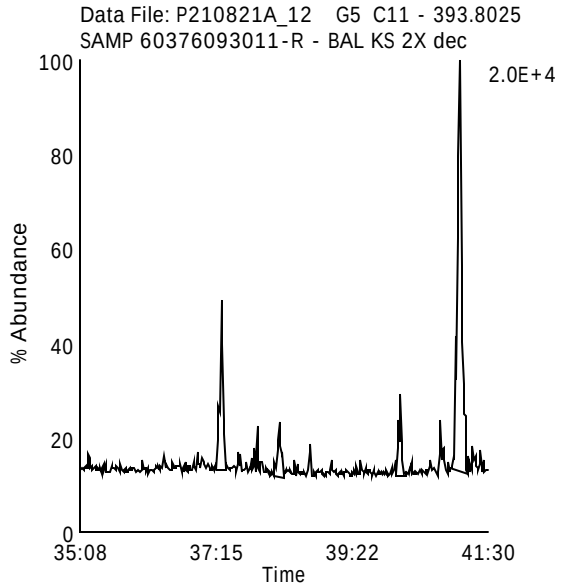


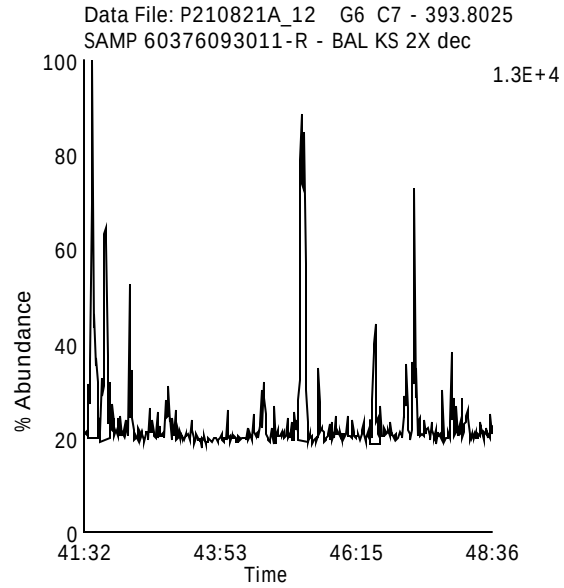


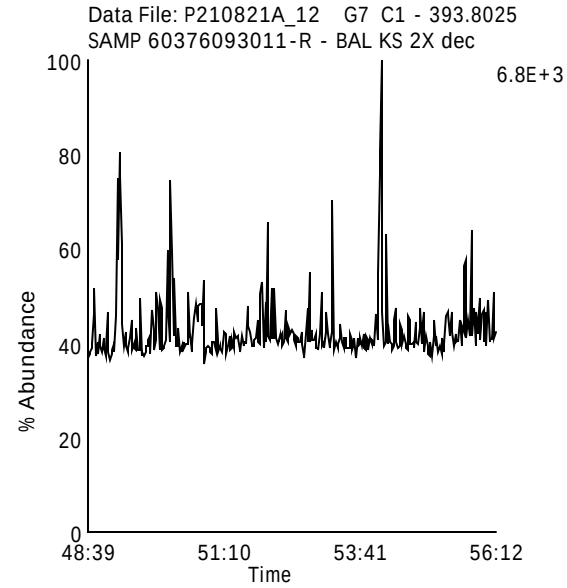


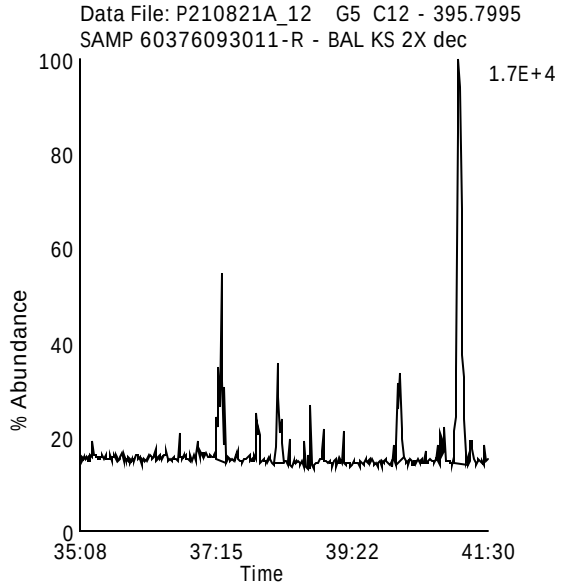
Hepta Chlorinated Biphenyls

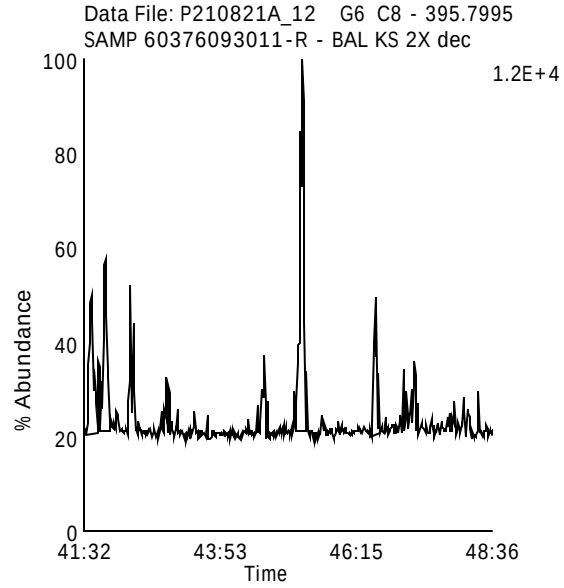
Data File Name: P210821A_12 | Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021 | Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec | Client Sample ID: GB-10/1.5-2.5

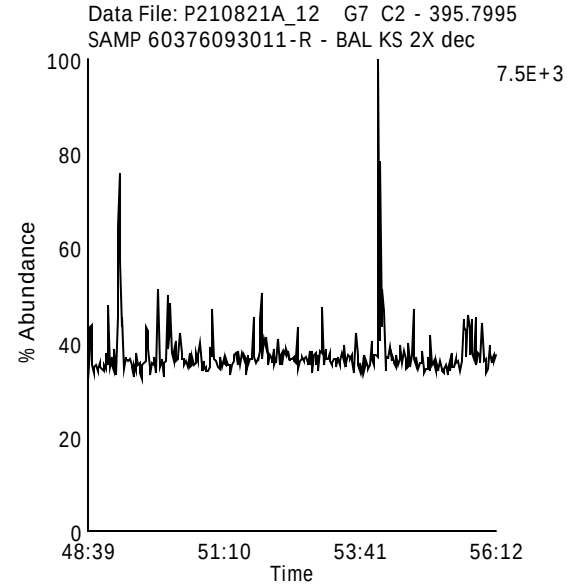






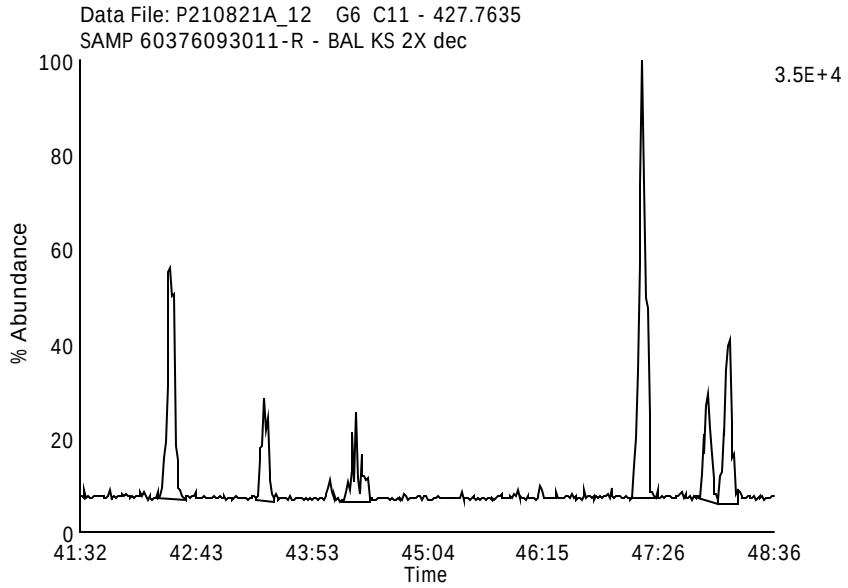


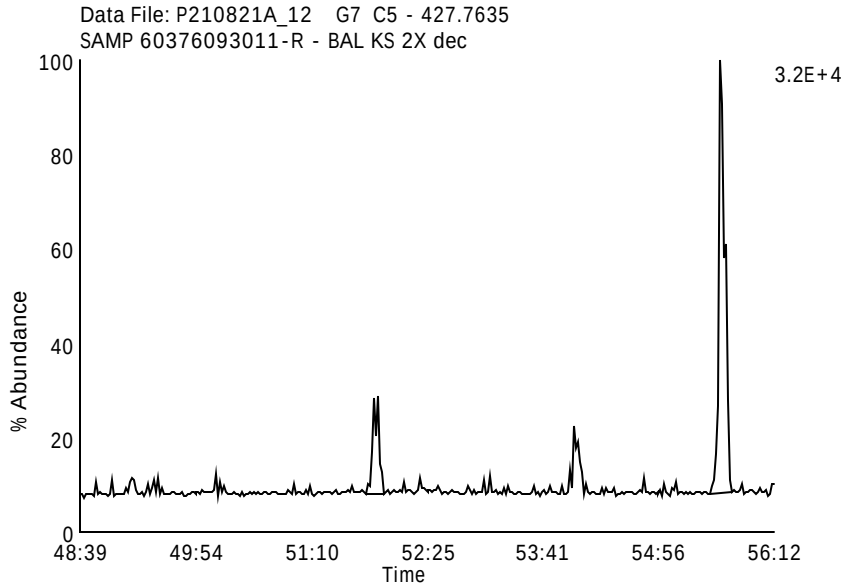


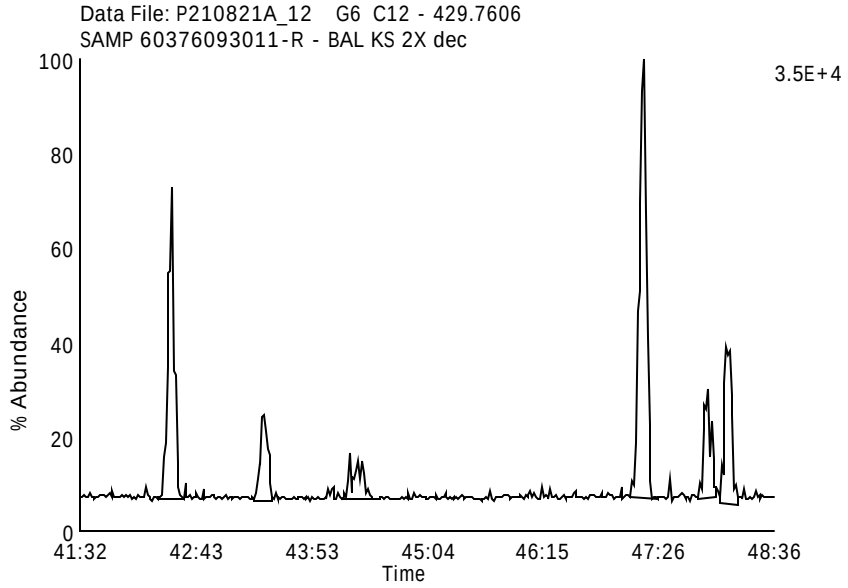


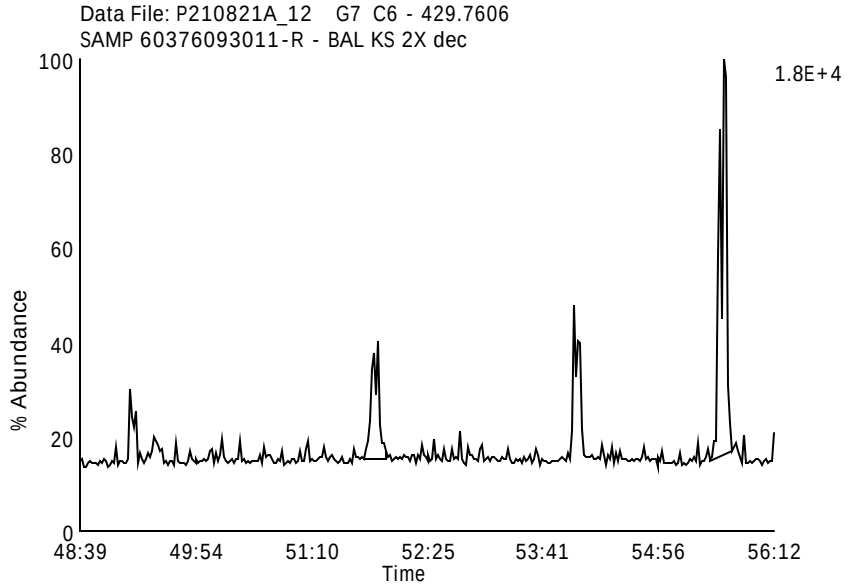
Octa Chlorinated Biphenyls

Data File Name: P210821A_12
Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021
Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec
Client Sample ID: GB-10/1.5-2.5



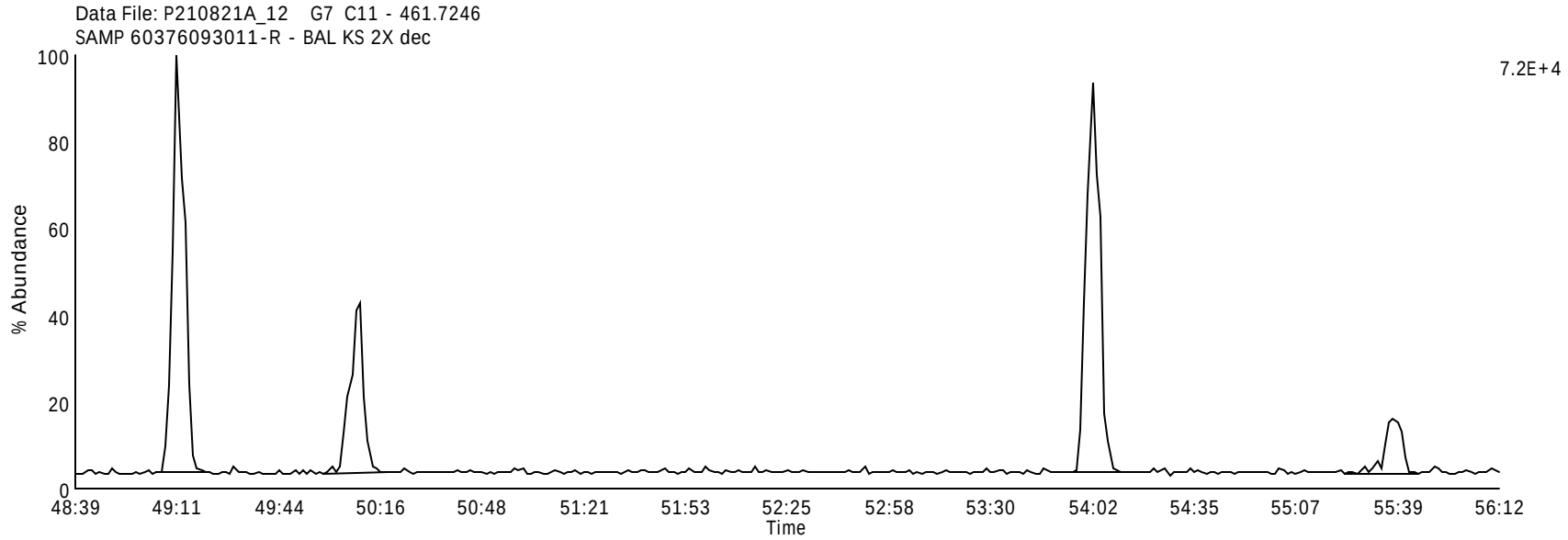


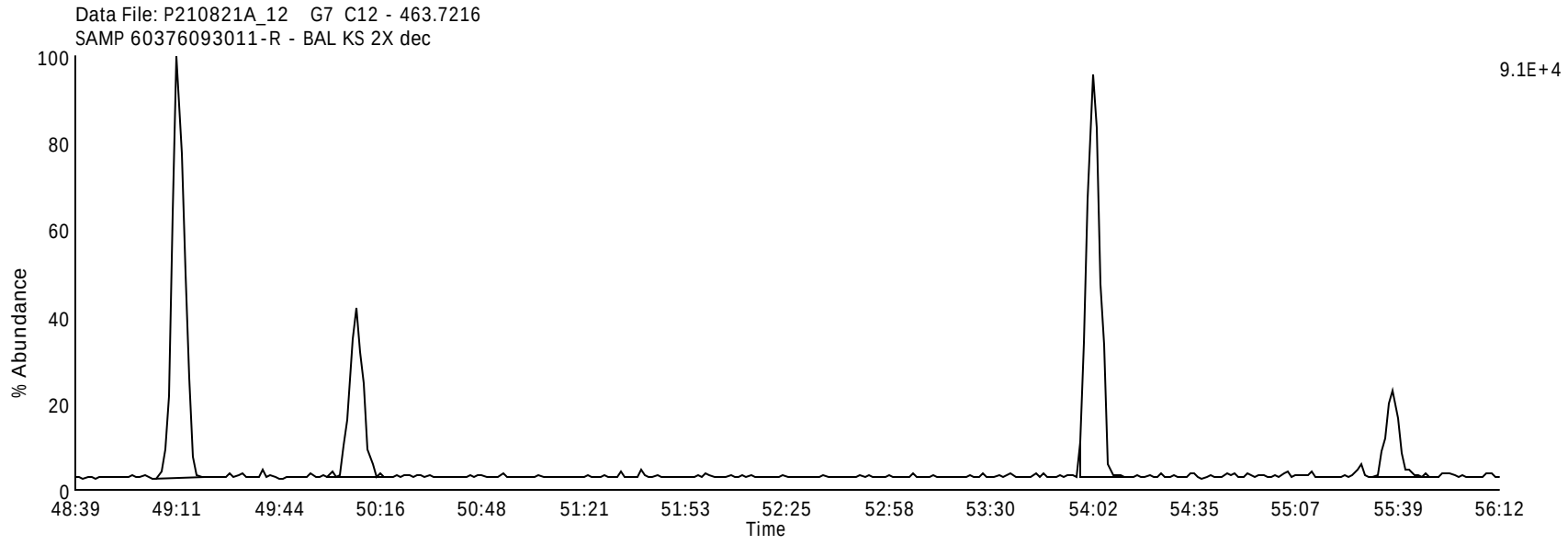




Nona Chlorinated Biphenyls

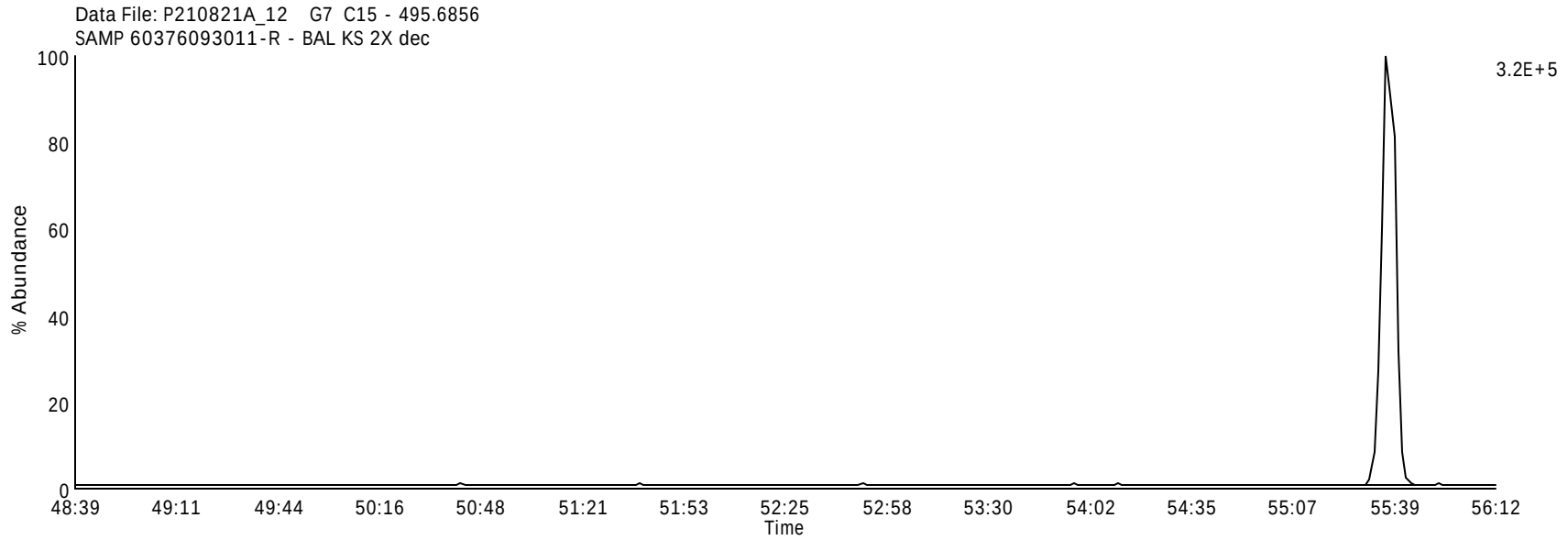
Data File Name: P210821A_12	Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021	Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec	Client Sample ID: GB-10/1.5-2.5

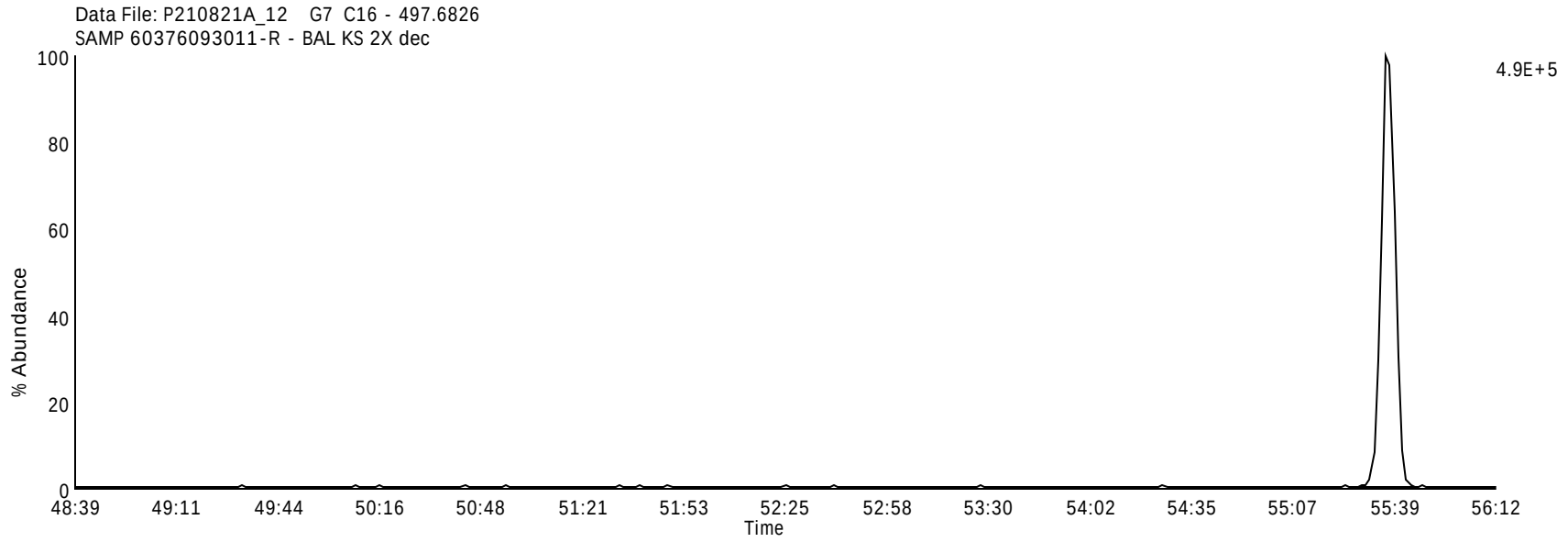




Deca Chlorinated Biphenyl

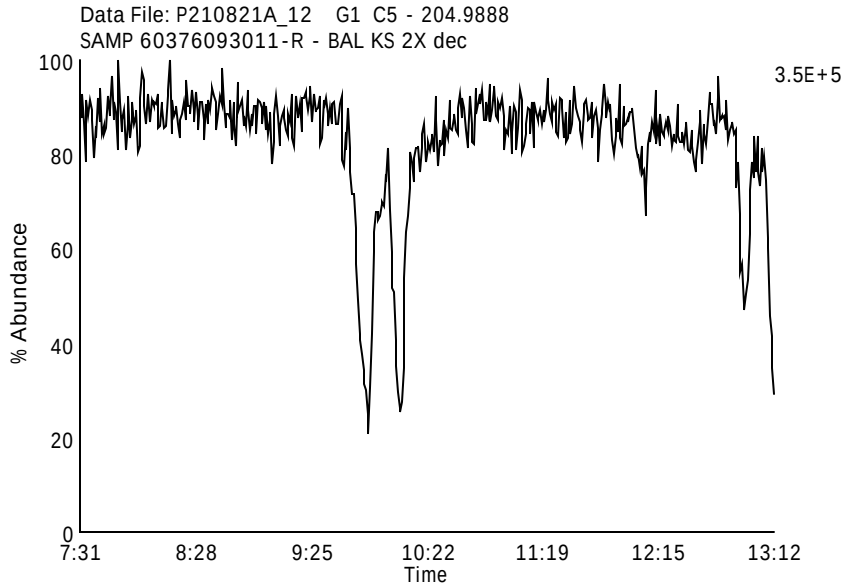
Data File Name: P210821A_12	Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021	Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec	Client Sample ID: GB-10/1.5-2.5

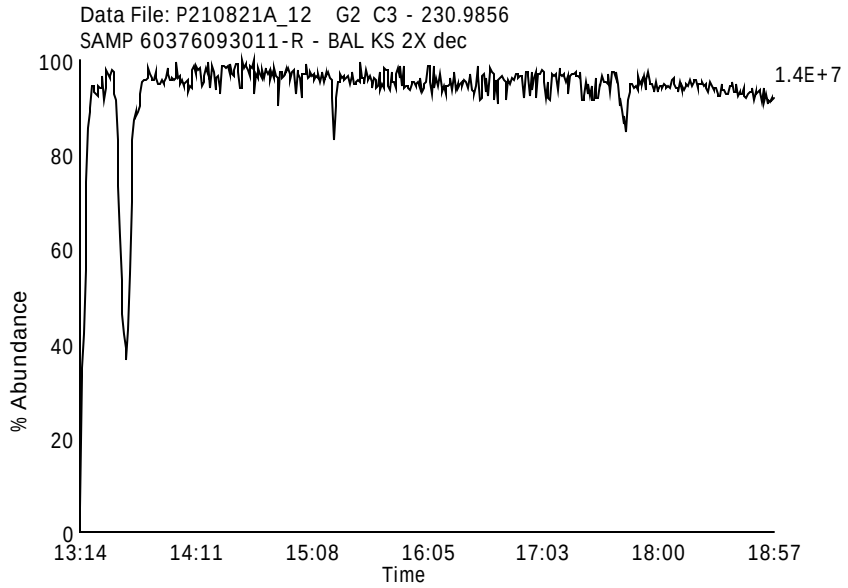


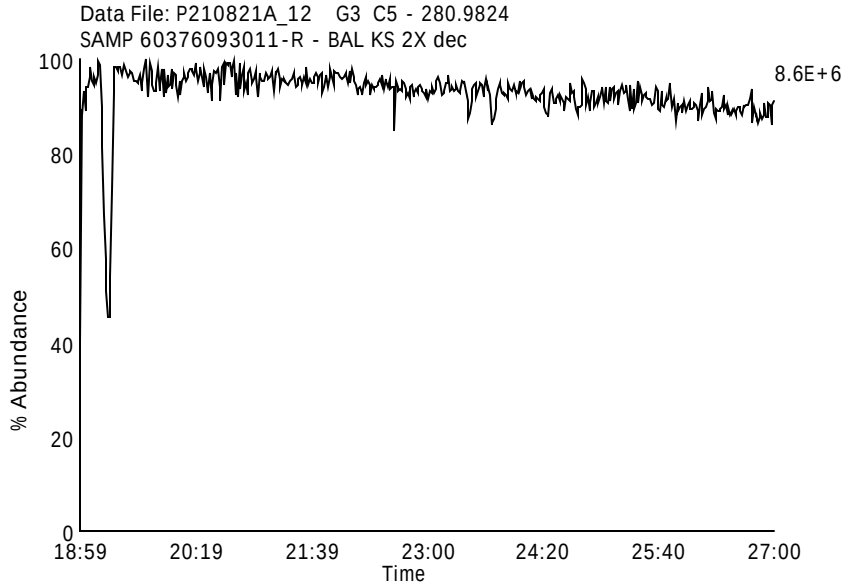


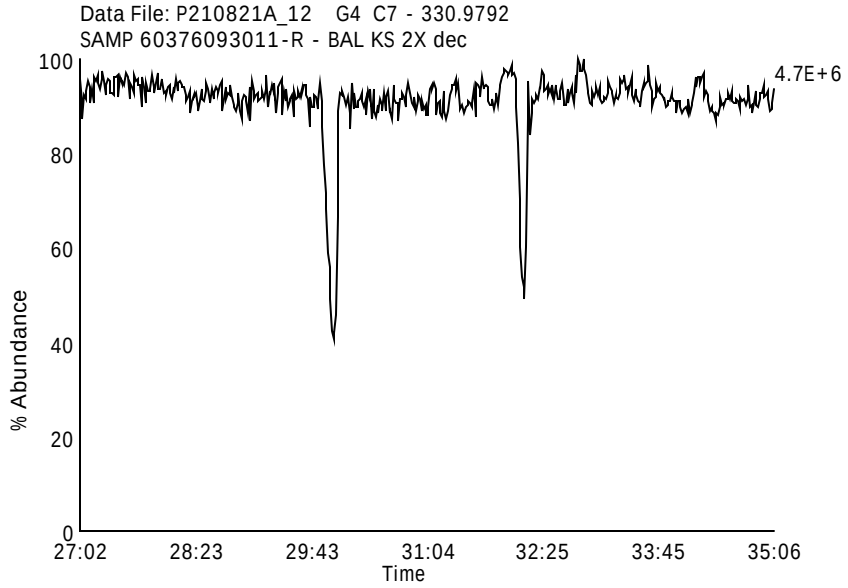
Group 1 - 4 Lock mass

Data File Name: P210821A_12
Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021
Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec
Client Sample ID: GB-10/1.5-2.5



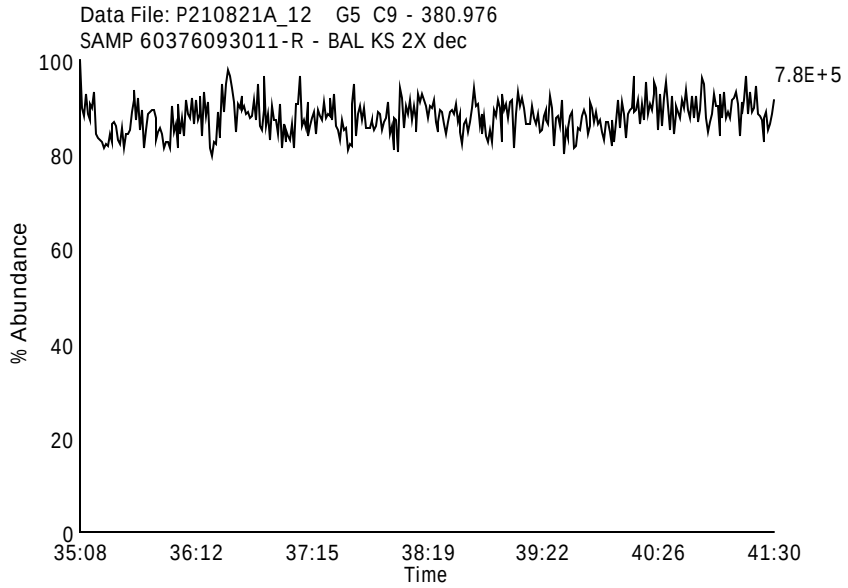


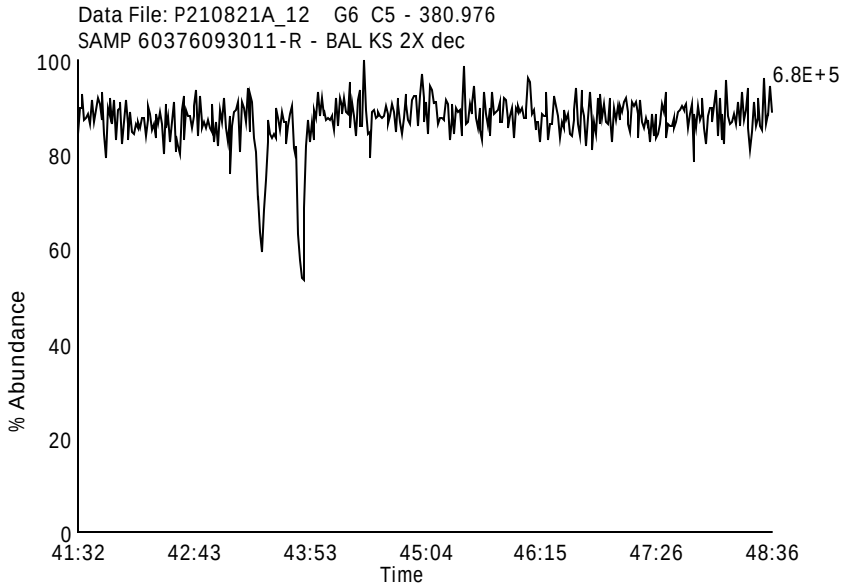


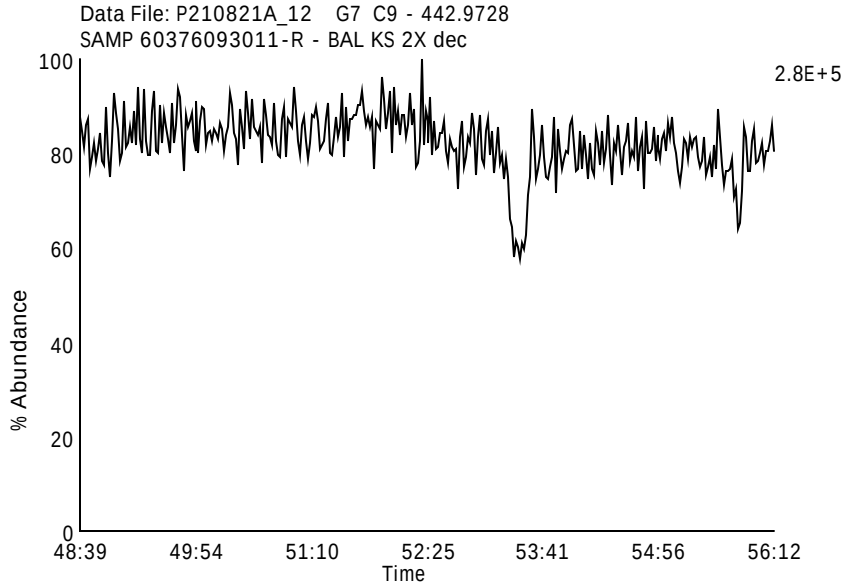


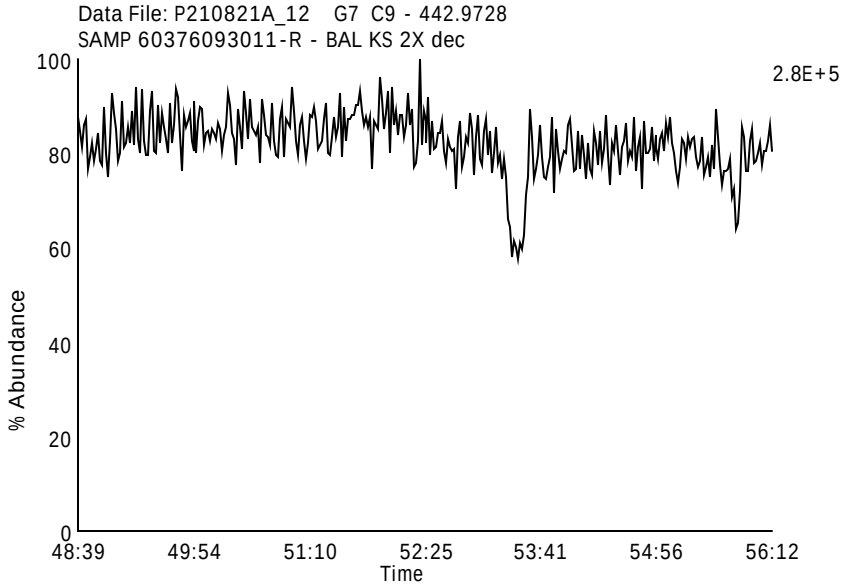
Group 5 - 7 Lock mass

Data File Name: P210821A_12
Lab Sample ID: 60376093011-R
Date Acquired: 8/22/2021
Instrument: 10MSHR09 (P)
Sample Description: SAMP 60376093011-R - BAL KS 2X dec
Client Sample ID: GB-10/1.5-2.5









Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-30/3-4	Injected By	CVS
Lab ID	60376093005-R	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_12	GC Column ID	261111-02
Analyzed	08/20/2021 12:25	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.850	0.79	1186117	1508976	
13C-3,3',4,4'-TeCB	77	35.454	0.77	1205128	1569617	
13C-2,3,3',4,4'-PeCB	105	39.031	1.45	1096352	756352	
13C-2,3,4,4',5-PeCB	114	38.393	1.52	1201868	792968	
13C-2,3',4,4',5-PeCB	118	37.840	1.62	1237555	761735	
13C-2,3',4,4',5'-PeCB	123	37.505	1.51	1268418	840225	
13C-3,3',4,4',5-PeCB	126	42.183	1.45	1061048	729764	
13C-HxCB(156/157)	156/157	45.257	1.26	1653012	1308546	
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.21	902442	745170	
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.14	731133	642713	
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.04	570181	547475	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	0.96	1883840	1967176	
13C-2,3,3',5,5'-PeCB	111	35.521	1.61	2150579	1338498	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.09	1075867	985174	
Recovery Standards						
13C-2,5-DiCB	9	15.529	1.46	5686124	3887360	
13C-2,2',5,5'-TeCB	52	25.421	0.81	2723797	3357753	
13C-2,2',4,5,5'-PeCB	101	32.704	1.56	2610674	1668608	
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.23	1937627	1570585	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.96	904818	937739	

REPORT OF LABORATORY ANALYSIS

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Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-30/3-4	Injected By	CVS
Lab ID	60376093005-R	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_12	GC Column ID	261111-02
Analyzed	08/20/2021 12:25	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.471	0.52	6544	12597	
105		39.098	2.27	16461	7249	
118		37.857	1.62	39860	24539	
156	156/157	45.307	0.39	4401	11281	
157	156/157	45.307	0.39	(4401)	(11281)	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	GB-10/1.5-2.5	Injected By	BAL
Lab ID	60376093011-R	Instrument ID	10MSHR09 (P)
Filename	P210821A_12	GC Column ID	261111-01
Analyzed	08/22/2021 00:58	ICAL Date	08/21/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	33.559	0.79	339645	430592	
13C-3,3',4,4'-TeCB	77	34.131	0.67	308166	458463	
13C-2,3,3',4,4'-PeCB	105	37.693	1.53	405892	265308	
13C-2,3,4,4',5-PeCB	114	37.022	1.57	404130	257995	
13C-2,3',4,4',5-PeCB	118	36.486	1.62	471385	290137	
13C-2,3',4,4',5'-PeCB	123	36.167	1.65	442449	268514	
13C-3,3',4,4',5-PeCB	126	40.863	1.52	408321	268386	
13C-HxCB(156/157)	156/157	43.903	1.27	696904	549977	
13C-2,3',4,4',5,5'-HxCB	167	42.780	1.17	346856	296115	
13C-3,3',4,4',5,5'-HxCB	169	47.223	1.28	331826	258746	
13C-2,3,3',4,4',5,5'-HpCB	189	49.736	1.18	305857	258411	
CleanupStandards						
13C-2,4,4'-TrCB	28	22.120	1.06	594902	562089	
13C-2,3,3',5,5'-PeCB	111	34.162	1.53	479801	312990	
13C-2,2',3,3',5,5',6-HpCB	178	40.091	1.12	310333	277867	
Recovery Standards						
13C-2,5-DiCB	9	14.204	1.49	1133482	758546	
13C-2,2',5,5'-TeCB	52	24.115	0.84	541755	643766	
13C-2,2',4,5,5'-PeCB	101	31.377	1.55	577617	371523	
13C-2,2',3,4,4',5'-HxCB	138	39.655	1.25	471237	378333	
13C-2,2',3,3',4,4',5,5'-OcCB	194	51.827	0.87	287521	330031	

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Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	GB-10/1.5-2.5	Injected By	BAL
Lab ID	60376093011-R	Instrument ID	10MSHR09 (P)
Filename	P210821A_12	GC Column ID	261111-01
Analyzed	08/22/2021 00:58	ICAL ID	P210821A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
105		37.710	1.90	26229	13773	
118		36.536	1.39	41073	29522	

REPORT OF LABORATORY ANALYSIS

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Appendix E

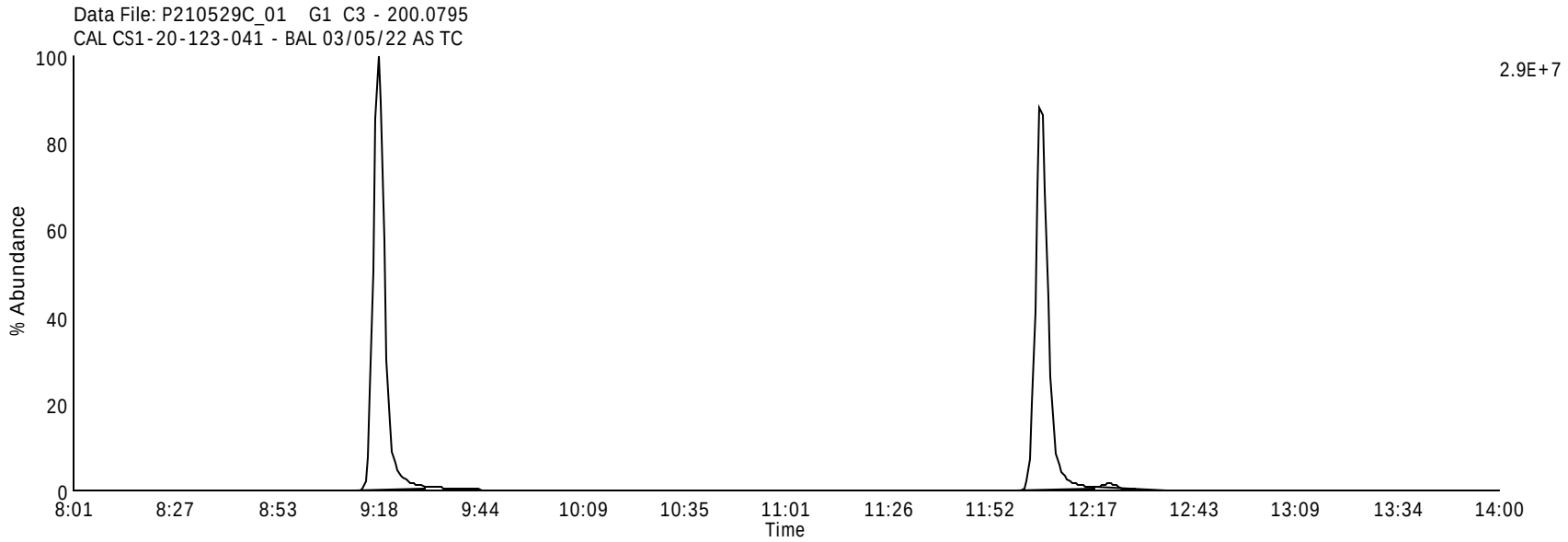
Calibration Raw Data

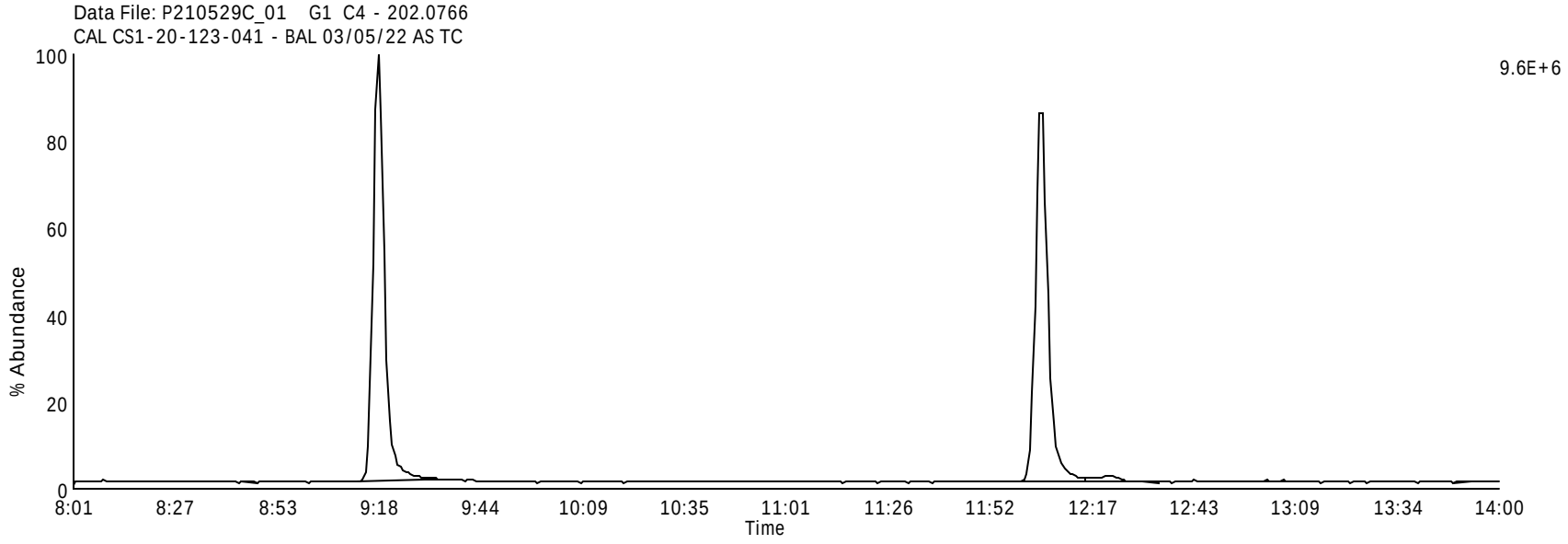
Labeled Mono Chlorinated Biphenyls

Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC



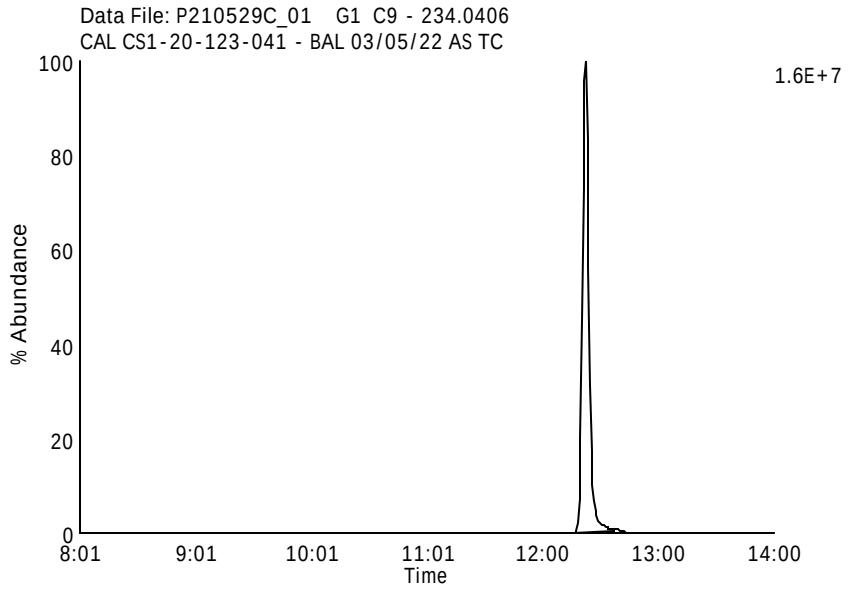


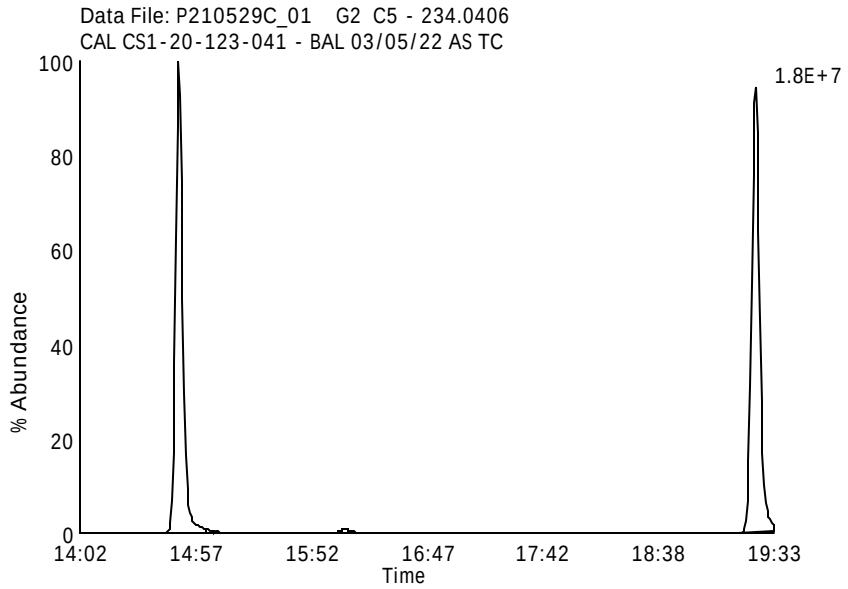
Labeled Di Chlorinated Biphenyls

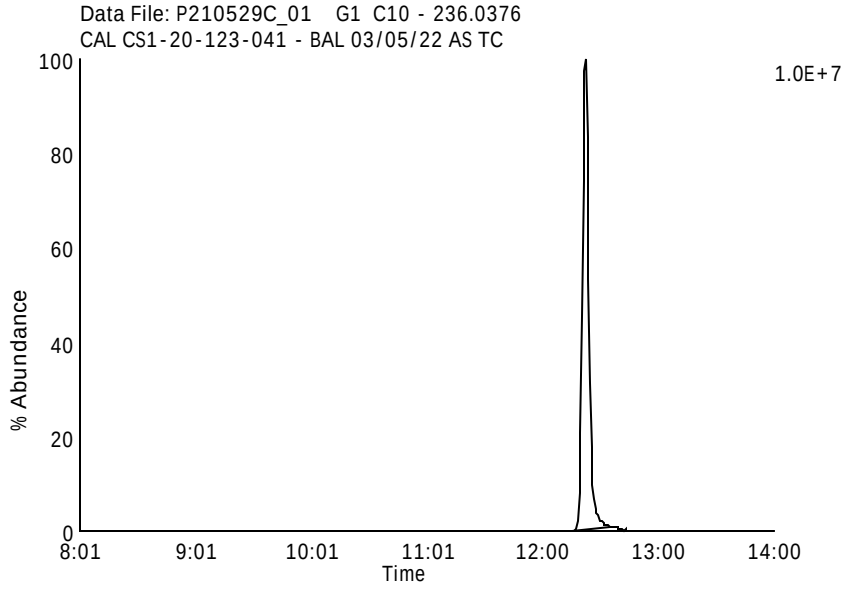
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

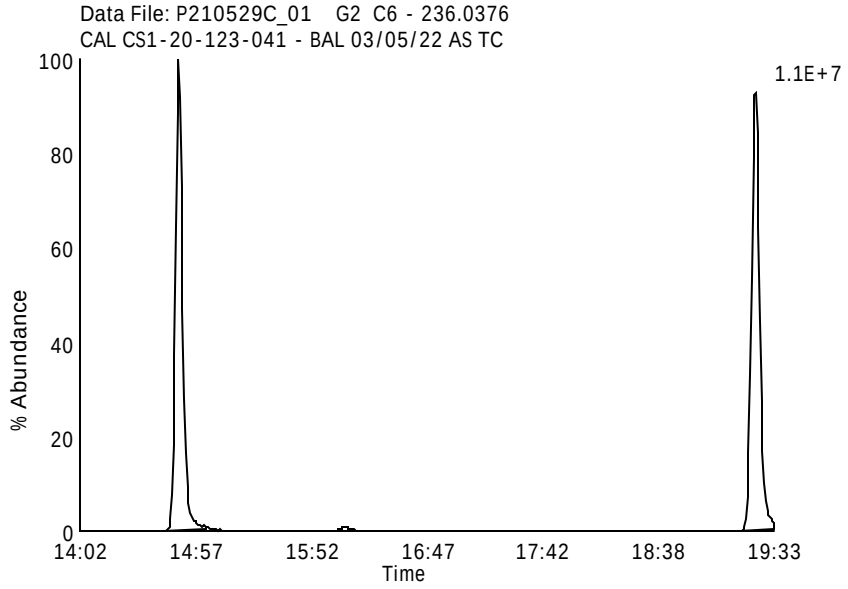
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







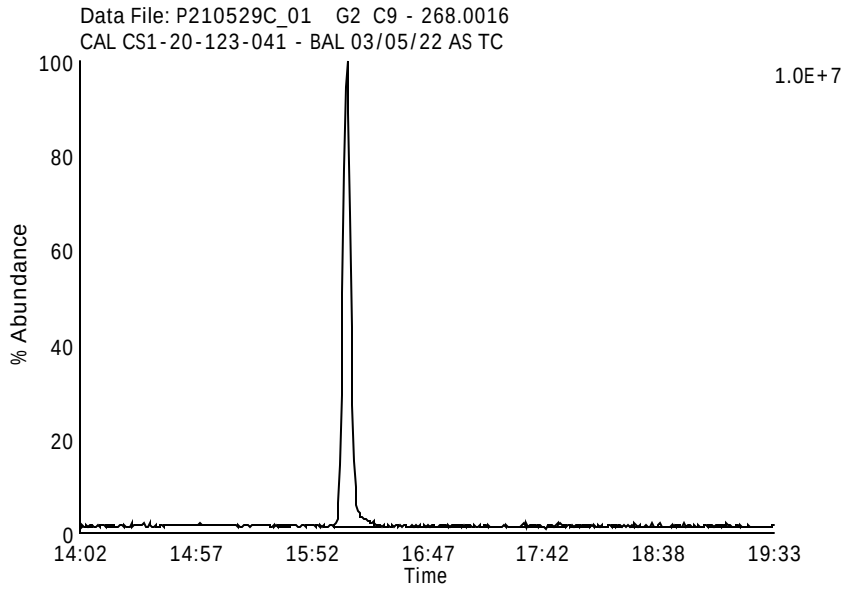


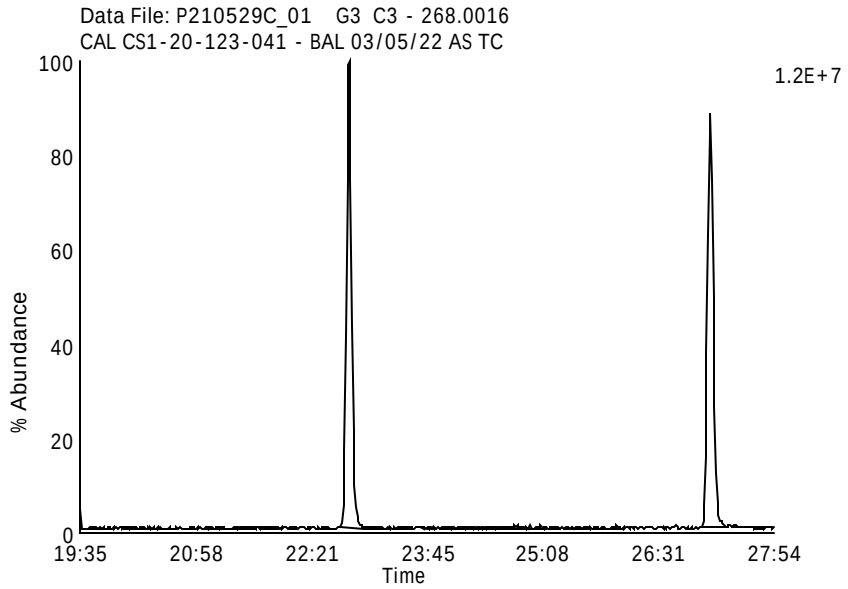
Labeled Tri Chlorinated Biphenyls

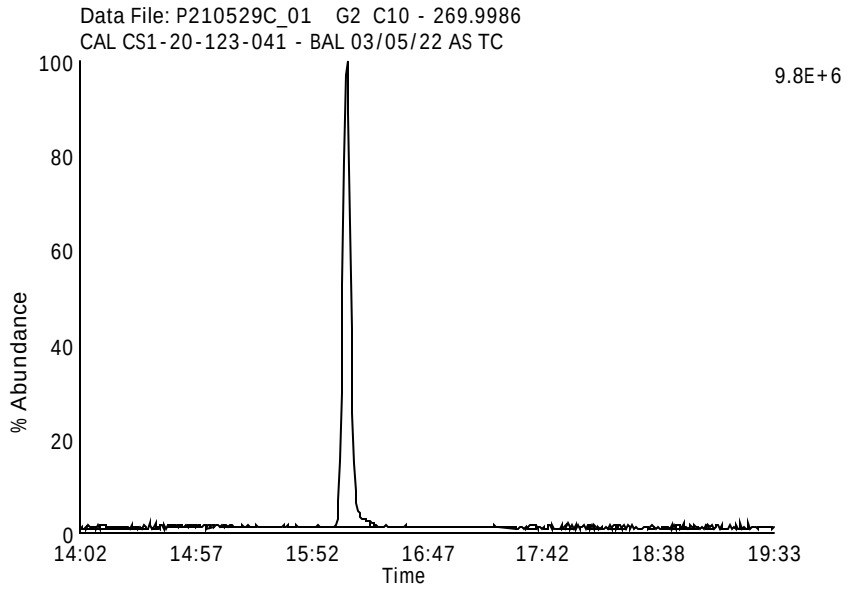
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

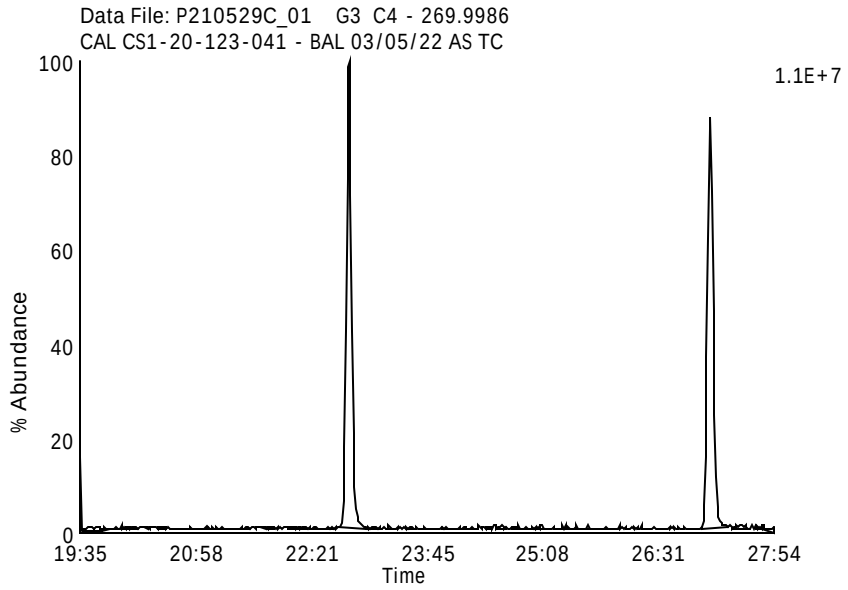
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







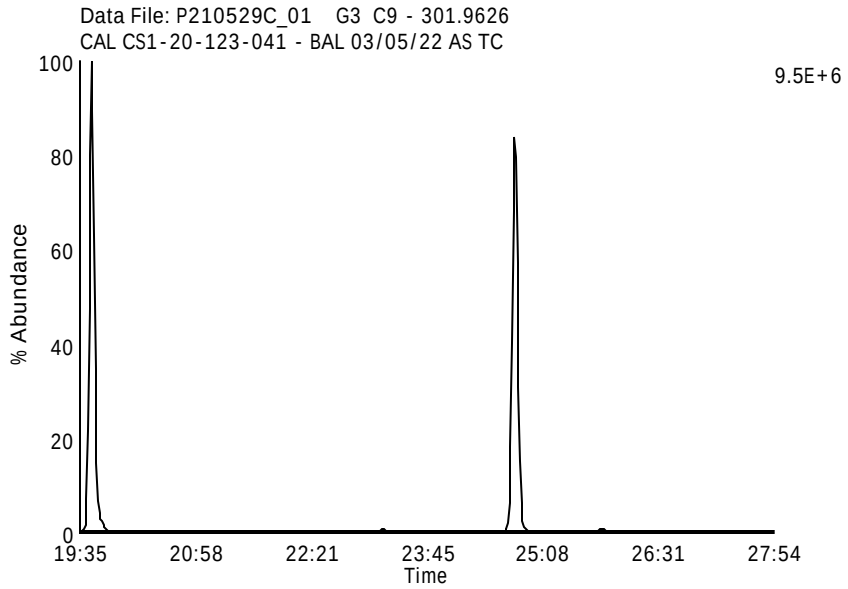


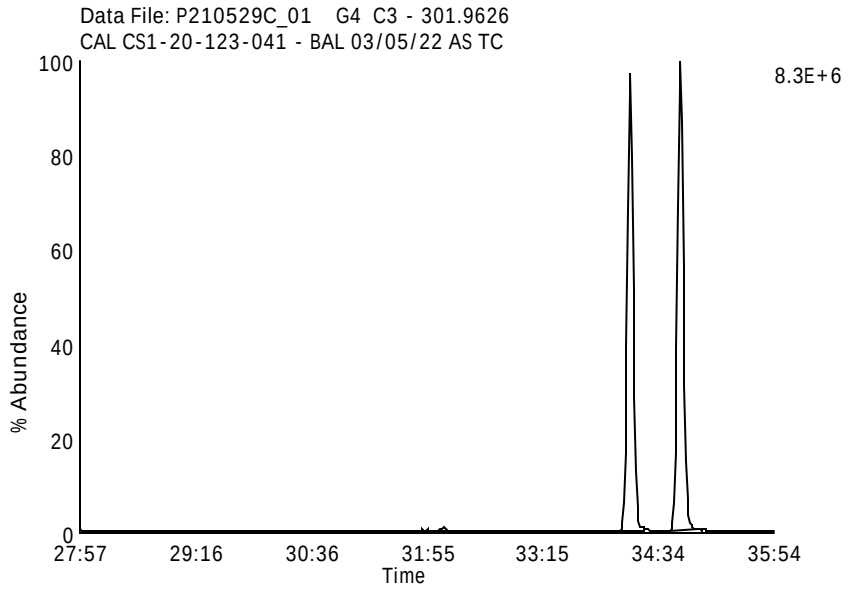
Labeled Tetra Chlorinated Biphenyls

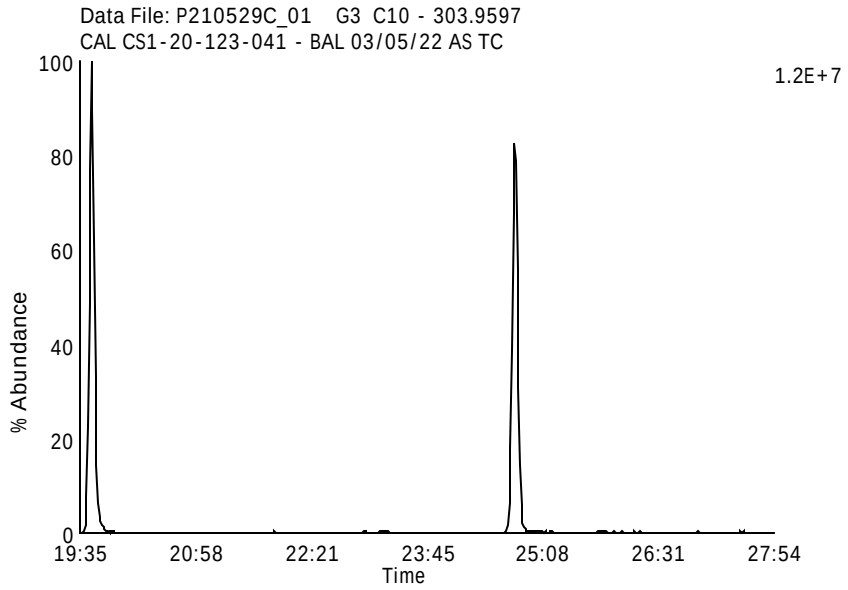
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

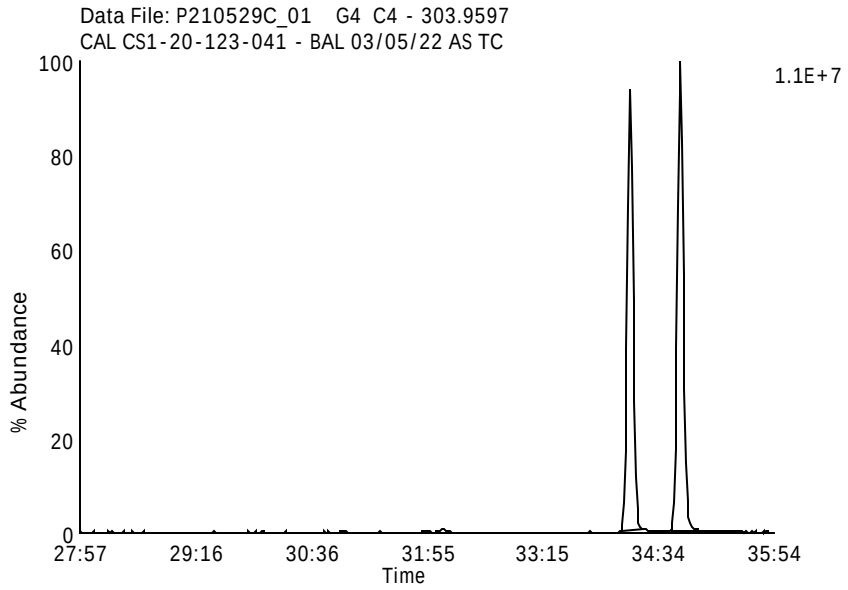
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







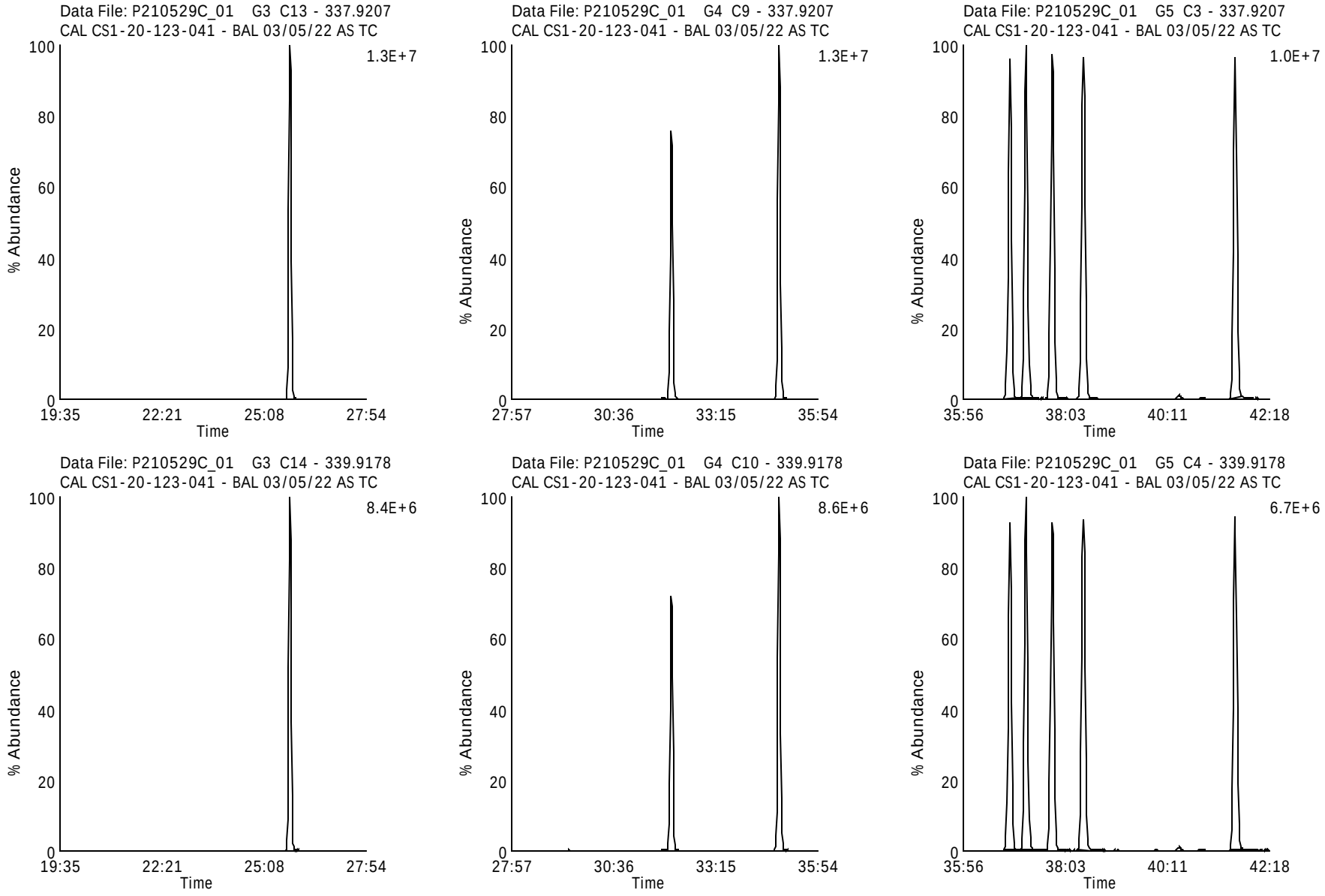


Labeled Penta Chlorinated Biphenyls

Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC

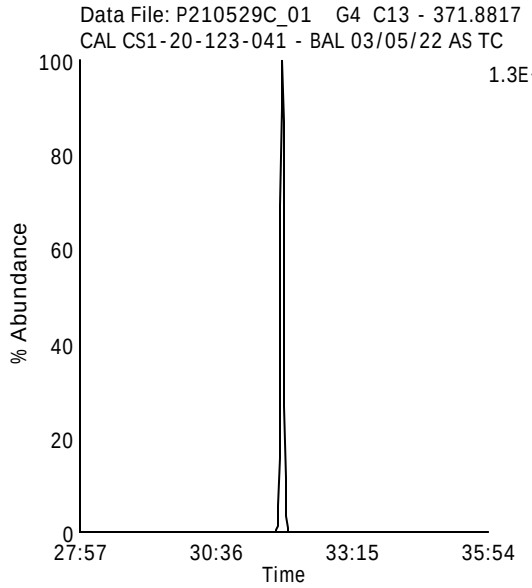


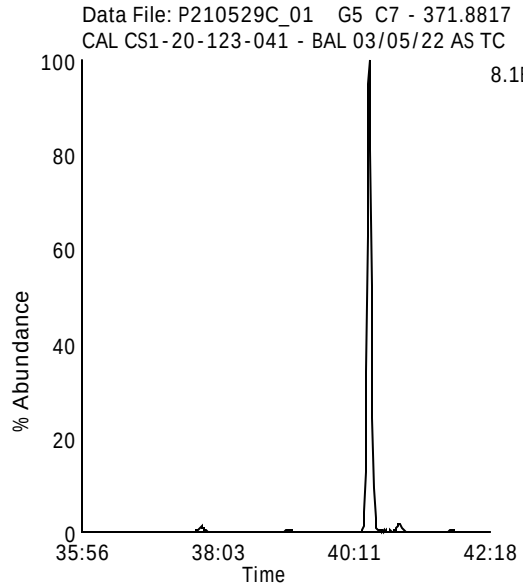
Labeled Hexa Chlorinated Biphenyls

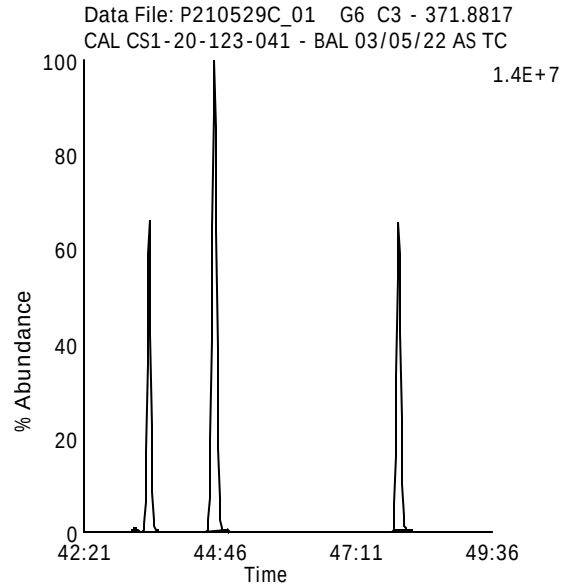
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

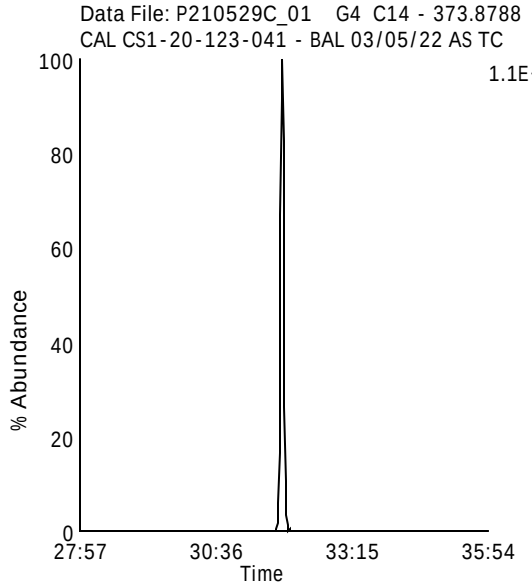
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

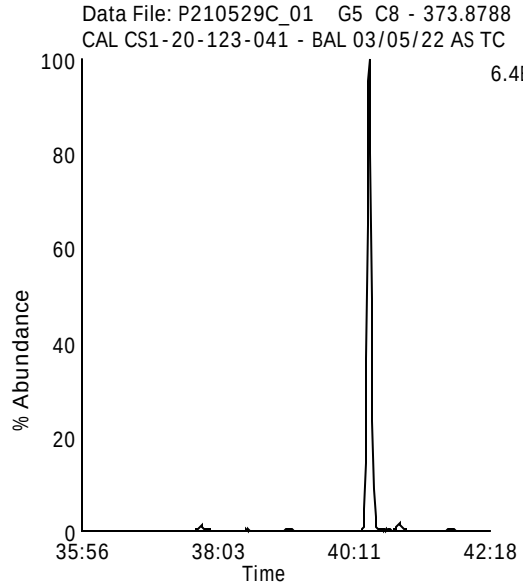
Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC

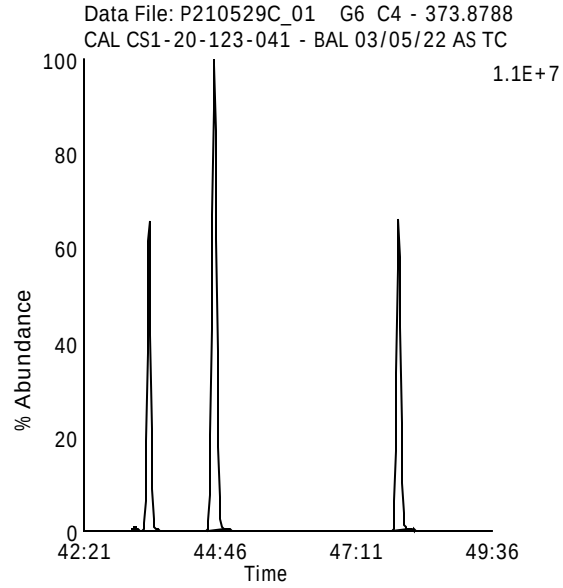










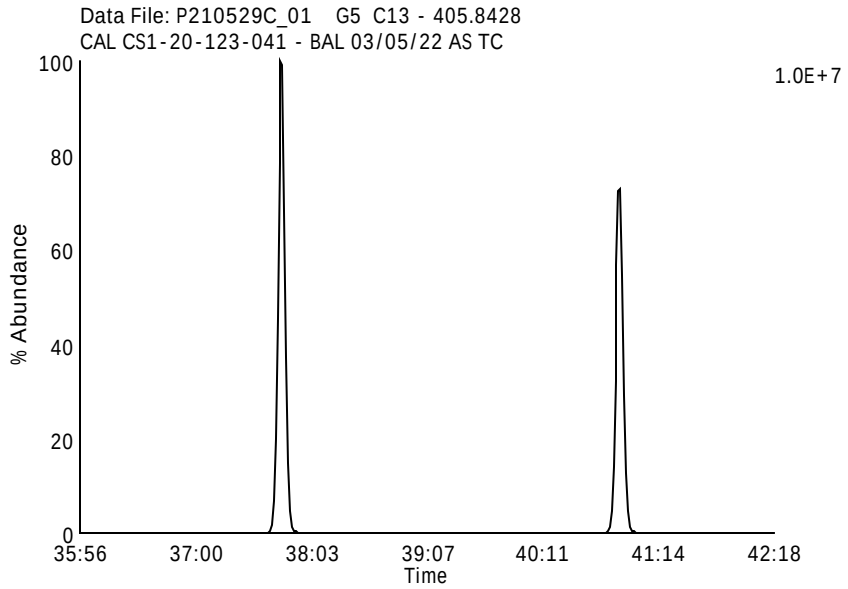


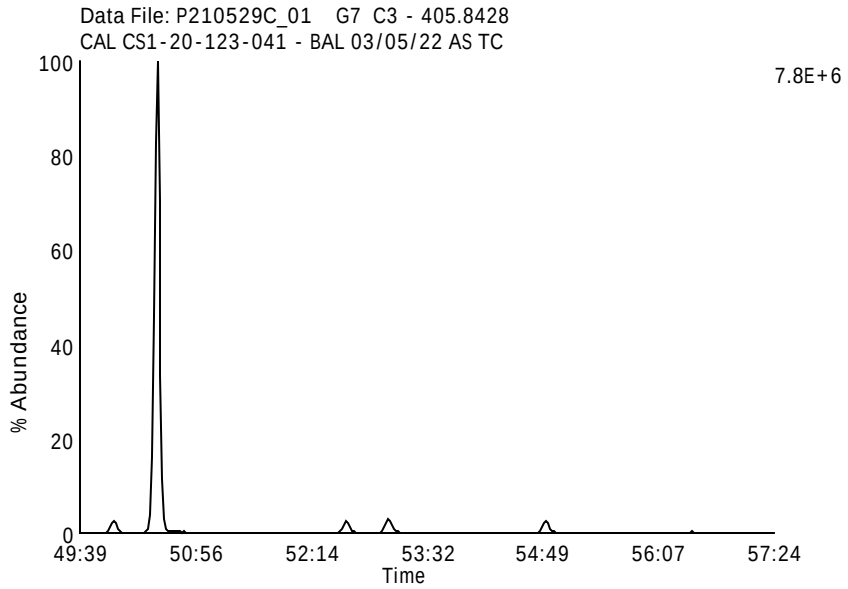
Labeled Hepta Chlorinated Biphenyls

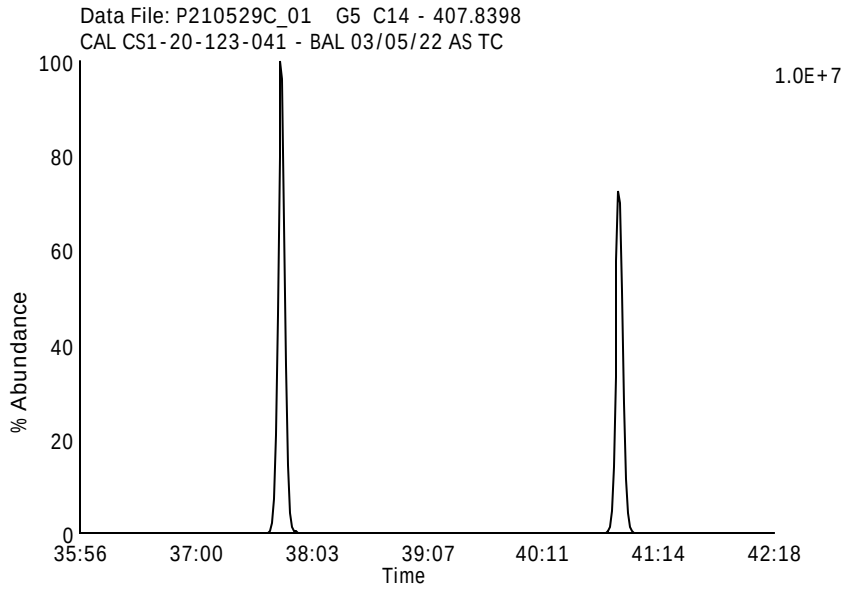
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

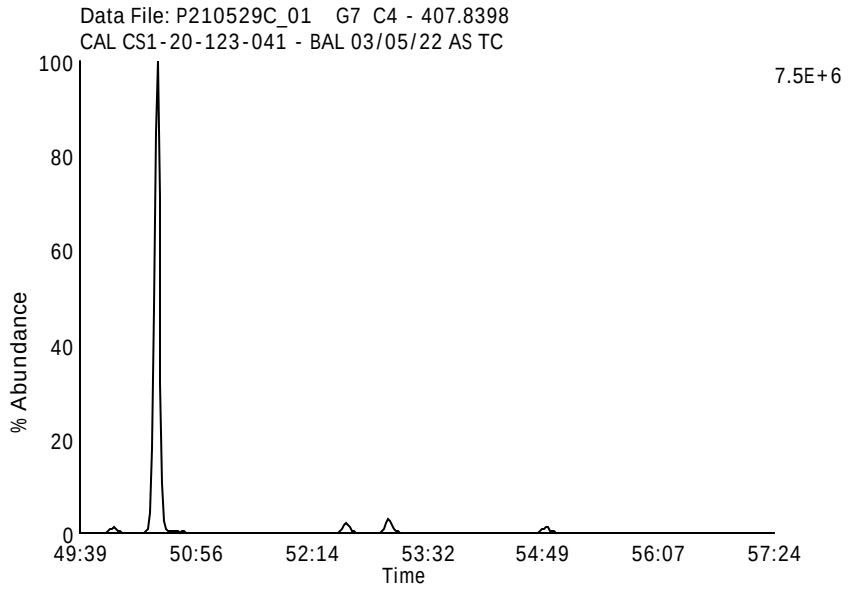
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







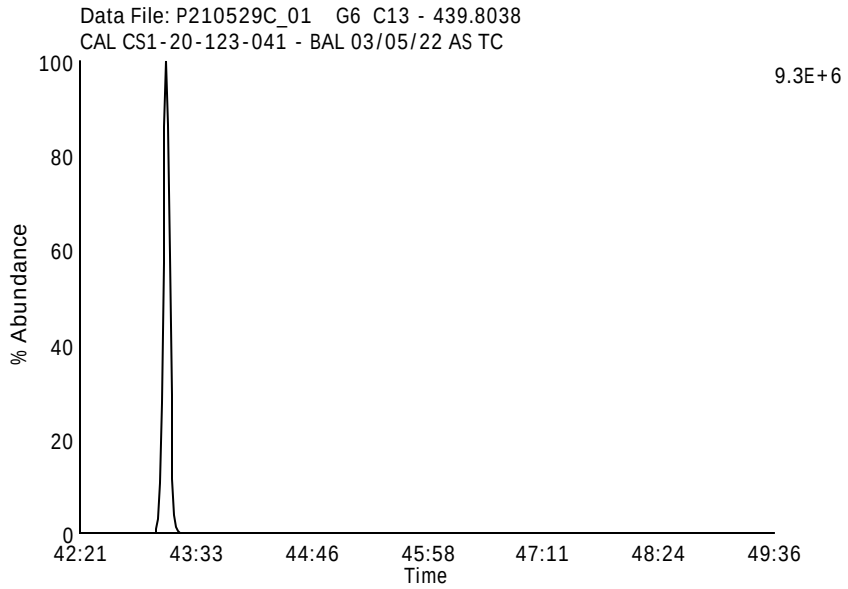


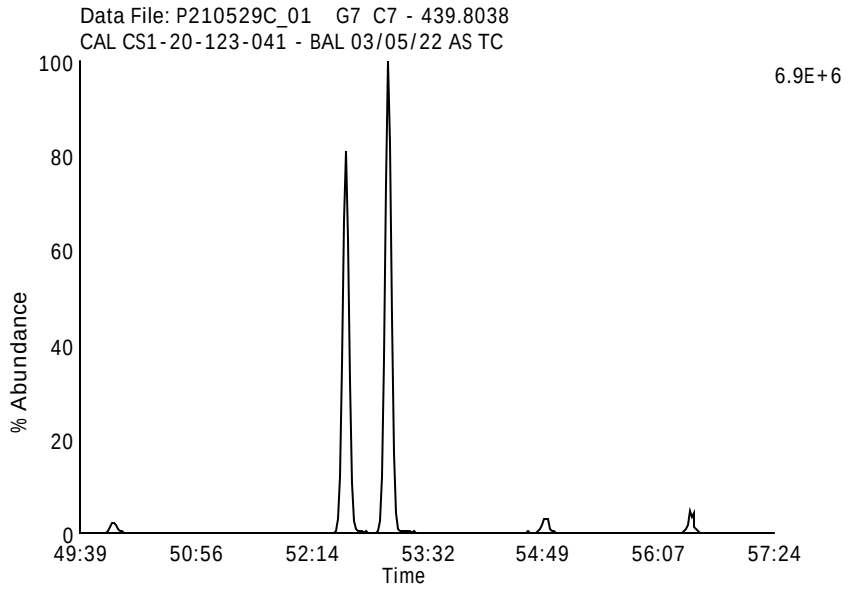
Labeled Octa Chlorinated Biphenyls

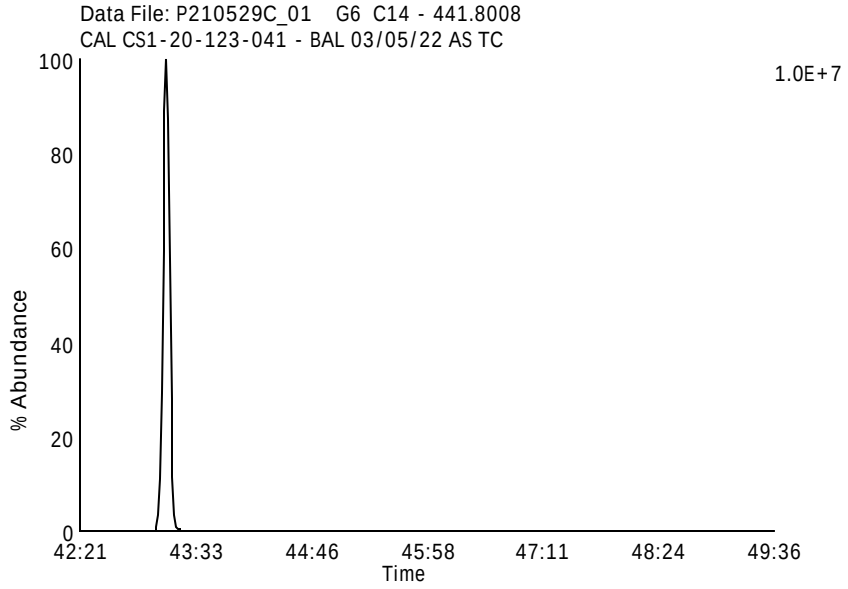
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

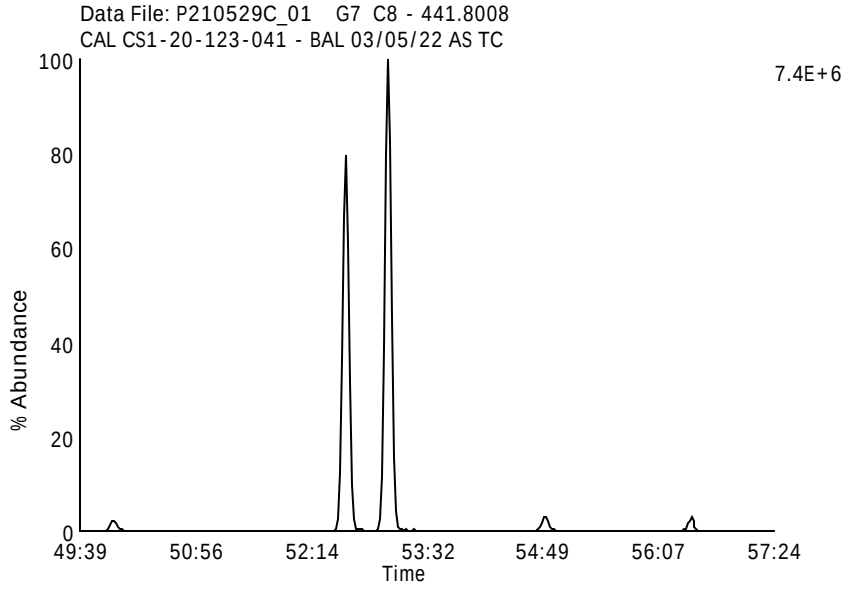
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







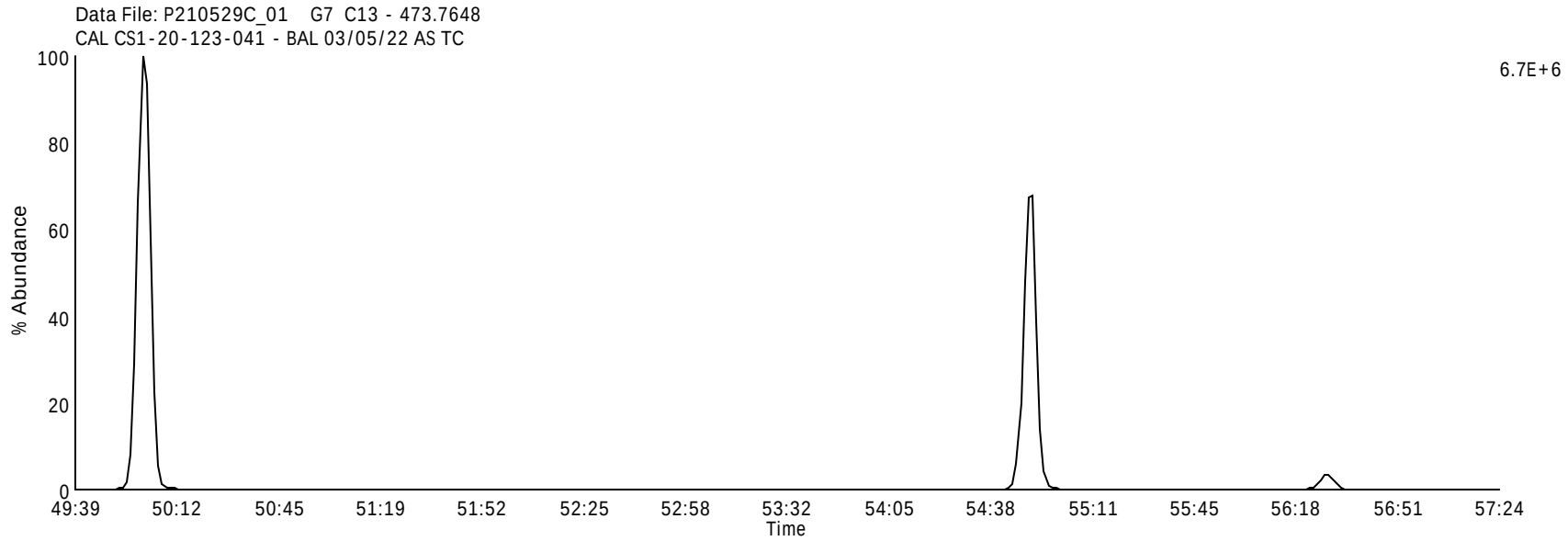


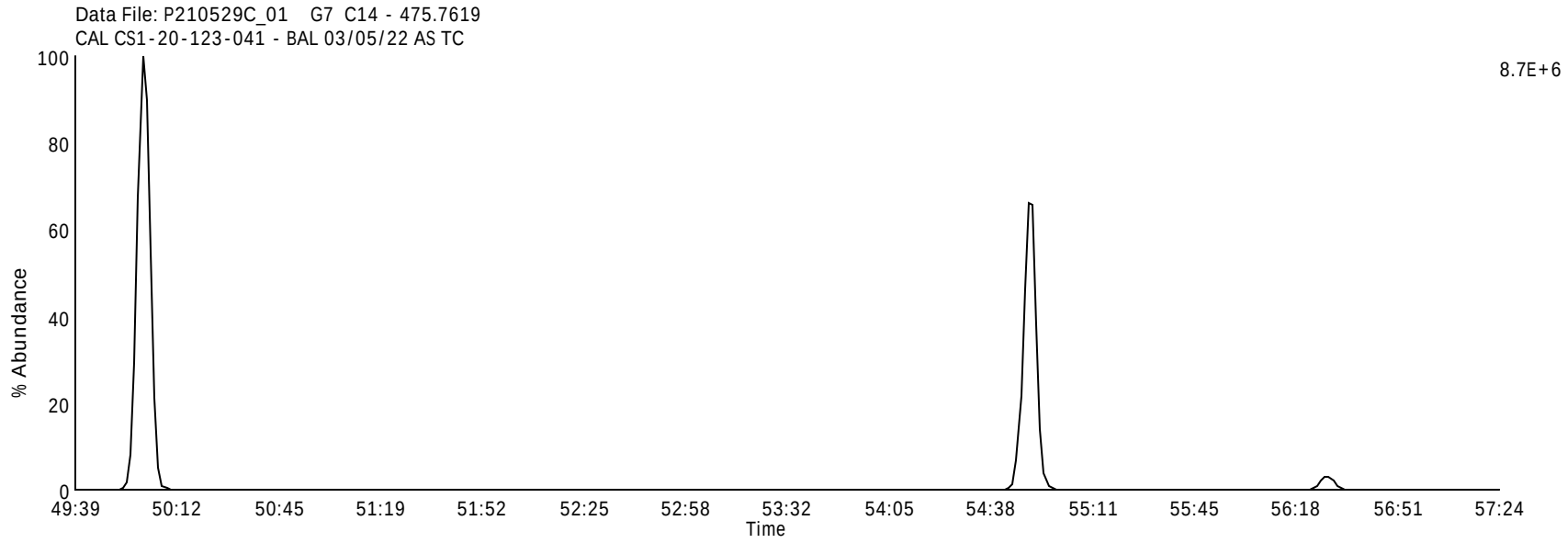
Labeled Nona Chlorinated Biphenyls

Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC



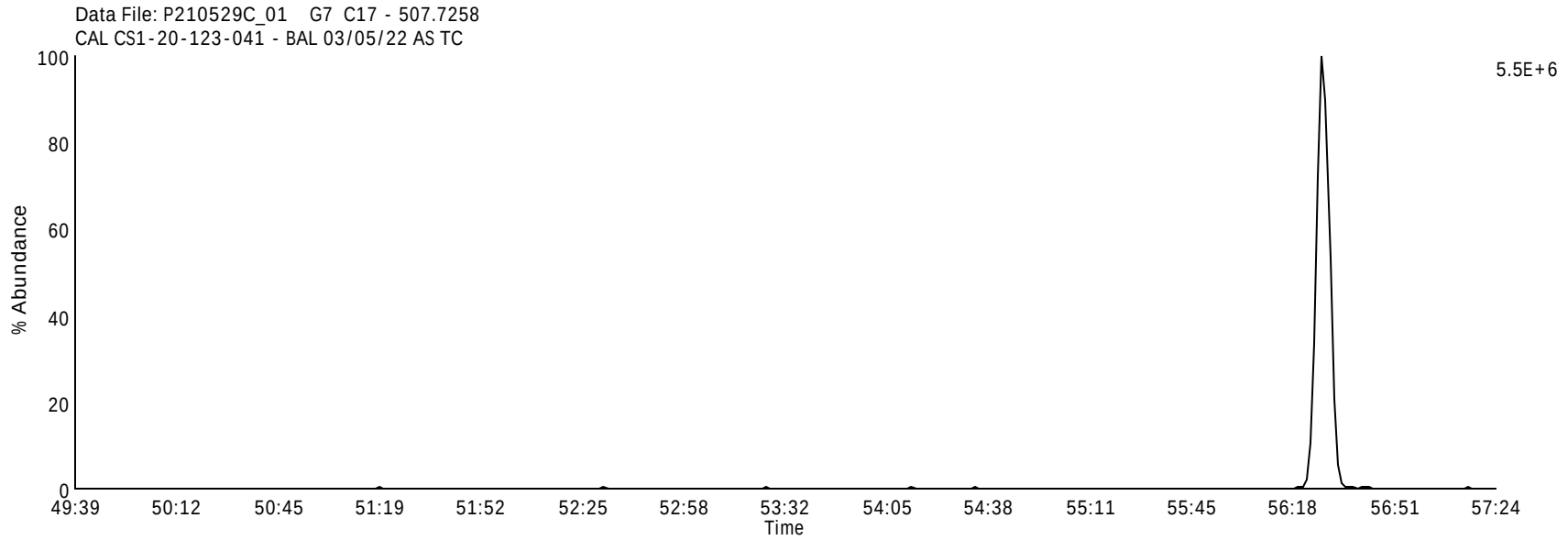


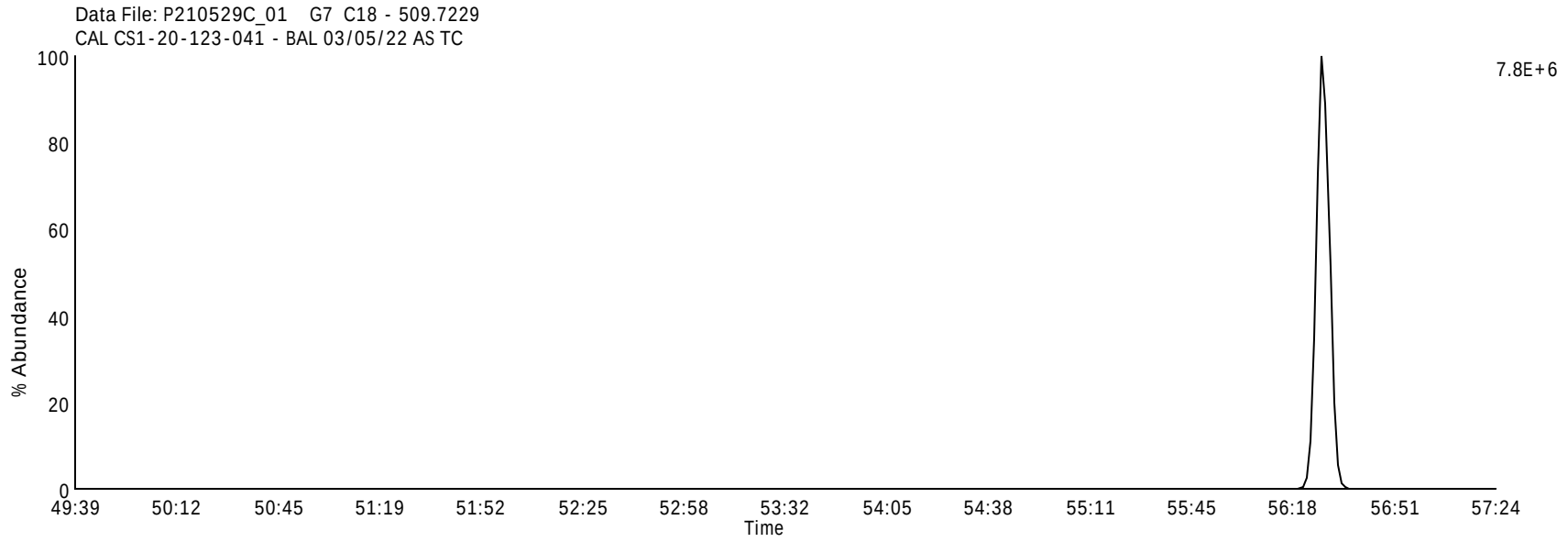
Labeled Deca Chlorinated Biphenyl

Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC



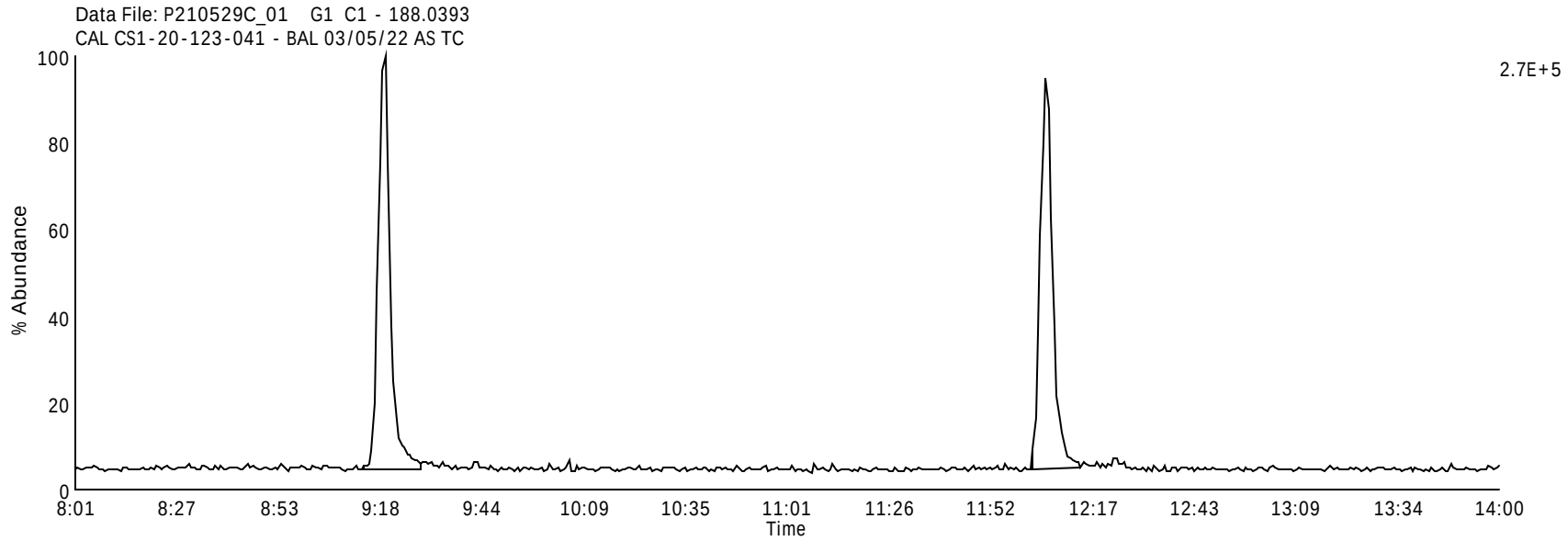


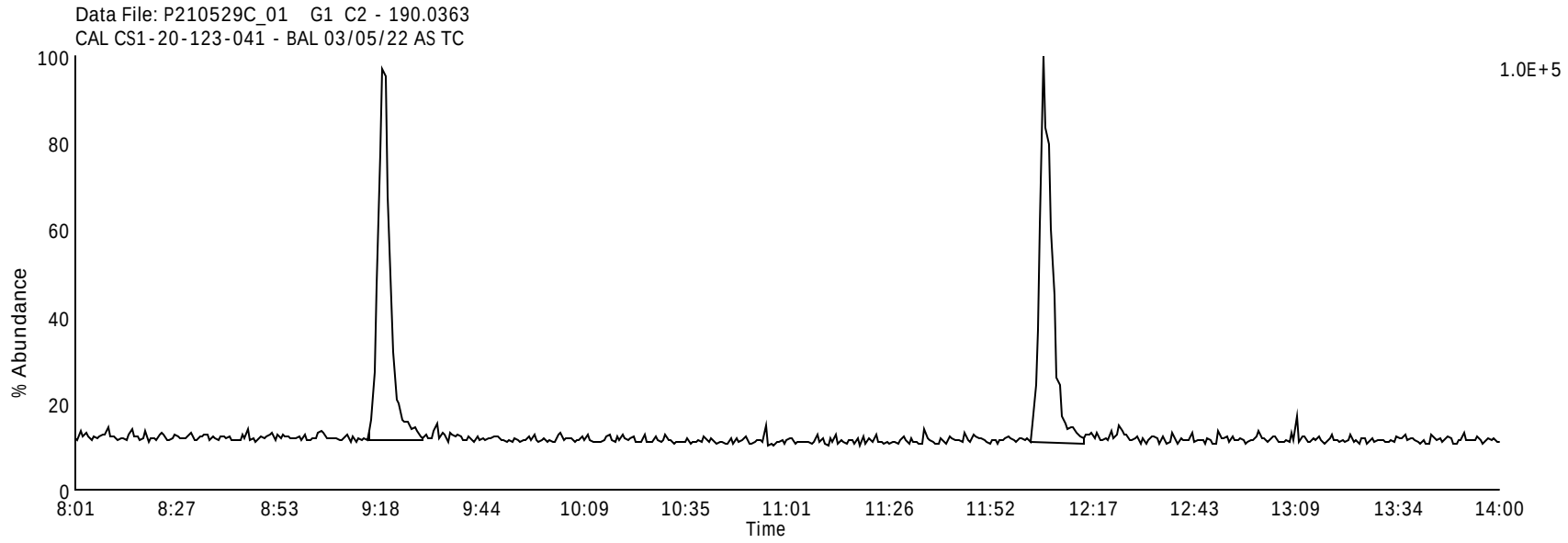
Mono Chlorinated Biphenyls

Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC



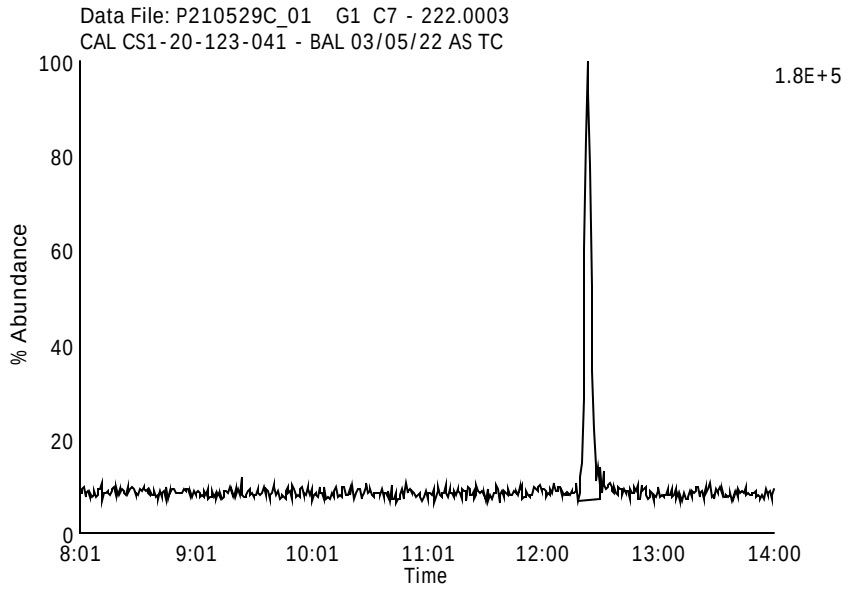


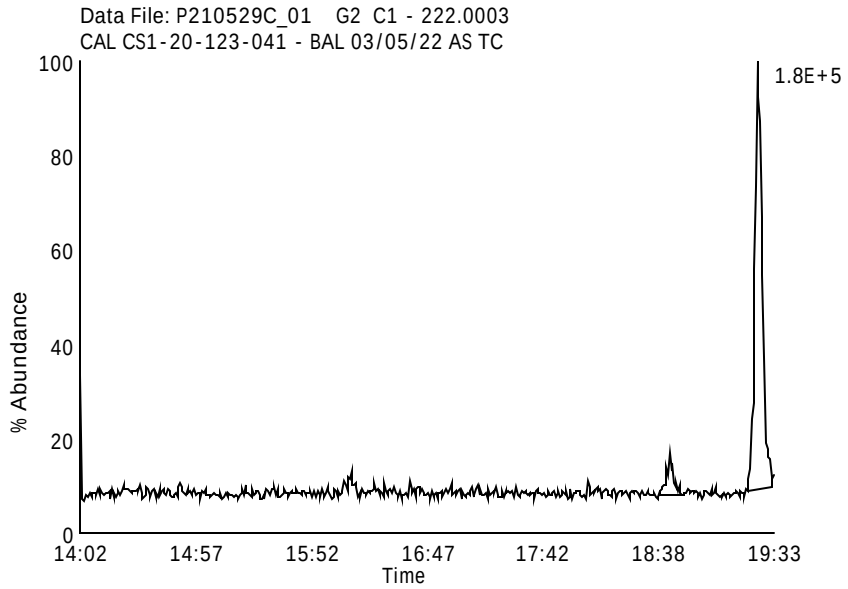
Di Chlorinated Biphenyls

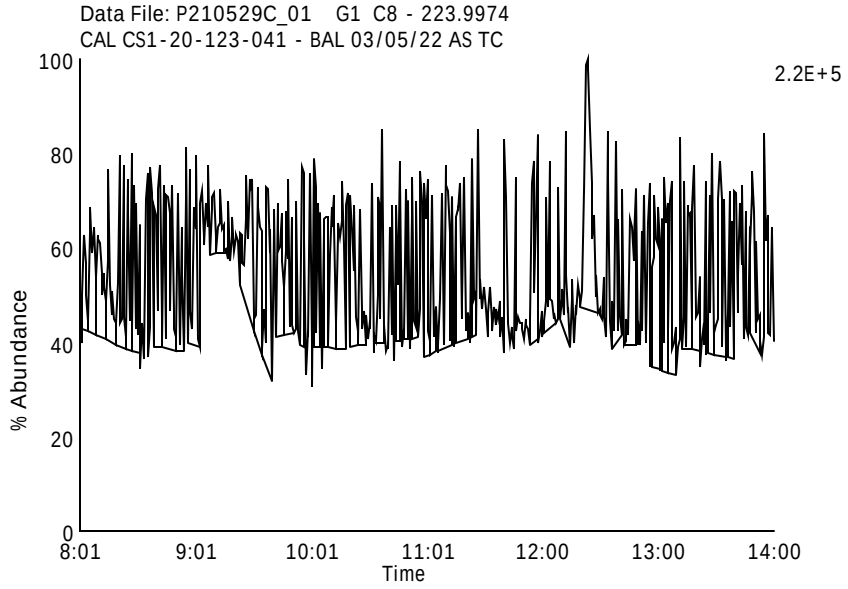
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

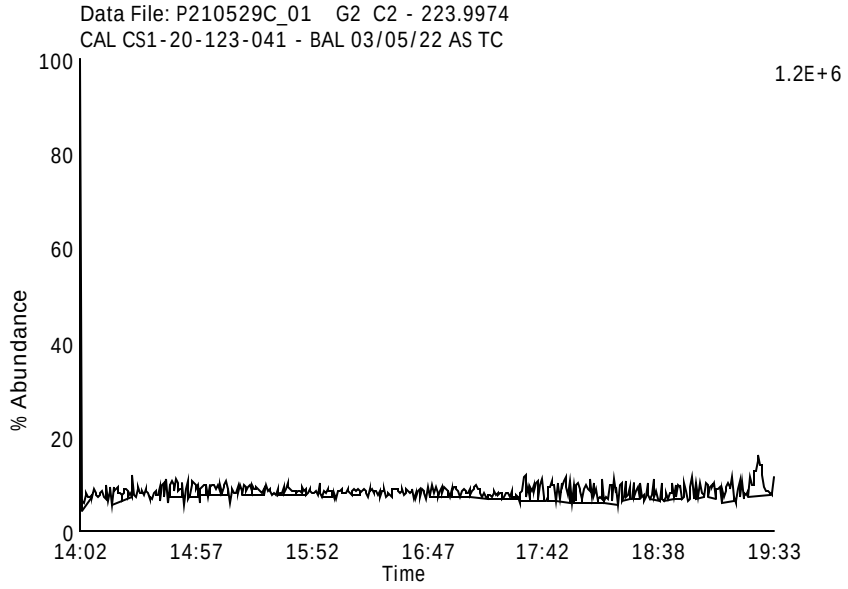
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







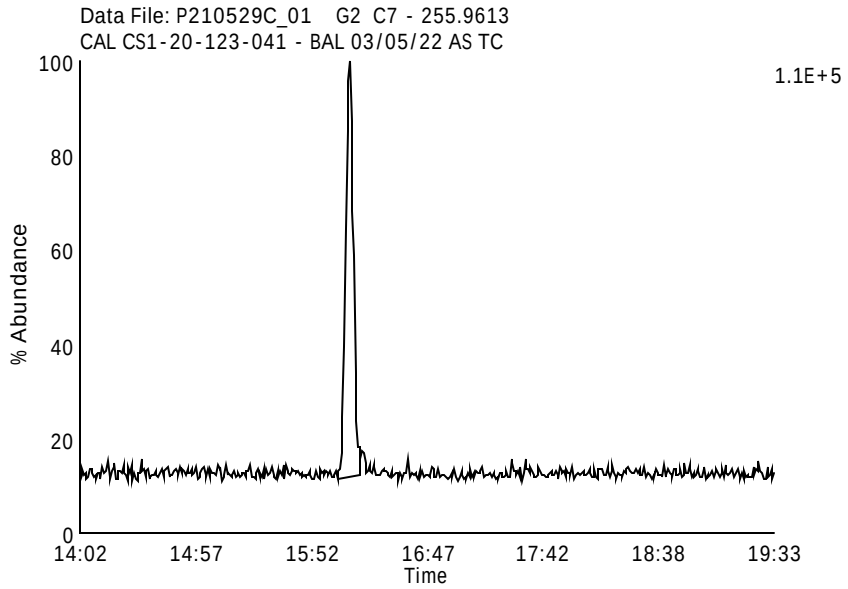


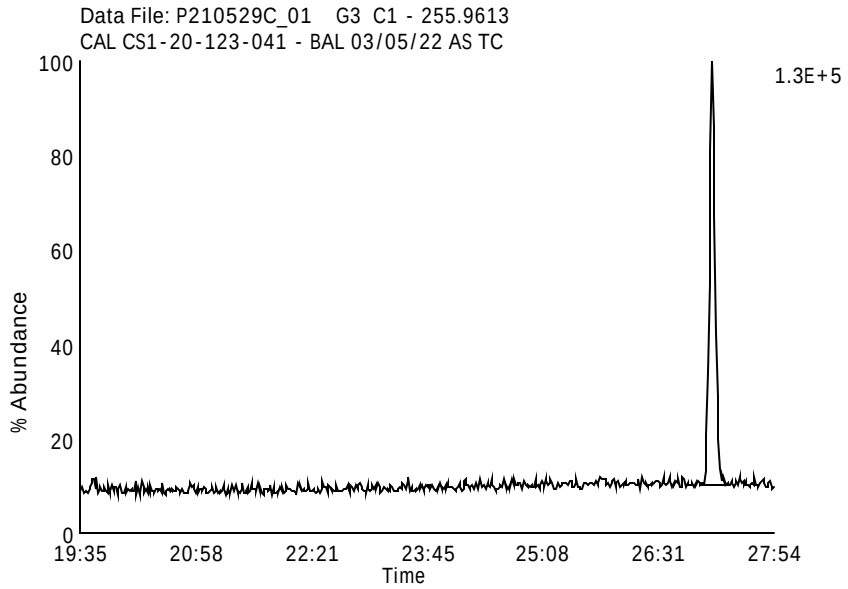
Tri Chlorinated Biphenyls

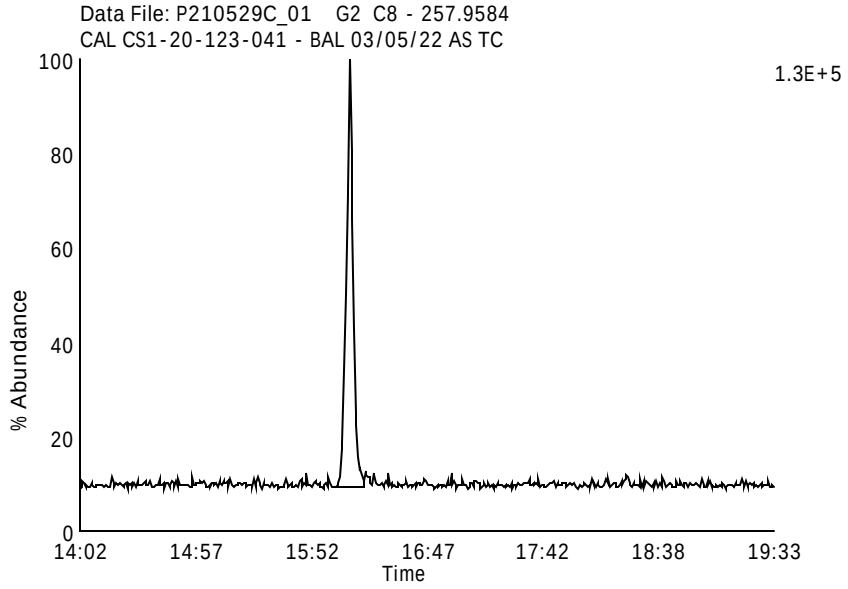
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

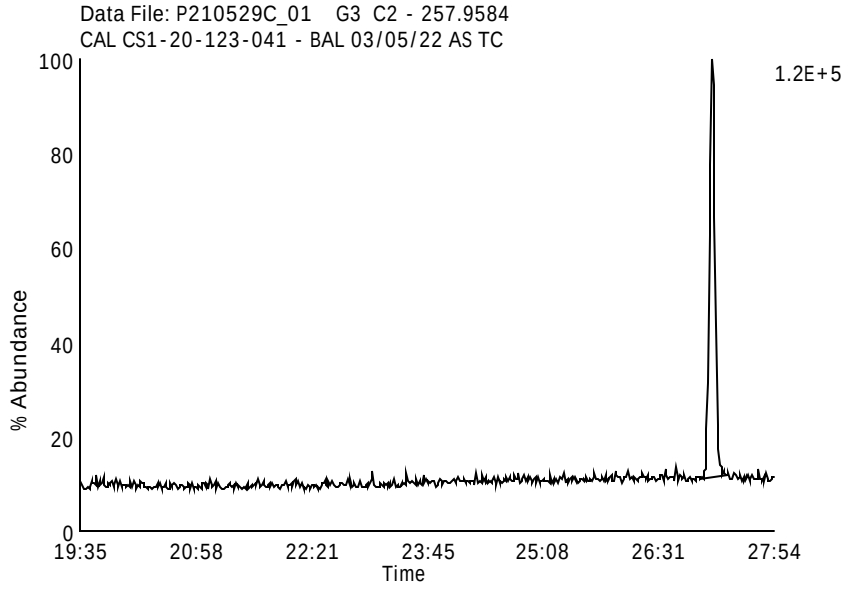
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







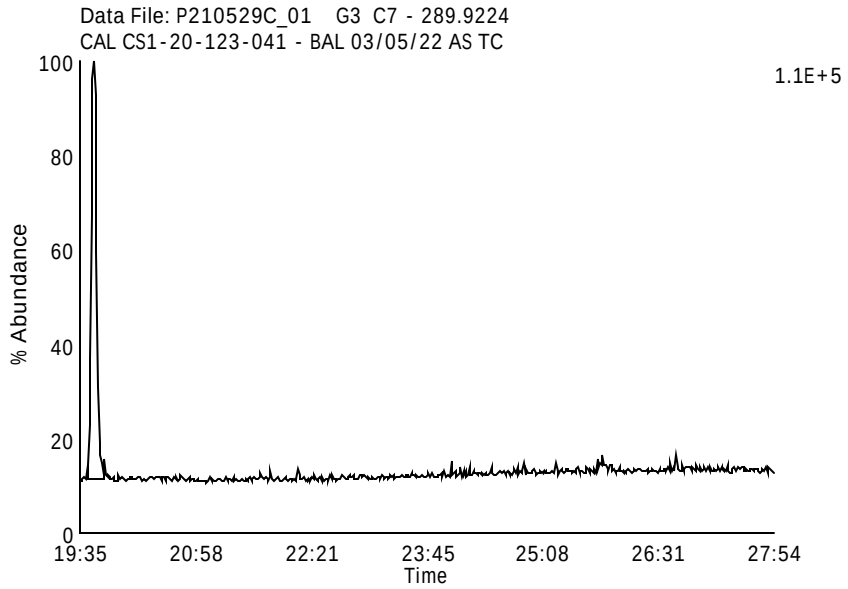


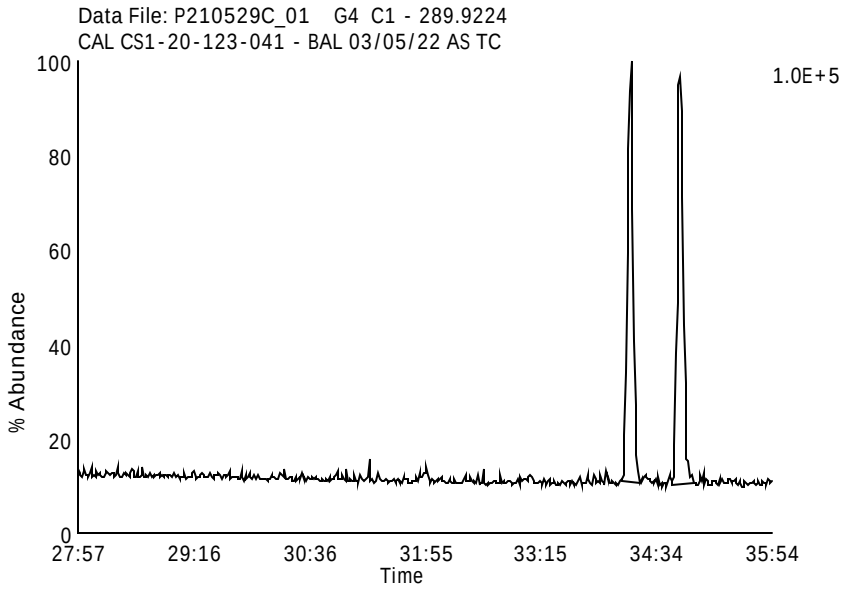
Tetra Chlorinated Biphenyls

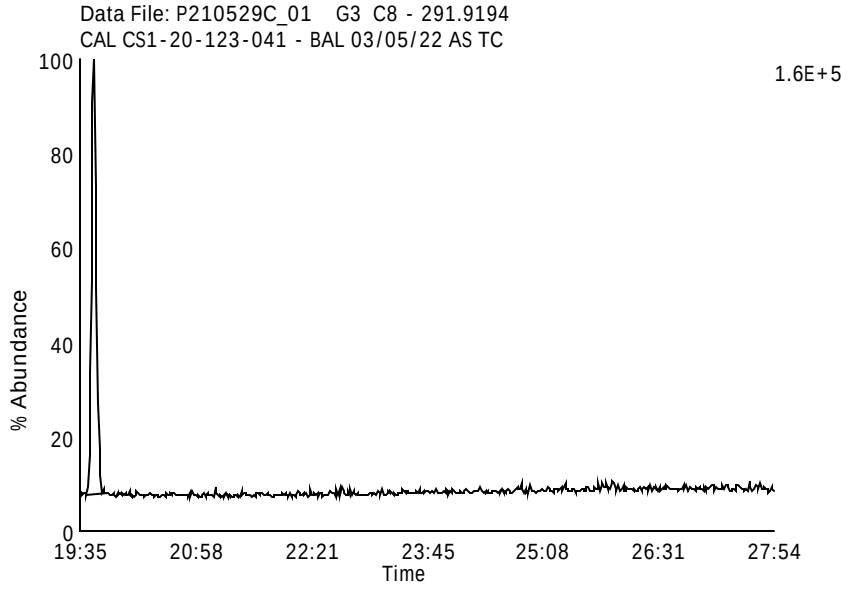
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

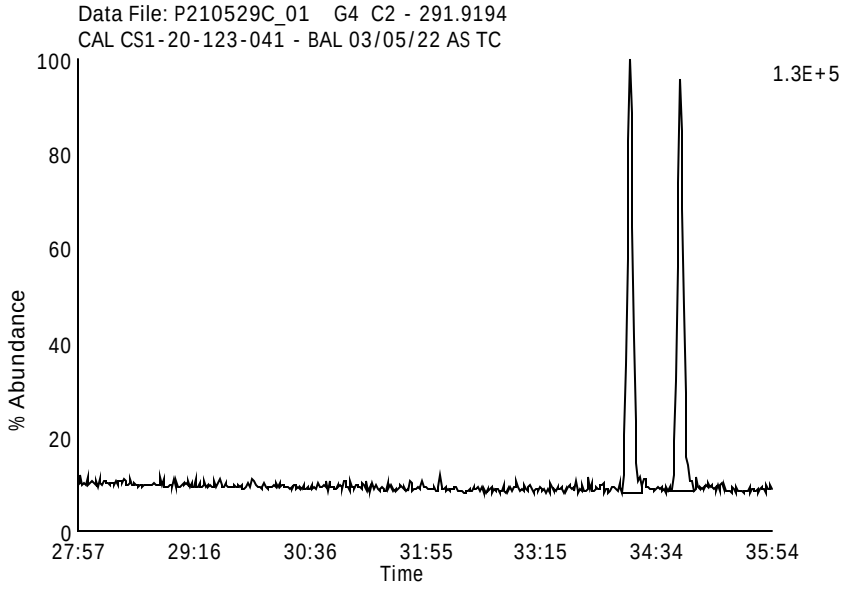
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







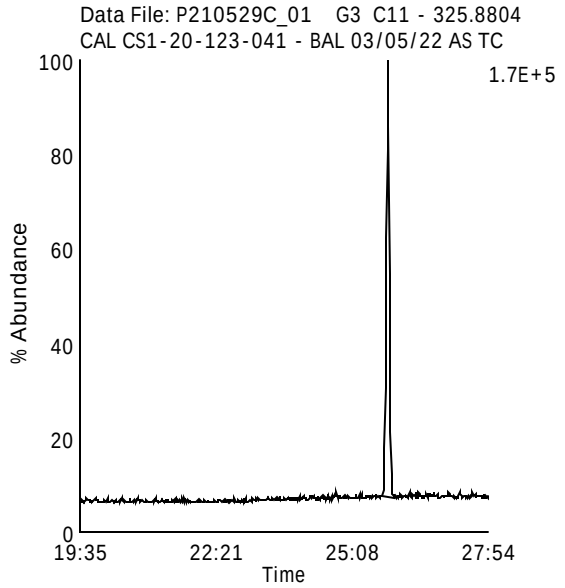


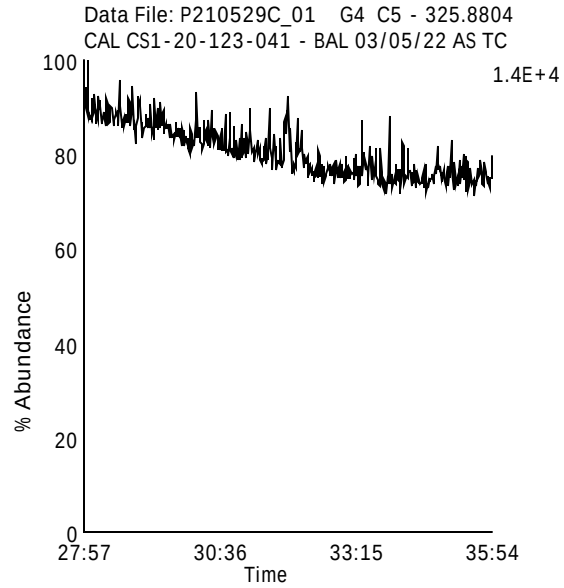
Penta Chlorinated Biphenyls

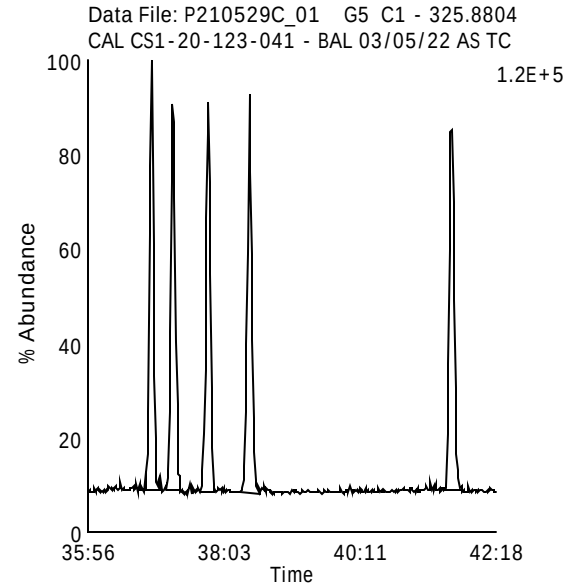
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

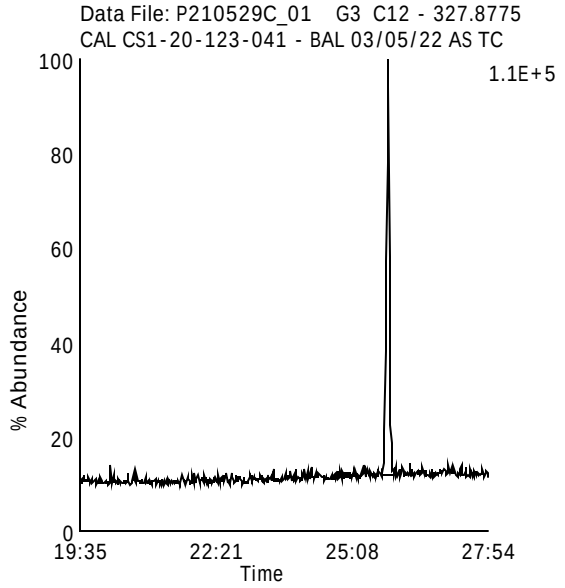
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

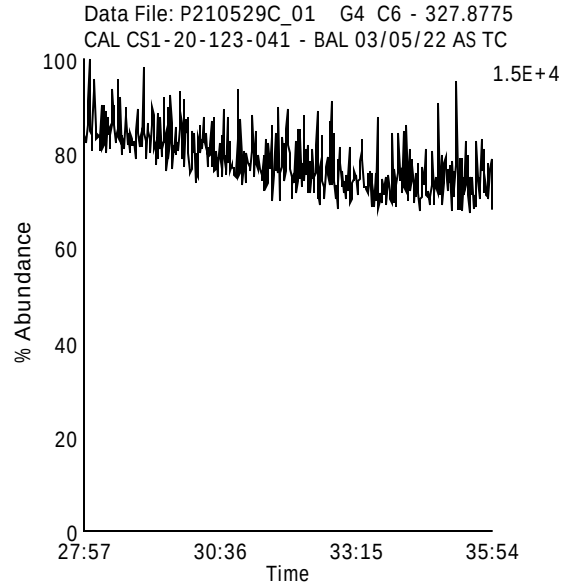
Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC

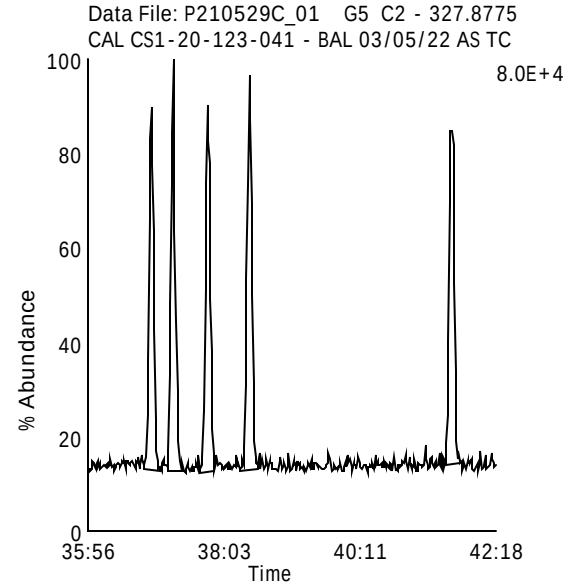












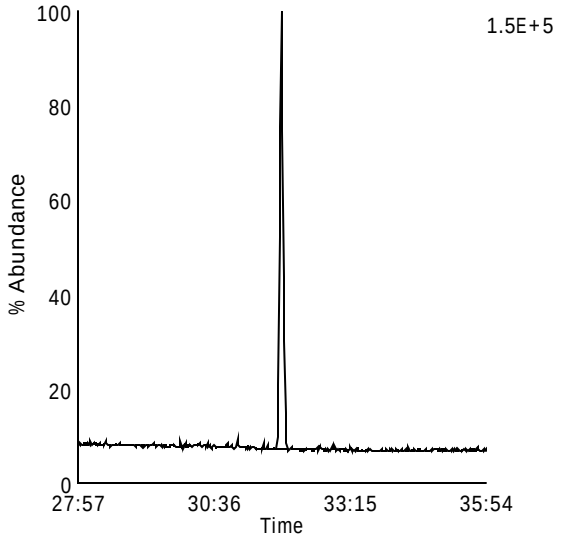
Hexa Chlorinated Biphenyls

Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

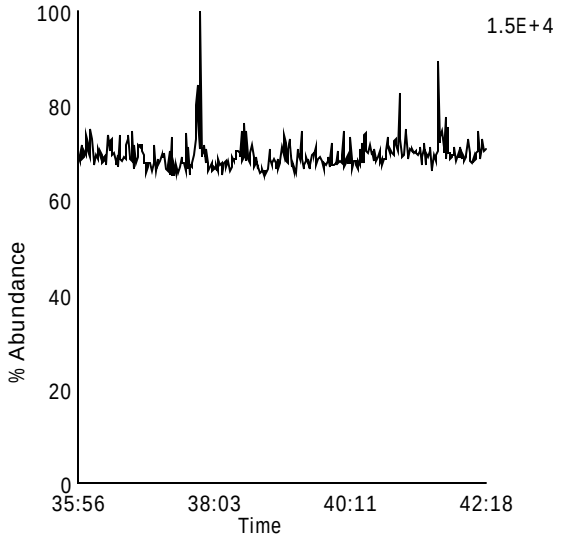
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC

Data File: P210529C_01 G4 C11 - 359.8415
CAL CS1-20-123-041 - BAL 03/05/22 AS TC



Data File: P210529C_01 G5 C5 - 359.8415
CAL CS1-20-123-041 - BAL 03/05/22 AS TC



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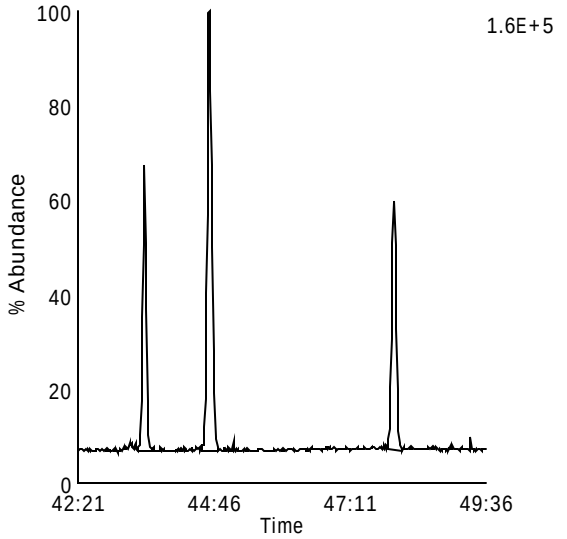
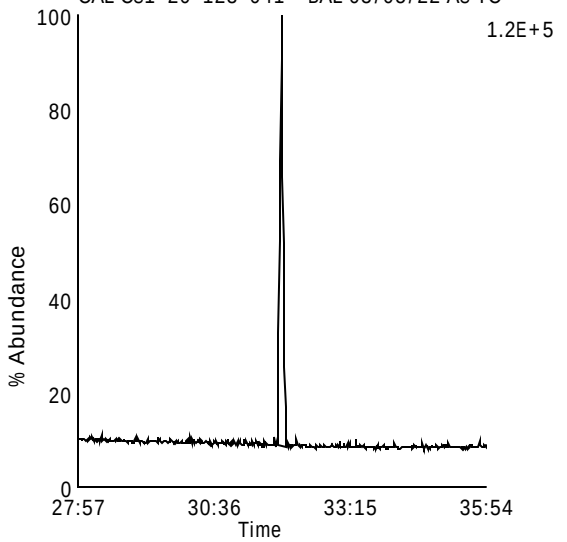
CAL CS1-20-123-041 - BAL 03/05/22 AS TC



Data File: P210529C_01 G4 C12 - 361.8385
CAL CS1-20-123-041 - BAL 03/05/22 AS TC



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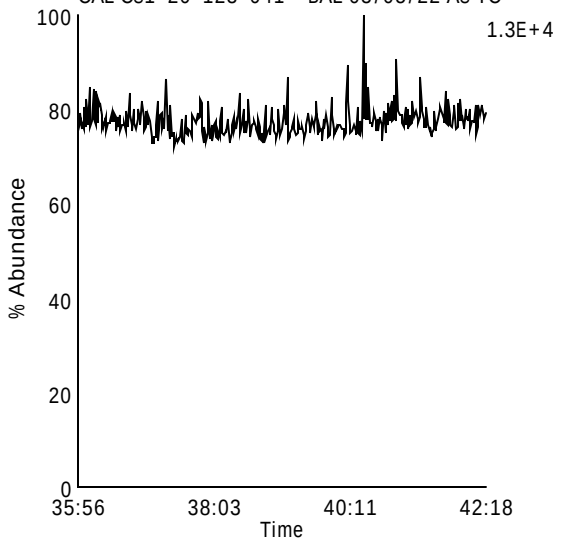
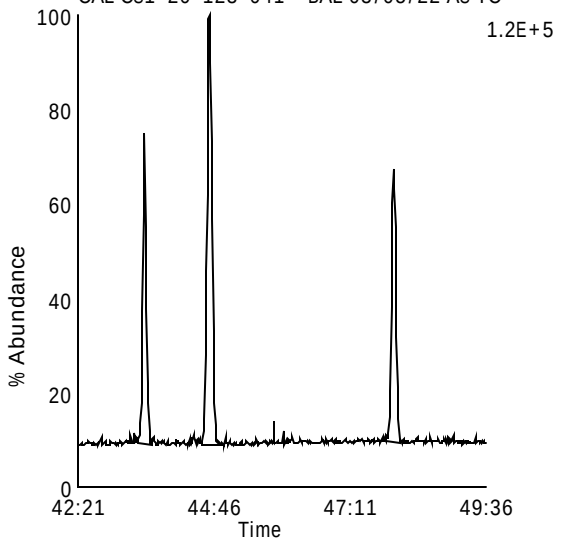
CAL CS1-20-123-041 - BAL 03/05/22 AS TC



Data File: P210529C_01 G6 C2 - 361.8385
CAL CS1-20-123-041 - BAL 03/05/22 AS TC

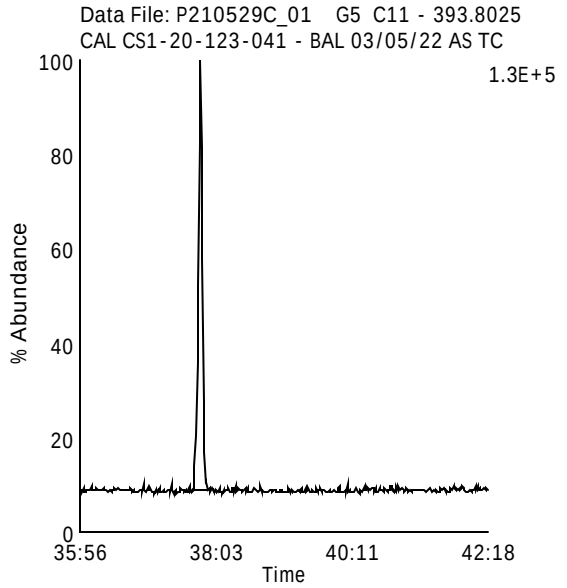


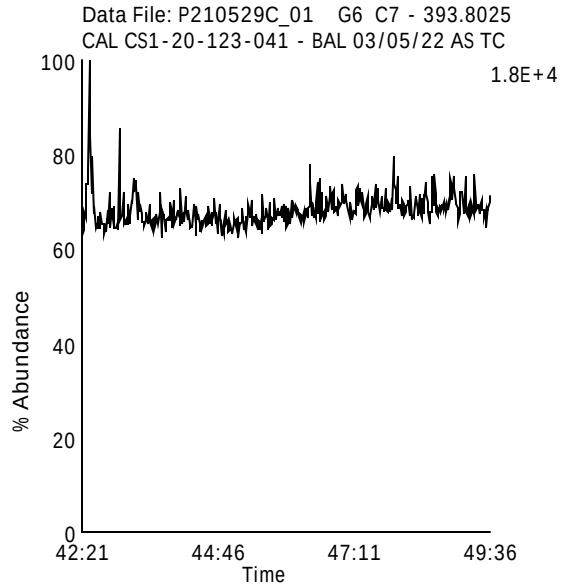
Hepta Chlorinated Biphenyls

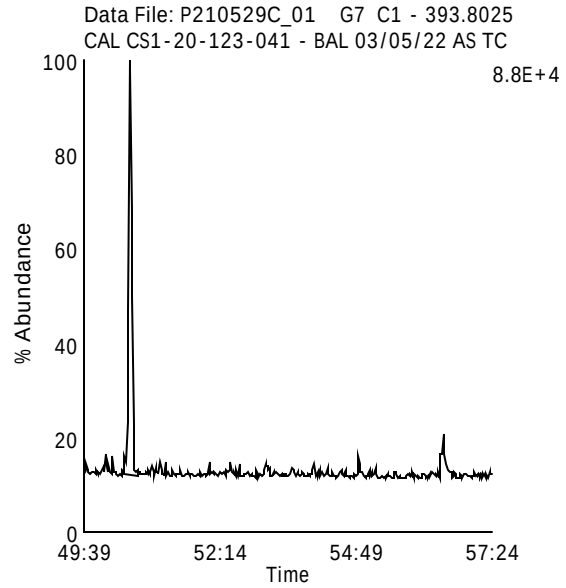
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

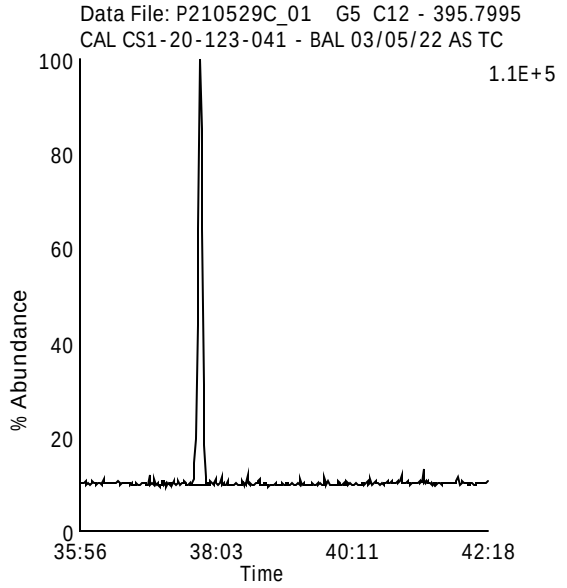
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

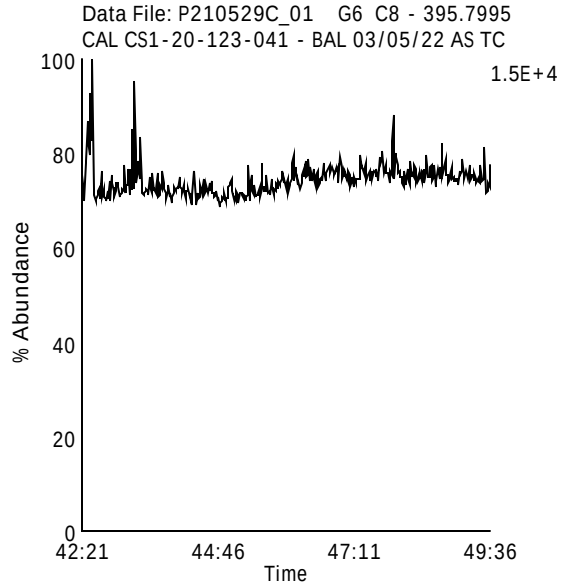
Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC

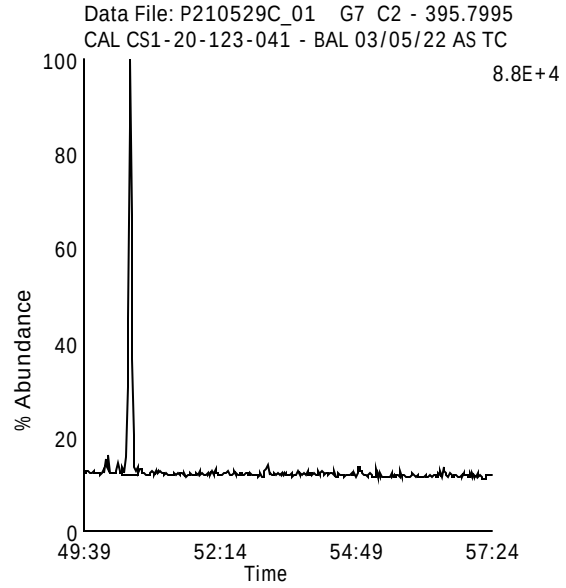










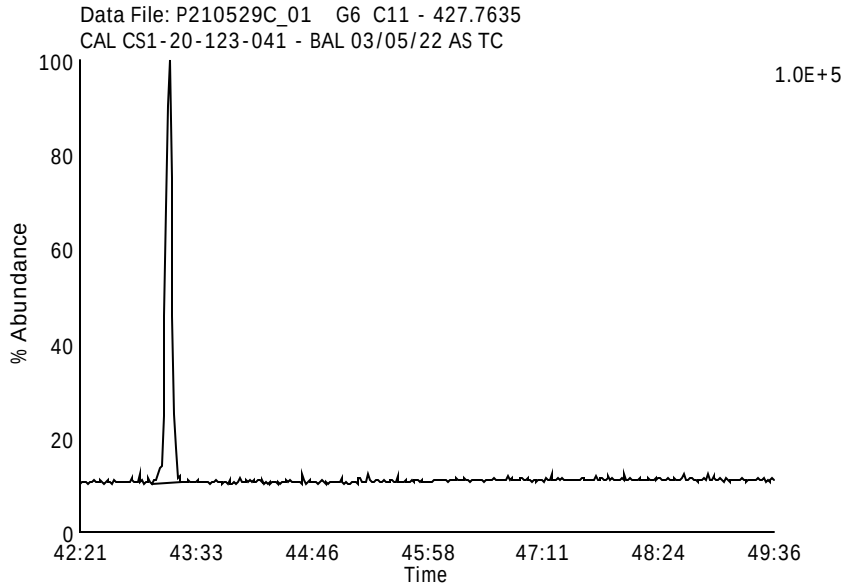


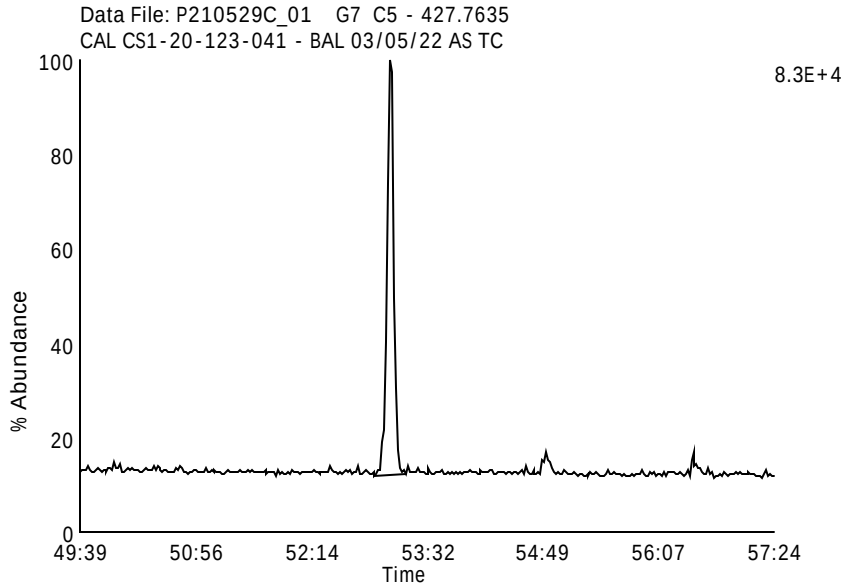
Octa Chlorinated Biphenyls

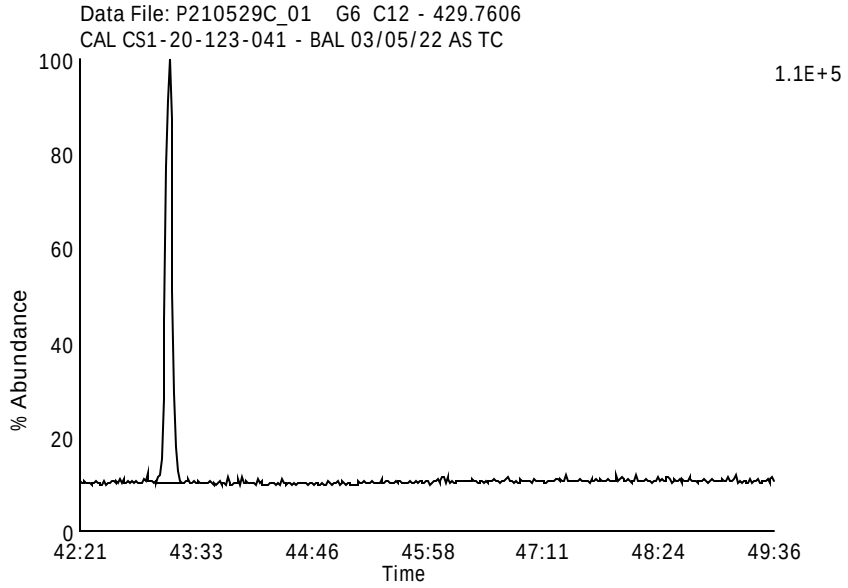
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

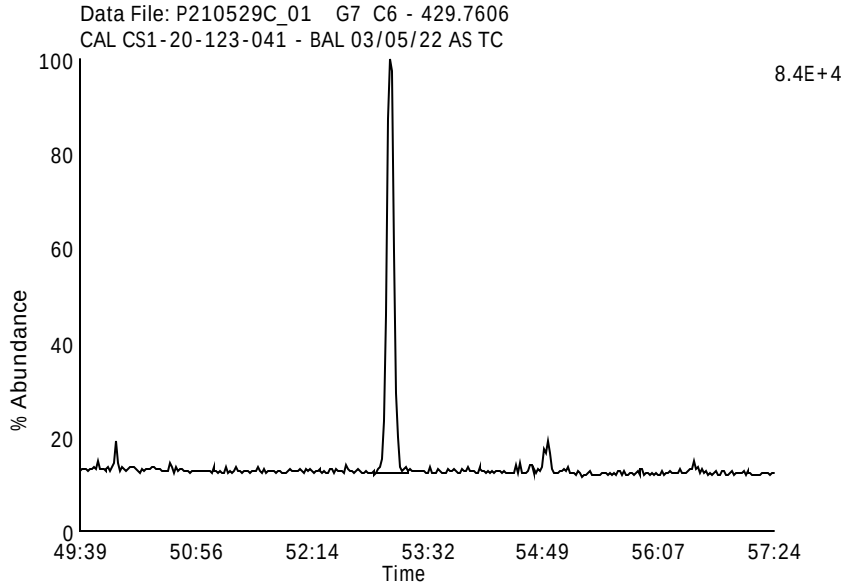
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







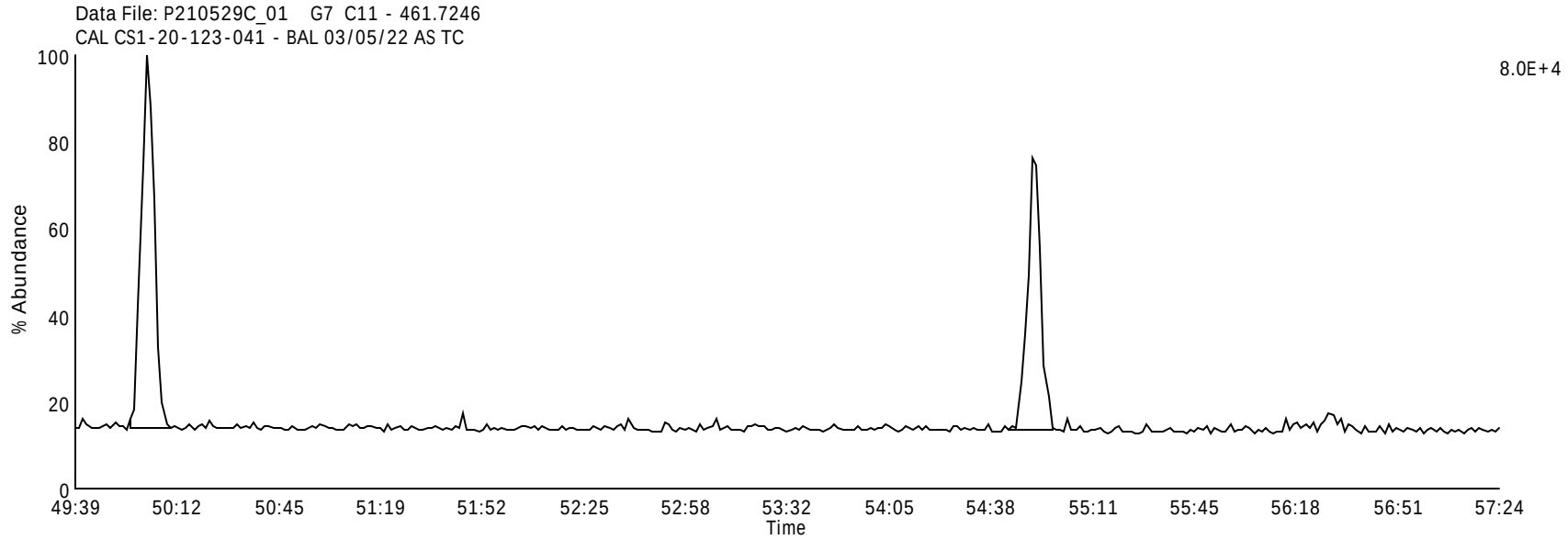


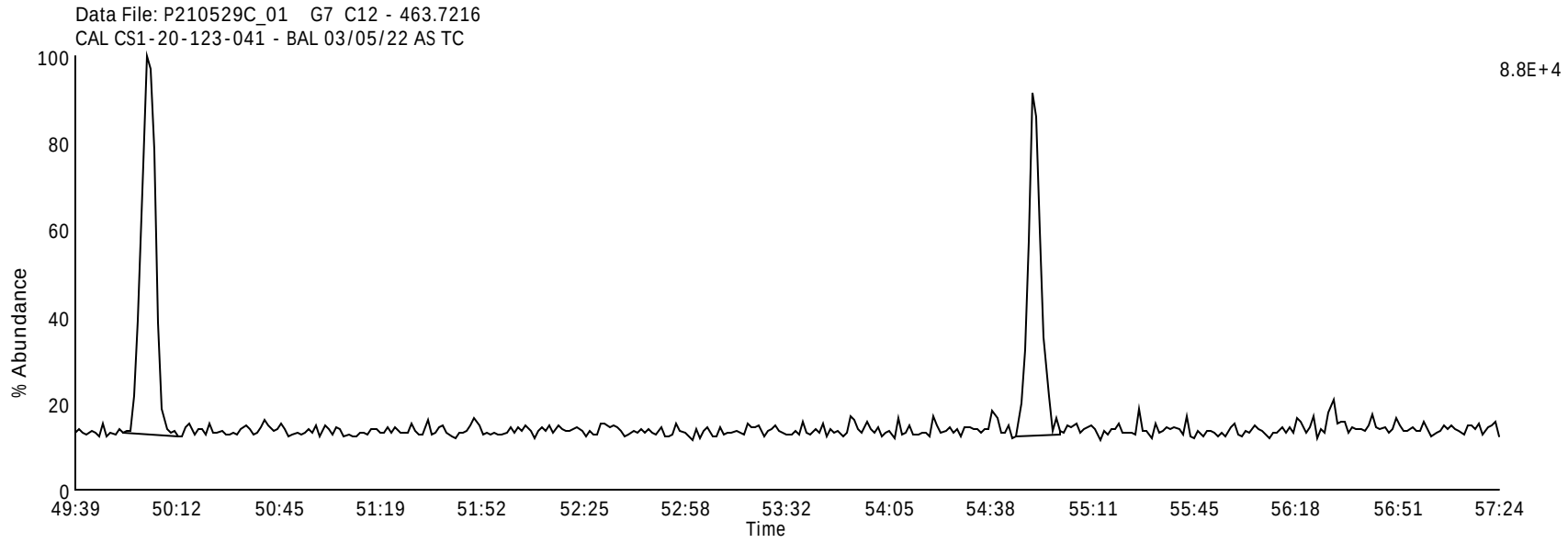
Nona Chlorinated Biphenyls

Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC



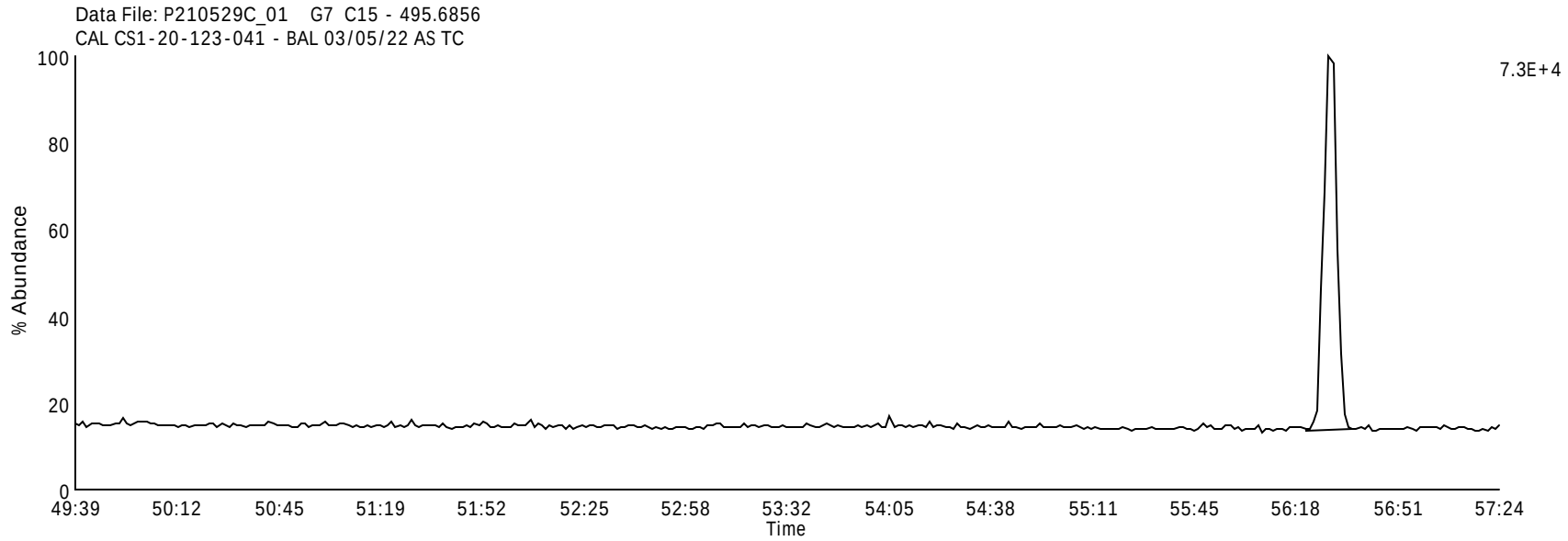


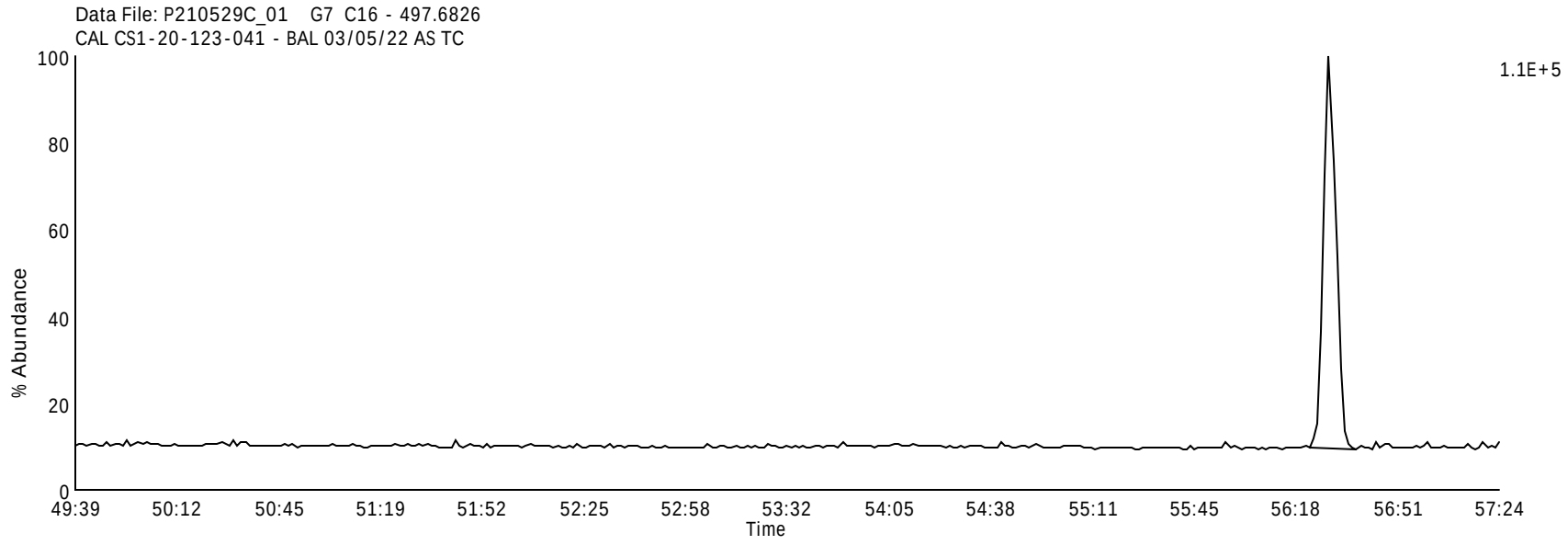
Deca Chlorinated Biphenyl

Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC



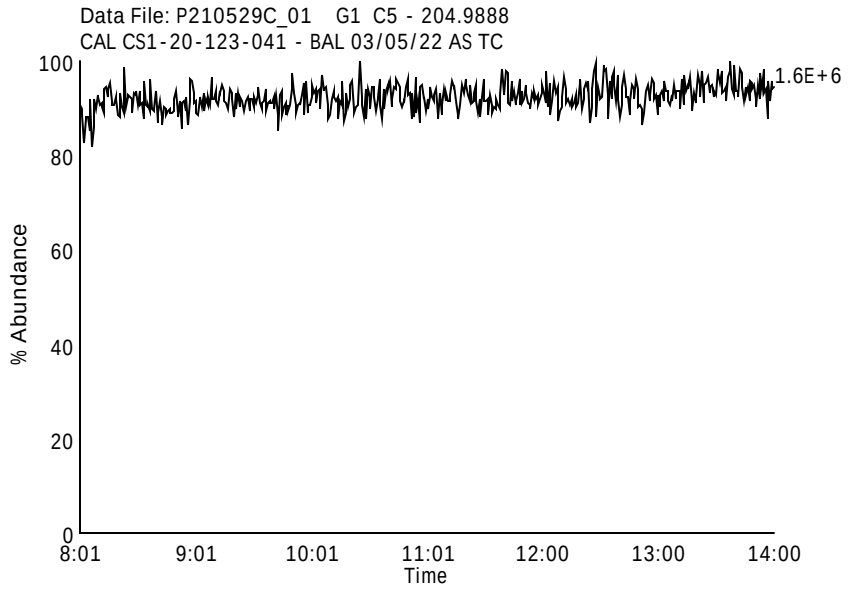


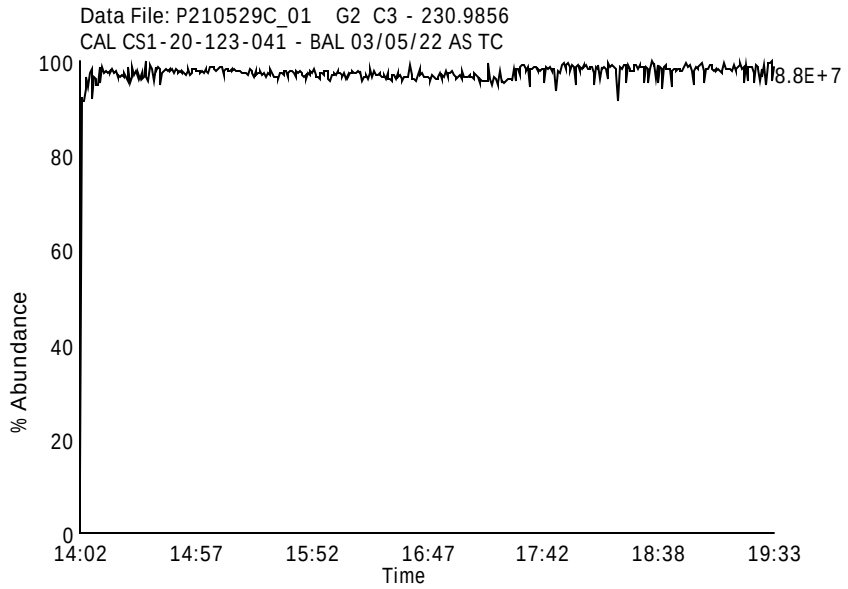
Group 1 - 4 Lock mass

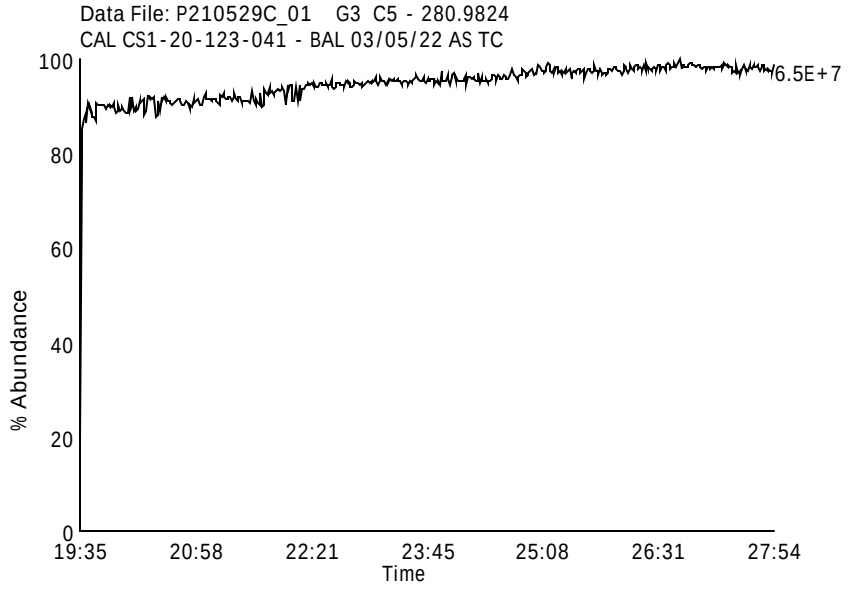
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

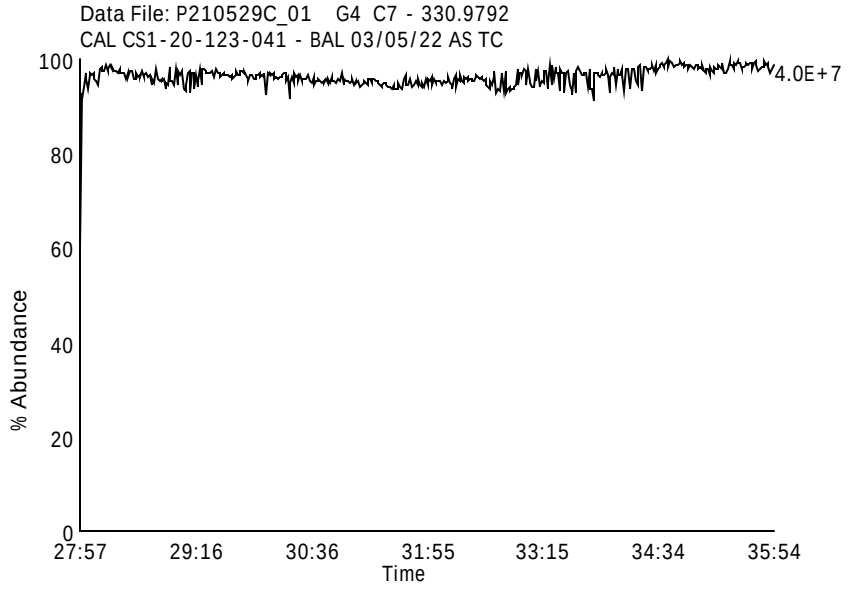
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







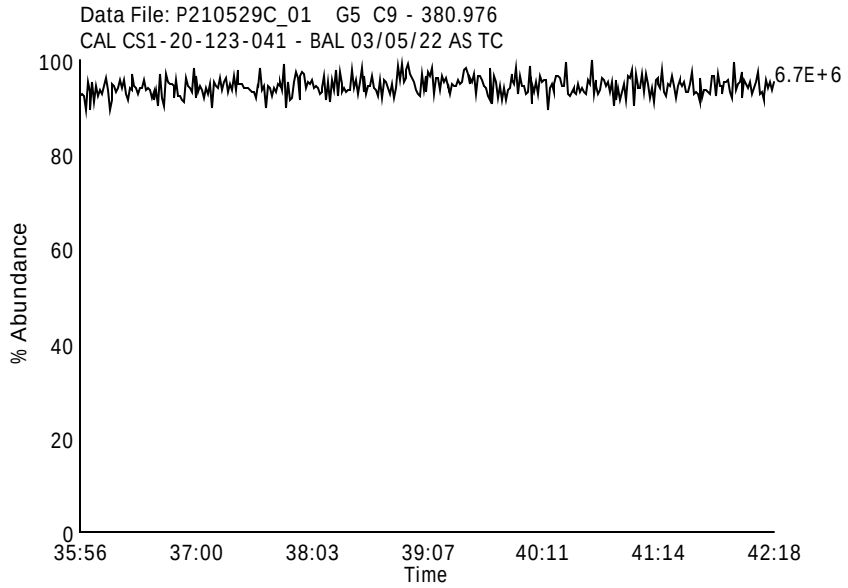


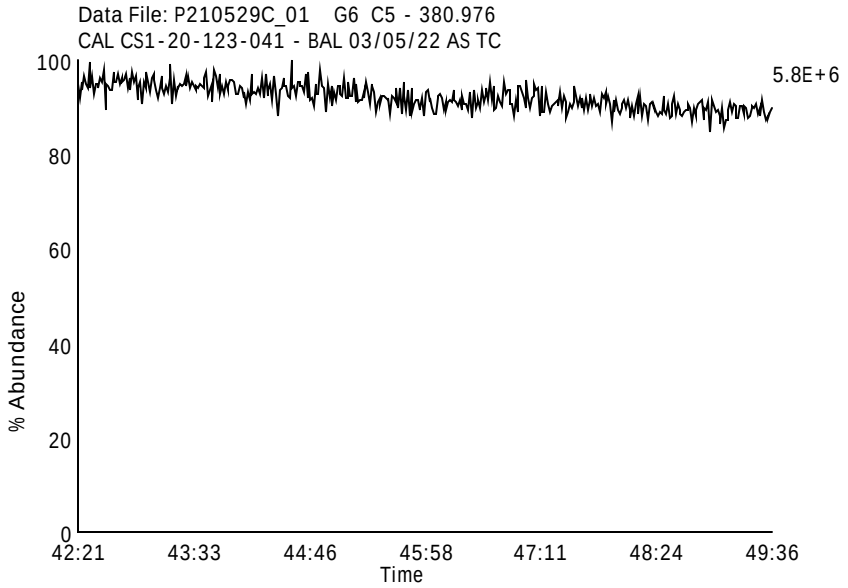
Group 5 - 7 Lock mass

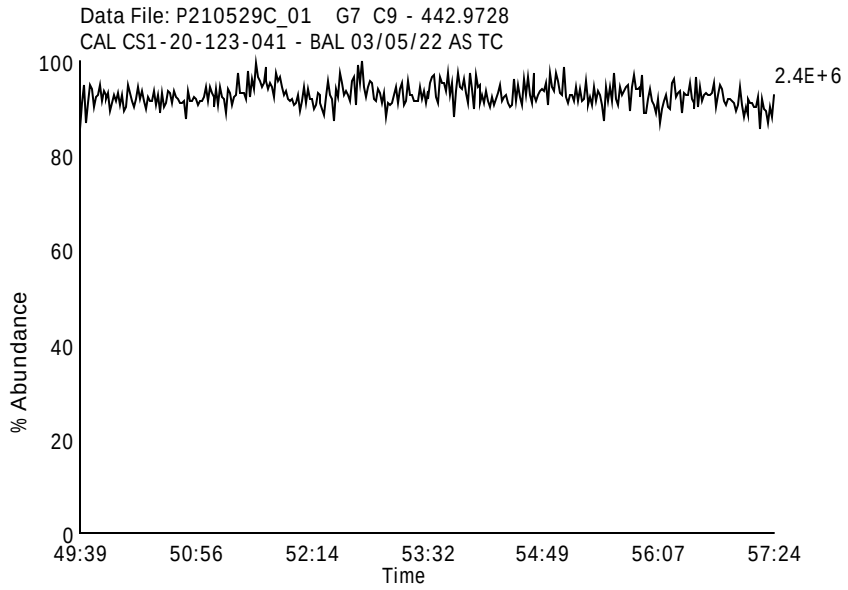
Data File Name: P210529C_01 Lab Sample ID: CS1-20-123-041

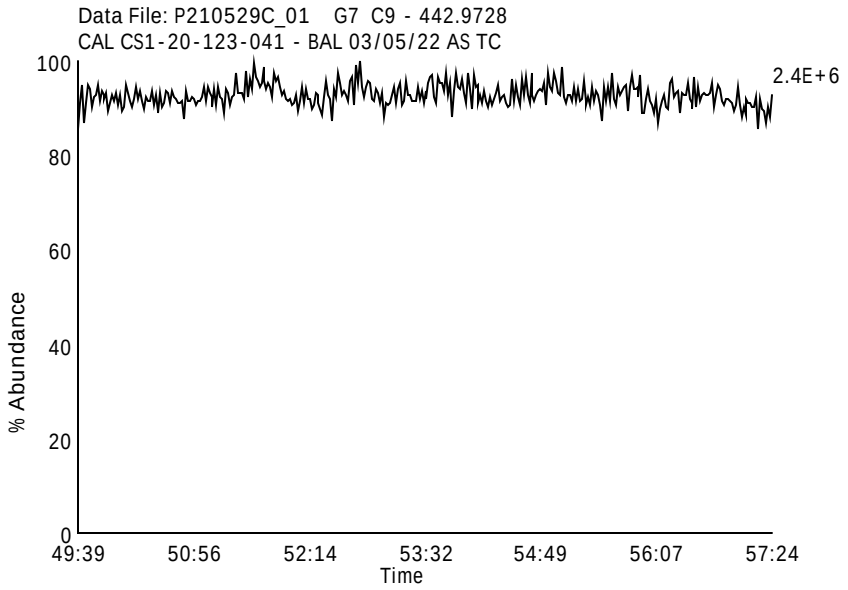
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS1-20-123-041 - BAL 03/05/22 AS TC







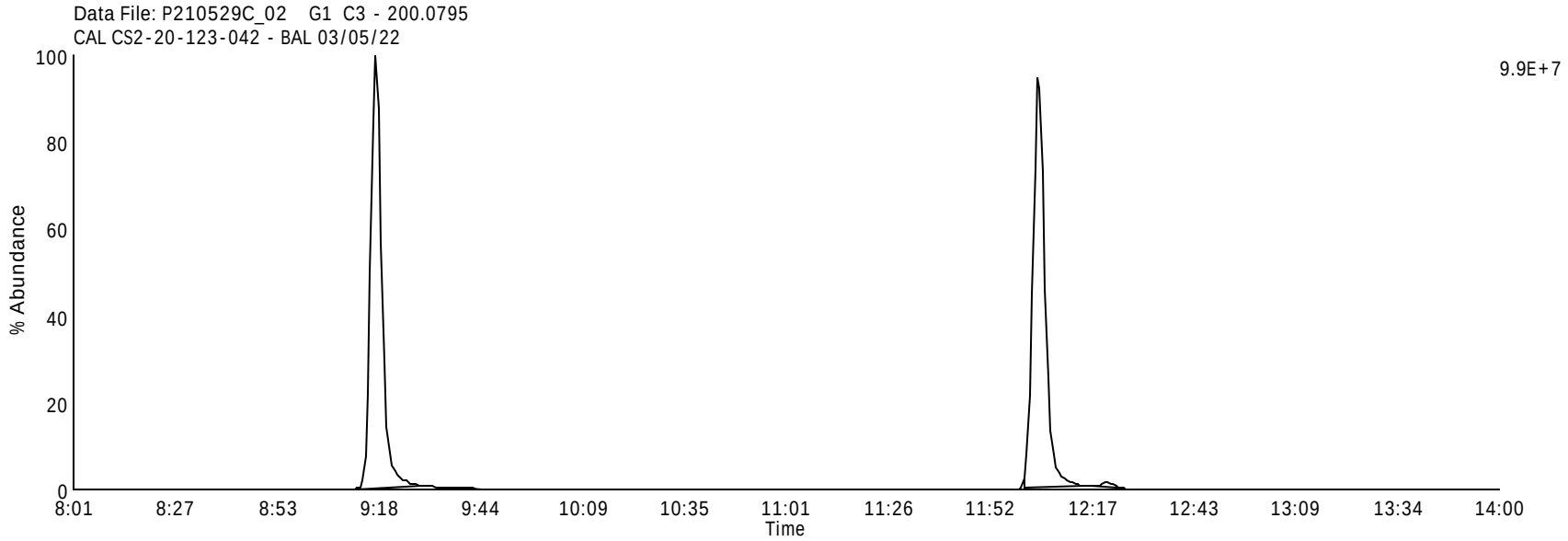


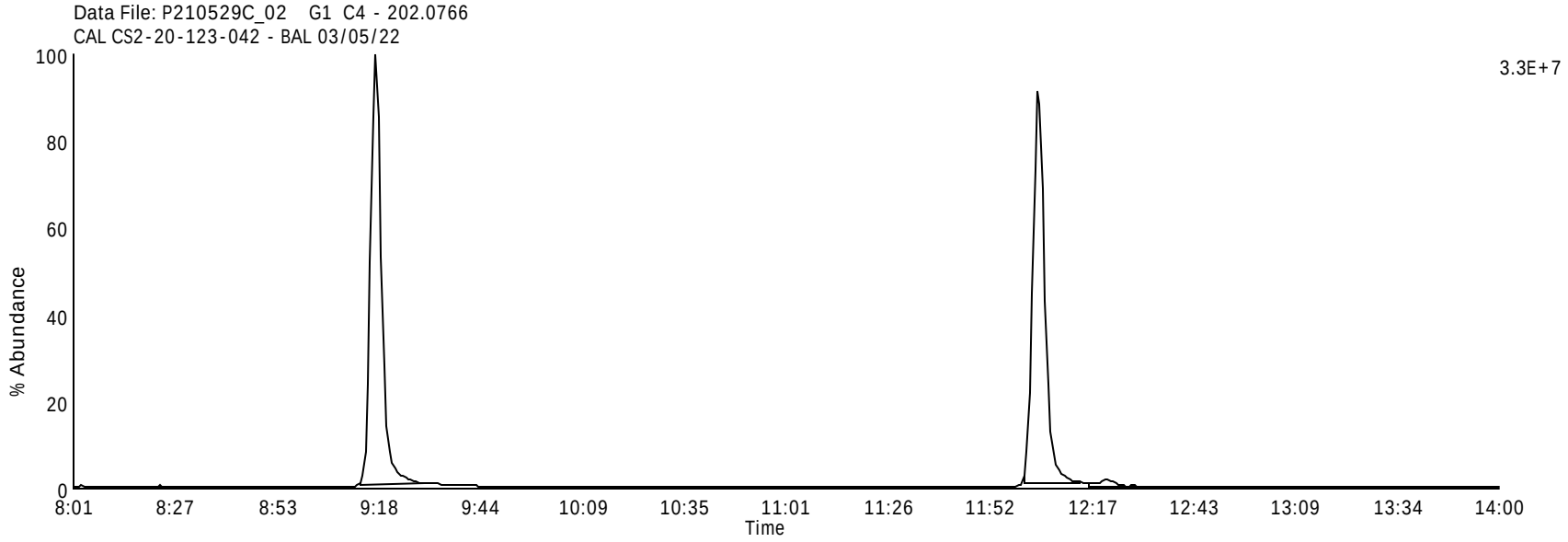
Labeled Mono Chlorinated Biphenyls

Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

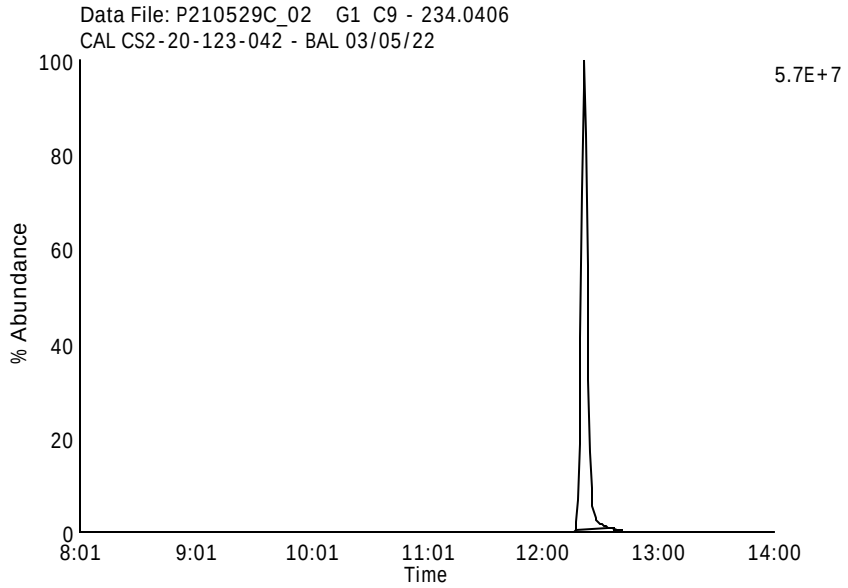
Sample Description: CAL CS2-20-123-042 - BAL 03/05/22

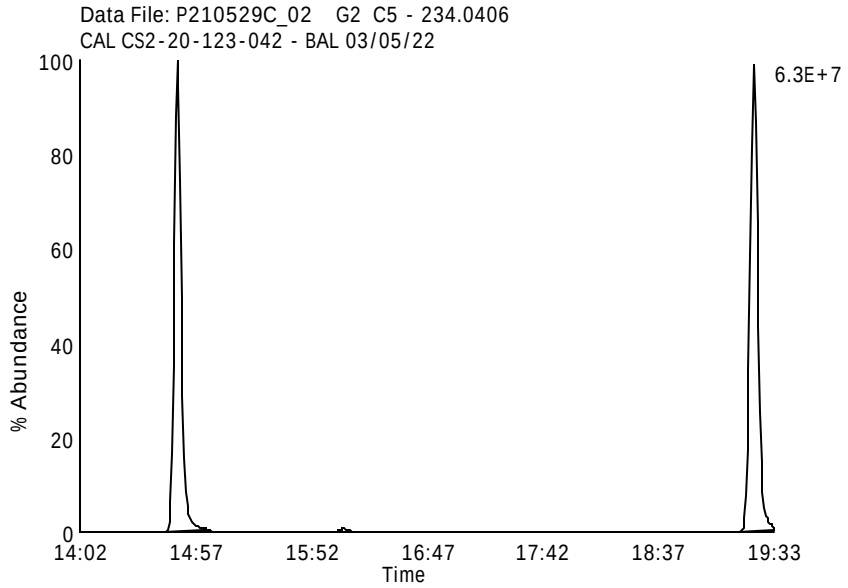


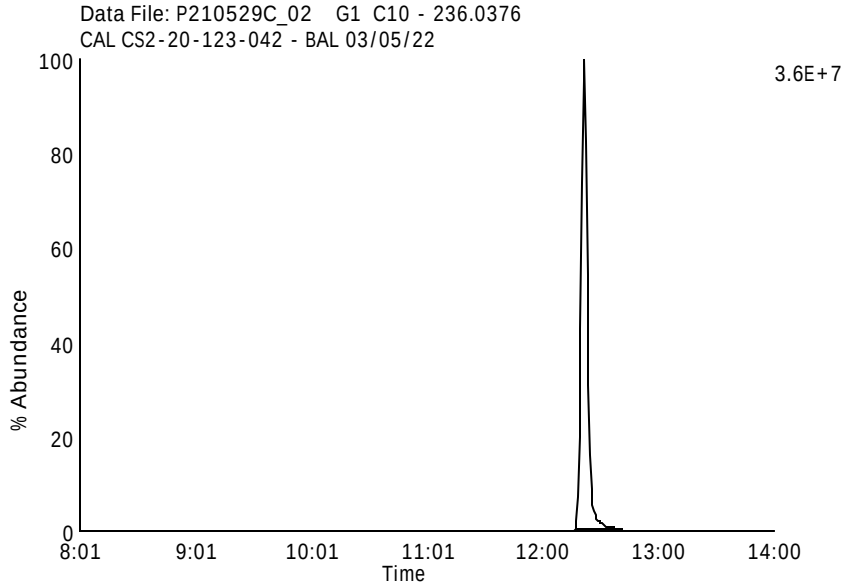


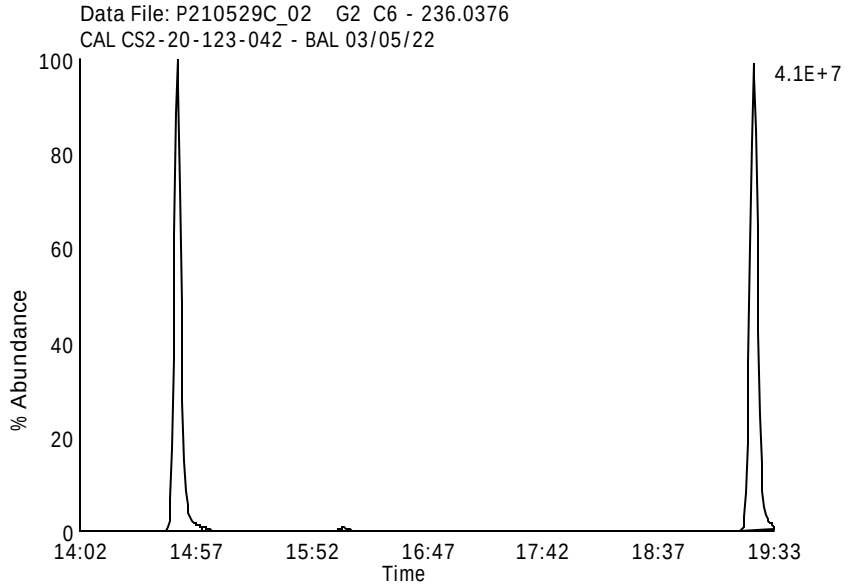
Labeled Di Chlorinated Biphenyls

Data File Name: P210529C_02
Lab Sample ID: CS2-20-123-042
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS2-20-123-042 - BAL 03/05/22







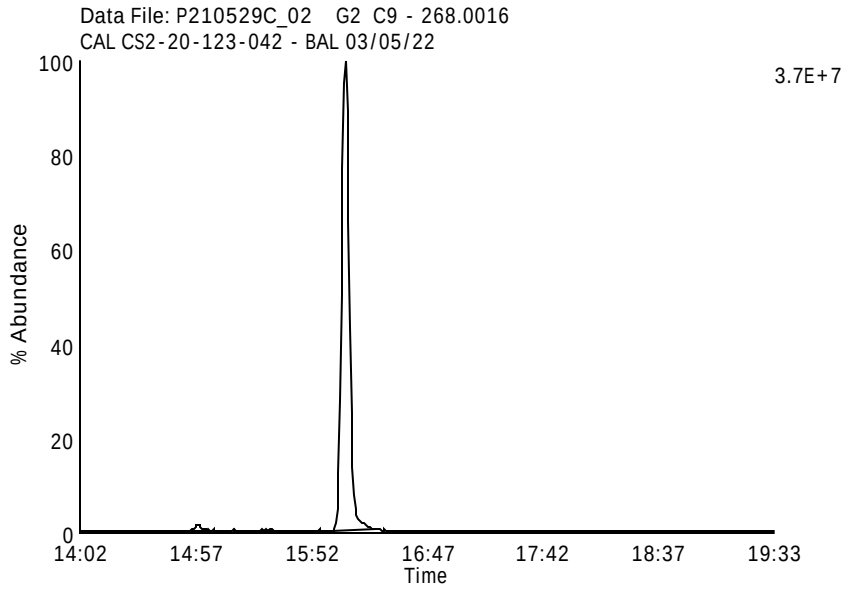


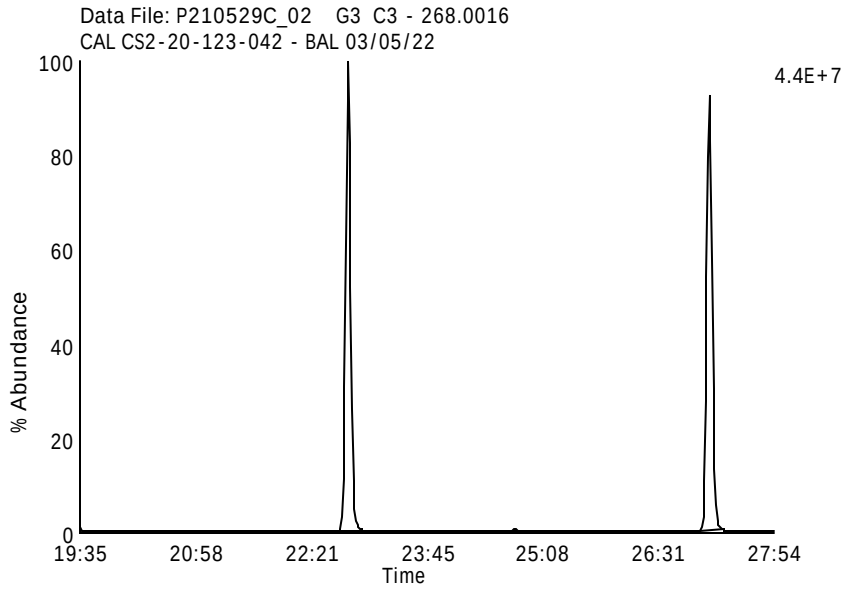
Labeled Tri Chlorinated Biphenyls

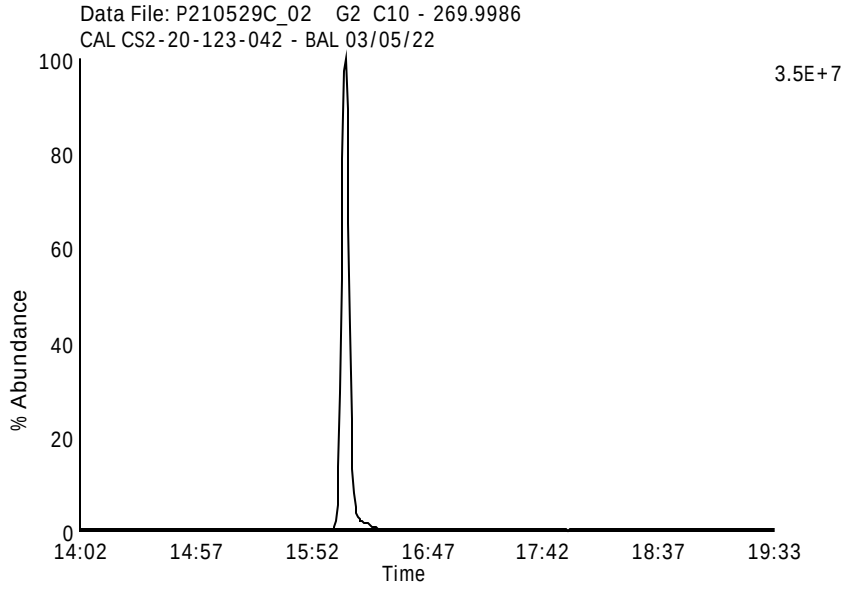
Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

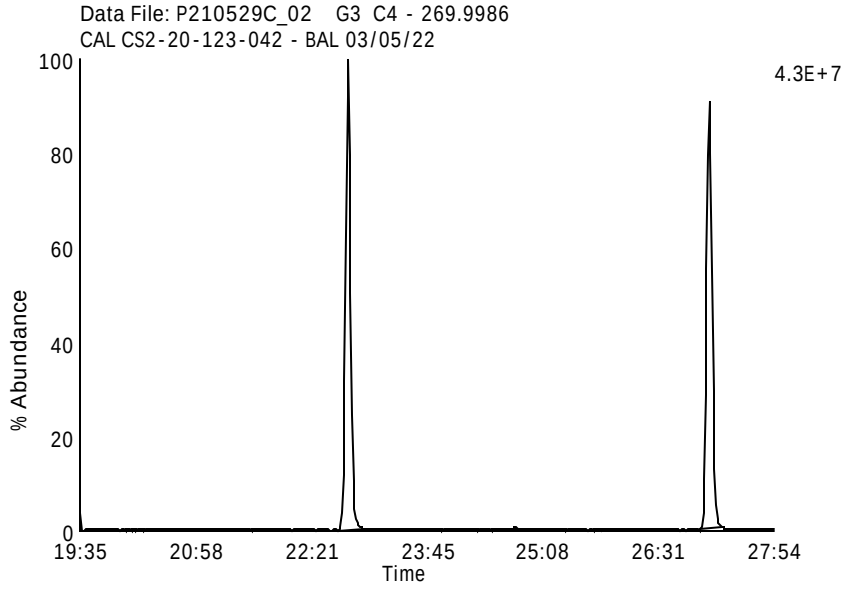
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22









Labeled Tetra Chlorinated Biphenyls

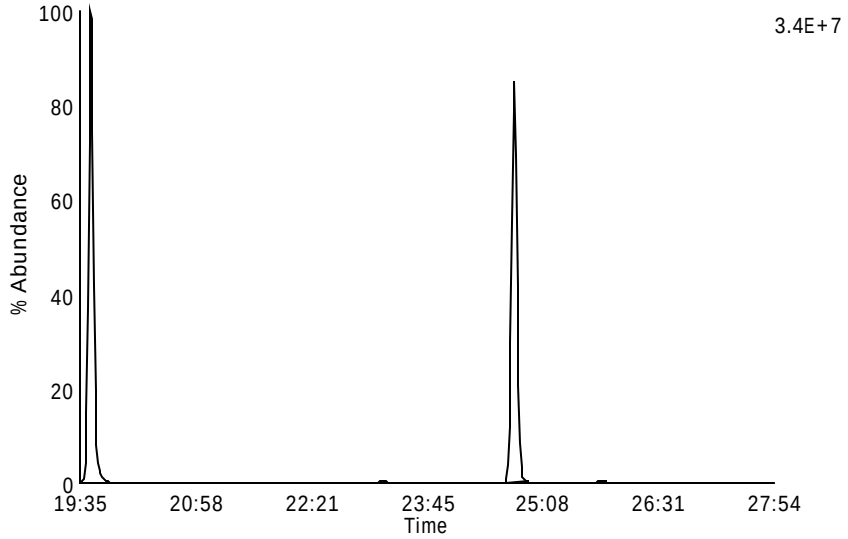
Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22

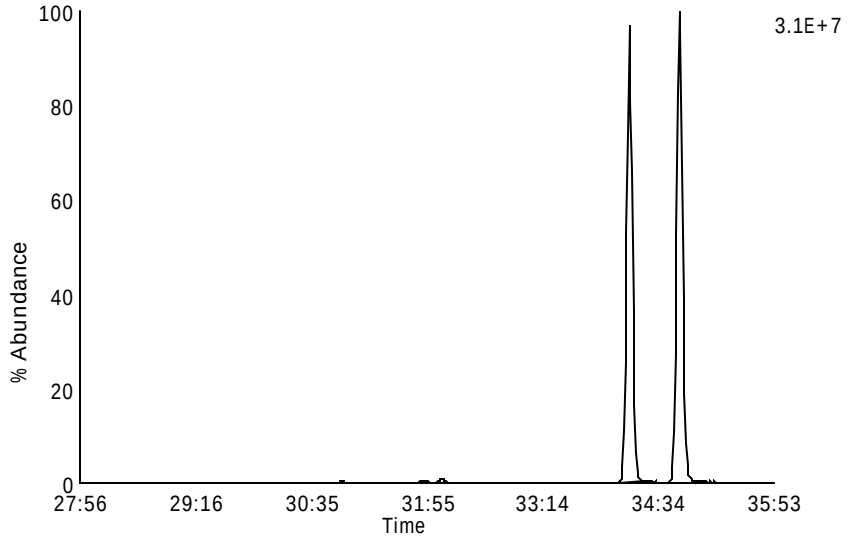
Data File: P210529C_02 G3 C9 - 301.9626

CAL CS2-20-123-042 - BAL 03/05/22



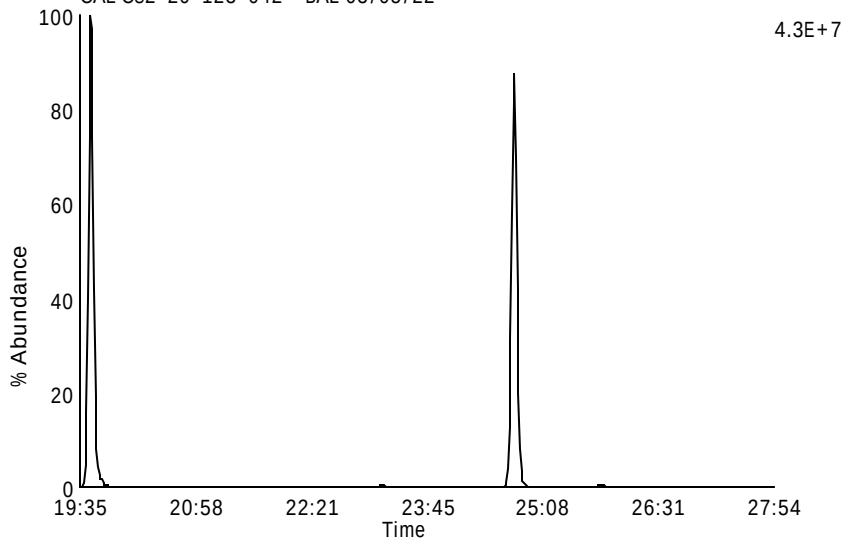
Data File: P210529C_02 G4 C3 - 301.9626

CAL CS2-20-123-042 - BAL 03/05/22



Data File: P210529C_02 G3 C10 - 303.9597

CAL CS2-20-123-042 - BAL 03/05/22



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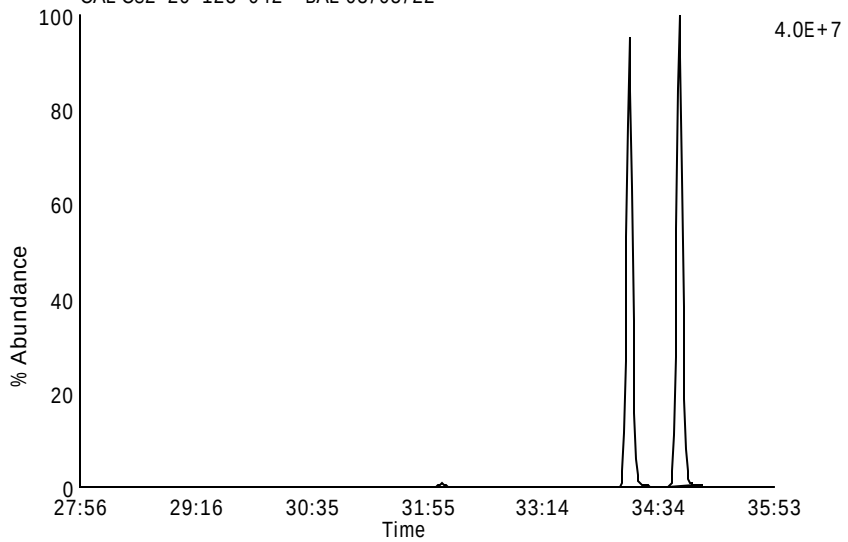
CAL CS2-20-123-042 - BAL 03/05/22

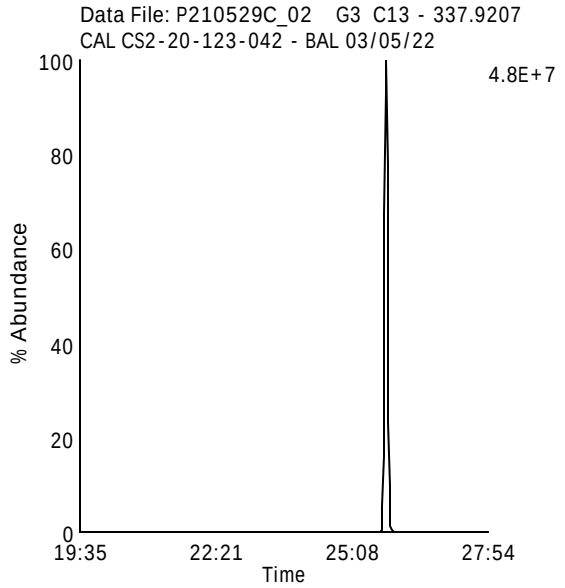


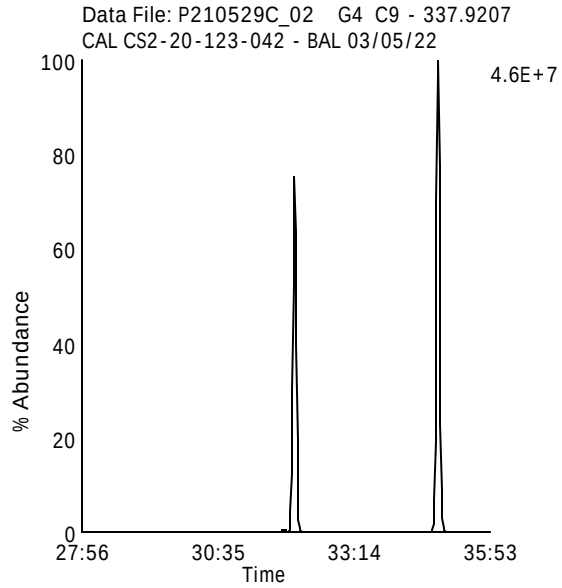
Labeled Penta Chlorinated Biphenyls

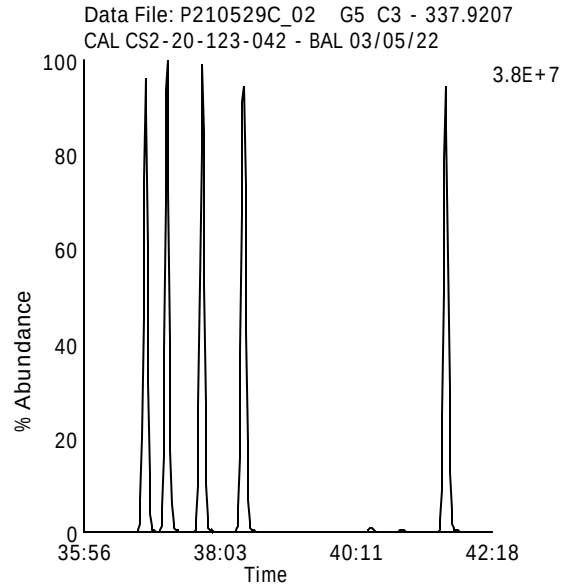
Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

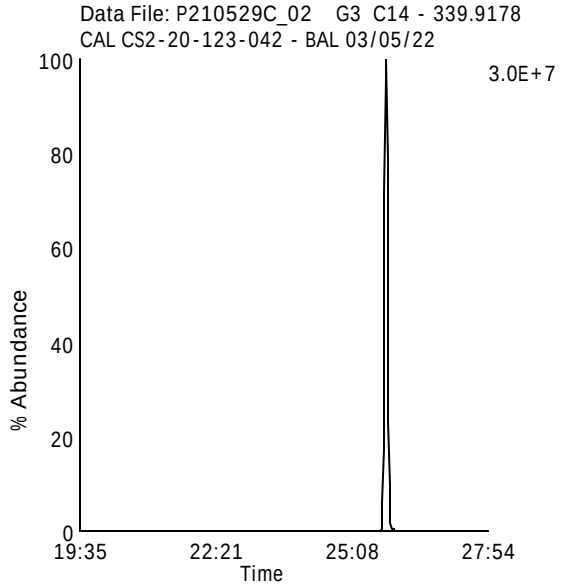
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

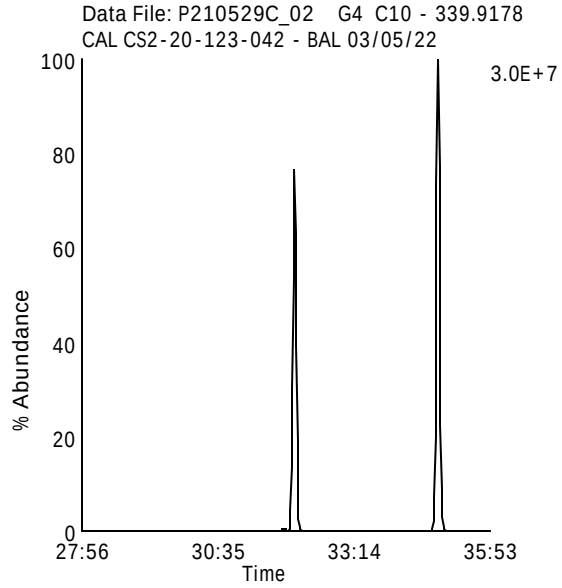
Sample Description: CAL CS2-20-123-042 - BAL 03/05/22

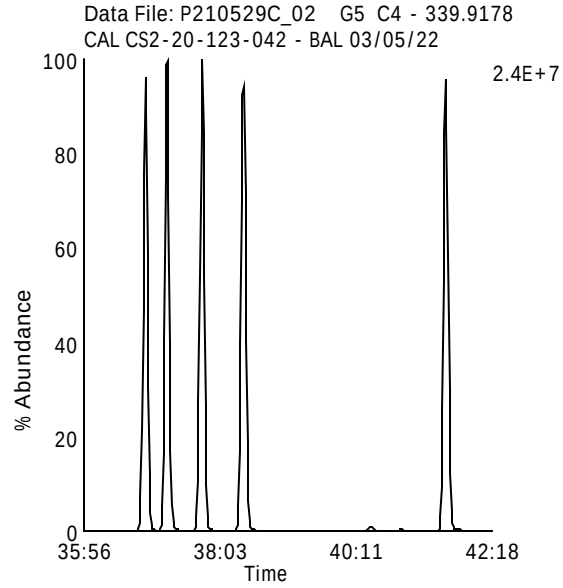












Labeled Hexa Chlorinated Biphenyls

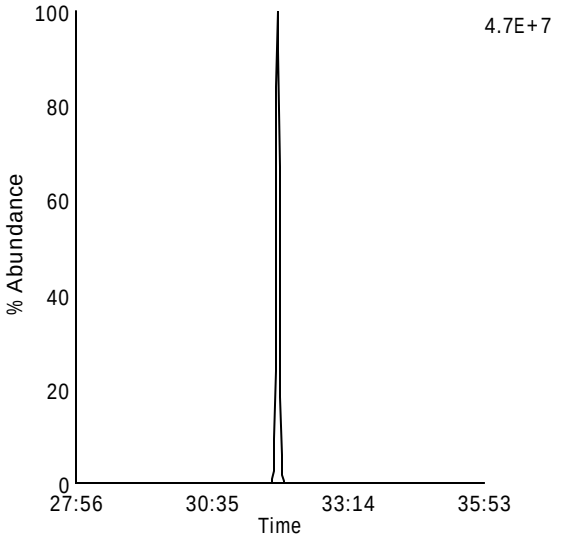
Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22

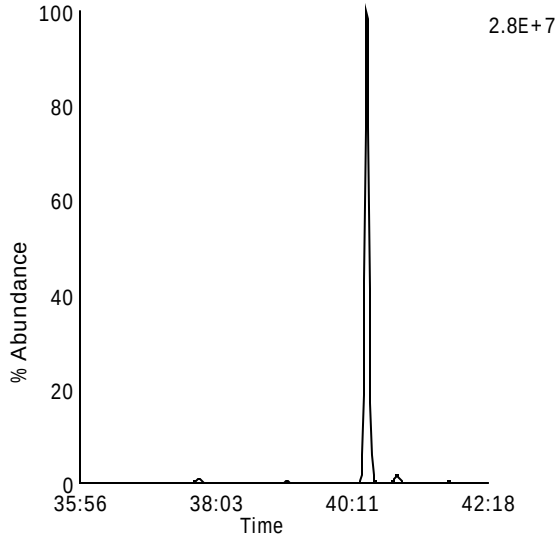
Data File: P210529C_02 G4 C13 - 371.8817

CAL CS2-20-123-042 - BAL 03/05/22



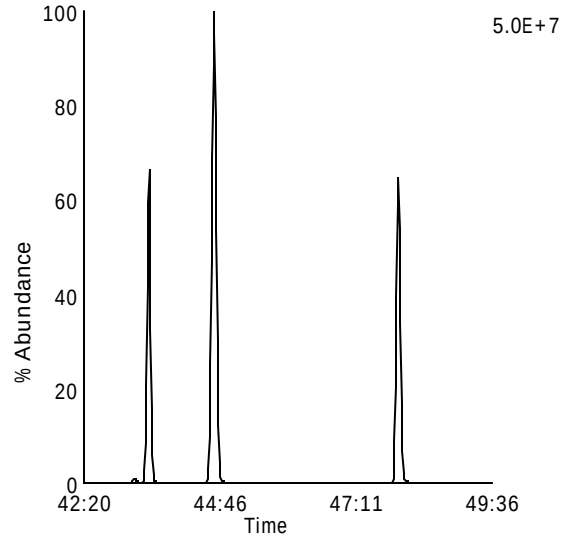
Data File: P210529C_02 G5 C7 - 371.8817

CAL CS2-20-123-042 - BAL 03/05/22



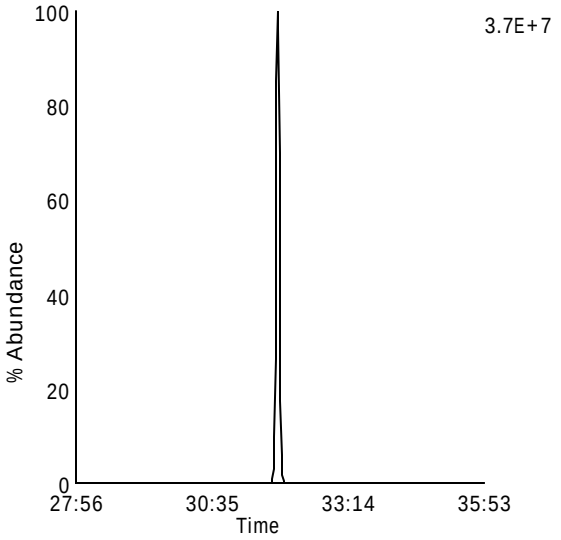
Data File: P210529C_02 G6 C3 - 371.8817

CAL CS2-20-123-042 - BAL 03/05/22



Data File: P210529C_02 G4 C14 - 373.8788

CAL CS2-20-123-042 - BAL 03/05/22



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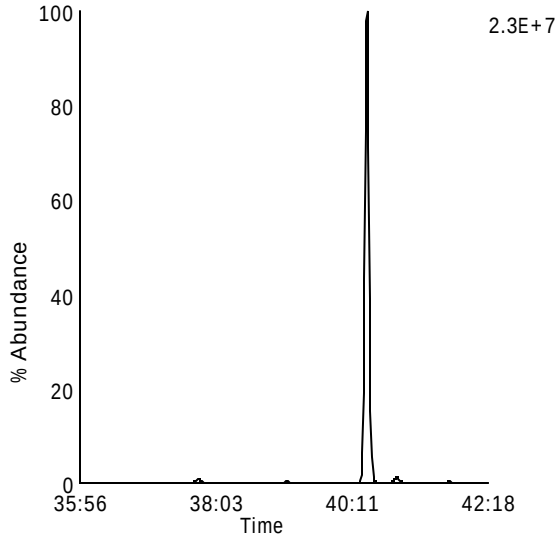
CAL CS2-20-123-042 - BAL 03/05/22



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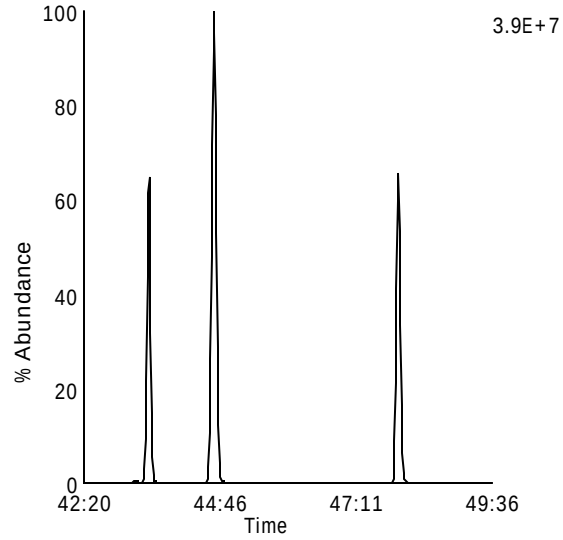
CAL CS2-20-123-042 - BAL 03/05/22

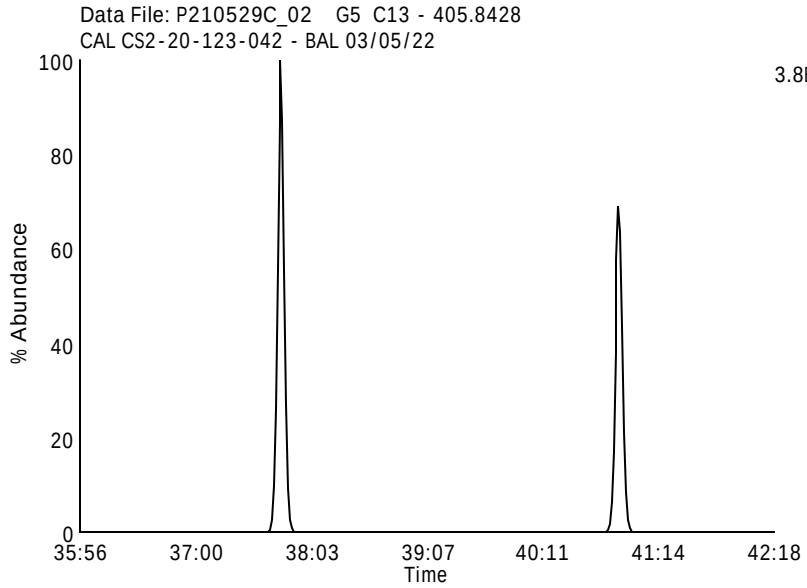


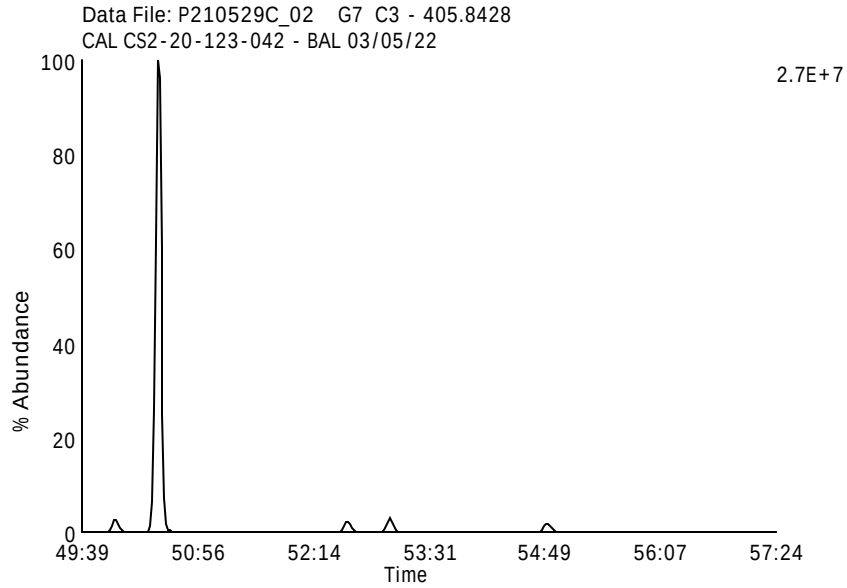
Labeled Hepta Chlorinated Biphenyls

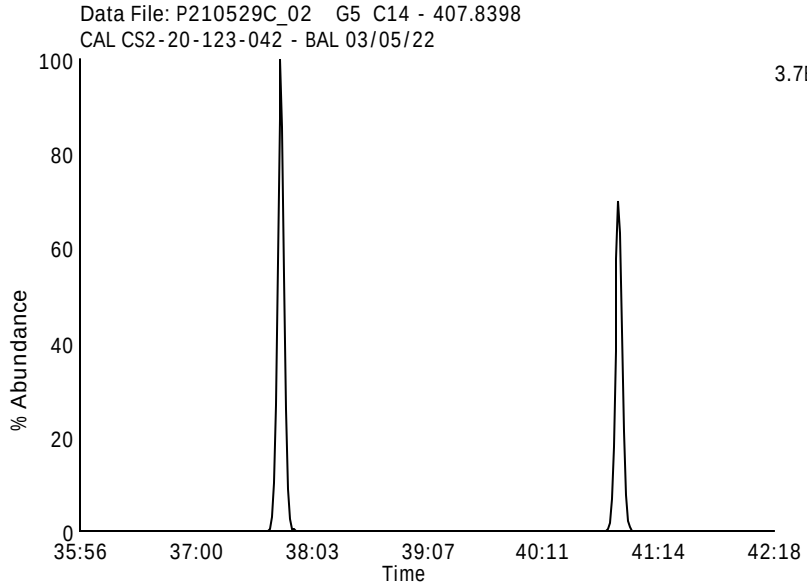
Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

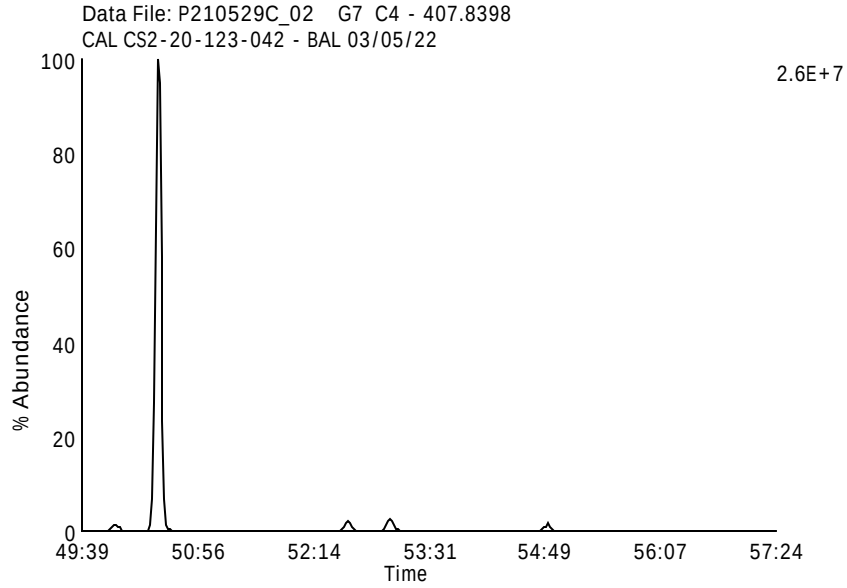
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22







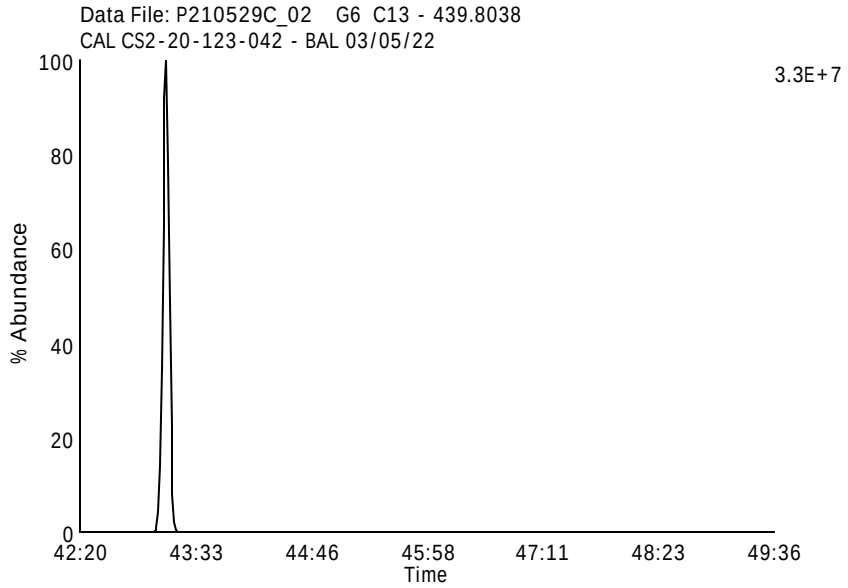


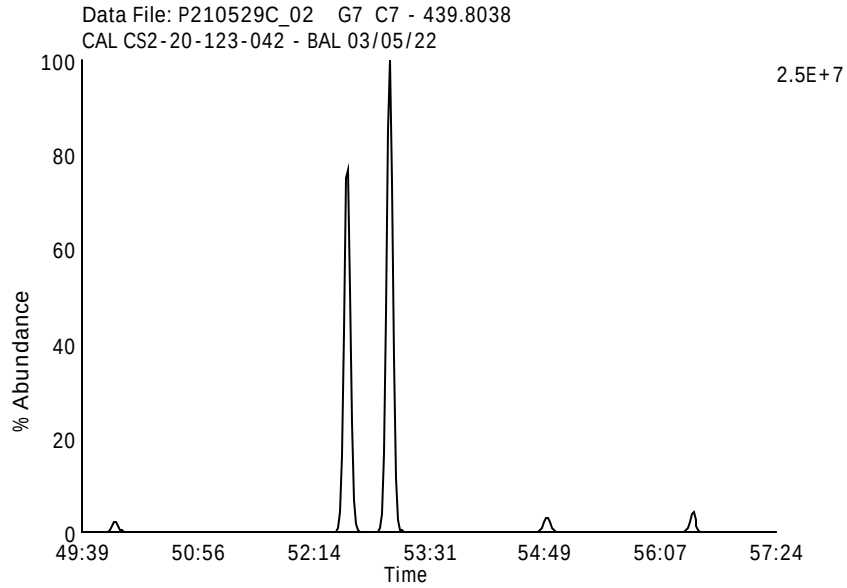
Labeled Octa Chlorinated Biphenyls

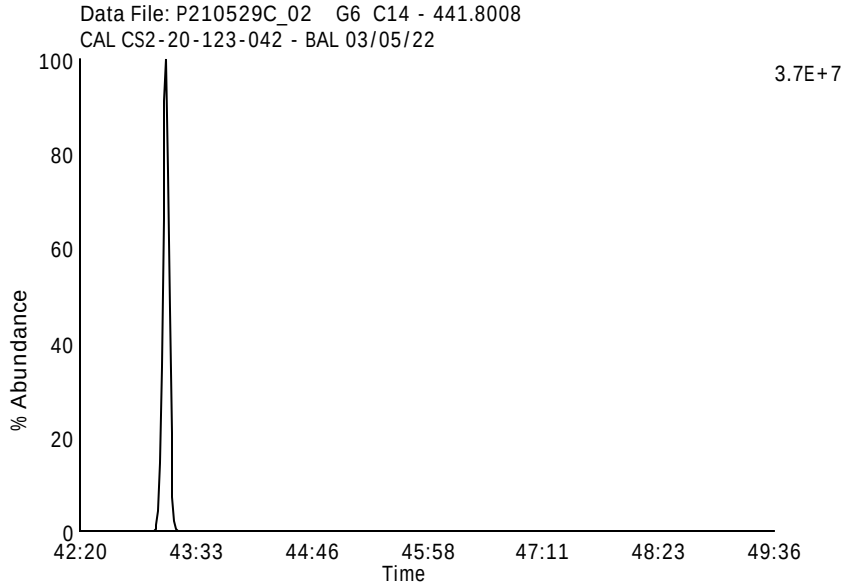
Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

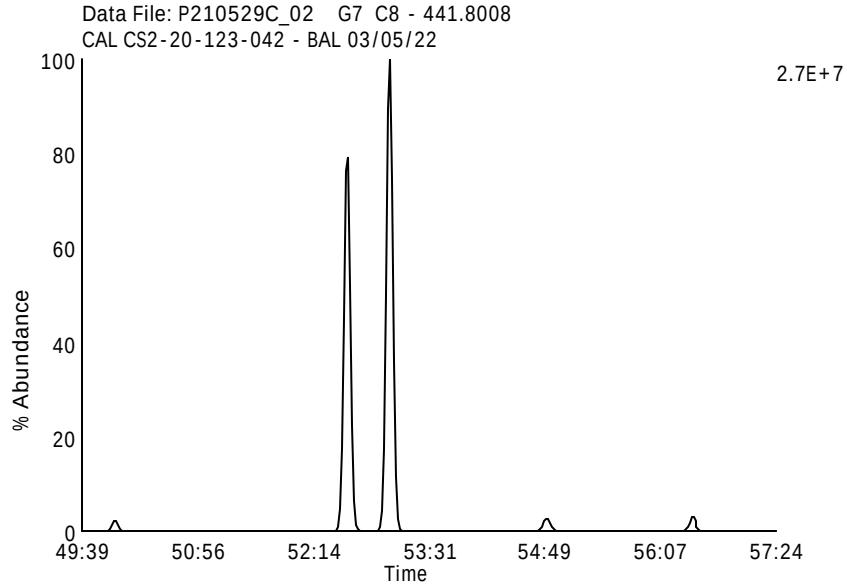
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22







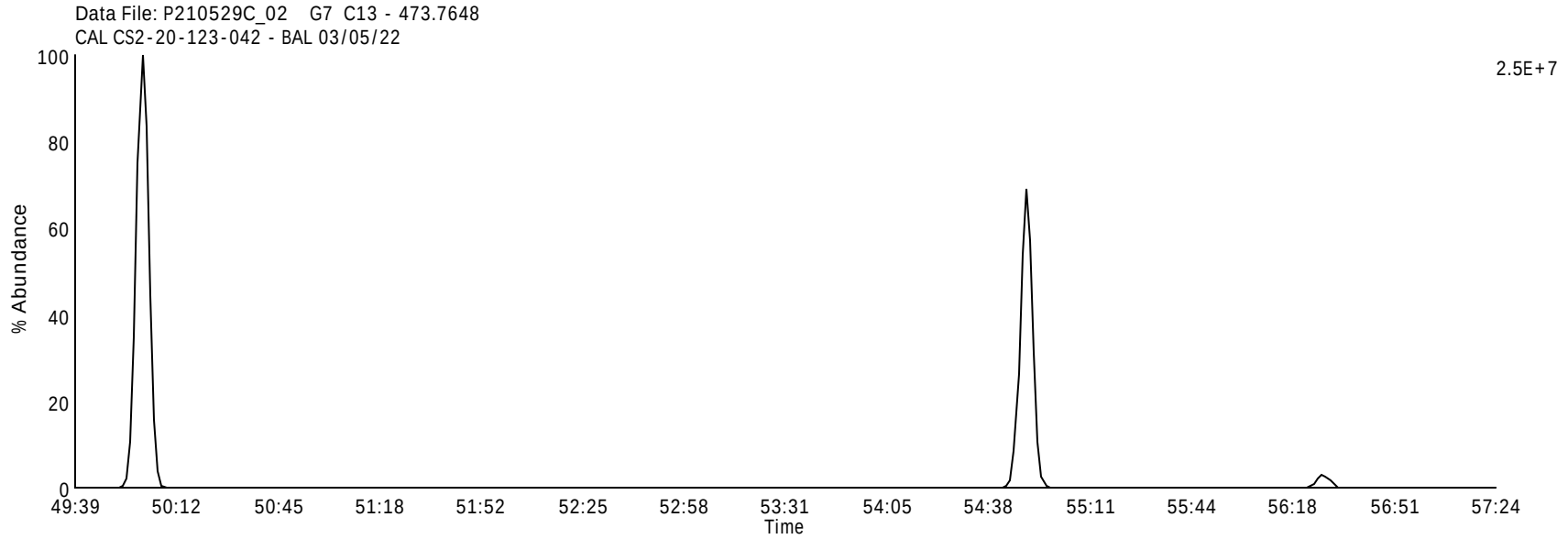


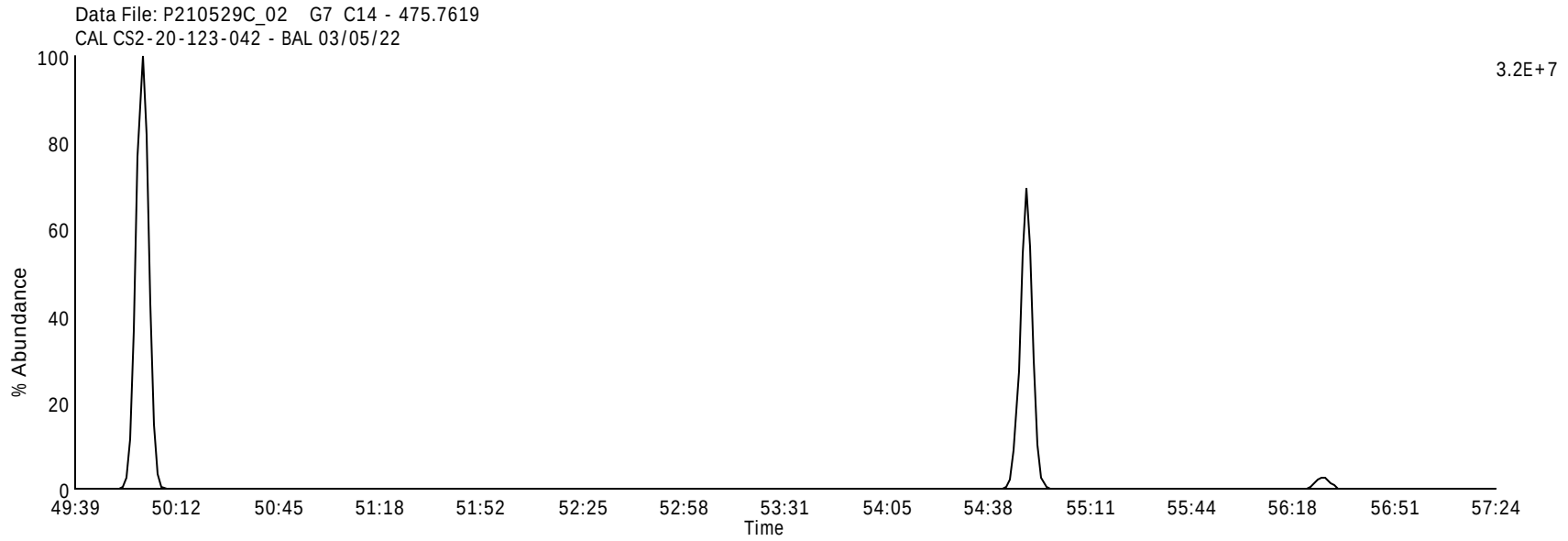
Labeled Nona Chlorinated Biphenyls

Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22



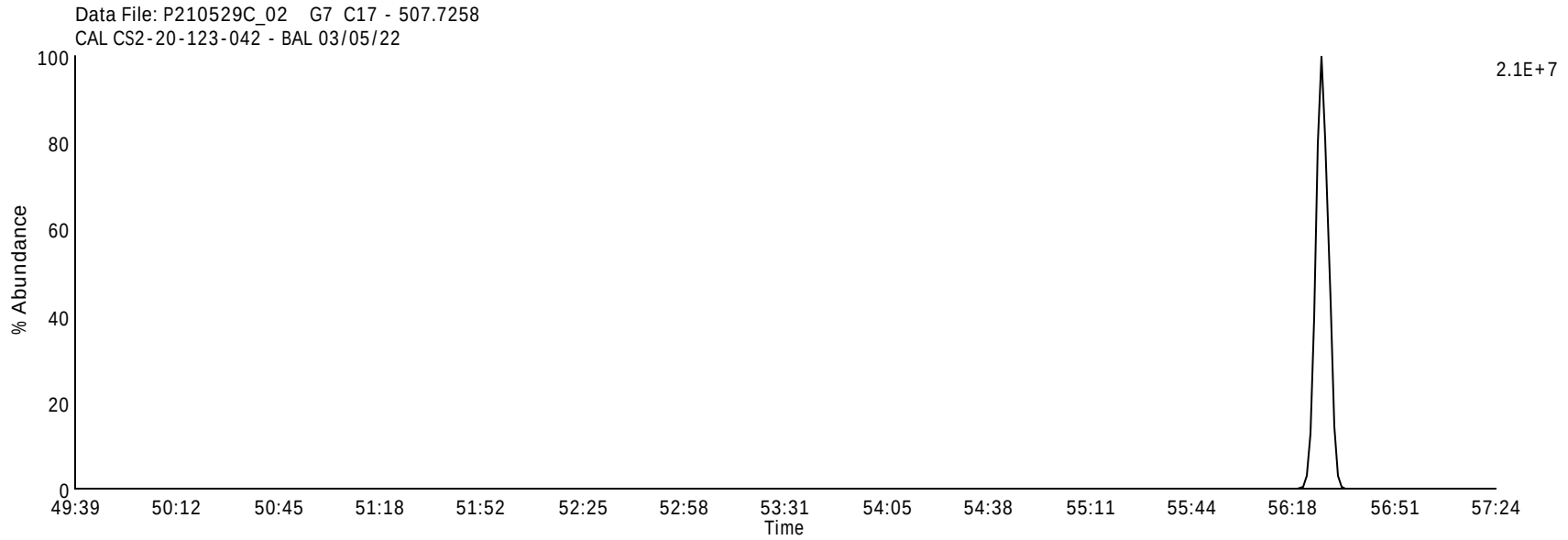


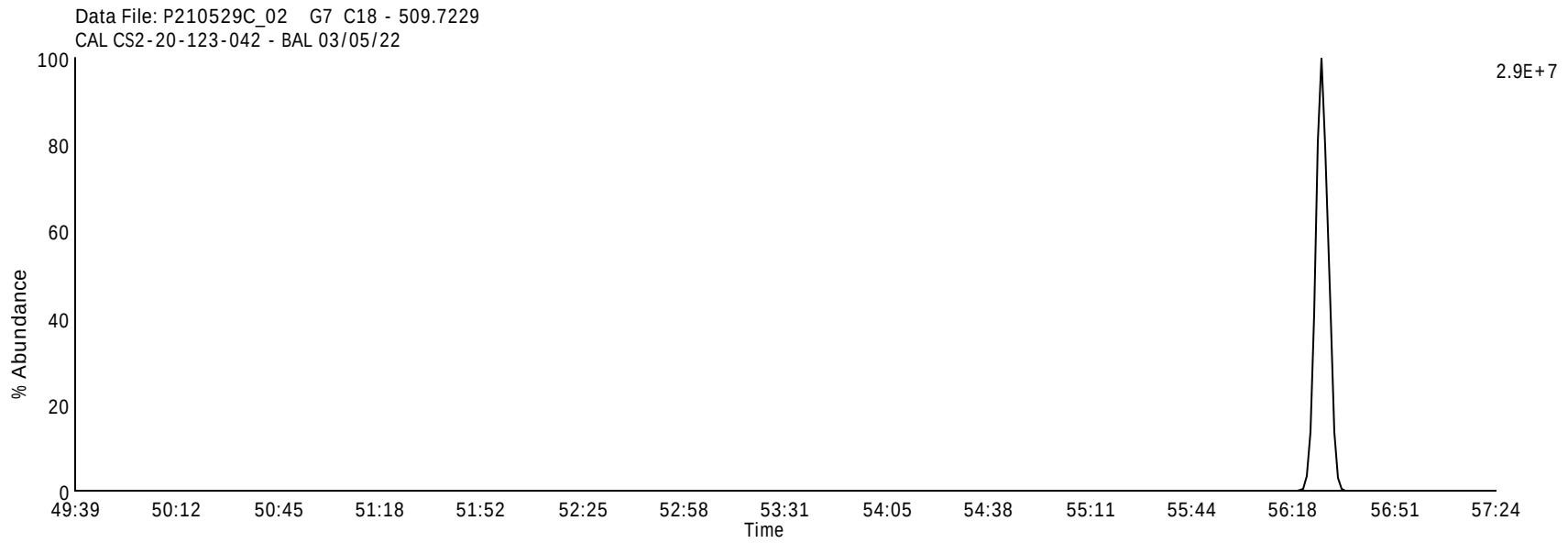
Labeled Deca Chlorinated Biphenyl

Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22



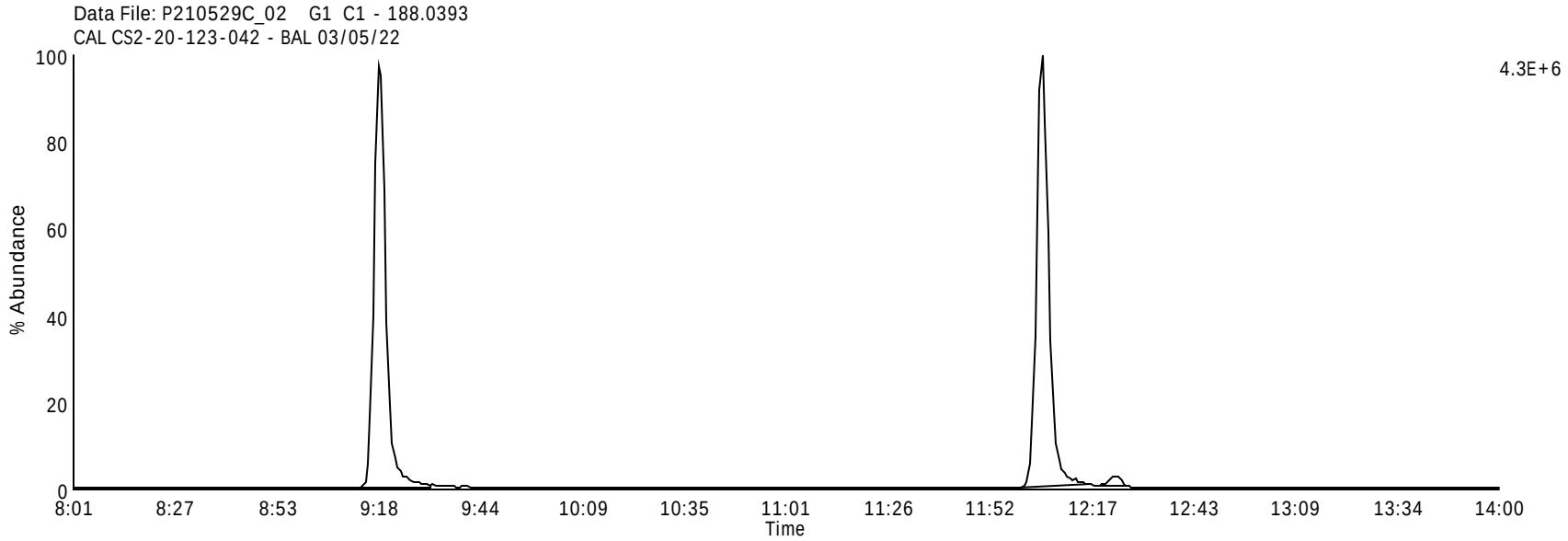


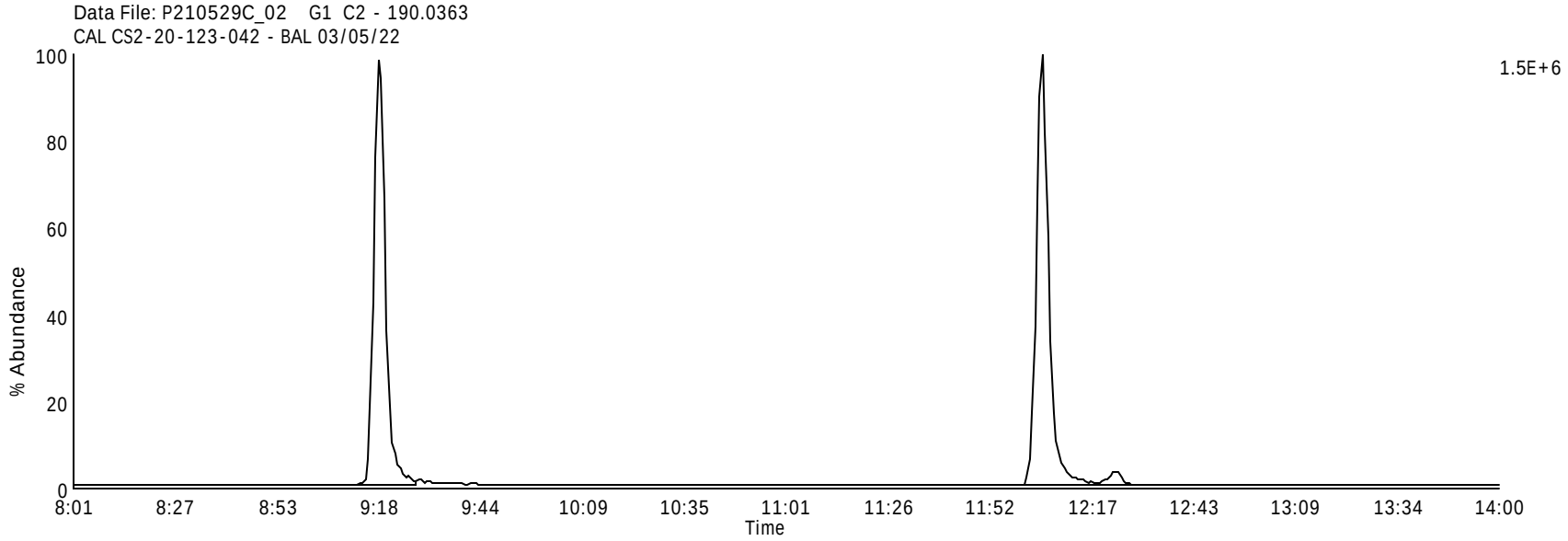
Mono Chlorinated Biphenyls

Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22



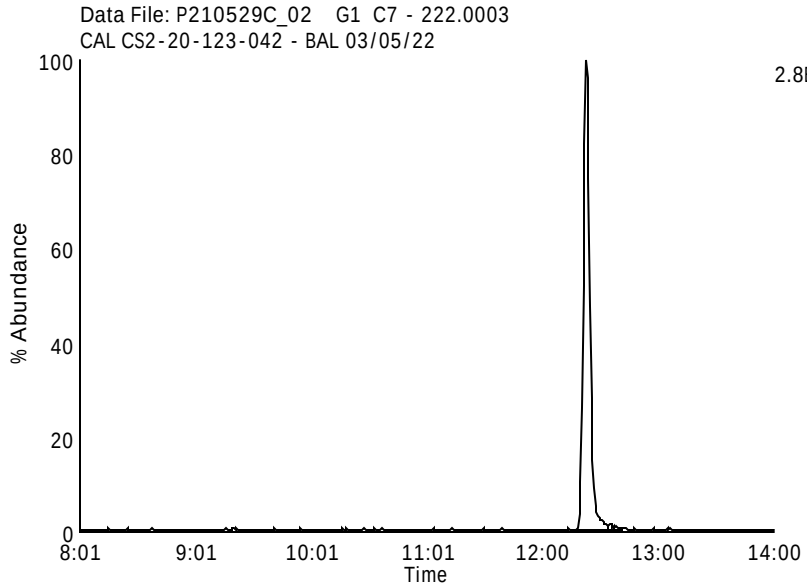


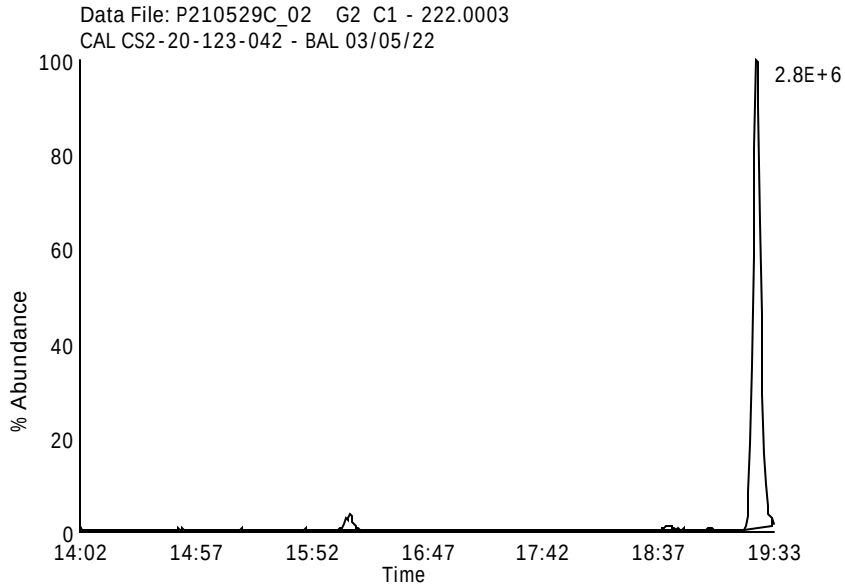
Di Chlorinated Biphenyls

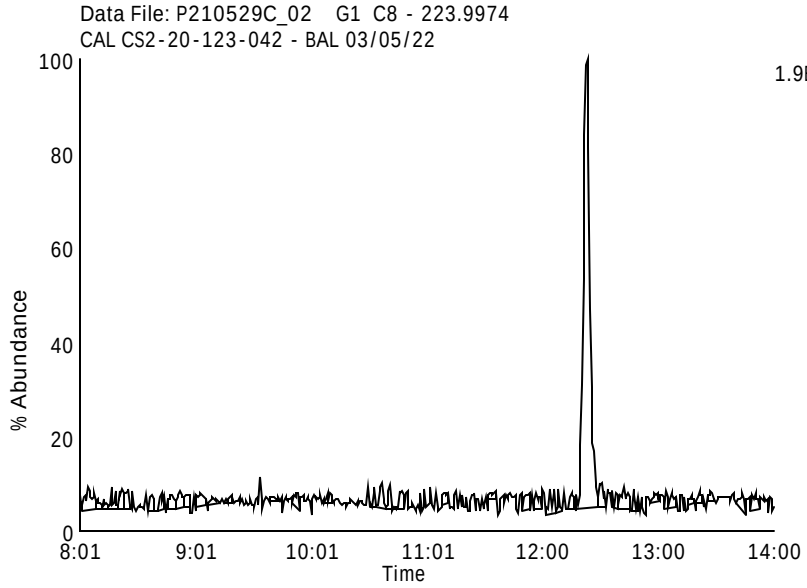
Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

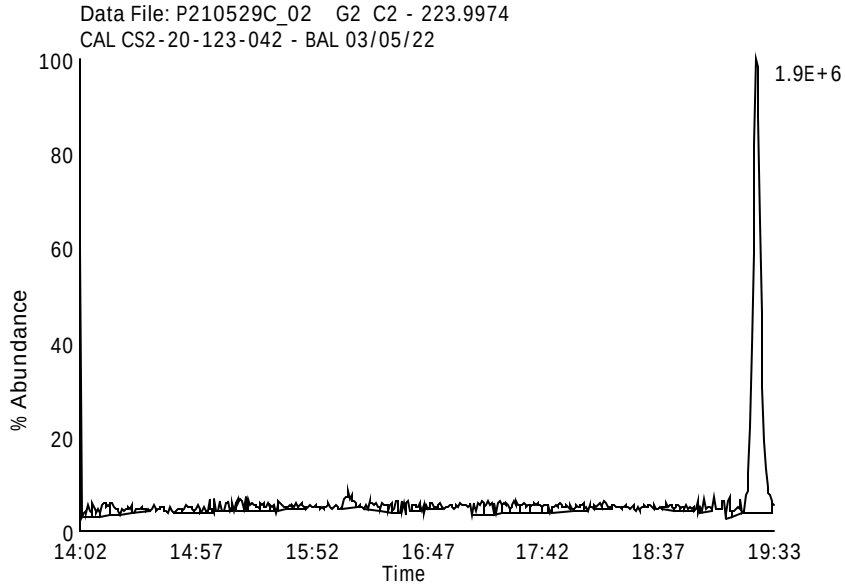
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22









Tri Chlorinated Biphenyls

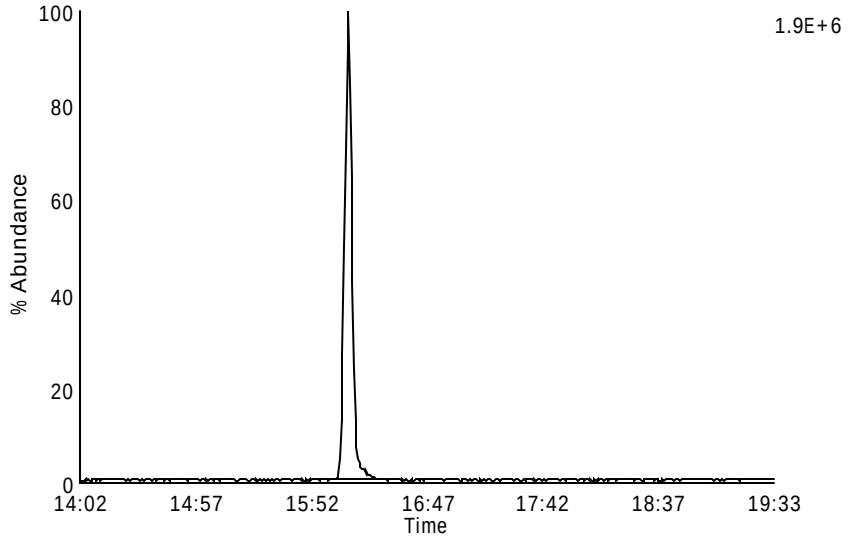
Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22

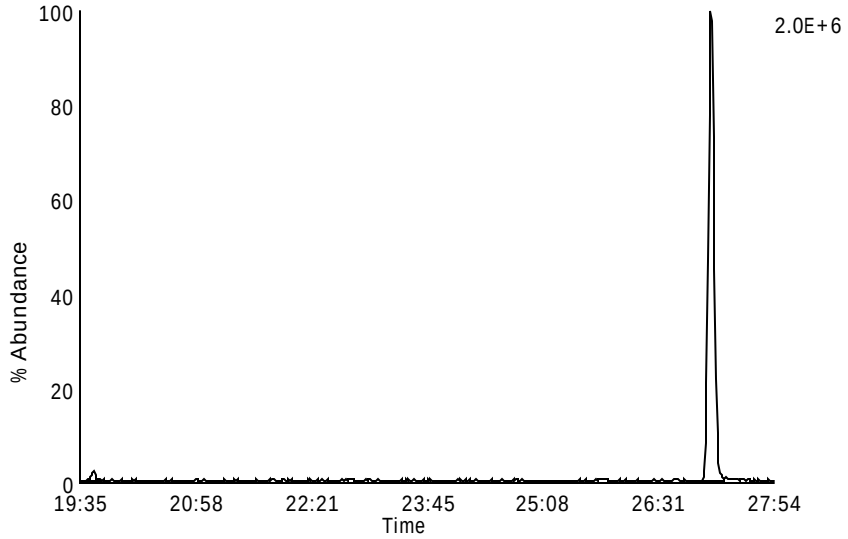
Data File: P210529C_02 G2 C7 - 255.9613

CAL CS2-20-123-042 - BAL 03/05/22



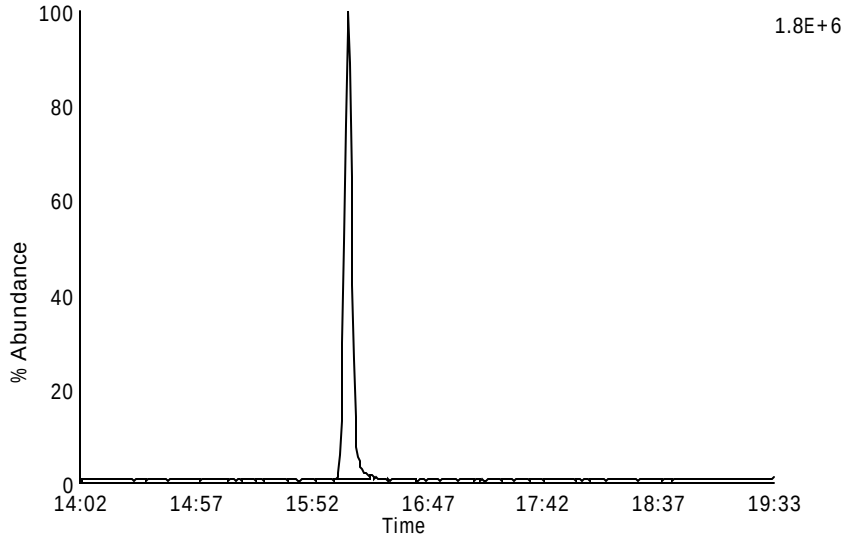
Data File: P210529C_02 G3 C1 - 255.9613

CAL CS2-20-123-042 - BAL 03/05/22



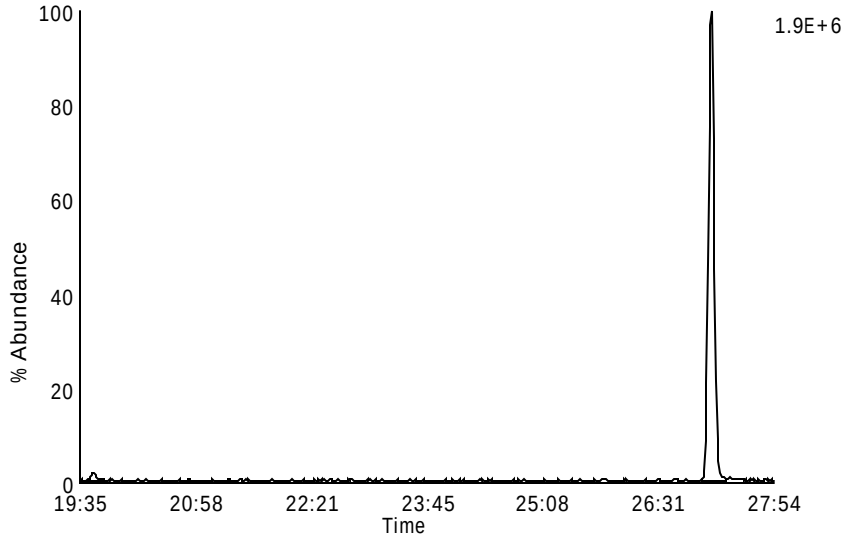
Data File: P210529C_02 G2 C8 - 257.9584

CAL CS2-20-123-042 - BAL 03/05/22



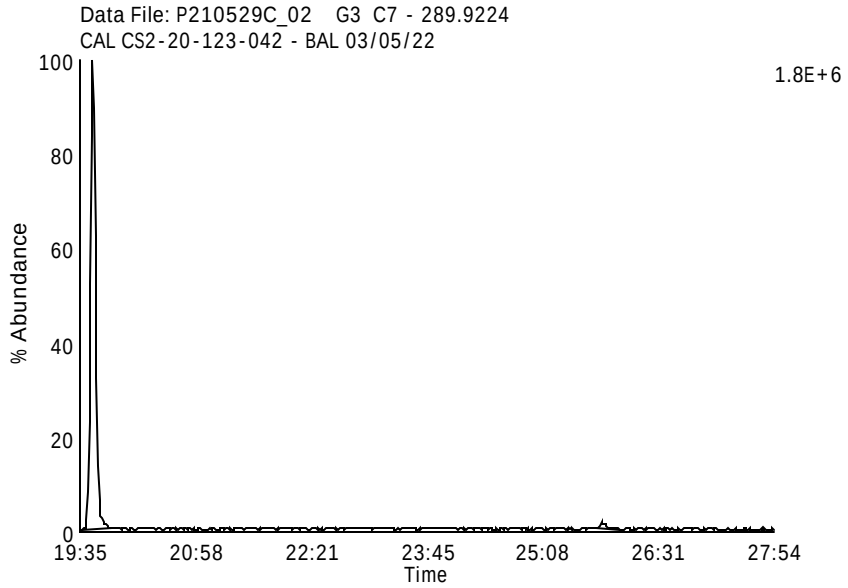
Data File: P210529C_02 G3 C2 - 257.9584

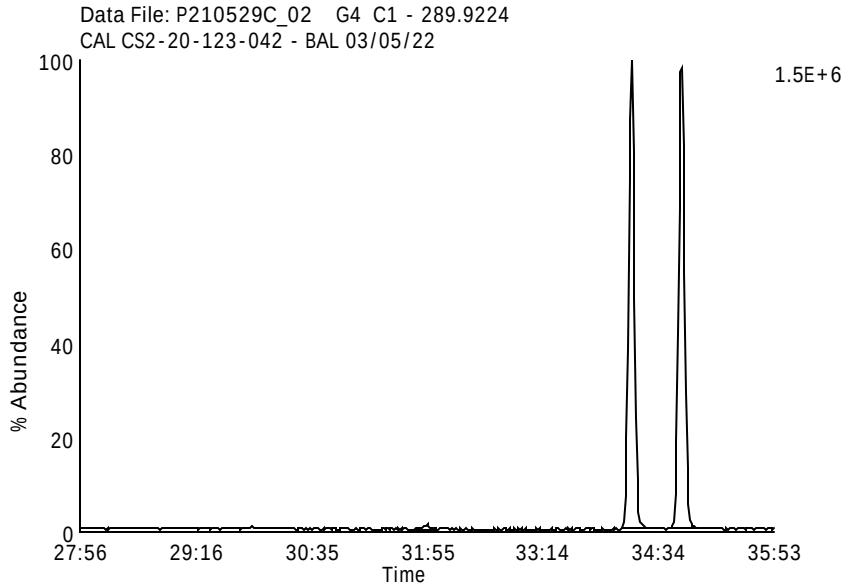
CAL CS2-20-123-042 - BAL 03/05/22

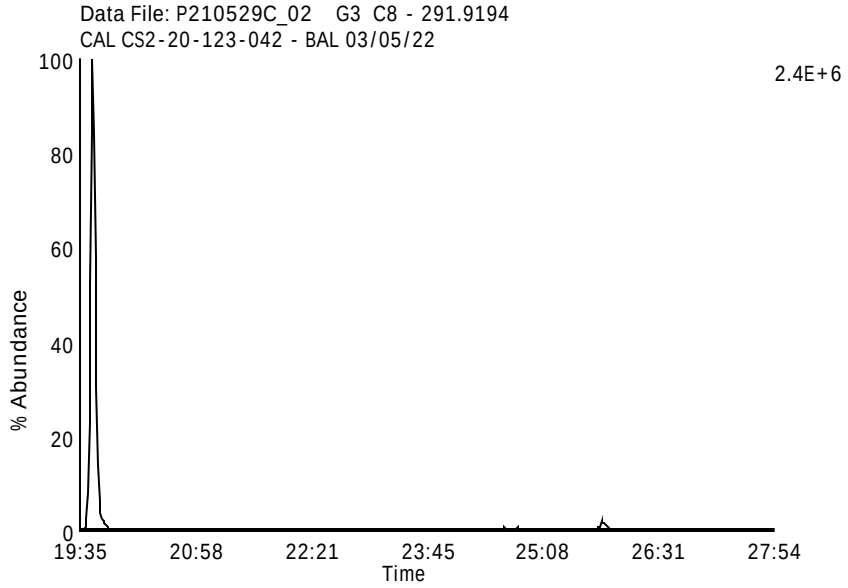


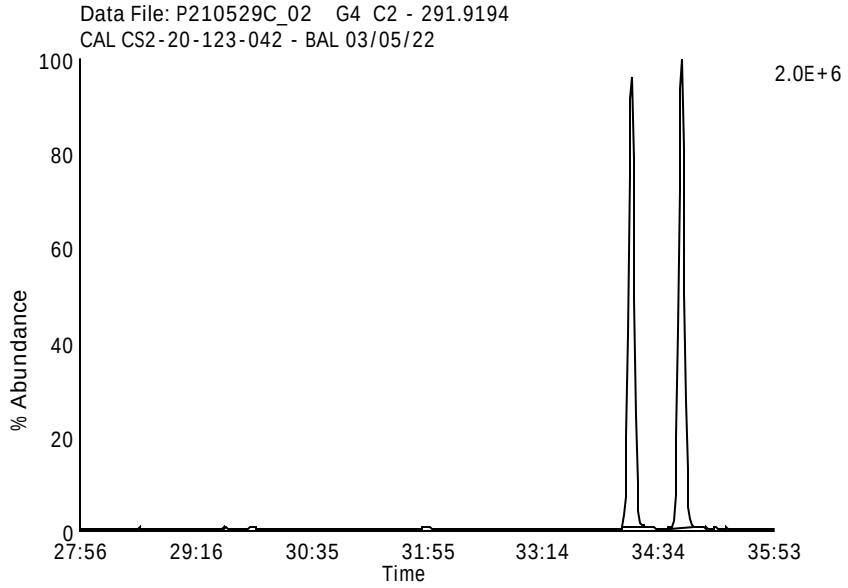
Tetra Chlorinated Biphenyls

Data File Name: P210529C_02
Lab Sample ID: CS2-20-123-042
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS2-20-123-042 - BAL 03/05/22







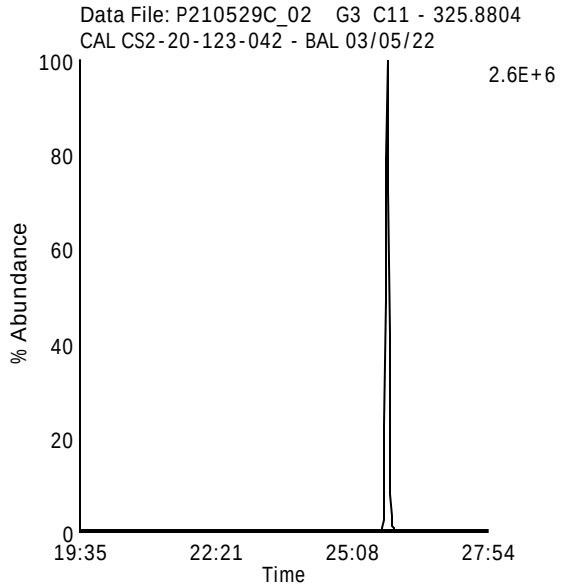


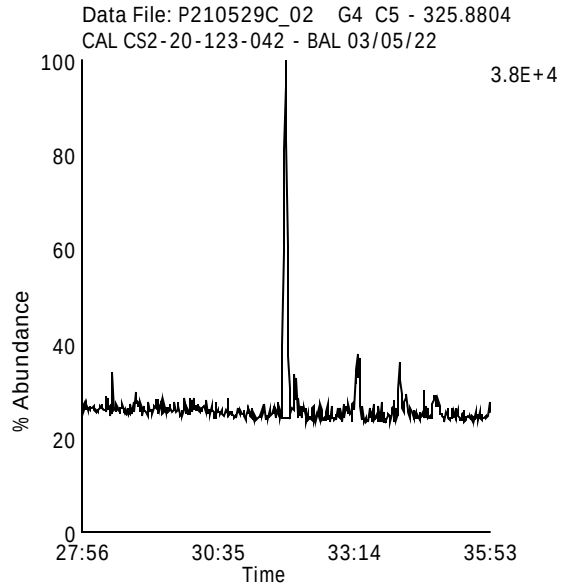
Penta Chlorinated Biphenyls

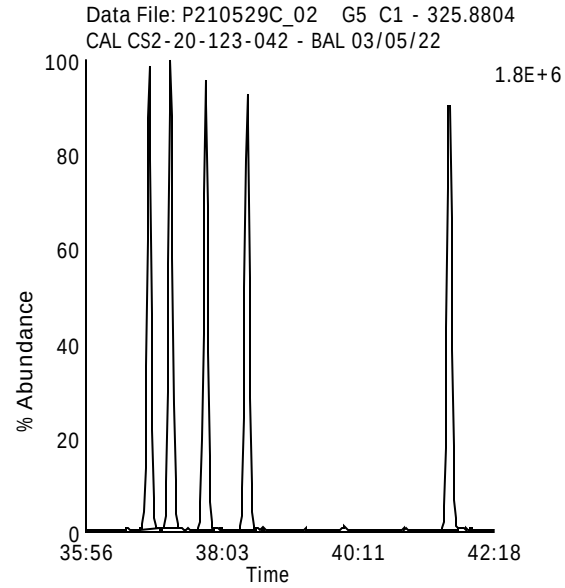
Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

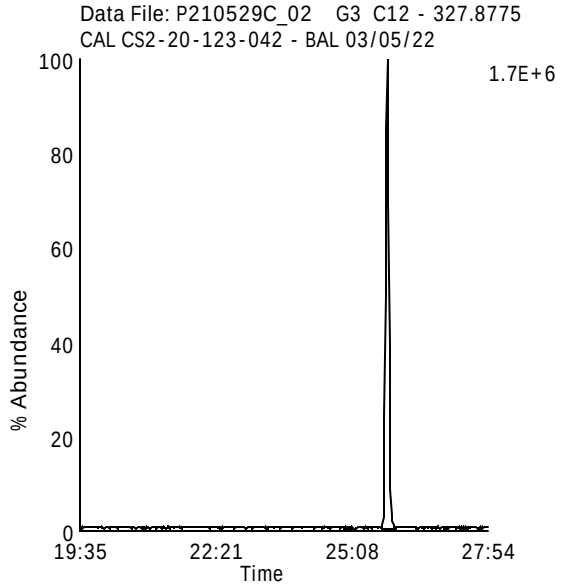
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

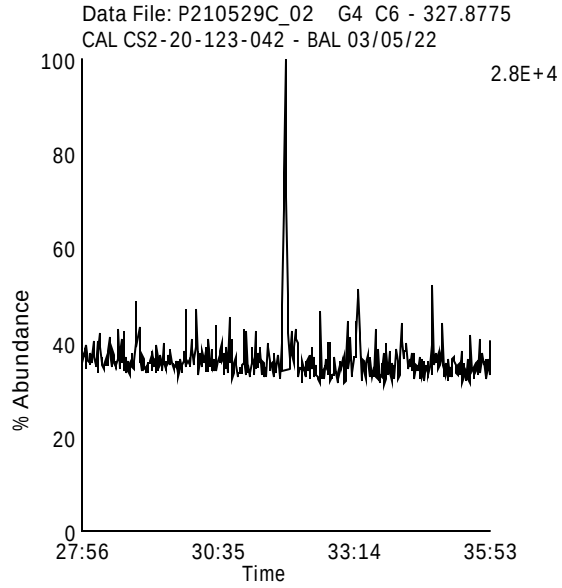
Sample Description: CAL CS2-20-123-042 - BAL 03/05/22

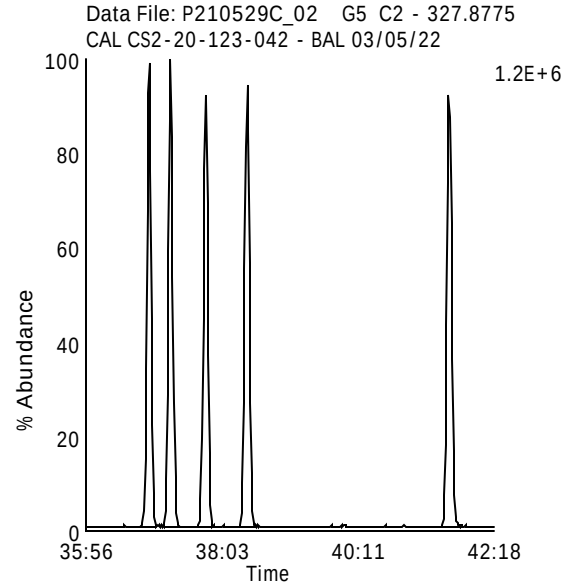












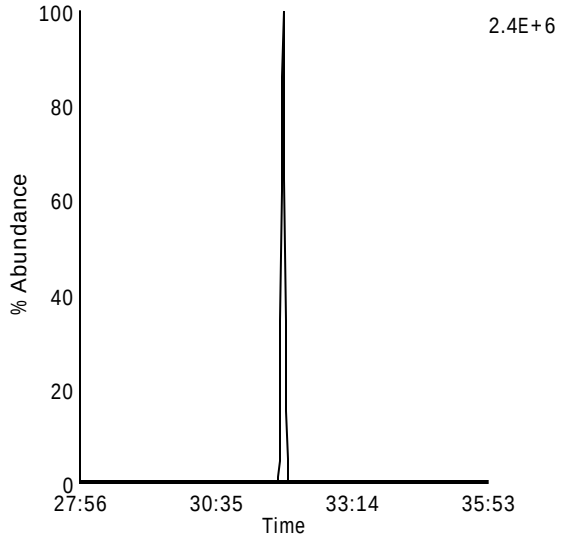
Hexa Chlorinated Biphenyls

Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

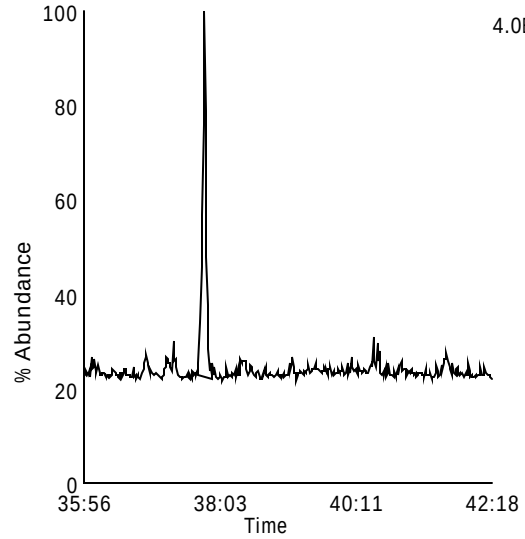
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22

Data File: P210529C_02 G4 C11 - 359.8415
CAL CS2-20-123-042 - BAL 03/05/22



Data File: P210529C_02 G5 C5 - 359.8415
CAL CS2-20-123-042 - BAL 03/05/22



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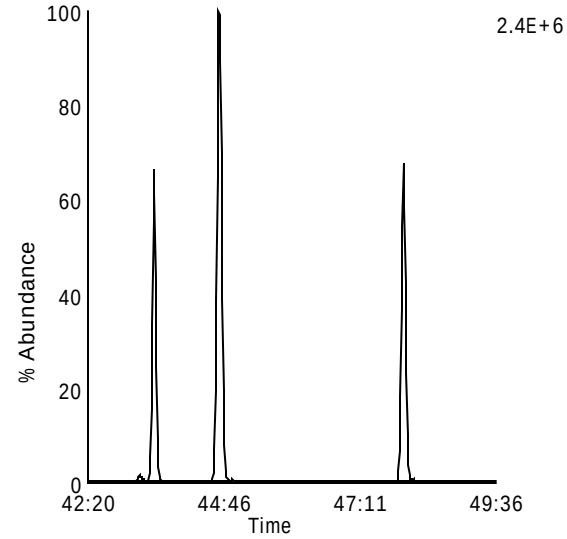
CAL CS2-20-123-042 - BAL 03/05/22



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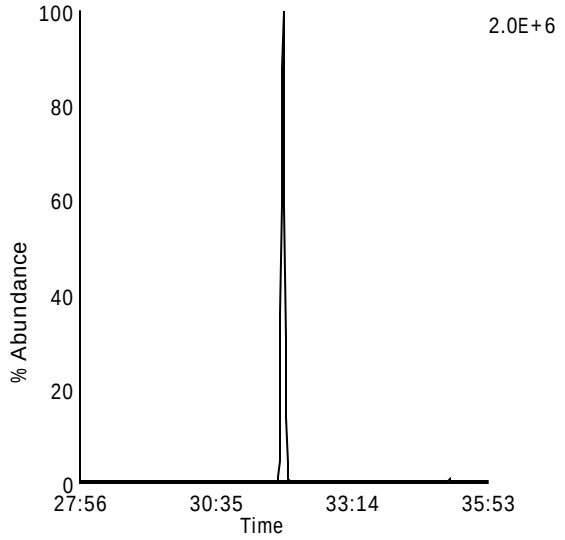
CAL CS2-20-123-042 - BAL 03/05/22



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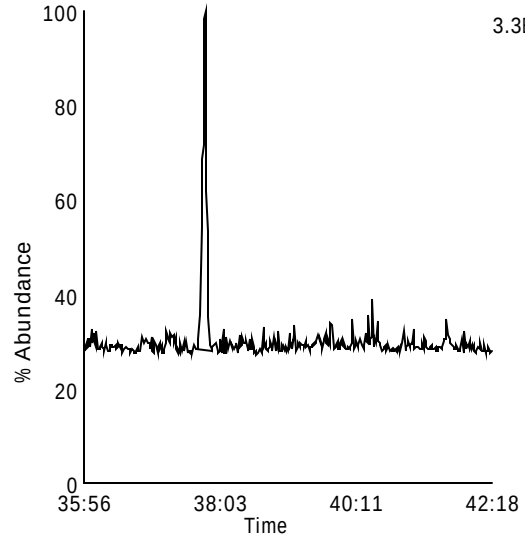
CAL CS2-20-123-042 - BAL 03/05/22



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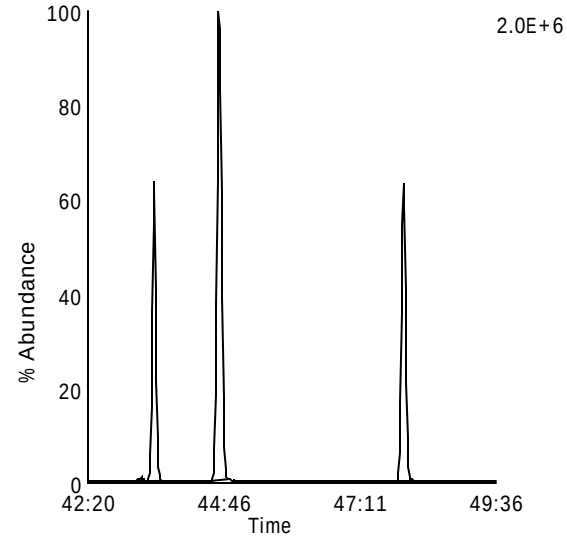
CAL CS2-20-123-042 - BAL 03/05/22



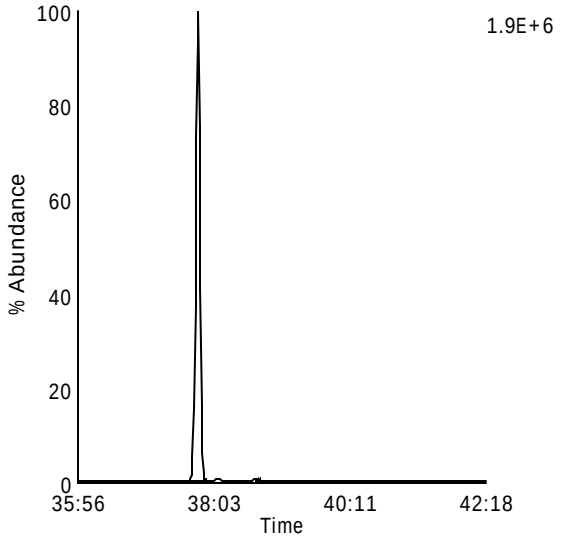
Hepta Chlorinated Biphenyls

Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

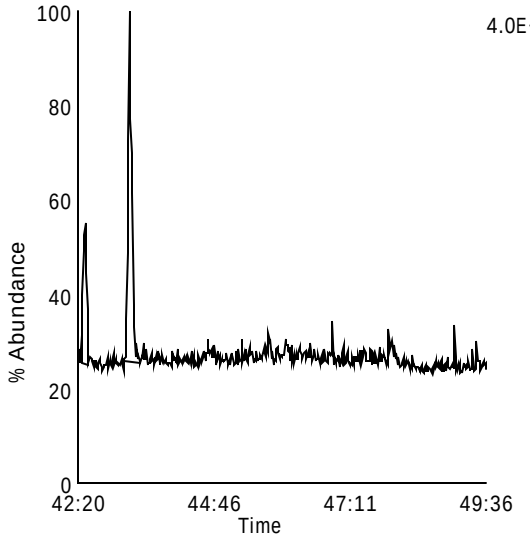
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22

Data File: P210529C_02 G5 C11 - 393.8025
CAL CS2-20-123-042 - BAL 03/05/22



Data File: P210529C_02 G6 C7 - 393.8025
CAL CS2-20-123-042 - BAL 03/05/22



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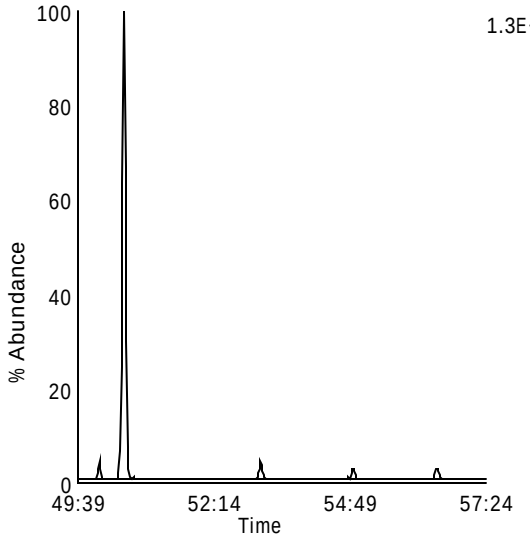
CAL CS2-20-123-042 - BAL 03/05/22



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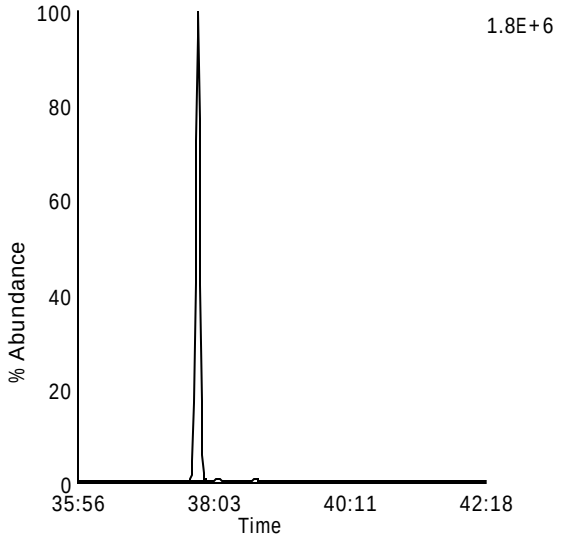
CAL CS2-20-123-042 - BAL 03/05/22



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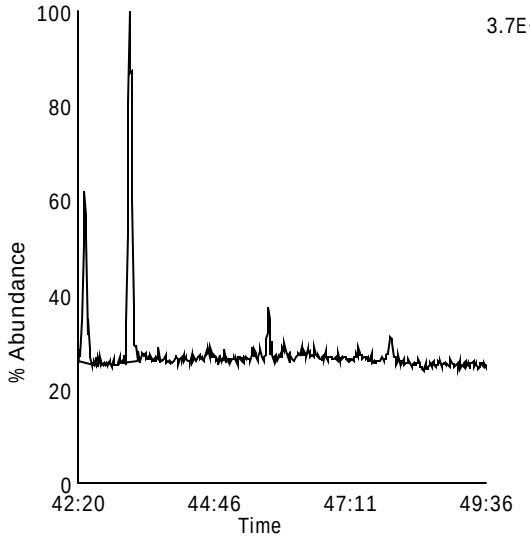
CAL CS2-20-123-042 - BAL 03/05/22



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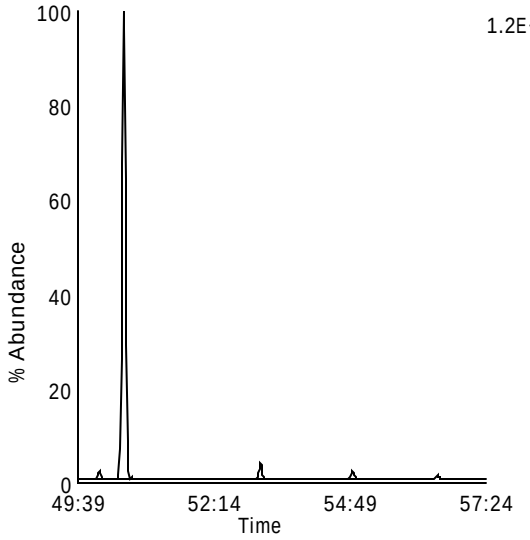
CAL CS2-20-123-042 - BAL 03/05/22

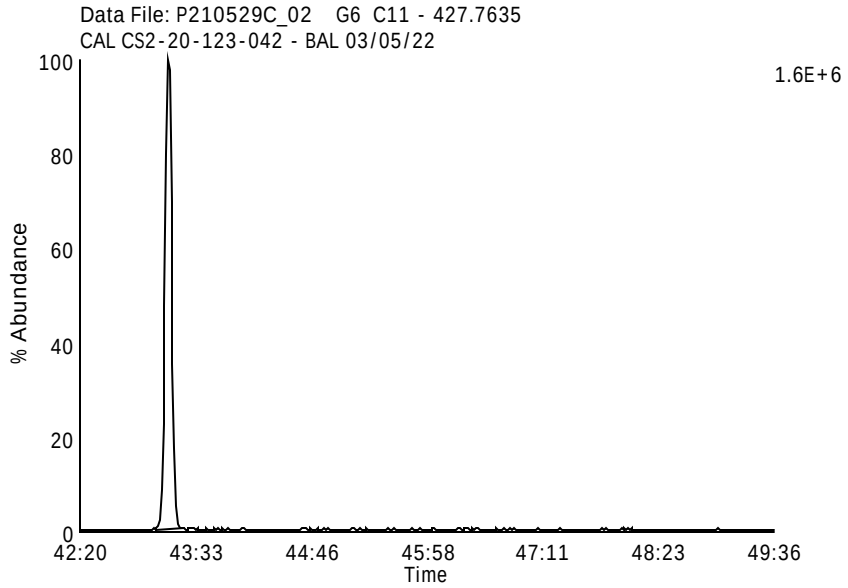


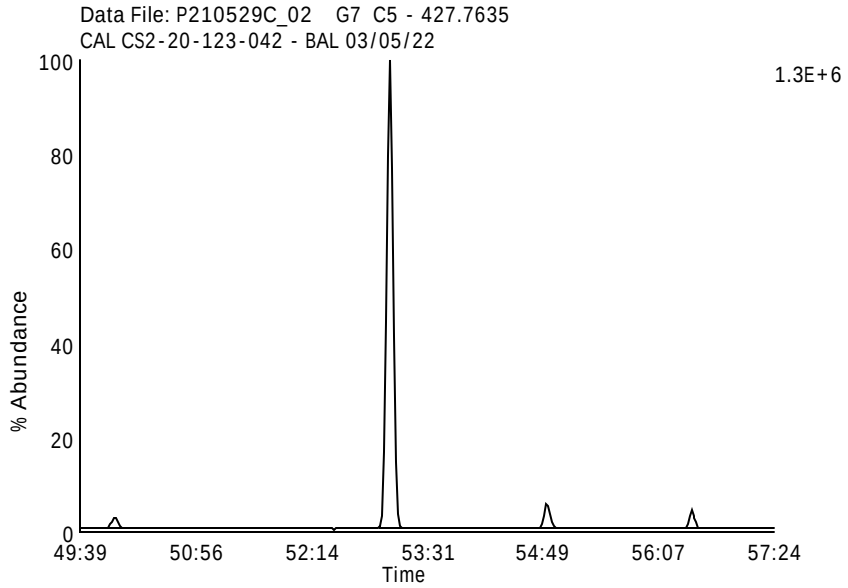
Octa Chlorinated Biphenyls

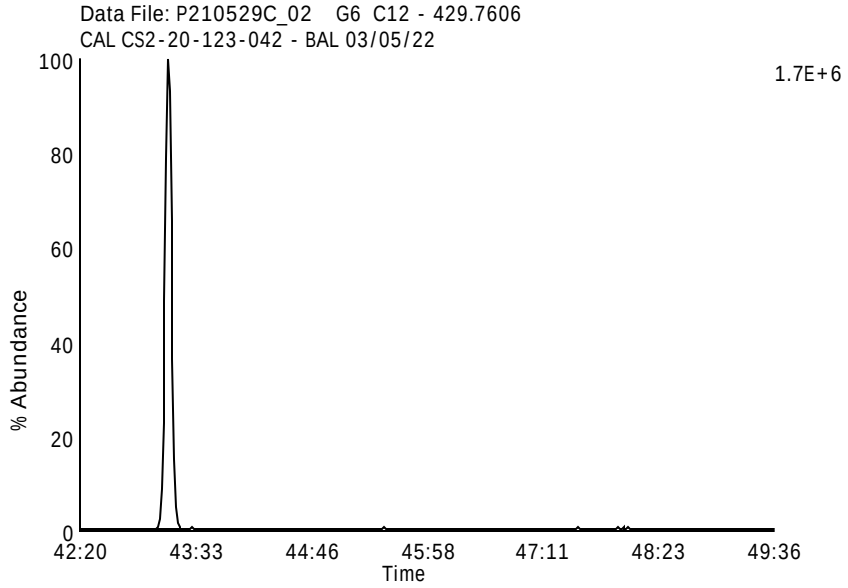
Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

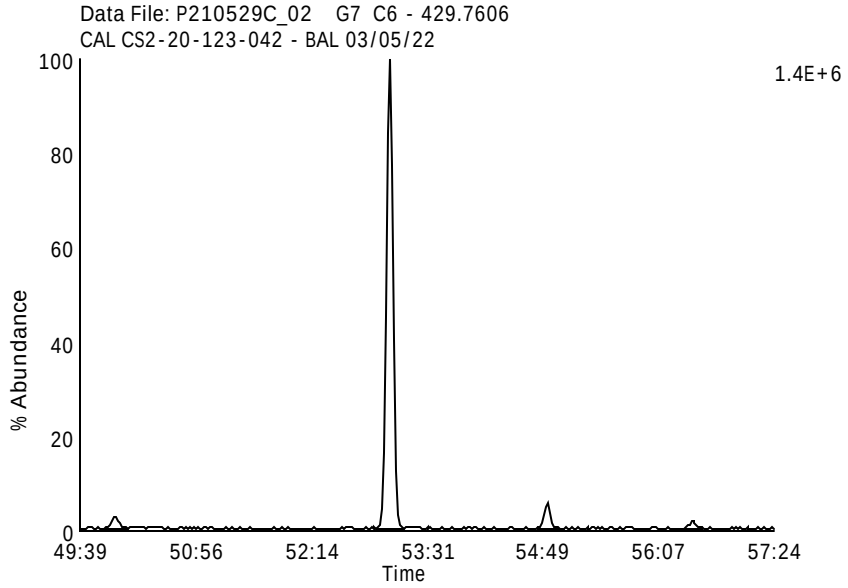
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22







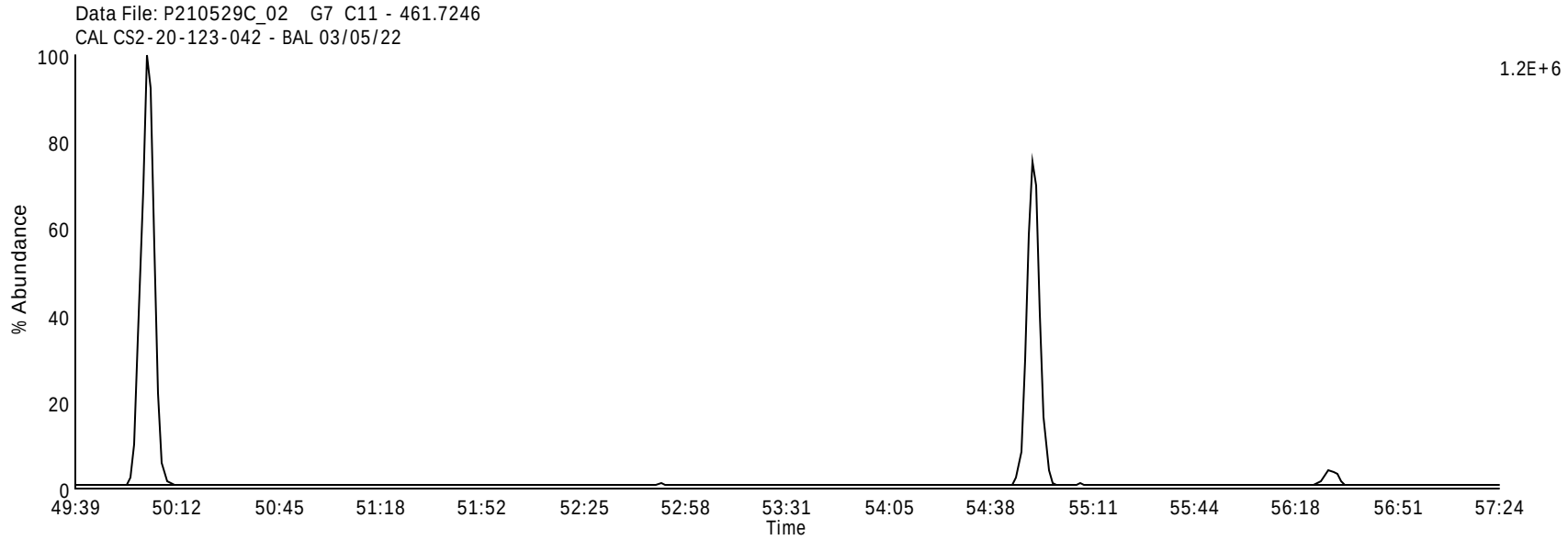


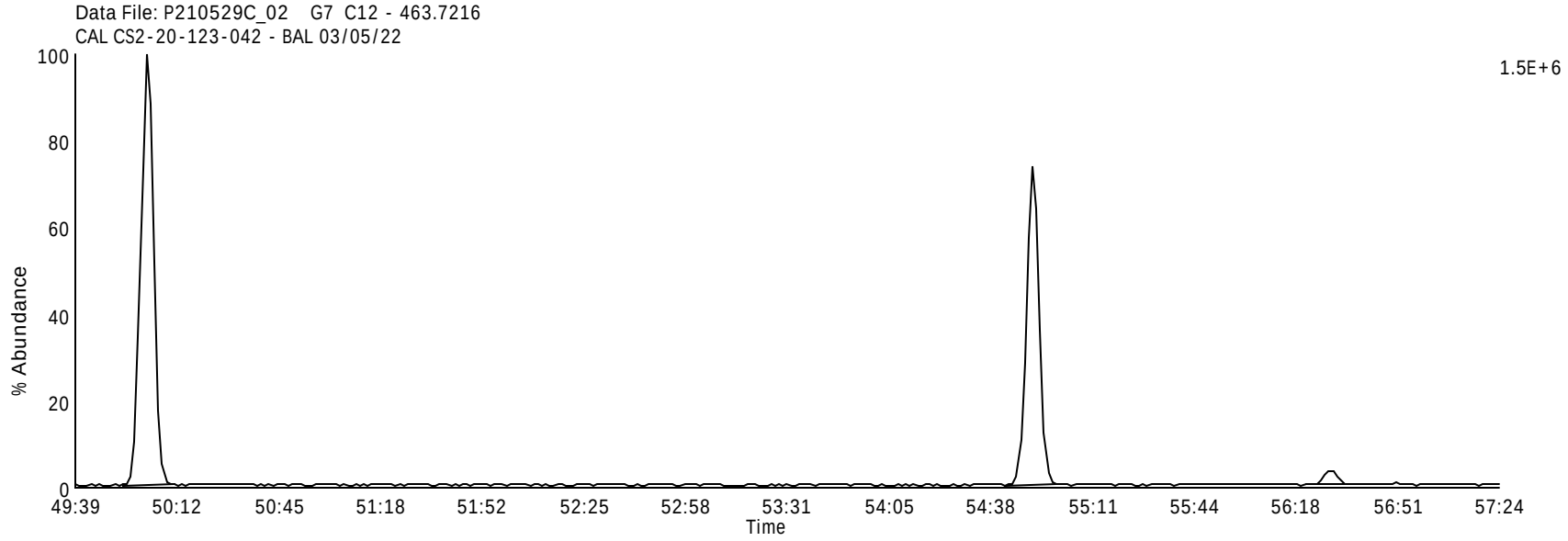
Nona Chlorinated Biphenyls

Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS2-20-123-042 - BAL 03/05/22



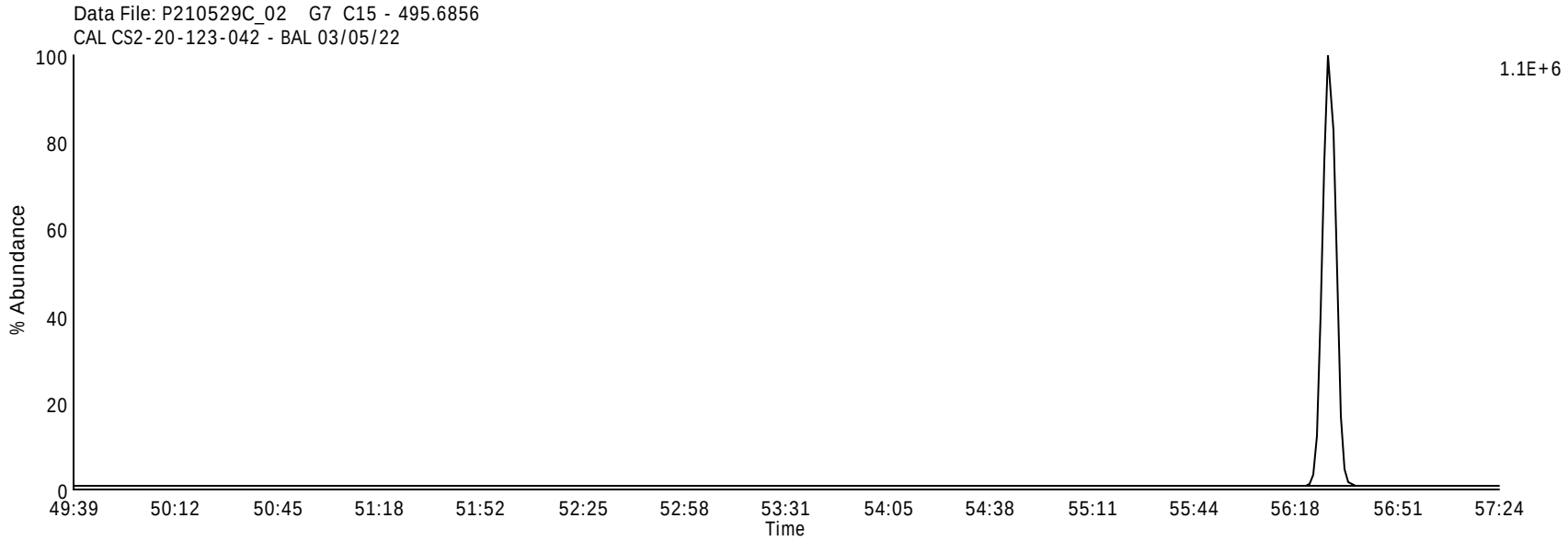


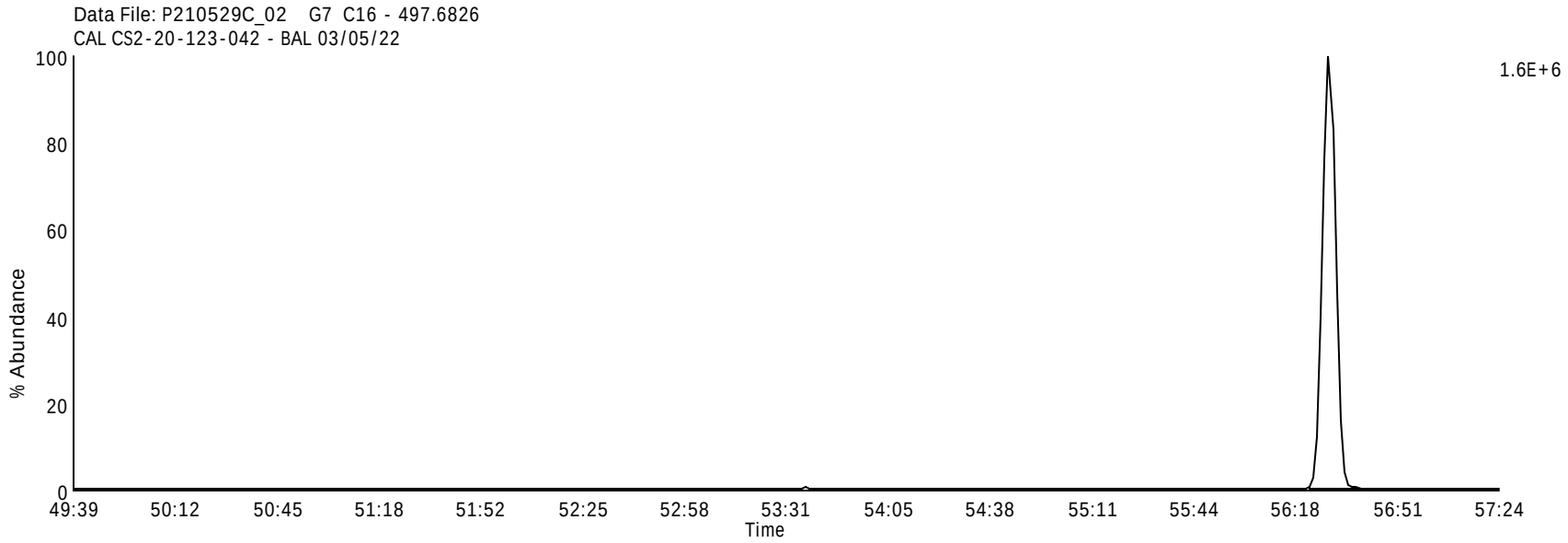
Deca Chlorinated Biphenyl

Data File Name: P210529C_02 Lab Sample ID: CS2-20-123-042

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

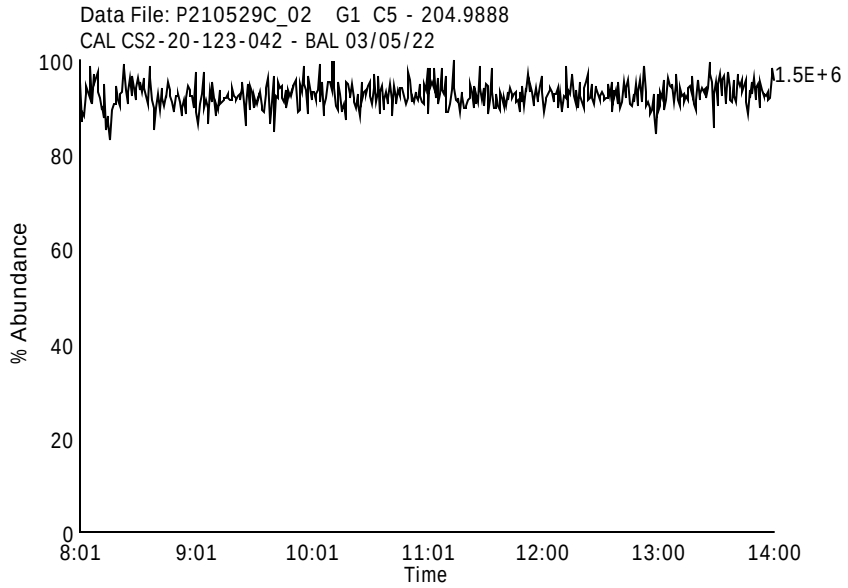
Sample Description: CAL CS2-20-123-042 - BAL 03/05/22

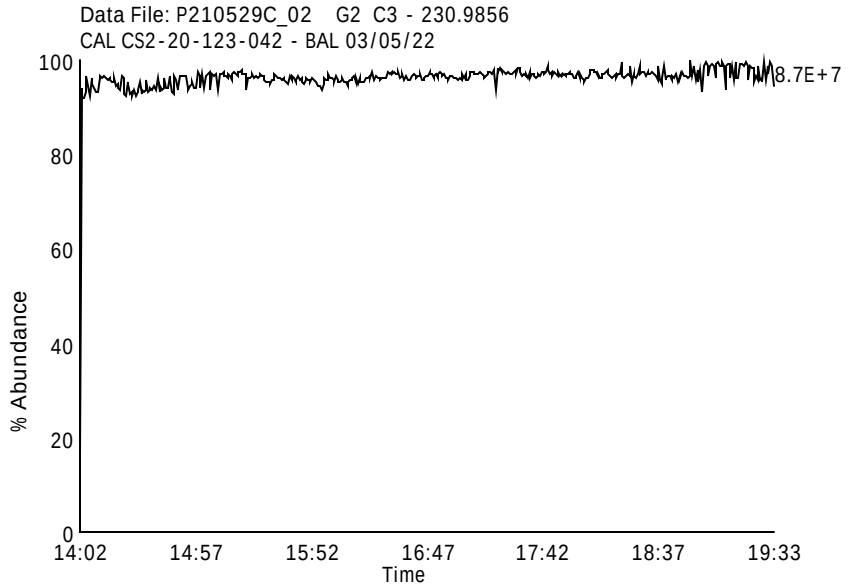


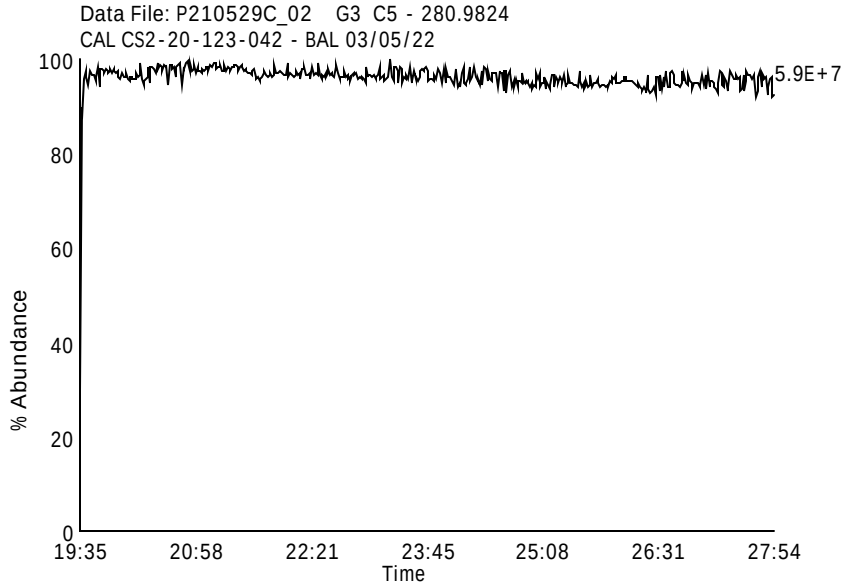


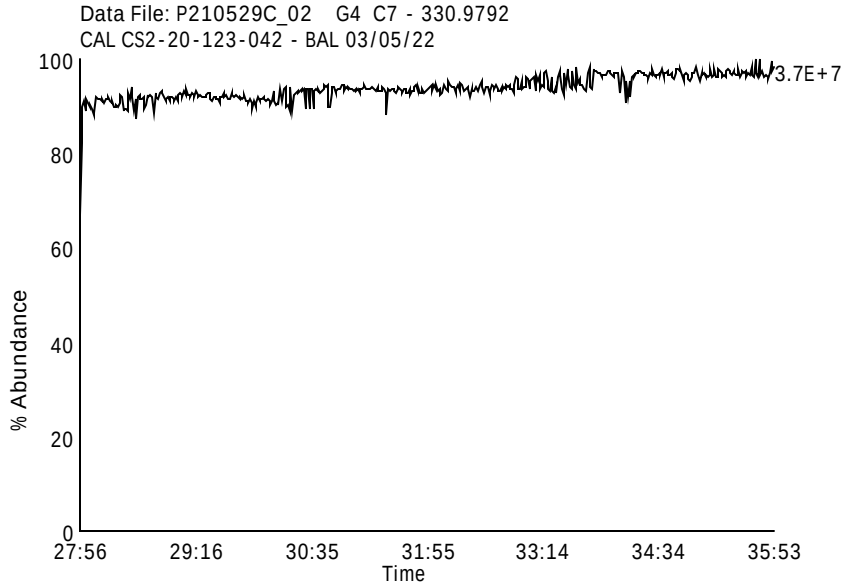
Group 1 - 4 Lock mass

Data File Name: P210529C_02
Lab Sample ID: CS2-20-123-042
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS2-20-123-042 - BAL 03/05/22



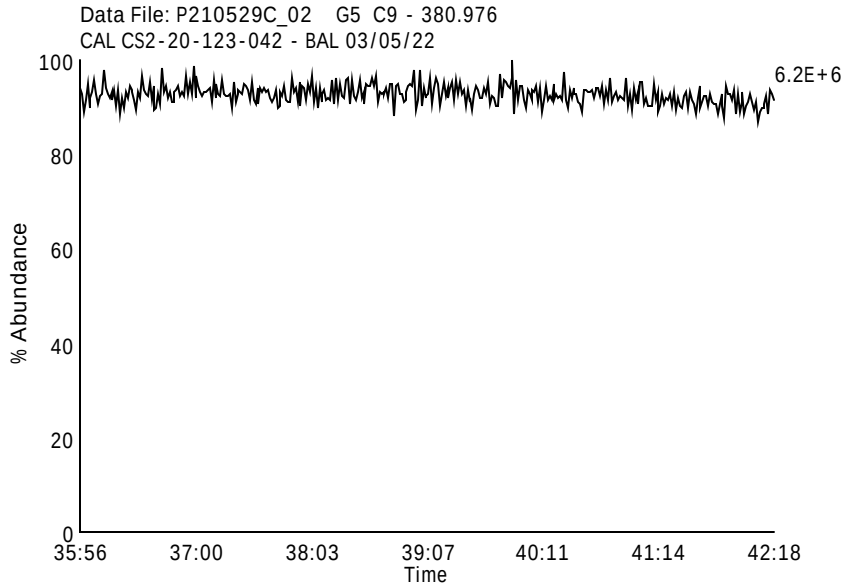


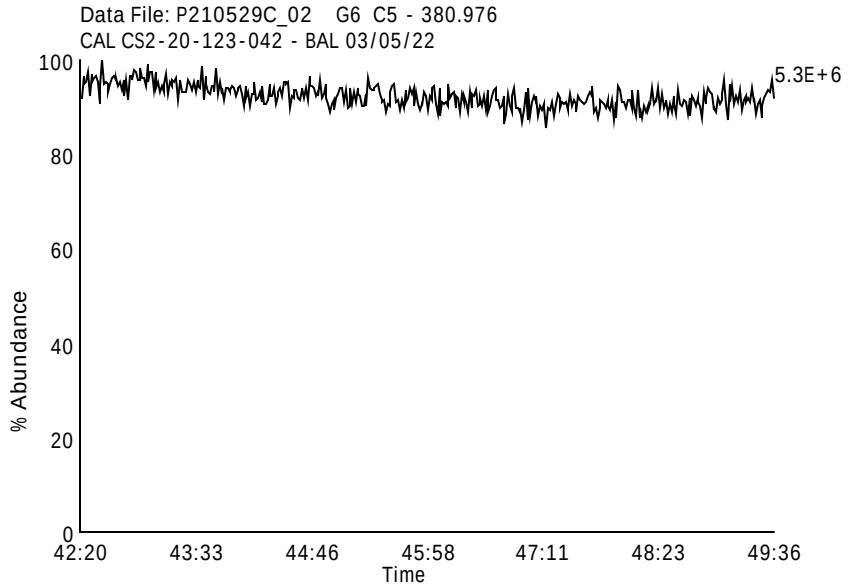


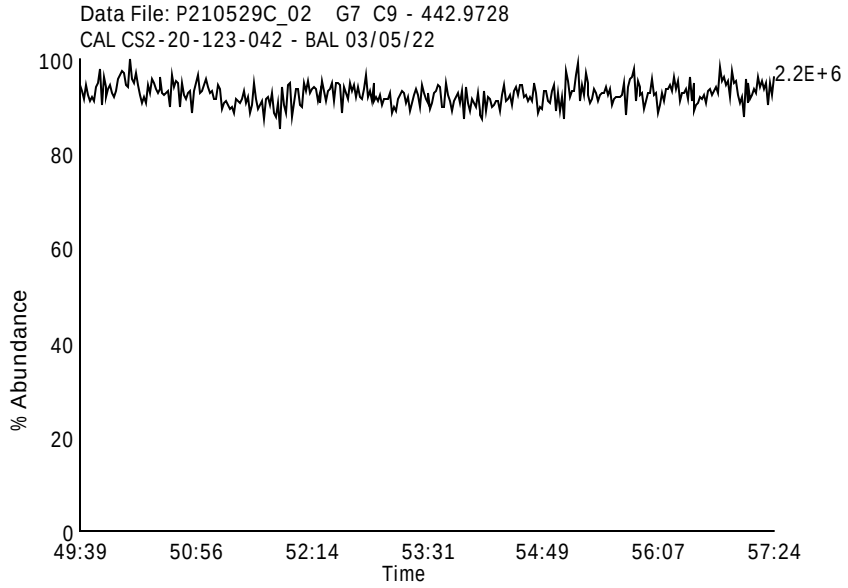


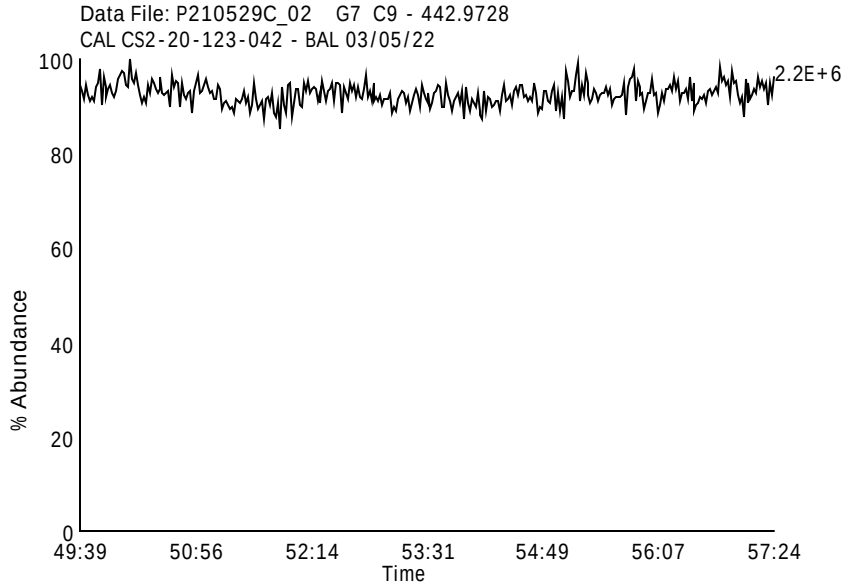
Group 5 - 7 Lock mass

Data File Name: P210529C_02
Lab Sample ID: CS2-20-123-042
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS2-20-123-042 - BAL 03/05/22







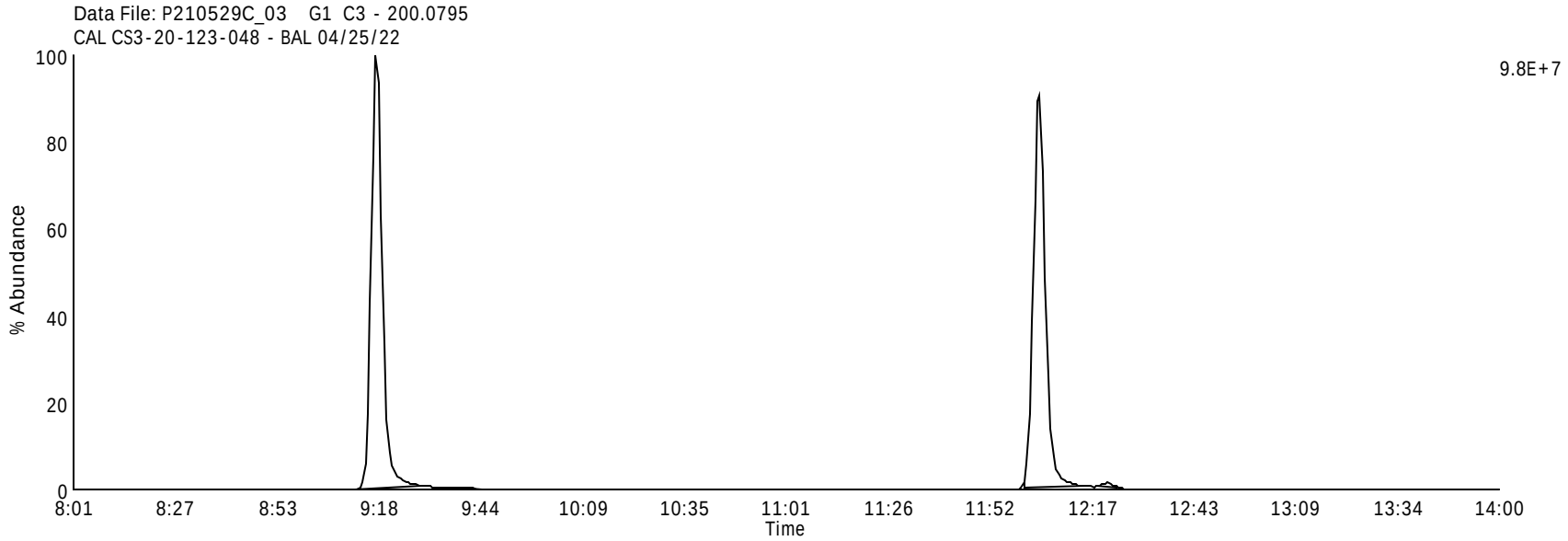


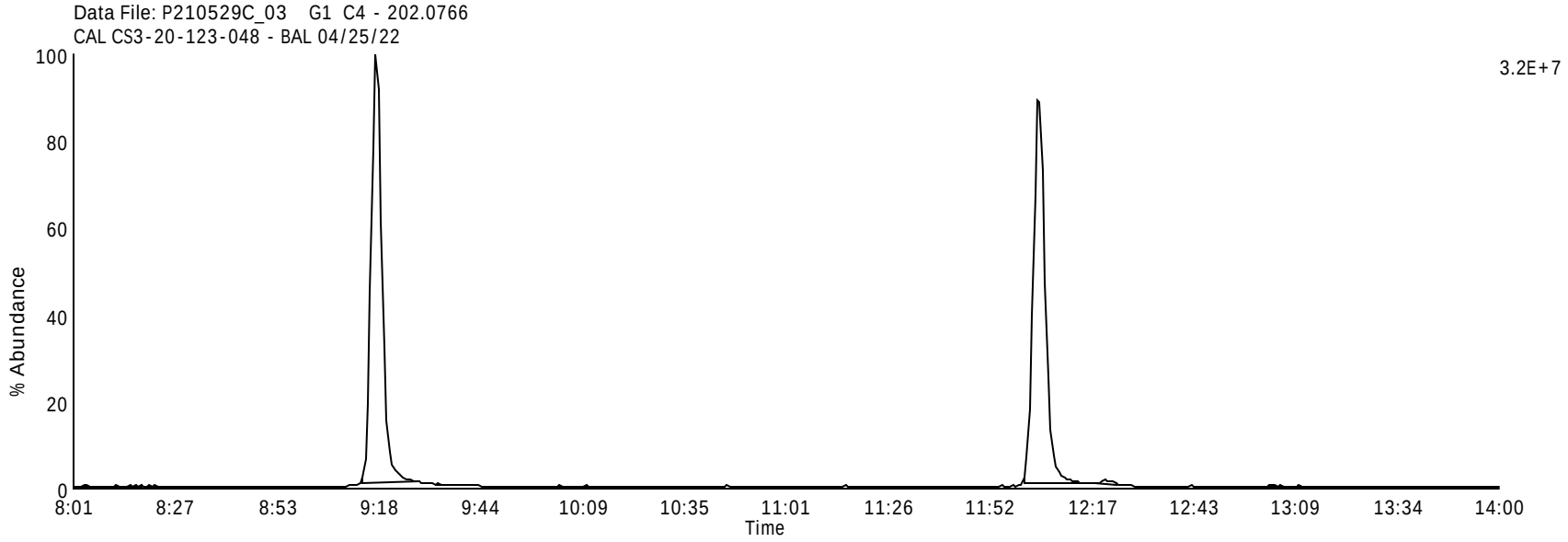
Labeled Mono Chlorinated Biphenyls

Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

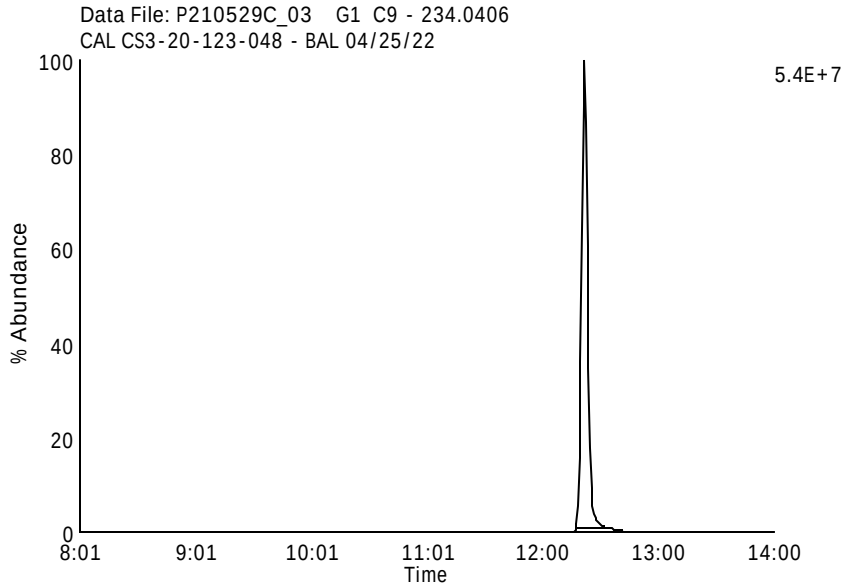
Sample Description: CAL CS3-20-123-048 - BAL 04/25/22

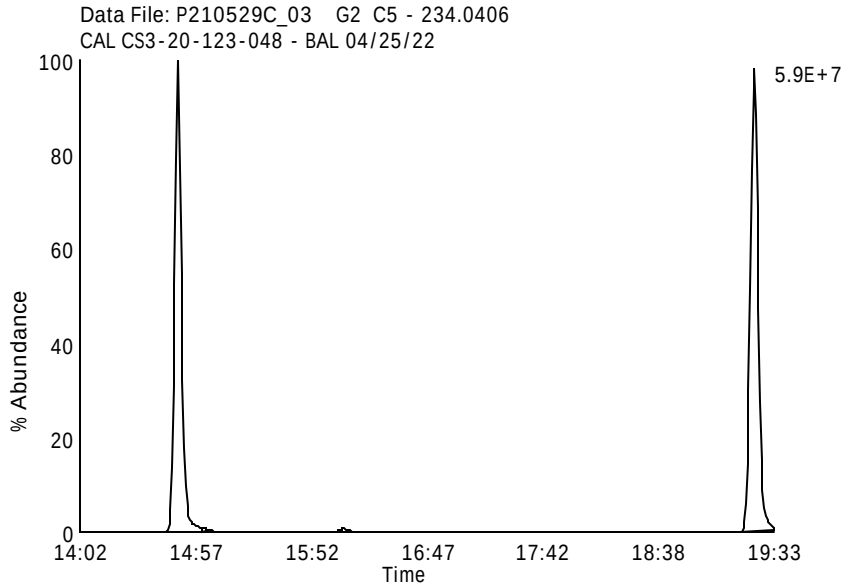


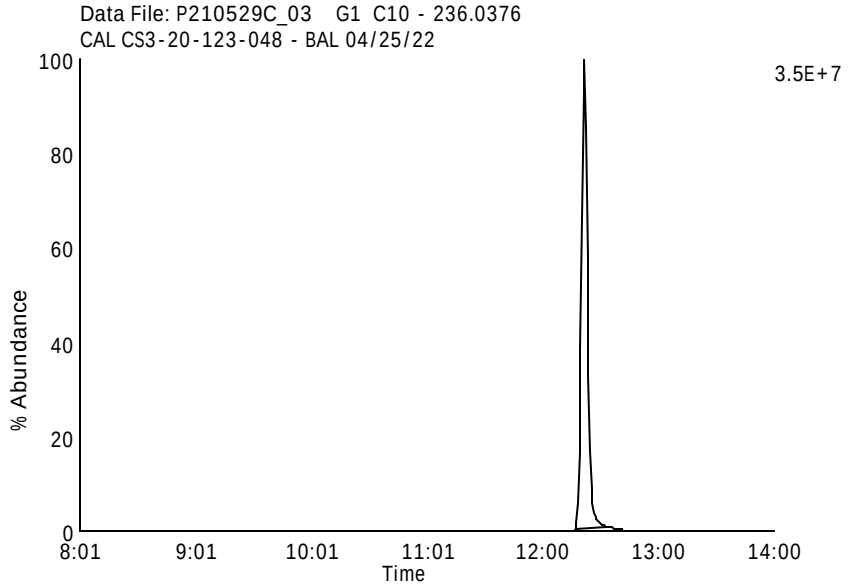


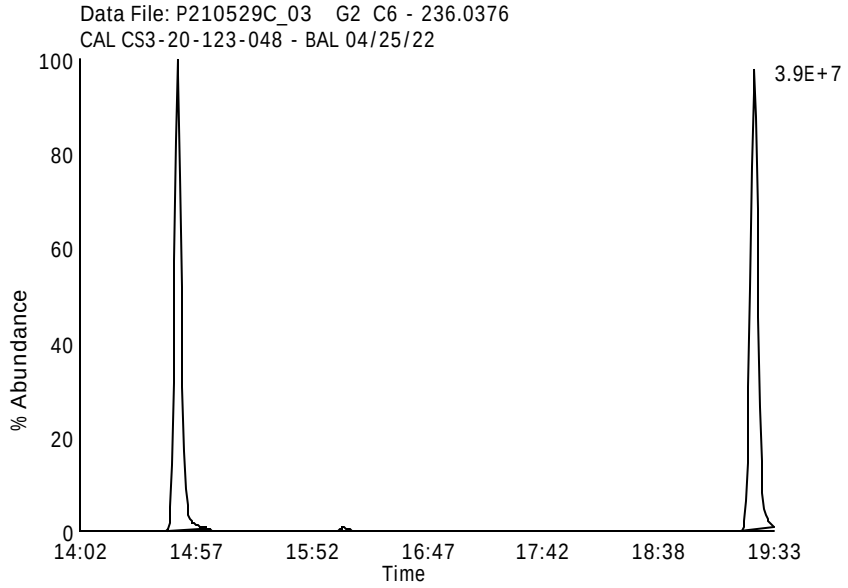
Labeled Di Chlorinated Biphenyls

Data File Name: P210529C_03
Lab Sample ID: CS3-20-123-048
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS3-20-123-048 - BAL 04/25/22







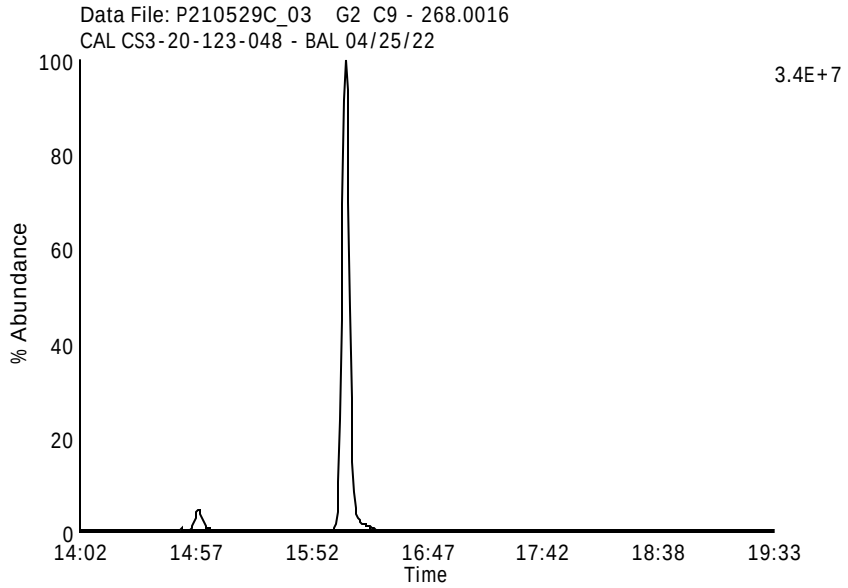


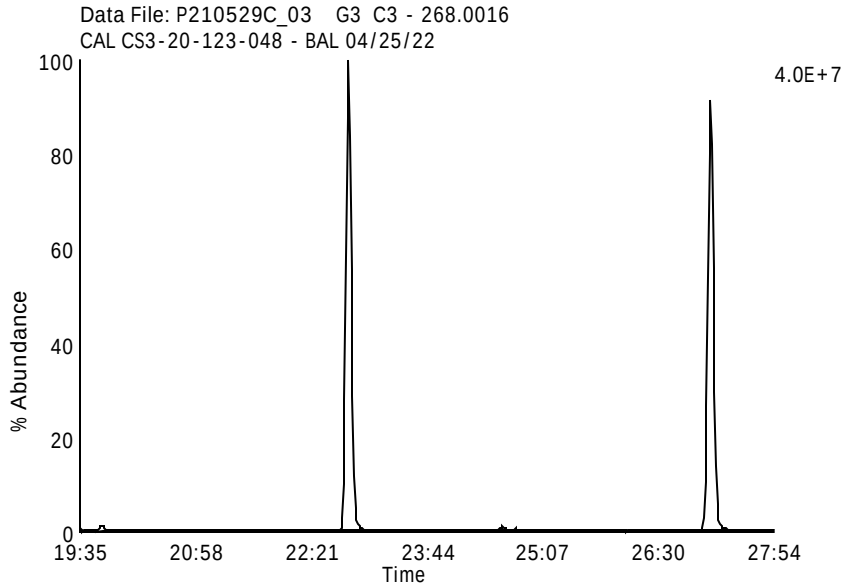
Labeled Tri Chlorinated Biphenyls

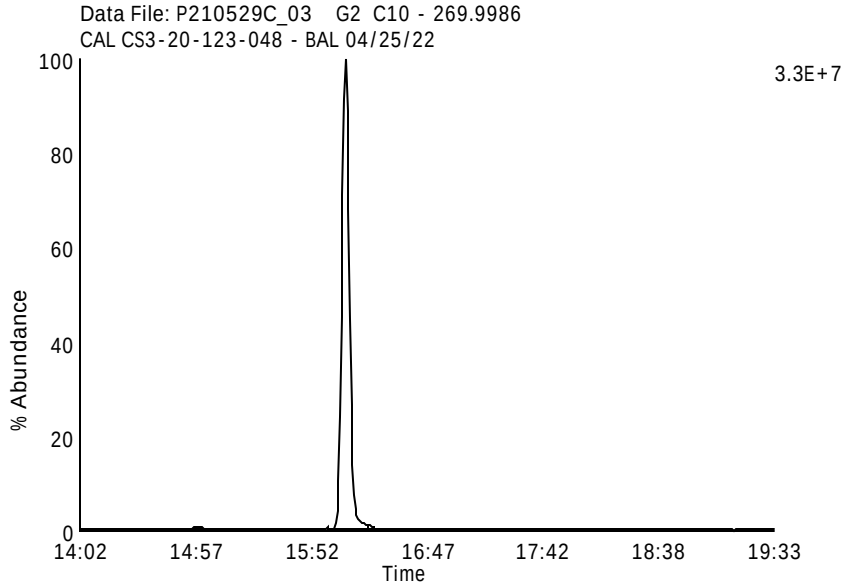
Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

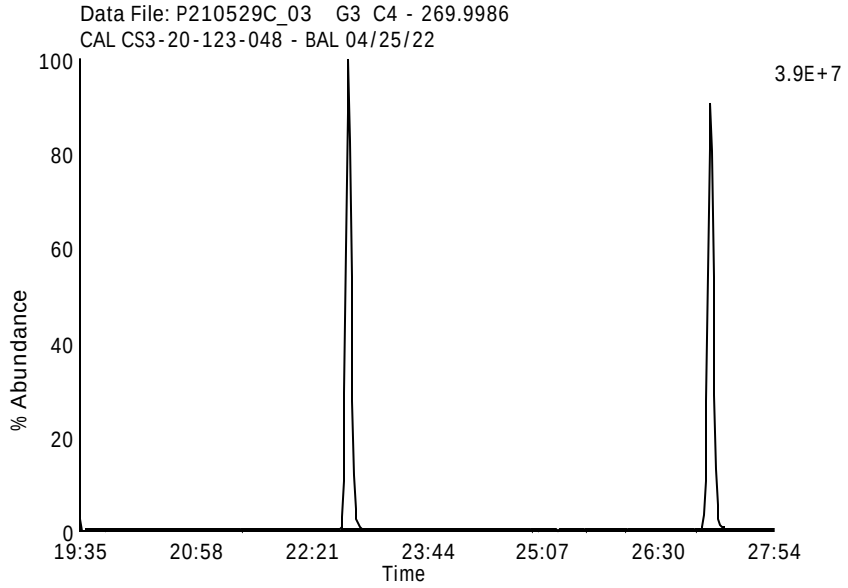
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22









Labeled Tetra Chlorinated Biphenyls

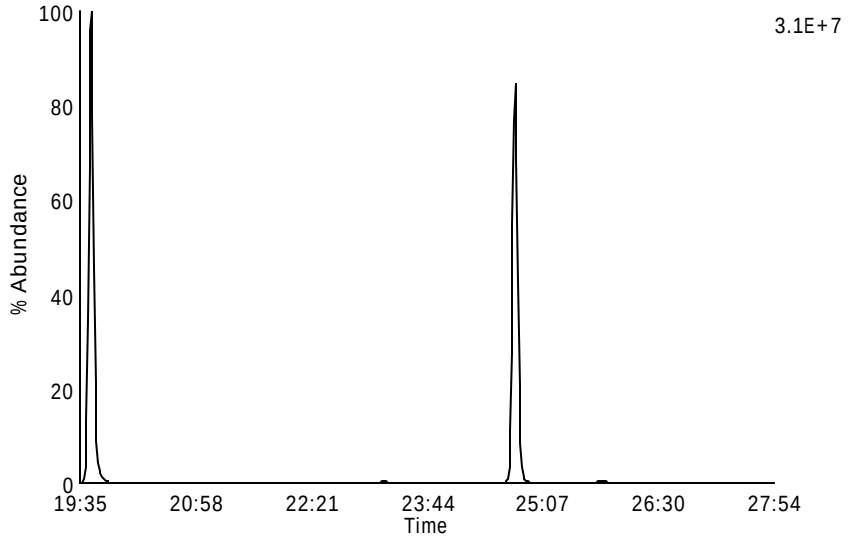
Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22

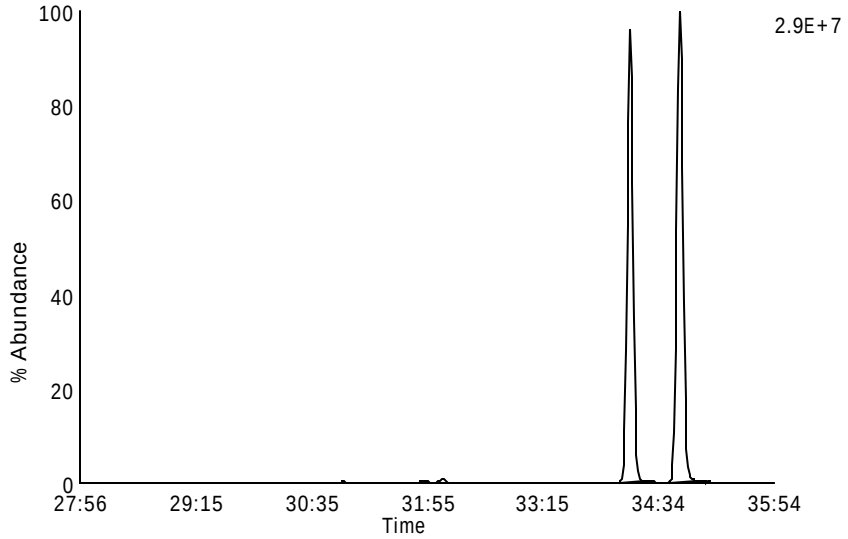
Data File: P210529C_03 G3 C9 - 301.9626

CAL CS3-20-123-048 - BAL 04/25/22



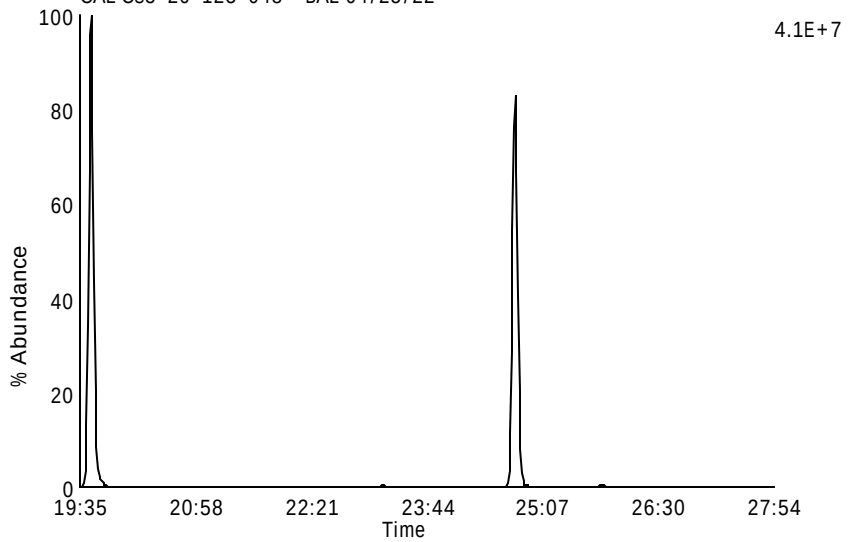
Data File: P210529C_03 G4 C3 - 301.9626

CAL CS3-20-123-048 - BAL 04/25/22



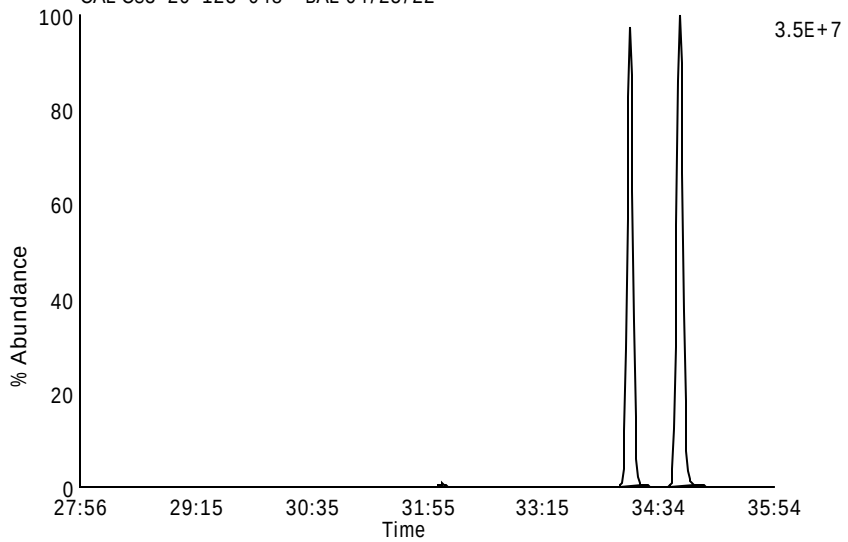
Data File: P210529C_03 G3 C10 - 303.9597

CAL CS3-20-123-048 - BAL 04/25/22



Data File: P210529C_03 G4 C4 - 303.9597

CAL CS3-20-123-048 - BAL 04/25/22

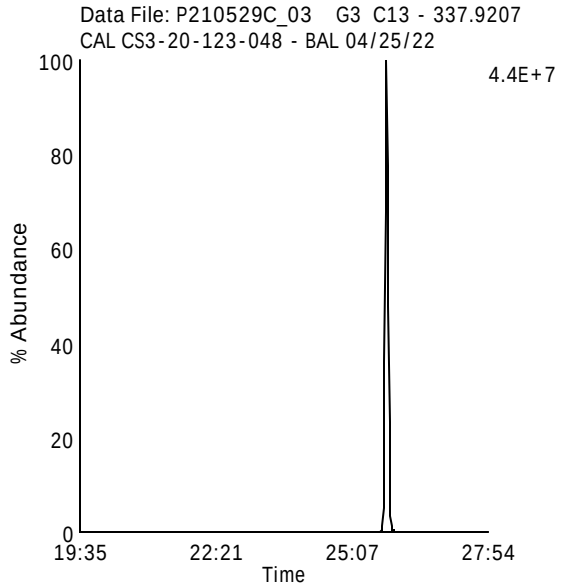


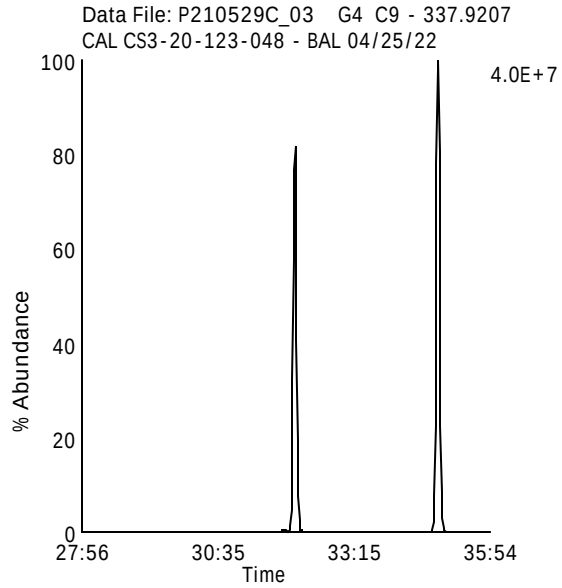
Labeled Penta Chlorinated Biphenyls

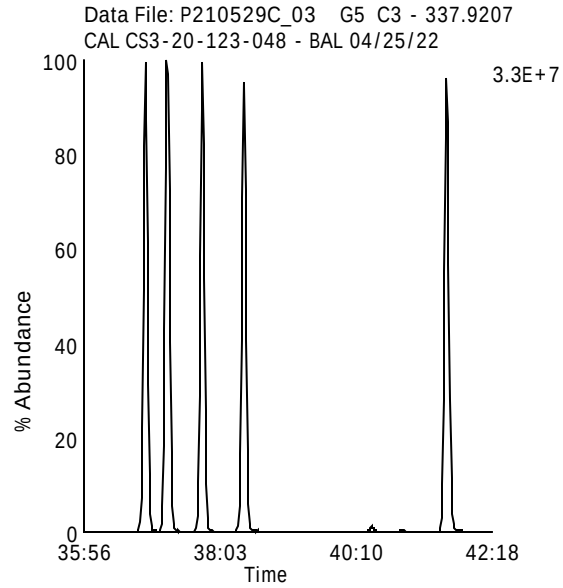
Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

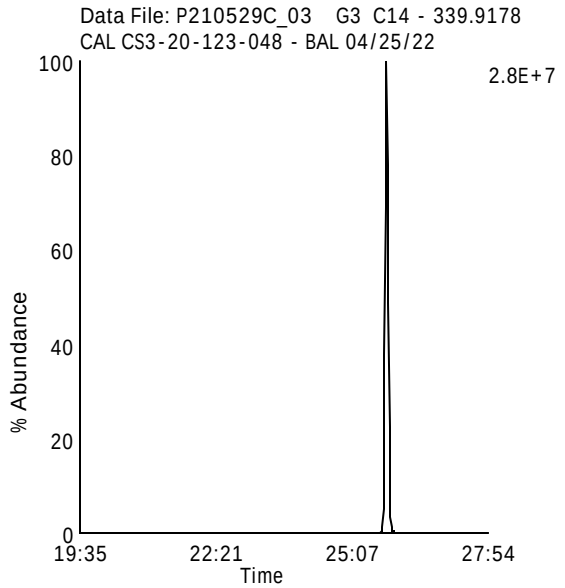
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

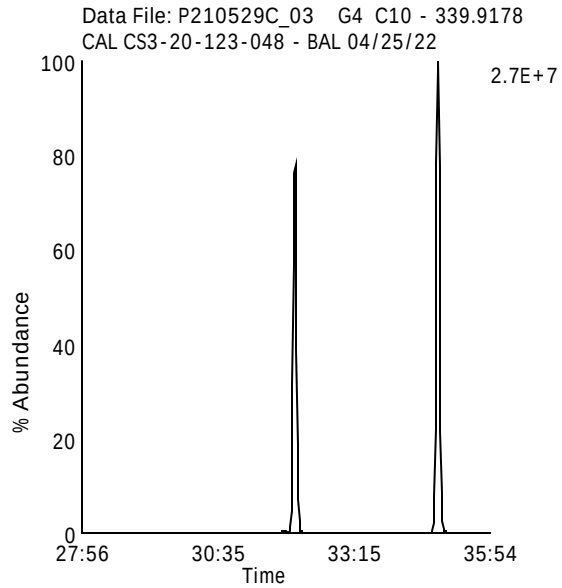
Sample Description: CAL CS3-20-123-048 - BAL 04/25/22

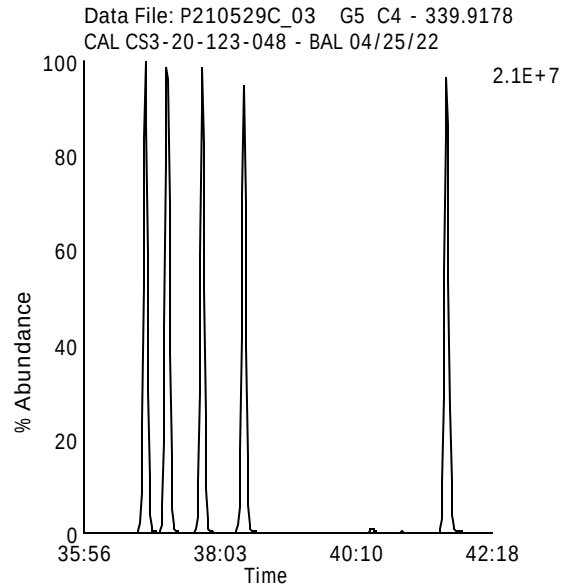












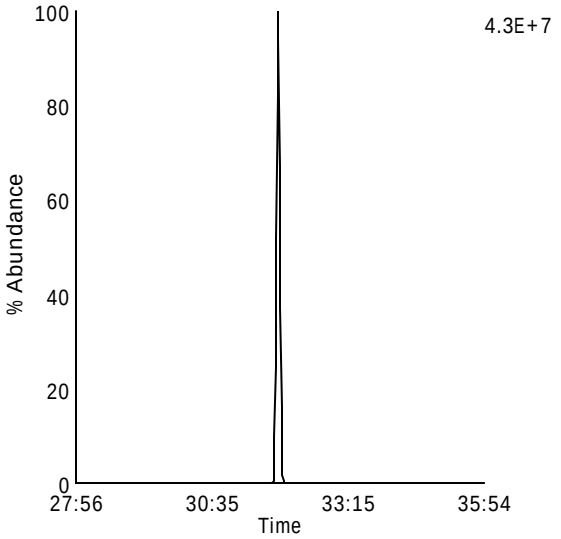
Labeled Hexa Chlorinated Biphenyls

Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

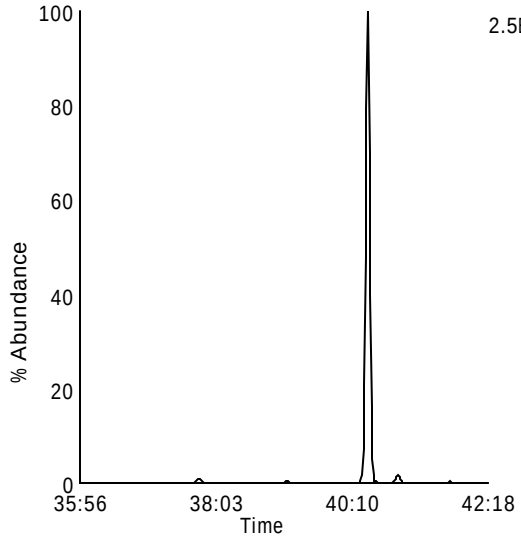
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22

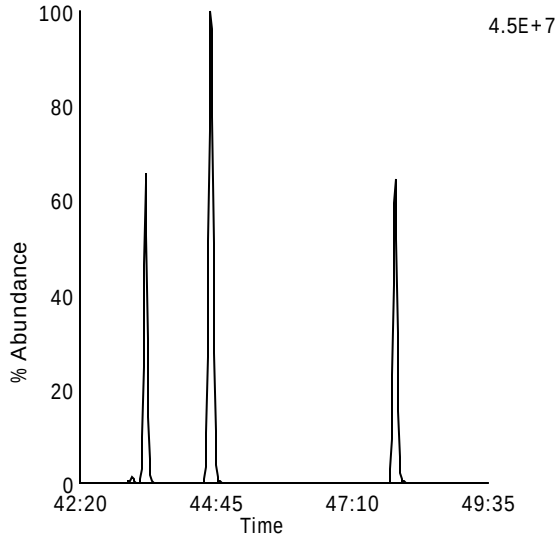
Data File: P210529C_03 G4 C13 - 371.8817
CAL CS3-20-123-048 - BAL 04/25/22



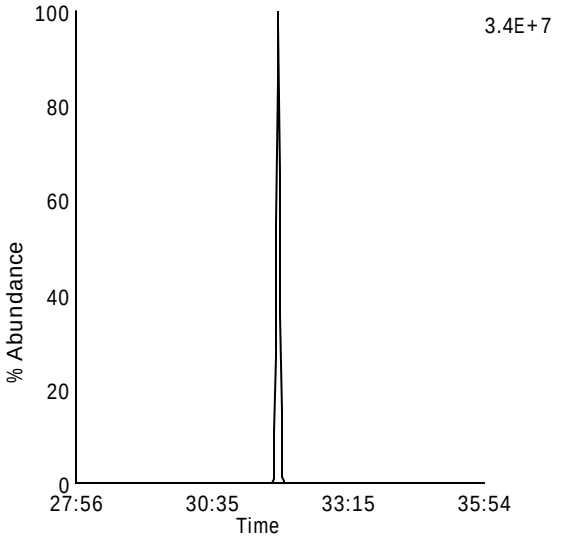
Data File: P210529C_03 G5 C7 - 371.8817
CAL CS3-20-123-048 - BAL 04/25/22



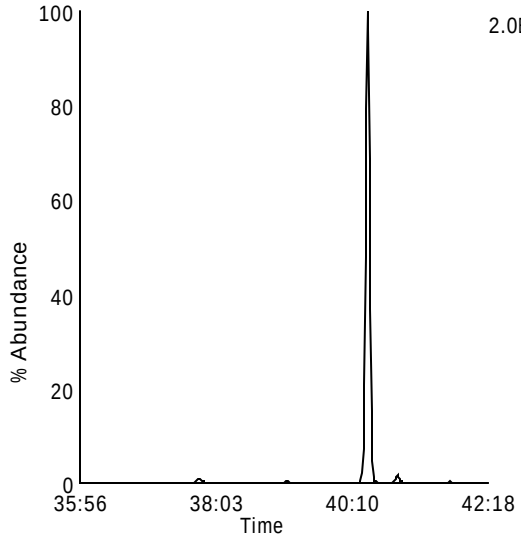
Data File: P210529C_03 G6 C3 - 371.8817
CAL CS3-20-123-048 - BAL 04/25/22



Data File: P210529C_03 G4 C14 - 373.8788
CAL CS3-20-123-048 - BAL 04/25/22



Data File: P210529C_03 G5 C8 - 373.8788
CAL CS3-20-123-048 - BAL 04/25/22



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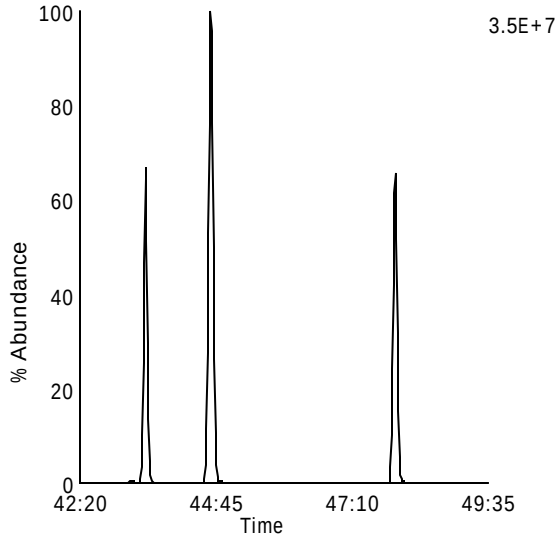
CAL CS3-20-123-048 - BAL 04/25/22

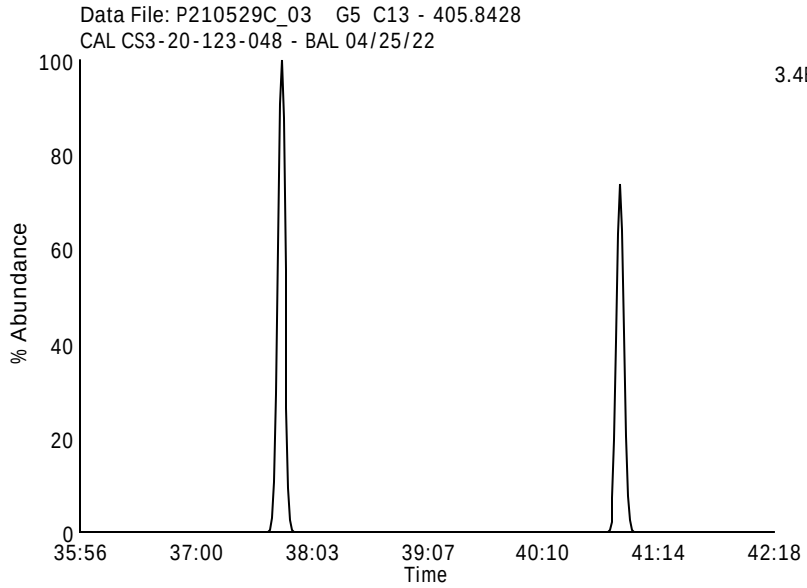


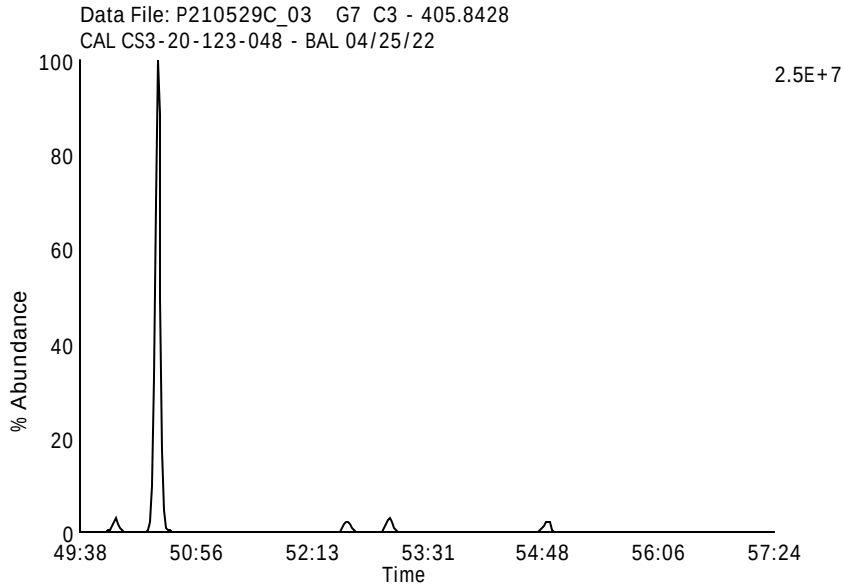
Labeled Hepta Chlorinated Biphenyls

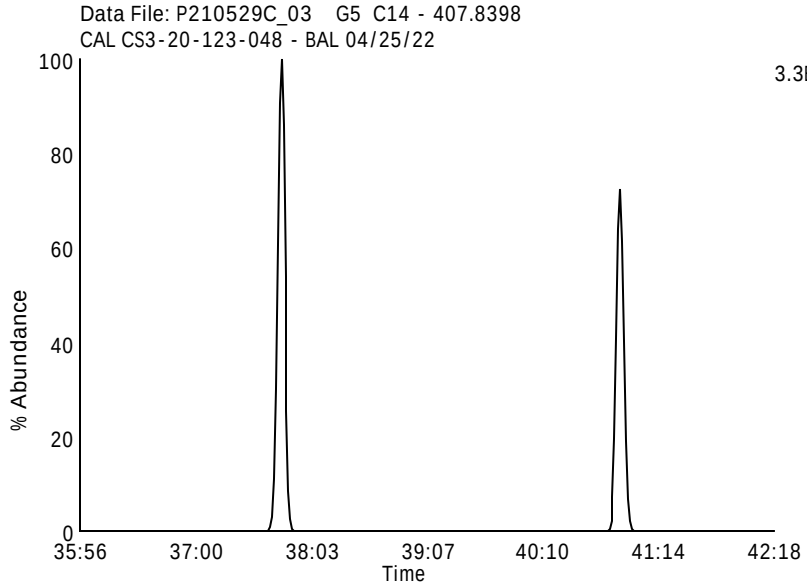
Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

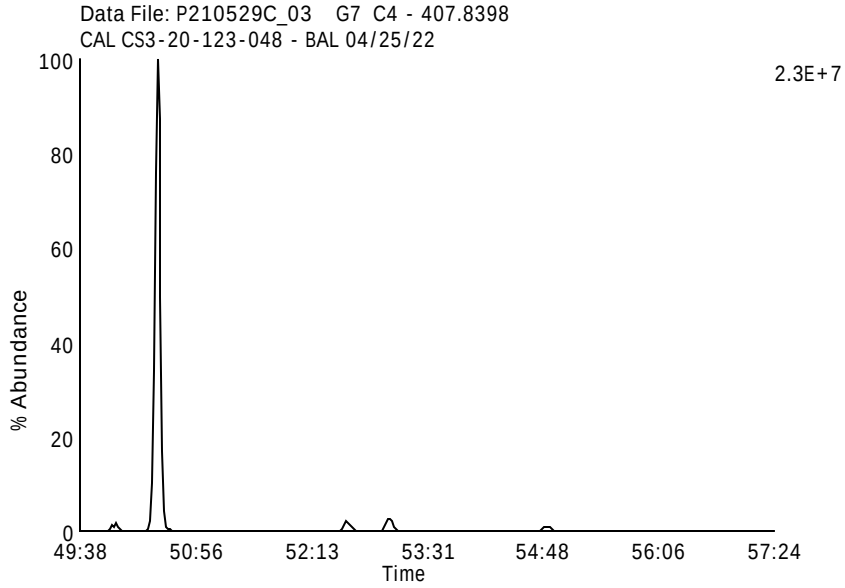
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22









Labeled Octa Chlorinated Biphenyls

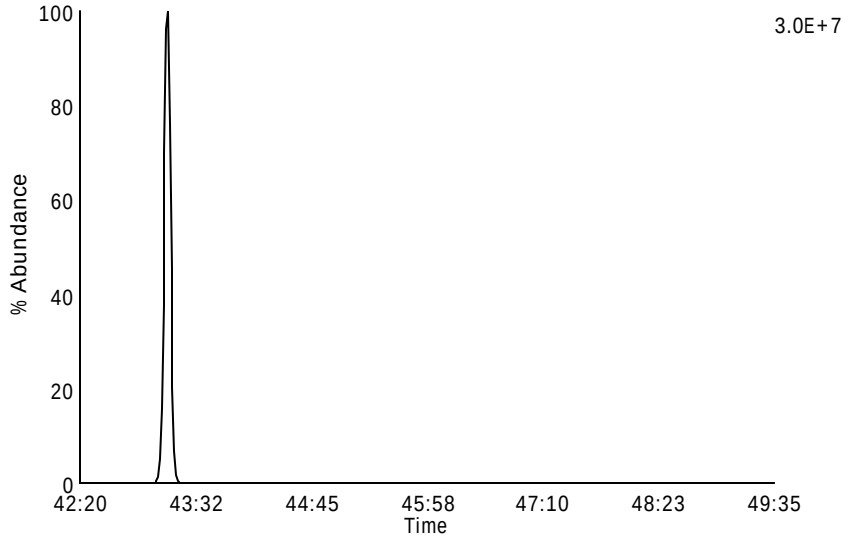
Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22

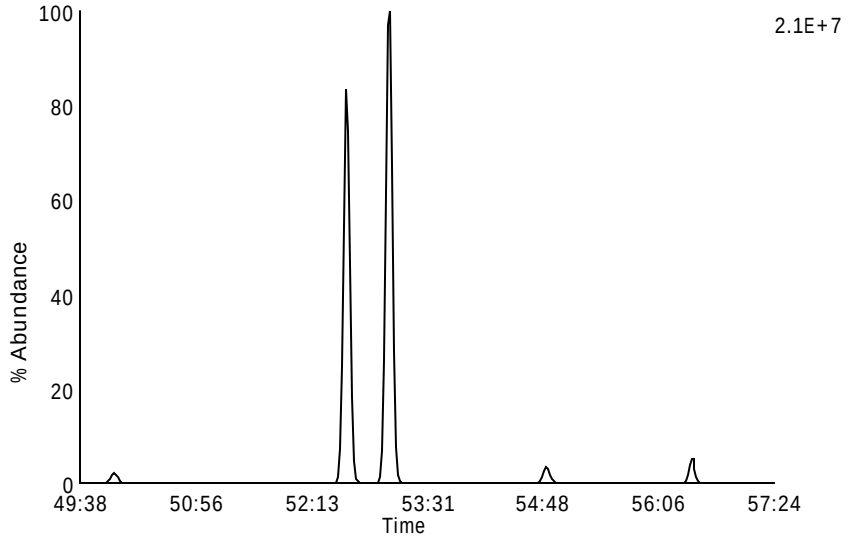
Data File: P210529C_03 G6 C13 - 439.8038

CAL CS3-20-123-048 - BAL 04/25/22



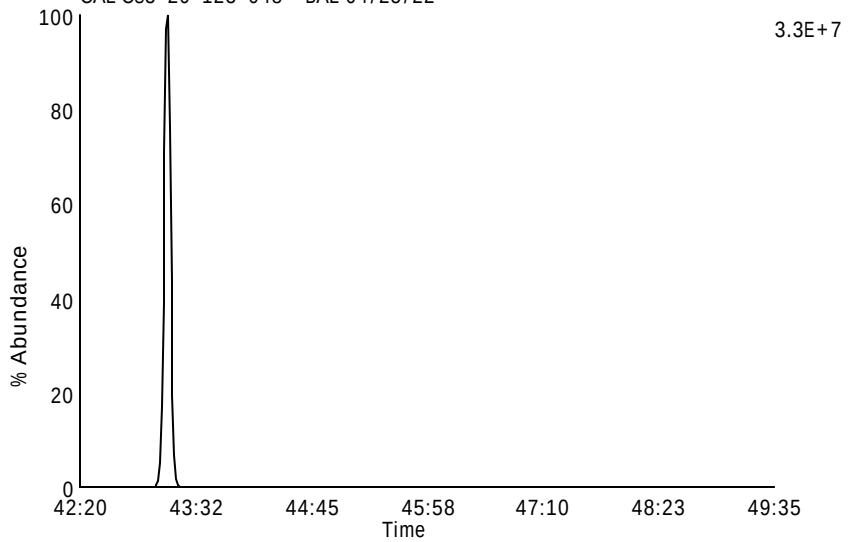
Data File: P210529C_03 G7 C7 - 439.8038

CAL CS3-20-123-048 - BAL 04/25/22



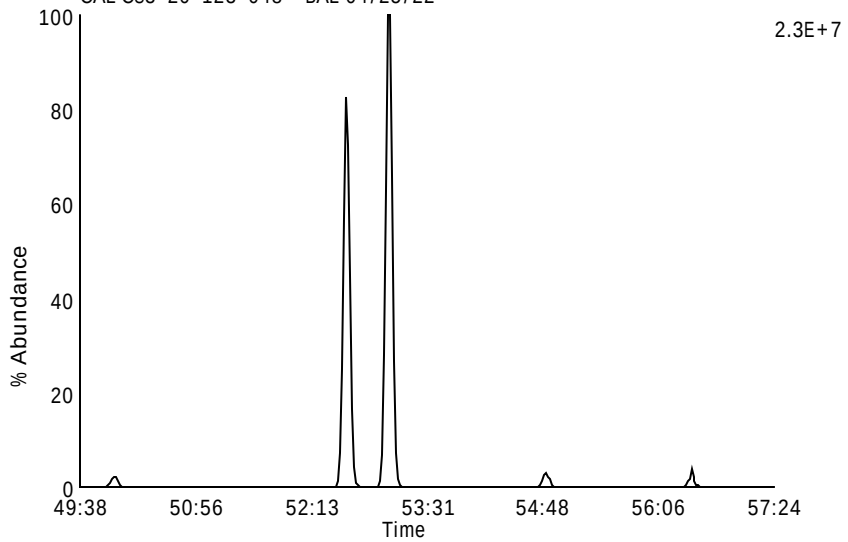
Data File: P210529C_03 G6 C14 - 441.8008

CAL CS3-20-123-048 - BAL 04/25/22



Data File: P210529C_03 G7 C8 - 441.8008

CAL CS3-20-123-048 - BAL 04/25/22

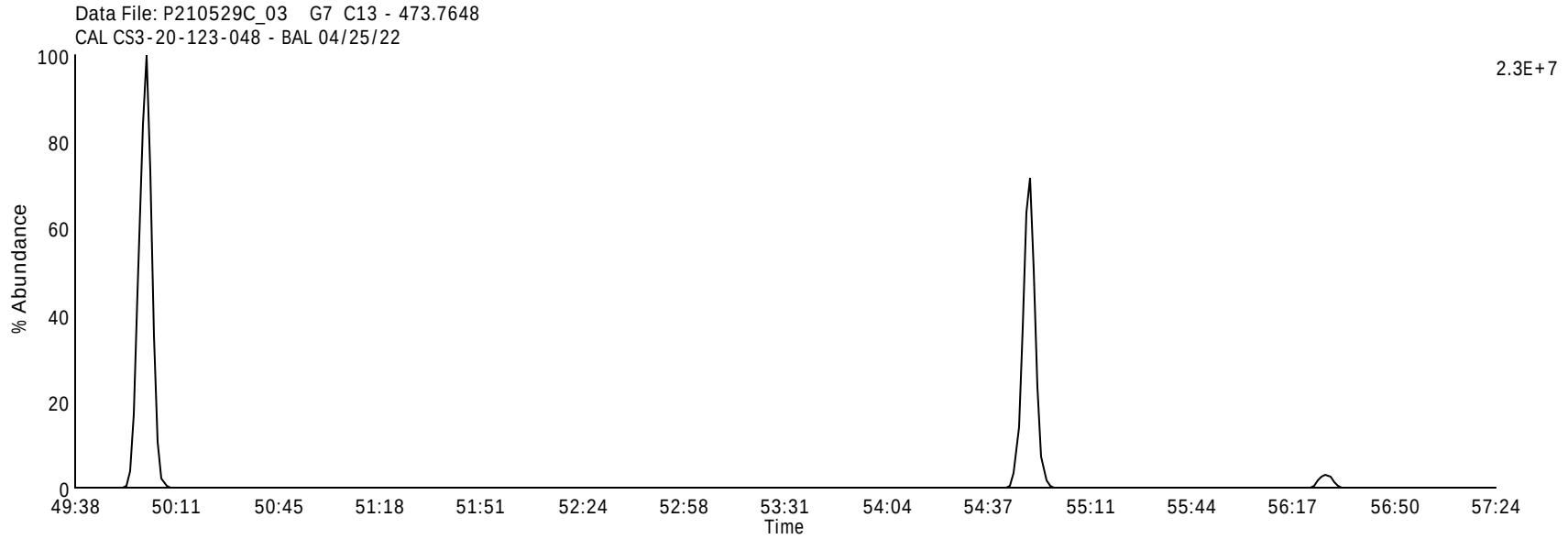


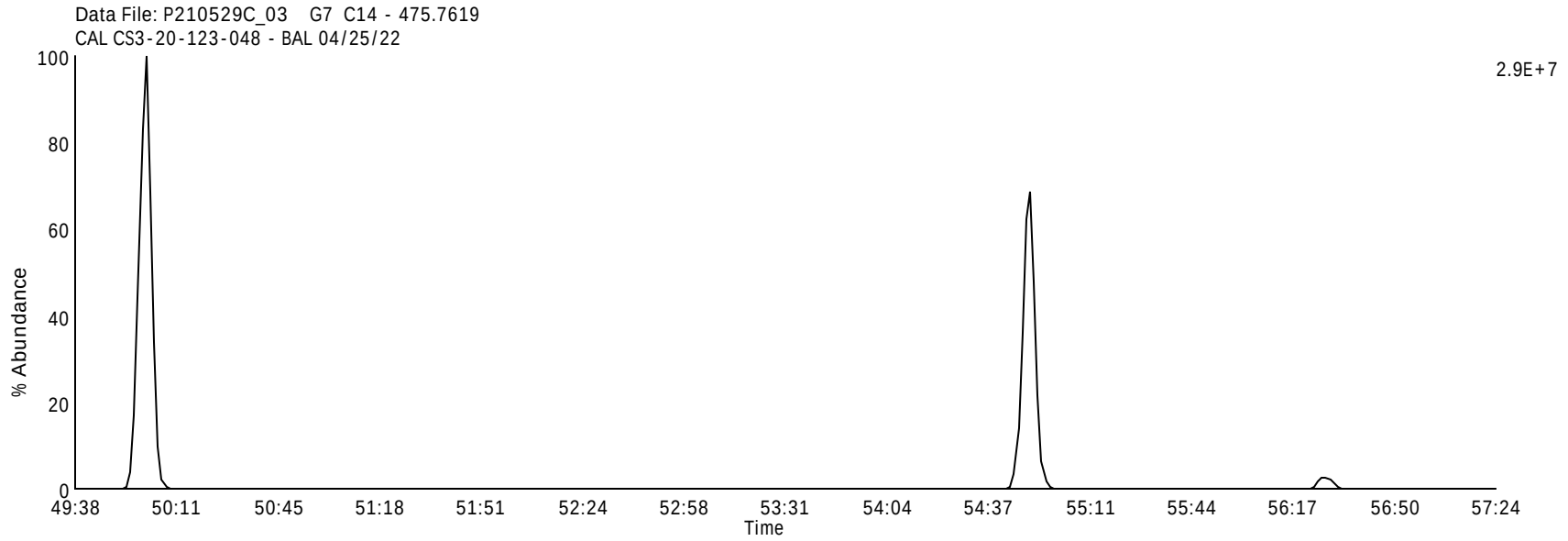
Labeled Nona Chlorinated Biphenyls

Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22



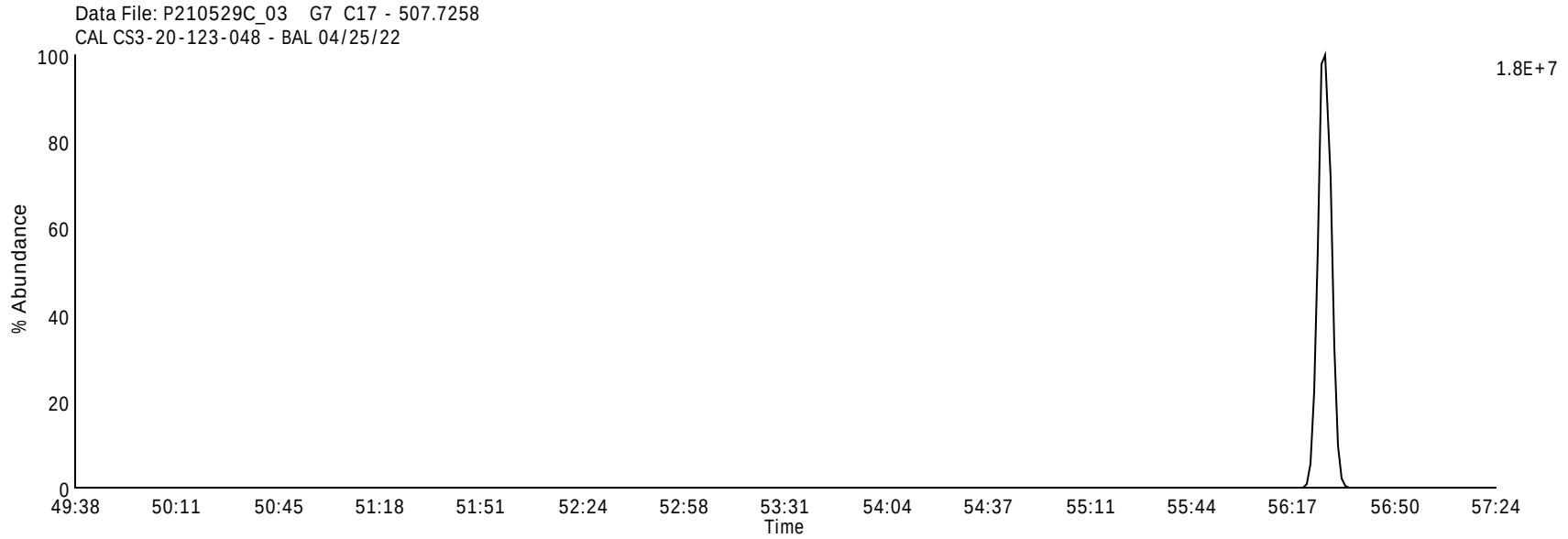


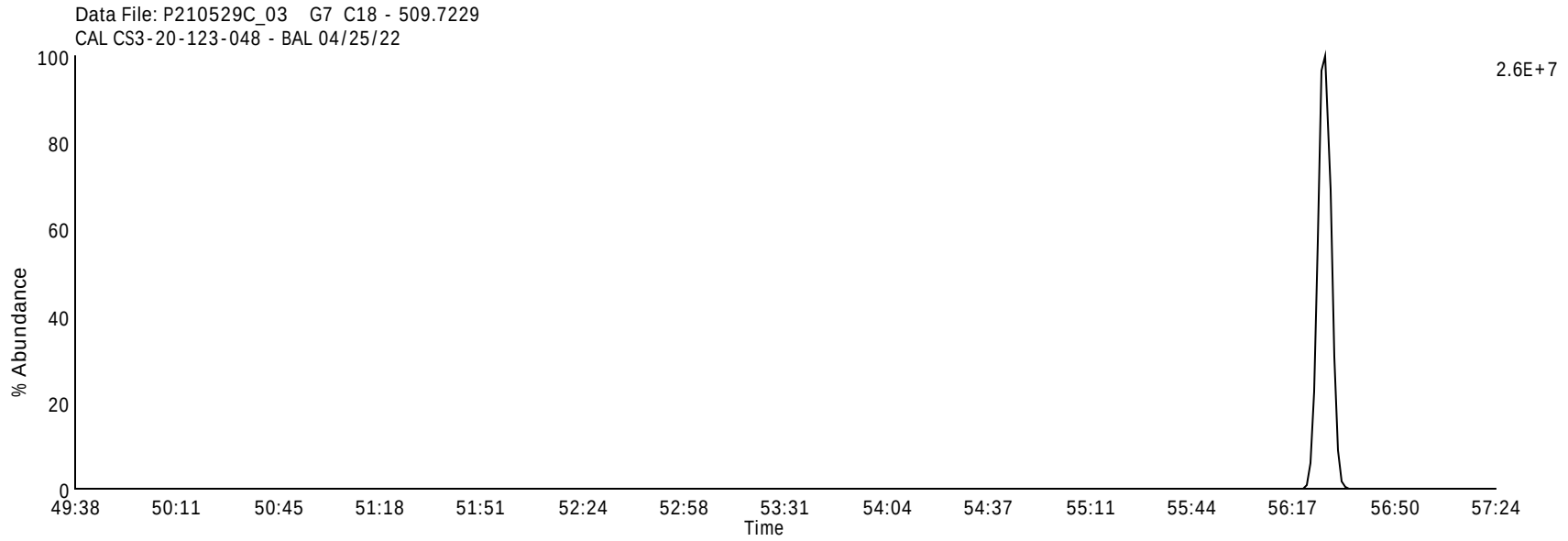
Labeled Deca Chlorinated Biphenyl

Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22



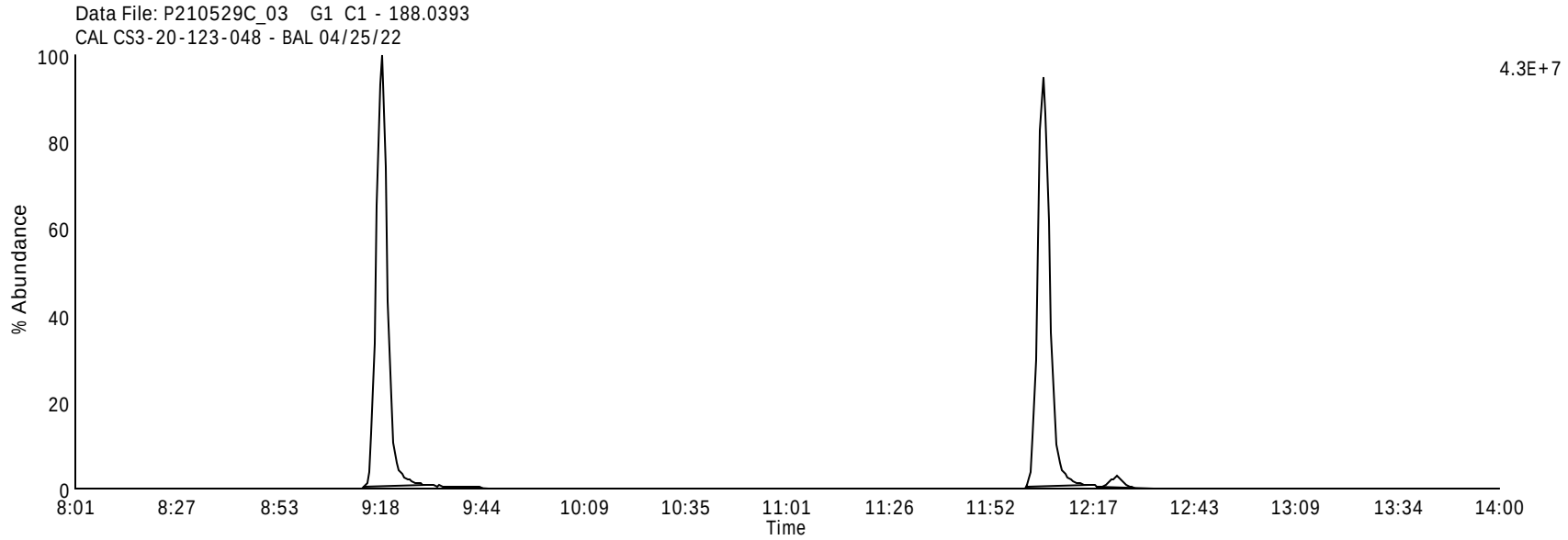


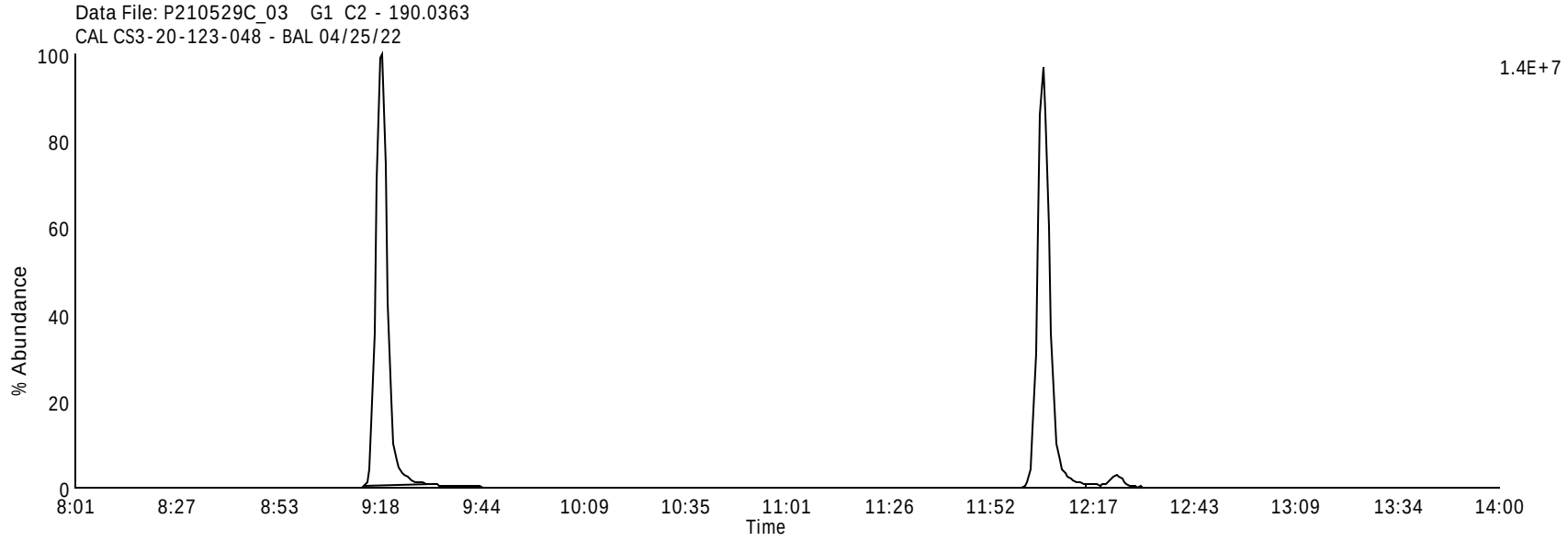
Mono Chlorinated Biphenyls

Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

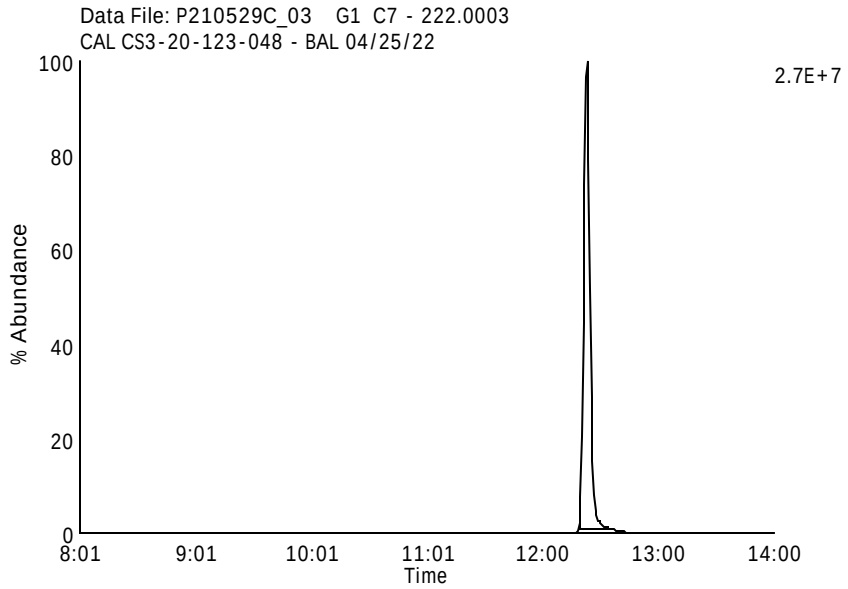
Sample Description: CAL CS3-20-123-048 - BAL 04/25/22

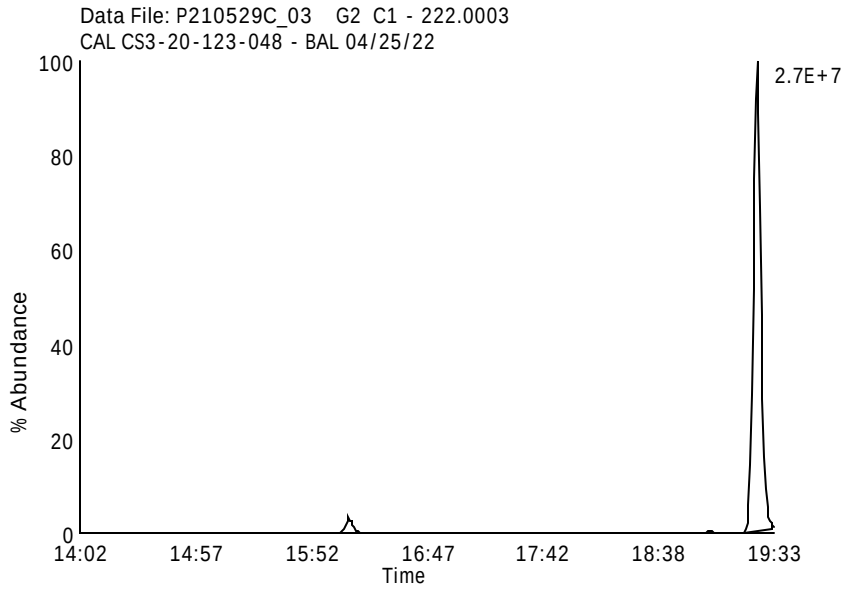


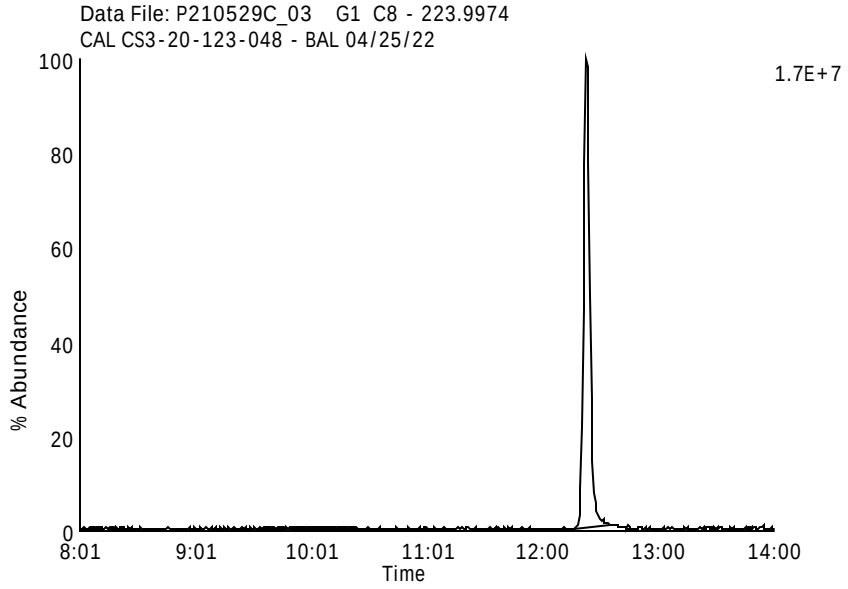


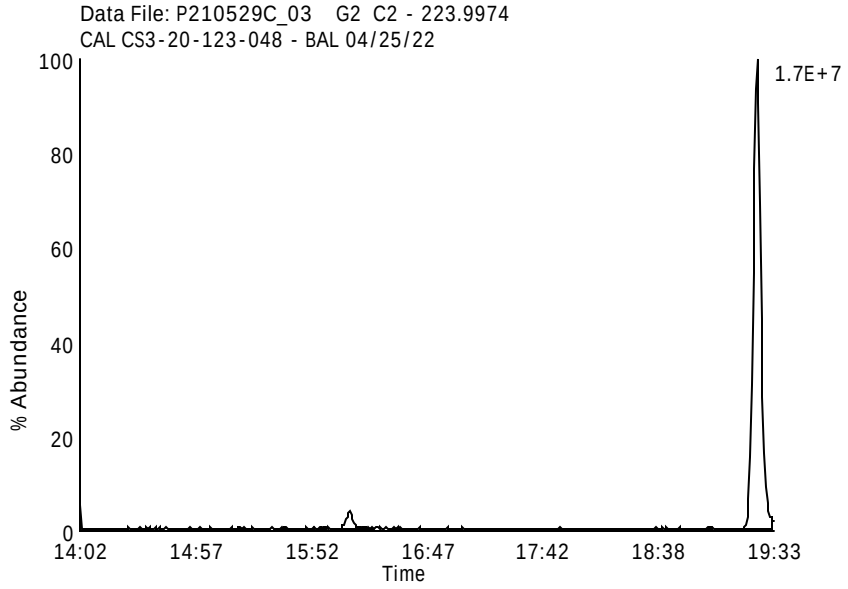
Di Chlorinated Biphenyls

Data File Name: P210529C_03
Lab Sample ID: CS3-20-123-048
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS3-20-123-048 - BAL 04/25/22



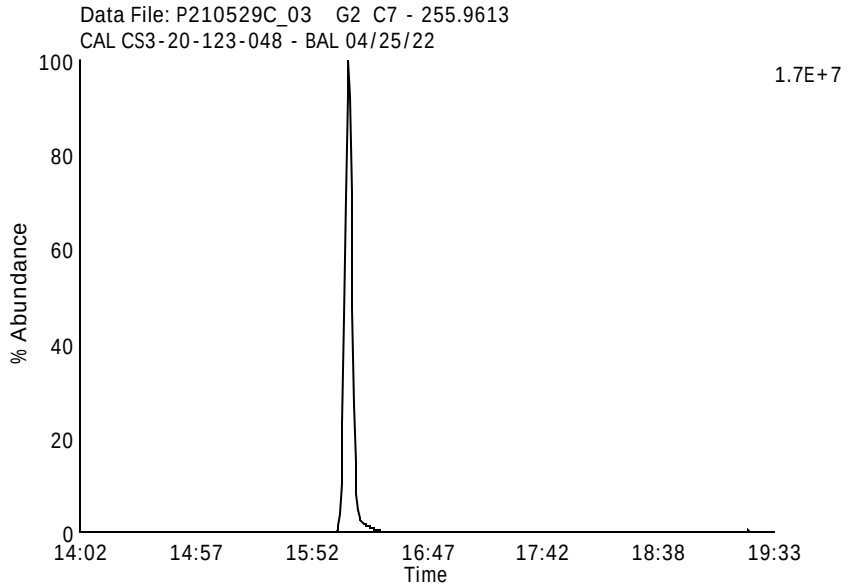


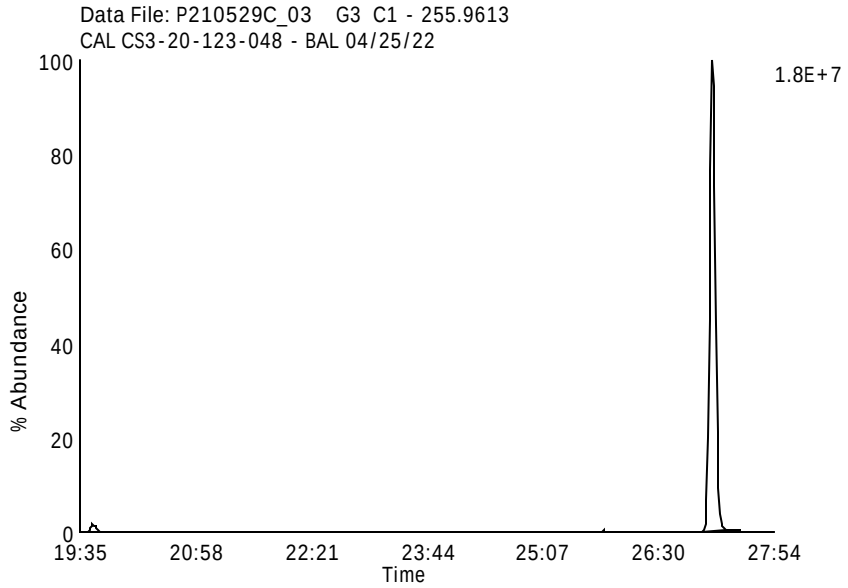


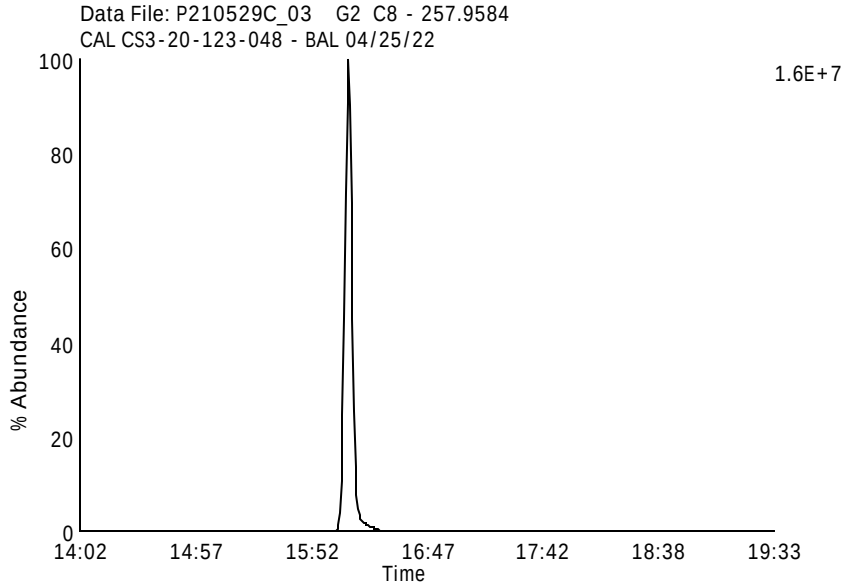


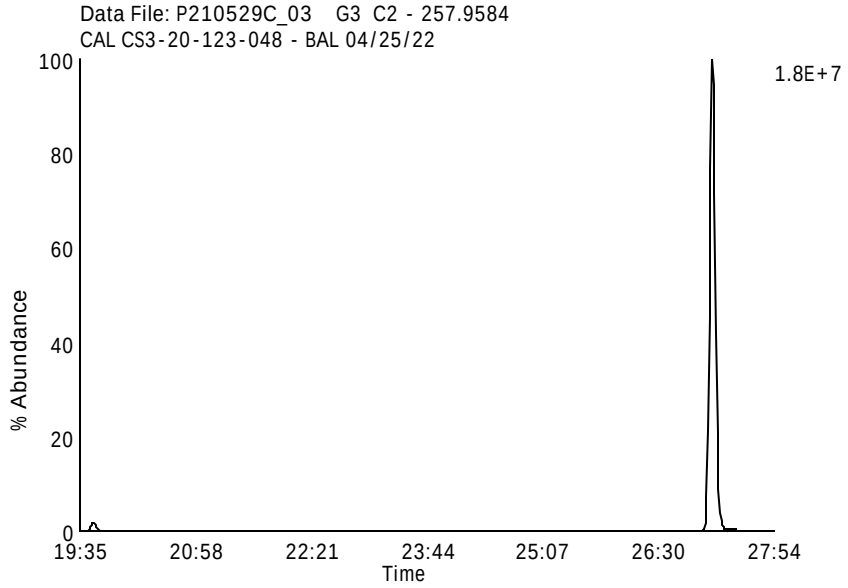
Tri Chlorinated Biphenyls

Data File Name: P210529C_03
Lab Sample ID: CS3-20-123-048
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS3-20-123-048 - BAL 04/25/22









Tetra Chlorinated Biphenyls

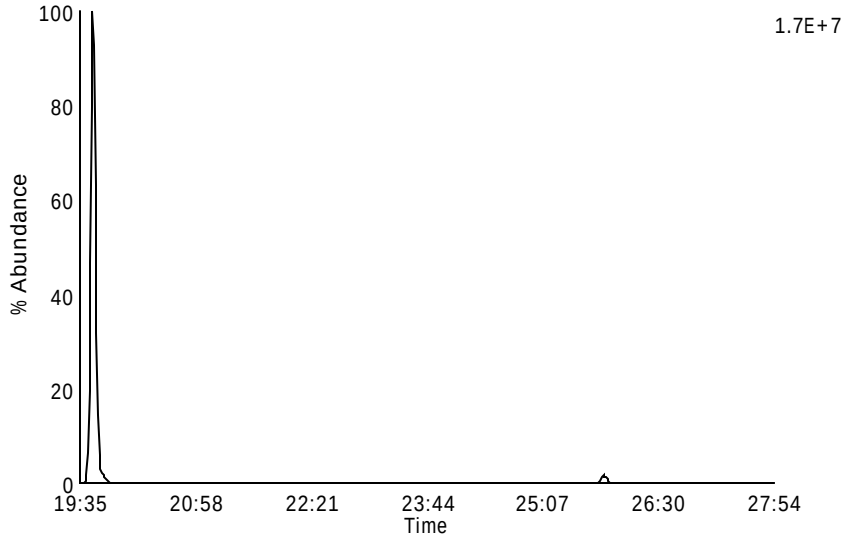
Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22

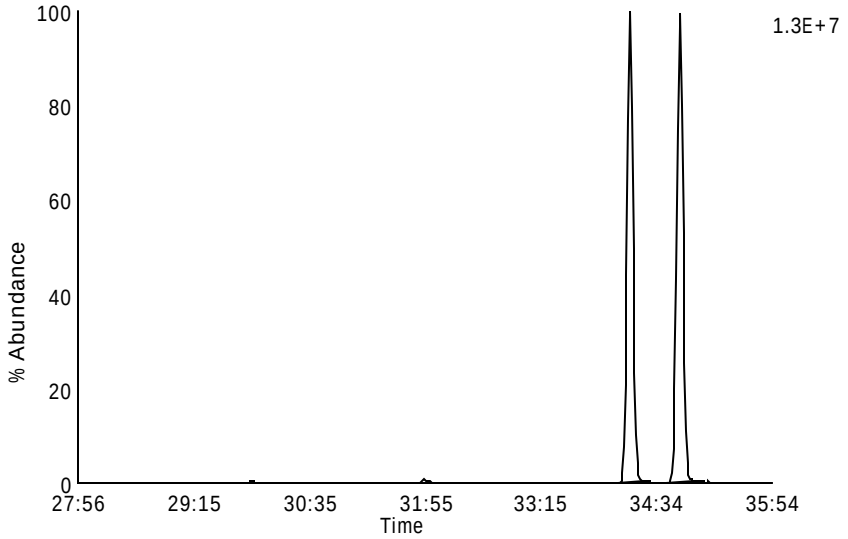
Data File: P210529C_03 G3 C7 - 289.9224

CAL CS3-20-123-048 - BAL 04/25/22



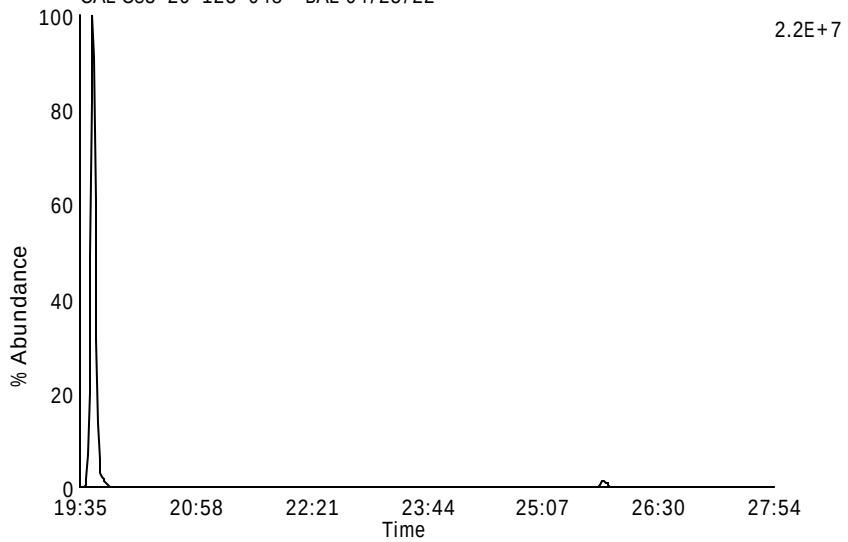
Data File: P210529C_03 G4 C1 - 289.9224

CAL CS3-20-123-048 - BAL 04/25/22



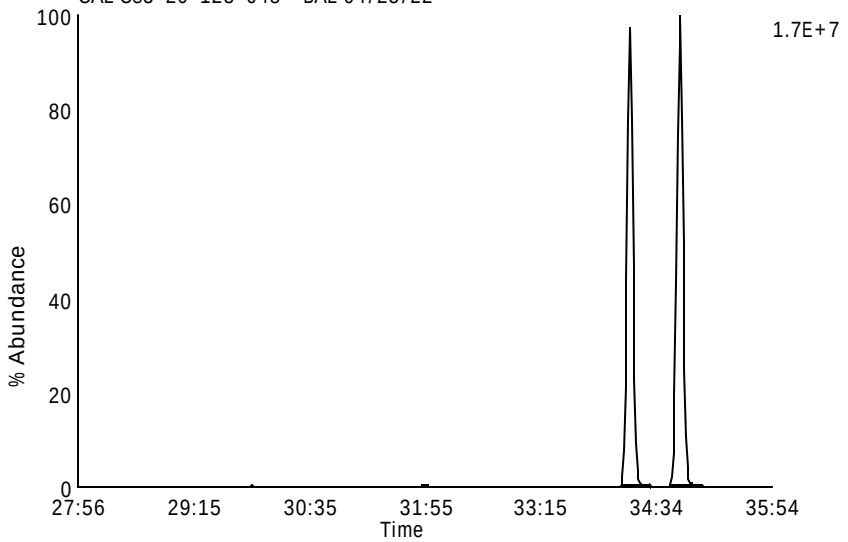
Data File: P210529C_03 G3 C8 - 291.9194

CAL CS3-20-123-048 - BAL 04/25/22



Data File: P210529C_03 G4 C2 - 291.9194

CAL CS3-20-123-048 - BAL 04/25/22

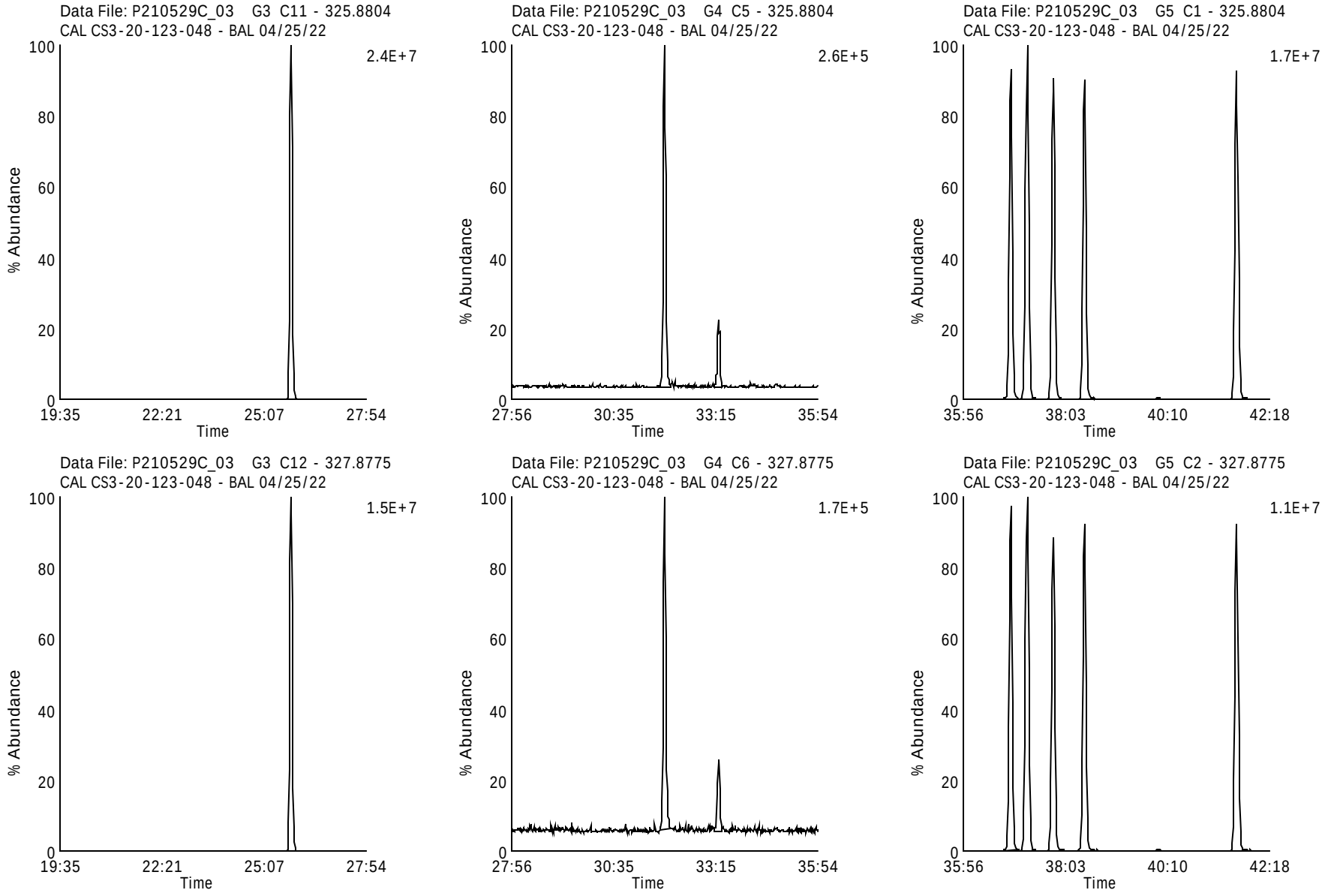


Penta Chlorinated Biphenyls

Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22



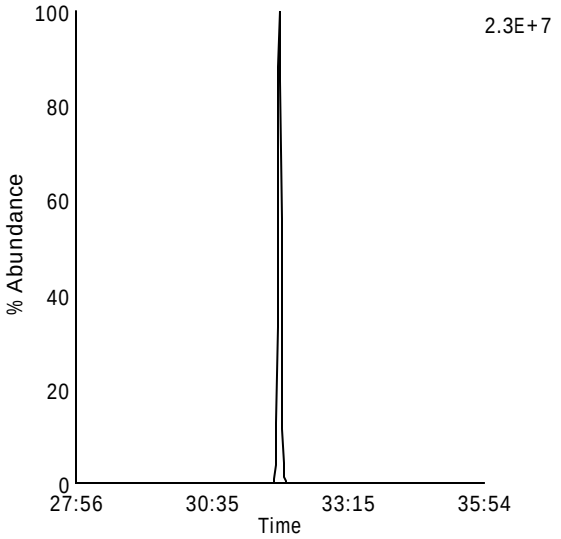
Hexa Chlorinated Biphenyls

Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

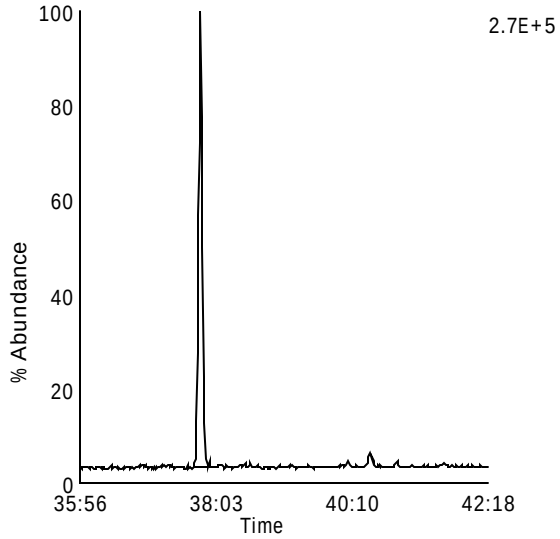
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22

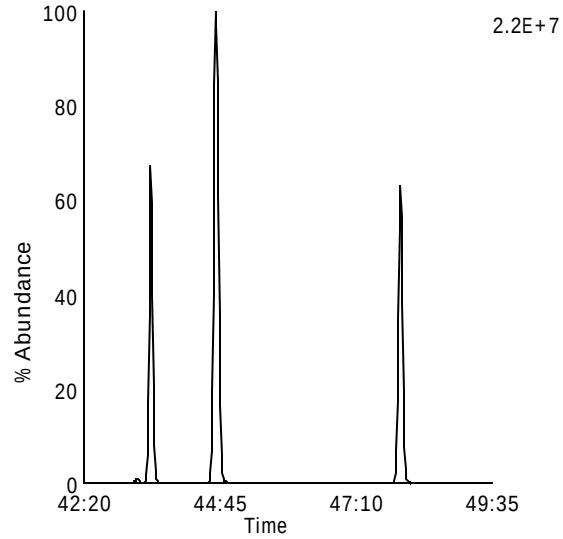
Data File: P210529C_03 G4 C11 - 359.8415
CAL CS3-20-123-048 - BAL 04/25/22



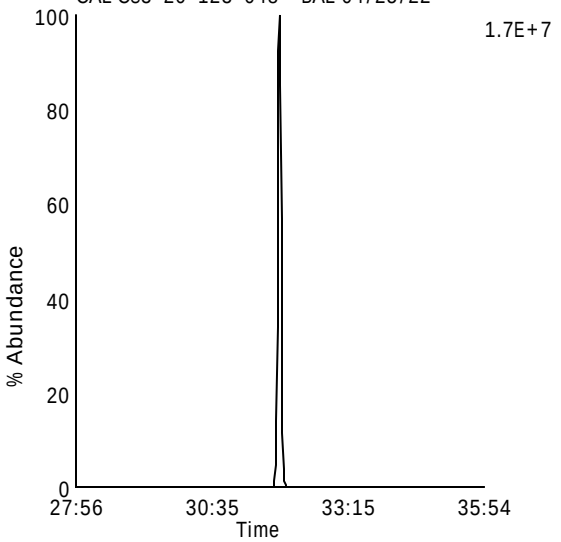
Data File: P210529C_03 G5 C5 - 359.8415
CAL CS3-20-123-048 - BAL 04/25/22



Data File: P210529C_03 G6 C1 - 359.8415
CAL CS3-20-123-048 - BAL 04/25/22



Data File: P210529C_03 G4 C12 - 361.8385
CAL CS3-20-123-048 - BAL 04/25/22



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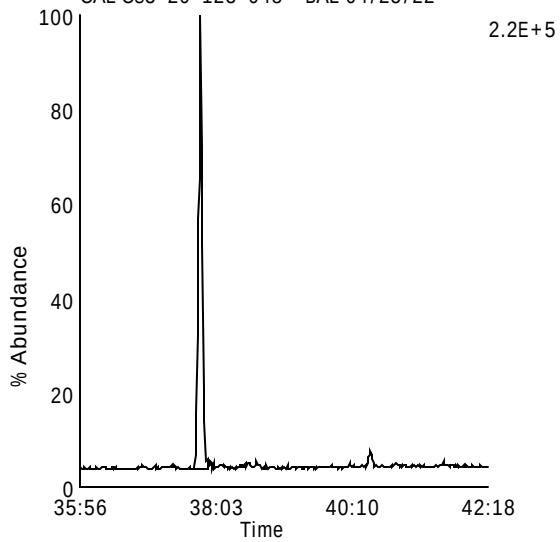
CAL CS3-20-123-048 - BAL 04/25/22



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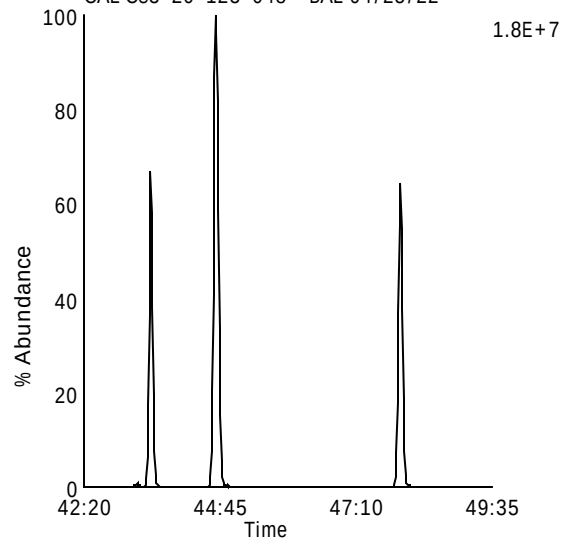
CAL CS3-20-123-048 - BAL 04/25/22



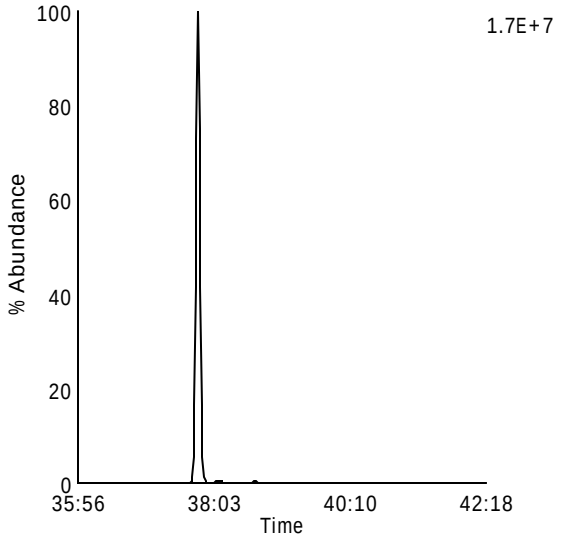
Hepta Chlorinated Biphenyls

Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

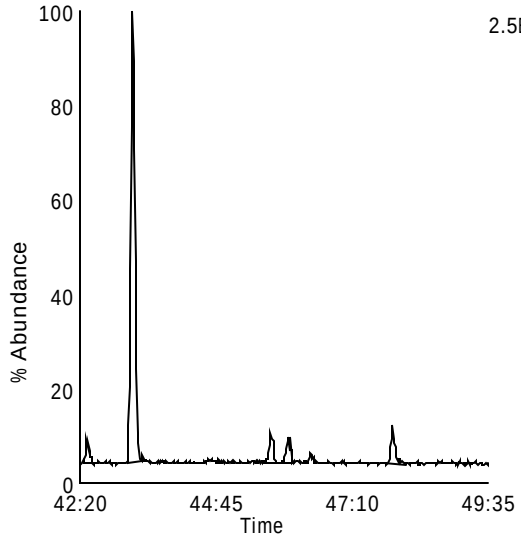
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22

Data File: P210529C_03 G5 C11 - 393.8025
CAL CS3-20-123-048 - BAL 04/25/22



Data File: P210529C_03 G6 C7 - 393.8025
CAL CS3-20-123-048 - BAL 04/25/22



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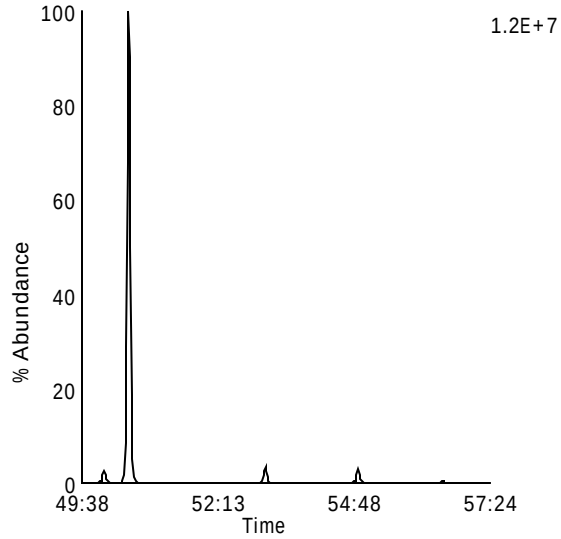
CAL CS3-20-123-048 - BAL 04/25/22



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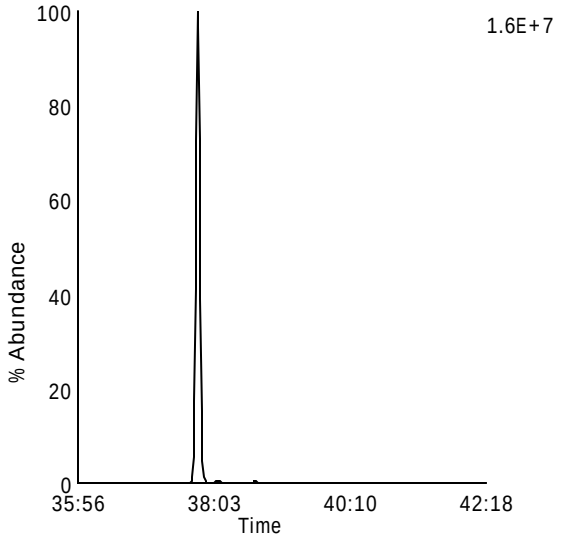
CAL CS3-20-123-048 - BAL 04/25/22



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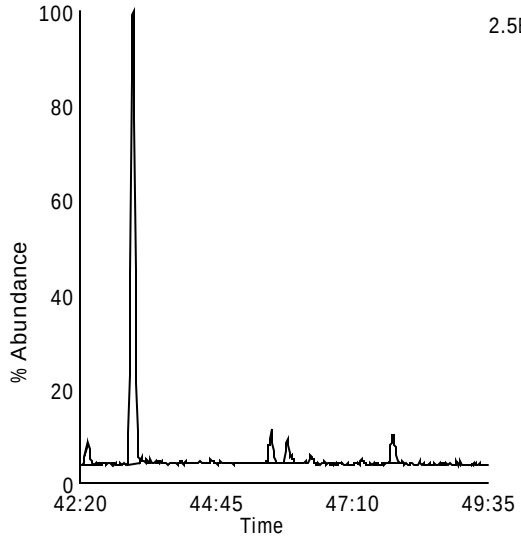
CAL CS3-20-123-048 - BAL 04/25/22



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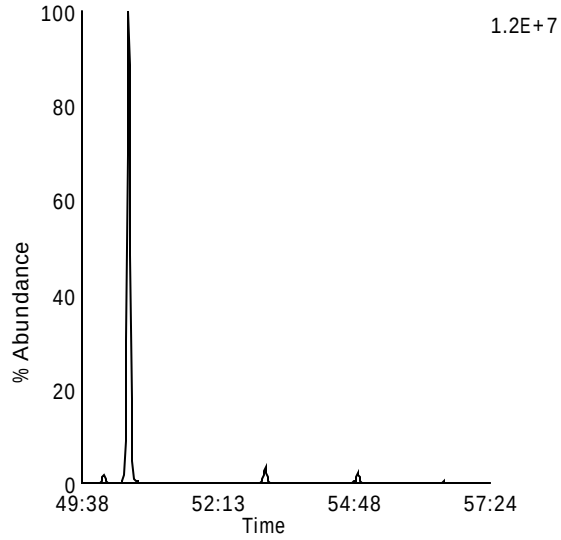
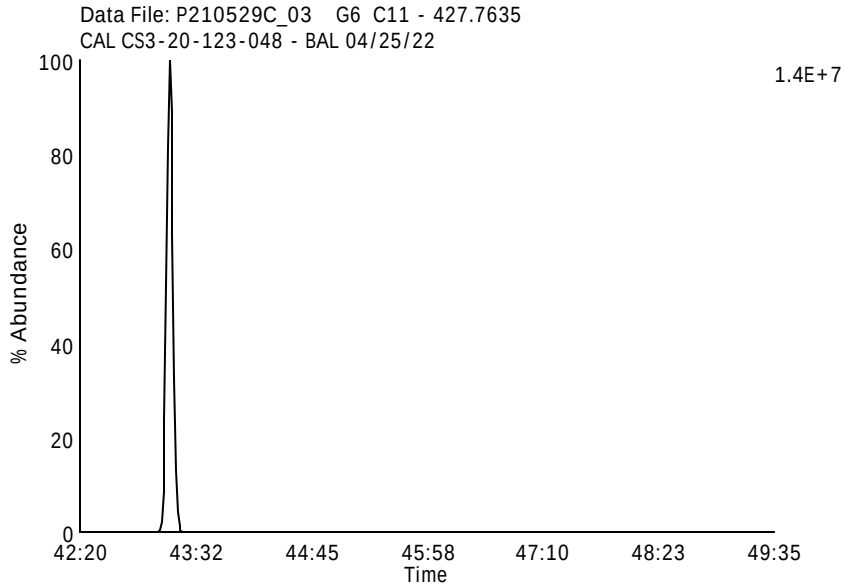
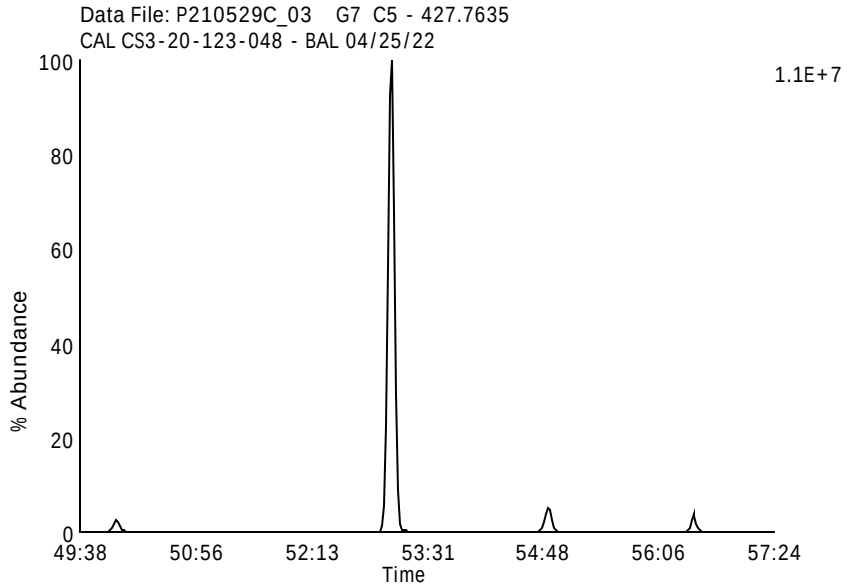
CAL CS3-20-123-048 - BAL 04/25/22

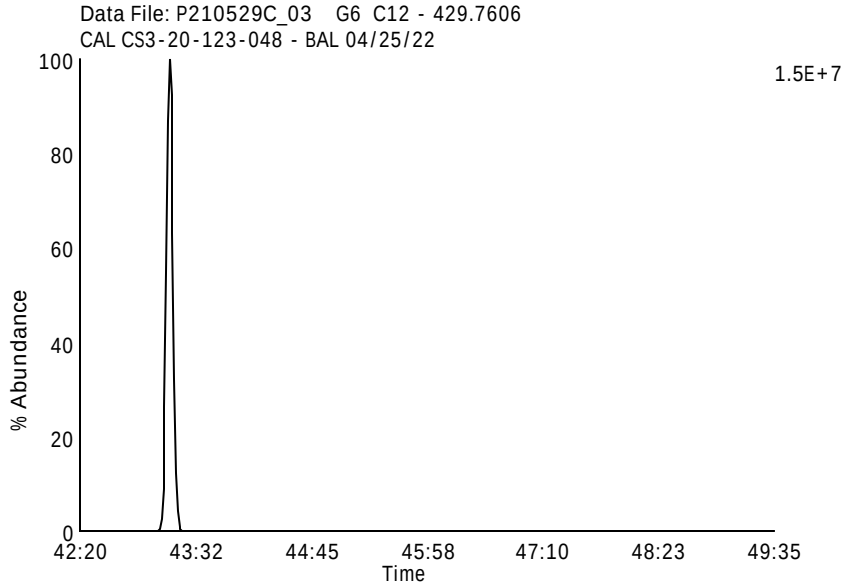


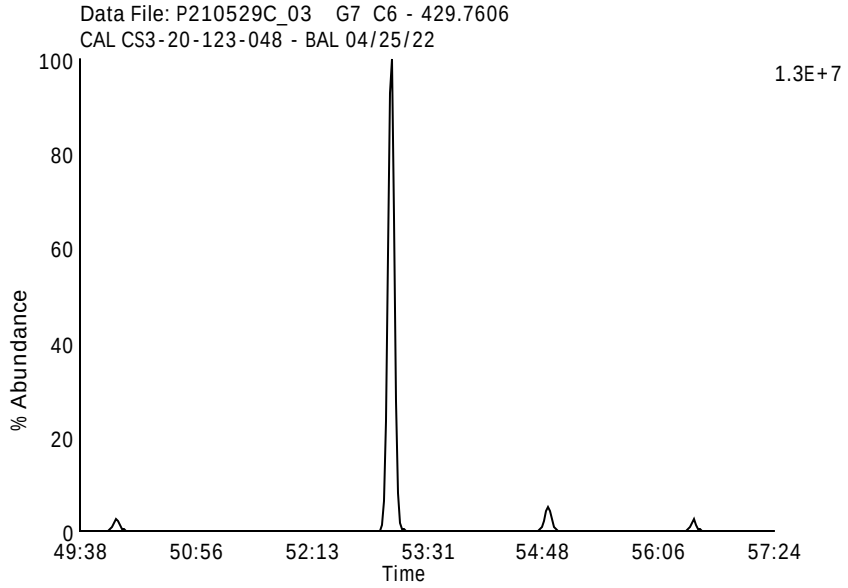
Octa Chlorinated Biphenyls

Data File Name: P210529C_03
Lab Sample ID: CS3-20-123-048
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS3-20-123-048 - BAL 04/25/22







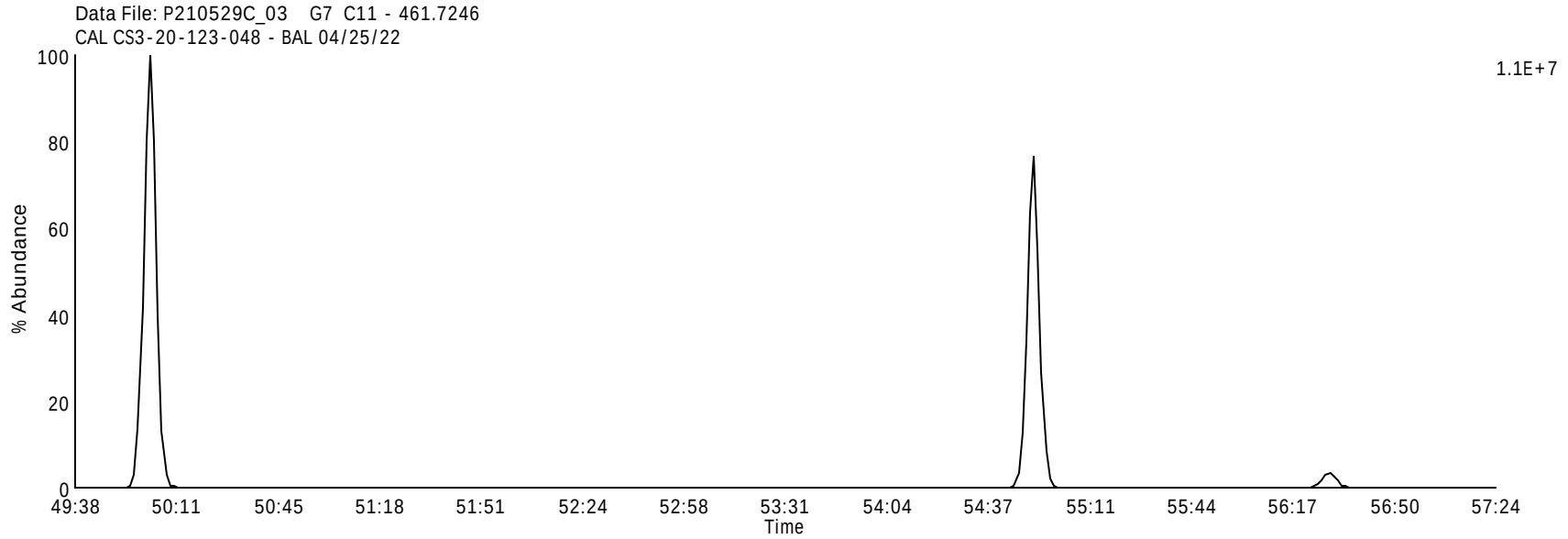


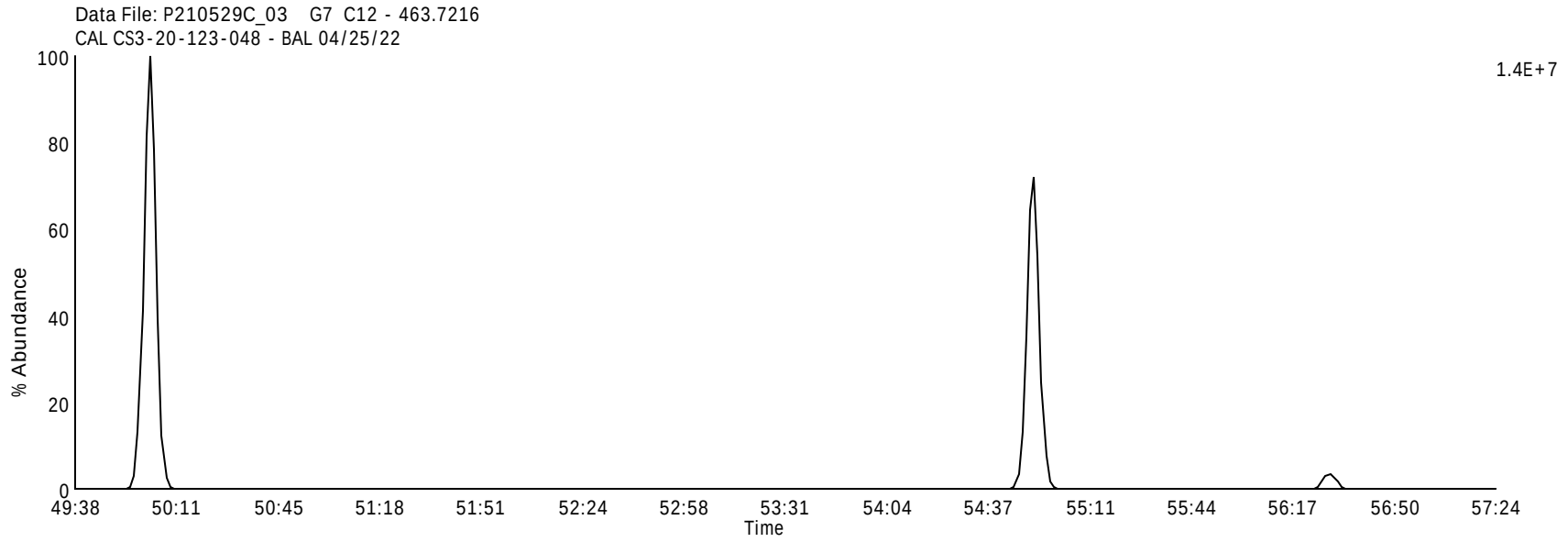
Nona Chlorinated Biphenyls

Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-048 - BAL 04/25/22



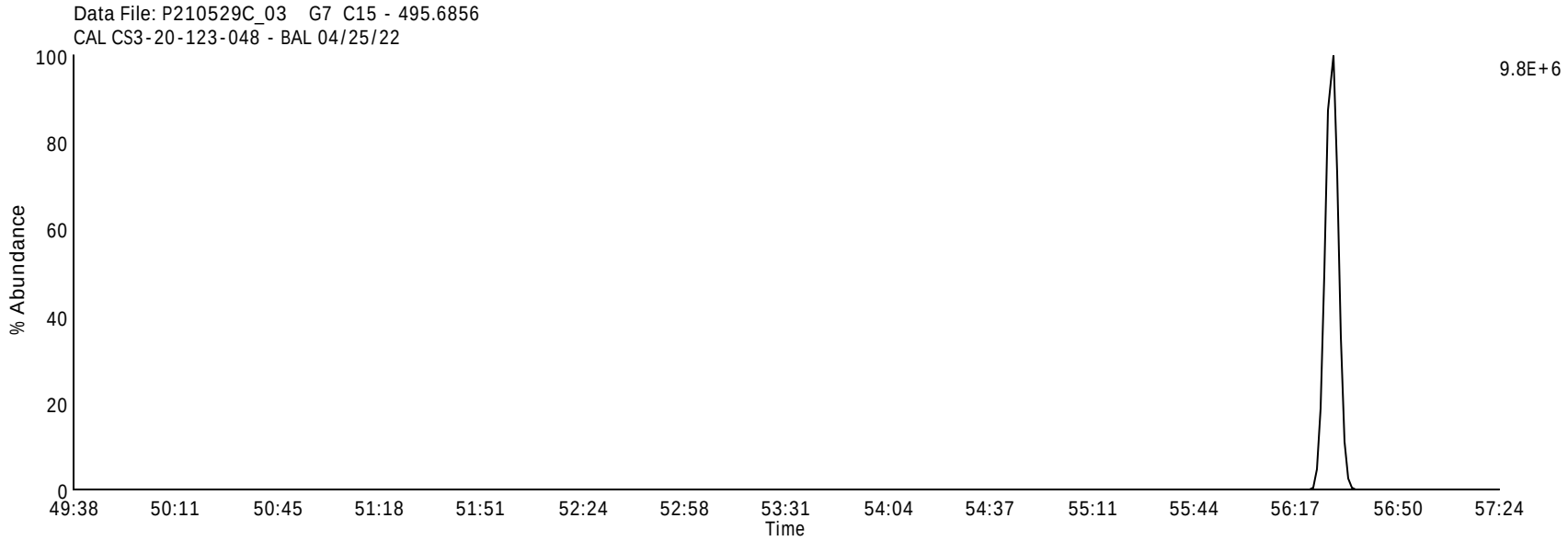


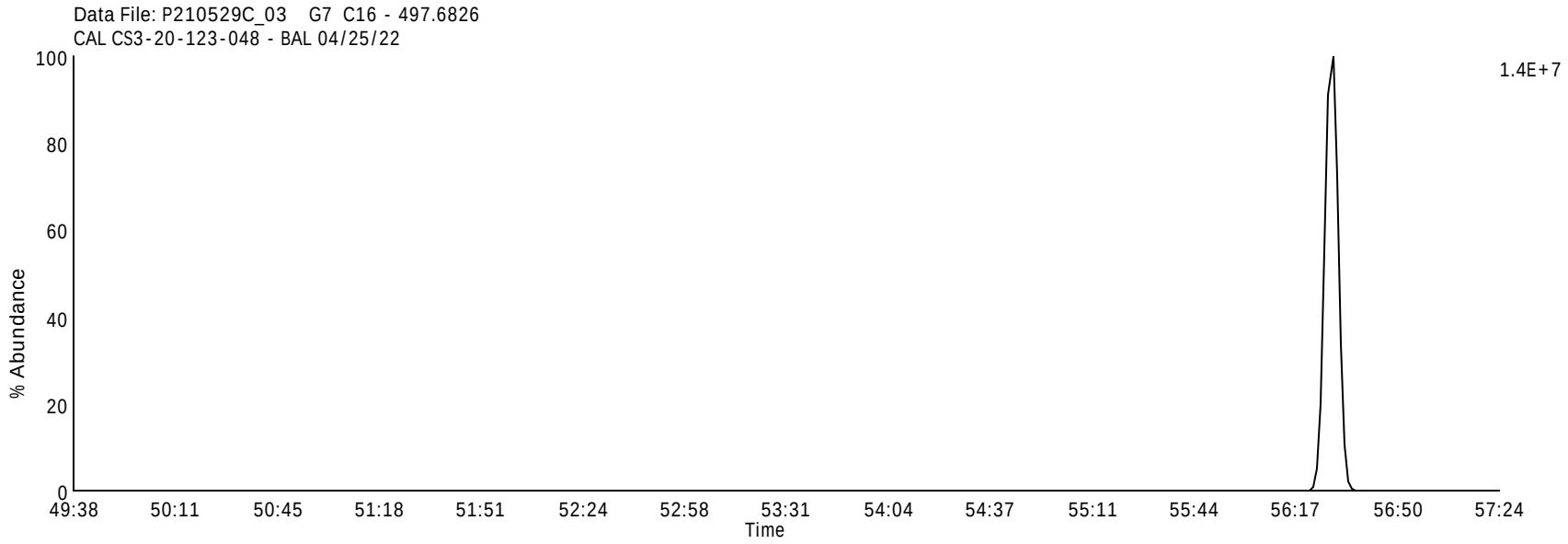
Deca Chlorinated Biphenyl

Data File Name: P210529C_03 Lab Sample ID: CS3-20-123-048

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

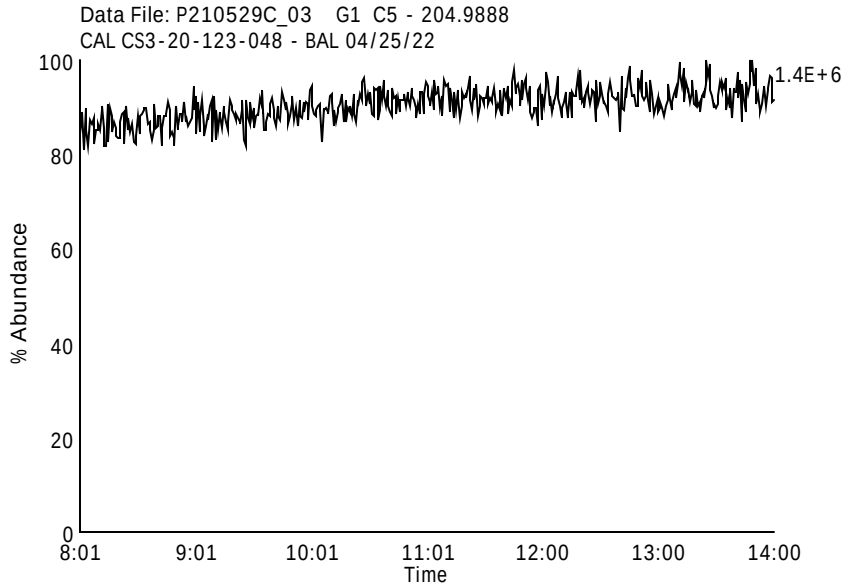
Sample Description: CAL CS3-20-123-048 - BAL 04/25/22

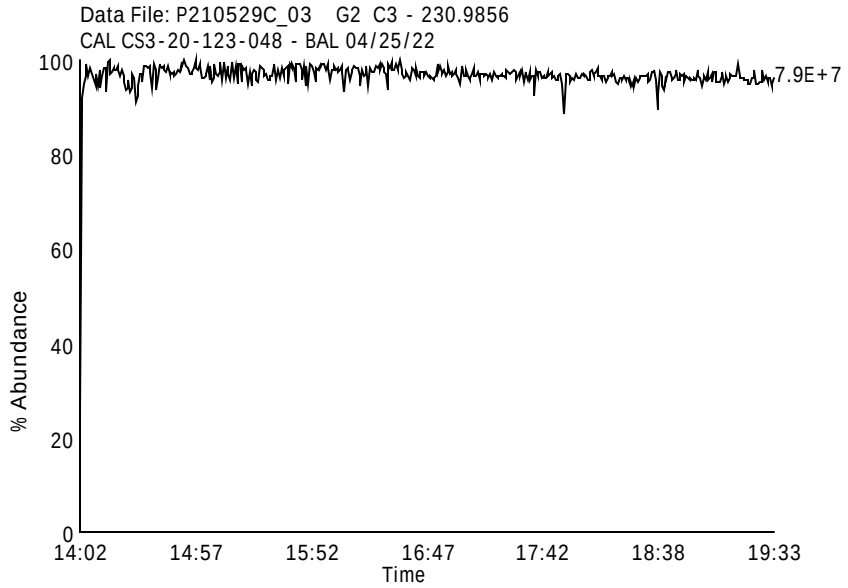


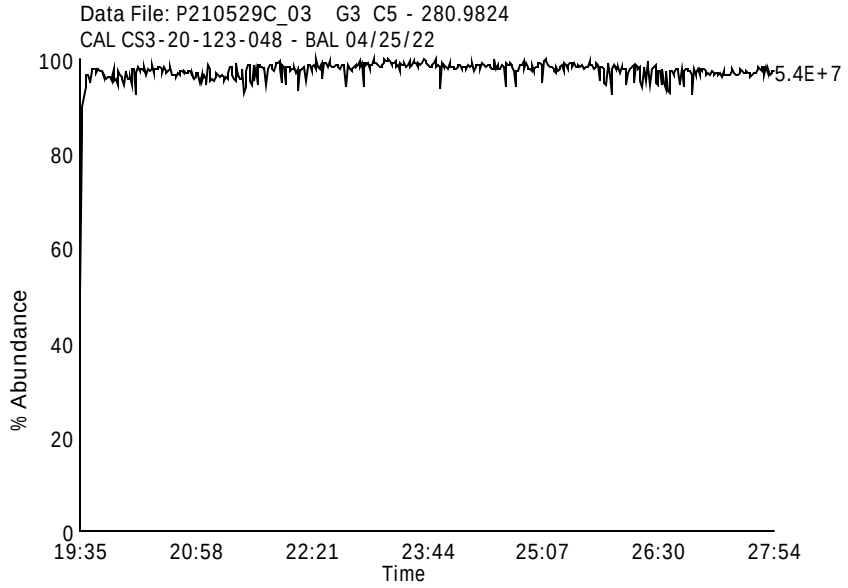


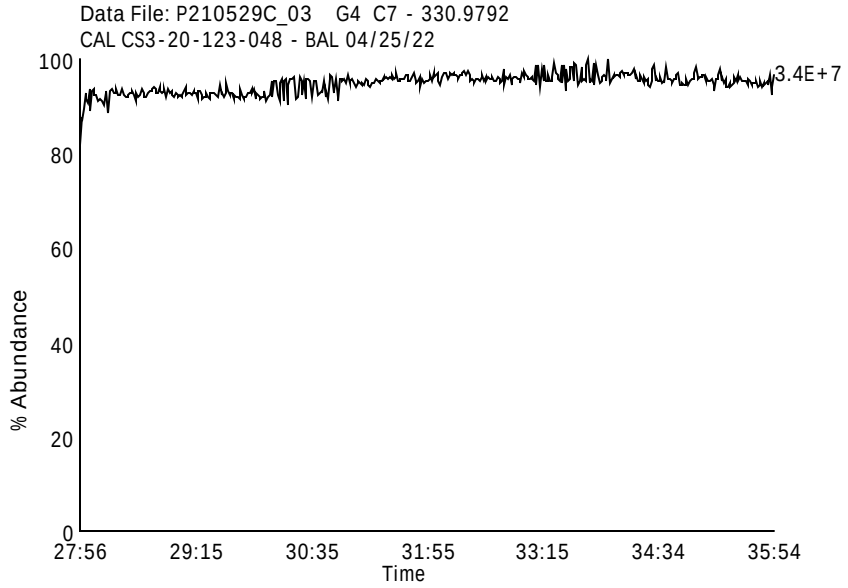
Group 1 - 4 Lock mass

Data File Name: P210529C_03
Lab Sample ID: CS3-20-123-048
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS3-20-123-048 - BAL 04/25/22



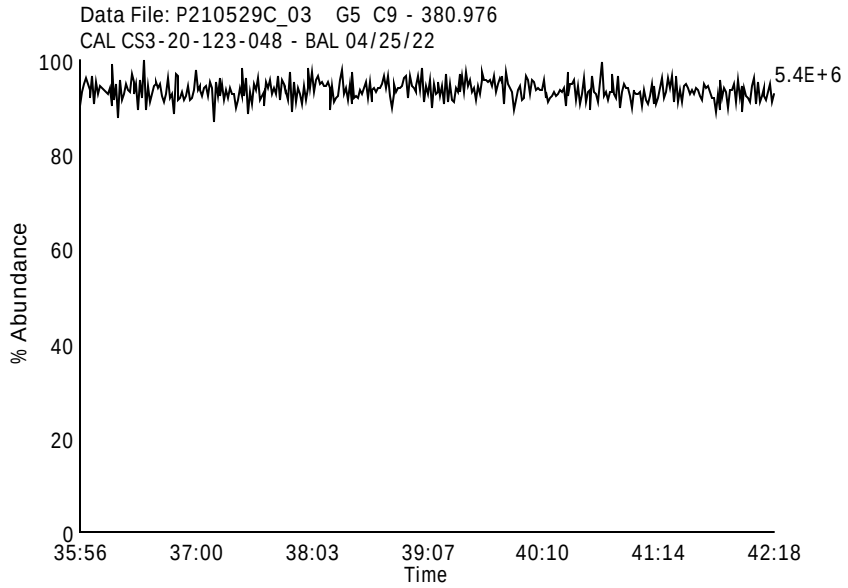


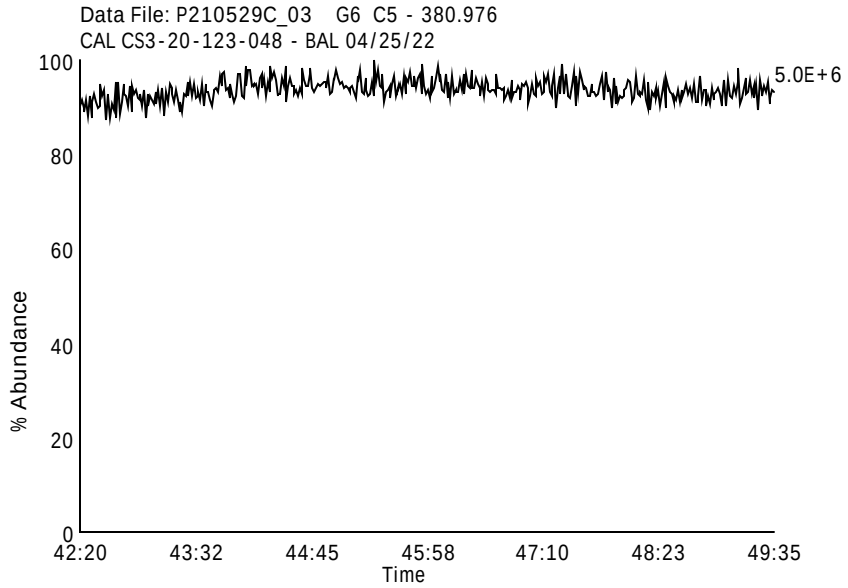


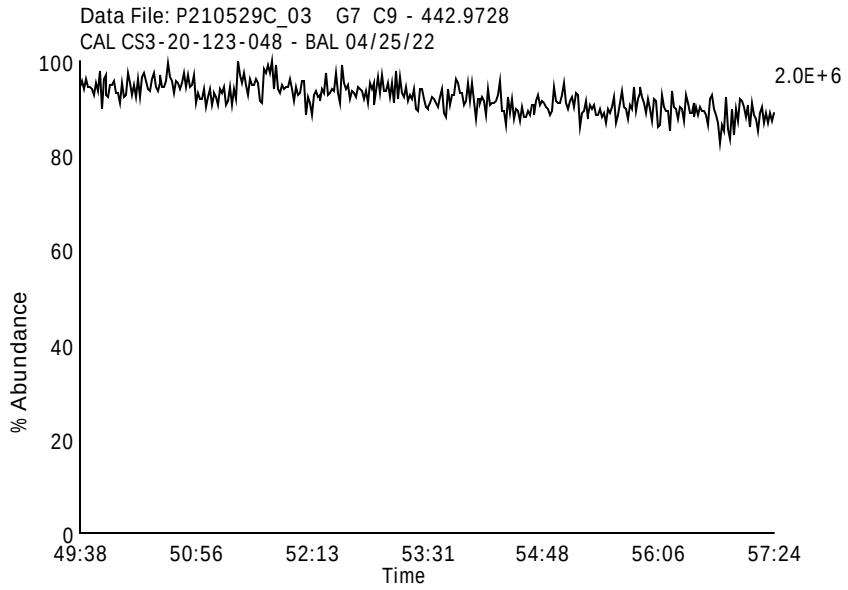


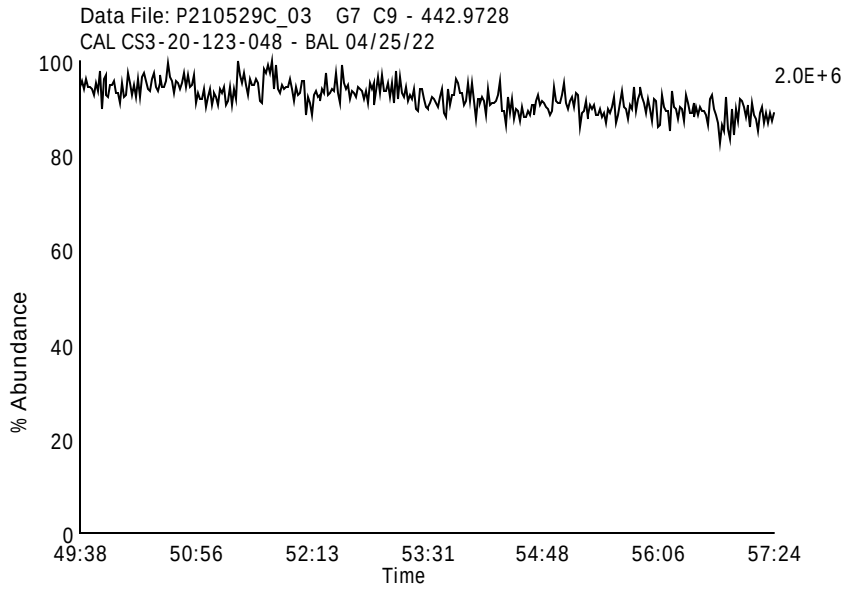
Group 5 - 7 Lock mass

Data File Name: P210529C_03
Lab Sample ID: CS3-20-123-048
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS3-20-123-048 - BAL 04/25/22







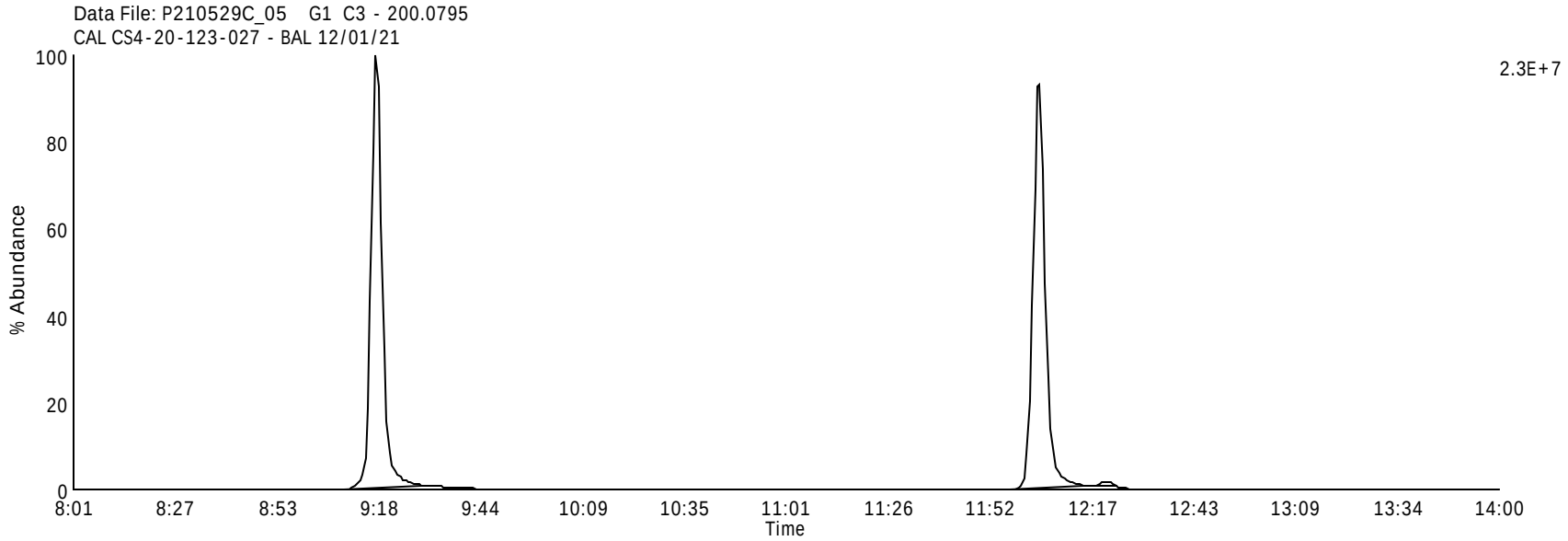


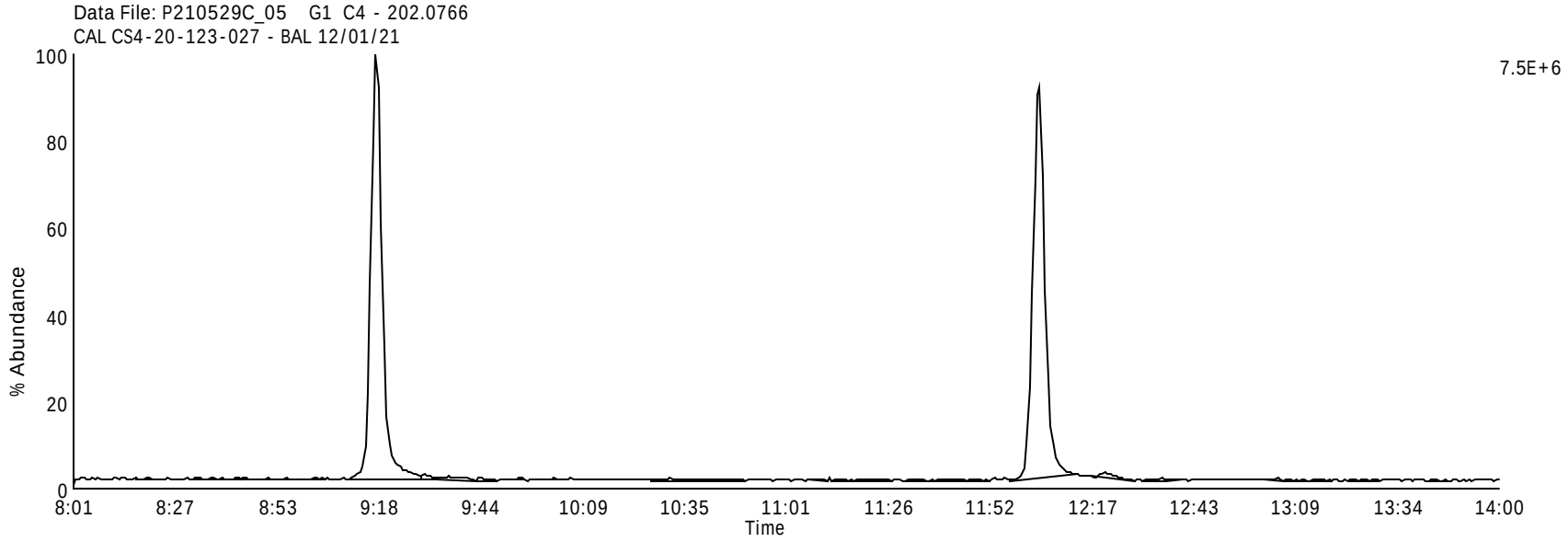
Labeled Mono Chlorinated Biphenyls

Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

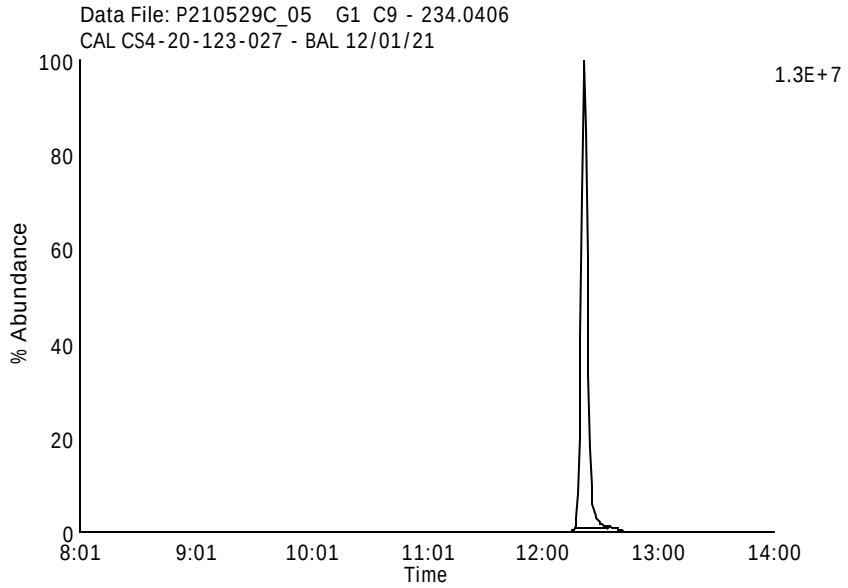
Sample Description: CAL CS4-20-123-027 - BAL 12/01/21

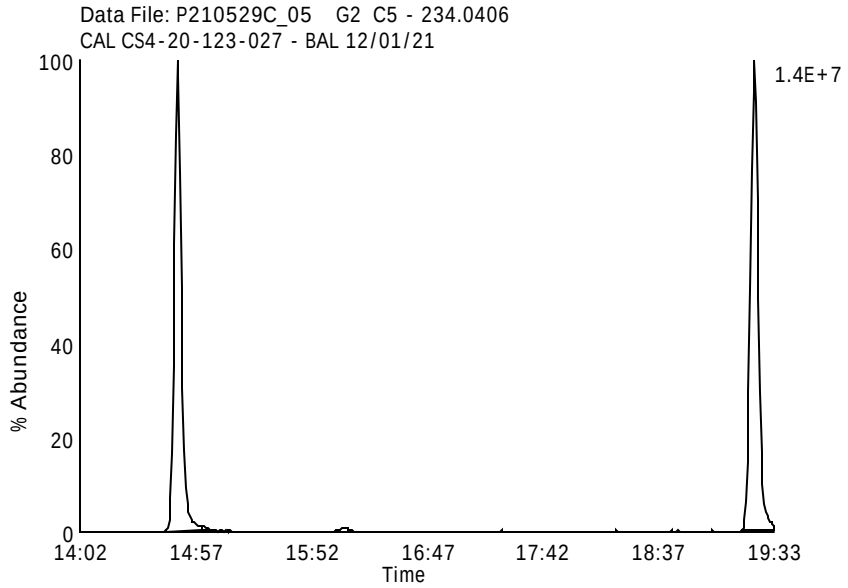


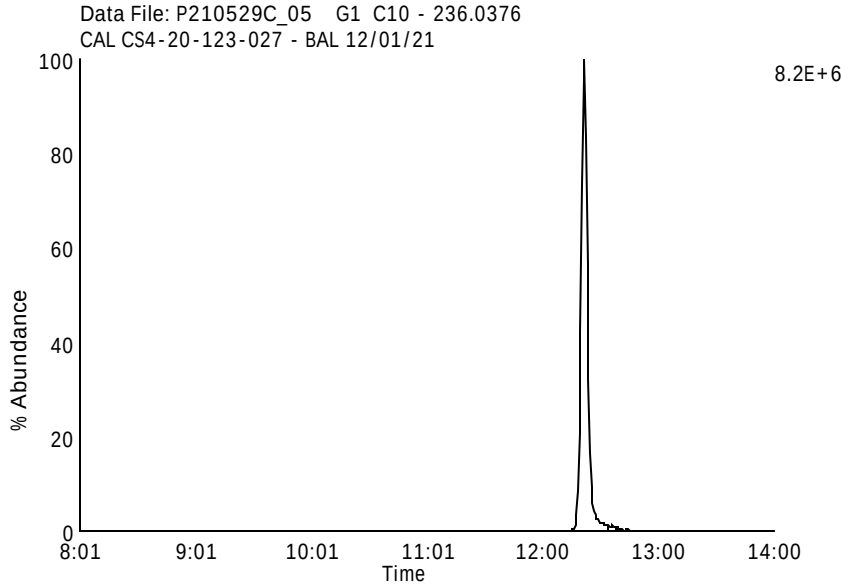


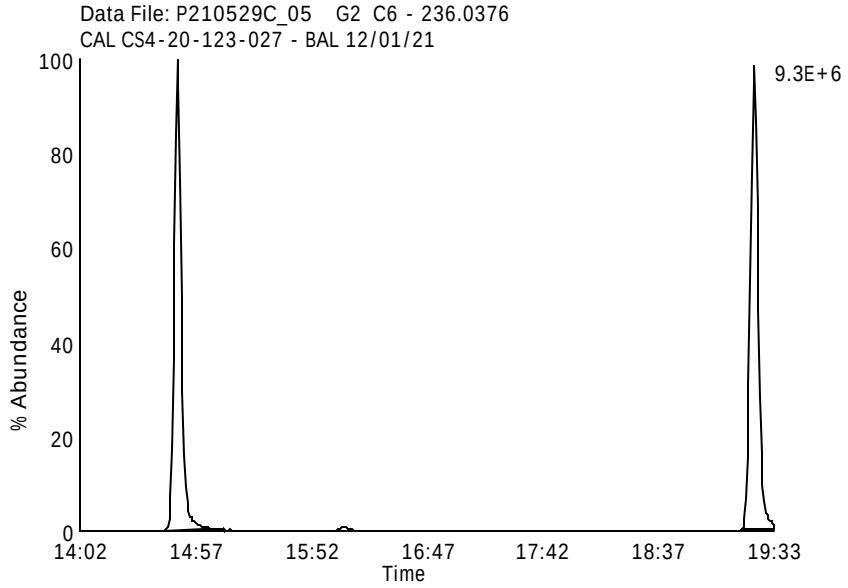
Labeled Di Chlorinated Biphenyls

Data File Name: P210529C_05
Lab Sample ID: CS4-20-123-027
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS4-20-123-027 - BAL 12/01/21







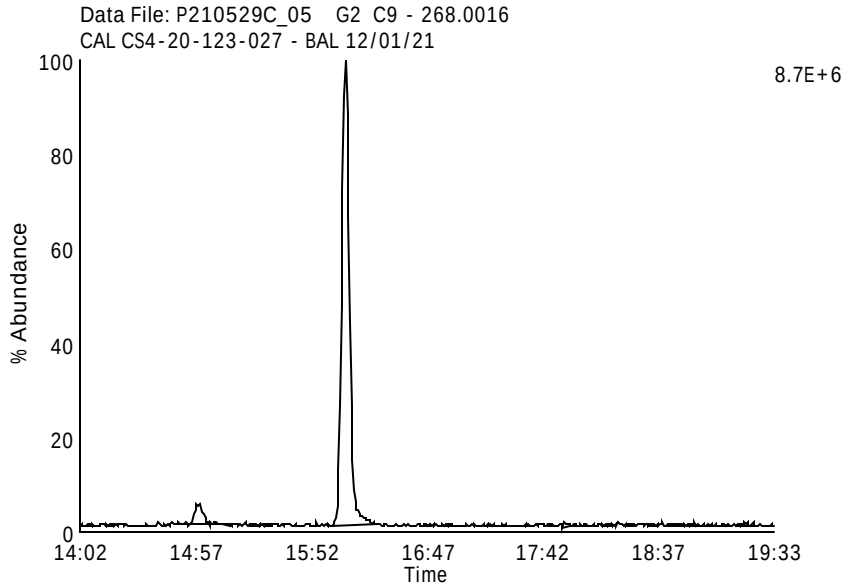


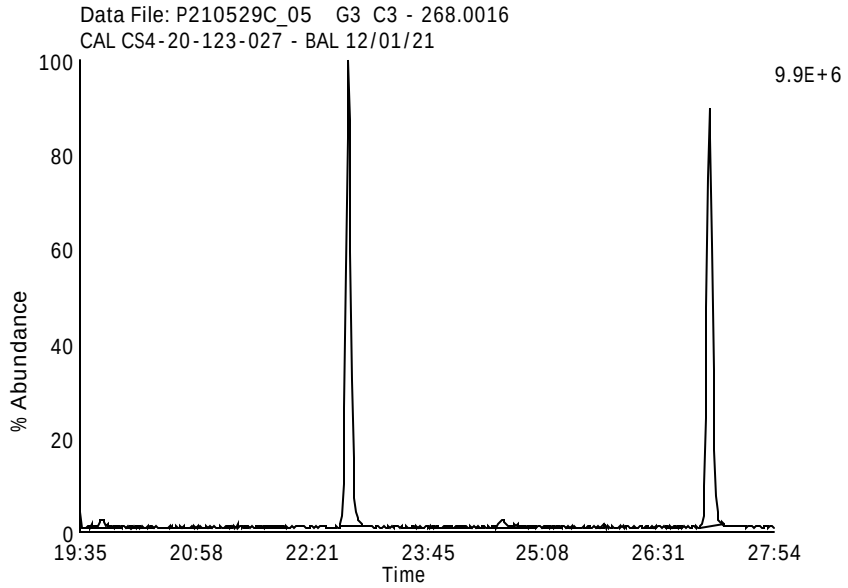
Labeled Tri Chlorinated Biphenyls

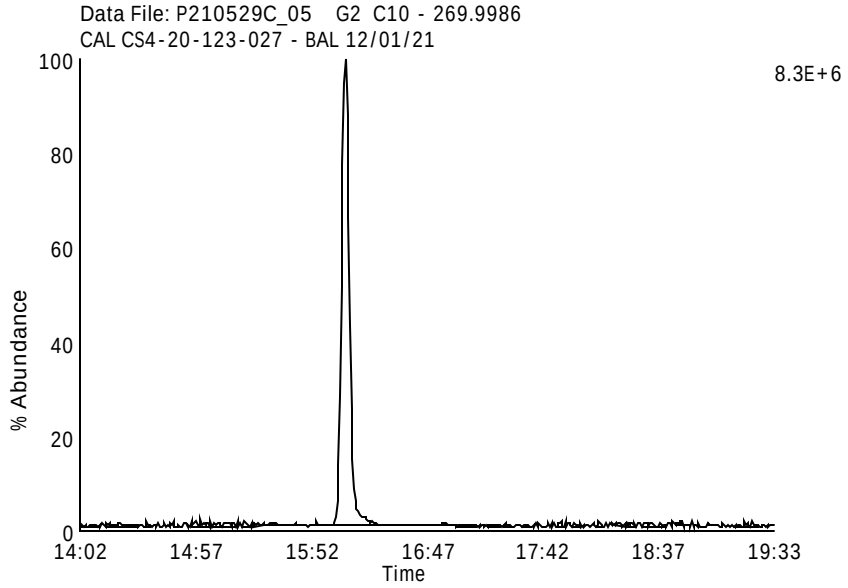
Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

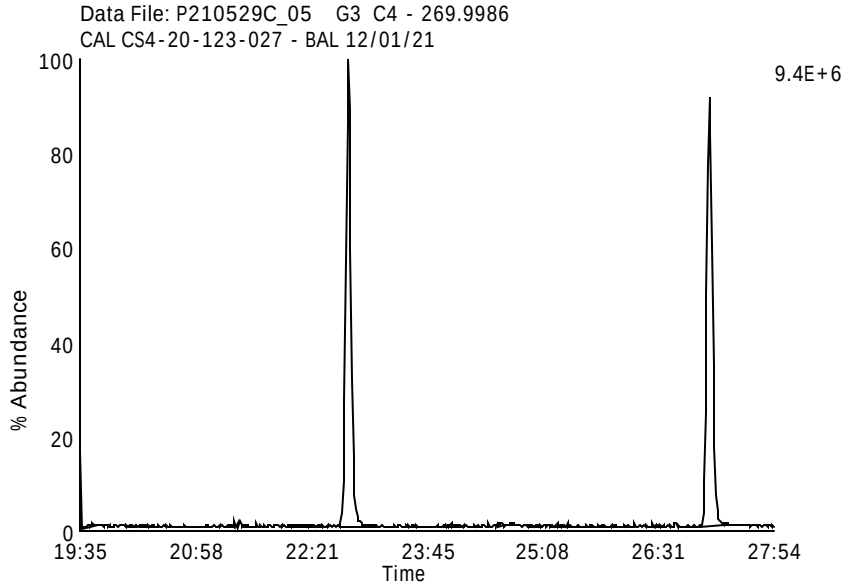
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21







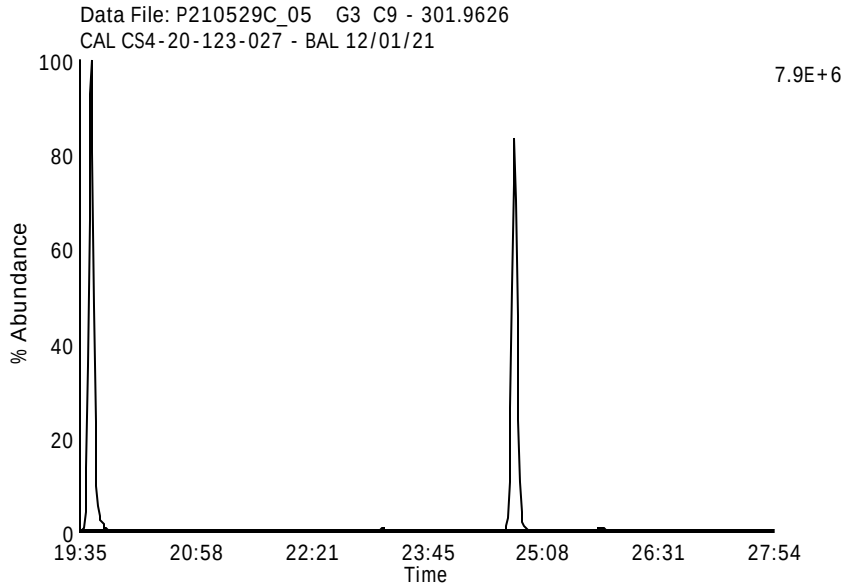


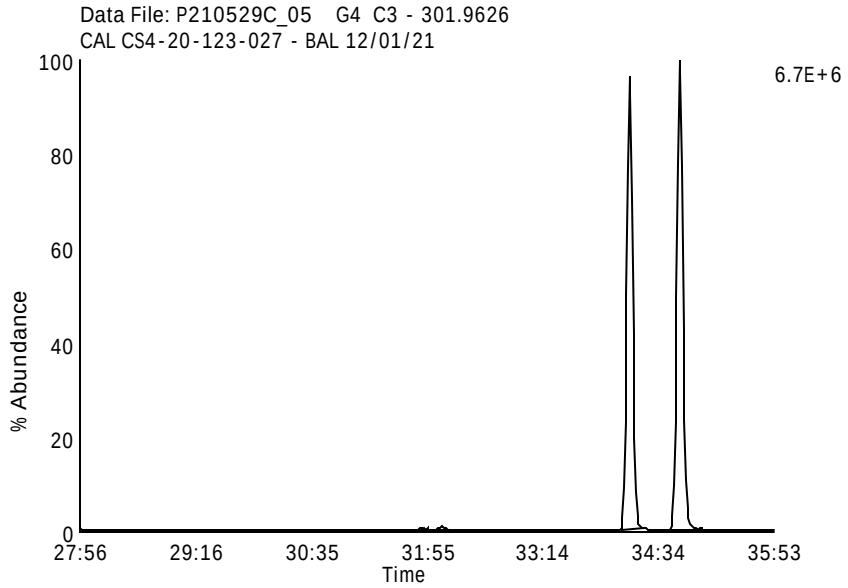
Labeled Tetra Chlorinated Biphenyls

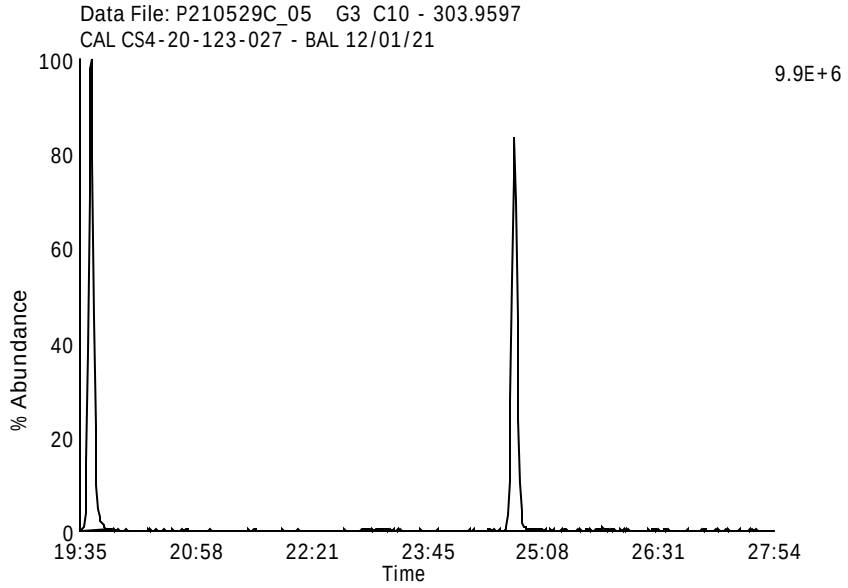
Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

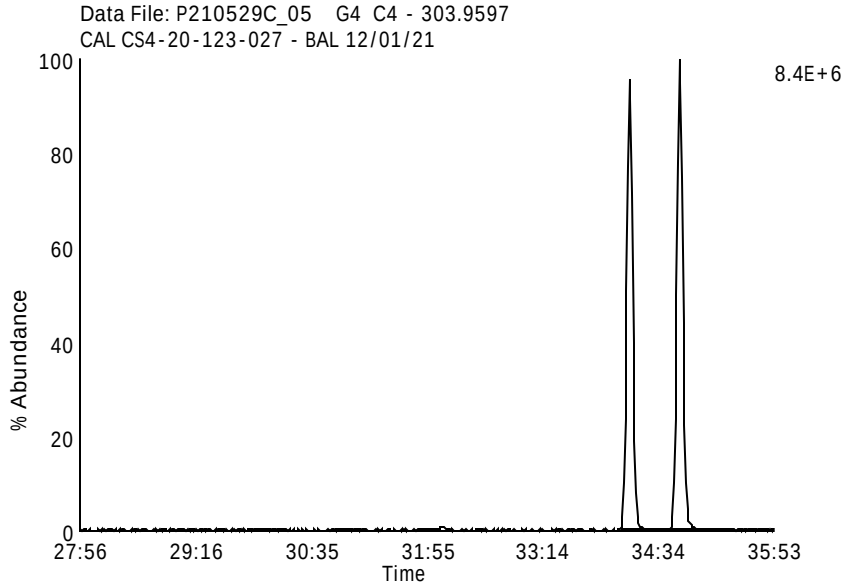
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21







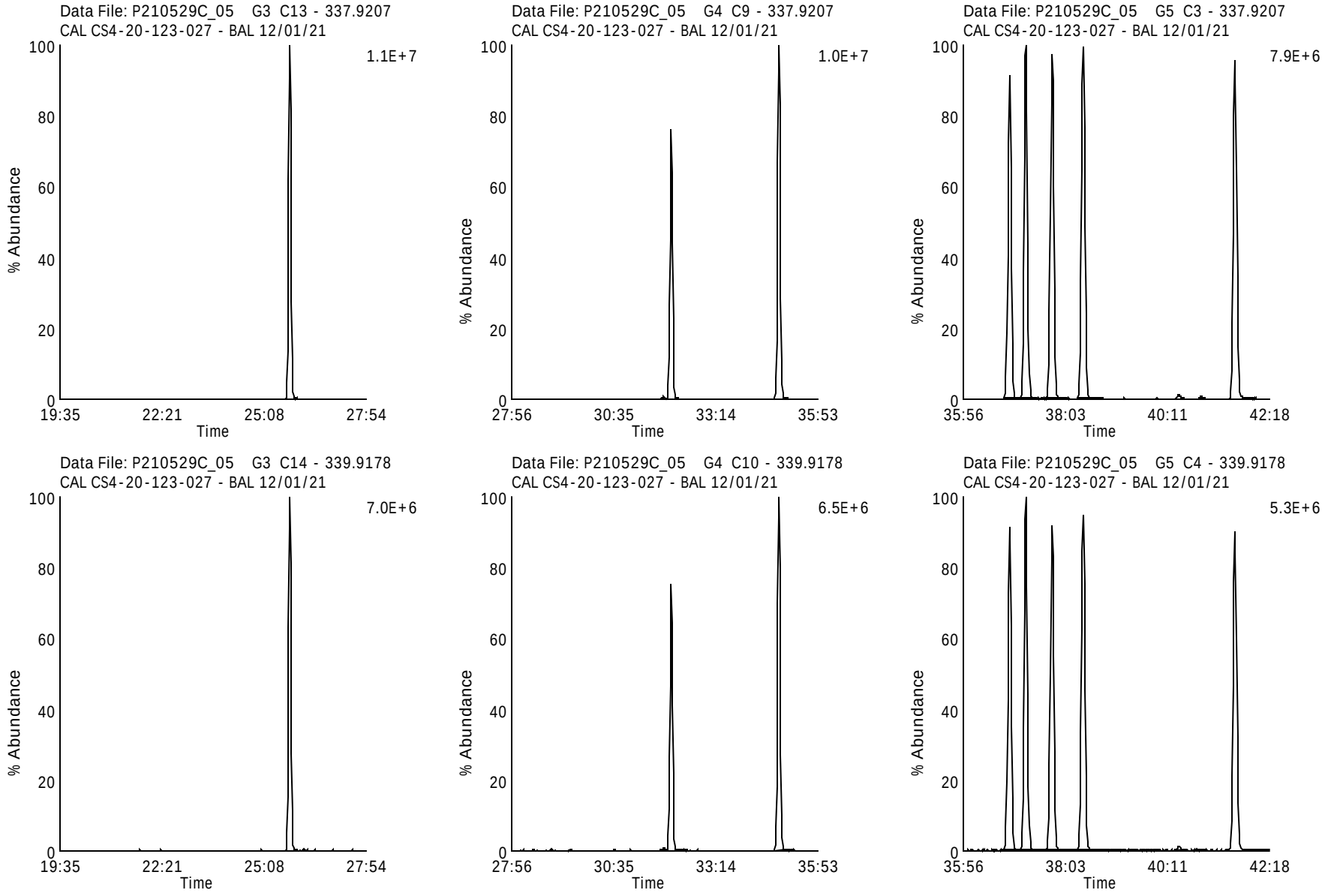


Labeled Penta Chlorinated Biphenyls

Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21



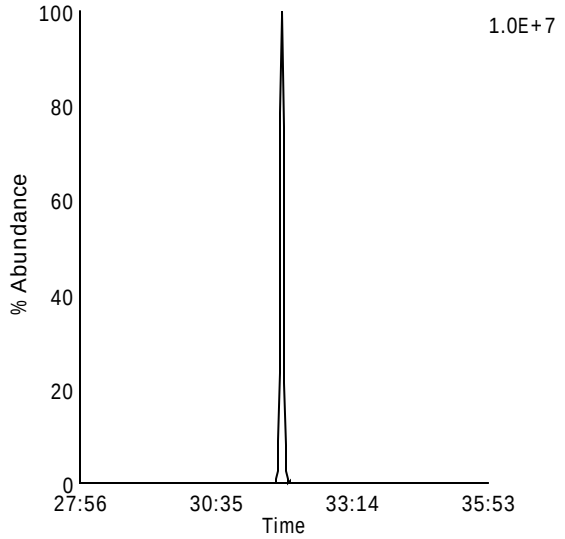
Labeled Hexa Chlorinated Biphenyls

Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

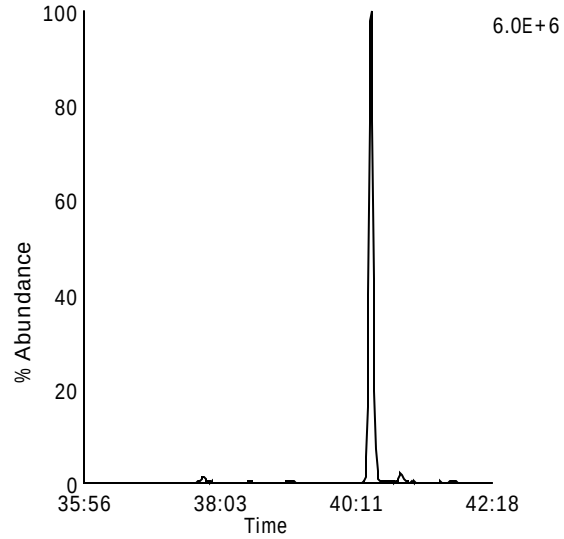
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21

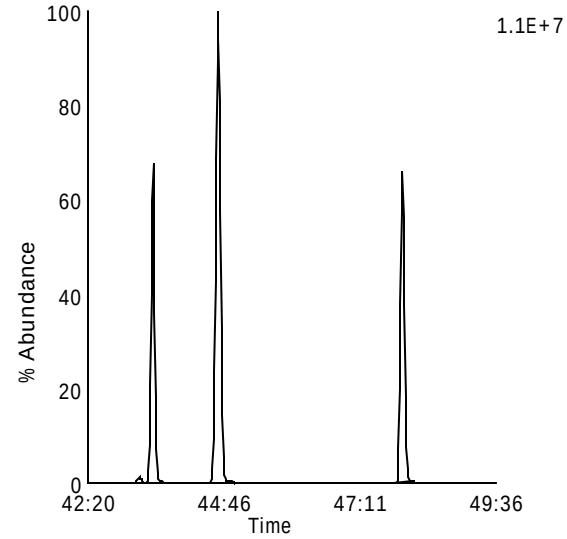
Data File: P210529C_05 G4 C13 - 371.8817
CAL CS4-20-123-027 - BAL 12/01/21



Data File: P210529C_05 G5 C7 - 371.8817
CAL CS4-20-123-027 - BAL 12/01/21



Data File: P210529C_05 G6 C3 - 371.8817
CAL CS4-20-123-027 - BAL 12/01/21



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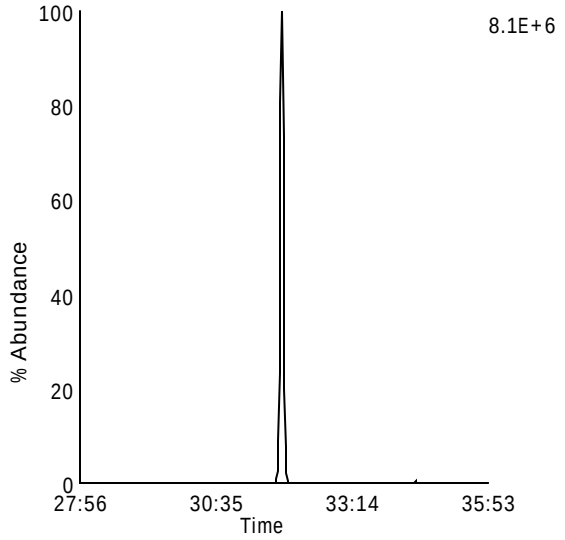
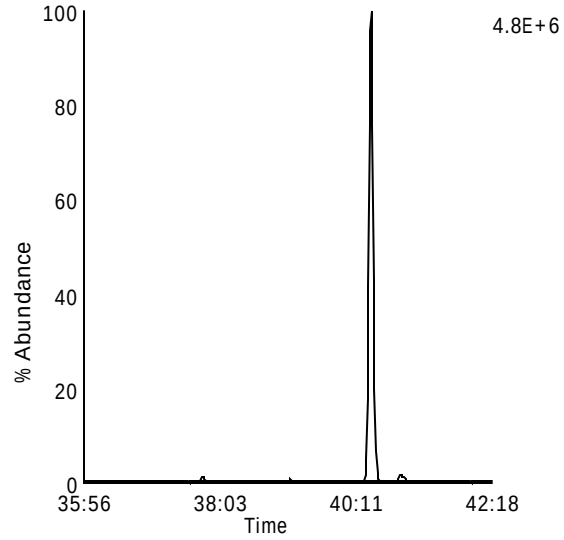
CAL CS4-20-123-027 - BAL 12/01/21



Data File: P210529C_05 G5 C8 - 373.8788
CAL CS4-20-123-027 - BAL 12/01/21



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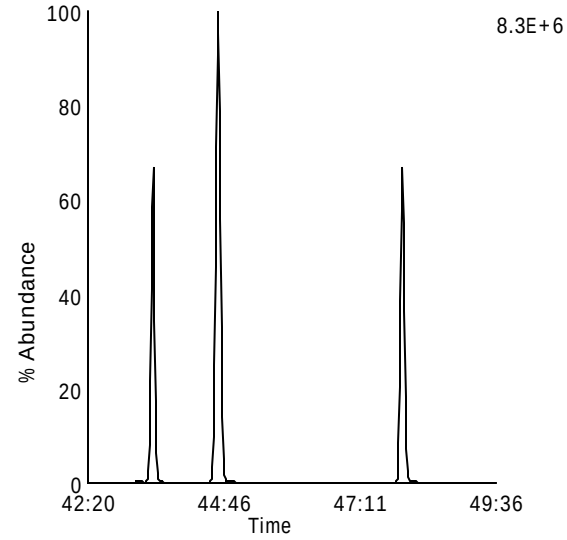
CAL CS4-20-123-027 - BAL 12/01/21



Labeled Hepta Chlorinated Biphenyls

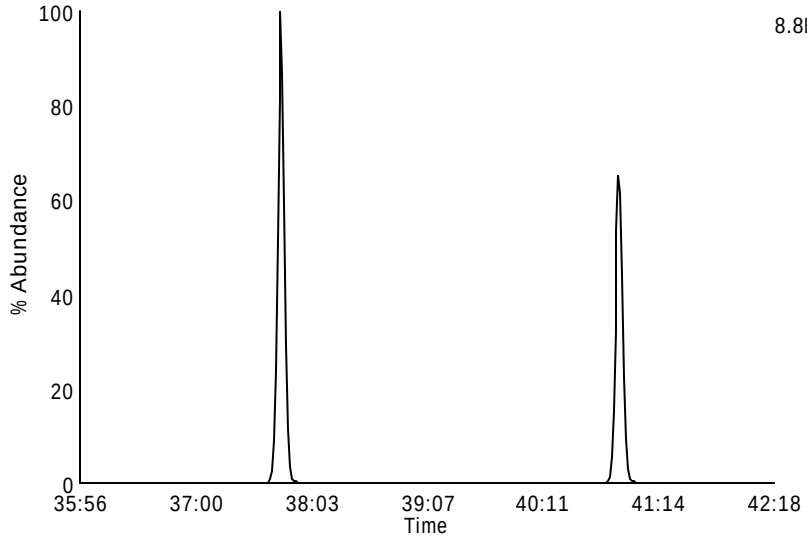
Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21

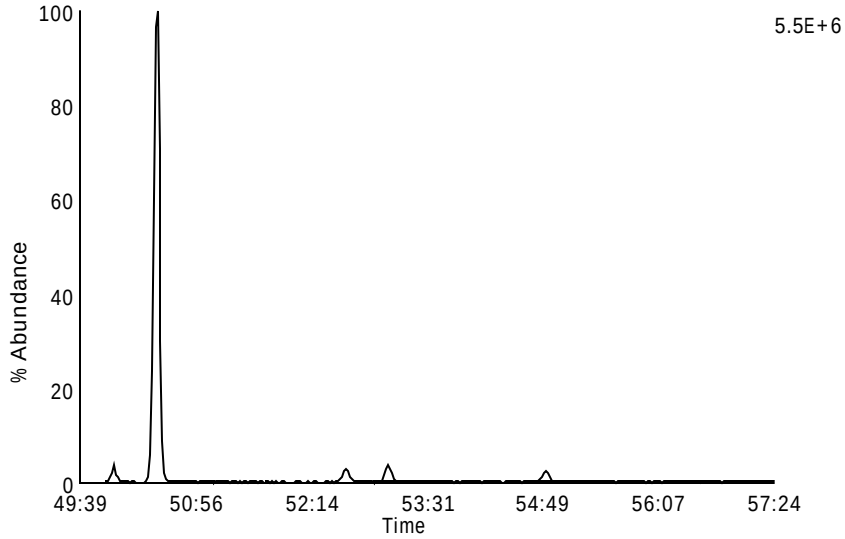
Data File: P210529C_05 G5 C13 - 405.8428

CAL CS4-20-123-027 - BAL 12/01/21



Data File: P210529C_05 G7 C3 - 405.8428

CAL CS4-20-123-027 - BAL 12/01/21



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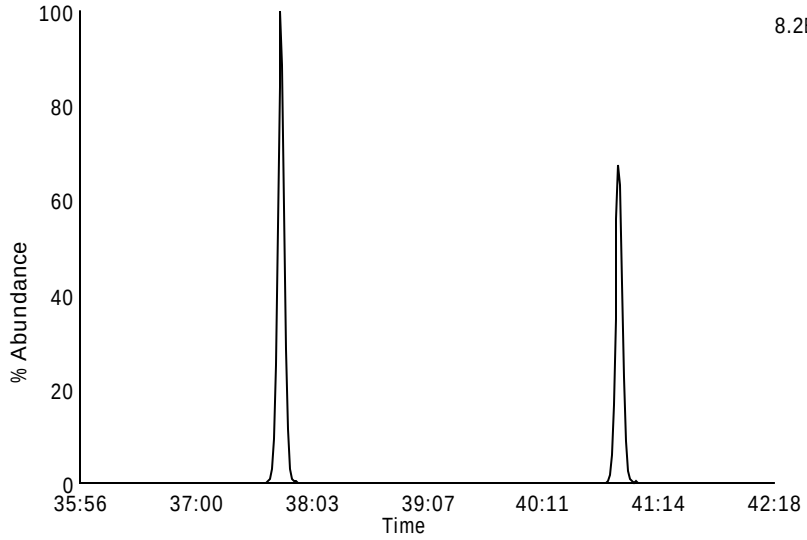
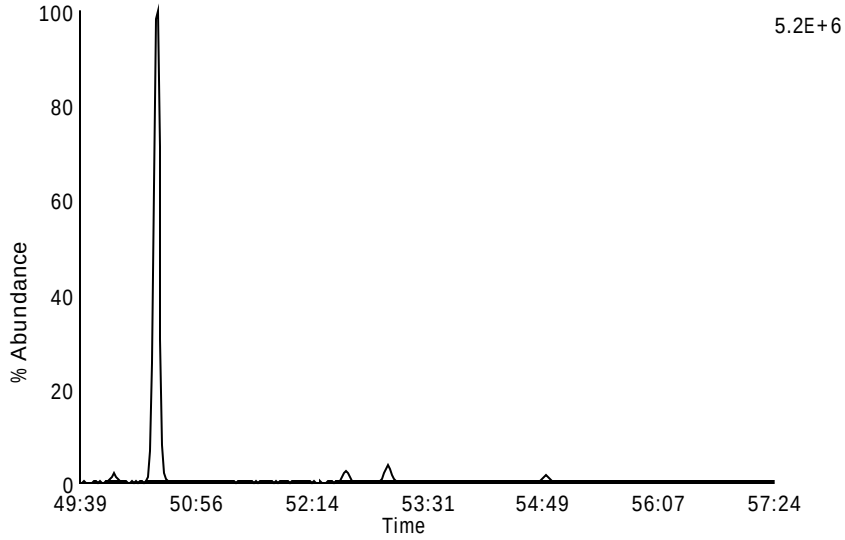
CAL CS4-20-123-027 - BAL 12/01/21



Data File: P210529C_05 G7 C4 - 407.8398

CAL CS4-20-123-027 - BAL 12/01/21

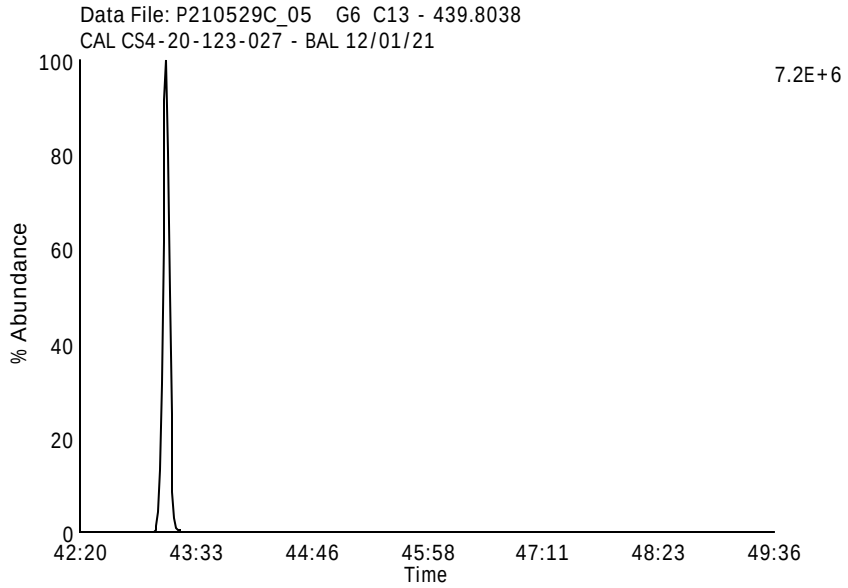


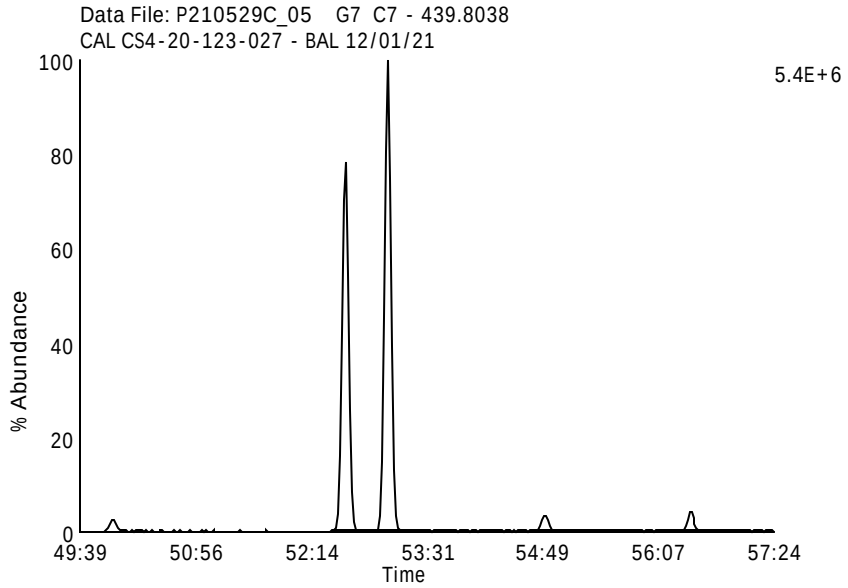
Labeled Octa Chlorinated Biphenyls

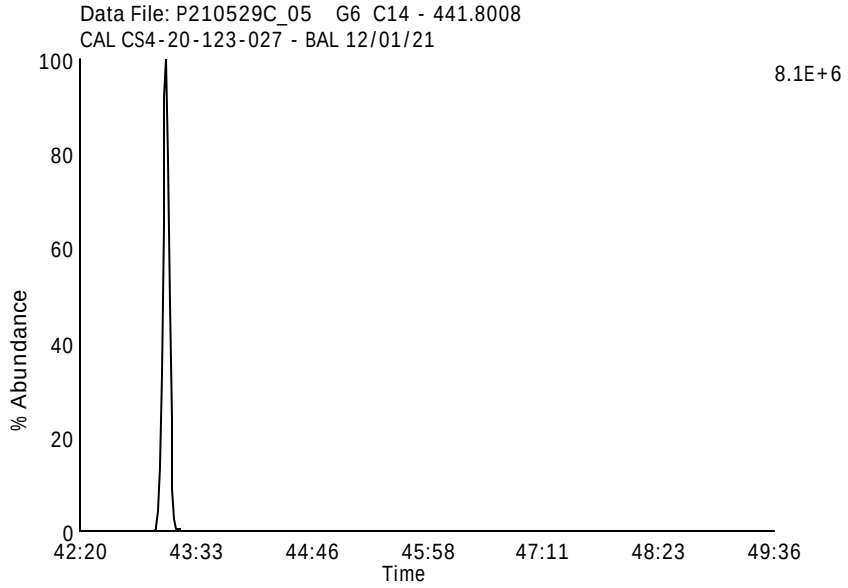
Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

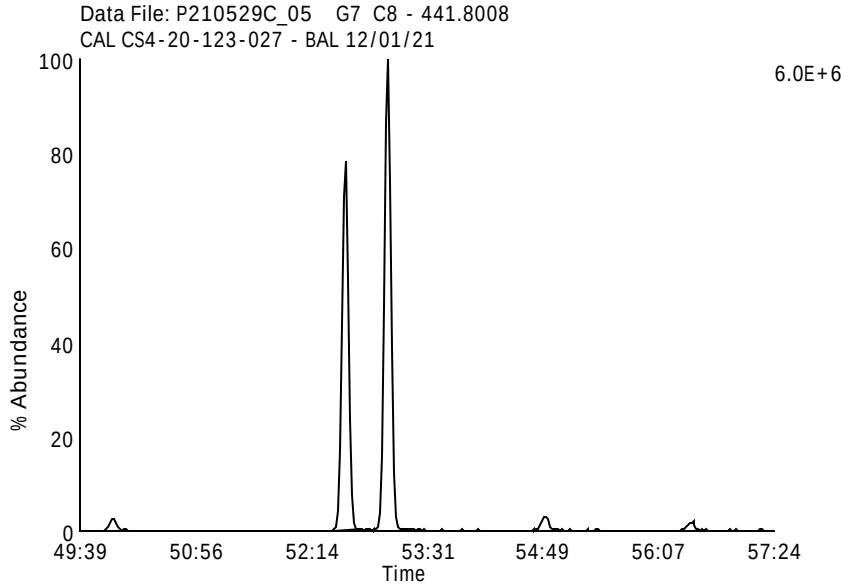
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21







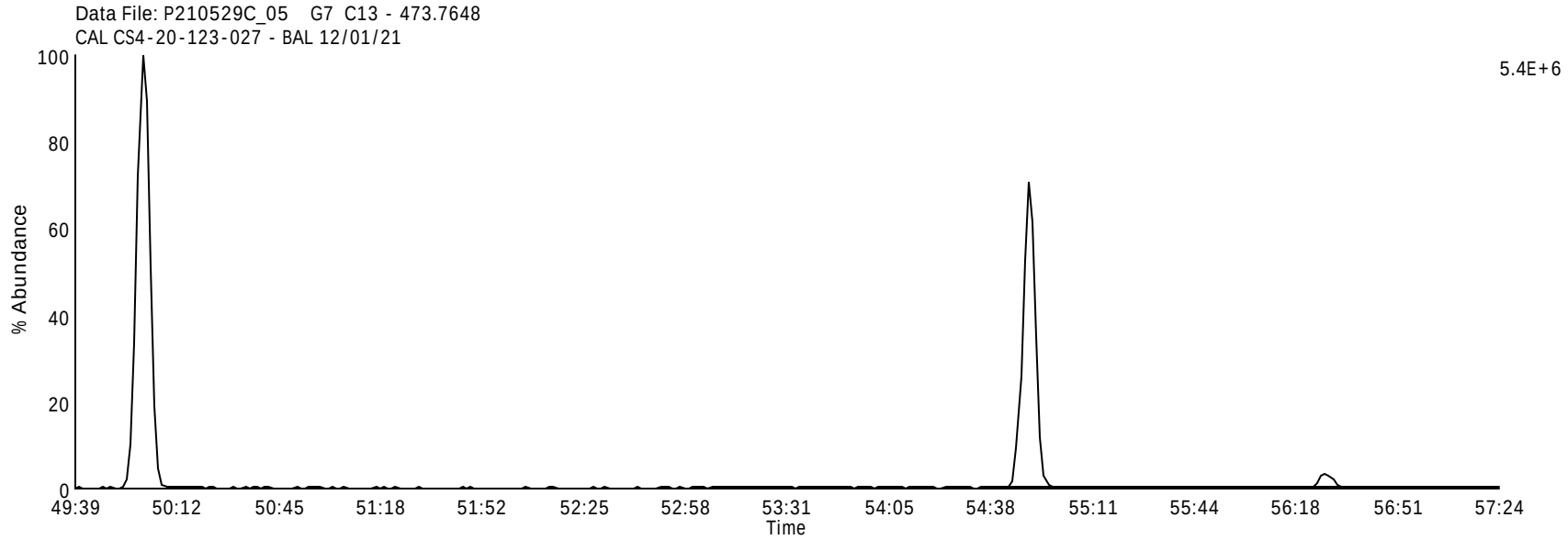


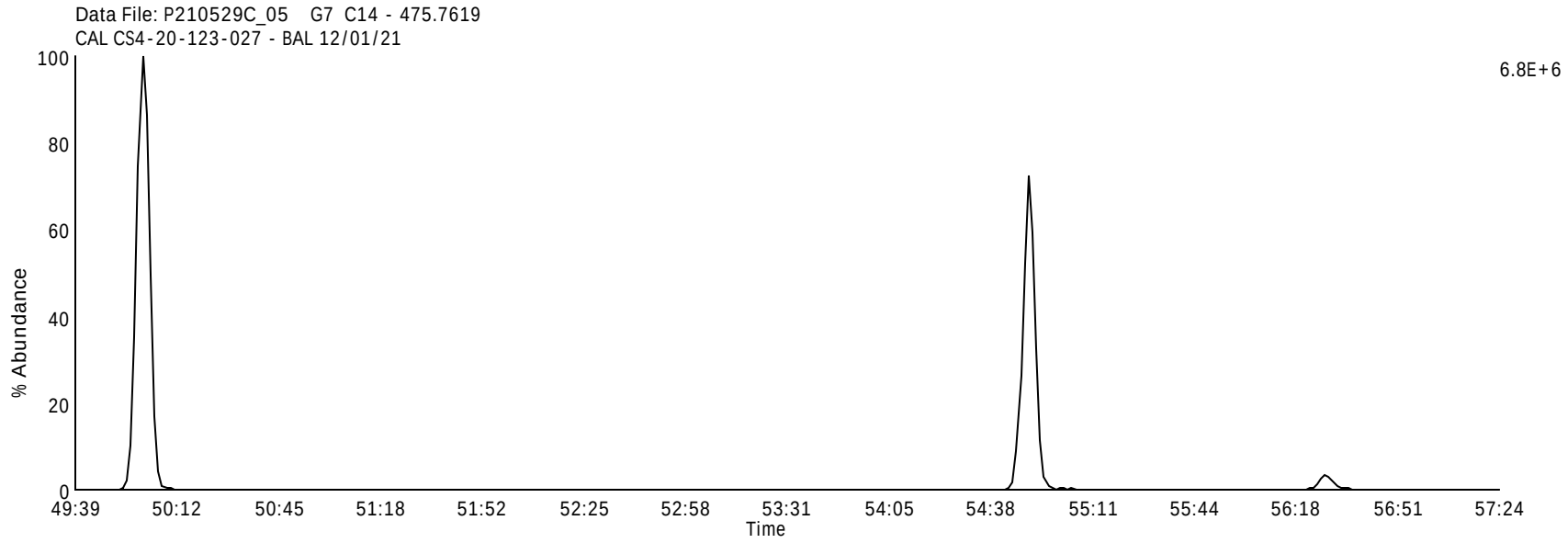
Labeled Nona Chlorinated Biphenyls

Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21



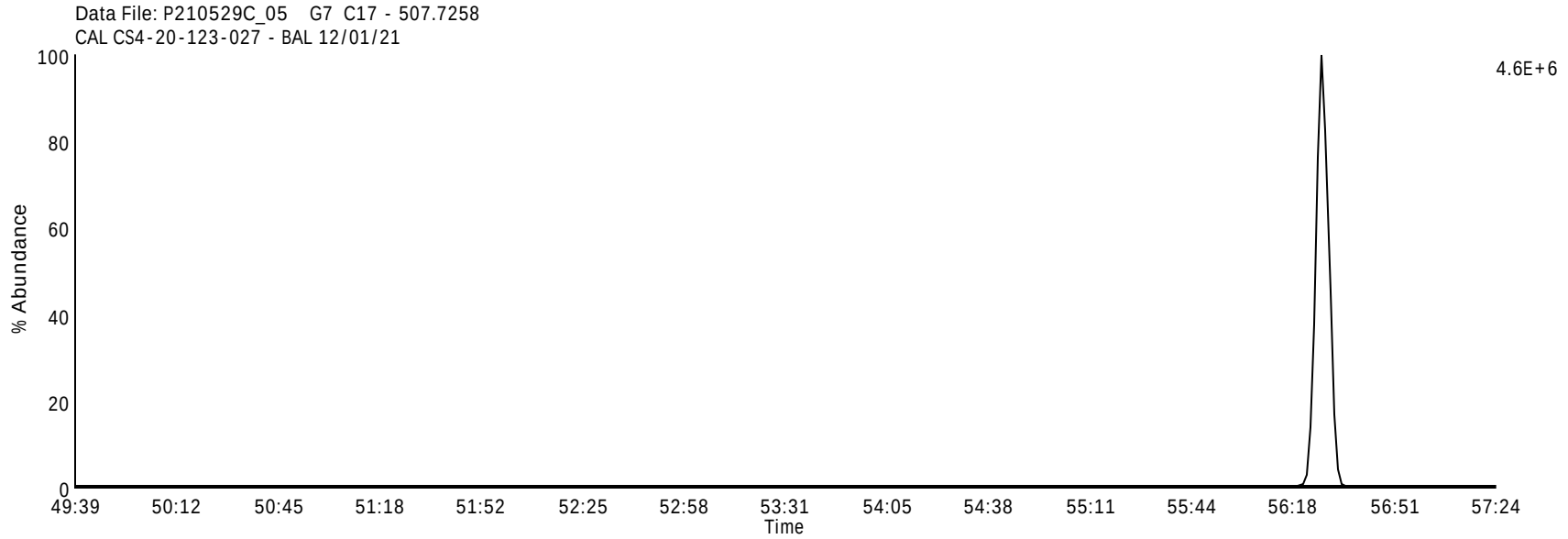


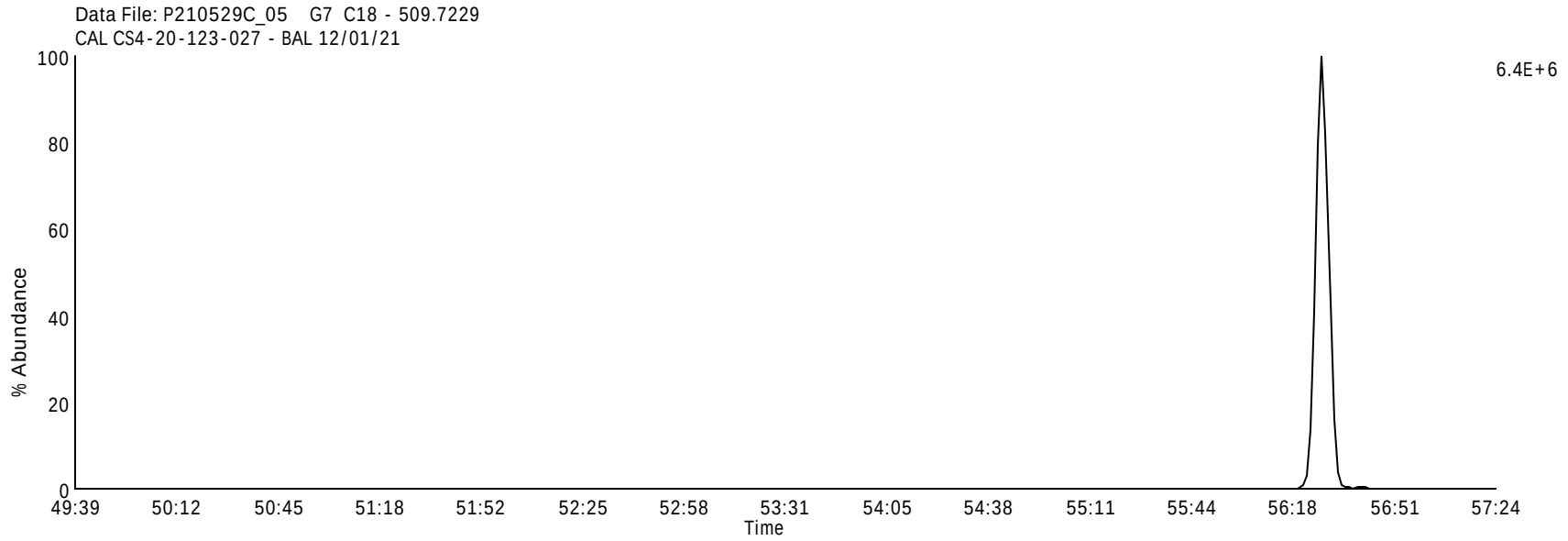
Labeled Deca Chlorinated Biphenyl

Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21



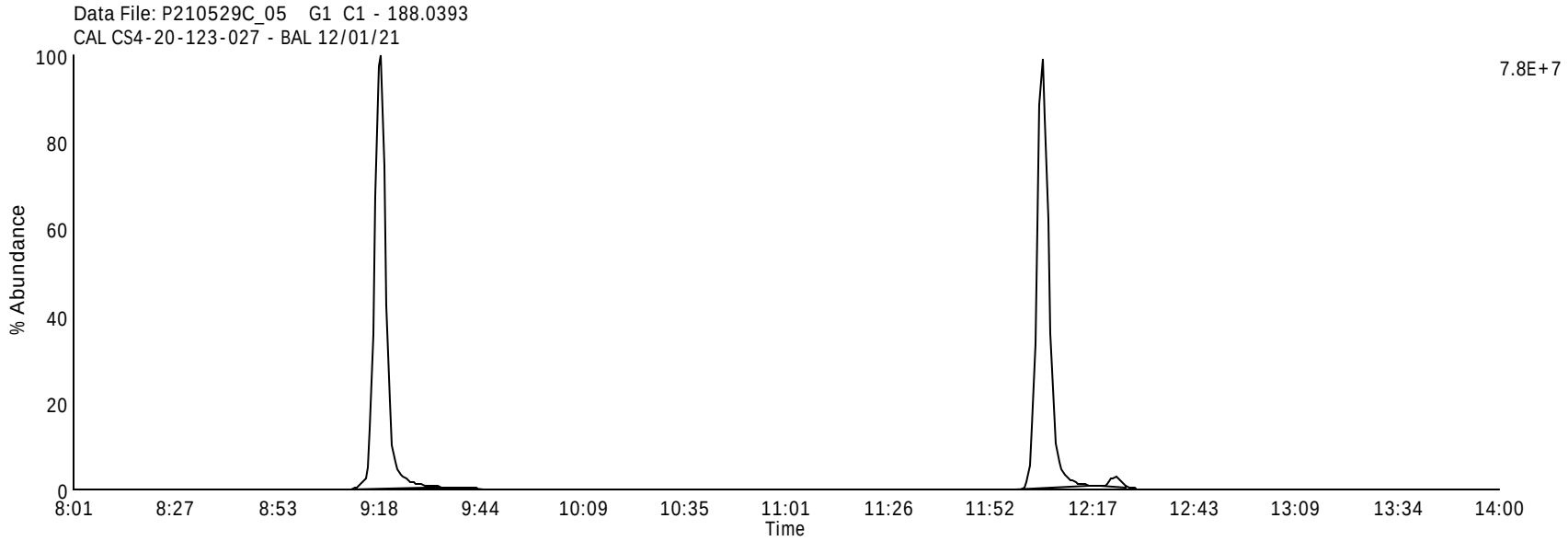


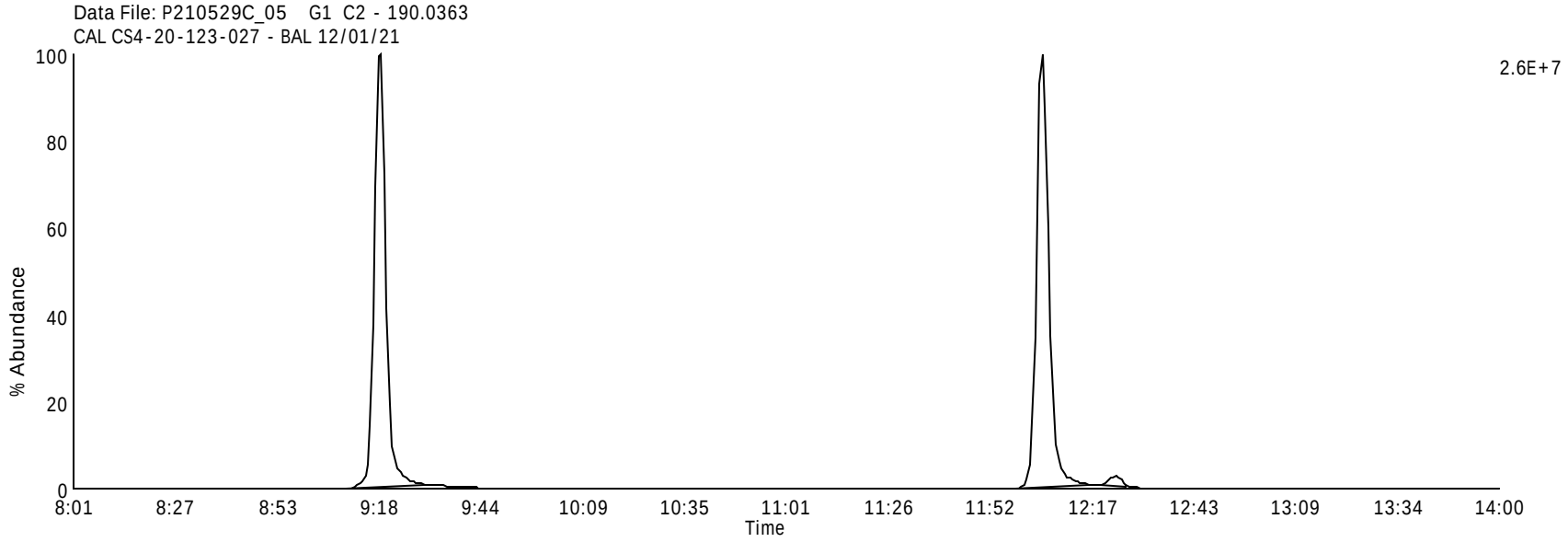
Mono Chlorinated Biphenyls

Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21





Di Chlorinated Biphenyls

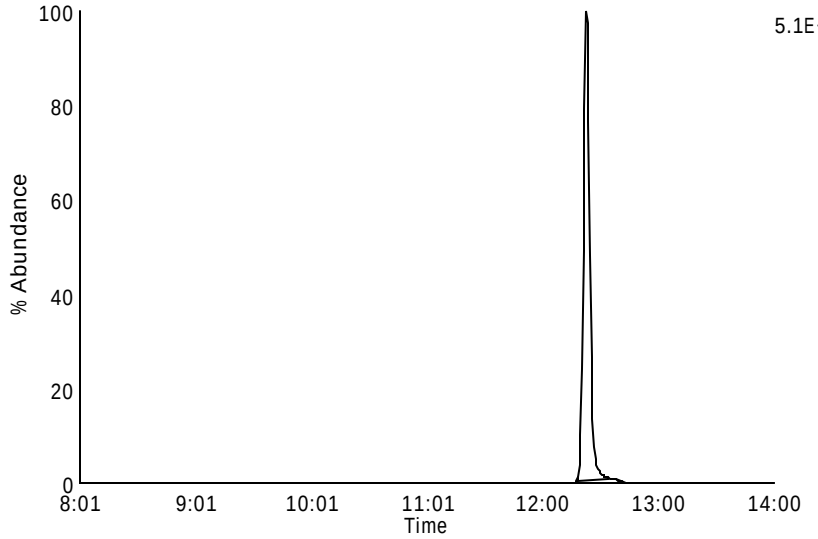
Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21

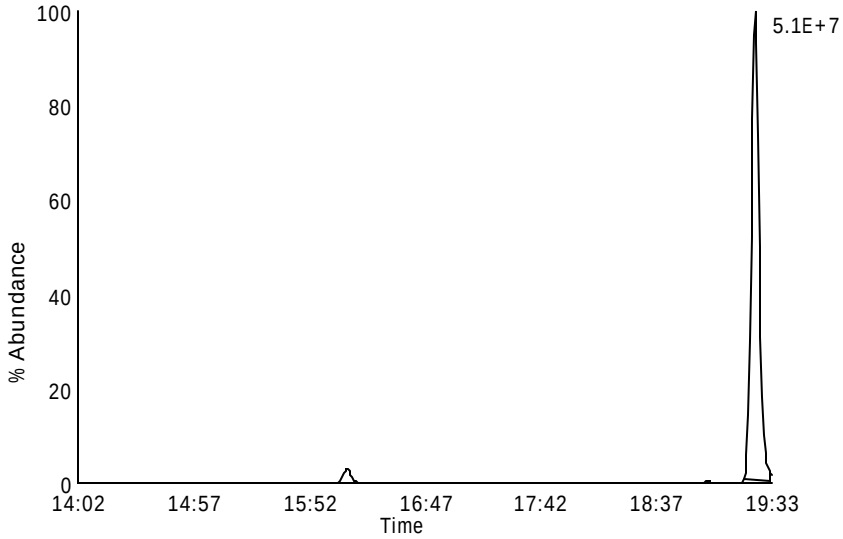
Data File: P210529C_05 G1 C7 - 222.0003

CAL CS4-20-123-027 - BAL 12/01/21



Data File: P210529C_05 G2 C1 - 222.0003

CAL CS4-20-123-027 - BAL 12/01/21



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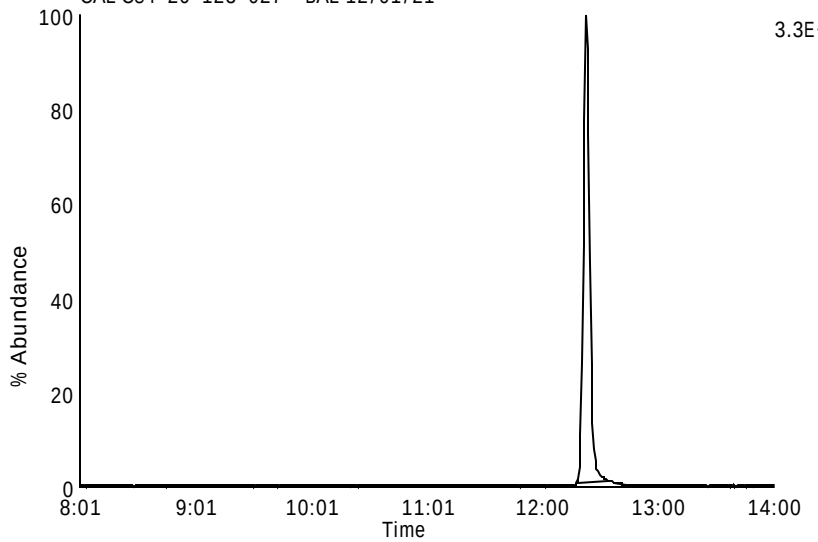
CAL CS4-20-123-027 - BAL 12/01/21



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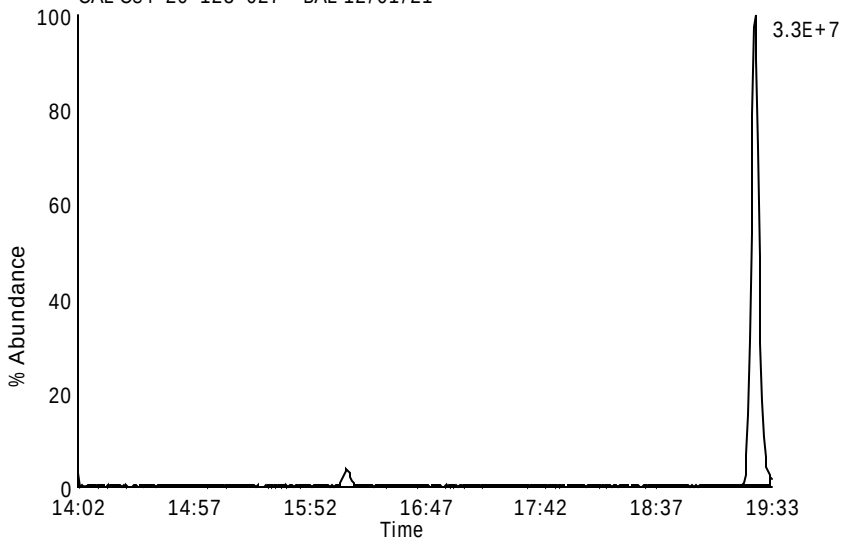
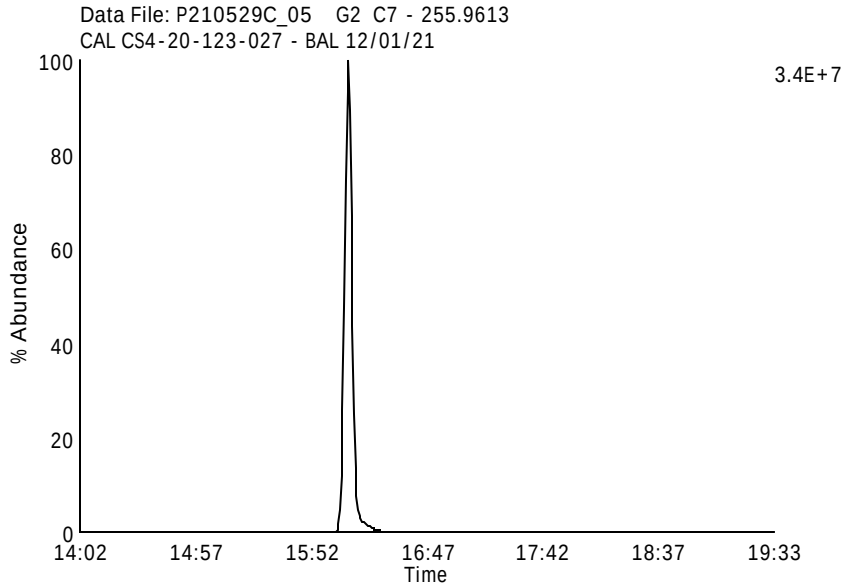
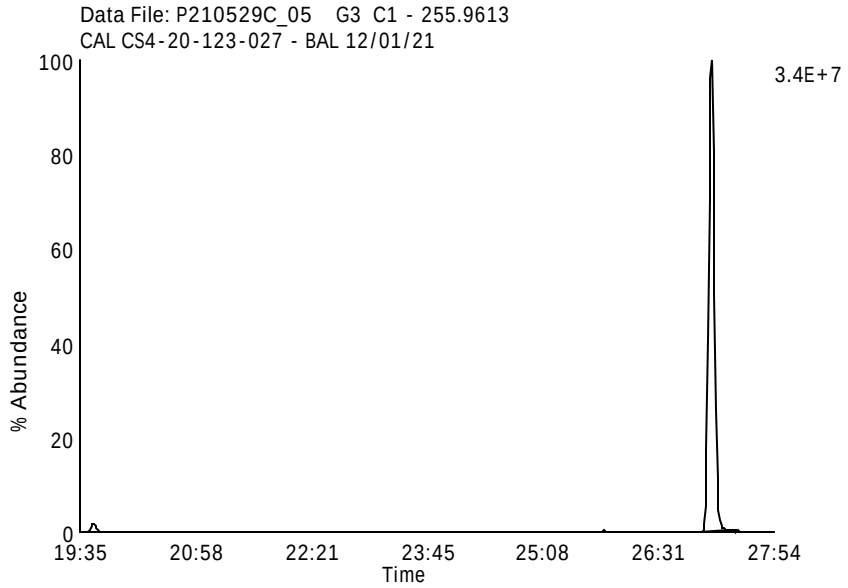
CAL CS4-20-123-027 - BAL 12/01/21

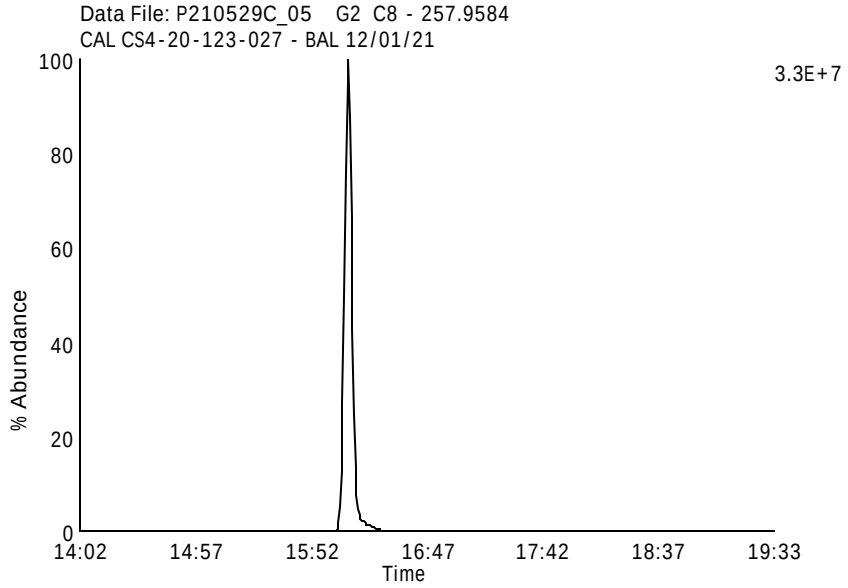


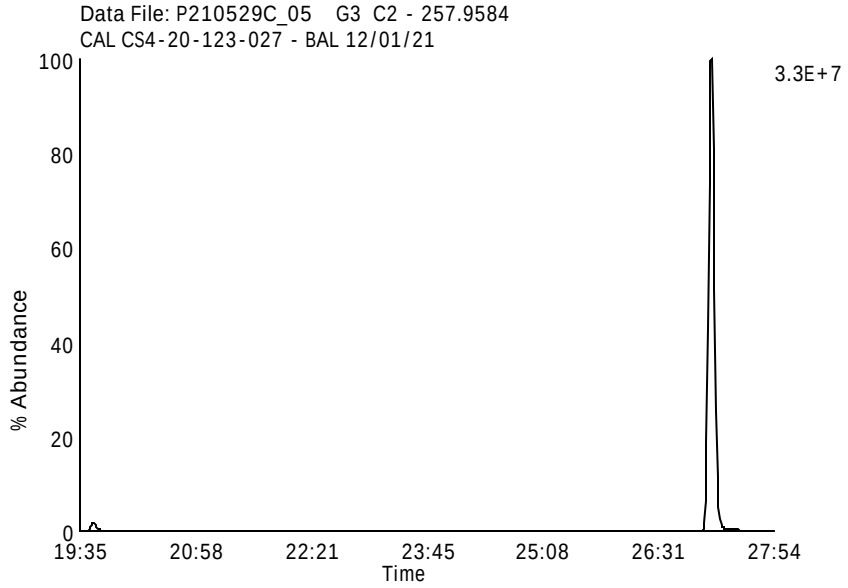
Tri Chlorinated Biphenyls

Data File Name: P210529C_05
Lab Sample ID: CS4-20-123-027
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS4-20-123-027 - BAL 12/01/21









Tetra Chlorinated Biphenyls

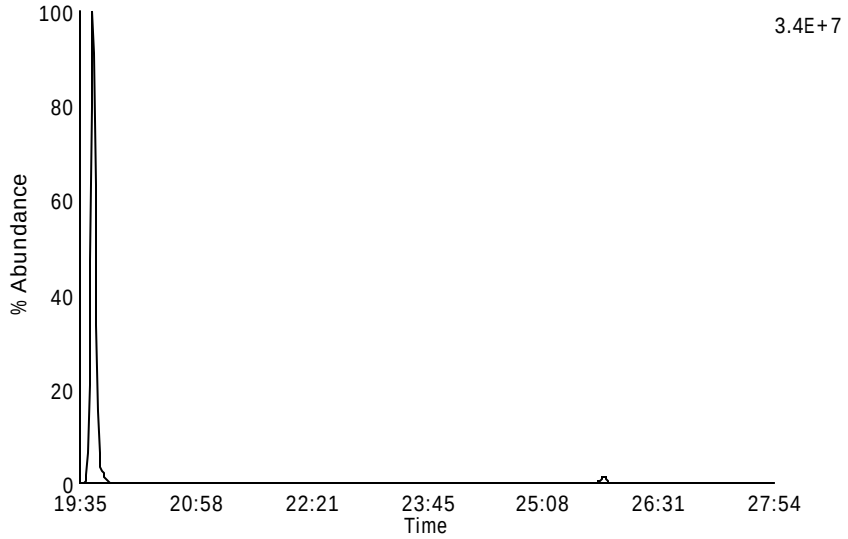
Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21

Data File: P210529C_05 G3 C7 - 289.9224

CAL CS4-20-123-027 - BAL 12/01/21



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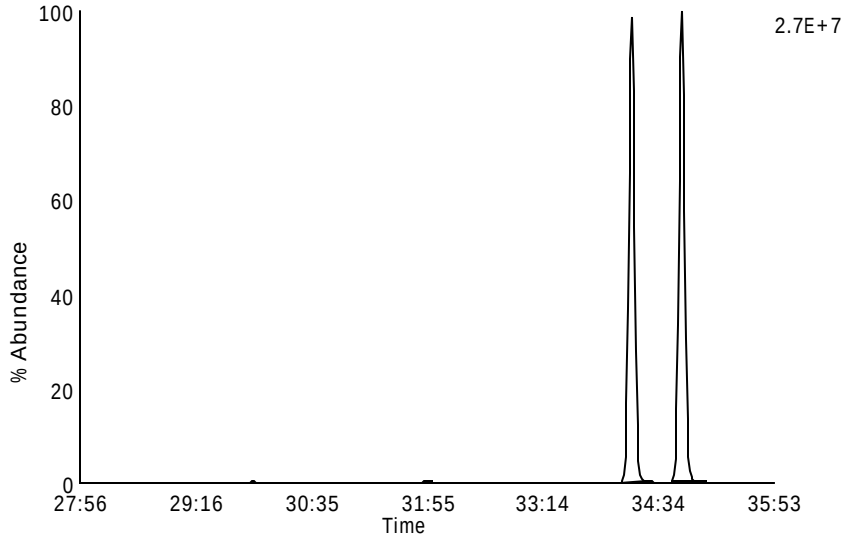
CAL CS4-20-123-027 - BAL 12/01/21



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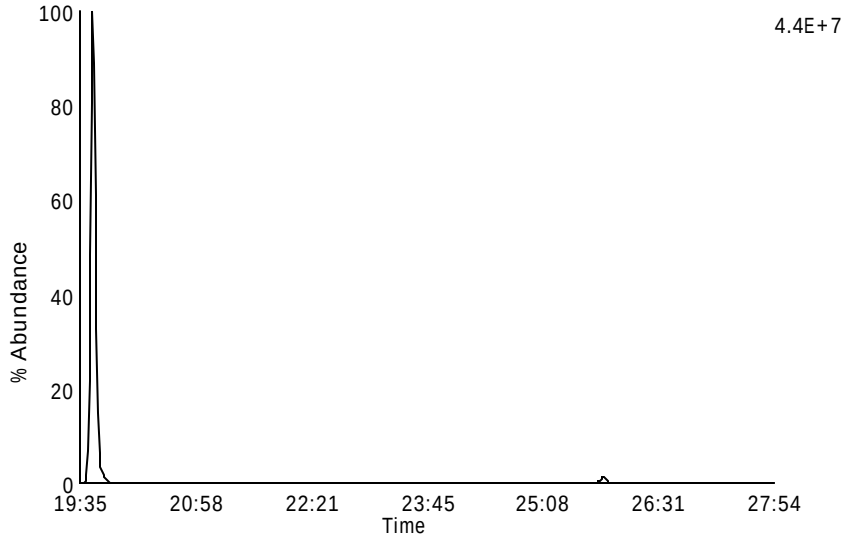
CAL CS4-20-123-027 - BAL 12/01/21



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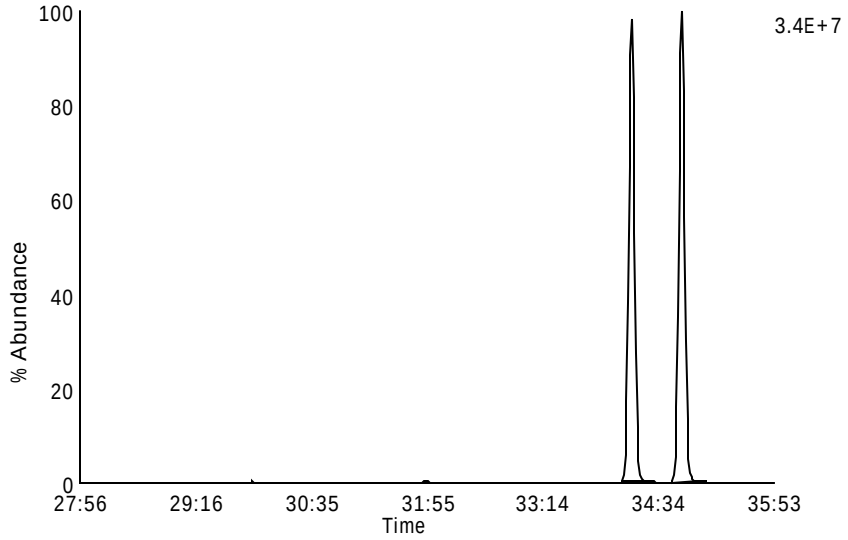
CAL CS4-20-123-027 - BAL 12/01/21

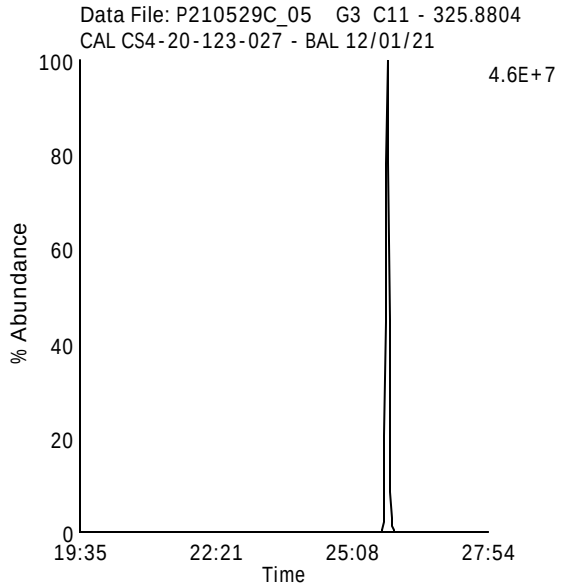


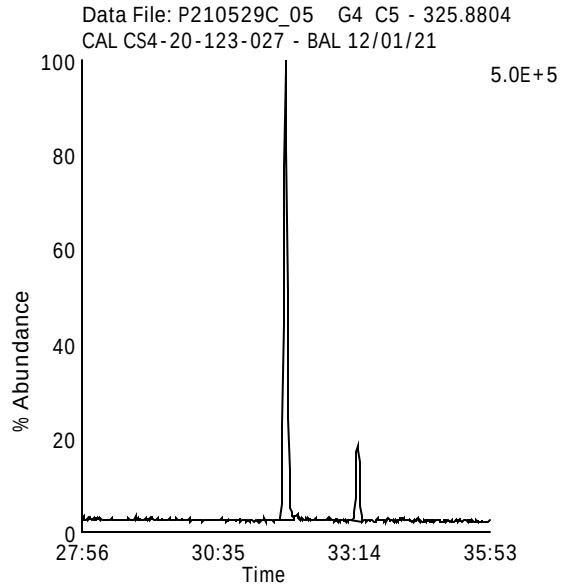
Penta Chlorinated Biphenyls

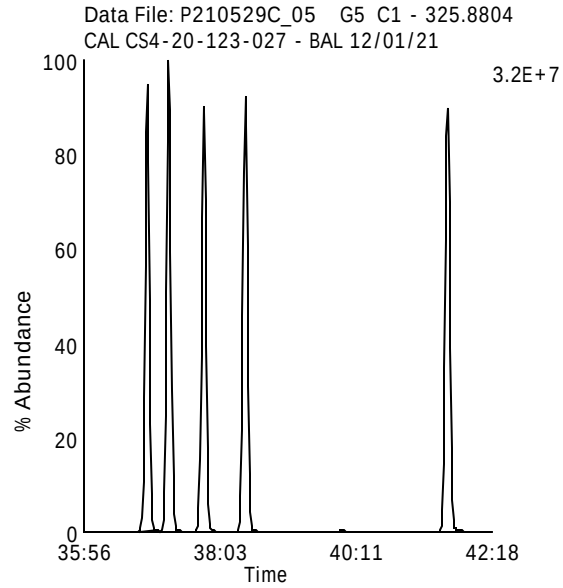
Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

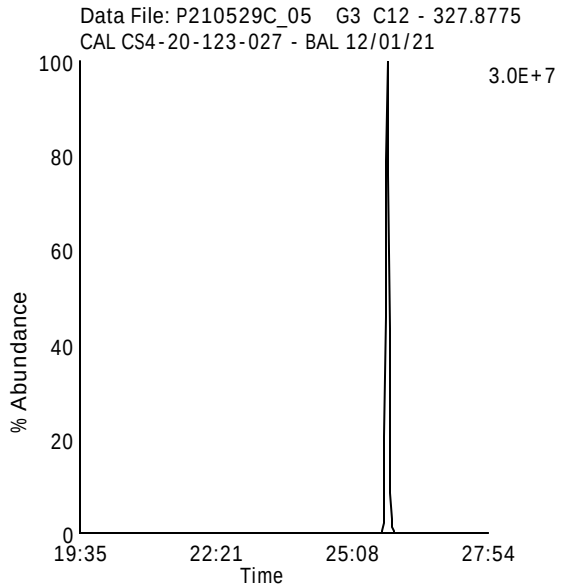
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

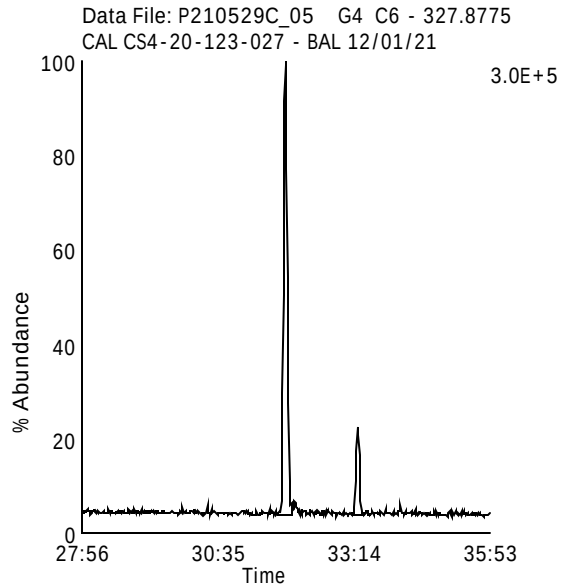
Sample Description: CAL CS4-20-123-027 - BAL 12/01/21

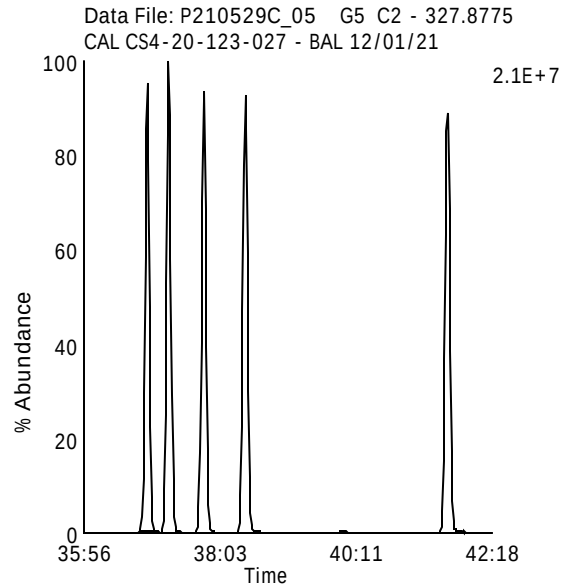












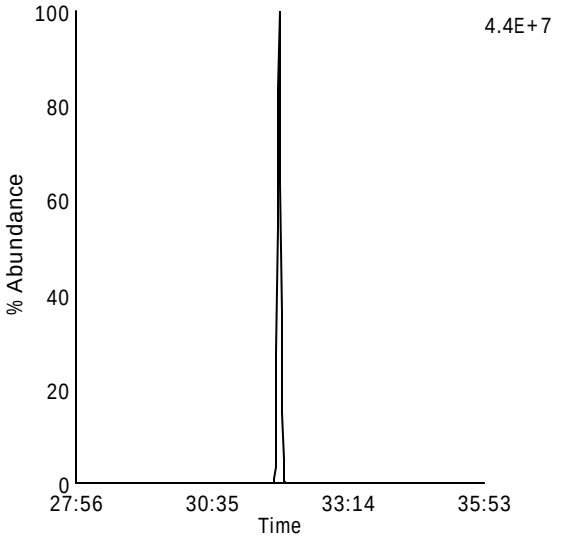
Hexa Chlorinated Biphenyls

Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21

Data File: P210529C_05 G4 C11 - 359.8415
CAL CS4-20-123-027 - BAL 12/01/21



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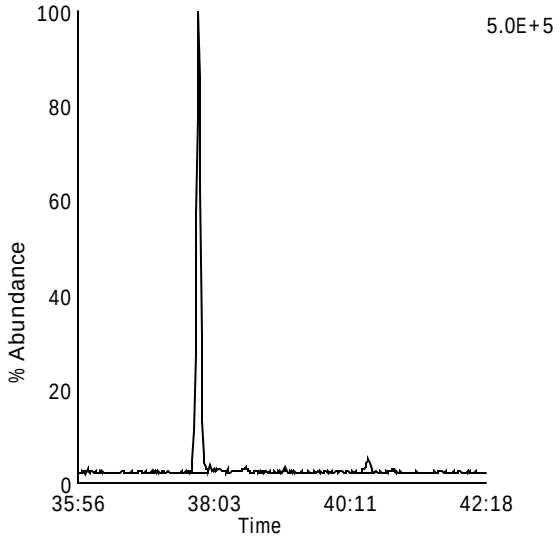
CAL CS4-20-123-027 - BAL 12/01/21



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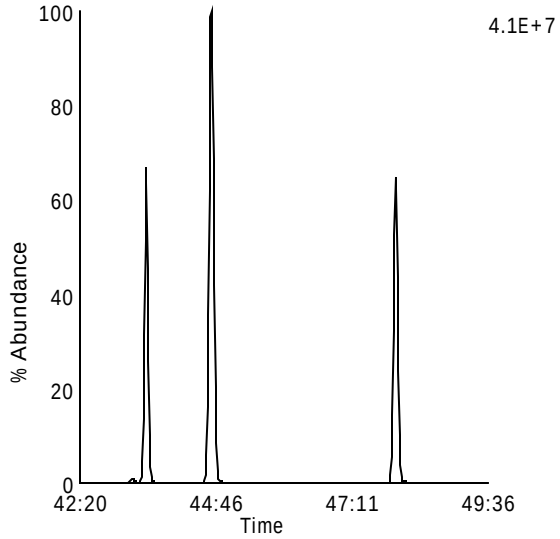
CAL CS4-20-123-027 - BAL 12/01/21



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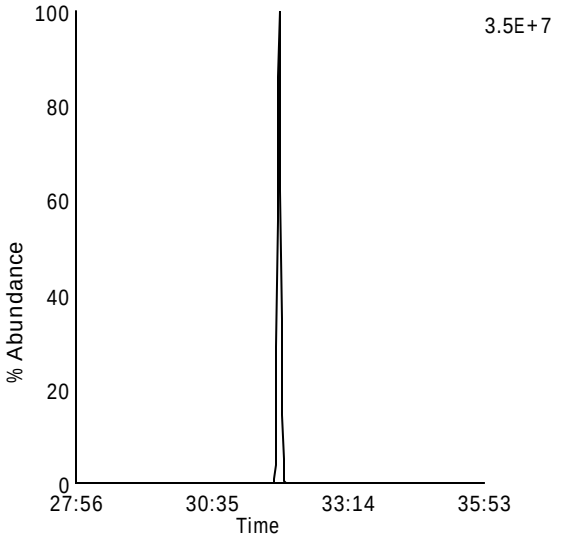
CAL CS4-20-123-027 - BAL 12/01/21



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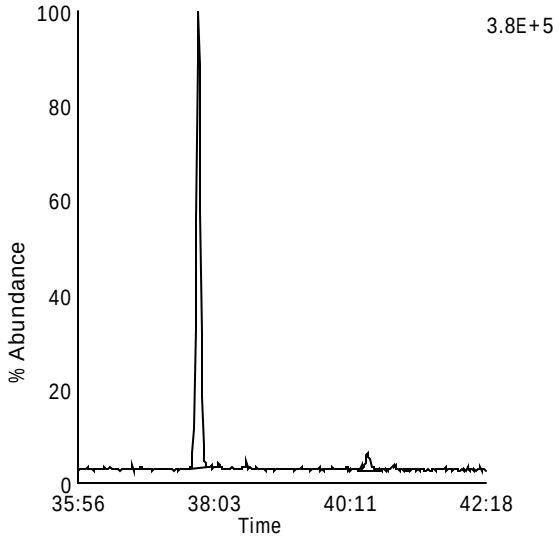
CAL CS4-20-123-027 - BAL 12/01/21



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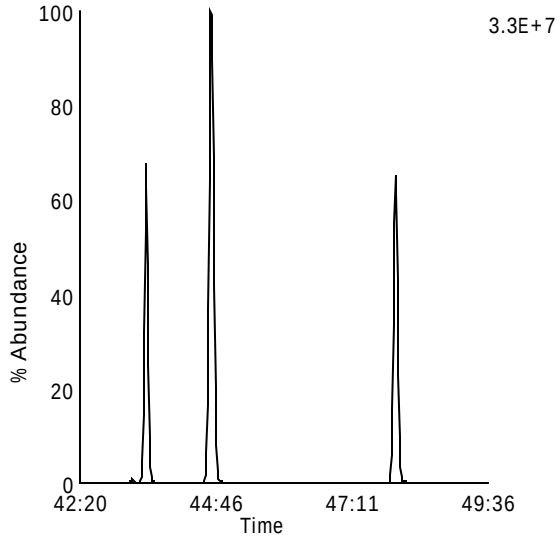
CAL CS4-20-123-027 - BAL 12/01/21



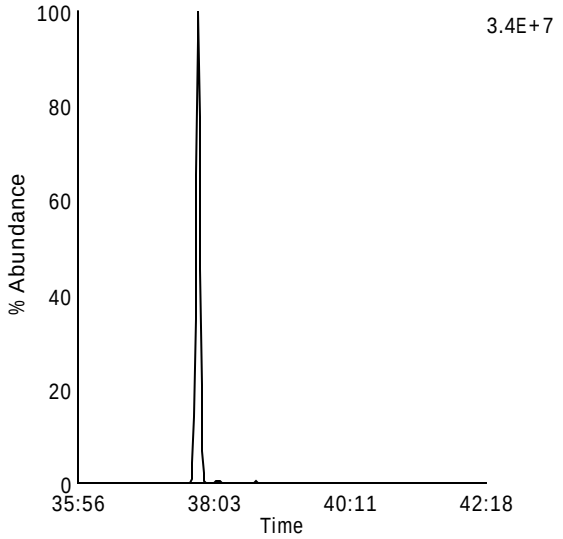
Hepta Chlorinated Biphenyls

Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21

Data File: P210529C_05 G5 C11 - 393.8025
CAL CS4-20-123-027 - BAL 12/01/21



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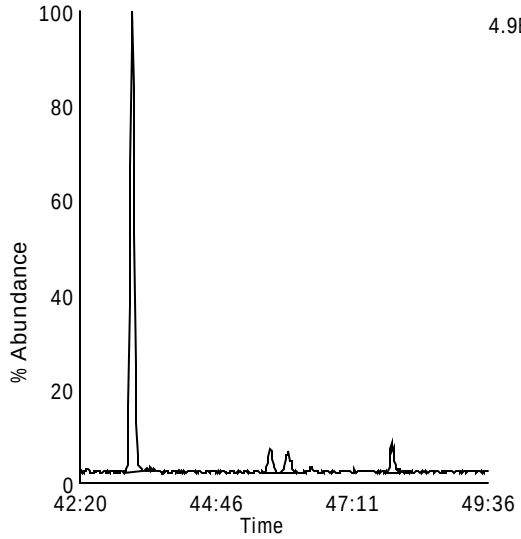
CAL CS4-20-123-027 - BAL 12/01/21



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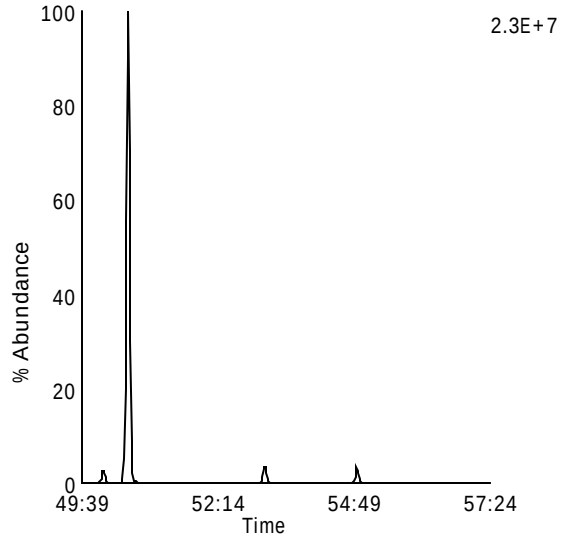
CAL CS4-20-123-027 - BAL 12/01/21



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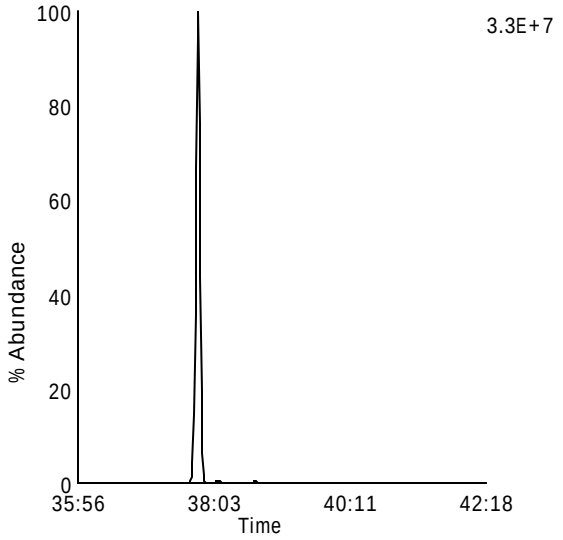
CAL CS4-20-123-027 - BAL 12/01/21



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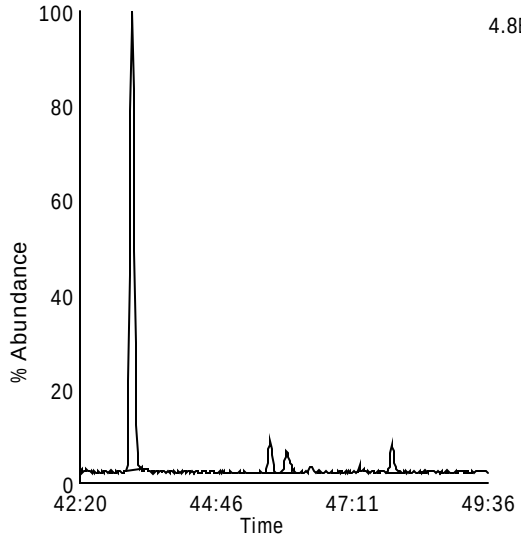
CAL CS4-20-123-027 - BAL 12/01/21



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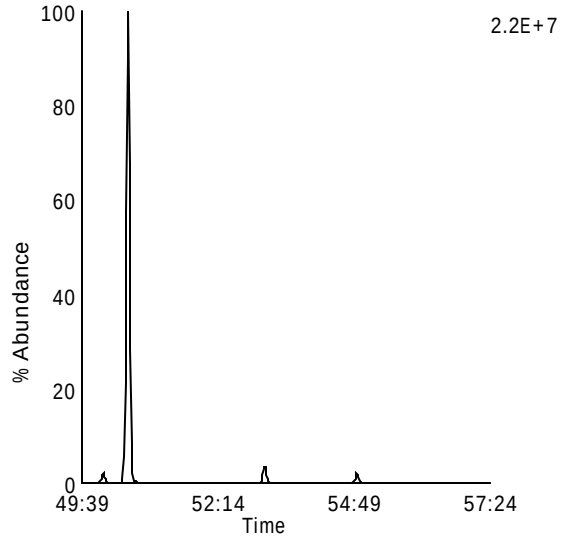
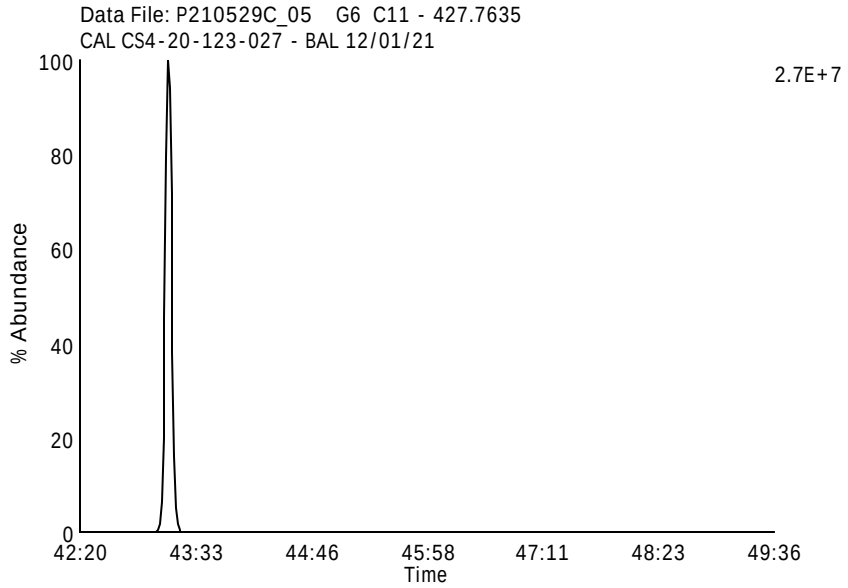
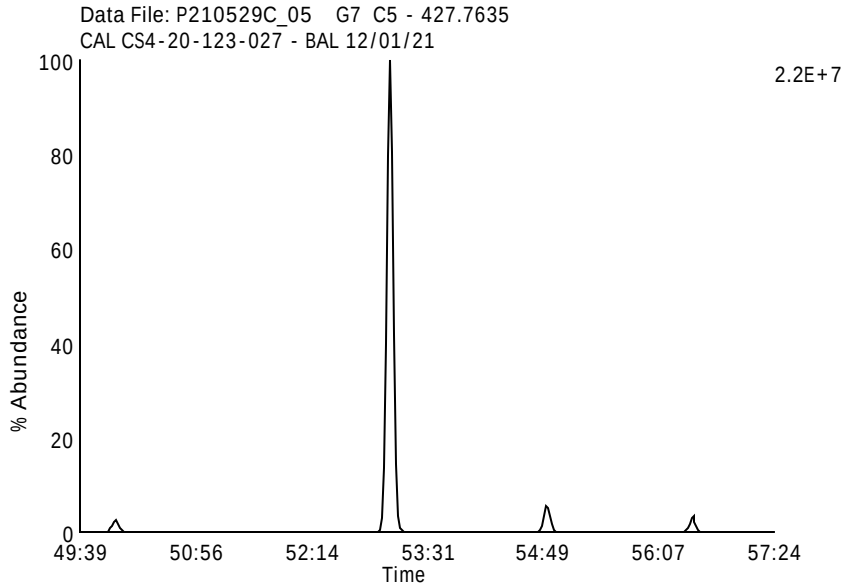
CAL CS4-20-123-027 - BAL 12/01/21

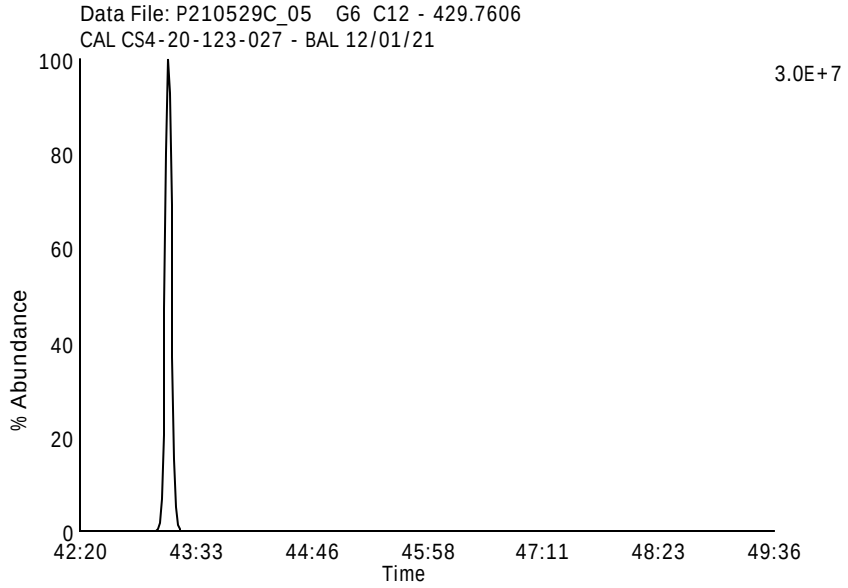


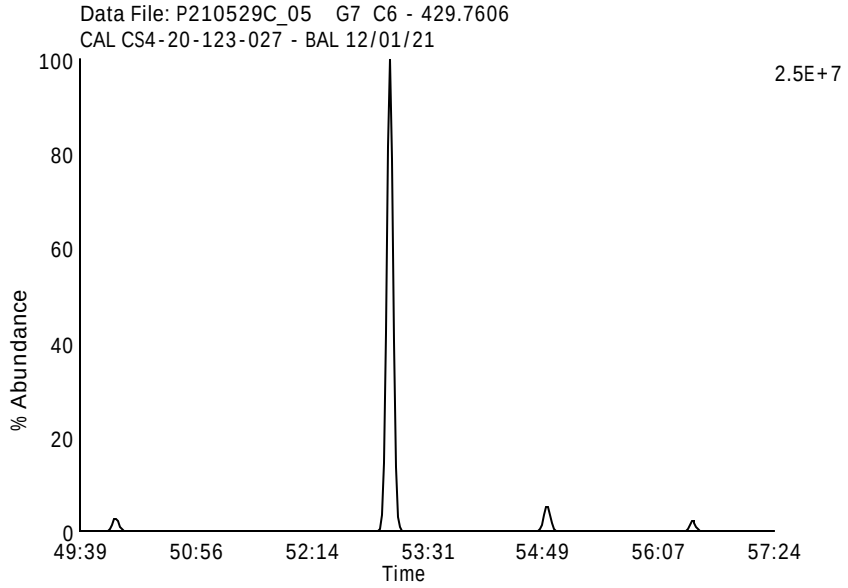
Octa Chlorinated Biphenyls

Data File Name: P210529C_05
Lab Sample ID: CS4-20-123-027
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS4-20-123-027 - BAL 12/01/21







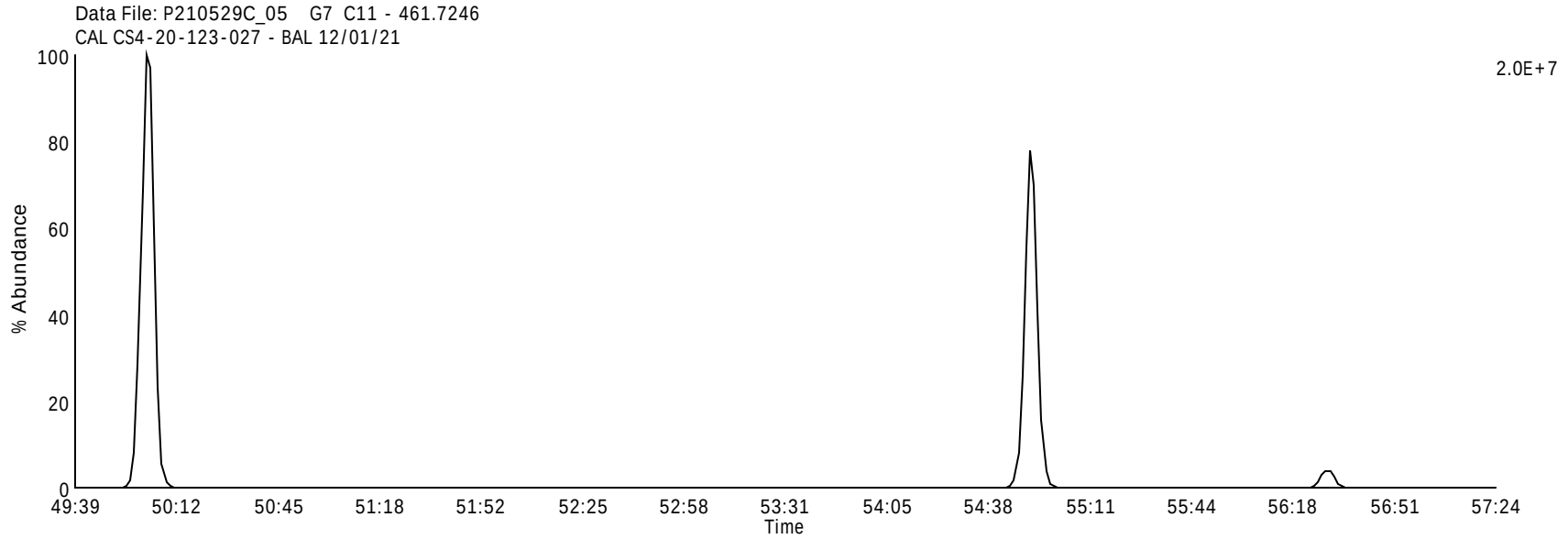


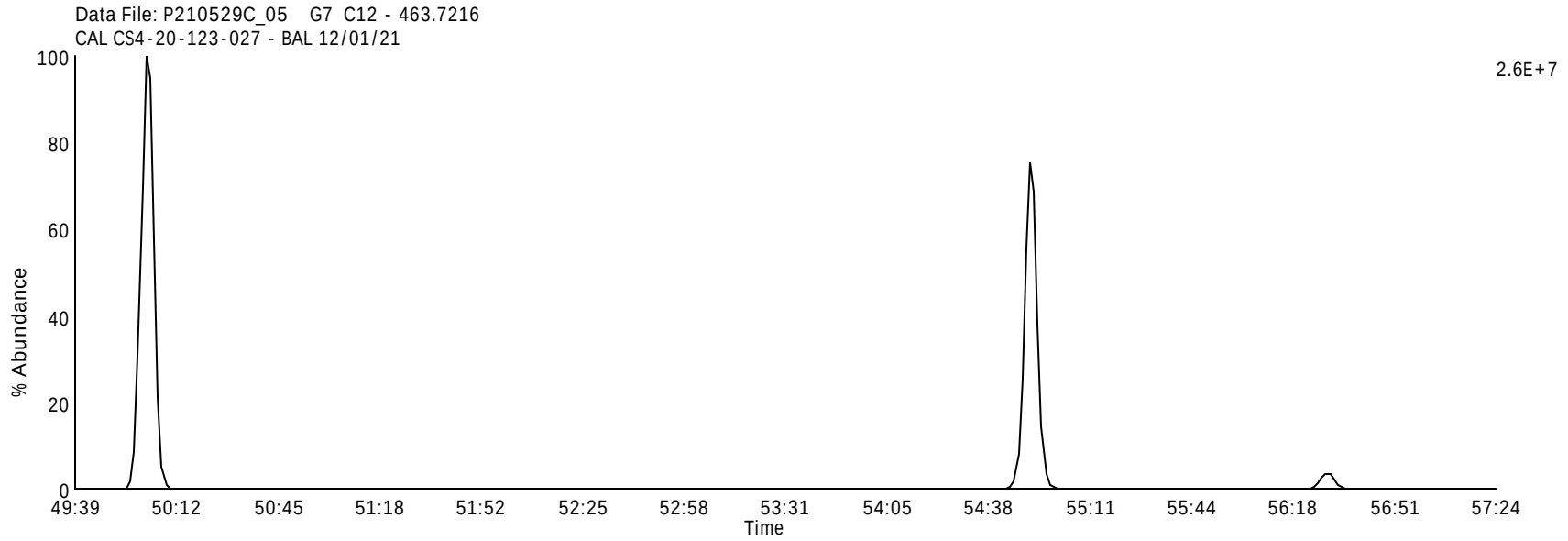
Nona Chlorinated Biphenyls

Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS4-20-123-027 - BAL 12/01/21



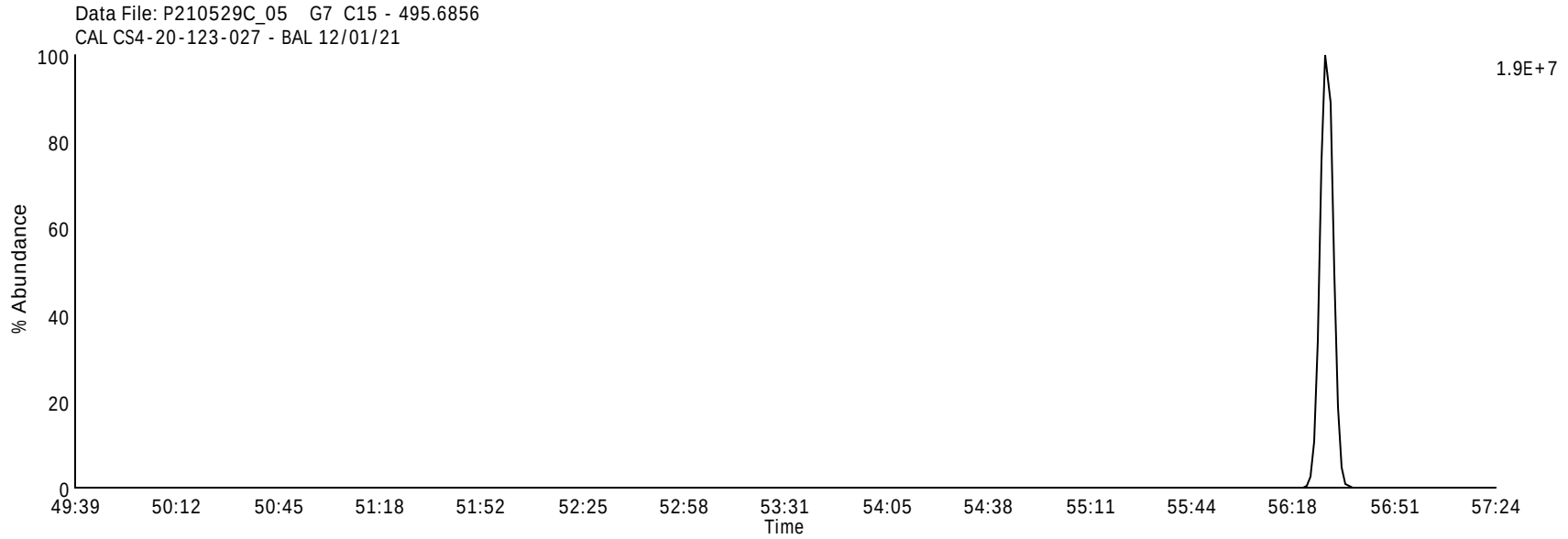


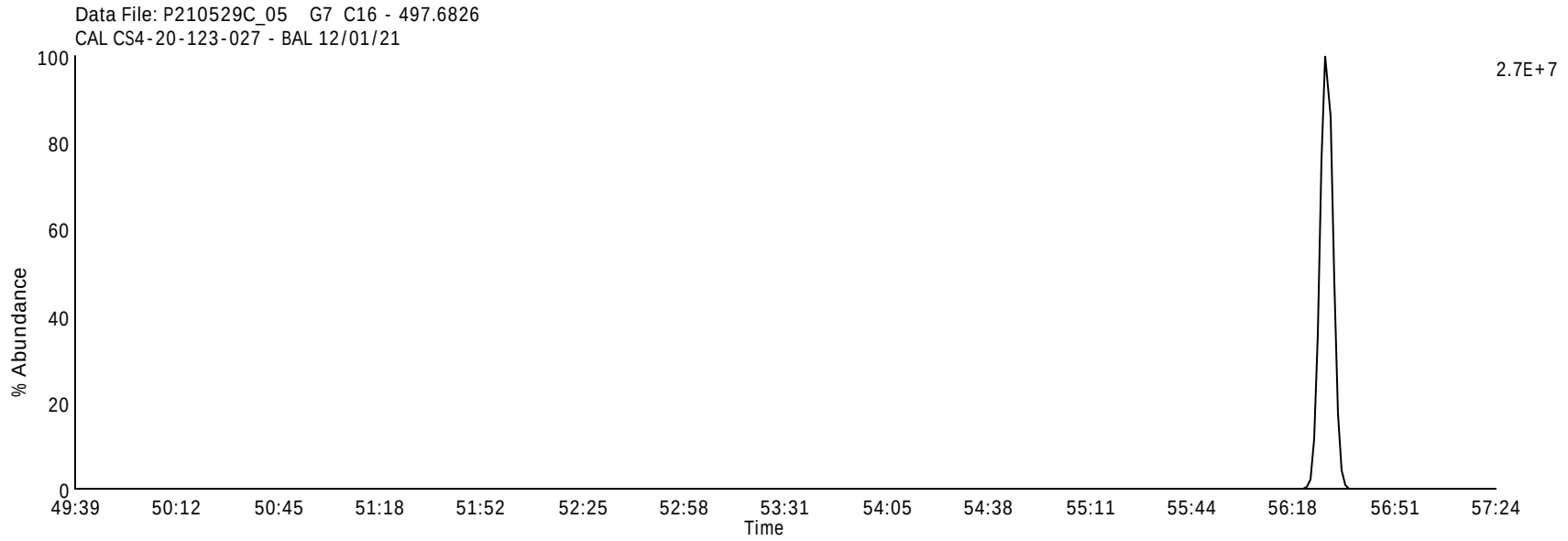
Deca Chlorinated Biphenyl

Data File Name: P210529C_05 Lab Sample ID: CS4-20-123-027

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

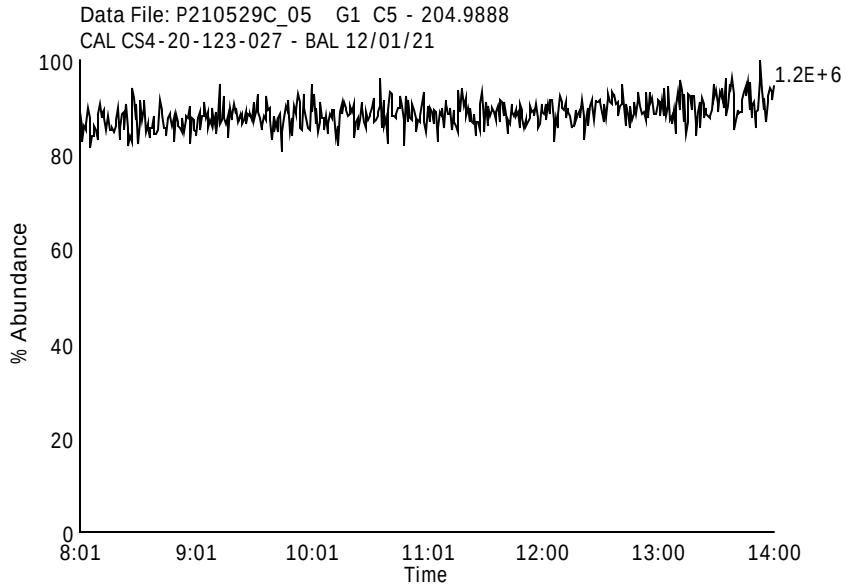
Sample Description: CAL CS4-20-123-027 - BAL 12/01/21

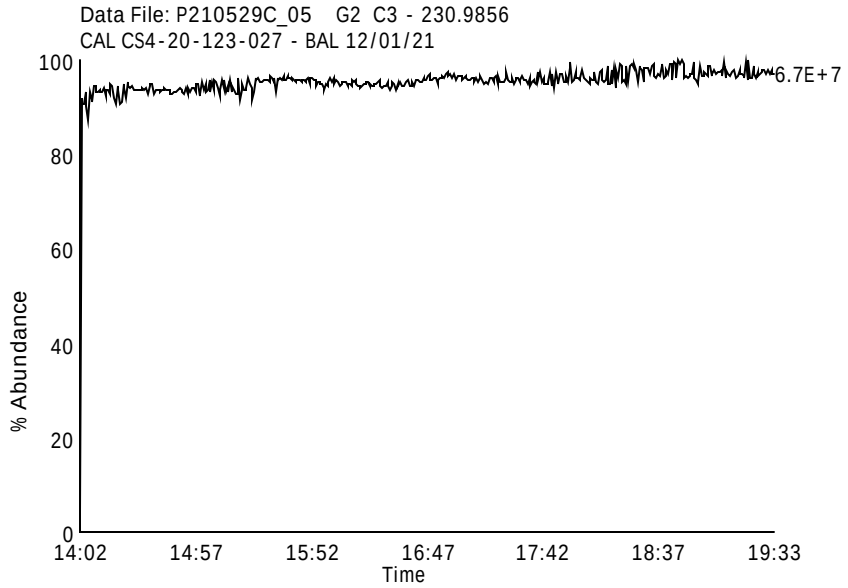


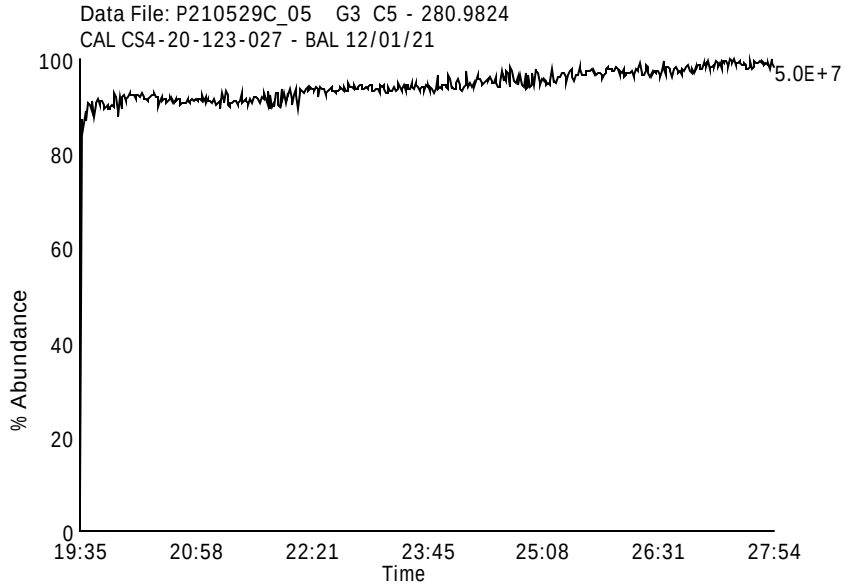


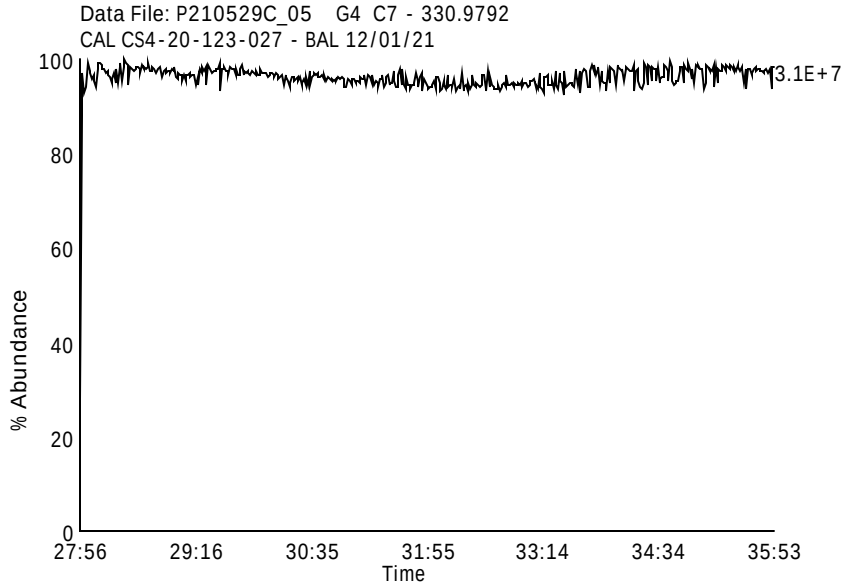
Group 1 - 4 Lock mass

Data File Name: P210529C_05
Lab Sample ID: CS4-20-123-027
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS4-20-123-027 - BAL 12/01/21



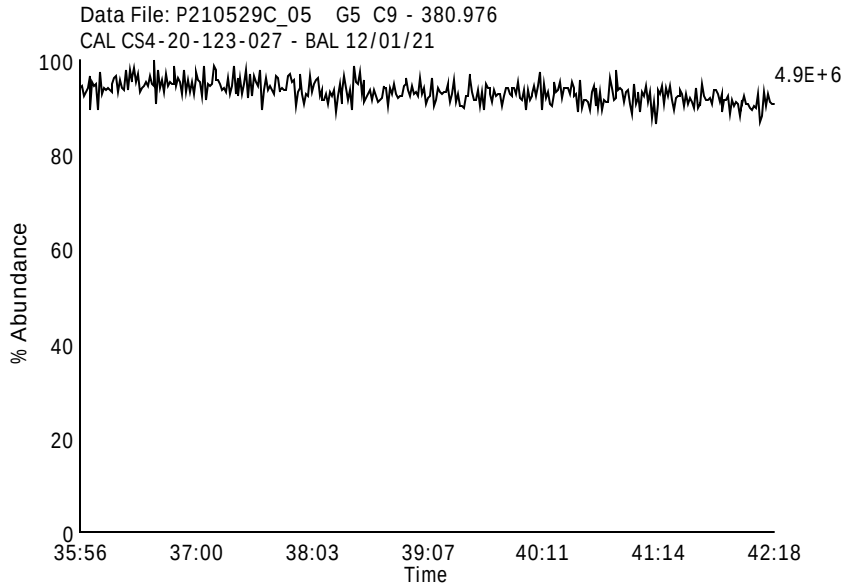


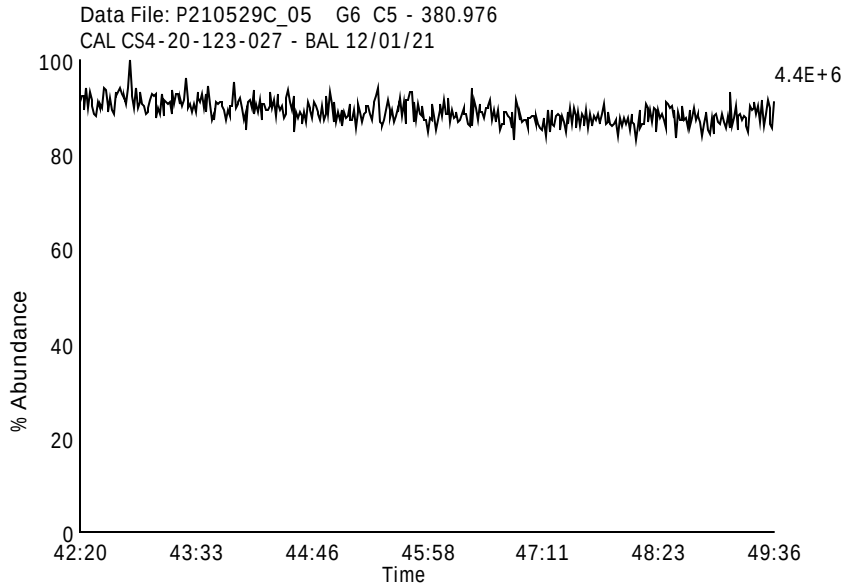


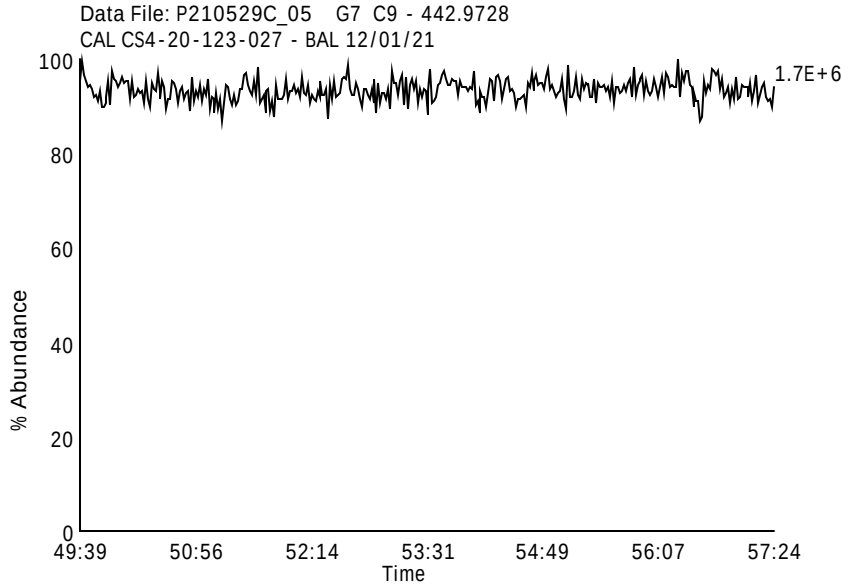


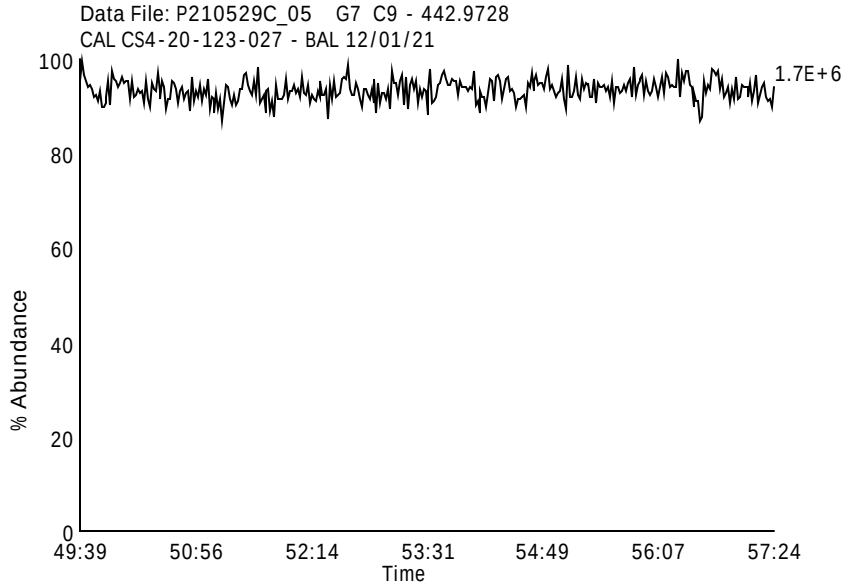
Group 5 - 7 Lock mass

Data File Name: P210529C_05
Lab Sample ID: CS4-20-123-027
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS4-20-123-027 - BAL 12/01/21







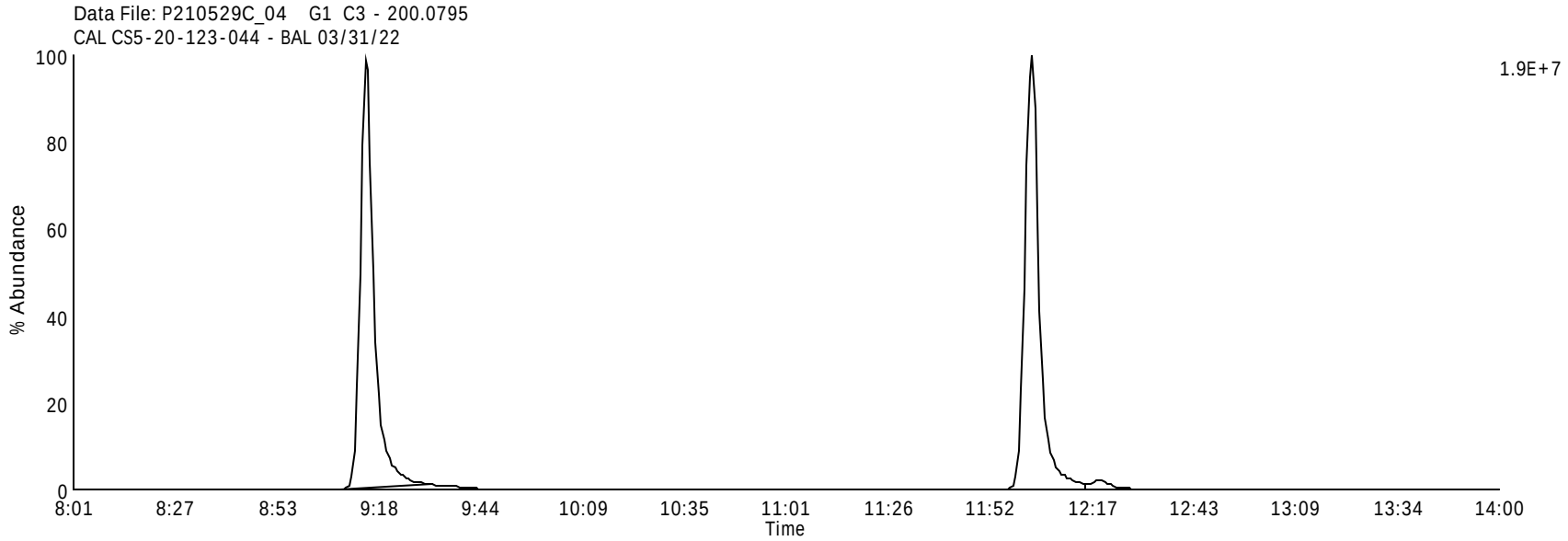


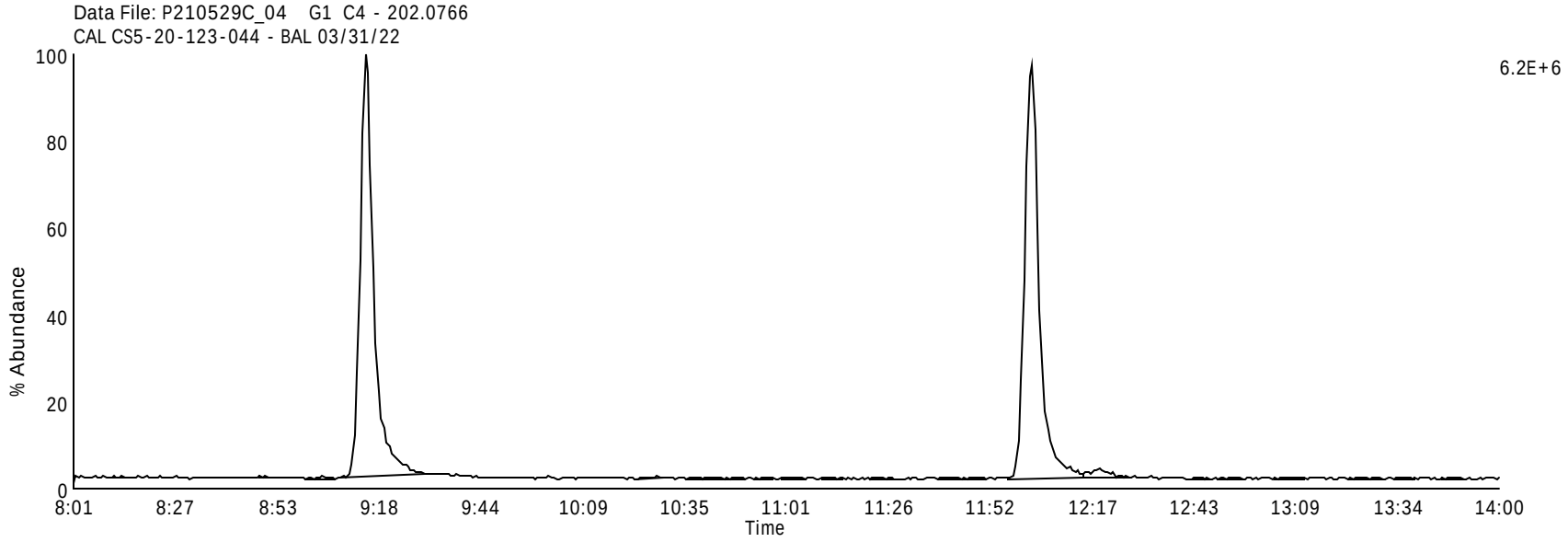
Labeled Mono Chlorinated Biphenyls

Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

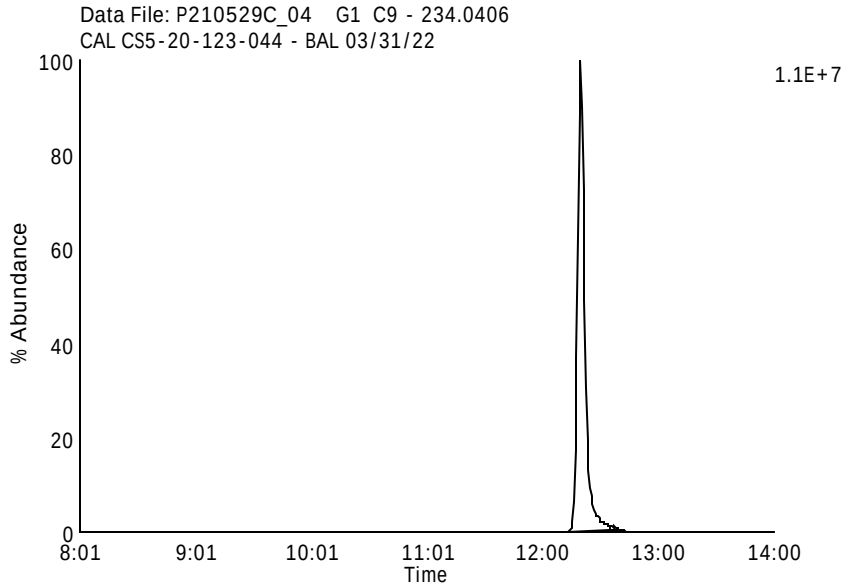
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22

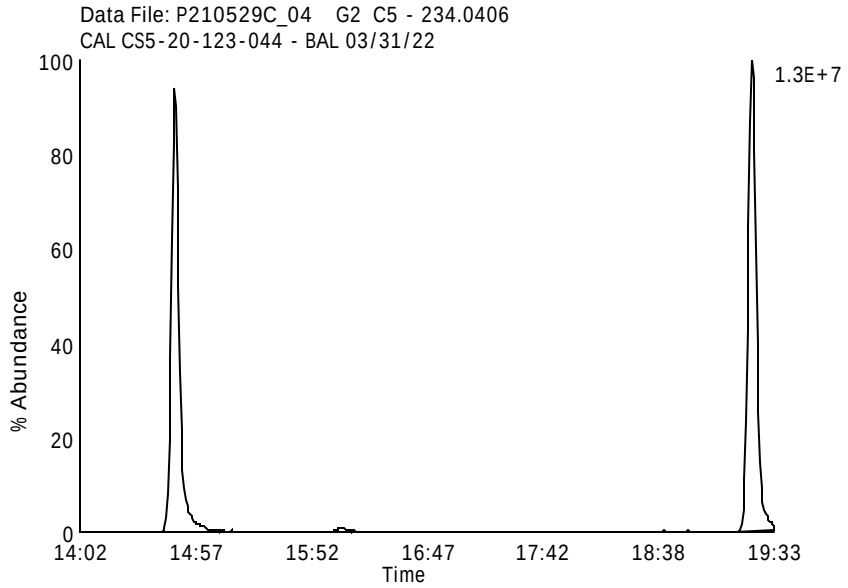


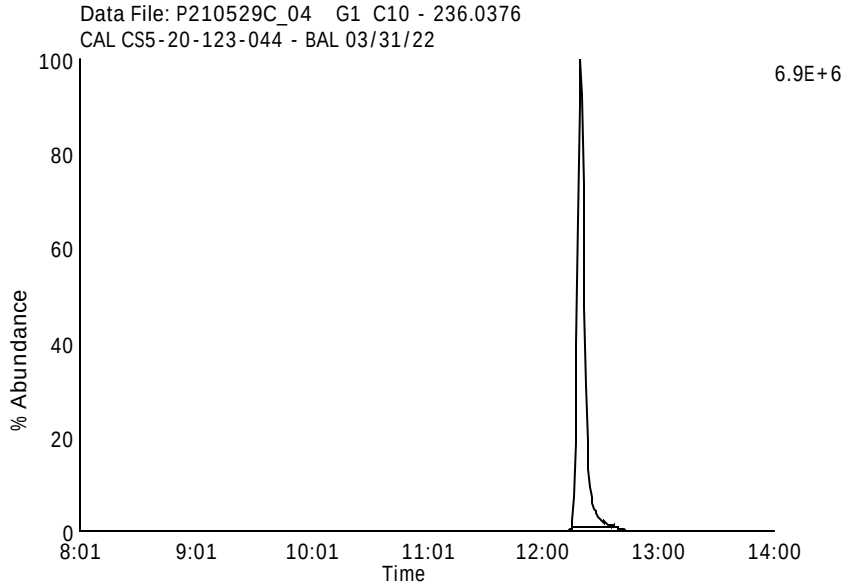


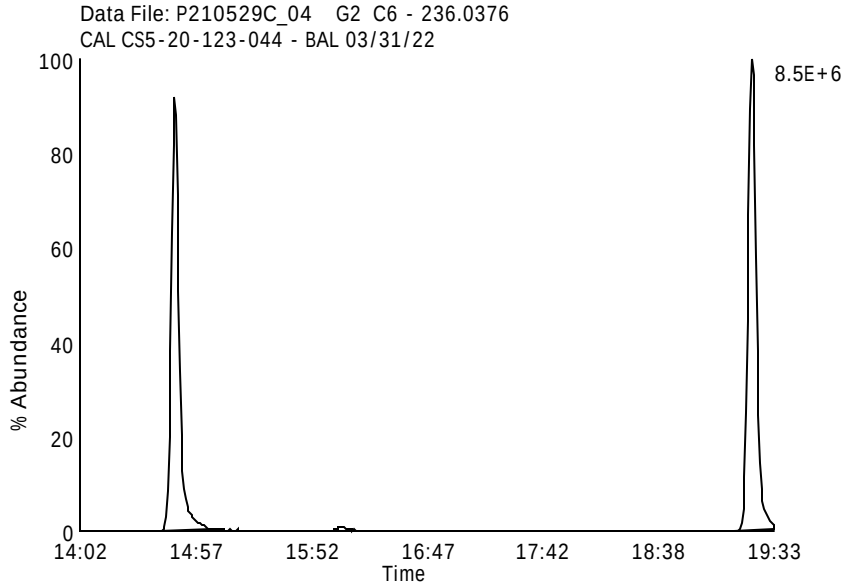
Labeled Di Chlorinated Biphenyls

Data File Name: P210529C_04
Lab Sample ID: CS5-20-123-044
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22







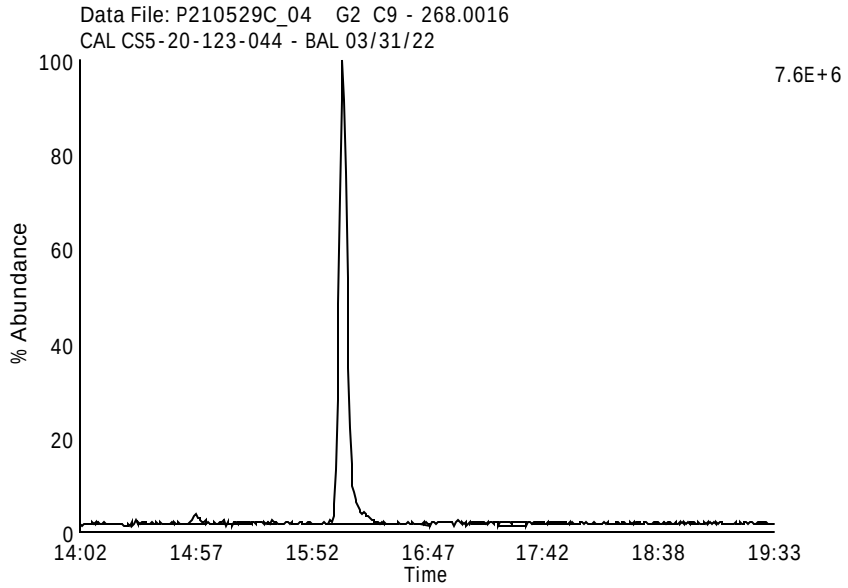


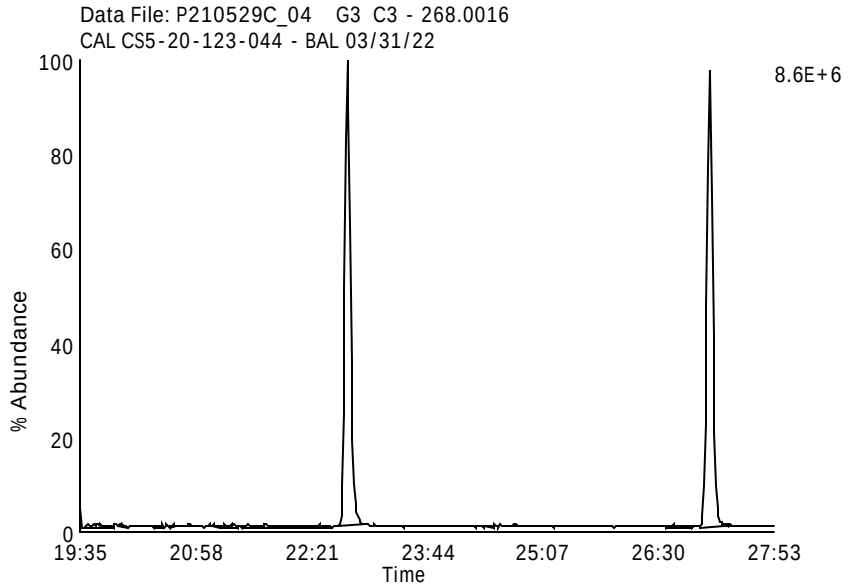
Labeled Tri Chlorinated Biphenyls

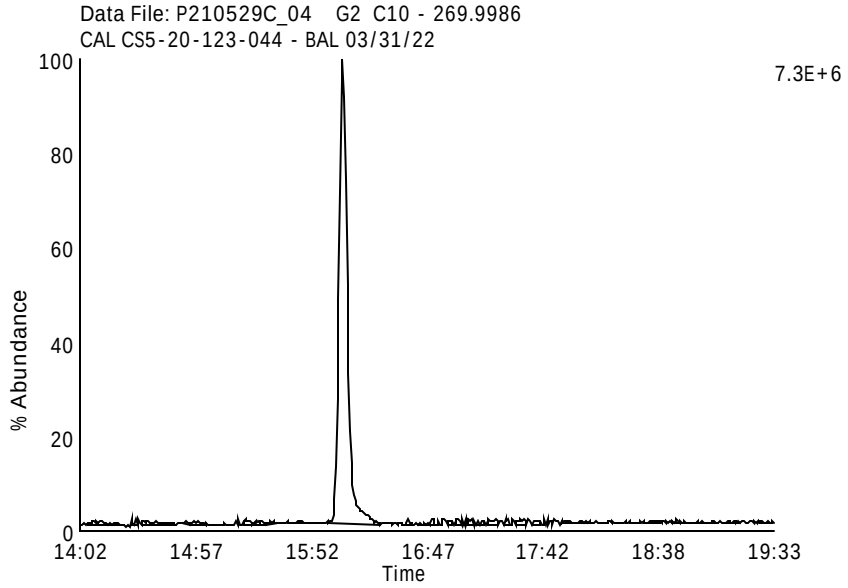
Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

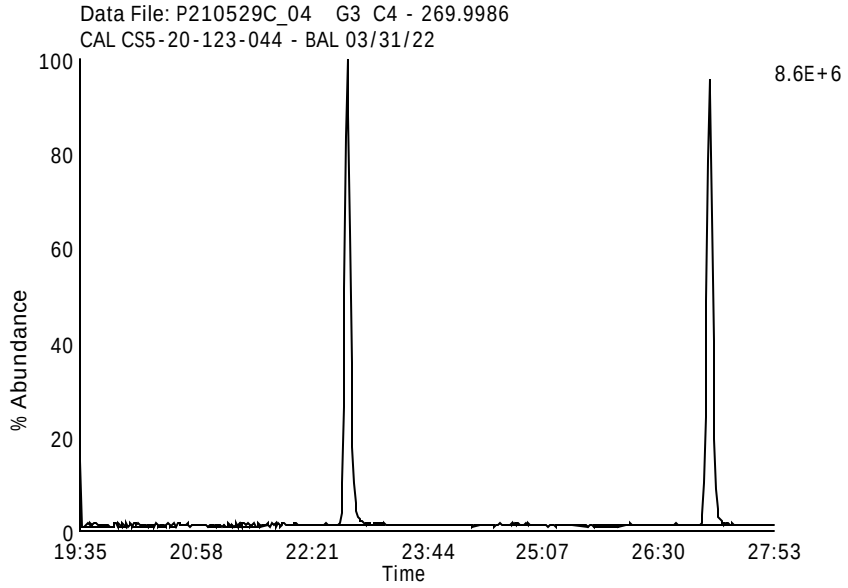
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22









Labeled Tetra Chlorinated Biphenyls

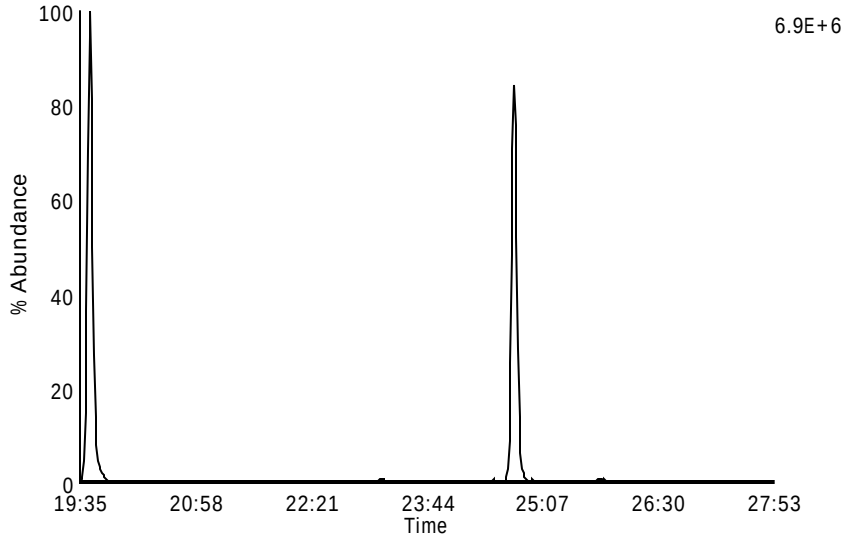
Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22

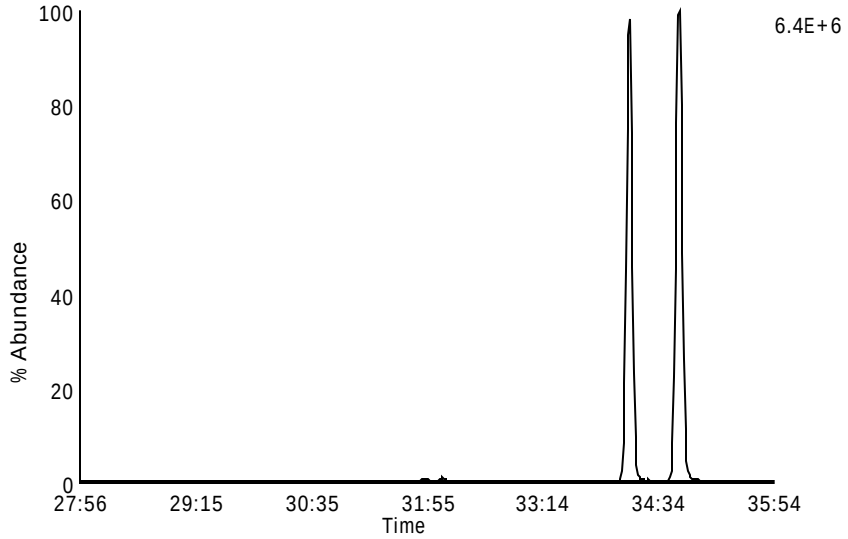
Data File: P210529C_04 G3 C9 - 301.9626

CAL CS5-20-123-044 - BAL 03/31/22



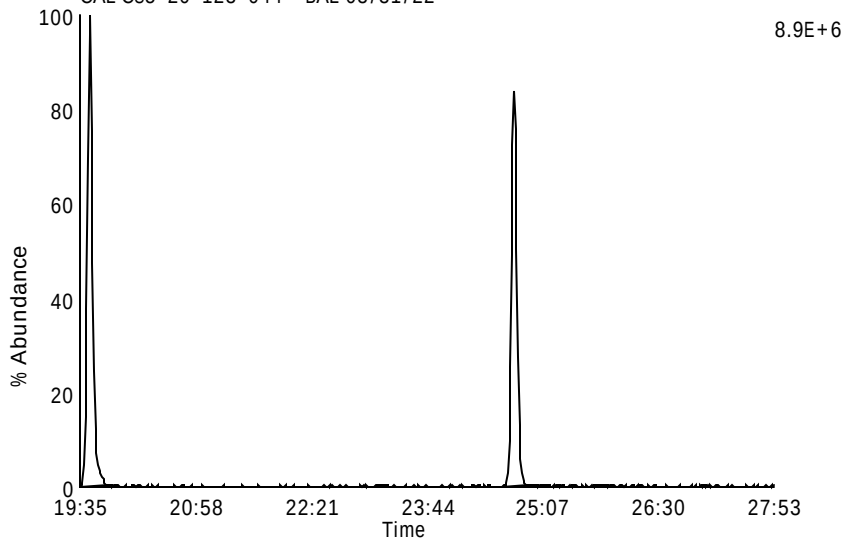
Data File: P210529C_04 G4 C3 - 301.9626

CAL CS5-20-123-044 - BAL 03/31/22



Data File: P210529C_04 G3 C10 - 303.9597

CAL CS5-20-123-044 - BAL 03/31/22



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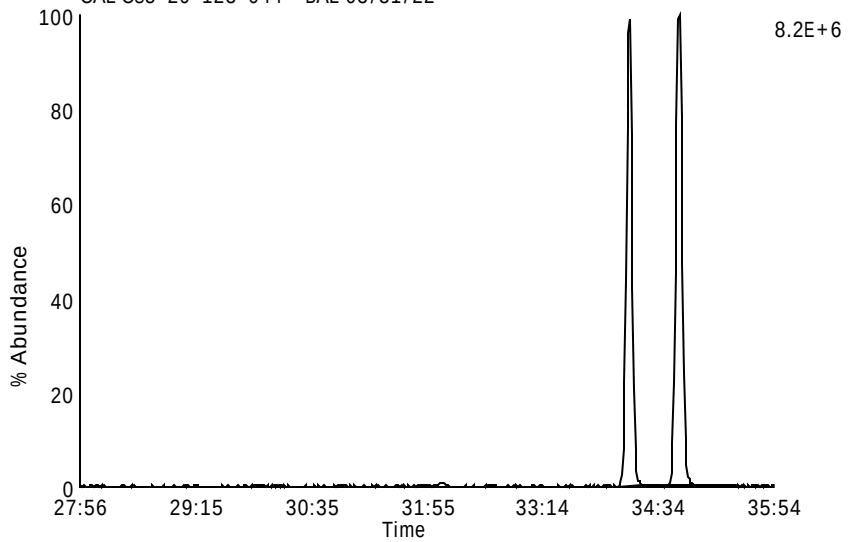
CAL CS5-20-123-044 - BAL 03/31/22

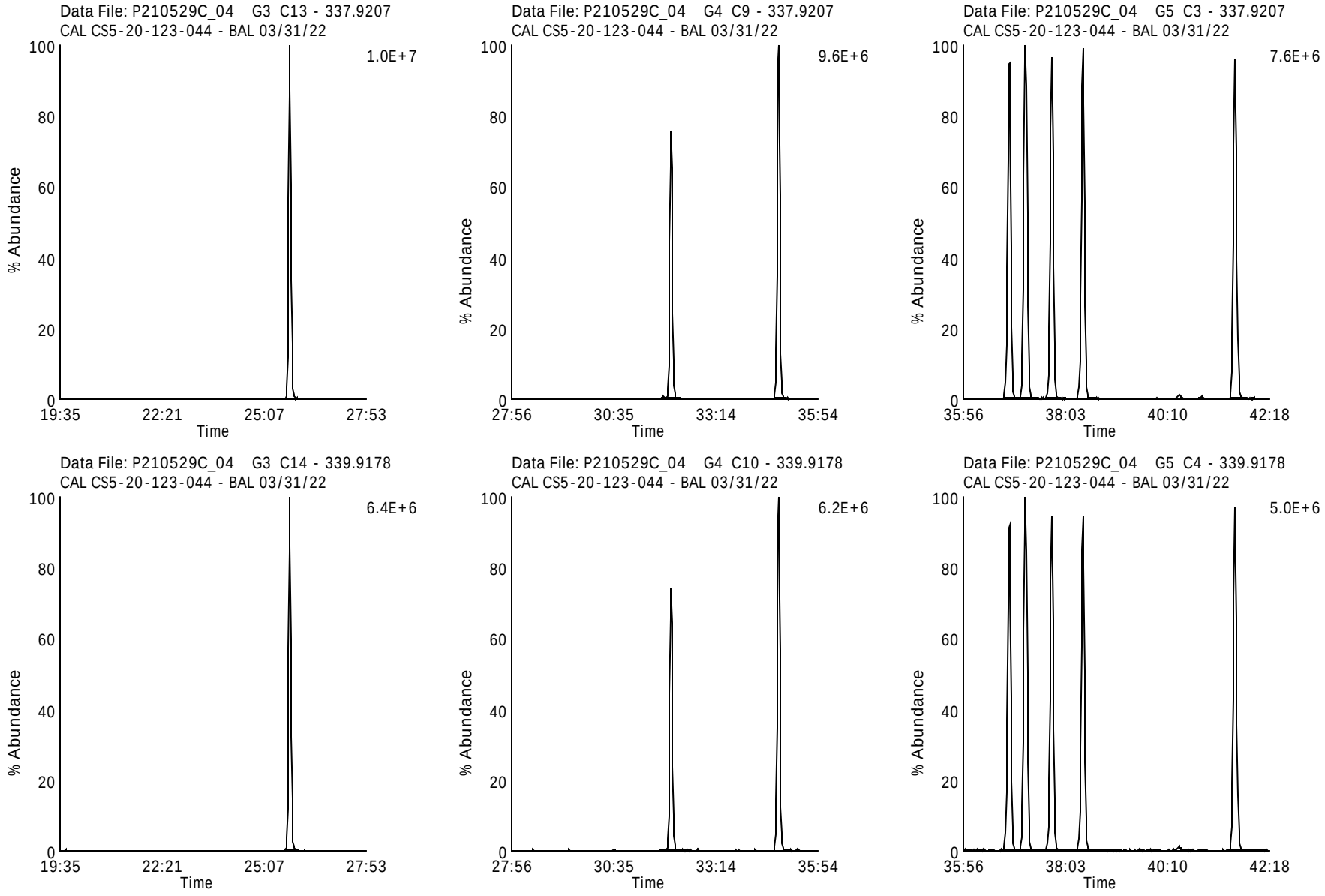


Labeled Penta Chlorinated Biphenyls

Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22



Labeled Hexa Chlorinated Biphenyls

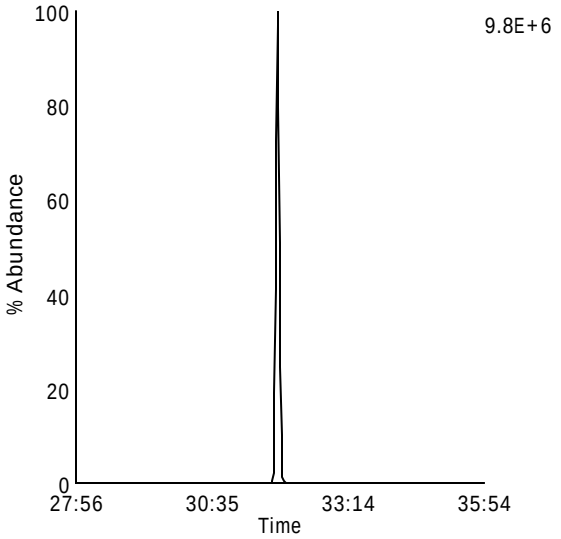
Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22

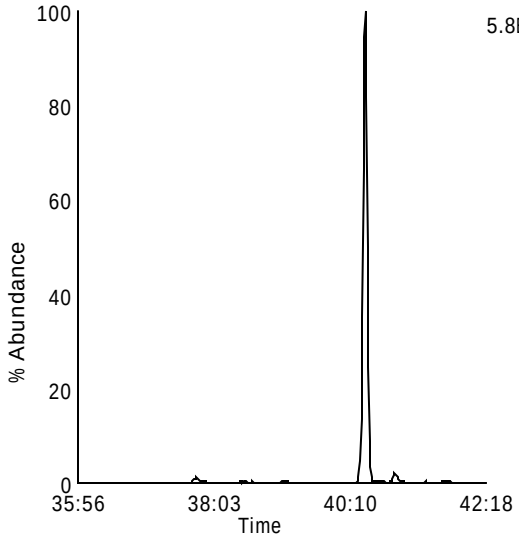
Data File: P210529C_04 G4 C13 - 371.8817

CAL CS5-20-123-044 - BAL 03/31/22



Data File: P210529C_04 G5 C7 - 371.8817

CAL CS5-20-123-044 - BAL 03/31/22



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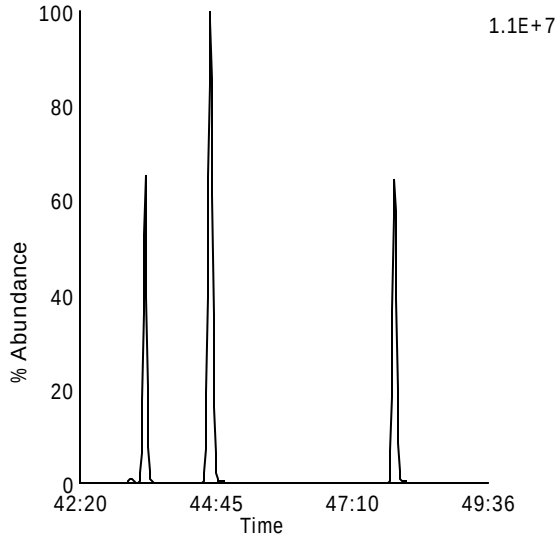
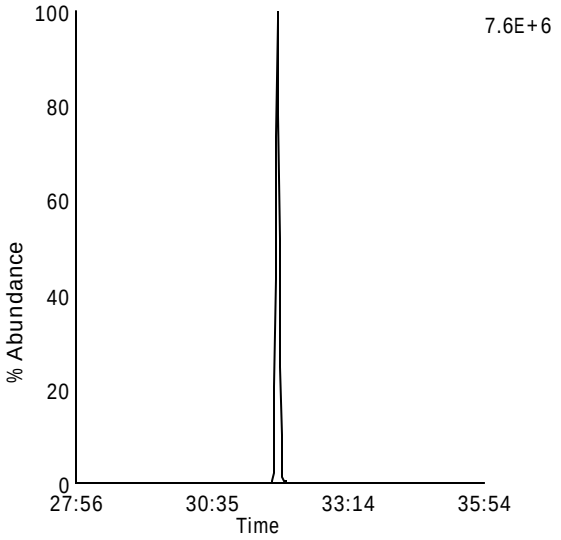
CAL CS5-20-123-044 - BAL 03/31/22



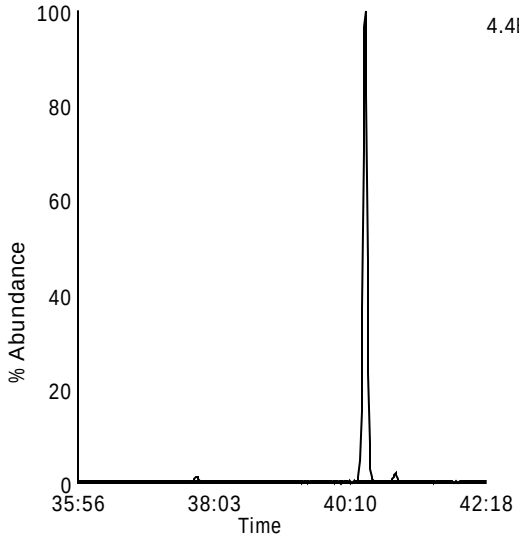
Data File: P210529C_04 G4 C14 - 373.8788

CAL CS5-20-123-044 - BAL 03/31/22



Data File: P210529C_04 G5 C8 - 373.8788

CAL CS5-20-123-044 - BAL 03/31/22



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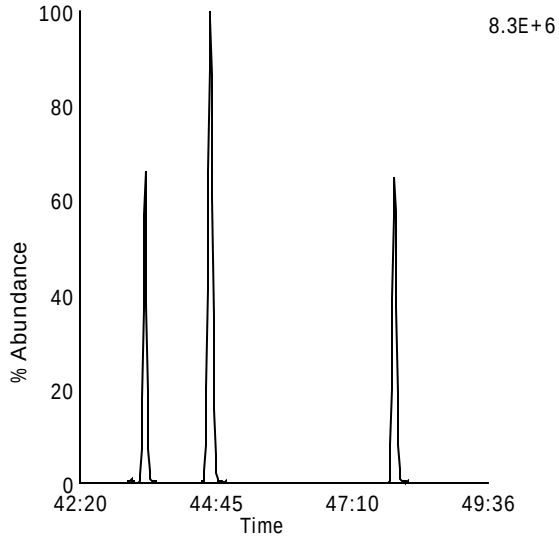
CAL CS5-20-123-044 - BAL 03/31/22

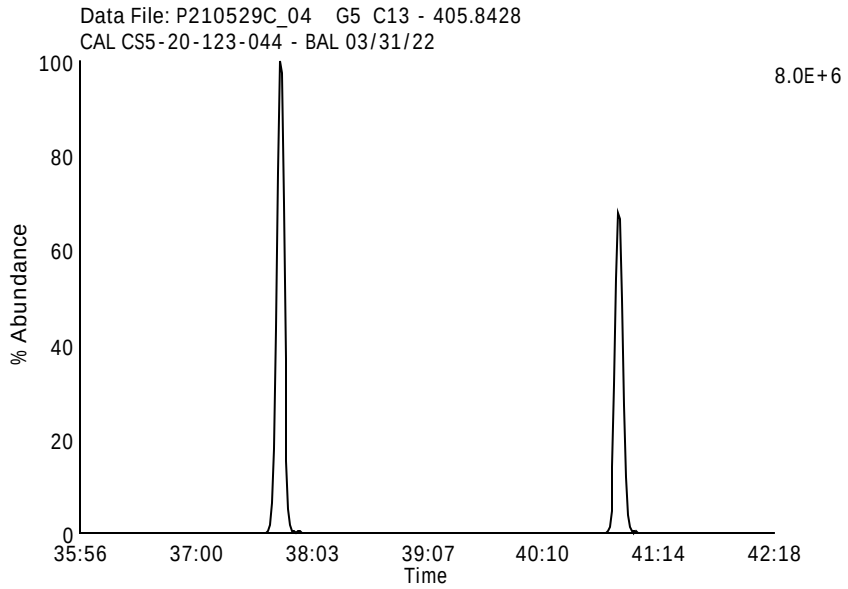


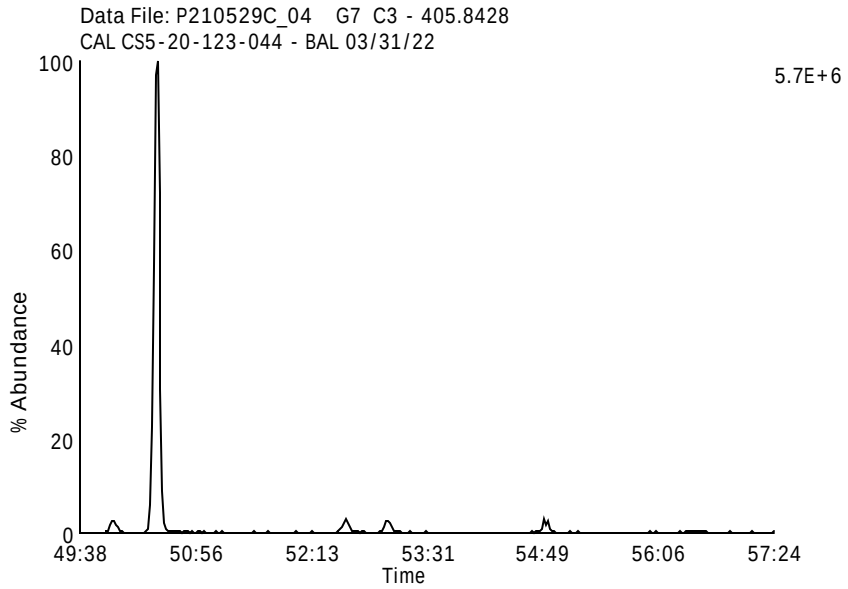
Labeled Hepta Chlorinated Biphenyls

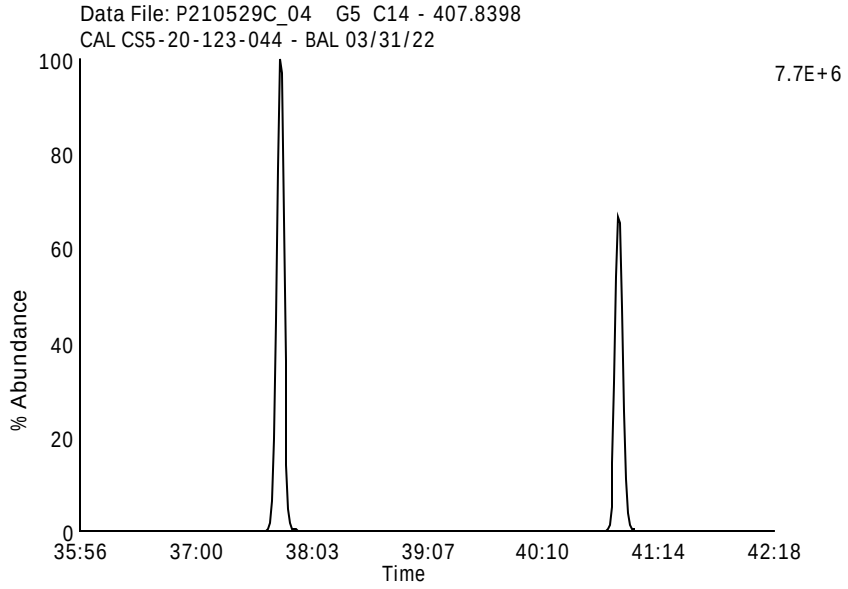
Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

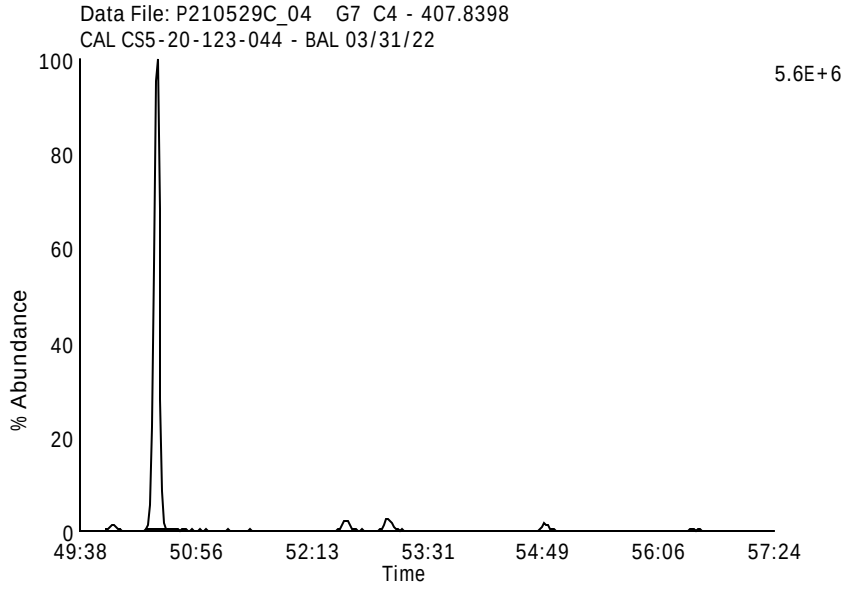
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22







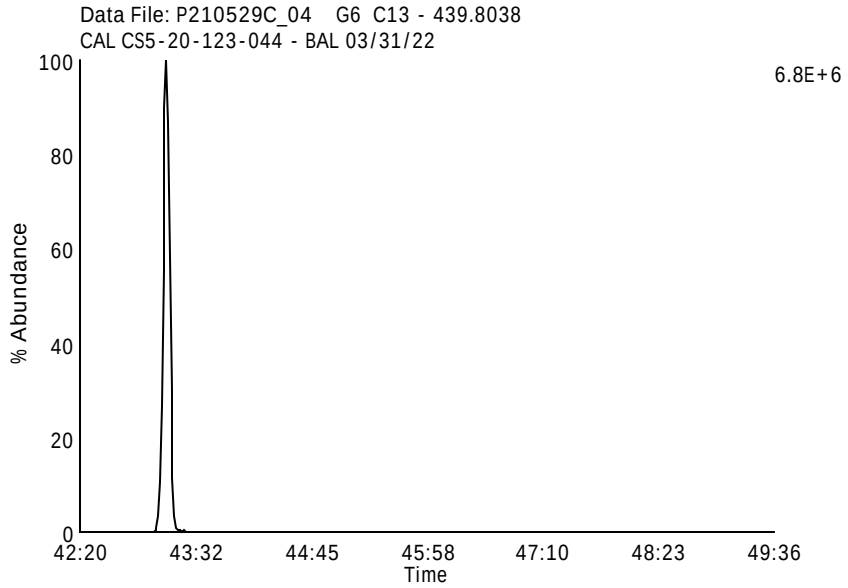


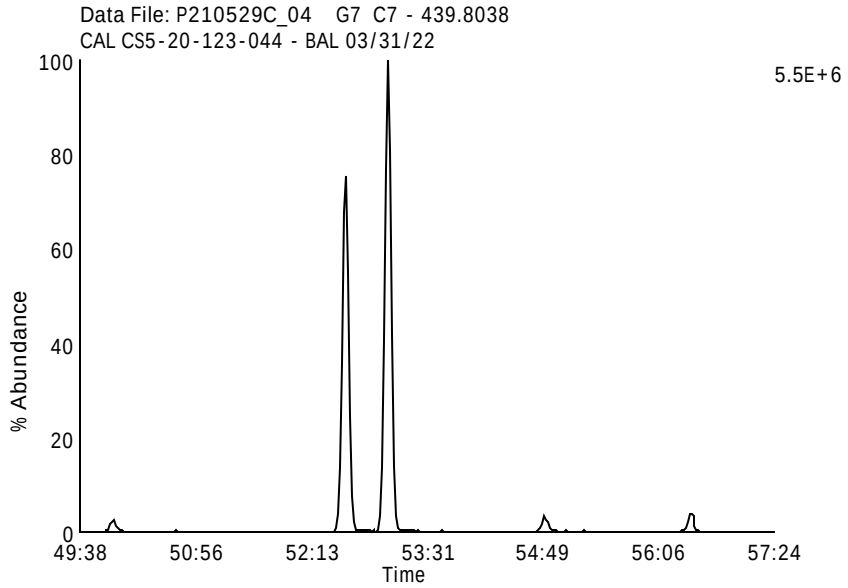
Labeled Octa Chlorinated Biphenyls

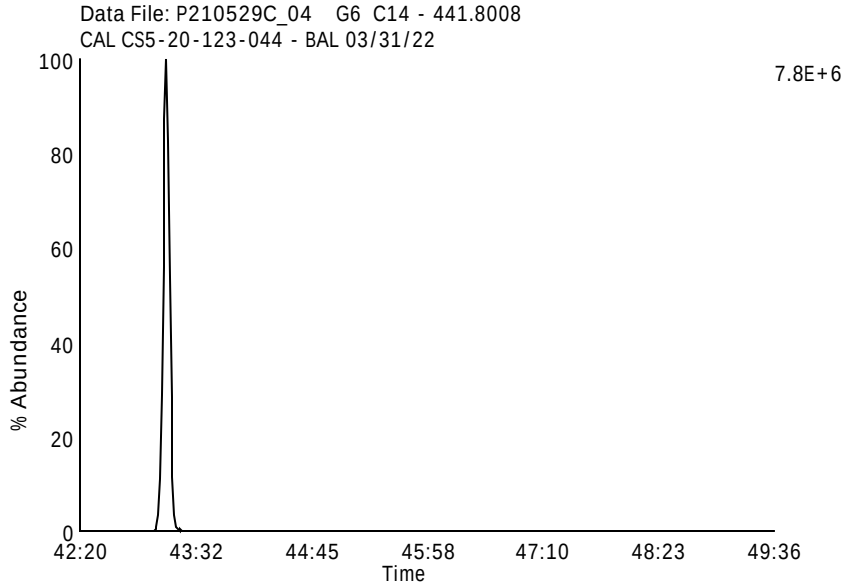
Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

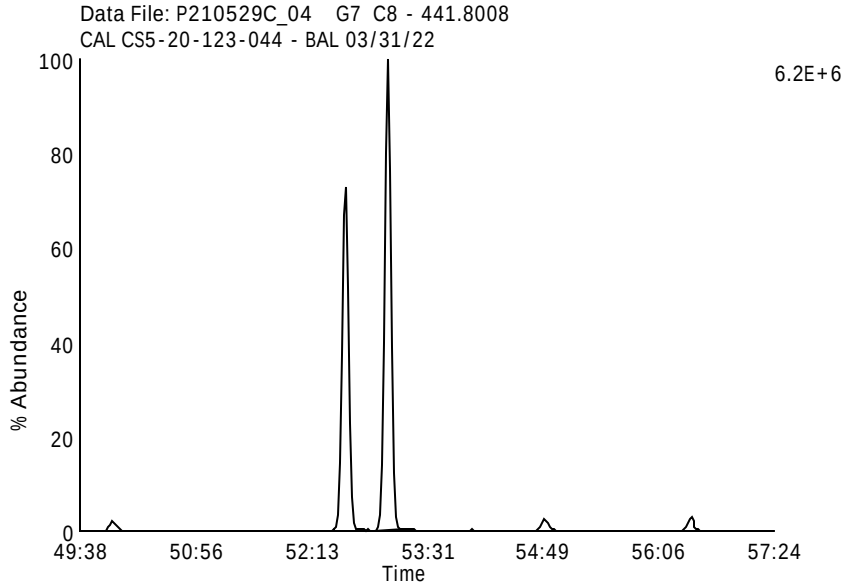
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22







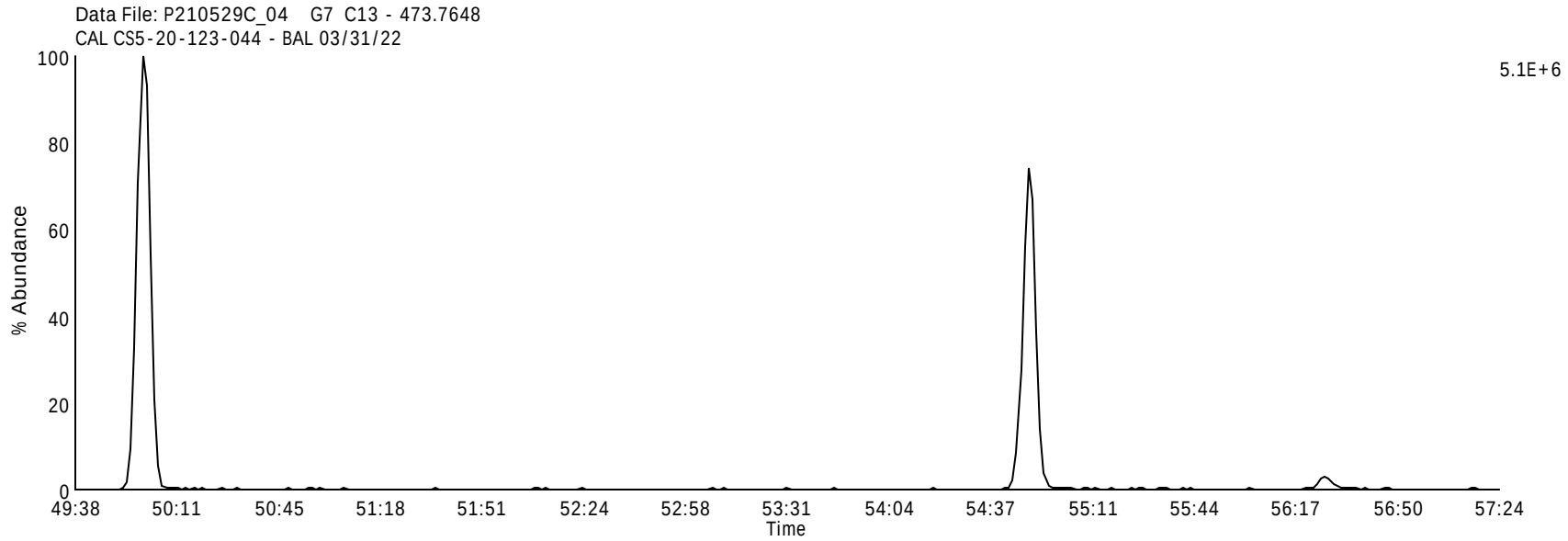


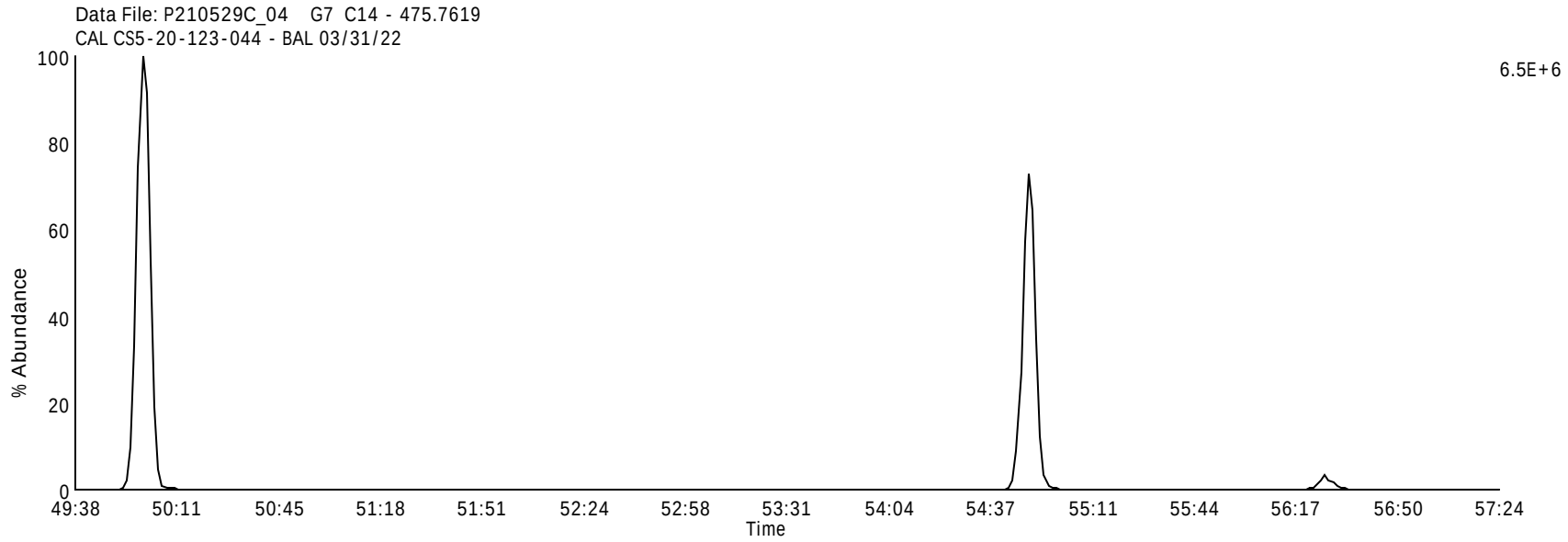
Labeled Nona Chlorinated Biphenyls

Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22



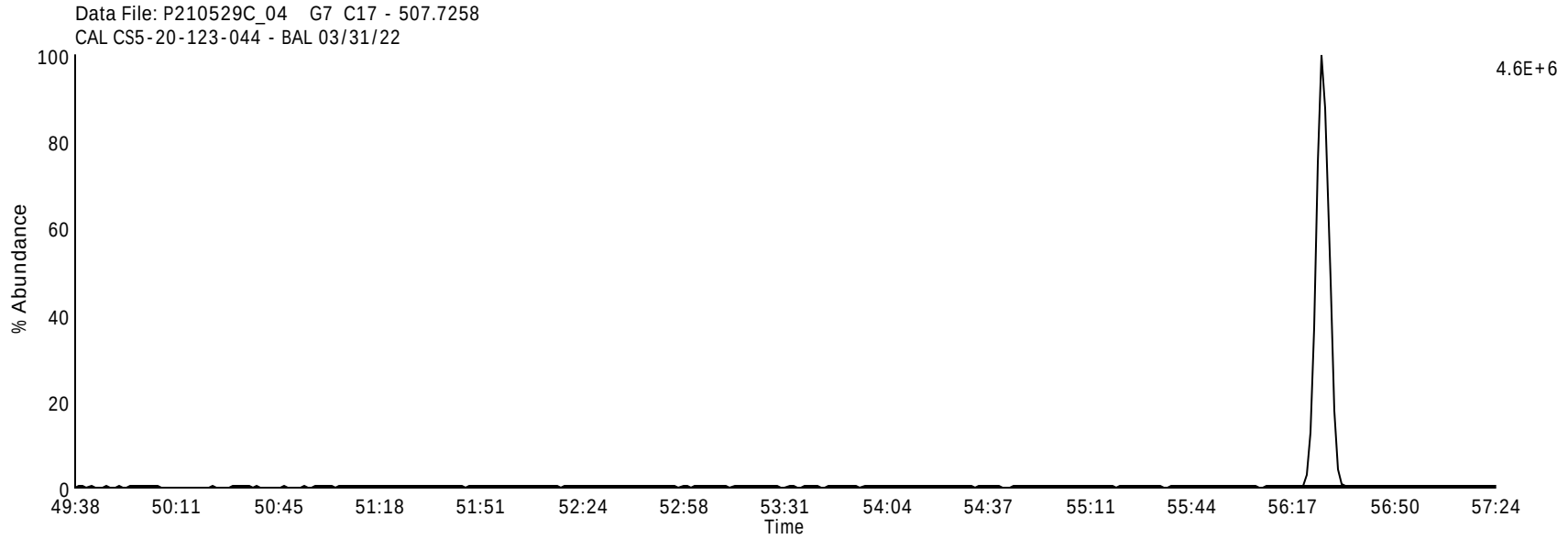


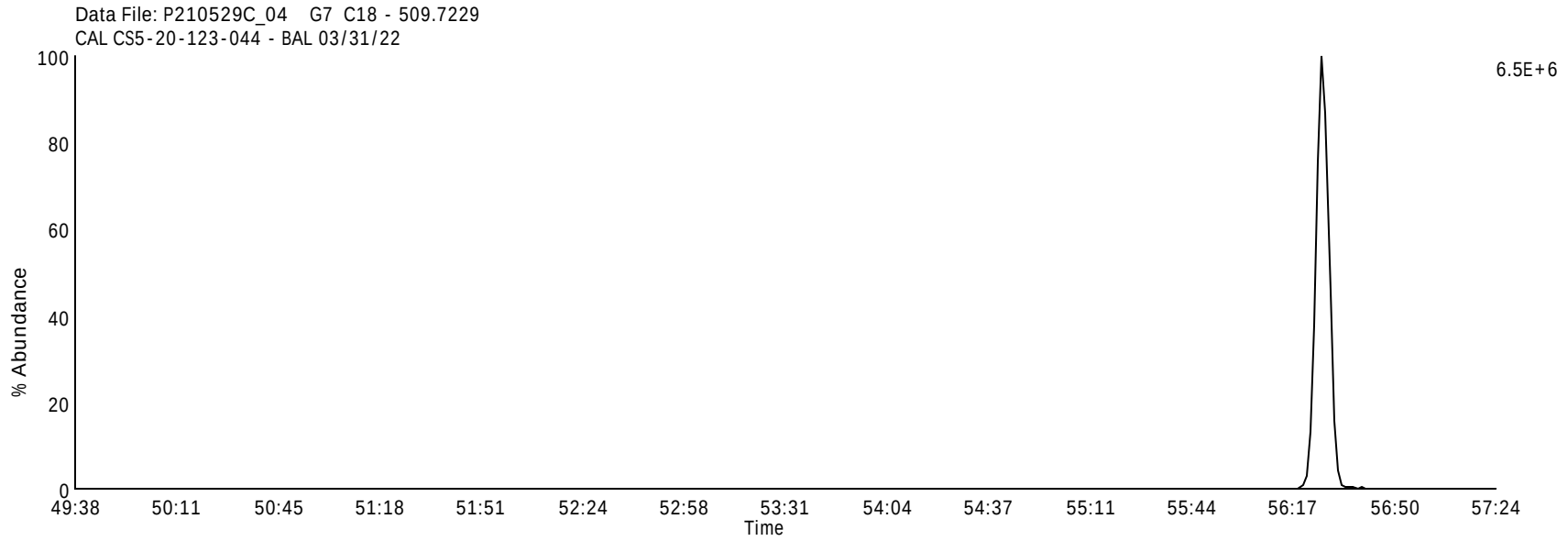
Labeled Deca Chlorinated Biphenyl

Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22



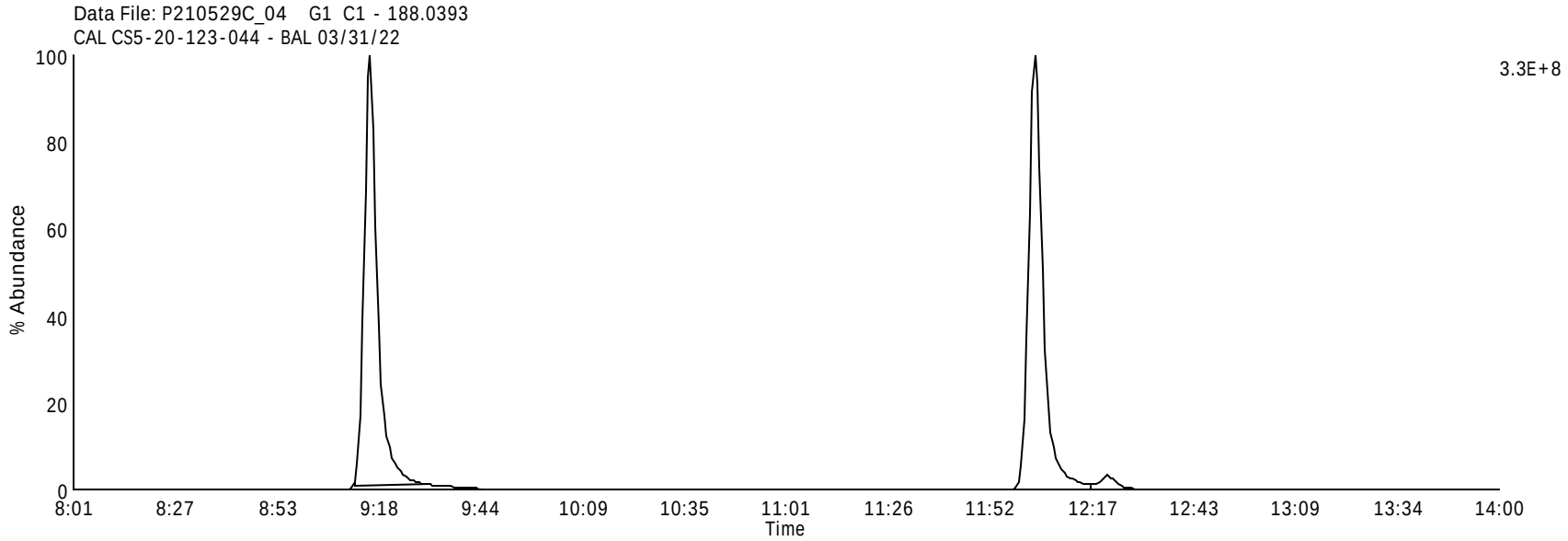


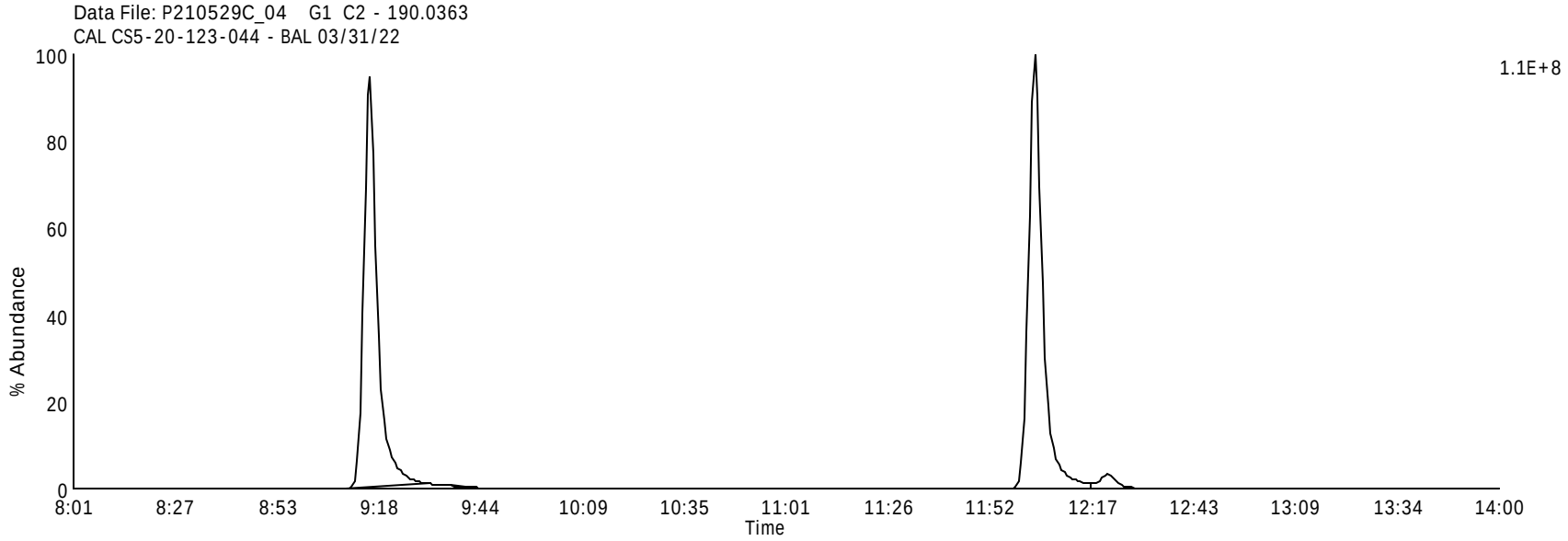
Mono Chlorinated Biphenyls

Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22



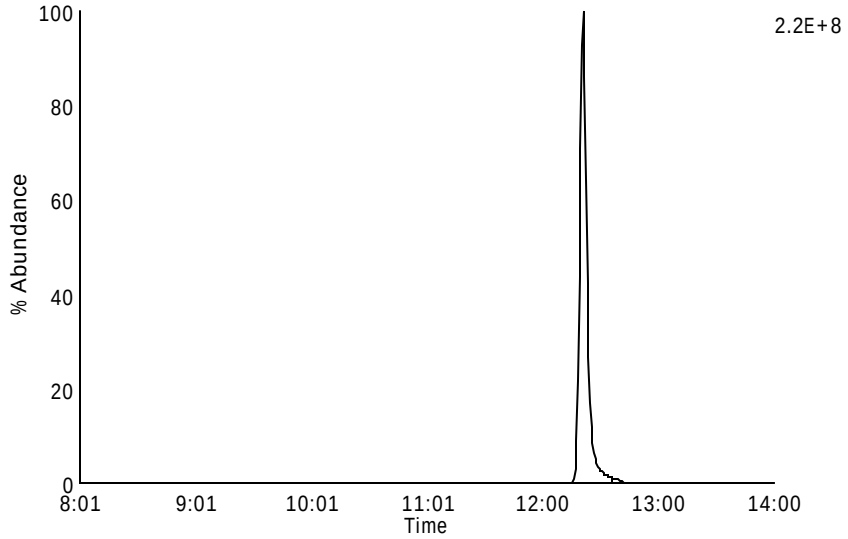


Di Chlorinated Biphenyls

Data File Name: P210529C_04
Date Acquired: 5/29/2021
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR09 (P)

Data File: P210529C_04 G1 C7 - 222.0003
CAL CS5-20-123-044 - BAL 03/31/22



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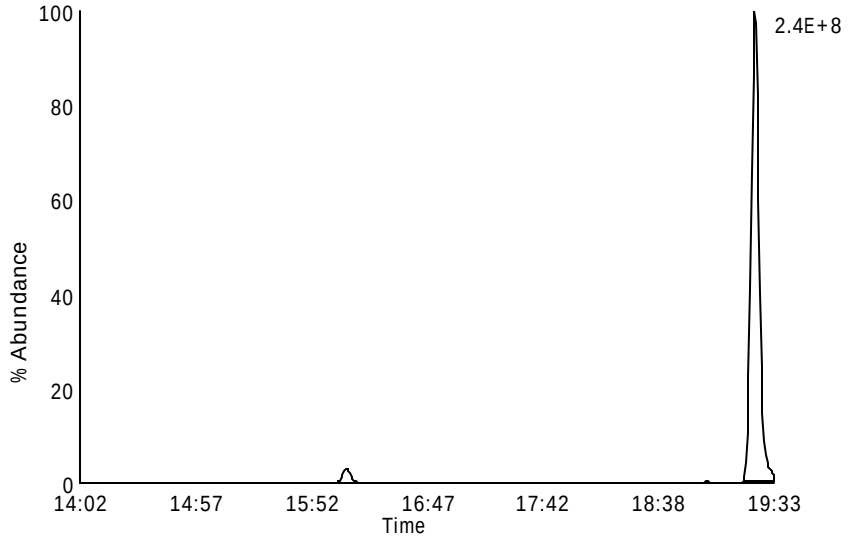
CAL CS5-20-123-044 - BAL 03/31/22



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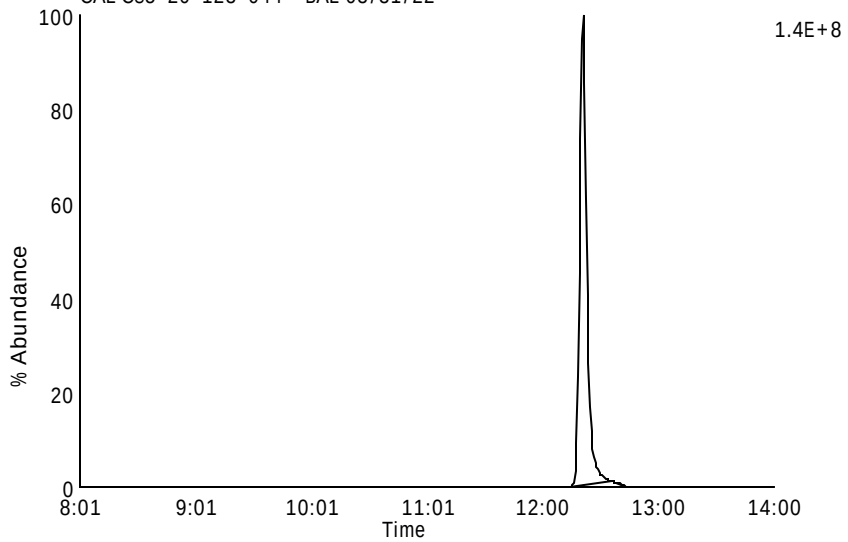
CAL CS5-20-123-044 - BAL 03/31/22



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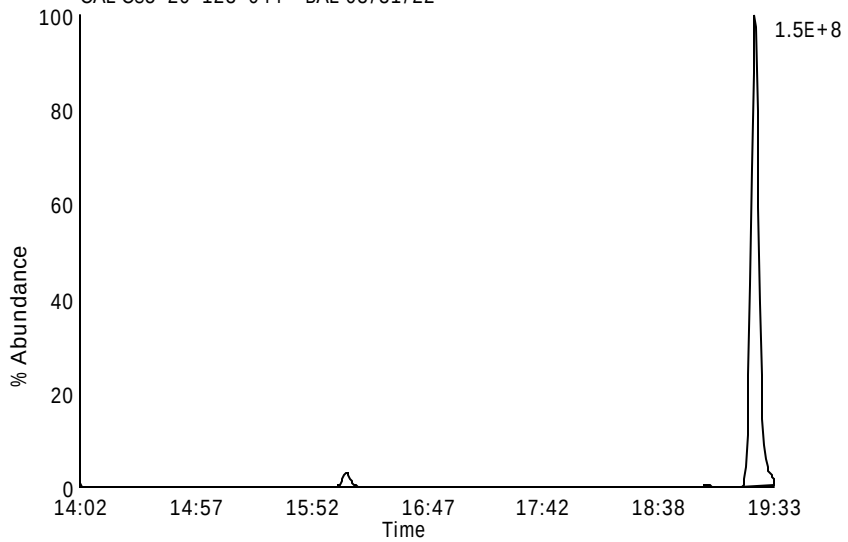
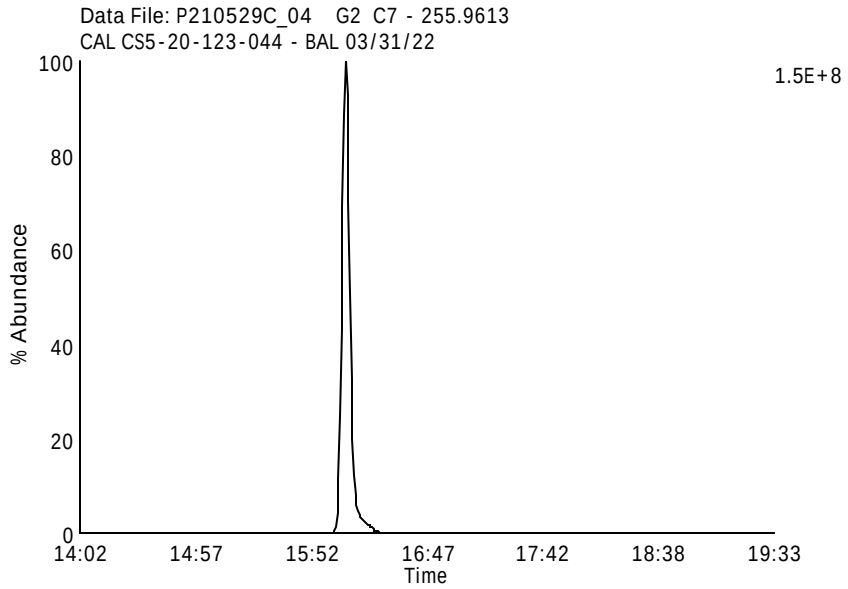
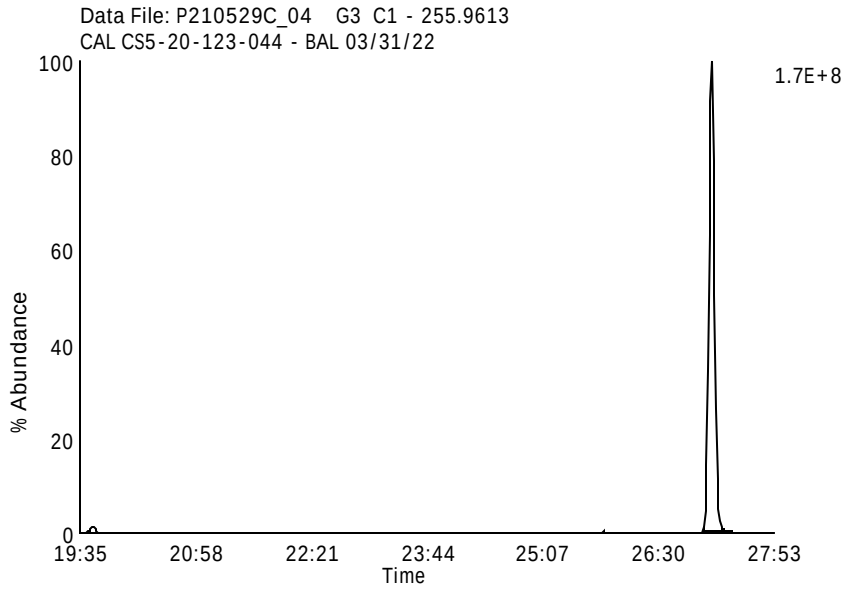
CAL CS5-20-123-044 - BAL 03/31/22

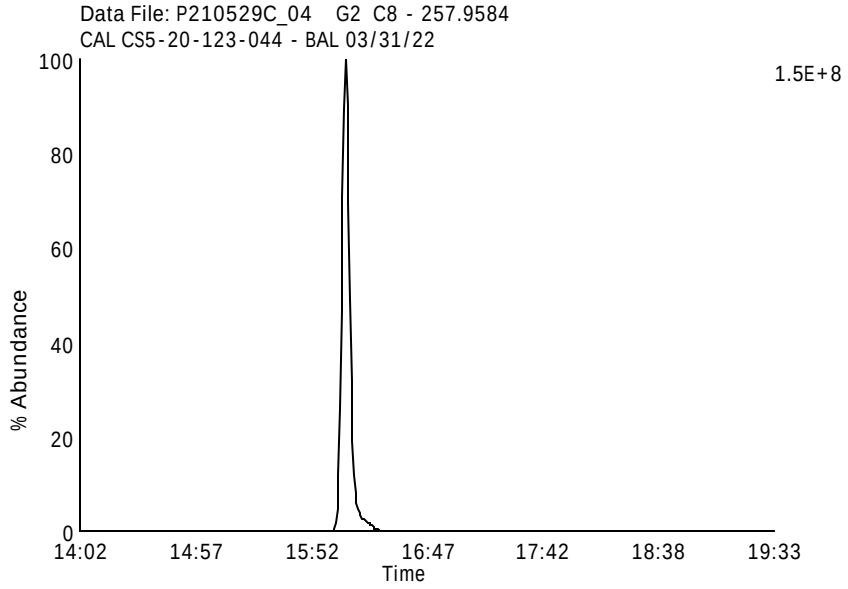


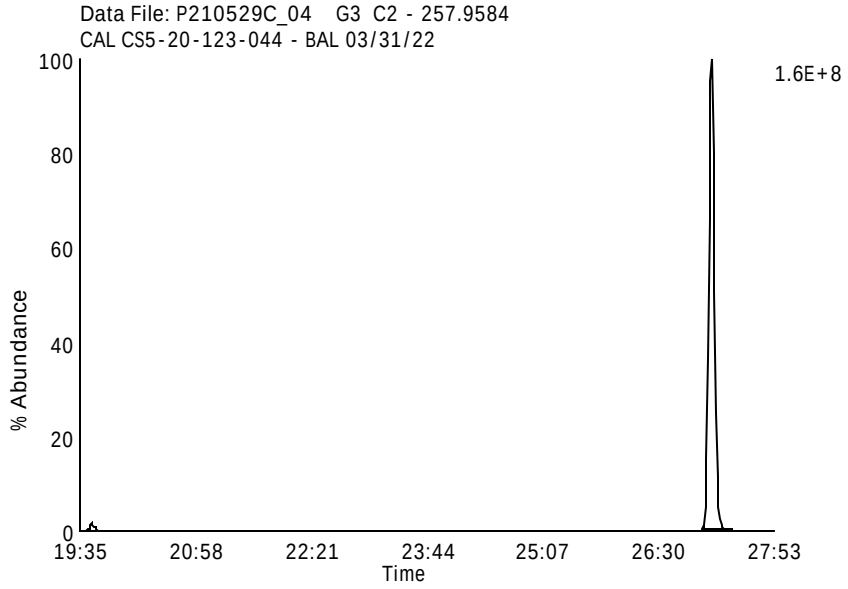
Tri Chlorinated Biphenyls

Data File Name: P210529C_04
Lab Sample ID: CS5-20-123-044
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22



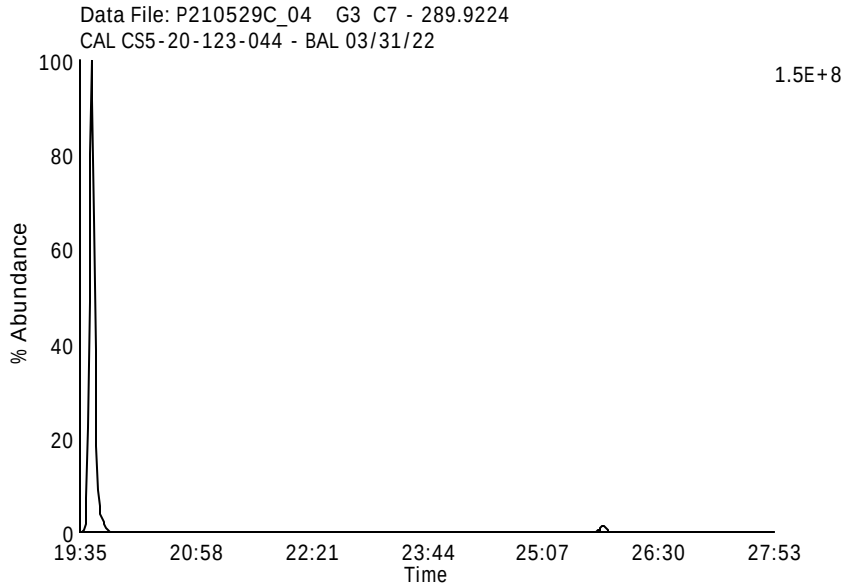


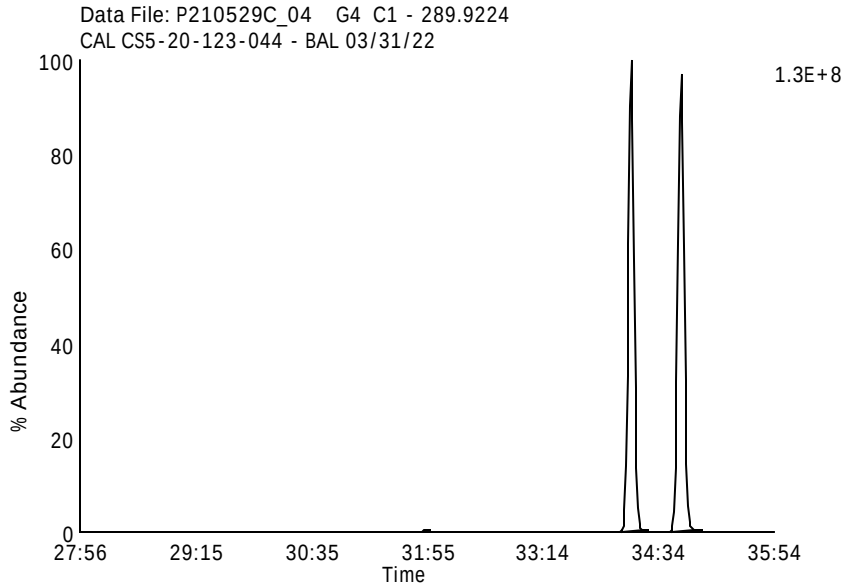


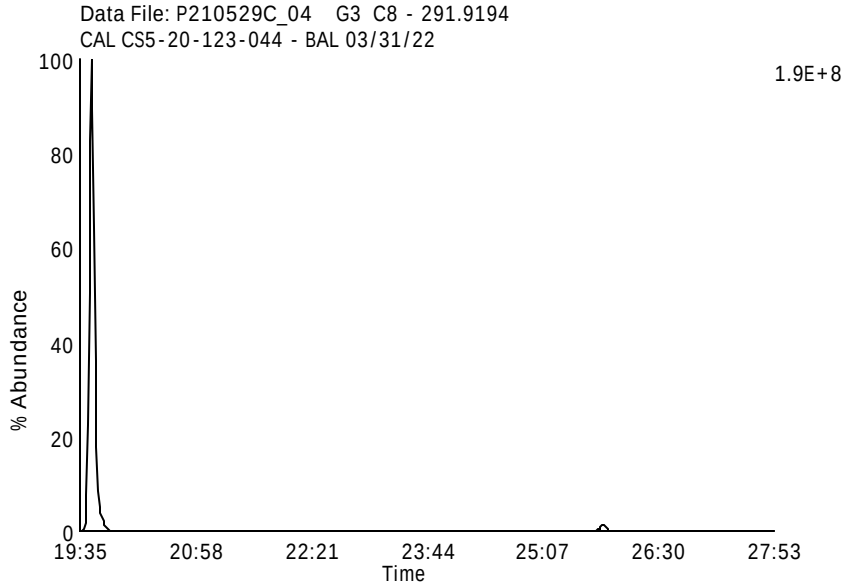


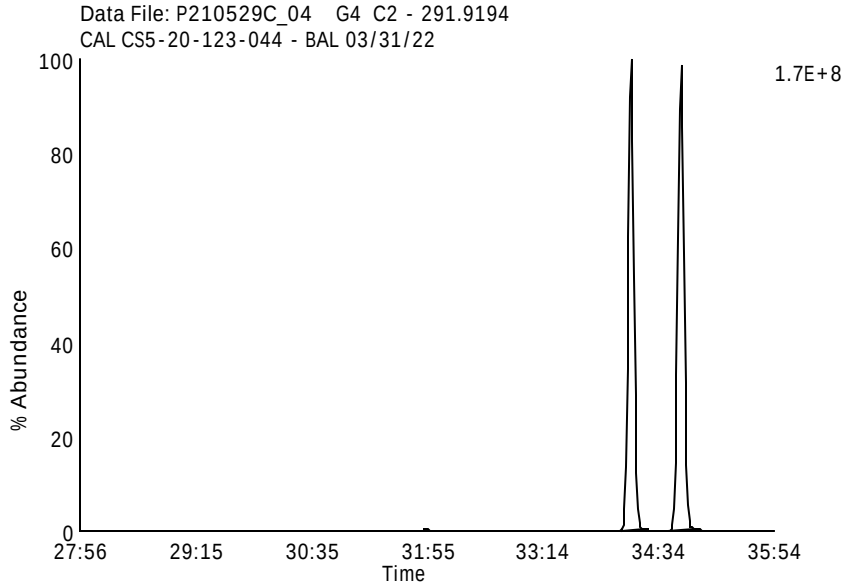
Tetra Chlorinated Biphenyls

Data File Name: P210529C_04
Lab Sample ID: CS5-20-123-044
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22



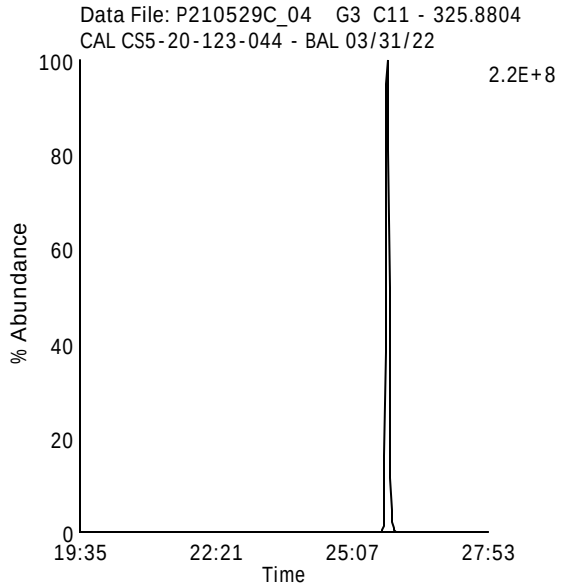


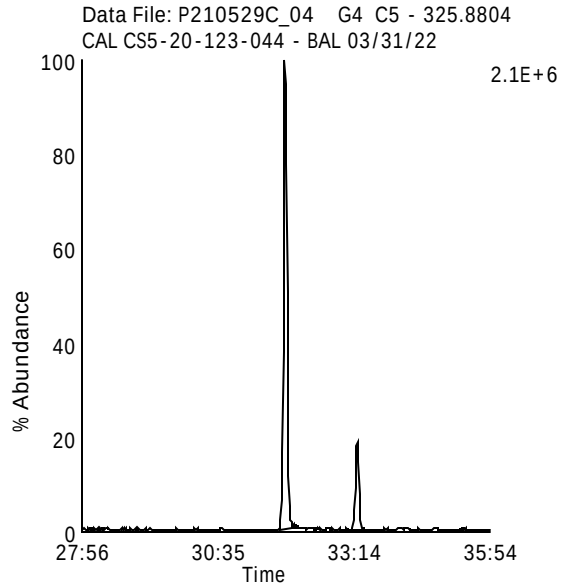


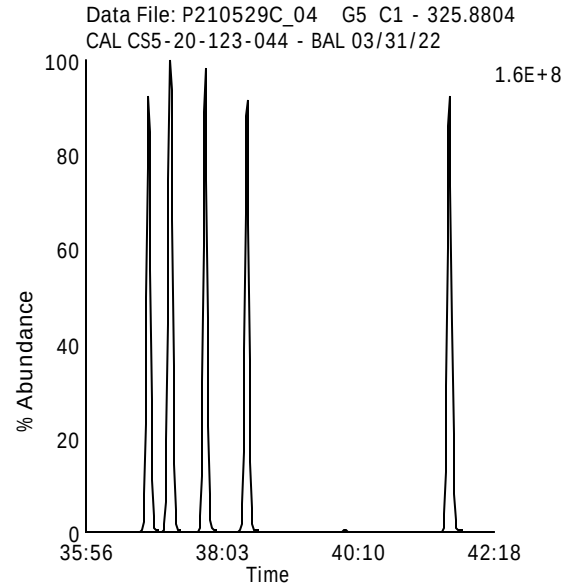


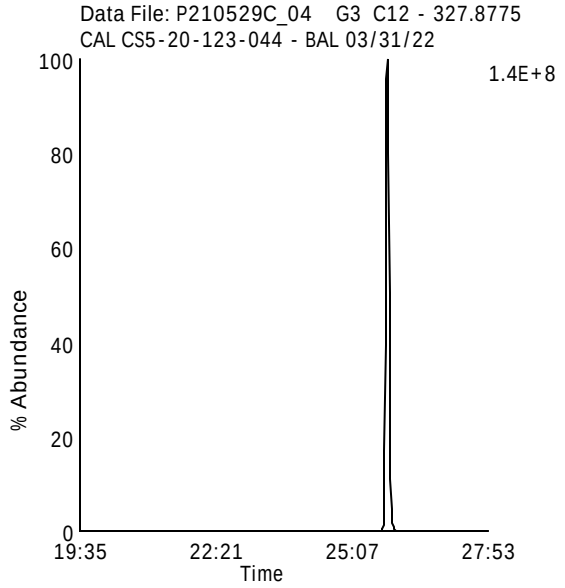
Penta Chlorinated Biphenyls

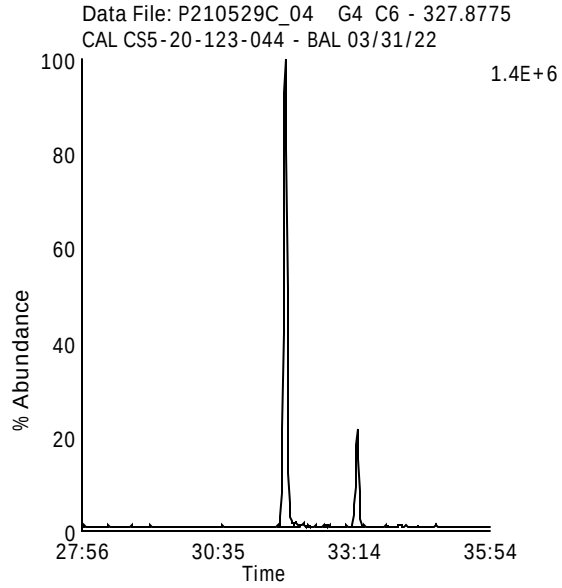
Data File Name: P210529C_04
Lab Sample ID: CS5-20-123-044
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22

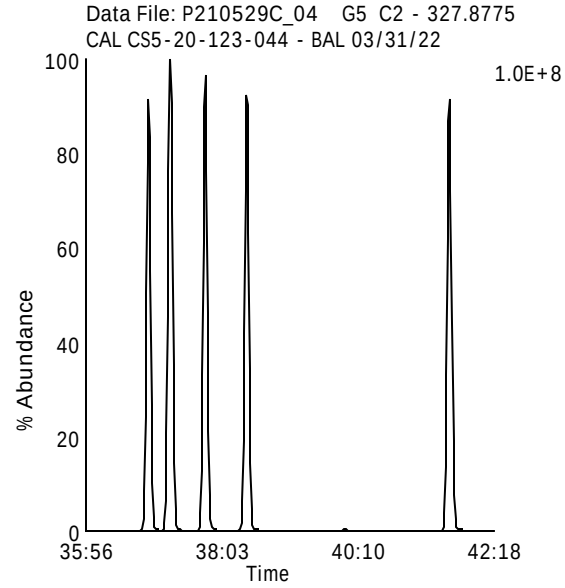












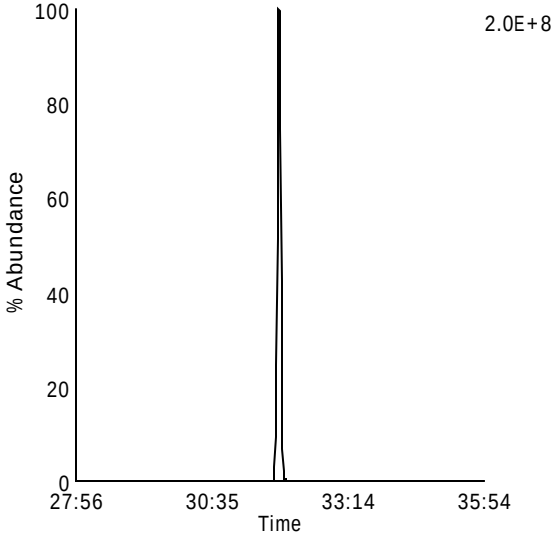
Hexa Chlorinated Biphenyls

Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

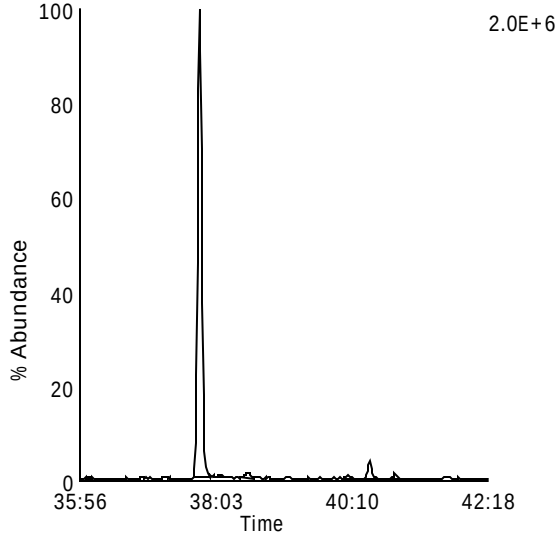
Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22

Data File: P210529C_04 G4 C11 - 359.8415
CAL CS5-20-123-044 - BAL 03/31/22



Data File: P210529C_04 G5 C5 - 359.8415
CAL CS5-20-123-044 - BAL 03/31/22



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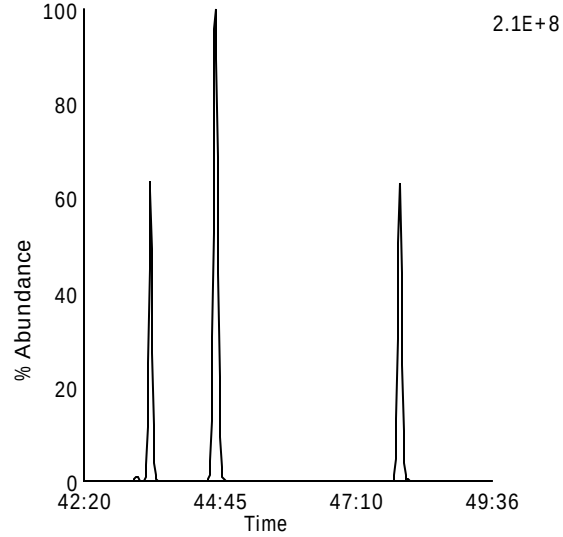
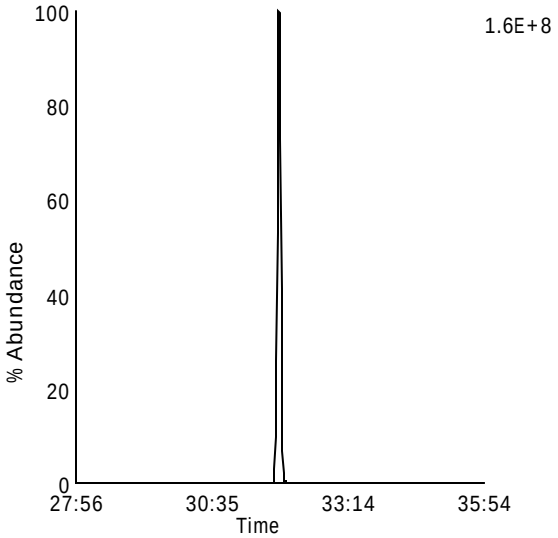
CAL CS5-20-123-044 - BAL 03/31/22



Data File: P210529C_04 G4 C12 - 361.8385
CAL CS5-20-123-044 - BAL 03/31/22



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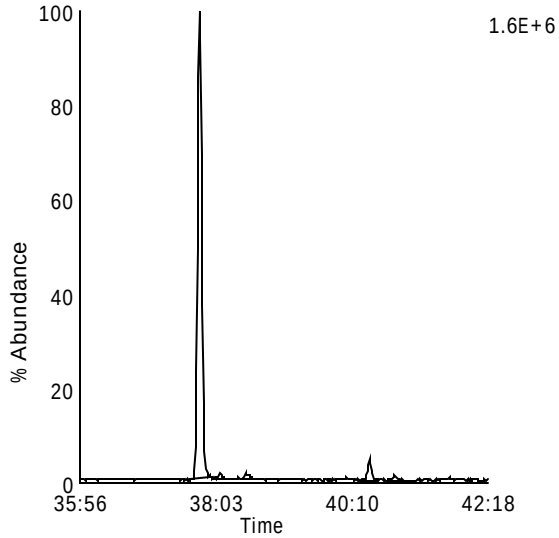
CAL CS5-20-123-044 - BAL 03/31/22



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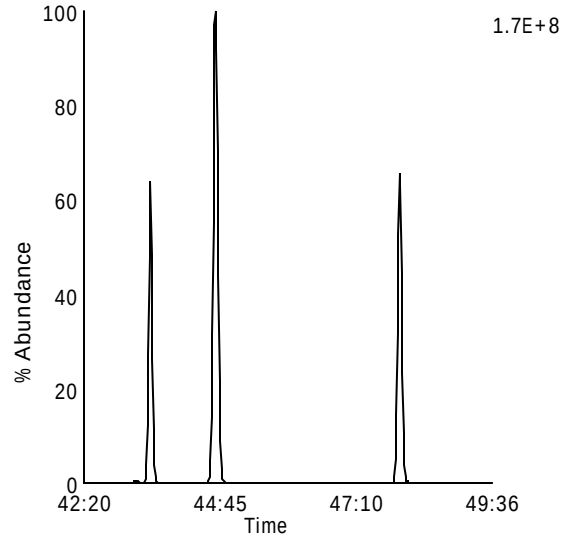
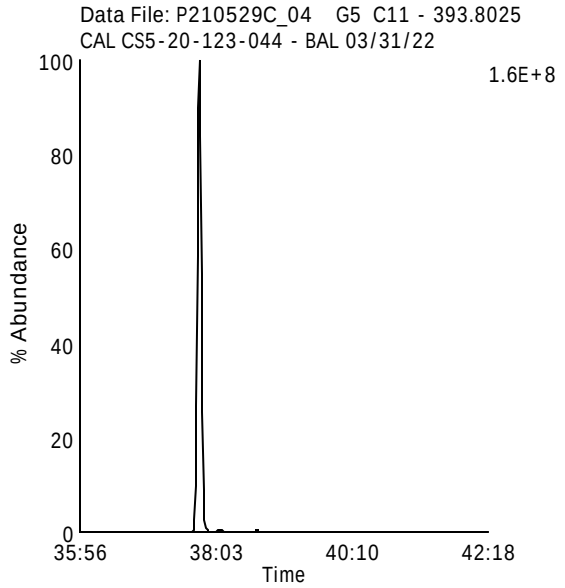
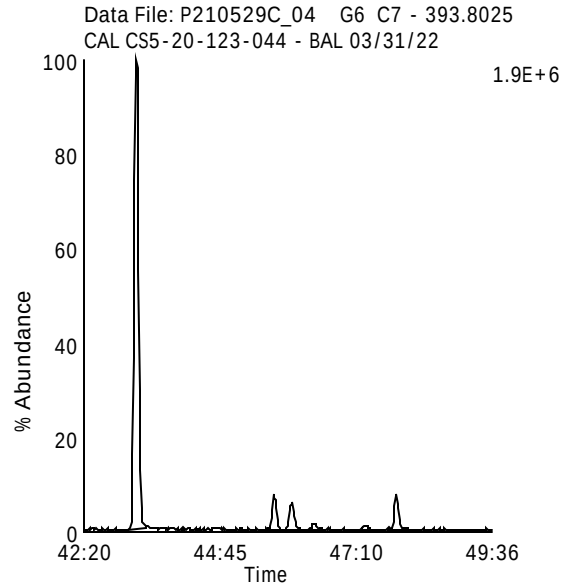
CAL CS5-20-123-044 - BAL 03/31/22

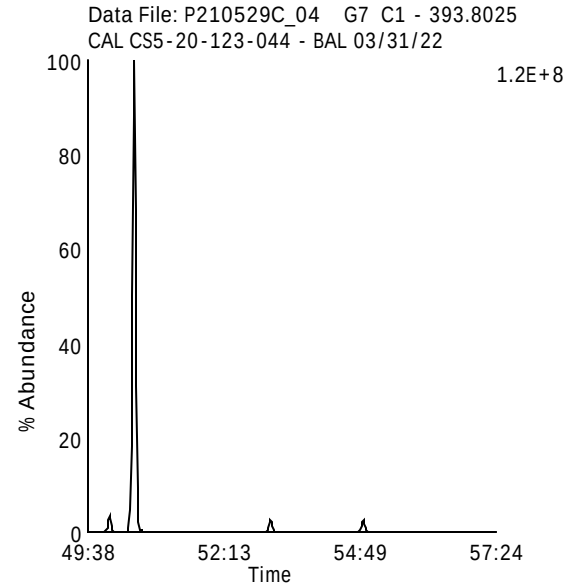


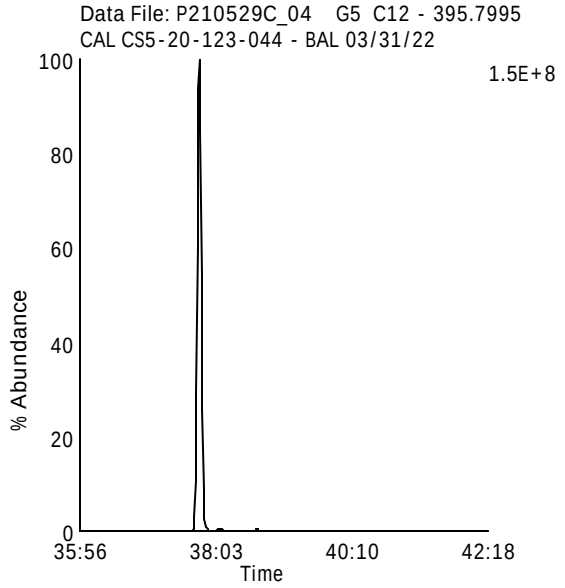
Hepta Chlorinated Biphenyls

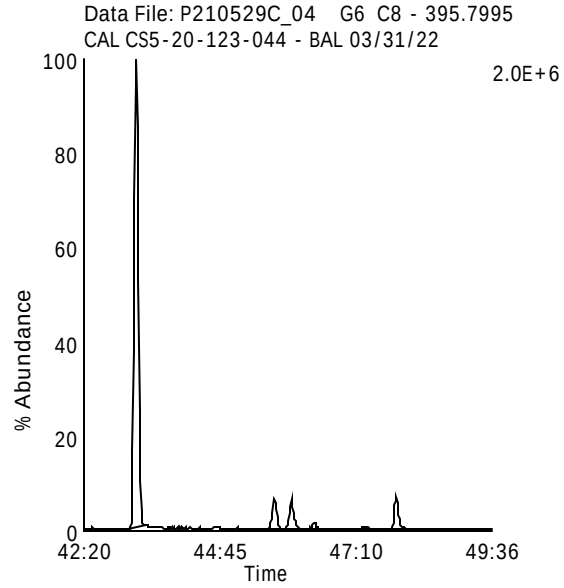
Data File Name: P210529C_04
Lab Sample ID: CS5-20-123-044
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22

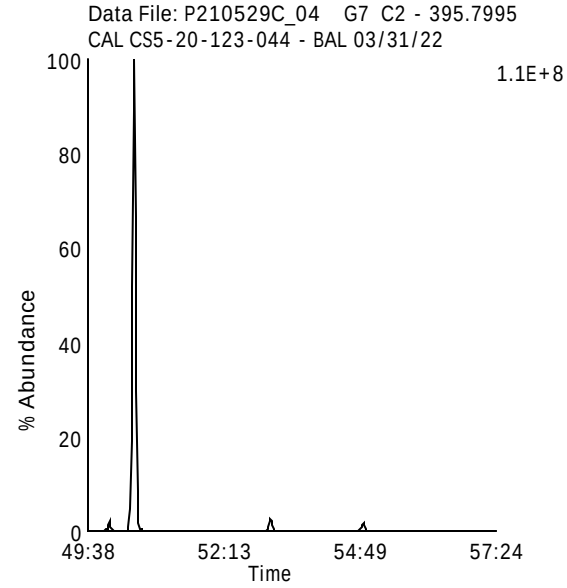






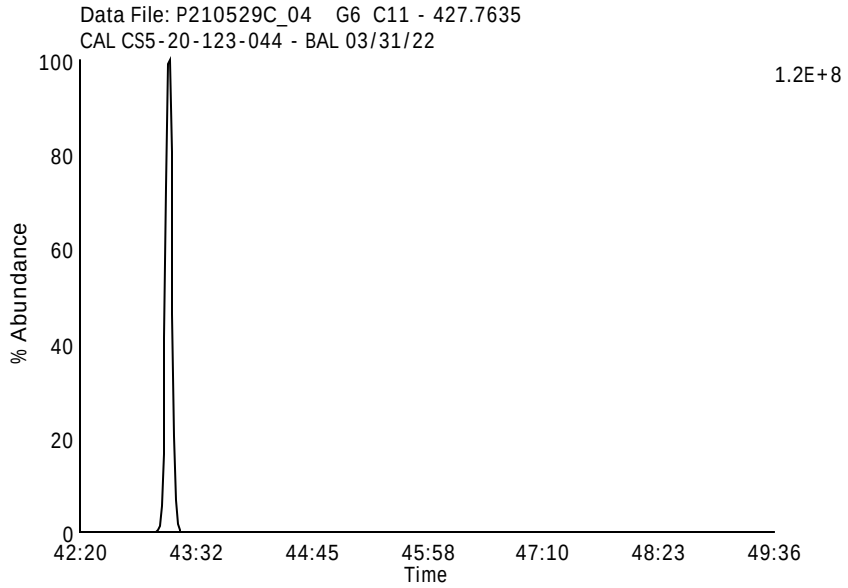


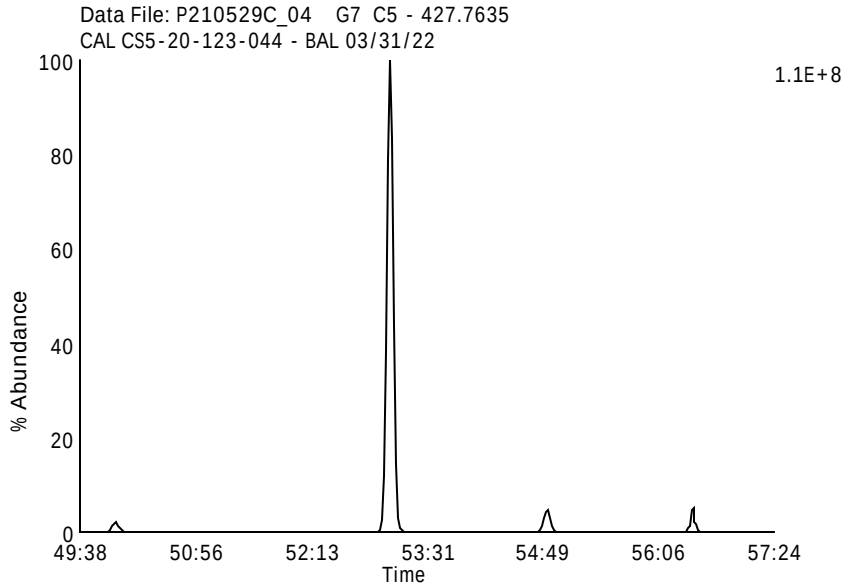


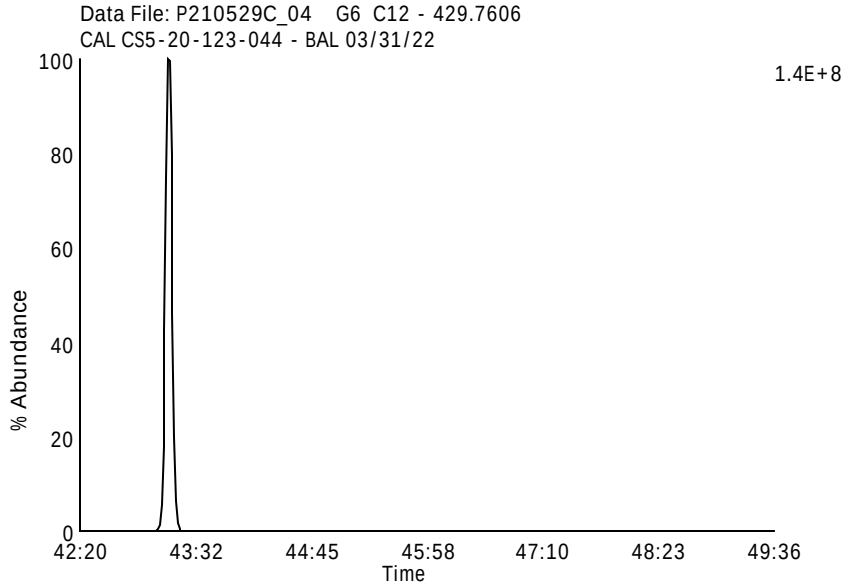


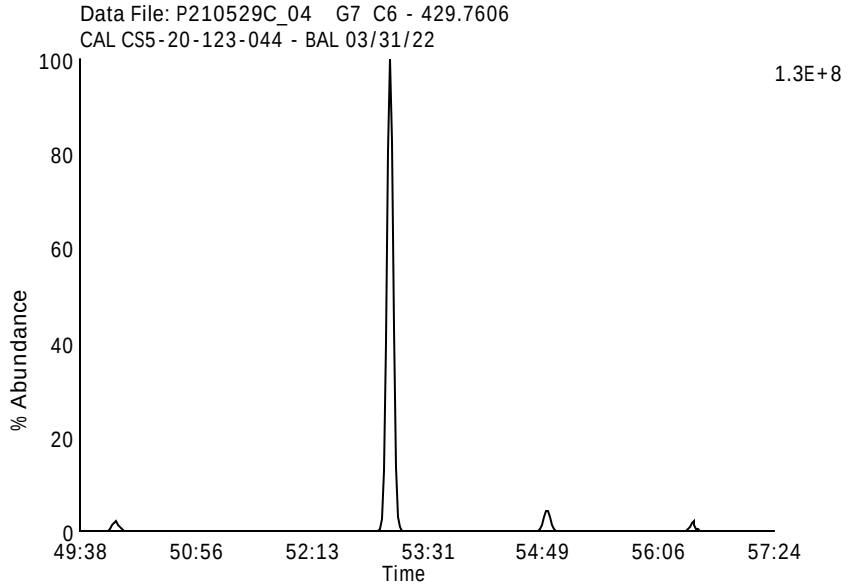
Octa Chlorinated Biphenyls

Data File Name: P210529C_04
Lab Sample ID: CS5-20-123-044
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22









Nona Chlorinated Biphenyls

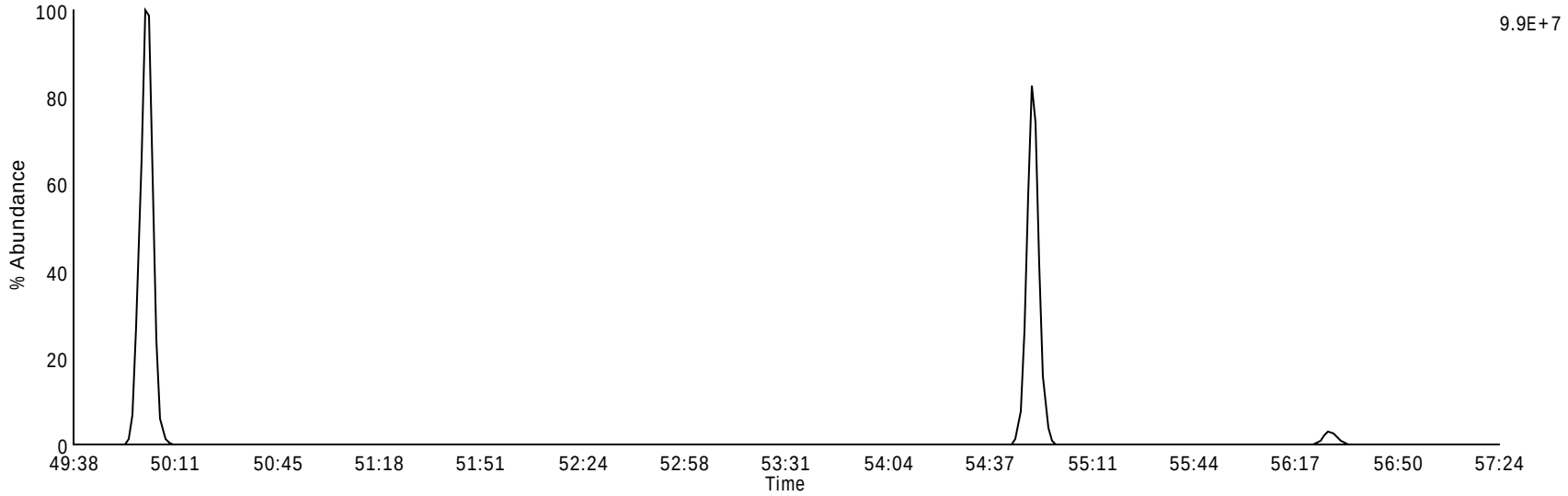
Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS5-20-123-044 - BAL 03/31/22

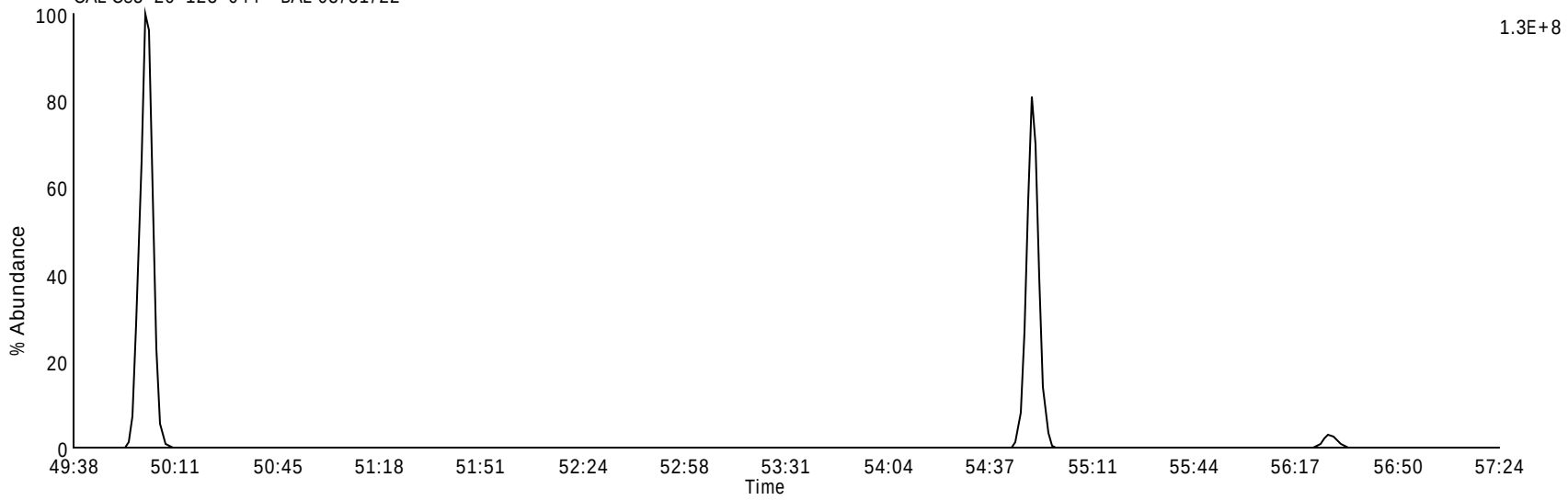
Data File: P210529C_04 G7 C11 - 461.7246

CAL CS5-20-123-044 - BAL 03/31/22



Data File: P210529C_04 G7 C12 - 463.7216

CAL CS5-20-123-044 - BAL 03/31/22

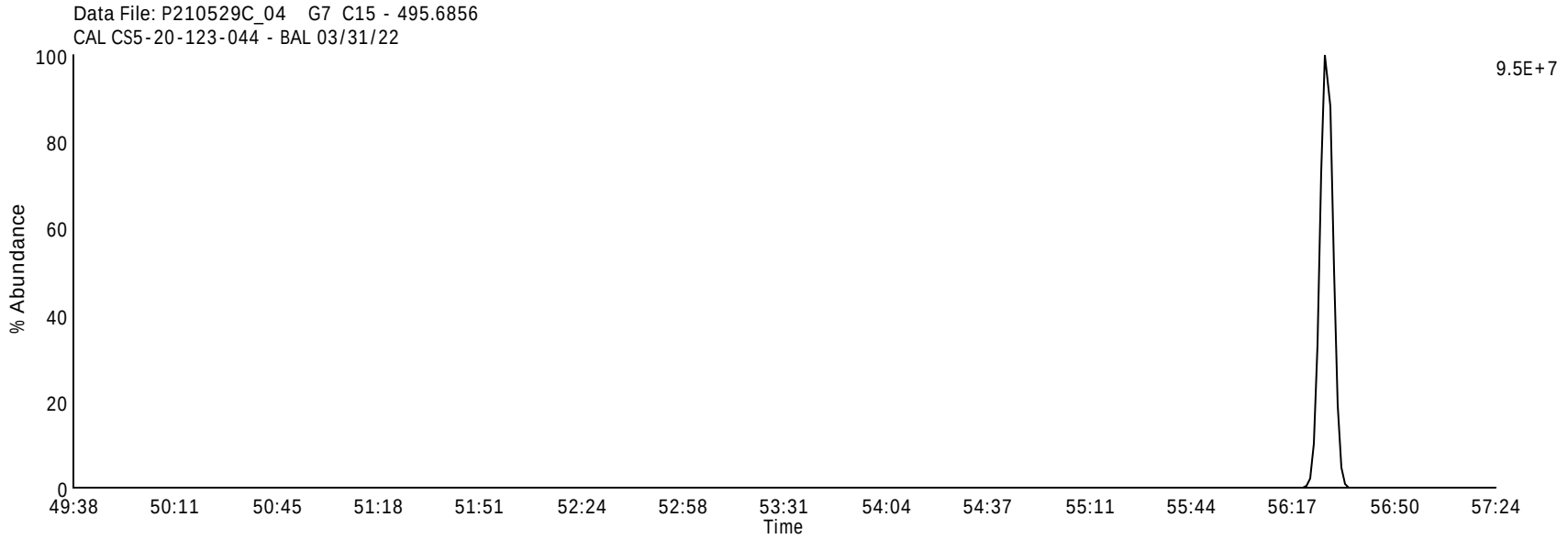


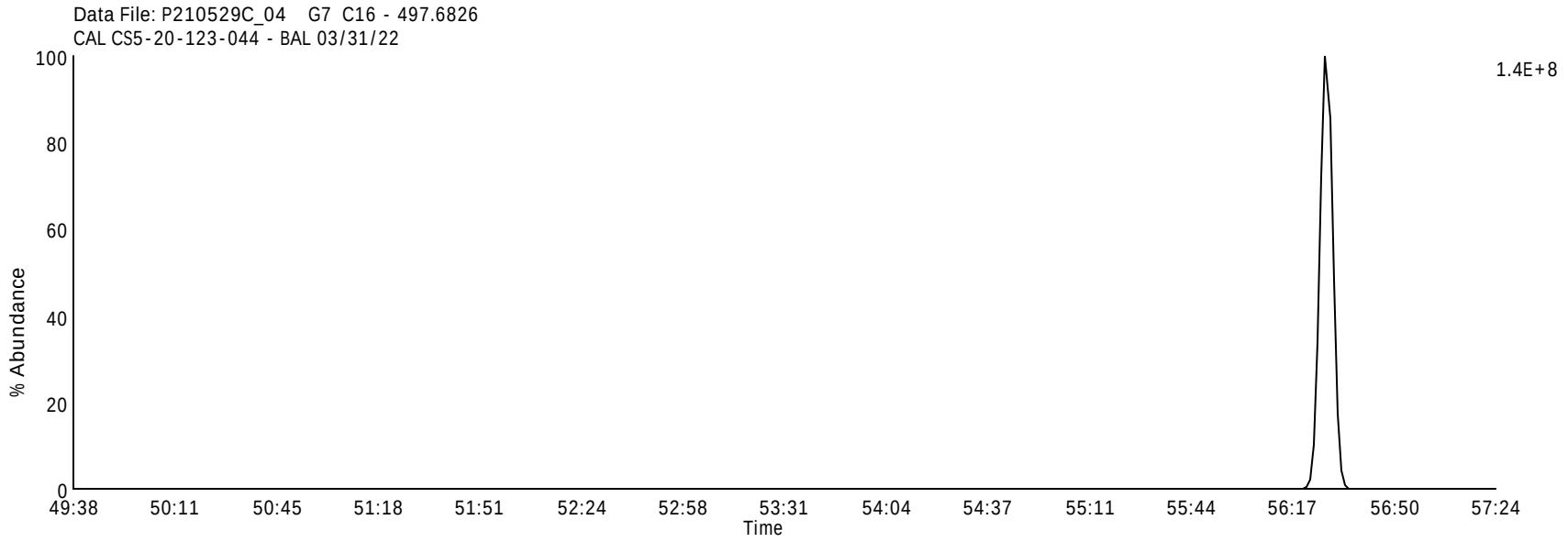
Deca Chlorinated Biphenyl

Data File Name: P210529C_04 Lab Sample ID: CS5-20-123-044

Date Acquired: 5/29/2021 Instrument: 10MSHR09 (P)

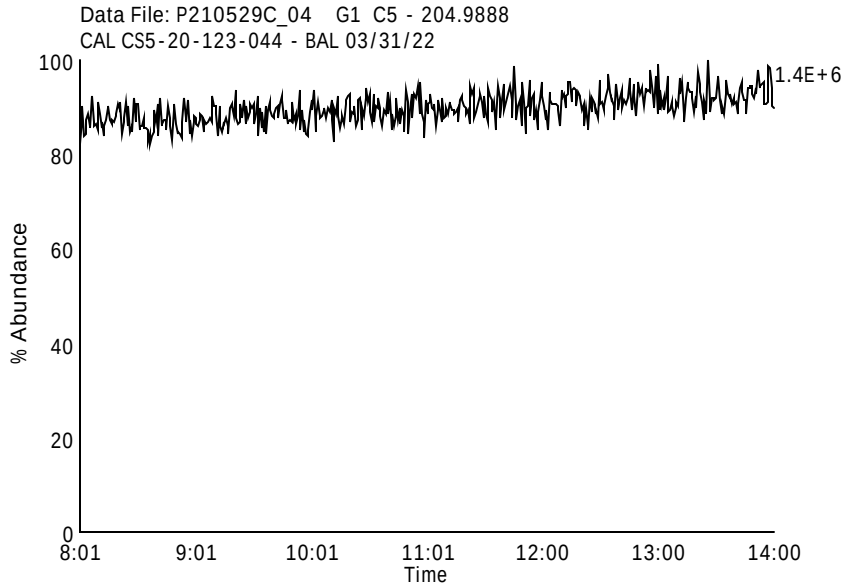
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22

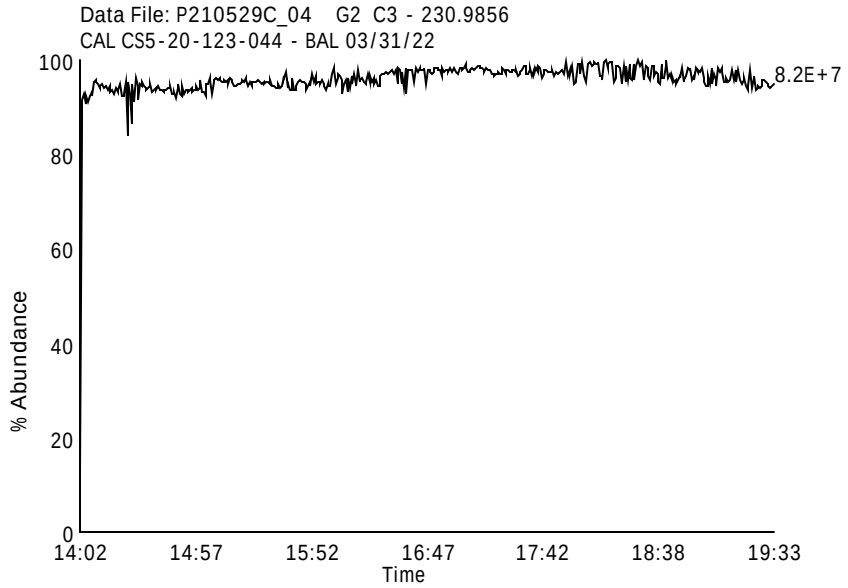


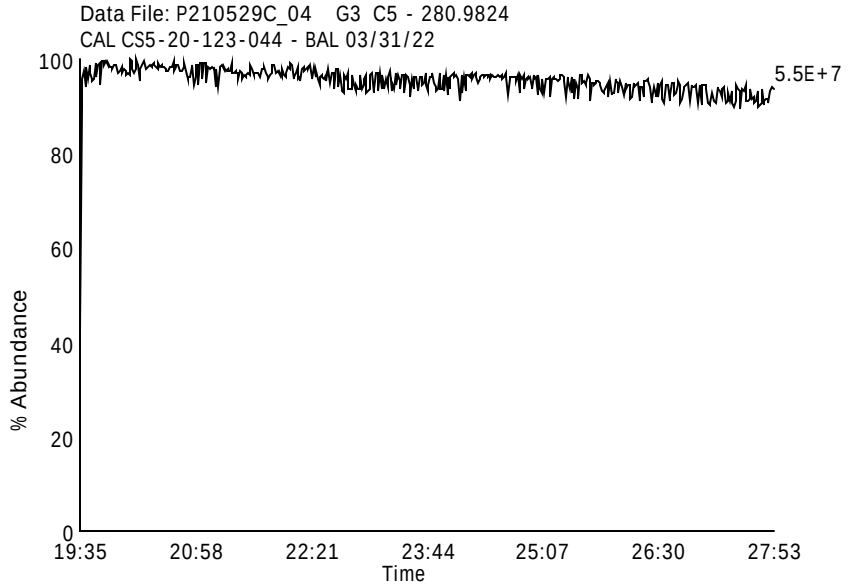


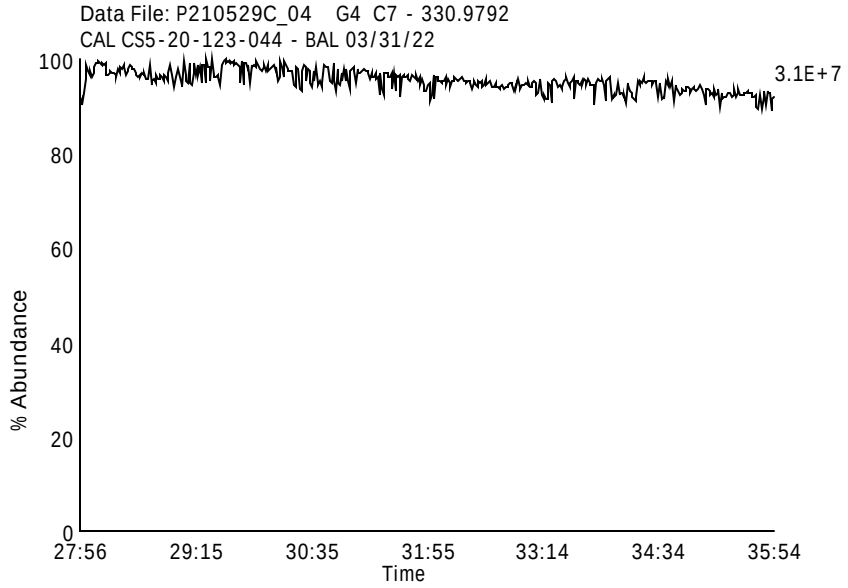
Group 1 - 4 Lock mass

Data File Name: P210529C_04
Lab Sample ID: CS5-20-123-044
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22



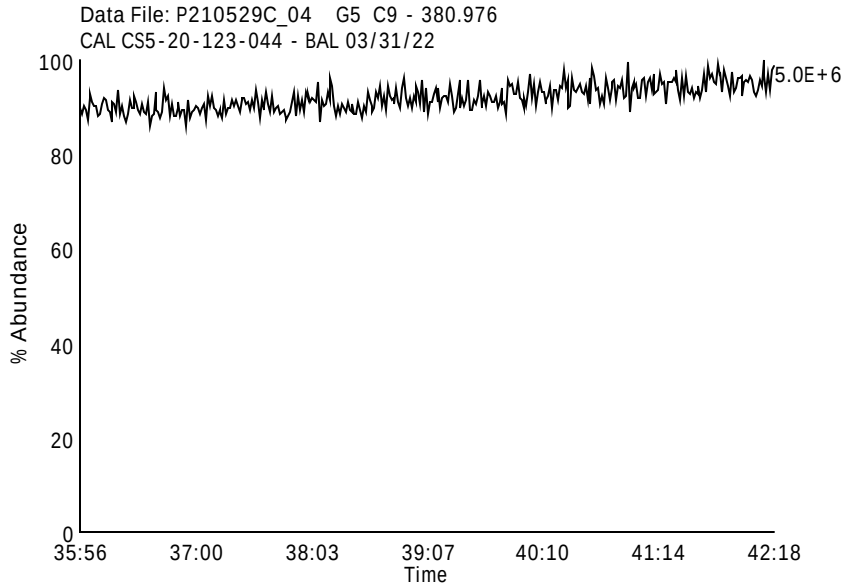


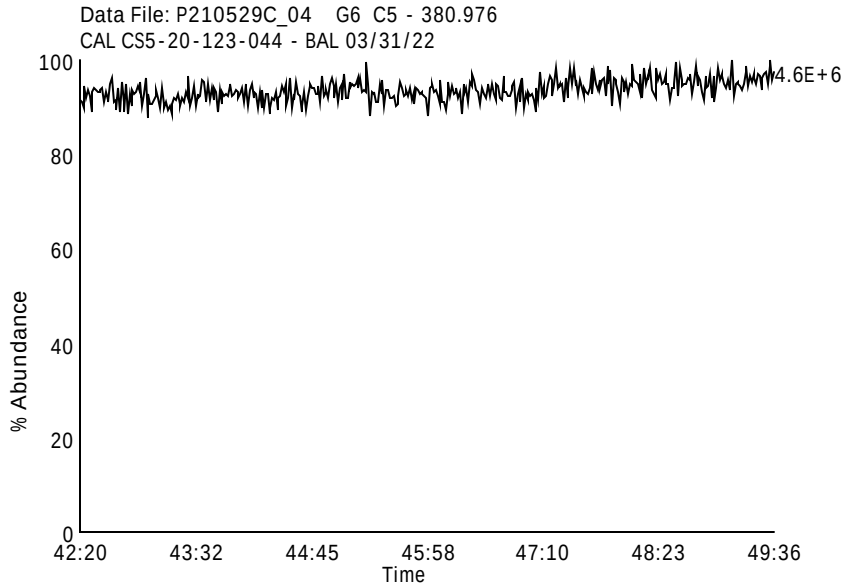


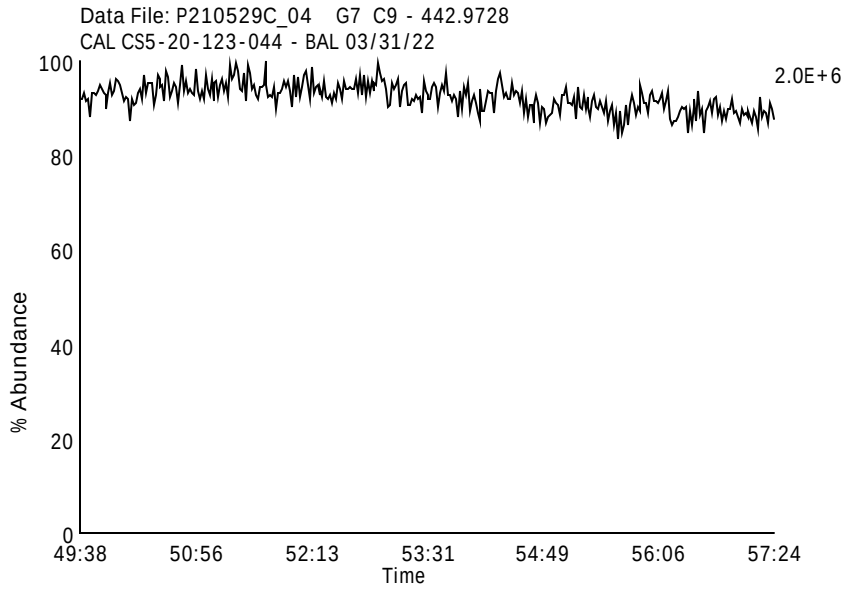


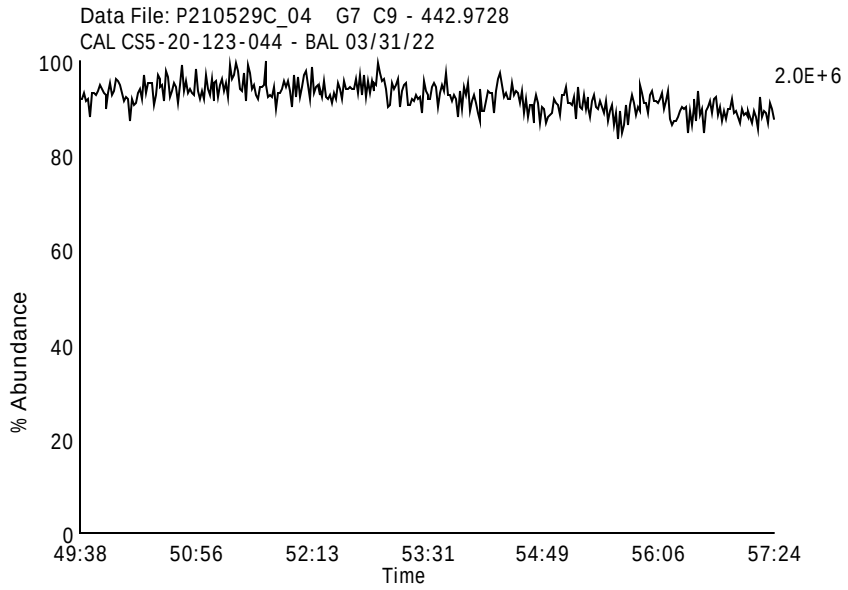
Group 5 - 7 Lock mass

Data File Name: P210529C_04
Lab Sample ID: CS5-20-123-044
Date Acquired: 5/29/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL CS5-20-123-044 - BAL 03/31/22



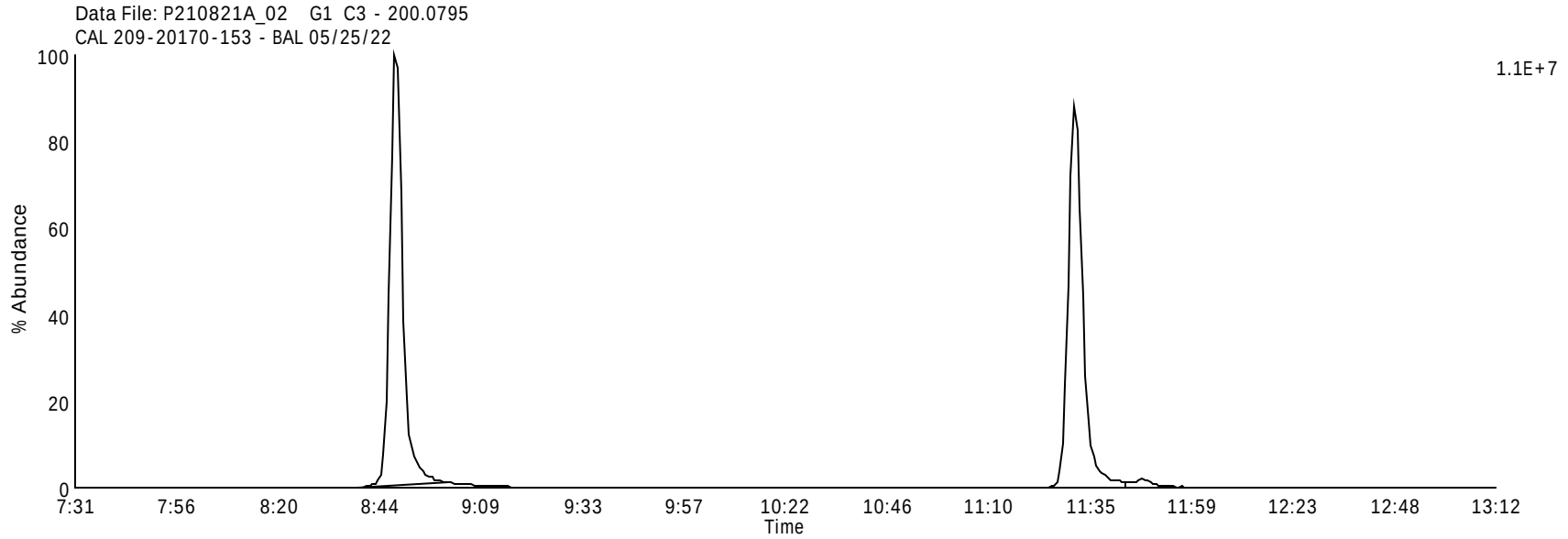


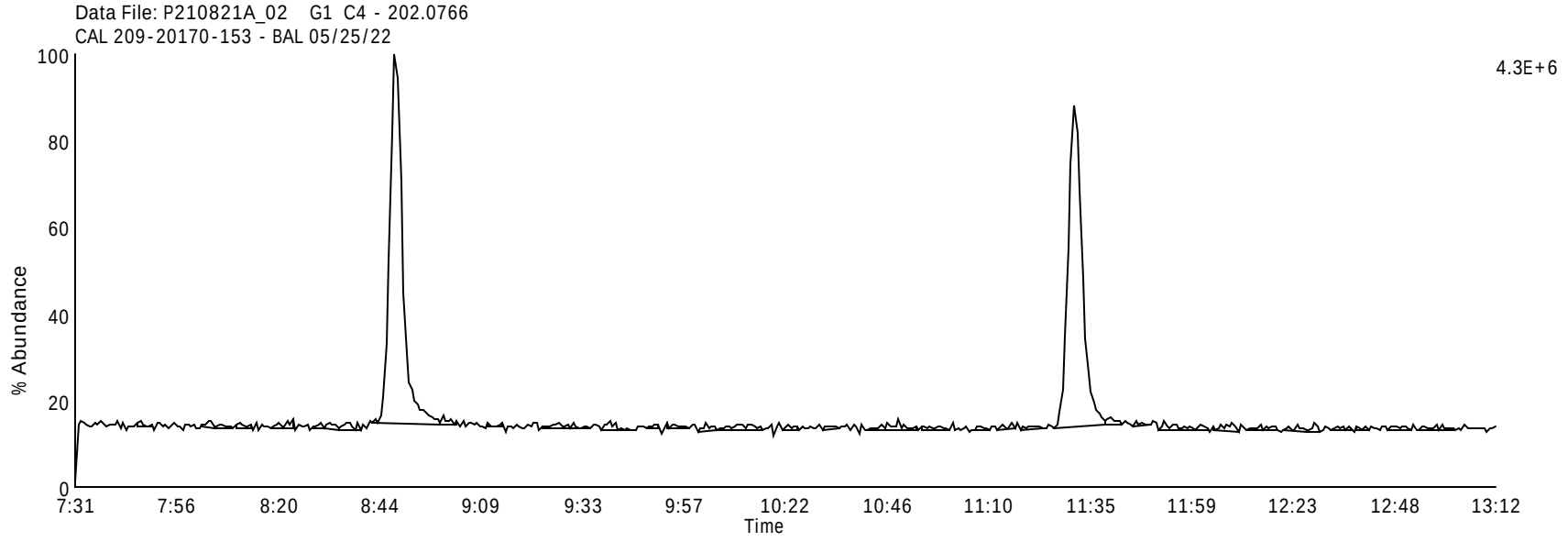




Labeled Mono Chlorinated Biphenyls

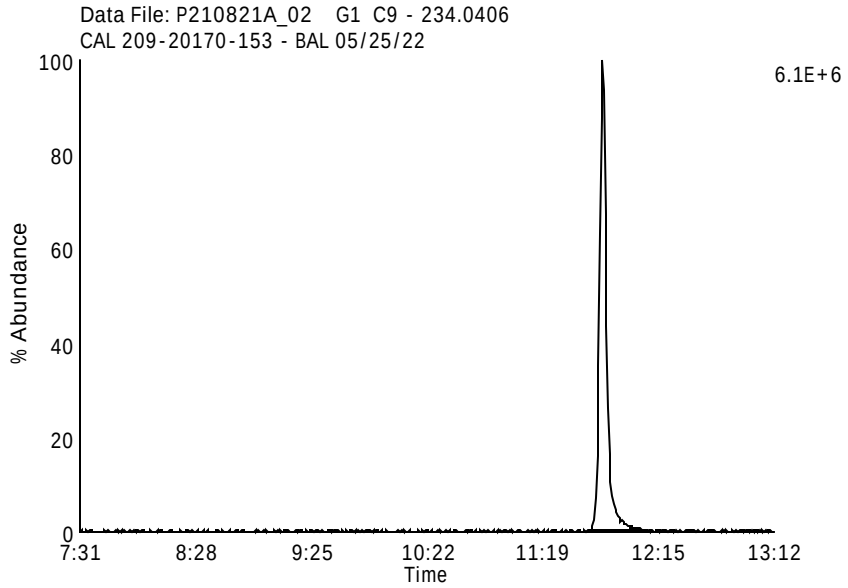
Data File Name: P210821A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021	Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22	Client Sample ID: 209 Mix

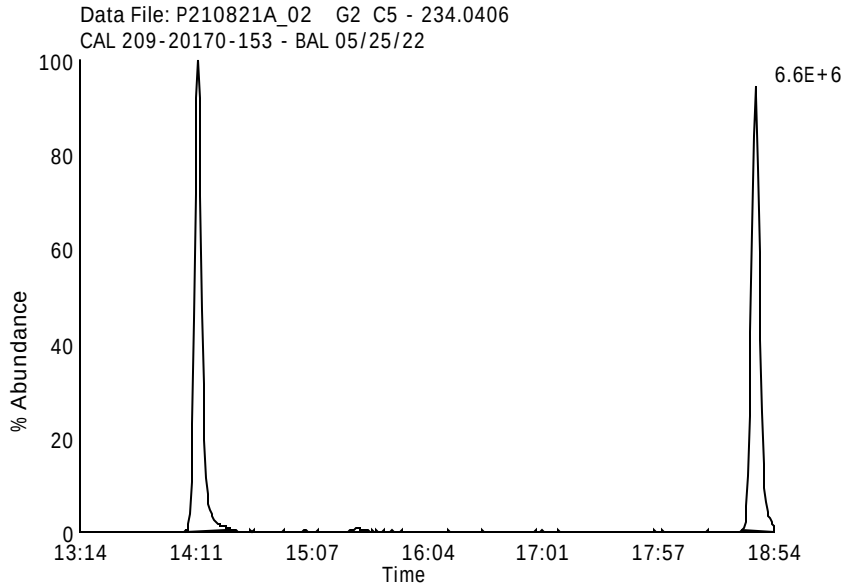


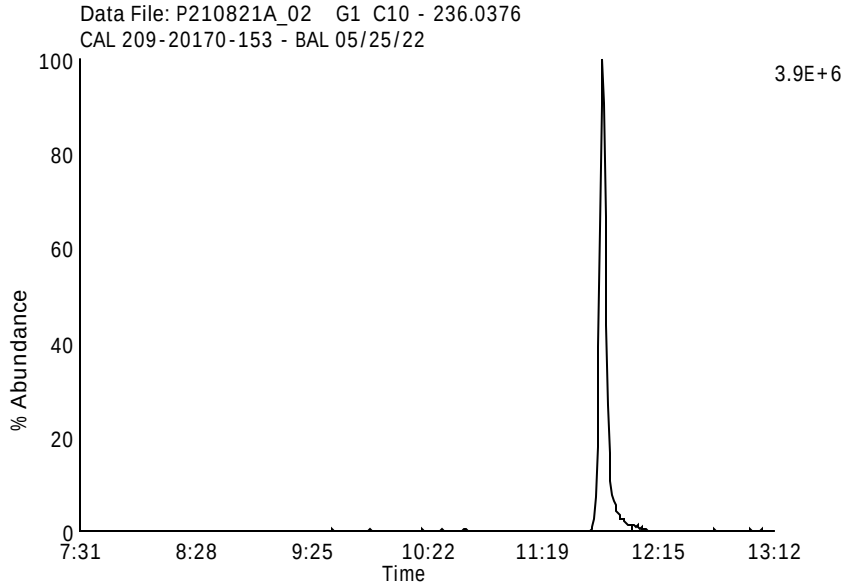


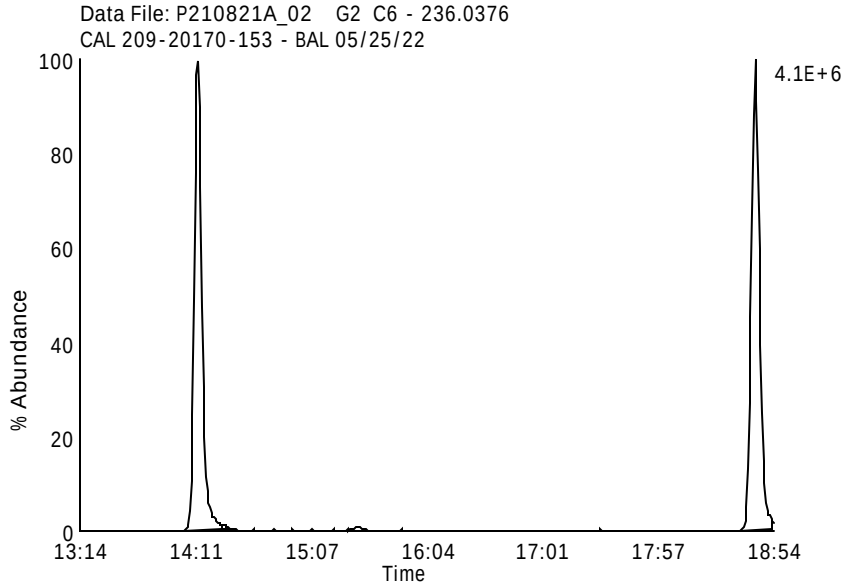
Labeled Di Chlorinated Biphenyls

Data File Name: P210821A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22
Client Sample ID: 209 Mix







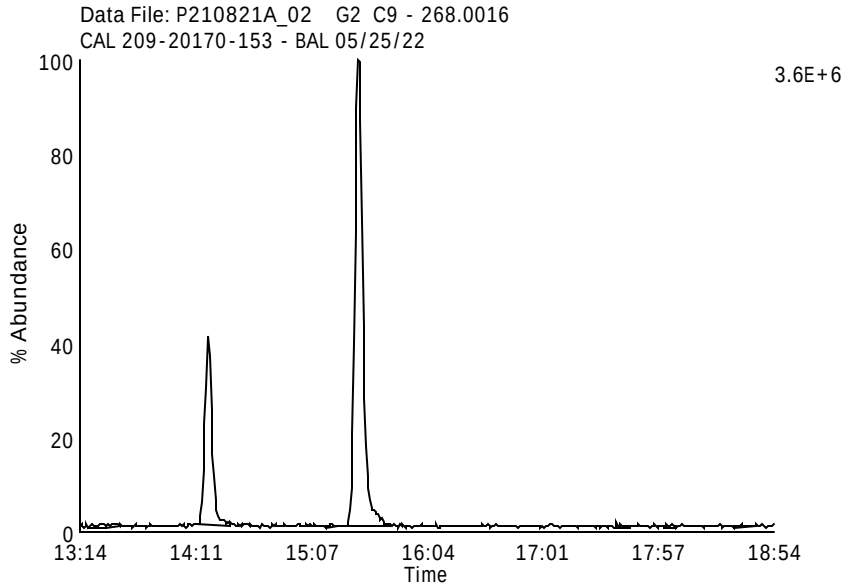


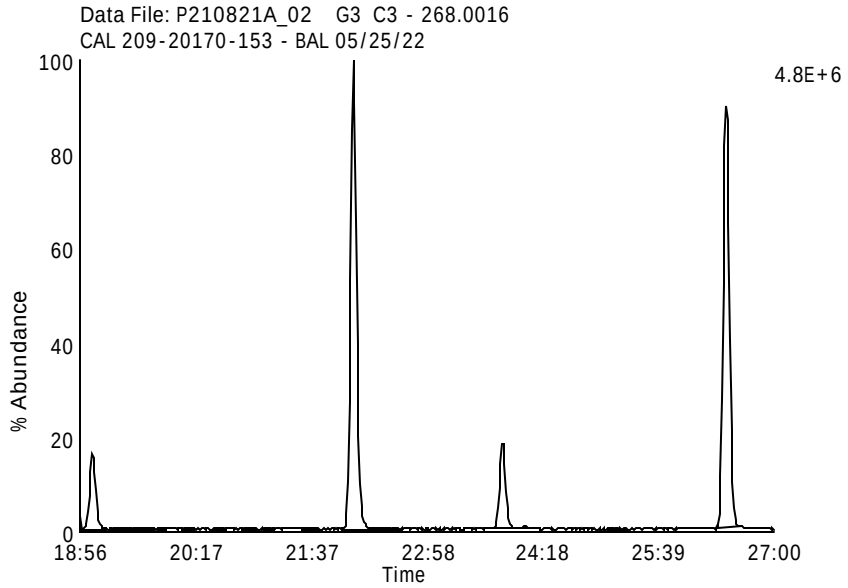
Labeled Tri Chlorinated Biphenyls

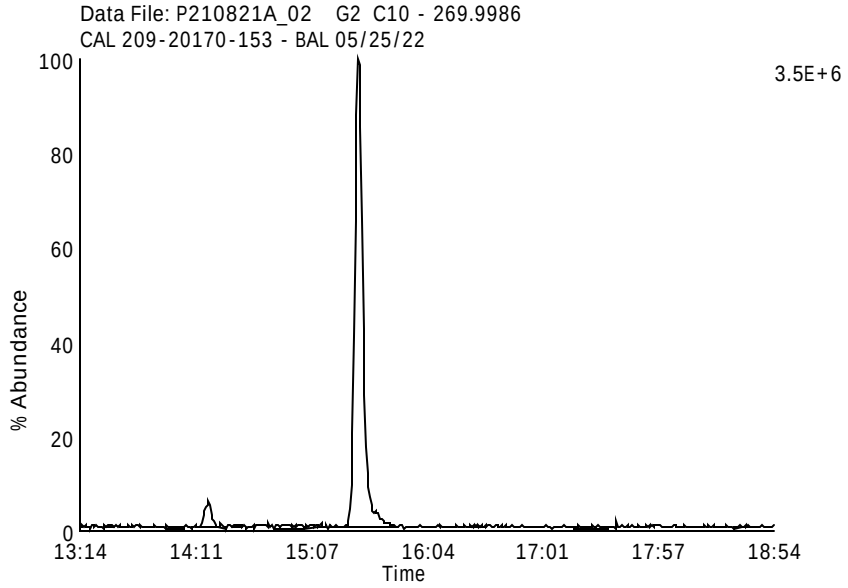
Data File Name: P210821A_02 | Lab Sample ID: 209-20170-153

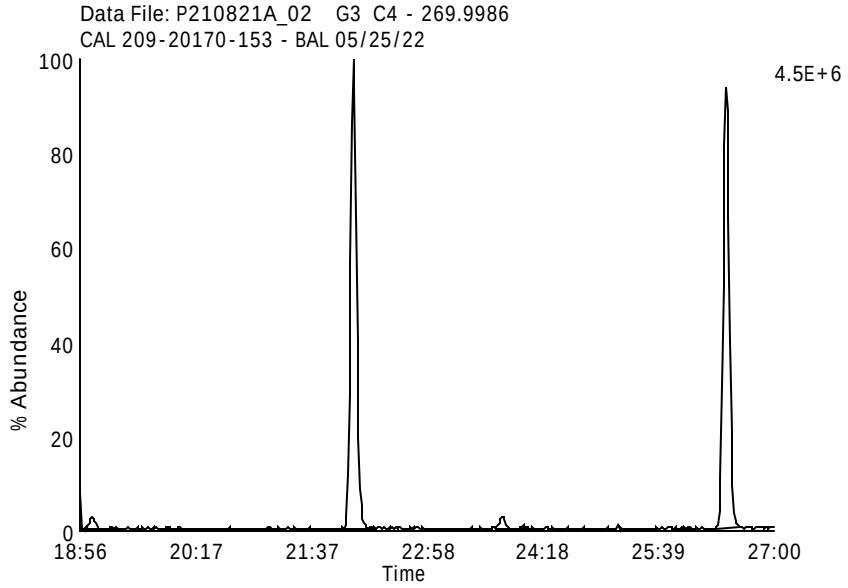
Date Acquired: 8/21/2021 | Instrument: 10MSHR09 (P)

Sample Description: CAL 209-20170-153 - BAL 05/25/22 | Client Sample ID: 209 Mix



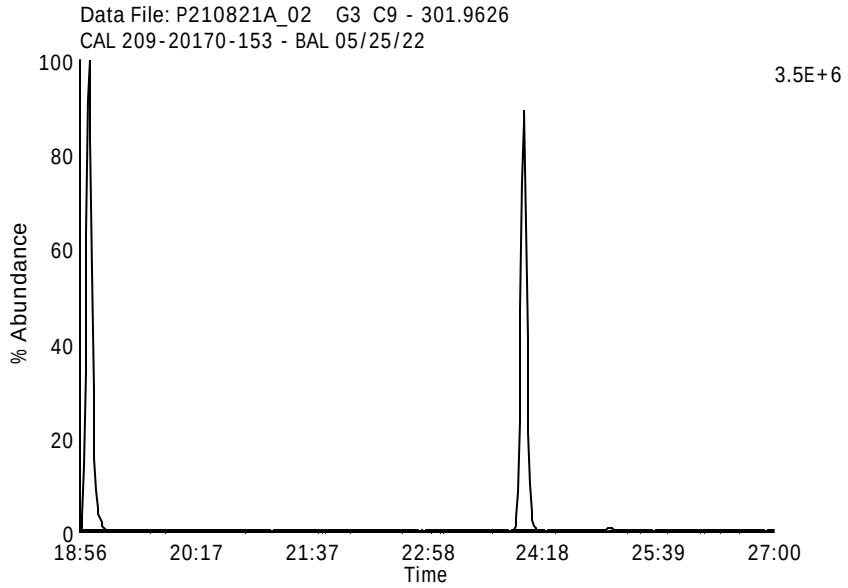


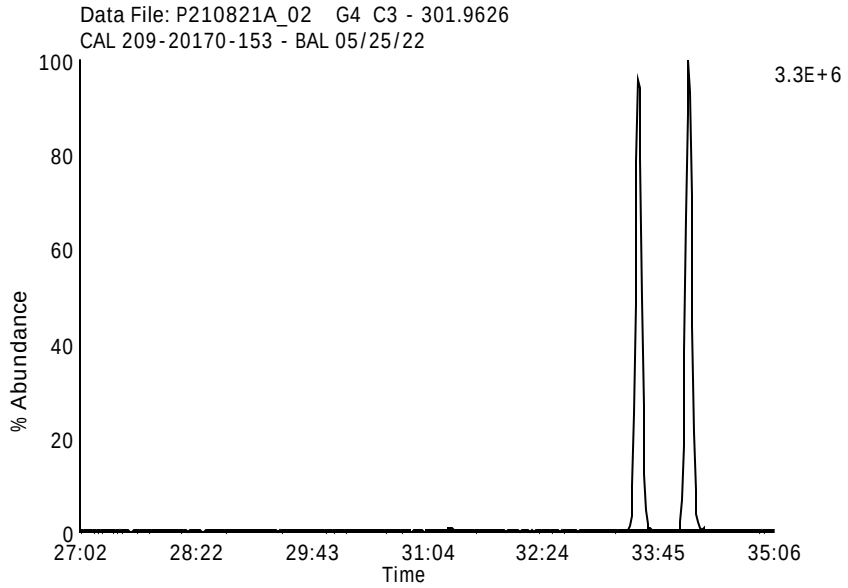


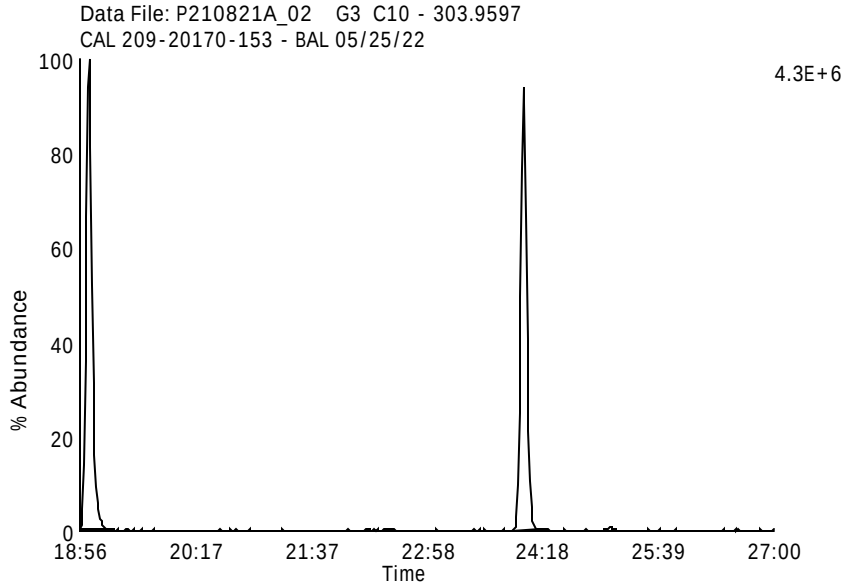


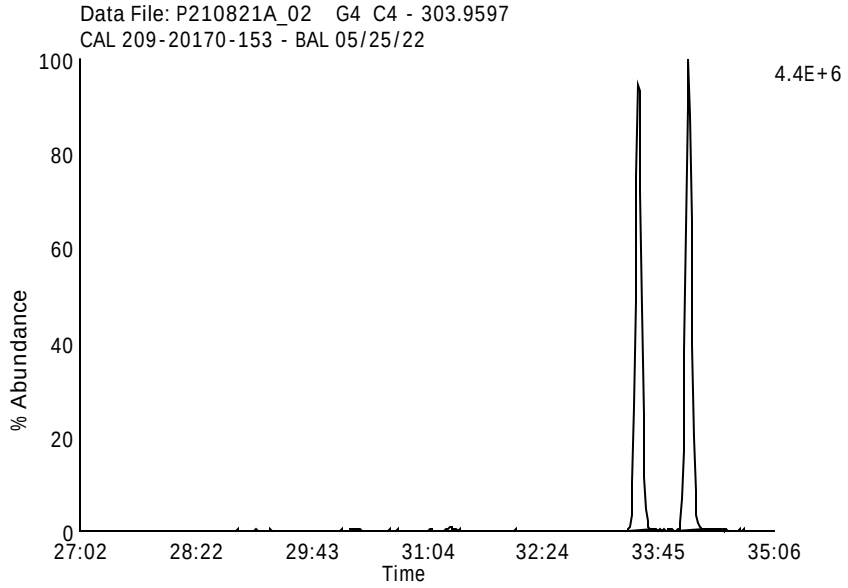
Labeled Tetra Chlorinated Biphenyls

Data File Name: P210821A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22
Client Sample ID: 209 Mix



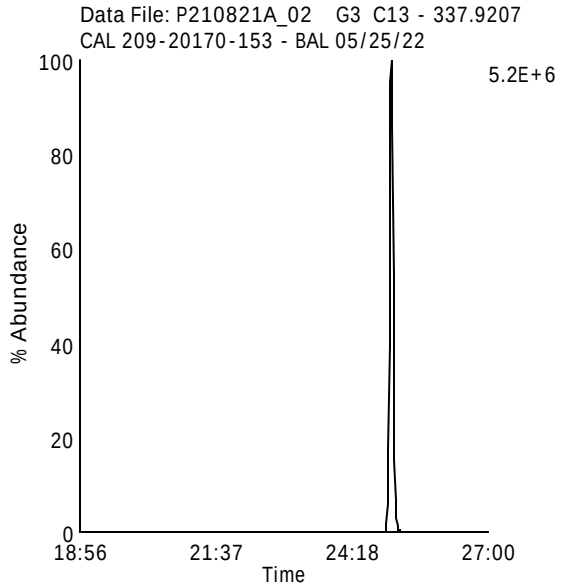


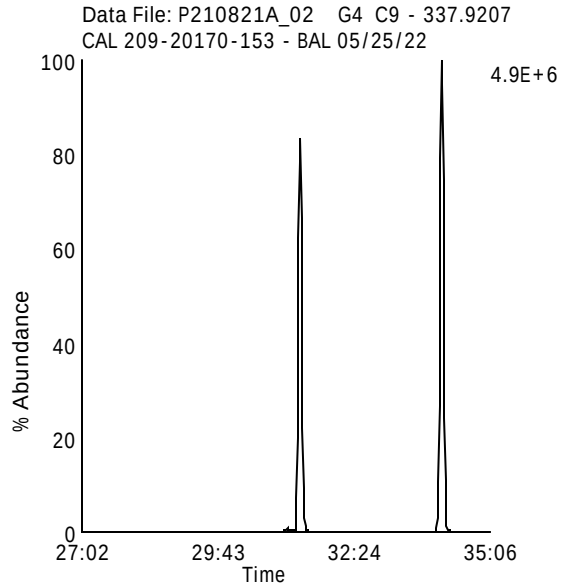


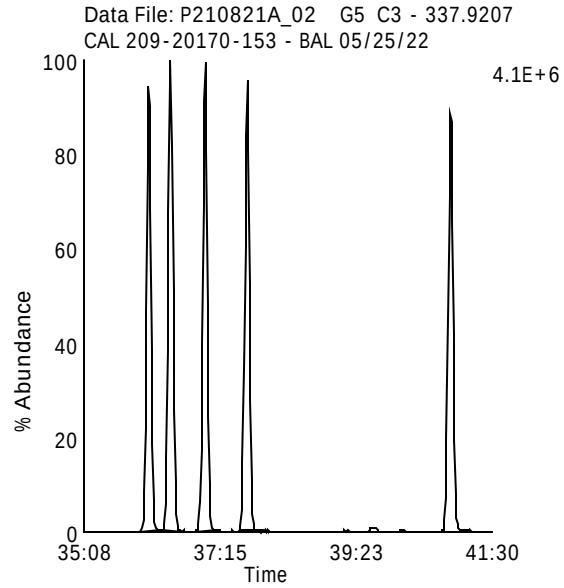


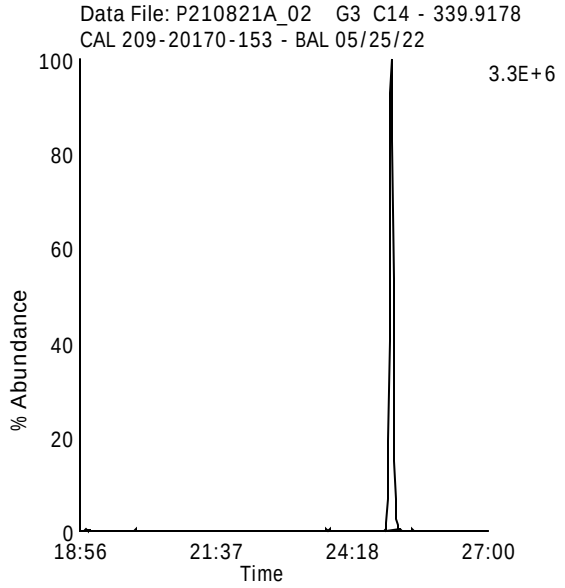
Labeled Penta Chlorinated Biphenyls

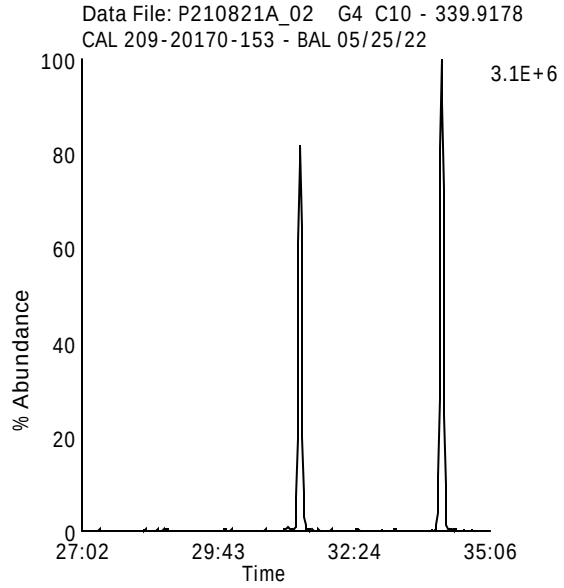
Data File Name: P210821A_02 | Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021 | Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22 | Client Sample ID: 209 Mix

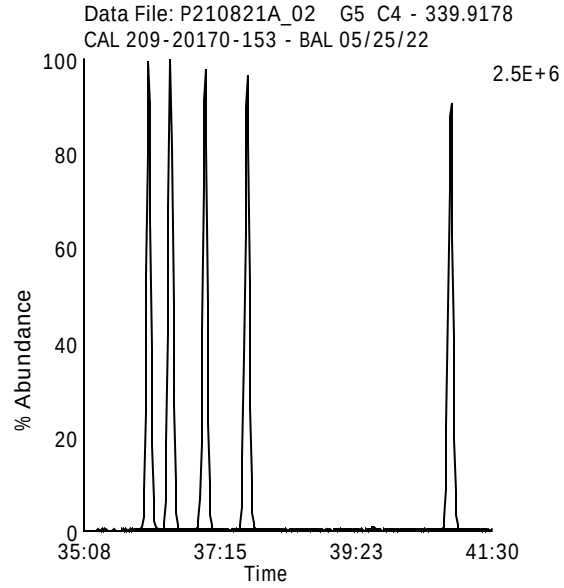






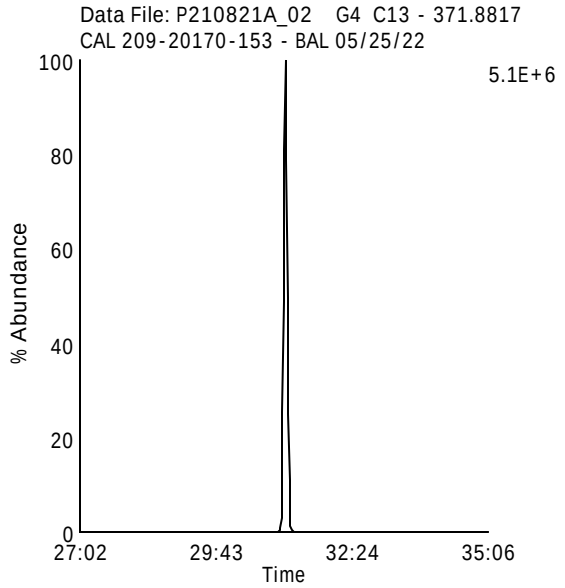


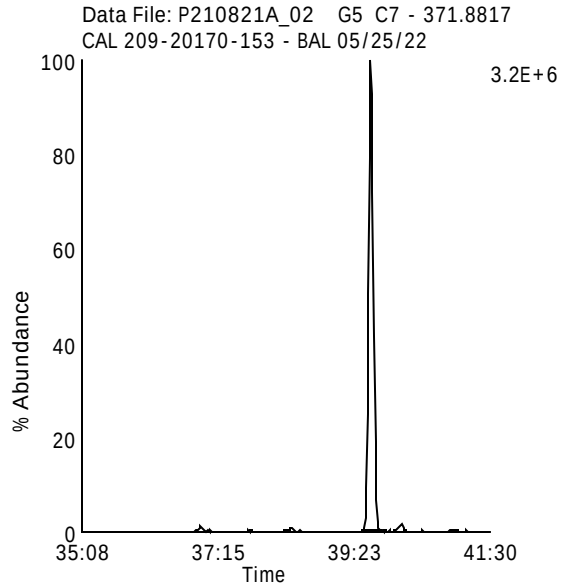


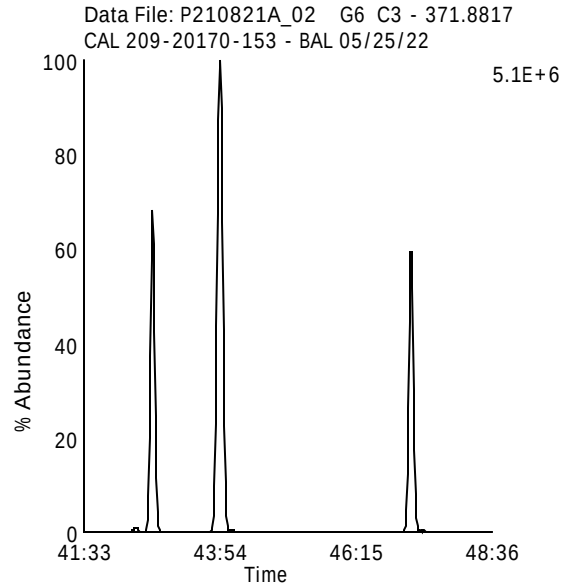


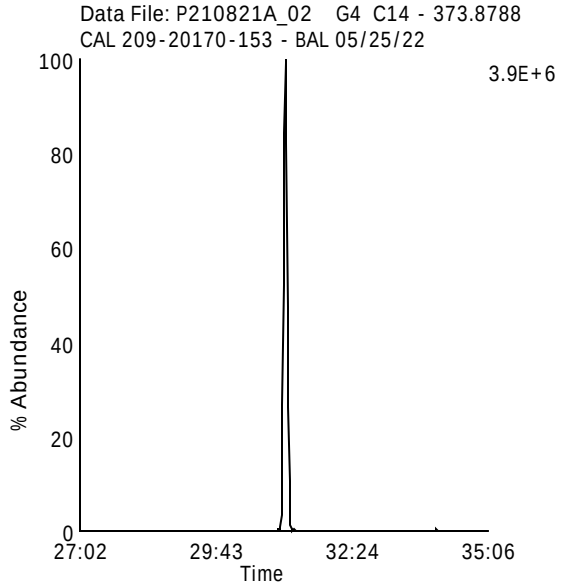
Labeled Hexa Chlorinated Biphenyls

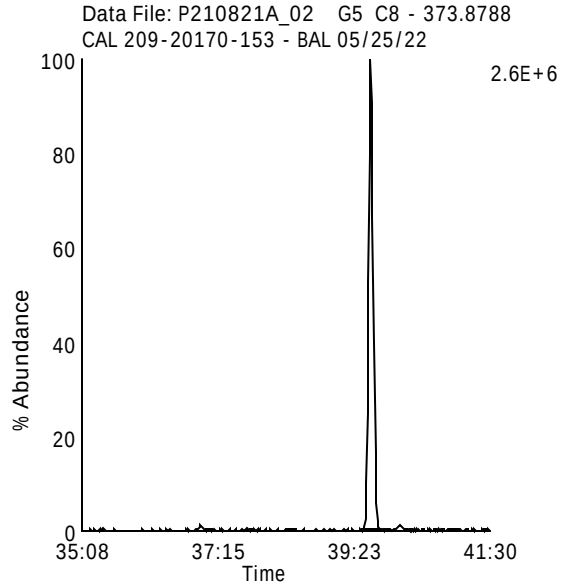
Data File Name: P210821A_02 | Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021 | Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22 | Client Sample ID: 209 Mix

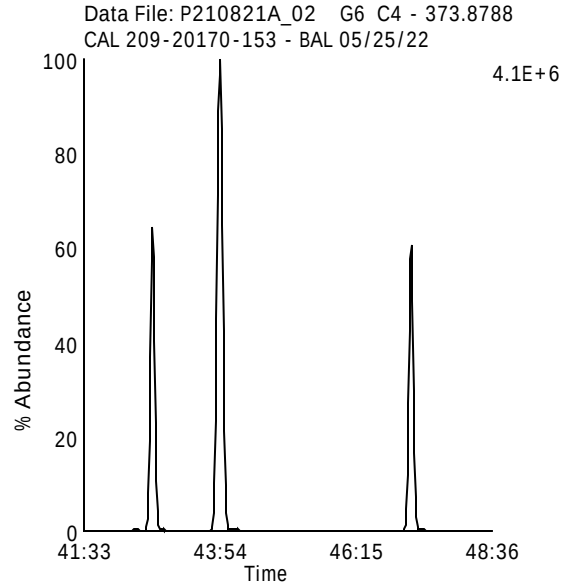








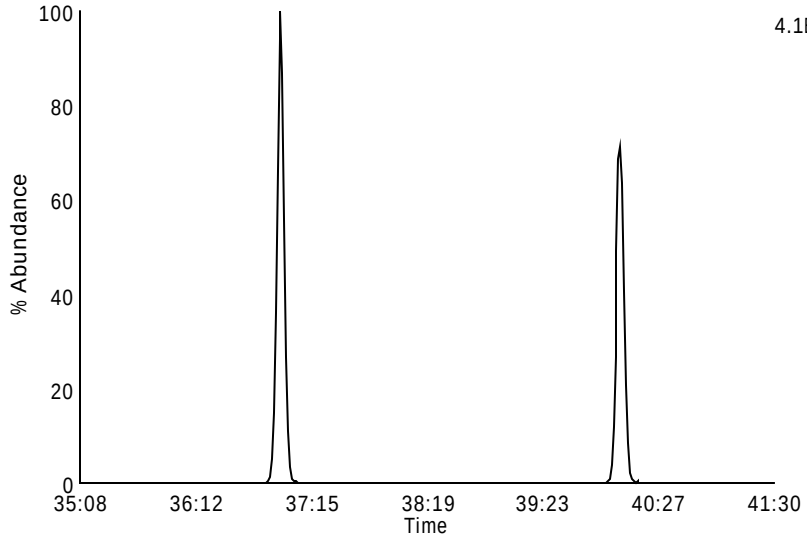




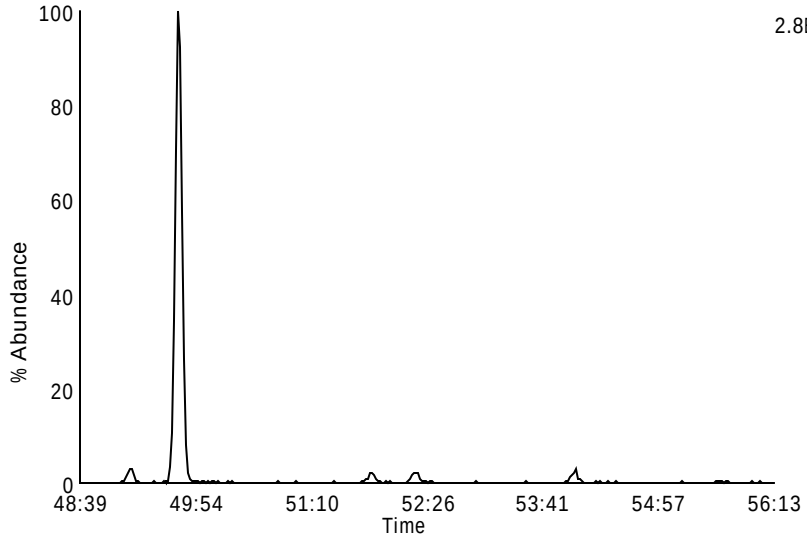
Labeled Hepta Chlorinated Biphenyls

Data File Name: P210821A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22
Client Sample ID: 209 Mix

Data File: P210821A_02 G5 C13 - 405.8428
CAL 209-20170-153 - BAL 05/25/22



Data File: P210821A_02 G7 C3 - 405.8428
CAL 209-20170-153 - BAL 05/25/22



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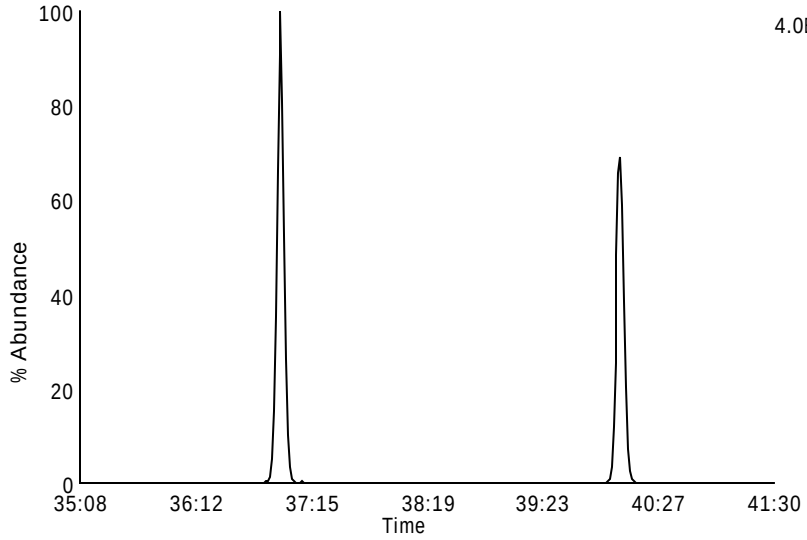
CAL 209-20170-153 - BAL 05/25/22



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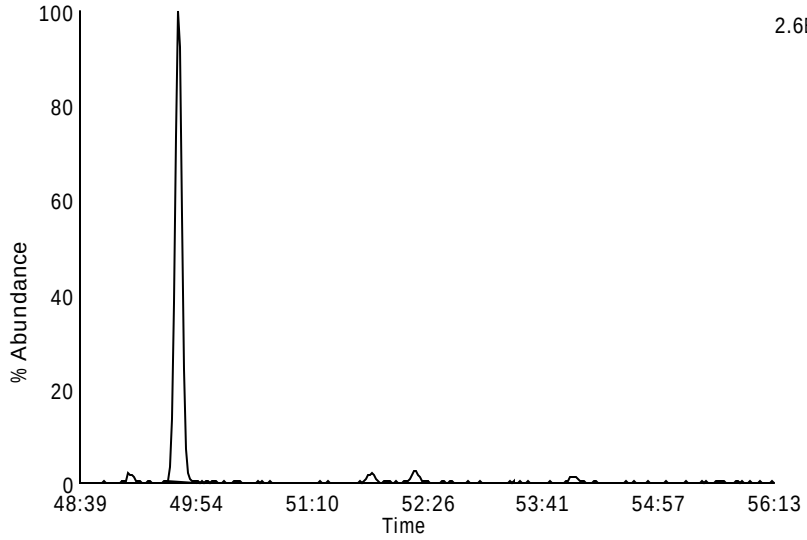
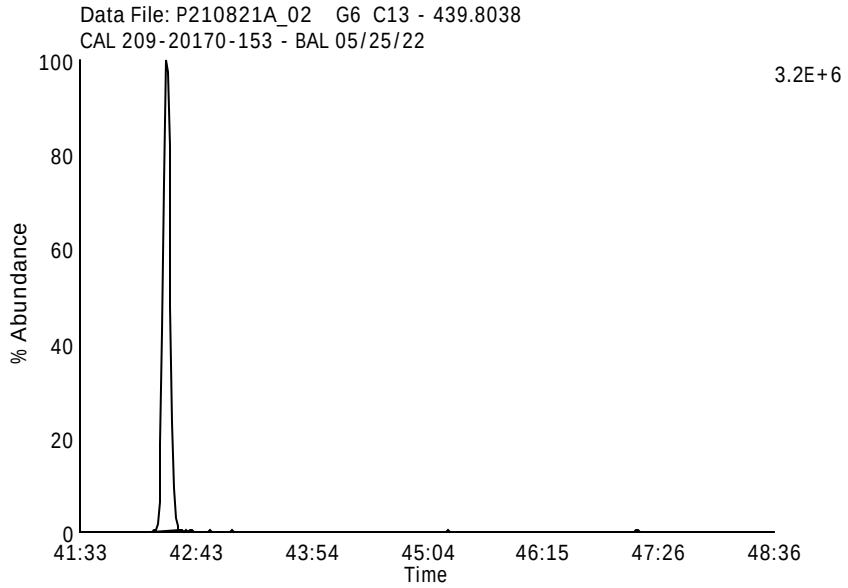
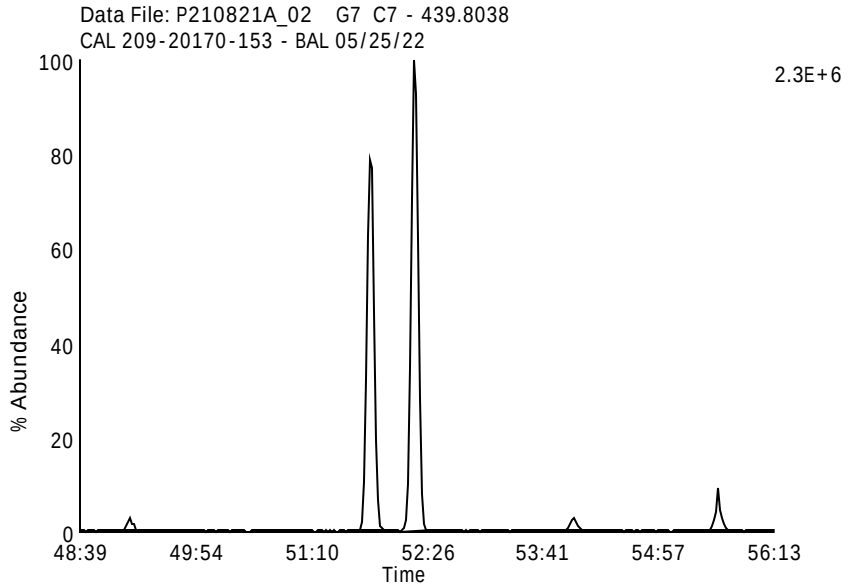
CAL 209-20170-153 - BAL 05/25/22

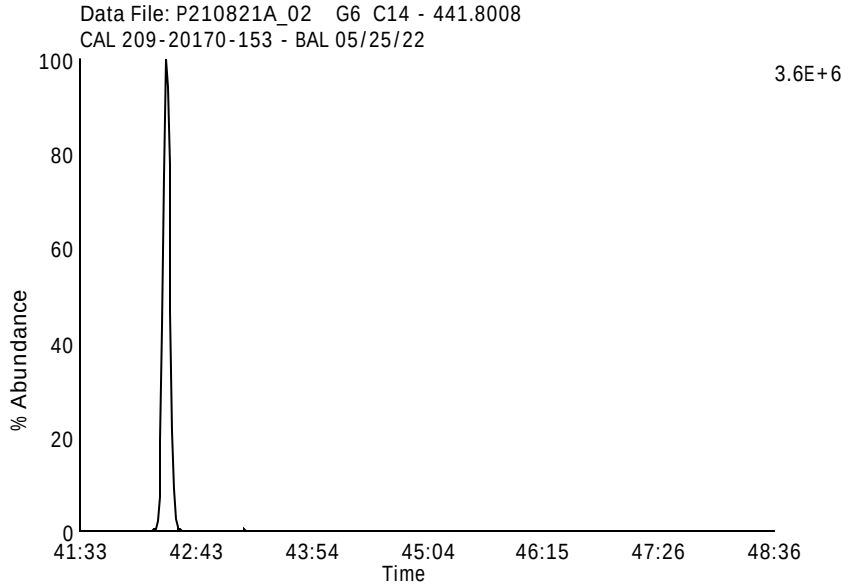


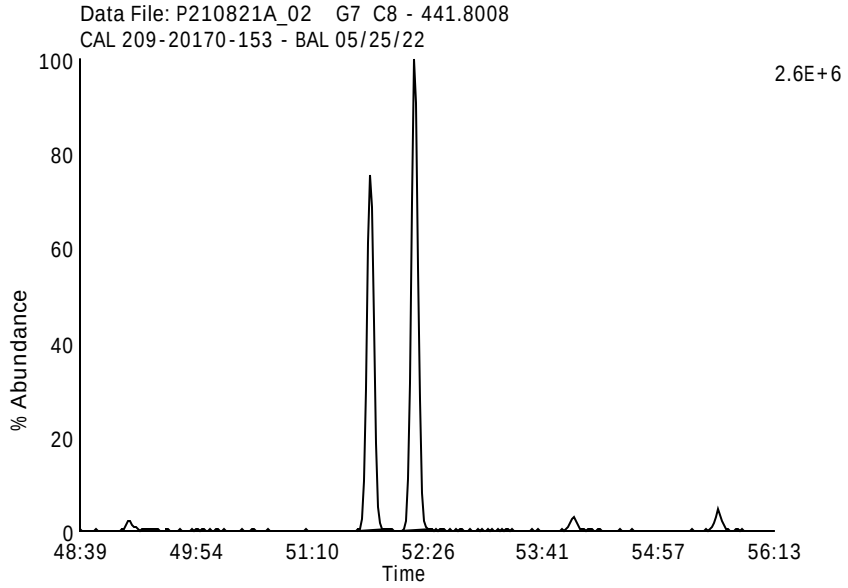
Labeled Octa Chlorinated Biphenyls

Data File Name: P210821A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22
Client Sample ID: 209 Mix



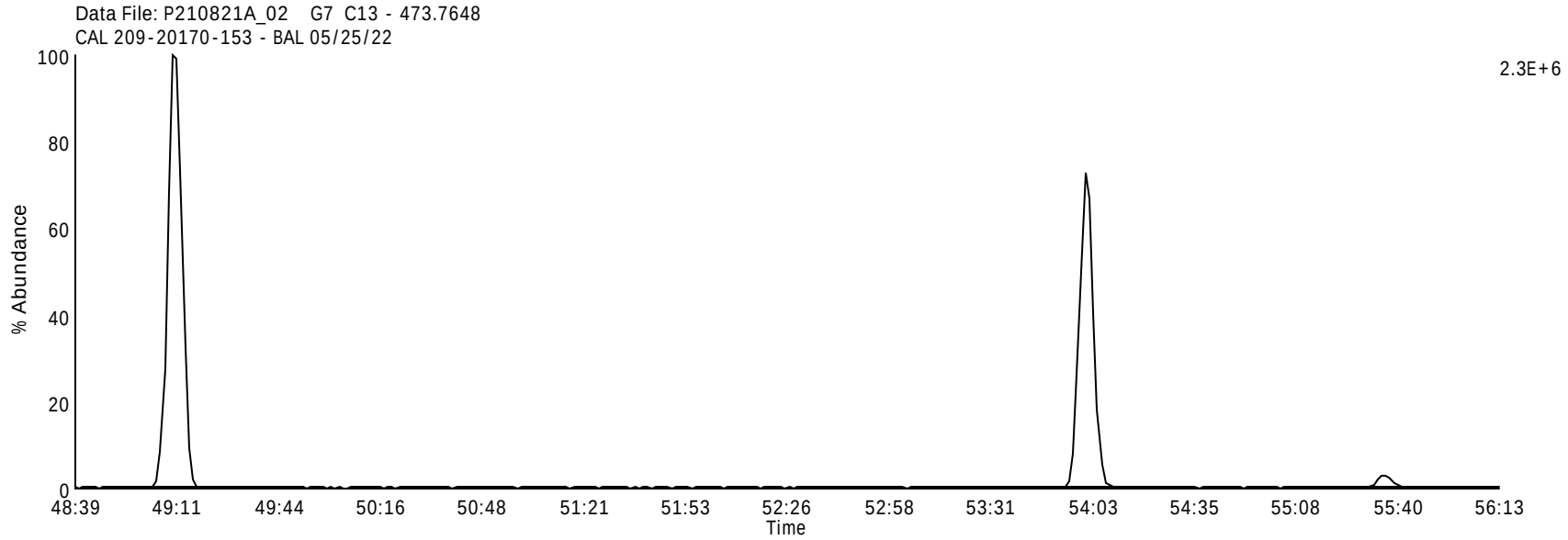


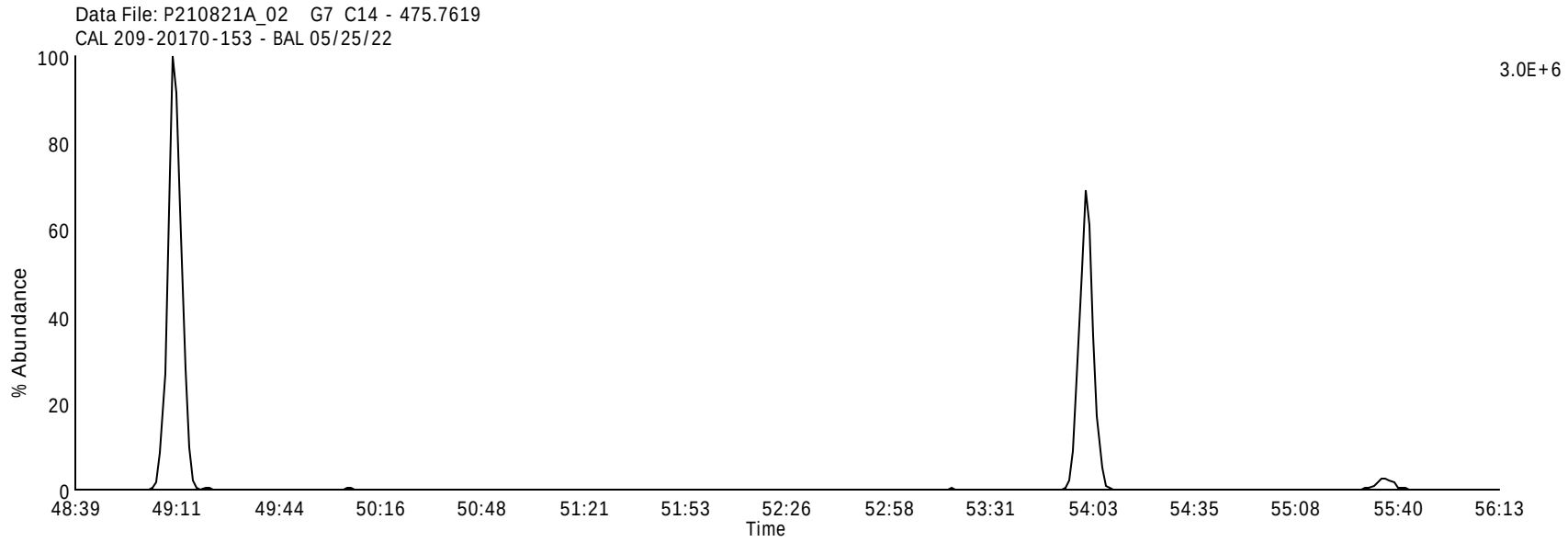




Labeled Nona Chlorinated Biphenyls

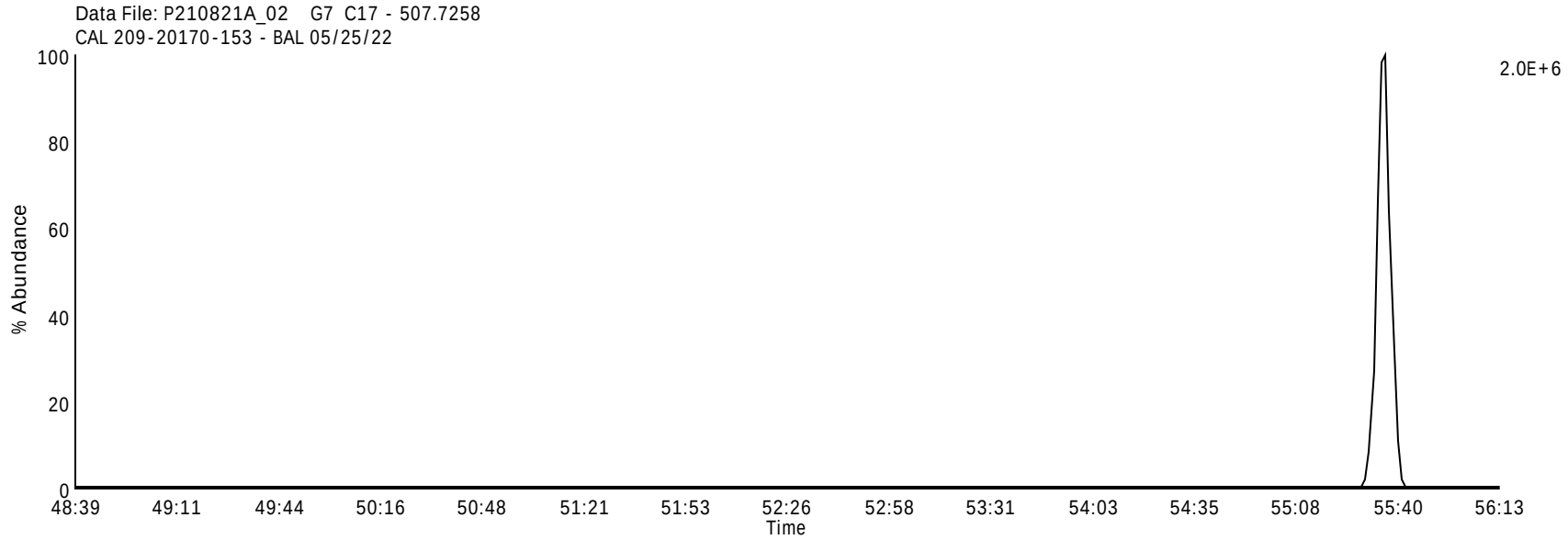
Data File Name: P210821A_02 | Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021 | Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22 | Client Sample ID: 209 Mix

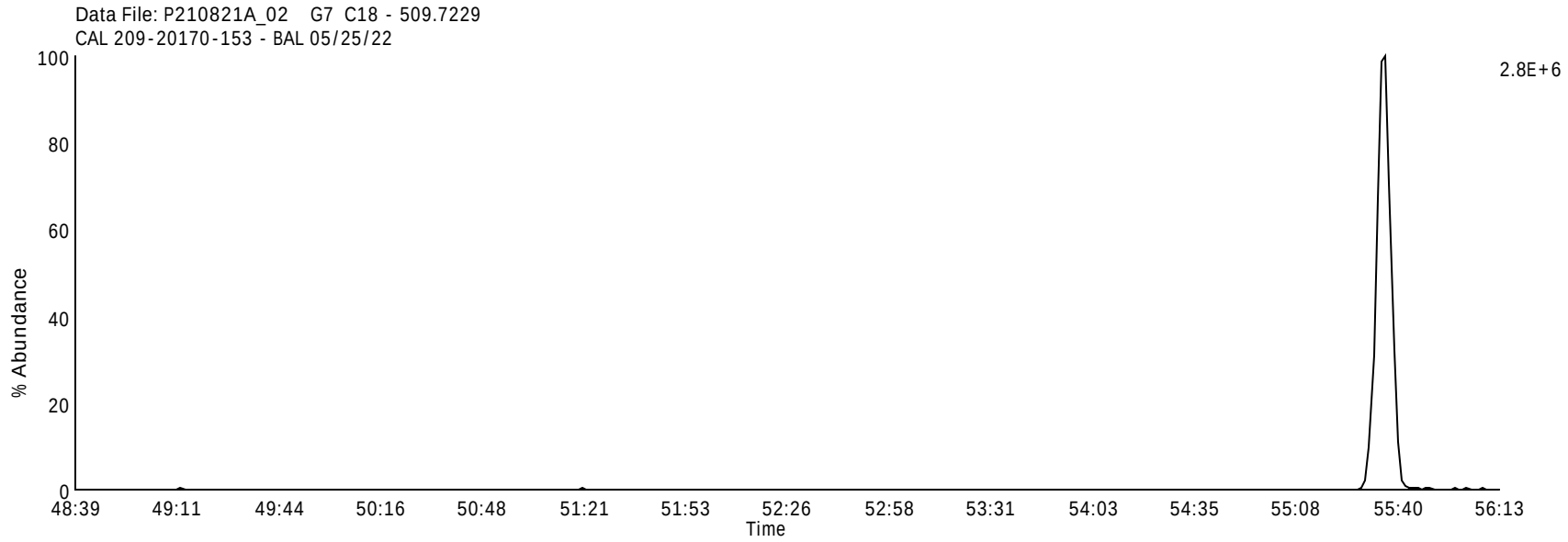




Labeled Deca Chlorinated Biphenyl

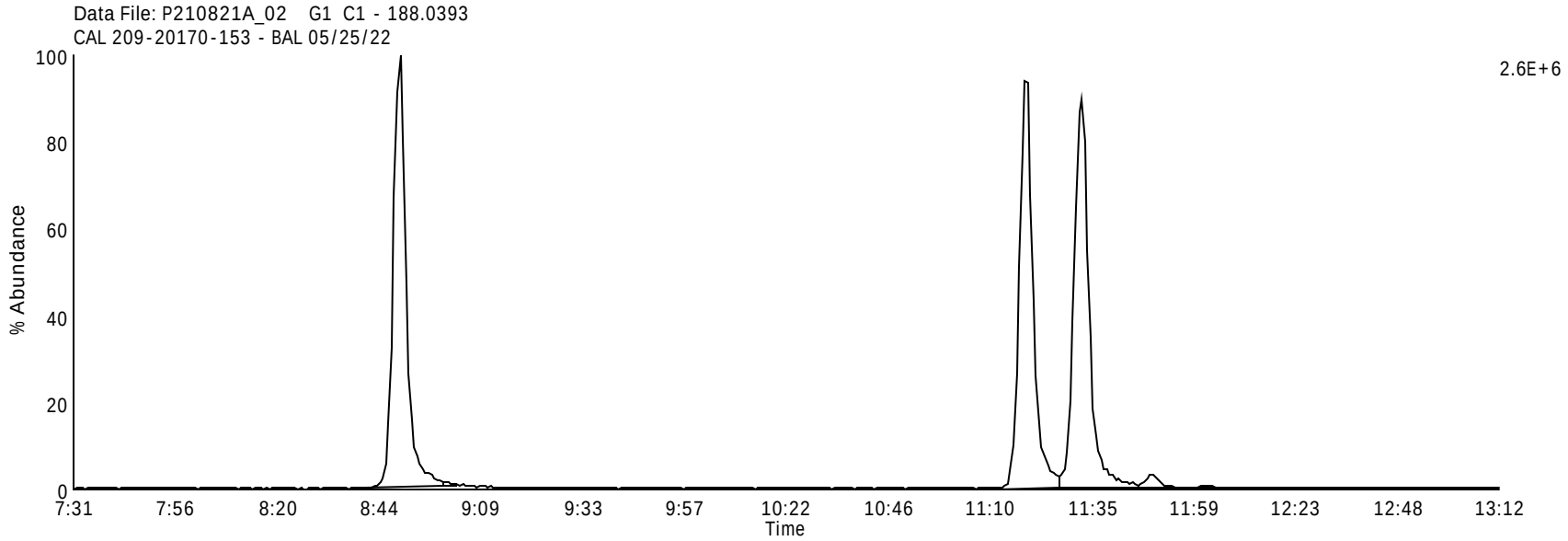
Data File Name: P210821A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021	Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22	Client Sample ID: 209 Mix

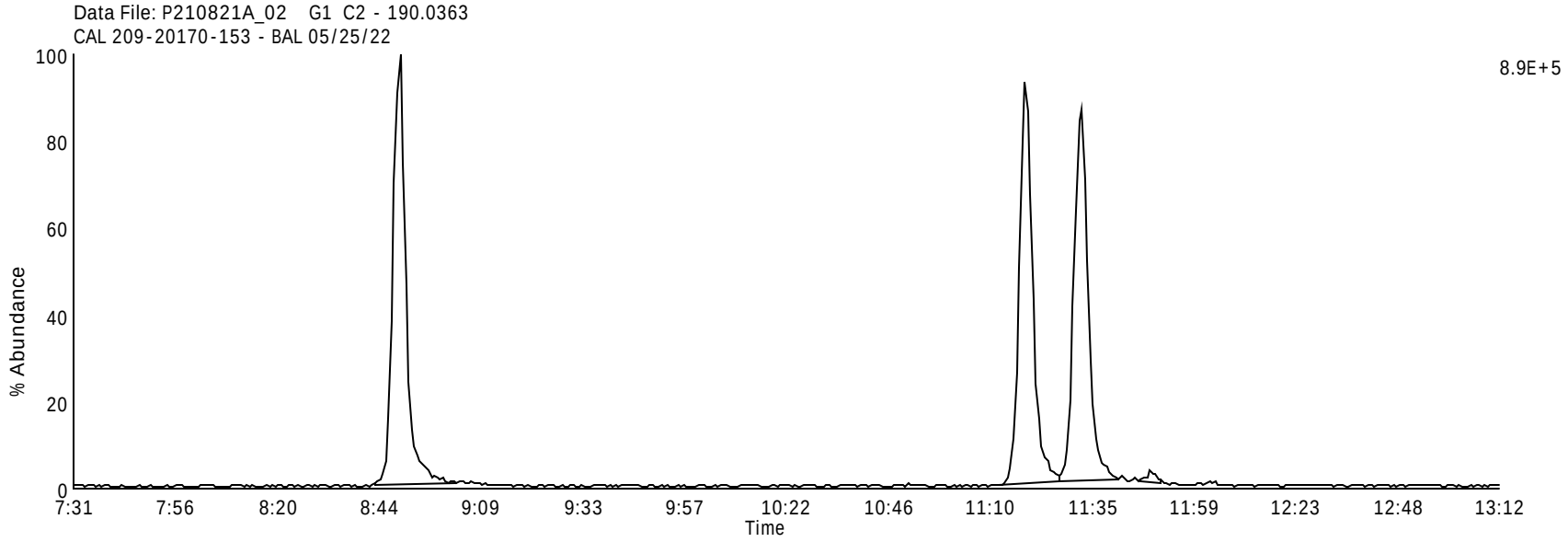




Mono Chlorinated Biphenyls

Data File Name: P210821A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021	Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22	Client Sample ID: 209 Mix



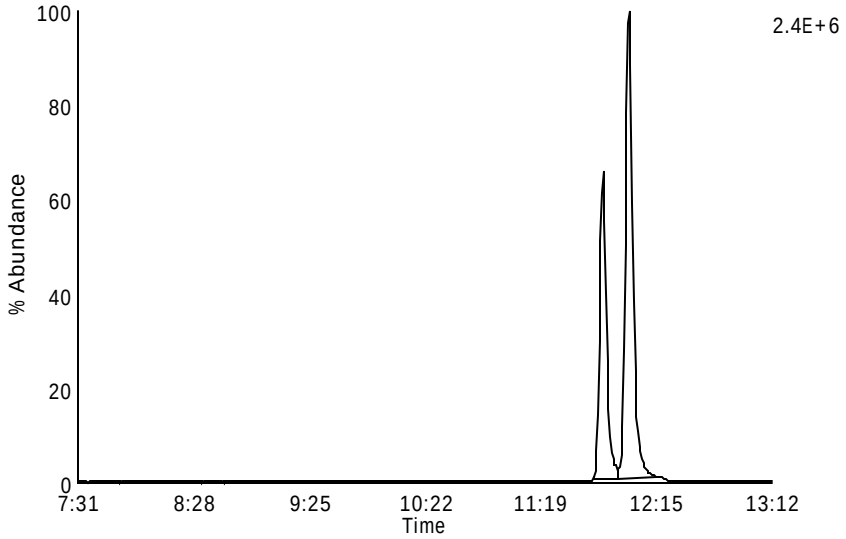


Di Chlorinated Biphenyls

Data File Name: P210821A_02
Date Acquired: 8/21/2021
Sample Description: CAL 209-20170-153 - BAL 05/25/22

Lab Sample ID: 209-20170-153
Instrument: 10MSHR09 (P)
Client Sample ID: 209 Mix

Data File: P210821A_02 G1 C7 - 222.0003
CAL 209-20170-153 - BAL 05/25/22



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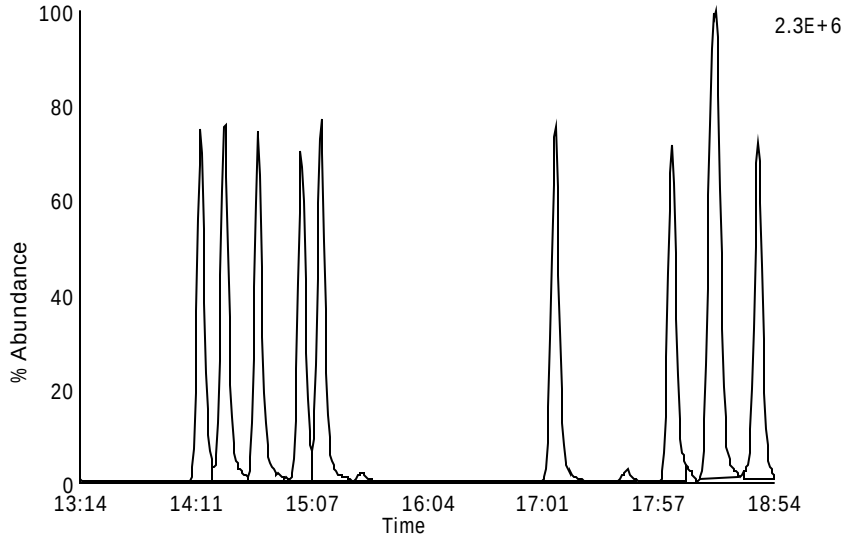
CAL 209-20170-153 - BAL 05/25/22



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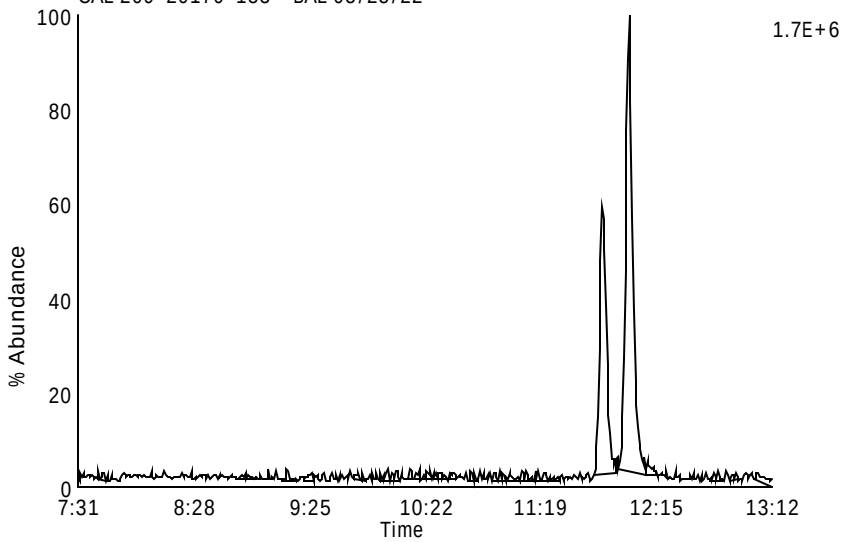
CAL 209-20170-153 - BAL 05/25/22



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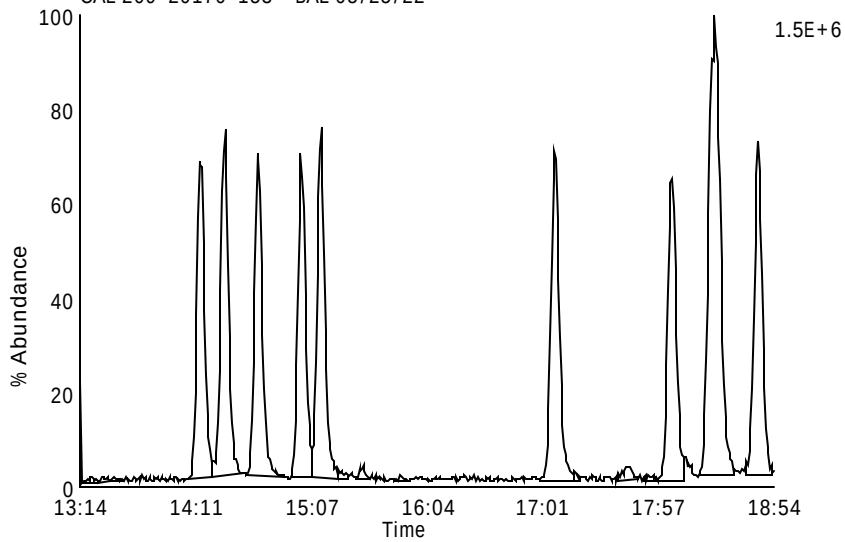
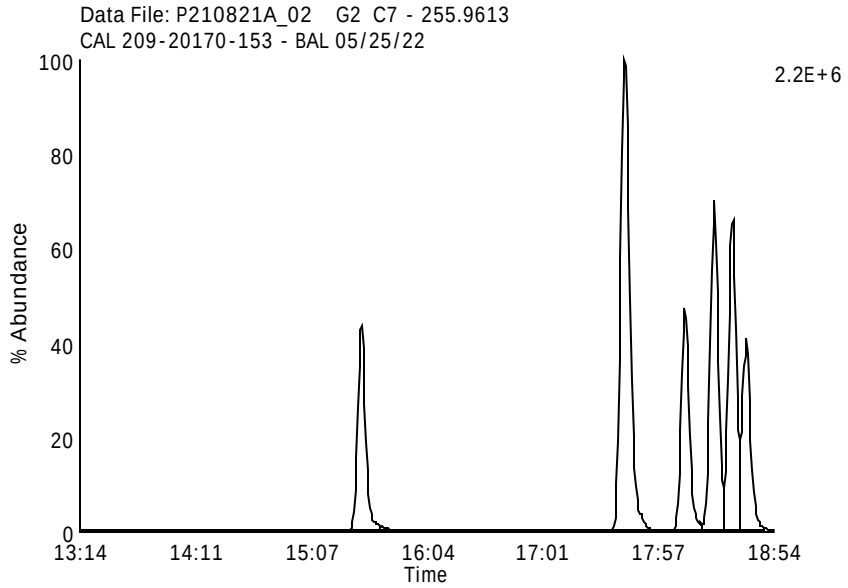
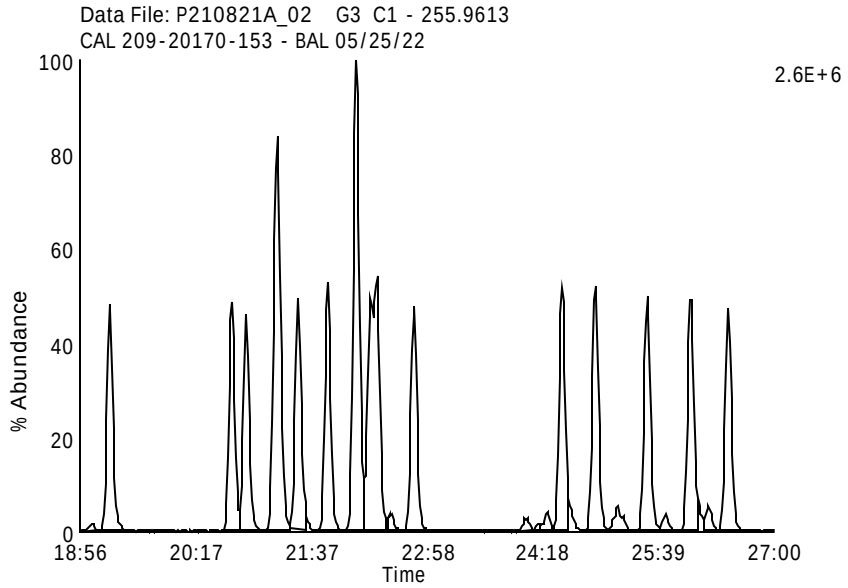
CAL 209-20170-153 - BAL 05/25/22

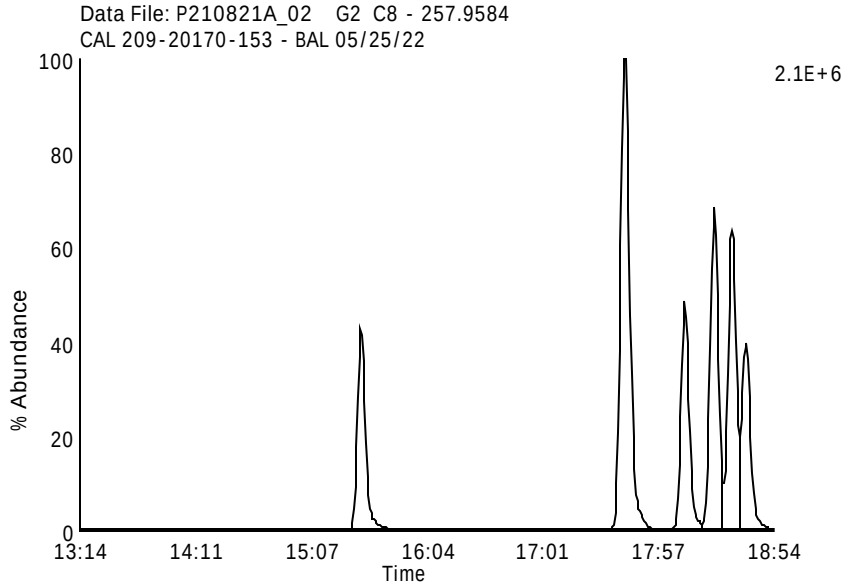


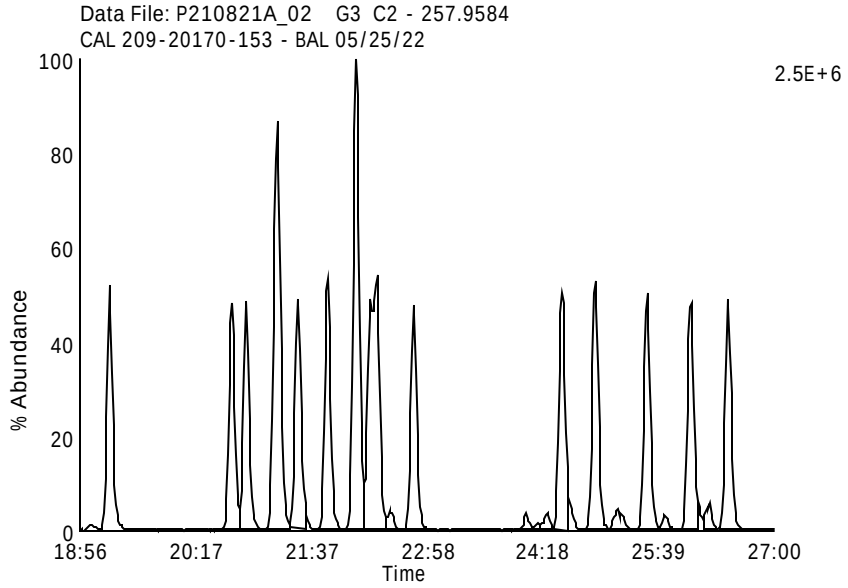
Tri Chlorinated Biphenyls

Data File Name: P210821A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22
Client Sample ID: 209 Mix





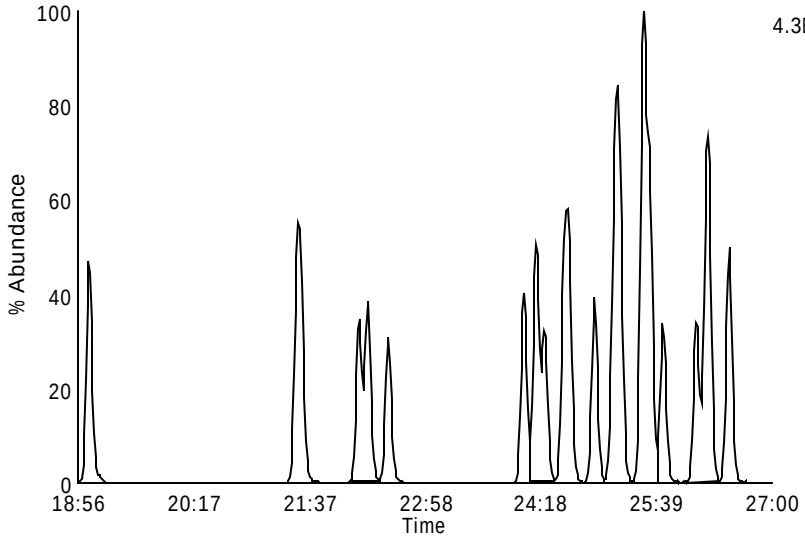




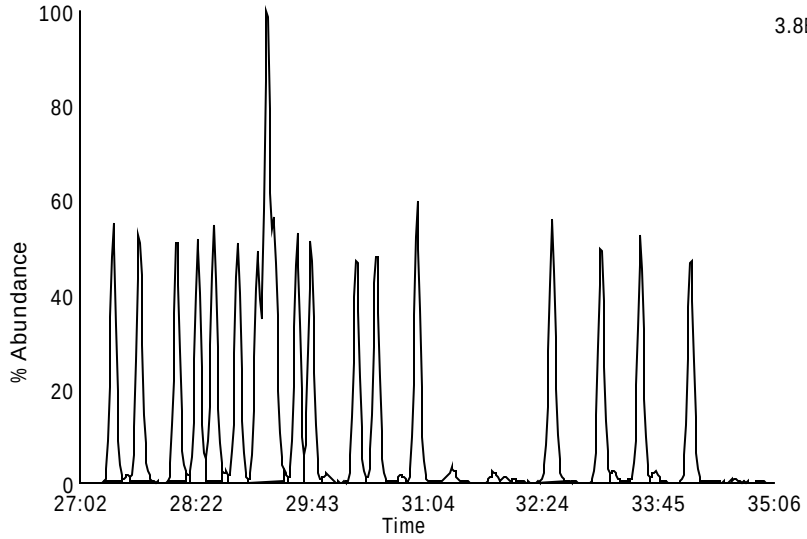
Tetra Chlorinated Biphenyls

Data File Name: P210821A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22
Client Sample ID: 209 Mix

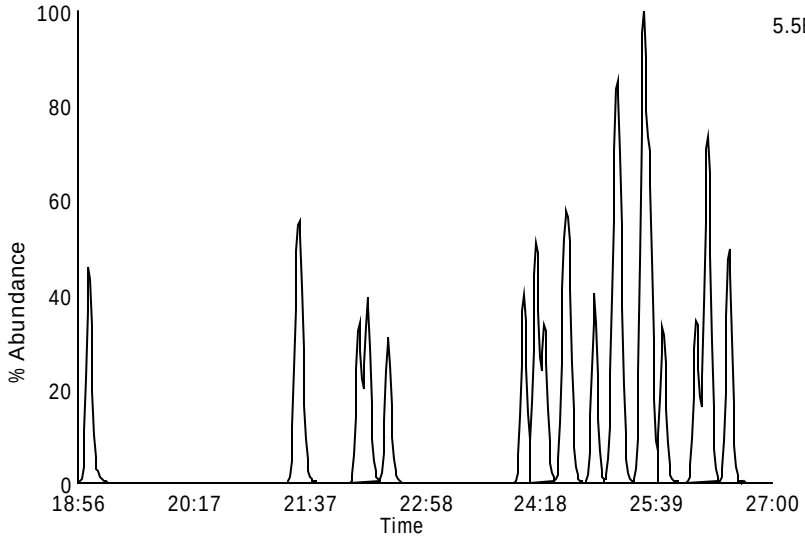
Data File: P210821A_02 G3 C7 - 289.9224
CAL 209-20170-153 - BAL 05/25/22



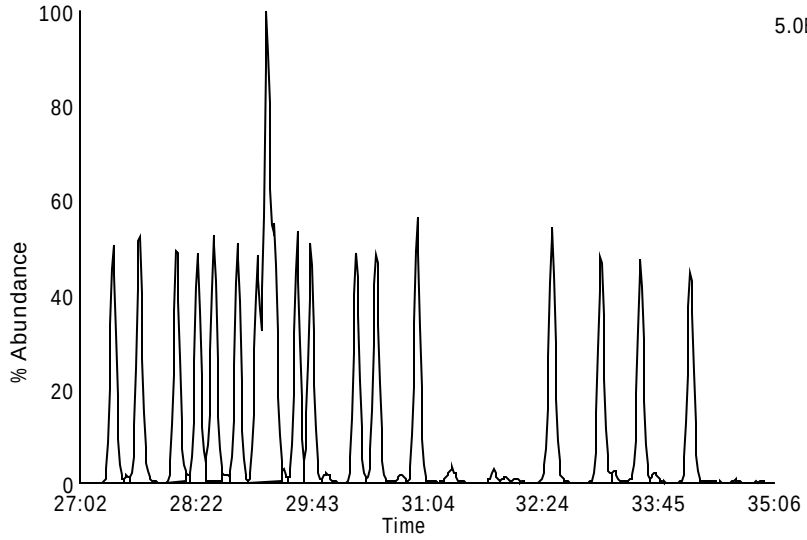
Data File: P210821A_02 G4 C1 - 289.9224
CAL 209-20170-153 - BAL 05/25/22



Data File: P210821A_02 G3 C8 - 291.9194
CAL 209-20170-153 - BAL 05/25/22

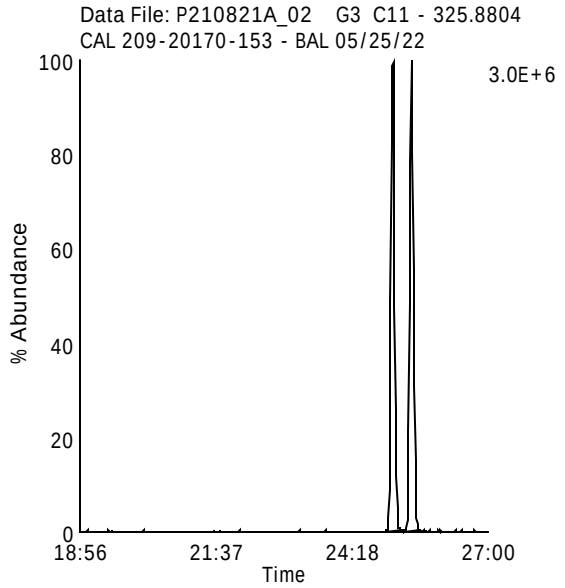


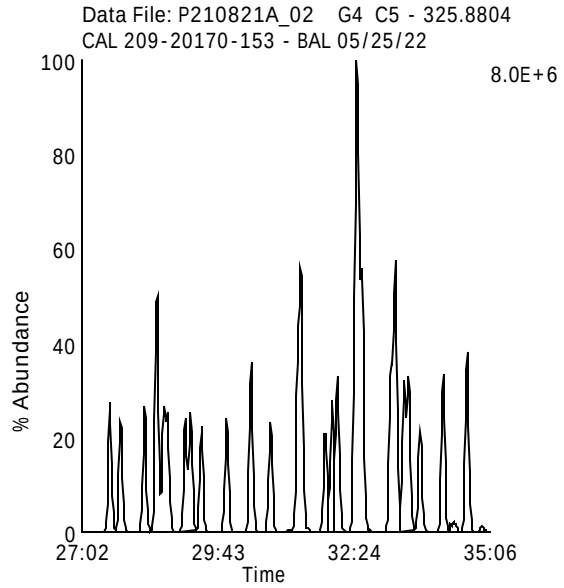
Data File: P210821A_02 G4 C2 - 291.9194
CAL 209-20170-153 - BAL 05/25/22

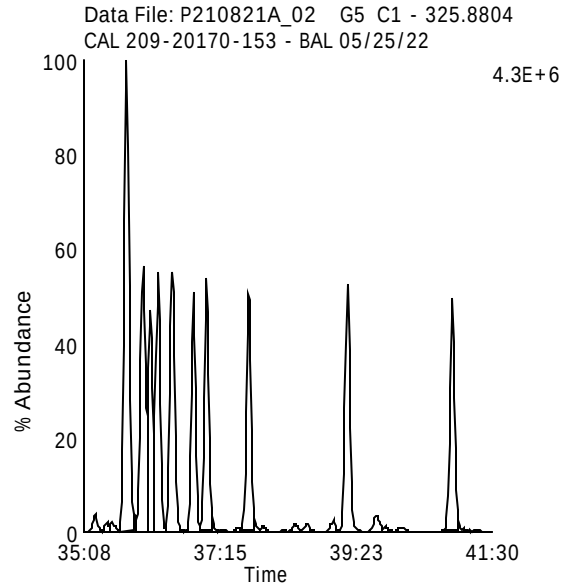


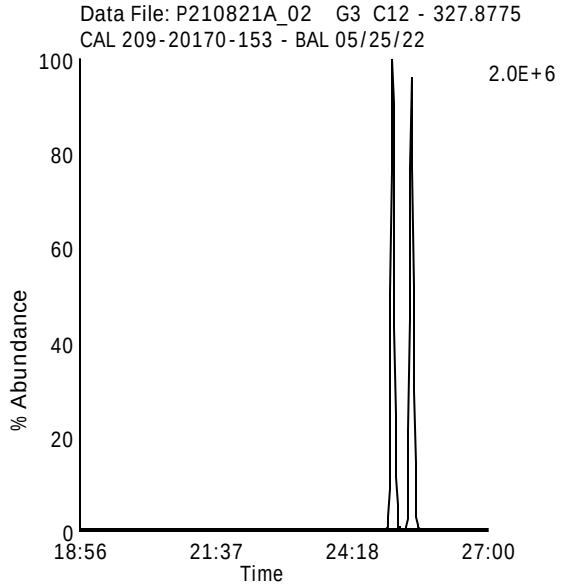
Penta Chlorinated Biphenyls

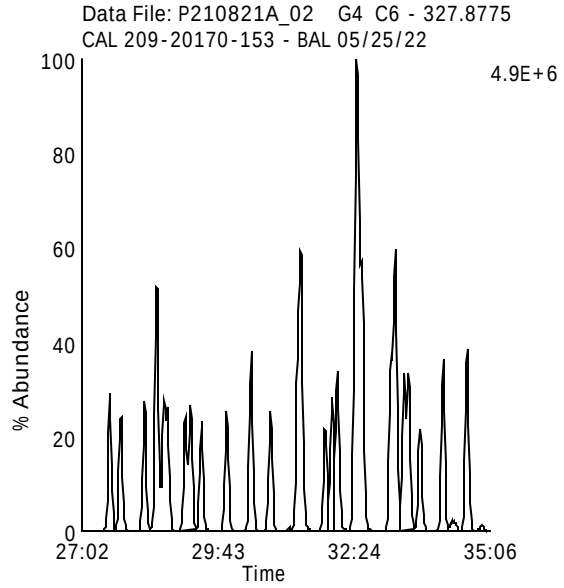
Data File Name: P210821A_02 | Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021 | Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22 | Client Sample ID: 209 Mix

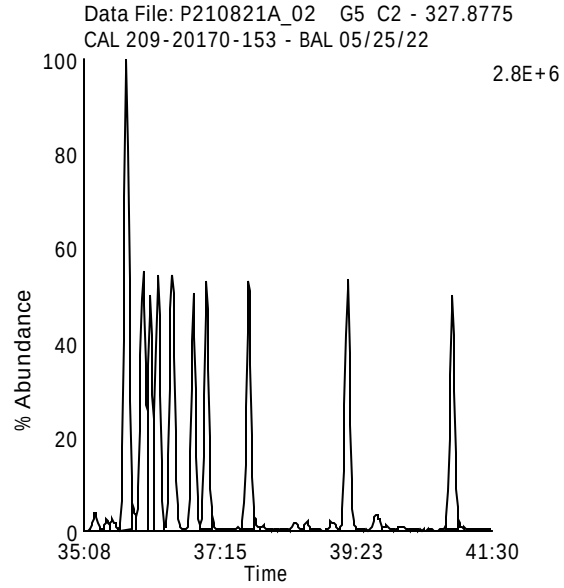






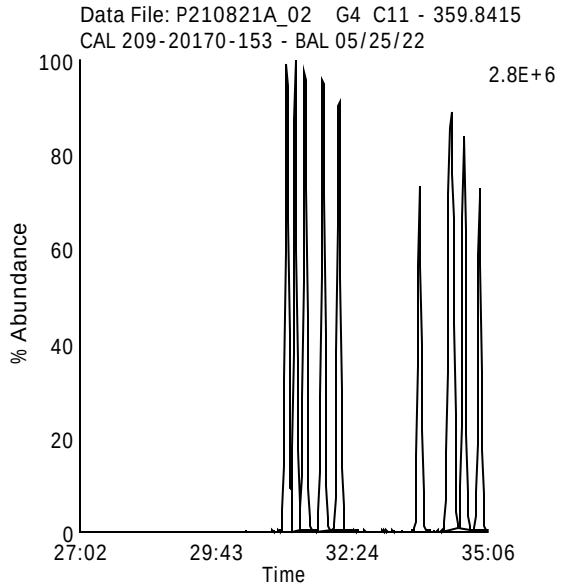


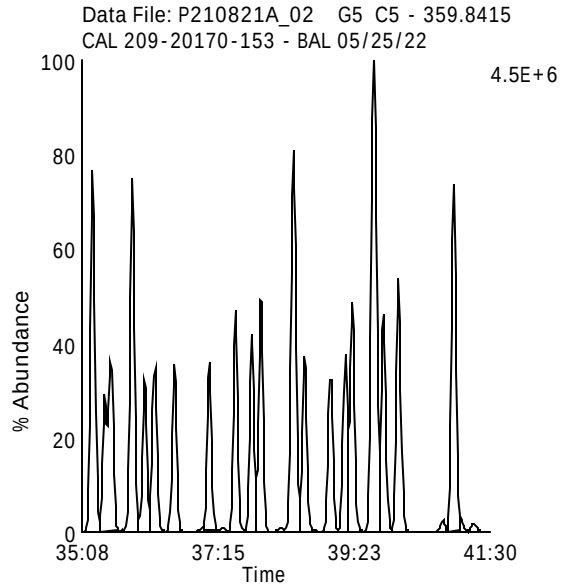


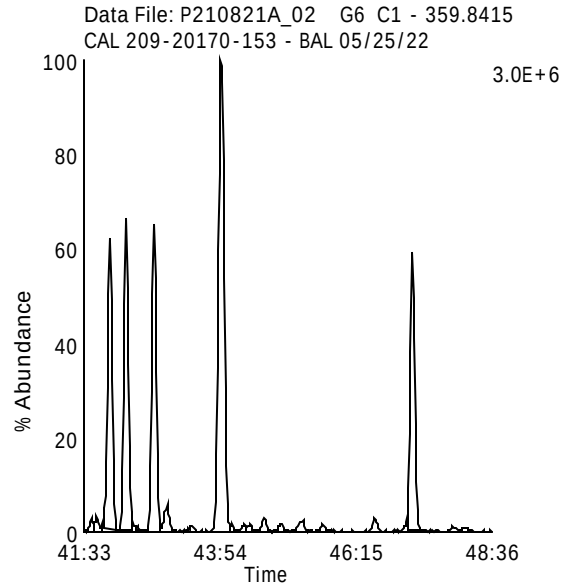


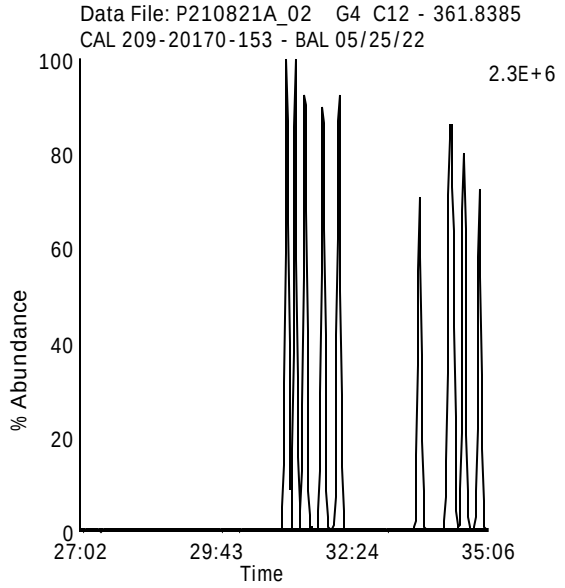
Hexa Chlorinated Biphenyls

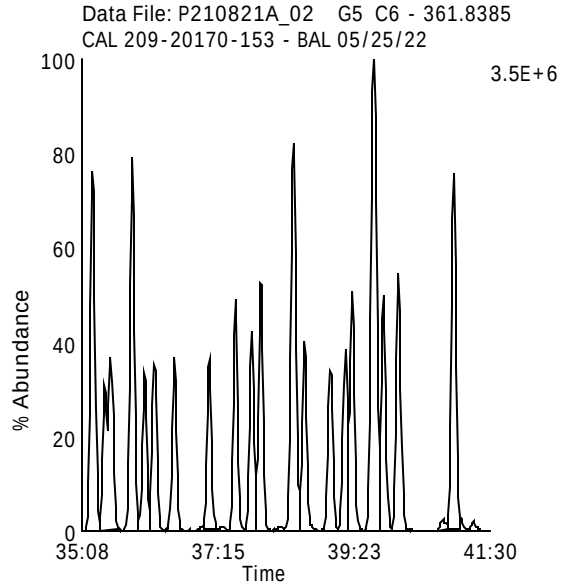
Data File Name: P210821A_02 | Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021 | Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22 | Client Sample ID: 209 Mix

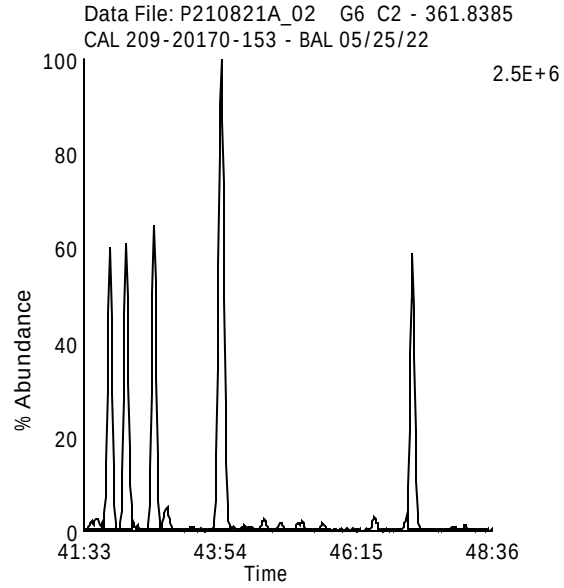






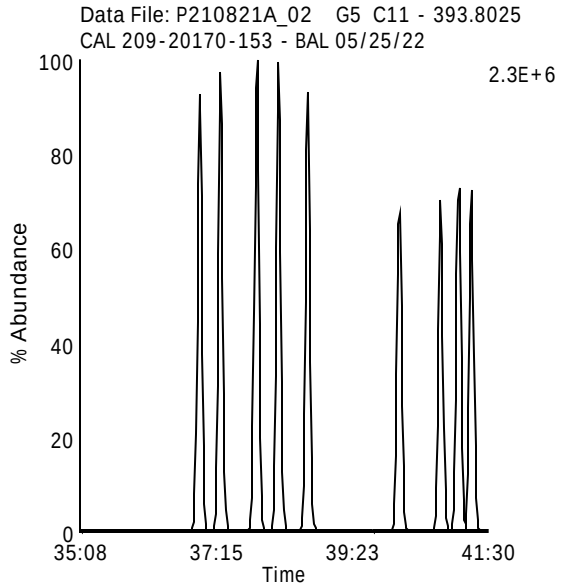


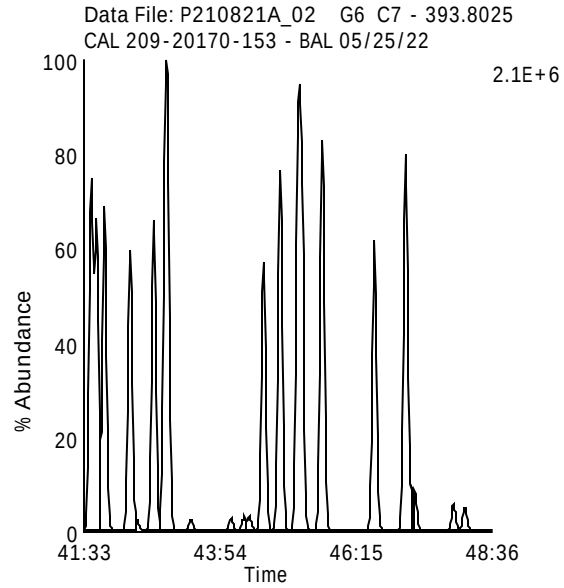


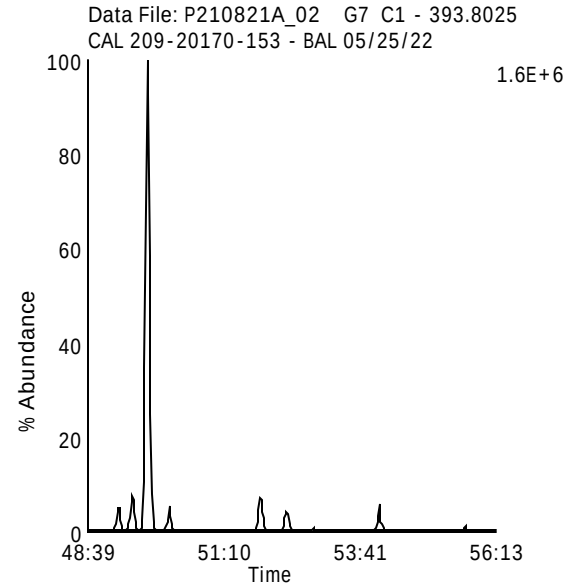


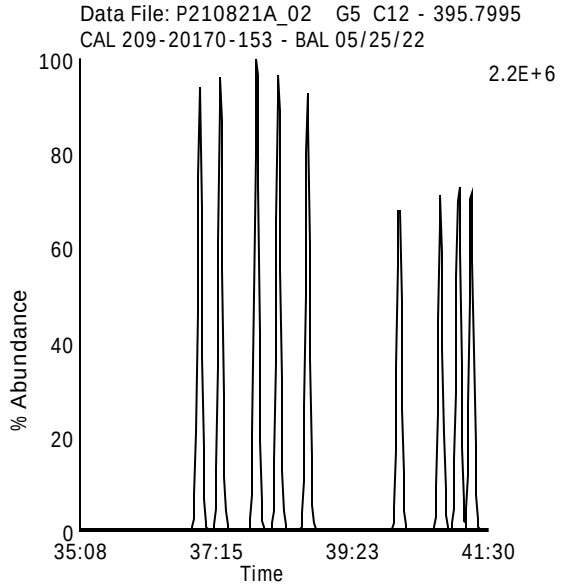
Hepta Chlorinated Biphenyls

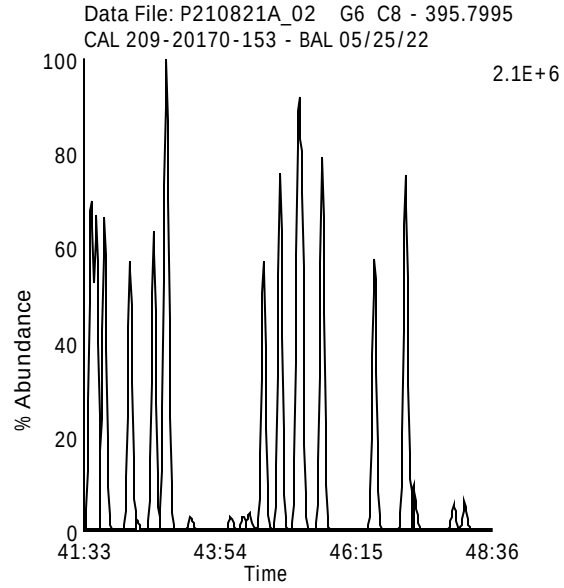
Data File Name: P210821A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22
Client Sample ID: 209 Mix

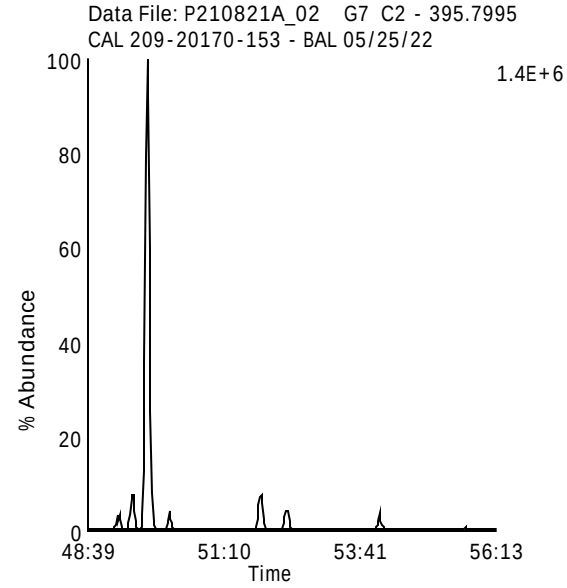






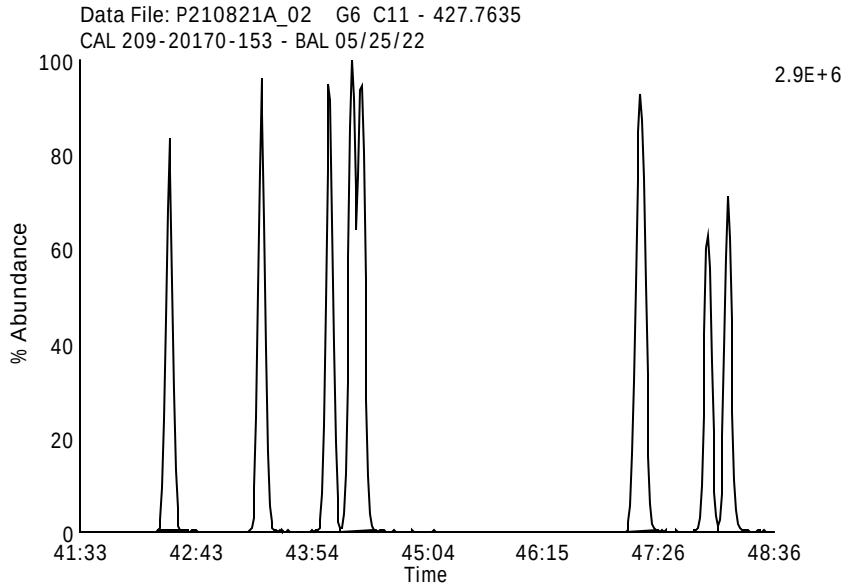


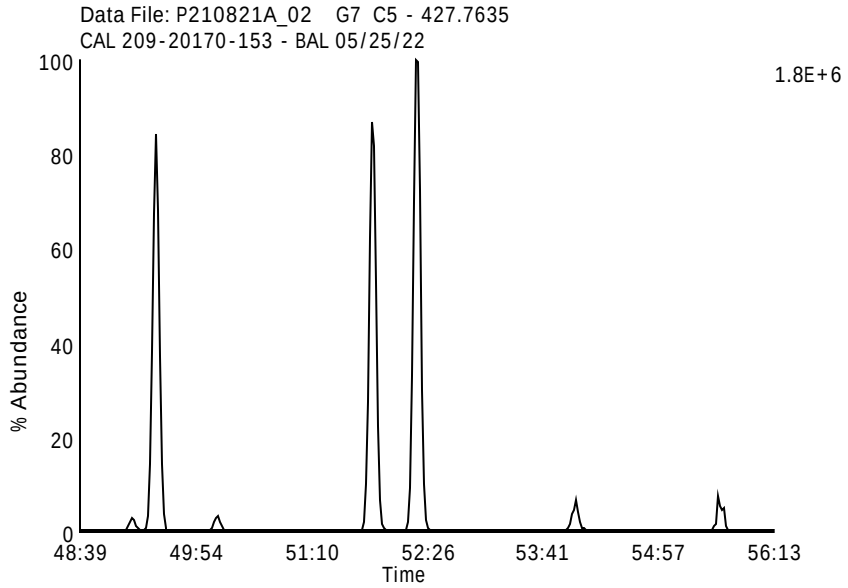


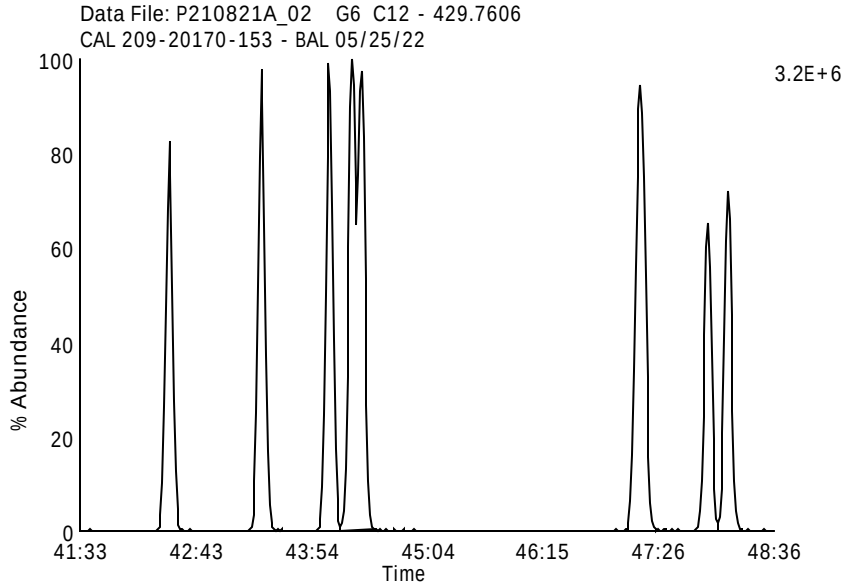


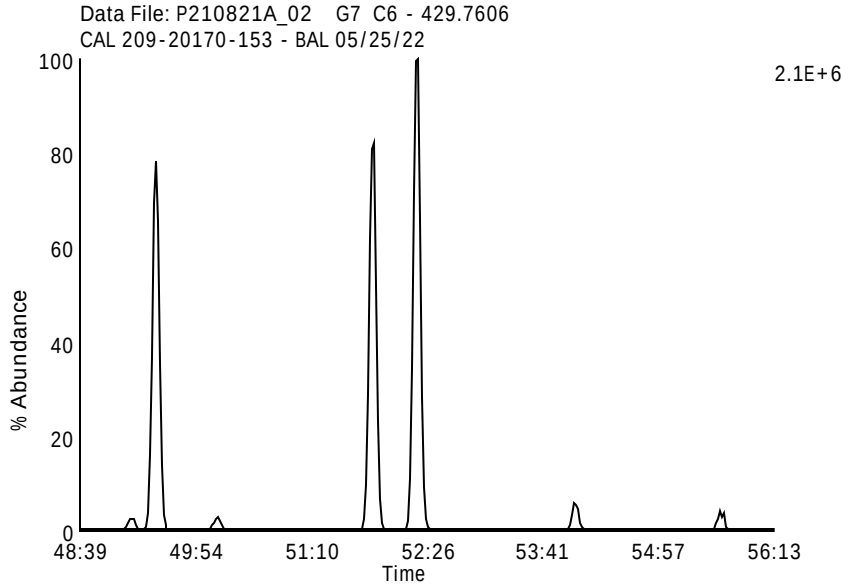
Octa Chlorinated Biphenyls

Data File Name: P210821A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021
Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22
Client Sample ID: 209 Mix



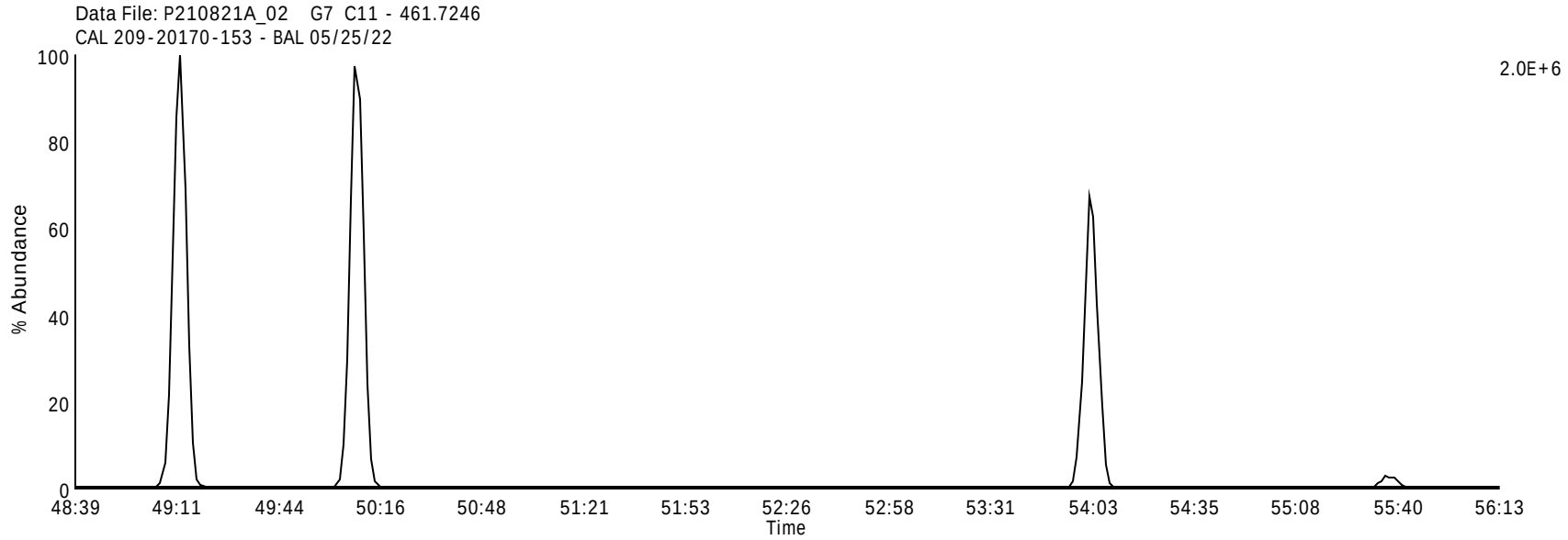


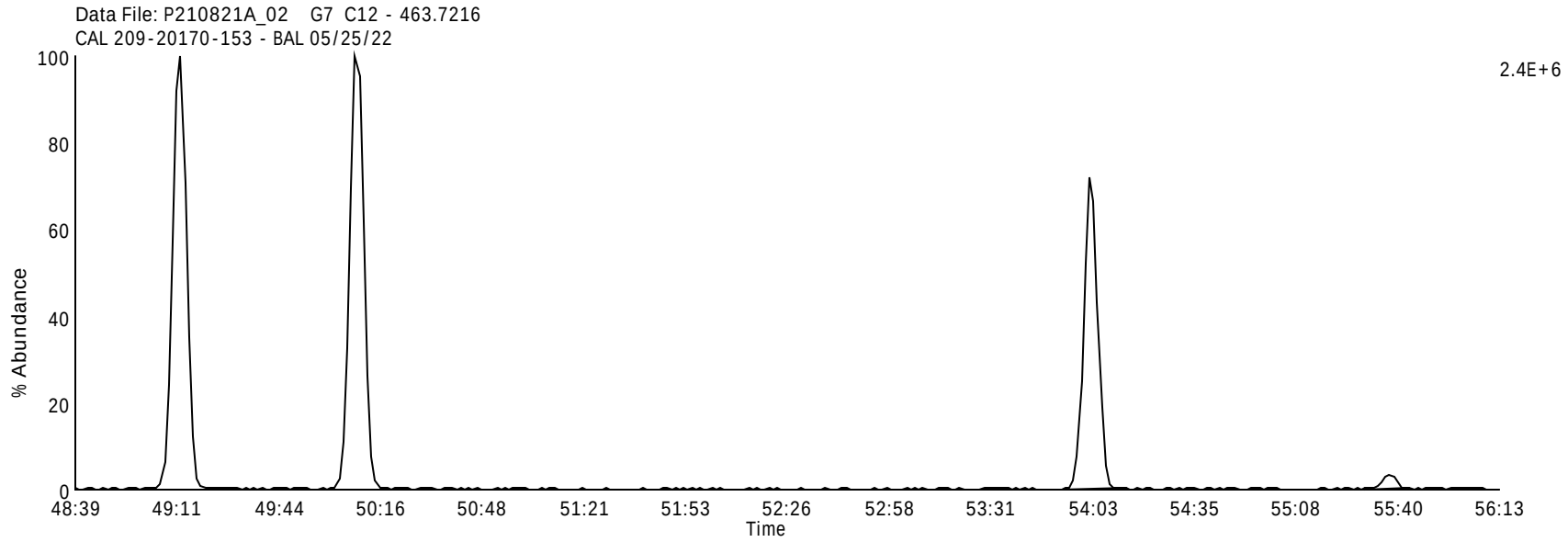




Nona Chlorinated Biphenyls

Data File Name: P210821A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/21/2021	Instrument: 10MSHR09 (P)
Sample Description: CAL 209-20170-153 - BAL 05/25/22	Client Sample ID: 209 Mix



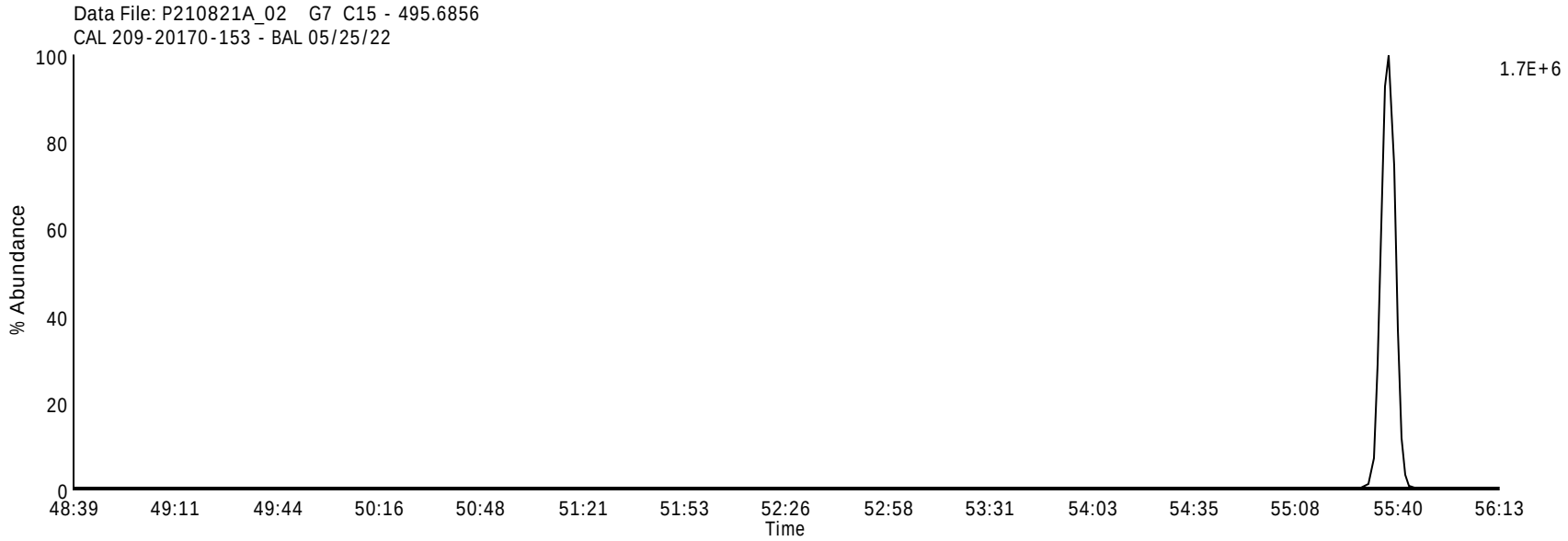


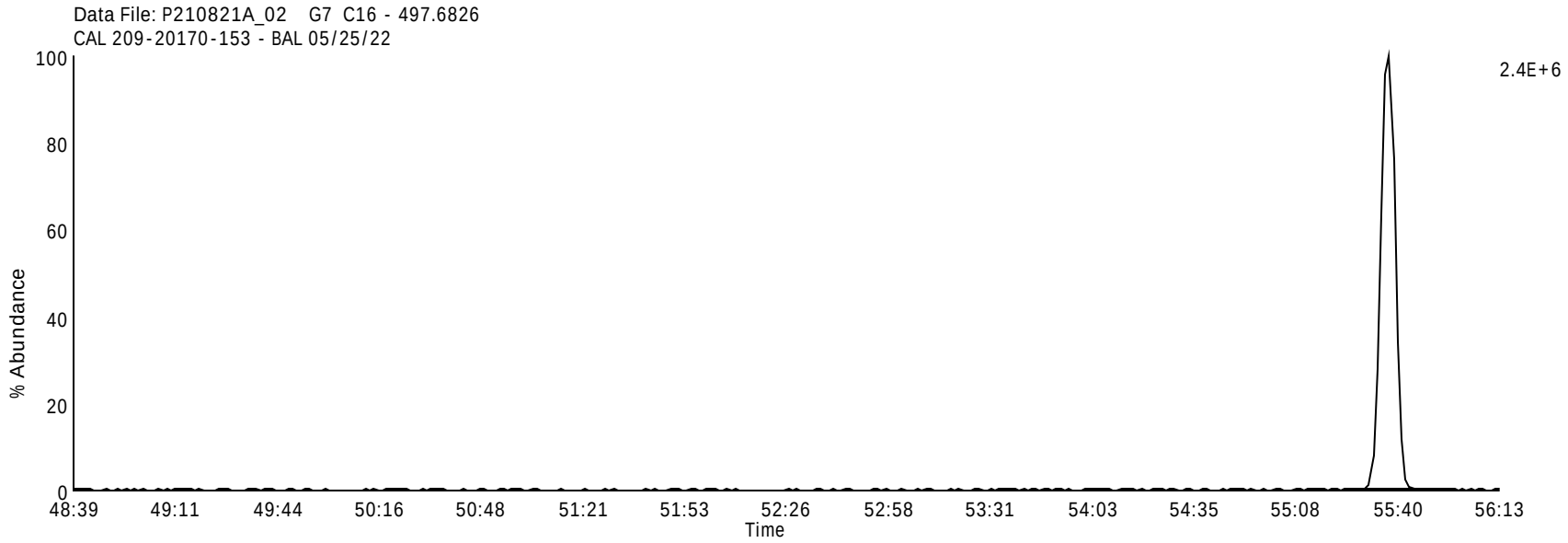
Deca Chlorinated Biphenyl

Data File Name: P210821A_02 | Lab Sample ID: 209-20170-153

Date Acquired: 8/21/2021 | Instrument: 10MSHR09 (P)

Sample Description: CAL 209-20170-153 - BAL 05/25/22 | Client Sample ID: 209 Mix

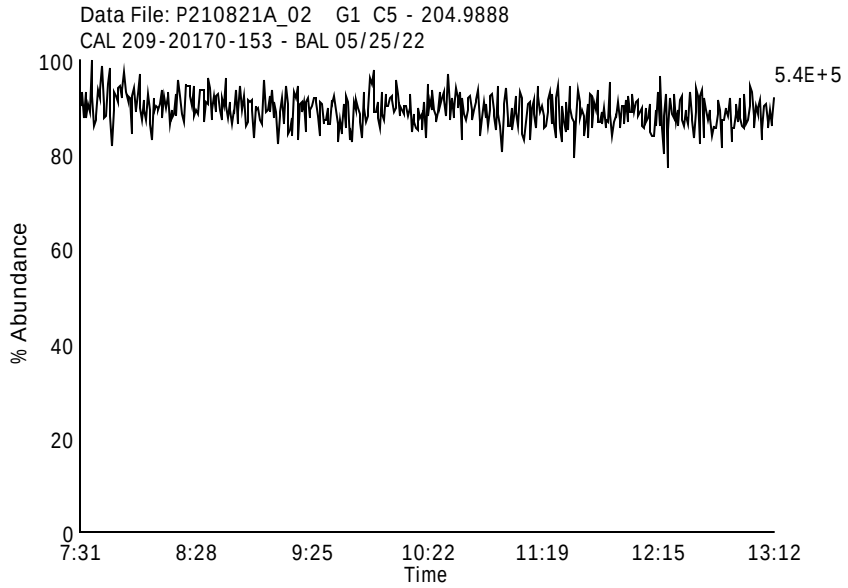


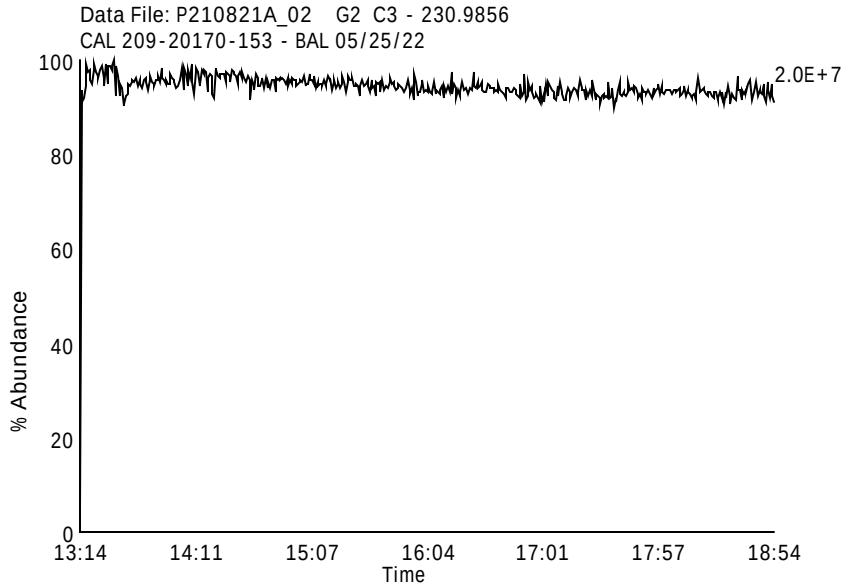


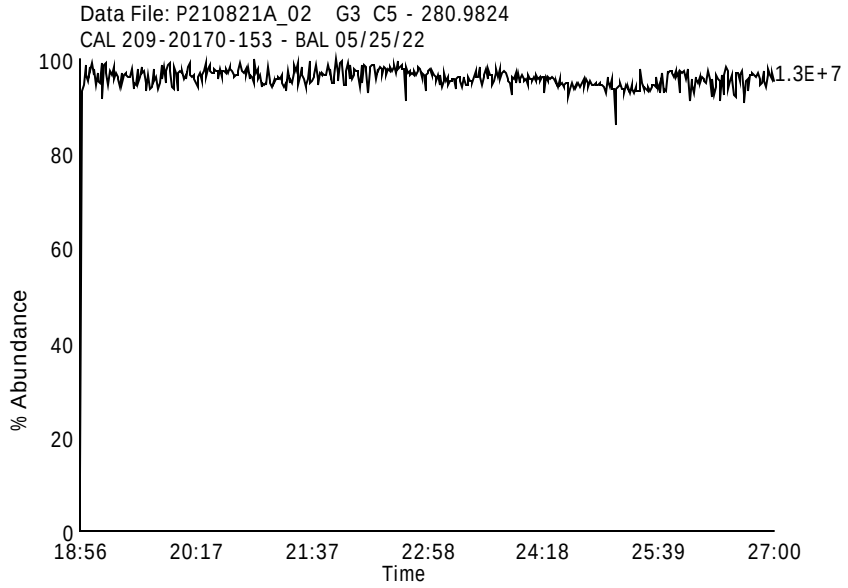
Group 1 - 4 Lock mass

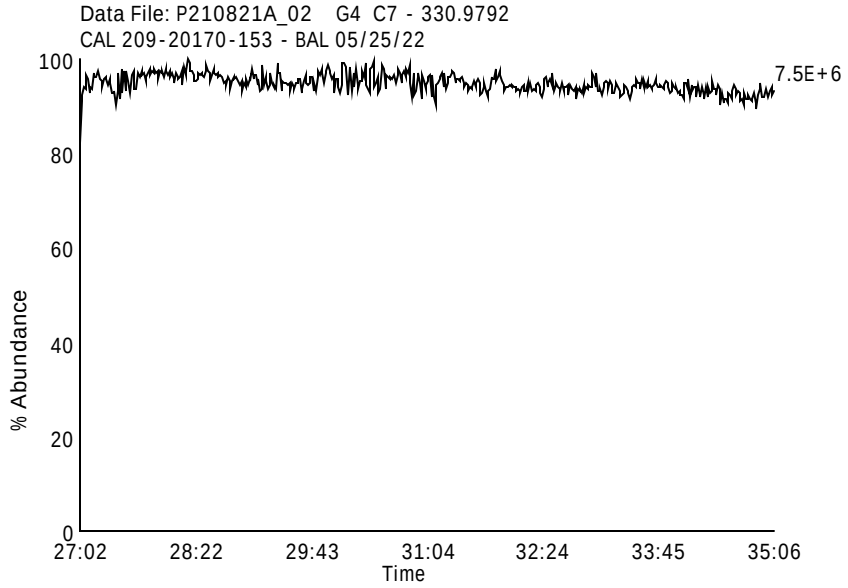
Data File Name: P210821A_02
Date Acquired: 8/21/2021
Sample Description: CAL 209-20170-153 - BAL 05/25/22

Lab Sample ID: 209-20170-153
Instrument: 10MSHR09 (P)
Client Sample ID: 209 Mix





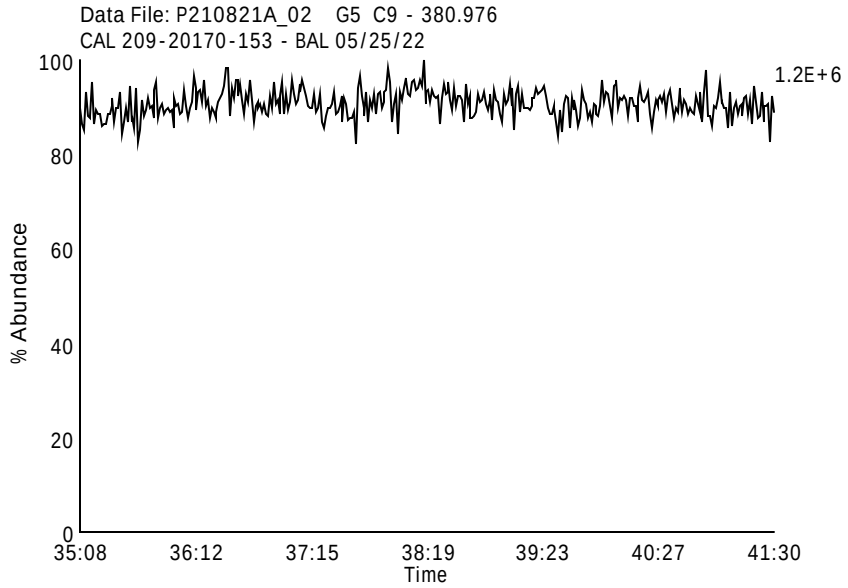


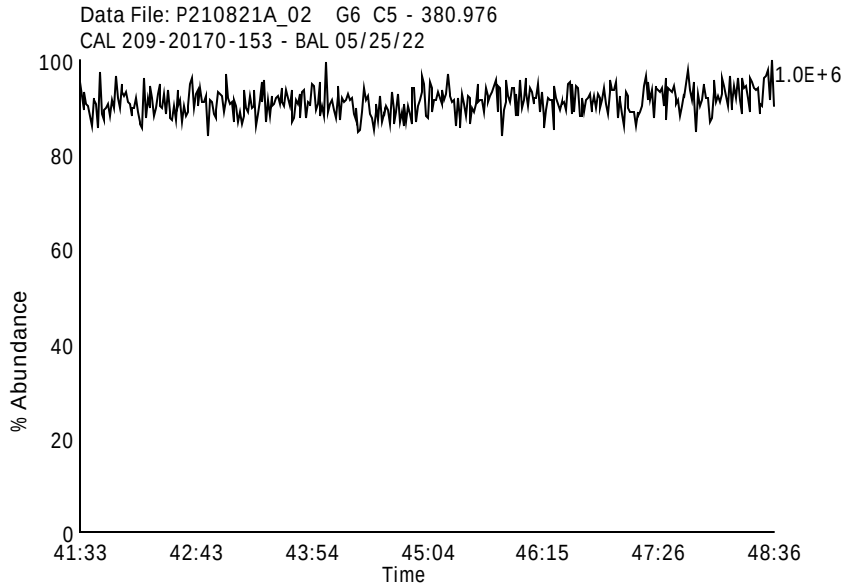


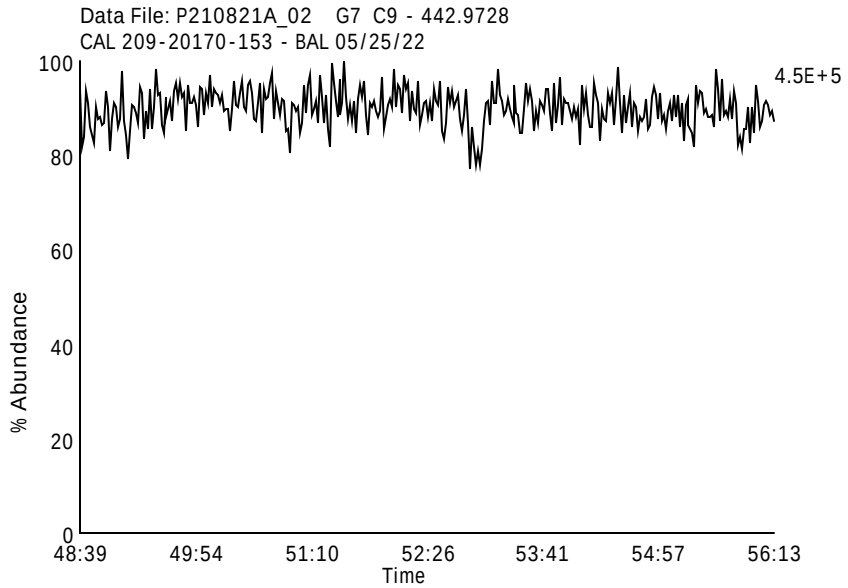
Group 5 - 7 Lock mass

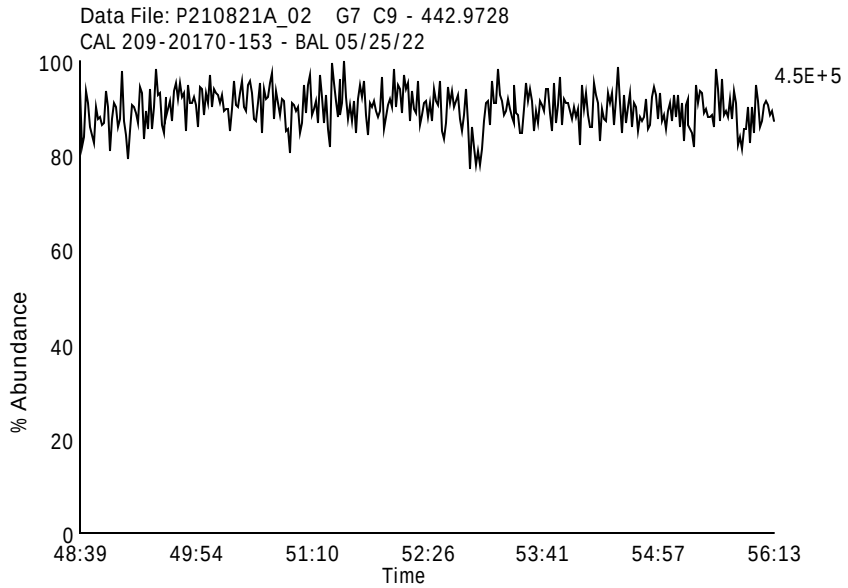
Data File Name: P210821A_02
Date Acquired: 8/21/2021
Sample Description: CAL 209-20170-153 - BAL 05/25/22

Lab Sample ID: 209-20170-153
Instrument: 10MSHR09 (P)
Client Sample ID: 209 Mix







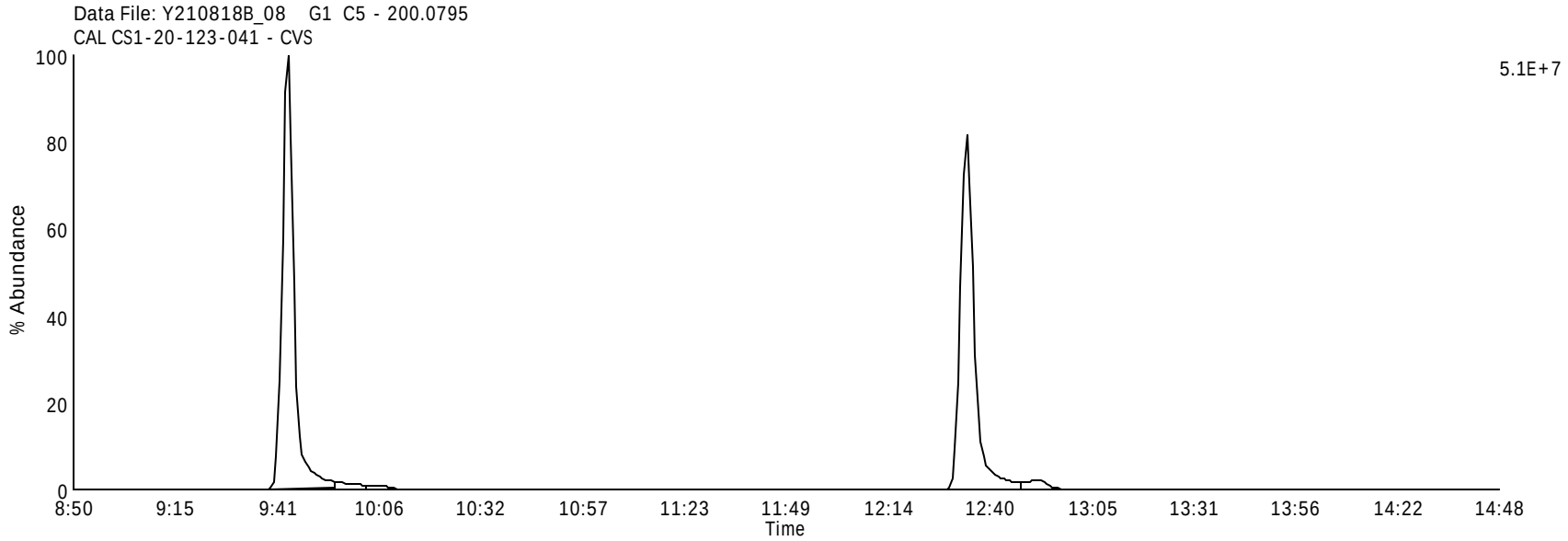


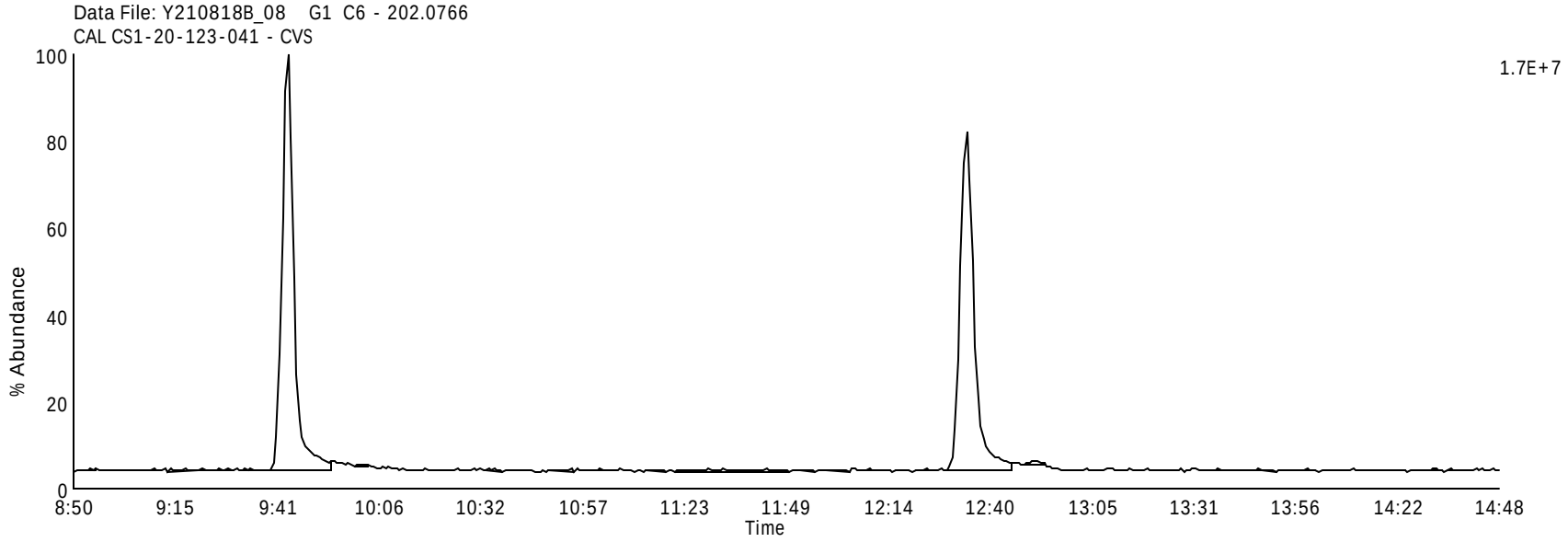
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

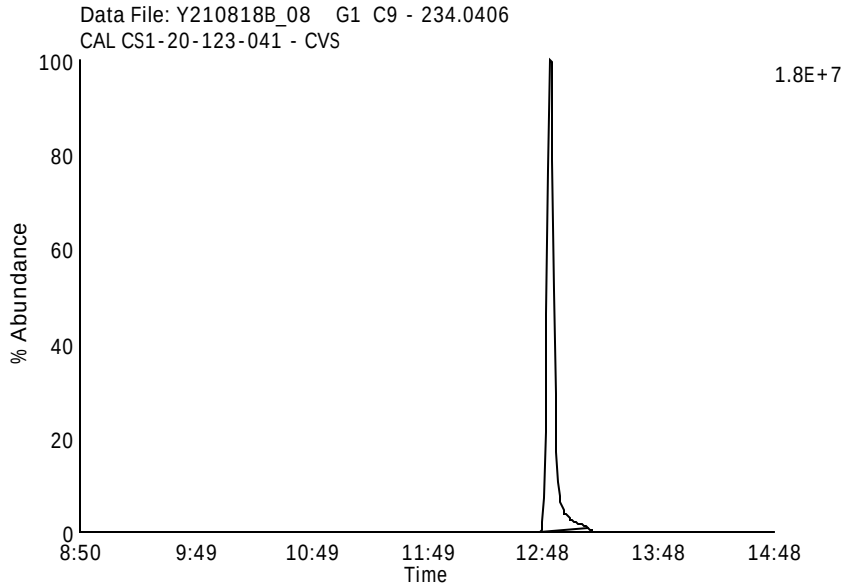
Sample Description: CAL CS1-20-123-041 - CVS

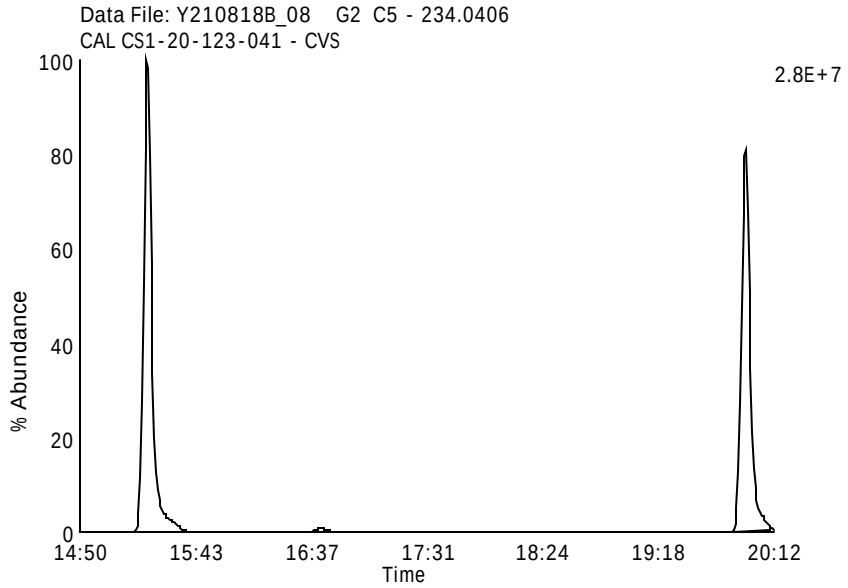


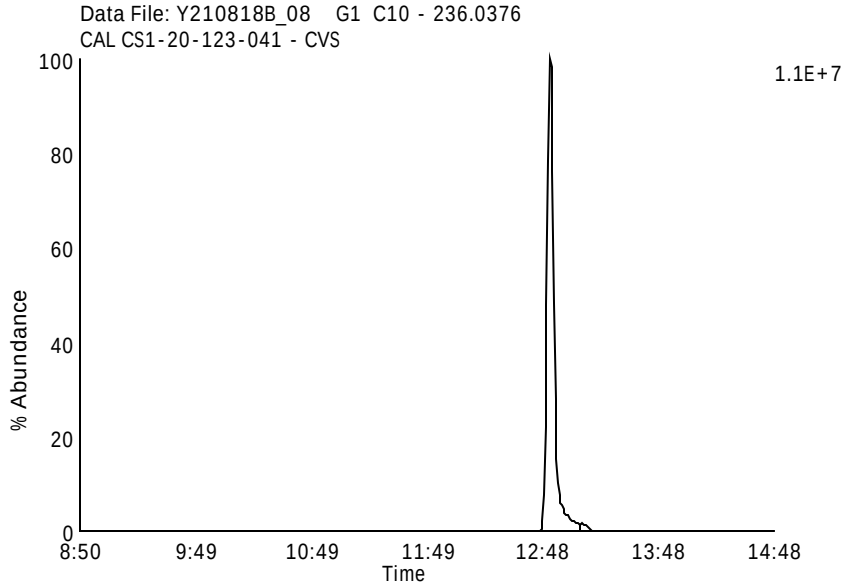


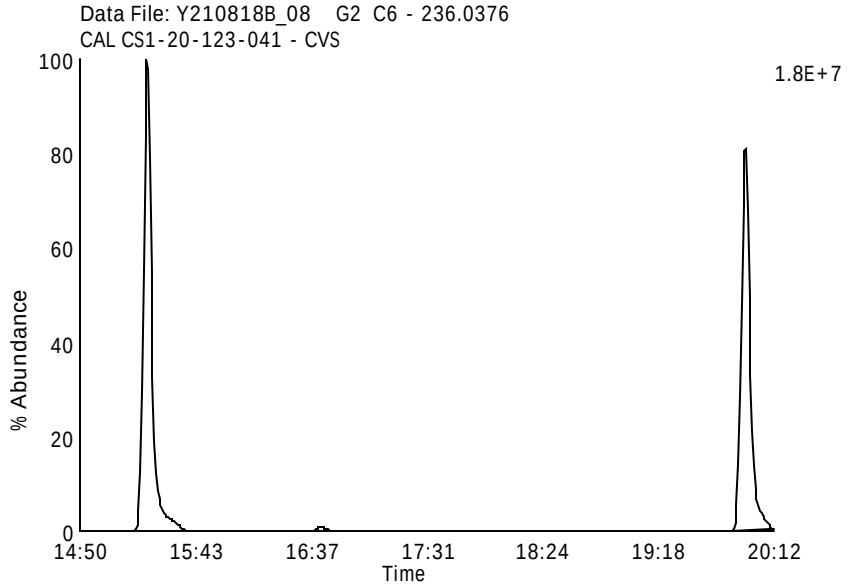
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







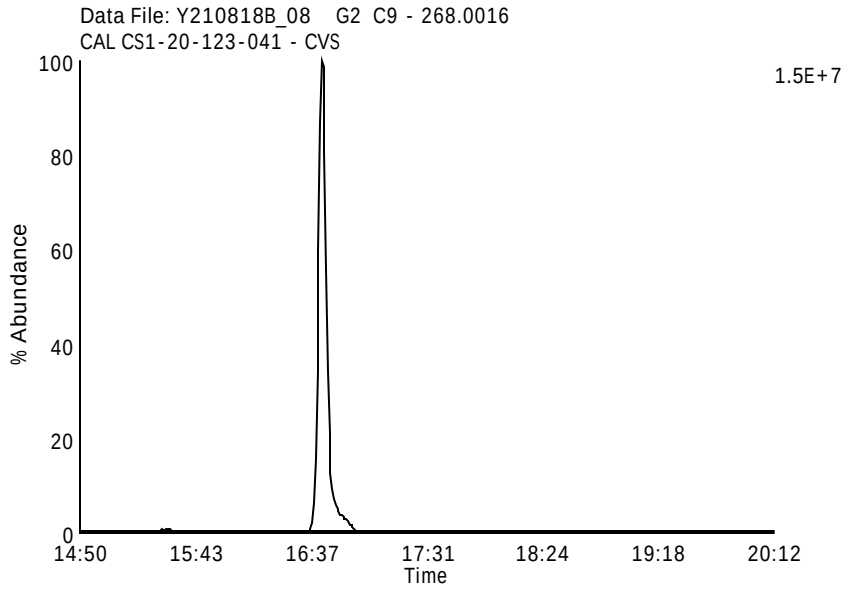


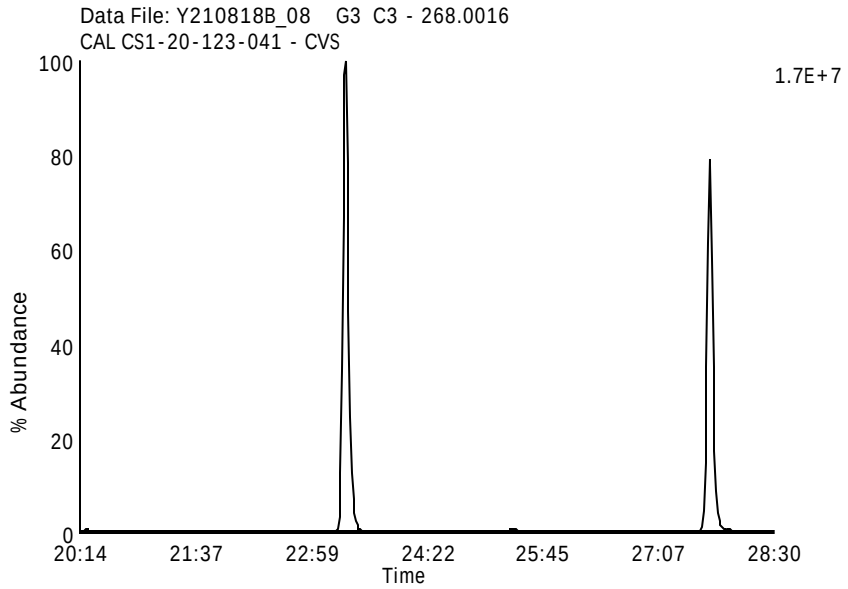
Labeled Tri Chlorinated Biphenyls

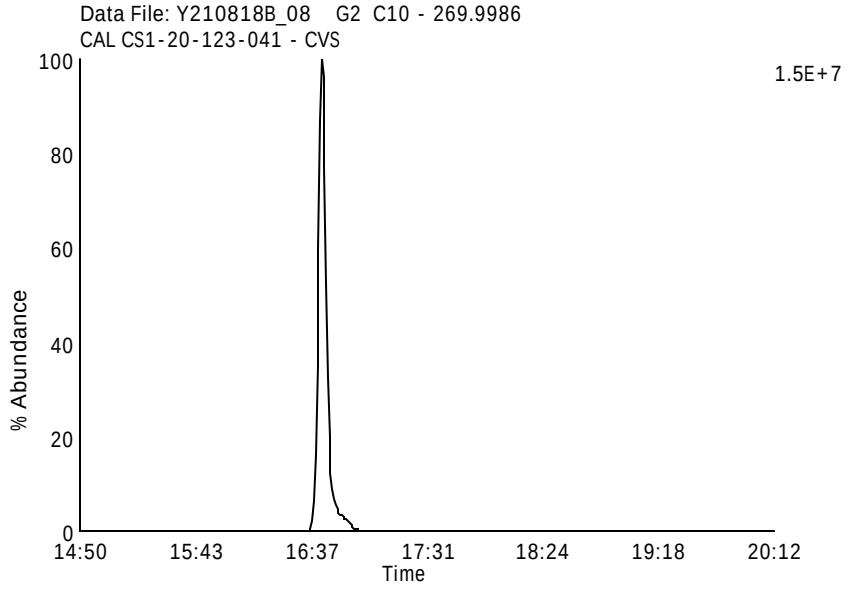
Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

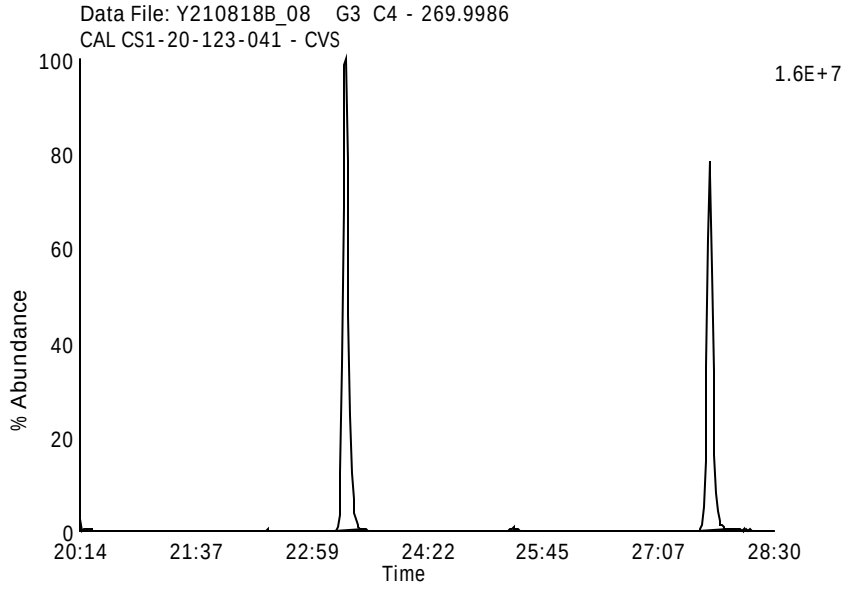
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS









Labeled Tetra Chlorinated Biphenyls

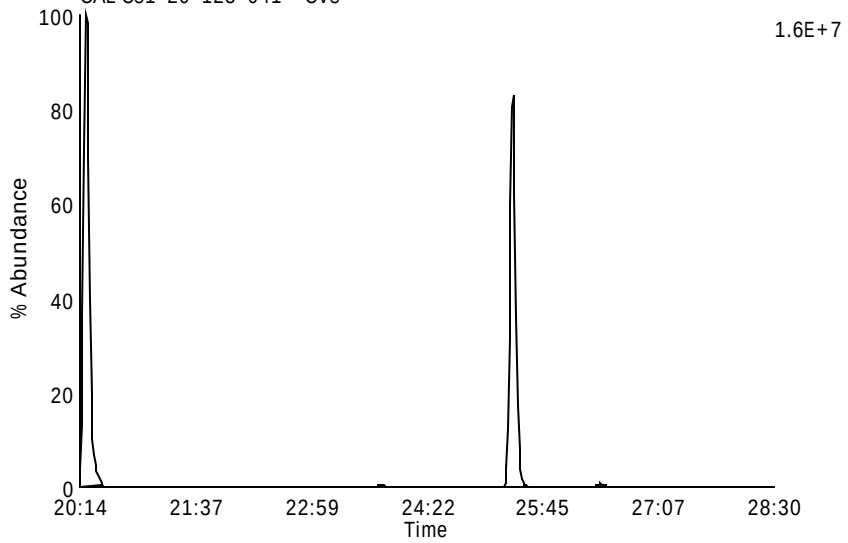
Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

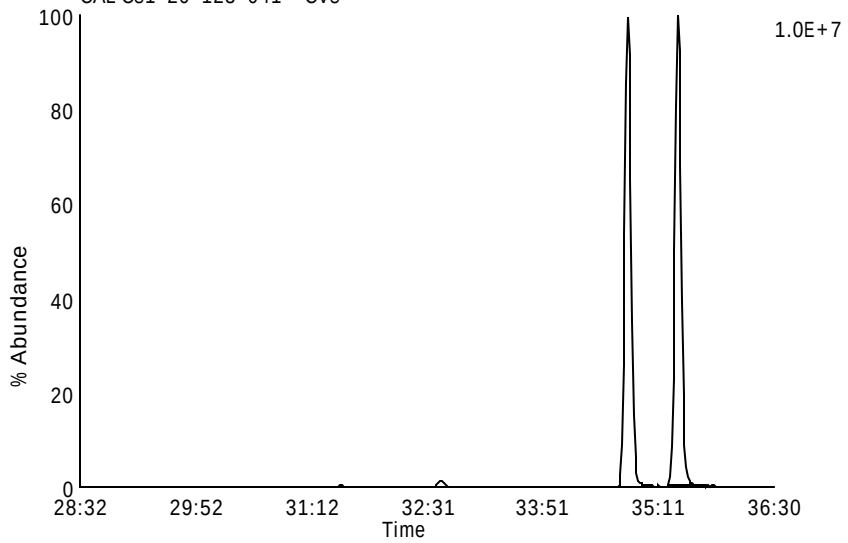
Data File: Y210818B_08 G3 C9 - 301.9626

CAL CS1-20-123-041 - CVS



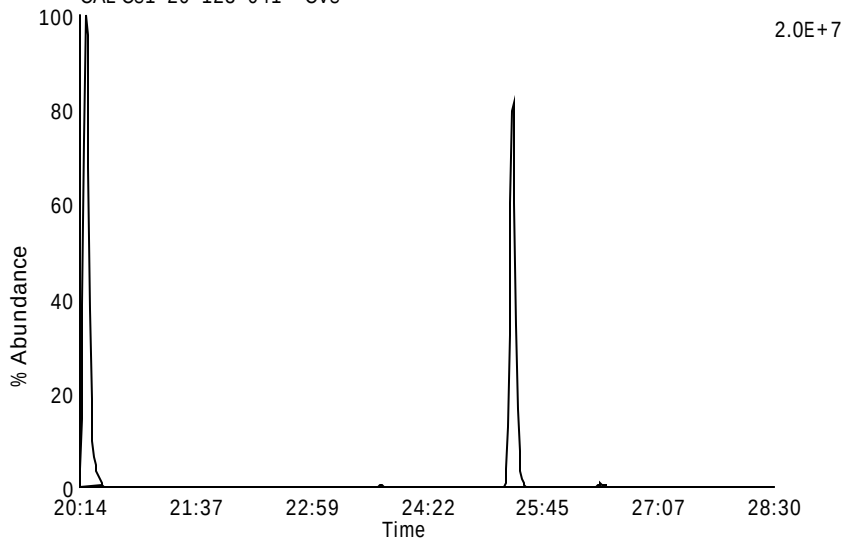
Data File: Y210818B_08 G4 C3 - 301.9626

CAL CS1-20-123-041 - CVS



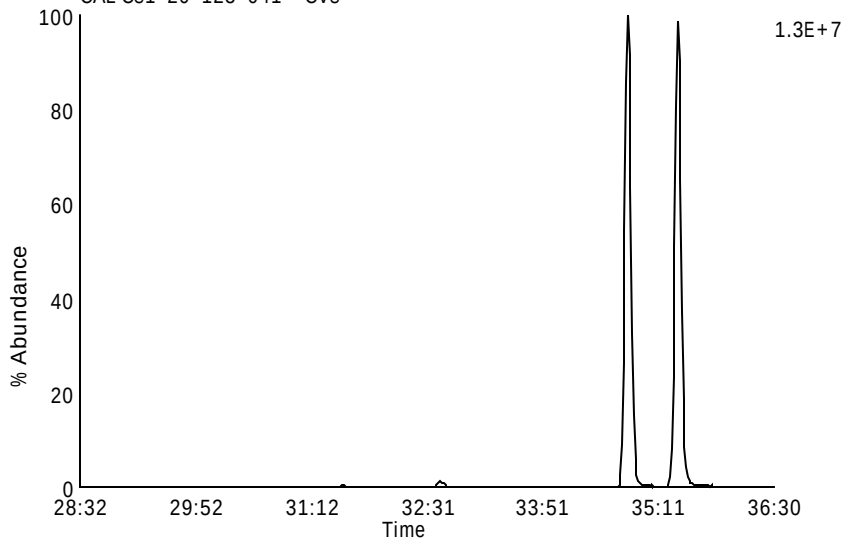
Data File: Y210818B_08 G3 C10 - 303.9597

CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C4 - 303.9597

CAL CS1-20-123-041 - CVS

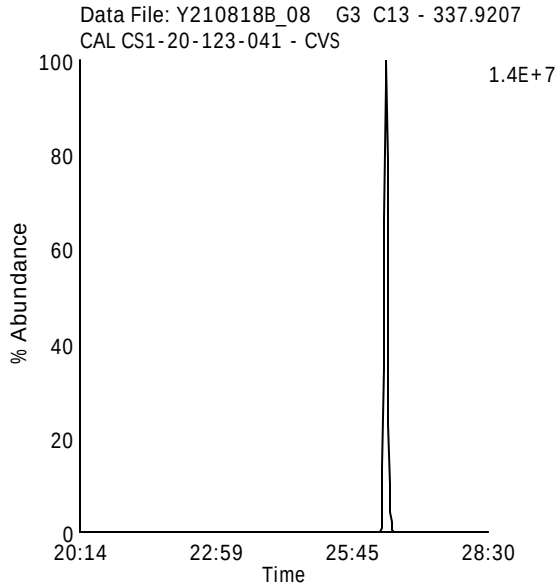


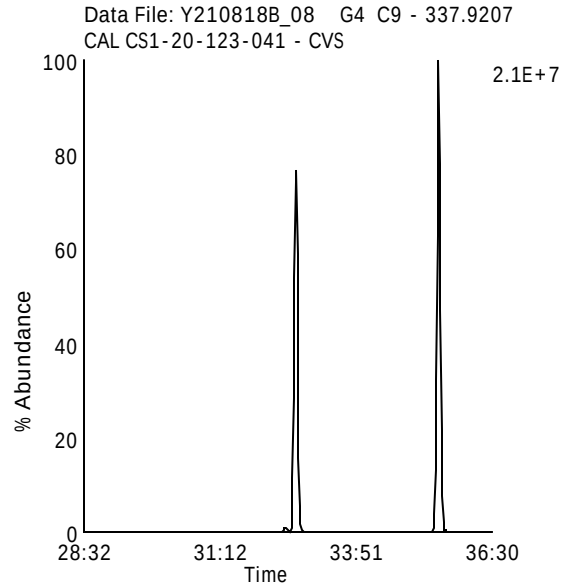
Labeled Penta Chlorinated Biphenyls

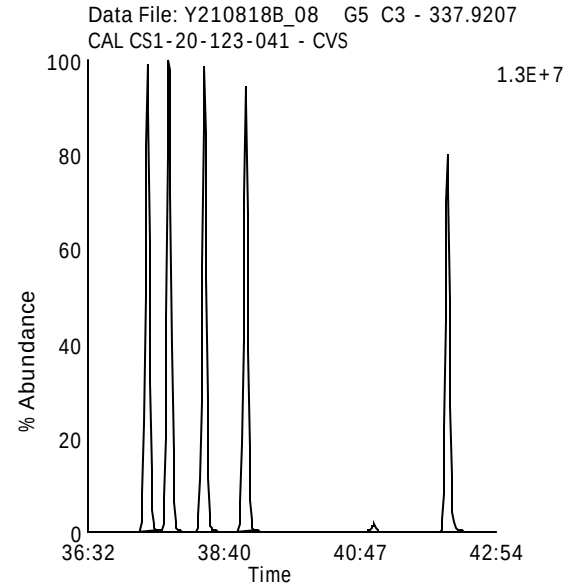
Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

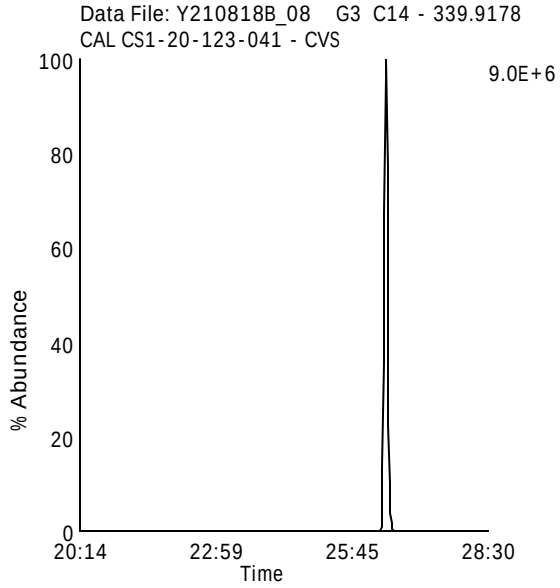
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

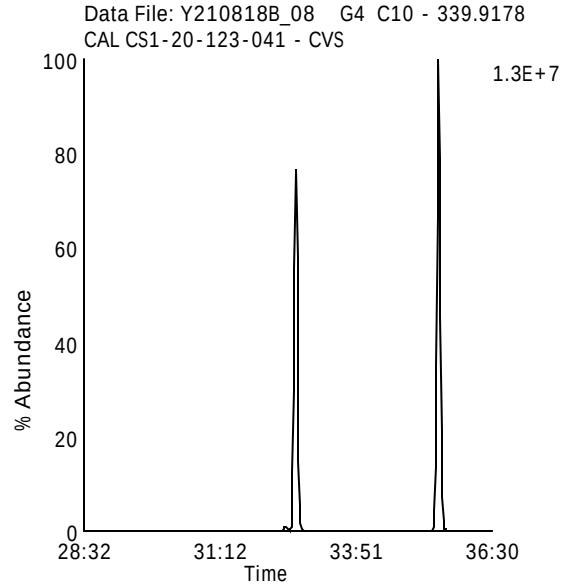
Sample Description: CAL CS1-20-123-041 - CVS

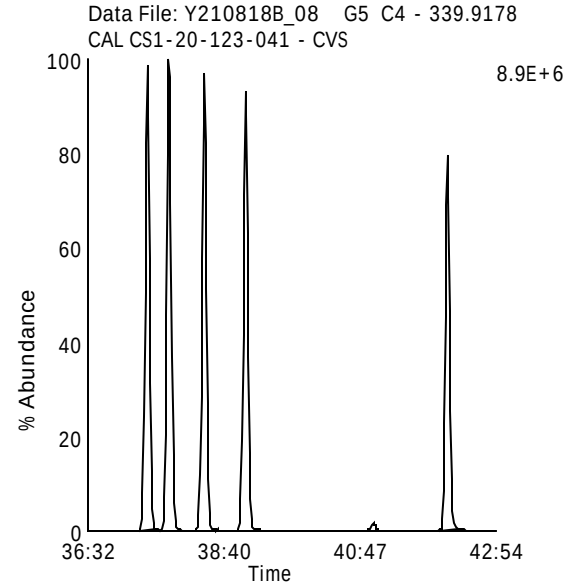










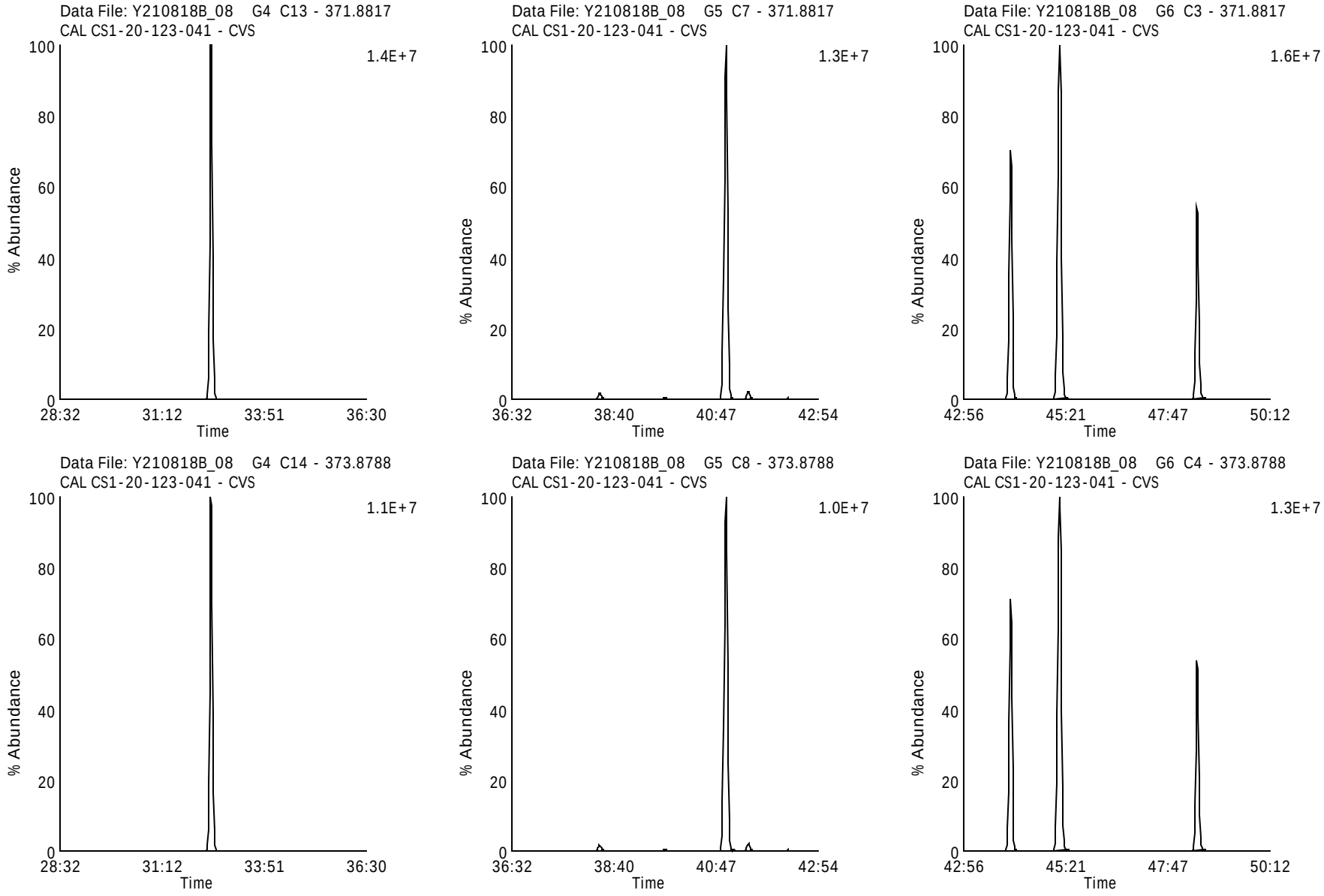


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

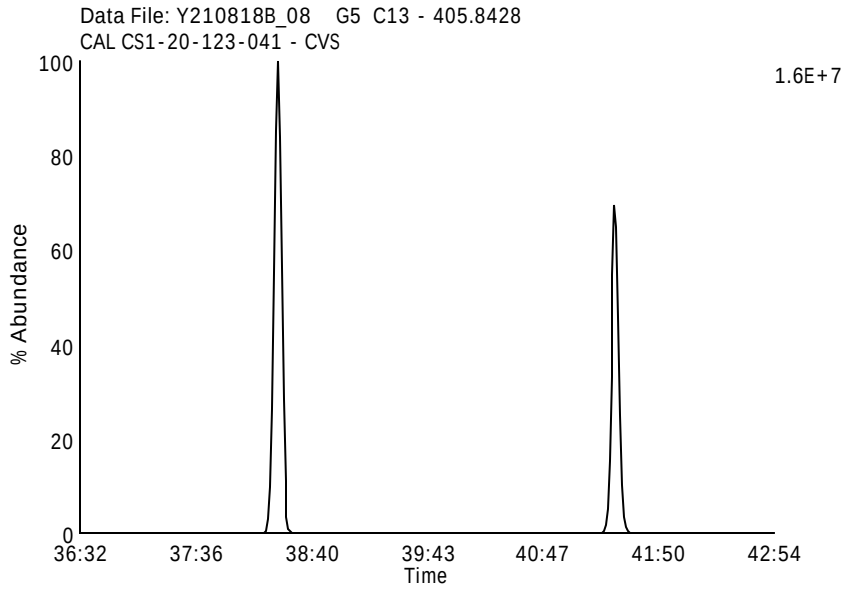
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

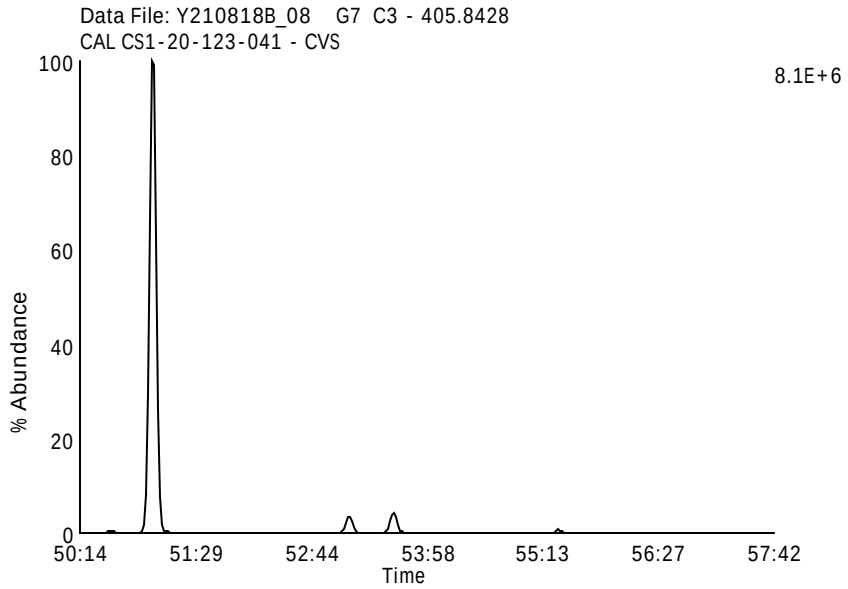
Sample Description: CAL CS1-20-123-041 - CVS

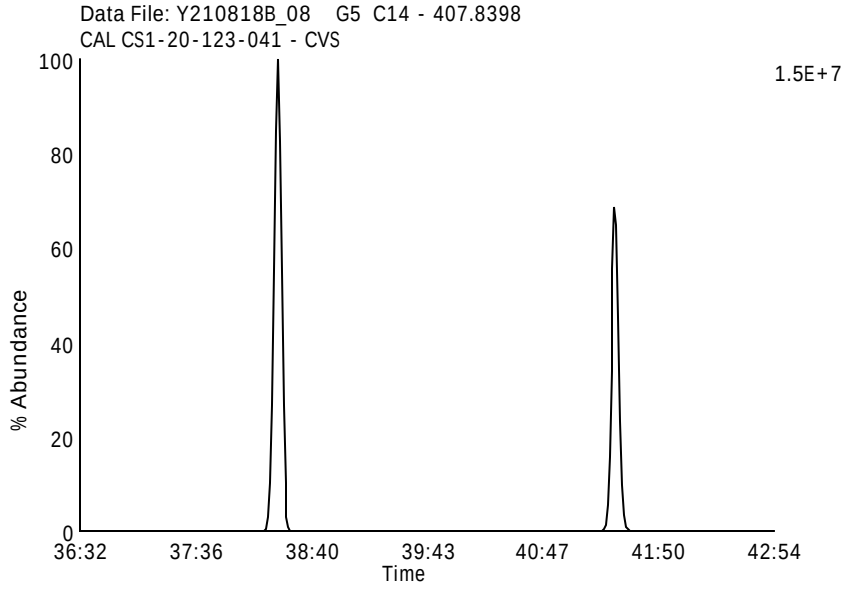


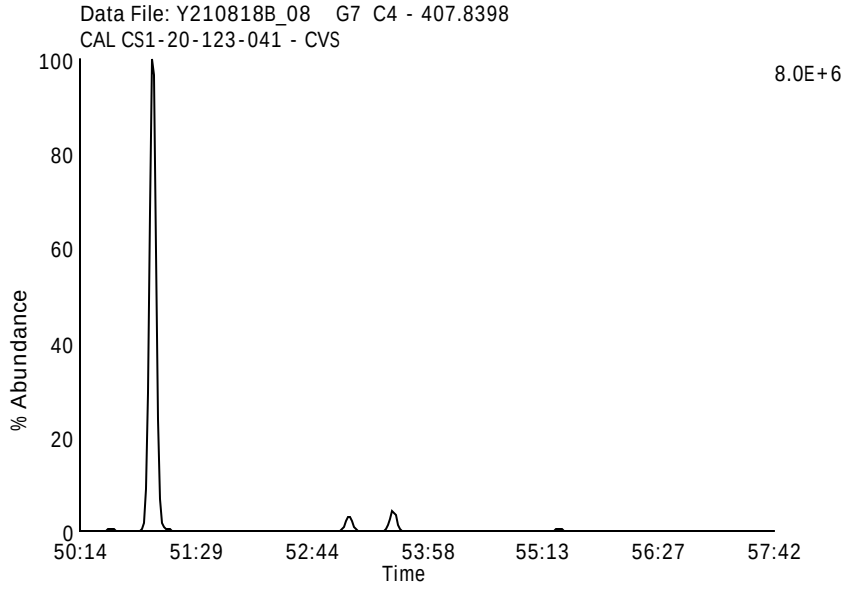
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS





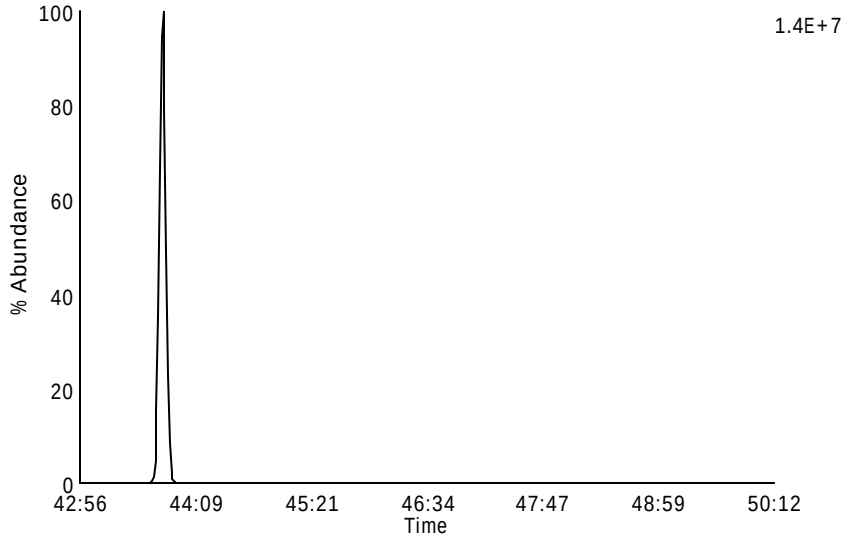




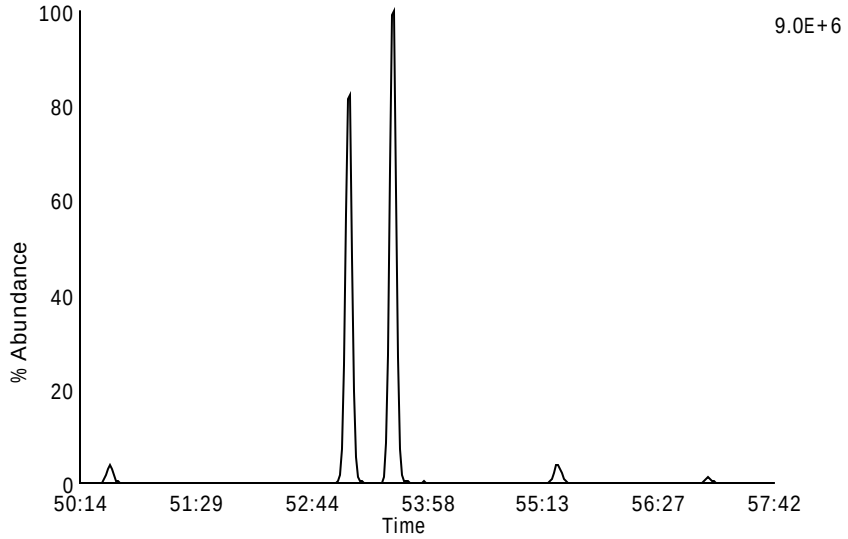
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

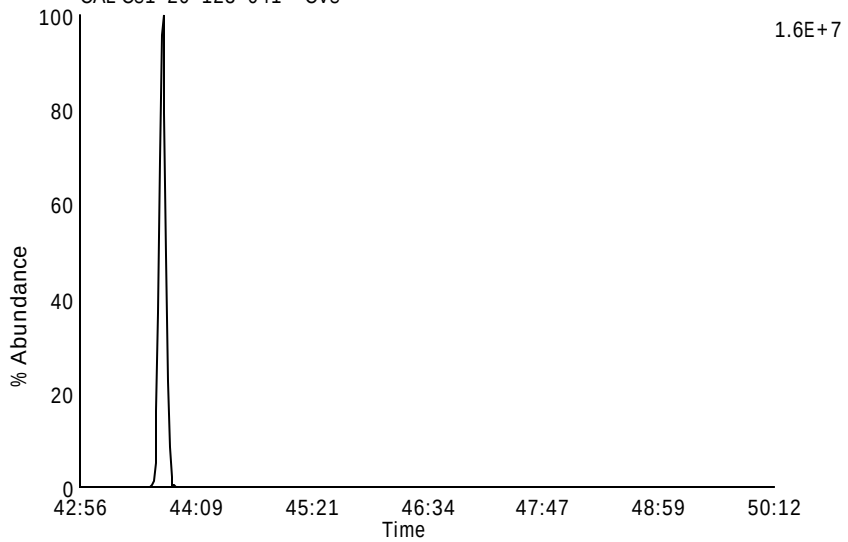
Data File: Y210818B_08 G6 C13 - 439.8038
CAL CS1-20-123-041 - CVS



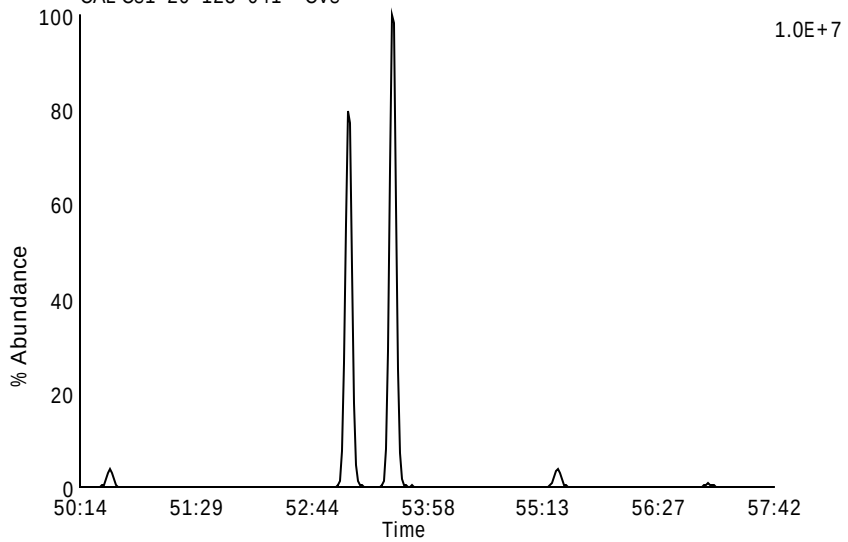
Data File: Y210818B_08 G7 C7 - 439.8038
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G6 C14 - 441.8008
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G7 C8 - 441.8008
CAL CS1-20-123-041 - CVS

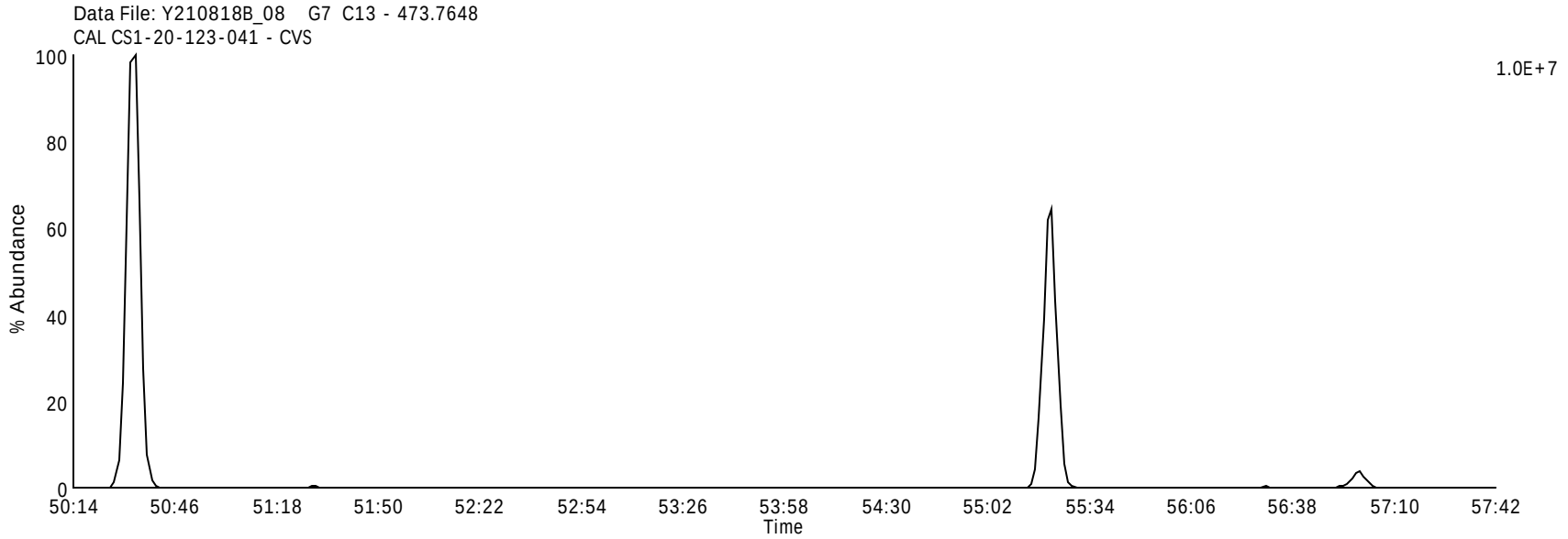


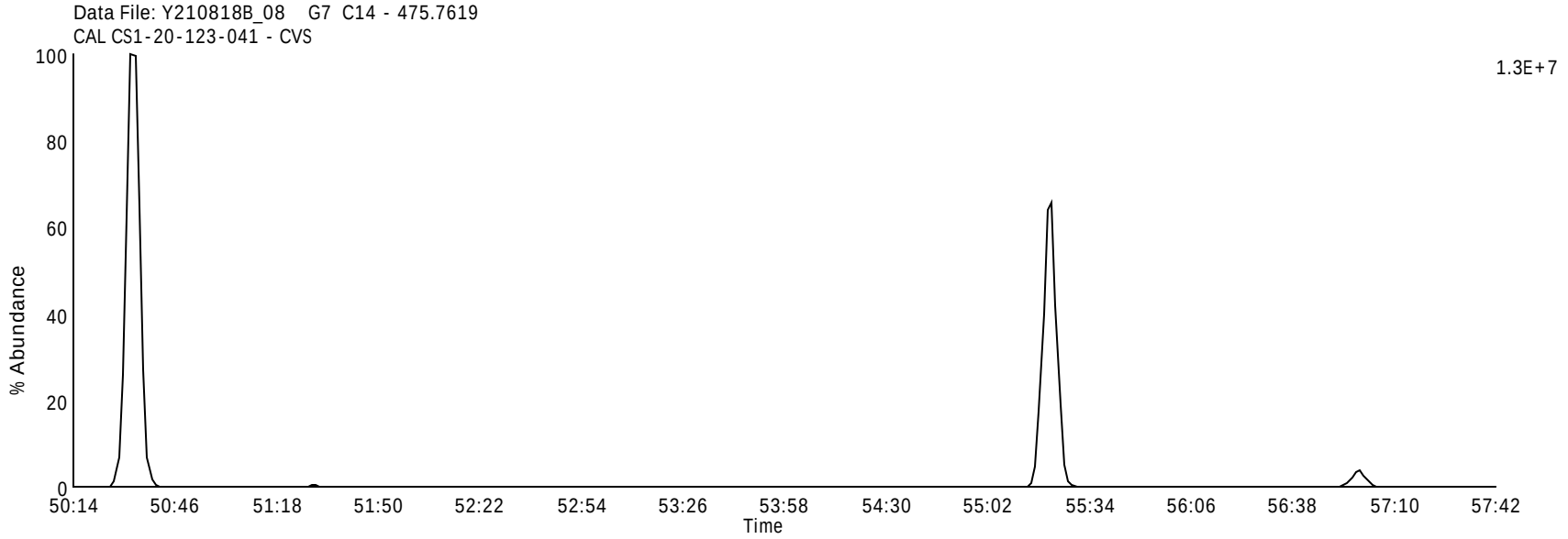
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



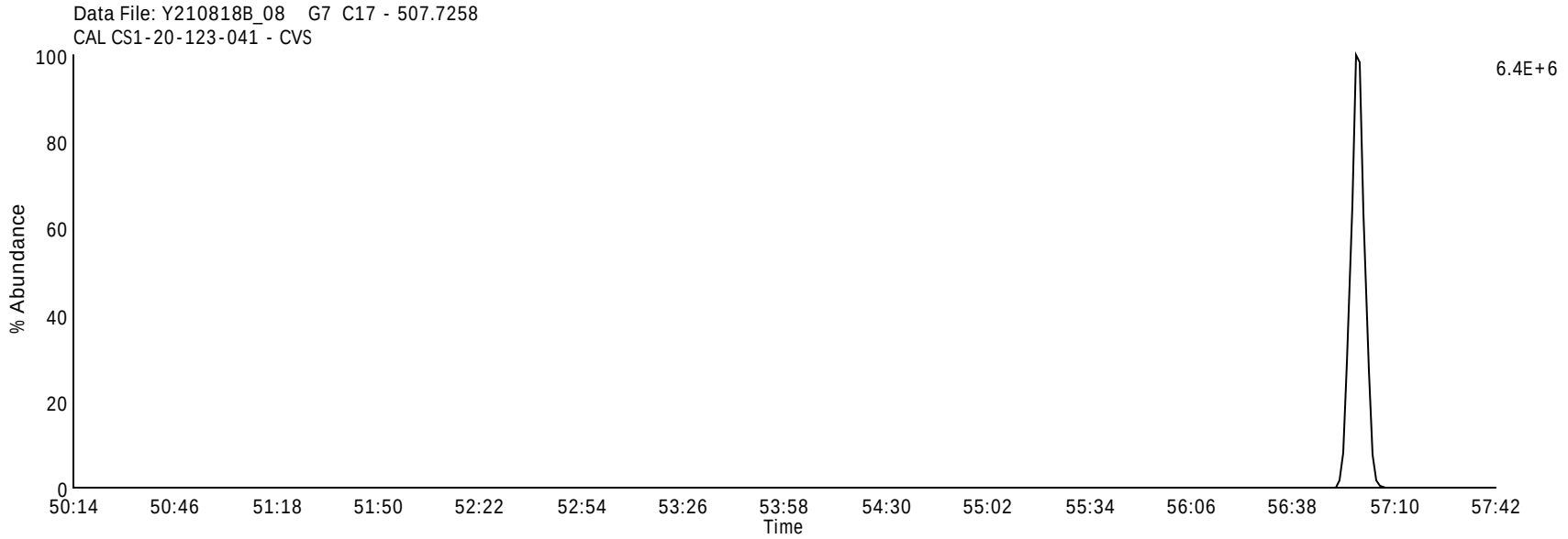


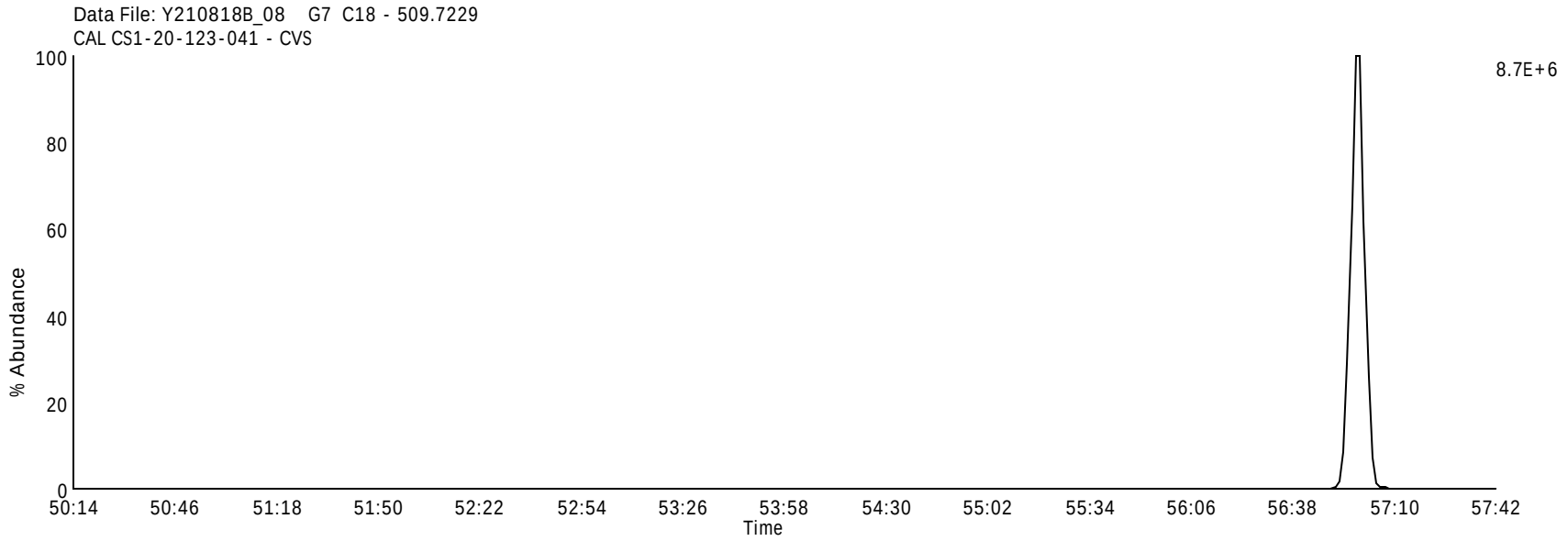
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



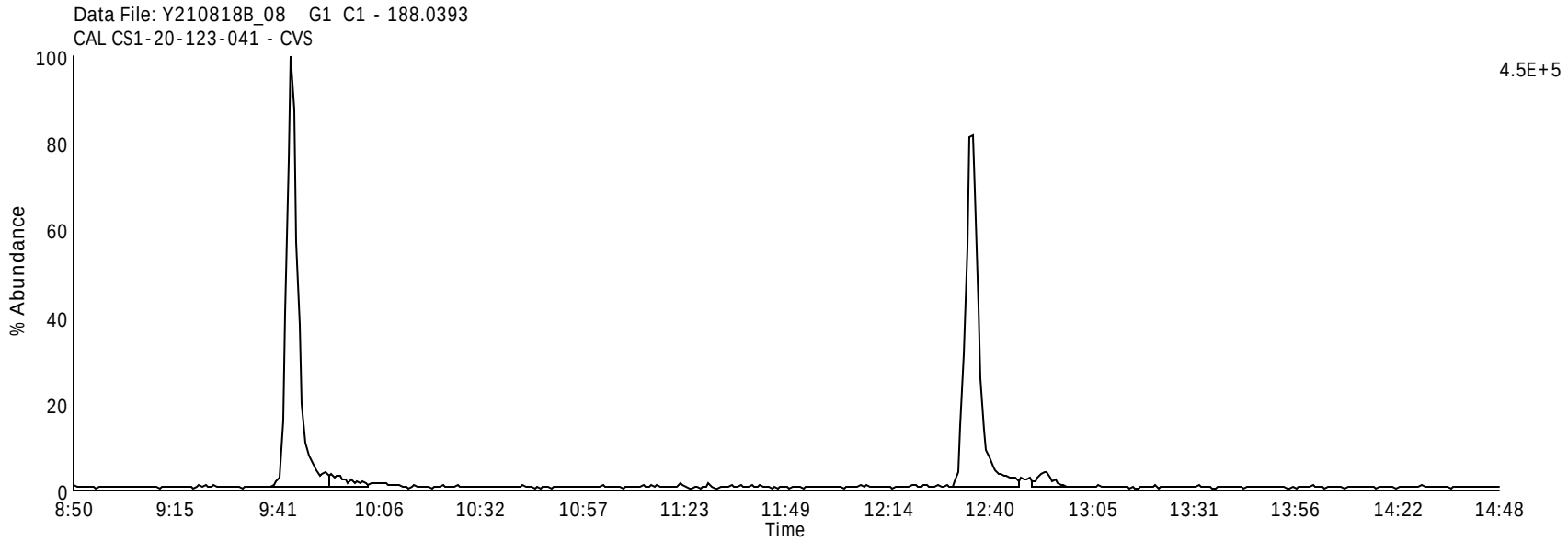


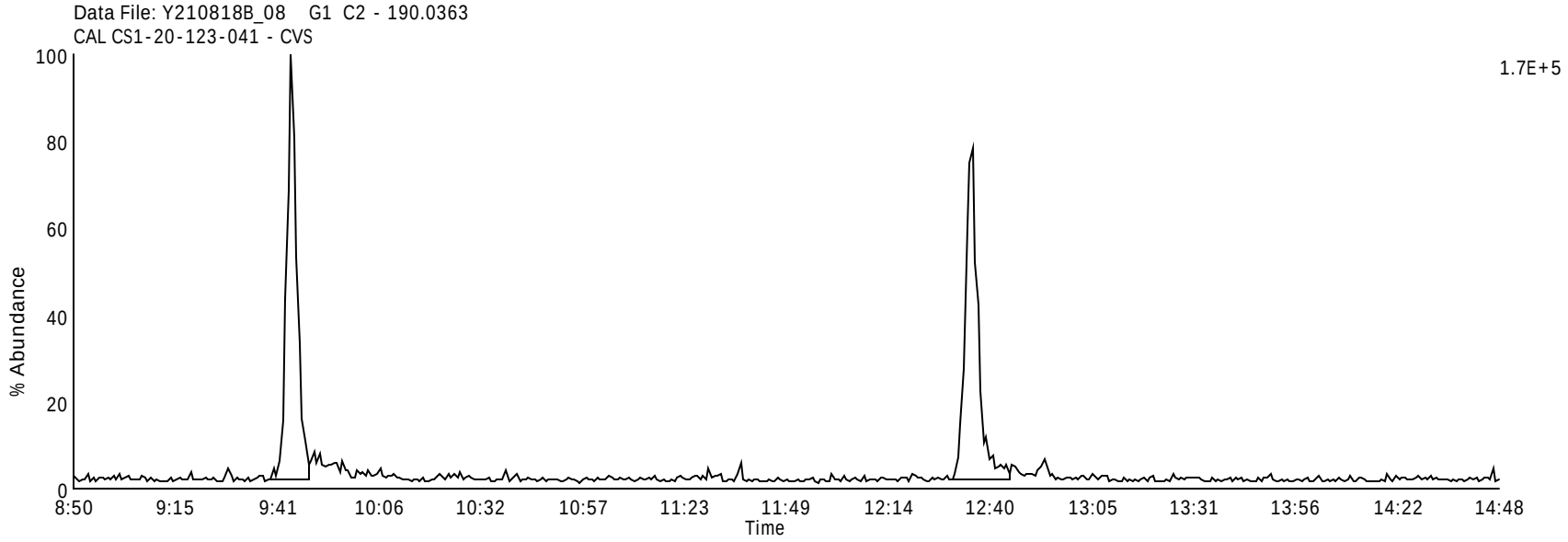
Mono Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

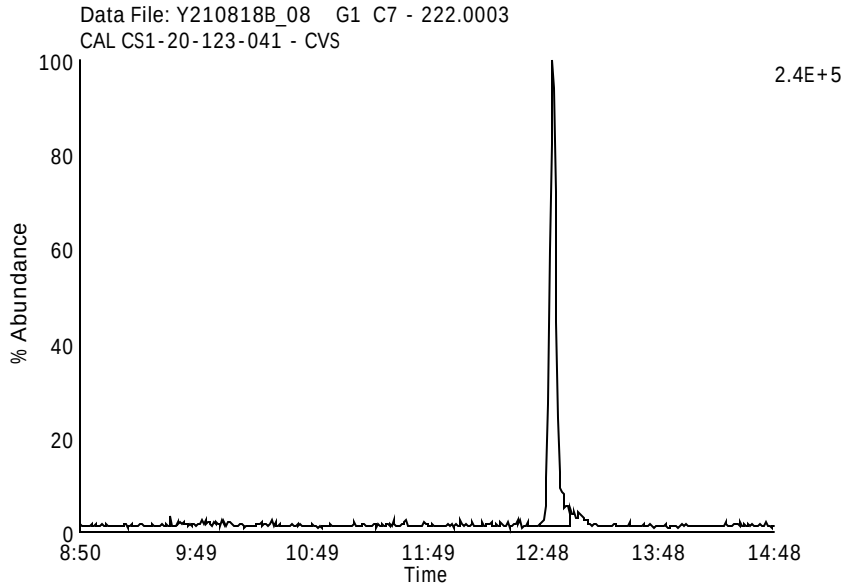
Sample Description: CAL CS1-20-123-041 - CVS

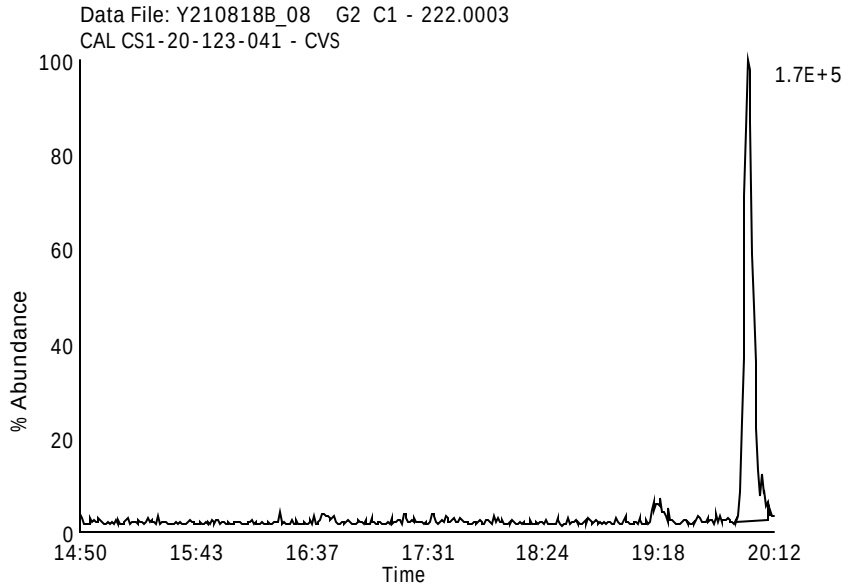


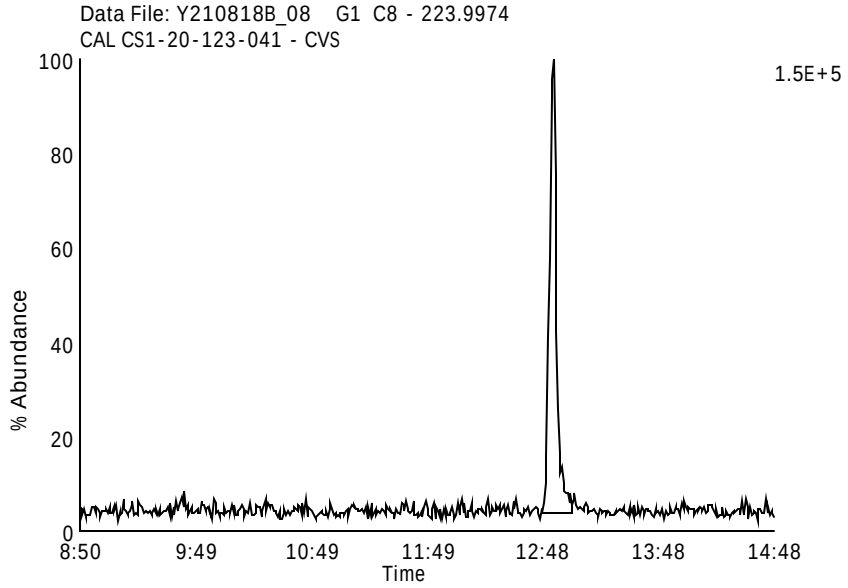


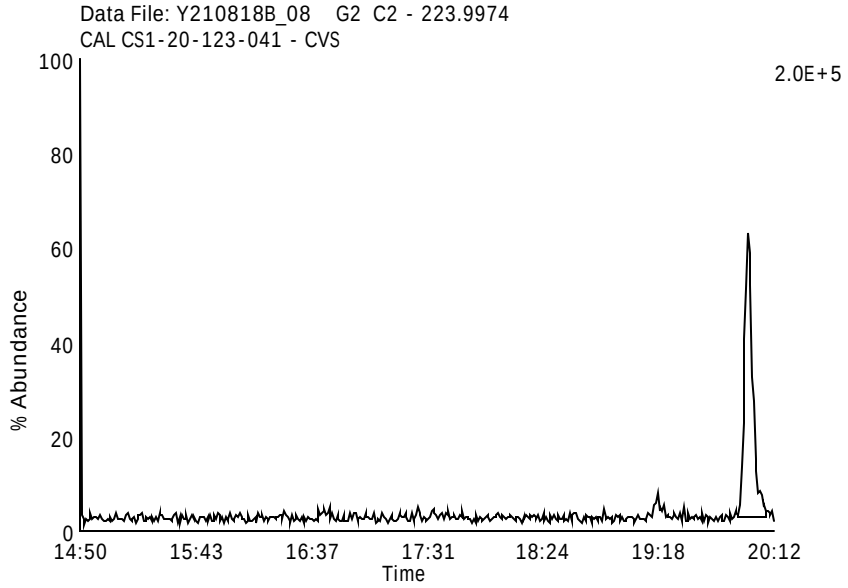
Di Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



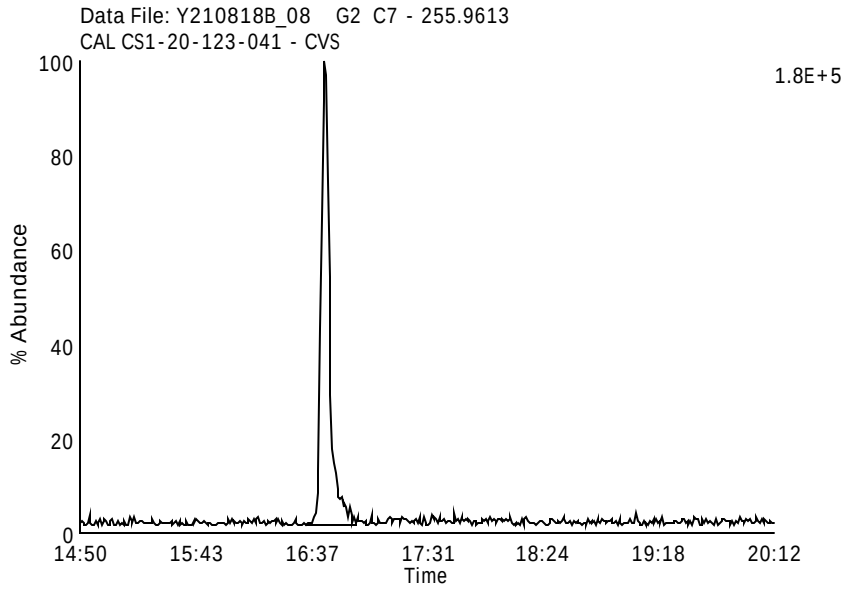


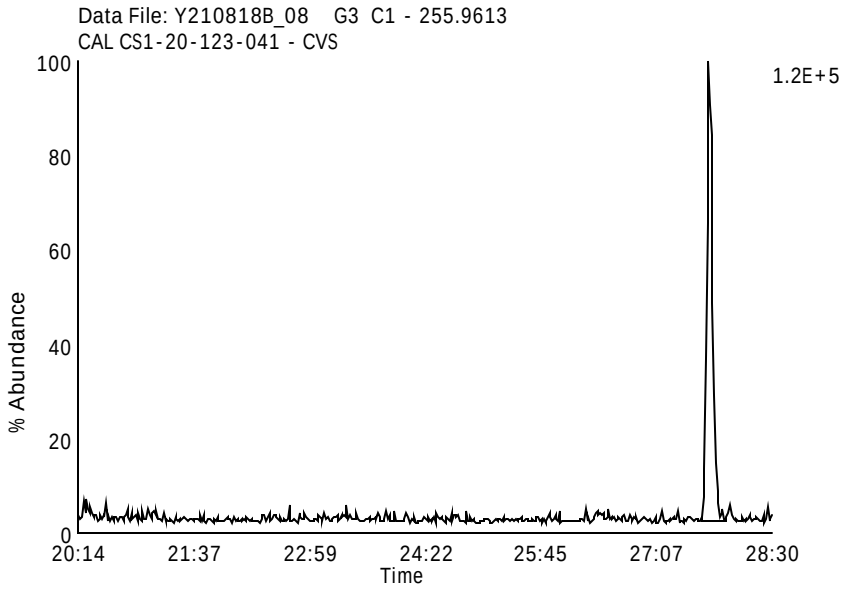


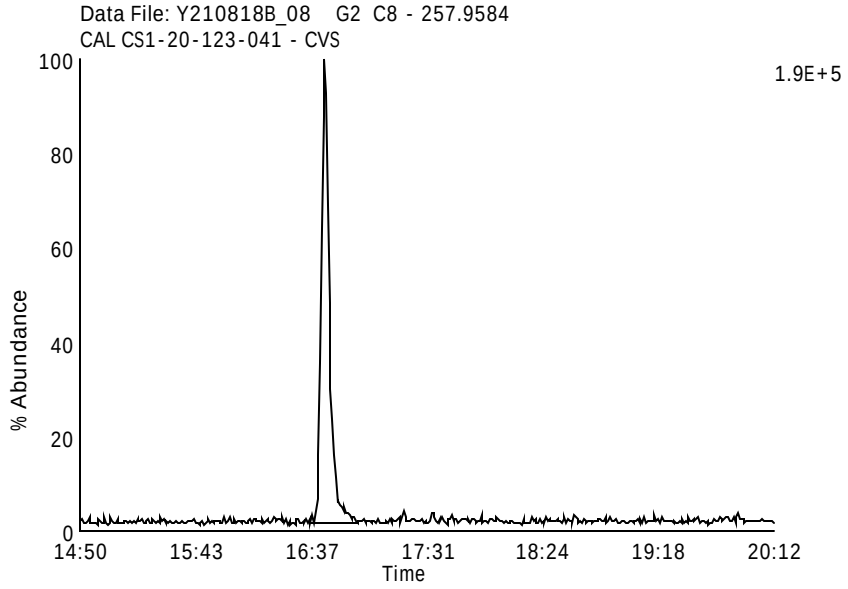


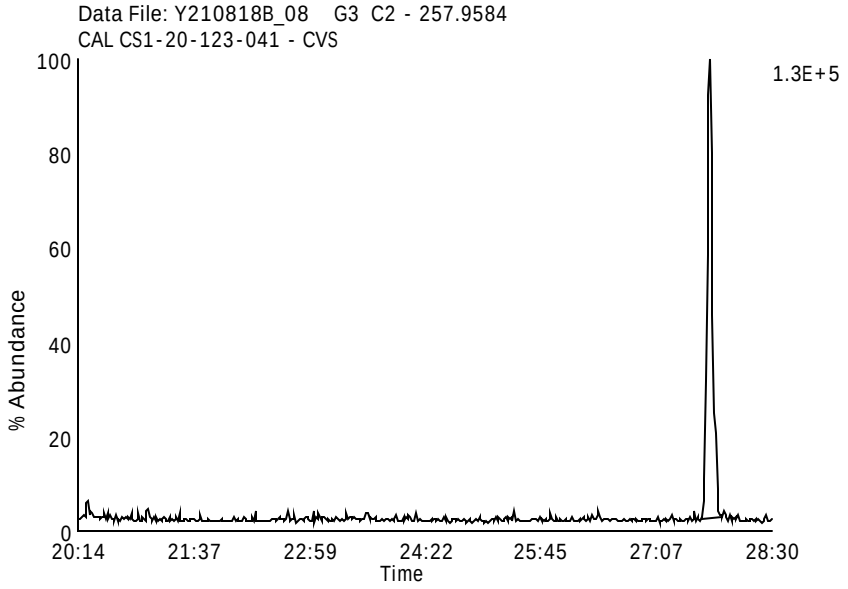
Tri Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS



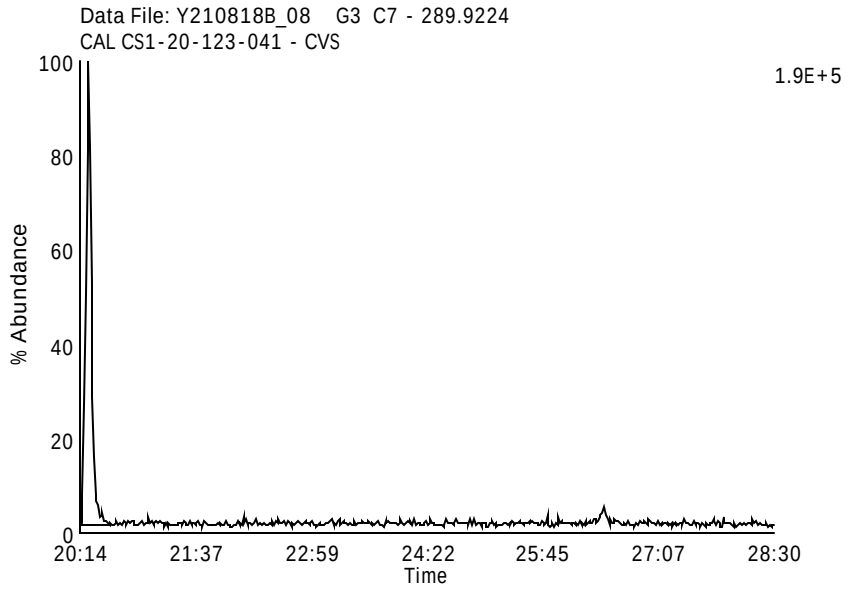


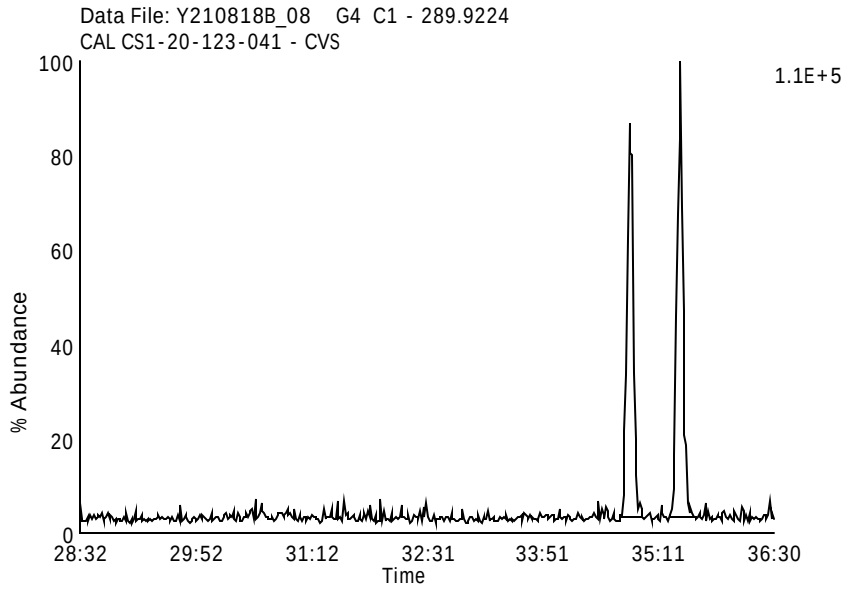


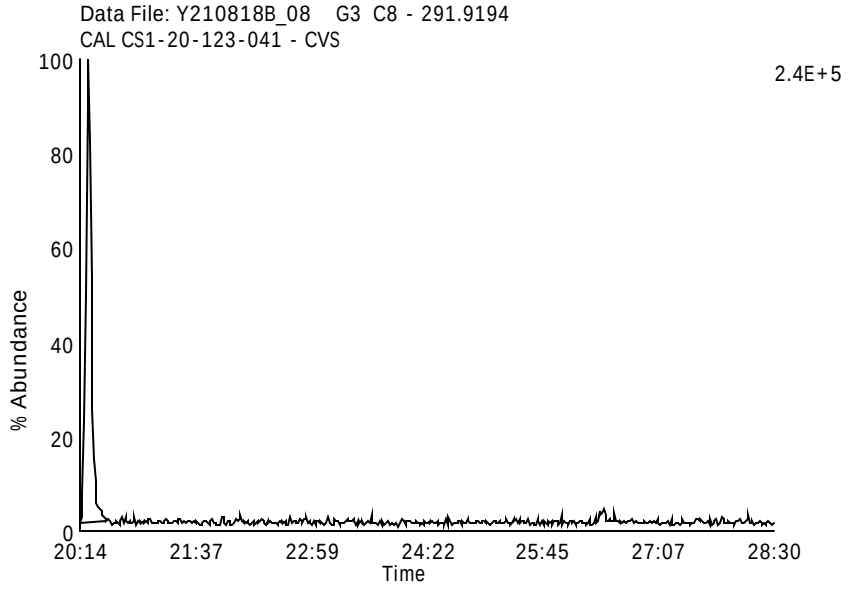


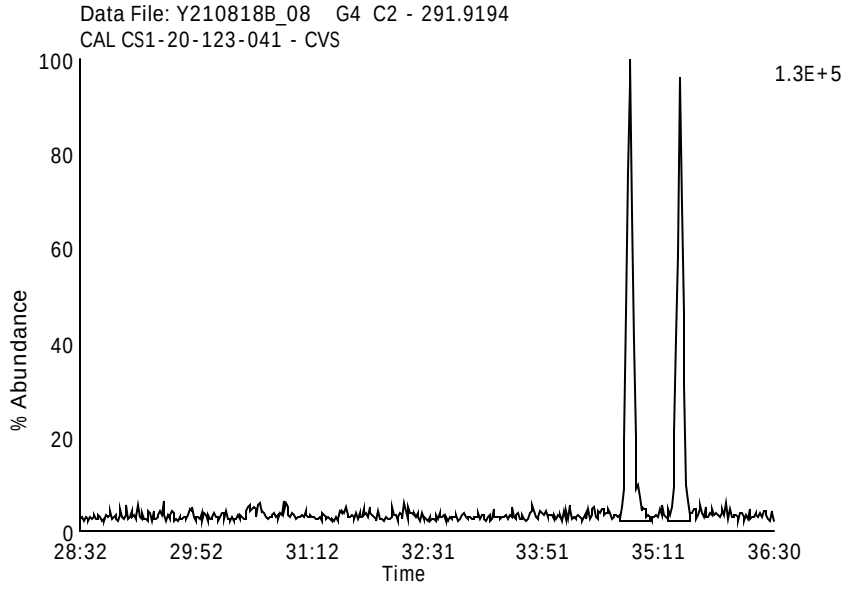
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS









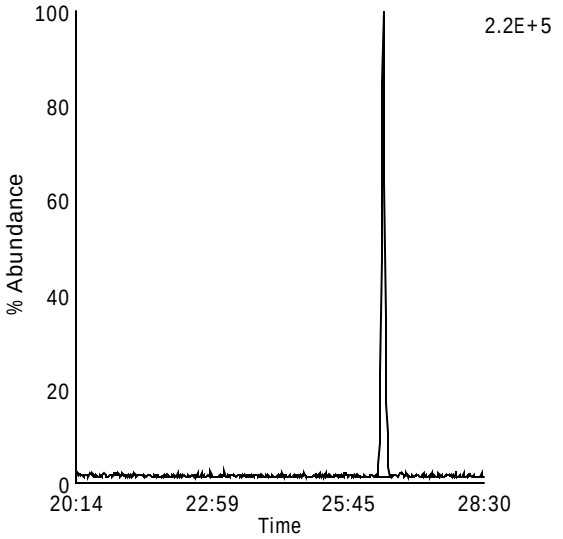
Penta Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

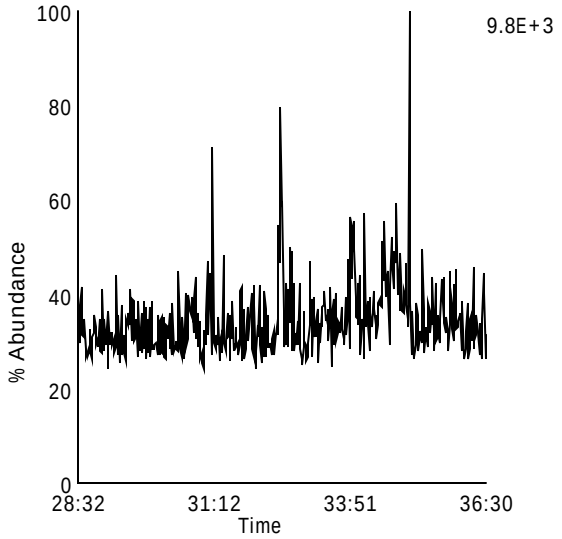
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

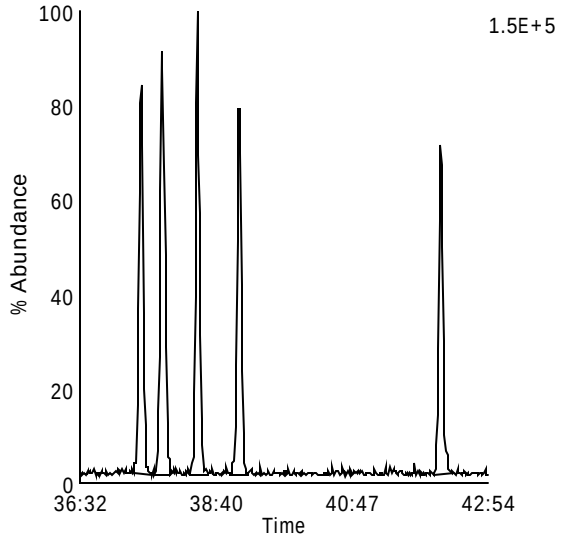
Data File: Y210818B_08 G3 C11 - 325.8804
CAL CS1-20-123-041 - CVS



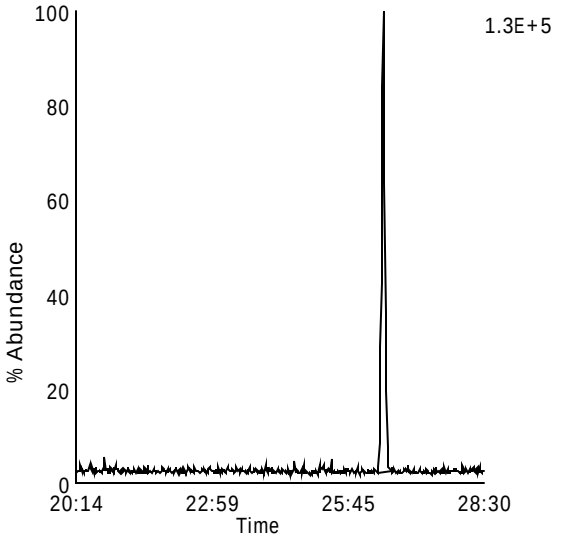
Data File: Y210818B_08 G4 C5 - 325.8804
CAL CS1-20-123-041 - CVS



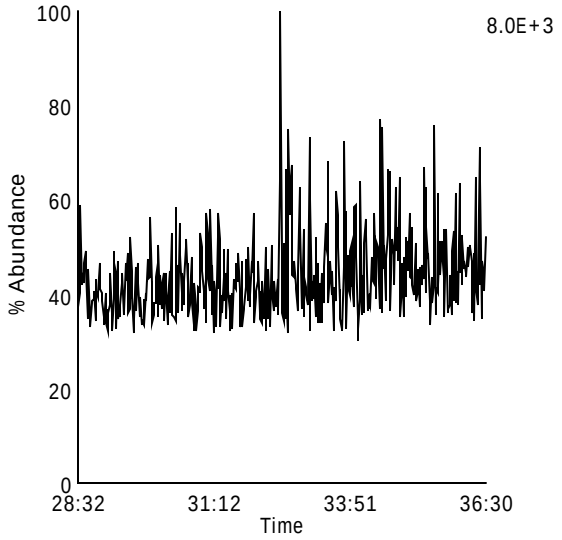
Data File: Y210818B_08 G5 C1 - 325.8804
CAL CS1-20-123-041 - CVS



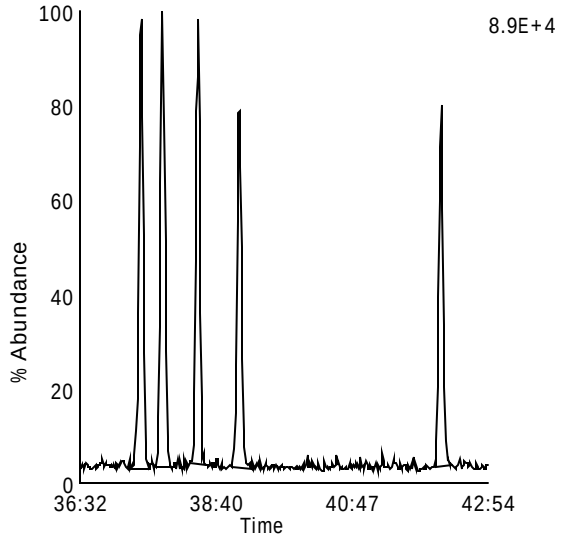
Data File: Y210818B_08 G3 C12 - 327.8775
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G4 C6 - 327.8775
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C2 - 327.8775
CAL CS1-20-123-041 - CVS



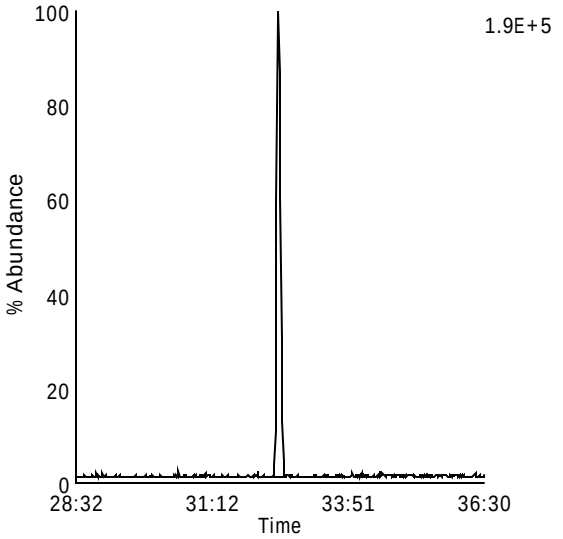
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

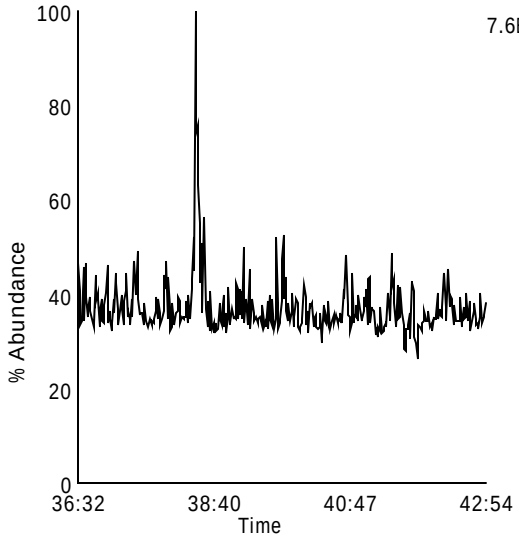
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

Data File: Y210818B_08 G4 C11 - 359.8415
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C5 - 359.8415
CAL CS1-20-123-041 - CVS



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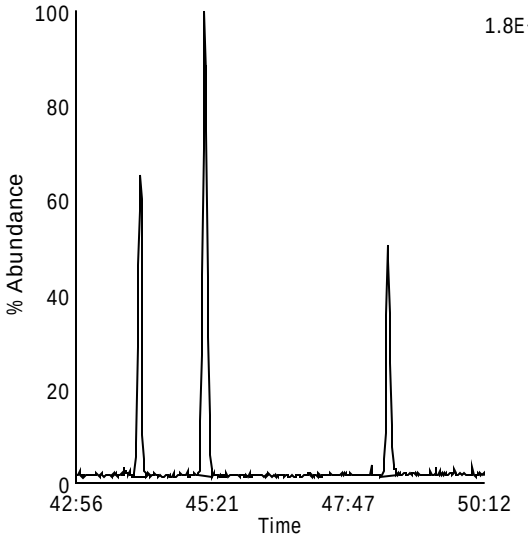
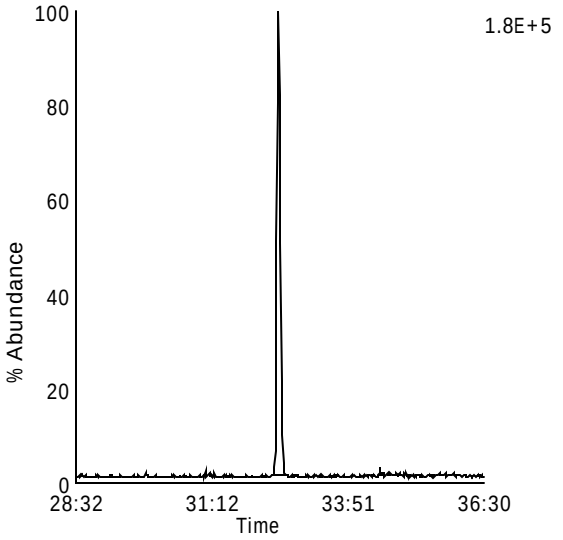
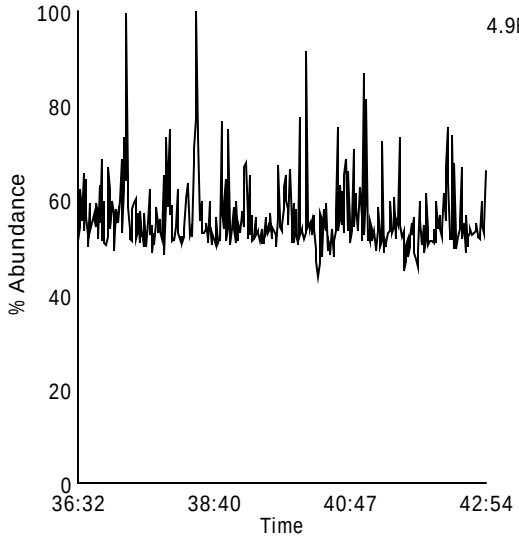
CAL CS1-20-123-041 - CVS



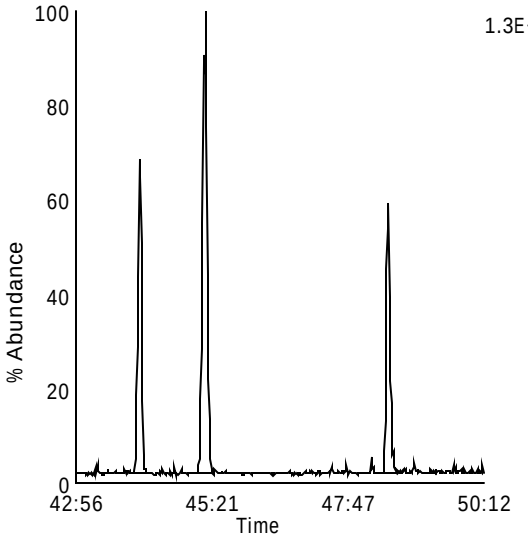
Data File: Y210818B_08 G4 C12 - 361.8385
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C6 - 361.8385
CAL CS1-20-123-041 - CVS



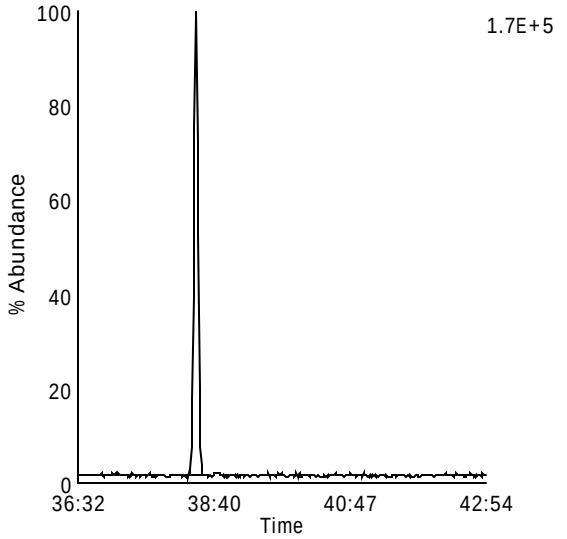
Data File: Y210818B_08 G6 C2 - 361.8385
CAL CS1-20-123-041 - CVS



Hepta Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS

Data File: Y210818B_08 G5 C11 - 393.8025
CAL CS1-20-123-041 - CVS



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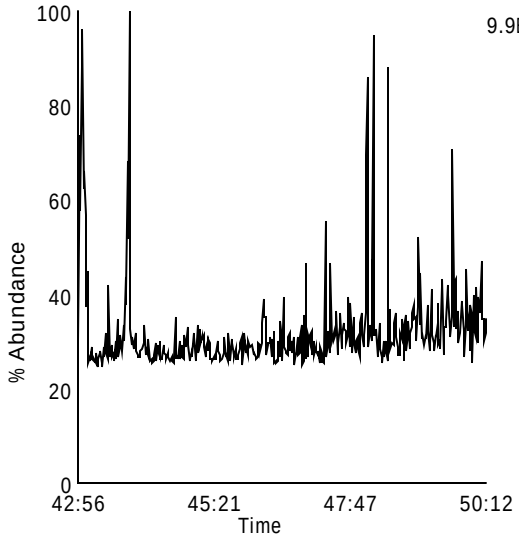
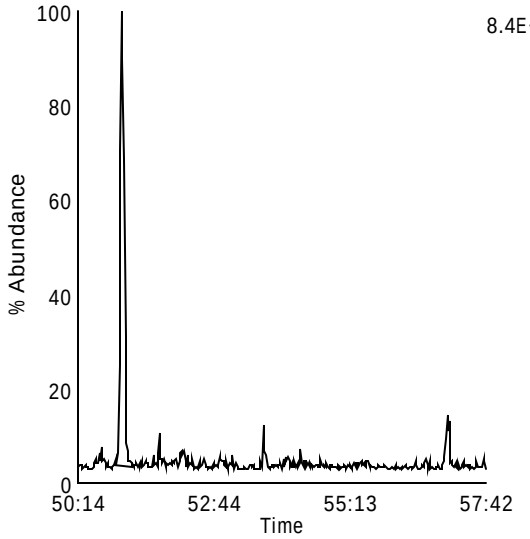
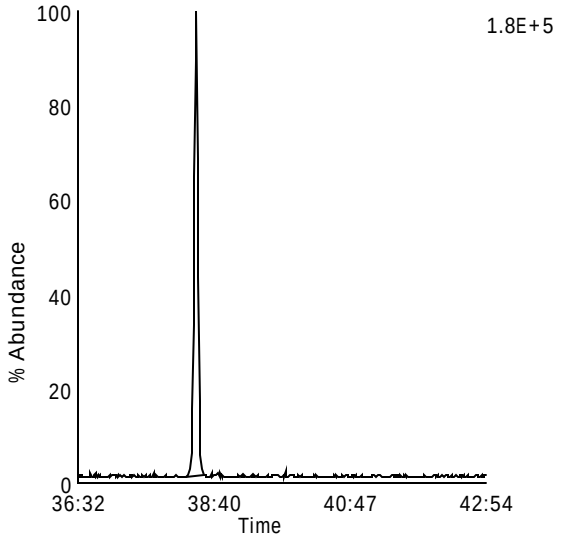
CAL CS1-20-123-041 - CVS



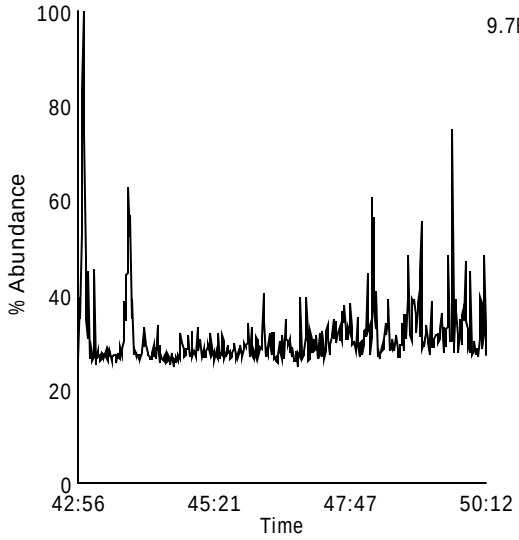
Data File: Y210818B_08 G7 C1 - 393.8025
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G5 C12 - 395.7995
CAL CS1-20-123-041 - CVS



Data File: Y210818B_08 G6 C8 - 395.7995
CAL CS1-20-123-041 - CVS



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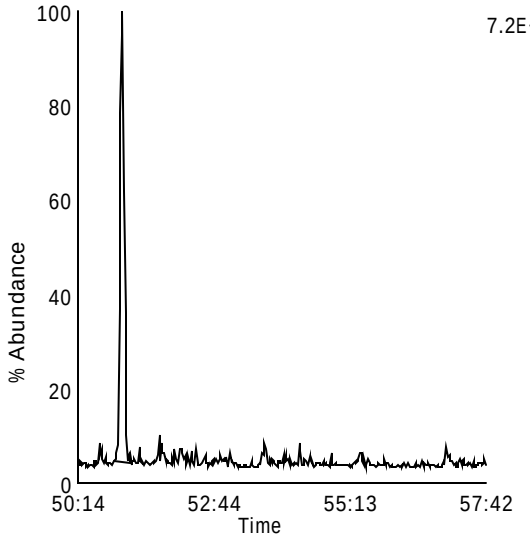
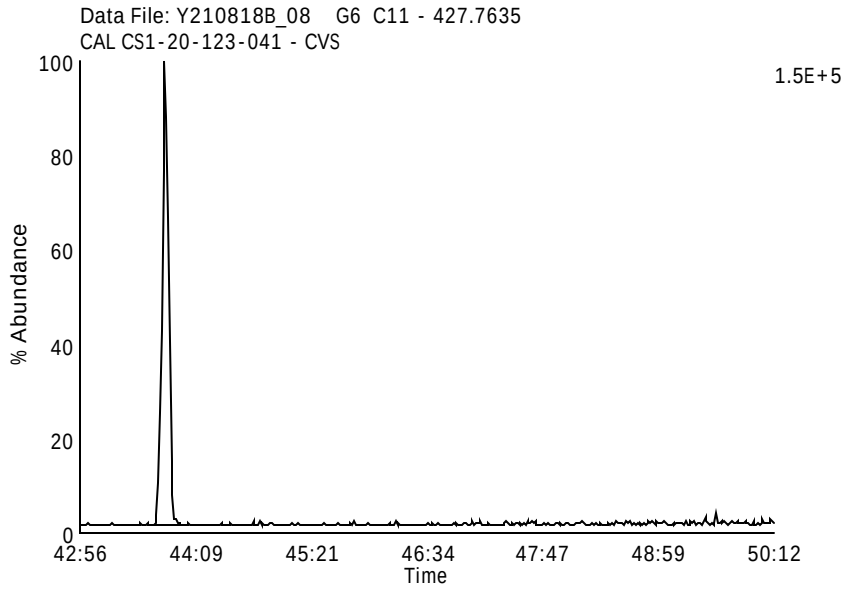
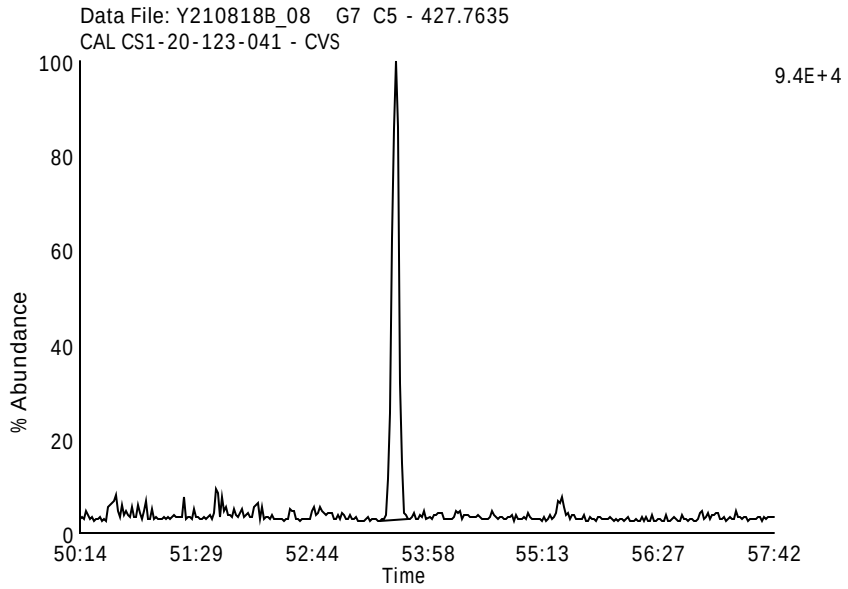
CAL CS1-20-123-041 - CVS

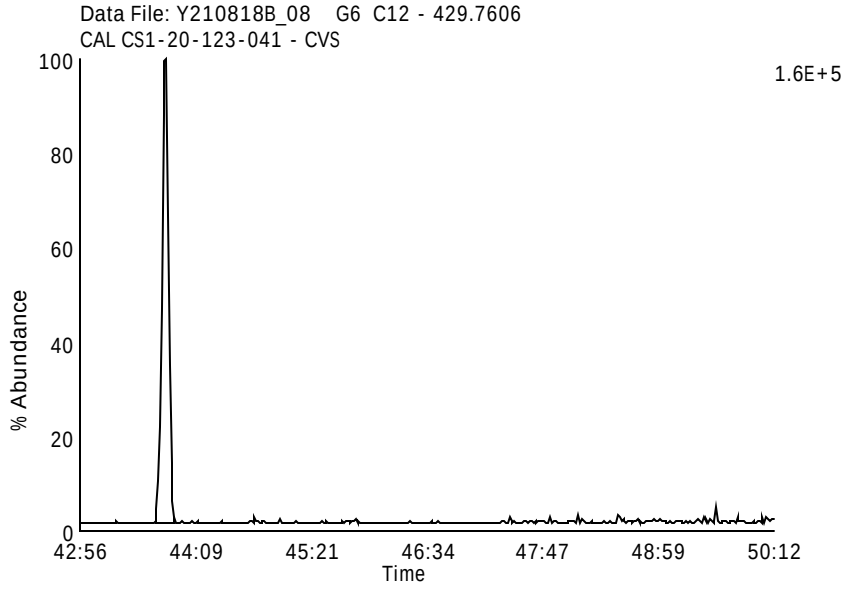


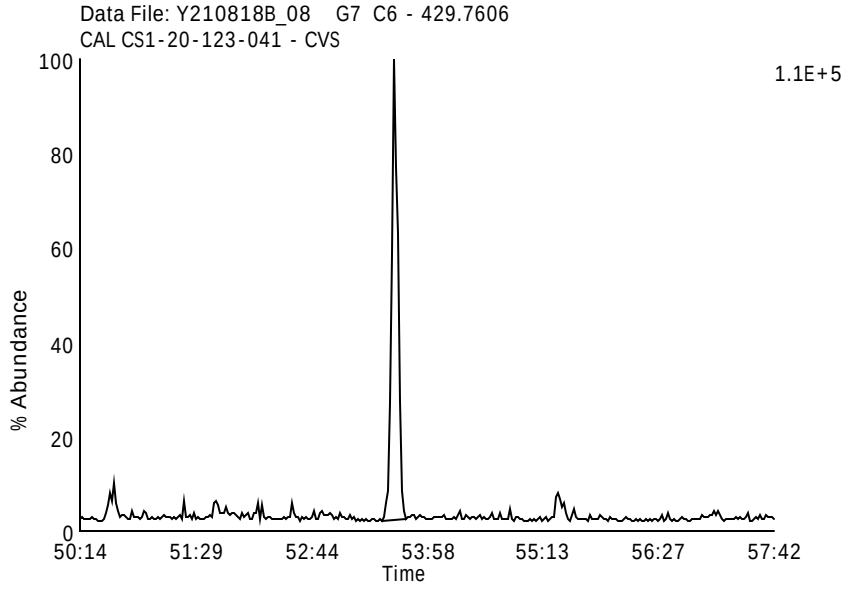
Octa Chlorinated Biphenyls

Data File Name: Y210818B_08
Lab Sample ID: CS1-20-123-041
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS1-20-123-041 - CVS







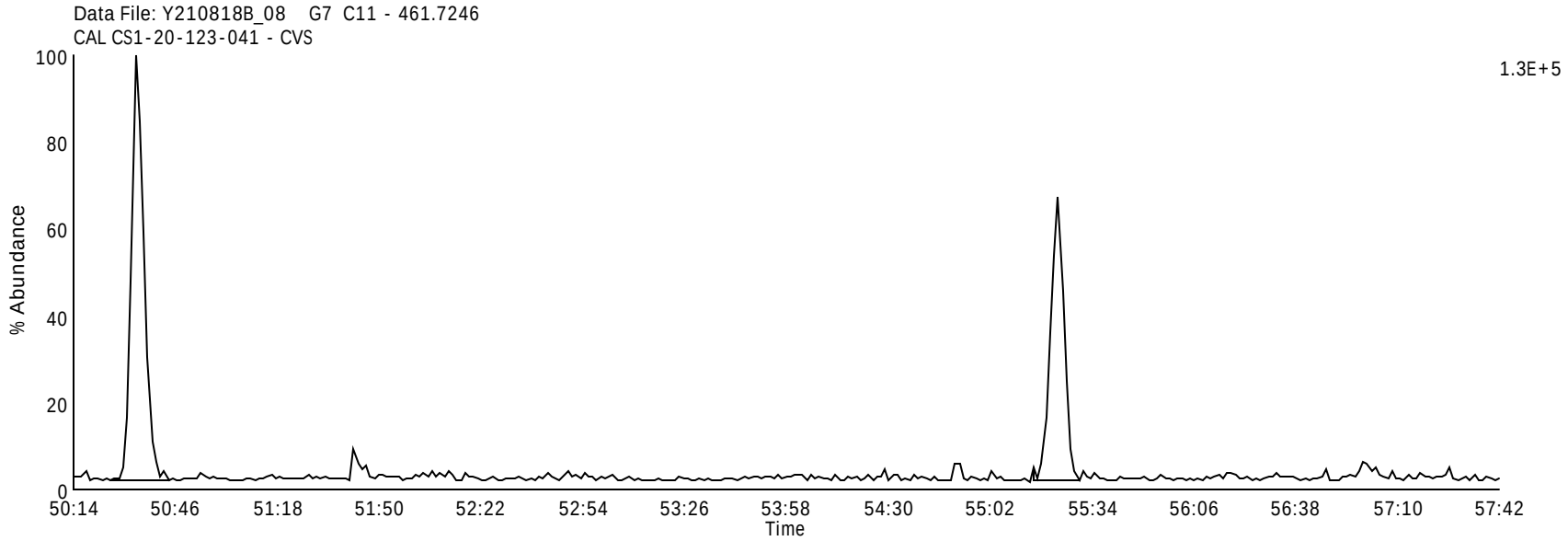


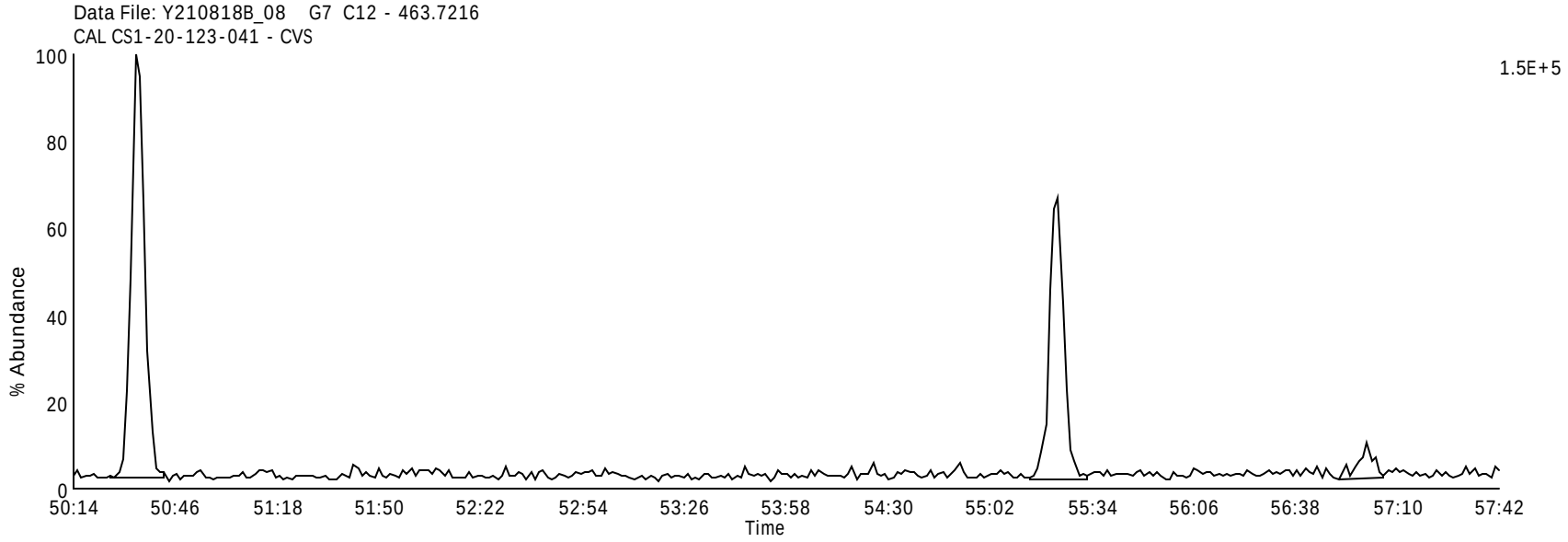
Nona Chlorinated Biphenyls

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS



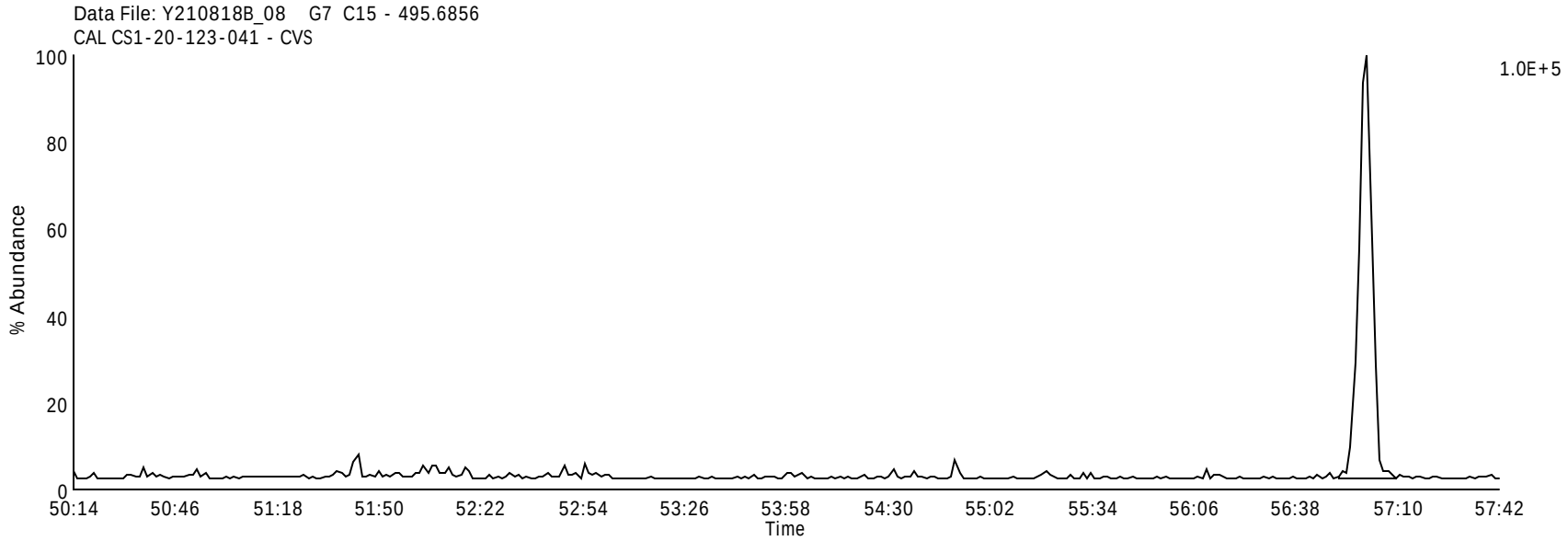


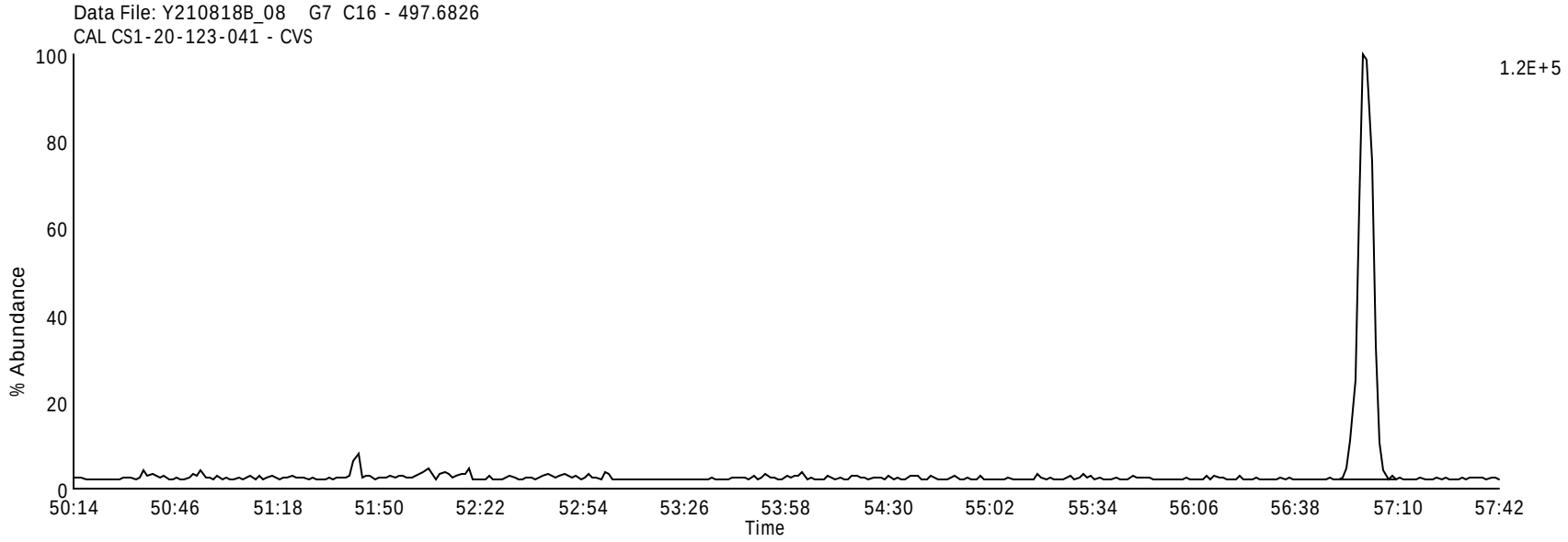
Deca Chlorinated Biphenyl

Data File Name: Y210818B_08 Lab Sample ID: CS1-20-123-041

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS1-20-123-041 - CVS

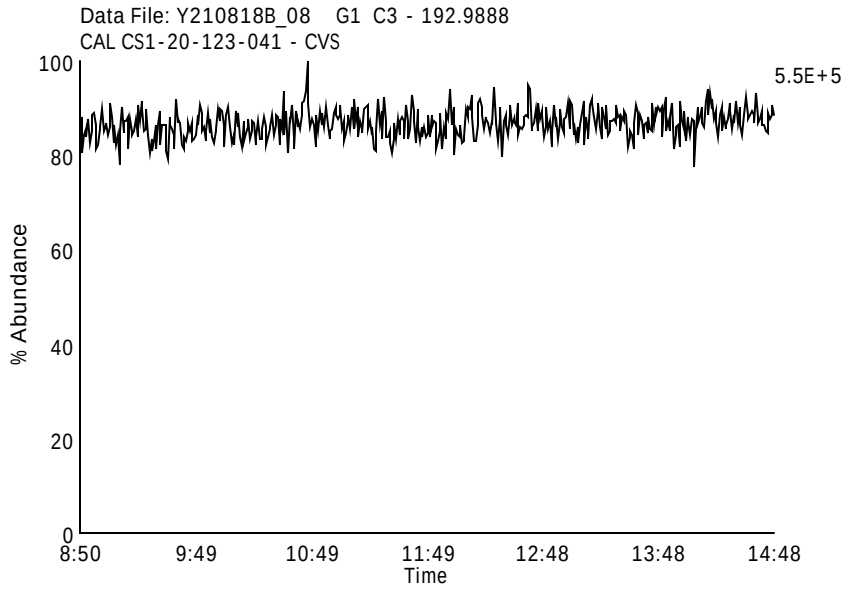


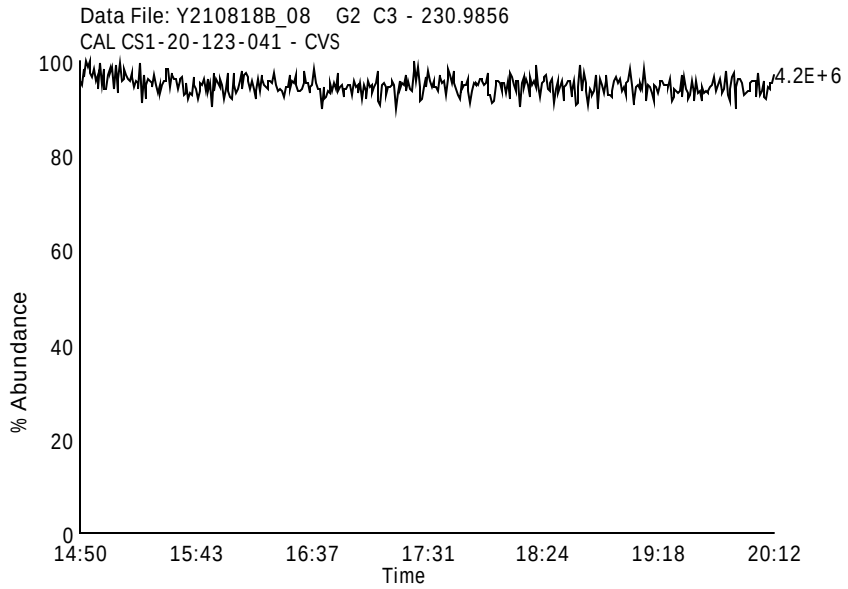


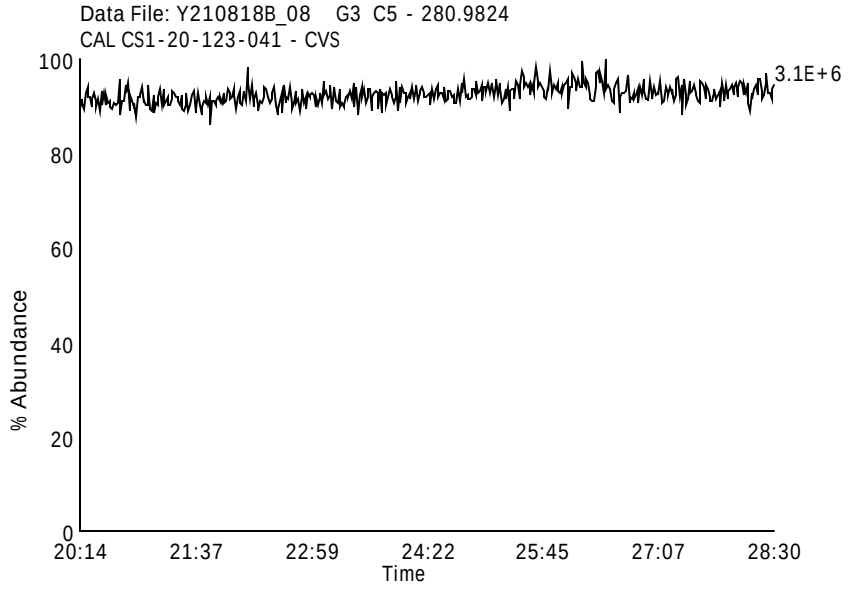
Group 1 - 4 Lock mass

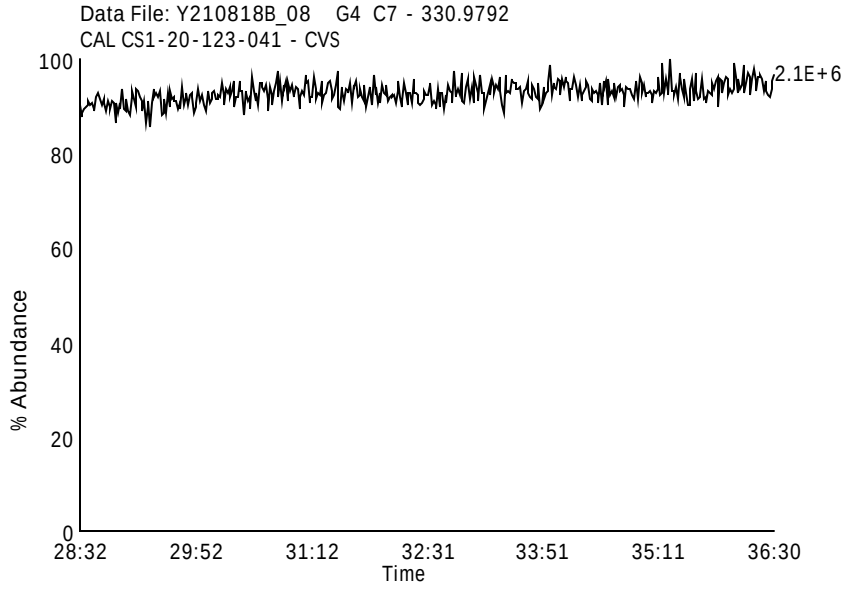
Data File Name: Y210818B_08
Date Acquired: 8/18/2021
Sample Description: CAL CS1-20-123-041 - CVS

Lab Sample ID: CS1-20-123-041
Instrument: 10MSHR12 (Y)





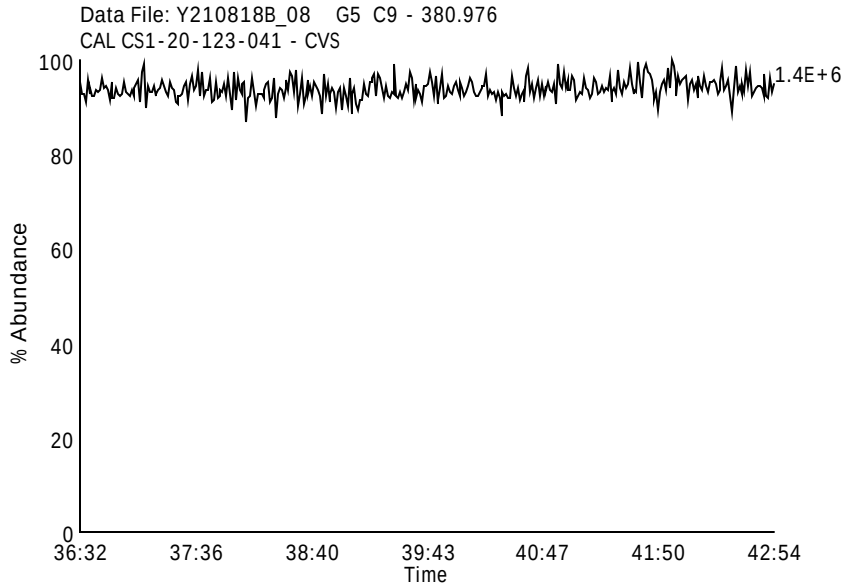


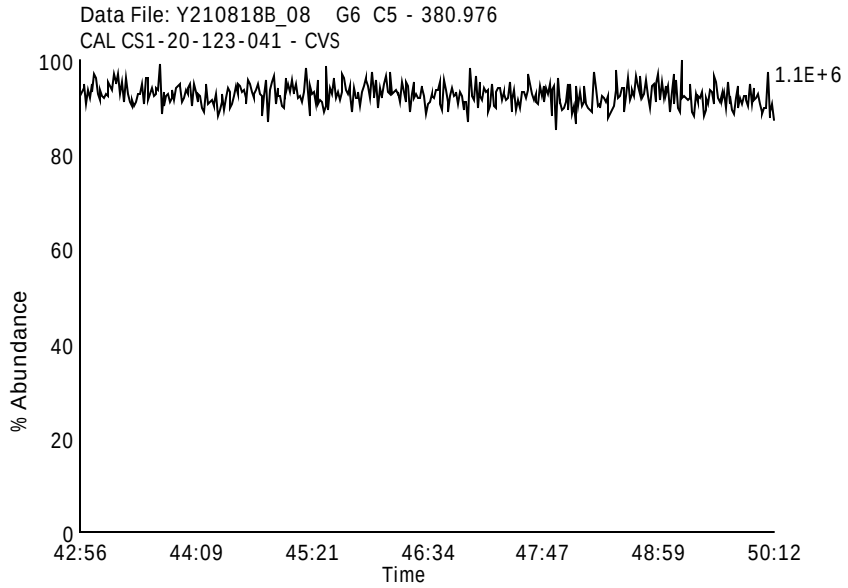


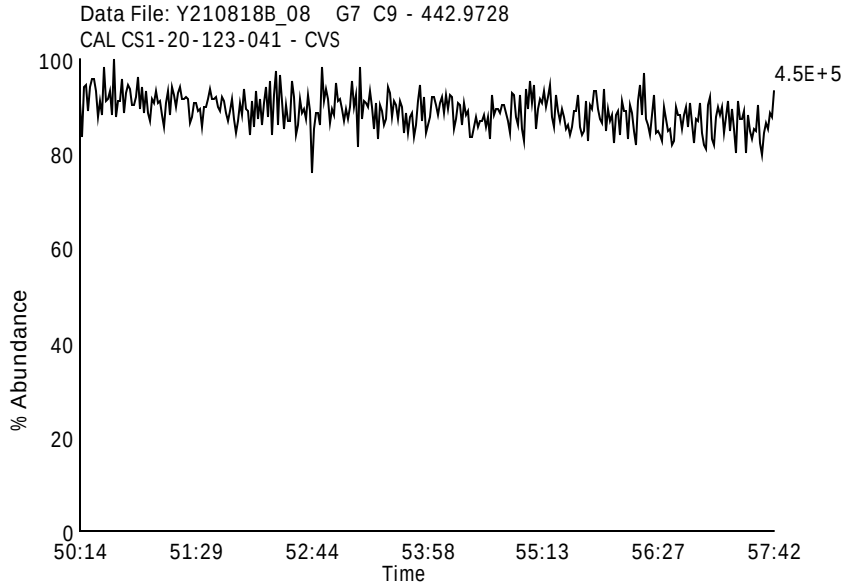
Group 5 - 7 Lock mass

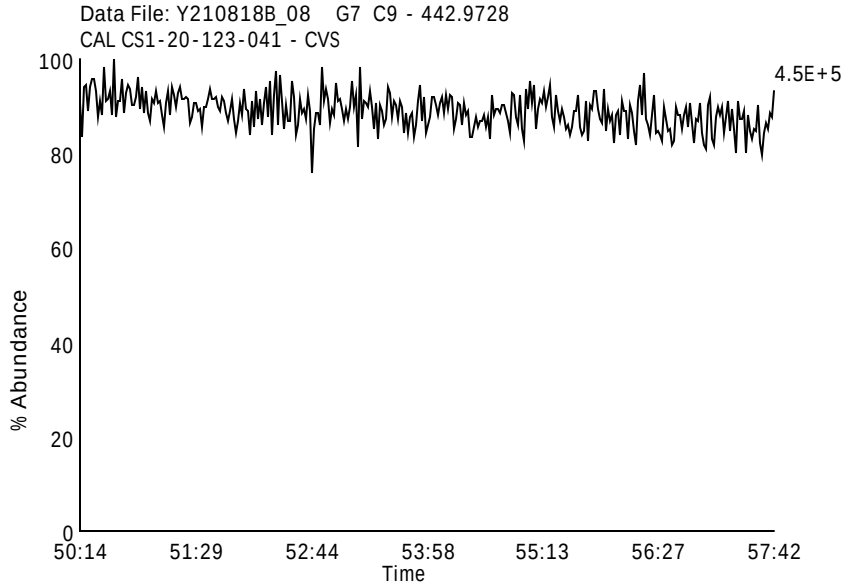
Data File Name: Y210818B_08
Date Acquired: 8/18/2021
Sample Description: CAL CS1-20-123-041 - CVS

Lab Sample ID: CS1-20-123-041
Instrument: 10MSHR12 (Y)







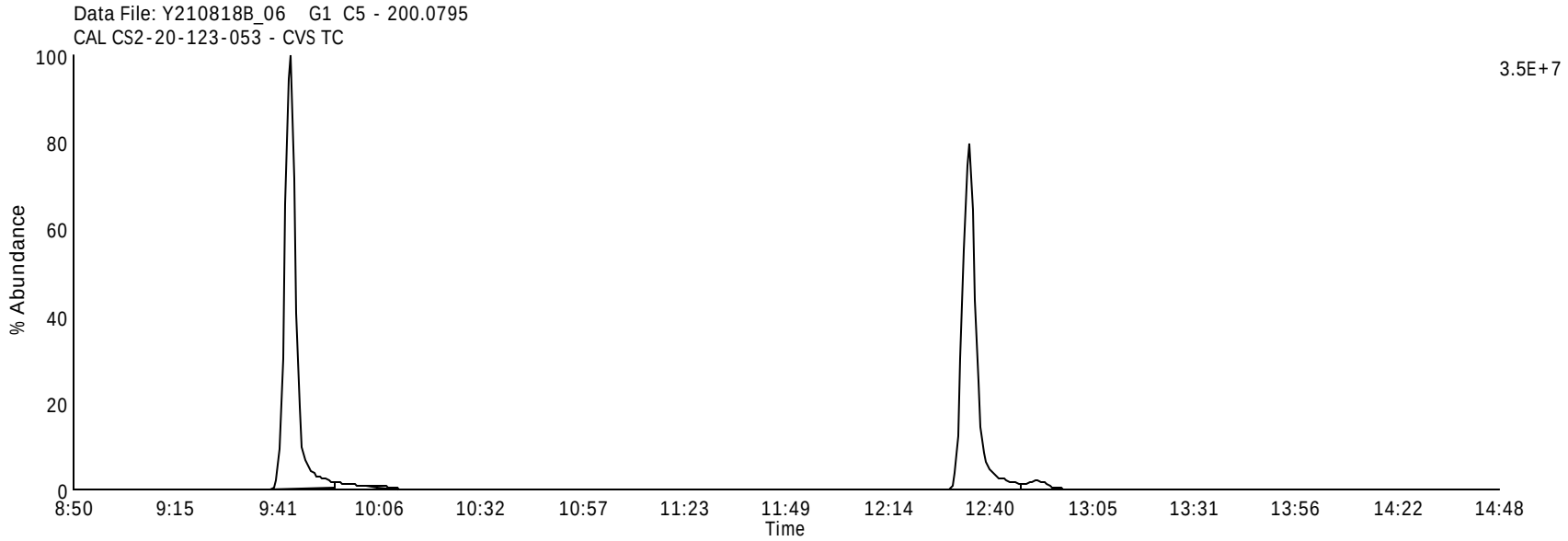


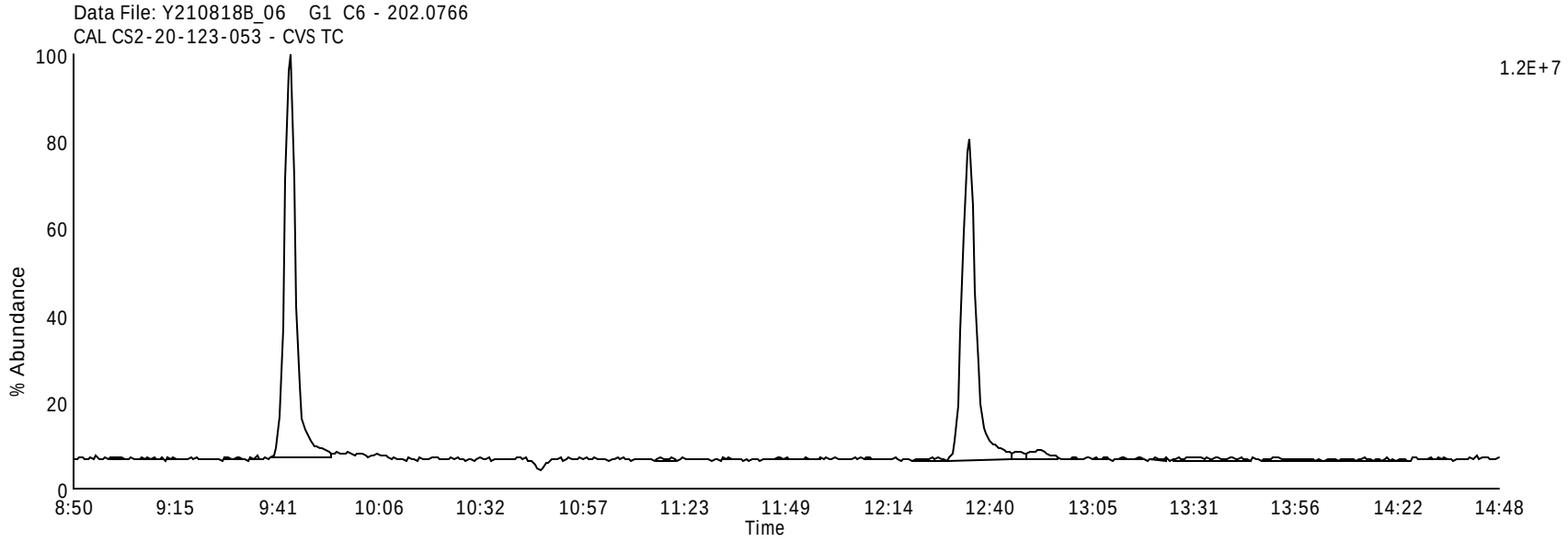
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

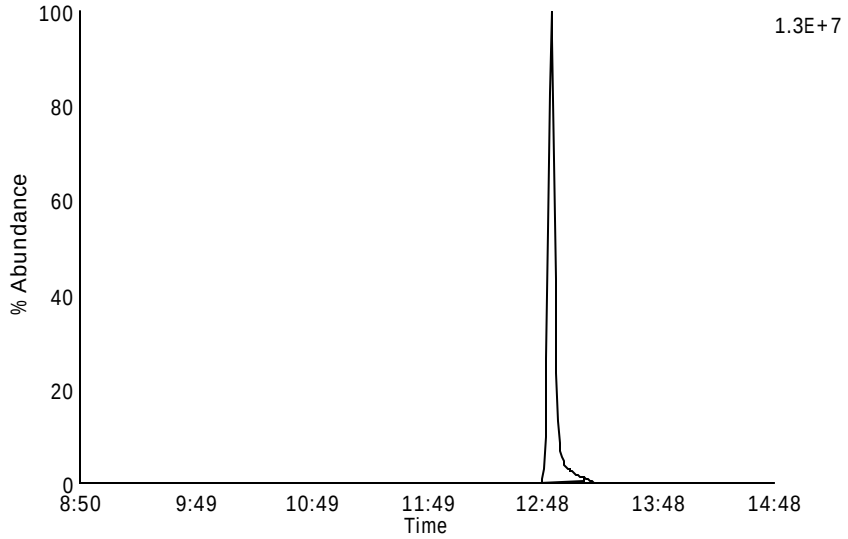




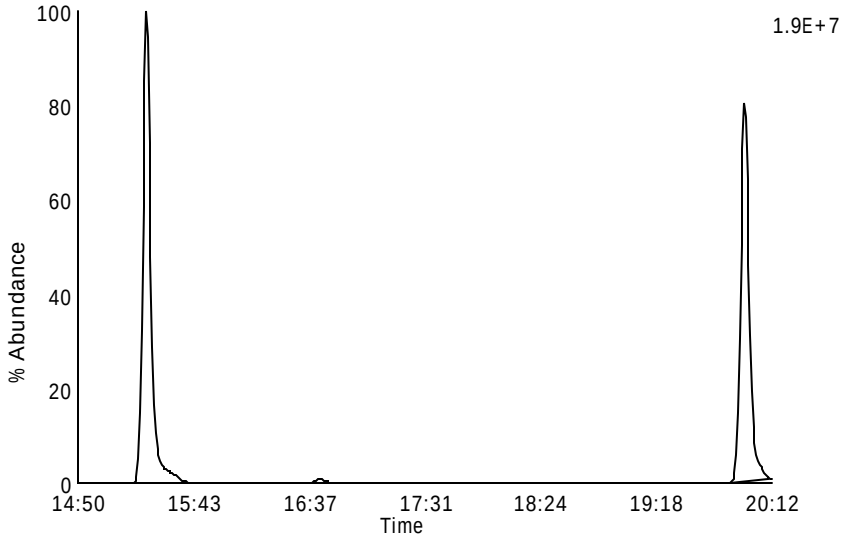
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC

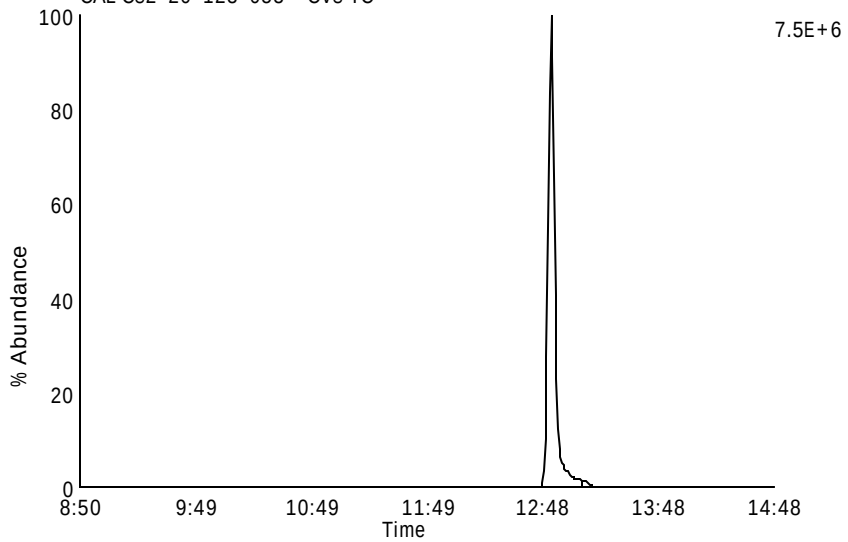
Data File: Y210818B_06 G1 C9 - 234.0406
CAL CS2-20-123-053 - CVS TC



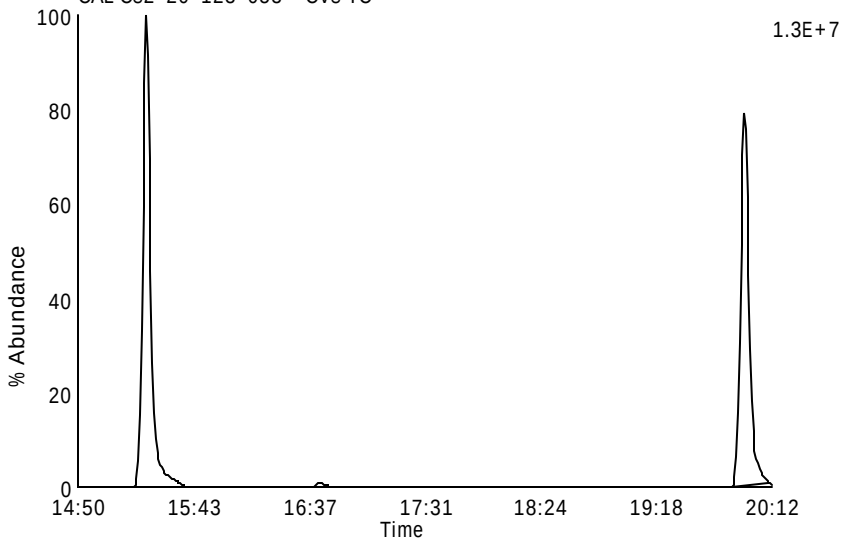
Data File: Y210818B_06 G2 C5 - 234.0406
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G1 C10 - 236.0376
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G2 C6 - 236.0376
CAL CS2-20-123-053 - CVS TC

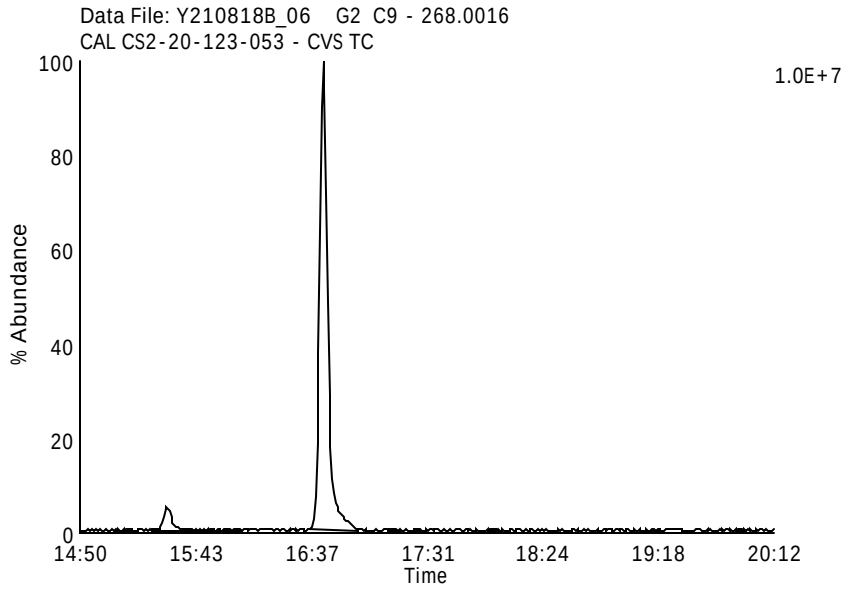


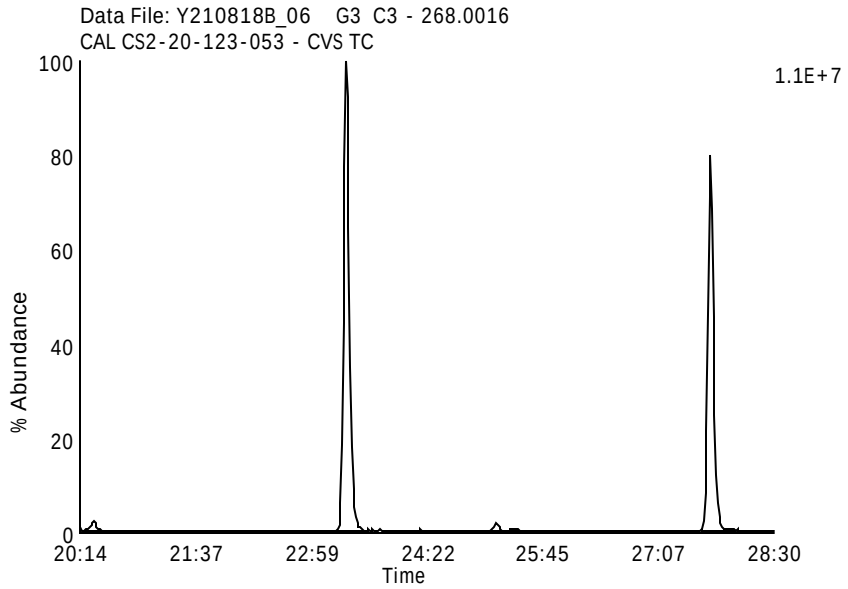
Labeled Tri Chlorinated Biphenyls

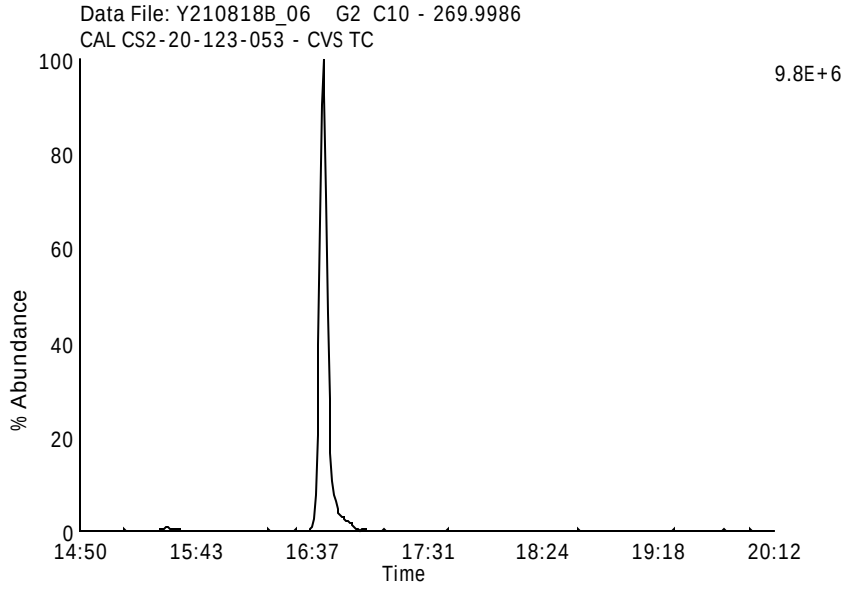
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

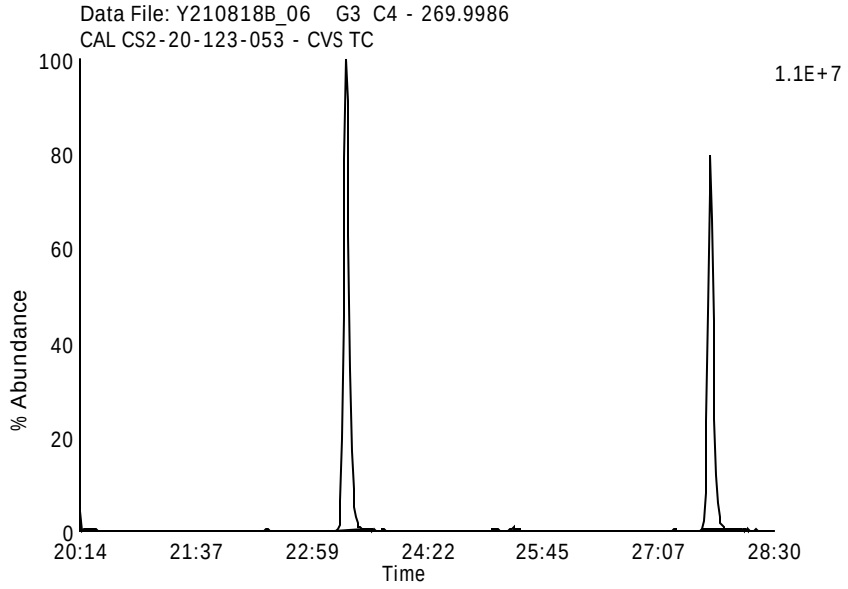
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC









Labeled Tetra Chlorinated Biphenyls

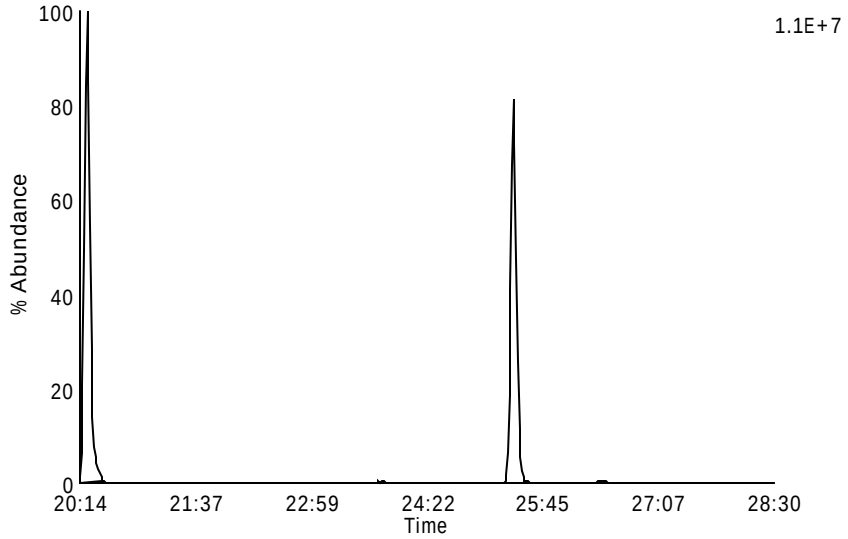
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

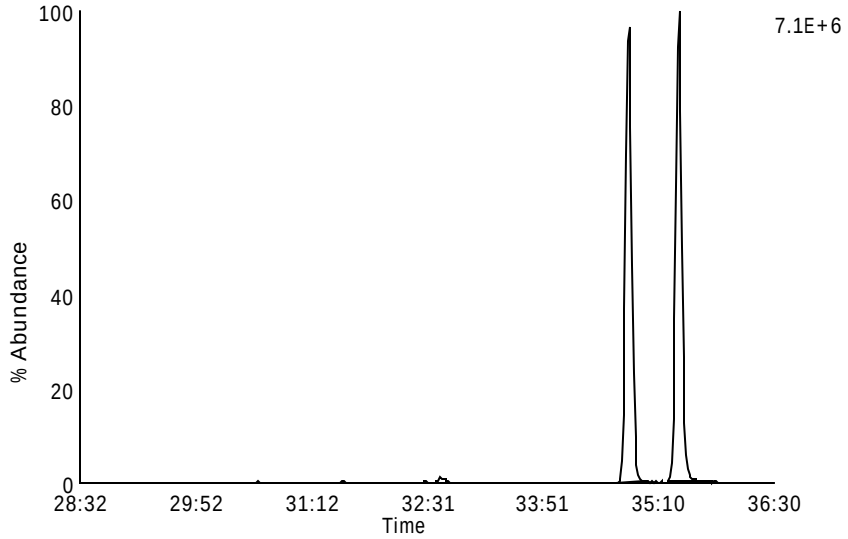
Data File: Y210818B_06 G3 C9 - 301.9626

CAL CS2-20-123-053 - CVS TC



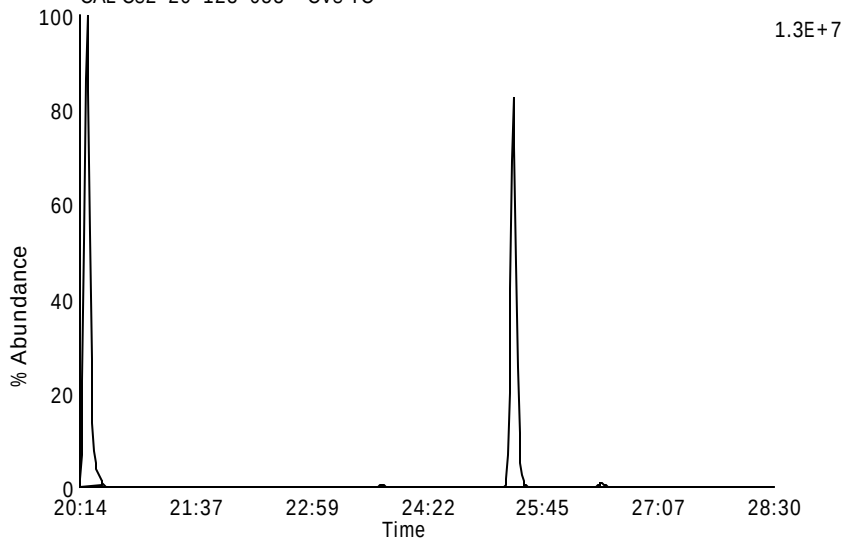
Data File: Y210818B_06 G4 C3 - 301.9626

CAL CS2-20-123-053 - CVS TC



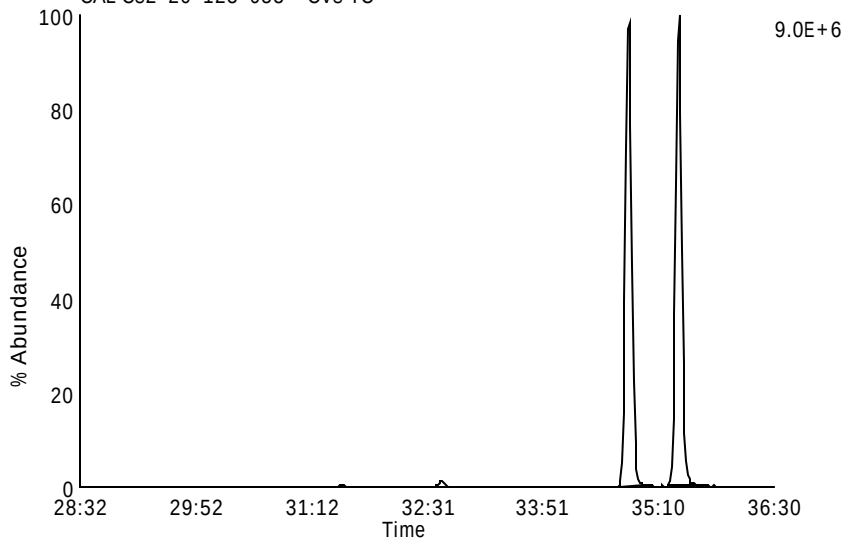
Data File: Y210818B_06 G3 C10 - 303.9597

CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C4 - 303.9597

CAL CS2-20-123-053 - CVS TC



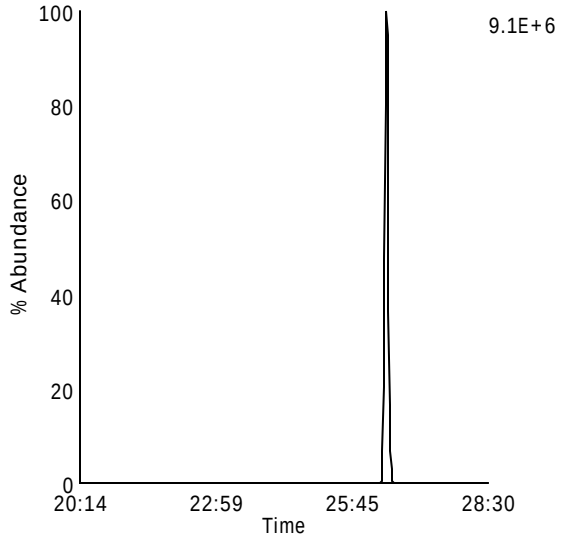
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

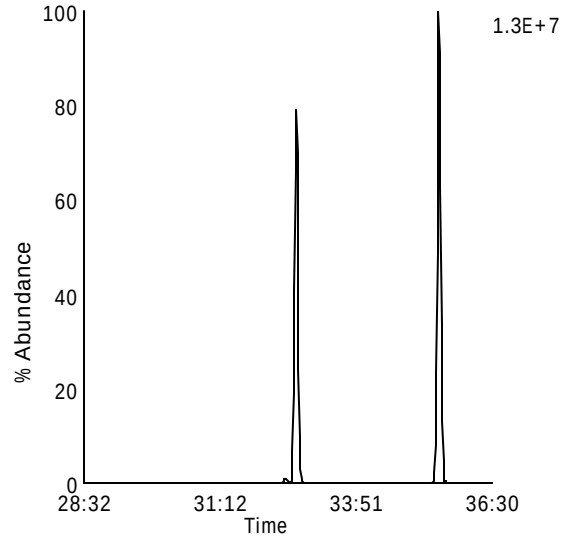
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

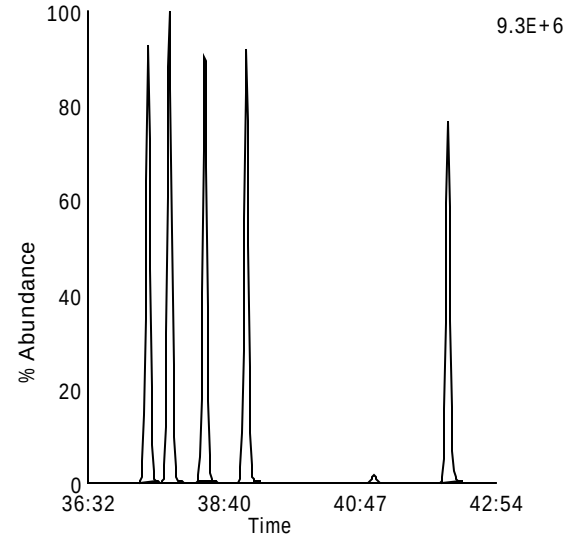
Data File: Y210818B_06 G3 C13 - 337.9207
CAL CS2-20-123-053 - CVS TC



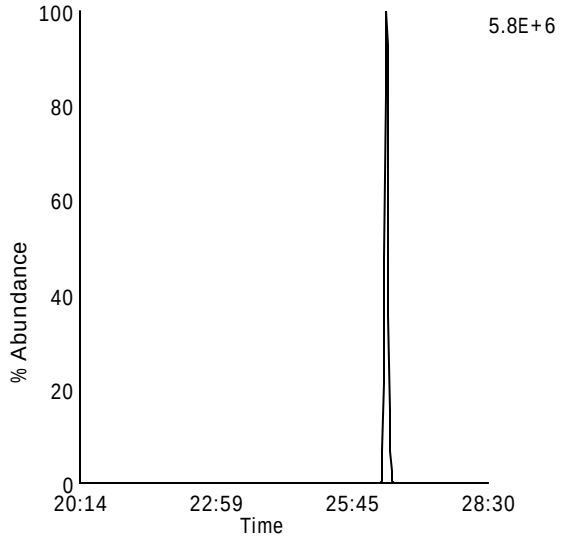
Data File: Y210818B_06 G4 C9 - 337.9207
CAL CS2-20-123-053 - CVS TC



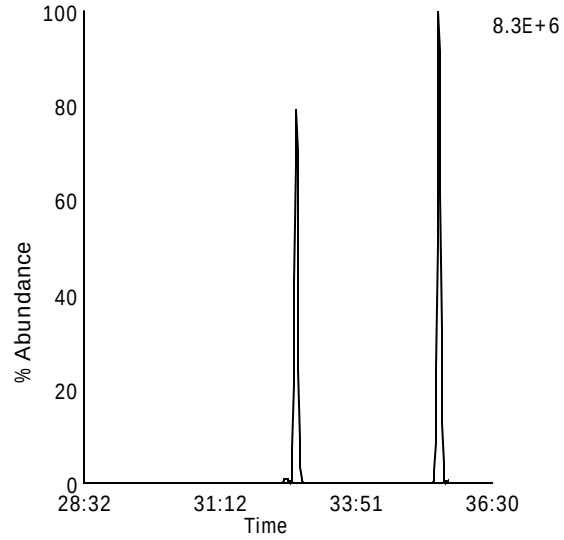
Data File: Y210818B_06 G5 C3 - 337.9207
CAL CS2-20-123-053 - CVS TC



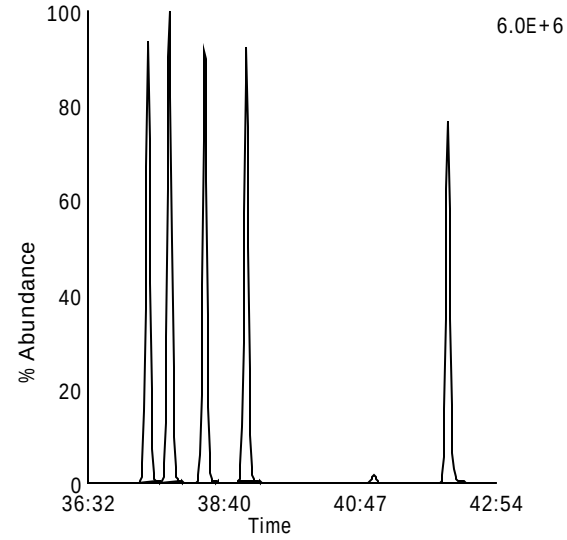
Data File: Y210818B_06 G3 C14 - 339.9178
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C10 - 339.9178
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C4 - 339.9178
CAL CS2-20-123-053 - CVS TC

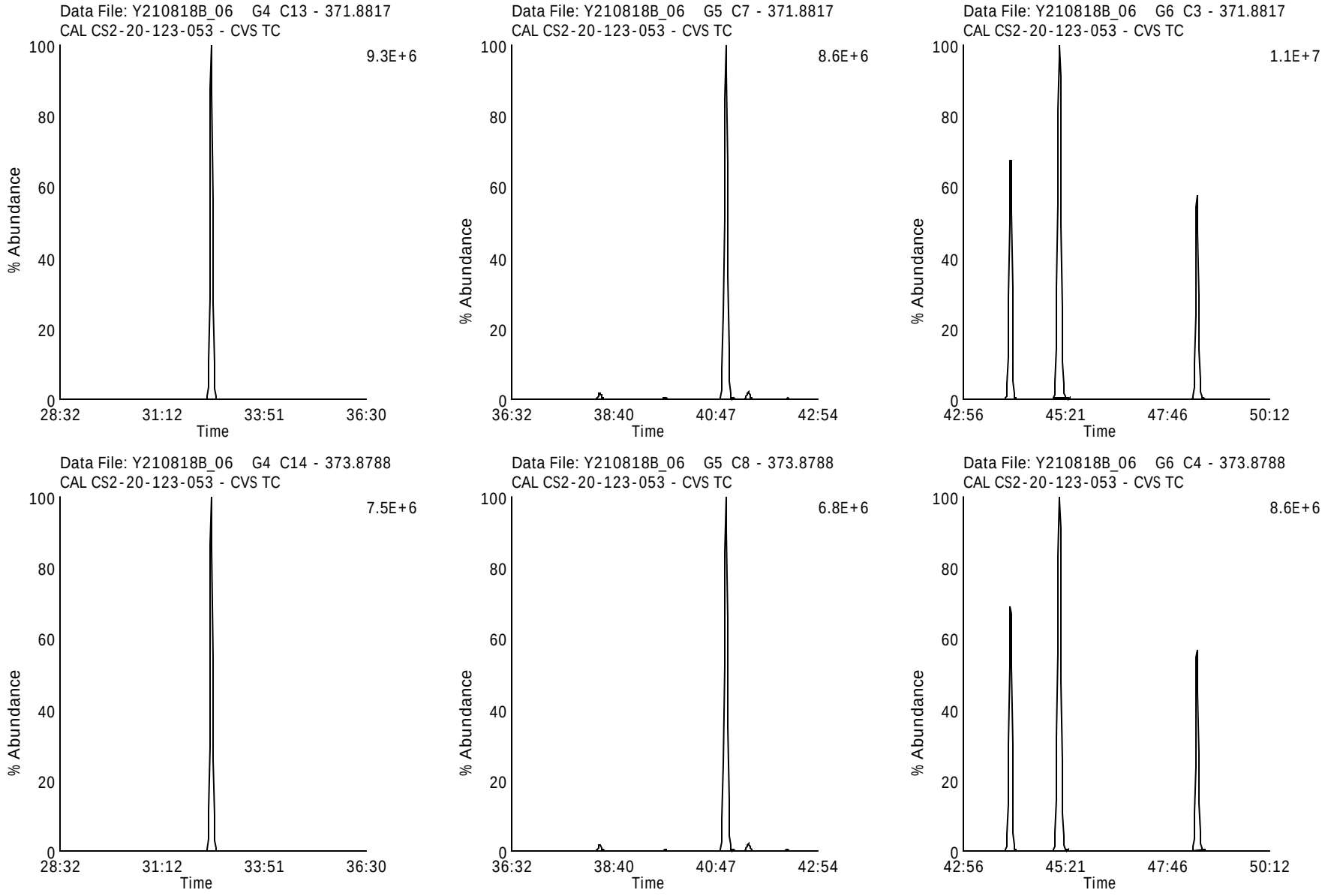


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



Labeled Hepta Chlorinated Biphenyls

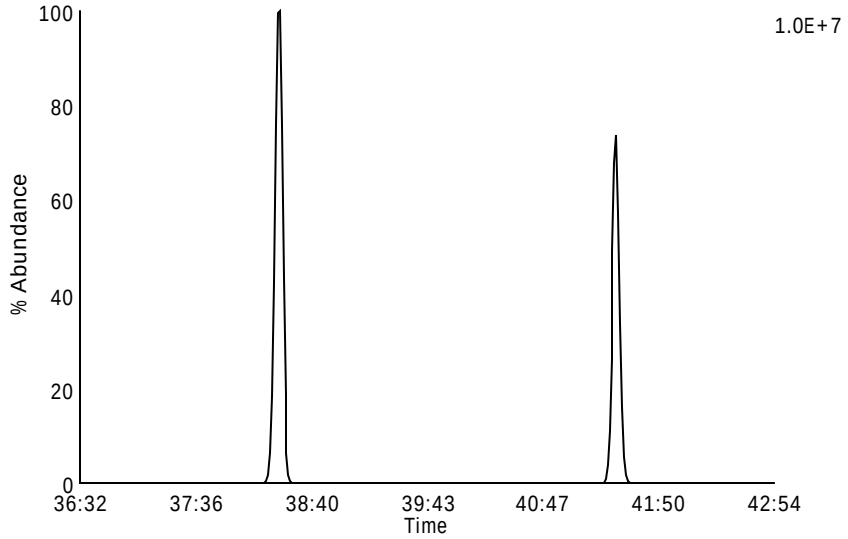
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

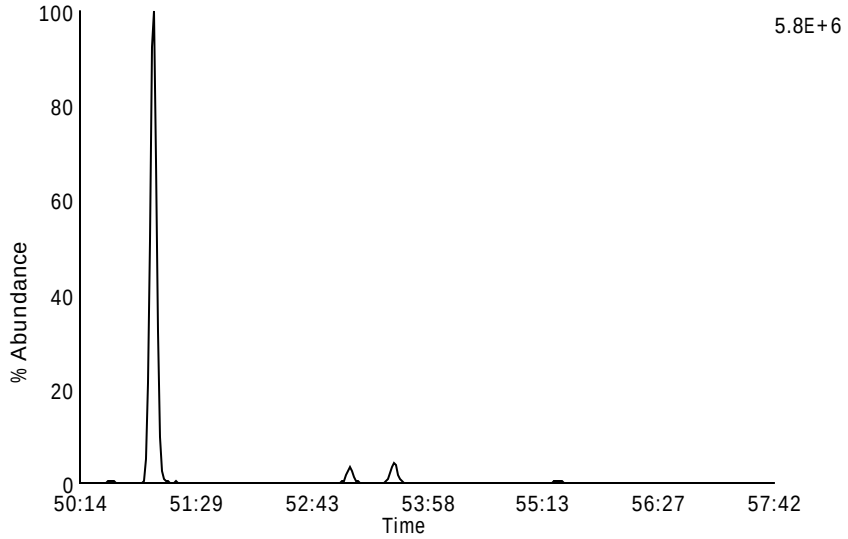
Data File: Y210818B_06 G5 C13 - 405.8428

CAL CS2-20-123-053 - CVS TC



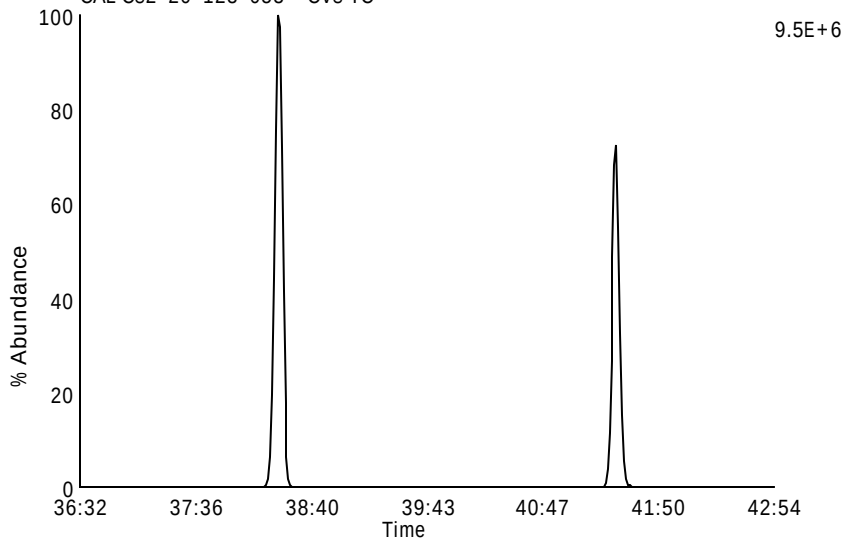
Data File: Y210818B_06 G7 C3 - 405.8428

CAL CS2-20-123-053 - CVS TC



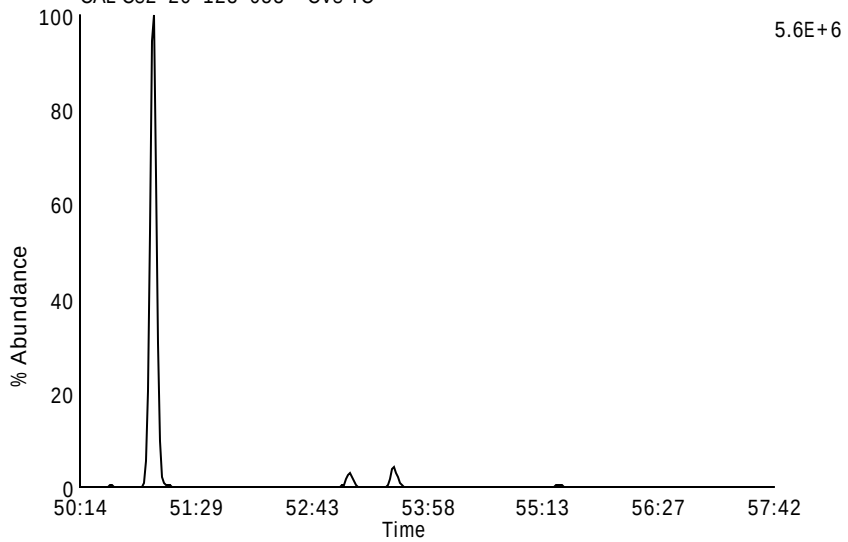
Data File: Y210818B_06 G5 C14 - 407.8398

CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G7 C4 - 407.8398

CAL CS2-20-123-053 - CVS TC



Labeled Octa Chlorinated Biphenyls

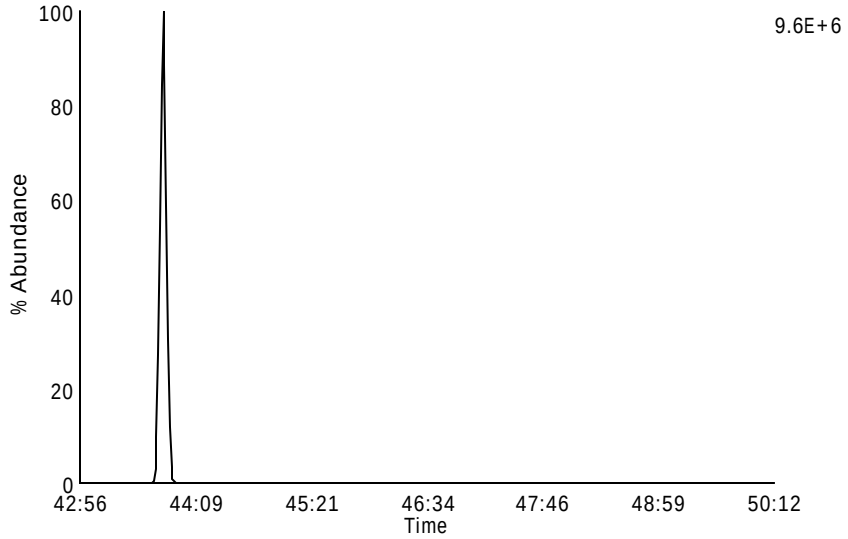
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

Data File: Y210818B_06 G6 C13 - 439.8038

CAL CS2-20-123-053 - CVS TC



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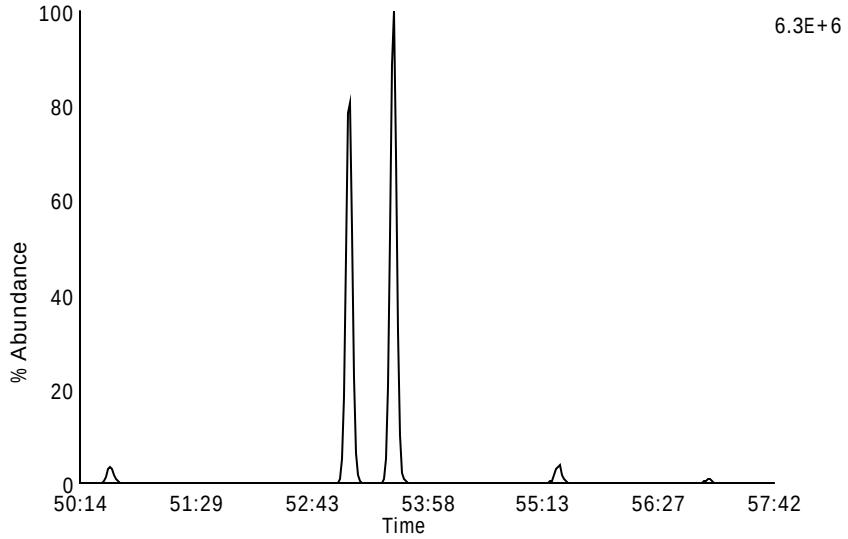
CAL CS2-20-123-053 - CVS TC



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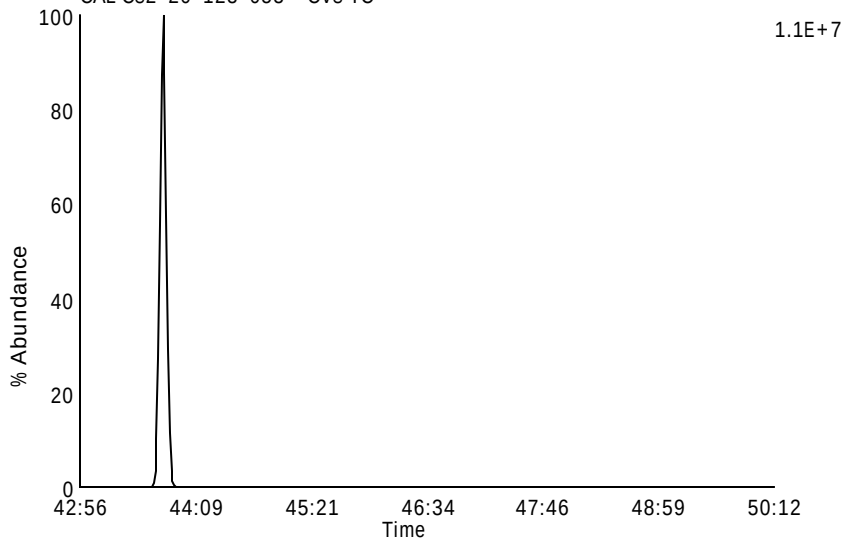
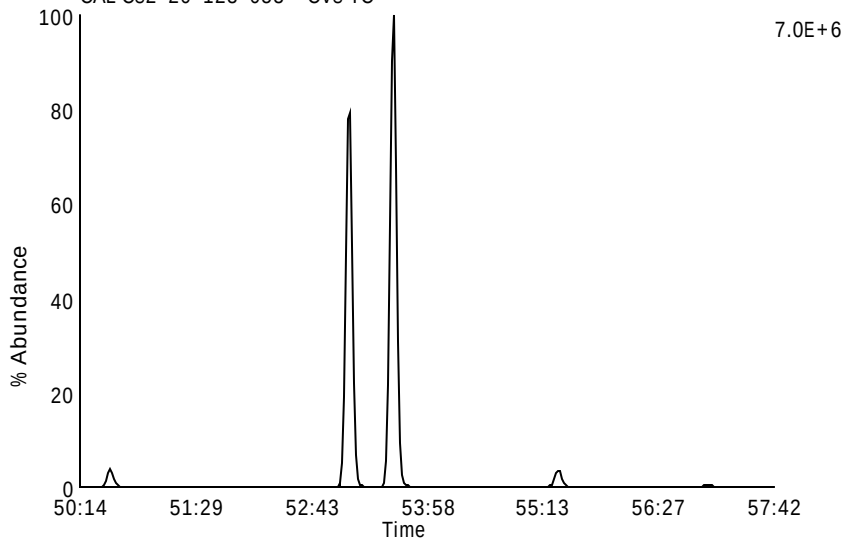
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G7 C8 - 441.8008

CAL CS2-20-123-053 - CVS TC

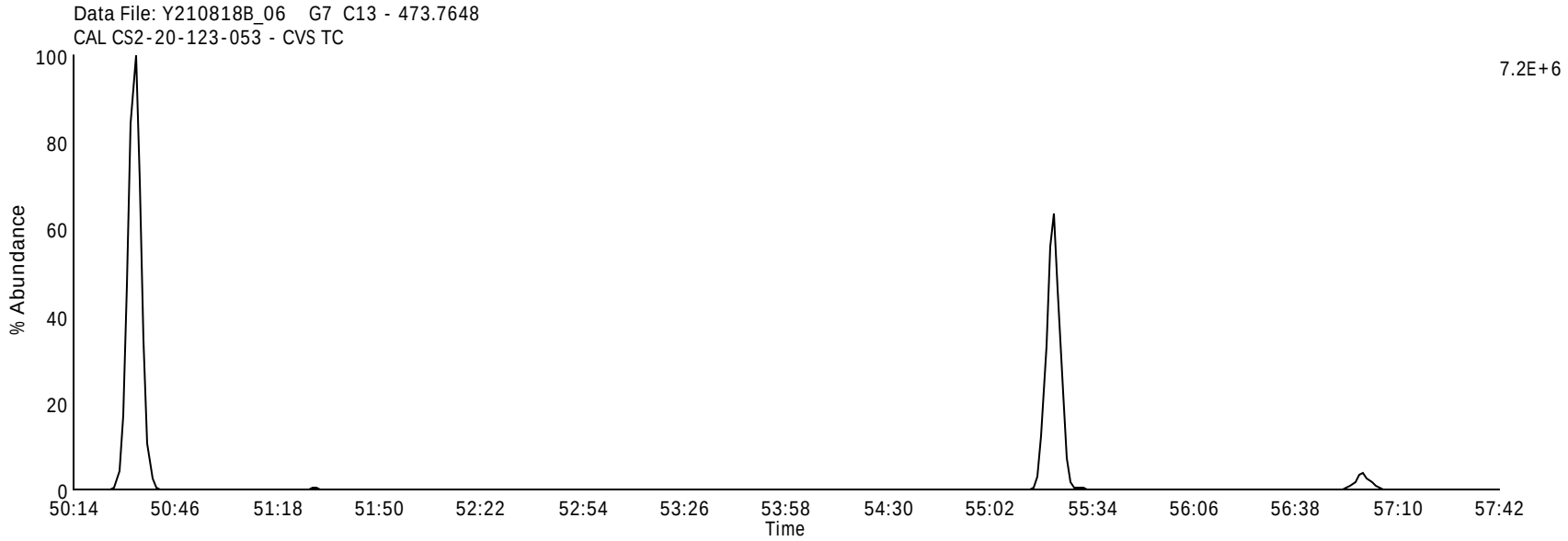


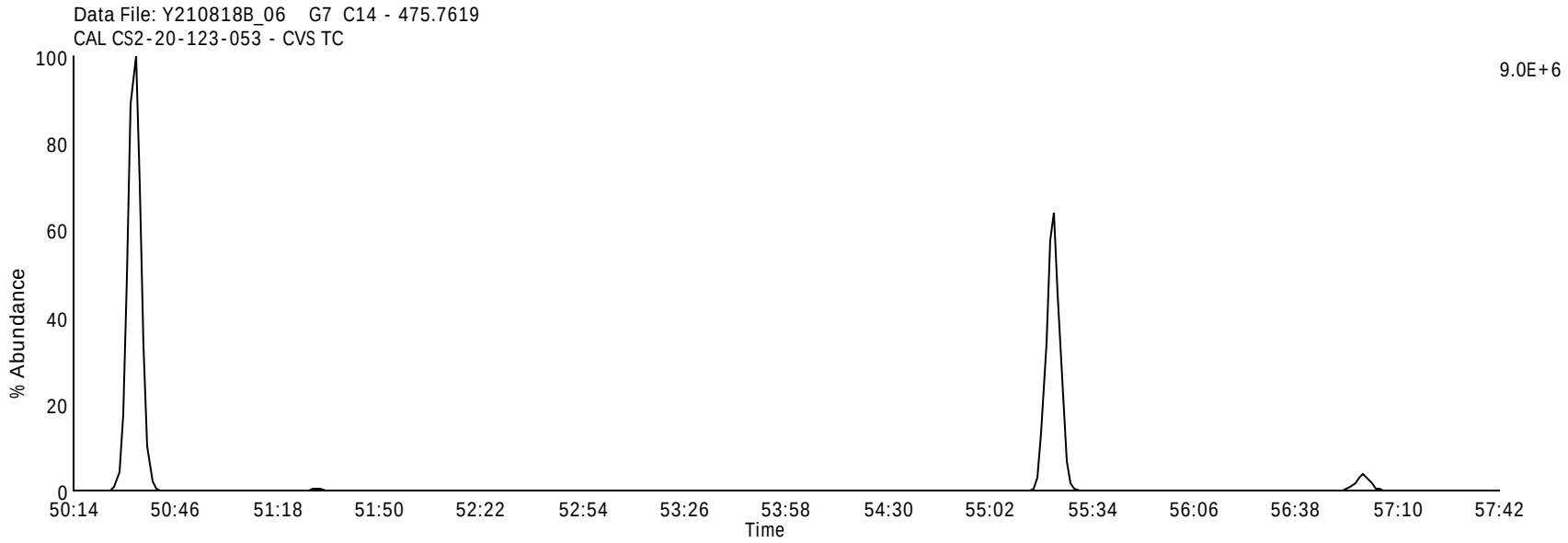
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



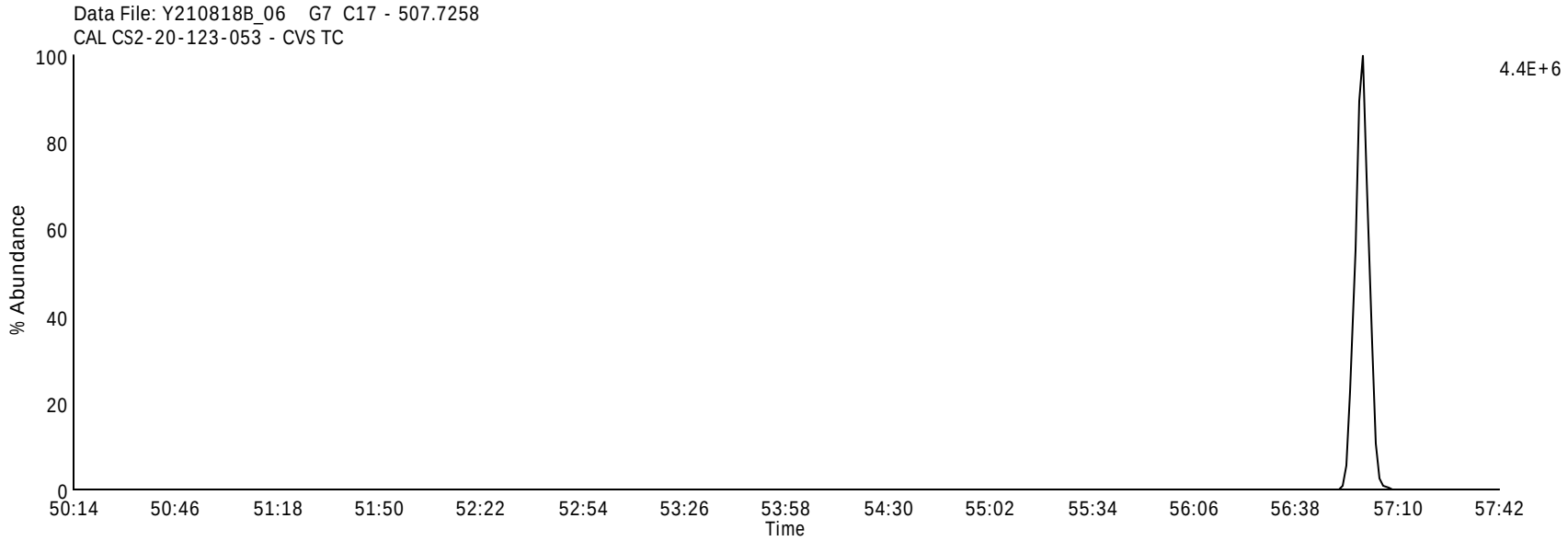


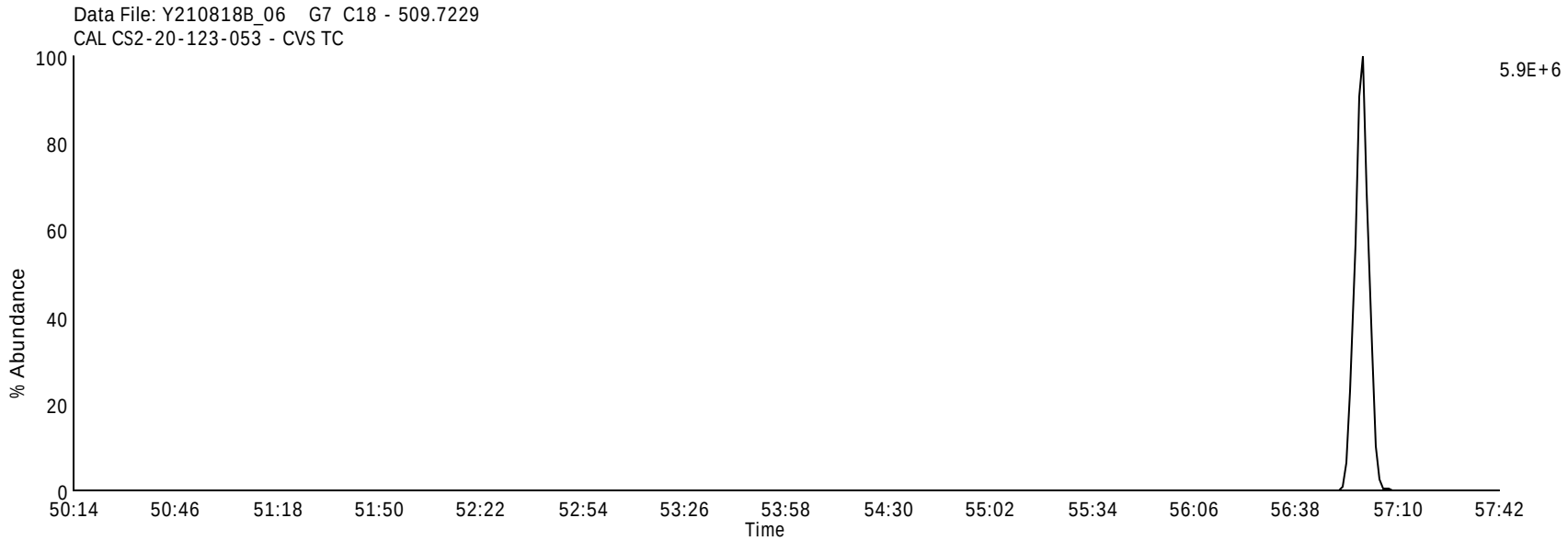
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC



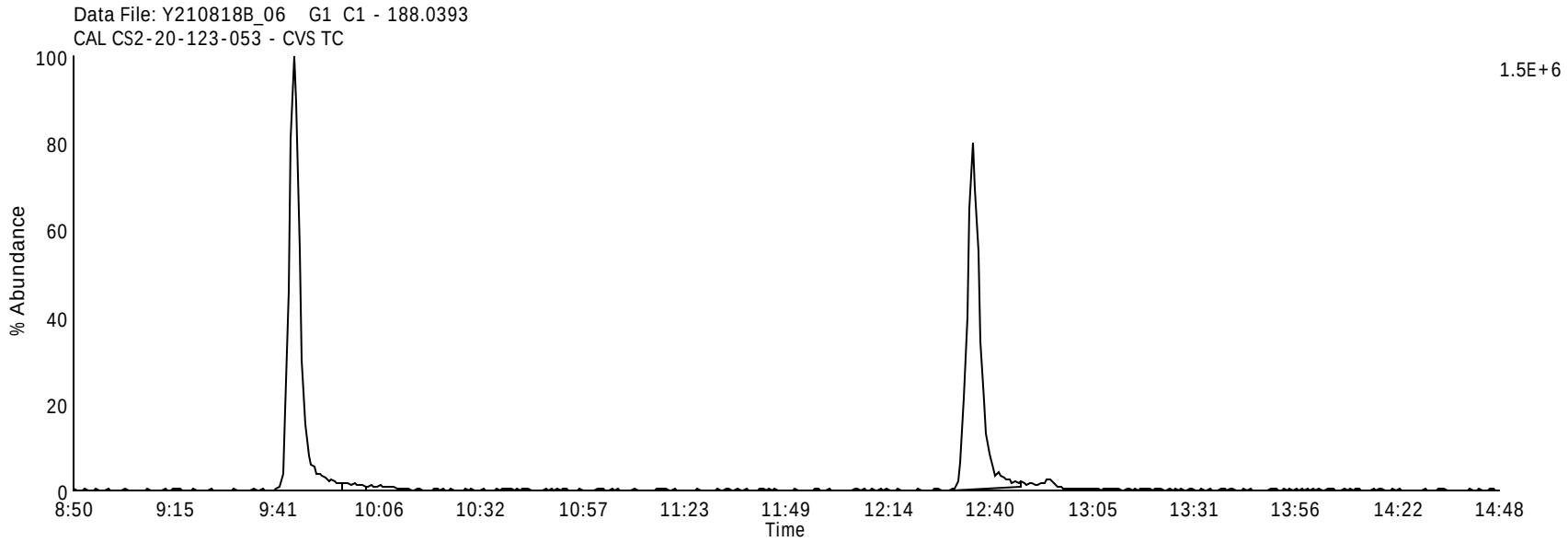


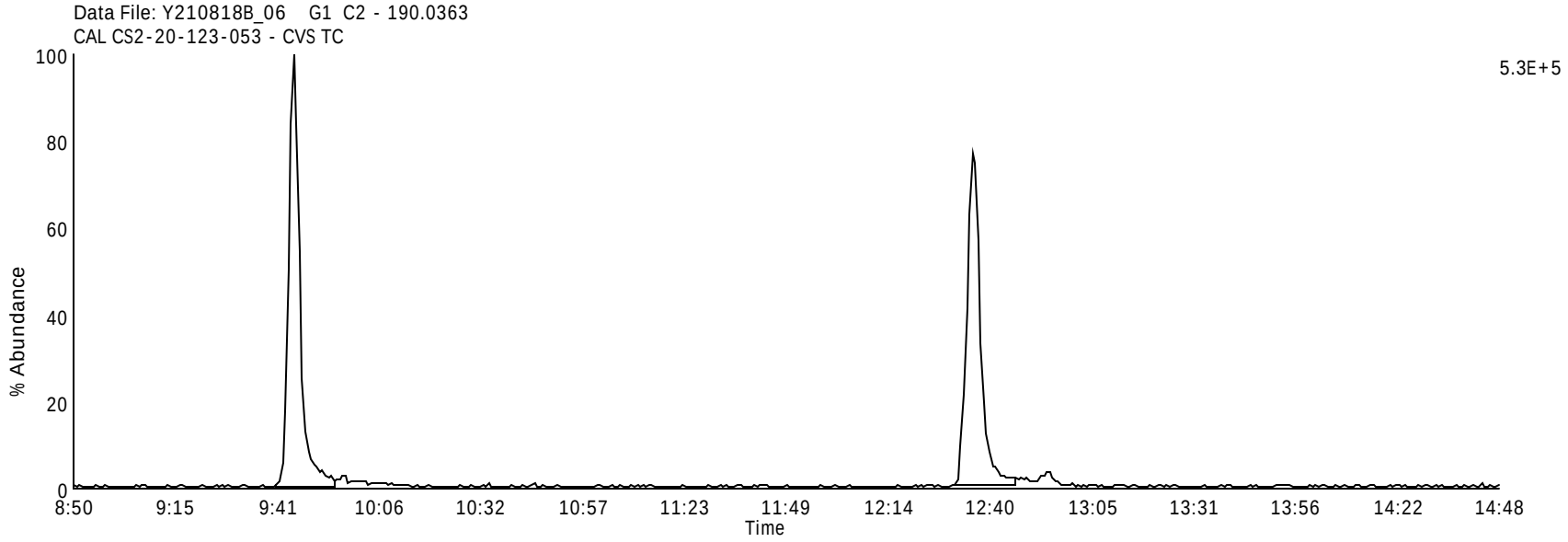
Mono Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

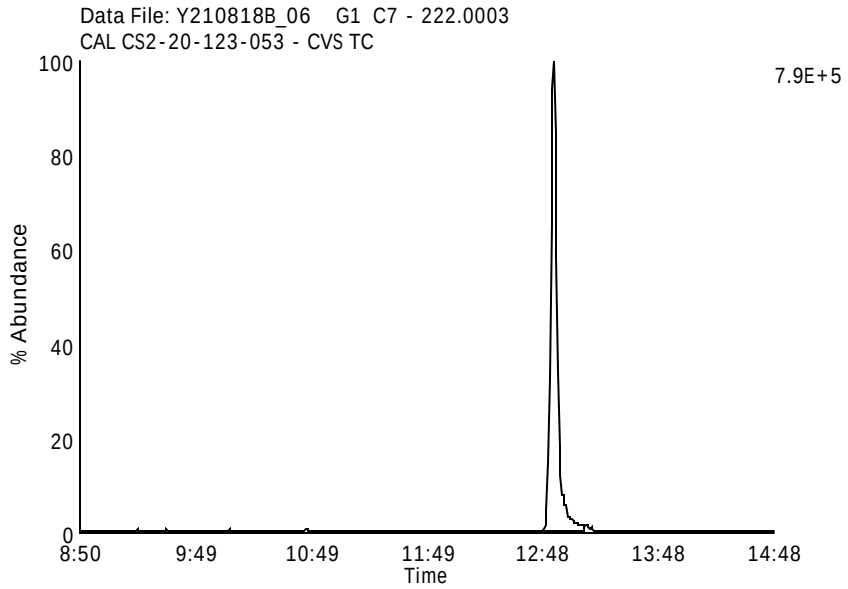
Sample Description: CAL CS2-20-123-053 - CVS TC

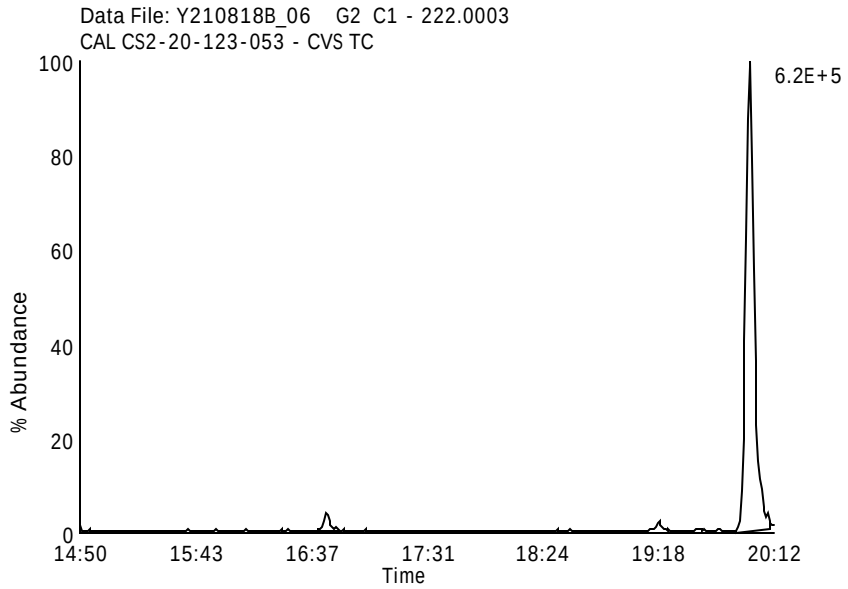


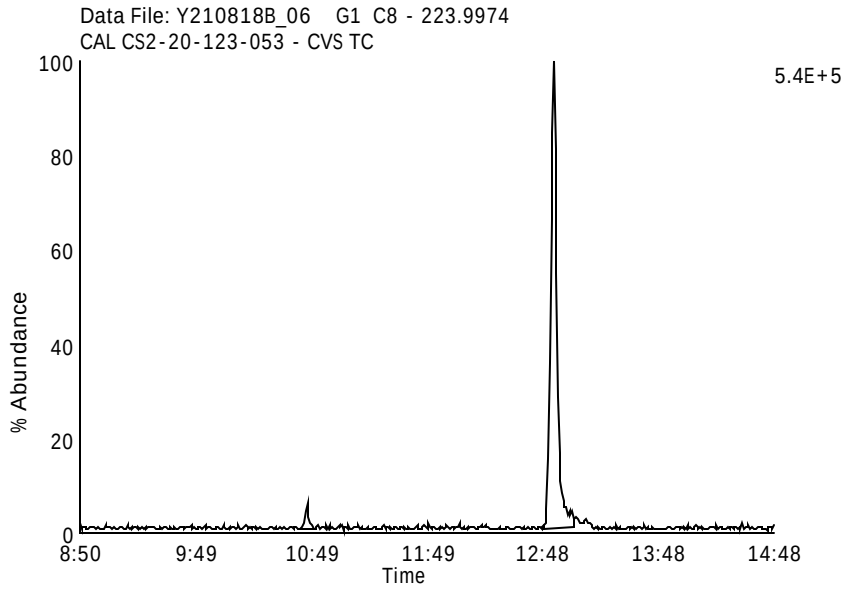


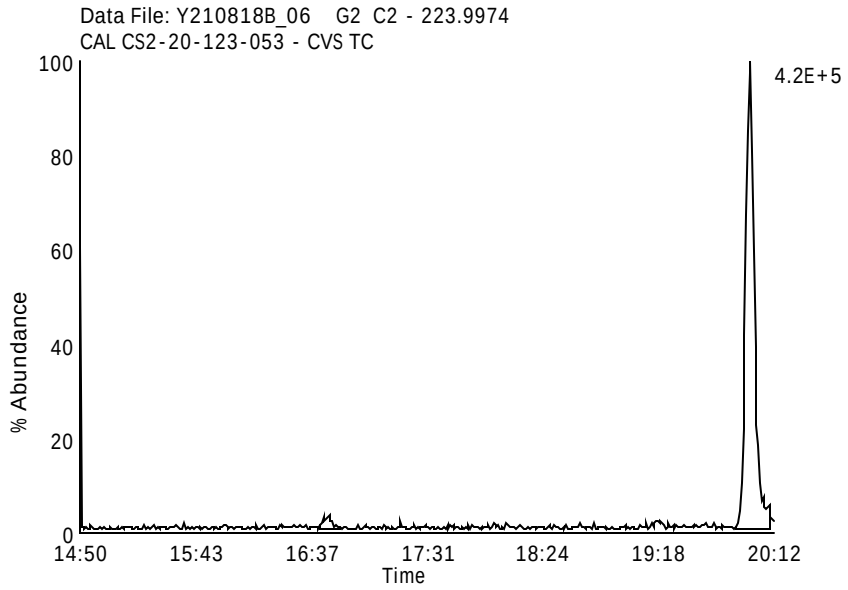
Di Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC









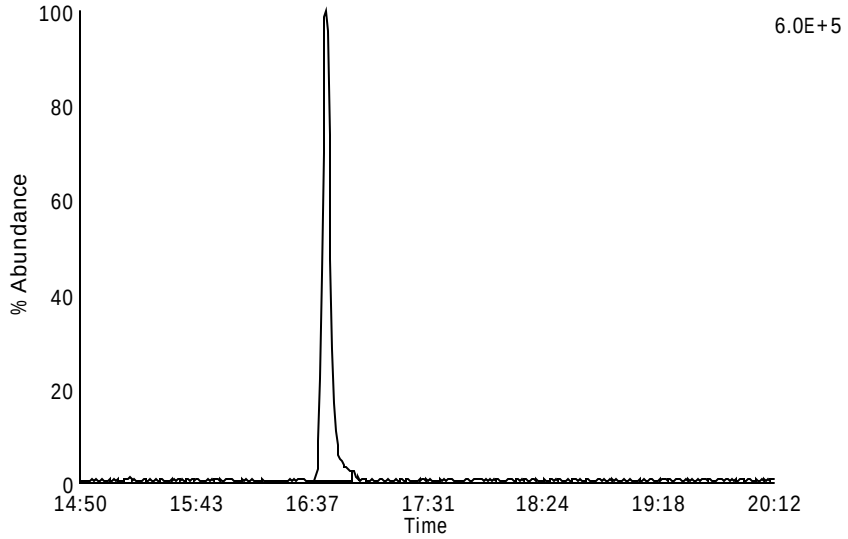
Tri Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

Data File: Y210818B_06 G2 C7 - 255.9613
CAL CS2-20-123-053 - CVS TC



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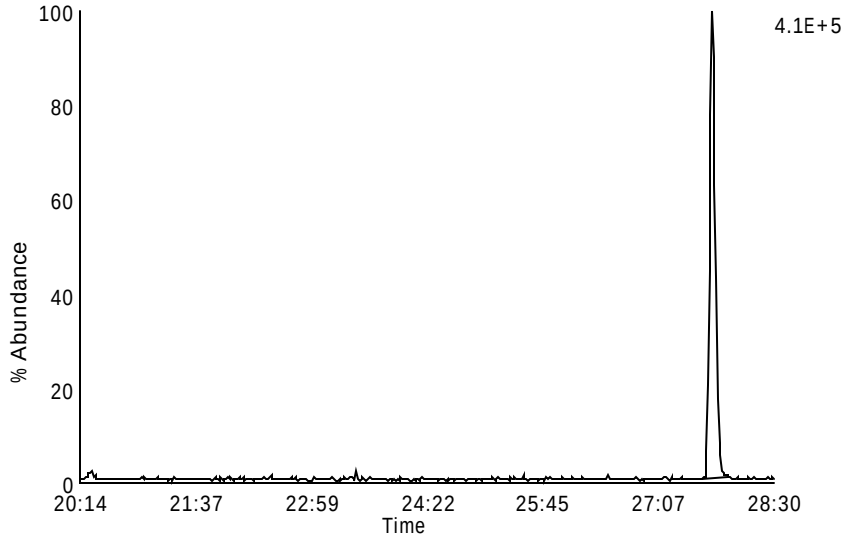
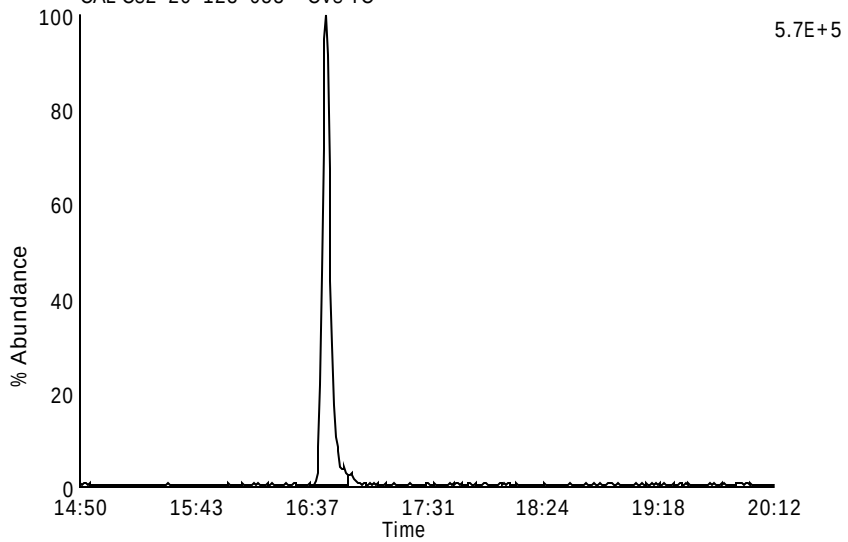
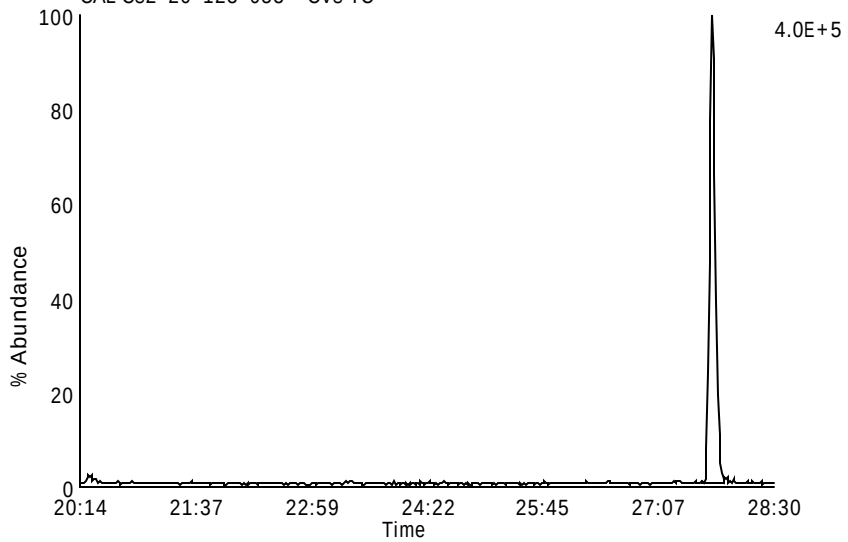
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G2 C8 - 257.9584
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G3 C2 - 257.9584
CAL CS2-20-123-053 - CVS TC



Tetra Chlorinated Biphenyls

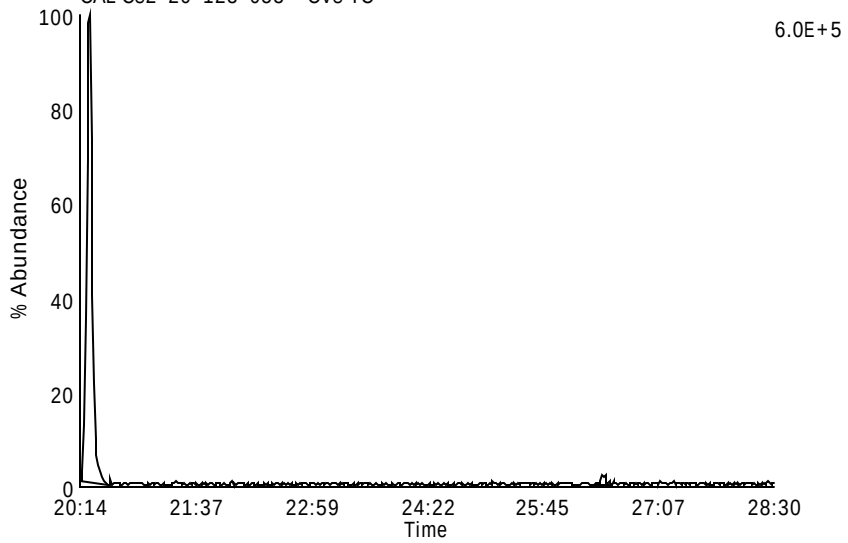
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

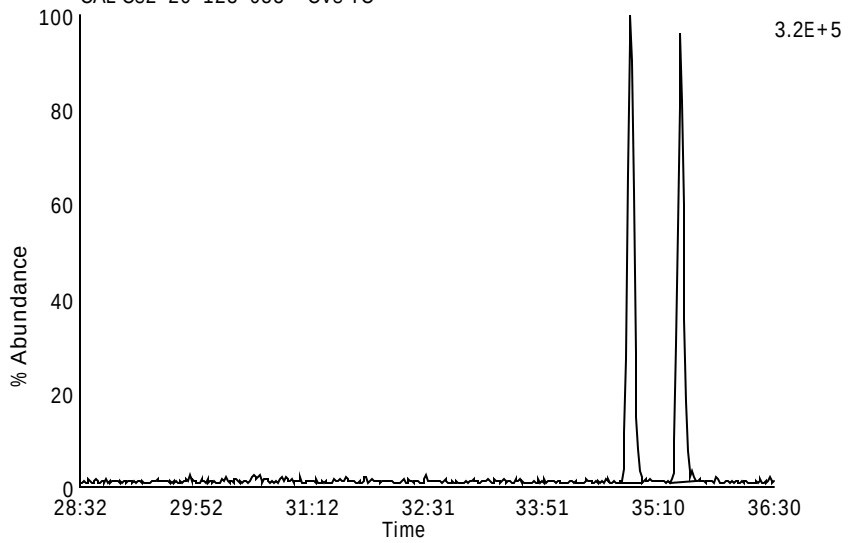
Data File: Y210818B_06 G3 C7 - 289.9224

CAL CS2-20-123-053 - CVS TC



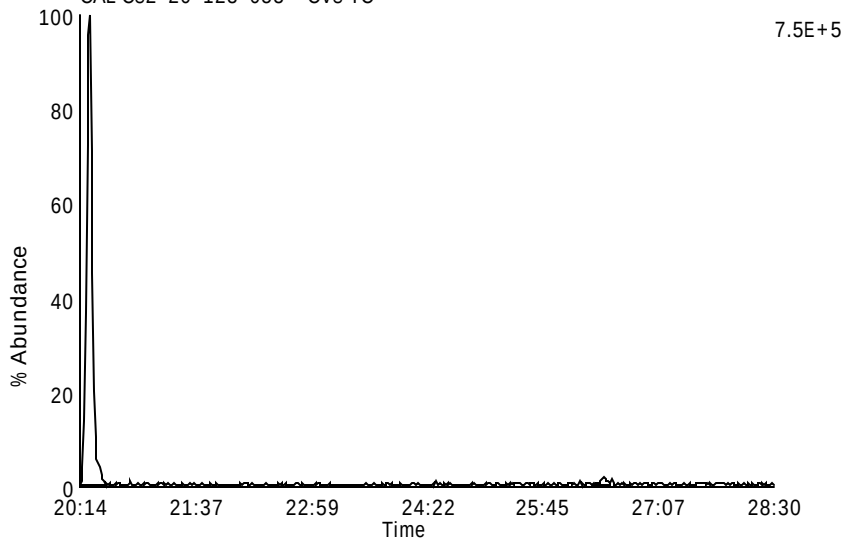
Data File: Y210818B_06 G4 C1 - 289.9224

CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G3 C8 - 291.9194

CAL CS2-20-123-053 - CVS TC



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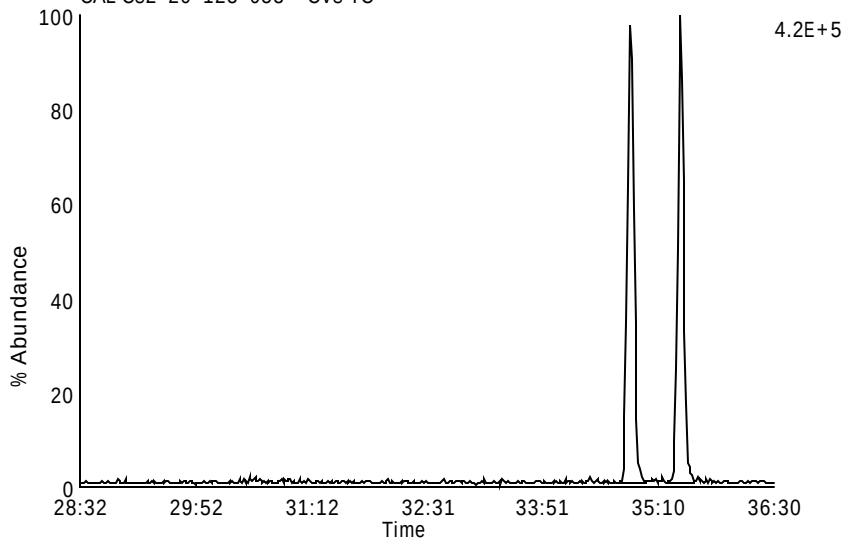
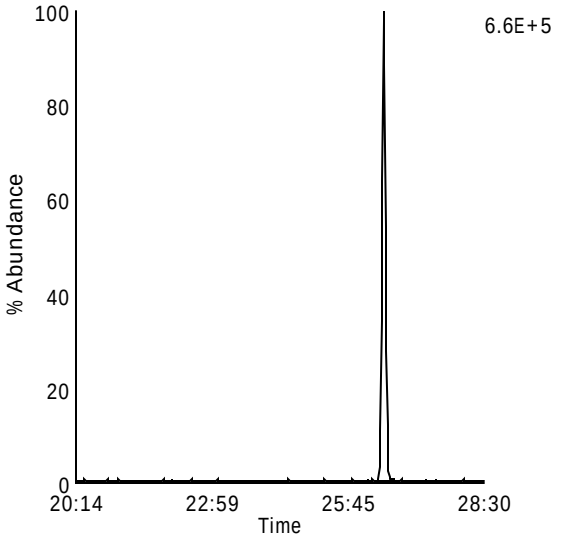
CAL CS2-20-123-053 - CVS TC



Penta Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC

Data File: Y210818B_06 G3 C11 - 325.8804
CAL CS2-20-123-053 - CVS TC



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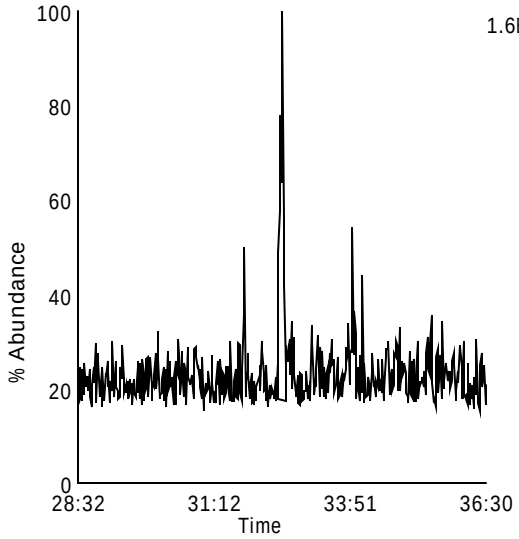
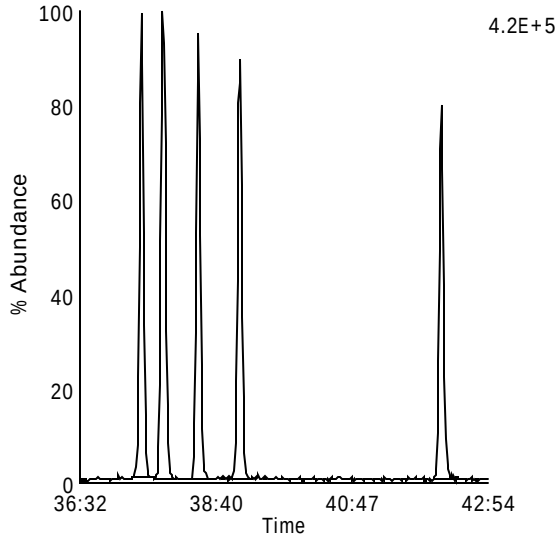
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G5 C1 - 325.8804
CAL CS2-20-123-053 - CVS TC



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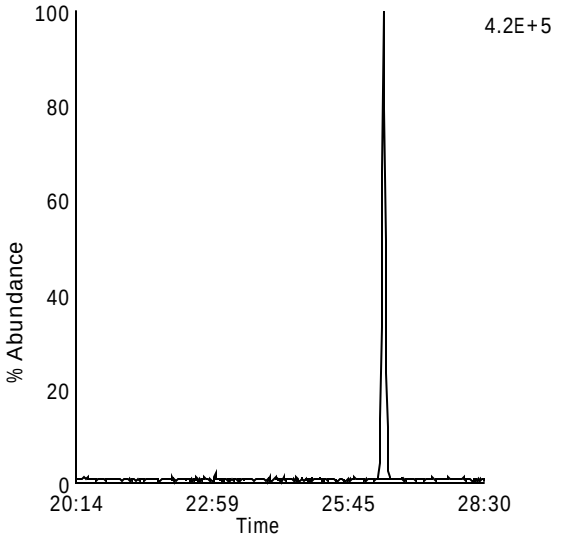
CAL CS2-20-123-053 - CVS TC



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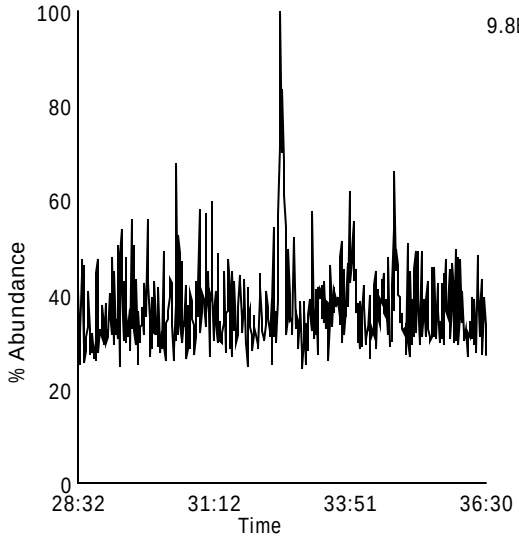
CAL CS2-20-123-053 - CVS TC



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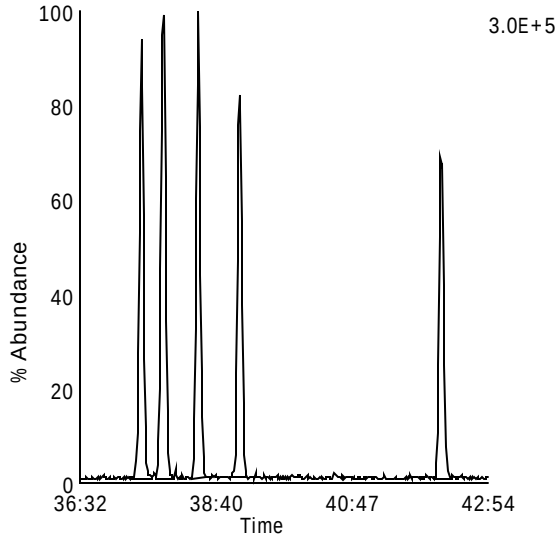
CAL CS2-20-123-053 - CVS TC



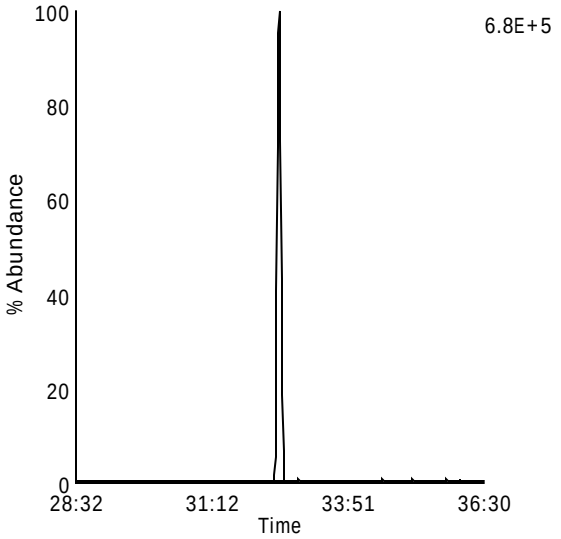
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

Data File: Y210818B_06 G4 C11 - 359.8415
CAL CS2-20-123-053 - CVS TC



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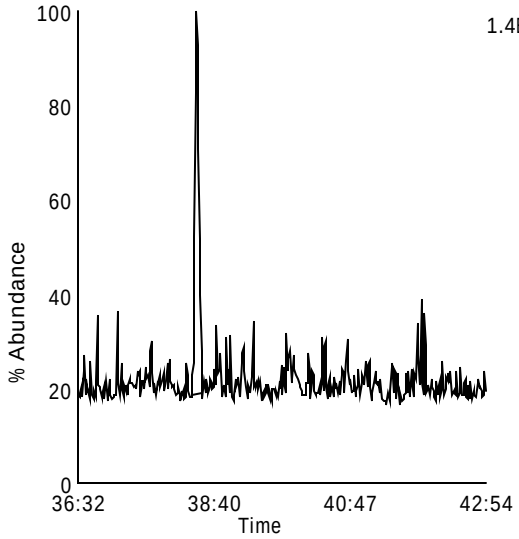
CAL CS2-20-123-053 - CVS TC



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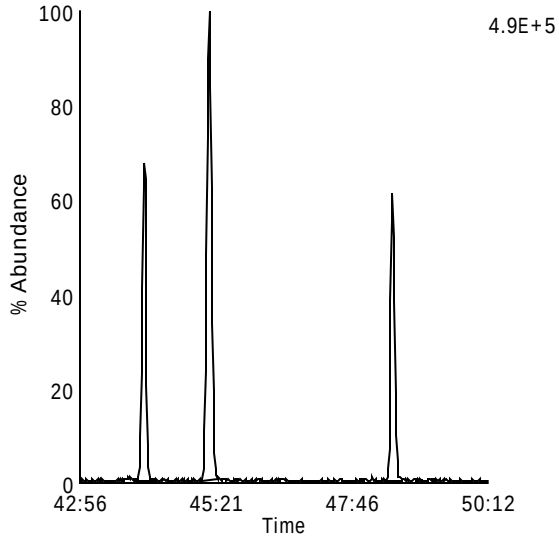
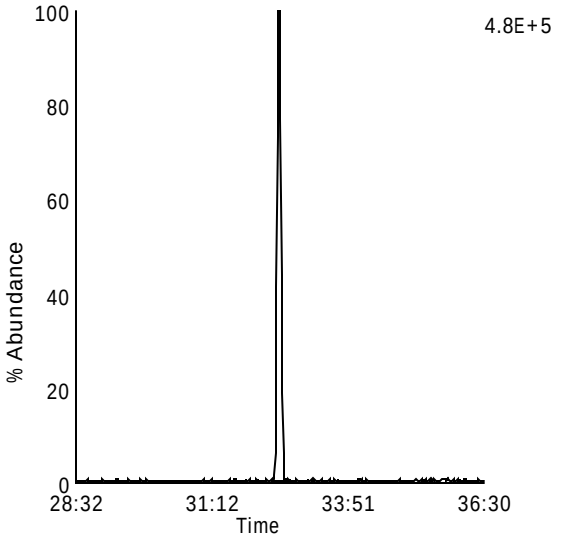
CAL CS2-20-123-053 - CVS TC



Data File: Y210818B_06 G4 C12 - 361.8385
CAL CS2-20-123-053 - CVS TC



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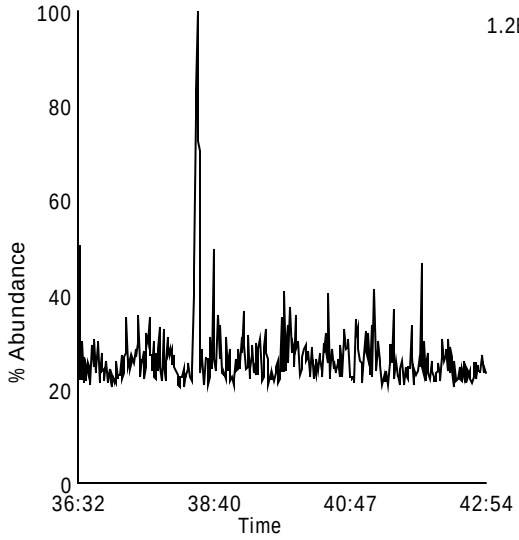
CAL CS2-20-123-053 - CVS TC



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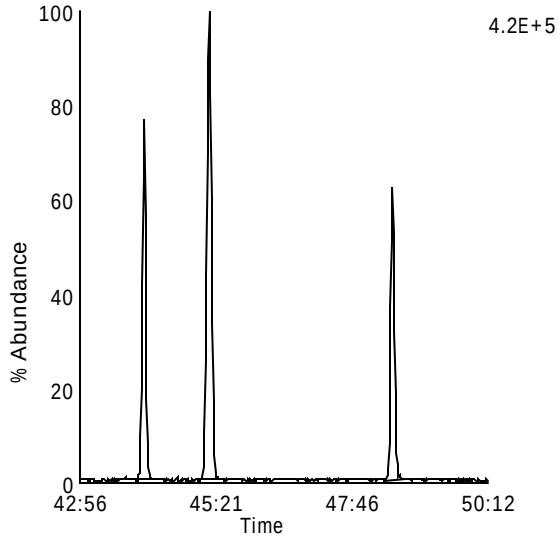
CAL CS2-20-123-053 - CVS TC

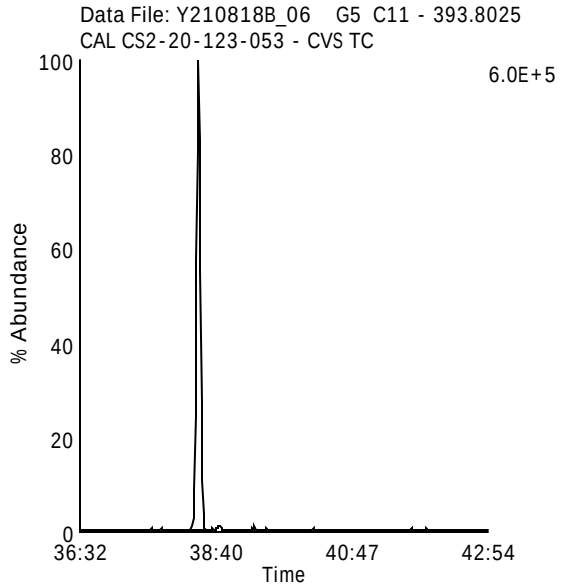


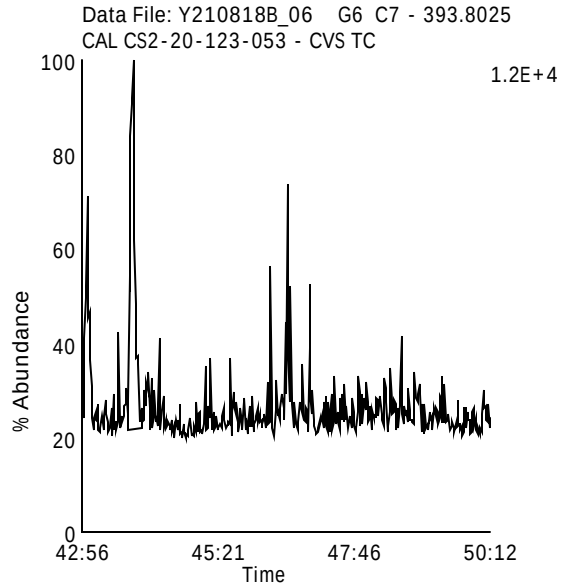
Hepta Chlorinated Biphenyls

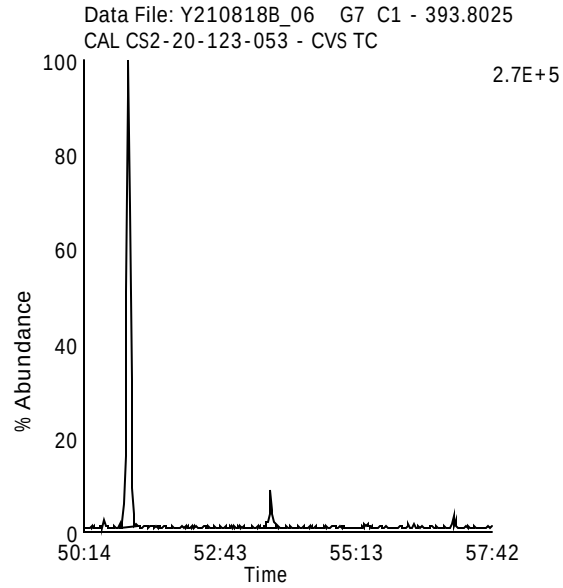
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

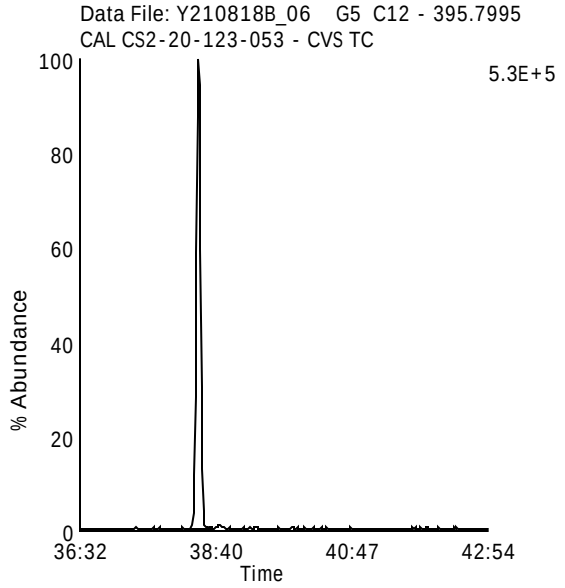
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

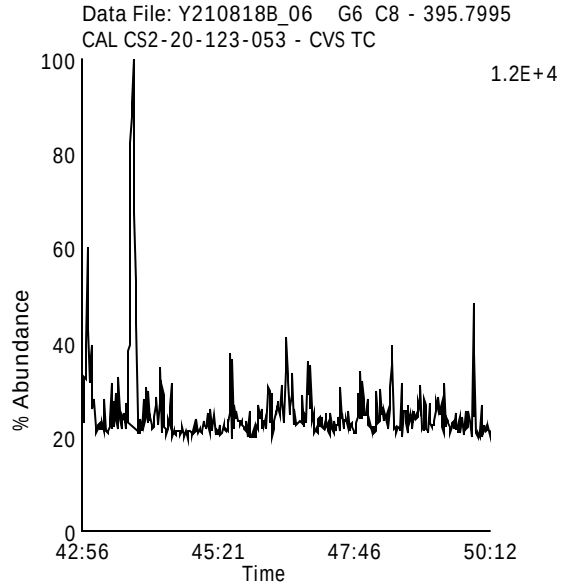
Sample Description: CAL CS2-20-123-053 - CVS TC

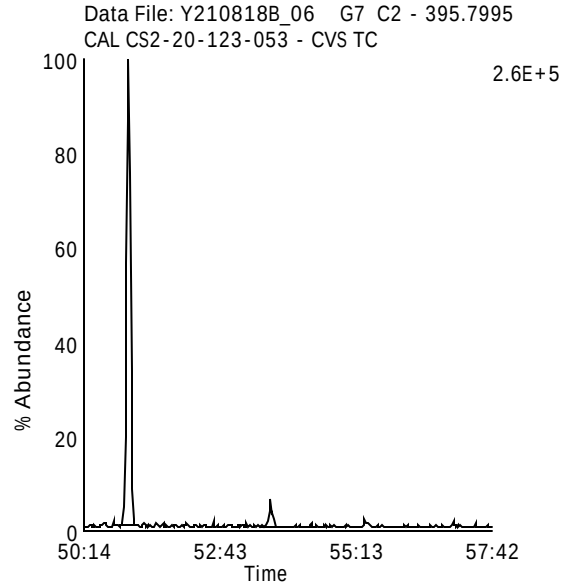






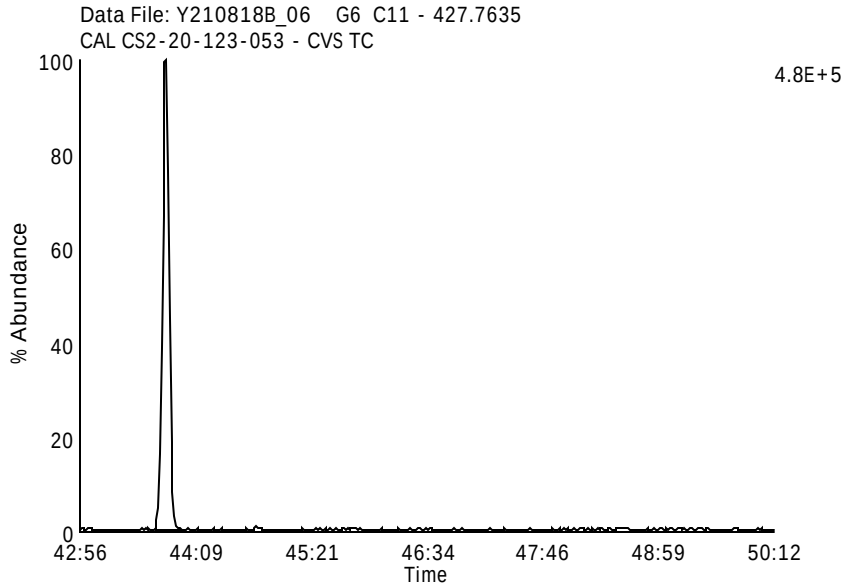


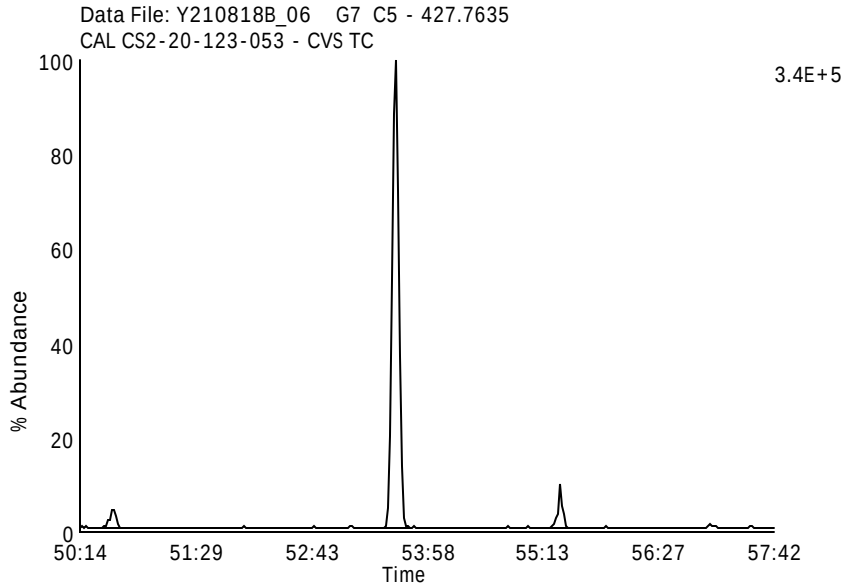


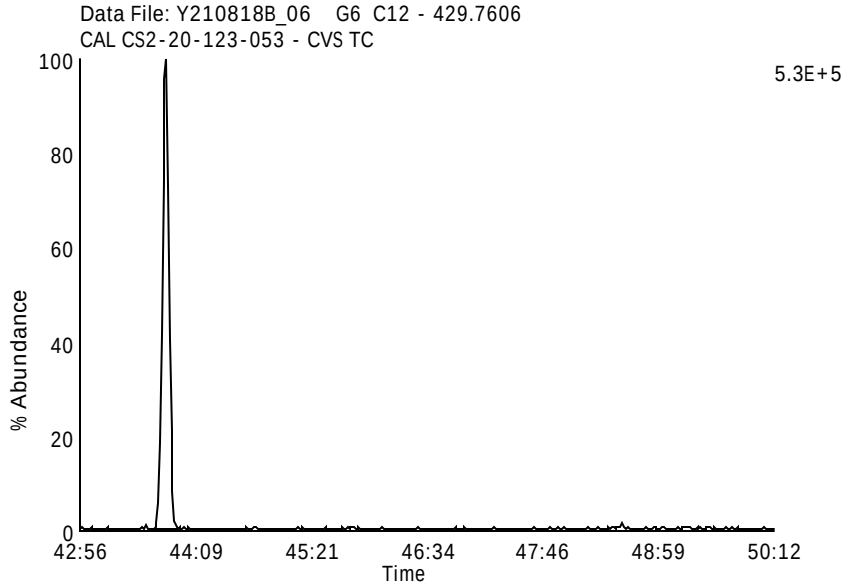


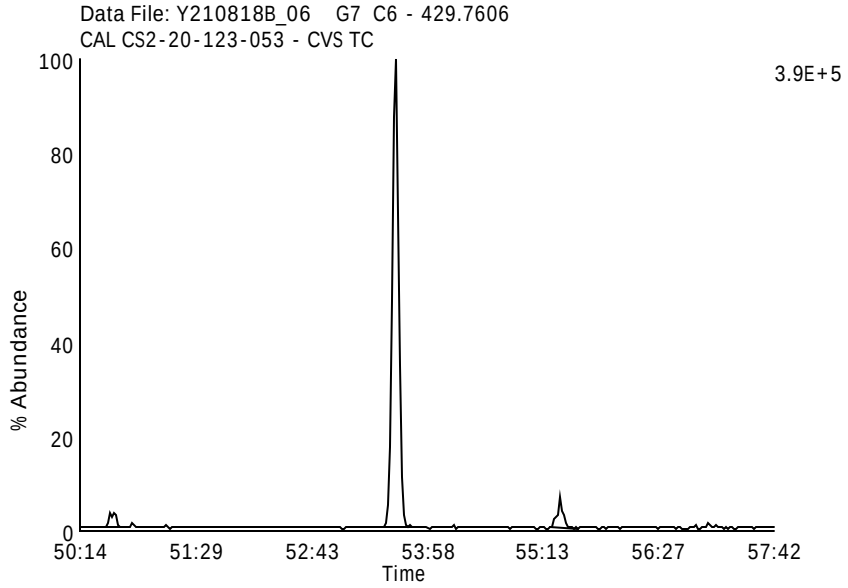
Octa Chlorinated Biphenyls

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







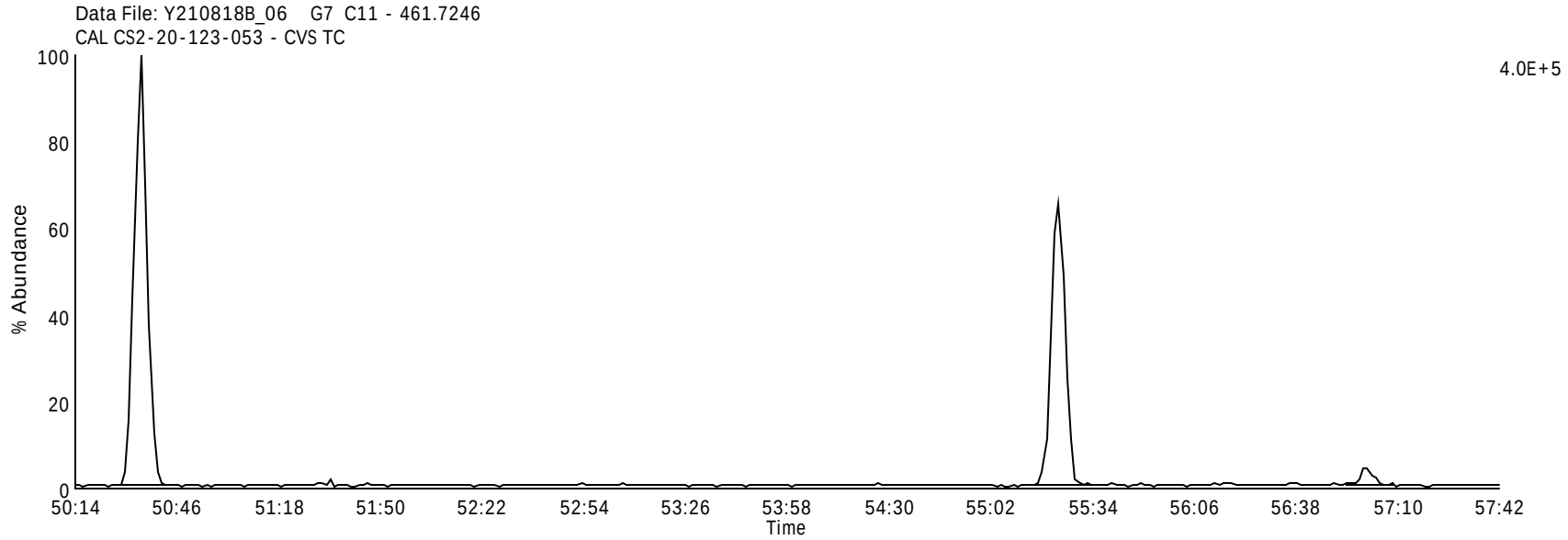


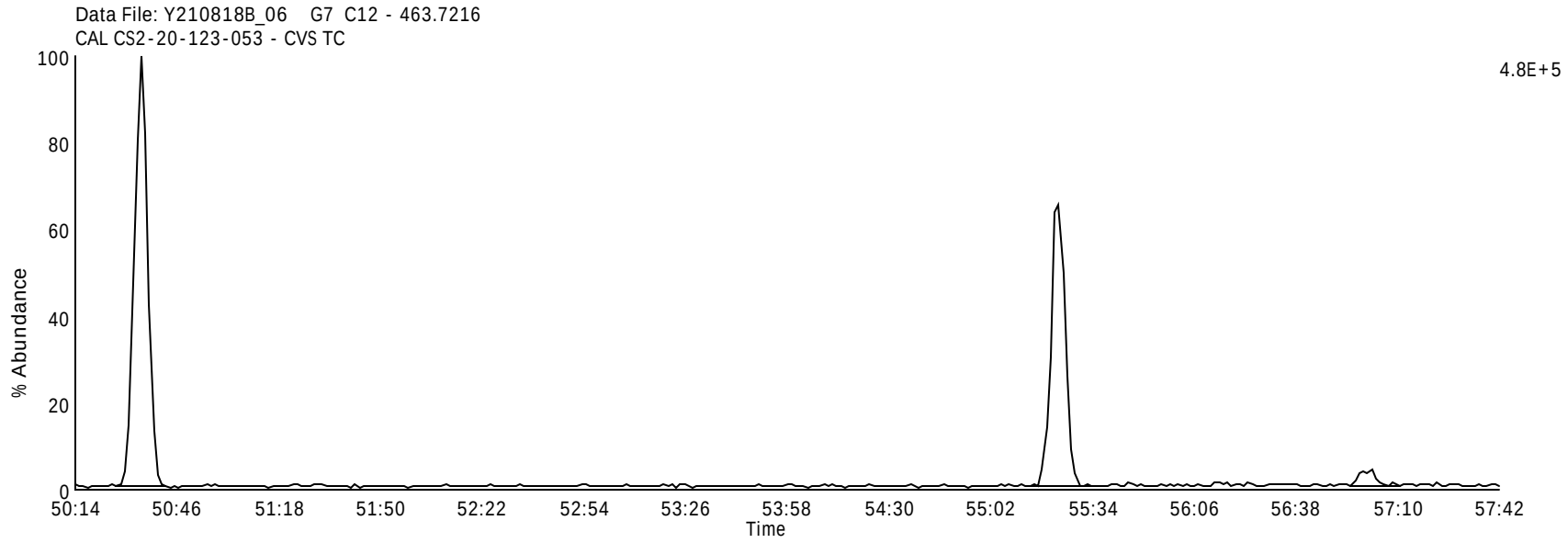
Nona Chlorinated Biphenyls

Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC





Deca Chlorinated Biphenyl

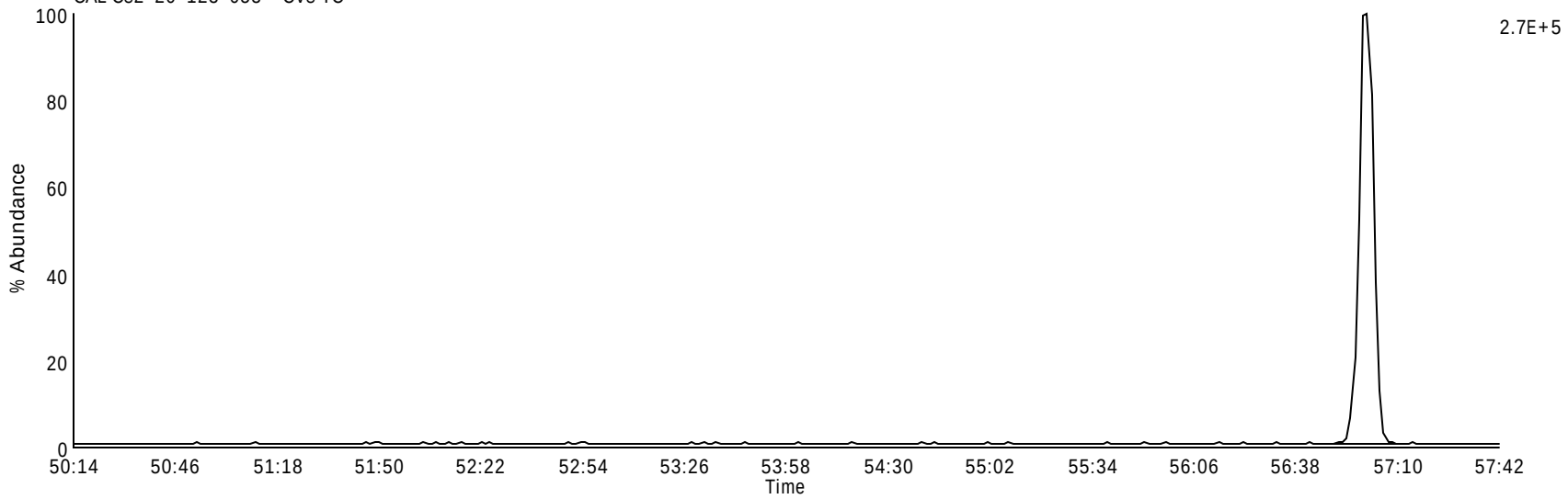
Data File Name: Y210818B_06 Lab Sample ID: CS2-20-123-053

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS2-20-123-053 - CVS TC

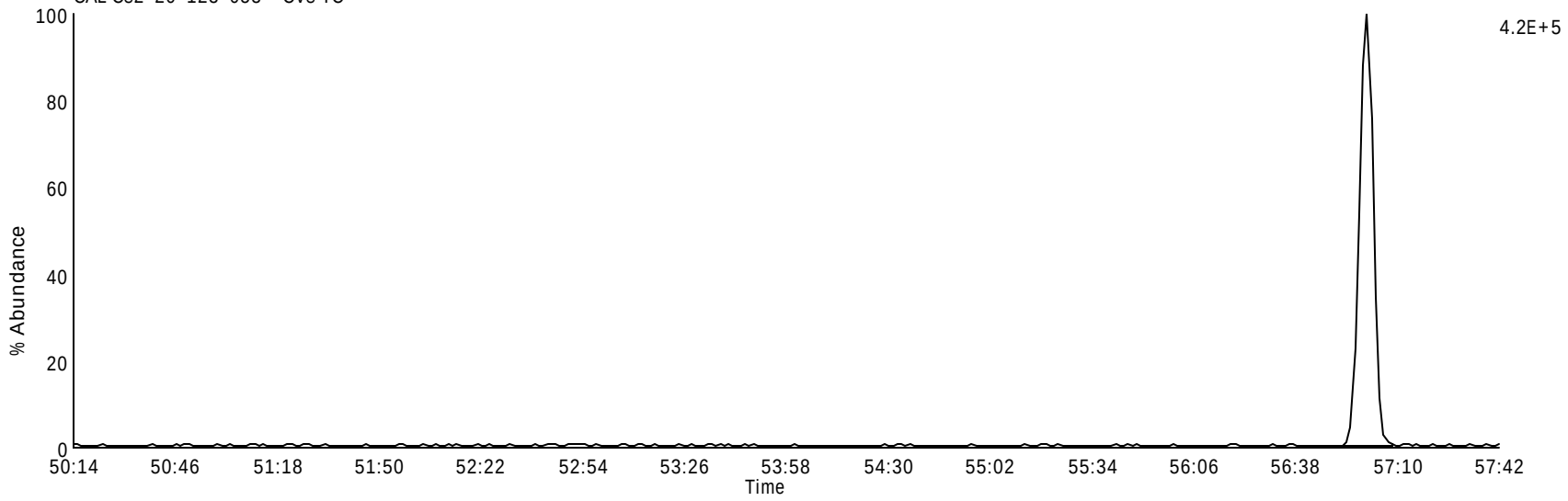
Data File: Y210818B_06 G7 C15 - 495.6856

CAL CS2-20-123-053 - CVS TC



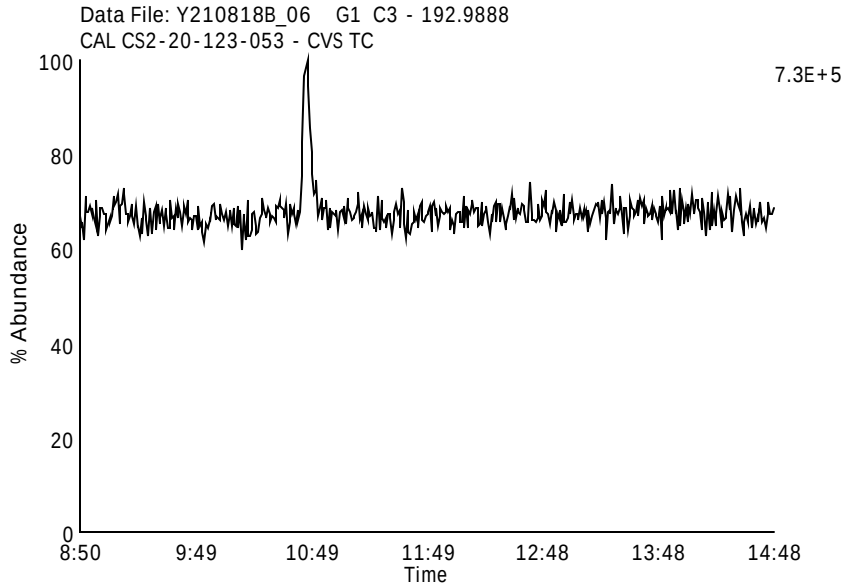
Data File: Y210818B_06 G7 C16 - 497.6826

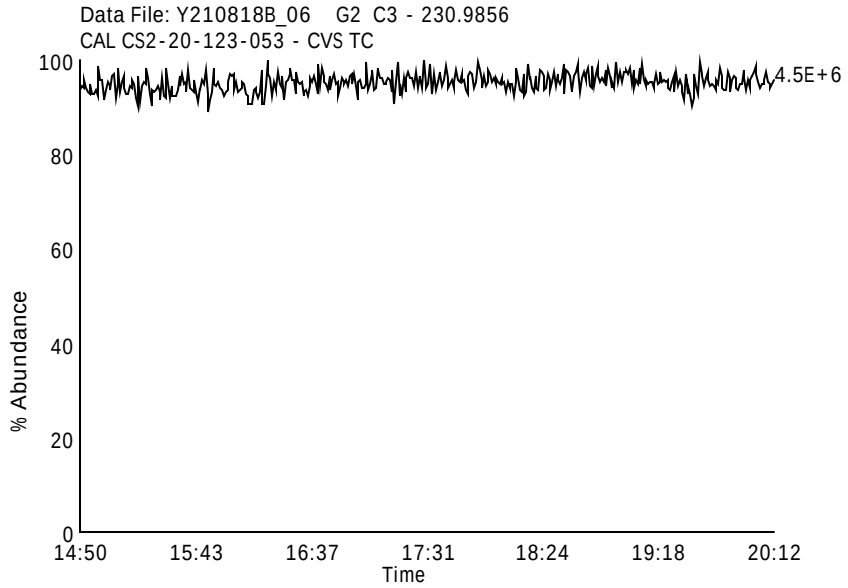
CAL CS2-20-123-053 - CVS TC

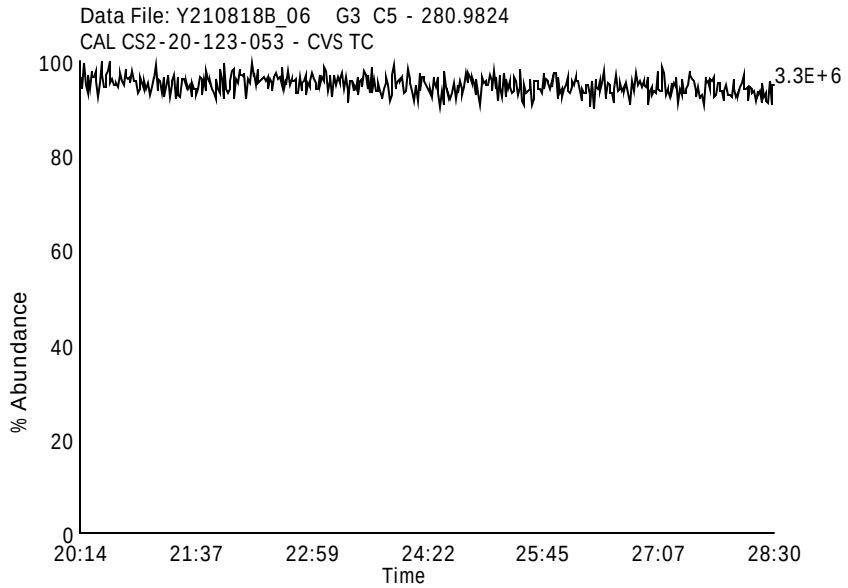


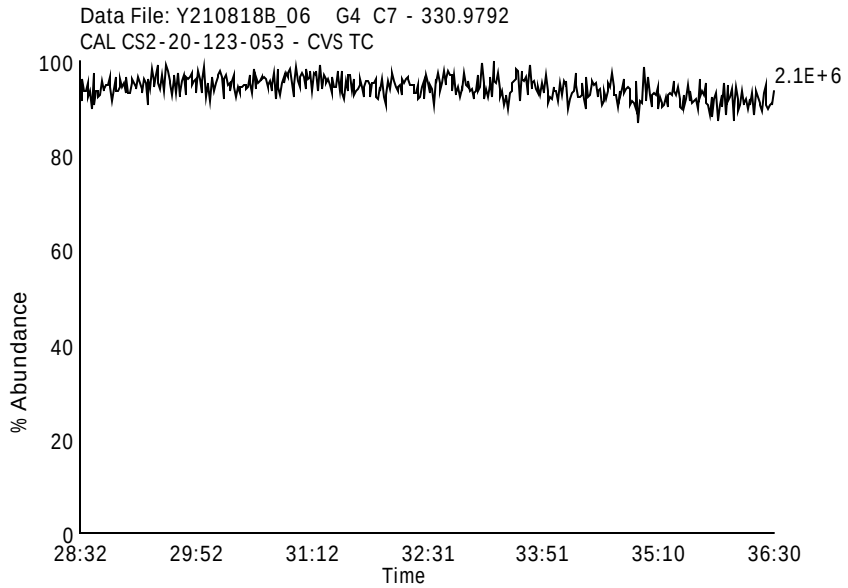
Group 1 - 4 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC



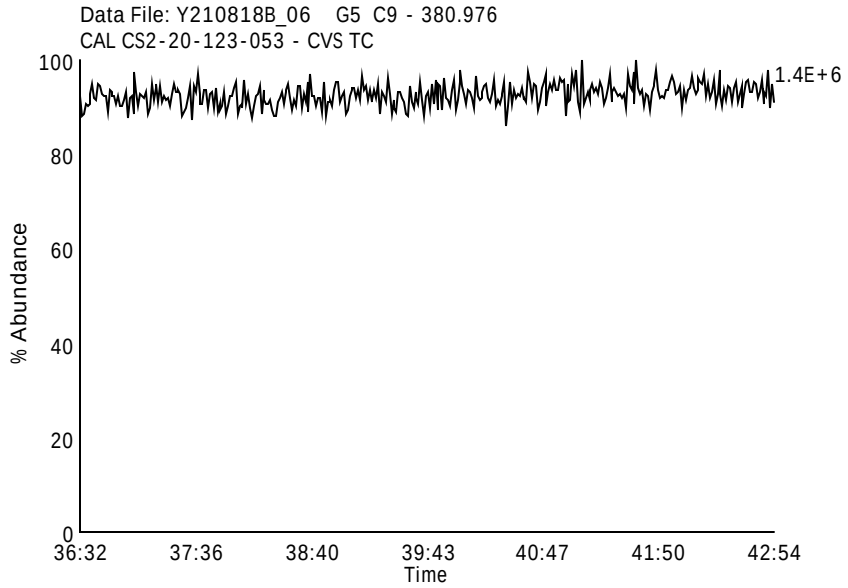


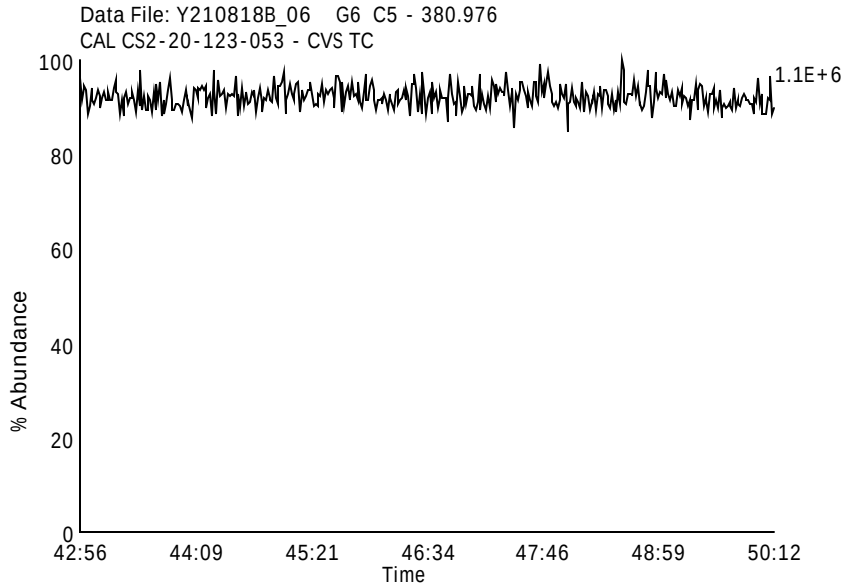


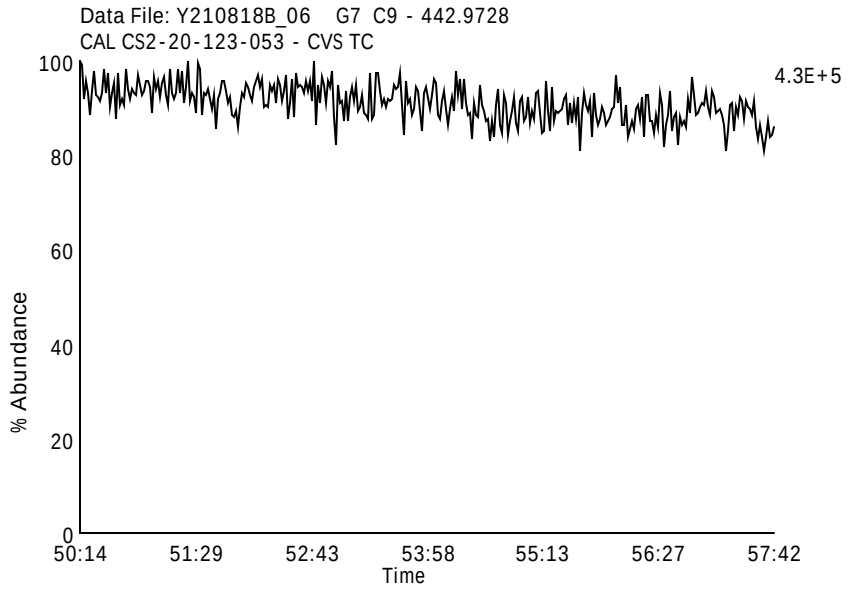


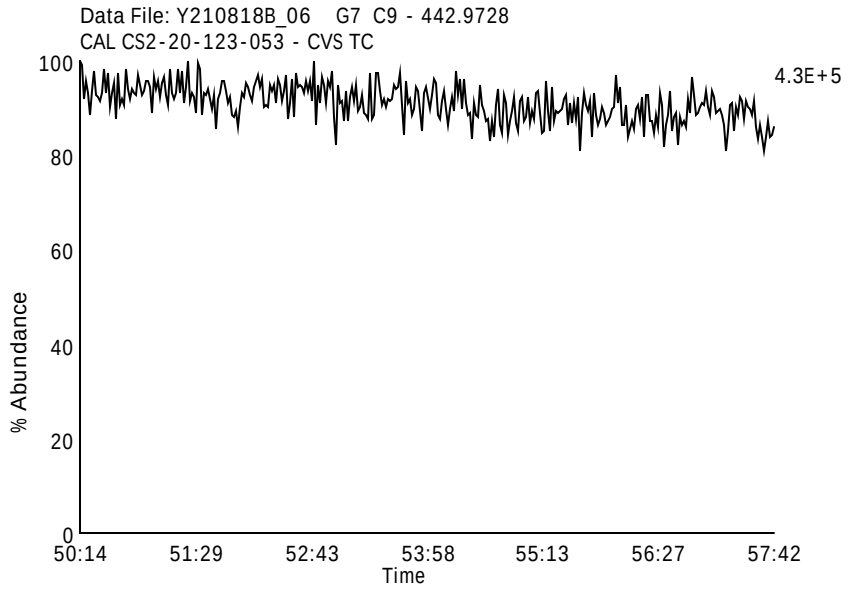
Group 5 - 7 Lock mass

Data File Name: Y210818B_06
Lab Sample ID: CS2-20-123-053
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS2-20-123-053 - CVS TC







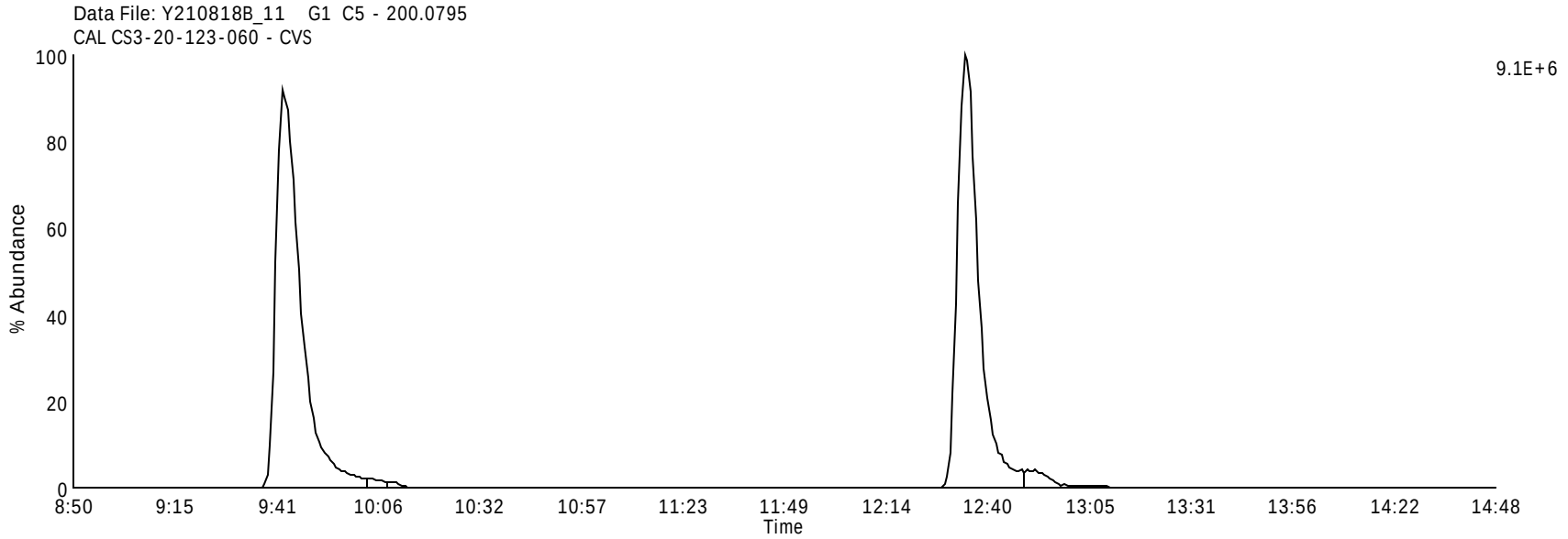


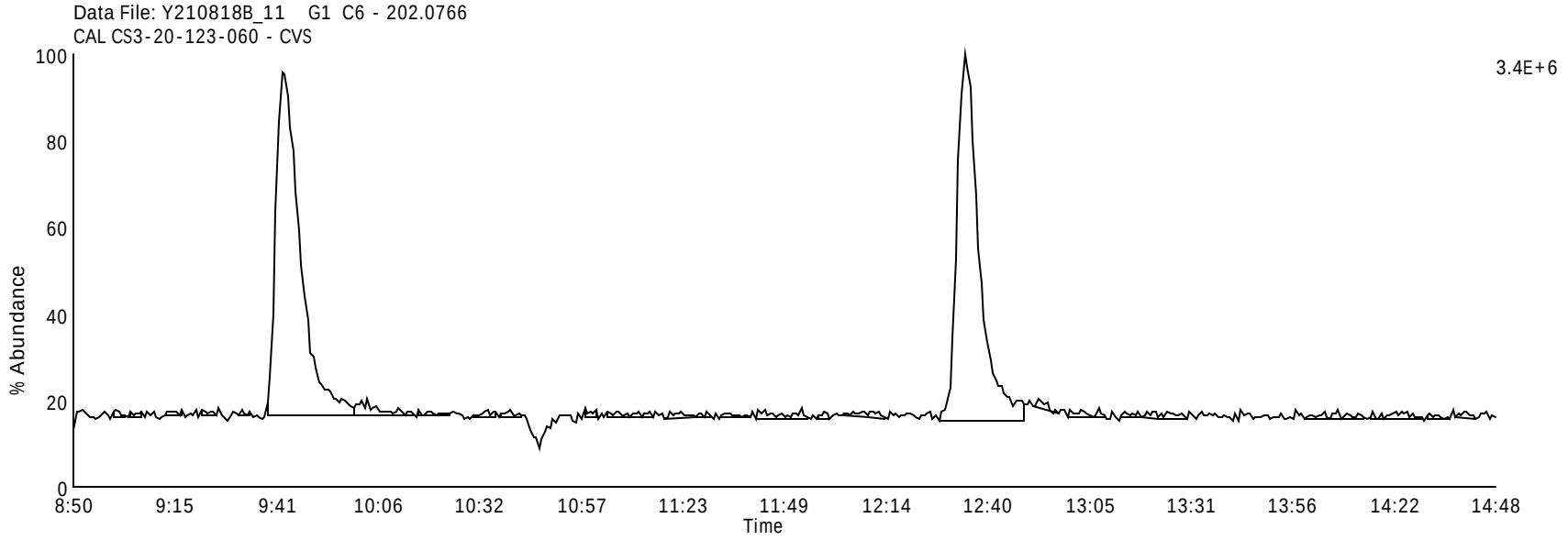
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

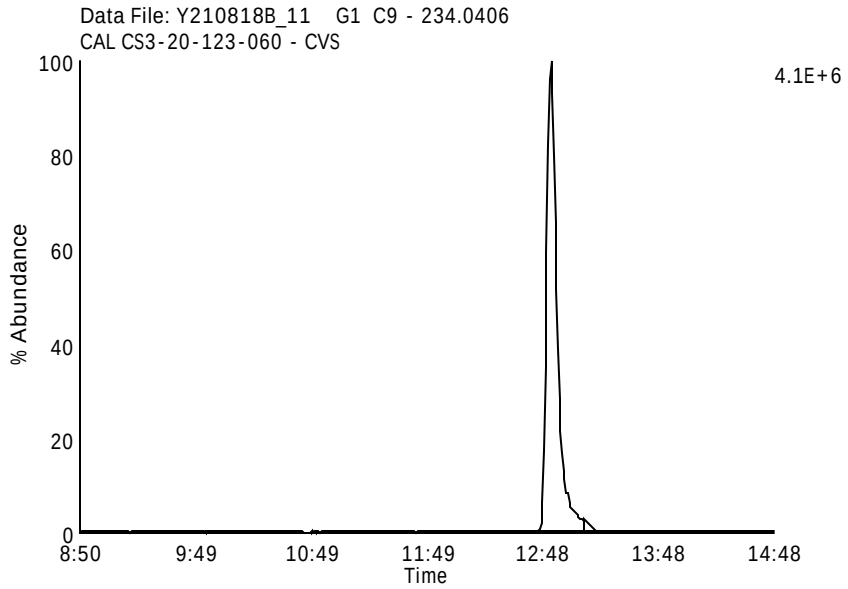
Sample Description: CAL CS3-20-123-060 - CVS

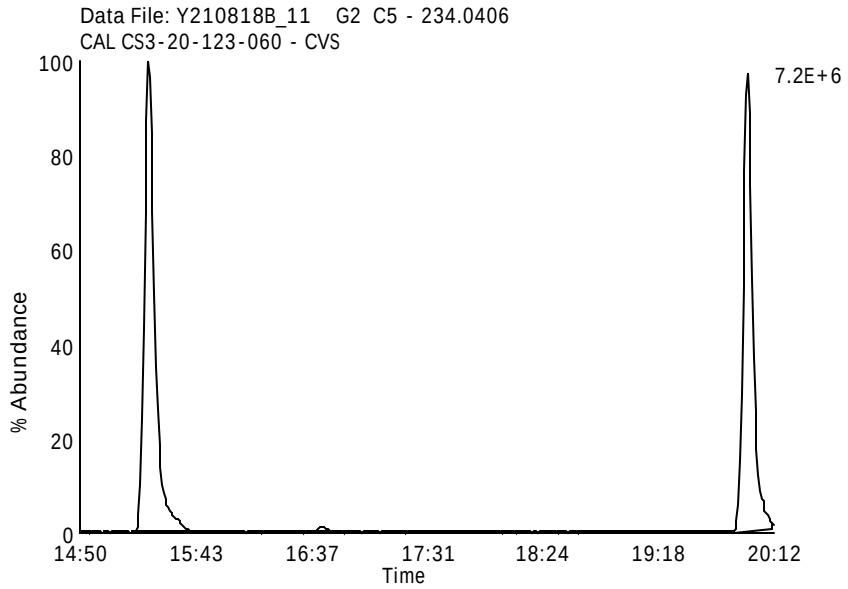


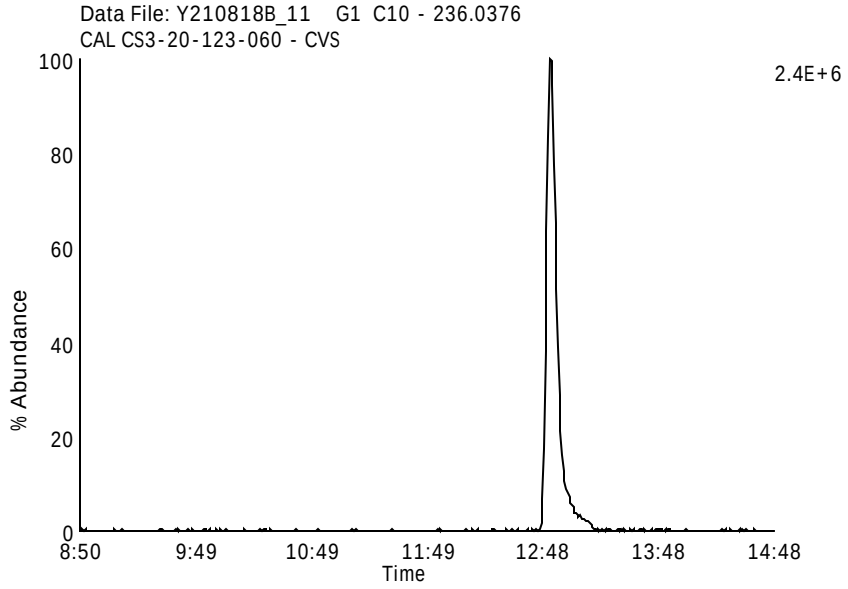


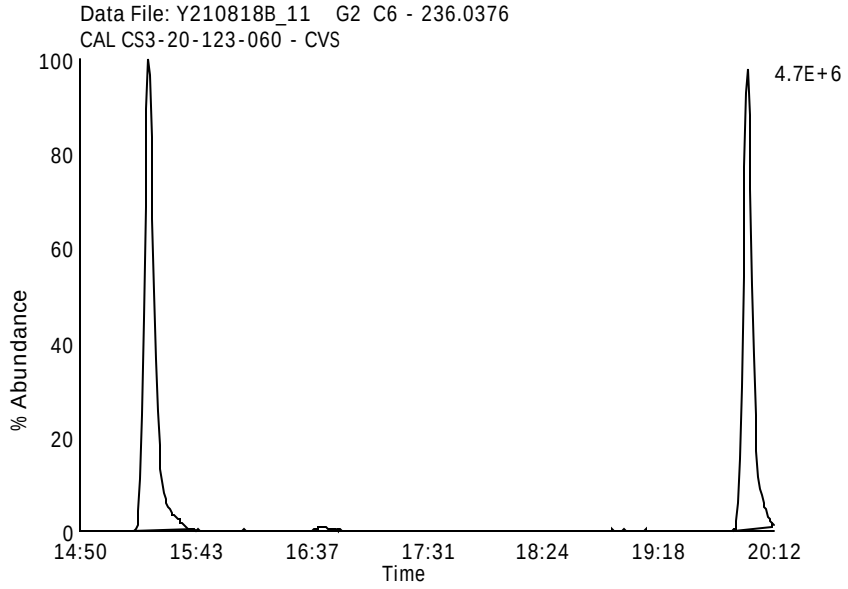
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



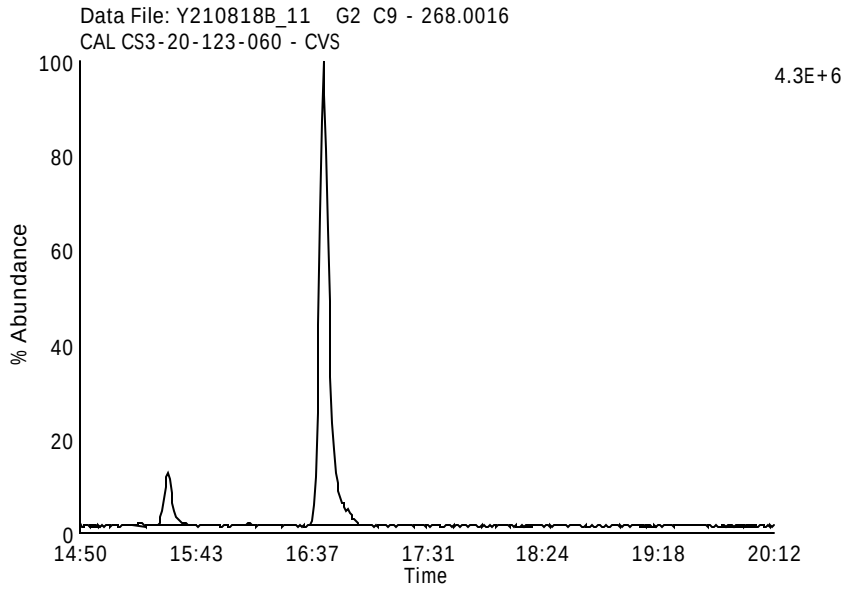


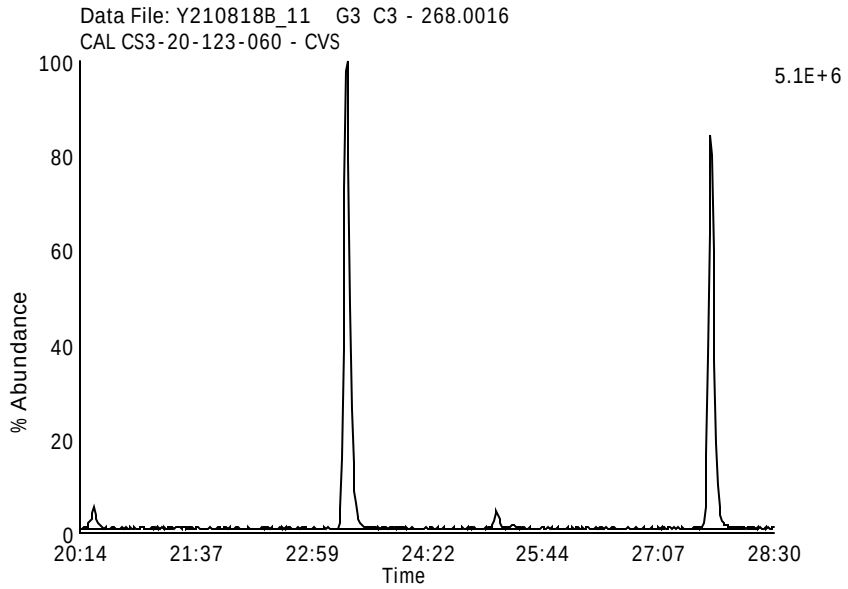


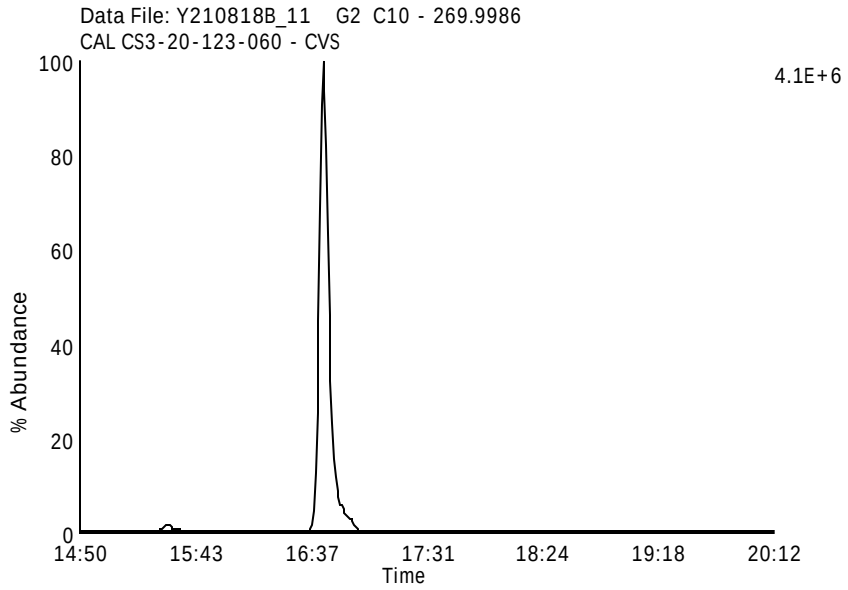


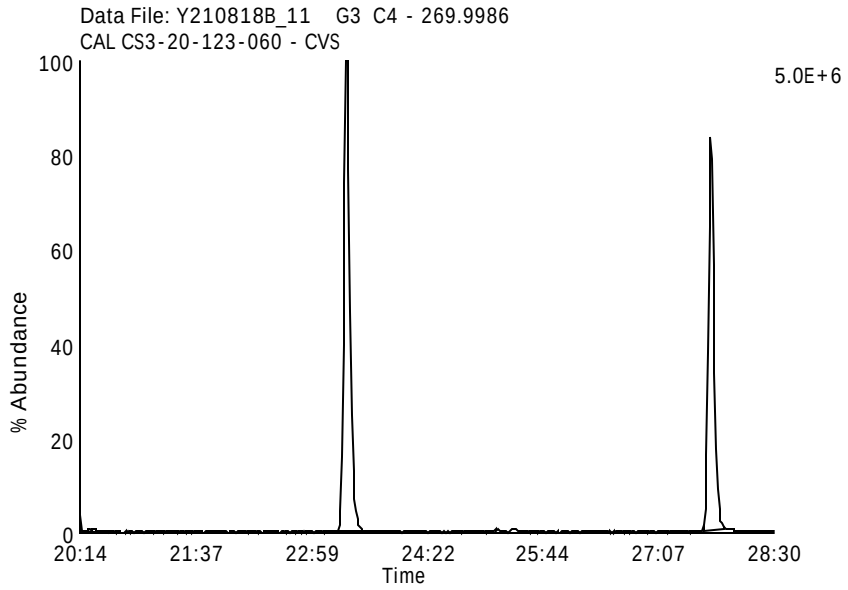
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



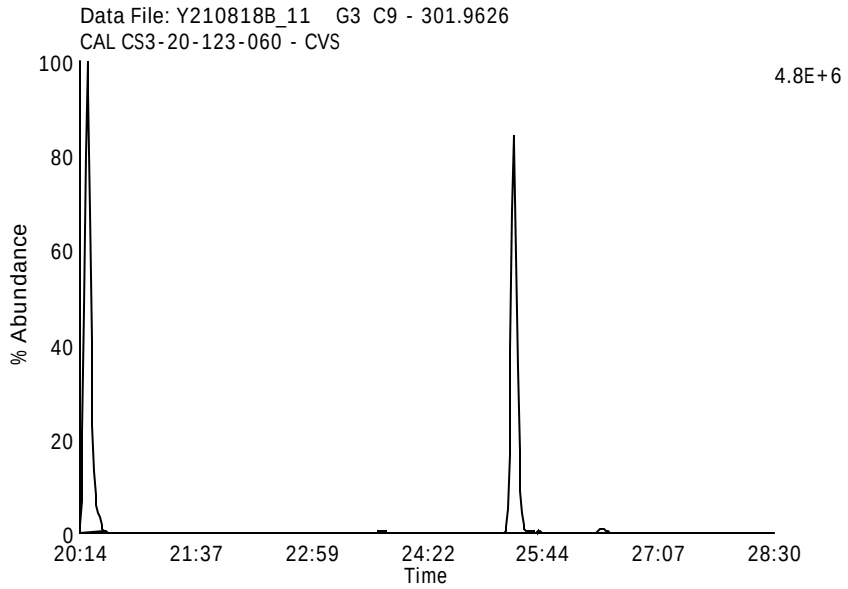


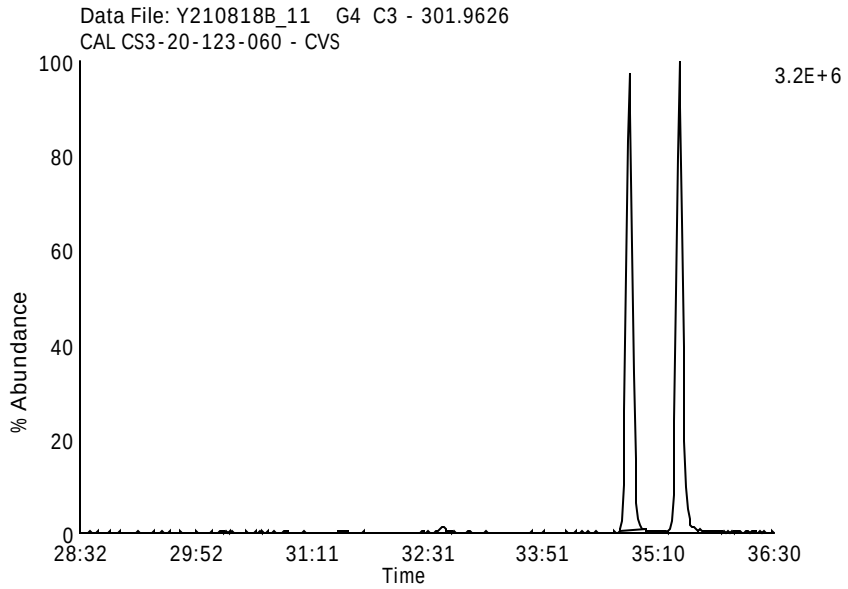


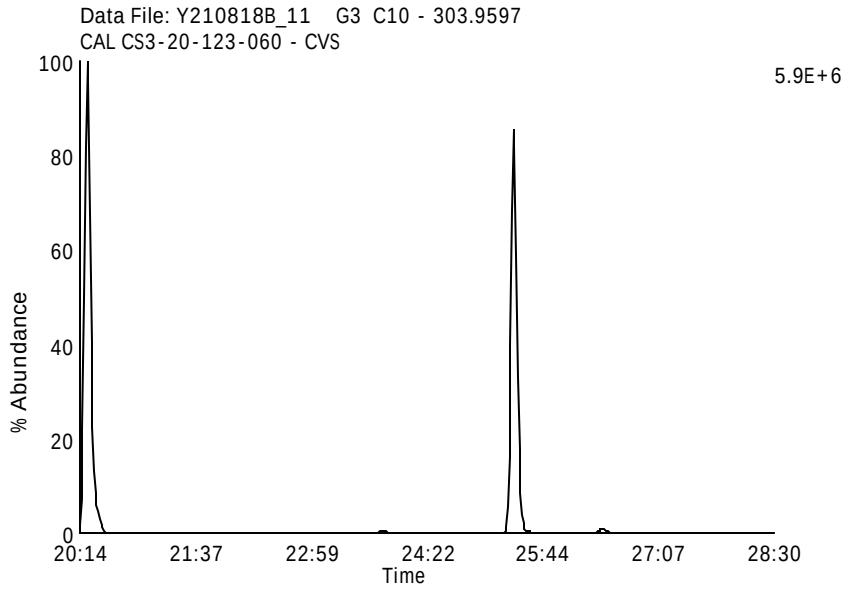


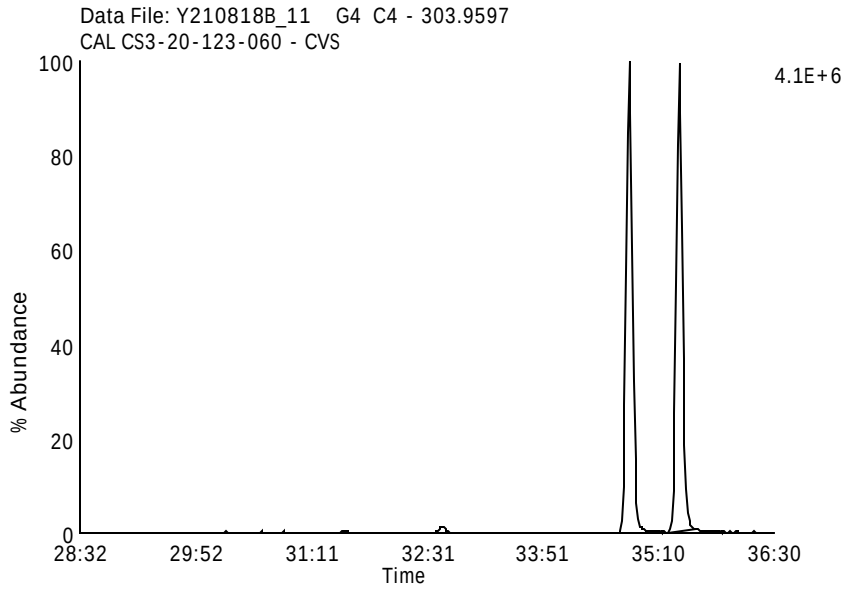
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







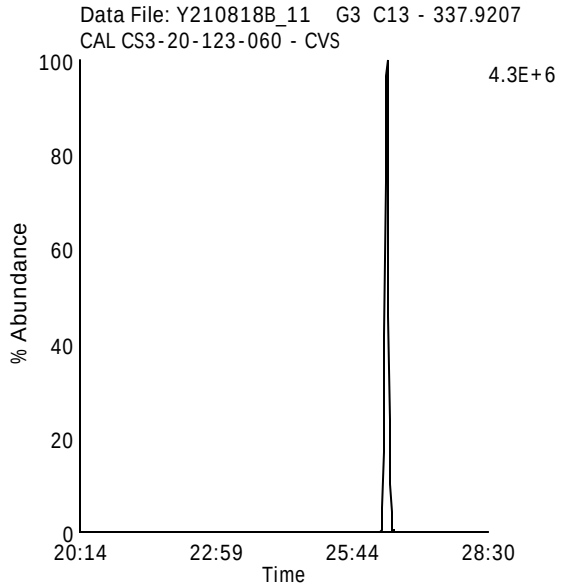


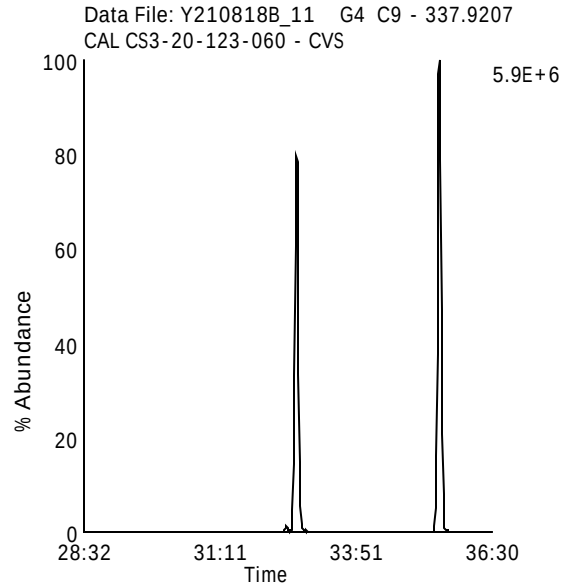
Labeled Penta Chlorinated Biphenyls

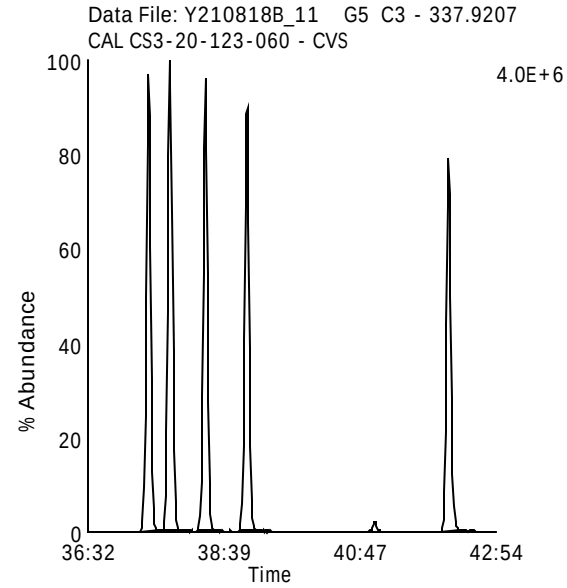
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

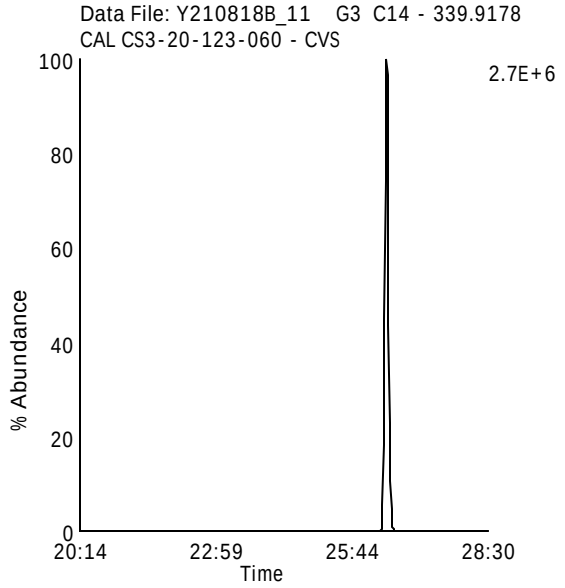
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

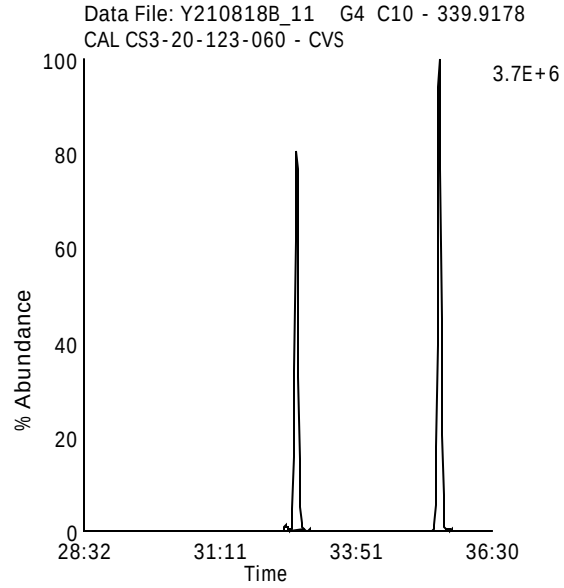
Sample Description: CAL CS3-20-123-060 - CVS

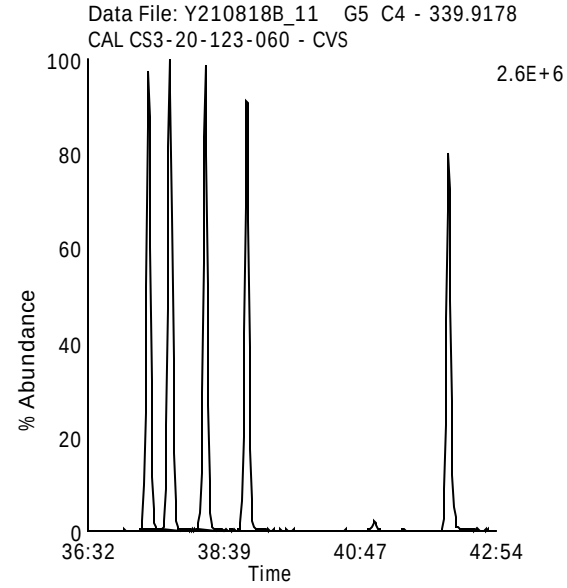










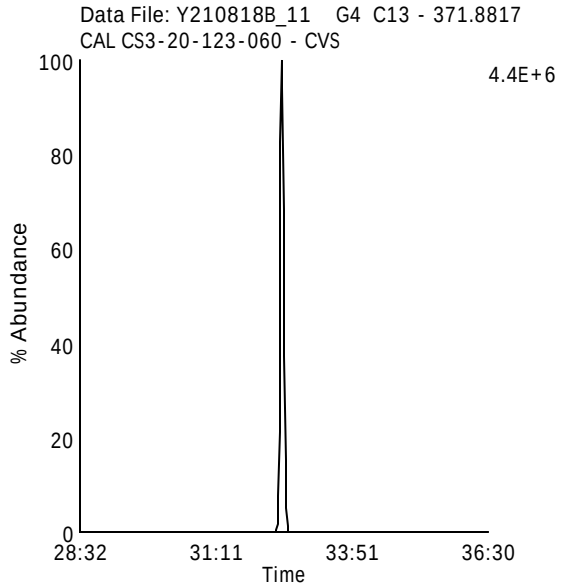


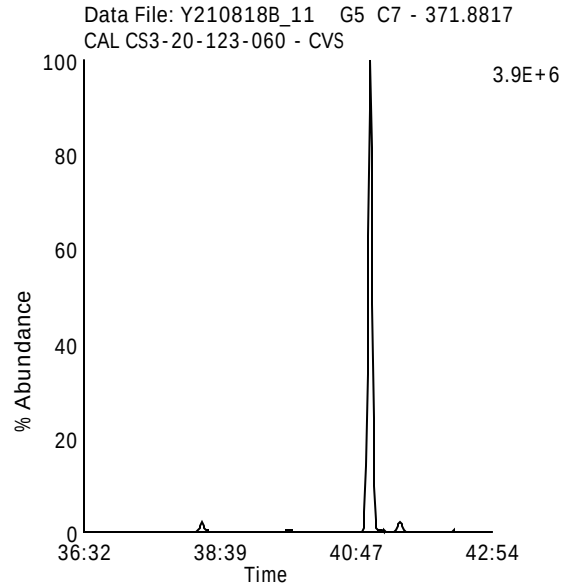
Labeled Hexa Chlorinated Biphenyls

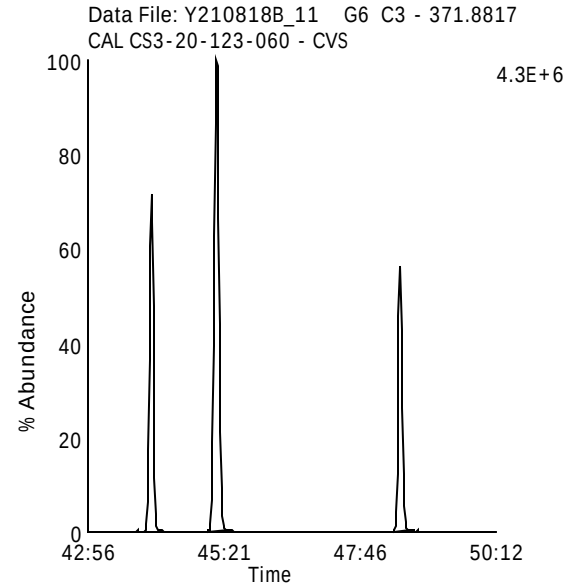
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

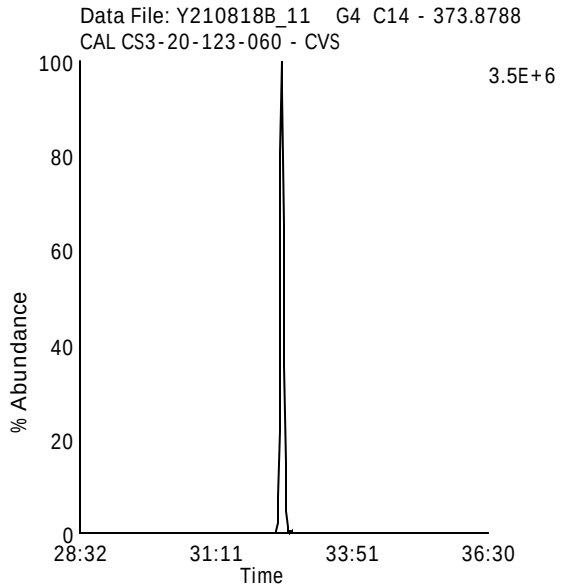
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

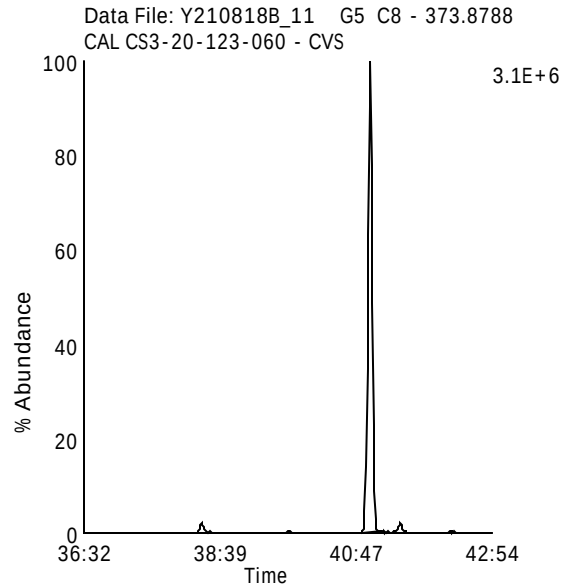
Sample Description: CAL CS3-20-123-060 - CVS

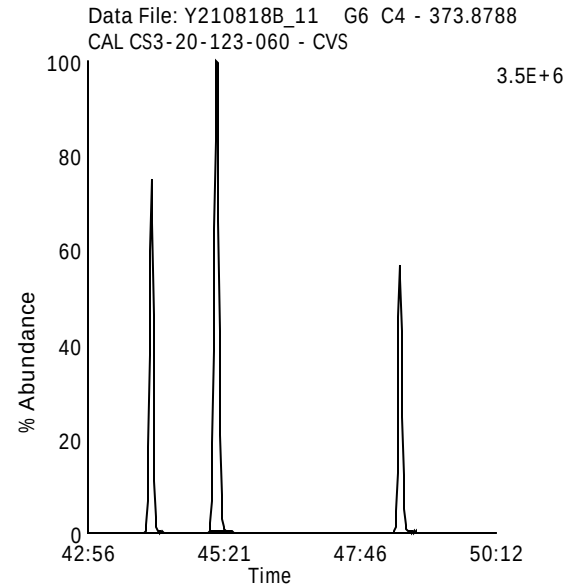






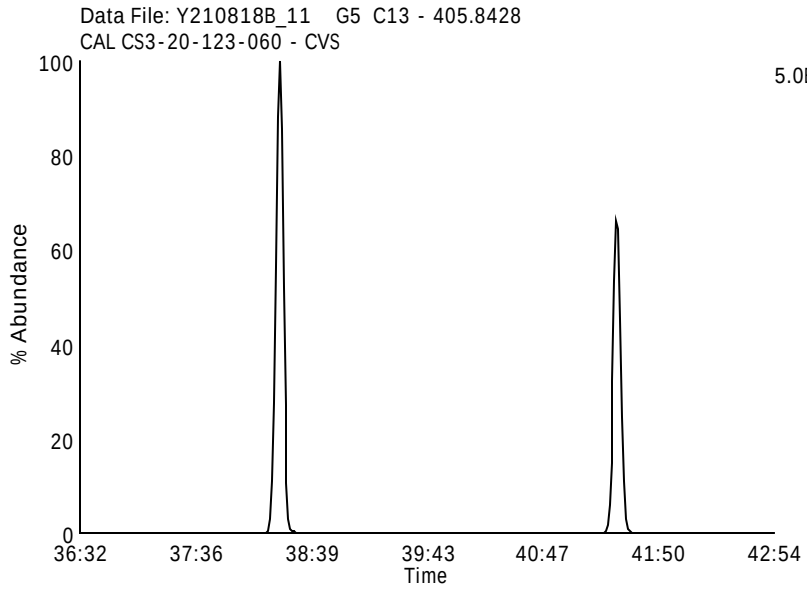


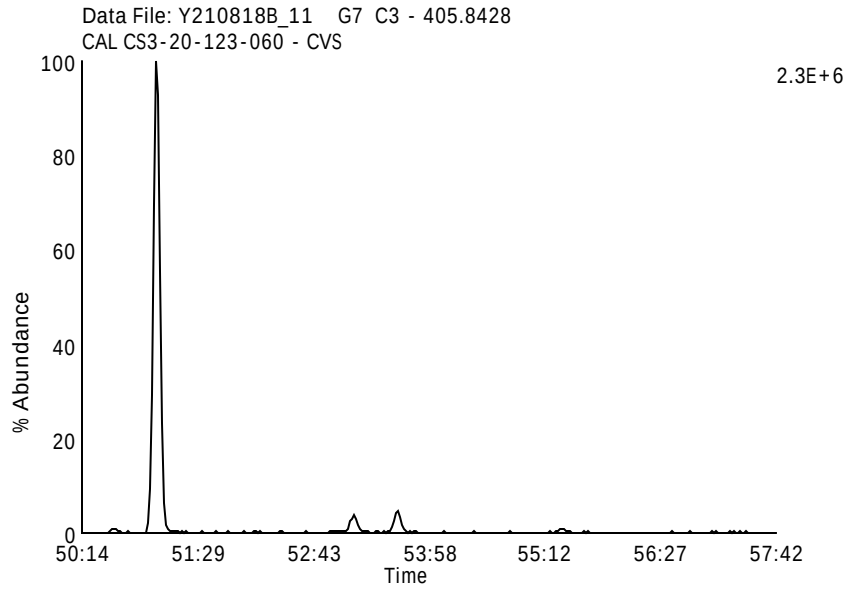


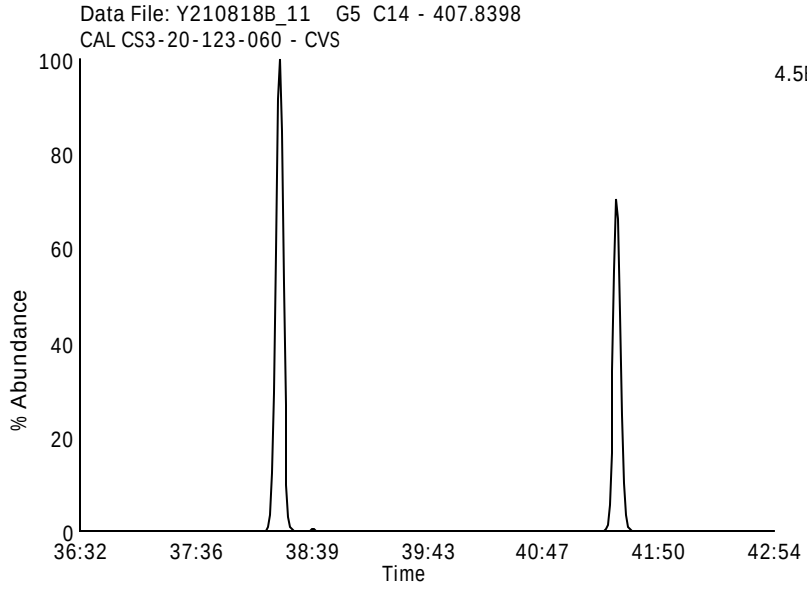


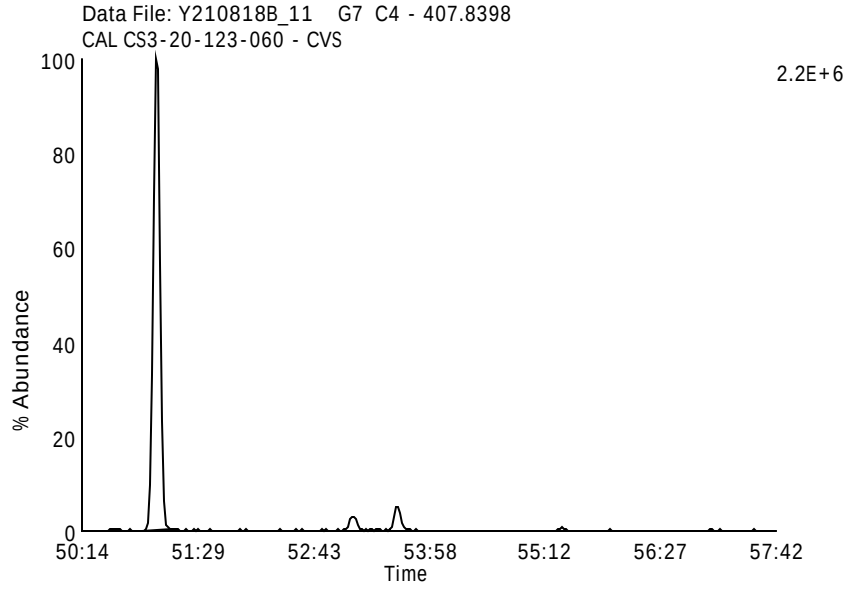
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





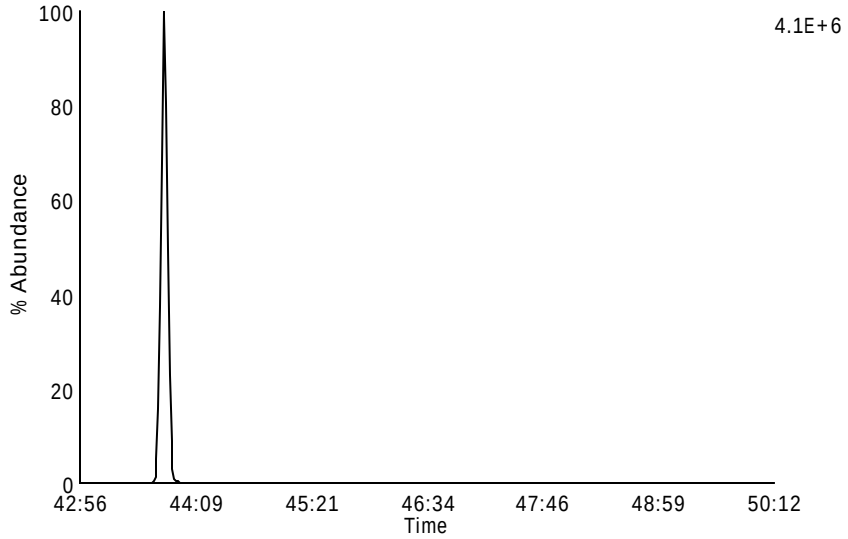




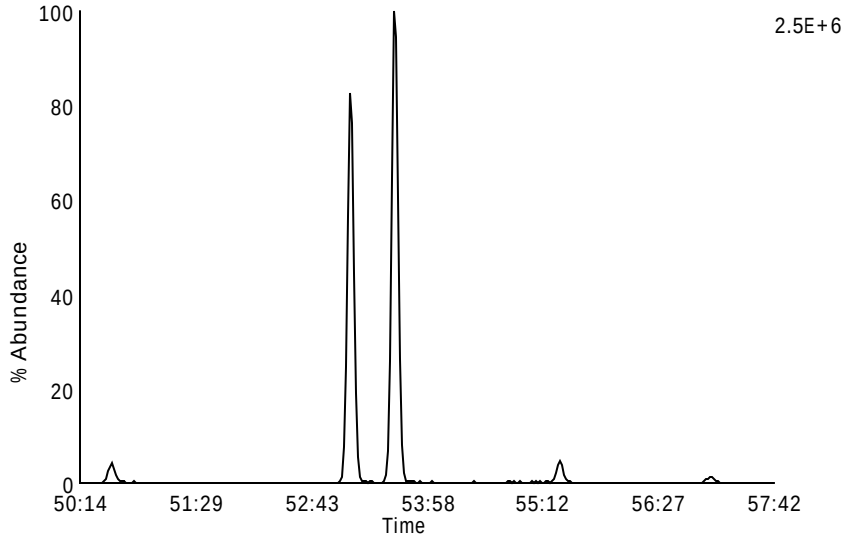
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

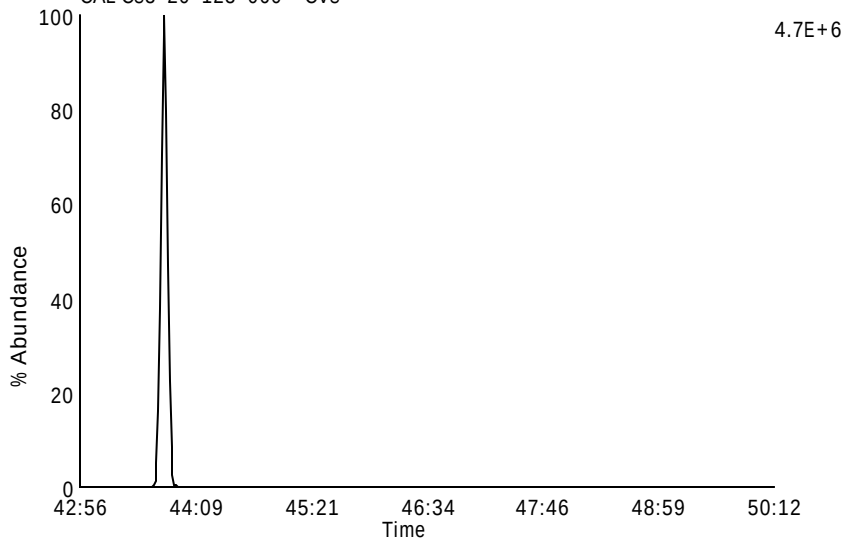
Data File: Y210818B_11 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



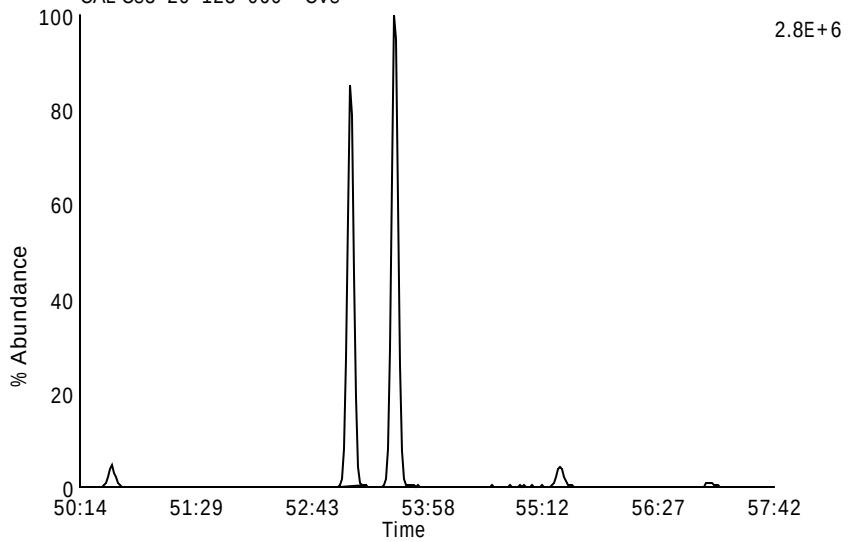
Data File: Y210818B_11 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G6 C14 - 441.8008
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

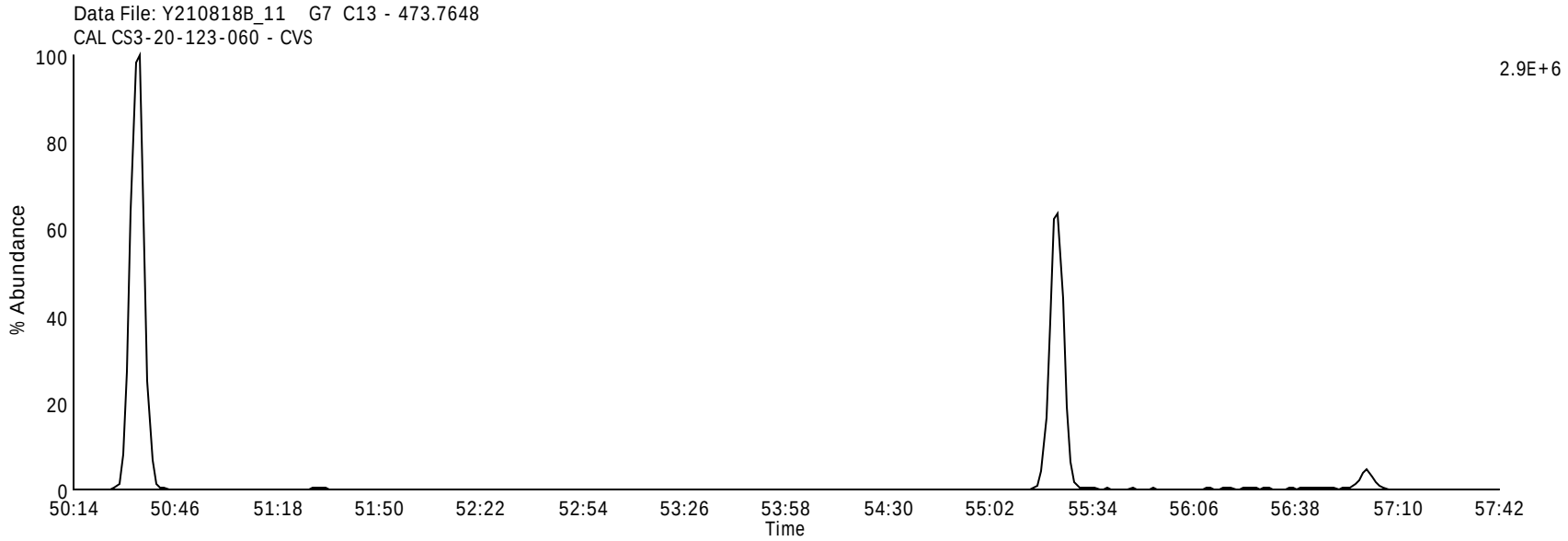


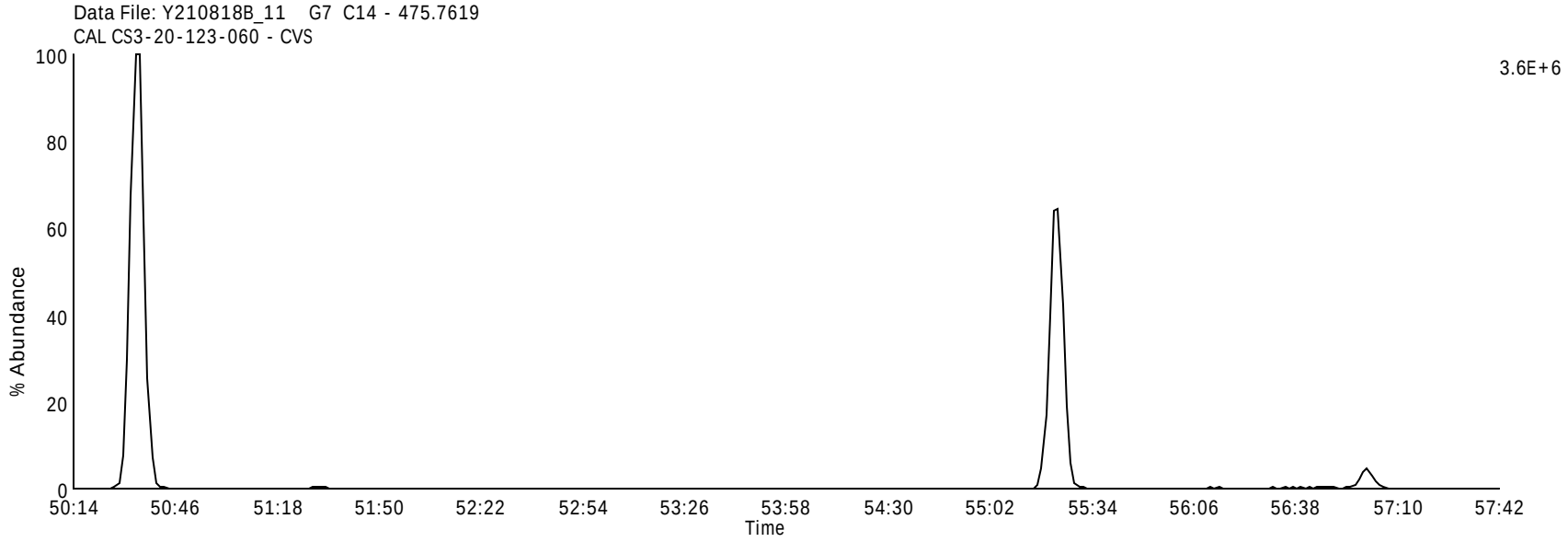
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



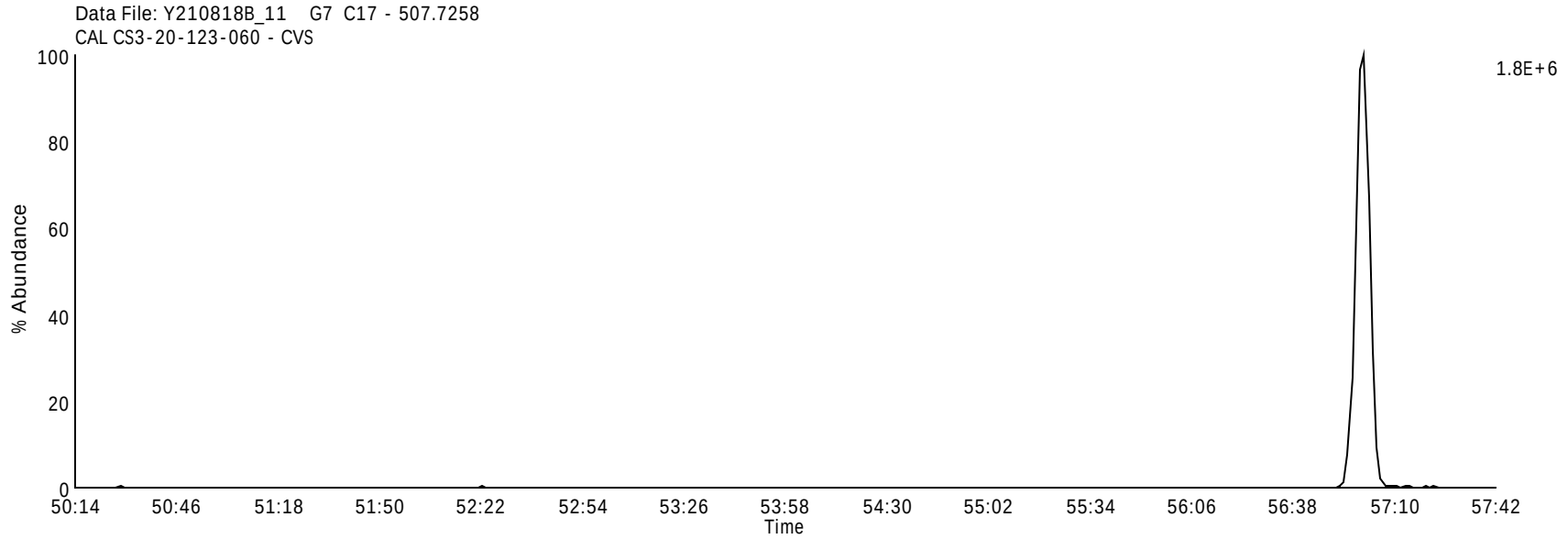


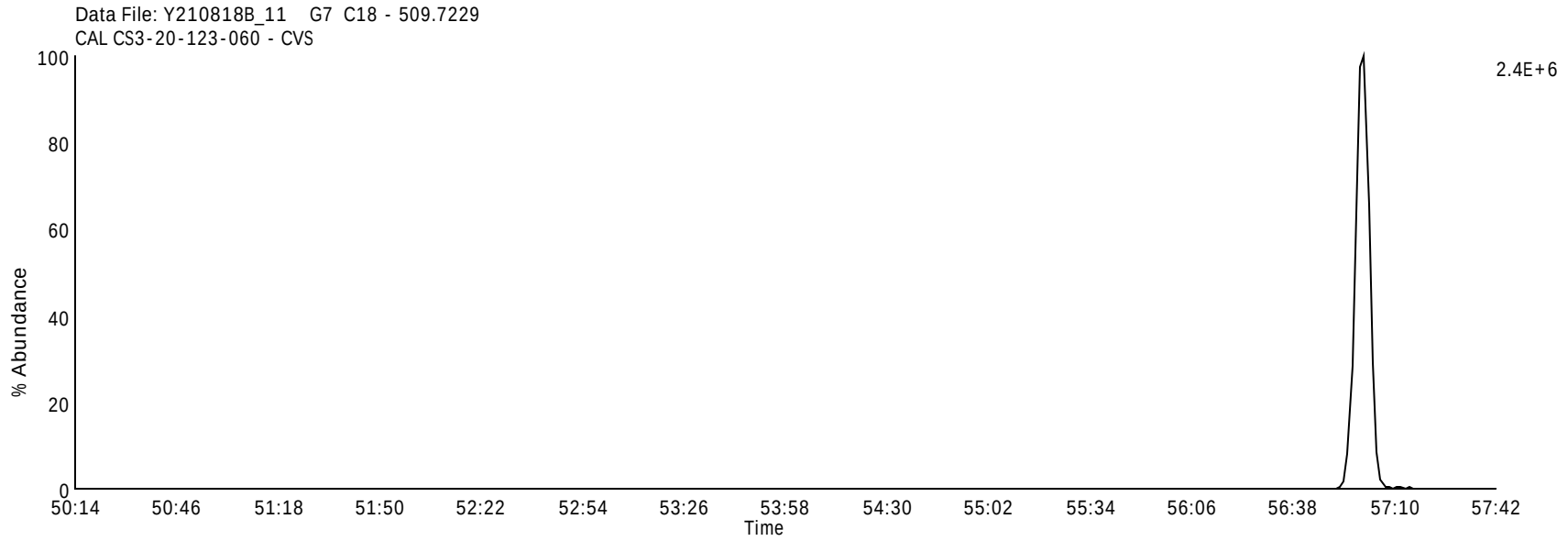
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



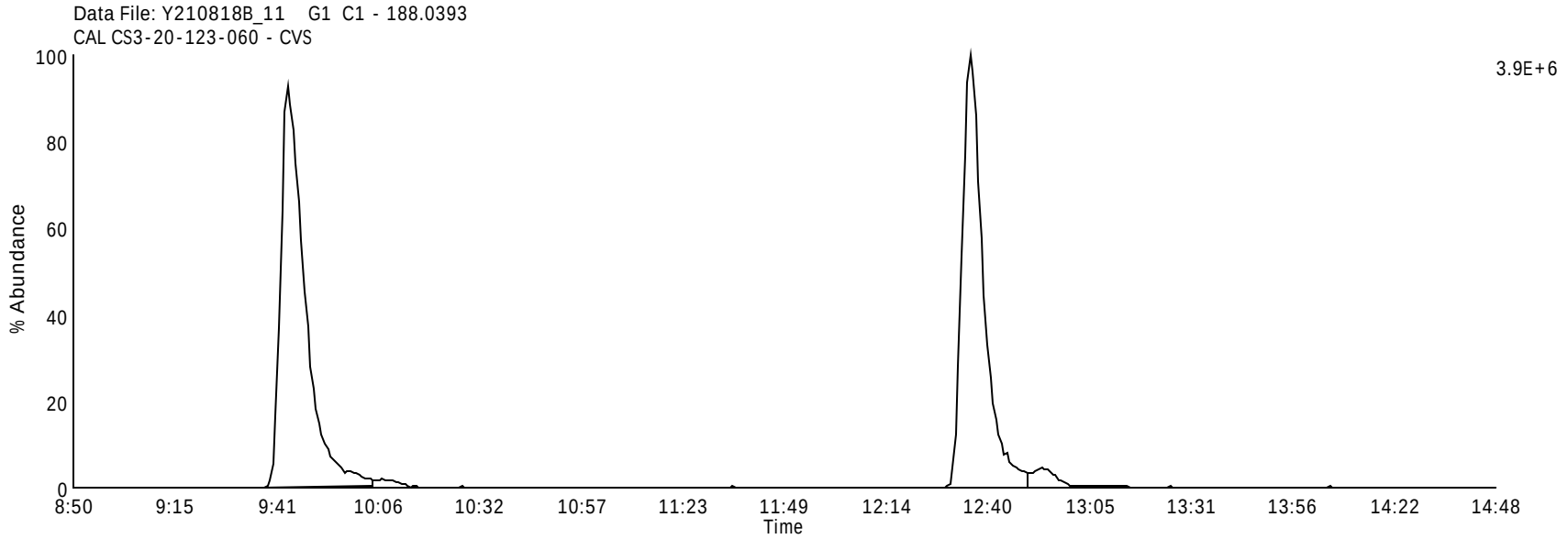


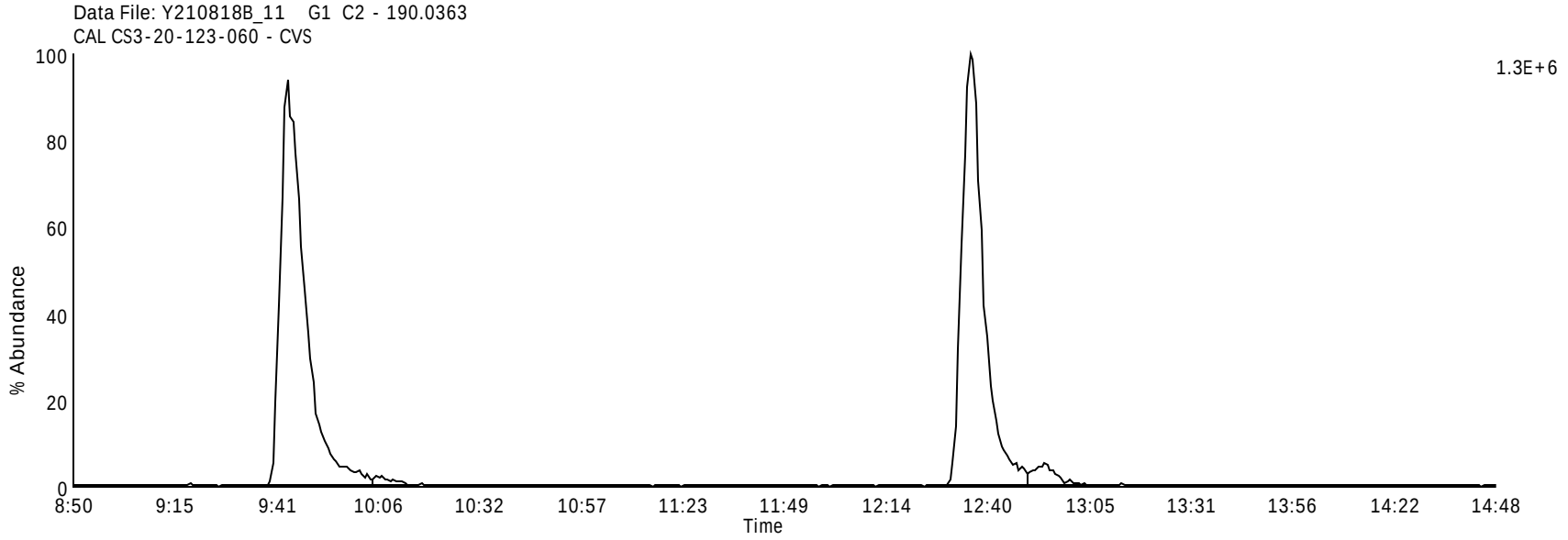
Mono Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

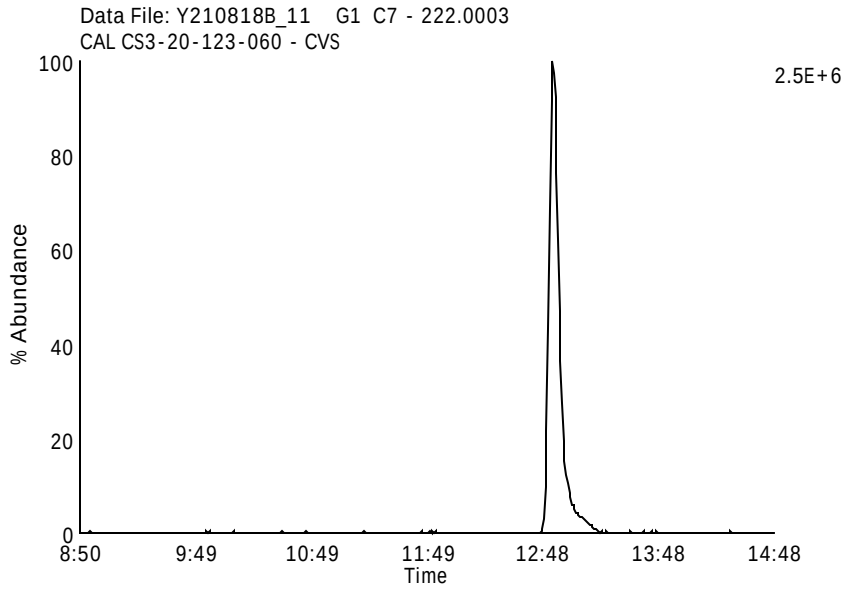
Sample Description: CAL CS3-20-123-060 - CVS

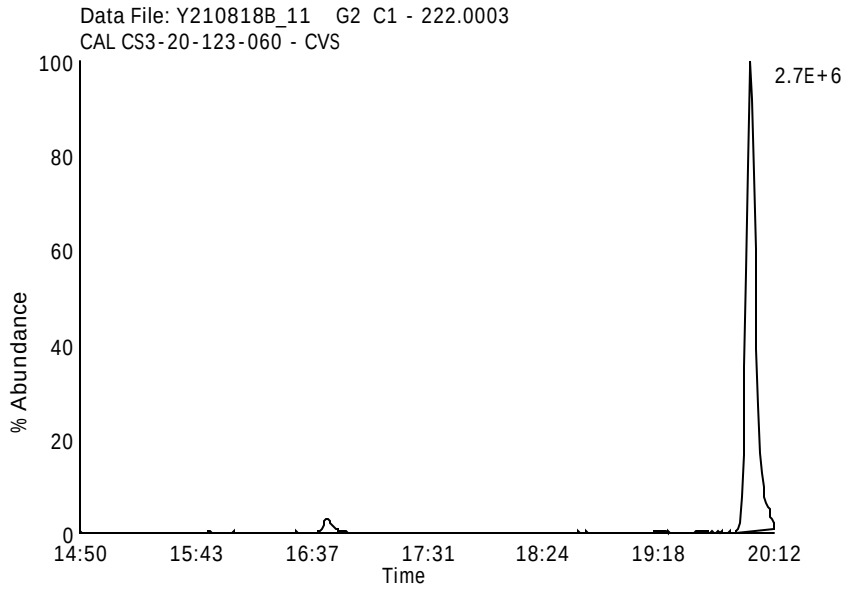


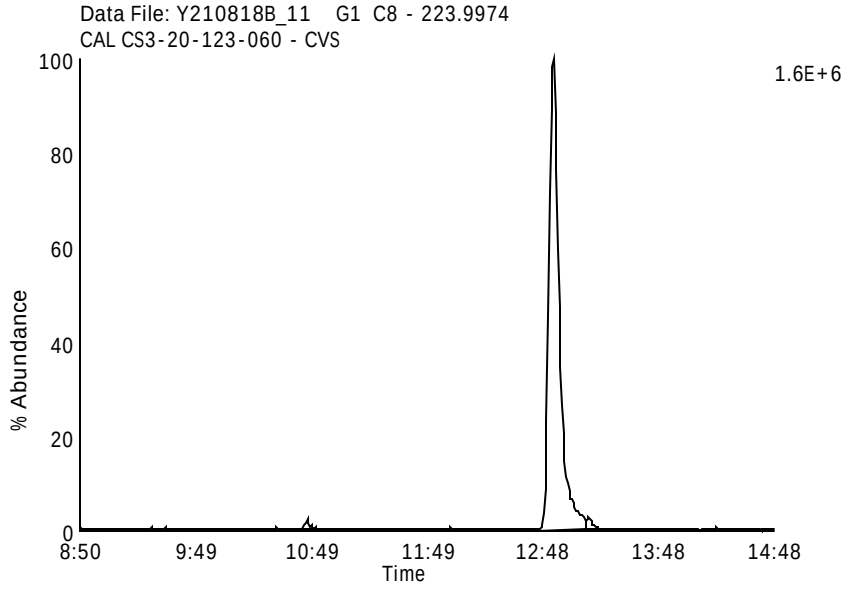


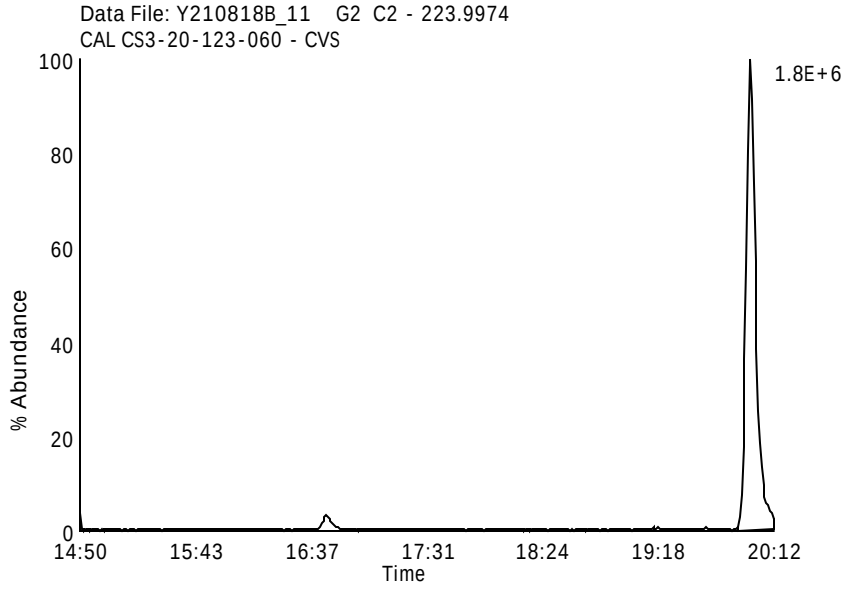
Di Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



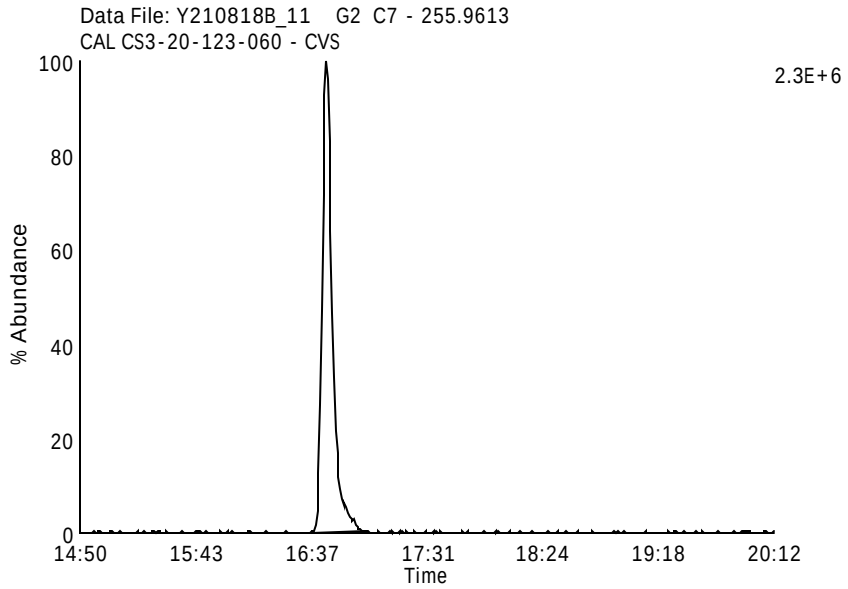


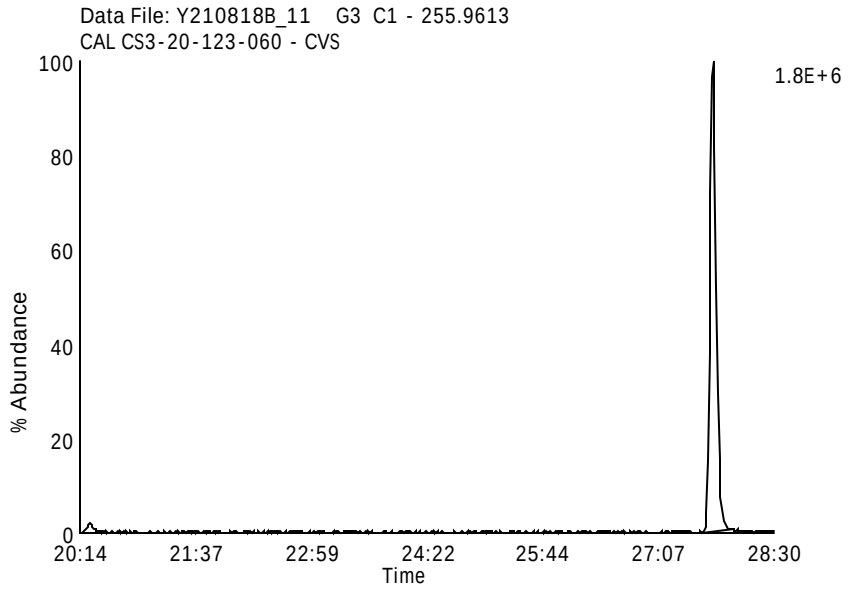


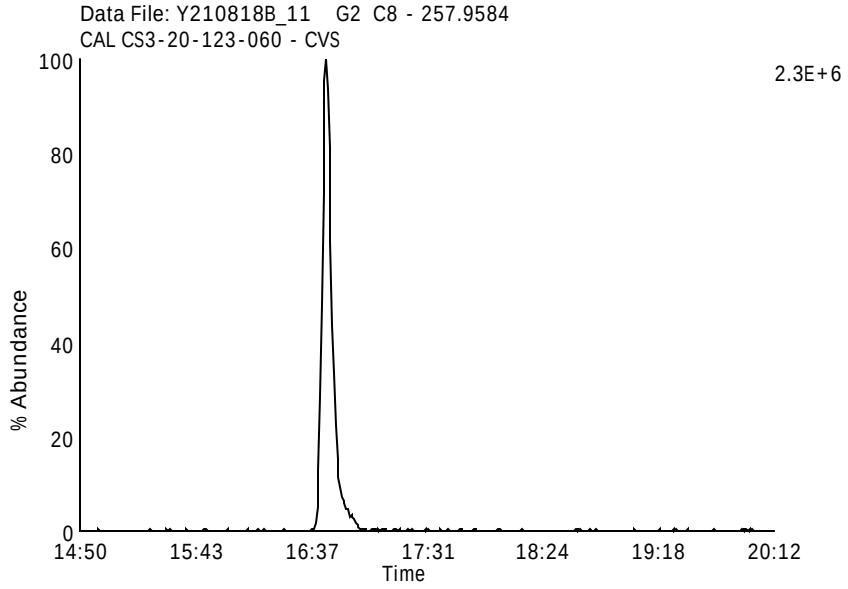


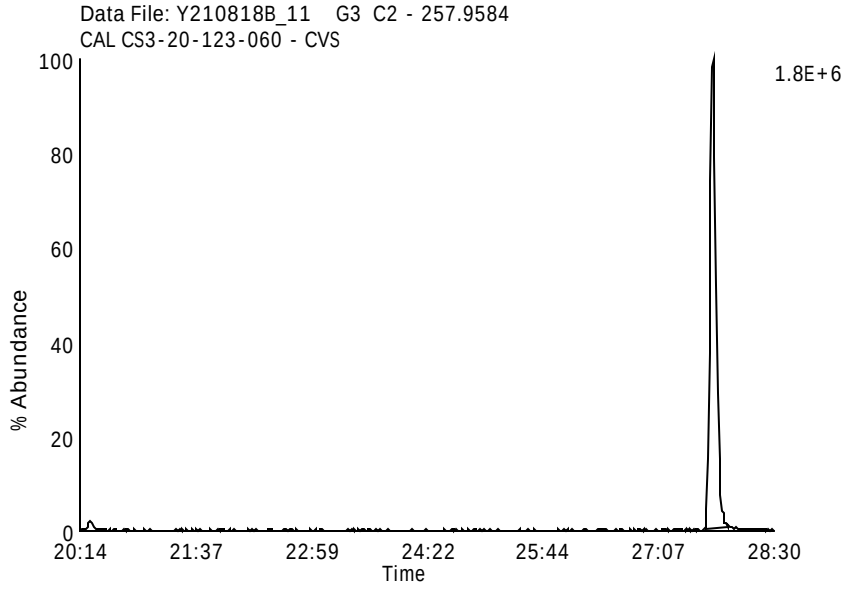
Tri Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



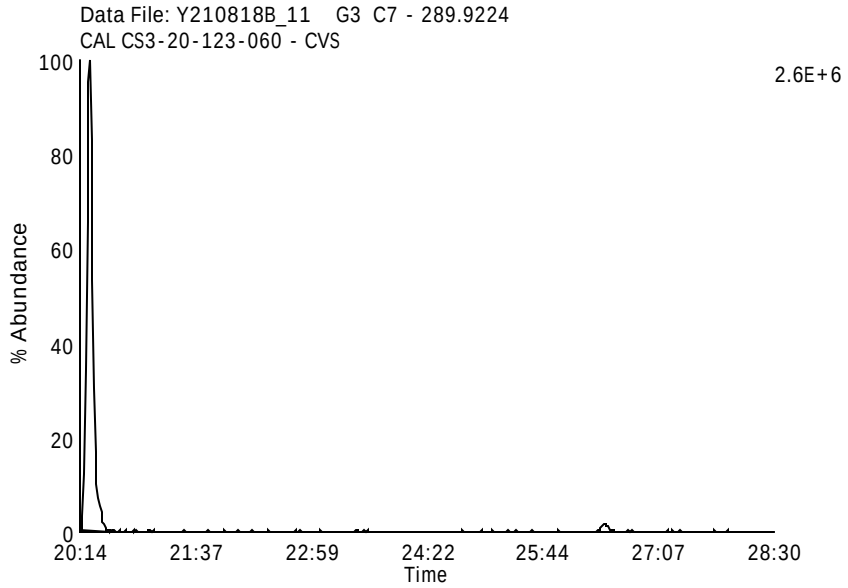


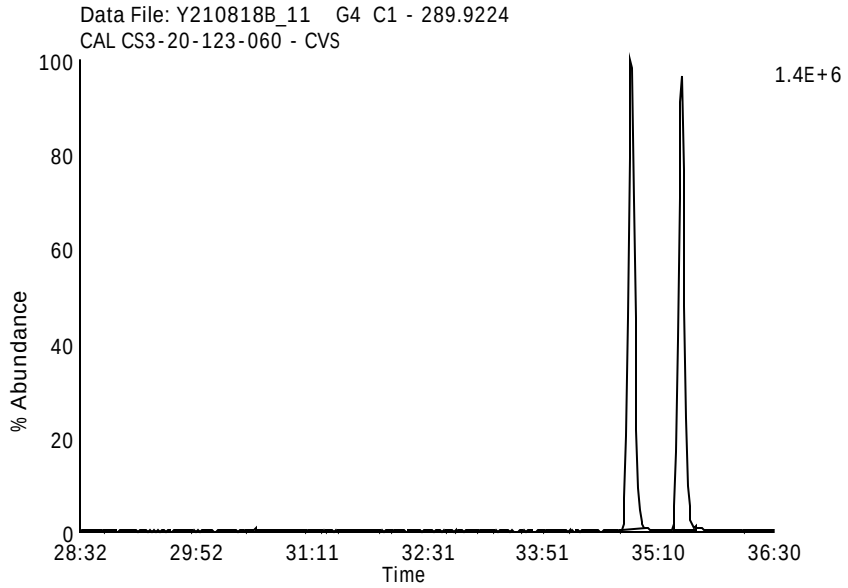


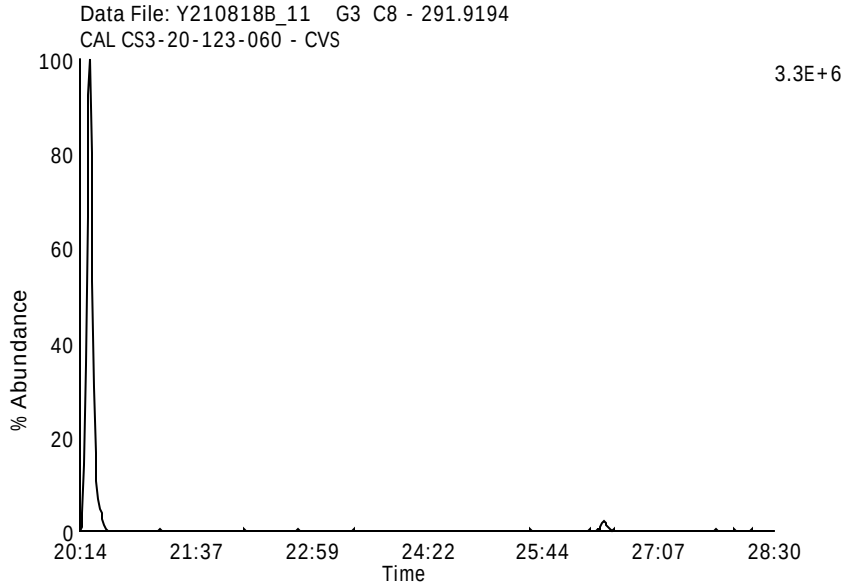


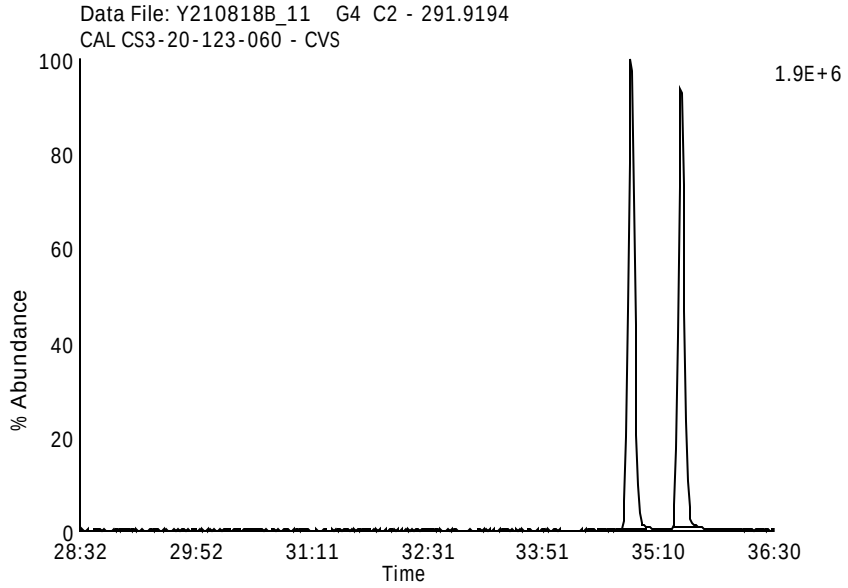
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



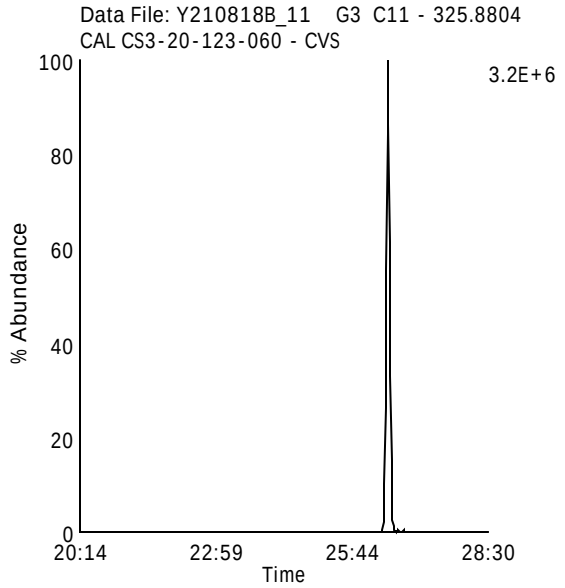


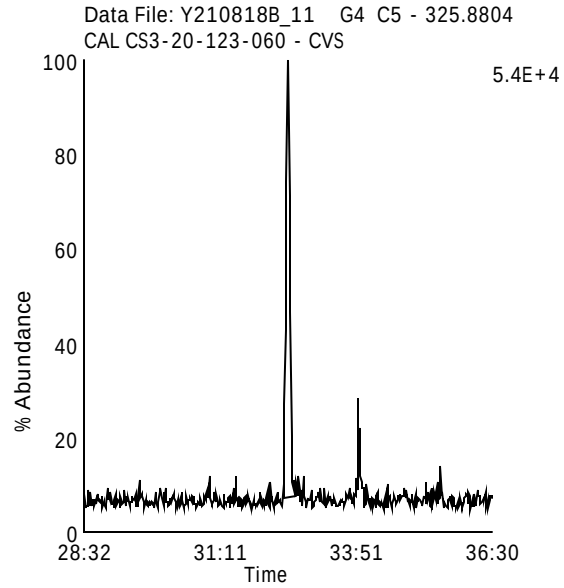


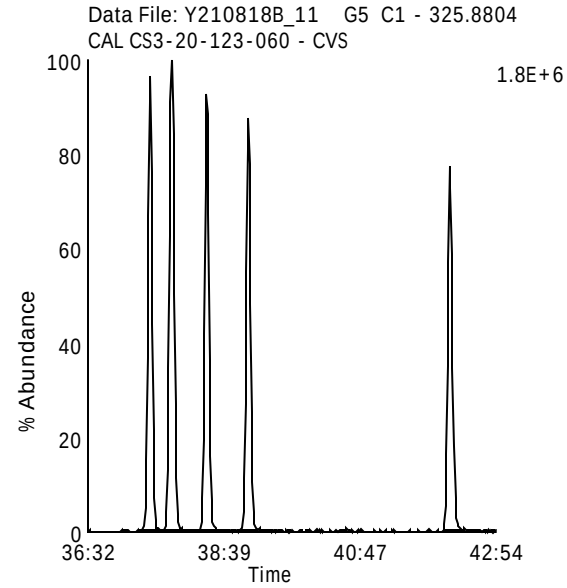


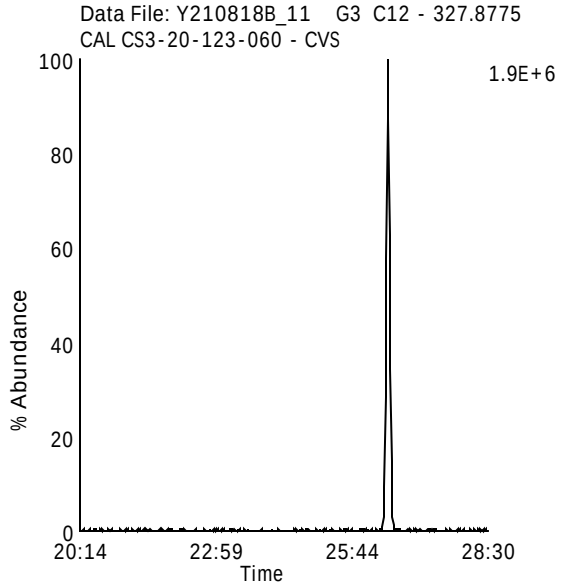
Penta Chlorinated Biphenyls

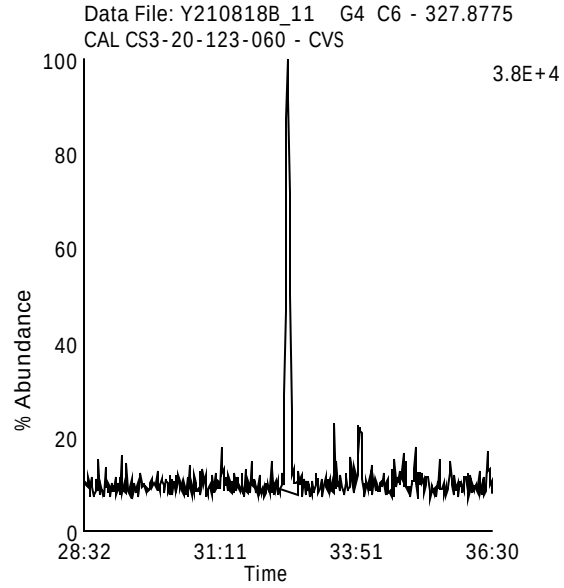
Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

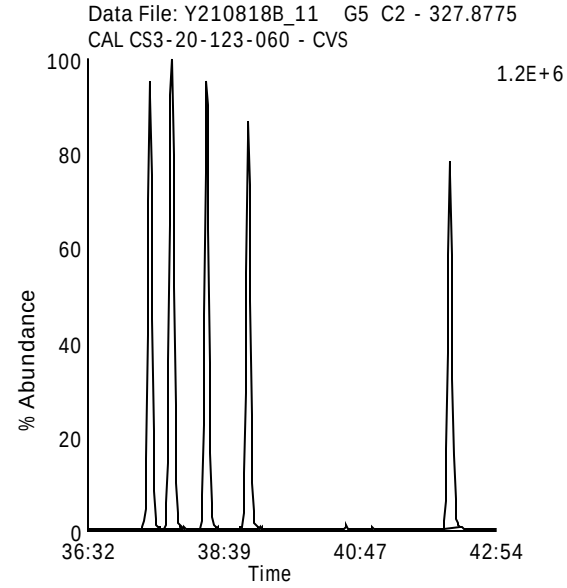












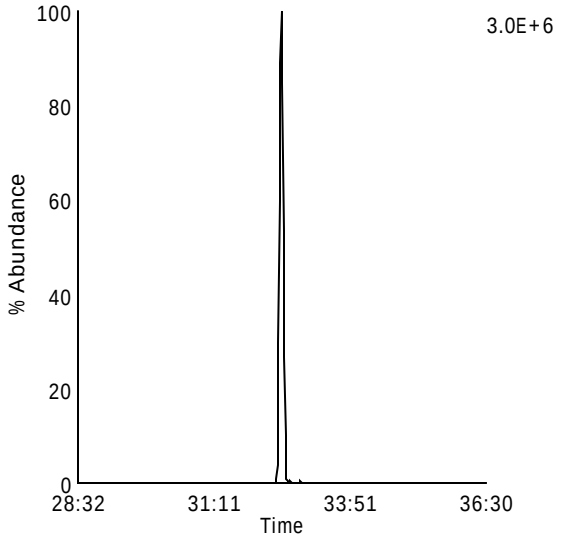
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

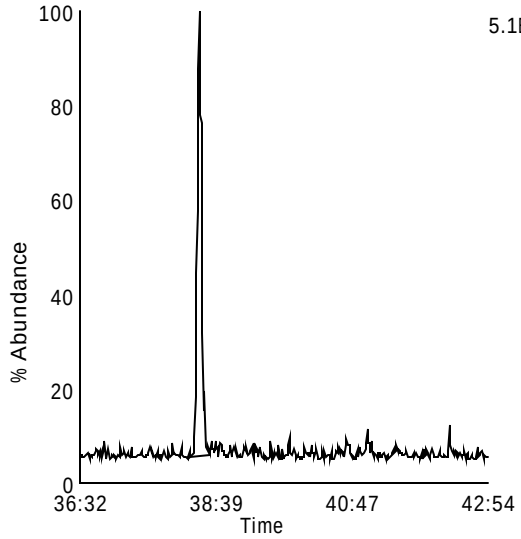
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS

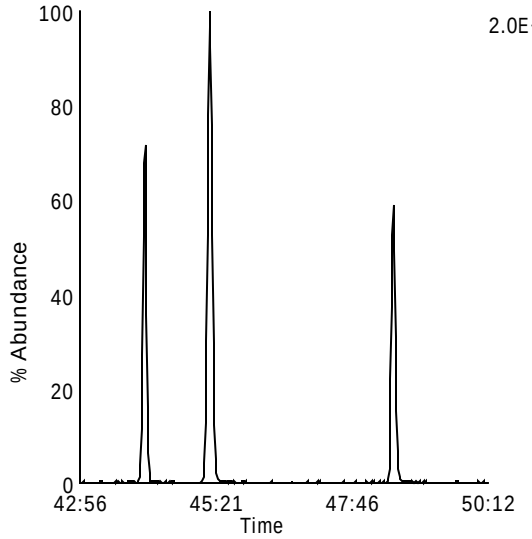
Data File: Y210818B_11 G4 C11 - 359.8415
CAL CS3-20-123-060 - CVS



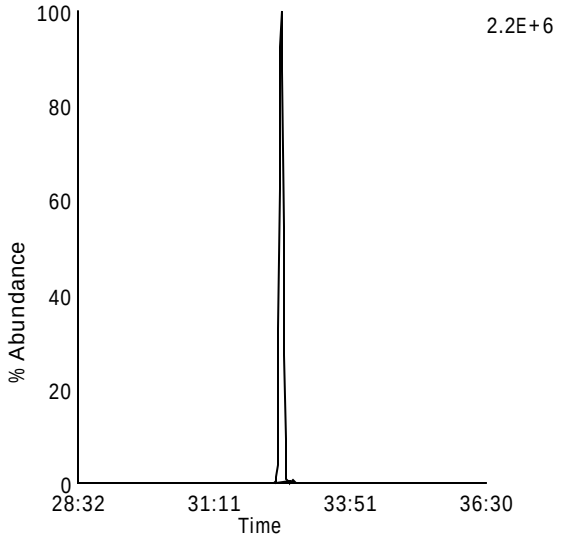
Data File: Y210818B_11 G5 C5 - 359.8415
CAL CS3-20-123-060 - CVS



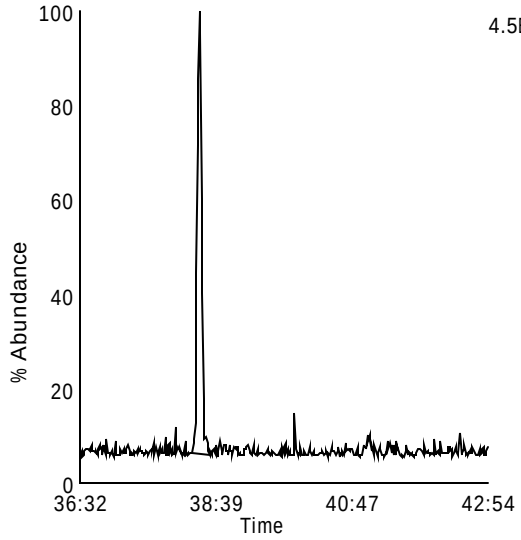
Data File: Y210818B_11 G6 C1 - 359.8415
CAL CS3-20-123-060 - CVS



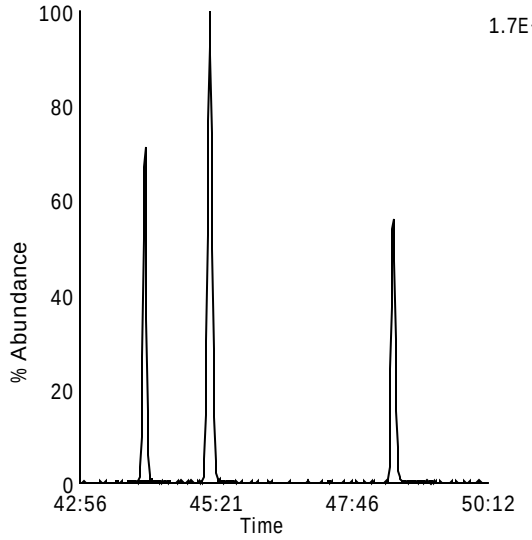
Data File: Y210818B_11 G4 C12 - 361.8385
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G5 C6 - 361.8385
CAL CS3-20-123-060 - CVS



Data File: Y210818B_11 G6 C2 - 361.8385
CAL CS3-20-123-060 - CVS



Hepta Chlorinated Biphenyls

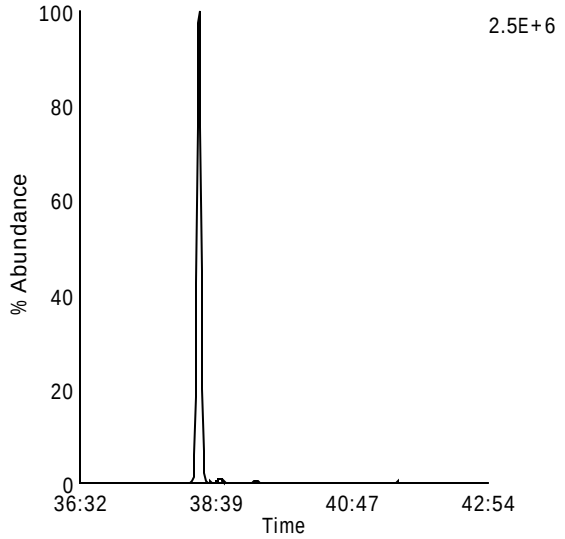
Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS

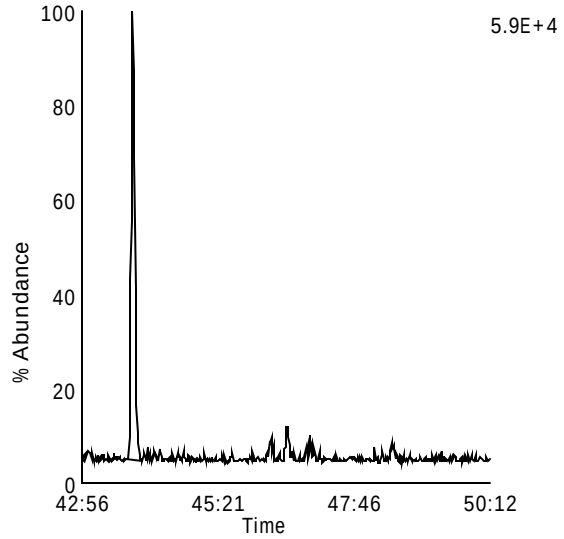
Data File: Y210818B_11 G5 C11 - 393.8025

CAL CS3-20-123-060 - CVS



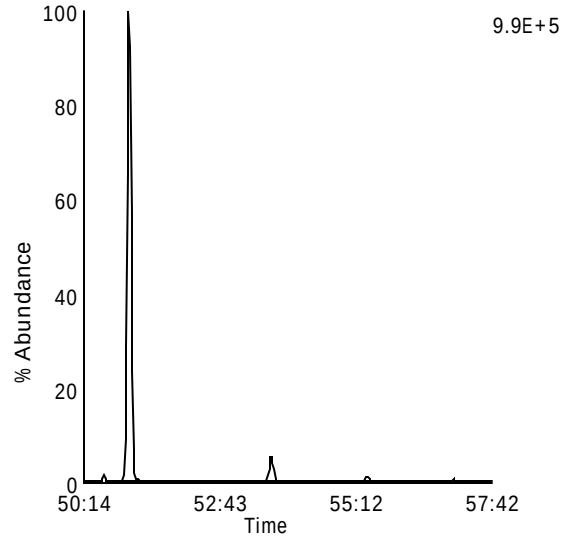
Data File: Y210818B_11 G6 C7 - 393.8025

CAL CS3-20-123-060 - CVS



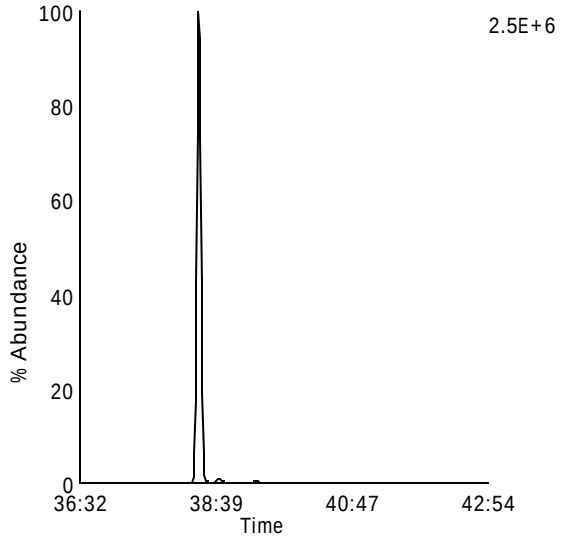
Data File: Y210818B_11 G7 C1 - 393.8025

CAL CS3-20-123-060 - CVS



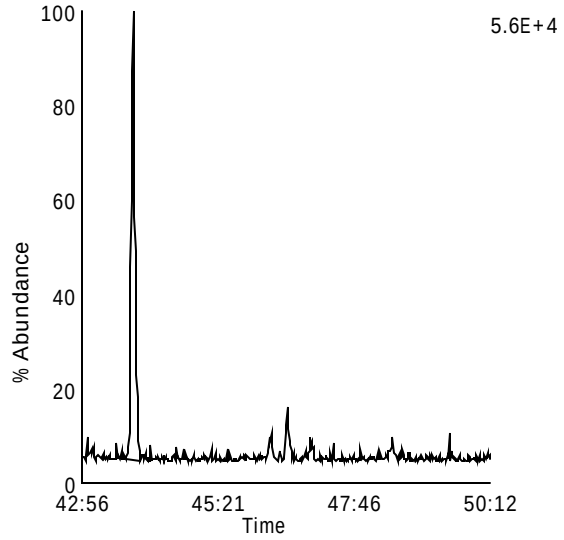
Data File: Y210818B_11 G5 C12 - 395.7995

CAL CS3-20-123-060 - CVS



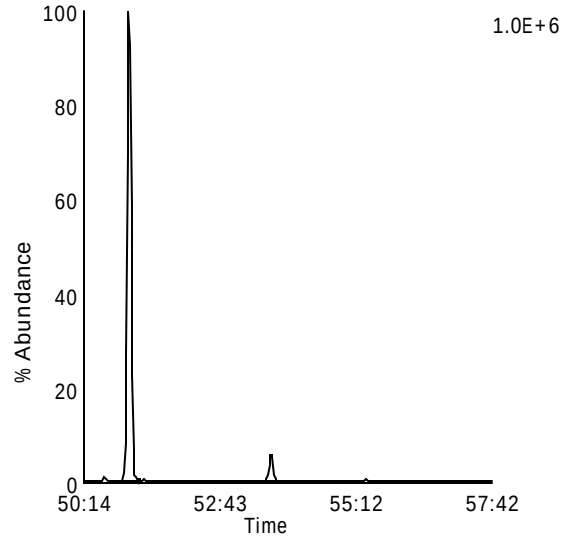
Data File: Y210818B_11 G6 C8 - 395.7995

CAL CS3-20-123-060 - CVS



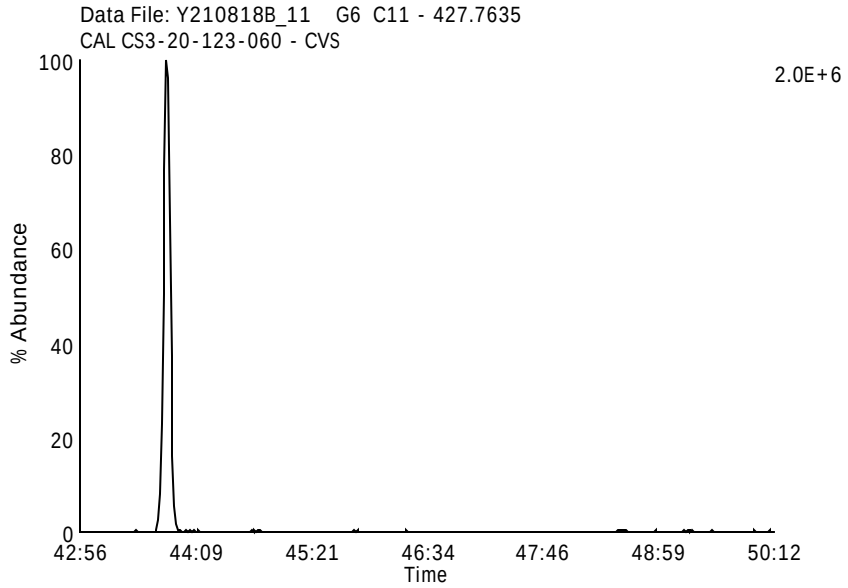
Data File: Y210818B_11 G7 C2 - 395.7995

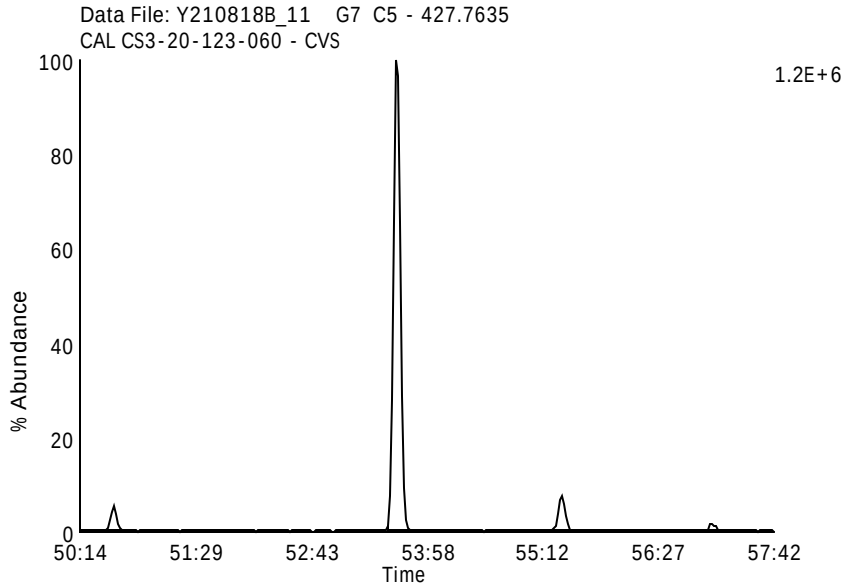
CAL CS3-20-123-060 - CVS

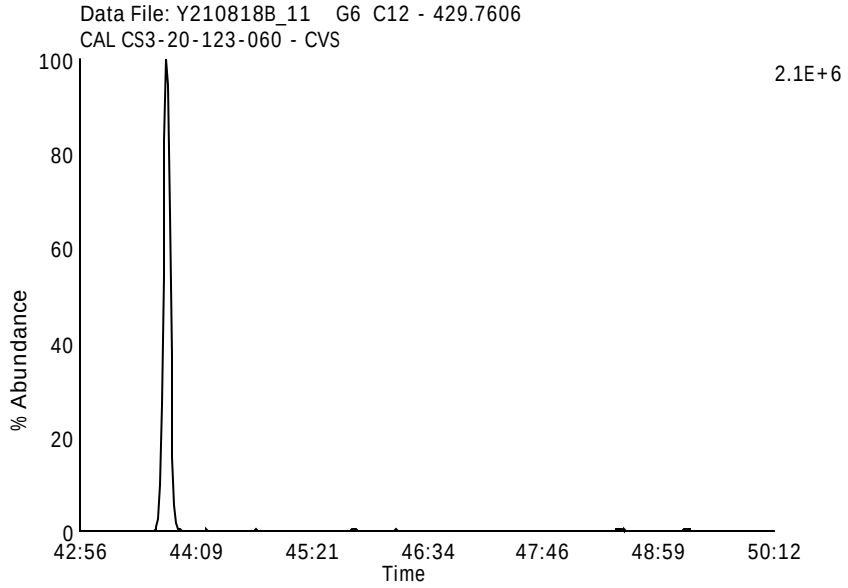


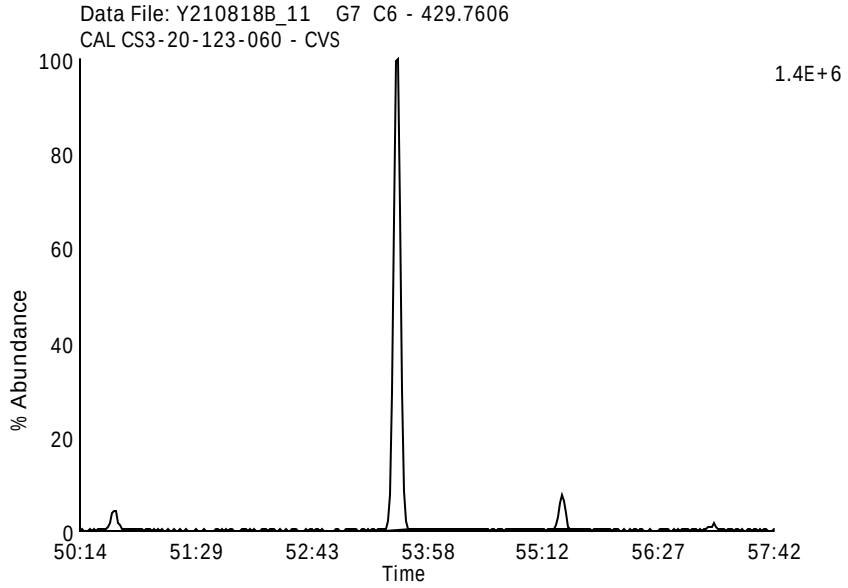
Octa Chlorinated Biphenyls

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







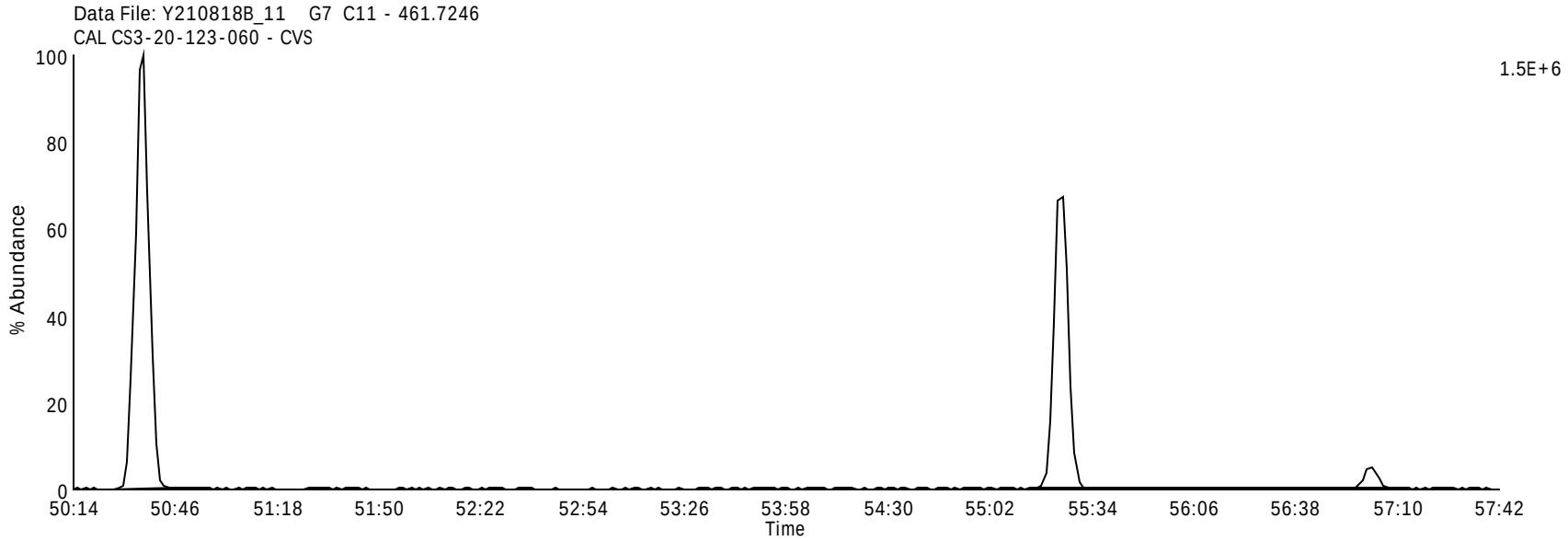


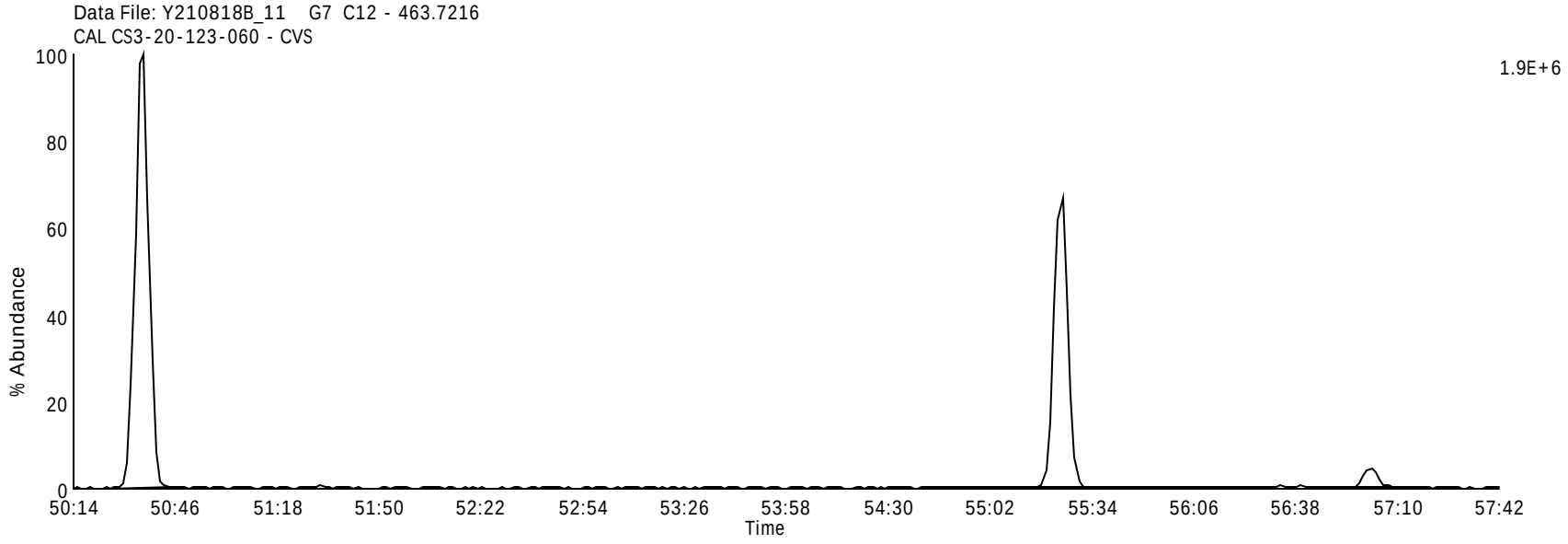
Nona Chlorinated Biphenyls

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



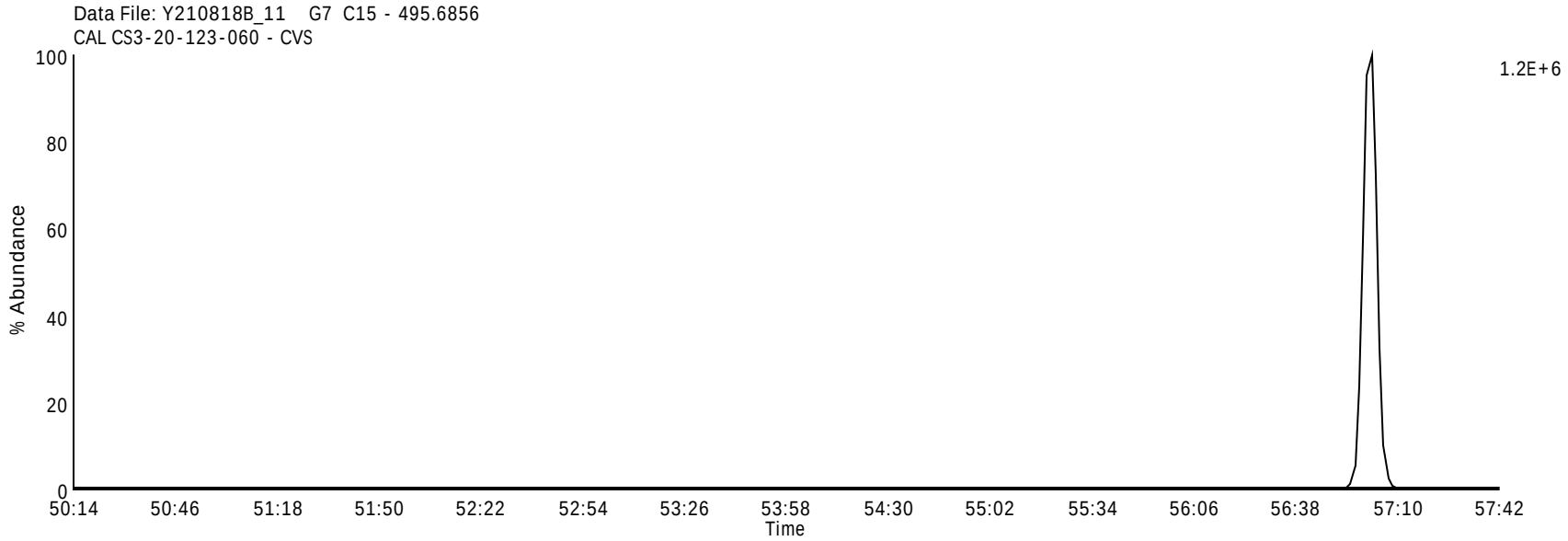


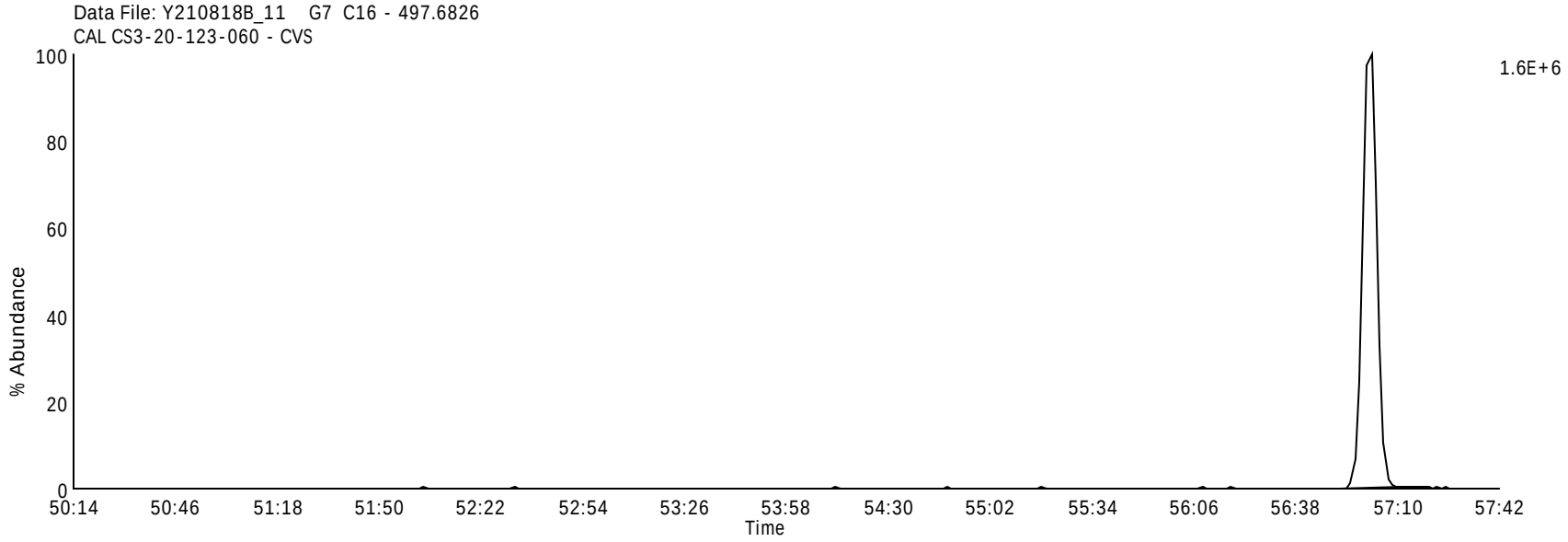
Deca Chlorinated Biphenyl

Data File Name: Y210818B_11 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

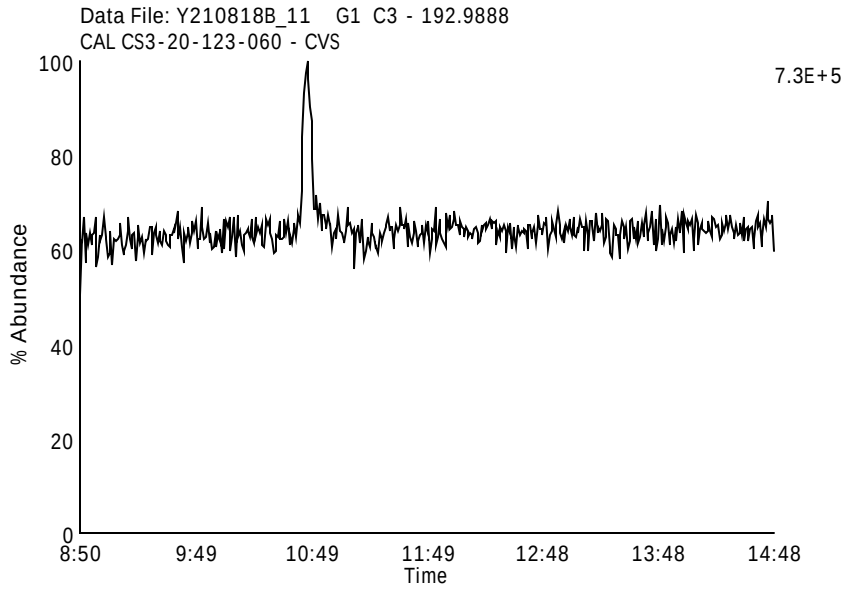
Sample Description: CAL CS3-20-123-060 - CVS

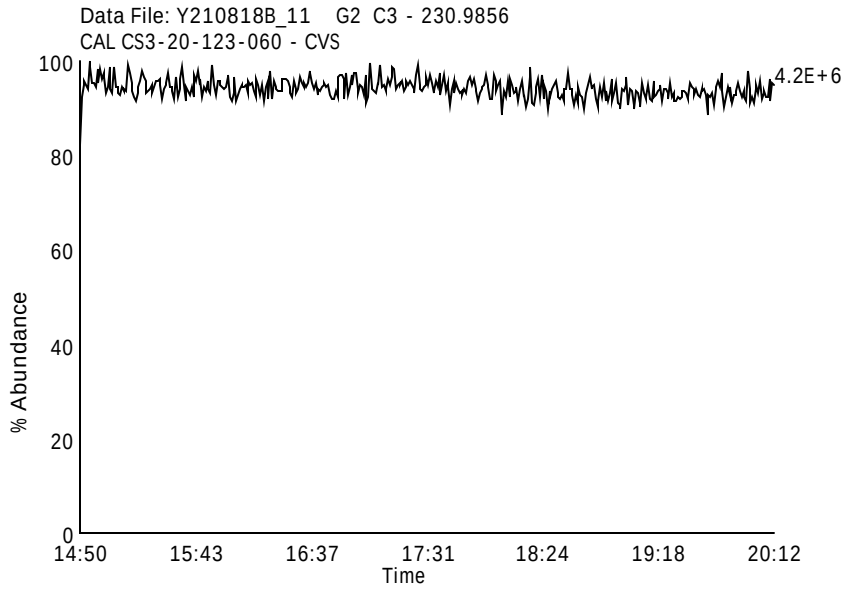


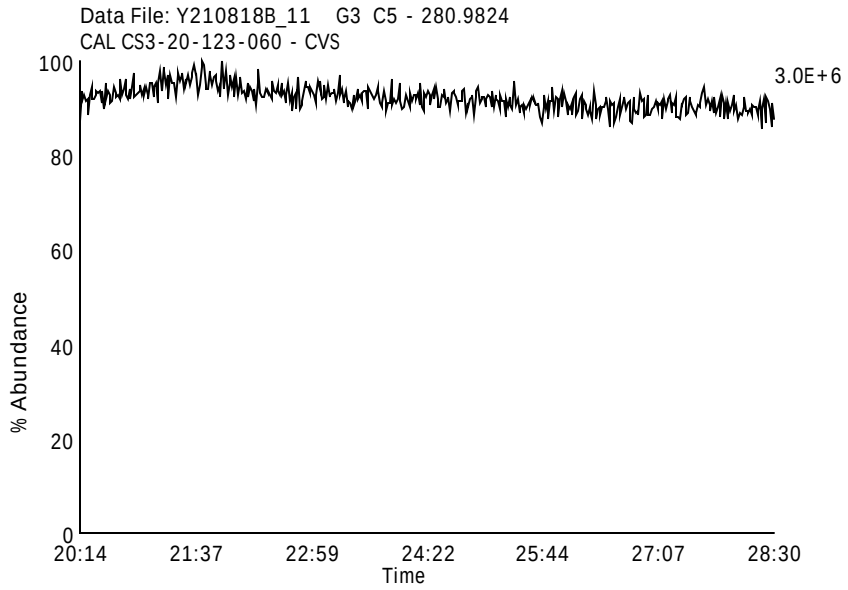


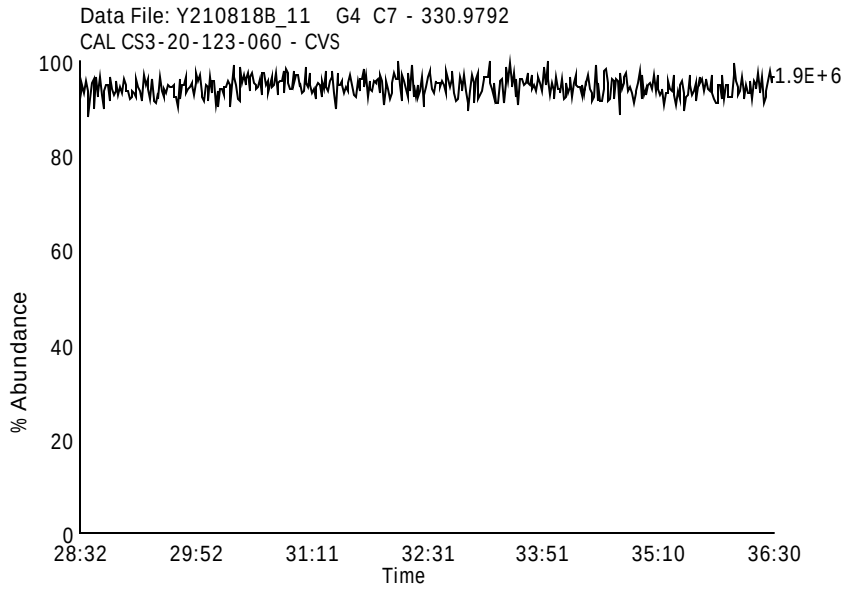
Group 1 - 4 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



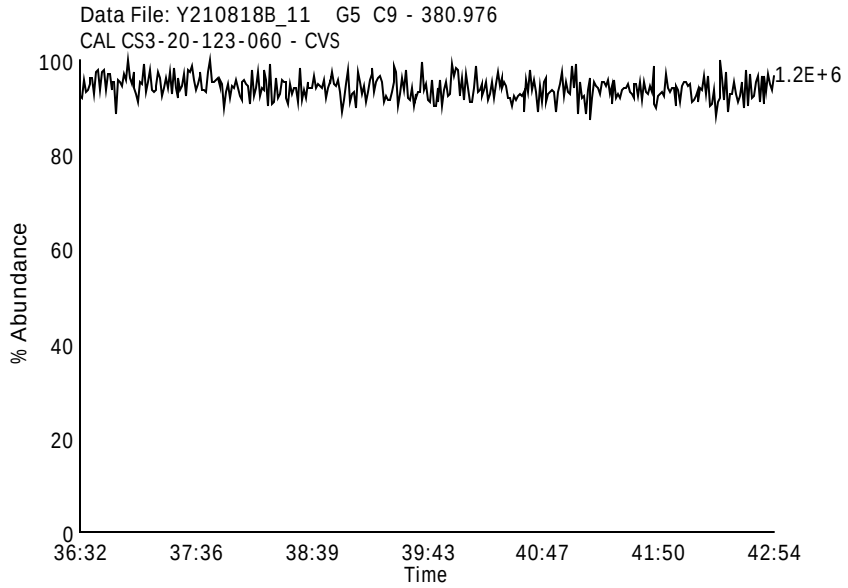


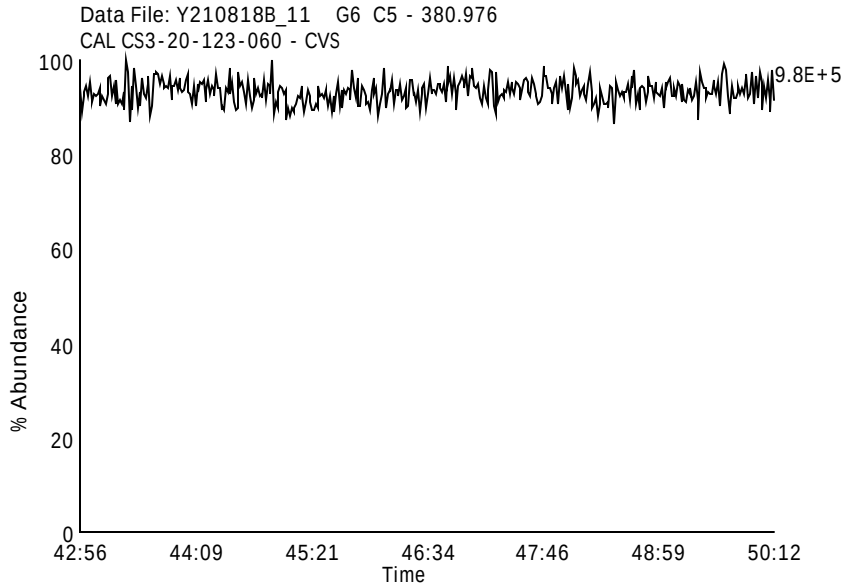


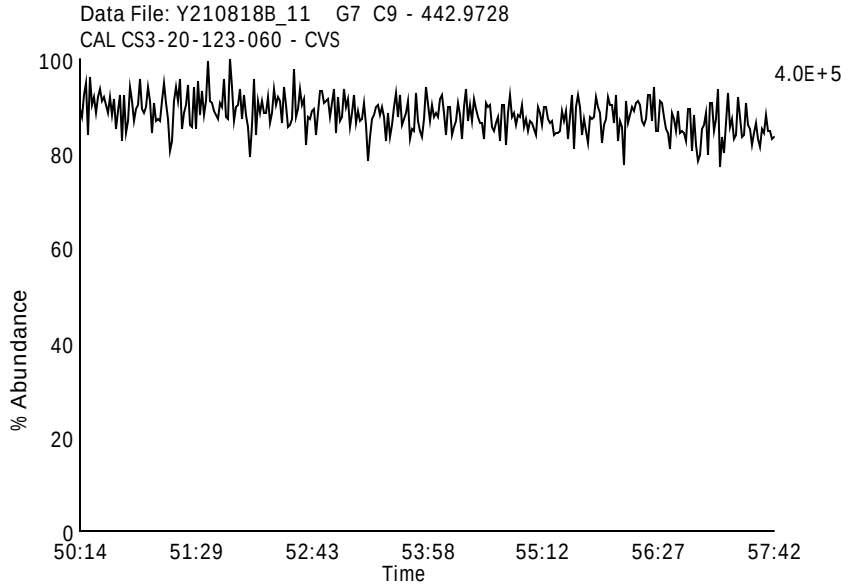


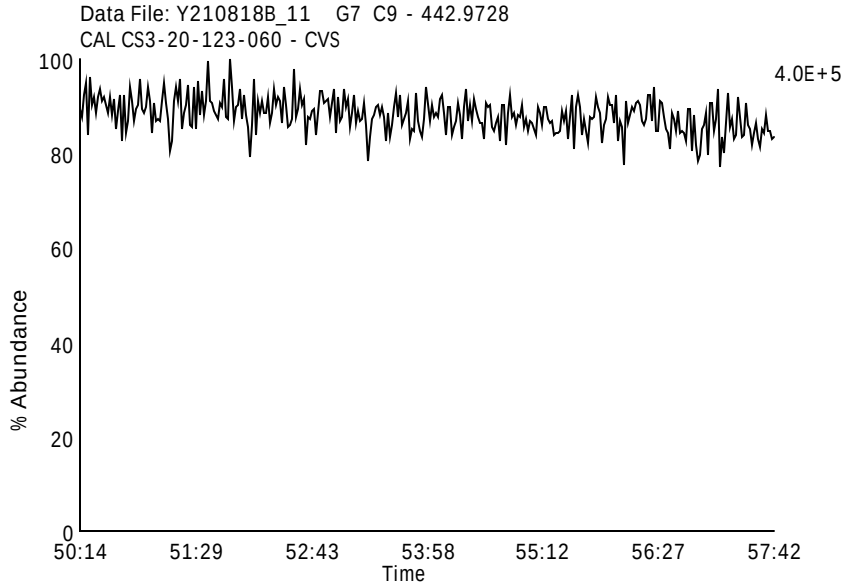
Group 5 - 7 Lock mass

Data File Name: Y210818B_11
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







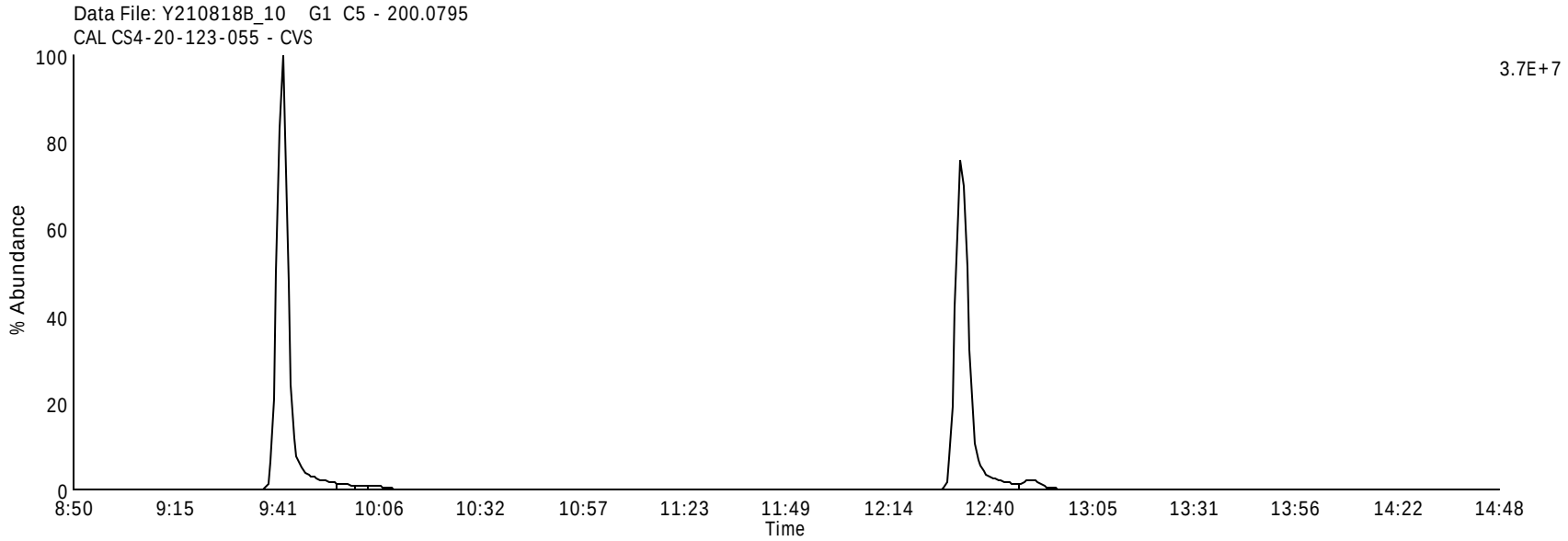


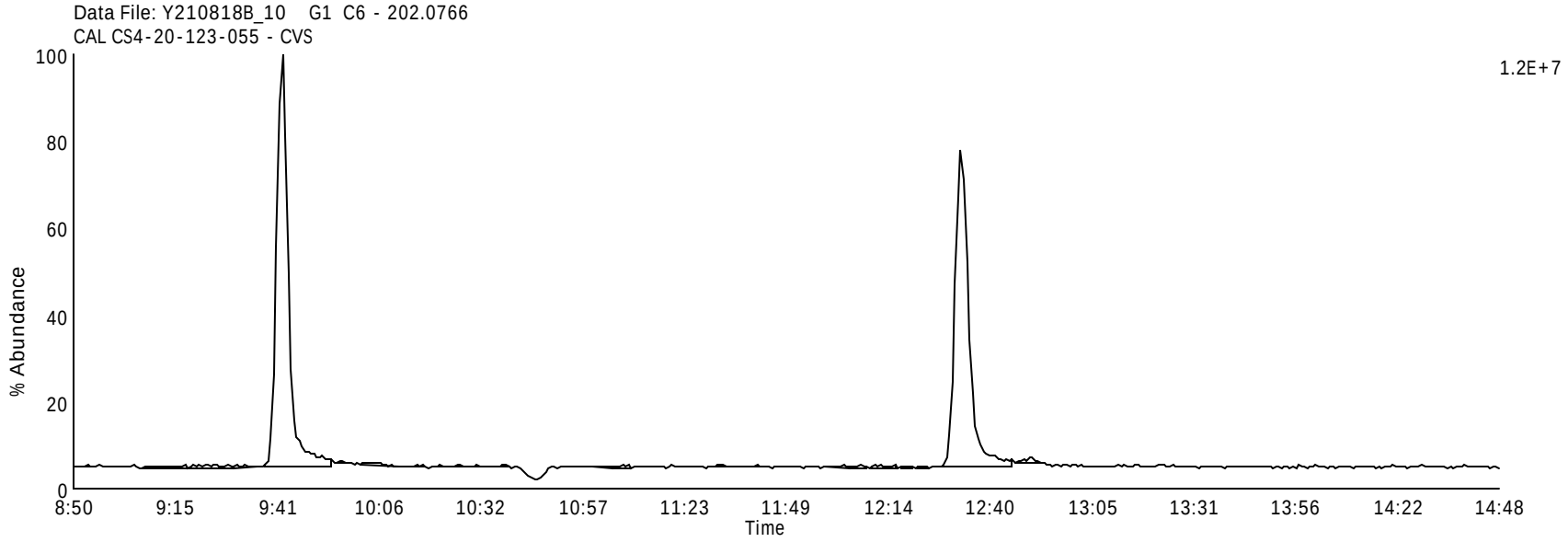
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

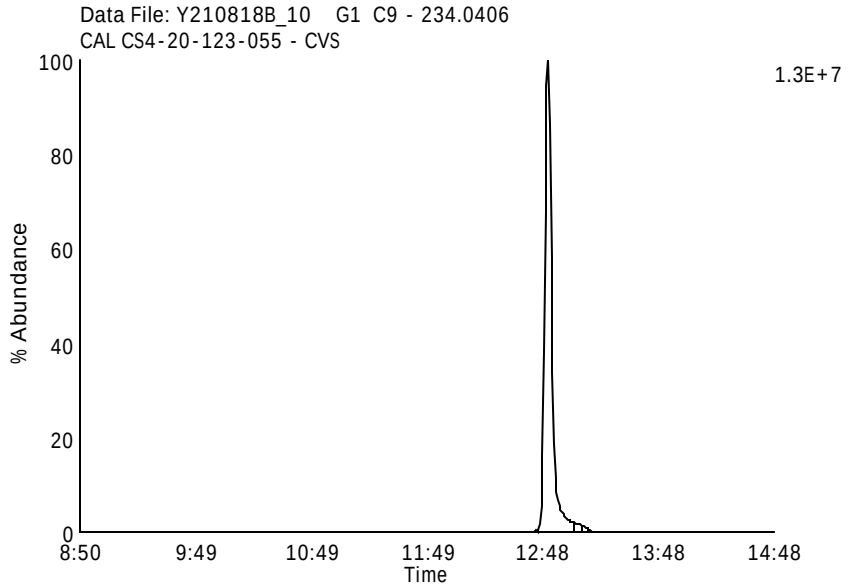
Sample Description: CAL CS4-20-123-055 - CVS

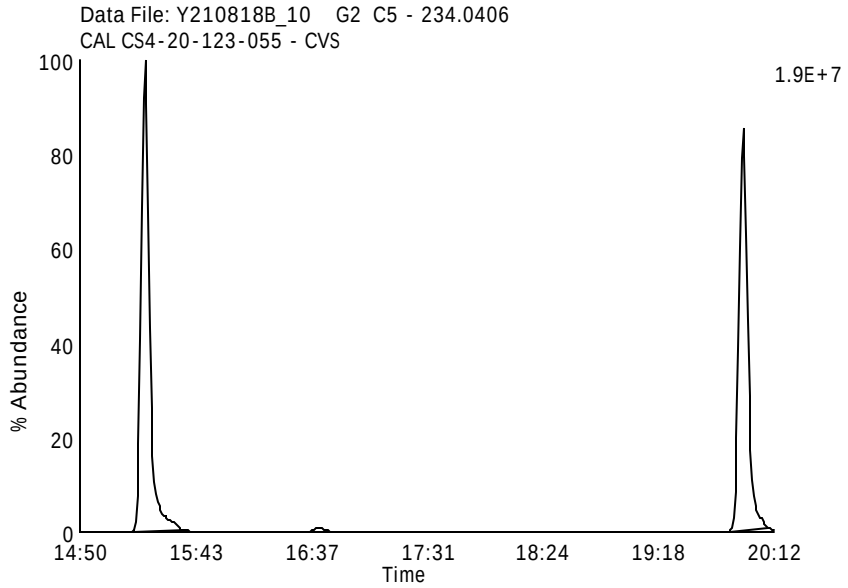


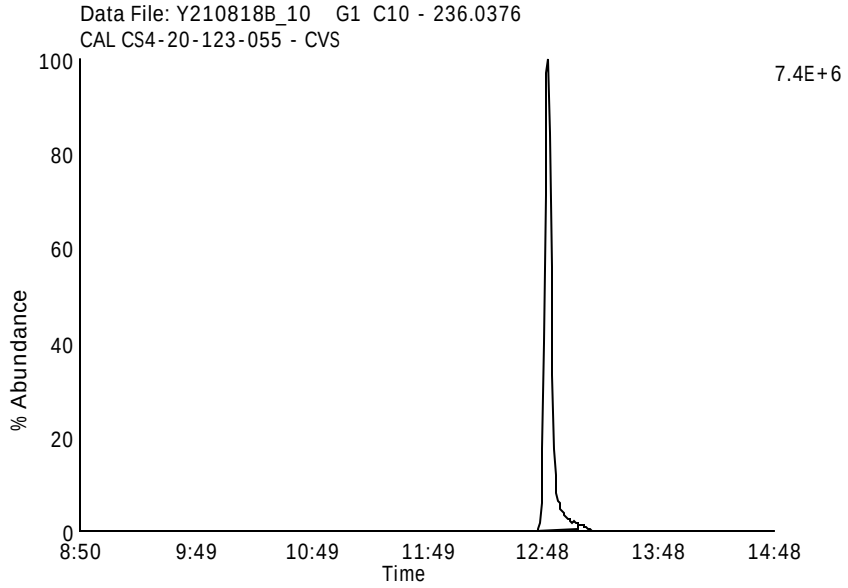


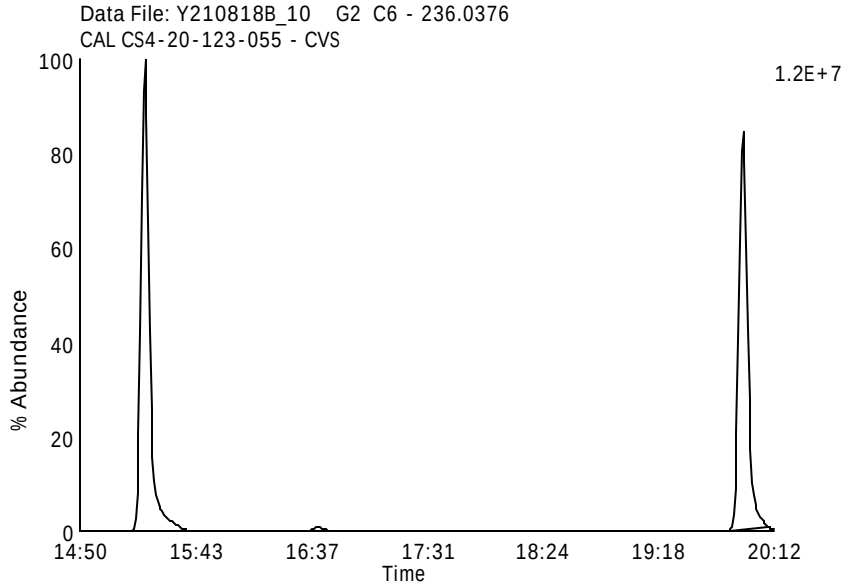
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



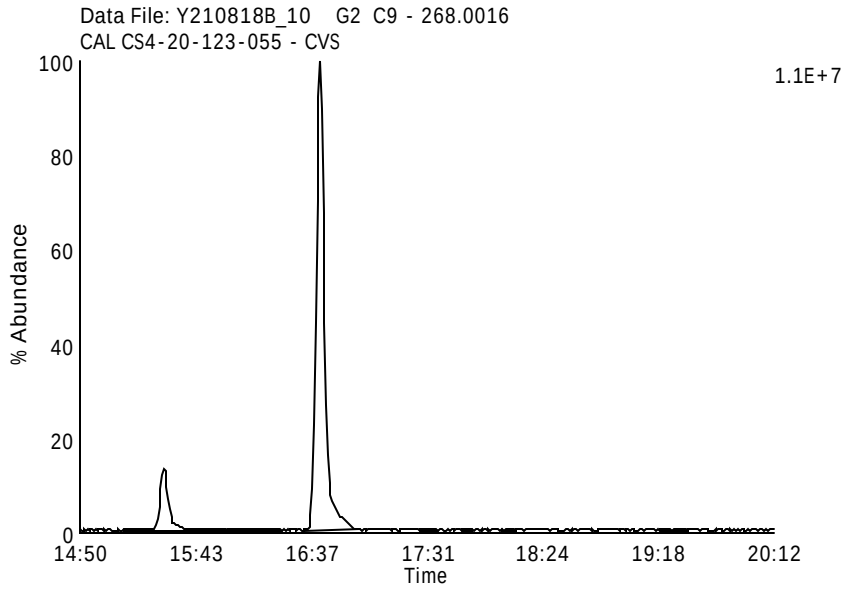


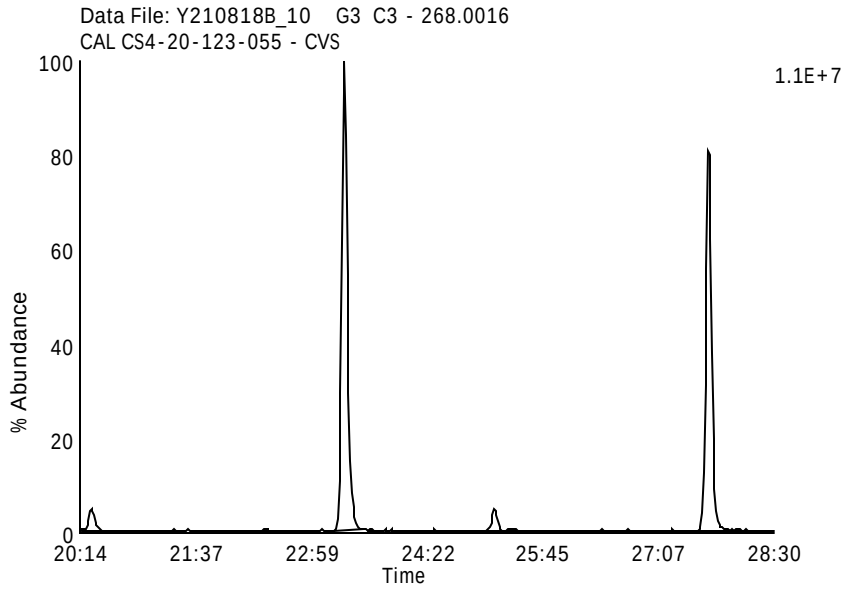


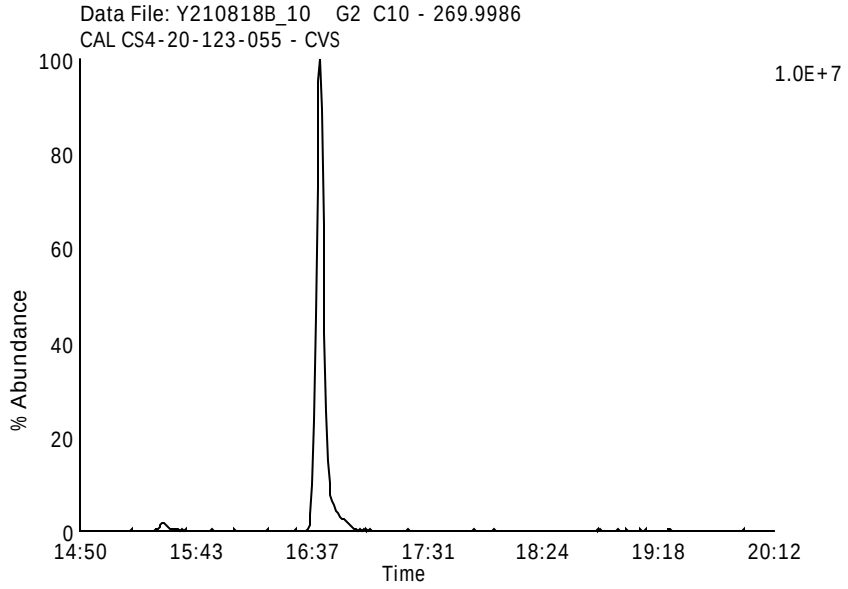


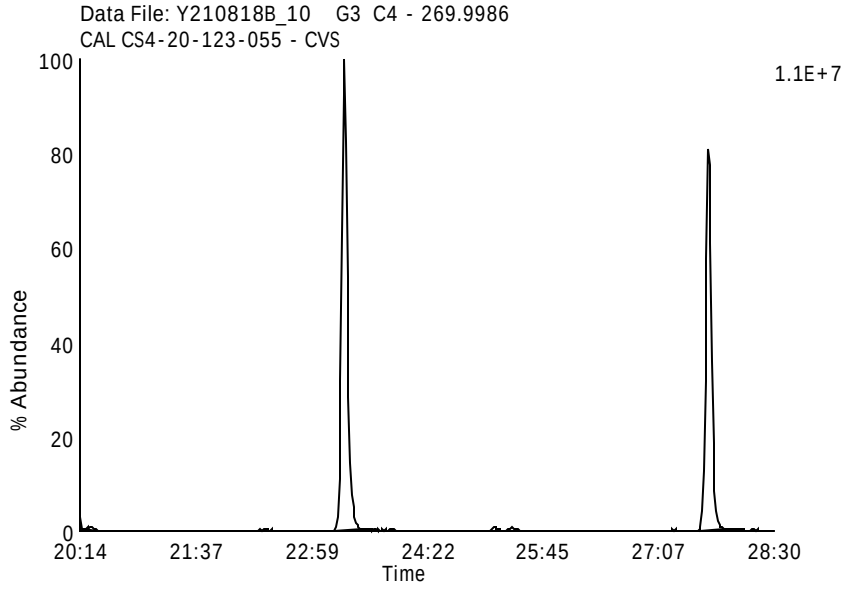
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



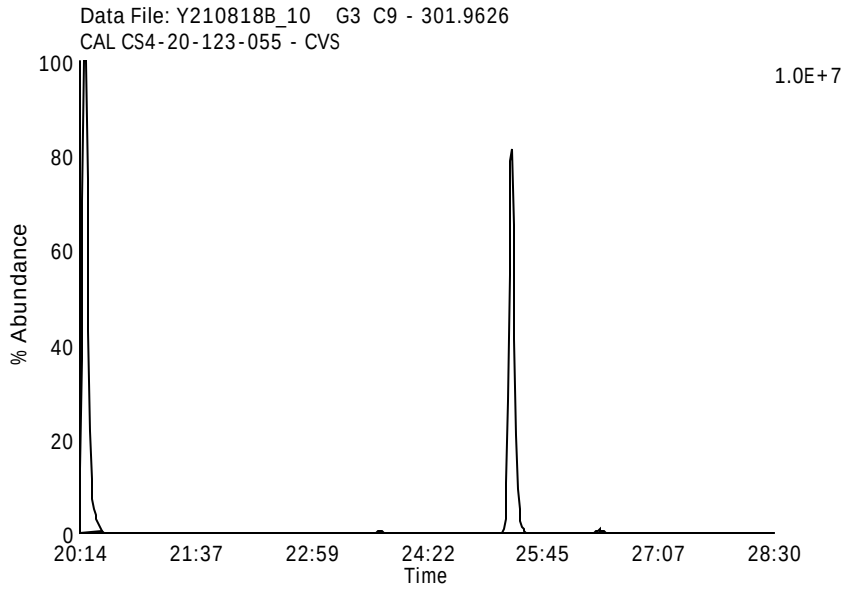


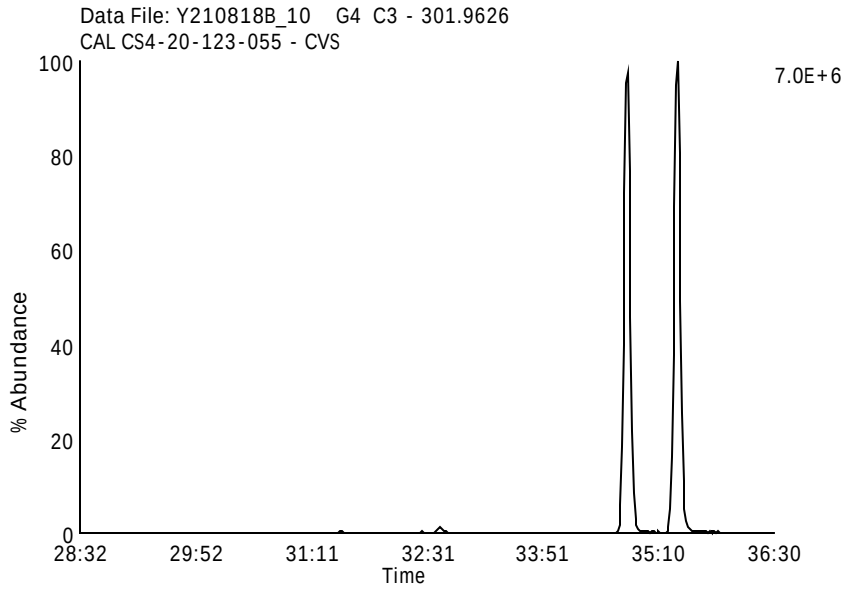


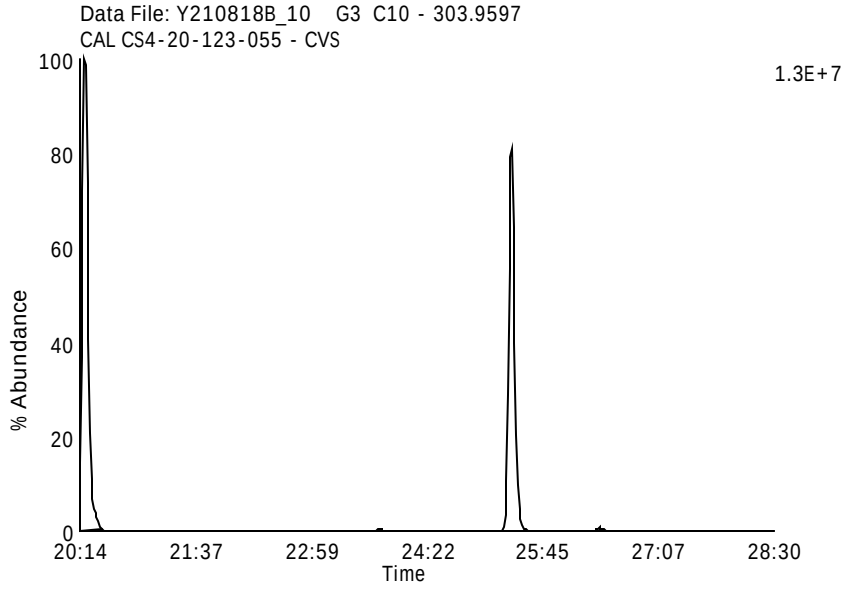


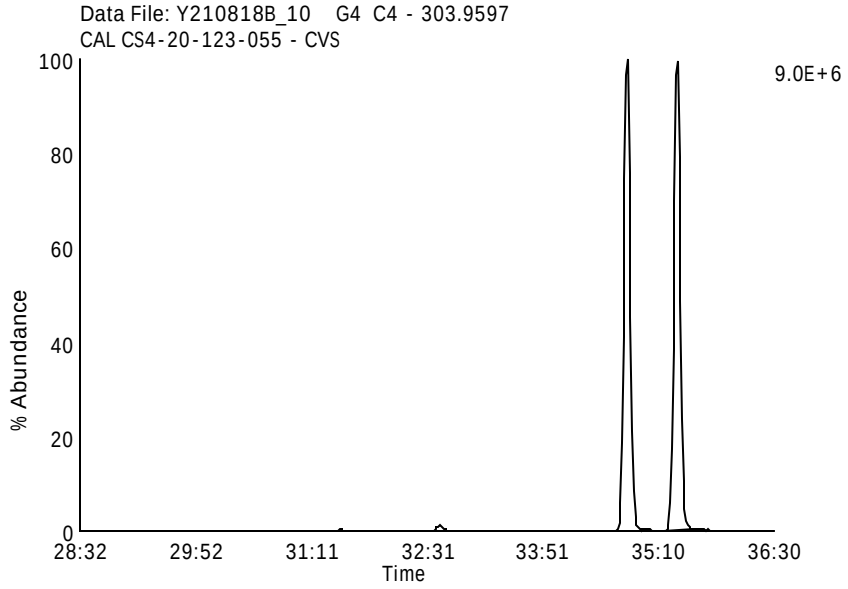
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS









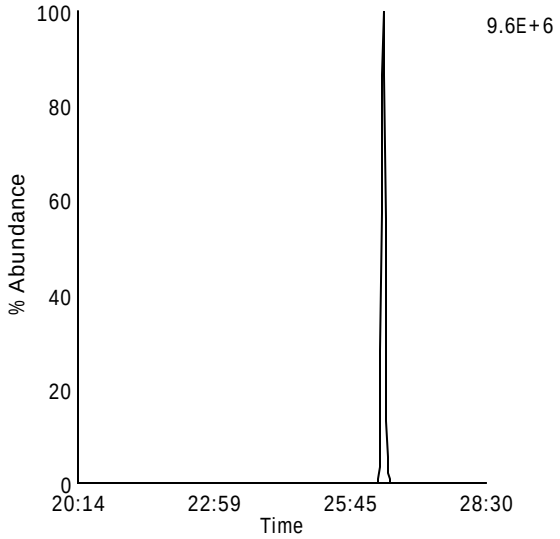
Labeled Penta Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

Data File: Y210818B_10 G3 C13 - 337.9207
CAL CS4-20-123-055 - CVS



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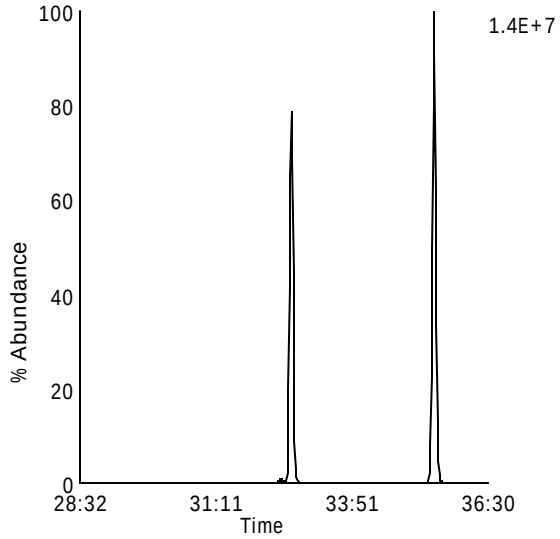
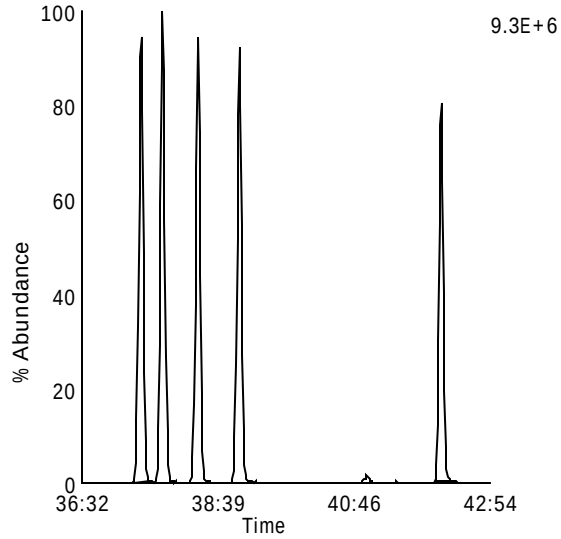
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G5 C3 - 337.9207
CAL CS4-20-123-055 - CVS



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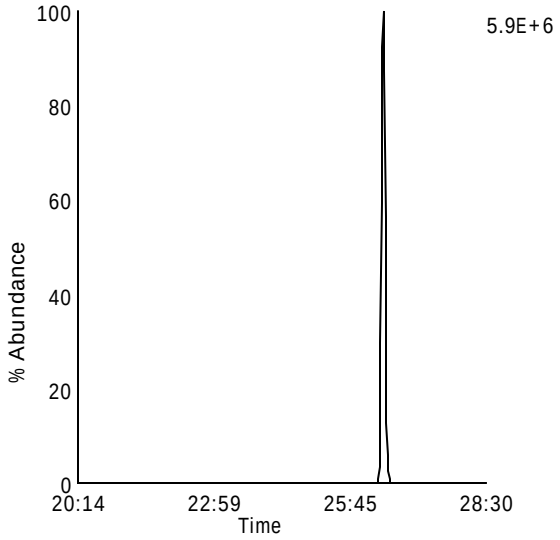
CAL CS4-20-123-055 - CVS



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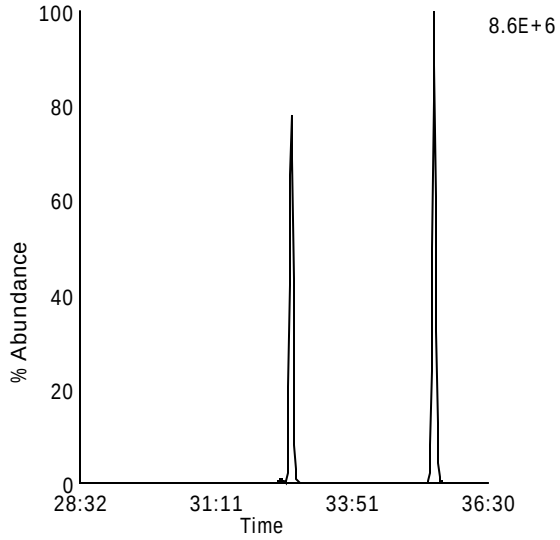
CAL CS4-20-123-055 - CVS



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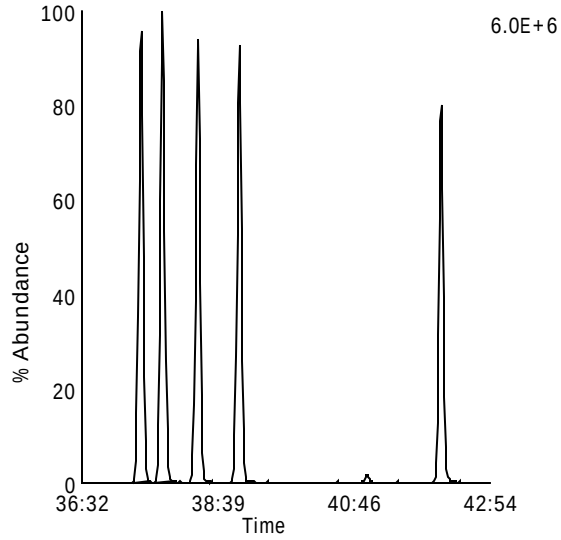
CAL CS4-20-123-055 - CVS

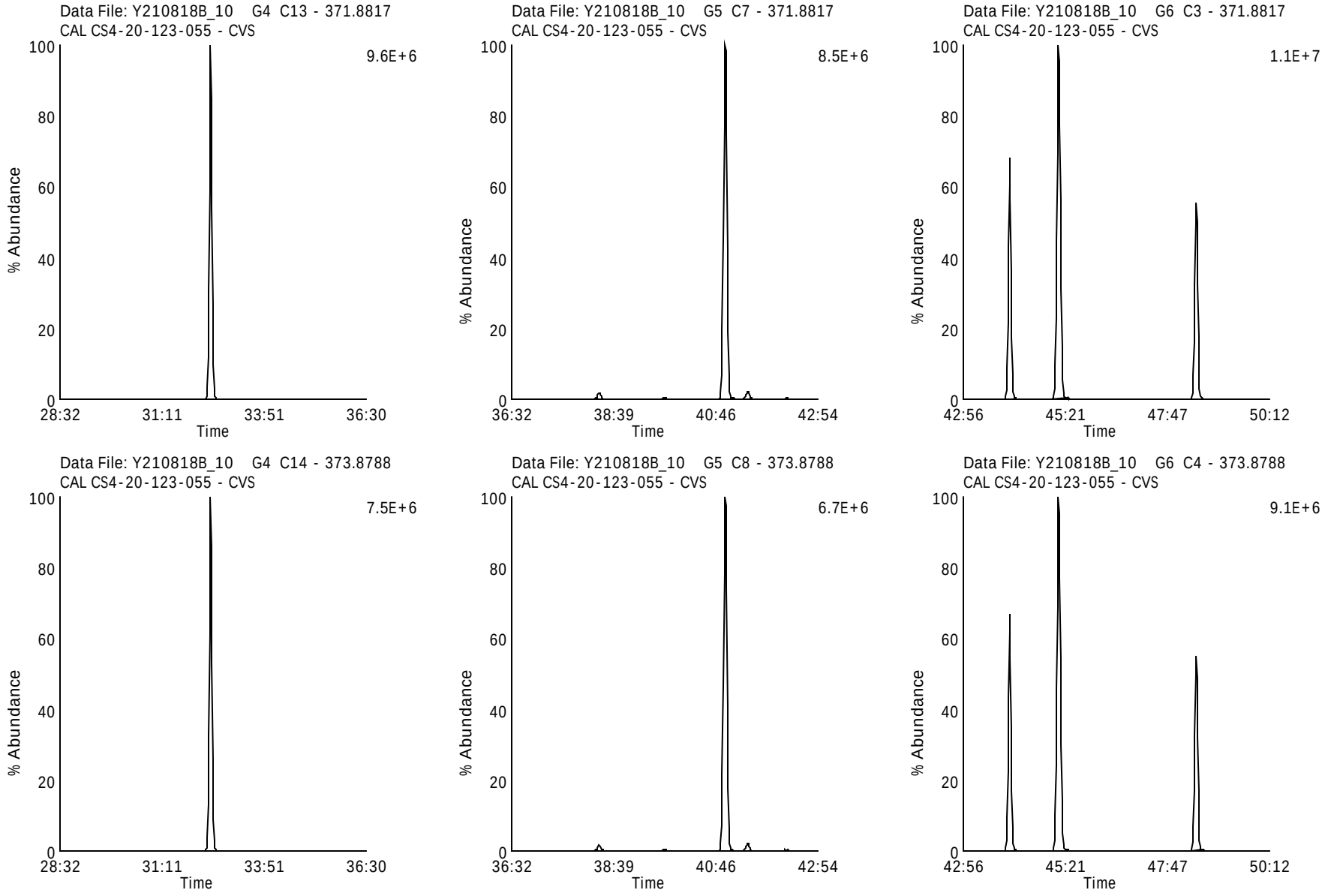


Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

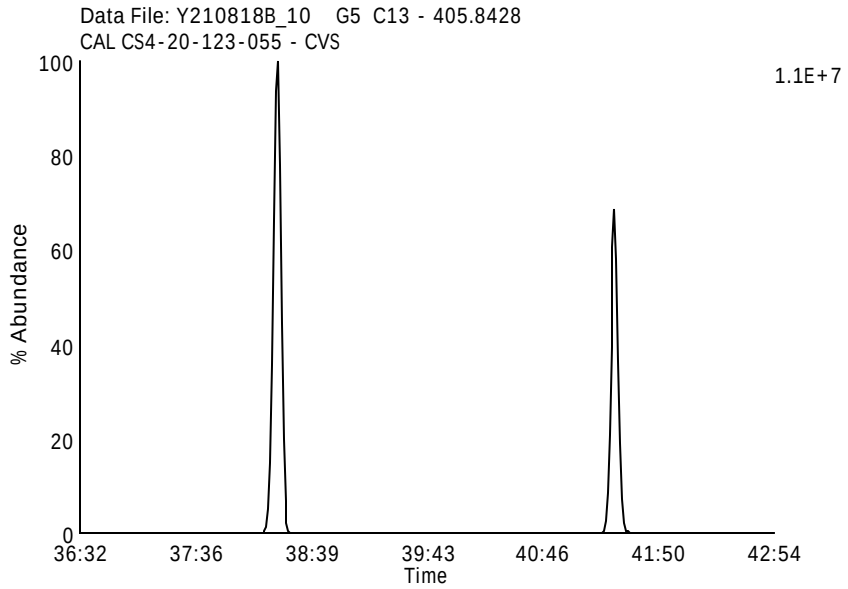


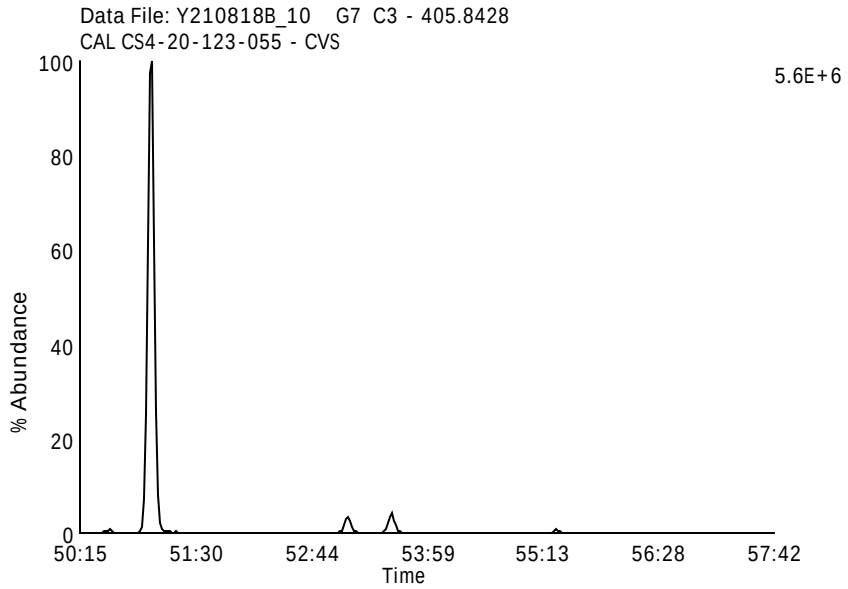
Labeled Hepta Chlorinated Biphenyls

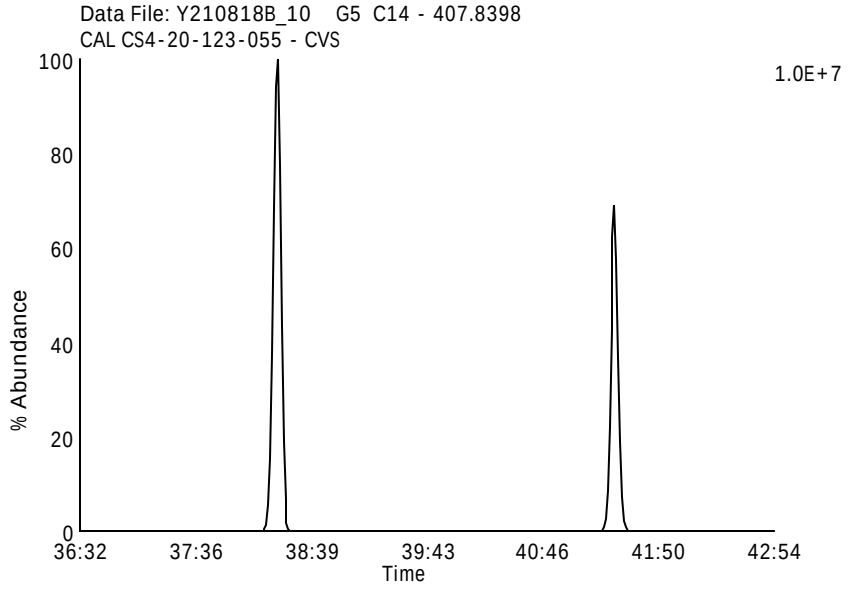
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

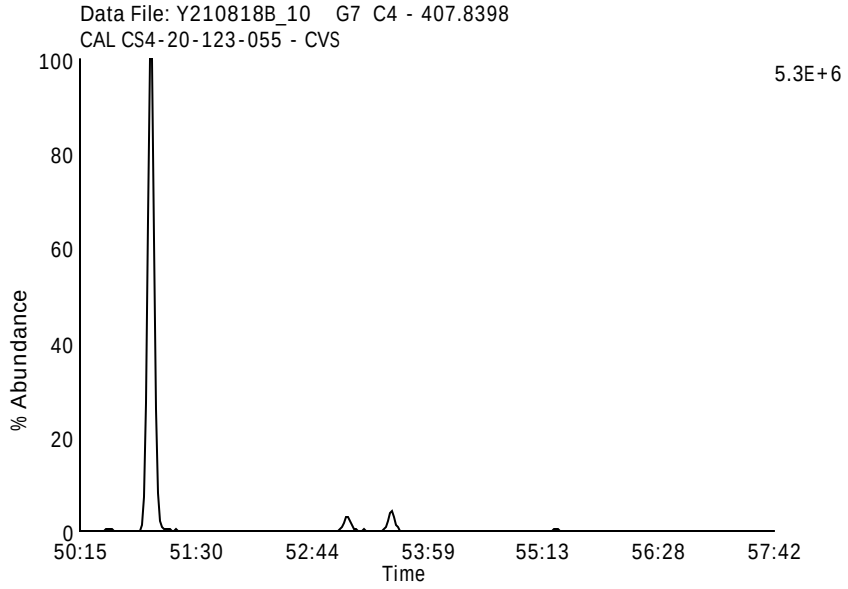
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS





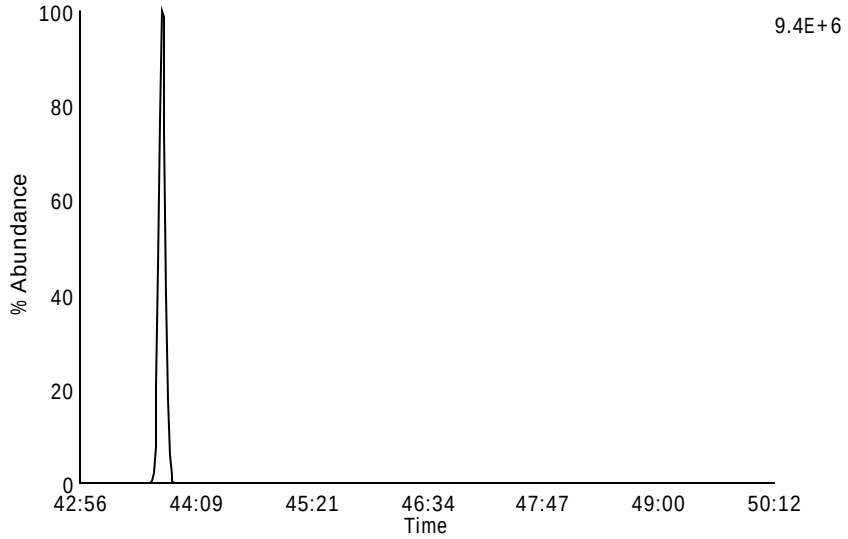




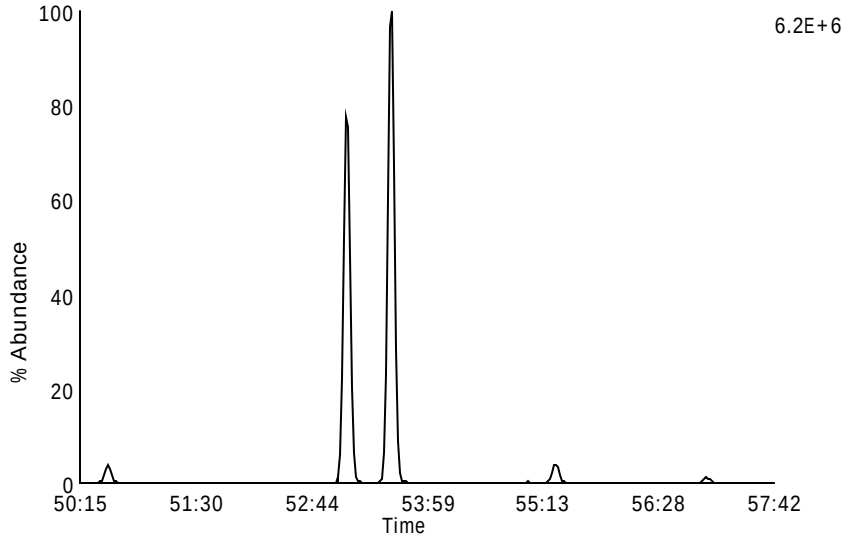
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

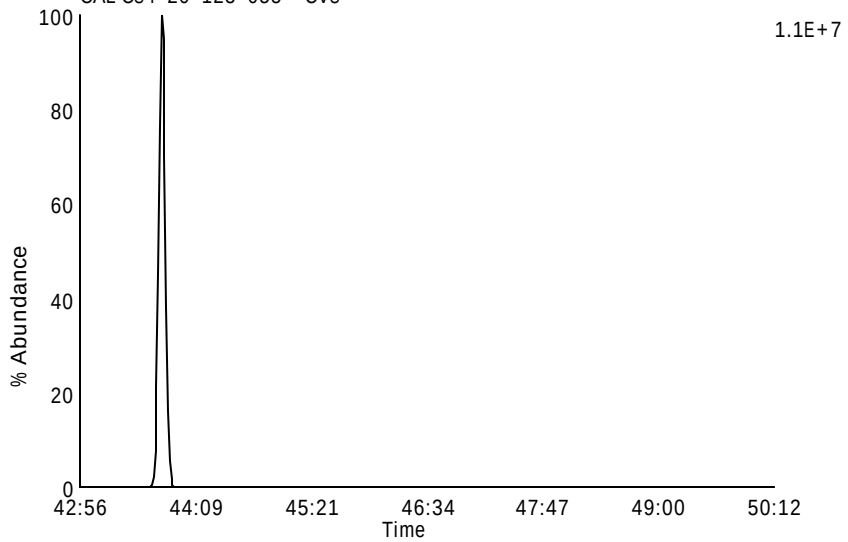
Data File: Y210818B_10 G6 C13 - 439.8038
CAL CS4-20-123-055 - CVS



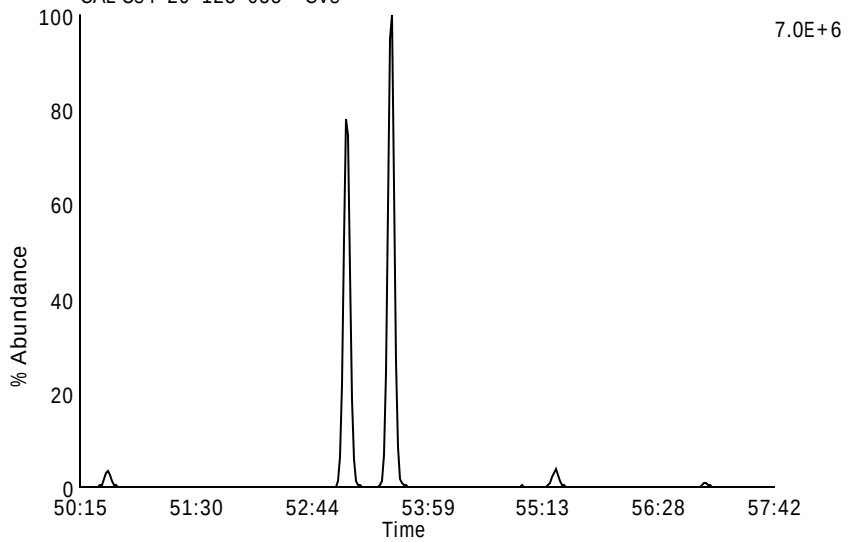
Data File: Y210818B_10 G7 C7 - 439.8038
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G6 C14 - 441.8008
CAL CS4-20-123-055 - CVS



Data File: Y210818B_10 G7 C8 - 441.8008
CAL CS4-20-123-055 - CVS

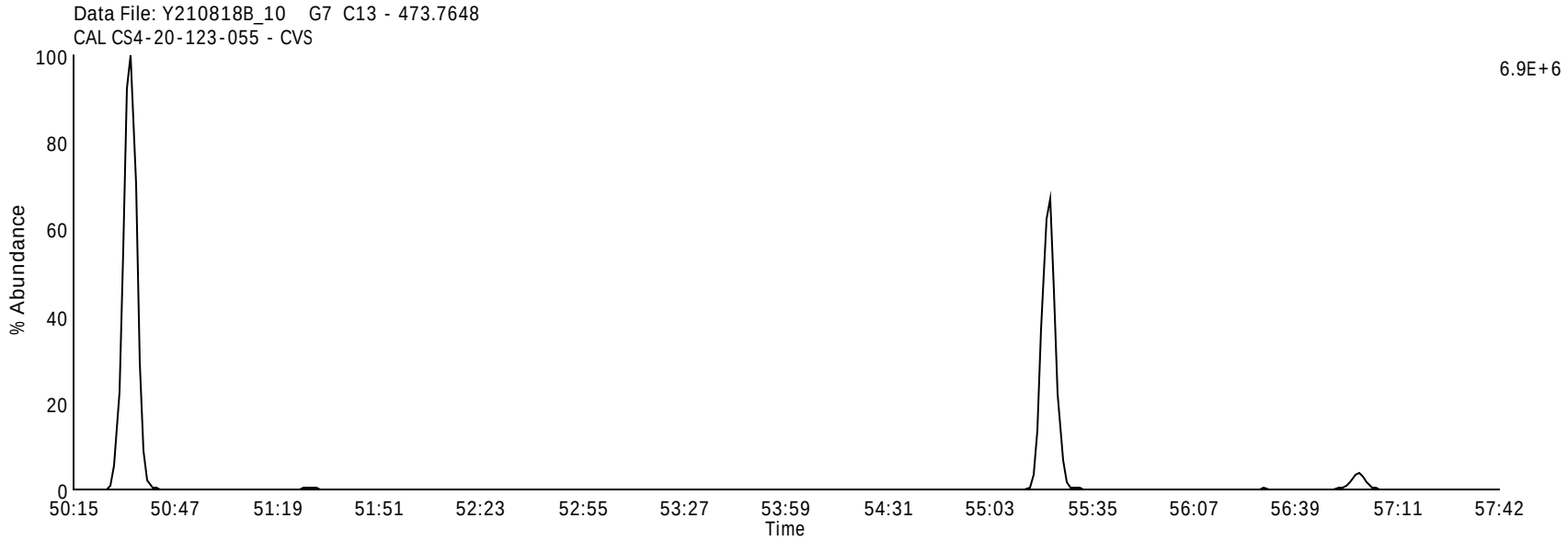


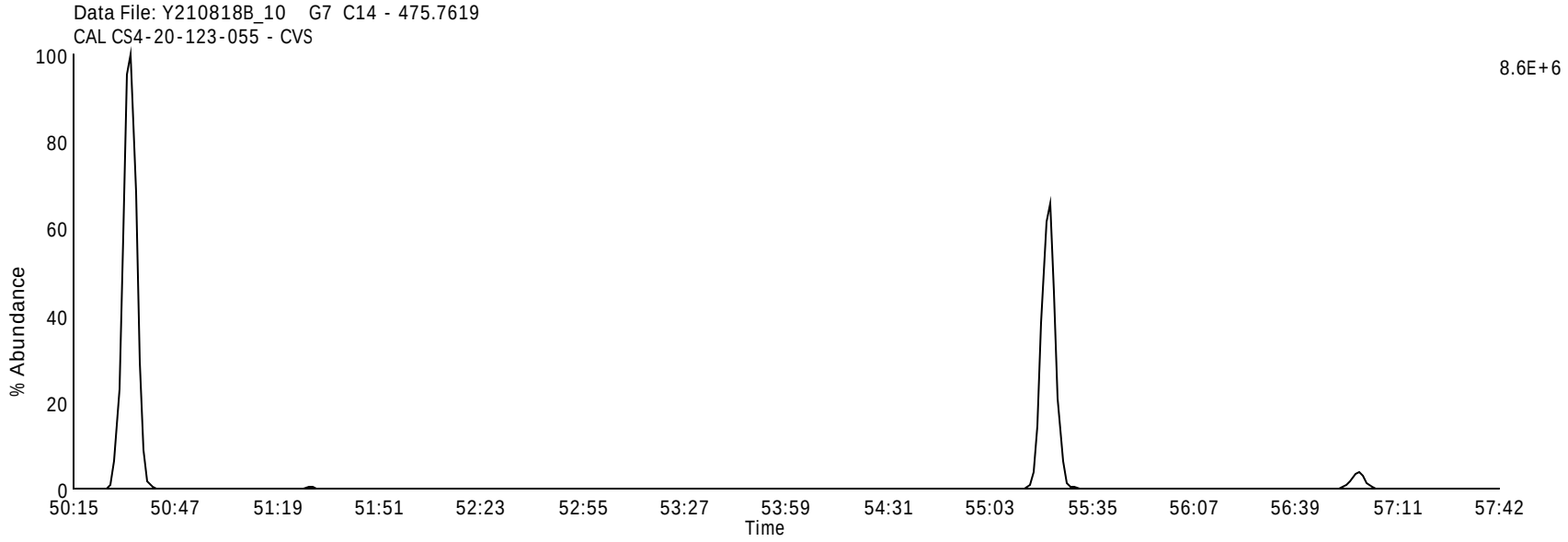
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



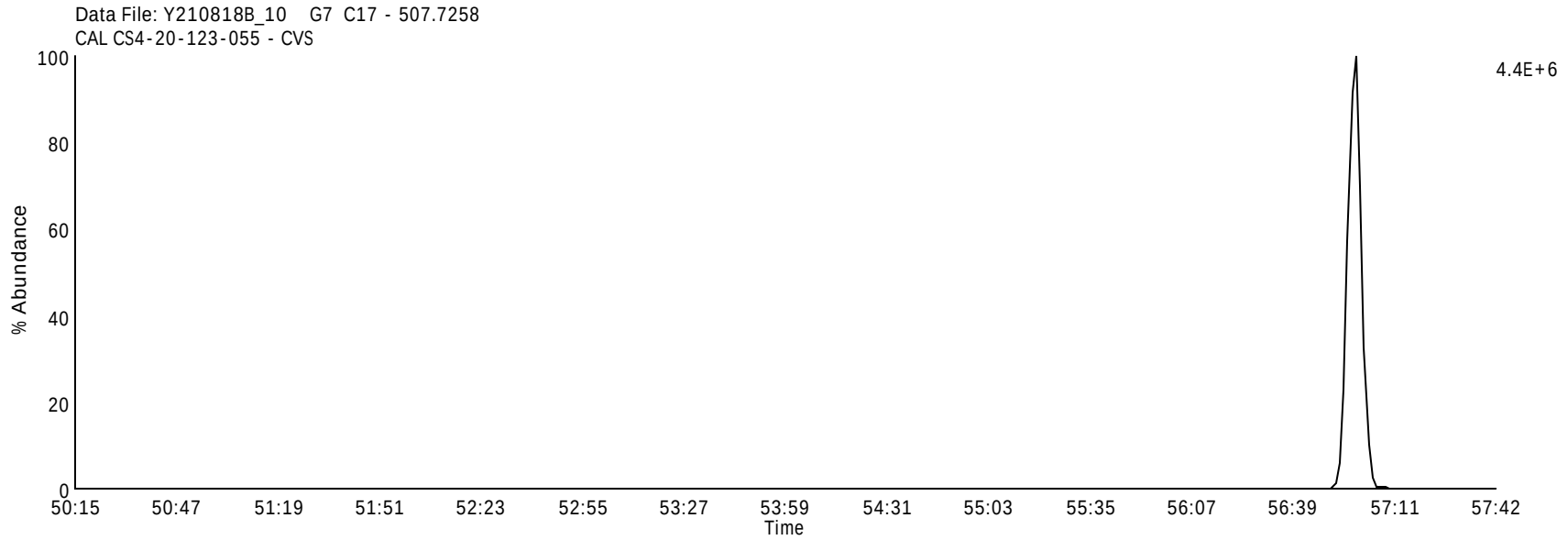


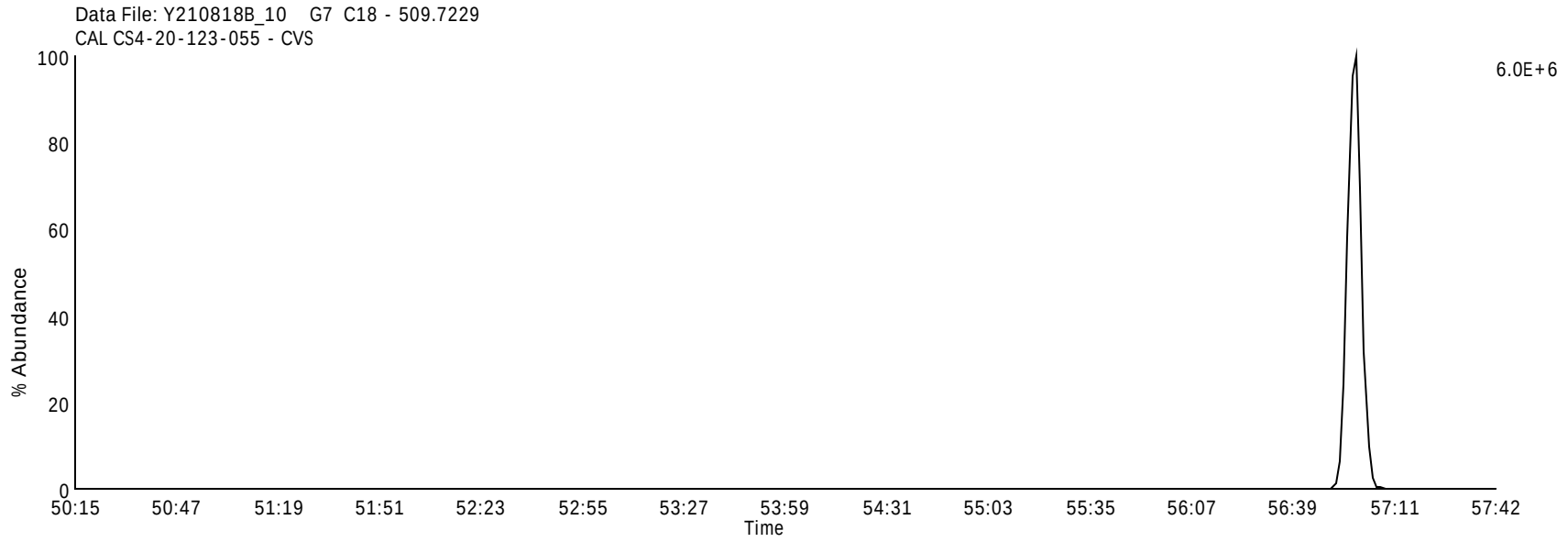
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS



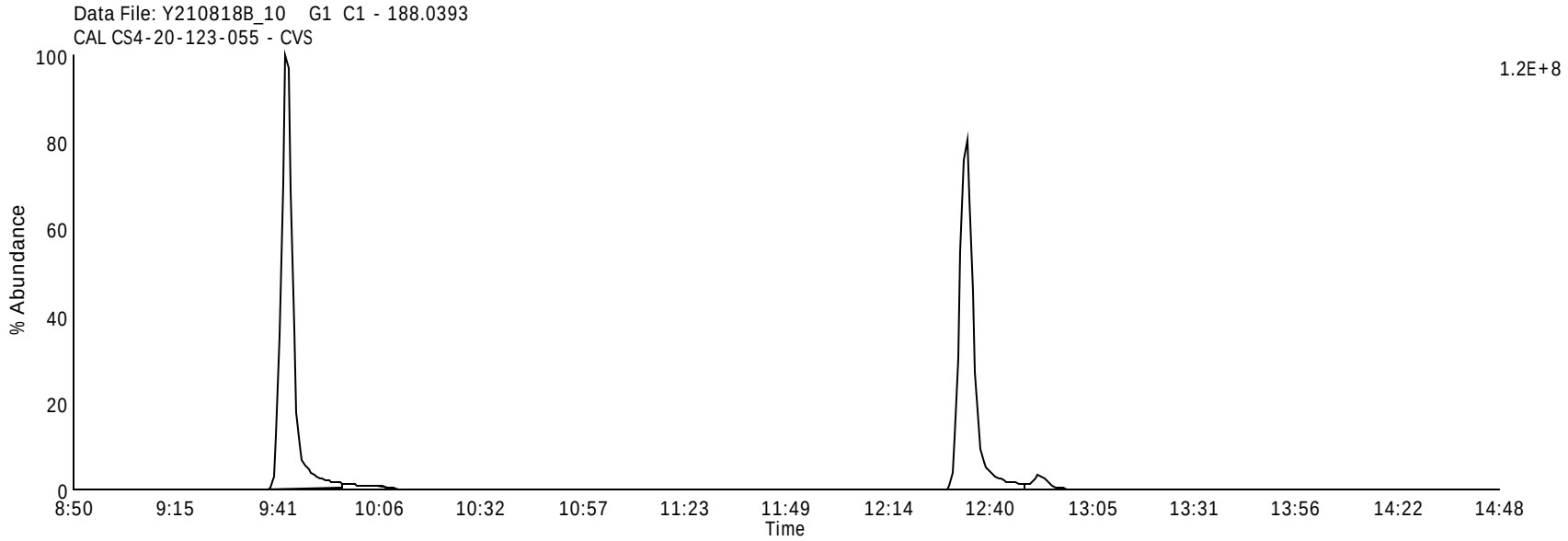


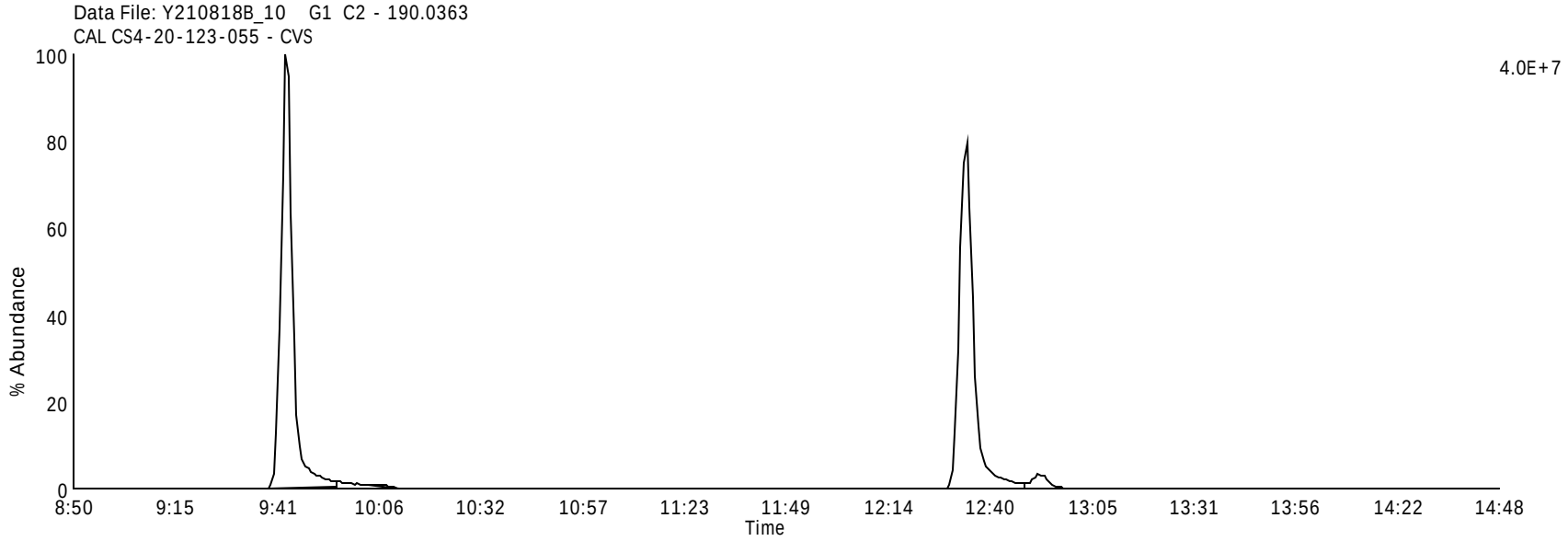
Mono Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

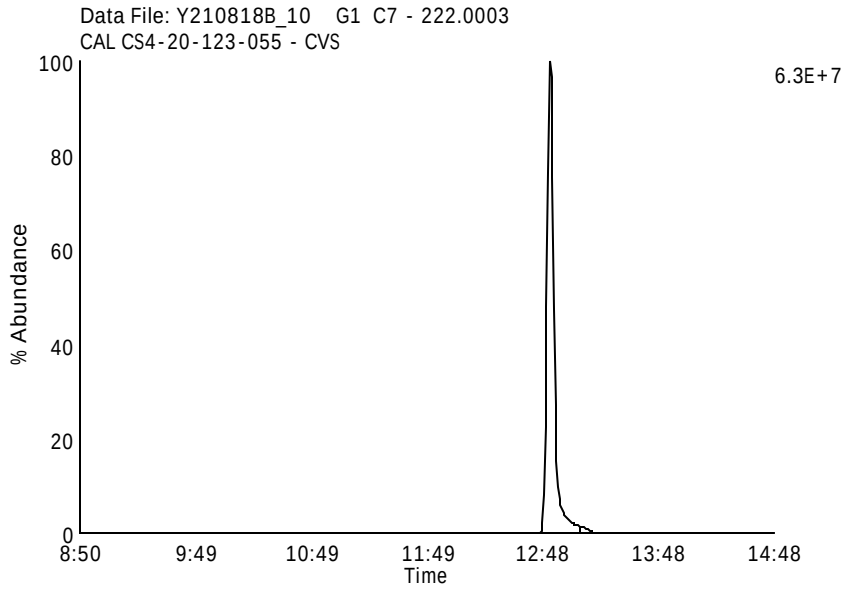
Sample Description: CAL CS4-20-123-055 - CVS

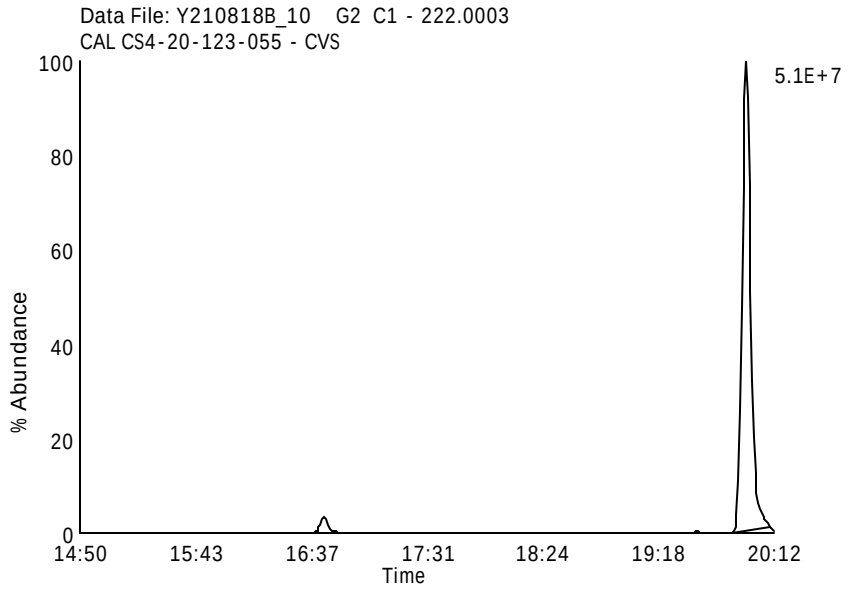


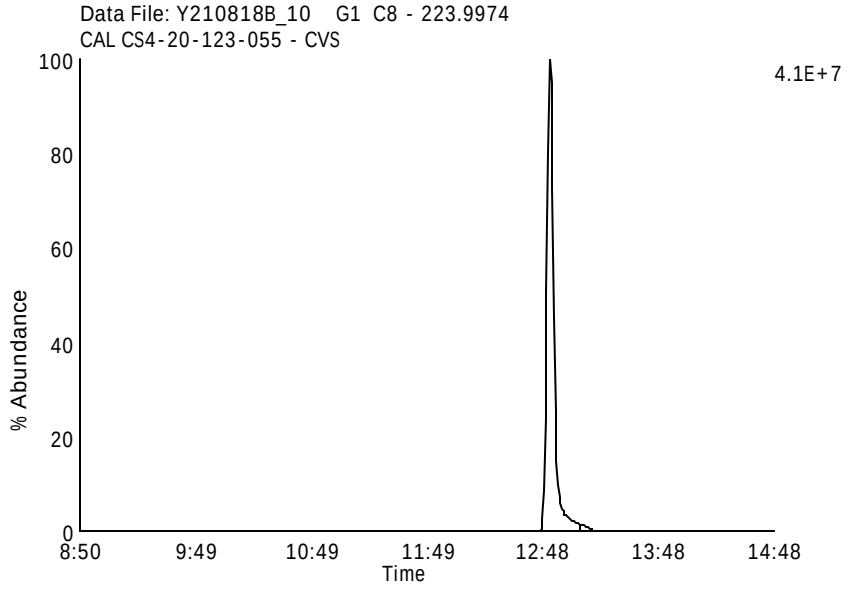


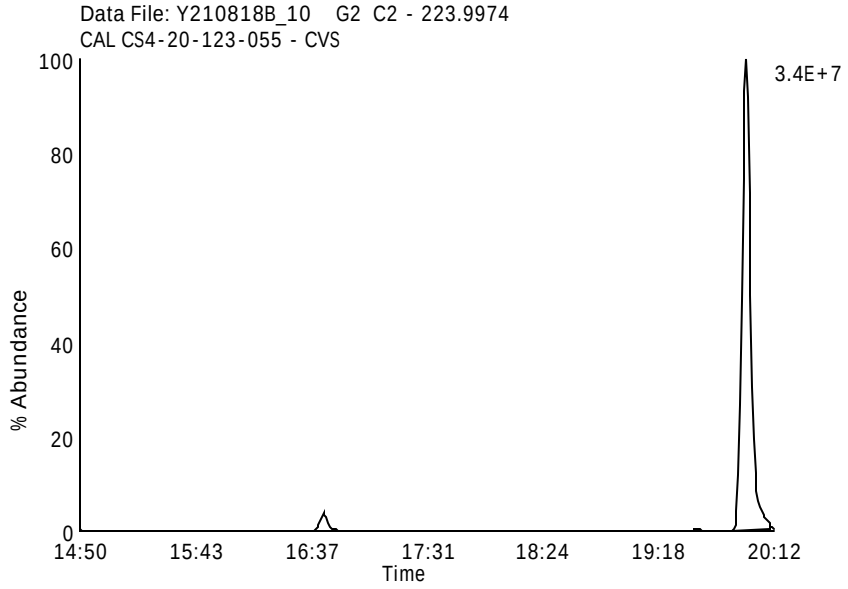
Di Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



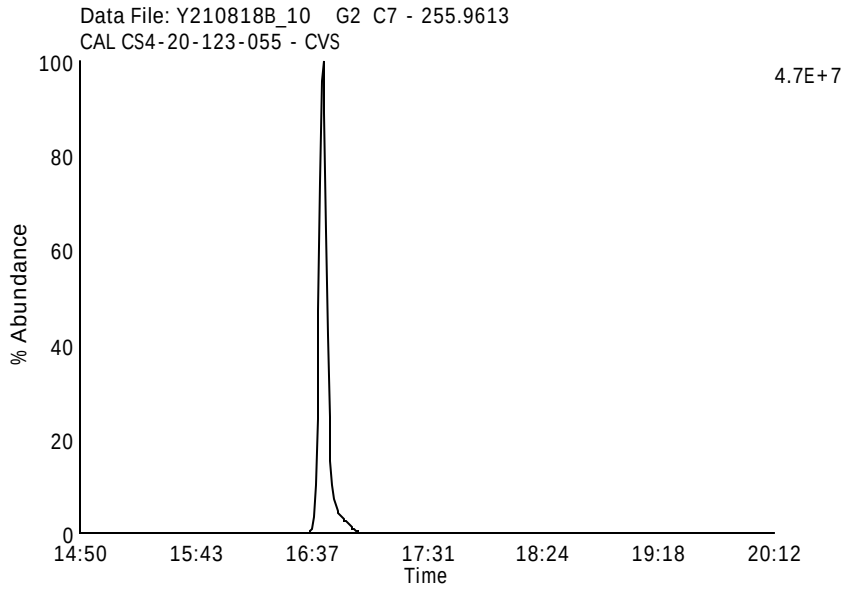


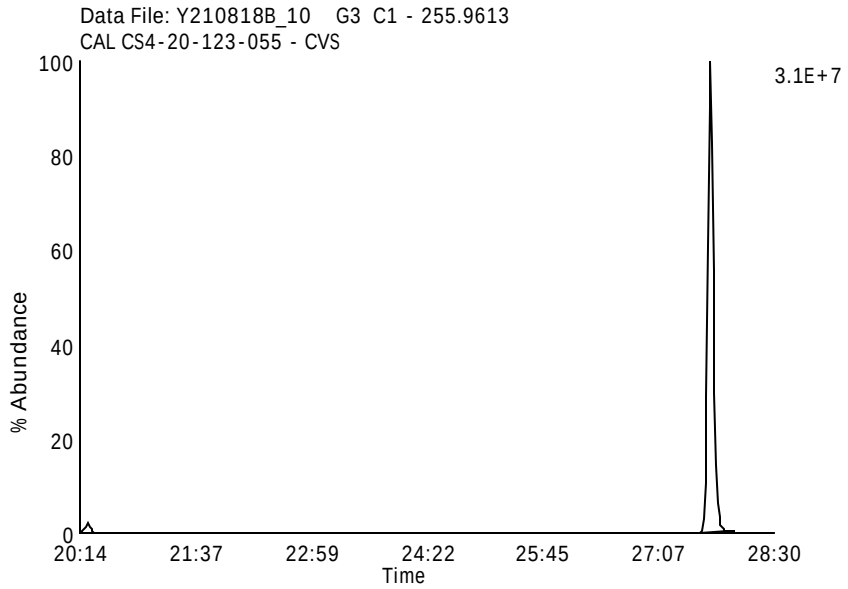


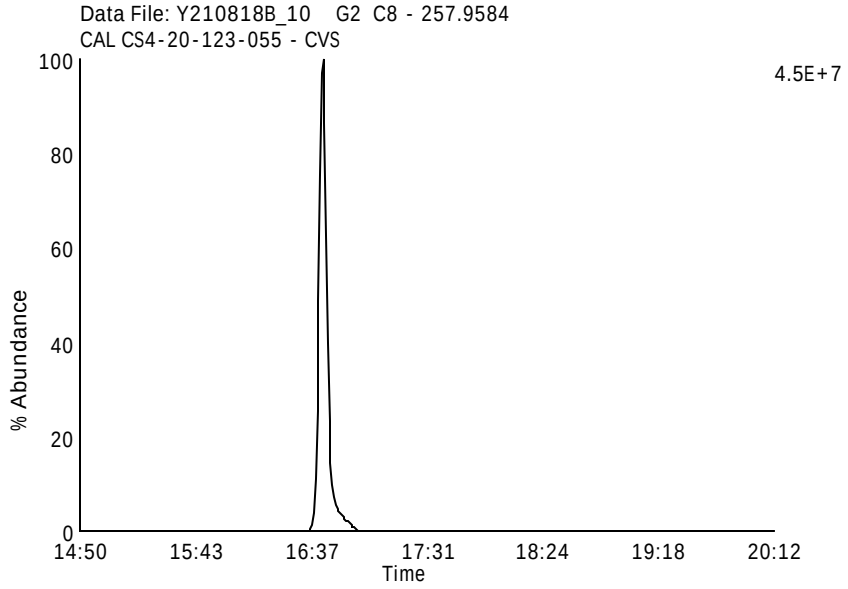


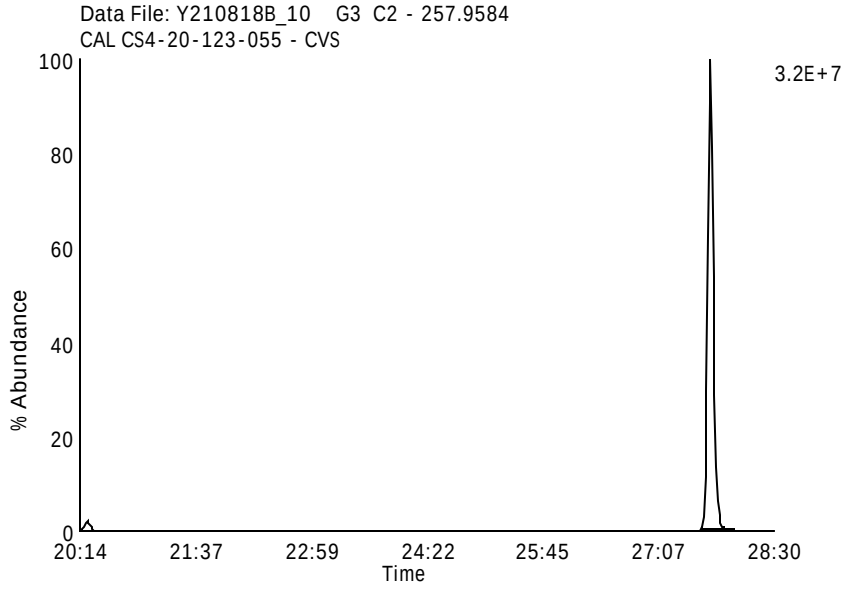
Tri Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



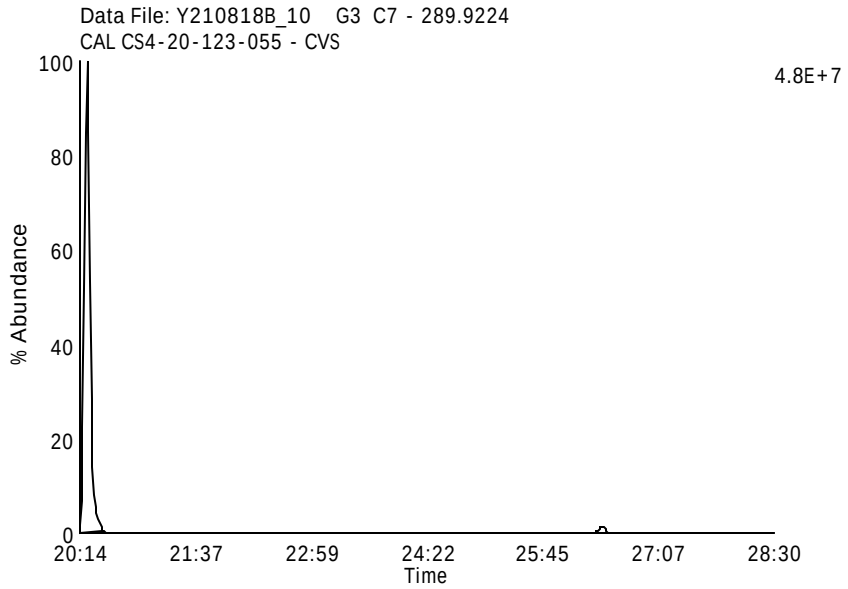


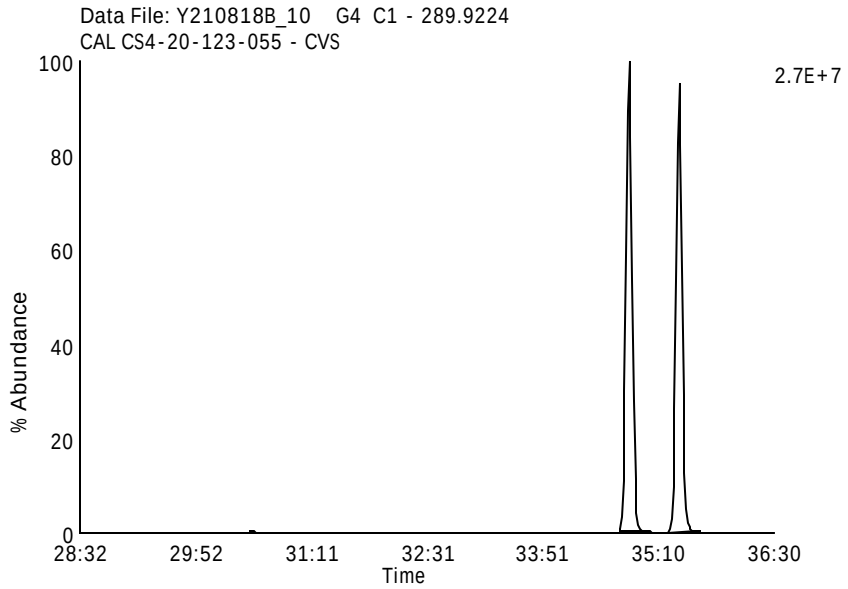


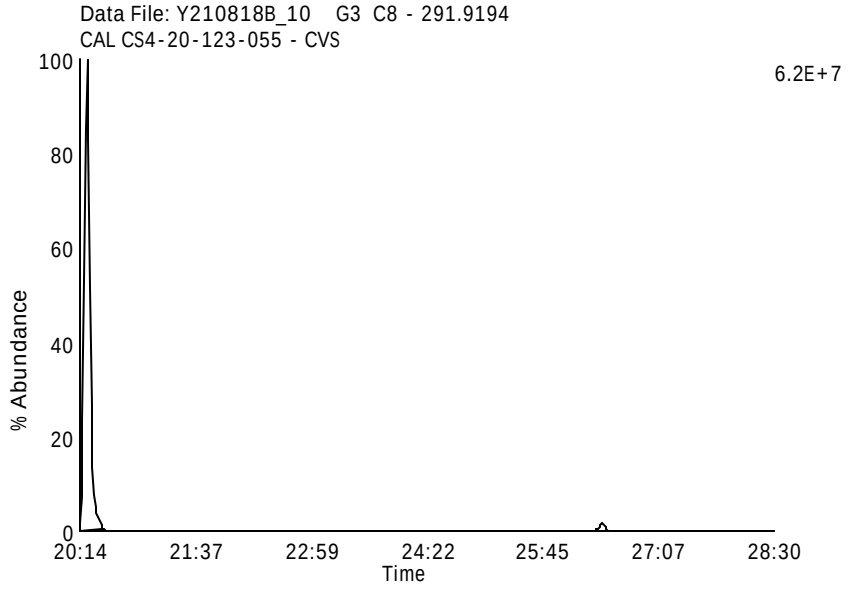


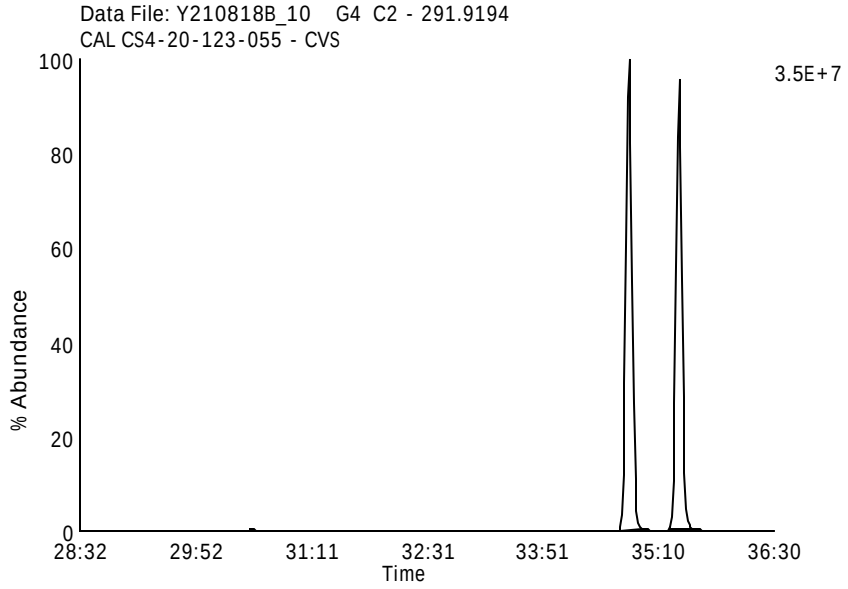
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS



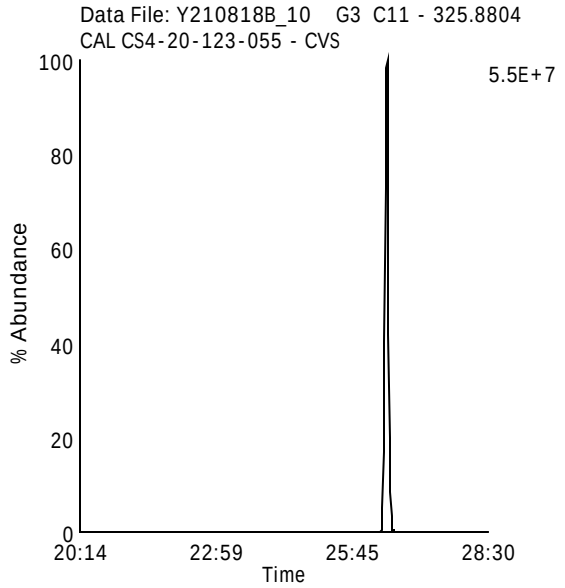


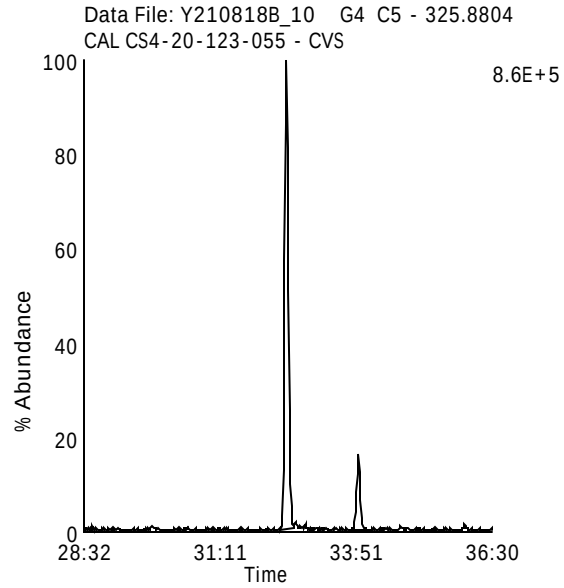


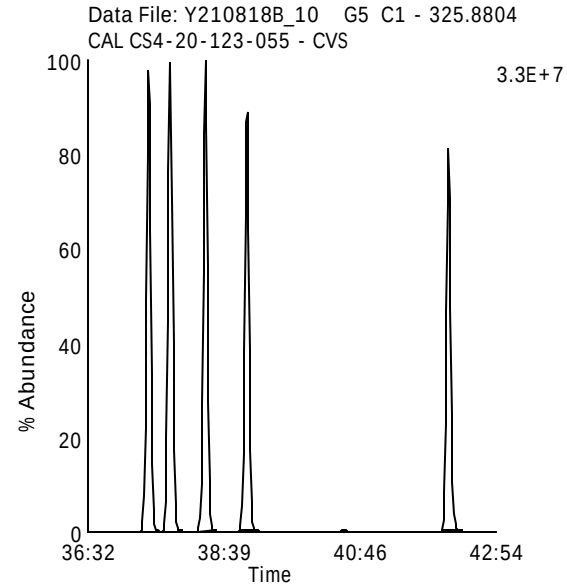


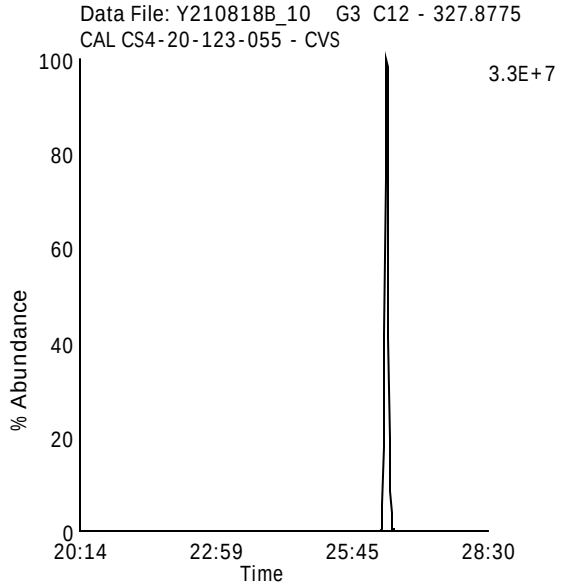
Penta Chlorinated Biphenyls

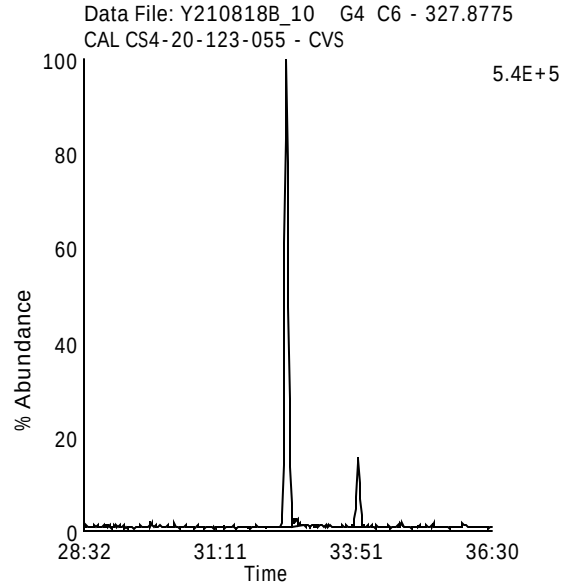
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

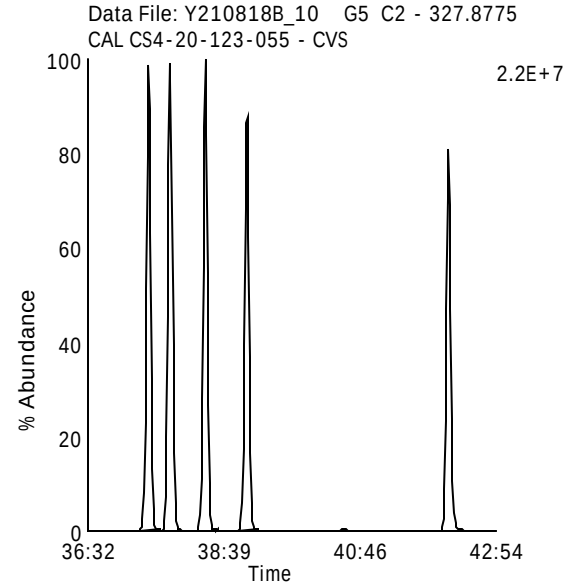










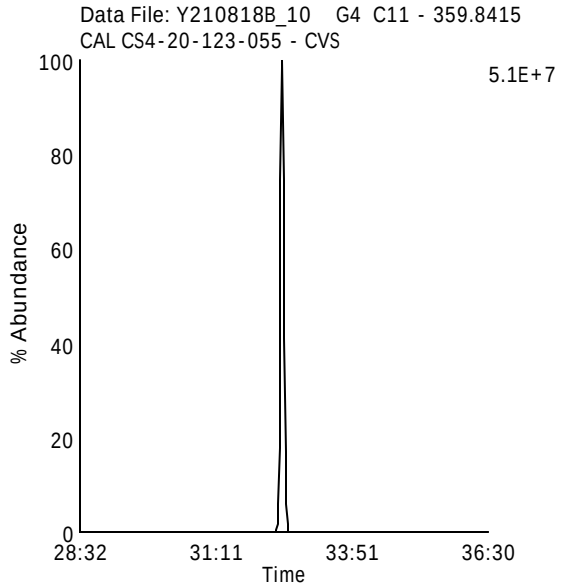


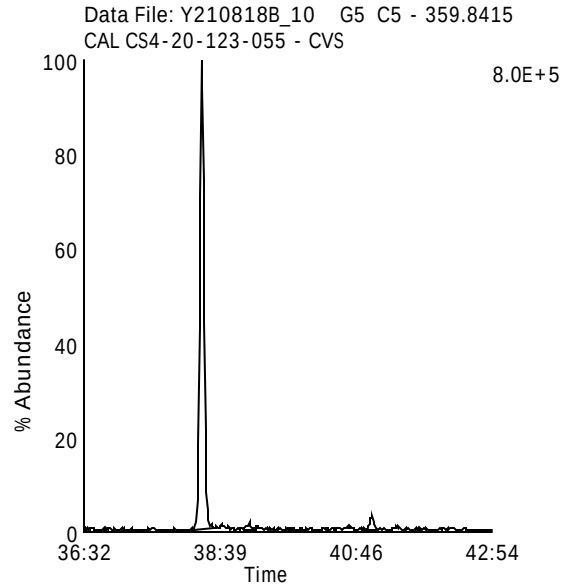
Hexa Chlorinated Biphenyls

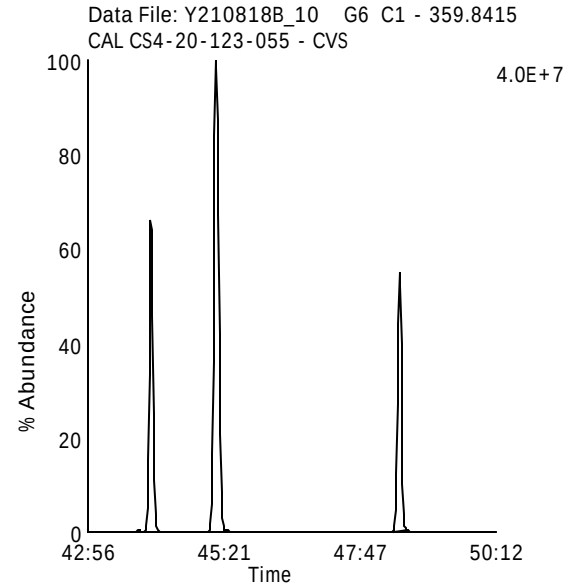
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

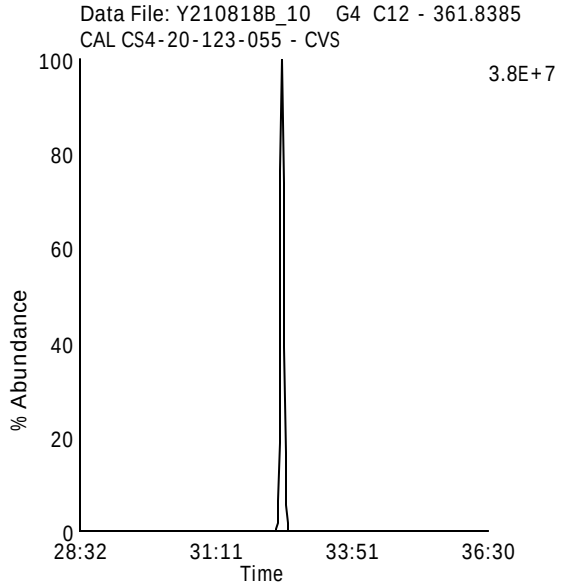
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

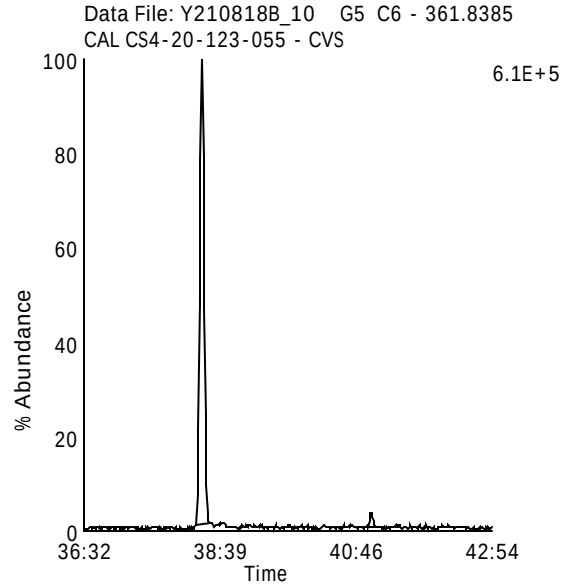
Sample Description: CAL CS4-20-123-055 - CVS

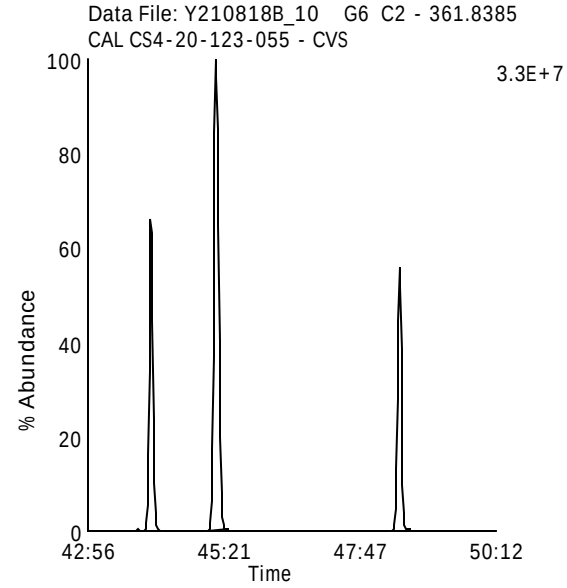






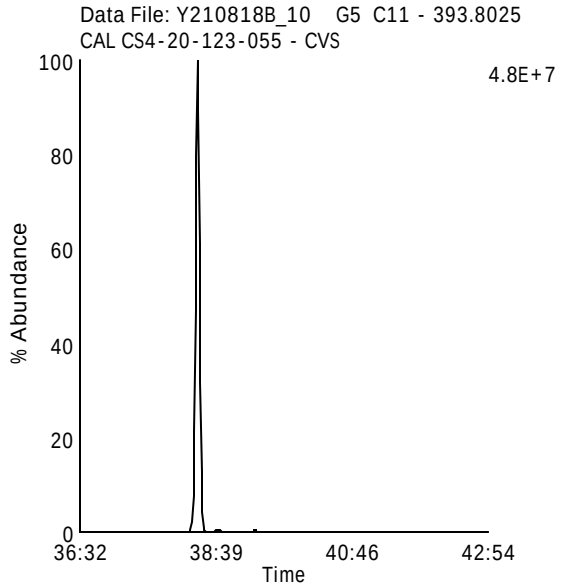


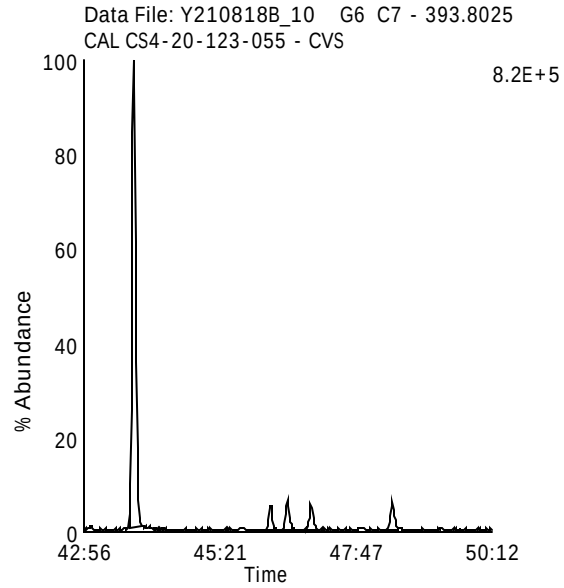


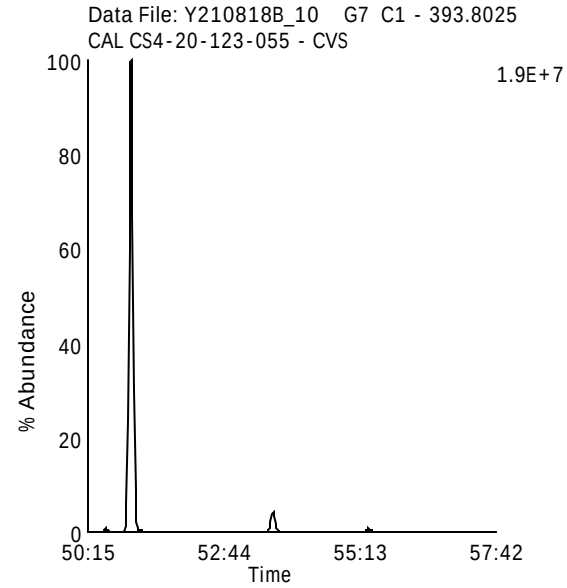


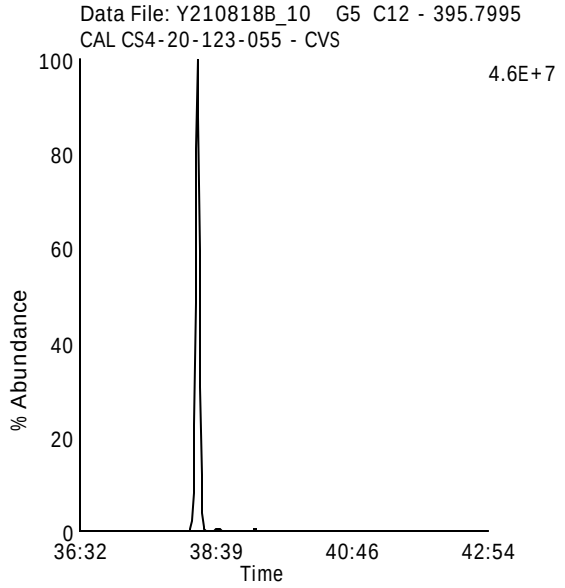
Hepta Chlorinated Biphenyls

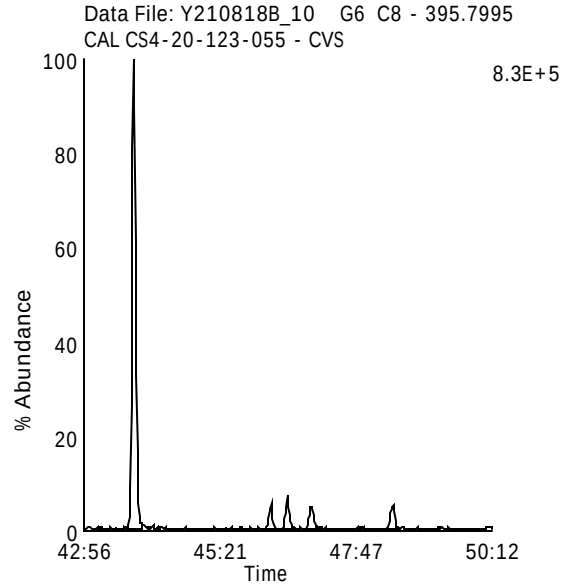
Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS

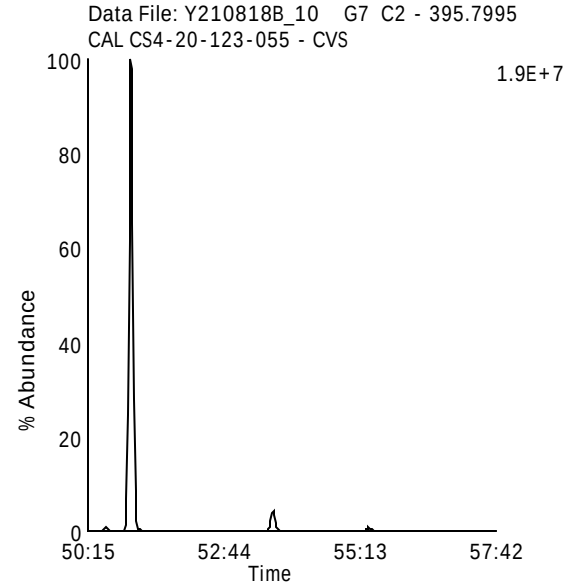






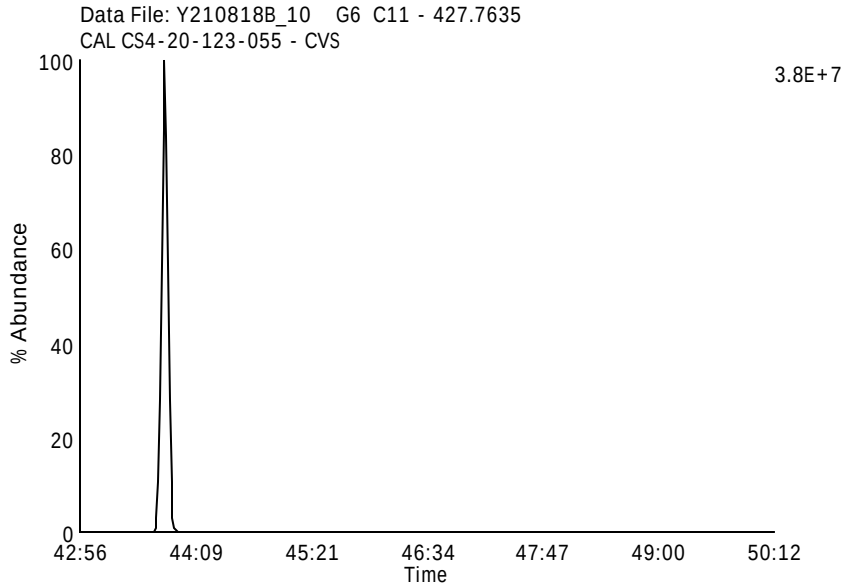


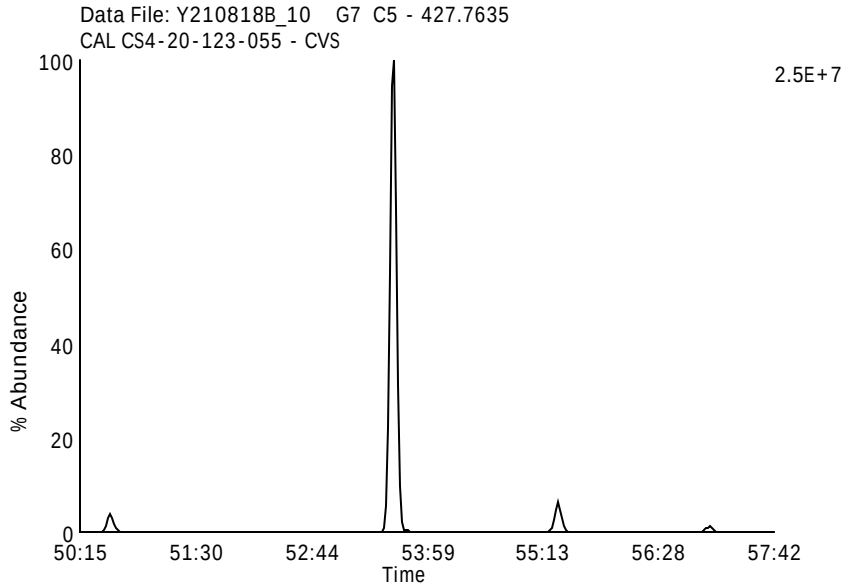


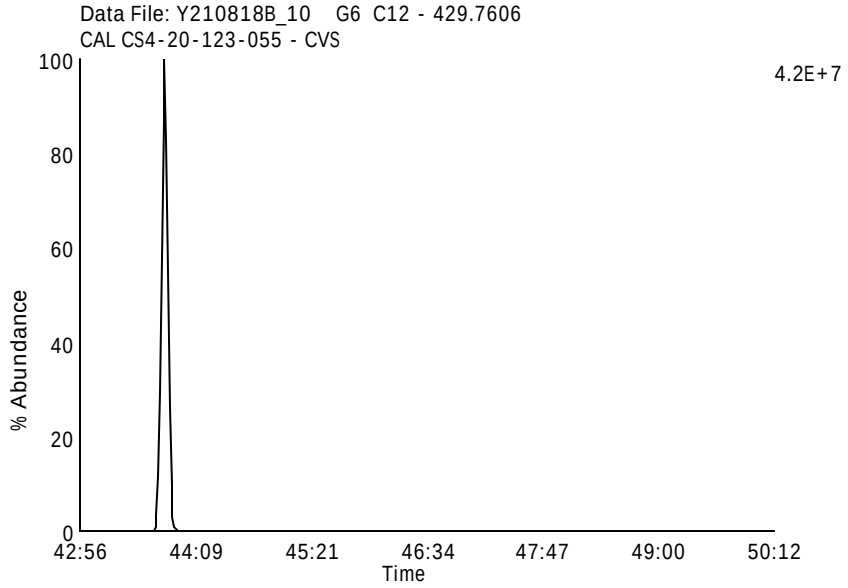


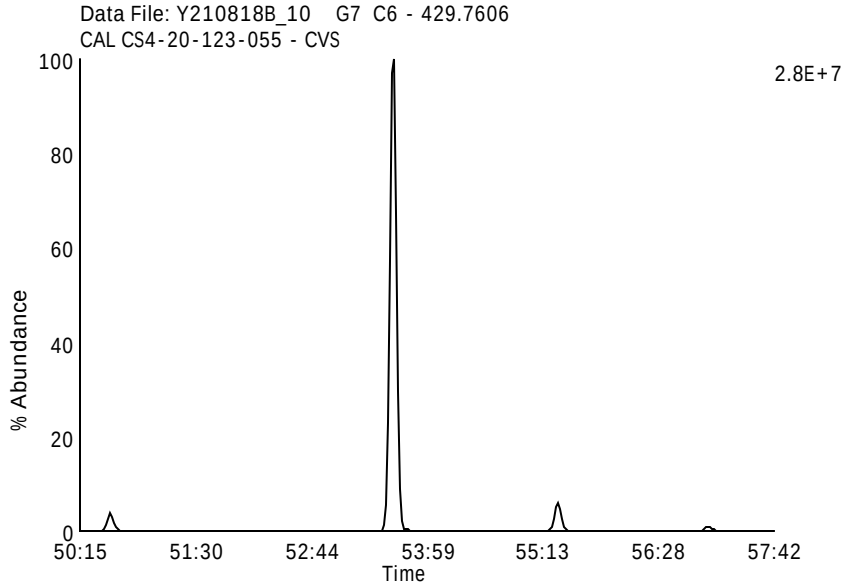
Octa Chlorinated Biphenyls

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS







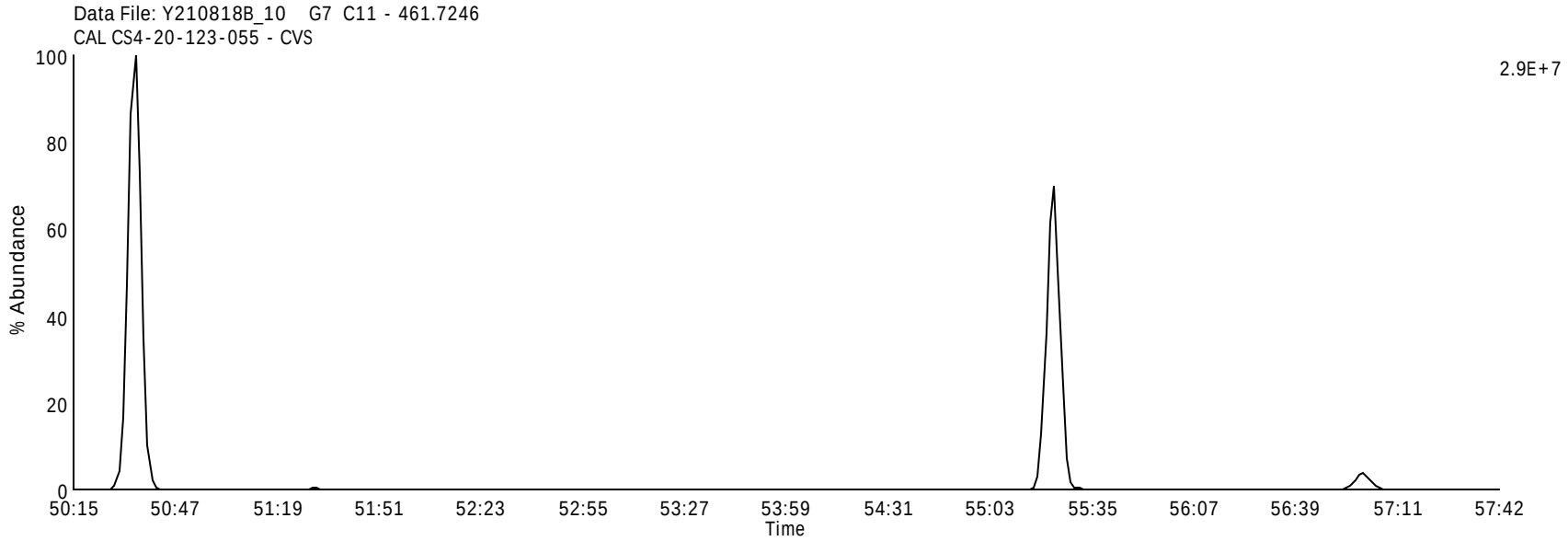


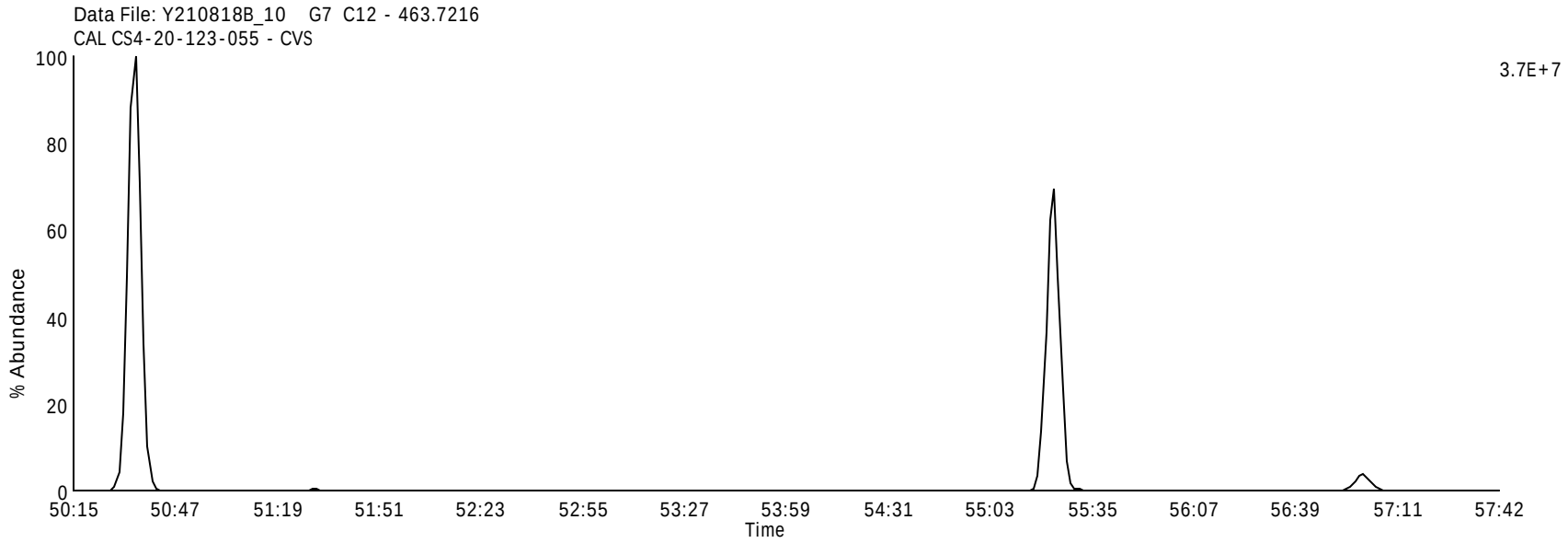
Nona Chlorinated Biphenyls

Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS





Deca Chlorinated Biphenyl

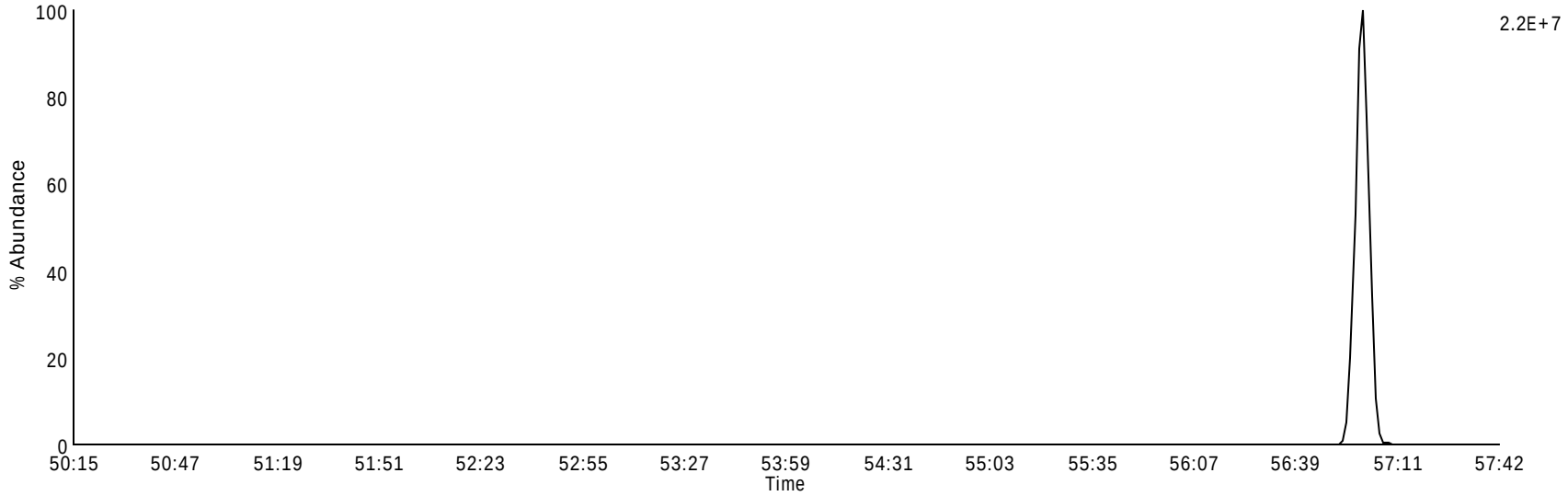
Data File Name: Y210818B_10 Lab Sample ID: CS4-20-123-055

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS4-20-123-055 - CVS

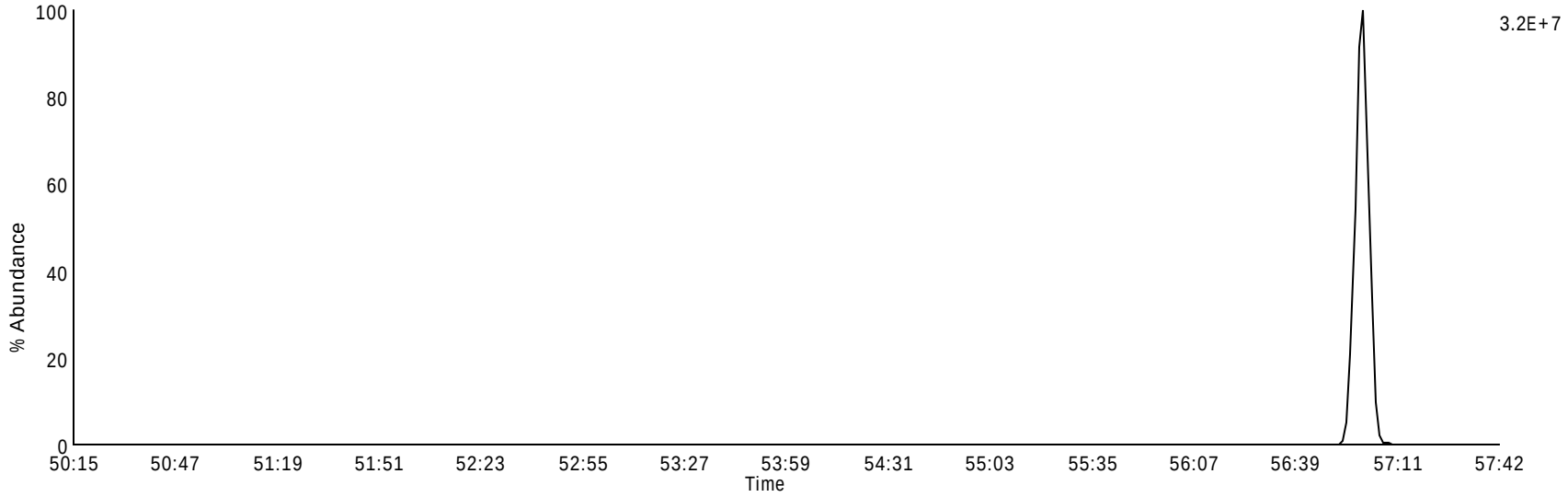
Data File: Y210818B_10 G7 C15 - 495.6856

CAL CS4-20-123-055 - CVS



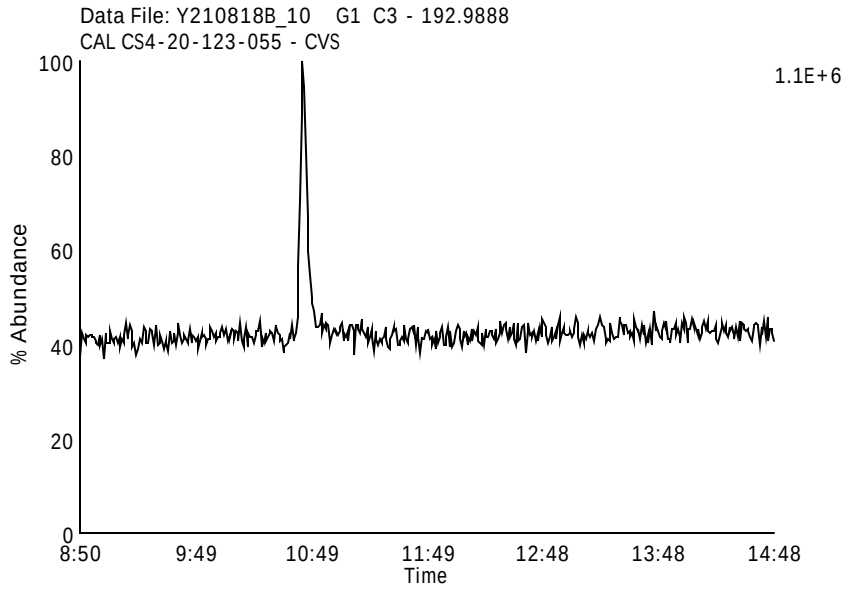
Data File: Y210818B_10 G7 C16 - 497.6826

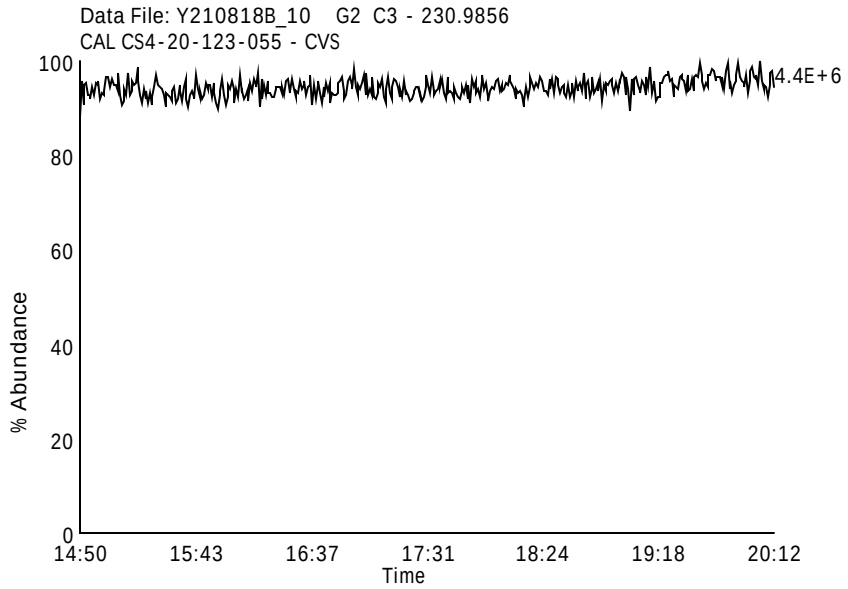
CAL CS4-20-123-055 - CVS

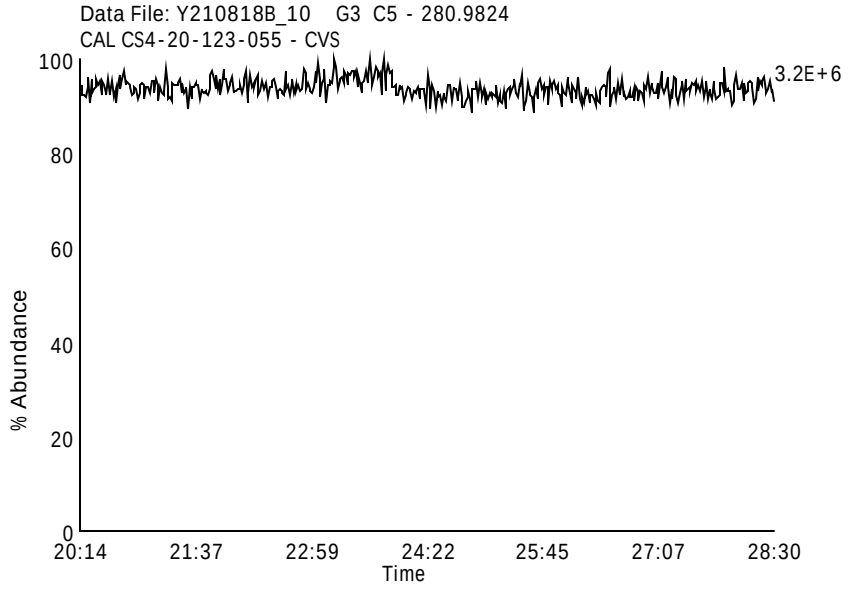


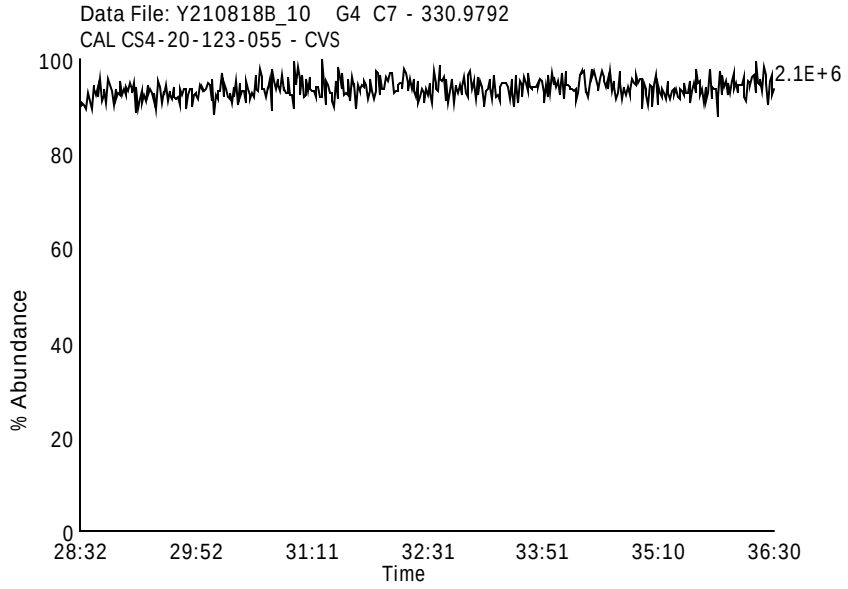
Group 1 - 4 Lock mass

Data File Name: Y210818B_10
Lab Sample ID: CS4-20-123-055
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS4-20-123-055 - CVS





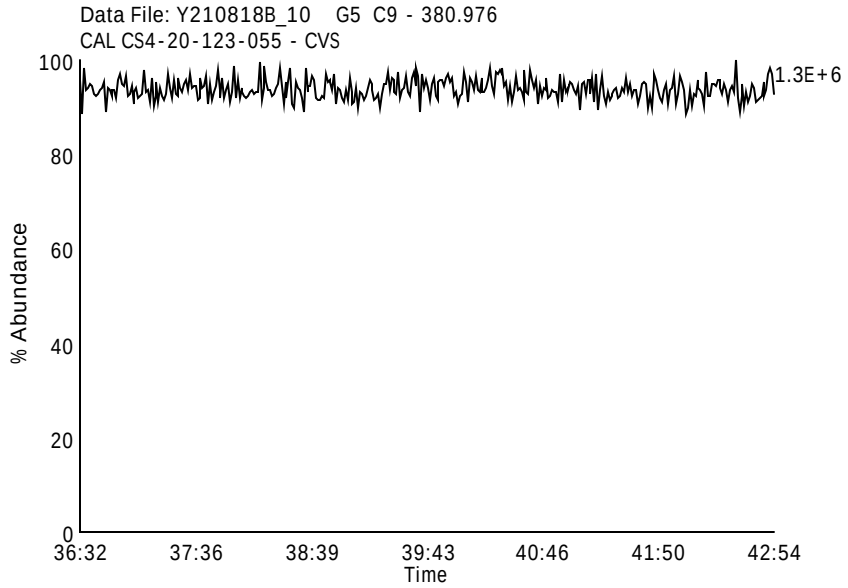


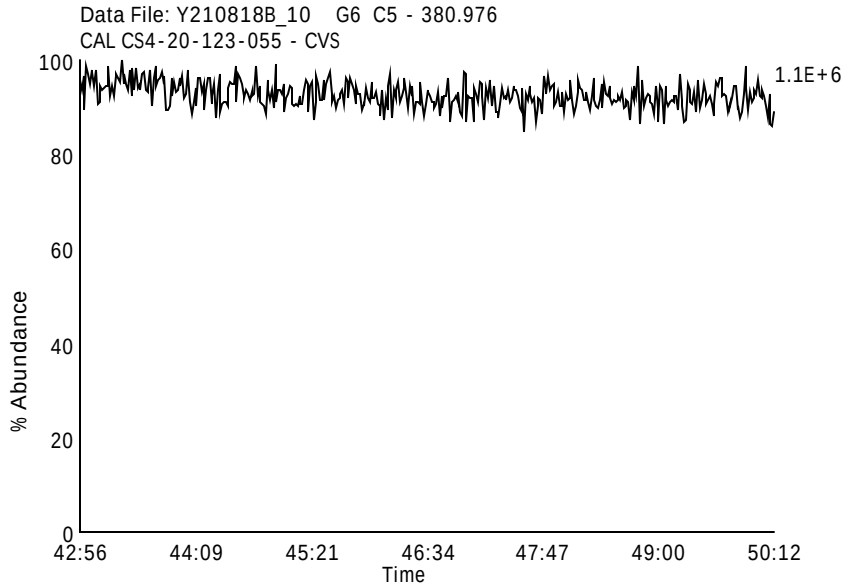


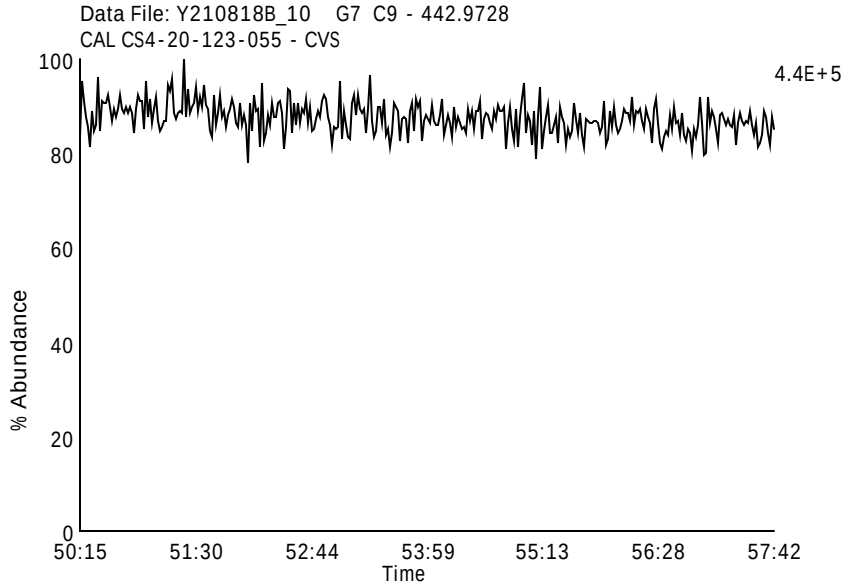
Group 5 - 7 Lock mass

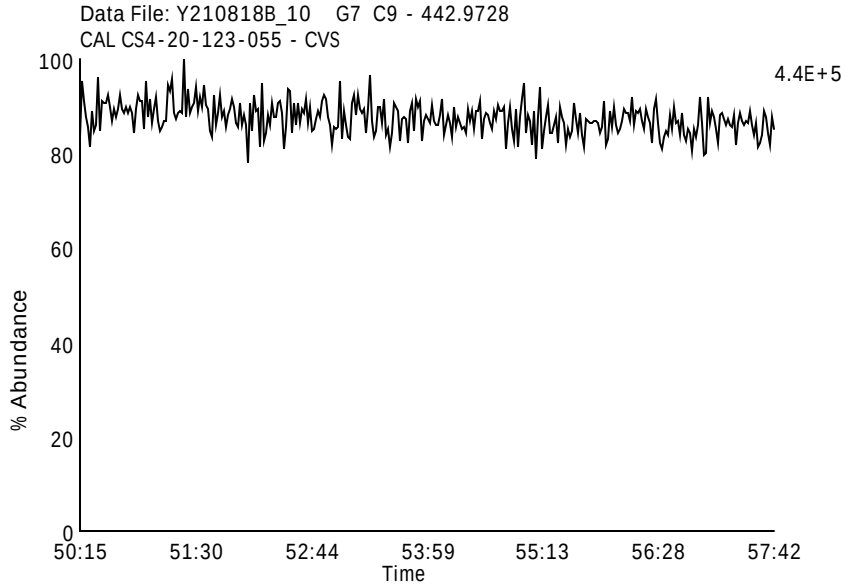
Data File Name: Y210818B_10
Date Acquired: 8/18/2021
Sample Description: CAL CS4-20-123-055 - CVS

Lab Sample ID: CS4-20-123-055
Instrument: 10MSHR12 (Y)







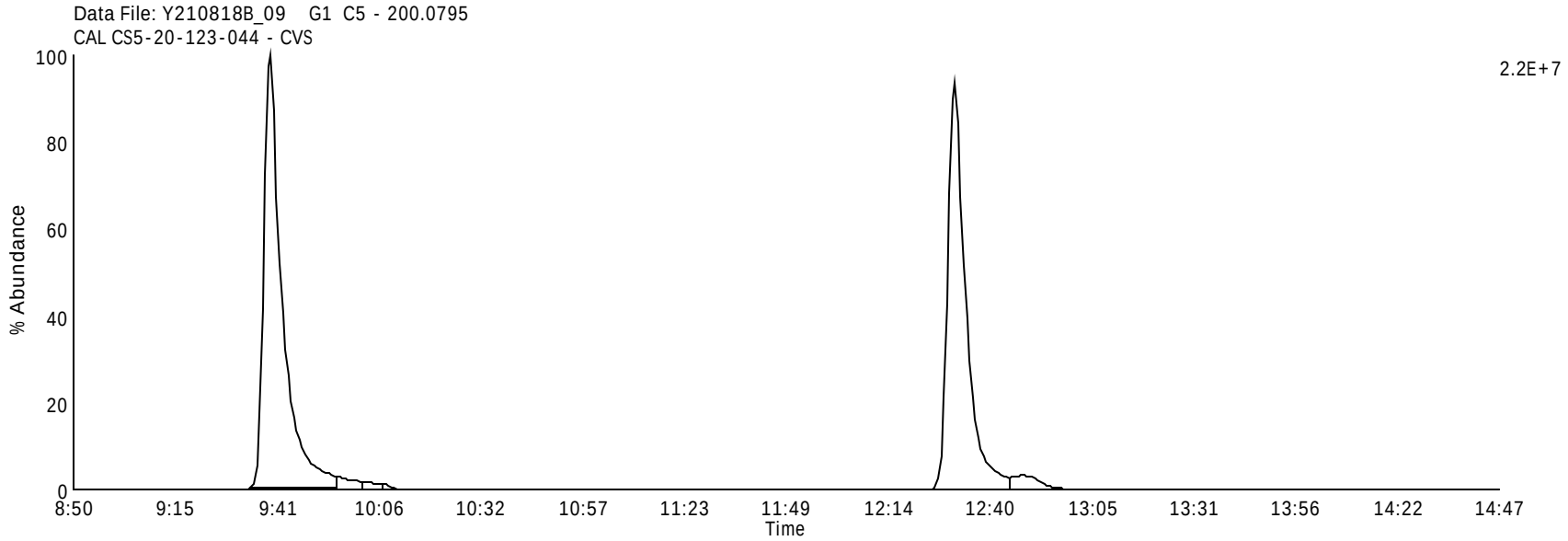


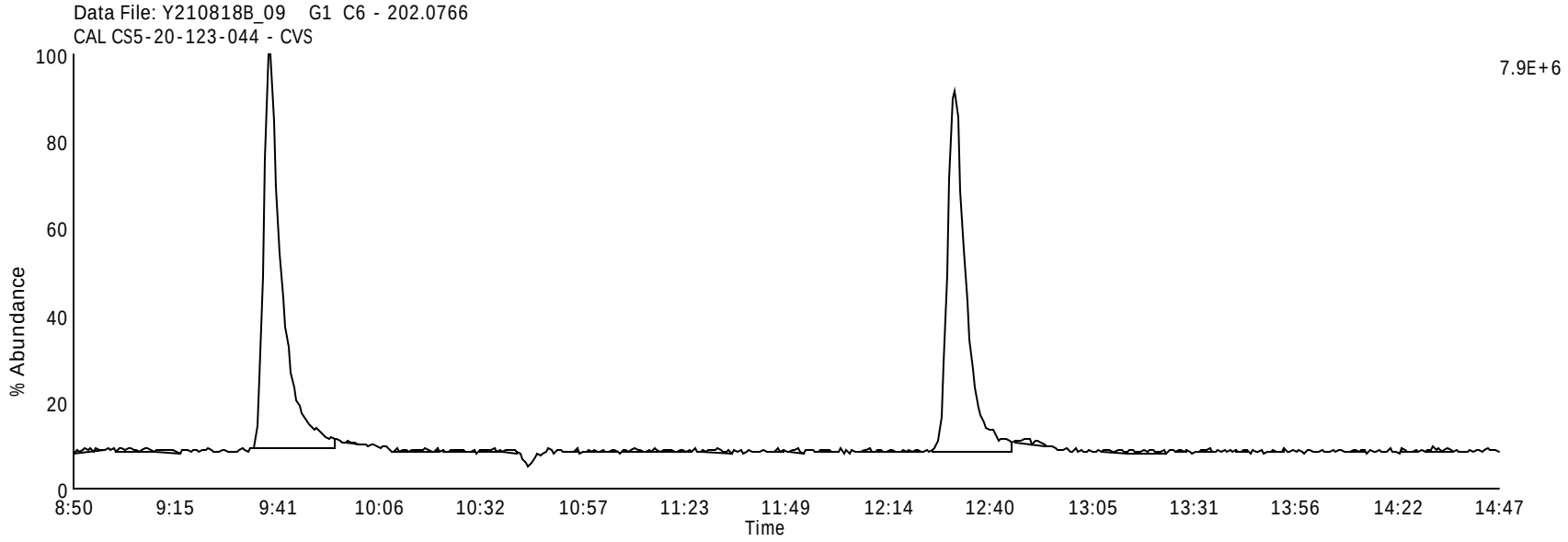
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

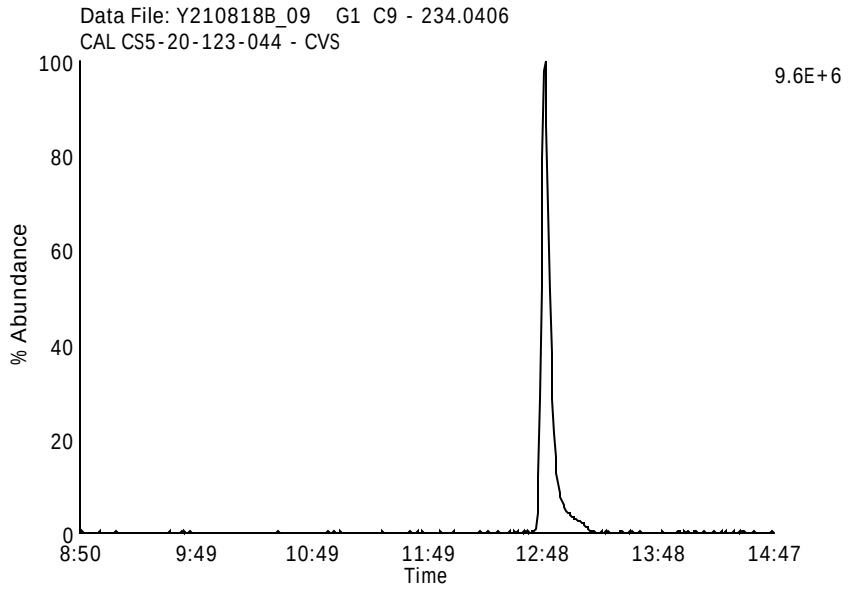
Sample Description: CAL CS5-20-123-044 - CVS

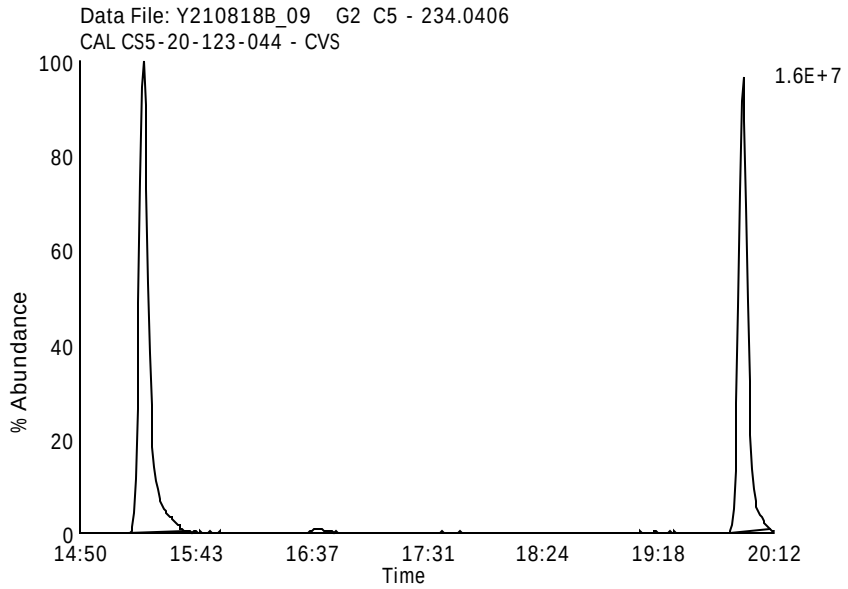


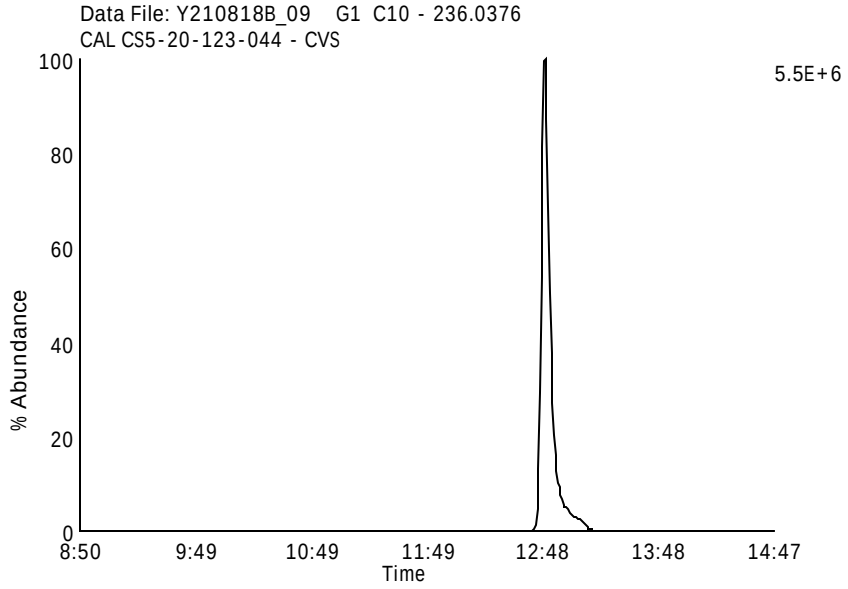


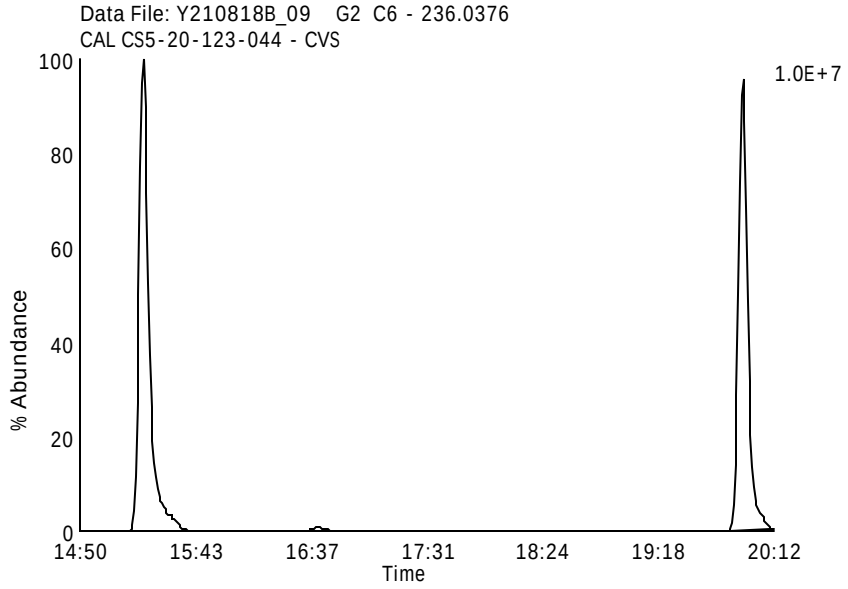
Labeled Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



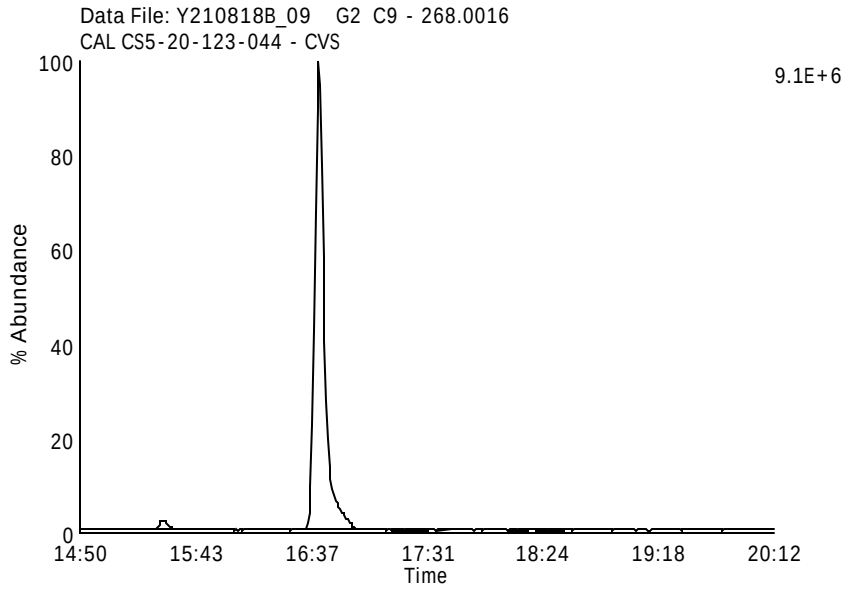


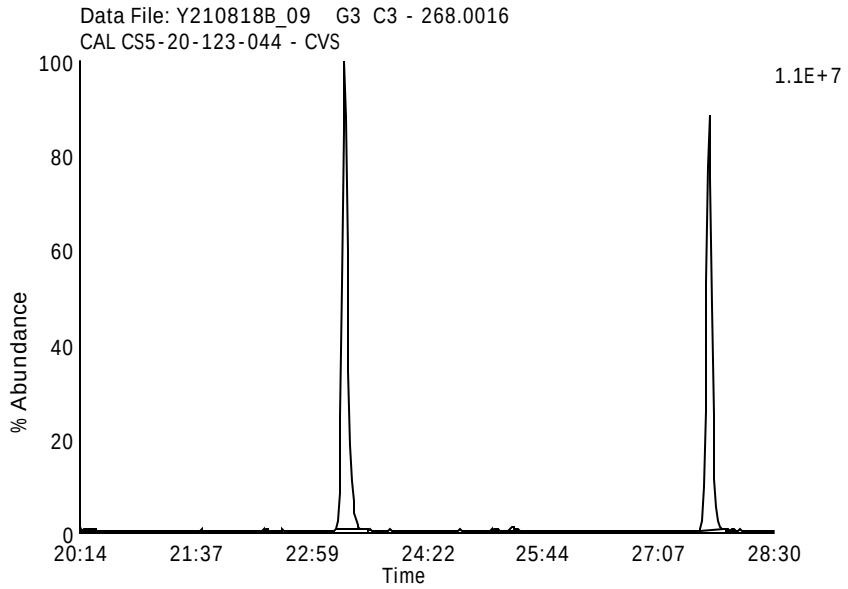


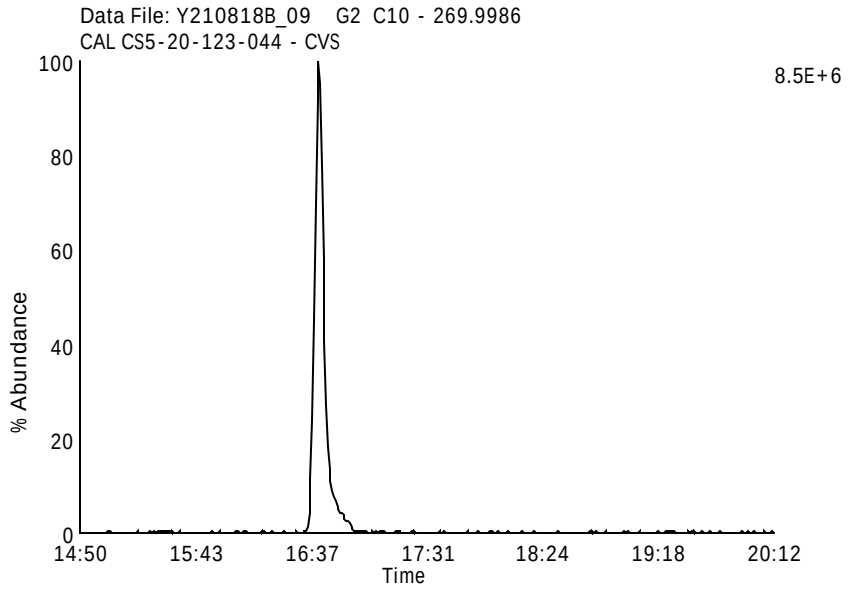


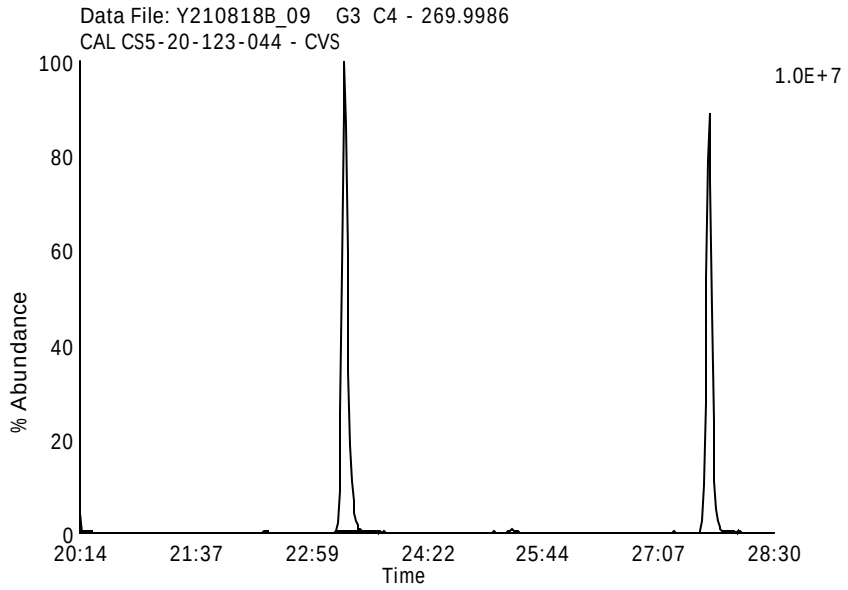
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



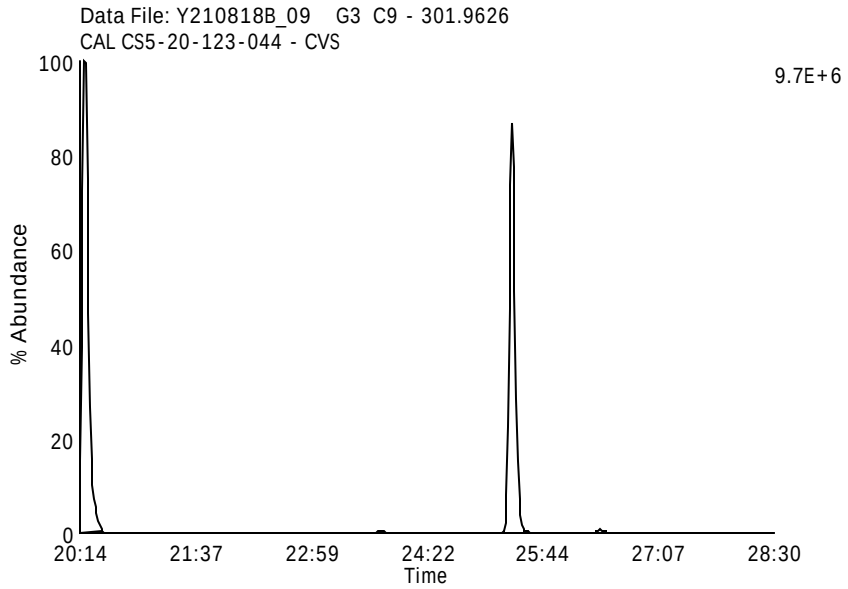


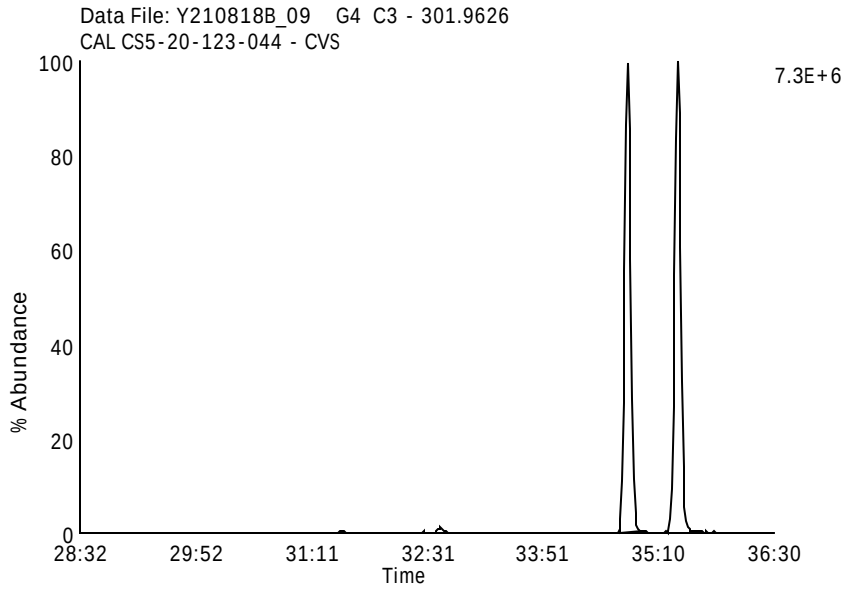


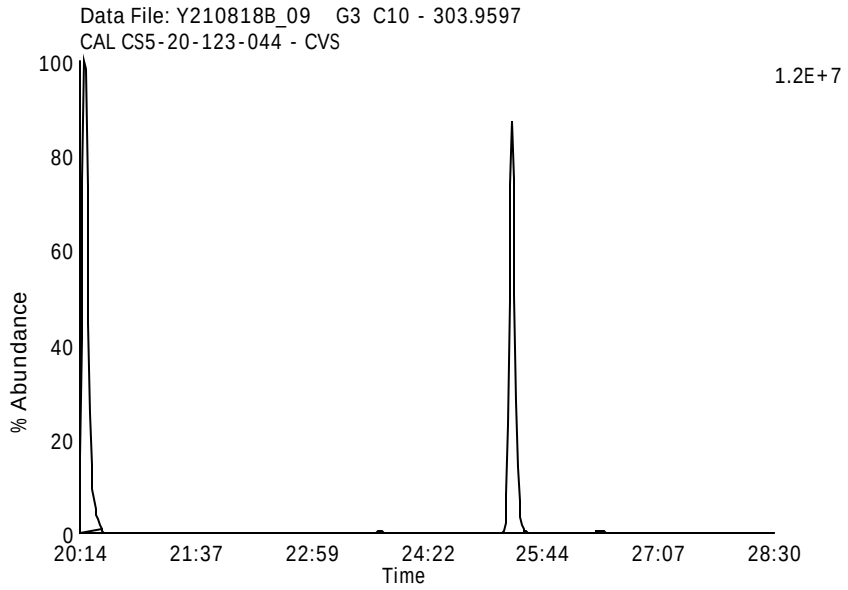


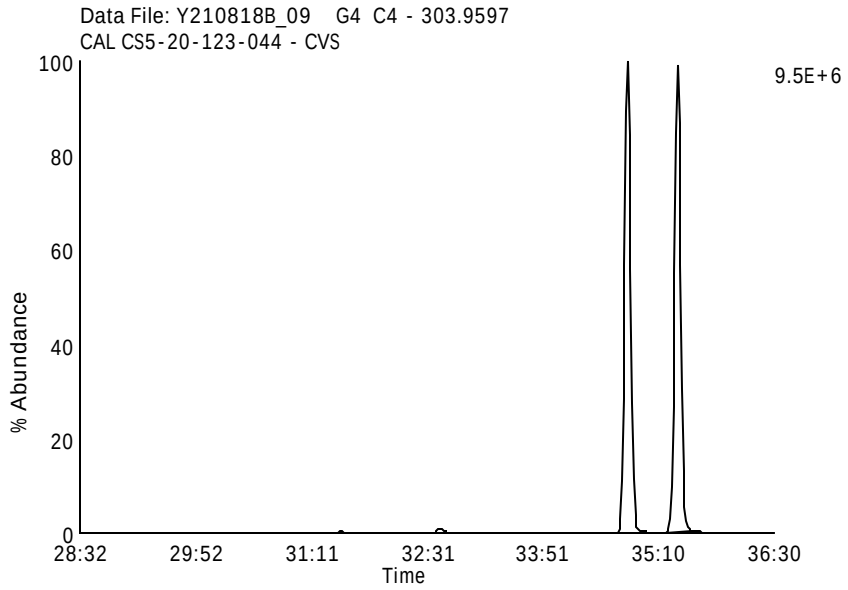
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS







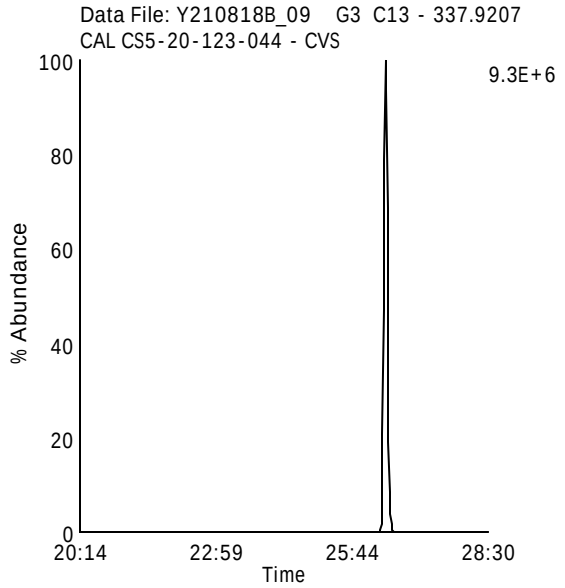


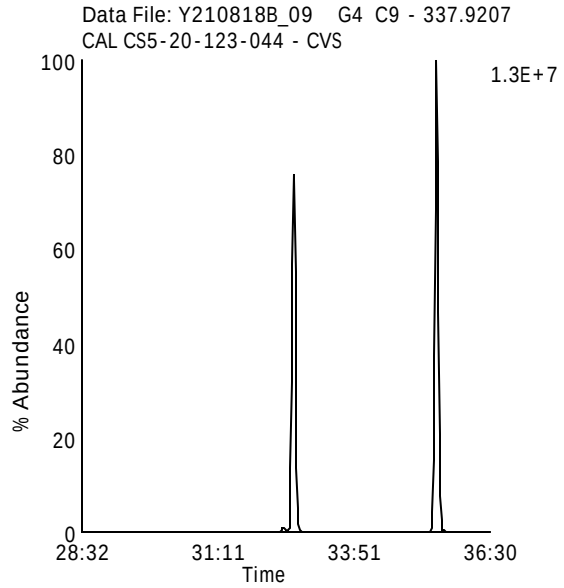
Labeled Penta Chlorinated Biphenyls

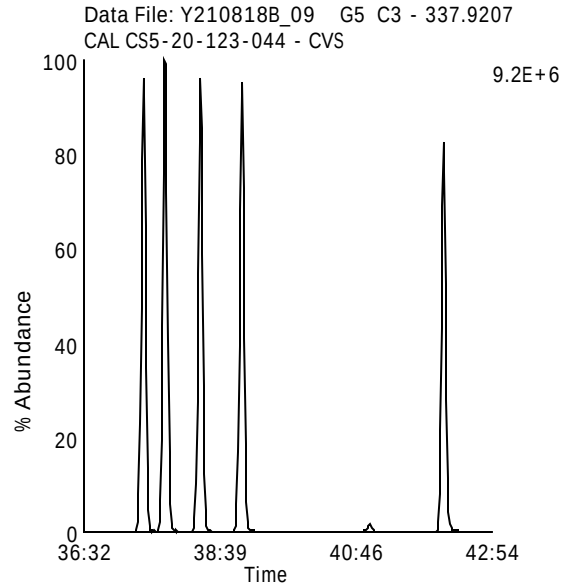
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

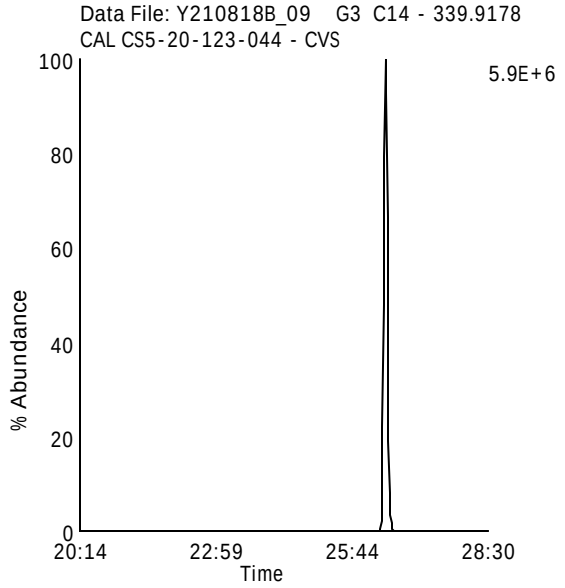
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

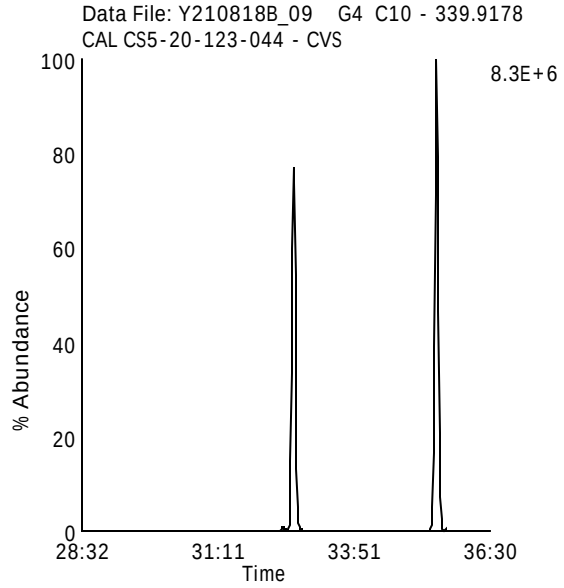
Sample Description: CAL CS5-20-123-044 - CVS

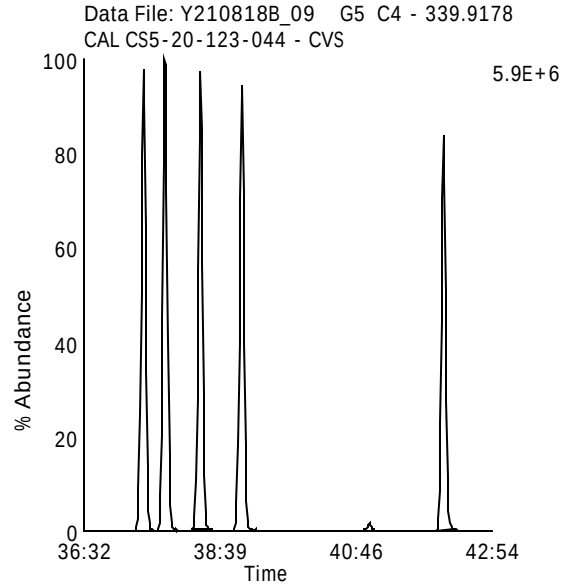












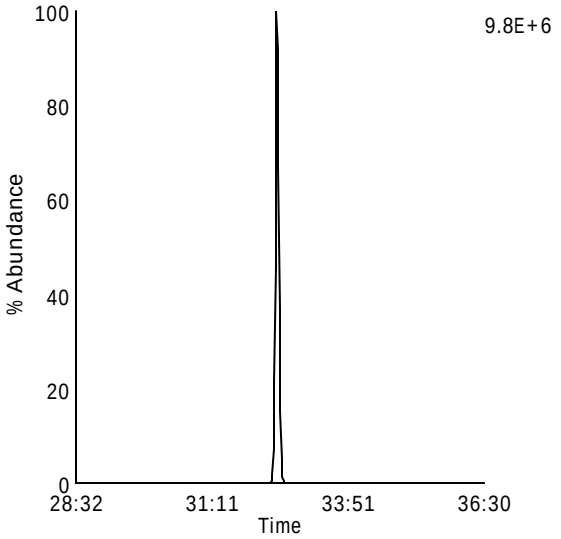
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

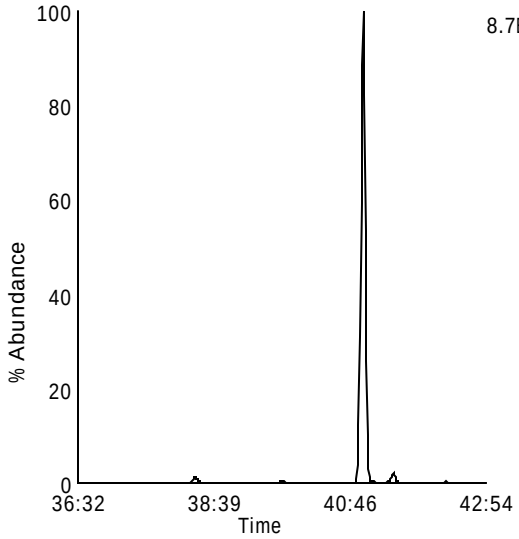
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

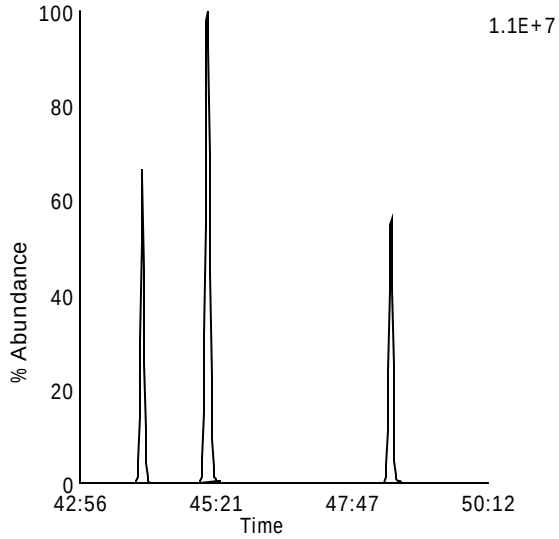
Data File: Y210818B_09 G4 C13 - 371.8817
CAL CS5-20-123-044 - CVS



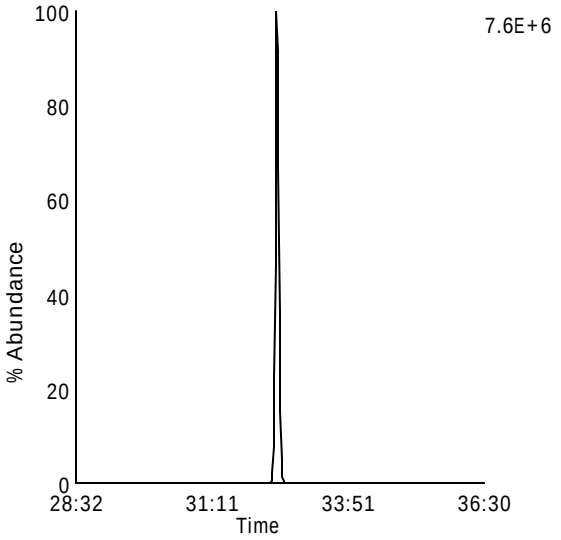
Data File: Y210818B_09 G5 C7 - 371.8817
CAL CS5-20-123-044 - CVS



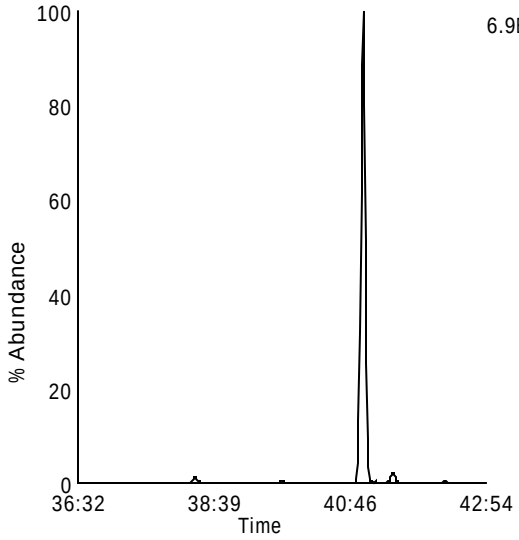
Data File: Y210818B_09 G6 C3 - 371.8817
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G4 C14 - 373.8788
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G5 C8 - 373.8788
CAL CS5-20-123-044 - CVS



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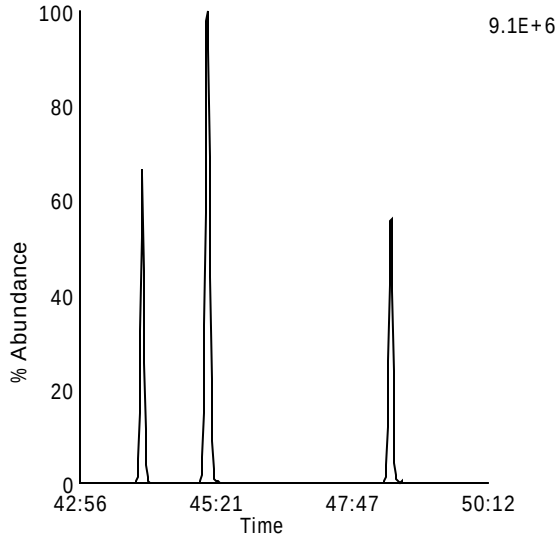
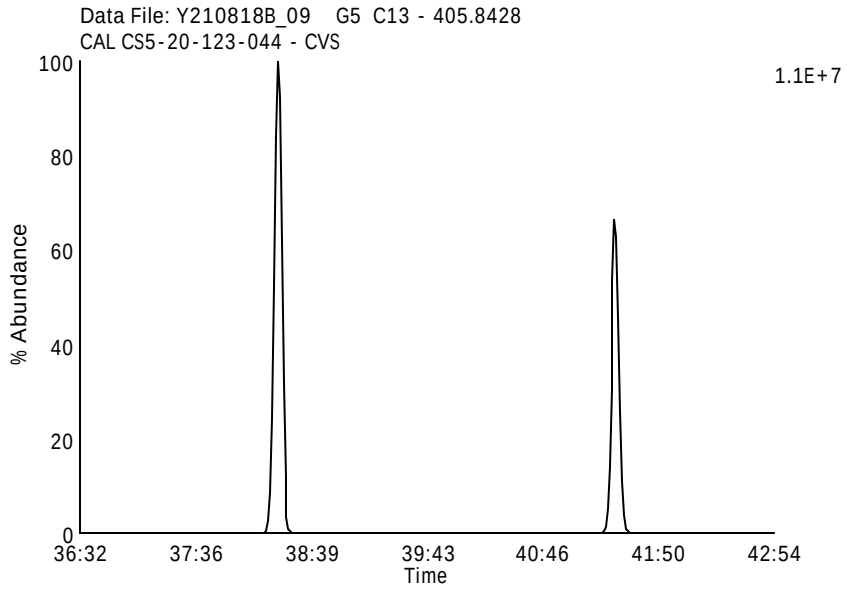
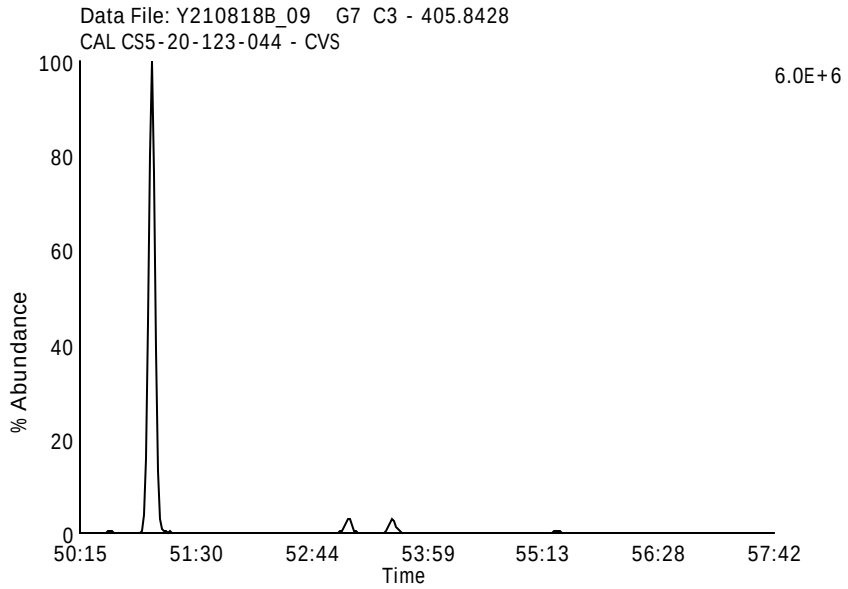
CAL CS5-20-123-044 - CVS

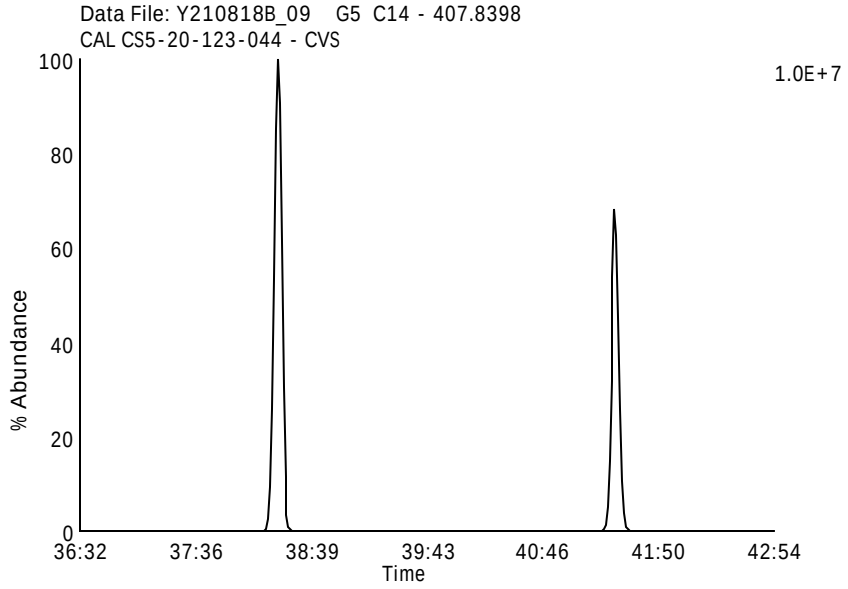


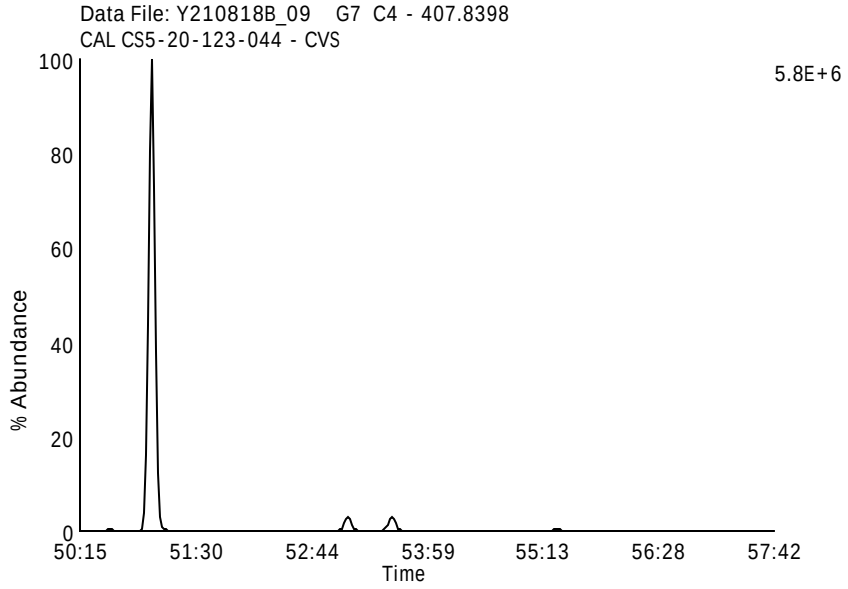
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS







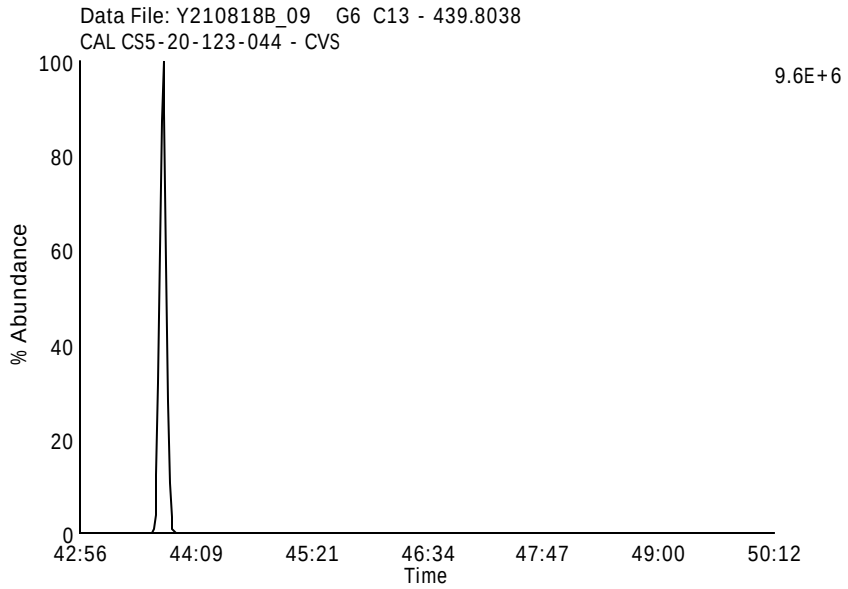


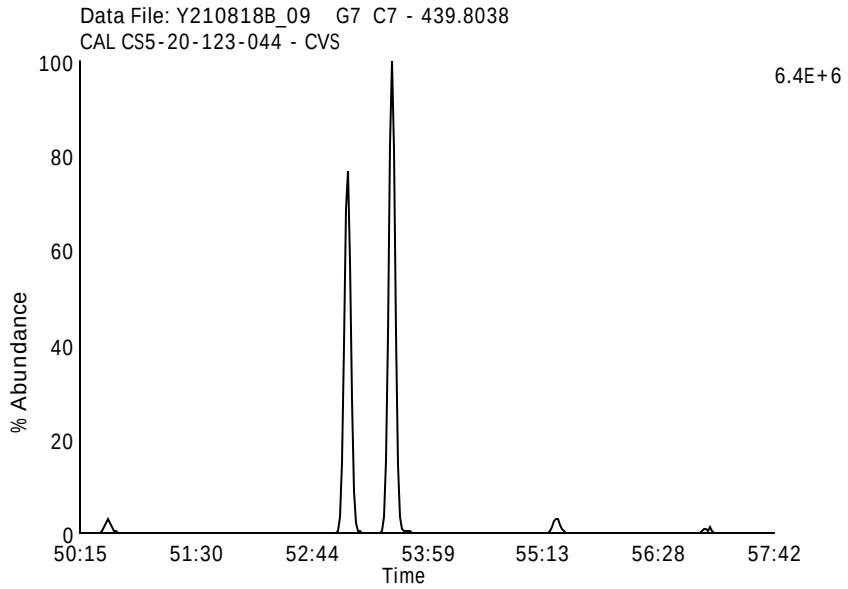
Labeled Octa Chlorinated Biphenyls

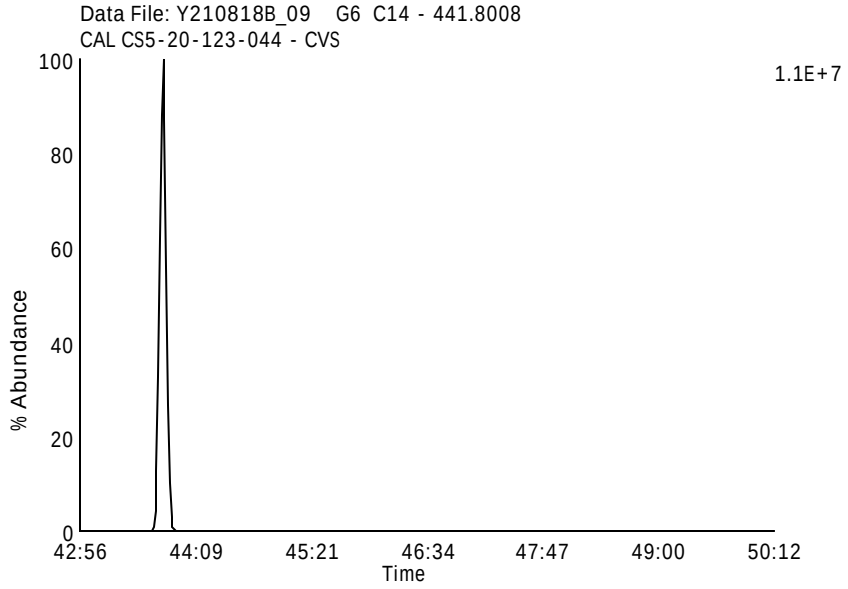
Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

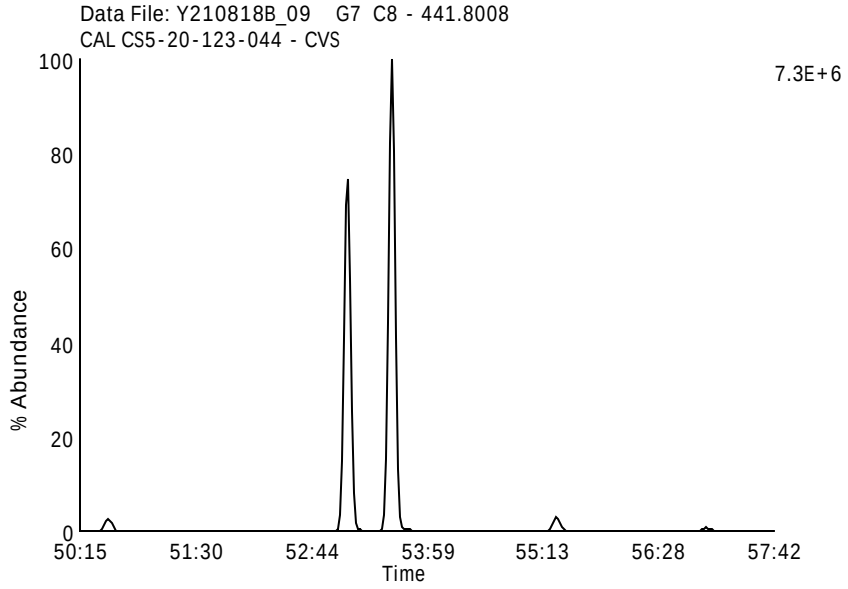
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS







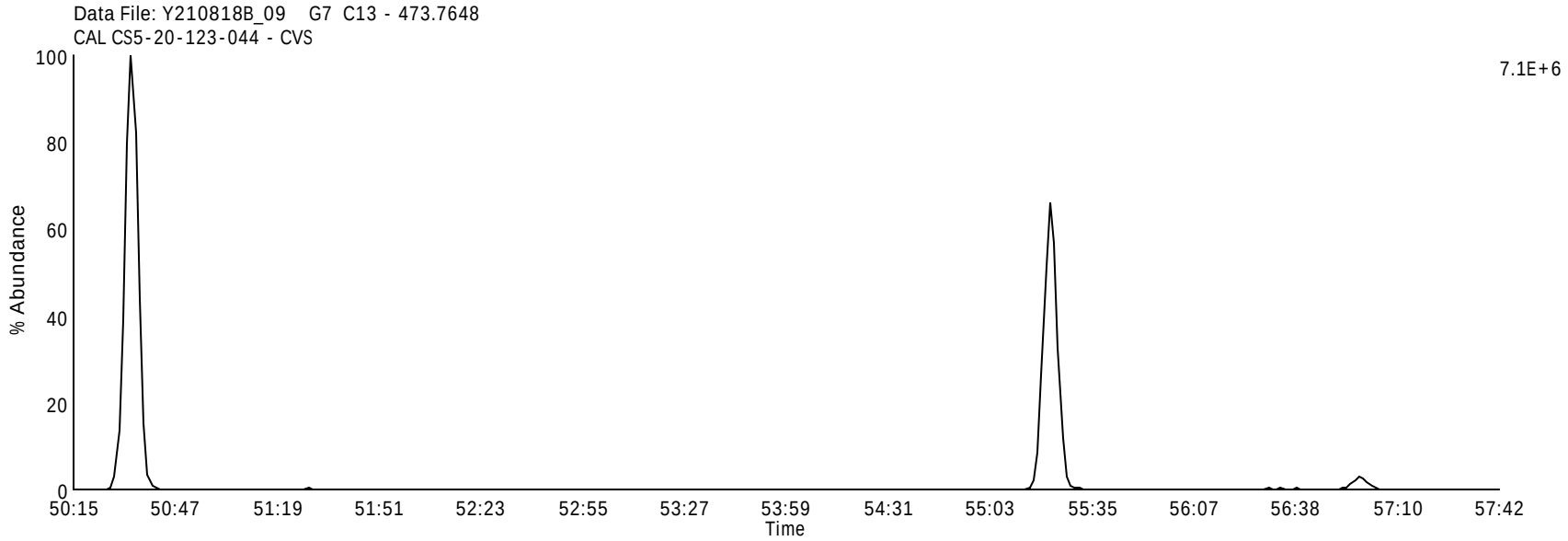


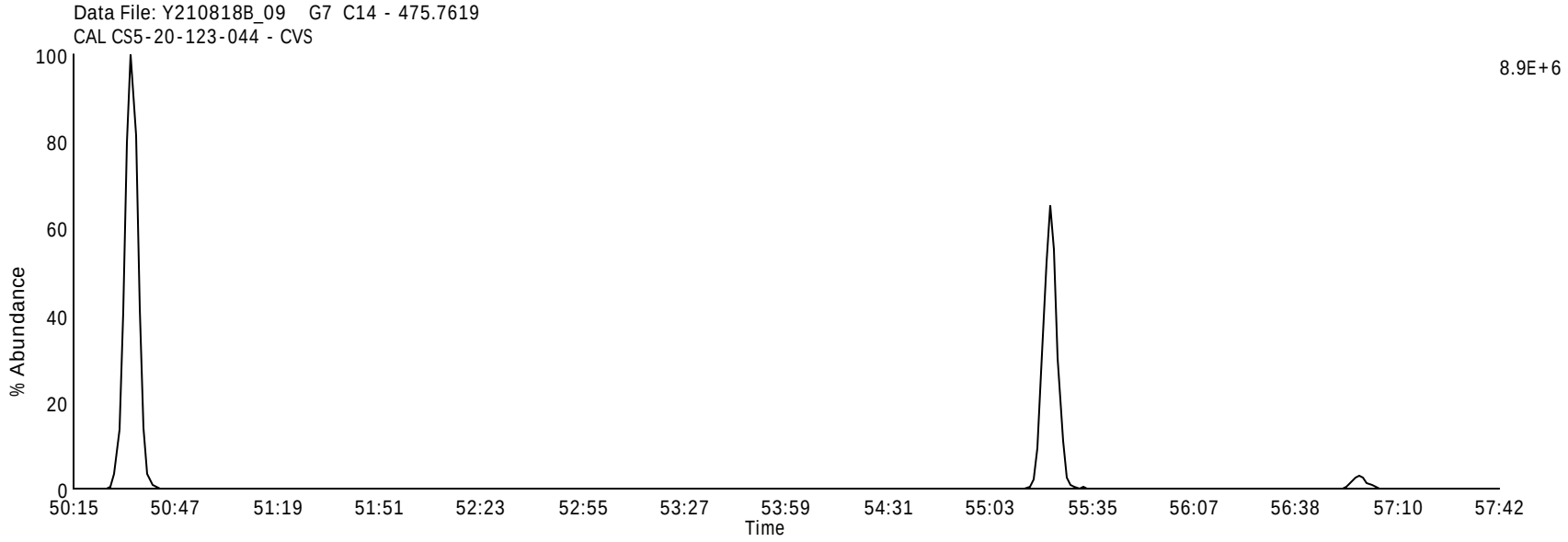
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



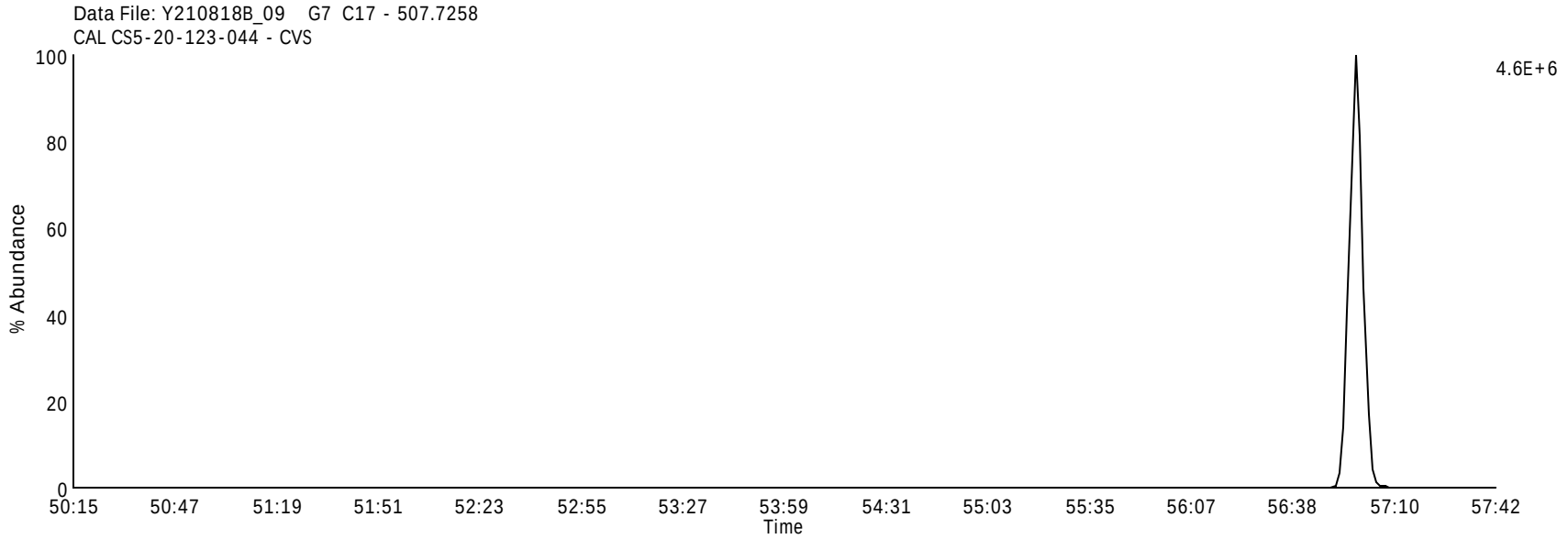


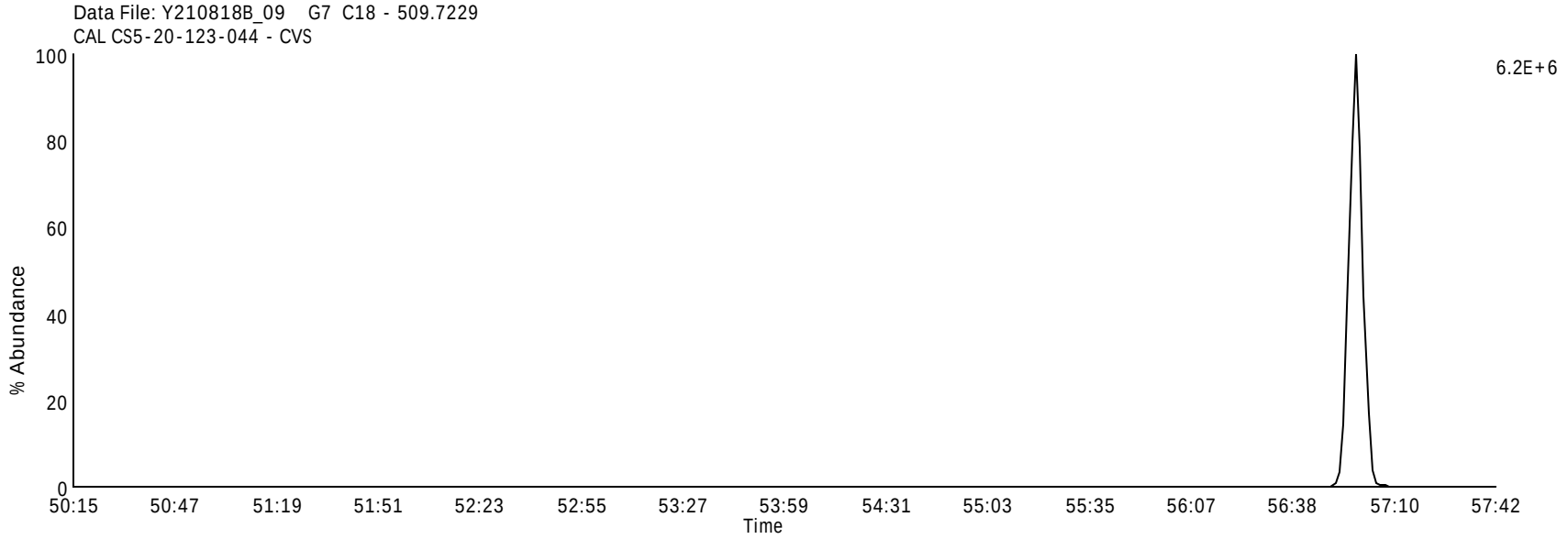
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



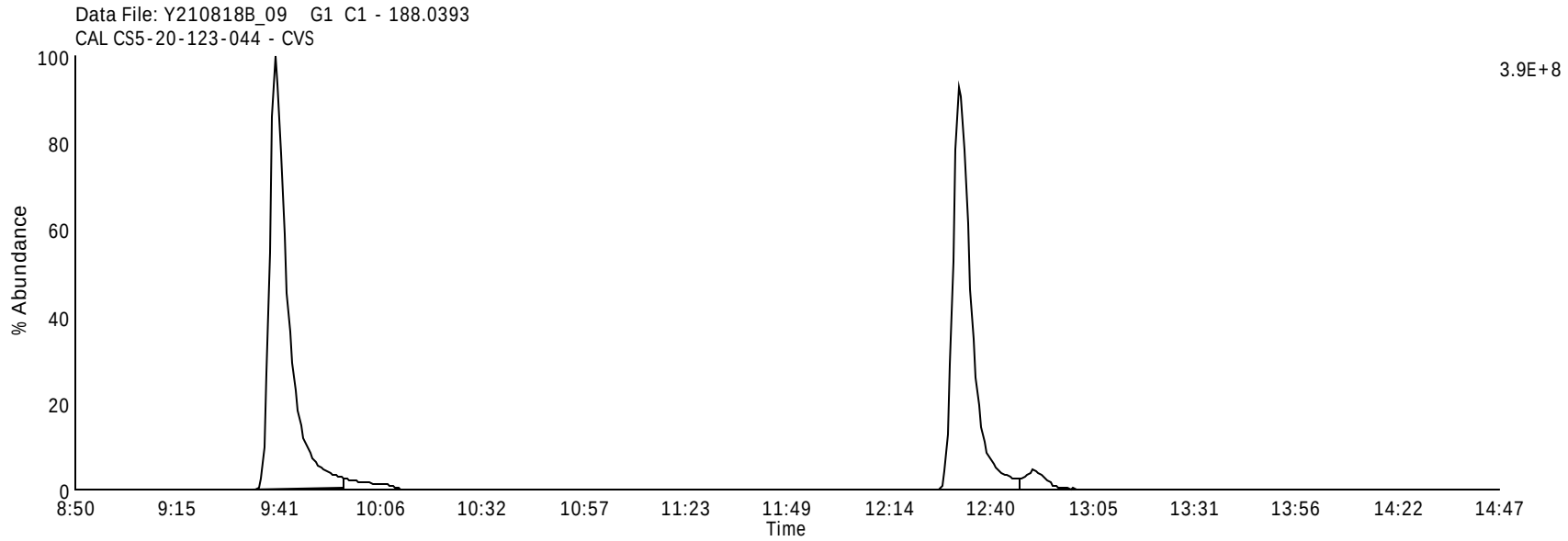


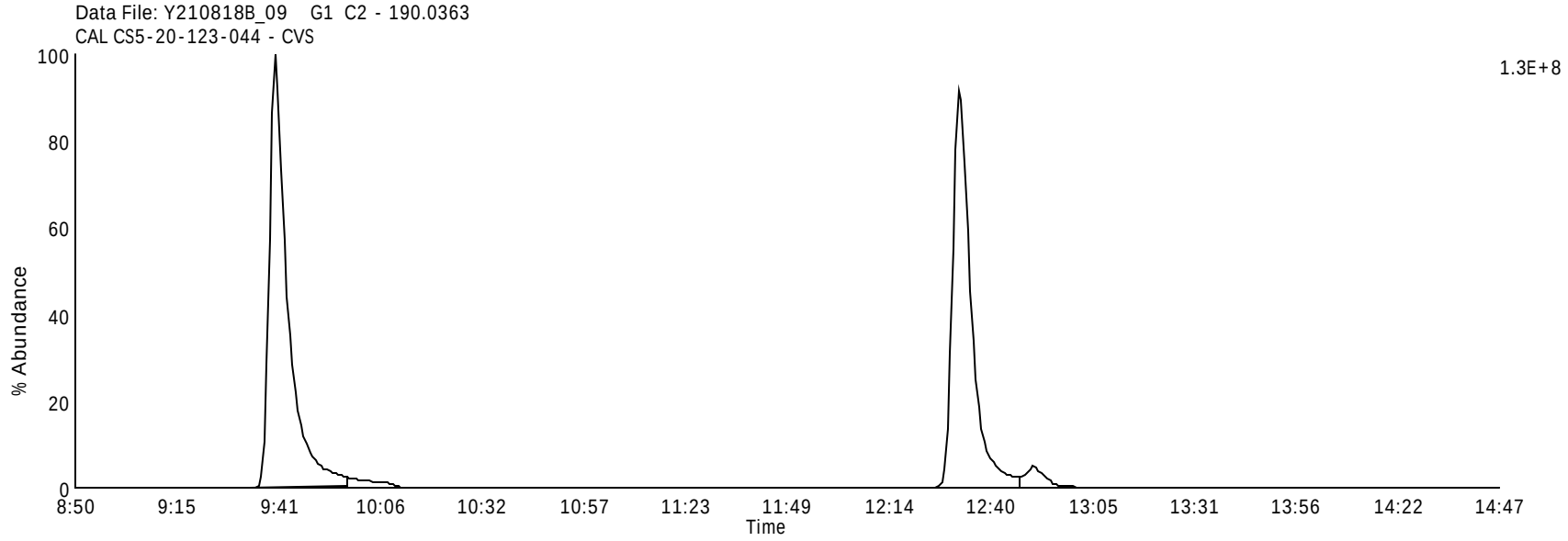
Mono Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

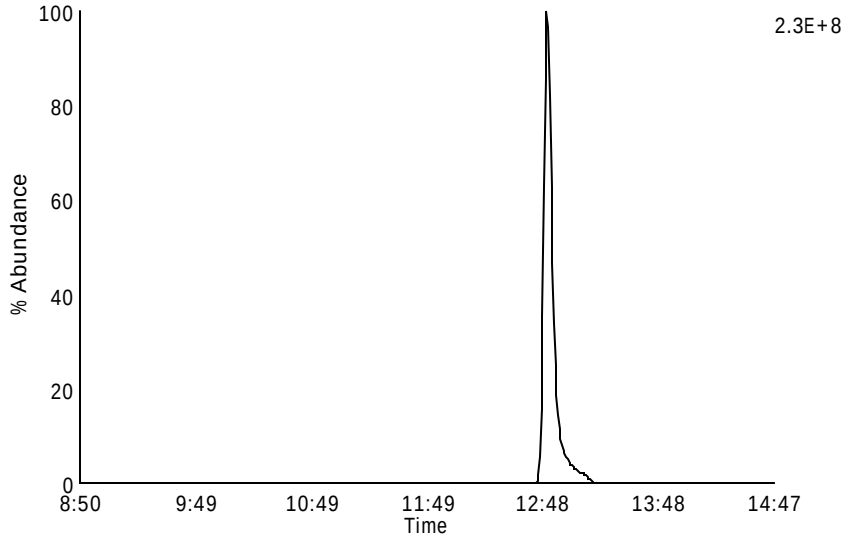




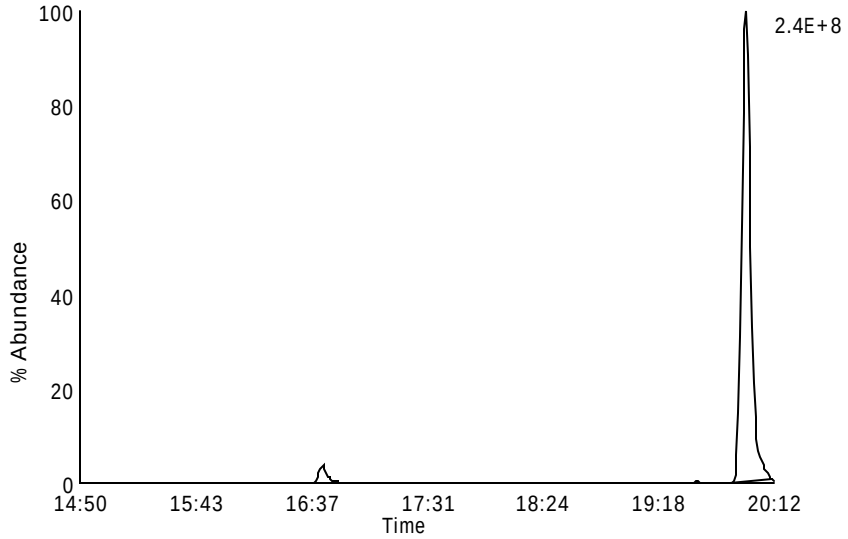
Di Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

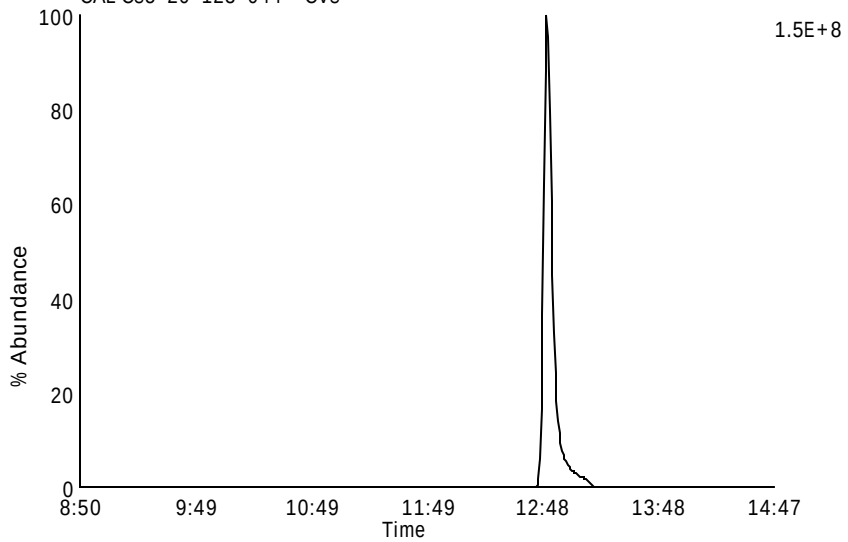
Data File: Y210818B_09 G1 C7 - 222.0003
CAL CS5-20-123-044 - CVS



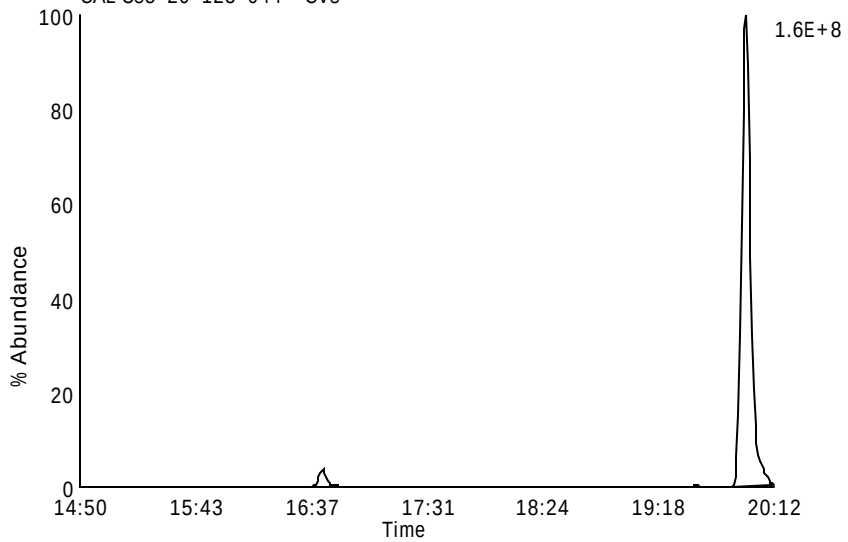
Data File: Y210818B_09 G2 C1 - 222.0003
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G1 C8 - 223.9974
CAL CS5-20-123-044 - CVS

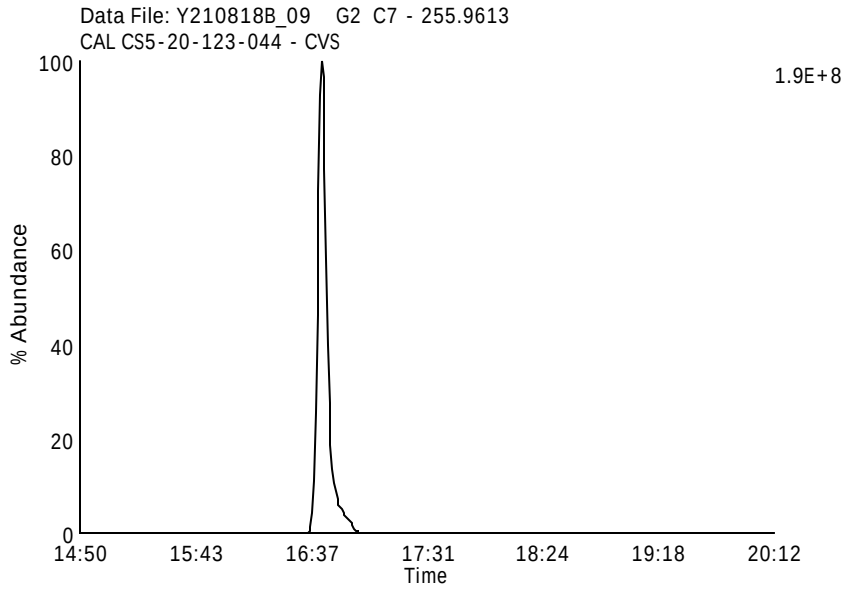


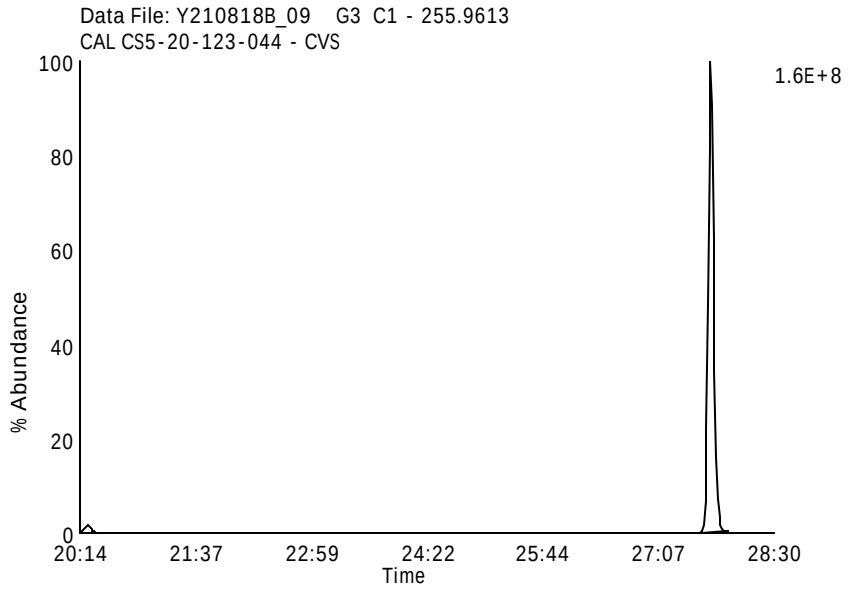
Data File: Y210818B_09 G2 C2 - 223.9974
CAL CS5-20-123-044 - CVS

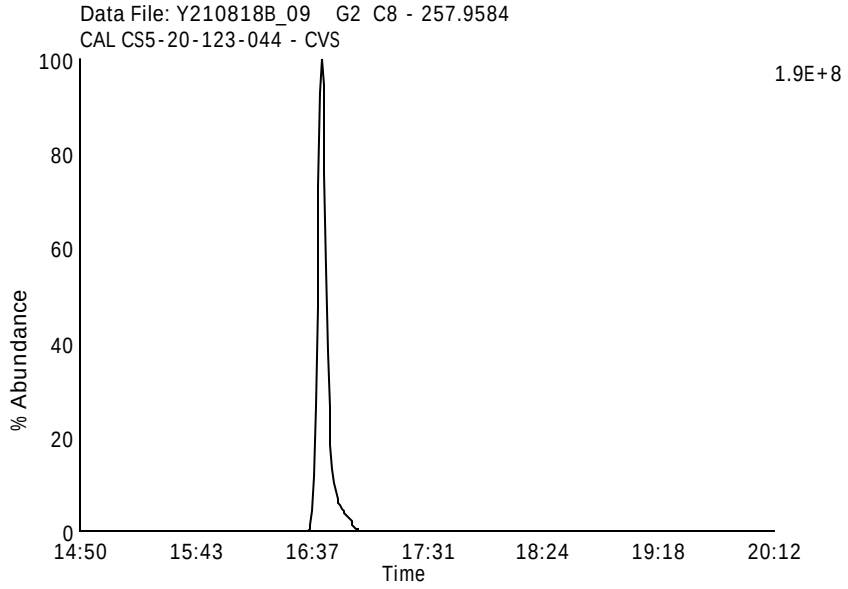


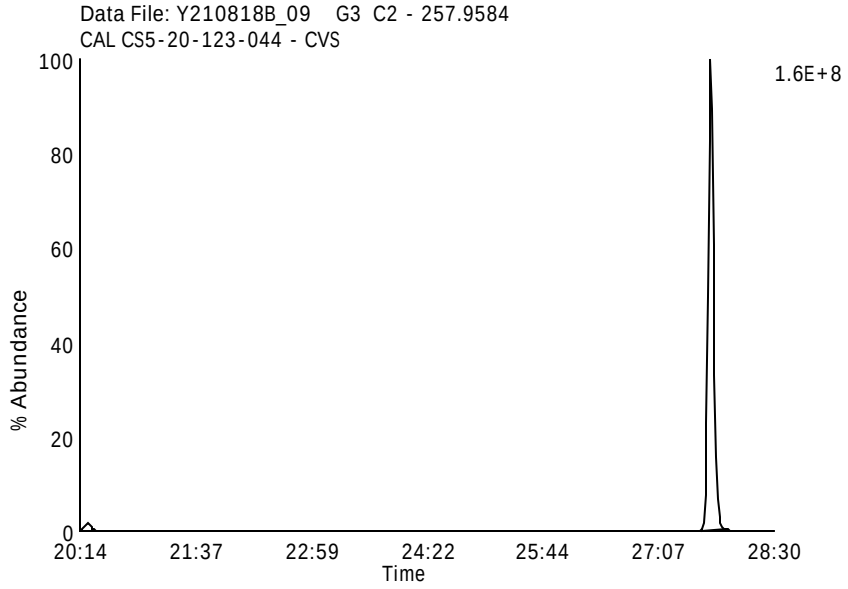
Tri Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



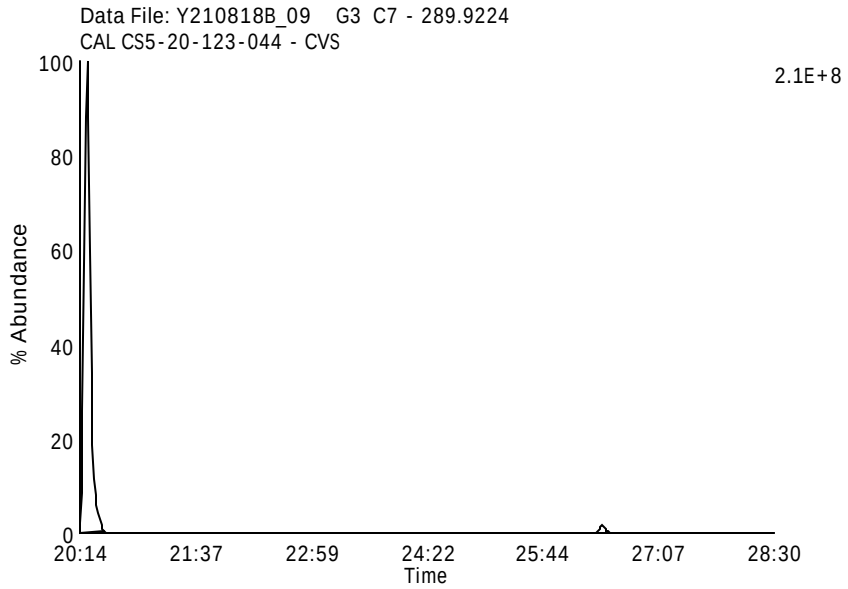


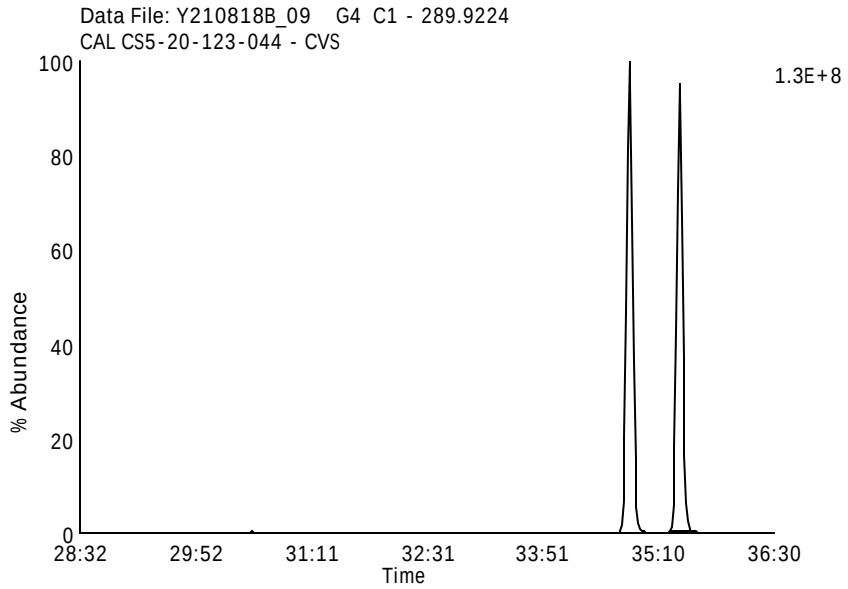


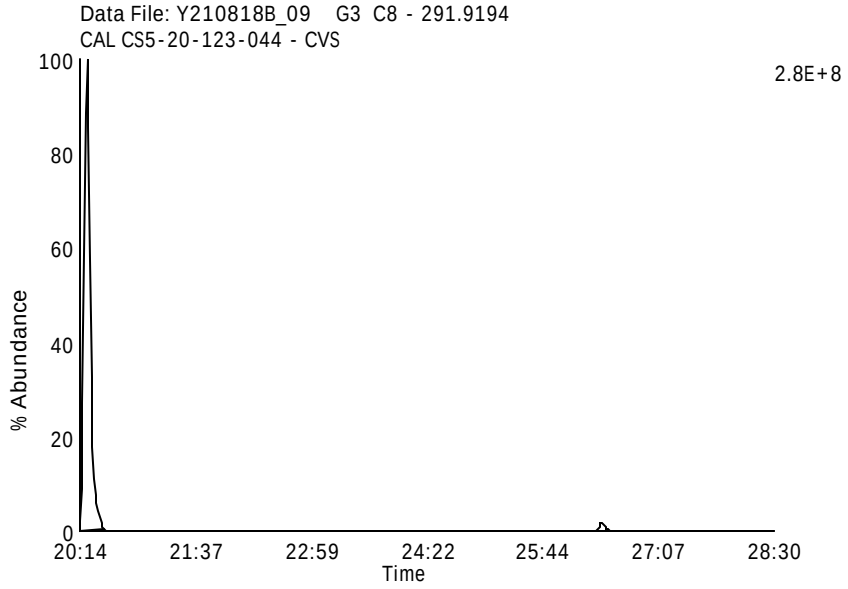


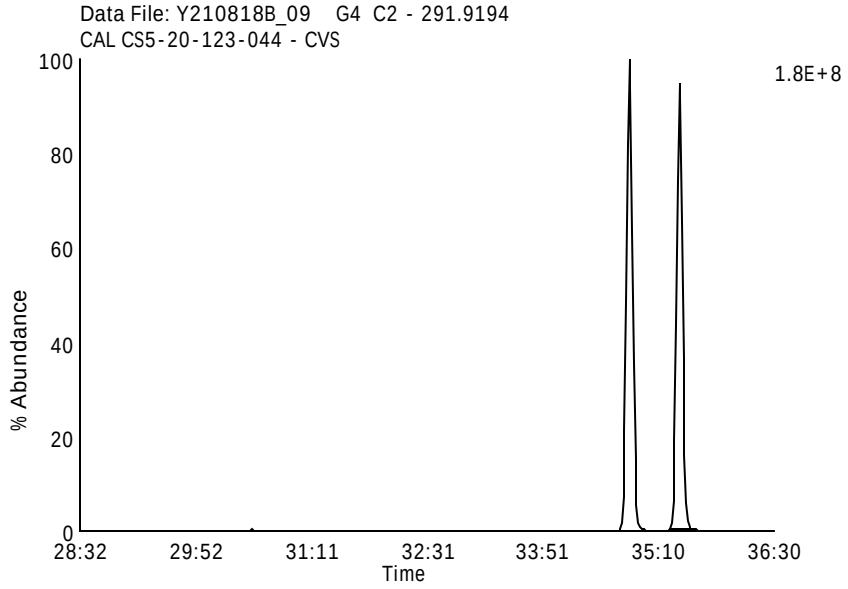
Tetra Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS



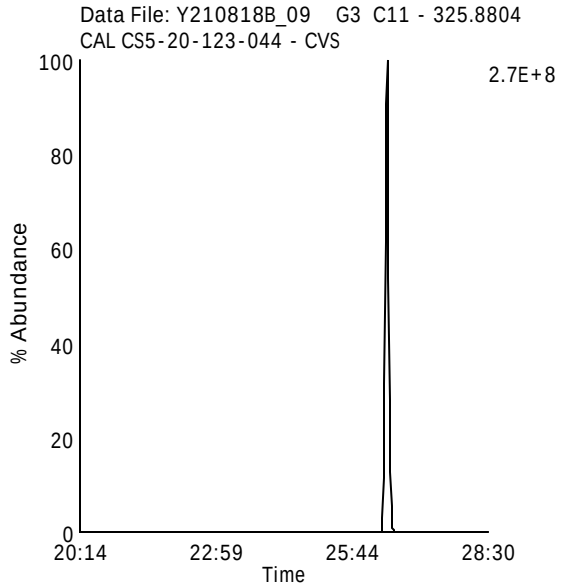


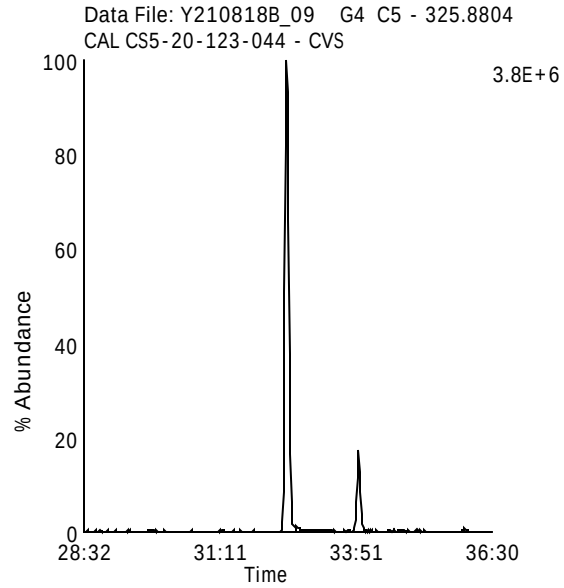


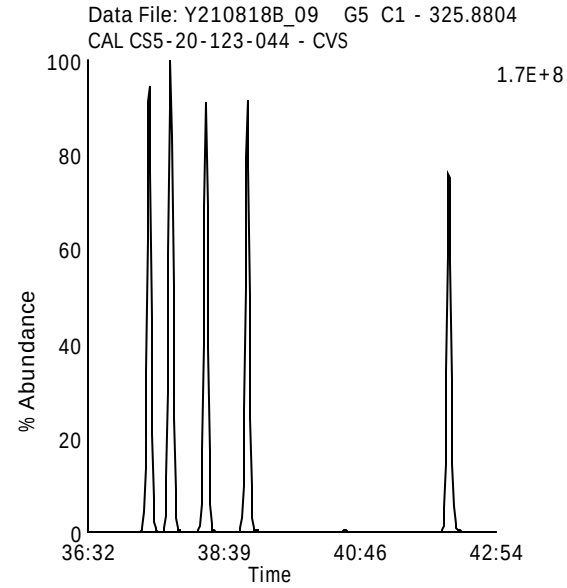


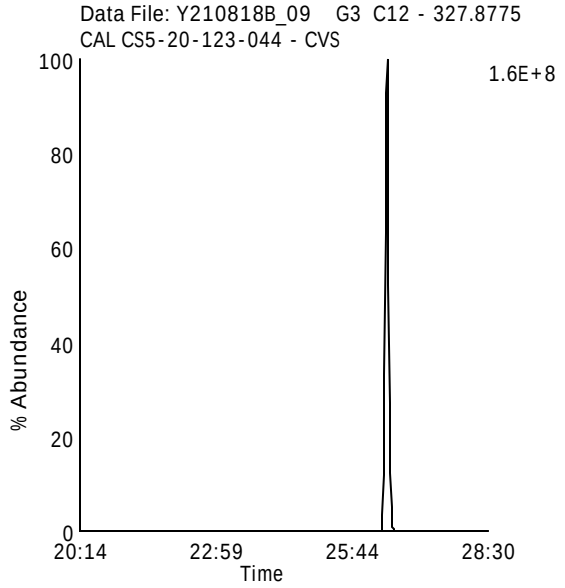
Penta Chlorinated Biphenyls

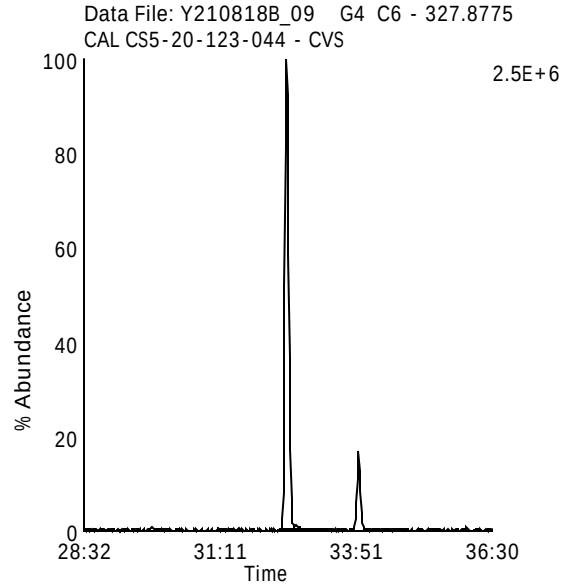
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

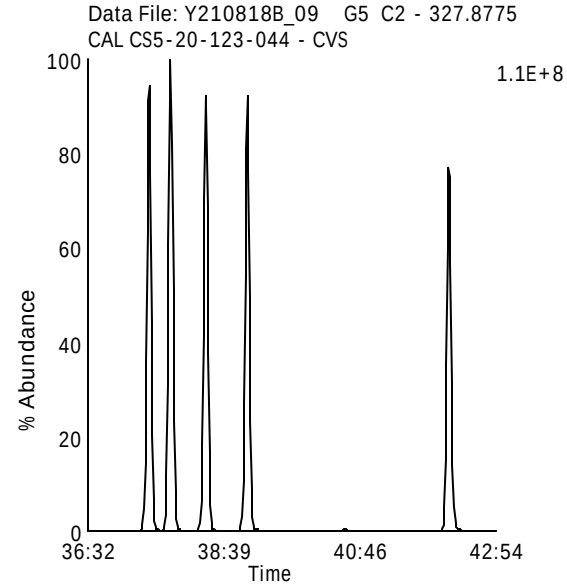












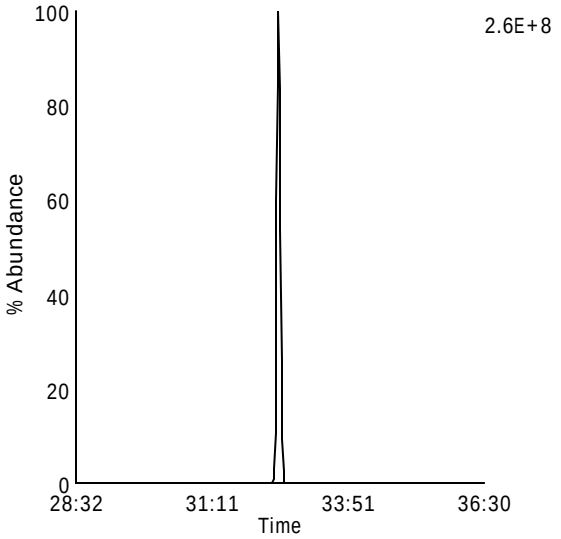
Hexa Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

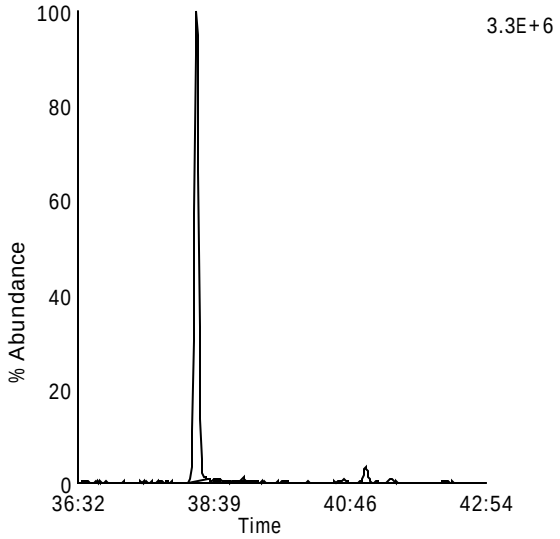
Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

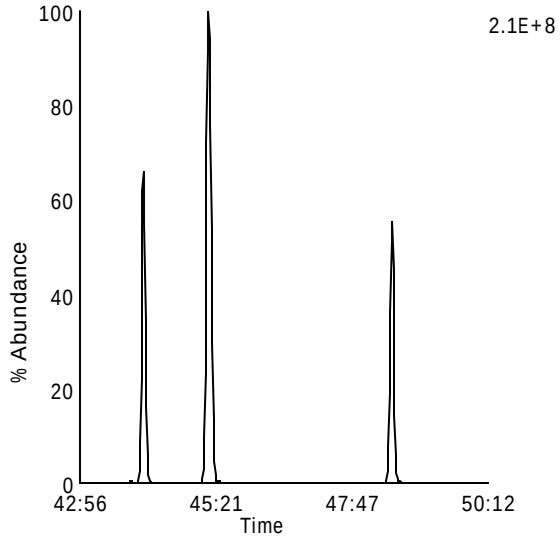
Data File: Y210818B_09 G4 C11 - 359.8415
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G5 C5 - 359.8415
CAL CS5-20-123-044 - CVS



Data File: Y210818B_09 G6 C1 - 359.8415
CAL CS5-20-123-044 - CVS



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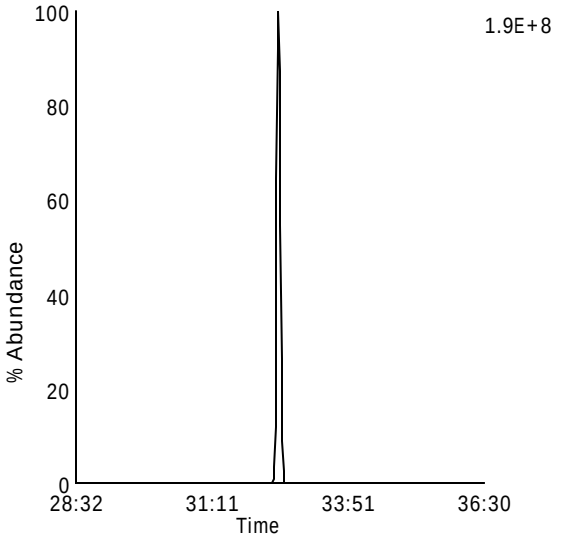
CAL CS5-20-123-044 - CVS



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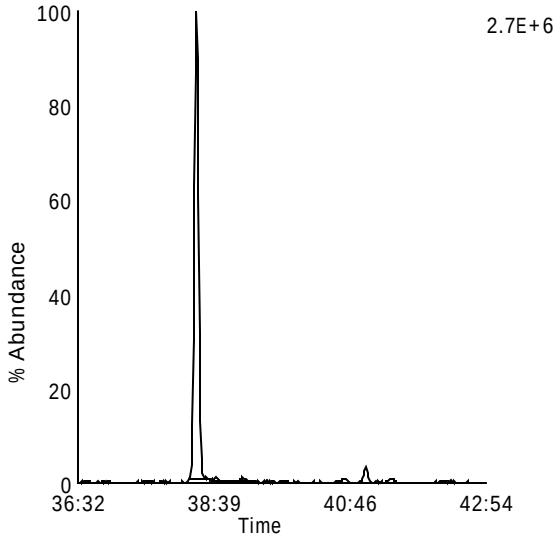
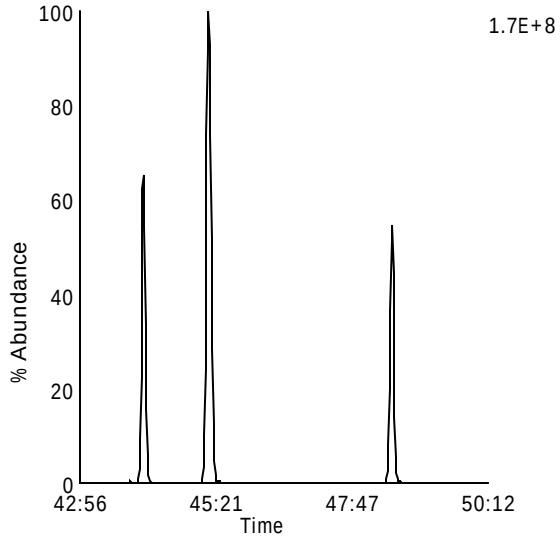
CAL CS5-20-123-044 - CVS

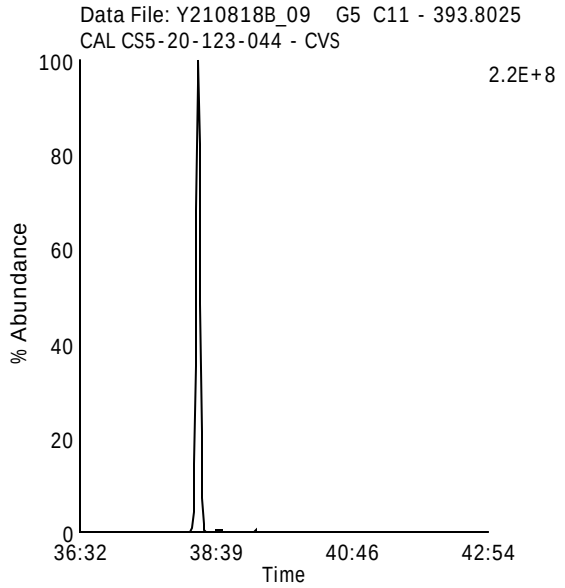


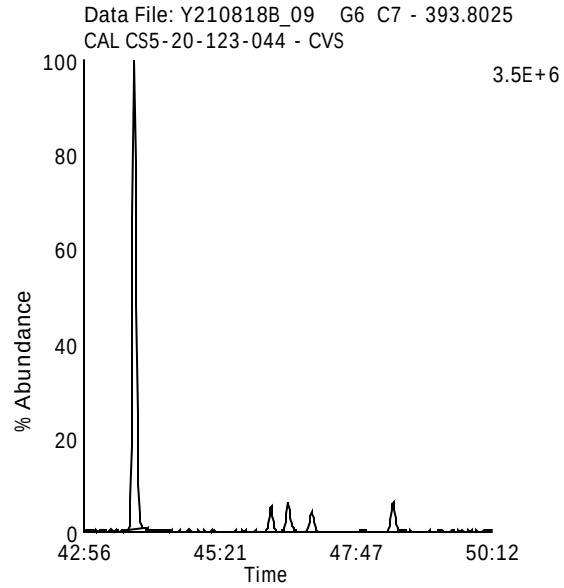
Data File: Y210818B_09 G6 C2 - 361.8385
CAL CS5-20-123-044 - CVS

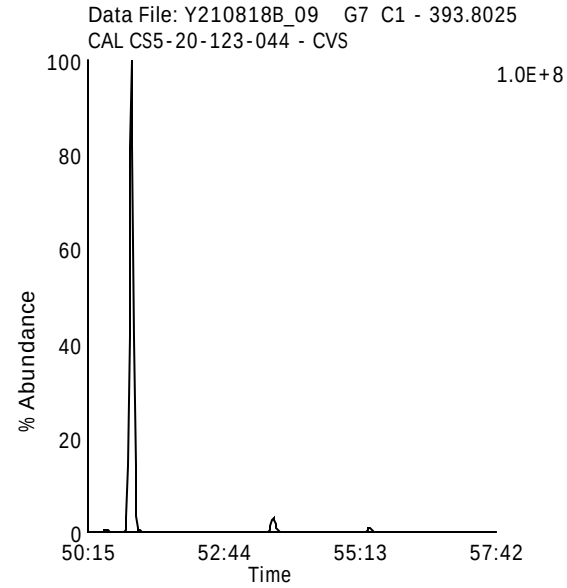


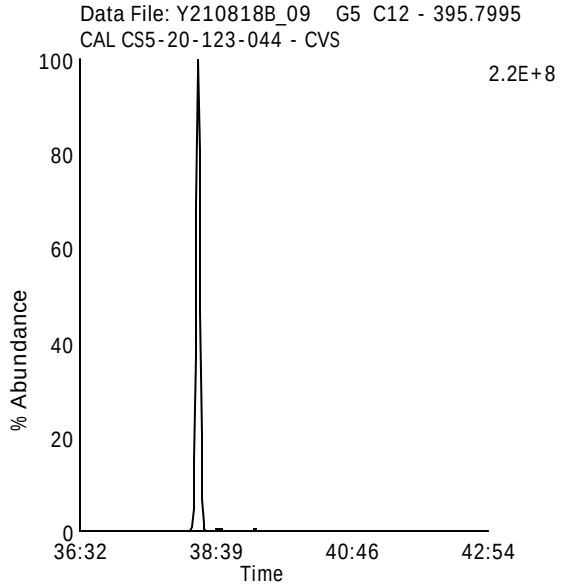
Hepta Chlorinated Biphenyls

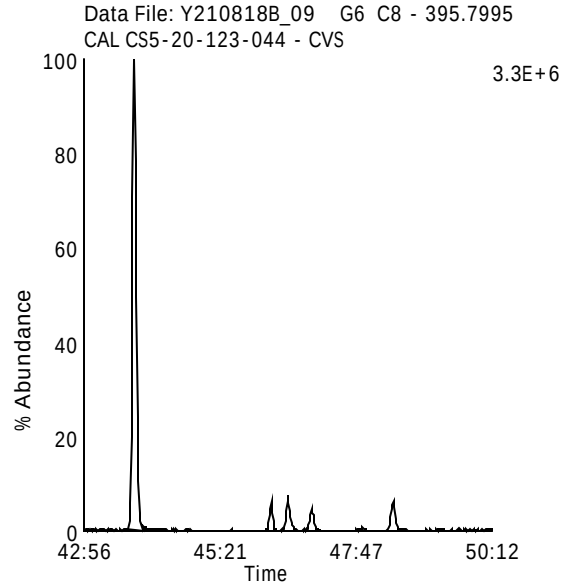
Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS

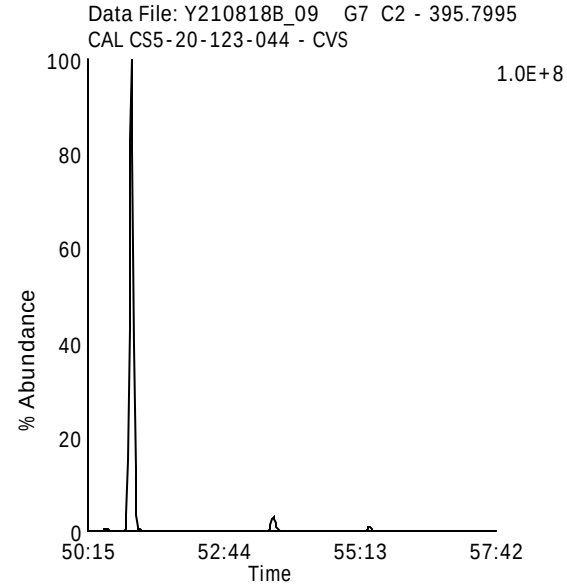






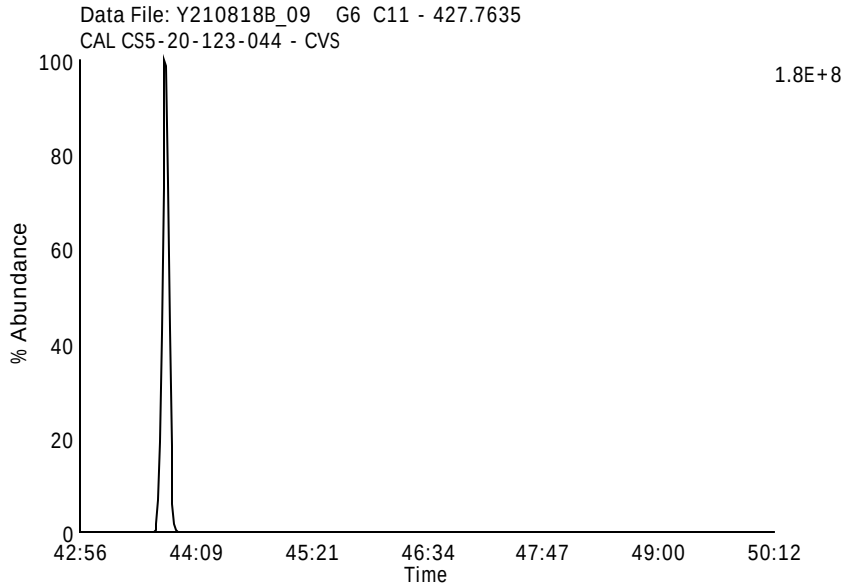


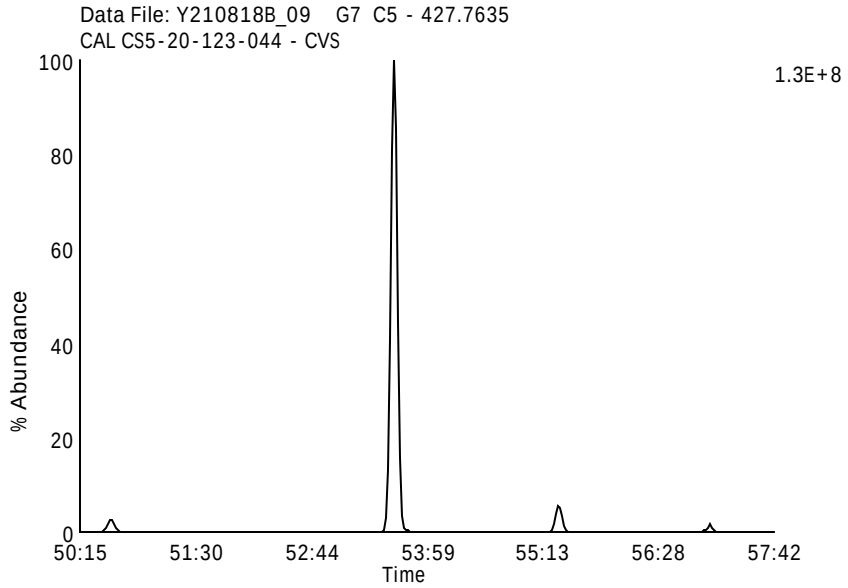


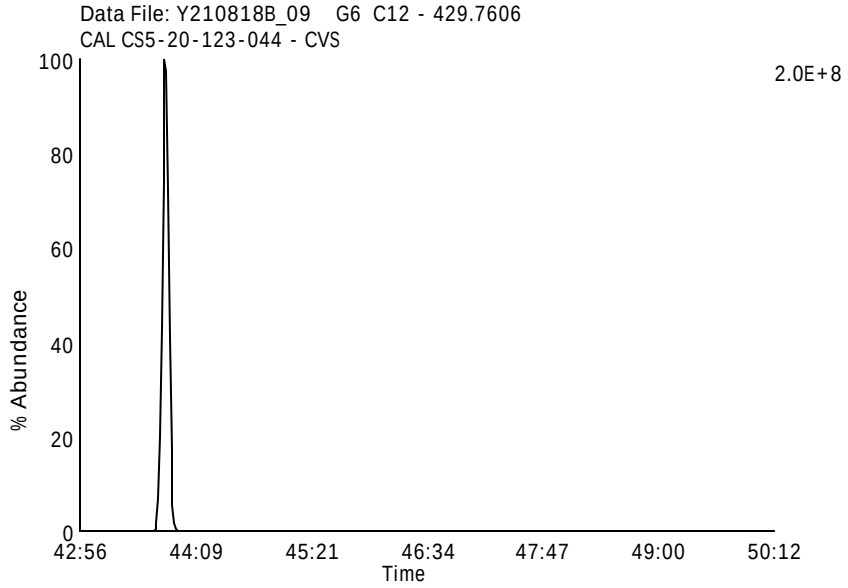


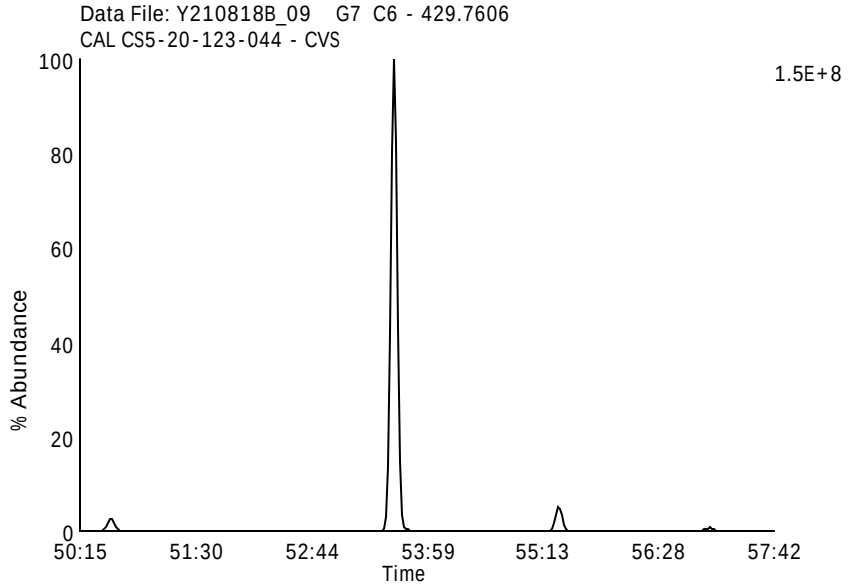
Octa Chlorinated Biphenyls

Data File Name: Y210818B_09
Lab Sample ID: CS5-20-123-044
Date Acquired: 8/18/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS5-20-123-044 - CVS







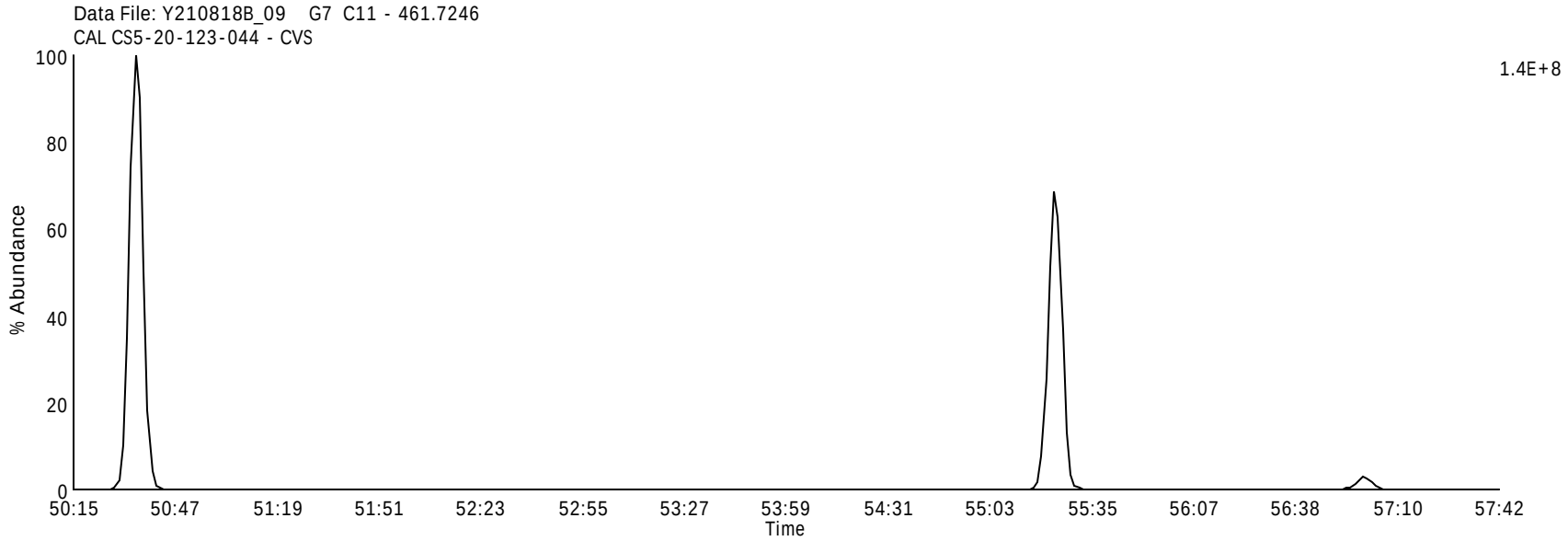


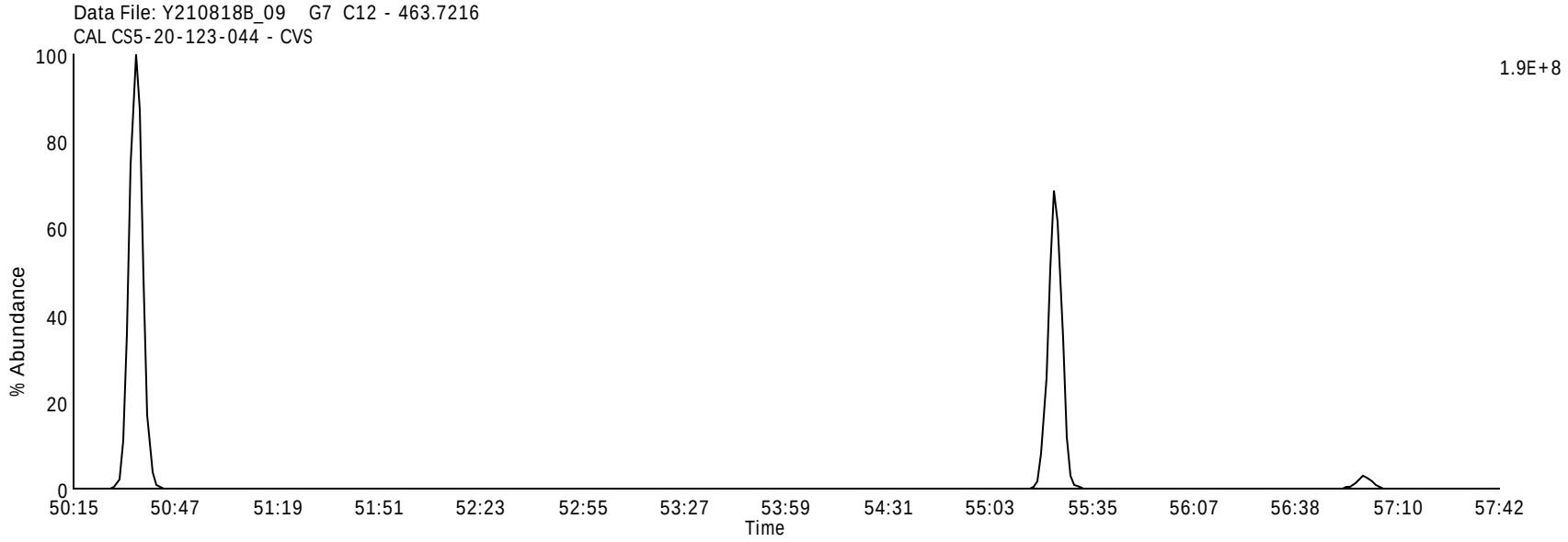
Nona Chlorinated Biphenyls

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS



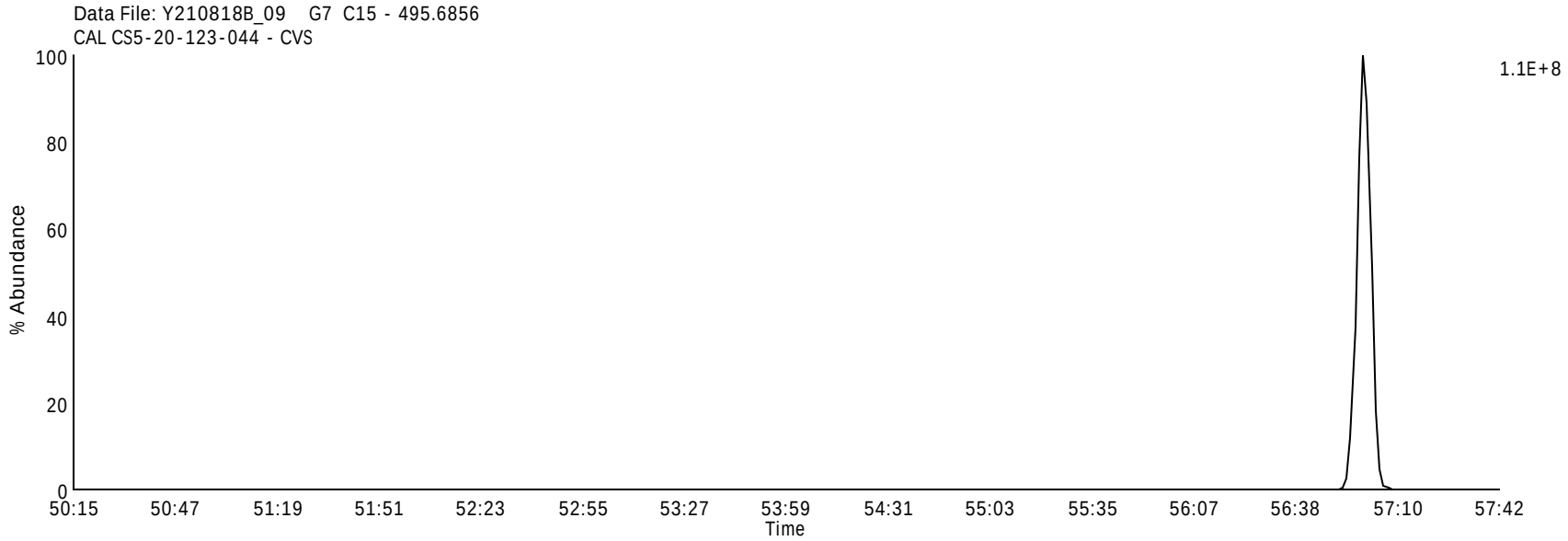


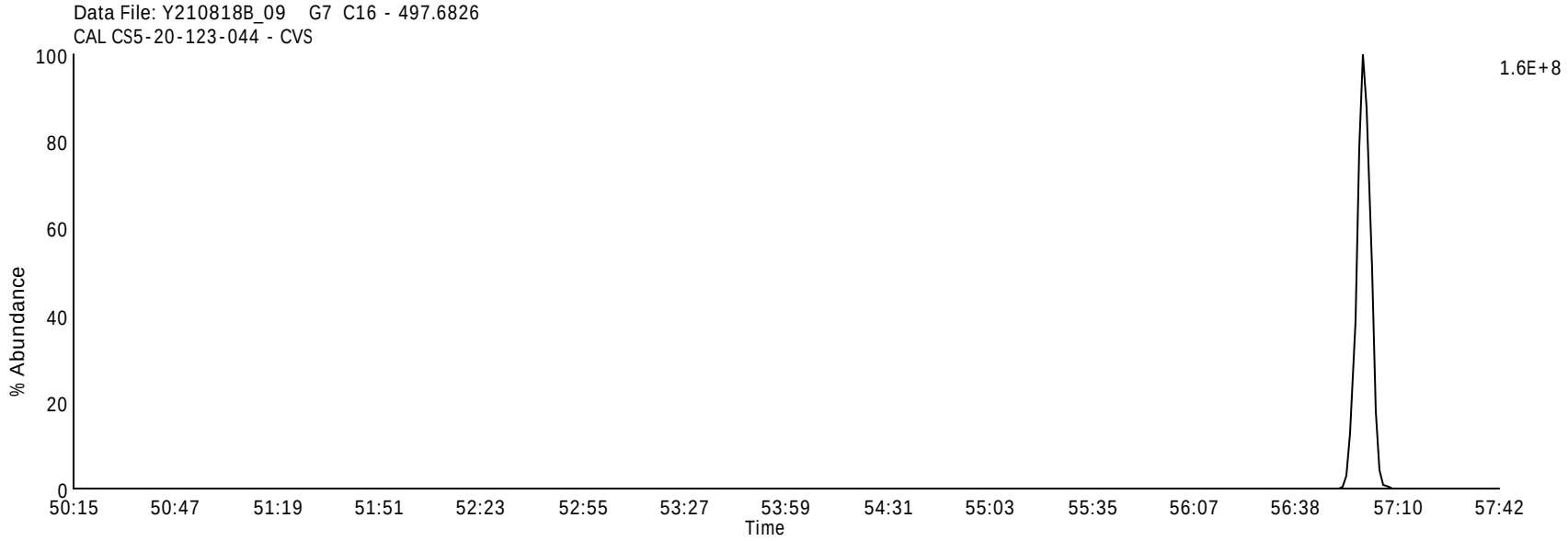
Deca Chlorinated Biphenyl

Data File Name: Y210818B_09 Lab Sample ID: CS5-20-123-044

Date Acquired: 8/18/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS5-20-123-044 - CVS

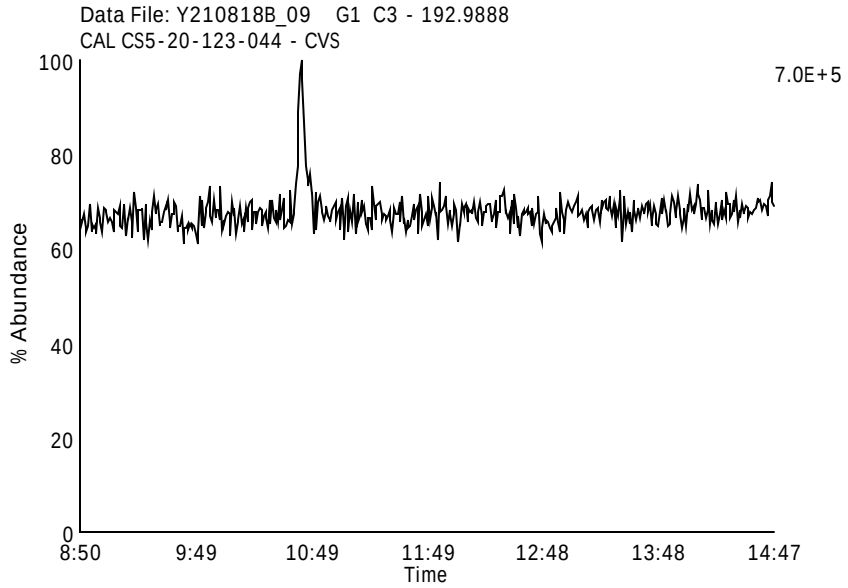


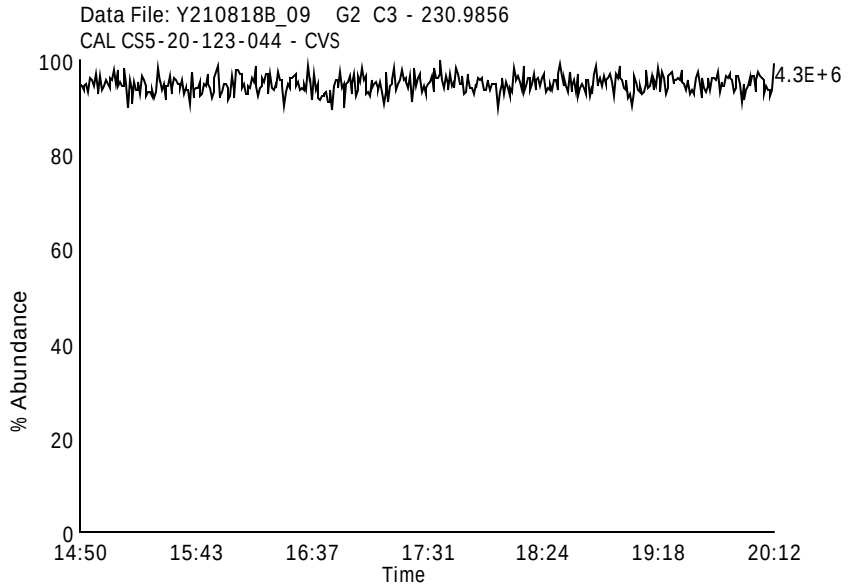


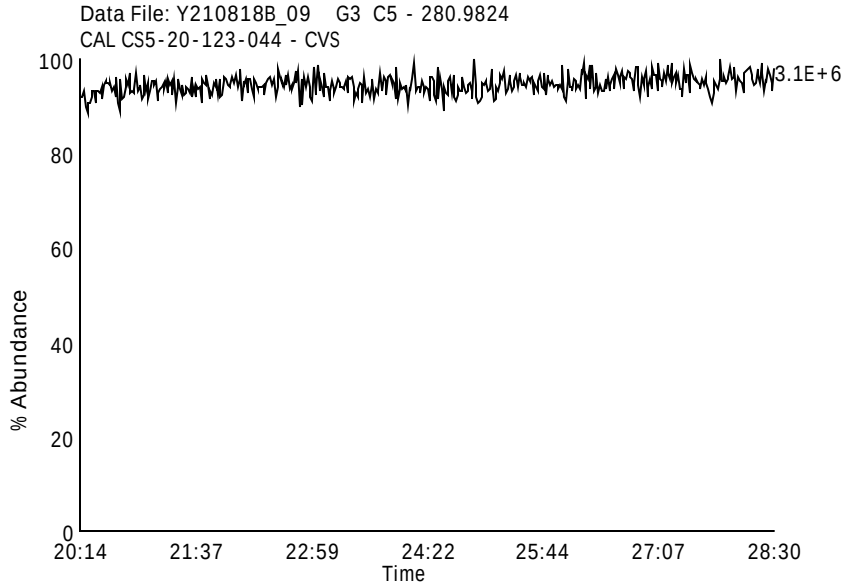
Group 1 - 4 Lock mass

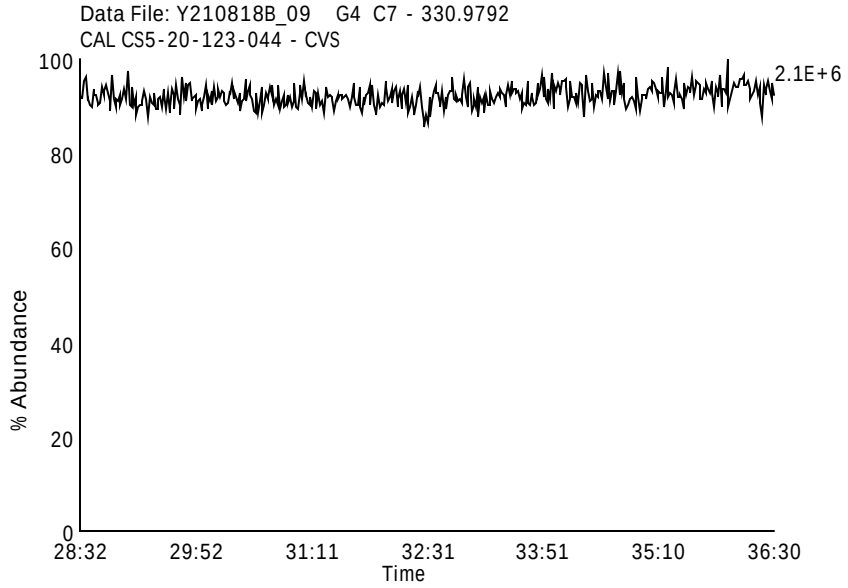
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)





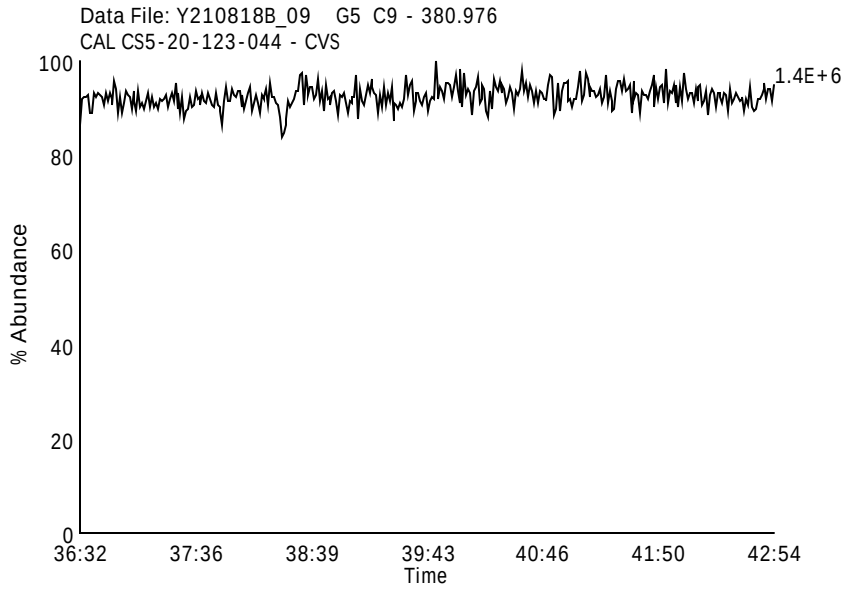


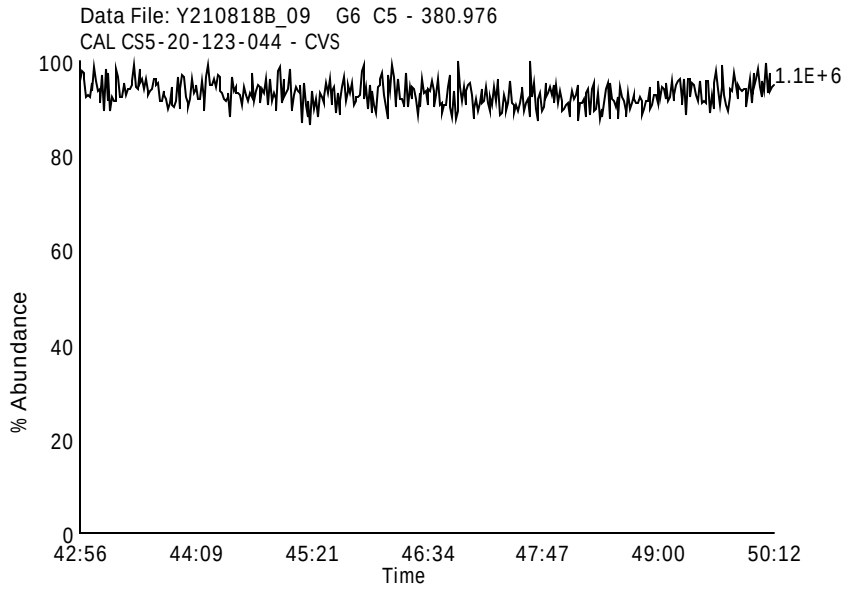


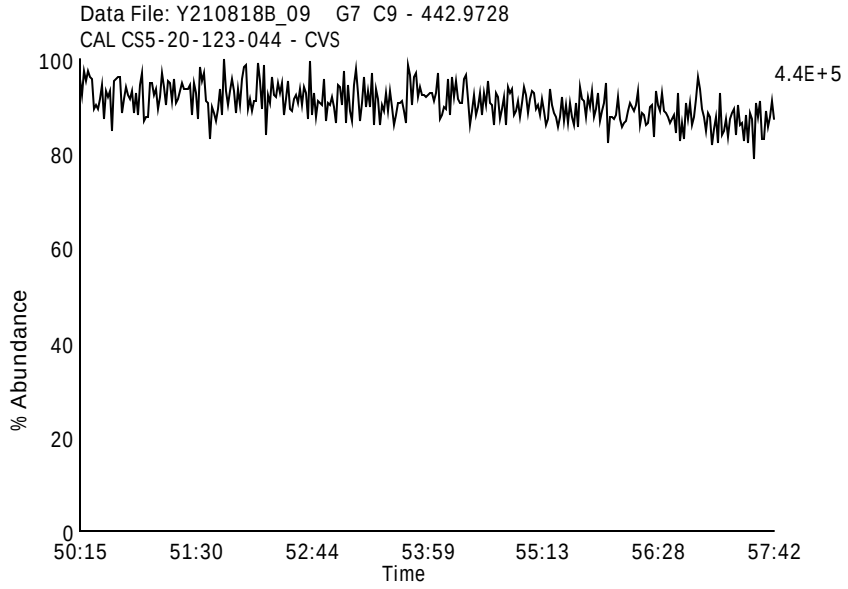
Group 5 - 7 Lock mass

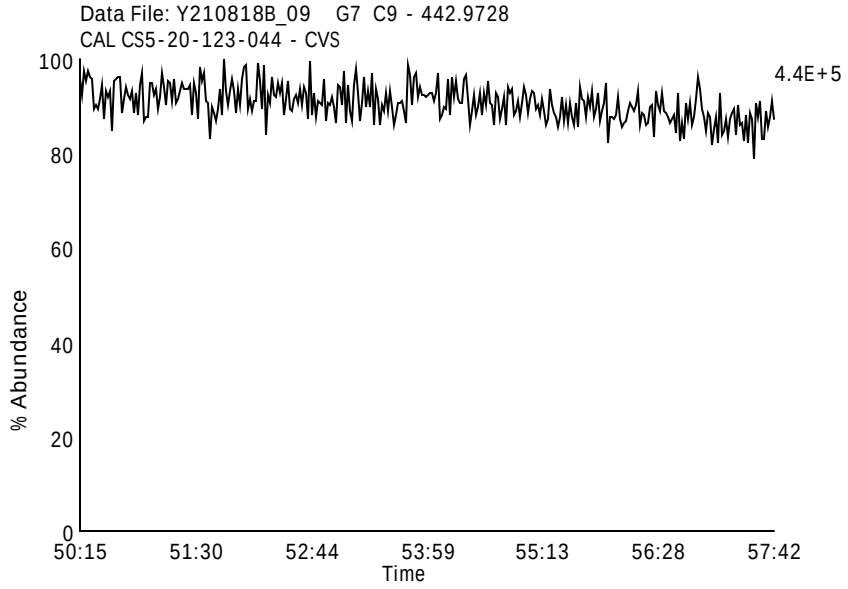
Data File Name: Y210818B_09
Date Acquired: 8/18/2021
Sample Description: CAL CS5-20-123-044 - CVS

Lab Sample ID: CS5-20-123-044
Instrument: 10MSHR12 (Y)







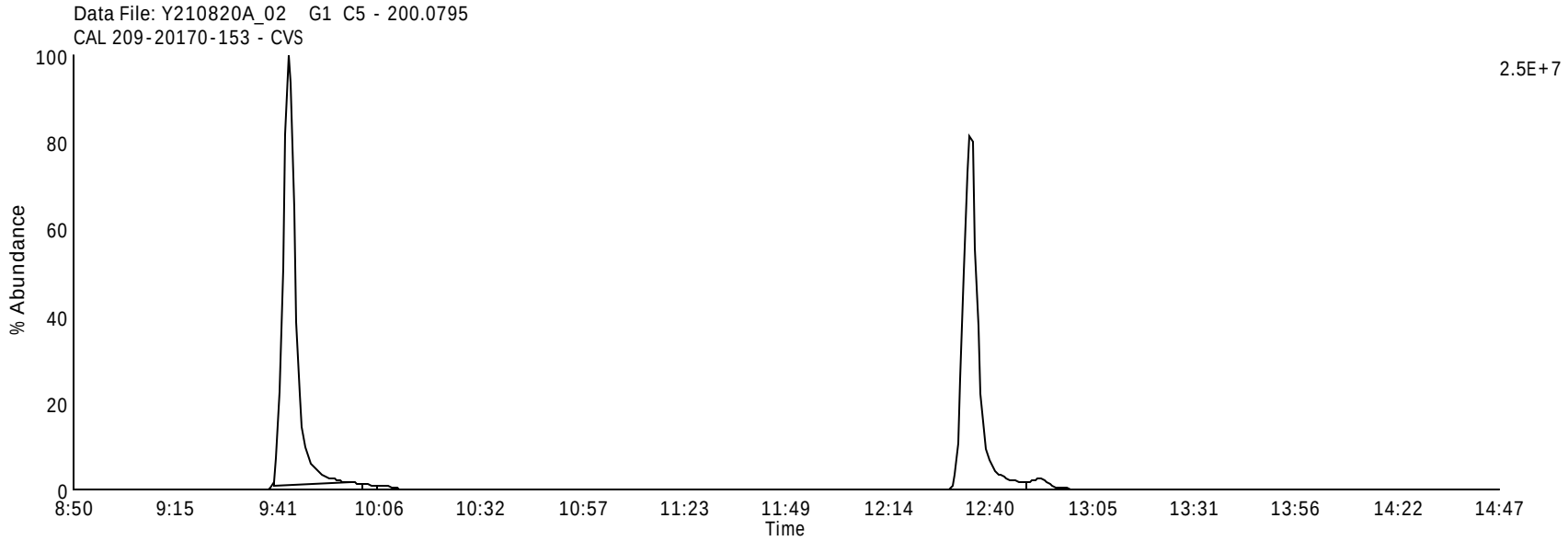


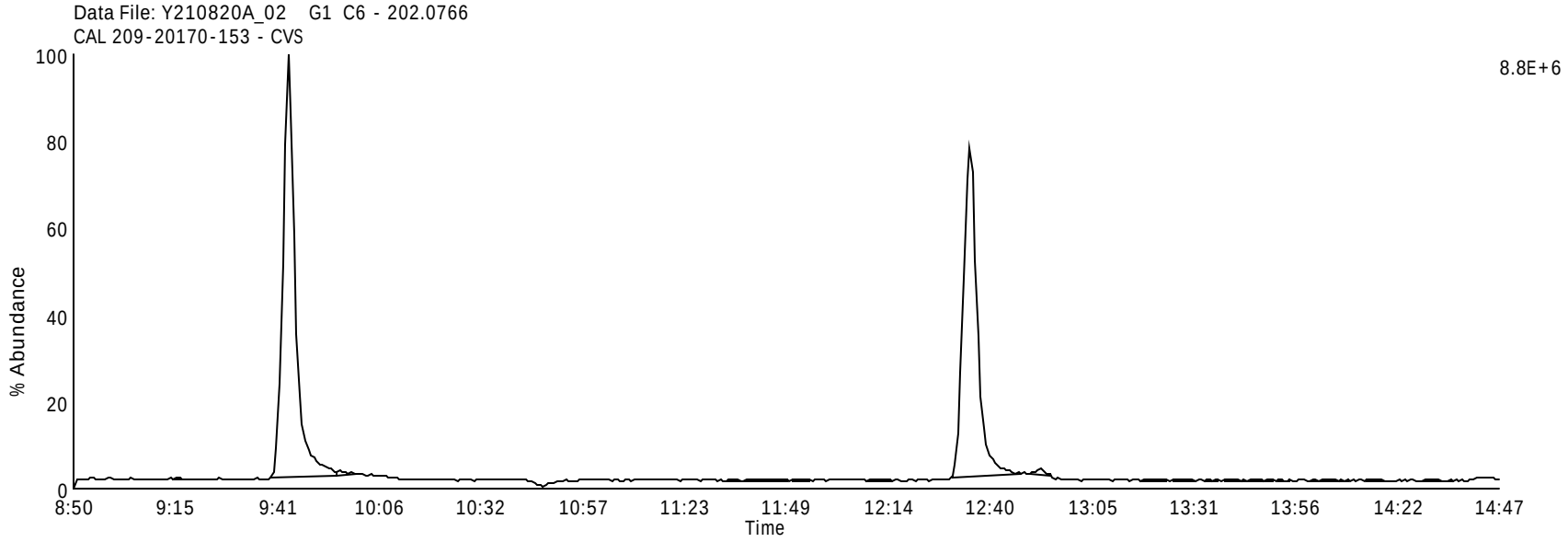
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210820A_02 | Lab Sample ID: 209-20170-153

Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)

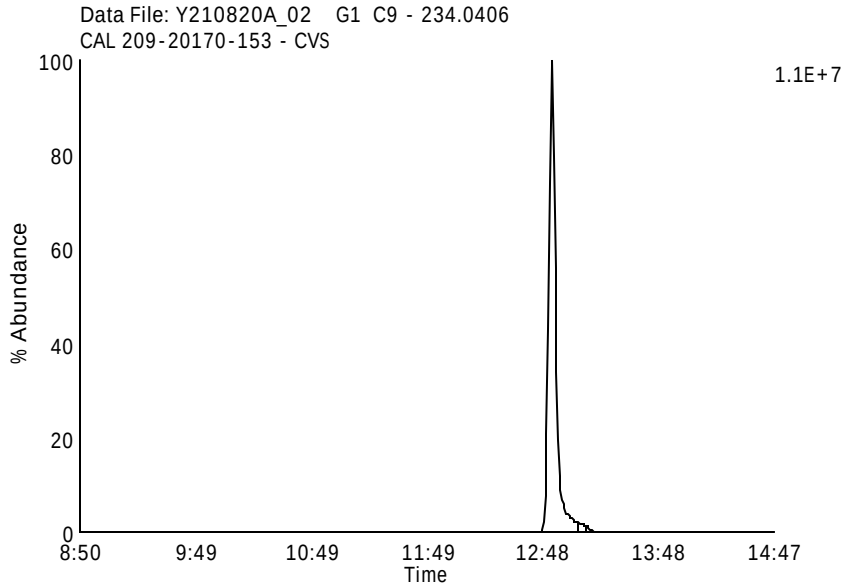
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

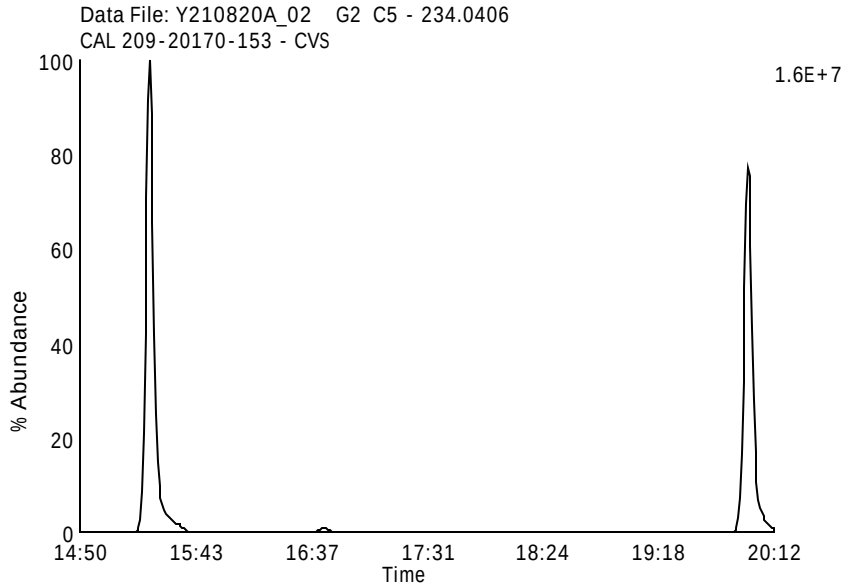


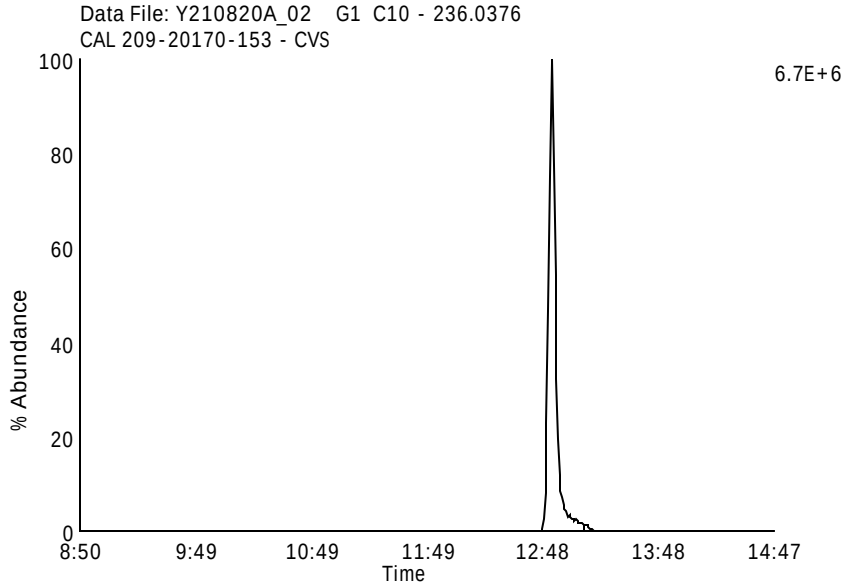


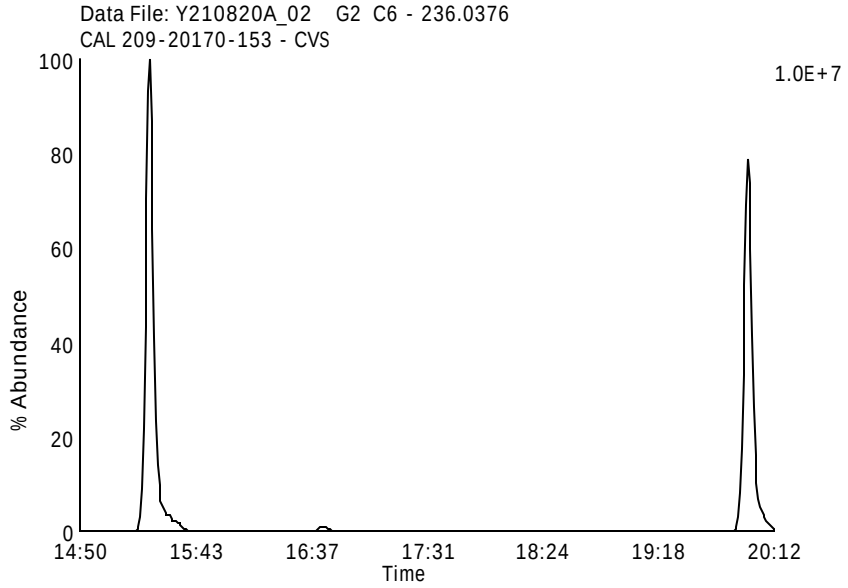
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



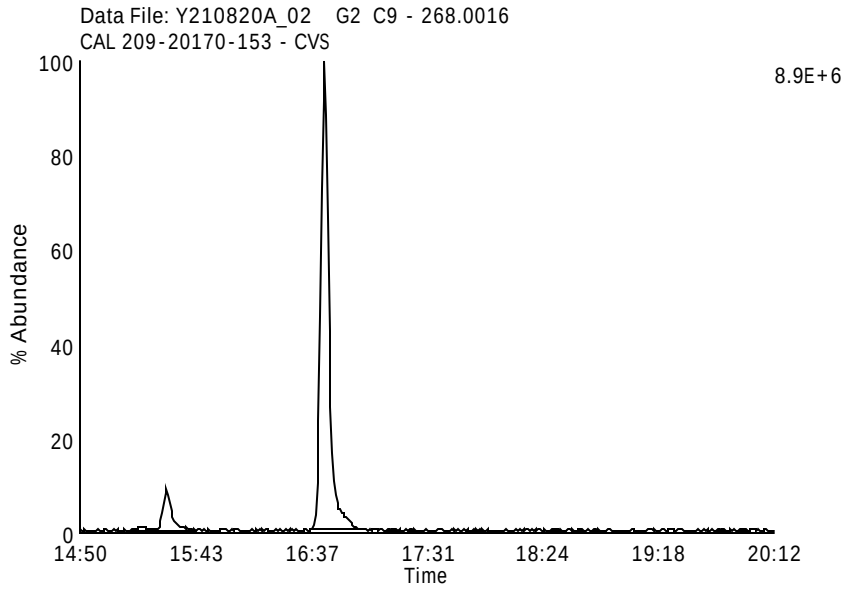


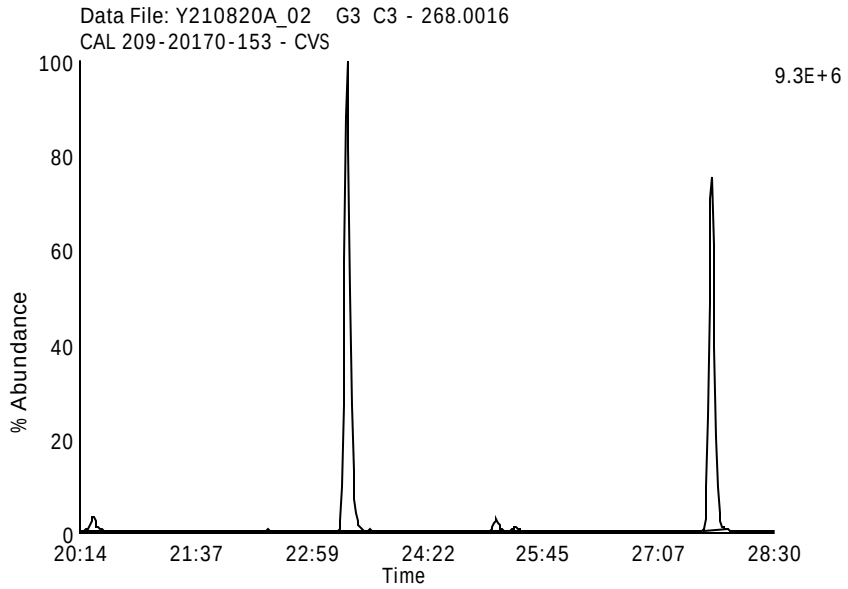


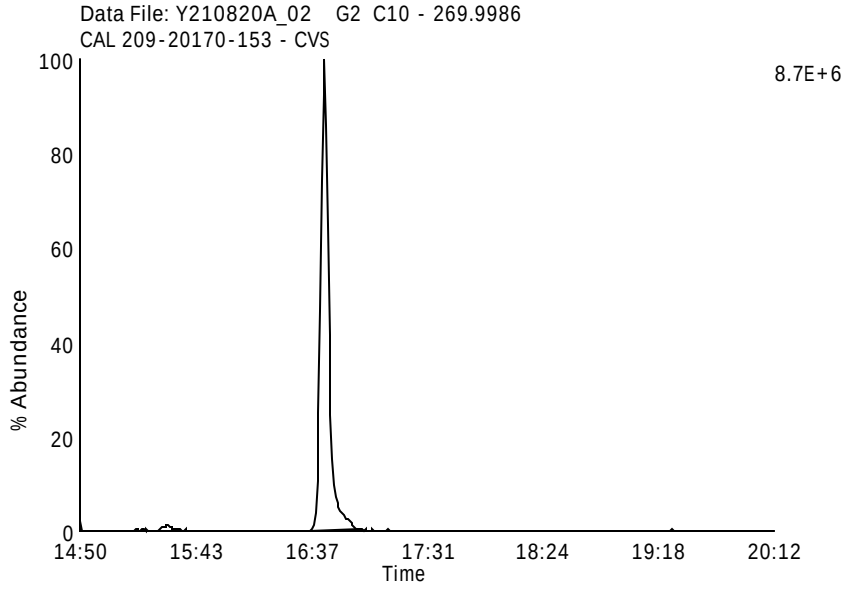


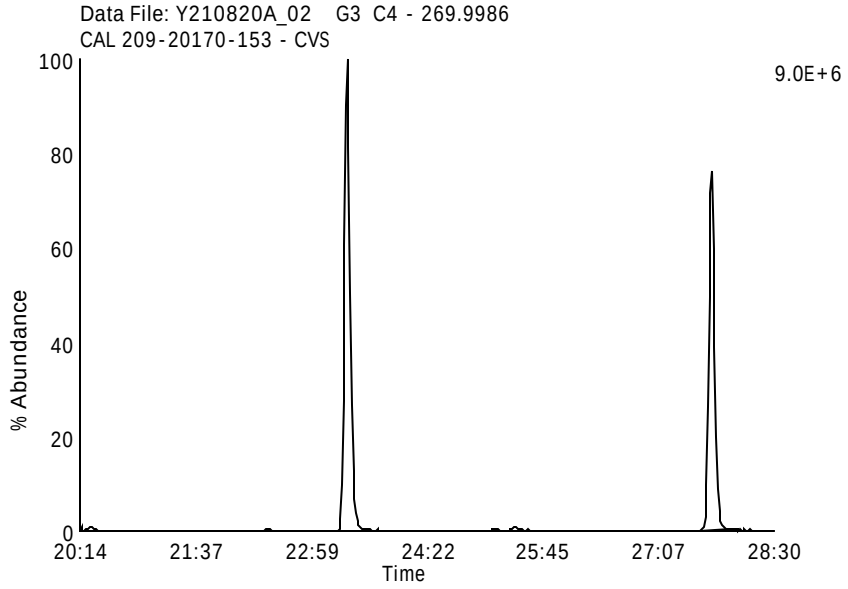
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





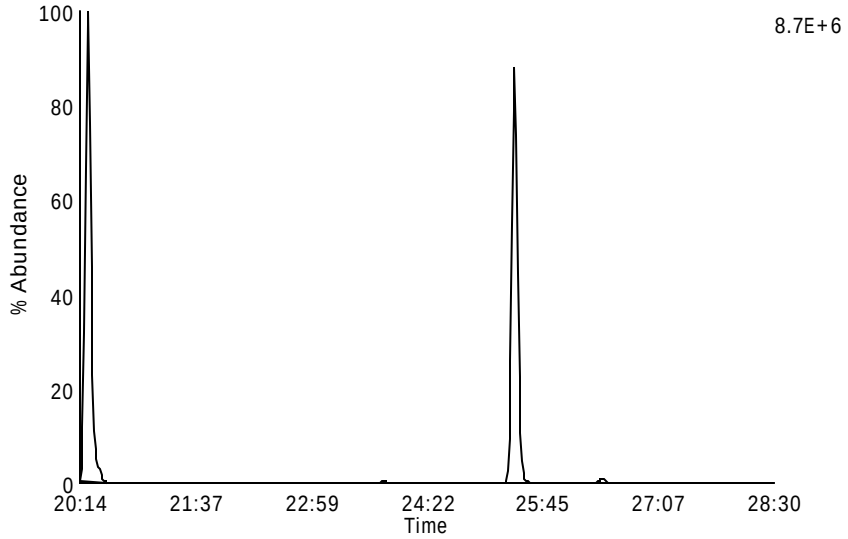




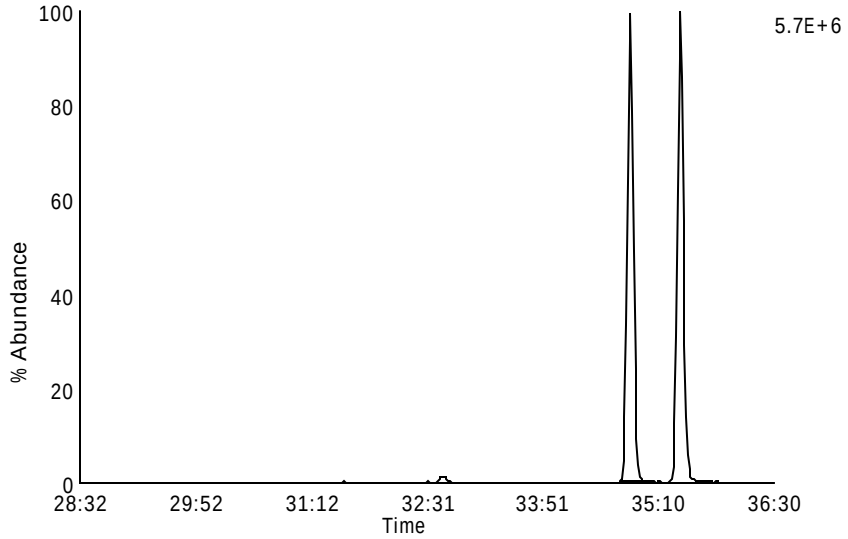
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

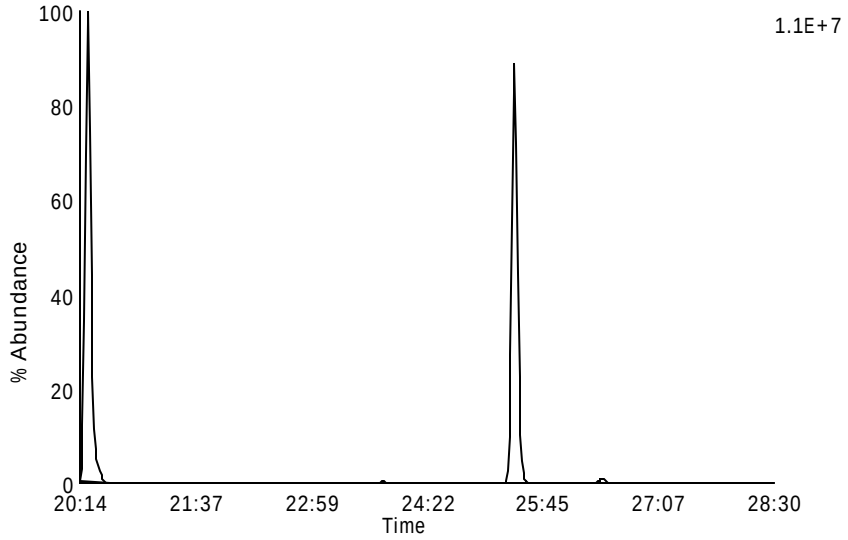
Data File: Y210820A_02 G3 C9 - 301.9626
CAL 209-20170-153 - CVS



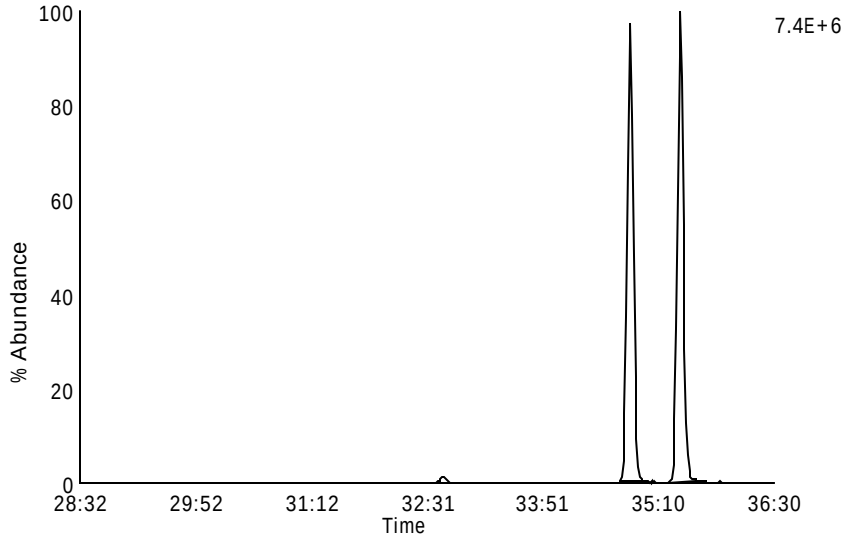
Data File: Y210820A_02 G4 C3 - 301.9626
CAL 209-20170-153 - CVS



Data File: Y210820A_02 G3 C10 - 303.9597
CAL 209-20170-153 - CVS

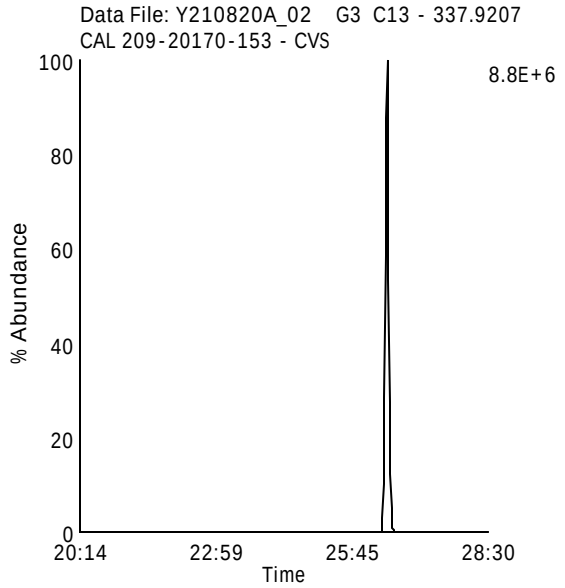


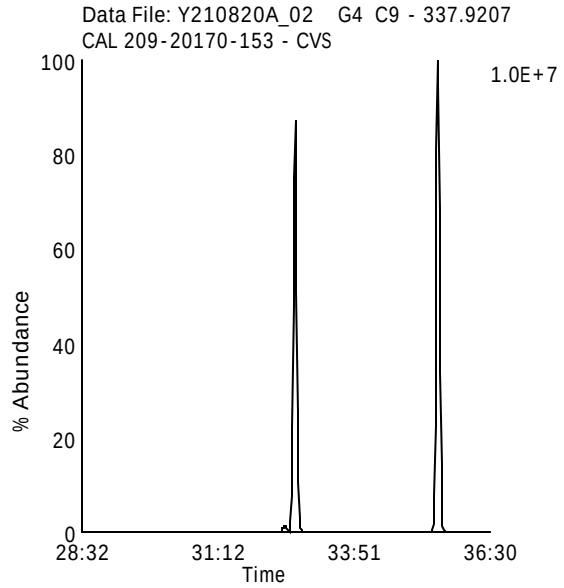
Data File: Y210820A_02 G4 C4 - 303.9597
CAL 209-20170-153 - CVS

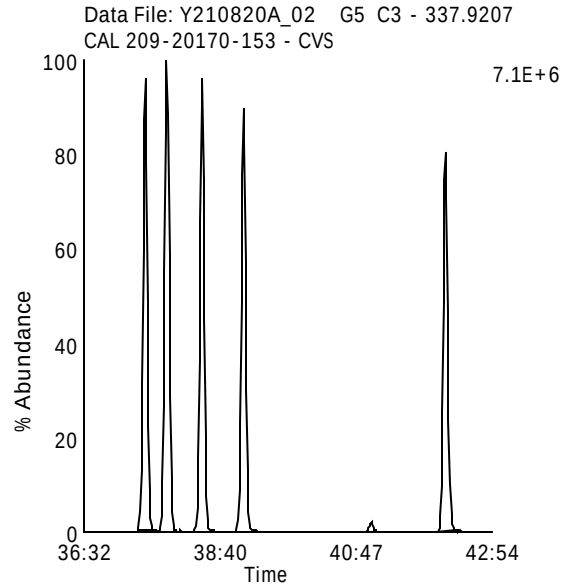


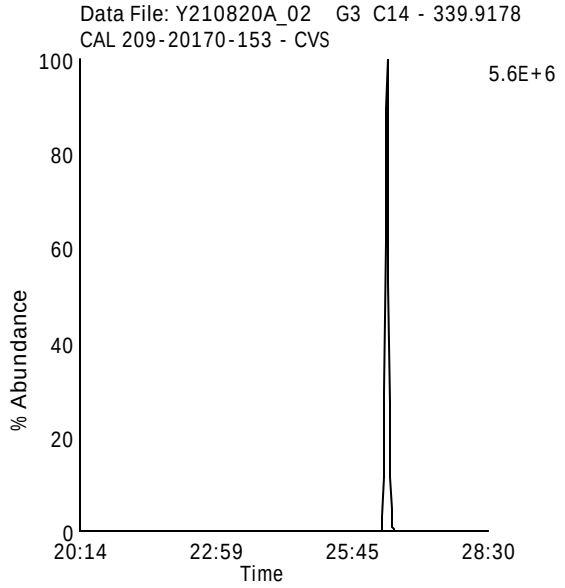
Labeled Penta Chlorinated Biphenyls

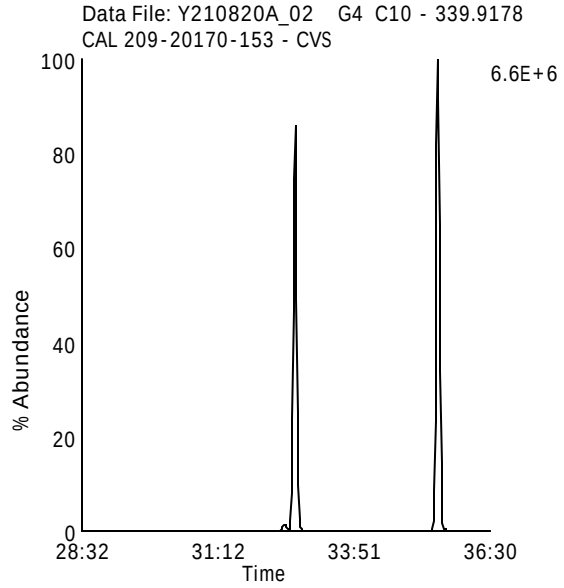
Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

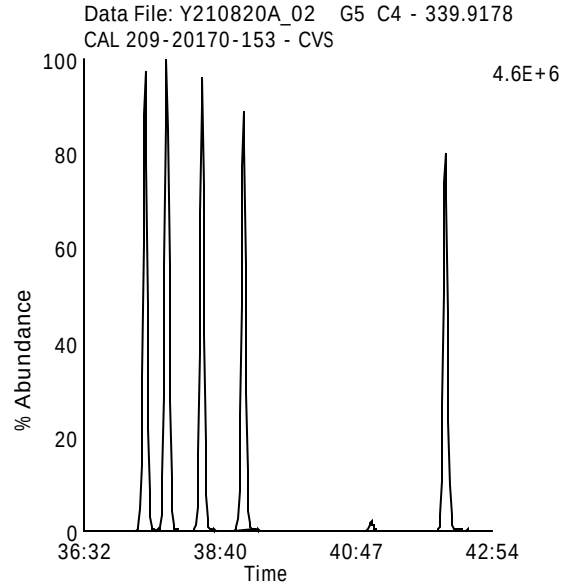








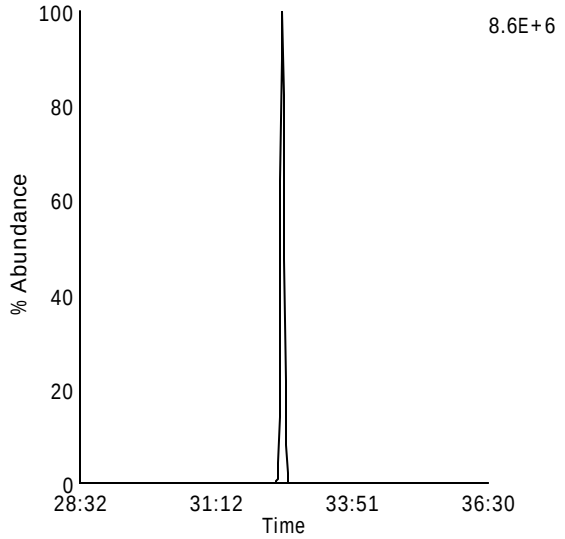




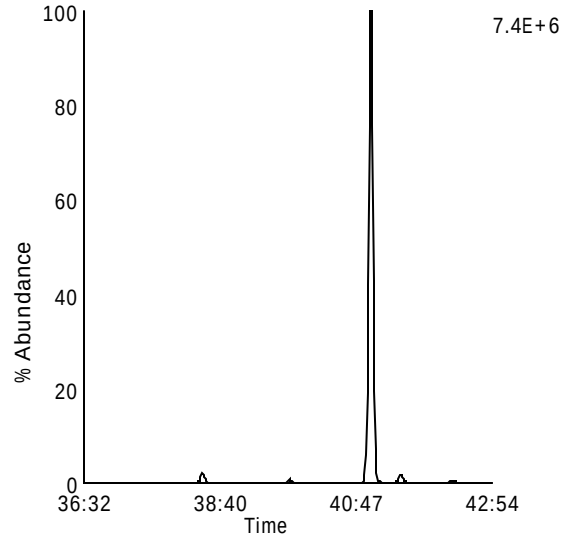
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210820A_02 | Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

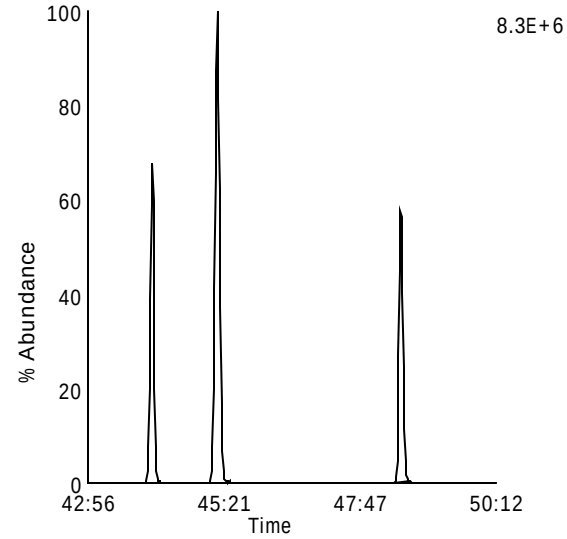
Data File: Y210820A_02 G4 C13 - 371.8817
CAL 209-20170-153 - CVS



Data File: Y210820A_02 G5 C7 - 371.8817
CAL 209-20170-153 - CVS



Data File: Y210820A_02 G6 C3 - 371.8817
CAL 209-20170-153 - CVS



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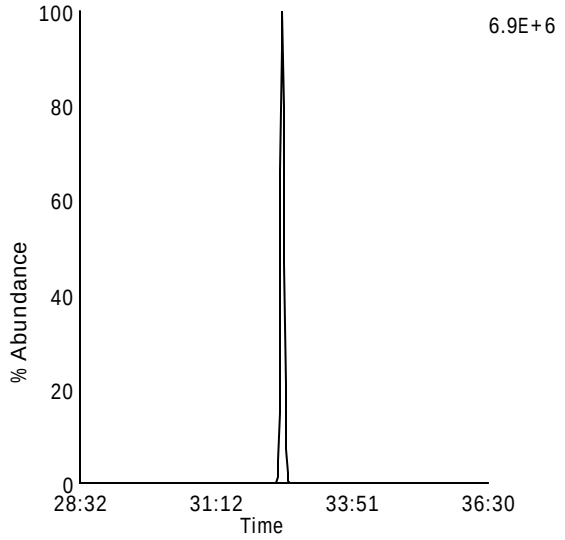
CAL 209-20170-153 - CVS



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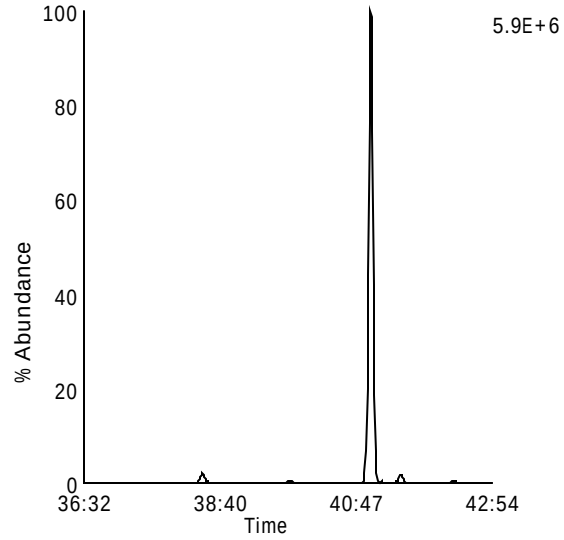
CAL 209-20170-153 - CVS



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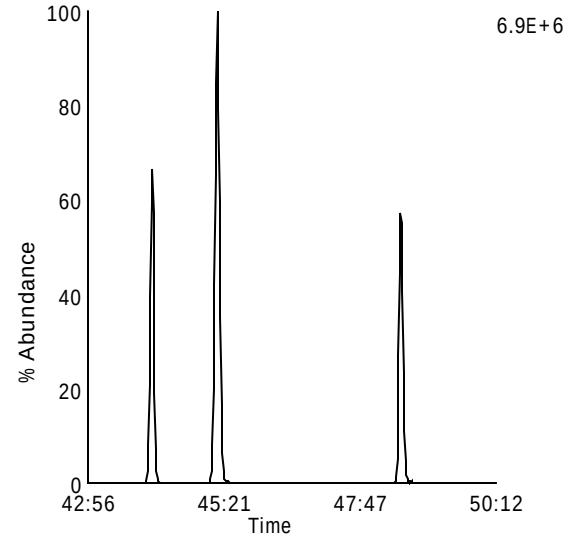
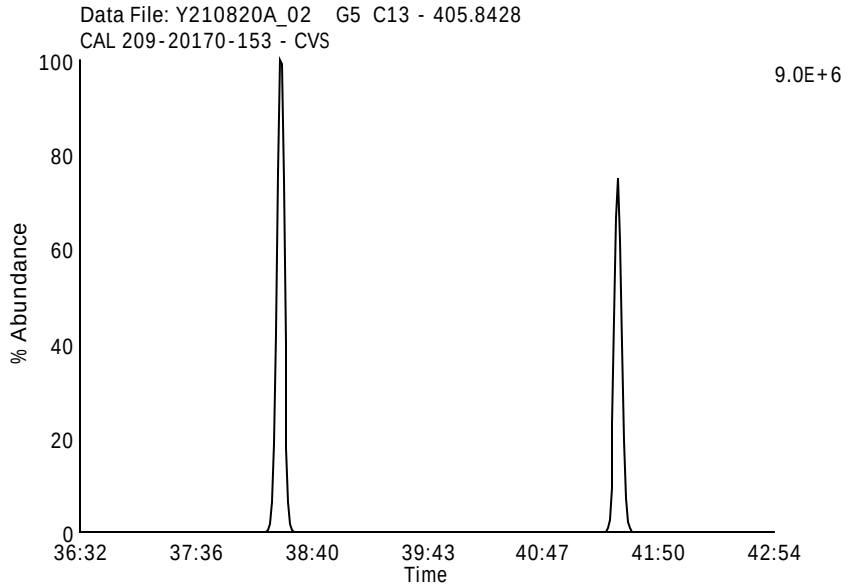
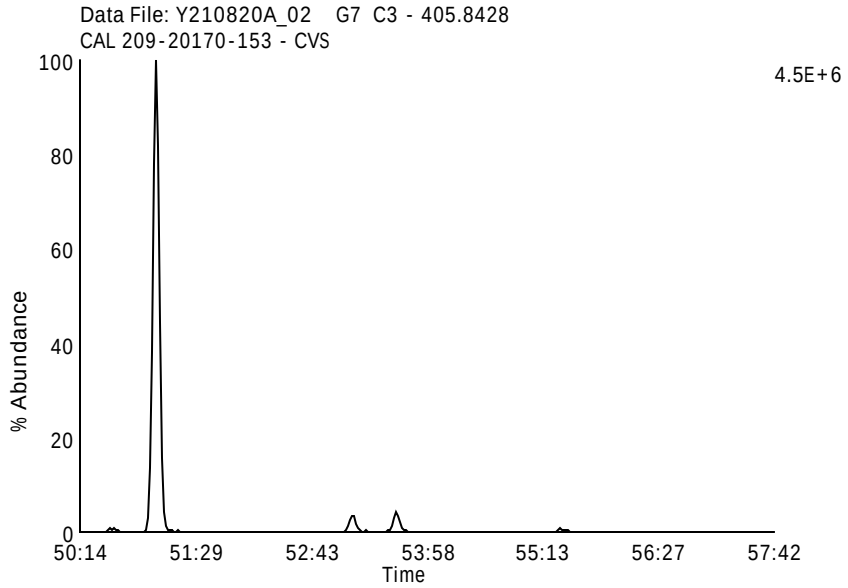
CAL 209-20170-153 - CVS

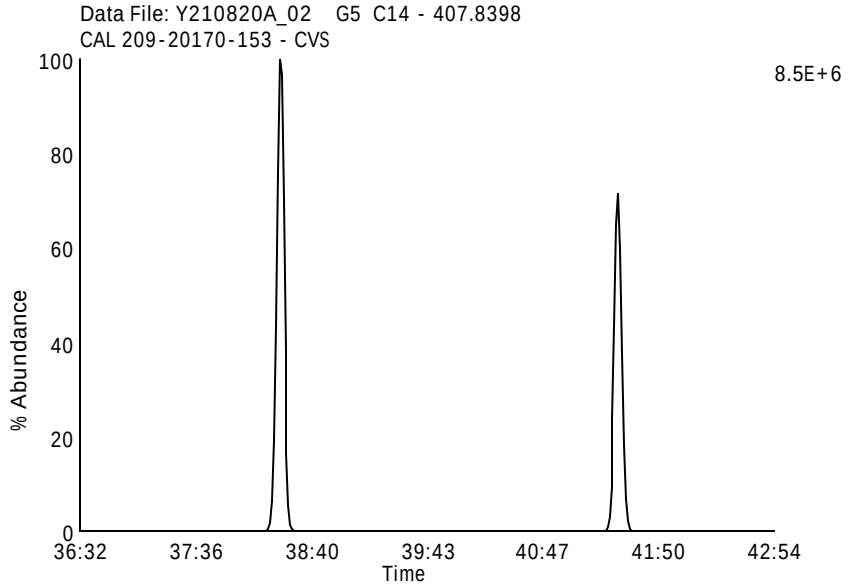


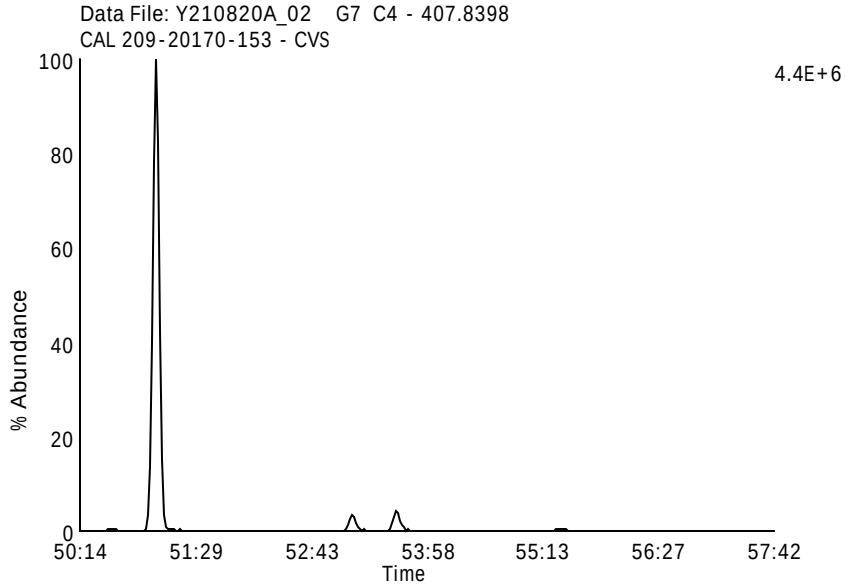
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





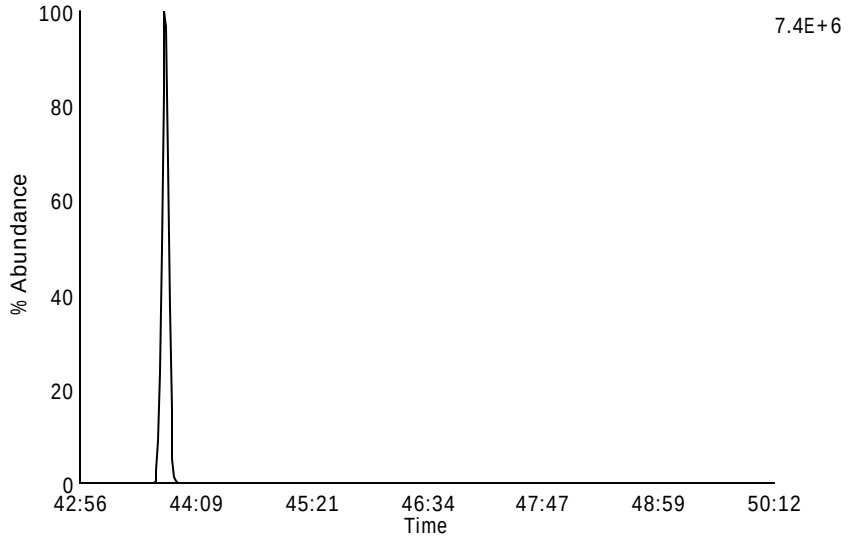




Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix

Data File: Y210820A_02 G6 C13 - 439.8038
CAL 209-20170-153 - CVS



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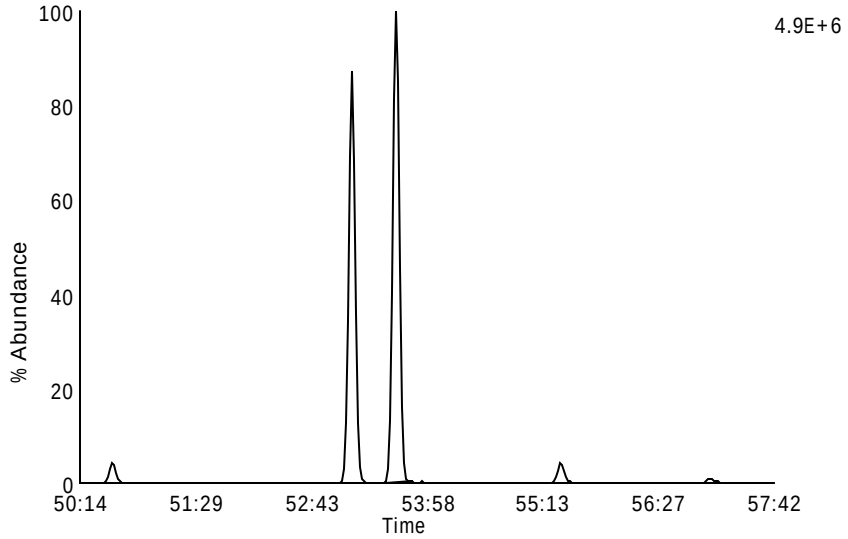
CAL 209-20170-153 - CVS



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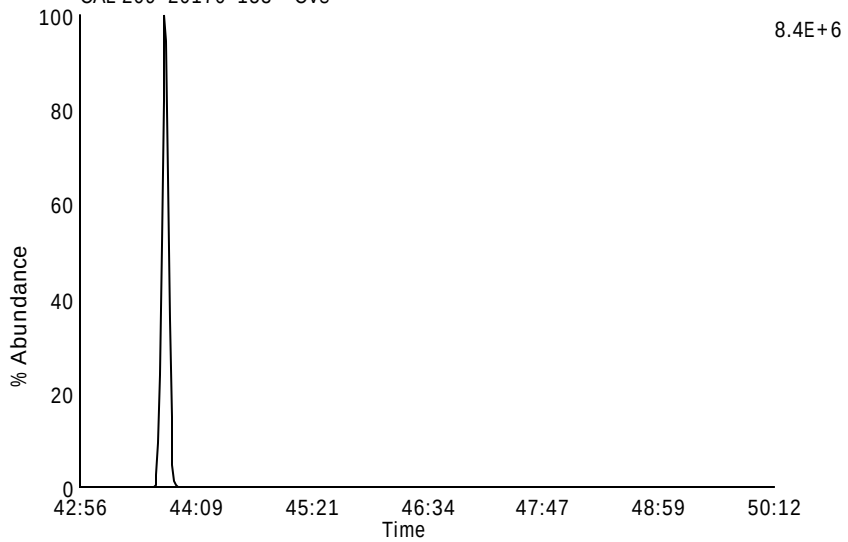
CAL 209-20170-153 - CVS



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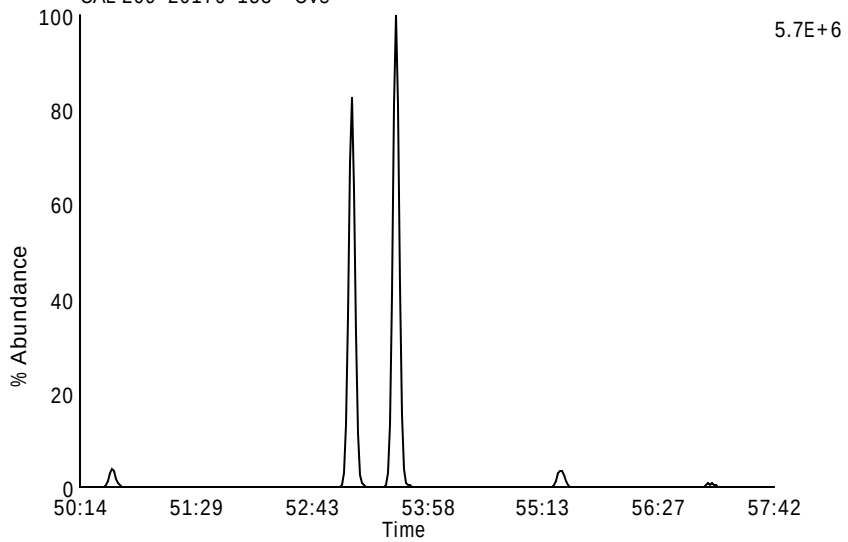
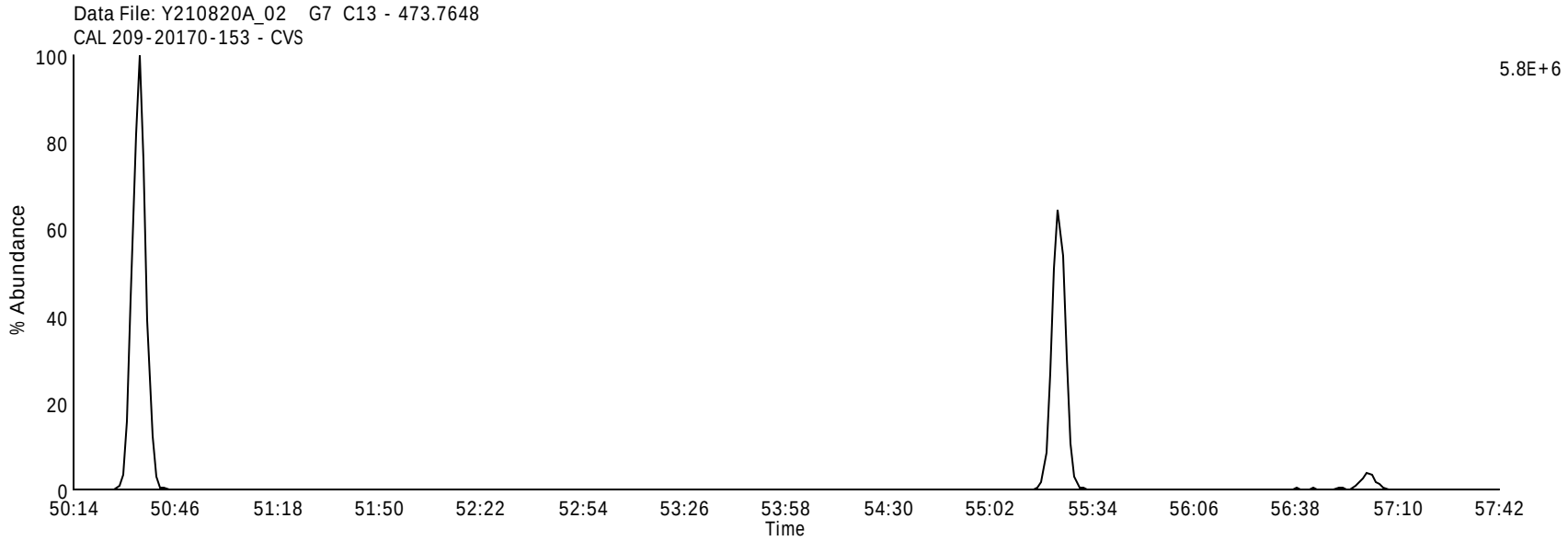
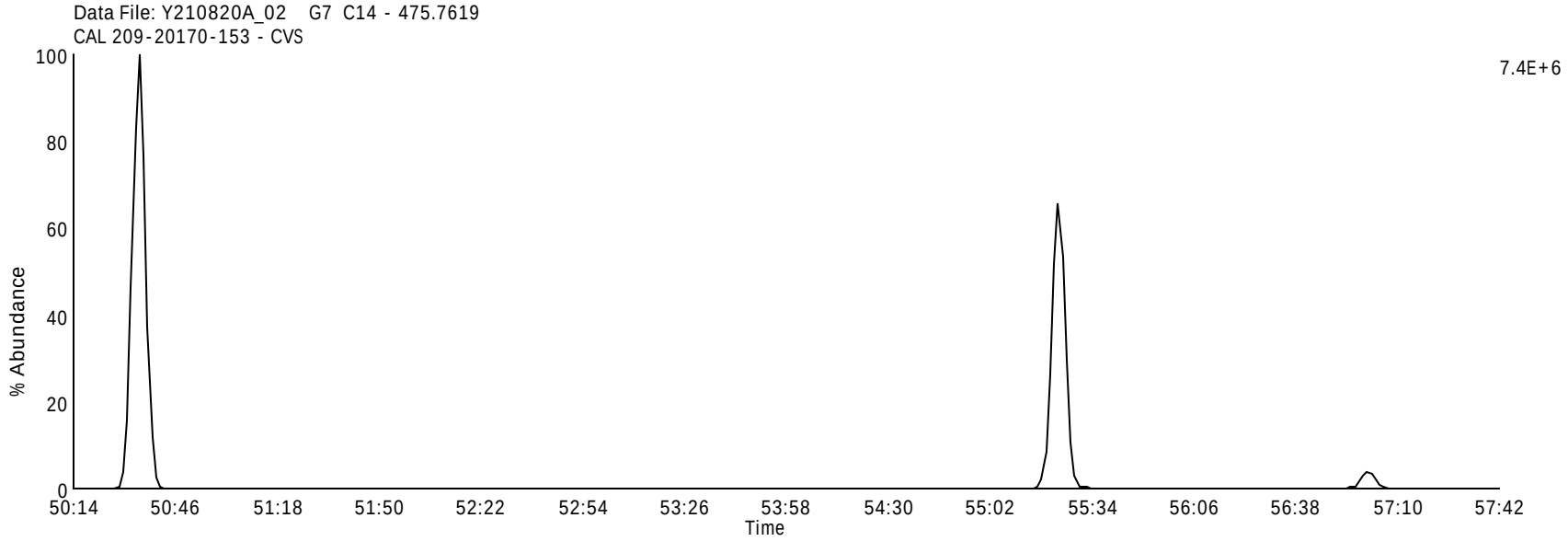
CAL 209-20170-153 - CVS



Labeled Nona Chlorinated Biphenyls

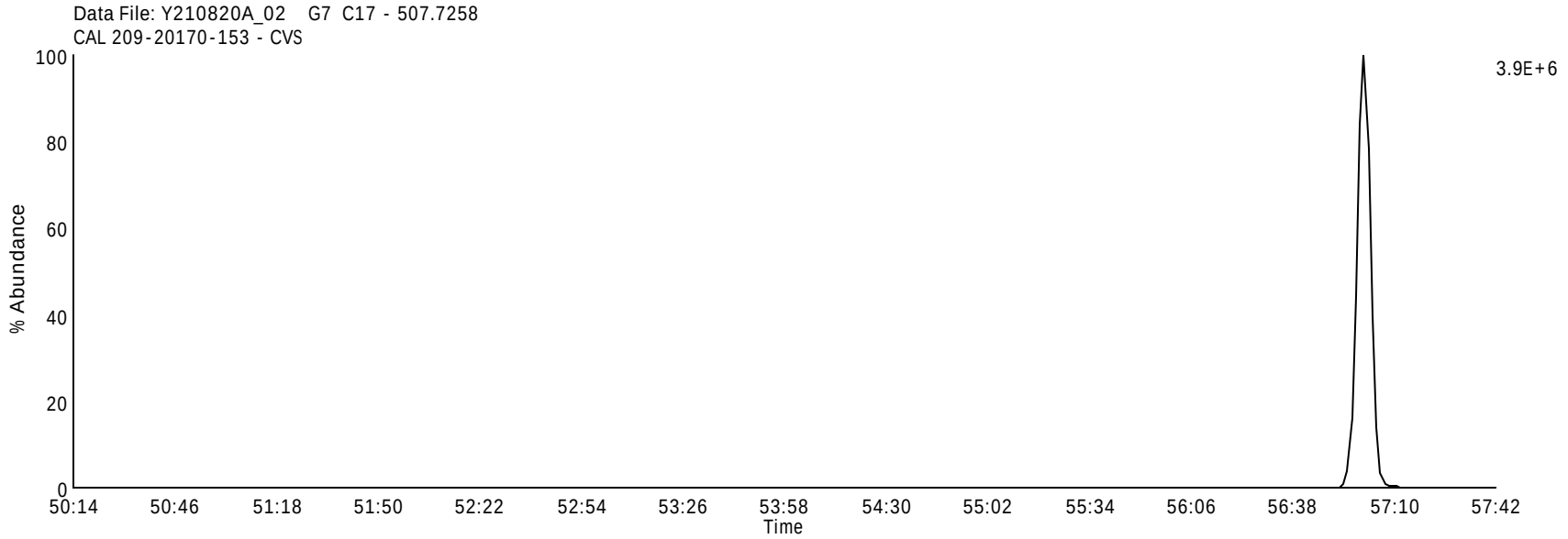
Data File Name: Y210820A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

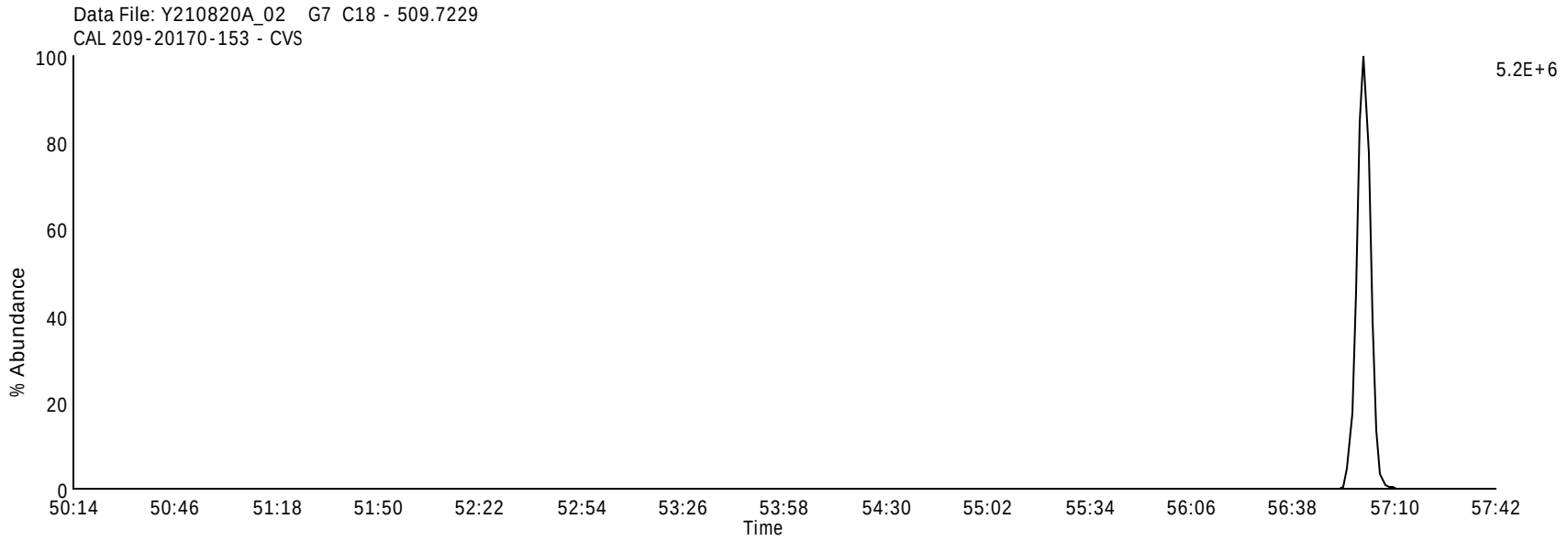




Labeled Deca Chlorinated Biphenyl

Data File Name: Y210820A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix



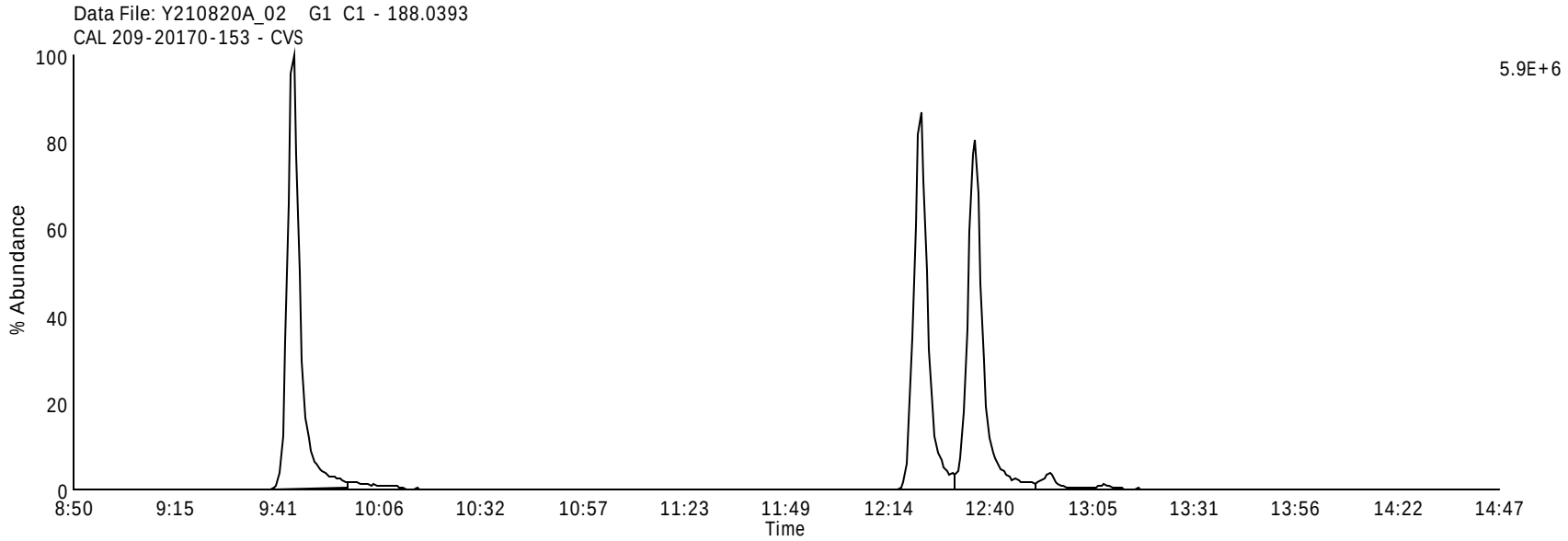


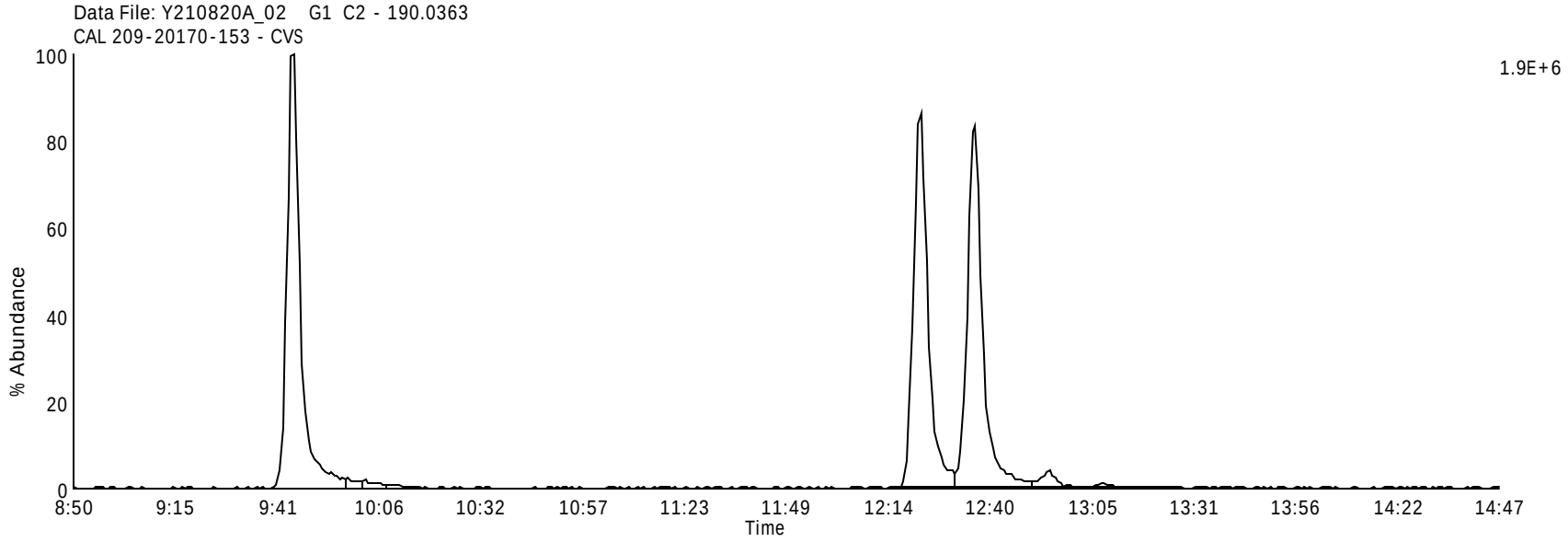
Mono Chlorinated Biphenyls

Data File Name: Y210820A_02 | Lab Sample ID: 209-20170-153

Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)

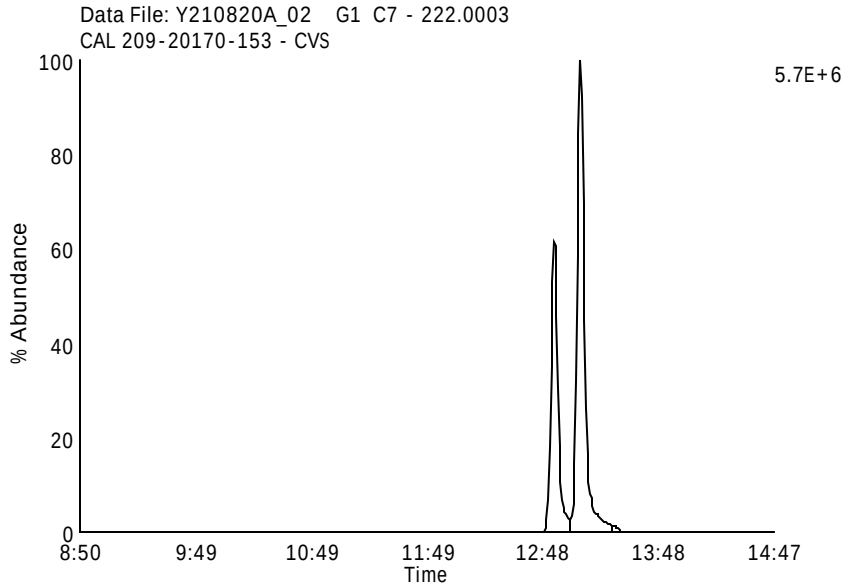
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

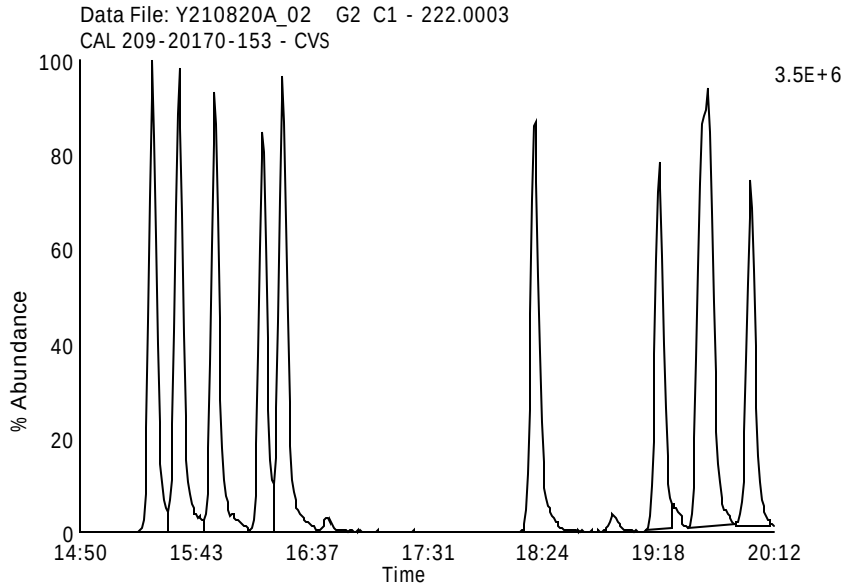


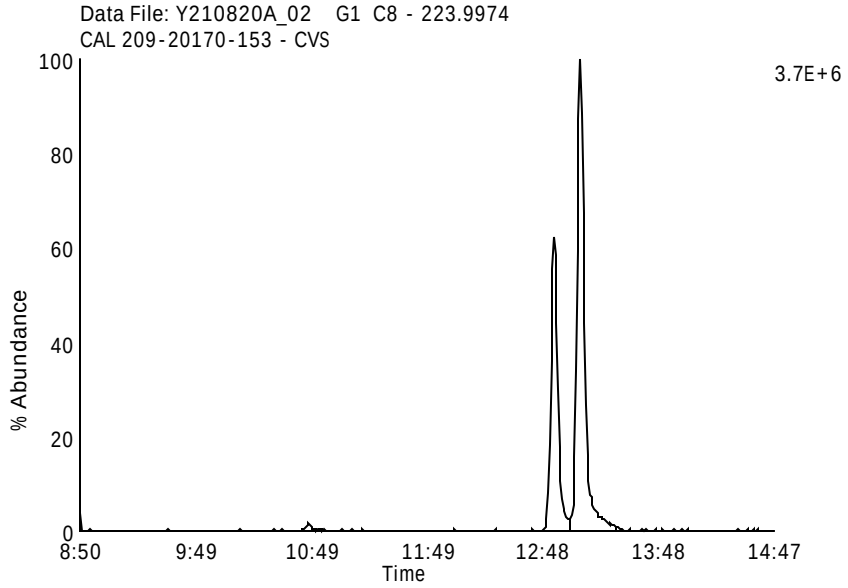


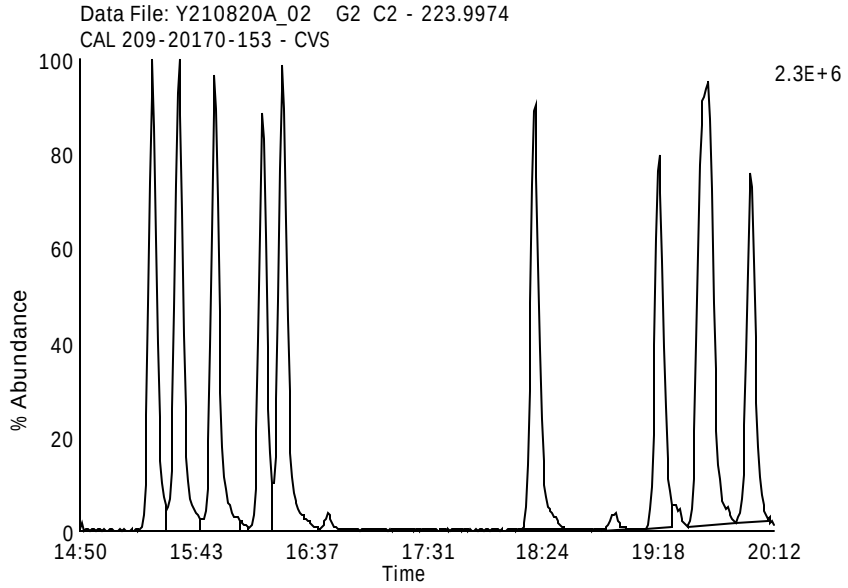
Di Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



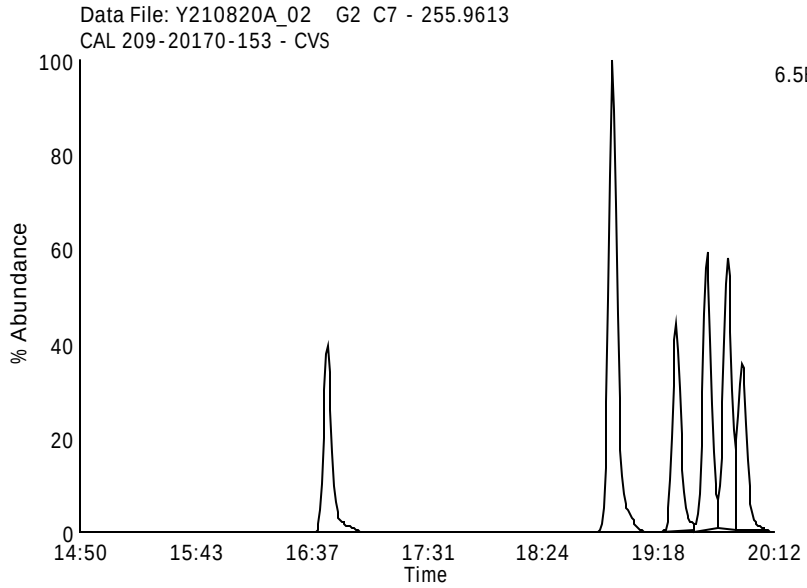


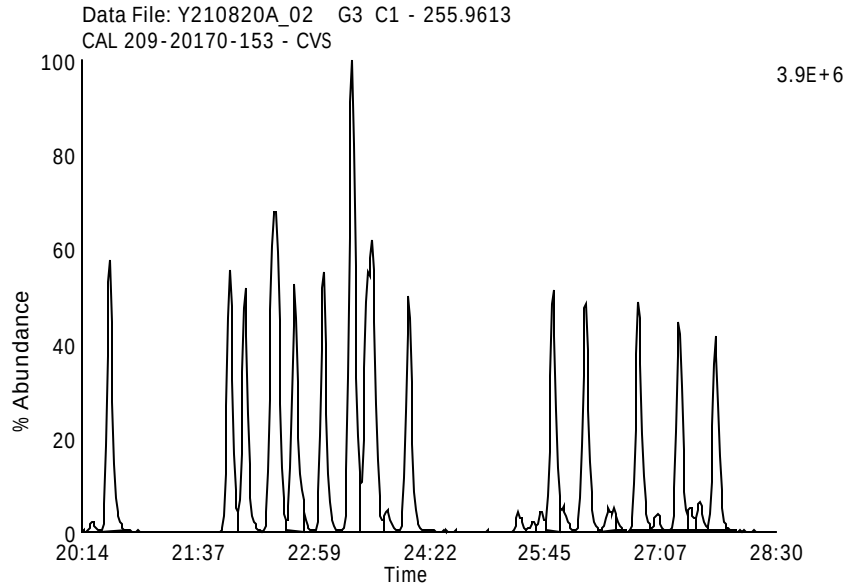


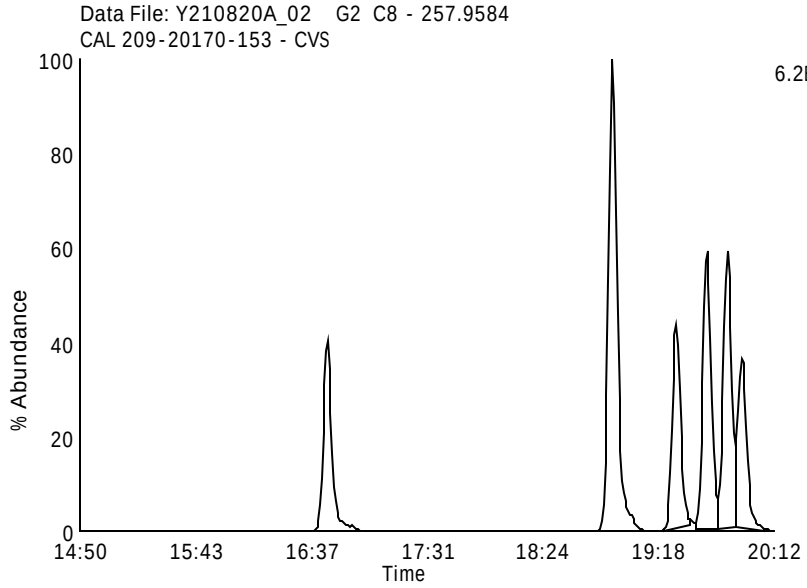


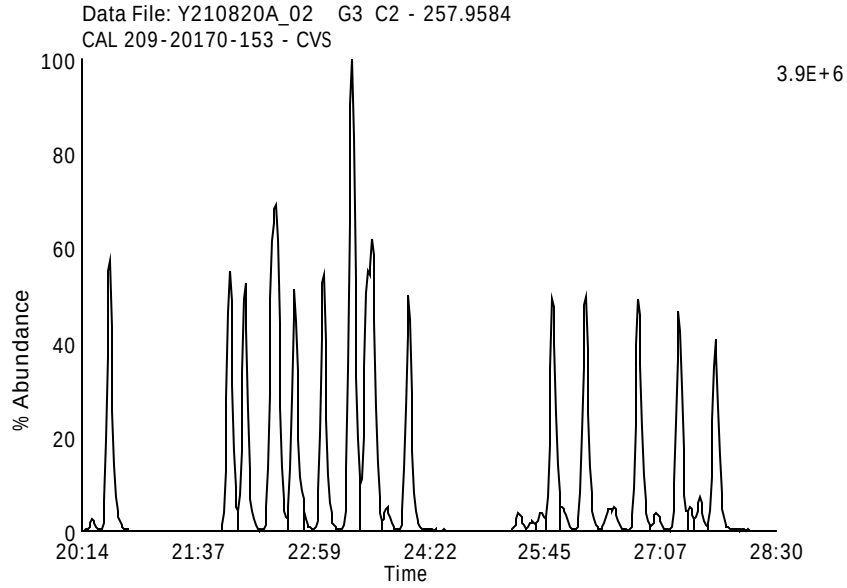
Tri Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix



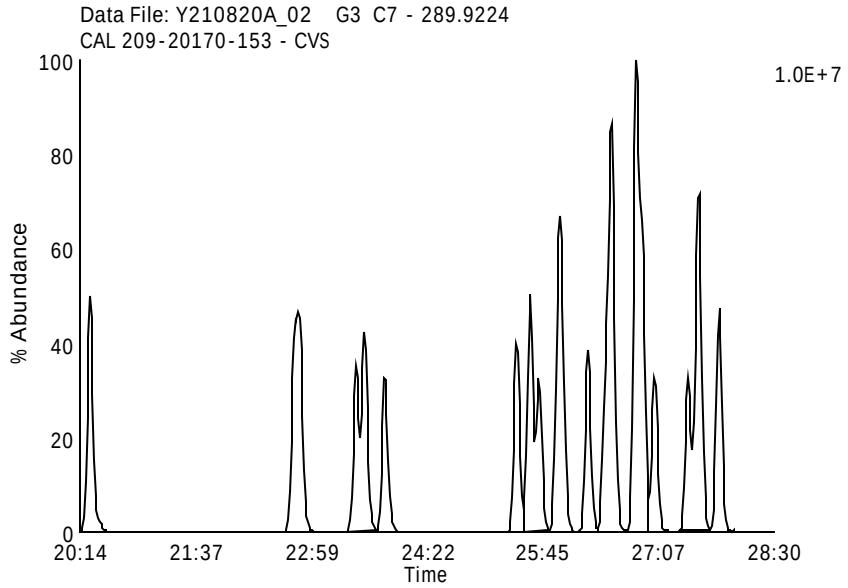


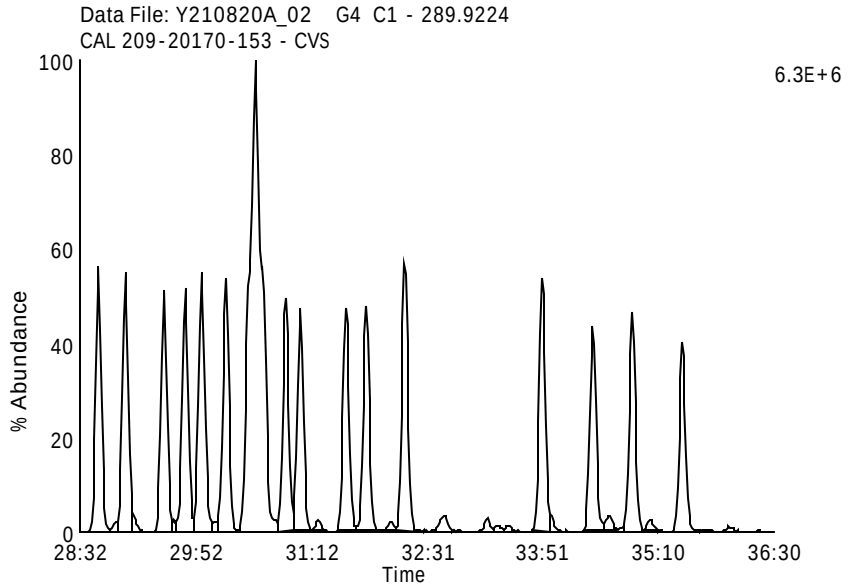


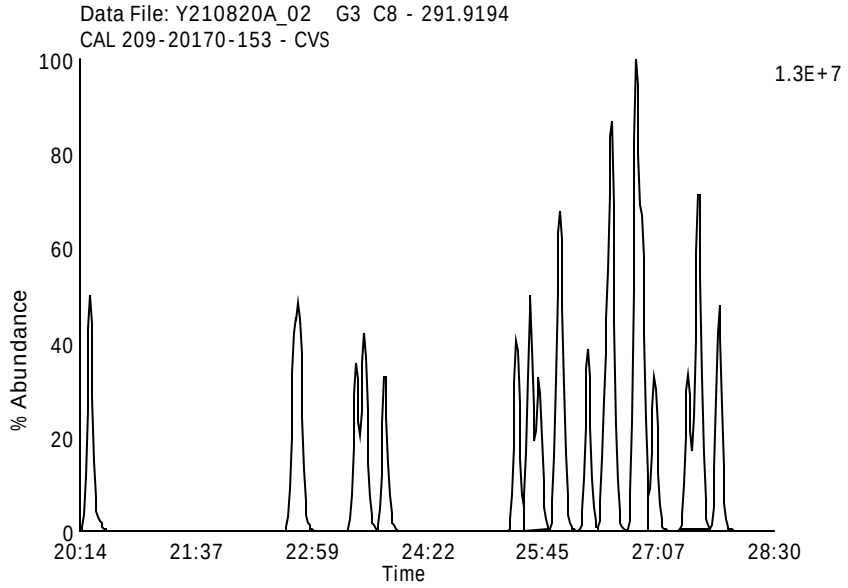


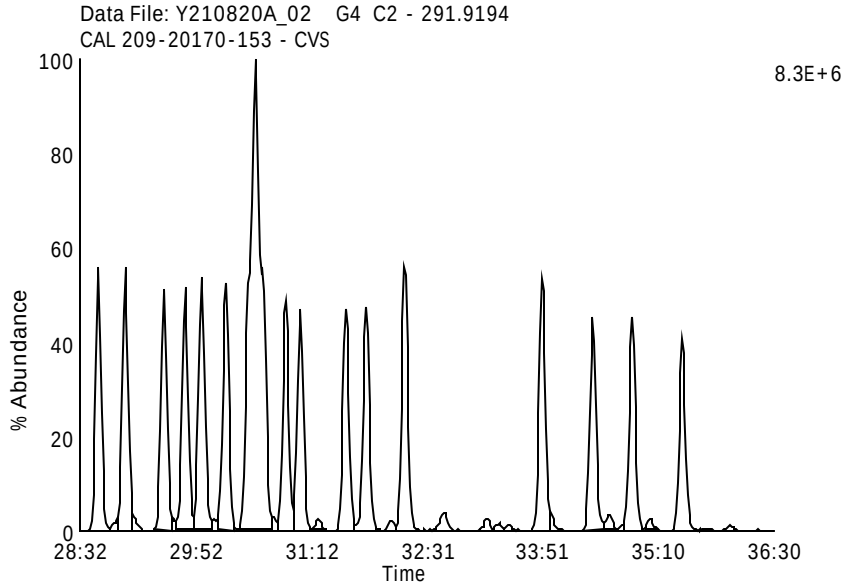
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix





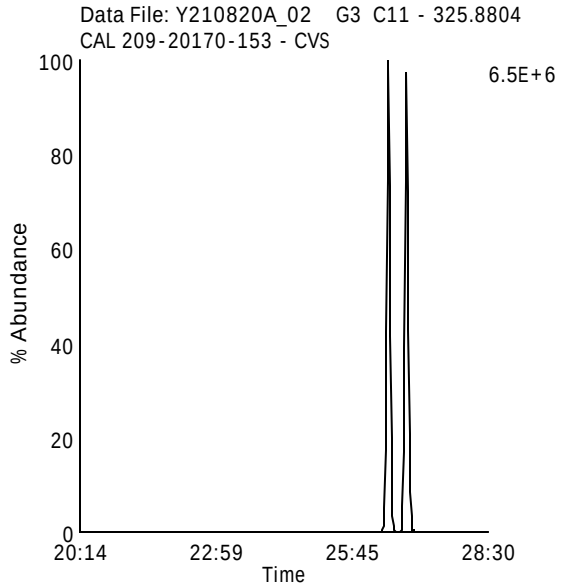


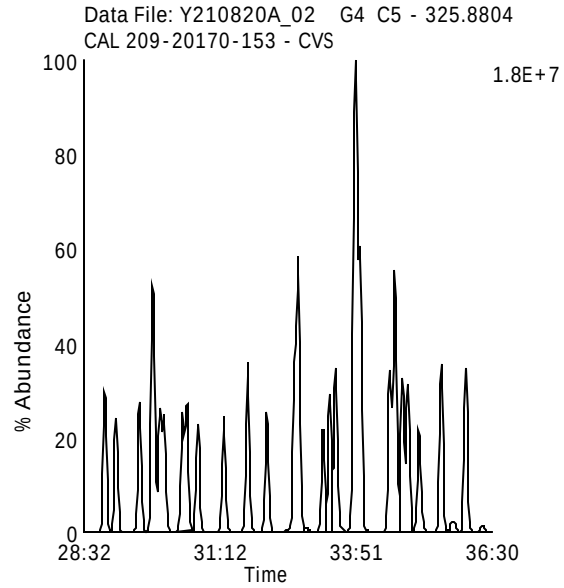


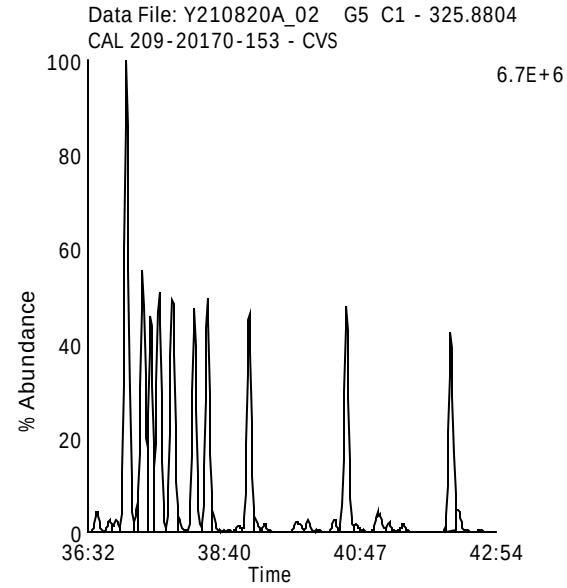
Penta Chlorinated Biphenyls

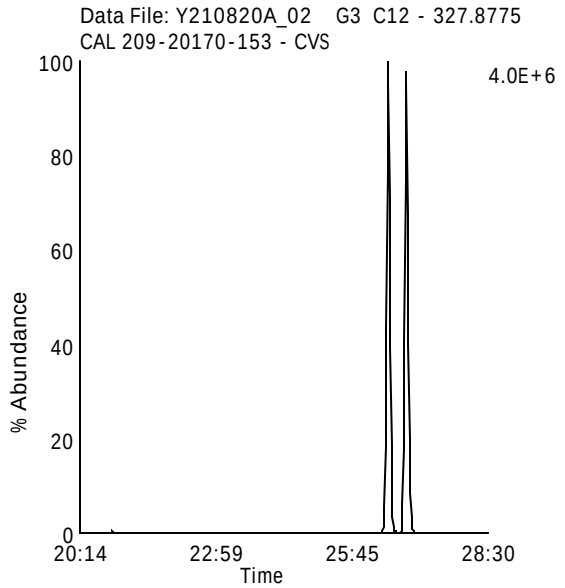
Data File Name: Y210820A_02
Date Acquired: 8/20/2021
Sample Description: CAL 209-20170-153 - CVS

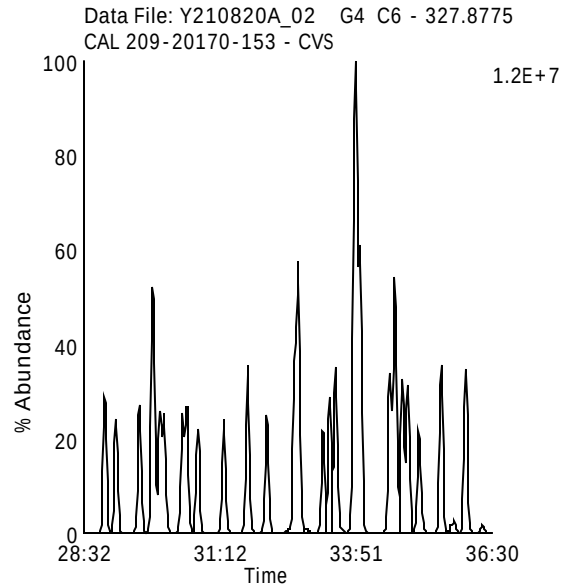
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

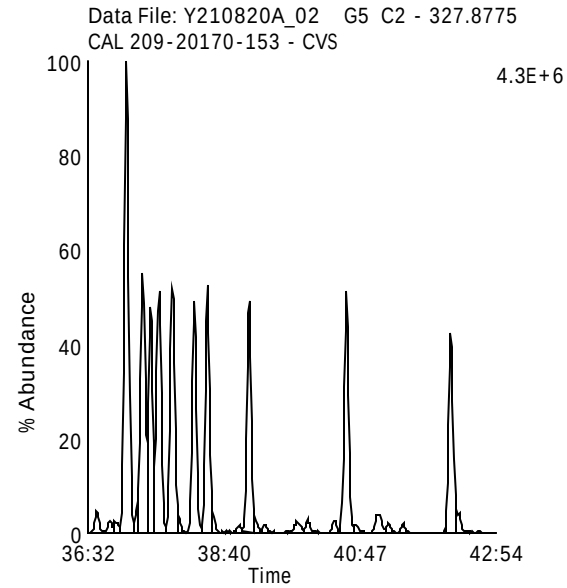








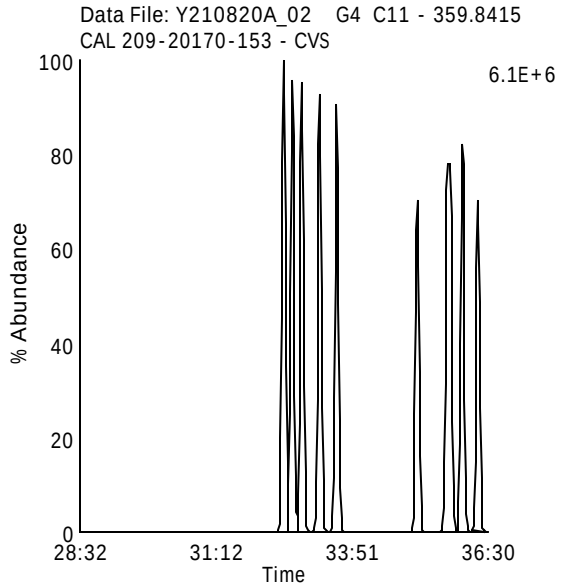


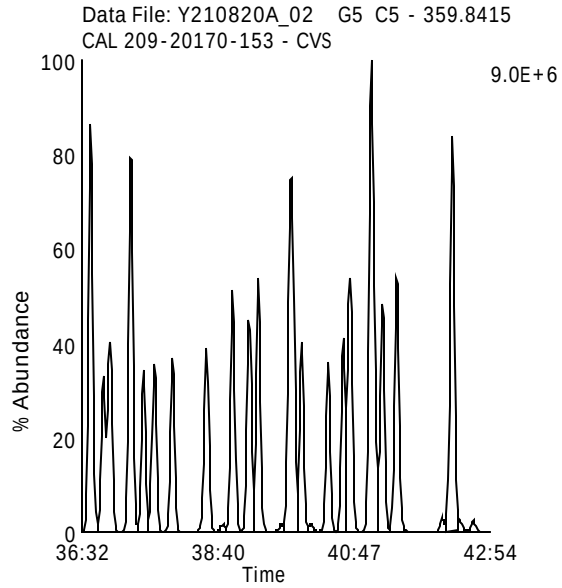


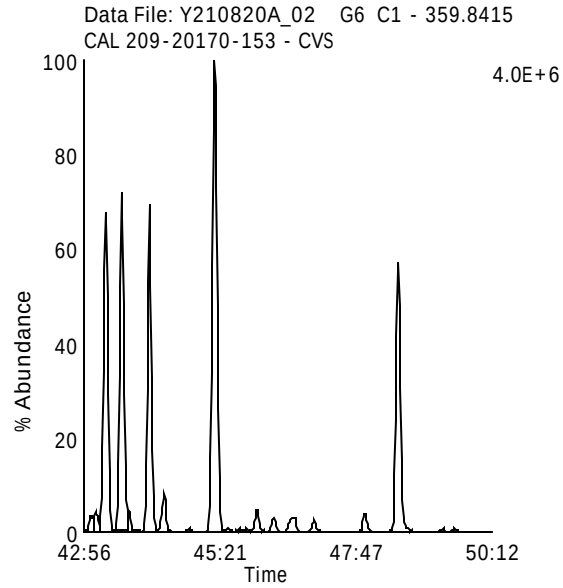
Hexa Chlorinated Biphenyls

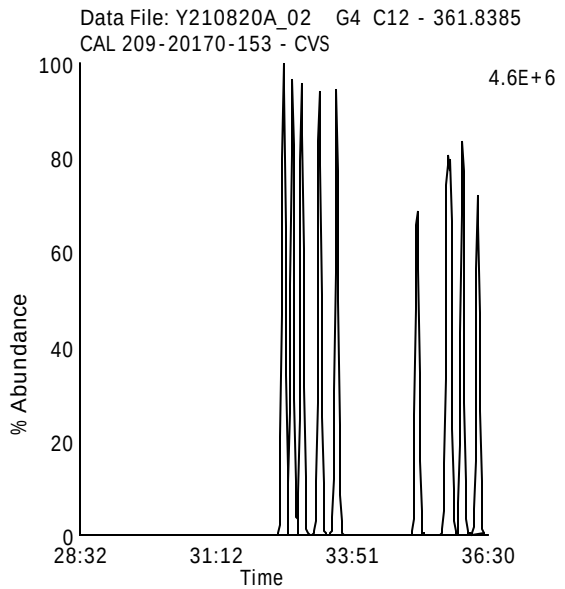
Data File Name: Y210820A_02
Date Acquired: 8/20/2021
Sample Description: CAL 209-20170-153 - CVS

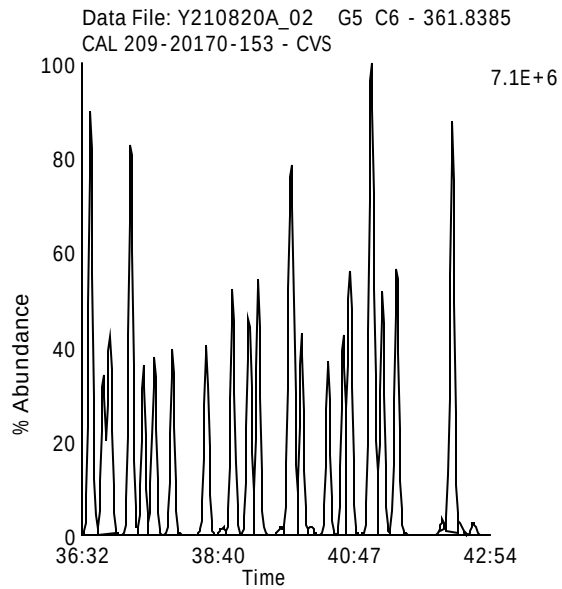
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

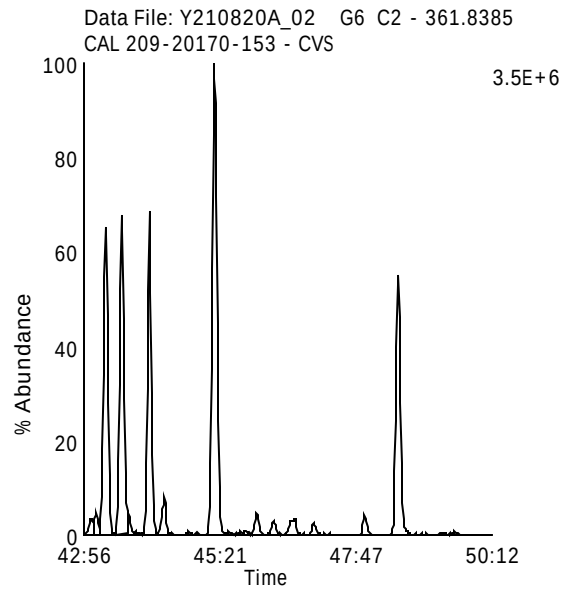








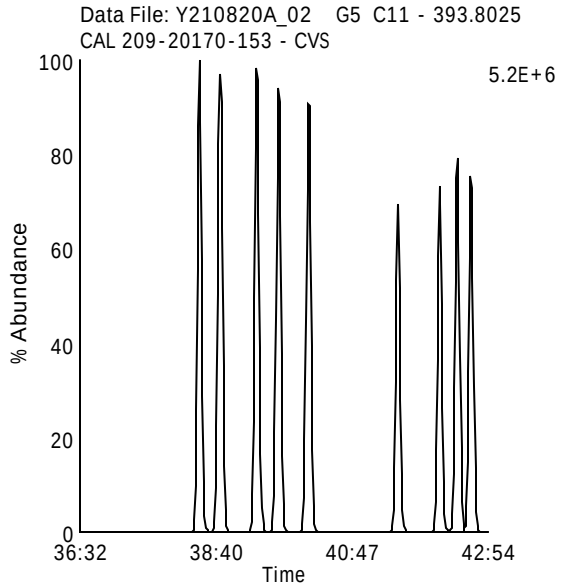


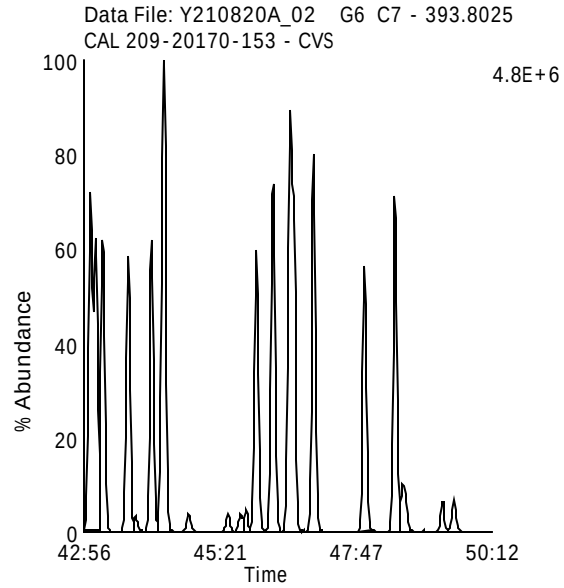


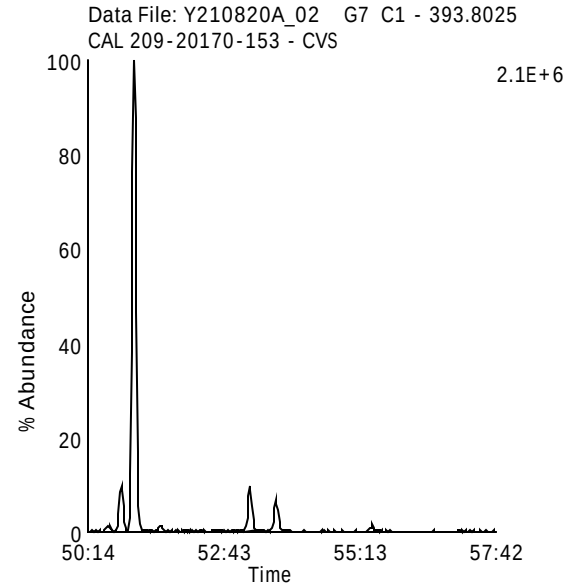
Hepta Chlorinated Biphenyls

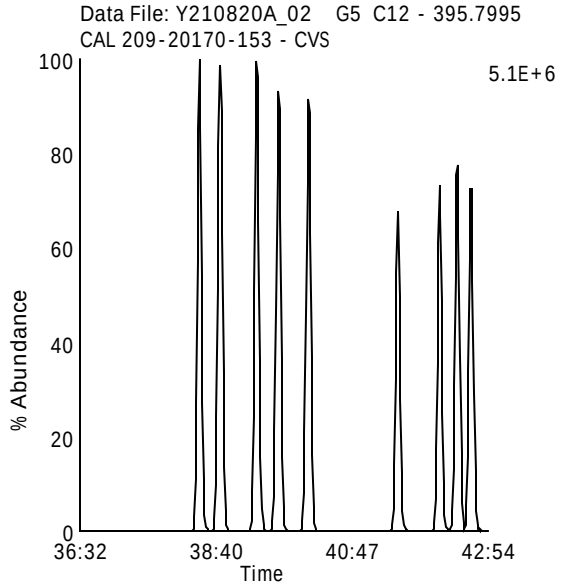
Data File Name: Y210820A_02
Date Acquired: 8/20/2021
Sample Description: CAL 209-20170-153 - CVS

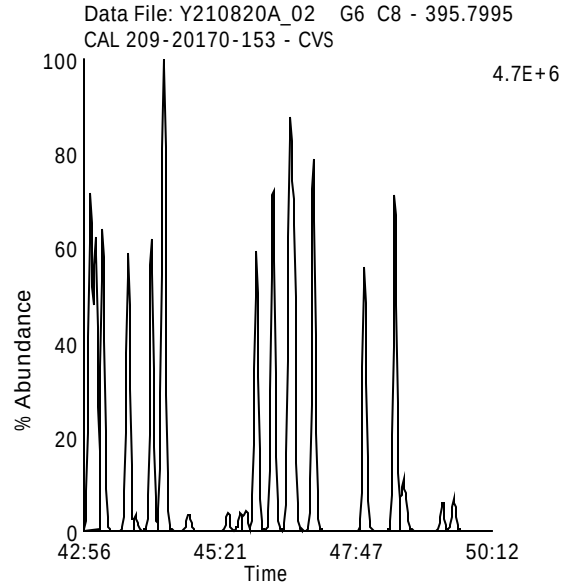
Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix

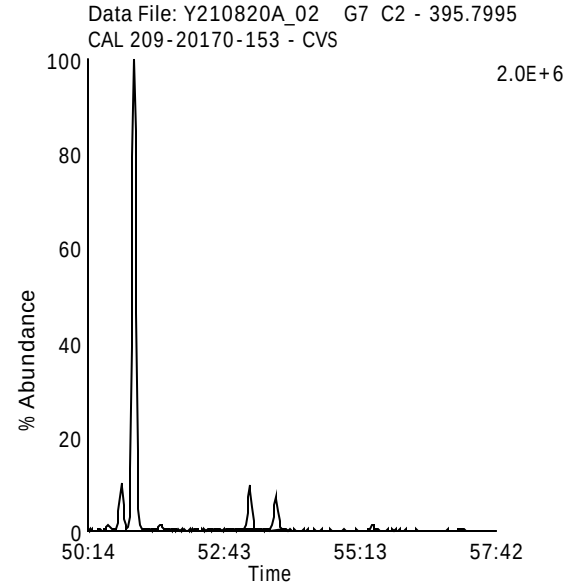






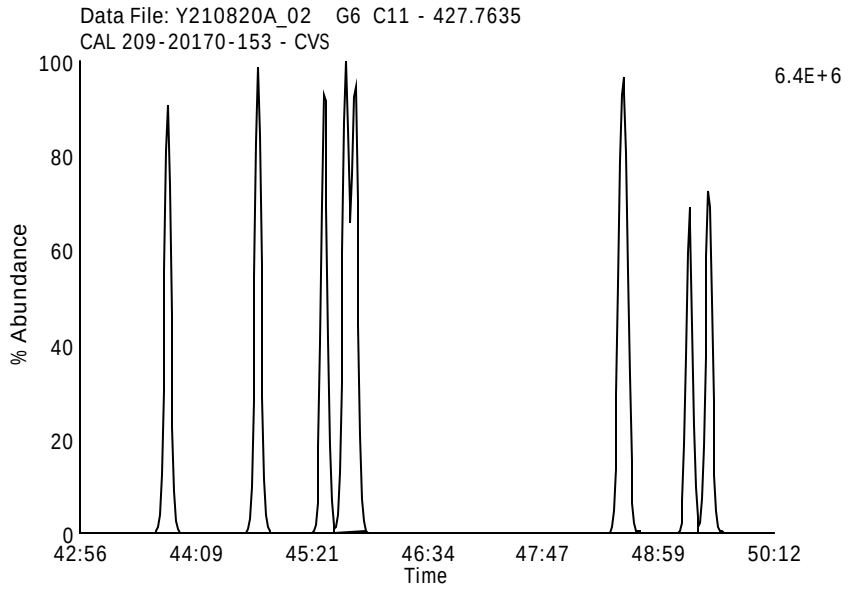


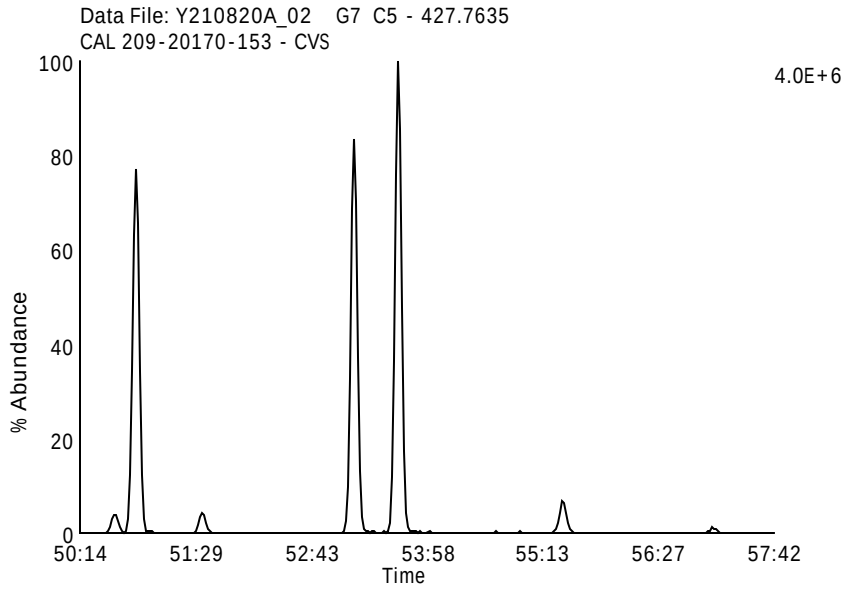


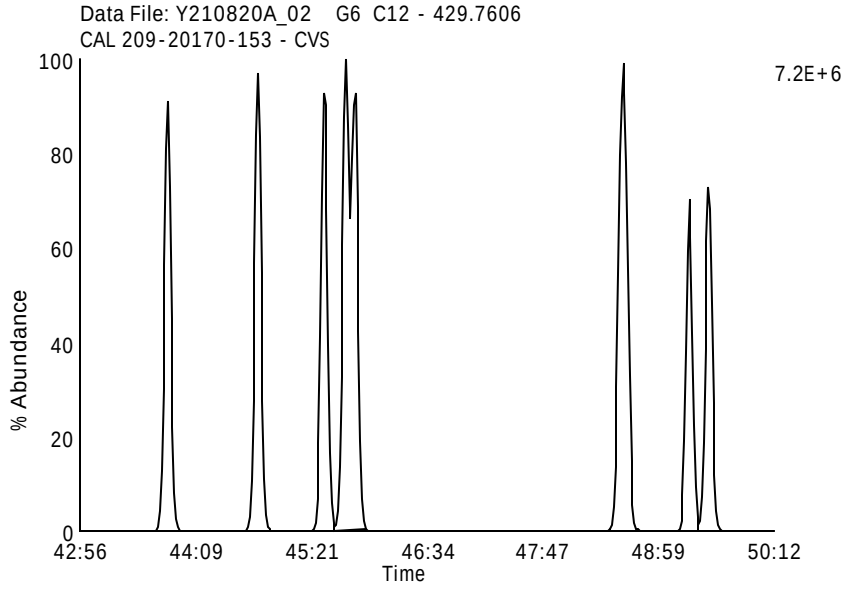


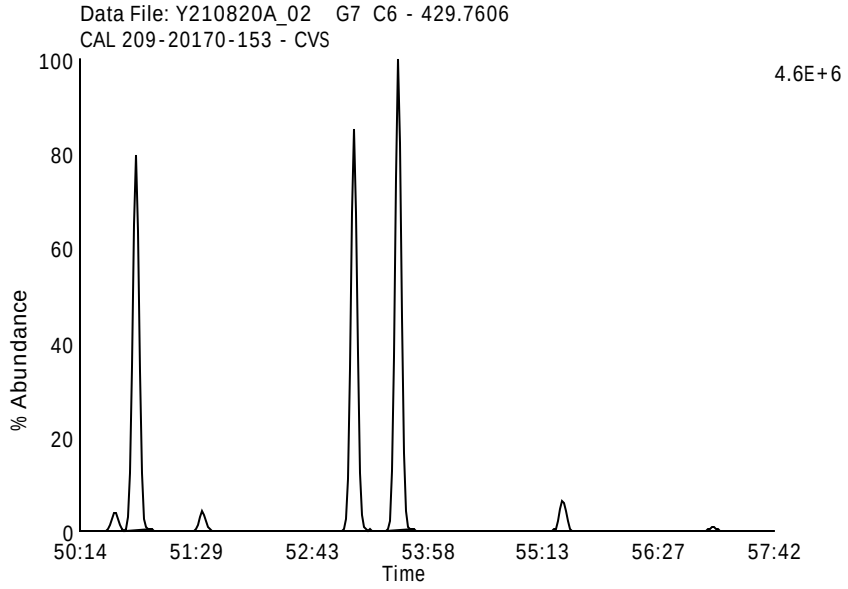
Octa Chlorinated Biphenyls

Data File Name: Y210820A_02
Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS
Client Sample ID: 209 Mix







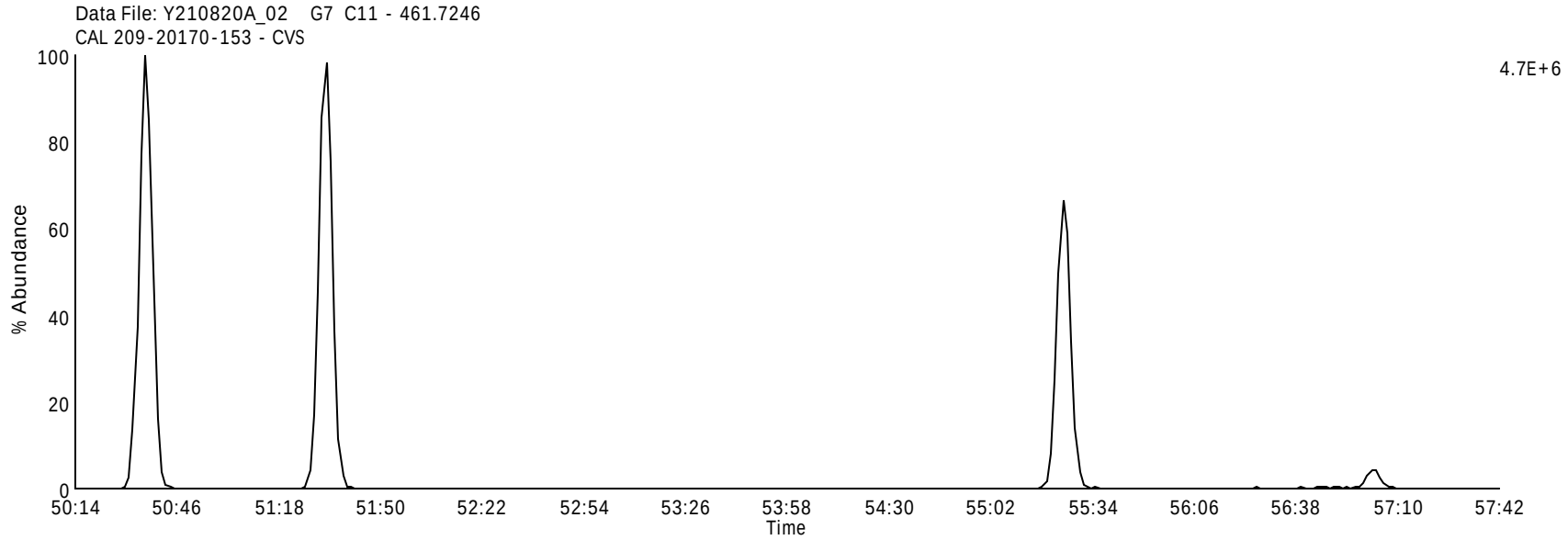


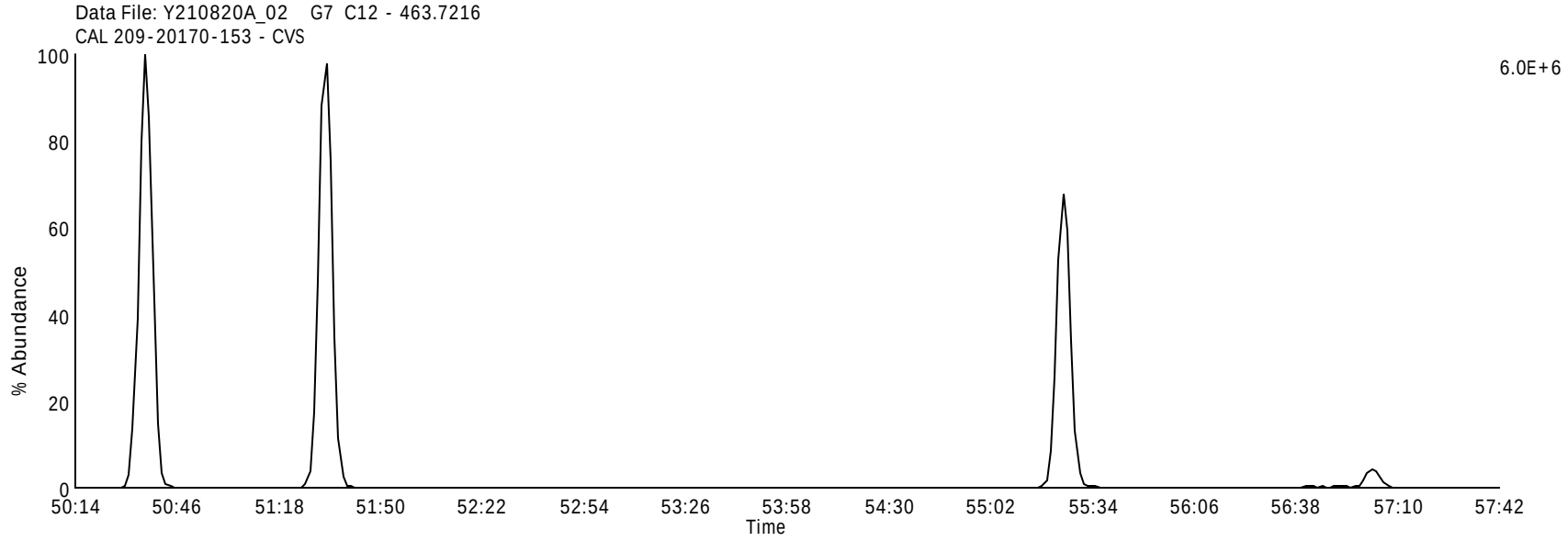
Nona Chlorinated Biphenyls

Data File Name: Y210820A_02 | Lab Sample ID: 209-20170-153

Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)

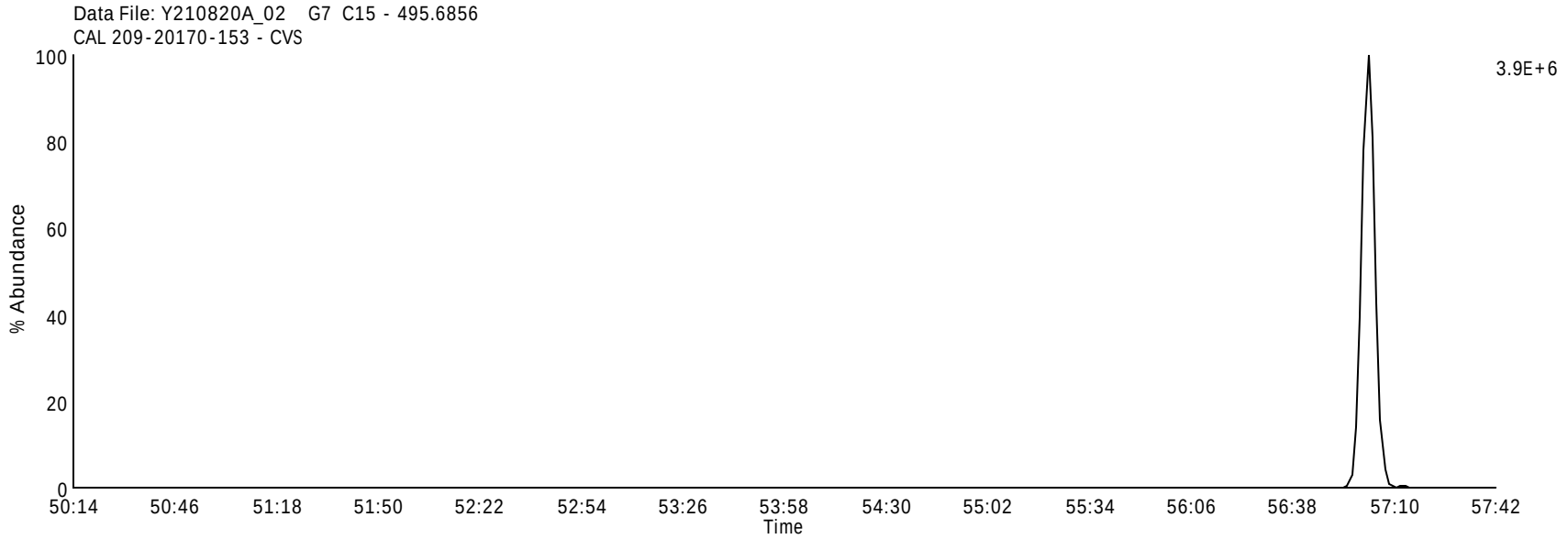
Sample Description: CAL 209-20170-153 - CVS | Client Sample ID: 209 Mix

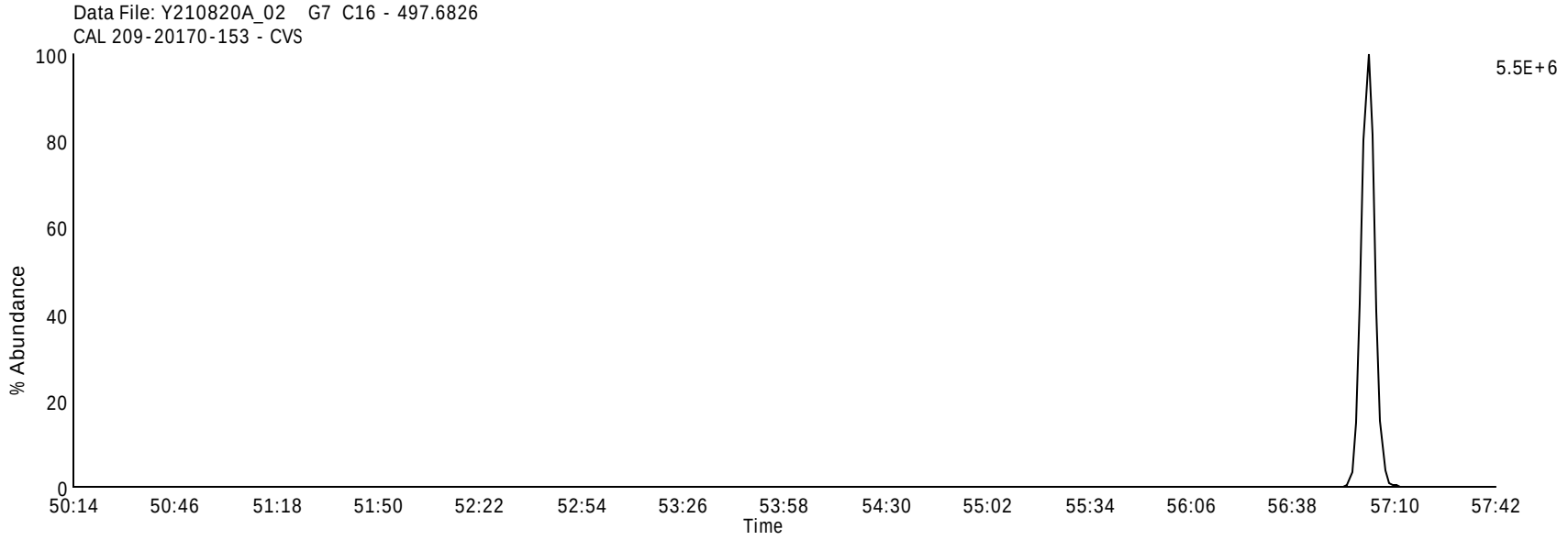




Deca Chlorinated Biphenyl

Data File Name: Y210820A_02	Lab Sample ID: 209-20170-153
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: CAL 209-20170-153 - CVS	Client Sample ID: 209 Mix

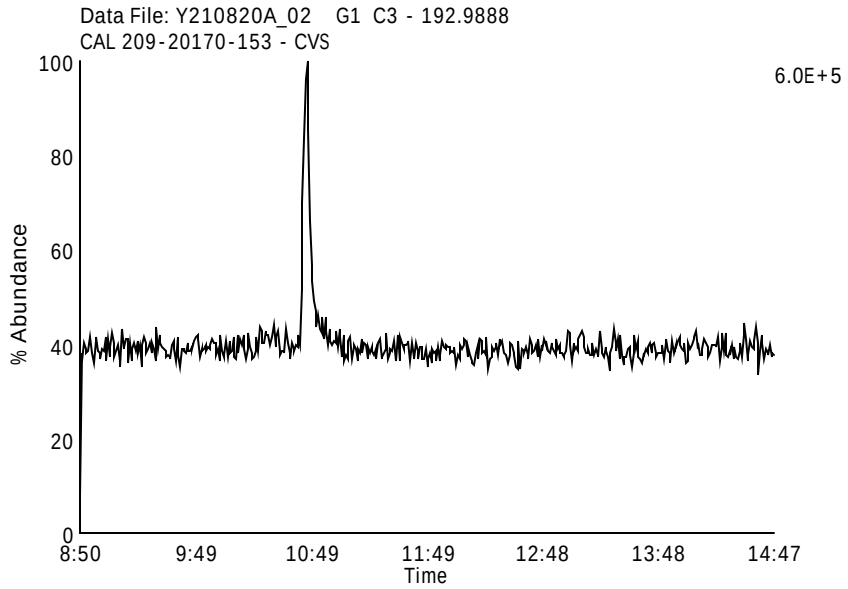


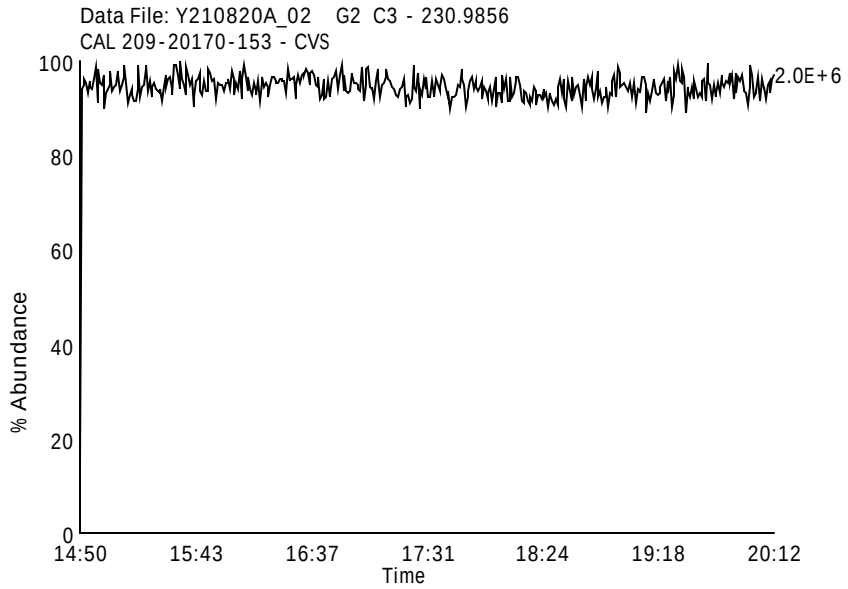


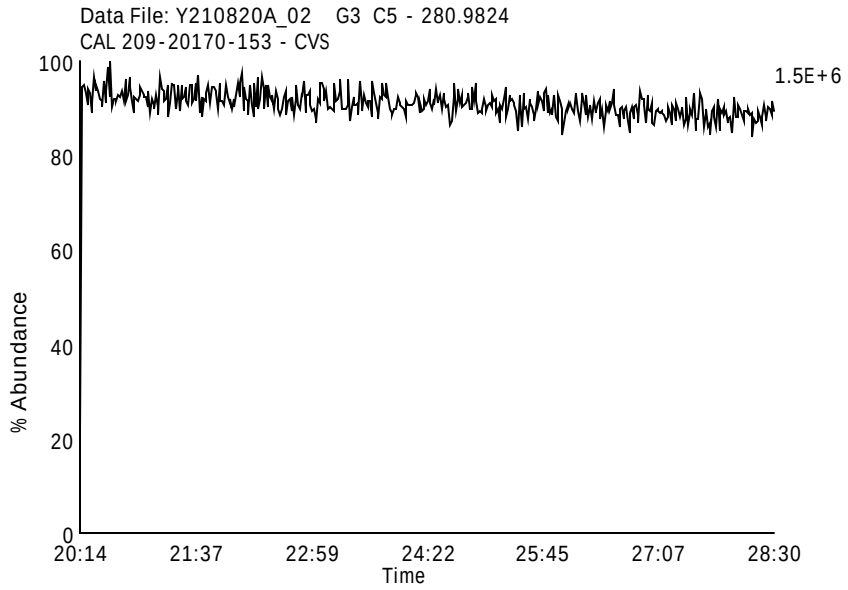
Group 1 - 4 Lock mass

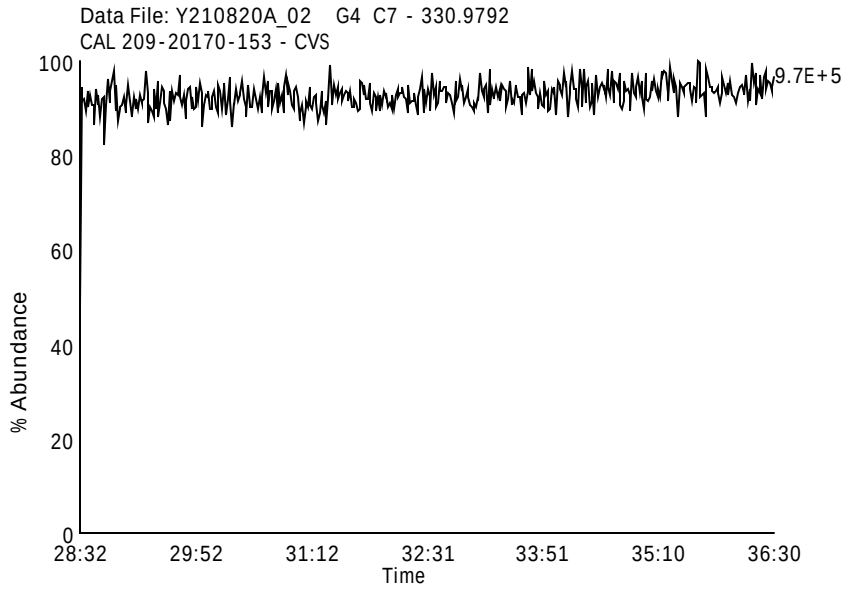
Data File Name: Y210820A_02
Date Acquired: 8/20/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix





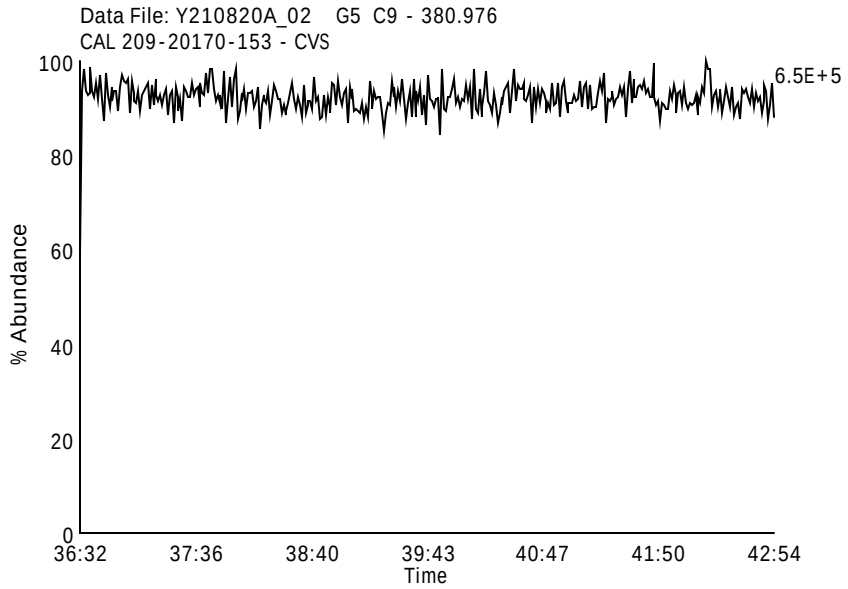


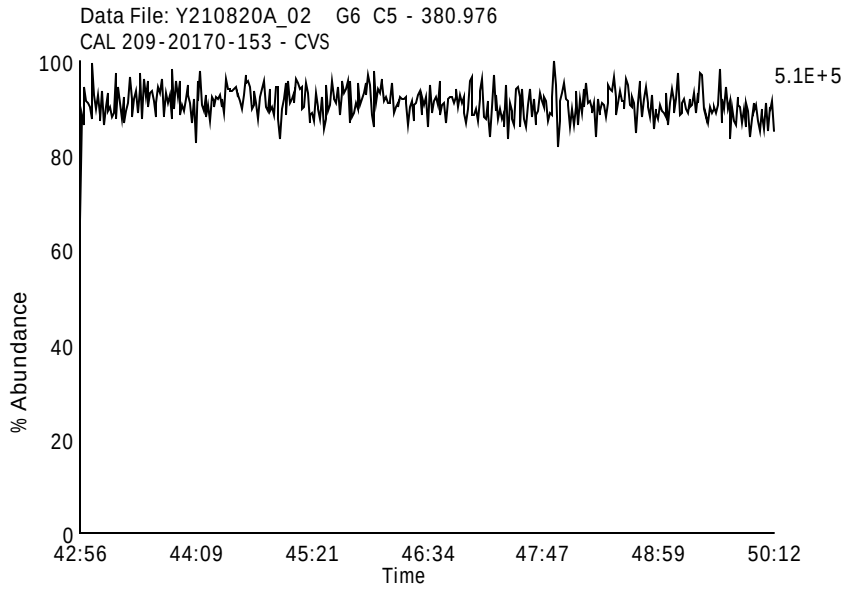


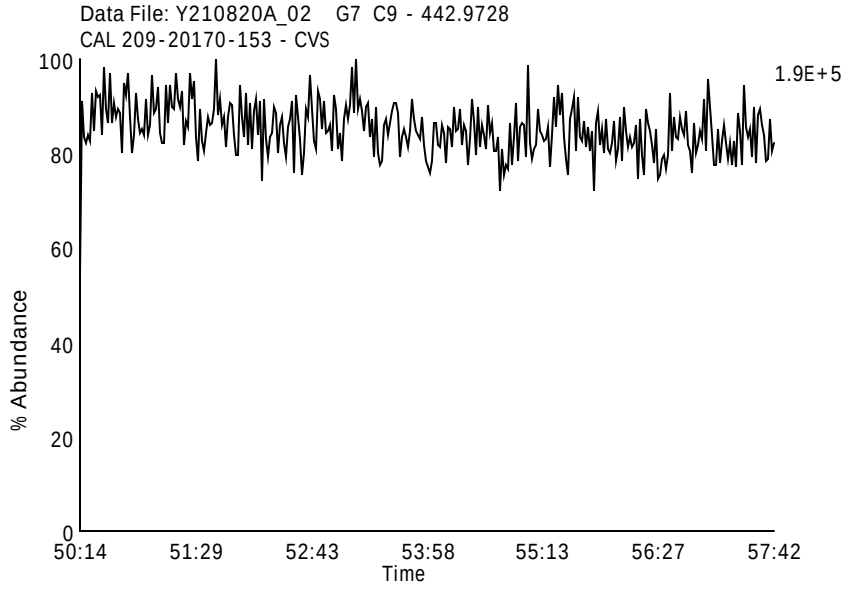
Group 5 - 7 Lock mass

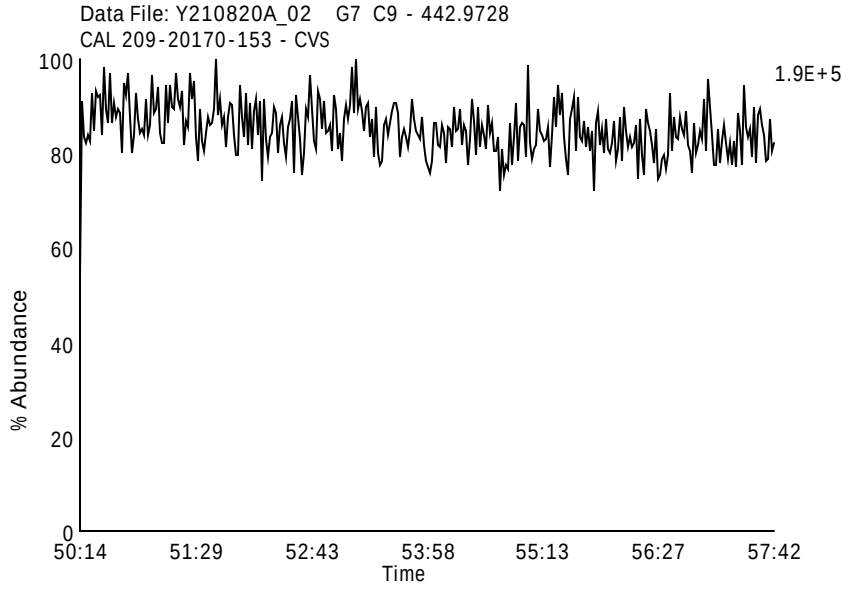
Data File Name: Y210820A_02
Date Acquired: 8/20/2021
Sample Description: CAL 209-20170-153 - CVS

Lab Sample ID: 209-20170-153
Instrument: 10MSHR12 (Y)
Client Sample ID: 209 Mix







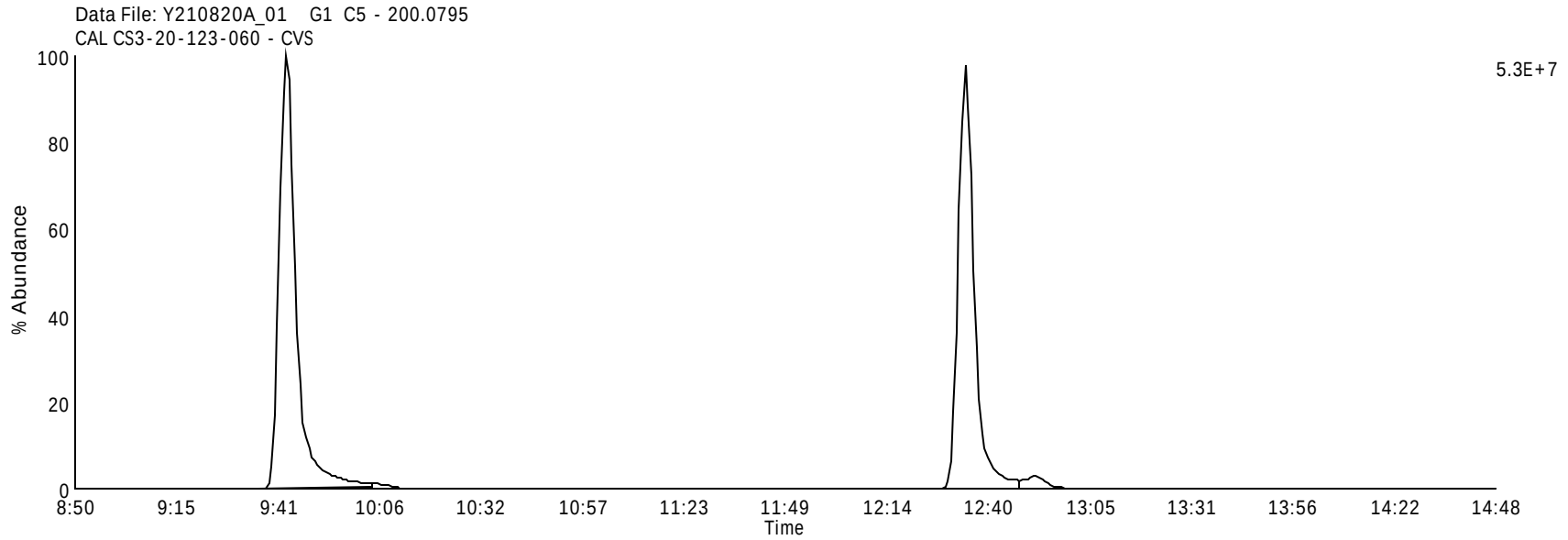


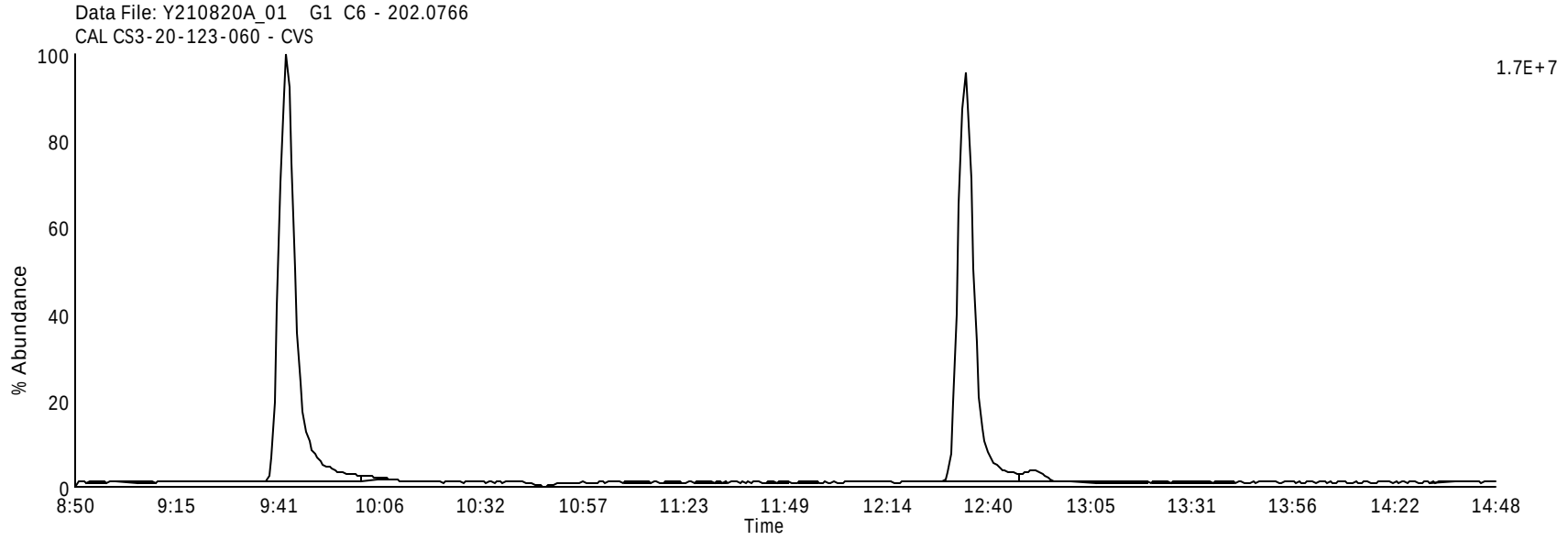
Labeled Mono Chlorinated Biphenyls

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

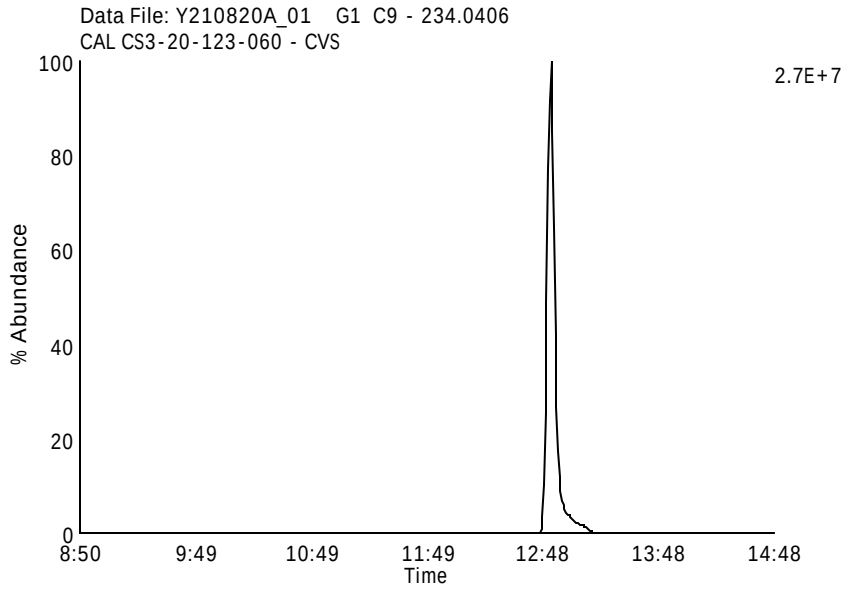
Sample Description: CAL CS3-20-123-060 - CVS

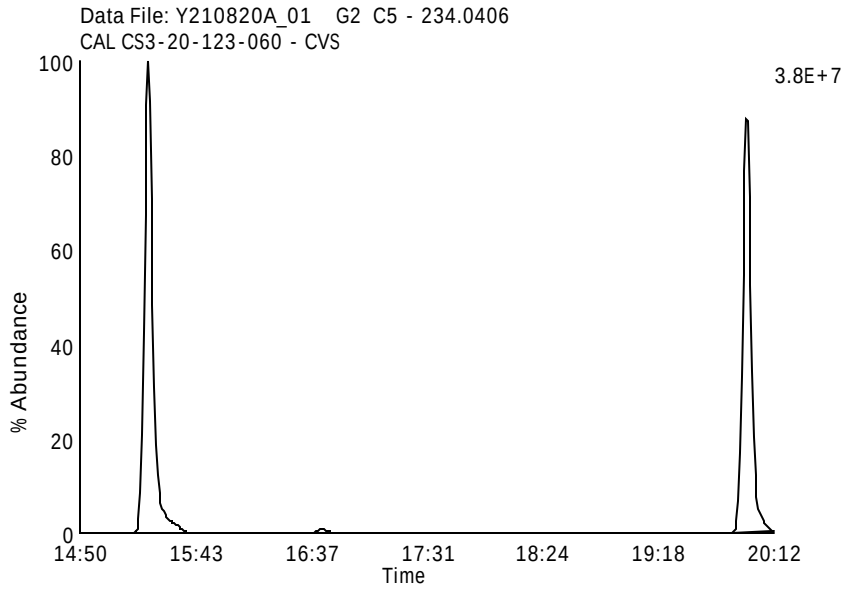


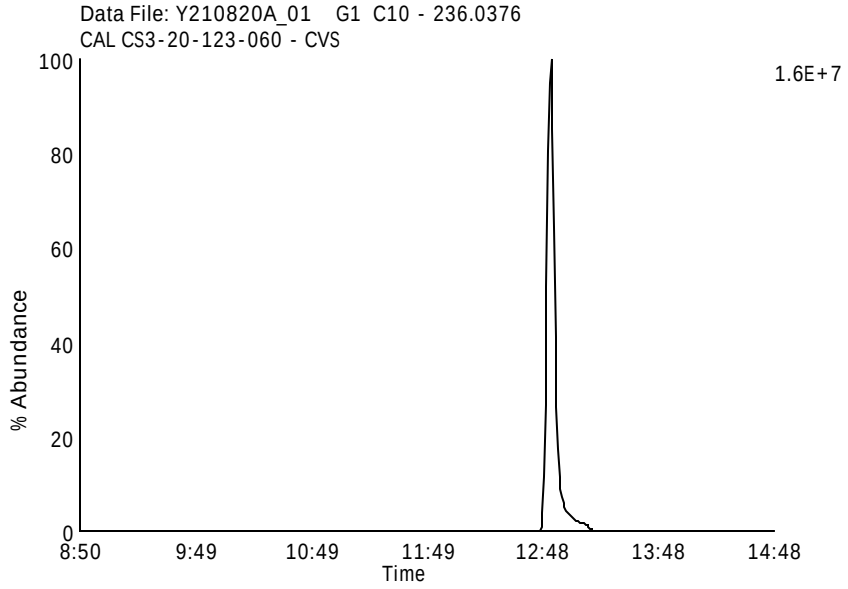


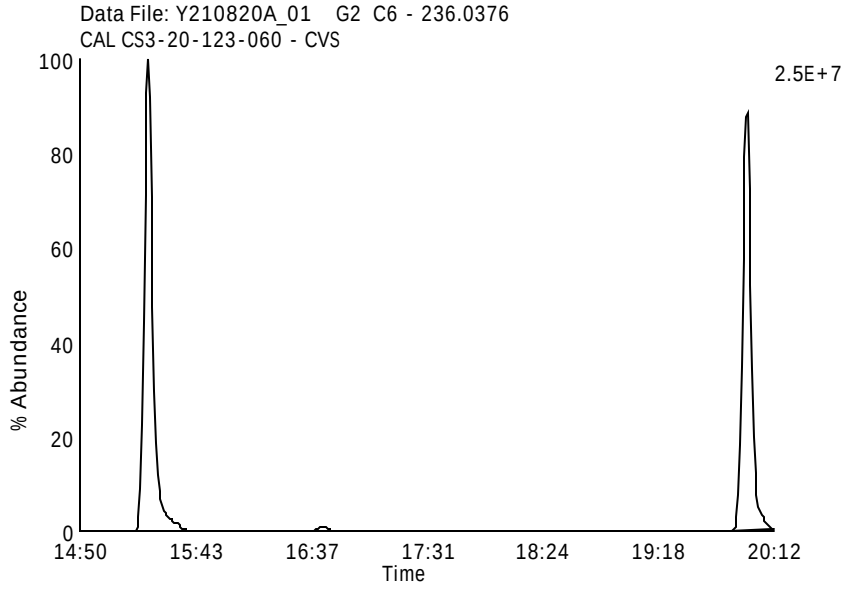
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





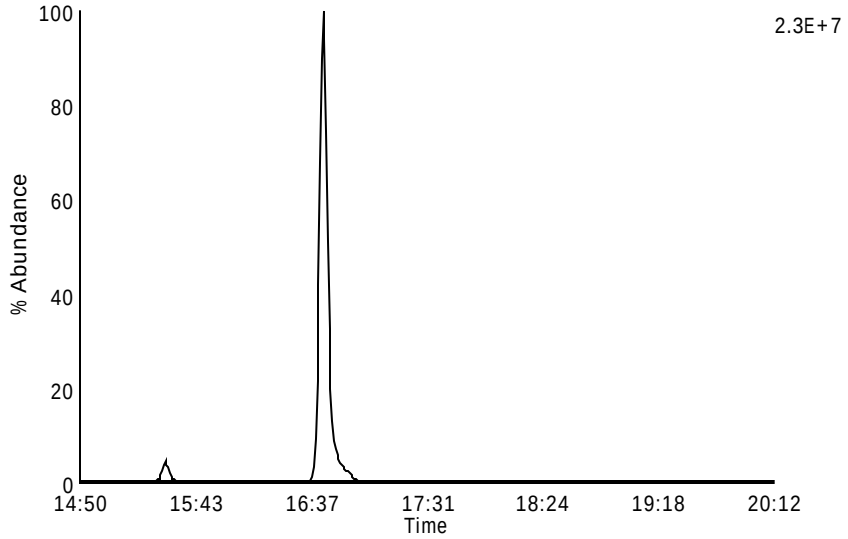




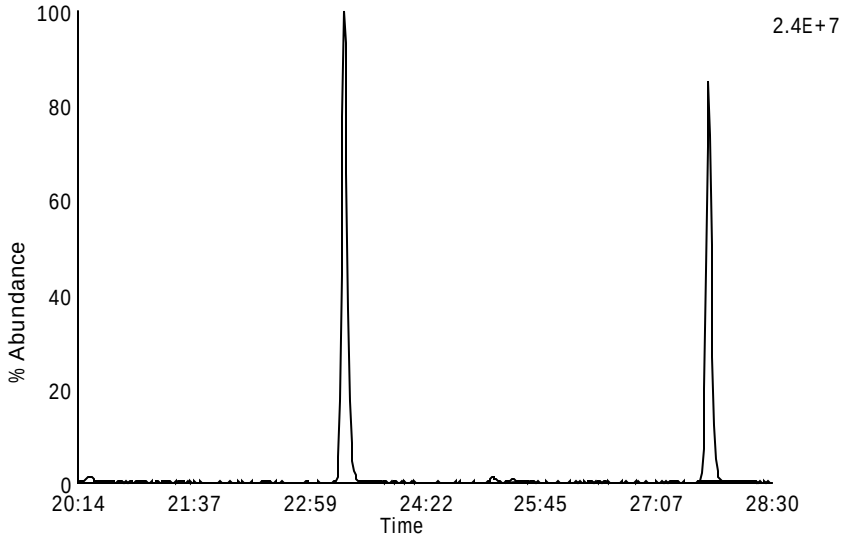
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

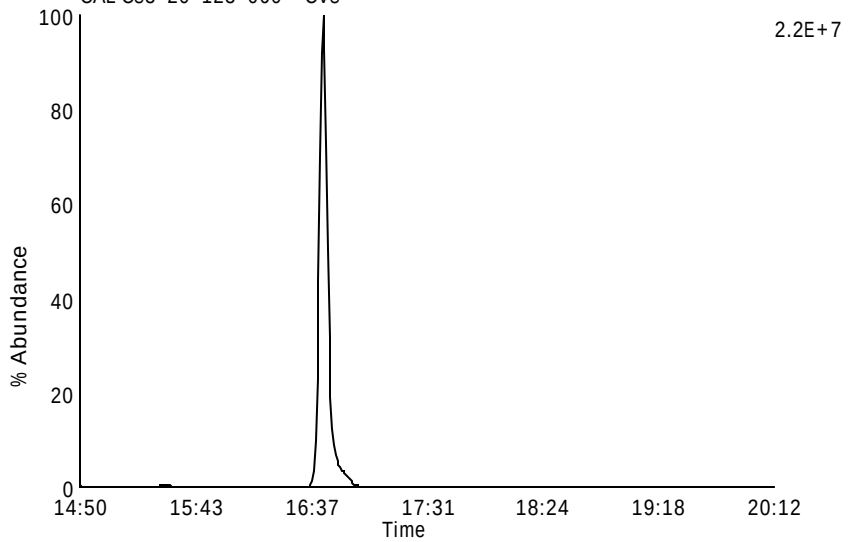
Data File: Y210820A_01 G2 C9 - 268.0016
CAL CS3-20-123-060 - CVS



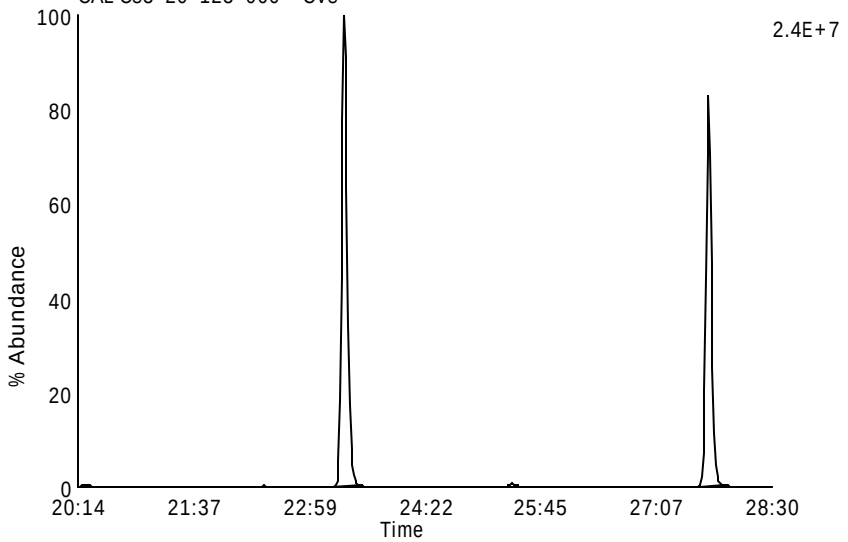
Data File: Y210820A_01 G3 C3 - 268.0016
CAL CS3-20-123-060 - CVS



Data File: Y210820A_01 G2 C10 - 269.9986
CAL CS3-20-123-060 - CVS

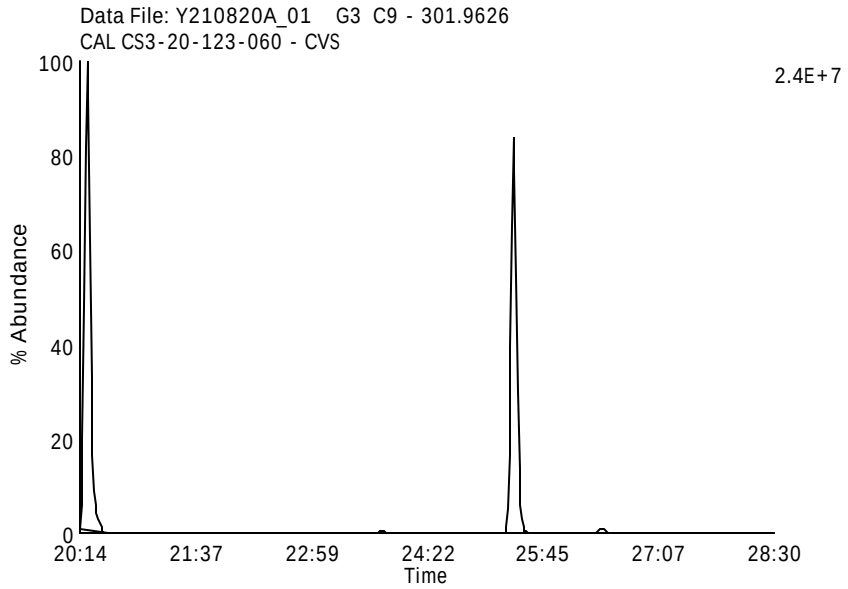


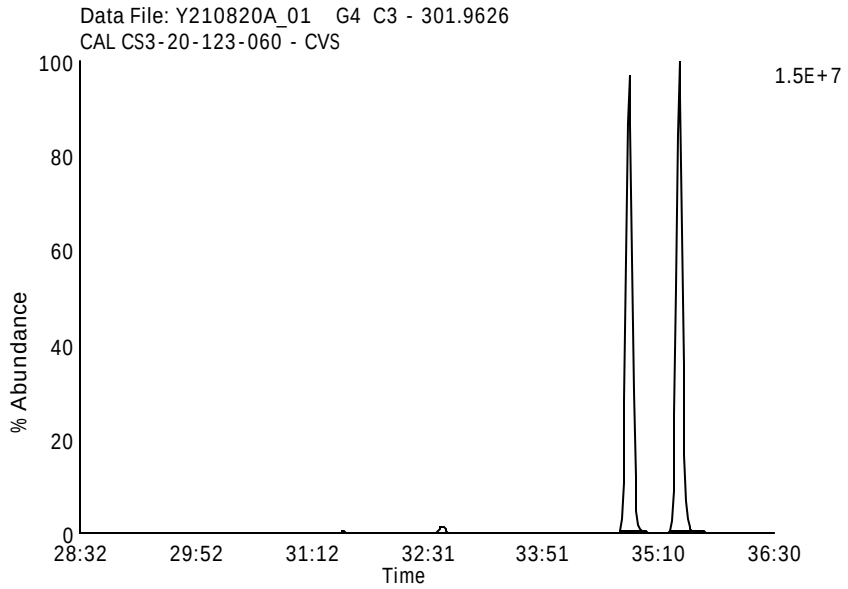
Data File: Y210820A_01 G3 C4 - 269.9986
CAL CS3-20-123-060 - CVS

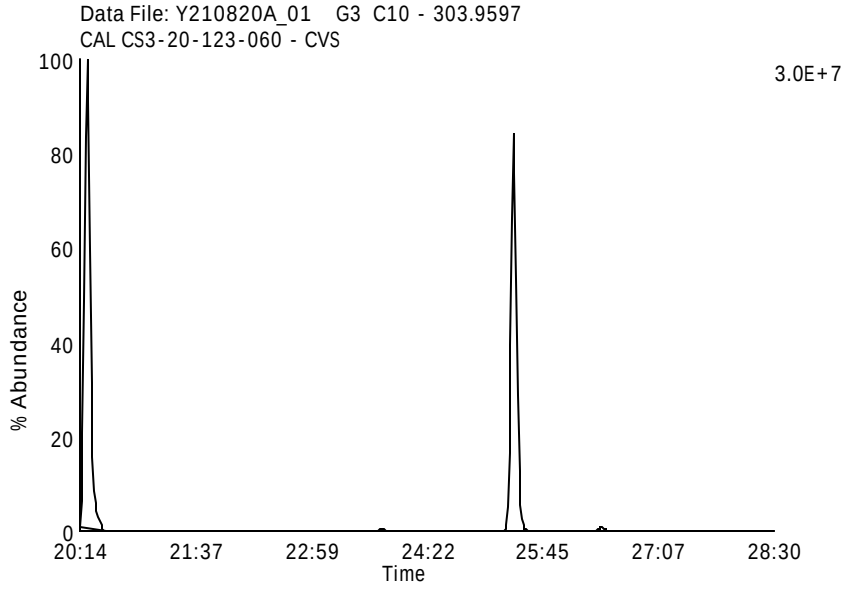


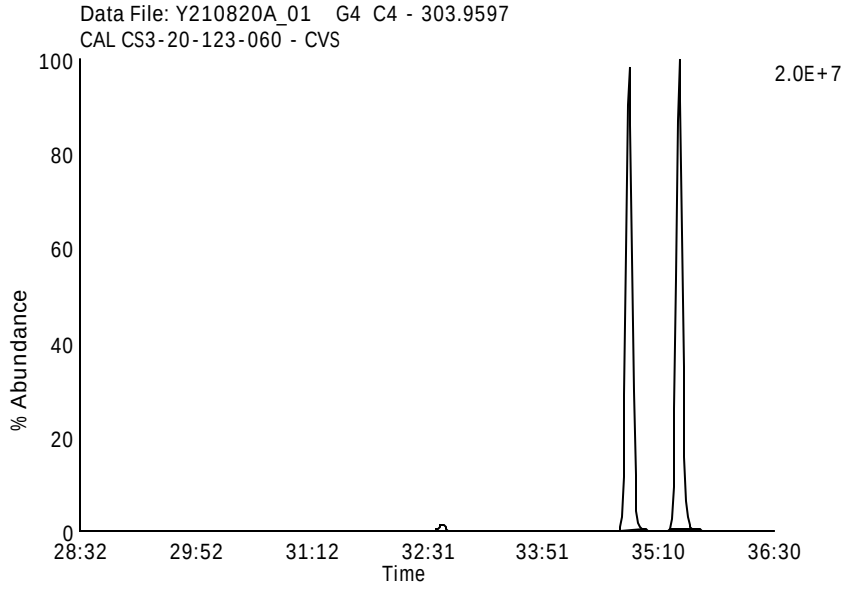
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







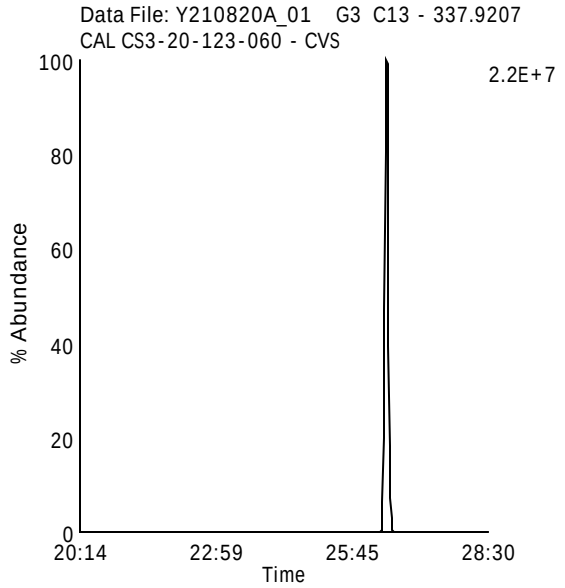


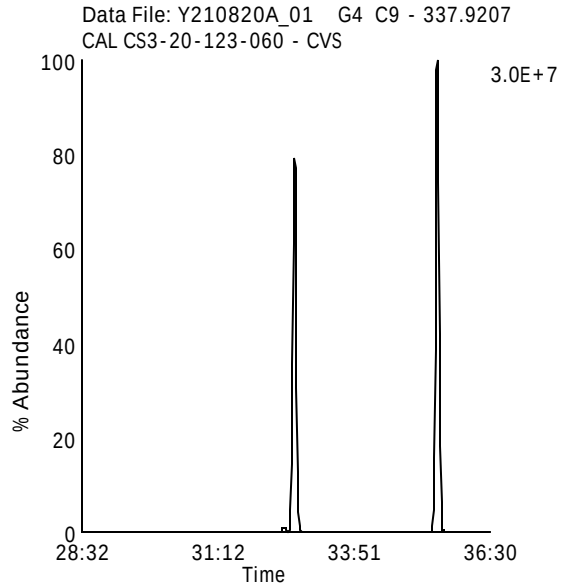
Labeled Penta Chlorinated Biphenyls

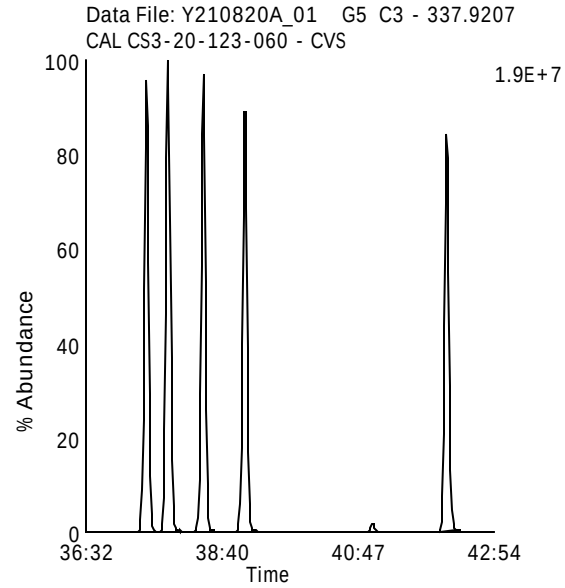
Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

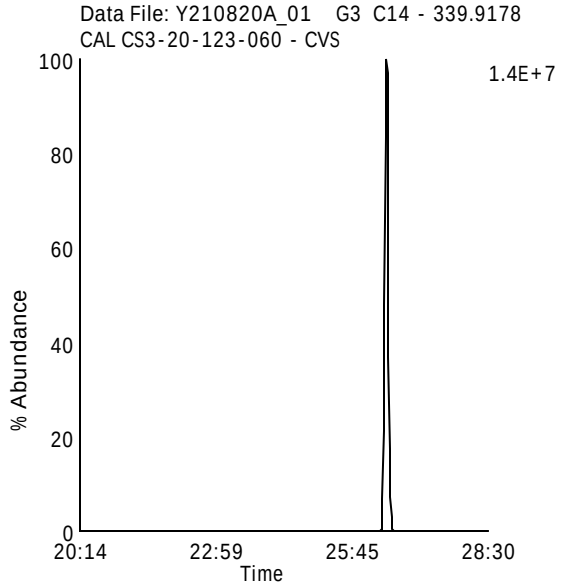
Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

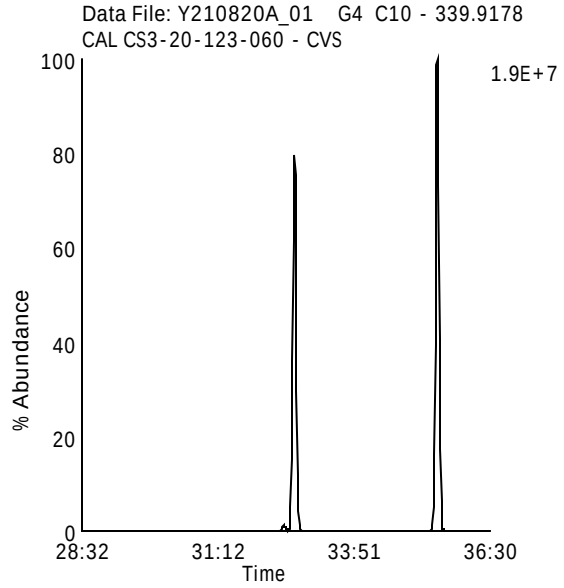
Sample Description: CAL CS3-20-123-060 - CVS

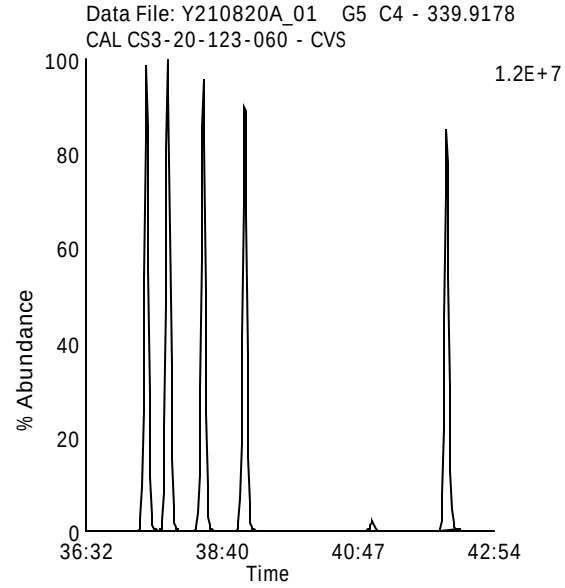










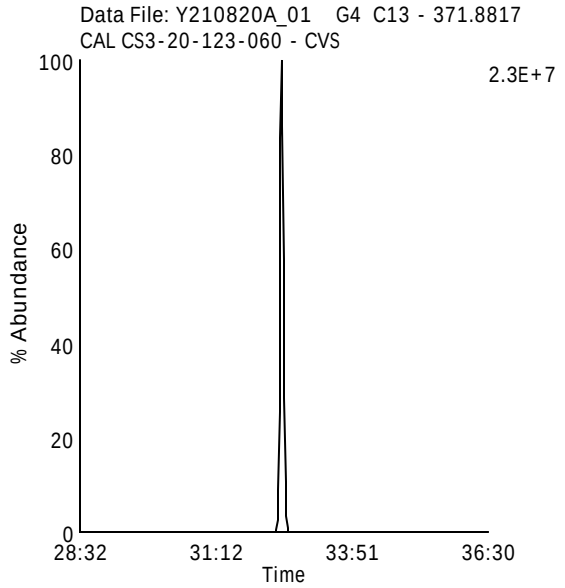


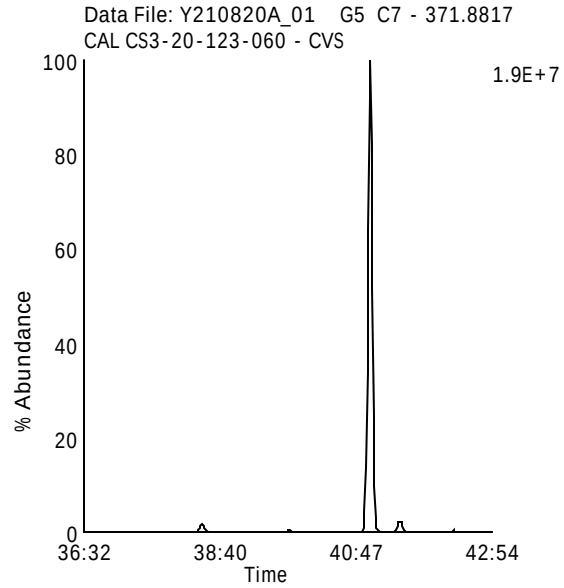
Labeled Hexa Chlorinated Biphenyls

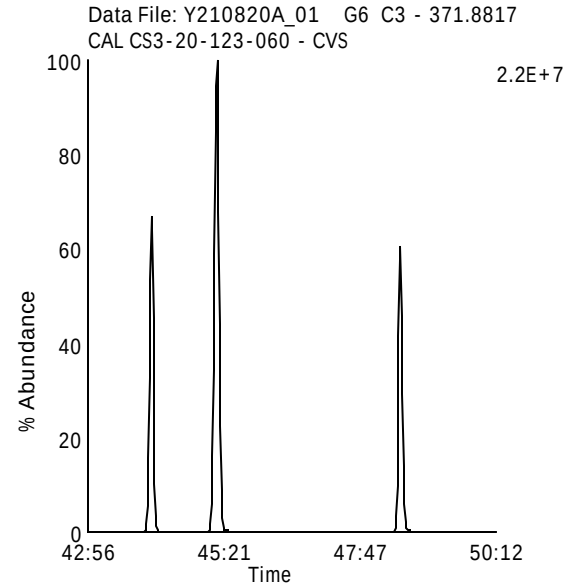
Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

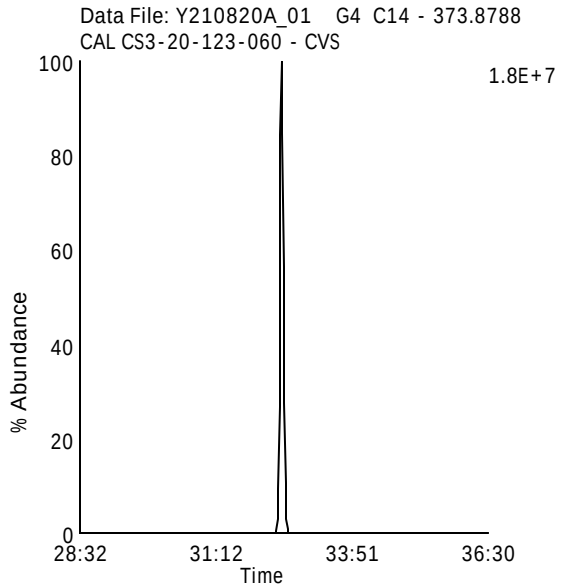
Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

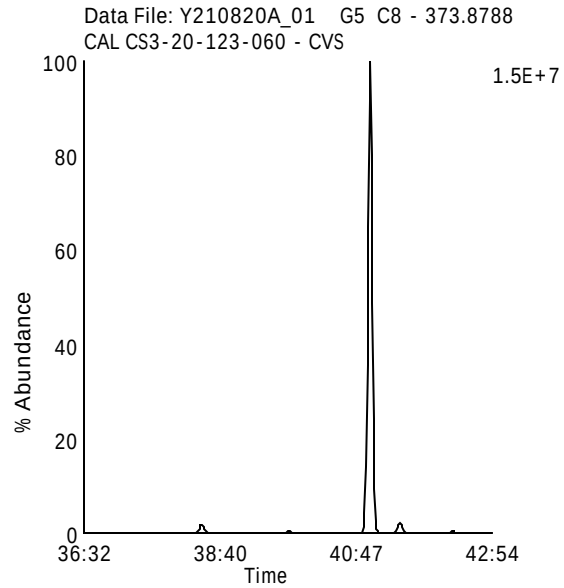
Sample Description: CAL CS3-20-123-060 - CVS

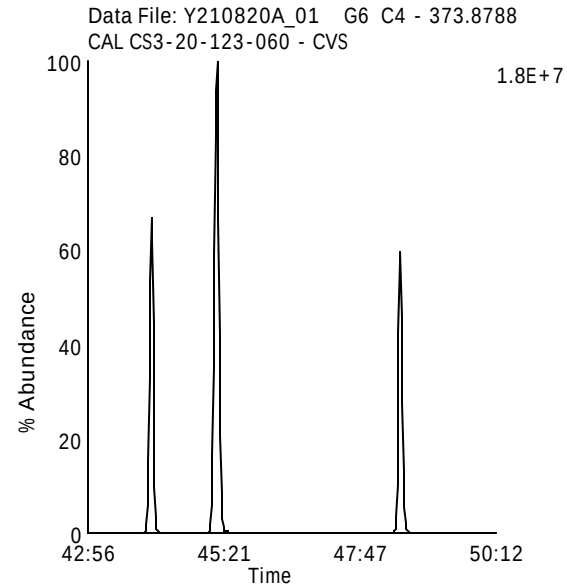






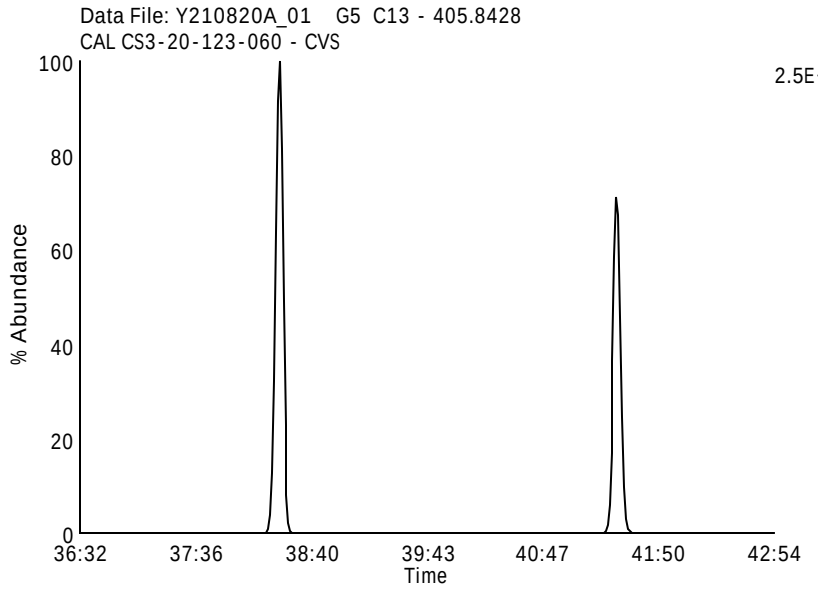


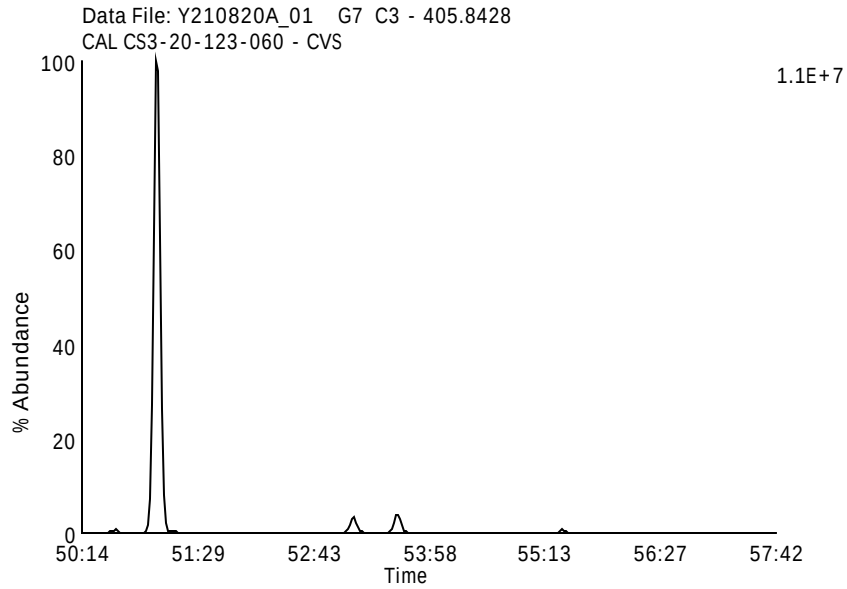


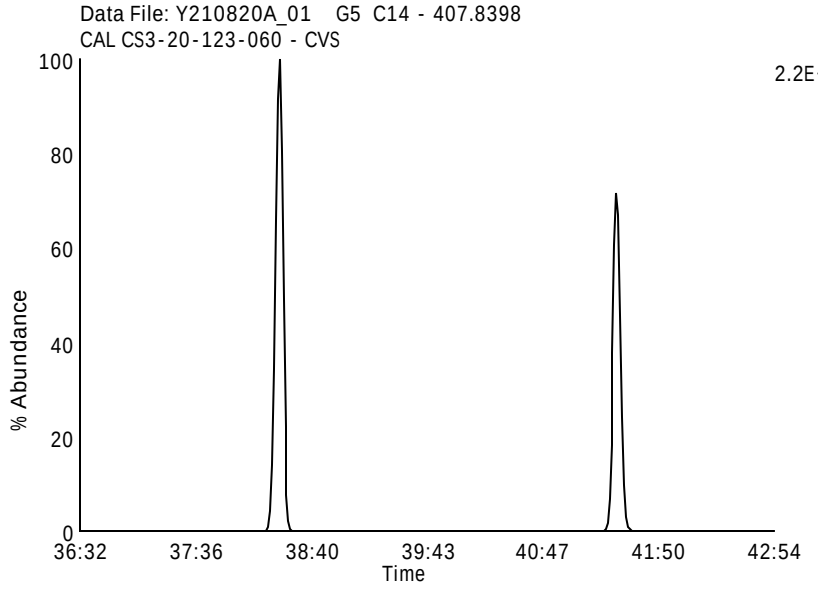


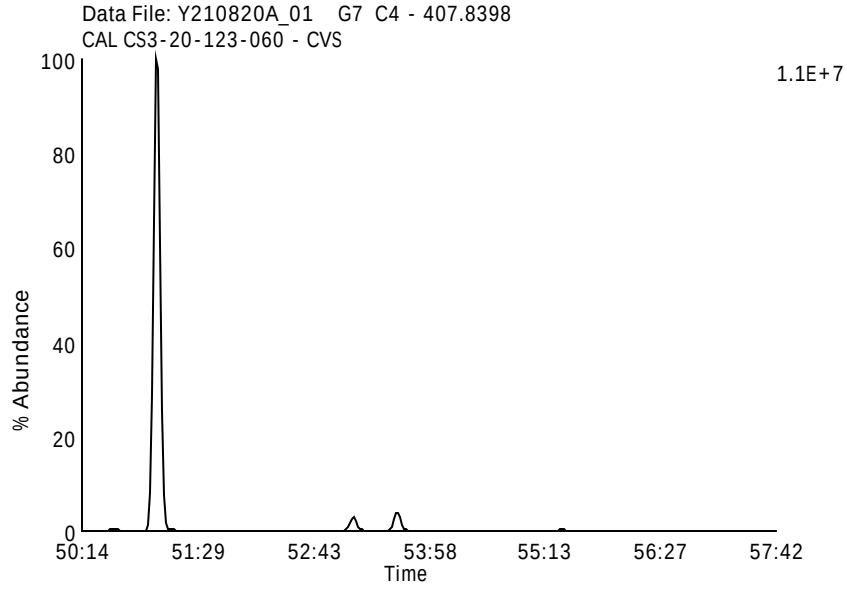
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS





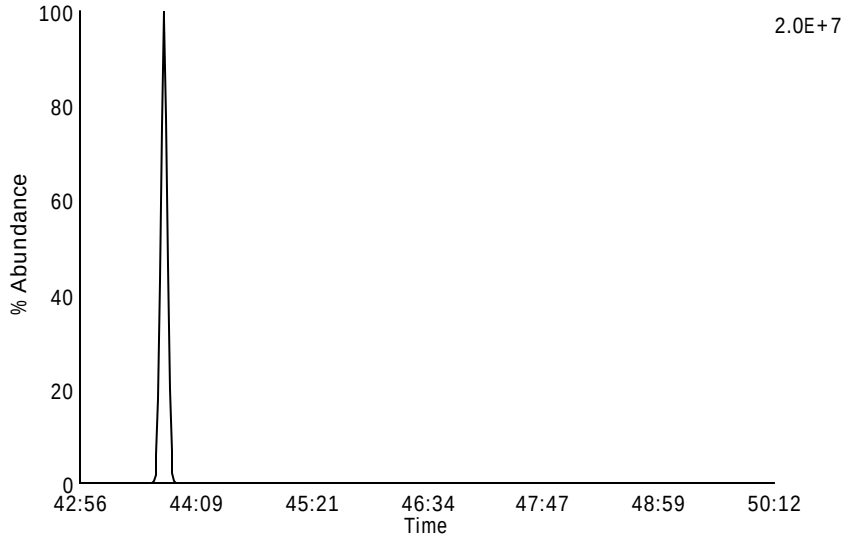




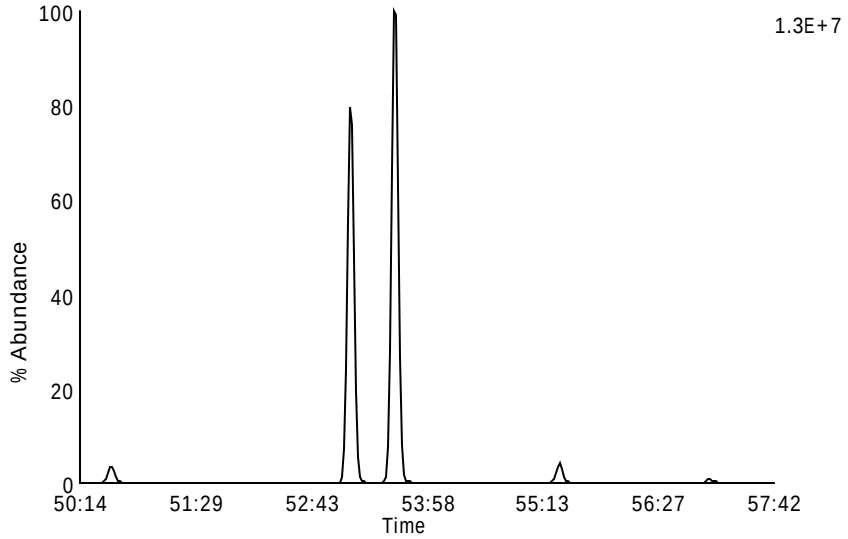
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

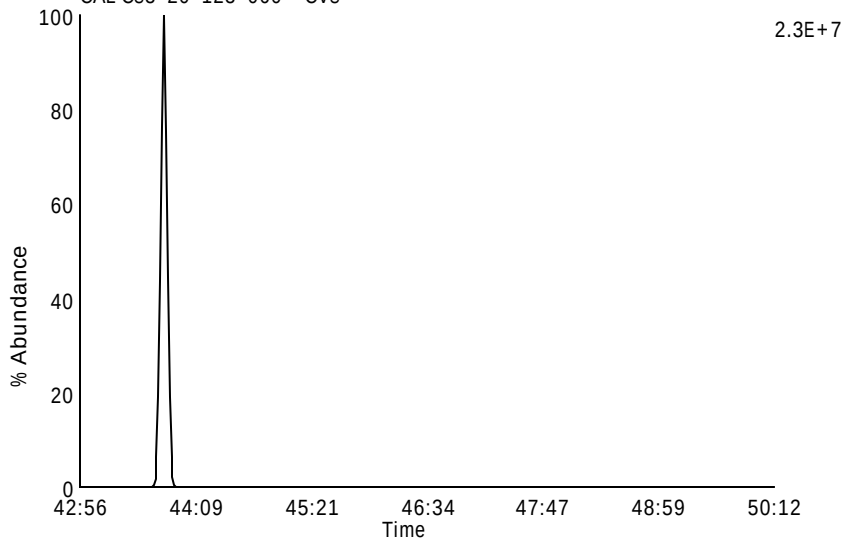
Data File: Y210820A_01 G6 C13 - 439.8038
CAL CS3-20-123-060 - CVS



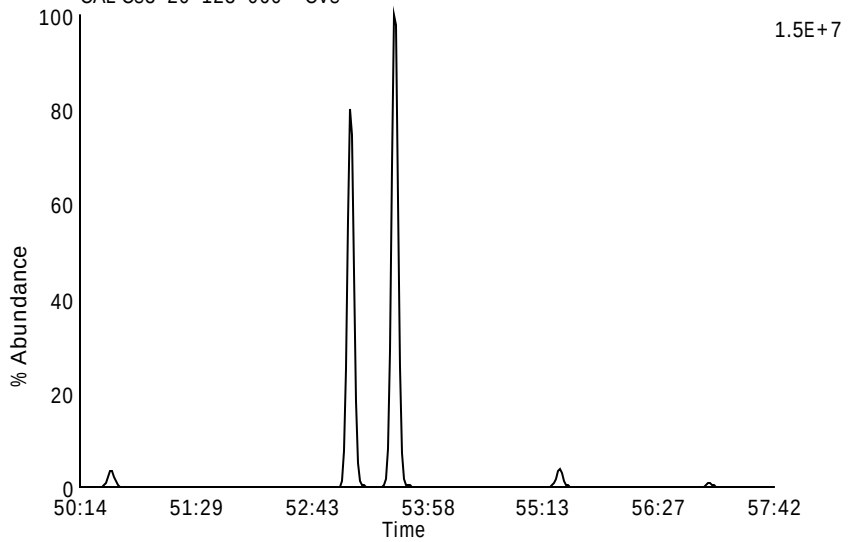
Data File: Y210820A_01 G7 C7 - 439.8038
CAL CS3-20-123-060 - CVS



Data File: Y210820A_01 G6 C14 - 441.8008
CAL CS3-20-123-060 - CVS



Data File: Y210820A_01 G7 C8 - 441.8008
CAL CS3-20-123-060 - CVS

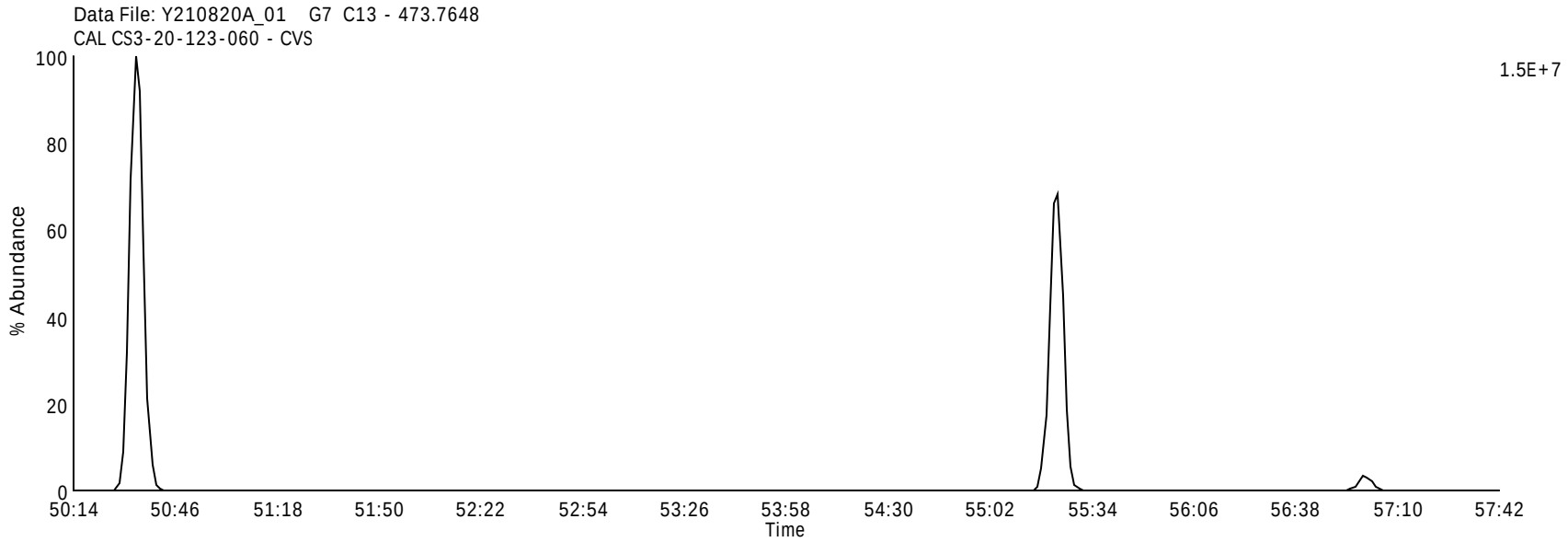


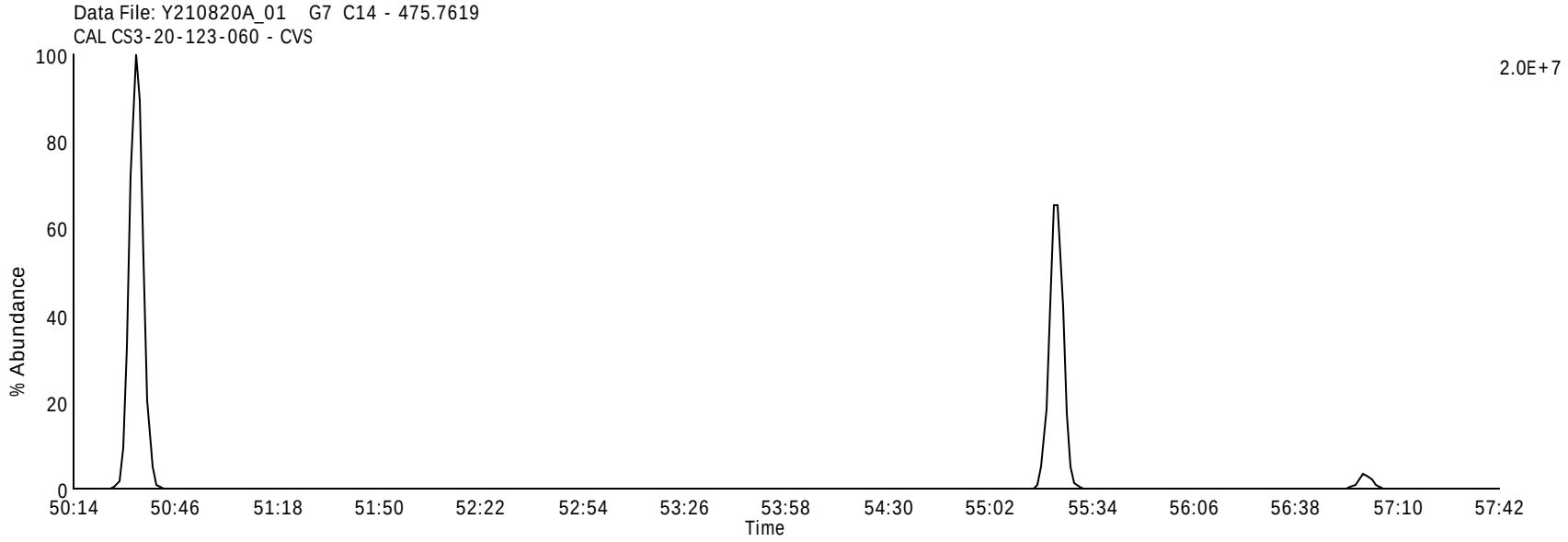
Labeled Nona Chlorinated Biphenyls

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



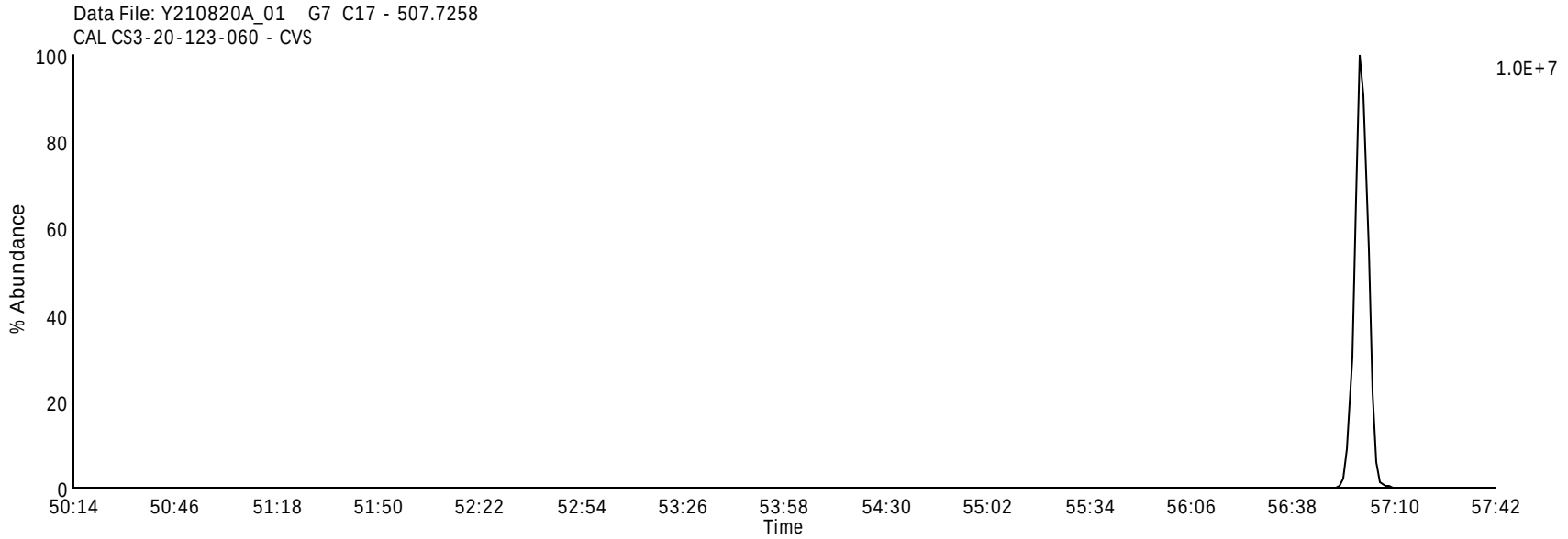


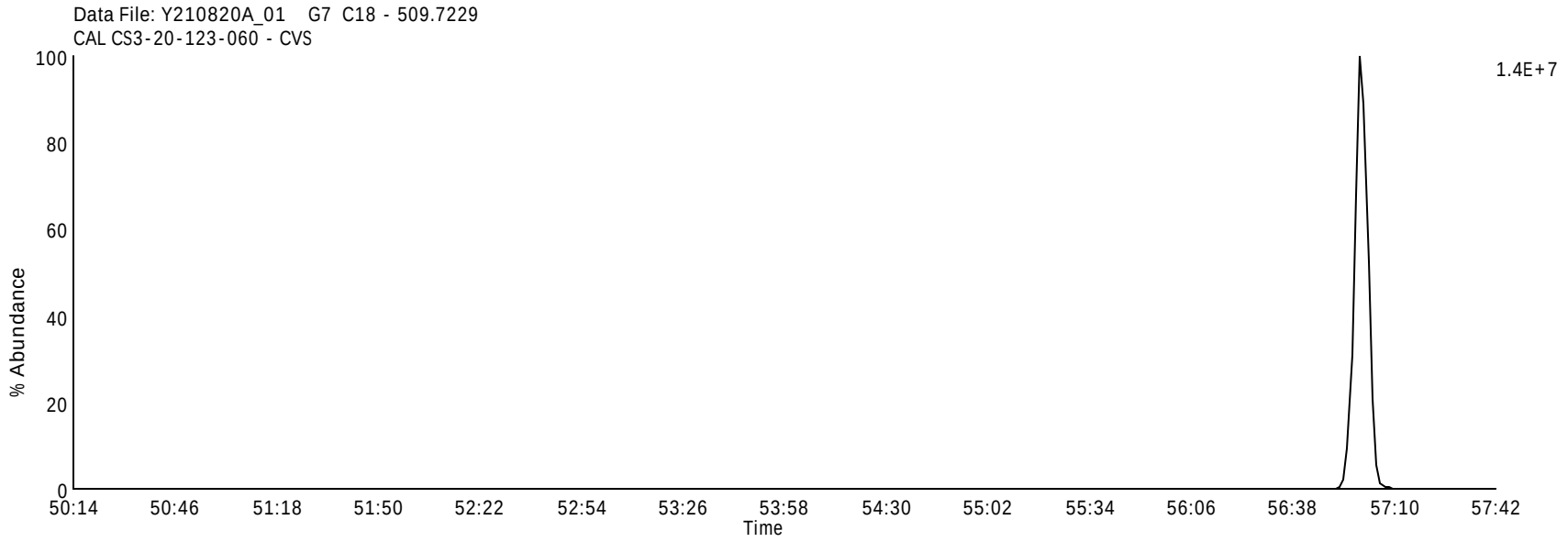
Labeled Deca Chlorinated Biphenyl

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



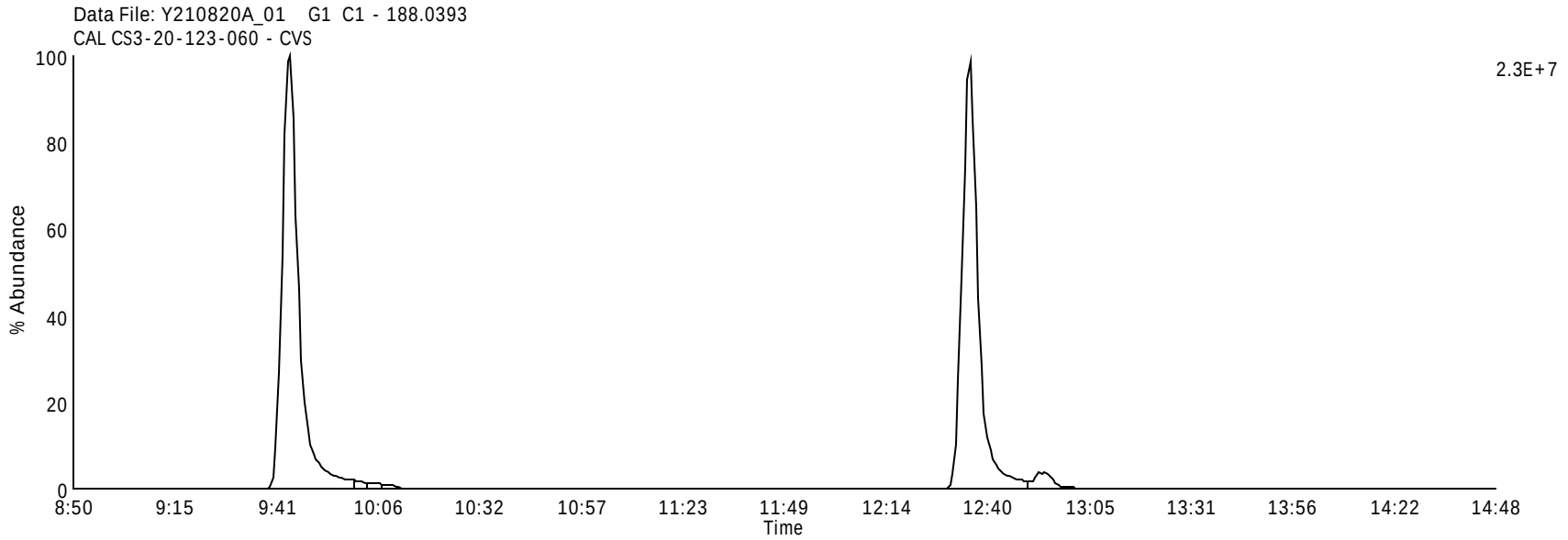


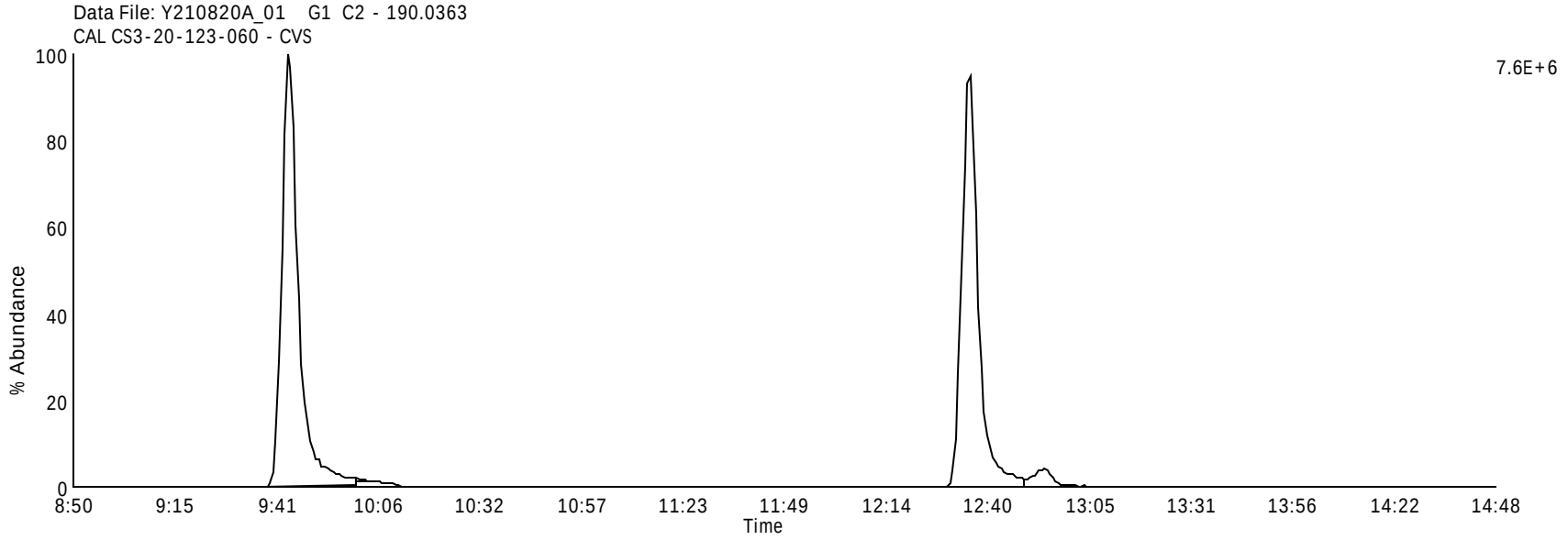
Mono Chlorinated Biphenyls

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

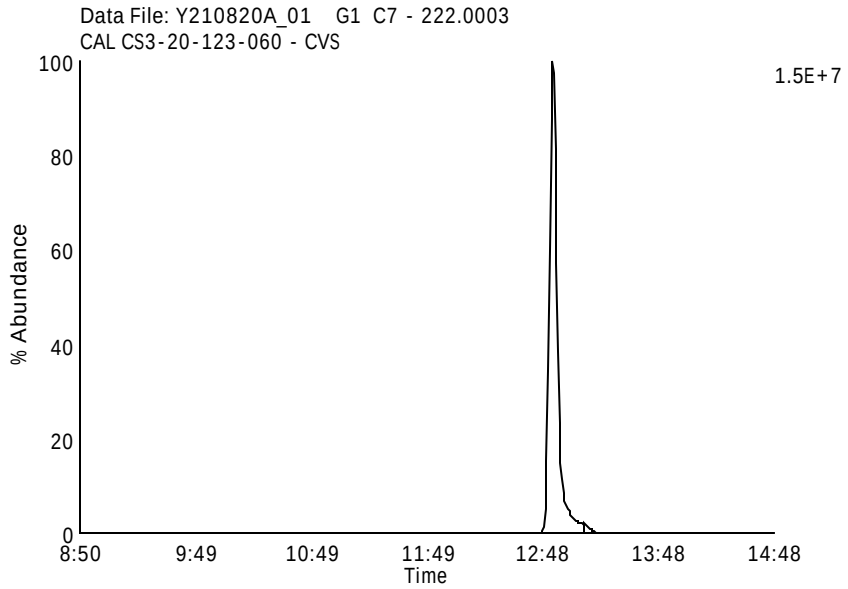
Sample Description: CAL CS3-20-123-060 - CVS

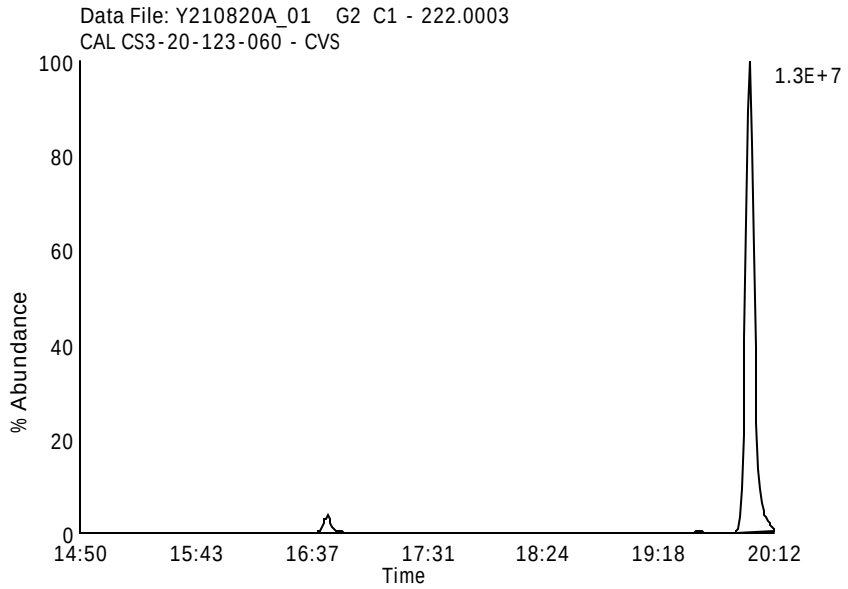


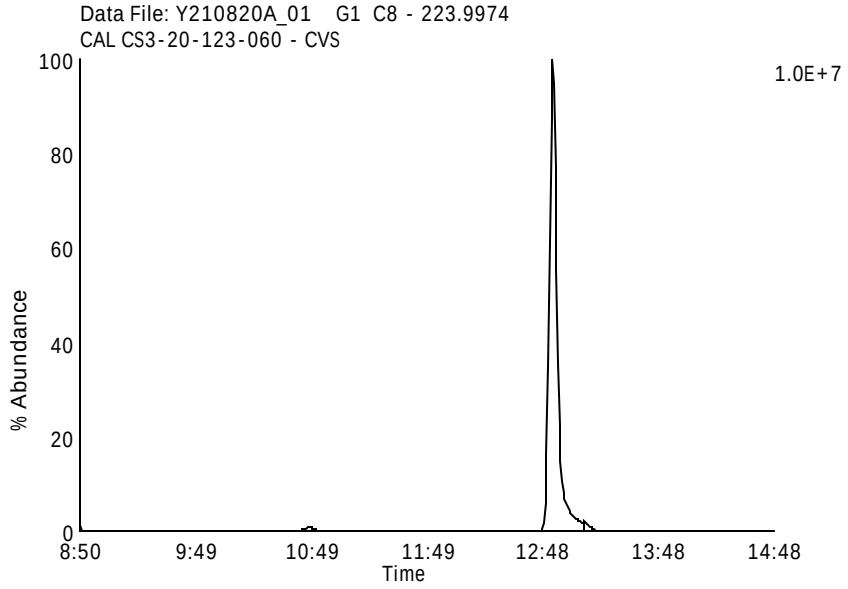


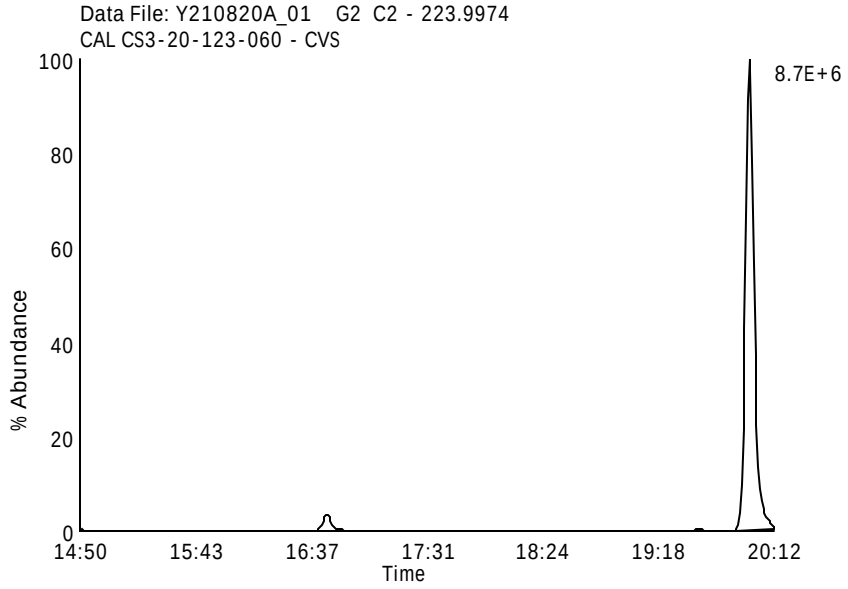
Di Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



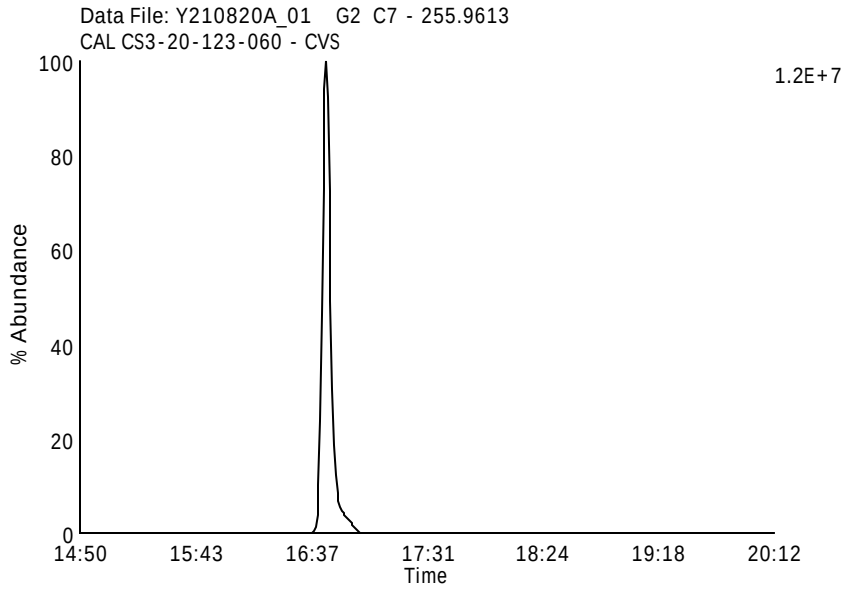


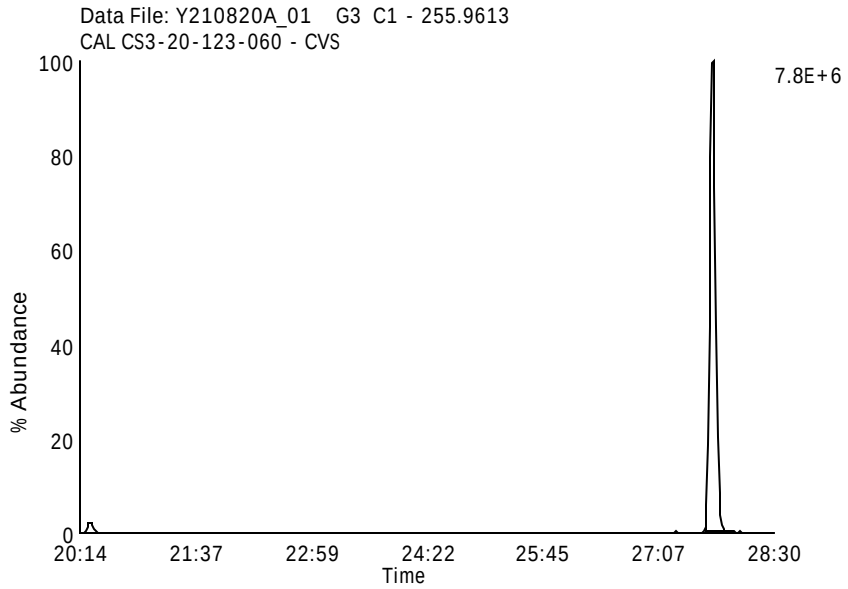


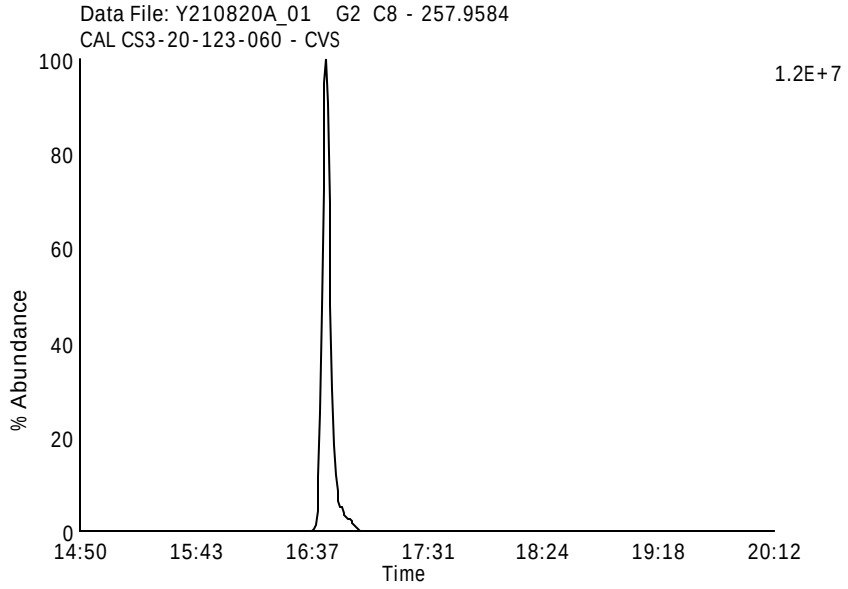


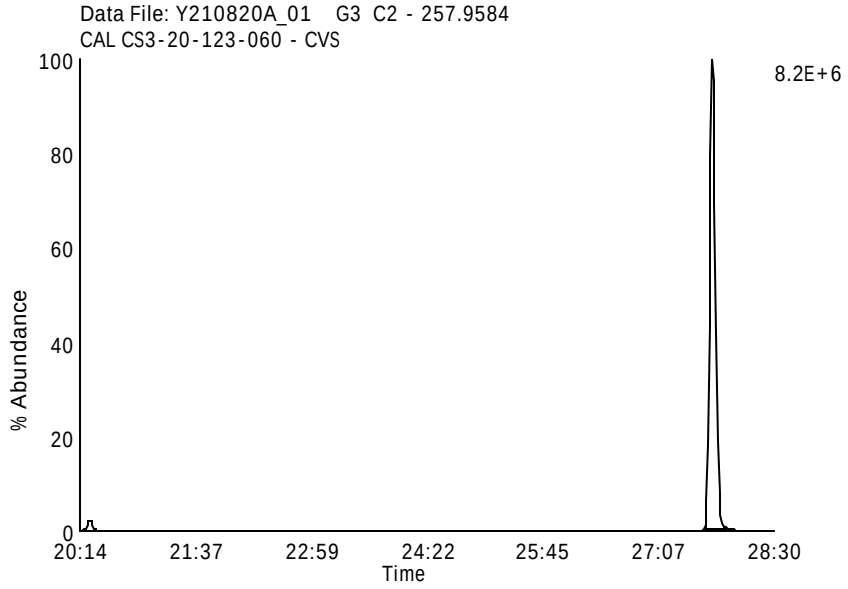
Tri Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



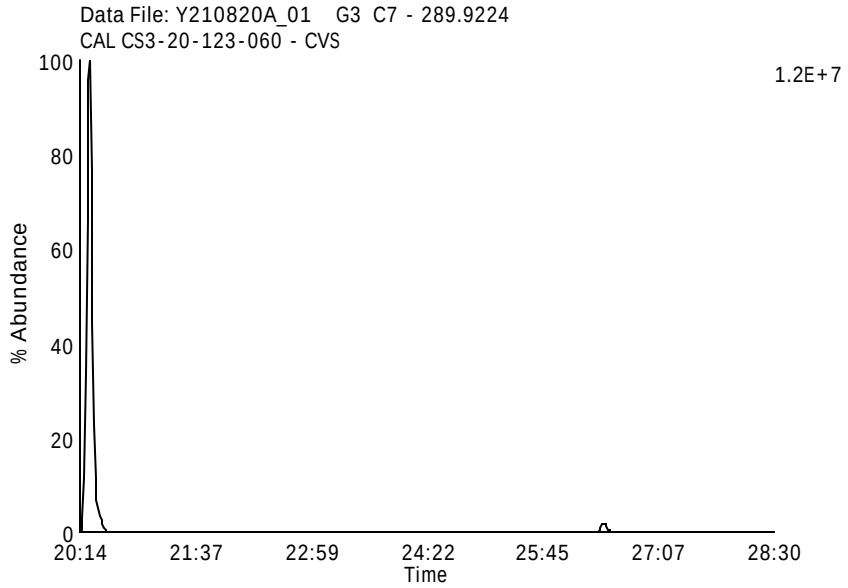


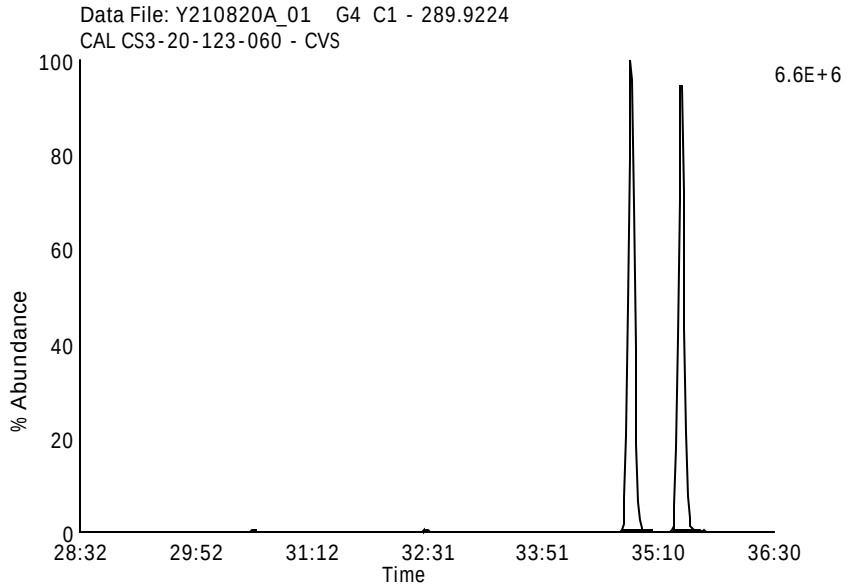


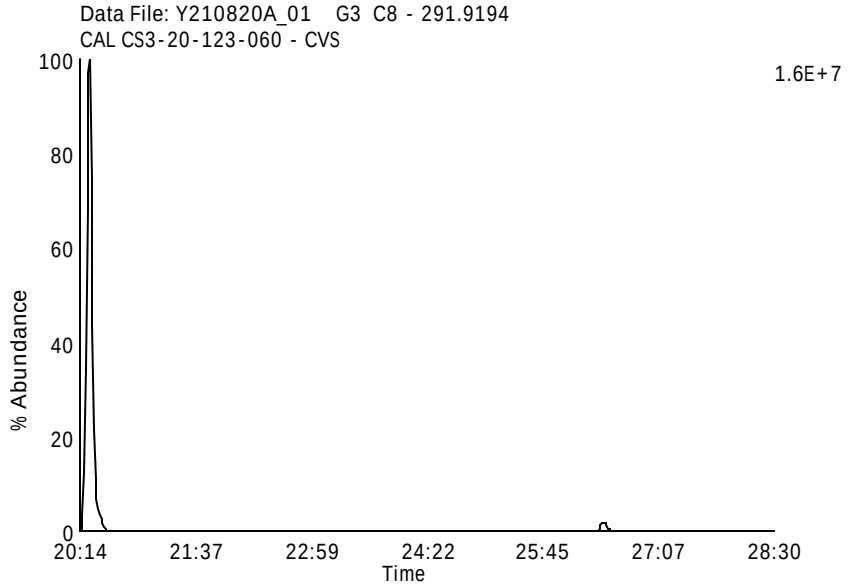


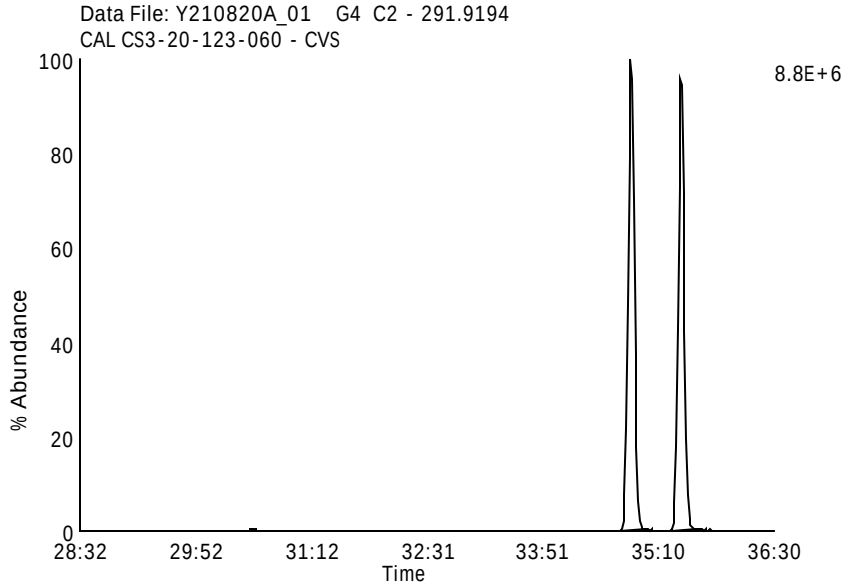
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



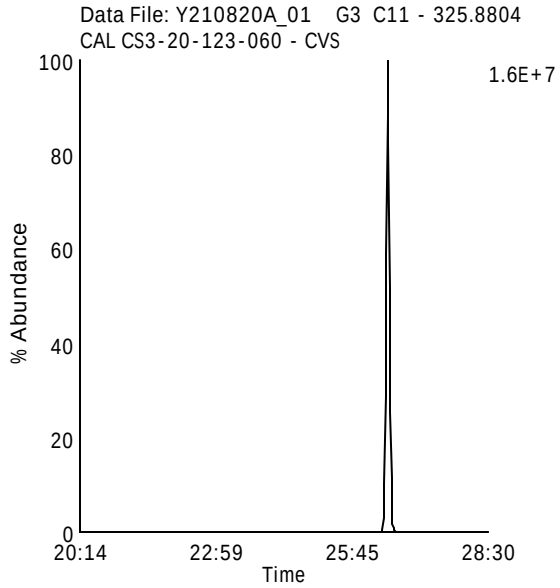


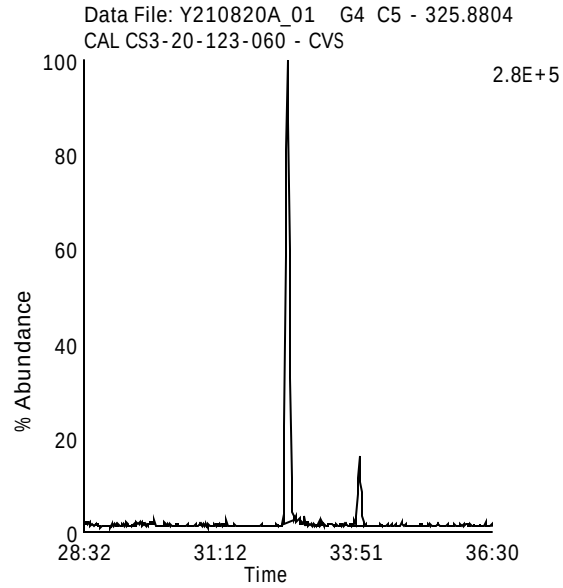


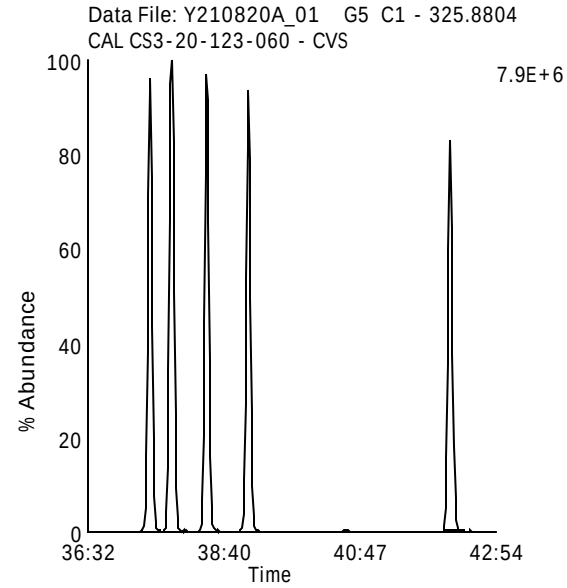


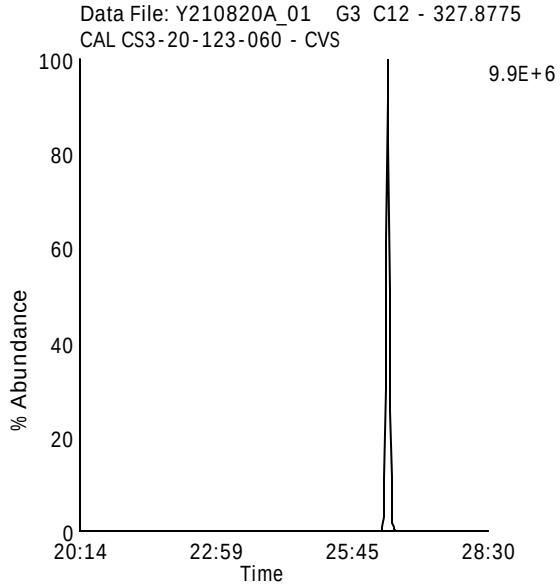
Penta Chlorinated Biphenyls

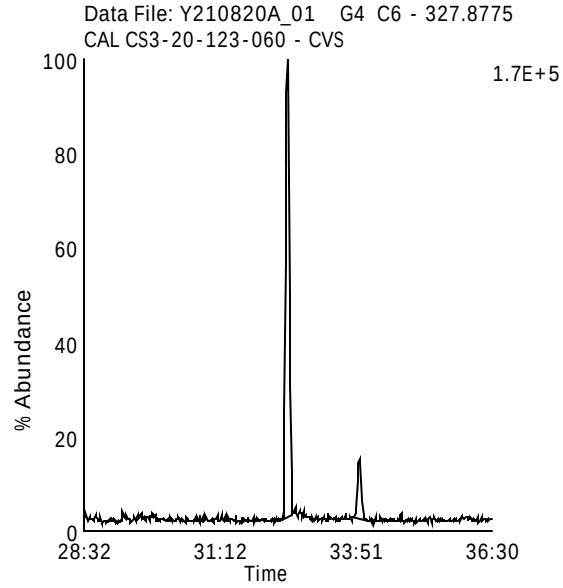
Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

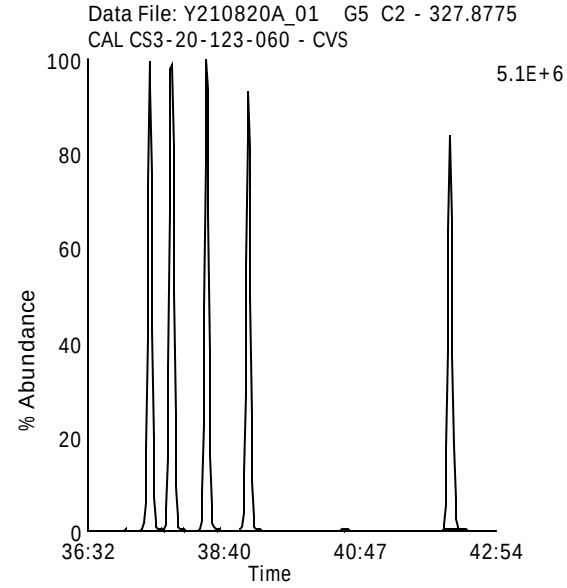






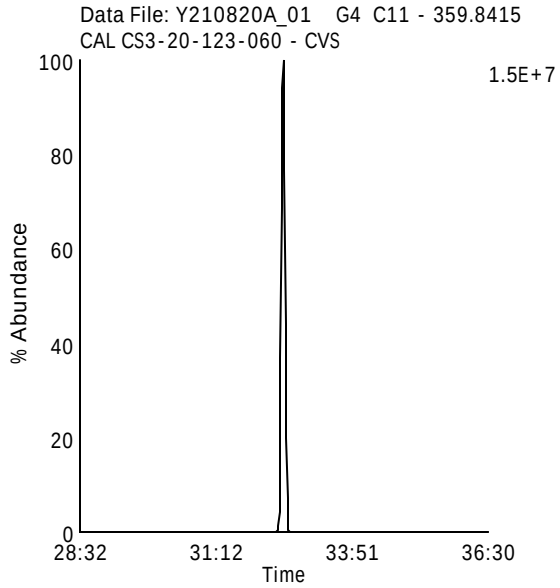


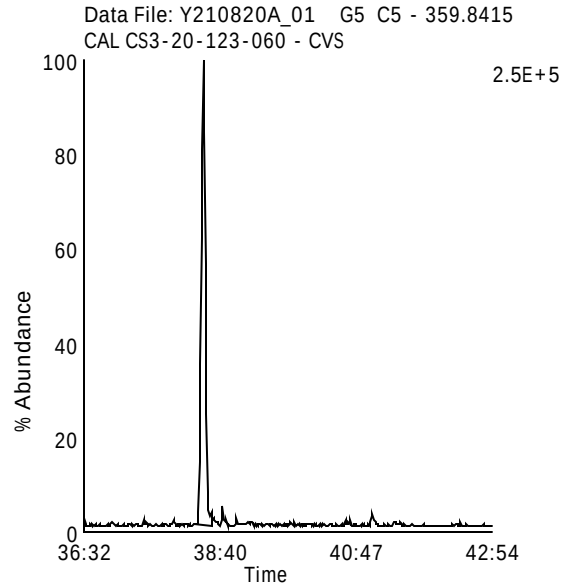


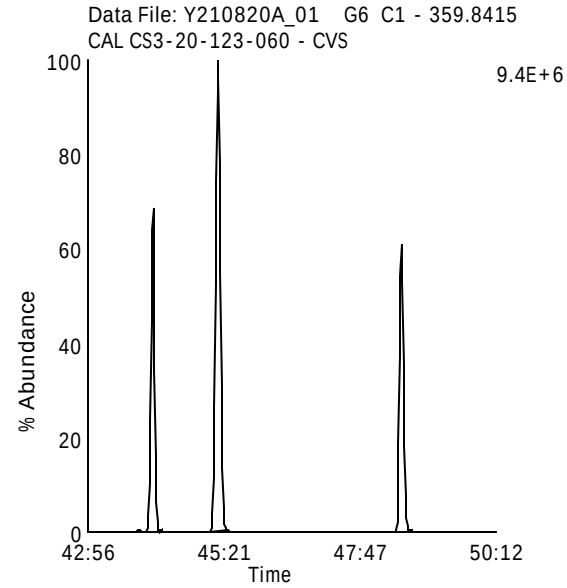


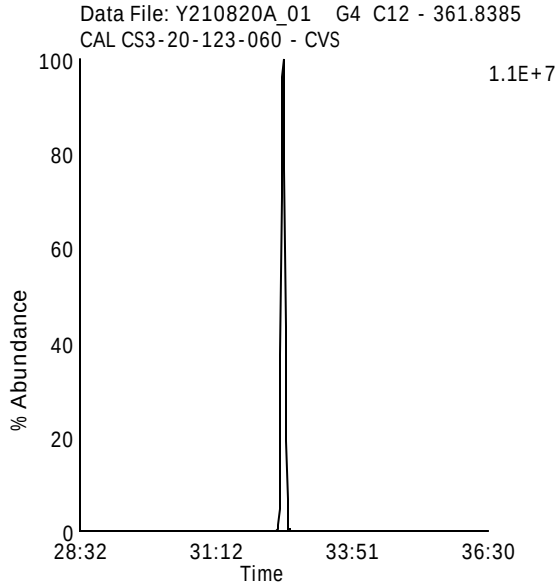
Hexa Chlorinated Biphenyls

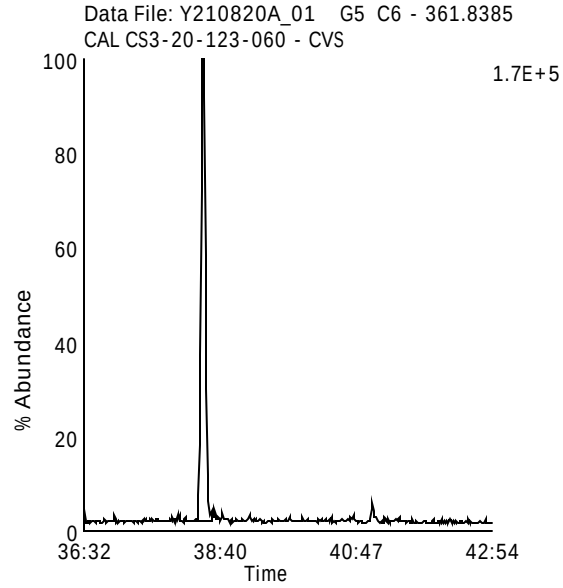
Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

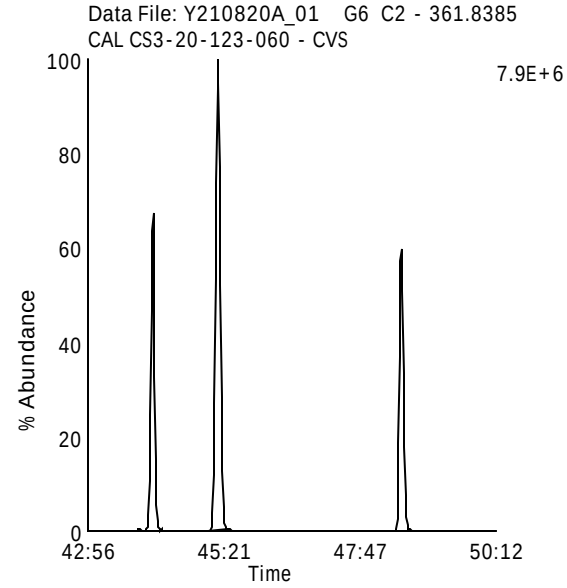






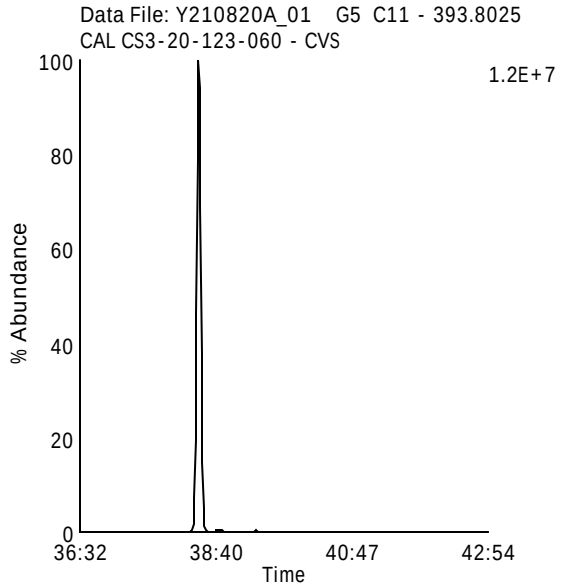


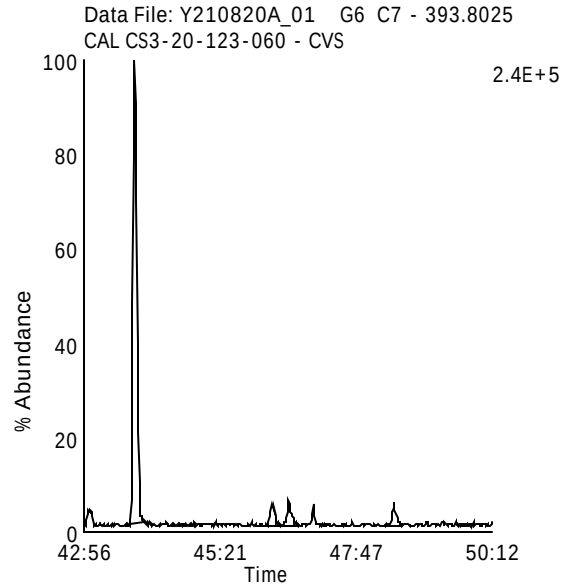


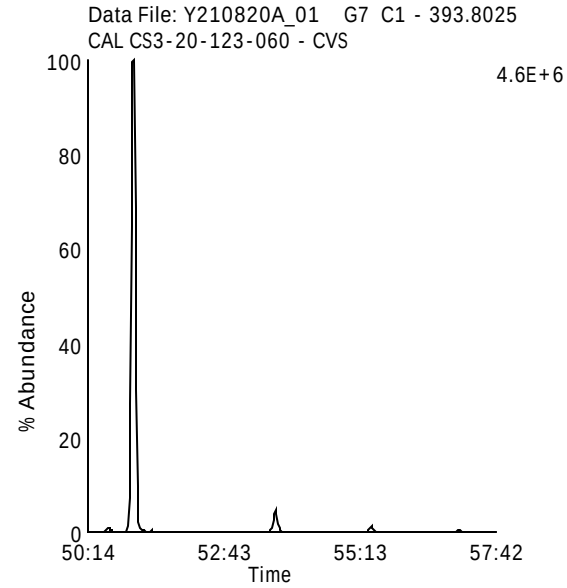


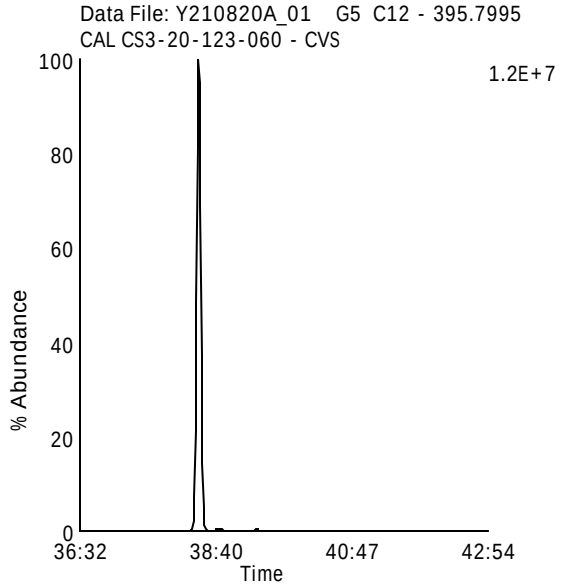
Hepta Chlorinated Biphenyls

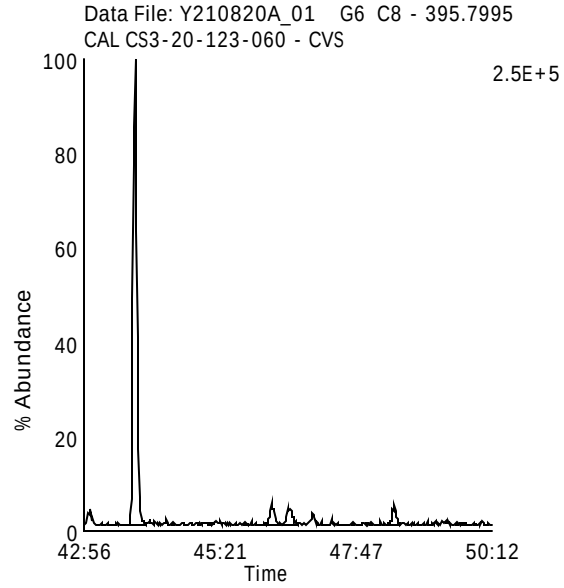
Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS

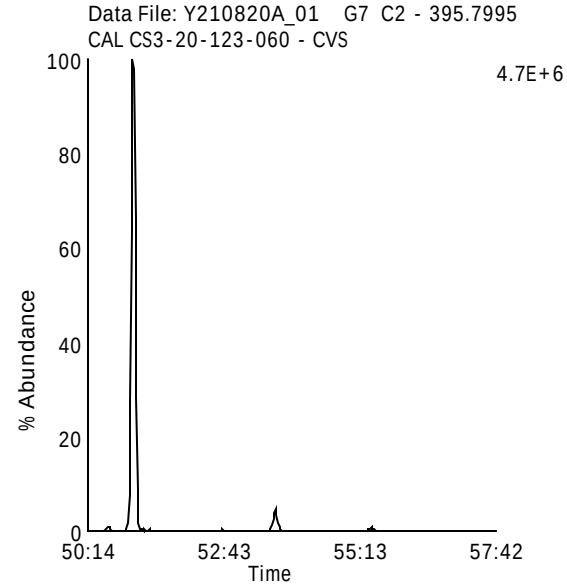










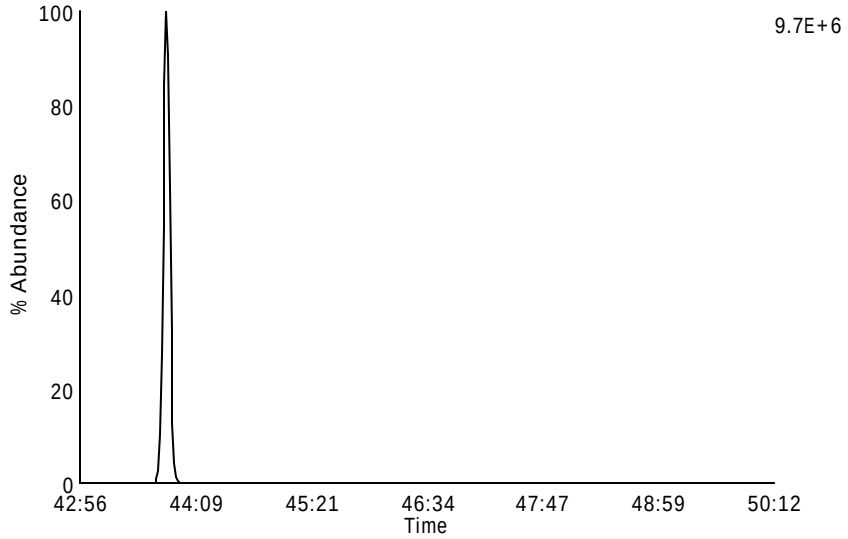


Octa Chlorinated Biphenyls

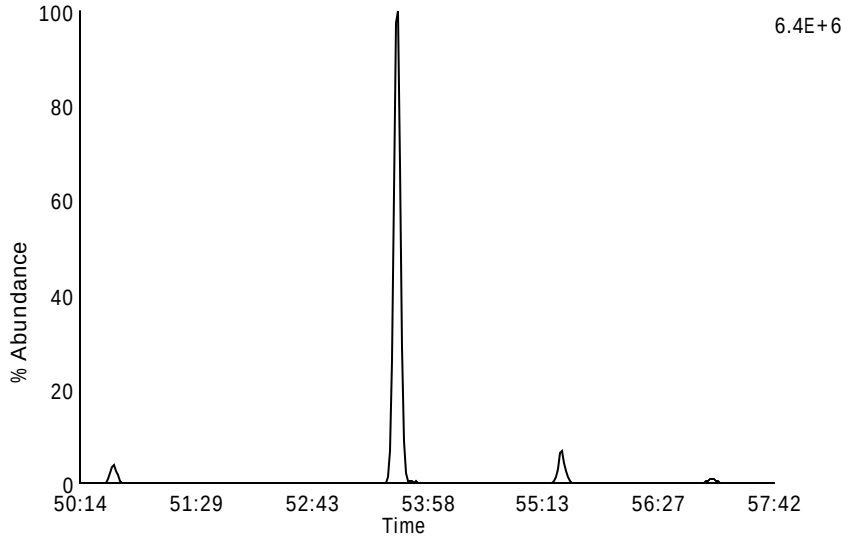
Data File Name: Y210820A_01
Date Acquired: 8/20/2021
Sample Description: CAL CS3-20-123-060 - CVS

Lab Sample ID: CS3-20-123-060
Instrument: 10MSHR12 (Y)

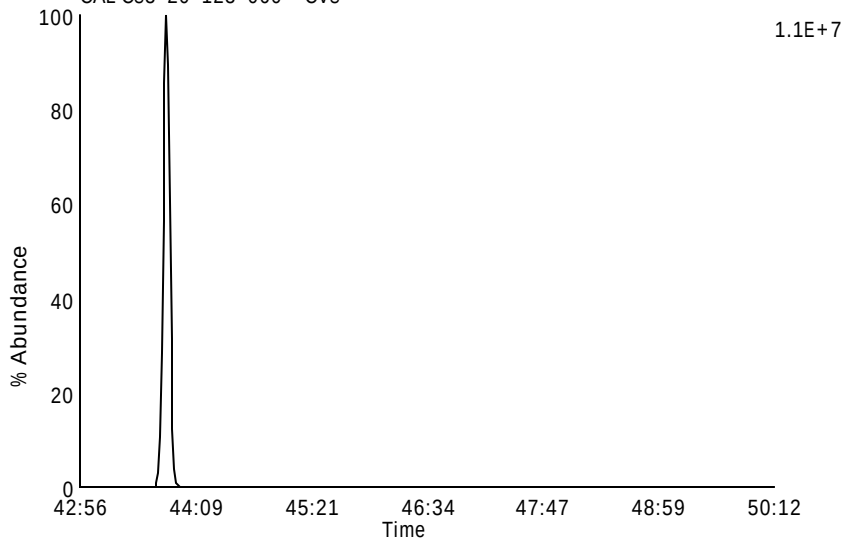
Data File: Y210820A_01 G6 C11 - 427.7635
CAL CS3-20-123-060 - CVS



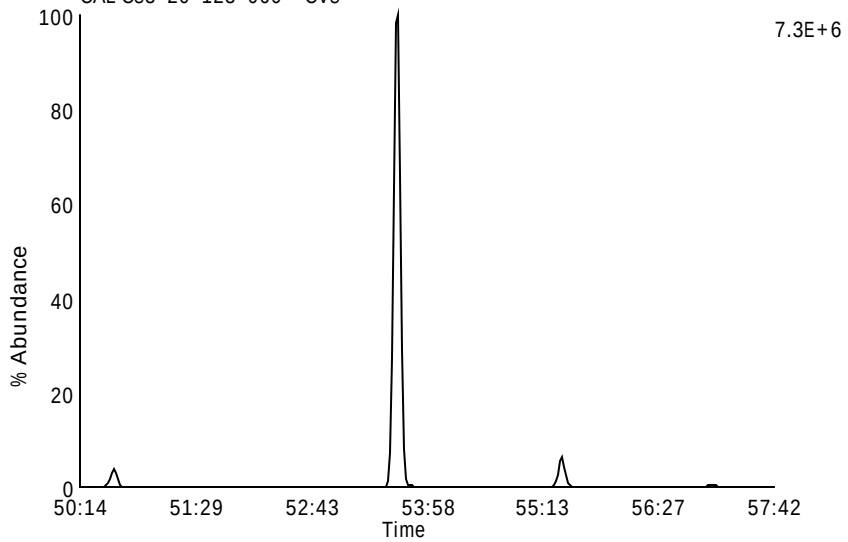
Data File: Y210820A_01 G7 C5 - 427.7635
CAL CS3-20-123-060 - CVS



Data File: Y210820A_01 G6 C12 - 429.7606
CAL CS3-20-123-060 - CVS



Data File: Y210820A_01 G7 C6 - 429.7606
CAL CS3-20-123-060 - CVS

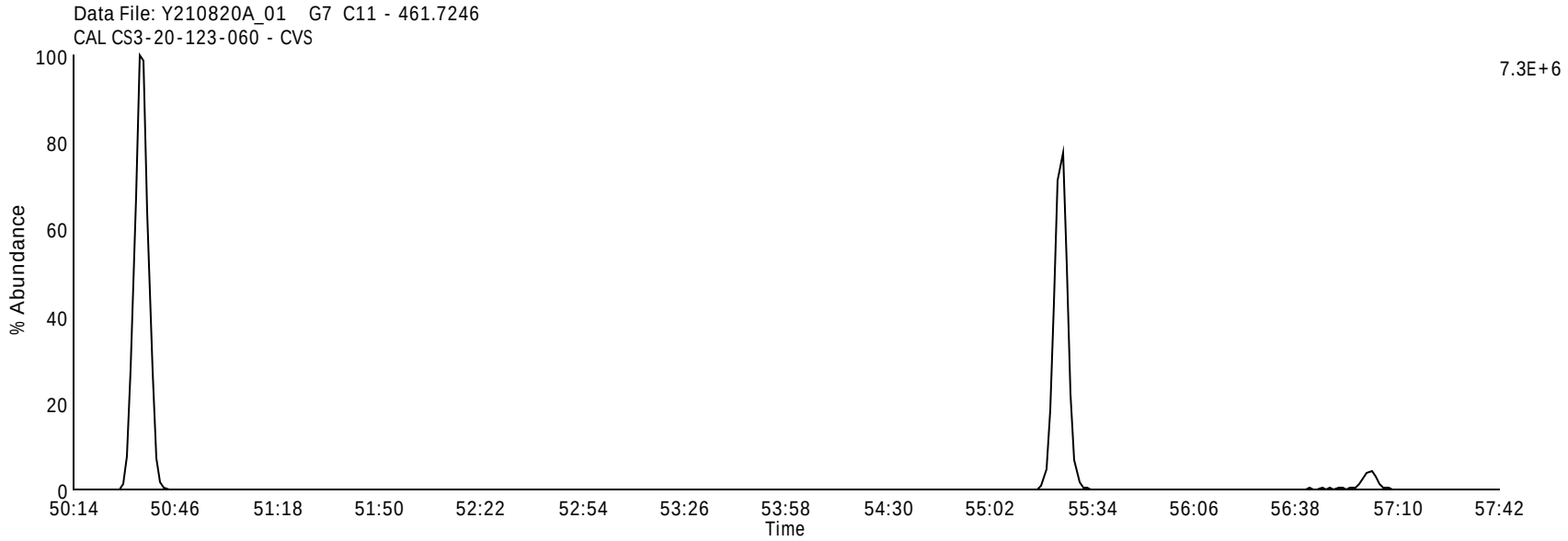


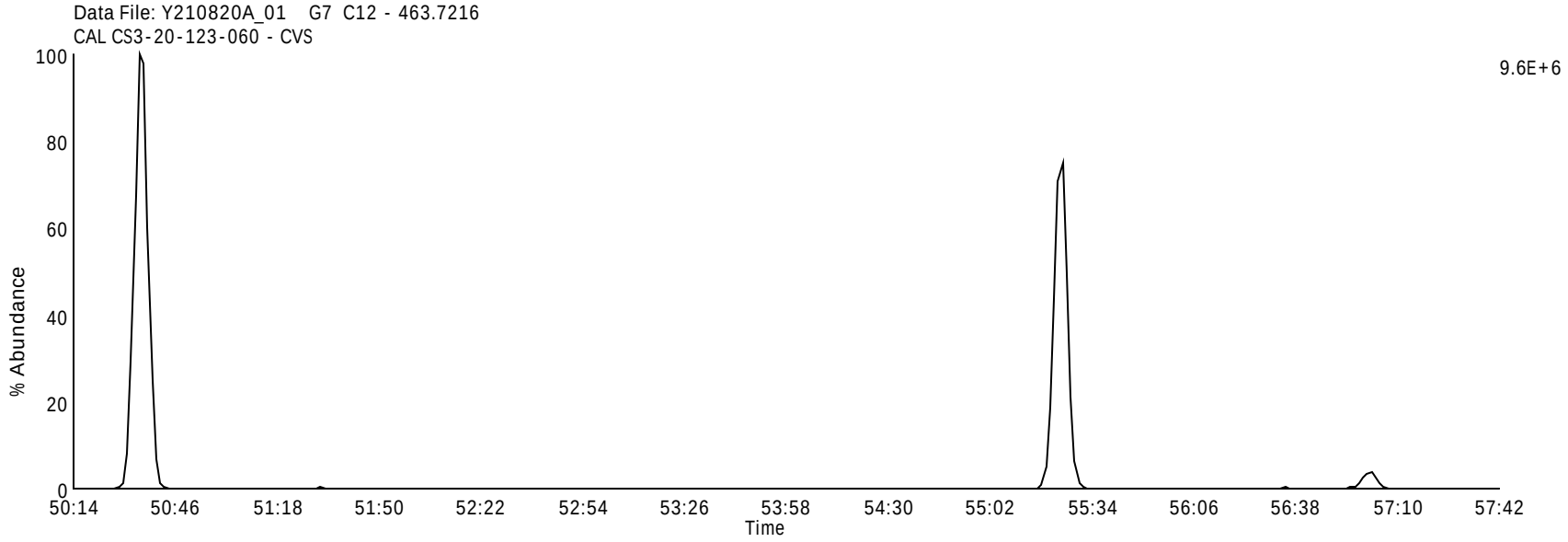
Nona Chlorinated Biphenyls

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

Sample Description: CAL CS3-20-123-060 - CVS



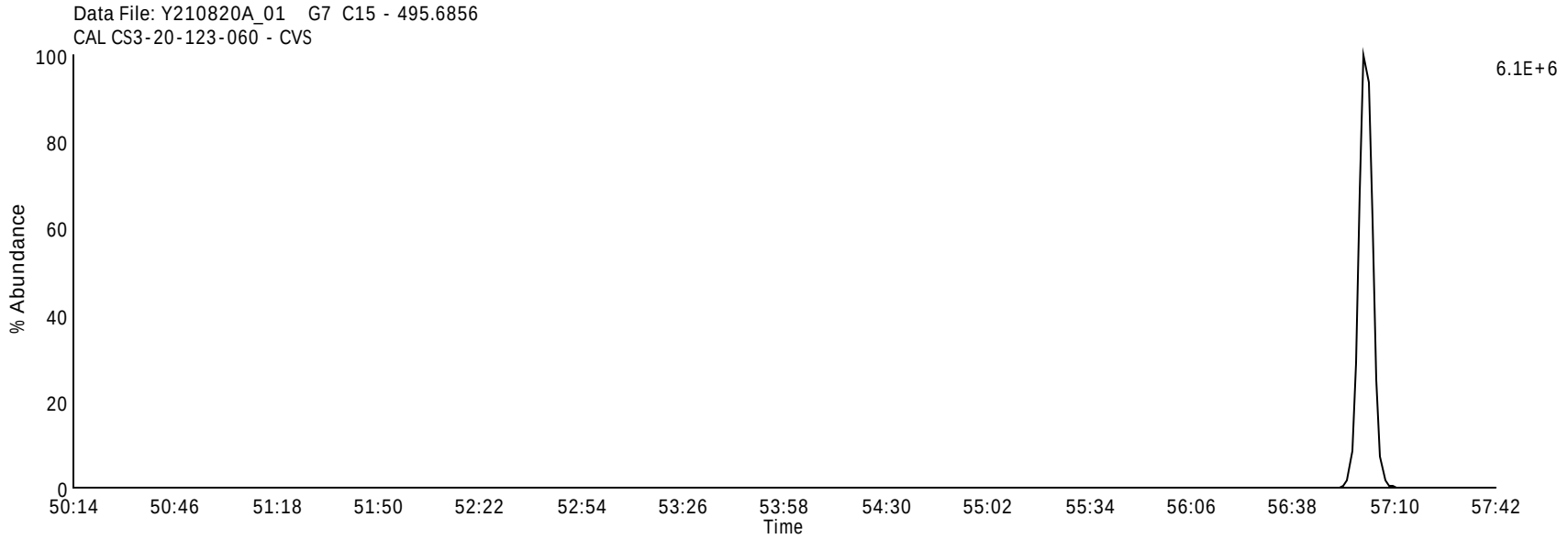


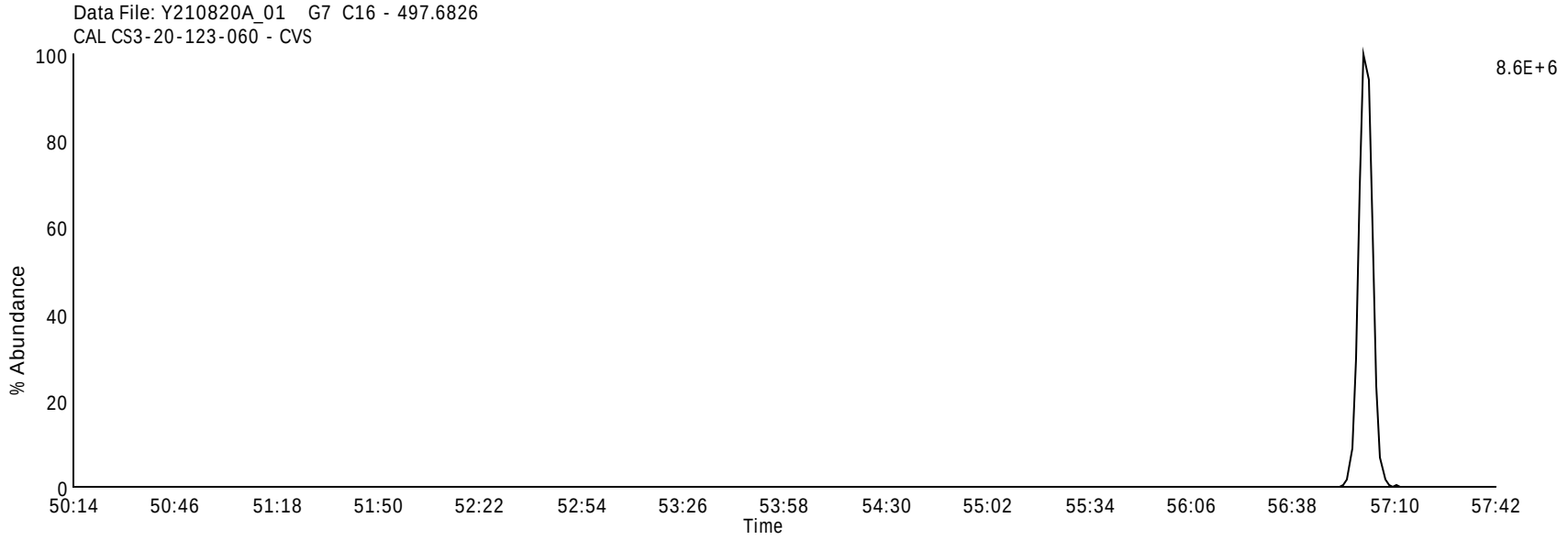
Deca Chlorinated Biphenyl

Data File Name: Y210820A_01 Lab Sample ID: CS3-20-123-060

Date Acquired: 8/20/2021 Instrument: 10MSHR12 (Y)

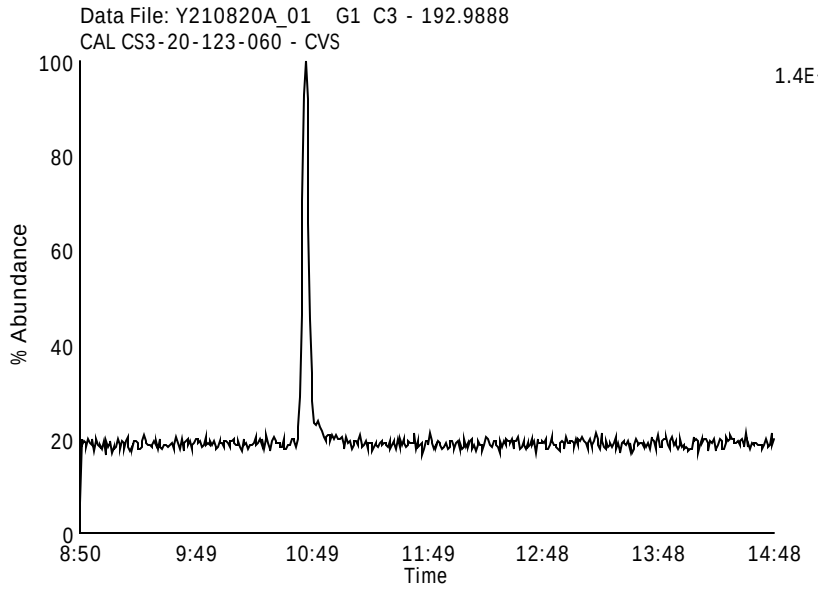
Sample Description: CAL CS3-20-123-060 - CVS

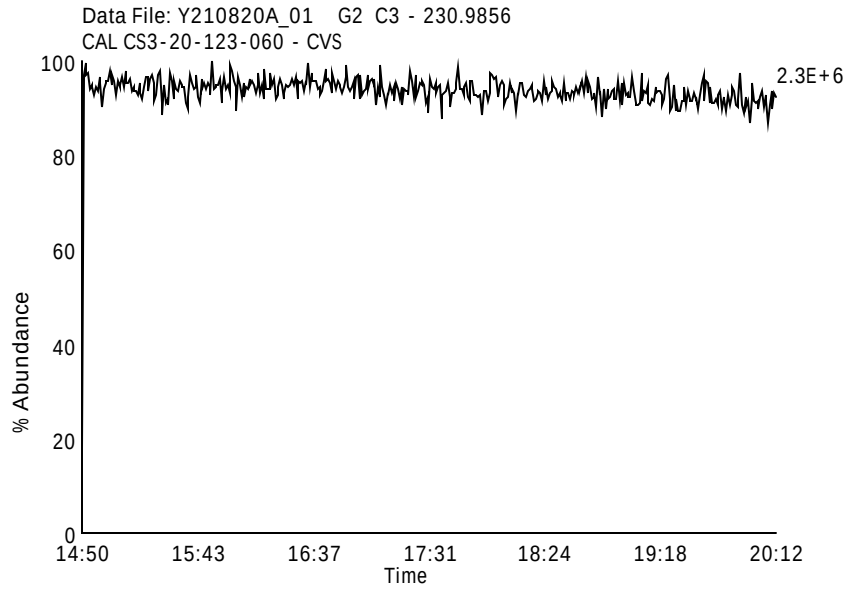


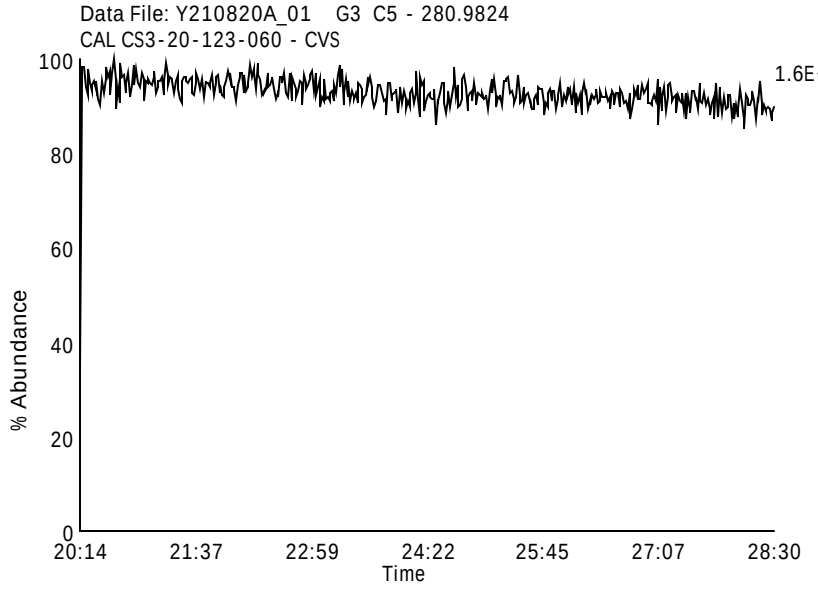


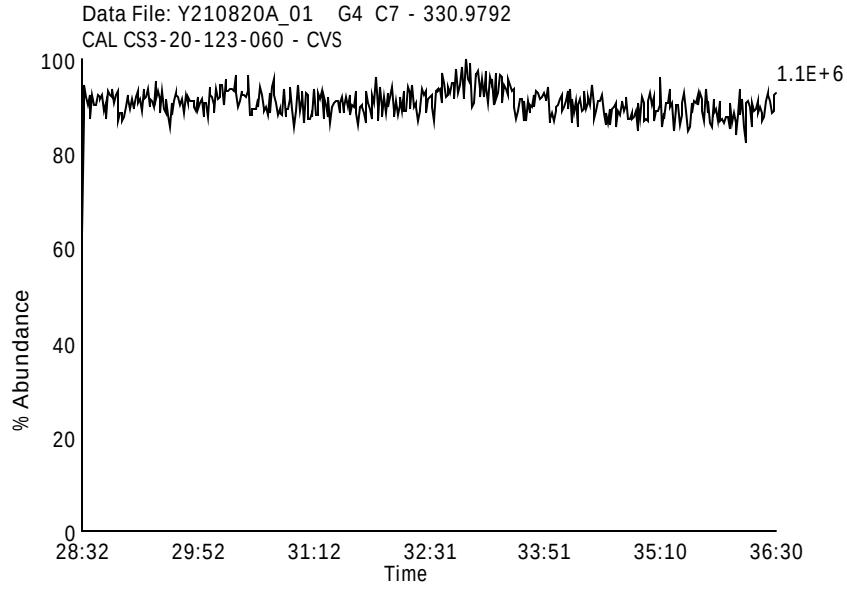
Group 1 - 4 Lock mass

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS



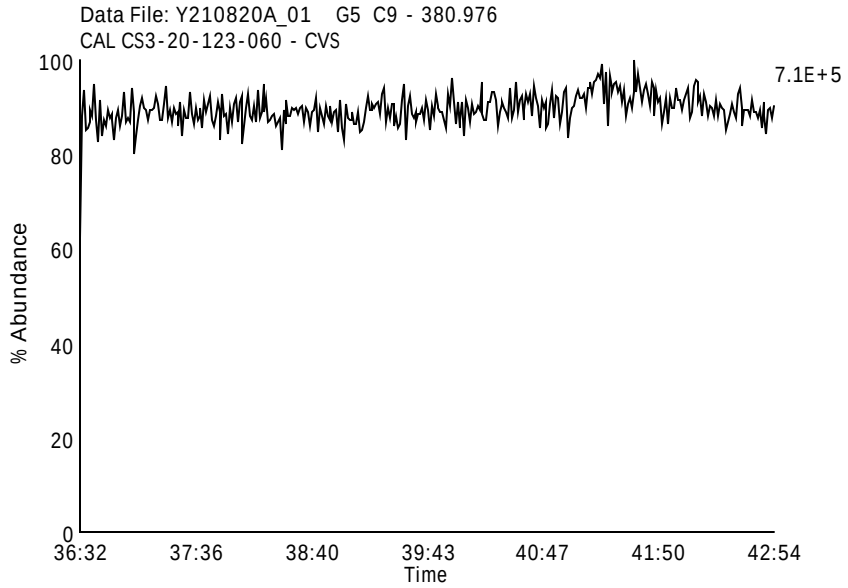


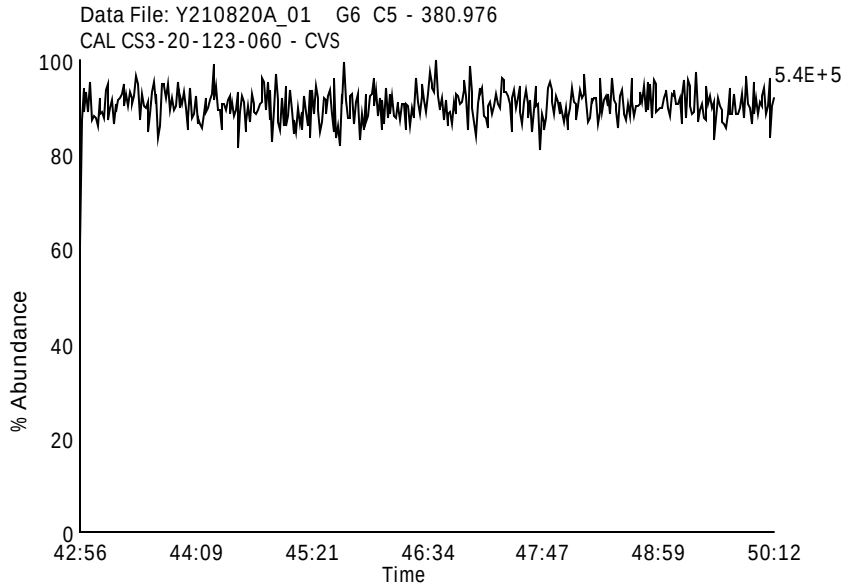


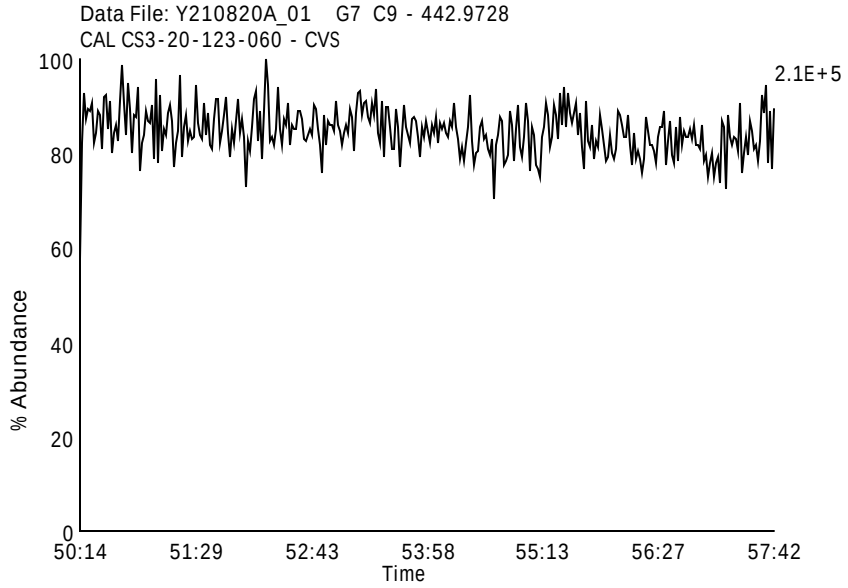


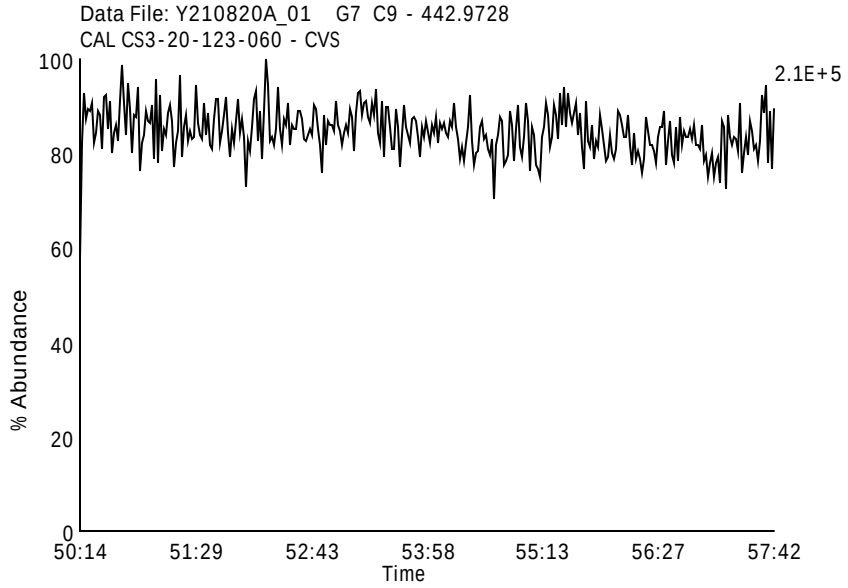
Group 5 - 7 Lock mass

Data File Name: Y210820A_01
Lab Sample ID: CS3-20-123-060
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: CAL CS3-20-123-060 - CVS







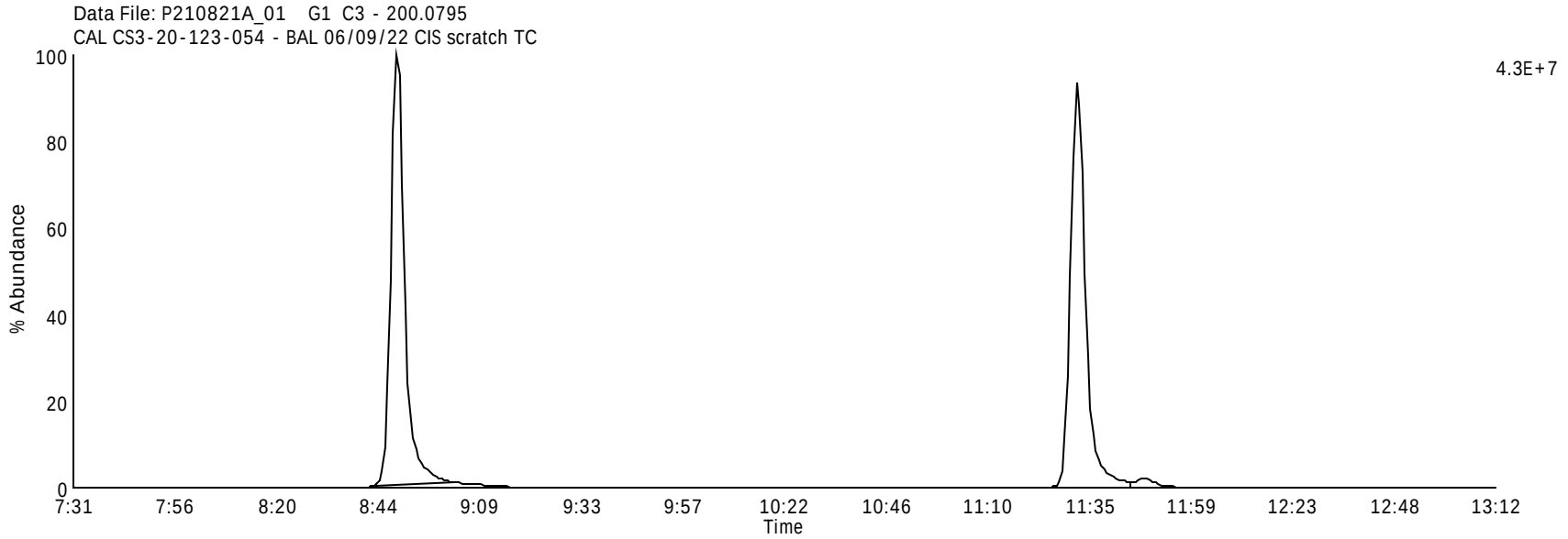


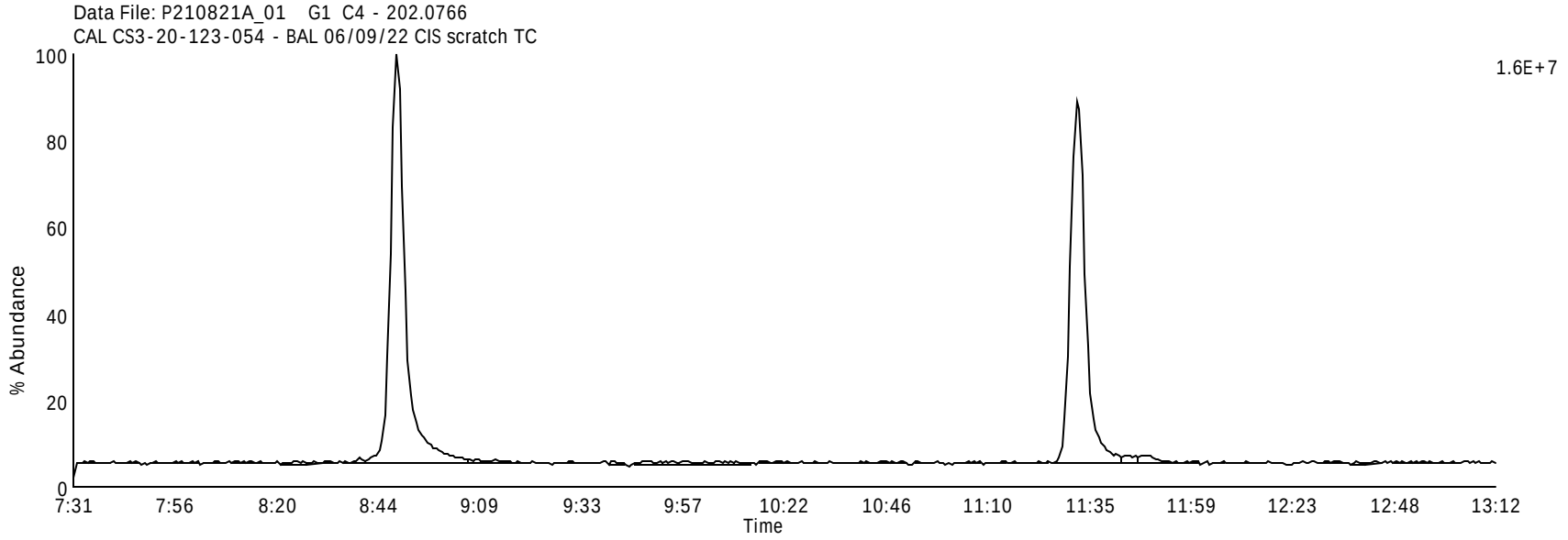
Labeled Mono Chlorinated Biphenyls

Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



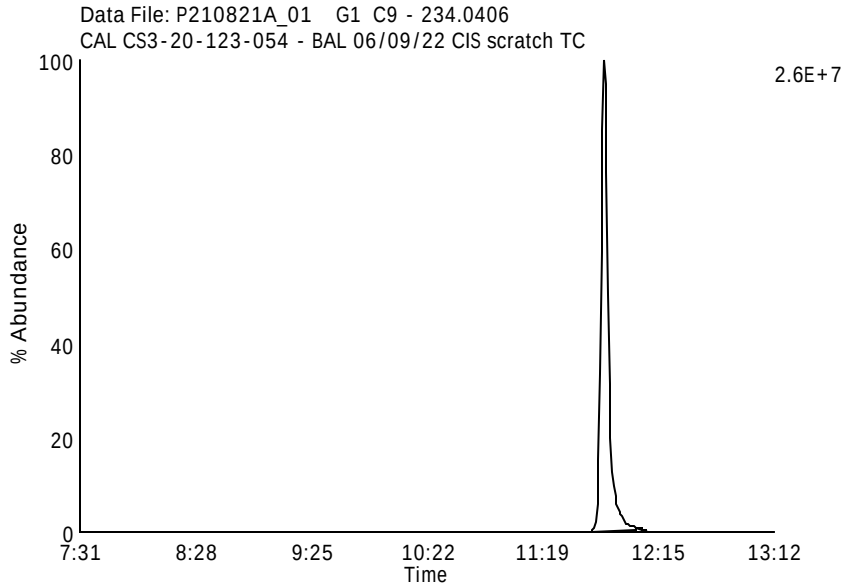


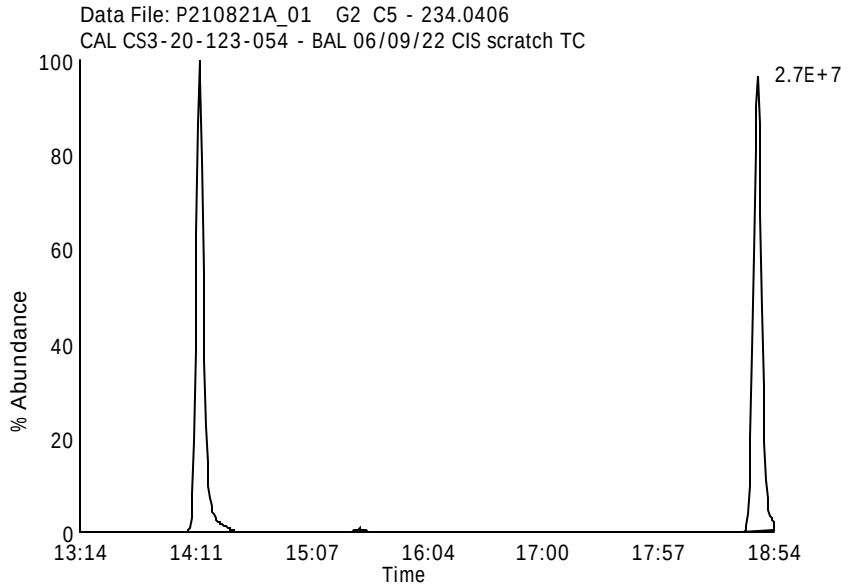
Labeled Di Chlorinated Biphenyls

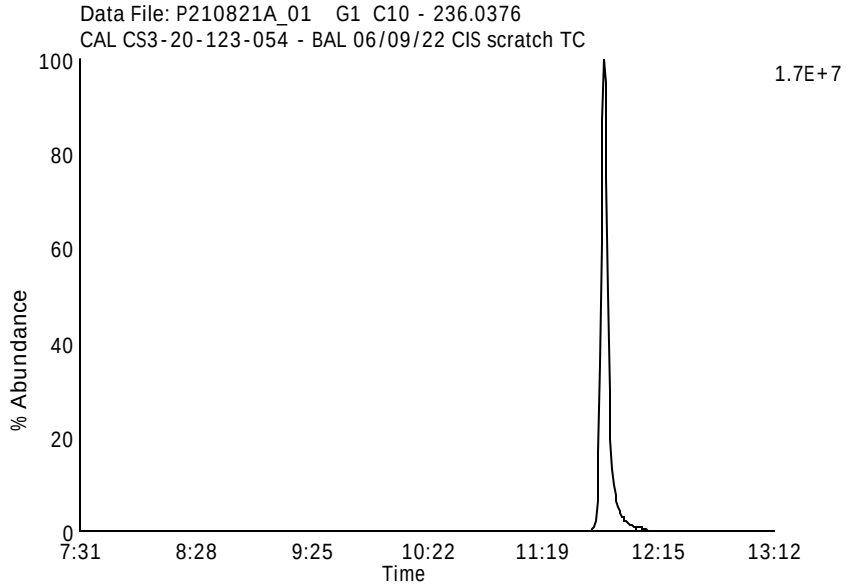
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

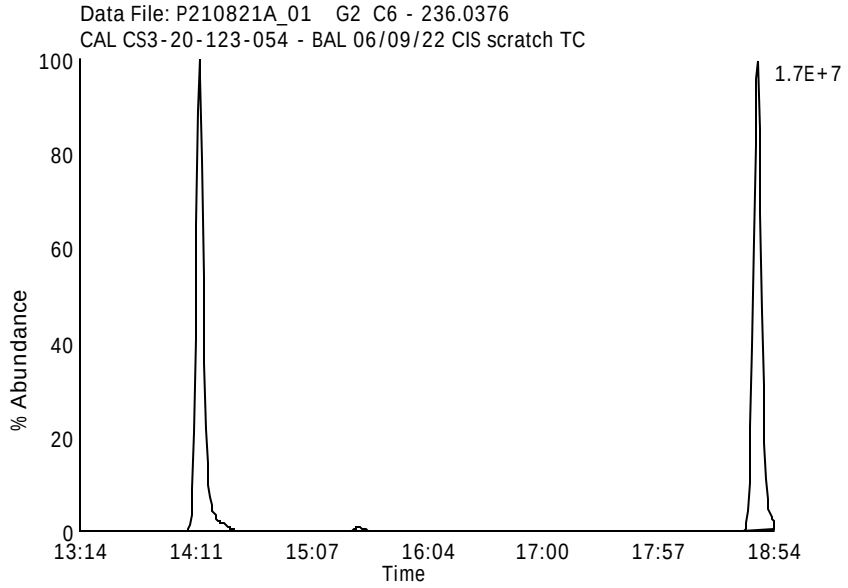
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC







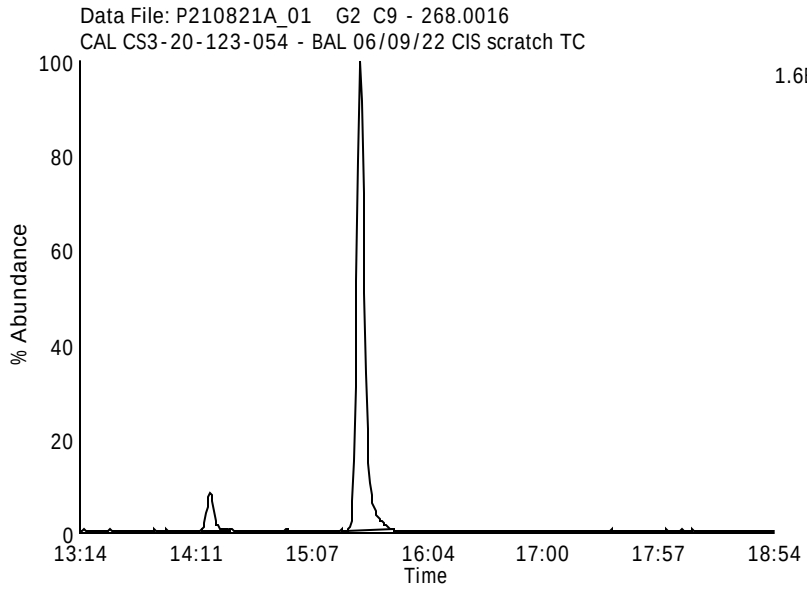


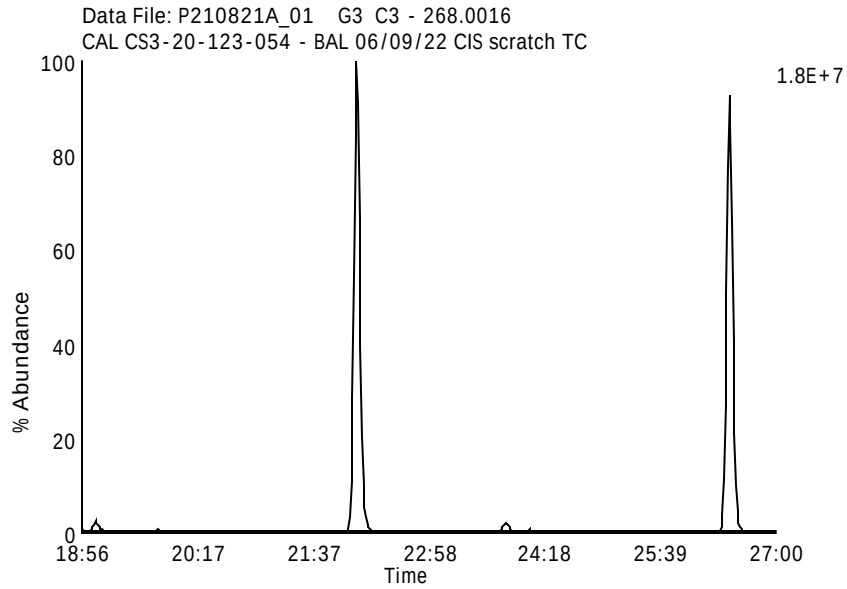
Labeled Tri Chlorinated Biphenyls

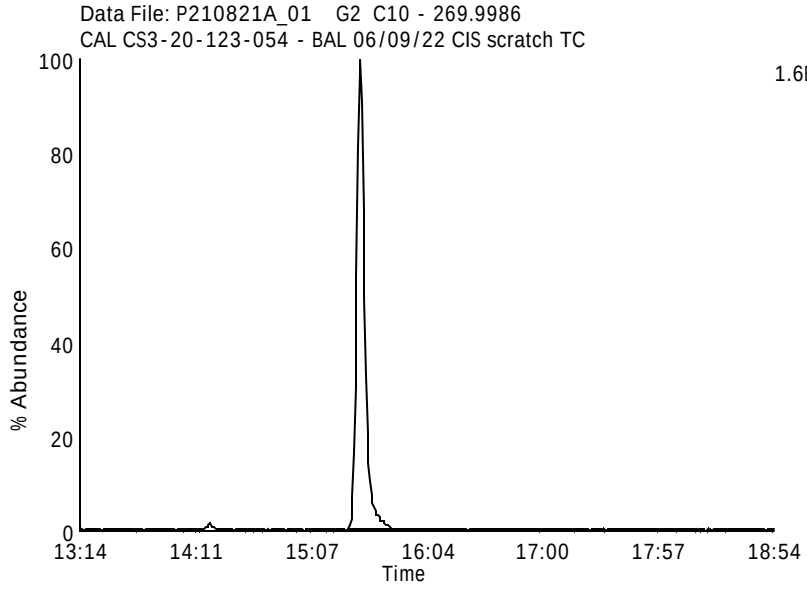
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

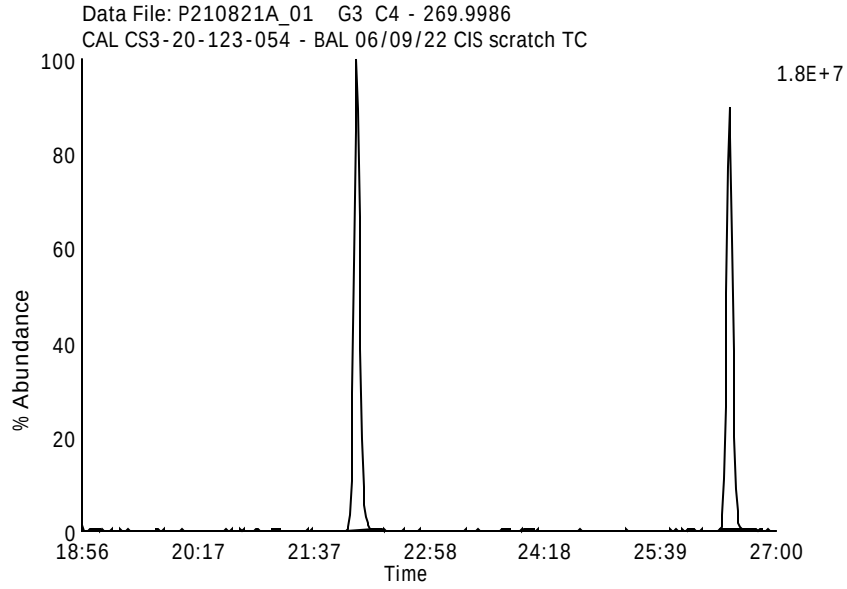
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC







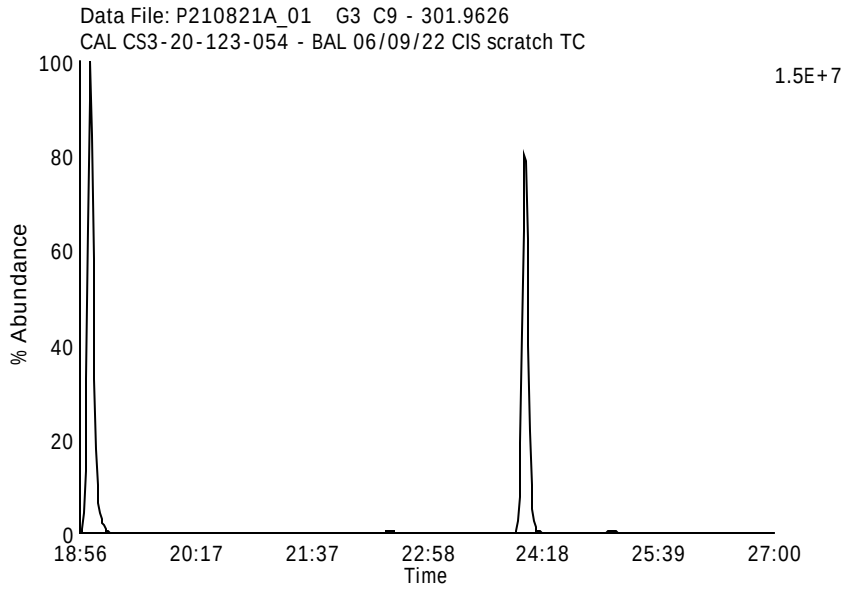


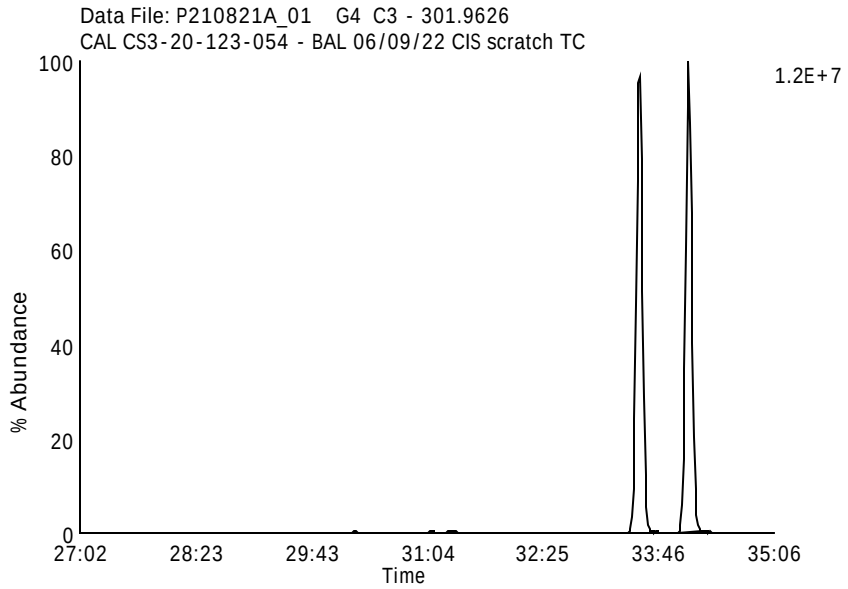
Labeled Tetra Chlorinated Biphenyls

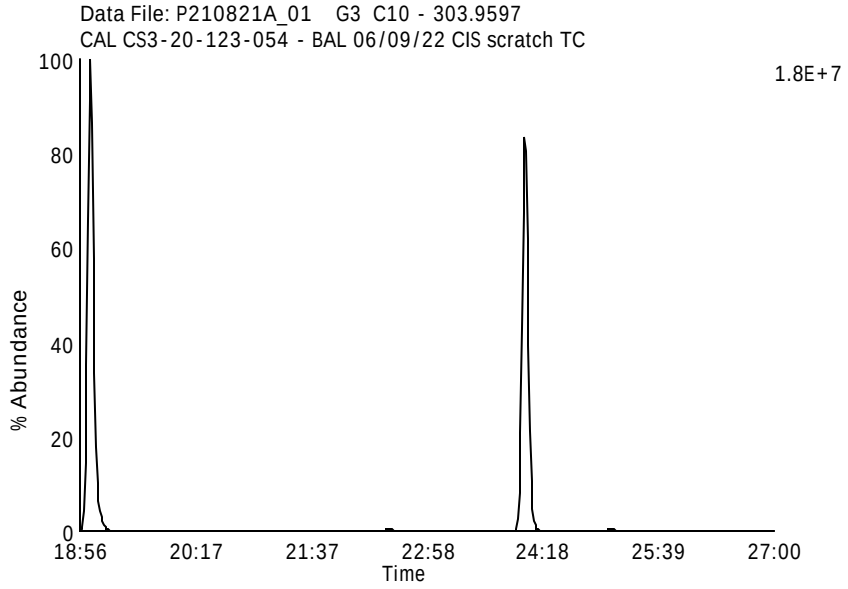
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

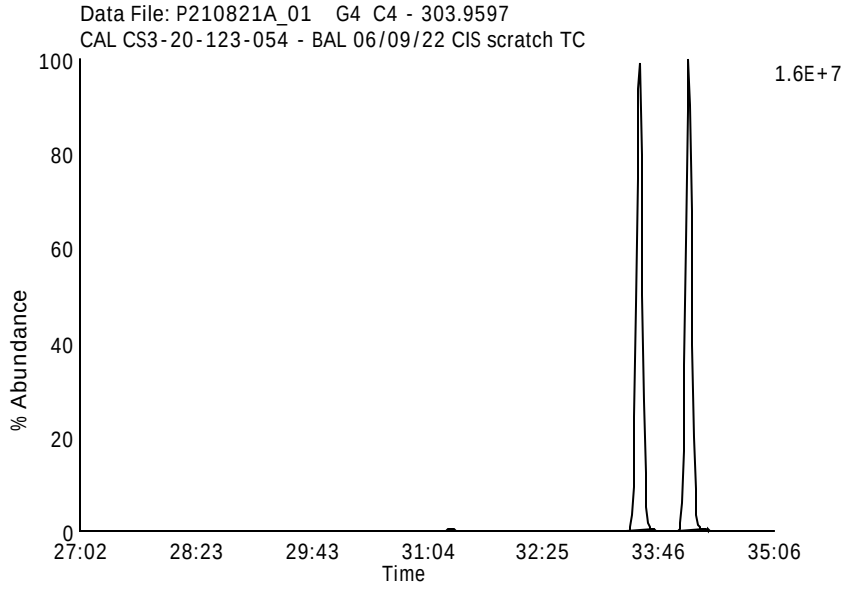
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC







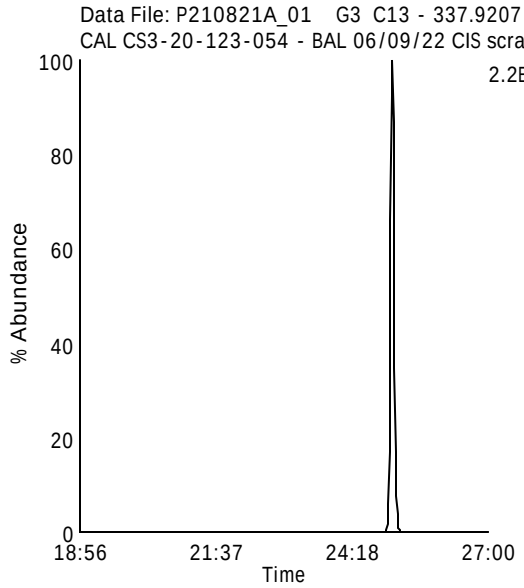


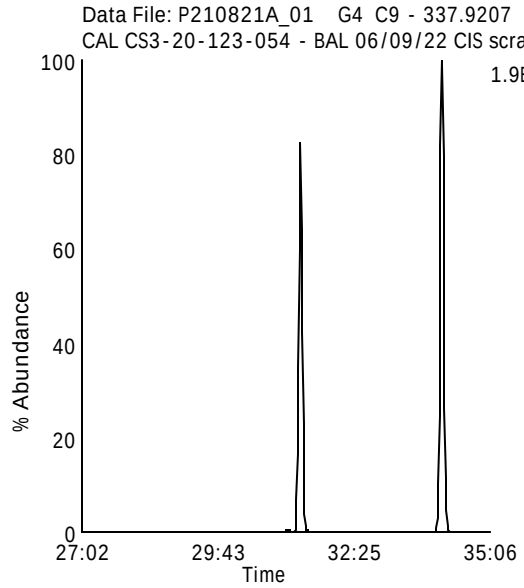
Labeled Penta Chlorinated Biphenyls

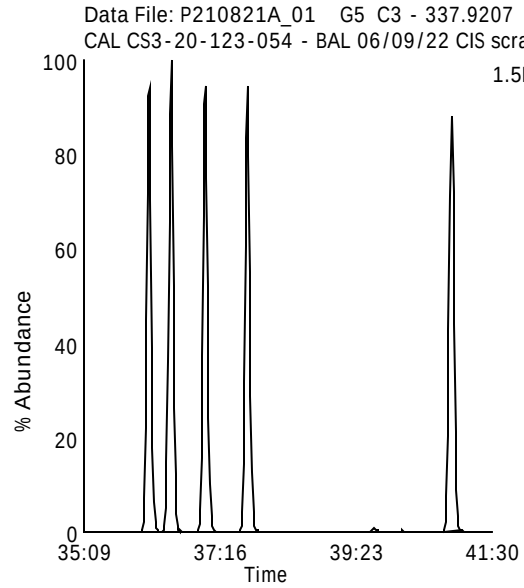
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

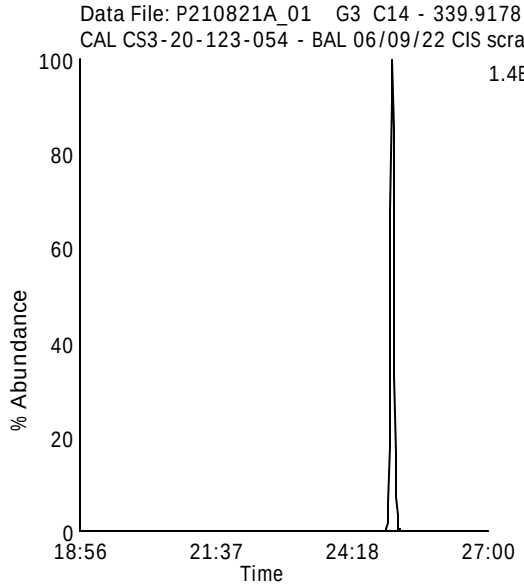
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

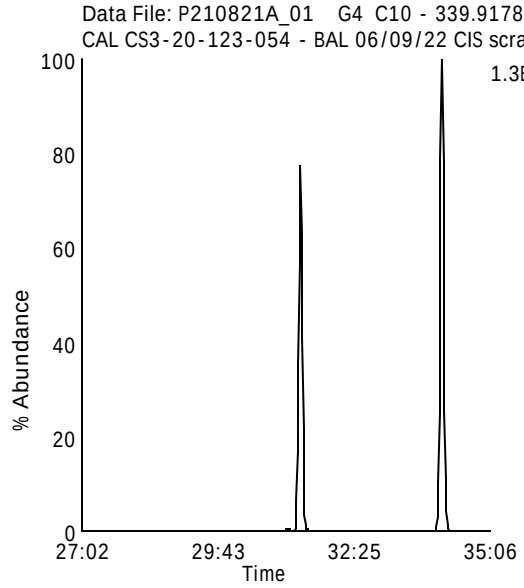
Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC

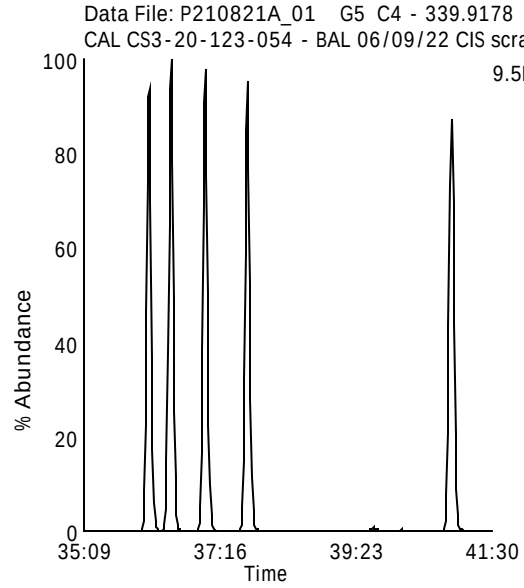










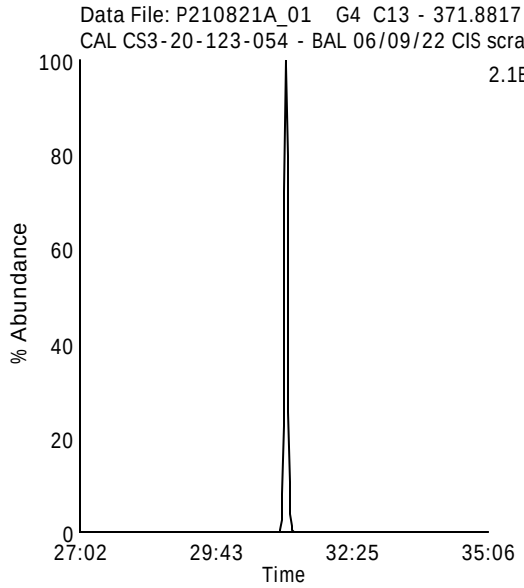


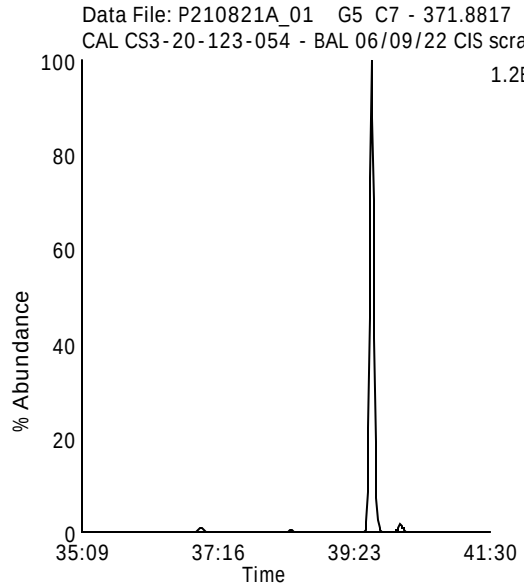
Labeled Hexa Chlorinated Biphenyls

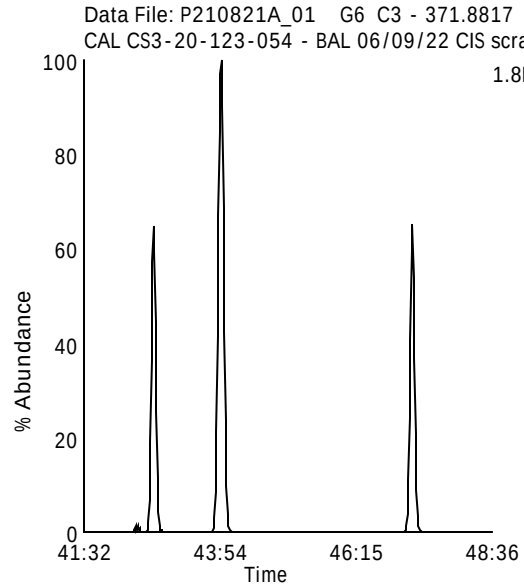
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

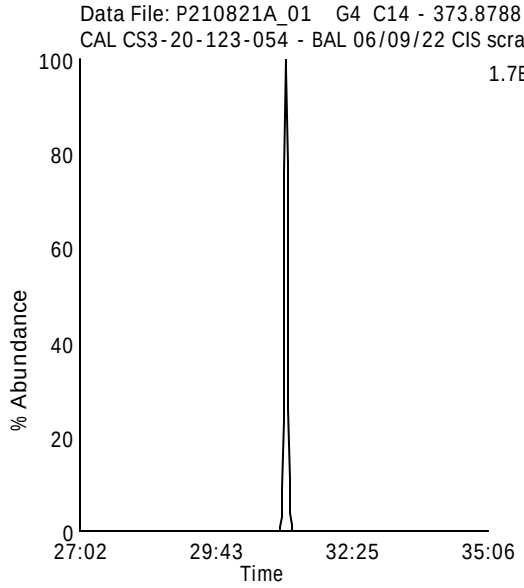
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

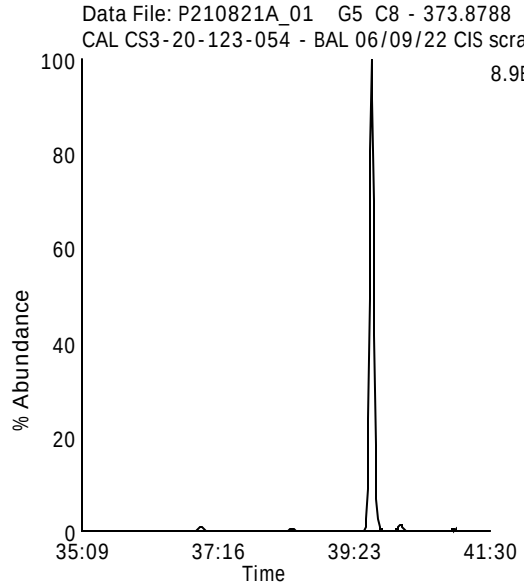
Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC

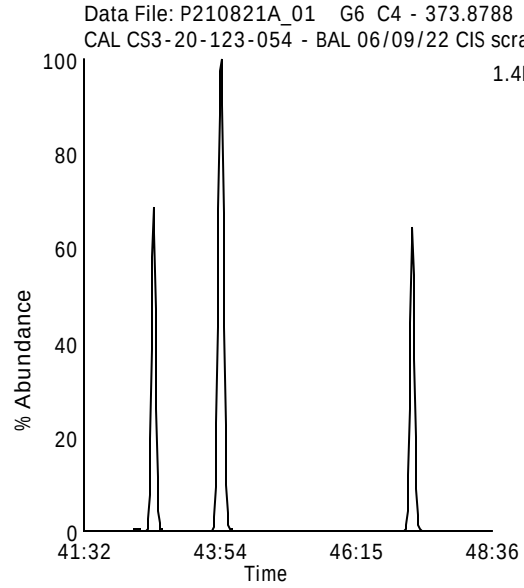










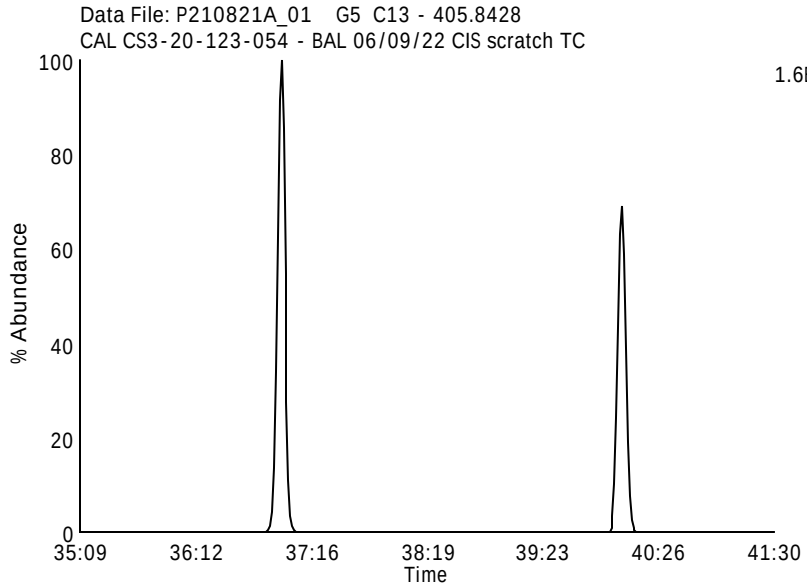


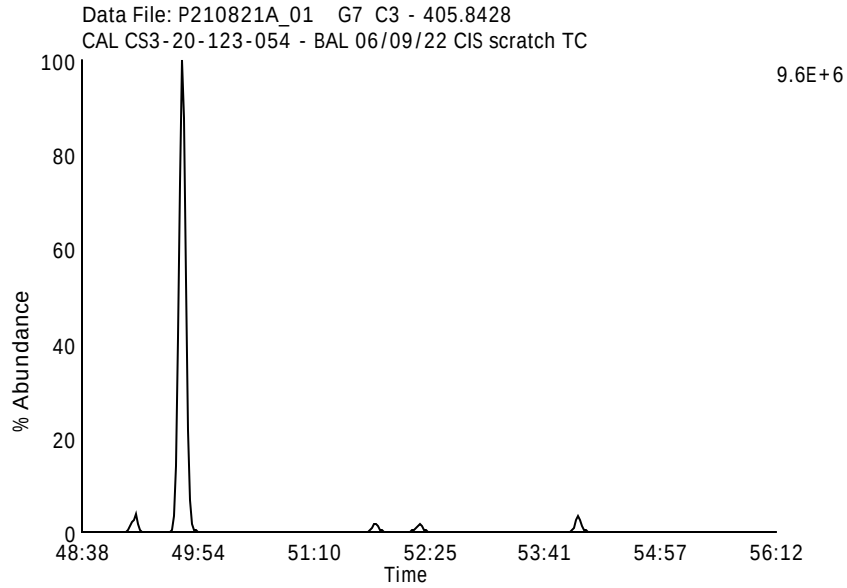
Labeled Hepta Chlorinated Biphenyls

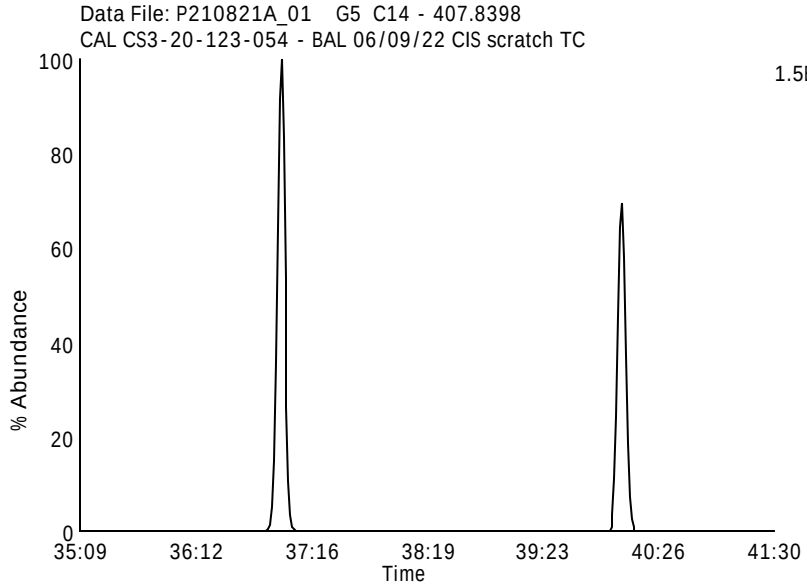
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

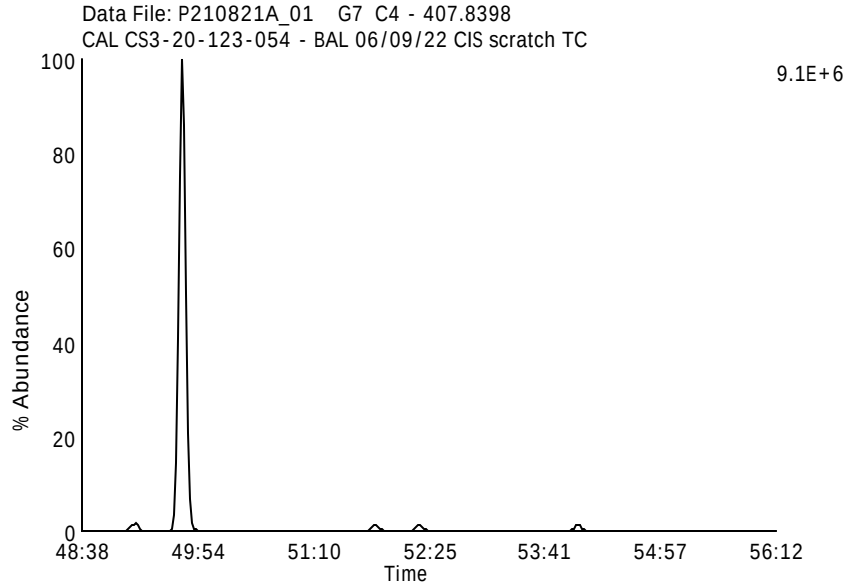
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC









Labeled Octa Chlorinated Biphenyls

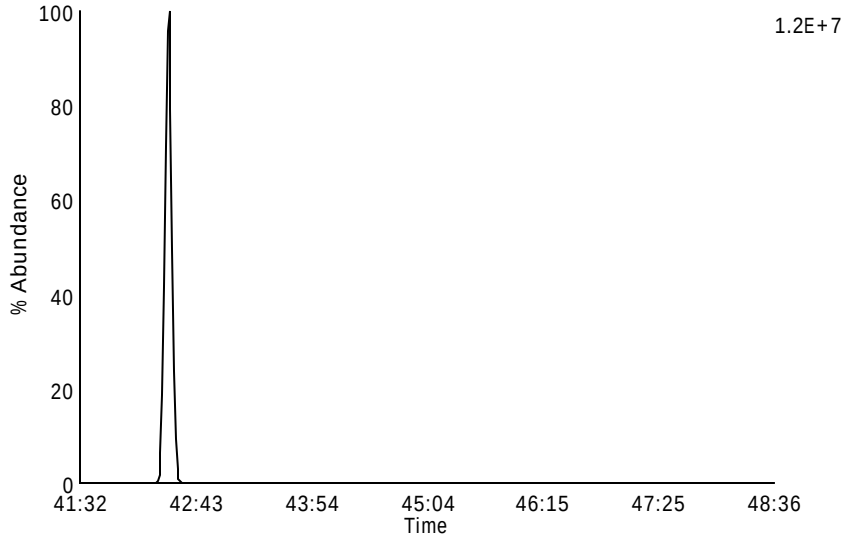
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC

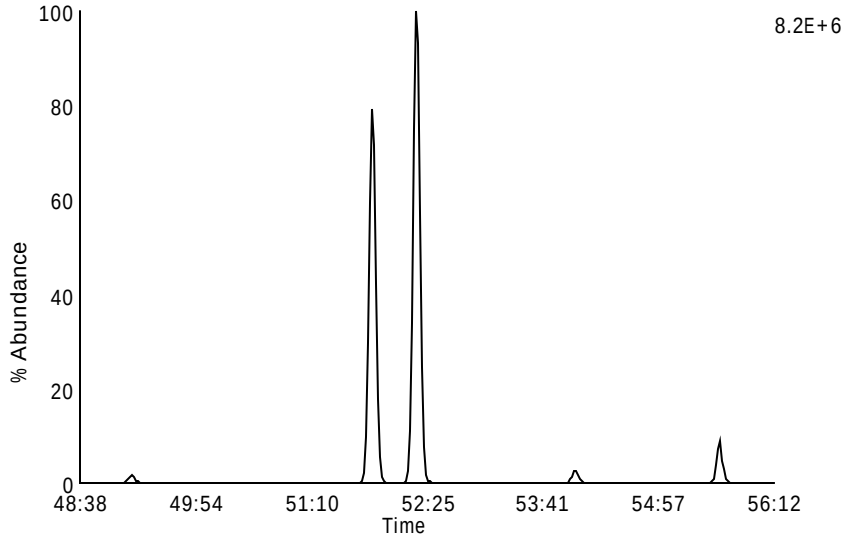
Data File: P210821A_01 G6 C13 - 439.8038

CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



Data File: P210821A_01 G7 C7 - 439.8038

CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



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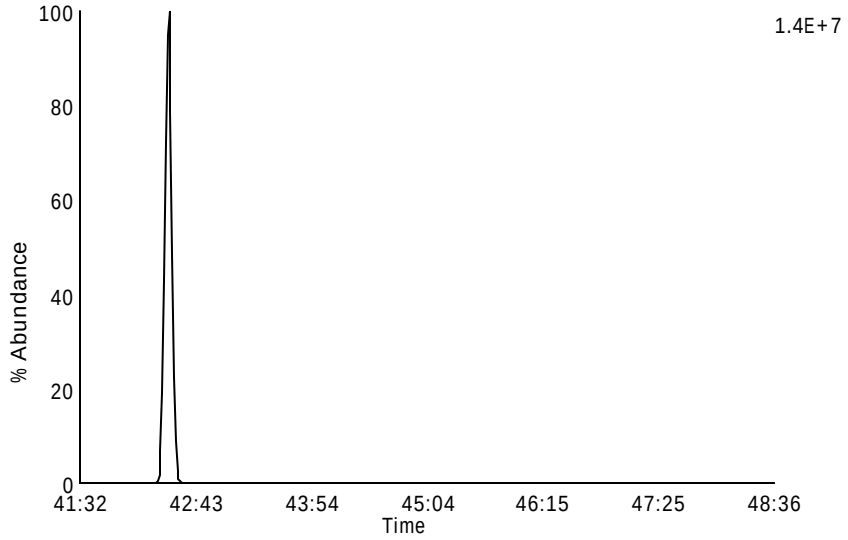
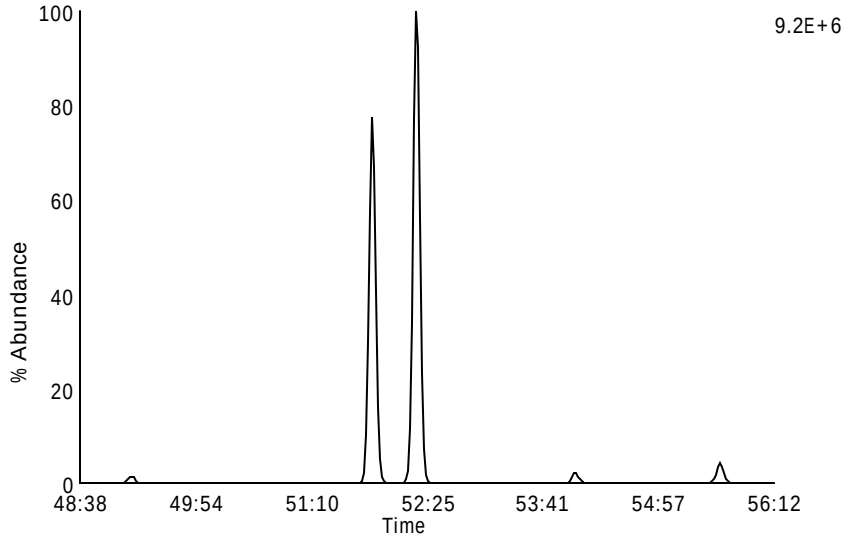
CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



Data File: P210821A_01 G7 C8 - 441.8008

CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC

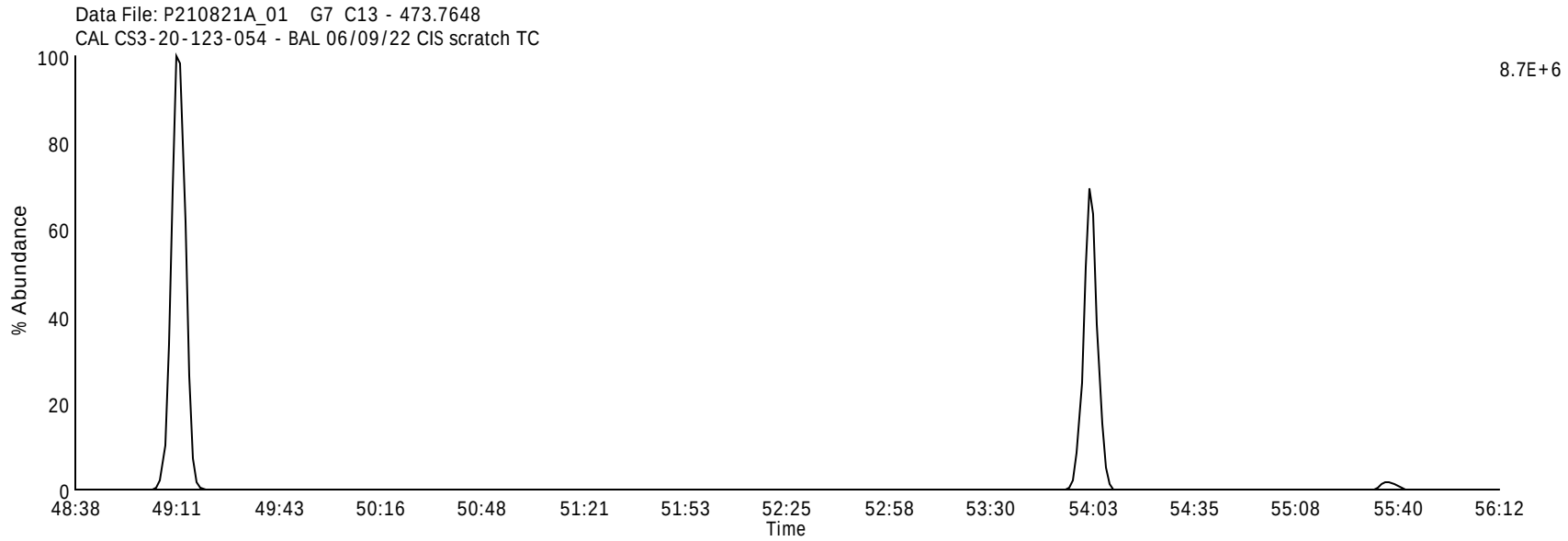


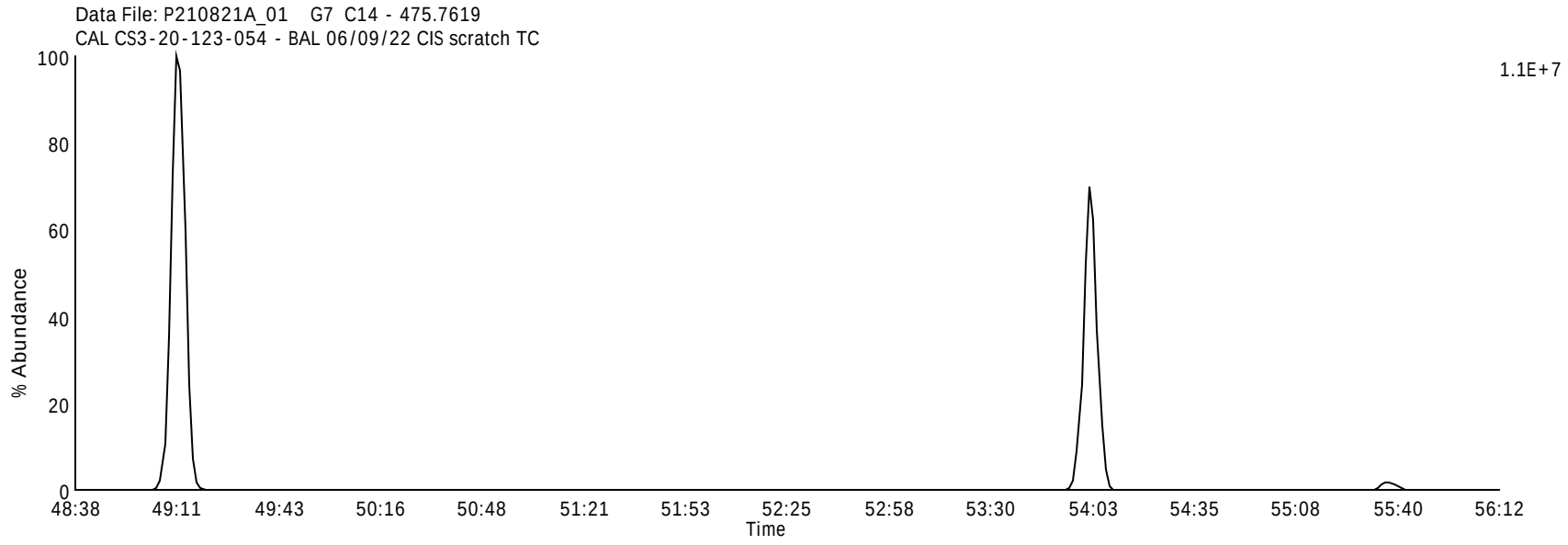
Labeled Nona Chlorinated Biphenyls

Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



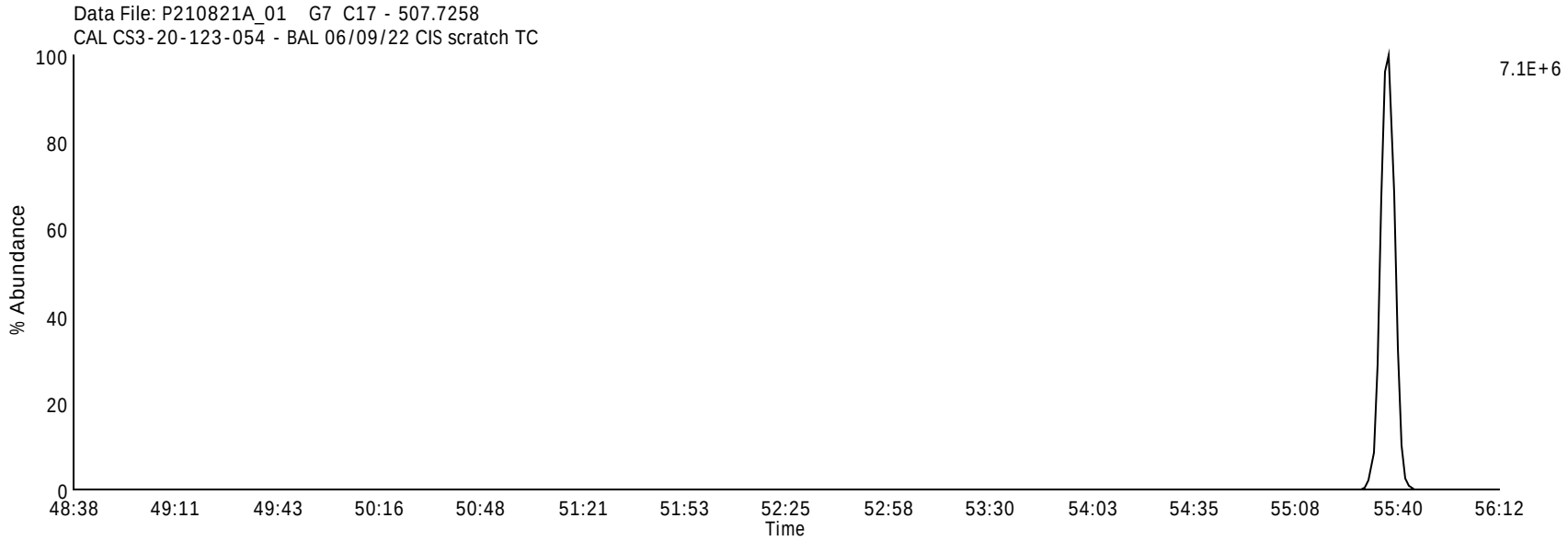


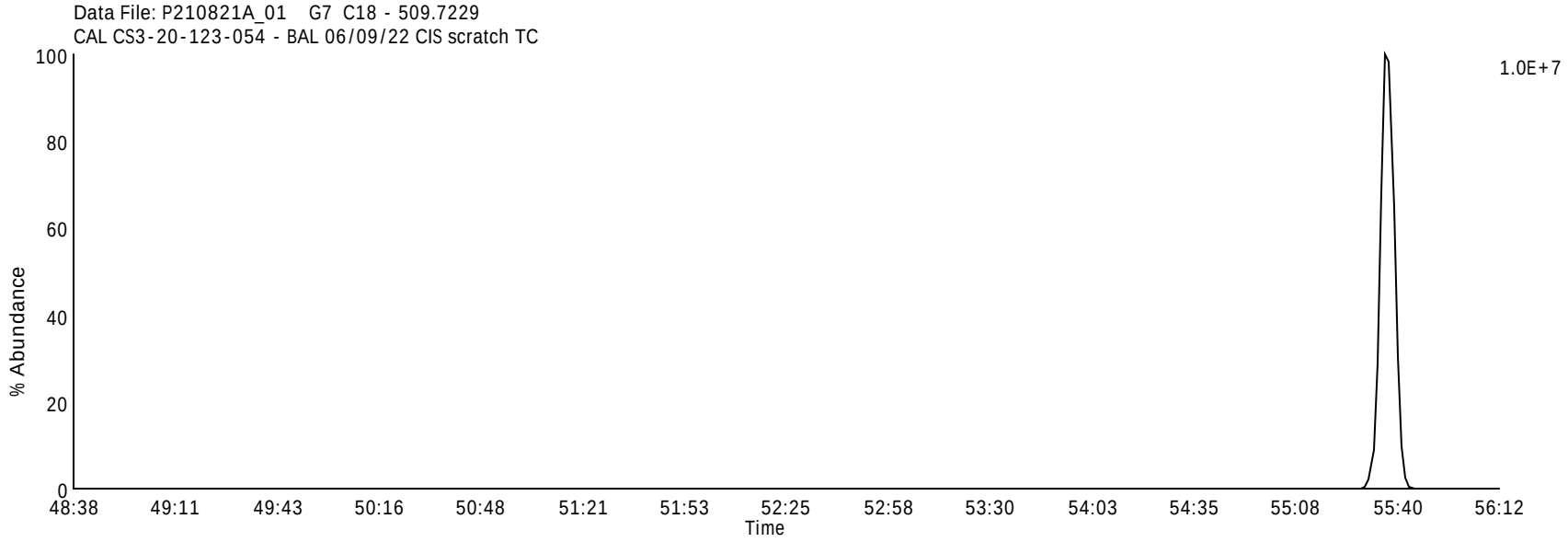
Labeled Deca Chlorinated Biphenyl

Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



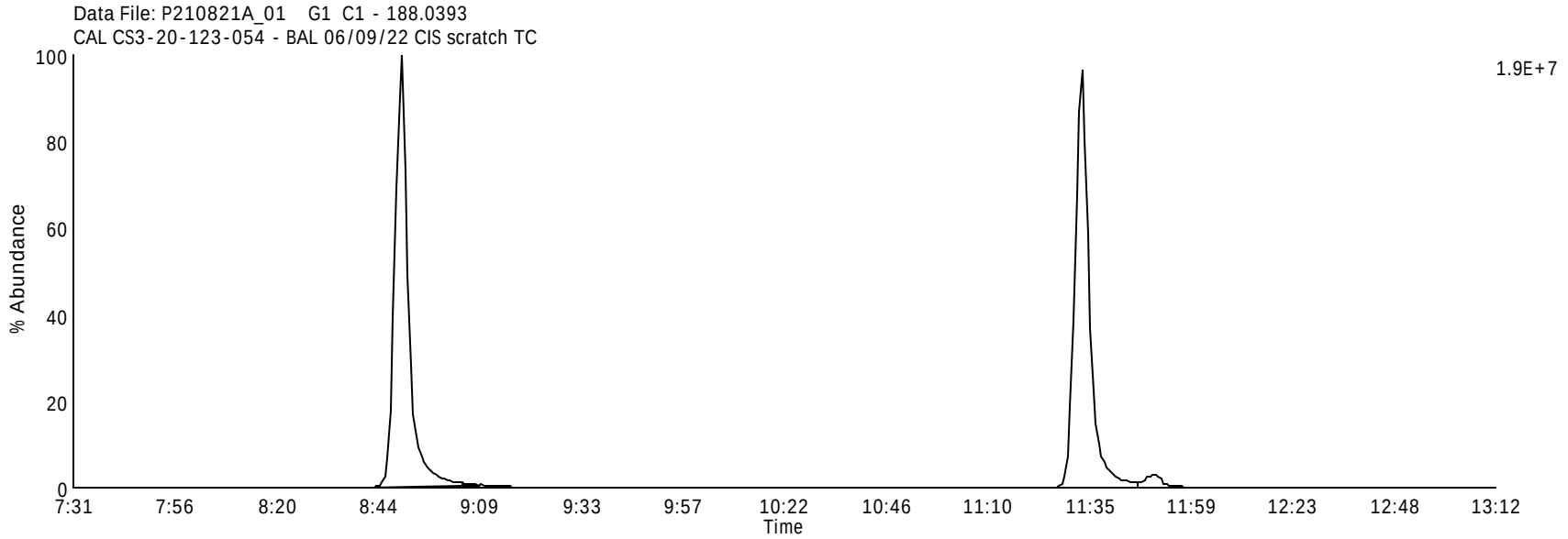


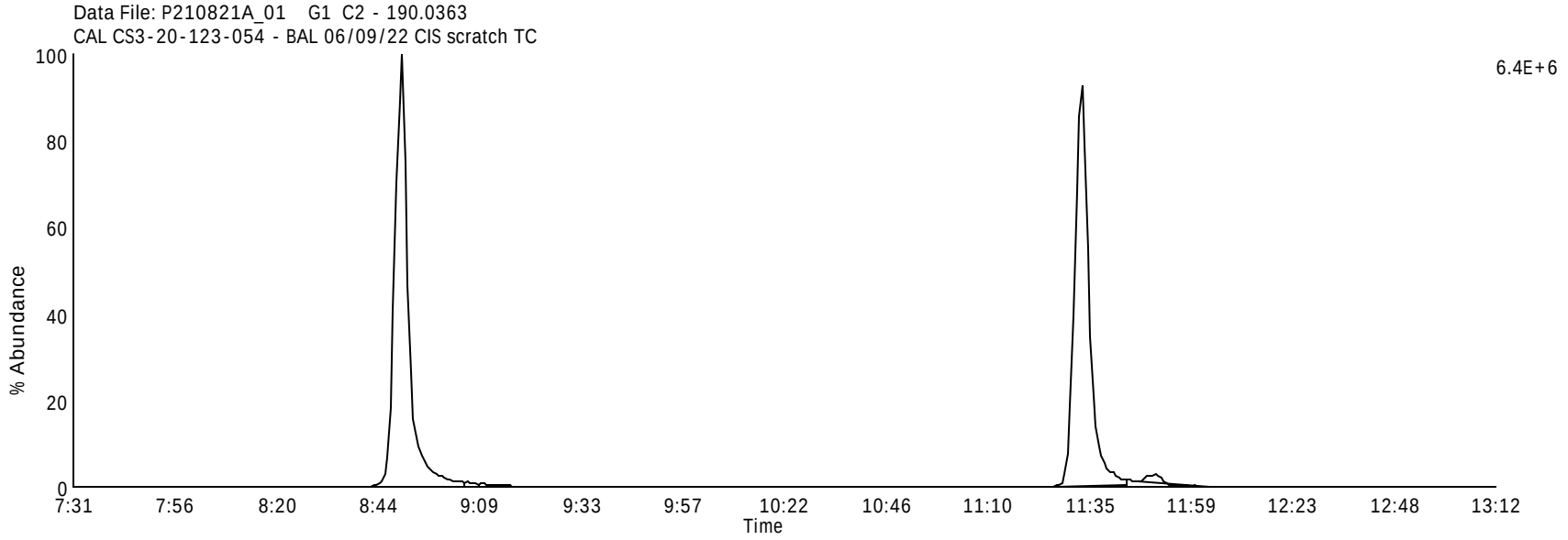
Mono Chlorinated Biphenyls

Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



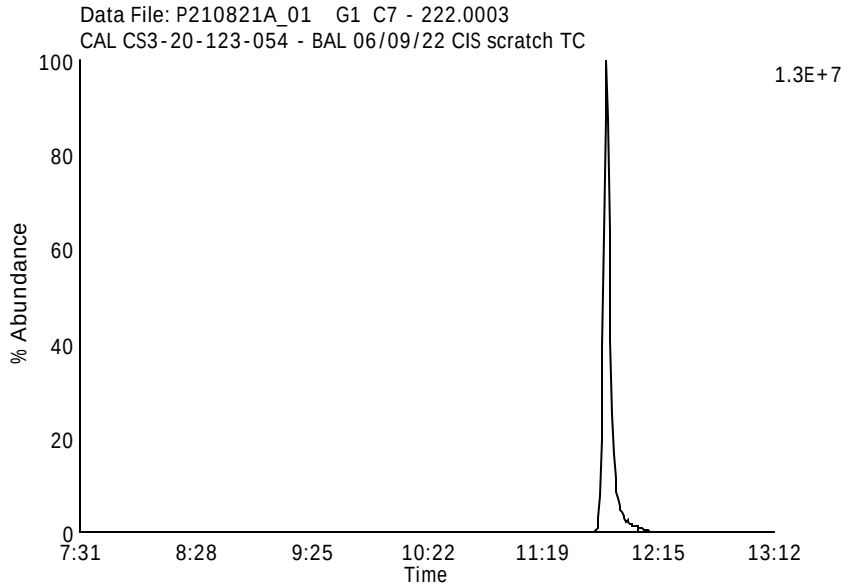


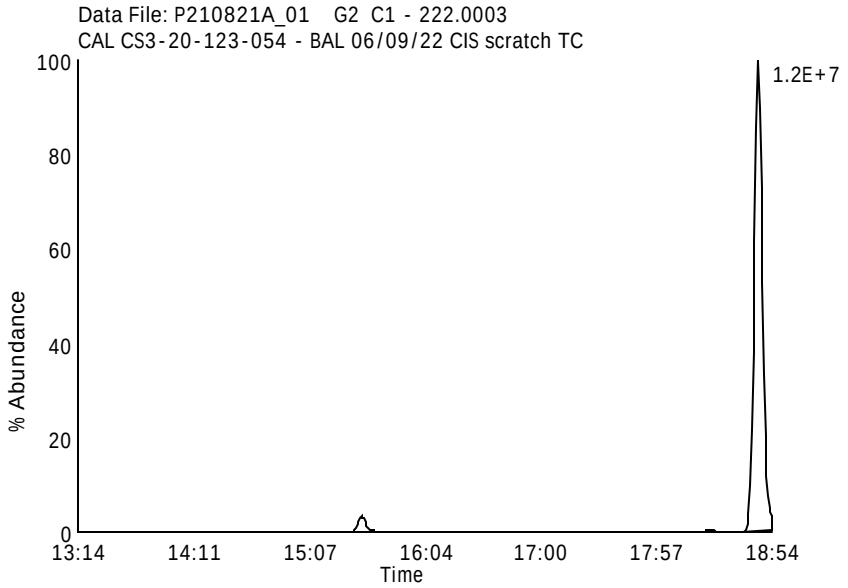
Di Chlorinated Biphenyls

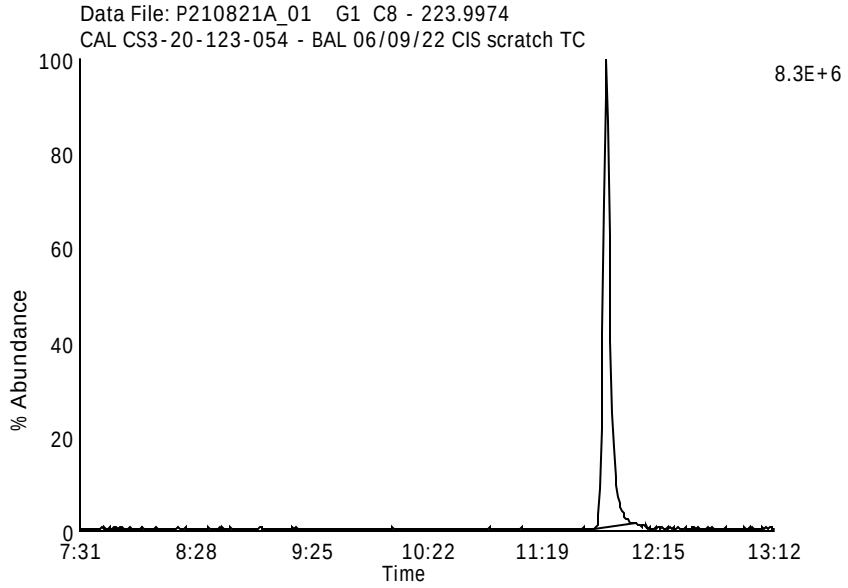
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

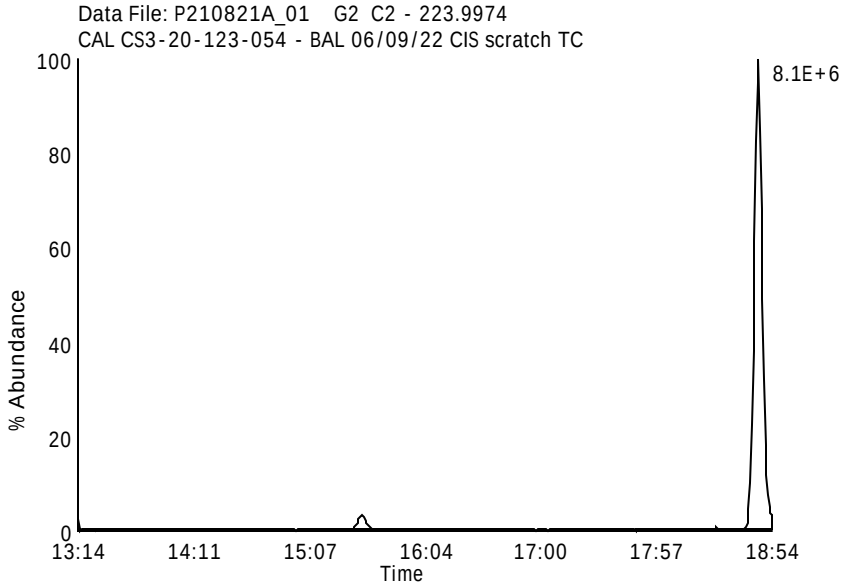
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC









Tri Chlorinated Biphenyls

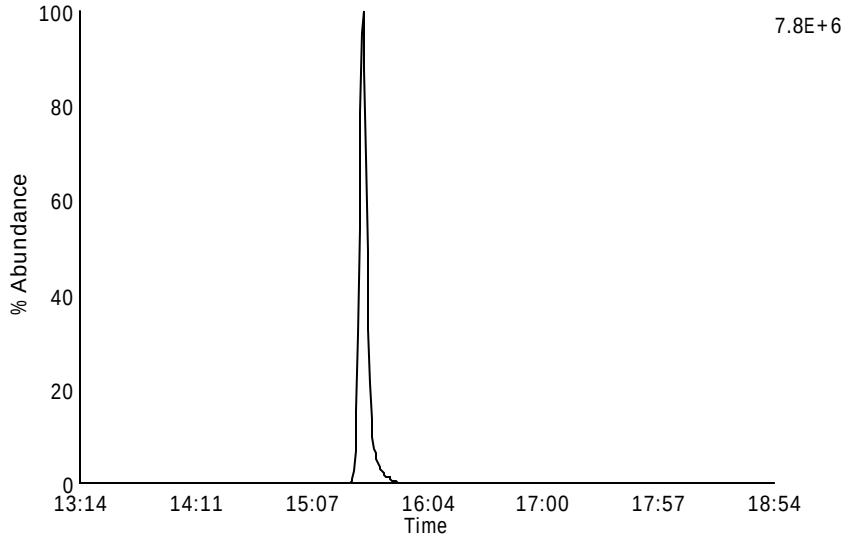
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC

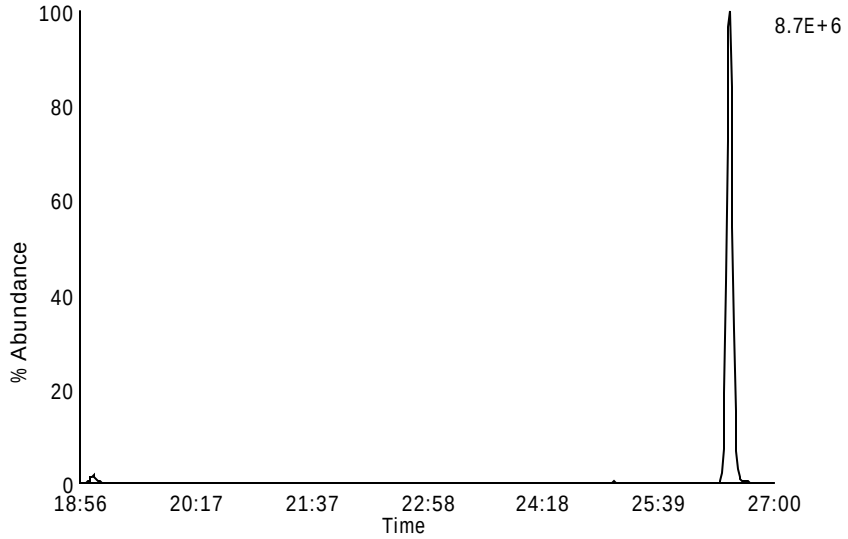
Data File: P210821A_01 G2 C7 - 255.9613

CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



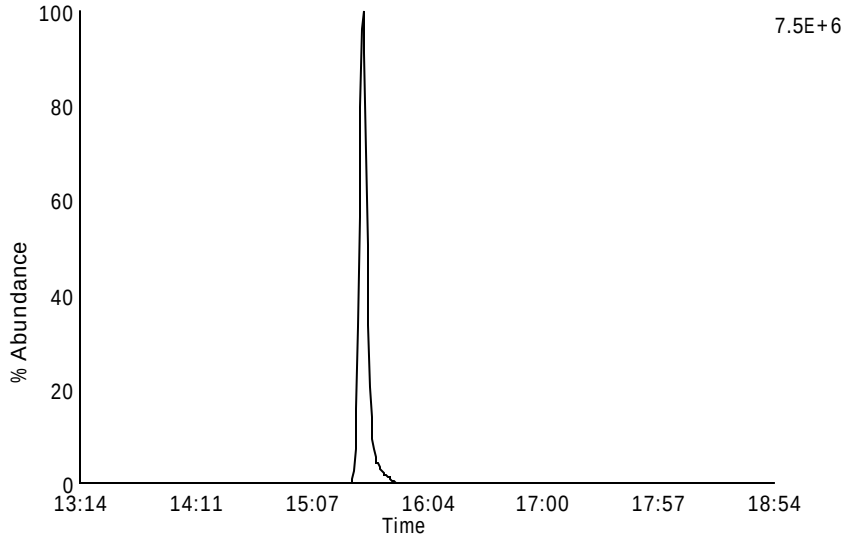
Data File: P210821A_01 G3 C1 - 255.9613

CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



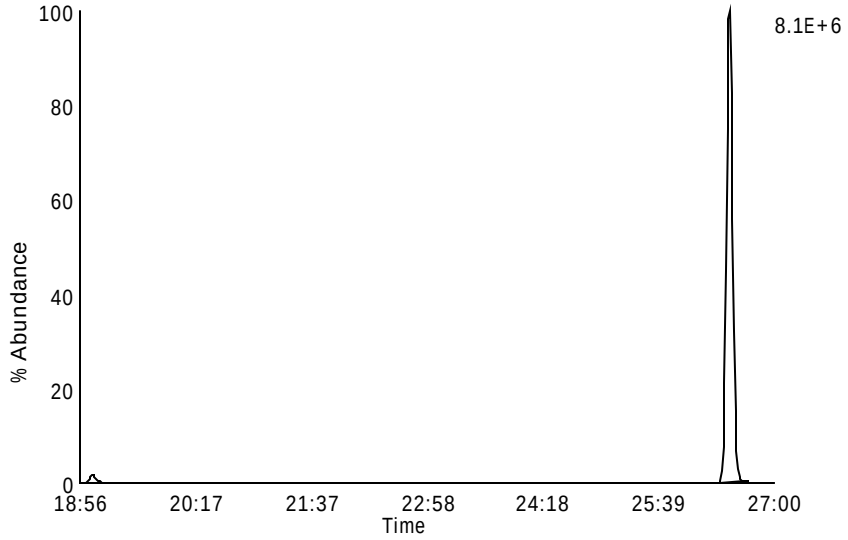
Data File: P210821A_01 G2 C8 - 257.9584

CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



Data File: P210821A_01 G3 C2 - 257.9584

CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC

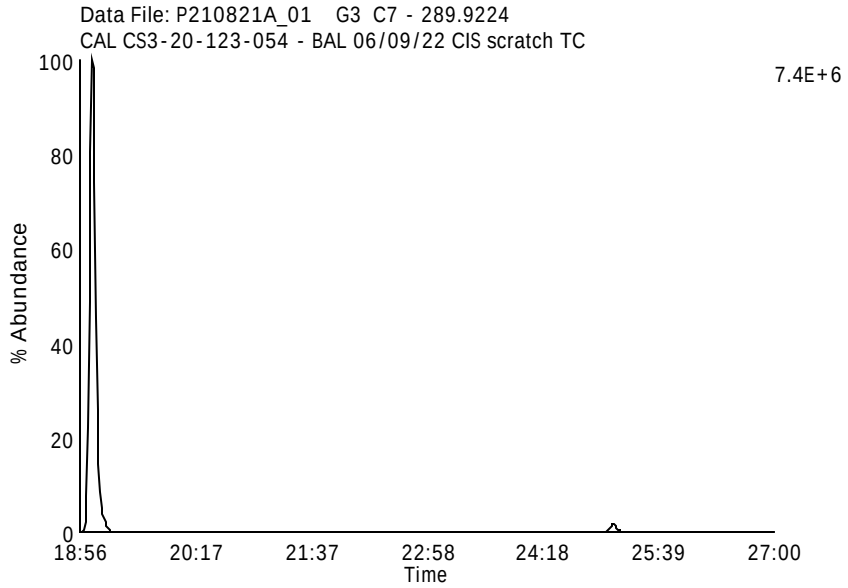


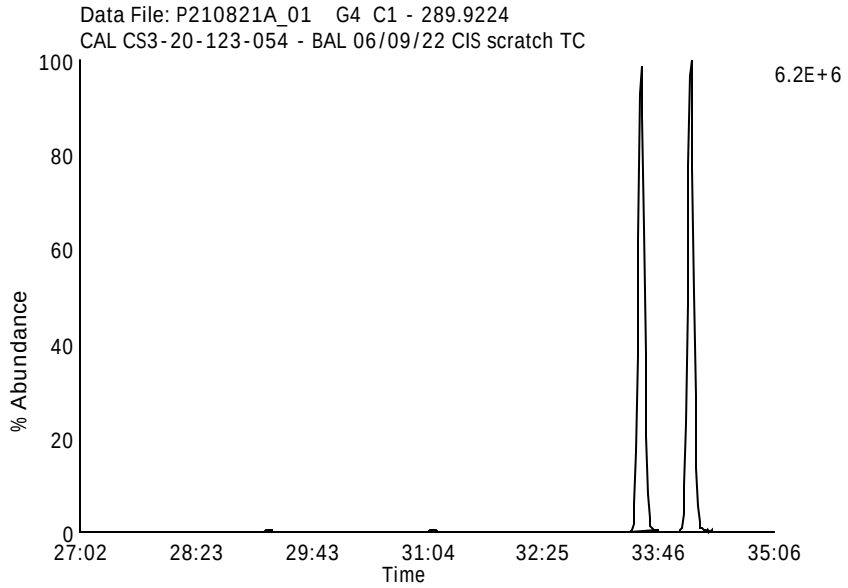
Tetra Chlorinated Biphenyls

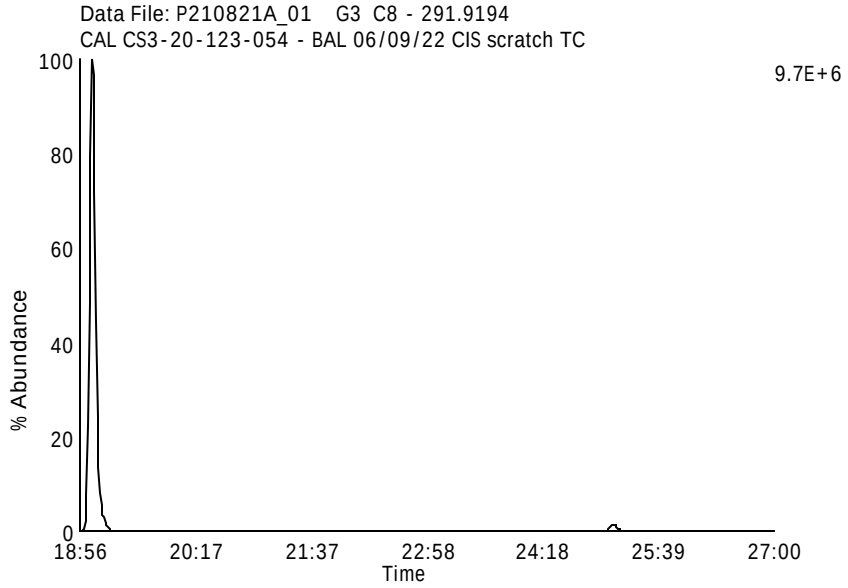
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

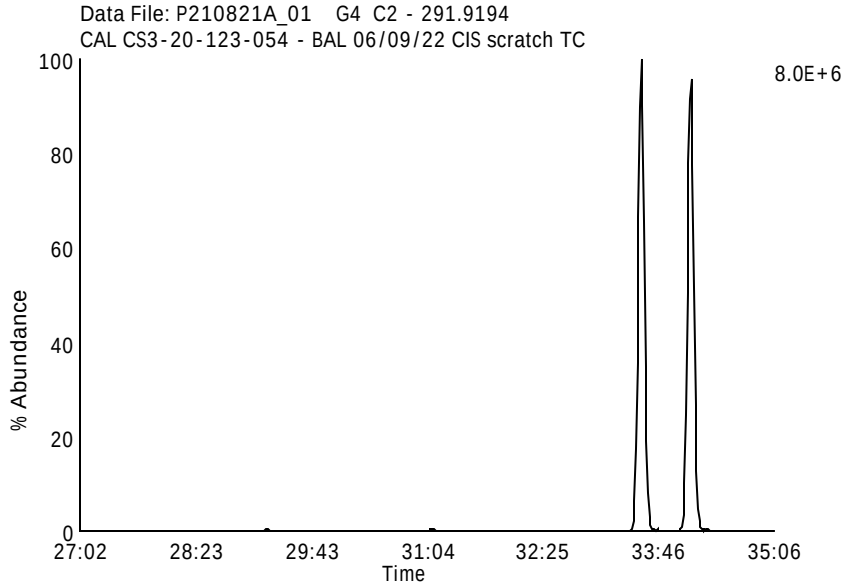
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC







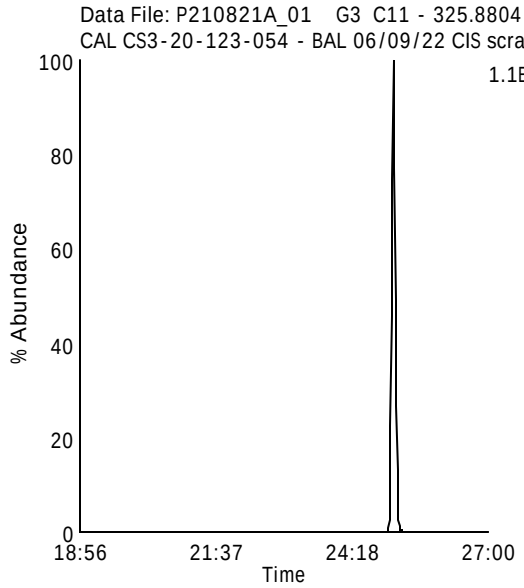


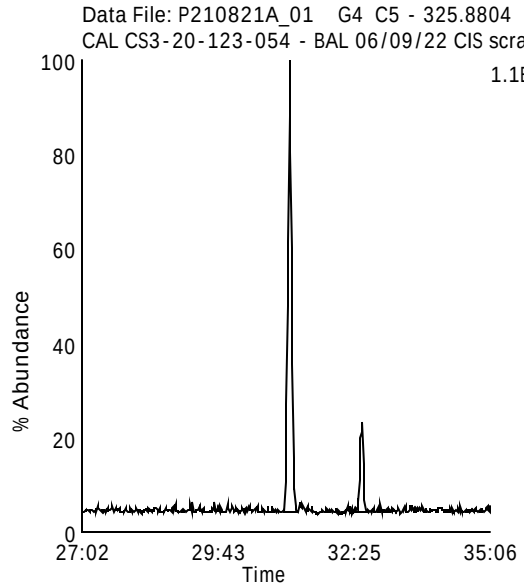
Penta Chlorinated Biphenyls

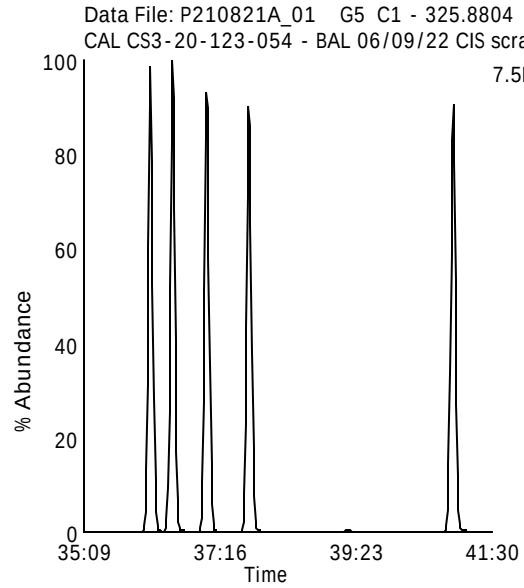
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

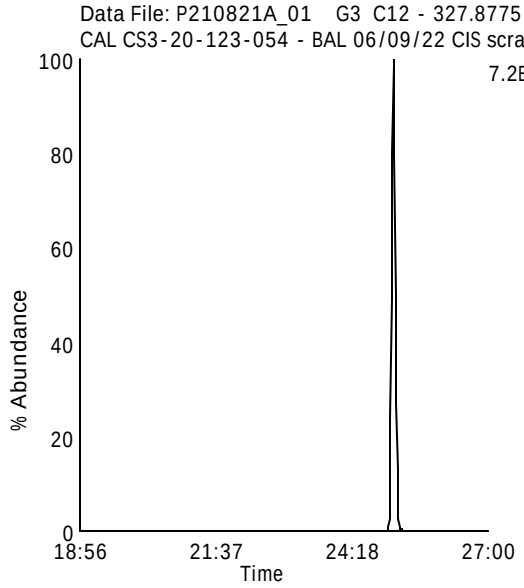
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

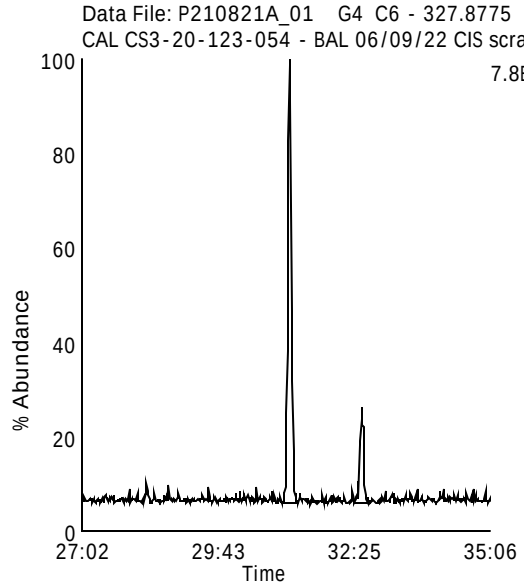
Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC

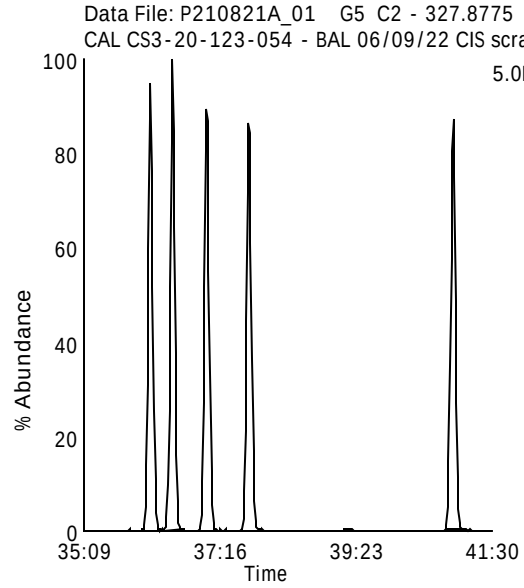












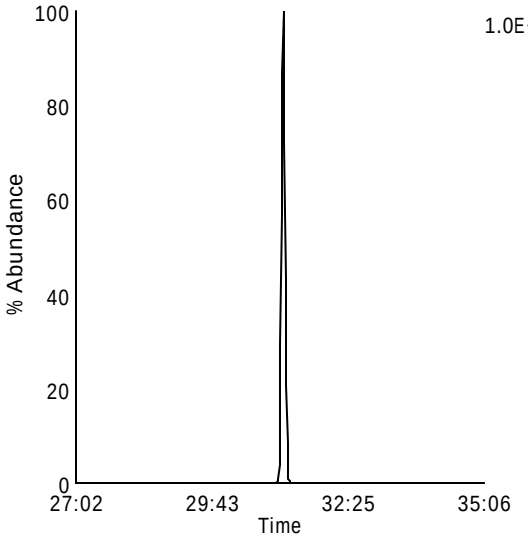
Hexa Chlorinated Biphenyls

Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

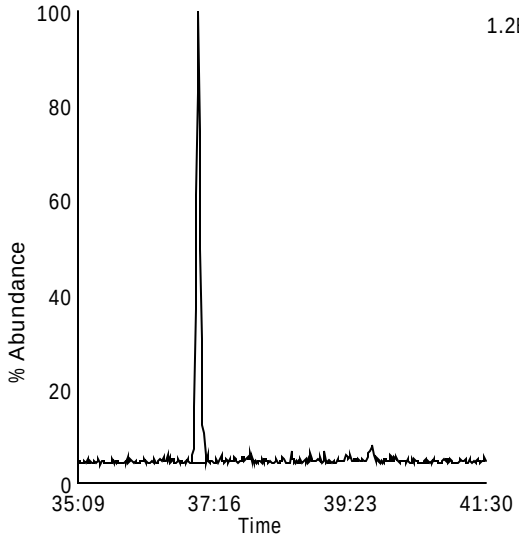
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC

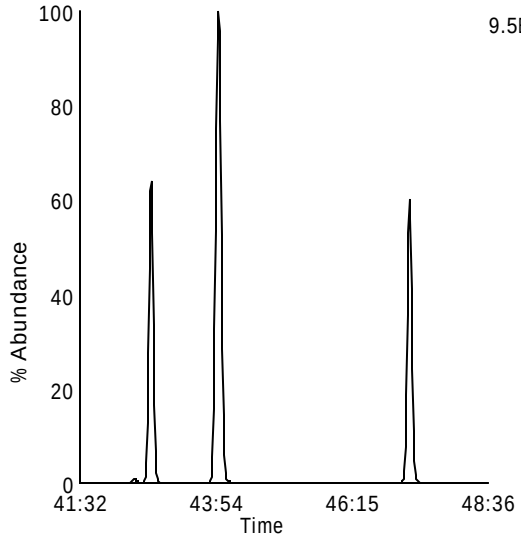
Data File: P210821A_01 G4 C11 - 359.8415
CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



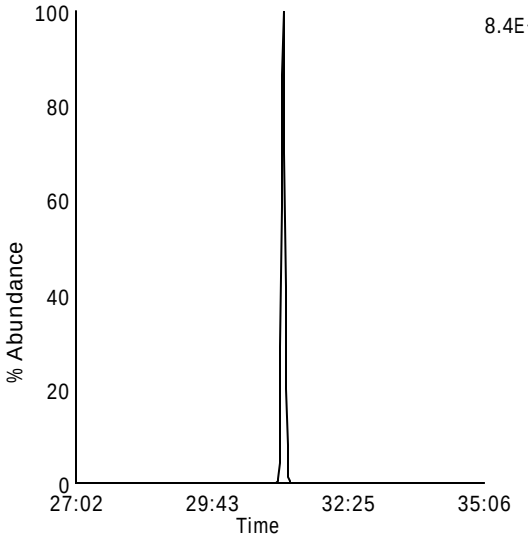
Data File: P210821A_01 G5 C5 - 359.8415
CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



Data File: P210821A_01 G6 C1 - 359.8415
CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



Data File: P210821A_01 G4 C12 - 361.8385
CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



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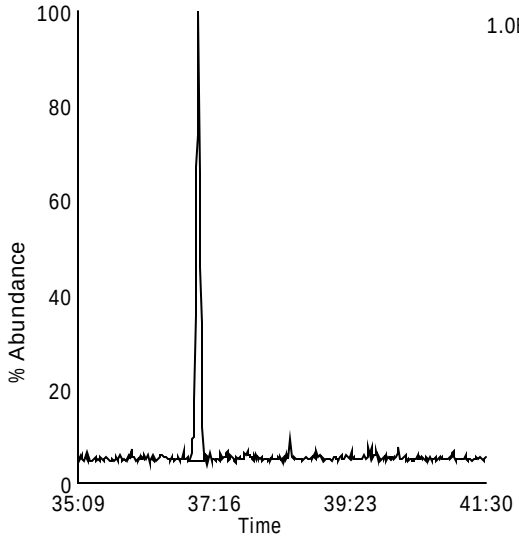
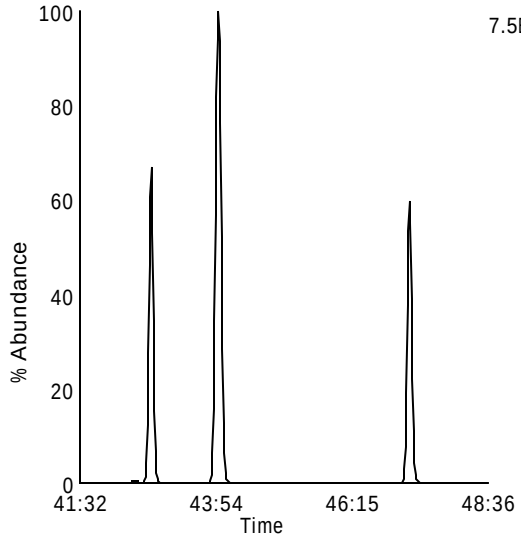
CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



Data File: P210821A_01 G6 C2 - 361.8385
CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC

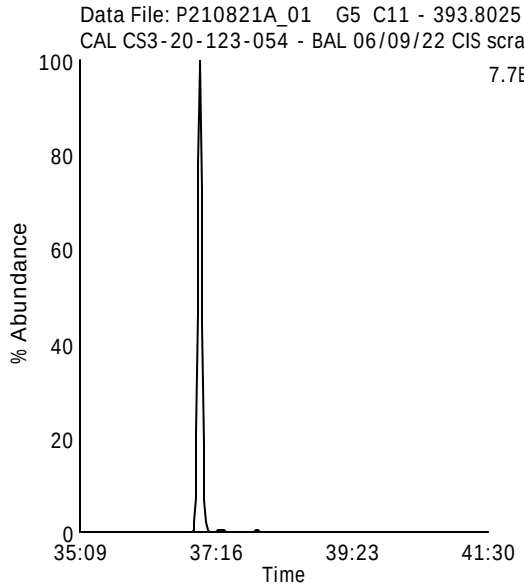


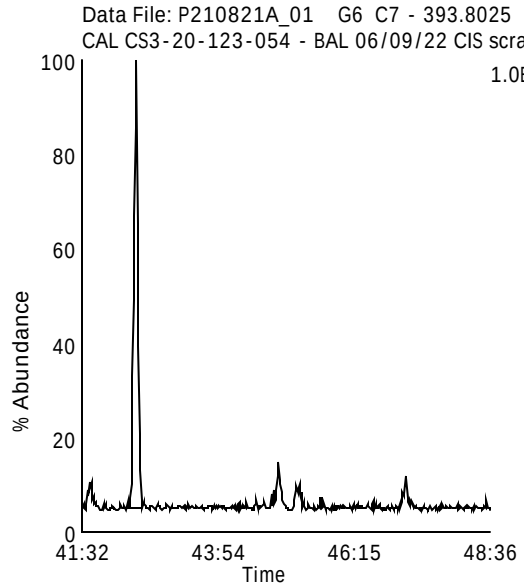
Hepta Chlorinated Biphenyls

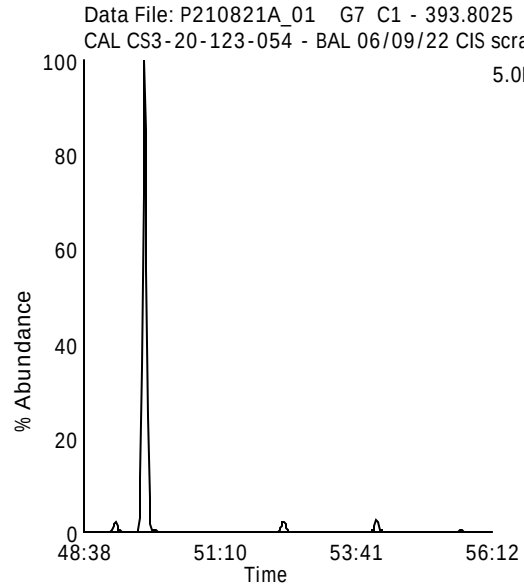
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

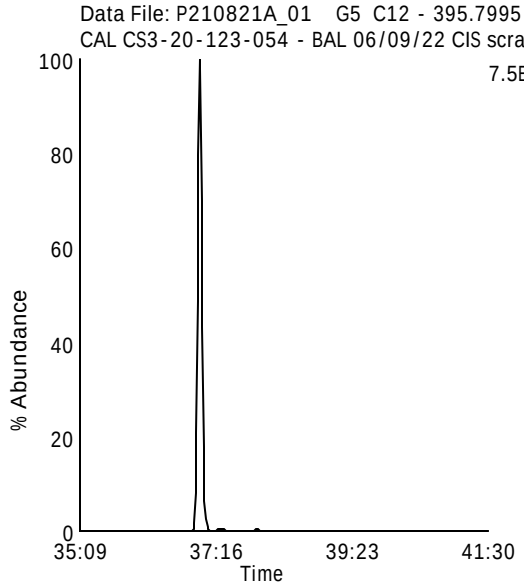
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

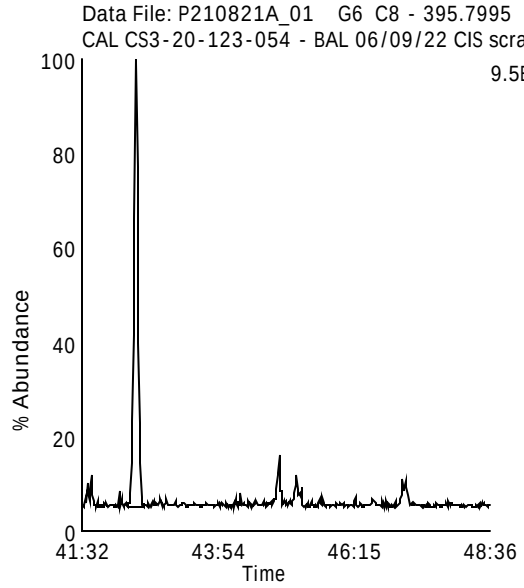
Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC

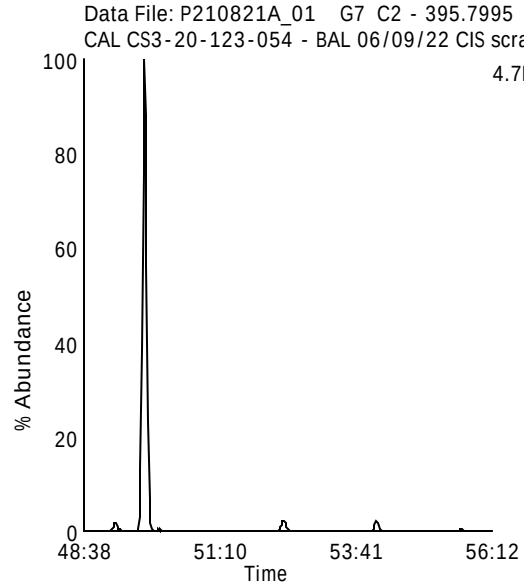










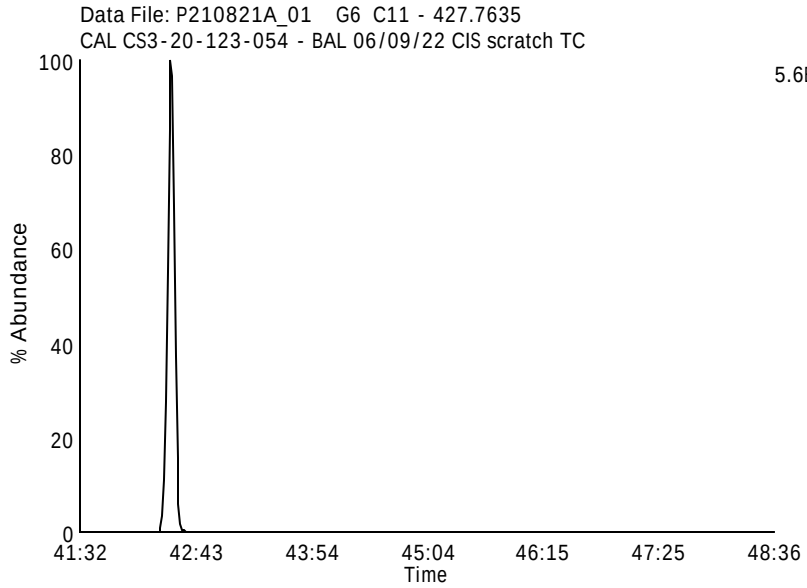


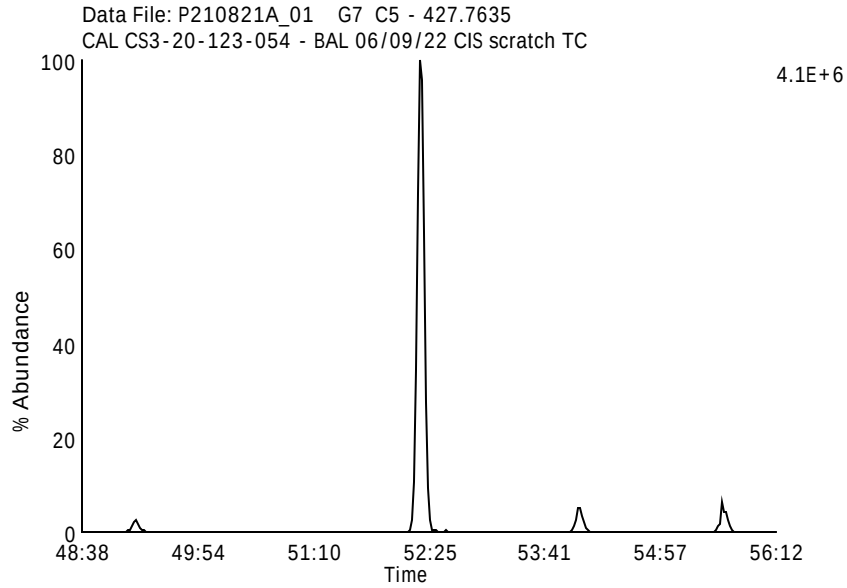
Octa Chlorinated Biphenyls

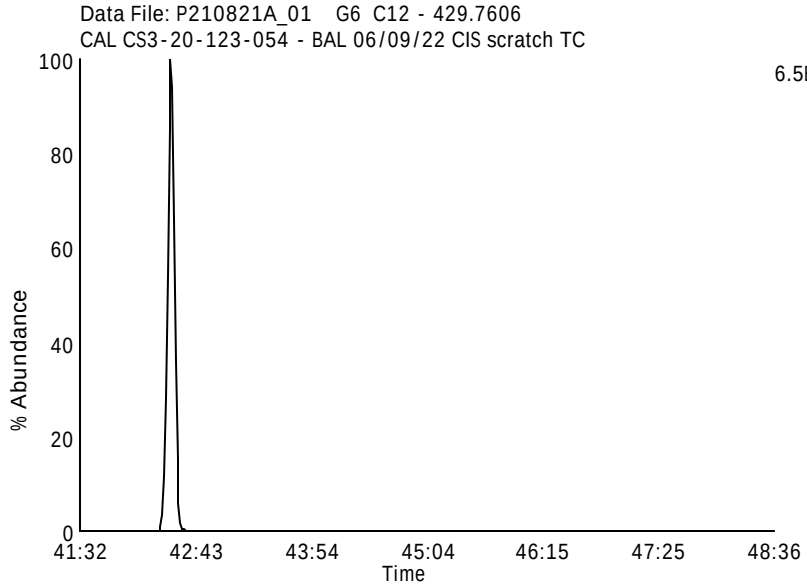
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

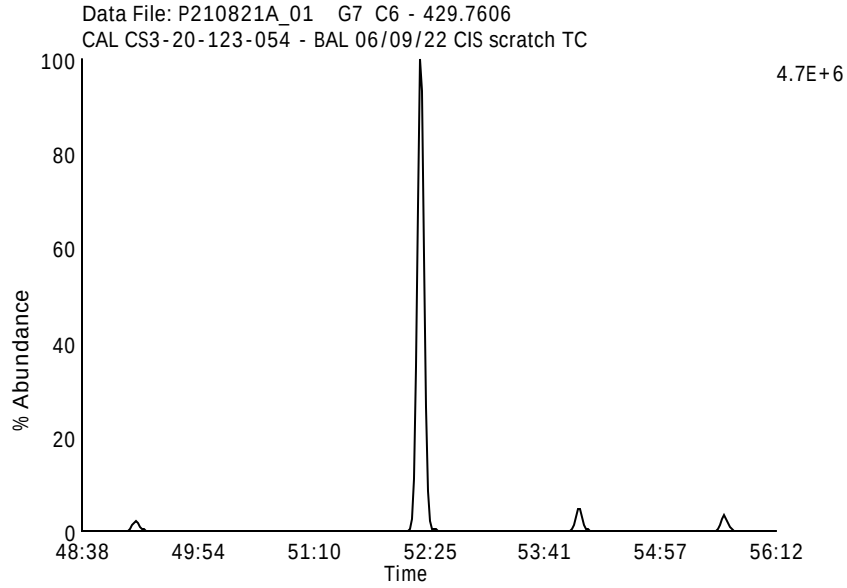
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC







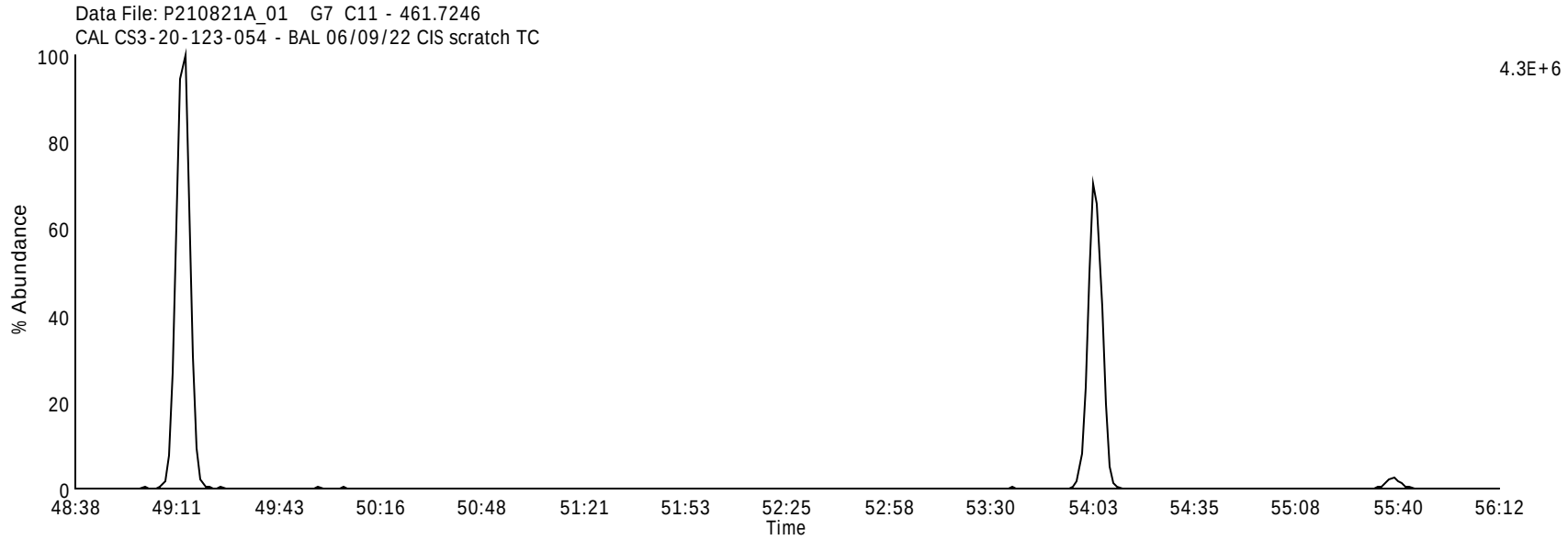


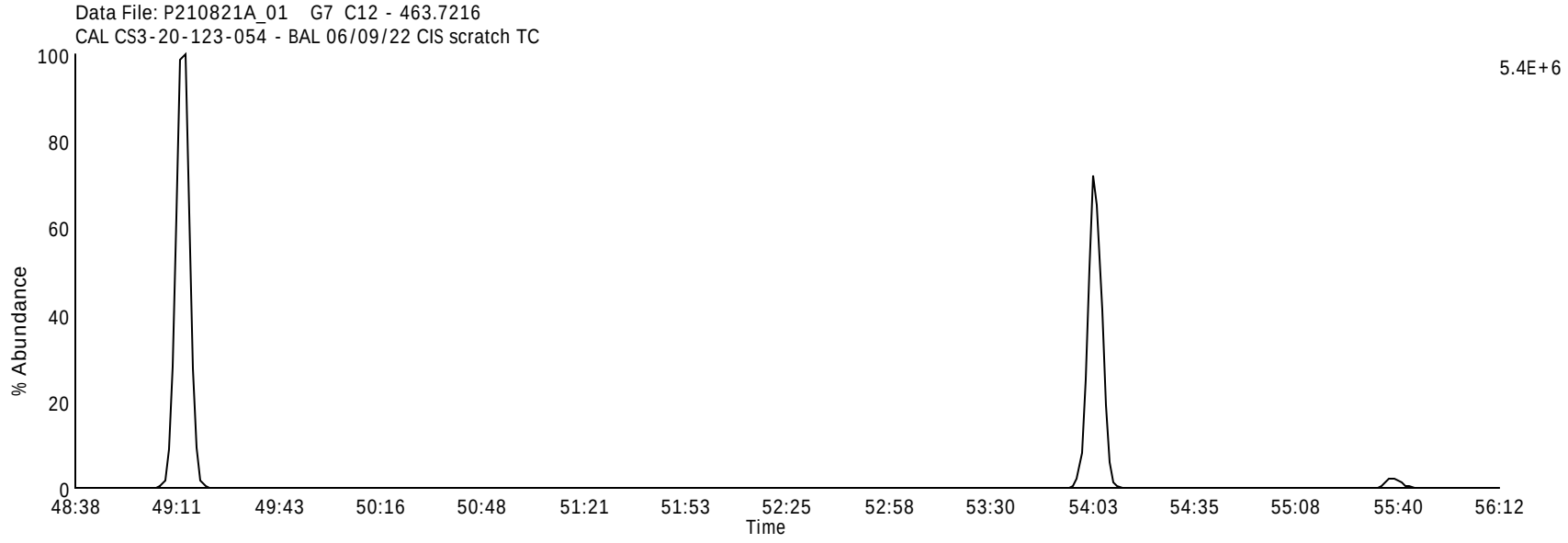
Nona Chlorinated Biphenyls

Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



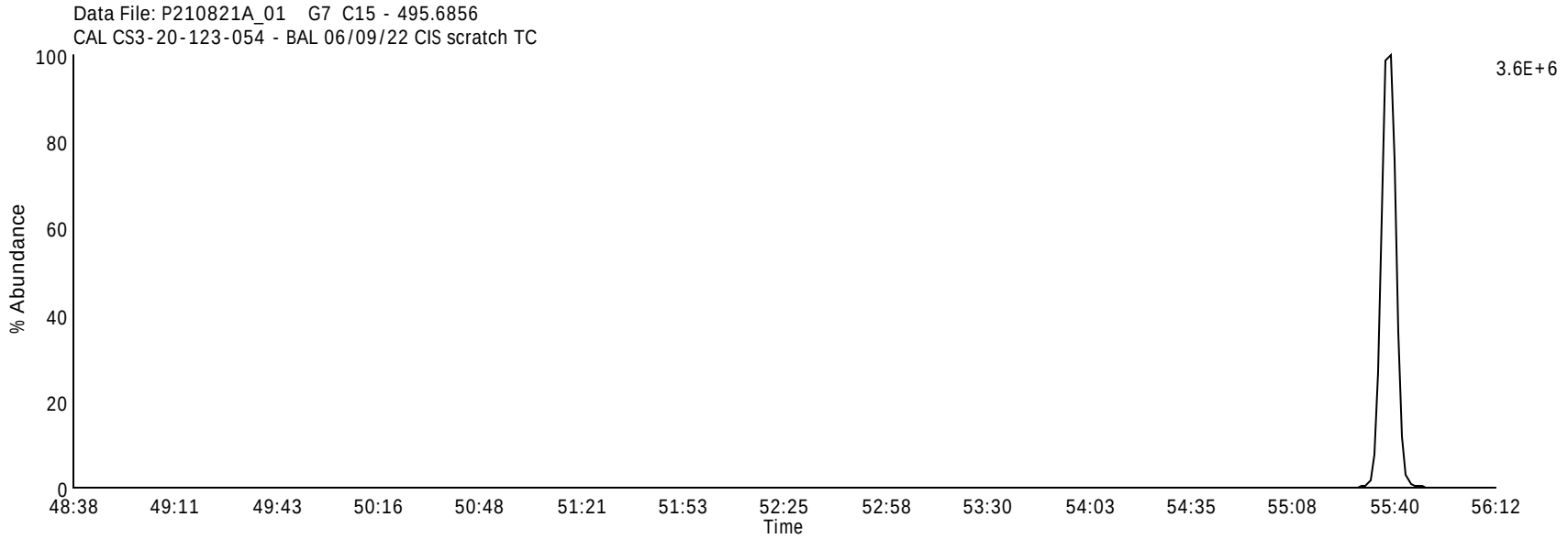


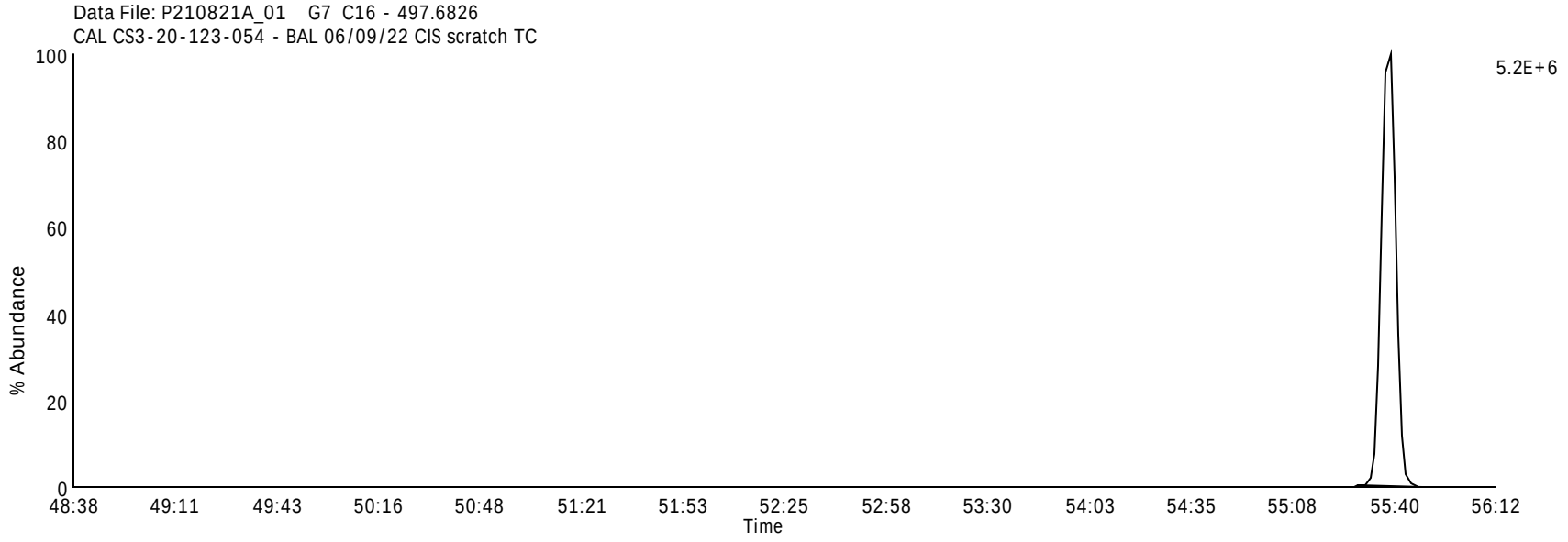
Deca Chlorinated Biphenyl

Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC



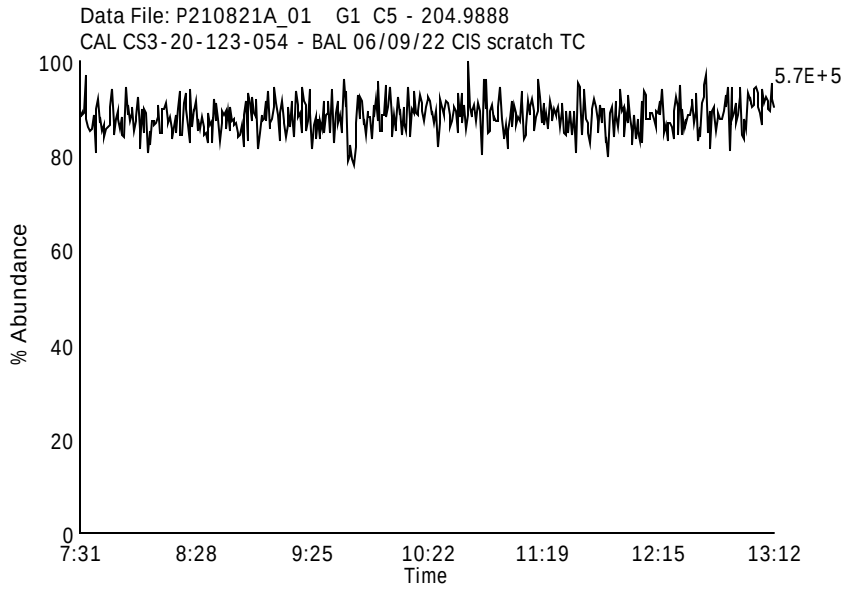


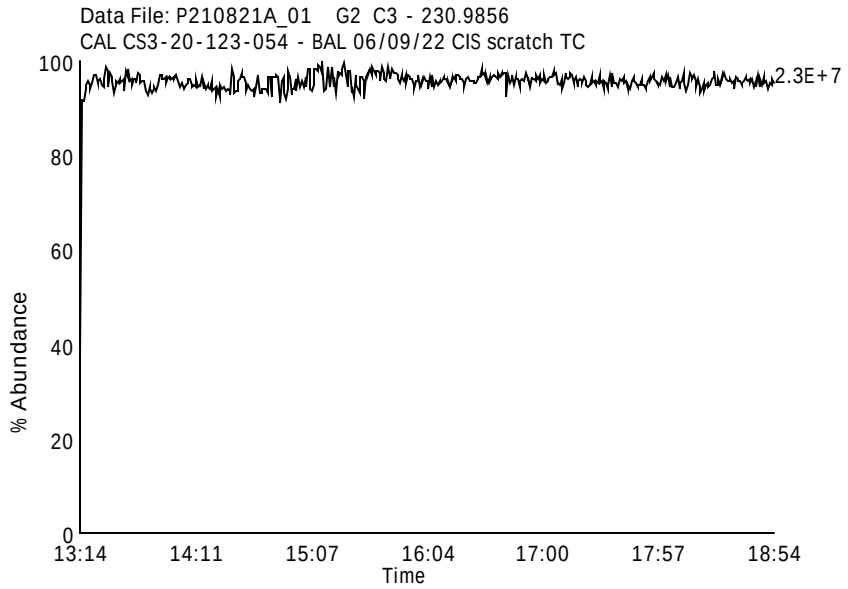
Group 1 - 4 Lock mass

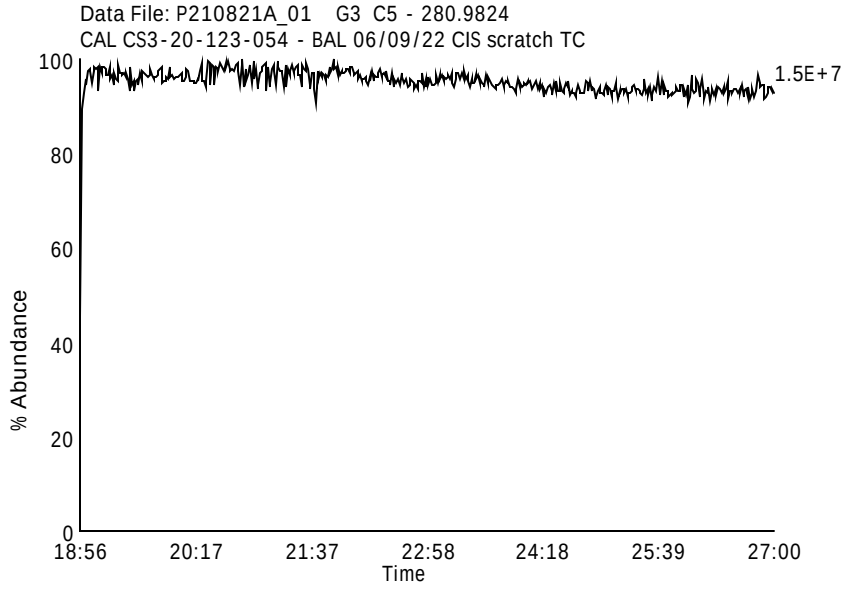
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

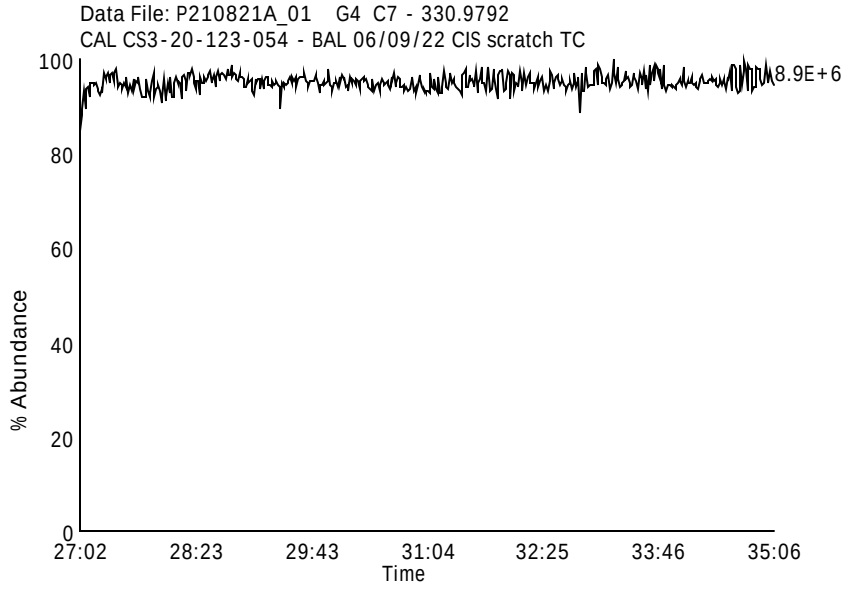
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC







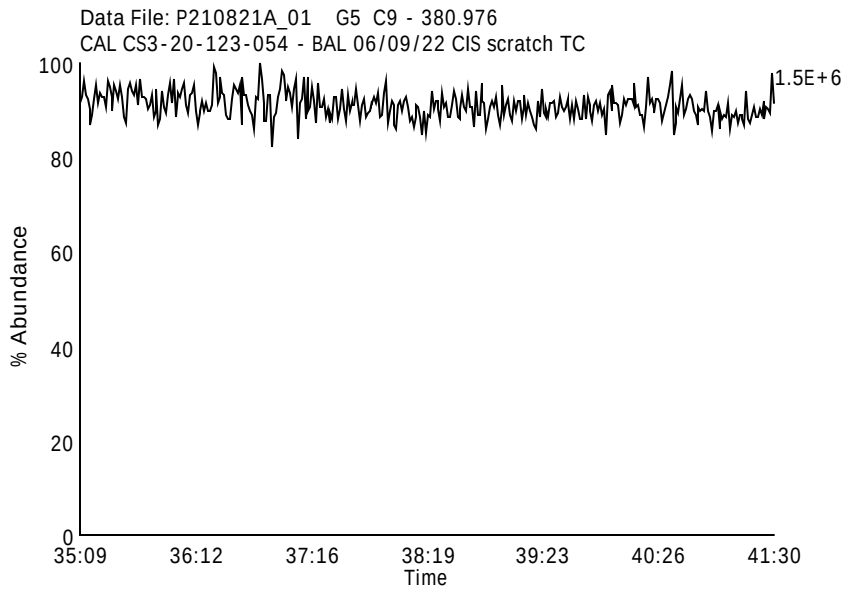


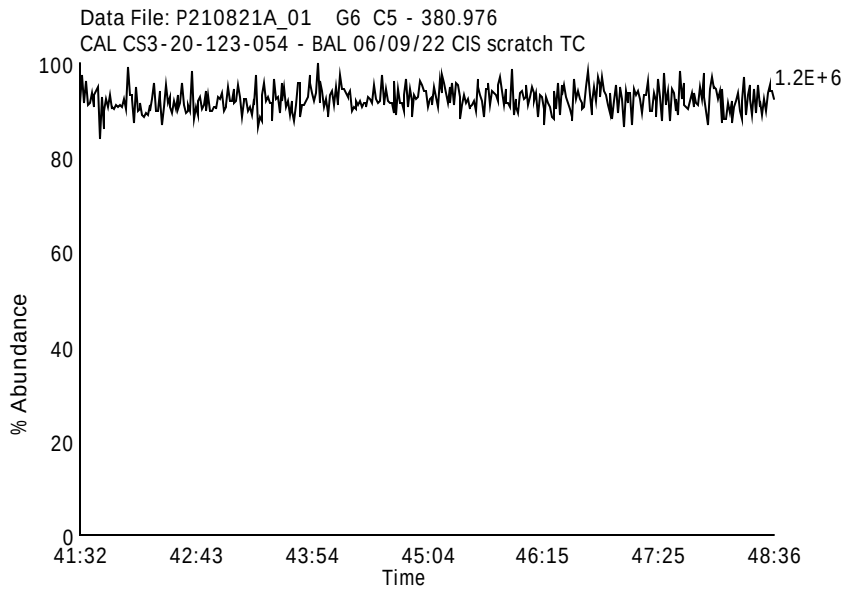
Group 5 - 7 Lock mass

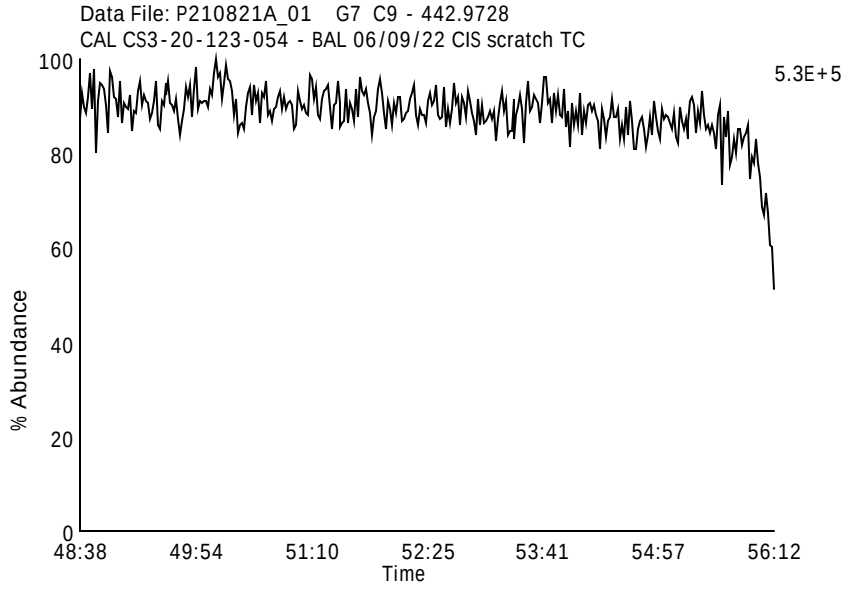
Data File Name: P210821A_01 Lab Sample ID: CS3-20-123-054

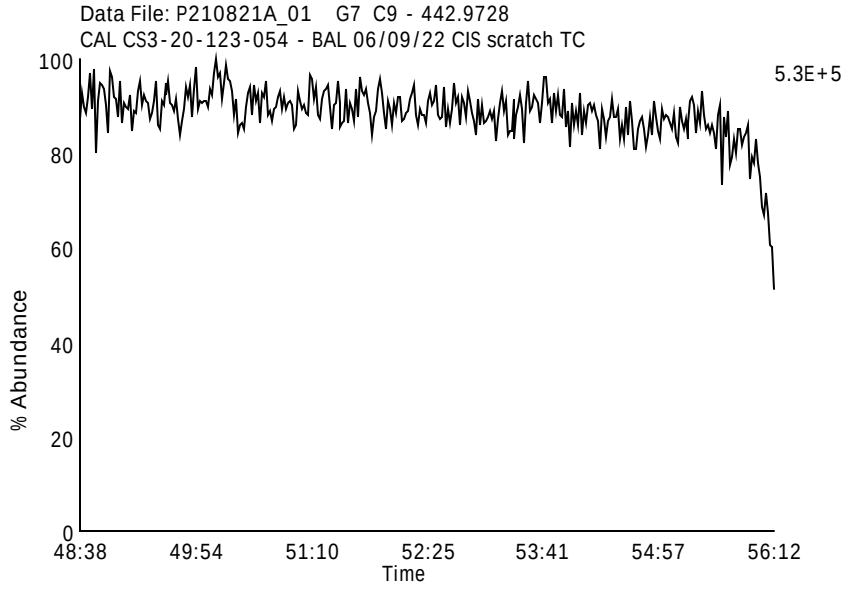
Date Acquired: 8/21/2021 Instrument: 10MSHR09 (P)

Sample Description: CAL CS3-20-123-054 - BAL 06/09/22 CIS scratch TC









Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	BAL
Lab ID	CS1-20-123-041	Instrument ID	10MSHR09 (P)
Filename	P210529C_01	GC Column ID	261111-01
Analyzed	05/29/2021 17:08	ICAL Date	05/29/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.261	0.81	39021271	48212755	
13C-3,3',4,4'-TeCB	77	34.834	0.79	40583544	51079062	
13C-2,3,3',4,4'-PeCB	105	38.438	1.57	47569439	30218827	
13C-2,3,4,4',5-PeCB	114	37.785	1.57	47790442	30357679	
13C-2,3',4,4',5-PeCB	118	37.248	1.52	48020213	31591865	
13C-2,3',4,4',5'-PeCB	123	36.913	1.57	47258558	30143848	
13C-3,3',4,4',5-PeCB	126	41.608	1.59	48267427	30330194	
13C-HxCB(156/157)	156/157	44.681	1.26	86325826	68264552	
13C-2,3',4,4',5,5'-HxCB	167	43.508	1.26	43848939	34764463	
13C-3,3',4,4',5,5'-HxCB	169	47.951	1.25	42483843	33936483	
13C-2,3,3',4,4',5,5'-HpCB	189	50.516	1.04	37150584	35662586	
CleanupStandards						
13C-2,4,4'-TrCB	28	22.824	1.03	52635170	51305546	
13C-2,3,3',5,5'-PeCB	111	34.896	1.55	60439421	38957000	
13C-2,2',3,3',5,5',6-HpCB	178	40.903	1.04	36831046	35277006	
Recovery Standards						
13C-2,5-DiCB	9	14.822	1.57	70403598	44932093	
13C-2,2',5,5'-TeCB	52	24.804	0.79	35593204	45254181	
13C-2,2',4,5,5'-PeCB	101	32.096	1.58	46148911	29251581	
13C-2,2',3,4,4',5'-HxCB	138	40.434	1.26	38716287	30647008	
13C-2,2',3,3',4,4',5,5'-OcCB	194	52.629	0.93	26917530	28881488	

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	BAL
Lab ID	CS1-20-123-041	Instrument ID	10MSHR09 (P)
Filename	P210529C_01	GC Column ID	261111-01
Analyzed	05/29/2021 17:08	ICAL ID	P210529

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		34.849	0.80	425424	534714	
81		34.292	0.76	414461	544691	
105		38.455	1.39	456124	327362	
114		37.818	1.51	491425	326433	
118		37.265	1.53	484729	317342	
123		36.930	1.60	518417	324150	
126		41.624	1.56	466909	299774	
156	156/157	44.698	1.27	891269	703971	
157	156/157	44.698	1.27	(891269)	(703971)	
167		43.541	1.25	469723	375173	
169		47.985	1.26	440339	348932	
189		50.516	1.07	384148	358073	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	BAL
Lab ID	CS2-20-123-042	Instrument ID	10MSHR09 (P)
Filename	P210529C_02	GC Column ID	261111-01
Analyzed	05/29/2021 18:15	ICAL Date	05/29/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.244	0.77	133236558	173756185	
13C-3,3',4,4'-TeCB	77	34.817	0.78	146890796	187192863	
13C-2,3,3',4,4'-PeCB	105	38.437	1.57	172020325	109721069	
13C-2,3,4,4',5-PeCB	114	37.783	1.56	169332566	108242893	
13C-2,3',4,4',5-PeCB	118	37.246	1.56	173975290	111269456	
13C-2,3',4,4',5'-PeCB	123	36.894	1.59	168106825	105968378	
13C-3,3',4,4',5-PeCB	126	41.589	1.56	172930658	111126944	
13C-HxCB(156/157)	156/157	44.662	1.25	306645397	244974891	
13C-2,3',4,4',5,5'-HxCB	167	43.506	1.26	153635265	122371263	
13C-3,3',4,4',5,5'-HxCB	169	47.949	1.25	155348454	123816603	
13C-2,3,3',4,4',5,5'-HpCB	189	50.493	1.06	134458849	127109784	
CleanupStandards						
13C-2,4,4'-TrCB	28	22.807	1.03	195636283	190377854	
13C-2,3,3',5,5'-PeCB	111	34.894	1.53	213535698	139413769	
13C-2,2',3,3',5,5',6-HpCB	178	40.885	1.06	128052304	121056731	
Recovery Standards						
13C-2,5-DiCB	9	14.810	1.54	252598981	164225263	
13C-2,2',5,5'-TeCB	52	24.802	0.78	130306192	166789305	
13C-2,2',4,5,5'-PeCB	101	32.094	1.55	163066982	105313862	
13C-2,2',3,4,4',5'-HxCB	138	40.415	1.28	137533191	107611443	
13C-2,2',3,3',4,4',5,5'-OcCB	194	52.627	0.90	94972911	105012376	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	BAL
Lab ID	CS2-20-123-042	Instrument ID	10MSHR09 (P)
Filename	P210529C_02	GC Column ID	261111-01
Analyzed	05/29/2021 18:15	ICAL ID	P210529

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		34.848	0.78	7255618	9283683	
81		34.276	0.77	6948977	9048883	
105		38.454	1.50	8090090	5376584	
114		37.800	1.52	8281424	5440319	
118		37.263	1.57	8668277	5520172	
123		36.928	1.51	8343551	5510863	
126		41.623	1.53	8301375	5413932	
156	156/157	44.679	1.27	15395458	12166262	
157	156/157	44.679	1.27	(15395458)	(12166262)	
167		43.522	1.21	7579773	6249994	
169		47.966	1.25	7715155	6183948	
189		50.536	1.03	6512384	6322651	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	BAL
Lab ID	CS3-20-123-048	Instrument ID	10MSHR09 (P)
Filename	P210529C_03	GC Column ID	261111-01
Analyzed	05/29/2021 19:13	ICAL Date	05/29/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.250	0.80	127687671	159611117	
13C-3,3',4,4'-TeCB	77	34.823	0.82	134706827	165182966	
13C-2,3,3',4,4'-PeCB	105	38.427	1.58	154934446	97834248	
13C-2,3,4,4',5-PeCB	114	37.789	1.58	155928838	98564493	
13C-2,3',4,4',5-PeCB	118	37.236	1.59	160084881	100837448	
13C-2,3',4,4',5'-PeCB	123	36.901	1.57	153479206	98029160	
13C-3,3',4,4',5-PeCB	126	41.596	1.58	153965122	97342485	
13C-HxCB(156/157)	156/157	44.670	1.26	283824090	226150203	
13C-2,3',4,4',5,5'-HxCB	167	43.513	1.26	144386306	114594455	
13C-3,3',4,4',5,5'-HxCB	169	47.956	1.24	138867238	111743025	
13C-2,3,3',4,4',5,5'-HpCB	189	50.506	1.04	120045470	115359370	
CleanupStandards						
13C-2,4,4'-TrCB	28	22.810	1.01	174664277	172382192	
13C-2,3,3',5,5'-PeCB	111	34.900	1.51	191585207	127095536	
13C-2,2',3,3',5,5',6-HpCB	178	40.892	1.06	116366368	110066302	
Recovery Standards						
13C-2,5-DiCB	9	14.811	1.54	232183945	150807335	
13C-2,2',5,5'-TeCB	52	24.806	0.78	118200813	152159848	
13C-2,2',4,5,5'-PeCB	101	32.100	1.54	149355035	97139244	
13C-2,2',3,4,4',5'-HxCB	138	40.422	1.26	121978045	96532705	
13C-2,2',3,3',4,4',5,5'-OcCB	194	52.618	0.92	87361397	94623199	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	BAL
Lab ID	CS3-20-123-048	Instrument ID	10MSHR09 (P)
Filename	P210529C_03	GC Column ID	261111-01
Analyzed	05/29/2021 19:13	ICAL ID	P210529

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		34.854	0.79	64474090	81436400	
81		34.282	0.79	64429492	81541084	
105		38.460	1.55	73373451	47371065	
114		37.823	1.53	74196185	48344311	
118		37.270	1.49	75427407	50751734	
123		36.934	1.50	72824965	48396329	
126		41.613	1.54	74332637	48286078	
156	156/157	44.687	1.25	140279925	112515561	
157	156/157	44.687	1.25	(140279925)	(112515561)	
167		43.530	1.26	71275959	56532026	
169		47.973	1.24	68495779	55245582	
189		50.527	1.03	59376247	57891754	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	BAL
Lab ID	CS4-20-123-027	Instrument ID	10MSHR09 (P)
Filename	P210529C_05	GC Column ID	261111-01
Analyzed	05/29/2021 21:14	ICAL Date	05/29/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.245	0.80	30776162	38400911	
13C-3,3',4,4'-TeCB	77	34.817	0.80	32632271	40645488	
13C-2,3,3',4,4'-PeCB	105	38.437	1.56	36679245	23518449	
13C-2,3,4,4',5-PeCB	114	37.783	1.56	36812575	23601145	
13C-2,3',4,4',5-PeCB	118	37.247	1.54	37869561	24602385	
13C-2,3',4,4',5'-PeCB	123	36.894	1.50	35294275	23474557	
13C-3,3',4,4',5-PeCB	126	41.590	1.60	37283226	23355691	
13C-HxCB(156/157)	156/157	44.663	1.26	66265210	52385842	
13C-2,3',4,4',5,5'-HxCB	167	43.506	1.29	33865556	26234713	
13C-3,3',4,4',5,5'-HxCB	169	47.950	1.27	33330709	26241440	
13C-2,3,3',4,4',5,5'-HpCB	189	50.515	1.06	28502059	27008316	
CleanupStandards						
13C-2,4,4'-TrCB	28	22.807	1.03	43599687	42500448	
13C-2,3,3',5,5'-PeCB	111	34.894	1.58	47883235	30336930	
13C-2,2',3,3',5,5',6-HpCB	178	40.885	1.04	27387691	26339286	
Recovery Standards						
13C-2,5-DiCB	9	14.810	1.55	57777473	37367347	
13C-2,2',5,5'-TeCB	52	24.802	0.78	29394529	37536746	
13C-2,2',4,5,5'-PeCB	101	32.095	1.61	35964408	22347610	
13C-2,2',3,4,4',5'-HxCB	138	40.432	1.25	29073810	23224889	
13C-2,2',3,3',4,4',5,5'-OcCB	194	52.628	0.90	20966192	23278014	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	BAL
Lab ID	CS4-20-123-027	Instrument ID	10MSHR09 (P)
Filename	P210529C_05	GC Column ID	261111-01
Analyzed	05/29/2021 21:14	ICAL ID	P210529

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		34.848	0.77	123163810	159652992	
81		34.276	0.79	122618727	155421463	
105		38.454	1.55	142726822	92306594	
114		37.800	1.50	140437977	93417104	
118		37.263	1.53	148199774	96955287	
123		36.928	1.54	141405483	92038500	
126		41.623	1.53	136954132	89656930	
156	156/157	44.697	1.24	260880638	210275361	
157	156/157	44.697	1.24	(260880638)	(210275361)	
167		43.523	1.24	131646139	106409620	
169		47.966	1.24	129146893	104485775	
189		50.537	1.03	111696882	108168405	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	BAL
Lab ID	CS5-20-123-044	Instrument ID	10MSHR09 (P)
Filename	P210529C_04	GC Column ID	261111-01
Analyzed	05/29/2021 20:14	ICAL Date	05/29/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.250	0.79	29803854	37601397	
13C-3,3',4,4'-TeCB	77	34.822	0.79	31393736	39693258	
13C-2,3,3',4,4'-PeCB	105	38.426	1.60	35958217	22542621	
13C-2,3,4,4',5-PeCB	114	37.789	1.56	36072768	23073851	
13C-2,3',4,4',5-PeCB	118	37.236	1.57	36966815	23609323	
13C-2,3',4,4',5'-PeCB	123	36.900	1.55	35253658	22720148	
13C-3,3',4,4',5-PeCB	126	41.579	1.55	35757598	23133409	
13C-HxCB(156/157)	156/157	44.653	1.26	65974444	52401050	
13C-2,3',4,4',5,5'-HxCB	167	43.496	1.26	32999116	26124705	
13C-3,3',4,4',5,5'-HxCB	169	47.940	1.26	33160368	26316513	
13C-2,3,3',4,4',5,5'-HpCB	189	50.506	1.04	29044770	27889897	
CleanupStandards						
13C-2,4,4'-TrCB	28	22.794	1.01	39323241	38952071	
13C-2,3,3',5,5'-PeCB	111	34.884	1.55	44905801	28973251	
13C-2,2',3,3',5,5',6-HpCB	178	40.875	1.06	26707771	25298507	
Recovery Standards						
13C-2,5-DiCB	9	14.789	1.57	55371657	35282022	
13C-2,2',5,5'-TeCB	52	24.790	0.77	26600473	34504728	
13C-2,2',4,5,5'-PeCB	101	32.084	1.55	32895136	21290157	
13C-2,2',3,4,4',5'-HxCB	138	40.422	1.30	28006567	21558778	
13C-2,2',3,3',4,4',5,5'-OcCB	194	52.618	0.90	20362549	22508230	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	BAL
Lab ID	CS5-20-123-044	Instrument ID	10MSHR09 (P)
Filename	P210529C_04	GC Column ID	261111-01
Analyzed	05/29/2021 20:14	ICAL ID	P210529

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		34.838	0.76	583520765	770568525	
81		34.265	0.77	591371423	765221180	
105		38.460	1.50	674540960	449288150	
114		37.806	1.52	698437539	459383868	
118		37.252	1.52	723259504	475221034	
123		36.917	1.54	681731585	443941871	
126		41.613	1.53	679166667	445107399	
156	156/157	44.687	1.24	1288002430	1040656253	
157	156/157	44.687	1.24	(1288002430)	(1040656253)	
167		43.513	1.23	644407486	522683623	
169		47.957	1.23	658567209	533807875	
189		50.528	1.03	572208127	555142991	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	209 Mix	Injected By	
Lab ID	209-20170-153	Instrument ID	10MSHR09 (P)
Filename	P210821A_02	GC Column ID	261111-01
Analyzed	08/21/2021 15:08	ICAL Date	08/21/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	33.523	0.78	16220875	20927539	
13C-3,3',4,4'-TeCB	77	34.111	0.79	17238243	21829203	
13C-2,3,3',4,4'-PeCB	105	37.688	1.54	19242894	12465316	
13C-2,3,4,4',5-PeCB	114	37.035	1.59	20120179	12677462	
13C-2,3',4,4',5-PeCB	118	36.498	1.58	20533265	12965316	
13C-2,3',4,4',5'-PeCB	123	36.146	1.56	19446318	12486895	
13C-3,3',4,4',5-PeCB	126	40.858	1.58	19018477	12001253	
13C-HxCB(156/157)	156/157	43.915	1.25	34128624	27412525	
13C-2,3',4,4',5,5'-HxCB	167	42.742	1.30	17397069	13395836	
13C-3,3',4,4',5,5'-HxCB	169	47.202	1.29	16296124	12621710	
13C-2,3,3',4,4',5,5'-HpCB	189	49.732	1.04	14440512	13832981	
CleanupStandards						
13C-2,4,4'-TrCB	28	22.113	1.05	22810110	21749222	
13C-2,3,3',5,5'-PeCB	111	34.142	1.58	23900130	15125331	
13C-2,2',3,3',5,5',6-HpCB	178	40.104	1.08	15072395	13999753	
Recovery Standards						
13C-2,5-DiCB	9	14.205	1.59	28741738	18092485	
13C-2,2',5,5'-TeCB	52	24.109	0.78	15502886	19837207	
13C-2,2',4,5,5'-PeCB	101	31.357	1.61	19662404	12193556	
13C-2,2',3,4,4',5'-HxCB	138	39.651	1.25	16147465	12930189	
13C-2,2',3,3',4,4',5,5'-OcCB	194	51.823	0.92	9804753	10651270	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

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Client ID	209 Mix	Injected By	
Lab ID	209-20170-153	Instrument ID	10MSHR09 (P)
Filename	P210821A_02	GC Column ID	261111-01
Analyzed	08/21/2021 15:08	ICAL ID	P210821A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		34.142	0.80	9171643	11485199	
81		33.554	0.80	9545722	11900969	
105		37.705	1.52	11237634	7374301	
114		37.051	1.55	11497173	7424289	
118		36.515	1.53	12112925	7907074	
123		36.179	1.52	9509706	6265191	
126		40.892	1.51	10990282	7258216	
156	156/157	43.915	1.24	20439947	16537922	
157	156/157	43.915	1.24	(20439947)	(16537922)	
167		42.775	1.21	10367706	8566872	
169		47.236	1.24	9485181	7666635	
189		49.754	1.05	8120627	7722828	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.834	0.77	51208204	66385842	
13C-3,3',4,4'-TeCB	77	35.404	0.78	51510819	65778826	
13C-2,3,3',4,4'-PeCB	105	38.998	1.54	62053684	40199072	
13C-2,3,4,4',5-PeCB	114	38.361	1.53	63364259	41331947	
13C-2,3',4,4',5-PeCB	118	37.808	1.53	66222064	43162719	
13C-2,3',4,4',5'-PeCB	123	37.472	1.53	63261741	41245986	
13C-3,3',4,4',5-PeCB	126	42.151	1.57	53825037	34264684	
13C-HxCB(156/157)	156/157	45.208	1.22	102568128	83923047	
13C-2,3',4,4',5,5'-HxCB	167	44.051	1.23	54766966	44508663	
13C-3,3',4,4',5,5'-HxCB	169	48.479	1.23	44916129	36397189	
13C-2,3,3',4,4',5,5'-HpCB	189	51.026	1.02	42127094	41118145	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.03	82906534	80731238	
13C-2,3,3',5,5'-PeCB	111	35.471	1.60	96770041	60487785	
13C-2,2',3,3',5,5',6-HpCB	178	41.447	1.08	54880980	50588888	
Recovery Standards						
13C-2,5-DiCB	9	15.349	1.54	127392779	82964986	
13C-2,2',5,5'-TeCB	52	25.405	0.80	64362200	80721712	
13C-2,2',4,5,5'-PeCB	101	32.687	1.61	76585881	47607767	
13C-2,2',3,4,4',5'-HxCB	138	40.994	1.27	64490799	50853483	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.160	0.92	38348105	41726961	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS1-20-123-041	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_08	GC Column ID	261111-02
Analyzed	08/18/2021 18:49	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.438	0.83	501814	607875	
81		34.851	0.72	456320	635945	
105		39.032	1.61	566945	352117	
114		38.378	1.53	600972	392715	
118		37.825	1.59	644411	405832	
123		37.506	1.42	603428	424525	
126		42.168	1.49	487021	327868	
156	156/157	45.225	1.25	1035842	827301	
157	156/157	45.225	1.25	(1035842)	(827301)	
167		44.084	1.25	538218	431899	
169		48.495	1.14	427965	374978	
189		51.047	1.10	410825	372156	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.850	0.76	33891332	44310376	
13C-3,3',4,4'-TeCB	77	35.420	0.77	34260374	44451965	
13C-2,3,3',4,4'-PeCB	105	39.014	1.54	41448453	26867484	
13C-2,3,4,4',5-PeCB	114	38.360	1.53	41156130	26821258	
13C-2,3',4,4',5-PeCB	118	37.823	1.55	43913917	28293186	
13C-2,3',4,4',5'-PeCB	123	37.488	1.53	42068498	27527636	
13C-3,3',4,4',5-PeCB	126	42.166	1.53	36221472	23742934	
13C-HxCB(156/157)	156/157	45.223	1.22	67390123	55431577	
13C-2,3',4,4',5,5'-HxCB	167	44.066	1.21	35666666	29418827	
13C-3,3',4,4',5,5'-HxCB	169	48.493	1.24	30688196	24842885	
13C-2,3,3',4,4',5,5'-HpCB	189	51.044	1.02	28764321	28122685	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.01	53600329	52989259	
13C-2,3,3',5,5'-PeCB	111	35.470	1.60	63084152	39378340	
13C-2,2',3,3',5,5',6-HpCB	178	41.462	1.09	35842158	32832358	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.53	83452779	54466090	
13C-2,2',5,5'-TeCB	52	25.404	0.80	42121385	52745355	
13C-2,2',4,5,5'-PeCB	101	32.687	1.59	49762849	31201326	
13C-2,2',3,4,4',5'-HxCB	138	40.992	1.26	41685419	33048264	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.156	0.91	25528617	28012392	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS2-20-123-053	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_06	GC Column ID	261111-02
Analyzed	08/18/2021 16:45	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.437	0.74	1519692	2060098	
81		34.867	0.74	1604994	2175256	
105		39.047	1.54	1922768	1250991	
114		38.393	1.41	1876437	1335265	
118		37.840	1.47	2033118	1378641	
123		37.505	1.47	1924699	1306566	
126		42.183	1.47	1609066	1094892	
156	156/157	45.240	1.19	3194335	2677855	
157	156/157	45.240	1.19	(3194335)	(2677855)	
167		44.083	1.18	1689220	1433831	
169		48.510	1.21	1514546	1248104	
189		51.066	1.00	1288821	1289718	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.848	0.76	15482827	20415180	
13C-3,3',4,4'-TeCB	77	35.419	0.80	16235531	20406222	
13C-2,3,3',4,4'-PeCB	105	39.029	1.50	17530979	11682823	
13C-2,3,4,4',5-PeCB	114	38.375	1.51	18054772	11978158	
13C-2,3',4,4',5-PeCB	118	37.822	1.52	19150985	12610753	
13C-2,3',4,4',5'-PeCB	123	37.486	1.55	18627896	12055363	
13C-3,3',4,4',5-PeCB	126	42.165	1.54	15761201	10258884	
13C-HxCB(156/157)	156/157	45.222	1.23	27885801	22733884	
13C-2,3',4,4',5,5'-HxCB	167	44.065	1.21	15205904	12550764	
13C-3,3',4,4',5,5'-HxCB	169	48.508	1.22	12578703	10327607	
13C-2,3,3',4,4',5,5'-HpCB	189	51.043	1.03	11578654	11263039	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.425	1.03	26265414	25481217	
13C-2,3,3',5,5'-PeCB	111	35.486	1.61	29126575	18044938	
13C-2,2',3,3',5,5',6-HpCB	178	41.460	1.07	16153584	15031324	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.55	40918082	26392839	
13C-2,2',5,5'-TeCB	52	25.403	0.82	20417393	24823362	
13C-2,2',4,5,5'-PeCB	101	32.685	1.59	23106412	14493249	
13C-2,2',3,4,4',5'-HxCB	138	41.008	1.25	18284670	14647807	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.155	0.90	10479666	11607480	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_11	GC Column ID	261111-02
Analyzed	08/18/2021 21:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.452	0.75	6908630	9157518	
81		34.865	0.76	7186537	9501154	
105		39.046	1.53	7946966	5189522	
114		38.392	1.50	8298330	5548139	
118		37.855	1.52	8853400	5831352	
123		37.520	1.49	8417688	5655194	
126		42.181	1.53	7036829	4607937	
156	156/157	45.255	1.22	13016131	10671543	
157	156/157	45.255	1.22	(13016131)	(10671543)	
167		44.098	1.25	7020713	5612988	
169		48.525	1.21	5836654	4837214	
189		51.064	0.99	4922715	4958579	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.832	0.77	34210797	44266996	
13C-3,3',4,4'-TeCB	77	35.402	0.79	35395450	44823730	
13C-2,3,3',4,4'-PeCB	105	38.995	1.51	40728648	26923537	
13C-2,3,4,4',5-PeCB	114	38.357	1.55	42745928	27575415	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44657518	28840602	
13C-2,3',4,4',5'-PeCB	123	37.469	1.53	43022555	28210031	
13C-3,3',4,4',5-PeCB	126	42.147	1.53	36577625	23922117	
13C-HxCB(156/157)	156/157	45.203	1.23	69653134	56819445	
13C-2,3',4,4',5,5'-HxCB	167	44.046	1.25	36559258	29211015	
13C-3,3',4,4',5,5'-HxCB	169	48.472	1.24	30651857	24792300	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.03	28316147	27496668	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	55689198	54423067	
13C-2,3,3',5,5'-PeCB	111	35.452	1.60	64883754	40430467	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.07	36247946	33766626	
Recovery Standards						
13C-2,5-DiCB	9	15.337	1.53	84686939	55315081	
13C-2,2',5,5'-TeCB	52	25.387	0.80	42416046	52980659	
13C-2,2',4,5,5'-PeCB	101	32.668	1.62	50281923	31100077	
13C-2,2',3,4,4',5'-HxCB	138	40.973	1.25	41920878	33447291	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.126	0.90	24833766	27679627	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS4-20-123-055	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_10	GC Column ID	261111-02
Analyzed	08/18/2021 20:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.418	0.77	122699703	159707089	
81		34.848	0.75	125942207	167138424	
105		39.028	1.52	143263175	94554749	
114		38.374	1.51	154363717	102247755	
118		37.821	1.52	158518382	104050458	
123		37.486	1.51	153580769	101647751	
126		42.163	1.50	127752628	85082410	
156	156/157	45.220	1.23	254098813	207052129	
157	156/157	45.220	1.23	(254098813)	(207052129)	
167		44.063	1.22	131084207	107816581	
169		48.489	1.21	109583957	90325860	
189		51.057	1.01	98180269	97375448	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.831	0.77	34784792	45413028	
13C-3,3',4,4'-TeCB	77	35.401	0.79	35556353	44802460	
13C-2,3,3',4,4'-PeCB	105	39.011	1.54	42719780	27666457	
13C-2,3,4,4',5-PeCB	114	38.357	1.56	42911393	27511946	
13C-2,3',4,4',5-PeCB	118	37.804	1.55	44868121	28881141	
13C-2,3',4,4',5'-PeCB	123	37.468	1.51	42837264	28287898	
13C-3,3',4,4',5-PeCB	126	42.146	1.55	37305170	24073584	
13C-HxCB(156/157)	156/157	45.219	1.25	71784489	57574094	
13C-2,3',4,4',5,5'-HxCB	167	44.045	1.24	36763440	29578303	
13C-3,3',4,4',5,5'-HxCB	169	48.488	1.23	31756784	25737966	
13C-2,3,3',4,4',5,5'-HpCB	189	51.035	1.04	29222728	28169942	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.392	1.02	51908930	51091675	
13C-2,3,3',5,5'-PeCB	111	35.468	1.60	64649598	40423708	
13C-2,2',3,3',5,5',6-HpCB	178	41.442	1.08	35851672	33086489	
Recovery Standards						
13C-2,5-DiCB	9	15.325	1.52	83143628	54673112	
13C-2,2',5,5'-TeCB	52	25.386	0.80	41733434	52403278	
13C-2,2',4,5,5'-PeCB	101	32.668	1.61	49712591	30937614	
13C-2,2',3,4,4',5'-HxCB	138	40.989	1.27	41161616	32464857	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.146	0.92	24949098	27236268	

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1668A Native Polychlorinated Biphenyls Detected Peak List

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Client ID		Injected By	CVS
Lab ID	CS5-20-123-044	Instrument ID	10MSHR12 (Y)
Filename	Y210818B_09	GC Column ID	261111-02
Analyzed	08/18/2021 19:47	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.417	0.76	616806932	810414208	
81		34.847	0.76	639607623	840095356	
105		39.027	1.54	745301804	485163987	
114		38.374	1.52	780283922	512899091	
118		37.837	1.53	803499802	526013471	
123		37.502	1.52	785601740	516404877	
126		42.162	1.52	649914791	428105060	
156	156/157	45.236	1.22	1286847987	1051857892	
157	156/157	45.236	1.22	(1286847987)	(1051857892)	
167		44.079	1.22	653652175	535863549	
169		48.505	1.22	557599158	455624388	
189		51.056	1.01	503772747	500470805	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	209 Mix	Injected By	
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_02	GC Column ID	261111-02
Analyzed	08/20/2021 02:28	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.77	27388399	35459246	
13C-3,3',4,4'-TeCB	77	35.437	0.78	28673312	36791379	
13C-2,3,3',4,4'-PeCB	105	39.031	1.54	31003663	20178219	
13C-2,3,4,4',5-PeCB	114	38.393	1.53	32934160	21510584	
13C-2,3',4,4',5-PeCB	118	37.840	1.53	33874353	22103326	
13C-2,3',4,4',5'-PeCB	123	37.505	1.51	32317667	21413559	
13C-3,3',4,4',5-PeCB	126	42.183	1.52	28241493	18556574	
13C-HxCB(156/157)	156/157	45.240	1.23	53282920	43476260	
13C-2,3',4,4',5,5'-HxCB	167	44.083	1.21	27120979	22377641	
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.20	23954861	20005266	
13C-2,3,3',4,4',5,5'-HpCB	189	51.066	1.03	22070617	21524436	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	1.02	43792180	43049957	
13C-2,3,3',5,5'-PeCB	111	35.487	1.59	50722765	31920193	
13C-2,2',3,3',5,5',6-HpCB	178	41.479	1.10	32251963	29363461	
Recovery Standards						
13C-2,5-DiCB	9	15.373	1.53	70433685	46050062	
13C-2,2',5,5'-TeCB	52	25.421	0.80	36850449	46243831	
13C-2,2',4,5,5'-PeCB	101	32.704	1.61	43369674	26895943	
13C-2,2',3,4,4',5'-HxCB	138	41.026	1.27	36671841	28817325	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.179	0.90	20679855	23049402	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	209 Mix	Injected By	
Lab ID	209-20170-153	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_02	GC Column ID	261111-02
Analyzed	08/20/2021 02:28	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.454	0.75	12702171	16896524	
81		34.883	0.77	13999102	18283601	
105		39.064	1.50	15647775	10427207	
114		38.410	1.52	16377594	10784769	
118		37.857	1.52	16508769	10841392	
123		37.521	1.49	14510832	9741275	
126		42.200	1.50	13595892	9068762	
156	156/157	45.257	1.19	26531613	22239074	
157	156/157	45.257	1.19	(26531613)	(22239074)	
167		44.100	1.20	14390320	12017694	
169		48.544	1.23	12565403	10252781	
189		51.088	1.03	10369758	10088459	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_01	GC Column ID	261111-02
Analyzed	08/20/2021 01:29	ICAL Date	08/18/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.850	0.76	72771551	95397382	
13C-3,3',4,4'-TeCB	77	35.421	0.77	75201157	97229019	
13C-2,3,3',4,4'-PeCB	105	39.014	1.53	84006159	54867531	
13C-2,3,4,4',5-PeCB	114	38.377	1.54	85964262	55816573	
13C-2,3',4,4',5-PeCB	118	37.824	1.54	90003577	58529307	
13C-2,3',4,4',5'-PeCB	123	37.488	1.51	85642759	56633481	
13C-3,3',4,4',5-PeCB	126	42.167	1.53	77817184	50830120	
13C-HxCB(156/157)	156/157	45.240	1.22	139846337	114211546	
13C-2,3',4,4',5,5'-HxCB	167	44.067	1.23	72135101	58843477	
13C-3,3',4,4',5,5'-HxCB	169	48.510	1.22	64871448	52967655	
13C-2,3,3',4,4',5,5'-HpCB	189	51.045	1.03	58266830	56696453	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.409	1.01	114751036	113560823	
13C-2,3,3',5,5'-PeCB	111	35.487	1.58	144813545	91512703	
13C-2,2',3,3',5,5',6-HpCB	178	41.462	1.09	84499191	77640712	
Recovery Standards						
13C-2,5-DiCB	9	15.361	1.53	180519682	118225495	
13C-2,2',5,5'-TeCB	52	25.405	0.80	93868601	116934252	
13C-2,2',4,5,5'-PeCB	101	32.687	1.61	116377826	72214984	
13C-2,2',3,4,4',5'-HxCB	138	41.009	1.25	89463146	71588051	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.157	0.89	53203600	59496271	

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Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	CVS
Lab ID	CS3-20-123-060	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_01	GC Column ID	261111-02
Analyzed	08/20/2021 01:29	ICAL ID	Y210818

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.454	0.75	31243535	41861511	
81		34.867	0.75	32419641	43026817	
105		39.048	1.52	35234157	23238211	
114		38.394	1.50	37203351	24817323	
118		37.857	1.53	38472725	25088191	
123		37.522	1.52	37235907	24573774	
126		42.200	1.51	32940808	21801753	
156	156/157	45.257	1.21	61176841	50760771	
157	156/157	45.257	1.21	(61176841)	(50760771)	
167		44.100	1.20	31375207	26039119	
169		48.527	1.20	28291481	23652894	
189		51.088	1.01	24843113	24540052	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID		Injected By	BAL
Lab ID	CS3-20-123-054	Instrument ID	10MSHR09 (P)
Filename	P210821A_01	GC Column ID	261111-01
Analyzed	08/21/2021 13:53	ICAL Date	05/29/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	33.552	0.80	61125301	76697512	
13C-3,3',4,4'-TeCB	77	34.124	0.78	61053510	78220987	
13C-2,3,3',4,4'-PeCB	105	37.702	1.59	70254889	44097075	
13C-2,3,4,4',5-PeCB	114	37.048	1.58	71763106	45436814	
13C-2,3',4,4',5-PeCB	118	36.511	1.58	72485572	45885355	
13C-2,3',4,4',5'-PeCB	123	36.176	1.57	70446651	44852145	
13C-3,3',4,4',5-PeCB	126	40.871	1.57	70397480	44788309	
13C-HxCB(156/157)	156/157	43.928	1.28	118995319	93156756	
13C-2,3',4,4',5,5'-HxCB	167	42.754	1.24	60376873	48848676	
13C-3,3',4,4',5,5'-HxCB	169	47.231	1.27	59271518	46596275	
13C-2,3,3',4,4',5,5'-HpCB	189	49.749	1.07	50243093	47058554	
CleanupStandards						
13C-2,4,4'-TrCB	28	22.127	1.03	87352100	84614209	
13C-2,3,3',5,5'-PeCB	111	34.155	1.54	96128160	62391858	
13C-2,2',3,3',5,5',6-HpCB	178	40.117	1.05	55190776	52479831	
Recovery Standards						
13C-2,5-DiCB	9	14.216	1.56	120932304	77307179	
13C-2,2',5,5'-TeCB	52	24.108	0.78	59195816	75481467	
13C-2,2',4,5,5'-PeCB	101	31.370	1.55	73573604	47446656	
13C-2,2',3,4,4',5'-HxCB	138	39.664	1.26	56521404	44807919	
13C-2,2',3,3',4,4',5,5'-OcCB	194	51.840	0.92	33629247	36577225	

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID		Injected By	BAL
Lab ID	CS3-20-123-054	Instrument ID	10MSHR09 (P)
Filename	P210821A_01	GC Column ID	261111-01
Analyzed	08/21/2021 13:53	ICAL ID	P210529

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		34.155	0.78	30933332	39686057	
81		33.567	0.77	30954501	40351909	
105		37.719	1.54	34452234	22303232	
114		37.065	1.57	35957456	22880781	
118		36.528	1.55	37734964	24362412	
123		36.193	1.53	35512083	23244980	
126		40.905	1.54	34818782	22541508	
156	156/157	43.945	1.25	62690637	50254913	
157	156/157	43.945	1.25	(62690637)	(50254913)	
167		42.788	1.26	31279495	24851265	
169		47.248	1.26	29992332	23800490	
189		49.771	1.04	25570721	24544112	

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AutoSpec Tune Parameters **MassLynx 4.1**

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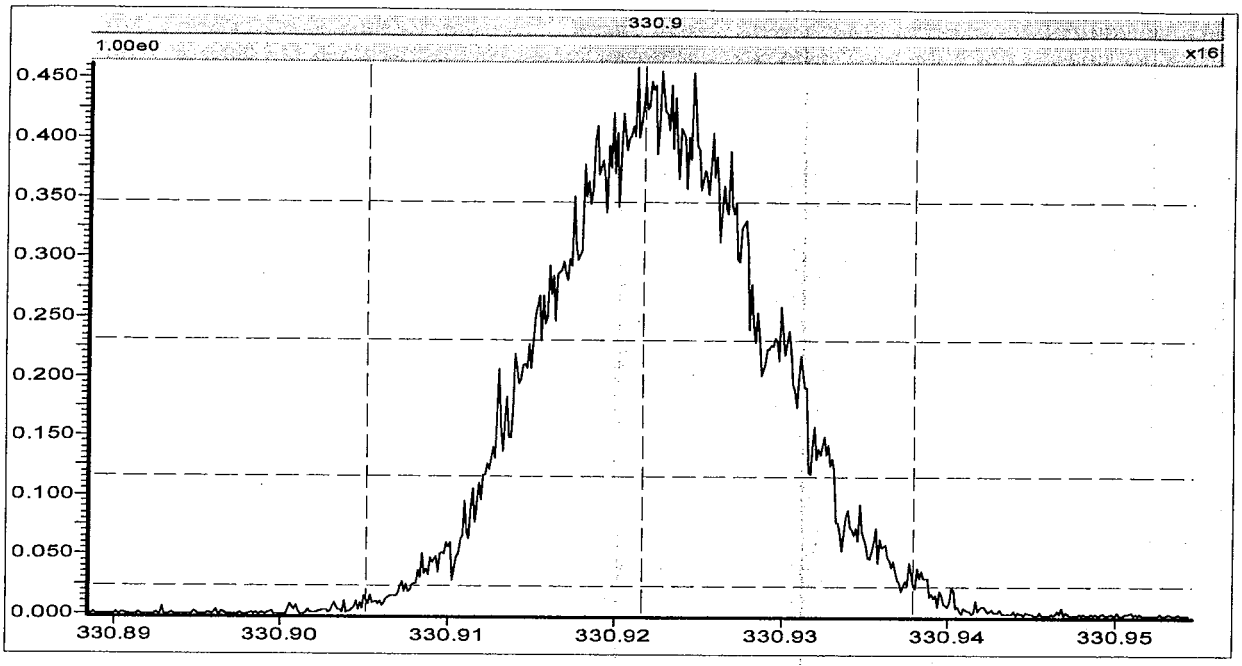
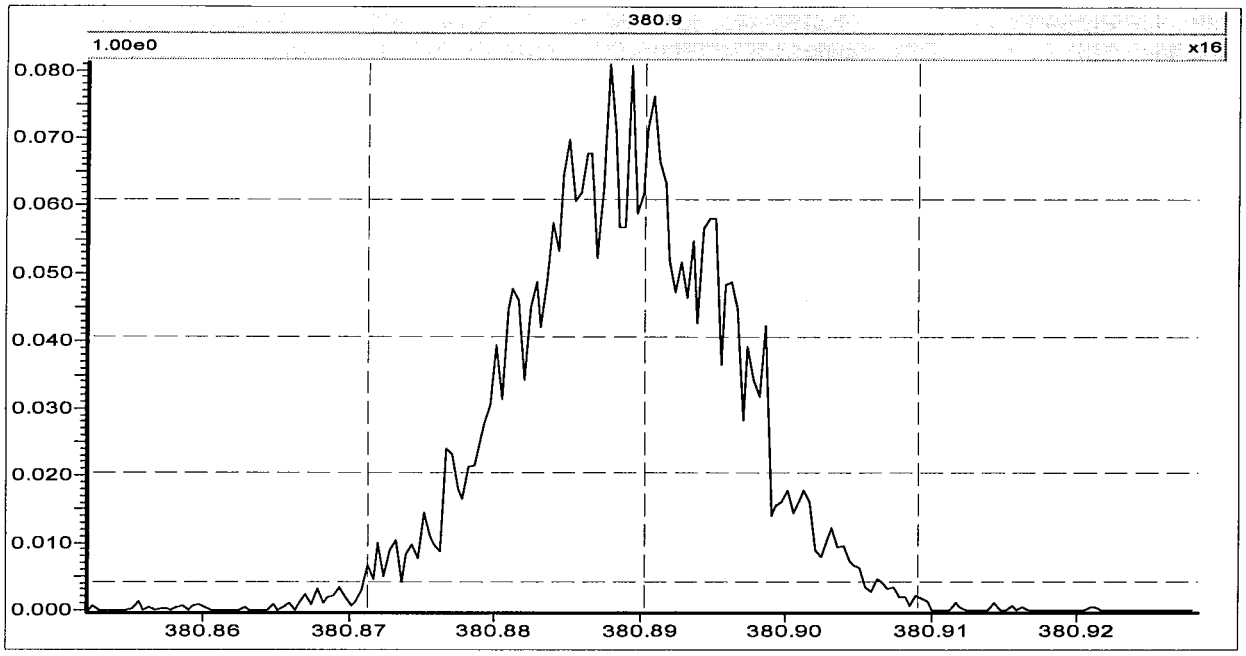


Source (EI+)

Ion Repeller (V)	-9.42
Focus 1	797
Beam Centre	-74.5
Focus 2	4219
Temperature (C)	280
Elec Energy (eV)	35.0
Trap Current (uA)	500.0
Y Deflect 1	-102.7
Z Deflect 1	-46.1
Z Deflect 2	-24.7
Z Focus 2	2392
Z Focus 3	0
Z Deflect 3	23.9
Y Focus	3286
Rotate 2	10.5
Curve 2	-4.7
Curve 3	-8.2
Rotate 3	-25.8
Rotate 4	1.4
V Acc (V)	6498.30
Magnet Mass	330.9
Source Slit	27.00
Collector Slit	12.94
MIKES Slit	100.00
Alpha	75.00
Detector Voltage	350
Ion Energy	-6.10
Z4 Restrictor	Off
Vacc Limit	8000

Analyser
No information

Engineer
No information



Source (EI+)

Ion Repeller (V)	-9.42
Focus 1	797
Beam Centre	-74.5
Focus 2	4219
Temperature (C)	280
Elec Energy (eV)	35.0
Trap Current (uA)	500.0
Y Deflect 1	-102.7
Z Deflect 1	-46.1
Z Deflect 2	-24.7
Z Focus 2	2392
Z Focus 3	0
Z Deflect 3	23.9
Y Focus	3286
Rotate 2	10.5
Curve 2	-4.7
Curve 3	-8.2
Rotate 3	-25.8
Rotate 4	1.4
V Acc (V)	6498.30
Magnet Mass	330.9
Source Slit	27.00
Collector Slit	12.94
MIKES Slit	100.00
Alpha	75.00
Detector Voltage	350
Ion Energy	-6.10
Z4 Restrictor	Off
Vacc Limit	8000

Analyser
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Engineer
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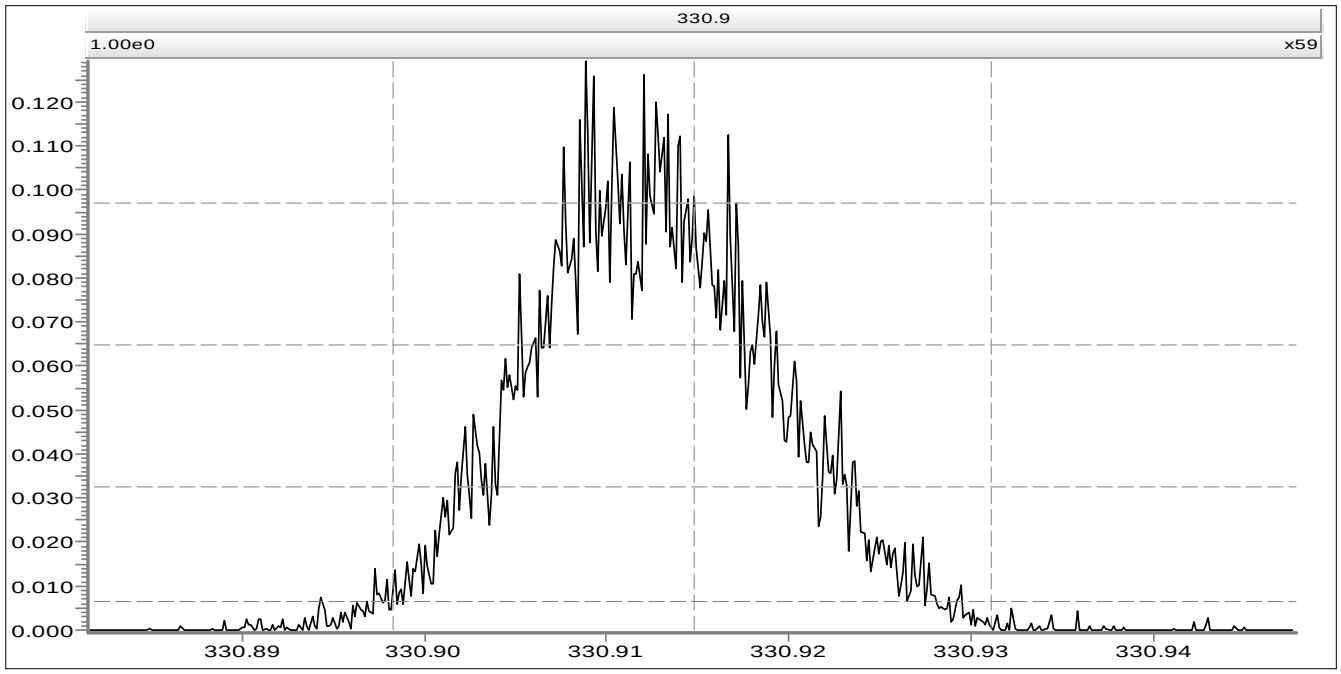

Source (EI+)

Ion Repeller (V)	-7.90
Focus 1	586
Beam Centre	-49.7
Focus 2	4047
Temperature (C)	280
Elec Energy (eV)	35.0
Trap Current (uA)	500.0
Y Deflect 1	-112.9
Z Deflect 1	-42.2
Z Deflect 2	-32.4
Z Focus 2	2360
Z Focus 3	0
Z Deflect 3	16.6
Y Focus	3037
Rotate 2	12.1
Curve 2	-10.7
Curve 3	-8.0
Rotate 3	-25.3
Rotate 4	0.7
V Acc (V)	6494.20
Magnet Mass	330.9
Source Slit	28.50
Collector Slit	13.22
MIKES Slit	100.00
Alpha	80.00
Detector Voltage	350
Ion Energy	-6.10
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

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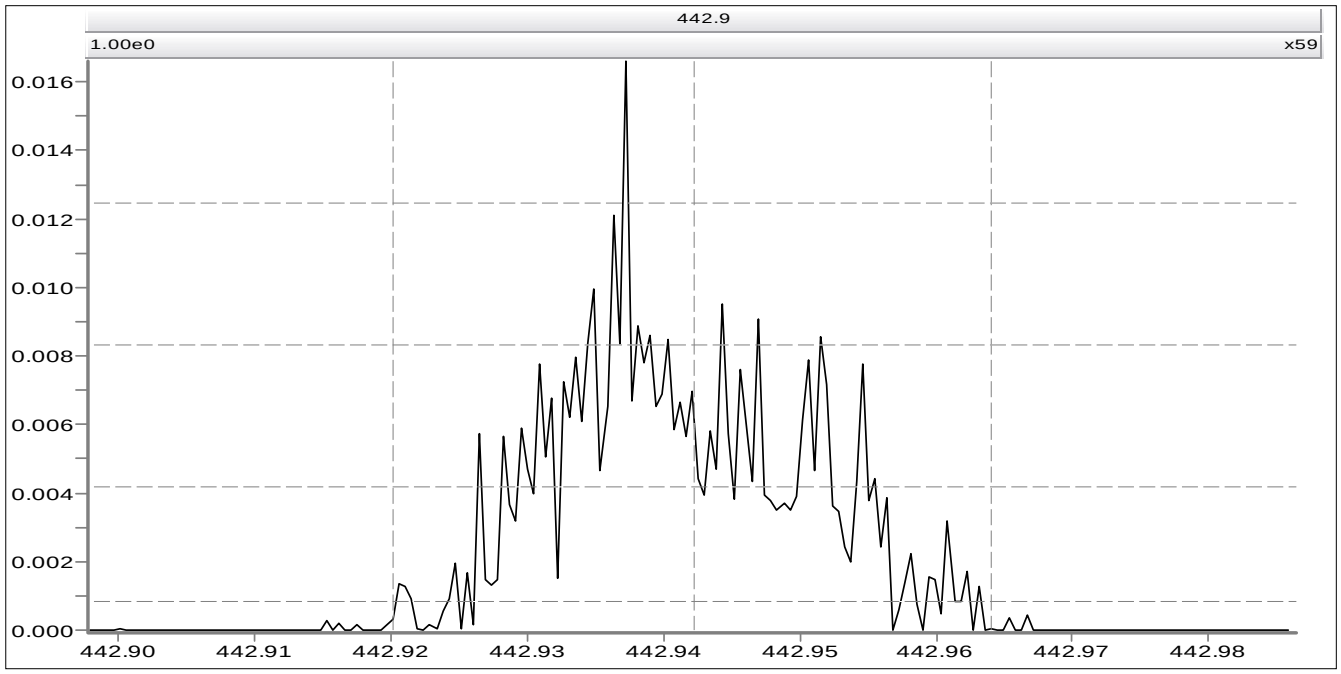

Source (EI+)

Ion Repeller (V)	-7.90
Focus 1	586
Beam Centre	-49.7
Focus 2	4047
Temperature (C)	280
Elec Energy (eV)	35.0
Trap Current (uA)	500.0
Y Deflect 1	-112.9
Z Deflect 1	-42.2
Z Deflect 2	-32.4
Z Focus 2	2360
Z Focus 3	0
Z Deflect 3	16.6
Y Focus	3037
Rotate 2	12.1
Curve 2	-10.7
Curve 3	-8.0
Rotate 3	-25.3
Rotate 4	0.7
V Acc (V)	6494.20
Magnet Mass	330.9
Source Slit	28.50
Collector Slit	13.22
MIKES Slit	100.00
Alpha	80.00
Detector Voltage	350
Ion Energy	-6.10
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

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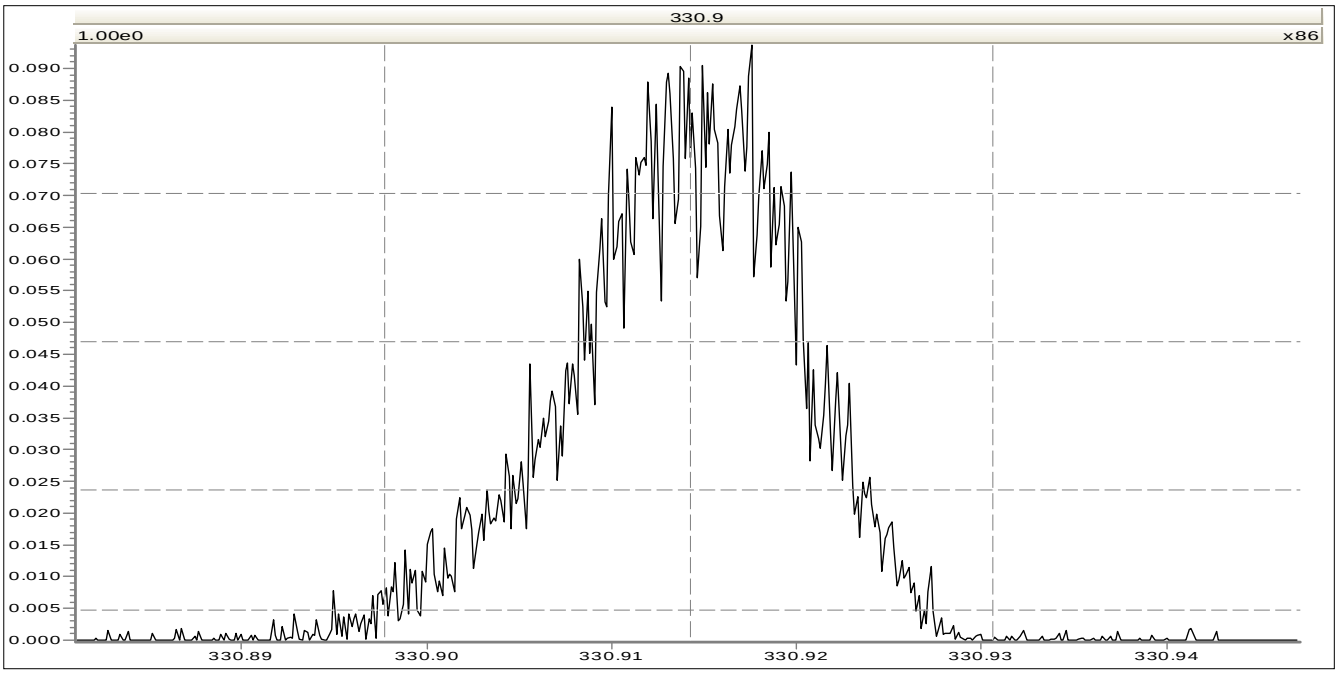

Source (EI+)

Ion Repeller (V)	-9.96
Focus 1	843
Beam Centre	37.3
Focus 2	4272
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-101.7
Z Deflect 1	-12.9
Z Deflect 2	-3.9
Z Focus 2	2338
Z Focus 3	0
Z Deflect 3	23.4
Y Focus	3492
Rotate 2	5.0
Curve 2	-4.1
Curve 3	0.8
Rotate 3	-40.5
Rotate 4	1.2
V Acc (V)	6495.96
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

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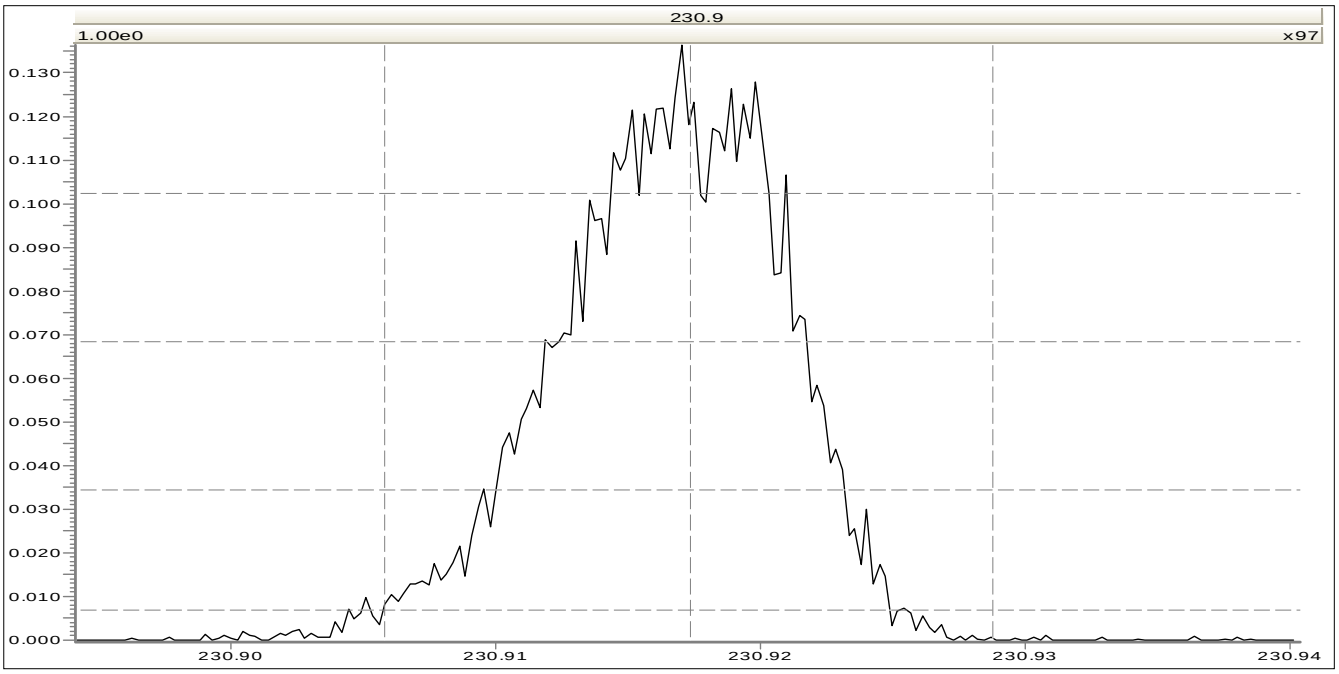

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.74
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

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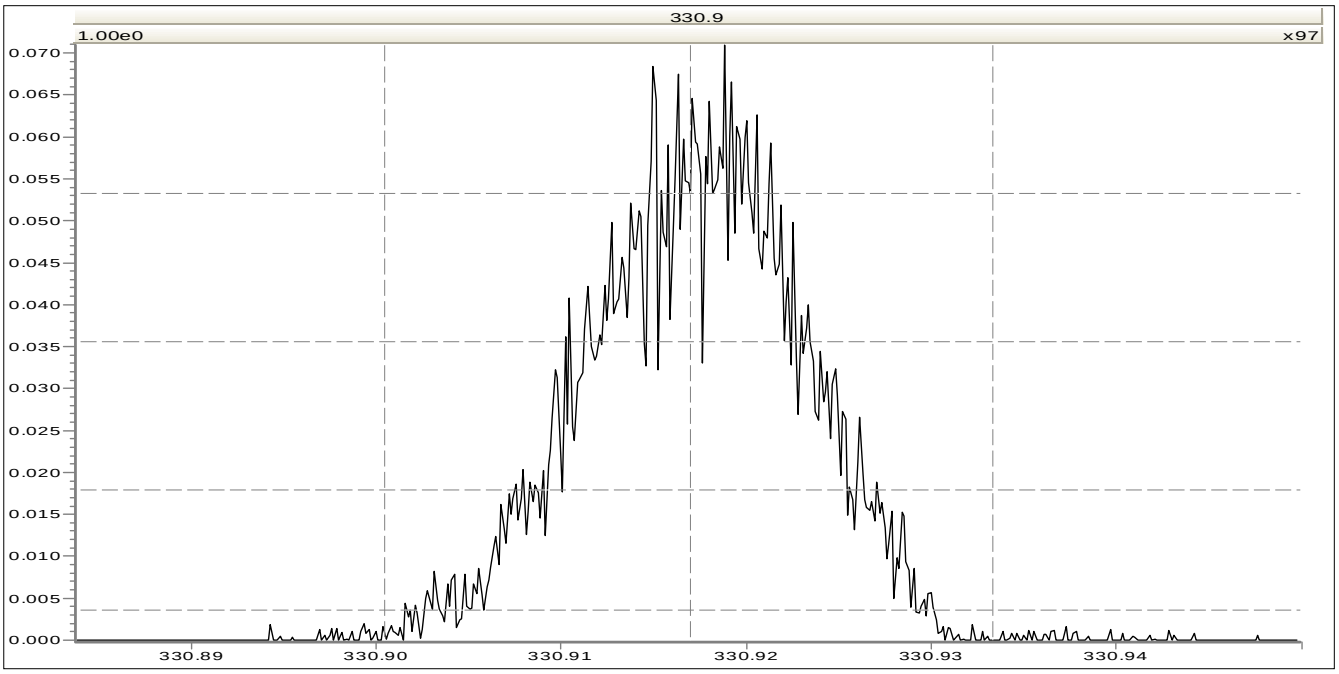

Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6495.92
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

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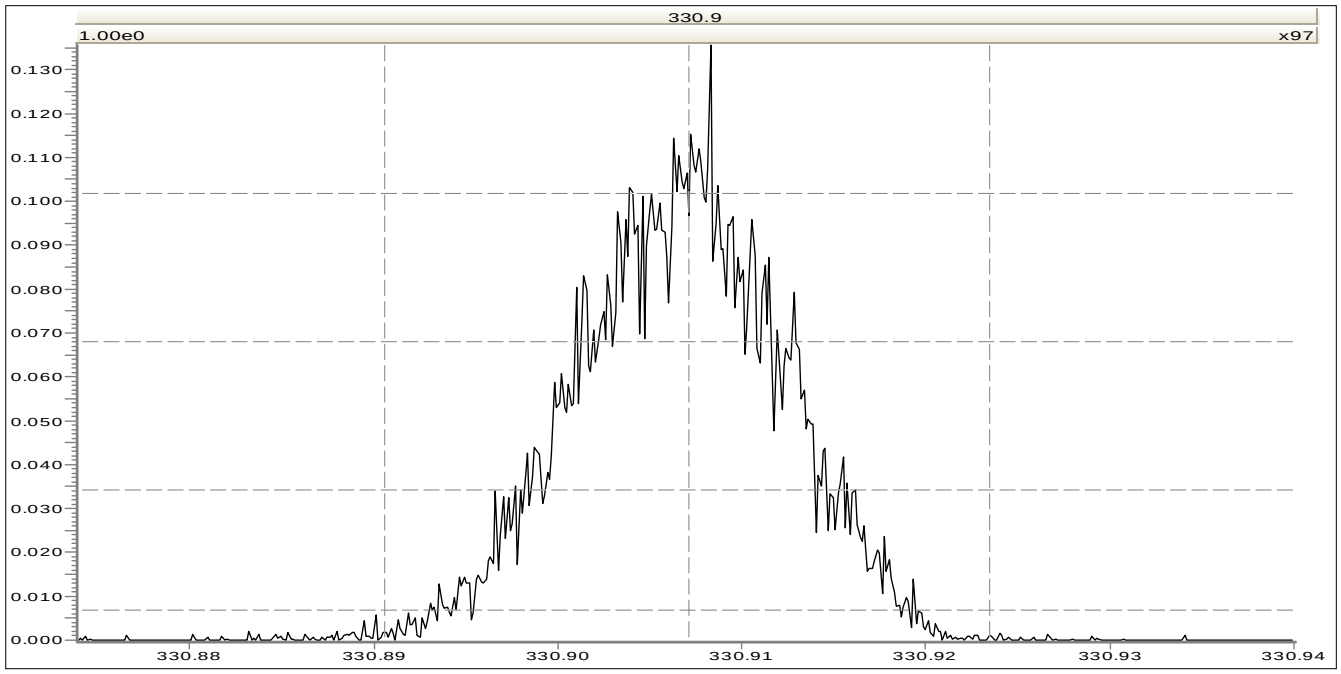


Source (EI+)

Ion Repeller (V)	-9.82
Focus 1	845
Beam Centre	36.7
Focus 2	4282
Temperature (C)	280
Elec Energy (eV)	35.2
Trap Current (uA)	500.0
Y Deflect 1	-104.8
Z Deflect 1	-8.4
Z Deflect 2	-4.9
Z Focus 2	2343
Z Focus 3	0
Z Deflect 3	30.6
Y Focus	3542
Rotate 2	4.0
Curve 2	-5.9
Curve 3	2.1
Rotate 3	-41.2
Rotate 4	1.2
V Acc (V)	6496.11
Magnet Mass	330.9
Source Slit	20.36
Collector Slit	12.92
MIKES Slit	100.00
Alpha	65.00
Detector Voltage	350
Ion Energy	17.60
Z4 Restrictor	Off
Vacc Limit	8000

Analyser

No information

Engineer

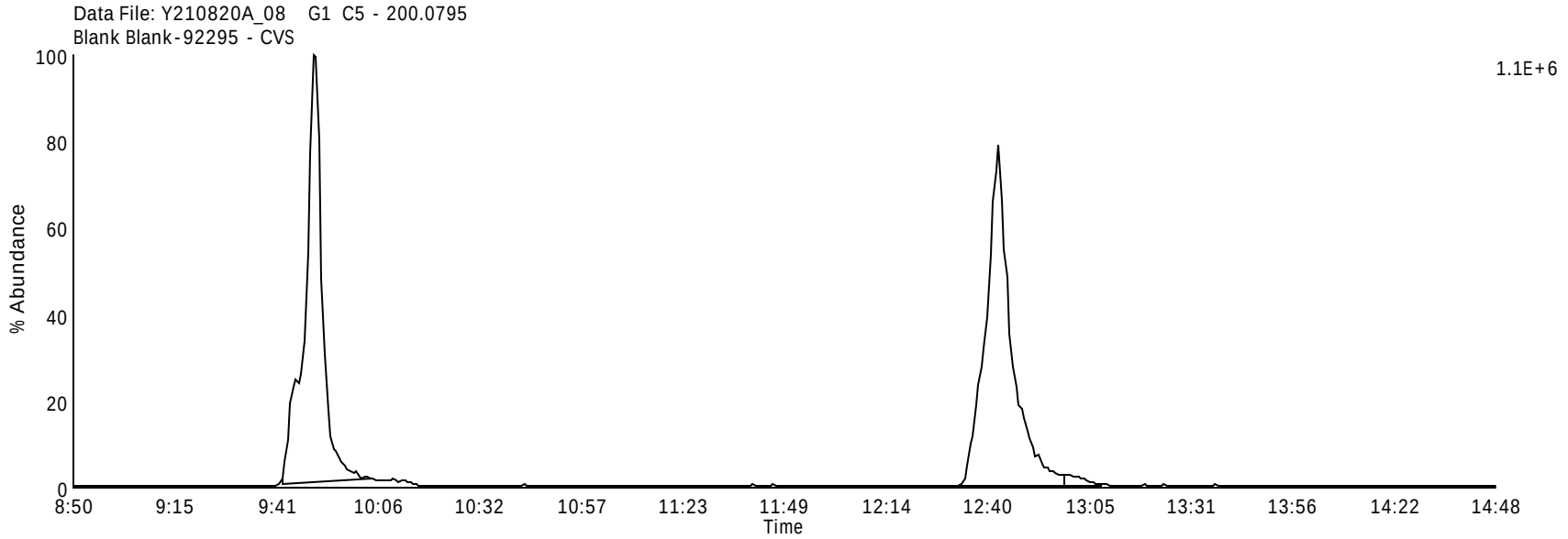
No information

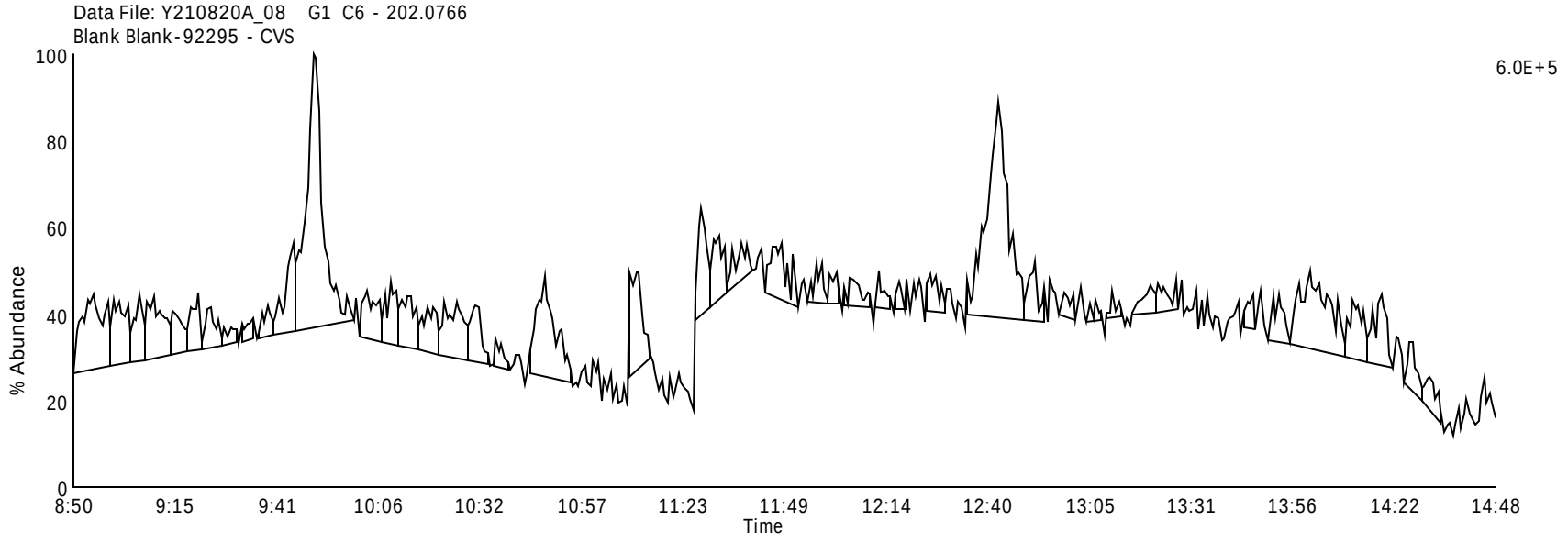
Appendix F

QC Raw Data

Labeled Mono Chlorinated Biphenyls

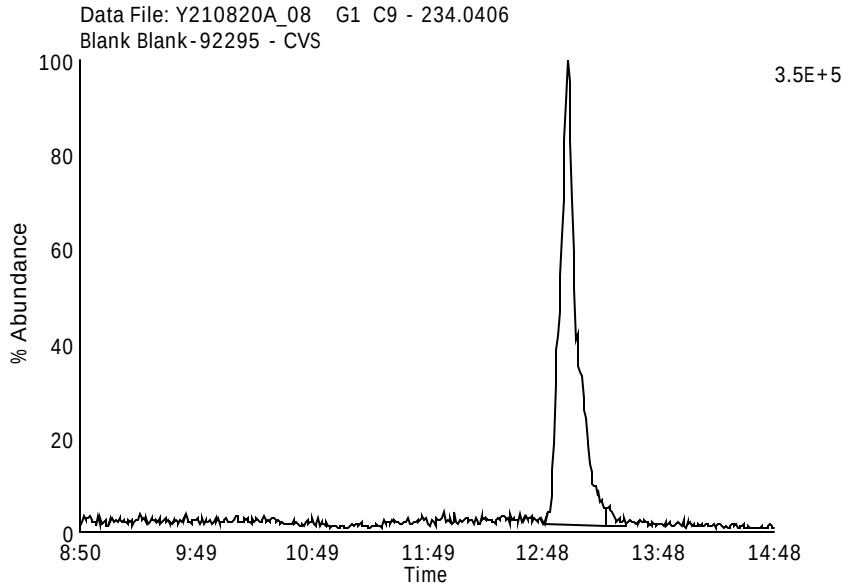
Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ

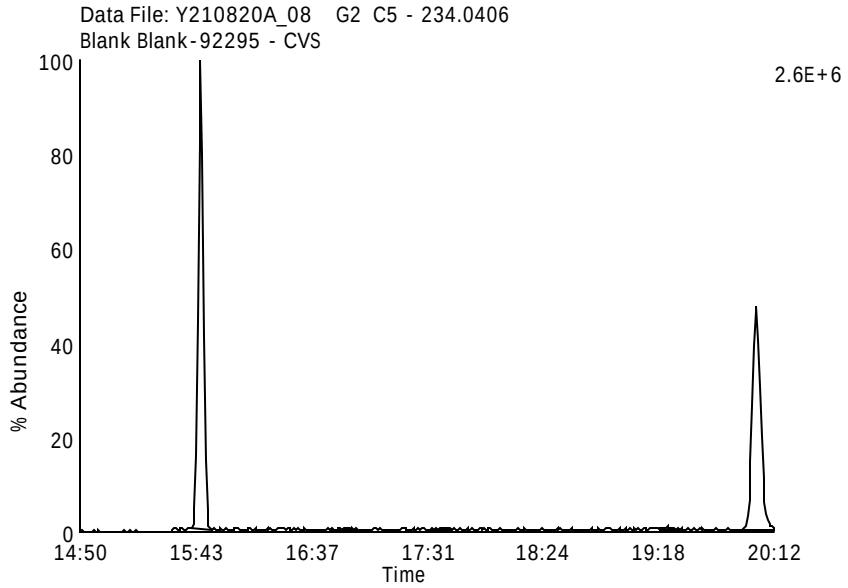


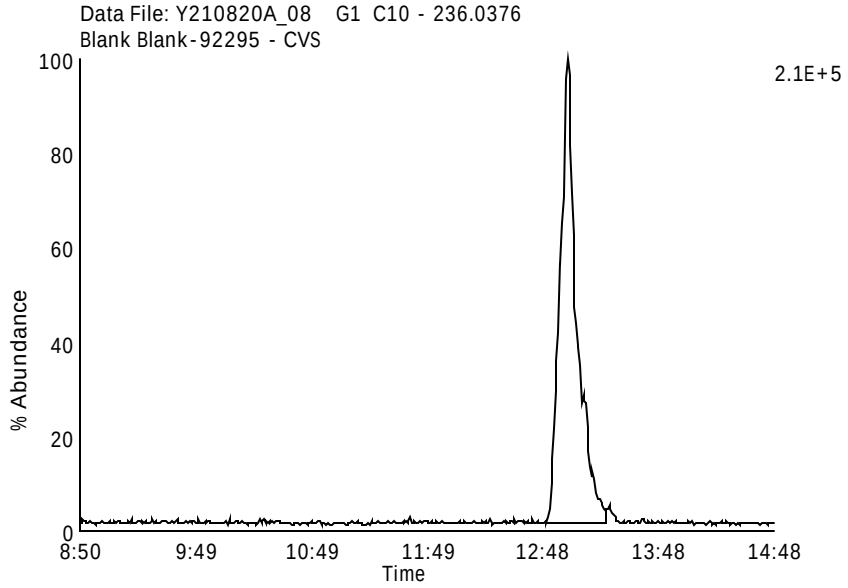


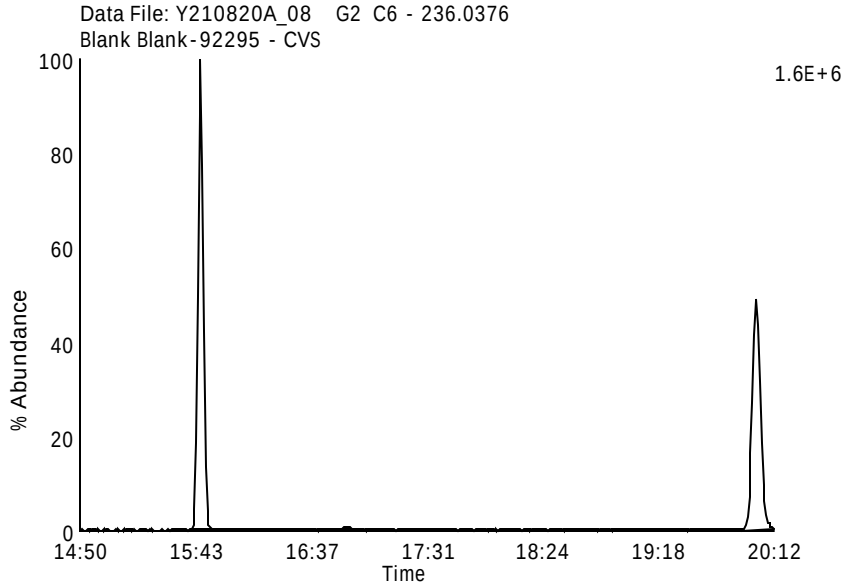
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ



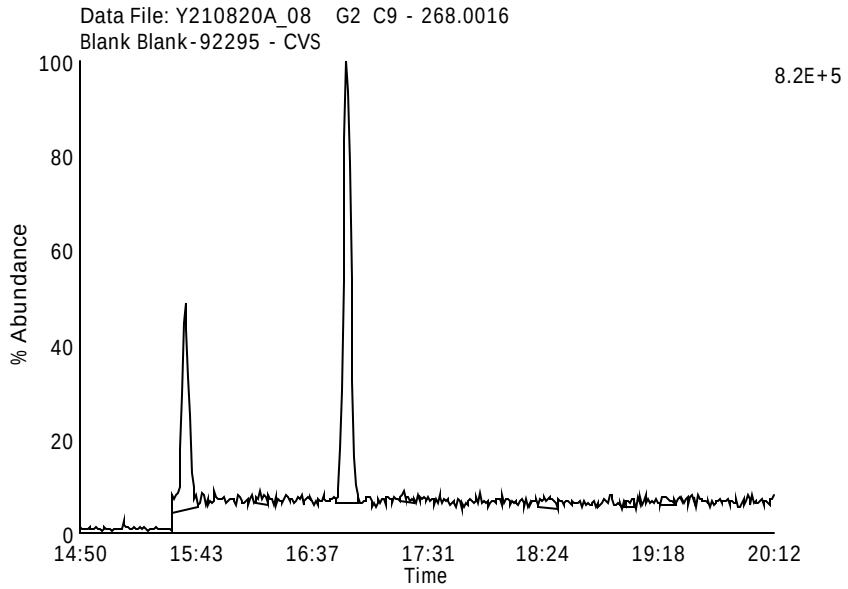


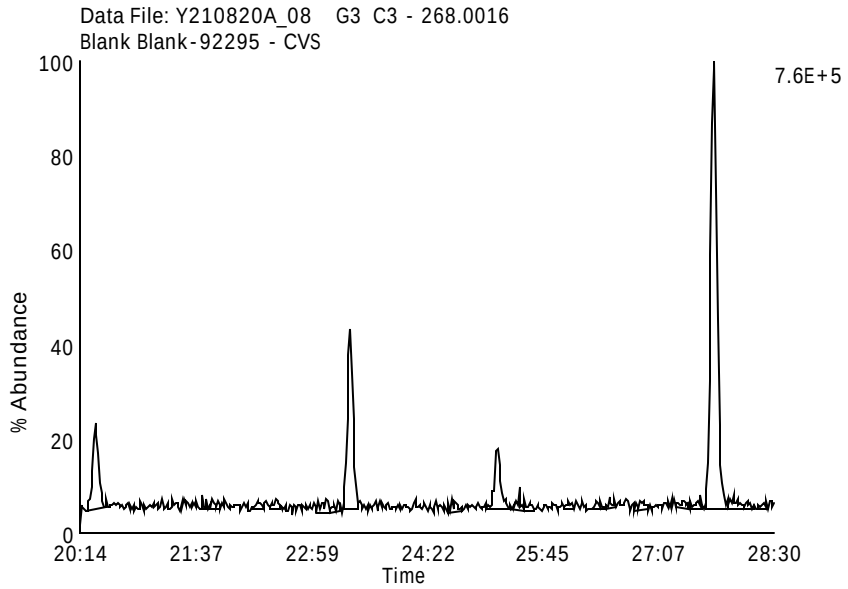


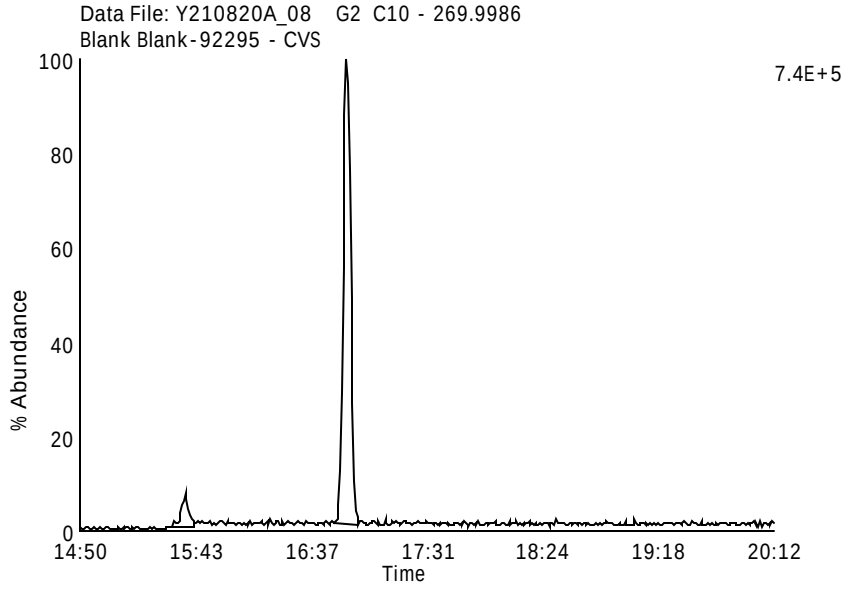


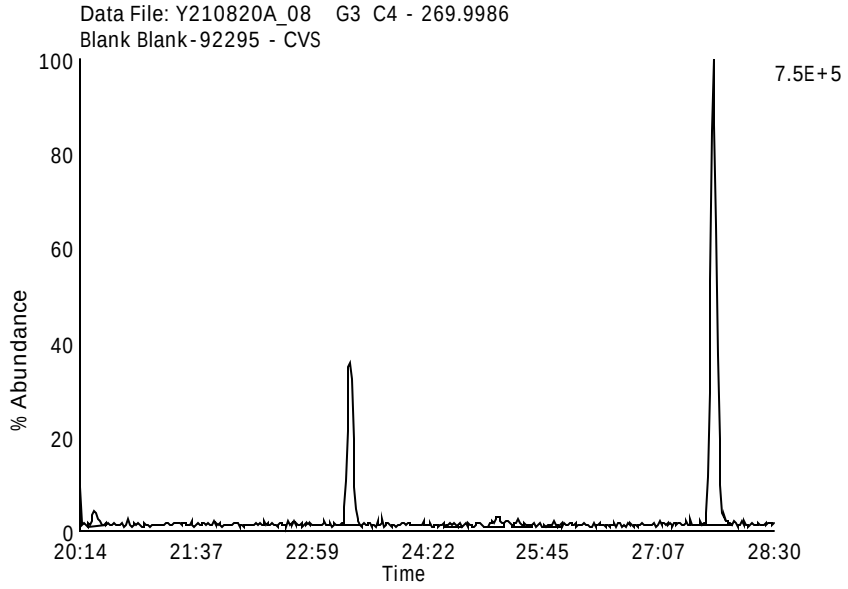
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ





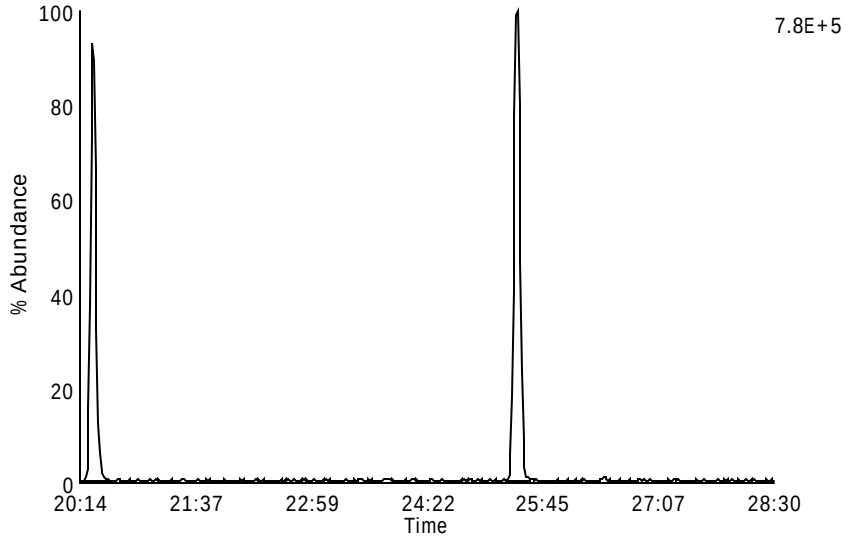




Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ

Data File: Y210820A_08 G3 C9 - 301.9626
Blank Blank-92295 - CVS



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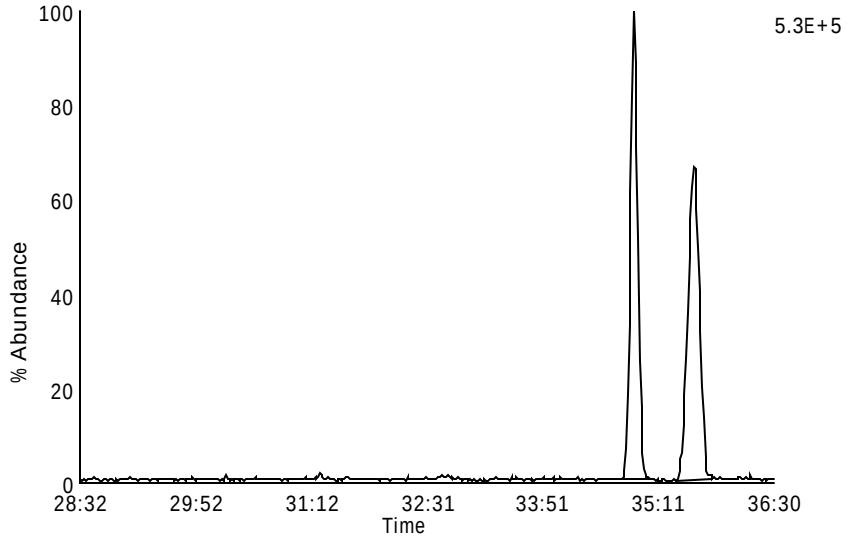

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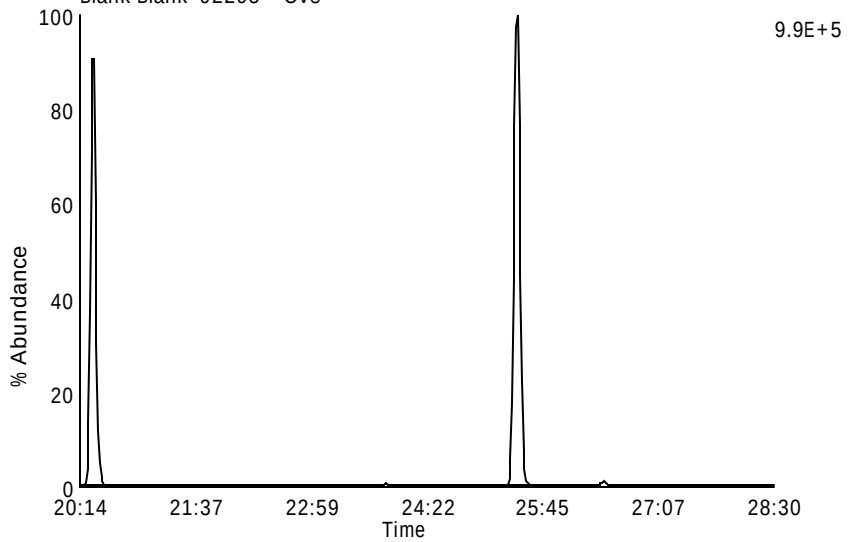

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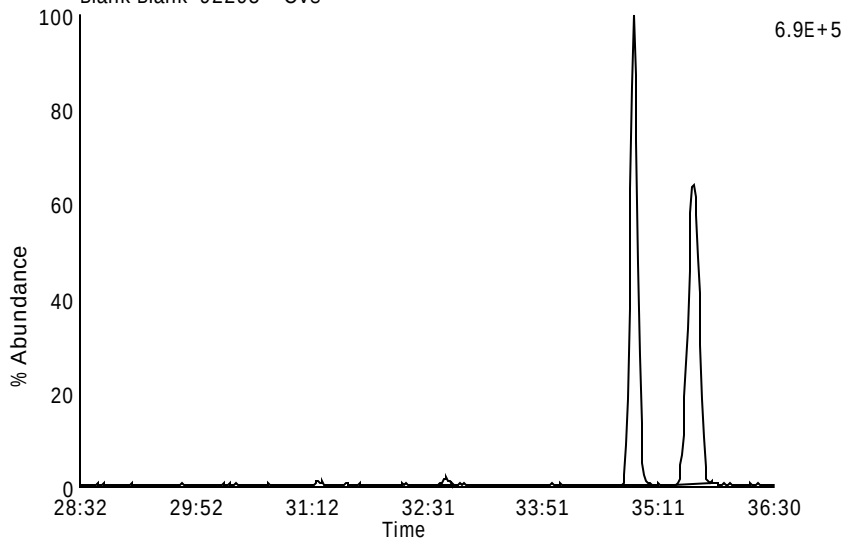
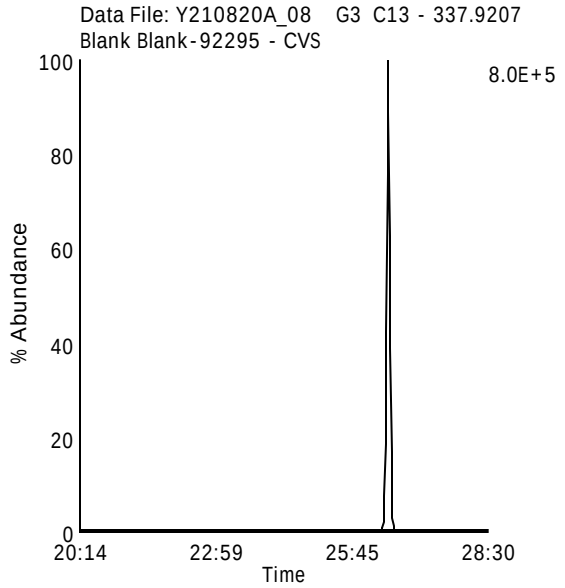
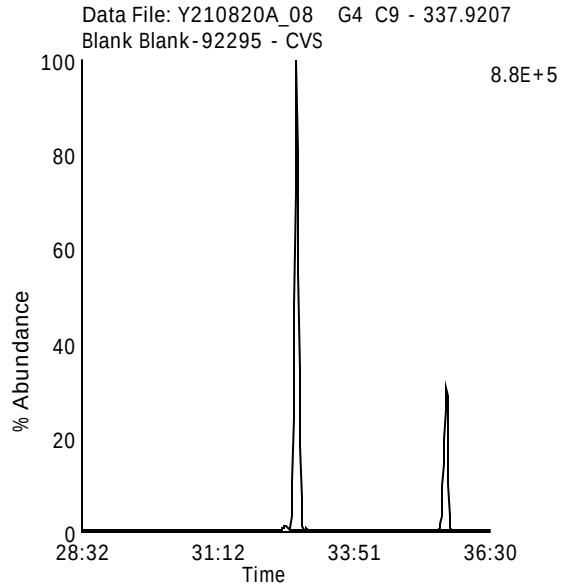
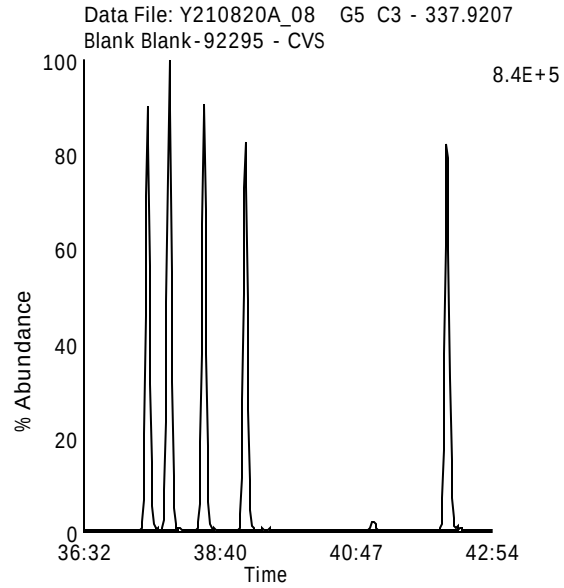


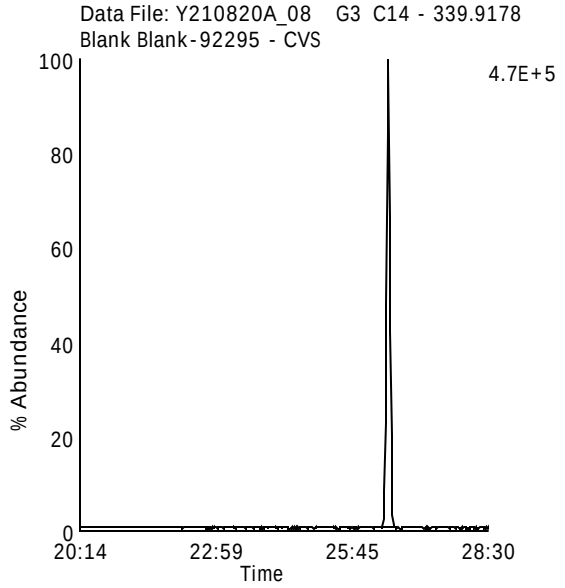
Labeled Penta Chlorinated Biphenyls

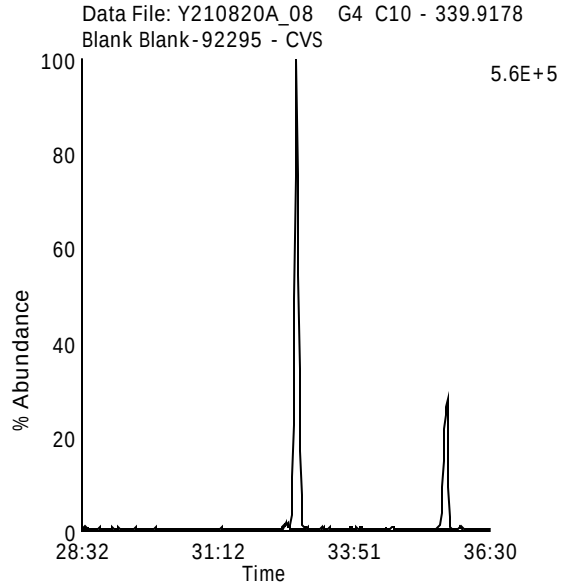
Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ

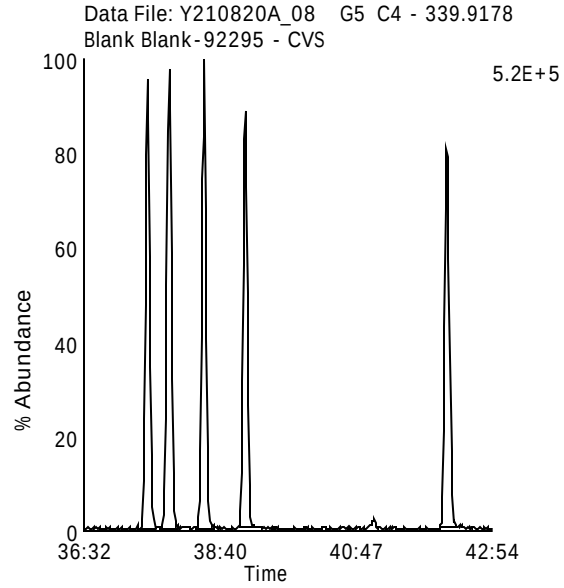








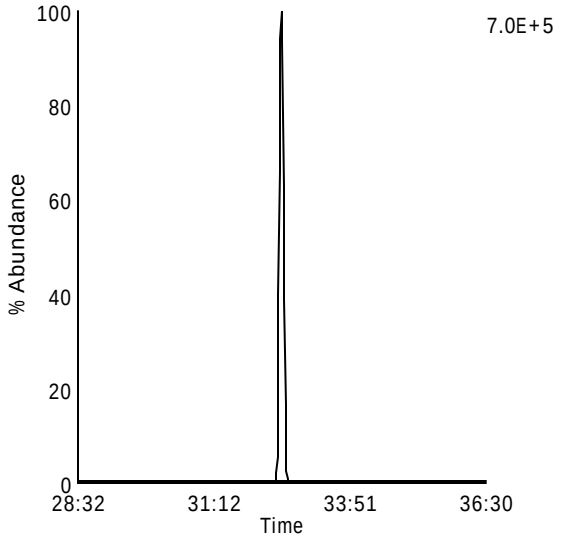




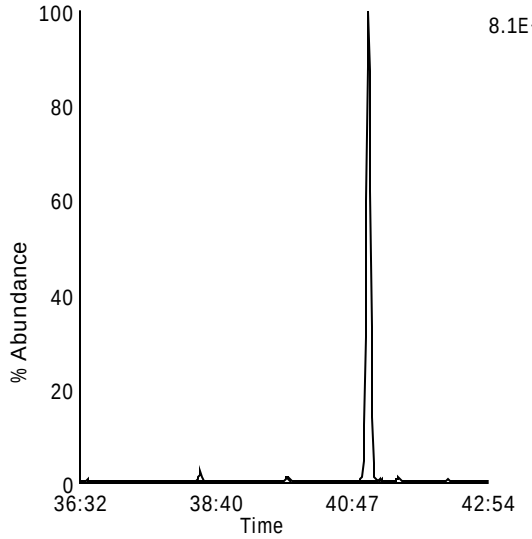
Labeled Hexa Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ

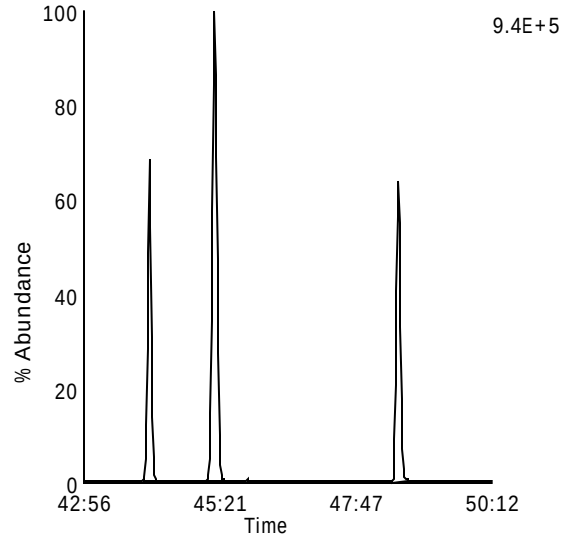
Data File: Y210820A_08 G4 C13 - 371.8817
Blank Blank-92295 - CVS



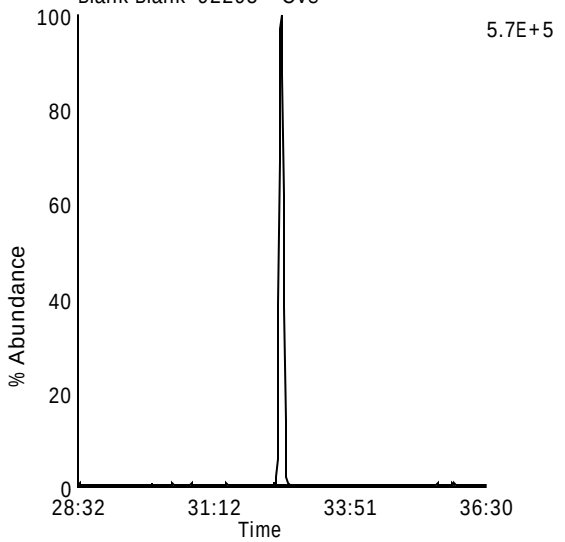
Data File: Y210820A_08 G5 C7 - 371.8817
Blank Blank-92295 - CVS



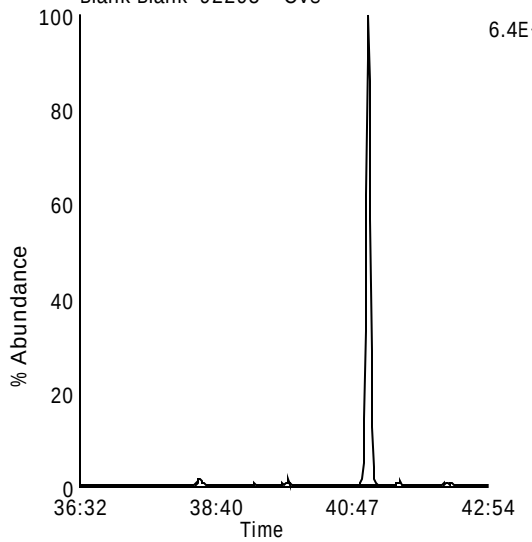
Data File: Y210820A_08 G6 C3 - 371.8817
Blank Blank-92295 - CVS



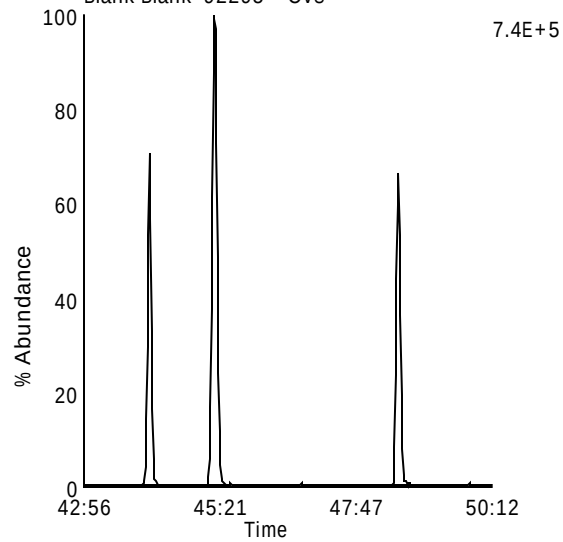
Data File: Y210820A_08 G4 C14 - 373.8788
Blank Blank-92295 - CVS



Data File: Y210820A_08 G5 C8 - 373.8788
Blank Blank-92295 - CVS

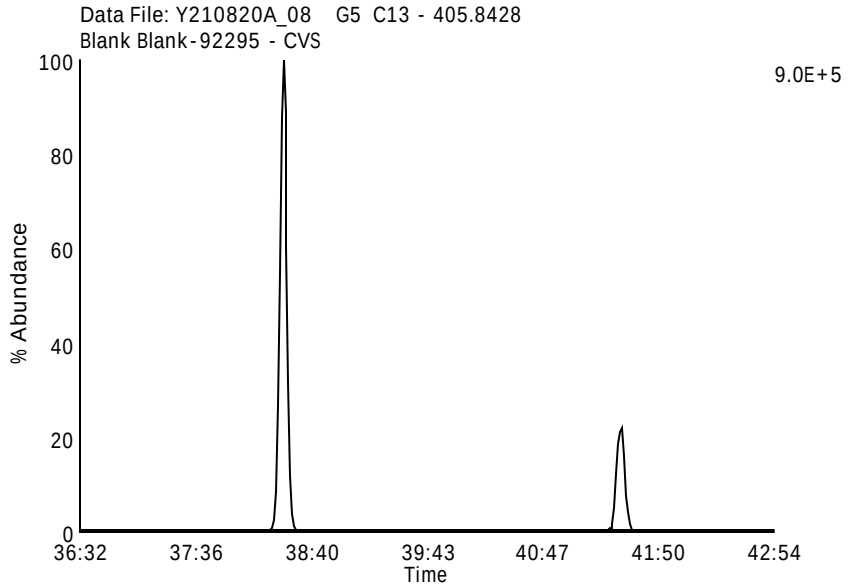


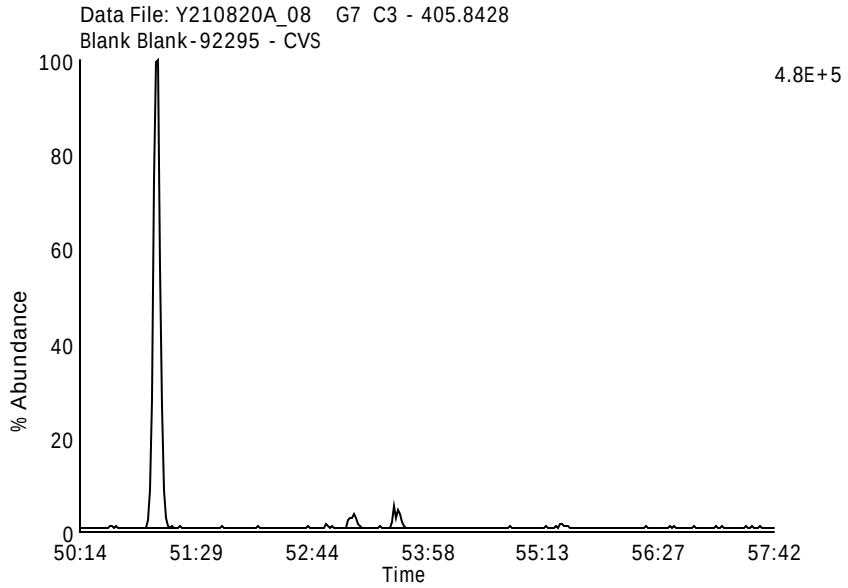
Data File: Y210820A_08 G6 C4 - 373.8788
Blank Blank-92295 - CVS

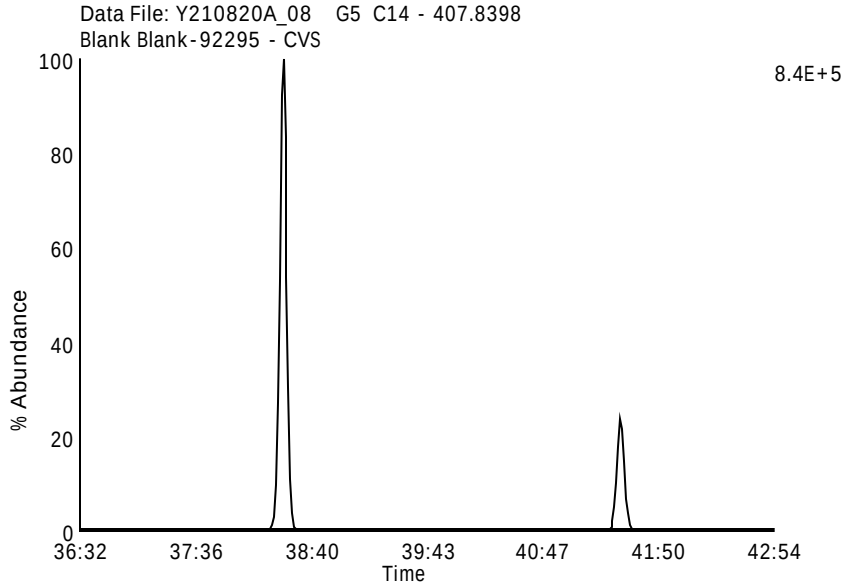


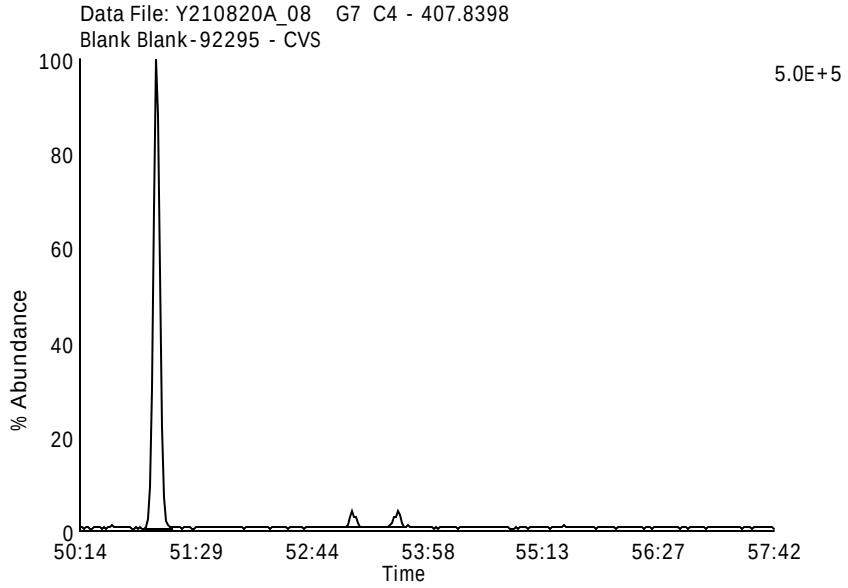
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ



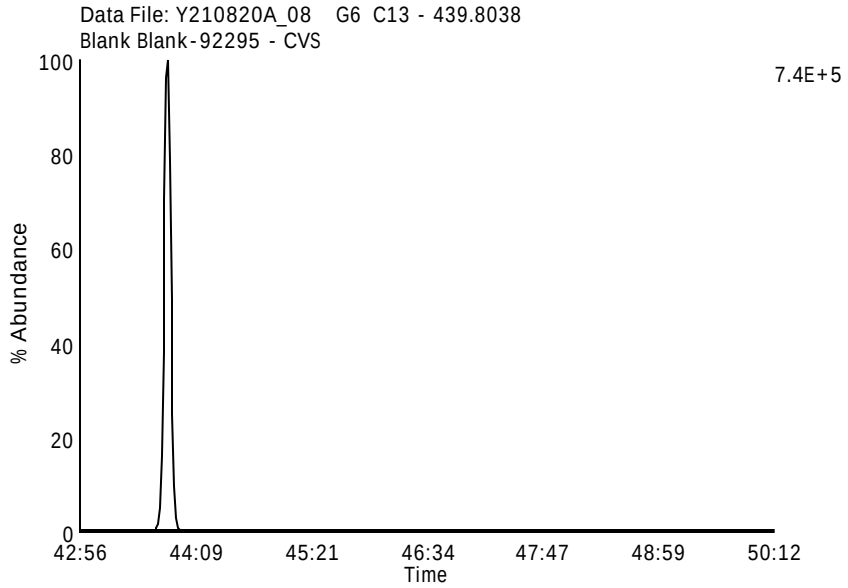


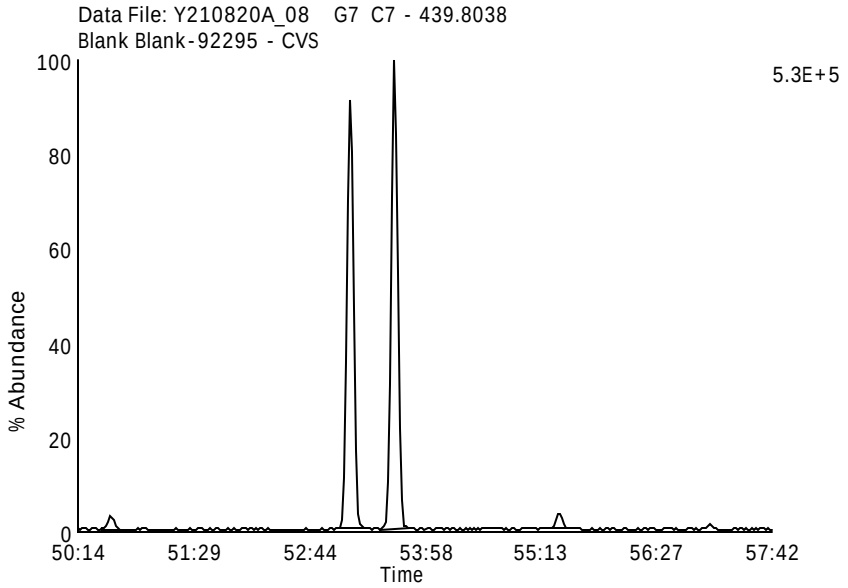


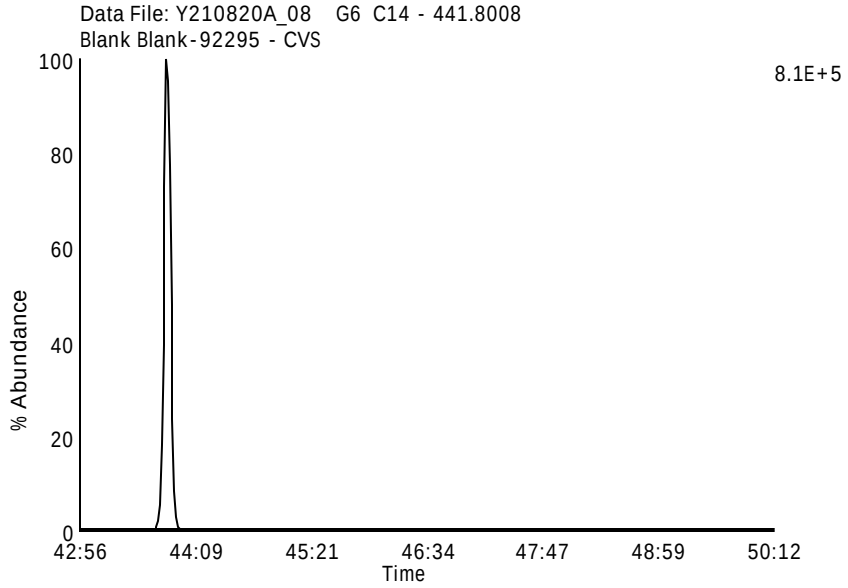


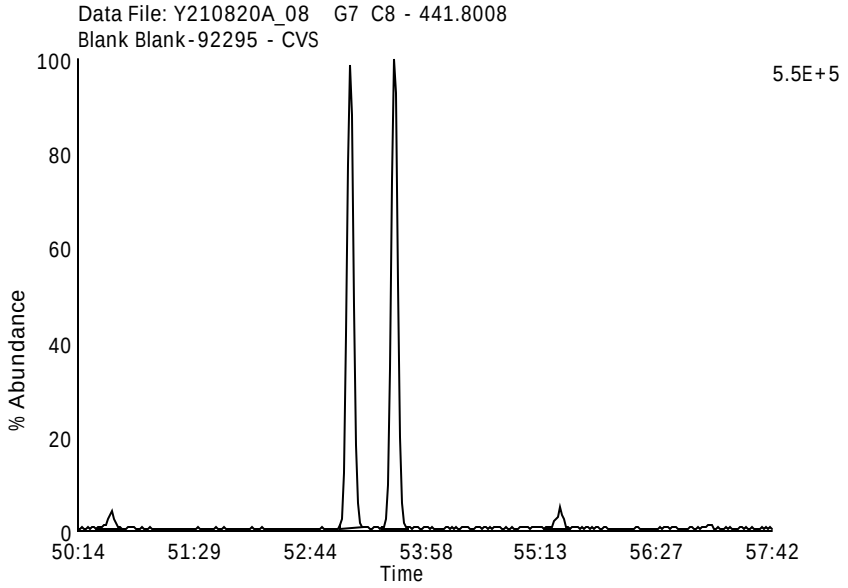
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_08
Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS
Client Sample ID: CBLKIZ



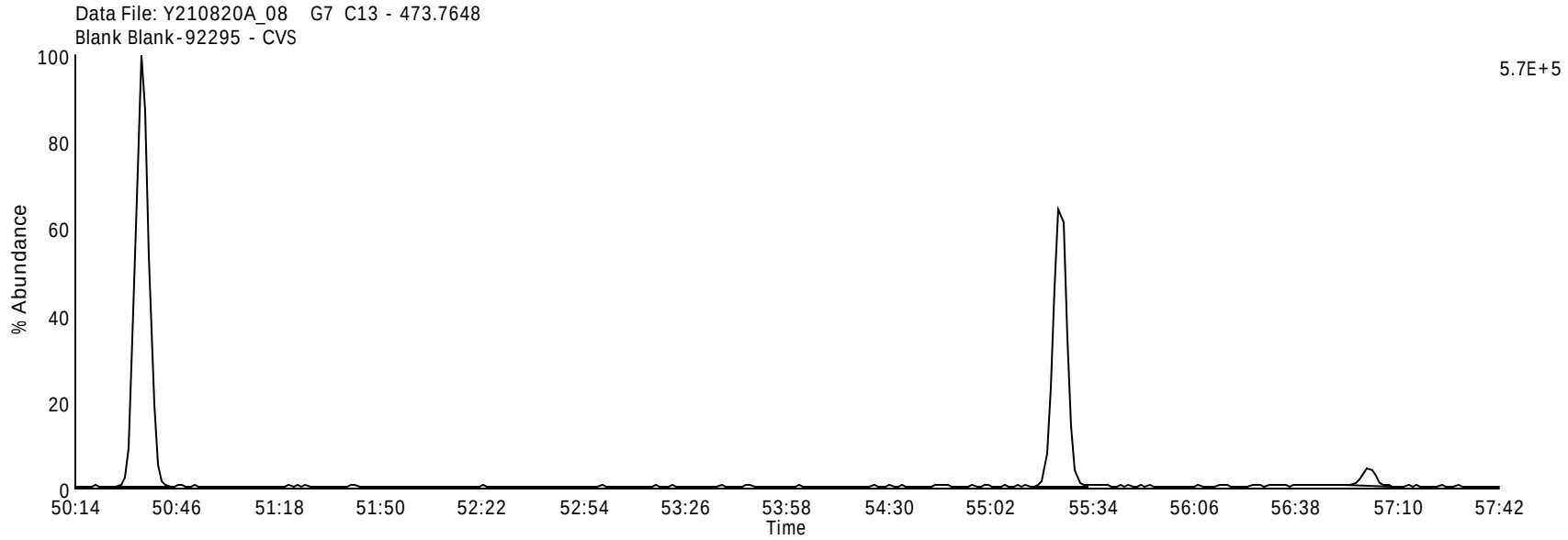


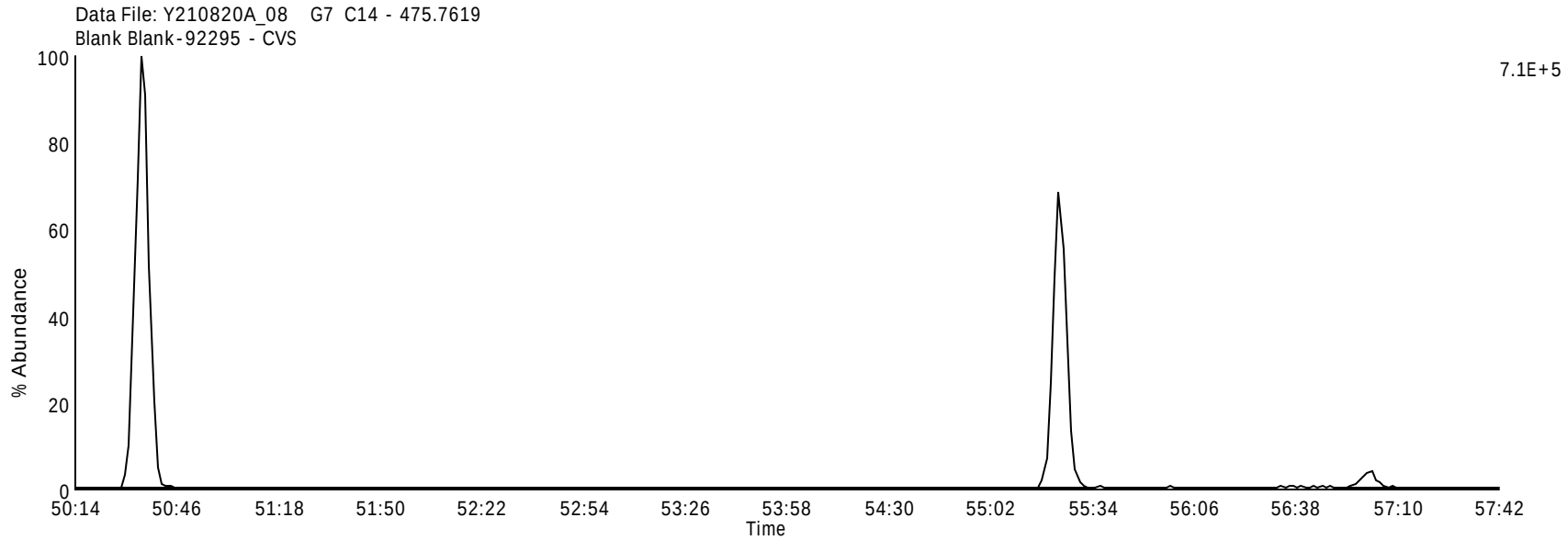




Labeled Nona Chlorinated Biphenyls

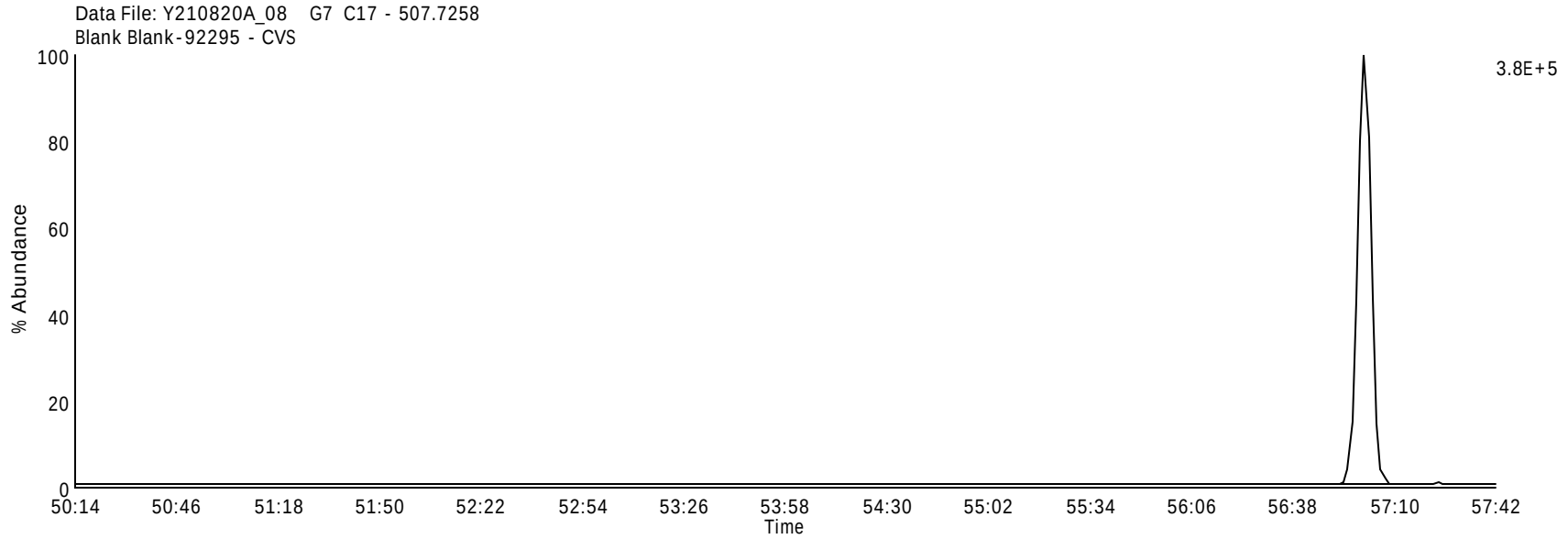
Data File Name: Y210820A_08	Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS	Client Sample ID: CBLKIZ

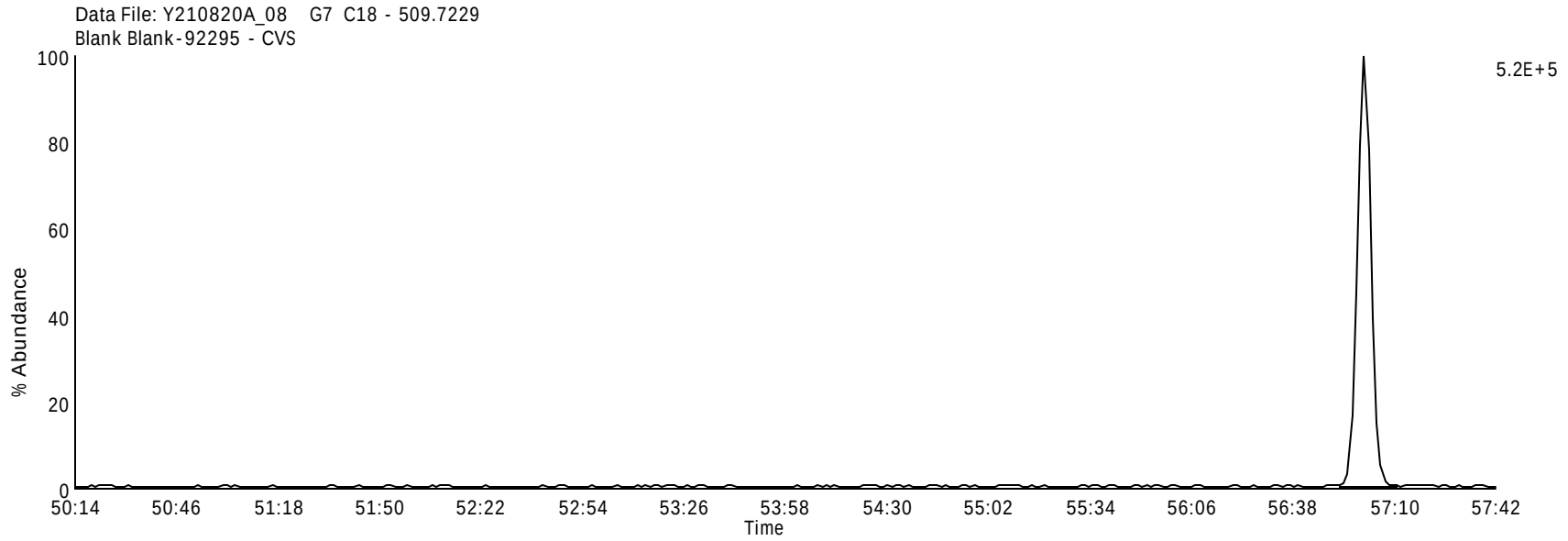




Labeled Deca Chlorinated Biphenyl

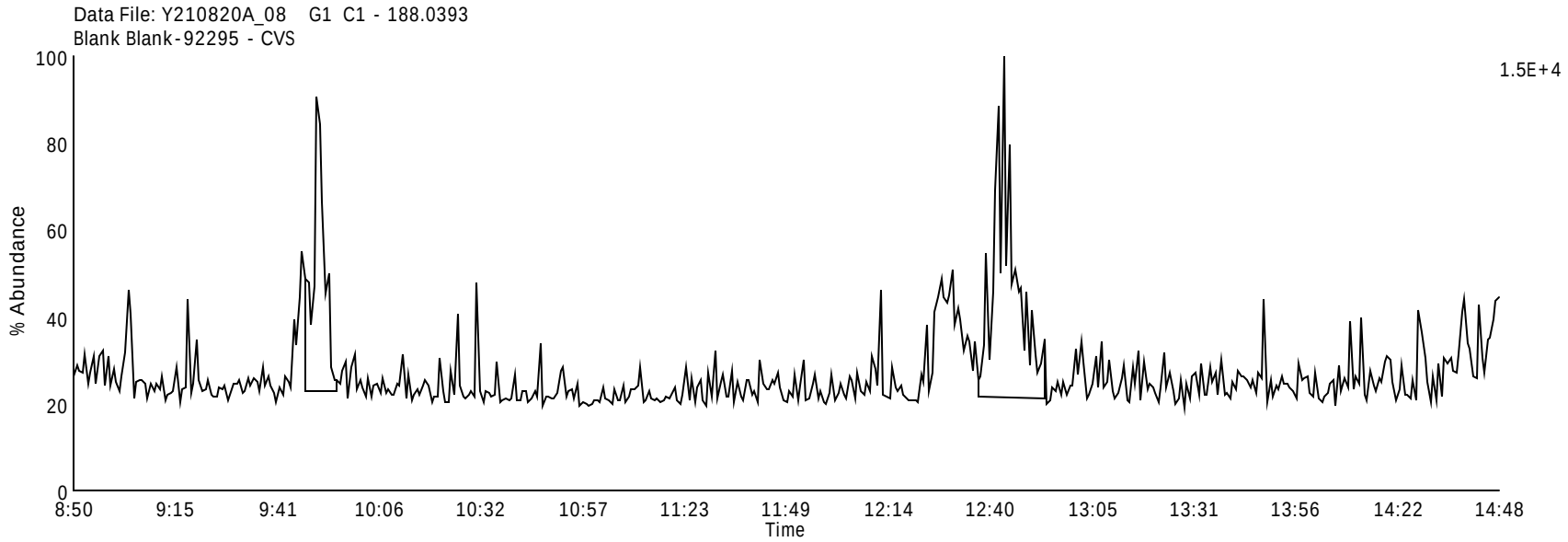
Data File Name: Y210820A_08	Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS	Client Sample ID: CBLKIZ

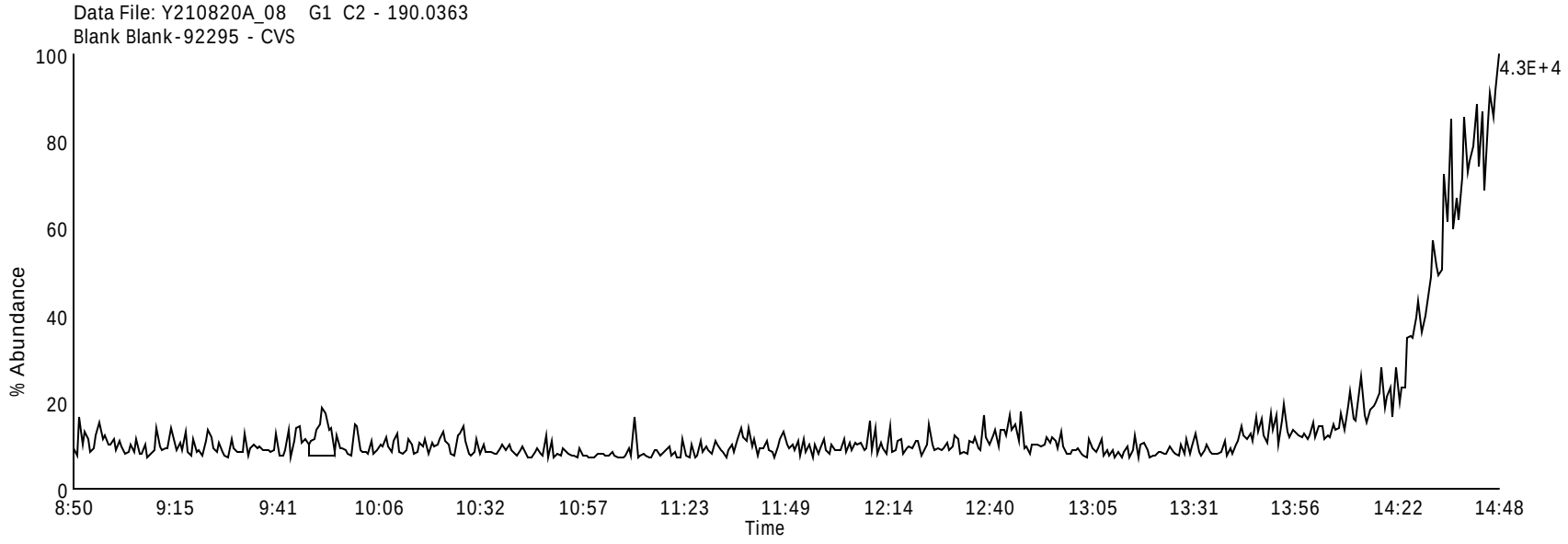




Mono Chlorinated Biphenyls

Data File Name: Y210820A_08	Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS	Client Sample ID: CBLKIZ

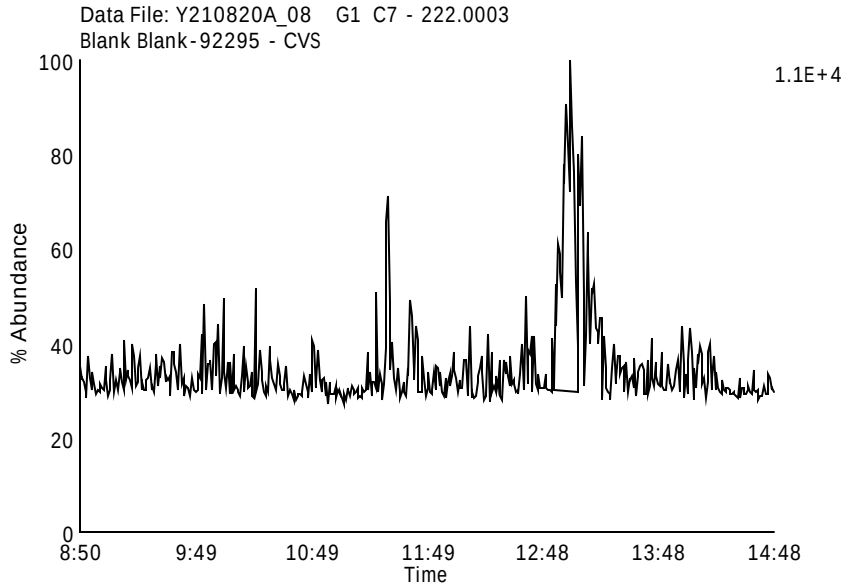


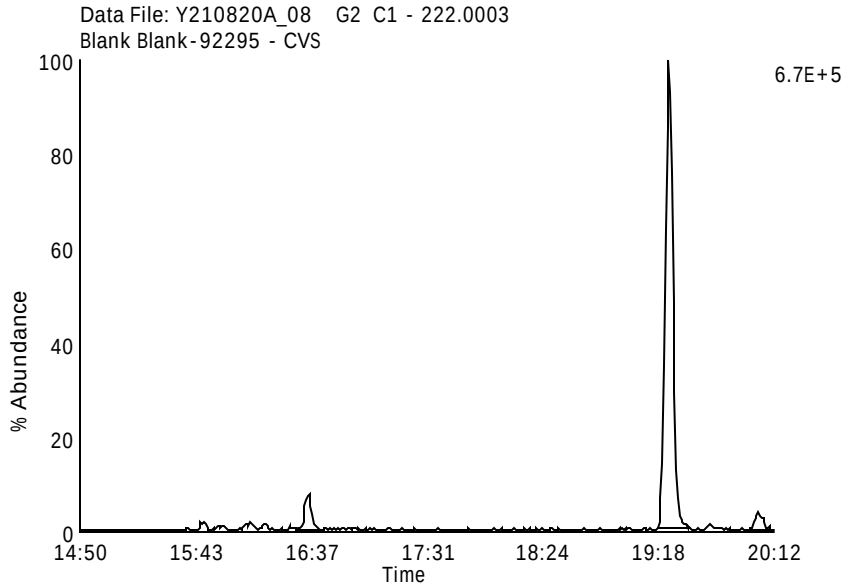


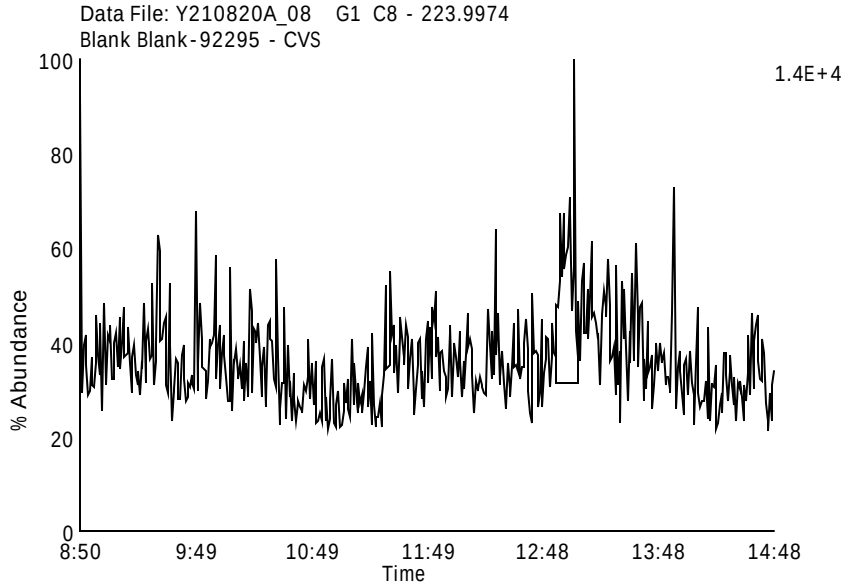
Di Chlorinated Biphenyls

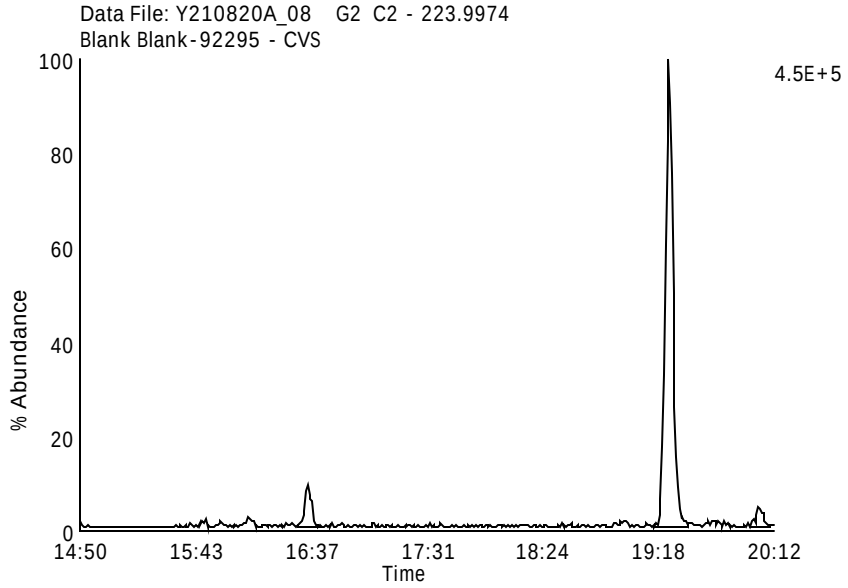
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ





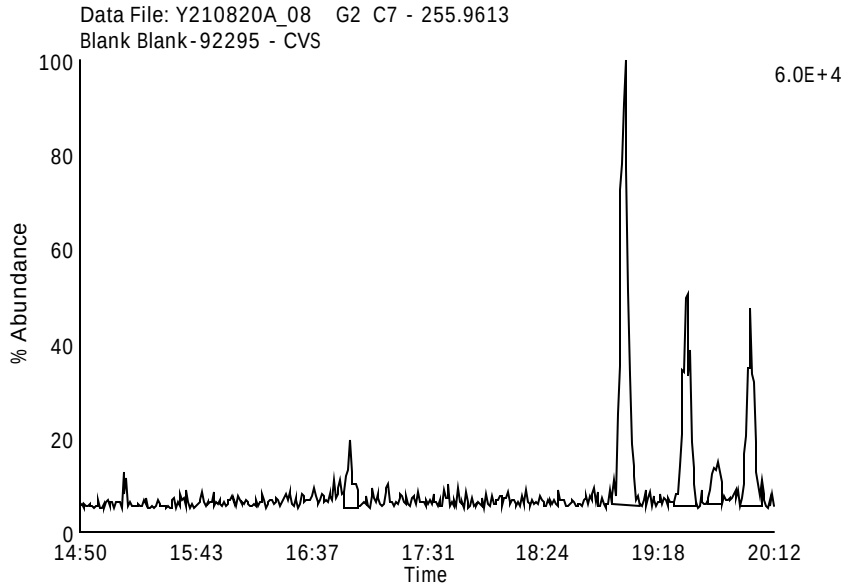


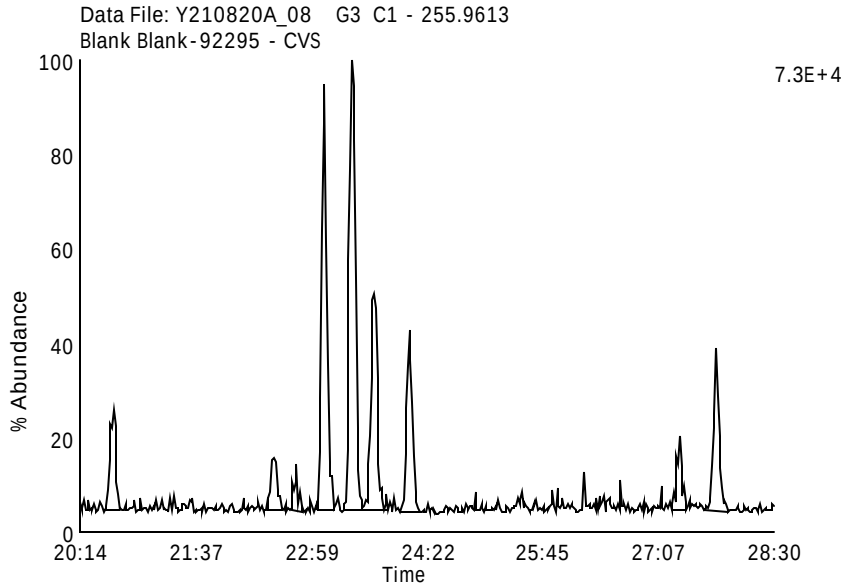


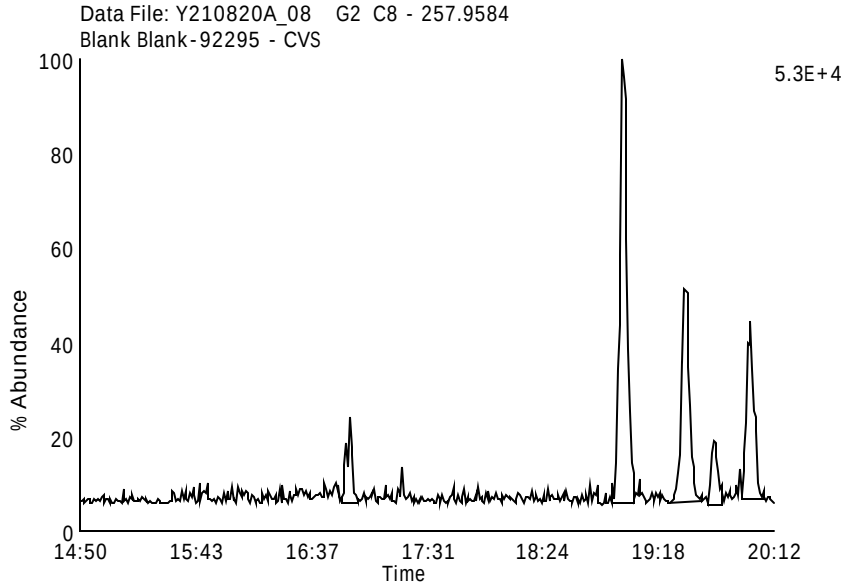
Tri Chlorinated Biphenyls

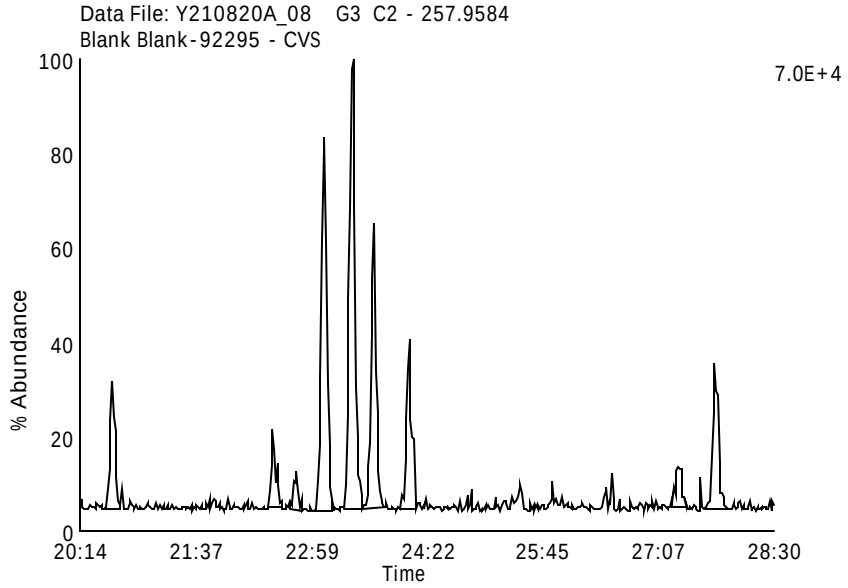
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ





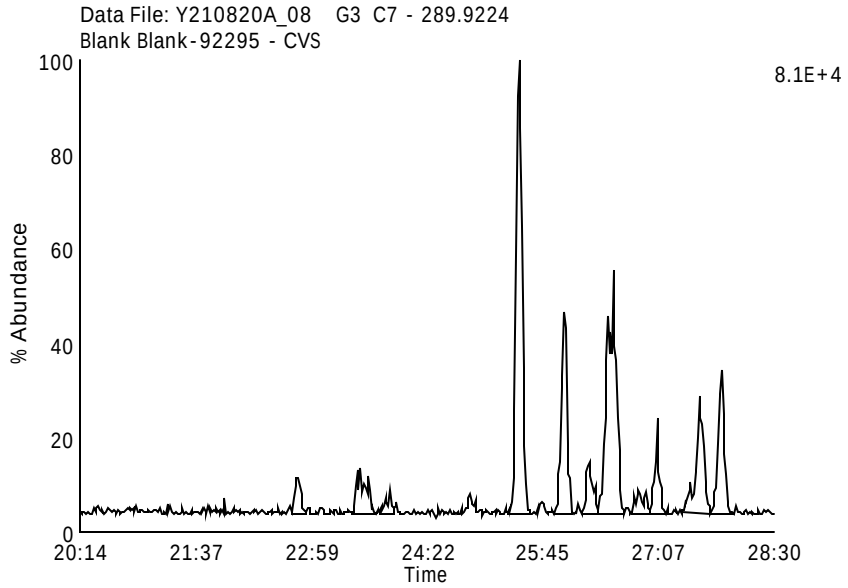


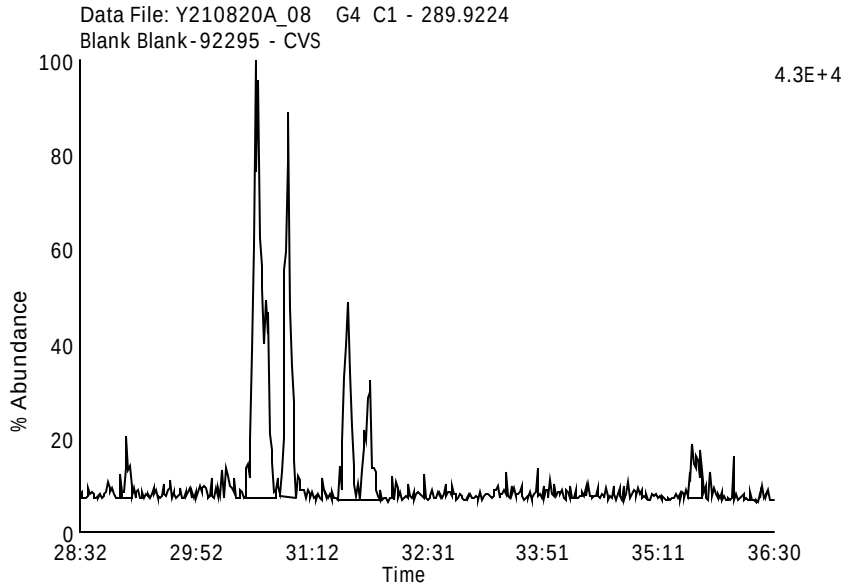


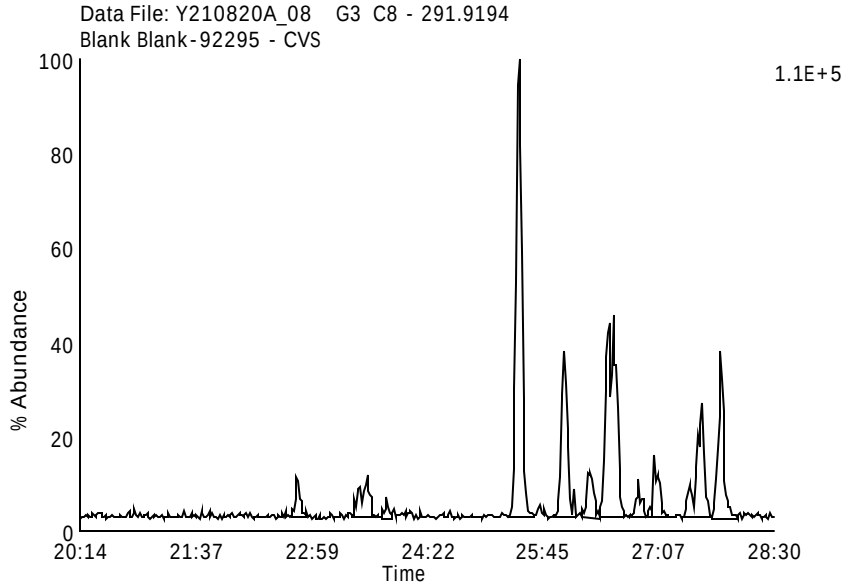
Tetra Chlorinated Biphenyls

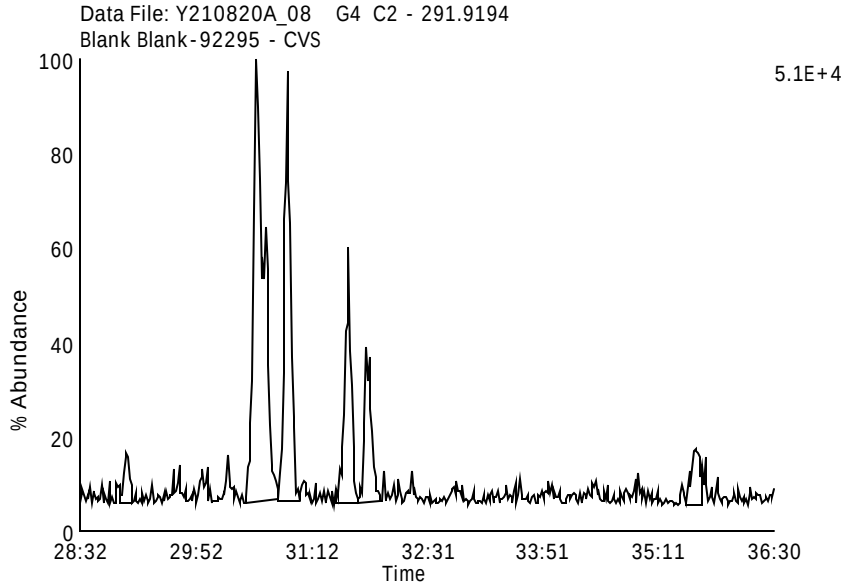
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ





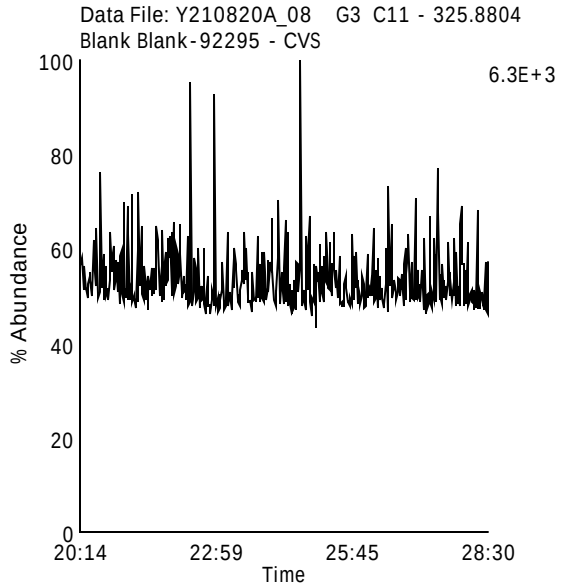


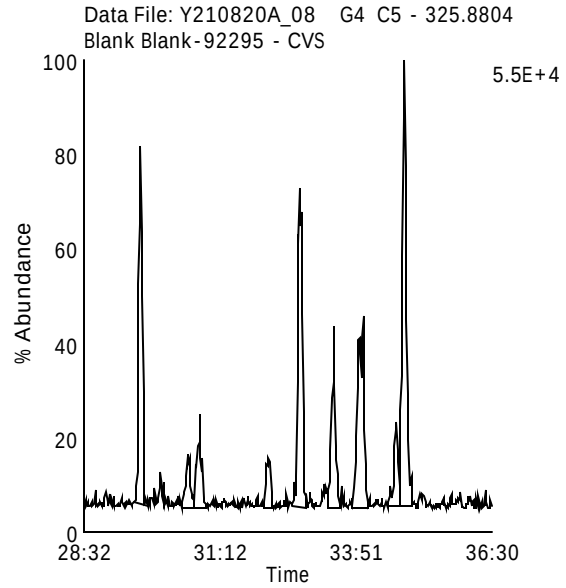


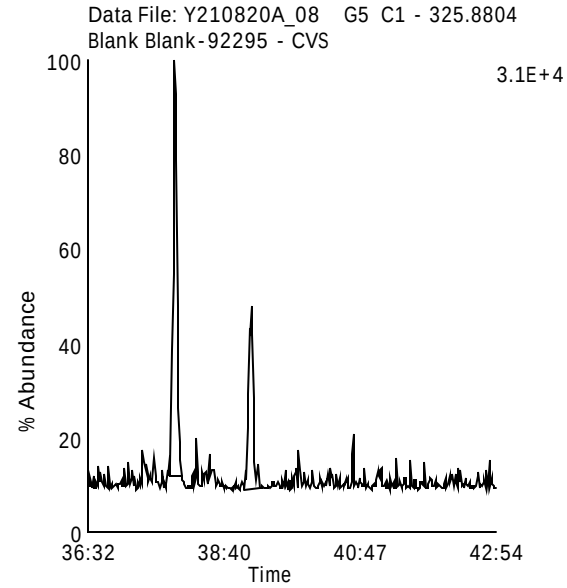
Penta Chlorinated Biphenyls

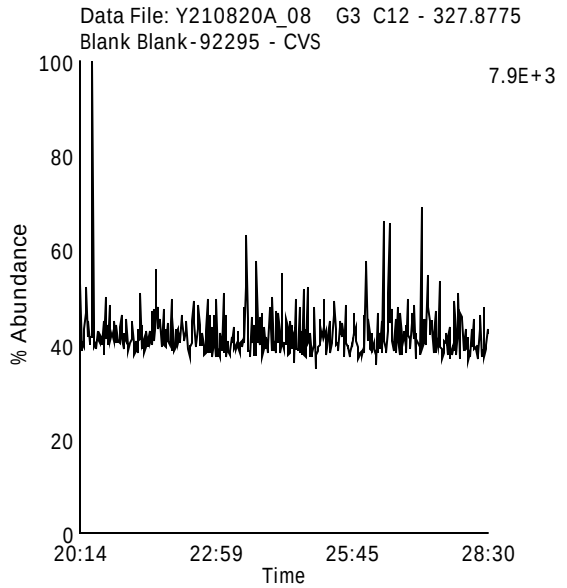
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

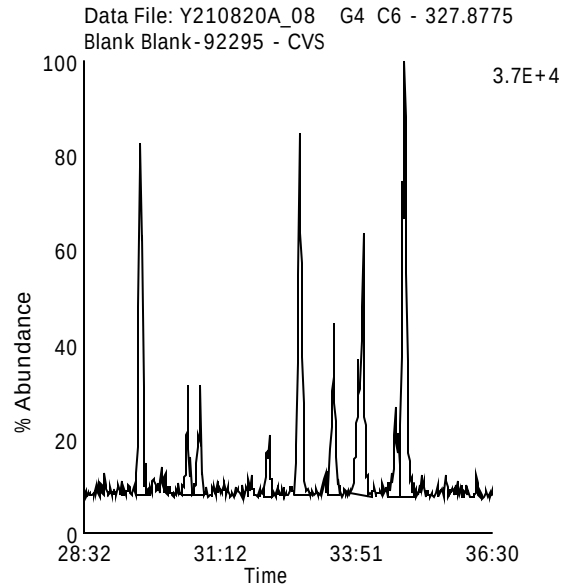
Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ

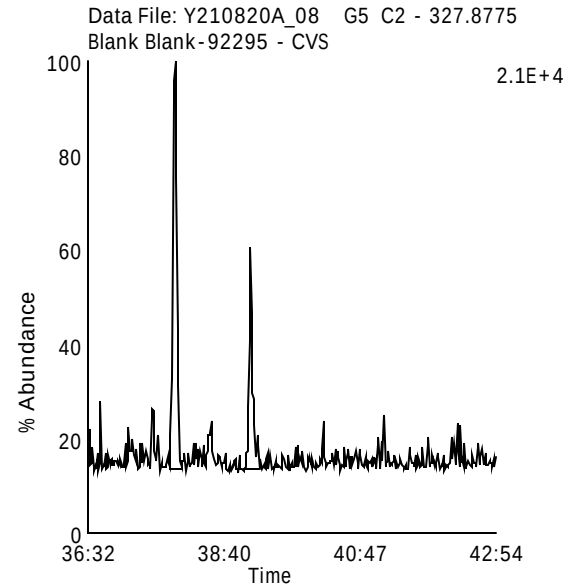








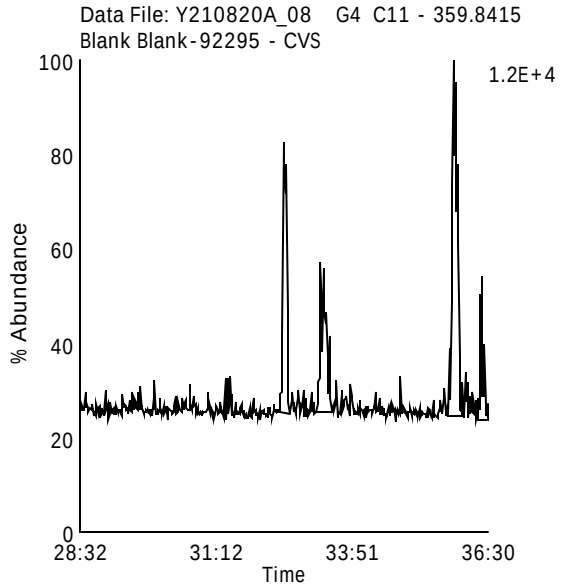


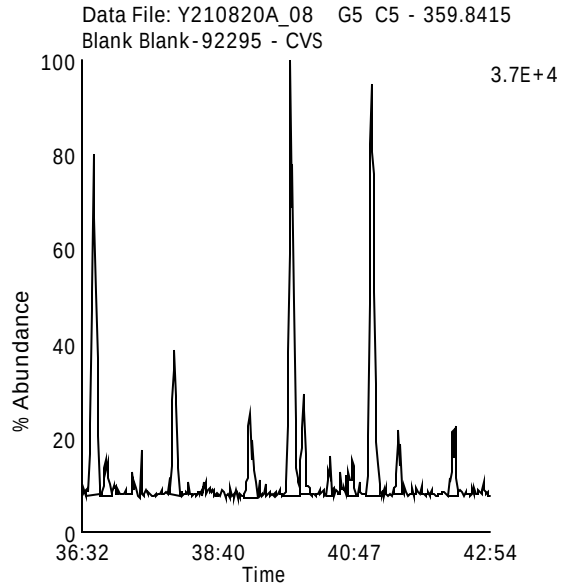


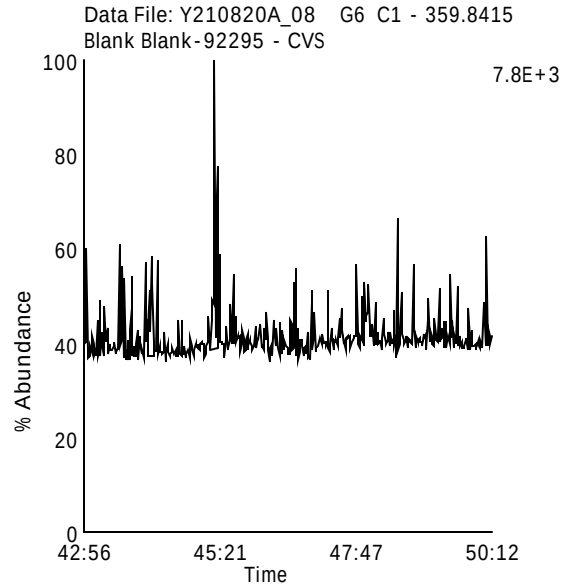
Hexa Chlorinated Biphenyls

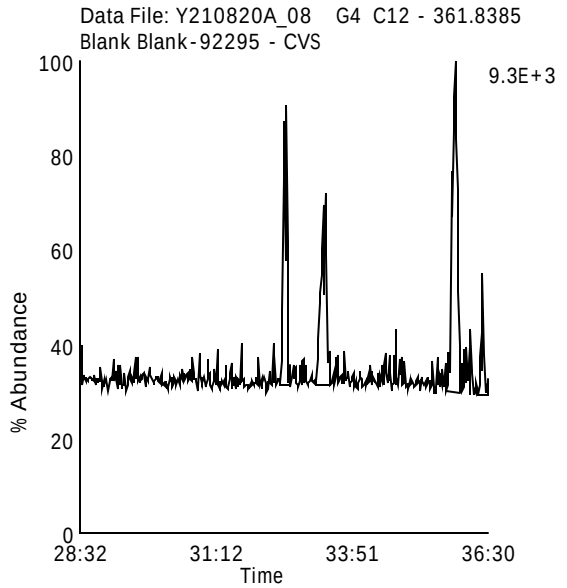
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

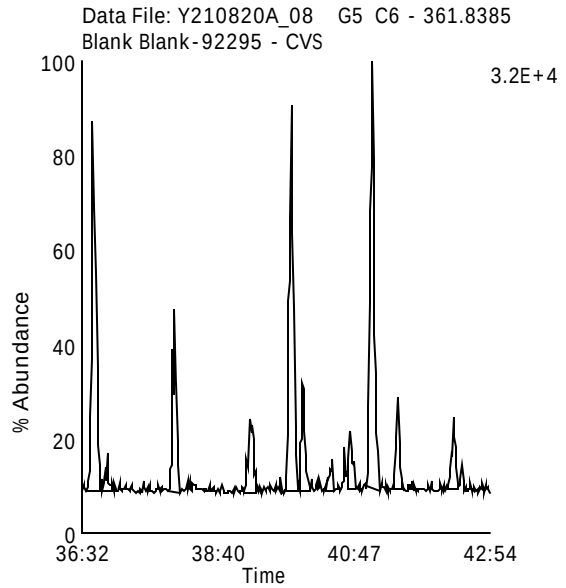
Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ

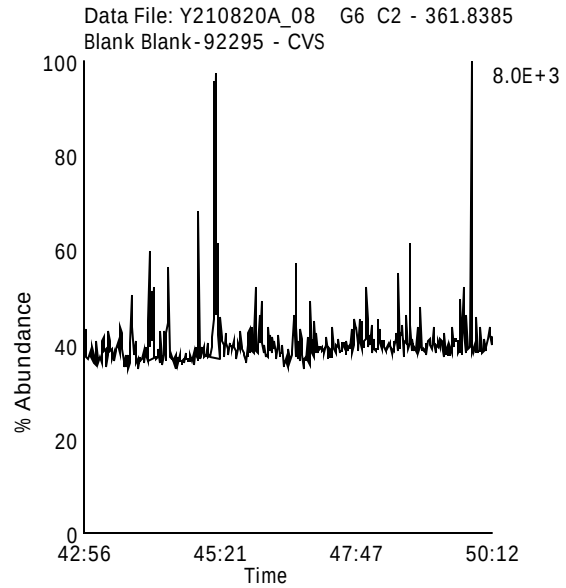








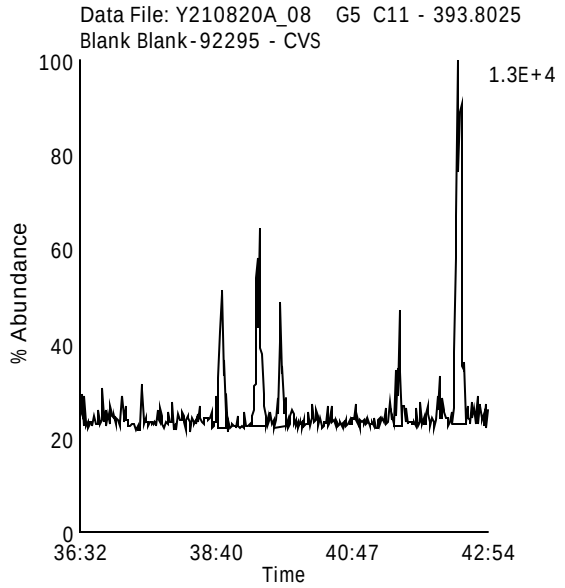


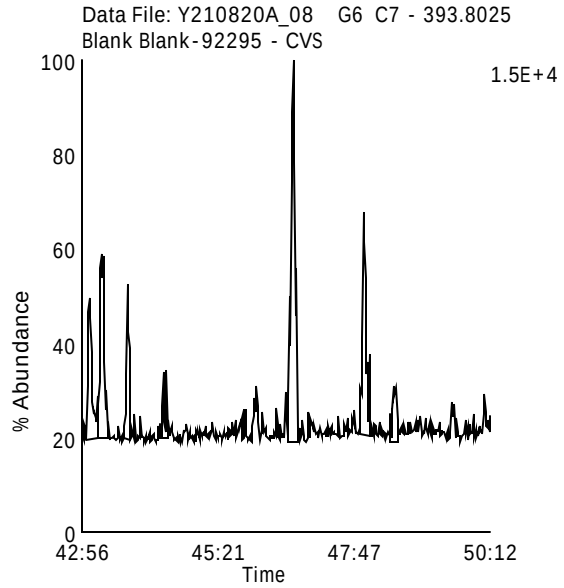


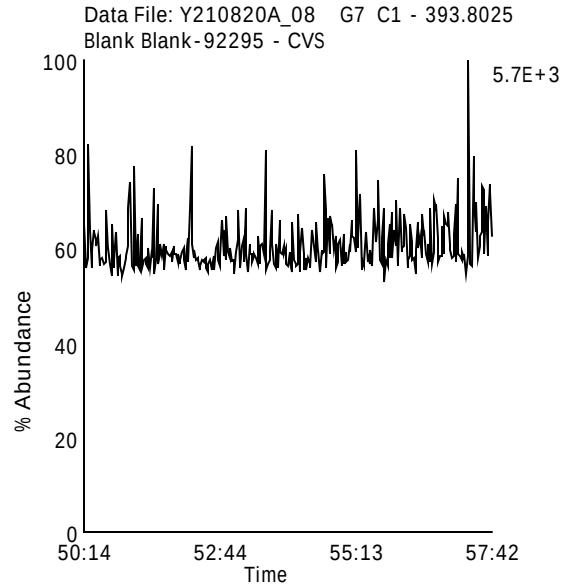
Hepta Chlorinated Biphenyls

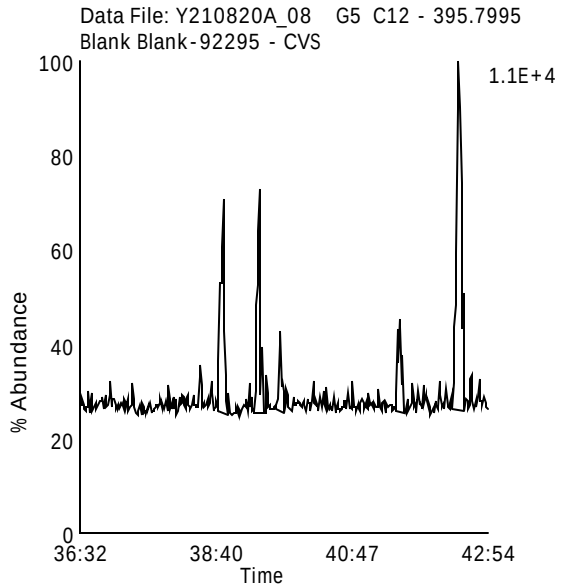
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

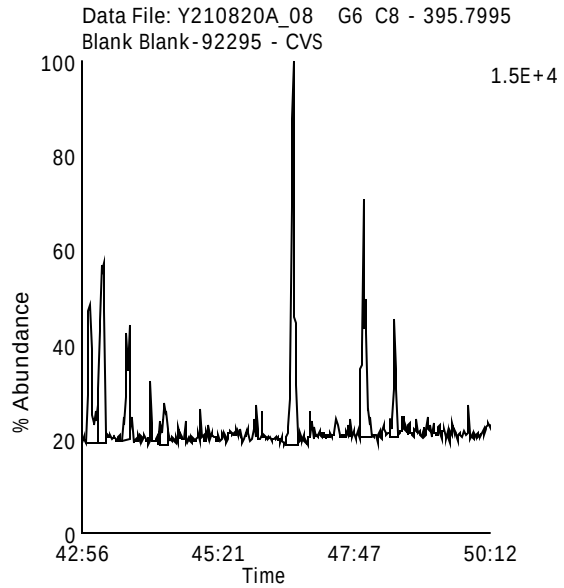
Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ

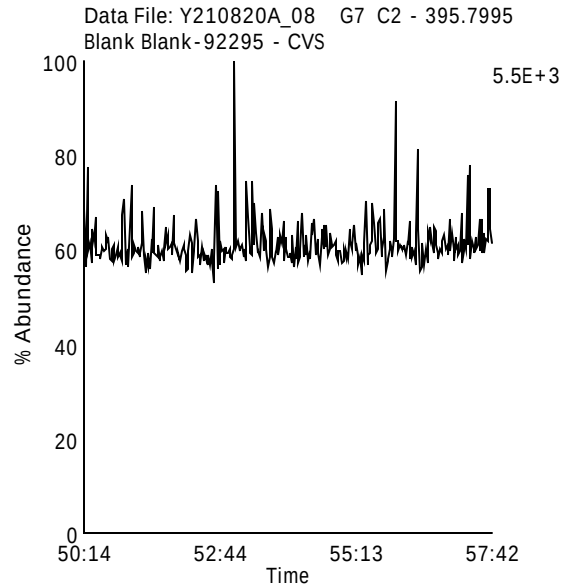








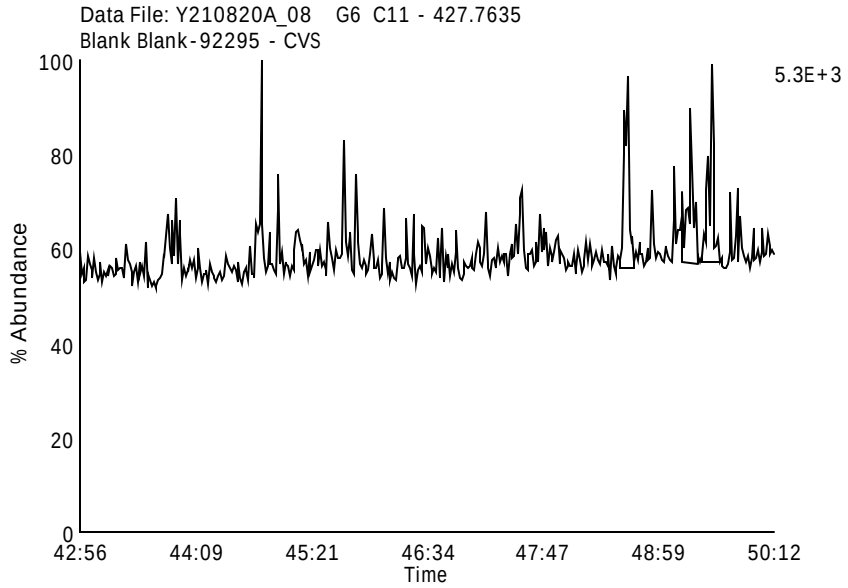


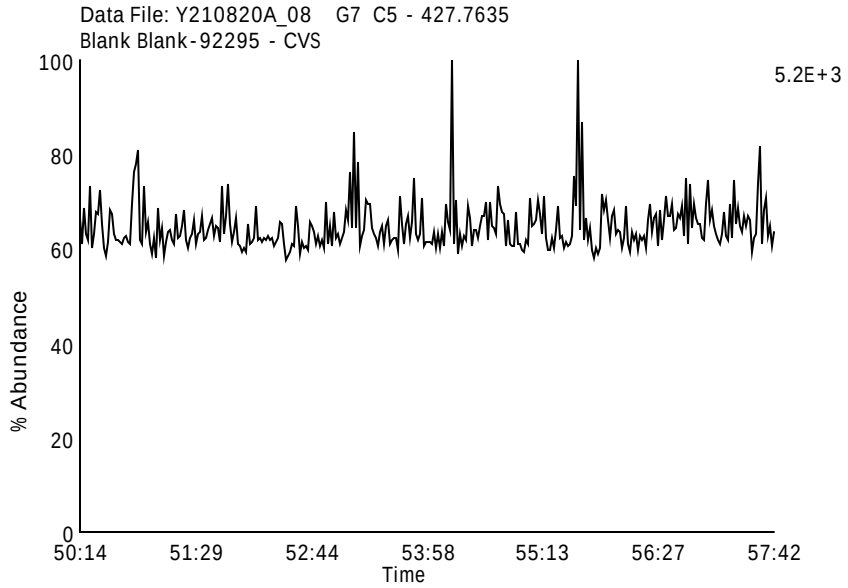


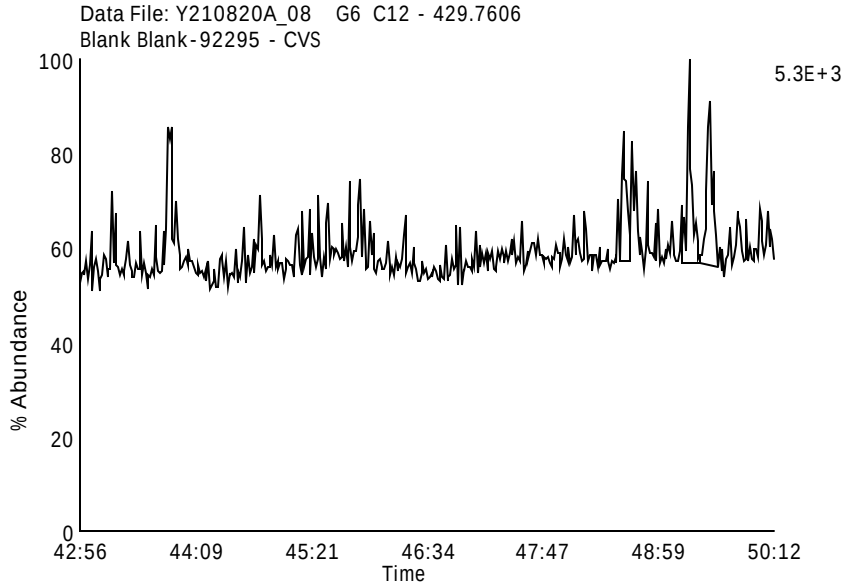
Octa Chlorinated Biphenyls

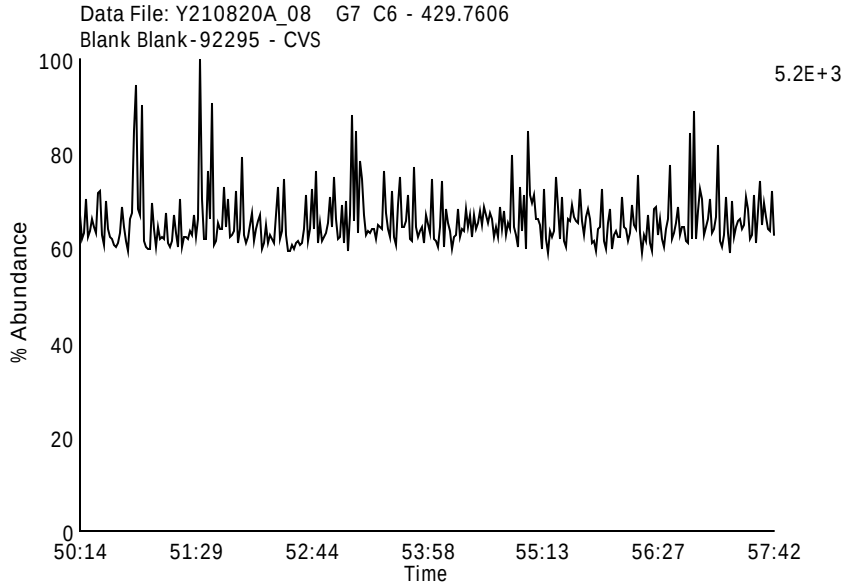
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ



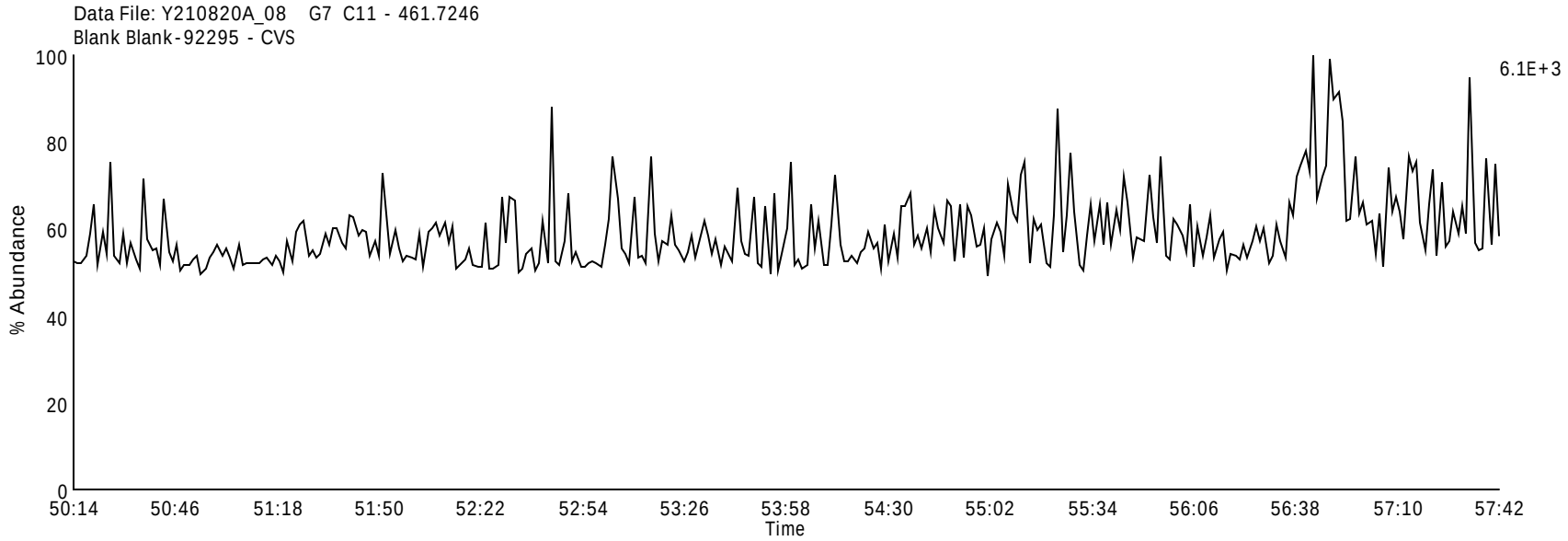


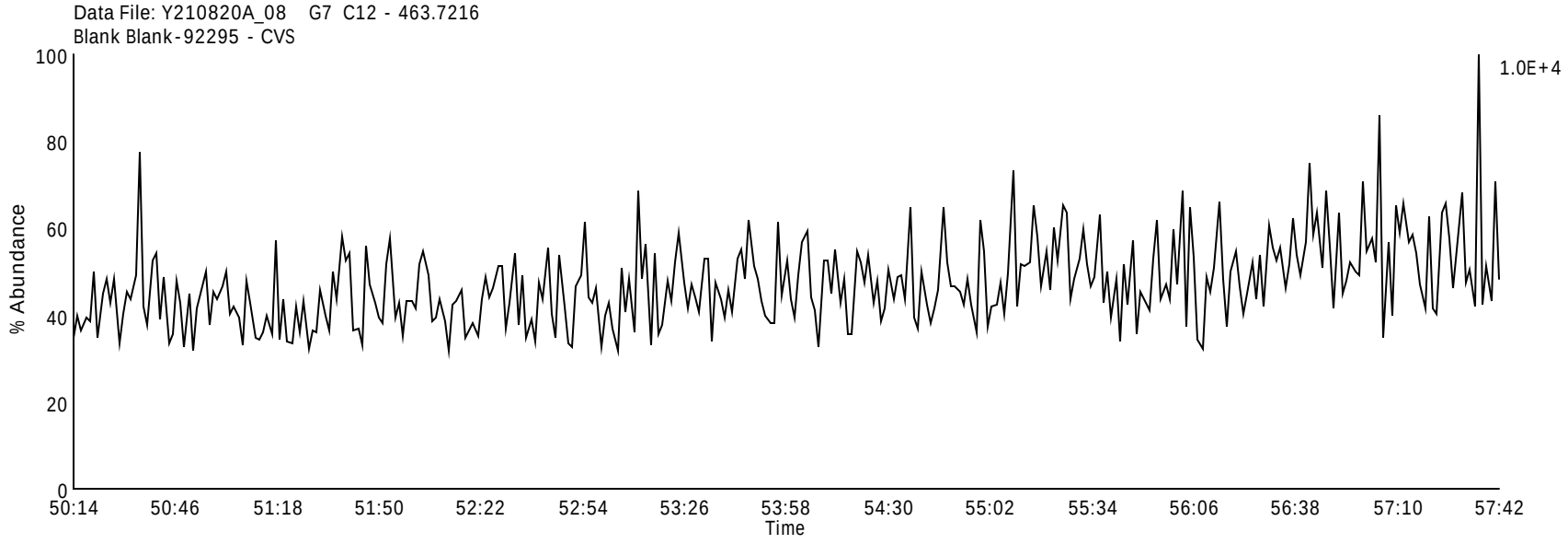




Nona Chlorinated Biphenyls

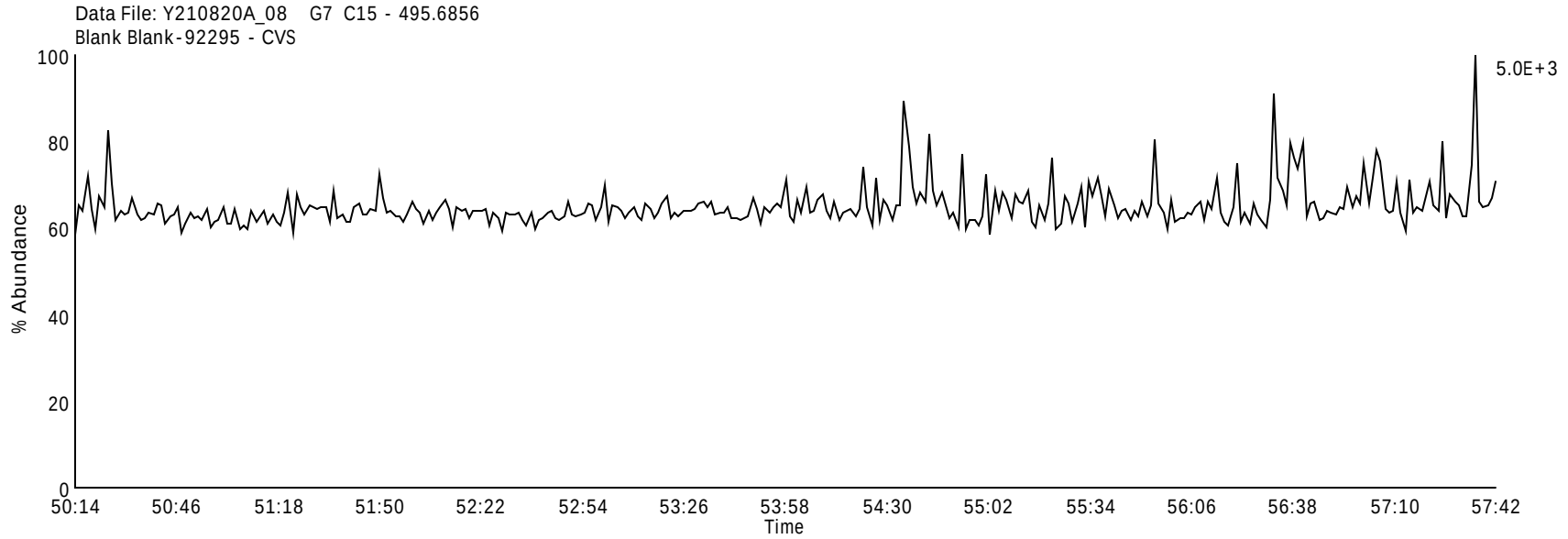
Data File Name: Y210820A_08	Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS	Client Sample ID: CBLKIZ

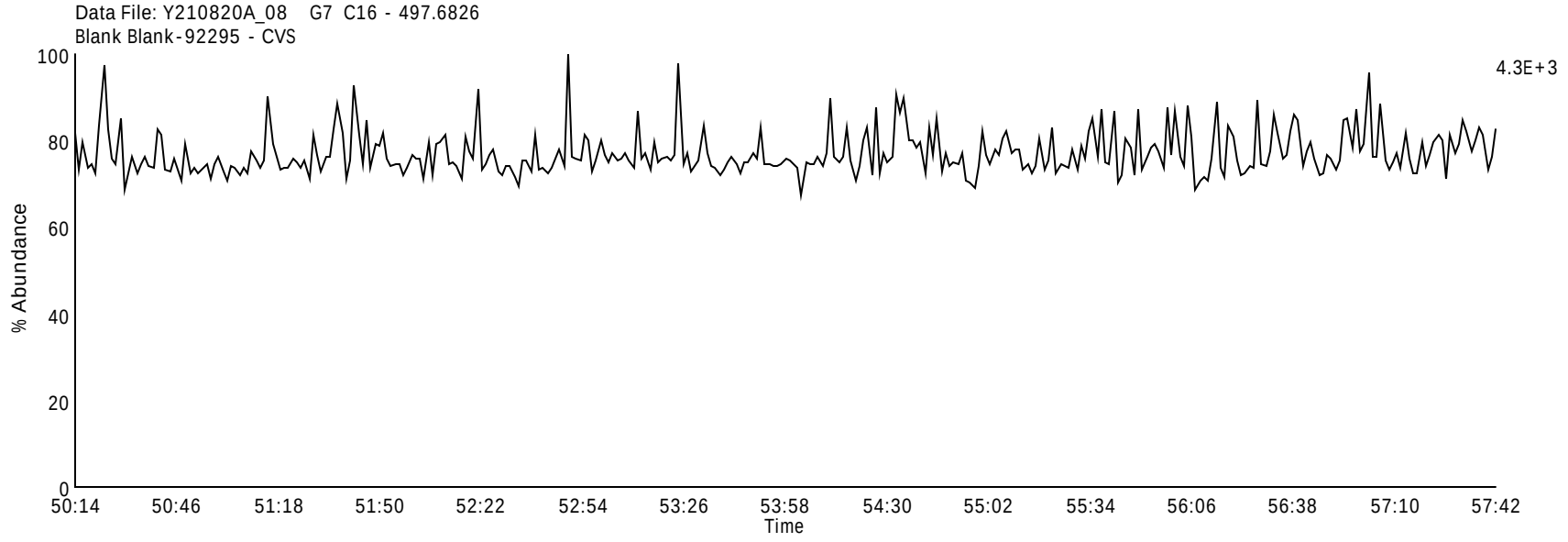




Deca Chlorinated Biphenyl

Data File Name: Y210820A_08	Lab Sample ID: BLANK-92295
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: Blank Blank-92295 - CVS	Client Sample ID: CBLKIZ

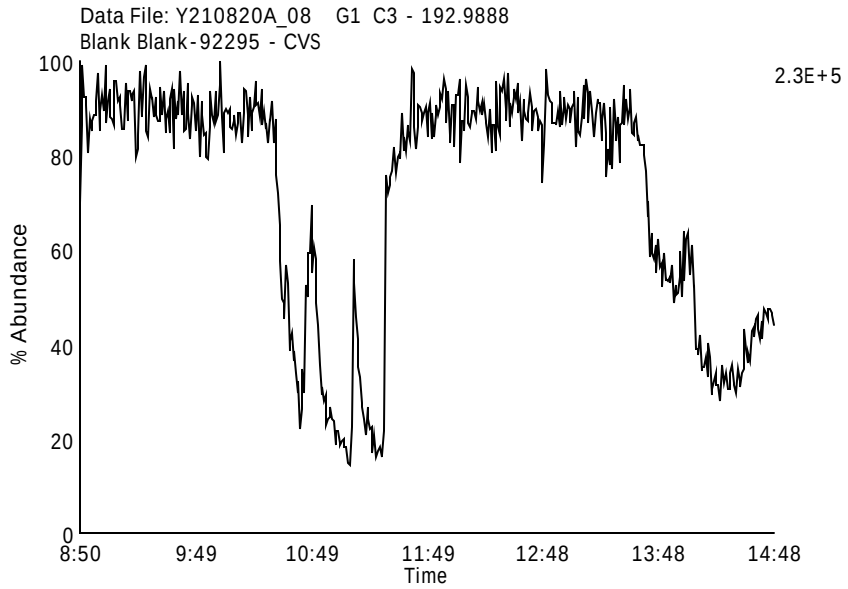


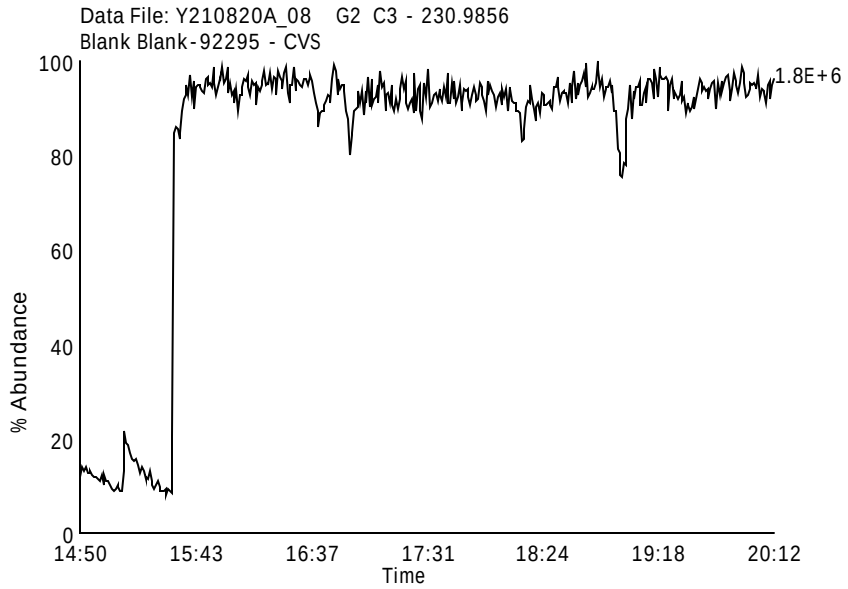


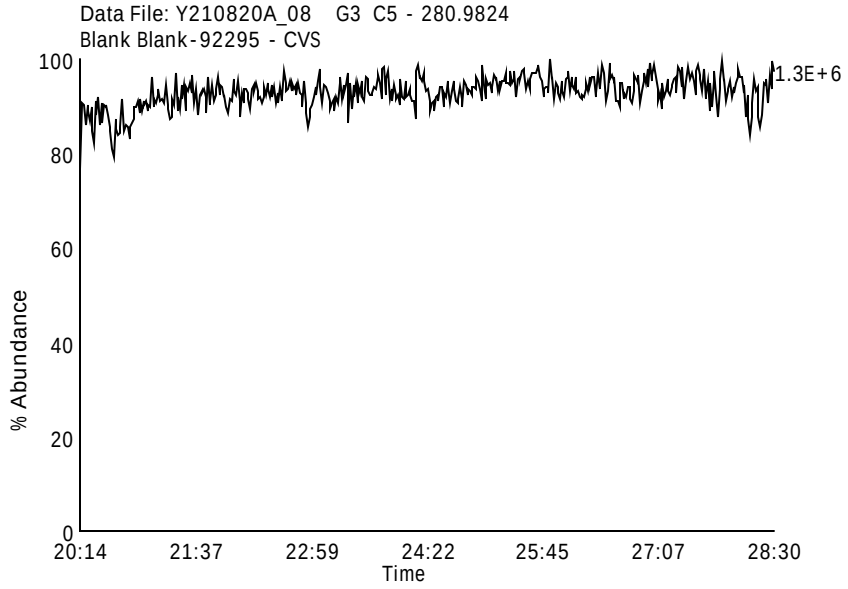
Group 1 - 4 Lock mass

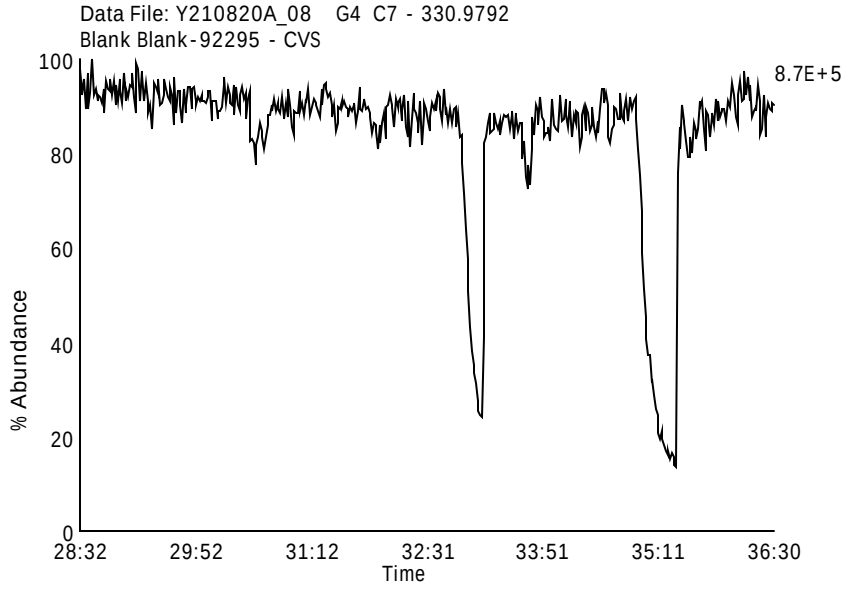
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ





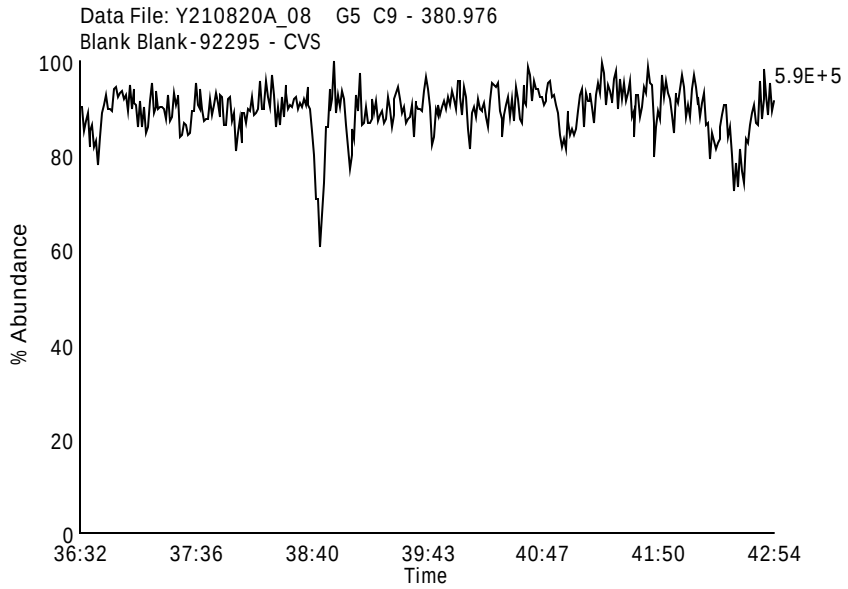


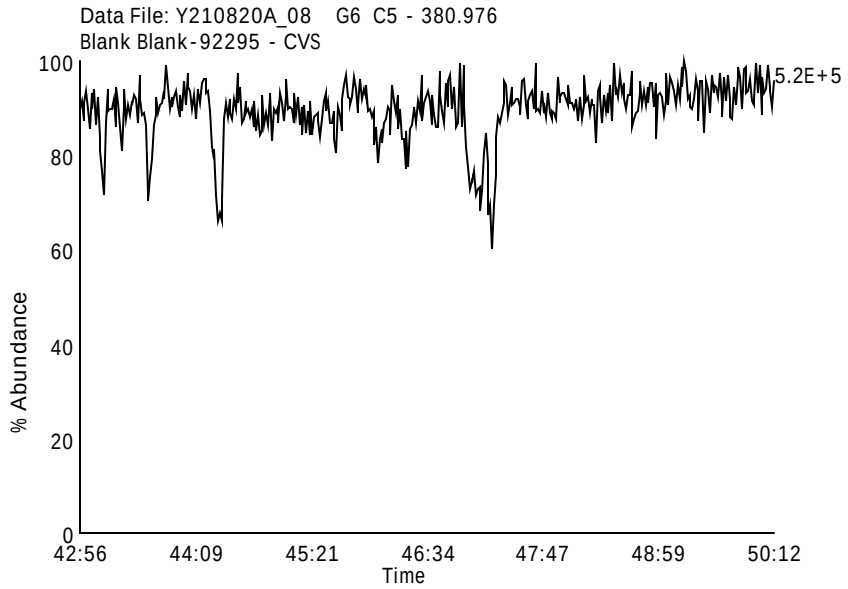


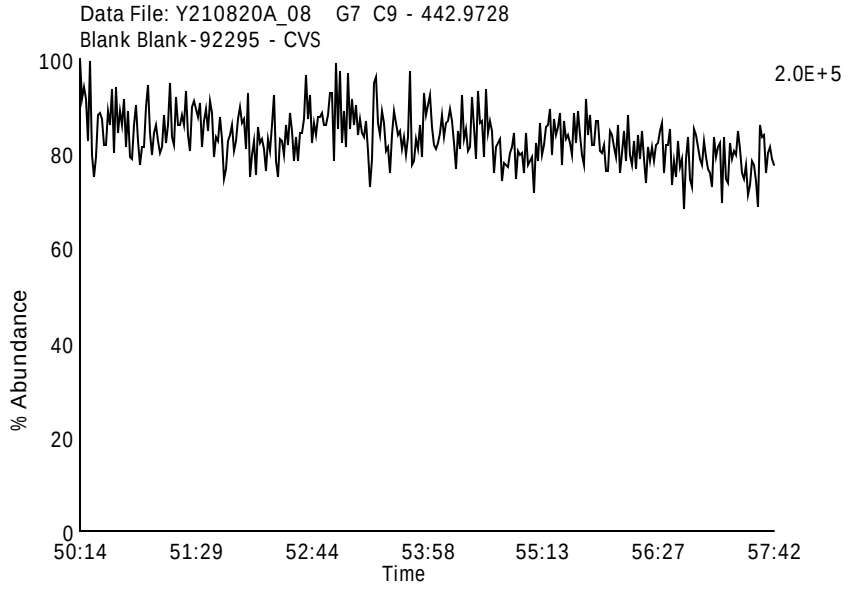
Group 5 - 7 Lock mass

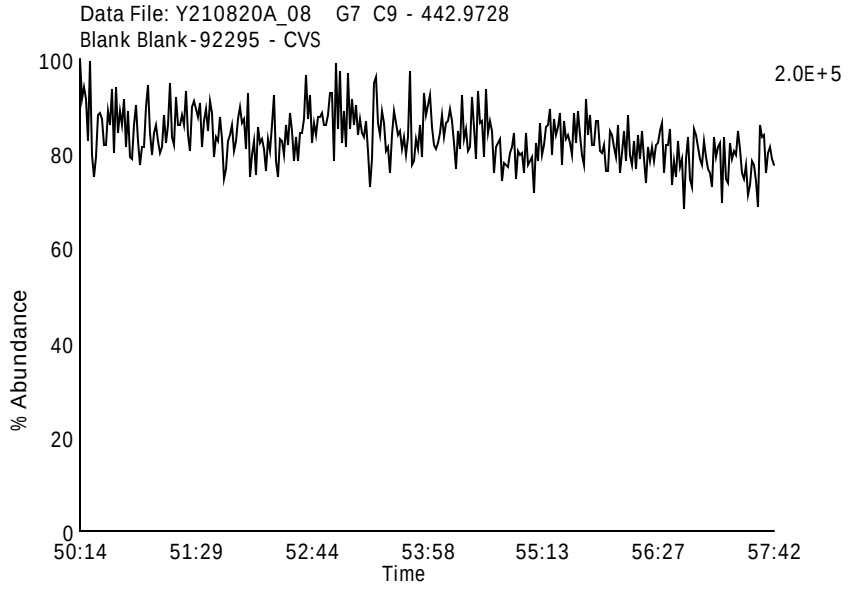
Data File Name: Y210820A_08
Date Acquired: 8/20/2021
Sample Description: Blank Blank-92295 - CVS

Lab Sample ID: BLANK-92295
Instrument: 10MSHR12 (Y)
Client Sample ID: CBLKIZ



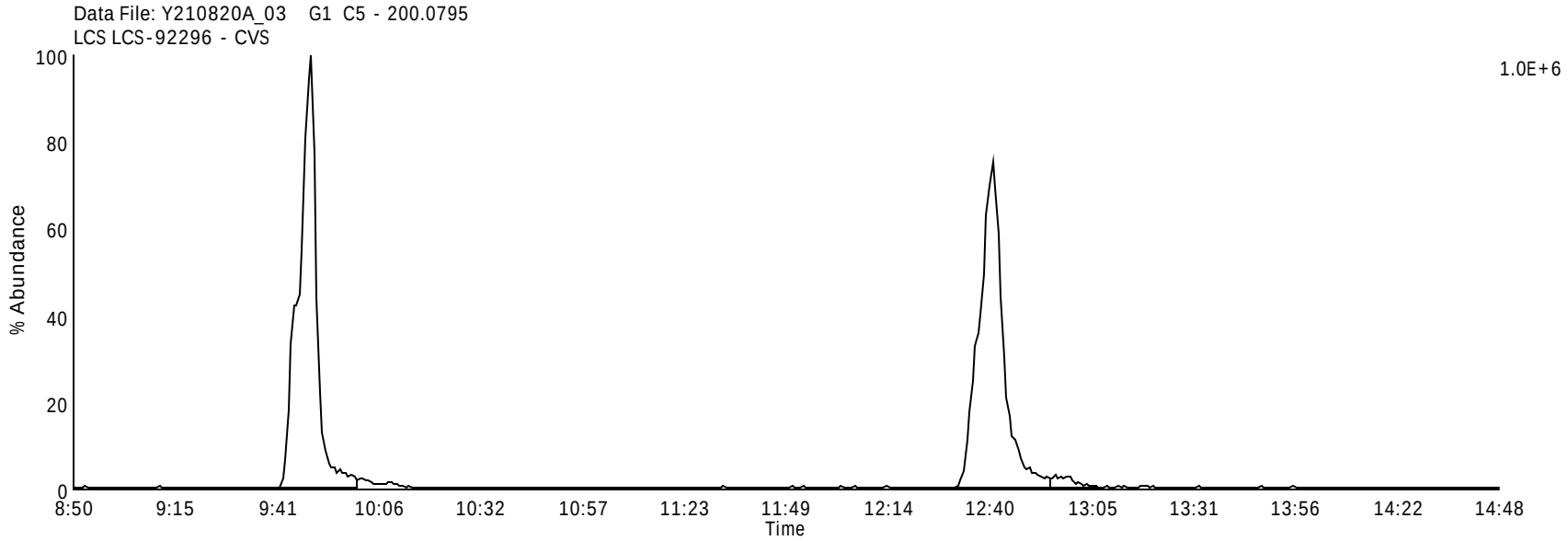


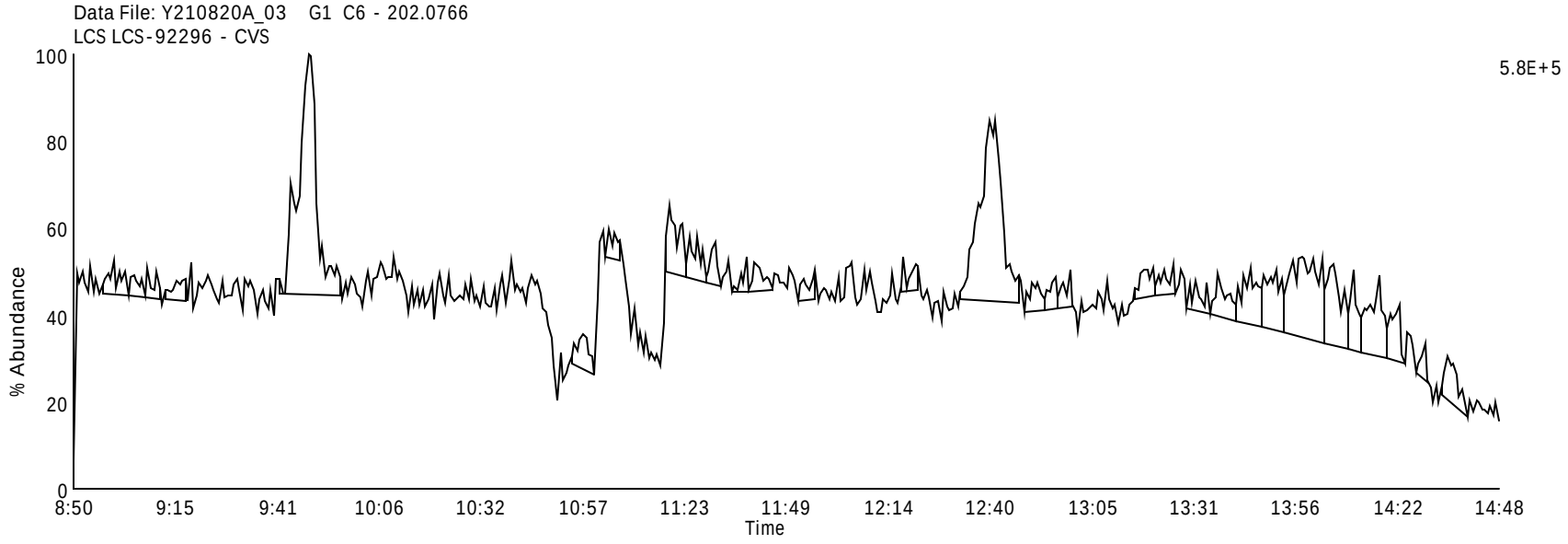




Labeled Mono Chlorinated Biphenyls

Data File Name: Y210820A_03 | Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS | Client Sample ID: CLCSET

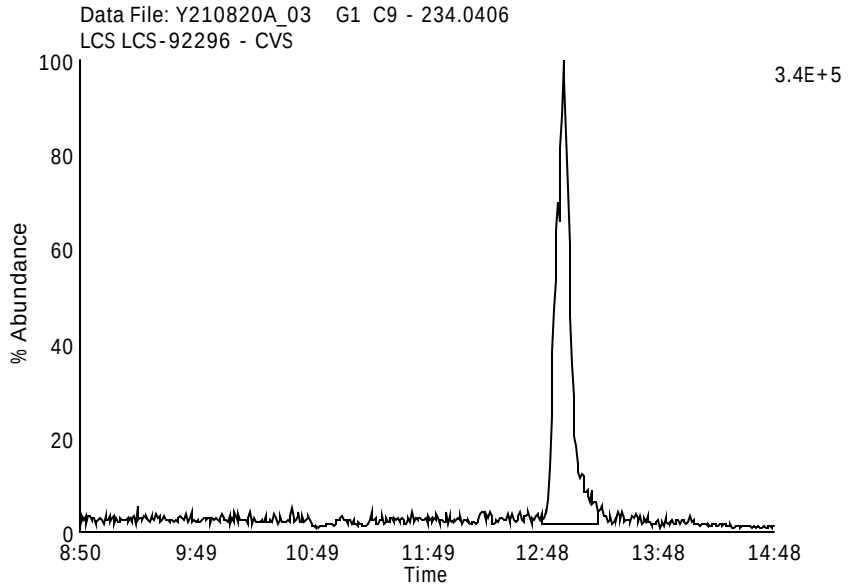


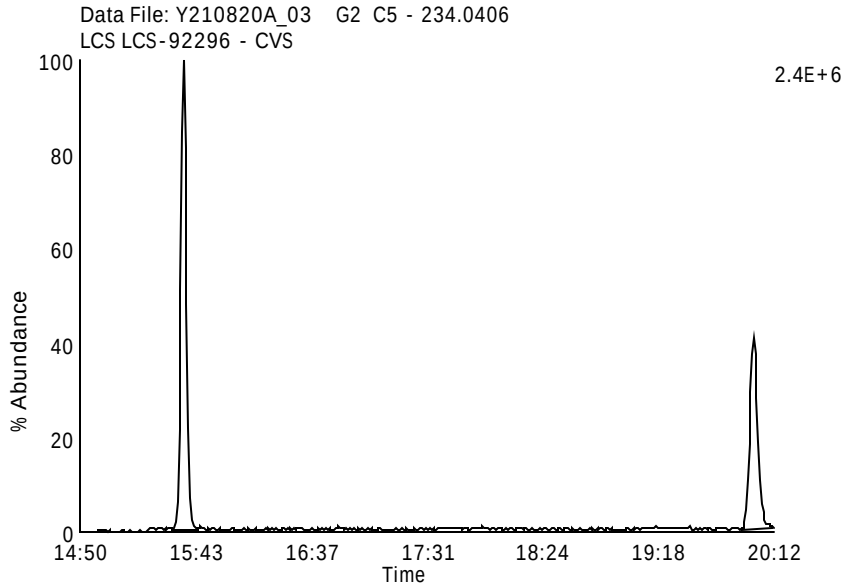


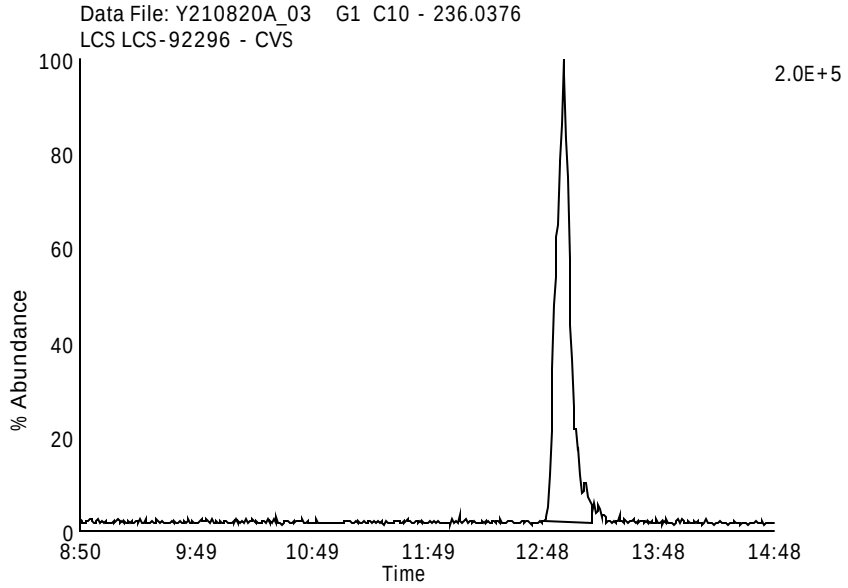
Labeled Di Chlorinated Biphenyls

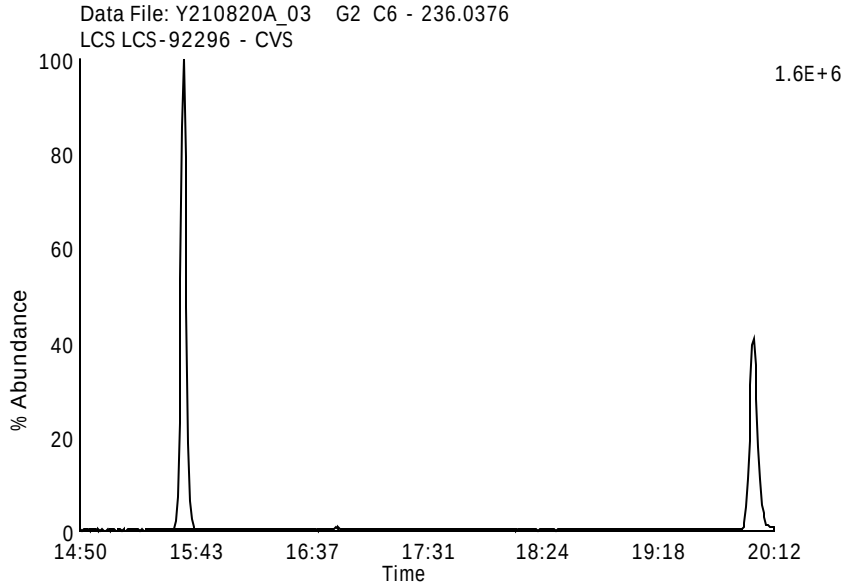
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET



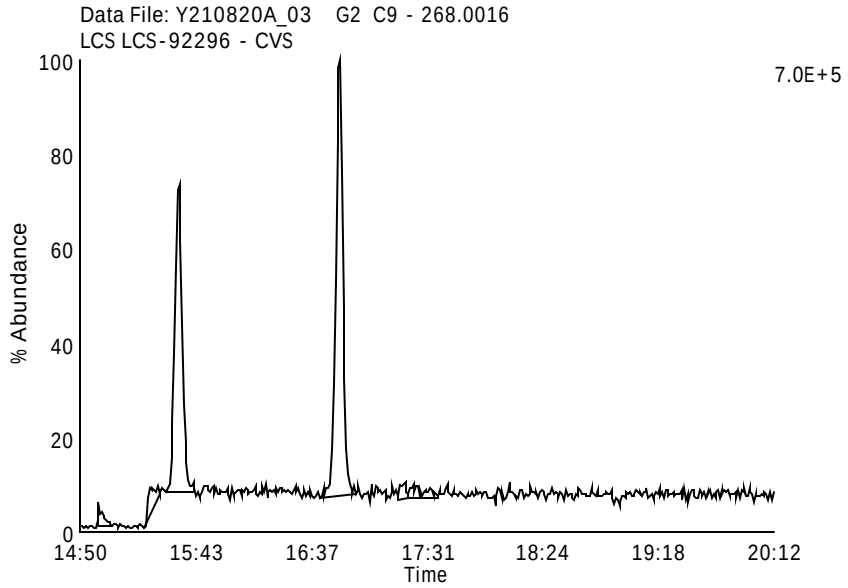


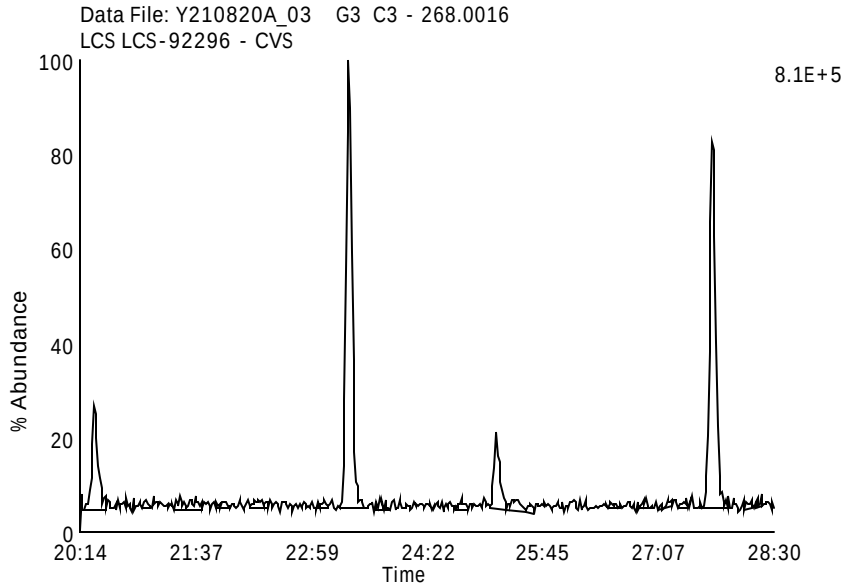


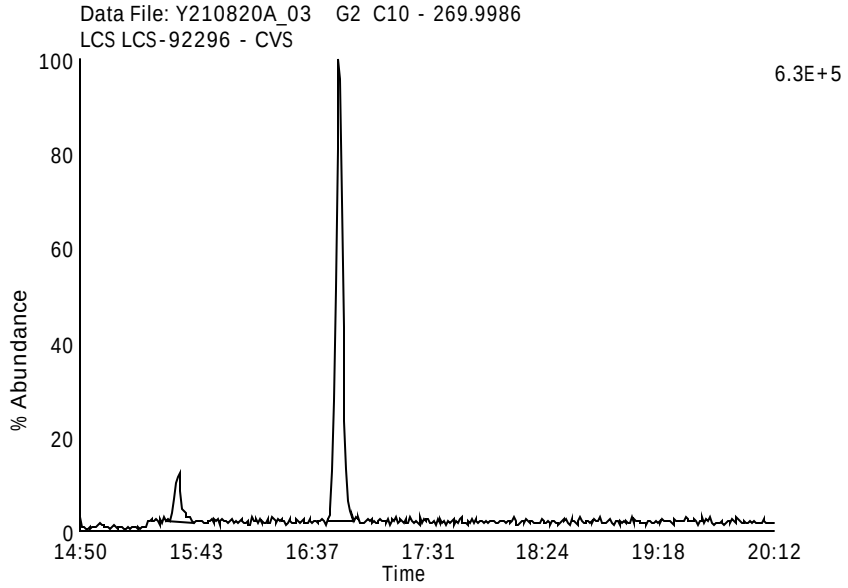


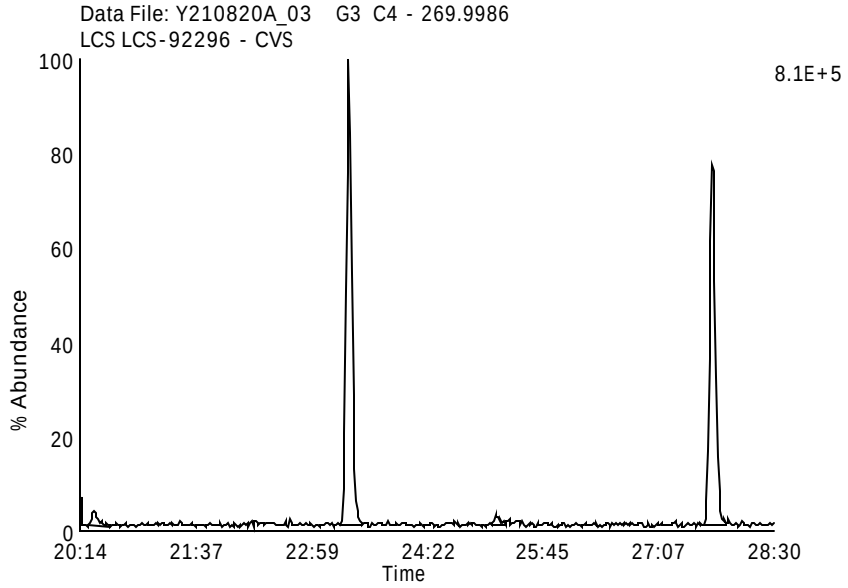
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET



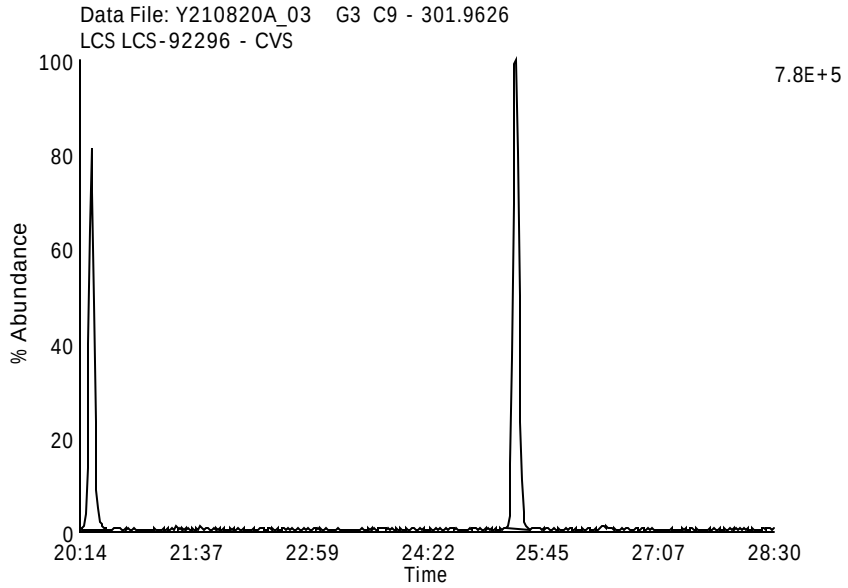


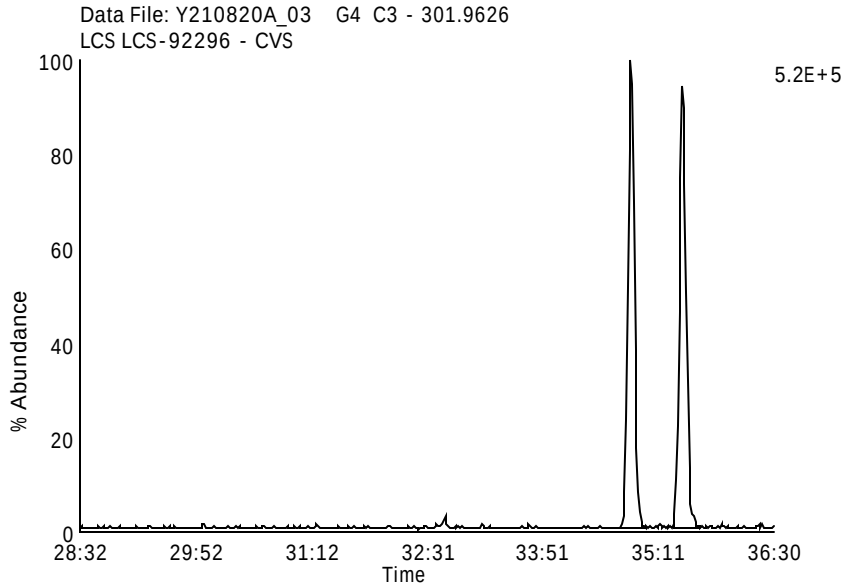


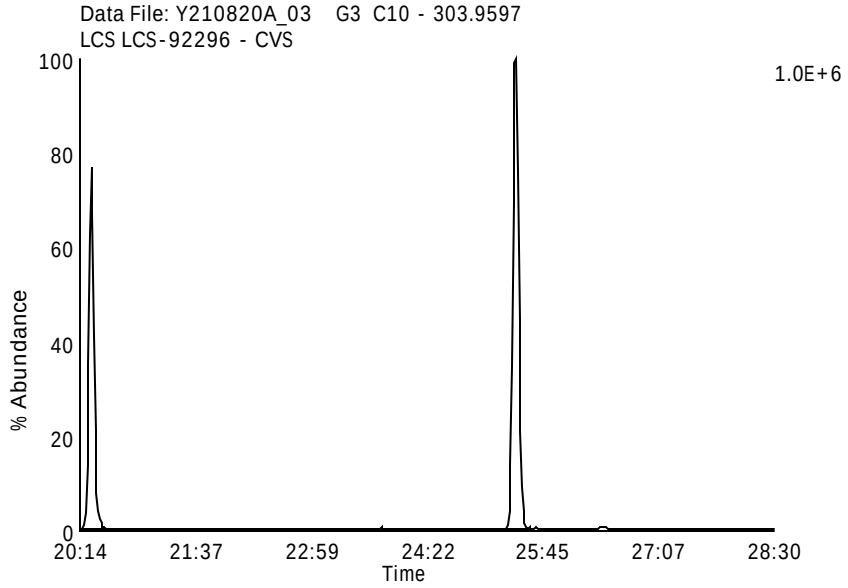


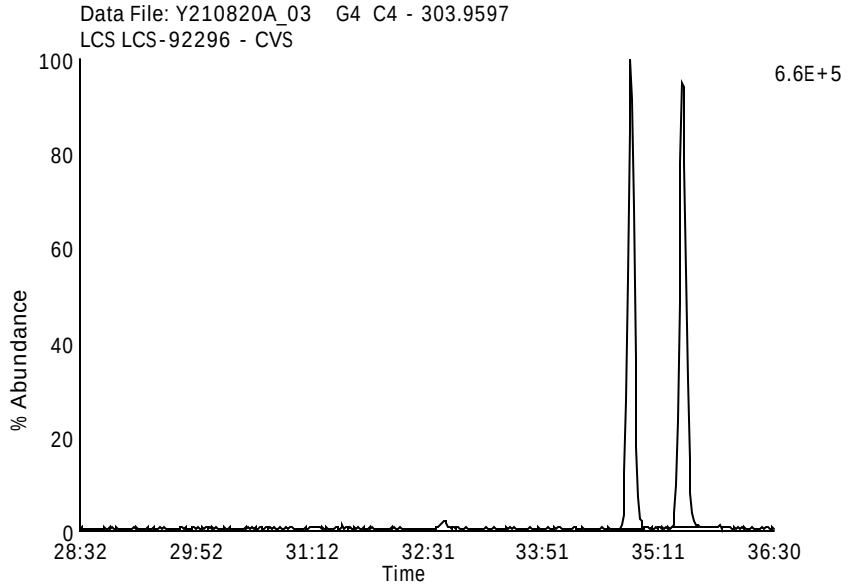
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET



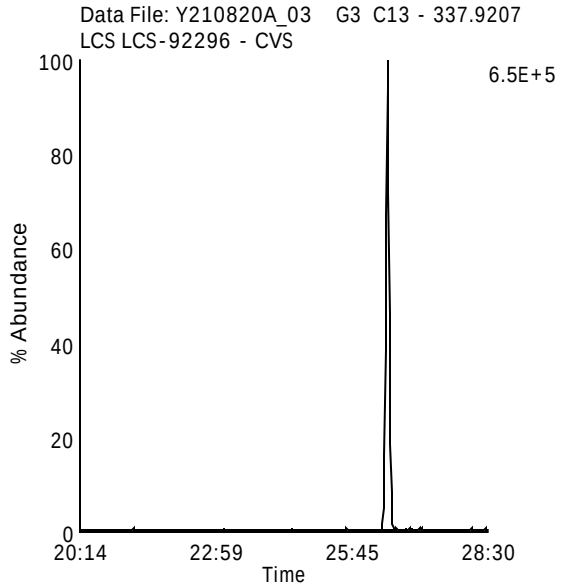


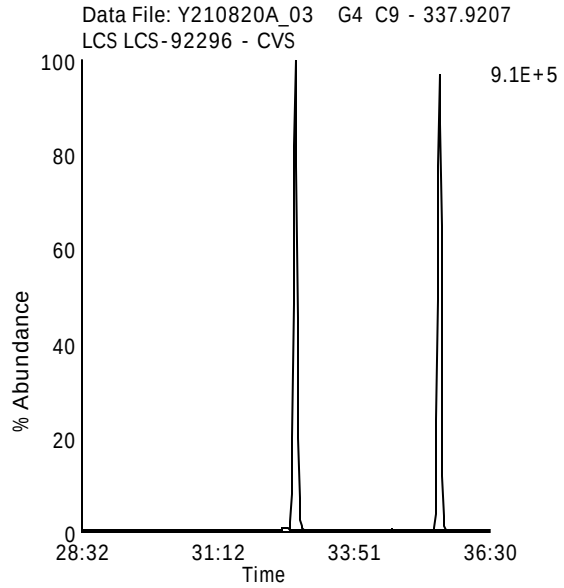


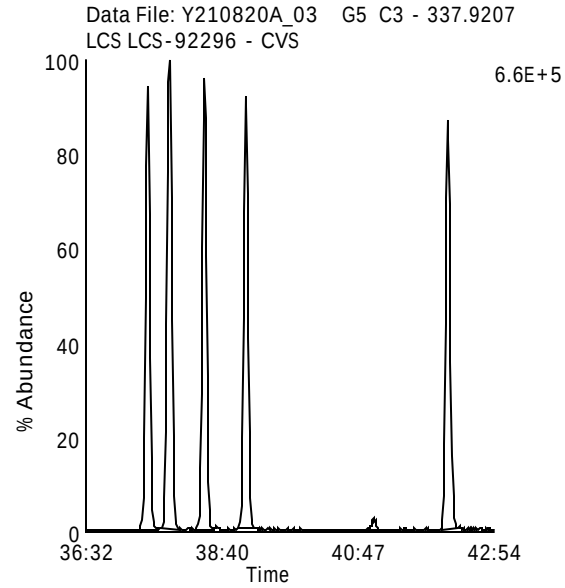


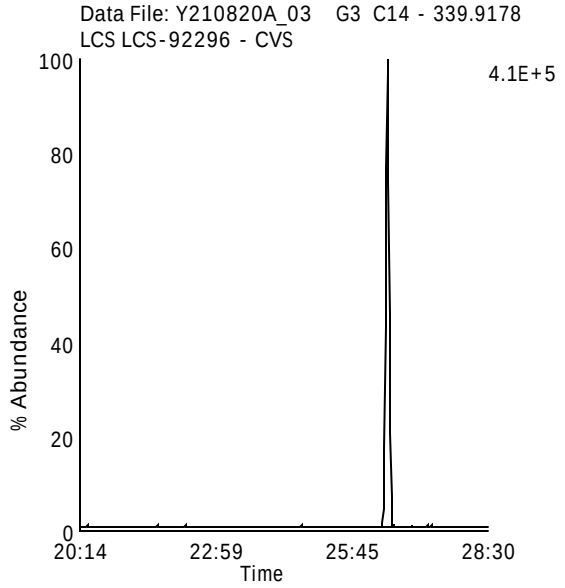
Labeled Penta Chlorinated Biphenyls

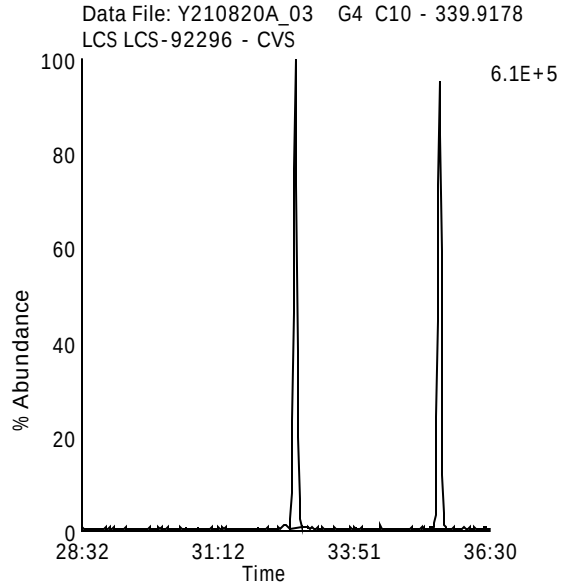
Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET

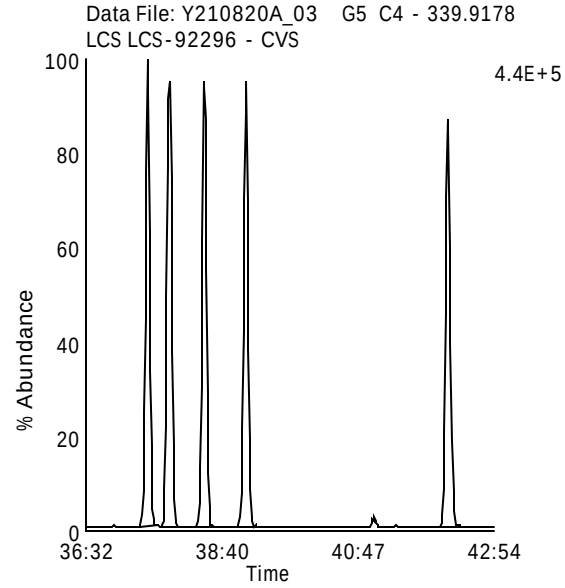






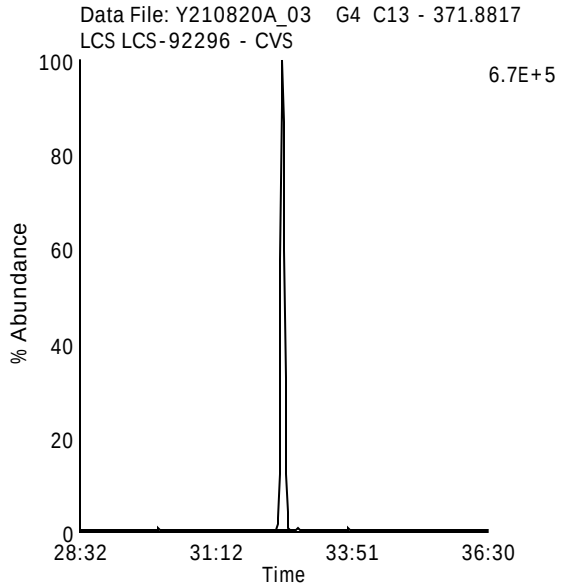


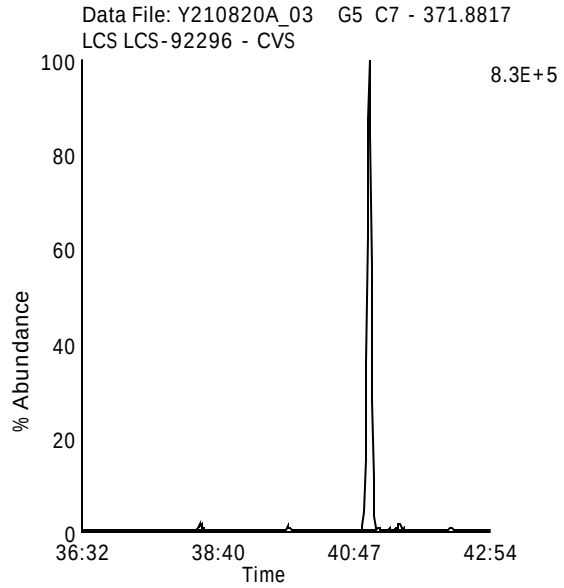


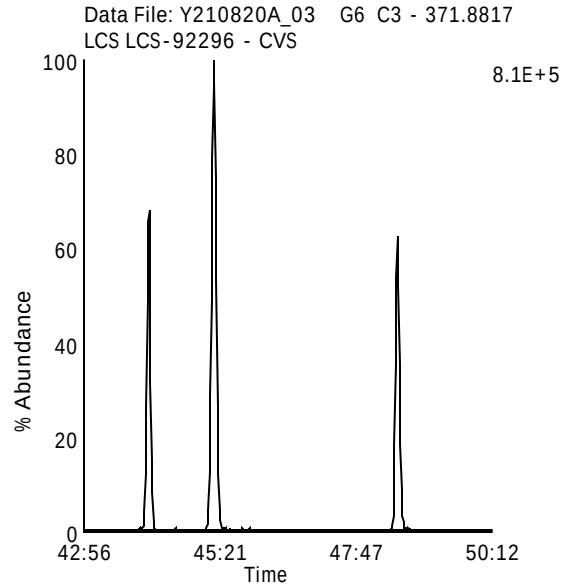


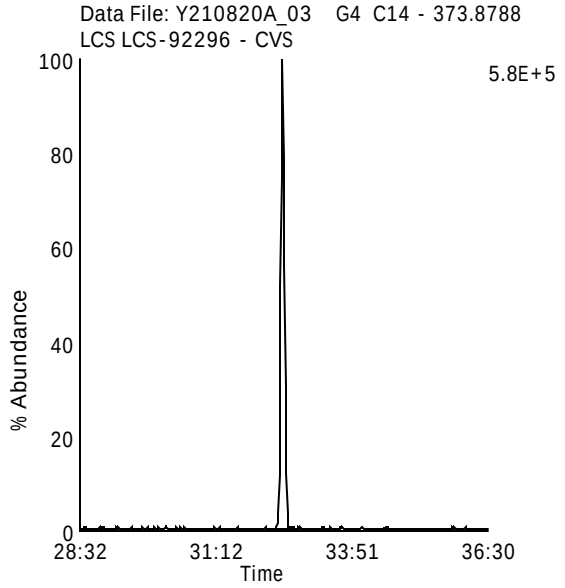
Labeled Hexa Chlorinated Biphenyls

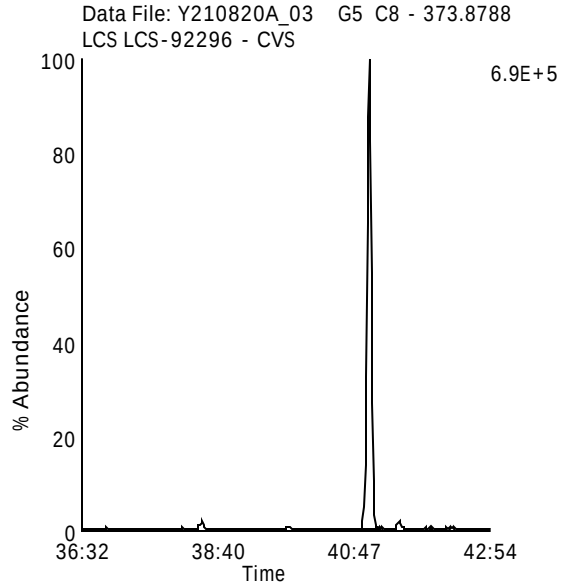
Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET

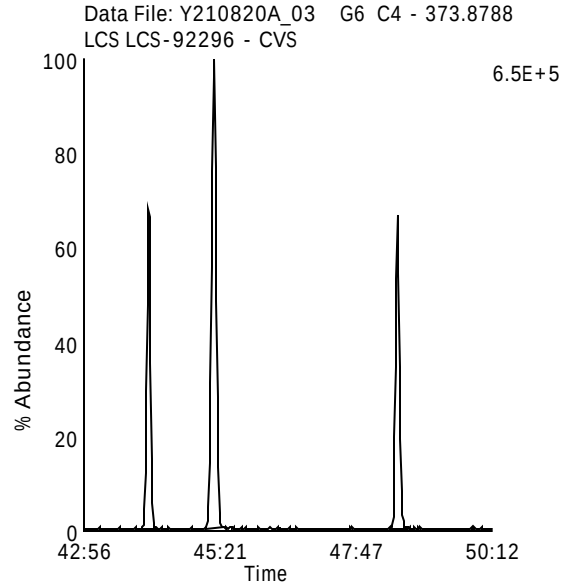






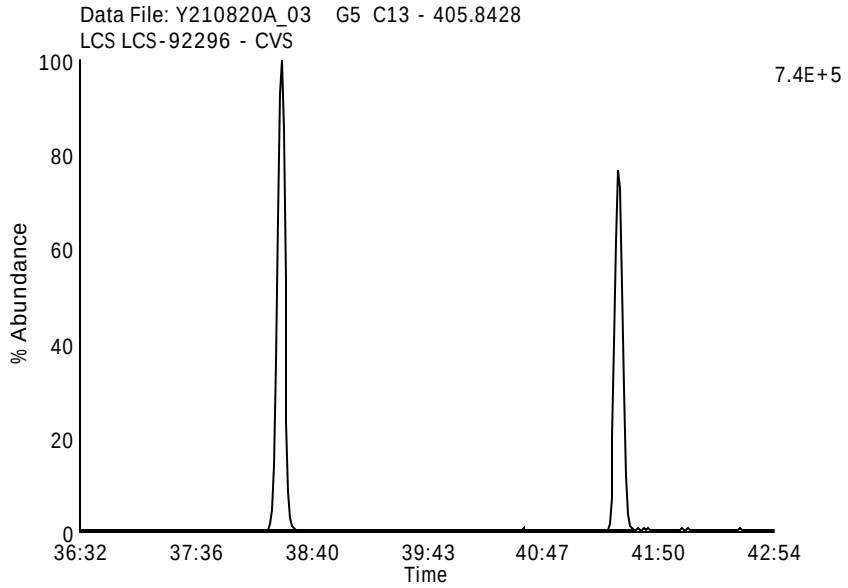


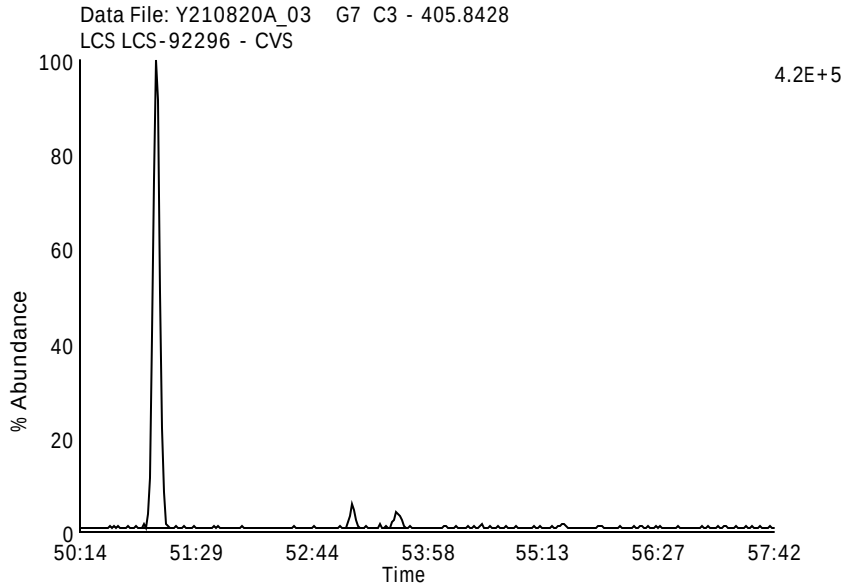


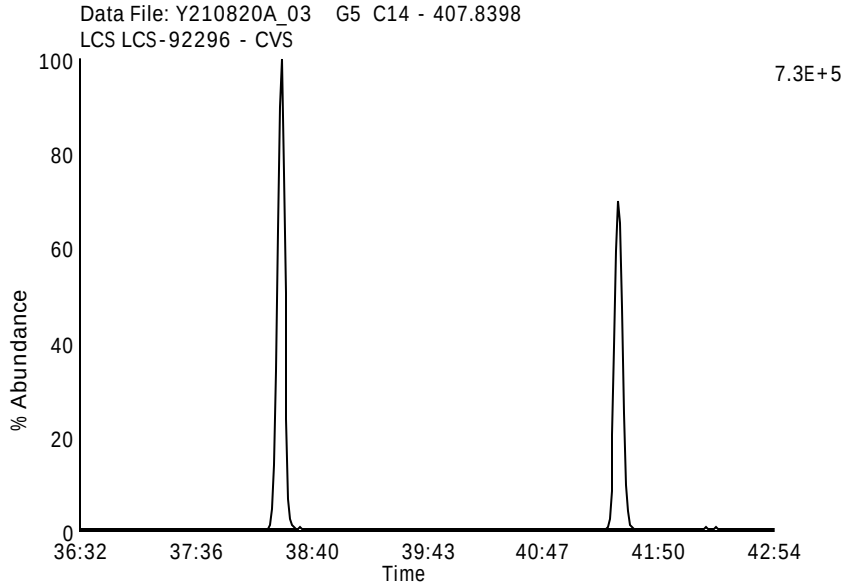


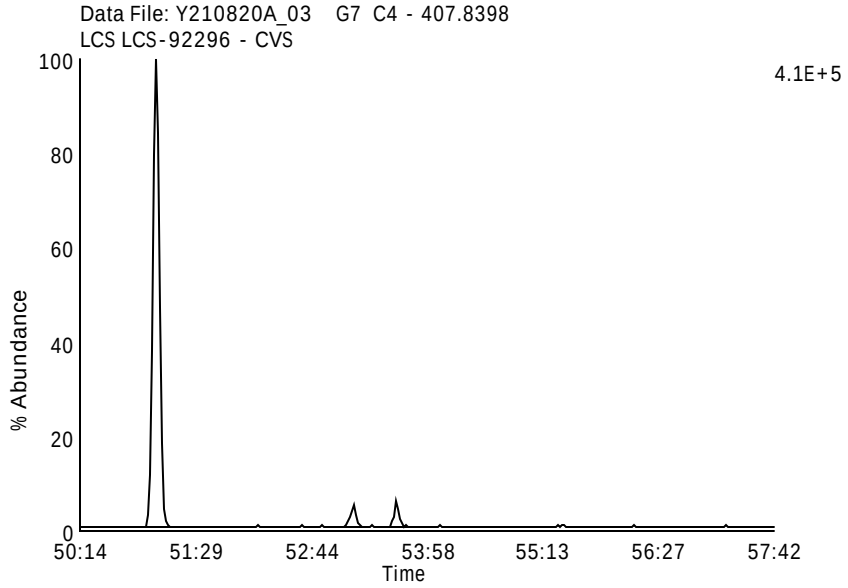
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET



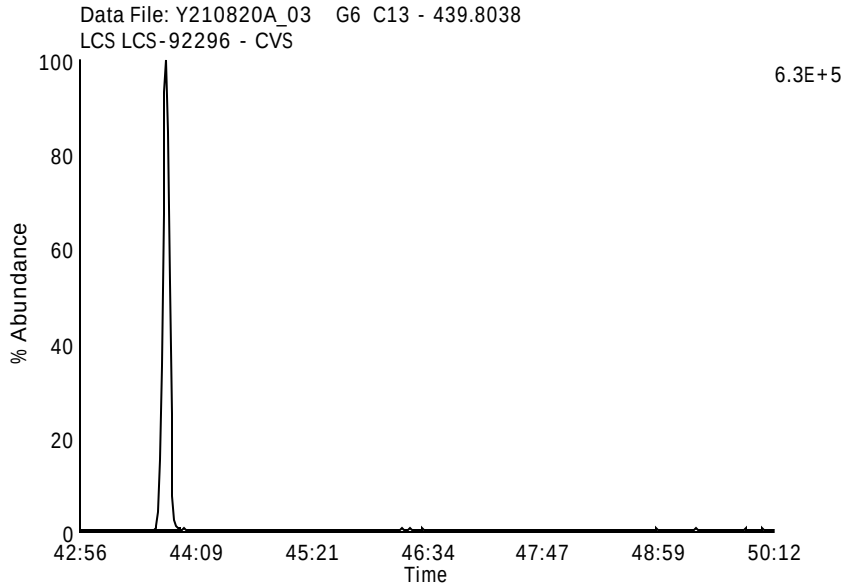


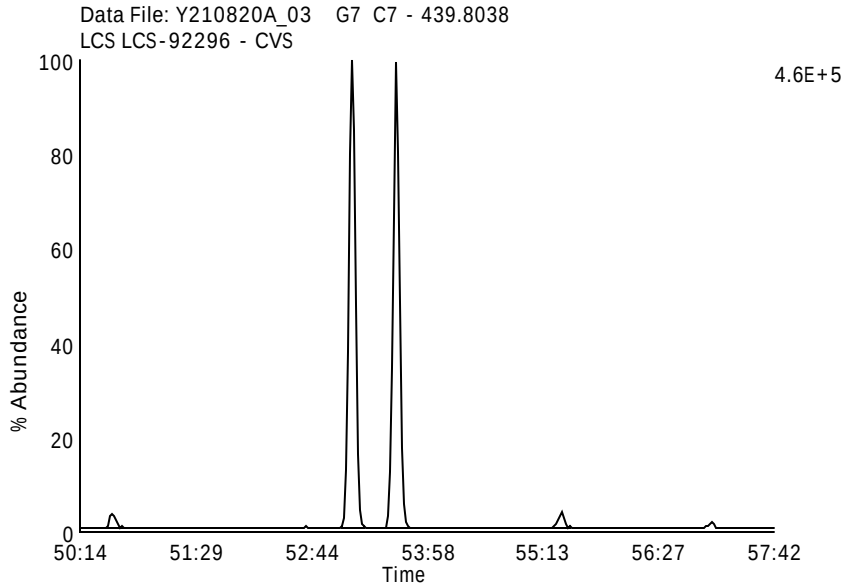


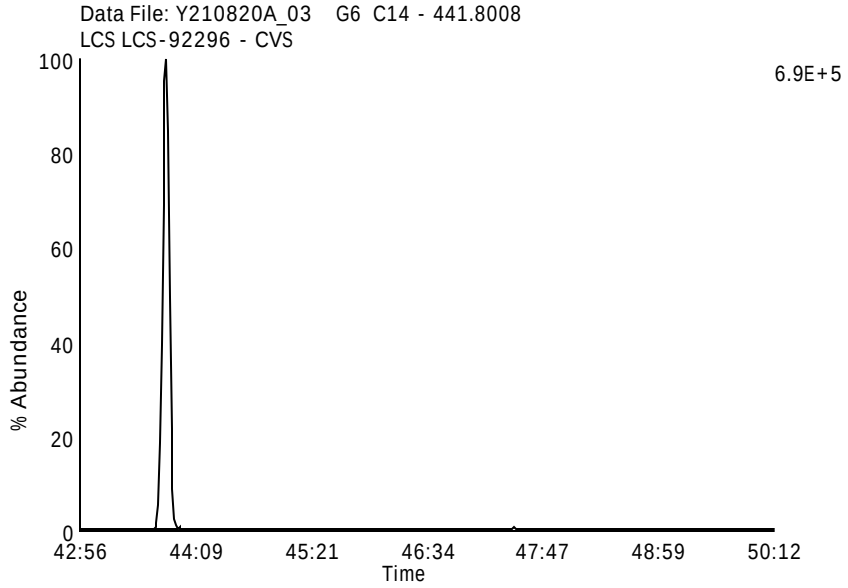


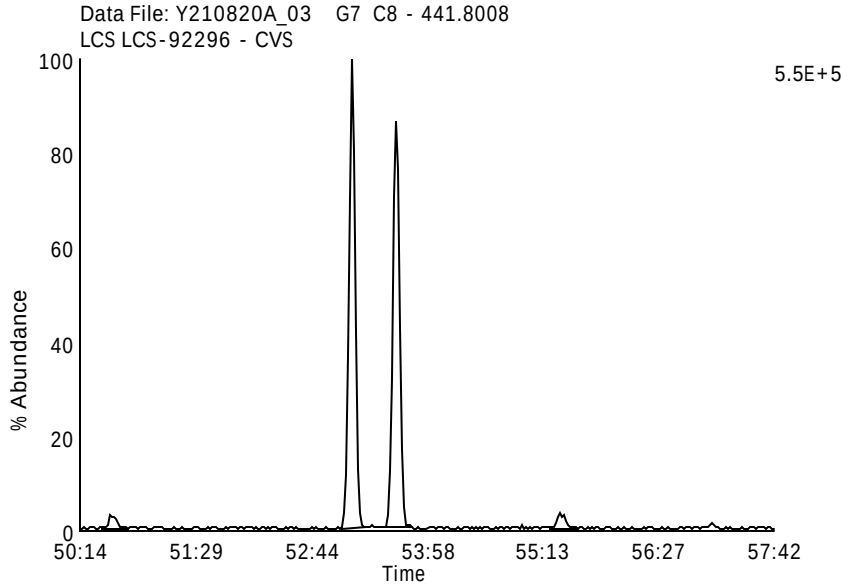
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET



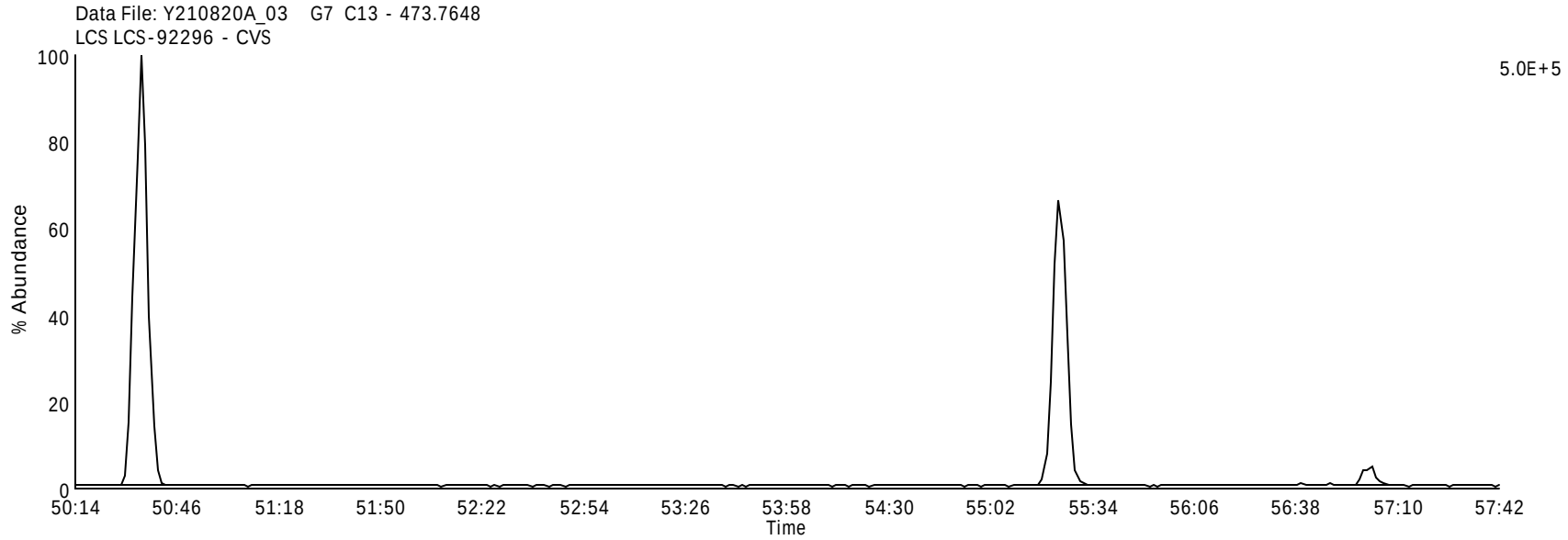


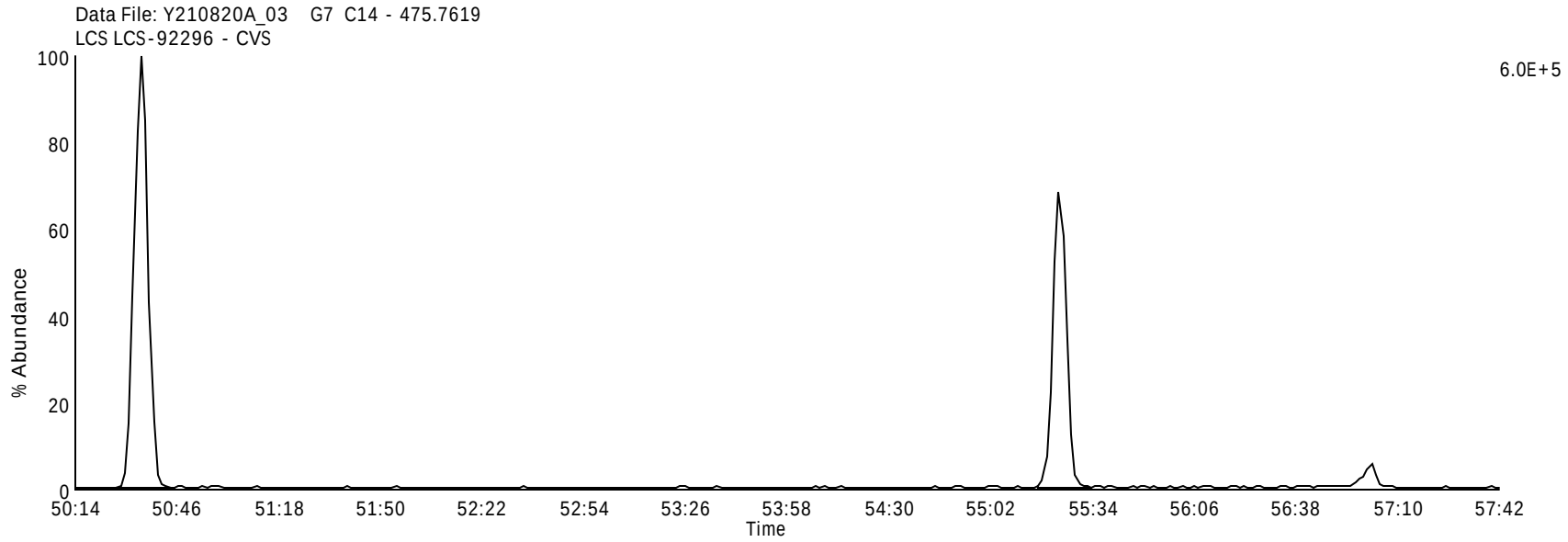




Labeled Nona Chlorinated Biphenyls

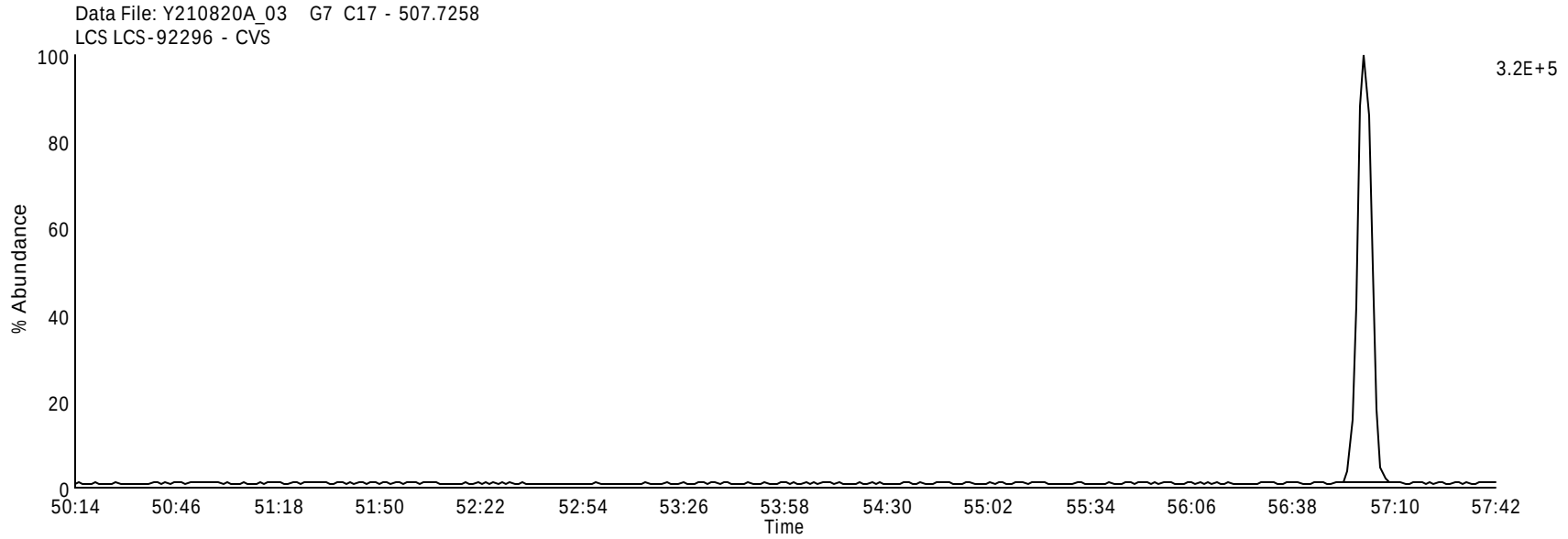
Data File Name: Y210820A_03	Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS	Client Sample ID: CLCSET

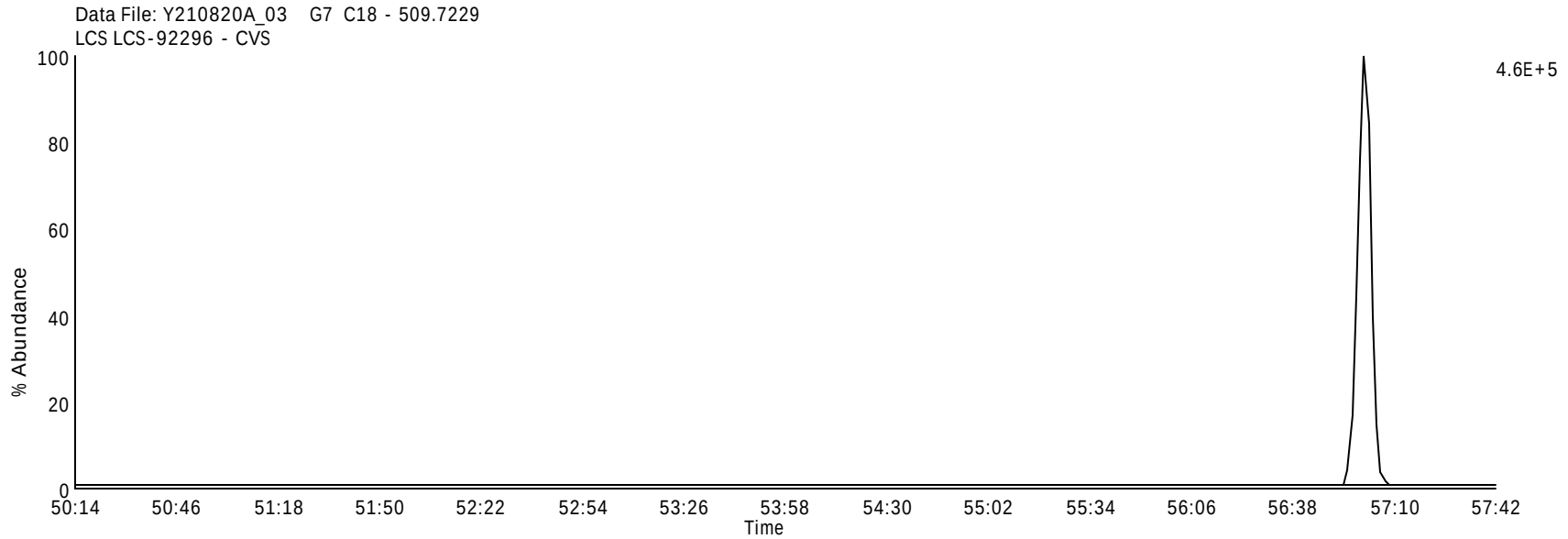




Labeled Deca Chlorinated Biphenyl

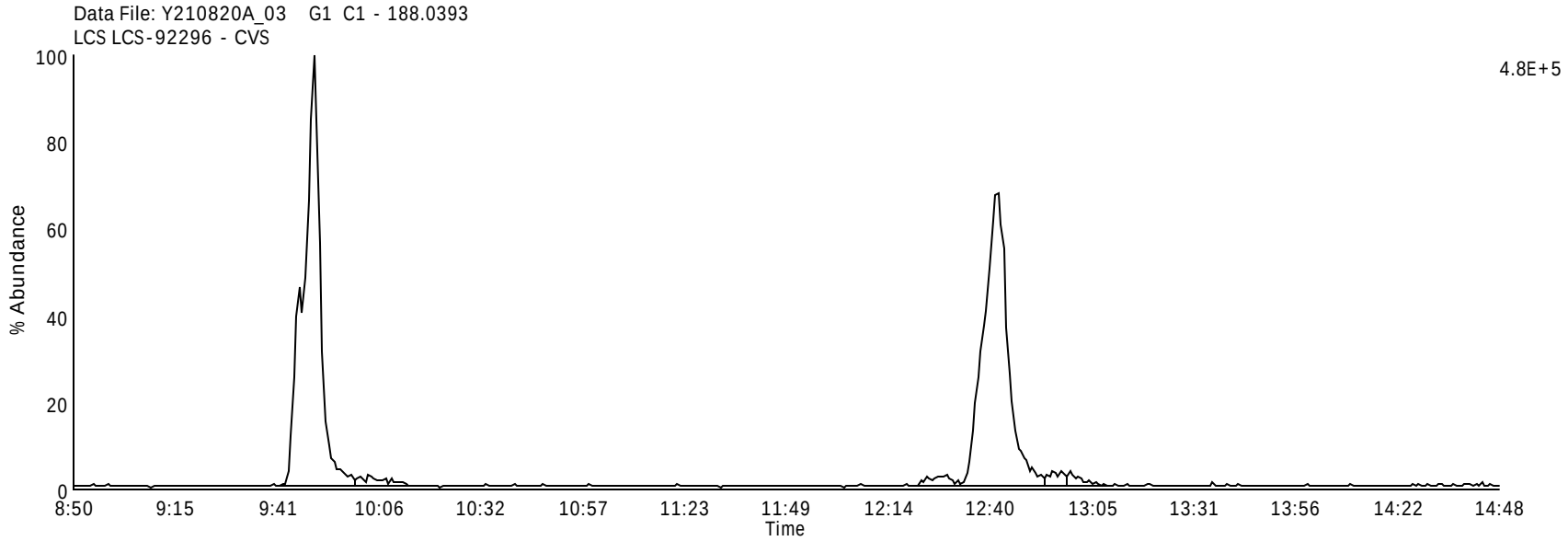
Data File Name: Y210820A_03	Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS	Client Sample ID: CLCSET

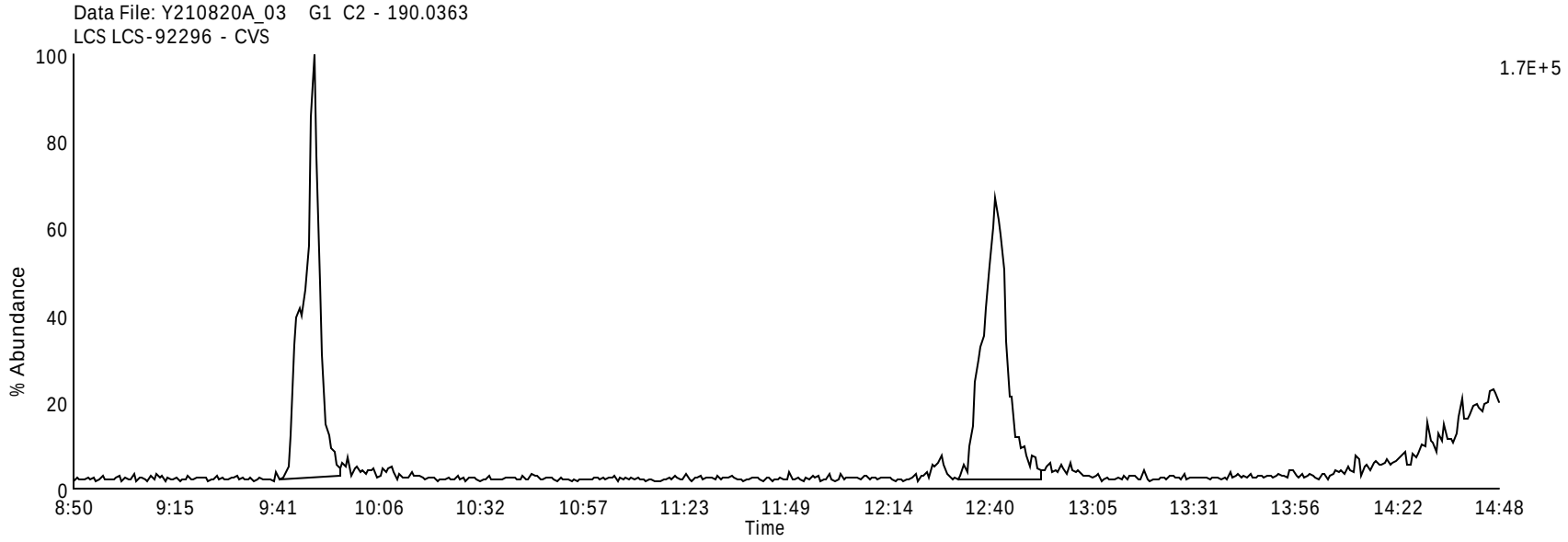




Mono Chlorinated Biphenyls

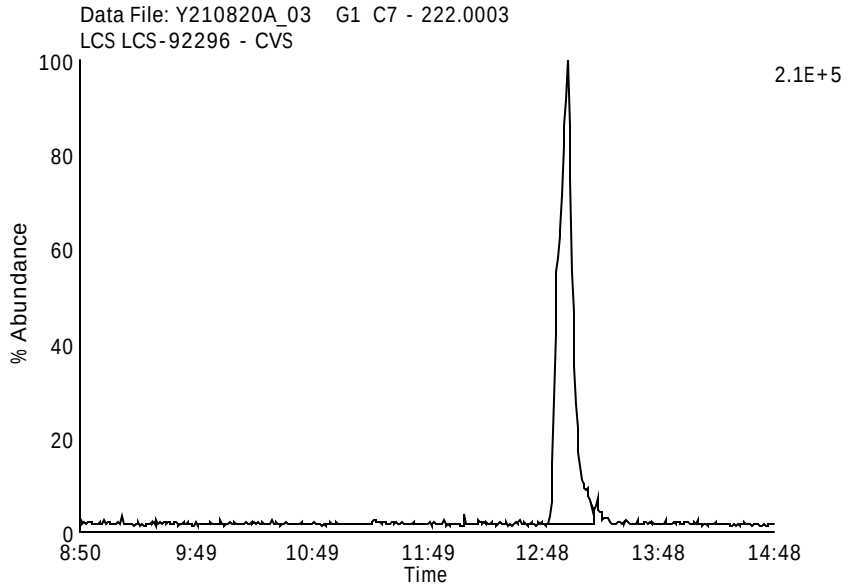
Data File Name: Y210820A_03	Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS	Client Sample ID: CLCSET

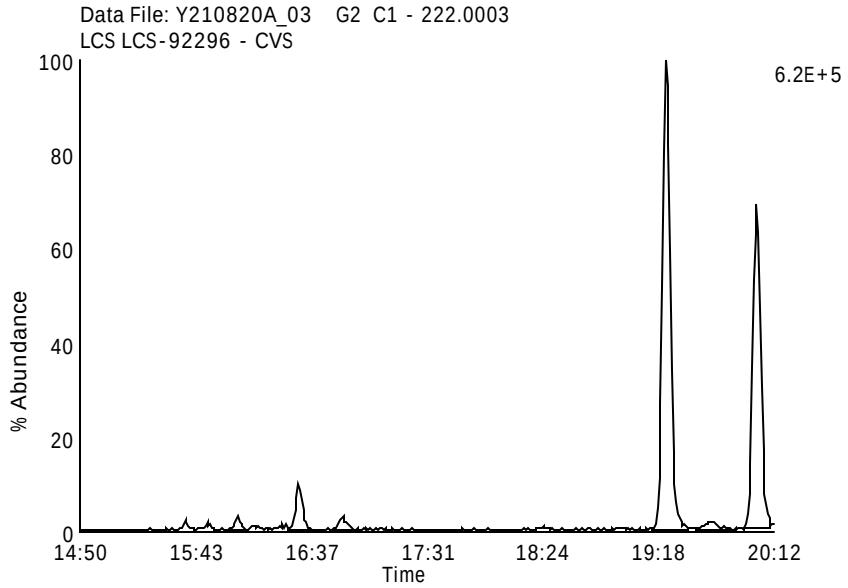


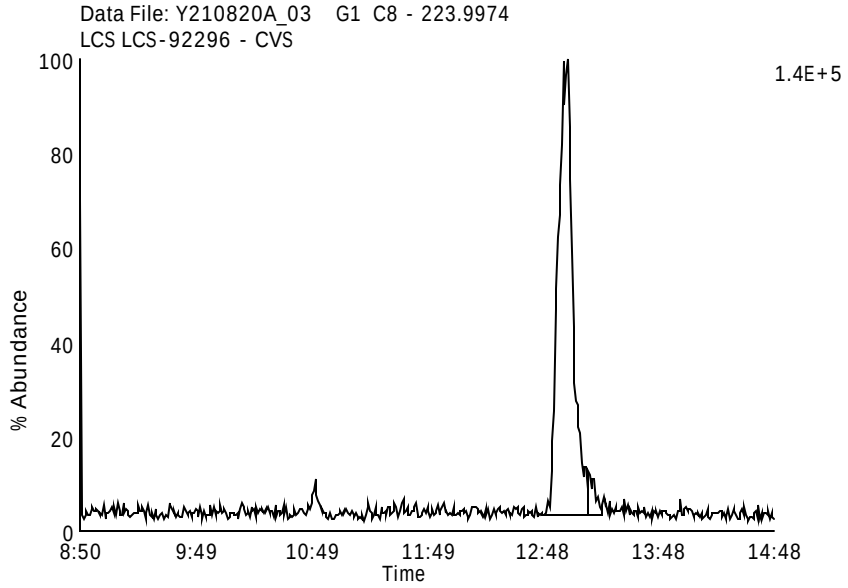


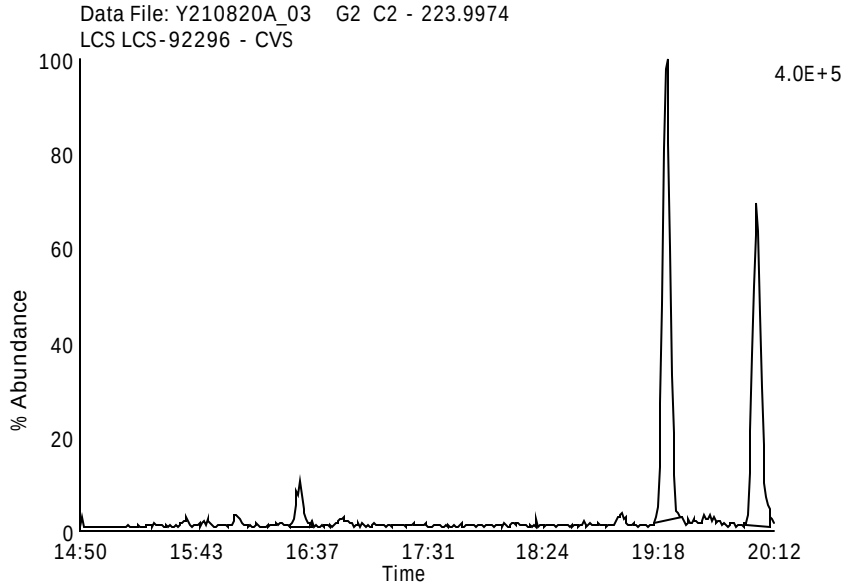
Di Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET



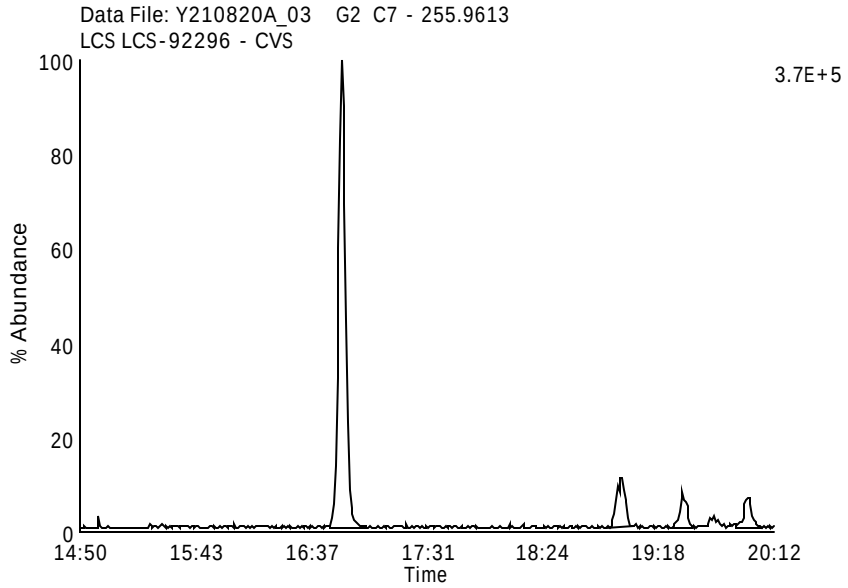


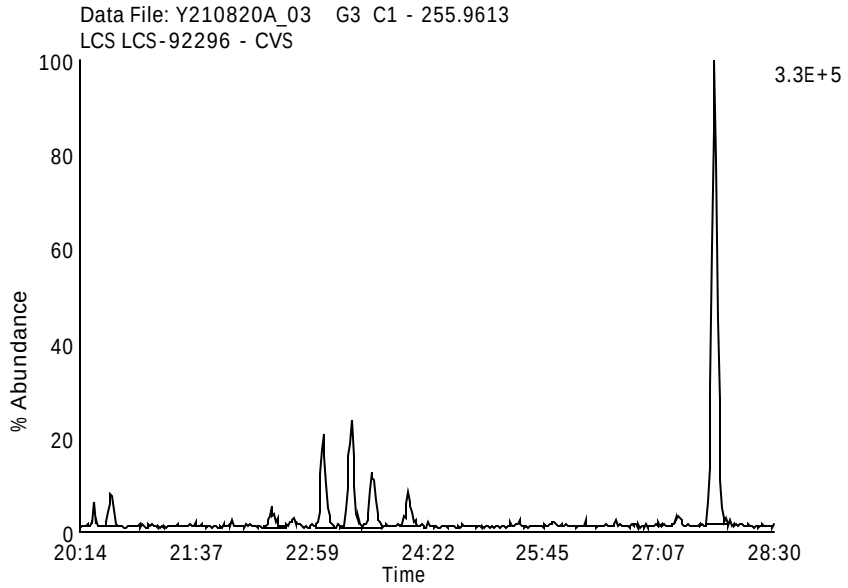


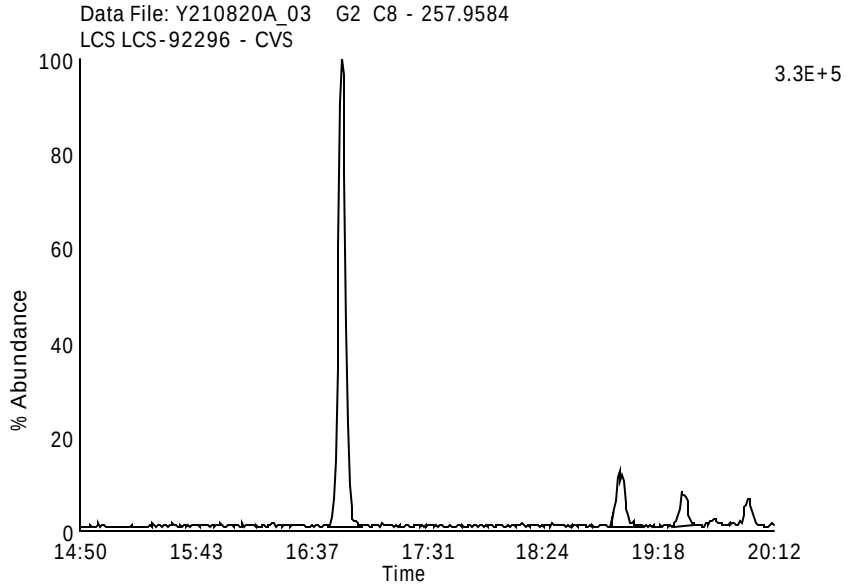


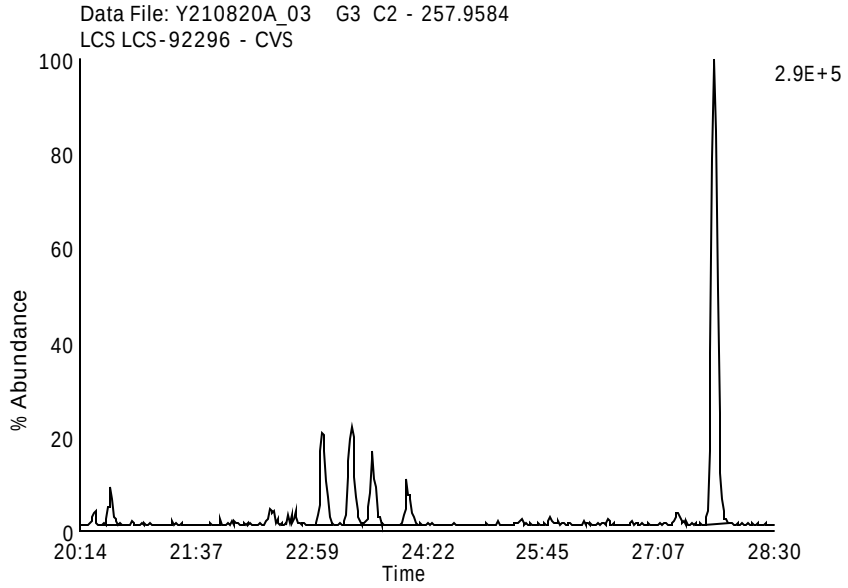
Tri Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET





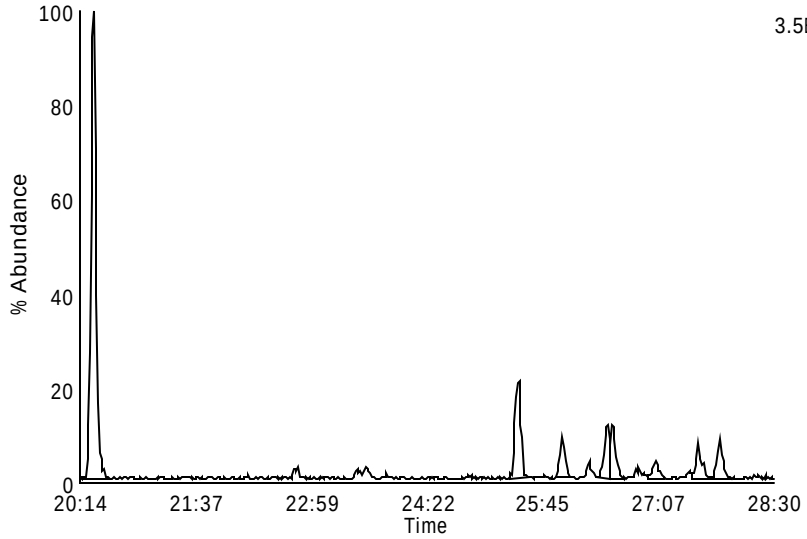




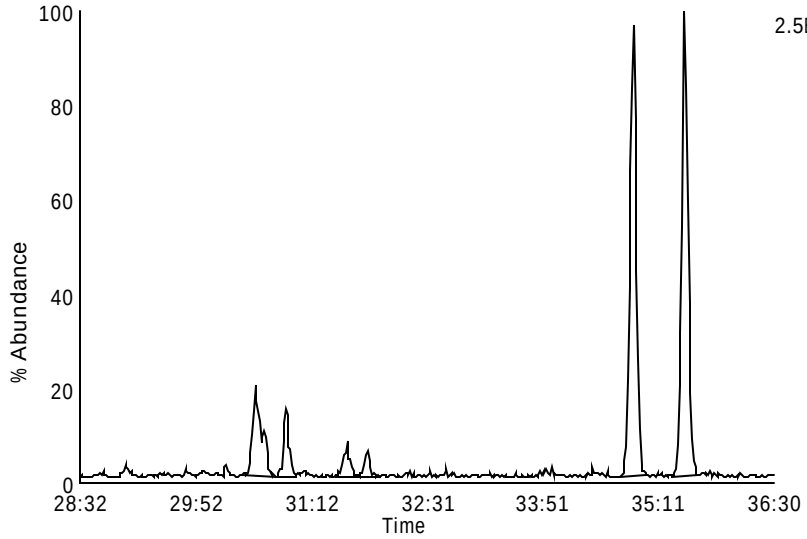
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET

Data File: Y210820A_03 G3 C7 - 289.9224
LCS LCS-92296 - CVS



Data File: Y210820A_03 G4 C1 - 289.9224
LCS LCS-92296 - CVS



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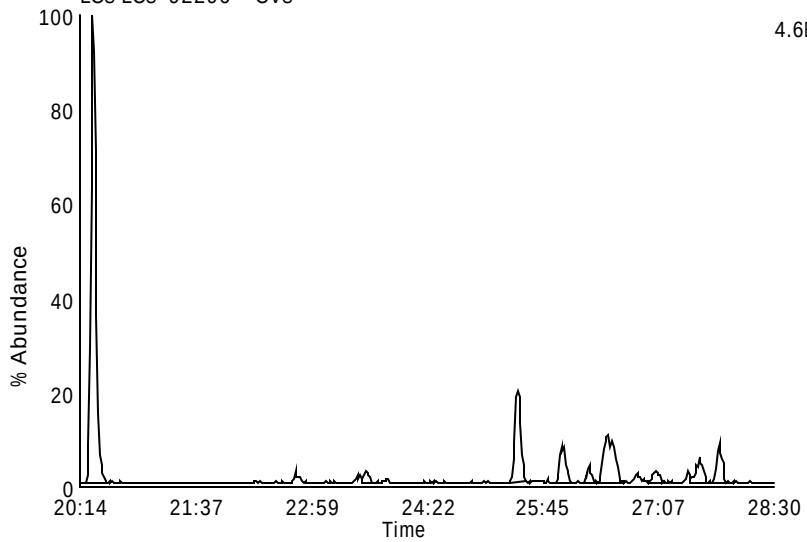
LCS LCS-92296 - CVS



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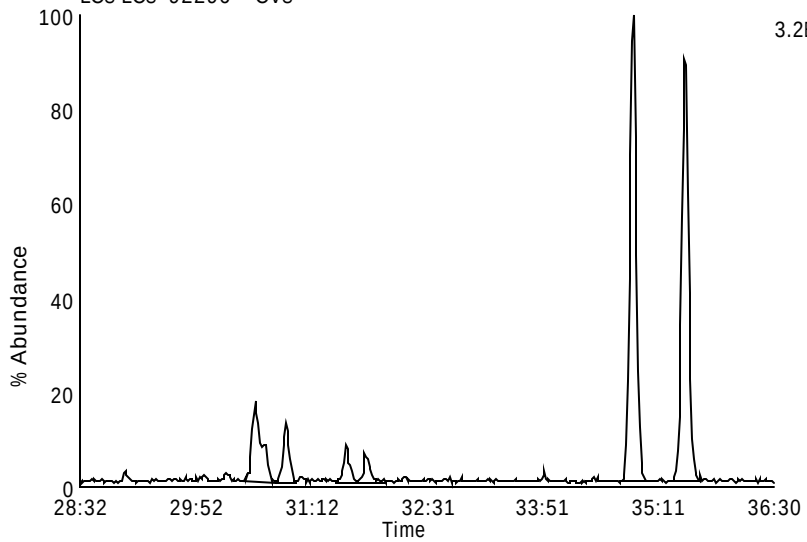
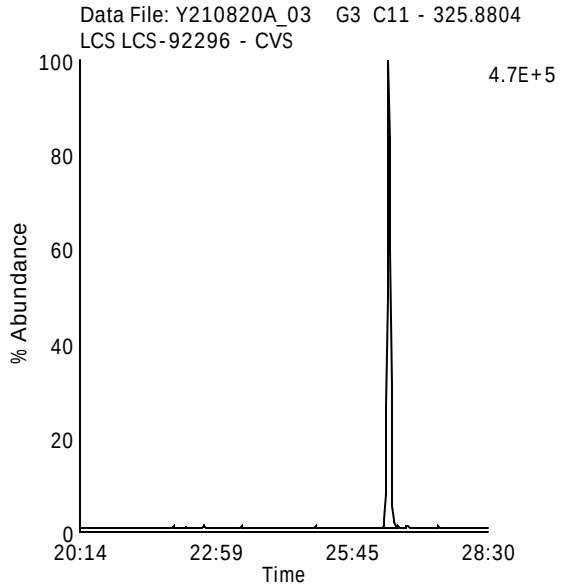
LCS LCS-92296 - CVS

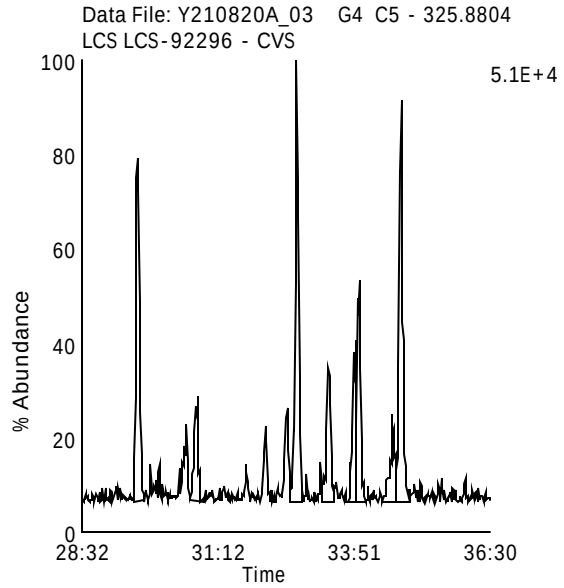


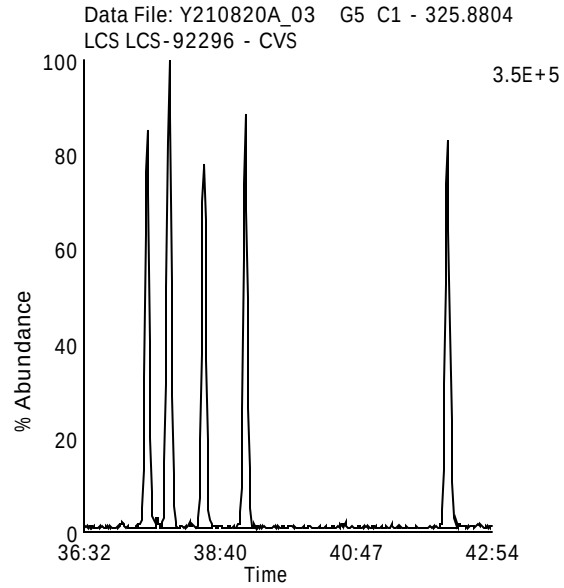
Penta Chlorinated Biphenyls

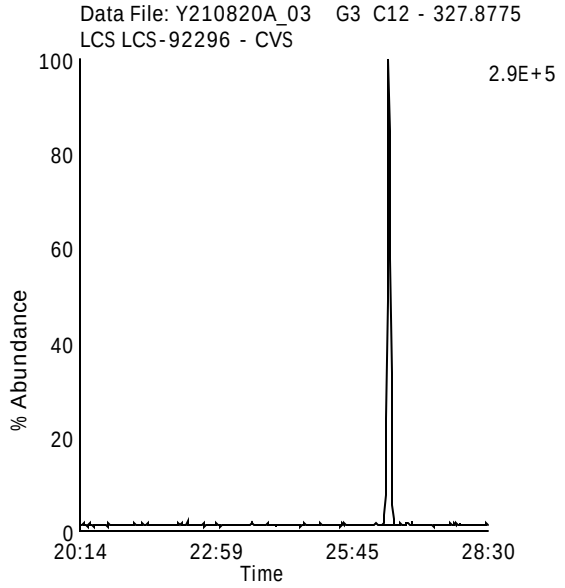
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

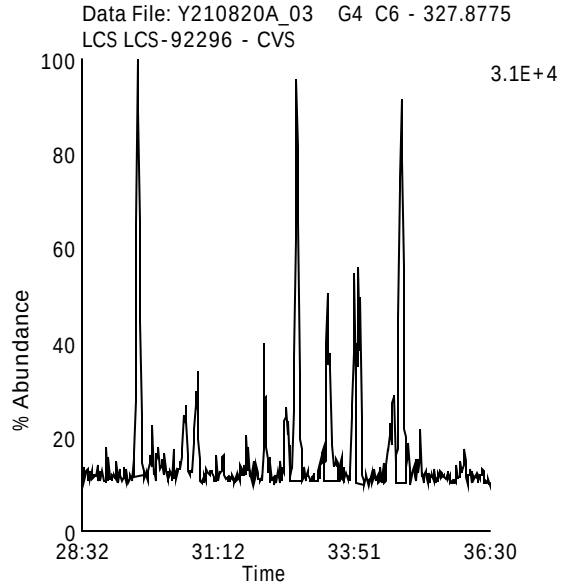
Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET

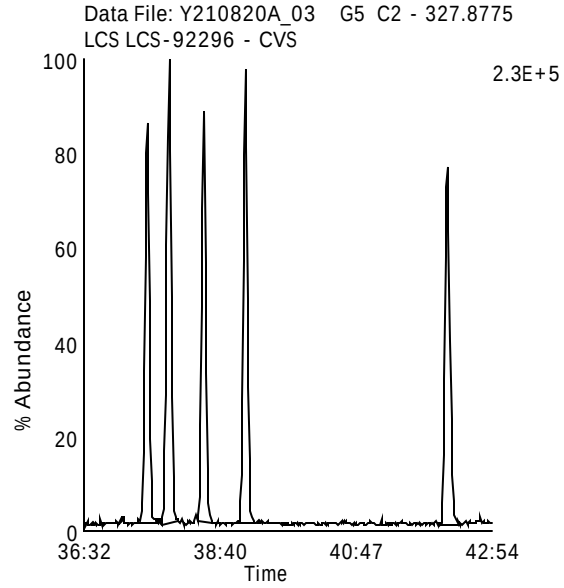






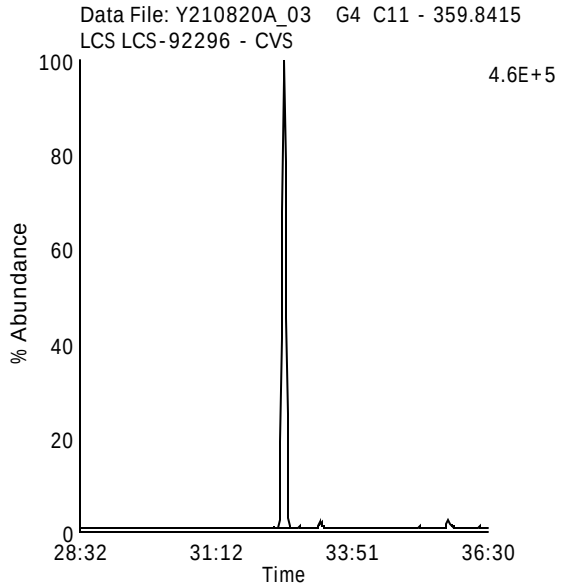


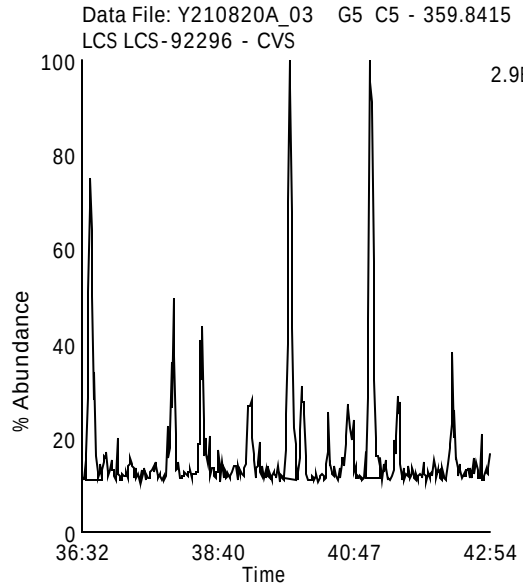


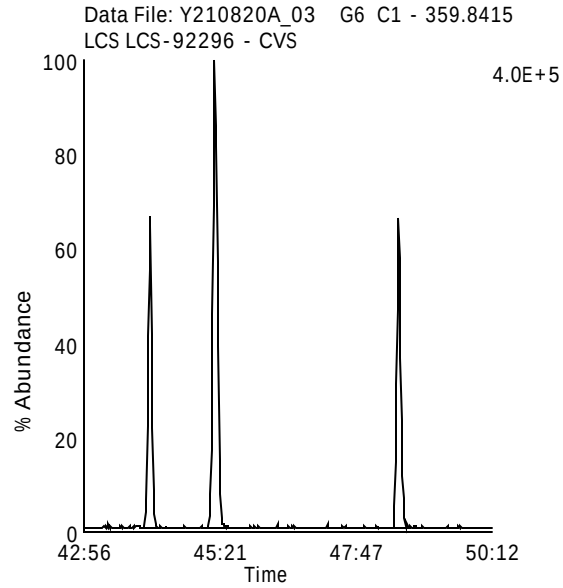


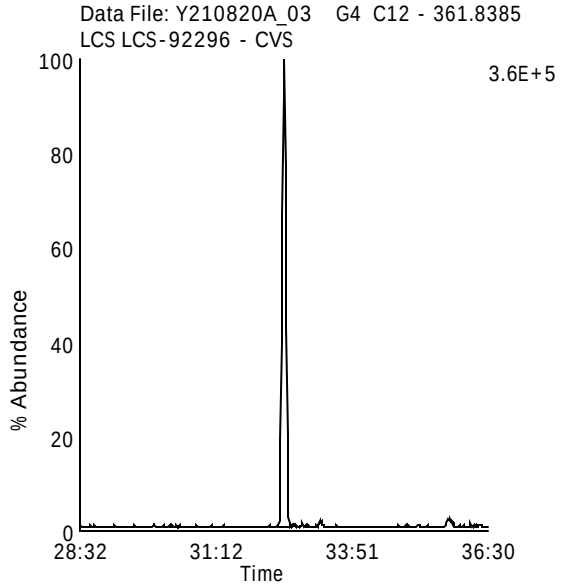
Hexa Chlorinated Biphenyls

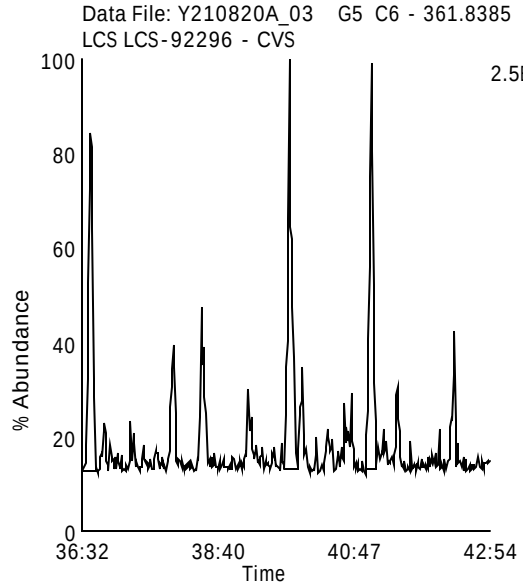
Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET

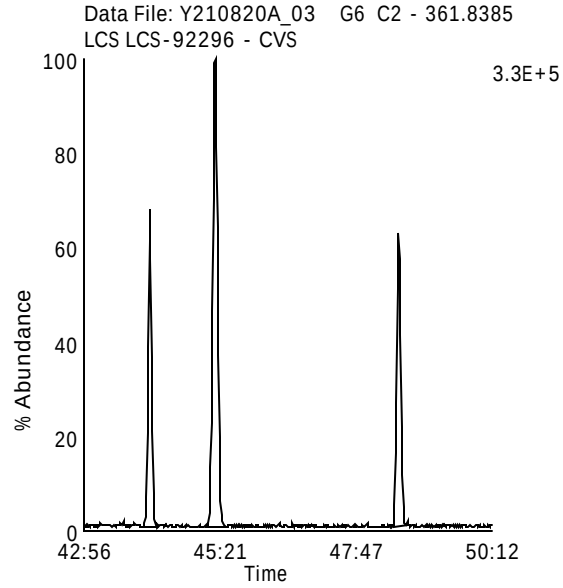






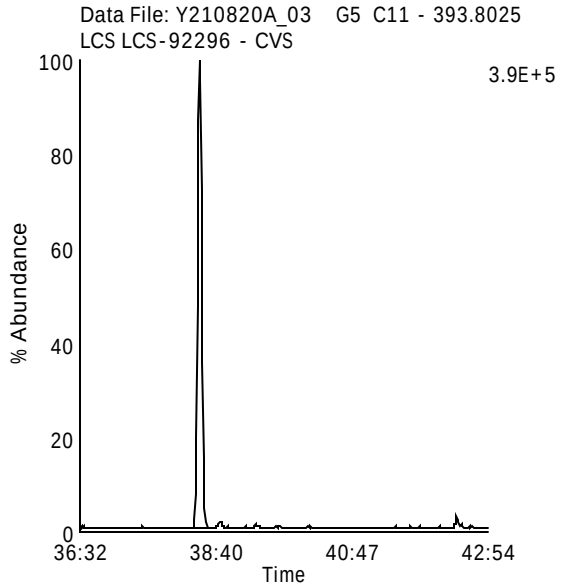


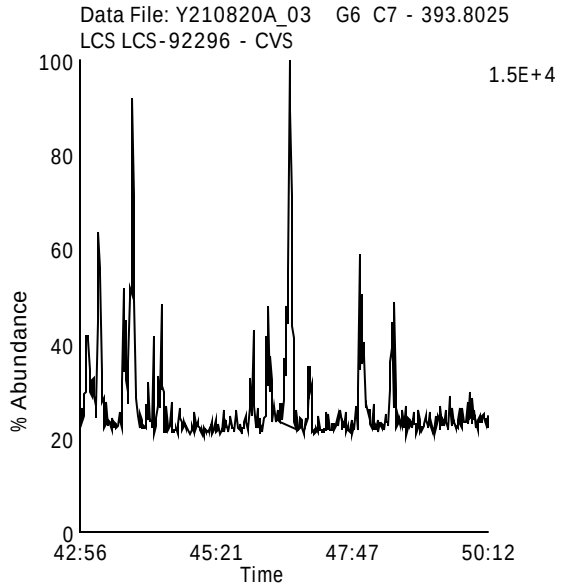


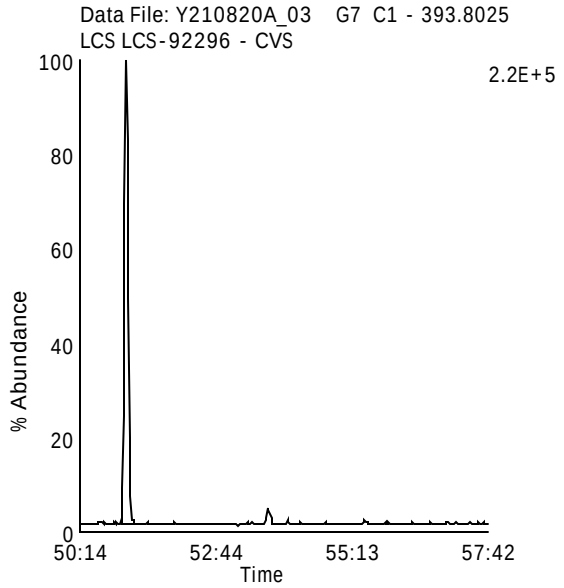


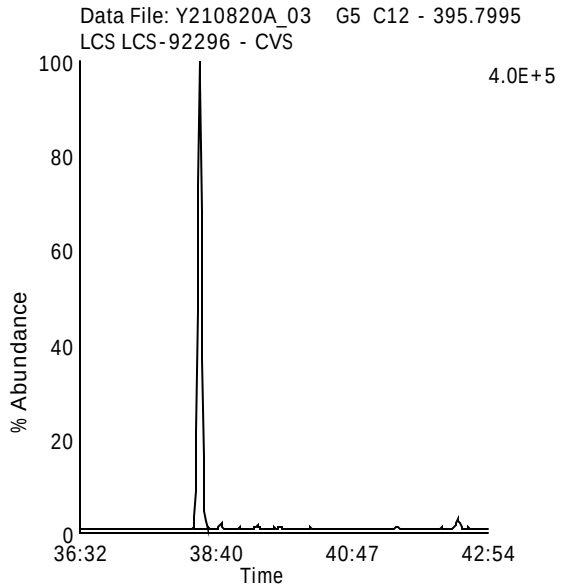
Hepta Chlorinated Biphenyls

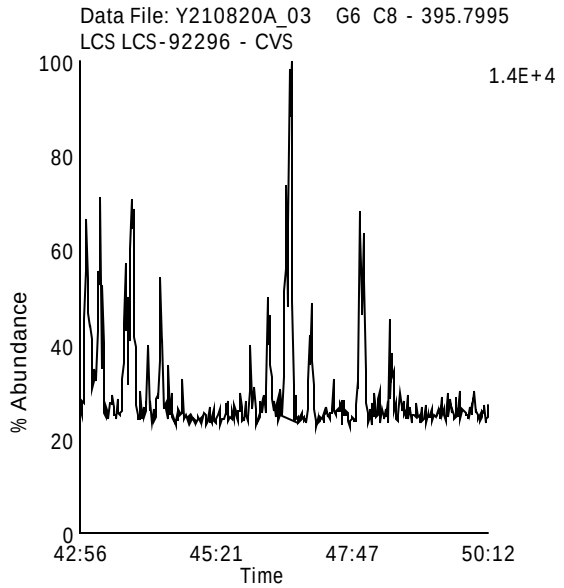
Data File Name: Y210820A_03
Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS
Client Sample ID: CLCSET

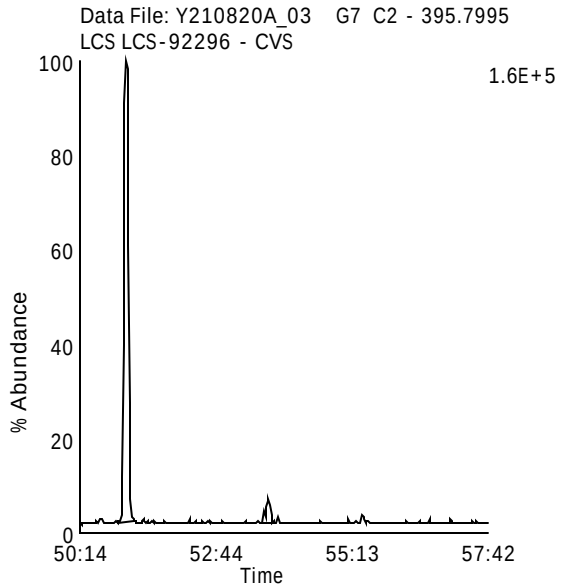










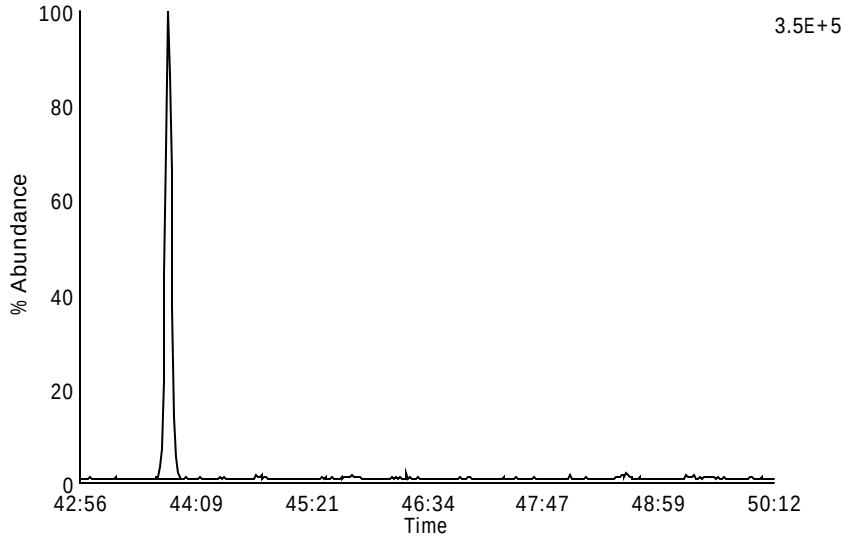


Octa Chlorinated Biphenyls

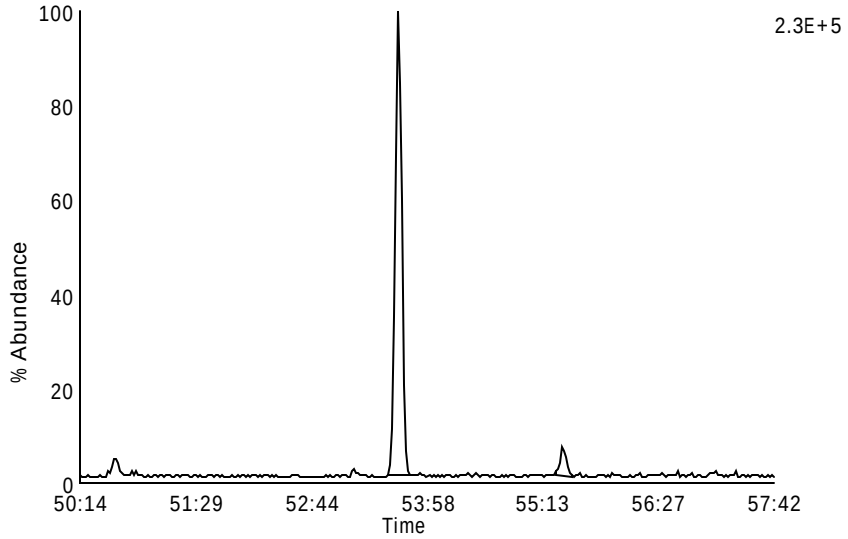
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET

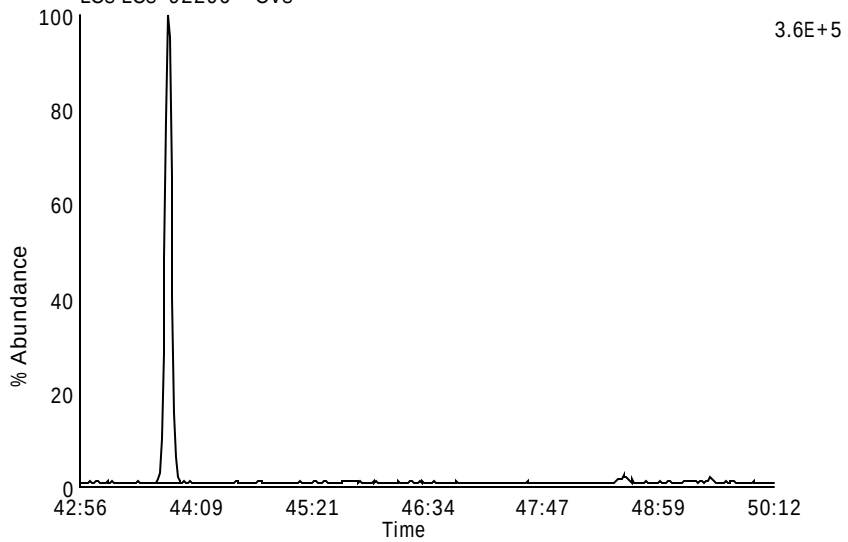
Data File: Y210820A_03 G6 C11 - 427.7635
LCS LCS-92296 - CVS



Data File: Y210820A_03 G7 C5 - 427.7635
LCS LCS-92296 - CVS



Data File: Y210820A_03 G6 C12 - 429.7606
LCS LCS-92296 - CVS



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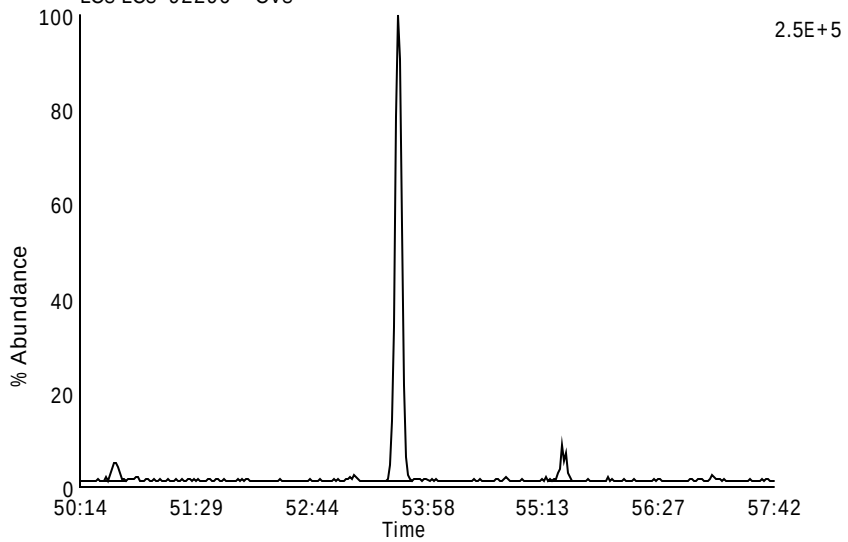
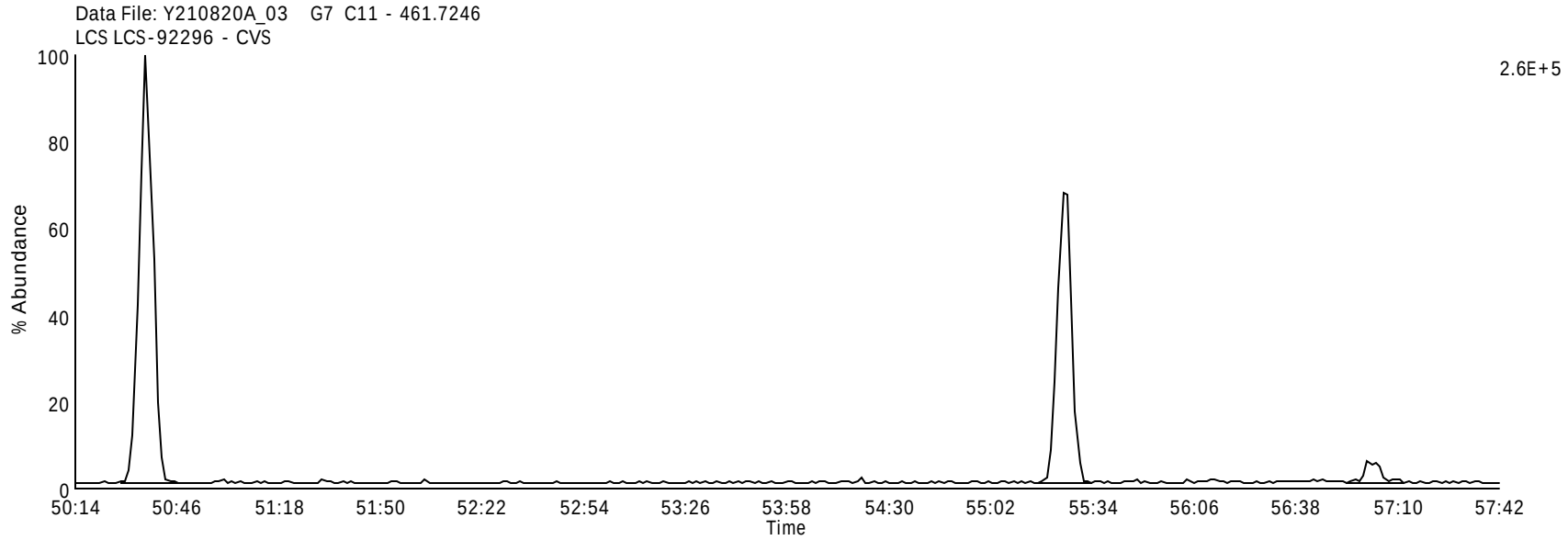
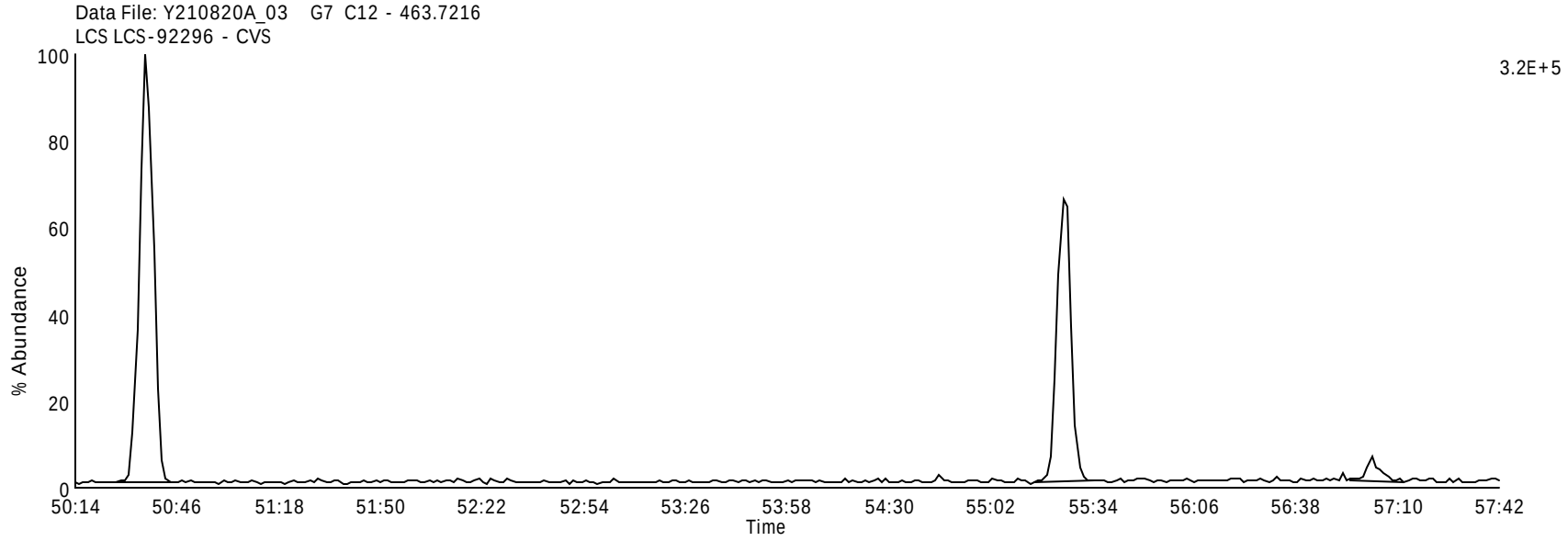
LCS LCS-92296 - CVS



Nona Chlorinated Biphenyls

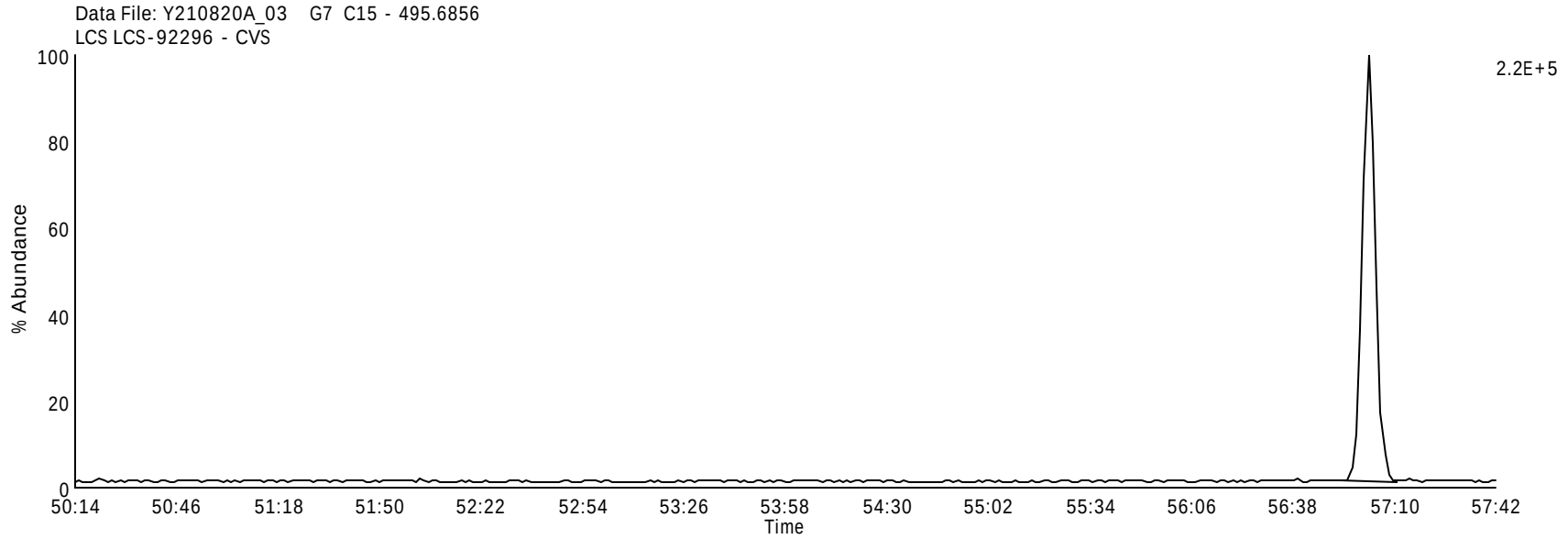
Data File Name: Y210820A_03 | Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS | Client Sample ID: CLCSET

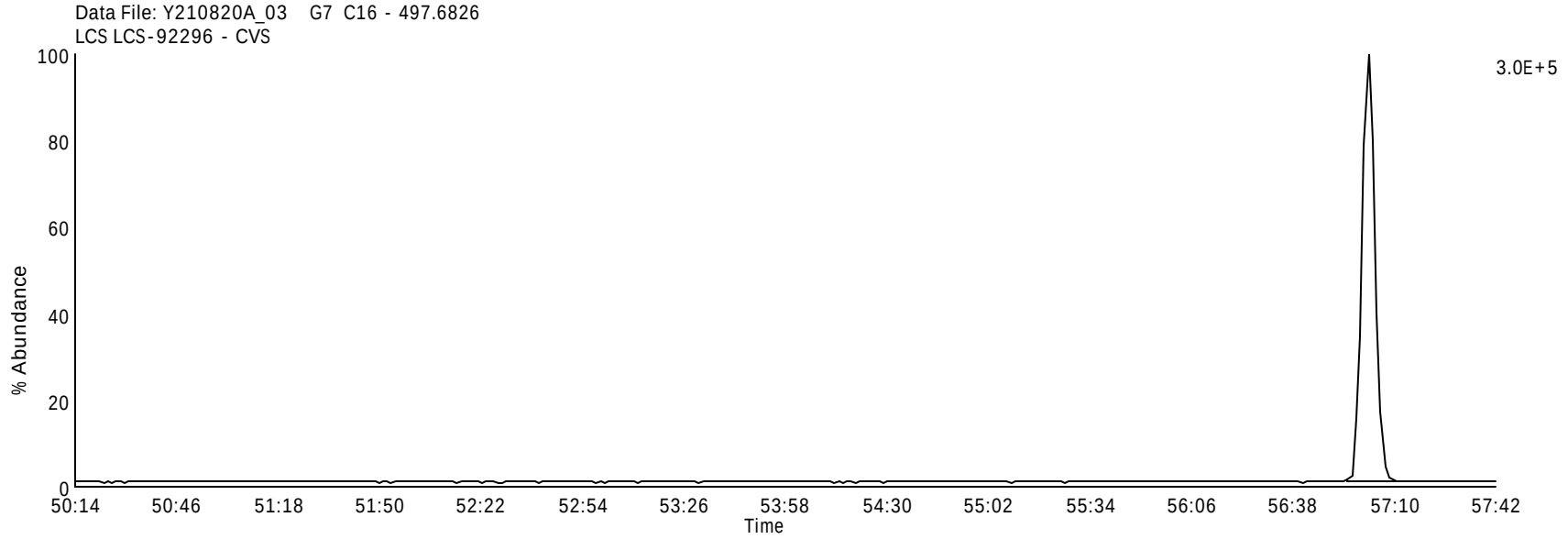




Deca Chlorinated Biphenyl

Data File Name: Y210820A_03	Lab Sample ID: LCS-92296
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCS-92296 - CVS	Client Sample ID: CLCSET

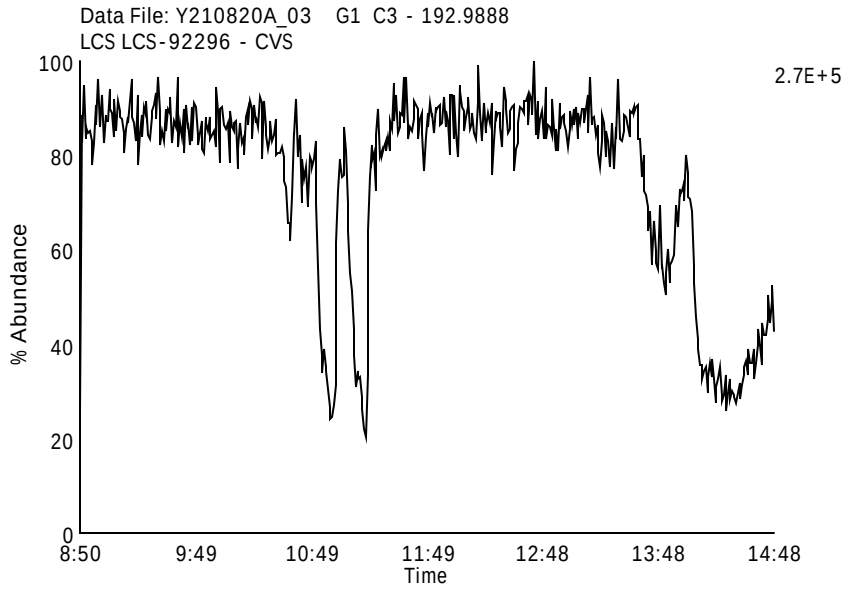


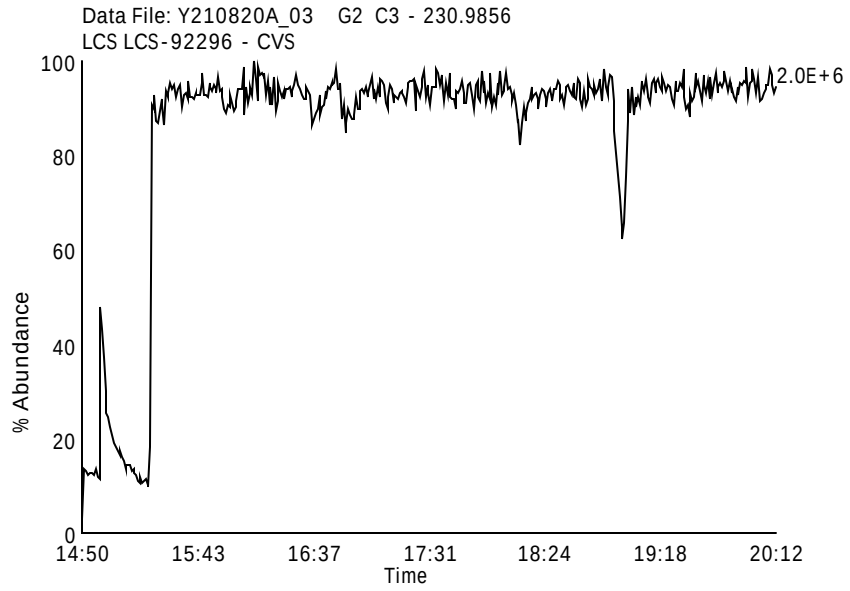


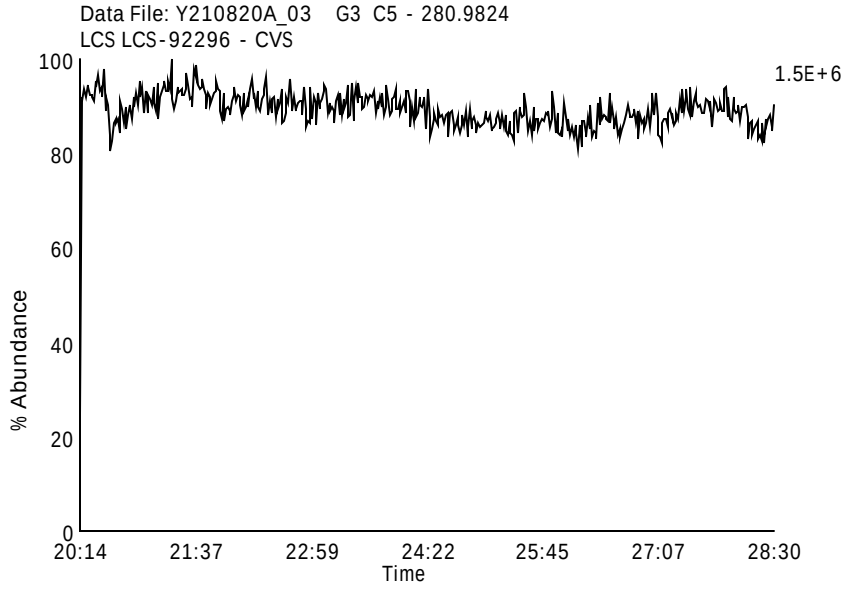
Group 1 - 4 Lock mass

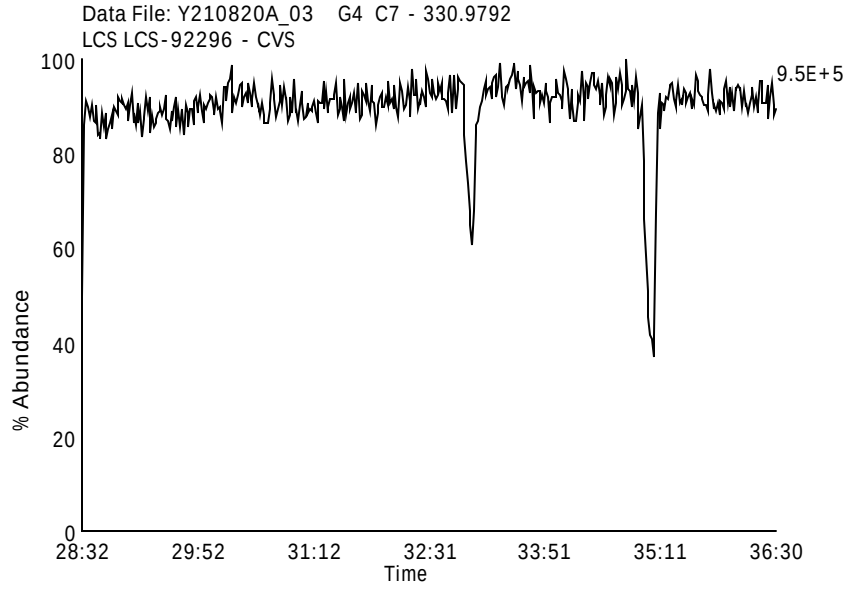
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET





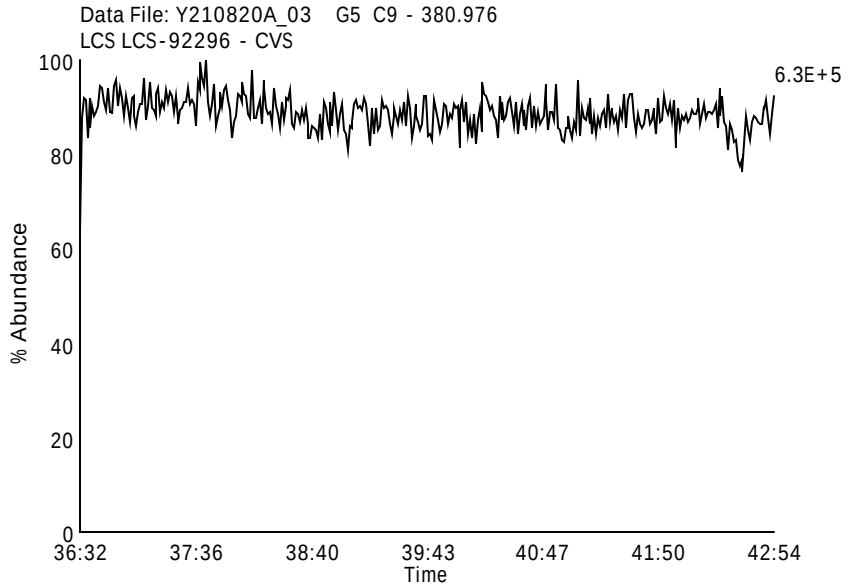


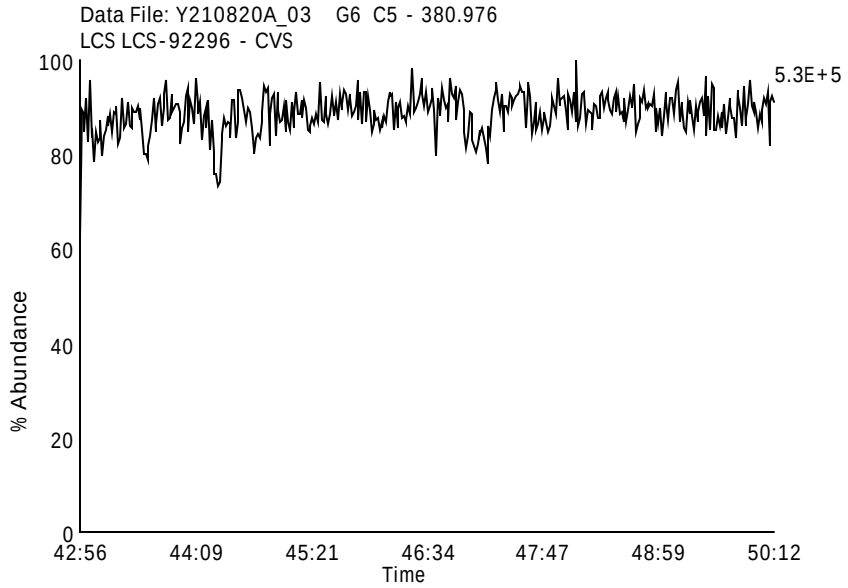


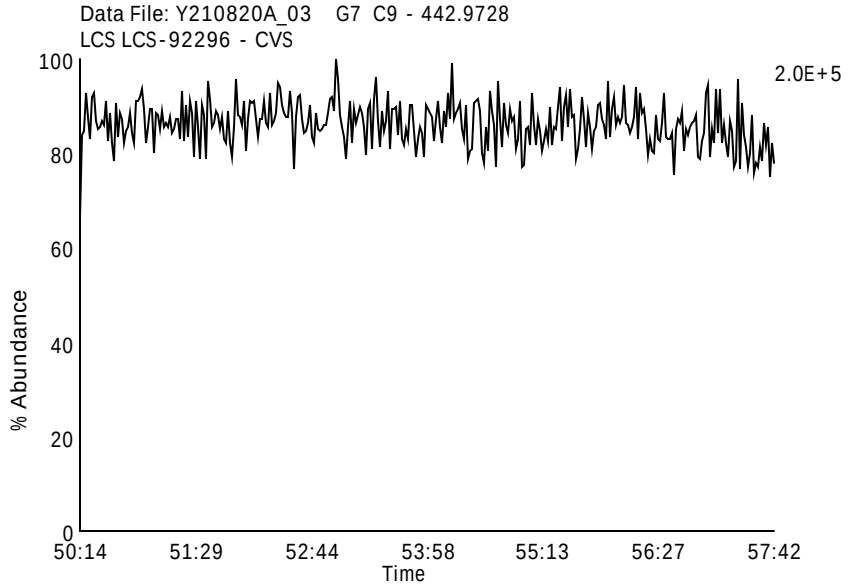
Group 5 - 7 Lock mass

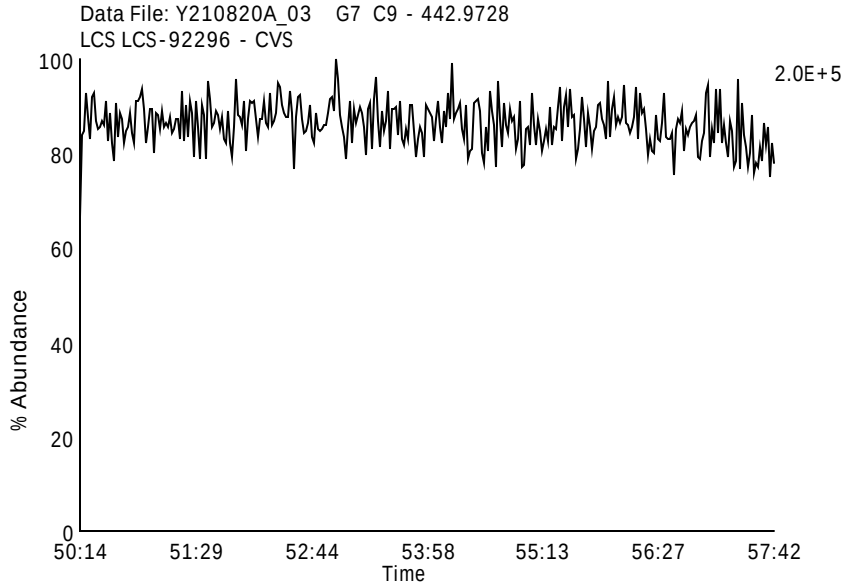
Data File Name: Y210820A_03
Date Acquired: 8/20/2021
Sample Description: LCS LCS-92296 - CVS

Lab Sample ID: LCS-92296
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSET



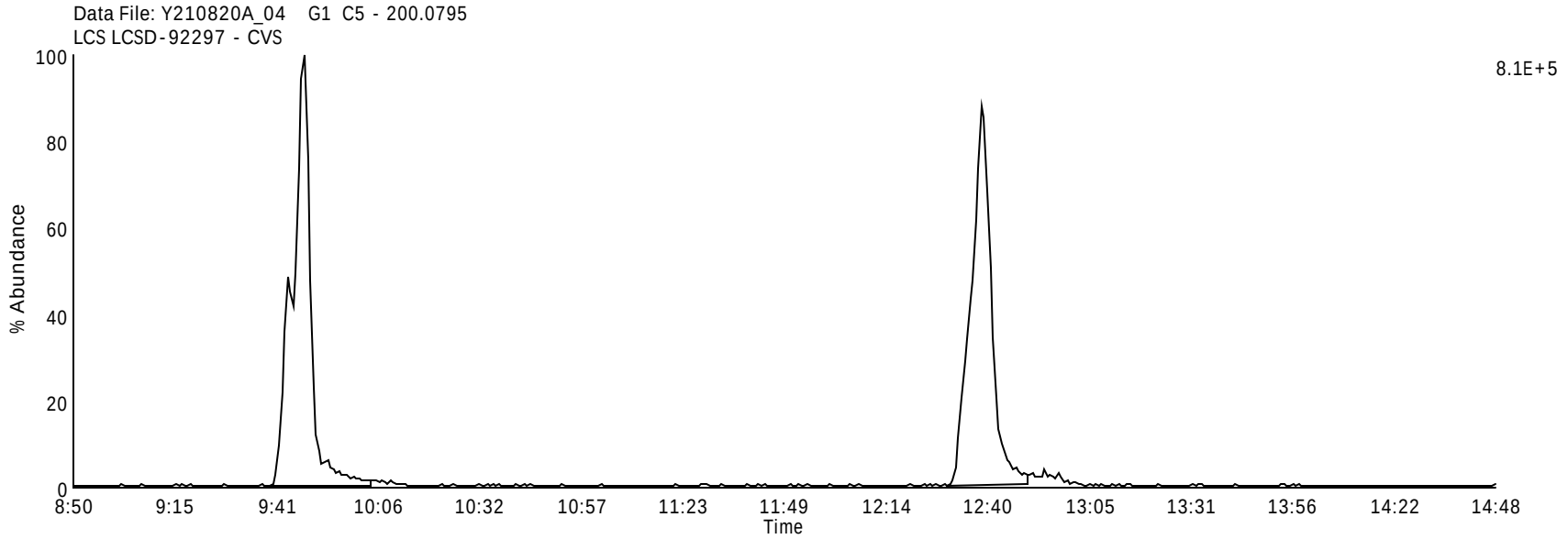


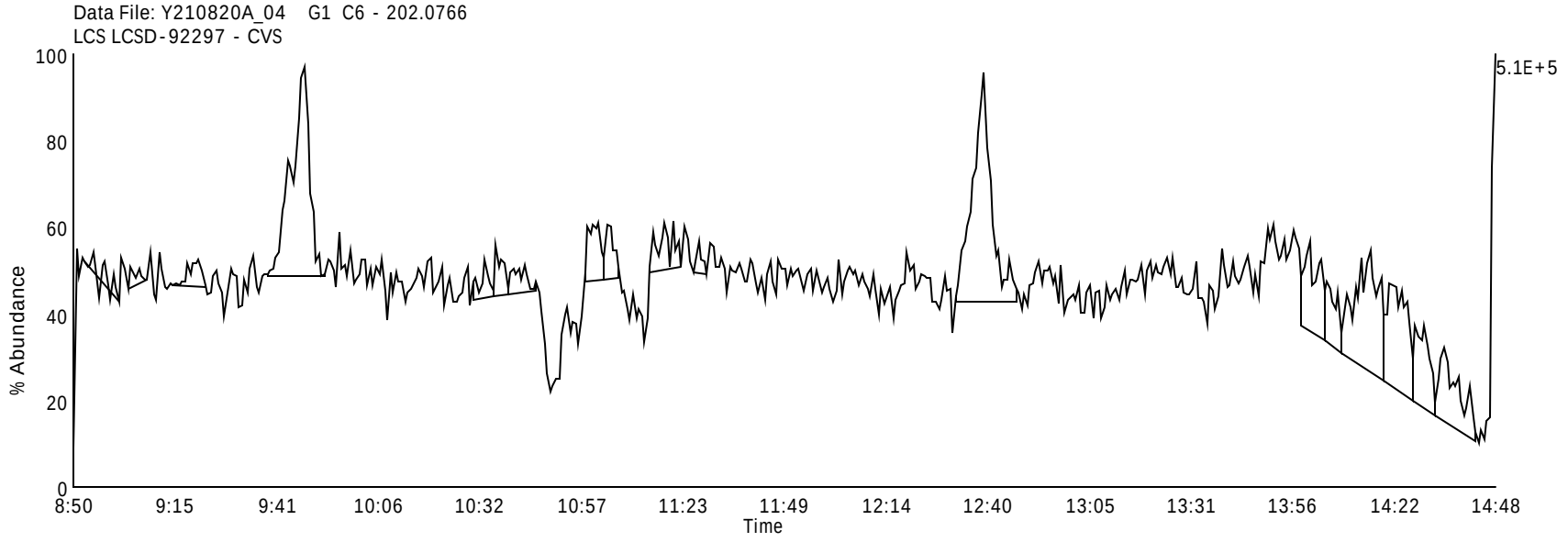




Labeled Mono Chlorinated Biphenyls

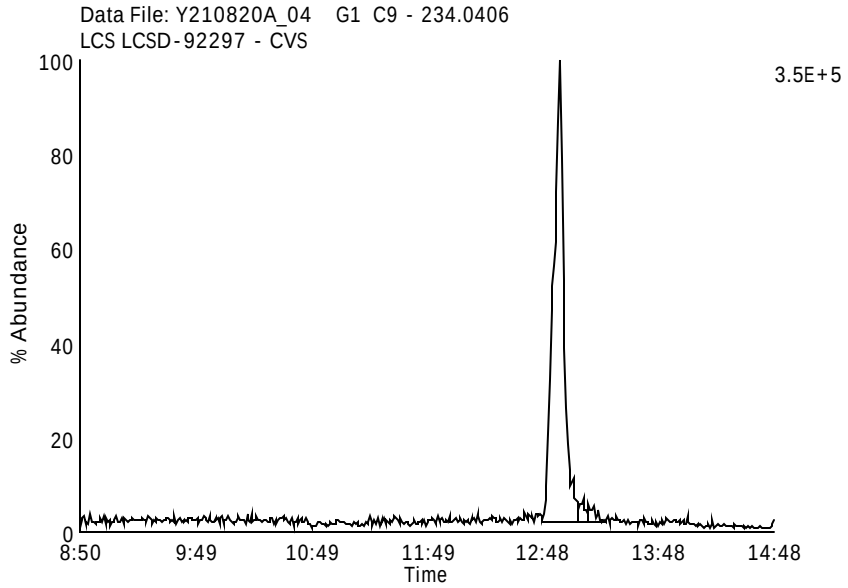
Data File Name: Y210820A_04 | Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS | Client Sample ID: CLCSEU

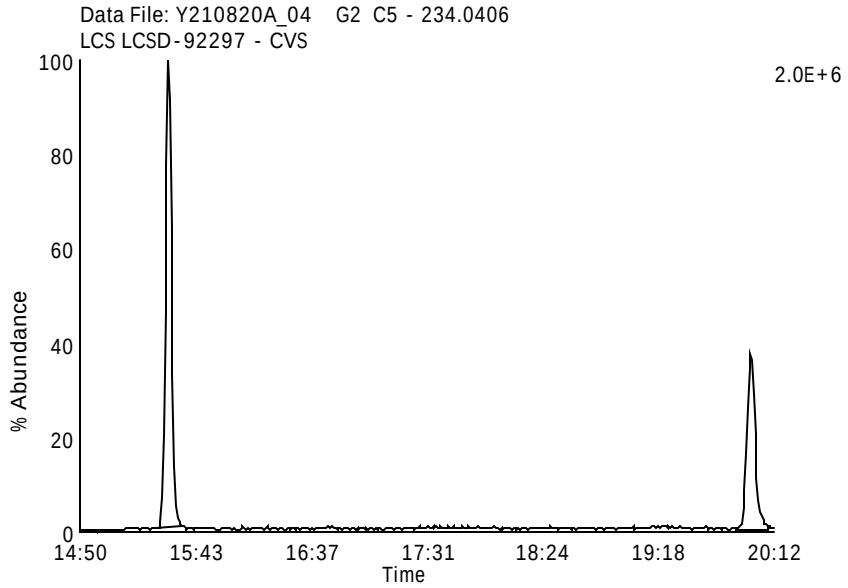


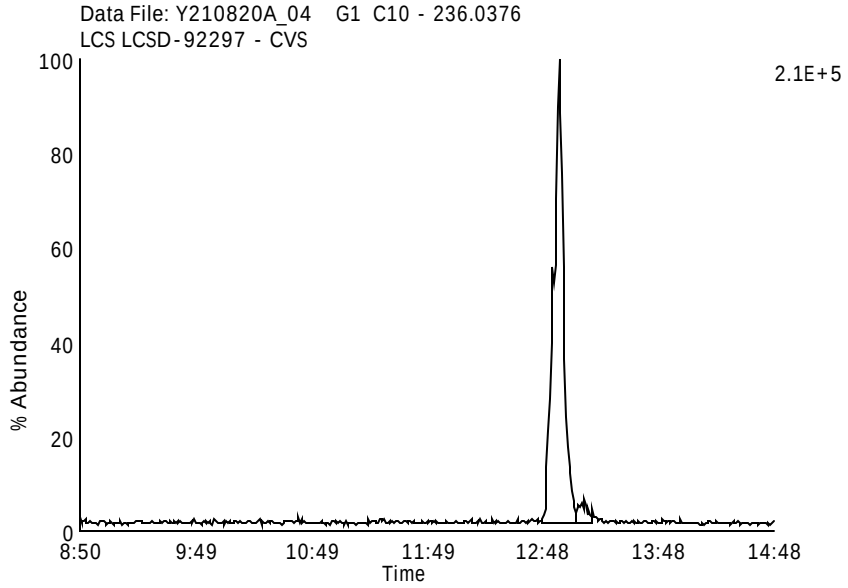


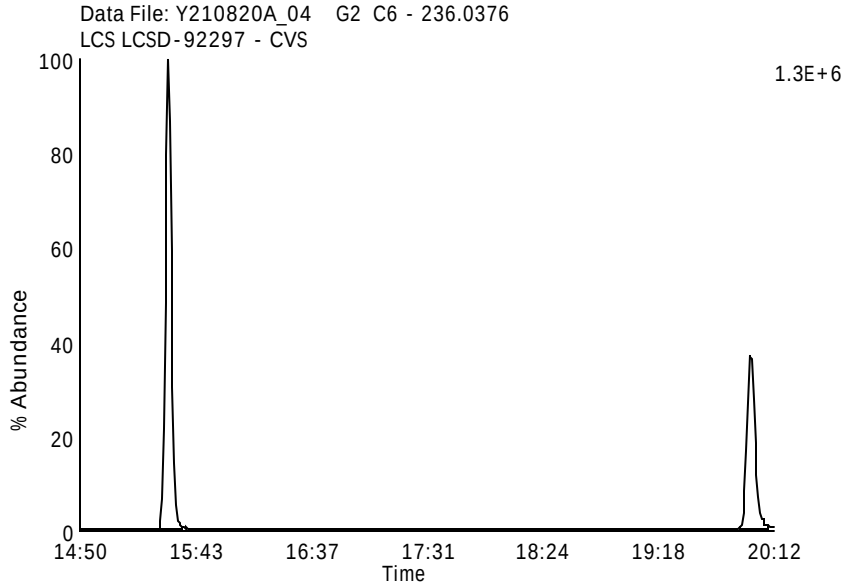
Labeled Di Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



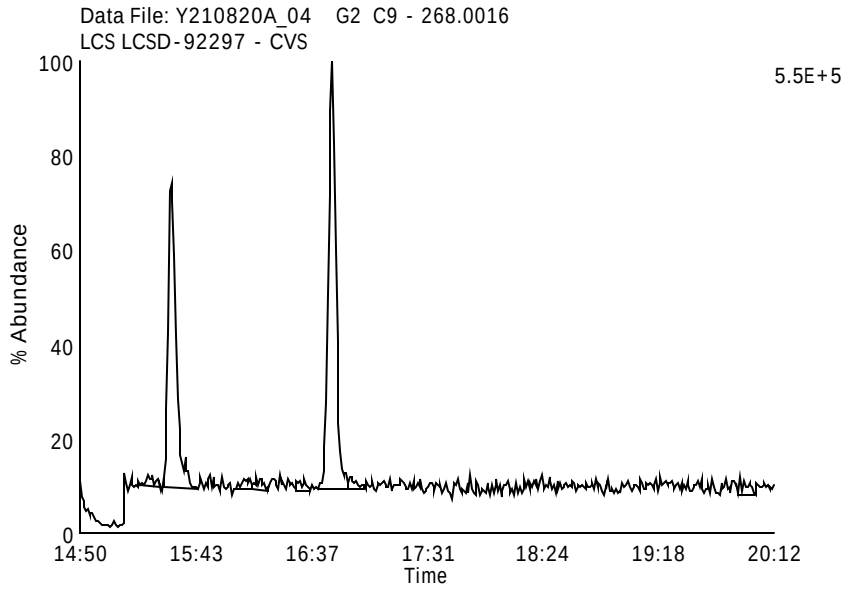


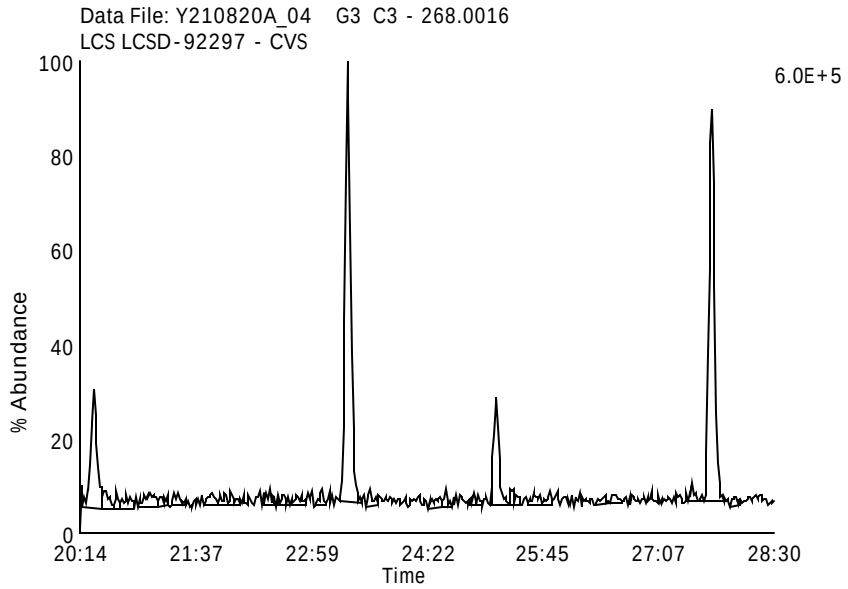


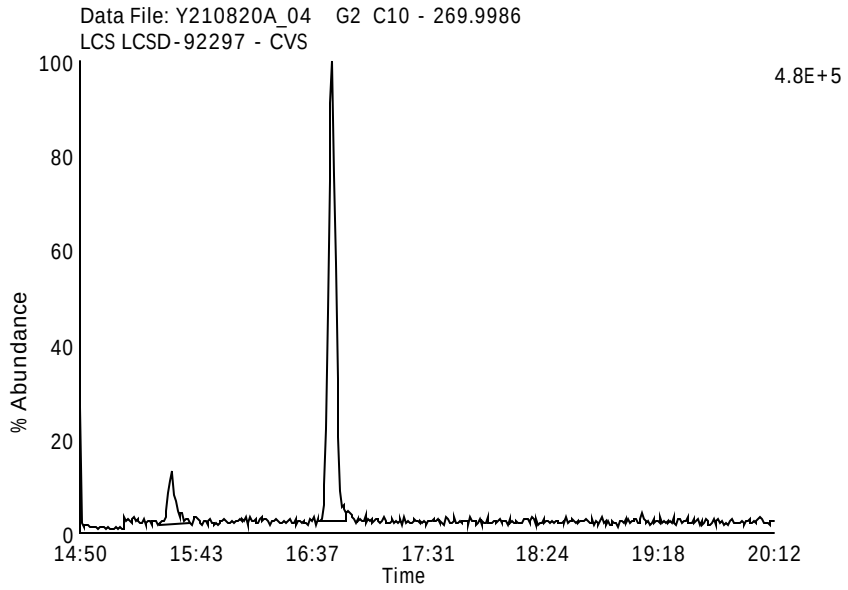


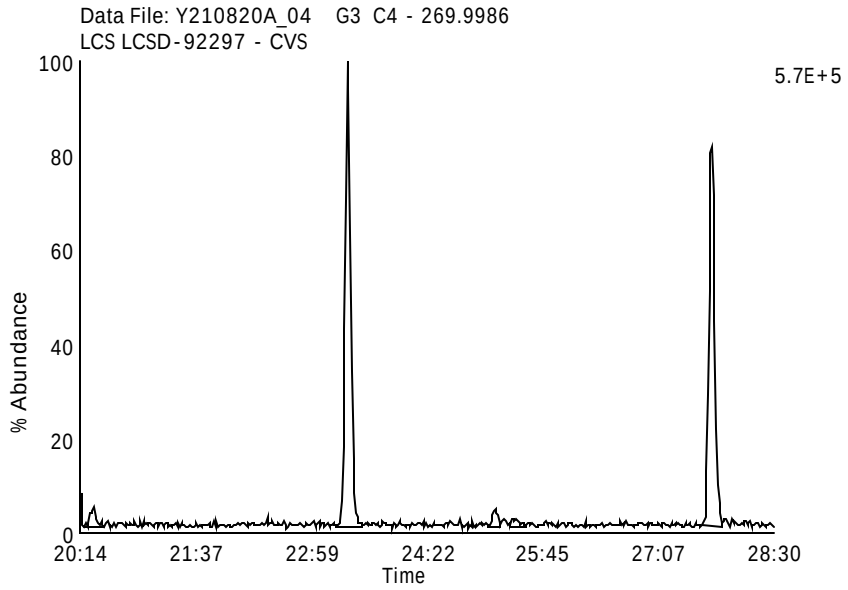
Labeled Tri Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU





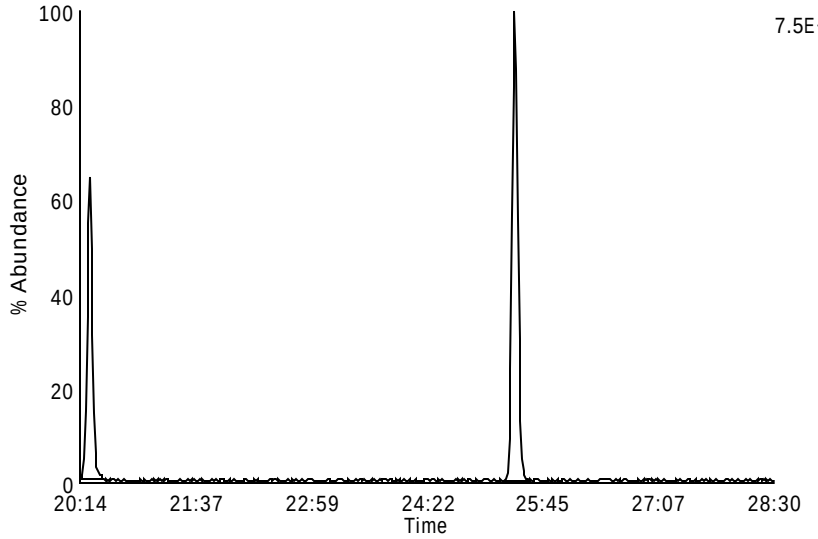




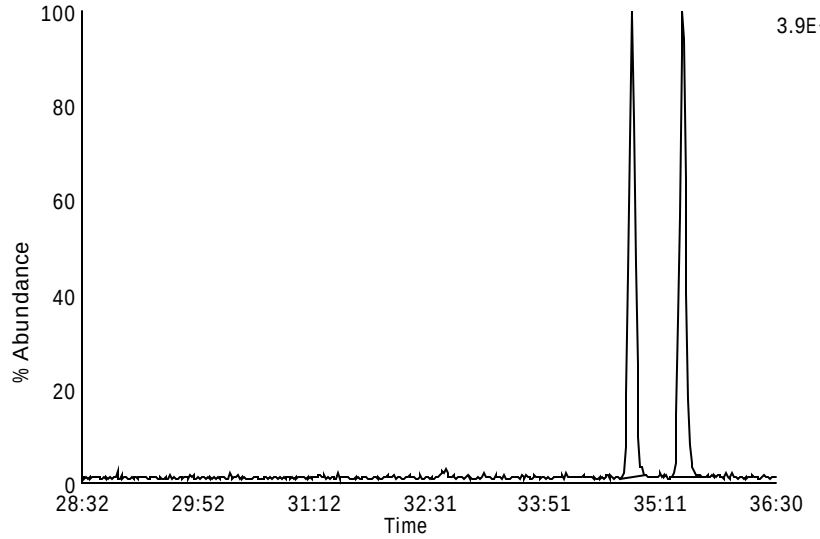
Labeled Tetra Chlorinated Biphenyls

Data File Name: Y210820A_04 | Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS | Client Sample ID: CLCSEU

Data File: Y210820A_04 G3 C9 - 301.9626
LCS LCSD-92297 - CVS



Data File: Y210820A_04 G4 C3 - 301.9626
LCS LCSD-92297 - CVS



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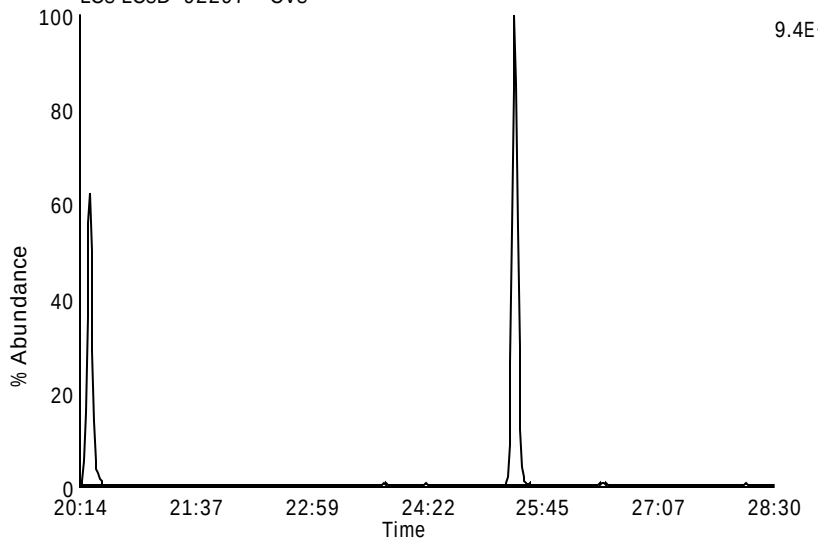
LCS LCSD-92297 - CVS



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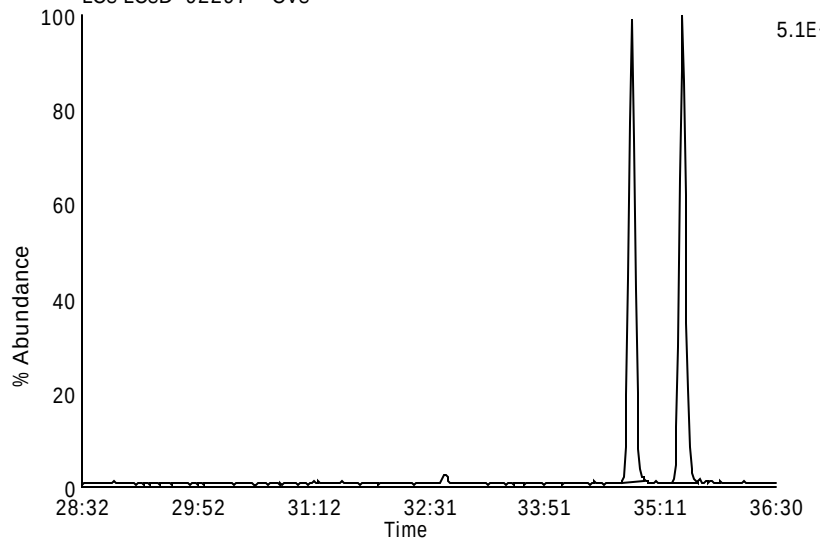
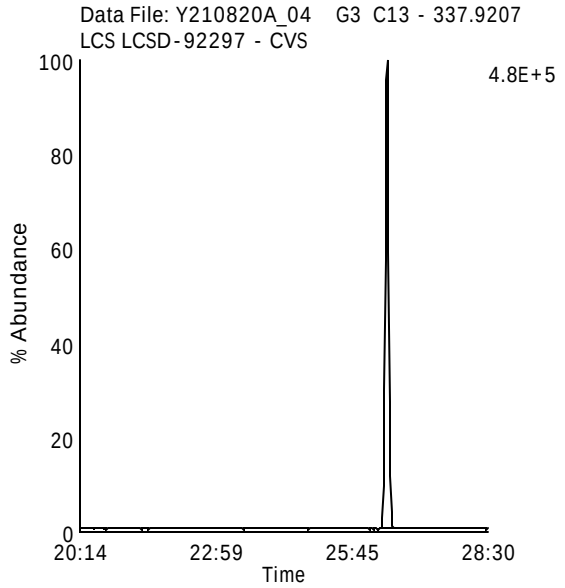
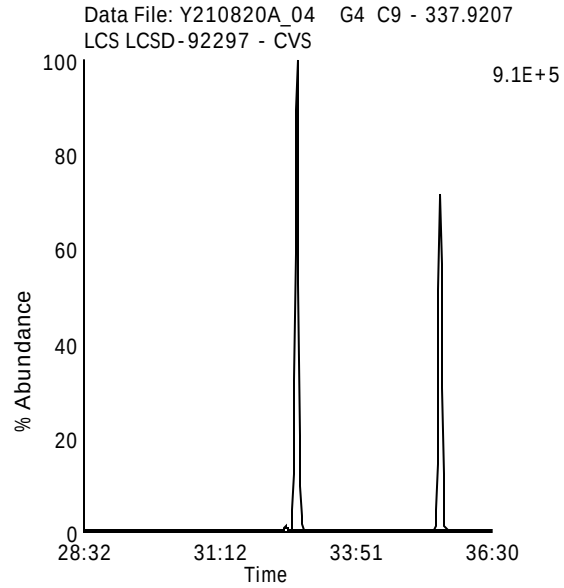
LCS LCSD-92297 - CVS

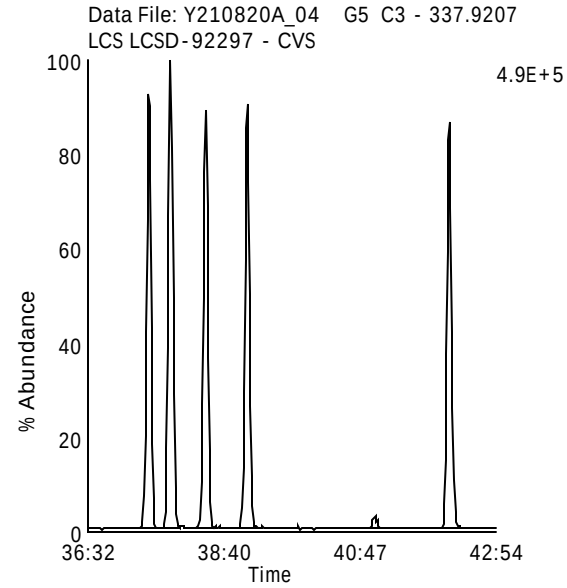


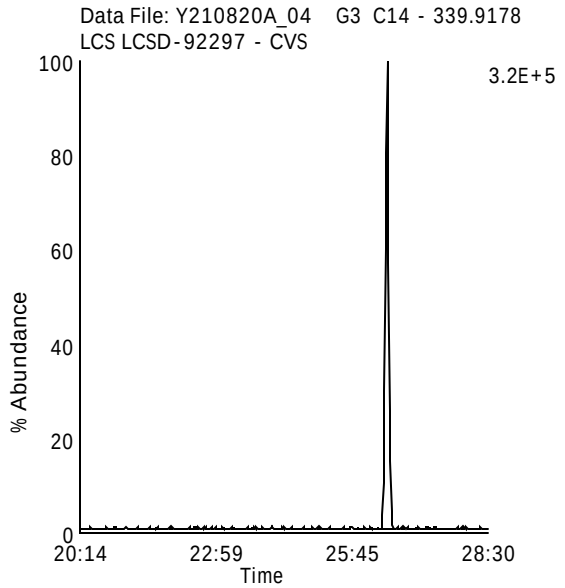
Labeled Penta Chlorinated Biphenyls

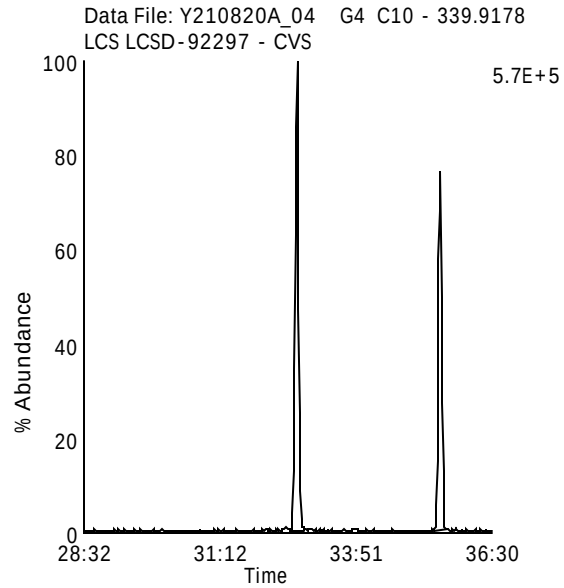
Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU

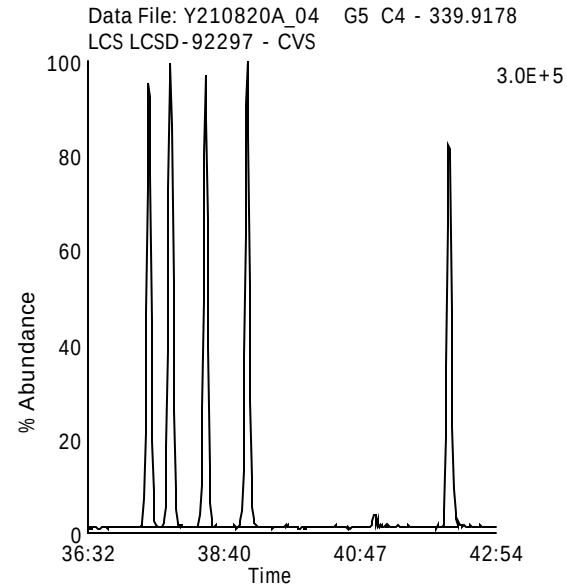






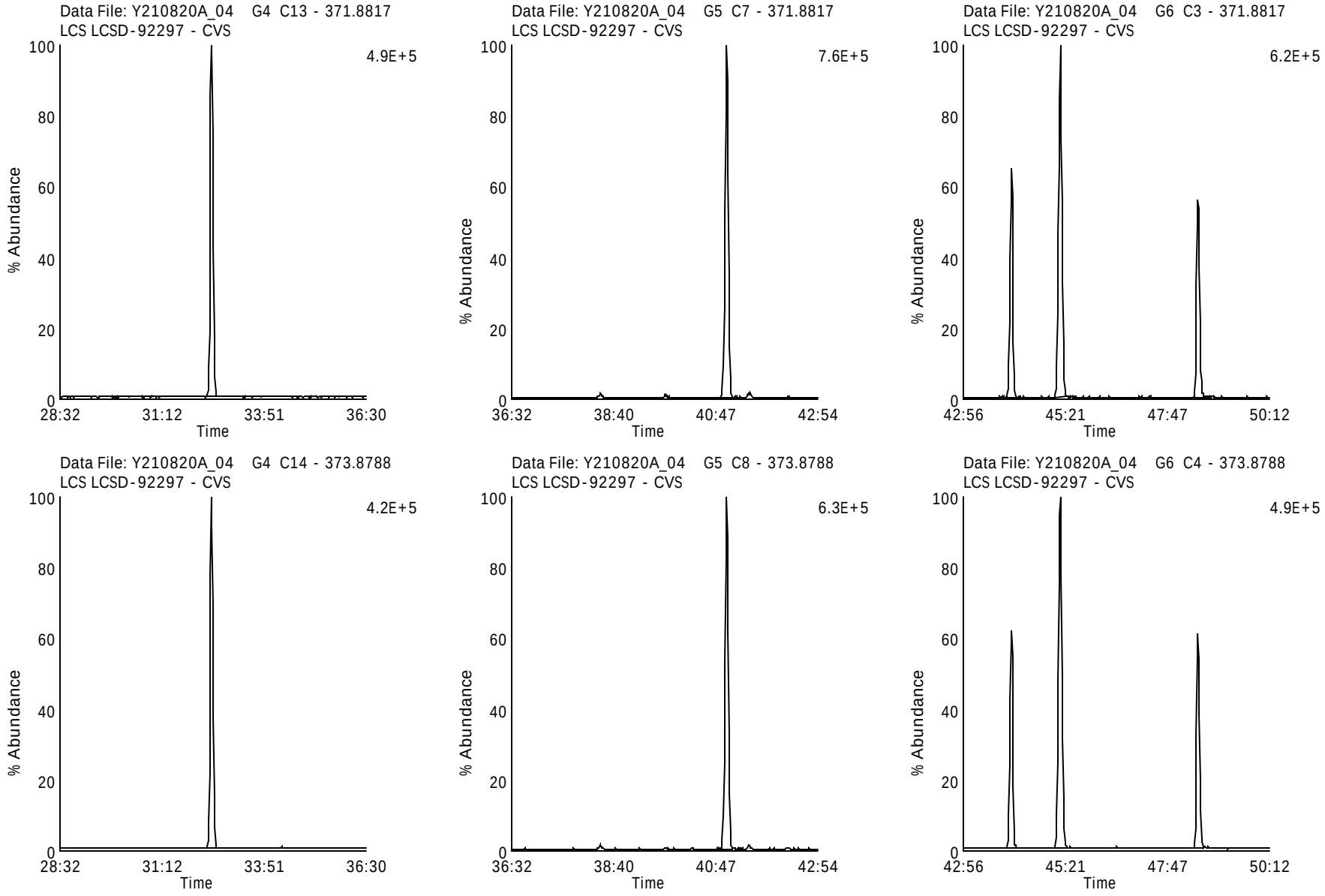






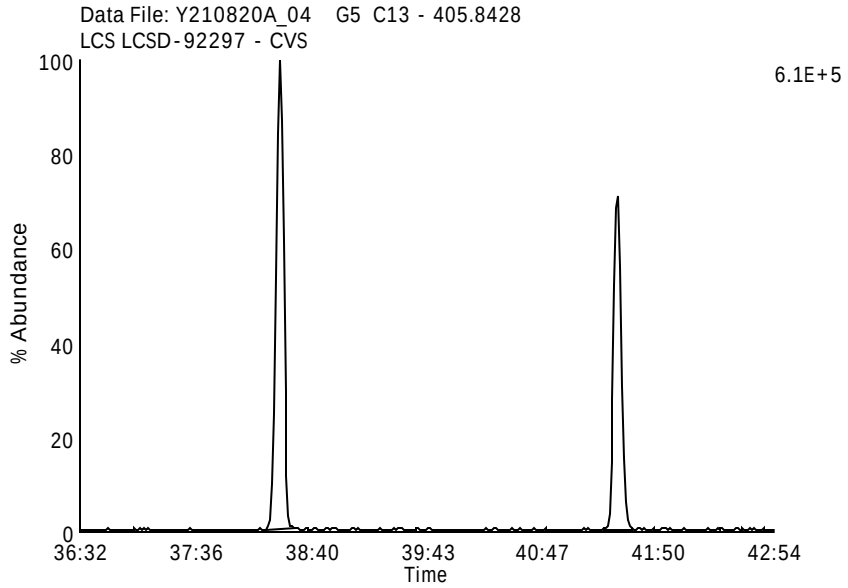
Labeled Hexa Chlorinated Biphenyls

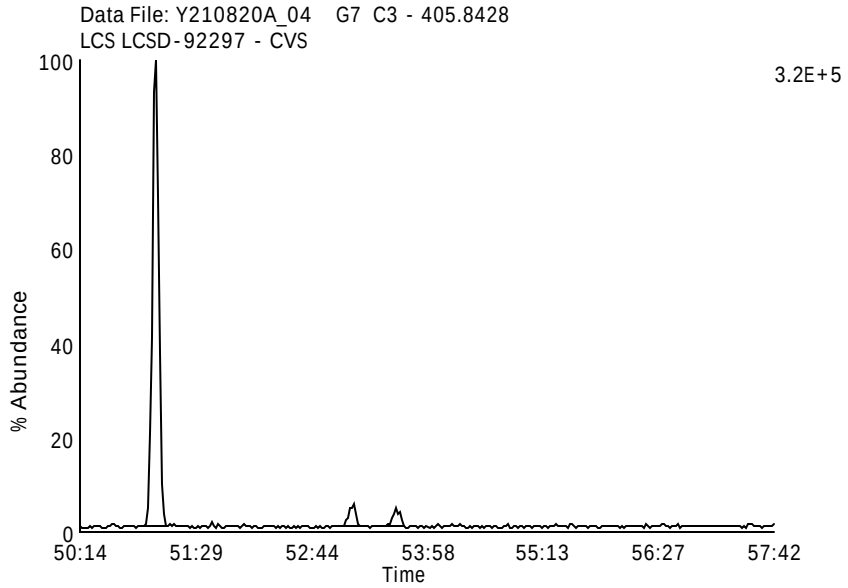
Data File Name: Y210820A_04 | Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS | Client Sample ID: CLCSEU

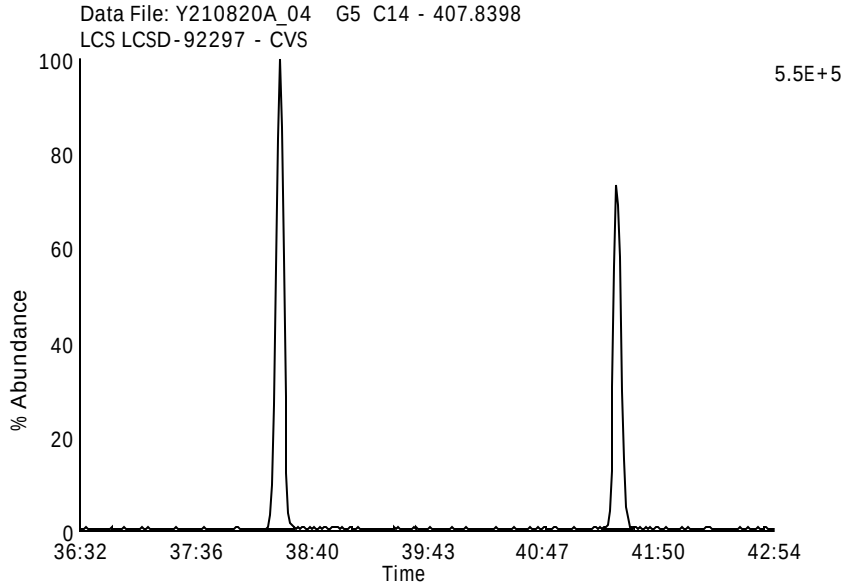


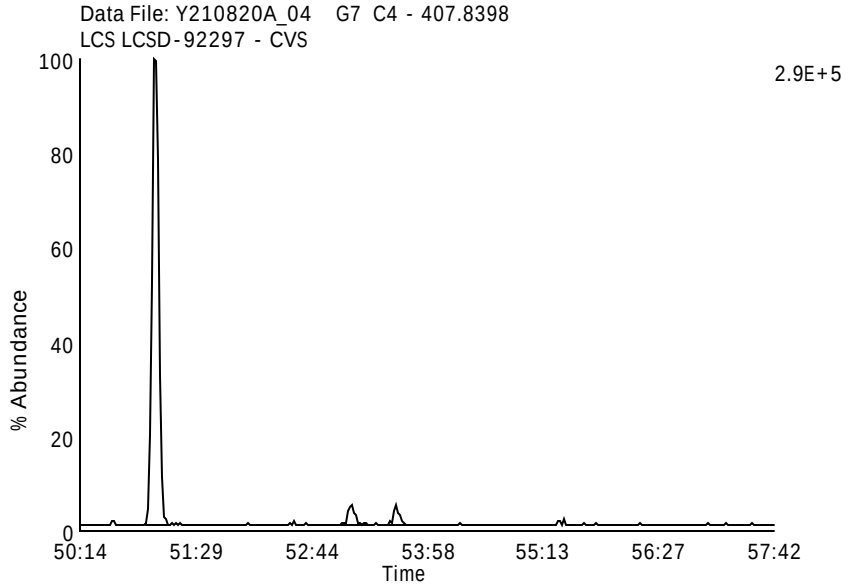
Labeled Hepta Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



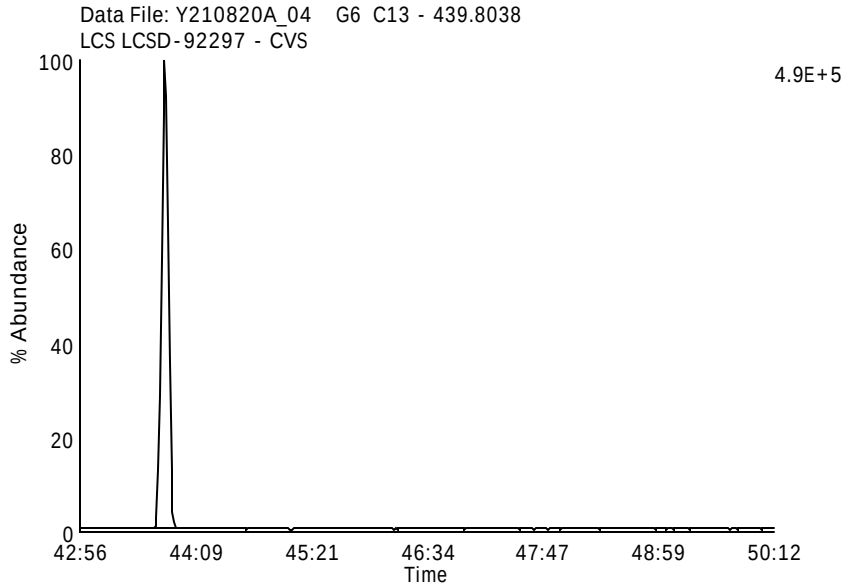


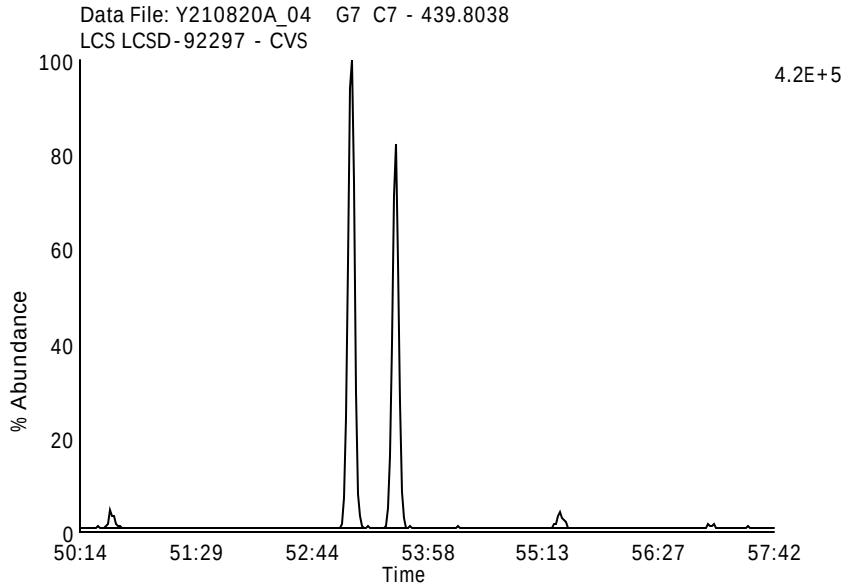


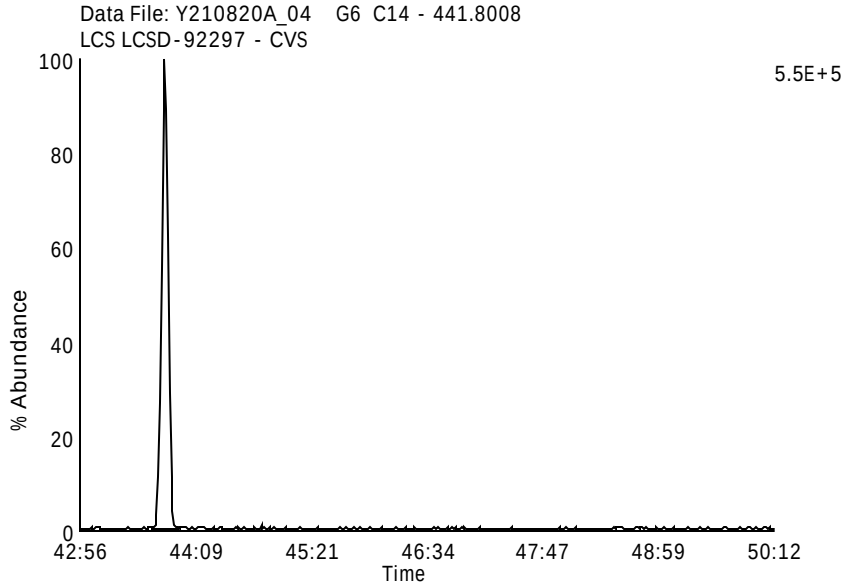


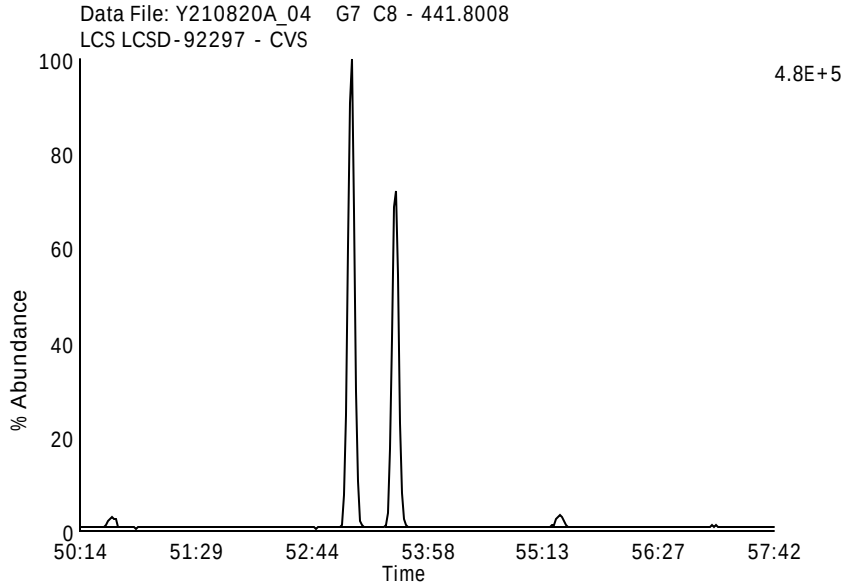
Labeled Octa Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



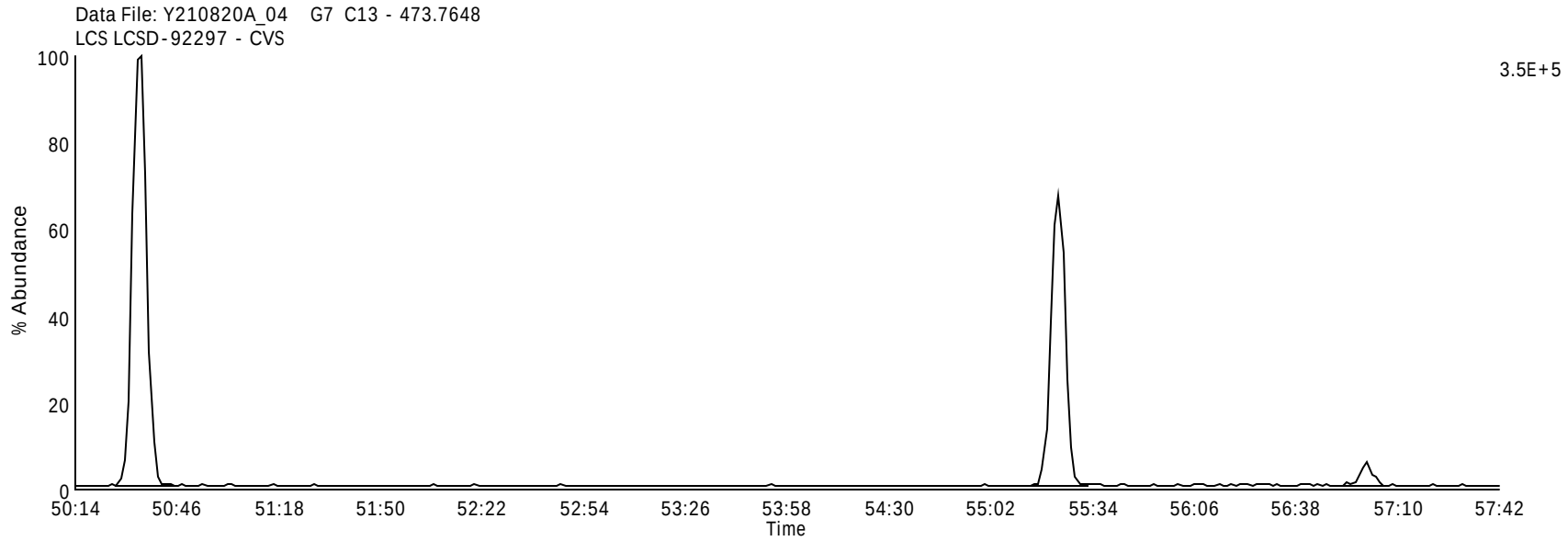


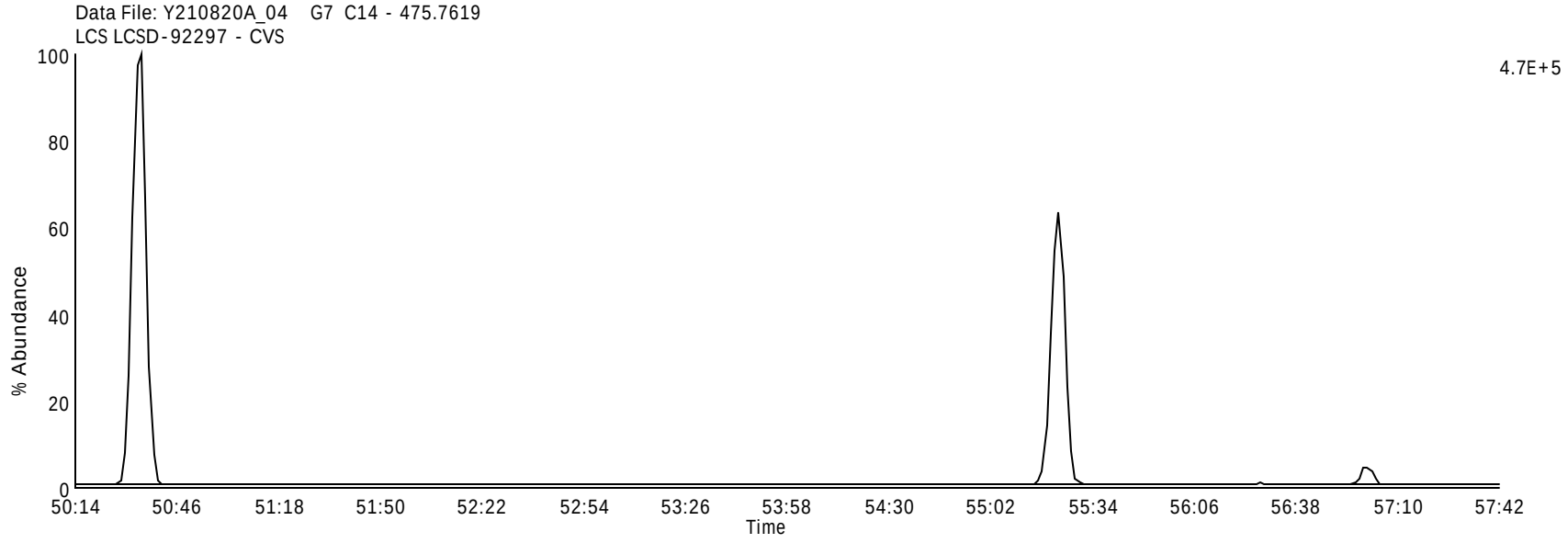




Labeled Nona Chlorinated Biphenyls

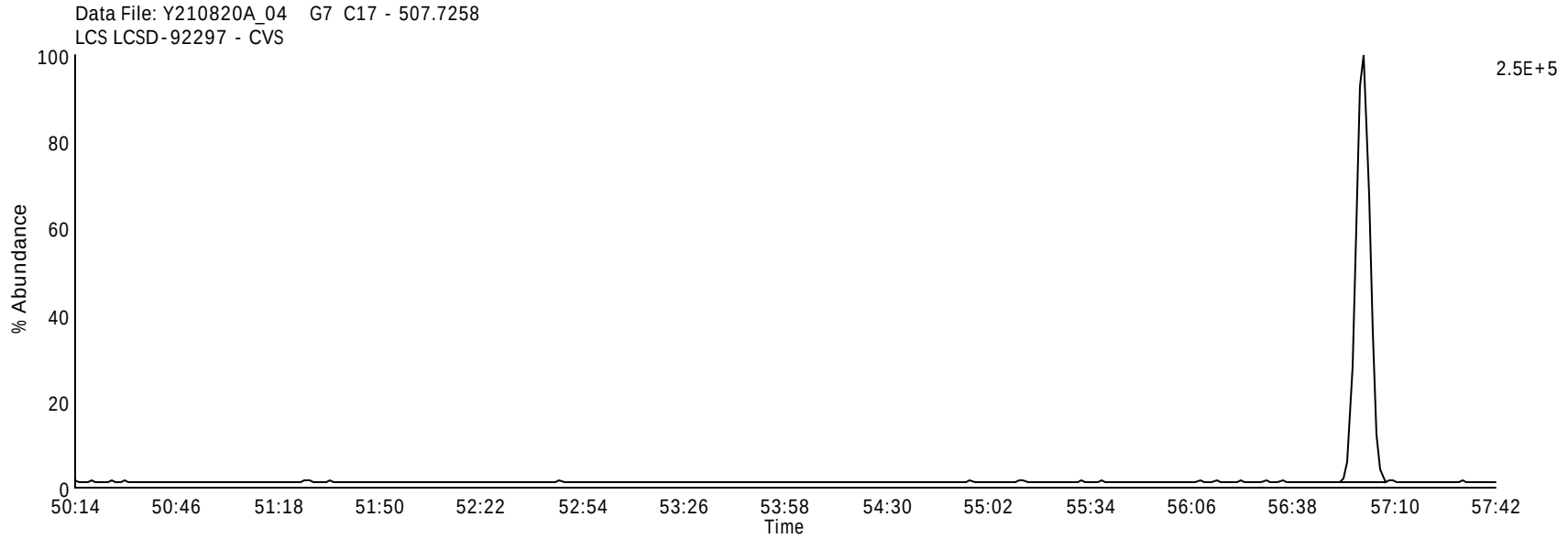
Data File Name: Y210820A_04 | Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021 | Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS | Client Sample ID: CLCSEU

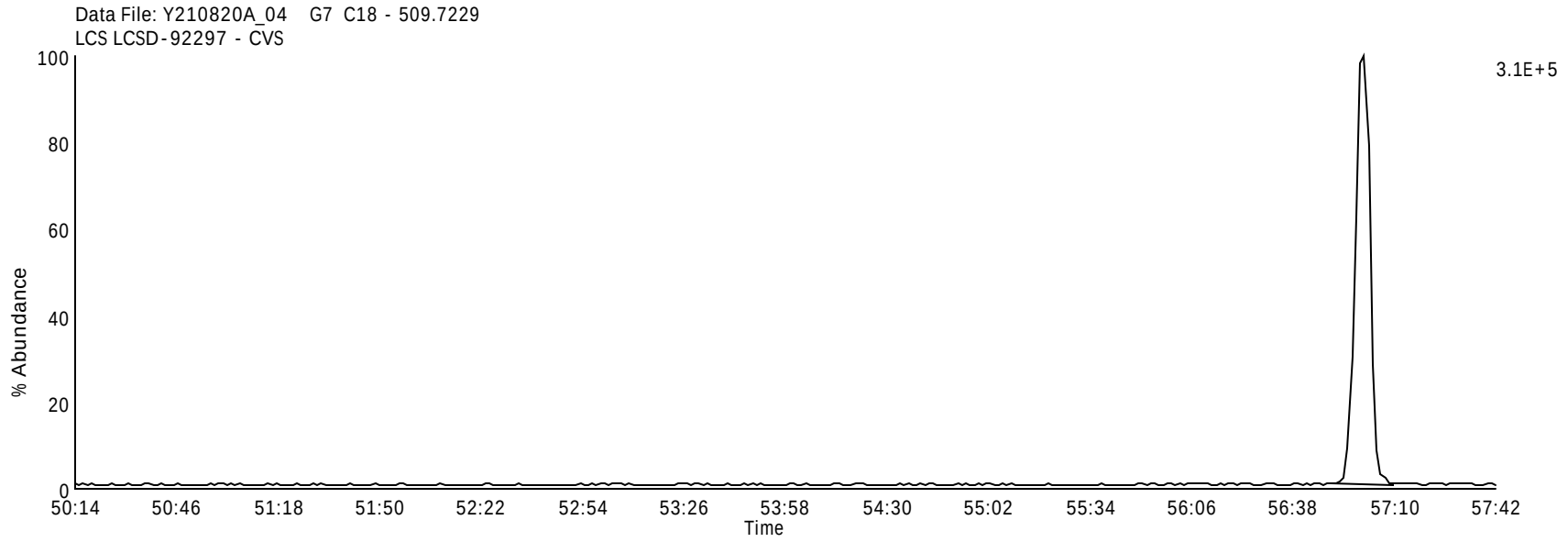




Labeled Deca Chlorinated Biphenyl

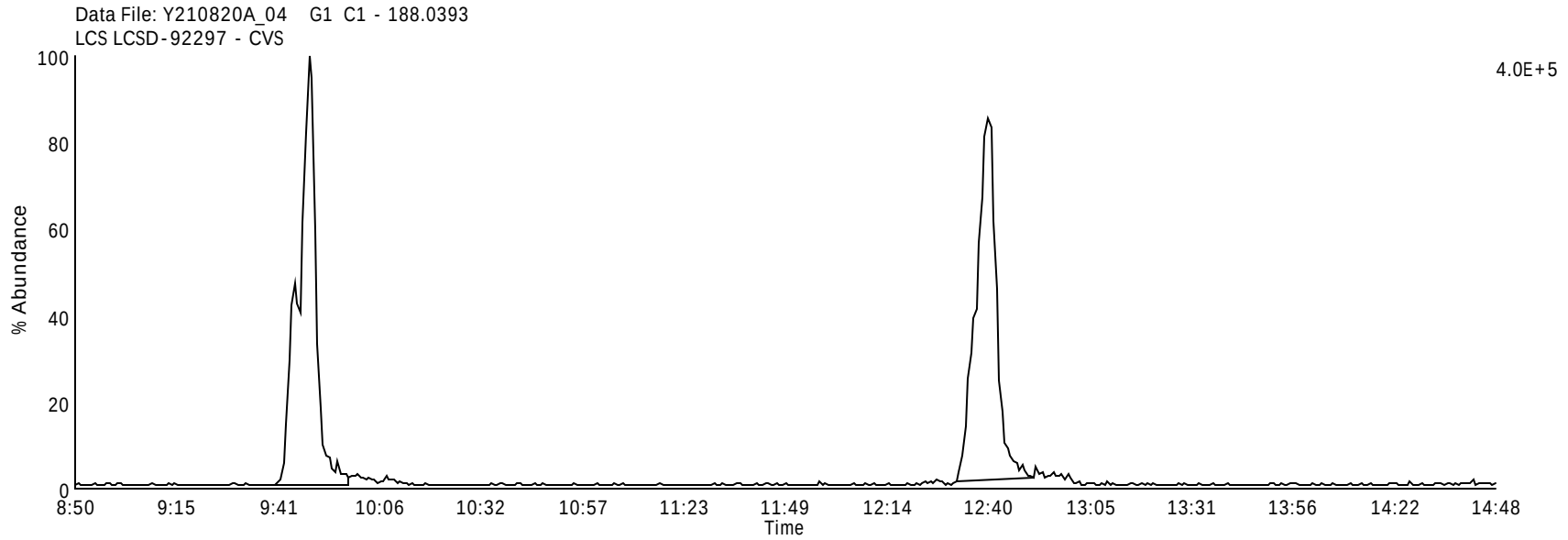
Data File Name: Y210820A_04	Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS	Client Sample ID: CLCSEU

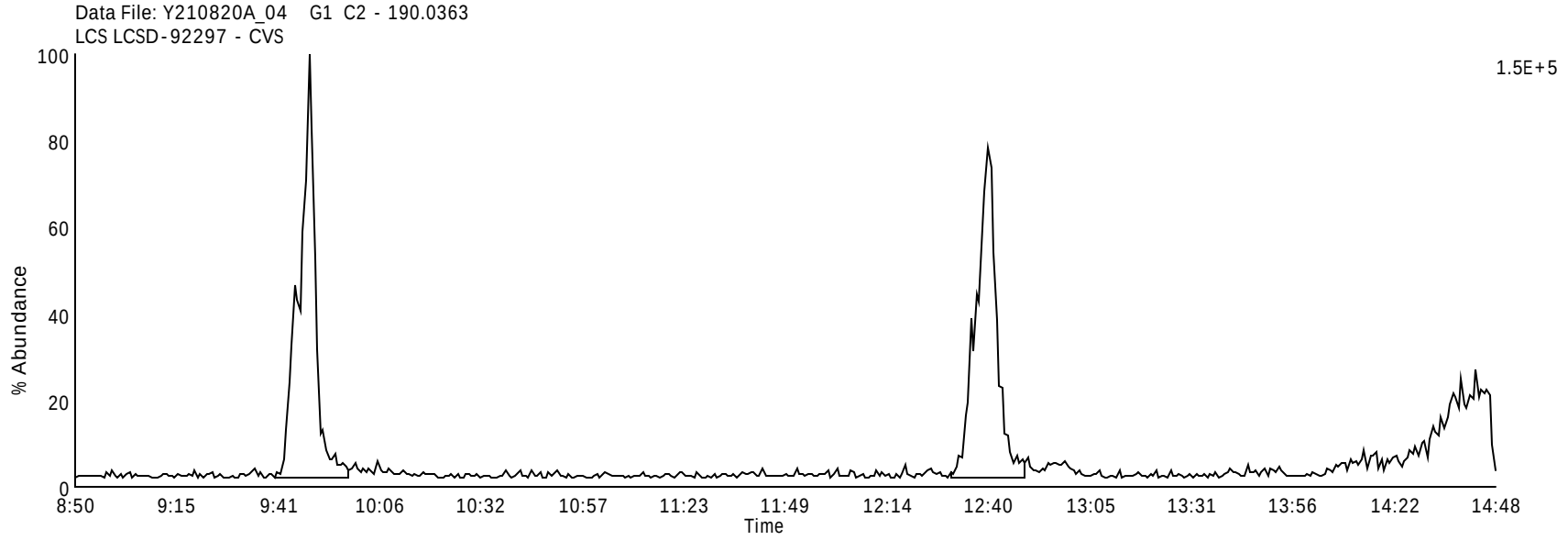




Mono Chlorinated Biphenyls

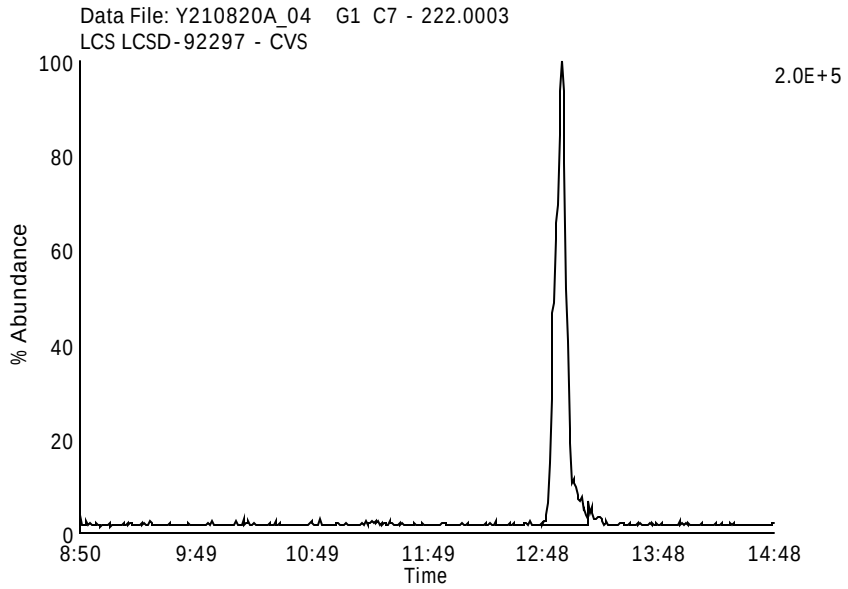
Data File Name: Y210820A_04	Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS	Client Sample ID: CLCSEU

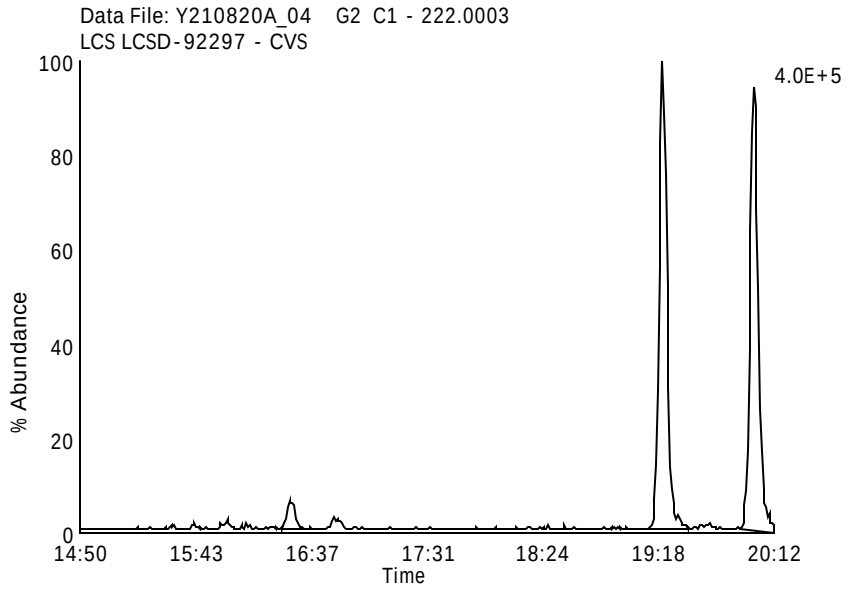


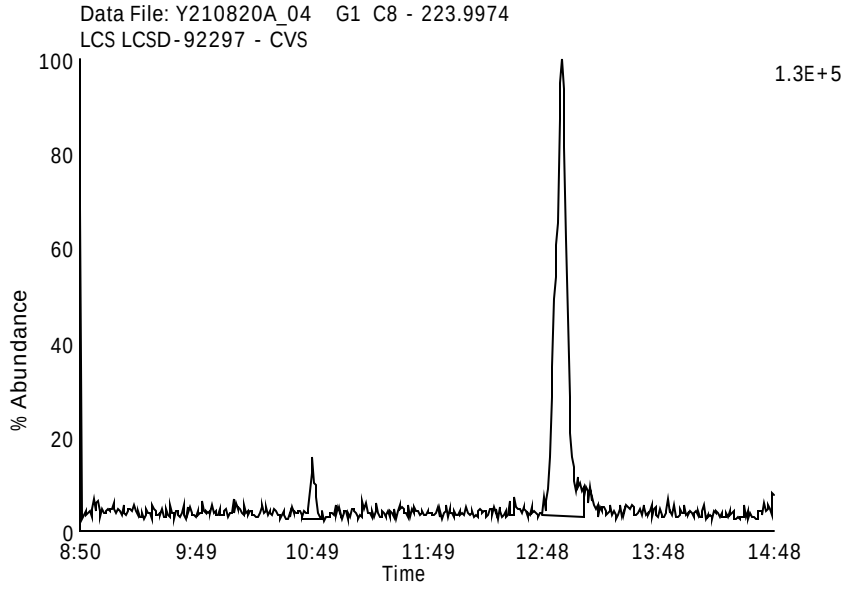


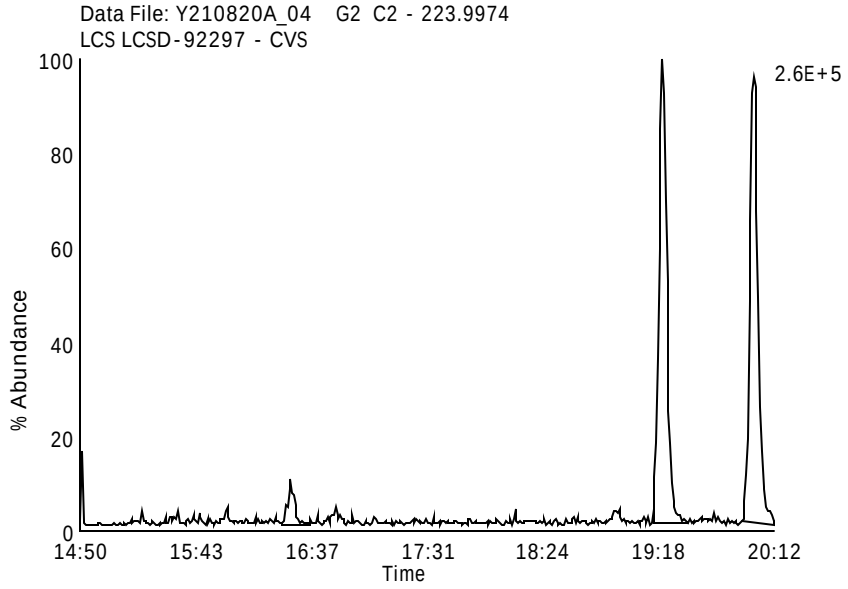
Di Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU





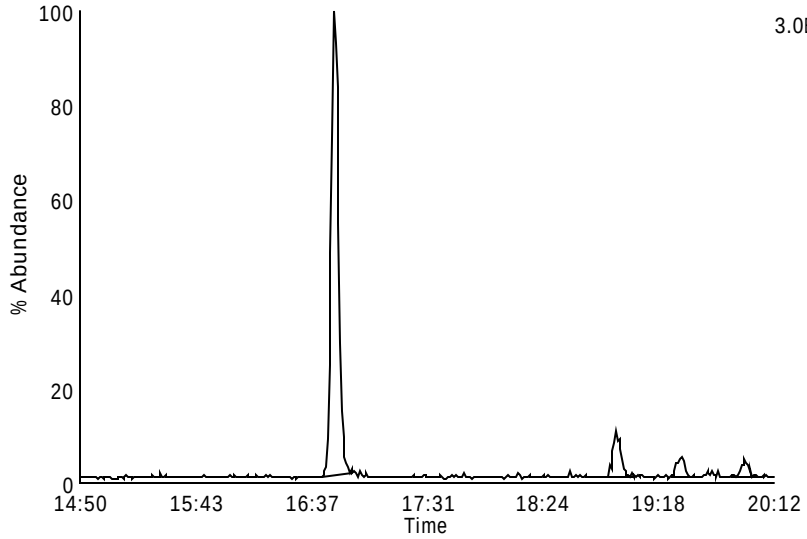




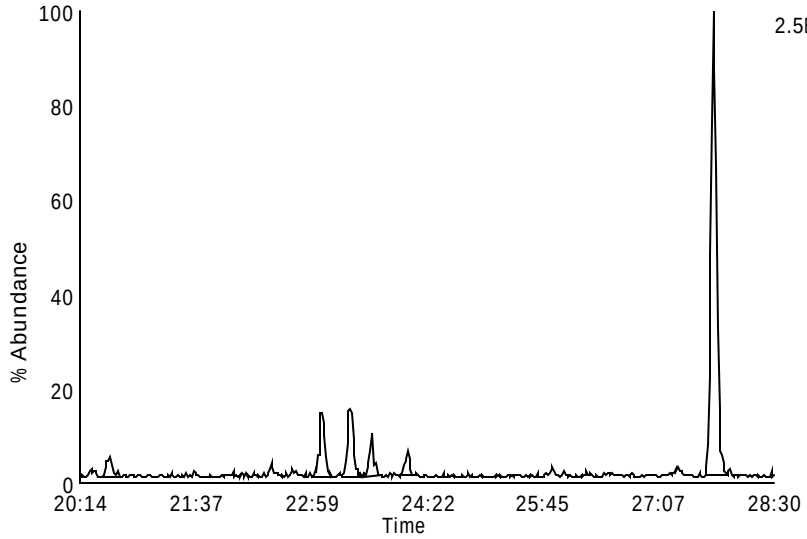
Tri Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU

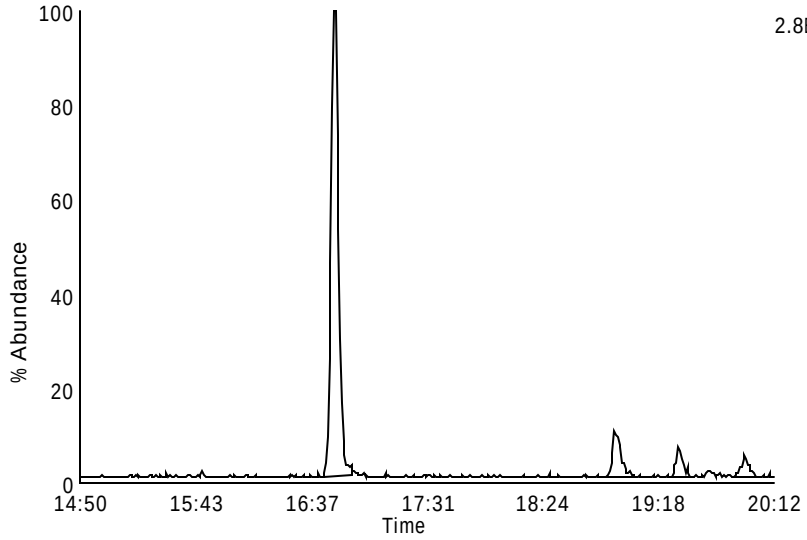
Data File: Y210820A_04 G2 C7 - 255.9613
LCS LCSD-92297 - CVS



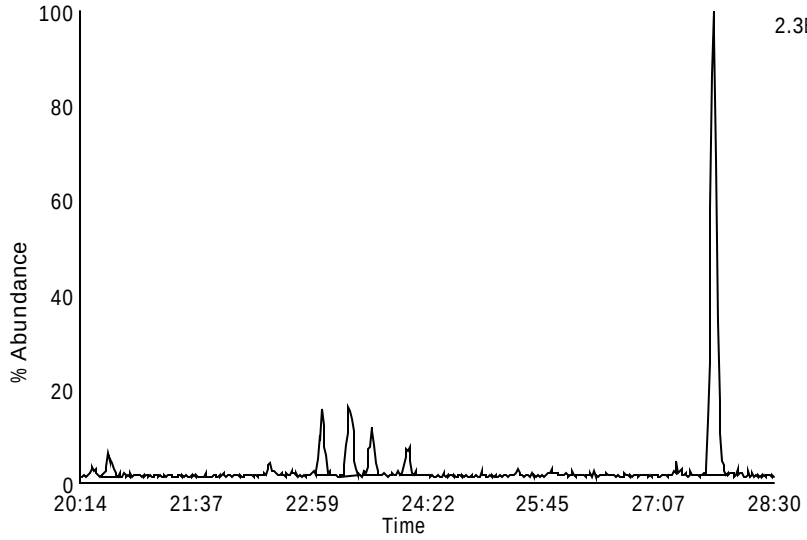
Data File: Y210820A_04 G3 C1 - 255.9613
LCS LCSD-92297 - CVS



Data File: Y210820A_04 G2 C8 - 257.9584
LCS LCSD-92297 - CVS

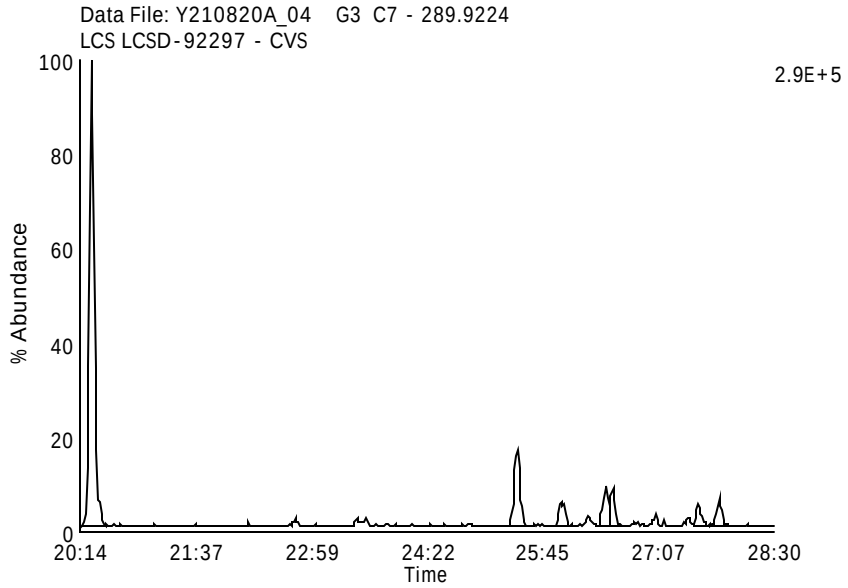


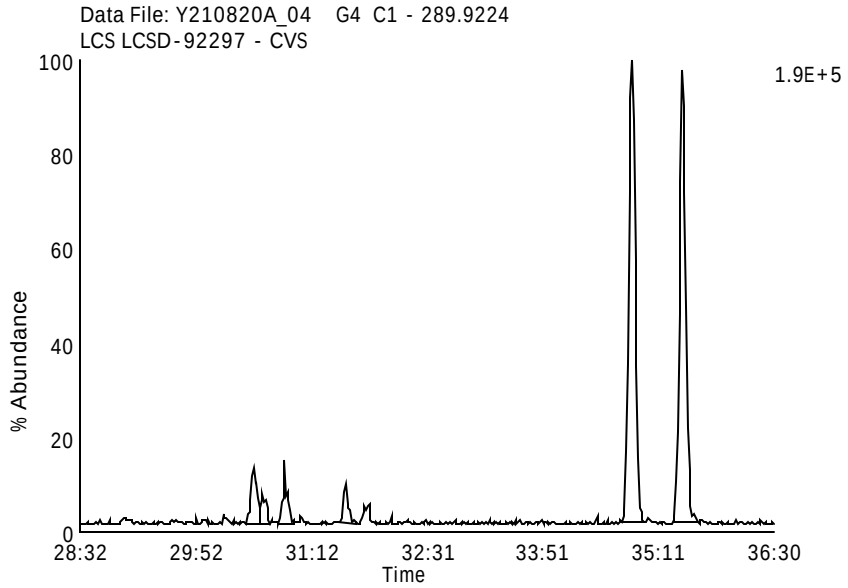
Data File: Y210820A_04 G3 C2 - 257.9584
LCS LCSD-92297 - CVS

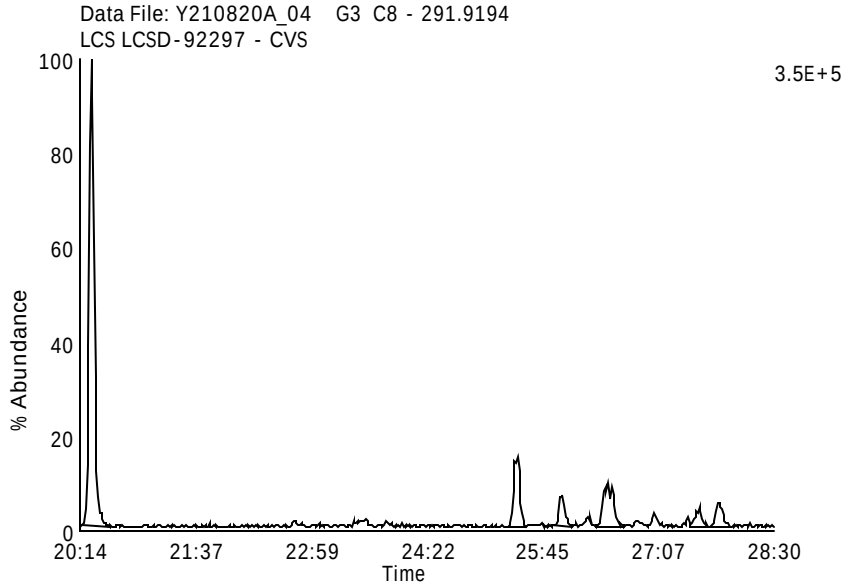


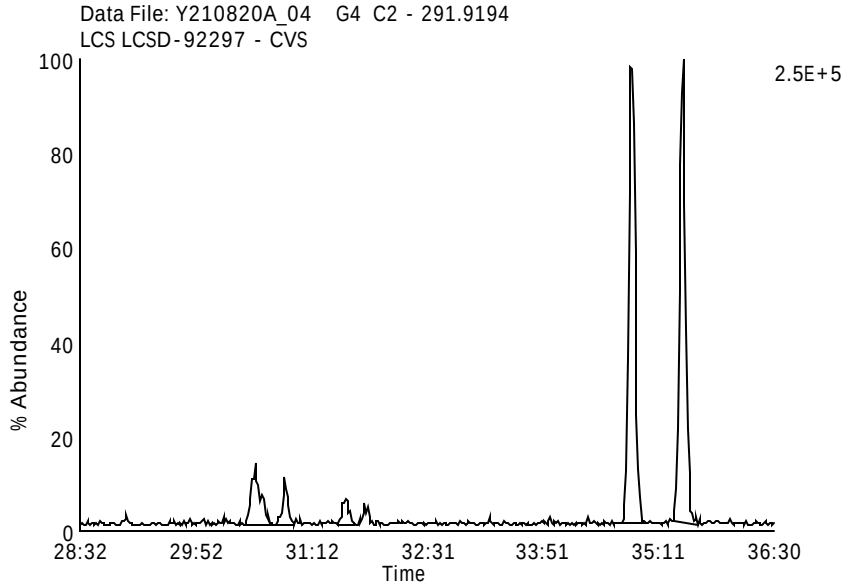
Tetra Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU





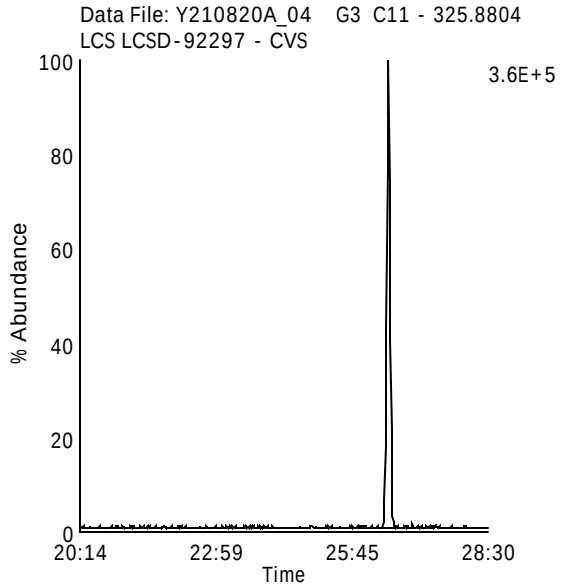


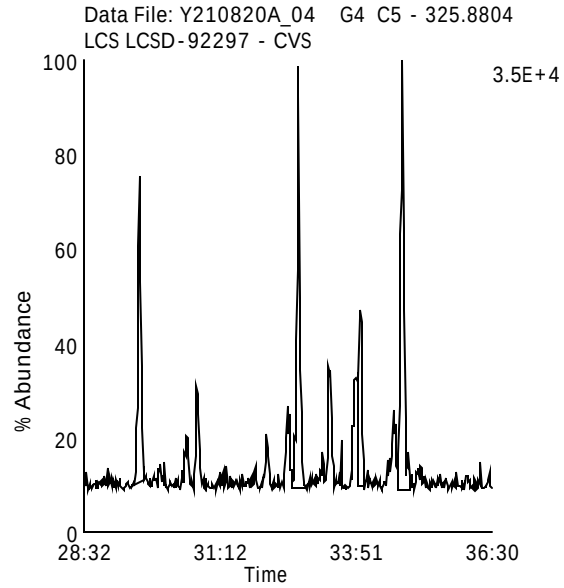


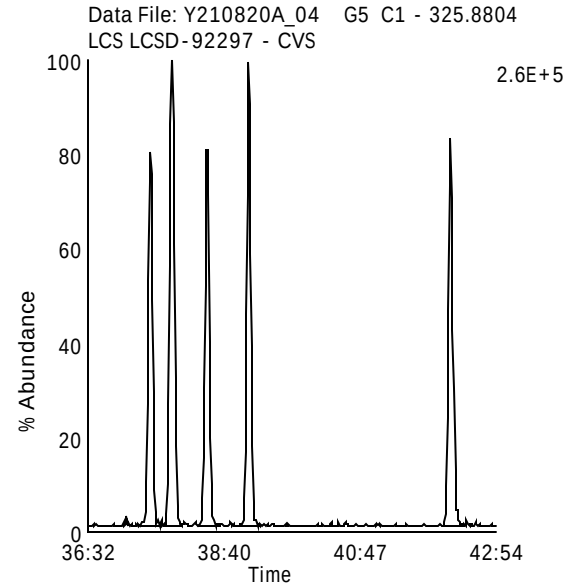
Penta Chlorinated Biphenyls

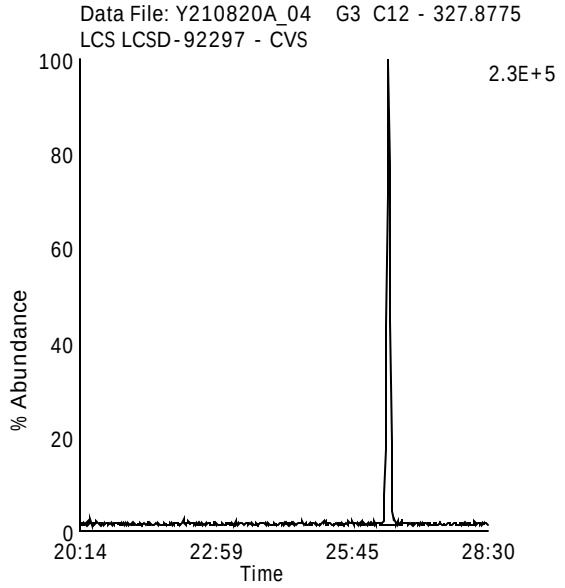
Data File Name: Y210820A_04
Date Acquired: 8/20/2021
Sample Description: LCS LCSD-92297 - CVS

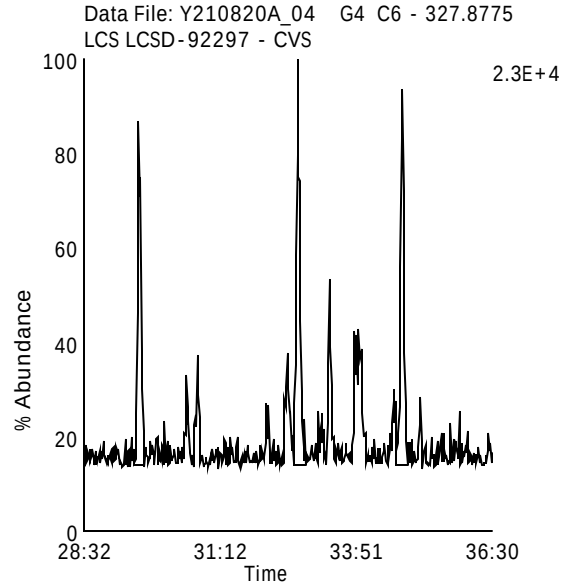
Lab Sample ID: LCSD-92297
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSEU

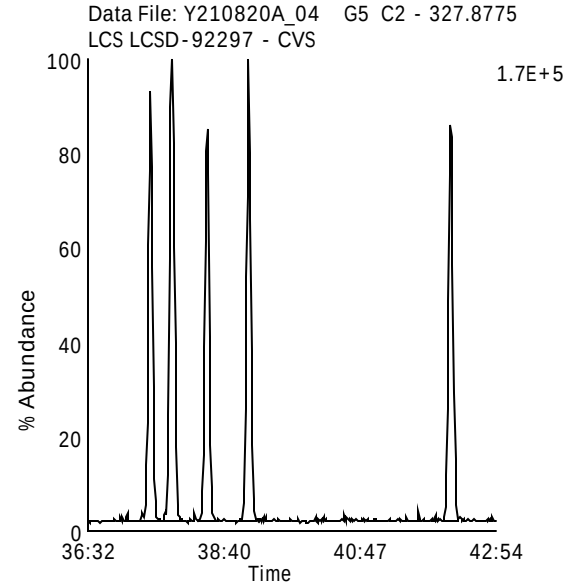






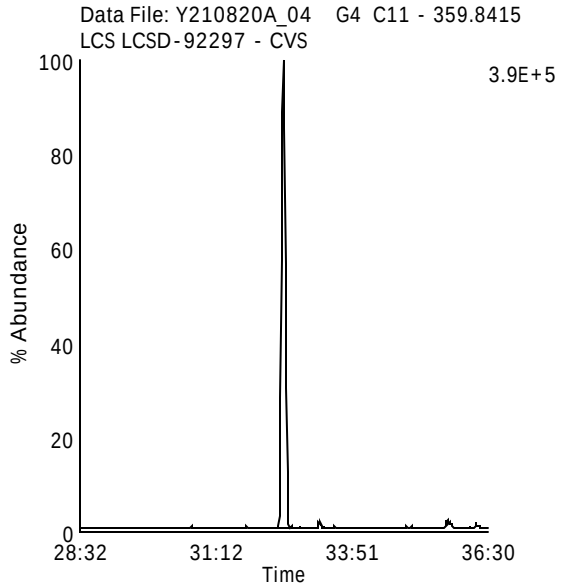


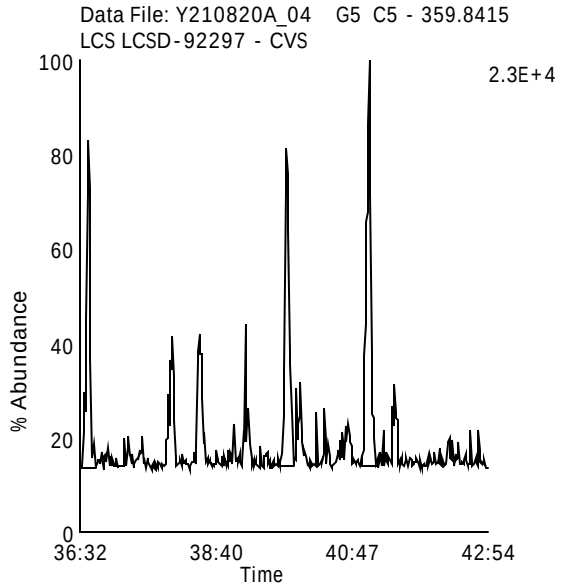


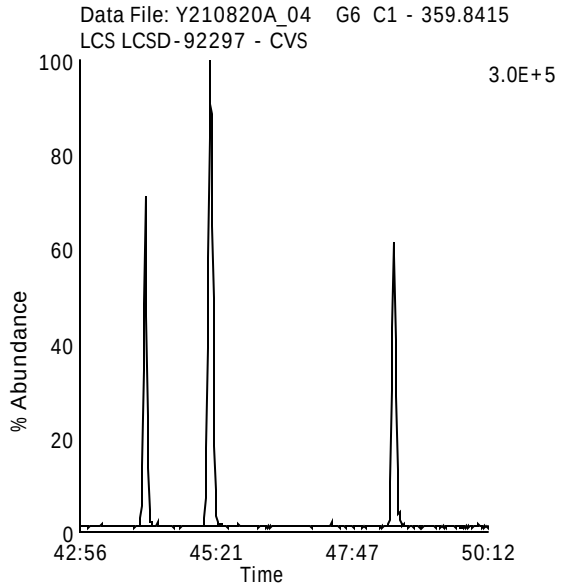


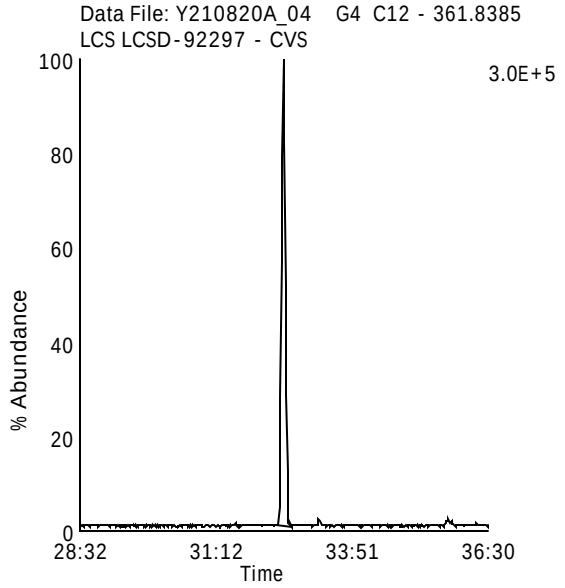
Hexa Chlorinated Biphenyls

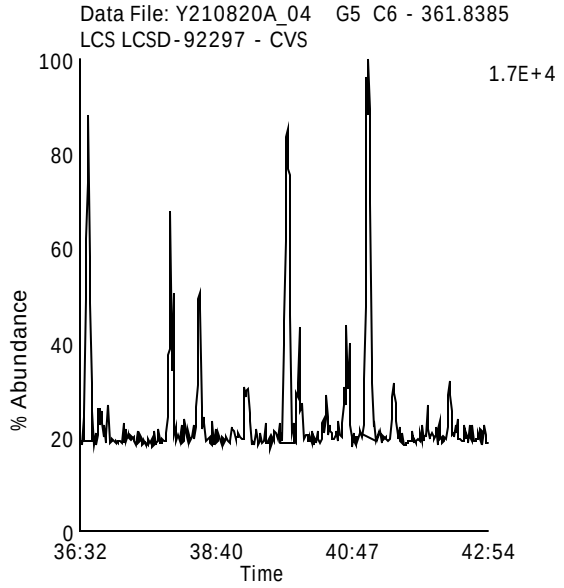
Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU

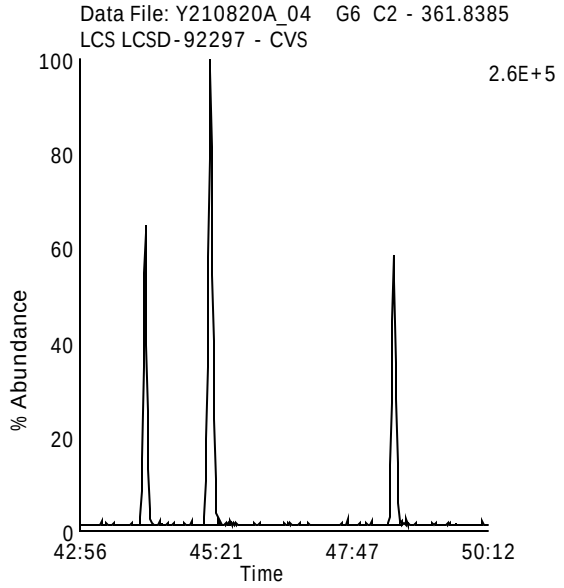








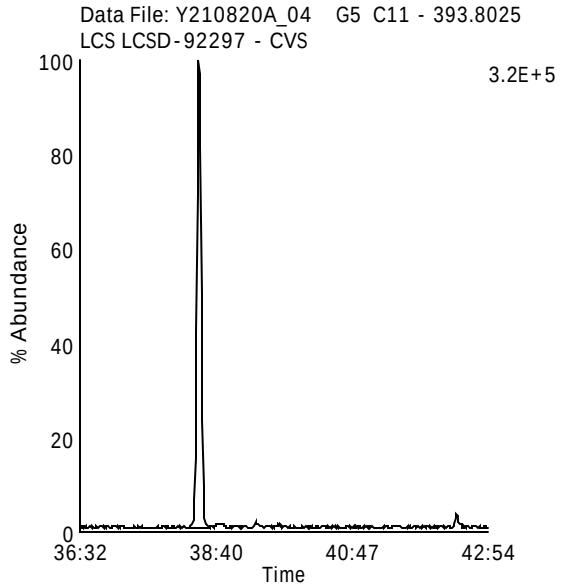


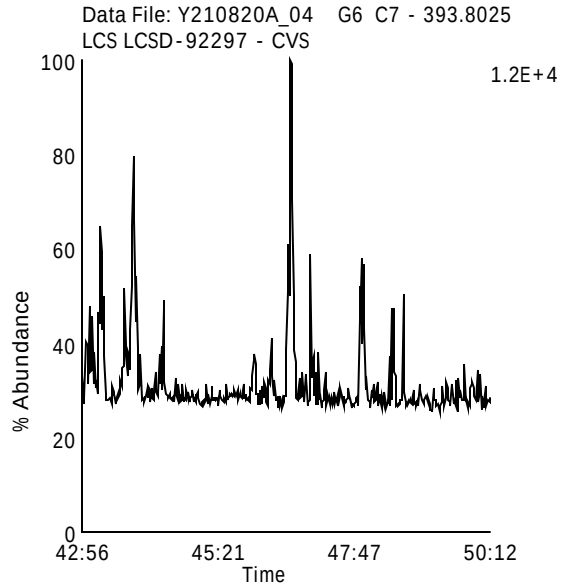


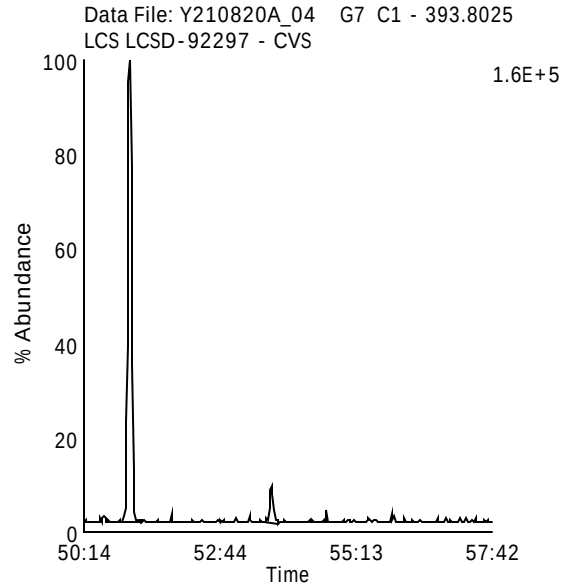
Hepta Chlorinated Biphenyls

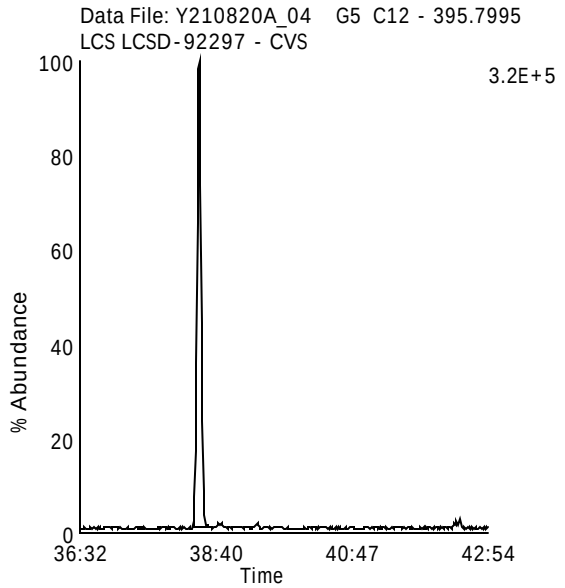
Data File Name: Y210820A_04
Date Acquired: 8/20/2021
Sample Description: LCS LCSD-92297 - CVS

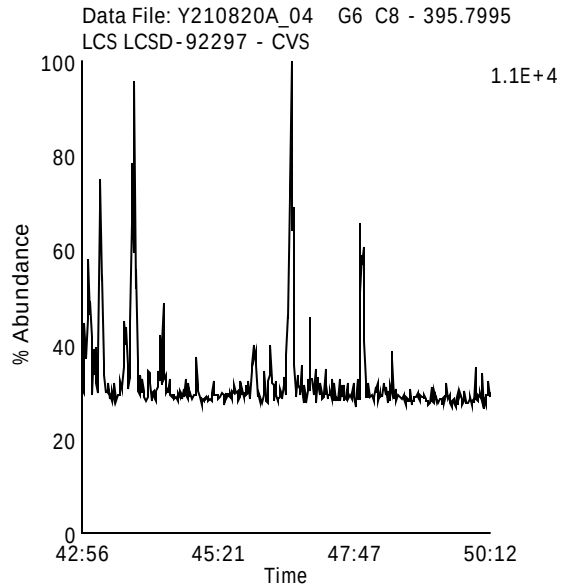
Lab Sample ID: LCSD-92297
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSEU

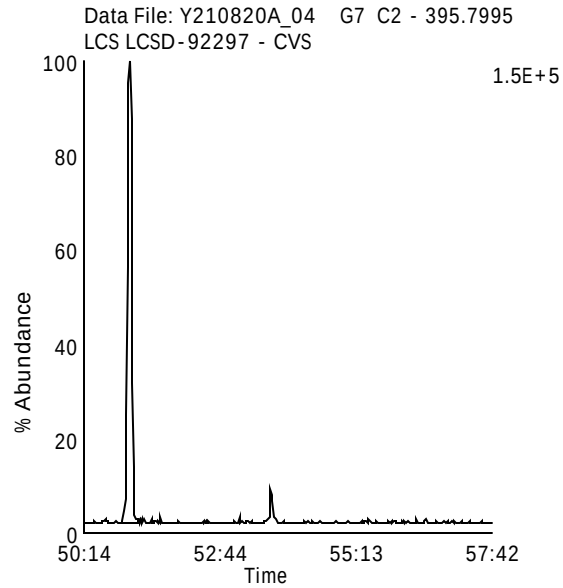






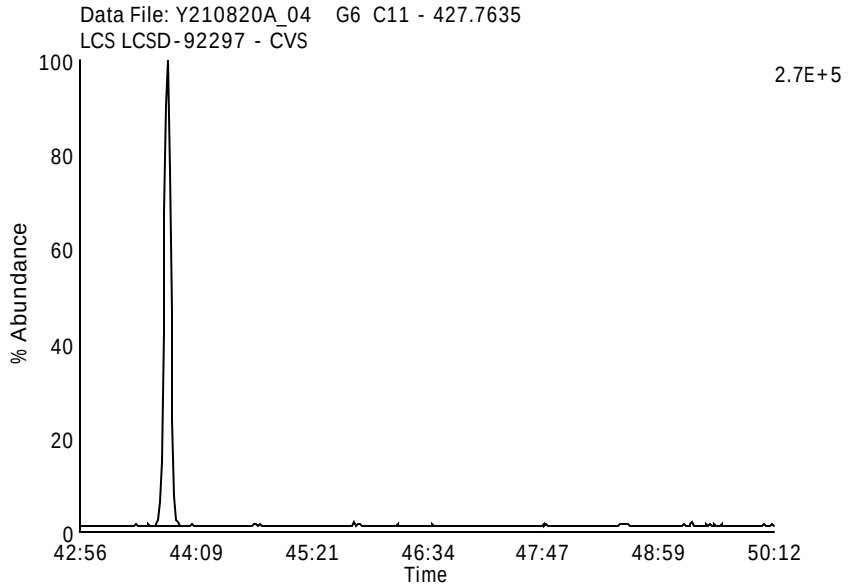


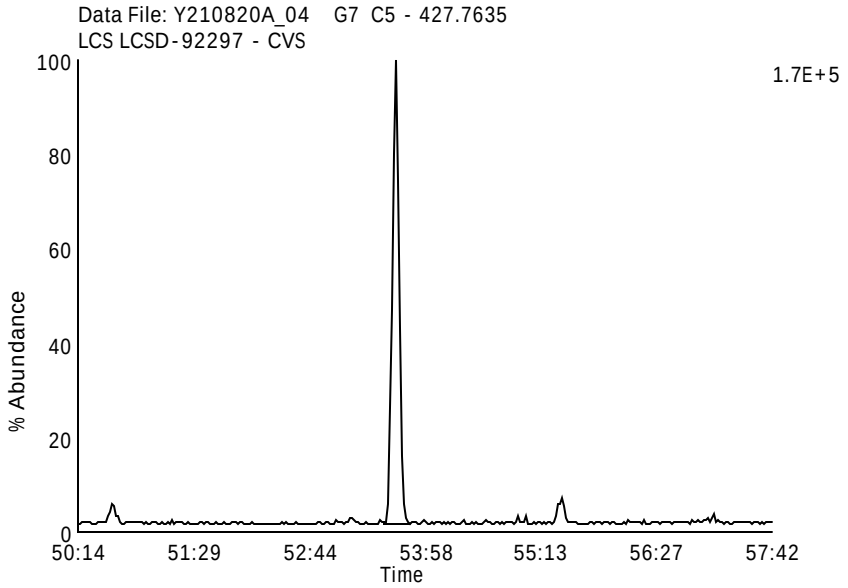


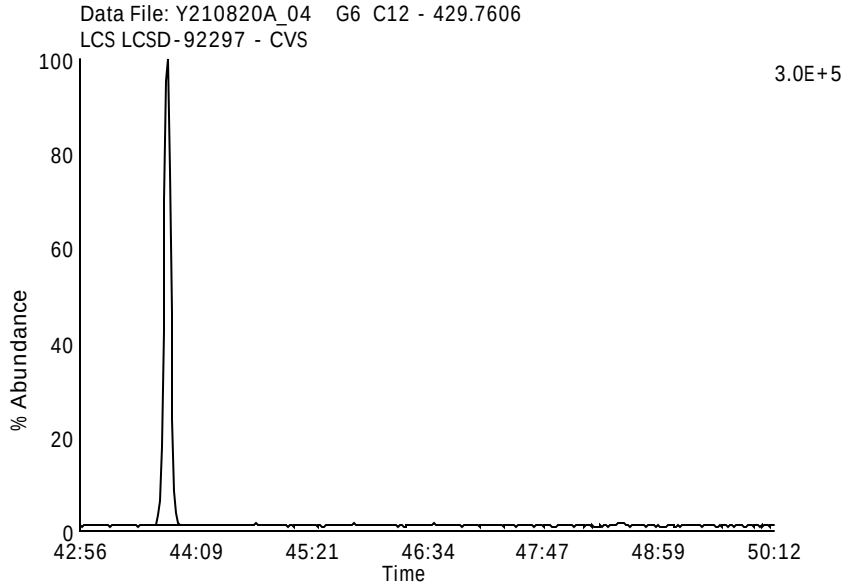


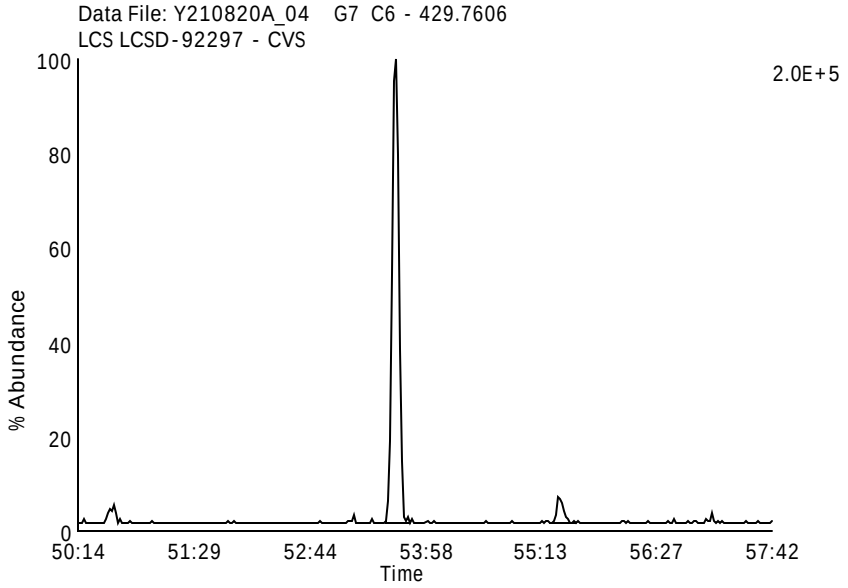
Octa Chlorinated Biphenyls

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU



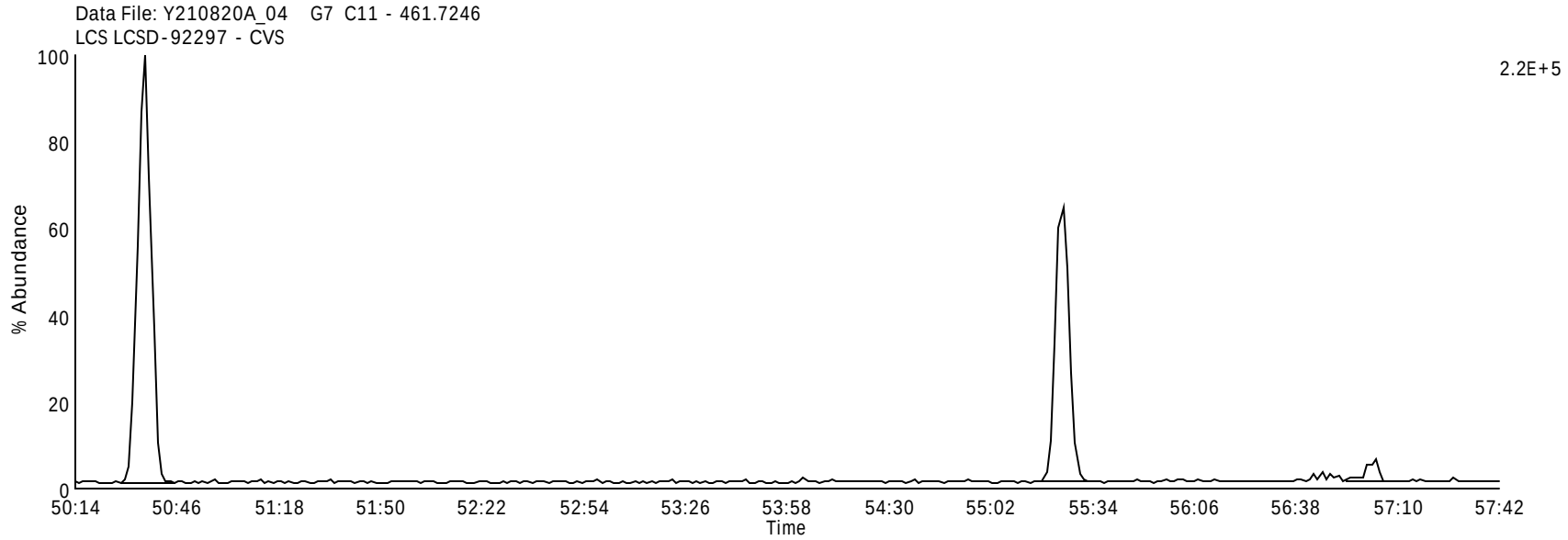


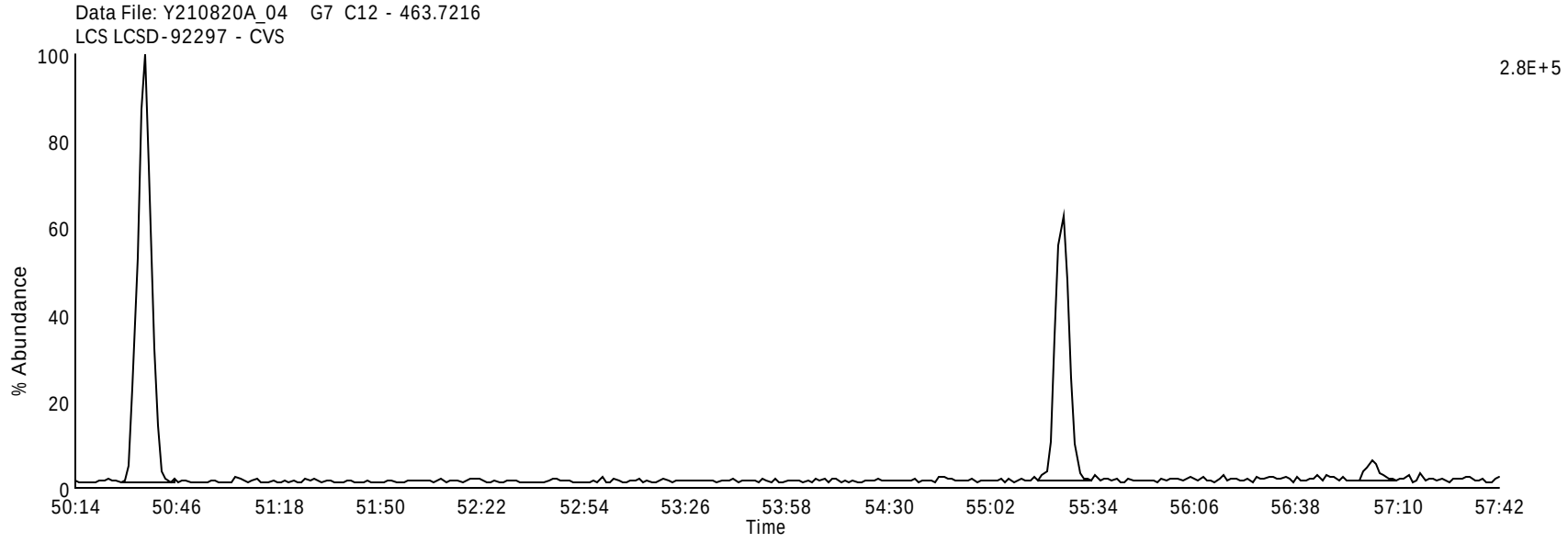




Nona Chlorinated Biphenyls

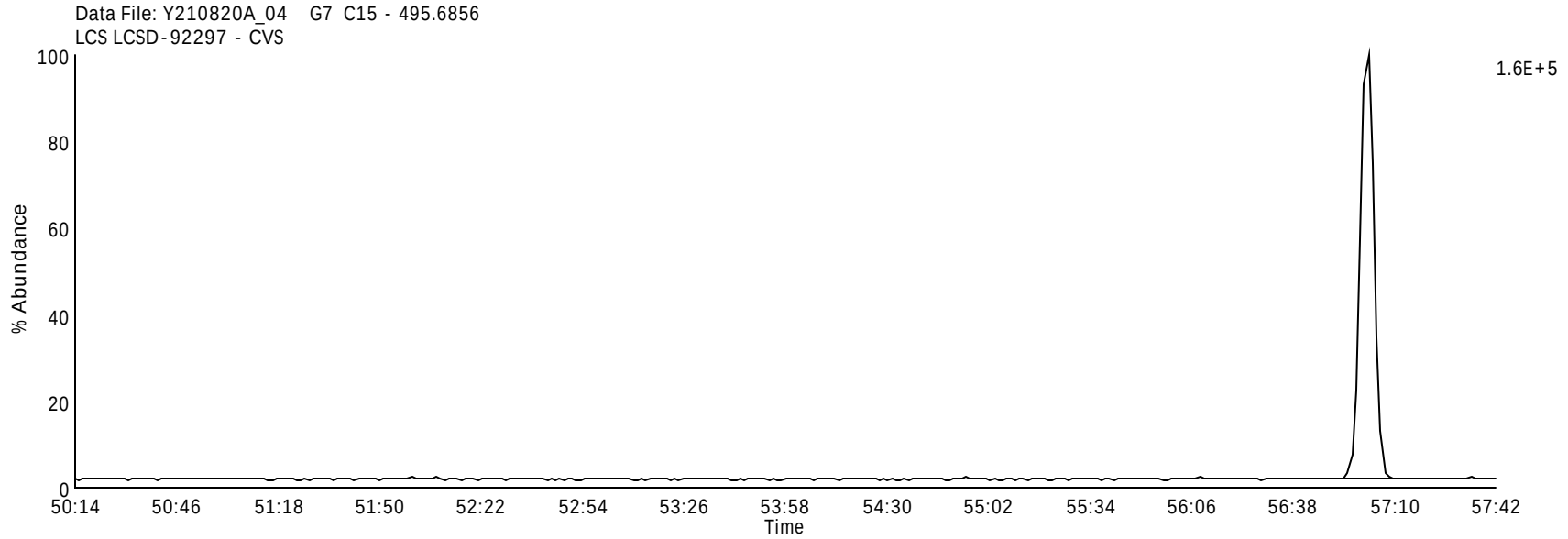
Data File Name: Y210820A_04	Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS	Client Sample ID: CLCSEU

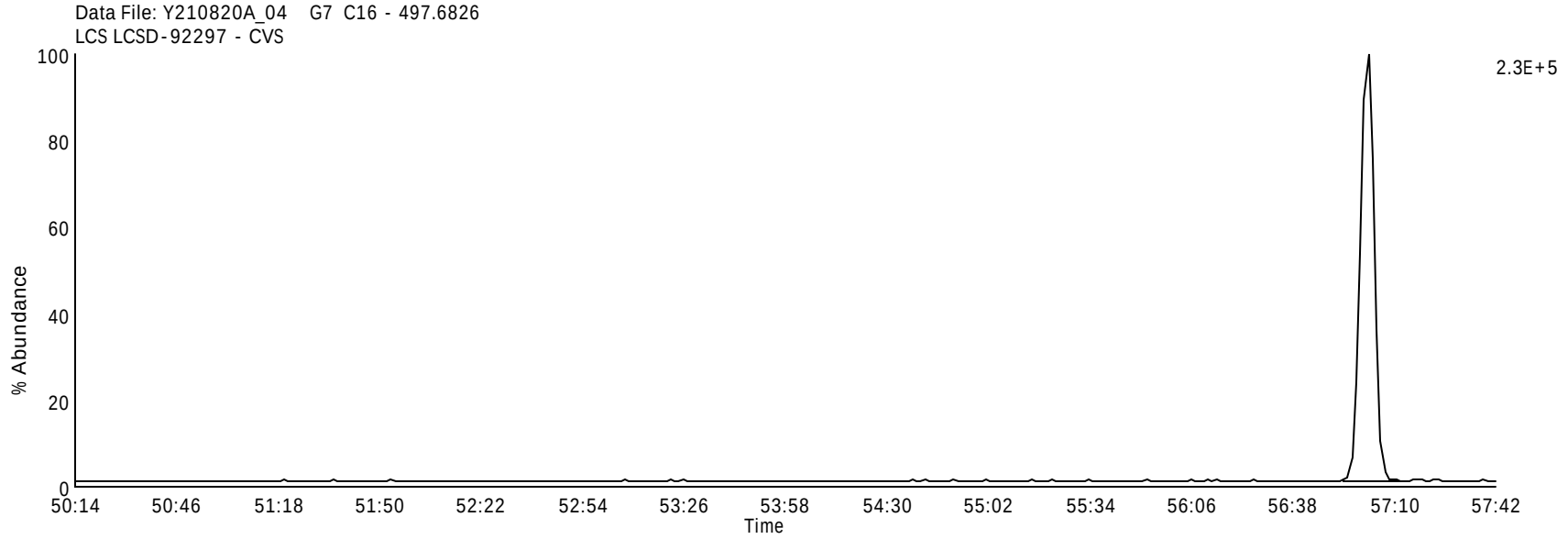




Deca Chlorinated Biphenyl

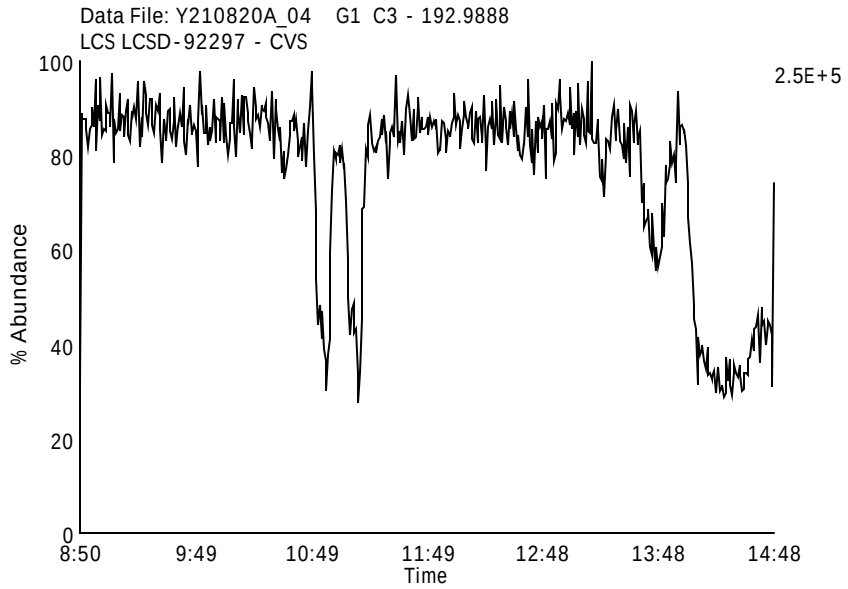
Data File Name: Y210820A_04	Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021	Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS	Client Sample ID: CLCSEU

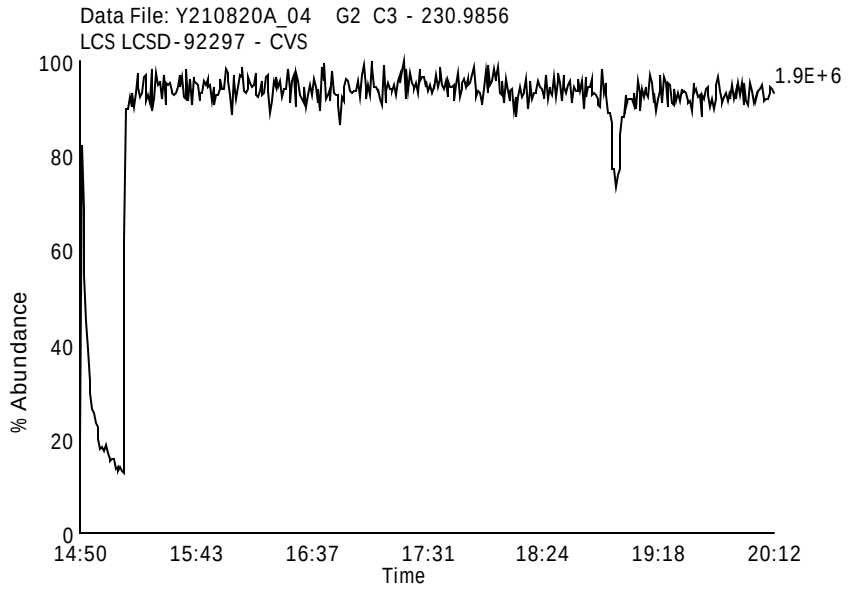


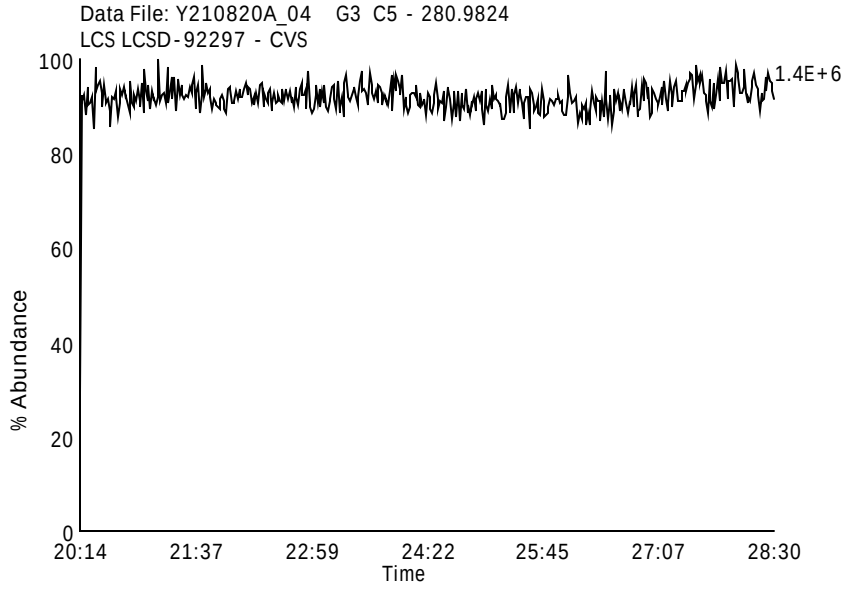


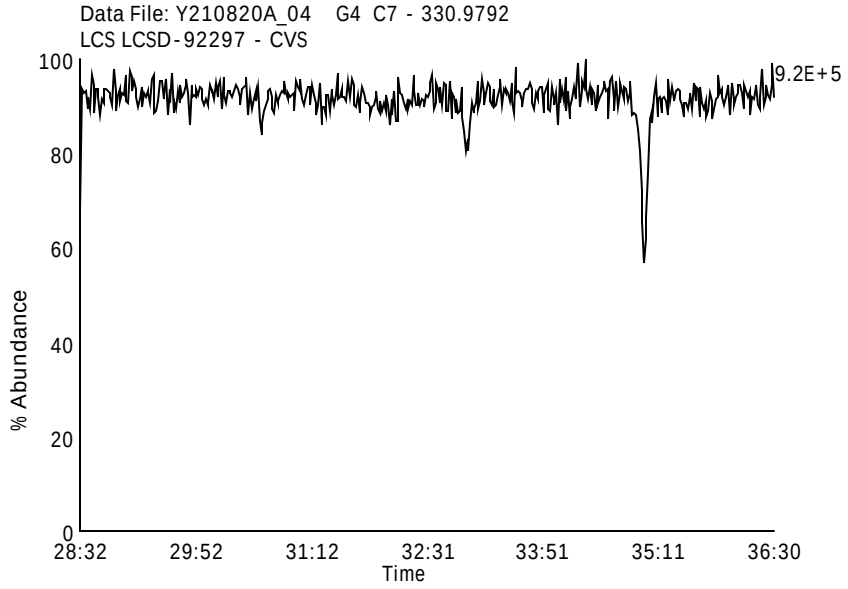
Group 1 - 4 Lock mass

Data File Name: Y210820A_04
Lab Sample ID: LCSD-92297
Date Acquired: 8/20/2021
Instrument: 10MSHR12 (Y)
Sample Description: LCS LCSD-92297 - CVS
Client Sample ID: CLCSEU





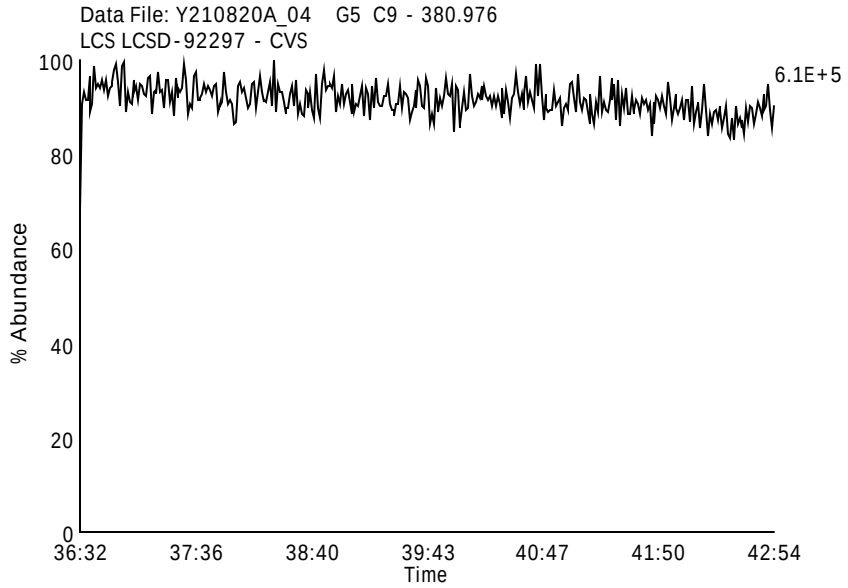


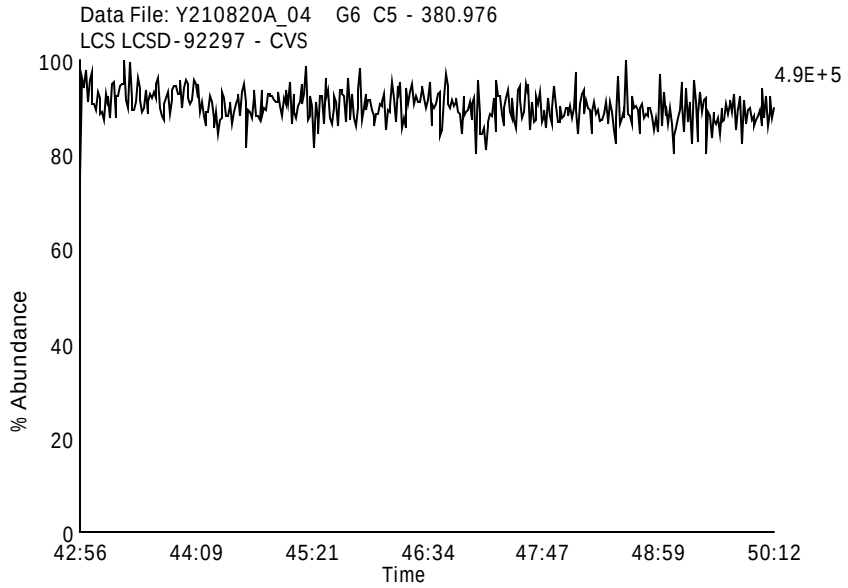


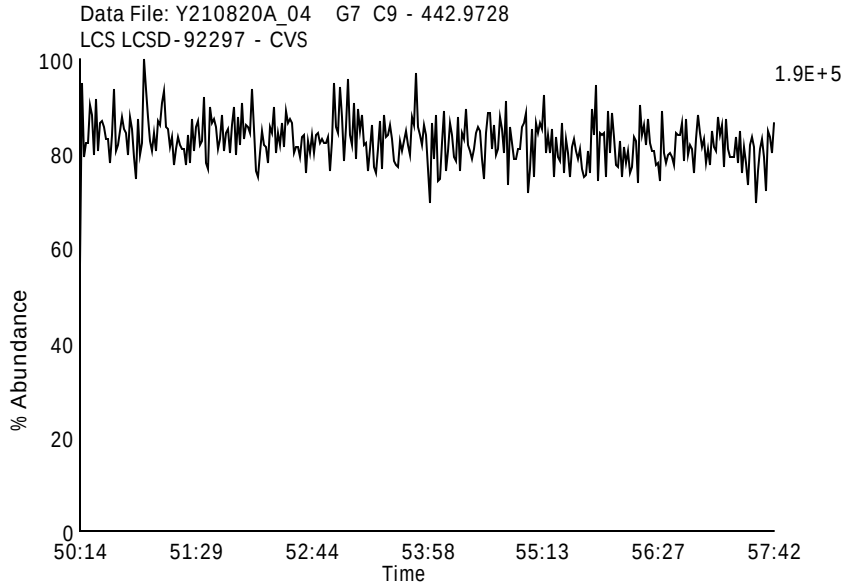
Group 5 - 7 Lock mass

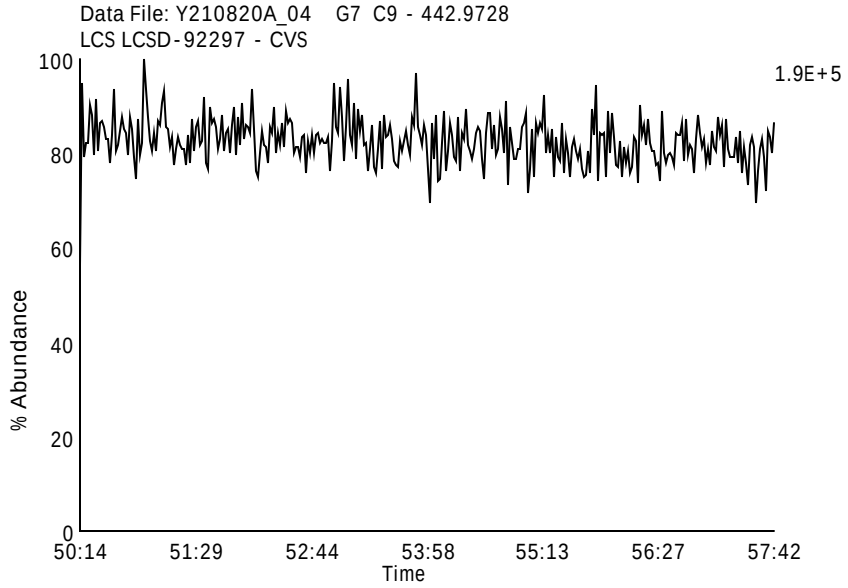
Data File Name: Y210820A_04
Date Acquired: 8/20/2021
Sample Description: LCS LCSD-92297 - CVS

Lab Sample ID: LCSD-92297
Instrument: 10MSHR12 (Y)
Client Sample ID: CLCSEU









Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CBLKIZ	Injected By	CVS
Lab ID	BLANK-92295	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_08	GC Column ID	261111-02
Analyzed	08/20/2021 08:26	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.901	0.76	3029519	4001173	
13C-3,3',4,4'-TeCB	77	35.589	0.80	3355052	4180622	
13C-2,3,3',4,4'-PeCB	105	39.065	1.53	3502328	2292685	
13C-2,3,4,4',5-PeCB	114	38.428	1.52	3683529	2420217	
13C-2,3',4,4',5-PeCB	118	37.874	1.55	3784288	2433675	
13C-2,3',4,4',5'-PeCB	123	37.539	1.49	3607980	2427603	
13C-3,3',4,4',5-PeCB	126	42.201	1.56	3421062	2191453	
13C-HxCB(156/157)	156/157	45.275	1.22	6020952	4937726	
13C-2,3',4,4',5,5'-HxCB	167	44.118	1.21	3165203	2608072	
13C-3,3',4,4',5,5'-HxCB	169	48.545	1.23	2973708	2415130	
13C-2,3,3',4,4',5,5'-HpCB	189	51.089	1.01	2486295	2463599	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.459	1.04	1293729	1249947	
13C-2,3,3',5,5'-PeCB	111	35.656	1.61	1500106	932636	
13C-2,2',3,3',5,5',6-HpCB	178	41.513	1.10	975773	888340	
Recovery Standards						
13C-2,5-DiCB	9	15.769	1.54	7228969	4702768	
13C-2,2',5,5'-TeCB	52	25.455	0.80	3926135	4916649	
13C-2,2',4,5,5'-PeCB	101	32.738	1.55	4757401	3070492	
13C-2,2',3,4,4',5'-HxCB	138	41.044	1.29	4071674	3167002	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.87	2434899	2787063	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CBLKIZ	Injected By	CVS
Lab ID	BLANK-92295	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_08	GC Column ID	261111-02
Analyzed	08/20/2021 08:26	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
77		35.572	0.67	30210	45341	
105		39.099	1.70	66997	39514	
118		37.891	1.42	116740	82371	
156	156/157	45.275	0.81	13407	16543	
157	156/157	45.275	0.81	(13407)	(16543)	
167		44.151	1.11	6537	5909	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CLCSET	Injected By	CVS
Lab ID	LCS-92296	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_03	GC Column ID	261111-02
Analyzed	08/20/2021 03:28	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.867	0.77	2587173	3346487	
13C-3,3',4,4'-TeCB	77	35.454	0.77	2738833	3575623	
13C-2,3,3',4,4'-PeCB	105	39.032	1.48	3024238	2042936	
13C-2,3,4,4',5-PeCB	114	38.394	1.47	3146103	2138526	
13C-2,3',4,4',5-PeCB	118	37.857	1.53	3220877	2104302	
13C-2,3',4,4',5'-PeCB	123	37.505	1.50	3068639	2048539	
13C-3,3',4,4',5-PeCB	126	42.184	1.48	2915852	1974102	
13C-HxCB(156/157)	156/157	45.258	1.22	5154682	4224713	
13C-2,3',4,4',5,5'-HxCB	167	44.101	1.23	2694089	2199082	
13C-3,3',4,4',5,5'-HxCB	169	48.528	1.22	2429338	1999155	
13C-2,3,3',4,4',5,5'-HpCB	189	51.068	1.07	2161450	2026404	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.443	1.05	3769073	3600641	
13C-2,3,3',5,5'-PeCB	111	35.521	1.58	4235872	2674432	
13C-2,2',3,3',5,5',6-HpCB	178	41.480	1.10	2815892	2569659	
Recovery Standards						
13C-2,5-DiCB	9	15.637	1.56	7407505	4750731	
13C-2,2',5,5'-TeCB	52	25.438	0.79	3822422	4839829	
13C-2,2',4,5,5'-PeCB	101	32.704	1.53	4654587	3034438	
13C-2,2',3,4,4',5'-HxCB	138	41.027	1.21	4015597	3332199	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.91	2289983	2524990	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CLCSET	Injected By	CVS
Lab ID	LCS-92296	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_03	GC Column ID	261111-02
Analyzed	08/20/2021 03:28	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
81		34.901	0.73	1171444	1605817	
77		35.488	0.79	1287592	1630403	
105		39.065	1.42	1453639	1021700	
114		38.428	1.54	1447047	938038	
118		37.874	1.56	1615818	1034767	
123		37.539	1.50	1451145	966620	
126		42.218	1.54	1399974	907402	
156	156/157	45.275	1.15	2455111	2133129	
157	156/157	45.275	1.15	(2455111)	(2133129)	
167		44.118	1.27	1326666	1043472	
169		48.545	1.23	1202153	979076	
189		51.089	1.10	981749	891771	

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1668A Labeled Polychlorinated Biphenyls Detected Peak List

Client ID	CLCSEU	Injected By	CVS
Lab ID	LCSD-92297	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_04	GC Column ID	261111-02
Analyzed	08/20/2021 04:28	ICAL Date	08/20/2021

Name	IUPAC	RT	Ratio	Area 1	Area 2	Flags
Labeled Analytes						
13C-3,4,4',5-TeCB	81	34.851	0.78	1939335	2487299	
13C-3,3',4,4'-TeCB	77	35.438	0.78	2038909	2608894	
13C-2,3,3',4,4'-PeCB	105	39.032	1.50	2206591	1467517	
13C-2,3,4,4',5-PeCB	114	38.394	1.63	2323739	1425388	
13C-2,3',4,4',5-PeCB	118	37.841	1.60	2430358	1521664	
13C-2,3',4,4',5'-PeCB	123	37.488	1.57	2275935	1450685	
13C-3,3',4,4',5-PeCB	126	42.184	1.59	2164015	1358238	
13C-HxCB(156/157)	156/157	45.241	1.25	3771433	3029042	
13C-2,3',4,4',5,5'-HxCB	167	44.084	1.25	1917935	1531494	
13C-3,3',4,4',5,5'-HxCB	169	48.511	1.21	1768910	1460998	
13C-2,3,3',4,4',5,5'-HpCB	189	51.067	1.07	1554417	1458020	
CleanupStandards						
13C-2,4,4'-TrCB	28	23.426	0.99	2559876	2587927	
13C-2,3,3',5,5'-PeCB	111	35.505	1.60	3180800	1993565	
13C-2,2',3,3',5,5',6-HpCB	178	41.480	1.08	2110090	1957763	
Recovery Standards						
13C-2,5-DiCB	9	15.517	1.49	6352702	4251416	
13C-2,2',5,5'-TeCB	52	25.421	0.81	3530550	4361277	
13C-2,2',4,5,5'-PeCB	101	32.704	1.57	4220750	2683112	
13C-2,2',3,4,4',5'-HxCB	138	41.010	1.20	3657117	3041023	
13C-2,2',3,3',4,4',5,5'-OcCB	194	53.180	0.88	2123014	2423254	

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1668A Native Polychlorinated Biphenyls Detected Peak List

Prepared By _____ Date _____

ReviewedBy _____ Date _____

Client ID	CLCSEU	Injected By	CVS
Lab ID	LCSD-92297	Instrument ID	10MSHR12 (Y)
Filename	Y210820A_04	GC Column ID	261111-02
Analyzed	08/20/2021 04:28	ICAL ID	Y210820A02

IUPAC	Co-Elutions	RT	Ratio	Area 1	Area 2	Flags
81		34.884	0.77	984844	1273312	
77		35.454	0.75	942336	1252795	
105		39.048	1.53	1176047	770912	
114		38.394	1.50	1063312	707732	
118		37.857	1.56	1254674	805789	
123		37.522	1.47	1077916	733927	
126		42.201	1.46	1051139	718121	
156	156/157	45.258	1.22	1908362	1559032	
157	156/157	45.258	1.22	(1908362)	(1559032)	
167		44.101	1.19	981777	827418	
169		48.528	1.23	896078	725798	
189		51.089	0.97	775711	796980	

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MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSV8

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2955103	2955103BLANK	99	105	98
2955104	2955104LCS	98	102	99
60376093014	TB-72721	100	102	99

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-1
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2949515	2949515BLANK	98	102	101
2949516	2949516LCS	99	99	99
60376093013	GB-01/2-3	103	101	100

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-2
SOLID VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2949659	2949659BLANK	98	102	101
2949660	2949660LCS	99	99	99
60376093013	GB-01/2-3	103	101	100

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(69-133)
(TOL8) = Toluene-d8 (S)	(78-122)

* Values outside of QC Limits

MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2949516LCS
Date Extracted: 07/30/2021
Date Analyzed (1): 07/30/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 073021A.B\0730A_21.D
SDG No.: 60376093

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acetone	500	643	129	50-150
Acrolein	500	574	115	10-180
Acrylonitrile	500	534	107	80-120
Benzene	100	105	105	80-120
Bromobenzene	100	103	103	80-120
Bromochloromethane	100	107	107	75-120
Bromodichloromethane	100	115	115	80-125
Bromoform	100	98.9	99	80-135
Bromomethane	100	93.4	93	35-135
2-Butanone (MEK)	500	642	128	60-135
n-Butylbenzene	100	108	108	80-135
sec-Butylbenzene	100	104	104	80-135
tert-Butylbenzene	100	104	104	80-125
Carbon disulfide	100	112	112	65-140
Carbon tetrachloride	100	115	115	75-140
Chlorobenzene	100	106	106	80-120
Chloroethane	100	112	112	50-135
Chloroform	100	108	108	80-120
Chloromethane	100	101	101	15-155
2-Chlorotoluene	100	103	103	80-120
4-Chlorotoluene	100	106	106	80-120
Cyclohexanone	500	581	116	80-120
1,2-Dibromo-3-chloropropane	100	114	114	75-135
Dibromochloromethane	100	119	119	80-130
1,2-Dibromoethane (EDB)	100	113	113	80-125
Dibromomethane	100	107	107	80-120
1,2-Dichlorobenzene	100	102	102	80-120
1,3-Dichlorobenzene	100	105	105	80-120
1,4-Dichlorobenzene	100	106	106	80-120
1,1-Dichloroethane	100	109	109	75-125
1,2-Dichloroethane	100	104	104	80-120
1,2-Dichloroethene (Total)	200	218	109	80-120
1,1-Dichloroethene	100	114	114	70-130
cis-1,2-Dichloroethene	100	109	109	80-120
trans-1,2-Dichloroethene	100	110	110	75-125
1,2-Dichloropropane	100	106	106	80-120
1,3-Dichloropropane	100	105	105	80-120
2,2-Dichloropropane	100	113	113	75-130
1,1-Dichloropropene	100	110	110	60-140
cis-1,3-Dichloropropene	100	115	115	80-125
trans-1,3-Dichloropropene	100	117	117	80-130
Diethyl ether (Ethyl ether)	100	107	107	80-120
Ethylbenzene	100	107	107	80-120
n-Heptane	100	115	115	80-120
Hexachloro-1,3-butadiene	100	113	113	80-135
n-Hexane	100	110	110	55-150
2-Hexanone	500	624	125	70-135

MSV - FORM III VOA-2

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2949516LCS
Date Extracted: 07/30/2021
Date Analyzed (1): 07/30/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 073021A.B\0730A_21.D
SDG No.: 60376093

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Iodomethane	100	109	109	65-145
Isopropylbenzene (Cumene)	100	111	111	75-135
p-Isopropyltoluene	100	107	107	65-145
Methyl acetate	500	516	103	80-120
Methylene Chloride	100	96.1	96	65-120
4-Methyl-2-pentanone (MIBK)	500	516	103	75-130
Methyl-tert-butyl ether	100	105	105	75-130
Naphthalene	100	113	113	80-120
n-Propylbenzene	100	106	106	80-125
Styrene	100	108	108	85-125
1,1,1,2-Tetrachloroethane	100	111	111	80-130
1,1,2,2-Tetrachloroethane	100	105	105	75-120
Tetrachloroethene	100	109	109	80-130
Tetrahydrofuran	500	506	101	80-120
Toluene	100	105	105	80-120
1,2,3-Trichlorobenzene	100	110	110	80-125
1,2,4-Trichlorobenzene	100	115	115	80-125
1,1,1-Trichloroethane	100	106	106	75-130
1,1,2-Trichloroethane	100	108	108	80-120
Trichloroethene	100	109	109	80-125
Trichlorofluoromethane	100	117	117	65-135
1,2,3-Trichloropropane	100	102	102	80-120
1,1,2-Trichlorotrifluoroethane	100	116	116	80-120
1,2,3-Trimethylbenzene	100	104	104	80-120
1,2,4-Trimethylbenzene	100	102	102	80-125
1,3,5-Trimethylbenzene	100	105	105	80-125
Vinyl acetate	100	104	104	80-120
Vinyl chloride	100	109	109	35-145
Xylene (Total)	300	316	105	80-120
m&p-Xylene	200	211	106	80-125
o-Xylene	100	105	105	80-125

Spike Recovery: 0 out of 78 outside limits.

MSV - FORM III VOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2949660LCS
Date Extracted: 07/30/2021
Date Analyzed (1): 07/30/2021
Instrument: 60MSVC
LCS Lot No:
Lab File ID: 073021AGRO.B\0730A_22.D
SDG No.: 60376093

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-GRO	4.0	3.9	98	61-140

Spike Recovery: 0 out of 1 outside limits.

09/08/2021 5:20

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2955104LCS
Date Extracted: 08/10/2021
Date Analyzed (1): 08/10/2021
Instrument: 60MSV8
LCS Lot No: 46486
Lab File ID: 081021A.B\0810A_04LCS.D
SDG No.: 60376093

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	100	96.2	96	20-175
Acetonitrile	100	106	106	25-180
Acrolein	100	98.6	99	10-200
Acrylonitrile	100	91.0	91	70-135
Benzene	20.0	19.2	96	80-120
Bromobenzene	20.0	19.9	99	80-120
Bromochloromethane	20.0	18.6	93	80-125
Bromodichloromethane	20.0	19.4	97	80-125
Bromoform	20.0	18.9	94	60-135
Bromomethane	20.0	19.1	96	10-165
2-Butanone (MEK)	100	112	112	40-150
n-Butylbenzene	20.0	19.8	99	80-125
sec-Butylbenzene	20.0	20.2	101	80-120
tert-Butylbenzene	20.0	20.4	102	80-120
Carbon disulfide	20.0	19.3	97	75-135
Carbon tetrachloride	20.0	19.3	96	80-125
Chlorobenzene	20.0	19.6	98	80-120
Chloroethane	20.0	20.9	105	70-130
2-Chloroethylvinyl ether	100	94.2	94	30-165
Chloroform	20.0	18.9	94	80-120
Chloromethane	20.0	19.9	100	35-155
2-Chlorotoluene	20.0	19.5	97	80-120
4-Chlorotoluene	20.0	20.8	104	80-120
Cyclohexane	20.0	20.0	100	80-130
Cyclohexanone	100	98.0	98	10-180
1,2-Dibromo-3-chloropropane	20.0	19.7	99	70-120
Dibromochloromethane	20.0	18.9	95	70-120
1,2-Dibromoethane (EDB)	20.0	18.1	91	80-120
Dibromomethane	20.0	18.4	92	80-120
1,2-Dichlorobenzene	20.0	19.0	95	80-120
1,3-Dichlorobenzene	20.0	19.6	98	80-120
1,4-Dichlorobenzene	20.0	19.9	100	80-120
Dichlorodifluoromethane	20.0	20.3	101	50-150
1,1-Dichloroethane	20.0	19.8	99	75-125
1,2-Dichloroethane	20.0	19.3	97	75-120
1,2-Dichloroethene (Total)	40.0	37.5	94	80-120
1,1-Dichloroethene	20.0	19.1	96	80-120
cis-1,2-Dichloroethene	20.0	18.8	94	80-120
trans-1,2-Dichloroethene	20.0	18.7	93	80-120
1,2-Dichloropropane	20.0	18.9	94	80-125
1,3-Dichloropropane	20.0	18.8	94	80-120
2,2-Dichloropropane	20.0	19.8	99	60-130
1,1-Dichloropropene	20.0	19.3	96	80-125
cis-1,3-Dichloropropene	20.0	19.7	99	80-125
trans-1,3-Dichloropropene	20.0	19.5	97	75-120
Diethyl ether (Ethyl ether)	20.0	18.3	92	70-140
1,4-Dioxane (p-Dioxane)	100	109	109	10-180

09/08/2021 5:20

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2955104LCS
Date Extracted: 08/10/2021
Date Analyzed (1): 08/10/2021
Instrument: 60MSV8
LCS Lot No: 46486
Lab File ID: 081021A.B\0810A_04LCS.D
SDG No.: 60376093

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Ethylbenzene	20.0	19.6	98	80-120
n-Heptane	20.0	21.1	105	10-180
Hexachloro-1,3-butadiene	20.0	18.0	90	65-135
n-Hexane	20.0	19.6	98	60-135
2-Hexanone	100	105	105	45-150
Isopropylbenzene (Cumene)	20.0	20.0	100	80-125
p-Isopropyltoluene	20.0	20.4	102	80-135
Methyl acetate	100	99.0	99	45-140
Methylcyclohexane	20.0	19.3	97	80-125
Methylene Chloride	20.0	18.3	91	75-120
1-Methylnaphthalene	20.0	18.9	94	40-160
2-Methylnaphthalene	20.0	19.0	95	55-150
4-Methyl-2-pentanone (MIBK)	100	92.1	92	65-140
Methyl-tert-butyl ether	20.0	18.7	94	65-130
Naphthalene	20.0	18.3	91	70-120
n-Propylbenzene	20.0	19.4	97	80-120
Styrene	20.0	19.2	96	80-120
1,1,1,2-Tetrachloroethane	20.0	19.3	97	80-120
1,1,2,2-Tetrachloroethane	20.0	20.4	102	75-125
Tetrachloroethene	20.0	19.0	95	80-120
Tetrahydrofuran	100	90.9	91	75-125
Toluene	20.0	18.7	94	80-120
1,2,3-Trichlorobenzene	20.0	18.7	94	75-125
1,2,4-Trichlorobenzene	20.0	18.6	93	75-120
1,1,1-Trichloroethane	20.0	18.8	94	80-120
1,1,2-Trichloroethane	20.0	17.8	89	80-120
Trichloroethene	20.0	18.7	94	80-120
Trichlorofluoromethane	20.0	20.1	100	80-130
1,2,3-Trichloropropane	20.0	19.3	96	80-125
1,2,3-Trimethylbenzene	20.0	20.2	101	80-125
1,2,4-Trimethylbenzene	20.0	20.1	100	80-125
1,3,5-Trimethylbenzene	20.0	20.5	103	80-125
Vinyl chloride	20.0	19.1	95	65-130
Xylene (Total)	60.0	58.7	98	80-120
m&p-Xylene	40.0	39.8	99	75-130
o-Xylene	20.0	18.9	95	75-130

Spike Recovery: 0 out of 83 outside limits.

09/08/2021 5:20

SAMPLE NO.

2949515BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2949515

Lab File ID: 073021A.B\0730A_24.D Date Analyzed: 07/30/2021 Time: 13:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2949516LCS	2949516	073021A.B\0730A_21.D	07/30/2021 12:13
GB-01/2-3	60376093013	073021A.B\0730A_27.D	07/30/2021 13:56

SAMPLE NO.

2949659BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVC Matrix: Solid Lab Sample ID: 2949659

Lab File ID (1): 073021A.B\0730A_24.D Date Analyzed (1): 07/30/2021 Time (1):13:09

Lab File ID (2): 073021AGRO.B\0730A_24.D Date Analyzed (2): 07/30/2021 Time (2):13:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2949660LCS	2949660	073021A.B\0730A_21.D	07/30/2021 12:13
2949660LCS	2949660	073021AGRO.B\0730A_22.D	07/30/2021 12:38
GB-01/2-3	60376093013	073021A.B\0730A_27.D	07/30/2021 13:56
GB-01/2-3	60376093013	073021AGRO.B\0730A_27.D	07/30/2021 13:56

SAMPLE NO.

2955103BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSV8 Matrix: Water Lab Sample ID: 2955103

Lab File ID: 081021A.B\0810A_06BLK.D Date Analyzed: 08/10/2021 Time: 07:59

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2955104LCS	2955104	081021A.B\0810A_04LCS.D	08/10/2021 07:31
TB-72721	60376093014	081021A.B\0810A_20.D	08/10/2021 11:18

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Lab File ID: 080921A.B\0809A_13BFB.D BFB Injection Date 08/09/2021

Instrument ID: 60MSV8 BFB Injection Time 10:52

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	22.43	
75	30.00 - 66.00% of mass 95	44.24	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.45	
173	Less than 2.00% of mass 174	0.63	(0.64)[1]
174	50.00 - 120.00% of mass 95	97.18	
175	4.00 - 9.00% of mass 174	7.94	(8.17)[1]
176	93.00 - 101.00% of mass 174	97.99	(100.84)[1]
177	5.00 - 9.00% of mass 176	6.18	(6.31)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19787995CAL1	19787995CAL1	080921A.B\0809A_15.D	08/09/2021	11:20
19787999CAL2	19787999CAL2	080921A.B\0809A_16.D	08/09/2021	11:34
19787998CAL3	19787998CAL3	080921A.B\0809A_17.D	08/09/2021	11:49
19787992CAL4	19787992CAL4	080921A.B\0809A_18.D	08/09/2021	12:03
19787993CAL5	19787993CAL5	080921A.B\0809A_19.D	08/09/2021	12:17
19788000CAL6	19788000CAL6	080921A.B\0809A_20.D	08/09/2021	12:31
19787997CAL7	19787997CAL7	080921A.B\0809A_21.D	08/09/2021	12:46
19787996CAL8	19787996CAL8	080921A.B\0809A_22.D	08/09/2021	13:00
19787994ICV	19787994ICV	080921A.B\0809A_25.D	08/09/2021	13:43

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Lab File ID: 081021A.B\0810A_02BFB.D BFB Injection Date 08/10/2021

Instrument ID: 60MSV8 BFB Injection Time 07:02

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	23.27	
75	30.00 - 66.00% of mass 95	43.30	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.18	
173	Less than 2.00% of mass 174	1.02	(1.01)[1]
174	50.00 - 120.00% of mass 95	101.24	
175	4.00 - 9.00% of mass 174	7.92	(7.83)[1]
176	93.00 - 101.00% of mass 174	100.55	(99.32)[1]
177	5.00 - 9.00% of mass 176	6.57	(6.54)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19790205CCV	19790205CCV	081021A.B\0810A_03CCV.D	08/10/2021	07:16
2955104LCS	2955104LCS	081021A.B\0810A_04LCS.D	08/10/2021	07:31
2955103BLANK	2955103BLANK	081021A.B\0810A_06BLK.D	08/10/2021	07:59
TB-72721	60376093014	081021A.B\0810A_20.D	08/10/2021	11:18

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW
Lab File ID: 071621B.B\0716B_01.D BFB Injection Date 07/16/2021
Instrument ID: 60MSVC BFB Injection Time 10:47

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.55	
75	30.00 - 66.00% of mass 95	44.16	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	7.08	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	102.97	
175	4.00 - 9.00% of mass 174	7.81	(7.58)[1]
176	93.00 - 101.00% of mass 174	100.39	(97.49)[1]
177	5.00 - 9.00% of mass 176	6.53	(6.50)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19684413CAL1	19684413CAL1	071621B.B\0716B_02.D	07/16/2021	11:02
19684462CAL2	19684462CAL2	071621B.B\0716B_03.D	07/16/2021	11:18
19684463CAL3	19684463CAL3	071621B.B\0716B_04.D	07/16/2021	11:33
19684464CAL4	19684464CAL4	071621B.B\0716B_05.D	07/16/2021	11:49
19684465CAL5	19684465CAL5	071621B.B\0716B_06.D	07/16/2021	12:05
19684466CAL6	19684466CAL6	071621B.B\0716B_07.D	07/16/2021	12:20
19684467CAL7	19684467CAL7	071621B.B\0716B_08.D	07/16/2021	12:36
19684415ICV	19684415ICV	071621B.B\0716B_09.D	07/16/2021	12:51
19894442CAL1	19894442CAL1	072721AGRO.B\0727A_04.D	07/27/2021	08:42
19894441CAL2	19894441CAL2	072721AGRO.B\0727A_05.D	07/27/2021	08:57
19894443CAL3	19894443CAL3	072721AGRO.B\0727A_06.D	07/27/2021	09:13
19894440CAL4	19894440CAL4	072721AGRO.B\0727A_07.D	07/27/2021	09:29
19894444CAL5	19894444CAL5	072721AGRO.B\0727A_08.D	07/27/2021	09:44
19894439CAL6	19894439CAL6	072721AGRO.B\0727A_09.D	07/27/2021	10:00
19895948ICV	19895948ICV	072721AGRO.B\0727A_10.D	07/27/2021	10:16

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

null

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Lab File ID: 073021A.B\0730A_01.D BFB Injection Date 07/30/2021

Instrument ID: 60MSVC BFB Injection Time 06:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	20.71	
75	30.00 - 66.00% of mass 95	44.51	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.60	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	105.12	
175	4.00 - 9.00% of mass 174	8.10	(7.70)[1]
176	93.00 - 101.00% of mass 174	103.08	(98.06)[1]
177	5.00 - 9.00% of mass 176	6.89	(6.68)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19752317CCV	19752317CCV	073021A.B\0730A_02.D	07/30/2021	07:06
19752322CCV	19752322CCV	073021AGRO.B\0730A_04.D	07/30/2021	07:37
2949660LCS	2949660LCS	073021A.B\0730A_21.D	07/30/2021	12:13
2949516LCS	2949516LCS	073021A.B\0730A_21.D	07/30/2021	12:13
2949660LCS	2949660LCS	073021AGRO.B\0730A_22.D	07/30/2021	12:38
2949515BLANK	2949515BLANK	073021A.B\0730A_24.D	07/30/2021	13:09
2949659BLANK	2949659BLANK	073021A.B\0730A_24.D	07/30/2021	13:09
2949659BLANK	2949659BLANK	073021AGRO.B\0730A_24.D	07/30/2021	13:09
GB-01/2-3	60376093013	073021A.B\0730A_27.D	07/30/2021	13:56
GB-01/2-3	60376093013	073021AGRO.B\0730A_27.D	07/30/2021	13:56
GB-01/2-3	60376093013	073021A.B\0730A_27.D	07/30/2021	13:56

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Sample ID : 19790205CCV Date Analyzed: 08/10/2021

Instrument ID: 60MSV8 GC Column: Col 1 Time Analyzed: 07:16

Lab File ID: 081021A.B\0810A_03CCV.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		394798	6.844	407010	5.285	1224762	3.31
UPPER LIMIT		789596	7.344	814020	5.785	2449524	3.81
LOWER LIMIT		197399	6.344	203505	4.785	612381	2.81
LAB SAMPLE ID	SAMPLE NO.						
2955103	2955103BLANK	375080	6.844	398325	5.284	1193766	3.31
2955104	2955104LCS	383999	6.844	403926	5.284	1202891	3.31
60376093014	TB-72721	387153	6.844	400475	5.284	1198810	3.307

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Sample ID : 19752317CCV Date Analyzed: 07/30/2021

Instrument ID: 60MSVC GC Column: Col 1 Time Analyzed: 07:06

Lab File ID: 073021A.B\0730A_02.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		168079	7.399	130729	5.821	312834	3.803
UPPER LIMIT		336158	7.899	261458	6.321	625668	4.303
LOWER LIMIT		84039.5	6.899	65364.5	5.321	156417	3.303
LAB SAMPLE ID	SAMPLE NO.						
2949515	2949515BLANK	159226	7.398	128879	5.82	306953	3.802
2949516	2949516LCS	166454	7.398	127712	5.82	307863	3.797
2949659	2949659BLANK	159226	7.398	128879	5.82	306953	3.802
2949660	2949660LCS	166454	7.398	127712	5.82	307863	3.797
60376093013	GB-01/2-3	164482	7.398	129482	5.82	297714	3.802

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-72721

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Water SDG No.: 60376093

Date Extracted: 08/10/2021 11:18 Lab Sample ID: 60376093014

Date Analyzed: 08/10/2021 11:18 Lab File ID: 081021A.B\0810A_20.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	<0.22	U
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-72721

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Water SDG No.: 60376093

Date Extracted: 08/10/2021 11:18 Lab Sample ID: 60376093014

Date Analyzed: 08/10/2021 11:18 Lab File ID: 081021A.B\0810A_20.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	<0.42	U
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U

SAMPLE NO.

TB-72721

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Water SDG No.: 60376093

Date Extracted: 08/10/2021 11:18 Lab Sample ID: 60376093014

Date Analyzed: 08/10/2021 11:18 Lab File ID: 081021A.B\0810A_20.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	<0.21	U
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

GB-01/2-3

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:31 Lab Sample ID: 60376093013

Date Analyzed: 07/30/2021 13:56 Lab File ID: 073021AGRO.B\0730A_27.D

Initial wt/vol: 6.17 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.052	U

SAMPLE NO.

GB-01/2-3

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:30 Lab Sample ID: 60376093013

Date Analyzed: 07/30/2021 13:56 Lab File ID: 073021A.B\0730A_27.D

Initial wt/vol: 6.17 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<15.6	U
107-02-8	Acrolein	<72.6	U
107-13-1	Acrylonitrile	<3.0	U
71-43-2	Benzene	<0.47	U
108-86-1	Bromobenzene	<0.90	U
74-97-5	Bromochloromethane	<0.58	U
75-27-4	Bromodichloromethane	<0.58	U
75-25-2	Bromoform	<0.55	U
74-83-9	Bromomethane	<2.8	U
78-93-3	2-Butanone (MEK)	<3.3	U
104-51-8	n-Butylbenzene	<0.62	U
135-98-8	sec-Butylbenzene	<0.70	U
98-06-6	tert-Butylbenzene	<0.85	U
75-15-0	Carbon disulfide	<0.62	U
56-23-5	Carbon tetrachloride	<0.82	U
108-90-7	Chlorobenzene	<0.60	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.47	U
74-87-3	Chloromethane	<0.77	U
95-49-8	2-Chlorotoluene	<0.70	U
106-43-4	4-Chlorotoluene	<0.58	U
108-94-1	Cyclohexanone	<12.2	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.62	U
106-93-4	1,2-Dibromoethane (EDB)	<0.51	U
74-95-3	Dibromomethane	<0.58	U
95-50-1	1,2-Dichlorobenzene	<0.60	U
541-73-1	1,3-Dichlorobenzene	<0.69	U
106-46-7	1,4-Dichlorobenzene	<0.78	U
75-34-3	1,1-Dichloroethane	<0.37	U
107-06-2	1,2-Dichloroethane	<0.38	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.61	U
156-59-2	cis-1,2-Dichloroethene	<0.41	U
156-60-5	trans-1,2-Dichloroethene	<0.65	U
78-87-5	1,2-Dichloropropane	<0.94	U
142-28-9	1,3-Dichloropropane	<0.66	U

SAMPLE NO.

GB-01/2-3

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:30 Lab Sample ID: 60376093013

Date Analyzed: 07/30/2021 13:56 Lab File ID: 073021A.B\0730A_27.D

Initial wt/vol: 6.17 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.46	U
563-58-6	1,1-Dichloropropene	<0.86	U
10061-01-5	cis-1,3-Dichloropropene	<0.51	U
10061-02-6	trans-1,3-Dichloropropene	<0.44	U
60-29-7	Diethyl ether (Ethyl ether)	<0.54	U
100-41-4	Ethylbenzene	<0.44	U
142-82-5	n-Heptane	<4.4	U
87-68-3	Hexachloro-1,3-butadiene	<0.82	U
110-54-3	n-Hexane	<0.66	U
591-78-6	2-Hexanone	<2.4	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.55	U
99-87-6	p-Isopropyltoluene	<0.66	U
79-20-9	Methyl acetate	<1.0	U
75-09-2	Methylene Chloride	<2.6	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<2.9	U
1634-04-4	Methyl-tert-butyl ether	<0.46	U
91-20-3	Naphthalene	<0.79	U
103-65-1	n-Propylbenzene	<0.77	U
100-42-5	Styrene	<0.57	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.98	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.96	U
127-18-4	Tetrachloroethene	<0.40	U
109-99-9	Tetrahydrofuran	<0.75	U
108-88-3	Toluene	<0.34	U
87-61-6	1,2,3-Trichlorobenzene	<0.77	U
120-82-1	1,2,4-Trichlorobenzene	<0.77	U
71-55-6	1,1,1-Trichloroethane	<0.72	U
79-00-5	1,1,2-Trichloroethane	<0.61	U
79-01-6	Trichloroethene	<0.70	U
75-69-4	Trichlorofluoromethane	<0.59	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<4.8	U
526-73-8	1,2,3-Trimethylbenzene	<1.9	U
95-63-6	1,2,4-Trimethylbenzene	<0.64	U
108-67-8	1,3,5-Trimethylbenzene	<0.60	U
108-05-4	Vinyl acetate	<0.54	U

SAMPLE NO.

GB-01/2-3

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:30 Lab Sample ID: 60376093013

Date Analyzed: 07/30/2021 13:56 Lab File ID: 073021A.B\0730A_27.D

Initial wt/vol: 6.17 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.64	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.61	U
95-47-6	o-Xylene	<0.36	U

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 08/09/2021 08/09/2021 Calibration Time(s): 11:20 13:00

LAB FILE ID

CAL1 = 080921A.B\0809A_15.D CAL2 = 080921A.B\0809A_16.D CAL3 = 080921A.B\0809A_17.D

CAL4 = 080921A.B\0809A_18.D CAL5 = 080921A.B\0809A_19.D CAL6 = 080921A.B\0809A_20.D

CAL7 = 080921A.B\0809A_21.D CAL8 = 080921A.B\0809A_22.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Averaged	0.14905	0.16281	0.13514	0.12564	0.13216	0.12031
Acetonitrile	Wt Linear	0.43414	0.42433	0.26721	0.25708	0.25420	0.24042
Acrolein	Averaged			0.04035	0.04380	0.04428	0.04360
Acrylonitrile	Averaged		0.12998	0.09355	0.09207	0.09741	0.09245
Benzene	Averaged	1.71015	2.23594	1.74380	1.70833	1.81384	1.75629
Bromobenzene	Averaged	1.11685	1.64376	1.30447	1.33600	1.38767	1.40021
Bromochloromethane	Averaged	0.24381	0.32194	0.23732	0.23570	0.24577	0.22916
Bromodichloromethane	Averaged	0.59762	0.59518	0.53294	0.53652	0.58194	0.56593
Bromoform	Averaged	0.40124	0.61132	0.55117	0.56281	0.61891	0.60937
Bromomethane	Averaged	0.31525	0.33350	0.27182	0.25185	0.27075	0.28369
2-Butanone (MEK)	Averaged	0.14506	0.19913	0.14146	0.15681	0.17201	0.15954
n-Butylbenzene	Averaged	3.42431	4.14905	3.24291	3.26945	3.32589	3.21310
sec-Butylbenzene	Averaged	4.37634	5.66456	4.65388	4.68132	4.86561	4.73348
tert-Butylbenzene	Averaged	3.25916	4.05283	3.36213	3.36840	3.37658	3.41871
Carbon disulfide	Averaged	1.25361	1.48673	1.23073	1.14318	1.18390	1.13418
Carbon tetrachloride	Averaged	0.66642	0.82125	0.70400	0.66964	0.71285	0.69807
Chlorobenzene	Averaged	2.93327	4.24140	3.34943	3.30731	3.50078	3.38528
Chloroethane	Wt Linear	0.42851	0.44289	0.29832	0.30084	0.29769	0.29637
2-Chloroethylvinyl ether	Averaged	0.09674	0.14223	0.12203	0.11799	0.12880	0.12454
Chloroform	Averaged	0.84997	1.07836	0.82170	0.81410	0.83958	0.80881
Chloromethane	Averaged	0.58898	0.63696	0.51561	0.53928	0.56470	0.50605
2-Chlorotoluene	Averaged	3.67496	3.97224	3.21764	3.22511	3.26053	3.22655
4-Chlorotoluene	Averaged	1.08421	1.56200	1.20522	1.26506	1.31982	1.31422
Cyclohexane	Averaged	1.05300	1.13880	1.05682	0.94222	1.01723	1.08929
Cyclohexanone	Wt Linear	0.14029	0.15516	0.10319	0.10531	0.10958	0.10083
1,2-Dibromo-3-chloropropane	Averaged		0.10208	0.06171	0.08052	0.08762	0.08164
Dibromochloromethane	Averaged	0.93905	1.39545	1.08681	1.13593	1.20125	1.16751
1,2-Dibromoethane (EDB)	Averaged	0.82041	0.93796	0.80875	0.81165	0.84746	0.80892
Dibromomethane	Averaged	0.19850	0.27362	0.21218	0.21189	0.22381	0.21765
1,2-Dichlorobenzene	Averaged	1.97554	2.39305	1.89412	1.95482	2.01994	1.98194
1,3-Dichlorobenzene	Averaged	2.01209	2.80396	2.28716	2.33244	2.37015	2.36866
1,4-Dichlorobenzene	Averaged	2.13644	2.78391	2.25544	2.26807	2.34178	2.34034
Dichlorodifluoromethane	Averaged	0.55105	0.65506	0.60378	0.55832	0.59292	0.57389
1,1-Dichloroethane	Averaged	0.88263	1.14413	0.94699	0.97034	0.98861	0.96200
1,2-Dichloroethane	Averaged	0.47150	0.67981	0.53067	0.53374	0.57776	0.55669

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/08/2021 5:20

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 08/09/2021 08/09/2021 Calibration Time(s): 11:20 13:00

LAB FILE ID

CAL1 = 080921A.B\0809A_15.D CAL2 = 080921A.B\0809A_16.D CAL3 = 080921A.B\0809A_17.D

CAL4 = 080921A.B\0809A_18.D CAL5 = 080921A.B\0809A_19.D CAL6 = 080921A.B\0809A_20.D

CAL7 = 080921A.B\0809A_21.D CAL8 = 080921A.B\0809A_22.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1-Dichloroethene	Averaged	0.46781	0.54089	0.40782	0.37197	0.40091	0.39311
cis-1,2-Dichloroethene	Averaged	0.50501	0.64720	0.50991	0.50018	0.52532	0.50635
trans-1,2-Dichloroethene	Averaged	0.57054	0.62595	0.47151	0.47707	0.49238	0.48053
1,2-Dichloropropane	Averaged	0.49289	0.62761	0.48185	0.50874	0.52451	0.51564
1,3-Dichloropropane	Averaged	1.16752	1.59752	1.33517	1.36368	1.42063	1.35427
2,2-Dichloropropane	Averaged	0.72722	0.84486	0.68395	0.68005	0.71107	0.69141
1,1-Dichloropropene	Averaged	0.54979	0.73688	0.61470	0.59672	0.61481	0.61686
cis-1,3-Dichloropropene	Averaged	0.56981	0.76095	0.61825	0.62793	0.67585	0.65093
trans-1,3-Dichloropropene	Averaged	1.12472	1.66282	1.45717	1.41530	1.53503	1.48563
Diethyl ether (Ethyl ether)	Averaged	0.15847	0.24682	0.16958	0.17134	0.18164	0.17365
1,4-Dioxane (p-Dioxane)	Wt Linear			0.00146	0.00202	0.00168	0.00143
Ethylbenzene	Averaged	1.79187	2.12904	1.74783	1.67562	1.82479	1.79452
n-Heptane	Averaged	0.07829	0.10811	0.09853	0.08353	0.09356	0.09185
Hexachloro-1,3-butadiene	Averaged	0.54472	0.65451	0.55084	0.57009	0.59092	0.54552
n-Hexane	Averaged	0.88495	0.97187	0.83836	0.80370	0.84076	0.81096
2-Hexanone	Averaged	0.54770	0.71460	0.58059	0.59224	0.64894	0.60381
Isopropylbenzene (Cumene)	Averaged	4.11936	5.79529	5.07743	4.81228	5.14643	4.94504
p-Isopropyltoluene	Averaged	3.91158	4.88662	4.07146	4.09953	4.19843	4.11094
Methyl acetate	Wt Linear	0.26731	0.28638	0.19810	0.20597	0.20873	0.19465
Methylcyclohexane	Averaged	0.75946	0.90704	0.71466	0.68762	0.72698	0.70862
Methylene Chloride	Averaged	0.48573	0.52467	0.40465	0.41596	0.43211	0.40605
1-Methylnaphthalene	Averaged	0.57344	0.77742	0.57663	0.60848	0.66681	0.66937
2-Methylnaphthalene	Averaged	0.75817	0.88926	0.71670	0.75748	0.82702	0.80708
4-Methyl-2-pentanone (MIBK)	Averaged	0.25079	0.32673	0.24553	0.25260	0.27063	0.25908
Methyl-tert-butyl ether	Averaged	0.77063	1.03385	0.83896	0.86189	0.90823	0.86458
Naphthalene	Averaged	1.52025	2.04790	1.59993	1.65634	1.76519	1.69066
n-Propylbenzene	Averaged	1.22194	1.67957	1.40317	1.38906	1.41482	1.40529
Styrene	Averaged	2.82470	3.97455	3.17743	3.16628	3.36033	3.25648
1,1,1,2-Tetrachloroethane	Averaged	1.16909	1.45909	1.25511	1.30254	1.37689	1.34204
1,1,2,2-Tetrachloroethane	Wt Linear	0.87533	1.04263	0.74873	0.73784	0.76205	0.72435
Tetrachloroethene	Averaged	1.44099	2.05835	1.66647	1.60039	1.66997	1.63590
Tetrahydrofuran	Averaged	0.06718	0.09685	0.07761	0.07492	0.08216	0.07700
Toluene	Averaged	3.26402	3.81187	3.31508	3.13708	3.24095	3.15108
1,2,3-Trichlorobenzene	Averaged	0.71019	0.88249	0.69913	0.74393	0.80904	0.76385
1,2,4-Trichlorobenzene	Averaged	0.83943	1.06906	0.92902	0.95981	1.02236	0.98968

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-3

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 08/09/2021 08/09/2021 Calibration Time(s): 11:20 13:00

LAB FILE ID

CAL1 = 080921A.B\0809A_15.D CAL2 = 080921A.B\0809A_16.D CAL3 = 080921A.B\0809A_17.D

CAL4 = 080921A.B\0809A_18.D CAL5 = 080921A.B\0809A_19.D CAL6 = 080921A.B\0809A_20.D

CAL7 = 080921A.B\0809A_21.D CAL8 = 080921A.B\0809A_22.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1,1-Trichloroethane	Averaged	0.68528	0.93047	0.75228	0.73985	0.77679	0.76122
1,1,2-Trichloroethane	Averaged	0.97304	0.82455	0.72783	0.69344	0.73348	0.69335
Trichloroethene	Averaged	0.54115	0.57597	0.48609	0.48488	0.49638	0.48749
Trichlorofluoromethane	Averaged	0.66706	0.85694	0.72815	0.70454	0.74745	0.71963
1,2,3-Trichloropropane	Averaged	0.19615	0.25727	0.20614	0.19525	0.20468	0.19452
1,2,3-Trimethylbenzene	Averaged	3.81759	4.35815	3.41016	3.55394	3.67888	3.54957
1,2,4-Trimethylbenzene	Averaged	3.42594	4.61542	3.78782	3.79384	3.88061	3.78542
1,3,5-Trimethylbenzene	Averaged	3.76994	4.73012	3.80098	3.93738	3.94503	3.86282
Vinyl chloride	Averaged	0.60879	0.68365	0.58994	0.56958	0.58403	0.57766
m&p-Xylene	Averaged	1.72343	2.47550	2.04048	2.03870	2.16929	2.10877
o-Xylene	Averaged	1.98101	2.36651	1.97435	1.92288	2.08905	2.01295
4-Bromofluorobenzene (S)	Averaged	0.85042	0.82088	0.82306	0.85969	0.84254	0.84485
1,2-Dichlorobenzene-d4 (S)	Averaged	0.85099	0.84272	0.83897	0.86371	0.85020	0.84493
Toluene-d8 (S)	Averaged	2.79004	2.84370	2.81629	2.80335	2.78565	2.79334

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 08/09/2021 08/09/2021 Calibration Time(s): 11:20 13:00

LAB FILE ID

CAL1 = 080921A.B\0809A_15.D CAL2 = 080921A.B\0809A_16.D CAL3 = 080921A.B\0809A_17.D

CAL4 = 080921A.B\0809A_18.D CAL5 = 080921A.B\0809A_19.D CAL6 = 080921A.B\0809A_20.D

CAL7 = 080921A.B\0809A_21.D CAL8 = 080921A.B\0809A_22.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acetone	Averaged	0.11737	0.10990
Acetonitrile	Wt Linear	0.23291	0.20340
Acrolein	Averaged	0.04241	0.04235
Acrylonitrile	Averaged	0.09419	0.09077
Benzene	Averaged	1.72813	1.59386
Bromobenzene	Averaged	1.41145	1.36041
Bromochloromethane	Averaged	0.22001	0.20958
Bromodichloromethane	Averaged	0.57328	0.55357
Bromoform	Averaged	0.62481	0.59845
Bromomethane	Averaged	0.30216	0.30183
2-Butanone (MEK)	Averaged	0.15461	0.14363
n-Butylbenzene	Averaged	3.23222	3.13667
sec-Butylbenzene	Averaged	4.62644	4.28148
tert-Butylbenzene	Averaged	3.39940	3.16494
Carbon disulfide	Averaged	1.11973	1.06975
Carbon tetrachloride	Averaged	0.71650	0.70347
Chlorobenzene	Averaged	3.34598	3.22220
Chloroethane	Wt Linear	0.30851	0.29460
2-Chloroethylvinyl ether	Averaged	0.12929	0.12429
Chloroform	Averaged	0.82054	0.79506
Chloromethane	Averaged	0.55816	0.59404
2-Chlorotoluene	Averaged	3.28688	3.07963
4-Chlorotoluene	Averaged	1.35209	1.28982
Cyclohexane	Averaged	1.04147	0.98925
Cyclohexanone	Wt Linear	0.10199	0.09973
1,2-Dibromo-3-chloropropane	Averaged	0.08144	0.08970
Dibromochloromethane	Averaged	1.20418	1.21164
1,2-Dibromoethane (EDB)	Averaged	0.83111	0.81476
Dibromomethane	Averaged	0.22555	0.21652
1,2-Dichlorobenzene	Averaged	2.01500	1.97607
1,3-Dichlorobenzene	Averaged	2.37194	2.32063
1,4-Dichlorobenzene	Averaged	2.32763	2.29105
Dichlorodifluoromethane	Averaged	0.57535	0.54909
1,1-Dichloroethane	Averaged	0.98318	0.93951
1,2-Dichloroethane	Averaged	0.55789	0.54192

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 08/09/2021 08/09/2021 Calibration Time(s): 11:20 13:00

LAB FILE ID

CAL1 = 080921A.B\0809A_15.D CAL2 = 080921A.B\0809A_16.D CAL3 = 080921A.B\0809A_17.D

CAL4 = 080921A.B\0809A_18.D CAL5 = 080921A.B\0809A_19.D CAL6 = 080921A.B\0809A_20.D

CAL7 = 080921A.B\0809A_21.D CAL8 = 080921A.B\0809A_22.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1-Dichloroethene	Averaged	0.38628	0.35435
cis-1,2-Dichloroethene	Averaged	0.52243	0.51041
trans-1,2-Dichloroethene	Averaged	0.48953	0.48235
1,2-Dichloropropane	Averaged	0.51008	0.49557
1,3-Dichloropropane	Averaged	1.40476	1.38086
2,2-Dichloropropane	Averaged	0.69342	0.67588
1,1-Dichloropropene	Averaged	0.61982	0.60986
cis-1,3-Dichloropropene	Averaged	0.66141	0.62902
trans-1,3-Dichloropropene	Averaged	1.50817	1.52766
Diethyl ether (Ethyl ether)	Averaged	0.18108	0.17484
1,4-Dioxane (p-Dioxane)	Wt Linear	0.00134	0.00140
Ethylbenzene	Averaged	1.80101	1.77523
n-Heptane	Averaged	0.09357	0.09598
Hexachloro-1,3-butadiene	Averaged	0.60484	0.69199
n-Hexane	Averaged	0.81078	0.79755
2-Hexanone	Averaged	0.60018	0.55684
Isopropylbenzene (Cumene)	Averaged	4.84154	4.27921
p-Isopropyltoluene	Averaged	4.09373	3.83593
Methyl acetate	Wt Linear	0.18919	0.18242
Methylcyclohexane	Averaged	0.71447	0.70188
Methylene Chloride	Averaged	0.41188	0.41116
1-Methylnaphthalene	Averaged	0.72636	0.77879
2-Methylnaphthalene	Averaged	0.90663	0.99721
4-Methyl-2-pentanone (MIBK)	Averaged	0.25034	0.22310
Methyl-tert-butyl ether	Averaged	0.87182	0.84945
Naphthalene	Averaged	1.84018	1.98392
n-Propylbenzene	Averaged	1.42922	1.39104
Styrene	Averaged	3.23974	3.01908
1,1,1,2-Tetrachloroethane	Averaged	1.38224	1.33304
1,1,2,2-Tetrachloroethane	Wt Linear	0.72276	0.67112
Tetrachloroethene	Averaged	1.69552	1.72983
Tetrahydrofuran	Averaged	0.07816	0.07485
Toluene	Averaged	3.21009	3.19798
1,2,3-Trichlorobenzene	Averaged	0.84627	0.90942
1,2,4-Trichlorobenzene	Averaged	1.06847	1.12698

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 08/09/2021 08/09/2021 Calibration Time(s): 11:20 13:00

LAB FILE ID

CAL1 = 080921A.B\0809A_15.D CAL2 = 080921A.B\0809A_16.D CAL3 = 080921A.B\0809A_17.D

CAL4 = 080921A.B\0809A_18.D CAL5 = 080921A.B\0809A_19.D CAL6 = 080921A.B\0809A_20.D

CAL7 = 080921A.B\0809A_21.D CAL8 = 080921A.B\0809A_22.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1,1-Trichloroethane	Averaged	0.78042	0.76038
1,1,2-Trichloroethane	Averaged	0.71923	0.71546
Trichloroethene	Averaged	0.49343	0.50056
Trichlorofluoromethane	Averaged	0.68899	0.61386
1,2,3-Trichloropropane	Averaged	0.20197	0.18166
1,2,3-Trimethylbenzene	Averaged	3.51730	3.40550
1,2,4-Trimethylbenzene	Averaged	3.74665	3.53360
1,3,5-Trimethylbenzene	Averaged	3.85572	3.60363
Vinyl chloride	Averaged	0.58242	0.56219
m&p-Xylene	Averaged	2.09637	1.92135
o-Xylene	Averaged	2.02690	1.92348
4-Bromofluorobenzene (S)	Averaged	0.84480	0.81614
1,2-Dichlorobenzene-d4 (S)	Averaged	0.84684	0.86302
Toluene-d8 (S)	Averaged	2.82327	2.93060

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-7
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 08/09/2021 08/09/2021 Calibration Time(s): 11:20 13:00

LAB FILE ID

CAL1 = 080921A.B\0809A_15.D CAL2 = 080921A.B\0809A_16.D CAL3 = 080921A.B\0809A_17.D

CAL4 = 080921A.B\0809A_18.D CAL5 = 080921A.B\0809A_19.D CAL6 = 080921A.B\0809A_20.D

CAL7 = 080921A.B\0809A_21.D CAL8 = 080921A.B\0809A_22.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Averaged	13.25293			0.13155	
Acetonitrile	Wt Linear		0.99318	0.01456790	0.21846	
Acrolein	Averaged	3.33351			0.04280	
Acrylonitrile	Averaged	14.17491			0.09863	
Benzene	Averaged	10.74610			1.78629	
Bromobenzene	Averaged	10.59538			1.37010	
Bromochloromethane	Averaged	14.05718			0.24291	
Bromodichloromethane	Averaged	4.35229			0.56712	
Bromoform	Averaged	12.92757			0.57226	
Bromomethane	Averaged	9.17233			0.29136	
2-Butanone (MEK)	Averaged	11.98294			0.15903	
n-Butylbenzene	Averaged	9.60971			3.37420	
sec-Butylbenzene	Averaged	8.87624			4.73539	
tert-Butylbenzene	Averaged	7.79870			3.42527	
Carbon disulfide	Averaged	10.75834			1.20273	
Carbon tetrachloride	Averaged	6.75231			0.71153	
Chlorobenzene	Averaged	10.97549			3.41071	
Chloroethane	Wt Linear		0.99937	0.00146890	0.29780	
2-Chloroethylvinyl ether	Averaged	10.45417			0.12324	
Chloroform	Averaged	10.83194			0.85351	
Chloromethane	Averaged	7.70972			0.56297	
2-Chlorotoluene	Averaged	8.86251			3.36794	
4-Chlorotoluene	Averaged	10.44255			1.29906	
Cyclohexane	Averaged	5.77403			1.04101	
Cyclohexanone	Wt Linear		0.99930	0.00283230	0.10076	
1,2-Dibromo-3-chloropropane	Averaged	14.59690			0.08353	
Dibromochloromethane	Averaged	11.02838			1.16773	
1,2-Dibromoethane (EDB)	Averaged	5.22084			0.83513	
Dibromomethane	Averaged	10.02059			0.22247	
1,2-Dichlorobenzene	Averaged	7.56133			2.02631	
1,3-Dichlorobenzene	Averaged	9.15134			2.35838	
1,4-Dichlorobenzene	Averaged	8.11851			2.34308	
Dichlorodifluoromethane	Averaged	6.03242			0.58243	
1,1-Dichloroethane	Averaged	7.69586			0.97717	
1,2-Dichloroethane	Averaged	10.58824			0.55625	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/08/2021 5:20

MSV - FORM VI VOA-8
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 08/09/2021 08/09/2021 Calibration Time(s): 11:20 13:00

LAB FILE ID

CAL1 = 080921A.B\0809A_15.D CAL2 = 080921A.B\0809A_16.D CAL3 = 080921A.B\0809A_17.D

CAL4 = 080921A.B\0809A_18.D CAL5 = 080921A.B\0809A_19.D CAL6 = 080921A.B\0809A_20.D

CAL7 = 080921A.B\0809A_21.D CAL8 = 080921A.B\0809A_22.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1-Dichloroethene	Averaged	14.59223			0.41539	
cis-1,2-Dichloroethene	Averaged	9.23213			0.52835	
trans-1,2-Dichloroethene	Averaged	10.97230			0.51123	
1,2-Dichloropropane	Averaged	8.79849			0.51961	
1,3-Dichloropropane	Averaged	8.57010			1.37805	
2,2-Dichloropropane	Averaged	7.81219			0.71348	
1,1-Dichloropropene	Averaged	8.47006			0.61993	
cis-1,3-Dichloropropene	Averaged	8.53016			0.64927	
trans-1,3-Dichloropropene	Averaged	10.59582			1.46456	
Diethyl ether (Ethyl ether)	Averaged	14.88178			0.18218	
1,4-Dioxane (p-Dioxane)	Wt Linear		0.99372	0.00027830	0.00137	
Ethylbenzene	Averaged	7.36237			1.81749	
n-Heptane	Averaged	9.75999			0.09293	
Hexachloro-1,3-butadiene	Averaged	9.13088			0.59418	
n-Hexane	Averaged	6.93661			0.84487	
2-Hexanone	Averaged	8.89782			0.60561	
Isopropylbenzene (Cumene)	Averaged	10.67531			4.87707	
p-Isopropyltoluene	Averaged	7.69301			4.15103	
Methyl acetate	Wt Linear		0.99851	0.00608870	0.18703	
Methylcyclohexane	Averaged	9.54442			0.74009	
Methylene Chloride	Averaged	10.18181			0.43653	
1-Methylnaphthalene	Averaged	12.36484			0.67216	
2-Methylnaphthalene	Averaged	11.22206			0.83244	
4-Methyl-2-pentanone (MIBK)	Averaged	11.61004			0.25985	
Methyl-tert-butyl ether	Averaged	8.58269			0.87493	
Naphthalene	Averaged	10.46007			1.76305	
n-Propylbenzene	Averaged	8.80475			1.41676	
Styrene	Averaged	10.28816			3.25232	
1,1,1,2-Tetrachloroethane	Averaged	6.61318			1.32750	
1,1,2,2-Tetrachloroethane	Wt Linear		0.99802	0.00368310	0.69617	
Tetrachloroethene	Averaged	10.29406			1.68718	
Tetrahydrofuran	Averaged	10.83300			0.07859	
Toluene	Averaged	6.63325			3.29102	
1,2,3-Trichlorobenzene	Averaged	9.91261			0.79554	
1,2,4-Trichlorobenzene	Averaged	9.14550			1.00060	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/08/2021 5:20

MSV - FORM VI VOA-9

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 08/09/2021 08/09/2021 Calibration Time(s): 11:20 13:00

LAB FILE ID

CAL1 = 080921A.B\0809A_15.D CAL2 = 080921A.B\0809A_16.D CAL3 = 080921A.B\0809A_17.D

CAL4 = 080921A.B\0809A_18.D CAL5 = 080921A.B\0809A_19.D CAL6 = 080921A.B\0809A_20.D

CAL7 = 080921A.B\0809A_21.D CAL8 = 080921A.B\0809A_22.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1,1-Trichloroethane	Averaged	9.06314			0.77334	
1,1,2-Trichloroethane	Averaged	12.56162			0.76005	
Trichloroethene	Averaged	6.46428			0.50824	
Trichlorofluoromethane	Averaged	9.83607			0.71583	
1,2,3-Trichloropropane	Averaged	11.03251			0.20471	
1,2,3-Trimethylbenzene	Averaged	8.53496			3.66138	
1,2,4-Trimethylbenzene	Averaged	9.28922			3.82116	
1,3,5-Trimethylbenzene	Averaged	8.57749			3.93820	
Vinyl chloride	Averaged	6.47316			0.59478	
m&p-Xylene	Averaged	10.32864			2.07174	
o-Xylene	Averaged	7.06350			2.03714	
4-Bromofluorobenzene (S)	Averaged	1.87790			0.83780	
1,2-Dichlorobenzene-d4 (S)	Averaged	1.06021			0.85017	
Toluene-d8 (S)	Averaged	1.68269			2.82328	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Averaged	0.15923	0.14293	0.12603	0.13635	0.12235	0.11988
Acrolein	Averaged	0.05049	0.04990	0.05350	0.05490	0.05571	0.05649
Acrylonitrile	Averaged	0.09636	0.09689	0.10184	0.10239	0.10374	0.10225
Benzene	Averaged	1.08325	1.01715	0.99635	1.01610	1.05444	1.05031
Bromobenzene	Averaged	0.87511	0.80229	0.84068	0.81596	0.83768	0.85540
Bromochloromethane	Averaged	0.14232	0.14333	0.15095	0.14744	0.15615	0.15318
Bromodichloromethane	Averaged	0.30798	0.31054	0.32468	0.34262	0.36483	0.37931
Bromoform	Wt Linear	0.35231	0.38302	0.41012	0.44460	0.51032	0.56413
Bromomethane	Averaged		0.22512	0.23496	0.21211	0.20410	0.19757
2-Butanone (MEK)	Averaged	0.16636	0.15804	0.15809	0.16388	0.15910	0.16163
n-Butylbenzene	Averaged	2.32319	2.37338	2.45743	2.42033	2.58194	2.55226
sec-Butylbenzene	Averaged	3.16535	3.13988	3.04574	3.01605	3.13518	3.12433
tert-Butylbenzene	Averaged	2.14291	2.08224	2.00502	1.94892	2.03443	2.02846
Carbon disulfide	Averaged	0.71337	0.73815	0.71642	0.74090	0.80119	0.79916
Carbon tetrachloride	Averaged	0.35068	0.32782	0.33649	0.35145	0.38748	0.39165
Chlorobenzene	Averaged	1.96400	1.94490	1.96022	1.95701	2.05107	2.06169
Chloroethane	Averaged	0.15143	0.16121	0.16527	0.16321	0.17535	0.16595
Chloroform	Averaged	0.50170	0.48403	0.48569	0.48340	0.49980	0.50113
Chloromethane	Averaged	0.49368	0.47456	0.45102	0.43471	0.44797	0.42151
2-Chlorotoluene	Averaged	2.05291	1.91186	1.91326	1.87496	1.91053	1.89647
4-Chlorotoluene	Averaged	0.74633	0.72720	0.73282	0.71300	0.73812	0.74670
Cyclohexanone	Averaged	0.19231	0.20577	0.20295	0.20807	0.19700	0.20028
1,2-Dibromo-3-chloropropane	Averaged		0.07784	0.09498	0.10073	0.11146	0.11813
Dibromochloromethane	Averaged	0.55734	0.58065	0.61209	0.65856	0.73107	0.77400
1,2-Dibromoethane (EDB)	Averaged	0.52588	0.56669	0.61400	0.64343	0.67056	0.68434
Dibromomethane	Averaged	0.16622	0.17244	0.17741	0.18762	0.18942	0.19148
1,2-Dichlorobenzene	Averaged	1.65495	1.58339	1.58626	1.54101	1.56591	1.58910
1,3-Dichlorobenzene	Averaged	1.61507	1.55924	1.54813	1.53485	1.59023	1.59840
1,4-Dichlorobenzene	Averaged	1.60178	1.55364	1.57268	1.56302	1.61434	1.62072
1,1-Dichloroethane	Averaged	0.53306	0.49349	0.48440	0.49470	0.51096	0.51064
1,2-Dichloroethane	Averaged	0.38342	0.37147	0.37850	0.39082	0.40047	0.39489
1,1-Dichloroethene	Averaged	0.22867	0.22066	0.20403	0.21896	0.23696	0.23371
cis-1,2-Dichloroethene	Averaged	0.28850	0.28417	0.29350	0.29697	0.30845	0.31080
trans-1,2-Dichloroethene	Averaged	0.27385	0.25016	0.25023	0.25313	0.26852	0.26782
1,2-Dichloropropane	Averaged	0.32567	0.29733	0.30218	0.31208	0.31920	0.32452

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,3-Dichloropropane	Averaged	0.87527	0.87776	0.89381	0.92931	0.96923	0.97449
2,2-Dichloropropane	Averaged	0.38563	0.34786	0.34105	0.33614	0.36225	0.36747
1,1-Dichloropropene	Averaged	0.35302	0.33085	0.32449	0.33310	0.35183	0.35072
cis-1,3-Dichloropropene	Averaged	0.35468	0.34384	0.38196	0.42266	0.44080	0.46480
trans-1,3-Dichloropropene	Averaged	0.68873	0.71644	0.83309	0.85135	0.94252	0.97404
Diethyl ether (Ethyl ether)	Averaged	0.11330	0.12010	0.12513	0.12985	0.13386	0.13073
Ethylbenzene	Averaged	1.03975	0.96221	0.96300	1.00525	1.02750	1.02593
n-Heptane	Averaged	1.13824	1.13427	1.07511	1.11117	1.18296	1.18495
Hexachloro-1,3-butadiene	Averaged	0.70369	0.71995	0.73697	0.74532	0.81945	0.81229
n-Hexane	Averaged	0.44035	0.44258	0.39152	0.40217	0.42756	0.42712
2-Hexanone	Averaged	0.60977	0.62550	0.58885	0.62001	0.60096	0.60501
Iodomethane	Wt Linear	0.09299	0.12158	0.14590	0.20678	0.29807	0.31374
Isopropylbenzene (Cumene)	Averaged	3.24447	3.20342	3.12427	3.16525	3.34238	3.33538
p-Isopropyltoluene	Averaged	2.81087	2.74400	2.71815	2.72329	2.80552	2.77443
Methyl acetate	Averaged	0.20386	0.19567	0.20536	0.20837	0.20401	0.19908
Methylene Chloride	Averaged		0.35099	0.33064	0.31591	0.30508	0.29952
4-Methyl-2-pentanone (MIBK)	Averaged	0.32467	0.30636	0.31764	0.32279	0.31609	0.31614
Methyl-tert-butyl ether	Averaged	0.67455	0.65641	0.67417	0.69305	0.69729	0.69431
Naphthalene	Wt Linear	0.37414	0.47887	0.95469	1.66405	2.36863	2.51379
n-Propylbenzene	Averaged	0.77237	0.72028	0.74995	0.71132	0.73603	0.76035
Styrene	Averaged	2.04251	2.01818	2.02462	2.07699	2.19775	2.22949
1,1,1,2-Tetrachloroethane	Averaged	0.65629	0.64981	0.67413	0.70266	0.76604	0.78242
1,1,2,2-Tetrachloroethane	Averaged	0.61175	0.65189	0.69676	0.67563	0.68438	0.69844
Tetrachloroethene	Averaged	0.90090	0.87776	0.83105	0.84703	0.90156	0.89463
Tetrahydrofuran	Averaged	0.45154	0.44170	0.47239	0.45137	0.44459	0.43412
Toluene	Averaged	1.71680	1.69394	1.58938	1.62267	1.67118	1.65751
1,2,3-Trichlorobenzene	Wt Linear	0.30463	0.47371	0.76528	1.04612	1.23433	1.25892
1,2,4-Trichlorobenzene	Wt Linear	0.36361	0.53222	0.80658	1.08901	1.31898	1.34283
1,1,1-Trichloroethane	Averaged	0.41562	0.38930	0.38440	0.40395	0.42503	0.43144
1,1,2-Trichloroethane	Averaged	0.46716	0.49061	0.50586	0.51708	0.53297	0.53869
Trichloroethene	Averaged	0.29444	0.27344	0.27878	0.27958	0.29926	0.29988
Trichlorofluoromethane	Averaged	0.37347	0.39139	0.38699	0.41100	0.44913	0.44074
1,2,3-Trichloropropane	Averaged	0.17668	0.16654	0.17686	0.17010	0.17289	0.17750
1,1,2-Trichlorotrifluoroethane	Averaged	0.24954	0.25467	0.24477	0.25581	0.27739	0.27127
1,2,3-Trimethylbenzene	Averaged	2.60345	2.53092	2.53408	2.49963	2.54417	2.51573

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/08/2021 5:20

MSV - FORM VI VOA-3

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,2,4-Trimethylbenzene	Averaged	2.62920	2.49052	2.46845	2.37006	2.42797	2.47526
1,3,5-Trimethylbenzene	Averaged	2.54778	2.35944	2.37664	2.31198	2.37179	2.39605
Vinyl acetate	Averaged	1.08781	1.02843	1.07423	1.11056	1.10954	1.09981
Vinyl chloride	Averaged	0.33078	0.32760	0.31790	0.31063	0.34036	0.32315
m&p-Xylene	Averaged	1.30122	1.29263	1.23340	1.24768	1.32252	1.32196
o-Xylene	Averaged	1.31128	1.29656	1.25258	1.27944	1.33402	1.33148
4-Bromofluorobenzene (S)	Averaged	0.76768	0.76771	0.77495	0.73807	0.73102	0.73597
1,2-Dichlorobenzene-d4 (S)	Averaged	0.96851	0.94566	0.96152	0.93816	0.93436	0.92085
Toluene-d8 (S)	Averaged	2.35404	2.38810	2.36003	2.41419	2.37744	2.38276

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
Acetone	Averaged	0.11043	12.51767			0.13103	
Acrolein	Averaged	0.05346	4.69471			0.05349	
Acrylonitrile	Averaged	0.09643	3.26151			0.09999	
Benzene	Averaged	0.99199	3.26409			1.02994	
Bromobenzene	Averaged	0.80865	3.16553			0.83368	
Bromochloromethane	Averaged	0.14428	3.59066			0.14823	
Bromodichloromethane	Averaged	0.37152	8.60104			0.34307	
Bromoform	Wt Linear	0.61749		0.99898	-0.0291224	0.62253	
Bromomethane	Averaged	0.17477	10.22701			0.20810	
2-Butanone (MEK)	Averaged	0.15064	3.16513			0.15968	
n-Butylbenzene	Averaged	2.38143	3.91946			2.44142	
sec-Butylbenzene	Averaged	2.85278	3.56602			3.06847	
tert-Butylbenzene	Averaged	1.86876	4.40404			2.01582	
Carbon disulfide	Averaged	0.76833	4.83021			0.75393	
Carbon tetrachloride	Averaged	0.37562	6.94016			0.36017	
Chlorobenzene	Averaged	1.89924	2.96289			1.97688	
Chloroethane	Averaged	0.14801	5.72083			0.16149	
Chloroform	Averaged	0.47030	2.41804			0.48944	
Chloromethane	Averaged	0.38409	8.04271			0.44393	
2-Chlorotoluene	Averaged	1.78818	4.09689			1.90688	
4-Chlorotoluene	Averaged	0.70135	2.33111			0.72936	
Cyclohexanone	Averaged	0.19146	3.21568			0.19969	
1,2-Dibromo-3-chloropropane	Averaged	0.11550	14.77076			0.10311	
Dibromochloromethane	Averaged	0.77169	13.50690			0.66934	
1,2-Dibromoethane (EDB)	Averaged	0.65308	9.28072			0.62257	
Dibromomethane	Averaged	0.18416	5.22847			0.18125	
1,2-Dichlorobenzene	Averaged	1.43675	4.24453			1.56534	
1,3-Dichlorobenzene	Averaged	1.47729	2.98700			1.56046	
1,4-Dichlorobenzene	Averaged	1.49050	2.85233			1.57381	
1,1-Dichloroethane	Averaged	0.49890	3.18416			0.50374	
1,2-Dichloroethane	Averaged	0.36912	3.09015			0.38410	
1,1-Dichloroethene	Averaged	0.23021	4.98811			0.22474	
cis-1,2-Dichloroethene	Averaged	0.29127	3.37329			0.29624	
trans-1,2-Dichloroethene	Averaged	0.25250	3.91502			0.25946	
1,2-Dichloropropane	Averaged	0.31137	3.44252			0.31319	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
1,3-Dichloropropane	Averaged	0.90822	4.46103			0.91830	
2,2-Dichloropropane	Averaged	0.34804	4.86502			0.35549	
1,1-Dichloropropene	Averaged	0.33491	3.44440			0.33985	
cis-1,3-Dichloropropene	Averaged	0.44506	11.64700			0.40769	
trans-1,3-Dichloropropene	Averaged	0.94486	13.33198			0.85015	
Diethyl ether (Ethyl ether)	Averaged	0.12293	5.65115			0.12513	
Ethylbenzene	Averaged	0.98565	3.16518			1.00133	
n-Heptane	Averaged	1.11273	3.49939			1.13421	
Hexachloro-1,3-butadiene	Averaged	0.78120	5.94394			0.75984	
n-Hexane	Averaged	0.40856	4.65364			0.41998	
2-Hexanone	Averaged	0.55784	3.75932			0.60114	
Iodomethane	Wt Linear	0.29728		0.99896	-0.0073354	0.30182	
Isopropylbenzene (Cumene)	Averaged	3.27947	2.56348			3.24209	
p-Isopropyltoluene	Averaged	2.55970	3.11490			2.73371	
Methyl acetate	Averaged	0.17968	4.84374			0.19943	
Methylene Chloride	Averaged	0.28100	7.84016			0.31386	
4-Methyl-2-pentanone (MIBK)	Averaged	0.30150	2.65818			0.31503	
Methyl-tert-butyl ether	Averaged	0.65879	2.49967			0.67837	
Naphthalene	Wt Linear	2.35978		0.99869	-0.0652234	2.40117	
n-Propylbenzene	Averaged	0.71049	3.32523			0.73726	
Styrene	Averaged	2.13660	4.06020			2.10373	
1,1,1,2-Tetrachloroethane	Averaged	0.76859	7.98937			0.71428	
1,1,2,2-Tetrachloroethane	Averaged	0.68288	4.56113			0.67167	
Tetrachloroethene	Averaged	0.82930	3.73208			0.86889	
Tetrahydrofuran	Averaged	0.40860	4.38815			0.44347	
Toluene	Averaged	1.53704	3.81644			1.64122	
1,2,3-Trichlorobenzene	Wt Linear	1.16921		0.99880	-0.0084481	1.18242	
1,2,4-Trichlorobenzene	Wt Linear	1.24128		0.99865	-0.0080417	1.25561	
1,1,1-Trichloroethane	Averaged	0.41073	4.26780			0.40864	
1,1,2-Trichloroethane	Averaged	0.50819	4.82903			0.50865	
Trichloroethene	Averaged	0.28525	3.70828			0.28723	
Trichlorofluoromethane	Averaged	0.41859	6.86711			0.41019	
1,2,3-Trichloropropane	Averaged	0.17088	2.39817			0.17306	
1,1,2-Trichlorotrifluoroethane	Averaged	0.25433	4.54814			0.25825	
1,2,3-Trimethylbenzene	Averaged	2.30306	3.77627			2.50443	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/16/2021 07/16/2021 Calibration Time(s): 11:02 12:36

LAB FILE ID

CAL1 = 071621B.B\0716B_02.D CAL2 = 071621B.B\0716B_03.D CAL3 = 071621B.B\0716B_04.D

CAL4 = 071621B.B\0716B_05.D CAL5 = 071621B.B\0716B_06.D CAL6 = 071621B.B\0716B_07.D

CAL7 = 071621B.B\0716B_08.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
1,2,4-Trimethylbenzene	Averaged	2.27832	4.44490			2.44854	
1,3,5-Trimethylbenzene	Averaged	2.24133	3.93711			2.37214	
Vinyl acetate	Averaged	1.03396	3.17763			1.07776	
Vinyl chloride	Averaged	0.30428	3.81653			0.32210	
m&p-Xylene	Averaged	1.20812	3.56607			1.27536	
o-Xylene	Averaged	1.25232	2.63509			1.29395	
4-Bromofluorobenzene (S)	Averaged	0.74644	2.39291			0.75169	
1,2-Dichlorobenzene-d4 (S)	Averaged	0.91338	2.13470			0.94035	
Toluene-d8 (S)	Averaged	2.32551	1.19384			2.37172	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:42 10:00

LAB FILE ID

CAL1 = 072721AGRO.B\0727A_04.D CAL2 = 072721AGRO.B\0727A_05.D CAL3 = 072721AGRO.B\0727A_06.D

CAL4 = 072721AGRO.B\0727A_07.D CAL5 = 072721AGRO.B\0727A_08.D CAL6 = 072721AGRO.B\0727A_09.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
TPH-GRO	Averaged	4323.4560	4266.8680	4525.0160	4554.4482	4425.8042	4227.7011
4-Bromofluorobenzene (S)	Averaged	13231.2000	13606.0800	14589.4400	15457.5800	19007.6000	25940.5000
1,2-Dichlorobenzene-d4 (S)	Averaged	17904.6600	18553.6000	19687.4200	22181.3800	27551.8200	40489.2400
Toluene-d8 (S)	Averaged	17216.2800	17344.8800	17694.6000	17803.8000	19371.5200	19999.3600

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVC GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:42 10:00

LAB FILE ID

CAL1 = 072721AGRO.B\0727A_04.D CAL2 = 072721AGRO.B\0727A_05.D CAL3 = 072721AGRO.B\0727A_06.D

CAL4 = 072721AGRO.B\0727A_07.D CAL5 = 072721AGRO.B\0727A_08.D CAL6 = 072721AGRO.B\0727A_09.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
TPH-GRO	Averaged	3.09922			4387.21560	
4-Bromofluorobenzene (S)	Averaged	28.60772			16972.0666	
1,2-Dichlorobenzene-d4 (S)	Averaged	35.37245			24394.6866	
Toluene-d8 (S)	Averaged	6.35294			18238.4066	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19787994ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 08/09/2021 Time: 13:43

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/09/2021 08/09/2021

Lab File ID: 080921A.B\0809A_25.D Init. Calib. Time(s): 11:20 13:00

SDG No.: 60376093

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13155	0.13204	0.0500	0.3769	20.0000
Acetonitrile	Wt Linear	100	108.9226	0.0500	8.9227	20.0000
Acrolein	Averaged	0.04280	0.04459	0.0500	4.1850	20.0000
Acrylonitrile	Averaged	0.09863	0.09591	0.0500	-2.7603	20.0000
Benzene	Averaged	1.78629	1.77028	0.3000	-0.8967	20.0000
Bromobenzene	Averaged	1.37010	1.33311	0.0500	-2.6997	20.0000
Bromochloromethane	Averaged	0.24291	0.22970	0.0500	-5.4405	20.0000
Bromodichloromethane	Averaged	0.56712	0.56270	0.0500	-0.7798	20.0000
Bromoform	Averaged	0.57226	0.58927	0.1000	2.9718	20.0000
Bromomethane	Averaged	0.29136	0.31867	0.0500	9.3746	20.0000
2-Butanone (MEK)	Averaged	0.15903	0.17027	0.0500	7.0668	20.0000
n-Butylbenzene	Averaged	3.37420	3.15065	0.0500	-6.6252	20.0000
sec-Butylbenzene	Averaged	4.73539	4.58804	0.0500	-3.1116	20.0000
tert-Butylbenzene	Averaged	3.42527	3.38082	0.0500	-1.2976	20.0000
Carbon disulfide	Averaged	1.20273	1.16593	0.0500	-3.0599	20.0000
Carbon tetrachloride	Averaged	0.71153	0.67050	0.1000	-5.7655	20.0000
Chlorobenzene	Averaged	3.41071	3.34286	0.3000	-1.9894	20.0000
Chloroethane	Wt Linear	20	20.52341	0.0500	2.6171	20.0000
2-Chloroethylvinyl ether	Averaged	0.12324	0.12545	0.0500	1.7914	20.0000
Chloroform	Averaged	0.85351	0.83235	0.0500	-2.4792	20.0000
Chloromethane	Averaged	0.56297	0.57537	0.1000	2.2016	20.0000
2-Chlorotoluene	Averaged	3.36794	3.25073	0.0500	-3.4802	20.0000
4-Chlorotoluene	Averaged	1.29906	1.28717	0.0500	-0.9146	20.0000
Cyclohexane	Averaged	1.04101	0.96299	0.0500	-7.4948	20.0000
Cyclohexanone	Wt Linear	100	92.32028	0.0500	-7.6797	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.08353	0.08457	0.0500	1.2465	20.0000
Dibromochloromethane	Averaged	1.16773	1.16193	0.0500	-0.4961	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.83513	0.81696	0.0500	-2.1751	20.0000
Dibromomethane	Averaged	0.22247	0.21601	0.0500	-2.9021	20.0000
1,2-Dichlorobenzene	Averaged	2.02631	1.95002	0.0500	-3.7651	20.0000
1,3-Dichlorobenzene	Averaged	2.35838	2.30370	0.0500	-2.3184	20.0000
1,4-Dichlorobenzene	Averaged	2.34308	2.32805	0.0500	-0.6414	20.0000
Dichlorodifluoromethane	Averaged	0.58243	0.57596	0.0500	-1.1114	20.0000
1,1-Dichloroethane	Averaged	0.97717	0.98247	0.1000	0.5416	20.0000
1,2-Dichloroethane	Averaged	0.55625	0.54814	0.0500	-1.4572	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

19787994ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/09/2021 Time: 13:43

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/09/2021 08/09/2021

Lab File ID: 080921A.B\0809A_25.D Init. Calib. Time(s): 11:20 13:00

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41539	0.39840	0.1000	-4.0912	20.0000
cis-1,2-Dichloroethene	Averaged	0.52835	0.50965	0.1000	-3.5393	20.0000
trans-1,2-Dichloroethene	Averaged	0.51123	0.48195	0.1000	-5.7287	20.0000
1,2-Dichloropropane	Averaged	0.51961	0.51039	0.0500	-1.7751	20.0000
1,3-Dichloropropane	Averaged	1.37805	1.31885	0.0500	-4.2962	20.0000
2,2-Dichloropropane	Averaged	0.71348	0.66012	0.0500	-7.4785	20.0000
1,1-Dichloropropene	Averaged	0.61993	0.58967	0.0500	-4.8811	20.0000
cis-1,3-Dichloropropene	Averaged	0.64927	0.64516	0.0500	-0.6319	20.0000
trans-1,3-Dichloropropene	Averaged	1.46456	1.44818	0.0500	-1.1186	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.18218	0.17450	0.0500	-4.2138	20.0000
1,4-Dioxane (p-Dioxane)	Wt Linear	100	76.71241	0.0500	-23.2876	20.0000
Ethylbenzene	Averaged	1.81749	1.74001	0.3000	-4.2629	20.0000
n-Heptane	Averaged	0.09293	0.09299	0.0500	0.0653	20.0000
Hexachloro-1,3-butadiene	Averaged	0.59418	0.60912	0.0500	2.5143	20.0000
n-Hexane	Averaged	0.84487	0.79190	0.0500	-6.2689	20.0000
2-Hexanone	Averaged	0.60561	0.65471	0.0500	8.1075	20.0000
Isopropylbenzene (Cumene)	Averaged	4.87707	4.81686	0.0500	-1.2347	20.0000
p-Isopropyltoluene	Averaged	4.15103	4.07032	0.0500	-1.9442	20.0000
Methyl acetate	Wt Linear	100	105.2870	0.0500	5.2871	20.0000
Methylcyclohexane	Averaged	0.74009	0.69556	0.0500	-6.0172	20.0000
Methylene Chloride	Averaged	0.43653	0.40664	0.0500	-6.8463	20.0000
1-Methylnaphthalene	Averaged	0.67216	0.69698	0.0500	3.6930	20.0000
2-Methylnaphthalene	Averaged	0.83244	0.83347	0.0500	0.1234	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.25985	0.25615	0.0500	-1.4256	20.0000
Methyl-tert-butyl ether	Averaged	0.87493	0.88901	0.3000	1.6092	20.0000
Naphthalene	Averaged	1.76305	1.68470	0.3000	-4.4439	20.0000
n-Propylbenzene	Averaged	1.41676	1.36046	0.0500	-3.9738	20.0000
Styrene	Averaged	3.25232	3.15975	0.0500	-2.8463	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.32750	1.30321	0.0500	-1.8299	20.0000
1,1,2,2-Tetrachloroethane	Wt Linear	20	19.88967	0.3000	-0.5516	20.0000
Tetrachloroethene	Averaged	1.68718	1.54505	0.1000	-8.4240	20.0000
Tetrahydrofuran	Averaged	0.07859	0.07359	0.0500	-6.3667	20.0000
Toluene	Averaged	3.29102	3.16628	0.3000	-3.7902	20.0000
1,2,3-Trichlorobenzene	Averaged	0.79554	0.76210	0.0500	-4.2037	20.0000
1,2,4-Trichlorobenzene	Averaged	1.00060	0.96236	0.0500	-3.8220	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/08/2021 5:20

SAMPLE NO.

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

19787994ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/09/2021 Time: 13:43

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/09/2021 08/09/2021

Lab File ID: 080921A.B\0809A_25.D Init. Calib. Time(s): 11:20 13:00

SDG No.: 60376093

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.77334	0.72261	0.0500	-6.5599	20.0000
1,1,2-Trichloroethane	Averaged	0.76005	0.69939	0.0500	-7.9802	20.0000
Trichloroethene	Averaged	0.50824	0.49463	0.1000	-2.6781	20.0000
Trichlorofluoromethane	Averaged	0.71583	0.72844	0.0500	1.7624	20.0000
1,2,3-Trichloropropane	Averaged	0.20471	0.19328	0.0500	-5.5812	20.0000
1,2,3-Trimethylbenzene	Averaged	3.66138	3.60501	0.0500	-1.5396	20.0000
1,2,4-Trimethylbenzene	Averaged	3.82116	3.80035	0.0500	-0.5446	20.0000
1,3,5-Trimethylbenzene	Averaged	3.93820	3.86339	0.0500	-1.8996	20.0000
Vinyl chloride	Averaged	0.59478	0.58086	0.0500	-2.3412	20.0000
m&p-Xylene	Averaged	2.07174	2.03461	0.3000	-1.7920	20.0000
o-Xylene	Averaged	2.03714	1.96104	0.3000	-3.7358	20.0000
4-Bromofluorobenzene (S)	Averaged	0.83780	0.83948	0.3000	0.2003	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.85017	0.84810	0.2000	-0.2440	20.0000
Toluene-d8 (S)	Averaged	2.82328	2.78452	0.3000	-1.3727	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19790205CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 08/10/2021 Time: 07:16

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/09/2021 08/09/2021

Lab File ID: 081021A.B\0810A_03CCV.D Init. Calib. Time(s): 11:20 13:00

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13155	0.09153	0.0500	-30.4200	20.0000
Acetonitrile	Wt Linear	100	105.6668	0.0500	5.6668	20.0000
Acrolein	Averaged	0.04280	0.04211	0.0500	-1.6148	20.0000
Acrylonitrile	Averaged	0.09863	0.08809	0.0500	-10.6871	20.0000
Benzene	Averaged	1.78629	1.70637	0.3000	-4.4741	20.0000
Bromobenzene	Averaged	1.37010	1.33249	0.0500	-2.7455	20.0000
Bromochloromethane	Averaged	0.24291	0.22747	0.0500	-6.3555	20.0000
Bromodichloromethane	Averaged	0.56712	0.53625	0.0500	-5.4438	20.0000
Bromoform	Averaged	0.57226	0.56174	0.1000	-1.8391	20.0000
Bromomethane	Averaged	0.29136	0.25909	0.0500	-11.0734	20.0000
2-Butanone (MEK)	Averaged	0.15903	0.13557	0.0500	-14.7509	20.0000
n-Butylbenzene	Averaged	3.37420	3.18887	0.0500	-5.4925	20.0000
sec-Butylbenzene	Averaged	4.73539	4.58258	0.0500	-3.2270	20.0000
tert-Butylbenzene	Averaged	3.42527	3.28900	0.0500	-3.9784	20.0000
Carbon disulfide	Averaged	1.20273	1.13866	0.0500	-5.3272	20.0000
Carbon tetrachloride	Averaged	0.71153	0.68159	0.1000	-4.2075	20.0000
Chlorobenzene	Averaged	3.41071	3.27343	0.3000	-4.0250	20.0000
Chloroethane	Wt Linear	20	19.39703	0.0500	-3.0148	20.0000
2-Chloroethylvinyl ether	Averaged	0.12324	0.12181	0.0500	-1.1616	20.0000
Chloroform	Averaged	0.85351	0.78772	0.0500	-7.7090	20.0000
Chloromethane	Averaged	0.56297	0.48586	0.1000	-13.6981	20.0000
2-Chlorotoluene	Averaged	3.36794	3.16804	0.0500	-5.9355	20.0000
4-Chlorotoluene	Averaged	1.29906	1.27967	0.0500	-1.4925	20.0000
Cyclohexane	Averaged	1.04101	0.94081	0.0500	-9.6253	20.0000
Cyclohexanone	Wt Linear	100	84.85484	0.0500	-15.1452	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.08353	0.08234	0.0500	-1.4246	20.0000
Dibromochloromethane	Averaged	1.16773	1.09882	0.0500	-5.9006	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.83513	0.79972	0.0500	-4.2403	20.0000
Dibromomethane	Averaged	0.22247	0.20950	0.0500	-5.8269	20.0000
1,2-Dichlorobenzene	Averaged	2.02631	1.90119	0.0500	-6.1749	20.0000
1,3-Dichlorobenzene	Averaged	2.35838	2.25646	0.0500	-4.3217	20.0000
1,4-Dichlorobenzene	Averaged	2.34308	2.22929	0.0500	-4.8567	20.0000
Dichlorodifluoromethane	Averaged	0.58243	0.54705	0.0500	-6.0748	20.0000
1,1-Dichloroethane	Averaged	0.97717	0.93510	0.1000	-4.3060	20.0000
1,2-Dichloroethane	Averaged	0.55625	0.54286	0.0500	-2.4075	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19790205CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/10/2021 Time: 07:16

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/09/2021 08/09/2021

Lab File ID: 081021A.B\0810A_03CCV.D Init. Calib. Time(s): 11:20 13:00

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41539	0.38839	0.1000	-6.5008	20.0000
cis-1,2-Dichloroethene	Averaged	0.52835	0.49468	0.1000	-6.3722	20.0000
trans-1,2-Dichloroethene	Averaged	0.51123	0.47377	0.1000	-7.3289	20.0000
1,2-Dichloropropane	Averaged	0.51961	0.50004	0.0500	-3.7662	20.0000
1,3-Dichloropropane	Averaged	1.37805	1.35645	0.0500	-1.5678	20.0000
2,2-Dichloropropane	Averaged	0.71348	0.68915	0.0500	-3.4105	20.0000
1,1-Dichloropropene	Averaged	0.61993	0.58815	0.0500	-5.1259	20.0000
cis-1,3-Dichloropropene	Averaged	0.64927	0.63317	0.0500	-2.4789	20.0000
trans-1,3-Dichloropropene	Averaged	1.46456	1.46013	0.0500	-0.3025	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.18218	0.17475	0.0500	-4.0745	20.0000
1,4-Dioxane (p-Dioxane)	Wt Linear	100	76.43013	0.0500	-23.5699	20.0000
Ethylbenzene	Averaged	1.81749	1.71613	0.3000	-5.5769	20.0000
n-Heptane	Averaged	0.09293	0.08744	0.0500	-5.9064	20.0000
Hexachloro-1,3-butadiene	Averaged	0.59418	0.52899	0.0500	-10.9718	20.0000
n-Hexane	Averaged	0.84487	0.79229	0.0500	-6.2227	20.0000
2-Hexanone	Averaged	0.60561	0.51573	0.0500	-14.8412	20.0000
Isopropylbenzene (Cumene)	Averaged	4.87707	4.78211	0.0500	-1.9472	20.0000
p-Isopropyltoluene	Averaged	4.15103	4.00893	0.0500	-3.4232	20.0000
Methyl acetate	Wt Linear	100	99.21030	0.0500	-0.7897	20.0000
Methylcyclohexane	Averaged	0.74009	0.69348	0.0500	-6.2982	20.0000
Methylene Chloride	Averaged	0.43653	0.39542	0.0500	-9.4174	20.0000
1-Methylnaphthalene	Averaged	0.67216	0.55691	0.0500	-17.1471	20.0000
2-Methylnaphthalene	Averaged	0.83244	0.67222	0.0500	-19.2469	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.25985	0.23938	0.0500	-7.8786	20.0000
Methyl-tert-butyl ether	Averaged	0.87493	0.84184	0.3000	-3.7817	20.0000
Naphthalene	Averaged	1.76305	1.57509	0.3000	-10.6609	20.0000
n-Propylbenzene	Averaged	1.41676	1.37512	0.0500	-2.9392	20.0000
Styrene	Averaged	3.25232	3.07703	0.0500	-5.3897	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.32750	1.32097	0.0500	-0.4923	20.0000
1,1,2,2-Tetrachloroethane	Wt Linear	20	20.52311	0.3000	2.6156	20.0000
Tetrachloroethene	Averaged	1.68718	1.55782	0.1000	-7.6669	20.0000
Tetrahydrofuran	Averaged	0.07859	0.07316	0.0500	-6.9122	20.0000
Toluene	Averaged	3.29102	3.13790	0.3000	-4.6525	20.0000
1,2,3-Trichlorobenzene	Averaged	0.79554	0.68735	0.0500	-13.6002	20.0000
1,2,4-Trichlorobenzene	Averaged	1.00060	0.92264	0.0500	-7.7918	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/08/2021 5:20

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19790205CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/10/2021 Time: 07:16

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/09/2021 08/09/2021

Lab File ID: 081021A.B\0810A_03CCV.D Init. Calib. Time(s): 11:20 13:00

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.77334	0.72210	0.0500	-6.6260	20.0000
1,1,2-Trichloroethane	Averaged	0.76005	0.68415	0.0500	-9.9853	20.0000
Trichloroethene	Averaged	0.50824	0.46495	0.1000	-8.5181	20.0000
Trichlorofluoromethane	Averaged	0.71583	0.70922	0.0500	-0.9231	20.0000
1,2,3-Trichloropropane	Averaged	0.20471	0.17947	0.0500	-12.3303	20.0000
1,2,3-Trimethylbenzene	Averaged	3.66138	3.46492	0.0500	-5.3659	20.0000
1,2,4-Trimethylbenzene	Averaged	3.82116	3.75855	0.0500	-1.6386	20.0000
1,3,5-Trimethylbenzene	Averaged	3.93820	3.79314	0.0500	-3.6836	20.0000
Vinyl chloride	Averaged	0.59478	0.57495	0.0500	-3.3349	20.0000
m&p-Xylene	Averaged	2.07174	2.03735	0.3000	-1.6598	20.0000
o-Xylene	Averaged	2.03714	1.91618	0.3000	-5.9377	20.0000
4-Bromofluorobenzene (S)	Averaged	0.83780	0.85812	0.3000	2.4263	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.85017	0.85750	0.2000	0.8624	20.0000
Toluene-d8 (S)	Averaged	2.82328	2.83905	0.3000	0.5587	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

19684415ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60376093

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.12485	0.0500	-8.5178	20.0000
Acrolein	Averaged	0.05349	0.05996	0.0500	5.0774	20.0000
Acrylonitrile	Averaged	0.09999	0.10586	0.0500	1.8661	20.0000
Benzene	Averaged	1.02994	1.02173	0.3000	1.9652	20.0000
Bromobenzene	Averaged	0.83368	0.81534	0.0500	2.6050	20.0000
Bromochloromethane	Averaged	0.14823	0.15027	0.0500	3.3236	20.0000
Bromodichloromethane	Averaged	0.34307	0.38351	0.0500	10.5511	20.0000
Bromoform	Wt Linear	100	97.70592	0.1000	-2.2941	20.0000
Bromomethane	Averaged	0.20810	0.20208	0.0500	-11.8058	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.16815	0.0500	1.3869	20.0000
n-Butylbenzene	Averaged	2.44142	2.47154	0.0500	4.4561	20.0000
sec-Butylbenzene	Averaged	3.06847	3.02062	0.0500	1.8277	20.0000
tert-Butylbenzene	Averaged	2.01582	1.95828	0.0500	0.8114	20.0000
Carbon disulfide	Averaged	0.75393	0.83297	0.0500	6.0414	20.0000
Carbon tetrachloride	Averaged	0.36017	0.38992	0.1000	8.7303	20.0000
Chlorobenzene	Averaged	1.97688	2.00433	0.3000	4.3442	20.0000
Chloroethane	Averaged	0.16149	0.17752	0.0500	2.7473	20.0000
Chloroform	Averaged	0.48944	0.50463	0.0500	2.3773	20.0000
Chloromethane	Averaged	0.44393	0.52693	0.1000	-5.0634	20.0000
2-Chlorotoluene	Averaged	1.90688	1.83524	0.0500	-0.5178	20.0000
4-Chlorotoluene	Averaged	0.72936	0.71690	0.0500	2.3799	20.0000
Cyclohexanone	Averaged	0.19969	0.20256	0.0500	0.3432	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.12029	0.0500	31.2020*	20.0000
Dibromochloromethane	Averaged	0.66934	0.79515	0.0500	15.7023	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.69207	0.0500	9.9818	20.0000
Dibromomethane	Averaged	0.18125	0.18977	0.0500	5.6308	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.55132	0.0500	1.4983	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.55360	0.0500	2.4238	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.60568	0.0500	2.9807	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.51805	0.1000	1.3703	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.39385	0.0500	2.8276	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.24483	0.1000	3.6845	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.30226	0.1000	4.9060	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.26726	0.1000	3.2083	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.31865	0.0500	3.6076	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

19684415ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.95571	0.0500	6.1729	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.35538	0.0500	3.3580	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.34512	0.0500	3.1905	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.45777	0.0500	13.8968	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	0.96825	0.0500	14.5672	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.13312	0.0500	4.4620	20.0000
Ethylbenzene	Averaged	1.00133	0.98494	0.3000	2.5055	20.0000
n-Heptane	Averaged	1.13421	1.22772	0.0500	4.4617	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.81386	0.0500	7.0436	20.0000
n-Hexane	Averaged	0.41998	0.43726	0.0500	1.6764	20.0000
2-Hexanone	Averaged	0.60114	0.62360	0.0500	0.7021	20.0000
Iodomethane	Wt Linear	100	109.9506	0.0500	9.9507	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.27448	0.0500	2.9305	20.0000
p-Isopropyltoluene	Averaged	2.73371	2.74222	0.0500	1.4539	20.0000
Methyl acetate	Averaged	0.19943	0.20591	0.0500	-0.1878	20.0000
Methylene Chloride	Averaged	0.31386	0.29665	0.0500	-10.1466	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.32341	0.0500	0.2928	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.70277	0.3000	2.3247	20.0000
Naphthalene	Wt Linear	100	112.3373	0.3000	12.3374	20.0000
n-Propylbenzene	Averaged	0.73726	0.71342	0.0500	3.1340	20.0000
Styrene	Averaged	2.10373	2.17583	0.0500	6.0334	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.75806	0.0500	9.6048	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.69887	0.3000	3.9845	20.0000
Tetrachloroethene	Averaged	0.86889	0.87133	0.1000	3.0156	20.0000
Tetrahydrofuran	Averaged	0.44347	0.44680	0.0001	-1.5163	20.0000
Toluene	Averaged	1.64122	1.61768	0.3000	1.0179	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	108.3593	0.0500	8.3593	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	108.2064	0.0500	8.2064	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.40394	0.0500	5.5658	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.53342	0.0500	5.9615	20.0000
Trichloroethene	Averaged	0.28723	0.29553	0.1000	4.3603	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.46689	0.0500	7.4371	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.17056	0.0500	2.5307	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.28128	0.0500	5.0218	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.51504	0.0500	0.4512	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/08/2021 5:20

SAMPLE NO.

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

19684415ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/16/2021 Time: 12:51

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 071621B.B\0716B_09.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.41767	0.0500	1.0732	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.30971	0.0500	1.0132	20.0000
Vinyl acetate	Averaged	1.07776	1.10424	0.0500	2.6775	20.0000
Vinyl chloride	Averaged	0.32210	0.36660	0.0500	0.3128	20.0000
m&p-Xylene	Averaged	1.27536	1.25417	0.3000	3.7060	20.0000
o-Xylene	Averaged	1.29395	1.28607	0.3000	2.9529	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.72921	0.3000	-2.0917	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.92090	0.0500	-2.0736	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.38714	0.3000	0.5153	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19895948ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/27/2021 Time: 10:16

Instrument ID: 60MSVC GC Column: Col 2
Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721AGRO.B\0727A_10.D
Init. Calib. Time(s): 08:42 10:00

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	4387.215	3784.906	0.0100	-13.7287	20.0000
4-Bromofluorobenzene (S)	Averaged	16972.06	16140.74	0.0100	-4.8982	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	24394.68	22966.40	0.0100	-5.8549	20.0000
Toluene-d8 (S)	Averaged	18238.40	17670.56	0.0100	-3.1135	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19752317CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/30/2021 Time: 07:06

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 073021A.B\0730A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.13103	0.12581	0.0500	-3.9847	20.0000
Acrolein	Averaged	0.05349	0.04692	0.0500	-12.2882	20.0000
Acrylonitrile	Averaged	0.09999	0.07981	0.0500	-20.1849	20.0000
Benzene	Averaged	1.02994	1.10540	0.3000	7.3266	20.0000
Bromobenzene	Averaged	0.83368	0.87351	0.0500	4.7772	20.0000
Bromochloromethane	Averaged	0.14823	0.15858	0.0500	6.9786	20.0000
Bromodichloromethane	Averaged	0.34307	0.38632	0.0500	12.6072	20.0000
Bromoform	Wt Linear	100	93.10801	0.1000	-6.8920	20.0000
Bromomethane	Averaged	0.20810	0.20687	0.0500	-0.5918	20.0000
2-Butanone (MEK)	Averaged	0.15968	0.15734	0.0500	-1.4627	20.0000
n-Butylbenzene	Averaged	2.44142	2.85262	0.0500	16.8426	20.0000
sec-Butylbenzene	Averaged	3.06847	3.45160	0.0500	12.4860	20.0000
tert-Butylbenzene	Averaged	2.01582	2.24957	0.0500	11.5960	20.0000
Carbon disulfide	Averaged	0.75393	0.88095	0.0500	16.8473	20.0000
Carbon tetrachloride	Averaged	0.36017	0.42947	0.1000	19.2410	20.0000
Chlorobenzene	Averaged	1.97688	2.12945	0.3000	7.7180	20.0000
Chloroethane	Averaged	0.16149	0.18233	0.0500	12.9050	20.0000
Chloroform	Averaged	0.48944	0.51815	0.0500	5.8669	20.0000
Chloromethane	Averaged	0.44393	0.40026	0.1000	-9.8387	20.0000
2-Chlorotoluene	Averaged	1.90688	2.04093	0.0500	7.0297	20.0000
4-Chlorotoluene	Averaged	0.72936	0.80492	0.0500	10.3594	20.0000
Cyclohexanone	Averaged	0.19969	0.19356	0.0500	-3.0712	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.10311	0.11112	0.0500	7.7711	20.0000
Dibromochloromethane	Averaged	0.66934	0.76937	0.0500	14.9442	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62257	0.65129	0.0500	4.6133	20.0000
Dibromomethane	Averaged	0.18125	0.18450	0.0500	1.7926	20.0000
1,2-Dichlorobenzene	Averaged	1.56534	1.57738	0.0500	0.7691	20.0000
1,3-Dichlorobenzene	Averaged	1.56046	1.67535	0.0500	7.3627	20.0000
1,4-Dichlorobenzene	Averaged	1.57381	1.68608	0.0500	7.1333	20.0000
1,1-Dichloroethane	Averaged	0.50374	0.54881	0.1000	8.9480	20.0000
1,2-Dichloroethane	Averaged	0.38410	0.37614	0.0500	-2.0717	20.0000
1,1-Dichloroethene	Averaged	0.22474	0.25048	0.1000	11.4542	20.0000
cis-1,2-Dichloroethene	Averaged	0.29624	0.32077	0.1000	8.2827	20.0000
trans-1,2-Dichloroethene	Averaged	0.25946	0.29093	0.1000	12.1294	20.0000
1,2-Dichloropropane	Averaged	0.31319	0.33015	0.0500	5.4132	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19752317CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/30/2021 Time: 07:06

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 073021A.B\0730A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,3-Dichloropropane	Averaged	0.91830	0.91749	0.0500	-0.0876	20.0000
2,2-Dichloropropane	Averaged	0.35549	0.42767	0.0500	20.3042*	20.0000
1,1-Dichloropropene	Averaged	0.33985	0.38188	0.0500	12.3685	20.0000
cis-1,3-Dichloropropene	Averaged	0.40769	0.46947	0.0500	15.1546	20.0000
trans-1,3-Dichloropropene	Averaged	0.85015	0.95968	0.0500	12.8841	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.12513	0.12246	0.0500	-2.1336	20.0000
Ethylbenzene	Averaged	1.00133	1.11061	0.3000	10.9140	20.0000
n-Heptane	Averaged	1.13421	1.26895	0.0500	11.8799	20.0000
Hexachloro-1,3-butadiene	Averaged	0.75984	0.90068	0.0500	18.5356	20.0000
n-Hexane	Averaged	0.41998	0.48344	0.0500	15.1116	20.0000
2-Hexanone	Averaged	0.60114	0.63617	0.0500	5.8280	20.0000
Iodomethane	Wt Linear	100	141.3369	0.0500	41.3369*	20.0000
Isopropylbenzene (Cumene)	Averaged	3.24209	3.65999	0.0500	12.8899	20.0000
p-Isopropyltoluene	Averaged	2.73371	3.11610	0.0500	13.9880	20.0000
Methyl acetate	Averaged	0.19943	0.16815	0.0500	-15.6850	20.0000
Methylene Chloride	Averaged	0.31386	0.29475	0.0500	-6.0872	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.31503	0.29163	0.0500	-7.4272	20.0000
Methyl-tert-butyl ether	Averaged	0.67837	0.66944	0.3000	-1.3157	20.0000
Naphthalene	Wt Linear	100	100.0780	0.3000	0.0780	20.0000
n-Propylbenzene	Averaged	0.73726	0.84469	0.0500	14.5726	20.0000
Styrene	Averaged	2.10373	2.32303	0.0500	10.4240	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.71428	0.80143	0.0500	12.2013	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.67167	0.66248	0.3000	-1.3689	20.0000
Tetrachloroethene	Averaged	0.86889	1.01358	0.1000	16.6519	20.0000
Tetrahydrofuran	Averaged	0.08869	0.07035	0.0001	-20.6860	20.0000
Toluene	Averaged	1.64122	1.78120	0.3000	8.5295	20.0000
1,2,3-Trichlorobenzene	Wt Linear	100	106.0206	0.0500	6.0207	20.0000
1,2,4-Trichlorobenzene	Wt Linear	100	110.7398	0.0500	10.7399	20.0000
1,1,1-Trichloroethane	Averaged	0.40864	0.47624	0.0500	16.5437	20.0000
1,1,2-Trichloroethane	Averaged	0.50865	0.51378	0.0500	1.0084	20.0000
Trichloroethene	Averaged	0.28723	0.33045	0.1000	15.0457	20.0000
Trichlorofluoromethane	Averaged	0.41019	0.47757	0.0500	16.4281	20.0000
1,2,3-Trichloropropane	Averaged	0.17306	0.16583	0.0500	-4.1784	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.25825	0.30113	0.0500	16.6041	20.0000
1,2,3-Trimethylbenzene	Averaged	2.50443	2.60883	0.0500	4.1685	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/08/2021 5:20

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19752317CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/30/2021 Time: 07:06

Instrument ID: 60MSVC GC Column: Col 1 Init. Calib. Date(s): 07/16/2021 07/16/2021

Lab File ID: 073021A.B\0730A_02.D Init. Calib. Time(s): 11:02 12:36

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,4-Trimethylbenzene	Averaged	2.44854	2.63041	0.0500	7.4275	20.0000
1,3,5-Trimethylbenzene	Averaged	2.37214	2.61546	0.0500	10.2572	20.0000
Vinyl acetate	Averaged	1.07776	1.05227	0.0500	-2.3650	20.0000
Vinyl chloride	Averaged	0.32210	0.33791	0.0500	4.9087	20.0000
m&p-Xylene	Averaged	1.27536	1.40221	0.3000	9.9459	20.0000
o-Xylene	Averaged	1.29395	1.42203	0.3000	9.8978	20.0000
4-Bromofluorobenzene (S)	Averaged	0.75169	0.73244	0.3000	-2.5609	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.94035	0.91030	0.0500	-3.1959	20.0000
Toluene-d8 (S)	Averaged	2.37172	2.38399	0.3000	0.5173	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19752322CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 07:37

Instrument ID: 60MSVC GC Column: Col 2
Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 073021AGRO.B\0730A_04.D
Init. Calib. Time(s): 08:42 10:00

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	4387.215	4542.917	0.0100	3.5490	20.0000
4-Bromofluorobenzene (S)	Averaged	16972.06	15524.18	0.0100	-8.5310	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	626.8367	274.9897	0.0100	-56.1306	20.0000
Toluene-d8 (S)	Averaged	18238.40	17631.20	0.0100	-3.3293	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376093

Date Extracted: 08/10/2021 07:31 Lab Sample ID: 2955104

Date Analyzed: 08/10/2021 07:31 Lab File ID: 081021A.B\0810A_04LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	96.2	
75-05-8	Acetonitrile	106	
107-02-8	Acrolein	98.6	
107-13-1	Acrylonitrile	91.0	
71-43-2	Benzene	19.2	
108-86-1	Bromobenzene	19.9	
74-97-5	Bromochloromethane	18.6	
75-27-4	Bromodichloromethane	19.4	
75-25-2	Bromoform	18.9	
74-83-9	Bromomethane	19.1	
78-93-3	2-Butanone (MEK)	112	
104-51-8	n-Butylbenzene	19.8	
135-98-8	sec-Butylbenzene	20.2	
98-06-6	tert-Butylbenzene	20.4	
75-15-0	Carbon disulfide	19.3	
56-23-5	Carbon tetrachloride	19.3	
108-90-7	Chlorobenzene	19.6	
75-00-3	Chloroethane	20.9	
110-75-8	2-Chloroethylvinyl ether	94.2	
67-66-3	Chloroform	18.9	
74-87-3	Chloromethane	19.9	
95-49-8	2-Chlorotoluene	19.5	
106-43-4	4-Chlorotoluene	20.8	
110-82-7	Cyclohexane	20.0	
108-94-1	Cyclohexanone	98.0	
96-12-8	1,2-Dibromo-3-chloropropane	19.7	
124-48-1	Dibromochloromethane	18.9	
106-93-4	1,2-Dibromoethane (EDB)	18.1	
74-95-3	Dibromomethane	18.4	
95-50-1	1,2-Dichlorobenzene	19.0	
541-73-1	1,3-Dichlorobenzene	19.6	
106-46-7	1,4-Dichlorobenzene	19.9	
75-71-8	Dichlorodifluoromethane	20.3	
75-34-3	1,1-Dichloroethane	19.8	
107-06-2	1,2-Dichloroethane	19.3	
540-59-0	1,2-Dichloroethene (Total)	37.5	
75-35-4	1,1-Dichloroethene	19.1	

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

LCS

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376093

Date Extracted: 08/10/2021 07:31 Lab Sample ID: 2955104

Date Analyzed: 08/10/2021 07:31 Lab File ID: 081021A.B\0810A_04LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	18.8	
156-60-5	trans-1,2-Dichloroethene	18.7	
78-87-5	1,2-Dichloropropane	18.9	
142-28-9	1,3-Dichloropropane	18.8	
594-20-7	2,2-Dichloropropane	19.8	
563-58-6	1,1-Dichloropropene	19.3	
10061-01-5	cis-1,3-Dichloropropene	19.7	
10061-02-6	trans-1,3-Dichloropropene	19.5	
60-29-7	Diethyl ether (Ethyl ether)	18.3	
123-91-1	1,4-Dioxane (p-Dioxane)	109	
100-41-4	Ethylbenzene	19.6	
142-82-5	n-Heptane	21.1	
87-68-3	Hexachloro-1,3-butadiene	18.0	
110-54-3	n-Hexane	19.6	
591-78-6	2-Hexanone	105	
98-82-8	Isopropylbenzene (Cumene)	20.0	
99-87-6	p-Isopropyltoluene	20.4	
79-20-9	Methyl acetate	99.0	
108-87-2	Methylcyclohexane	19.3	
75-09-2	Methylene Chloride	18.3	
90-12-0	1-Methylnaphthalene	18.9	
91-57-6	2-Methylnaphthalene	19.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	92.1	
1634-04-4	Methyl-tert-butyl ether	18.7	
91-20-3	Naphthalene	18.3	
103-65-1	n-Propylbenzene	19.4	
100-42-5	Styrene	19.2	
630-20-6	1,1,1,2-Tetrachloroethane	19.3	
79-34-5	1,1,2,2-Tetrachloroethane	20.4	
127-18-4	Tetrachloroethene	19.0	
109-99-9	Tetrahydrofuran	90.9	
108-88-3	Toluene	18.7	
87-61-6	1,2,3-Trichlorobenzene	18.7	
120-82-1	1,2,4-Trichlorobenzene	18.6	
71-55-6	1,1,1-Trichloroethane	18.8	
79-00-5	1,1,2-Trichloroethane	17.8	
79-01-6	Trichloroethene	18.7	

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376093

Date Extracted: 08/10/2021 07:31 Lab Sample ID: 2955104

Date Analyzed: 08/10/2021 07:31 Lab File ID: 081021A.B\0810A_04LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	20.1	
96-18-4	1,2,3-Trichloropropane	19.3	
526-73-8	1,2,3-Trimethylbenzene	20.2	
95-63-6	1,2,4-Trimethylbenzene	20.1	
108-67-8	1,3,5-Trimethylbenzene	20.5	
75-01-4	Vinyl chloride	19.1	
1330-20-7	Xylene (Total)	58.7	
179601-23-1	m&p-Xylene	39.8	
95-47-6	o-Xylene	18.9	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376093

Date Extracted: 08/10/2021 07:59 Lab Sample ID: 2955103

Date Analyzed: 08/10/2021 07:59 Lab File ID: 081021A.B\0810A_06BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.5	U
75-05-8	Acetonitrile	<1.1	U
107-02-8	Acrolein	<4.0	U
107-13-1	Acrylonitrile	<1.4	U
71-43-2	Benzene	<0.14	U
108-86-1	Bromobenzene	<0.088	U
74-97-5	Bromochloromethane	<0.20	U
75-27-4	Bromodichloromethane	<0.16	U
75-25-2	Bromoform	<0.68	U
74-83-9	Bromomethane	<0.46	U
78-93-3	2-Butanone (MEK)	<0.98	U
104-51-8	n-Butylbenzene	<0.15	U
135-98-8	sec-Butylbenzene	<0.11	U
98-06-6	tert-Butylbenzene	<0.12	U
75-15-0	Carbon disulfide	<0.98	U
56-23-5	Carbon tetrachloride	<0.17	U
108-90-7	Chlorobenzene	<0.089	U
75-00-3	Chloroethane	<0.37	U
110-75-8	2-Chloroethylvinyl ether	<1.8	U
67-66-3	Chloroform	<0.22	U
74-87-3	Chloromethane	<0.28	U
95-49-8	2-Chlorotoluene	<0.11	U
106-43-4	4-Chlorotoluene	<0.15	U
110-82-7	Cyclohexane	<0.24	U
108-94-1	Cyclohexanone	<3.3	U
96-12-8	1,2-Dibromo-3-chloropropane	<0.78	U
124-48-1	Dibromochloromethane	<0.30	U
106-93-4	1,2-Dibromoethane (EDB)	<0.20	U
74-95-3	Dibromomethane	<0.11	U
95-50-1	1,2-Dichlorobenzene	<0.12	U
541-73-1	1,3-Dichlorobenzene	<0.13	U
106-46-7	1,4-Dichlorobenzene	<0.13	U
75-71-8	Dichlorodifluoromethane	<0.20	U
75-34-3	1,1-Dichloroethane	<0.12	U
107-06-2	1,2-Dichloroethane	<0.21	U
540-59-0	1,2-Dichloroethene (Total)	<0.22	U
75-35-4	1,1-Dichloroethene	<0.22	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376093

Date Extracted: 08/10/2021 07:59 Lab Sample ID: 2955103

Date Analyzed: 08/10/2021 07:59 Lab File ID: 081021A.B\0810A_06BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	<0.13	U
156-60-5	trans-1,2-Dichloroethene	<0.10	U
78-87-5	1,2-Dichloropropane	<0.14	U
142-28-9	1,3-Dichloropropane	<0.10	U
594-20-7	2,2-Dichloropropane	<0.16	U
563-58-6	1,1-Dichloropropene	<0.14	U
10061-01-5	cis-1,3-Dichloropropene	<0.078	U
10061-02-6	trans-1,3-Dichloropropene	<0.18	U
60-29-7	Diethyl ether (Ethyl ether)	<0.23	U
123-91-1	1,4-Dioxane (p-Dioxane)	<4.4	U
100-41-4	Ethylbenzene	<0.12	U
142-82-5	n-Heptane	<2.6	U
87-68-3	Hexachloro-1,3-butadiene	0.47	J
110-54-3	n-Hexane	<0.22	U
591-78-6	2-Hexanone	<1.1	U
98-82-8	Isopropylbenzene (Cumene)	<0.097	U
99-87-6	p-Isopropyltoluene	<0.13	U
79-20-9	Methyl acetate	<0.87	U
108-87-2	Methylcyclohexane	<0.12	U
75-09-2	Methylene Chloride	<0.39	U
90-12-0	1-Methylnaphthalene	<2.6	U
91-57-6	2-Methylnaphthalene	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.74	U
1634-04-4	Methyl-tert-butyl ether	<0.13	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.12	U
100-42-5	Styrene	<0.12	U
630-20-6	1,1,1,2-Tetrachloroethane	<0.084	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.15	U
127-18-4	Tetrachloroethene	<0.33	U
109-99-9	Tetrahydrofuran	<2.8	U
108-88-3	Toluene	<0.25	U
87-61-6	1,2,3-Trichlorobenzene	<0.93	U
120-82-1	1,2,4-Trichlorobenzene	<0.73	U
71-55-6	1,1,1-Trichloroethane	<0.11	U
79-00-5	1,1,2-Trichloroethane	<0.14	U
79-01-6	Trichloroethene	<0.21	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376093

Date Extracted: 08/10/2021 07:59 Lab Sample ID: 2955103

Date Analyzed: 08/10/2021 07:59 Lab File ID: 081021A.B\0810A_06BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	<0.16	U
96-18-4	1,2,3-Trichloropropane	<0.41	U
526-73-8	1,2,3-Trimethylbenzene	<0.93	U
95-63-6	1,2,4-Trimethylbenzene	<0.32	U
108-67-8	1,3,5-Trimethylbenzene	<0.090	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<0.28	U
179601-23-1	m&p-Xylene	<0.22	U
95-47-6	o-Xylene	<0.082	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:30 Lab Sample ID: 2949516

Date Analyzed: 07/30/2021 12:13 Lab File ID: 073021A.B\0730A_21.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	643	
107-02-8	Acrolein	574	
107-13-1	Acrylonitrile	534	
71-43-2	Benzene	105	
108-86-1	Bromobenzene	103	
74-97-5	Bromochloromethane	107	
75-27-4	Bromodichloromethane	115	
75-25-2	Bromoform	98.9	
74-83-9	Bromomethane	93.4	
78-93-3	2-Butanone (MEK)	642	
104-51-8	n-Butylbenzene	108	
135-98-8	sec-Butylbenzene	104	
98-06-6	tert-Butylbenzene	104	
75-15-0	Carbon disulfide	112	
56-23-5	Carbon tetrachloride	115	
108-90-7	Chlorobenzene	106	
75-00-3	Chloroethane	112	
67-66-3	Chloroform	108	
74-87-3	Chloromethane	101	
95-49-8	2-Chlorotoluene	103	
106-43-4	4-Chlorotoluene	106	
108-94-1	Cyclohexanone	581	
96-12-8	1,2-Dibromo-3-chloropropane	114	
124-48-1	Dibromochloromethane	119	
106-93-4	1,2-Dibromoethane (EDB)	113	
74-95-3	Dibromomethane	107	
95-50-1	1,2-Dichlorobenzene	102	
541-73-1	1,3-Dichlorobenzene	105	
106-46-7	1,4-Dichlorobenzene	106	
75-34-3	1,1-Dichloroethane	109	
107-06-2	1,2-Dichloroethane	104	
540-59-0	1,2-Dichloroethene (Total)	218	
75-35-4	1,1-Dichloroethene	114	
156-59-2	cis-1,2-Dichloroethene	109	
156-60-5	trans-1,2-Dichloroethene	110	
78-87-5	1,2-Dichloropropane	106	
142-28-9	1,3-Dichloropropane	105	

SAMPLE NO.

LCS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:30 Lab Sample ID: 2949516

Date Analyzed: 07/30/2021 12:13 Lab File ID: 073021A.B\0730A_21.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	113	
563-58-6	1,1-Dichloropropene	110	
10061-01-5	cis-1,3-Dichloropropene	115	
10061-02-6	trans-1,3-Dichloropropene	117	
60-29-7	Diethyl ether (Ethyl ether)	107	
100-41-4	Ethylbenzene	107	
142-82-5	n-Heptane	115	
87-68-3	Hexachloro-1,3-butadiene	113	
110-54-3	n-Hexane	110	
591-78-6	2-Hexanone	624	
74-88-4	Iodomethane	109	
98-82-8	Isopropylbenzene (Cumene)	111	
99-87-6	p-Isopropyltoluene	107	
79-20-9	Methyl acetate	516	
75-09-2	Methylene Chloride	96.1	
108-10-1	4-Methyl-2-pentanone (MIBK)	516	
1634-04-4	Methyl-tert-butyl ether	105	
91-20-3	Naphthalene	113	
103-65-1	n-Propylbenzene	106	
100-42-5	Styrene	108	
630-20-6	1,1,1,2-Tetrachloroethane	111	
79-34-5	1,1,2,2-Tetrachloroethane	105	
127-18-4	Tetrachloroethene	109	
109-99-9	Tetrahydrofuran	506	
108-88-3	Toluene	105	
87-61-6	1,2,3-Trichlorobenzene	110	
120-82-1	1,2,4-Trichlorobenzene	115	
71-55-6	1,1,1-Trichloroethane	106	
79-00-5	1,1,2-Trichloroethane	108	
79-01-6	Trichloroethene	109	
75-69-4	Trichlorofluoromethane	117	
96-18-4	1,2,3-Trichloropropane	102	
76-13-1	1,1,2-Trichlorotrifluoroethane	116	
526-73-8	1,2,3-Trimethylbenzene	104	
95-63-6	1,2,4-Trimethylbenzene	102	
108-67-8	1,3,5-Trimethylbenzene	105	
108-05-4	Vinyl acetate	104	

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:30 Lab Sample ID: 2949516

Date Analyzed: 07/30/2021 12:13 Lab File ID: 073021A.B\0730A_21.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	109	
1330-20-7	Xylene (Total)	316	
179601-23-1	m&p-Xylene	211	
95-47-6	o-Xylene	105	

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:31 Lab Sample ID: 2949660

Date Analyzed: 07/30/2021 12:38 Lab File ID: 073021AGRO.B\0730A_22.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	3.9	

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:31 Lab Sample ID: 2949659

Date Analyzed: 07/30/2021 13:09 Lab File ID: 073021AGRO.B\0730A_24.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-GRO	<0.055	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:30 Lab Sample ID: 2949515

Date Analyzed: 07/30/2021 13:09 Lab File ID: 073021A.B\0730A_24.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
67-64-1	Acetone	<16.2	U
107-02-8	Acrolein	<75.6	U
107-13-1	Acrylonitrile	<3.2	U
71-43-2	Benzene	<0.49	U
108-86-1	Bromobenzene	<0.94	U
74-97-5	Bromochloromethane	<0.60	U
75-27-4	Bromodichloromethane	<0.60	U
75-25-2	Bromoform	<0.58	U
74-83-9	Bromomethane	<2.9	U
78-93-3	2-Butanone (MEK)	<3.4	U
104-51-8	n-Butylbenzene	<0.65	U
135-98-8	sec-Butylbenzene	<0.73	U
98-06-6	tert-Butylbenzene	<0.88	U
75-15-0	Carbon disulfide	<0.64	U
56-23-5	Carbon tetrachloride	<0.86	U
108-90-7	Chlorobenzene	<0.63	U
75-00-3	Chloroethane	<1.5	U
67-66-3	Chloroform	<0.49	U
74-87-3	Chloromethane	<0.80	U
95-49-8	2-Chlorotoluene	<0.73	U
106-43-4	4-Chlorotoluene	<0.60	U
108-94-1	Cyclohexanone	<12.7	U
96-12-8	1,2-Dibromo-3-chloropropane	<1.8	U
124-48-1	Dibromochloromethane	<0.65	U
106-93-4	1,2-Dibromoethane (EDB)	<0.54	U
74-95-3	Dibromomethane	<0.60	U
95-50-1	1,2-Dichlorobenzene	<0.62	U
541-73-1	1,3-Dichlorobenzene	<0.72	U
106-46-7	1,4-Dichlorobenzene	<0.81	U
75-34-3	1,1-Dichloroethane	<0.39	U
107-06-2	1,2-Dichloroethane	<0.40	U
540-59-0	1,2-Dichloroethene (Total)	<1.1	U
75-35-4	1,1-Dichloroethene	<0.64	U
156-59-2	cis-1,2-Dichloroethene	<0.43	U
156-60-5	trans-1,2-Dichloroethene	<0.68	U
78-87-5	1,2-Dichloropropane	<0.98	U
142-28-9	1,3-Dichloropropane	<0.69	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

BLANK

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:30 Lab Sample ID: 2949515

Date Analyzed: 07/30/2021 13:09 Lab File ID: 073021A.B\0730A_24.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
594-20-7	2,2-Dichloropropane	<0.48	U
563-58-6	1,1-Dichloropropene	<0.90	U
10061-01-5	cis-1,3-Dichloropropene	<0.53	U
10061-02-6	trans-1,3-Dichloropropene	<0.46	U
60-29-7	Diethyl ether (Ethyl ether)	<0.56	U
100-41-4	Ethylbenzene	<0.46	U
142-82-5	n-Heptane	<4.5	U
87-68-3	Hexachloro-1,3-butadiene	<0.85	U
110-54-3	n-Hexane	<0.69	U
591-78-6	2-Hexanone	<2.5	U
74-88-4	Iodomethane	<1.5	U
98-82-8	Isopropylbenzene (Cumene)	<0.57	U
99-87-6	p-Isopropyltoluene	<0.69	U
79-20-9	Methyl acetate	<1.1	U
75-09-2	Methylene Chloride	<2.7	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<3.0	U
1634-04-4	Methyl-tert-butyl ether	<0.48	U
91-20-3	Naphthalene	<0.82	U
103-65-1	n-Propylbenzene	<0.80	U
100-42-5	Styrene	<0.59	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<0.41	U
109-99-9	Tetrahydrofuran	<0.78	U
108-88-3	Toluene	0.47	J
87-61-6	1,2,3-Trichlorobenzene	<0.80	U
120-82-1	1,2,4-Trichlorobenzene	<0.80	U
71-55-6	1,1,1-Trichloroethane	<0.75	U
79-00-5	1,1,2-Trichloroethane	<0.63	U
79-01-6	Trichloroethene	<0.72	U
75-69-4	Trichlorofluoromethane	<0.61	U
96-18-4	1,2,3-Trichloropropane	<2.1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	<5.0	U
526-73-8	1,2,3-Trimethylbenzene	<2.0	U
95-63-6	1,2,4-Trimethylbenzene	<0.67	U
108-67-8	1,3,5-Trimethylbenzene	<0.63	U
108-05-4	Vinyl acetate	<0.56	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60376093

Date Extracted: 07/30/2021 11:30 Lab Sample ID: 2949515

Date Analyzed: 07/30/2021 13:09 Lab File ID: 073021A.B\0730A_24.D

Initial wt/vol: 5 g Final wt/vol: 5 mL Dilution: 1 Instrument: 60MSVC Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
75-01-4	Vinyl chloride	<0.67	U
1330-20-7	Xylene (Total)	<1.1	U
179601-23-1	m&p-Xylene	<0.63	U
95-47-6	o-Xylene	<0.37	U

MSSV FULL SCAN - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS9

LAB SAMPLE ID	SAMPLE NAME	2FBP	NIT5	TD14
2948401	2948401BLANK	71	70	76
2948402	2948402LCS	71	77	73
2948403	2948403MS	73	75	72
2948404	2948404MSD	73	74	73
60376093013	GB-01/2-3	75	74	78

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(NIT5) = Nitrobenzene-d5 (S)	(30-120)
(TD14) = Terphenyl-d14 (S)	(45-120)

* Values outside of QC Limits

MSSV FULL SCAN - FORM III SVOA-1
SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2948402LCS
Date Extracted: 07/29/2021
Date Analyzed (1): 08/02/2021
Instrument: 60MSS9
LCS Lot No: 45688
Lab File ID: 080221D.B\0802AM28.D
SDG No.: 60376093

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
TPH-DRO	314	246	78	40-120

Spike Recovery: 0 out of 1 outside limits.

MSSV FULL SCAN - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas

Date Extracted: 07/29/2021

Instrument: 60MSS9

Parent Sample ID: GB-01/2-3

Matrix Spike - Sample No: 2948403MS

Date Analyzed (1): 08/02/2021

Lab File ID: 080221D.B\0802AM30.D

SDG No.: 60376093

COMPOUND	SPIKE ADDED (mg/kg)	SAMPLE CONCENTRATION (mg/kg)	MS CONCENTRATION (mg/kg)	MS %REC	QC LIMITS REC.
TPH-DRO	376	4.5J	300	79	10-145

Spike Recovery: 0 out of 1 outside limits.

09/08/2021 5:20

MSSV FULL SCAN - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS9 Matrix Spike Duplicate - Sample No: 2948404MSD

Lab File ID (2): 080221D.B\0802AM31.D Date Analyzed (2): 08/02/2021

COMPOUND	SPIKE ADDED (mg/kg)	MSD CONCENTRATION (mg/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
TPH-DRO	375	290	76	3	0-38	10-145

RPD: 0 out of 1 outside limits.

Spike Recovery: 0 out of 1 outside limits.

09/08/2021 5:20

SAMPLE NO.

2948401BLANK

MSSV FULL SCAN - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS9 Matrix: Solid Lab Sample ID: 2948401

Lab File ID (1): 080221S.B\0802AM27.D Date Analyzed (1): 08/02/2021 Time (1):20:09

Lab File ID (2): 080221D.B\0802AM27.D Date Analyzed (2): 08/02/2021 Time (2):20:09

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2948402LCS	2948402	080221S.B\0802AM28.D	08/02/2021 20:28
2948402LCS	2948402	080221D.B\0802AM28.D	08/02/2021 20:28
GB-01/2-3	60376093013	080221D.B\0802AM29.D	08/02/2021 20:47
GB-01/2-3	60376093013	080221S.B\0802AM29.D	08/02/2021 20:47
2948403MS	2948403	080221S.B\0802AM30.D	08/02/2021 21:07
2948403MS	2948403	080221D.B\0802AM30.D	08/02/2021 21:07
2948404MSD	2948404	080221D.B\0802AM31.D	08/02/2021 21:26
2948404MSD	2948404	080221S.B\0802AM31.D	08/02/2021 21:26

MSSV Full Scan - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW
Lab File ID: 072821S.B\0728ADFT.D DFTPP Injection Date: 07/28/2021
Instrument ID: 60MSS9 DFTPP Injection Time: 10:56

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.00 - 80.00% of mass 198	51.02	
68	Less than 2.00% of mass 69	0.69	(1.55)[1]
69	Mass 69 relative abundance	44.40	
70	Less than 2.00% of mass 69	0.30	(0.67)[1]
127	25.00 - 75.00% of mass 198	52.75	
197	Less than 1.00% of mass 198	0.00	
198	Base Peak, 100.00% relative	100.00	
199	5.00 - 9.00% of mass 198	7.10	
275	10.00 - 30.00% of mass 198	26.64	
365	Greater than 0.75% of mass 198	4.14	
441	Present, but less than mass 443	14.14	
442	40.00 - 110.00% of mass 198	102.74	
443	15.00 - 24.00% of mass 442	19.89	(19.36)[2]

1 - Value is % mass 69 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19936171CAL5	19936171CAL5	072821S.B\0728AMI5.D	07/28/2021	11:08
19936220CAL5	19936220CAL5	072821D.B\0728AMI5.D	07/28/2021	11:08
19936172CAL1	19936172CAL1	072821S.B\0728AMI1.D	07/28/2021	11:29
19936223CAL1	19936223CAL1	072821D.B\0728AMI1.D	07/28/2021	11:29
19936173CAL2	19936173CAL2	072821S.B\0728AMI2.D	07/28/2021	11:49
19936225CAL2	19936225CAL2	072821D.B\0728AMI2.D	07/28/2021	11:49
19936174CAL3	19936174CAL3	072821S.B\0728AMI3.D	07/28/2021	12:09
19936221CAL3	19936221CAL3	072821D.B\0728AMI3.D	07/28/2021	12:09
19936224CAL4	19936224CAL4	072821D.B\0728AMI4.D	07/28/2021	12:28
19936175CAL4	19936175CAL4	072821S.B\0728AMI4.D	07/28/2021	12:28
19936226CAL6	19936226CAL6	072821D.B\0728AMI6.D	07/28/2021	12:48
19936176CAL6	19936176CAL6	072821S.B\0728AMI6.D	07/28/2021	12:48
19936227CAL7	19936227CAL7	072821D.B\0728AMI7.D	07/28/2021	13:08
19936177CAL7	19936177CAL7	072821S.B\0728AMI7.D	07/28/2021	13:08
19936222ICV	19936222ICV	072821D.B\0728AMICV.D	07/28/2021	13:28
19936178ICV	19936178ICV	072821S.B\0728AMICV.D	07/28/2021	13:28

MSSV Full Scan - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW
Lab File ID: 080221S.B\0802ADFT.D DFTPP Injection Date: 08/02/2021
Instrument ID: 60MSS9 DFTPP Injection Time: 11:11

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.00 - 80.00% of mass 198	51.73	
68	Less than 2.00% of mass 69	0.80	(1.76)[1]
69	Mass 69 relative abundance	45.25	
70	Less than 2.00% of mass 69	0.28	(0.63)[1]
127	25.00 - 75.00% of mass 198	53.95	
197	Less than 1.00% of mass 198	0.00	
198	Base Peak, 100.00% relative	100.00	
199	5.00 - 9.00% of mass 198	7.07	
275	10.00 - 30.00% of mass 198	26.98	
365	Greater than 0.75% of mass 198	4.11	
441	Present, but less than mass 443	16.52	
442	40.00 - 110.00% of mass 198	99.95	
443	15.00 - 24.00% of mass 442	20.28	(20.29)[2]

1 - Value is % mass 69 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19753984CCV	19753984CCV	080221D.B\0802AMI5.D	08/02/2021	11:23
19936525CCV	19936525CCV	080221S.B\0802AMI5.D	08/02/2021	11:23
2948401BLANK	2948401BLANK	080221D.B\0802AM27.D	08/02/2021	20:09
2948401BLANK	2948401BLANK	080221S.B\0802AM27.D	08/02/2021	20:09
2948402LCS	2948402LCS	080221D.B\0802AM28.D	08/02/2021	20:28
2948402LCS	2948402LCS	080221S.B\0802AM28.D	08/02/2021	20:28
GB-01/2-3	60376093013	080221D.B\0802AM29.D	08/02/2021	20:47
GB-01/2-3	60376093013	080221S.B\0802AM29.D	08/02/2021	20:47
2948403MS	2948403MS	080221S.B\0802AM30.D	08/02/2021	21:07
2948403MS	2948403MS	080221D.B\0802AM30.D	08/02/2021	21:07
2948404MSD	2948404MSD	080221D.B\0802AM31.D	08/02/2021	21:26
2948404MSD	2948404MSD	080221S.B\0802AM31.D	08/02/2021	21:26

MSSV FULL SCAN - FORM VIII SVOA-1
MSSV FULL SCAN INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Sample ID : 19936525CCV Date Analyzed: 08/02/2021

Instrument ID: 60MSS9 GC Column: Col 1 Time Analyzed: 11:23

Lab File ID: 080221S.B\0802AMI5.D

		AREA 14DDIS	RT	AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD		952365	4.148	1999606	6.293	1730195	9.183	3232308	5.057
UPPER LIMIT		1904730	4.648	3999212	6.793	3460390	9.683	6464616	5.557
LOWER LIMIT		476182.5	3.648	999803	5.793	865097.5	8.683	1616154	4.557
LAB SAMPLE ID	SAMPLE NO.								
2948401	2948401BLANK	1015711	4.153	2278038	6.282	2321876	9.183	3572958	5.052
2948402	2948402LCS	1019801	4.159	2278070	6.288	2326164	9.183	3570458	5.052
2948403	2948403MS	999719	4.159	2204606	6.288	2320452	9.183	3562452	5.052
2948404	2948404MSD	995009	4.153	2193908	6.288	2251700	9.183	3487647	5.052
60376093013	GB-01/2-3	1005218	4.153	2310434	6.282	2376154	9.183	3586999	5.052

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV FULL SCAN - FORM VIII SVOA-1
MSSV FULL SCAN INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Sample ID : 19936525CCV Date Analyzed: 08/02/2021

Instrument ID: 60MSS9 GC Column: Col 1 Time Analyzed: 11:23

Lab File ID: 080221S.B\0802AMI5.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		694191	10.139	3392269	7.329
UPPER LIMIT		1388382	10.639	6784538	7.829
LOWER LIMIT		347095.5	9.639	1696134.5	6.829
LAB SAMPLE ID	SAMPLE NO.				
2948401	2948401BLANK	946621	10.127	3995449	7.329
2948402	2948402LCS	1014982	10.133	3977592	7.329
2948403	2948403MS	985375	10.127	3859217	7.329
2948404	2948404MSD	965454	10.133	3814648	7.329
60376093013	GB-01/2-3	999352	10.127	4045593	7.329

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

GB-01/2-3

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:57
Lab Sample ID: 60376093013
Date Analyzed: 08/02/2021 20:47
Lab File ID: 080221D.B\0802AM29.D
Initial wt/vol: 30.09 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	19.1	
	TPH-DRO	4.5	J

MSSV FULL SCAN - FORM VI SVOA-1

MSSV FULL SCAN INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS9 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:08 13:08

LAB FILE ID

CAL1 = 072821D.B\0728AMI1.D CAL2 = 072821D.B\0728AMI2.D CAL3 = 072821D.B\0728AMI3.D

CAL4 = 072821D.B\0728AMI4.D CAL5 = 072821D.B\0728AMI5.D CAL6 = 072821D.B\0728AMI6.D

CAL7 = 072821D.B\0728AMI7.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
TPH-ORO	Averaged	159810.236	160344.058	155585.571	150784.349	156076.452	141997.343
TPH-DRO	Averaged	159810.236	160344.058	155585.571	150784.349	156076.452	141997.343

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV FULL SCAN - FORM VI SVOA-2

MSSV FULL SCAN INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS9 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:08 13:08

LAB FILE ID

CAL1 = 072821D.B\0728AMI1.D CAL2 = 072821D.B\0728AMI2.D CAL3 = 072821D.B\0728AMI3.D

CAL4 = 072821D.B\0728AMI4.D CAL5 = 072821D.B\0728AMI5.D CAL6 = 072821D.B\0728AMI6.D

CAL7 = 072821D.B\0728AMI7.D

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
TPH-ORO	Averaged	134153.926	6.47896		0.00000000	151250.276	
TPH-DRO	Averaged	134153.926	6.47896		0.00000000	151250.276	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN INITIAL CALIBRATION DATA

19936178ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 13:28

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821S.B\0728AMICV.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60376093

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
2-Fluorobiphenyl (S)	Averaged	1.26337	0.00000	0.0100	-8.5155	20.0000
Nitrobenzene-d5 (S)	Averaged	0.39962	0.01065	0.0100	-1.7567	20.0000
Terphenyl-d14 (S)	Averaged	1.45875	0.00000	0.0100	3.1982	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN INITIAL CALIBRATION DATA

19936222ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 13:28

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821D.B\0728AMICV.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60376093

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-ORO	Averaged	151250.2	106775.3	0.0100	-29.4048	20.0000
TPH-DRO	Averaged	151250.2	106775.3	0.0100	-29.4048	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN CONTINUING CALIBRATION DATA

19753984CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:23

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 080221D.B\0802AMI5.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-ORO	Averaged	151250.2	147008.2	0.0100	-2.8046	20.0000
TPH-DRO	Averaged	151250.2	147008.2	0.0100	-2.8046	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV FULL SCAN - FORM VII SVOA-1
MSSV FULL SCAN CONTINUING CALIBRATION DATA

19936525CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:23

Instrument ID: 60MSS9 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 080221S.B\0802AMI5.D Init. Calib. Time(s): 11:08 13:08

SDG No.: 60376093

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
2-Fluorobiphenyl (S)	Averaged	1.26337	1.18479	0.0100	-6.2196	20.0000
Nitrobenzene-d5 (S)	Averaged	0.39962	0.37060	0.0100	-7.2607	20.0000
Terphenyl-d14 (S)	Averaged	1.45875	1.58463	0.0100	8.6297	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

BLANK

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:57
Lab Sample ID: 2948401
Date Analyzed: 08/02/2021 20:09
Lab File ID: 080221D.B\0802AM27.D
Initial wt/vol: 31.42 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-ORO	2.5	J
	TPH-DRO	<1.4	U

SAMPLE NO.

LCS

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:57
Lab Sample ID: 2948402
Date Analyzed: 08/02/2021 20:28
Lab File ID: 080221D.B\0802AM28.D
Initial wt/vol: 31.86 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	246	

SAMPLE NO.

MS

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:57
Lab Sample ID: 2948403
Date Analyzed: 08/02/2021 21:07
Lab File ID: 080221D.B\0802AM30.D
Initial wt/vol: 31.57 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	300	

SAMPLE NO.

MSD

MSSV FULL SCAN - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:57
Lab Sample ID: 2948404
Date Analyzed: 08/02/2021 21:26
Lab File ID: 080221D.B\0802AM31.D
Initial wt/vol: 31.67 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS9
Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
	TPH-DRO	290	

MSSV SIM - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2948409	2948409BLANK	91	115
2948410	2948410LCS	83	102
2948413	2948413MS	77	110
2948414	2948414MSD	84	104
60376093001	GB-44/3-5	0*	0*
60376093002	GB-44/5-7	88	106
60376093003	GB-37/3-5	83	107
60376093004	GB-37/5-7	80	100

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM II SVOA-2
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2948405	2948405BLANK	66	76
2948406	2948406LCS	92	114
2948407	2948407MS	90	117
2948408	2948408MSD	89	110
60376093013	GB-01/2-3	69	80

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(40-120)
(TD14) = Terphenyl-d14 (S)	(45-130)

* Values outside of QC Limits

MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2948410LCS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/30/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 073021.B\0730AP29.D
SDG No.: 60376093

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	32.1	26.2	82	45-120
Acenaphthylene	32.1	25.9	81	50-120
Anthracene	32.1	27.5	85	50-120
Benzo(a)anthracene	32.1	27.5	85	55-125
Benzo(a)pyrene	32.1	26.5	82	45-120
Benzo(b)fluoranthene	32.1	29.9	93	50-125
Benzo(g,h,i)perylene	32.1	24.1	75	40-120
Benzo(k)fluoranthene	32.1	30.4	95	55-120
Chrysene	32.1	26.8	83	55-120
Dibenz(a,h)anthracene	32.1	24.7	77	40-125
Fluoranthene	32.1	28.5	89	50-125
Fluorene	32.1	26.7	83	50-120
Indeno(1,2,3-cd)pyrene	32.1	23.8	74	44-125
Naphthalene	32.1	26.4	82	45-120
Phenanthrene	32.1	27.6	86	50-125
Pyrene	32.1	30.6	95	50-125

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 5:20

MSSV SIM - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2948406LCS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/30/2021
Instrument: 60MSS5
LCS Lot No: 44362
Lab File ID: 073021.B\0730AP37.D
SDG No.: 60376093

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
Acenaphthene	31.3	26.5	85	45-120
Acenaphthylene	31.3	25.8	82	50-120
Anthracene	31.3	28.1	90	50-120
Benzo(a)anthracene	31.3	27.3	87	55-125
Benzo(a)pyrene	31.3	25.4	81	45-120
Benzo(b)fluoranthene	31.3	28.8	92	50-125
Benzo(g,h,i)perylene	31.3	23.3	74	40-120
Benzo(k)fluoranthene	31.3	29.5	94	55-120
Chrysene	31.3	26.7	85	55-120
Dibenz(a,h)anthracene	31.3	23.4	75	40-125
Fluoranthene	31.3	30.1	96	50-125
Fluorene	31.3	26.9	86	50-120
Indeno(1,2,3-cd)pyrene	31.3	22.9	73	44-125
Naphthalene	31.3	26.4	84	45-120
Phenanthrene	31.3	29.1	93	50-125
Pyrene	31.3	31.9	102	50-125

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 5:20

MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2948413MS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/30/2021
Instrument: 60MSS5
Lab File ID: 073021.B\0730AP32.D
Parent Sample ID: GB-44/5-7
SDG No.: 60376093

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	40.2	3.1J	33.1	75	10-150
Acenaphthylene	40.2	3.0J	33.1	75	30-125
Anthracene	40.2	9.5	40.1	76	10-160
Benzo(a)anthracene	40.2	31.2	54.5	58	10-160
Benzo(a)pyrene	40.2	25.6	47.4	54	10-150
Benzo(b)fluoranthene	40.2	52.4	65.7	33	10-165
Benzo(g,h,i)perylene	40.2	17.9	43.3	63	10-155
Benzo(k)fluoranthene	40.2	18.8	49.8	77	10-165
Chrysene	40.2	39.3	58.9	49	10-150
Dibenz(a,h)anthracene	40.2	3.9	33.4	73	10-175
Fluoranthene	40.2	86.9	95.5	21	10-180
Fluorene	40.2	5.7	36.7	77	20-145
Indeno(1,2,3-cd)pyrene	40.2	14.3	42.8	71	10-150
Naphthalene	40.2	17.2	39.3	55	10-165
Phenanthrene	40.2	52.7	69.4	42	10-170
Pyrene	40.2	70.2	91.2	52	10-180

Spike Recovery: 0 out of 16 outside limits.

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2948414MSD

Lab File ID (2): 073021.B\0730AP33.D Date Analyzed (2): 07/30/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	39.4	38.0	89	14	0-42	10-150
Acenaphthylene	39.4	35.0	81	6	0-44	30-125
Anthracene	39.4	42.5	84	6	0-54	10-160
Benzo(a)anthracene	39.4	59.5	72	9	0-62	10-160
Benzo(a)pyrene	39.4	50.0	62	5	0-66	10-150
Benzo(b)fluoranthene	39.4	74.9	57	13	0-61	10-165
Benzo(g,h,i)perylene	39.4	46.7	73	8	0-58	10-155
Benzo(k)fluoranthene	39.4	49.6	78	0	0-53	10-165
Chrysene	39.4	69.5	76	17	0-57	10-150
Dibenz(a,h)anthracene	39.4	32.1	72	4	0-48	10-175
Fluoranthene	39.4	120	84	23	0-54	10-180
Fluorene	39.4	38.0	82	4	0-39	20-145
Indeno(1,2,3-cd)pyrene	39.4	45.6	79	6	0-59	10-150
Naphthalene	39.4	48.2	78	20	0-54	10-165
Phenanthrene	39.4	85.1	82	20	0-51	10-170
Pyrene	39.4	104	86	13	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 5:20

MSSV SIM - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2948407MS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/30/2021
Instrument: 60MSS5
Lab File ID: 073021.B\0730AP38.D
Parent Sample ID: GB-01/2-3
SDG No.: 60376093

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
Acenaphthene	39.2	<2.9	35.9	91	10-150
Acenaphthylene	39.2	<2.9	33.1	84	30-125
Anthracene	39.2	6.9J	42.4	91	10-160
Benzo(a)anthracene	39.2	26.6	70.0	111	10-160
Benzo(a)pyrene	39.2	22.5	61.7	100	10-150
Benzo(b)fluoranthene	39.2	42.8	90.9	122	10-165
Benzo(g,h,i)perylene	39.2	18.3	50.6	82	10-155
Benzo(k)fluoranthene	39.2	21.1	62.1	104	10-165
Chrysene	39.2	29.9	72.4	108	10-150
Dibenz(a,h)anthracene	39.2	<3.4	32.1	82	10-175
Fluoranthene	39.2	73.0	122	126	10-180
Fluorene	39.2	<3.0	36.6	93	20-145
Indeno(1,2,3-cd)pyrene	39.2	13.6	47.2	86	10-150
Naphthalene	39.2	<3.3	35.5	90	10-165
Phenanthrene	39.2	34.7	71.0	93	10-170
Pyrene	39.2	61.1	116	141	10-180

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 5:20

MSSV SIM - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60MSS5 Matrix Spike Duplicate - Sample No: 2948408MSD

Lab File ID (2): 073021.B\0730AP39.D Date Analyzed (2): 07/30/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Acenaphthene	37.3	33.1	89	8	0-42	10-150
Acenaphthylene	37.3	31.4	84	5	0-44	30-125
Anthracene	37.3	38.1	84	11	0-54	10-160
Benzo(a)anthracene	37.3	56.7	81	21	0-62	10-160
Benzo(a)pyrene	37.3	48.5	70	24	0-66	10-150
Benzo(b)fluoranthene	37.3	67.3	65	30	0-61	10-165
Benzo(g,h,i)perylene	37.3	43.5	68	15	0-58	10-155
Benzo(k)fluoranthene	37.3	47.0	69	28	0-53	10-165
Chrysene	37.3	55.6	69	26	0-57	10-150
Dibenz(a,h)anthracene	37.3	30.6	82	5	0-48	10-175
Fluoranthene	37.3	92.9	53	27	0-54	10-180
Fluorene	37.3	33.9	91	8	0-39	20-145
Indeno(1,2,3-cd)pyrene	37.3	40.0	71	16	0-59	10-150
Naphthalene	37.3	33.0	88	7	0-54	10-165
Phenanthrene	37.3	58.3	63	20	0-51	10-170
Pyrene	37.3	86.5	68	29	0-61	10-180

RPD: 0 out of 16 outside limits.

Spike Recovery: 0 out of 16 outside limits.

09/08/2021 5:20

SAMPLE NO.

2948409BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2948409

Lab File ID: 073021.B\0730AP28.D Date Analyzed: 07/30/2021 Time: 15:48

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2948410LCS	2948410	073021.B\0730AP29.D	07/30/2021 16:05
GB-44/3-5	60376093001	073021.B\0730AP30.D	07/30/2021 16:22
GB-44/5-7	60376093002	073021.B\0730AP31.D	07/30/2021 16:40
2948413MS	2948413	073021.B\0730AP32.D	07/30/2021 16:57
2948414MSD	2948414	073021.B\0730AP33.D	07/30/2021 17:14
GB-37/3-5	60376093003	073021.B\0730AP34.D	07/30/2021 17:31
GB-37/5-7	60376093004	073021.B\0730AP35.D	07/30/2021 17:48

SAMPLE NO.

2948405BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS5 Matrix: Solid Lab Sample ID: 2948405

Lab File ID: 073021.B\0730AP36.D Date Analyzed: 07/30/2021 Time: 18:05

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2948406LCS	2948406	073021.B\0730AP37.D	07/30/2021 18:23
2948407MS	2948407	073021.B\0730AP38.D	07/30/2021 18:40
2948408MSD	2948408	073021.B\0730AP39.D	07/30/2021 18:57
GB-01/2-3	60376093013	073021.B\0730AP40.D	07/30/2021 19:14

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW
Lab File ID: 072721.B\0727ADFT.D DFTPP Injection Date 07/27/2021
Instrument ID: 60MSS5 DFTPP Injection Time 08:26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.22	(16.76)[1]
68	Less than 2.00% of mass 69	0.37	(1.34)[2]
69	Mass 69 relative abundance	27.19	(20.51)[2]
70	Less than 2.00% of mass 69	0.15	(0.57)[2]
127	10.00 - 80.00% of mass 442	42.09	(31.74)[2]
197	Less than 2.00% of mass 198	0.00	
198	Greater than 50.00% of mass 442	100.00	(75.42)[2]
199	5.00 - 9.00% of mass 198	6.80	
275	10.00 - 60.00% of mass 442	26.56	(20.03)[2]
365	Greater than 1.00% of mass 442	3.84	(2.90)[2]
441	Present, but less than mass 443	20.27	
442	Greater than 50.00% of mass 198	132.60	
443	15.00 - 24.00% of mass 442	26.31	(19.84)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19896110CAL6	19896110CAL6	072721.B\0727API6.D	07/27/2021	08:37
19896111CAL1	19896111CAL1	072721.B\0727API1.D	07/27/2021	08:57
19896112CAL2	19896112CAL2	072721.B\0727API2.D	07/27/2021	09:14
19896113CAL3	19896113CAL3	072721.B\0727API3.D	07/27/2021	09:31
19896114CAL4	19896114CAL4	072721.B\0727API4.D	07/27/2021	09:48
19896115CAL5	19896115CAL5	072721.B\0727API5.D	07/27/2021	10:05
19896116CAL7	19896116CAL7	072721.B\0727API7.D	07/27/2021	10:22
19896117CAL8	19896117CAL8	072721.B\0727API8.D	07/27/2021	10:40
19896118ICV	19896118ICV	072721.B\0727APICV.D	07/27/2021	10:57

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW
Lab File ID: 073021.B\0730ADFT.D DFTPP Injection Date 07/30/2021
Instrument ID: 60MSS5 DFTPP Injection Time 07:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	22.42	(15.38)[1]
68	Less than 2.00% of mass 69	0.39	(1.42)[2]
69	Mass 69 relative abundance	27.63	(18.95)[2]
70	Less than 2.00% of mass 69	0.16	(0.58)[2]
127	10.00 - 80.00% of mass 442	42.33	(29.04)[2]
197	Less than 2.00% of mass 198	0.34	
198	Greater than 50.00% of mass 442	100.00	(68.60)[2]
199	5.00 - 9.00% of mass 198	6.88	
275	10.00 - 60.00% of mass 442	27.49	(18.86)[2]
365	Greater than 1.00% of mass 442	3.89	(2.67)[2]
441	Present, but less than mass 443	22.26	
442	Greater than 50.00% of mass 198	145.77	
443	15.00 - 24.00% of mass 442	28.94	(19.85)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19745925CCV	19745925CCV	073021.B\0730API6.D	07/30/2021	07:43
2948409BLANK	2948409BLANK	073021.B\0730AP28.D	07/30/2021	15:48
2948410LCS	2948410LCS	073021.B\0730AP29.D	07/30/2021	16:05
GB-44/3-5	60376093001	073021.B\0730AP30.D	07/30/2021	16:22
GB-44/5-7	60376093002	073021.B\0730AP31.D	07/30/2021	16:40
2948413MS	2948413MS	073021.B\0730AP32.D	07/30/2021	16:57
2948414MSD	2948414MSD	073021.B\0730AP33.D	07/30/2021	17:14
GB-37/3-5	60376093003	073021.B\0730AP34.D	07/30/2021	17:31
GB-37/5-7	60376093004	073021.B\0730AP35.D	07/30/2021	17:48
2948405BLANK	2948405BLANK	073021.B\0730AP36.D	07/30/2021	18:05
2948406LCS	2948406LCS	073021.B\0730AP37.D	07/30/2021	18:23
2948407MS	2948407MS	073021.B\0730AP38.D	07/30/2021	18:40
2948408MSD	2948408MSD	073021.B\0730AP39.D	07/30/2021	18:57
GB-01/2-3	60376093013	073021.B\0730AP40.D	07/30/2021	19:14

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Sample ID : 19745925CCV Date Analyzed: 07/30/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 07:43

Lab File ID: 073021.B\0730API6.D

				AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT
12 HOUR STD				106074	6.409	147276	9.921	177549	4.362
UPPER LIMIT				212148	6.909	294552	10.421	355098	4.862
LOWER LIMIT				53037	5.909	73638	9.421	88774.5	3.862
LAB SAMPLE ID	SAMPLE NO.								
2948405	2948405BLANK			135425	6.407	197197	9.858	222981	4.357
2948406	2948406LCS			134725	6.407	184833	9.859	220453	4.357
2948407	2948407MS			145897	6.407	185757	9.862	233404	4.358
2948408	2948408MSD			144843	6.407	195245	9.862	235684	4.357
2948409	2948409BLANK			131641	6.407	176539	9.865	217380	4.357
2948410	2948410LCS			142696	6.407	191761	9.862	236013	4.354
2948413	2948413MS			141184	6.407	169613	9.856	230270	4.356
2948414	2948414MSD			132506	6.408	162272	9.862	215876	4.357
60376093001	GB-44/3-5			145523	6.408	188297	9.86	235361	4.361
60376093002	GB-44/5-7			134370	6.407	176564	9.862	216985	4.356
60376093003	GB-37/3-5			128589	6.408	148522	9.861	210682	4.36
60376093004	GB-37/5-7			141303	6.408	189690	9.861	225128	4.357
60376093013	GB-01/2-3			140578	6.407	189586	9.86	233379	4.356

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Sample ID : 19745925CCV Date Analyzed: 07/30/2021

Instrument ID: 60MSS5 GC Column: Col 1 Time Analyzed: 07:43

Lab File ID: 073021.B\0730API6.D

		AREA PERYD12IS	RT	AREA PHENAD10IS	RT
12 HOUR STD		85731	11.273	194529	7.757
UPPER LIMIT		171462	11.773	389058	8.257
LOWER LIMIT		42865.5	10.773	97264.5	7.257
LAB SAMPLE ID	SAMPLE NO.				
2948405	2948405BLANK	113979	11.188	253546	7.752
2948406	2948406LCS	97021	11.19	243045	7.752
2948407	2948407MS	97658	11.193	259507	7.752
2948408	2948408MSD	108968	11.194	258383	7.752
2948409	2948409BLANK	91983	11.197	232993	7.752
2948410	2948410LCS	102725	11.194	253714	7.752
2948413	2948413MS	100393	11.186	247283	7.752
2948414	2948414MSD	100852	11.194	233750	7.752
60376093001	GB-44/3-5	104288	11.191	257213	7.752
60376093002	GB-44/5-7	102555	11.194	234847	7.752
60376093003	GB-37/3-5	88541	11.192	225472	7.752
60376093004	GB-37/5-7	112479	11.193	247487	7.752
60376093013	GB-01/2-3	99326	11.19	257881	7.752

PERYD12IS = Perylene-d12 (IS)
PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

GB-44/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 08:17
Lab Sample ID: 60376093001
Date Analyzed: 07/30/2021 16:22
Lab File ID: 073021.B\0730AP30.D
Initial wt/vol: 30.51 g
Final wt/vol: 2 mL
Dilution: 10
Instrument: 60MSS5
Percent Moisture: 19.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	88.6	
208-96-8	Acenaphthylene	42.3	J
120-12-7	Anthracene	290	
56-55-3	Benzo(a)anthracene	799	
50-32-8	Benzo(a)pyrene	657	
205-99-2	Benzo(b)fluoranthene	894	
191-24-2	Benzo(g,h,i)perylene	422	
207-08-9	Benzo(k)fluoranthene	516	
218-01-9	Chrysene	707	
53-70-3	Dibenz(a,h)anthracene	89.8	
206-44-0	Fluoranthene	1560	
86-73-7	Fluorene	76.5	J
193-39-5	Indeno(1,2,3-cd)pyrene	322	
91-20-3	Naphthalene	<34.3	U
85-01-8	Phenanthrene	691	
129-00-0	Pyrene	1620	

SAMPLE NO.

GB-44/5-7

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 08:17
Lab Sample ID: 60376093002
Date Analyzed: 07/30/2021 16:40
Lab File ID: 073021.B\0730AP31.D
Initial wt/vol: 31.34 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 17.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	3.1	J
208-96-8	Acenaphthylene	3.0	J
120-12-7	Anthracene	9.5	
56-55-3	Benzo(a)anthracene	31.2	
50-32-8	Benzo(a)pyrene	25.6	
205-99-2	Benzo(b)fluoranthene	52.4	
191-24-2	Benzo(g,h,i)perylene	17.9	
207-08-9	Benzo(k)fluoranthene	18.8	
218-01-9	Chrysene	39.3	
53-70-3	Dibenz(a,h)anthracene	3.9	
206-44-0	Fluoranthene	86.9	
86-73-7	Fluorene	5.7	
193-39-5	Indeno(1,2,3-cd)pyrene	14.3	
91-20-3	Naphthalene	17.2	
85-01-8	Phenanthrene	52.7	
129-00-0	Pyrene	70.2	

SAMPLE NO.

GB-37/3-5

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 08:17
Lab Sample ID: 60376093003
Date Analyzed: 07/30/2021 17:31
Lab File ID: 073021.B\0730AP34.D
Initial wt/vol: 31.08 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 19.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	17.2	
208-96-8	Acenaphthylene	13.3	
120-12-7	Anthracene	48.8	
56-55-3	Benzo(a)anthracene	152	
50-32-8	Benzo(a)pyrene	133	
205-99-2	Benzo(b)fluoranthene	202	
191-24-2	Benzo(g,h,i)perylene	100	
207-08-9	Benzo(k)fluoranthene	115	
218-01-9	Chrysene	154	
53-70-3	Dibenz(a,h)anthracene	21.4	
206-44-0	Fluoranthene	289	
86-73-7	Fluorene	15.2	
193-39-5	Indeno(1,2,3-cd)pyrene	82.7	
91-20-3	Naphthalene	8.2	
85-01-8	Phenanthrene	218	
129-00-0	Pyrene	307	

SAMPLE NO.

GB-37/5-7

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 08:17
Lab Sample ID: 60376093004
Date Analyzed: 07/30/2021 17:48
Lab File ID: 073021.B\0730AP35.D
Initial wt/vol: 30.1 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 21.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.6	U
208-96-8	Acenaphthylene	<1.6	U
120-12-7	Anthracene	4.1	J
56-55-3	Benzo(a)anthracene	6.6	
50-32-8	Benzo(a)pyrene	4.5	
205-99-2	Benzo(b)fluoranthene	8.5	
191-24-2	Benzo(g,h,i)perylene	2.9	J
207-08-9	Benzo(k)fluoranthene	<2.3	U
218-01-9	Chrysene	6.3	
53-70-3	Dibenz(a,h)anthracene	<1.8	U
206-44-0	Fluoranthene	18.9	
86-73-7	Fluorene	<1.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.4	J
91-20-3	Naphthalene	<1.8	U
85-01-8	Phenanthrene	15.2	
129-00-0	Pyrene	15.9	

SAMPLE NO.

GB-01/2-3

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:57
Lab Sample ID: 60376093013
Date Analyzed: 07/30/2021 19:14
Lab File ID: 073021.B\0730AP40.D
Initial wt/vol: 30.09 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.9	U
208-96-8	Acenaphthylene	<2.9	U
120-12-7	Anthracene	6.9	J
56-55-3	Benzo(a)anthracene	26.6	
50-32-8	Benzo(a)pyrene	22.5	
205-99-2	Benzo(b)fluoranthene	42.8	
191-24-2	Benzo(g,h,i)perylene	18.3	
207-08-9	Benzo(k)fluoranthene	21.1	
218-01-9	Chrysene	29.9	
53-70-3	Dibenz(a,h)anthracene	<3.4	U
206-44-0	Fluoranthene	73.0	
86-73-7	Fluorene	<3.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	13.6	
91-20-3	Naphthalene	<3.3	U
85-01-8	Phenanthrene	34.7	
129-00-0	Pyrene	61.1	

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.11894	1.09422	1.06549	1.09074	1.06233	1.07547
Acenaphthylene	Averaged	1.79964	1.76321	1.71369	1.75430	1.72876	1.79109
Anthracene	Averaged	0.95480	0.98971	0.96996	1.02024	0.95352	0.91919
Benzo(a)anthracene	Averaged	1.27227	1.27235	1.22018	1.25033	1.17391	1.19779
Benzo(a)pyrene	Averaged	1.16001	1.16178	1.11150	1.18053	1.10095	1.09725
Benzo(b)fluoranthene	Averaged	1.36990	1.36367	1.29770	1.32666	1.29133	1.28286
Benzo(g,h,i)perylene	Averaged	0.56259	0.56634	0.51596	0.56411	0.50102	0.54197
Benzo(k)fluoranthene	Averaged	1.36448	1.32831	1.25870	1.40703	1.23369	1.19632
Chrysene	Averaged	1.10282	1.12963	1.07868	1.12828	1.06358	1.06173
Dibenz(a,h)anthracene	Averaged	0.74399	0.74879	0.70296	0.75423	0.68003	0.70465
Fluoranthene	Averaged	1.14036	1.17220	1.14496	1.19523	1.12899	1.08856
Fluorene	Averaged	1.28712	1.25285	1.22613	1.25270	1.22477	1.24394
Indeno(1,2,3-cd)pyrene	Averaged	0.78877	0.80206	0.74322	0.79324	0.72210	0.77636
Naphthalene	Averaged	1.01672	0.97880	0.95885	0.97000	0.94927	0.92788
Phenanthrene	Averaged	0.96149	0.98305	0.95421	1.00263	0.93523	0.92065
Pyrene	Averaged	1.39709	1.43920	1.38165	1.44039	1.35084	1.32652
2-Fluorobiphenyl (S)	Averaged	1.43833	1.39109	1.34963	1.37522	1.30411	1.31850
Terphenyl-d14 (S)	Averaged	1.37860	1.11909	1.05333	1.07924	1.01676	0.97814

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.04529	0.97405
Acenaphthylene	Averaged	1.74049	1.61912
Anthracene	Averaged	0.89655	0.84396
Benzo(a)anthracene	Averaged	1.17451	1.07257
Benzo(a)pyrene	Averaged	1.07722	0.99775
Benzo(b)fluoranthene	Averaged	1.20236	1.15863
Benzo(g,h,i)perylene	Averaged	0.56424	0.45218
Benzo(k)fluoranthene	Averaged	1.13691	1.10135
Chrysene	Averaged	1.05875	1.00538
Dibenz(a,h)anthracene	Averaged	0.69301	0.59322
Fluoranthene	Averaged	1.03891	0.96136
Fluorene	Averaged	1.21855	1.12528
Indeno(1,2,3-cd)pyrene	Averaged	0.78171	0.64710
Naphthalene	Averaged	0.93595	0.88423
Phenanthrene	Averaged	0.88955	0.82761
Pyrene	Averaged	1.31974	1.20996
2-Fluorobiphenyl (S)	Averaged	1.28345	1.17304
Terphenyl-d14 (S)	Averaged	0.97497	0.91027

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS5 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/27/2021 07/27/2021 Calibration Time(s): 08:37 10:40

LAB FILE ID

CAL1 = 072721.B\0727API1.D CAL2 = 072721.B\0727API2.D CAL3 = 072721.B\0727API3.D

CAL4 = 072721.B\0727API4.D CAL5 = 072721.B\0727API5.D CAL6 = 072721.B\0727API6.D

CAL7 = 072721.B\0727API7.D CAL8 = 072721.B\0727API8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	4.07400			1.06582	
Acenaphthylene	Averaged	3.24813			1.73879	
Anthracene	Averaged	5.89516			0.94349	
Benzo(a)anthracene	Averaged	5.51081			1.20424	
Benzo(a)pyrene	Averaged	5.27878			1.11087	
Benzo(b)fluoranthene	Averaged	5.73520			1.28664	
Benzo(g,h,i)perylene	Averaged	7.71237			0.53355	
Benzo(k)fluoranthene	Averaged	8.63097			1.25335	
Chrysene	Averaged	3.82632			1.07860	
Dibenz(a,h)anthracene	Averaged	7.43095			0.70261	
Fluoranthene	Averaged	6.92175			1.10882	
Fluorene	Averaged	3.84432			1.22892	
Indeno(1,2,3-cd)pyrene	Averaged	6.85201			0.75682	
Naphthalene	Averaged	4.10623			0.95271	
Phenanthrene	Averaged	5.96680			0.93430	
Pyrene	Averaged	5.55817			1.35818	
2-Fluorobiphenyl (S)	Averaged	6.06551			1.32917	
Terphenyl-d14 (S)	Averaged	13.46000			1.06380	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19936277ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/27/2021 Time: 10:57

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 072721.B\0727APICV.D Init. Calib. Time(s): 08:37 10:40

SDG No.: 60376093

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	0.22095	0.0500	0.9060	20.0000
Acenaphthylene	Averaged	1.73879	0.35133	0.0500	3.0080	20.0000
Anthracene	Averaged	0.94349	0.18059	0.0500	-2.5757	20.0000
Benzo(a)anthracene	Averaged	1.20424	0.22518	0.0500	-0.5352	20.0000
Benzo(a)pyrene	Averaged	1.11087	0.19714	0.0500	-1.2261	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	0.25506	0.0500	-0.2937	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.11115	0.0500	1.5775	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	0.25020	0.0500	-4.5498	20.0000
Chrysene	Averaged	1.07860	0.20717	0.0500	-1.5645	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.13678	0.0500	0.2906	20.0000
Fluoranthene	Averaged	1.10882	0.22009	0.0500	-1.8274	20.0000
Fluorene	Averaged	1.22892	0.24519	0.0500	1.2220	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.15867	0.0500	2.5815	20.0000
Naphthalene	Averaged	0.95271	0.18683	0.0500	-2.6064	20.0000
Phenanthrene	Averaged	0.93430	0.18236	0.0500	-1.4614	20.0000
Pyrene	Averaged	1.35818	0.26889	0.0500	-2.3305	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	0.00000	0.0500	-0.8029	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	0.00000	0.0500	-8.0523	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19936282CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/30/2021 Time: 07:43

Instrument ID: 60MSS5 GC Column: Col 1 Init. Calib. Date(s): 07/27/2021 07/27/2021

Lab File ID: 073021.B\0730API6.D Init. Calib. Time(s): 08:37 10:40

SDG No.: 60376093

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.06582	1.05837	0.0500	-0.6987	20.0000
Acenaphthylene	Averaged	1.73879	1.73884	0.0500	0.0027	20.0000
Anthracene	Averaged	0.94349	0.91583	0.0500	-2.9316	20.0000
Benzo(a)anthracene	Averaged	1.20424	1.16747	0.0500	-3.0537	20.0000
Benzo(a)pyrene	Averaged	1.11087	1.06404	0.0500	-4.2164	20.0000
Benzo(b)fluoranthene	Averaged	1.28664	1.33380	0.0500	3.6649	20.0000
Benzo(g,h,i)perylene	Averaged	0.53355	0.49779	0.0500	-6.7025	20.0000
Benzo(k)fluoranthene	Averaged	1.25335	1.20895	0.0500	-3.5426	20.0000
Chrysene	Averaged	1.07860	1.03285	0.0500	-4.2420	20.0000
Dibenz(a,h)anthracene	Averaged	0.70261	0.64997	0.0500	-7.4922	20.0000
Fluoranthene	Averaged	1.10882	1.08219	0.0500	-2.4015	20.0000
Fluorene	Averaged	1.22892	1.22040	0.0500	-0.6931	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	0.75682	0.70439	0.0500	-6.9276	20.0000
Naphthalene	Averaged	0.95271	0.94642	0.0500	-0.6604	20.0000
Phenanthrene	Averaged	0.93430	0.90868	0.0500	-2.7427	20.0000
Pyrene	Averaged	1.35818	1.42600	0.0500	4.9938	20.0000
2-Fluorobiphenyl (S)	Averaged	1.32917	1.28418	0.0500	-3.3854	20.0000
Terphenyl-d14 (S)	Averaged	1.06380	1.13584	0.0500	6.7722	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

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MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 08:17
Lab Sample ID: 2948409
Date Analyzed: 07/30/2021 15:48
Lab File ID: 073021.B\0730AP28.D
Initial wt/vol: 30.9 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<1.2	U
208-96-8	Acenaphthylene	<1.2	U
120-12-7	Anthracene	<1.3	U
56-55-3	Benzo(a)anthracene	<1.5	U
50-32-8	Benzo(a)pyrene	<1.2	U
205-99-2	Benzo(b)fluoranthene	<1.6	U
191-24-2	Benzo(g,h,i)perylene	<1.4	U
207-08-9	Benzo(k)fluoranthene	<1.8	U
218-01-9	Chrysene	<1.5	U
53-70-3	Dibenz(a,h)anthracene	<1.4	U
206-44-0	Fluoranthene	<2.4	U
86-73-7	Fluorene	<1.3	U
193-39-5	Indeno(1,2,3-cd)pyrene	<1.4	U
91-20-3	Naphthalene	<1.4	U
85-01-8	Phenanthrene	<2.6	U
129-00-0	Pyrene	<1.7	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 08:17
Lab Sample ID: 2948410
Date Analyzed: 07/30/2021 16:05
Lab File ID: 073021.B\0730AP29.D
Initial wt/vol: 31.13 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	26.2	
208-96-8	Acenaphthylene	25.9	
120-12-7	Anthracene	27.5	
56-55-3	Benzo(a)anthracene	27.5	
50-32-8	Benzo(a)pyrene	26.5	
205-99-2	Benzo(b)fluoranthene	29.9	
191-24-2	Benzo(g,h,i)perylene	24.1	
207-08-9	Benzo(k)fluoranthene	30.4	
218-01-9	Chrysene	26.8	
53-70-3	Dibenz(a,h)anthracene	24.7	
206-44-0	Fluoranthene	28.5	
86-73-7	Fluorene	26.7	
193-39-5	Indeno(1,2,3-cd)pyrene	23.8	
91-20-3	Naphthalene	26.4	
85-01-8	Phenanthrene	27.6	
129-00-0	Pyrene	30.6	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 08:17
Lab Sample ID: 2948413
Date Analyzed: 07/30/2021 16:57
Lab File ID: 073021.B\0730AP32.D
Initial wt/vol: 30.14 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 17.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	33.1	
208-96-8	Acenaphthylene	33.1	
120-12-7	Anthracene	40.1	
56-55-3	Benzo(a)anthracene	54.5	
50-32-8	Benzo(a)pyrene	47.4	
205-99-2	Benzo(b)fluoranthene	65.7	
191-24-2	Benzo(g,h,i)perylene	43.3	
207-08-9	Benzo(k)fluoranthene	49.8	
218-01-9	Chrysene	58.9	
53-70-3	Dibenz(a,h)anthracene	33.4	
206-44-0	Fluoranthene	95.5	
86-73-7	Fluorene	36.7	
193-39-5	Indeno(1,2,3-cd)pyrene	42.8	
91-20-3	Naphthalene	39.3	
85-01-8	Phenanthrene	69.4	
129-00-0	Pyrene	91.2	

SAMPLE NO.

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 08:17
Lab Sample ID: 2948414
Date Analyzed: 07/30/2021 17:14
Lab File ID: 073021.B\0730AP33.D
Initial wt/vol: 30.74 g
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 17.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	38.0	
208-96-8	Acenaphthylene	35.0	
120-12-7	Anthracene	42.5	
56-55-3	Benzo(a)anthracene	59.5	
50-32-8	Benzo(a)pyrene	50.0	
205-99-2	Benzo(b)fluoranthene	74.9	
191-24-2	Benzo(g,h,i)perylene	46.7	
207-08-9	Benzo(k)fluoranthene	49.6	
218-01-9	Chrysene	69.5	
53-70-3	Dibenz(a,h)anthracene	32.1	
206-44-0	Fluoranthene	120	
86-73-7	Fluorene	38.0	
193-39-5	Indeno(1,2,3-cd)pyrene	45.6	
91-20-3	Naphthalene	48.2	
85-01-8	Phenanthrene	85.1	
129-00-0	Pyrene	104	

SAMPLE NO.

BLANK

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:57
Lab Sample ID: 2948405
Date Analyzed: 07/30/2021 18:05
Lab File ID: 073021.B\0730AP36.D
Initial wt/vol: 31.42 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	<2.3	U
208-96-8	Acenaphthylene	<2.3	U
120-12-7	Anthracene	<2.6	U
56-55-3	Benzo(a)anthracene	<3.0	U
50-32-8	Benzo(a)pyrene	<2.3	U
205-99-2	Benzo(b)fluoranthene	<3.1	U
191-24-2	Benzo(g,h,i)perylene	<2.8	U
207-08-9	Benzo(k)fluoranthene	<3.5	U
218-01-9	Chrysene	<3.0	U
53-70-3	Dibenz(a,h)anthracene	<2.7	U
206-44-0	Fluoranthene	<4.7	U
86-73-7	Fluorene	<2.5	U
193-39-5	Indeno(1,2,3-cd)pyrene	<2.7	U
91-20-3	Naphthalene	<2.7	U
85-01-8	Phenanthrene	<5.2	U
129-00-0	Pyrene	<3.4	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:57
Lab Sample ID: 2948406
Date Analyzed: 07/30/2021 18:23
Lab File ID: 073021.B\0730AP37.D
Initial wt/vol: 31.95 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	26.5	
208-96-8	Acenaphthylene	25.8	
120-12-7	Anthracene	28.1	
56-55-3	Benzo(a)anthracene	27.3	
50-32-8	Benzo(a)pyrene	25.4	
205-99-2	Benzo(b)fluoranthene	28.8	
191-24-2	Benzo(g,h,i)perylene	23.3	
207-08-9	Benzo(k)fluoranthene	29.5	
218-01-9	Chrysene	26.7	
53-70-3	Dibenz(a,h)anthracene	23.4	
206-44-0	Fluoranthene	30.1	
86-73-7	Fluorene	26.9	
193-39-5	Indeno(1,2,3-cd)pyrene	22.9	
91-20-3	Naphthalene	26.4	
85-01-8	Phenanthrene	29.1	
129-00-0	Pyrene	31.9	

SAMPLE NO.

MS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:57
Lab Sample ID: 2948407
Date Analyzed: 07/30/2021 18:40
Lab File ID: 073021.B\0730AP38.D
Initial wt/vol: 30.2 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	35.9	
208-96-8	Acenaphthylene	33.1	
120-12-7	Anthracene	42.4	
56-55-3	Benzo(a)anthracene	70.0	
50-32-8	Benzo(a)pyrene	61.7	
205-99-2	Benzo(b)fluoranthene	90.9	
191-24-2	Benzo(g,h,i)perylene	50.6	
207-08-9	Benzo(k)fluoranthene	62.1	
218-01-9	Chrysene	72.4	
53-70-3	Dibenz(a,h)anthracene	32.1	
206-44-0	Fluoranthene	122	
86-73-7	Fluorene	36.6	
193-39-5	Indeno(1,2,3-cd)pyrene	47.2	
91-20-3	Naphthalene	35.5	
85-01-8	Phenanthrene	71.0	
129-00-0	Pyrene	116	

SAMPLE NO.

MSD

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:57
Lab Sample ID: 2948408
Date Analyzed: 07/30/2021 18:57
Lab File ID: 073021.B\0730AP39.D
Initial wt/vol: 31.76 g
Final wt/vol: 2 mL
Dilution: 1
Instrument: 60MSS5
Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
83-32-9	Acenaphthene	33.1	
208-96-8	Acenaphthylene	31.4	
120-12-7	Anthracene	38.1	
56-55-3	Benzo(a)anthracene	56.7	
50-32-8	Benzo(a)pyrene	48.5	
205-99-2	Benzo(b)fluoranthene	67.3	
191-24-2	Benzo(g,h,i)perylene	43.5	
207-08-9	Benzo(k)fluoranthene	47.0	
218-01-9	Chrysene	55.6	
53-70-3	Dibenz(a,h)anthracene	30.6	
206-44-0	Fluoranthene	92.9	
86-73-7	Fluorene	33.9	
193-39-5	Indeno(1,2,3-cd)pyrene	40.0	
91-20-3	Naphthalene	33.0	
85-01-8	Phenanthrene	58.3	
129-00-0	Pyrene	86.5	

PCB - FORM II SVOA-1
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60GCS8

LAB SAMPLE ID	SAMPLE NAME	DCBP
2948397	2948397BLANK	80
2948398	2948398LCS	81
2948399	2948399MS	71
2948400	2948400MSD	73
60376093001	GB-44/3-5	80
60376093002	GB-44/5-7	83
60376093003	GB-37/3-5	80
60376093004	GB-37/5-7	68
60376093005	GB-30/3-4	80
60376093006	GB-30/4-5	71
60376093007	GB-23/2.5-3.5	77
60376093008	GB-23/4-6	76
60376093009	GB-16/3-4	79
60376093010	GB-16/4-5	75
60376093011	GB-10/1.5-2.5	82
60376093012	GB-10/3-5	80
60376093013	GB-01/2-3	79

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(35-120)

* Values outside of QC Limits

PCB - FORM III SVOA-1

SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2948398LCS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/30/2021
Instrument: 60GCS8
LCS Lot No: 42472
Lab File ID: 072821-1.B\0728210183.D
SDG No.: 60376093

COMPOUND	AMOUNT ADDED (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	162	141	87	65-120
PCB-1260 (Aroclor 1260)	162	137	84	65-120

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-1

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Kansas
Matrix Spike - Sample No: 2948399MS
Date Extracted: 07/29/2021
Date Analyzed (1): 07/30/2021
Instrument: 60GCS8
Lab File ID: 072821-1.B\0728210187.D
Parent Sample ID: GB-44/3-5
SDG No.: 60376093

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	199	<9.9	143	72	30-130
PCB-1260 (Aroclor 1260)	199	<7.9	145	73	15-155

Spike Recovery: 0 out of 2 outside limits.

PCB - FORM III SVOA-2

SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 60GCS8 Matrix Spike Duplicate - Sample No: 2948400MSD

Lab File ID (2): 072821-1.B\0728210188.D Date Analyzed (2): 07/30/2021

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
PCB-1016 (Aroclor 1016)	203	160	79	11	0-40	30-130
PCB-1260 (Aroclor 1260)	203	156	77	7	0-40	15-155

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

09/15/2021 1:49

SAMPLE NO.

2948397BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60GCS8 Matrix: Solid Lab Sample ID: 2948397

Lab File ID (1): 072821-1.B\0728210182.D Date Analyzed (1): 07/30/2021 Time (1):17:47

Lab File ID (2): 072821-2.B\0728210182.D Date Analyzed (2): 07/30/2021 Time (2):17:47

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2948398LCS	2948398	072821-1.B\0728210183.D	07/30/2021 18:04
2948398LCS	2948398	072821-2.B\0728210183.D	07/30/2021 18:04
GB-44/3-5	60376093001	072821-1.B\0728210186.D	07/30/2021 18:58
2948399MS	2948399	072821-1.B\0728210187.D	07/30/2021 19:16
2948399MS	2948399	072821-2.B\0728210187.D	07/30/2021 19:16
2948400MSD	2948400	072821-1.B\0728210188.D	07/30/2021 19:34
2948400MSD	2948400	072821-2.B\0728210188.D	07/30/2021 19:34
GB-44/5-7	60376093002	072821-1.B\0728210189.D	07/30/2021 19:52
GB-37/3-5	60376093003	072821-1.B\0728210190.D	07/30/2021 20:10
GB-37/5-7	60376093004	072821-1.B\0728210191.D	07/30/2021 20:28
GB-30/3-4	60376093005	072821-1.B\0728210192.D	07/30/2021 20:46
GB-30/4-5	60376093006	072821-1.B\0728210193.D	07/30/2021 21:04
GB-23/2.5-3.5	60376093007	072821-1.B\0728210194.D	07/30/2021 21:21
GB-23/4-6	60376093008	072821-1.B\0728210195.D	07/30/2021 21:39
GB-16/3-4	60376093009	072821-1.B\0728210196.D	07/30/2021 21:57
GB-16/4-5	60376093010	072821-1.B\0728210197.D	07/30/2021 22:15
GB-10/1.5-2.5	60376093011	072821-1.B\0728210198.D	07/30/2021 22:33
GB-10/3-5	60376093012	072821-1.B\0728210199.D	07/30/2021 22:51
GB-01/2-3	60376093013	072821-1.B\0728210200.D	07/30/2021 23:09

SAMPLE NO.

GB-44/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093001

Date Analyzed: 07/30/2021 18:58 Lab File ID: 072821-1.B\0728210186.D

Initial wt/vol: 30.62 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-44/5-7

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093002

Date Analyzed: 07/30/2021 19:52 Lab File ID: 072821-1.B\0728210189.D

Initial wt/vol: 30.1 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 17.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-37/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093003

Date Analyzed: 07/30/2021 20:10 Lab File ID: 072821-1.B\0728210190.D

Initial wt/vol: 30.46 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.0	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.6	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.7	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.9	U

SAMPLE NO.

GB-37/5-7

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093004

Date Analyzed: 07/30/2021 20:28 Lab File ID: 072821-1.B\0728210191.D

Initial wt/vol: 31.15 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.1	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.7	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.8	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.0	U

SAMPLE NO.

GB-30/3-4

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093005

Date Analyzed: 07/30/2021 20:46 Lab File ID: 072821-1.B\0728210192.D

Initial wt/vol: 31.92 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 22.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.9	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-30/4-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093006

Date Analyzed: 07/30/2021 21:04 Lab File ID: 072821-1.B\0728210193.D

Initial wt/vol: 30.6 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 22.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.3	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.9	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10.0	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.8	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.2	U

SAMPLE NO.

GB-23/2.5-3.5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093007

Date Analyzed: 07/30/2021 21:21 Lab File ID: 072821-1.B\0728210194.D

Initial wt/vol: 30.52 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 18.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	52.5	

SAMPLE NO.

GB-23/4-6

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093008

Date Analyzed: 07/30/2021 21:39 Lab File ID: 072821-1.B\0728210195.D

Initial wt/vol: 30.34 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 21.0%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.3	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-16/3-4

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:25
Lab Sample ID: 60376093009
Date Analyzed: 07/30/2021 21:57
Lab File ID: 072821-1.B\0728210196.D
Initial wt/vol: 31.83 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 20.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.7	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.3	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.4	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.7	U

SAMPLE NO.

GB-16/4-5

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/28/2021 04:25
Matrix: Solid
SDG No.: 60376093
Date Extracted: 07/29/2021 07:25
Lab Sample ID: 60376093010
Date Analyzed: 07/30/2021 22:15
Lab File ID: 072821-1.B\0728210197.D
Initial wt/vol: 30.07 g
Final wt/vol: 10 mL
Dilution: 1
Instrument: 60GCS8
Percent Moisture: 20.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.3	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.9	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<10	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.9	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.2	U

SAMPLE NO.

GB-10/1.5-2.5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093011

Date Analyzed: 07/30/2021 22:33 Lab File ID: 072821-1.B\0728210198.D

Initial wt/vol: 30.38 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 17.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.4	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.3	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.5	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.6	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.7	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.8	U

SAMPLE NO.

GB-10/3-5

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093012

Date Analyzed: 07/30/2021 22:51 Lab File ID: 072821-1.B\0728210199.D

Initial wt/vol: 30.29 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 20.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<10.2	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.8	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.5	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.9	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.7	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.8	U
11096-82-5	PCB-1260 (Aroclor 1260)	<8.1	U

SAMPLE NO.

GB-01/2-3

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 60376093013

Date Analyzed: 07/30/2021 23:09 Lab File ID: 072821-1.B\0728210200.D

Initial wt/vol: 30.95 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 15.6%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<9.4	U
11104-28-2	PCB-1221 (Aroclor 1221)	<9.0	U
11141-16-5	PCB-1232 (Aroclor 1232)	<4.1	U
53469-21-9	PCB-1242 (Aroclor 1242)	<9.1	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.5	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.6	U
11096-82-5	PCB-1260 (Aroclor 1260)	<7.5	U

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	970840.00000	897090.00000	848670.00000	775983.33333	751107.50000	730754.00000
Aroclor 1016	2	Averaged	2030800.00000	1870550.00000	1753495.00000	1609373.33333	1558385.00000	1526438.00000
Aroclor 1016	3	Averaged	1001540.00000	938820.00000	894895.00000	815493.33333	790935.00000	781846.00000
Aroclor 1016	4	Averaged	728080.00000	697890.00000	656465.00000	609860.00000	593575.00000	577708.00000
Aroclor 1016	5	Averaged	615720.00000	586330.00000	555330.00000	531306.66667	523252.50000	511044.00000
Aroclor 1260	1	Averaged	1407220.00000	1275040.00000	1167125.00000	1089186.66667	1059987.50000	1017992.00000
Aroclor 1260	2	Averaged	1601100.00000	1449940.00000	1347575.00000	1255346.66667	1224605.00000	1155912.00000
Aroclor 1260	3	Averaged	1440020.00000	1344870.00000	1260425.00000	1219733.33333	1187650.00000	1142266.00000
Aroclor 1260	4	Averaged	1077200.00000	993910.00000	953650.00000	913590.00000	872122.50000	822290.00000
Aroclor 1260	5	Averaged	1033420.00000	945000.00000	910125.00000	864850.00000	848505.00000	798406.00000
Decachlorobiphenyl		Averaged	22550600.0000	19414000.0000	18135700.0000	16997500.0000	16662850.0000	15891420.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	678037.50000	639431.00000	542441.00000
Aroclor 1016	2	Averaged	1428126.25000	1343964.00000	1166113.00000
Aroclor 1016	3	Averaged	729408.75000	684899.00000	581626.00000
Aroclor 1016	4	Averaged	533293.75000	506675.00000	439605.00000
Aroclor 1016	5	Averaged	488555.00000	459861.00000	413286.50000
Aroclor 1260	1	Averaged	955648.75000	902415.00000	783202.00000
Aroclor 1260	2	Averaged	1088666.25000	1037329.00000	918955.00000
Aroclor 1260	3	Averaged	1087676.25000	1056969.00000	946479.00000
Aroclor 1260	4	Averaged	807747.50000	764514.00000	683372.50000
Aroclor 1260	5	Averaged	782333.75000	730673.00000	673601.50000
Decachlorobiphenyl		Averaged	15345562.5000	14520250.0000	13227495.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	17.47			759372.70	
Aroclor 1016	2	Averaged	16.83			1587471.62	
Aroclor 1016	3	Averaged	16.21			802162.56	
Aroclor 1016	4	Averaged	15.56			593683.52	
Aroclor 1016	5	Averaged	11.96			520520.62	
Aroclor 1260	1	Averaged	17.79			1073090.76	
Aroclor 1260	2	Averaged	17.22			1231047.65	
Aroclor 1260	3	Averaged	12.70			1187343.17	
Aroclor 1260	4	Averaged	13.91			876488.50	
Aroclor 1260	5	Averaged	13.17			842990.47	
Decachlorobiphenyl		Averaged	16.45			16971708.61	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	1424340.00000	1387940.00000	1353655.00000	1268366.66667	1250982.50000	1214660.00000
Aroclor 1016	2	Averaged	2765480.00000	2624980.00000	2547520.00000	2366853.33333	2320287.50000	2252520.00000
Aroclor 1016	3	Averaged	1060340.00000	1001070.00000	1012590.00000	950720.00000	941760.00000	912578.00000
Aroclor 1016	4	Averaged	1023180.00000	1009120.00000	979085.00000	923663.33333	909462.50000	887270.00000
Aroclor 1016	5	Averaged	975340.00000	966030.00000	949390.00000	896156.66667	897797.50000	880792.00000
Aroclor 1260	1	Averaged	1986480.00000	1919180.00000	1856270.00000	1731980.00000	1714490.00000	1646706.00000
Aroclor 1260	2	Averaged	2611200.00000	2435340.00000	2348200.00000	2215843.33333	2188460.00000	2112124.00000
Aroclor 1260	3	Averaged	1788240.00000	1693920.00000	1664700.00000	1591370.00000	1557472.50000	1517404.00000
Aroclor 1260	4	Averaged	1977120.00000	1870610.00000	1828635.00000	1748463.33333	1754042.50000	1689950.00000
Aroclor 1260	5	Averaged	1838060.00000	1739710.00000	1709030.00000	1606620.00000	1592980.00000	1577298.00000
Decachlorobiphenyl		Averaged	37102600.0000	32197000.0000	30949950.0000	30231133.3333	28633675.0000	27983960.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

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PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	1146172.50000	1082018.00000	948775.00000
Aroclor 1016	2	Averaged	2117733.75000	1999484.00000	1775932.50000
Aroclor 1016	3	Averaged	879001.25000	811467.00000	743099.00000
Aroclor 1016	4	Averaged	835183.75000	783751.00000	691553.50000
Aroclor 1016	5	Averaged	838305.00000	798289.00000	712520.00000
Aroclor 1260	1	Averaged	1560540.00000	1420054.00000	1280849.50000
Aroclor 1260	2	Averaged	1996308.75000	1894627.00000	1696410.00000
Aroclor 1260	3	Averaged	1470232.50000	1372561.00000	1282513.00000
Aroclor 1260	4	Averaged	1629258.75000	1556540.00000	1387805.00000
Aroclor 1260	5	Averaged	1500142.50000	1416916.00000	1285497.00000
Decachlorobiphenyl		Averaged	26321800.0000	25331760.0000	22648670.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	12.46			1230767.74	
Aroclor 1016	2	Averaged	13.60			2307865.67	
Aroclor 1016	3	Averaged	10.89			923625.02	
Aroclor 1016	4	Averaged	12.19			893585.45	
Aroclor 1016	5	Averaged	9.71			879402.24	
Aroclor 1260	1	Averaged	13.77			1679616.61	
Aroclor 1260	2	Averaged	12.98			2166501.45	
Aroclor 1260	3	Averaged	10.28			1548712.55	
Aroclor 1260	4	Averaged	10.27			1715824.95	
Aroclor 1260	5	Averaged	10.67			1585139.27	
Decachlorobiphenyl		Averaged	14.57			29044505.37	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	3.679	3.68	3.681	3.681	3.681	3.681	3.684	3.683
Aroclor 1016	2	4.35	4.35	4.35	4.351	4.351	4.351	4.351	4.352
Aroclor 1016	3	4.504	4.505	4.505	4.505	4.505	4.505	4.505	4.506
Aroclor 1016	4	5.222	5.223	5.223	5.222	5.223	5.223	5.223	5.224
Aroclor 1016	5	5.417	5.417	5.417	5.417	5.418	5.418	5.418	5.418
Aroclor 1260	1	7.351	7.349	7.351	7.35	7.35	7.35	7.35	7.351
Aroclor 1260	2	7.769	7.768	7.77	7.77	7.77	7.77	7.771	7.771
Aroclor 1260	3	8.228	8.228	8.229	8.229	8.228	8.23	8.23	8.231
Aroclor 1260	4	8.522	8.523	8.522	8.523	8.523	8.524	8.524	8.525
Aroclor 1260	5	8.912	8.913	8.913	8.913	8.914	8.913	8.914	8.915
Decachlorobiphenyl		12.053	12.053	12.053	12.053	12.053	12.053	12.055	12.055

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-1.B\0728210002.D CAL2A = 072821-1.B\0728210003.D CAL3A = 072821-1.B\0728210004.D

CAL4A = 072821-1.B\0728210005.D CAL5A = 072821-1.B\0728210006.D CAL6A = 072821-1.B\0728210007.D

CAL7A = 072821-1.B\0728210008.D CAL8A = 072821-1.B\0728210009.D CAL9A = 072821-1.B\0728210010.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	3.684	3.681	3.561	3.801
Aroclor 1016	2	4.353	4.35	4.23	4.47
Aroclor 1016	3	4.506	4.506	4.386	4.626
Aroclor 1016	4	5.224	5.222	5.102	5.342
Aroclor 1016	5	5.419	5.418	5.298	5.538
Aroclor 1260	1	7.351	7.35	7.23	7.47
Aroclor 1260	2	7.771	7.77	7.65	7.89
Aroclor 1260	3	8.231	8.229	8.109	8.349
Aroclor 1260	4	8.524	8.523	8.403	8.643
Aroclor 1260	5	8.915	8.913	8.793	9.033
Decachlorobiphenyl		12.054	12.053	11.933	12.173

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	4.307	4.306	4.307	4.307	4.307	4.307	4.306	4.307
Aroclor 1016	2	4.973	4.973	4.974	4.973	4.974	4.974	4.974	4.975
Aroclor 1016	3	5.205	5.204	5.204	5.203	5.203	5.203	5.204	5.204
Aroclor 1016	4	5.541	5.539	5.54	5.539	5.539	5.54	5.54	5.54
Aroclor 1016	5	6.018	6.018	6.019	6.018	6.018	6.018	6.019	6.019
Aroclor 1260	1	8.127	8.125	8.126	8.125	8.126	8.126	8.125	8.126
Aroclor 1260	2	8.393	8.393	8.394	8.393	8.393	8.394	8.395	8.394
Aroclor 1260	3	9.067	9.066	9.067	9.067	9.067	9.068	9.068	9.068
Aroclor 1260	4	9.192	9.192	9.193	9.192	9.193	9.193	9.194	9.194
Aroclor 1260	5	9.747	9.747	9.747	9.747	9.748	9.748	9.748	9.749
Decachlorobiphenyl		12.806	12.805	12.807	12.807	12.807	12.807	12.808	12.807

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 07/28/2021 Calibration Time(s): 11:39 14:03

LAB FILE ID

CAL1A = 072821-2.B\0728210002.D CAL2A = 072821-2.B\0728210003.D CAL3A = 072821-2.B\0728210004.D

CAL4A = 072821-2.B\0728210005.D CAL5A = 072821-2.B\0728210006.D CAL6A = 072821-2.B\0728210007.D

CAL7A = 072821-2.B\0728210008.D CAL8A = 072821-2.B\0728210009.D CAL9A = 072821-2.B\0728210010.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	4.308	4.307	4.187	4.427
Aroclor 1016	2	4.974	4.973	4.853	5.093
Aroclor 1016	3	5.204	5.203	5.083	5.323
Aroclor 1016	4	5.54	5.54	5.42	5.66
Aroclor 1016	5	6.019	6.019	5.899	6.139
Aroclor 1260	1	8.127	8.127	8.007	8.247
Aroclor 1260	2	8.395	8.393	8.273	8.513
Aroclor 1260	3	9.068	9.068	8.948	9.188
Aroclor 1260	4	9.195	9.192	9.072	9.312
Aroclor 1260	5	9.748	9.748	9.628	9.868
Decachlorobiphenyl		12.808	12.808	12.688	12.928

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-1.B\0728210014.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	353695.00000	0.00			353695.00	
Aroclor 1221	2	Averaged	275622.50000	0.00			275622.50	
Aroclor 1221	3	Averaged	825162.50000	0.00			825162.50	
Aroclor 1254	1	Averaged	1094090.00000	0.00			1094090.00	
Aroclor 1254	2	Averaged	588712.50000	0.00			588712.50	
Aroclor 1254	3	Averaged	1530757.50000	0.00			1530757.50	
Aroclor 1254	4	Averaged	1336107.50000	0.00			1336107.50	
Aroclor 1254	5	Averaged	1226710.00000	0.00			1226710.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-2.B\0728210014.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	455120.00000	0.00			455120.00	
Aroclor 1221	2	Averaged	312310.00000	0.00			312310.00	
Aroclor 1221	3	Averaged	981785.00000	0.00			981785.00	
Aroclor 1254	1	Averaged	1476170.00000	0.00			1476170.00	
Aroclor 1254	2	Averaged	1834265.00000	0.00			1834265.00	
Aroclor 1254	3	Averaged	2354395.00000	0.00			2354395.00	
Aroclor 1254	4	Averaged	2517735.00000	0.00			2517735.00	
Aroclor 1254	5	Averaged	1867382.50000	0.00			1867382.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-1.B\0728210014.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	2.894	2.894	2.774	3.014
Aroclor 1221	2	3.023	3.023	2.903	3.143
Aroclor 1221	3	3.102	3.102	2.982	3.222
Aroclor 1254	1	5.937	5.937	5.817	6.057
Aroclor 1254	2	6.41	6.41	6.29	6.53
Aroclor 1254	3	6.935	6.935	6.815	7.055
Aroclor 1254	4	7.375	7.375	7.255	7.495
Aroclor 1254	5	8.23	8.23	8.11	8.35

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:14

LAB FILE ID

CAL5B = 072821-2.B\0728210014.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	3.347	3.347	3.227	3.467
Aroclor 1221	2	3.551	3.551	3.431	3.671
Aroclor 1221	3	3.647	3.647	3.527	3.767
Aroclor 1254	1	6.739	6.739	6.619	6.859
Aroclor 1254	2	6.967	6.967	6.847	7.087
Aroclor 1254	3	7.791	7.791	7.671	7.911
Aroclor 1254	4	8.111	8.111	7.991	8.231
Aroclor 1254	5	9.067	9.067	8.947	9.187

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-1.B\0728210015.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	290970.00000	0.00			290970.00	
Aroclor 1232	2	Averaged	241032.50000	0.00			241032.50	
Aroclor 1232	3	Averaged	144622.50000	0.00			144622.50	
Aroclor 1232	4	Averaged	207037.50000	0.00			207037.50	
Aroclor 1232	5	Averaged	285862.50000	0.00			285862.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-2.B\0728210015.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	214850.00000	0.00			214850.00	
Aroclor 1232	2	Averaged	301147.50000	0.00			301147.50	
Aroclor 1232	3	Averaged	260002.50000	0.00			260002.50	
Aroclor 1232	4	Averaged	213185.00000	0.00			213185.00	
Aroclor 1232	5	Averaged	414137.50000	0.00			414137.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-1.B\0728210015.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	3.945	3.945	3.825	4.065
Aroclor 1232	2	4.618	4.618	4.498	4.738
Aroclor 1232	3	5.015	5.015	4.895	5.135
Aroclor 1232	4	5.275	5.275	5.155	5.395
Aroclor 1232	5	5.865	5.865	5.745	5.985

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:32

LAB FILE ID

CAL5C = 072821-2.B\0728210015.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	4.713	4.713	4.593	4.833
Aroclor 1232	2	5.399	5.399	5.279	5.519
Aroclor 1232	3	5.611	5.611	5.491	5.731
Aroclor 1232	4	6.233	6.233	6.113	6.353
Aroclor 1232	5	6.574	6.574	6.454	6.694

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-1.B\0728210016.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	1486032.50000	0.00			1486032.50	
Aroclor 1242	2	Averaged	753562.50000	0.00			753562.50	
Aroclor 1242	3	Averaged	425075.00000	0.00			425075.00	
Aroclor 1242	4	Averaged	692697.50000	0.00			692697.50	
Aroclor 1242	5	Averaged	587032.50000	0.00			587032.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-2.B\0728210016.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	894672.50000	0.00			894672.50	
Aroclor 1242	2	Averaged	670042.50000	0.00			670042.50	
Aroclor 1242	3	Averaged	470497.50000	0.00			470497.50	
Aroclor 1242	4	Averaged	914435.00000	0.00			914435.00	
Aroclor 1242	5	Averaged	974090.00000	0.00			974090.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-1.B\0728210016.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	4.351	4.351	4.231	4.471
Aroclor 1242	2	4.505	4.505	4.385	4.625
Aroclor 1242	3	4.962	4.962	4.842	5.082
Aroclor 1242	4	5.925	5.925	5.805	6.045
Aroclor 1242	5	6.202	6.202	6.082	6.322

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 15:50

LAB FILE ID

CAL5D = 072821-2.B\0728210016.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	5.203	5.203	5.083	5.323
Aroclor 1242	2	5.4	5.4	5.28	5.52
Aroclor 1242	3	6.071	6.071	5.951	6.191
Aroclor 1242	4	6.66	6.66	6.54	6.78
Aroclor 1242	5	7.081	7.081	6.961	7.201

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-1.B\0728210017.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	887470.00000	0.00			887470.00	
Aroclor 1248	2	Averaged	544552.50000	0.00			544552.50	
Aroclor 1248	3	Averaged	1272032.50000	0.00			1272032.50	
Aroclor 1248	4	Averaged	976775.00000	0.00			976775.00	
Aroclor 1248	5	Averaged	621375.00000	0.00			621375.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-2.B\0728210017.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	1060257.50000	0.00			1060257.50	
Aroclor 1248	2	Averaged	1789272.50000	0.00			1789272.50	
Aroclor 1248	3	Averaged	1587427.50000	0.00			1587427.50	
Aroclor 1248	4	Averaged	1757167.50000	0.00			1757167.50	
Aroclor 1248	5	Averaged	984897.50000	0.00			984897.50	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 1 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-1.B\0728210017.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	4.894	4.894	4.774	5.014
Aroclor 1248	2	5.271	5.271	5.151	5.391
Aroclor 1248	3	5.926	5.926	5.806	6.046
Aroclor 1248	4	6.202	6.202	6.082	6.322
Aroclor 1248	5	6.934	6.934	6.814	7.054

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCS8 GC Column: Col 2 SDG No.: 60376093

Calibration Date(s): 07/28/2021 Calibration Time(s): 16:08

LAB FILE ID

CAL5E = 072821-2.B\0728210017.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	5.611	5.611	5.491	5.731
Aroclor 1248	2	6.574	6.574	6.454	6.694
Aroclor 1248	3	6.66	6.66	6.54	6.78
Aroclor 1248	4	7.081	7.081	6.961	7.201
Aroclor 1248	5	7.789	7.789	7.669	7.909

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19965002CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 10:45

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-1.B\0726210170.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.682	3.561	3.801	562455.0277	770717.5000	37.0274
Aroclor 1016	2	Averaged	4.352	4.23	4.47	1169806.314	1591920.000	36.0841
Aroclor 1016	3	Averaged	4.506	4.385	4.625	595685.7592	816542.5000	37.0760
Aroclor 1016	4	Averaged	5.223	5.103	5.343	435128.1759	606850.0000	39.4647
Aroclor 1016	5	Averaged	5.418	5.299	5.539	379283.1388	529617.5000	39.6364
Aroclor 1260	1	Averaged	7.351	7.231	7.471	807420.2037	1092325.000	35.2858
Aroclor 1260	2	Averaged	7.771	7.652	7.892	926110.6574	1237022.500	33.5718
Aroclor 1260	3	Averaged	8.231	8.111	8.351	886295.6944	1196157.500	34.9614
Aroclor 1260	4	Averaged	8.524	8.407	8.647	650939.0555	892275.0000	37.0750
Aroclor 1260	5	Averaged	8.914	8.797	9.037	623150.2129	858620.0000	37.7870
Decachlorobiphenyl		Averaged	12.056	11.938	12.178	12155278.75	16450600.00	35.3371

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

19965010CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 10:45

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/19/2021 07/19/2021

Lab File ID: 072621-2.B\0726210170.D
Init. Calib. Time(s): 17:09 22:14

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.307	4.188	4.428	891742.3240	1270505.000	42.4745
Aroclor 1016	2	Averaged	4.975	4.855	5.095	1718814.990	2360675.000	37.3432
Aroclor 1016	3	Averaged	5.205	5.086	5.326	678128.4722	937020.0000	38.1774
Aroclor 1016	4	Averaged	5.541	5.42	5.66	651780.6481	916320.0000	40.5872
Aroclor 1016	5	Averaged	6.02	5.9	6.14	648434.8703	910867.5000	40.4717
Aroclor 1260	1	Averaged	8.127	8.009	8.249	1255882.703	1692275.000	34.7479
Aroclor 1260	2	Averaged	8.395	8.278	8.518	1607301.398	2162667.500	34.5527
Aroclor 1260	3	Averaged	9.067	8.95	9.19	1148837.759	1574232.500	37.0283
Aroclor 1260	4	Averaged	9.195	9.078	9.318	1283000.064	1749112.500	36.3299
Aroclor 1260	5	Averaged	9.749	9.63	9.87	1161667.138	1599802.500	37.7161
Decachlorobiphenyl		Averaged	12.808	12.691	12.931	21812535.55	29095050.00	33.3868

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19943828ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/28/2021 Time: 14:38

Instrument ID: 60GCS8 GC Column: Col 1 Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210012.D Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.68	3.561	3.801	759372.7037	740945.0000	-2.4267
Aroclor 1016	2	Averaged	4.35	4.23	4.47	1587471.620	1519610.000	-4.2748
Aroclor 1016	3	Averaged	4.504	4.386	4.626	802162.5648	781082.5000	-2.6279
Aroclor 1016	4	Averaged	5.222	5.102	5.342	593683.5277	572945.0000	-3.4932
Aroclor 1016	5	Averaged	5.417	5.298	5.538	520520.6296	553325.0000	6.3022
Aroclor 1260	1	Averaged	7.349	7.23	7.47	1073090.768	1059305.000	-1.2847
Aroclor 1260	2	Averaged	7.769	7.65	7.89	1231047.657	1245140.000	1.1447
Aroclor 1260	3	Averaged	8.229	8.109	8.349	1187343.175	1139552.500	-4.0250
Aroclor 1260	4	Averaged	8.523	8.403	8.643	876488.5000	873130.0000	-0.3832
Aroclor 1260	5	Averaged	8.913	8.793	9.033	842990.4722	841575.0000	-0.1679

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19943827ICV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 14:38

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210012.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.307	4.187	4.427	1230767.740	1215962.500	-1.2029
Aroclor 1016	2	Averaged	4.973	4.853	5.093	2307865.675	2233027.500	-3.2427
Aroclor 1016	3	Averaged	5.202	5.083	5.323	923625.0277	903635.0000	-2.1643
Aroclor 1016	4	Averaged	5.539	5.42	5.66	893585.4537	842725.0000	-5.6917
Aroclor 1016	5	Averaged	6.018	5.899	6.139	879402.2407	869695.0000	-1.1038
Aroclor 1260	1	Averaged	8.126	8.007	8.247	1679616.611	1716337.500	2.1863
Aroclor 1260	2	Averaged	8.393	8.273	8.513	2166501.453	2195332.500	1.3308
Aroclor 1260	3	Averaged	9.066	8.948	9.188	1548712.555	1509407.500	-2.5379
Aroclor 1260	4	Averaged	9.192	9.072	9.312	1715824.953	1763470.000	2.7768
Aroclor 1260	5	Averaged	9.747	9.628	9.868	1585139.277	1594177.500	0.5702

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19943474ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:20

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210021.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	2.895	2.774	3.014	353695.0000	349865.0000	-1.0829
Aroclor 1221	2	Averaged	3.025	2.903	3.143	275622.5000	262975.0000	-4.5887
Aroclor 1221	3	Averaged	3.102	2.982	3.222	825162.5000	814880.0000	-1.2461
Aroclor 1254	1	Averaged	5.937	5.817	6.057	1094090.000	1067360.000	-2.4431
Aroclor 1254	2	Averaged	6.41	6.29	6.53	588712.5000	549302.5000	-6.6943
Aroclor 1254	3	Averaged	6.933	6.815	7.055	1530757.500	1436950.000	-6.1282
Aroclor 1254	4	Averaged	7.374	7.255	7.495	1336107.500	1272957.500	-4.7264
Aroclor 1254	5	Averaged	8.23	8.11	8.35	1226710.000	1231277.500	0.3723

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

19943475ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:20

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210021.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	3.346	3.227	3.467	455120.0000	424265.0000	-6.7795
Aroclor 1221	2	Averaged	3.55	3.431	3.671	312310.0000	310542.5000	-0.5659
Aroclor 1221	3	Averaged	3.646	3.527	3.767	981785.0000	969380.0000	-1.2635
Aroclor 1254	1	Averaged	6.739	6.619	6.859	1476170.000	1496557.500	1.3811
Aroclor 1254	2	Averaged	6.966	6.847	7.087	1834265.000	1840942.500	0.3640
Aroclor 1254	3	Averaged	7.791	7.671	7.911	2354395.000	2248335.000	-4.5048
Aroclor 1254	4	Averaged	8.113	7.991	8.231	2517735.000	2499730.000	-0.7151
Aroclor 1254	5	Averaged	9.067	8.947	9.187	1867382.500	1950202.500	4.4351

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

19943497ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:38

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210022.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	3.945	3.825	4.065	290970.0000	320895.0000	10.2846
Aroclor 1232	2	Averaged	4.62	4.498	4.738	241032.5000	258955.0000	7.4357
Aroclor 1232	3	Averaged	5.015	4.895	5.135	144622.5000	164537.5000	13.7703
Aroclor 1232	4	Averaged	5.275	5.155	5.395	207037.5000	220715.0000	6.6063
Aroclor 1232	5	Averaged	5.865	5.745	5.985	285862.5000	319307.5000	11.6997

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19943482ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:38

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210022.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	4.715	4.593	4.833	214850.0000	245287.5000	14.1669
Aroclor 1232	2	Averaged	5.4	5.279	5.519	301147.5000	330345.0000	9.6954
Aroclor 1232	3	Averaged	5.612	5.491	5.731	260002.5000	301050.0000	15.7873
Aroclor 1232	4	Averaged	6.234	6.113	6.353	213185.0000	246542.5000	15.6472
Aroclor 1232	5	Averaged	6.575	6.454	6.694	414137.5000	454090.0000	9.6472

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19943495ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:56

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210023.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	4.351	4.231	4.471	1486032.500	1527477.500	2.7890
Aroclor 1242	2	Averaged	4.504	4.385	4.625	753562.5000	781410.0000	3.6954
Aroclor 1242	3	Averaged	4.962	4.842	5.082	425075.0000	451510.0000	6.2189
Aroclor 1242	4	Averaged	5.926	5.805	6.045	692697.5000	726650.0000	4.9015
Aroclor 1242	5	Averaged	6.201	6.082	6.322	587032.5000	580830.0000	-1.0566

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19943494ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 17:56

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210023.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	5.203	5.083	5.323	894672.5000	918275.0000	2.6381
Aroclor 1242	2	Averaged	5.4	5.28	5.52	670042.5000	676130.0000	0.9085
Aroclor 1242	3	Averaged	6.071	5.951	6.191	470497.5000	481750.0000	2.3916
Aroclor 1242	4	Averaged	6.66	6.54	6.78	914435.0000	888932.5000	-2.7889
Aroclor 1242	5	Averaged	7.082	6.961	7.201	974090.0000	975145.0000	0.1083

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19943486ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 18:14

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210024.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	4.894	4.774	5.014	887470.0000	685120.0000	-22.8008
Aroclor 1248	2	Averaged	5.271	5.151	5.391	544552.5000	403610.0000	-25.8823
Aroclor 1248	3	Averaged	5.926	5.806	6.046	1272032.500	943562.5000	-25.8225
Aroclor 1248	4	Averaged	6.201	6.082	6.322	976775.0000	720072.5000	-26.2806
Aroclor 1248	5	Averaged	6.933	6.814	7.054	621375.0000	473077.5000	-23.8660

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

19943483ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/28/2021 Time: 18:14

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210024.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	5.611	5.491	5.731	1060257.500	799555.0000	-24.5886
Aroclor 1248	2	Averaged	6.574	6.454	6.694	1789272.500	1322467.500	-26.0891
Aroclor 1248	3	Averaged	6.659	6.54	6.78	1587427.500	1142545.000	-28.0254
Aroclor 1248	4	Averaged	7.08	6.961	7.201	1757167.500	1277520.000	-27.2966
Aroclor 1248	5	Averaged	7.789	7.669	7.909	984897.5000	711990.0000	-27.7092

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19964766CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 15:23

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210174.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.681	3.561	3.801	759372.7037	760960.0000	0.2090
Aroclor 1016	2	Averaged	4.349	4.23	4.47	1587471.620	1590665.000	0.2012
Aroclor 1016	3	Averaged	4.504	4.386	4.626	802162.5648	806252.5000	0.5099
Aroclor 1016	4	Averaged	5.222	5.102	5.342	593683.5277	597347.5000	0.6172
Aroclor 1016	5	Averaged	5.416	5.298	5.538	520520.6296	525242.5000	0.9071
Aroclor 1260	1	Averaged	7.349	7.23	7.47	1073090.768	1062425.000	-0.9939
Aroclor 1260	2	Averaged	7.77	7.65	7.89	1231047.657	1211977.500	-1.5491
Aroclor 1260	3	Averaged	8.229	8.109	8.349	1187343.175	1188285.000	0.0793
Aroclor 1260	4	Averaged	8.522	8.403	8.643	876488.5000	876325.0000	-0.0187
Aroclor 1260	5	Averaged	8.912	8.793	9.033	842990.4722	842455.0000	-0.0635
Decachlorobiphenyl		Averaged	12.054	11.933	12.173	16971708.61	15784400.00	-6.9958

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

19964767CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 15:23

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210174.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.305	4.187	4.427	1230767.740	1243582.500	1.0412
Aroclor 1016	2	Averaged	4.972	4.853	5.093	2307865.675	2353807.500	1.9907
Aroclor 1016	3	Averaged	5.202	5.083	5.323	923625.0277	942615.0000	2.0560
Aroclor 1016	4	Averaged	5.539	5.42	5.66	893585.4537	908995.0000	1.7245
Aroclor 1016	5	Averaged	6.018	5.899	6.139	879402.2407	893790.0000	1.6361
Aroclor 1260	1	Averaged	8.125	8.007	8.247	1679616.611	1672190.000	-0.4422
Aroclor 1260	2	Averaged	8.393	8.273	8.513	2166501.453	2174397.500	0.3645
Aroclor 1260	3	Averaged	9.066	8.948	9.188	1548712.555	1541260.000	-0.4812
Aroclor 1260	4	Averaged	9.192	9.072	9.312	1715824.953	1723075.000	0.4225
Aroclor 1260	5	Averaged	9.746	9.628	9.868	1585139.277	1559365.000	-1.6260
Decachlorobiphenyl		Averaged	12.806	12.688	12.928	29044505.37	28202525.00	-2.8989

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

19964769CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 18:22

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210184.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.679	3.561	3.801	759372.7037	740947.5000	-2.4264
Aroclor 1016	2	Averaged	4.349	4.23	4.47	1587471.620	1543527.500	-2.7682
Aroclor 1016	3	Averaged	4.504	4.386	4.626	802162.5648	778475.0000	-2.9530
Aroclor 1016	4	Averaged	5.222	5.102	5.342	593683.5277	578367.5000	-2.5798
Aroclor 1016	5	Averaged	5.416	5.298	5.538	520520.6296	505970.0000	-2.7954
Aroclor 1260	1	Averaged	7.349	7.23	7.47	1073090.768	1053472.500	-1.8282
Aroclor 1260	2	Averaged	7.769	7.65	7.89	1231047.657	1215350.000	-1.2751
Aroclor 1260	3	Averaged	8.229	8.109	8.349	1187343.175	1165477.500	-1.8416
Aroclor 1260	4	Averaged	8.523	8.403	8.643	876488.5000	870040.0000	-0.7357
Aroclor 1260	5	Averaged	8.913	8.793	9.033	842990.4722	831045.0000	-1.4170
Decachlorobiphenyl		Averaged	12.054	11.933	12.173	16971708.61	16049575.00	-5.4334

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

19964768CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 18:22

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210184.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.305	4.187	4.427	1230767.740	1202067.500	-2.3319
Aroclor 1016	2	Averaged	4.973	4.853	5.093	2307865.675	2264292.500	-1.8880
Aroclor 1016	3	Averaged	5.202	5.083	5.323	923625.0277	908862.5000	-1.5983
Aroclor 1016	4	Averaged	5.538	5.42	5.66	893585.4537	879695.0000	-1.5545
Aroclor 1016	5	Averaged	6.017	5.899	6.139	879402.2407	869917.5000	-1.0785
Aroclor 1260	1	Averaged	8.125	8.007	8.247	1679616.611	1637897.500	-2.4838
Aroclor 1260	2	Averaged	8.393	8.273	8.513	2166501.453	2132040.000	-1.5906
Aroclor 1260	3	Averaged	9.066	8.948	9.188	1548712.555	1510652.500	-2.4575
Aroclor 1260	4	Averaged	9.192	9.072	9.312	1715824.953	1711420.000	-0.2567
Aroclor 1260	5	Averaged	9.747	9.628	9.868	1585139.277	1519352.500	-4.1502
Decachlorobiphenyl		Averaged	12.806	12.688	12.928	29044505.37	27962250.00	-3.7262

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

19964770CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 23:27

Instrument ID: 60GCS8 GC Column: Col 1
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-1.B\0728210201.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	3.681	3.561	3.801	759372.7037	769390.0000	1.3192
Aroclor 1016	2	Averaged	4.35	4.23	4.47	1587471.620	1597515.000	0.6327
Aroclor 1016	3	Averaged	4.505	4.386	4.626	802162.5648	801915.0000	-0.0309
Aroclor 1016	4	Averaged	5.222	5.102	5.342	593683.5277	597570.0000	0.6546
Aroclor 1016	5	Averaged	5.417	5.298	5.538	520520.6296	524460.0000	0.7568
Aroclor 1260	1	Averaged	7.35	7.23	7.47	1073090.768	1087180.000	1.3130
Aroclor 1260	2	Averaged	7.77	7.65	7.89	1231047.657	1245462.500	1.1709
Aroclor 1260	3	Averaged	8.229	8.109	8.349	1187343.175	1205182.500	1.5025
Aroclor 1260	4	Averaged	8.524	8.403	8.643	876488.5000	897370.0000	2.3824
Aroclor 1260	5	Averaged	8.914	8.793	9.033	842990.4722	866602.5000	2.8010
Decachlorobiphenyl		Averaged	12.055	11.933	12.173	16971708.61	16689700.00	-1.6616

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

19964771CCV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/30/2021 Time: 23:27

Instrument ID: 60GCS8 GC Column: Col 2
Init. Calib. Date(s): 07/28/2021 07/28/2021

Lab File ID: 072821-2.B\0728210201.D
Init. Calib. Time(s): 11:39 16:44

SDG No.: 60376093

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	4.305	4.187	4.427	1230767.740	1259162.500	2.3071
Aroclor 1016	2	Averaged	4.973	4.853	5.093	2307865.675	2376007.500	2.9526
Aroclor 1016	3	Averaged	5.203	5.083	5.323	923625.0277	952367.5000	3.1119
Aroclor 1016	4	Averaged	5.539	5.42	5.66	893585.4537	919760.0000	2.9292
Aroclor 1016	5	Averaged	6.018	5.899	6.139	879402.2407	915012.5000	4.0494
Aroclor 1260	1	Averaged	8.125	8.007	8.247	1679616.611	1722022.500	2.5247
Aroclor 1260	2	Averaged	8.394	8.273	8.513	2166501.453	2221190.000	2.5243
Aroclor 1260	3	Averaged	9.067	8.948	9.188	1548712.555	1591745.000	2.7786
Aroclor 1260	4	Averaged	9.192	9.072	9.312	1715824.953	1794145.000	4.5646
Aroclor 1260	5	Averaged	9.747	9.628	9.868	1585139.277	1641762.500	3.5721
Decachlorobiphenyl		Averaged	12.806	12.688	12.928	29044505.37	29456025.00	1.4169

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

09/15/2021 1:49

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 2948397

Date Analyzed: 07/30/2021 17:47 Lab File ID: 072821-1.B\0728210182.D

Initial wt/vol: 31.42 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	<7.8	U
11104-28-2	PCB-1221 (Aroclor 1221)	<7.5	U
11141-16-5	PCB-1232 (Aroclor 1232)	<3.4	U
53469-21-9	PCB-1242 (Aroclor 1242)	<7.6	U
12672-29-6	PCB-1248 (Aroclor 1248)	<2.1	U
11097-69-1	PCB-1254 (Aroclor 1254)	<3.0	U
11096-82-5	PCB-1260 (Aroclor 1260)	<6.2	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 2948398

Date Analyzed: 07/30/2021 18:04 Lab File ID: 072821-1.B\0728210183.D

Initial wt/vol: 30.78 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	141	
11096-82-5	PCB-1260 (Aroclor 1260)	137	

SAMPLE NO.

MS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 2948399

Date Analyzed: 07/30/2021 19:16 Lab File ID: 072821-1.B\0728210187.D

Initial wt/vol: 30.97 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	143	
11096-82-5	PCB-1260 (Aroclor 1260)	145	

SAMPLE NO.

MSD

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/28/2021 04:25 Matrix: Solid SDG No.: 60376093

Date Extracted: 07/29/2021 07:25 Lab Sample ID: 2948400

Date Analyzed: 07/30/2021 19:34 Lab File ID: 072821-1.B\0728210188.D

Initial wt/vol: 30.49 g Final wt/vol: 10 mL Dilution: 1 Instrument: 60GCS8 Percent Moisture: 19.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/kg	Q
12674-11-2	PCB-1016 (Aroclor 1016)	160	
11096-82-5	PCB-1260 (Aroclor 1260)	156	

SAMPLE NO.

GB-44/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093001 Percent Moisture: 19.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.62	U	mg/kg	10	08/09/2021 15:03
7440-38-2	Arsenic	5.4		mg/kg	10	08/09/2021 15:03
7440-50-8	Copper	18.2		mg/kg	10	08/09/2021 15:03
7439-92-1	Lead	26.8		mg/kg	10	08/09/2021 15:03
7440-66-6	Zinc	54.2		mg/kg	10	08/09/2021 15:03

SAMPLE NO.

GB-44/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093002 Percent Moisture: 17.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.59	U	mg/kg	10	08/09/2021 15:05
7440-38-2	Arsenic	8.6		mg/kg	10	08/09/2021 15:05
7440-50-8	Copper	17.4		mg/kg	10	08/09/2021 15:05
7439-92-1	Lead	28.7		mg/kg	10	08/09/2021 15:05
7440-66-6	Zinc	62.7		mg/kg	10	08/09/2021 15:05

SAMPLE NO.

GB-37/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093003 Percent Moisture: 19.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.61	U	mg/kg	10	08/09/2021 15:07
7440-38-2	Arsenic	6.5		mg/kg	10	08/09/2021 15:07
7440-50-8	Copper	15.5		mg/kg	10	08/09/2021 15:07
7439-92-1	Lead	9.9		mg/kg	10	08/09/2021 15:07
7440-66-6	Zinc	43.7		mg/kg	10	08/09/2021 15:07

SAMPLE NO.

GB-37/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093004 Percent Moisture: 21.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.51	U	mg/kg	10	08/09/2021 15:08
7440-38-2	Arsenic	9.9		mg/kg	10	08/09/2021 15:08
7440-50-8	Copper	18.1		mg/kg	10	08/09/2021 15:08
7439-92-1	Lead	11.4		mg/kg	10	08/09/2021 15:08
7440-66-6	Zinc	55.7		mg/kg	10	08/09/2021 15:08

SAMPLE NO.

GB-30/3-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093005 Percent Moisture: 22.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.53	U	mg/kg	10	08/09/2021 15:10
7440-38-2	Arsenic	9.8		mg/kg	10	08/09/2021 15:10
7440-50-8	Copper	19.1		mg/kg	10	08/09/2021 15:10
7439-92-1	Lead	18.2		mg/kg	10	08/09/2021 15:10
7440-66-6	Zinc	58.4		mg/kg	10	08/09/2021 15:10

SAMPLE NO.

GB-30/4-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093006 Percent Moisture: 22.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.67	U	mg/kg	10	08/09/2021 15:11
7440-38-2	Arsenic	17.7		mg/kg	10	08/09/2021 15:11
7440-50-8	Copper	23.2		mg/kg	10	08/09/2021 15:11
7439-92-1	Lead	20.7		mg/kg	10	08/09/2021 15:11
7440-66-6	Zinc	63.4		mg/kg	10	08/09/2021 15:11

SAMPLE NO.

GB-23/2.5-3.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093007 Percent Moisture: 18.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.60	U	mg/kg	10	08/09/2021 15:18
7440-38-2	Arsenic	10.2		mg/kg	10	08/09/2021 15:18
7440-50-8	Copper	17.7		mg/kg	10	08/09/2021 15:18
7439-92-1	Lead	22.6		mg/kg	10	08/09/2021 15:18
7440-66-6	Zinc	53.9		mg/kg	10	08/09/2021 15:18

SAMPLE NO.

GB-23/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093008 Percent Moisture: 21.0

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.47	U	mg/kg	10	08/09/2021 15:19
7440-38-2	Arsenic	6.9		mg/kg	10	08/09/2021 15:19
7440-50-8	Copper	15.1		mg/kg	10	08/09/2021 15:19
7439-92-1	Lead	11.0		mg/kg	10	08/09/2021 15:19
7440-66-6	Zinc	46.6		mg/kg	10	08/09/2021 15:19

SAMPLE NO.

GB-16/3-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093009 Percent Moisture: 20.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.56	U	mg/kg	10	08/09/2021 15:21
7440-38-2	Arsenic	12.6		mg/kg	10	08/09/2021 15:21
7440-50-8	Copper	22.6		mg/kg	10	08/09/2021 15:21
7439-92-1	Lead	17.2		mg/kg	10	08/09/2021 15:21
7440-66-6	Zinc	67.3		mg/kg	10	08/09/2021 15:21

SAMPLE NO.

GB-16/4-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093010 Percent Moisture: 20.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.56	U	mg/kg	10	08/09/2021 15:23
7440-38-2	Arsenic	12.7		mg/kg	10	08/09/2021 15:23
7440-50-8	Copper	21.4		mg/kg	10	08/09/2021 15:23
7439-92-1	Lead	13.8		mg/kg	10	08/09/2021 15:23
7440-66-6	Zinc	54.0		mg/kg	10	08/09/2021 15:23

SAMPLE NO.

GB-10/1.5-2.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093011 Percent Moisture: 17.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.53	U	mg/kg	10	08/09/2021 15:24
7440-38-2	Arsenic	13.1		mg/kg	10	08/09/2021 15:24
7440-50-8	Copper	11.7		mg/kg	10	08/09/2021 15:24
7439-92-1	Lead	158		mg/kg	10	08/09/2021 15:24
7440-66-6	Zinc	66.3		mg/kg	10	08/09/2021 15:24

SAMPLE NO.

GB-10/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093012 Percent Moisture: 20.3

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.63	U	mg/kg	10	08/09/2021 15:26
7440-38-2	Arsenic	10.9		mg/kg	10	08/09/2021 15:26
7440-50-8	Copper	19.4		mg/kg	10	08/09/2021 15:26
7439-92-1	Lead	15.2		mg/kg	10	08/09/2021 15:26
7440-66-6	Zinc	61.5		mg/kg	10	08/09/2021 15:26

SAMPLE NO.

GB-01/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093013 Percent Moisture: 15.6

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.57	U	mg/kg	10	08/09/2021 15:31
7440-38-2	Arsenic	8.5		mg/kg	10	08/09/2021 15:31
7440-50-8	Copper	16.1		mg/kg	10	08/09/2021 15:31
7439-92-1	Lead	12.2		mg/kg	10	08/09/2021 15:31
7440-66-6	Zinc	50.4		mg/kg	10	08/09/2021 15:31

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Initial Calibration Verification Source: 45988

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Initial Calibration Verification				Continuing Calibration Verification						
	08/09/2021 14:07				08/09/2021 14:15			08/09/2021 14:55			
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	Control Limit
Antimony	50	49.5	98.9	90-110	40	39.5	98.6	40	40.6	101.5	90-110
Arsenic	50	49.9	99.9	90-110	40	40.2	100.4	40	41.4	103.4	90-110
Copper	50	50.7	101.4	90-110	40	40.5	101.4	40	41.7	104.3	90-110
Lead	50	48.8	97.6	90-110	40	39.2	98.0	40	39.6	99.1	90-110
Zinc	50	49.4	98.8	90-110	400	39.9	10.0	400	40.9	10.2	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 46144

Concentration Units: ug/L Instrument ID: 60ICM3

	Continuing Calibration Verification									
	08/09/2021 15:15			08/09/2021 15:34			08/09/2021 15:39			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Antimony	40	39.8	99.5	40	39.9	99.7	40	40.1	100.3	90-110
Arsenic	40	41.2	103.0	40	40.9	102.3	40	40.5	101.3	90-110
Copper	40	41.4	103.5	40	41.0	102.5	40	40.9	102.2	90-110
Lead	40	39.3	98.3	40	38.8	97.1	40	38.9	97.3	90-110
Zinc	400	40.1	10.0	400	39.9	10.0	400	39.8	9.9	90-110

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

CRDL Check Standard Source: 46657 Analysis Date/Time: 08/09/2021 14:11

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	102.5	50-150
Arsenic	1.0	1.0	104.5	50-150
Copper	1.0	1.1	108.1	50-150
Lead	1.0	0.95	95.2	50-150
Zinc	10.0	10.0	100.3	50-150

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

CRDL Check Standard Source: 46657 Analysis Date/Time: 08/09/2021 15:37

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	104.9	50-150
Arsenic	1.0	1.1	106.1	50-150
Copper	1.0	1.1	107.9	50-150
Lead	1.0	0.97	96.6	50-150
Zinc	10.0	10.2	101.5	50-150

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract : GSA-GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60ICM3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	08/09/2021 14:09	C	08/09/2021 14:17	C	08/09/2021 14:57	C	08/09/2021 15:16	C	2953701	C
Antimony	0.0096	U	0.0096	U	0.0096	U	0.0096	U	<0.54	U
Arsenic	0.0090	U	0.0090	U	0.0090	U	0.0090	U	<0.11	U
Copper	0.014	U	0.014	U	0.014	U	0.014	U	<0.31	U
Lead	0.018	J	0.012	J	0.012	J	0.013	J	<0.13	U
Zinc	0.11	U	0.11	U	0.11	U	0.11	U	<0.84	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract : GSA-GOODFELLOW

Method Blank Matrix: Instrument ID: 60ICM3

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	08/09/2021 15:35	C	08/09/2021 15:40	C		C
Antimony			0.0096	U	0.0096	U		
Arsenic			0.0090	U	0.0090	U		
Copper			0.014	U	0.014	U		
Lead			0.020	J	0.014	J		
Zinc			0.11	U	0.11	U		

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Solution A Run Date: 08/09/2021 14:12

ICS Source: 46286,46287 Solution AB Run Date: 08/09/2021 14:14

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Antimony	0	50	0.00829		51.93847	103.9	80-120
Arsenic	0	50	0.05595		52.28534	104.6	80-120
Copper	0	50	0.07798		47.03219	94.1	80-120
Lead	0	50	0.01937		51.37417	102.7	80-120
Zinc	0	500	0.19625		471.10793	94.2	80-120

SAMPLE NO.

2953703MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-10/3-5

Percent Moisture: 20.3

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	34.9	<0.63	101	34*
Arsenic	mg/kg	75-125	109	10.9	101	97
Copper	mg/kg	75-125	120	19.4	101	99
Lead	mg/kg	75-125	124	15.2	101	107
Zinc	mg/kg	75-125	160	61.5	101	98

* Spike Recovery outside QC Limits

SAMPLE NO.

2953704MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Matrix: Solid Basis: Dry Parent Sample ID: GB-10/3-5

Percent Moisture: 20.3

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	34.5	<0.63	95.1	36*
Arsenic	mg/kg	75-125	102	10.9	95.1	96
Copper	mg/kg	75-125	113	19.4	95.1	98
Lead	mg/kg	75-125	113	15.2	95.1	103
Zinc	mg/kg	75-125	153	61.5	95.1	96

* Spike Recovery outside QC Limits

SAMPLE NO.

2953704MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 20.3 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Antimony	20	34.9	34.5	1
Arsenic	20	109	102	7
Copper	20	120	113	6
Lead	20	124	113	9
Zinc	20	160	153	5

SAMPLE NO.

2953702LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	100	95.6	96	80	120
Arsenic	mg/kg	100	98.4	98	80	120
Copper	mg/kg	100	105	105	80	120
Lead	mg/kg	100	99.0	99	80	120
Zinc	mg/kg	100	96.4	96	80	120

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Preparation Method: None Instrument ID: 60ICM3

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Antimony	1.0	0.0096	01/10/2020
Arsenic	1.0	0.0090	01/10/2020
Copper	1.0	0.014	01/10/2020
Lead	1.0	0.0052	01/10/2020
Zinc	10.0	0.11	01/10/2020

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Preparation Method: EPA 3050 Instrument ID: 60ICM3

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Antimony	0.10	0.054	01/22/2021
Arsenic	0.10	0.011	01/22/2021
Copper	0.10	0.031	01/22/2021
Lead	0.050	0.013	01/22/2021
Zinc	0.50	0.084	01/22/2021

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract : GSA-GOODFELLOW

Instrument ID: 60ICM3 Effective Date:05/07/2019

Analyte	Concentration (ug/L)
Antimony	5000
Arsenic	5000
Copper	5000
Lead	5000
Zinc	50000

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Preparation Method: EPA 3050 Batch: MPRP 65411

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
2953701	2953701	08/06/2021	0.5	50
2953702	2953702	08/06/2021	0.5	50
2953703	2953703	08/06/2021	0.62	50
2953704	2953704	08/06/2021	0.66	50
60376093001	GB-44/3-5	08/06/2021	0.54	50
60376093002	GB-44/5-7	08/06/2021	0.55	50
60376093003	GB-37/3-5	08/06/2021	0.55	50
60376093004	GB-37/5-7	08/06/2021	0.67	50
60376093005	GB-30/3-4	08/06/2021	0.65	50
60376093006	GB-30/4-5	08/06/2021	0.52	50
60376093007	GB-23/2.5-3.5	08/06/2021	0.55	50
60376093008	GB-23/4-6	08/06/2021	0.73	50
60376093009	GB-16/3-4	08/06/2021	0.6	50
60376093010	GB-16/4-5	08/06/2021	0.61	50
60376093011	GB-10/1.5-2.5	08/06/2021	0.62	50
60376093012	GB-10/3-5	08/06/2021	0.54	50
60376093013	GB-01/2-3	08/06/2021	0.56	50

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Analysis Method: EPA 6020

Start Date: 08/09/2021 13:59 End Date: 08/09/2021 15:40

Sample Name	Lab Sample ID	D/F	Date	Time	As	Cu	Pb	Sb	Zn
19789348CAL0	19789348CAL0	1	08/09/2021	13:59	X	X	X	X	X
19789349CAL1	19789349CAL1	1	08/09/2021	14:01	X	X	X	X	X
19789350CAL2	19789350CAL2	1	08/09/2021	14:03	X	X	X	X	X
19789351CAL3	19789351CAL3	1	08/09/2021	14:04	X	X	X	X	X
19789352CAL4	19789352CAL4	1	08/09/2021	14:06	X	X	X	X	X
19789353ICV	19789353ICV	1	08/09/2021	14:07	X	X	X	X	X
19789354ICB	19789354ICB	1	08/09/2021	14:09	X	X	X	X	X
19789355CRDL	19789355CRDL	1	08/09/2021	14:11	X	X	X	X	X
19789356ICSA	19789356ICSA	1	08/09/2021	14:12	X	X	X	X	X
19789357ICSAB	19789357ICSAB	1	08/09/2021	14:14	X	X	X	X	X
19789358CCV	19789358CCV	1	08/09/2021	14:15	X	X	X	X	X
19789359CCB	19789359CCB	1	08/09/2021	14:17	X	X	X	X	X
19789366CCV	19789366CCV	1	08/09/2021	14:55	X	X	X	X	X
19789367CCB	19789367CCB	1	08/09/2021	14:57	X	X	X	X	X
2953701BLANK	2953701	10	08/09/2021	14:59	X	X	X	X	X
2953702LCS	2953702	10	08/09/2021	15:00	X	X	X	X	X
GB-44/3-5	60376093001	10	08/09/2021	15:03	X	X	X	X	X
GB-44/5-7	60376093002	10	08/09/2021	15:05	X	X	X	X	X
GB-37/3-5	60376093003	10	08/09/2021	15:07	X	X	X	X	X
GB-37/5-7	60376093004	10	08/09/2021	15:08	X	X	X	X	X
GB-30/3-4	60376093005	10	08/09/2021	15:10	X	X	X	X	X
GB-30/4-5	60376093006	10	08/09/2021	15:11	X	X	X	X	X
19789368CCV	19789368CCV	1	08/09/2021	15:15	X	X	X	X	X
19789369CCB	19789369CCB	1	08/09/2021	15:16	X	X	X	X	X
GB-23/2.5-3.5	60376093007	10	08/09/2021	15:18	X	X	X	X	X
GB-23/4-6	60376093008	10	08/09/2021	15:19	X	X	X	X	X
GB-16/3-4	60376093009	10	08/09/2021	15:21	X	X	X	X	X
GB-16/4-5	60376093010	10	08/09/2021	15:23	X	X	X	X	X
GB-10/1.5-2.5	60376093011	10	08/09/2021	15:24	X	X	X	X	X
GB-10/3-5	60376093012	10	08/09/2021	15:26	X	X	X	X	X
2953703MS	2953703	10	08/09/2021	15:27	X	X	X	X	X
2953704MSD	2953704	10	08/09/2021	15:29	X	X	X	X	X
GB-01/2-3	60376093013	10	08/09/2021	15:31	X	X	X	X	X
19789371CCV	19789371CCV	1	08/09/2021	15:34	X	X	X	X	X
19789372CCB	19789372CCB	1	08/09/2021	15:35	X	X	X	X	X
19789373CRDL	19789373CRDL	1	08/09/2021	15:37	X	X	X	X	X
19789374CCV	19789374CCV	1	08/09/2021	15:39	X	X	X	X	X
19789375CCB	19789375CCB	1	08/09/2021	15:40	X	X	X	X	X

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/09/2021 13:59 End Date: 08/09/2021 15:40

Sample Name	Time	Bi-209	Ga-71	Ho-165	In-115	Ir-193	Li-6	Rh-103
19789348CAL0	13:59	100.0	100.0	100.0	100.0	100.0	100.0	100.0
19789349CAL1	14:01	98.9	98.8	98.9	98.1	97.8	98.7	98.3
19789350CAL2	14:03	96.1	96.8	99.2	95.3	96.6	99.9	95.4
19789351CAL3	14:04	95.4	97.0	98.0	94.9	96.4	100.4	94.2
19789352CAL4	14:06	92.3	96.2	97.7	94.6	95.5	101.5	93.4
19789353ICV	14:07	95.7	98.9	100.3	97.3	97.6	102.0	96.2
19789354ICB	14:09	99.9	101.0	99.7	99.6	98.9	99.2	100.0
19789355CRDL	14:11	100.6	101.0	100.3	100.4	98.8	100.0	100.3
19789356ICSA	14:12	80.8	91.9	88.0	87.9	87.2	90.5	83.8
19789357ICSAB	14:14	81.0	92.7	88.7	88.1	87.9	89.5	84.6
19789358CCV	14:15	98.6	101.8	102.9	102.4	99.6	100.8	99.4
19789359CCB	14:17	103.1	103.6	102.5	104.6	102.0	101.0	103.8
19789366CCV	14:55	97.6	104.3	101.9	102.9	98.3	106.4	101.7
19789367CCB	14:57	103.5	107.5	103.1	106.2	102.0	106.2	106.6
2953701	14:59	102.3	104.5	101.4	104.8	99.1	93.7	102.9
2953702	15:00	99.8	103.6	100.6	104.6	97.2	96.6	101.5
GB-44/3-5	15:03	98.5	110.8	103.5	107.9	97.9	98.7	103.8
GB-44/5-7	15:05	100.8	112.6	105.7	109.3	100.0	99.1	106.0
GB-37/3-5	15:07	98.9	110.6	104.3	106.9	97.7	98.9	104.3
GB-37/5-7	15:08	98.4	112.6	105.3	108.2	98.6	100.2	103.9
GB-30/3-4	15:10	97.2	110.5	103.5	107.4	96.9	97.3	102.8
GB-30/4-5	15:11	99.1	113.0	105.4	108.6	97.9	99.4	104.9
19789368CCV	15:15	100.3	112.4	105.3	108.8	101.7	118.9	107.5
19789369CCB	15:16	105.1	113.6	106.1	110.6	103.9	114.7	114.4
GB-23/2.5-3.5	15:18	98.5	110.6	103.9	107.4	97.0	97.1	104.0
GB-23/4-6	15:19	98.6	112.1	104.7	107.7	97.6	99.0	104.2
GB-16/3-4	15:21	95.8	109.5	102.8	106.2	96.7	94.6	101.7
GB-16/4-5	15:23	98.4	113.8	104.8	108.7	98.0	98.4	104.9
GB-10/1.5-2.5	15:24	93.5	98.2	96.2	98.4	92.1	87.6	93.0
GB-10/3-5	15:26	98.0	114.3	103.4	109.2	97.6	97.4	104.8
2953703	15:27	95.2	110.8	101.2	105.8	96.0	104.9	101.2
2953704	15:29	95.1	111.4	101.2	105.1	95.6	105.0	103.5
GB-01/2-3	15:31	98.6	113.6	105.5	108.9	98.2	100.3	104.9
19789371CCV	15:34	101.6	113.8	105.8	108.9	101.1	122.2	108.3
19789372CCB	15:35	105.7	115.1	105.5	110.5	102.9	117.7	114.1
19789373CRDL	15:37	105.4	113.2	105.5	110.0	103.3	116.4	116.3
19789374CCV	15:39	100.2	109.4	104.0	106.3	100.2	114.4	104.9
19789375CCB	15:40	105.5	112.6	104.9	108.6	103.4	112.5	109.1

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60ICM3 Start Date: 08/09/2021 13:59 End Date: 08/09/2021 15:40

Sample Name	Time	Sc-45-IS	Tb-159	Y-89
19789348CAL0	13:59	100.0	100.0	100.0
19789349CAL1	14:01	99.9	100.2	99.9
19789350CAL2	14:03	97.7	99.0	97.5
19789351CAL3	14:04	98.8	98.2	98.2
19789352CAL4	14:06	99.2	98.0	98.1
19789353ICV	14:07	100.1	100.6	100.2
19789354ICB	14:09	101.4	100.6	100.9
19789355CRDL	14:11	100.5	100.7	101.1
19789356ICSA	14:12	93.1	89.3	90.3
19789357ICSAB	14:14	94.1	89.7	90.5
19789358CCV	14:15	101.3	103.0	102.4
19789359CCB	14:17	103.3	103.8	103.7
19789366CCV	14:55	107.3	102.7	105.3
19789367CCB	14:57	108.5	104.4	107.7
2953701	14:59	101.5	102.8	103.9
2953702	15:00	101.6	100.9	104.9
GB-44/3-5	15:03	110.3	105.0	202.9
GB-44/5-7	15:05	111.1	106.8	184.5
GB-37/3-5	15:07	110.3	105.2	203.0
GB-37/5-7	15:08	111.5	106.2	217.7
GB-30/3-4	15:10	110.9	104.8	211.3
GB-30/4-5	15:11	112.2	107.3	222.1
19789368CCV	15:15	117.5	106.3	111.6
19789369CCB	15:16	116.4	107.2	112.2
GB-23/2.5-3.5	15:18	109.3	105.0	193.7
GB-23/4-6	15:19	110.8	105.9	241.0
GB-16/3-4	15:21	108.1	104.2	213.4
GB-16/4-5	15:23	112.8	107.0	232.9
GB-10/1.5-2.5	15:24	96.3	96.5	142.8
GB-10/3-5	15:26	111.3	104.9	168.3
2953703	15:27	110.5	103.4	176.6
2953704	15:29	110.7	101.8	176.7
GB-01/2-3	15:31	111.8	106.5	213.6
19789371CCV	15:34	119.6	106.2	113.2
19789372CCB	15:35	117.7	106.7	113.0
19789373CRDL	15:37	116.0	106.5	112.5
19789374CCV	15:39	113.3	104.7	108.9
19789375CCB	15:40	114.7	106.1	110.6

SAMPLE NO.

GB-44/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.1		%	1	07/29/2021 11:13

SAMPLE NO.

GB-44/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	17.5		%	1	07/29/2021 11:13

SAMPLE NO.

GB-37/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	19.3		%	1	07/29/2021 11:13

SAMPLE NO.

GB-37/5-7

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.8		%	1	07/29/2021 11:13

SAMPLE NO.

GB-30/3-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	22.0		%	1	07/29/2021 11:13

SAMPLE NO.

GB-30/4-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	22.3		%	1	07/29/2021 11:13

SAMPLE NO.

GB-23/2.5-3.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	18.0		%	1	07/29/2021 11:13

SAMPLE NO.

GB-23/4-6

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	21.0		%	1	07/29/2021 11:14

SAMPLE NO.

GB-16/3-4

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.2		%	1	07/29/2021 11:14

SAMPLE NO.

GB-16/4-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.5		%	1	07/29/2021 11:14

SAMPLE NO.

GB-10/1.5-2.5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	17.6		%	1	07/29/2021 11:14

SAMPLE NO.

GB-10/3-5

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093012 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	20.3		%	1	07/29/2021 11:14

SAMPLE NO.

GB-01/2-3

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Lab Sample ID: 60376093013 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	15.6		%	1	07/29/2021 11:14

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract : GSA-GOODFELLOW

Method Blank Matrix: Solid Instrument ID: 60BAL2

Method Blank Concentration Units: %

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2948776	C
Container weight										
Dry weight w/dish weight										
Percent Moisture									<0.50	U
Wet weight w/dish weight										

SAMPLE NO.

2948777DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Matrix: Solid Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	20	23.2	23.1	1

FORM IX INORGANIC-1
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Preparation Method: ASTM D2974 Instrument ID: 60BAL2

Concentration Units: %

Analyte	PQL	MDL	MDL Date
Percent Moisture	0.10	0.10	01/01/2021

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Preparation Method: ASTM D2974 Batch: PMST 18405

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2948776	2948776	07/29/2021	1	1
2948777	2948777	07/29/2021	1	1
60376093001	GB-44/3-5	07/29/2021	1	1
60376093002	GB-44/5-7	07/29/2021	1	1
60376093003	GB-37/3-5	07/29/2021	1	1
60376093004	GB-37/5-7	07/29/2021	1	1
60376093005	GB-30/3-4	07/29/2021	1	1
60376093006	GB-30/4-5	07/29/2021	1	1
60376093007	GB-23/2.5-3.5	07/29/2021	1	1
60376093008	GB-23/4-6	07/29/2021	1	1
60376093009	GB-16/3-4	07/29/2021	1	1
60376093010	GB-16/4-5	07/29/2021	1	1
60376093011	GB-10/1.5-2.5	07/29/2021	1	1
60376093012	GB-10/3-5	07/29/2021	1	1
60376093013	GB-01/2-3	07/29/2021	1	1

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Kansas SDG No. : 60376093 Contract: GSA-GOODFELLOW

Instrument ID: 60BAL2 Analysis Method: ASTM D2974

Start Date: 07/29/2021 11:12 End Date: 07/29/2021 11:14

Sample Name	Lab Sample ID	D/F	Date	Time	MOIST
2948776BLANK	2948776	1	07/29/2021	11:12	X
2948777DUP	2948777	1	07/29/2021	11:13	X
60375889001	60375889001	1	07/29/2021	11:13	X
GB-44/3-5	60376093001	1	07/29/2021	11:13	X
GB-44/5-7	60376093002	1	07/29/2021	11:13	X
GB-37/3-5	60376093003	1	07/29/2021	11:13	X
GB-37/5-7	60376093004	1	07/29/2021	11:13	X
GB-30/3-4	60376093005	1	07/29/2021	11:13	X
GB-30/4-5	60376093006	1	07/29/2021	11:13	X
GB-23/2.5-3.5	60376093007	1	07/29/2021	11:13	X
GB-23/4-6	60376093008	1	07/29/2021	11:14	X
GB-16/3-4	60376093009	1	07/29/2021	11:14	X
GB-16/4-5	60376093010	1	07/29/2021	11:14	X
GB-10/1.5-2.5	60376093011	1	07/29/2021	11:14	X
GB-10/3-5	60376093012	1	07/29/2021	11:14	X
GB-01/2-3	60376093013	1	07/29/2021	11:14	X

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 60376299

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Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

August 09, 2021

Justin Carter
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on July 30, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

(b) (6)

Jeffrey Shopper
jeff.shopper@pacelabs.com
1(913)563-1408
Project Manager

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL
Jacquelin Lee, Burns & McDonnell

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CERTIFICATIONS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 20-020-0
Arkansas Drinking Water
Illinois Certification #: 200030
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212020-2
Oklahoma Certification #: 9205/9935
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-19-12
Utah Certification #: KS000212019-9
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

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SAMPLE SUMMARY

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60376299001	**RB-06**	Water	07/26/21 16:30	07/30/21 04:15
60376299002	**RB-07**	Water	07/27/21 15:50	07/30/21 04:15
60376299003	**RB-08**	Water	07/28/21 08:28	07/30/21 04:15

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SAMPLE ANALYTE COUNT

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60376299001	**RB-06**	EPA 8082	AJA1	8	PASI-K
		EPA 8270C by SIM	JMT	18	PASI-K
		EPA 5030B/8260	PGH	87	PASI-K
		EPA 8260	CJC	5	PASI-K
60376299002	**RB-07**	EPA 8082	AJA1	8	PASI-K
		EPA 8270C by SIM	JMT	18	PASI-K
		EPA 5030B/8260	PGH	87	PASI-K
		EPA 8260	CJC	5	PASI-K
60376299003	**RB-08**	EPA 8082	AJA1	8	PASI-K
		EPA 8270C by SIM	JMT	18	PASI-K
		EPA 5030B/8260	PGH	87	PASI-K
		EPA 8260	CJC	5	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Method: **EPA 8082**
Description: 8082 GCS PCB, LV
Client: BURNS & MCDONNELL
Date: August 09, 2021

General Information:
3 samples were analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 735426

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2950399)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- LCS (Lab ID: 2950400)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- RB-06 (Lab ID: 60376299001)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- RB-07 (Lab ID: 60376299002)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)
- RB-08 (Lab ID: 60376299003)
  - Decachlorobiphenyl (S)
  - PCB-1016 (Aroclor 1016)
  - PCB-1260 (Aroclor 1260)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Method: **EPA 8082**
Description: 8082 GCS PCB, LV
Client: BURNS & MCDONNELL
Date: August 09, 2021

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Method: **EPA 8270C by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: August 09, 2021

General Information:
3 samples were analyzed for EPA 8270C by SIM by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: BURNS & MCDONNELL
Date: August 09, 2021

General Information:
3 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 735760

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: 736397

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Method: **EPA 8260**
Description: 8260 MSV GRO and Oxygenates
Client: BURNS & MCDONNELL
Date: August 09, 2021

General Information:
3 samples were analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Sample: RB-06 **Lab ID: 60376299001** Collected: 07/26/21 16:30 Received: 07/30/21 04:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB, LV	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:43	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:43	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:43	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:43	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:43	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:43	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:43	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	75	%	25-120	1	08/02/21 14:05	08/02/21 19:43	2051-24-3	CH
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	83-32-9	
Acenaphthylene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	208-96-8	
Anthracene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	207-08-9	
Chrysene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	53-70-3	
Fluoranthene	ND	ug/L	0.48	1	08/02/21 10:00	08/02/21 10:51	206-44-0	
Fluorene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	193-39-5	
Naphthalene	ND	ug/L	0.48	1	08/02/21 10:00	08/02/21 10:51	91-20-3	
Phenanthrene	ND	ug/L	0.48	1	08/02/21 10:00	08/02/21 10:51	85-01-8	
Pyrene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 10:51	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	65	%	37-109	1	08/02/21 10:00	08/02/21 10:51	321-60-8	
Terphenyl-d14 (S)	78	%	34-120	1	08/02/21 10:00	08/02/21 10:51	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	1		08/04/21 08:07	67-64-1	
Acetonitrile	ND	ug/L	10.0	1		08/04/21 08:07	75-05-8	
Acrolein	ND	ug/L	50.0	1		08/04/21 08:07	107-02-8	
Acrylonitrile	ND	ug/L	20.0	1		08/04/21 08:07	107-13-1	
Benzene	ND	ug/L	1.0	1		08/04/21 08:07	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		08/04/21 08:07	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		08/04/21 08:07	74-97-5	
Bromodichloromethane	**1.3**	ug/L	1.0	1		08/04/21 08:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		08/04/21 08:07	75-25-2	
Bromomethane	ND	ug/L	5.0	1		08/04/21 08:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		08/04/21 08:07	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		08/04/21 08:07	104-51-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Sample: RB-06 **Lab ID: 60376299001** Collected: 07/26/21 16:30 Received: 07/30/21 04:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
sec-Butylbenzene	ND	ug/L	1.0	1		08/04/21 08:07	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		08/04/21 08:07	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		08/04/21 08:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		08/04/21 08:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		08/04/21 08:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		08/04/21 08:07	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	10.0	1		08/04/21 08:07	110-75-8	c2
Chloroform	**4.7**	ug/L	1.0	1		08/04/21 08:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		08/04/21 08:07	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		08/04/21 08:07	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		08/04/21 08:07	106-43-4	
Cyclohexane	ND	ug/L	1.0	1		08/04/21 08:07	110-82-7	
Cyclohexanone	ND	ug/L	20.0	1		08/04/21 08:07	108-94-1	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		08/04/21 08:07	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		08/04/21 08:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/04/21 08:07	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		08/04/21 08:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		08/04/21 08:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		08/04/21 08:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		08/04/21 08:07	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		08/04/21 08:07	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		08/04/21 08:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		08/04/21 08:07	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		08/04/21 08:07	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/04/21 08:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/04/21 08:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/04/21 08:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		08/04/21 08:07	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		08/04/21 08:07	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		08/04/21 08:07	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		08/04/21 08:07	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/04/21 08:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/04/21 08:07	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	1.0	1		08/04/21 08:07	60-29-7	
1,4-Dioxane (p-Dioxane)	ND	ug/L	100	1		08/04/21 08:07	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		08/04/21 08:07	100-41-4	
n-Heptane	ND	ug/L	10.0	1		08/04/21 08:07	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		08/04/21 08:07	87-68-3	
n-Hexane	ND	ug/L	10.0	1		08/04/21 08:07	110-54-3	
2-Hexanone	ND	ug/L	10.0	1		08/04/21 08:07	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/04/21 08:07	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		08/04/21 08:07	99-87-6	
Methyl acetate	ND	ug/L	1.0	1		08/04/21 08:07	79-20-9	
Methylcyclohexane	ND	ug/L	1.0	1		08/04/21 08:07	108-87-2	
Methylene Chloride	ND	ug/L	1.0	1		08/04/21 08:07	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		08/04/21 08:07	90-12-0	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Sample: RB-06 **Lab ID: 60376299001** Collected: 07/26/21 16:30 Received: 07/30/21 04:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
2-Methylnaphthalene	ND	ug/L	10.0	1		08/04/21 08:07	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/04/21 08:07	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		08/04/21 08:07	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		08/04/21 08:07	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		08/04/21 08:07	103-65-1	
Styrene	ND	ug/L	1.0	1		08/04/21 08:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/04/21 08:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		08/04/21 08:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/04/21 08:07	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		08/04/21 08:07	109-99-9	
Toluene	ND	ug/L	1.0	1		08/04/21 08:07	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		08/04/21 08:07	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		08/04/21 08:07	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		08/04/21 08:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/04/21 08:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		08/04/21 08:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/04/21 08:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		08/04/21 08:07	96-18-4	
1,2,3-Trimethylbenzene	ND	ug/L	1.0	1		08/04/21 08:07	526-73-8	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		08/04/21 08:07	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		08/04/21 08:07	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		08/04/21 08:07	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		08/04/21 08:07	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		08/04/21 08:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		08/04/21 08:07	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	80-120	1		08/04/21 08:07	460-00-4	
Toluene-d8 (S)	99	%	80-120	1		08/04/21 08:07	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120	1		08/04/21 08:07	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/04/21 08:07		
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260 Pace Analytical Services - Kansas City							
TPH-GRO	ND	ug/L	500	1		08/04/21 14:30		
Surrogates								
Toluene-d8 (S)	110	%	80-120	1		08/04/21 14:30	2037-26-5	
4-Bromofluorobenzene (S)	89	%	80-120	1		08/04/21 14:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	80-120	1		08/04/21 14:30	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/04/21 14:30		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Sample: RB-07 **Lab ID: 60376299002** Collected: 07/27/21 15:50 Received: 07/30/21 04:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB, LV	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:50	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:50	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:50	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:50	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:50	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:50	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.91	1	08/02/21 14:05	08/02/21 19:50	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	44	%	25-120	1	08/02/21 14:05	08/02/21 19:50	2051-24-3	CH
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/02/21 10:00	08/02/21 11:06	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/02/21 10:00	08/02/21 11:06	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/02/21 10:00	08/02/21 11:06	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/02/21 10:00	08/02/21 11:06	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	69	%	37-109	1	08/02/21 10:00	08/02/21 11:06	321-60-8	
Terphenyl-d14 (S)	76	%	34-120	1	08/02/21 10:00	08/02/21 11:06	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	1		08/05/21 14:52	67-64-1	
Acetonitrile	ND	ug/L	10.0	1		08/05/21 14:52	75-05-8	
Acrolein	ND	ug/L	50.0	1		08/05/21 14:52	107-02-8	
Acrylonitrile	ND	ug/L	20.0	1		08/05/21 14:52	107-13-1	
Benzene	ND	ug/L	1.0	1		08/05/21 14:52	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		08/05/21 14:52	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		08/05/21 14:52	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		08/05/21 14:52	75-27-4	
Bromoform	ND	ug/L	1.0	1		08/05/21 14:52	75-25-2	
Bromomethane	ND	ug/L	5.0	1		08/05/21 14:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		08/05/21 14:52	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		08/05/21 14:52	104-51-8	

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Sample: RB-07 **Lab ID: 60376299002** Collected: 07/27/21 15:50 Received: 07/30/21 04:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
sec-Butylbenzene	ND	ug/L	1.0	1		08/05/21 14:52	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		08/05/21 14:52	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		08/05/21 14:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		08/05/21 14:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		08/05/21 14:52	108-90-7	
Chloroethane	ND	ug/L	1.0	1		08/05/21 14:52	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	10.0	1		08/05/21 14:52	110-75-8	c2
Chloroform	ND	ug/L	1.0	1		08/05/21 14:52	67-66-3	
Chloromethane	ND	ug/L	1.0	1		08/05/21 14:52	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		08/05/21 14:52	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		08/05/21 14:52	106-43-4	
Cyclohexane	ND	ug/L	1.0	1		08/05/21 14:52	110-82-7	
Cyclohexanone	ND	ug/L	20.0	1		08/05/21 14:52	108-94-1	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		08/05/21 14:52	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		08/05/21 14:52	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/05/21 14:52	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		08/05/21 14:52	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		08/05/21 14:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		08/05/21 14:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		08/05/21 14:52	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		08/05/21 14:52	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		08/05/21 14:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		08/05/21 14:52	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		08/05/21 14:52	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/05/21 14:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/05/21 14:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/05/21 14:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		08/05/21 14:52	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		08/05/21 14:52	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		08/05/21 14:52	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		08/05/21 14:52	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/05/21 14:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/05/21 14:52	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	1.0	1		08/05/21 14:52	60-29-7	
1,4-Dioxane (p-Dioxane)	ND	ug/L	100	1		08/05/21 14:52	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		08/05/21 14:52	100-41-4	
n-Heptane	ND	ug/L	10.0	1		08/05/21 14:52	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		08/05/21 14:52	87-68-3	
n-Hexane	ND	ug/L	10.0	1		08/05/21 14:52	110-54-3	
2-Hexanone	ND	ug/L	10.0	1		08/05/21 14:52	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/05/21 14:52	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		08/05/21 14:52	99-87-6	
Methyl acetate	ND	ug/L	1.0	1		08/05/21 14:52	79-20-9	
Methylcyclohexane	ND	ug/L	1.0	1		08/05/21 14:52	108-87-2	
Methylene Chloride	ND	ug/L	1.0	1		08/05/21 14:52	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		08/05/21 14:52	90-12-0	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Sample: RB-07 **Lab ID: 60376299002** Collected: 07/27/21 15:50 Received: 07/30/21 04:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Kansas City							
2-Methylnaphthalene	ND	ug/L	10.0	1		08/05/21 14:52	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/05/21 14:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		08/05/21 14:52	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		08/05/21 14:52	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		08/05/21 14:52	103-65-1	
Styrene	ND	ug/L	1.0	1		08/05/21 14:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/05/21 14:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		08/05/21 14:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/05/21 14:52	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		08/05/21 14:52	109-99-9	
Toluene	ND	ug/L	1.0	1		08/05/21 14:52	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		08/05/21 14:52	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		08/05/21 14:52	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		08/05/21 14:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/05/21 14:52	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		08/05/21 14:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/05/21 14:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		08/05/21 14:52	96-18-4	
1,2,3-Trimethylbenzene	ND	ug/L	1.0	1		08/05/21 14:52	526-73-8	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		08/05/21 14:52	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		08/05/21 14:52	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		08/05/21 14:52	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		08/05/21 14:52	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		08/05/21 14:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		08/05/21 14:52	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	80-120	1		08/05/21 14:52	460-00-4	
Toluene-d8 (S)	100	%	80-120	1		08/05/21 14:52	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120	1		08/05/21 14:52	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/05/21 14:52		
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260							
	Pace Analytical Services - Kansas City							
TPH-GRO	ND	ug/L	500	1		08/06/21 13:52		
Surrogates								
Toluene-d8 (S)	106	%	80-120	1		08/06/21 13:52	2037-26-5	
4-Bromofluorobenzene (S)	84	%	80-120	1		08/06/21 13:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	80-120	1		08/06/21 13:52	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/06/21 13:52		

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Sample: RB-08 **Lab ID: 60376299003** Collected: 07/28/21 08:28 Received: 07/30/21 04:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB, LV	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Kansas City							
PCB-1016 (Aroclor 1016)	ND	ug/L	1.0	1	08/02/21 14:05	08/02/21 19:57	12674-11-2	CH
PCB-1221 (Aroclor 1221)	ND	ug/L	1.0	1	08/02/21 14:05	08/02/21 19:57	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	1.0	1	08/02/21 14:05	08/02/21 19:57	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	1.0	1	08/02/21 14:05	08/02/21 19:57	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	1.0	1	08/02/21 14:05	08/02/21 19:57	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	1.0	1	08/02/21 14:05	08/02/21 19:57	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	1.0	1	08/02/21 14:05	08/02/21 19:57	11096-82-5	CH
Surrogates								
Decachlorobiphenyl (S)	62	%	25-120	1	08/02/21 14:05	08/02/21 19:57	2051-24-3	CH
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C Pace Analytical Services - Kansas City							
Acenaphthene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	83-32-9	
Acenaphthylene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	208-96-8	
Anthracene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	207-08-9	
Chrysene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	53-70-3	
Fluoranthene	ND	ug/L	0.48	1	08/02/21 10:00	08/02/21 11:20	206-44-0	
Fluorene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	193-39-5	
Naphthalene	ND	ug/L	0.48	1	08/02/21 10:00	08/02/21 11:20	91-20-3	
Phenanthrene	ND	ug/L	0.48	1	08/02/21 10:00	08/02/21 11:20	85-01-8	
Pyrene	ND	ug/L	0.095	1	08/02/21 10:00	08/02/21 11:20	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	69	%	37-109	1	08/02/21 10:00	08/02/21 11:20	321-60-8	
Terphenyl-d14 (S)	80	%	34-120	1	08/02/21 10:00	08/02/21 11:20	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	1		08/05/21 15:06	67-64-1	
Acetonitrile	ND	ug/L	10.0	1		08/05/21 15:06	75-05-8	
Acrolein	ND	ug/L	50.0	1		08/05/21 15:06	107-02-8	
Acrylonitrile	ND	ug/L	20.0	1		08/05/21 15:06	107-13-1	
Benzene	ND	ug/L	1.0	1		08/05/21 15:06	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		08/05/21 15:06	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		08/05/21 15:06	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		08/05/21 15:06	75-27-4	
Bromoform	ND	ug/L	1.0	1		08/05/21 15:06	75-25-2	
Bromomethane	ND	ug/L	5.0	1		08/05/21 15:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		08/05/21 15:06	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		08/05/21 15:06	104-51-8	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Sample: RB-08 **Lab ID: 60376299003** Collected: 07/28/21 08:28 Received: 07/30/21 04:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
sec-Butylbenzene	ND	ug/L	1.0	1		08/05/21 15:06	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		08/05/21 15:06	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		08/05/21 15:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		08/05/21 15:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		08/05/21 15:06	108-90-7	
Chloroethane	ND	ug/L	1.0	1		08/05/21 15:06	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	10.0	1		08/05/21 15:06	110-75-8	c2
Chloroform	ND	ug/L	1.0	1		08/05/21 15:06	67-66-3	
Chloromethane	ND	ug/L	1.0	1		08/05/21 15:06	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		08/05/21 15:06	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		08/05/21 15:06	106-43-4	
Cyclohexane	ND	ug/L	1.0	1		08/05/21 15:06	110-82-7	
Cyclohexanone	ND	ug/L	20.0	1		08/05/21 15:06	108-94-1	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		08/05/21 15:06	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		08/05/21 15:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/05/21 15:06	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		08/05/21 15:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		08/05/21 15:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		08/05/21 15:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		08/05/21 15:06	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		08/05/21 15:06	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		08/05/21 15:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		08/05/21 15:06	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		08/05/21 15:06	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/05/21 15:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/05/21 15:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/05/21 15:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		08/05/21 15:06	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		08/05/21 15:06	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		08/05/21 15:06	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		08/05/21 15:06	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/05/21 15:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/05/21 15:06	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	1.0	1		08/05/21 15:06	60-29-7	
1,4-Dioxane (p-Dioxane)	ND	ug/L	100	1		08/05/21 15:06	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		08/05/21 15:06	100-41-4	
n-Heptane	ND	ug/L	10.0	1		08/05/21 15:06	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		08/05/21 15:06	87-68-3	
n-Hexane	ND	ug/L	10.0	1		08/05/21 15:06	110-54-3	
2-Hexanone	ND	ug/L	10.0	1		08/05/21 15:06	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/05/21 15:06	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		08/05/21 15:06	99-87-6	
Methyl acetate	ND	ug/L	1.0	1		08/05/21 15:06	79-20-9	
Methylcyclohexane	ND	ug/L	1.0	1		08/05/21 15:06	108-87-2	
Methylene Chloride	ND	ug/L	1.0	1		08/05/21 15:06	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		08/05/21 15:06	90-12-0	

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ANALYTICAL RESULTS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Sample: RB-08 **Lab ID: 60376299003** Collected: 07/28/21 08:28 Received: 07/30/21 04:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Kansas City							
2-Methylnaphthalene	ND	ug/L	10.0	1		08/05/21 15:06	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/05/21 15:06	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		08/05/21 15:06	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		08/05/21 15:06	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		08/05/21 15:06	103-65-1	
Styrene	ND	ug/L	1.0	1		08/05/21 15:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/05/21 15:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		08/05/21 15:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/05/21 15:06	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		08/05/21 15:06	109-99-9	
Toluene	ND	ug/L	1.0	1		08/05/21 15:06	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		08/05/21 15:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		08/05/21 15:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		08/05/21 15:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/05/21 15:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		08/05/21 15:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/05/21 15:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		08/05/21 15:06	96-18-4	
1,2,3-Trimethylbenzene	ND	ug/L	1.0	1		08/05/21 15:06	526-73-8	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		08/05/21 15:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		08/05/21 15:06	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		08/05/21 15:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		08/05/21 15:06	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		08/05/21 15:06	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		08/05/21 15:06	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	80-120	1		08/05/21 15:06	460-00-4	
Toluene-d8 (S)	99	%	80-120	1		08/05/21 15:06	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120	1		08/05/21 15:06	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/05/21 15:06		
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260							
	Pace Analytical Services - Kansas City							
TPH-GRO	ND	ug/L	500	1		08/06/21 14:08		
Surrogates								
Toluene-d8 (S)	106	%	80-120	1		08/06/21 14:08	2037-26-5	
4-Bromofluorobenzene (S)	84	%	80-120	1		08/06/21 14:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	80-120	1		08/06/21 14:08	2199-69-1	
Preservation pH	**1.0**		0.10	1		08/06/21 14:08		

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

QC Batch: 735760
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60376299001

METHOD BLANK: 2951244 Matrix: Water
Associated Lab Samples: 60376299001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	08/04/21 07:53	
1,1,1-Trichloroethane	ug/L	ND	1.0	08/04/21 07:53	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	08/04/21 07:53	
1,1,2-Trichloroethane	ug/L	ND	1.0	08/04/21 07:53	
1,1-Dichloroethane	ug/L	ND	1.0	08/04/21 07:53	
1,1-Dichloroethene	ug/L	ND	1.0	08/04/21 07:53	
1,1-Dichloropropene	ug/L	ND	1.0	08/04/21 07:53	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	08/04/21 07:53	
1,2,3-Trichloropropane	ug/L	ND	2.5	08/04/21 07:53	
1,2,3-Trimethylbenzene	ug/L	ND	1.0	08/04/21 07:53	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	08/04/21 07:53	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	08/04/21 07:53	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	08/04/21 07:53	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	08/04/21 07:53	
1,2-Dichlorobenzene	ug/L	ND	1.0	08/04/21 07:53	
1,2-Dichloroethane	ug/L	ND	1.0	08/04/21 07:53	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	08/04/21 07:53	
1,2-Dichloropropane	ug/L	ND	1.0	08/04/21 07:53	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	08/04/21 07:53	
1,3-Dichlorobenzene	ug/L	ND	1.0	08/04/21 07:53	
1,3-Dichloropropane	ug/L	ND	1.0	08/04/21 07:53	
1,4-Dichlorobenzene	ug/L	ND	1.0	08/04/21 07:53	
1,4-Dioxane (p-Dioxane)	ug/L	ND	100	08/04/21 07:53	
1-Methylnaphthalene	ug/L	ND	10.0	08/04/21 07:53	
2,2-Dichloropropane	ug/L	ND	1.0	08/04/21 07:53	
2-Butanone (MEK)	ug/L	ND	10.0	08/04/21 07:53	
2-Chloroethylvinyl ether	ug/L	ND	10.0	08/04/21 07:53	
2-Chlorotoluene	ug/L	ND	1.0	08/04/21 07:53	
2-Hexanone	ug/L	ND	10.0	08/04/21 07:53	
2-Methylnaphthalene	ug/L	ND	10.0	08/04/21 07:53	
4-Chlorotoluene	ug/L	ND	1.0	08/04/21 07:53	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	08/04/21 07:53	
Acetone	ug/L	ND	10.0	08/04/21 07:53	
Acetonitrile	ug/L	ND	10.0	08/04/21 07:53	
Acrolein	ug/L	ND	50.0	08/04/21 07:53	
Acrylonitrile	ug/L	ND	20.0	08/04/21 07:53	
Benzene	ug/L	ND	1.0	08/04/21 07:53	
Bromobenzene	ug/L	ND	1.0	08/04/21 07:53	
Bromochloromethane	ug/L	ND	1.0	08/04/21 07:53	
Bromodichloromethane	ug/L	ND	1.0	08/04/21 07:53	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

METHOD BLANK: 2951244 Matrix: Water
Associated Lab Samples: 60376299001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromoform	ug/L	ND	1.0	08/04/21 07:53	
Bromomethane	ug/L	ND	5.0	08/04/21 07:53	
Carbon disulfide	ug/L	ND	5.0	08/04/21 07:53	
Carbon tetrachloride	ug/L	ND	1.0	08/04/21 07:53	
Chlorobenzene	ug/L	ND	1.0	08/04/21 07:53	
Chloroethane	ug/L	ND	1.0	08/04/21 07:53	
Chloroform	ug/L	ND	1.0	08/04/21 07:53	
Chloromethane	ug/L	ND	1.0	08/04/21 07:53	
cis-1,2-Dichloroethene	ug/L	ND	1.0	08/04/21 07:53	
cis-1,3-Dichloropropene	ug/L	ND	1.0	08/04/21 07:53	
Cyclohexane	ug/L	ND	1.0	08/04/21 07:53	
Cyclohexanone	ug/L	ND	20.0	08/04/21 07:53	
Dibromochloromethane	ug/L	ND	1.0	08/04/21 07:53	
Dibromomethane	ug/L	ND	1.0	08/04/21 07:53	
Dichlorodifluoromethane	ug/L	ND	1.0	08/04/21 07:53	
Diethyl ether (Ethyl ether)	ug/L	ND	1.0	08/04/21 07:53	
Ethylbenzene	ug/L	ND	1.0	08/04/21 07:53	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	08/04/21 07:53	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	08/04/21 07:53	
m&p-Xylene	ug/L	ND	2.0	08/04/21 07:53	
Methyl acetate	ug/L	ND	1.0	08/04/21 07:53	
Methyl-tert-butyl ether	ug/L	ND	1.0	08/04/21 07:53	
Methylcyclohexane	ug/L	ND	1.0	08/04/21 07:53	
Methylene Chloride	ug/L	ND	1.0	08/04/21 07:53	
n-Butylbenzene	ug/L	ND	1.0	08/04/21 07:53	
n-Heptane	ug/L	ND	10.0	08/04/21 07:53	
n-Hexane	ug/L	ND	10.0	08/04/21 07:53	
n-Propylbenzene	ug/L	ND	1.0	08/04/21 07:53	
Naphthalene	ug/L	ND	10.0	08/04/21 07:53	
o-Xylene	ug/L	ND	1.0	08/04/21 07:53	
p-Isopropyltoluene	ug/L	ND	1.0	08/04/21 07:53	
sec-Butylbenzene	ug/L	ND	1.0	08/04/21 07:53	
Styrene	ug/L	ND	1.0	08/04/21 07:53	
tert-Butylbenzene	ug/L	ND	1.0	08/04/21 07:53	
Tetrachloroethene	ug/L	ND	1.0	08/04/21 07:53	
Tetrahydrofuran	ug/L	ND	5.0	08/04/21 07:53	
Toluene	ug/L	ND	1.0	08/04/21 07:53	
trans-1,2-Dichloroethene	ug/L	ND	1.0	08/04/21 07:53	
trans-1,3-Dichloropropene	ug/L	ND	1.0	08/04/21 07:53	
Trichloroethene	ug/L	ND	1.0	08/04/21 07:53	
Trichlorofluoromethane	ug/L	ND	1.0	08/04/21 07:53	
Vinyl chloride	ug/L	ND	1.0	08/04/21 07:53	
Xylene (Total)	ug/L	ND	3.0	08/04/21 07:53	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120	08/04/21 07:53	
4-Bromofluorobenzene (S)	%	95	80-120	08/04/21 07:53	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

METHOD BLANK: 2951244 Matrix: Water
Associated Lab Samples: 60376299001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene-d8 (S)	%	98	80-120	08/04/21 07:53	

LABORATORY CONTROL SAMPLE: 2951245

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.8	94	80-120	
1,1,1-Trichloroethane	ug/L	20	19.3	96	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	17.4	87	75-125	
1,1,2-Trichloroethane	ug/L	20	18.2	91	80-120	
1,1-Dichloroethane	ug/L	20	19.5	98	75-125	
1,1-Dichloroethene	ug/L	20	20.9	104	80-120	
1,1-Dichloropropene	ug/L	20	19.0	95	80-125	
1,2,3-Trichlorobenzene	ug/L	20	18.3	91	75-125	
1,2,3-Trichloropropane	ug/L	20	19.1	95	80-125	
1,2,3-Trimethylbenzene	ug/L	20	19.5	98	80-125	
1,2,4-Trichlorobenzene	ug/L	20	18.3	91	75-120	
1,2,4-Trimethylbenzene	ug/L	20	19.4	97	80-125	
1,2-Dibromo-3-chloropropane	ug/L	20	18.7	93	70-120	
1,2-Dibromoethane (EDB)	ug/L	20	19.5	97	80-120	
1,2-Dichlorobenzene	ug/L	20	19.3	97	80-120	
1,2-Dichloroethane	ug/L	20	19.9	99	75-120	
1,2-Dichloroethene (Total)	ug/L	40	39.3	98	80-120	
1,2-Dichloropropane	ug/L	20	18.2	91	80-125	
1,3,5-Trimethylbenzene	ug/L	20	19.0	95	80-125	
1,3-Dichlorobenzene	ug/L	20	18.8	94	80-120	
1,3-Dichloropropane	ug/L	20	17.9	89	80-120	
1,4-Dichlorobenzene	ug/L	20	18.4	92	80-120	
1,4-Dioxane (p-Dioxane)	ug/L	100	118	118	10-180	
1-Methylnaphthalene	ug/L	20	21.6	108	40-160	
2,2-Dichloropropane	ug/L	20	19.8	99	60-130	
2-Butanone (MEK)	ug/L	100	98.7	99	40-150	
2-Chloroethylvinyl ether	ug/L	100	92.3	92	30-165	
2-Chlorotoluene	ug/L	20	18.4	92	80-120	
2-Hexanone	ug/L	100	88.8	89	45-150	
2-Methylnaphthalene	ug/L	20	21.1	106	55-150	
4-Chlorotoluene	ug/L	20	19.1	96	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	86.1	86	65-140	
Acetone	ug/L	100	102	102	20-175	
Acetonitrile	ug/L	100	93.9	94	25-180	
Acrolein	ug/L	100	87.8	88	10-200	
Acrylonitrile	ug/L	100	94.7	95	70-135	
Benzene	ug/L	20	18.3	91	80-120	
Bromobenzene	ug/L	20	19.5	97	80-120	
Bromochloromethane	ug/L	20	20.9	105	80-125	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

LABORATORY CONTROL SAMPLE: 2951245

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	20	19.2	96	80-125	
Bromoform	ug/L	20	18.5	92	60-135	
Bromomethane	ug/L	20	17.2	86	10-165	
Carbon disulfide	ug/L	20	20.4	102	75-135	
Carbon tetrachloride	ug/L	20	19.8	99	80-125	
Chlorobenzene	ug/L	20	19.3	97	80-120	
Chloroethane	ug/L	20	20.4	102	70-130	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	19.3	97	35-155	
cis-1,2-Dichloroethene	ug/L	20	19.1	95	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.7	93	80-125	
Cyclohexane	ug/L	20	17.7	88	80-130	
Cyclohexanone	ug/L	100	88.2	88	10-180	
Dibromochloromethane	ug/L	20	19.4	97	70-120	
Dibromomethane	ug/L	20	19.0	95	80-120	
Dichlorodifluoromethane	ug/L	20	19.2	96	50-150	
Diethyl ether (Ethyl ether)	ug/L	20	19.9	99	70-140	
Ethylbenzene	ug/L	20	18.6	93	80-120	
Hexachloro-1,3-butadiene	ug/L	20	20.4	102	65-135	
Isopropylbenzene (Cumene)	ug/L	20	19.5	97	80-125	
m&p-Xylene	ug/L	40	37.1	93	75-130	
Methyl acetate	ug/L	100	96.0	96	45-140	
Methyl-tert-butyl ether	ug/L	20	19.4	97	65-130	
Methylcyclohexane	ug/L	20	18.8	94	80-125	
Methylene Chloride	ug/L	20	18.8	94	75-120	
n-Butylbenzene	ug/L	20	18.8	94	80-125	
n-Heptane	ug/L	20	18.4	92	10-180	
n-Hexane	ug/L	20	17.6	88	60-135	
n-Propylbenzene	ug/L	20	18.0	90	80-120	
Naphthalene	ug/L	20	17.0	85	70-120	
o-Xylene	ug/L	20	18.1	91	75-130	
p-Isopropyltoluene	ug/L	20	19.4	97	80-135	
sec-Butylbenzene	ug/L	20	18.7	94	80-120	
Styrene	ug/L	20	19.0	95	80-120	
tert-Butylbenzene	ug/L	20	18.9	95	80-120	
Tetrachloroethene	ug/L	20	19.6	98	80-120	
Tetrahydrofuran	ug/L	100	83.4	83	75-125	
Toluene	ug/L	20	17.7	88	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.2	101	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.8	94	75-120	
Trichloroethene	ug/L	20	18.8	94	80-120	
Trichlorofluoromethane	ug/L	20	22.6	113	80-130	
Vinyl chloride	ug/L	20	19.9	99	65-130	
Xylene (Total)	ug/L	60	55.3	92	80-120	
1,2-Dichlorobenzene-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			98	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

QC Batch: 736397
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376299002, 60376299003

METHOD BLANK: 2953354 Matrix: Water
Associated Lab Samples: 60376299002, 60376299003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	08/05/21 14:38	
1,1,1-Trichloroethane	ug/L	ND	1.0	08/05/21 14:38	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	08/05/21 14:38	
1,1,2-Trichloroethane	ug/L	ND	1.0	08/05/21 14:38	
1,1-Dichloroethane	ug/L	ND	1.0	08/05/21 14:38	
1,1-Dichloroethene	ug/L	ND	1.0	08/05/21 14:38	
1,1-Dichloropropene	ug/L	ND	1.0	08/05/21 14:38	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	08/05/21 14:38	
1,2,3-Trichloropropane	ug/L	ND	2.5	08/05/21 14:38	
1,2,3-Trimethylbenzene	ug/L	ND	1.0	08/05/21 14:38	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	08/05/21 14:38	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	08/05/21 14:38	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	08/05/21 14:38	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	08/05/21 14:38	
1,2-Dichlorobenzene	ug/L	ND	1.0	08/05/21 14:38	
1,2-Dichloroethane	ug/L	ND	1.0	08/05/21 14:38	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	08/05/21 14:38	
1,2-Dichloropropane	ug/L	ND	1.0	08/05/21 14:38	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	08/05/21 14:38	
1,3-Dichlorobenzene	ug/L	ND	1.0	08/05/21 14:38	
1,3-Dichloropropane	ug/L	ND	1.0	08/05/21 14:38	
1,4-Dichlorobenzene	ug/L	ND	1.0	08/05/21 14:38	
1,4-Dioxane (p-Dioxane)	ug/L	ND	100	08/05/21 14:38	
1-Methylnaphthalene	ug/L	ND	10.0	08/05/21 14:38	
2,2-Dichloropropane	ug/L	ND	1.0	08/05/21 14:38	
2-Butanone (MEK)	ug/L	ND	10.0	08/05/21 14:38	
2-Chloroethylvinyl ether	ug/L	ND	10.0	08/05/21 14:38	
2-Chlorotoluene	ug/L	ND	1.0	08/05/21 14:38	
2-Hexanone	ug/L	ND	10.0	08/05/21 14:38	
2-Methylnaphthalene	ug/L	ND	10.0	08/05/21 14:38	
4-Chlorotoluene	ug/L	ND	1.0	08/05/21 14:38	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	08/05/21 14:38	
Acetone	ug/L	ND	10.0	08/05/21 14:38	
Acetonitrile	ug/L	ND	10.0	08/05/21 14:38	
Acrolein	ug/L	ND	50.0	08/05/21 14:38	
Acrylonitrile	ug/L	ND	20.0	08/05/21 14:38	
Benzene	ug/L	ND	1.0	08/05/21 14:38	
Bromobenzene	ug/L	ND	1.0	08/05/21 14:38	
Bromochloromethane	ug/L	ND	1.0	08/05/21 14:38	
Bromodichloromethane	ug/L	ND	1.0	08/05/21 14:38	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

METHOD BLANK: 2953354 Matrix: Water
Associated Lab Samples: 60376299002, 60376299003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromoform	ug/L	ND	1.0	08/05/21 14:38	
Bromomethane	ug/L	ND	5.0	08/05/21 14:38	
Carbon disulfide	ug/L	ND	5.0	08/05/21 14:38	
Carbon tetrachloride	ug/L	ND	1.0	08/05/21 14:38	
Chlorobenzene	ug/L	ND	1.0	08/05/21 14:38	
Chloroethane	ug/L	ND	1.0	08/05/21 14:38	
Chloroform	ug/L	ND	1.0	08/05/21 14:38	
Chloromethane	ug/L	ND	1.0	08/05/21 14:38	
cis-1,2-Dichloroethene	ug/L	ND	1.0	08/05/21 14:38	
cis-1,3-Dichloropropene	ug/L	ND	1.0	08/05/21 14:38	
Cyclohexane	ug/L	ND	1.0	08/05/21 14:38	
Cyclohexanone	ug/L	ND	20.0	08/05/21 14:38	
Dibromochloromethane	ug/L	ND	1.0	08/05/21 14:38	
Dibromomethane	ug/L	ND	1.0	08/05/21 14:38	
Dichlorodifluoromethane	ug/L	ND	1.0	08/05/21 14:38	
Diethyl ether (Ethyl ether)	ug/L	ND	1.0	08/05/21 14:38	
Ethylbenzene	ug/L	ND	1.0	08/05/21 14:38	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	08/05/21 14:38	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	08/05/21 14:38	
m&p-Xylene	ug/L	ND	2.0	08/05/21 14:38	
Methyl acetate	ug/L	ND	1.0	08/05/21 14:38	
Methyl-tert-butyl ether	ug/L	ND	1.0	08/05/21 14:38	
Methylcyclohexane	ug/L	ND	1.0	08/05/21 14:38	
Methylene Chloride	ug/L	ND	1.0	08/05/21 14:38	
n-Butylbenzene	ug/L	ND	1.0	08/05/21 14:38	
n-Heptane	ug/L	ND	10.0	08/05/21 14:38	
n-Hexane	ug/L	ND	10.0	08/05/21 14:38	
n-Propylbenzene	ug/L	ND	1.0	08/05/21 14:38	
Naphthalene	ug/L	ND	10.0	08/05/21 14:38	
o-Xylene	ug/L	ND	1.0	08/05/21 14:38	
p-Isopropyltoluene	ug/L	ND	1.0	08/05/21 14:38	
sec-Butylbenzene	ug/L	ND	1.0	08/05/21 14:38	
Styrene	ug/L	ND	1.0	08/05/21 14:38	
tert-Butylbenzene	ug/L	ND	1.0	08/05/21 14:38	
Tetrachloroethene	ug/L	ND	1.0	08/05/21 14:38	
Tetrahydrofuran	ug/L	ND	5.0	08/05/21 14:38	
Toluene	ug/L	ND	1.0	08/05/21 14:38	
trans-1,2-Dichloroethene	ug/L	ND	1.0	08/05/21 14:38	
trans-1,3-Dichloropropene	ug/L	ND	1.0	08/05/21 14:38	
Trichloroethene	ug/L	ND	1.0	08/05/21 14:38	
Trichlorofluoromethane	ug/L	ND	1.0	08/05/21 14:38	
Vinyl chloride	ug/L	ND	1.0	08/05/21 14:38	
Xylene (Total)	ug/L	ND	3.0	08/05/21 14:38	
1,2-Dichlorobenzene-d4 (S)	%	101	80-120	08/05/21 14:38	
4-Bromofluorobenzene (S)	%	101	80-120	08/05/21 14:38	

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REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

METHOD BLANK: 2953354 Matrix: Water
Associated Lab Samples: 60376299002, 60376299003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene-d8 (S)	%	100	80-120	08/05/21 14:38	

LABORATORY CONTROL SAMPLE: 2953355

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.5	98	80-120	
1,1,1-Trichloroethane	ug/L	20	18.8	94	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	75-125	
1,1,2-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1-Dichloroethane	ug/L	20	20.2	101	75-125	
1,1-Dichloroethene	ug/L	20	19.4	97	80-120	
1,1-Dichloropropene	ug/L	20	19.4	97	80-125	
1,2,3-Trichlorobenzene	ug/L	20	19.8	99	75-125	
1,2,3-Trichloropropane	ug/L	20	21.3	106	80-125	
1,2,3-Trimethylbenzene	ug/L	20	20.2	101	80-125	
1,2,4-Trichlorobenzene	ug/L	20	19.7	99	75-120	
1,2,4-Trimethylbenzene	ug/L	20	19.9	100	80-125	
1,2-Dibromo-3-chloropropane	ug/L	20	18.3	92	70-120	
1,2-Dibromoethane (EDB)	ug/L	20	20.7	103	80-120	
1,2-Dichlorobenzene	ug/L	20	19.5	98	80-120	
1,2-Dichloroethane	ug/L	20	20.0	100	75-120	
1,2-Dichloroethene (Total)	ug/L	40	39.1	98	80-120	
1,2-Dichloropropane	ug/L	20	19.5	97	80-125	
1,3,5-Trimethylbenzene	ug/L	20	19.6	98	80-125	
1,3-Dichlorobenzene	ug/L	20	20.2	101	80-120	
1,3-Dichloropropane	ug/L	20	20.1	100	80-120	
1,4-Dichlorobenzene	ug/L	20	20.2	101	80-120	
1,4-Dioxane (p-Dioxane)	ug/L	100	112	112	10-180	
1-Methylnaphthalene	ug/L	20	22.6	113	40-160	
2,2-Dichloropropane	ug/L	20	18.5	93	60-130	
2-Butanone (MEK)	ug/L	100	114	114	40-150	
2-Chloroethylvinyl ether	ug/L	100	101	101	30-165	
2-Chlorotoluene	ug/L	20	20.0	100	80-120	
2-Hexanone	ug/L	100	116	116	45-150	
2-Methylnaphthalene	ug/L	20	22.4	112	55-150	
4-Chlorotoluene	ug/L	20	19.7	98	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	107	107	65-140	
Acetone	ug/L	100	121	121	20-175	
Acetonitrile	ug/L	100	98.6	99	25-180	
Acrolein	ug/L	100	102	102	10-200	
Acrylonitrile	ug/L	100	104	104	70-135	
Benzene	ug/L	20	19.8	99	80-120	
Bromobenzene	ug/L	20	19.7	98	80-120	
Bromochloromethane	ug/L	20	21.9	109	80-125	

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(913)599-5665

QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

LABORATORY CONTROL SAMPLE: 2953355

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	20	20.1	100	80-125	
Bromoform	ug/L	20	21.9	109	60-135	
Bromomethane	ug/L	20	19.4	97	10-165	
Carbon disulfide	ug/L	20	20.0	100	75-135	
Carbon tetrachloride	ug/L	20	19.8	99	80-125	
Chlorobenzene	ug/L	20	20.1	100	80-120	
Chloroethane	ug/L	20	17.5	88	70-130	
Chloroform	ug/L	20	20.0	100	80-120	
Chloromethane	ug/L	20	20.3	102	35-155	
cis-1,2-Dichloroethene	ug/L	20	19.5	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.5	103	80-125	
Cyclohexane	ug/L	20	20.5	103	80-130	
Cyclohexanone	ug/L	100	102	102	10-180	
Dibromochloromethane	ug/L	20	19.8	99	70-120	
Dibromomethane	ug/L	20	20.3	102	80-120	
Dichlorodifluoromethane	ug/L	20	18.7	93	50-150	
Diethyl ether (Ethyl ether)	ug/L	20	19.6	98	70-140	
Ethylbenzene	ug/L	20	20.0	100	80-120	
Hexachloro-1,3-butadiene	ug/L	20	19.6	98	65-135	
Isopropylbenzene (Cumene)	ug/L	20	21.1	106	80-125	
m&p-Xylene	ug/L	40	40.9	102	75-130	
Methyl acetate	ug/L	100	99.3	99	45-140	
Methyl-tert-butyl ether	ug/L	20	20.7	104	65-130	
Methylcyclohexane	ug/L	20	19.7	99	80-125	
Methylene Chloride	ug/L	20	19.4	97	75-120	
n-Butylbenzene	ug/L	20	19.8	99	80-125	
n-Heptane	ug/L	20	19.8	99	10-180	
n-Hexane	ug/L	20	20.2	101	60-135	
n-Propylbenzene	ug/L	20	19.0	95	80-120	
Naphthalene	ug/L	20	17.8	89	70-120	
o-Xylene	ug/L	20	20.0	100	75-130	
p-Isopropyltoluene	ug/L	20	20.1	101	80-135	
sec-Butylbenzene	ug/L	20	21.4	107	80-120	
Styrene	ug/L	20	20.3	101	80-120	
tert-Butylbenzene	ug/L	20	20.9	104	80-120	
Tetrachloroethene	ug/L	20	19.0	95	80-120	
Tetrahydrofuran	ug/L	100	96.3	96	75-125	
Toluene	ug/L	20	19.7	99	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.6	98	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.6	103	75-120	
Trichloroethene	ug/L	20	18.7	94	80-120	
Trichlorofluoromethane	ug/L	20	19.9	100	80-130	
Vinyl chloride	ug/L	20	19.0	95	65-130	
Xylene (Total)	ug/L	60	60.8	101	80-120	
1,2-Dichlorobenzene-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

QC Batch: 736079
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV MO GRO Oxygenates
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60376299001

METHOD BLANK: 2952141 Matrix: Water
Associated Lab Samples: 60376299001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	ug/L	ND	500	08/04/21 09:38	
1,2-Dichlorobenzene-d4 (S)	%	101	80-120	08/04/21 09:38	
4-Bromofluorobenzene (S)	%	88	80-120	08/04/21 09:38	
Toluene-d8 (S)	%	116	80-120	08/04/21 09:38	

LABORATORY CONTROL SAMPLE: 2952142

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	4000	3600	90	60-120	
1,2-Dichlorobenzene-d4 (S)	%			106	80-120	
4-Bromofluorobenzene (S)	%			89	80-120	
Toluene-d8 (S)	%			108	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

QC Batch: 736339
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV MO GRO Oxygenates
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376299002, 60376299003

METHOD BLANK: 2953170 Matrix: Water
Associated Lab Samples: 60376299002, 60376299003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	ug/L	ND	500	08/06/21 10:12	
1,2-Dichlorobenzene-d4 (S)	%	117	80-120	08/06/21 10:12	
4-Bromofluorobenzene (S)	%	85	80-120	08/06/21 10:12	
Toluene-d8 (S)	%	107	80-120	08/06/21 10:12	

LABORATORY CONTROL SAMPLE: 2953171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	4000	2920	73	60-120	
1,2-Dichlorobenzene-d4 (S)	%			114	80-120	
4-Bromofluorobenzene (S)	%			85	80-120	
Toluene-d8 (S)	%			107	80-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

QC Batch: 735426
QC Batch Method: EPA 3510
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB, LV
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376299001, 60376299002, 60376299003

METHOD BLANK: 2950399 Matrix: Water
Associated Lab Samples: 60376299001, 60376299002, 60376299003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	ND	1.0	08/02/21 18:29	CH
PCB-1221 (Aroclor 1221)	ug/L	ND	1.0	08/02/21 18:29	
PCB-1232 (Aroclor 1232)	ug/L	ND	1.0	08/02/21 18:29	
PCB-1242 (Aroclor 1242)	ug/L	ND	1.0	08/02/21 18:29	
PCB-1248 (Aroclor 1248)	ug/L	ND	1.0	08/02/21 18:29	
PCB-1254 (Aroclor 1254)	ug/L	ND	1.0	08/02/21 18:29	
PCB-1260 (Aroclor 1260)	ug/L	ND	1.0	08/02/21 18:29	CH
Decachlorobiphenyl (S)	%	75	25-120	08/02/21 18:29	

LABORATORY CONTROL SAMPLE: 2950400

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	3.8	75	40-120	CH
PCB-1260 (Aroclor 1260)	ug/L	5	4.0	80	55-120	CH
Decachlorobiphenyl (S)	%			74	25-120	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

QC Batch: 735425
QC Batch Method: EPA 3510C
Analysis Method: EPA 8270C by SIM
Analysis Description: 8270 Water PAH by SIM MSSV
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60376299001, 60376299002, 60376299003

METHOD BLANK: 2950397 Matrix: Water
Associated Lab Samples: 60376299001, 60376299002, 60376299003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	08/02/21 10:22	
Acenaphthylene	ug/L	ND	0.10	08/02/21 10:22	
Anthracene	ug/L	ND	0.10	08/02/21 10:22	
Benzo(a)anthracene	ug/L	ND	0.10	08/02/21 10:22	
Benzo(a)pyrene	ug/L	ND	0.10	08/02/21 10:22	
Benzo(b)fluoranthene	ug/L	ND	0.10	08/02/21 10:22	
Benzo(g,h,i)perylene	ug/L	ND	0.10	08/02/21 10:22	
Benzo(k)fluoranthene	ug/L	ND	0.10	08/02/21 10:22	
Chrysene	ug/L	ND	0.10	08/02/21 10:22	
Dibenz(a,h)anthracene	ug/L	ND	0.10	08/02/21 10:22	
Fluoranthene	ug/L	ND	0.50	08/02/21 10:22	
Fluorene	ug/L	ND	0.10	08/02/21 10:22	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	08/02/21 10:22	
Naphthalene	ug/L	ND	0.50	08/02/21 10:22	
Phenanthrene	ug/L	ND	0.50	08/02/21 10:22	
Pyrene	ug/L	ND	0.10	08/02/21 10:22	
2-Fluorobiphenyl (S)	%	61	37-109	08/02/21 10:22	
Terphenyl-d14 (S)	%	80	34-120	08/02/21 10:22	

LABORATORY CONTROL SAMPLE: 2950398

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.2	72	46-102	
Acenaphthylene	ug/L	10	7.8	78	48-112	
Anthracene	ug/L	10	8.8	88	50-114	
Benzo(a)anthracene	ug/L	10	8.8	88	52-124	
Benzo(a)pyrene	ug/L	10	8.2	82	56-119	
Benzo(b)fluoranthene	ug/L	10	8.5	85	49-116	
Benzo(g,h,i)perylene	ug/L	10	8.0	80	43-120	
Benzo(k)fluoranthene	ug/L	10	7.5	75	48-110	
Chrysene	ug/L	10	7.9	79	53-105	
Dibenz(a,h)anthracene	ug/L	10	8.0	80	39-127	
Fluoranthene	ug/L	10	8.4	84	54-122	
Fluorene	ug/L	10	7.2	72	47-109	
Indeno(1,2,3-cd)pyrene	ug/L	10	8.1	81	47-124	
Naphthalene	ug/L	10	6.8	68	42-103	
Phenanthrene	ug/L	10	8.0	80	47-107	
Pyrene	ug/L	10	8.7	87	44-104	
2-Fluorobiphenyl (S)	%			69	37-109	

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QUALITY CONTROL DATA

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

LABORATORY CONTROL SAMPLE: 2950398

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			82	34-120	

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QUALIFIERS

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 735760

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 736397

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

CH The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

c2 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA-GOODFELLOW
Pace Project No.: 60376299

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60376299001	**RB-06**	EPA 3510	735426	EPA 8082	735591
60376299002	**RB-07**	EPA 3510	735426	EPA 8082	735591
60376299003	**RB-08**	EPA 3510	735426	EPA 8082	735591
60376299001	**RB-06**	EPA 3510C	735425	EPA 8270C by SIM	735511
60376299002	**RB-07**	EPA 3510C	735425	EPA 8270C by SIM	735511
60376299003	**RB-08**	EPA 3510C	735425	EPA 8270C by SIM	735511
60376299001	**RB-06**	EPA 5030B/8260	735760		
60376299002	**RB-07**	EPA 5030B/8260	736397		
60376299003	**RB-08**	EPA 5030B/8260	736397		
60376299001	**RB-06**	EPA 8260	736079		
60376299002	**RB-07**	EPA 8260	736339		
60376299003	**RB-08**	EPA 8260	736339		

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Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60376299

60376299

Client Name: Burns + Mc

Courier: FedEx ☐ UPS ☐ VIA ☑ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T-296 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 1.7 Corr. Factor -0.3 Corrected 1.4

Date and initials of person examining contents: 7-30-21 (b)(6)

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	Rcvd a bpsU that says
Correct containers used:	☑Yes ☐No ☐N/A	metals by 6020 but
Pace containers used:	☑Yes ☐No ☐N/A	analysis not on COC
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT# 603173	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☑No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Jeffrey Shopper Date: _____

L0S:7L2299

BURNS McDONNELL.

021618 Form WCD-KC1-STL

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
425 South Woods Mill Road
Chesterfield, Missouri 63017
Phone: (314) 682-1500 Fax: (314) 682-1600
Attention: jcarter@burnsmcd.com

Laboratory: Pace Analytical
Address: 9608 Loiret BLVD
City/State/Zip: Lenexa, KS
Telephone: (785) 827-1273

Document Control No: 133835-017
Lab. Reference No. or Episode No.:

Project Number: 133835
Client Name: GSA-Goodfellow

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Sample Type / Matrix			Number of Containers	Analysis						Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		VOCs	GRO	PAHs	PCBs			
RB-06							7/26/21	1630	X			10	X	X	X	X			
RB-07							7/27/21	1550	X			10	X	X	X	X			
RB-08							7/28/21	828	X			10	X	X	X	X			

1 Relinquished By (signature): [redacted] (6) (b)	Date/Time	Received By (signature): [redacted] (6) (b)	Date/Time
2 Relinquished By (signature): [redacted] (6) (b)	7/29/21 1525 Date/Time	Received By (signature): [redacted] (6) (b)	7/29/21 1525 Date/Time
3 Relinquished By (signature): [redacted] (6) (b)		Received By (signature): [redacted] (6) (b)	7.30.21 0415

Special Instructions:
SEE WORK ORDER

Ice Present in Container: Yes ☑ No ☐

Temperature Upon Receipt: 1.4°

Laboratory Comments:
4 AMBER, DPAN, 5VIAL per sample

MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60MSV8

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2951244	2951244BLANK	100	95	98
2951245	2951245LCS	103	98	98
60376299001	RB-06	101	99	99

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-2
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60MSV8

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2953354	2953354BLANK	101	101	100
2953355	2953355LCS	103	102	101
60376299002	RB-07	102	99	100
60376299003	RB-08	99	98	99

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVA

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2952141	2952141BLANK	101	88	116
60376299001	RB-06	106	89	110

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM II VOA-2
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVA

LAB SAMPLE ID	SAMPLE NAME	1DB4	BFB	TOL8
2953170	2953170BLANK	117	85	107
60376299002	RB-07	118	84	106
60376299003	RB-08	114	84	106

	QC LIMITS
(1DB4) = 1,2-Dichlorobenzene-d4 (S)	(80-120)
(BFB) = 4-Bromofluorobenzene (S)	(80-120)
(TOL8) = Toluene-d8 (S)	(80-120)

* Values outside of QC Limits

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2951245LCS

Date Extracted: 08/04/2021 | Date Analyzed (1): 08/04/2021

Instrument: 60MSV8 | LCS Lot No: 45079

Lab File ID: 080421A.B\0804A_04LCS.D | SDG No.: 60376299

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	100	102	102	20-175
Acetonitrile	100	93.9	94	25-180
Acrolein	100	87.8	88	10-200
Acrylonitrile	100	94.7	95	70-135
Benzene	20.0	18.3	91	80-120
Bromobenzene	20.0	19.5	97	80-120
Bromochloromethane	20.0	20.9	105	80-125
Bromodichloromethane	20.0	19.2	96	80-125
Bromoform	20.0	18.5	92	60-135
Bromomethane	20.0	17.2	86	10-165
2-Butanone (MEK)	100	98.7	99	40-150
n-Butylbenzene	20.0	18.8	94	80-125
sec-Butylbenzene	20.0	18.7	94	80-120
tert-Butylbenzene	20.0	18.9	95	80-120
Carbon disulfide	20.0	20.4	102	75-135
Carbon tetrachloride	20.0	19.8	99	80-125
Chlorobenzene	20.0	19.3	97	80-120
Chloroethane	20.0	20.4	102	70-130
2-Chloroethylvinyl ether	100	92.3	92	30-165
Chloroform	20.0	20.1	100	80-120
Chloromethane	20.0	19.3	97	35-155
2-Chlorotoluene	20.0	18.4	92	80-120
4-Chlorotoluene	20.0	19.1	96	80-120
Cyclohexane	20.0	17.7	88	80-130
Cyclohexanone	100	88.2	88	10-180
1,2-Dibromo-3-chloropropane	20.0	18.7	93	70-120
Dibromochloromethane	20.0	19.4	97	70-120
1,2-Dibromoethane (EDB)	20.0	19.5	97	80-120
Dibromomethane	20.0	19.0	95	80-120
1,2-Dichlorobenzene	20.0	19.3	97	80-120
1,3-Dichlorobenzene	20.0	18.8	94	80-120
1,4-Dichlorobenzene	20.0	18.4	92	80-120
Dichlorodifluoromethane	20.0	19.2	96	50-150
1,1-Dichloroethane	20.0	19.5	98	75-125
1,2-Dichloroethane	20.0	19.9	99	75-120
1,2-Dichloroethene (Total)	40.0	39.3	98	80-120
1,1-Dichloroethene	20.0	20.9	104	80-120
cis-1,2-Dichloroethene	20.0	19.1	95	80-120
trans-1,2-Dichloroethene	20.0	20.2	101	80-120
1,2-Dichloropropane	20.0	18.2	91	80-125
1,3-Dichloropropane	20.0	17.9	89	80-120
2,2-Dichloropropane	20.0	19.8	99	60-130
1,1-Dichloropropene	20.0	19.0	95	80-125
cis-1,3-Dichloropropene	20.0	18.7	93	80-125
trans-1,3-Dichloropropene	20.0	18.8	94	75-120
Diethyl ether (Ethyl ether)	20.0	19.9	99	70-140
1,4-Dioxane (p-Dioxane)	100	118	118	10-180

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2951245LCS
Date Extracted: 08/04/2021
Date Analyzed (1): 08/04/2021
Instrument: 60MSV8
LCS Lot No: 45079
Lab File ID: 080421A.B\0804A_04LCS.D
SDG No.: 60376299

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Ethylbenzene	20.0	18.6	93	80-120
n-Heptane	20.0	18.4	92	10-180
Hexachloro-1,3-butadiene	20.0	20.4	102	65-135
n-Hexane	20.0	17.6	88	60-135
2-Hexanone	100	88.8	89	45-150
Isopropylbenzene (Cumene)	20.0	19.5	97	80-125
p-Isopropyltoluene	20.0	19.4	97	80-135
Methyl acetate	100	96.0	96	45-140
Methylcyclohexane	20.0	18.8	94	80-125
Methylene Chloride	20.0	18.8	94	75-120
1-Methylnaphthalene	20.0	21.6	108	40-160
2-Methylnaphthalene	20.0	21.1	106	55-150
4-Methyl-2-pentanone (MIBK)	100	86.1	86	65-140
Methyl-tert-butyl ether	20.0	19.4	97	65-130
Naphthalene	20.0	17.0	85	70-120
n-Propylbenzene	20.0	18.0	90	80-120
Styrene	20.0	19.0	95	80-120
1,1,1,2-Tetrachloroethane	20.0	18.8	94	80-120
1,1,2,2-Tetrachloroethane	20.0	17.4	87	75-125
Tetrachloroethene	20.0	19.6	98	80-120
Tetrahydrofuran	100	83.4	83	75-125
Toluene	20.0	17.7	88	80-120
1,2,3-Trichlorobenzene	20.0	18.3	91	75-125
1,2,4-Trichlorobenzene	20.0	18.3	91	75-120
1,1,1-Trichloroethane	20.0	19.3	96	80-120
1,1,2-Trichloroethane	20.0	18.2	91	80-120
Trichloroethene	20.0	18.8	94	80-120
Trichlorofluoromethane	20.0	22.6	113	80-130
1,2,3-Trichloropropane	20.0	19.1	95	80-125
1,2,3-Trimethylbenzene	20.0	19.5	98	80-125
1,2,4-Trimethylbenzene	20.0	19.4	97	80-125
1,3,5-Trimethylbenzene	20.0	19.0	95	80-125
Vinyl chloride	20.0	19.9	99	65-130
Xylene (Total)	60.0	55.3	92	80-120
m&p-Xylene	40.0	37.1	93	75-130
o-Xylene	20.0	18.1	91	75-130

Spike Recovery: 0 out of 83 outside limits.

08/24/2021 11:43

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas | Lab Sample ID: 2953355LCS

Date Extracted: 08/05/2021 | Date Analyzed (1): 08/05/2021

Instrument: 60MSV8 | LCS Lot No: 45079

Lab File ID: 080521A.B\0805A_29LCS.D | SDG No.: 60376299

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	100	121	121	20-175
Acetonitrile	100	98.6	99	25-180
Acrolein	100	102	102	10-200
Acrylonitrile	100	104	104	70-135
Benzene	20.0	19.8	99	80-120
Bromobenzene	20.0	19.7	98	80-120
Bromochloromethane	20.0	21.9	109	80-125
Bromodichloromethane	20.0	20.1	100	80-125
Bromoform	20.0	21.9	109	60-135
Bromomethane	20.0	19.4	97	10-165
2-Butanone (MEK)	100	114	114	40-150
n-Butylbenzene	20.0	19.8	99	80-125
sec-Butylbenzene	20.0	21.4	107	80-120
tert-Butylbenzene	20.0	20.9	104	80-120
Carbon disulfide	20.0	20.0	100	75-135
Carbon tetrachloride	20.0	19.8	99	80-125
Chlorobenzene	20.0	20.1	100	80-120
Chloroethane	20.0	17.5	88	70-130
2-Chloroethylvinyl ether	100	101	101	30-165
Chloroform	20.0	20.0	100	80-120
Chloromethane	20.0	20.3	102	35-155
2-Chlorotoluene	20.0	20.0	100	80-120
4-Chlorotoluene	20.0	19.7	98	80-120
Cyclohexane	20.0	20.5	103	80-130
Cyclohexanone	100	102	102	10-180
1,2-Dibromo-3-chloropropane	20.0	18.3	92	70-120
Dibromochloromethane	20.0	19.8	99	70-120
1,2-Dibromoethane (EDB)	20.0	20.7	103	80-120
Dibromomethane	20.0	20.3	102	80-120
1,2-Dichlorobenzene	20.0	19.5	98	80-120
1,3-Dichlorobenzene	20.0	20.2	101	80-120
1,4-Dichlorobenzene	20.0	20.2	101	80-120
Dichlorodifluoromethane	20.0	18.7	93	50-150
1,1-Dichloroethane	20.0	20.2	101	75-125
1,2-Dichloroethane	20.0	20.0	100	75-120
1,2-Dichloroethene (Total)	40.0	39.1	98	80-120
1,1-Dichloroethene	20.0	19.4	97	80-120
cis-1,2-Dichloroethene	20.0	19.5	98	80-120
trans-1,2-Dichloroethene	20.0	19.6	98	80-120
1,2-Dichloropropane	20.0	19.5	97	80-125
1,3-Dichloropropane	20.0	20.1	100	80-120
2,2-Dichloropropane	20.0	18.5	93	60-130
1,1-Dichloropropene	20.0	19.4	97	80-125
cis-1,3-Dichloropropene	20.0	20.5	103	80-125
trans-1,3-Dichloropropene	20.0	20.6	103	75-120
Diethyl ether (Ethyl ether)	20.0	19.6	98	70-140
1,4-Dioxane (p-Dioxane)	100	112	112	10-180

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2953355LCS
Date Extracted: 08/05/2021
Date Analyzed (1): 08/05/2021
Instrument: 60MSV8
LCS Lot No: 45079
Lab File ID: 080521A.B\0805A_29LCS.D
SDG No.: 60376299

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Ethylbenzene	20.0	20.0	100	80-120
n-Heptane	20.0	19.8	99	10-180
Hexachloro-1,3-butadiene	20.0	19.6	98	65-135
n-Hexane	20.0	20.2	101	60-135
2-Hexanone	100	116	116	45-150
Isopropylbenzene (Cumene)	20.0	21.1	106	80-125
p-Isopropyltoluene	20.0	20.1	101	80-135
Methyl acetate	100	99.3	99	45-140
Methylcyclohexane	20.0	19.7	99	80-125
Methylene Chloride	20.0	19.4	97	75-120
1-Methylnaphthalene	20.0	22.6	113	40-160
2-Methylnaphthalene	20.0	22.4	112	55-150
4-Methyl-2-pentanone (MIBK)	100	107	107	65-140
Methyl-tert-butyl ether	20.0	20.7	104	65-130
Naphthalene	20.0	17.8	89	70-120
n-Propylbenzene	20.0	19.0	95	80-120
Styrene	20.0	20.3	101	80-120
1,1,1,2-Tetrachloroethane	20.0	19.5	98	80-120
1,1,2,2-Tetrachloroethane	20.0	19.8	99	75-125
Tetrachloroethene	20.0	19.0	95	80-120
Tetrahydrofuran	100	96.3	96	75-125
Toluene	20.0	19.7	99	80-120
1,2,3-Trichlorobenzene	20.0	19.8	99	75-125
1,2,4-Trichlorobenzene	20.0	19.7	99	75-120
1,1,1-Trichloroethane	20.0	18.8	94	80-120
1,1,2-Trichloroethane	20.0	20.5	103	80-120
Trichloroethene	20.0	18.7	94	80-120
Trichlorofluoromethane	20.0	19.9	100	80-130
1,2,3-Trichloropropane	20.0	21.3	106	80-125
1,2,3-Trimethylbenzene	20.0	20.2	101	80-125
1,2,4-Trimethylbenzene	20.0	19.9	100	80-125
1,3,5-Trimethylbenzene	20.0	19.6	98	80-125
Vinyl chloride	20.0	19.0	95	65-130
Xylene (Total)	60.0	60.8	101	80-120
m&p-Xylene	40.0	40.9	102	75-130
o-Xylene	20.0	20.0	100	75-130

Spike Recovery: 0 out of 83 outside limits.

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2952142LCS
Date Extracted: 08/04/2021
Date Analyzed (1): 08/04/2021
Instrument: 60MSVA
LCS Lot No: 44858
Lab File ID: 080421AGRO.B\0804A_05.D
SDG No.: 60376299

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
TPH-GRO	4000	3600	90	60-120

Spike Recovery: 0 out of 1 outside limits.

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2953171LCS
Date Extracted: 08/06/2021
Date Analyzed (1): 08/06/2021
Instrument: 60MSVA
LCS Lot No: 44858
Lab File ID: 080621AGRO.B\0806A_05.D
SDG No.: 60376299

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
TPH-GRO	4000	2920	73	60-120

Spike Recovery: 0 out of 1 outside limits.

SAMPLE NO.

2951244BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60MSV8 Matrix: Water Lab Sample ID: 2951244

Lab File ID: 080421A.B\0804A_06BLK.D Date Analyzed: 08/04/2021 Time:07:53

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2951245LCS	2951245	080421A.B\0804A_04LCS.D	08/04/2021 07:25
RB-06	60376299001	080421A.B\0804A_07.D	08/04/2021 08:07

SAMPLE NO.

2952141BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVA Matrix: Water Lab Sample ID: 2952141

Lab File ID (1): 080421A.B\0804A_07.D Date Analyzed (1): 08/04/2021 Time (1): 09:38

Lab File ID (2): 080421AGRO.B\0804A_07.D Date Analyzed (2): 08/04/2021 Time (2): 09:38

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2952142LCS	2952142	080421AGRO.B\0804A_05.D	08/04/2021 09:08
RB-06	60376299001	080421A.B\0804A_26.D	08/04/2021 14:30
RB-06	60376299001	080421AGRO.B\0804A_26.D	08/04/2021 14:30

SAMPLE NO.

2953170BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60MSVA Matrix: Water Lab Sample ID: 2953170

Lab File ID (1): 080621A.B\0806A_07.D Date Analyzed (1): 08/06/2021 Time (1):10:12

Lab File ID (2): 080621AGRO.B\0806A_07.D Date Analyzed (2): 08/06/2021 Time (2):10:12

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2953171LCS	2953171	080621AGRO.B\0806A_05.D	08/06/2021 09:42
RB-07	60376299002	080621A.B\0806A_21.D	08/06/2021 13:52
RB-07	60376299002	080621AGRO.B\0806A_21.D	08/06/2021 13:52
RB-08	60376299003	080621A.B\0806A_22.D	08/06/2021 14:08
RB-08	60376299003	080621AGRO.B\0806A_22.D	08/06/2021 14:08

SAMPLE NO.

2953354BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60MSV8 Matrix: Water Lab Sample ID: 2953354

Lab File ID: 080521A.B\0805A_32BLK.D Date Analyzed: 08/05/2021 Time:14:38

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2953355LCS	2953355	080521A.B\0805A_29LCS.D	08/05/2021 13:55
RB-07	60376299002	080521A.B\0805A_33.D	08/05/2021 14:52
RB-08	60376299003	080521A.B\0805A_34.D	08/05/2021 15:06

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW
Lab File ID: 080221A.B\0802A_11BFB.D BFB Injection Date 08/02/2021
Instrument ID: 60MSV8 BFB Injection Time 09:16

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	18.59	
75	30.00 - 66.00% of mass 95	42.90	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.59	
173	Less than 2.00% of mass 174	1.01	(1.03)[1]
174	50.00 - 120.00% of mass 95	98.16	
175	4.00 - 9.00% of mass 174	7.38	(7.52)[1]
176	93.00 - 101.00% of mass 174	93.52	(95.28)[1]
177	5.00 - 9.00% of mass 176	6.07	(6.49)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19754653CAL1	19754653CAL1	080221A.B\0802A_12.D	08/02/2021	09:31
19754651CAL2	19754651CAL2	080221A.B\0802A_13.D	08/02/2021	09:45
19754658CAL3	19754658CAL3	080221A.B\0802A_14.D	08/02/2021	09:59
19754657CAL4	19754657CAL4	080221A.B\0802A_15.D	08/02/2021	10:13
19754659CAL5	19754659CAL5	080221A.B\0802A_16.D	08/02/2021	10:28
19754655CAL6	19754655CAL6	080221A.B\0802A_17.D	08/02/2021	10:42
19754656CAL7	19754656CAL7	080221A.B\0802A_18.D	08/02/2021	10:56
19754654CAL8	19754654CAL8	080221A.B\0802A_19.D	08/02/2021	11:10
19754652ICV	19754652ICV	080221A.B\0802A_22.D	08/02/2021	11:53

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW
Lab File ID: 080421A.B\0804A_01.D BFB Injection Date 08/04/2021
Instrument ID: 60MSV8 BFB Injection Time 06:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	17.63	
75	30.00 - 66.00% of mass 95	41.34	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.55	
173	Less than 2.00% of mass 174	0.45	(0.45)[1]
174	50.00 - 120.00% of mass 95	100.12	
175	4.00 - 9.00% of mass 174	7.53	(7.52)[1]
176	93.00 - 101.00% of mass 174	97.81	(97.69)[1]
177	5.00 - 9.00% of mass 176	6.03	(6.17)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19763624CCV	19763624CCV	080421A.B\0804A_03CCV.D	08/04/2021	07:10
2951245LCS	2951245LCS	080421A.B\0804A_04LCS.D	08/04/2021	07:25
2951244BLANK	2951244BLANK	080421A.B\0804A_06BLK.D	08/04/2021	07:53
RB-06	60376299001	080421A.B\0804A_07.D	08/04/2021	08:07

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW
Lab File ID: 080521A.B\0805A_18BFB.D BFB Injection Date 08/05/2021
Instrument ID: 60MSV8 BFB Injection Time 11:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	19.18	
75	30.00 - 66.00% of mass 95	52.36	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.32	
173	Less than 2.00% of mass 174	0.97	(1.29)[1]
174	50.00 - 120.00% of mass 95	75.50	
175	4.00 - 9.00% of mass 174	5.97	(7.90)[1]
176	93.00 - 101.00% of mass 174	74.54	(98.73)[1]
177	5.00 - 9.00% of mass 176	5.00	(6.71)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19775487CAL1	19775487CAL1	080521A.B\0805A_19.D	08/05/2021	11:34
19775488CAL2	19775488CAL2	080521A.B\0805A_20.D	08/05/2021	11:48
19775493CAL3	19775493CAL3	080521A.B\0805A_21.D	08/05/2021	12:02
19775490CAL4	19775490CAL4	080521A.B\0805A_22.D	08/05/2021	12:16
19775494CAL5	19775494CAL5	080521A.B\0805A_23.D	08/05/2021	12:31
19775491CAL6	19775491CAL6	080521A.B\0805A_24.D	08/05/2021	12:45
19775485CAL7	19775485CAL7	080521A.B\0805A_25.D	08/05/2021	12:59
19775489CAL8	19775489CAL8	080521A.B\0805A_26.D	08/05/2021	13:13
19775486ICV	19775486ICV	080521A.B\0805A_29.D	08/05/2021	13:55
2953355LCS	2953355LCS	080521A.B\0805A_29LCS.D	08/05/2021	13:55
2953354BLANK	2953354BLANK	080521A.B\0805A_32BLK.D	08/05/2021	14:38
RB-07	60376299002	080521A.B\0805A_33.D	08/05/2021	14:52
RB-08	60376299003	080521A.B\0805A_34.D	08/05/2021	15:06

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW
Lab File ID: 080421A.B\0804A_01.D BFB Injection Date 08/04/2021
Instrument ID: 60MSVA BFB Injection Time 08:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	13.92	
75	30.00 - 66.00% of mass 95	42.61	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.73	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	105.08	
175	4.00 - 9.00% of mass 174	7.67	(7.30)[1]
176	93.00 - 101.00% of mass 174	102.85	(97.87)[1]
177	5.00 - 9.00% of mass 176	6.65	(6.46)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19768008CCV	19768008CCV	080421A.B\0804A_02.D	08/04/2021	08:22
19768010CCV	19768010CCV	080421AGRO.B\0804A_04.D	08/04/2021	08:53
2952142LCS	2952142LCS	080421AGRO.B\0804A_05.D	08/04/2021	09:08
2952141BLANK	2952141BLANK	080421AGRO.B\0804A_07.D	08/04/2021	09:38
2952141BLANK	2952141BLANK	080421A.B\0804A_07.D	08/04/2021	09:38
RB-06	60376299001	080421AGRO.B\0804A_26.D	08/04/2021	14:30
RB-06	60376299001	080421A.B\0804A_26.D	08/04/2021	14:30

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW
Lab File ID: 080621A.B\0806A_01.D BFB Injection Date 08/06/2021
Instrument ID: 60MSVA BFB Injection Time 08:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.00 - 40.00% of mass 95	13.85	
75	30.00 - 66.00% of mass 95	42.17	
95	100.00 - 100.00% of mass 95	100.00	
96	5.00 - 9.00% of mass 95	6.64	
173	Less than 2.00% of mass 174	0.00	
174	50.00 - 120.00% of mass 95	105.86	
175	4.00 - 9.00% of mass 174	7.88	(7.44)[1]
176	93.00 - 101.00% of mass 174	104.78	(98.98)[1]
177	5.00 - 9.00% of mass 176	7.01	(6.69)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19784362CCV	19784362CCV	080621A.B\0806A_02.D	08/06/2021	08:56
19784363CCV	19784363CCV	080621AGRO.B\0806A_04.D	08/06/2021	09:27
2953171LCS	2953171LCS	080621AGRO.B\0806A_05.D	08/06/2021	09:42
2953170BLANK	2953170BLANK	080621A.B\0806A_07.D	08/06/2021	10:12
2953170BLANK	2953170BLANK	080621AGRO.B\0806A_07.D	08/06/2021	10:12
RB-07	60376299002	080621A.B\0806A_21.D	08/06/2021	13:52
RB-07	60376299002	080621AGRO.B\0806A_21.D	08/06/2021	13:52
RB-08	60376299003	080621A.B\0806A_22.D	08/06/2021	14:08
RB-08	60376299003	080621AGRO.B\0806A_22.D	08/06/2021	14:08

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Sample ID : 19763624CCV Date Analyzed: 08/04/2021

Instrument ID: 60MSV8 GC Column: Col 1 Time Analyzed: 07:10

Lab File ID: 080421A.B\0804A_03CCV.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		291995	6.844	281336	5.284	841863	3.307
UPPER LIMIT		583990	7.344	562672	5.784	1683726	3.807
LOWER LIMIT		145997.5	6.344	140668	4.784	420931.5	2.807
LAB SAMPLE ID	SAMPLE NO.						
2951244	2951244BLANK	278684	6.844	265262	5.284	814440	3.31
2951245	2951245LCS	279494	6.844	264148	5.284	807910	3.31
60376299001	RB-06	274603	6.844	261667	5.284	822861	3.31

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Sample ID : 19775494CAL5 Date Analyzed: 08/05/2021

Instrument ID: 60MSV8 GC Column: Col 1 Time Analyzed: 12:31

Lab File ID: 080521A.B\0805A_23.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		284393	6.844	505908	5.284	1268939	3.313
UPPER LIMIT		568786	7.344	1011816	5.784	2537878	3.813
LOWER LIMIT		142196.5	6.344	252954	4.784	634469.5	2.813
LAB SAMPLE ID	SAMPLE NO.						
2953354	2953354BLANK	287716	6.844	517808	5.284	1328107	3.31
2953355	2953355LCS	288833	6.844	519729	5.284	1311702	3.31
60376299002	RB-07	296312	6.844	540223	5.284	1371783	3.31
60376299003	RB-08	307433	6.844	546768	5.281	1365970	3.307

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Sample ID : 19768008CCV Date Analyzed: 08/04/2021

Instrument ID: 60MSVA GC Column: Col 1 Time Analyzed: 08:22

Lab File ID: 080421A.B\0804A_02.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		251203	7.51	206789	5.966	470768	4.031
UPPER LIMIT		502406	8.01	413578	6.466	941536	4.531
LOWER LIMIT		125601.5	7.01	103394.5	5.466	235384	3.531
LAB SAMPLE ID	SAMPLE NO.						
2952141	2952141BLANK	246350	7.51	197948	5.966	545743	4.034
60376299001	RB-06	254021	7.51	211967	5.966	537379	4.028

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Sample ID : 19784362CCV Date Analyzed: 08/06/2021

Instrument ID: 60MSVA GC Column: Col 1 Time Analyzed: 08:56

Lab File ID: 080621A.B\0806A_02.D

		AREA 14DDIS	RT	AREA CBD5IS	RT	AREA FBZNIS	RT
12 HOUR STD		227109	7.51	172646	5.966	441305	4.028
UPPER LIMIT		454218	8.01	345292	6.466	882610	4.528
LOWER LIMIT		113554.5	7.01	86323	5.466	220652.5	3.528
LAB SAMPLE ID	SAMPLE NO.						
2953170	2953170BLANK	224183	7.51	174798	5.966	428943	4.031
60376299002	RB-07	226359	7.51	179228	5.966	423672	4.031
60376299003	RB-08	219373	7.51	173589	5.966	429414	4.031

14DDIS = 1,4-Dichlorobenzene-d4 (IS)
CBD5IS = Chlorobenzene-d5 (IS)
FBZNIS = Fluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-06

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 08:07 Lab Sample ID: 60376299001

Date Analyzed: 08/04/2021 08:07 Lab File ID: 080421A.B\0804A_07.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
75-05-8	Acetonitrile	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
108-86-1	Bromobenzene	ND	U
74-97-5	Bromochloromethane	ND	U
75-27-4	Bromodichloromethane	1.3	
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
104-51-8	n-Butylbenzene	ND	U
135-98-8	sec-Butylbenzene	ND	U
98-06-6	tert-Butylbenzene	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
110-75-8	2-Chloroethylvinyl ether	ND	U
67-66-3	Chloroform	4.7	
74-87-3	Chloromethane	ND	U
95-49-8	2-Chlorotoluene	ND	U
106-43-4	4-Chlorotoluene	ND	U
110-82-7	Cyclohexane	ND	U
108-94-1	Cyclohexanone	ND	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	U
124-48-1	Dibromochloromethane	ND	U
106-93-4	1,2-Dibromoethane (EDB)	ND	U
74-95-3	Dibromomethane	ND	U
95-50-1	1,2-Dichlorobenzene	ND	U
541-73-1	1,3-Dichlorobenzene	ND	U
106-46-7	1,4-Dichlorobenzene	ND	U
75-71-8	Dichlorodifluoromethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
540-59-0	1,2-Dichloroethene (Total)	ND	U
75-35-4	1,1-Dichloroethene	ND	U

SAMPLE NO.

RB-06

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 08:07 Lab Sample ID: 60376299001

Date Analyzed: 08/04/2021 08:07 Lab File ID: 080421A.B\0804A_07.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
142-28-9	1,3-Dichloropropane	ND	U
594-20-7	2,2-Dichloropropane	ND	U
563-58-6	1,1-Dichloropropene	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
60-29-7	Diethyl ether (Ethyl ether)	ND	U
123-91-1	1,4-Dioxane (p-Dioxane)	ND	U
100-41-4	Ethylbenzene	ND	U
142-82-5	n-Heptane	ND	U
87-68-3	Hexachloro-1,3-butadiene	ND	U
110-54-3	n-Hexane	ND	U
591-78-6	2-Hexanone	ND	U
98-82-8	Isopropylbenzene (Cumene)	ND	U
99-87-6	p-Isopropyltoluene	ND	U
79-20-9	Methyl acetate	ND	U
108-87-2	Methylcyclohexane	ND	U
75-09-2	Methylene Chloride	ND	U
90-12-0	1-Methylnaphthalene	ND	U
91-57-6	2-Methylnaphthalene	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
1634-04-4	Methyl-tert-butyl ether	ND	U
91-20-3	Naphthalene	ND	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	ND	U
100-42-5	Styrene	ND	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
109-99-9	Tetrahydrofuran	ND	U
108-88-3	Toluene	ND	U
87-61-6	1,2,3-Trichlorobenzene	ND	U
120-82-1	1,2,4-Trichlorobenzene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U

SAMPLE NO.

RB-06

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 08:07 Lab Sample ID: 60376299001

Date Analyzed: 08/04/2021 08:07 Lab File ID: 080421A.B\0804A_07.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U
526-73-8	1,2,3-Trimethylbenzene	ND	U
95-63-6	1,2,4-Trimethylbenzene	ND	U
108-67-8	1,3,5-Trimethylbenzene	ND	U
75-01-4	Vinyl chloride	ND	U
1330-20-7	Xylene (Total)	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-07

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/05/2021 14:52 Lab Sample ID: 60376299002

Date Analyzed: 08/05/2021 14:52 Lab File ID: 080521A.B\0805A_33.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
75-05-8	Acetonitrile	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
108-86-1	Bromobenzene	ND	U
74-97-5	Bromochloromethane	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
104-51-8	n-Butylbenzene	ND	U
135-98-8	sec-Butylbenzene	ND	U
98-06-6	tert-Butylbenzene	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
110-75-8	2-Chloroethylvinyl ether	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
95-49-8	2-Chlorotoluene	ND	U
106-43-4	4-Chlorotoluene	ND	U
110-82-7	Cyclohexane	ND	U
108-94-1	Cyclohexanone	ND	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	U
124-48-1	Dibromochloromethane	ND	U
106-93-4	1,2-Dibromoethane (EDB)	ND	U
74-95-3	Dibromomethane	ND	U
95-50-1	1,2-Dichlorobenzene	ND	U
541-73-1	1,3-Dichlorobenzene	ND	U
106-46-7	1,4-Dichlorobenzene	ND	U
75-71-8	Dichlorodifluoromethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
540-59-0	1,2-Dichloroethene (Total)	ND	U
75-35-4	1,1-Dichloroethene	ND	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-07

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/05/2021 14:52 Lab Sample ID: 60376299002

Date Analyzed: 08/05/2021 14:52 Lab File ID: 080521A.B\0805A_33.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
142-28-9	1,3-Dichloropropane	ND	U
594-20-7	2,2-Dichloropropane	ND	U
563-58-6	1,1-Dichloropropene	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
60-29-7	Diethyl ether (Ethyl ether)	ND	U
123-91-1	1,4-Dioxane (p-Dioxane)	ND	U
100-41-4	Ethylbenzene	ND	U
142-82-5	n-Heptane	ND	U
87-68-3	Hexachloro-1,3-butadiene	ND	U
110-54-3	n-Hexane	ND	U
591-78-6	2-Hexanone	ND	U
98-82-8	Isopropylbenzene (Cumene)	ND	U
99-87-6	p-Isopropyltoluene	ND	U
79-20-9	Methyl acetate	ND	U
108-87-2	Methylcyclohexane	ND	U
75-09-2	Methylene Chloride	ND	U
90-12-0	1-Methylnaphthalene	ND	U
91-57-6	2-Methylnaphthalene	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
1634-04-4	Methyl-tert-butyl ether	ND	U
91-20-3	Naphthalene	ND	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	ND	U
100-42-5	Styrene	ND	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
109-99-9	Tetrahydrofuran	ND	U
108-88-3	Toluene	ND	U
87-61-6	1,2,3-Trichlorobenzene	ND	U
120-82-1	1,2,4-Trichlorobenzene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U

SAMPLE NO.

RB-07

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/05/2021 14:52 Lab Sample ID: 60376299002

Date Analyzed: 08/05/2021 14:52 Lab File ID: 080521A.B\0805A_33.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U
526-73-8	1,2,3-Trimethylbenzene	ND	U
95-63-6	1,2,4-Trimethylbenzene	ND	U
108-67-8	1,3,5-Trimethylbenzene	ND	U
75-01-4	Vinyl chloride	ND	U
1330-20-7	Xylene (Total)	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-08

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/05/2021 15:06 Lab Sample ID: 60376299003

Date Analyzed: 08/05/2021 15:06 Lab File ID: 080521A.B\0805A_34.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
75-05-8	Acetonitrile	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
108-86-1	Bromobenzene	ND	U
74-97-5	Bromochloromethane	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
104-51-8	n-Butylbenzene	ND	U
135-98-8	sec-Butylbenzene	ND	U
98-06-6	tert-Butylbenzene	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
110-75-8	2-Chloroethylvinyl ether	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
95-49-8	2-Chlorotoluene	ND	U
106-43-4	4-Chlorotoluene	ND	U
110-82-7	Cyclohexane	ND	U
108-94-1	Cyclohexanone	ND	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	U
124-48-1	Dibromochloromethane	ND	U
106-93-4	1,2-Dibromoethane (EDB)	ND	U
74-95-3	Dibromomethane	ND	U
95-50-1	1,2-Dichlorobenzene	ND	U
541-73-1	1,3-Dichlorobenzene	ND	U
106-46-7	1,4-Dichlorobenzene	ND	U
75-71-8	Dichlorodifluoromethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
540-59-0	1,2-Dichloroethene (Total)	ND	U
75-35-4	1,1-Dichloroethene	ND	U

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-08

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/05/2021 15:06 Lab Sample ID: 60376299003

Date Analyzed: 08/05/2021 15:06 Lab File ID: 080521A.B\0805A_34.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
142-28-9	1,3-Dichloropropane	ND	U
594-20-7	2,2-Dichloropropane	ND	U
563-58-6	1,1-Dichloropropene	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
60-29-7	Diethyl ether (Ethyl ether)	ND	U
123-91-1	1,4-Dioxane (p-Dioxane)	ND	U
100-41-4	Ethylbenzene	ND	U
142-82-5	n-Heptane	ND	U
87-68-3	Hexachloro-1,3-butadiene	ND	U
110-54-3	n-Hexane	ND	U
591-78-6	2-Hexanone	ND	U
98-82-8	Isopropylbenzene (Cumene)	ND	U
99-87-6	p-Isopropyltoluene	ND	U
79-20-9	Methyl acetate	ND	U
108-87-2	Methylcyclohexane	ND	U
75-09-2	Methylene Chloride	ND	U
90-12-0	1-Methylnaphthalene	ND	U
91-57-6	2-Methylnaphthalene	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
1634-04-4	Methyl-tert-butyl ether	ND	U
91-20-3	Naphthalene	ND	U
	Preservation pH	1.0	
103-65-1	n-Propylbenzene	ND	U
100-42-5	Styrene	ND	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
109-99-9	Tetrahydrofuran	ND	U
108-88-3	Toluene	ND	U
87-61-6	1,2,3-Trichlorobenzene	ND	U
120-82-1	1,2,4-Trichlorobenzene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U

SAMPLE NO.

MSV - FORM I VOA-3
VOLATILE ORGANICS ANALYSIS DATA SHEET

RB-08

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW
Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299
Date Extracted: 08/05/2021 15:06 Lab Sample ID: 60376299003
Date Analyzed: 08/05/2021 15:06 Lab File ID: 080521A.B\0805A_34.D
Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U
526-73-8	1,2,3-Trimethylbenzene	ND	U
95-63-6	1,2,4-Trimethylbenzene	ND	U
108-67-8	1,3,5-Trimethylbenzene	ND	U
75-01-4	Vinyl chloride	ND	U
1330-20-7	Xylene (Total)	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

RB-06

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 14:30 Lab Sample ID: 60376299001

Date Analyzed: 08/04/2021 14:30 Lab File ID: 080421AGRO.B\0804A_26.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	ND	U

SAMPLE NO.

RB-07

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/06/2021 13:52 Lab Sample ID: 60376299002

Date Analyzed: 08/06/2021 13:52 Lab File ID: 080621AGRO.B\0806A_21.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	ND	U

SAMPLE NO.

RB-08

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299

Date Extracted: 08/06/2021 14:08 Lab Sample ID: 60376299003

Date Analyzed: 08/06/2021 14:08 Lab File ID: 080621AGRO.B\0806A_22.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	ND	U

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Wt Linear	0.12770	0.14551	0.10241	0.10999	0.10882	0.09607
Acetonitrile	Averaged	0.20519	0.23879	0.19275	0.20970	0.19978	0.19106
Acrolein	Averaged	0.04180	0.04643	0.03211	0.03513	0.03486	0.03397
Acrylonitrile	Averaged	0.07366	0.09921	0.07704	0.08732	0.08346	0.07836
Benzene	Averaged	1.53521	1.92991	1.60481	1.72562	1.62126	1.58693
Bromobenzene	Wt Linear	1.20918	1.95997	1.31552	1.42983	1.36073	1.36722
Bromochloromethane	Averaged	0.22104	0.31134	0.23256	0.25800	0.24707	0.22443
Bromodichloromethane	Averaged	0.44293	0.57619	0.45370	0.51355	0.49633	0.48524
Bromoform	Wt Linear	0.24604	0.68222	0.46718	0.49434	0.49663	0.49824
Bromomethane	Wt Linear	0.29297	0.36742	0.22717	0.26171	0.25039	0.25972
2-Butanone (MEK)	Averaged	0.13649	0.16358	0.11876	0.14080	0.12308	0.11540
n-Butylbenzene	Averaged	2.86132	3.98042	3.04371	3.25647	2.98423	3.10441
sec-Butylbenzene	Averaged	3.67808	5.46856	4.69434	4.97766	4.60261	4.61503
tert-Butylbenzene	Averaged	2.84688	4.13358	3.35116	3.44384	3.25972	3.33365
Carbon disulfide	Averaged	1.04761	1.22830	1.10384	1.16928	1.05921	1.05340
Carbon tetrachloride	Averaged	0.52350	0.73052	0.61590	0.69214	0.63641	0.66014
Chlorobenzene	Averaged	2.87709	4.39024	3.31376	3.62303	3.48272	3.35387
Chloroethane	Wt Linear	0.19876	0.41947	0.28976	0.30279	0.28768	0.28386
2-Chloroethylvinyl ether	Averaged	0.08099	0.10619	0.08984	0.10326	0.10466	0.10142
Chloroform	Averaged	0.71691	0.93833	0.73171	0.78946	0.75254	0.72345
Chloromethane	Averaged	0.44305	0.53976	0.43568	0.48525	0.46252	0.43236
2-Chlorotoluene	Averaged	2.68543	4.15871	3.14069	3.35971	3.05176	3.09225
4-Chlorotoluene	Wt Linear	1.07015	1.80786	1.31716	1.36593	1.22310	1.30240
Cyclohexane	Averaged	0.74320	0.90910	0.89807	1.02673	0.84745	0.91037
Cyclohexanone	Wt Linear	0.06413	0.12386	0.07912	0.09053	0.09060	0.08453
1,2-Dibromo-3-chloropropane	Averaged		0.06710	0.06492	0.06890	0.06770	0.07475
Dibromochloromethane	Averaged	0.94475	1.43553	1.01990	1.12463	1.09684	1.10009
1,2-Dibromoethane (EDB)	Averaged	0.63060	1.07960	0.79161	0.88016	0.84520	0.82910
Dibromomethane	Averaged	0.19109	0.26576	0.21423	0.22178	0.21480	0.19942
1,2-Dichlorobenzene	Wt Linear	1.78586	2.99630	1.95595	2.03832	1.90924	1.93500
1,3-Dichlorobenzene	Averaged	1.95073	3.12283	2.43352	2.44542	2.30979	2.30798
1,4-Dichlorobenzene	Averaged	2.26717	3.20528	2.30940	2.35493	2.29589	2.27579
Dichlorodifluoromethane	Averaged	0.42905	0.52841	0.51733	0.55194	0.50397	0.50410
1,1-Dichloroethane	Averaged	0.79870	1.07172	0.84977	0.96581	0.89021	0.86960
1,2-Dichloroethane	Averaged	0.38791	0.54504	0.45921	0.50553	0.49412	0.48713

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1-Dichloroethene	Averaged	0.39387	0.50228	0.42020	0.43770	0.41490	0.39752
cis-1,2-Dichloroethene	Averaged	0.45595	0.61300	0.50165	0.53773	0.51379	0.49294
trans-1,2-Dichloroethene	Averaged	0.39278	0.60437	0.47193	0.52328	0.47601	0.46450
1,2-Dichloropropane	Averaged	0.40325	0.56397	0.44676	0.48799	0.47876	0.46334
1,3-Dichloropropane	Averaged	1.14563	1.69843	1.28703	1.39871	1.31268	1.26591
2,2-Dichloropropane	Averaged	0.62392	0.71667	0.60665	0.65458	0.59550	0.60699
1,1-Dichloropropene	Averaged	0.53080	0.61808	0.55862	0.61860	0.56906	0.57516
cis-1,3-Dichloropropene	Averaged	0.52703	0.71897	0.55451	0.64356	0.60648	0.60173
trans-1,3-Dichloropropene	Averaged	1.03926	1.81037	1.32575	1.43667	1.42334	1.40293
Diethyl ether (Ethyl ether)	Averaged	0.18282	0.18098	0.15164	0.17124	0.17466	0.16321
1,4-Dioxane (p-Dioxane)	Averaged			0.00091	0.00136	0.00128	0.00139
Ethylbenzene	Averaged	1.68593	2.10867	1.71706	1.88607	1.74957	1.77296
n-Heptane	Averaged		0.08014	0.08330	0.09507	0.08135	0.08812
Hexachloro-1,3-butadiene	Averaged	0.44523	0.65448	0.47608	0.51719	0.47413	0.48345
n-Hexane	Averaged	0.62611	0.74715	0.74112	0.81208	0.73303	0.72417
2-Hexanone	Wt Linear	0.45619	0.72451	0.47478	0.52297	0.52011	0.48578
Isopropylbenzene (Cumene)	Averaged	4.42297	6.11878	4.87800	5.27862	4.97873	4.88636
p-Isopropyltoluene	Averaged	3.19942	5.01991	3.89953	4.19402	3.94881	3.92301
Methyl acetate	Averaged	0.17138	0.19939	0.15364	0.16835	0.16659	0.15406
Methylcyclohexane	Averaged	0.55795	0.63437	0.62019	0.71445	0.63183	0.64535
Methylene Chloride	Averaged	0.43051	0.51513	0.35075	0.40829	0.39472	0.37658
1-Methylnaphthalene	Quadratic	0.53792	0.89490	0.57381	0.62588	0.61216	0.64550
2-Methylnaphthalene	Quadratic	0.81790	1.11818	0.65559	0.73077	0.75287	0.76836
4-Methyl-2-pentanone (MIBK)	Averaged	0.16281	0.26384	0.18766	0.20686	0.20468	0.19413
Methyl-tert-butyl ether	Averaged	0.58801	0.92654	0.69911	0.80449	0.76608	0.72490
Naphthalene	Wt Linear	1.42838	2.35009	1.54346	1.57339	1.66540	1.66703
n-Propylbenzene	Averaged	1.14194	1.62069	1.38942	1.42372	1.31705	1.34643
Styrene	Averaged	2.54266	4.18890	3.00039	3.30341	3.10257	3.08919
1,1,1,2-Tetrachloroethane	Averaged	1.24780	1.80674	1.31786	1.41849	1.35719	1.32847
1,1,2,2-Tetrachloroethane	Averaged	0.60554	0.92529	0.63552	0.72758	0.68400	0.66444
Tetrachloroethene	Averaged	1.41846	2.01504	1.67131	1.74447	1.64751	1.65953
Tetrahydrofuran	Averaged	0.06431	0.07513	0.05772	0.06186	0.06240	0.05649
Toluene	Averaged	2.93028	4.07621	3.10885	3.29540	3.09746	3.07841
1,2,3-Trichlorobenzene	Wt Linear	0.63707	1.09350	0.65456	0.71869	0.68920	0.68950
1,2,4-Trichlorobenzene	Averaged	1.04317	1.32580	0.86849	0.94670	0.89842	0.90220

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-3

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1,1-Trichloroethane	Averaged	0.57365	0.79148	0.68379	0.73925	0.69153	0.69171
1,1,2-Trichloroethane	Averaged	0.67498	0.91819	0.66918	0.74359	0.66357	0.66084
Trichloroethene	Averaged	0.47603	0.57672	0.47172	0.51846	0.47539	0.46694
Trichlorofluoromethane	Averaged	0.70766	0.69754	0.70524	0.79361	0.71818	0.72787
1,2,3-Trichloropropane	Wt Linear	0.27846	0.24584	0.18613	0.20244	0.18958	0.19316
1,2,3-Trimethylbenzene	Wt Linear	3.08279	4.96002	3.53365	3.71428	3.52324	3.44298
1,2,4-Trimethylbenzene	Averaged	3.09837	4.66453	3.70064	3.87666	3.56937	3.65611
1,3,5-Trimethylbenzene	Averaged	3.29553	4.83033	3.81499	3.99835	3.72579	3.77837
Vinyl chloride	Averaged	0.47749	0.61333	0.53867	0.58268	0.52902	0.52987
m&p-Xylene	Averaged	1.89829	2.83922	2.11951	2.24534	2.09679	2.07633
o-Xylene	Averaged	1.91628	2.70013	2.03598	2.17214	2.04795	1.95925
4-Bromofluorobenzene (S)	Averaged	0.80394	0.82690	0.82455	0.80808	0.80486	0.83639
1,2-Dichlorobenzene-d4 (S)	Averaged	0.82722	0.84669	0.84129	0.83878	0.83393	0.84298
Toluene-d8 (S)	Averaged	2.84213	2.78643	2.80885	2.80646	2.75183	2.76100

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acetone	Wt Linear	0.10199	0.09969
Acetonitrile	Averaged	0.18786	0.15809
Acrolein	Averaged	0.03809	0.04038
Acrylonitrile	Averaged	0.08074	0.08169
Benzene	Averaged	1.57163	1.48546
Bromobenzene	Wt Linear	1.41055	1.32710
Bromochloromethane	Averaged	0.21607	0.20683
Bromodichloromethane	Averaged	0.50161	0.50414
Bromoform	Wt Linear	0.54433	0.53711
Bromomethane	Wt Linear	0.28375	0.29890
2-Butanone (MEK)	Averaged	0.13082	0.11910
n-Butylbenzene	Averaged	3.03649	3.00180
sec-Butylbenzene	Averaged	4.52841	4.17448
tert-Butylbenzene	Averaged	3.22641	3.02448
Carbon disulfide	Averaged	1.06304	1.04303
Carbon tetrachloride	Averaged	0.67960	0.67769
Chlorobenzene	Averaged	3.45072	3.25653
Chloroethane	Wt Linear	0.29030	0.28333
2-Chloroethylvinyl ether	Averaged	0.10729	0.10847
Chloroform	Averaged	0.75122	0.72864
Chloromethane	Averaged	0.46144	0.51422
2-Chlorotoluene	Averaged	3.18261	2.91318
4-Chlorotoluene	Wt Linear	1.32644	1.24763
Cyclohexane	Averaged	0.85959	0.85694
Cyclohexanone	Wt Linear	0.08924	0.09300
1,2-Dibromo-3-chloropropane	Averaged	0.07356	0.08133
Dibromochloromethane	Averaged	1.20205	1.22060
1,2-Dibromoethane (EDB)	Averaged	0.87679	0.86279
Dibromomethane	Averaged	0.21047	0.20884
1,2-Dichlorobenzene	Wt Linear	1.95864	1.94238
1,3-Dichlorobenzene	Averaged	2.31958	2.25726
1,4-Dichlorobenzene	Averaged	2.31266	2.24684
Dichlorodifluoromethane	Averaged	0.51315	0.50246
1,1-Dichloroethane	Averaged	0.89066	0.86173
1,2-Dichloroethane	Averaged	0.50102	0.49363

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1-Dichloroethene	Averaged	0.40261	0.36665
cis-1,2-Dichloroethene	Averaged	0.50661	0.49411
trans-1,2-Dichloroethene	Averaged	0.48033	0.47162
1,2-Dichloropropane	Averaged	0.47391	0.46580
1,3-Dichloropropane	Averaged	1.34221	1.33608
2,2-Dichloropropane	Averaged	0.62497	0.61784
1,1-Dichloropropene	Averaged	0.57892	0.57735
cis-1,3-Dichloropropene	Averaged	0.61444	0.59400
trans-1,3-Dichloropropene	Averaged	1.49746	1.49294
Diethyl ether (Ethyl ether)	Averaged	0.17294	0.17715
1,4-Dioxane (p-Dioxane)	Averaged	0.00131	0.00128
Ethylbenzene	Averaged	1.83826	1.77503
n-Heptane	Averaged	0.08818	0.08898
Hexachloro-1,3-butadiene	Averaged	0.52482	0.59218
n-Hexane	Averaged	0.72563	0.72542
2-Hexanone	Wt Linear	0.51717	0.50373
Isopropylbenzene (Cumene)	Averaged	4.91675	4.35593
p-Isopropyltoluene	Averaged	3.95241	3.72915
Methyl acetate	Averaged	0.15643	0.14706
Methylcyclohexane	Averaged	0.63686	0.63839
Methylene Chloride	Averaged	0.35981	0.35266
1-Methylnaphthalene	Quadratic	0.72311	0.82259
2-Methylnaphthalene	Quadratic	0.89273	0.99422
4-Methyl-2-pentanone (MIBK)	Averaged	0.19849	0.18709
Methyl-tert-butyl ether	Averaged	0.77444	0.78054
Naphthalene	Wt Linear	1.87063	2.05476
n-Propylbenzene	Averaged	1.38495	1.28542
Styrene	Averaged	3.15112	2.90799
1,1,1,2-Tetrachloroethane	Averaged	1.40244	1.34858
1,1,2,2-Tetrachloroethane	Averaged	0.69239	0.60549
Tetrachloroethene	Averaged	1.70732	1.71723
Tetrahydrofuran	Averaged	0.06086	0.06025
Toluene	Averaged	3.19369	3.14294
1,2,3-Trichlorobenzene	Wt Linear	0.77923	0.85308
1,2,4-Trichlorobenzene	Averaged	0.97639	1.08187

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1,1-Trichloroethane	Averaged	0.71162	0.71685
1,1,2-Trichloroethane	Averaged	0.70423	0.70602
Trichloroethene	Averaged	0.48037	0.48245
Trichlorofluoromethane	Averaged	0.70603	0.63142
1,2,3-Trichloropropane	Wt Linear	0.19999	0.17875
1,2,3-Trimethylbenzene	Wt Linear	3.47352	3.33684
1,2,4-Trimethylbenzene	Averaged	3.68180	3.44255
1,3,5-Trimethylbenzene	Averaged	3.77294	3.48275
Vinyl chloride	Averaged	0.54235	0.52927
m&p-Xylene	Averaged	2.07799	1.95781
o-Xylene	Averaged	2.01620	1.90214
4-Bromofluorobenzene (S)	Averaged	0.83505	0.79237
1,2-Dichlorobenzene-d4 (S)	Averaged	0.84503	0.83610
Toluene-d8 (S)	Averaged	2.86879	3.00783

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-7
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Wt Linear		0.99894	0.00231930	0.10026	
Acetonitrile	Averaged	11.50044			0.19790	
Acrolein	Averaged	12.63209			0.03785	
Acrylonitrile	Averaged	9.50041			0.08268	
Benzene	Averaged	8.50266			1.63260	
Bromobenzene	Wt Linear		0.99878	0.00270400	1.35686	
Bromochloromethane	Averaged	13.92179			0.23967	
Bromodichloromethane	Averaged	8.17910			0.49671	
Bromoform	Wt Linear		0.99836	-0.0014693	0.53144	
Bromomethane	Wt Linear		0.99595	-0.0002335	0.28592	
2-Butanone (MEK)	Averaged	12.18948			0.13100	
n-Butylbenzene	Averaged	11.09296			3.15861	
sec-Butylbenzene	Averaged	11.46877			4.59240	
tert-Butylbenzene	Averaged	11.36759			3.32747	
Carbon disulfide	Averaged	6.20148			1.09596	
Carbon tetrachloride	Averaged	9.58226			0.65199	
Chlorobenzene	Averaged	12.45216			3.46849	
Chloroethane	Wt Linear		0.99914	0.00035330	0.28591	
2-Chloroethylvinyl ether	Averaged	9.69590			0.10026	
Chloroform	Averaged	9.54071			0.76653	
Chloromethane	Averaged	8.20135			0.47178	
2-Chlorotoluene	Averaged	13.62499			3.19804	
4-Chlorotoluene	Wt Linear		0.99860	0.00230200	1.27669	
Cyclohexane	Averaged	9.02853			0.88143	
Cyclohexanone	Wt Linear		0.99829	-0.0002662	0.09067	
1,2-Dibromo-3-chloropropane	Averaged	7.99863			0.07118	
Dibromochloromethane	Averaged	12.96984			1.14305	
1,2-Dibromoethane (EDB)	Averaged	14.52088			0.84948	
Dibromomethane	Averaged	10.34772			0.21580	
1,2-Dichlorobenzene	Wt Linear		0.99927	0.00499300	1.94397	
1,3-Dichlorobenzene	Averaged	13.86296			2.39339	
1,4-Dichlorobenzene	Averaged	13.43678			2.40850	
Dichlorodifluoromethane	Averaged	6.97607			0.50630	
1,1-Dichloroethane	Averaged	9.31497			0.89978	
1,2-Dichloroethane	Averaged	9.40973			0.48420	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-8
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1-Dichloroethene	Averaged	9.66686			0.41697	
cis-1,2-Dichloroethene	Averaged	8.93106			0.51447	
trans-1,2-Dichloroethene	Averaged	12.32872			0.48560	
1,2-Dichloropropane	Averaged	9.53372			0.47297	
1,3-Dichloropropane	Averaged	11.83352			1.34834	
2,2-Dichloropropane	Averaged	6.16341			0.63089	
1,1-Dichloropropene	Averaged	5.03957			0.57833	
cis-1,3-Dichloropropene	Averaged	9.48997			0.60759	
trans-1,3-Dichloropropene	Averaged	14.90897			1.42859	
Diethyl ether (Ethyl ether)	Averaged	5.91986			0.17183	
1,4-Dioxane (p-Dioxane)	Averaged	13.95999			0.00125	
Ethylbenzene	Averaged	7.37656			1.81669	
n-Heptane	Averaged	6.01764			0.08645	
Hexachloro-1,3-butadiene	Averaged	13.43268			0.52094	
n-Hexane	Averaged	6.95822			0.72934	
2-Hexanone	Wt Linear		0.99907	0.00414580	0.50552	
Isopropylbenzene (Cumene)	Averaged	11.02277			4.97952	
p-Isopropyltoluene	Averaged	12.76869			3.98328	
Methyl acetate	Averaged	9.95487			0.16461	
Methylcyclohexane	Averaged	6.68243			0.63492	
Methylene Chloride	Averaged	13.77431			0.39856	
1-Methylnaphthalene	Quadratic		0.99994	-0.0022598	0.61094	0.05320
2-Methylnaphthalene	Quadratic		0.99974	-0.0079680	0.76107	0.05915
4-Methyl-2-pentanone (MIBK)	Averaged	14.44114			0.20069	
Methyl-tert-butyl ether	Averaged	12.69989			0.75801	
Naphthalene	Wt Linear		0.99262	-0.0063960	1.92445	
n-Propylbenzene	Averaged	9.93687			1.36370	
Styrene	Averaged	14.92436			3.16078	
1,1,1,2-Tetrachloroethane	Averaged	12.19944			1.40345	
1,1,2,2-Tetrachloroethane	Averaged	14.91284			0.69253	
Tetrachloroethene	Averaged	9.60249			1.69761	
Tetrahydrofuran	Averaged	9.18876			0.06238	
Toluene	Averaged	10.90103			3.24040	
1,2,3-Trichlorobenzene	Wt Linear		0.99283	-0.0014762	0.80020	
1,2,4-Trichlorobenzene	Averaged	14.80361			1.00538	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-9
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/02/2021 08/02/2021 Calibration Time(s): 09:31 11:10

LAB FILE ID

CAL1 = 080221A.B\0802A_12.D CAL2 = 080221A.B\0802A_13.D CAL3 = 080221A.B\0802A_14.D

CAL4 = 080221A.B\0802A_15.D CAL5 = 080221A.B\0802A_16.D CAL6 = 080221A.B\0802A_17.D

CAL7 = 080221A.B\0802A_18.D CAL8 = 080221A.B\0802A_19.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1,1-Trichloroethane	Averaged	8.82242			0.69998	
1,1,2-Trichloroethane	Averaged	11.95652			0.71758	
Trichloroethene	Averaged	7.52564			0.49351	
Trichlorofluoromethane	Averaged	6.23281			0.71095	
1,2,3-Trichloropropane	Wt Linear		0.99741	0.00093070	0.18670	
1,2,3-Trimethylbenzene	Wt Linear		0.99898	0.00953150	3.40198	
1,2,4-Trimethylbenzene	Averaged	12.08492			3.71125	
1,3,5-Trimethylbenzene	Averaged	11.86786			3.83738	
Vinyl chloride	Averaged	7.43010			0.54284	
m&p-Xylene	Averaged	13.49839			2.16391	
o-Xylene	Averaged	12.39669			2.09376	
4-Bromofluorobenzene (S)	Averaged	1.99560			0.81652	
1,2-Dichlorobenzene-d4 (S)	Averaged	0.76646			0.83900	
Toluene-d8 (S)	Averaged	2.89751			2.82916	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/05/2021 08/05/2021 Calibration Time(s): 11:34 13:13

LAB FILE ID

CAL1 = 080521A.B\0805A_19.D CAL2 = 080521A.B\0805A_20.D CAL3 = 080521A.B\0805A_21.D

CAL4 = 080521A.B\0805A_22.D CAL5 = 080521A.B\0805A_23.D CAL6 = 080521A.B\0805A_24.D

CAL7 = 080521A.B\0805A_25.D CAL8 = 080521A.B\0805A_26.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Wt Linear	0.20952	0.19540	0.14243	0.17204	0.14347	0.13333
Acetonitrile	Averaged	0.25948	0.32636	0.25670	0.28385	0.27114	0.25923
Acrolein	Averaged	0.04942	0.07013	0.04633	0.05875	0.05166	0.05095
Acrylonitrile	Averaged	0.08077	0.10446	0.08605	0.09497	0.08763	0.08375
Benzene	Averaged	1.69260	2.46976	1.95149	2.21759	2.08523	1.99533
Bromobenzene	Averaged	1.18700	1.75302	1.39929	1.51720	1.52593	1.43523
Bromochloromethane	Wt Linear	0.10394	0.21132	0.14121	0.16327	0.15926	0.14708
Bromodichloromethane	Wt Linear	0.23665	0.68410	0.57505	0.66439	0.62476	0.63748
Bromoform	Averaged	0.29216	0.31278	0.27156	0.35791	0.35336	0.33060
Bromomethane	Averaged	0.40143	0.46260	0.30410	0.34019	0.31898	0.35299
2-Butanone (MEK)	Averaged	0.10782	0.16331	0.13462	0.14794	0.13334	0.13015
n-Butylbenzene	Averaged	3.68136	6.08442	4.88319	5.13105	5.20487	4.91357
sec-Butylbenzene	Wt Linear	4.29728	7.61735	5.92023	6.28296	6.44984	6.04209
tert-Butylbenzene	Averaged	2.88247	4.24454	3.67892	4.00677	3.94771	3.85100
Carbon disulfide	Averaged	1.65360	2.31465	1.76161	1.88465	1.84669	1.75457
Carbon tetrachloride	Averaged	0.49075	0.70840	0.57760	0.65264	0.59881	0.61554
Chlorobenzene	Averaged	1.83465	2.51028	2.07063	2.37461	2.29933	2.11870
Chloroethane	Averaged	0.55861	0.63944	0.45736	0.50552	0.46236	0.46310
2-Chloroethylvinyl ether	Averaged	0.08764	0.14265	0.11260	0.13681	0.12408	0.12728
Chloroform	Averaged	0.91109	1.13791	0.91153	1.02360	0.97632	0.96733
Chloromethane	Averaged	0.37881	0.61529	0.42820	0.50551	0.48841	0.49527
2-Chlorotoluene	Averaged	4.18671	6.16429	5.04700	5.35363	5.37024	5.04947
4-Chlorotoluene	Averaged	0.84018	1.46613	1.22170	1.24158	1.31715	1.23395
Cyclohexane	Averaged	0.88155	1.13911	0.98754	1.01781	0.98587	0.99305
Cyclohexanone	Averaged	0.08399	0.09047	0.07260	0.09201	0.08550	0.07330
1,2-Dibromo-3-chloropropane	Wt Linear		0.18642	0.11498	0.13993	0.14062	0.13838
Dibromochloromethane	Wt Linear	0.31581	0.78441	0.57617	0.66839	0.65688	0.65482
1,2-Dibromoethane (EDB)	Averaged	0.51652	0.68587	0.60713	0.67341	0.63286	0.60574
Dibromomethane	Averaged	0.17307	0.26970	0.22522	0.24864	0.22852	0.22800
1,2-Dichlorobenzene	Averaged	1.63507	2.43171	1.93304	2.05809	2.09880	1.97266
1,3-Dichlorobenzene	Averaged	2.11245	2.63524	2.17528	2.38790	2.48594	2.33455
1,4-Dichlorobenzene	Averaged	2.06627	2.81927	2.18014	2.46217	2.46885	2.27748
Dichlorodifluoromethane	Averaged	0.45828	0.71111	0.58585	0.62588	0.60839	0.60094
1,1-Dichloroethane	Averaged	0.95575	1.33101	0.99908	1.13442	1.09134	1.07766
1,2-Dichloroethane	Averaged	0.48334	0.65185	0.55455	0.65836	0.60061	0.59369

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/05/2021 08/05/2021 Calibration Time(s): 11:34 13:13

LAB FILE ID

CAL1 = 080521A.B\0805A_19.D CAL2 = 080521A.B\0805A_20.D CAL3 = 080521A.B\0805A_21.D

CAL4 = 080521A.B\0805A_22.D CAL5 = 080521A.B\0805A_23.D CAL6 = 080521A.B\0805A_24.D

CAL7 = 080521A.B\0805A_25.D CAL8 = 080521A.B\0805A_26.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1-Dichloroethene	Averaged	0.44404	0.63514	0.51497	0.53847	0.53011	0.52860
cis-1,2-Dichloroethene	Averaged	0.47261	0.66425	0.47924	0.54369	0.51344	0.50498
trans-1,2-Dichloroethene	Averaged	0.44619	0.55281	0.47289	0.51401	0.48282	0.47781
1,2-Dichloropropane	Averaged	0.53043	0.63920	0.54030	0.61931	0.56949	0.56051
1,3-Dichloropropane	Averaged	1.17936	1.62642	1.29274	1.48721	1.39307	1.28091
2,2-Dichloropropane	Averaged	0.74094	0.94645	0.74488	0.81004	0.76962	0.75758
1,1-Dichloropropene	Averaged	0.67084	0.86205	0.71603	0.78595	0.74809	0.74274
cis-1,3-Dichloropropene	Averaged	0.61984	0.84256	0.71551	0.81928	0.78279	0.77104
trans-1,3-Dichloropropene	Averaged	1.12644	1.64850	1.36614	1.54642	1.51908	1.43714
Diethyl ether (Ethyl ether)	Averaged	0.26619	0.34229	0.25300	0.31021	0.27888	0.27595
1,4-Dioxane (p-Dioxane)	Averaged		0.00149	0.00135	0.00145	0.00158	0.00125
Ethylbenzene	Averaged	1.00719	1.39512	1.20164	1.29553	1.30770	1.19621
n-Heptane	Averaged		0.08285	0.06901	0.07701	0.07433	0.07269
Hexachloro-1,3-butadiene	Averaged		0.99116	0.77603	0.73206	0.78828	0.75729
n-Hexane	Averaged	0.60970	0.85218	0.80043	0.82868	0.77105	0.73663
2-Hexanone	Averaged	0.32381	0.47301	0.39534	0.48918	0.43351	0.39252
Isopropylbenzene (Cumene)	Averaged	2.74331	4.15847	3.54522	3.78262	3.80871	3.50323
p-Isopropyltoluene	Averaged	4.06503	5.71932	4.39033	4.84268	4.83251	4.63694
Methyl acetate	Averaged	0.21945	0.27775	0.20968	0.24927	0.23070	0.21648
Methylcyclohexane	Averaged	0.70204	0.89084	0.74655	0.80227	0.77933	0.75315
Methylene Chloride	Averaged	0.48558	0.67806	0.54267	0.61389	0.57477	0.56490
1-Methylnaphthalene	Averaged	0.46894	0.63930	0.53399	0.62922	0.70705	0.62906
2-Methylnaphthalene	Averaged		0.81652	0.65113	0.82473	0.75936	0.75599
4-Methyl-2-pentanone (MIBK)	Averaged	0.14864	0.22606	0.19454	0.23825	0.21367	0.20217
Methyl-tert-butyl ether	Averaged	0.75440	1.15466	0.96291	1.14666	1.01318	1.02476
Naphthalene	Wt Linear	1.07155	1.85921	1.41980	1.70320	1.67513	1.58714
n-Propylbenzene	Averaged	1.51162	1.90724	1.38664	1.54080	1.56856	1.45939
Styrene	Averaged	1.94439	2.98933	2.18239	2.49654	2.45373	2.26229
1,1,1,2-Tetrachloroethane	Averaged	0.70576	0.92630	0.71432	0.77889	0.78610	0.72952
1,1,2,2-Tetrachloroethane	Averaged	0.90591	1.34062	1.12518	1.31711	1.23336	1.14945
Tetrachloroethene	Averaged	1.08133	1.31344	0.98903	0.99732	1.02570	0.93913
Tetrahydrofuran	Averaged	0.05382	0.07827	0.05861	0.06700	0.06207	0.06057
Toluene	Averaged	2.43676	3.05596	2.64903	2.70382	2.71329	2.55416
1,2,3-Trichlorobenzene	Averaged	0.62570	0.97018	0.82102	0.91980	0.90829	0.82516
1,2,4-Trichlorobenzene	Averaged	0.97607	1.11924	0.94366	1.13777	1.17071	1.07894

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-3

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/05/2021 08/05/2021 Calibration Time(s): 11:34 13:13

LAB FILE ID

CAL1 = 080521A.B\0805A_19.D CAL2 = 080521A.B\0805A_20.D CAL3 = 080521A.B\0805A_21.D

CAL4 = 080521A.B\0805A_22.D CAL5 = 080521A.B\0805A_23.D CAL6 = 080521A.B\0805A_24.D

CAL7 = 080521A.B\0805A_25.D CAL8 = 080521A.B\0805A_26.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1,1-Trichloroethane	Averaged	0.67357	0.96653	0.77402	0.82972	0.82154	0.82443
1,1,2-Trichloroethane	Averaged	0.50555	0.73293	0.68150	0.71978	0.69831	0.65055
Trichloroethene	Averaged	0.53716	0.67734	0.51558	0.55217	0.53301	0.51554
Trichlorofluoromethane	Averaged	0.77293	1.14794	0.90256	0.99968	0.93842	0.92440
1,2,3-Trichloropropane	Wt Linear	0.18962	0.36971	0.28026	0.30162	0.29166	0.27136
1,2,3-Trimethylbenzene	Averaged	4.17428	5.65546	4.57882	4.98915	5.01296	4.72081
1,2,4-Trimethylbenzene	Averaged	4.10367	5.89690	4.89768	5.24558	5.27042	5.02063
1,3,5-Trimethylbenzene	Averaged	5.04199	6.45671	4.96812	5.20781	5.31258	5.12487
Vinyl chloride	Averaged	0.67445	0.87915	0.71322	0.76443	0.75874	0.73586
m&p-Xylene	Averaged	1.09864	1.76530	1.41577	1.51869	1.50588	1.37282
o-Xylene	Averaged	1.23253	1.56802	1.29954	1.42526	1.49425	1.36379
4-Bromofluorobenzene (S)	Averaged	1.25202	1.26797	1.27443	1.24734	1.22713	1.30057
1,2-Dichlorobenzene-d4 (S)	Averaged	0.82375	0.87294	0.85789	0.82190	0.83043	0.83132
Toluene-d8 (S)	Averaged	2.24887	2.28548	2.29073	2.21122	2.26946	2.21695

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/05/2021 08/05/2021 Calibration Time(s): 11:34 13:13

LAB FILE ID

CAL1 = 080521A.B\0805A_19.D CAL2 = 080521A.B\0805A_20.D CAL3 = 080521A.B\0805A_21.D

CAL4 = 080521A.B\0805A_22.D CAL5 = 080521A.B\0805A_23.D CAL6 = 080521A.B\0805A_24.D

CAL7 = 080521A.B\0805A_25.D CAL8 = 080521A.B\0805A_26.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acetone	Wt Linear	0.11124	0.12316
Acetonitrile	Averaged	0.25929	0.20748
Acrolein	Averaged	0.05543	0.05790
Acrylonitrile	Averaged	0.08541	0.08245
Benzene	Averaged	1.98567	1.76999
Bromobenzene	Averaged	1.42603	1.37437
Bromochloromethane	Wt Linear	0.14415	0.13633
Bromodichloromethane	Wt Linear	0.65757	0.63347
Bromoform	Averaged	0.35794	0.36131
Bromomethane	Averaged	0.39756	0.40381
2-Butanone (MEK)	Averaged	0.11811	0.11741
n-Butylbenzene	Averaged	4.83756	4.74872
sec-Butylbenzene	Wt Linear	5.89424	5.45185
tert-Butylbenzene	Averaged	3.72057	3.53746
Carbon disulfide	Averaged	1.76395	1.57413
Carbon tetrachloride	Averaged	0.63832	0.62252
Chlorobenzene	Averaged	2.21376	2.14083
Chloroethane	Averaged	0.45850	0.44222
2-Chloroethylvinyl ether	Averaged	0.13295	0.12618
Chloroform	Averaged	0.96616	0.92421
Chloromethane	Averaged	0.50318	0.54323
2-Chlorotoluene	Averaged	4.99049	4.64106
4-Chlorotoluene	Averaged	1.22264	1.17619
Cyclohexane	Averaged	0.99157	0.97452
Cyclohexanone	Averaged	0.07144	0.07657
1,2-Dibromo-3-chloropropane	Wt Linear	0.13494	0.15480
Dibromochloromethane	Wt Linear	0.69638	0.72222
1,2-Dibromoethane (EDB)	Averaged	0.64995	0.63616
Dibromomethane	Averaged	0.24072	0.22797
1,2-Dichlorobenzene	Averaged	1.96170	1.98524
1,3-Dichlorobenzene	Averaged	2.32176	2.31691
1,4-Dichlorobenzene	Averaged	2.27628	2.28882
Dichlorodifluoromethane	Averaged	0.60884	0.57184
1,1-Dichloroethane	Averaged	1.07732	1.00121
1,2-Dichloroethane	Averaged	0.60430	0.57003

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/05/2021 08/05/2021 Calibration Time(s): 11:34 13:13

LAB FILE ID

CAL1 = 080521A.B\0805A_19.D CAL2 = 080521A.B\0805A_20.D CAL3 = 080521A.B\0805A_21.D

CAL4 = 080521A.B\0805A_22.D CAL5 = 080521A.B\0805A_23.D CAL6 = 080521A.B\0805A_24.D

CAL7 = 080521A.B\0805A_25.D CAL8 = 080521A.B\0805A_26.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1-Dichloroethene	Averaged	0.52704	0.47596
cis-1,2-Dichloroethene	Averaged	0.51317	0.49936
trans-1,2-Dichloroethene	Averaged	0.49351	0.47767
1,2-Dichloropropane	Averaged	0.56336	0.53815
1,3-Dichloropropane	Averaged	1.35752	1.31878
2,2-Dichloropropane	Averaged	0.77427	0.74309
1,1-Dichloropropene	Averaged	0.75862	0.71994
cis-1,3-Dichloropropene	Averaged	0.78863	0.73753
trans-1,3-Dichloropropene	Averaged	1.51158	1.51355
Diethyl ether (Ethyl ether)	Averaged	0.29591	0.28615
1,4-Dioxane (p-Dioxane)	Averaged	0.00145	0.00147
Ethylbenzene	Averaged	1.25231	1.23650
n-Heptane	Averaged	0.07405	0.07803
Hexachloro-1,3-butadiene	Averaged	0.79327	0.92066
n-Hexane	Averaged	0.76228	0.72472
2-Hexanone	Averaged	0.35797	0.36644
Isopropylbenzene (Cumene)	Averaged	3.53102	3.21127
p-Isopropyltoluene	Averaged	4.49310	4.38075
Methyl acetate	Averaged	0.21899	0.19268
Methylcyclohexane	Averaged	0.76442	0.72176
Methylene Chloride	Averaged	0.56946	0.55318
1-Methylnaphthalene	Averaged	0.68778	0.65430
2-Methylnaphthalene	Averaged	0.82685	0.81320
4-Methyl-2-pentanone (MIBK)	Averaged	0.20043	0.18041
Methyl-tert-butyl ether	Averaged	1.04210	1.01383
Naphthalene	Wt Linear	1.73983	1.91488
n-Propylbenzene	Averaged	1.48878	1.43014
Styrene	Averaged	2.29650	2.23627
1,1,1,2-Tetrachloroethane	Averaged	0.77732	0.75450
1,1,2,2-Tetrachloroethane	Averaged	1.14814	1.04349
Tetrachloroethene	Averaged	1.02067	1.03137
Tetrahydrofuran	Averaged	0.06007	0.05758
Toluene	Averaged	2.64503	2.64693
1,2,3-Trichlorobenzene	Averaged	0.90767	1.01077
1,2,4-Trichlorobenzene	Averaged	1.13476	1.26335

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/05/2021 08/05/2021 Calibration Time(s): 11:34 13:13

LAB FILE ID

CAL1 = 080521A.B\0805A_19.D CAL2 = 080521A.B\0805A_20.D CAL3 = 080521A.B\0805A_21.D

CAL4 = 080521A.B\0805A_22.D CAL5 = 080521A.B\0805A_23.D CAL6 = 080521A.B\0805A_24.D

CAL7 = 080521A.B\0805A_25.D CAL8 = 080521A.B\0805A_26.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1,1-Trichloroethane	Averaged	0.83448	0.80477
1,1,2-Trichloroethane	Averaged	0.67451	0.67042
Trichloroethene	Averaged	0.51921	0.51525
Trichlorofluoromethane	Averaged	0.88741	0.78396
1,2,3-Trichloropropane	Wt Linear	0.26739	0.24891
1,2,3-Trimethylbenzene	Averaged	4.58052	4.55307
1,2,4-Trimethylbenzene	Averaged	4.84450	4.68094
1,3,5-Trimethylbenzene	Averaged	4.98158	4.70764
Vinyl chloride	Averaged	0.73966	0.65782
m&p-Xylene	Averaged	1.45043	1.38701
o-Xylene	Averaged	1.38049	1.33681
4-Bromofluorobenzene (S)	Averaged	1.27902	1.20064
1,2-Dichlorobenzene-d4 (S)	Averaged	0.82462	0.81998
Toluene-d8 (S)	Averaged	2.31951	2.39552

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-7
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/05/2021 08/05/2021 Calibration Time(s): 11:34 13:13

LAB FILE ID

CAL1 = 080521A.B\0805A_19.D CAL2 = 080521A.B\0805A_20.D CAL3 = 080521A.B\0805A_21.D

CAL4 = 080521A.B\0805A_22.D CAL5 = 080521A.B\0805A_23.D CAL6 = 080521A.B\0805A_24.D

CAL7 = 080521A.B\0805A_25.D CAL8 = 080521A.B\0805A_26.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Wt Linear		0.99183	0.00636450	0.12292	
Acetonitrile	Averaged	12.43810			0.26544	
Acrolein	Averaged	13.47315			0.05507	
Acrylonitrile	Averaged	8.89827			0.08819	
Benzene	Averaged	12.14574			2.02096	
Bromobenzene	Averaged	11.05149			1.45226	
Bromochloromethane	Wt Linear		0.99695	0.00038570	0.14145	
Bromodichloromethane	Wt Linear		0.99938	-0.0021663	0.64178	
Bromoform	Averaged	10.39990			0.32970	
Bromomethane	Averaged	14.17274			0.37271	
2-Butanone (MEK)	Averaged	13.58050			0.13159	
n-Butylbenzene	Averaged	13.37709			4.93559	
sec-Butylbenzene	Wt Linear		0.99672	0.01153440	5.71441	
tert-Butylbenzene	Averaged	10.90931			3.73368	
Carbon disulfide	Averaged	12.26565			1.81923	
Carbon tetrachloride	Averaged	10.28156			0.61307	
Chlorobenzene	Averaged	9.38228			2.19535	
Chloroethane	Averaged	13.68086			0.49839	
2-Chloroethylvinyl ether	Averaged	13.85673			0.12377	
Chloroform	Averaged	7.70536			0.97727	
Chloromethane	Averaged	14.28837			0.49474	
2-Chlorotoluene	Averaged	11.31693			5.10036	
4-Chlorotoluene	Averaged	14.48063			1.21494	
Cyclohexane	Averaged	7.06808			0.99638	
Cyclohexanone	Averaged	10.26113			0.08074	
1,2-Dibromo-3-chloropropane	Wt Linear		0.99496	-0.0001868	0.14615	
Dibromochloromethane	Wt Linear		0.99826	-0.0028177	0.70280	
1,2-Dibromoethane (EDB)	Averaged	8.39035			0.62595	
Dibromomethane	Averaged	11.96518			0.23023	
1,2-Dichlorobenzene	Averaged	10.94890			2.00954	
1,3-Dichlorobenzene	Averaged	7.02656			2.34626	
1,4-Dichlorobenzene	Averaged	9.76973			2.35491	
Dichlorodifluoromethane	Averaged	11.70962			0.59639	
1,1-Dichloroethane	Averaged	10.70717			1.08347	
1,2-Dichloroethane	Averaged	9.47806			0.58959	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-8
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/05/2021 08/05/2021 Calibration Time(s): 11:34 13:13

LAB FILE ID

CAL1 = 080521A.B\0805A_19.D CAL2 = 080521A.B\0805A_20.D CAL3 = 080521A.B\0805A_21.D

CAL4 = 080521A.B\0805A_22.D CAL5 = 080521A.B\0805A_23.D CAL6 = 080521A.B\0805A_24.D

CAL7 = 080521A.B\0805A_25.D CAL8 = 080521A.B\0805A_26.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1-Dichloroethene	Averaged	10.54873			0.52429	
cis-1,2-Dichloroethene	Averaged	11.61196			0.52384	
trans-1,2-Dichloroethene	Averaged	6.50239			0.48971	
1,2-Dichloropropane	Averaged	6.89512			0.57009	
1,3-Dichloropropane	Averaged	10.08254			1.36700	
2,2-Dichloropropane	Averaged	8.74976			0.78586	
1,1-Dichloropropene	Averaged	7.52022			0.75053	
cis-1,3-Dichloropropene	Averaged	9.16335			0.75965	
trans-1,3-Dichloropropene	Averaged	10.76534			1.45861	
Diethyl ether (Ethyl ether)	Averaged	9.65419			0.28857	
1,4-Dioxane (p-Dioxane)	Averaged	7.43768			0.00143	
Ethylbenzene	Averaged	9.13867			1.23652	
n-Heptane	Averaged	5.83190			0.07542	
Hexachloro-1,3-butadiene	Averaged	11.60602			0.82268	
n-Hexane	Averaged	9.85636			0.76071	
2-Hexanone	Averaged	14.20662			0.40397	
Isopropylbenzene (Cumene)	Averaged	11.98898			3.53548	
p-Isopropyltoluene	Averaged	10.60672			4.67008	
Methyl acetate	Averaged	11.53499			0.22687	
Methylcyclohexane	Averaged	7.53102			0.77005	
Methylene Chloride	Averaged	9.73012			0.57281	
1-Methylnaphthalene	Averaged	12.82759			0.61870	
2-Methylnaphthalene	Averaged	8.16380			0.77825	
4-Methyl-2-pentanone (MIBK)	Averaged	13.82960			0.20052	
Methyl-tert-butyl ether	Averaged	12.26551			1.01406	
Naphthalene	Wt Linear		0.99503	-0.0077654	1.80990	
n-Propylbenzene	Averaged	10.46747			1.53665	
Styrene	Averaged	12.99031			2.35768	
1,1,1,2-Tetrachloroethane	Averaged	9.02011			0.77159	
1,1,2,2-Tetrachloroethane	Averaged	12.31167			1.15791	
Tetrachloroethene	Averaged	10.85919			1.04975	
Tetrahydrofuran	Averaged	12.03614			0.06225	
Toluene	Averaged	6.64300			2.67562	
1,2,3-Trichlorobenzene	Averaged	13.62775			0.87357	
1,2,4-Trichlorobenzene	Averaged	9.37492			1.10306	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-9

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSV8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 08/05/2021 08/05/2021 Calibration Time(s): 11:34 13:13

LAB FILE ID

CAL1 = 080521A.B\0805A_19.D CAL2 = 080521A.B\0805A_20.D CAL3 = 080521A.B\0805A_21.D

CAL4 = 080521A.B\0805A_22.D CAL5 = 080521A.B\0805A_23.D CAL6 = 080521A.B\0805A_24.D

CAL7 = 080521A.B\0805A_25.D CAL8 = 080521A.B\0805A_26.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1,1-Trichloroethane	Averaged	9.87494			0.81613	
1,1,2-Trichloroethane	Averaged	10.56500			0.66669	
Trichloroethene	Averaged	10.04983			0.54566	
Trichlorofluoromethane	Averaged	13.00717			0.91966	
1,2,3-Trichloropropane	Wt Linear		0.99662	0.00071980	0.26009	
1,2,3-Trimethylbenzene	Averaged	9.23739			4.78313	
1,2,4-Trimethylbenzene	Averaged	10.36943			4.99504	
1,3,5-Trimethylbenzene	Averaged	10.13082			5.22516	
Vinyl chloride	Averaged	9.14518			0.74042	
m&p-Xylene	Averaged	12.88861			1.43932	
o-Xylene	Averaged	7.72084			1.38759	
4-Bromofluorobenzene (S)	Averaged	2.51527			1.25614	
1,2-Dichlorobenzene-d4 (S)	Averaged	2.31975			0.83535	
Toluene-d8 (S)	Averaged	2.61288			2.27972	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVA GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 08/03/2021 08/03/2021 Calibration Time(s): 11:18 12:34

LAB FILE ID

CAL1 = 080321AGRO.B\0803A_09.D CAL2 = 080321AGRO.B\0803A_10.D CAL3 = 080321AGRO.B\0803A_11.D

CAL4 = 080321AGRO.B\0803A_12.D CAL5 = 080321AGRO.B\0803A_13.D CAL6 = 080321AGRO.B\0803A_14.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
TPH-GRO	Averaged	8271.8400	7668.6880	8036.9060	7728.3640	7990.6411	7714.9409
4-Bromofluorobenzene (S)	Averaged	18921.8600	19217.7800	19737.5400	21826.9000	26344.3400	27052.1600
1,2-Dichlorobenzene-d4 (S)	Averaged	4785.2840	2456.5960	1310.4640	382.60675	253.72637	156.53620
Toluene-d8 (S)	Averaged	25827.4600	25605.5800	26493.3200	27975.6400	31495.0600	37080.4000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSVA GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 08/03/2021 08/03/2021 Calibration Time(s): 11:18 12:34

LAB FILE ID

CAL1 = 080321AGRO.B\0803A_09.D CAL2 = 080321AGRO.B\0803A_10.D CAL3 = 080321AGRO.B\0803A_11.D

CAL4 = 080321AGRO.B\0803A_12.D CAL5 = 080321AGRO.B\0803A_13.D CAL6 = 080321AGRO.B\0803A_14.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
TPH-GRO	Averaged	3.00764			7901.89667	
4-Bromofluorobenzene (S)	Averaged	16.44725			22183.4300	
1,2-Dichlorobenzene-d4 (S)	Averaged	116.0331			1557.53555	
Toluene-d8 (S)	Averaged	15.40969			29079.5766	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

19754652ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:53

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080221A.B\0802A_22.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60376299

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	116.0200	0.0500	16.0201	20.0000
Acetonitrile	Averaged	0.19790	0.18992	0.0500	-4.0335	20.0000
Acrolein	Averaged	0.03785	0.03783	0.0500	-0.0356	20.0000
Acrylonitrile	Averaged	0.08268	0.08518	0.0500	3.0228	20.0000
Benzene	Averaged	1.63260	1.57226	0.3000	-3.6960	20.0000
Bromobenzene	Wt Linear	20	19.44843	0.0500	-2.7578	20.0000
Bromochloromethane	Averaged	0.23967	0.23481	0.0500	-2.0281	20.0000
Bromodichloromethane	Averaged	0.49671	0.49121	0.0500	-1.1074	20.0000
Bromoform	Wt Linear	20	19.46422	0.1000	-2.6789	20.0000
Bromomethane	Wt Linear	20	20.49057	0.0500	2.4529	20.0000
2-Butanone (MEK)	Averaged	0.13100	0.13960	0.0500	6.5597	20.0000
n-Butylbenzene	Averaged	3.15861	3.05460	0.0500	-3.2926	20.0000
sec-Butylbenzene	Averaged	4.59240	4.56501	0.0500	-0.5964	20.0000
tert-Butylbenzene	Averaged	3.32747	3.30011	0.0500	-0.8220	20.0000
Carbon disulfide	Averaged	1.09596	1.07041	0.0500	-2.3315	20.0000
Carbon tetrachloride	Averaged	0.65199	0.64231	0.1000	-1.4842	20.0000
Chlorobenzene	Averaged	3.46849	3.39464	0.3000	-2.1293	20.0000
Chloroethane	Wt Linear	20	20.08090	0.0500	0.4045	20.0000
2-Chloroethylvinyl ether	Averaged	0.10026	0.10353	0.0500	3.2619	20.0000
Chloroform	Averaged	0.76653	0.75393	0.0500	-1.6436	20.0000
Chloromethane	Averaged	0.47178	0.42145	0.1000	-10.6689	20.0000
2-Chlorotoluene	Averaged	3.19804	3.00885	0.0500	-5.9159	20.0000
4-Chlorotoluene	Wt Linear	20	20.21294	0.0500	1.0647	20.0000
Cyclohexane	Averaged	0.88143	0.93364	0.0500	5.9235	20.0000
Cyclohexanone	Wt Linear	100	94.50946	0.0500	-5.4905	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.07118	0.07000	0.0500	-1.6584	20.0000
Dibromochloromethane	Averaged	1.14305	1.12551	0.0500	-1.5347	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.84948	0.86278	0.0500	1.5661	20.0000
Dibromomethane	Averaged	0.21580	0.20335	0.0500	-5.7699	20.0000
1,2-Dichlorobenzene	Wt Linear	20	20.06916	0.0500	0.3458	20.0000
1,3-Dichlorobenzene	Averaged	2.39339	2.25246	0.0500	-5.8883	20.0000
1,4-Dichlorobenzene	Averaged	2.40850	2.26045	0.0500	-6.1470	20.0000
Dichlorodifluoromethane	Averaged	0.50630	0.49291	0.0500	-2.6453	20.0000
1,1-Dichloroethane	Averaged	0.89978	0.89342	0.1000	-0.7068	20.0000
1,2-Dichloroethane	Averaged	0.48420	0.47722	0.0500	-1.4408	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

19754652ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:53

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080221A.B\0802A_22.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60376299

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41697	0.40147	0.1000	-3.7162	20.0000
cis-1,2-Dichloroethene	Averaged	0.51447	0.50511	0.1000	-1.8195	20.0000
trans-1,2-Dichloroethene	Averaged	0.48560	0.47539	0.1000	-2.1033	20.0000
1,2-Dichloropropane	Averaged	0.47297	0.46396	0.0500	-1.9053	20.0000
1,3-Dichloropropane	Averaged	1.34834	1.29598	0.0500	-3.8830	20.0000
2,2-Dichloropropane	Averaged	0.63089	0.58404	0.0500	-7.4263	20.0000
1,1-Dichloropropene	Averaged	0.57833	0.57122	0.0500	-1.2286	20.0000
cis-1,3-Dichloropropene	Averaged	0.60759	0.60648	0.0500	-0.1829	20.0000
trans-1,3-Dichloropropene	Averaged	1.42859	1.40020	0.0500	-1.9873	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.17183	0.16590	0.0500	-3.4519	20.0000
1,4-Dioxane (p-Dioxane)	Averaged	0.00125	0.00112	0.0500	-10.4951	20.0000
Ethylbenzene	Averaged	1.81669	1.74236	0.3000	-4.0915	20.0000
n-Heptane	Averaged	0.08645	0.08570	0.0500	-0.8688	20.0000
Hexachloro-1,3-butadiene	Averaged	0.52094	0.52966	0.0500	1.6734	20.0000
n-Hexane	Averaged	0.72934	0.74045	0.0500	1.5235	20.0000
2-Hexanone	Wt Linear	100	116.6083	0.0500	16.6084	20.0000
Isopropylbenzene (Cumene)	Averaged	4.97952	4.98169	0.0500	0.0435	20.0000
p-Isopropyltoluene	Averaged	3.98328	4.03996	0.0500	1.4228	20.0000
Methyl acetate	Averaged	0.16461	0.16077	0.0500	-2.3319	20.0000
Methylcyclohexane	Averaged	0.63492	0.64805	0.0500	2.0669	20.0000
Methylene Chloride	Averaged	0.39856	0.34169	0.0500	-14.2683	20.0000
1-Methylnaphthalene	Quadratic	20	21.65032	0.0500	8.2516	20.0000
2-Methylnaphthalene	Quadratic	20	21.65858	0.0500	8.2929	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.20069	0.20223	0.0500	0.7652	20.0000
Methyl-tert-butyl ether	Averaged	0.75801	0.77803	0.3000	2.6404	20.0000
Naphthalene	Wt Linear	20	17.57158	0.3000	-12.1421	20.0000
n-Propylbenzene	Averaged	1.36370	1.30738	0.0500	-4.1300	20.0000
Styrene	Averaged	3.16078	3.09736	0.0500	-2.0065	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.40345	1.29322	0.0500	-7.8542	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.69253	0.65316	0.3000	-5.6859	20.0000
Tetrachloroethene	Averaged	1.69761	1.65873	0.1000	-2.2899	20.0000
Tetrahydrofuran	Averaged	0.06238	0.06148	0.0500	-1.4369	20.0000
Toluene	Averaged	3.24040	3.05099	0.3000	-5.8455	20.0000
1,2,3-Trichlorobenzene	Wt Linear	20	18.55085	0.0500	-7.2457	20.0000
1,2,4-Trichlorobenzene	Averaged	1.00538	0.89241	0.0500	-11.2370	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

19754652ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/02/2021 Time: 11:53

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080221A.B\0802A_22.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60376299

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.69998	0.66571	0.0500	-4.8965	20.0000
1,1,2-Trichloroethane	Averaged	0.71758	0.68699	0.0500	-4.2621	20.0000
Trichloroethene	Averaged	0.49351	0.49319	0.1000	-0.0659	20.0000
Trichlorofluoromethane	Averaged	0.71095	0.73082	0.0500	2.7954	20.0000
1,2,3-Trichloropropane	Wt Linear	20	20.11857	0.0500	0.5929	20.0000
1,2,3-Trimethylbenzene	Wt Linear	20	20.47263	0.0500	2.3632	20.0000
1,2,4-Trimethylbenzene	Averaged	3.71125	3.61475	0.0500	-2.6004	20.0000
1,3,5-Trimethylbenzene	Averaged	3.83738	3.67129	0.0500	-4.3282	20.0000
Vinyl chloride	Averaged	0.54284	0.54583	0.0500	0.5518	20.0000
m&p-Xylene	Averaged	2.16391	2.05655	0.3000	-4.9613	20.0000
o-Xylene	Averaged	2.09376	1.98944	0.3000	-4.9823	20.0000
4-Bromofluorobenzene (S)	Averaged	0.81652	0.82851	0.3000	1.4684	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.83900	0.83060	0.2000	-1.0012	20.0000
Toluene-d8 (S)	Averaged	2.82916	2.81016	0.3000	-0.6719	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19763624CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/04/2021 Time: 07:10

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080421A.B\0804A_03CCV.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60376299

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	87.93316	0.0500	-12.0668	20.0000
Acetonitrile	Averaged	0.19790	0.19021	0.0500	-3.8881	20.0000
Acrolein	Averaged	0.03785	0.03627	0.0500	-4.1631	20.0000
Acrylonitrile	Averaged	0.08268	0.07628	0.0500	-7.7409	20.0000
Benzene	Averaged	1.63260	1.55566	0.3000	-4.7127	20.0000
Bromobenzene	Wt Linear	20	19.37092	0.0500	-3.1454	20.0000
Bromochloromethane	Averaged	0.23967	0.24138	0.0500	0.7165	20.0000
Bromodichloromethane	Averaged	0.49671	0.48552	0.0500	-2.2532	20.0000
Bromoform	Wt Linear	20	17.44949	0.1000	-12.7525	20.0000
Bromomethane	Wt Linear	20	16.12244	0.0500	-19.3878	20.0000
2-Butanone (MEK)	Averaged	0.13100	0.10609	0.0500	-19.0154	20.0000
n-Butylbenzene	Averaged	3.15861	2.90539	0.0500	-8.0166	20.0000
sec-Butylbenzene	Averaged	4.59240	4.36436	0.0500	-4.9656	20.0000
tert-Butylbenzene	Averaged	3.32747	3.17719	0.0500	-4.5161	20.0000
Carbon disulfide	Averaged	1.09596	1.15679	0.0500	5.5499	20.0000
Carbon tetrachloride	Averaged	0.65199	0.66971	0.1000	2.7182	20.0000
Chlorobenzene	Averaged	3.46849	3.31467	0.3000	-4.4350	20.0000
Chloroethane	Wt Linear	20	21.33900	0.0500	6.6950	20.0000
2-Chloroethylvinyl ether	Averaged	0.10026	0.09435	0.0500	-5.8940	20.0000
Chloroform	Averaged	0.76653	0.76982	0.0500	0.4284	20.0000
Chloromethane	Averaged	0.47178	0.43392	0.1000	-8.0259	20.0000
2-Chlorotoluene	Averaged	3.19804	2.93839	0.0500	-8.1191	20.0000
4-Chlorotoluene	Wt Linear	20	18.97211	0.0500	-5.1394	20.0000
Cyclohexane	Averaged	0.88143	0.86054	0.0500	-2.3696	20.0000
Cyclohexanone	Wt Linear	100	79.13655	0.0500	-20.8634	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.07118	0.06234	0.0500	-12.4225	20.0000
Dibromochloromethane	Averaged	1.14305	1.04301	0.0500	-8.7522	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.84948	0.78200	0.0500	-7.9437	20.0000
Dibromomethane	Averaged	0.21580	0.20694	0.0500	-4.1062	20.0000
1,2-Dichlorobenzene	Wt Linear	20	19.09903	0.0500	-4.5048	20.0000
1,3-Dichlorobenzene	Averaged	2.39339	2.26452	0.0500	-5.3844	20.0000
1,4-Dichlorobenzene	Averaged	2.40850	2.20095	0.0500	-8.6171	20.0000
Dichlorodifluoromethane	Averaged	0.50630	0.53819	0.0500	6.2992	20.0000
1,1-Dichloroethane	Averaged	0.89978	0.85760	0.1000	-4.6875	20.0000
1,2-Dichloroethane	Averaged	0.48420	0.48240	0.0500	-0.3707	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

19763624CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/04/2021 Time: 07:10

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080421A.B\0804A_03CCV.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60376299

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.41697	0.46477	0.1000	11.4642	20.0000
cis-1,2-Dichloroethene	Averaged	0.51447	0.49193	0.1000	-4.3809	20.0000
trans-1,2-Dichloroethene	Averaged	0.48560	0.48535	0.1000	-0.0512	20.0000
1,2-Dichloropropane	Averaged	0.47297	0.43857	0.0500	-7.2744	20.0000
1,3-Dichloropropane	Averaged	1.34834	1.19424	0.0500	-11.4286	20.0000
2,2-Dichloropropane	Averaged	0.63089	0.63339	0.0500	0.3958	20.0000
1,1-Dichloropropene	Averaged	0.57833	0.57898	0.0500	0.1139	20.0000
cis-1,3-Dichloropropene	Averaged	0.60759	0.57546	0.0500	-5.2880	20.0000
trans-1,3-Dichloropropene	Averaged	1.42859	1.33879	0.0500	-6.2858	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.17183	0.17873	0.0500	4.0132	20.0000
1,4-Dioxane (p-Dioxane)	Averaged	0.00125	0.00094	0.0500	-24.8641	20.0000
Ethylbenzene	Averaged	1.81669	1.70615	0.3000	-6.0847	20.0000
n-Heptane	Averaged	0.08645	0.08614	0.0500	-0.3537	20.0000
Hexachloro-1,3-butadiene	Averaged	0.52094	0.48126	0.0500	-7.6181	20.0000
n-Hexane	Averaged	0.72934	0.70287	0.0500	-3.6296	20.0000
2-Hexanone	Wt Linear	100	76.31894	0.0500	-23.6811	20.0000
Isopropylbenzene (Cumene)	Averaged	4.97952	4.84452	0.0500	-2.7111	20.0000
p-Isopropyltoluene	Averaged	3.98328	3.87782	0.0500	-2.6475	20.0000
Methyl acetate	Averaged	0.16461	0.15364	0.0500	-6.6644	20.0000
Methylcyclohexane	Averaged	0.63492	0.63422	0.0500	-0.1101	20.0000
Methylene Chloride	Averaged	0.39856	0.37579	0.0500	-5.7117	20.0000
1-Methylnaphthalene	Quadratic	20	16.14495	0.0500	-19.2752	20.0000
2-Methylnaphthalene	Quadratic	20	16.83372	0.0500	-15.8314	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.20069	0.16785	0.0500	-16.3681	20.0000
Methyl-tert-butyl ether	Averaged	0.75801	0.73764	0.3000	-2.6882	20.0000
Naphthalene	Wt Linear	20	15.56004	0.3000	-22.1998	20.0000
n-Propylbenzene	Averaged	1.36370	1.22154	0.0500	-10.4250	20.0000
Styrene	Averaged	3.16078	2.97258	0.0500	-5.9541	20.0000
1,1,1,2-Tetrachloroethane	Averaged	1.40345	1.31878	0.0500	-6.0328	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.69253	0.61403	0.3000	-11.3349	20.0000
Tetrachloroethene	Averaged	1.69761	1.68769	0.1000	-0.5844	20.0000
Tetrahydrofuran	Averaged	0.06238	0.05290	0.0500	-15.1889	20.0000
Toluene	Averaged	3.24040	2.92199	0.3000	-9.8265	20.0000
1,2,3-Trichlorobenzene	Wt Linear	20	16.00275	0.0500	-19.9862	20.0000
1,2,4-Trichlorobenzene	Averaged	1.00538	0.86079	0.0500	-14.3813	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-3
MSV CONTINUING CALIBRATION DATA

19763624CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/04/2021 Time: 07:10

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/02/2021 08/02/2021

Lab File ID: 080421A.B\0804A_03CCV.D Init. Calib. Time(s): 09:31 11:10

SDG No.: 60376299

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.69998	0.72764	0.0500	3.9503	20.0000
1,1,2-Trichloroethane	Averaged	0.71758	0.62612	0.0500	-12.7451	20.0000
Trichloroethene	Averaged	0.49351	0.48630	0.1000	-1.4612	20.0000
Trichlorofluoromethane	Averaged	0.71095	0.80666	0.0500	13.4630	20.0000
1,2,3-Trichloropropane	Wt Linear	20	19.21621	0.0500	-3.9189	20.0000
1,2,3-Trimethylbenzene	Wt Linear	20	19.12813	0.0500	-4.3593	20.0000
1,2,4-Trimethylbenzene	Averaged	3.71125	3.53787	0.0500	-4.6719	20.0000
1,3,5-Trimethylbenzene	Averaged	3.83738	3.62201	0.0500	-5.6126	20.0000
Vinyl chloride	Averaged	0.54284	0.54540	0.0500	0.4728	20.0000
m&p-Xylene	Averaged	2.16391	2.03521	0.3000	-5.9475	20.0000
o-Xylene	Averaged	2.09376	1.93977	0.3000	-7.3545	20.0000
4-Bromofluorobenzene (S)	Averaged	0.81652	0.79921	0.3000	-2.1200	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.83900	0.83954	0.2000	0.0637	20.0000
Toluene-d8 (S)	Averaged	2.82916	2.74897	0.3000	-2.8347	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

19775486ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/05/2021 Time: 13:55

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/05/2021 08/05/2021

Lab File ID: 080521A.B\0805A_29.D Init. Calib. Time(s): 11:34 13:13

SDG No.: 60376299

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Wt Linear	100	120.9023	0.0500	20.9023*	20.0000
Acetonitrile	Averaged	0.26544	0.26176	0.0500	-1.3860	20.0000
Acrolein	Averaged	0.05507	0.05551	0.0500	2.4422	20.0000
Acrylonitrile	Averaged	0.08819	0.09165	0.0500	3.6462	20.0000
Benzene	Averaged	2.02096	2.00332	0.3000	-0.8726	20.0000
Bromobenzene	Averaged	1.45226	1.42439	0.0500	-1.6785	20.0000
Bromochloromethane	Wt Linear	20	21.87028	0.0500	9.3514	20.0000
Bromodichloromethane	Wt Linear	20	20.06022	0.0500	0.3011	20.0000
Bromoform	Averaged	0.32970	0.36076	0.1000	9.4211	20.0000
Bromomethane	Averaged	0.37271	0.36212	0.0500	-2.8397	20.0000
2-Butanone (MEK)	Averaged	0.13159	0.13814	0.0500	14.0990	20.0000
n-Butylbenzene	Averaged	4.93559	4.89921	0.0500	-0.8728	20.0000
sec-Butylbenzene	Wt Linear	20	21.38582	0.0500	6.9291	20.0000
tert-Butylbenzene	Averaged	3.73368	3.88968	0.0500	4.4336	20.0000
Carbon disulfide	Averaged	1.81923	1.81866	0.0500	-0.0311	20.0000
Carbon tetrachloride	Averaged	0.61307	0.60679	0.1000	-1.0254	20.0000
Chlorobenzene	Averaged	2.19535	2.20157	0.3000	0.3332	20.0000
Chloroethane	Averaged	0.49839	0.43722	0.0500	-12.2731	20.0000
2-Chloroethylvinyl ether	Averaged	0.12377	0.12537	0.0500	1.2645	20.0000
Chloroform	Averaged	0.97727	0.97510	0.0500	-0.2224	20.0000
Chloromethane	Averaged	0.49474	0.50266	0.1000	1.6003	20.0000
2-Chlorotoluene	Averaged	5.10036	5.05085	0.0500	0.0392	20.0000
4-Chlorotoluene	Averaged	1.21494	1.19333	0.0500	-1.5003	20.0000
Cyclohexane	Averaged	0.99638	1.02314	0.0500	2.6862	20.0000
Cyclohexanone	Averaged	0.08074	0.08259	0.0500	2.3002	20.0000
1,2-Dibromo-3-chloropropane	Wt Linear	20	18.27726	0.0500	-8.6137	20.0000
Dibromochloromethane	Wt Linear	20	19.86442	0.0500	-0.6779	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.62595	0.64751	0.0500	3.4438	20.0000
Dibromomethane	Averaged	0.23023	0.23414	0.0500	1.6999	20.0000
1,2-Dichlorobenzene	Averaged	2.00954	1.96356	0.0500	-2.2804	20.0000
1,3-Dichlorobenzene	Averaged	2.34626	2.35509	0.0500	0.8738	20.0000
1,4-Dichlorobenzene	Averaged	2.35491	2.36345	0.0500	0.7994	20.0000
Dichlorodifluoromethane	Averaged	0.59639	0.55691	0.0500	-6.6192	20.0000
1,1-Dichloroethane	Averaged	1.08347	1.09400	0.1000	0.9716	20.0000
1,2-Dichloroethane	Averaged	0.58959	0.58971	0.0500	0.1600	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

19775486ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/05/2021 Time: 13:55

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/05/2021 08/05/2021

Lab File ID: 080521A.B\0805A_29.D Init. Calib. Time(s): 11:34 13:13

SDG No.: 60376299

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloroethene	Averaged	0.52429	0.50940	0.1000	-2.8393	20.0000
cis-1,2-Dichloroethene	Averaged	0.52384	0.51119	0.1000	-2.2601	20.0000
trans-1,2-Dichloroethene	Averaged	0.48971	0.47870	0.1000	-2.2488	20.0000
1,2-Dichloropropane	Averaged	0.57009	0.55459	0.0500	-2.7193	20.0000
1,3-Dichloropropane	Averaged	1.36700	1.37102	0.0500	0.2941	20.0000
2,2-Dichloropropane	Averaged	0.78586	0.72675	0.0500	-7.3278	20.0000
1,1-Dichloropropene	Averaged	0.75053	0.73109	0.0500	-3.0560	20.0000
cis-1,3-Dichloropropene	Averaged	0.75965	0.77732	0.0500	2.5003	20.0000
trans-1,3-Dichloropropene	Averaged	1.45861	1.50000	0.0500	2.8378	20.0000
Diethyl ether (Ethyl ether)	Averaged	0.28857	0.28232	0.0500	-2.1668	20.0000
1,4-Dioxane (p-Dioxane)	Averaged	0.00143	0.00160	0.0500	11.6381	20.0000
Ethylbenzene	Averaged	1.23652	1.23878	0.3000	0.1820	20.0000
n-Heptane	Averaged	0.07542	0.07465	0.0500	-1.0218	20.0000
Hexachloro-1,3-butadiene	Averaged	0.82268	0.80546	0.0500	-1.8523	20.0000
n-Hexane	Averaged	0.76071	0.76939	0.0500	1.1161	20.0000
2-Hexanone	Averaged	0.40397	0.46777	0.0500	15.7919	20.0000
Isopropylbenzene (Cumene)	Averaged	3.53548	3.73045	0.0500	5.5267	20.0000
p-Isopropyltoluene	Averaged	4.67008	4.69394	0.0500	0.6072	20.0000
Methyl acetate	Averaged	0.22687	0.22532	0.0500	-0.6837	20.0000
Methylcyclohexane	Averaged	0.77005	0.75899	0.0500	-1.4709	20.0000
Methylene Chloride	Averaged	0.57281	0.55457	0.0500	-3.1615	20.0000
1-Methylnaphthalene	Averaged	0.61870	0.69810	0.0500	13.1085	20.0000
2-Methylnaphthalene	Averaged	0.77825	0.85965	0.0500	11.8054	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.20052	0.21392	0.0500	6.6831	20.0000
Methyl-tert-butyl ether	Averaged	1.01406	1.05309	0.3000	3.6592	20.0000
Naphthalene	Wt Linear	20	17.71818	0.3000	-11.4091	20.0000
n-Propylbenzene	Averaged	1.53665	1.45719	0.0500	-5.0320	20.0000
Styrene	Averaged	2.35768	2.36866	0.0500	1.3843	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.77159	0.75279	0.0500	-2.2660	20.0000
1,1,2,2-Tetrachloroethane	Averaged	1.15791	1.14387	0.3000	-0.9701	20.0000
Tetrachloroethene	Averaged	1.04975	0.99816	0.1000	-4.9139	20.0000
Tetrahydrofuran	Averaged	0.06225	0.06079	0.0500	-3.6636	20.0000
Toluene	Averaged	2.67562	2.63356	0.3000	-1.4675	20.0000
1,2,3-Trichlorobenzene	Averaged	0.87357	0.87777	0.0500	-0.7944	20.0000
1,2,4-Trichlorobenzene	Averaged	1.10306	1.09522	0.0500	-1.4686	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19775486ICV

MSV - FORM VII VOA-3
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 08/05/2021 Time: 13:55

Instrument ID: 60MSV8 GC Column: Col 1 Init. Calib. Date(s): 08/05/2021 08/05/2021

Lab File ID: 080521A.B\0805A_29.D Init. Calib. Time(s): 11:34 13:13

SDG No.: 60376299

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,1-Trichloroethane	Averaged	0.81613	0.76429	0.0500	-6.2497	20.0000
1,1,2-Trichloroethane	Averaged	0.66669	0.68925	0.0500	2.5276	20.0000
Trichloroethene	Averaged	0.54566	0.51105	0.1000	-6.4411	20.0000
Trichlorofluoromethane	Averaged	0.91966	0.91514	0.0500	-0.4915	20.0000
1,2,3-Trichloropropane	Wt Linear	20	21.24306	0.0500	6.2153	20.0000
1,2,3-Trimethylbenzene	Averaged	4.78313	4.82079	0.0500	1.0345	20.0000
1,2,4-Trimethylbenzene	Averaged	4.99504	4.96273	0.0500	-0.4032	20.0000
1,3,5-Trimethylbenzene	Averaged	5.22516	5.09645	0.0500	-2.2243	20.0000
Vinyl chloride	Averaged	0.74042	0.70489	0.0500	-4.7980	20.0000
m&p-Xylene	Averaged	1.43932	1.47128	0.3000	2.2141	20.0000
o-Xylene	Averaged	1.38759	1.38421	0.3000	-0.2435	20.0000
4-Bromofluorobenzene (S)	Averaged	1.25614	1.27616	0.3000	1.8430	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	0.83535	0.85864	0.2000	3.0397	20.0000
Toluene-d8 (S)	Averaged	2.27972	2.29691	0.3000	0.7542	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19764073ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Calibration Date: 08/03/2021 Time: 12:49

Instrument ID: 60MSVA GC Column: Col 2 Init. Calib. Date(s): 08/03/2021 08/03/2021

Lab File ID: 080321AGRO.B\0803A_15.D Init. Calib. Time(s): 11:18 12:34

SDG No.: 60376299

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	7901.896	7026.966	0.0100	-11.0724	20.0000
4-Bromofluorobenzene (S)	Averaged	22183.43	23355.40	0.0100	5.2831	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	1557.535	433.3942	0.0100	-72.1744	20.0000
Toluene-d8 (S)	Averaged	29079.57	28016.12	0.0100	-3.6571	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19768010CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/04/2021 Time: 08:53

Instrument ID: 60MSVA GC Column: Col 2 Init. Calib. Date(s): 08/03/2021 08/03/2021

Lab File ID: 080421AGRO.B\0804A_04.D Init. Calib. Time(s): 11:18 12:34

SDG No.: 60376299

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	7901.896	8400.916	0.0100	6.3152	20.0000
4-Bromofluorobenzene (S)	Averaged	22183.43	23055.44	0.0100	3.9309	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	1557.535	410.4615	0.0100	-73.6467	20.0000
Toluene-d8 (S)	Averaged	29079.57	27647.40	0.0100	-4.9250	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

19784363CCV

Lab Name: Pace Analytical - Kansas Calibration Date: 08/06/2021 Time: 09:27

Instrument ID: 60MSVA GC Column: Col 2 Init. Calib. Date(s): 08/03/2021 08/03/2021

Lab File ID: 080621AGRO.B\0806A_04.D Init. Calib. Time(s): 11:18 12:34

SDG No.: 60376299

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
TPH-GRO	Averaged	7901.896	7002.202	0.0100	-11.3858	20.0000
4-Bromofluorobenzene (S)	Averaged	22183.43	19447.94	0.0100	-12.3312	20.0000
1,2-Dichlorobenzene-d4 (S)	Averaged	1557.535	363.1490	0.0100	-76.6844	20.0000
Toluene-d8 (S)	Averaged	29079.57	25024.00	0.0100	-13.9465	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 07:25 Lab Sample ID: 2951245

Date Analyzed: 08/04/2021 07:25 Lab File ID: 080421A.B\0804A_04LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	102	
75-05-8	Acetonitrile	93.9	
107-02-8	Acrolein	87.8	
107-13-1	Acrylonitrile	94.7	
71-43-2	Benzene	18.3	
108-86-1	Bromobenzene	19.5	
74-97-5	Bromochloromethane	20.9	
75-27-4	Bromodichloromethane	19.2	
75-25-2	Bromoform	18.5	
74-83-9	Bromomethane	17.2	
78-93-3	2-Butanone (MEK)	98.7	
104-51-8	n-Butylbenzene	18.8	
135-98-8	sec-Butylbenzene	18.7	
98-06-6	tert-Butylbenzene	18.9	
75-15-0	Carbon disulfide	20.4	
56-23-5	Carbon tetrachloride	19.8	
108-90-7	Chlorobenzene	19.3	
75-00-3	Chloroethane	20.4	
110-75-8	2-Chloroethylvinyl ether	92.3	
67-66-3	Chloroform	20.1	
74-87-3	Chloromethane	19.3	
95-49-8	2-Chlorotoluene	18.4	
106-43-4	4-Chlorotoluene	19.1	
110-82-7	Cyclohexane	17.7	
108-94-1	Cyclohexanone	88.2	
96-12-8	1,2-Dibromo-3-chloropropane	18.7	
124-48-1	Dibromochloromethane	19.4	
106-93-4	1,2-Dibromoethane (EDB)	19.5	
74-95-3	Dibromomethane	19.0	
95-50-1	1,2-Dichlorobenzene	19.3	
541-73-1	1,3-Dichlorobenzene	18.8	
106-46-7	1,4-Dichlorobenzene	18.4	
75-71-8	Dichlorodifluoromethane	19.2	
75-34-3	1,1-Dichloroethane	19.5	
107-06-2	1,2-Dichloroethane	19.9	
540-59-0	1,2-Dichloroethene (Total)	39.3	
75-35-4	1,1-Dichloroethene	20.9	

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

LCS

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 07:25 Lab Sample ID: 2951245

Date Analyzed: 08/04/2021 07:25 Lab File ID: 080421A.B\0804A_04LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	19.1	
156-60-5	trans-1,2-Dichloroethene	20.2	
78-87-5	1,2-Dichloropropane	18.2	
142-28-9	1,3-Dichloropropane	17.9	
594-20-7	2,2-Dichloropropane	19.8	
563-58-6	1,1-Dichloropropene	19.0	
10061-01-5	cis-1,3-Dichloropropene	18.7	
10061-02-6	trans-1,3-Dichloropropene	18.8	
60-29-7	Diethyl ether (Ethyl ether)	19.9	
123-91-1	1,4-Dioxane (p-Dioxane)	118	
100-41-4	Ethylbenzene	18.6	
142-82-5	n-Heptane	18.4	
87-68-3	Hexachloro-1,3-butadiene	20.4	
110-54-3	n-Hexane	17.6	
591-78-6	2-Hexanone	88.8	
98-82-8	Isopropylbenzene (Cumene)	19.5	
99-87-6	p-Isopropyltoluene	19.4	
79-20-9	Methyl acetate	96.0	
108-87-2	Methylcyclohexane	18.8	
75-09-2	Methylene Chloride	18.8	
90-12-0	1-Methylnaphthalene	21.6	
91-57-6	2-Methylnaphthalene	21.1	
108-10-1	4-Methyl-2-pentanone (MIBK)	86.1	
1634-04-4	Methyl-tert-butyl ether	19.4	
91-20-3	Naphthalene	17.0	
103-65-1	n-Propylbenzene	18.0	
100-42-5	Styrene	19.0	
630-20-6	1,1,1,2-Tetrachloroethane	18.8	
79-34-5	1,1,2,2-Tetrachloroethane	17.4	
127-18-4	Tetrachloroethene	19.6	
109-99-9	Tetrahydrofuran	83.4	
108-88-3	Toluene	17.7	
87-61-6	1,2,3-Trichlorobenzene	18.3	
120-82-1	1,2,4-Trichlorobenzene	18.3	
71-55-6	1,1,1-Trichloroethane	19.3	
79-00-5	1,1,2-Trichloroethane	18.2	
79-01-6	Trichloroethene	18.8	

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 07:25 Lab Sample ID: 2951245

Date Analyzed: 08/04/2021 07:25 Lab File ID: 080421A.B\0804A_04LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	22.6	
96-18-4	1,2,3-Trichloropropane	19.1	
526-73-8	1,2,3-Trimethylbenzene	19.5	
95-63-6	1,2,4-Trimethylbenzene	19.4	
108-67-8	1,3,5-Trimethylbenzene	19.0	
75-01-4	Vinyl chloride	19.9	
1330-20-7	Xylene (Total)	55.3	
179601-23-1	m&p-Xylene	37.1	
95-47-6	o-Xylene	18.1	

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW

Date Received: | Matrix: Water | SDG No.: 60376299

Date Extracted: 08/04/2021 07:53 | Lab Sample ID: 2951244

Date Analyzed: 08/04/2021 07:53 | Lab File ID: 080421A.B\0804A_06BLK.D

Initial wt/vol: 10 mL | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60MSV8 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
75-05-8	Acetonitrile	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
108-86-1	Bromobenzene	ND	U
74-97-5	Bromochloromethane	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
104-51-8	n-Butylbenzene	ND	U
135-98-8	sec-Butylbenzene	ND	U
98-06-6	tert-Butylbenzene	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
110-75-8	2-Chloroethylvinyl ether	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
95-49-8	2-Chlorotoluene	ND	U
106-43-4	4-Chlorotoluene	ND	U
110-82-7	Cyclohexane	ND	U
108-94-1	Cyclohexanone	ND	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	U
124-48-1	Dibromochloromethane	ND	U
106-93-4	1,2-Dibromoethane (EDB)	ND	U
74-95-3	Dibromomethane	ND	U
95-50-1	1,2-Dichlorobenzene	ND	U
541-73-1	1,3-Dichlorobenzene	ND	U
106-46-7	1,4-Dichlorobenzene	ND	U
75-71-8	Dichlorodifluoromethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
540-59-0	1,2-Dichloroethene (Total)	ND	U
75-35-4	1,1-Dichloroethene	ND	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 07:53 Lab Sample ID: 2951244

Date Analyzed: 08/04/2021 07:53 Lab File ID: 080421A.B\0804A_06BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
142-28-9	1,3-Dichloropropane	ND	U
594-20-7	2,2-Dichloropropane	ND	U
563-58-6	1,1-Dichloropropene	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
60-29-7	Diethyl ether (Ethyl ether)	ND	U
123-91-1	1,4-Dioxane (p-Dioxane)	ND	U
100-41-4	Ethylbenzene	ND	U
142-82-5	n-Heptane	ND	U
87-68-3	Hexachloro-1,3-butadiene	ND	U
110-54-3	n-Hexane	ND	U
591-78-6	2-Hexanone	ND	U
98-82-8	Isopropylbenzene (Cumene)	ND	U
99-87-6	p-Isopropyltoluene	ND	U
79-20-9	Methyl acetate	ND	U
108-87-2	Methylcyclohexane	ND	U
75-09-2	Methylene Chloride	ND	U
90-12-0	1-Methylnaphthalene	ND	U
91-57-6	2-Methylnaphthalene	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
1634-04-4	Methyl-tert-butyl ether	ND	U
91-20-3	Naphthalene	ND	U
103-65-1	n-Propylbenzene	ND	U
100-42-5	Styrene	ND	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
109-99-9	Tetrahydrofuran	ND	U
108-88-3	Toluene	ND	U
87-61-6	1,2,3-Trichlorobenzene	ND	U
120-82-1	1,2,4-Trichlorobenzene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 07:53 Lab Sample ID: 2951244

Date Analyzed: 08/04/2021 07:53 Lab File ID: 080421A.B\0804A_06BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U
526-73-8	1,2,3-Trimethylbenzene	ND	U
95-63-6	1,2,4-Trimethylbenzene	ND	U
108-67-8	1,3,5-Trimethylbenzene	ND	U
75-01-4	Vinyl chloride	ND	U
1330-20-7	Xylene (Total)	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

LCS

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Water SDG No.: 60376299
Date Extracted: 08/05/2021 13:55
Lab Sample ID: 2953355
Date Analyzed: 08/05/2021 13:55
Lab File ID: 080521A.B\0805A_29LCS.D
Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1
Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	121	
75-05-8	Acetonitrile	98.6	
107-02-8	Acrolein	102	
107-13-1	Acrylonitrile	104	
71-43-2	Benzene	19.8	
108-86-1	Bromobenzene	19.7	
74-97-5	Bromochloromethane	21.9	
75-27-4	Bromodichloromethane	20.1	
75-25-2	Bromoform	21.9	
74-83-9	Bromomethane	19.4	
78-93-3	2-Butanone (MEK)	114	
104-51-8	n-Butylbenzene	19.8	
135-98-8	sec-Butylbenzene	21.4	
98-06-6	tert-Butylbenzene	20.9	
75-15-0	Carbon disulfide	20.0	
56-23-5	Carbon tetrachloride	19.8	
108-90-7	Chlorobenzene	20.1	
75-00-3	Chloroethane	17.5	
110-75-8	2-Chloroethylvinyl ether	101	
67-66-3	Chloroform	20.0	
74-87-3	Chloromethane	20.3	
95-49-8	2-Chlorotoluene	20.0	
106-43-4	4-Chlorotoluene	19.7	
110-82-7	Cyclohexane	20.5	
108-94-1	Cyclohexanone	102	
96-12-8	1,2-Dibromo-3-chloropropane	18.3	
124-48-1	Dibromochloromethane	19.8	
106-93-4	1,2-Dibromoethane (EDB)	20.7	
74-95-3	Dibromomethane	20.3	
95-50-1	1,2-Dichlorobenzene	19.5	
541-73-1	1,3-Dichlorobenzene	20.2	
106-46-7	1,4-Dichlorobenzene	20.2	
75-71-8	Dichlorodifluoromethane	18.7	
75-34-3	1,1-Dichloroethane	20.2	
107-06-2	1,2-Dichloroethane	20.0	
540-59-0	1,2-Dichloroethene (Total)	39.1	
75-35-4	1,1-Dichloroethene	19.4	

SAMPLE NO.

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

LCS

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/05/2021 13:55 Lab Sample ID: 2953355

Date Analyzed: 08/05/2021 13:55 Lab File ID: 080521A.B\0805A_29LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	19.5	
156-60-5	trans-1,2-Dichloroethene	19.6	
78-87-5	1,2-Dichloropropane	19.5	
142-28-9	1,3-Dichloropropane	20.1	
594-20-7	2,2-Dichloropropane	18.5	
563-58-6	1,1-Dichloropropene	19.4	
10061-01-5	cis-1,3-Dichloropropene	20.5	
10061-02-6	trans-1,3-Dichloropropene	20.6	
60-29-7	Diethyl ether (Ethyl ether)	19.6	
123-91-1	1,4-Dioxane (p-Dioxane)	112	
100-41-4	Ethylbenzene	20.0	
142-82-5	n-Heptane	19.8	
87-68-3	Hexachloro-1,3-butadiene	19.6	
110-54-3	n-Hexane	20.2	
591-78-6	2-Hexanone	116	
98-82-8	Isopropylbenzene (Cumene)	21.1	
99-87-6	p-Isopropyltoluene	20.1	
79-20-9	Methyl acetate	99.3	
108-87-2	Methylcyclohexane	19.7	
75-09-2	Methylene Chloride	19.4	
90-12-0	1-Methylnaphthalene	22.6	
91-57-6	2-Methylnaphthalene	22.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	107	
1634-04-4	Methyl-tert-butyl ether	20.7	
91-20-3	Naphthalene	17.8	
103-65-1	n-Propylbenzene	19.0	
100-42-5	Styrene	20.3	
630-20-6	1,1,1,2-Tetrachloroethane	19.5	
79-34-5	1,1,2,2-Tetrachloroethane	19.8	
127-18-4	Tetrachloroethene	19.0	
109-99-9	Tetrahydrofuran	96.3	
108-88-3	Toluene	19.7	
87-61-6	1,2,3-Trichlorobenzene	19.8	
120-82-1	1,2,4-Trichlorobenzene	19.7	
71-55-6	1,1,1-Trichloroethane	18.8	
79-00-5	1,1,2-Trichloroethane	20.5	
79-01-6	Trichloroethene	18.7	

SAMPLE NO.

LCS

MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/05/2021 13:55 Lab Sample ID: 2953355

Date Analyzed: 08/05/2021 13:55 Lab File ID: 080521A.B\0805A_29LCS.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	19.9	
96-18-4	1,2,3-Trichloropropane	21.3	
526-73-8	1,2,3-Trimethylbenzene	20.2	
95-63-6	1,2,4-Trimethylbenzene	19.9	
108-67-8	1,3,5-Trimethylbenzene	19.6	
75-01-4	Vinyl chloride	19.0	
1330-20-7	Xylene (Total)	60.8	
179601-23-1	m&p-Xylene	40.9	
95-47-6	o-Xylene	20.0	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas | Contract: GSA-GOODFELLOW

Date Received: | Matrix: Water | SDG No.: 60376299

Date Extracted: 08/05/2021 14:38 | Lab Sample ID: 2953354

Date Analyzed: 08/05/2021 14:38 | Lab File ID: 080521A.B\0805A_32BLK.D

Initial wt/vol: 10 mL | Final wt/vol: 10 mL | Dilution: 1 | Instrument: 60MSV8 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
75-05-8	Acetonitrile	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
108-86-1	Bromobenzene	ND	U
74-97-5	Bromochloromethane	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
104-51-8	n-Butylbenzene	ND	U
135-98-8	sec-Butylbenzene	ND	U
98-06-6	tert-Butylbenzene	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
110-75-8	2-Chloroethylvinyl ether	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
95-49-8	2-Chlorotoluene	ND	U
106-43-4	4-Chlorotoluene	ND	U
110-82-7	Cyclohexane	ND	U
108-94-1	Cyclohexanone	ND	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	U
124-48-1	Dibromochloromethane	ND	U
106-93-4	1,2-Dibromoethane (EDB)	ND	U
74-95-3	Dibromomethane	ND	U
95-50-1	1,2-Dichlorobenzene	ND	U
541-73-1	1,3-Dichlorobenzene	ND	U
106-46-7	1,4-Dichlorobenzene	ND	U
75-71-8	Dichlorodifluoromethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
540-59-0	1,2-Dichloroethene (Total)	ND	U
75-35-4	1,1-Dichloroethene	ND	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/05/2021 14:38 Lab Sample ID: 2953354

Date Analyzed: 08/05/2021 14:38 Lab File ID: 080521A.B\0805A_32BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
142-28-9	1,3-Dichloropropane	ND	U
594-20-7	2,2-Dichloropropane	ND	U
563-58-6	1,1-Dichloropropene	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
60-29-7	Diethyl ether (Ethyl ether)	ND	U
123-91-1	1,4-Dioxane (p-Dioxane)	ND	U
100-41-4	Ethylbenzene	ND	U
142-82-5	n-Heptane	ND	U
87-68-3	Hexachloro-1,3-butadiene	ND	U
110-54-3	n-Hexane	ND	U
591-78-6	2-Hexanone	ND	U
98-82-8	Isopropylbenzene (Cumene)	ND	U
99-87-6	p-Isopropyltoluene	ND	U
79-20-9	Methyl acetate	ND	U
108-87-2	Methylcyclohexane	ND	U
75-09-2	Methylene Chloride	ND	U
90-12-0	1-Methylnaphthalene	ND	U
91-57-6	2-Methylnaphthalene	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
1634-04-4	Methyl-tert-butyl ether	ND	U
91-20-3	Naphthalene	ND	U
103-65-1	n-Propylbenzene	ND	U
100-42-5	Styrene	ND	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
109-99-9	Tetrahydrofuran	ND	U
108-88-3	Toluene	ND	U
87-61-6	1,2,3-Trichlorobenzene	ND	U
120-82-1	1,2,4-Trichlorobenzene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U

SAMPLE NO.

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MSV - FORM I VOA-3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/05/2021 14:38 Lab Sample ID: 2953354

Date Analyzed: 08/05/2021 14:38 Lab File ID: 080521A.B\0805A_32BLK.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U
526-73-8	1,2,3-Trimethylbenzene	ND	U
95-63-6	1,2,4-Trimethylbenzene	ND	U
108-67-8	1,3,5-Trimethylbenzene	ND	U
75-01-4	Vinyl chloride	ND	U
1330-20-7	Xylene (Total)	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 09:08 Lab Sample ID: 2952142

Date Analyzed: 08/04/2021 09:08 Lab File ID: 080421AGRO.B\0804A_05.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	3600	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/04/2021 09:38 Lab Sample ID: 2952141

Date Analyzed: 08/04/2021 09:38 Lab File ID: 080421AGRO.B\0804A_07.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	ND	U

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/06/2021 09:42 Lab Sample ID: 2953171

Date Analyzed: 08/06/2021 09:42 Lab File ID: 080621AGRO.B\0806A_05.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	2920	

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/06/2021 10:12 Lab Sample ID: 2953170

Date Analyzed: 08/06/2021 10:12 Lab File ID: 080621AGRO.B\0806A_07.D

Initial wt/vol: 10 mL Final wt/vol: 10 mL Dilution: 1 Instrument: 60MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
	TPH-GRO	ND	U

MSSV SIM - FORM II SVOA-1
WATER SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS8

LAB SAMPLE ID	SAMPLE NAME	2FBP	TD14
2950397	2950397BLANK	61	80
2950398	2950398LCS	69	82
60376299001	RB-06	65	78
60376299002	RB-07	69	76
60376299003	RB-08	69	80

	QC LIMITS
(2FBP) = 2-Fluorobiphenyl (S)	(37-109)
(TD14) = Terphenyl-d14 (S)	(34-120)

* Values outside of QC Limits

MSSV SIM - FORM III SVOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2950398LCS
Date Extracted: 08/02/2021
Date Analyzed (1): 08/02/2021
Instrument: 60MSS8
LCS Lot No: 44362
Lab File ID: 080221.B\0802AP07.D
SDG No.: 60376299

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acenaphthene	10.0	7.2	72	46-102
Acenaphthylene	10.0	7.8	78	48-112
Anthracene	10.0	8.8	88	50-114
Benzo(a)anthracene	10.0	8.8	88	52-124
Benzo(a)pyrene	10.0	8.2	82	56-119
Benzo(b)fluoranthene	10.0	8.5	85	49-116
Benzo(g,h,i)perylene	10.0	8.0	80	43-120
Benzo(k)fluoranthene	10.0	7.5	75	48-110
Chrysene	10.0	7.9	79	53-105
Dibenz(a,h)anthracene	10.0	8.0	80	39-127
Fluoranthene	10.0	8.4	84	54-122
Fluorene	10.0	7.2	72	47-109
Indeno(1,2,3-cd)pyrene	10.0	8.1	81	47-124
Naphthalene	10.0	6.8	68	42-103
Phenanthrene	10.0	8.0	80	47-107
Pyrene	10.0	8.7	87	44-104

Spike Recovery: 0 out of 16 outside limits.

08/26/2021 9:41

SAMPLE NO.

2950397BLANK

MSSV SIM - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60MSS8 Matrix: Water Lab Sample ID: 2950397

Lab File ID: 080221.B\0802AP06.D Date Analyzed: 08/02/2021 Time: 10:22

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2950398LCS	2950398	080221.B\0802AP07.D	08/02/2021 10:37
RB-06	60376299001	080221.B\0802AP08.D	08/02/2021 10:51
RB-07	60376299002	080221.B\0802AP09.D	08/02/2021 11:06
RB-08	60376299003	080221.B\0802AP10.D	08/02/2021 11:20

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW
Lab File ID: 071421.B\0714ADFT.D DFTPP Injection Date: 07/14/2021
Instrument ID: 60MSS8 DFTPP Injection Time: 11:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	32.83	(22.44)[1]
68	Less than 2.00% of mass 69	0.66	(1.88)[2]
69	Mass 69 relative abundance	35.41	(24.21)[2]
70	Less than 2.00% of mass 69	0.18	(0.52)[2]
127	10.00 - 80.00% of mass 442	47.06	(32.16)[2]
197	Less than 2.00% of mass 198	1.52	
198	Greater than 50.00% of mass 442	100.00	(68.35)[2]
199	5.00 - 9.00% of mass 198	7.04	
275	10.00 - 60.00% of mass 442	26.76	(18.29)[2]
365	Greater than 1.00% of mass 442	4.68	(3.20)[2]
441	Present, but less than mass 443	23.19	
442	Greater than 50.00% of mass 198	146.31	
443	15.00 - 24.00% of mass 442	29.06	(19.86)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19793869CAL6	19793869CAL6	071421.B\0714API6A.D	07/14/2021	12:26
19793870CAL2	19793870CAL2	071421.B\0714API2.D	07/14/2021	12:58
19793871CAL1	19793871CAL1	071421.B\0714API1A.D	07/14/2021	13:12
19793872CAL3	19793872CAL3	071421.B\0714API3.D	07/14/2021	13:27
19793873CAL4	19793873CAL4	071421.B\0714API4.D	07/14/2021	13:42
19793874CAL5	19793874CAL5	071421.B\0714API5.D	07/14/2021	13:56
19793875CAL7	19793875CAL7	071421.B\0714API7.D	07/14/2021	14:11
19793876CAL8	19793876CAL8	071421.B\0714API8.D	07/14/2021	14:26
19793877ICV	19793877ICV	071421.B\0714APICV.D	07/14/2021	14:42

MSSV SIM - FORM V SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
null

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW
Lab File ID: 080221.B\0802ADFT.D DFTPP Injection Date 08/02/2021
Instrument ID: 60MSS8 DFTPP Injection Time 08:11

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.00 - 80.00% of mass 442	34.46	(24.27)[1]
68	Less than 2.00% of mass 69	0.71	(1.94)[2]
69	Mass 69 relative abundance	36.75	(25.89)[2]
70	Less than 2.00% of mass 69	0.19	(0.51)[2]
127	10.00 - 80.00% of mass 442	46.40	(32.69)[2]
197	Less than 2.00% of mass 198	1.90	
198	Greater than 50.00% of mass 442	100.00	(70.44)[2]
199	5.00 - 9.00% of mass 198	6.90	
275	10.00 - 60.00% of mass 442	26.34	(18.56)[2]
365	Greater than 1.00% of mass 442	4.89	(3.44)[2]
441	Present, but less than mass 443	22.45	
442	Greater than 50.00% of mass 198	141.96	
443	15.00 - 24.00% of mass 442	27.33	(19.25)[2]

1 - Value is % mass 442 2 - Value is % mass 442

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19753220CCV	19753220CCV	080221.B\0802API6.D	08/02/2021	08:25
2950397BLANK	2950397BLANK	080221.B\0802AP06.D	08/02/2021	10:22
2950398LCS	2950398LCS	080221.B\0802AP07.D	08/02/2021	10:37
RB-06	60376299001	080221.B\0802AP08.D	08/02/2021	10:51
RB-07	60376299002	080221.B\0802AP09.D	08/02/2021	11:06
RB-08	60376299003	080221.B\0802AP10.D	08/02/2021	11:20

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Sample ID : 19753220CCV Date Analyzed: 08/02/2021

Instrument ID: 60MSS8 GC Column: Col 1 Time Analyzed: 08:25

Lab File ID: 080221.B\0802API6.D

		AREA ANAPHD10IS	RT	AREA CHRYD12IS	RT	AREA NAPD8IS	RT	AREA PERYD12IS	RT
12 HOUR STD		5184	5.063	6175	8.032	13913	3.81	6348	9.301
UPPER LIMIT		10368	5.563	12350	8.532	27826	4.31	12696	9.801
LOWER LIMIT		2592	4.563	3087.5	7.532	6956.5	3.31	3174	8.801
LAB SAMPLE ID	SAMPLE NO.								
2950397	2950397BLANK	4236	5.063	5805	8.051	11567	3.811	6111	9.33
2950398	2950398LCS	3717	5.058	5334	8.026	9764	3.808	5477	9.292
60376299001	RB-06	5092	5.058	6965	8.023	13162	3.807	7183	9.288
60376299002	RB-07	4864	5.058	7629	8.026	12603	3.808	8163	9.292
60376299003	RB-08	4482	5.058	6929	8.02	11628	3.808	7418	9.288

ANAPHD10IS = Acenaphthene-d10 (IS)
CHRYD12IS = Chrysene-d12 (IS)
NAPD8IS = Naphthalene-d8 (IS)
PERYD12IS = Perylene-d12 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSSV SIM - FORM VIII SVOA-1
MSSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Sample ID : 19753220CCV Date Analyzed: 08/02/2021

Instrument ID: 60MSS8 GC Column: Col 1 Time Analyzed: 08:25

Lab File ID: 080221.B\0802API6.D

		AREA PHENAD10IS	RT
12 HOUR STD		13889	6.127
UPPER LIMIT		27778	6.627
LOWER LIMIT		6944.5	5.627
LAB SAMPLE ID	SAMPLE NO.		
2950397	2950397BLANK	11688	6.132
2950398	2950398LCS	10701	6.124
60376299001	RB-06	14874	6.124
60376299002	RB-07	14548	6.122
60376299003	RB-08	13445	6.122

PHENAD10IS = Phenanthrene-d10 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

RB-06

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW
Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299
Date Extracted: 08/02/2021 10:00 Lab Sample ID: 60376299001
Date Analyzed: 08/02/2021 10:51 Lab File ID: 080221.B\0802AP08.D
Initial wt/vol: 105 mL Final wt/vol: 1 mL Dilution: 1 Instrument: 60MSS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

RB-07

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW
Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299
Date Extracted: 08/02/2021 10:00 Lab Sample ID: 60376299002
Date Analyzed: 08/02/2021 11:06 Lab File ID: 080221.B\0802AP09.D
Initial wt/vol: 110 mL Final wt/vol: 1 mL Dilution: 1 Instrument: 60MSS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

RB-08

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW
Date Received: 07/30/2021 04:15 Matrix: Water SDG No.: 60376299
Date Extracted: 08/02/2021 10:00 Lab Sample ID: 60376299003
Date Analyzed: 08/02/2021 11:20 Lab File ID: 080221.B\0802AP10.D
Initial wt/vol: 105 mL Final wt/vol: 1 mL Dilution: 1 Instrument: 60MSS8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

MSSV SIM - FORM VI SVOA-1

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/14/2021 07/14/2021 Calibration Time(s): 12:26 14:26

LAB FILE ID

CAL1 = 071421.B\0714API1A.D CAL2 = 071421.B\0714API2.D CAL3 = 071421.B\0714API3.D

CAL4 = 071421.B\0714API4.D CAL5 = 071421.B\0714API5.D CAL6 = 071421.B\0714API6A.D

CAL7 = 071421.B\0714API7.D CAL8 = 071421.B\0714API8.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acenaphthene	Averaged	1.30574	1.45013	1.37486	1.41640	1.26168	1.27937
Acenaphthylene	Averaged	1.53979	1.72719	1.69319	1.72850	1.56419	1.66879
Anthracene	Averaged	0.63741	0.78851	0.73001	0.77263	0.68366	0.72173
Benzo(a)anthracene	Averaged	1.08231	1.06312	1.01903	0.97371	0.86221	0.92253
Benzo(a)pyrene	Averaged	1.15084	1.13219	0.99578	1.00665	0.88362	0.93515
Benzo(b)fluoranthene	Averaged	0.84684	1.00214	0.92430	0.95632	0.78881	0.88615
Benzo(g,h,i)perylene	Averaged	0.96989	1.03657	0.99578	0.98277	0.86971	0.87411
Benzo(k)fluoranthene	Averaged	1.02056	1.03274	1.05426	1.07831	1.01972	1.03342
Chrysene	Averaged	1.20336	1.30931	1.24002	1.29428	1.11847	1.07999
Dibenz(a,h)anthracene	Averaged	0.94094	0.93712	1.07050	0.99642	0.90511	0.90286
Fluoranthene	Averaged	0.83056	0.77165	0.77032	0.75713	0.67149	0.70764
Fluorene	Averaged	1.42892	1.67413	1.54095	1.56054	1.39879	1.44456
Indeno(1,2,3-cd)pyrene	Averaged	1.04951	1.10924	1.15984	1.11585	0.98390	1.00340
Naphthalene	Averaged	0.95637	1.09614	1.02610	1.04648	0.93160	0.93857
Phenanthrene	Averaged	0.78034	0.89901	0.87557	0.85904	0.75975	0.77753
Pyrene	Averaged	1.47394	1.55178	1.59761	1.57317	1.39789	1.44773
2-Fluorobiphenyl (S)	Averaged	2.68539	2.31078	2.91580	3.01454	2.70598	2.73750
Terphenyl-d14 (S)	Averaged		1.29812	1.31369	1.29588	1.15639	1.23773

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-2

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/14/2021 07/14/2021 Calibration Time(s): 12:26 14:26

LAB FILE ID

CAL1 = 071421.B\0714API1A.D CAL2 = 071421.B\0714API2.D CAL3 = 071421.B\0714API3.D

CAL4 = 071421.B\0714API4.D CAL5 = 071421.B\0714API5.D CAL6 = 071421.B\0714API6A.D

CAL7 = 071421.B\0714API7.D CAL8 = 071421.B\0714API8.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acenaphthene	Averaged	1.26749	1.29973
Acenaphthylene	Averaged	1.66682	1.75799
Anthracene	Averaged	0.72451	0.72522
Benzo(a)anthracene	Averaged	0.89694	0.88713
Benzo(a)pyrene	Averaged	0.91737	0.92715
Benzo(b)fluoranthene	Averaged	0.86233	0.84651
Benzo(g,h,i)perylene	Averaged	0.88467	0.87147
Benzo(k)fluoranthene	Averaged	0.97855	1.02472
Chrysene	Averaged	1.00768	0.98339
Dibenz(a,h)anthracene	Averaged	0.90376	0.88148
Fluoranthene	Averaged	0.72466	0.74897
Fluorene	Averaged	1.42590	1.45536
Indeno(1,2,3-cd)pyrene	Averaged	1.00311	0.98848
Naphthalene	Averaged	0.93165	0.98412
Phenanthrene	Averaged	0.77587	0.77212
Pyrene	Averaged	1.37292	1.35692
2-Fluorobiphenyl (S)	Averaged	2.71840	2.86236
Terphenyl-d14 (S)	Averaged	1.13614	1.11975

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSSV SIM - FORM VI SVOA-3

MSSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Kansas Instrument ID: 60MSS8 GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/14/2021 07/14/2021 Calibration Time(s): 12:26 14:26

LAB FILE ID

CAL1 = 071421.B\0714API1A.D CAL2 = 071421.B\0714API2.D CAL3 = 071421.B\0714API3.D

CAL4 = 071421.B\0714API4.D CAL5 = 071421.B\0714API5.D CAL6 = 071421.B\0714API6A.D

CAL7 = 071421.B\0714API7.D CAL8 = 071421.B\0714API8.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acenaphthene	Averaged	5.42307			1.33192	
Acenaphthylene	Averaged	4.70412			1.66831	
Anthracene	Averaged	6.54762			0.72296	
Benzo(a)anthracene	Averaged	8.72261			0.96337	
Benzo(a)pyrene	Averaged	10.05344			0.99359	
Benzo(b)fluoranthene	Averaged	7.71239			0.88918	
Benzo(g,h,i)perylene	Averaged	7.23141			0.93562	
Benzo(k)fluoranthene	Averaged	2.79662			1.03028	
Chrysene	Averaged	10.90124			1.15456	
Dibenz(a,h)anthracene	Averaged	6.65381			0.94227	
Fluoranthene	Averaged	6.39044			0.74780	
Fluorene	Averaged	6.25461			1.49114	
Indeno(1,2,3-cd)pyrene	Averaged	6.47042			1.05167	
Naphthalene	Averaged	6.20728			0.98888	
Phenanthrene	Averaged	6.84370			0.81240	
Pyrene	Averaged	6.37079			1.47149	
2-Fluorobiphenyl (S)	Averaged	7.66933			2.74384	
Terphenyl-d14 (S)	Averaged	6.84658			1.22253	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM INITIAL CALIBRATION DATA

19793877ICV

Lab Name: Pace Analytical - Kansas Calibration Date: 07/14/2021 Time: 14:42

Instrument ID: 60MSS8 GC Column: Col 1 Init. Calib. Date(s): 07/14/2021 07/14/2021

Lab File ID: 071421.B\0714APICV.D Init. Calib. Time(s): 12:26 14:26

SDG No.: 60376299

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.33192	1.40036	0.0500	5.1382	20.0000
Acenaphthylene	Averaged	1.66831	1.77331	0.0500	6.2938	20.0000
Anthracene	Averaged	0.72296	0.75782	0.0500	4.8218	20.0000
Benzo(a)anthracene	Averaged	0.96337	0.93468	0.0500	-2.9787	20.0000
Benzo(a)pyrene	Averaged	0.99359	0.97491	0.0500	-1.8806	20.0000
Benzo(b)fluoranthene	Averaged	0.88918	1.00369	0.0500	12.8782	20.0000
Benzo(g,h,i)perylene	Averaged	0.93562	1.01375	0.0500	8.3506	20.0000
Benzo(k)fluoranthene	Averaged	1.03028	1.14063	0.0500	10.7102	20.0000
Chrysene	Averaged	1.15456	1.13419	0.0500	-1.7650	20.0000
Dibenz(a,h)anthracene	Averaged	0.94227	0.97193	0.0500	3.1476	20.0000
Fluoranthene	Averaged	0.74780	0.77068	0.0500	3.0594	20.0000
Fluorene	Averaged	1.49114	1.57717	0.0500	5.7693	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	1.05167	1.15608	0.0500	9.9285	20.0000
Naphthalene	Averaged	0.98888	0.98045	0.0500	-0.8523	20.0000
Phenanthrene	Averaged	0.81240	0.83556	0.0500	2.8503	20.0000
Pyrene	Averaged	1.47149	1.53688	0.0500	4.4435	20.0000
2-Fluorobiphenyl (S)	Averaged	2.74384	0.00000	0.0500	0.0000	20.0000
Terphenyl-d14 (S)	Averaged	1.22253	0.00000	0.0500	0.0000	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSSV SIM - FORM VII SVOA-1
MSSV SIM CONTINUING CALIBRATION DATA

19872192CCV

Lab Name: Pace Analytical - Kansas
Calibration Date: 08/02/2021 Time: 08:25

Instrument ID: 60MSS8 GC Column: Col 1
Init. Calib. Date(s): 07/14/2021 07/14/2021

Lab File ID: 080221.B\0802API6.D
Init. Calib. Time(s): 12:26 14:26

SDG No.: 60376299

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acenaphthene	Averaged	1.33192	1.32562	0.0500	-0.4734	20.0000
Acenaphthylene	Averaged	1.66831	1.75675	0.0500	5.3013	20.0000
Anthracene	Averaged	0.72296	0.75844	0.0500	4.9077	20.0000
Benzo(a)anthracene	Averaged	0.96337	0.94008	0.0500	-2.4177	20.0000
Benzo(a)pyrene	Averaged	0.99359	0.92313	0.0500	-7.0922	20.0000
Benzo(b)fluoranthene	Averaged	0.88918	0.79710	0.0500	-10.3551	20.0000
Benzo(g,h,i)perylene	Averaged	0.93562	0.84373	0.0500	-9.8214	20.0000
Benzo(k)fluoranthene	Averaged	1.03028	0.99464	0.0500	-3.4592	20.0000
Chrysene	Averaged	1.15456	1.11271	0.0500	-3.6249	20.0000
Dibenz(a,h)anthracene	Averaged	0.94227	0.82388	0.0500	-12.5644	20.0000
Fluoranthene	Averaged	0.74780	0.66059	0.0500	-11.6619	20.0000
Fluorene	Averaged	1.49114	1.37056	0.0500	-8.0865	20.0000
Indeno(1,2,3-cd)pyrene	Averaged	1.05167	0.95542	0.0500	-9.1520	20.0000
Naphthalene	Averaged	0.98888	0.96564	0.0500	-2.3494	20.0000
Phenanthrene	Averaged	0.81240	0.77997	0.0500	-3.9925	20.0000
Pyrene	Averaged	1.47149	1.54251	0.0500	4.8261	20.0000
2-Fluorobiphenyl (S)	Averaged	2.74384	2.64506	0.0500	-3.6001	20.0000
Terphenyl-d14 (S)	Averaged	1.22253	1.18121	0.0500	-3.3795	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

BLANK

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Water
SDG No.: 60376299
Date Extracted: 08/02/2021 10:00
Lab Sample ID: 2950397
Date Analyzed: 08/02/2021 10:22
Lab File ID: 080221.B\0802AP06.D
Initial wt/vol: 100 mL
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	ND	U
208-96-8	Acenaphthylene	ND	U
120-12-7	Anthracene	ND	U
56-55-3	Benzo(a)anthracene	ND	U
50-32-8	Benzo(a)pyrene	ND	U
205-99-2	Benzo(b)fluoranthene	ND	U
191-24-2	Benzo(g,h,i)perylene	ND	U
207-08-9	Benzo(k)fluoranthene	ND	U
218-01-9	Chrysene	ND	U
53-70-3	Dibenz(a,h)anthracene	ND	U
206-44-0	Fluoranthene	ND	U
86-73-7	Fluorene	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U
91-20-3	Naphthalene	ND	U
85-01-8	Phenanthrene	ND	U
129-00-0	Pyrene	ND	U

SAMPLE NO.

LCS

MSSV SIM - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received:
Matrix: Water
SDG No.: 60376299
Date Extracted: 08/02/2021 10:00
Lab Sample ID: 2950398
Date Analyzed: 08/02/2021 10:37
Lab File ID: 080221.B\0802AP07.D
Initial wt/vol: 100 mL
Final wt/vol: 1 mL
Dilution: 1
Instrument: 60MSS8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
83-32-9	Acenaphthene	7.2	
208-96-8	Acenaphthylene	7.8	
120-12-7	Anthracene	8.8	
56-55-3	Benzo(a)anthracene	8.8	
50-32-8	Benzo(a)pyrene	8.2	
205-99-2	Benzo(b)fluoranthene	8.5	
191-24-2	Benzo(g,h,i)perylene	8.0	
207-08-9	Benzo(k)fluoranthene	7.5	
218-01-9	Chrysene	7.9	
53-70-3	Dibenz(a,h)anthracene	8.0	
206-44-0	Fluoranthene	8.4	
86-73-7	Fluorene	7.2	
193-39-5	Indeno(1,2,3-cd)pyrene	8.1	
91-20-3	Naphthalene	6.8	
85-01-8	Phenanthrene	8.0	
129-00-0	Pyrene	8.7	

PCB - FORM II SVOA-1
WATER SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60GCSG

LAB SAMPLE ID	SAMPLE NAME	DCBP
2950399	2950399BLANK	75
2950400	2950400LCS	74
60376299001	RB-06	75
60376299002	RB-07	44
60376299003	RB-08	62

	QC LIMITS
(DCBP) = Decachlorobiphenyl (S)	(25-120)

* Values outside of QC Limits

PCB - FORM III SVOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Kansas
Lab Sample ID: 2950400LCS
Date Extracted: 08/02/2021
Date Analyzed (1): 08/02/2021
Instrument: 60GCSG
LCS Lot No: 42472
Lab File ID: 080221-1.B\0802210000029.D
SDG No.: 60376299

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
PCB-1016 (Aroclor 1016)	5.0	3.8	75	40-120
PCB-1260 (Aroclor 1260)	5.0	4.0	80	55-120

Spike Recovery: 0 out of 2 outside limits.

SAMPLE NO.

2950399BLANK

PCB - FORM IV SVOA-1
SEMI-VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Kansas SDG No.: 60376299 Contract: GSA-GOODFELLOW

Instrument ID: 60GCSG Matrix: Water Lab Sample ID: 2950399

Lab File ID (1): 080221-1.B\0802210000028.D Date Analyzed (1): 08/02/2021 Time (1):18:29

Lab File ID (2): 080221-2.B\0802210000028.D Date Analyzed (2): 08/02/2021 Time (2):18:29

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
2950400LCS	2950400	080221-1.B\0802210000029.D	08/02/2021 18:36
2950400LCS	2950400	080221-2.B\0802210000029.D	08/02/2021 18:36
RB-06	60376299001	080221-1.B\0802210000038.D	08/02/2021 19:43
RB-07	60376299002	080221-1.B\0802210000039.D	08/02/2021 19:50
RB-08	60376299003	080221-1.B\0802210000040.D	08/02/2021 19:57

SAMPLE NO.

RB-06

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/30/2021 04:15
Matrix: Water SDG No.: 60376299
Date Extracted: 08/02/2021 14:05
Lab Sample ID: 60376299001
Date Analyzed: 08/02/2021 19:43
Lab File ID: 080221-1.B\0802210000038.D
Initial wt/vol: 110 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

RB-07

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/30/2021 04:15
Matrix: Water SDG No.: 60376299
Date Extracted: 08/02/2021 14:05
Lab Sample ID: 60376299002
Date Analyzed: 08/02/2021 19:50
Lab File ID: 080221-1.B\0802210000039.D
Initial wt/vol: 110 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

RB-08

PCB - FORM I SVOA-1
SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas
Contract: GSA-GOODFELLOW
Date Received: 07/30/2021 04:15
Matrix: Water SDG No.: 60376299
Date Extracted: 08/02/2021 14:05
Lab Sample ID: 60376299003
Date Analyzed: 08/02/2021 19:57
Lab File ID: 080221-1.B\0802210000040.D
Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	10159600.0000	9332000.00000	8705250.00000	9701000.00000	8449925.00000	9905440.00000
Aroclor 1016	2	Averaged	31576400.0000	28475600.0000	24799850.0000	24894466.6666	22477450.0000	27520540.0000
Aroclor 1016	3	Averaged	16950600.0000	12364500.0000	10584450.0000	10854100.0000	9581950.00000	11667100.0000
Aroclor 1016	4	Averaged	12956400.0000	9012500.00000	7466050.00000	7678433.33333	7068625.00000	9167320.00000
Aroclor 1260	1	Averaged	15050000.0000	17903300.0000	14889300.0000	13795266.6666	13036900.0000	16817700.0000
Aroclor 1260	2	Averaged	23802400.0000	19707900.0000	16121550.0000	14732866.6666	13712350.0000	17320340.0000
Aroclor 1260	3	Averaged	30791200.0000	23699700.0000	19924950.0000	17029866.6666	16266300.0000	21205080.0000
Aroclor 1260	4	Averaged	21667800.0000	15689500.0000	12952100.0000	11476466.6666	10937975.0000	13648520.0000
Aroclor 1260	5	Averaged	20760000.0000	14143400.0000	11297500.0000	10523500.0000	10070400.0000	12370860.0000
Decachlorobiphenyl		Averaged		211868000.000	169425000.000	157968000.000	142147250.000	172693600.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	6912300.00000	7161230.00000	5743125.00000
Aroclor 1016	2	Averaged	20502062.5000	21098660.0000	17656720.0000
Aroclor 1016	3	Averaged	8377650.00000	8532050.00000	6994225.00000
Aroclor 1016	4	Averaged	6237512.50000	6334360.00000	5175200.00000
Aroclor 1260	1	Averaged	11349250.0000	11329330.0000	10064720.0000
Aroclor 1260	2	Averaged	12236225.0000	12443550.0000	10631715.0000
Aroclor 1260	3	Averaged	14590500.0000	15918700.0000	13313800.0000
Aroclor 1260	4	Averaged	9757312.50000	9895520.00000	8203050.00000
Aroclor 1260	5	Averaged	9016312.50000	9131750.00000	7608320.00000
Decachlorobiphenyl		Averaged	135044750.000	135919600.000	113984450.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	18.57			6784121.85	
Aroclor 1016	2	Averaged	16.90			17723620.64	
Aroclor 1016	3	Averaged	18.73			9276350.31	
Aroclor 1016	4	Averaged	17.94			7363139.27	
Aroclor 1260	1	Averaged	17.70			14027393.42	
Aroclor 1260	2	Averaged	19.17			16300539.58	
Aroclor 1260	3	Averaged	18.01			17350647.18	
Aroclor 1260	4	Averaged	18.92			12232884.37	
Aroclor 1260	5	Averaged	18.05			11579601.70	
Decachlorobiphenyl		Averaged	19.48			154881331.25	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Aroclor 1016	1	Averaged	248486200.000	187648800.000	133519750.000	141841800.000	124781100.000	146024400.000
Aroclor 1016	2	Averaged	286155800.000	299195600.000	226633700.000	229459266.666	214528900.000	260187220.000
Aroclor 1016	3	Averaged	125731800.000	104623800.000	84913550.0000	86696066.6666	76584225.0000	93607620.0000
Aroclor 1016	4	Averaged	53418400.0000	51305700.0000	41716550.0000	46131600.0000	43273225.0000	48213880.0000
Aroclor 1016	5	Averaged	106124000.000	66502000.0000	58428250.0000	63040700.0000	53734475.0000	67930280.0000
Aroclor 1260	1	Averaged	82519000.0000	81893500.0000	71898700.0000	66793466.6666	64233100.0000	79630980.0000
Aroclor 1260	2	Averaged	61430000.0000	48875200.0000	36744550.0000	35238033.3333	32503825.0000	40698040.0000
Aroclor 1260	3	Averaged	49415800.0000	57082400.0000	43799450.0000	40332433.3333	35966500.0000	46171920.0000
Aroclor 1260	4	Averaged	86355200.0000	64088000.0000	53923600.0000	51623466.6666	48386450.0000	58778320.0000
Aroclor 1260	5	Averaged	173295600.000	127959800.000	101186650.000	102650666.666	94806125.0000	119729040.000
Decachlorobiphenyl		Averaged	877434000.000	826675000.000	662854000.000	633834000.000	598170750.000	737774000.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	CAL7	CAL8	CAL9
Aroclor 1016	1	Averaged	110459150.000	112635320.000	97937800.0000
Aroclor 1016	2	Averaged	198726537.500	208554800.000	244640830.000
Aroclor 1016	3	Averaged	69816075.0000	75180660.0000	64667800.0000
Aroclor 1016	4	Averaged	55246762.5000	39395810.0000	34315640.0000
Aroclor 1016	5	Averaged	51755937.5000	51576980.0000	44562880.0000
Aroclor 1260	1	Averaged	59105650.0000	61671510.0000	54896175.0000
Aroclor 1260	2	Averaged	29772800.0000	30677690.0000	26169155.0000
Aroclor 1260	3	Averaged	33318225.0000	41312560.0000	34745225.0000
Aroclor 1260	4	Averaged	45459787.5000	46209230.0000	39910420.0000
Aroclor 1260	5	Averaged	92740350.0000	96177060.0000	87581640.0000
Decachlorobiphenyl		Averaged	575062000.000	583530100.000	496588250.000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-3

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CURVE TYPE	%RSD	R2	A1	A2	A3
Aroclor 1016	1	Averaged	19.00			105907364.79	
Aroclor 1016	2	Averaged	16.45			189019616.94	
Aroclor 1016	3	Averaged	16.47			71296828.43	
Aroclor 1016	4	Averaged	17.50			51419036.85	
Aroclor 1016	5	Averaged	15.62			63861538.85	
Aroclor 1260	1	Averaged	16.62			79969425.64	
Aroclor 1260	2	Averaged	18.22			42208332.60	
Aroclor 1260	3	Averaged	18.94			54739175.92	
Aroclor 1260	4	Averaged	19.39			65081862.68	
Aroclor 1260	5	Averaged	16.88			127455452.31	
Decachlorobiphenyl		Averaged	18.78			665769122.22	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	1.796	1.795	1.796	1.796	1.795	1.795	1.794	1.796
Aroclor 1016	2	1.91	1.909	1.909	1.911	1.909	1.908	1.907	1.909
Aroclor 1016	3	1.96	1.959	1.959	1.96	1.959	1.959	1.958	1.96
Aroclor 1016	4	2.176	2.175	2.176	2.176	2.175	2.175	2.175	2.176
Aroclor 1260	1	2.84	2.84	2.84	2.841	2.84	2.84	2.84	2.84
Aroclor 1260	2	2.966	2.965	2.966	2.966	2.965	2.965	2.965	2.966
Aroclor 1260	3	3.127	3.126	3.127	3.127	3.126	3.126	3.126	3.127
Aroclor 1260	4	3.217	3.217	3.217	3.217	3.217	3.217	3.217	3.217
Aroclor 1260	5	3.354	3.353	3.354	3.354	3.353	3.354	3.354	3.354
Decachlorobiphenyl		4.41	4.41	4.41	4.41	4.409	4.411	4.411	4.41

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-1.B\0721210000061.D CAL2A = 072121-1.B\0721210000062.D CAL3A = 072121-1.B\0721210000063.D

CAL4A = 072121-1.B\0721210000064.D CAL5A = 072121-1.B\0721210000065.D CAL6A = 072121-1.B\0721210000066.D

CAL7A = 072121-1.B\0721210000067.D CAL8A = 072121-1.B\0721210000068.D CAL9A = 072121-1.B\0721210000069.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	1.796	1.796	1.676	1.916
Aroclor 1016	2	1.91	1.909	1.789	2.029
Aroclor 1016	3	1.96	1.959	1.839	2.079
Aroclor 1016	4	2.176	2.176	2.056	2.296
Aroclor 1260	1	2.841	2.84	2.72	2.96
Aroclor 1260	2	2.966	2.966	2.846	3.086
Aroclor 1260	3	3.127	3.127	3.007	3.247
Aroclor 1260	4	3.217	3.217	3.097	3.337
Aroclor 1260	5	3.354	3.353	3.233	3.473
Decachlorobiphenyl		4.411	4.41	4.29	4.53

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	CAL8
Aroclor 1016	1	1.674	1.673	1.673	1.675	1.674	1.673	1.672	1.674
Aroclor 1016	2	1.859	1.86	1.86	1.862	1.86	1.861	1.86	1.861
Aroclor 1016	3	1.929	1.929	1.929	1.931	1.93	1.929	1.929	1.93
Aroclor 1016	4	2.015	2.015	2.015	2.015	2.014	2.014	2.013	2.014
Aroclor 1016	5	2.164	2.164	2.165	2.165	2.164	2.164	2.164	2.165
Aroclor 1260	1	2.813	2.813	2.814	2.813	2.813	2.813	2.813	2.813
Aroclor 1260	2	2.995	2.995	2.995	2.995	2.995	2.995	2.995	2.995
Aroclor 1260	3	3.151	3.15	3.153	3.152	3.151	3.152	3.152	3.152
Aroclor 1260	4	3.342	3.341	3.342	3.342	3.341	3.342	3.342	3.342
Aroclor 1260	5	3.446	3.446	3.447	3.447	3.446	3.447	3.447	3.447
Decachlorobiphenyl		4.367	4.368	4.368	4.368	4.367	4.369	4.369	4.369

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-2

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 07/21/2021 Calibration Time(s): 22:06 23:05

LAB FILE ID

CAL1A = 072121-2.B\0721210000061.D CAL2A = 072121-2.B\0721210000062.D CAL3A = 072121-2.B\0721210000063.D

CAL4A = 072121-2.B\0721210000064.D CAL5A = 072121-2.B\0721210000065.D CAL6A = 072121-2.B\0721210000066.D

CAL7A = 072121-2.B\0721210000067.D CAL8A = 072121-2.B\0721210000068.D CAL9A = 072121-2.B\0721210000069.D

COMPOUND	PEAK	CAL9	RT	RT WINDOW	
				FROM	TO
Aroclor 1016	1	1.675	1.673	1.553	1.793
Aroclor 1016	2	1.865	1.861	1.741	1.981
Aroclor 1016	3	1.93	1.929	1.809	2.049
Aroclor 1016	4	2.015	2.015	1.895	2.135
Aroclor 1016	5	2.165	2.164	2.044	2.284
Aroclor 1260	1	2.814	2.812	2.692	2.932
Aroclor 1260	2	2.996	2.996	2.876	3.116
Aroclor 1260	3	3.153	3.151	3.031	3.271
Aroclor 1260	4	3.342	3.341	3.221	3.461
Aroclor 1260	5	3.448	3.447	3.327	3.567
Decachlorobiphenyl		4.369	4.369	4.249	4.489

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-1.B\0721210000073.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	2527550.00000	0.00			2131625.00	
Aroclor 1221	2	Averaged	1476475.00000	0.00			1608950.00	
Aroclor 1221	3	Averaged	6416825.00000	0.00			5273325.00	
Aroclor 1254	1	Averaged	8609950.00000	0.00			9077550.00	
Aroclor 1254	2	Averaged	11791375.0000	0.00			11510200.00	
Aroclor 1254	3	Averaged	14012450.0000	0.00			15443500.00	
Aroclor 1254	4	Averaged	14109775.0000	0.00			13237900.00	
Aroclor 1254	5	Averaged	8801550.00000	0.00			9272000.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-2.B\0721210000073.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1221	1	Averaged	54051000.0000	0.00			36050100.00	
Aroclor 1221	2	Averaged	32000875.0000	0.00			25768525.00	
Aroclor 1221	3	Averaged	89519450.0000	0.00			63845600.00	
Aroclor 1254	1	Averaged	49834650.0000	0.00			62784150.00	
Aroclor 1254	2	Averaged	66270700.0000	0.00			78219700.00	
Aroclor 1254	3	Averaged	43054825.0000	0.00			50511200.00	
Aroclor 1254	4	Averaged	79576525.0000	0.00			90063100.00	
Aroclor 1254	5	Averaged	46964325.0000	0.00			56407875.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-1.B\0721210000073.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	1.48	1.48	1.36	1.6
Aroclor 1221	2	1.521	1.521	1.401	1.641
Aroclor 1221	3	1.543	1.543	1.423	1.663
Aroclor 1254	1	2.396	2.396	2.276	2.516
Aroclor 1254	2	2.509	2.509	2.389	2.629
Aroclor 1254	3	2.712	2.712	2.592	2.832
Aroclor 1254	4	2.846	2.846	2.726	2.966
Aroclor 1254	5	3	3	2.88	3.12

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:34

LAB FILE ID

CAL5B = 072121-2.B\0721210000073.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1221	1	1.417	1.417	1.297	1.537
Aroclor 1221	2	1.47	1.47	1.35	1.59
Aroclor 1221	3	1.497	1.497	1.377	1.617
Aroclor 1254	1	2.382	2.382	2.262	2.502
Aroclor 1254	2	2.442	2.442	2.322	2.562
Aroclor 1254	3	2.65	2.65	2.53	2.77
Aroclor 1254	4	2.71	2.71	2.59	2.83
Aroclor 1254	5	3.117	3.117	2.997	3.237

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1
PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-1.B\0721210000074.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	3277725.00000	0.00			2529725.00	
Aroclor 1232	2	Averaged	2664550.00000	0.00			2364325.00	
Aroclor 1232	3	Averaged	1783825.00000	0.00			1992650.00	
Aroclor 1232	4	Averaged	2193500.00000	0.00			2017500.00	
Aroclor 1232	5	Averaged	1386575.00000	0.00			1665700.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-2.B\0721210000074.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1232	1	Averaged	25841775.0000	0.00			22278500.00	
Aroclor 1232	2	Averaged	11903900.0000	0.00			15022950.00	
Aroclor 1232	3	Averaged	17268375.0000	0.00			18242400.00	
Aroclor 1232	4	Averaged	11603000.0000	0.00			13431300.00	
Aroclor 1232	5	Averaged	19397050.0000	0.00			21684000.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-1.B\0721210000074.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	1.795	1.795	1.675	1.915
Aroclor 1232	2	1.996	1.996	1.876	2.116
Aroclor 1232	3	2.091	2.091	1.971	2.211
Aroclor 1232	4	2.195	2.195	2.075	2.315
Aroclor 1232	5	2.351	2.351	2.231	2.471

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:42

LAB FILE ID

CAL5C = 072121-2.B\0721210000074.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1232	1	1.796	1.796	1.676	1.916
Aroclor 1232	2	2.015	2.015	1.895	2.135
Aroclor 1232	3	2.233	2.233	2.113	2.353
Aroclor 1232	4	2.301	2.301	2.181	2.421
Aroclor 1232	5	2.358	2.358	2.238	2.478

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-1.B\0721210000075.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	15607225.0000	0.00			11322650.00	
Aroclor 1242	2	Averaged	4259425.00000	0.00			4326975.00	
Aroclor 1242	3	Averaged	6223800.00000	0.00			4894100.00	
Aroclor 1242	4	Averaged	5065025.00000	0.00			5741650.00	
Aroclor 1242	5	Averaged	5232800.00000	0.00			5110350.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-2.B\0721210000075.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1242	1	Averaged	147425975.000	0.00			112837775.00	
Aroclor 1242	2	Averaged	26979700.0000	0.00			33153375.00	
Aroclor 1242	3	Averaged	41108475.0000	0.00			43495650.00	
Aroclor 1242	4	Averaged	35512900.0000	0.00			38677750.00	
Aroclor 1242	5	Averaged	48800325.0000	0.00			37639725.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-1.B\0721210000075.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	1.91	1.91	1.79	2.03
Aroclor 1242	2	2.066	2.066	1.946	2.186
Aroclor 1242	3	2.24	2.24	2.12	2.36
Aroclor 1242	4	2.369	2.369	2.249	2.489
Aroclor 1242	5	2.485	2.485	2.365	2.605

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:49

LAB FILE ID

CAL5D = 072121-2.B\0721210000075.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1242	1	1.861	1.861	1.741	1.981
Aroclor 1242	2	1.988	1.988	1.868	2.108
Aroclor 1242	3	2.165	2.165	2.045	2.285
Aroclor 1242	4	2.358	2.358	2.238	2.478
Aroclor 1242	5	2.494	2.494	2.374	2.614

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-1.B\0721210000076.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	7021850.00000	0.00			7521200.00	
Aroclor 1248	2	Averaged	7661525.00000	0.00			8185225.00	
Aroclor 1248	3	Averaged	10469050.0000	0.00			9850050.00	
Aroclor 1248	4	Averaged	7773625.00000	0.00			7900500.00	
Aroclor 1248	5	Averaged	5718800.00000	0.00			5895125.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-2.B\0721210000076.D

COMPOUND	PEAK	CURVE TYPE	CAL5	%RSD	R2	A1	A2	A3
Aroclor 1248	1	Averaged	48772050.0000	0.00			58058825.00	
Aroclor 1248	2	Averaged	65383750.0000	0.00			74406450.00	
Aroclor 1248	3	Averaged	31825625.0000	0.00			38664850.00	
Aroclor 1248	4	Averaged	54062425.0000	0.00			62073200.00	
Aroclor 1248	5	Averaged	32843000.0000	0.00			35133275.00	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 1 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-1.B\0721210000076.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	2.066	2.066	1.946	2.186
Aroclor 1248	2	2.175	2.175	2.055	2.295
Aroclor 1248	3	2.391	2.391	2.271	2.511
Aroclor 1248	4	2.485	2.485	2.365	2.605
Aroclor 1248	5	2.711	2.711	2.591	2.831

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PCB - FORM VI SVOA-1

PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

Lab Name: Pace Analytical - Kansas Instrument ID: 60GCSG GC Column: Col 2 SDG No.: 60376299

Calibration Date(s): 07/21/2021 Calibration Time(s): 23:56

LAB FILE ID

CAL5E = 072121-2.B\0721210000076.D

COMPOUND	PEAK	CAL5	RT	RT WINDOW	
				FROM	TO
Aroclor 1248	1	2.015	2.015	1.895	2.135
Aroclor 1248	2	2.165	2.165	2.045	2.285
Aroclor 1248	3	2.302	2.302	2.182	2.422
Aroclor 1248	4	2.358	2.358	2.238	2.478
Aroclor 1248	5	2.709	2.709	2.589	2.829

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19708972ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/21/2021 Time: 23:19

Instrument ID: 60GCSG GC Column: Col 1 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000071.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60376299

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	1.796	1.676	1.916	6784121.850	9840500.000	17.3494
Aroclor 1016	2	Averaged	1.91	1.789	2.029	17723620.64	28279075.00	17.7633
Aroclor 1016	3	Averaged	1.96	1.839	2.079	9276350.312	11766175.00	20.9635
Aroclor 1016	4	Averaged	2.176	2.056	2.296	7363139.270	8519125.000	22.0071
Aroclor 1260	1	Averaged	2.775	2.72	2.96	14027393.42	6789700.000	24.6002
Aroclor 1260	2	Averaged	2.966	2.846	3.086	16300539.58	18764475.00	29.9670
Aroclor 1260	3	Averaged	3.126	3.007	3.247	17350647.18	20999425.00	23.7089
Aroclor 1260	4	Averaged	3.217	3.097	3.337	12232884.37	14239500.00	26.8799
Aroclor 1260	5	Averaged	3.354	3.233	3.473	11579601.70	13304875.00	28.8889

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19708960ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/21/2021 Time: 23:19

Instrument ID: 60GCSG GC Column: Col 2 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000071.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60376299

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1016	1	Averaged	1.674	1.553	1.793	105907364.7	159778875.0	22.8217
Aroclor 1016	2	Averaged	1.861	1.741	1.981	189019616.9	274014250.0	10.1054
Aroclor 1016	3	Averaged	1.93	1.809	2.049	71296828.43	102058350.0	26.3402
Aroclor 1016	4	Averaged	2.014	1.895	2.135	51419036.85	51366750.00	18.7805
Aroclor 1016	5	Averaged	2.164	2.044	2.284	63861538.85	75244275.00	25.2164
Aroclor 1260	1	Averaged	2.813	2.692	2.932	79969425.64	99424775.00	34.6110
Aroclor 1260	2	Averaged	2.995	2.876	3.116	42208332.60	47718550.00	32.8614
Aroclor 1260	3	Averaged	3.152	3.031	3.271	54739175.92	51777000.00	22.7561
Aroclor 1260	4	Averaged	3.342	3.221	3.461	65081862.68	66615100.00	25.3386
Aroclor 1260	5	Averaged	3.447	3.327	3.567	127455452.3	137918700.0	26.3073

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

19709046ICV

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:26

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000080.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60376299

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	1.48	1.36	1.6	2131625.000	2708350.000	-1.0673
Aroclor 1221	2	Averaged	1.521	1.401	1.641	1608950.000	1620350.000	-1.0566
Aroclor 1221	3	Averaged	1.542	1.423	1.663	5273325.000	6163800.000	-5.8677
Aroclor 1254	1	Averaged	2.395	2.276	2.516	9077550.000	8997850.000	0.8931
Aroclor 1254	2	Averaged	2.507	2.389	2.629	11510200.00	12562750.00	4.5355
Aroclor 1254	3	Averaged	2.711	2.592	2.832	15443500.00	14801875.00	-1.4046
Aroclor 1254	4	Averaged	2.846	2.726	2.966	13237900.00	15071700.00	2.8318
Aroclor 1254	5	Averaged	3	2.88	3.12	9272000.000	9190650.000	0.6137

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19709038ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:26

Instrument ID: 60GCSG GC Column: Col 2
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000080.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60376299

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1221	1	Averaged	1.416	1.297	1.537	36050100.00	56636000.00	-1.1130
Aroclor 1221	2	Averaged	1.47	1.35	1.59	25768525.00	31233375.00	5.1691
Aroclor 1221	3	Averaged	1.497	1.377	1.617	63845600.00	88320950.00	-2.3070
Aroclor 1254	1	Averaged	2.381	2.262	2.502	62784150.00	50808700.00	0.0221
Aroclor 1254	2	Averaged	2.441	2.322	2.562	78219700.00	67241875.00	0.7838
Aroclor 1254	3	Averaged	2.649	2.53	2.77	50511200.00	47014075.00	4.6493
Aroclor 1254	4	Averaged	2.71	2.59	2.83	90063100.00	80282100.00	-1.1403
Aroclor 1254	5	Averaged	3.116	2.997	3.237	56407875.00	51470550.00	8.9767

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

08/24/2021 12:05

SAMPLE NO.

19709066ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:33

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000081.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60376299

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	1.795	1.675	1.915	2529725.000	2732350.000	-9.8113
Aroclor 1232	2	Averaged	1.997	1.876	2.116	2364325.000	2362525.000	-11.1861
Aroclor 1232	3	Averaged	2.09	1.971	2.211	1992650.000	1806875.000	-6.6908
Aroclor 1232	4	Averaged	2.195	2.075	2.315	2017500.000	1918325.000	-8.6183
Aroclor 1232	5	Averaged	2.351	2.231	2.471	1665700.000	1211800.000	-8.1782

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19709060ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/22/2021 Time: 00:33

Instrument ID: 60GCSG GC Column: Col 2 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000081.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60376299

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1232	1	Averaged	1.796	1.676	1.916	22278500.00	12555675.00	-11.9347
Aroclor 1232	2	Averaged	2.014	1.895	2.135	15022950.00	13650850.00	10.1724
Aroclor 1232	3	Averaged	2.233	2.113	2.353	18242400.00	16306200.00	-1.7221
Aroclor 1232	4	Averaged	2.302	2.181	2.421	13431300.00	12135475.00	0.4357
Aroclor 1232	5	Averaged	2.359	2.238	2.478	21684000.00	17876525.00	-8.5060

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

08/24/2021 12:05

SAMPLE NO.

19709032ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:41

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000082.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60376299

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	1.91	1.79	2.03	11322650.00	14554325.00	-7.1273
Aroclor 1242	2	Averaged	2.067	1.946	2.186	4326975.000	4208400.000	-0.0410
Aroclor 1242	3	Averaged	2.239	2.12	2.36	4894100.000	5940375.000	-6.4164
Aroclor 1242	4	Averaged	2.368	2.249	2.489	5741650.000	4728425.000	-7.5388
Aroclor 1242	5	Averaged	2.485	2.365	2.605	5110350.000	4791800.000	-10.9704

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

08/24/2021 12:05

SAMPLE NO.

19709037ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas Calibration Date: 07/22/2021 Time: 00:41

Instrument ID: 60GCSG GC Column: Col 2 Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000082.D Init. Calib. Time(s): 22:06 00:11

SDG No.: 60376299

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1242	1	Averaged	1.86	1.741	1.981	112837775.0	136760550.0	-7.6076
Aroclor 1242	2	Averaged	1.989	1.868	2.108	33153375.00	25375700.00	-10.1003
Aroclor 1242	3	Averaged	2.164	2.045	2.285	43495650.00	39707625.00	-1.4149
Aroclor 1242	4	Averaged	2.358	2.238	2.478	38677750.00	29247400.00	-9.4015
Aroclor 1242	5	Averaged	2.494	2.374	2.614	37639725.00	41819275.00	-13.9500

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19709043ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:48

Instrument ID: 60GCSG GC Column: Col 1
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-1.B\0721210000083.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60376299

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	2.066	1.946	2.186	7521200.000	6846200.000	-6.3271
Aroclor 1248	2	Averaged	2.175	2.055	2.295	8185225.000	7670475.000	-7.2695
Aroclor 1248	3	Averaged	2.391	2.271	2.511	9850050.000	10216025.00	-6.2591
Aroclor 1248	4	Averaged	2.484	2.365	2.605	7900500.000	7335900.000	-8.0118
Aroclor 1248	5	Averaged	2.711	2.591	2.831	5895125.000	5679375.000	-5.0720

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

19709035ICV

PCB - FORM VII SVOA-1
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: Pace Analytical - Kansas
Calibration Date: 07/22/2021 Time: 00:48

Instrument ID: 60GCSG GC Column: Col 2
Init. Calib. Date(s): 07/21/2021 07/22/2021

Lab File ID: 072121-2.B\0721210000083.D
Init. Calib. Time(s): 22:06 00:11

SDG No.: 60376299

COMPOUND	PEAK	CURVE TYPE	RT	RT WINDOW		$\overline{RRF}$ or Amount	RRF or Amount	%D
				FROM	TO			
Aroclor 1248	1	Averaged	2.013	1.895	2.135	58058825.00	41245425.00	-10.5436
Aroclor 1248	2	Averaged	2.164	2.045	2.285	74406450.00	57398250.00	-10.3808
Aroclor 1248	3	Averaged	2.3	2.182	2.422	38664850.00	27009600.00	-11.1029
Aroclor 1248	4	Averaged	2.357	2.238	2.478	62073200.00	47124450.00	-10.8562
Aroclor 1248	5	Averaged	2.71	2.589	2.829	35133275.00	30375375.00	-6.0203

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

BLANK

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/02/2021 14:05 Lab Sample ID: 2950399

Date Analyzed: 08/02/2021 18:29 Lab File ID: 080221-1.B\0802210000028.D

Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	ND	U
11104-28-2	PCB-1221 (Aroclor 1221)	ND	U
11141-16-5	PCB-1232 (Aroclor 1232)	ND	U
53469-21-9	PCB-1242 (Aroclor 1242)	ND	U
12672-29-6	PCB-1248 (Aroclor 1248)	ND	U
11097-69-1	PCB-1254 (Aroclor 1254)	ND	U
11096-82-5	PCB-1260 (Aroclor 1260)	ND	U

SAMPLE NO.

LCS

PCB - FORM I SVOA-1

SEMI-VOLATILE ORGANICS ANALYSIS DATA

Lab Name: Pace Analytical - Kansas Contract: GSA-GOODFELLOW

Date Received: Matrix: Water SDG No.: 60376299

Date Extracted: 08/02/2021 14:05 Lab Sample ID: 2950400

Date Analyzed: 08/02/2021 18:36 Lab File ID: 080221-1.B\0802210000029.D

Initial wt/vol: 100 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 60GCSG Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
12674-11-2	PCB-1016 (Aroclor 1016)	3.8	
11096-82-5	PCB-1260 (Aroclor 1260)	4.0	

APPENDIX F – GEOTECHNICAL LABORATORY DATA

List of Acronyms

%	percent
%e	percent void
AASHTO	American Association of State Highway and Transportation Officials
CH	high plasticity clay
CL	low plasticity clay
g-C/g-soil	grams of carbon per grams of soil
Gs	specific gravity
LL	liquid limit of soil
Mm	millimeter
Pcf	pounds per cubic foot
PI	plasticity index
PL	plastic limit of soil
Psf	pounds per square foot
USCS	Unified Soil Classification System

Summary of Laboratory Testing

Alpha-Omega Geotech, Inc.
1701 State Avenue
Kansas City, KS 66102
Office: (913) 371-0000 Fax: (913) 371-6710
Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

PROJECT NAME: GSA, #133835
PROJECT LOCATION:

PROJECT NUMBER: 21-290T
DATE: 8/16/2021

Boring Number	Sample Number	Depth or Elevation	Description	Natural Moisture (%)	Dry Unit Weight (pcf)	Ash Content (%)	Organic Matter (%)	FOC (g-c/g-soil)	USCS/ Visual Class.	% Passing No. 200	Unconfined Compression (psf)	%e	Gs	Remarks
	GB-01	3' - 5'	Reddish brown, spotted gray and dark brown LEAN / FAT CLAY	23.9	100.5	97.8	2.2	0.013	CL/CH	98.3			2.68	
	GB-01	11' - 13'	Gray and brown, spotted dark brown LEAN / FAT CLAY	24.1	99.8	98.3	1.7	0.010	CL/CH	99.8			2.68	
	GB-07	2' - 4'	Light reddish brown, mottled gray LEAN / FAT CLAY	24.4	98.8	98.9	1.1	0.006	CL/CH	98.7			2.69	
	GB-11	2' - 4'	Light brown, mottled reddish brown, spotted gray LEAN / FAT CLAY	28.3	94.7	97.4	2.6	0.015	CL/CH	96.8			2.71	
	GB-11	6' - 8'	Reddish brown, mottled gray LEAN / FAT CLAY	19.1	109.0	97.7	2.3	0.013	CL/CH	98.1			2.69	
	GB-22	2' - 4'	Brown, spotted reddish brown and dark brown LEAN / FAT CLAY	26.8	95.9	96.9	3.1	0.018	CL/CH	97.9			2.68	
	GB-22	5' - 7'	Reddish brown LEAN / FAT CLAY	24.2	100.5	97.4	2.6	0.015	CL/CH	99.1			2.71	
	GB-34	1' - 3'	Reddish brown, mottled gray LEAN CLAY	24.6	101.5	98.6	1.4	0.008	CL	99.8			2.73	

Summary of Laboratory Testing

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ALPHA-OMEGA GEOTECH

PROJECT NAME: GSA, #133835
PROJECT LOCATION:

PROJECT NUMBER: 21-290T
DATE: 8/16/2021

Boring Number	Sample Number	Depth or Elevation	Description	Natural Moisture (%)	Dry Unit Weight (pcf)	Ash Content (%)	Organic Matter (%)	FOC (g-c/g-soil)	USCS/ Visual Class.	% Passing No. 200	Unconfined Compression (psf)	%e	Gs	Remarks
	GB-34	4' - 6'	Light brown, spotted reddish brown and dark brown LEAN CLAY	26.2	97.4	98.3	1.7	0.010	CL	99.0			2.71	
	GB-40	2' - 4'	Brown, spotted reddish brown and dark brown LEAN / FAT CLAY	24.2	101.5	98.4	1.6	0.009	CL/CH	99.3			2.71	
	GB-40	11' - 13'	Reddish brown, spotted dark brown FAT CLAY	27.7	95.8	95.9	4.1	0.024	CH	96.3			2.69	
	GB-47	3' - 5'	Brown, mottled reddish brown, spotted dark brown LEAN / FAT CLAY	23.1	102.7	98.2	1.8	0.010	CL/CH	97.9			2.69	
	GB-47	7' - 9'	Light reddish brown FAT CLAY	26.5	97.1	97.7	2.3	0.013	CH	99.0			2.68	
	GB-51	2' - 4'	Light brown, spotted reddish brown and dark brown LEAN CLAY	25.1	100.6	99.3	0.7	0.004	CL	99.8			2.72	
	GB-51	6' - 8'	Brown, mottled reddish brown, spotted dark brown LEAN CLAY	25.3	97.8	97.6	2.4	0.014	CL	99.6			2.69	
	GB-59	2' - 4'	Brown, spotted dark brown LEAN CLAY	27.4	93.0	98.6	1.4	0.008	CL	97.8			2.69	

Summary of Laboratory Testing

Alpha-Omega Geotech, Inc.
1701 State Avenue
Kansas City, KS 66102
Office: (913) 371-0000 Fax: (913) 371-6710
Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

PROJECT NAME: GSA, #133835
PROJECT LOCATION:

PROJECT NUMBER: 21-290T
DATE: 8/16/2021

Boring Number	Sample Number	Depth or Elevation	Description	Natural Moisture (%)	Dry Unit Weight (pcf)	Ash Content (%)	Organic Matter (%)	FOC (g-c/g-soil)	USCS/ Visual Class.	% Passing No. 200	Unconfined Compression (psf)	%e	Gs	Remarks
	GB-59	8' - 10'	Brown LEAN CLAY	28.1	94.5	98.9	1.1	0.006	CL	99.8			2.68	
	GB-18	2' - 4'	Light brown, spotted dark brown gravelly FAT CLAY	26.7	97.5	98.3	1.7	0.010	CH	79.3			2.71	
	GB-18	6' - 8'	Light brown, spotted light gray LEAN / FAT CLAY	18.0	110.0	95.3	4.7	0.027	CL/CH	99.2			2.68	

Ash Content (ASTM D2974)

Alpha-Omega Geotech, Inc.
1701 State Avenue
Kansas City, KS 66102
Office: (913) 371-0000 / Fax: (913) 371-6710
Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/1/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-01 **Depth:** 3' - 5'
Description: Reddish brown, spotted gray and dark brown LEAN / FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen:	38.92	grams
Ash Weight:	38.07	grams
Ash Content:	97.8	%
Organic Matter:	2.2	%
Percent Fraction Organic Carbon Content:	1.3	%
Fraction Organic Carbon Content:	0.013	g-C / g-soil

Ash Content (ASTM D2974)

Alpha-Omega Geotech, Inc.
1701 State Avenue
Kansas City, KS 66102
Office: (913) 371-0000 / Fax: (913) 371-6710
Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/1/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-01 **Depth:** 11' - 13'
Description: Gray and brown, spotted dark brown LEAN / FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen:	37.89	grams
Ash Weight:	37.26	grams
Ash Content:	98.3	%
Organic Matter:	1.7	%
Percent Fraction Organic Carbon Content:	1.0	%
Fraction Organic Carbon Content:	0.010	g-C / g-soil

Ash Content (ASTM D2974)

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Kansas City, KS 66102
Office: (913) 371-0000 / Fax: (913) 371-6710
Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/1/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-07 **Depth:** 2' - 4'
Description: Light reddish brown, mottled gray LEAN / FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen:	33.54	grams
Ash Weight:	33.17	grams
Ash Content:	98.9	%
Organic Matter:	1.1	%
Percent Fraction Organic Carbon Content:	0.6	%
Fraction Organic Carbon Content:	0.006	g-C / g-soil

Ash Content (ASTM D2974)

Alpha-Omega Geotech, Inc.
1701 State Avenue
Kansas City, KS 66102
Office: (913) 371-0000 / Fax: (913) 371-6710
Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/1/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-11 **Depth:** 2' - 4'
Description: Light brown, mottled reddish brown, spotted gray LEAN / FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen:	40.42	grams
Ash Weight:	39.35	grams
Ash Content:	97.4	%
Organic Matter:	2.6	%
Percent Fraction Organic Carbon Content:	1.5	%
Fraction Organic Carbon Content:	0.015	g-C / g-soil

Ash Content (ASTM D2974)

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ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/1/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-11 **Depth:** 6' - 8'
Description: Reddish brown, mottled gray LEAN / FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 40.93 grams

Ash Weight: 40.00 grams

Ash Content: 97.7 %

Organic Matter: 2.3 %

Percent Fraction Organic Carbon Content: 1.3 %

Fraction Organic Carbon Content: 0.013 g-C / g-soil

Ash Content (ASTM D2974)

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Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/1/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-22 **Depth:** 2' - 4'
Description: Brown, spotted reddish brown and dark brown LEAN / FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 27.04 grams

Ash Weight: 26.21 grams

Ash Content: 96.9 %

Organic Matter: 3.1 %

Percent Fraction Organic Carbon Content: 1.8 %

Fraction Organic Carbon Content: 0.018 g-C / g-soil

Ash Content (ASTM D2974)

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Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/4/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-22 **Depth:** 5' - 7'
Description: Reddish brown LEAN / FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 32.64 grams

Ash Weight: 31.79 grams

Ash Content: 97.4 %

Organic Matter: 2.6 %

Percent Fraction Organic Carbon Content: 1.5 %

Fraction Organic Carbon Content: 0.015 g-C / g-soil

Ash Content (ASTM D2974)

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Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/4/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-34 **Depth:** 1' - 3'
Description: Reddish brown, mottled gray LEAN CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 34.23 grams

Ash Weight: 33.75 grams

Ash Content: 98.6 %

Organic Matter: 1.4 %

Percent Fraction Organic Carbon Content: 0.8 %

Fraction Organic Carbon Content: 0.008 g-C / g-soil

Ash Content (ASTM D2974)

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Office: (913) 371-0000 / Fax: (913) 371-6710
Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/4/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-34 **Depth:** 4' - 6'
Description: Light brown, spotted reddish brown and dark brown LEAN CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 34.56 grams

Ash Weight: 33.97 grams

Ash Content: 98.3 %

Organic Matter: 1.7 %

Percent Fraction Organic Carbon Content: 1.0 %

Fraction Organic Carbon Content: 0.010 g-C / g-soil

Ash Content (ASTM D2974)

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1701 State Avenue
Kansas City, KS 66102
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Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/9/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-40 **Depth:** 2' - 4'
Description: Brown, spotted reddish brown and dark brown LEAN / FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 36.00 grams

Ash Weight: 35.43 grams

Ash Content: 98.4 %

Organic Matter: 1.6 %

Percent Fraction Organic Carbon Content: 0.9 %

Fraction Organic Carbon Content: 0.009 g-C / g-soil

Ash Content (ASTM D2974)

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Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/7/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-40 **Depth:** 11' - 13'
Description: Reddish brown, spotted dark brown FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen:	55.56	grams
Ash Weight:	53.26	grams
Ash Content:	95.9	%
Organic Matter:	4.1	%
Percent Fraction Organic Carbon Content:	2.4	%
Fraction Organic Carbon Content:	0.024	g-C / g-soil

Ash Content (ASTM D2974)

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Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/7/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-47 **Depth:** 3' - 5'
Description: Brown, mottled reddish brown, spotted dark brown LEAN / FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen:	37.21	grams
Ash Weight:	36.55	grams
Ash Content:	98.2	%
Organic Matter:	1.8	%
Percent Fraction Organic Carbon Content:	1.0	%
Fraction Organic Carbon Content:	0.010	g-C / g-soil

Ash Content (ASTM D2974)

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Office: (913) 371-0000 / Fax: (913) 371-6710
Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/7/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-47 **Depth:** 7' - 9'
Description: Light reddish brown FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 34.94 grams

Ash Weight: 34.14 grams

Ash Content: 97.7 %

Organic Matter: 2.3 %

Percent Fraction Organic Carbon Content: 1.3 %

Fraction Organic Carbon Content: 0.013 g-C / g-soil

Ash Content (ASTM D2974)

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ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/7/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-51 **Depth:** 2' - 4'
Description: Light brown, spotted reddishbrown and dark brown LEAN CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 41.31 grams

Ash Weight: 41.03 grams

Ash Content: 99.3 %

Organic Matter: 0.7 %

Percent Fraction Organic Carbon Content: 0.4 %

Fraction Organic Carbon Content: 0.004 g-C / g-soil

Ash Content (ASTM D2974)

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1701 State Avenue
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ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/15/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-51 **Depth:** 6' - 8'
Description: Brown, mottled reddish brown, spotted dark brown LEAN CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 37.78 grams

Ash Weight: 36.89 grams

Ash Content: 97.6 %

Organic Matter: 2.4 %

Percent Fraction Organic Carbon Content: 1.4 %

Fraction Organic Carbon Content: 0.014 g-C / g-soil

Ash Content (ASTM D2974)

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1701 State Avenue
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Office: (913) 371-0000 / Fax: (913) 371-6710
Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/15/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-59 **Depth:** 2' - 4'
Description: Brown, spotted dark brown LEAN CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 46.65 grams

Ash Weight: 46.00 grams

Ash Content: 98.6 %

Organic Matter: 1.4 %

Percent Fraction Organic Carbon Content: 0.8 %

Fraction Organic Carbon Content: 0.008 g-C / g-soil

Ash Content (ASTM D2974)

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ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/16/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-59 **Depth:** 8' - 10'
Description: Brown LEAN CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 36.96 grams

Ash Weight: 36.57 grams

Ash Content: 98.9 %

Organic Matter: 1.1 %

Percent Fraction Organic Carbon Content: 0.6 %

Fraction Organic Carbon Content: 0.006 g-C / g-soil

Ash Content (ASTM D2974)

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Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/16/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-18 **Depth:** 2' - 4'
Description: Light brown, spotted dark brown gravelly FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen:	34.48	grams
Ash Weight:	33.90	grams
Ash Content:	98.3	%
Organic Matter:	1.7	%
Percent Fraction Organic Carbon Content:	1.0	%
Fraction Organic Carbon Content:	0.010	g-C / g-soil

Ash Content (ASTM D2974)

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Website: www.aogeotech.com

ALPHA-OMEGA GEOTECH

Project Name: GSA, #133835 **Date:** 8/17/2021
Project No.: 21-290T
Boring No.: **Sample No.:** GB-18 **Depth:** 6' - 8'
Description: Light brown, spotted light gray LEAN / FAT CLAY

Method Used: C

Ash Content

Oven-Dried Test Specimen: 36.52 grams

Ash Weight: 34.80 grams

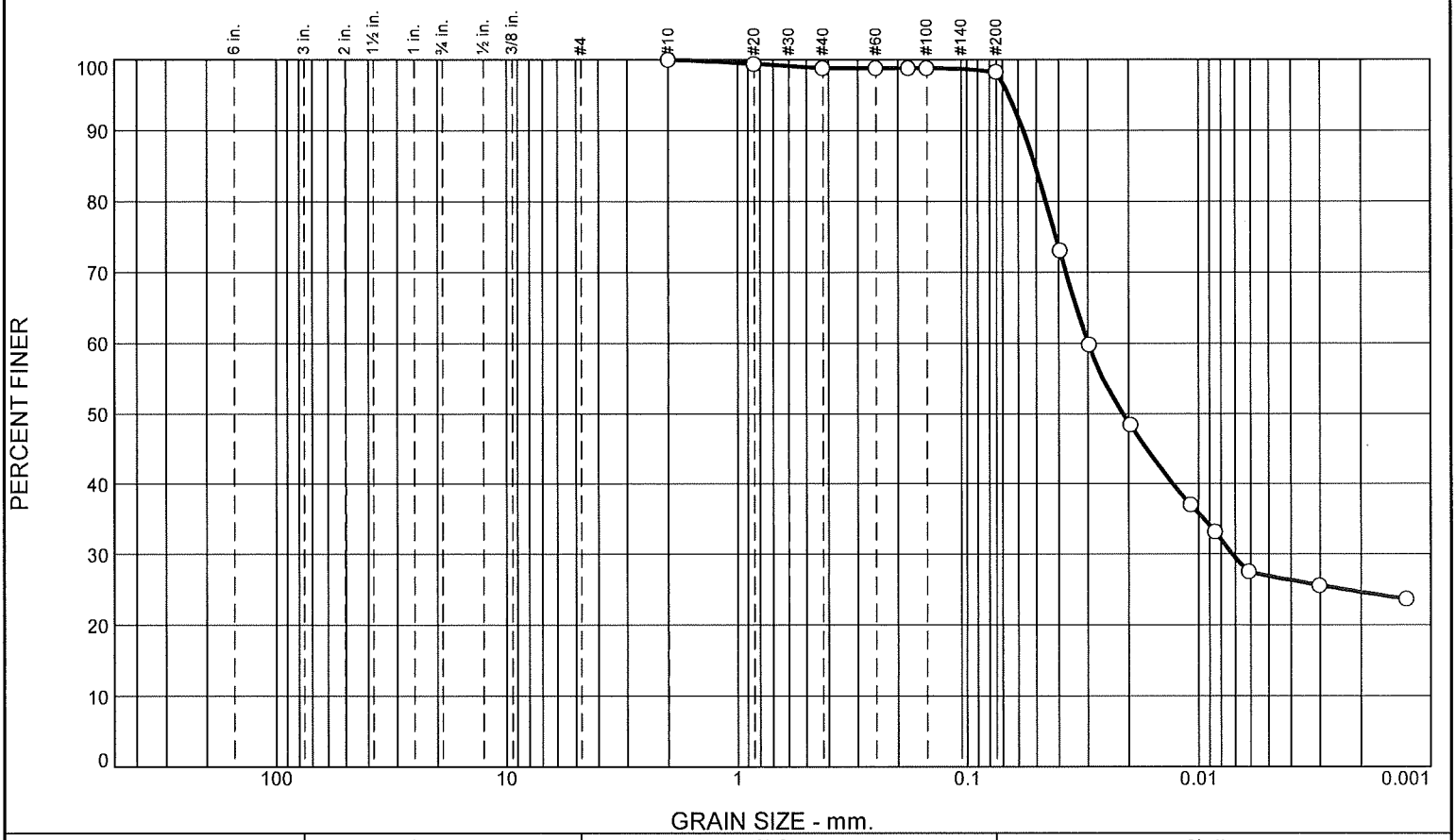
Ash Content: 95.3 %

Organic Matter: 4.7 %

Percent Fraction Organic Carbon Content: 2.7 %

Fraction Organic Carbon Content: 0.027 g-C / g-soil

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	1.2	0.5	71.4	26.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	99.4		
#40	98.8		
#60	98.8		
#80	98.8		
#100	98.8		
#200	98.3		

* (no specification provided)

Material Description

Reddish brown, spotted gray and dark brown LEAN / FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0569 D_{85}= 0.0505 D_{60}= 0.0298
D_{50}= 0.0212 D_{30}= 0.0071 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.04

Sample Number: GB-01 **Depth:** 3' - 5'

Date: 8/5/2021

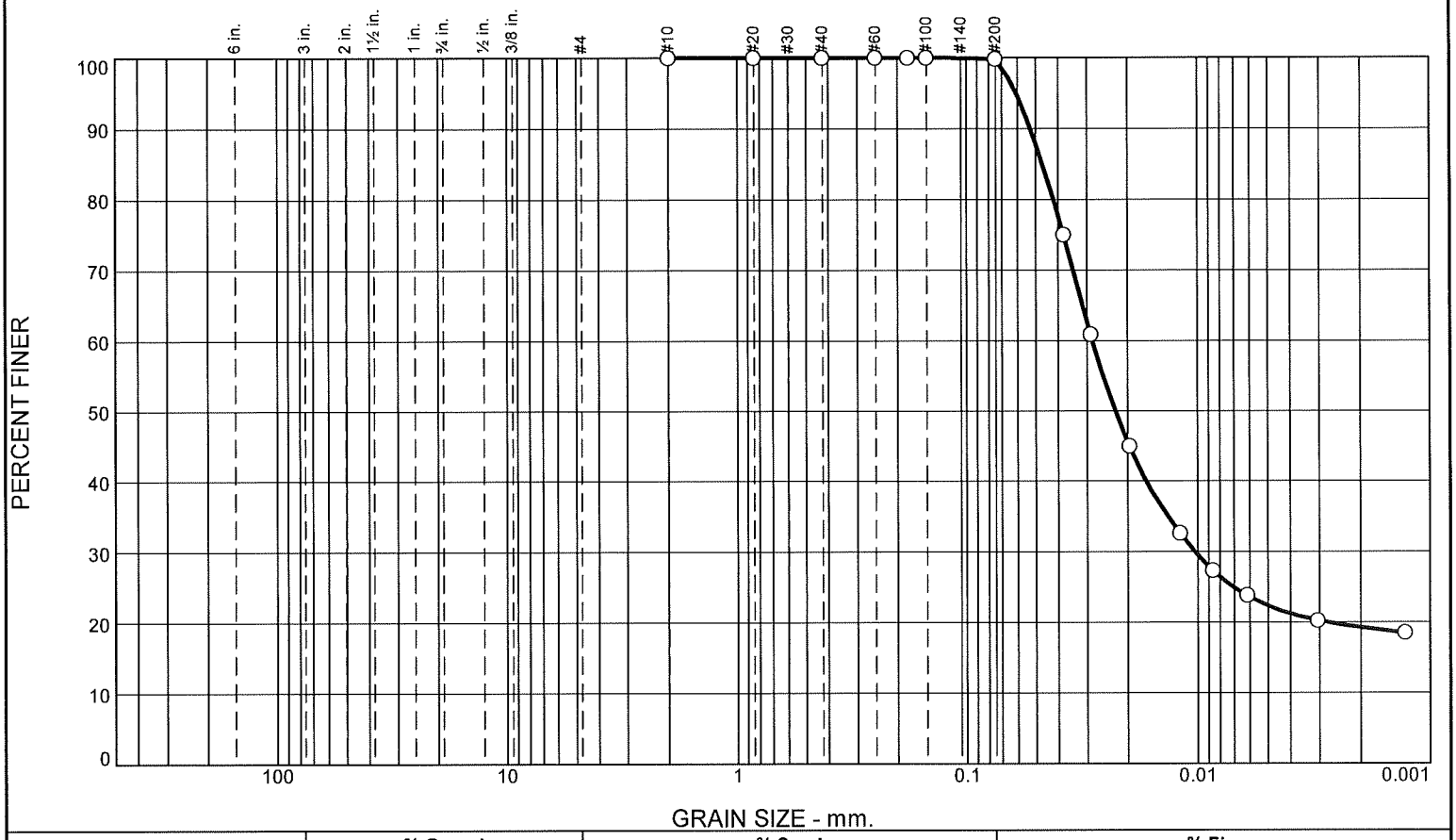
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** D.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	0.2	77.4	22.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	100.0		
#100	100.0		
#200	99.8		

* (no specification provided)

Material Description

Gray and brown, spotted dark brown LEAN / FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0526 D_{85}= 0.0467 D_{60}= 0.0284
D_{50}= 0.0226 D_{30}= 0.0103 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-01 **Depth:** 11' - 13'

Date: 8/5/2021

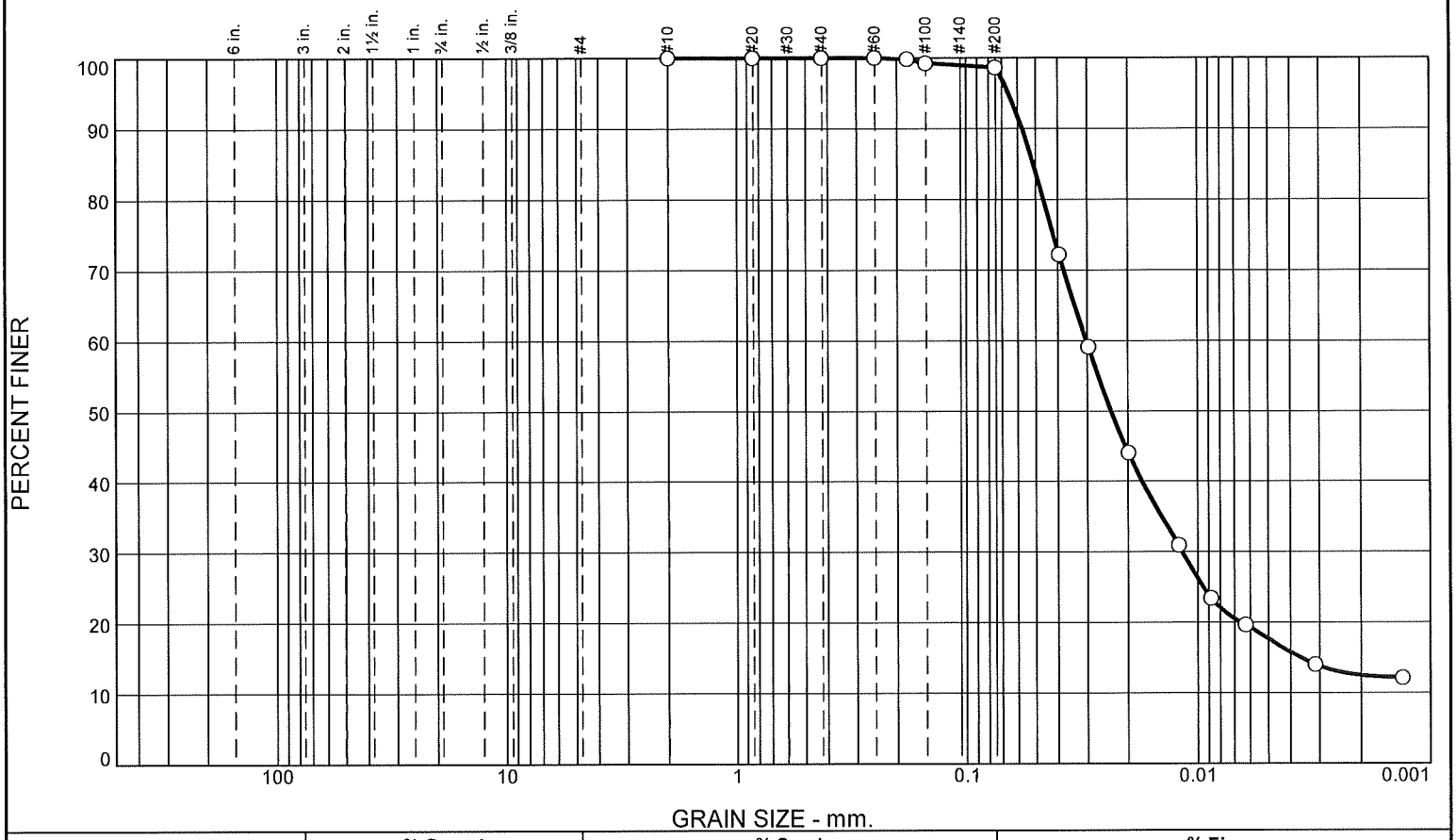
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	1.3	81.0	17.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	99.8		
#100	99.2		
#200	98.7		

* (no specification provided)

Material Description

Light reddish brown, mottled gray LEAN / FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0573 D_{85}= 0.0512 D_{60}= 0.0303
D_{50}= 0.0237 D_{30}= 0.0116 D_{15}= 0.0036
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.01

Sample Number: GB-07 **Depth:** 2' - 4'

Date: 8/5/2021

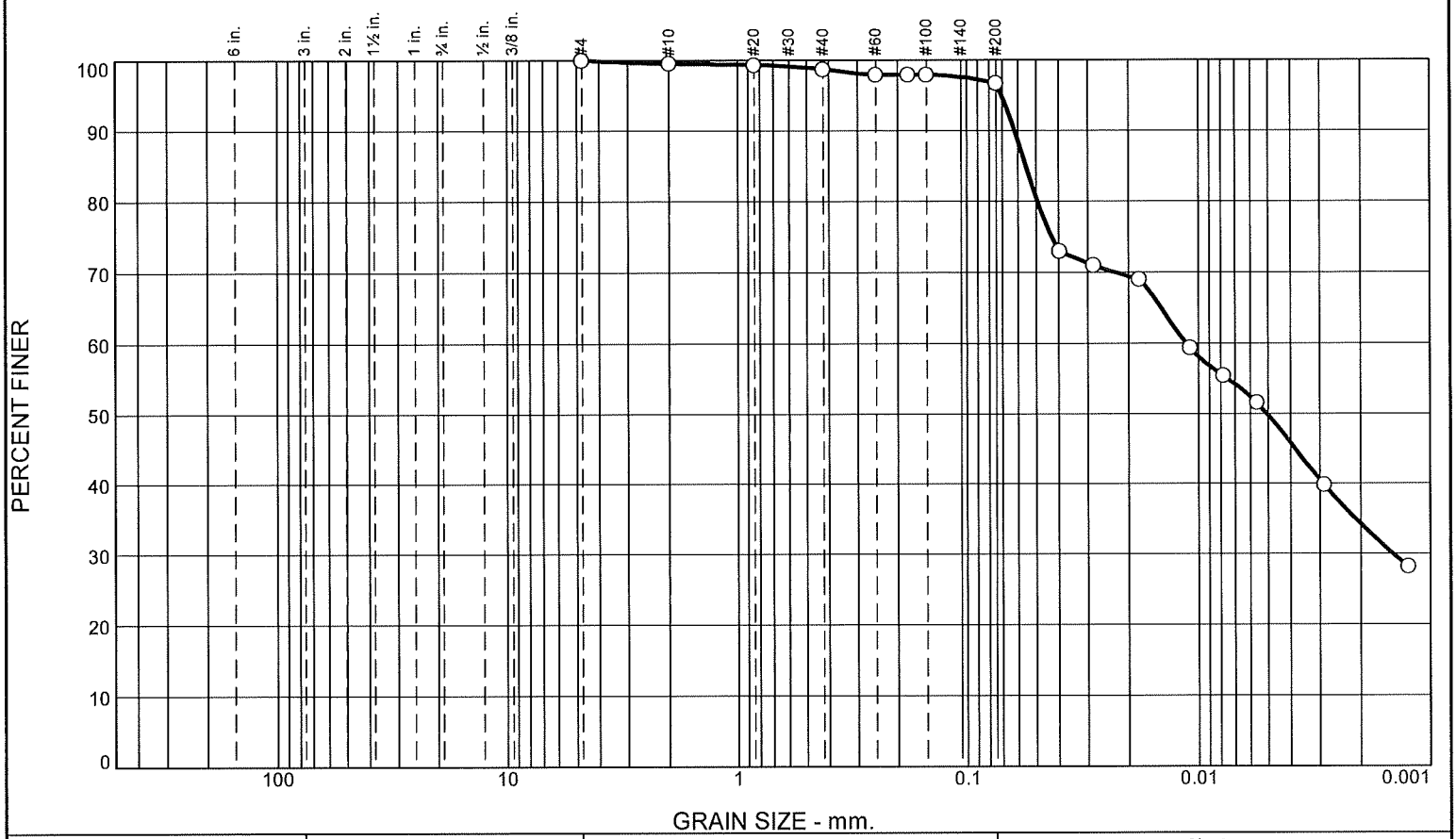
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.5	0.7	2.0	47.1	49.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.5		
#20	99.3		
#40	98.8		
#60	98.0		
#80	98.0		
#100	98.0		
#200	96.8		

* (no specification provided)

Material Description

Light brown, mottled reddish brown, spotted gray LEAN / FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0619 D_{85}= 0.0553 D_{60}= 0.0113
D_{50}= 0.0051 D_{30}= 0.0014 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.06

Sample Number: GB-11 **Depth:** 2' - 4'

Date: 8/5/2021

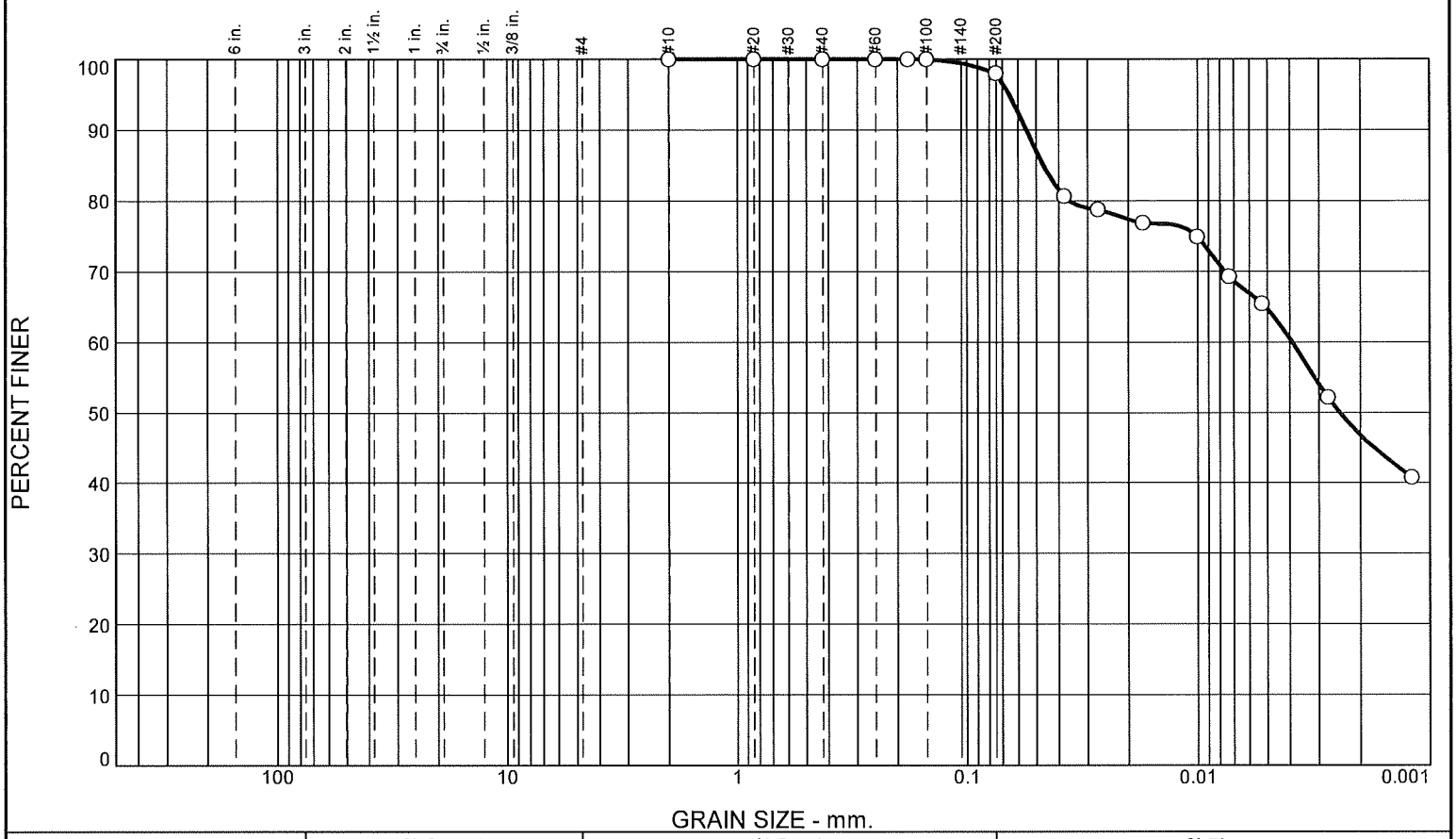
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	1.9	33.4	64.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	100.0		
#100	100.0		
#200	98.1		

* (no specification provided)

Material Description

Reddish brown, mottled gray LEAN / FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0551 D_{85}= 0.0464 D_{60}= 0.0039
D_{50}= 0.0024 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-11 **Depth:** 6' - 8'

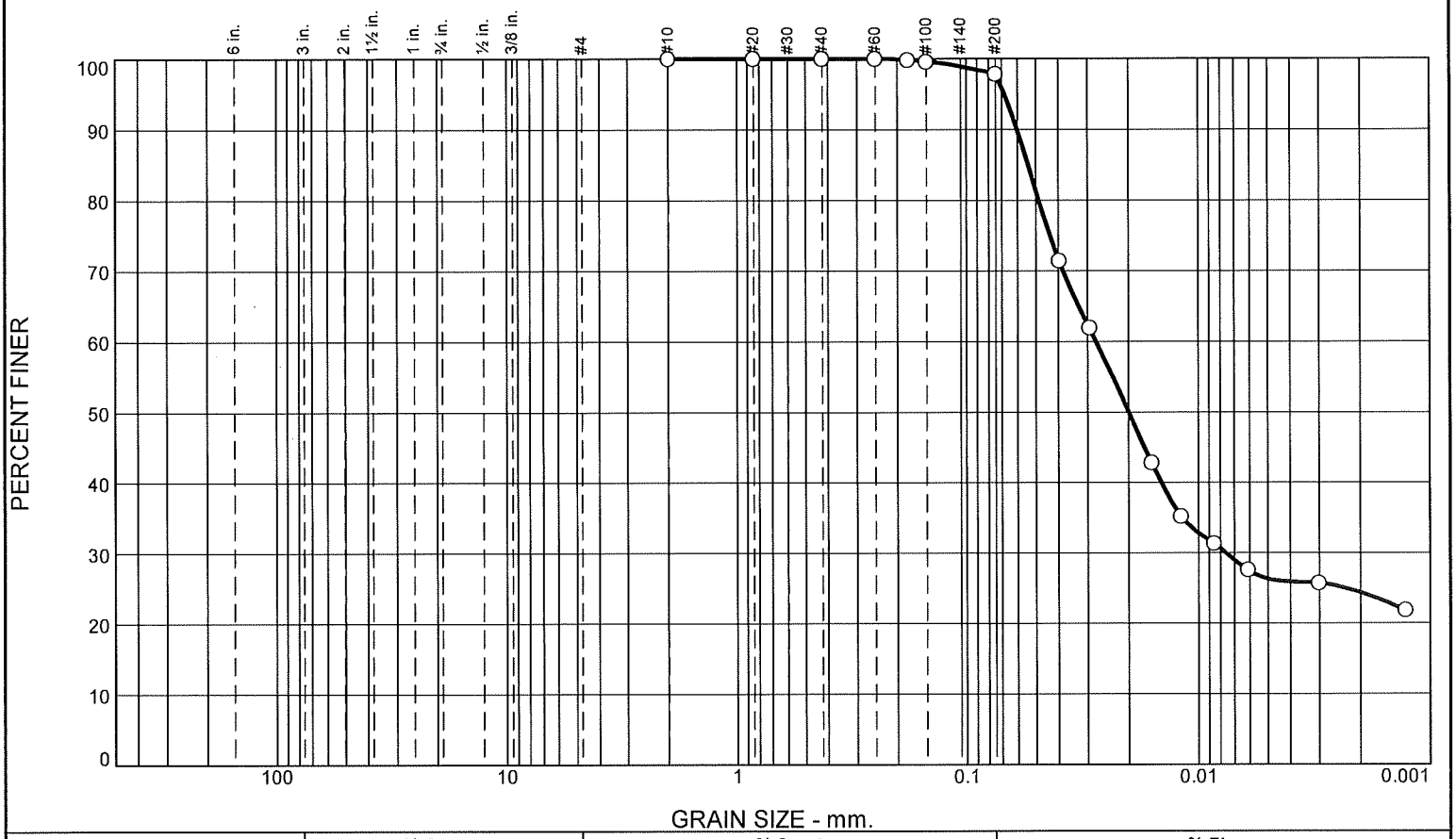
Date: 8/5/2021

ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835
Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	2.1	71.6	26.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	99.8		
#100	99.6		
#200	97.9		

* (no specification provided)

Material Description

Brown, spotted reddish brown and dark brown LEAN / FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0600 D_{85}= 0.0538 D_{60}= 0.0275
D_{50}= 0.0199 D_{30}= 0.0075 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-22 **Depth:** 2' - 4'

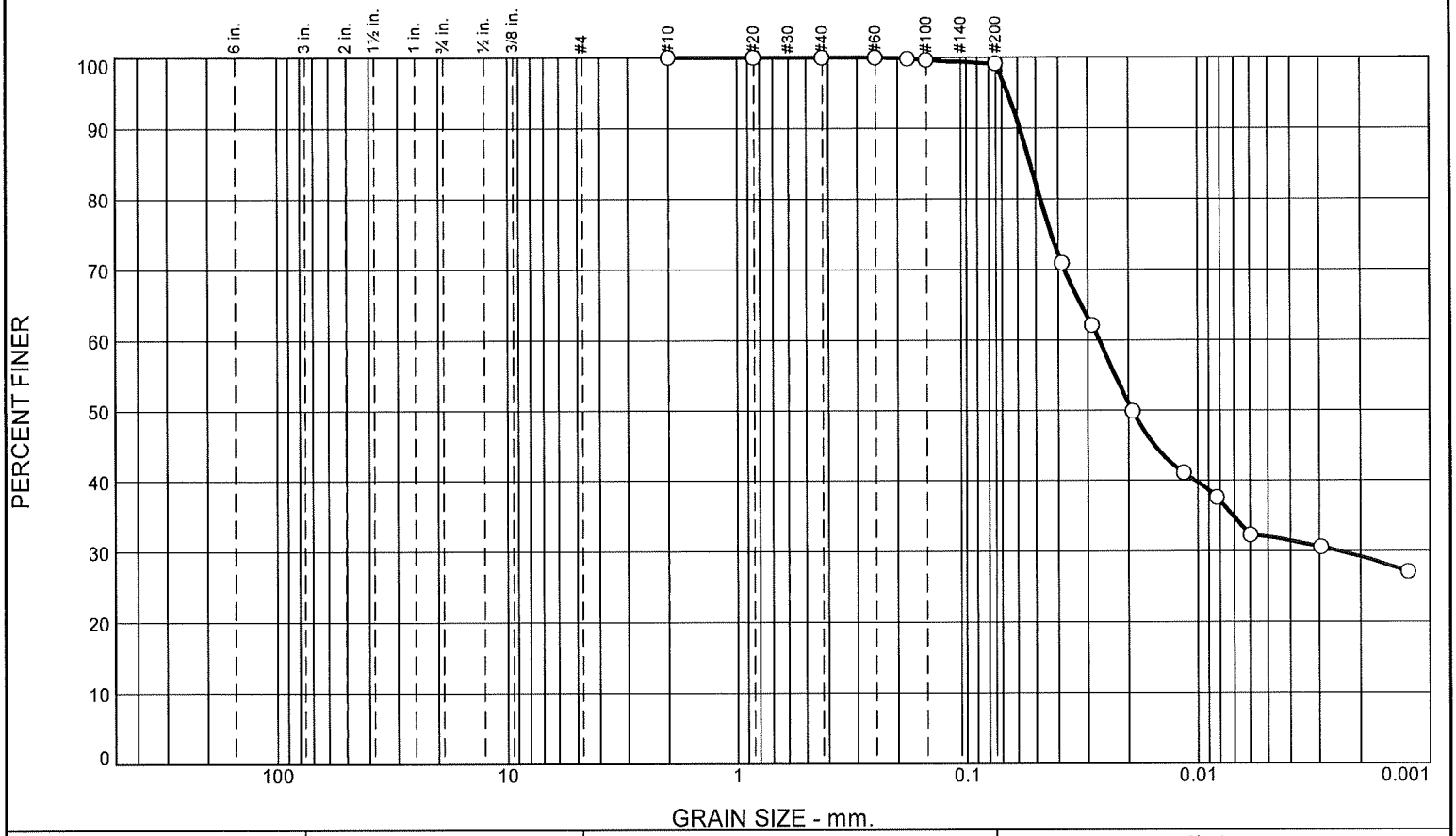
Date: 8/5/2021

ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835
Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	0.9	67.1	32.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	99.8		
#100	99.6		
#200	99.1		

* (no specification provided)

Material Description

Reddish brown LEAN / FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0586 D_{85}= 0.0528 D_{60}= 0.0267
D_{50}= 0.0193 D_{30}= 0.0024 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-22 **Depth:** 5' - 7'

Date: 8/5/2021

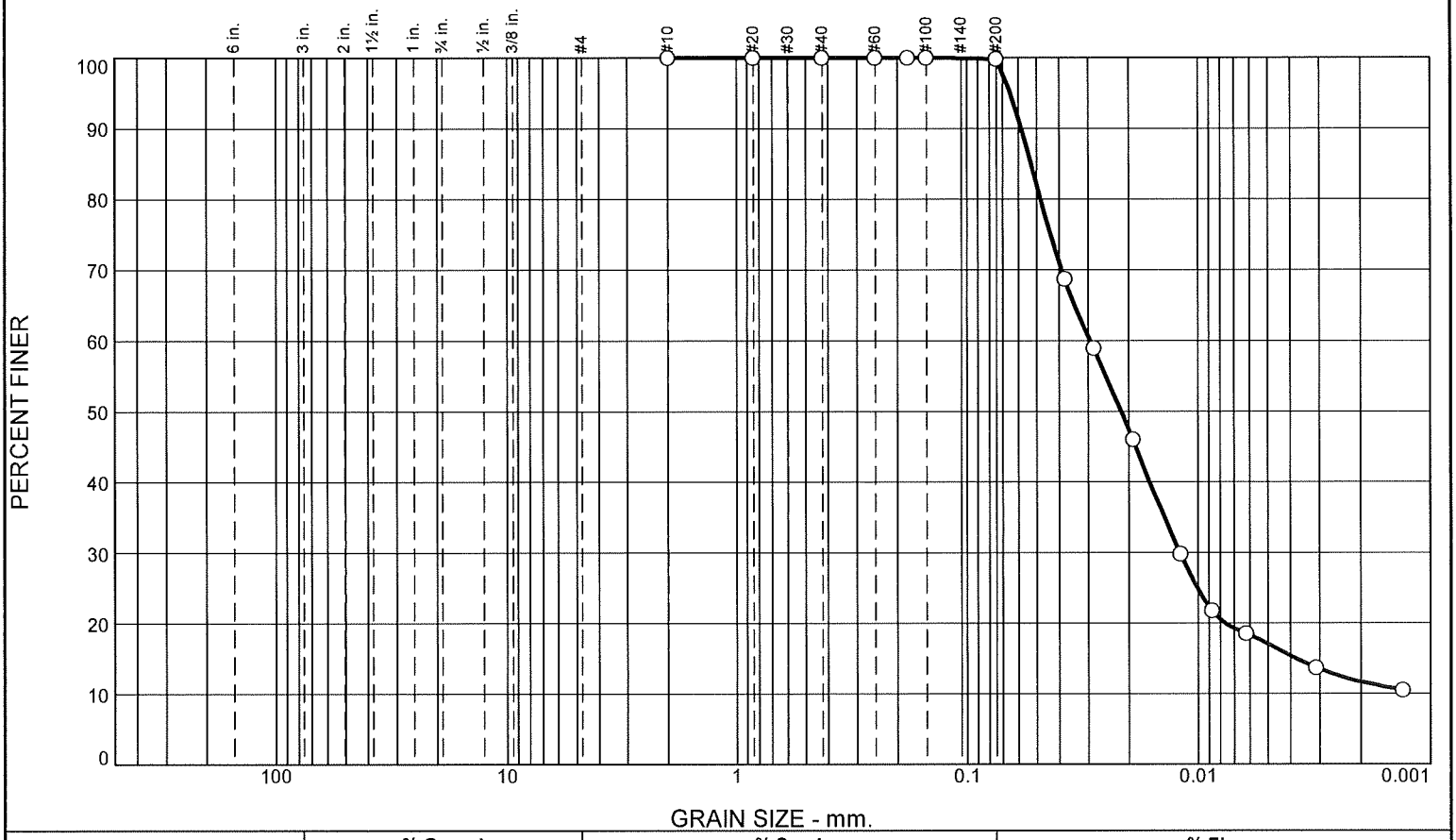
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	0.2	82.8	17.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	100.0		
#100	100.0		
#200	99.8		

* (no specification provided)

Material Description

Reddish brown, mottled gray LEAN CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0582 D_{85}= 0.0527 D_{60}= 0.0294
D_{50}= 0.0216 D_{30}= 0.0120 D_{15}= 0.0038
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-34 **Depth:** 1' - 3'

Date: 8/12/2021

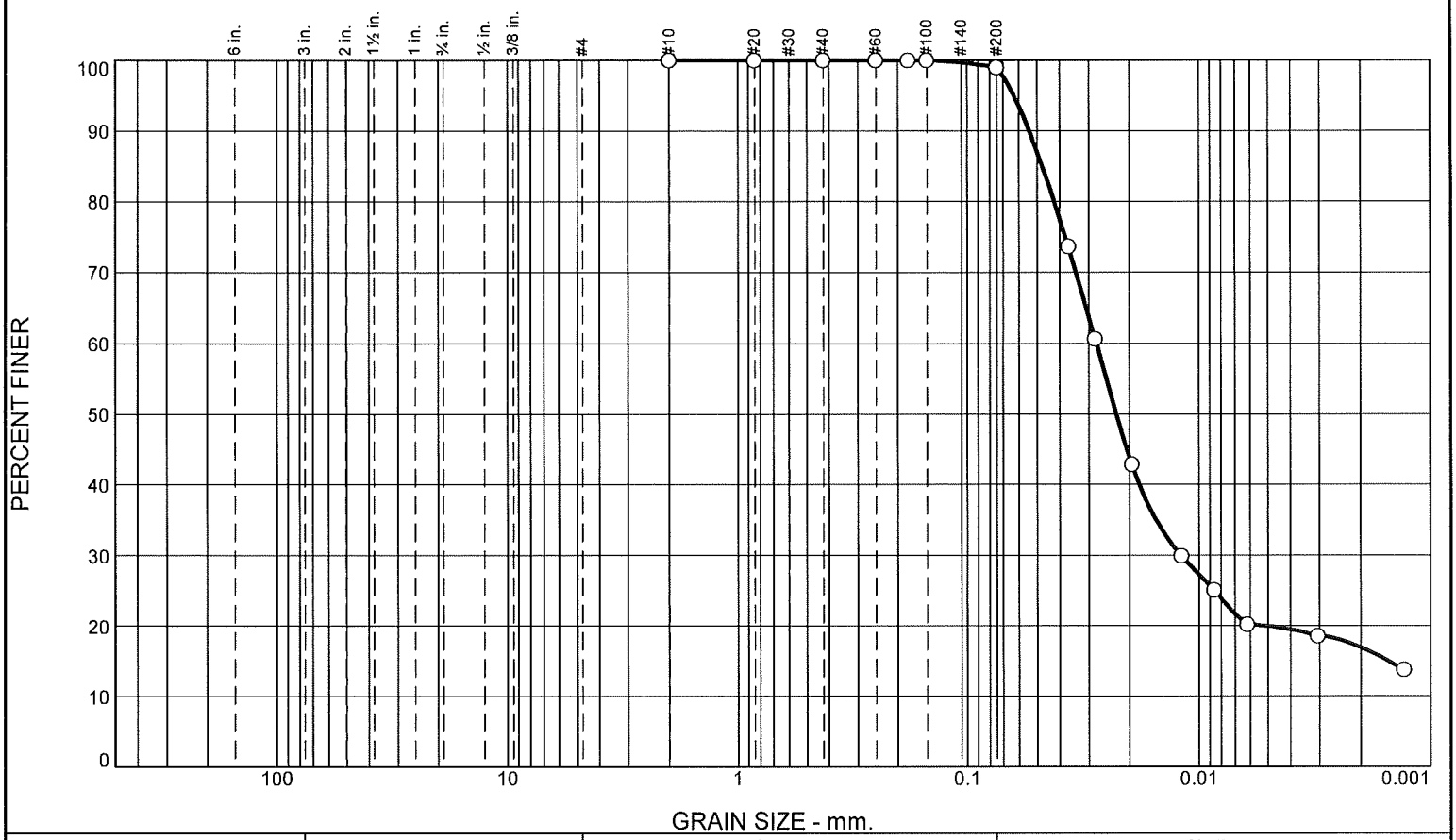
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	1.0	79.0	20.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	100.0		
#100	100.0		
#200	99.0		

* (no specification provided)

Material Description

Light brown, spotted reddish brown and dark brown LEAN CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0539 D_{85}= 0.0475 D_{60}= 0.0278
D_{50}= 0.0228 D_{30}= 0.0120 D_{15}= 0.0015
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-34 **Depth:** 4' - 6'

Date: 8/15/2021

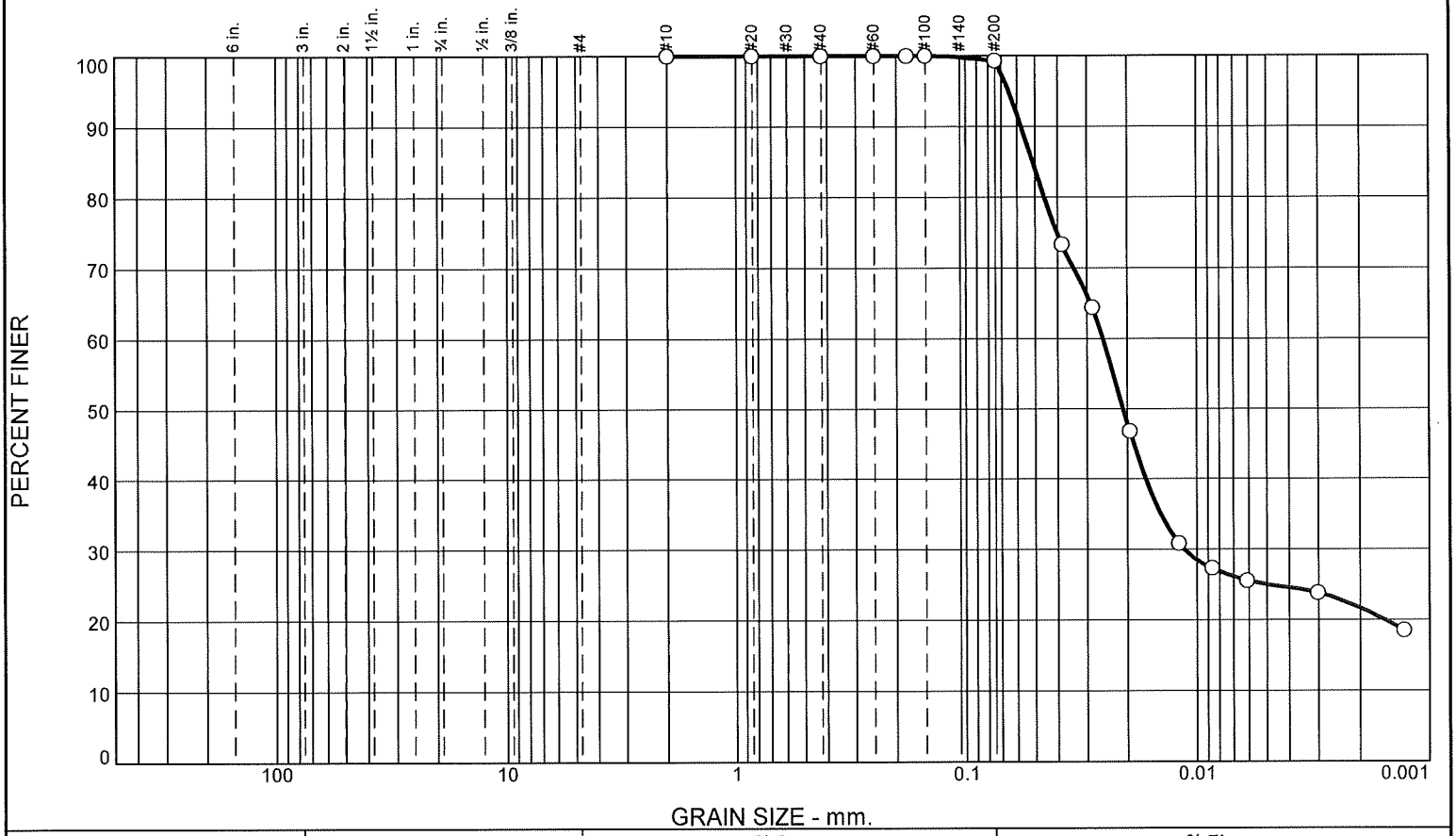
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	0.7	74.3	25.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	100.0		
#100	100.0		
#200	99.3		

* (no specification provided)

Material Description

Brown, spotted reddish brown and dark brown LEAN / FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0573 D_{85}= 0.0512 D_{60}= 0.0255
D_{50}= 0.0208 D_{30}= 0.0114 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-40 **Depth:** 2' - 4'

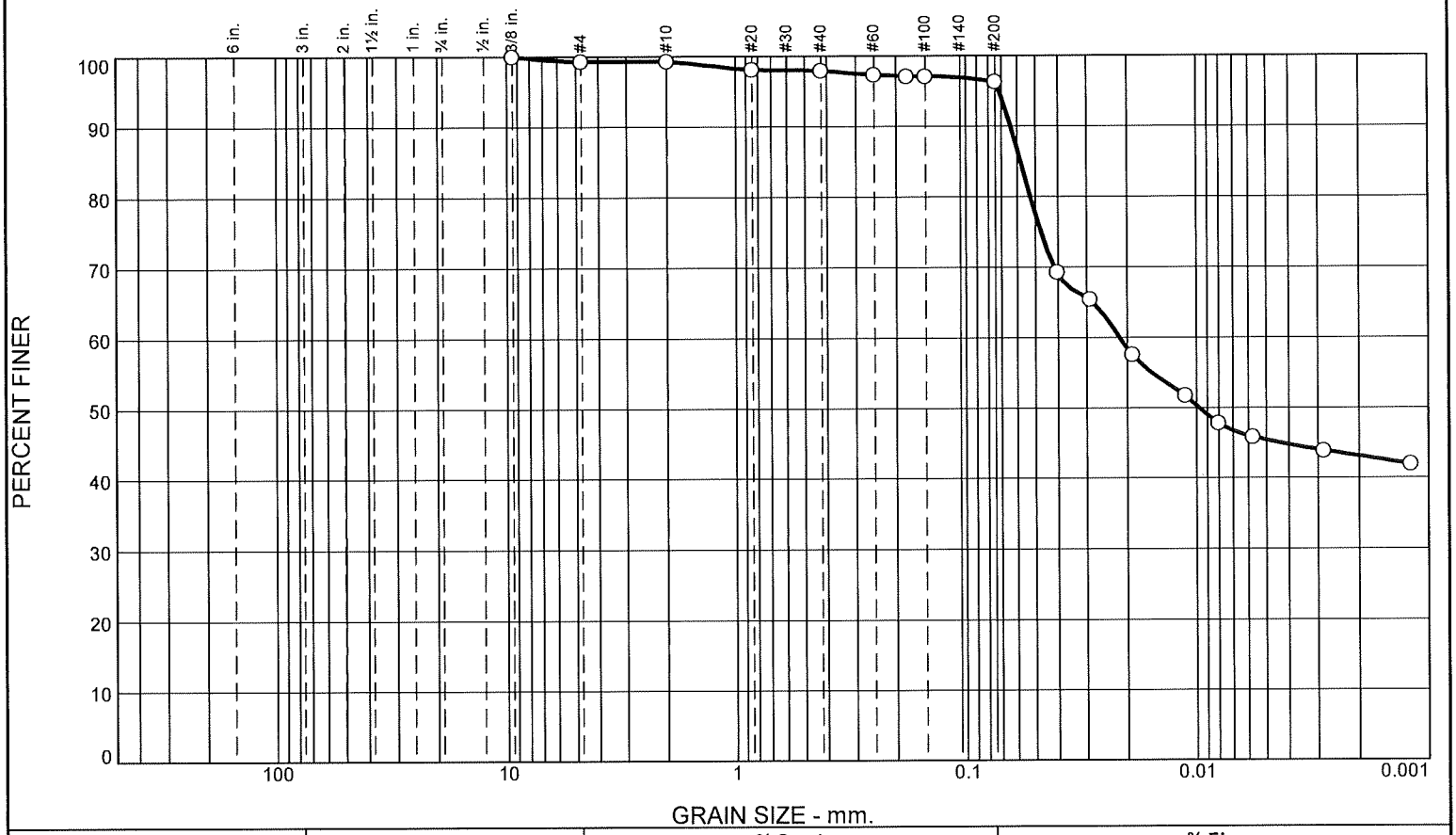
Date: 8/15/2021

ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835
Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.7	0.0	1.4	1.6	50.9	45.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.375	100.0		
#4	99.3		
#10	99.3		
#20	98.1		
#40	97.9		
#60	97.3		
#80	97.1		
#100	97.1		
#200	96.3		

* (no specification provided)

Material Description

Reddish brown, spotted dark brown FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0639 D_{85}= 0.0578 D_{60}= 0.0216
D_{50}= 0.0098 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.10

Sample Number: GB-40 **Depth:** 11' - 13'

Date: 8/13/2021

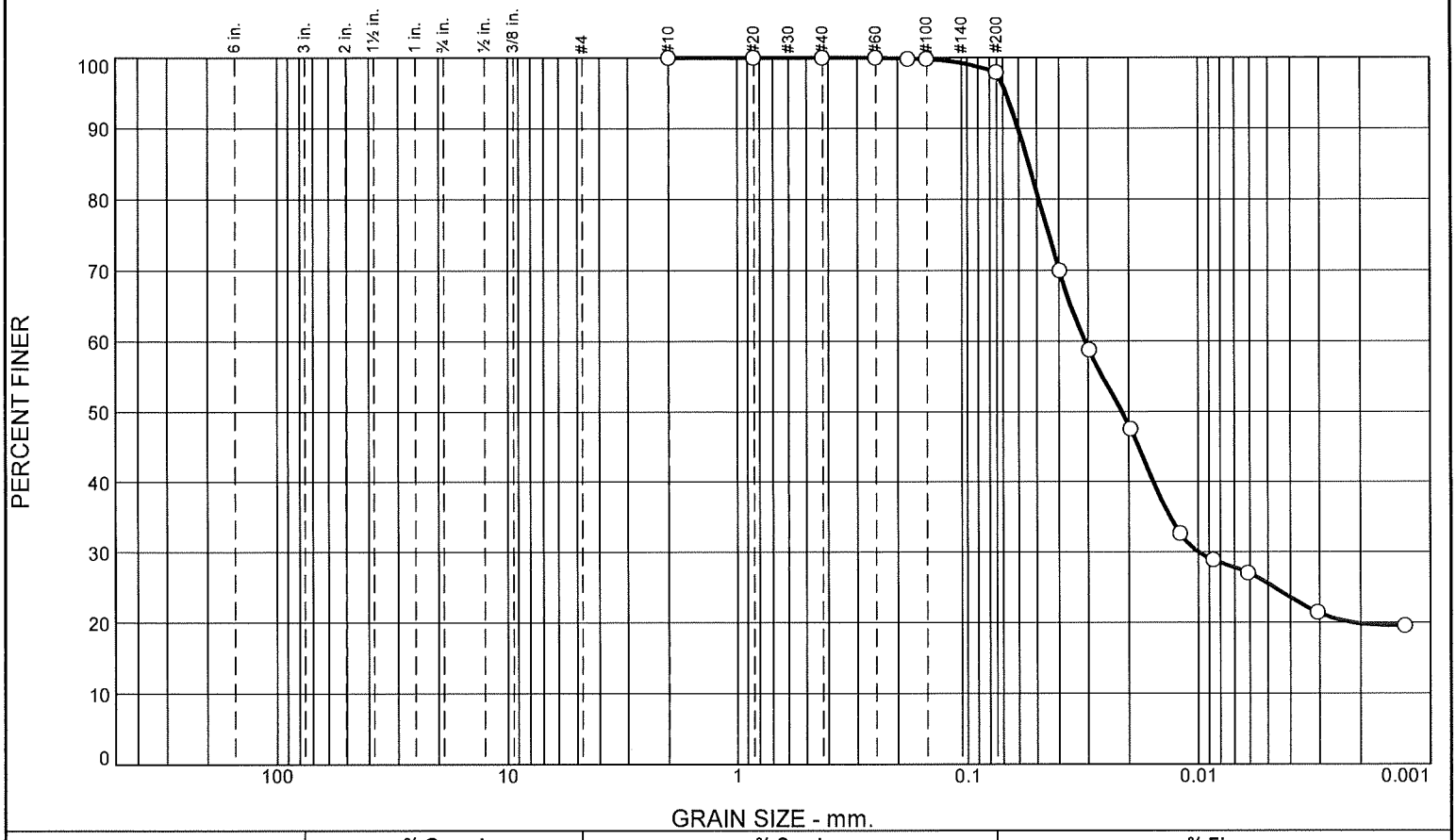
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	2.1	72.4	25.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	99.8		
#100	99.8		
#200	97.9		

* (no specification provided)

Material Description

Brown, mottled reddish brown, spotted dark brown LEAN / FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0601 D_{85}= 0.0540 D_{60}= 0.0308
D_{50}= 0.0214 D_{30}= 0.0100 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-47 **Depth:** 3' - 5'

Date: 8/16/2021

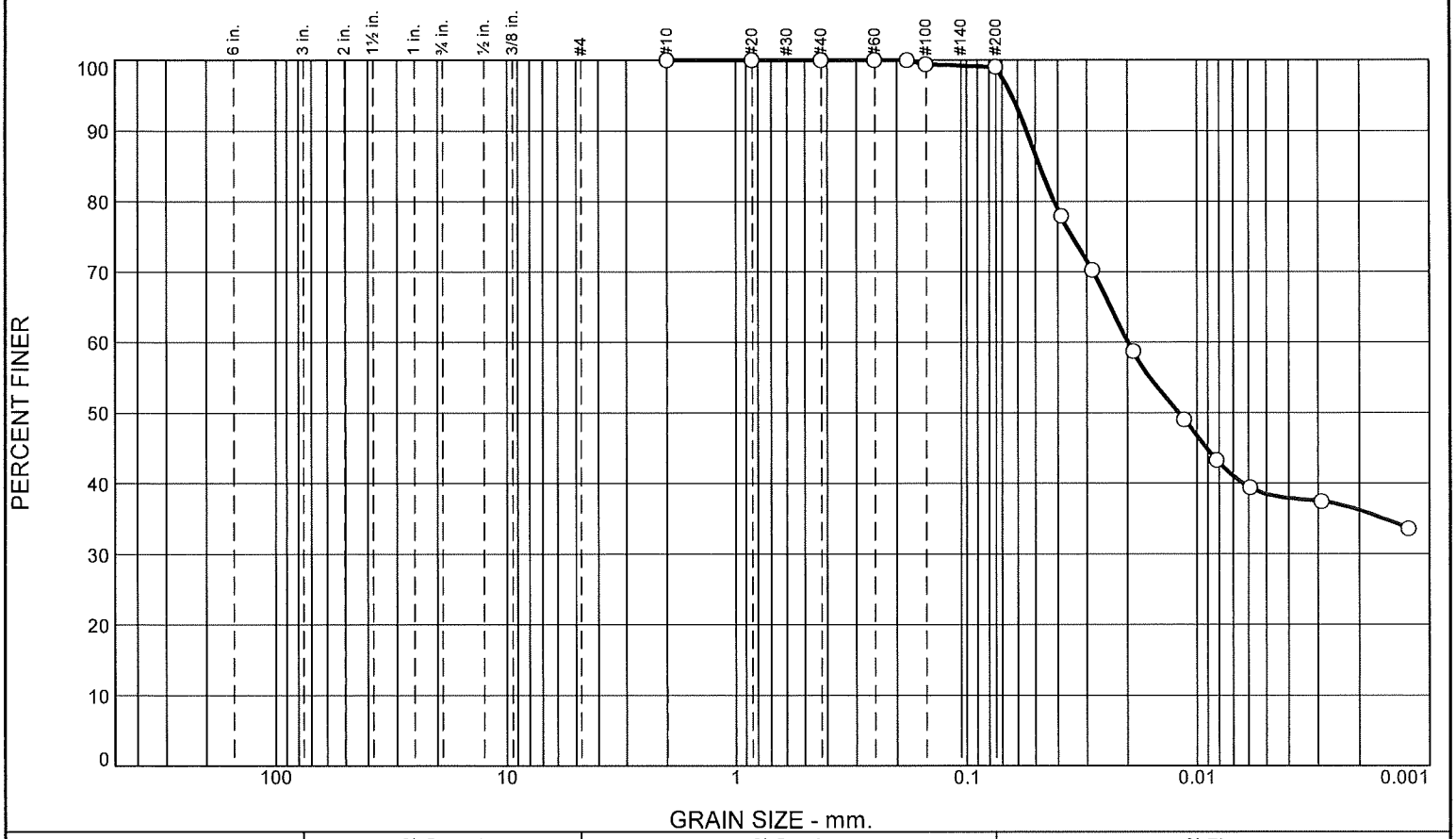
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	1.0	60.5	38.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	100.0		
#100	99.4		
#200	99.0		

* (no specification provided)

Material Description

Light reddish brown FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0547 D_{85}= 0.0477 D_{60}= 0.0199
D_{50}= 0.0120 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.01

Sample Number: GB-47 **Depth:** 7' - 9'

Date: 8/15/2021

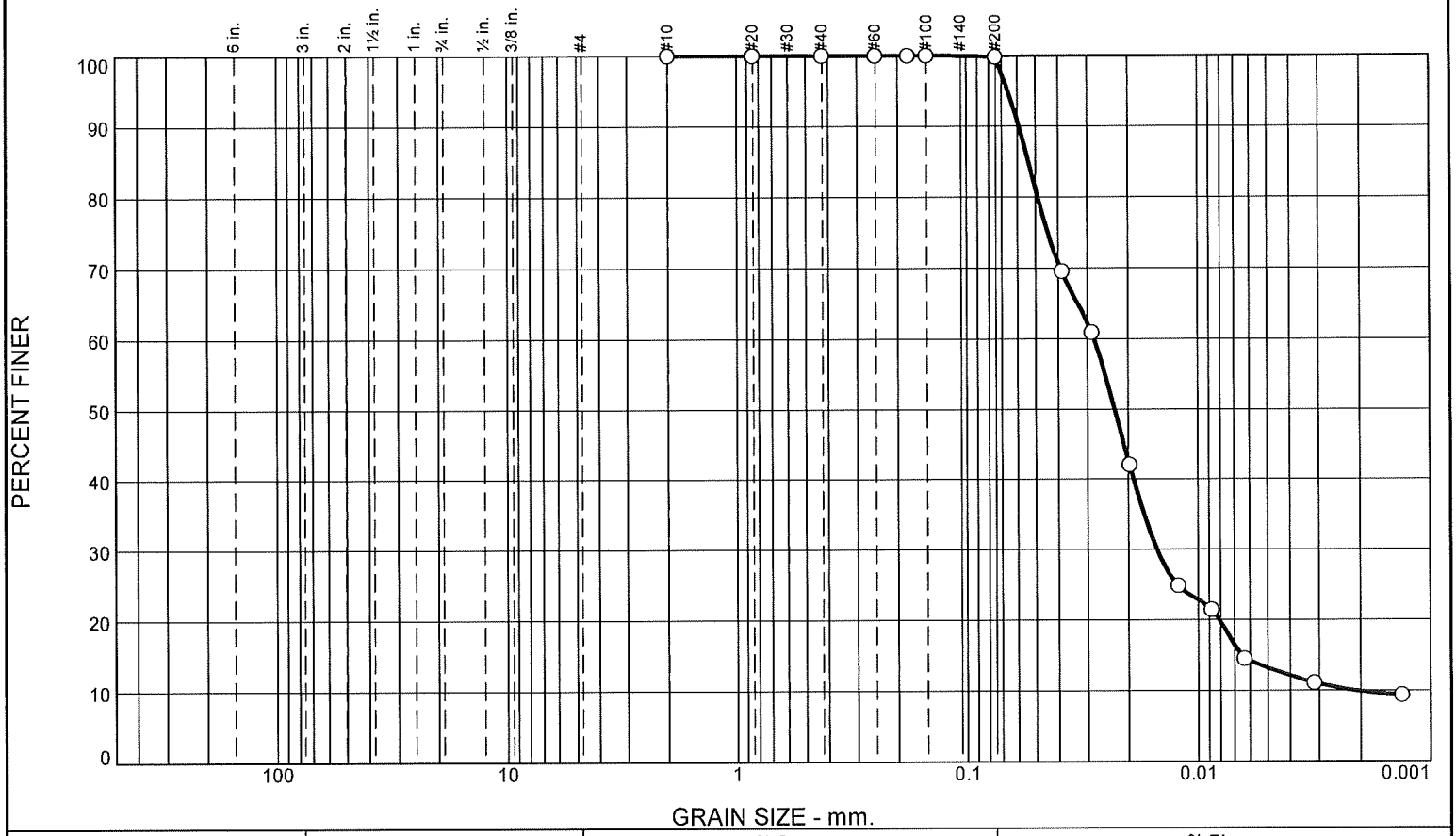
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	0.2	86.6	13.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	100.0		
#100	100.0		
#200	99.8		

* (no specification provided)

Material Description

Light brown, spotted reddish brown and dark brown LEAN CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0590 D_{85}= 0.0537 D_{60}= 0.0280
D_{50}= 0.0229 D_{30}= 0.0150 D_{15}= 0.0065
D_{10}= 0.0021 C_u= 13.38 C_c= 3.86

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-51 **Depth:** 2' - 4'

Date: 8/15/2021

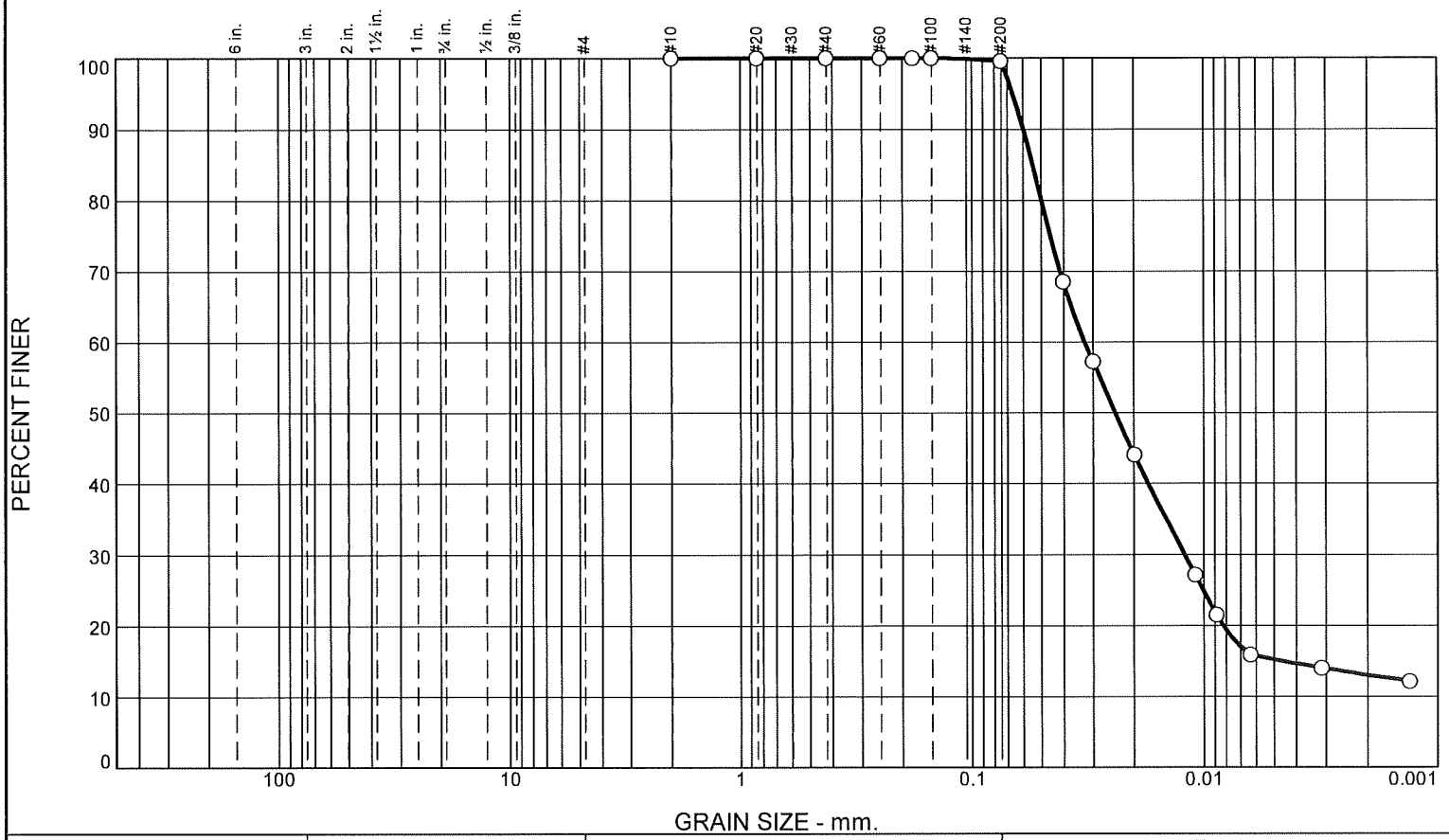
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	0.4	84.3	15.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	100.0		
#100	100.0		
#200	99.6		

* (no specification provided)

Material Description

Brown, mottled reddish brown, spotted dark brown LEAN CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0596 D_{85}= 0.0544 D_{60}= 0.0324
D_{50}= 0.0241 D_{30}= 0.0120 D_{15}= 0.0045
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-51 **Depth:** 6' - 8'

Date: 8/15/2021

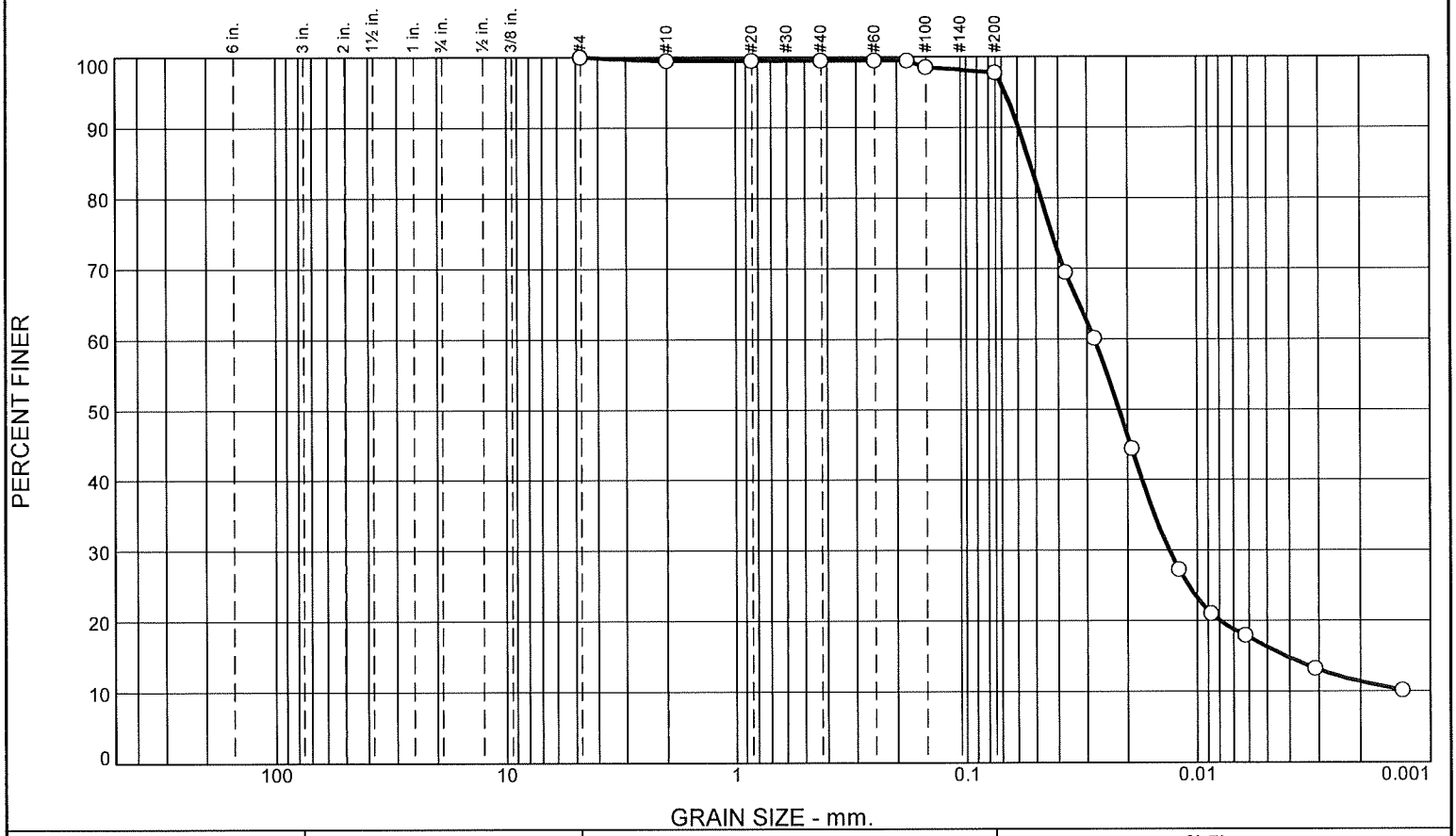
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.5	0.0	1.7	81.5	16.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.5		
#20	99.5		
#40	99.5		
#60	99.5		
#80	99.5		
#100	98.5		
#200	97.8		

* (no specification provided)

Material Description

Brown, spotted dark brown LEAN CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0592 D_{85}= 0.0528 D_{60}= 0.0278
D_{50}= 0.0218 D_{30}= 0.0132 D_{15}= 0.0041
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.03

Sample Number: GB-59 **Depth:** 2' - 4'

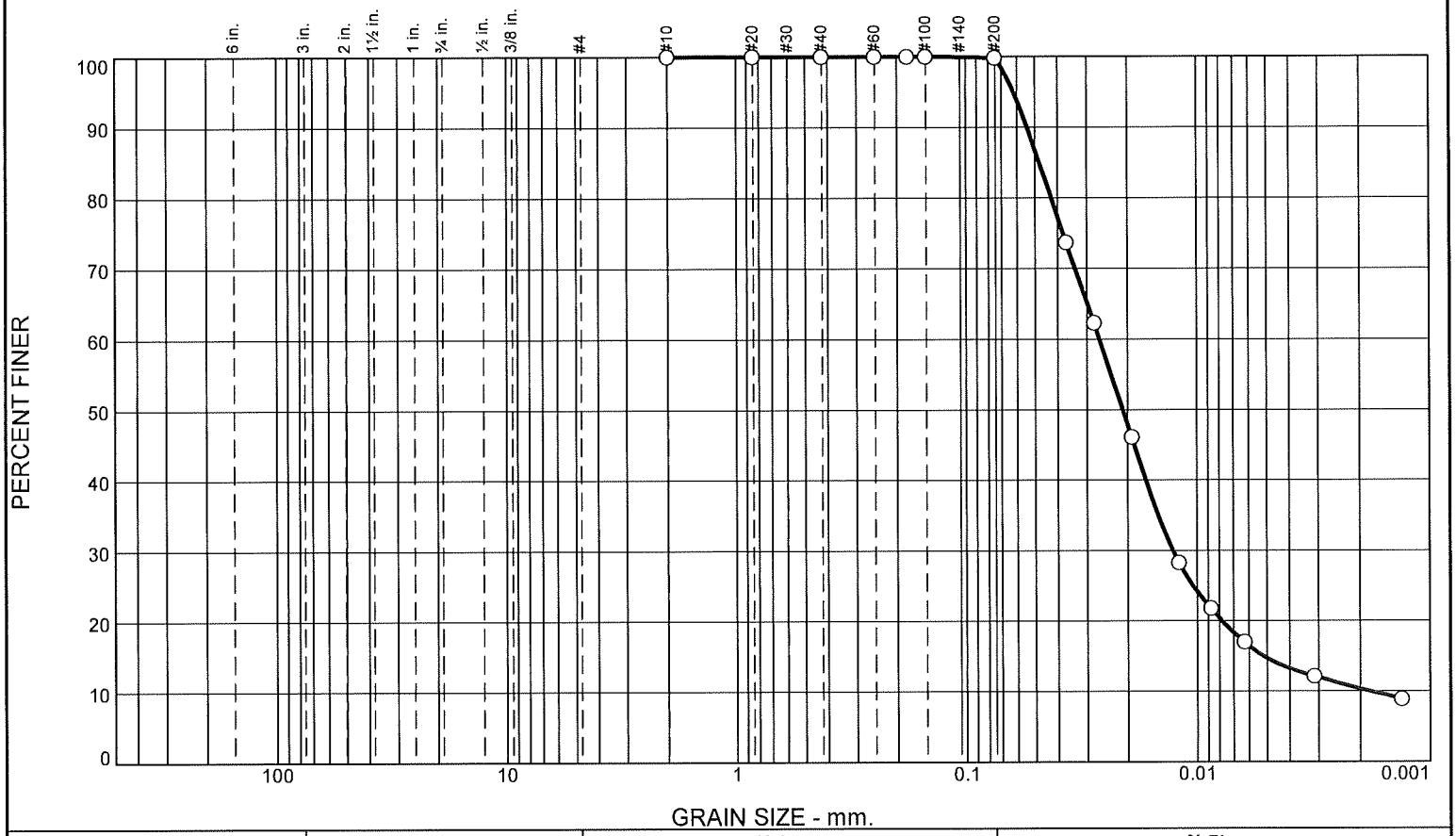
Date: 8/15/2021

ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835
Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	0.2	85.1	14.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	100.0		
#100	100.0		
#200	99.8		

* (no specification provided)

Material Description

Brown LEAN CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0540 D_{85}= 0.0478 D_{60}= 0.0264
D_{50}= 0.0210 D_{30}= 0.0127 D_{15}= 0.0052
D_{10}= 0.0018 C_u= 14.71 C_c= 3.42

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-59 **Depth:** 8' - 10'

Date: 8/14/2021

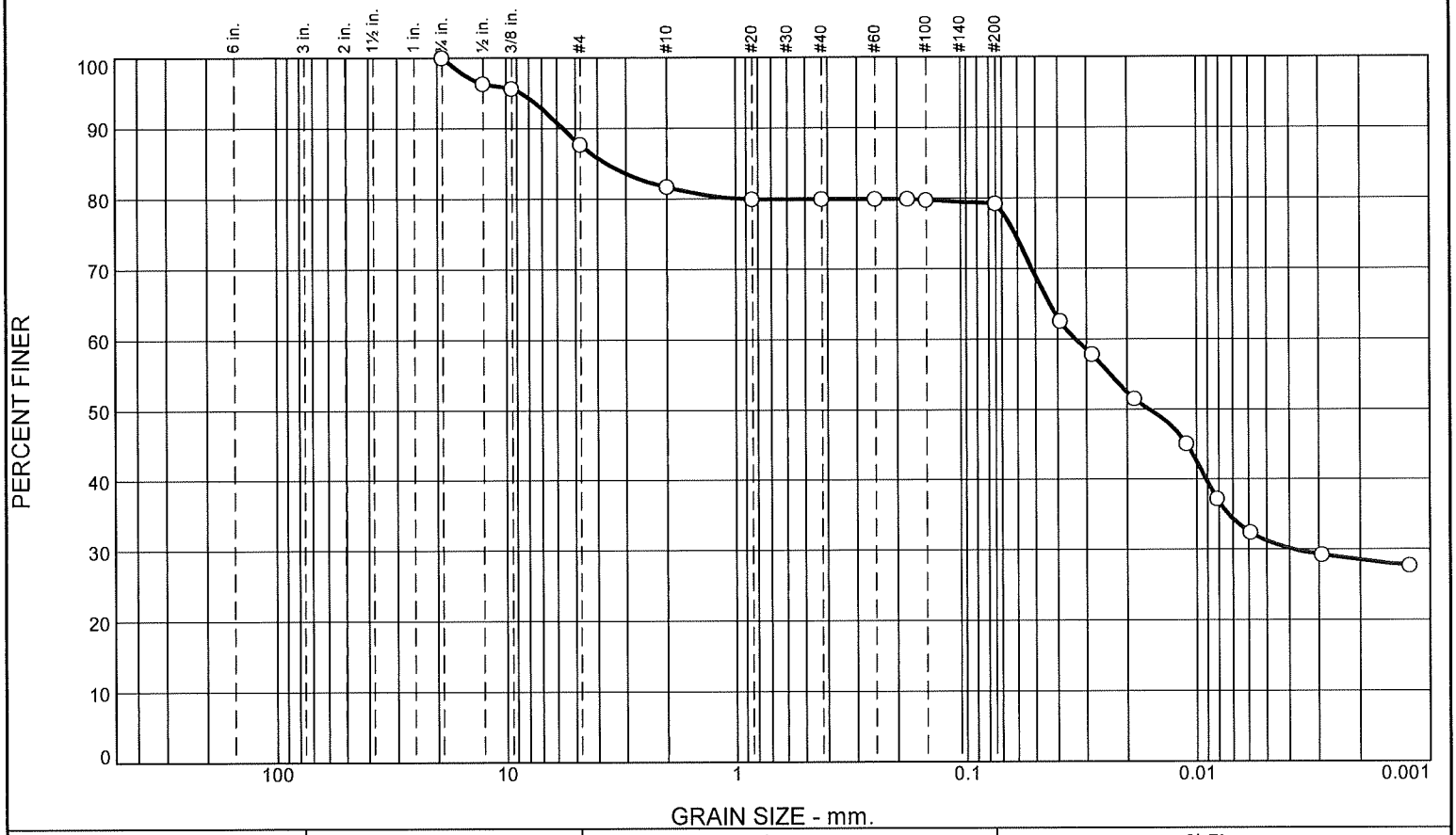
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	12.3	6.0	1.8	0.6	48.1	31.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75	100.0		
.5	96.3		
.375	95.6		
#4	87.7		
#10	81.7		
#20	79.9		
#40	79.9		
#60	79.9		
#80	79.9		
#100	79.7		
#200	79.3		

* (no specification provided)

Material Description

Light brown, spotted dark brown gravelly FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 5.6471 D_{85}= 3.6388 D_{60}= 0.0335
D_{50}= 0.0161 D_{30}= 0.0039 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=1.14

Sample Number: GB-18 **Depth:** 2' - 4'

Date: 8/12/2021

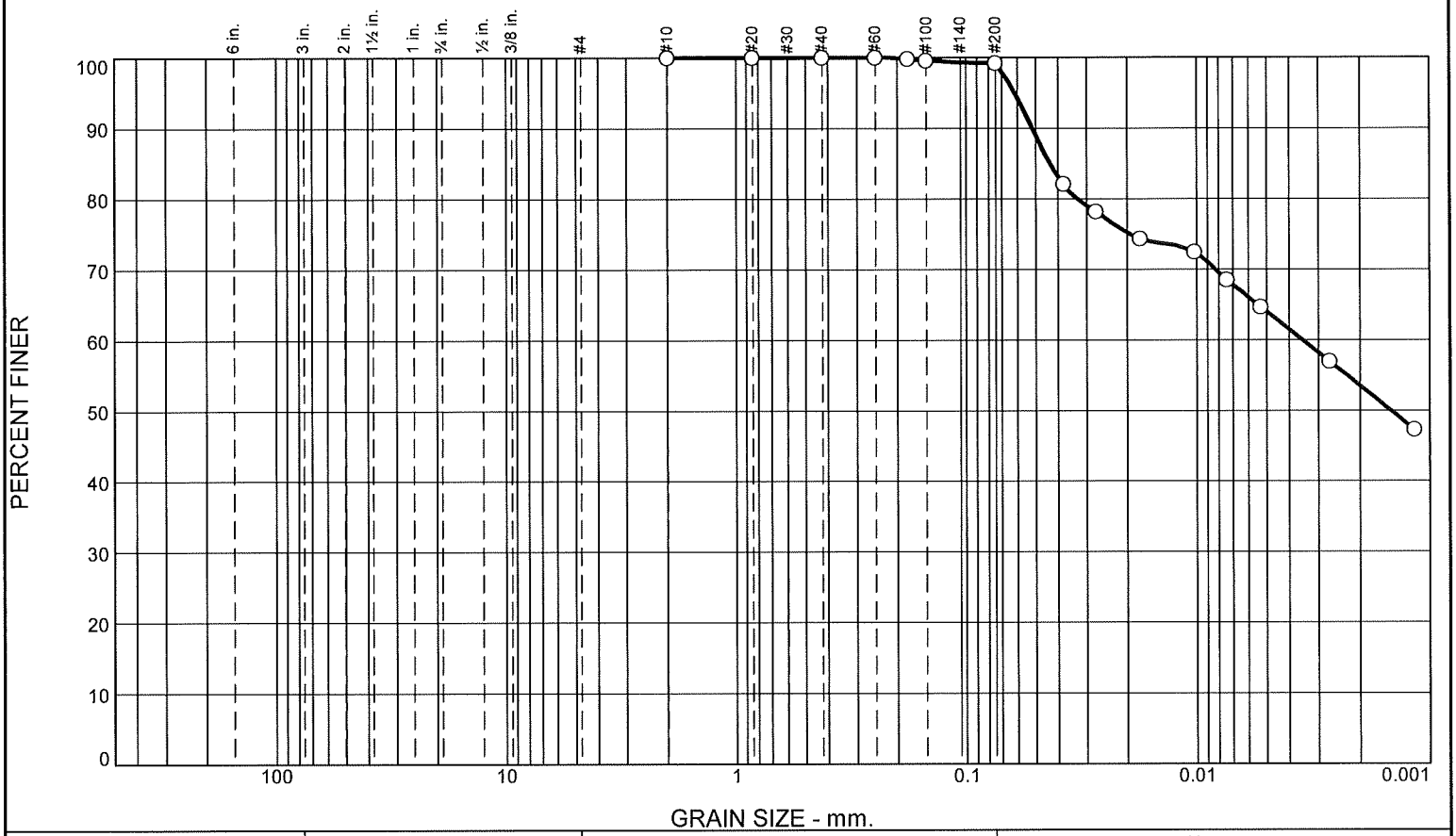
ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Grain Size Analysis



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	0.8	35.2	64.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	100.0		
#60	100.0		
#80	99.8		
#100	99.6		
#200	99.2		

* (no specification provided)

Material Description

Light brown, spotted light gray LEAN / FAT CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0516 D_{85}= 0.0432 D_{60}= 0.0035
D_{50}= 0.0015 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

F.M.=0.00

Sample Number: GB-18 **Depth:** 6' - 8'

Date: 8/12/2021

ALPHA-OMEGA GEOTECH

Client: Burns & McDonnell
Project: GSA, #133835

Project No: 21-290T **Figure** 1 of 1

Tested By: D.B. **Checked By:** T.B.

Porosity Calculations

PC 3705

Alpha-Omega Geotech, Inc.
1701 State Avenue
Kansas City, KS 66102
Office: (913) 371-0000 Fax: (913) 371-6710
Website: www.aogeotech.com

Project Name: GSA, #133835
Project No.: 21-290T

Date: 30-Sep-21

Sample Number	Depth (feet)	Dry Unit Weight (pcf)	Specific Gravity	Porosity
GB-01	3' - 5'	100.5	2.68	0.399
GB-01	11' - 13'	99.8	2.68	0.403
GB-07	2' - 4'	98.8	2.69	0.411
GB-11	2' - 4'	94.7	2.71	0.440
GB-11	6' - 8'	109.0	2.69	0.351
GB-22	2' - 4'	95.9	2.68	0.427
GB-22	5' - 7'	100.5	2.71	0.406
GB-34	1' - 3'	101.5	2.73	0.404

POROSITY = 1 - (Dry Unit Wt. of Soil / (Unit Wt. of Water * Specific Gravity)

Porosity Calculations

PC 3705

Alpha-Omega Geotech, Inc.
1701 State Avenue
Kansas City, KS 66102
Office: (913) 371-0000 Fax: (913) 371-6710
Website: www.aogeotech.com

Project Name: GSA, #133835
Project No.: 21-290T

Date: 30-Sep-21

Sample Number	Depth (feet)	Dry Unit Weight (pcf)	Specific Gravity	Porosity
GB-34	4' - 6'	97.4	2.71	0.424
GB-40	2' - 4'	101.5	2.71	0.400
GB-40	11' - 13'	95.8	2.69	0.429
GB-47	3' - 5'	102.7	2.69	0.388
GB-47	7' - 9'	97.1	2.68	0.419
GB-51	2' - 4'	100.6	2.72	0.407
GB-51	6' - 8'	97.8	2.69	0.417
GB-59	2' - 4'	93.0	2.69	0.446

POROSITY = 1 - (Dry Unit Wt. of Soil / (Unit Wt. of Water * Specific Gravity)

Porosity Calculations

PC 3705

Alpha-Omega Geotech, Inc.
1701 State Avenue
Kansas City, KS 66102
Office: (913) 371-0000 Fax: (913) 371-6710
Website: www.aogeotech.com

Project Name: GSA, #133835
Project No.: 21-290T

Date: 30-Sep-21

Sample Number	Depth (feet)	Dry Unit Weight (pcf)	Specific Gravity	Porosity
GB-59	8' - 10'	94.5	2.68	0.435
GB-18	2' - 4'	97.5	2.71	0.423
GB-18	6' - 8'	110.0	2.68	0.342

POROSITY = 1 - (Dry Unit Wt. of Soil / (Unit Wt. of Water * Specific Gravity)

APPENDIX G – DATA VALIDATION MEMORANDUM

Date: October 18, 2021

To: Justin Carter

From: Kortney Blaufuss

Subject: Data Validation Memorandum
QA/QC Review of Analytical Data; Soil Sampling Event – July 2021
Goodfellow Federal Complex; St. Louis, Missouri
Project No. 133835

Soil samples and associated field samples were collected July 19-23 and 26-28, 2021, and were analyzed at Pace Analytical Services, LLC (Pace) of Lenexa, Kansas, or by sister laboratories within their network. This included Pace Analytical National (Pace National) in Mount Juliet, Tennessee or Pace Analytical Services, LLC (Pace Minneapolis) of Minneapolis, Minnesota. Analyses performed for one or more samples for this sampling event included:

Analysis	Analytical Method(s)	Laboratory
Organics		
Total Petroleum Hydrocarbons – Gasoline Range Organics (TPH-GRO)	SW-846 8260	Pace
TPH – Diesel Range Organics/Oil Range Organics (TPH-DRO/ORO)	SW-846 8270	Pace
Volatile Organic Compounds (VOCs)	SW-846 8260B	Pace
Polychlorinated Biphenyls (PCBs) PCB Congeners	SW-846 8082 USEPA Method 1668A	Pace Pace Minneapolis
Explosives	SW-846 8330	Pace National
Semivolatile Organic Compounds (SVOCs) SVOCs – Select Ion Monitoring (SIM)	SW-846 8270 SW-8270-SIM/8270C-SIM	Pace
Inorganics		
Metals	SW-846 6020	Pace
Total Solids	SM 2540G	Pace National
Percent Moisture	ASTM D2974	Pace / Pace Minneapolis

The quality assurance (QA)/quality control (QC) results in association with the soil samples collected were examined for any method-specific requirements. The analytical data were reviewed in accordance with the *Final Quality Assurance Project Plan, Goodfellow Federal Complex (QAPP)*, United States Environmental Protection Agency's (USEPA) *National Functional Guidelines for Organic Superfund Methods Data Review* (NFGO, 2020), and/or *National Functional Guidelines for Inorganic Superfund Methods Data Review* (NFGO, 2020). Additionally, the PCB Congener data were evaluated using the *EPA Region III Interim Guidelines for Validation of Data Generated Using Method 1668 Toxic, Dioxin-like PCB Data* (EPA, 2004). Data qualifiers, when appropriate, were added to the data in accordance with

recommendations noted in the above references. The QA/QC review results are discussed below. Table 1 presents the data qualifiers added during this review.

1. Chain-of-Custody (COC) – The COC forms were reviewed for any errors or omissions. The relinquished and received signatures, times, and dates on the COC forms were present and properly signed.

2. Requested Analyses Completed – All analyses were completed as requested.

   Pace Minneapolis noted that one or more PCB congener samples were double spiked with cleanup standards. These were taken into account in the data calculations and were not associated with sample quantitation. Therefore, impact to the PCB congener data was minimal, and no further actions were necessary.

3. Holding Times – All samples were extracted and/or analyzed within their method-required holding times.

4. Sample Preservation – Samples were received by the laboratories within or slightly below the recommended 4 degrees Celsius (°C) ± 2 °C sample preservation temperature range. Since the samples were not frozen upon arrival, no data qualification was necessary.

   - In one or more sample delivery groups (SDGs), the laboratory noted that acid preservation may not be suitable for the analysis of VOC analyte 2-chloroethylvinyl ether due to reactivity with the acid and potential degradation of this analyte. No significant issues were noted with the sample results or QC for this analyte, and no further actions were necessary based on this laboratory note.

   - SDG 60375743: Trip blank sample, TB-3, was analyzed from a vial with headspace. As such, all results were nondetect and qualified estimated at the reporting limit (UJ).

5. Method Blanks – Method blanks were reviewed to assess possible cross-contamination or carry over in sample preparation or analysis. These were analyzed with each analytical batch. General qualification for method blank review is as follows: any detection noted in the blank was reviewed in the associated sample(s). If the sample exhibited a detection of said analyte less than five times this blank detection (or ten times for common laboratory contaminants), the sample was disregarded as false positive and qualified as undetected (U).

   In particular, the congener method blanks were evaluated using the *EPA Region III Interim Guidelines* which states that concentrations less than five times the blank

concentration will result in the associated sample being qualified "B". As such, the samples with "B" flags were qualified as false positive nondetect (U). The laboratory "B" flag should be dropped in the final reporting of the results.

Table 2 summarizes the method blank detections noted during this review. Any data qualifiers added based on method blank detections are presented on Table 1.

6. Rinsate and Trip Blanks – Rinsate blanks were collected due to the use of non-dedicated equipment to evaluate potential cross-contamination between samples caused by residual contamination on sampling equipment. Trip blanks are supplied by the laboratory and sent to the field with the sample containers to evaluate potential cross-contamination during sample shipment. Trip blanks were included with the shipments of VOCs. General qualification for review is as follows: any detection noted in these blanks were reviewed in the associated sample(s). If the sample exhibited a detection of said analyte less than five times this blank detection (or ten times for common laboratory contaminants), the sample was disregarded as false positive and qualified as undetected (U).

   It should be noted that RB-08 is not associated with any field samples included in this review, as they were for a different task and will be reported under separate cover. This rinsate blank was collected in accordance with the sampling plan requiring a rinsate blank to be collected daily while onsite. No detections were noted in this rinsate sample, and no further review was necessary.

   Table 3 summarizes the rinsate and trip blank detections noted during this review. Any data qualifiers added based on these blank detections are presented on Table 1.

7. Surrogate Spikes – Surrogates are added for organic analyses. Surrogates are compounds not normally found in the environment that are added (spiked) into samples and analyzed for percent recovery (REC). For any surrogate REC exceeding its control limit, associated detections were qualified as estimated high bias (J+) and non-detects did not require qualification. Any surrogate REC below its control limit resulted in detections qualified as estimated low bias (J-), and non-detects qualified as estimated at the reporting limit (UJ). For extremely low or lack of surrogate RECs, the non-detect results may have been rejected (R).

   Note: For extractable organics, two or more surrogates of the same fraction (where applicable) are generally allowed outside control limits before data validation qualifiers are added. Additionally, for any dilutions greater than five, it was likely the surrogate was diluted out of the sample in the extraction process, and no conclusions were made for these instances.

For the PCB Congener analysis, the laboratory spiked C-13 labeled congeners in lieu of surrogates. Each case narrative summarized the ranges of RECs for these QC results, with specific results included for each sample. All congener isotope RECs were within the 35-135% QC criteria established in EPA Method 1668A Table 6. No data qualifiers were necessary.

Table 4 summarizes the surrogate RECs outside control limits for this review. Note, surrogates outside control limits for laboratory-specific QC samples were not included, as these are not typically qualified during QA/QC review. Any data qualifiers added based on surrogate RECs are presented on Table 1.

8. Laboratory Control Samples/Laboratory Control Sample Duplicate (LCS/LCSD) – The LCS contains a matrix similar to that of the field sample that has been spiked with known concentrations of target analytes. The LCS is prepared and analyzed by the same method as the field samples. As a measure of analytical accuracy, the results of the LCS are compared against the known analyte concentrations in the spike to determine REC. The purpose of the LCS is to determine the performance of the laboratory with respect to analyte recovery, independent of field sample matrix interference. A LCSD is a duplicate sample of the LCS. The difference between the LCS/LCSD RECs is calculated for precision and reported as the relative percent difference (RPD).

   For any LCS/LCSD RECs exceeding their control limits, associated detections were qualified as estimated high bias (J+) and non-detects did not require qualification. Any LCS/LCSD RECs below their control limits resulted in detections qualified as estimated low bias (J-), and non-detects qualified as estimated at the reporting limit (UJ). For extremely low RECs, the non-detect results may have been rejected (R). For elevated LCS/LCSD RPDs, associated detections were qualified as estimated (J), while no qualifiers were necessary for nondetects.

   Table 5 summarizes the LCS/LCSD results outside their respective control limits for this review. It should be noted that the LCS REC for tetrahydrofuran in QC batch734490 was slightly below the NFGO rejection limit, and all other QC was acceptable. Because of this, the associated results were qualified as estimated at the reporting limit (UJ), rather than rejected (R) based on professional judgement. Any data qualifiers added based on LCS/LCSD RECs and/or RPDs are presented on Table 1.

9. Matrix Spikes/Matrix Spike Duplicates (MS/MSD) – MS/MSD analyses were performed for each sample batch, as sample volumes permitted. Only project-specific MS/MSDs were compared and used for qualification in this review. MS/MSD RECs outside control limits can indicate potential problems with analytical accuracy, while the MS/MSD RPD may indicate problems with analytical precision.

For any MS/MSD REC exceeding its control limit, spiked sample detections were qualified as estimated (J) for organics/estimated high bias (J+) for inorganics and non-detects did not require qualification. Any MS/MSD REC below its control limit resulted in spiked sample detections qualified as estimated (J) for organics/estimated low bias (J-) for inorganics, and non-detects qualified as estimated at the reporting limit (UJ). For extremely low RECs, the non-detect results may have been rejected (R). For elevated MSMS/D RPDs, a spiked sample detection was qualified as estimated (J), while no qualifiers were necessary for nondetects.

Table 6 summarizes the site-specific MS/MSD results outside their respective control limits for this review. Any data qualifiers added based on MS/MSD RECs and/or RPDs are presented on Table 1.

10. Field Duplicates – Eight field duplicate pairs were analyzed for the sampling event included in this review. The purpose of the field duplicates was to provide a QC assessment to evaluate field and analytical precision, therefore, unless significant differences were noted, qualifiers were not applied.

An RPD limit of 30 percent was used for review of the field duplicates. For field duplicate pairs yielding results less than five times the lower reporting limit, a sensitivity test was used. Criteria for the sensitivity test was that the difference between the field duplicate results was less than two times the lower reporting limit.

Table 7 presents detections noted in the field duplicate pairs for this data review. Field duplicate pairs GB-35/3-5' // GB-35/3-5'D, GB-46/2-4' // GB-46/2-4'D, GB-50/3-5' // GB-50/3-5'D and GB-57/6-8' // GB-57/6-8'D had one or more analytes exhibit elevated RPDs or fail a sensitivity test. As such, one or more analytes in the noted samples were qualified as estimated (J) for detections. See Table 1 for qualifiers.

11. Detection and Quantitation Limits – Some samples required a dilution for one or more metals or SVOC analyses. These dilutions were necessary in order to bring the concentration of target analytes within the calibration range and/or to account for matrix interferences. This mainly affected the majority of the antimony results and a few SVOC analytes, as they were all nondetects, and resulted in elevated reporting limits. All other dilutions were detected concentrations above their respective reporting limit. No qualifiers were added based on these dilutions.

Additionally, for explosives samples GB-41/4-6 and GB-41/6-8 in SDG 60376093, the extractions could not be concentrated to the routine final volume, which resulted in elevated reporting limits. These adjustments were necessary for these soil samples to adjust for dry weight reporting and/or during sample extractions to concentrate the sample to the needed volume(s) for analysis. Therefore, although a dilution was not

noted, this resulted in elevated reporting limit for these samples. No data qualifiers were necessary based on the elevated reporting limits.

12. Miscellaneous – In one or more SDGs, the laboratory noted that the continuing calibration verifications (CCVs) for PCB analytes Aroclor 1016 and/or Aroclor 1260 exceeded their control limits. To account for potential high bias, the associated samples exhibiting detections of these analytes were qualified as estimated (J). See Table 1.

    Pace also noted that they did not hold NELAC/TNI accreditation at the time of analysis for VOCs 1,1,2-trichlorotrifluoroethane and tetrahydrofuran. Data were reviewed using the reported QC, and qualifiers were added as necessary based on these results.

    Pace Minneapolis flagged one or more congener analytes with method-specific qualifiers. Unless otherwise noted, these flags should be dropped in the final reporting of the results:

    - C – Reported result was obtained from a confirmation analysis.
    - I – Interference was noted for this reported result. Each of these results were also trace detections below their respective reporting limit, and were reported as estimated (J).

13. Conclusion – The data were reviewed for achievement of any method-specified QA/QC criteria. Data qualifiers added as a result of this review are included on Table 1. With the exception of the rejected (R) 1,1,2,2-tetrachloroethane and methyl acetate results for samples GB-02/2-3 and GB07/7-9 due to lack of MS/MSD spike recovery, all data are valid for use, as qualified, in reporting the results of this sampling event.

Attachments
Table 1 – Summary of Qualifiers Added During Data Validation Review
Table 2 – Method Blank Detections
Table 3 – Rinsate and Trip Blank Detections
Table 4 – Surrogate Results Outside QC Limits
Table 5 – LCS/LCSD Results Outside QC Limits
Table 6 – MS/MSD Results Outside QC Limits
Table 7 – Field Duplicate Analysis – Detections Only

Table 1
Summary of Qualifiers Added During Data Validation Review
Goodfellow Federal Complex - St. Louis, Missouri

Sample Identification	Sample Date	Analytical Method	Analyte(s)	Units	Laboratory Result/ Qualifier	Data Validation Qualifier	Reason(s) for Qualification	Final Result for Reporting
GB-01/8-10	7/26/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	6.57 BJ	U	MB	6.57 JU
GB-01/8-10	7/26/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	11.6 BJ	U	MB	11.6 JU
GB-01/8-10	7/26/2021	EPA1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	2.01 BJ	U	MB	2.01 JU
GB-01/8-10	7/26/2021	SW-846 8270	TPH as Diesel	mg/kg	3.2 J	U	MB	3.2 JU
GB-01/8-10	7/26/2021	SW-846 8270	TPH as Oil	mg/kg	6.6 J	U	MB	6.6 JU
GB-02/2-3	7/26/2021	SW-846 6020	Antimony	mg/kg	0.55 U	UJ	MS/MSD	0.55 UJ
GB-02/2-3	7/26/2021	SW-846 8270	TPH as Diesel	mg/kg	5.1 J	U	MB	5.1 JU
GB-02/2-3	7/26/2021	SW-846 8260B	1,1,2,2-Tetrachloroethane	ug/kg	1.0 U	R	MS/MSD	1.0 UR
GB-02/2-3	7/26/2021	SW-846 8260B	Methyl acetate	ug/kg	1.1 U	R	MS/MSD	1.1 UR
GB-02/2-3	7/26/2021	SW-846 8260B	Vinyl acetate	ug/kg	0.56 U	UJ	MS/MSD	0.56 UJ
GB-02/2-3	7/26/2021	SW-846 8270-SIM	Benzo(a)anthracene	ug/kg	69.2	J	MS/MSD	69.2 J
GB-02/2-3	7/26/2021	SW-846 8270-SIM	Benzo(b)fluoranthene	ug/kg	86.8	J	MS/MSD	86.8 J
GB-02/2-3	7/26/2021	SW-846 8270-SIM	Chrysene	ug/kg	63.3	J	MS/MSD	63.3 J
GB-02/2-3	7/26/2021	SW-846 8270-SIM	Fluoranthene	ug/kg	175	J	MS/MSD	175 J
GB-02/2-3	7/26/2021	SW-846 8270-SIM	Phenanthrene	ug/kg	94.1	J	MS/MSD	94.1 J
GB-02/2-3	7/26/2021	SW-846 8270-SIM	Pyrene	ug/kg	149	J	MS/MSD	149 J
GB-02/8-9	7/26/2021	SW-846 8270	TPH as Diesel	mg/kg	9.1 J	U	MB	9.1 JU
GB-06/3-5	7/23/2021	EPA1668A	Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	ng/kg	1.83 CBJ	U	MB	1.83 JU
GB-06/3-5	7/23/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	2.45 BJ	U	MB	2.45 JU
GB-06/3-5	7/23/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	4.25 BJ	U	MB	4.25 JU
GB-07/7-9	7/23/2021	SW-846 6020	Antimony	mg/kg	0.52 U	UJ	MS/MSD	0.52 UJ
GB-07/7-9	7/23/2021	SW-846 8260B	1,1,2,2-Tetrachloroethane	ug/kg	1.1 U	R	MS/MSD	1.1 UR
GB-07/7-9	7/23/2021	SW-846 8260B	Iodomethane	ug/kg	1.6 U	UJ	MS/MSD	1.6 UJ
GB-07/7-9	7/23/2021	SW-846 8260B	Methyl Acetate	ug/kg	1.1 U	R	MS/MSD	1.1 UR
GB-07/7-9	7/23/2021	SW-846 8260B	Naphthalene	ug/kg	13.9	J	MS/MSD	13.9 J
GB-07/7-9	7/23/2021	SW-846 8270-SIM	Acenaphthene	ug/kg	38.9	J	MS/MSD	38.9 J
GB-07/7-9	7/23/2021	SW-846 8270-SIM	Fluoranthene	ug/kg	24.2	J	MS/MSD	24.2 J
GB-07/7-9	7/23/2021	SW-846 8270-SIM	Fluorene	ug/kg	41.5	J	MS/MSD	41.5 J
GB-07/7-9	7/23/2021	SW-846 8270-SIM	Naphthalene	ug/kg	111	J	MS/MSD	111 J
GB-07/7-9	7/23/2021	SW-846 8270-SIM	Phenanthrene	ug/kg	45.2	J	MS/MSD	45.2 J
GB-09/1.5-3	7/23/2021	SW-846 8082	Aroclor 1260	ug/kg	9.2 J	J	CCV	9.2 J
GB-10/1.5-2.5	7/26/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	17.9 BJ	U	MB	17.9 JU
GB-10/3-5	7/26/2021	SW-846 6020	Antimony	mg/kg	0.63 U	UJ	MS/MSD	0.63 UJ
GB-11/1-3	7/22/2021	SW-846 6020	Antimony	mg/kg	1.1 U	UJ	MS/MSD	1.1 UJ
GB-11/3-5	7/22/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	1.94 BJ	U	MB	1.94 JU
GB-14/0-2	7/23/2021	SW-846 8082	Aroclor 1260	ug/kg	43.3	J	CCV	43.3 J
GB-19/0-2	7/22/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	4.84 BJ	U	MB	4.84 JU
GB-19/0-2	7/22/2021	EPA1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	2.26 BJ	U	MB	2.26 JU
GB-22/1-3	7/23/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	13.4 BJ	U	MB	13.4 JU
GB-22/1-3	7/23/2021	EPA1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	2.09 BJ	U	MB	2.09 JU
GB-22/1-3	7/23/2021	SW-846 8270-SIM	Benzo(b)fluoranthene	ug/kg	19.4	J	MS/MSD	19.4 J
GB-22/1-3	7/23/2021	SW-846 8270-SIM	Chrysene	ug/kg	14.3	J	MS/MSD	14.3 J
GB-22/1-3	7/23/2021	SW-846 8270-SIM	Fluoranthene	ug/kg	41.9	J	MS/MSD	41.9 J
GB-22/1-3	7/23/2021	SW-846 8270-SIM	Phenanthrene	ug/kg	19.8	J	MS/MSD	19.8 J
GB-24/3-5	7/21/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	3.90 BJ	U	MB	3.90 JU
GB-25/2-4	7/22/2021	SW-846 6020	Antimony	mg/kg	1.1 U	UJ	MS/MSD	1.1 UJ
GB-27/3-5	7/23/2021	SW-846 6020	Antimony	mg/kg	0.49 U	UJ	MS/MSD	0.49 UJ
GB-28/1.5-2.5	7/22/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	4.18 BJ	U	MB	4.18 JU

Table 1
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Goodfellow Federal Complex - St. Louis, Missouri

Sample Identification	Sample Date	Analytical Method	Analyte(s)	Units	Laboratory Result/ Qualifier	Data Validation Qualifier	Reason(s) for Qualification	Final Result for Reporting
GB-28/1.5-2.5	7/22/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	7.02 BJ	U	MB	7.02 JU
GB-28/1.5-2.5	7/22/2021	EPA1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	2.74 BJ	U	MB	2.74 JU
GB-30/3-4	7/26/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	6.88 BJ	U	MB	6.88 JU
GB-32/0-2	7/21/2021	SW-846 8082	Aroclor 1260	ug/kg	14.6 J	J	CCV	14.6 J
GB-32/2-4	7/21/2021	SW-846 6020	Antimony	mg/kg	0.62 U	UJ	MS/MSD	0.62 UJ
GB-35/3-5	7/22/2021	SW-846 6020	Arsenic	mg/kg	14.9	J	Field Duplicate	14.9 J
GB-35/3-5	7/22/2021	SW-846 8270-SIM	Benzo(b)fluoranthene	ug/kg	2.3 J	J	Field Duplicate	2.3 J
GB-35/3-5	7/22/2021	SW-846 6020	Copper	mg/kg	22.1	J	Field Duplicate	22.1 J
GB-35/3-5	7/22/2021	SW-846 8270-SIM	Fluoranthene	ug/kg	5.0	J	Field Duplicate	5.0 J
GB-35/3-5	7/22/2021	SW-846 6020	Lead	mg/kg	17.6	J	Field Duplicate	17.6 J
GB-35/3-5	7/22/2021	SW-846 8270-SIM	Pyrene	ug/kg	3.9 J	J	Field Duplicate	3.9 J
GB-35/3-5D	7/22/2021	SW-846 6020	Arsenic	mg/kg	6.2	J	Field Duplicate	6.2 J
GB-35/3-5D	7/22/2021	SW-846 8270-SIM	Benzo(b)fluoranthene	ug/kg	12.0 J	J	Field Duplicate	12.0 J
GB-35/3-5D	7/22/2021	SW-846 6020	Copper	mg/kg	12.9	J	Field Duplicate	12.9 J
GB-35/3-5D	7/22/2021	SW-846 8270-SIM	Fluoranthene	ug/kg	24.8	J	Field Duplicate	24.8 J
GB-35/3-5D	7/22/2021	SW-846 6020	Lead	mg/kg	10.7	J	Field Duplicate	10.7 J
GB-35/3-5D	7/22/2021	SW-846 8270-SIM	Pyrene	ug/kg	19.3 J	J	Field Duplicate	19.3 J
GB-38/3-5	7/21/2021	SW-846 6020	Antimony	mg/kg	0.60 U	UJ	MS/MSD	0.60 UJ
GB-38/3-5	7/26/2021	SW-846 6020	Arsenic	mg/kg	9.5	J	MS/MSD	9.5 J
GB-38/3-5	7/26/2021	SW-846 6020	Copper	mg/kg	19.3	J	MS/MSD	19.3 J
GB-38/3-5	7/26/2021	SW-846 6020	Lead	mg/kg	12.3	J	MS/MSD	12.3 J
GB-38/3-5	7/21/2021	EPA1668A	Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	ng/kg	2.24 CBJ	U	MB	2.24 JU
GB-38/3-5	7/21/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	3.71 BJ	U	MB	3.71 JU
GB-38/3-5	7/21/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	6.92 BJ	U	MB	6.92 JU
GB-38/3-5	7/21/2021	EPA1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	3.28 BJ	U	MB	3.28 JU
GB-45/0-2	7/21/2021	SW-846 8082	Aroclor 1260	ug/kg	9.9 J	J	CCV	9.9 J
GB-46/2-4	7/21/2021	EPA1668A	Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157)	ng/kg	3.01 C156	J	Field Duplicate	3.01 J
GB-46/2-4	7/21/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	7.41 BJ	U	MB	7.41 JU
GB-46/2-4	7/21/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	14.9 BJ	U	MB	14.9 JU
GB-46/2-4	7/21/2021	EPA1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	4.26 BJ	U	MB	4.26 JU
GB-46/2-4D	7/21/2021	EPA1668A	Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	ng/kg	4.08 CBJ	U	MB	4.08 JU
GB-46/2-4D	7/21/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	5.30 BJ	U	MB	5.30 JU
GB-46/2-4D	7/21/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	10.9 BJ	U	MB	10.9 JU
GB-46/2-4D	7/21/2021	EPA1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	2.55 BJ	U	MB	2.55 JU
GB-48/3-5'	7/20/2021	SW-846 6020	Antimony	mg/kg	0.58 U	UJ	MS/MSD	0.58 UJ
GB-50/3-5'	7/19/2021	SW-846 8270-SIM	Benzo(b)fluoranthene	ug/kg	11.2	J	Field Duplicate	11.2 J
GB-50/3-5'	7/19/2021	SW-846 8270-SIM	Fluoranthene	ug/kg	15.5	J	Field Duplicate	15.5 J
GB-50/3-5'D	7/19/2021	SW-846 8270-SIM	Benzo(b)fluoranthene	ug/kg	3.5	J	Field Duplicate	3.5 J
GB-50/3-5'D	7/19/2021	SW-846 8270-SIM	Fluoranthene	ug/kg	4.5	J	Field Duplicate	4.5 J
GB-53/0-2	7/21/2021	SW-846 8082	Aroclor 1260	ug/kg	10.4 J	J	CCV	10.4 J
GB-54/0-2'	7/20/2021	SW-846 8270	TPH as Oil	mg/kg	9.1 J	U	MB	9.1 JU
GB-54/2-4'	7/20/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	4.55 BJ	U	MB	4.55 JU
GB-54/2-4'	7/20/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	6.57 BJ	U	MB	6.57 JU
GB-54/2-4'	7/20/2021	EPA1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	2.69 BJ	U	MB	2.69 JU
GB-54/2-4'	7/20/2021	SW-846 8270	TPH as Oil	mg/kg	10.4 J	U	MB	10.4 JU
GB-55/0-2'	7/20/2021	SW-846 8270	TPH as Oil	mg/kg	7.8 J	U	MB	7.8 JU
GB-55/3-5'	7/20/2021	SW-846 8270	TPH as Oil	mg/kg	5.9 J	U	MB	5.9 JU

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Goodfellow Federal Complex - St. Louis, Missouri

Sample Identification	Sample Date	Analytical Method	Analyte(s)	Units	Laboratory Result/ Qualifier	Data Validation Qualifier	Reason(s) for Qualification	Final Result for Reporting
GB-55/3-5'D	7/20/2021	SW-846 6020	Antimony	mg/kg	0.59 U	UJ	MS/MSD	0.59 UJ
GB-55/3-5'D	7/20/2021	SW-846 8260B	Tetrahydrofuran	ug/kg	0.80 U	UJ	LCS	0.80 UJ
GB-55/3-5'D	7/20/2021	SW-846 8270	TPH as Oil	mg/kg	4.6 J	U	MB	4.6 JU
GB-57/6.0'-8.0'	7/19/2021	SW-846 8270-SIM	Benzo(a)anthracene	ug/kg	4.3	J	Field Duplicate	4.3 J
GB-57/6.0'-8.0'	7/19/2021	SW-846 8270-SIM	Benzo(a)pyrene	ug/kg	3.8 J	J	Field Duplicate	3.8 J
GB-57/6.0'-8.0'	7/19/2021	SW-846 8270-SIM	Benzo(b)fluoranthene	ug/kg	8.1	J	Field Duplicate	8.1 J
GB-57/6.0'-8.0'	7/19/2021	SW-846 8270-SIM	Benzo(k)fluoranthene	ug/kg	2.8 J	J	Field Duplicate	2.8 J
GB-57/6.0'-8.0'	7/19/2021	SW-846 8270-SIM	Chrysene	ug/kg	4.6	J	Field Duplicate	4.6 J
GB-57/6.0'-8.0'	7/19/2021	SW-846 8270-SIM	Fluoranthene	ug/kg	12.3	J	Field Duplicate	12.3 J
GB-57/6.0'-8.0'	7/19/2021	SW-846 8270-SIM	Phenanthrene	ug/kg	6.8	J	Field Duplicate	6.8 J
GB-57/6.0'-8.0'	7/19/2021	SW-846 8270-SIM	Pyrene	ug/kg	10.2	J	Field Duplicate	10.2 J
GB-57/6.0'-8.0' D	7/19/2021	SW-846 8270-SIM	Benzo(a)anthracene	ug/kg	14.4	J	Field Duplicate	14.4 J
GB-57/6.0'-8.0' D	7/19/2021	SW-846 8270-SIM	Benzo(a)pyrene	ug/kg	12.3	J	Field Duplicate	12.3 J
GB-57/6.0'-8.0' D	7/19/2021	SW-846 8270-SIM	Benzo(b)fluoranthene	ug/kg	25.5	J	Field Duplicate	25.5 J
GB-57/6.0'-8.0' D	7/19/2021	SW-846 8270-SIM	Benzo(k)fluoranthene	ug/kg	11.1	J	Field Duplicate	11.1 J
GB-57/6.0'-8.0' D	7/19/2021	SW-846 8270-SIM	Chrysene	ug/kg	15.7	J	Field Duplicate	15.7 J
GB-57/6.0'-8.0' D	7/19/2021	SW-846 8270-SIM	Fluoranthene	ug/kg	40.4	J	Field Duplicate	40.4 J
GB-57/6.0'-8.0' D	7/19/2021	SW-846 8270-SIM	Phenanthrene	ug/kg	18.9	J	Field Duplicate	18.9 J
GB-57/6.0'-8.0' D	7/19/2021	SW-846 8270-SIM	Pyrene	ug/kg	33.2	J	Field Duplicate	33.2 J
GB-58/4-6'	7/19/2021	SW-846 6020	Antimony	mg/kg	0.59 U	UJ	MS/MSD	0.59 UJ
GB-62/0-2'	7/20/2021	SW-846 8260B	Tetrahydrofuran	ug/kg	0.73 U	UJ	LCS	0.73 UJ
GB-62/3-5'	7/20/2021	SW-846 8260B	Tetrahydrofuran	ug/kg	0.79 U	UJ	LCS	0.79 UJ
GB-64/3'-4'	7/19/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	3.64 BJ	U	MB	3.64 JU
GB-64/3'-4'	7/19/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	6.91 BJ	U	MB	6.91 JU
GB-64/3'-4'	7/19/2021	EPA1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	2.13 BJ	U	MB	2.13 JU
GB-67/5-6'	7/20/2021	SW-846 8260B	Tetrahydrofuran	ug/kg	0.69 U	UJ	LCS	0.69 UJ
GB-67/5-6'	7/20/2021	SW-846 8270	TPH as Oil	mg/kg	6.7 J	U	MB	6.7 JU
GB-67/8-10'	7/20/2021	SW-846 8270	TPH as Oil	mg/kg	8.5 J	U	MB	8.5 JU
GB-68/1-3'	7/20/2021	SW-846 8260B	Tetrahydrofuran	ug/kg	0.71 U	UJ	LCS	0.71 UJ
GB-68/1-3'	7/20/2021	SW-846 8270	TPH as Oil	mg/kg	7.6 J	U	MB	7.6 JU
GB-68/3-5'	7/20/2021	SW-846 8260B	Tetrahydrofuran	ug/kg	0.72 U	UJ	LCS	0.72 UJ
GB-68/3-5'	7/20/2021	SW-846 8270	TPH as Oil	mg/kg	9.0 J	U	MB	9.0 JU
GB-68/3-5'D	7/20/2021	SW-846 8260B	Tetrahydrofuran	ug/kg	0.83 U	UJ	LCS	0.83 UJ
GB-68/3-5'D	7/20/2021	SW-846 8270	TPH as Oil	mg/kg	8.9 J	U	MB	8.9 JU
GB-69/2'-3'	7/19/2021	SW-846 6020	Antimony	mg/kg	0.46 U	UJ	MS/MSD	0.46 UJ
GB-71/0'-2'	7/19/2021	EPA1668A	Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	ng/kg	8.86 CBJ	U	MB	8.86 JU
GB-71/0'-2'	7/19/2021	EPA1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	14.3 BJ	U	MB	14.3 JU
GB-71/0'-2'	7/19/2021	EPA1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	26.0 B	U	MB	26.0 U
GB-71/0'-2'	7/19/2021	EPA1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	4.59 BJ	U	MB	4.59 JU
TB-03	7/19/2021	SW-846 8260	All VOC Analytes	ug/L	Various U	UJ	Headspace	Various UJ

Notes:

J - qualified as estimated

JU - estimated result qualified as nondetect

LCS - laboratory control sample

MB - method blank

mg/kg - milligram per kilogram

MS/MSD - matrix spike/matrix spike duplicate

PCB - polychlorinated biphenyl

SVOC-SIM - semivolatile organic compounds-select ion monitoring

TPH - total petroleum hydrocarbons

U - qualified as nondetect

ug/kg - micrograms per kilogram

UJ - qualified as estimated at the reporting limit

UR - qualified as rejected at the reporting limit

VOC - volatile organic compounds

Table 2
Method Blank Detections
Goodfellow Federal Complex - St. Louis, Missouri

Analysis Batch	Analytical Method	Analyte(s) Detected in Method Blank	Units	Method Blank Result	Qualifiers Added to Associated Field Samples During Data Validation
733754	SW-846 8270	TPH as Oil	mg/kg	2.4 J	Associated sample detections less than 5x noted blank concentration were qualified as nondetect (U).
734530	SW-846 8270	TPH as Diesel	mg/kg	1.5 J	
734530	SW-846 8270	TPH as Oil	mg/kg	2.1 J	
734954	SW-846 8270	TPH as Oil	mg/kg	2.5 J	No data validation qualifiers added. All samples nondetect or >5x blank detection.
735258	SW-846 8260B	Toluene	ug/kg	0.47 J	
735565	SW-846 8260	Hexachlorobutadiene	ug/L	0.52 J	
736890	SW-846 8260	Hexachlorobutadiene	ug/L	0.47 J	
Y210819A	EPA 1668A	Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	ng/kg	0.728 IJ	Associated sample detections less than 5x noted blank concentration were qualified as nondetect (U).
Y210819A	EPA 1668A	Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	ng/kg	4.24 CJ	
Y210819A	EPA 1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	7.71 J	
Y210819A	EPA 1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	3.33 J	
Y210819A	EPA 1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	2.07 J	
Y210820A	EPA 1668A	Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157)	ng/kg	0.894 C156	
Y210820A	EPA 1668A	Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	ng/kg	0.894 CIJ	
Y210820A	EPA 1668A	Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	6.59 J	
Y210820A	EPA 1668A	Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	3.91 J	
Y210820A	EPA 1668A	Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	2.12 J	

Notes:
C - laboratory flag for confirmation analysis
EPA - Environmental Protection Agency
IJ - laboratory flag for interference, estimated result
J - estimated
mg/kg - milligrams per kilogram
ng/kg - nanograms per kilogram
PCB - Polychlorinated Biphenyl's
TPH - total petroleum hydrocarbons
U - nondetect
ug/L - micrograms per Liter

Table 3
Rinsate and Trip Blank Detections
Goodfellow Federal Complex - St. Louis, Missouri

Rinsate/Trip Blank With Detections	Sample Date	Analytical Method	Analyte(s) Detected in Method Blank	Units	Method Blank Result	Qualifiers Added to Associated Field Samples During Data Validation
TB-01	7/20/2021	SW-846 8260	m/p-Xylene	ug/L	0.23 J	No data validation qualifiers added. Associated sample(s) were either nondetect or greater than 5x (or 10x) the noted blank detection.
RB-01	7/19/2021	SW-846 8260	Bromodichloromethane	ug/L	1.8	
		SW-846 8260	Chloroform	ug/L	6.9	
RB-03	7/21/2021	SW-846 8260	Chloroform	ug/L	0.67 J	
		SW-846 8270C-SIM	Benzo(a)pyrene	ug/L	0.092 J	
		SW-846 8270C-SIM	Dibenzo(a,h)anthracene	ug/L	0.073 J	
		SW-846 8270C-SIM	Indeno(1,2,3-cd)pyrene	ug/L	0.080 J	
		SW-846 8270C-SIM	Naphthalene	ug/L	0.12 J	
RB-04	7/22/2021	SW-846 8260	Acetone	ug/L	4.8 J	
		SW-846 8260	Chloroform	ug/L	0.44 J	
RB-05	7/23/2021	SW-846 8260	Chloroform	ug/L	0.52 J	
		SW-846 8270C-SIM	Fluoranthene	ug/L	0.33 J	
		SW-846 8270C-SIM	Phenanthrene	ug/L	0.45 J	
		SW-846 8270C-SIM	Pyrene	ug/L	0.17	
RB-06	7/26/2021	SW-846 8260	Bromodichloromethane	ug/L	1.3	
		SW-846 8260	Chloroform	ug/L	4.7	

Notes:
J - estimated
ug/L - micrograms per Liter
SIM - select ion monitoring

Table 4
Surrogate Results Outside QC Limits
Goodfellow Federal Complex - St. Louis, Missouri

Sample Identification	Analytical Method	Surrogate Spike(s)	Surrogate REC (%)	Lower Limit (%)	Upper Limit (%)	Sample Dilution	Reason for Qualification
GB-17/3-5	SW-846 8082	Decachlorobiphenyl	122	35	120	1	Detections qualified as estimated low bias J-. Nondetects did not require qualification.
GB-33/2-4	SW-846 8082	Decachlorobiphenyl	130	35	120	1	
GB-40/1.5-3.5	SW-846 8270-SIM	2-Fluorobiphenyl	0	40	120	10	Surrogate spike likely diluted out of sample during extraction process. Also, two surrogates of the same fraction are allowed outside limits before qualifiers are necessary for this analysis. No conclusion could be made for the noted surrogate spike for this sample/analysis.
		Terphenyl-d14	0	45	130	10	
GB-44/3-5	SW-846 8270-SIM	2-Fluorobiphenyl	0	40	120	10	
		Terphenyl-d14	0	45	130	10	
GB-45/0-2	SW-846 8270-SIM	Terphenyl-d14	136	45	120	1	For this analysis, two surrogates of the same fraction are allowed outside QC limits before qualifiers are applied for this analysis.

Notes:

J(-) - estimated low bias

% - percent

QC - quality control

REC - percent recovery

SIM - select ion monitoring

Table 5
LCS/LCSD Results Outside QC Limits
Goodfellow Federal Complex - St. Louis, Missouri

QC Batch	Analytical Method	Analyte(s)	LCS REC %	LCSD REC %	Lower Limit (%)	Upper Limit (%)	Reason for Qualification
734480	SW-846 8260B	Tetrahydrofuran	19	NA	80	120	Detections - qualified as estimated low bias (J-). Nondetects - qualified as estimated at the reporting limit (UJ) (see text).

Notes:
J(-) - estimated (low bias)
% - percent
LCS/LCSD - laboratory control sample/ laboratory control sample duplicate
NA - not available
QC - quality control
REC - percent recovery
UJ - estimated at the reporting limit

Table 6
MS/MSD Results Outside QC Limits
Goodfellow Federal Complex - St. Louis, Missouri

Spiked Sample Identification(s)	Analysis Batch	Analytical Method	Analyte(s)	MS REC %	MSD REC %	MS/MSD RPD %	Lower Limit (%)	Upper Limit (%)	Reason for Qualification
GB-07/7-9	736298	SW-846 6020	Antimony	35	34	OK	75	125	Detections - qualified as estimated low bias (J-). Nondetects - qualified as estimated at the reporting limit (UJ).
GB-10/3-5	736513	SW-846 6020	Antimony	34	36	OK	75	125	
GB-38/3-5	736159	SW-846 6020	Antimony	39	35	38	75	125	
GB-55/3-5'D	736069	SW-846 6020	Antimony	35	39	26	75	125	
GB-11/1-3	736299	SW-846 6020	Antimony	34	31	23	75	125	
GB-25/2-4	736298	SW-846 6020	Antimony	38	36	21	75	125	
GB-69/2'-3'	736024	SW-846 6020	Antimony	48	46	21	75	125	
GB-27/3-5	735728	SW-846 6020	Antimony	48	47	OK	75	125	
GB-32/2-4	736153	SW-846 6020	Antimony	43	52	OK	75	125	
GB-48/3-5'	736067	SW-846 6020	Antimony	52	45	OK	75	125	
GB-58/4-6'	736067	SW-846 6020	Antimony	36	39	OK	75	125	
GB-02/2-3	735731	SW-846 6020	Antimony	45	45	OK	75	125	
GB-07/7-9	734679	SW-846 8260B	Iodomethane	27	OK	37	30	120	Detections - qualified as estimated (J). Nondetects - qualified as estimated at the reporting limit (UJ).
GB-02/2-3	735024	SW-846 8260B	Vinyl acetate	29	OK	OK	30	120	
GB-02/2-3	735731	SW-846 6020	Lead	309	OK	93	75	125	Detections - qualified as estimated high bias (J+). Nondetects - no qualifiers necessary.
GB-02/2-3	734531	SW-846 8270-SIM	Benzo(a)anthracene	175	OK	OK	10	160	Detections - qualified as estimated (J). Nondetects - no qualifiers necessary.
GB-02/2-3	734531	SW-846 8270-SIM	Benzo(b)fluoranthene	182	OK	OK	10	165	
GB-02/2-3	734531	SW-846 8270-SIM	Chrysene	170	OK	OK	10	150	
GB-02/2-3	734531	SW-846 8270-SIM	Fluoranthene	328	OK	OK	10	180	
GB-07/7-9	734192	SW-846 8270-SIM	Naphthalene	-36	406	97	10	165	
GB-02/2-3	734531	SW-846 8270-SIM	Phenanthrene	172	OK	OK	10	170	
GB-02/2-3	734531	SW-846 8270-SIM	Pyrene	263	OK	OK	10	180	
GB-22/1-3	734532	SW-846 8270-SIM	Benzo(b)fluoranthene	192	OK	OK	10	165	
GB-22/1-3	734532	SW-846 8270-SIM	Chrysene	159	OK	OK	10	150	
GB-22/1-3	734532	SW-846 8270-SIM	Fluoranthene	284	OK	OK	10	180	
GB-22/1-3	734532	SW-846 8270-SIM	Pyrene	262	OK	OK	10	180	
GB-02/2-3	735024	SW-846 8260B	Trichloroethene	OK	177	OK	25	140	Detections - qualified as estimated (J). Nondetects - no qualifiers necessary.
GB-07/7-9	734679	SW-846 8260B	1,1-Dichloroethene	OK	128	OK	35	120	
GB-07/7-9	734192	SW-846 8270-SIM	Fluoranthene	OK	195	OK	10	180	
GB-07/7-9	734192	SW-846 8270-SIM	Phenanthrene	OK	188	OK	10	170	
GB-07/7-9	734679	SW-846 8260B	Trichloroethene	OK	154	OK	25	140	
GB-07/7-9	734192	SW-846 8270-SIM	Acenaphthene	OK	283	82	10	150	
GB-07/7-9	734192	SW-846 8270-SIM	Fluorene	OK	207	50	20	145	
GB-02/2-3	735024	SW-846 8260B	Cyclohexanone	OK	140	45	35	120	

Table 6
MS/MSD Results Outside QC Limits
Goodfellow Federal Complex - St. Louis, Missouri

Spiked Sample Identification(s)	Analysis Batch	Analytical Method	Analyte(s)	MS REC %	MSD REC %	MS/MSD RPD %	Lower Limit (%)	Upper Limit (%)	Reason for Qualification
GB-02/2-3	735024	SW-846 8260B	Tetrahydrofuran	OK	OK	43	35	120	Detections - qualified as estimated (J). Nondetects - no qualifiers necessary.
GB-02/2-3	735024	SW-846 8260B	2-Butanone	OK	OK	42	20	145	
GB-02/2-3	735024	SW-846 8260B	2-Hexanone	OK	OK	42	15	150	
GB-02/2-3	735024	SW-846 8260B	Acetone	OK	OK	41	10	165	
GB-02/2-3	735024	SW-846 8260B	1,2-Dibromo-3-chloropropane	OK	OK	40	10	145	
GB-02/2-3	735024	SW-846 8260B	4-Methyl-2-pentanone	OK	OK	40	30	140	
GB-02/2-3	735024	SW-846 8260B	1,2,3-Trichloropropane	OK	OK	38	25	135	
GB-02/2-3	735024	SW-846 8260B	Naphthalene	OK	OK	38	10	165	
GB-02/2-3	735024	SW-846 8260B	Acrylonitrile	OK	OK	37	10	145	
GB-02/2-3	735024	SW-846 8260B	Bromoform	OK	OK	36	10	145	
GB-38/3-5	736159	SW-846 6020	Arsenic	OK	OK	22	75	125	
GB-38/3-5	736159	SW-846 6020	Copper	OK	OK	21	75	125	
GB-38/3-5	736159	SW-846 6020	Lead	OK	OK	21	75	125	
GB-02/2-3	735024	SW-846 8260B	1,1,2,2-Tetrachloroethane	0	2	OK	10	145	Nondetects - qualified as rejected at the reporting limit (UR).
GB-02/2-3	735024	SW-846 8260B	Methyl Acetate	1	0	OK	30	120	
GB-07/7-9	734679	SW-846 8260B	1,1,2,2-Tetrachloroethane	2	0	OK	10	145	
GB-07/7-9	734679	SW-846 8260B	Methyl Acetate	0	0	OK	30	120	

Notes:

EPA - Environmental Protection Agency
% - percent
J(-/+) - estimated (low bias/high bias)
MS/MSD - matrix spike/matrix spike duplicate
PCB - Polychlorinated Biphenyl
REC - percent recovery
RPD - relative percent difference
SIM - select ion monitoring
UJ - estimated at the reporting limit
UR - qualified as rejected at the reporting limit

Table 7
Field Duplicate Analysis - Detections Only
Goodfellow Federal Complex - St. Louis, Missouri

Sample Name:		GB-04/3-5'		GB-04/3-5'D		
Compound	**Units**	**Results**	**Qual**	**Results**	**Qual**	**Meets QC**
Arsenic	mg/kg	7.9		7.4		Yes
Copper	mg/kg	14.8		15.1		Yes
Lead	mg/kg	10.2		9.8		Yes
Zinc	mg/kg	45.1		46.0		Yes

Sample Name:		GB-35/3-5'		GB-35/3-5'D		
Compound	**Units**	**Results**	**Qual**	**Results**	**Qual**	**Meets QC**
Arsenic	mg/kg	14.9	J	6.2	J	**RPD 82%**
Copper	mg/kg	22.1	J	12.9	J	**RPD 52%**
Lead	mg/kg	17.6	J	10.7	J	**RPD 48%**
Zinc	mg/kg	57.0		47.3		Yes
Benzo(b)fluoranthene	ug/kg	2.3	J	12.0	J	**STF**
Fluoranthene	ug/kg	5.0	J	24.8	J	**STF**
Pyrene	ug/kg	3.9	J	19.3	J	**STF**

Sample Name:		GB-46/2-4'		GB-46/2-4'D		
Compound	**Units**	**Results**	**Qual**	**Results**	**Qual**	**Meets QC**
Arsenic	mg/kg	9.8		9.1		Yes
Copper	mg/kg	17.9		16.9		Yes
Lead	mg/kg	10.8		11.2		Yes
Zinc	mg/kg	52.6		56.8		Yes
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	ng/kg	3.01	J	4.08	J	Yes
Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157)	ng/kg	3.01	J	0.000	J	**STF**
Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	ng/kg	1.25	J	2.67	U	Yes
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	ng/kg	7.41	J	5.30	J	Yes
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	ng/kg	14.9	J	10.9	J	Yes
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	ng/kg	4.26	J	2.55	J	Yes

Table 7
Field Duplicate Analysis - Detections Only
Goodfellow Federal Complex - St. Louis, Missouri

Sample Name:		GB-50/3-5'		GB-50/3-5'D		
Compound	**Units**	**Results**	**Qual**	**Results**	**Qual**	**Meets QC**
Arsenic	mg/kg	5.6		5.4		Yes
Copper	mg/kg	12.6		11.6		Yes
Lead	mg/kg	8.2		7.7		Yes
Zinc	mg/kg	42.7		41.5		Yes
Benzo(b)fluoranthene	ug/kg	11.2		3.5	J	Yes
Fluoranthene	ug/kg	15.5	J	4.5	J	**STF**
Pyrene	ug/kg	12.2	J	3.5	J	**STF**

Sample Name:		GB-55/3-5'		GB-55/3-5'D		
Compound	**Units**	**Results**	**Qual**	**Results**	**Qual**	**Meets QC**
Arsenic	mg/kg	5.2		5.0		Yes
Copper	mg/kg	12.8		12.5		Yes
Lead	mg/kg	8.8		8.7		Yes
Zinc	mg/kg	38.2		39.2		Yes
TPH as Oil	mg/kg	5.9	J	4.6	J	Yes

Sample Name:		GB-57/6.0'-8.0'		GB-57/6.0'-8.0'D		
Compound	**Units**	**Results**	**Qual**	**Results**	**Qual**	**Meets QC**
Arsenic	mg/kg	4.3		4.3		Yes
Copper	mg/kg	13.2		12.2		Yes
Lead	mg/kg	7.9		7.8		Yes
Zinc	mg/kg	38.7		38.5		Yes
Benzo(a)anthracene	ug/kg	4.3	J	14.4	J	**STF**
Benzo(a)pyrene	ug/kg	3.8	J	12.3	J	**STF**
Benzo(b)fluoranthene	ug/kg	8.1	J	25.5	J	**RPD 103%**
Benzo(k)fluoranthene	ug/kg	2.8	J	11.1	J	**STF**
Chrysene	ug/kg	4.6	J	15.7	J	**STF**
Fluoranthene	ug/kg	12.3	J	40.4	J	**RPD 106%**
Phenanthrene	ug/kg	6.8	J	18.9	J	**STF**
Pyrene	ug/kg	10.2	J	33.2	J	**RPD 106%**

Table 7
Field Duplicate Analysis - Detections Only
Goodfellow Federal Complex - St. Louis, Missouri

Sample Name:		GB-66/3-5'		GB-66/3-5'D		
Compound	**Units**	**Results**	**Qual**	**Results**	**Qual**	**Meets QC**
Arsenic	mg/kg	5.2		6.6		Yes
Copper	mg/kg	11.0		11.3		Yes
Lead	mg/kg	19.4		14.5		Yes
Zinc	mg/kg	50.8		48.9		Yes

Sample Name:		GB-68/3-5'		GB-68/3-5'D		
Compound	**Units**	**Results**	**Qual**	**Results**	**Qual**	**Meets QC**
Arsenic	mg/kg	9.3		8.5		Yes
Copper	mg/kg	17.7		19.6		Yes
Lead	mg/kg	13.2		10.3		Yes
Zinc	mg/kg	69.5		74.9		Yes
Acetone	ug/kg	23.0		22.1		Yes
TPH as Diesel	mg/kg	2.4	J	2.0	J	Yes
TPH as Oil	mg/kg	9.0	J	8.9	J	Yes

Notes:

% - percent
J - trace value detection or qualified as estimated (J)
mg/kg - milligrams per kilogram
ng/kg - nanograms per kilogram
PCB - Polychlorinated Biphenyl
QC - quality control
RPD - relative percent difference
STF - sensitivity test failure
TPH - total petroleum hydrocarbons
U - nondetect
ug/kg - micrograms per kilogram

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