



APRIL 2022 QUARTERLY GROUNDWATER SAMPLING

This quarterly groundwater sampling report presents a summary of field activities conducted and analytical data collected at the Goodfellow Federal Center, 4300 Goodfellow Blvd., in St. Louis, Missouri, in April 2022. Previously, 19 groundwater monitoring wells were installed at the facility in accordance with [GSA's Remedial Investigation Work Plan](#), approved by the Missouri Department of Natural Resources in March 2021.

In April 2022, the 19 monitoring wells were sampled. The groundwater samples collected were tested for several analytical parameters (including metals, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, total petroleum hydrocarbons, volatile organic compounds, and explosives). Laboratory analytical methods are detailed in Section 4.0 of this report. Groundwater analytical results were compared to project action limits (listed on page 292 of [the RIWP](#)). The project action limits are the lowest EPA screening level for groundwater.

Laboratory results are presented in Section 5.0 of this report. Lead and zinc were detected in some groundwater samples, but the concentrations were below the action limits. The laboratory did not detect any other compounds.

In addition to this sampling event, GSA has conducted previous quarterly groundwater sampling events in July and October 2021 and January 2022. Now that four quarters of sampling is completed and all analytical results have been received, GSA will complete a baseline human health risk assessment.

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

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

Please note: The tables and figures in this report are not accessible for people using screen reader technology. The information can be furnished upon request by contacting 816-223-6198 or r6environmental@gsa.gov.

Goodfellow Federal Complex
Quarterly Groundwater Sampling Report
April 2022



**General Services Administration
Kansas City, Missouri**

**Goodfellow Federal Complex
4300 Goodfellow Boulevard
St. Louis, Missouri**

Project No. 128487

June 2022

**Goodfellow Federal Complex
Quarterly Groundwater Sampling Report – April 2022
Goodfellow Federal Complex; 4300 Goodfellow Boulevard
St. Louis, Missouri**

June 2022

Prepared for



General Services
Administration

Prepared by



Work Order:
47PG0220F0076

Project Number:
128487

Goodfellow Federal Complex
Quarterly Groundwater Sampling Report
April 2022



**General Services Administration
Kansas City, Missouri**

**Goodfellow Federal Complex
4300 Goodfellow Boulevard
St. Louis, Missouri**

Project No. 128487

June 2022

Goodfellow Federal Complex Quarterly Groundwater Sampling Report April 2022

prepared for

**General Services Administration
Kansas City, Missouri
Goodfellow Federal Complex
4300 Goodfellow Boulevard
St. Louis, Missouri**

Project No. 128487

June 2022

prepared by

**Burns & McDonnell
Kansas City, Missouri**

TABLE OF CONTENTS

	<u>Page No.</u>
1.0 INTRODUCTION	1-1
1.1 Project Documentation.....	1-1
1.2 Objectives	1-2
1.3 Responsible Agency.....	1-2
1.4 Contaminants of Concern	1-2
1.5 General Comments.....	1-2
2.0 REPORT ORGANIZATION.....	2-1
3.0 FIELD ACTIVITIES	3-1
3.1 Health and Safety	3-1
3.2 Monitoring Well Inspections	3-1
3.3 Monitoring Well Gauging.....	3-1
3.4 Groundwater Sampling	3-2
3.5 Investigation-Derived Waste	3-2
4.0 LABORATORY ANALYTICAL METHODS.....	4-1
5.0 GROUNDWATER ANALYTICAL RESULTS	5-1
5.1 Total Metals	5-1
5.2 Dissolved Metals.....	5-1
5.3 Polychlorinated Biphenyls	5-1
5.4 Polycyclic Aromatic Hydrocarbons	5-1
5.5 Volatile Organic Compounds	5-1
5.6 Explosives	5-2
5.7 Quality Control Samples.....	5-2
6.0 DATA VALIDATION.....	6-1
7.0 RECOMMENDATIONS	7-1
8.0 REFERENCES	8-1

APPENDICES

APPENDIX A – SUPPORTING FIELD DOCUMENTATION

APPENDIX B – GROUNDWATER HYDROGRAPH

APPENDIX C – ANALYTICAL LABORATORY REPORT FOR LIQUID IDW

APPENDIX D – WASTE PROFILE AND MANIFEST

**APPENDIX E – ANALYTICAL LABORATORY REPORTS FOR
GROUNDWATER SAMPLES**

APPENDIX F – DATA VALIDATION MEMORANDUM

LIST OF TABLES

Table Name	Table No.
Monitoring Well Construction Summary	Table 1
Monitoring Well Gauging Measurements and Elevations	Table 2
Sample Collection Summary	Table 3
Liquid Investigation-Derived Waste Results	Table 4
Groundwater Analytical Results	Table 5
Historical Groundwater Analytical Results	Table 6

LIST OF FIGURES

Figure Name	Figure No.
Area Location Map	Figure 1
Site Location Map	Figure 2
Potentiometric Surface Map – April 2022	Figure 3

LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
Etegra	Etegra, Inc.
FSP	<i>Final Field Sampling Plan; Goodfellow Federal Complex, St. Louis, Missouri</i>
GFC	Goodfellow Federal Complex
GSA	General Services Administration
HASP	<i>Final Health and Safety Plan for Remedial Investigation Activities at the Goodfellow Federal Complex; St. Louis, Missouri</i>
IDW	investigation-derived waste
MDNR	Missouri Department of Natural Resources
mg/L	milligrams per liter
mL/min	milliliters per minute
MS	matrix spike
MSD	matrix spike duplicate
NAPL	non-aqueous phase liquid
NELAP	National Environmental Laboratory Accreditation Program
PAH	polycyclic aromatic hydrocarbon
PAL	project action limit
PCB	polychlorinated biphenyl
QAPP	<i>Final Quality Assurance Project Plan; Goodfellow Federal Complex, St. Louis, Missouri</i>
RI	remedial investigation
SLOP	St. Louis Ordnance Plant
SSSP	<i>Final Site Specific Safety Plan for Remedial Investigation Activities at the Goodfellow Federal Complex; St. Louis Missouri</i>
TekLab	TekLab, Inc.
VOC	volatile organic compound
Work Plan	<i>Final Remedial Investigation Work Plan; Goodfellow Federal Complex, St. Louis, Missouri</i>

1.0 INTRODUCTION

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

The GFC is located at 4300 Goodfellow Boulevard in St. Louis, Missouri and occupies a portion of the former St. Louis Ordnance Plant (SLOP) near the western boundary of the City of St. Louis, Missouri (see **Figure 1**). The GFC property is owned and operated by the GSA. The GFC encompasses approximately 64 acres, and is bordered northeast by the former SLOP, southeast by Planned Industrial Drive, southwest by Lincoln Way, and northwest by Goodfellow Boulevard. The site location is shown on **Figure 2**. The GFC is developed with buildings, utility tunnels, and separated stormwater and sanitary sewer collection systems.

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

1.1 Project Documentation

The following planning documents provided general guidance for the groundwater sampling activities during April 2022:

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

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

1.2 Objectives

The following objectives were identified for the April 2022 quarterly sampling event:

- Inspect the well integrity for the 19 site monitoring wells (MW-01 through MW-19);
- Gauge the water levels and total depths for the 19 site monitoring wells; and
- Sample the 19 site monitoring wells.

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

1.3 Responsible Agency

The Missouri Department of Natural Resources (MDNR) is the regulatory agency responsible for this project. Deliverables will be submitted to MDNR.

1.4 Contaminants of Concern

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

- Metals, total and dissolved (antimony, arsenic, copper, lead, and zinc);
- Polychlorinated biphenyls (PCBs);
- Polycyclic aromatic hydrocarbons (PAHs);
- Volatile organic compounds (VOCs); and
- Explosives.

1.5 General Comments

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

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

2.0 REPORT ORGANIZATION

This Quarterly Groundwater Sampling Report has been divided into eight sections as follows:

- Section 1.0, Introduction, discusses the project objectives, site location, and other general project information.
- Section 2.0, Report Organization, discusses the sectional outline for this Quarterly Groundwater Sampling Report.
- Section 3.0, Field Activities, discusses the field activities that were conducted at the GFC during the April 2022 quarterly groundwater sampling event.
- Section 4.0, Laboratory Analytical Methods, presents the analytical methods that groundwater samples were analyzed for during the April 2022 quarterly groundwater sampling event.
- Section 5.0, Groundwater Analytical Results, discusses the groundwater analytical results for the April 2022 quarterly groundwater sampling event.
- Section 6.0, Data Validation, discusses data validation related aspects of the groundwater monitoring program.
- Section 7.0, Recommendations, presents the recommendations for the GFC as it pertains to groundwater sampling.
- Section 8.0, References, includes a list of references used in the report.

Included as attachments to this Quarterly Groundwater Sampling Report are supporting tables, figures, and appendices. **Appendix A** includes supporting field documentation; **Appendix B** includes a groundwater hydrograph; **Appendix C** includes the analytical laboratory report for liquid investigation-derived waste (IDW); **Appendix D** includes the waste profile and manifest; **Appendix E** includes the analytical laboratory reports for groundwater samples; and **Appendix F** includes the data validation memorandum. The tables, figures, and appendices may not be accessible for people using screen reader technology. The information can be furnished upon request by contacting 816-223-6198 or r6environmental@gsa.gov.

3.0 FIELD ACTIVITIES

Field activities were completed to meet the project objectives. Field activities were conducted in general accordance with the FSP. The field activities conducted at the GFC during quarterly groundwater sampling activities consisted of the following activities:

- Conducting monitoring well integrity inspections for 19 monitoring wells;
- Gauging water levels and total depths for the 19 monitoring wells; and
- Conducting low-flow groundwater purging and sampling.

3.1 Health and Safety

Burns & McDonnell conducted the fieldwork under a HASP (Burns & McDonnell, 2021a) and a SSSP (Burns & McDonnell, 2021b) developed for this project. Work was performed using Occupational Safety and Health Standards Level D personal protective equipment in accordance with Burns & McDonnell's core safety rules and practices. There were no safety incidents reported during the quarterly groundwater sampling event conducted in April 2022.

3.2 Monitoring Well Inspections

Monitoring wells (MW-01 through MW-19) were inspected on April 18, 2022. The locations of these monitoring wells are illustrated on **Figure 2**. Monitoring well construction details for each of these monitoring wells are summarized on **Table 1**. Each monitoring well was inspected for integrity prior to gauging the water level and total depth. Each of these monitoring wells were observed to be secured with lids and sealed J-plug caps. The rim of the well vault for Monitoring Well MW-14 was observed to be broken and the well vault for Monitoring Well MW-15 was observed to cracked. Additionally, one of the threaded bolt flanges was broken on the well vault for Monitoring Well MW-15. The damage to these two wells appears to have been done during the winter from snow plowing. No other integrity or security issues were noted during the inspections. Monitoring well inspection checklists are provided in **Appendix A**. Photos of the damaged well vaults are provided in **Appendix A**.

3.3 Monitoring Well Gauging

Monitoring wells (MW-01 through MW-19) were gauged for water levels and well total depths on April 18, 2022. Monitoring wells were gauged with an electronic interface probe that also detects non-aqueous phase liquid (NAPL) prior to sampling. Groundwater elevations were recorded and then used to create a potentiometric surface map for groundwater flow direction illustrated on **Figure 3**. Measurable NAPL was not detected/observed in the monitoring wells. Groundwater elevations are provided in **Table 2** and

ranged from 505.37 feet above mean sea level (MW-19) to 568.60 feet above mean sea level (MW-06). As illustrated on **Figure 3**, groundwater flow in northern portion of the GFC is toward the east-northeast; groundwater flow in the central portion of the GFC is toward the east-southeast; and groundwater flow in the southern portion of the GFC is toward the southeast. A groundwater hydrograph illustrating the quarterly groundwater elevations of the monitoring well network is presented in **Appendix B**.

3.4 Groundwater Sampling

Monitoring wells (MW-01 through MW-19) were purged and sampled using low-flow techniques on April 18 and 19, 2022. The monitoring wells sampled, and their associated analytical analyses are presented in **Table 3**. The monitoring wells were purged at flow rates of between 90 milliliters per minute (mL/min) and 300 mL/min. Low-flow sampling included the use of polyethylene tubing, a pneumatically operated non-dedicated QED[®] Sample Pro Portable MicroPurge[®] bladder pump, and a compressed carbon dioxide cylinder.

During purging, depth to water, and water quality field parameters were recorded every three to five minutes with a YSI[®] 556 MPS water quality meter equipped to a flow-through cell. Turbidity was measured ex-situ using a Hach[®] 2100Q turbidity meter. Water quality field parameters included pH, temperature, specific conductivity, dissolved oxygen, oxidation-reduction potential, and turbidity. Groundwater samples were collected after three consecutive water quality field parameter readings and water level measurements had stabilized and/or one well volume of water had been removed. Dissolved metals samples were field filtered through a 0.45-micron filter. Field groundwater sampling reports for each monitoring well are provided in **Appendix A**.

3.5 Investigation-Derived Waste

Non-dedicated sampling equipment was cleaned and decontaminated before each sample location to further maintain sample quality. Equipment decontamination generally consisted of a distilled water and Liquinox[®] cleaning solution pumped through the bladder pump assembly, scrubbing the outer stainless-steel housing of the bladder pump using a nylon brush and cleaning solution, followed by a distilled water rinse. Field personnel wore new disposable gloves during the decontamination process to increase personal protection and limit potential cross-contamination.

Generated IDW consisted of decontamination water and minimal volumes of purge groundwater generated from low-flow sampling activities. Approximately 25 gallons of liquid IDW was generated. Liquid IDW was containerized in 55-gallon drums and staged onsite. Used personal protective equipment and general trash were disposed of as municipal solid waste.

A composite water sample from the 55-gallon drums storing liquid IDW was collected on April 20, 2022, for waste characterization/profiling purposes. The waste characterization sample was submitted to Pace Analytical, LLC of Lenexa, Kansas, a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory, for analysis of waste characterization parameters requested by the disposal facility. O6 Environmental, LLC of St. Louis, Missouri completed liquid IDW waste characterization paperwork. The liquid IDW was characterized as non-hazardous waste and three 55-gallon drums were transported by Illini Environmental, Inc. and disposed of at their disposal and recycling facility located in Caseyville, Illinois on June 23, 2022. The analytical laboratory test report for liquid IDW is provided in **Appendix C**. Copies of the waste profile and manifest are provided in **Appendix D**. Analytical results for liquid IDW are summarized in **Table 4**.

4.0 LABORATORY ANALYTICAL METHODS

Groundwater samples were collected in laboratory provided containers (with proper preservative where applicable), labeled, immediately placed on ice in a cooler following sample collection, and the cooler secured with a custody seal prior to shipment to the laboratory. Metals (total and dissolved), PCBs, PAHs, and VOCs samples were submitted with chain-of-custody forms to TekLab, Inc. (TekLab) of Collinsville, Illinois, a NELAP accredited laboratory. Dissolved metals samples were field filtered through a 0.45-micron filter prior to sample collection. Explosives samples were submitted with chain-of-custody forms to Pace Analytical National of Mt. Juliet, Tennessee, a NELAP accredited laboratory.

Groundwater samples were analyzed for the following compounds as outlined in the QAPP:

- Total metals (antimony, arsenic, copper, lead, and zinc) by USEPA Method SW-846 6010B;
- Dissolved metals (antimony, arsenic, copper, lead, and zinc) by USEPA Method SW-846 6010B (20% of monitoring wells);
- PCBs (aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260) by USEPA Method SW-846 8082;
- PAHs by USEPA Method SW-846 8270C;
- VOCs by USEPA Method SW-846 8260B; and
- Explosives by USEPA Method SW-846 8330 (Monitoring Well MW-08 only).

5.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater analytical results were compared to project action limits (PALs) listed in Table 2 of the QAPP. Groundwater analytical data is summarized in **Table 5** and compared to PALs. **Table 6** provides historical groundwater analytical results for site monitoring wells compared to PALs. Copies of the laboratory analytical reports for the April 2022 quarterly sampling event are provided in **Appendix E**.

5.1 Total Metals

Total antimony, arsenic, and copper were not detected in any groundwater samples collected from site monitoring wells above their respective laboratory reporting limits. Total lead was detected in the groundwater samples collected from Monitoring Wells MW-05, MW-15, and MW-18 at trace-level concentrations of 0.0326 milligrams per liter (mg/L), 0.0216 mg/L, and 0.0351 mg/L, respectively. Total zinc was detected in groundwater samples collected from Monitoring Wells MW-02, MW-09, MW-11, MW-19 at trace-level concentrations of 0.0107 mg/L, 0.0127 mg/L, 0.0142 mg/L, and 0.0168 mg/L, respectively. The three detections of total lead were reported well below the PAL of 15 mg/L, and all four detections of total zinc were reported below the PAL of 4.69 mg/L.

5.2 Dissolved Metals

The dissolved metals (antimony, arsenic, copper, lead, and zinc) were not detected in any of the groundwater samples collected from site monitoring wells above their respective laboratory reporting limits.

5.3 Polychlorinated Biphenyls

Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260 were not detected in any groundwater samples collected from site monitoring wells above their respective laboratory reporting limits.

5.4 Polycyclic Aromatic Hydrocarbons

PAHs were not detected in any groundwater samples collected from site monitoring wells above their respective laboratory reporting limits.

5.5 Volatile Organic Compounds

No VOCs constituents were detected in the groundwater samples collected from site monitoring wells above their respective laboratory reporting limits.

5.6 Explosives

Explosives were not detected in the groundwater sample collected from Monitoring Well MW-08 above their respective laboratory reporting limits.

5.7 Quality Control Samples

Quality control samples were collected in accordance with the QAPP for this sampling event and included two field duplicate samples, one matrix spike (MS) sample/matrix spike duplicate (MSD) sample pair, one equipment rinsate blank sample, and four trip blanks. Copies of the laboratory analytical reports are provided in **Appendix E**.

Two field duplicate samples (MW-08/DUP and MW-15/DUP) were collected during this sampling event from Monitoring Wells MW-08 and MW-15, respectively. Duplicate Sample MW-15/DUP was analyzed for total metals, dissolved metals, PCBs, PAHs, and VOCs. No analytes were detected above laboratory reporting limits in the parent and duplicate sample pair (MW-15 / MW-15/DUP). Duplicate Sample MW-08/DUP was analyzed for explosives only. No analytes were detected above laboratory reporting limits in the parent and duplicate sample pair (MW-08 / MW-08/DUP).

One MS/MSD sample pair was collected during this sampling event from Monitoring Well MW-04. The MS/MSD sample pair were analyzed for total metals, dissolved metals, PCBs, and VOCs. TekLab does not analyze spike samples for PAH.

One equipment rinsate blank sample (ERB 04202022) was collected during this sampling event. Equipment rinsate blank sample ERB 04202022 was collected following decontaminating sampling equipment used at Monitoring Well MW-19 and was analyzed for total metals, PCBs, PAHs, and VOCs. No analytes were detected above laboratory reporting limits in the equipment rinsate blank sample (ERB 04202022).

Six trip blank samples (TB-1 through TB-6) were collected during this sampling event. Trip blank samples were included in coolers containing VOC samples. There were no VOC analytes detected above laboratory reporting limits in the six trip blank samples.

6.0 DATA VALIDATION

Analytical laboratory data were reviewed in accordance with the QAPP. No data were rejected during the course of the data review, and all sample results are usable for reporting the results of this sampling event (Ayuda, 2022). A copy of the data validation memorandum is provided in **Appendix F**.

7.0 RECOMMENDATIONS

This was the fourth quarterly groundwater sampling event that was conducted at the GFC in support of the RI. During the four quarterly groundwater sampling events that have been conducted, no groundwater contaminants of concern were detected above their respective PALs (see **Table 6**). As there have not been any groundwater contaminants of concern detected above their respective PALs in the four consecutive quarterly events, no additional groundwater data is needed to conduct the risk assessment. Based on the data collected to date, it is recommended to end groundwater sampling activities at the GFC as groundwater has been adequately characterized seasonally. Additionally, as groundwater sampling is no longer needed and there have not been any groundwater contaminants of concern detected above their respective PALs, it is recommended that the monitoring wells be abandoned.

8.0 REFERENCES

Ayuda, 2022. *Review of Analytical Data; Quarterly Groundwater Sampling Event – April 2022; Remedial Investigation for Goodfellow Federal Complex; St. Louis, Missouri*. June.

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

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

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

TABLES

Table 1
Monitoring Well Construction Summary
Goodfellow Federal Complex
St. Louis, Missouri

Monitoring Well ID	Date Installed	Location ¹		Ground Surface Elevation (MSL)	Top of Casing Elevation (MSL)	Installed Total Depth (feet BTOC)	Elevation Top of Screen (feet amsl)	Screen Length (feet)	Formation Screened
		Northing (feet)	Easting (feet)						
MW-01	6/1/2021	1039540.011	886756.158	543.61	543.55	45.37	513.18	15	Overburden/ Weathered Bedrock
MW-02	6/2/2021	1039740.048	886772.671	544.91	544.92	40.15	519.77	15	Overburden/ Weathered Bedrock
MW-03	6/4/2021	1039766.083	887286.651	539.97	539.95	35.54	519.41	15	Overburden/ Weathered Bedrock
MW-04	6/7/2021	1039867.834	886169.816	559.24	559.27	38.48	535.79	15	Overburden/ Weathered Bedrock
MW-05	6/7/2021	1040193.907	886714.163	550.50	550.51	33.34	532.17	15	Overburden/ Weathered Bedrock
MW-06	6/7/2021	1040587.209	886232.490	577.68	577.72	31.11	561.61	15	Overburden/ Weathered Bedrock
MW-07	6/11/2021	1040354.896	887604.510	540.31	540.49	30.45	525.04	15	Overburden/ Weathered Bedrock
MW-08	6/10/2021	1040246.301	887212.279	545.27	545.28	30.61	529.67	15	Overburden/ Weathered Bedrock
MW-09	6/2/2021	1040523.215	886983.470	550.71	550.73	35.78	529.95	15	Overburden/ Weathered Bedrock
MW-10	6/8/2021	1040781.406	886693.211	557.58	557.40	32.39	540.01	15	Overburden/ Weathered Bedrock
MW-11	6/8/2021	1041164.567	886430.240	581.03	581.06	33.02	563.04	15	Overburden/ Weathered Bedrock
MW-12	6/10/2021	1040836.731	887502.433	545.58	545.57	45.80	514.77	15	Overburden/ Weathered Bedrock
MW-13	6/11/2021	1041047.777	887235.784	551.17	551.20	21.16	545.04	15	Overburden/ Weathered Bedrock
MW-14	6/9/2021	1041487.386	886782.388	563.77	563.86	21.16	557.70	15	Overburden/ Weathered Bedrock
MW-15	6/11/2021	1041098.447	887886.420	541.18	541.18	38.65	517.53	15	Overburden/ Weathered Bedrock

Table 1
Monitoring Well Construction Summary
Goodfellow Federal Complex
St. Louis, Missouri

Monitoring Well ID	Date Installed	Location ¹		Ground Surface Elevation (MSL)	Top of Casing Elevation (MSL)	Installed Total Depth (feet BTOC)	Elevation Top of Screen (feet amsl)	Screen Length (feet)	Formation Screened
		Northing (feet)	Easting (feet)						
MW-16	6/11/2021	1041247.606	887513.158	548.80	548.76	38.58	525.18	15	Overburden/ Weathered Bedrock
MW-17	6/3/2021	1041488.726	887088.652	557.77	557.84	24.63	548.21	15	Overburden/ Weathered Bedrock
MW-18	6/10/2021	1041681.762	886623.582	564.77	564.89	28.68	551.21	15	Overburden/ Weathered Bedrock
MW-19	6/11/2021	1041423.948	888125.728	524.51	524.51	40.62	498.89	15	Overburden/ Weathered Bedrock

Notes:

¹ North American Datum 1983 - State Plane, Missouri East 2401

BTOC = below top of casing

ID = identification

MSL = mean sea level

Table 2
Monitoring Well Gauging Measurements and Elevations
Goodfellow Federal Complex
St. Louis, Missouri

Monitoring Well ID	Location ¹		Ground Surface Elevation (MSL)	Top of Casing Elevation (MSL)	Installed Total Depth (feet BTOC)	Measured Total Depth (feet BTOC) (7/6/2021)	Measured Water Level (feet BTOC) (7/6/2021)	Groundwater Elevation (MSL) (7/6/2021)	Measured Total Depth (feet BTOC) (10/25/2021)	Measured Water Level (feet BTOC) (10/25/2021)	Groundwater Elevation (MSL) (10/25/2021)
	Northing (feet)	Easting (feet)									
MW-01	1039540.01	886756.16	543.61	543.55	45.37	45.37	27.15	516.40	45.37	27.18	516.37
MW-02	1039740.05	886772.67	544.91	544.92	40.15	40.15	14.12	530.80	40.14	13.14	531.78
MW-03	1039766.08	887286.65	539.97	539.95	35.54	35.54	11.95	528.00	35.55	13.75	526.20
MW-04	1039867.83	886169.82	559.24	559.27	38.48	38.48	16.99	542.28	38.48	16.86	542.41
MW-05	1040193.91	886714.16	550.50	550.51	33.34	33.34	10.78	539.73	33.39	3.20	547.31
MW-06	1040587.21	886232.49	577.68	577.72	31.11	31.11	22.02	555.70	31.36	8.03	569.69
MW-07	1040354.90	887604.51	540.31	540.49	30.45	30.45	16.40	524.09	30.46	16.45	524.04
MW-08	1040246.30	887212.28	545.27	545.28	30.61	30.61	12.51	532.77	30.62	11.19	534.09
MW-09	1040523.22	886983.47	550.71	550.73	35.78	35.78	13.62	537.11	35.79	12.59	538.14
MW-10	1040781.41	886693.21	557.58	557.40	32.39	32.39	9.56	547.84	32.40	8.66	548.74
MW-11	1041164.57	886430.24	581.03	581.06	33.02	33.02	DRY	NM	33.03	DRY	NM
MW-12	1040836.73	887502.43	545.58	545.57	45.80	45.80	15.67	529.90	45.80	12.23	533.34
MW-13	1041047.78	887235.78	551.17	551.20	21.16	21.16	3.20	548.00	21.19	5.99	545.21
MW-14	1041487.39	886782.39	563.77	563.86	21.16	21.16	DRY	NM	21.19	14.74	549.12
MW-15	1041098.45	887886.42	541.18	541.18	38.65	38.65	21.83	519.35	38.80	21.02	520.16
MW-16	1041247.61	887513.16	548.80	548.76	38.58	38.58	17.18	531.58	38.53	17.02	531.74
MW-17	1041488.73	887088.65	557.77	557.84	24.63	24.63	19.12	538.72	24.65	11.07	546.77
MW-18	1041681.76	886623.58	564.77	564.89	28.68	28.68	14.40	550.49	28.71	14.39	550.50
MW-19	1041423.95	888125.73	524.51	524.51	40.62	40.62	19.63	504.88	40.60	18.67	505.84

Notes:

* Measurable amounts of non-aqueous phase liquids were not identified during monitoring well gauging at any of the monitoring wells.

**Monitoring Well MW-19 was gauged on January 18, 2022. It was unaccessible on January 17, 2022 due to the Martin Luther King, Jr. holiday.

¹ North American Datum 1983 - State Plane, Missouri East 2401

BTOC = below top of casing

ID = identification

MSL = mean sea level

NM = not measured

Table 2
Monitoring Well Gauging Measurements and Elevations
Goodfellow Federal Complex
St. Louis, Missouri

Monitoring Well ID	Location ¹		Ground Surface Elevation (MSL)	Top of Casing Elevation (MSL)	Installed Total Depth (feet BTOC)	Measured Total Depth (feet BTOC) (1/17/2022)	Measured Water Level (feet BTOC) (1/17/2022)	Groundwater Elevation (MSL) (1/17/2022)	Measured Total Depth (feet BTOC) (1/17/2022)	Measured Water Level (feet BTOC) (4/18/2022)	Groundwater Elevation (MSL) (4/18/2022)
	Northing (feet)	Easting (feet)									
MW-01	1039540.01	886756.16	543.61	543.55	45.37	45.40	28.39	515.22	44.93	27.30	516.31
MW-02	1039740.05	886772.67	544.91	544.92	40.15	40.17	12.89	532.02	40.26	14.10	530.81
MW-03	1039766.08	887286.65	539.97	539.95	35.54	35.55	14.21	525.76	35.52	13.10	526.87
MW-04	1039867.83	886169.82	559.24	559.27	38.48	38.50	16.89	542.35	38.48	17.11	542.13
MW-05	1040193.91	886714.16	550.50	550.51	33.34	33.38	7.07	543.43	33.32	8.26	542.24
MW-06	1040587.21	886232.49	577.68	577.72	31.11	31.35	8.12	569.56	31.22	9.08	568.60
MW-07	1040354.90	887604.51	540.31	540.49	30.45	30.50	16.73	523.58	30.48	16.53	523.78
MW-08	1040246.30	887212.28	545.27	545.28	30.61	30.64	11.32	533.95	30.62	11.01	534.26
MW-09	1040523.22	886983.47	550.71	550.73	35.78	35.80	12.79	537.92	35.80	13.28	537.43
MW-10	1040781.41	886693.21	557.58	557.40	32.39	32.41	9.23	548.35	32.40	8.96	548.62
MW-11	1041164.57	886430.24	581.03	581.06	33.02	33.04	29.65	551.38	33.02	20.13	560.90
MW-12	1040836.73	887502.43	545.58	545.57	45.80	45.82	12.80	532.78	45.80	13.11	532.47
MW-13	1041047.78	887235.78	551.17	551.20	21.16	21.20	6.00	545.17	21.19	6.01	545.16
MW-14	1041487.39	886782.39	563.77	563.86	21.16	21.20	11.99	551.78	21.18	9.59	554.18
MW-15	1041098.45	887886.42	541.18	541.18	38.65	38.69	21.05	520.13	38.67	20.24	520.94
MW-16	1041247.61	887513.16	548.80	548.76	38.58	38.55	17.29	531.51	38.33	16.33	532.47
MW-17	1041488.73	887088.65	557.77	557.84	24.63	24.67	10.90	546.87	24.66	8.79	548.98
MW-18	1041681.76	886623.58	564.77	564.89	28.68	28.10	14.86	549.91	28.52	15.02	549.75
MW-19	1041423.95	888125.73	524.51	524.51	40.62	40.62**	20.10**	504.41**	40.65	19.14	505.37

Notes:

* Measurable amounts of non-aqueous phase liquids were not identified during monitoring well gauging at any of the monitoring wells.

**Monitoring Well MW-19 was gauged on January 18, 2022. It was unaccessible on January 17, 2022 due to the Martin Luther King, Jr. holiday.

¹ North American Datum 1983 - State Plane, Missouri East 2401

BTOC = below top of casing

ID = identification

MSL = mean sea level

NM = not measured

Table 3
Sample Collection Summary
Goodfellow Federal Complex
St. Louis, Missouri

Group Name	Monitoring Well ID	Sample Designator	Formation Screened	Water Level Measurements	Sampling Method		Analytical Parameters					Field Measured Parameters					QA/QC Samples				
					Low-flow	Grab	VOCs (8260B)	PAHs (8270C)	PCBs (8082)	Metals ¹ (Totals) (6010B)	Metals ^{1,2} (Dissolved) (6010B)	Explosives (8330)	Temp	pH	Cond	ORP	DO	Turbidity	Field Duplicate	MS/MSD	
GFC	MW-01	04182022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	X	X	X	X	X	X			
	MW-02	04182022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	X	X	X	X	X	X			
	MW-03	04182022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	X	X	X	X	X	X			
	MW-04	04182022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	X	--	--	X	X	X	X	X	X		X ⁴
	MW-05	04182022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	X	--	--	X	X	X	X	X	X		
	MW-06	04182022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	--	X	X	X	X	X	X		
	MW-07	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	--	X	X	X	X	X	X		
	MW-08	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	X	X	X	X	X	X	X	X ³	
	MW-09	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	--	X	X	X	X	X	X		
	MW-10	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	--	X	X	X	X	X	X		
	MW-11	04182022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	--	X	X	X	X	X	X		
	MW-12	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	--	X	X	X	X	X	X		
	MW-13	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	X	--	--	X	X	X	X	X	X		
	MW-14	04182022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	X	--	--	X	X	X	X	X	X		
	MW-15	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	X	--	--	X	X	X	X	X	X	X	
	MW-16	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	--	X	X	X	X	X	X		
	MW-17	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	--	X	X	X	X	X	X		
	MW-18	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	--	X	X	X	X	X	X		
	MW-19	04192022	Overburden/ Weathered Bedrock	X	X	--	X	X	X	X	--	--	--	X	X	X	X	X	X		

Notes:

1. Metals analyzed for antimony, arsenic, copper, lead, and zinc.
2. Groundwater samples for dissolved metals were field filtered through a 0.45-micron filter prior to collection.
3. Duplicate sample from MW-08 was only analyzed for explosives.
4. Laboratory did not analyze MS/MSD for PAHs.

Cond = specific conductance	GFC = Goodfellow Federal Complex	MS = matrix spike	ORP = oxidation-reduction potential	PCB = polychlorinated biphenyl
DO = dissolved oxygen	ID = identification	MSD = matrix spike duplicate	PAH = polycyclic aromatic hydrocarbon	VOC = volatile organic compound

Table 4
Liquid Investigation-Derived Waste Results
Goodfellow Federal Complex
St. Louis, Missouri

		IDW-GW04202022 4/20/2022
Parameter	Units	
Ignitability		
Ignitability, Open Cup	°F	>201
Cyanide		
Cyanide (Total)	mg/L	0.0050 U
Sulfide		
Sulfide (Total)	mg/L	0.050 U
Sulfate		
Sulfate (Total)	mg/L	86.0
pH		
pH	SU	7.5
Total Organic Halogens		
Total Organic Halogens	µg/L	100 U
Phenols		
Phenolics, Total Recoverable	mg/L	0.12
Polychlorinated Biphenyls		
Aroclor 1016	µg/L	0.97 U
Aroclor 1221	µg/L	0.97 U
Aroclor 1232	µg/L	0.97 U
Aroclor 1242	µg/L	0.97 U
Aroclor 1248	µg/L	0.97 U
Aroclor 1254	µg/L	0.97 U
Aroclor 1260	µg/L	0.97 U
Herbicides (Toxicity Characteristic Leaching Procedure)		
2,4-D	mg/L	0.0050 U
2,4,5-TP (Silvex)	mg/L	0.0050 U
Metals (Toxicity Characteristic Leaching Procedure)		
Arsenic	mg/L	0.50 U
Barium	mg/L	2.5 U
Cadmium	mg/L	0.050 U
Chromium	mg/L	0.10 U
Lead	mg/L	0.50 U
Selenium	mg/L	0.50 U
Silver	mg/L	0.10 U
Mercury	mg/L	0.0020 U
Pesticides (Toxicity Characteristic Leaching Procedure)		
gamma-BHC (Lindane)	µg/L	0.25 U
Chlordane (Technical)	µg/L	5.0 U
Endrin	µg/L	0.50 U
Heptachlor	µg/L	0.25 U
Heptachlor epoxide	µg/L	0.25 U
Methoxychlor	µg/L	2.5 U
Toxaphene	µg/L	5.0 U

Table 4
Liquid Investigation-Derived Waste Results
Goodfellow Federal Complex
St. Louis, Missouri

		IDW-GW04202022 4/20/2022
Parameter	Units	
Semivolatle Organic Compounds (Toxicity Characteristic Leaching Procedure)		
1,4-Dichlorbenzene	µg/L	100 U
2,4-Dinitrotoluene	µg/L	100 U
Hexachloro-1,3-butadiene	µg/L	100 U
Hexachlorobenzene	µg/L	100 U
Hexachloroethane	µg/L	100 U
2-Methylphenol (o-Cresol)	µg/L	100 U
3&4-Methylphenol (m&p Cresol)	µg/L	100 U
Nitrobenzene	µg/L	100 U
Pentachlorophenol	µg/L	500 U
Pyridine	µg/L	500 U
2,4,5-Trichlorophenol	µg/L	500 U
2,4,6-Trichlorophenol	µg/L	100 U
Volatile Organic Compounds (Toxicity Characteristic Leaching Procedure)		
Benzene	µg/L	50.0 U
2-Butanone (MEK)	µg/L	1,000 U
Carbon tetrachloride	µg/L	50.0 U
Chlorobenzene	µg/L	50.0 U
Chlorform	µg/L	200 U
1,2-Dichloroethane	µg/L	50.0 U
1,1-Dichloroethene	µg/L	50.0 U
Tetrachloroethene	µg/L	50.0 U
Trichloroethene	µg/L	50.0 U
Vinyl chloride	µg/L	50.0 U

Notes:

Bold - compound was detected

°F - degrees Fahrenheit

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-01	MW-02	MW-03	MW-04
			Sample Designator:	04182022	04182022	04182022	04182022
			Sample Date:	4/18/2022	4/18/2022	4/18/2022	4/18/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0107	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	0.0500 U	
Arsenic	mg/L	10	NA	NA	NA	0.0250 U	
Copper	mg/L	1,300	NA	NA	NA	0.0050 U	
Lead	mg/L	15	NA	NA	NA	0.0150 U	
Zinc	mg/L	4.69	NA	NA	NA	0.0100 U	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00400 U	0.00400 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00400 U	0.00400 U	0.00100 U	0.00100 U	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-01	MW-02	MW-03	MW-04
			Sample Designator:	04182022	04182022	04182022	04182022
			Sample Date:	4/18/2022	4/18/2022	4/18/2022	4/18/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-01	MW-02	MW-03	MW-04
			Sample Designator:	04182022	04182022	04182022	04182022
			Sample Date:	4/18/2022	4/18/2022	4/18/2022	4/18/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-01	MW-02	MW-03	MW-04
			Sample Designator:	04182022	04182022	04182022	04182022
			Sample Date:	4/18/2022	4/18/2022	4/18/2022	4/18/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-01	MW-02	MW-03	MW-04
			Sample Designator:	04182022	04182022	04182022	04182022
			Sample Date:	4/18/2022	4/18/2022	4/18/2022	4/18/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Rinse was collected following decontamination of sampling equipment used for Monitoring Well MW-19.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-05	MW-06	MW-07
			Sample Designator:	04182022	04182022	04192022
			Sample Date:	4/18/2022	4/18/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-
Parameter	Units	PAL ¹				
Metals, Total						
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0326	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved						
Antimony	mg/L	6	0.0500 U	NA	NA	
Arsenic	mg/L	10	0.0250 U	NA	NA	
Copper	mg/L	1,300	0.0050 U	NA	NA	
Lead	mg/L	15	0.0150 U	NA	NA	
Zinc	mg/L	4.69	0.0100 U	NA	NA	
Polychlorinated Biphenyls						
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-05	MW-06	MW-07
			Sample Designator:	04182022	04182022	04192022
			Sample Date:	4/18/2022	4/18/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-
Parameter	Units	PAL ¹				
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-05	MW-06	MW-07
			Sample Designator:	04182022	04182022	04192022
			Sample Date:	4/18/2022	4/18/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-
Parameter	Units	PAL ¹				
Volatile Organic Compounds (continued)						
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-05	MW-06	MW-07
			Sample Designator:	04182022	04182022	04192022
			Sample Date:	4/18/2022	4/18/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-
Parameter	Units	PAL ¹				
Volatile Organic Compounds (continued)						
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U
Explosives						
Tetryl	mg/L	0.154	NA	NA	NA	NA
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA
RDX	mg/L	0.0607	NA	NA	NA	NA
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA
HMX	mg/L	0.782	NA	NA	NA	NA
PETN	mg/L	5.06	NA	NA	NA	NA
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-05	MW-06	MW-07
			Sample Designator:	04182022	04182022	04192022
			Sample Date:	4/18/2022	4/18/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-
Parameter	Units	PAL¹				

Notes:

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

² Rinse was collected following decontamination of sampling equipment used for Monitoring Well MW-19.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-09	MW-10
			Sample Designator:	04192022	04192022	04192022	04192022
			Sample Date:	4/19/2022	4/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	NA	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	NA	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	NA	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	NA	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	NA	0.0127	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	NA	
Arsenic	mg/L	10	NA	NA	NA	NA	
Copper	mg/L	1,300	NA	NA	NA	NA	
Lead	mg/L	15	NA	NA	NA	NA	
Zinc	mg/L	4.69	NA	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	NA	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	NA	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	NA	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	NA	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	NA	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	NA	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	NA	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	NA	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	NA	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	NA	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	NA	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	NA	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	NA	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	NA	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	NA	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	NA	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	NA	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	NA	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	NA	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	NA	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	NA	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	NA	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	NA	0.00100 U	0.00100 U	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-09	MW-10
			Sample Designator:	04192022	04192022	04192022	04192022
			Sample Date:	4/19/2022	4/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	NA	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	NA	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	NA	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	NA	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	NA	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	NA	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	NA	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	NA	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	NA	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	NA	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	NA	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	NA	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	NA	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	NA	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	NA	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	NA	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	NA	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	NA	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	NA	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	NA	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	NA	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	NA	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	NA	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	NA	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	NA	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	NA	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	NA	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	NA	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	NA	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	NA	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	NA	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	NA	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	NA	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	NA	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	NA	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	NA	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	NA	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	NA	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	NA	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	NA	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	NA	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	NA	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	NA	0.002 U	0.002 U	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-09	MW-10
			Sample Designator:	04192022	04192022	04192022	04192022
			Sample Date:	4/19/2022	4/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	NA	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	NA	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	NA	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	NA	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	NA	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	NA	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	NA	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	NA	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	NA	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	NA	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	NA	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	NA	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	NA	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	NA	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	NA	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	NA	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	NA	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	NA	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	NA	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	NA	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	NA	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	NA	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	NA	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	NA	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	NA	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	NA	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	NA	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	NA	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	NA	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	NA	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	NA	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	NA	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	NA	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	NA	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	NA	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	NA	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	NA	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	NA	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	NA	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	NA	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	NA	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	NA	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	NA	0.002 U	0.002 U	0.002 U

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-09	MW-10
			Sample Designator:	04192022	04192022	04192022	04192022
			Sample Date:	4/19/2022	4/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	NA	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	NA	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	NA	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	NA	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	NA	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	NA	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	NA	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	NA	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	NA	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	NA	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	NA	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	NA	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	NA	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	NA	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	NA	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	NA	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	NA	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	0.000500 U	0.000500 U	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	0.00200 U	0.00200 U	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	0.00200 U	0.00200 U	NA	NA	
RDX	mg/L	0.0607	0.00200 U	0.00200 U	NA	NA	
Nitrobenzene	mg/L	0.00181	0.000500 U	0.000500 U	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	0.000500 U	0.000500 U	NA	NA	
2-Nitrotoluene	mg/L	0.000604	0.000500 U	0.000500 U	NA	NA	
3-Nitrotoluene	mg/L	0.0649	0.000500 U	0.000500 U	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	0.000500 U	0.000500 U	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	0.005000 U	0.000500 U	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	0.000500 U	0.000500 U	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	0.000500 U	0.000500 U	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	0.000500 U	0.000500 U	NA	NA	
HMX	mg/L	0.782	0.00200 U	0.00200 U	NA	NA	
PETN	mg/L	5.06	0.000500 U	0.000500 U	NA	NA	
Nitroglycerine	mg/L	0.00107	0.000500 U	0.000500 U	NA	NA	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-09	MW-10
			Sample Designator:	04192022	04192022	04192022	04192022
			Sample Date:	4/19/2022	4/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	-
Parameter	Units	PAL¹					

Notes:

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

² Rinse was collected following decontamination of sampling equipment used for Monitoring Well MW-19.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-11	MW-12	MW-13	MW-14
			Sample Designator:	04182022	04192022	04192022	04182022
			Sample Date:	4/18/2022	4/19/2022	4/19/2022	4/18/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0142	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	0.0500 U	0.0500 U	
Arsenic	mg/L	10	NA	NA	0.0250 U	0.0250 U	
Copper	mg/L	1,300	NA	NA	0.0050 U	0.0050 U	
Lead	mg/L	15	NA	NA	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	NA	NA	0.0100 U	0.0100 U	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00100 U	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-11	MW-12	MW-13	MW-14
			Sample Designator:	04182022	04192022	04192022	04182022
			Sample Date:	4/18/2022	4/19/2022	4/19/2022	4/18/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-11	MW-12	MW-13	MW-14
			Sample Designator:	04182022	04192022	04192022	04182022
			Sample Date:	4/18/2022	4/19/2022	4/19/2022	4/18/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-11	MW-12	MW-13	MW-14
			Sample Designator:	04182022	04192022	04192022	04182022
			Sample Date:	4/18/2022	4/19/2022	4/19/2022	4/18/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NS	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NS	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NS	NA	NA	NA	
RDX	mg/L	0.0607	NS	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NS	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NS	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NS	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NS	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NS	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NS	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NS	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NS	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NS	NA	NA	NA	
HMX	mg/L	0.782	NS	NA	NA	NA	
PETN	mg/L	5.06	NS	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NS	NA	NA	NA	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-11	MW-12	MW-13	MW-14
			Sample Designator:	04182022	04192022	04192022	04182022
			Sample Date:	4/18/2022	4/19/2022	4/19/2022	4/18/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Rinse was collected following decontamination of sampling equipment used for Monitoring Well MW-19.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15/DUP	MW-16	MW-17
			Sample Designator:	04192022	04192022	04192022	04192022
			Sample Date:	4/19/2022	4/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0189	0.0216	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	0.0500 U	0.0500 U	NA	NA	
Arsenic	mg/L	10	0.0250 U	0.0250 U	NA	NA	
Copper	mg/L	1,300	0.0050 U	0.0050 U	NA	NA	
Lead	mg/L	15	0.0150 U	0.0150 U	NA	NA	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00400 U	0.00100 U	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15/DUP	MW-16	MW-17
			Sample Designator:	04192022	04192022	04192022	04192022
			Sample Date:	4/19/2022	4/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15/DUP	MW-16	MW-17
			Sample Designator:	04192022	04192022	04192022	04192022
			Sample Date:	4/19/2022	4/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15/DUP	MW-16	MW-17
			Sample Designator:	04192022	04192022	04192022	04192022
			Sample Date:	4/19/2022	4/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15/DUP	MW-16	MW-17
			Sample Designator:	04192022	04192022	04192022	04192022
			Sample Date:	4/19/2022	4/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	-
Parameter	Units	PAL¹					

Notes:

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

² Rinse was collected following decontamination of sampling equipment used for Monitoring Well MW-19.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-18	MW-19	ERB 04202022 ²
			Sample Designator:	04192022	04192022	04202022
			Sample Date:	4/19/2022	4/19/2022	4/20/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	Rinsate
Parameter	Units	PAL ¹				
Metals, Total						
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Lead	mg/L	15	0.0351	0.0150 U	0.0150 U	0.0150 U
Zinc	mg/L	4.69	0.0100 U	0.0168	0.0100 U	0.0100 U
Metals, Dissolved						
Antimony	mg/L	6	NA	NA	NA	NA
Arsenic	mg/L	10	NA	NA	NA	NA
Copper	mg/L	1,300	NA	NA	NA	NA
Lead	mg/L	15	NA	NA	NA	NA
Zinc	mg/L	4.69	NA	NA	NA	NA
Polychlorinated Biphenyls						
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00100 U

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-18	MW-19	ERB 04202022 ²
			Sample Designator:	04192022	04192022	04202022
			Sample Date:	4/19/2022	4/19/2022	4/20/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	Rinsate
Parameter	Units	PAL ¹				
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-18	MW-19	ERB 04202022 ²
			Sample Designator:	04192022	04192022	04202022
			Sample Date:	4/19/2022	4/19/2022	4/20/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	Rinsate
Parameter	Units	PAL ¹				
Volatile Organic Compounds (continued)						
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-18	MW-19	ERB 04202022 ²
			Sample Designator:	04192022	04192022	04202022
			Sample Date:	4/19/2022	4/19/2022	4/20/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	Rinsate
Parameter	Units	PAL ¹				
Volatile Organic Compounds (continued)						
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U
Explosives						
Tetryl	mg/L	0.154	NA	NA	NA	NA
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA
RDX	mg/L	0.0607	NA	NA	NA	NA
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA
HMX	mg/L	0.782	NA	NA	NA	NA
PETN	mg/L	5.06	NA	NA	NA	NA
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA

Table 5
Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-18	MW-19	ERB 04202022²
			Sample Designator:	04192022	04192022	04202022
			Sample Date:	4/19/2022	4/19/2022	4/20/2022
			Quarterly Event:	4th Quarter	4th Quarter	4th Quarter
			Notes:	-	-	Rinsate
Parameter	Units	PAL¹				

Notes:

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

² Rinse was collected following decontamination of sampling equipment used for Monitoring Well MW-19.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-01	MW-01	MW-01	MW-01
			Sample Designator:	07062021	10252021	01172022	04182022
			Sample Date:	7/6/2021	10/25/2021	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	0.0500 U	NA	NA	
Arsenic	mg/L	10	NA	0.0250 U	NA	NA	
Copper	mg/L	1,300	NA	0.0050 U	NA	NA	
Lead	mg/L	15	NA	0.0150 U	NA	NA	
Zinc	mg/L	4.69	NA	0.0100 U	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-01	MW-01	MW-01	MW-01
			Sample Designator:	07062021	10252021	01172022	04182022
			Sample Date:	7/6/2021	10/25/2021	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.0182 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-01	MW-01	MW-01	MW-01
			Sample Designator:	07062021	10252021	01172022	04182022
			Sample Date:	7/6/2021	10/25/2021	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-01	MW-01	MW-01	MW-01
			Sample Designator:	07062021	10252021	01172022	04182022
			Sample Date:	7/6/2021	10/25/2021	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-01	MW-01	MW-01	MW-01
			Sample Designator:	07062021	10252021	01172022	04182022
			Sample Date:	7/6/2021	10/25/2021	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-02	MW-02/DUP	MW-02
			Sample Designator:	07072021	07072021	10252021
			Sample Date:	7/7/2021	7/7/2021	10/25/2021
			Quarterly Event:	1st Quarter	1st Quarter	2nd Quarter
			Notes:	-	Duplicate	-
Parameter	Units	PAL ¹				
Metals, Total						
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved						
Antimony	mg/L	6	0.0500 U	0.0500 U	NA	
Arsenic	mg/L	10	0.0250 U	0.0250 U	NA	
Copper	mg/L	1,300	0.0050 U	0.0050 U	NA	
Lead	mg/L	15	0.0150 U	0.0150 U	NA	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	NA	
Polychlorinated Biphenyls						
Aroclor 1016	mg/L	0.0172	0.00105 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00105 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00105 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00105 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00105 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00105 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00105 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	mg/L	1,610	0.00100 U	0.00400 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00400 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00400 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00400 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00400 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00400 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00400 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00400 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00400 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00400 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00400 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00400 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00400 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00400 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00400 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00400 U	0.00100 U	
Total Petroleum Hydrocarbons²						
Gasoline Range Organics	mg/L	18.1	0.5 U	0.5 U	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	2 U	NA	
Oil Range Organics	mg/L	31.8	0.7 U	2.8 U	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-02	MW-02/DUP	MW-02
			Sample Designator:	07072021	07072021	10252021
			Sample Date:	7/7/2021	7/7/2021	10/25/2021
			Quarterly Event:	1st Quarter	1st Quarter	2nd Quarter
			Notes:	-	Duplicate	-
Parameter	Units	PAL ¹				
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	3370	0.01 U	0.01 U	0.0135 U	0.0135 U
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-02	MW-02/DUP	MW-02
			Sample Designator:	07072021	07072021	10252021
			Sample Date:	7/7/2021	7/7/2021	10/25/2021
			Quarterly Event:	1st Quarter	1st Quarter	2nd Quarter
			Notes:	-	Duplicate	-
Parameter	Units	PAL ¹				
Volatile Organic Compounds (continued)						
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.001 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-02	MW-02/DUP	MW-02
			Sample Designator:	07072021	07072021	10252021
			Sample Date:	7/7/2021	7/7/2021	10/25/2021
			Quarterly Event:	1st Quarter	1st Quarter	2nd Quarter
			Notes:	-	Duplicate	-
Parameter	Units	PAL ¹				
Volatile Organic Compounds (continued)						
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U
Explosives						
Tetryl	mg/L	0.154	NA	NA	NA	NA
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA
RDX	mg/L	0.0607	NA	NA	NA	NA
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA
HMX	mg/L	0.782	NA	NA	NA	NA
PETN	mg/L	5.06	NA	NA	NA	NA
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-02	MW-02/DUP	MW-02
			Sample Designator:	07072021	07072021	10252021
			Sample Date:	7/7/2021	7/7/2021	10/25/2021
			Quarterly Event:	1st Quarter	1st Quarter	2nd Quarter
			Notes:	-	Duplicate	-
Parameter	Units	PAL¹				

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC
			Sample Point:	MW-02	MW-02
			Sample Designator:	01172022	04182022
			Sample Date:	1/17/2022	4/18/2022
			Quarterly Event:	3rd Quarter	4th Quarter
			Notes:	-	-
Parameter	Units	PAL ¹			
Metals, Total					
Antimony	mg/L	6	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0107	
Metals, Dissolved					
Antimony	mg/L	6	NA	NA	
Arsenic	mg/L	10	NA	NA	
Copper	mg/L	1,300	NA	NA	
Lead	mg/L	15	NA	NA	
Zinc	mg/L	4.69	NA	NA	
Polychlorinated Biphenyls					
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	mg/L	1,610	0.00100 U	0.00400 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00400 U	
Anthracene	mg/L	2,290	0.00100 U	0.00400 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00400 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00400 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00400 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00400 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00400 U	
Chrysene	mg/L	81.7	0.00100 U	0.00400 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00400 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00400 U	
Fluorene	mg/L	3,010	0.00100 U	0.00400 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00400 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00400 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00400 U	
Pyrene	mg/L	17,300	0.00100 U	0.00400 U	
Total Petroleum Hydrocarbons²					
Gasoline Range Organics	mg/L	18.1	NA	NA	
Diesel Range Organics	mg/L	34.3	NA	NA	
Oil Range Organics	mg/L	31.8	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	GFC	GFC
		Sample Point:	MW-02	MW-02
		Sample Designator:	01172022	04182022
		Sample Date:	1/17/2022	4/18/2022
		Quarterly Event:	3rd Quarter	4th Quarter
		Notes:	-	-
Parameter	Units	PAL ¹		
Volatile Organic Compounds				
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U
2-Butanone	mg/L	354	0.01 U	0.01 U
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U
2-Hexanone	mg/L	1.46	0.01 U	0.01 U
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U
Acetone	mg/L	3370	0.01 U	0.01 U
Acetonitrile	mg/L	6.82	0.01 U	0.01 U
Acrolein	mg/L	0.04	0.02 U	0.02 U
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U
Allyl chloride	mg/L	0.01	0.005 U	0.005 U
Benzene	mg/L	0.00246	0.0005 U	0.0005 U
Bromobenzene	mg/L	0.125	0.002 U	0.002 U
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	GFC	GFC
		Sample Point:	MW-02	MW-02
		Sample Designator:	01172022	04182022
		Sample Date:	1/17/2022	4/18/2022
		Quarterly Event:	3rd Quarter	4th Quarter
		Notes:	-	-
Parameter	Units	PAL ¹		
Volatile Organic Compounds (continued)				
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

		Group Name:	GFC	GFC
		Sample Point:	MW-02	MW-02
		Sample Designator:	01172022	04182022
		Sample Date:	1/17/2022	4/18/2022
		Quarterly Event:	3rd Quarter	4th Quarter
		Notes:	-	-
Parameter	Units	PAL ¹		
Volatile Organic Compounds (continued)				
Propionitrile	mg/L	NE	0.01 U	0.01 U
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U
Styrene	mg/L	1.65	0.002 U	0.002 U
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U
Toluene	mg/L	3.16	0.002 U	0.002 U
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U
Trichloroethene	mg/L	0.004	0.002 U	0.002 U
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U
Xylenes, Total	mg/L	10	0.004 U	0.004 U
Explosives				
Tetryl	mg/L	0.154	NA	NA
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA
RDX	mg/L	0.0607	NA	NA
Nitrobenzene	mg/L	0.00181	NA	NA
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA
2-Nitrotoluene	mg/L	0.000604	NA	NA
3-Nitrotoluene	mg/L	0.0649	NA	NA
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA
HMX	mg/L	0.782	NA	NA
PETN	mg/L	5.06	NA	NA
Nitroglycerine	mg/L	0.00107	NA	NA

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC
			Sample Point:	MW-02	MW-02
			Sample Designator:	01172022	04182022
			Sample Date:	1/17/2022	4/18/2022
			Quarterly Event:	3rd Quarter	4th Quarter
			Notes:	-	-
Parameter	Units	PAL¹			

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-03	MW-03	MW-03	MW-03
			Sample Designator:	07072021	10252021	01172022	04182022
			Sample Date:	7/7/2021	10/25/2021	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	NA	
Arsenic	mg/L	10	NA	NA	NA	NA	
Copper	mg/L	1,300	NA	NA	NA	NA	
Lead	mg/L	15	NA	NA	NA	NA	
Zinc	mg/L	4.69	NA	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-03	MW-03	MW-03	MW-03
			Sample Designator:	07072021	10252021	01172022	04182022
			Sample Date:	7/7/2021	10/25/2021	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-03	MW-03	MW-03	MW-03
			Sample Designator:	07072021	10252021	01172022	04182022
			Sample Date:	7/7/2021	10/25/2021	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-03	MW-03	MW-03	MW-03
			Sample Designator:	07072021	10252021	01172022	04182022
			Sample Date:	7/7/2021	10/25/2021	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-03	MW-03	MW-03	MW-03
			Sample Designator:	07072021	10252021	01172022	04182022
			Sample Date:	7/7/2021	10/25/2021	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-04	MW-04	MW-04	MW-04
			Sample Designator:	07072021	10262021	01182022	04182022
			Sample Date:	7/7/2021	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	NA	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	NA	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	NA	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	NA	0.0100 U	0.0100 U	0.0100 U	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-04	MW-04	MW-04	MW-04
			Sample Designator:	07072021	10262021	01182022	04182022
			Sample Date:	7/7/2021	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.0180 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-04	MW-04	MW-04	MW-04
			Sample Designator:	07072021	10262021	01182022	04182022
			Sample Date:	7/7/2021	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-04	MW-04	MW-04	MW-04
			Sample Designator:	07072021	10262021	01182022	04182022
			Sample Date:	7/7/2021	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-04	MW-04	MW-04	MW-04
			Sample Designator:	07072021	10262021	01182022	04182022
			Sample Date:	7/7/2021	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-05	MW-05	MW-05	MW-05
			Sample Designator:	07072021	10252021	01172022	04182022
			Sample Date:	7/7/2021	10/25/201	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0326	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	0.0500 U	NA	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	NA	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	NA	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	NA	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	NA	0.0100 U	0.0100 U	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-05	MW-05	MW-05	MW-05
			Sample Designator:	07072021	10252021	01172022	04182022
			Sample Date:	7/7/2021	10/25/201	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-05	MW-05	MW-05	MW-05
			Sample Designator:	07072021	10252021	01172022	04182022
			Sample Date:	7/7/2021	10/25/201	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-05	MW-05	MW-05	MW-05
			Sample Designator:	07072021	10252021	01172022	04182022
			Sample Date:	7/7/2021	10/25/201	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-05	MW-05	MW-05	MW-05
			Sample Designator:	07072021	10252021	01172022	04182022
			Sample Date:	7/7/2021	10/25/201	1/17/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-06	MW-06	MW-06	MW-06
			Sample Designator:	07072021	10262021	01182022	04182022
			Sample Date:	7/7/2021	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	NA	
Arsenic	mg/L	10	NA	NA	NA	NA	
Copper	mg/L	1,300	NA	NA	NA	NA	
Lead	mg/L	15	NA	NA	NA	NA	
Zinc	mg/L	4.69	NA	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-06	MW-06	MW-06	MW-06
			Sample Designator:	07072021	10262021	01182022	04182022
			Sample Date:	7/7/2021	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-06	MW-06	MW-06	MW-06
			Sample Designator:	07072021	10262021	01182022	04182022
			Sample Date:	7/7/2021	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-06	MW-06	MW-06	MW-06
			Sample Designator:	07072021	10262021	01182022	04182022
			Sample Date:	7/7/2021	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-06	MW-06	MW-06	MW-06
			Sample Designator:	07072021	10262021	01182022	04182022
			Sample Date:	7/7/2021	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-07	MW-07	MW-07	MW-07
			Sample Designator:	07082021	10282021	01202022	04192022
			Sample Date:	7/8/2021	10/28/2021	1/20/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	NA	
Arsenic	mg/L	10	NA	NA	NA	NA	
Copper	mg/L	1,300	NA	NA	NA	NA	
Lead	mg/L	15	NA	NA	NA	NA	
Zinc	mg/L	4.69	NA	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-07	MW-07	MW-07	MW-07
			Sample Designator:	07082021	10282021	01202022	04192022
			Sample Date:	7/8/2021	10/28/2021	1/20/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.0144 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-07	MW-07	MW-07	MW-07
			Sample Designator:	07082021	10282021	01202022	04192022
			Sample Date:	7/8/2021	10/28/2021	1/20/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-07	MW-07	MW-07	MW-07
			Sample Designator:	07082021	10282021	01202022	04192022
			Sample Date:	7/8/2021	10/28/2021	1/20/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-07	MW-07	MW-07	MW-07
			Sample Designator:	07082021	10282021	01202022	04192022
			Sample Date:	7/8/2021	10/28/2021	1/20/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-08	MW-08/DUP
			Sample Designator:	07092021	07092021	10272021	10272021
			Sample Date:	7/9/2021	7/9/2021	10/27/2021	10/27/2021
			Quarterly Event:	1st Quarter	1st Quarter	2nd Quarter	2nd Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	NA	0.0500 U	NA	
Arsenic	mg/L	10	0.0250 U	NA	0.0250 U	NA	
Copper	mg/L	1,300	0.0540	NA	0.0050 U	NA	
Lead	mg/L	15	0.0150 U	NA	0.0150 U	NA	
Zinc	mg/L	4.69	0.0413	NA	0.0100 U	NA	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	NA	
Arsenic	mg/L	10	NA	NA	NA	NA	
Copper	mg/L	1,300	NA	NA	NA	NA	
Lead	mg/L	15	NA	NA	NA	NA	
Zinc	mg/L	4.69	NA	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	NA	0.00100 U	NA	
Aroclor 1221	mg/L	0.002	0.00100 U	NA	0.00100 U	NA	
Aroclor 1232	mg/L	0.002	0.00100 U	NA	0.00100 U	NA	
Aroclor 1242	mg/L	0.00101	0.00100 U	NA	0.00100 U	NA	
Aroclor 1248	mg/L	0.002	0.00100 U	NA	0.00100 U	NA	
Aroclor 1254	mg/L	0.00125	0.00100 U	NA	0.00100 U	NA	
Aroclor 1260	mg/L	0.002	0.00100 U	NA	0.00100 U	NA	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	NA	0.00100 U	NA	
Acenaphthylene	mg/L	2,060	0.00100 U	NA	0.00100 U	NA	
Anthracene	mg/L	2,290	0.00100 U	NA	0.00100 U	NA	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	NA	0.00100 U	NA	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	NA	0.00100 U	NA	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	NA	0.00100 U	NA	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	NA	0.00100 U	NA	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	NA	0.00100 U	NA	
Chrysene	mg/L	81.7	0.00100 U	NA	0.00100 U	NA	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	NA	0.00100 U	NA	
Fluoranthene	mg/L	14,200	0.00100 U	NA	0.00100 U	NA	
Fluorene	mg/L	3,010	0.00100 U	NA	0.00100 U	NA	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	NA	0.00100 U	NA	
Naphthalene	mg/L	0.1	0.00100 U	NA	0.00100 U	NA	
Phenanthrene	mg/L	1,190	0.00100 U	NA	0.00100 U	NA	
Pyrene	mg/L	17,300	0.00100 U	NA	0.00100 U	NA	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	NA	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-08	MW-08/DUP
			Sample Designator:	07092021	07092021	10272021	10272021
			Sample Date:	7/9/2021	7/9/2021	10/27/2021	10/27/2021
			Quarterly Event:	1st Quarter	1st Quarter	2nd Quarter	2nd Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	NA	0.002 U	NA	NA
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	NA	0.002 U	NA	NA
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	NA	0.002 U	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	NA	0.005 U	NA	NA
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	NA	0.0005 U	NA	NA
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	NA	0.03 U	NA	NA
1,1-Dichloroethane	mg/L	0.0114	0.002 U	NA	0.002 U	NA	NA
1,1-Dichloroethene	mg/L	0.0276	0.002 U	NA	0.002 U	NA	NA
1,1-Dichloropropene	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	NA	0.002 U	NA	NA
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	NA	0.002 U	NA	NA
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	NA	0.002 U	NA	NA
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	NA	0.002 U	NA	NA
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
1,2-Dibromoethane	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	NA	0.002 U	NA	NA
1,2-Dichloroethane	mg/L	0.00355	0.002 U	NA	0.002 U	NA	NA
1,2-Dichloroethene, Total	mg/L	70	0.004 U	NA	0.004 U	NA	NA
1,2-Dichloropropane	mg/L	0.00577	0.002 U	NA	0.002 U	NA	NA
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	NA	0.002 U	NA	NA
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	NA	0.002 U	NA	NA
1,3-Dichloropropane	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	NA	0.004 U	NA	NA
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	NA	0.004 U	NA	NA
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	NA	0.002 U	NA	NA
1-Chlorobutane	mg/L	NE	0.005 U	NA	0.005 U	NA	NA
2,2-Dichloropropane	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
2-Butanone	mg/L	354	0.01 U	NA	0.01 U	NA	NA
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	NA	0.005 U	NA	NA
2-Chlorotoluene	mg/L	17.1	0.002 U	NA	0.002 U	NA	NA
2-Hexanone	mg/L	1.46	0.01 U	NA	0.01 U	NA	NA
2-Nitropropane	mg/L	0.02	0.01 U	NA	0.01 U	NA	NA
4-Chlorotoluene	mg/L	0.0666	0.002 U	NA	0.002 U	NA	NA
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	NA	0.01 U	NA	NA
Acetone	mg/L	3370	0.01 U	NA	0.0103 U	NA	NA
Acetonitrile	mg/L	6.82	0.01 U	NA	0.01 U	NA	NA
Acrolein	mg/L	0.04	0.02 U	NA	0.02 U	NA	NA
Acrylonitrile	mg/L	0.0117	0.005 U	NA	0.005 U	NA	NA
Allyl chloride	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
Benzene	mg/L	0.00246	0.0005 U	NA	0.0005 U	NA	NA
Bromobenzene	mg/L	0.125	0.002 U	NA	0.002 U	NA	NA
Bromochloromethane	mg/L	0.106	0.002 U	NA	0.002 U	NA	NA

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-08	MW-08/DUP
			Sample Designator:	07092021	07092021	10272021	10272021
			Sample Date:	7/9/2021	7/9/2021	10/27/2021	10/27/2021
			Quarterly Event:	1st Quarter	1st Quarter	2nd Quarter	2nd Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
Bromoform	mg/L	0.214	0.002 U	NA	0.002 U	NA	NA
Bromomethane	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
Carbon disulfide	mg/L	0.177	0.002 U	NA	0.002 U	NA	NA
Carbon tetrachloride	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
Chlorobenzene	mg/L	0.0702	0.002 U	NA	0.002 U	NA	NA
Chloroethane	mg/L	3.13	0.002 U	NA	0.002 U	NA	NA
Chloroform	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
Chloromethane	mg/L	0.0331	0.005 U	NA	0.005 U	NA	NA
Chloroprene	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
cis-1,2-Dichloroethene	mg/L	70	0.002 U	NA	0.002 U	NA	NA
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	NA	0.002 U	NA	NA
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
Cyclohexanone	mg/L	404	0.02 U	NA	0.02 U	NA	NA
Dibromochloromethane	mg/L	80	0.002 U	NA	0.002 U	NA	NA
Dibromomethane	mg/L	0.0199	0.002 U	NA	0.002 U	NA	NA
Dichlorodifluoromethane	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
Diisopropyl ether	mg/L	0.0697	0.002 U	NA	0.002 U	NA	NA
Ethyl acetate	mg/L	2.13	0.01 U	NA	0.01 U	NA	NA
Ethyl ether	mg/L	NE	0.005 U	NA	0.005 U	NA	NA
Ethyl methacrylate	mg/L	2.76	0.005 U	NA	0.005 U	NA	NA
Ethylbenzene	mg/L	0.00609	0.002 U	NA	0.002 U	NA	NA
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	NA	0.002 U	NA	NA
Hexachlorobutadiene	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
Hexachloroethane	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
Iodomethane	mg/L	NE	0.005 U	NA	0.005 U	NA	NA
Isopropylbenzene	mg/L	0.1790	0.002 U	NA	0.002 U	NA	NA
m,p-Xylenes	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
Methacrylonitrile	mg/L	0.495	0.005 U	NA	0.005 U	NA	NA
Methyl Methacrylate	mg/L	10.1	0.005 U	NA	0.005 U	NA	NA
Methyl tert-butyl ether	mg/L	0.664	0.002 U	NA	0.002 U	NA	NA
Methylacrylate	mg/L	0.417	0.005 U	NA	0.005 U	NA	NA
Methylene chloride	mg/L	0.685	0.002 U	NA	0.002 U	NA	NA
Naphthalene	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
n-Butyl acetate	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
n-Butylbenzene	mg/L	8.76	0.002 U	NA	0.002 U	NA	NA
n-Heptane	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
n-Hexane	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
Nitrobenzene	mg/L	0.151	0.05 U	NA	0.05 U	NA	NA
n-Propylbenzene	mg/L	0.452	0.002 U	NA	0.002 U	NA	NA
o-Xylene	mg/L	0.0873	0.002 U	NA	0.002 U	NA	NA
Pentachloroethane	mg/L	NE	0.005 U	NA	0.005 U	NA	NA
p-Isopropyltoluene	mg/L	98.5	0.002 U	NA	0.002 U	NA	NA

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-08	MW-08/DUP
			Sample Designator:	07092021	07092021	10272021	10272021
			Sample Date:	7/9/2021	7/9/2021	10/27/2021	10/27/2021
			Quarterly Event:	1st Quarter	1st Quarter	2nd Quarter	2nd Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	NA	0.01 U	NA	
sec-Butylbenzene	mg/L	6.23	0.002 U	NA	0.002 U	NA	
Styrene	mg/L	1.65	0.002 U	NA	0.002 U	NA	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	NA	0.002 U	NA	
tert-Butyl alcohol	mg/L	0.286	0.01 U	NA	0.01 U	NA	
tert-Butylbenzene	mg/L	9.43	0.002 U	NA	0.002 U	NA	
Tetrachloroethene	mg/L	0.00972	0.0005 U	NA	0.0005 U	NA	
Tetrahydrofuran	mg/L	109	0.005 U	NA	0.005 U	NA	
Toluene	mg/L	3.16	0.002 U	NA	0.002 U	NA	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	NA	0.002 U	NA	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	NA	0.002 U	NA	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	NA	0.002 U	NA	
Trichloroethene	mg/L	0.004	0.002 U	NA	0.002 U	NA	
Trichlorofluoromethane	mg/L	5.36	0.005 U	NA	0.005 U	NA	
Vinyl acetate	mg/L	1.61	0.005 U	NA	0.005 U	NA	
Vinyl chloride	mg/L	0.004	0.002 U	NA	0.002 U	NA	
Xylenes, Total	mg/L	10	0.004 U	NA	0.004 U	NA	
Explosives							
Tetryl	mg/L	0.154	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
2,4-Dinitrotoluene	mg/L	0.00209	0.00200 U	0.00200 U	0.002 U	0.002 U	
4-Nitrotoluene (4-NT)	mg/L	0.00818	0.00200 U	0.00200 U	0.002 U	0.002 U	
RDX	mg/L	0.0607	0.00200 U	0.00200 U	0.002 U	0.002 U	
Nitrobenzene	mg/L	0.00181	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
2,6-Dinitrotoluene	mg/L	0.000964	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
2-Nitrotoluene	mg/L	0.000604	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
3-Nitrotoluene	mg/L	0.0649	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
1,3,5-Trinitrobenzene	mg/L	0.464	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
1,3-Dinitrobenzene	mg/L	0.00153	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
2,4,6-Trinitrotoluene	mg/L	0.00763	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
HMX	mg/L	0.782	0.00200 U	0.00200 U	0.002 U	0.002 U	
PETN	mg/L	5.06	0.000500 U	0.000500 U	0.0005 U	0.0005 U	
Nitroglycerine	mg/L	0.00107	0.000500 U	0.000500 U	0.0005 U	0.0005 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-08	MW-08/DUP
			Sample Designator:	07092021	07092021	10272021	10272021
			Sample Date:	7/9/2021	7/9/2021	10/27/2021	10/27/2021
			Quarterly Event:	1st Quarter	1st Quarter	2nd Quarter	2nd Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-08	MW-08/DUP
			Sample Designator:	01202022	01202022	04192022	04192022
			Sample Date:	1/20/2022	1/20/2022	4/19/2022	4/19/2022
			Quarterly Event:	3rd Quarter	3rd Quarter	3rd Quarter	4th Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	NA	0.0500 U	NA	
Arsenic	mg/L	10	0.0250 U	NA	0.0250 U	NA	
Copper	mg/L	1,300	0.0050 U	NA	0.0050 U	NA	
Lead	mg/L	15	0.0150 U	NA	0.0150 U	NA	
Zinc	mg/L	4.69	0.0100 U	NA	0.0100 U	NA	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	NA	
Arsenic	mg/L	10	NA	NA	NA	NA	
Copper	mg/L	1,300	NA	NA	NA	NA	
Lead	mg/L	15	NA	NA	NA	NA	
Zinc	mg/L	4.69	NA	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	NA	0.00100 U	NA	
Aroclor 1221	mg/L	0.002	0.00100 U	NA	0.00100 U	NA	
Aroclor 1232	mg/L	0.002	0.00100 U	NA	0.00100 U	NA	
Aroclor 1242	mg/L	0.00101	0.00100 U	NA	0.00100 U	NA	
Aroclor 1248	mg/L	0.002	0.00100 U	NA	0.00100 U	NA	
Aroclor 1254	mg/L	0.00125	0.00100 U	NA	0.00100 U	NA	
Aroclor 1260	mg/L	0.002	0.00100 U	NA	0.00100 U	NA	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	NA	0.00100 U	NA	
Acenaphthylene	mg/L	2,060	0.00100 U	NA	0.00100 U	NA	
Anthracene	mg/L	2,290	0.00100 U	NA	0.00100 U	NA	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	NA	0.00100 U	NA	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	NA	0.00100 U	NA	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	NA	0.00100 U	NA	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	NA	0.00100 U	NA	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	NA	0.00100 U	NA	
Chrysene	mg/L	81.7	0.00100 U	NA	0.00100 U	NA	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	NA	0.00100 U	NA	
Fluoranthene	mg/L	14,200	0.00100 U	NA	0.00100 U	NA	
Fluorene	mg/L	3,010	0.00100 U	NA	0.00100 U	NA	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	NA	0.00100 U	NA	
Naphthalene	mg/L	0.1	0.00100 U	NA	0.00100 U	NA	
Phenanthrene	mg/L	1,190	0.00100 U	NA	0.00100 U	NA	
Pyrene	mg/L	17,300	0.00100 U	NA	0.00100 U	NA	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	NA	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	NA	NA	NA	NA	
Oil Range Organics	mg/L	31.8	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-08	MW-08/DUP
			Sample Designator:	01202022	01202022	04192022	04192022
			Sample Date:	1/20/2022	1/20/2022	4/19/2022	4/19/2022
			Quarterly Event:	3rd Quarter	3rd Quarter	3rd Quarter	4th Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	NA	0.002 U	NA	NA
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	NA	0.002 U	NA	NA
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	NA	0.002 U	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	NA	0.005 U	NA	NA
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	NA	0.0005 U	NA	NA
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	NA	0.03 U	NA	NA
1,1-Dichloroethane	mg/L	0.0114	0.002 U	NA	0.002 U	NA	NA
1,1-Dichloroethene	mg/L	0.0276	0.002 U	NA	0.002 U	NA	NA
1,1-Dichloropropene	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	NA	0.002 U	NA	NA
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	NA	0.002 U	NA	NA
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	NA	0.002 U	NA	NA
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	NA	0.002 U	NA	NA
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
1,2-Dibromoethane	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	NA	0.002 U	NA	NA
1,2-Dichloroethane	mg/L	0.00355	0.002 U	NA	0.002 U	NA	NA
1,2-Dichloroethene, Total	mg/L	70	0.004 U	NA	0.004 U	NA	NA
1,2-Dichloropropane	mg/L	0.00577	0.002 U	NA	0.002 U	NA	NA
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	NA	0.002 U	NA	NA
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	NA	0.002 U	NA	NA
1,3-Dichloropropane	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	NA	0.004 U	NA	NA
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	NA	0.004 U	NA	NA
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	NA	0.002 U	NA	NA
1-Chlorobutane	mg/L	NE	0.005 U	NA	0.005 U	NA	NA
2,2-Dichloropropane	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
2-Butanone	mg/L	354	0.01 U	NA	0.01 U	NA	NA
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	NA	0.005 U	NA	NA
2-Chlorotoluene	mg/L	17.1	0.002 U	NA	0.002 U	NA	NA
2-Hexanone	mg/L	1.46	0.01 U	NA	0.01 U	NA	NA
2-Nitropropane	mg/L	0.02	0.01 U	NA	0.01 U	NA	NA
4-Chlorotoluene	mg/L	0.0666	0.002 U	NA	0.002 U	NA	NA
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	NA	0.01 U	NA	NA
Acetone	mg/L	3370	0.01 U	NA	0.01 U	NA	NA
Acetonitrile	mg/L	6.82	0.01 U	NA	0.01 U	NA	NA
Acrolein	mg/L	0.04	0.02 U	NA	0.02 U	NA	NA
Acrylonitrile	mg/L	0.0117	0.005 U	NA	0.005 U	NA	NA
Allyl chloride	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
Benzene	mg/L	0.00246	0.0005 U	NA	0.0005 U	NA	NA
Bromobenzene	mg/L	0.125	0.002 U	NA	0.002 U	NA	NA
Bromochloromethane	mg/L	0.106	0.002 U	NA	0.002 U	NA	NA

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-08	MW-08/DUP
			Sample Designator:	01202022	01202022	04192022	04192022
			Sample Date:	1/20/2022	1/20/2022	4/19/2022	4/19/2022
			Quarterly Event:	3rd Quarter	3rd Quarter	3rd Quarter	4th Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
Bromoform	mg/L	0.214	0.002 U	NA	0.002 U	NA	NA
Bromomethane	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
Carbon disulfide	mg/L	0.177	0.002 U	NA	0.002 U	NA	NA
Carbon tetrachloride	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
Chlorobenzene	mg/L	0.0702	0.002 U	NA	0.002 U	NA	NA
Chloroethane	mg/L	3.13	0.002 U	NA	0.002 U	NA	NA
Chloroform	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
Chloromethane	mg/L	0.0331	0.005 U	NA	0.005 U	NA	NA
Chloroprene	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
cis-1,2-Dichloroethene	mg/L	70	0.002 U	NA	0.002 U	NA	NA
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	NA	0.002 U	NA	NA
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
Cyclohexanone	mg/L	404	0.02 U	NA	0.02 U	NA	NA
Dibromochloromethane	mg/L	80	0.002 U	NA	0.002 U	NA	NA
Dibromomethane	mg/L	0.0199	0.002 U	NA	0.002 U	NA	NA
Dichlorodifluoromethane	mg/L	0.004	0.002 U	NA	0.002 U	NA	NA
Diisopropyl ether	mg/L	0.0697	0.002 U	NA	0.002 U	NA	NA
Ethyl acetate	mg/L	2.13	0.01 U	NA	0.01 U	NA	NA
Ethyl ether	mg/L	NE	0.005 U	NA	0.005 U	NA	NA
Ethyl methacrylate	mg/L	2.76	0.005 U	NA	0.005 U	NA	NA
Ethylbenzene	mg/L	0.00609	0.002 U	NA	0.002 U	NA	NA
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	NA	0.002 U	NA	NA
Hexachlorobutadiene	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
Hexachloroethane	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
Iodomethane	mg/L	NE	0.005 U	NA	0.005 U	NA	NA
Isopropylbenzene	mg/L	0.1790	0.002 U	NA	0.002 U	NA	NA
m,p-Xylenes	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
Methacrylonitrile	mg/L	0.495	0.005 U	NA	0.005 U	NA	NA
Methyl Methacrylate	mg/L	10.1	0.005 U	NA	0.005 U	NA	NA
Methyl tert-butyl ether	mg/L	0.664	0.002 U	NA	0.002 U	NA	NA
Methylacrylate	mg/L	0.417	0.005 U	NA	0.005 U	NA	NA
Methylene chloride	mg/L	0.685	0.002 U	NA	0.002 U	NA	NA
Naphthalene	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
n-Butyl acetate	mg/L	NE	0.002 U	NA	0.002 U	NA	NA
n-Butylbenzene	mg/L	8.76	0.002 U	NA	0.002 U	NA	NA
n-Heptane	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
n-Hexane	mg/L	0.01	0.005 U	NA	0.005 U	NA	NA
Nitrobenzene	mg/L	0.151	0.05 U	NA	0.05 U	NA	NA
n-Propylbenzene	mg/L	0.452	0.002 U	NA	0.002 U	NA	NA
o-Xylene	mg/L	0.0873	0.002 U	NA	0.002 U	NA	NA
Pentachloroethane	mg/L	NE	0.005 U	NA	0.005 U	NA	NA
p-Isopropyltoluene	mg/L	98.5	0.002 U	NA	0.002 U	NA	NA

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-08	MW-08/DUP
			Sample Designator:	01202022	01202022	04192022	04192022
			Sample Date:	1/20/2022	1/20/2022	4/19/2022	4/19/2022
			Quarterly Event:	3rd Quarter	3rd Quarter	3rd Quarter	4th Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	NA	0.01 U	NA	
sec-Butylbenzene	mg/L	6.23	0.002 U	NA	0.002 U	NA	
Styrene	mg/L	1.65	0.002 U	NA	0.002 U	NA	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	NA	0.002 U	NA	
tert-Butyl alcohol	mg/L	0.286	0.01 U	NA	0.01 U	NA	
tert-Butylbenzene	mg/L	9.43	0.002 U	NA	0.002 U	NA	
Tetrachloroethene	mg/L	0.00972	0.0005 U	NA	0.0005 U	NA	
Tetrahydrofuran	mg/L	109	0.005 U	NA	0.005 U	NA	
Toluene	mg/L	3.16	0.002 U	NA	0.002 U	NA	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	NA	0.002 U	NA	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	NA	0.002 U	NA	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	NA	0.002 U	NA	
Trichloroethene	mg/L	0.004	0.002 U	NA	0.002 U	NA	
Trichlorofluoromethane	mg/L	5.36	0.005 U	NA	0.005 U	NA	
Vinyl acetate	mg/L	1.61	0.005 U	NA	0.005 U	NA	
Vinyl chloride	mg/L	0.004	0.002 U	NA	0.002 U	NA	
Xylenes, Total	mg/L	10	0.004 U	NA	0.004 U	NA	
Explosives							
Tetryl	mg/L	0.154	0.000500 U	0.000500 U	0.000500 U	0.000500 U	
2,4-Dinitrotoluene	mg/L	0.00209	0.00200 U	0.00200 U	0.00200 U	0.00200 U	
4-Nitrotoluene (4-NT)	mg/L	0.00818	0.00200 U	0.00200 U	0.00200 U	0.00200 U	
RDX	mg/L	0.0607	0.00200 U	0.00200 U	0.00200 U	0.00200 U	
Nitrobenzene	mg/L	0.00181	0.000500 U	0.000500 U	0.000500 U	0.000500 U	
2,6-Dinitrotoluene	mg/L	0.000964	0.000500 U	0.000500 U	0.000500 U	0.000500 U	
2-Nitrotoluene	mg/L	0.000604	0.000500 U	0.000500 U	0.000500 U	0.000500 U	
3-Nitrotoluene	mg/L	0.0649	0.000500 U	0.000500 U	0.000500 U	0.000500 U	
1,3,5-Trinitrobenzene	mg/L	0.464	0.000500 U	0.000500 U	0.000500 U	0.000500 U	
1,3-Dinitrobenzene	mg/L	0.00153	0.005000 U	0.000500 U	0.005000 U	0.000500 U	
2,4,6-Trinitrotoluene	mg/L	0.00763	0.000500 U	0.000500 U	0.000500 U	0.000500 U	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	0.000500 U	0.000500 U	0.000500 U	0.000500 U	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	0.000500 U	0.000500 U	0.000500 U	0.000500 U	
HMX	mg/L	0.782	0.00200 U	0.00200 U	0.00200 U	0.00200 U	
PETN	mg/L	5.06	0.000500 U	0.000500 U	0.000500 U	0.000500 U	
Nitroglycerine	mg/L	0.00107	0.000500 U	0.000500 U	0.000500 U	0.000500 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-08	MW-08/DUP	MW-08	MW-08/DUP
			Sample Designator:	01202022	01202022	04192022	04192022
			Sample Date:	1/20/2022	1/20/2022	4/19/2022	4/19/2022
			Quarterly Event:	3rd Quarter	3rd Quarter	3rd Quarter	4th Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-09	MW-09	MW-09	MW-09
			Sample Designator:	07092021	10272021	01202022	04192022
			Sample Date:	7/9/2021	10/27/2021	1/20/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0127	
Metals, Dissolved							
Antimony	mg/L	6	NA	0.05 U	NA	NA	
Arsenic	mg/L	10	NA	0.025 U	NA	NA	
Copper	mg/L	1,300	NA	0.005 U	NA	NA	
Lead	mg/L	15	NA	0.015 U	NA	NA	
Zinc	mg/L	4.69	NA	0.0100 U	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-09	MW-09	MW-09	MW-09
			Sample Designator:	07092021	10272021	01202022	04192022
			Sample Date:	7/9/2021	10/27/2021	1/20/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-09	MW-09	MW-09	MW-09
			Sample Designator:	07092021	10272021	01202022	04192022
			Sample Date:	7/9/2021	10/27/2021	1/20/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-09	MW-09	MW-09	MW-09
			Sample Designator:	07092021	10272021	01202022	04192022
			Sample Date:	7/9/2021	10/27/2021	1/20/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-09	MW-09	MW-09	MW-09
			Sample Designator:	07092021	10272021	01202022	04192022
			Sample Date:	7/9/2021	10/27/2021	1/20/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-10	MW-10	MW-10	MW-10
			Sample Designator:	07082021	10262021	01192022	04192022
			Sample Date:	7/8/2021	10/26/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	NA	
Arsenic	mg/L	10	NA	NA	NA	NA	
Copper	mg/L	1,300	NA	NA	NA	NA	
Lead	mg/L	15	NA	NA	NA	NA	
Zinc	mg/L	4.69	NA	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-10	MW-10	MW-10	MW-10
			Sample Designator:	07082021	10262021	01192022	04192022
			Sample Date:	7/8/2021	10/26/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.0207 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-10	MW-10	MW-10	MW-10
			Sample Designator:	07082021	10262021	01192022	04192022
			Sample Date:	7/8/2021	10/26/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-10	MW-10	MW-10	MW-10
			Sample Designator:	07082021	10262021	01192022	04192022
			Sample Date:	7/8/2021	10/26/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-10	MW-10	MW-10	MW-10
			Sample Designator:	07082021	10262021	01192022	04192022
			Sample Date:	7/8/2021	10/26/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-11	MW-11	MW-11	MW-11
			Sample Designator:	NS	NS	01182022	04182022
			Sample Date:	NS	NS	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	Dry	Dry		Dry
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	NS	NS	0.0500 U	0.0500 U	
Arsenic	mg/L	10	NS	NS	0.0250 U	0.0250 U	
Copper	mg/L	1,300	NS	NS	0.0050 U	0.0050 U	
Lead	mg/L	15	NS	NS	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	NS	NS	0.0229	0.0142	
Metals, Dissolved							
Antimony	mg/L	6	NS	NS	0.0500 U	NA	
Arsenic	mg/L	10	NS	NS	0.0250 U	NA	
Copper	mg/L	1,300	NS	NS	0.0050 U	NA	
Lead	mg/L	15	NS	NS	0.0150 U	NA	
Zinc	mg/L	4.69	NS	NS	0.0113	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	NS	NS	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	NS	NS	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	NS	NS	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	NS	NS	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	NS	NS	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	NS	NS	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	NS	NS	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	NS	NS	0.00400 U	0.00100 U	
Acenaphthylene	mg/L	2,060	NS	NS	0.00400 U	0.00100 U	
Anthracene	mg/L	2,290	NS	NS	0.00400 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	NS	NS	0.00400 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	NS	NS	0.00400 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	NS	NS	0.00400 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	NS	NS	0.00400 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	NS	NS	0.00400 U	0.00100 U	
Chrysene	mg/L	81.7	NS	NS	0.00400 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	NS	NS	0.00400 U	0.00100 U	
Fluoranthene	mg/L	14,200	NS	NS	0.00400 U	0.00100 U	
Fluorene	mg/L	3,010	NS	NS	0.00400 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	NS	NS	0.00400 U	0.00100 U	
Naphthalene	mg/L	0.1	NS	NS	0.00400 U	0.00100 U	
Phenanthrene	mg/L	1,190	NS	NS	0.00400 U	0.00100 U	
Pyrene	mg/L	17,300	NS	NS	0.00400 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	NS	NS	NS	NS	
Diesel Range Organics	mg/L	34.3	NS	NS	NS	NS	
Oil Range Organics	mg/L	31.8	NS	NS	NS	NS	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-11	MW-11	MW-11	MW-11
			Sample Designator:	NS	NS	01182022	04182022
			Sample Date:	NS	NS	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	Dry	Dry		Dry
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	NS	NS	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	NS	NS	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	NS	NS	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	NS	NS	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	NS	NS	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	NS	NS	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	NS	NS	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	NS	NS	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	NS	NS	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	NS	NS	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	NS	NS	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	NS	NS	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	NS	NS	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	NS	NS	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	NS	NS	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	NS	NS	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	NS	NS	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	NS	NS	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	NS	NS	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	NS	NS	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	NS	NS	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	NS	NS	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	NS	NS	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	NS	NS	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	NS	NS	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	NS	NS	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	NS	NS	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	NS	NS	0.002 U	0.002 U	
2-Butanone	mg/L	354	NS	NS	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	NS	NS	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	NS	NS	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	NS	NS	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	NS	NS	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	NS	NS	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	NS	NS	0.01 U	0.01 U	
Acetone	mg/L	3370	NS	NS	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	NS	NS	0.01 U	0.01 U	
Acrolein	mg/L	0.04	NS	NS	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	NS	NS	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	NS	NS	0.005 U	0.005 U	
Benzene	mg/L	0.00246	NS	NS	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	NS	NS	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	NS	NS	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-11	MW-11	MW-11	MW-11
			Sample Designator:	NS	NS	01182022	04182022
			Sample Date:	NS	NS	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	Dry	Dry		Dry
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	NS	NS	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	NS	NS	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	NS	NS	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	NS	NS	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	NS	NS	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	NS	NS	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	NS	NS	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	NS	NS	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	NS	NS	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	NS	NS	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	NS	NS	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	NS	NS	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	NS	NS	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	NS	NS	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	NS	NS	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	NS	NS	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	NS	NS	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	NS	NS	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	NS	NS	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	NS	NS	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	NS	NS	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	NS	NS	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	NS	NS	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	NS	NS	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	NS	NS	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	NS	NS	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	NS	NS	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	NS	NS	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	NS	NS	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	NS	NS	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	NS	NS	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	NS	NS	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	NS	NS	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	NS	NS	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	NS	NS	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	NS	NS	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	NS	NS	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	NS	NS	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	NS	NS	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	NS	NS	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	NS	NS	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	NS	NS	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	NS	NS	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-11	MW-11	MW-11	MW-11
			Sample Designator:	NS	NS	01182022	04182022
			Sample Date:	NS	NS	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	Dry	Dry		Dry
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	NS	NS	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	NS	NS	0.002 U	0.002 U	
Styrene	mg/L	1.65	NS	NS	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	NS	NS	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	NS	NS	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	NS	NS	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	NS	NS	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	NS	NS	0.005 U	0.005 U	
Toluene	mg/L	3.16	NS	NS	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	NS	NS	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	NS	NS	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	NS	NS	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	NS	NS	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	NS	NS	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	NS	NS	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	NS	NS	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	NS	NS	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NS	NS	NS	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NS	NS	NS	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NS	NS	NS	NA	
RDX	mg/L	0.0607	NS	NS	NS	NA	
Nitrobenzene	mg/L	0.00181	NS	NS	NS	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NS	NS	NS	NA	
2-Nitrotoluene	mg/L	0.000604	NS	NS	NS	NA	
3-Nitrotoluene	mg/L	0.0649	NS	NS	NS	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NS	NS	NS	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NS	NS	NS	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NS	NS	NS	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NS	NS	NS	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NS	NS	NS	NA	
HMX	mg/L	0.782	NS	NS	NS	NA	
PETN	mg/L	5.06	NS	NS	NS	NA	
Nitroglycerine	mg/L	0.00107	NS	NS	NS	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-11	MW-11	MW-11	MW-11
			Sample Designator:	NS	NS	01182022	04182022
			Sample Date:	NS	NS	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	Dry	Dry		Dry
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-12	MW-12	MW-12	MW-12
			Sample Designator:	0709/2021	1027/2021	0119/2022	0419/2022
			Sample Date:	7/9/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4thQuarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0206	0.0211	0.0167	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	NA	
Arsenic	mg/L	10	NA	NA	NA	NA	
Copper	mg/L	1,300	NA	NA	NA	NA	
Lead	mg/L	15	NA	NA	NA	NA	
Zinc	mg/L	4.69	NA	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00400 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	NA	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-12	MW-12	MW-12	MW-12
			Sample Designator:	0709/2021	10272021	01192022	04192022
			Sample Date:	7/9/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4thQuarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-12	MW-12	MW-12	MW-12
			Sample Designator:	0709/2021	10272021	01192022	04192022
			Sample Date:	7/9/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4thQuarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-12	MW-12	MW-12	MW-12
			Sample Designator:	0709/2021	10272021	01192022	04192022
			Sample Date:	7/9/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4thQuarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-12	MW-12	MW-12	MW-12
			Sample Designator:	0709/2021	1027/2021	0119/2022	0419/2022
			Sample Date:	7/9/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4thQuarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-13	MW-13	MW-13	MW-13
			Sample Designator:	07082021	10272021	01192022	04192022
			Sample Date:	7/8/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0129	0.0050 U	0.0715	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0227	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	0.0500 U	NA	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	NA	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0129	NA	0.0475	0.0050 U	
Lead	mg/L	15	0.0150 U	NA	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0196	NA	0.0100 U	0.0100 U	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Anthracene	mg/L	2,290	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Chrysene	mg/L	81.7	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Fluorene	mg/L	3,010	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Pyrene	mg/L	17,300	0.00400 U	0.00100 U	0.00400 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	2 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	2.8 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-13	MW-13	MW-13	MW-13
			Sample Designator:	07082021	10272021	01192022	04192022
			Sample Date:	7/8/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.0225 U	0.0332 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-13	MW-13	MW-13	MW-13
			Sample Designator:	07082021	10272021	01192022	04192022
			Sample Date:	7/8/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-13	MW-13	MW-13	MW-13
			Sample Designator:	07082021	10272021	01192022	04192022
			Sample Date:	7/8/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.0059 J+	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-13	MW-13	MW-13	MW-13
			Sample Designator:	07082021	10272021	01192022	04192022
			Sample Date:	7/8/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-14	MW-14	MW-14	MW-14
			Sample Designator:	NS	10262021	01182022	04182022
			Sample Date:	NS	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	Dry	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	NS	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	NS	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	NS	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	NS	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	NS	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NS	NA	NA	NA	
Arsenic	mg/L	10	NS	NA	NA	NA	
Copper	mg/L	1,300	NS	NA	NA	NA	
Lead	mg/L	15	NS	NA	NA	NA	
Zinc	mg/L	4.69	NS	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	NS	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	NS	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	NS	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	NS	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	NS	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	NS	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	NS	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	NS	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	NS	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	NS	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	NS	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	NS	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	NS	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	NS	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	NS	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	NS	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	NS	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	NS	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	NS	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	NS	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	NS	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	NS	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	NS	0.00100 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	NS	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	NS	NA	NA	NA	
Oil Range Organics	mg/L	31.8	NS	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-14	MW-14	MW-14	MW-14
			Sample Designator:	NS	10262021	01182022	04182022
			Sample Date:	NS	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	Dry	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,1,1-Trichloroethane	mg/L	1.13	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2,2-Tetrachloroethane	mg/L	0.00582	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	NS	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/L	0.00105	NS	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1-Dichloro-2-propanone	mg/L	NE	NS	0.03 U	0.03 U	0.03 U	0.03 U
1,1-Dichloroethane	mg/L	0.0114	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloroethene	mg/L	0.0276	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloropropene	mg/L	NE	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichlorobenzene	mg/L	NE	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichloropropane	mg/L	0.00411	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trimethylbenzene	mg/L	0.0794	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trichlorobenzene	mg/L	0.00752	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trimethylbenzene	mg/L	0.0475	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromo-3-chloropropane	mg/L	0.004	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromoethane	mg/L	0.004	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichlorobenzene	mg/L	0.5	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethane	mg/L	0.00355	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethene, Total	mg/L	70	NS	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichloropropane	mg/L	0.00577	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,3,5-Trimethylbenzene	mg/L	0.0333	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichlorobenzene	mg/L	43.6	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropane	mg/L	NE	NS	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropene, Total	mg/L	0.00431	NS	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichloro-2-butene, Total	mg/L	0.00192	NS	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichlorobenzene	mg/L	0.00488	NS	0.002 U	0.002 U	0.002 U	0.002 U
1-Chlorobutane	mg/L	NE	NS	0.005 U	0.005 U	0.005 U	0.005 U
2,2-Dichloropropane	mg/L	NE	NS	0.002 U	0.002 U	0.002 U	0.002 U
2-Butanone	mg/L	354	NS	0.01 U	0.01 U	0.01 U	0.01 U
2-Chloroethyl vinyl ether	mg/L	NE	NS	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorotoluene	mg/L	17.1	NS	0.002 U	0.002 U	0.002 U	0.002 U
2-Hexanone	mg/L	1.46	NS	0.01 U	0.01 U	0.01 U	0.01 U
2-Nitropropane	mg/L	0.02	NS	0.01 U	0.01 U	0.01 U	0.01 U
4-Chlorotoluene	mg/L	0.0666	NS	0.002 U	0.002 U	0.002 U	0.002 U
4-Methyl-2-pentanone	mg/L	94.9	NS	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	3370	NS	0.0180 U	0.01 U	0.01 U	0.01 U
Acetonitrile	mg/L	6.82	NS	0.01 U	0.01 U	0.01 U	0.01 U
Acrolein	mg/L	0.04	NS	0.02 U	0.02 U	0.02 U	0.02 U
Acrylonitrile	mg/L	0.0117	NS	0.005 U	0.005 U	0.005 U	0.005 U
Allyl chloride	mg/L	0.01	NS	0.005 U	0.005 U	0.005 U	0.005 U
Benzene	mg/L	0.00246	NS	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromobenzene	mg/L	0.125	NS	0.002 U	0.002 U	0.002 U	0.002 U
Bromochloromethane	mg/L	0.106	NS	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-14	MW-14	MW-14	MW-14
			Sample Designator:	NS	10262021	01182022	04182022
			Sample Date:	NS	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	Dry	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	NS	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	NS	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	NS	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	NS	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	NS	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	NS	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	NS	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	NS	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	NS	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	NS	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	NS	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	NS	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	NS	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	NS	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	NS	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	NS	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	NS	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	NS	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	NS	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	NS	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	NS	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	NS	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	NS	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	NS	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	NS	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	NS	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	NS	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	NS	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	NS	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	NS	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	NS	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	NS	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	NS	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	NS	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	NS	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	NS	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	NS	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	NS	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	NS	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	NS	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	NS	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	NS	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	NS	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-14	MW-14	MW-14	MW-14
			Sample Designator:	NS	10262021	01182022	04182022
			Sample Date:	NS	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	Dry	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	NS	0.01 U	0.01 U	0.01 U	0.01 U
sec-Butylbenzene	mg/L	6.23	NS	0.002 U	0.002 U	0.002 U	0.002 U
Styrene	mg/L	1.65	NS	0.002 U	0.002 U	0.002 U	0.002 U
tert-Amyl methyl ether	mg/L	0.0828	NS	0.002 U	0.002 U	0.002 U	0.002 U
tert-Butyl alcohol	mg/L	0.286	NS	0.01 U	0.01 U	0.01 U	0.01 U
tert-Butylbenzene	mg/L	9.43	NS	0.002 U	0.002 U	0.002 U	0.002 U
Tetrachloroethene	mg/L	0.00972	NS	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Tetrahydrofuran	mg/L	109	NS	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	mg/L	3.16	NS	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,2-Dichloroethene	mg/L	100	NS	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,3-Dichloropropene	mg/L	0.596	NS	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,4-Dichloro-2-butene	mg/L	0.004	NS	0.002 U	0.002 U	0.002 U	0.002 U
Trichloroethene	mg/L	0.004	NS	0.002 U	0.002 U	0.002 U	0.002 U
Trichlorofluoromethane	mg/L	5.36	NS	0.005 U	0.005 U	0.005 U	0.005 U
Vinyl acetate	mg/L	1.61	NS	0.005 U	0.005 U	0.005 U	0.005 U
Vinyl chloride	mg/L	0.004	NS	0.002 U	0.002 U	0.002 U	0.002 U
Xylenes, Total	mg/L	10	NS	0.004 U	0.004 U	0.004 U	0.004 U
Explosives							
Tetryl	mg/L	0.154	NS	NA	NA	NA	NA
2,4-Dinitrotoluene	mg/L	0.00209	NS	NA	NA	NA	NA
4-Nitrotoluene (4-NT)	mg/L	0.00818	NS	NA	NA	NA	NA
RDX	mg/L	0.0607	NS	NA	NA	NA	NA
Nitrobenzene	mg/L	0.00181	NS	NA	NA	NA	NA
2,6-Dinitrotoluene	mg/L	0.000964	NS	NA	NA	NA	NA
2-Nitrotoluene	mg/L	0.000604	NS	NA	NA	NA	NA
3-Nitrotoluene	mg/L	0.0649	NS	NA	NA	NA	NA
1,3,5-Trinitrobenzene	mg/L	0.464	NS	NA	NA	NA	NA
1,3-Dinitrobenzene	mg/L	0.00153	NS	NA	NA	NA	NA
2,4,6-Trinitrotoluene	mg/L	0.00763	NS	NA	NA	NA	NA
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NS	NA	NA	NA	NA
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NS	NA	NA	NA	NA
HMX	mg/L	0.782	NS	NA	NA	NA	NA
PETN	mg/L	5.06	NS	NA	NA	NA	NA
Nitroglycerine	mg/L	0.00107	NS	NA	NA	NA	NA

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-14	MW-14	MW-14	MW-14
			Sample Designator:	NS	10262021	01182022	04182022
			Sample Date:	NS	10/26/2021	1/18/2022	4/18/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	Dry	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15	MW-15/DUP
			Sample Designator:	07092021	10282021	10282021
			Sample Date:	7/9/2021	10/28/2021	10/28/2021
			Quarterly Event:	1st Quarter	2nd Quarter	2nd Quarter
			Notes:	-	-	Duplicate
Parameter	Units	PAL ¹				
Metals, Total						
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved						
Antimony	mg/L	6	NA	0.0500 U	0.0500 U	
Arsenic	mg/L	10	NA	0.0250 U	0.0250 U	
Copper	mg/L	1,300	NA	0.0050 U	0.0050 U	
Lead	mg/L	15	NA	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	NA	0.0100 U	0.0100 U	
Polychlorinated Biphenyls						
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²						
Gasoline Range Organics	mg/L	18.1	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15	MW-15/DUP
			Sample Designator:	07092021	10282021	10282021
			Sample Date:	7/9/2021	10/28/2021	10/28/2021
			Quarterly Event:	1st Quarter	2nd Quarter	2nd Quarter
			Notes:	-	-	Duplicate
Parameter	Units	PAL ¹				
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15	MW-15/DUP
			Sample Designator:	07092021	10282021	10282021
			Sample Date:	7/9/2021	10/28/2021	10/28/2021
			Quarterly Event:	1st Quarter	2nd Quarter	2nd Quarter
			Notes:	-	-	Duplicate
Parameter	Units	PAL ¹				
Volatile Organic Compounds (continued)						
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15	MW-15/DUP
			Sample Designator:	07092021	10282021	10282021
			Sample Date:	7/9/2021	10/28/2021	10/28/2021
			Quarterly Event:	1st Quarter	2nd Quarter	2nd Quarter
			Notes:	-	-	Duplicate
Parameter	Units	PAL ¹				
Volatile Organic Compounds (continued)						
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U
Explosives						
Tetryl	mg/L	0.154	NA	NA	NA	NA
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA
RDX	mg/L	0.0607	NA	NA	NA	NA
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA
HMX	mg/L	0.782	NA	NA	NA	NA
PETN	mg/L	5.06	NA	NA	NA	NA
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15	MW-15/DUP
			Sample Designator:	07092021	10282021	10282021
			Sample Date:	7/9/2021	10/28/2021	10/28/2021
			Quarterly Event:	1st Quarter	2nd Quarter	2nd Quarter
			Notes:	-	-	Duplicate
Parameter	Units	PAL¹				

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15/DUP	MW-15	MW-15/DUP
			Sample Designator:	01192022	01192022	04192022	04192022
			Sample Date:	1/19/2022	1/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	3rd Quarter	3rd Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Lead	mg/L	15	0.0150 U	0.0150 U	0.0189	0.0216	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Metals, Dissolved							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	0.0150 U
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00100 U	0.00100 U
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	34.3	NA	NA	NA	NA	NA
Oil Range Organics	mg/L	31.8	NA	NA	NA	NA	NA

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15/DUP	MW-15	MW-15/DUP
			Sample Designator:	01192022	01192022	04192022	04192022
			Sample Date:	1/19/2022	1/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	3rd Quarter	3rd Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15/DUP	MW-15	MW-15/DUP
			Sample Designator:	01192022	01192022	04192022	04192022
			Sample Date:	1/19/2022	1/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	3rd Quarter	3rd Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15/DUP	MW-15	MW-15/DUP
			Sample Designator:	01192022	01192022	04192022	04192022
			Sample Date:	1/19/2022	1/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	3rd Quarter	3rd Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-15	MW-15/DUP	MW-15	MW-15/DUP
			Sample Designator:	01192022	01192022	04192022	04192022
			Sample Date:	1/19/2022	1/19/2022	4/19/2022	4/19/2022
			Quarterly Event:	3rd Quarter	3rd Quarter	4th Quarter	4th Quarter
			Notes:	-	Duplicate	-	Duplicate
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-16	MW-16	MW-16	MW-16
			Sample Designator:	07082021	10272021	01192022	04192022
			Sample Date:	7/8/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	NA	
Arsenic	mg/L	10	NA	NA	NA	NA	
Copper	mg/L	1,300	NA	NA	NA	NA	
Lead	mg/L	15	NA	NA	NA	NA	
Zinc	mg/L	4.69	NA	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00400 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-16	MW-16	MW-16	MW-16
			Sample Designator:	07082021	10272021	01192022	04192022
			Sample Date:	7/8/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-16	MW-16	MW-16	MW-16
			Sample Designator:	07082021	10272021	01192022	04192022
			Sample Date:	7/8/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-16	MW-16	MW-16	MW-16
			Sample Designator:	07082021	10272021	01192022	04192022
			Sample Date:	7/8/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-16	MW-16	MW-16	MW-16
			Sample Designator:	07082021	10272021	01192022	04192022
			Sample Date:	7/8/2021	10/27/2021	1/19/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-17	MW-17	MW-17	MW-17
			Sample Designator:	07292021	10262021	01182022	04192022
			Sample Date:	7/29/2021	10/26/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	NA	NA	
Arsenic	mg/L	10	NA	NA	NA	NA	
Copper	mg/L	1,300	NA	NA	NA	NA	
Lead	mg/L	15	NA	NA	NA	NA	
Zinc	mg/L	4.69	NA	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.001 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-17	MW-17	MW-17	MW-17
			Sample Designator:	07292021	10262021	01182022	04192022
			Sample Date:	7/29/2021	10/26/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.0103 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-17	MW-17	MW-17	MW-17
			Sample Designator:	07292021	10262021	01182022	04192022
			Sample Date:	7/29/2021	10/26/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-17	MW-17	MW-17	MW-17
			Sample Designator:	07292021	10262021	01182022	04192022
			Sample Date:	7/29/2021	10/26/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-17	MW-17	MW-17	MW-17
			Sample Designator:	07292021	10262021	01182022	04192022
			Sample Date:	7/29/2021	10/26/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-18	MW-18	MW-18	MW-18
			Sample Designator:	07082021	10262021	01182022	04192022
			Sample Date:	7/8/2021	10/26/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0351	
Zinc	mg/L	4.69	0.0100 U	0.0100 U	0.0100 U	0.0100 U	
Metals, Dissolved							
Antimony	mg/L	6	0.0500 U	NA	NA	NA	
Arsenic	mg/L	10	0.0250 U	NA	NA	NA	
Copper	mg/L	1,300	0.0050 U	NA	NA	NA	
Lead	mg/L	15	0.0150 U	NA	NA	NA	
Zinc	mg/L	4.69	0.0100 U	NA	NA	NA	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00102	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	0.5 U	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	0.5 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	0.7 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-18	MW-18	MW-18	MW-18
			Sample Designator:	07082021	10262021	01182022	04192022
			Sample Date:	7/8/2021	10/26/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.0219 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-18	MW-18	MW-18	MW-18
			Sample Designator:	07082021	10262021	01182022	04192022
			Sample Date:	7/8/2021	10/26/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-18	MW-18	MW-18	MW-18
			Sample Designator:	07082021	10262021	01182022	04192022
			Sample Date:	7/8/2021	10/26/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-18	MW-18	MW-18	MW-18
			Sample Designator:	07082021	10262021	01182022	04192022
			Sample Date:	7/8/2021	10/26/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

NS = not sampled

PAL = Project Action Limit

U = compound was not detected

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-19	MW-19	MW-19	MW-19
			Sample Designator:	07092021	10282021	01182022	04192022
			Sample Date:	7/9/2021	10/28/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Metals, Total							
Antimony	mg/L	6	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
Arsenic	mg/L	10	0.0250 U	0.0250 U	0.0250 U	0.0250 U	
Copper	mg/L	1,300	0.0050 U	0.0050 U	0.0050 U	0.0050 U	
Lead	mg/L	15	0.0150 U	0.0150 U	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	0.0100 U	0.0105	0.0100 U	0.0168	
Metals, Dissolved							
Antimony	mg/L	6	NA	NA	0.0500 U	0.0500 U	
Arsenic	mg/L	10	NA	NA	0.0250 U	0.0250 U	
Copper	mg/L	1,300	NA	NA	0.0050 U	0.0050 U	
Lead	mg/L	15	NA	NA	0.0150 U	0.0150 U	
Zinc	mg/L	4.69	NA	NA	0.0100 U	0.0100 U	
Polychlorinated Biphenyls							
Aroclor 1016	mg/L	0.0172	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1221	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1232	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1242	mg/L	0.00101	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1248	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1254	mg/L	0.00125	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Aroclor 1260	mg/L	0.002	0.00100 U	0.00100 U	0.00100 U	0.00100 U	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	1,610	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Acenaphthylene	mg/L	2,060	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Anthracene	mg/L	2,290	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)anthracene	mg/L	0.133	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(a)pyrene	mg/L	0.2	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(b)fluoranthene	mg/L	7.65	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(g,h,i)perylene	mg/L	218,000	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Benzo(k)fluoranthene	mg/L	937	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Chrysene	mg/L	81.7	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Dibenzo(a,h)anthracene	mg/L	985	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Fluoranthene	mg/L	14,200	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Fluorene	mg/L	3,010	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Indeno(1,2,3-cd)pyrene	mg/L	596	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Naphthalene	mg/L	0.1	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Phenanthrene	mg/L	1,190	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Pyrene	mg/L	17,300	0.00400 U	0.00100 U	0.00100 U	0.00100 U	
Total Petroleum Hydrocarbons²							
Gasoline Range Organics	mg/L	18.1	NA	NA	NA	NA	
Diesel Range Organics	mg/L	34.3	2 U	NA	NA	NA	
Oil Range Organics	mg/L	31.8	2.8 U	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-19	MW-19	MW-19	MW-19
			Sample Designator:	07092021	10282021	01182022	04192022
			Sample Date:	7/9/2021	10/28/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4thQuarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	mg/L	0.00699	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,1-Trichloroethane	mg/L	1.13	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2,2-Tetrachloroethane	mg/L	0.00582	0.002 U	0.002 U	0.002 U	0.002 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	0.0351	0.005 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	mg/L	0.00105	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
1,1-Dichloro-2-propanone	mg/L	NE	0.03 U	0.03 U	0.03 U	0.03 U	
1,1-Dichloroethane	mg/L	0.0114	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloroethene	mg/L	0.0276	0.002 U	0.002 U	0.002 U	0.002 U	
1,1-Dichloropropene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichlorobenzene	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trichloropropane	mg/L	0.00411	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,3-Trimethylbenzene	mg/L	0.0794	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trichlorobenzene	mg/L	0.00752	0.002 U	0.002 U	0.002 U	0.002 U	
1,2,4-Trimethylbenzene	mg/L	0.0475	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromo-3-chloropropane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichlorobenzene	mg/L	0.5	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethane	mg/L	0.00355	0.002 U	0.002 U	0.002 U	0.002 U	
1,2-Dichloroethene, Total	mg/L	70	0.004 U	0.004 U	0.004 U	0.004 U	
1,2-Dichloropropane	mg/L	0.00577	0.002 U	0.002 U	0.002 U	0.002 U	
1,3,5-Trimethylbenzene	mg/L	0.0333	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichlorobenzene	mg/L	43.6	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
1,3-Dichloropropene, Total	mg/L	0.00431	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichloro-2-butene, Total	mg/L	0.00192	0.004 U	0.004 U	0.004 U	0.004 U	
1,4-Dichlorobenzene	mg/L	0.00488	0.002 U	0.002 U	0.002 U	0.002 U	
1-Chlorobutane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2,2-Dichloropropane	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
2-Butanone	mg/L	354	0.01 U	0.01 U	0.01 U	0.01 U	
2-Chloroethyl vinyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
2-Chlorotoluene	mg/L	17.1	0.002 U	0.002 U	0.002 U	0.002 U	
2-Hexanone	mg/L	1.46	0.01 U	0.01 U	0.01 U	0.01 U	
2-Nitropropane	mg/L	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
4-Chlorotoluene	mg/L	0.0666	0.002 U	0.002 U	0.002 U	0.002 U	
4-Methyl-2-pentanone	mg/L	94.9	0.01 U	0.01 U	0.01 U	0.01 U	
Acetone	mg/L	3370	0.01 U	0.01 U	0.01 U	0.01 U	
Acetonitrile	mg/L	6.82	0.01 U	0.01 U	0.01 U	0.01 U	
Acrolein	mg/L	0.04	0.02 U	0.02 U	0.02 U	0.02 U	
Acrylonitrile	mg/L	0.0117	0.005 U	0.005 U	0.005 U	0.005 U	
Allyl chloride	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Benzene	mg/L	0.00246	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Bromobenzene	mg/L	0.125	0.002 U	0.002 U	0.002 U	0.002 U	
Bromochloromethane	mg/L	0.106	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-19	MW-19	MW-19	MW-19
			Sample Designator:	07092021	10282021	01182022	04192022
			Sample Date:	7/9/2021	10/28/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4thQuarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Bromodichloromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Bromoform	mg/L	0.214	0.002 U	0.002 U	0.002 U	0.002 U	
Bromomethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	mg/L	0.177	0.002 U	0.002 U	0.002 U	0.002 U	
Carbon tetrachloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chlorobenzene	mg/L	0.0702	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroethane	mg/L	3.13	0.002 U	0.002 U	0.002 U	0.002 U	
Chloroform	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Chloromethane	mg/L	0.0331	0.005 U	0.005 U	0.005 U	0.005 U	
Chloroprene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	mg/L	70	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
cis-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Cyclohexanone	mg/L	404	0.02 U	0.02 U	0.02 U	0.02 U	
Dibromochloromethane	mg/L	80	0.002 U	0.002 U	0.002 U	0.002 U	
Dibromomethane	mg/L	0.0199	0.002 U	0.002 U	0.002 U	0.002 U	
Dichlorodifluoromethane	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Diisopropyl ether	mg/L	0.0697	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl acetate	mg/L	2.13	0.01 U	0.01 U	0.01 U	0.01 U	
Ethyl ether	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Ethyl methacrylate	mg/L	2.76	0.005 U	0.005 U	0.005 U	0.005 U	
Ethylbenzene	mg/L	0.00609	0.002 U	0.002 U	0.002 U	0.002 U	
Ethyl-tert-butyl ether	mg/L	0.0144	0.002 U	0.002 U	0.002 U	0.002 U	
Hexachlorobutadiene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Hexachloroethane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Iodomethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
Isopropylbenzene	mg/L	0.1790	0.002 U	0.002 U	0.002 U	0.002 U	
m,p-Xylenes	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
Methacrylonitrile	mg/L	0.495	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl Methacrylate	mg/L	10.1	0.005 U	0.005 U	0.005 U	0.005 U	
Methyl tert-butyl ether	mg/L	0.664	0.002 U	0.002 U	0.002 U	0.002 U	
Methylacrylate	mg/L	0.417	0.005 U	0.005 U	0.005 U	0.005 U	
Methylene chloride	mg/L	0.685	0.002 U	0.002 U	0.002 U	0.002 U	
Naphthalene	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Butyl acetate	mg/L	NE	0.002 U	0.002 U	0.002 U	0.002 U	
n-Butylbenzene	mg/L	8.76	0.002 U	0.002 U	0.002 U	0.002 U	
n-Heptane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
n-Hexane	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	
Nitrobenzene	mg/L	0.151	0.05 U	0.05 U	0.05 U	0.05 U	
n-Propylbenzene	mg/L	0.452	0.002 U	0.002 U	0.002 U	0.002 U	
o-Xylene	mg/L	0.0873	0.002 U	0.002 U	0.002 U	0.002 U	
Pentachloroethane	mg/L	NE	0.005 U	0.005 U	0.005 U	0.005 U	
p-Isopropyltoluene	mg/L	98.5	0.002 U	0.002 U	0.002 U	0.002 U	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-19	MW-19	MW-19	MW-19
			Sample Designator:	07092021	10282021	01182022	04192022
			Sample Date:	7/9/2021	10/28/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4thQuarter
			Notes:	-	-	-	-
Parameter	Units	PAL ¹					
Volatile Organic Compounds (continued)							
Propionitrile	mg/L	NE	0.01 U	0.01 U	0.01 U	0.01 U	
sec-Butylbenzene	mg/L	6.23	0.002 U	0.002 U	0.002 U	0.002 U	
Styrene	mg/L	1.65	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Amyl methyl ether	mg/L	0.0828	0.002 U	0.002 U	0.002 U	0.002 U	
tert-Butyl alcohol	mg/L	0.286	0.01 U	0.01 U	0.01 U	0.01 U	
tert-Butylbenzene	mg/L	9.43	0.002 U	0.002 U	0.002 U	0.002 U	
Tetrachloroethene	mg/L	0.00972	0.0005 U	0.0005 U	0.0005 U	0.0005 U	
Tetrahydrofuran	mg/L	109	0.005 U	0.005 U	0.005 U	0.005 U	
Toluene	mg/L	3.16	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,2-Dichloroethene	mg/L	100	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,3-Dichloropropene	mg/L	0.596	0.002 U	0.002 U	0.002 U	0.002 U	
trans-1,4-Dichloro-2-butene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichloroethene	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Trichlorofluoromethane	mg/L	5.36	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl acetate	mg/L	1.61	0.005 U	0.005 U	0.005 U	0.005 U	
Vinyl chloride	mg/L	0.004	0.002 U	0.002 U	0.002 U	0.002 U	
Xylenes, Total	mg/L	10	0.004 U	0.004 U	0.004 U	0.004 U	
Explosives							
Tetryl	mg/L	0.154	NA	NA	NA	NA	
2,4-Dinitrotoluene	mg/L	0.00209	NA	NA	NA	NA	
4-Nitrotoluene (4-NT)	mg/L	0.00818	NA	NA	NA	NA	
RDX	mg/L	0.0607	NA	NA	NA	NA	
Nitrobenzene	mg/L	0.00181	NA	NA	NA	NA	
2,6-Dinitrotoluene	mg/L	0.000964	NA	NA	NA	NA	
2-Nitrotoluene	mg/L	0.000604	NA	NA	NA	NA	
3-Nitrotoluene	mg/L	0.0649	NA	NA	NA	NA	
1,3,5-Trinitrobenzene	mg/L	0.464	NA	NA	NA	NA	
1,3-Dinitrobenzene	mg/L	0.00153	NA	NA	NA	NA	
2,4,6-Trinitrotoluene	mg/L	0.00763	NA	NA	NA	NA	
4-Amino-2,6-Dinitrotoluene	mg/L	0.00247	NA	NA	NA	NA	
2-Amino-4,6-Dinitrotoluene	mg/L	0.00241	NA	NA	NA	NA	
HMX	mg/L	0.782	NA	NA	NA	NA	
PETN	mg/L	5.06	NA	NA	NA	NA	
Nitroglycerine	mg/L	0.00107	NA	NA	NA	NA	

Table 6
Historical Groundwater Analytical Results
Goodfellow Federal Complex
St. Louis, Missouri

			Group Name:	GFC	GFC	GFC	GFC
			Sample Point:	MW-19	MW-19	MW-19	MW-19
			Sample Designator:	07092021	10282021	01182022	04192022
			Sample Date:	7/9/2021	10/28/2021	1/18/2022	4/19/2022
			Quarterly Event:	1st Quarter	2nd Quarter	3rd Quarter	4thQuarter
			Notes:	-	-	-	-
Parameter	Units	PAL¹					

Notes:

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

² Total petroleum hydrocarbons were inadvertently analysed by the laboratory during the first quarterly sampling event. Total petroleum hydrocarbons are not part of the groundwater analytical suite.

Bold - compound was detected

Highlighted - concentration exceeds screening level

GFC = Goodfellow Federal Complex

J = estimated value

J+ = Qualified as estimated due to non-conformance discovered during data validation.

mg/L = milligrams per liter

NA = not analyzed

NE = not established

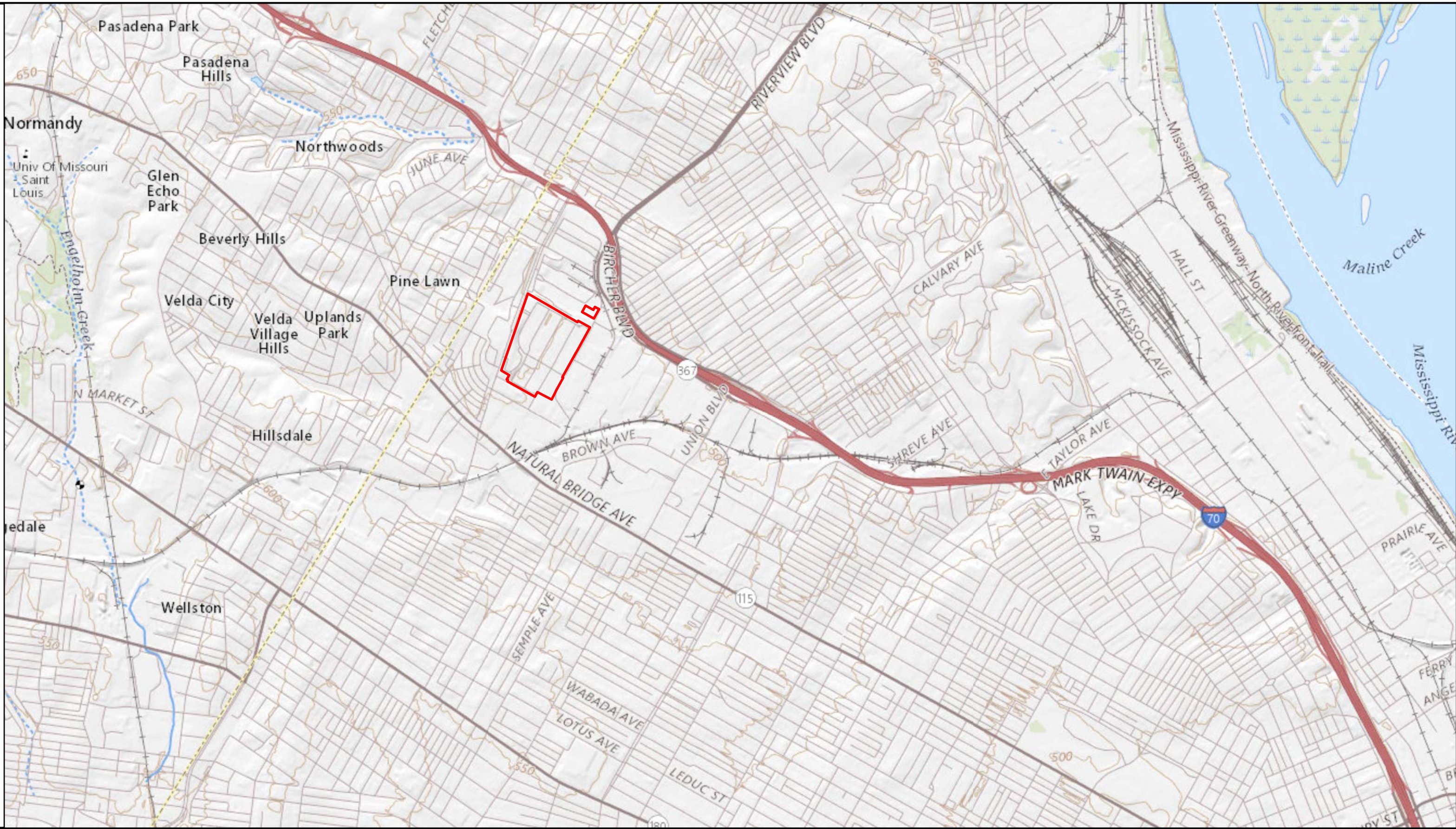
NS = not sampled

PAL = Project Action Limit

U = compound was not detected

FIGURES

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



Site Boundary

Notes:
Site is approximately 66 acres.

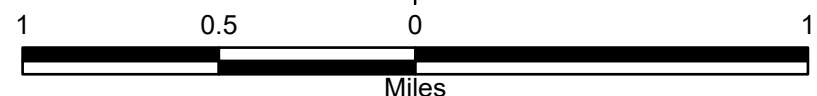
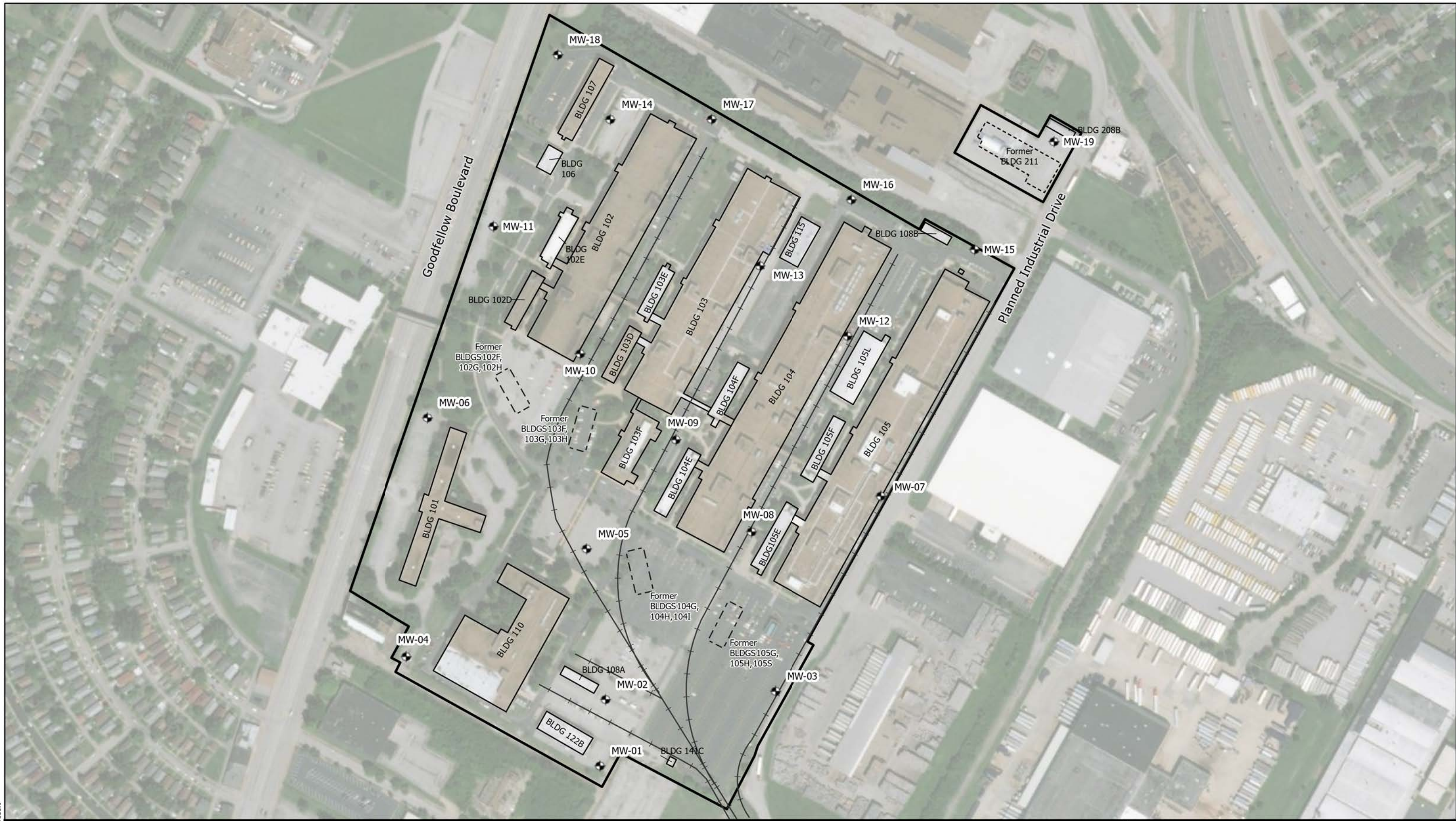


Figure 1
Area Location Map
Goodfellow Federal Complex
St. Louis, Missouri

Path: \\bmc\dfs\clients\USGS\133835_GoodfellowRI\Studies\Geospatial\DataFiles\ArcDocs\Analytical Figures.aprx irradiator 11/15/2021
Service Layer Credits: Maxar, Microsoft



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

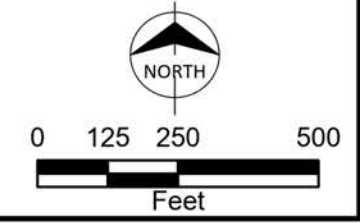
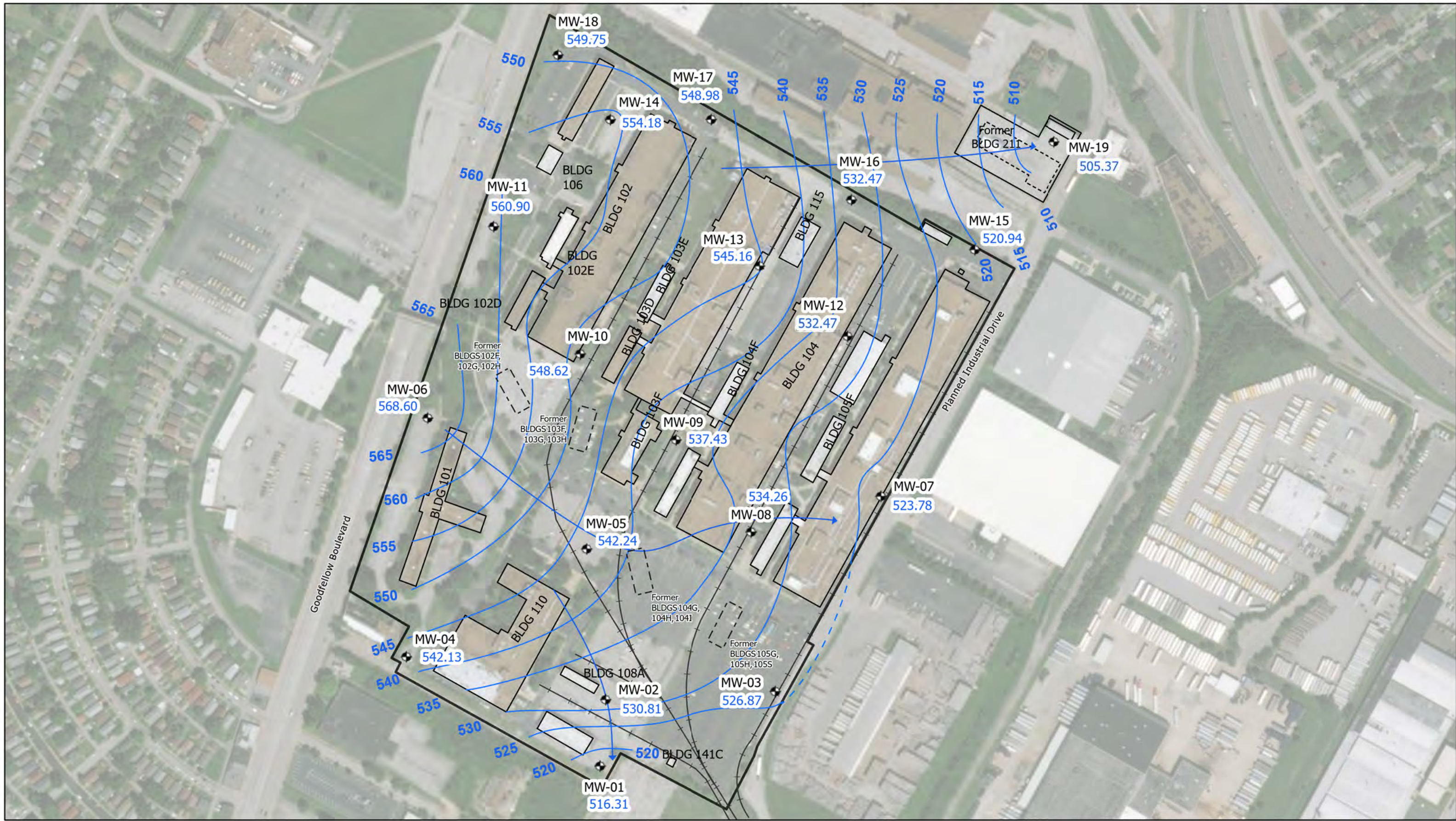


Figure 2
Site Location Map
Goodfellow Federal Complex
St. Louis, Missouri

Path: Z:\Clients\ENR\USGSA\133835_GoodfellowRI\Studies\Geospatial\DataFiles\ArcDocs\Analytical Figures_january2021.aprx irradler 5/9/2022
Service Layer Credits: Maxar



Notes:

1. Monitoring Wells MW-01 through MW-19 were gauged on April 18, 2022.
2. Elevations presented in feet above mean sea level.

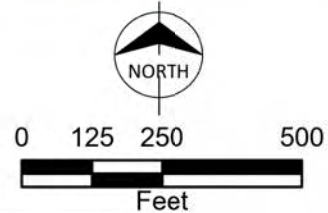


Figure 3
Potentiometric Surface Map
April 2022
Goodfellow Federal Complex
St. Louis, Missouri

APPENDIX A – SUPPORTING FIELD DOCUMENTATION

- **Monitoring Well Inspection Checklists**
- **Photograph Log**
- **Daily Instrument Calibration Log**
- **Field Groundwater Sampling Reports**
- **Field Notes**

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-01

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?			X				
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-02

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?			X				
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-03

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?			X				
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-04

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?			X				
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-05

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?			X				
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-06

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-07

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-08

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-09

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-10

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-11

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-12

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-13

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-14

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		One side of vault rim bronken off (see Photograph Log in Appendix A).
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-15

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments	
Is well locked?	4/18/2022	X						
Is well clearly labeled?		X						
Is well easily seen?		X						
Is there water in the vault?			X					
Vegetation overgrowth			X					
Overall vault condition							X	Well vault cracked and one of the threaded bolt flanges is broken off
Well casing condition					X			
Condition of well pad					X			
Condition of J-plug					X			
Is positive pressure observed?				X				
Is negative pressure observed?				X				

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-16

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-17

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-18

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

Monitoring Well Inspection Checklist
Goodfellow Federal Complex
St. Louis, Missouri

Name of Inspector(s): Ben Lockwood

Well ID: MW-19

Item Inspected	Date	Yes	No	Good	Poor	Needs Repair	Comments
Is well locked?	4/18/2022	X					
Is well clearly labeled?		X					
Is well easily seen?		X					
Is there water in the vault?			X				
Vegetation overgrowth			X				
Overall vault condition					X		
Well casing condition					X		
Condition of well pad					X		
Condition of J-plug					X		
Is positive pressure observed?				X			
Is negative pressure observed?				X			

Take pictures to document needed repairs or site conditions that need to be addressed.

Document any conditions that may affect the integrity of the well, e.g. construction, lawn maintenance, etc.

PHOTOGRAPH LOG
Monitoring Well MW-14



Photo shows the rim of the well vault for Monitoring Well MW-14 to be broken off.

Monitoring Well MW-15



Photo of Monitoring Well MW-15 shows a crack in the well vault and the broken threaded bolt flange.

Monitoring Well MW-15 (continued)



Photo shows a finger pointing out the broken treaded bolt flange for Monitoring Well MW-15.

Monitoring Well MW-15 (continued)



Photo shows a finger pointing toward the cracked well vault for Monitoring Well MW-15.

Monitoring Well MW-15 (continued)



Photo shows a finger pointing toward the cracked well vault for Monitoring Well MW-15.

Daily Instrument Calibration Log

Project Number: 128487
 Project Name: Goodfellow Federal Complex
 Field Site Manager: Ben Lockwood

Ben Lockwood's Instruments

Acceptance Criteria: Units: Standard Used:	Time	DO	pH	Specific Conductivity	Turbidity	ORP	Notes
		+/- 10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%	
		mg/L	Standard Units	mS/cm	NTU	mV	
		in Air	4.00 / 7.00 / 10.00	1409	10 / 100 / 800	220	
4/18/2022	0815	10.03	4.00 / 7.00 / 10.00	1436	10.4 / 108 / 808	224.6	
4/19/2022	0740	10.05	4.00 / 7.00 / 10.01	1409	10.3 / 105 / 803	221.4	

Tasnima Uddin's Instruments

Acceptance Criteria: Units: Standard Used:	Time	DO	pH	Specific Conductivity	Turbidity	ORP	Notes
		+/- 10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%	
		mg/L	Standard Units	mS/cm	NTU	mV	
		in Air	4.00 / 7.00 / 10.00	1409	10 / 100 / 800	220	
4/18/2022	0815	10.01	4.00 / 7.00 / 10.04	1414	10.0 / 101 / 808	223.3	
4/19/2022	0740	10.02	4.00 / 7.00 / 10.03	1405	10.1 / 103 / 803	222.2	

EQUIPMENT TYPE (Manufacturer, Model No. Version)

Mult-Meter YSI 556 MPS (2)

Turbidity Meter Hach 2100Q (2)

Notes:

- % = percent
- mS/cm = millisiemens per centimeter
- DO = dissolved oxygen
- mg/L = milligram per liter
- mV = millivolt
- ORP = oxidation-reduction potential
- NTU = Nephelometric Turbidity Units

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-01

DATE: 4/18/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

Empty box for comments.

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-02

DATE: 4/18/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-03

DATE: 4/18/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

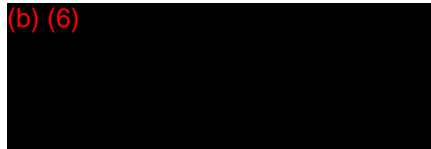
COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)


5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-04

DATE: 4/18/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS: MS/MSD SAMPLED FOR VOCs, PAHs, PCBs, AND METALS; and DISSOLVED METALS FIELD FILTERED

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-05

DATE: 4/18/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-06
DATE: 4/18/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

	<u>NAME</u>	<u>SIGNATURE</u>	<u>DATE</u>
PREPARED:	Tas Uddin	(b) (6)	5/3/2022
REVIEWED:	Justin Carter		1/29/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-07

DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-08
DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS: DUPLICATE SAMPLED FOR EXPLOSIVES ONLY (PACE ANALYTICAL)

	<u>NAME</u>	<u>SIGNATURE</u>	<u>DATE</u>
PREPARED:	Tas Uddin	(b) (6)	5/3/2022
REVIEWED:	Justin Carter		5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-09

DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-10

DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-11

DATE: 4/18/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-12

DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-13

DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-14

DATE: 4/18/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS: Field Filtered

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-15

DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS: DUPLICATE SAMPLED FOR VOCs, PAHs, PCBs, AND METALS, and FIELD FILTERED

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-16
DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

	<u>NAME</u>	<u>SIGNATURE</u>	<u>DATE</u>
PREPARED:	Tas Uddin	(b) (6)	5/3/2022
REVIEWED:	Justin Carter		5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-17

DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-18

DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

FIELD GROUNDWATER SAMPLING REPORT

WELL NO.: MW-19

DATE: 4/19/2022 SITE NAME: GOODFELLOW FEDERAL COMPLEX PROJECT NO.: 128487

COMMENTS:

NAME

SIGNATURE

DATE

PREPARED: Tas Uddin

(b) (6)

5/3/2022

REVIEWED: Justin Carter

5/6/2022

4/10/77

128487

T5 Lakeland

From: Miss G. Wray

Wanted: 405, 2000

830 Lakeland 1000 100 100

840 Lakeland 1000 100 100

850 Lakeland 1000 100 100

860 Lakeland 1000 100 100

870 Lakeland 1000 100 100

880 Lakeland 1000 100 100

2 Lakeland (1000)

3 Lakeland (1000)

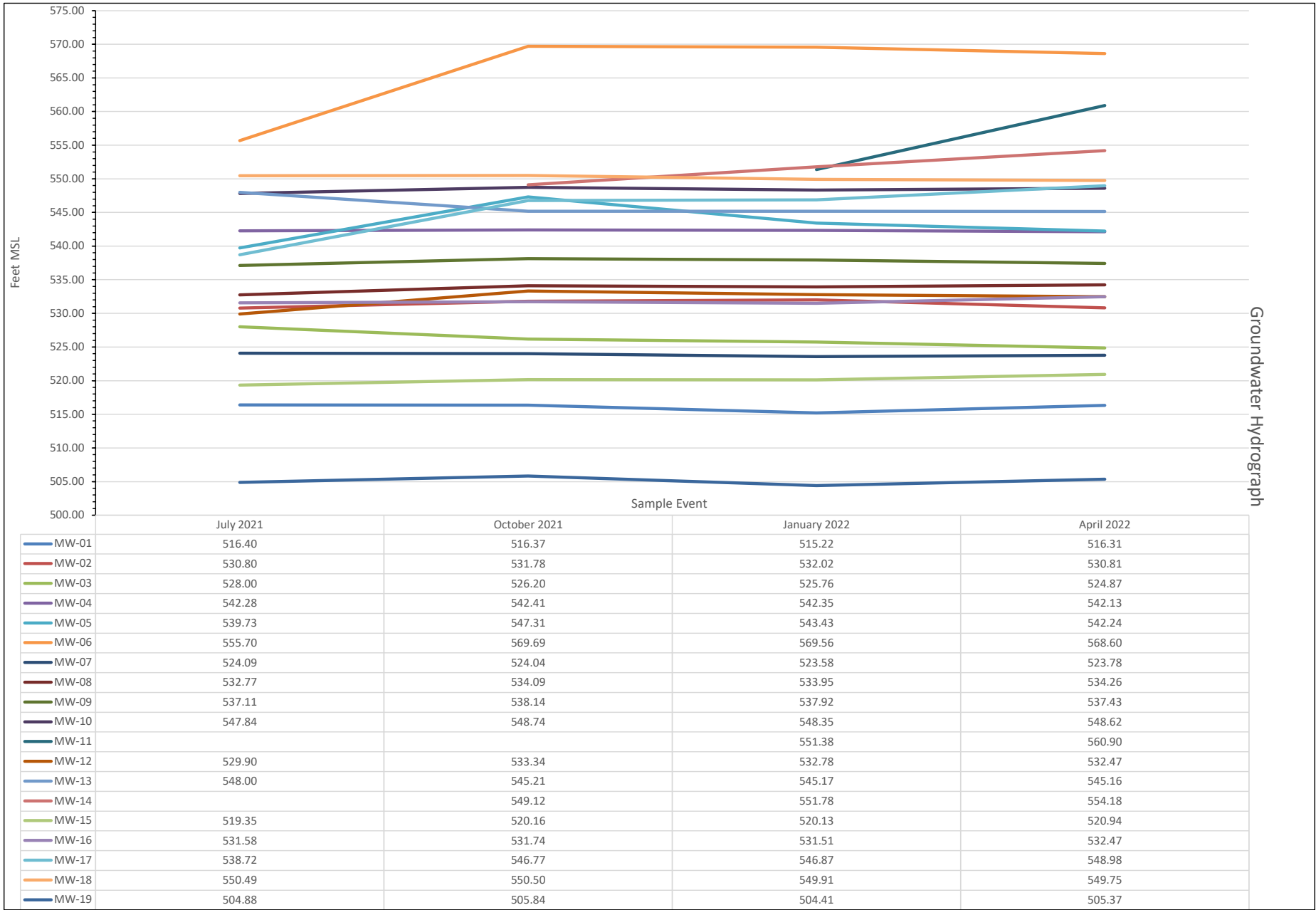
1 Lakeland (1000)

890 Lakeland 1000 100 100

900 Lakeland

(b) (6)

APPENDIX B – GROUNDWATER HYDROGRAPH



APPENDIX C – ANALYTICAL LABORATORY REPORT FOR LIQUID IDW

May 16, 2022

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

RE: Project: GSA GOODFELLOW WC 128487
Pace Project No.: 60398453

Dear Justin Carter:

Enclosed are the analytical results for sample(s) received by the laboratory on April 21, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

(b) (6)

Alice Spiller
alice.spiller@pacelabs.com
(913)599-5665
PM Lab Management

Enclosures

cc: SHAUNA LAWRENCE, BURNS & MCDONNELL
Jacquelin Lee, Burns & McDonnell



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Pace Analytical Services Indianapolis

7726 Moller Road, Indianapolis, IN 46268

Illinois Accreditation #: 200074

Indiana Drinking Water Laboratory #: C-49-06

Kansas/TNI Certification #: E-10177

Kentucky UST Agency Interest #: 80226

Kentucky WW Laboratory ID #: 98019

Michigan Drinking Water Laboratory #9050

Ohio VAP Certified Laboratory #: CL0065

Oklahoma Laboratory #: 9204

Texas Certification #: T104704355

Wisconsin Laboratory #: 999788130

USDA Soil Permit #: P330-19-00257

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219

Missouri Inorganic Drinking Water Certification #: 10090

Arkansas Drinking Water

Arkansas Certification #: 20-020-0

Arkansas Drinking Water

Illinois Certification #: 2000302021-3

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212020-2

Oklahoma Certification #: 9205/9935

Florida: Cert E871149 SEKS WET

Texas Certification #: T104704407-21-15

Utah Certification #: KS000212019-9

Illinois Certification #: 004592

Kansas Field Laboratory Accreditation: # E-92587

Missouri SEKS Micro Certification: 10070

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122

Alabama Certification #: 40660

Alaska Certification 17-026

Arizona Certification #: AZ0612

Arkansas Certification #: 88-0469

California Certification #: 2932

Canada Certification #: 1461.01

Colorado Certification #: TN00003

Connecticut Certification #: PH-0197

DOD Certification: #1461.01

EPA# TN00003

Florida Certification #: E87487

Georgia DW Certification #: 923

Georgia Certification: NELAP

Idaho Certification #: TN00003

Illinois Certification #: 200008

Indiana Certification #: C-TN-01

Iowa Certification #: 364

Kansas Certification #: E-10277

Kentucky UST Certification #: 16

Kentucky Certification #: 90010

Louisiana Certification #: AI30792

Louisiana DW Certification #: LA180010

Maine Certification #: TN0002

Maryland Certification #: 324

Massachusetts Certification #: M-TN003

Michigan Certification #: 9958

Minnesota Certification #: 047-999-395

Mississippi Certification #: TN00003

Missouri Certification #: 340

Montana Certification #: CERT0086

Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34

New Hampshire Certification #: 2975

New Jersey Certification #: TN002

New Mexico DW Certification

New York Certification #: 11742

North Carolina Aquatic Toxicity Certification #: 41

North Carolina Drinking Water Certification #: 21704

North Carolina Environmental Certificate #: 375

North Dakota Certification #: R-140

Ohio VAP Certification #: CL0069

Oklahoma Certification #: 9915

Oregon Certification #: TN200002

Pennsylvania Certification #: 68-02979

Rhode Island Certification #: LAO00356

South Carolina Certification #: 84004

South Dakota Certification

Tennessee DW/Chem/Micro Certification #: 2006

Texas Certification #: T 104704245-17-14

Texas Mold Certification #: LAB0152

USDA Soil Permit #: P330-15-00234

Utah Certification #: TN00003

Vermont Dept. of Health: ID# VT-2006

Virginia Certification #: VT2006

Virginia Certification #: 460132

Washington Certification #: C847

West Virginia Certification #: 233

Wisconsin Certification #: 998093910

Wyoming UST Certification #: via A2LA 2926.01

A2LA-ISO 17025 Certification #: 1461.01

A2LA-ISO 17025 Certification #: 1461.02

AIHA-LAP/LLC EMLAP Certification #:100789

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60398453001	DW-GW-04202022	Water	04/20/22 09:08	04/21/22 08:45

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60398453001	DW-GW-04202022	EPA 8081	KAV	8	PASI-I
		EPA 8082	AJA1	8	PASI-K
		EPA 8151A	BJW	3	PASI-I
		EPA 6010	MA1	7	PASI-K
		EPA 7470	ALH	1	PASI-K
		EPA 8270	JMT	18	PASI-K
		EPA 8260	JLO	13	PASI-K
		EPA 9020	VRP	1	PAN
		EPA 1010	NNNP	1	PASI-K
		SM 4500-S-2 D	SK	1	PASI-K
		EPA 9040	SK	1	PASI-K
		EPA 300.0	KB	1	PASI-K
		EPA 420.1	KWM	1	PASI-K
		SM 4500-CN-E	KWM	1	PASI-K

PAN = Pace National - Mt. Juliet

PASI-I = Pace Analytical Services - Indianapolis

PASI-K = Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Date: May 16, 2022

DUP (Lab ID: R3789668-7)

- Wet Chemistry by Method 9020B - Breakthrough due to matrix.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 8081

Description: 8081 GCS Pest RV, TCLP

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 8081 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 8082

Description: 8082 GCS PCB, LV

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 8082 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 8151A

Description: 8151A CI Acid Herbicides TCLP

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 8151A by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 8151 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 674639

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.

- LCS (Lab ID: 3106113)
- 2,4-D

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 674639

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60398422001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 3106114)
- 2,4,5-TP (Silvex)
- 2,4-D

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 6010

Description: 6010 MET ICP, TCLP

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 6010 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 7470

Description: 7470 Mercury, TCLP

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 7470 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 8270

Description: 8270 MSSV TCLP Sep Funnel

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 8270 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 8260

Description: 8260 MSV TCLP

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 8260 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 9020

Description: Wet Chemistry 9020B

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 9020 by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 1859861

D8: The sample and duplicate results for this parameter are less than 5 times the reporting limit, the RPD may not be statistically valid.

- DUP (Lab ID: R3789668-3)
 - Total Organic Halides
- DUP (Lab ID: R3791220-5)
 - Total Organic Halides

R1: RPD value was outside control limits.

- DUP (Lab ID: R3789668-10)
 - Total Organic Halides

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 1010

Description: 1010 Flashpoint,Closed Cup

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 1010 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: SM 4500-S-2 D

Description: 4500S2D Sulfide, Total

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for SM 4500-S-2 D by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 9040

Description: 9040 pH

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 9040 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.

- DW-GW-04202022 (Lab ID: 60398453001)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 300.0

Description: 300.0 IC Anions 28 Days

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 300.0 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 783678

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 3125090)
- Sulfate

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: EPA 420.1

Description: Phenolics, Total Recoverable

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for EPA 420.1 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 420.1 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 784345

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60398103004,60398253004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3127520)
- Phenolics, Total Recoverable

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Method: SM 4500-CN-E

Description: 4500CNE Cyanide, Total

Client: BURNS & MCDONNELL

Date: May 16, 2022

General Information:

1 sample was analyzed for SM 4500-CN-E by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with SM 4500-CN-E with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Sample: DW-GW-04202022	Lab ID: 60398453001	Collected: 04/20/22 09:08	Received: 04/21/22 08:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pest RV, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 05/03/22 14:40 Initial pH: 7.66; Final pH: 7.66								
Pace Analytical Services - Indianapolis								
gamma-BHC (Lindane)	ND	ug/L	0.25	1	05/09/22 11:17	05/09/22 23:42	58-89-9	
Chlordane (Technical)	ND	ug/L	5.0	1	05/09/22 11:17	05/09/22 23:42	57-74-9	
Endrin	ND	ug/L	0.50	1	05/09/22 11:17	05/09/22 23:42	72-20-8	
Heptachlor	ND	ug/L	0.25	1	05/09/22 11:17	05/09/22 23:42	76-44-8	
Heptachlor epoxide	ND	ug/L	0.25	1	05/09/22 11:17	05/09/22 23:42	1024-57-3	
Methoxychlor	ND	ug/L	2.5	1	05/09/22 11:17	05/09/22 23:42	72-43-5	
Toxaphene	ND	ug/L	5.0	1	05/09/22 11:17	05/09/22 23:42	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	52	%	10-135	1	05/09/22 11:17	05/09/22 23:42	2051-24-3	
8082 GCS PCB, LV								
Analytical Method: EPA 8082 Preparation Method: EPA 3510								
Pace Analytical Services - Kansas City								
PCB-1016 (Aroclor 1016)	ND	ug/L	0.97	1	04/28/22 21:42	04/29/22 08:32	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	0.97	1	04/28/22 21:42	04/29/22 08:32	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.97	1	04/28/22 21:42	04/29/22 08:32	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.97	1	04/28/22 21:42	04/29/22 08:32	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.97	1	04/28/22 21:42	04/29/22 08:32	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.97	1	04/28/22 21:42	04/29/22 08:32	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.97	1	04/28/22 21:42	04/29/22 08:32	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	47	%	25-120	1	04/28/22 21:42	04/29/22 08:32	2051-24-3	
8151A CI Acid Herbicides TCLP								
Analytical Method: EPA 8151A Preparation Method: EPA 8151								
Leachate Method/Date: EPA 1311; 05/03/22 14:40 Initial pH: 7.66; Final pH: 7.66								
Pace Analytical Services - Indianapolis								
2,4-D	ND	mg/L	0.0050	1	05/05/22 13:28	05/06/22 23:49	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.0050	1	05/05/22 13:28	05/06/22 23:49	93-72-1	
Surrogates								
2,4-DCAA (S)	74	%	12-143	1	05/05/22 13:28	05/06/22 23:49	19719-28-9	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Leachate Method/Date: EPA 1311; 04/29/22 09:31 Initial pH: ; Final pH: 7.67								
Pace Analytical Services - Kansas City								
Arsenic	ND	mg/L	0.50	1	05/04/22 15:47	05/05/22 19:55	7440-38-2	
Barium	ND	mg/L	2.5	1	05/04/22 15:47	05/05/22 19:55	7440-39-3	
Cadmium	ND	mg/L	0.050	1	05/04/22 15:47	05/05/22 19:55	7440-43-9	
Chromium	ND	mg/L	0.10	1	05/04/22 15:47	05/05/22 19:55	7440-47-3	
Lead	ND	mg/L	0.50	1	05/04/22 15:47	05/05/22 19:55	7439-92-1	
Selenium	ND	mg/L	0.50	1	05/04/22 15:47	05/05/22 19:55	7782-49-2	
Silver	ND	mg/L	0.10	1	05/04/22 15:47	05/05/22 19:55	7440-22-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Sample: DW-GW-0420222	Lab ID: 60398453001	Collected: 04/20/22 09:08	Received: 04/21/22 08:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 04/29/22 09:31 Initial pH: ; Final pH: 7.67								
Pace Analytical Services - Kansas City								
Mercury	ND	mg/L	0.0020	1	04/29/22 15:53	05/02/22 11:50	7439-97-6	
8270 MSSV TCLP Sep Funnel								
Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 04/29/22 09:31 Initial pH: ; Final pH: 7.67								
Pace Analytical Services - Kansas City								
1,4-Dichlorobenzene	ND	ug/L	100	1	04/29/22 20:55	05/02/22 17:12	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	04/29/22 20:55	05/02/22 17:12	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	04/29/22 20:55	05/02/22 17:12	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	04/29/22 20:55	05/02/22 17:12	118-74-1	
Hexachloroethane	ND	ug/L	100	1	04/29/22 20:55	05/02/22 17:12	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	04/29/22 20:55	05/02/22 17:12	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	100	1	04/29/22 20:55	05/02/22 17:12	15831-10-4	
Nitrobenzene	ND	ug/L	100	1	04/29/22 20:55	05/02/22 17:12	98-95-3	
Pentachlorophenol	ND	ug/L	500	1	04/29/22 20:55	05/02/22 17:12	87-86-5	
Pyridine	ND	ug/L	500	1	04/29/22 20:55	05/02/22 17:12	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	500	1	04/29/22 20:55	05/02/22 17:12	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	04/29/22 20:55	05/02/22 17:12	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	74	%	57-101	1	04/29/22 20:55	05/02/22 17:12	4165-60-0	
2-Fluorobiphenyl (S)	72	%	56-97	1	04/29/22 20:55	05/02/22 17:12	321-60-8	
Terphenyl-d14 (S)	77	%	67-106	1	04/29/22 20:55	05/02/22 17:12	1718-51-0	
Phenol-d6 (S)	69	%	52-95	1	04/29/22 20:55	05/02/22 17:12	13127-88-3	
2-Fluorophenol (S)	69	%	47-94	1	04/29/22 20:55	05/02/22 17:12	367-12-4	
2,4,6-Tribromophenol (S)	85	%	57-110	1	04/29/22 20:55	05/02/22 17:12	118-79-6	
8260 MSV TCLP								
Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 05/03/22 13:24								
Initial pH: ; Final pH: 7.99								
Pace Analytical Services - Kansas City								
Benzene	ND	ug/L	50.0	1		05/06/22 12:14	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		05/06/22 12:14	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		05/06/22 12:14	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		05/06/22 12:14	108-90-7	
Chloroform	ND	ug/L	200	1		05/06/22 12:14	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		05/06/22 12:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		05/06/22 12:14	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		05/06/22 12:14	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		05/06/22 12:14	79-01-6	
Vinyl chloride	ND	ug/L	50.0	1		05/06/22 12:14	75-01-4	
Surrogates								
Toluene-d8 (S)	97	%	80-120	1		05/06/22 12:14	2037-26-5	
4-Bromofluorobenzene (S)	104	%	80-120	1		05/06/22 12:14	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120	1		05/06/22 12:14	2199-69-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Sample: DW-GW-0420222	Lab ID: 60398453001	Collected: 04/20/22 09:08	Received: 04/21/22 08:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Wet Chemistry 9020B								
Analytical Method: EPA 9020 Preparation Method: 9020B								
Pace National - Mt. Juliet								
Total Organic Halides	ND	ug/L	100	1	05/14/22 16:25	05/14/22 16:25		
1010 Flashpoint,Closed Cup								
Analytical Method: EPA 1010								
Pace Analytical Services - Kansas City								
Flashpoint	>201	deg F	78.0	1		05/09/22 17:10		
4500S2D Sulfide, Total								
Analytical Method: SM 4500-S-2 D								
Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	1		04/27/22 10:42	18496-25-8	
9040 pH								
Analytical Method: EPA 9040								
Pace Analytical Services - Kansas City								
pH at 25 Degrees C	7.5	Std. Units	0.10	1		04/29/22 11:57		H6
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0								
Pace Analytical Services - Kansas City								
Sulfate	86.0	mg/L	10.0	10		04/28/22 13:39	14808-79-8	
Phenolics, Total Recoverable								
Analytical Method: EPA 420.1 Preparation Method: EPA 420.1								
Pace Analytical Services - Kansas City								
Phenolics, Total Recoverable	0.12	mg/L	0.050	1	05/03/22 14:10	05/04/22 12:08	64743-03-9	
4500CNE Cyanide, Total								
Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-E								
Pace Analytical Services - Kansas City								
Cyanide	ND	mg/L	0.0050	1	05/03/22 10:43	05/03/22 12:47	57-12-5	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

QC Batch: 784152	Analysis Method: EPA 7470
QC Batch Method: EPA 7470	Analysis Description: 7470 Mercury TCLP
	Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

METHOD BLANK: 3126135 Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	05/02/22 11:46	

LABORATORY CONTROL SAMPLE: 3126835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.015	0.015	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3126836 3126837

Parameter	Units	60398453001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Mercury	mg/L	ND	0.015	0.015	0.015	0.015	97	97	75-125	0	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

QC Batch: 785047

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET TCLP

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

METHOD BLANK: 3126135

Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	05/05/22 19:51	
Barium	mg/L	ND	2.5	05/05/22 19:51	
Cadmium	mg/L	ND	0.050	05/05/22 19:51	
Chromium	mg/L	ND	0.10	05/05/22 19:51	
Lead	mg/L	ND	0.50	05/05/22 19:51	
Selenium	mg/L	ND	0.50	05/05/22 19:51	
Silver	mg/L	ND	0.10	05/05/22 19:51	

LABORATORY CONTROL SAMPLE: 3129976

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	10	9.3	93	80-120	
Barium	mg/L	10	10.2	102	80-120	
Cadmium	mg/L	10	10.2	102	80-120	
Chromium	mg/L	10	10.1	101	80-120	
Lead	mg/L	10	10.2	102	80-120	
Selenium	mg/L	10	9.9	99	80-120	
Silver	mg/L	5	4.8	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3129977 3129978

Parameter	Units	60398453001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	MSD Result	% Rec	% Rec					
Arsenic	mg/L	ND	10	10	9.3	9.2	93	92	75-125	1	20		
Barium	mg/L	ND	10	10	10.1	10	100	98	75-125	1	20		
Cadmium	mg/L	ND	10	10	10.1	9.9	101	99	75-125	1	20		
Chromium	mg/L	ND	10	10	10	9.9	100	99	75-125	1	20		
Lead	mg/L	ND	10	10	10.0	9.9	100	99	75-125	1	20		
Selenium	mg/L	ND	10	10	9.9	9.8	99	98	75-125	1	20		
Silver	mg/L	ND	5	5	4.8	4.8	96	95	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

QC Batch: 785390

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV TCLP

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

METHOD BLANK: 3131350

Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	05/06/22 10:38	
1,2-Dichloroethane	ug/L	ND	50.0	05/06/22 10:38	
2-Butanone (MEK)	ug/L	ND	1000	05/06/22 10:38	
Benzene	ug/L	ND	50.0	05/06/22 10:38	
Carbon tetrachloride	ug/L	ND	50.0	05/06/22 10:38	
Chlorobenzene	ug/L	ND	50.0	05/06/22 10:38	
Chloroform	ug/L	ND	200	05/06/22 10:38	
Tetrachloroethene	ug/L	ND	50.0	05/06/22 10:38	
Trichloroethene	ug/L	ND	50.0	05/06/22 10:38	
Vinyl chloride	ug/L	ND	50.0	05/06/22 10:38	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120	05/06/22 10:38	
4-Bromofluorobenzene (S)	%	103	80-120	05/06/22 10:38	
Toluene-d8 (S)	%	99	80-120	05/06/22 10:38	

METHOD BLANK: 3127640

Matrix: Solid

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	05/06/22 11:11	
1,2-Dichloroethane	ug/L	ND	50.0	05/06/22 11:11	
2-Butanone (MEK)	ug/L	ND	1000	05/06/22 11:11	
Benzene	ug/L	ND	50.0	05/06/22 11:11	
Carbon tetrachloride	ug/L	ND	50.0	05/06/22 11:11	
Chlorobenzene	ug/L	ND	50.0	05/06/22 11:11	
Chloroform	ug/L	ND	200	05/06/22 11:11	
Tetrachloroethene	ug/L	ND	50.0	05/06/22 11:11	
Trichloroethene	ug/L	ND	50.0	05/06/22 11:11	
Vinyl chloride	ug/L	ND	50.0	05/06/22 11:11	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120	05/06/22 11:11	
4-Bromofluorobenzene (S)	%	103	80-120	05/06/22 11:11	
Toluene-d8 (S)	%	98	80-120	05/06/22 11:11	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

METHOD BLANK: 3128239

Matrix: Solid

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	05/06/22 11:27	
1,2-Dichloroethane	ug/L	ND	50.0	05/06/22 11:27	
2-Butanone (MEK)	ug/L	ND	1000	05/06/22 11:27	
Benzene	ug/L	ND	50.0	05/06/22 11:27	
Carbon tetrachloride	ug/L	ND	50.0	05/06/22 11:27	
Chlorobenzene	ug/L	ND	50.0	05/06/22 11:27	
Chloroform	ug/L	ND	200	05/06/22 11:27	
Tetrachloroethene	ug/L	ND	50.0	05/06/22 11:27	
Trichloroethene	ug/L	ND	50.0	05/06/22 11:27	
Vinyl chloride	ug/L	ND	50.0	05/06/22 11:27	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120	05/06/22 11:27	
4-Bromofluorobenzene (S)	%	103	80-120	05/06/22 11:27	
Toluene-d8 (S)	%	98	80-120	05/06/22 11:27	

METHOD BLANK: 3129274

Matrix: Solid

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	05/06/22 11:43	
1,2-Dichloroethane	ug/L	ND	50.0	05/06/22 11:43	
2-Butanone (MEK)	ug/L	ND	1000	05/06/22 11:43	
Benzene	ug/L	ND	50.0	05/06/22 11:43	
Carbon tetrachloride	ug/L	ND	50.0	05/06/22 11:43	
Chlorobenzene	ug/L	ND	50.0	05/06/22 11:43	
Chloroform	ug/L	ND	200	05/06/22 11:43	
Tetrachloroethene	ug/L	ND	50.0	05/06/22 11:43	
Trichloroethene	ug/L	ND	50.0	05/06/22 11:43	
Vinyl chloride	ug/L	ND	50.0	05/06/22 11:43	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120	05/06/22 11:43	
4-Bromofluorobenzene (S)	%	102	80-120	05/06/22 11:43	
Toluene-d8 (S)	%	98	80-120	05/06/22 11:43	

LABORATORY CONTROL SAMPLE: 3131349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	200	220	110	77-130	
1,2-Dichloroethane	ug/L	200	205	103	75-125	
2-Butanone (MEK)	ug/L	1000	1020	102	54-145	
Benzene	ug/L	200	191	96	80-120	
Carbon tetrachloride	ug/L	200	211	106	70-130	
Chlorobenzene	ug/L	200	203	101	80-120	
Chloroform	ug/L	200	190J	95	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

LABORATORY CONTROL SAMPLE: 3131349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/L	200	202	101	78-128	
Trichloroethene	ug/L	200	201	101	80-120	
Vinyl chloride	ug/L	200	165	82	50-138	
1,2-Dichlorobenzene-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			106	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE SAMPLE: 3131351

Parameter	Units	60398453001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	200	220	110	35-136	
1,2-Dichloroethane	ug/L	ND	200	201	100	55-135	
2-Butanone (MEK)	ug/L	ND	1000	780J	78	35-140	
Benzene	ug/L	ND	200	197	99	55-145	
Carbon tetrachloride	ug/L	ND	200	209	105	50-150	
Chlorobenzene	ug/L	ND	200	197	99	65-135	
Chloroform	ug/L	ND	200	189J	95	65-135	
Tetrachloroethene	ug/L	ND	200	201	100	55-135	
Trichloroethene	ug/L	ND	200	197	99	55-130	
Vinyl chloride	ug/L	ND	200	158	79	10-150	
1,2-Dichlorobenzene-d4 (S)	%				98	80-120	
4-Bromofluorobenzene (S)	%				102	80-120	
Toluene-d8 (S)	%				98	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487
Pace Project No.: 60398453

QC Batch: 675114	Analysis Method: EPA 8081
QC Batch Method: EPA 3510	Analysis Description: 8081 GCS TCLP Pesticides
	Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 60398453001

METHOD BLANK: 3108789 Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlordane (Technical)	ug/L	ND	1.0	05/09/22 19:42	
Endrin	ug/L	ND	0.10	05/09/22 19:42	
gamma-BHC (Lindane)	ug/L	ND	0.050	05/09/22 19:42	
Heptachlor	ug/L	ND	0.050	05/09/22 19:42	
Heptachlor epoxide	ug/L	ND	0.050	05/09/22 19:42	
Methoxychlor	ug/L	ND	0.50	05/09/22 19:42	
Toxaphene	ug/L	ND	1.0	05/09/22 19:42	
Decachlorobiphenyl (S)	%	59	10-135	05/09/22 19:42	

LABORATORY CONTROL SAMPLE: 3108790

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	ug/L	2	1.4	69	44-159	
gamma-BHC (Lindane)	ug/L	1	0.69	69	40-153	
Heptachlor	ug/L	1	0.67	67	29-152	
Heptachlor epoxide	ug/L	1	0.68	68	43-146	
Methoxychlor	ug/L	10	6.8	68	40-170	
Decachlorobiphenyl (S)	%			32	10-135	

MATRIX SPIKE SAMPLE: 3108791

Parameter	Units	60398422001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Endrin	ug/L	ND	10	15.0	150	37-153	
gamma-BHC (Lindane)	ug/L	ND	5	4.9	98	31-146	
Heptachlor	ug/L	ND	5	3.2	65	17-143	
Heptachlor epoxide	ug/L	ND	5	4.6	93	33-142	
Methoxychlor	ug/L	ND	50	51.1	102	32-162	
Decachlorobiphenyl (S)	%				40	10-135	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

QC Batch: 783818

Analysis Method: EPA 8082

QC Batch Method: EPA 3510

Analysis Description: 8082 GCS PCB, LV

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

METHOD BLANK: 3125608

Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	ND	1.0	04/29/22 07:48	
PCB-1221 (Aroclor 1221)	ug/L	ND	1.0	04/29/22 07:48	
PCB-1232 (Aroclor 1232)	ug/L	ND	1.0	04/29/22 07:48	
PCB-1242 (Aroclor 1242)	ug/L	ND	1.0	04/29/22 07:48	
PCB-1248 (Aroclor 1248)	ug/L	ND	1.0	04/29/22 07:48	
PCB-1254 (Aroclor 1254)	ug/L	ND	1.0	04/29/22 07:48	
PCB-1260 (Aroclor 1260)	ug/L	ND	1.0	04/29/22 07:48	
Decachlorobiphenyl (S)	%	50	25-120	04/29/22 07:48	

LABORATORY CONTROL SAMPLE: 3125609

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	2.5	51	40-120	
PCB-1260 (Aroclor 1260)	ug/L	5	3.0	59	55-120	
Decachlorobiphenyl (S)	%			50	25-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

QC Batch: 674639	Analysis Method: EPA 8151A
QC Batch Method: EPA 8151	Analysis Description: 8151 GCS TCLP Herbicides
	Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 60398453001

METHOD BLANK: 3106112 Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-TP (Silvex)	mg/L	ND	0.0010	05/06/22 22:39	
2,4-D	mg/L	ND	0.0010	05/06/22 22:39	
2,4-DCAA (S)	%	75	12-143	05/06/22 22:39	

LABORATORY CONTROL SAMPLE: 3106113

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-TP (Silvex)	mg/L	0.005	0.0042	84	27-127	
2,4-D	mg/L	0.005	0.0087	174	10-160	L3
2,4-DCAA (S)	%			82	12-143	

MATRIX SPIKE SAMPLE: 3106114

Parameter	Units	60398422001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2,4,5-TP (Silvex)	mg/L	ND	0.025	0.21	844	22-150	M0
2,4-D	mg/L	ND	0.025	0.082	328	11-160	ED, M0
2,4-DCAA (S)	%				103	12-143	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487
Pace Project No.: 60398453

QC Batch: 784192	Analysis Method: EPA 8270
QC Batch Method: EPA 3510	Analysis Description: 8270 TCLP MSSV
	Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

METHOD BLANK: 3125754 Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	100	05/02/22 14:15	
2,4,5-Trichlorophenol	ug/L	ND	500	05/02/22 14:15	
2,4,6-Trichlorophenol	ug/L	ND	100	05/02/22 14:15	
2,4-Dinitrotoluene	ug/L	ND	100	05/02/22 14:15	
2-Methylphenol(o-Cresol)	ug/L	ND	100	05/02/22 14:15	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	100	05/02/22 14:15	
Hexachloro-1,3-butadiene	ug/L	ND	100	05/02/22 14:15	
Hexachlorobenzene	ug/L	ND	100	05/02/22 14:15	
Hexachloroethane	ug/L	ND	100	05/02/22 14:15	
Nitrobenzene	ug/L	ND	100	05/02/22 14:15	
Pentachlorophenol	ug/L	ND	500	05/02/22 14:15	
Pyridine	ug/L	ND	500	05/02/22 14:15	
2,4,6-Tribromophenol (S)	%	86	57-110	05/02/22 14:15	
2-Fluorobiphenyl (S)	%	77	56-97	05/02/22 14:15	
2-Fluorophenol (S)	%	78	47-94	05/02/22 14:15	
Nitrobenzene-d5 (S)	%	83	57-101	05/02/22 14:15	
Phenol-d6 (S)	%	79	52-95	05/02/22 14:15	
Terphenyl-d14 (S)	%	80	67-106	05/02/22 14:15	

METHOD BLANK: 3126137 Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	100	05/02/22 14:59	
2,4,5-Trichlorophenol	ug/L	ND	500	05/02/22 14:59	
2,4,6-Trichlorophenol	ug/L	ND	100	05/02/22 14:59	
2,4-Dinitrotoluene	ug/L	ND	100	05/02/22 14:59	
2-Methylphenol(o-Cresol)	ug/L	ND	100	05/02/22 14:59	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	100	05/02/22 14:59	
Hexachloro-1,3-butadiene	ug/L	ND	100	05/02/22 14:59	
Hexachlorobenzene	ug/L	ND	100	05/02/22 14:59	
Hexachloroethane	ug/L	ND	100	05/02/22 14:59	
Nitrobenzene	ug/L	ND	100	05/02/22 14:59	
Pentachlorophenol	ug/L	ND	500	05/02/22 14:59	
Pyridine	ug/L	ND	500	05/02/22 14:59	
2,4,6-Tribromophenol (S)	%	75	57-110	05/02/22 14:59	
2-Fluorobiphenyl (S)	%	66	56-97	05/02/22 14:59	
2-Fluorophenol (S)	%	63	47-94	05/02/22 14:59	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

METHOD BLANK: 3126137

Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrobenzene-d5 (S)	%	69	57-101	05/02/22 14:59	
Phenol-d6 (S)	%	64	52-95	05/02/22 14:59	
Terphenyl-d14 (S)	%	69	67-106	05/02/22 14:59	

LABORATORY CONTROL SAMPLE: 3126937

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	400	80	48-95	
2,4,5-Trichlorophenol	ug/L	500	468J	94	63-112	
2,4,6-Trichlorophenol	ug/L	500	467	93	60-110	
2,4-Dinitrotoluene	ug/L	500	342	68	44-107	
2-Methylphenol(o-Cresol)	ug/L	500	425	85	52-103	
3&4-Methylphenol(m&p Cresol)	ug/L	1000	847	85	53-104	
Hexachloro-1,3-butadiene	ug/L	500	373	75	42-97	
Hexachlorobenzene	ug/L	500	422	84	60-108	
Hexachloroethane	ug/L	500	285	57	39-91	
Nitrobenzene	ug/L	500	448	90	50-116	
Pentachlorophenol	ug/L	500	520	104	47-127	
Pyridine	ug/L	500	383J	77	10-116	
2,4,6-Tribromophenol (S)	%			93	57-110	
2-Fluorobiphenyl (S)	%			82	56-97	
2-Fluorophenol (S)	%			80	47-94	
Nitrobenzene-d5 (S)	%			87	57-101	
Phenol-d6 (S)	%			81	52-95	
Terphenyl-d14 (S)	%			87	67-106	

MATRIX SPIKE SAMPLE: 3126938

Parameter	Units	60398642001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	500	378	76	49-91	
2,4,5-Trichlorophenol	ug/L	ND	500	425J	85	53-119	
2,4,6-Trichlorophenol	ug/L	ND	500	411	82	50-117	
2,4-Dinitrotoluene	ug/L	ND	500	339	68	43-109	
2-Methylphenol(o-Cresol)	ug/L	ND	500	402	80	52-102	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	1000	787	79	49-105	
Hexachloro-1,3-butadiene	ug/L	ND	500	363	73	43-95	
Hexachlorobenzene	ug/L	ND	500	372	74	50-110	
Hexachloroethane	ug/L	ND	500	299	60	40-89	
Nitrobenzene	ug/L	ND	500	399	80	48-115	
Pentachlorophenol	ug/L	ND	500	572	114	37-142	
Pyridine	ug/L	ND	500	411J	82	10-118	
2,4,6-Tribromophenol (S)	%				82	57-110	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

MATRIX SPIKE SAMPLE:		3126938					
Parameter	Units	60398642001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%				67	56-97	
2-Fluorophenol (S)	%				72	47-94	
Nitrobenzene-d5 (S)	%				76	57-101	
Phenol-d6 (S)	%				74	52-95	
Terphenyl-d14 (S)	%				72	67-106	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487
Pace Project No.: 60398453

QC Batch: 1859861 Analysis Method: EPA 9020
QC Batch Method: 9020B Analysis Description: Wet Chemistry 9020B
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60398453001

METHOD BLANK: R3789668-2 Matrix: Water
Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Halides	ug/L	ND	100	05/06/22 13:43	

LABORATORY CONTROL SAMPLE: R3789668-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Halides	ug/L	250	229	91.6	85.0-115	

SAMPLE DUPLICATE: R3789668-3

Parameter	Units	L1484517-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	92.7	ND	32.8	20	D8

SAMPLE DUPLICATE: R3789668-5

Parameter	Units	L1486235-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	72.0	98.2	0.00	20	

SAMPLE DUPLICATE: R3789668-7

Parameter	Units	L1484516-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	2420	2200	9.68	20	

SAMPLE DUPLICATE: R3789668-9

Parameter	Units	L1484515-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	74.3	ND	12.6	20	

SAMPLE DUPLICATE: R3790579-5

Parameter	Units	L1484882-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	6200	6610	6.42	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

SAMPLE DUPLICATE: R3790579-7

Parameter	Units	L1484975-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3791220-1

Parameter	Units	L1486821-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3791220-2

Parameter	Units	L1486821-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3791220-3

Parameter	Units	L1486821-03 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3791220-4

Parameter	Units	L1486821-04 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3791220-5

Parameter	Units	L1488182-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	200	20	D8

SAMPLE DUPLICATE: R3791220-6

Parameter	Units	L1486926-08 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3791220-7

Parameter	Units	L1486926-09 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

SAMPLE DUPLICATE: R3791861-3

Parameter	Units	L1486926-10 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3791861-4

Parameter	Units	L1486941-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3791861-5

Parameter	Units	L1486941-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3791861-6

Parameter	Units	60398453001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3791861-7

Parameter	Units	L1488010-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3789668-10

Parameter	Units	L1484519-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Halides	ug/L	809	534	40.9	20	R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

QC Batch: 785735

Analysis Method: EPA 1010

QC Batch Method: EPA 1010

Analysis Description: 1010 Flash Point, Closed Cup

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

SAMPLE DUPLICATE: 3132666

Parameter	Units	60398453001 Result	Dup Result	RPD	Max RPD	Qualifiers
Flashpoint	deg F	>201	>201			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

QC Batch: 783515	Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D	Analysis Description: 4500S2D Sulfide, Total
	Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

METHOD BLANK: 3124396 Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	04/27/22 10:42	

LABORATORY CONTROL SAMPLE: 3124397

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.50	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3124398 3124399

Parameter	Units	60398453001		3124399		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Sulfide, Total	mg/L	ND	0.5	0.5	0.50	0.50	99	99	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

QC Batch: 783784

Analysis Method: EPA 9040

QC Batch Method: EPA 9040

Analysis Description: 9040 pH

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

SAMPLE DUPLICATE: 3125459

Parameter	Units	60398453001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.5	7.6	1	10	H6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

QC Batch: 783678	Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0	Analysis Description: 300.0 IC Anions
	Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

METHOD BLANK: 3125086 Matrix: Water
Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	04/28/22 09:01	

METHOD BLANK: 3126817 Matrix: Water
Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	04/29/22 06:33	

LABORATORY CONTROL SAMPLE: 3125087

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.0	99	90-110	

LABORATORY CONTROL SAMPLE: 3126818

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.0	100	90-110	

MATRIX SPIKE SAMPLE: 3125090

Parameter	Units	60398489003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	189	50	245	111	80-120	E

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3125093 3125092

Parameter	Units	60397546008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Sulfate	mg/L	13.3	5	5	18.5	18.4	102	101	80-120	0 15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

SAMPLE DUPLICATE: 3125094

Parameter	Units	60397546008 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfate	mg/L	13.3	13.3	0	15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487
Pace Project No.: 60398453

QC Batch: 784345	Analysis Method: EPA 420.1
QC Batch Method: EPA 420.1	Analysis Description: 420.1 Phenolics Macro
	Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

METHOD BLANK: 3127516 Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	mg/L	ND	0.050	05/04/22 11:46	

LABORATORY CONTROL SAMPLE: 3127517

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/L	0.25	0.25	100	90-110	

MATRIX SPIKE SAMPLE: 3127518

Parameter	Units	60398103004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/L		0.38	0.25	0.63	98	90-110

MATRIX SPIKE SAMPLE: 3127520

Parameter	Units	60398253004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/L		0.26	0.25	0.34	32	90-110 M1

SAMPLE DUPLICATE: 3127519

Parameter	Units	60398160001 Result	Dup Result	RPD	Max RPD	Qualifiers
Phenolics, Total Recoverable	mg/L		0.77	0.80	3	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

QC Batch: 784620

Analysis Method: SM 4500-CN-E

QC Batch Method: SM 4500-CN-E

Analysis Description: 4500CNE Cyanide, Total

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60398453001

METHOD BLANK: 3128335

Matrix: Water

Associated Lab Samples: 60398453001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	05/03/22 12:11	

LABORATORY CONTROL SAMPLE: 3128336

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.1	0.10	100	69-126	

MATRIX SPIKE SAMPLE: 3128339

Parameter	Units	60398423002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	<0.0030	0.1	0.10	99	55-124	

SAMPLE DUPLICATE: 3128340

Parameter	Units	60398423002 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	<0.0030	ND		46	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: R3789668-7

[1] Wet Chemistry by Method 9020B - Breakthrough due to matrix.

Sample: L1484516-01

[1] Wet Chemistry by Method 9020B - Breakthrough due to matrix.

Sample: L1484882-01

[1] Wet Chemistry by Method 9020B - In hold result was above the calibration range. Ran OOH at a dilution.

ANALYTE QUALIFIERS

D8 The sample and duplicate results for this parameter are less than 5 times the reporting limit, the RPD may not be statistically valid.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

ED Due to the extract's physical characteristics, the analysis was performed at dilution.

H6 Analysis initiated outside of the 15 minute EPA required holding time.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GSA GOODFELLOW WC 128487

Pace Project No.: 60398453

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60398453001	DW-GW-04202022	EPA 3510	675114	EPA 8081	675261
60398453001	DW-GW-04202022	EPA 3510	783818	EPA 8082	784011
60398453001	DW-GW-04202022	EPA 8151	674639	EPA 8151A	674846
60398453001	DW-GW-04202022	EPA 3010	785047	EPA 6010	785050
60398453001	DW-GW-04202022	EPA 7470	784152	EPA 7470	784339
60398453001	DW-GW-04202022	EPA 3510	784192	EPA 8270	784368
60398453001	DW-GW-04202022	EPA 8260	785390		
60398453001	DW-GW-04202022	9020B	1859861	EPA 9020	1859861
60398453001	DW-GW-04202022	EPA 1010	785735		
60398453001	DW-GW-04202022	SM 4500-S-2 D	783515		
60398453001	DW-GW-04202022	EPA 9040	783784		
60398453001	DW-GW-04202022	EPA 300.0	783678		
60398453001	DW-GW-04202022	EPA 420.1	784345	EPA 420.1	784829
60398453001	DW-GW-04202022	SM 4500-CN-E	784620	SM 4500-CN-E	784730

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

WO#: 60398453



DC#_Title: ENV-FRM-LENE-0009_Sample Cor

Revision: 2

Effective Date: 01/12/2022

Issued By: Lenexa

Client Name: Burns & McD

Courier: FedEx UPS VIA Clay PEX ECI Pace Xroads Client Other

Tracking #: 5646 2492 9093 Pace Shipping Label Used? Yes No

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No

Packing Material: Bubble Wrap Bubble Bags Foam None Other

Thermometer Used: T301 Type of Ice: Wet Blue None

Cooler Temperature (°C): As-read 2.5 Corr. Factor -1.0 Corrected 1.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents:

(b) (6) 1/25/22

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>WT</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

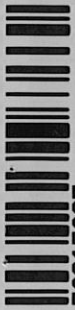
Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: Collection date/time noted on the sample bottle labels as 4/20/22 09:08

Project Manager Review: _____ Date: _____

WO#: 50315097



50315097

ustody

Samples Pre-Logged into eCOC.

State Of Origin: MO

Cert. Needed: Yes No

Owner Received Date: 4/21/2022 Results Requested By: 5/5/2022



Report To: Subcontract To: GSA GOODFELLOW WC 128487 Requested Analysis:

Alice Spiller
Pace Analytical Kansas
9608 Loiret Blvd.
Lenexa, KS 66219
Phone (913)599-5665

Pace Analytical Indianapolis
7726 Moller Road
Indianapolis, IN 46268
Phone (317)875-5894

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers		LAB USE ONLY
						Unpreserved		
1	DW-GW-04202022	PS	4/20/2022 00:00 09:08	60398453001	Water	1		X
2								X
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time	Received on Ice	Y or N	Custody Seal	Y or N	Received on Ice	Y or N	Samples Intact	Y or N
1	[Redacted]	4.27.22	700									
2												
3												

Cooler Temperature on Receipt 1.2 °C

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace

SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining contents: (b) (6) 4-28-22 1630

1. Courier: FED EX UPS CLIENT PACE USPS OTHER _____

2. Custody Seal on Cooler/Box Present: Yes No (leave blank if no seals were present)

3. Thermometer: 1 2 3 4 5 6 **A B C D E F**

4. Cooler Temperature(s): RECORD TEMPS OF ALL COOLERS RECEIVED (use Comments below to add more)

5. Packing Material: Bubble Wrap Bubble Bags None Other _____

6. Ice Type: Wet Blue None

7. If temp. is over 6°C or under 0°C, was the PM notified?: Yes No
Cooler temp should be above freezing to 6°C

All discrepancies will be written out in the comments section below.

	Yes	No	Yes	No	N/A
USDA Regulated Soils? (HI, ID, NY, WA, OR, CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		<input checked="" type="checkbox"/>			
Short Hold Time Analysis (48 hours or less)? Analysis:		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Time 5035A TC placed in Freezer or Short Holds To Lab	Time:				
Rush TAT Requested (4 days or less):		<input checked="" type="checkbox"/>			
Custody Signatures Present?	<input checked="" type="checkbox"/>				
Containers Intact?:	<input checked="" type="checkbox"/>				
Sample Label (IDs/Dates/Times) Match COC? Except TCs, which only require sample ID		<input checked="" type="checkbox"/>			
Extra labels on Terracore Vials? (soils only)					
COMMENTS:					
Time doesn't match Received 2 AGIU's COC has 1. - (b) (6) 4-28-22					

Per Kansas PM the correct collection time for this sample is 09:08. kh042922

Sample Container Count

SBS
DI
MeOH
(only)
BK
Kit

** Place a RED dot on containers that are out of conformance **

COC Line Item	WGFU	R	DG9H	VG9H	VOA VIAL HS (<6mm)	VG9U	DG9U	VG9T	AG0U	AG1H	AG1U	AG2U	AG3S	AG3SF	AG3C	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H	Syringe Kit	Matrix	HNO3/ H2SO4 pH <2	NaOH/ ZnAc pH >9	NaOH pH >10
1											2																WT			
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

Container Codes

Glass		Plastic / Misc.	
DG9H	40mL HCl amber vial	BP4U	125mL unreserved plastic
DG9P	40mL TSP amber vial	BP4N	125mL HNO3 plastic
DG9S	40mL H2SO4 amber vial	BP4S	125mL H2SO4 plastic
DG9T	40mL Na Thio amber vial		
DG9U	40mL unreserved amber vial	Syringe Kit	LL Cr+6 sampling kit
VG9H	40mL HCl clear vial		
VG9T	40mL Na Thio. clear vial		
VG9U	40mL unreserved clear vial		
I	40mL w/hexane wipe vial		
WGKU	8oz unreserved clear jar		
WGFU	4oz clear soil jar		
JGFU	4oz unreserved amber wide		
CG3H	250mL clear glass HCl		
BG1H	1L HCl clear glass		
BG3H	1L H2SO4 clear glass		
GN5	General		
BG1T	1L Na Thiosulfate clear glass		
BG1U	1L unreserved glass		
BG3H	250mL HCl Clear Glass		
BG3U	250mL Unpres Clear Glass		
AG0U	100mL unpres amber glass		
AG1H	1L HCl amber glass		
AG1S	1L H2SO4 amber glass		
AG1T	1L Na Thiosulfate amber glass		
AG1U	1liter unpres amber glass		
AG2N	500mL HNO3 amber glass		
AG2S	500mL H2SO4 amber glass		
AG2U	500mL unpres amber glass		
AG3S	250mL H2SO4 amber glass		
AG3SF	250mL H2SO4 amb glass -field filtered		
AG3U	250mL unpres amber glass		
AG3C	250mL NaOH amber glass		
BP1B	1L NaOH plastic		
BP1N	1L HNO3 plastic		
BP1S	1L H2SO4 plastic		
BP1U	1L unreserved plastic		
BP1Z	1L NaOH, Zn, Ac		
BP2N	500mL HNO3 plastic		
BP2C	500mL NaOH plastic		
BP2S	500mL H2SO4 plastic		
BP2U	500mL unreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3F	250mL HNO3 plastic-field filtered		
BP3U	250mL unreserved plastic		
BP3S	250mL H2SO4 plastic		
BP3Z	250mL NaOH, ZnAc plastic		
AF	Air Filter		
C	Air Cassettes		
R	Terracore kit		
SP5T	120mL Coliform Na Thiosulfate		
U	Summa Can		
ZPLC	Ziploc Bag		
WT	Water		
SL	Solid		
NAL	Non-aqueous liquid		
WP	Wipe		

APPENDIX D – WASTE PROFILE AND MANIFEST

**APPENDIX E – ANALYTICAL LABORATORY REPORTS FOR
GROUNDWATER SAMPLES**

April 28, 2022

Justin Carter
Burns & McDonnell Waste Consultants
9400 Ward Parkway
P.O. Box 419173
Kansas City, MO 64114
TEL: (816) 333-9400
FAX: (816) 822-3494



Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: 128487 GSA

WorkOrder: 22041266

Dear Justin Carter:

TEKLAB, INC received 27 samples on 4/20/2022 12:13:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

(b) (6)

Emily E. Hayer
Project Manager
(618)344-1004 ex 44
ehayer@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Sample Summary	109
Dates Report	110
Quality Control Results	117
Receiving Check List	152
Chain of Custody	Appended

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Qualifiers

- # - Unknown hydrocarbon
- C - RL shown is a Client Requested Quantitation Limit
- H - Holding times exceeded
- J - Analyte detected below quantitation limits
- ND - Not Detected at the Reporting Limit
- S - Spike Recovery outside recovery limits
- X - Value exceeds Maximum Contaminant Level
- B - Analyte detected in associated Method Blank
- E - Value above quantitation range
- I - Associated internal standard was outside method criteria
- M - Manual Integration used to determine area response
- R - RPD outside accepted recovery limits
- T - TIC(Tentatively identified compound)

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Cooler Receipt Temp: 1.8 °C

Per Justin Carter, do not analyze any of the samples for TPH-GRO, TPH-DRO, or TPH-ORO; the total and dissolved metals are only analyzed for antimony, arsenic, copper, lead and zinc. EEH 4/21/22

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2023	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2022	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2022	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2022	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2022	Collinsville
Arkansas	ADEQ	88-0966		3/14/2023	Collinsville
Illinois	IDPH	17584		5/31/2023	Collinsville
Kentucky	UST	0073		1/31/2023	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-001

Client Sample ID: MW-01 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 11:58

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 11:43	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:02	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:21	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 11:43	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:02	190886

Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/25/2022 16:21	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/25/2022 16:21	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/25/2022 16:21	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/25/2022 16:21	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/25/2022 16:21	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/25/2022 16:21	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/25/2022 16:21	191002
Surr: Decachlorobiphenyl	*	10-152		65.4	%REC	1	04/25/2022 16:21	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		88.9	%REC	1	04/25/2022 16:21	191002

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Acenaphthylene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Anthracene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Benzo(a)anthracene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Benzo(a)pyrene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Benzo(b)fluoranthene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Benzo(g,h,i)perylene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Benzo(k)fluoranthene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Chrysene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Dibenzo(a,h)anthracene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Fluoranthene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Fluorene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Naphthalene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Phenanthrene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Pyrene	NELAP	0.00400		ND	mg/L	1	04/22/2022 14:36	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		40.0	%REC	1	04/22/2022 14:36	190899
Surr: Nitrobenzene-d5	*	29.1-125		54.4	%REC	1	04/22/2022 14:36	190899
Surr: p-Terphenyl-d14	*	35.2-164		89.8	%REC	1	04/22/2022 14:36	190899

Elevated reporting limit due to sample composition.

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 10:23	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 10:23	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 10:23	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-001

Client Sample ID: MW-01 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 11:58

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 10:23	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 10:23	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 10:23	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 10:23	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 10:23	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 10:23	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 10:23	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 10:23	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 10:23	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 10:23	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 10:23	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-001

Client Sample ID: MW-01 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 11:58

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 10:23	190900
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 10:23	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 10:23	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 10:23	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 10:23	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 10:23	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 10:23	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 10:23	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 10:23	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 10:23	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 10:23	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 10:23	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants
Client Project: 128487 GSA
Lab ID: 22041266-001
Matrix: GROUNDWATER

Work Order: 22041266
Report Date: 28-Apr-22
Client Sample ID: MW-01 04182022
Collection Date: 04/18/2022 11:58

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 1,2-Dichloroethane-d4	*	80-120		98.0	%REC	1	04/21/2022 10:23	190900
Surr: 4-Bromofluorobenzene	*	80-120		96.3	%REC	1	04/21/2022 10:23	190900
Surr: Toluene-d8	*	80-120		95.5	%REC	1	04/21/2022 10:23	190900

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-002

Client Sample ID: MW-02 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 12:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 11:44	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:04	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:23	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 11:44	190886
Zinc	NELAP	0.0100		0.0107	mg/L	1	04/22/2022 16:04	190886

Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/25/2022 16:36	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/25/2022 16:36	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/25/2022 16:36	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/25/2022 16:36	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/25/2022 16:36	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/25/2022 16:36	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/25/2022 16:36	191002
Surr: Decachlorobiphenyl	*	10-152		60.2	%REC	1	04/25/2022 16:36	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		66.9	%REC	1	04/25/2022 16:36	191002

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Acenaphthylene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Anthracene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Benzo(a)anthracene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Benzo(a)pyrene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Benzo(b)fluoranthene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Benzo(g,h,i)perylene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Benzo(k)fluoranthene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Chrysene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Dibenzo(a,h)anthracene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Fluoranthene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Fluorene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Naphthalene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Phenanthrene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Pyrene	NELAP	0.00400		ND	mg/L	1	04/22/2022 15:16	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		44.3	%REC	1	04/22/2022 15:16	190899
Surr: Nitrobenzene-d5	*	29.1-125		74.3	%REC	1	04/22/2022 15:16	190899
Surr: p-Terphenyl-d14	*	35.2-164		99.6	%REC	1	04/22/2022 15:16	190899

Elevated reporting limit due to sample composition.

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 10:49	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 10:49	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 10:49	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-002

Client Sample ID: MW-02 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 12:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 10:49	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 10:49	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 10:49	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 10:49	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 10:49	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 10:49	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 10:49	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 10:49	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 10:49	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 10:49	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 10:49	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-002

Client Sample ID: MW-02 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 12:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 10:49	190900
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 10:49	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 10:49	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 10:49	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 10:49	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 10:49	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 10:49	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 10:49	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 10:49	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 10:49	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 10:49	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 10:49	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-002

Client Sample ID: MW-02 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 12:28

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 1,2-Dichloroethane-d4	*	80-120		96.0	%REC	1	04/21/2022 10:49	190900
Surr: 4-Bromofluorobenzene	*	80-120		96.2	%REC	1	04/21/2022 10:49	190900
Surr: Toluene-d8	*	80-120		94.7	%REC	1	04/21/2022 10:49	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-003

Client Sample ID: MW-03 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 13:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 11:46	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:06	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:25	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 11:46	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:06	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/25/2022 16:52	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/25/2022 16:52	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/25/2022 16:52	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/25/2022 16:52	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/25/2022 16:52	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/25/2022 16:52	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/25/2022 16:52	191002
Surr: Decachlorobiphenyl	*	10-152		53.8	%REC	1	04/25/2022 16:52	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		57.2	%REC	1	04/25/2022 16:52	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/26/2022 18:46	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/26/2022 18:46	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/26/2022 18:46	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 15:57	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		49.3	%REC	1	04/22/2022 15:57	190899
Surr: Nitrobenzene-d5	*	29.1-125		110.6	%REC	1	04/22/2022 15:57	190899
Surr: p-Terphenyl-d14	*	35.2-164		149.7	%REC	1	04/22/2022 15:57	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 11:13	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 11:13	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 11:13	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-003

Client Sample ID: MW-03 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 13:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 11:13	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 11:13	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 11:13	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 11:13	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 11:13	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 11:13	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 11:13	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 11:13	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 11:13	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 11:13	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 11:13	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 11:13	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-003

Client Sample ID: MW-03 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 13:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 11:13	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 11:13	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 11:13	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 11:13	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 11:13	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 11:13	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 11:13	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 11:13	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 11:13	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 11:13	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 11:13	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		95.7	%REC	1	04/21/2022 11:13	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-003

Client Sample ID: MW-03 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 13:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		96.7	%REC	1	04/21/2022 11:13	190900
Surr: Toluene-d8	*	80-120		94.0	%REC	1	04/21/2022 11:13	190900

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-004

Client Sample ID: MW-04 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 14:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (DISSOLVED)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/21/2022 14:07	190889
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/21/2022 14:07	190889
Copper	NELAP	0.0050		< 0.0050	mg/L	1	04/21/2022 14:07	190889
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/21/2022 14:07	190889
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/21/2022 14:07	190889
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 11:48	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:08	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:26	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 11:48	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:08	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/25/2022 17:07	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/25/2022 17:07	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/25/2022 17:07	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/25/2022 17:07	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/25/2022 17:07	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/25/2022 17:07	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/25/2022 17:07	191002
Surr: Decachlorobiphenyl	*	10-152		91.3	%REC	1	04/25/2022 17:07	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		87.9	%REC	1	04/25/2022 17:07	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 16:36	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		55.7	%REC	1	04/22/2022 16:36	190899
Surr: Nitrobenzene-d5	*	29.1-125	S	110.8	%REC	1	04/22/2022 16:36	190899
Surr: p-Terphenyl-d14	*	35.2-164		138.7	%REC	1	04/22/2022 16:36	190899
<i>Surrogate recovery in the matrix spike is outside control limits due to matrix interference.</i>								
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-004

Client Sample ID: MW-04 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 14:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 11:38	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 11:38	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 11:38	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 11:38	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 11:38	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 11:38	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 11:38	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 11:38	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 11:38	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 11:38	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 11:38	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 11:38	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 11:38	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 11:38	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-004

Client Sample ID: MW-04 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 14:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 11:38	190900
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 11:38	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 11:38	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 11:38	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 11:38	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 11:38	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 11:38	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 11:38	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 11:38	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-004

Client Sample ID: MW-04 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 14:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 11:38	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 11:38	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 11:38	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		97.7	%REC	1	04/21/2022 11:38	190900
Surr: 4-Bromofluorobenzene	*	80-120		95.7	%REC	1	04/21/2022 11:38	190900
Surr: Toluene-d8	*	80-120		94.0	%REC	1	04/21/2022 11:38	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-005

Client Sample ID: MW-05 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 14:47

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:35	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:13	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:42	190886
Lead	NELAP	0.0150		0.0326	mg/L	1	04/25/2022 12:35	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:13	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/25/2022 17:53	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/25/2022 17:53	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/25/2022 17:53	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/25/2022 17:53	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/25/2022 17:53	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/25/2022 17:53	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/25/2022 17:53	191002
Surr: Decachlorobiphenyl	*	10-152		68.4	%REC	1	04/25/2022 17:53	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		78.5	%REC	1	04/25/2022 17:53	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 18:34	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		58.4	%REC	1	04/22/2022 18:34	190899
Surr: Nitrobenzene-d5	*	29.1-125		103.4	%REC	1	04/22/2022 18:34	190899
Surr: p-Terphenyl-d14	*	35.2-164		126.4	%REC	1	04/22/2022 18:34	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 12:50	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 12:50	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 12:50	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-005

Client Sample ID: MW-05 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 14:47

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 12:50	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 12:50	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 12:50	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 12:50	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 12:50	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 12:50	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 12:50	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 12:50	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 12:50	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 12:50	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 12:50	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 12:50	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-005

Client Sample ID: MW-05 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 14:47

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 12:50	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 12:50	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 12:50	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 12:50	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 12:50	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 12:50	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 12:50	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 12:50	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 12:50	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 12:50	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 12:50	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		97.6	%REC	1	04/21/2022 12:50	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-005

Client Sample ID: MW-05 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 14:47

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		95.9	%REC	1	04/21/2022 12:50	190900
Surr: Toluene-d8	*	80-120		94.9	%REC	1	04/21/2022 12:50	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-006

Client Sample ID: MW-06 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 16:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:01	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:23	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:43	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:01	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:23	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/25/2022 18:08	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/25/2022 18:08	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/25/2022 18:08	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/25/2022 18:08	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/25/2022 18:08	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/25/2022 18:08	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/25/2022 18:08	191002
Surr: Decachlorobiphenyl	*	10-152		62.4	%REC	1	04/25/2022 18:08	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		81.0	%REC	1	04/25/2022 18:08	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:13	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		61.3	%REC	1	04/22/2022 19:13	190899
Surr: Nitrobenzene-d5	*	29.1-125		108.2	%REC	1	04/22/2022 19:13	190899
Surr: p-Terphenyl-d14	*	35.2-164		121.3	%REC	1	04/22/2022 19:13	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 13:15	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 13:15	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 13:15	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-006

Client Sample ID: MW-06 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 16:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:15	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:15	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:15	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:15	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:15	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 13:15	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:15	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:15	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 13:15	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 13:15	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 13:15	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 13:15	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-006

Client Sample ID: MW-06 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 16:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 13:15	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 13:15	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 13:15	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 13:15	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 13:15	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:15	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 13:15	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 13:15	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:15	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:15	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 13:15	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		96.0	%REC	1	04/21/2022 13:15	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants
Client Project: 128487 GSA
Lab ID: 22041266-006
Matrix: GROUNDWATER

Work Order: 22041266
Report Date: 28-Apr-22
Client Sample ID: MW-06 04182022
Collection Date: 04/18/2022 16:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		95.9	%REC	1	04/21/2022 13:15	190900
Surr: Toluene-d8	*	80-120		94.0	%REC	1	04/21/2022 13:15	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-007

Client Sample ID: MW-07 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 16:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:03	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:47	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:45	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:03	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:47	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/27/2022 10:59	191071
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/27/2022 10:59	191071
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/27/2022 10:59	191071
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/27/2022 10:59	191071
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/27/2022 10:59	191071
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/27/2022 10:59	191071
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/27/2022 10:59	191071
Surr: Decachlorobiphenyl	*	10-152		100.7	%REC	1	04/27/2022 10:59	191071
Surr: Tetrachloro-meta-xylene	*	9.73-128		112.9	%REC	1	04/27/2022 10:59	191071
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/22/2022 19:52	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		61.6	%REC	1	04/22/2022 19:52	190899
Surr: Nitrobenzene-d5	*	29.1-125		96.6	%REC	1	04/22/2022 19:52	190899
Surr: p-Terphenyl-d14	*	35.2-164		114.8	%REC	1	04/22/2022 19:52	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 13:39	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 13:39	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 13:39	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-007

Client Sample ID: MW-07 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 16:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:39	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:39	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:39	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:39	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:39	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 13:39	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:39	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:39	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 13:39	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 13:39	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 13:39	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 13:39	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-007

Client Sample ID: MW-07 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 16:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 13:39	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 13:39	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 13:39	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 13:39	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 13:39	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:39	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 13:39	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 13:39	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:39	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:39	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 13:39	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		96.5	%REC	1	04/21/2022 13:39	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-007

Client Sample ID: MW-07 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 16:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		96.2	%REC	1	04/21/2022 13:39	190900
Surr: Toluene-d8	*	80-120		94.0	%REC	1	04/21/2022 13:39	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-008

Client Sample ID: MW-08 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 15:31

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:05	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:48	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:47	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:05	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:48	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/27/2022 11:15	191071
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/27/2022 11:15	191071
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/27/2022 11:15	191071
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/27/2022 11:15	191071
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/27/2022 11:15	191071
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/27/2022 11:15	191071
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/27/2022 11:15	191071
Surr: Decachlorobiphenyl	*	10-152		72.3	%REC	1	04/27/2022 11:15	191071
Surr: Tetrachloro-meta-xylene	*	9.73-128		94.6	%REC	1	04/27/2022 11:15	191071
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:19	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		21.7	%REC	1	04/23/2022 12:19	190899
Surr: Nitrobenzene-d5	*	29.1-125		37.8	%REC	1	04/23/2022 12:19	190899
Surr: p-Terphenyl-d14	*	35.2-164		60.9	%REC	1	04/23/2022 12:19	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 14:03	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 14:03	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 14:03	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-008

Client Sample ID: MW-08 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 15:31

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:03	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:03	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:03	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 14:03	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:03	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 14:03	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-008

Client Sample ID: MW-08 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 15:31

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 14:03	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 14:03	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 14:03	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:03	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:03	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 14:03	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		96.0	%REC	1	04/21/2022 14:03	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants
Client Project: 128487 GSA
Lab ID: 22041266-008
Matrix: GROUNDWATER

Work Order: 22041266
Report Date: 28-Apr-22
Client Sample ID: MW-08 04192022
Collection Date: 04/19/2022 15:31

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		96.2	%REC	1	04/21/2022 14:03	190900
Surr: Toluene-d8	*	80-120		94.0	%REC	1	04/21/2022 14:03	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-009

Client Sample ID: MW-09 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 10:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:06	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:50	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:49	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:06	190886
Zinc	NELAP	0.0100		0.0127	mg/L	1	04/22/2022 16:50	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/26/2022 13:34	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/26/2022 13:34	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/26/2022 13:34	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/26/2022 13:34	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/26/2022 13:34	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/26/2022 13:34	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/26/2022 13:34	191002
Surr: Decachlorobiphenyl	*	10-152		82.3	%REC	1	04/26/2022 13:34	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		82.6	%REC	1	04/26/2022 13:34	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 12:58	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		20.7	%REC	1	04/23/2022 12:58	190899
Surr: Nitrobenzene-d5	*	29.1-125		40.8	%REC	1	04/23/2022 12:58	190899
Surr: p-Terphenyl-d14	*	35.2-164		88.0	%REC	1	04/23/2022 12:58	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 14:28	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 14:28	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 14:28	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-009

Client Sample ID: MW-09 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 10:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:28	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:28	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:28	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:28	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:28	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 14:28	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:28	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:28	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:28	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 14:28	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:28	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 14:28	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-009

Client Sample ID: MW-09 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 10:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 14:28	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 14:28	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 14:28	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 14:28	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:28	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:28	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 14:28	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:28	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:28	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:28	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 14:28	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		95.1	%REC	1	04/21/2022 14:28	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants
Client Project: 128487 GSA
Lab ID: 22041266-009
Matrix: GROUNDWATER

Work Order: 22041266
Report Date: 28-Apr-22
Client Sample ID: MW-09 04192022
Collection Date: 04/19/2022 10:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		96.3	%REC	1	04/21/2022 14:28	190900
Surr: Toluene-d8	*	80-120		94.0	%REC	1	04/21/2022 14:28	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-010

Client Sample ID: MW-10 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 9:59

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:08	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:52	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:50	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:08	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:52	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/26/2022 13:49	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/26/2022 13:49	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/26/2022 13:49	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/26/2022 13:49	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/26/2022 13:49	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/26/2022 13:49	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/26/2022 13:49	191002
Surr: Decachlorobiphenyl	*	10-152		96.7	%REC	1	04/26/2022 13:49	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		105.4	%REC	1	04/26/2022 13:49	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 13:37	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		23.4	%REC	1	04/23/2022 13:37	190899
Surr: Nitrobenzene-d5	*	29.1-125		35.2	%REC	1	04/23/2022 13:37	190899
Surr: p-Terphenyl-d14	*	35.2-164		60.4	%REC	1	04/23/2022 13:37	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 14:52	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 14:52	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 14:52	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-010

Client Sample ID: MW-10 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 9:59

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:52	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:52	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:52	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:52	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:52	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 14:52	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:52	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:52	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:52	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 14:52	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:52	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 14:52	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-010

Client Sample ID: MW-10 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 9:59

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 14:52	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 14:52	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 14:52	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 14:52	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:52	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:52	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 14:52	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:52	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:52	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:52	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 14:52	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		96.7	%REC	1	04/21/2022 14:52	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants
Client Project: 128487 GSA
Lab ID: 22041266-010
Matrix: GROUNDWATER

Work Order: 22041266
Report Date: 28-Apr-22
Client Sample ID: MW-10 04192022
Collection Date: 04/19/2022 9:59

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		95.8	%REC	1	04/21/2022 14:52	190900
Surr: Toluene-d8	*	80-120		94.4	%REC	1	04/21/2022 14:52	190900

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-011

Client Sample ID: MW-11 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 16:27

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:10	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:54	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:52	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:10	190886
Zinc	NELAP	0.0100		0.0142	mg/L	1	04/22/2022 16:54	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/25/2022 18:23	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/25/2022 18:23	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/25/2022 18:23	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/25/2022 18:23	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/25/2022 18:23	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/25/2022 18:23	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/25/2022 18:23	191002
Surr: Decachlorobiphenyl	*	10-152		47.1	%REC	1	04/25/2022 18:23	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		61.0	%REC	1	04/25/2022 18:23	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:16	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		98.8	%REC	1	04/23/2022 14:16	190899
Surr: Nitrobenzene-d5	*	29.1-125		122.1	%REC	1	04/23/2022 14:16	190899
Surr: p-Terphenyl-d14	*	35.2-164		161.6	%REC	1	04/23/2022 14:16	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 15:16	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 15:16	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 15:16	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-011

Client Sample ID: MW-11 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 16:27

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:16	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:16	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:16	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:16	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:16	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 15:16	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:16	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:16	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 15:16	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 15:16	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 15:16	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 15:16	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-011

Client Sample ID: MW-11 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 16:27

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 15:16	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 15:16	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 15:16	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 15:16	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 15:16	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:16	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 15:16	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 15:16	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:16	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:16	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 15:16	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		95.7	%REC	1	04/21/2022 15:16	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-011

Client Sample ID: MW-11 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 16:27

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		95.6	%REC	1	04/21/2022 15:16	190900
Surr: Toluene-d8	*	80-120		94.2	%REC	1	04/21/2022 15:16	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-012

Client Sample ID: MW-12 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:19

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:11	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:55	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 16:54	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:11	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:55	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/27/2022 11:30	191071
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/27/2022 11:30	191071
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/27/2022 11:30	191071
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/27/2022 11:30	191071
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/27/2022 11:30	191071
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/27/2022 11:30	191071
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/27/2022 11:30	191071
Surr: Decachlorobiphenyl	*	10-152		69.5	%REC	1	04/27/2022 11:30	191071
Surr: Tetrachloro-meta-xylene	*	9.73-128		96.9	%REC	1	04/27/2022 11:30	191071
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 14:55	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		68.3	%REC	1	04/23/2022 14:55	190899
Surr: Nitrobenzene-d5	*	29.1-125		103.2	%REC	1	04/23/2022 14:55	190899
Surr: p-Terphenyl-d14	*	35.2-164		152.4	%REC	1	04/23/2022 14:55	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 15:40	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 15:40	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 15:40	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-012

Client Sample ID: MW-12 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:19

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:40	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:40	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:40	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:40	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:40	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 15:40	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:40	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:40	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 15:40	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 15:40	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 15:40	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 15:40	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-012

Client Sample ID: MW-12 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:19

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 15:40	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 15:40	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 15:40	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 15:40	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 15:40	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:40	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 15:40	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 15:40	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:40	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:40	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 15:40	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		95.8	%REC	1	04/21/2022 15:40	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-012

Client Sample ID: MW-12 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:19

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		96.3	%REC	1	04/21/2022 15:40	190900
Surr: Toluene-d8	*	80-120		94.1	%REC	1	04/21/2022 15:40	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-013

Client Sample ID: MW-13 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 11:41

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (DISSOLVED)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/21/2022 14:18	190889
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/21/2022 14:18	190889
Copper	NELAP	0.0050		< 0.0050	mg/L	1	04/21/2022 14:18	190889
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/21/2022 14:18	190889
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/21/2022 14:18	190889
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:25	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:57	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 17:06	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:25	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:57	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/26/2022 14:04	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/26/2022 14:04	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/26/2022 14:04	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/26/2022 14:04	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/26/2022 14:04	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/26/2022 14:04	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/26/2022 14:04	191002
Surr: Decachlorobiphenyl	*	10-152		60.1	%REC	1	04/26/2022 14:04	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		78.4	%REC	1	04/26/2022 14:04	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 15:34	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		71.3	%REC	1	04/23/2022 15:34	190899
Surr: Nitrobenzene-d5	*	29.1-125		102.0	%REC	1	04/23/2022 15:34	190899
Surr: p-Terphenyl-d14	*	35.2-164		136.2	%REC	1	04/23/2022 15:34	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 16:05	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-013

Client Sample ID: MW-13 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 11:41

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 16:05	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 16:05	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 16:05	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 16:05	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 16:05	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:05	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:05	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 16:05	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:05	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:05	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 16:05	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 16:05	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 16:05	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-013

Client Sample ID: MW-13 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 11:41

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 16:05	190900
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 16:05	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 16:05	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 16:05	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 16:05	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 16:05	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 16:05	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 16:05	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 16:05	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-013

Client Sample ID: MW-13 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 11:41

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:05	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 16:05	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 16:05	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		96.9	%REC	1	04/21/2022 16:05	190900
Surr: 4-Bromofluorobenzene	*	80-120		95.6	%REC	1	04/21/2022 16:05	190900
Surr: Toluene-d8	*	80-120		93.7	%REC	1	04/21/2022 16:05	190900

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-014

Client Sample ID: MW-14 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 17:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (DISSOLVED)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/21/2022 14:22	190889
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/21/2022 14:22	190889
Copper	NELAP	0.0050		< 0.0050	mg/L	1	04/21/2022 14:22	190889
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/21/2022 14:22	190889
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/21/2022 14:22	190889
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:26	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 16:59	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 17:07	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:26	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 16:59	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/26/2022 14:20	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/26/2022 14:20	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/26/2022 14:20	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/26/2022 14:20	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/26/2022 14:20	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/26/2022 14:20	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/26/2022 14:20	191002
Surr: Decachlorobiphenyl	*	10-152		72.9	%REC	1	04/26/2022 14:20	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		75.8	%REC	1	04/26/2022 14:20	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:13	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		81.9	%REC	1	04/23/2022 16:13	190899
Surr: Nitrobenzene-d5	*	29.1-125		107.5	%REC	1	04/23/2022 16:13	190899
Surr: p-Terphenyl-d14	*	35.2-164		145.1	%REC	1	04/23/2022 16:13	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 16:29	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-014

Client Sample ID: MW-14 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 17:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 16:29	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 16:29	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 16:29	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 16:29	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 16:29	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:29	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:29	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 16:29	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:29	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:29	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 16:29	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 16:29	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 16:29	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-014

Client Sample ID: MW-14 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 17:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 16:29	190900
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 16:29	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 16:29	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 16:29	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 16:29	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 16:29	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 16:29	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 16:29	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 16:29	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-014

Client Sample ID: MW-14 04182022

Matrix: GROUNDWATER

Collection Date: 04/18/2022 17:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:29	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 16:29	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 16:29	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		95.9	%REC	1	04/21/2022 16:29	190900
Surr: 4-Bromofluorobenzene	*	80-120		96.4	%REC	1	04/21/2022 16:29	190900
Surr: Toluene-d8	*	80-120		93.8	%REC	1	04/21/2022 16:29	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-015

Client Sample ID: MW-15 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (DISSOLVED)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/21/2022 14:25	190889
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/21/2022 14:25	190889
Copper	NELAP	0.0050		< 0.0050	mg/L	1	04/21/2022 14:25	190889
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/21/2022 14:25	190889
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/21/2022 14:25	190889
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:28	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 17:01	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 17:09	190886
Lead	NELAP	0.0150		0.0189	mg/L	1	04/26/2022 17:09	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 17:01	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/27/2022 11:45	191071
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/27/2022 11:45	191071
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/27/2022 11:45	191071
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/27/2022 11:45	191071
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/27/2022 11:45	191071
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/27/2022 11:45	191071
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/27/2022 11:45	191071
Surr: Decachlorobiphenyl	*	10-152		90.4	%REC	1	04/27/2022 11:45	191071
Surr: Tetrachloro-meta-xylene	*	9.73-128		110.1	%REC	1	04/27/2022 11:45	191071
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 16:52	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		82.2	%REC	1	04/23/2022 16:52	190899
Surr: Nitrobenzene-d5	*	29.1-125		124.5	%REC	1	04/23/2022 16:52	190899
Surr: p-Terphenyl-d14	*	35.2-164		163.6	%REC	1	04/23/2022 16:52	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 16:53	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-015

Client Sample ID: MW-15 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 16:53	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 16:53	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 16:53	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 16:53	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 16:53	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:53	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:53	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 16:53	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:53	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 16:53	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 16:53	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 16:53	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 16:53	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-015

Client Sample ID: MW-15 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 16:53	190900
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 16:53	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 16:53	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 16:53	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 16:53	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 16:53	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 16:53	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 16:53	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 16:53	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-015

Client Sample ID: MW-15 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 16:53	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 16:53	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 16:53	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		97.5	%REC	1	04/21/2022 16:53	190900
Surr: 4-Bromofluorobenzene	*	80-120		96.4	%REC	1	04/21/2022 16:53	190900
Surr: Toluene-d8	*	80-120		93.7	%REC	1	04/21/2022 16:53	190900

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-016

Client Sample ID: MW-15 04192022/DUP

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (DISSOLVED)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/21/2022 14:29	190889
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/21/2022 14:29	190889
Copper	NELAP	0.0050		< 0.0050	mg/L	1	04/21/2022 14:29	190889
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/21/2022 14:29	190889
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/21/2022 14:29	190889
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:30	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 17:11	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 17:11	190886
Lead	NELAP	0.0150		0.0216	mg/L	1	04/25/2022 12:30	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 17:11	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/27/2022 12:00	191071
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/27/2022 12:00	191071
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/27/2022 12:00	191071
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/27/2022 12:00	191071
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/27/2022 12:00	191071
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/27/2022 12:00	191071
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/27/2022 12:00	191071
Surr: Decachlorobiphenyl	*	10-152		79.5	%REC	1	04/27/2022 12:00	191071
Surr: Tetrachloro-meta-xylene	*	9.73-128		108.2	%REC	1	04/27/2022 12:00	191071
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 17:31	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		79.3	%REC	1	04/23/2022 17:31	190899
Surr: Nitrobenzene-d5	*	29.1-125		109.4	%REC	1	04/23/2022 17:31	190899
Surr: p-Terphenyl-d14	*	35.2-164		142.5	%REC	1	04/23/2022 17:31	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 17:18	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-016

Client Sample ID: MW-15 04192022/DUP

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 17:18	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 17:18	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 17:18	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 17:18	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 17:18	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 17:18	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 17:18	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 17:18	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 17:18	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 17:18	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 17:18	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 17:18	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 17:18	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-016

Client Sample ID: MW-15 04192022/DUP

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 17:18	190900
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 17:18	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 17:18	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 17:18	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 17:18	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 17:18	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 17:18	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 17:18	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 17:18	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-016

Client Sample ID: MW-15 04192022/DUP

Matrix: GROUNDWATER

Collection Date: 04/19/2022 14:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 17:18	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 17:18	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 17:18	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		96.5	%REC	1	04/21/2022 17:18	190900
Surr: 4-Bromofluorobenzene	*	80-120		96.0	%REC	1	04/21/2022 17:18	190900
Surr: Toluene-d8	*	80-120		94.2	%REC	1	04/21/2022 17:18	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-017

Client Sample ID: MW-16 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 12:46

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:32	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 17:13	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 17:13	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:32	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 17:13	190886

Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/26/2022 14:35	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/26/2022 14:35	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/26/2022 14:35	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/26/2022 14:35	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/26/2022 14:35	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/26/2022 14:35	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/26/2022 14:35	191002
Surr: Decachlorobiphenyl	*	10-152		104.0	%REC	1	04/26/2022 14:35	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		92.2	%REC	1	04/26/2022 14:35	191002

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Acenaphthylene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Anthracene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Benzo(a)anthracene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Benzo(a)pyrene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Benzo(b)fluoranthene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Benzo(g,h,i)perylene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Benzo(k)fluoranthene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Chrysene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Dibenzo(a,h)anthracene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Fluoranthene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Fluorene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Naphthalene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Phenanthrene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Pyrene	NELAP	0.00400		ND	mg/L	1	04/23/2022 18:11	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		63.5	%REC	1	04/23/2022 18:11	190899
Surr: Nitrobenzene-d5	*	29.1-125		79.8	%REC	1	04/23/2022 18:11	190899
Surr: p-Terphenyl-d14	*	35.2-164		123.7	%REC	1	04/23/2022 18:11	190899

Elevated reporting limit due to sample composition.

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 17:42	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 17:42	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 17:42	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-017

Client Sample ID: MW-16 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 12:46

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 17:42	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 17:42	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 17:42	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 17:42	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 17:42	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 17:42	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 17:42	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 17:42	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 17:42	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 17:42	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 17:42	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-017

Client Sample ID: MW-16 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 12:46

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 17:42	190900
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 17:42	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 17:42	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 17:42	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 17:42	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 17:42	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 17:42	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 17:42	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 17:42	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 17:42	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 17:42	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 17:42	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-017

Client Sample ID: MW-16 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 12:46

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 1,2-Dichloroethane-d4	*	80-120		97.1	%REC	1	04/21/2022 17:42	190900
Surr: 4-Bromofluorobenzene	*	80-120		96.1	%REC	1	04/21/2022 17:42	190900
Surr: Toluene-d8	*	80-120		93.7	%REC	1	04/21/2022 17:42	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-018

Client Sample ID: MW-17 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 8:52

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:33	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 17:14	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 17:14	190886
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/25/2022 12:33	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/22/2022 17:14	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/26/2022 14:50	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/26/2022 14:50	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/26/2022 14:50	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/26/2022 14:50	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/26/2022 14:50	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/26/2022 14:50	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/26/2022 14:50	191002
Surr: Decachlorobiphenyl	*	10-152		89.3	%REC	1	04/26/2022 14:50	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		95.6	%REC	1	04/26/2022 14:50	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 18:50	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		66.6	%REC	1	04/23/2022 18:50	190899
Surr: Nitrobenzene-d5	*	29.1-125		98.5	%REC	1	04/23/2022 18:50	190899
Surr: p-Terphenyl-d14	*	35.2-164		131.6	%REC	1	04/23/2022 18:50	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 18:06	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 18:06	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 18:06	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-018

Client Sample ID: MW-17 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 8:52

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 18:06	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 18:06	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 18:06	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 18:06	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 18:06	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 18:06	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 18:06	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 18:06	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 18:06	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 18:06	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 18:06	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 18:06	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-018

Client Sample ID: MW-17 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 8:52

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 18:06	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 18:06	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 18:06	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 18:06	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 18:06	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 18:06	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 18:06	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 18:06	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 18:06	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 18:06	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 18:06	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		96.1	%REC	1	04/21/2022 18:06	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-018

Client Sample ID: MW-17 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 8:52

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		96.4	%REC	1	04/21/2022 18:06	190900
Surr: Toluene-d8	*	80-120		94.2	%REC	1	04/21/2022 18:06	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-019

Client Sample ID: MW-18 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 9:06

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/25/2022 12:45	190886
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/22/2022 17:16	190886
Copper	NELAP	0.0050	B	< 0.0050	mg/L	1	04/26/2022 17:30	190886
Lead	NELAP	0.0150		0.0351	mg/L	1	04/25/2022 12:45	190886
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/25/2022 12:45	190886
<i>Contamination present in the MBLK for Cu. Sample results below the reporting limit are reportable per the TNI Standard.</i>								
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/26/2022 15:05	191002
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/26/2022 15:05	191002
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/26/2022 15:05	191002
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/26/2022 15:05	191002
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/26/2022 15:05	191002
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/26/2022 15:05	191002
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/26/2022 15:05	191002
Surr: Decachlorobiphenyl	*	10-152		69.3	%REC	1	04/26/2022 15:05	191002
Surr: Tetrachloro-meta-xylene	*	9.73-128		73.5	%REC	1	04/26/2022 15:05	191002
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Chrysene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Fluorene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Pyrene	NELAP	0.00100		ND	mg/L	1	04/23/2022 19:29	190899
Surr: 2-Fluorobiphenyl	*	1.39-137		72.1	%REC	1	04/23/2022 19:29	190899
Surr: Nitrobenzene-d5	*	29.1-125		105.6	%REC	1	04/23/2022 19:29	190899
Surr: p-Terphenyl-d14	*	35.2-164		142.2	%REC	1	04/23/2022 19:29	190899
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 18:31	190900
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 18:31	190900
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 18:31	190900
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-019

Client Sample ID: MW-18 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 9:06

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 18:31	190900
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 18:31	190900
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 18:31	190900
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 18:31	190900
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 18:31	190900
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 18:31	190900
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 18:31	190900
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 18:31	190900
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 18:31	190900
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 18:31	190900
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 18:31	190900
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 18:31	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-019

Client Sample ID: MW-18 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 9:06

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 18:31	190900
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 18:31	190900
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 18:31	190900
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 18:31	190900
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 18:31	190900
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 18:31	190900
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 18:31	190900
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 18:31	190900
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 18:31	190900
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 18:31	190900
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 18:31	190900
Surr: 1,2-Dichloroethane-d4	*	80-120		98.6	%REC	1	04/21/2022 18:31	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants
Client Project: 128487 GSA
Lab ID: 22041266-019
Matrix: GROUNDWATER

Work Order: 22041266
Report Date: 28-Apr-22
Client Sample ID: MW-18 04192022
Collection Date: 04/19/2022 9:06

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 4-Bromofluorobenzene	*	80-120		96.3	%REC	1	04/21/2022 18:31	190900
Surr: Toluene-d8	*	80-120		94.2	%REC	1	04/21/2022 18:31	190900



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-020

Client Sample ID: MW-19 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 18:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/21/2022 19:08	190887
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/21/2022 19:08	190887
Copper	NELAP	0.0050		< 0.0050	mg/L	1	04/21/2022 19:08	190887
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/21/2022 19:08	190887
Zinc	NELAP	0.0100		0.0168	mg/L	1	04/21/2022 19:08	190887
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/27/2022 12:16	191071
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/27/2022 12:16	191071
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/27/2022 12:16	191071
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/27/2022 12:16	191071
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/27/2022 12:16	191071
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/27/2022 12:16	191071
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/27/2022 12:16	191071
Surr: Decachlorobiphenyl	*	10-152		66.3	%REC	1	04/27/2022 12:16	191071
Surr: Tetrachloro-meta-xylene	*	9.73-128		79.4	%REC	1	04/27/2022 12:16	191071
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Anthracene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Chrysene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Fluorene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Pyrene	NELAP	0.00100		ND	mg/L	1	04/26/2022 14:53	191022
Surr: 2-Fluorobiphenyl	*	1.39-137		58.3	%REC	1	04/26/2022 14:53	191022
Surr: Nitrobenzene-d5	*	29.1-125		93.7	%REC	1	04/26/2022 14:53	191022
Surr: p-Terphenyl-d14	*	35.2-164		118.2	%REC	1	04/26/2022 14:53	191022
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 12:41	190922
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 12:41	190922
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 12:41	190922
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-020

Client Sample ID: MW-19 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 18:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 12:41	190922
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 12:41	190922
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 12:41	190922
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 12:41	190922
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 12:41	190922
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 12:41	190922
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 12:41	190922
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 12:41	190922
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 12:41	190922
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 12:41	190922
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 12:41	190922
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 12:41	190922
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-020

Client Sample ID: MW-19 04192022

Matrix: GROUNDWATER

Collection Date: 04/19/2022 18:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 12:41	190922
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 12:41	190922
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 12:41	190922
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 12:41	190922
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 12:41	190922
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 12:41	190922
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 12:41	190922
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 12:41	190922
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 12:41	190922
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 12:41	190922
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 12:41	190922
Surr: 1,2-Dichloroethane-d4	*	80-120		100.1	%REC	1	04/21/2022 12:41	190922
Surr: 4-Bromofluorobenzene	*	80-120		97.5	%REC	1	04/21/2022 12:41	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants
Client Project: 128487 GSA
Lab ID: 22041266-020
Matrix: GROUNDWATER

Work Order: 22041266
Report Date: 28-Apr-22
Client Sample ID: MW-19 04192022
Collection Date: 04/19/2022 18:37

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: Toluene-d8	*	80-120		95.2	%REC	1	04/21/2022 12:41	190922

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-021

Client Sample ID: TB-1

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 13:09	190922
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 13:09	190922
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 13:09	190922
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:09	190922
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:09	190922
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:09	190922
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:09	190922
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:09	190922
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 13:09	190922
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:09	190922
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:09	190922
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 13:09	190922
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 13:09	190922
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 13:09	190922
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-021

Client Sample ID: TB-1

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 13:09	190922
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 13:09	190922
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 13:09	190922
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 13:09	190922
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 13:09	190922
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 13:09	190922
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:09	190922
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 13:09	190922
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 13:09	190922
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-021

Client Sample ID: TB-1

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:09	190922
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:09	190922
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 13:09	190922
Surr: 1,2-Dichloroethane-d4	*	80-120		100.1	%REC	1	04/21/2022 13:09	190922
Surr: 4-Bromofluorobenzene	*	80-120		98.2	%REC	1	04/21/2022 13:09	190922
Surr: Toluene-d8	*	80-120		95.5	%REC	1	04/21/2022 13:09	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-022

Client Sample ID: TB-2

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 13:36	190922
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 13:36	190922
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 13:36	190922
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:36	190922
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:36	190922
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 13:36	190922
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:36	190922
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:36	190922
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 13:36	190922
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:36	190922
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 13:36	190922
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 13:36	190922
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 13:36	190922
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 13:36	190922
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-022

Client Sample ID: TB-2

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 13:36	190922
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 13:36	190922
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 13:36	190922
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 13:36	190922
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 13:36	190922
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 13:36	190922
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 13:36	190922
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 13:36	190922
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 13:36	190922
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-022

Client Sample ID: TB-2

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 13:36	190922
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 13:36	190922
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 13:36	190922
Surr: 1,2-Dichloroethane-d4	*	80-120		99.6	%REC	1	04/21/2022 13:36	190922
Surr: 4-Bromofluorobenzene	*	80-120		99.0	%REC	1	04/21/2022 13:36	190922
Surr: Toluene-d8	*	80-120		95.6	%REC	1	04/21/2022 13:36	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-023

Client Sample ID: TB-3

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 14:03	190922
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 14:03	190922
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 14:03	190922
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:03	190922
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:03	190922
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:03	190922
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190922
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190922
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190922
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190922
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190922
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190922
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 14:03	190922
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:03	190922
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-023

Client Sample ID: TB-3

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 14:03	190922
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190922
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 14:03	190922
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 14:03	190922
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 14:03	190922
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190922
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:03	190922
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 14:03	190922
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:03	190922
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-023

Client Sample ID: TB-3

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:03	190922
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:03	190922
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 14:03	190922
Surr: 1,2-Dichloroethane-d4	*	80-120		100.1	%REC	1	04/21/2022 14:03	190922
Surr: 4-Bromofluorobenzene	*	80-120		97.5	%REC	1	04/21/2022 14:03	190922
Surr: Toluene-d8	*	80-120		95.8	%REC	1	04/21/2022 14:03	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-024

Client Sample ID: TB-4

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 14:31	190922
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 14:31	190922
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 14:31	190922
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:31	190922
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:31	190922
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:31	190922
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:31	190922
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:31	190922
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 14:31	190922
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:31	190922
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:31	190922
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:31	190922
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 14:31	190922
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:31	190922
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-024

Client Sample ID: TB-4

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 14:31	190922
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 14:31	190922
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 14:31	190922
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 14:31	190922
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 14:31	190922
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:31	190922
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:31	190922
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 14:31	190922
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:31	190922
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-024

Client Sample ID: TB-4

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:31	190922
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:31	190922
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 14:31	190922
Surr: 1,2-Dichloroethane-d4	*	80-120		100.5	%REC	1	04/21/2022 14:31	190922
Surr: 4-Bromofluorobenzene	*	80-120		98.2	%REC	1	04/21/2022 14:31	190922
Surr: Toluene-d8	*	80-120		95.8	%REC	1	04/21/2022 14:31	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-025

Client Sample ID: TB-5

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 14:59	190922
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 14:59	190922
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 14:59	190922
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:59	190922
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:59	190922
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 14:59	190922
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:59	190922
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:59	190922
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 14:59	190922
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:59	190922
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 14:59	190922
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:59	190922
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 14:59	190922
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:59	190922
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-025

Client Sample ID: TB-5

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 14:59	190922
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 14:59	190922
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 14:59	190922
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 14:59	190922
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 14:59	190922
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 14:59	190922
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 14:59	190922
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 14:59	190922
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 14:59	190922
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-025

Client Sample ID: TB-5

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 14:59	190922
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 14:59	190922
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 14:59	190922
Surr: 1,2-Dichloroethane-d4	*	80-120		99.8	%REC	1	04/21/2022 14:59	190922
Surr: 4-Bromofluorobenzene	*	80-120		96.6	%REC	1	04/21/2022 14:59	190922
Surr: Toluene-d8	*	80-120		95.3	%REC	1	04/21/2022 14:59	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-026

Client Sample ID: TB-6

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 15:27	190922
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 15:27	190922
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 15:27	190922
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:27	190922
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:27	190922
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:27	190922
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:27	190922
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:27	190922
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 15:27	190922
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:27	190922
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:27	190922
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 15:27	190922
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 15:27	190922
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 15:27	190922
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-026

Client Sample ID: TB-6

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 15:27	190922
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 15:27	190922
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 15:27	190922
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 15:27	190922
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 15:27	190922
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 15:27	190922
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:27	190922
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 15:27	190922
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 15:27	190922
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-026

Client Sample ID: TB-6

Matrix: TRIP BLANK

Collection Date: 04/20/2022 12:13

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:27	190922
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:27	190922
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 15:27	190922
Surr: 1,2-Dichloroethane-d4	*	80-120		100.3	%REC	1	04/21/2022 15:27	190922
Surr: 4-Bromofluorobenzene	*	80-120		97.8	%REC	1	04/21/2022 15:27	190922
Surr: Toluene-d8	*	80-120		95.0	%REC	1	04/21/2022 15:27	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-027

Client Sample ID: ERB 04202022

Matrix: GROUNDWATER

Collection Date: 04/20/2022 8:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500		< 0.0500	mg/L	1	04/21/2022 19:30	190887
Arsenic	NELAP	0.0250		< 0.0250	mg/L	1	04/21/2022 19:30	190887
Copper	NELAP	0.0050		< 0.0050	mg/L	1	04/21/2022 19:30	190887
Lead	NELAP	0.0150		< 0.0150	mg/L	1	04/21/2022 19:30	190887
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	04/21/2022 19:30	190887
SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	1.00		ND	µg/L	1	04/27/2022 12:31	191071
Aroclor 1221	NELAP	1.00		ND	µg/L	1	04/27/2022 12:31	191071
Aroclor 1232	NELAP	1.00		ND	µg/L	1	04/27/2022 12:31	191071
Aroclor 1242	NELAP	1.00		ND	µg/L	1	04/27/2022 12:31	191071
Aroclor 1248	NELAP	1.00		ND	µg/L	1	04/27/2022 12:31	191071
Aroclor 1254	NELAP	1.00		ND	µg/L	1	04/27/2022 12:31	191071
Aroclor 1260	NELAP	1.00		ND	µg/L	1	04/27/2022 12:31	191071
Surr: Decachlorobiphenyl	*	10-152		47.7	%REC	1	04/27/2022 12:31	191071
Surr: Tetrachloro-meta-xylene	*	9.73-128		79.5	%REC	1	04/27/2022 12:31	191071
SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Acenaphthene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Acenaphthylene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Anthracene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Benzo(a)anthracene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Benzo(a)pyrene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Benzo(b)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Benzo(g,h,i)perylene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Benzo(k)fluoranthene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Chrysene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Dibenzo(a,h)anthracene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Fluoranthene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Fluorene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Indeno(1,2,3-cd)pyrene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Naphthalene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Phenanthrene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Pyrene	NELAP	0.00100		ND	mg/L	1	04/26/2022 16:10	191022
Surr: 2-Fluorobiphenyl	*	1.39-137		79.9	%REC	1	04/26/2022 16:10	191022
Surr: Nitrobenzene-d5	*	29.1-125		90.3	%REC	1	04/26/2022 16:10	191022
Surr: p-Terphenyl-d14	*	35.2-164		107.6	%REC	1	04/26/2022 16:10	191022
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,1,1-Trichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,1,2,2-Tetrachloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND	µg/L	1	04/21/2022 15:54	190922
1,1,2-Trichloroethane	NELAP	0.5		ND	µg/L	1	04/21/2022 15:54	190922
1,1-Dichloro-2-propanone	NELAP	30.0		ND	µg/L	1	04/21/2022 15:54	190922
1,1-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,1-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,1-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,2,3-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,2,3-Trichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-027

Client Sample ID: ERB 04202022

Matrix: GROUNDWATER

Collection Date: 04/20/2022 8:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,2,3-Trimethylbenzene	*	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,2,4-Trichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,2,4-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,2-Dibromo-3-chloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,2-Dibromoethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,2-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,2-Dichloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,2-Dichloroethene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:54	190922
1,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,3,5-Trimethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,3-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,3-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1,3-Dichloropropene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:54	190922
1,4-Dichloro-2-butene, Total	*	4.0		ND	µg/L	1	04/21/2022 15:54	190922
1,4-Dichlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
1-Chlorobutane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
2,2-Dichloropropane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
2-Butanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:54	190922
2-Chloroethyl vinyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
2-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
2-Hexanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:54	190922
2-Nitropropane	NELAP	10.0		ND	µg/L	1	04/21/2022 15:54	190922
4-Chlorotoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
4-Methyl-2-pentanone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:54	190922
Acetone	NELAP	10.0		ND	µg/L	1	04/21/2022 15:54	190922
Acetonitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 15:54	190922
Acrolein	NELAP	20.0		ND	µg/L	1	04/21/2022 15:54	190922
Acrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Allyl chloride	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Benzene	NELAP	0.5		ND	µg/L	1	04/21/2022 15:54	190922
Bromobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Bromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Bromodichloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Bromoform	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Bromomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Carbon disulfide	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Carbon tetrachloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Chlorobenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Chloroethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Chloroform	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Chloromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Chloroprene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
cis-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
cis-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
cis-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Cyclohexanone	*	20.0		ND	µg/L	1	04/21/2022 15:54	190922
Dibromochloromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-027

Client Sample ID: ERB 04202022

Matrix: GROUNDWATER

Collection Date: 04/20/2022 8:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Dibromomethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Dichlorodifluoromethane	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Diisopropyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Ethyl acetate	NELAP	10.0		ND	µg/L	1	04/21/2022 15:54	190922
Ethyl ether	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Ethyl methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Ethylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Ethyl-tert-butyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Hexachlorobutadiene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Hexachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Iodomethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Isopropylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
m,p-Xylenes	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Methacrylonitrile	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Methyl Methacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Methylacrylate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Methylene chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Naphthalene	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
n-Butyl acetate	*	2.0		ND	µg/L	1	04/21/2022 15:54	190922
n-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
n-Heptane	*	5.0		ND	µg/L	1	04/21/2022 15:54	190922
n-Hexane	*	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Nitrobenzene	NELAP	50.0		ND	µg/L	1	04/21/2022 15:54	190922
n-Propylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
o-Xylene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Pentachloroethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
p-Isopropyltoluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Propionitrile	NELAP	10.0		ND	µg/L	1	04/21/2022 15:54	190922
sec-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Styrene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
tert-Amyl methyl ether	*	2.0		ND	µg/L	1	04/21/2022 15:54	190922
tert-Butyl alcohol	NELAP	10.0		ND	µg/L	1	04/21/2022 15:54	190922
tert-Butylbenzene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Tetrachloroethene	NELAP	0.5		ND	µg/L	1	04/21/2022 15:54	190922
Tetrahydrofuran	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Toluene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
trans-1,2-Dichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
trans-1,3-Dichloropropene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
trans-1,4-Dichloro-2-butene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Trichloroethene	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Vinyl acetate	NELAP	5.0		ND	µg/L	1	04/21/2022 15:54	190922
Vinyl chloride	NELAP	2.0		ND	µg/L	1	04/21/2022 15:54	190922
Xylenes, Total	NELAP	4.0		ND	µg/L	1	04/21/2022 15:54	190922
Surr: 1,2-Dichloroethane-d4	*	80-120		99.9	%REC	1	04/21/2022 15:54	190922
Surr: 4-Bromofluorobenzene	*	80-120		98.1	%REC	1	04/21/2022 15:54	190922



Laboratory Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab ID: 22041266-027

Client Sample ID: ERB 04202022

Matrix: GROUNDWATER

Collection Date: 04/20/2022 8:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: Toluene-d8	*	80-120		96.0	%REC	1	04/21/2022 15:54	190922



Sample Summary

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
22041266-001	MW-01 04182022	Groundwater	4	04/18/2022 11:58
22041266-002	MW-02 04182022	Groundwater	4	04/18/2022 12:28
22041266-003	MW-03 04182022	Groundwater	4	04/18/2022 13:25
22041266-004	MW-04 04182022	Groundwater	5	04/18/2022 14:37
22041266-005	MW-05 04182022	Groundwater	4	04/18/2022 14:47
22041266-006	MW-06 04182022	Groundwater	4	04/18/2022 16:25
22041266-007	MW-07 04192022	Groundwater	4	04/19/2022 16:21
22041266-008	MW-08 04192022	Groundwater	4	04/19/2022 15:31
22041266-009	MW-09 04192022	Groundwater	4	04/19/2022 10:51
22041266-010	MW-10 04192022	Groundwater	4	04/19/2022 9:59
22041266-011	MW-11 04182022	Groundwater	4	04/18/2022 16:27
22041266-012	MW-12 04192022	Groundwater	4	04/19/2022 14:19
22041266-013	MW-13 04192022	Groundwater	5	04/19/2022 11:41
22041266-014	MW-14 04182022	Groundwater	5	04/18/2022 17:29
22041266-015	MW-15 04192022	Groundwater	5	04/19/2022 14:21
22041266-016	MW-15 04192022/DUP	Groundwater	5	04/19/2022 14:21
22041266-017	MW-16 04192022	Groundwater	4	04/19/2022 12:46
22041266-018	MW-17 04192022	Groundwater	4	04/19/2022 8:52
22041266-019	MW-18 04192022	Groundwater	4	04/19/2022 9:06
22041266-020	MW-19 04192022	Groundwater	4	04/19/2022 18:37
22041266-021	TB-1	Trip Blank	1	04/20/2022 12:13
22041266-022	TB-2	Trip Blank	1	04/20/2022 12:13
22041266-023	TB-3	Trip Blank	1	04/20/2022 12:13
22041266-024	TB-4	Trip Blank	1	04/20/2022 12:13
22041266-025	TB-5	Trip Blank	1	04/20/2022 12:13
22041266-026	TB-6	Trip Blank	1	04/20/2022 12:13
22041266-027	ERB 04202022	Groundwater	4	04/20/2022 8:45



Dates Report

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22041266-001A	MW-01 04182022	04/18/2022 11:58	04/20/2022 12:13		
SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD		04/25/2022 8:38 04/25/2022 16:21			
22041266-001B	MW-01 04182022	04/18/2022 11:58	04/20/2022 12:13		
SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS		04/21/2022 9:11 04/22/2022 14:36			
22041266-001C	MW-01 04182022	04/18/2022 11:58	04/20/2022 12:13		
SW-846 3005A, 6010B, Metals by ICP (Total)		04/21/2022 7:29 04/22/2022 16:02			
SW-846 3005A, 6010B, Metals by ICP (Total)		04/21/2022 7:29 04/25/2022 11:43			
SW-846 3005A, 6010B, Metals by ICP (Total)		04/21/2022 7:29 04/26/2022 16:21			
22041266-001D	MW-01 04182022	04/18/2022 11:58	04/20/2022 12:13		
SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS		04/21/2022 10:23			
22041266-002A	MW-02 04182022	04/18/2022 12:28	04/20/2022 12:13		
SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD		04/25/2022 8:38 04/25/2022 16:36			
22041266-002B	MW-02 04182022	04/18/2022 12:28	04/20/2022 12:13		
SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS		04/21/2022 9:11 04/22/2022 15:16			
22041266-002C	MW-02 04182022	04/18/2022 12:28	04/20/2022 12:13		
SW-846 3005A, 6010B, Metals by ICP (Total)		04/21/2022 7:29 04/22/2022 16:04			
SW-846 3005A, 6010B, Metals by ICP (Total)		04/21/2022 7:29 04/25/2022 11:44			
SW-846 3005A, 6010B, Metals by ICP (Total)		04/21/2022 7:29 04/26/2022 16:23			
22041266-002D	MW-02 04182022	04/18/2022 12:28	04/20/2022 12:13		
SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS		04/21/2022 10:49			
22041266-003A	MW-03 04182022	04/18/2022 13:25	04/20/2022 12:13		
SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD		04/25/2022 8:38 04/25/2022 16:52			
22041266-003B	MW-03 04182022	04/18/2022 13:25	04/20/2022 12:13		
SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS		04/21/2022 9:11 04/22/2022 15:57			
SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS		04/21/2022 9:11 04/26/2022 18:46			
22041266-003C	MW-03 04182022	04/18/2022 13:25	04/20/2022 12:13		
SW-846 3005A, 6010B, Metals by ICP (Total)		04/21/2022 7:29 04/22/2022 16:06			
SW-846 3005A, 6010B, Metals by ICP (Total)		04/21/2022 7:29 04/25/2022 11:46			
SW-846 3005A, 6010B, Metals by ICP (Total)		04/21/2022 7:29 04/26/2022 16:25			
22041266-003D	MW-03 04182022	04/18/2022 13:25	04/20/2022 12:13		
SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS		04/21/2022 11:13			
22041266-004A	MW-04 04182022	04/18/2022 14:37	04/20/2022 12:13		
SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD		04/25/2022 10:29 04/25/2022 17:07			
22041266-004B	MW-04 04182022	04/18/2022 14:37	04/20/2022 12:13		
SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS		04/21/2022 9:11 04/22/2022 16:36			



Dates Report

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22041266-004C	MW-04 04182022	04/18/2022 14:37	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/22/2022 16:08
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/25/2022 11:48
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/26/2022 16:26
22041266-004D	MW-04 04182022	04/18/2022 14:37	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			04/21/2022 7:39	04/21/2022 14:07
22041266-004E	MW-04 04182022	04/18/2022 14:37	04/20/2022 12:13		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				04/21/2022 11:38
22041266-005A	MW-05 04182022	04/18/2022 14:47	04/20/2022 12:13		
	SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD			04/25/2022 10:29	04/25/2022 17:53
22041266-005B	MW-05 04182022	04/18/2022 14:47	04/20/2022 12:13		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS			04/21/2022 9:11	04/22/2022 18:34
22041266-005C	MW-05 04182022	04/18/2022 14:47	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/22/2022 16:13
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/25/2022 12:35
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/26/2022 16:42
22041266-005D	MW-05 04182022	04/18/2022 14:47	04/20/2022 12:13		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				04/21/2022 12:50
22041266-006A	MW-06 04182022	04/18/2022 16:25	04/20/2022 12:13		
	SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD			04/25/2022 10:29	04/25/2022 18:08
22041266-006B	MW-06 04182022	04/18/2022 16:25	04/20/2022 12:13		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS			04/21/2022 9:11	04/22/2022 19:13
22041266-006C	MW-06 04182022	04/18/2022 16:25	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/22/2022 16:23
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/25/2022 12:01
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/26/2022 16:43
22041266-006D	MW-06 04182022	04/18/2022 16:25	04/20/2022 12:13		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				04/21/2022 13:15
22041266-007A	MW-07 04192022	04/19/2022 16:21	04/20/2022 12:13		
	SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD			04/26/2022 11:15	04/27/2022 10:59
22041266-007B	MW-07 04192022	04/19/2022 16:21	04/20/2022 12:13		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS			04/21/2022 9:11	04/22/2022 19:52
22041266-007C	MW-07 04192022	04/19/2022 16:21	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/22/2022 16:47
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/25/2022 12:03



Dates Report

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
Test Name					
22041266-011B	MW-11 04182022	04/18/2022 16:27	04/20/2022 12:13		
SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS					
				04/21/2022 9:11	04/23/2022 14:16
22041266-011C	MW-11 04182022	04/18/2022 16:27	04/20/2022 12:13		
SW-846 3005A, 6010B, Metals by ICP (Total)					
				04/21/2022 7:29	04/22/2022 16:54
SW-846 3005A, 6010B, Metals by ICP (Total)					
				04/21/2022 7:29	04/25/2022 12:10
SW-846 3005A, 6010B, Metals by ICP (Total)					
				04/21/2022 7:29	04/26/2022 16:52
22041266-011D	MW-11 04182022	04/18/2022 16:27	04/20/2022 12:13		
SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS					
					04/21/2022 15:16
22041266-012A	MW-12 04192022	04/19/2022 14:19	04/20/2022 12:13		
SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD					
				04/26/2022 11:15	04/27/2022 11:30
22041266-012B	MW-12 04192022	04/19/2022 14:19	04/20/2022 12:13		
SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS					
				04/21/2022 9:11	04/23/2022 14:55
22041266-012C	MW-12 04192022	04/19/2022 14:19	04/20/2022 12:13		
SW-846 3005A, 6010B, Metals by ICP (Total)					
				04/21/2022 7:29	04/22/2022 16:55
SW-846 3005A, 6010B, Metals by ICP (Total)					
				04/21/2022 7:29	04/25/2022 12:11
SW-846 3005A, 6010B, Metals by ICP (Total)					
				04/21/2022 7:29	04/26/2022 16:54
22041266-012D	MW-12 04192022	04/19/2022 14:19	04/20/2022 12:13		
SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS					
					04/21/2022 15:40
22041266-013A	MW-13 04192022	04/19/2022 11:41	04/20/2022 12:13		
SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD					
				04/25/2022 13:27	04/26/2022 14:04
22041266-013B	MW-13 04192022	04/19/2022 11:41	04/20/2022 12:13		
SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS					
				04/21/2022 9:11	04/23/2022 15:34
22041266-013C	MW-13 04192022	04/19/2022 11:41	04/20/2022 12:13		
SW-846 3005A, 6010B, Metals by ICP (Total)					
				04/21/2022 7:29	04/22/2022 16:57
SW-846 3005A, 6010B, Metals by ICP (Total)					
				04/21/2022 7:29	04/25/2022 12:25
SW-846 3005A, 6010B, Metals by ICP (Total)					
				04/21/2022 7:29	04/26/2022 17:06
22041266-013D	MW-13 04192022	04/19/2022 11:41	04/20/2022 12:13		
SW-846 3005A, 6010B, Metals by ICP (Dissolved)					
				04/21/2022 7:39	04/21/2022 14:18
22041266-013E	MW-13 04192022	04/19/2022 11:41	04/20/2022 12:13		
SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS					
					04/21/2022 16:05
22041266-014A	MW-14 04182022	04/18/2022 17:29	04/20/2022 12:13		
SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD					
				04/25/2022 10:29	04/26/2022 14:20
22041266-014B	MW-14 04182022	04/18/2022 17:29	04/20/2022 12:13		
SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS					
				04/21/2022 9:11	04/23/2022 16:13
22041266-014C	MW-14 04182022	04/18/2022 17:29	04/20/2022 12:13		



Dates Report

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/22/2022 16:59
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/25/2022 12:26
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/26/2022 17:07
22041266-014D	MW-14 04182022	04/18/2022 17:29	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			04/21/2022 7:39	04/21/2022 14:22
22041266-014E	MW-14 04182022	04/18/2022 17:29	04/20/2022 12:13		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				04/21/2022 16:29
22041266-015A	MW-15 04192022	04/19/2022 14:21	04/20/2022 12:13		
	SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD			04/26/2022 11:15	04/27/2022 11:45
22041266-015B	MW-15 04192022	04/19/2022 14:21	04/20/2022 12:13		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS			04/21/2022 9:11	04/23/2022 16:52
22041266-015C	MW-15 04192022	04/19/2022 14:21	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/22/2022 17:01
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/25/2022 12:28
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/26/2022 17:09
22041266-015D	MW-15 04192022	04/19/2022 14:21	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			04/21/2022 7:39	04/21/2022 14:25
22041266-015E	MW-15 04192022	04/19/2022 14:21	04/20/2022 12:13		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				04/21/2022 16:53
22041266-016A	MW-15 04192022/DUP	04/19/2022 14:21	04/20/2022 12:13		
	SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD			04/26/2022 11:15	04/27/2022 12:00
22041266-016B	MW-15 04192022/DUP	04/19/2022 14:21	04/20/2022 12:13		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS			04/21/2022 9:11	04/23/2022 17:31
22041266-016C	MW-15 04192022/DUP	04/19/2022 14:21	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/22/2022 17:11
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/25/2022 12:30
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/26/2022 17:11
22041266-016D	MW-15 04192022/DUP	04/19/2022 14:21	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Dissolved)			04/21/2022 7:39	04/21/2022 14:29
22041266-016E	MW-15 04192022/DUP	04/19/2022 14:21	04/20/2022 12:13		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				04/21/2022 17:18
22041266-017A	MW-16 04192022	04/19/2022 12:46	04/20/2022 12:13		
	SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD			04/25/2022 13:27	04/26/2022 14:35
22041266-017B	MW-16 04192022	04/19/2022 12:46	04/20/2022 12:13		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS			04/21/2022 9:11	04/23/2022 18:11



Dates Report

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
	Test Name				
22041266-017C	MW-16 04192022	04/19/2022 12:46	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/22/2022 17:13
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/25/2022 12:32
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/26/2022 17:13
22041266-017D	MW-16 04192022	04/19/2022 12:46	04/20/2022 12:13		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				04/21/2022 17:42
22041266-018A	MW-17 04192022	04/19/2022 8:52	04/20/2022 12:13		
	SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD			04/25/2022 13:27	04/26/2022 14:50
22041266-018B	MW-17 04192022	04/19/2022 8:52	04/20/2022 12:13		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS			04/21/2022 9:11	04/23/2022 18:50
22041266-018C	MW-17 04192022	04/19/2022 8:52	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/22/2022 17:14
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/25/2022 12:33
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/26/2022 17:14
22041266-018D	MW-17 04192022	04/19/2022 8:52	04/20/2022 12:13		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				04/21/2022 18:06
22041266-019A	MW-18 04192022	04/19/2022 9:06	04/20/2022 12:13		
	SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD			04/25/2022 13:27	04/26/2022 15:05
22041266-019B	MW-18 04192022	04/19/2022 9:06	04/20/2022 12:13		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS			04/21/2022 9:11	04/23/2022 19:29
22041266-019C	MW-18 04192022	04/19/2022 9:06	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/22/2022 17:16
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/25/2022 12:45
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:29	04/26/2022 17:30
22041266-019D	MW-18 04192022	04/19/2022 9:06	04/20/2022 12:13		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				04/21/2022 18:31
22041266-020A	MW-19 04192022	04/19/2022 18:37	04/20/2022 12:13		
	SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD			04/26/2022 14:06	04/27/2022 12:16
22041266-020B	MW-19 04192022	04/19/2022 18:37	04/20/2022 12:13		
	SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS			04/25/2022 15:26	04/26/2022 14:53
22041266-020C	MW-19 04192022	04/19/2022 18:37	04/20/2022 12:13		
	SW-846 3005A, 6010B, Metals by ICP (Total)			04/21/2022 7:32	04/21/2022 19:08
22041266-020D	MW-19 04192022	04/19/2022 18:37	04/20/2022 12:13		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				04/21/2022 12:41
22041266-021A	TB-1	04/20/2022 12:13	04/20/2022 12:13		



Dates Report

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Sample ID	Client Sample ID	Collection Date	Received Date	Prep Date/Time	Analysis Date/Time
					SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS
22041266-022A	TB-2	04/20/2022 12:13	04/20/2022 12:13		04/21/2022 13:09
					SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS
22041266-023A	TB-3	04/20/2022 12:13	04/20/2022 12:13		04/21/2022 13:36
					SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS
22041266-024A	TB-4	04/20/2022 12:13	04/20/2022 12:13		04/21/2022 14:03
					SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS
22041266-025A	TB-5	04/20/2022 12:13	04/20/2022 12:13		04/21/2022 14:31
					SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS
22041266-026A	TB-6	04/20/2022 12:13	04/20/2022 12:13		04/21/2022 14:59
					SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS
22041266-027A	ERB 04202022	04/20/2022 8:45	04/20/2022 12:13		04/21/2022 15:27
					SW-846 3510C, 8082, PolyChlorinated Biphenyls (PCBs) by GC/ECD
22041266-027B	ERB 04202022	04/20/2022 8:45	04/20/2022 12:13	04/26/2022 14:06	04/27/2022 12:31
					SW-846 3510C, 8270C, Semi-Volatile Organic Compounds by GC/MS
22041266-027C	ERB 04202022	04/20/2022 8:45	04/20/2022 12:13	04/25/2022 15:26	04/26/2022 16:10
					SW-846 3005A, 6010B, Metals by ICP (Total)
22041266-027D	ERB 04202022	04/20/2022 8:45	04/20/2022 12:13	04/21/2022 7:32	04/21/2022 19:30
					SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS
					04/21/2022 15:54



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3005A, 6010B, METALS BY ICP (DISSOLVED)

Batch 190889 **SampType: MBLK** Units mg/L
 SampID: MBLK-190889

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		< 0.0500	0.0068	0	0	-100	100	04/22/2022
Arsenic		0.0250		< 0.0250	0.0087	0	0	-100	100	04/21/2022
Copper		0.0050		< 0.0050	0.0013	0	0	-100	100	04/21/2022
Lead		0.0150		< 0.0150	0.0014	0	0	-100	100	04/21/2022
Zinc		0.0100		< 0.0100	0.0050	0	0	-100	100	04/21/2022

Batch 190889 **SampType: LCS** Units mg/L
 SampID: LCS-190889

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		0.473	0.5000	0	94.6	85	115	04/21/2022
Arsenic		0.0250		0.511	0.5000	0	102.2	85	115	04/21/2022
Copper		0.0050		0.250	0.2500	0	99.9	85	115	04/21/2022
Lead		0.0150		0.495	0.5000	0	99.1	85	115	04/21/2022
Zinc		0.0100		0.489	0.5000	0	97.8	85	115	04/21/2022

Batch 190889 **SampType: MS** Units mg/L
 SampID: 22041266-004DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		0.498	0.5000	0	99.6	75	125	04/21/2022
Arsenic		0.0250		0.530	0.5000	0	106.1	75	125	04/21/2022
Copper		0.0050		0.254	0.2500	0	101.4	75	125	04/21/2022
Lead		0.0150		0.492	0.5000	0	98.5	75	125	04/21/2022
Zinc		0.0100		0.496	0.5000	0	99.3	75	125	04/21/2022

Batch 190889 **SampType: MSD** Units mg/L
 SampID: 22041266-004DMSD

RPD Limit 20

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0500		0.498	0.5000	0	99.5	0.4978	0.06	04/21/2022
Arsenic		0.0250		0.532	0.5000	0	106.5	0.5304	0.36	04/21/2022
Copper		0.0050		0.253	0.2500	0	101.2	0.2536	0.24	04/21/2022
Lead		0.0150		0.489	0.5000	0	97.8	0.4923	0.65	04/21/2022
Zinc		0.0100		0.494	0.5000	0	98.9	0.4963	0.36	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 190886		SampType: MBLK		Units mg/L						
SampID: MBLK-190886										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		< 0.0500	0.0068	0	0	-100	100	04/25/2022
Arsenic		0.0250		< 0.0250	0.0087	0	0	-100	100	04/22/2022
Copper		0.0050	S	< 0.0050	0.0013	0	138.5	-100	100	04/26/2022
Lead		0.0150		< 0.0150	0.0014	0	0	-100	100	04/25/2022
Zinc		0.0100		< 0.0100	0.0050	0	0	-100	100	04/22/2022

Batch 190886		SampType: LCS		Units mg/L						
SampID: LCS-190886										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		0.479	0.5000	0	95.9	85	115	04/25/2022
Arsenic		0.0250		0.522	0.5000	0	104.5	85	115	04/22/2022
Copper		0.0050	B	0.268	0.2500	0	107.0	85	115	04/26/2022
Lead		0.0150		0.482	0.5000	0	96.5	85	115	04/25/2022
Zinc		0.0100		0.505	0.5000	0	101.0	85	115	04/22/2022

Batch 190886		SampType: MS		Units mg/L						
SampID: 22041266-004CMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		0.496	0.5000	0	99.2	75	125	04/25/2022
Arsenic		0.0250		0.563	0.5000	0	112.5	75	125	04/22/2022
Copper		0.0050	B	0.258	0.2500	0	103.0	75	125	04/26/2022
Lead		0.0150		0.500	0.5000	0.009000	98.3	75	125	04/25/2022
Zinc		0.0100		0.528	0.5000	0	105.7	75	125	04/22/2022

Batch 190886		SampType: MSD		Units mg/L				RPD Limit 20		Date Analyzed
SampID: 22041266-004CMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0500		0.495	0.5000	0	98.9	0.4961	0.28	04/25/2022
Arsenic		0.0250		0.548	0.5000	0	109.7	0.5627	2.56	04/22/2022
Copper		0.0050	B	0.263	0.2500	0	105.1	0.2576	1.96	04/26/2022
Lead		0.0150		0.499	0.5000	0.009000	98.1	0.5003	0.18	04/25/2022
Zinc		0.0100		0.523	0.5000	0	104.6	0.5285	1.03	04/22/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 190886		SampType: MS		Units mg/L						
SampID: 22041266-019CMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		0.501	0.5000	0	100.2	75	125	04/25/2022
Arsenic		0.0250		0.594	0.5000	0	118.8	75	125	04/22/2022
Copper		0.0050	B	0.275	0.2500	0	110.0	75	125	04/26/2022
Lead		0.0150		0.500	0.5000	0.03510	93.0	75	125	04/25/2022
Zinc		0.0100		0.493	0.5000	0	98.6	75	125	04/25/2022

Batch 190886		SampType: MSD		Units mg/L						
SampID: 22041266-019CMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0500		0.490	0.5000	0	98.0	0.5010	2.26	04/25/2022
Arsenic		0.0250		0.600	0.5000	0	119.9	0.5940	0.92	04/22/2022
Copper		0.0050	B	0.278	0.2500	0	111.1	0.2751	0.98	04/26/2022
Lead		0.0150		0.496	0.5000	0.03510	92.2	0.5000	0.74	04/25/2022
Zinc		0.0100		0.484	0.5000	0	96.8	0.4932	1.90	04/25/2022

Batch 190887		SampType: MBLK		Units mg/L						
SampID: MBLK-190887										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		< 0.0500	0.0068	0	0	-100	100	04/22/2022
Arsenic		0.0250		< 0.0250	0.0087	0	0	-100	100	04/21/2022
Copper		0.0050		< 0.0050	0.0013	0	0	-100	100	04/21/2022
Lead		0.0150		< 0.0150	0.0040	0	0	-100	100	04/21/2022
Zinc		0.0100		< 0.0100	0.0050	0	0	-100	100	04/21/2022

Batch 190887		SampType: LCS		Units mg/L						
SampID: LCS-190887										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		0.521	0.5000	0	104.3	85	115	04/21/2022
Arsenic		0.0250		0.547	0.5000	0	109.5	85	115	04/21/2022
Copper		0.0050		0.268	0.2500	0	107.4	85	115	04/21/2022
Lead		0.0150		0.521	0.5000	0	104.2	85	115	04/21/2022
Zinc		0.0100		0.519	0.5000	0	103.8	85	115	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 190887		SampType: MS		Units mg/L						
SampID: 22041266-027CMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0500		0.510	0.5000	0.01420	99.2	75	125	04/21/2022
Arsenic		0.0250		0.535	0.5000	0	106.9	75	125	04/21/2022
Copper		0.0050		0.262	0.2500	0	104.6	75	125	04/21/2022
Lead		0.0150		0.512	0.5000	0	102.4	75	125	04/21/2022
Zinc		0.0100		0.509	0.5000	0	101.7	75	125	04/21/2022

Batch 190887		SampType: MSD		Units mg/L						
SampID: 22041266-027CMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0500		0.514	0.5000	0.01420	100.0	0.5102	0.80	04/21/2022
Arsenic		0.0250		0.536	0.5000	0	107.2	0.5347	0.26	04/21/2022
Copper		0.0050		0.263	0.2500	0	105.3	0.2616	0.65	04/21/2022
Lead		0.0150		0.515	0.5000	0	103.0	0.5121	0.55	04/21/2022
Zinc		0.0100		0.509	0.5000	0	101.9	0.5087	0.14	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD

Batch 191002		SampType: MBLK		Units µg/L						
SampID: MBLK-191002										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aroclor 1016		0.095		ND						04/25/2022
Aroclor 1016		1.00		ND						04/25/2022
Aroclor 1221		1.00		ND						04/25/2022
Aroclor 1221		0.095		ND						04/25/2022
Aroclor 1232		1.00		ND						04/25/2022
Aroclor 1232		0.095		ND						04/25/2022
Aroclor 1242		0.095		ND						04/25/2022
Aroclor 1242		1.00		ND						04/25/2022
Aroclor 1248		1.00		ND						04/25/2022
Aroclor 1248		0.095		ND						04/25/2022
Aroclor 1254		1.00		ND						04/25/2022
Aroclor 1254		0.095		ND						04/25/2022
Aroclor 1260		1.00		ND						04/25/2022
Aroclor 1260		0.095		ND						04/25/2022
Surr: Decachlorobiphenyl	*			0.137	0.1250		109.6	31.2	141	04/25/2022
Surr: Decachlorobiphenyl	*			0.098	0.1250		78.4	31.2	141	04/25/2022
Surr: Decachlorobiphenyl	*			0.14	0.1250		109.6	27.5	143	04/25/2022
Surr: Tetrachloro-meta-xylene	*			0.12	0.1250		94.3	35.2	135	04/25/2022

Batch 191002		SampType: LCS		Units µg/L						
SampID: LCSPCB-191002										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aroclor 1016		0.095		2.71	2.500	0	108.4	50	140	04/25/2022
Aroclor 1016		1.00		2.71	2.500	0	108.4	56.2	136	04/25/2022
Aroclor 1260		0.095		2.64	2.500	0	105.4	8	140	04/25/2022
Aroclor 1260		1.00		2.64	2.500	0	105.4	42.1	125	04/25/2022
Surr: Decachlorobiphenyl	*			0.14	0.1250		111.2	27.5	143	04/25/2022
Surr: Decachlorobiphenyl	*			0.139	0.1250		111.2	31.2	141	04/25/2022
Surr: Tetrachloro-meta-xylene	*			0.11	0.1250		91.8	35.2	135	04/25/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD

Batch 191002		SampType: LCSD		Units µg/L				RPD Limit 36			Date Analyzed
SampID: LCSPCBD-191002											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Aroclor 1016		0.095		2.66	2.500	0	106.3	2.709	1.90	04/25/2022	
Aroclor 1016		1.00		2.66	2.500	0	106.3	2.709	1.90	04/25/2022	
Aroclor 1260		1.00		2.33	2.500	0	93.1	2.636	12.40	04/25/2022	
Aroclor 1260		0.095		2.33	2.500	0	93.1	2.636	12.40	04/25/2022	
Surr: Decachlorobiphenyl	*			0.11	0.1250		88.0			04/25/2022	
Surr: Decachlorobiphenyl	*			0.110	0.1250		88.0			04/25/2022	
Surr: Tetrachloro-meta-xylene	*			0.12	0.1250		98.0			04/25/2022	

Batch 191002		SampType: LCS		Units %REC				RPD Limit 0		Date Analyzed
SampID: LCSPST-191002										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: Decachlorobiphenyl	*			0.099	0.1250		79.0	31.2	141	04/25/2022

Batch 191002		SampType: LCSD		Units %REC				RPD Limit 0		Date Analyzed
SampID: LCSPSTD-191002										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Surr: Decachlorobiphenyl	*			0.112	0.1250		89.5			04/25/2022

Batch 191002		SampType: MS		Units µg/L				RPD Limit 0		Date Analyzed
SampID: 22041266-004AMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aroclor 1016		1.00		2.72	2.500	0	109.0	51	130	04/25/2022
Aroclor 1260		1.00		2.47	2.500	0	98.9	38.4	123	04/25/2022
Surr: Decachlorobiphenyl	*			0.11	0.1250		88.1	10	152	04/25/2022
Surr: Tetrachloro-meta-xylene	*			0.11	0.1250		88.4	9.73	128	04/25/2022

Batch 191002		SampType: MSD		Units µg/L				RPD Limit 40		Date Analyzed
SampID: 22041266-004AMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Aroclor 1016		1.00		2.91	2.500	0	116.3	2.724	6.55	04/25/2022
Aroclor 1260		1.00		2.72	2.500	0	108.9	2.473	9.63	04/25/2022
Surr: Decachlorobiphenyl	*			0.12	0.1250		94.3			04/25/2022
Surr: Tetrachloro-meta-xylene	*			0.12	0.1250		96.0			04/25/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD

Batch 191071 **SampType:** MBLK **Units** µg/L

SampID: MBLK-191071

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aroclor 1016		1.00		ND						04/27/2022
Aroclor 1016		0.095		ND						04/27/2022
Aroclor 1221		0.095		ND						04/27/2022
Aroclor 1221		1.00		ND						04/27/2022
Aroclor 1232		0.095		ND						04/27/2022
Aroclor 1232		1.00		ND						04/27/2022
Aroclor 1242		0.095		ND						04/27/2022
Aroclor 1242		1.00		ND						04/27/2022
Aroclor 1248		0.095		ND						04/27/2022
Aroclor 1248		1.00		ND						04/27/2022
Aroclor 1254		1.00		ND						04/27/2022
Aroclor 1254		0.095		ND						04/27/2022
Aroclor 1260		0.095		ND						04/27/2022
Aroclor 1260		1.00		ND						04/27/2022
Surr: Decachlorobiphenyl	*			0.13	0.1250		100.2	27.5	143	04/27/2022
Surr: Decachlorobiphenyl	*			0.125	0.1250		100.2	31.2	141	04/27/2022
Surr: Tetrachloro-meta-xylene	*			0.11	0.1250		91.1	35.2	135	04/27/2022

Batch 191071 **SampType:** LCS **Units** µg/L

SampID: LCSPCB-191071

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aroclor 1016		0.095		3.02	2.500	0	121.0	50	140	04/27/2022
Aroclor 1016		1.00		3.02	2.500	0	121.0	56.2	136	04/27/2022
Aroclor 1260		0.095		2.87	2.500	0	114.7	8	140	04/27/2022
Aroclor 1260		1.00		2.87	2.500	0	114.7	42.1	125	04/27/2022
Surr: Decachlorobiphenyl	*			0.149	0.1250		119.0	31.2	141	04/27/2022
Surr: Decachlorobiphenyl	*			0.15	0.1250		119.0	27.5	143	04/27/2022
Surr: Tetrachloro-meta-xylene	*			0.13	0.1250		103.8	35.2	135	04/27/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3510C, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD

Batch 191071		SampType: LCSD		Units µg/L				RPD Limit 40			Date Analyzed
SampID: LCSPCBD-191071											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Aroclor 1016		1.00		2.92	2.500	0	116.7	3.024	3.55	04/27/2022	
Aroclor 1016		0.095		2.92	2.500	0	116.7	3.024	3.55	04/27/2022	
Aroclor 1260		1.00		2.78	2.500	0	111.2	2.867	3.03	04/27/2022	
Aroclor 1260		0.095		2.78	2.500	0	111.2	2.867	3.03	04/27/2022	
Surr: Decachlorobiphenyl	*			0.141	0.1250		112.7			04/27/2022	
Surr: Decachlorobiphenyl	*			0.14	0.1250		112.7			04/27/2022	
Surr: Tetrachloro-meta-xylene	*			0.12	0.1250		95.6			04/27/2022	

SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190899		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK-190899											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Acenaphthene		0.00100		ND						04/23/2022	
Acenaphthylene		0.00100		ND						04/23/2022	
Anthracene		0.00100		ND						04/23/2022	
Benzo(a)anthracene		0.00100		ND						04/23/2022	
Benzo(a)pyrene		0.00100		ND						04/23/2022	
Benzo(b)fluoranthene		0.00100		ND						04/23/2022	
Benzo(g,h,i)perylene		0.00100		ND						04/23/2022	
Benzo(k)fluoranthene		0.00100		ND						04/23/2022	
Chrysene		0.00100		ND						04/23/2022	
Dibenzo(a,h)anthracene		0.00100		ND						04/23/2022	
Fluoranthene		0.00100		ND						04/23/2022	
Fluorene		0.00100		ND						04/23/2022	
Indeno(1,2,3-cd)pyrene		0.00100		ND						04/23/2022	
Naphthalene		0.00100		ND						04/23/2022	
Phenanthrene		0.00100		ND						04/23/2022	
Pyrene		0.00100		ND						04/23/2022	
Surr: 2-Fluorobiphenyl	*			0.00445	0.0125		35.6	1.09	175	04/23/2022	
Surr: Nitrobenzene-d5	*			0.00618	0.0125		49.4	35.5	156	04/23/2022	
Surr: p-Terphenyl-d14	*			0.0117	0.0125		93.8	35	222	04/23/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190899		SampType: LCS		Units mg/L							
SampID: LCS-190899											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Acenaphthene		0.00100		0.00899	0.0100	0	89.9	39.6	145	04/22/2022	
Acenaphthylene		0.00100		0.00874	0.0100	0	87.4	38.3	147	04/22/2022	
Anthracene		0.00100		0.0102	0.0100	0	101.5	47.7	153	04/22/2022	
Benzo(a)anthracene		0.00100		0.0103	0.0100	0	103.1	45	136	04/22/2022	
Benzo(a)pyrene		0.00100		0.00912	0.0100	0	91.2	49.8	164	04/22/2022	
Benzo(b)fluoranthene		0.00100		0.0108	0.0100	0	108.0	45.7	167	04/22/2022	
Benzo(g,h,i)perylene		0.00100		0.00941	0.0100	0	94.1	41	157	04/22/2022	
Benzo(k)fluoranthene		0.00100		0.0115	0.0100	0	115.3	46.7	166	04/22/2022	
Chrysene		0.00100		0.00848	0.0100	0	84.8	45.5	162	04/22/2022	
Dibenzo(a,h)anthracene		0.00100		0.00882	0.0100	0	88.2	40.4	154	04/22/2022	
Fluoranthene		0.00100		0.0117	0.0100	0	117.0	47.3	168	04/22/2022	
Fluorene		0.00100		0.00977	0.0100	0	97.7	45.2	153	04/22/2022	
Indeno(1,2,3-cd)pyrene		0.00100		0.00910	0.0100	0	91.0	44.6	166	04/22/2022	
Naphthalene		0.00100		0.00810	0.0100	0	81.0	16.6	137	04/22/2022	
Phenanthrene		0.00100		0.0108	0.0100	0	107.8	50.8	149	04/22/2022	
Pyrene		0.00100		0.0119	0.0100	0	118.8	44.9	163	04/22/2022	
Surr: 2-Fluorobiphenyl	*			0.00837	0.0125		66.9	1.09	175	04/22/2022	
Surr: Nitrobenzene-d5	*			0.0124	0.0125		98.8	35.5	156	04/22/2022	
Surr: p-Terphenyl-d14	*			0.0158	0.0125		126.5	35	222	04/22/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190899		SampType: LCSD		Units mg/L				RPD Limit 40			
SampID: LCSD-190899											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Acenaphthene		0.00100		0.00954	0.0100	0	95.4	0.008989	5.93	04/22/2022	
Acenaphthylene		0.00100		0.00956	0.0100	0	95.6	0.008736	9.07	04/22/2022	
Anthracene		0.00100		0.0106	0.0100	0	105.9	0.01015	4.16	04/22/2022	
Benzo(a)anthracene		0.00100		0.0109	0.0100	0	108.5	0.01031	5.14	04/22/2022	
Benzo(a)pyrene		0.00100		0.00985	0.0100	0	98.5	0.009115	7.79	04/22/2022	
Benzo(b)fluoranthene		0.00100		0.0115	0.0100	0	115.0	0.01080	6.33	04/22/2022	
Benzo(g,h,i)perylene		0.00100		0.00998	0.0100	0	99.8	0.009413	5.83	04/22/2022	
Benzo(k)fluoranthene		0.00100		0.0118	0.0100	0	117.9	0.01153	2.23	04/22/2022	
Chrysene		0.00100		0.00893	0.0100	0	89.3	0.008475	5.18	04/22/2022	
Dibenzo(a,h)anthracene		0.00100		0.00944	0.0100	0	94.4	0.008818	6.77	04/22/2022	
Fluoranthene		0.00100		0.0121	0.0100	0	121.5	0.01170	3.74	04/22/2022	
Fluorene		0.00100		0.0103	0.0100	0	102.7	0.009766	5.06	04/22/2022	
Indeno(1,2,3-cd)pyrene		0.00100		0.0102	0.0100	0	102.4	0.009099	11.84	04/22/2022	
Naphthalene		0.00100		0.00892	0.0100	0	89.2	0.008096	9.69	04/22/2022	
Phenanthrene		0.00100		0.0113	0.0100	0	112.5	0.01078	4.29	04/22/2022	
Pyrene		0.00100		0.0122	0.0100	0	122.0	0.01188	2.63	04/22/2022	
Surr: 2-Fluorobiphenyl	*			0.00917	0.0125		73.4			04/22/2022	
Surr: Nitrobenzene-d5	*			0.0131	0.0125		105.2			04/22/2022	
Surr: p-Terphenyl-d14	*			0.0169	0.0125		135.6			04/22/2022	

Batch 190899		SampType: LCSG		Units %REC				RPD Limit 0			
SampID: LCSG-190899											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Surr: 2-Fluorobiphenyl	*			0.00790	0.0125		63.2	1.09	175	04/22/2022	
Surr: Nitrobenzene-d5	*			0.00550	0.0125		44.0	35.5	156	04/22/2022	
Surr: p-Terphenyl-d14	*			0.00991	0.0125		79.3	35	222	04/22/2022	

Batch 190899		SampType: LCSGD		Units %REC				RPD Limit 0			
SampID: LCSGD-190899											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Surr: 2-Fluorobiphenyl	*			0.0113	0.0125		90.7			04/22/2022	
Surr: Nitrobenzene-d5	*			0.00857	0.0125		68.6			04/22/2022	
Surr: p-Terphenyl-d14	*			0.0131	0.0125		104.8			04/22/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190899		SampType: MS		Units %REC						
SampID: 22041266-004BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 2-Fluorobiphenyl	*			0.0132	0.0125		105.9	1.39	137	04/22/2022
Surr: Nitrobenzene-d5	*		S	0.0164	0.0125		131.6	29.1	125	04/22/2022
Surr: p-Terphenyl-d14	*			0.0196	0.0125		156.7	35.2	164	04/22/2022

Batch 190899		SampType: MSD		Units %REC		RPD Limit 0				
SampID: 22041266-004BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Surr: 2-Fluorobiphenyl	*			0.0134	0.0125		106.8			04/22/2022
Surr: Nitrobenzene-d5	*			0.0145	0.0125		116.2			04/22/2022
Surr: p-Terphenyl-d14	*			0.0174	0.0125		139.0			04/22/2022

Batch 191022		SampType: MBLK		Units mg/L						
SampID: MBLK-191022										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Acenaphthene		0.00100		ND						04/26/2022
Acenaphthylene		0.00100		ND						04/26/2022
Anthracene		0.00100		ND						04/26/2022
Benzo(a)anthracene		0.00100		ND						04/26/2022
Benzo(a)pyrene		0.00100		ND						04/26/2022
Benzo(b)fluoranthene		0.00100		ND						04/26/2022
Benzo(g,h,i)perylene		0.00100		ND						04/26/2022
Benzo(k)fluoranthene		0.00100		ND						04/26/2022
Chrysene		0.00100		ND						04/26/2022
Dibenzo(a,h)anthracene		0.00100		ND						04/26/2022
Fluoranthene		0.00100		ND						04/26/2022
Fluorene		0.00100		ND						04/26/2022
Indeno(1,2,3-cd)pyrene		0.00100		ND						04/26/2022
Naphthalene		0.00100		ND						04/26/2022
Phenanthrene		0.00100		ND						04/26/2022
Pyrene		0.00100		ND						04/26/2022
Surr: 2-Fluorobiphenyl	*			0.00924	0.0125		74.0	1.09	175	04/26/2022
Surr: Nitrobenzene-d5	*			0.0132	0.0125		106.0	35.5	156	04/26/2022
Surr: p-Terphenyl-d14	*			0.0173	0.0125		138.7	35	222	04/26/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 191022		SampType: LCS		Units mg/L							
SampID: LCS-191022											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Acenaphthene		0.00100		0.00769	0.0100	0	76.9	39.6	145	04/26/2022	
Acenaphthylene		0.00100		0.00758	0.0100	0	75.8	38.3	147	04/26/2022	
Anthracene		0.00100		0.00899	0.0100	0	89.9	47.7	153	04/26/2022	
Benzo(a)anthracene		0.00100		0.00954	0.0100	0	95.4	45	136	04/26/2022	
Benzo(a)pyrene		0.00100		0.00845	0.0100	0	84.5	49.8	164	04/26/2022	
Benzo(b)fluoranthene		0.00100		0.00968	0.0100	0	96.8	45.7	167	04/26/2022	
Benzo(g,h,i)perylene		0.00100		0.00978	0.0100	0	97.8	41	157	04/26/2022	
Benzo(k)fluoranthene		0.00100		0.0101	0.0100	0	101.2	46.7	166	04/26/2022	
Chrysene		0.00100		0.00753	0.0100	0	75.3	45.5	162	04/26/2022	
Dibenzo(a,h)anthracene		0.00100		0.00972	0.0100	0	97.2	40.4	154	04/26/2022	
Fluoranthene		0.00100		0.0106	0.0100	0	105.7	47.3	168	04/26/2022	
Fluorene		0.00100		0.00878	0.0100	0	87.8	45.2	153	04/26/2022	
Indeno(1,2,3-cd)pyrene		0.00100		0.00947	0.0100	0	94.7	44.6	166	04/26/2022	
Naphthalene		0.00100		0.00698	0.0100	0	69.8	16.6	137	04/26/2022	
Phenanthrene		0.00100		0.00962	0.0100	0	96.2	50.8	149	04/26/2022	
Pyrene		0.00100		0.0105	0.0100	0	105.4	44.9	163	04/26/2022	
Surr: 2-Fluorobiphenyl	*			0.00927	0.0125		74.1	1.09	175	04/26/2022	
Surr: Nitrobenzene-d5	*			0.0115	0.0125		92.1	35.5	156	04/26/2022	
Surr: p-Terphenyl-d14	*			0.0148	0.0125		118.8	35	222	04/26/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 191022		SampType: LCSD		Units mg/L				RPD Limit 40			
SampID: LCSD-191022											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Acenaphthene		0.00100		0.00822	0.0100	0	82.2	0.007694	6.57	04/26/2022	
Acenaphthylene		0.00100		0.00816	0.0100	0	81.6	0.007580	7.41	04/26/2022	
Anthracene		0.00100		0.00930	0.0100	0	93.0	0.008992	3.39	04/26/2022	
Benzo(a)anthracene		0.00100		0.00998	0.0100	0	99.8	0.009536	4.52	04/26/2022	
Benzo(a)pyrene		0.00100		0.00888	0.0100	0	88.8	0.008446	4.99	04/26/2022	
Benzo(b)fluoranthene		0.00100		0.0101	0.0100	0	101.3	0.009684	4.47	04/26/2022	
Benzo(g,h,i)perylene		0.00100		0.0105	0.0100	0	104.6	0.009784	6.66	04/26/2022	
Benzo(k)fluoranthene		0.00100		0.0108	0.0100	0	107.9	0.01012	6.40	04/26/2022	
Chrysene		0.00100		0.00788	0.0100	0	78.8	0.007533	4.45	04/26/2022	
Dibenzo(a,h)anthracene		0.00100		0.00986	0.0100	0	98.6	0.009725	1.37	04/26/2022	
Fluoranthene		0.00100		0.0109	0.0100	0	108.6	0.01057	2.72	04/26/2022	
Fluorene		0.00100		0.00903	0.0100	0	90.3	0.008780	2.82	04/26/2022	
Indeno(1,2,3-cd)pyrene		0.00100		0.00958	0.0100	0	95.8	0.009466	1.16	04/26/2022	
Naphthalene		0.00100		0.00778	0.0100	0	77.8	0.006978	10.91	04/26/2022	
Phenanthrene		0.00100		0.00994	0.0100	0	99.4	0.009616	3.35	04/26/2022	
Pyrene		0.00100		0.0108	0.0100	0	108.0	0.01054	2.52	04/26/2022	
Surr: 2-Fluorobiphenyl	*			0.00857	0.0125		68.5			04/26/2022	
Surr: Nitrobenzene-d5	*			0.0116	0.0125		92.8			04/26/2022	
Surr: p-Terphenyl-d14	*			0.0152	0.0125		121.6			04/26/2022	

Batch 191022		SampType: LCSG		Units %REC							
SampID: LCSG-191022											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Surr: 2-Fluorobiphenyl	*			0.0111	0.0125		88.7	1.09	175	04/26/2022	
Surr: Nitrobenzene-d5	*			0.0114	0.0125		90.8	35.5	156	04/26/2022	
Surr: p-Terphenyl-d14	*			0.0147	0.0125		117.7	35	222	04/26/2022	

Batch 191022		SampType: LCSGD		Units %REC				RPD Limit 0			
SampID: LCSGD-191022											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Surr: 2-Fluorobiphenyl	*			0.0124	0.0125		98.8			04/26/2022	
Surr: Nitrobenzene-d5	*			0.0124	0.0125		99.4			04/26/2022	
Surr: p-Terphenyl-d14	*			0.0162	0.0125		129.3			04/26/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 191022		SampType: MS		Units %REC						
SampID: 22041266-027BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 2-Fluorobiphenyl	*			0.0124	0.0125		99.2	1.39	137	04/26/2022
Surr: Nitrobenzene-d5	*			0.0118	0.0125		94.2	29.1	125	04/26/2022
Surr: p-Terphenyl-d14	*			0.0150	0.0125		120.1	35.2	164	04/26/2022

Batch 191022		SampType: MSD		Units %REC						RPD Limit 0
SampID: 22041266-027BMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Surr: 2-Fluorobiphenyl	*			0.0130	0.0125		103.7			04/26/2022
Surr: Nitrobenzene-d5	*			0.0124	0.0125		99.0			04/26/2022
Surr: p-Terphenyl-d14	*			0.0155	0.0125		123.6			04/26/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190900 **SampType:** MBLK **Units** µg/L
SampID: MBLK-AM220421A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	*	2.0		ND						04/21/2022
1,1,1-Trichloroethane	*	2.0		ND						04/21/2022
1,1,2,2-Tetrachloroethane	*	2.0		ND						04/21/2022
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND						04/21/2022
1,1,2-Trichloroethane	*	0.5		ND						04/21/2022
1,1-Dichloro-2-propanone	*	30.0		ND						04/21/2022
1,1-Dichloroethane	*	2.0		ND						04/21/2022
1,1-Dichloroethene	*	2.0		ND						04/21/2022
1,1-Dichloropropene	*	2.0		ND						04/21/2022
1,2,3-Trichlorobenzene	*	2.0		ND						04/21/2022
1,2,3-Trichloropropane	*	2.0		ND						04/21/2022
1,2,3-Trimethylbenzene	*	2.0		ND						04/21/2022
1,2,4-Trichlorobenzene	*	2.0		ND						04/21/2022
1,2,4-Trimethylbenzene	*	2.0		ND						04/21/2022
1,2-Dibromo-3-chloropropane	*	5.0		ND						04/21/2022
1,2-Dibromoethane	*	2.0		ND						04/21/2022
1,2-Dichlorobenzene	*	2.0		ND						04/21/2022
1,2-Dichloroethane	*	2.0		ND						04/21/2022
1,2-Dichloropropane	*	2.0		ND						04/21/2022
1,3,5-Trimethylbenzene	*	2.0		ND						04/21/2022
1,3-Dichlorobenzene	*	2.0		ND						04/21/2022
1,3-Dichloropropane	*	2.0		ND						04/21/2022
1,4-Dichlorobenzene	*	2.0		ND						04/21/2022
1-Chlorobutane	*	5.0		ND						04/21/2022
2,2-Dichloropropane	*	2.0		ND						04/21/2022
2-Butanone	*	10.0		ND						04/21/2022
2-Chloroethyl vinyl ether	*	5.0		ND						04/21/2022
2-Chlorotoluene	*	2.0		ND						04/21/2022
2-Hexanone	*	10.0		ND						04/21/2022
2-Nitropropane	*	10.0		ND						04/21/2022
4-Chlorotoluene	*	2.0		ND						04/21/2022
4-Methyl-2-pentanone	*	10.0		ND						04/21/2022
Acetone	*	10.0		ND						04/21/2022
Acetonitrile	*	10.0		ND						04/21/2022
Acrolein	*	20.0		ND						04/21/2022
Acrylonitrile	*	5.0		ND						04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190900 **SampType:** MBLK **Units** µg/L

SampID: MBLK-AM220421A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Allyl chloride	*	5.0		ND						04/21/2022
Benzene	*	0.5		ND						04/21/2022
Bromobenzene	*	2.0		ND						04/21/2022
Bromochloromethane	*	2.0		ND						04/21/2022
Bromodichloromethane	*	2.0		ND						04/21/2022
Bromoform	*	2.0		ND						04/21/2022
Bromomethane	*	5.0		ND						04/21/2022
Carbon disulfide	*	2.0		ND						04/21/2022
Carbon tetrachloride	*	2.0		ND						04/21/2022
Chlorobenzene	*	2.0		ND						04/21/2022
Chloroethane	*	2.0		ND						04/21/2022
Chloroform	*	2.0		ND						04/21/2022
Chloromethane	*	5.0		ND						04/21/2022
Chloroprene	*	5.0		ND						04/21/2022
cis-1,2-Dichloroethene	*	2.0		ND						04/21/2022
cis-1,3-Dichloropropene	*	2.0		ND						04/21/2022
cis-1,4-Dichloro-2-butene	*	2.0		ND						04/21/2022
Cyclohexanone	*	20.0		ND						04/21/2022
Dibromochloromethane	*	2.0		ND						04/21/2022
Dibromomethane	*	2.0		ND						04/21/2022
Dichlorodifluoromethane	*	2.0		ND						04/21/2022
Diisopropyl ether	*	2.0		ND						04/21/2022
Ethyl acetate	*	10.0		ND						04/21/2022
Ethyl ether	*	5.0		ND						04/21/2022
Ethyl methacrylate	*	5.0		ND						04/21/2022
Ethylbenzene	*	2.0		ND						04/21/2022
Ethyl-tert-butyl ether	*	2.0		ND						04/21/2022
Hexachlorobutadiene	*	5.0		ND						04/21/2022
Hexachloroethane	*	5.0		ND						04/21/2022
Iodomethane	*	5.0		ND						04/21/2022
Isopropylbenzene	*	2.0		ND						04/21/2022
m,p-Xylenes	*	2.0		ND						04/21/2022
Methacrylonitrile	*	5.0		ND						04/21/2022
Methyl Methacrylate	*	5.0		ND						04/21/2022
Methyl tert-butyl ether	*	2.0		ND						04/21/2022
Methylacrylate	*	5.0		ND						04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190900		SampType: MBLK		Units µg/L							
SampID: MBLK-AM220421A-1						Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Analyses	Cert	RL	Qual	Result							
Methylene chloride	*	2.0		ND							04/21/2022
Naphthalene	*	5.0		ND							04/21/2022
n-Butyl acetate	*	2.0		ND							04/21/2022
n-Butylbenzene	*	2.0		ND							04/21/2022
n-Heptane	*	5.0		ND							04/21/2022
n-Hexane	*	5.0		ND							04/21/2022
Nitrobenzene	*	50.0		ND							04/21/2022
n-Propylbenzene	*	2.0		ND							04/21/2022
o-Xylene	*	2.0		ND							04/21/2022
Pentachloroethane	*	5.0		ND							04/21/2022
p-Isopropyltoluene	*	2.0		ND							04/21/2022
Propionitrile	*	10.0		ND							04/21/2022
sec-Butylbenzene	*	2.0		ND							04/21/2022
Styrene	*	2.0		ND							04/21/2022
tert-Amyl methyl ether	*	2.0		ND							04/21/2022
tert-Butyl alcohol	*	10.0		ND							04/21/2022
tert-Butylbenzene	*	2.0		ND							04/21/2022
Tetrachloroethene	*	0.5		ND							04/21/2022
Tetrahydrofuran	*	5.0		ND							04/21/2022
Toluene	*	2.0		ND							04/21/2022
trans-1,2-Dichloroethene	*	2.0		ND							04/21/2022
trans-1,3-Dichloropropene	*	2.0		ND							04/21/2022
trans-1,4-Dichloro-2-butene	*	2.0		ND							04/21/2022
Trichloroethene	*	2.0		ND							04/21/2022
Trichlorofluoromethane	*	5.0		ND							04/21/2022
Vinyl acetate	*	5.0		ND							04/21/2022
Vinyl chloride	*	2.0		ND							04/21/2022
Xylenes, Total	*	4.0		ND							04/21/2022
1,2-Dichloroethene, Total	*	4.0		ND							04/21/2022
1,3-Dichloropropene, Total	*	4.0		ND							04/21/2022
1,4-Dichloro-2-butene, Total	*	4.0		ND							04/21/2022
Surr: 1,2-Dichloroethane-d4	*			48.3	50.00		96.6	80	120		04/21/2022
Surr: 4-Bromofluorobenzene	*			48.3	50.00		96.6	80	120		04/21/2022
Surr: Toluene-d8	*			47.0	50.00		94.1	80	120		04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190900 **SampType:** LCS

Units µg/L

SampID: LCS-AM220421A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	*	2.0		46.3	50.00	0	92.6	82	113	04/21/2022
1,1,1-Trichloroethane	*	2.0		44.8	50.00	0	89.6	76.9	128	04/21/2022
1,1,2,2-Tetrachloroethane	*	2.0		42.6	50.00	0	85.3	76.7	113	04/21/2022
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		45.4	50.00	0	90.9	69.5	127	04/21/2022
1,1,2-Trichloroethane	*	0.5		44.0	50.00	0	87.9	83.8	111	04/21/2022
1,1-Dichloro-2-propanone	*	30.0		103	125.0	0	82.5	74.9	117	04/21/2022
1,1-Dichloroethane	*	2.0		44.1	50.00	0	88.3	77	129	04/21/2022
1,1-Dichloroethene	*	2.0		42.6	50.00	0	85.2	69.4	127	04/21/2022
1,1-Dichloropropene	*	2.0		45.0	50.00	0	90.0	75.1	123	04/21/2022
1,2,3-Trichlorobenzene	*	2.0		43.3	50.00	0	86.6	77.3	121	04/21/2022
1,2,3-Trichloropropane	*	2.0		41.5	50.00	0	83.1	75.3	109	04/21/2022
1,2,3-Trimethylbenzene	*	2.0		43.7	50.00	0	87.5	77	115	04/21/2022
1,2,4-Trichlorobenzene	*	2.0		42.1	50.00	0	84.2	76.8	124	04/21/2022
1,2,4-Trimethylbenzene	*	2.0		43.9	50.00	0	87.7	75	115	04/21/2022
1,2-Dibromo-3-chloropropane	*	5.0		40.4	50.00	0	80.8	71.9	119	04/21/2022
1,2-Dibromoethane	*	2.0		44.6	50.00	0	89.2	83.6	110	04/21/2022
1,2-Dichlorobenzene	*	2.0		43.5	50.00	0	87.0	72.1	113	04/21/2022
1,2-Dichloroethane	*	2.0		44.2	50.00	0	88.4	72.3	117	04/21/2022
1,2-Dichloropropane	*	2.0		46.1	50.00	0	92.1	76.5	119	04/21/2022
1,3,5-Trimethylbenzene	*	2.0		43.9	50.00	0	87.8	75.2	117	04/21/2022
1,3-Dichlorobenzene	*	2.0		44.2	50.00	0	88.4	75.2	115	04/21/2022
1,3-Dichloropropane	*	2.0		44.2	50.00	0	88.4	80.9	110	04/21/2022
1,4-Dichlorobenzene	*	2.0		44.2	50.00	0	88.5	73.9	112	04/21/2022
1-Chlorobutane	*	5.0		45.4	50.00	0	90.9	74.9	130	04/21/2022
2,2-Dichloropropane	*	2.0		42.2	50.00	0	84.4	66.5	138	04/21/2022
2-Butanone	*	10.0		108	125.0	0	86.6	68.8	134	04/21/2022
2-Chloroethyl vinyl ether	*	5.0		48.9	50.00	0	97.7	17.8	163	04/21/2022
2-Chlorotoluene	*	2.0		43.2	50.00	0	86.3	74.9	115	04/21/2022
2-Hexanone	*	10.0		103	125.0	0	82.5	73.2	117	04/21/2022
2-Nitropropane	*	10.0		502	500.0	0	100.4	67.1	140	04/21/2022
4-Chlorotoluene	*	2.0		46.3	50.00	0	92.6	75.7	113	04/21/2022
4-Methyl-2-pentanone	*	10.0		105	125.0	0	84.4	77	113	04/21/2022
Acetone	*	10.0		125	125.0	0	100.2	61.4	130	04/21/2022
Acetonitrile	*	10.0		439	500.0	0	87.8	68.8	136	04/21/2022
Acrolein	*	20.0		396	500.0	0	79.1	28.4	168	04/21/2022
Acrylonitrile	*	5.0		43.4	50.00	0	86.8	77.9	124	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190900 **SampType:** LCS

Units µg/L

SampID: LCS-AM220421A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Allyl chloride	*	5.0		46.7	50.00	0	93.4	75.8	130	04/21/2022
Benzene	*	0.5		45.8	50.00	0	91.7	78.5	119	04/21/2022
Bromobenzene	*	2.0		44.2	50.00	0	88.4	77.5	113	04/21/2022
Bromochloromethane	*	2.0		46.3	50.00	0	92.6	71.5	123	04/21/2022
Bromodichloromethane	*	2.0		49.5	50.00	0	99.1	75.7	123	04/21/2022
Bromoform	*	2.0		46.8	50.00	0	93.7	78.9	121	04/21/2022
Bromomethane	*	5.0		42.9	50.00	0	85.8	30.5	192	04/21/2022
Carbon disulfide	*	2.0		43.3	50.00	0	86.6	66.7	121	04/21/2022
Carbon tetrachloride	*	2.0		47.6	50.00	0	95.3	70.9	127	04/21/2022
Chlorobenzene	*	2.0		44.2	50.00	0	88.5	80	111	04/21/2022
Chloroethane	*	2.0		41.3	50.00	0	82.6	69.6	135	04/21/2022
Chloroform	*	2.0		46.4	50.00	0	92.9	76.2	120	04/21/2022
Chloromethane	*	5.0		31.9	50.00	0	63.8	50.9	138	04/21/2022
Chloroprene	*	5.0		43.6	50.00	0	87.1	68.4	127	04/21/2022
cis-1,2-Dichloroethene	*	2.0		47.9	50.00	0	95.7	79.5	121	04/21/2022
cis-1,3-Dichloropropene	*	2.0		49.0	50.00	0	98.0	79.8	123	04/21/2022
cis-1,4-Dichloro-2-butene	*	2.0		45.8	50.00	0	91.5	64.6	130	04/21/2022
Cyclohexanone	*	20.0		424	500.0	0	84.8	70.5	114	04/21/2022
Dibromochloromethane	*	2.0		46.7	50.00	0	93.3	84.5	114	04/21/2022
Dibromomethane	*	2.0		47.1	50.00	0	94.3	76	119	04/21/2022
Dichlorodifluoromethane	*	2.0		24.4	50.00	0	48.7	46.6	142	04/21/2022
Diisopropyl ether	*	2.0		45.2	50.00	0	90.5	72	128	04/21/2022
Ethyl acetate	*	10.0		43.4	50.00	0	86.9	70.3	115	04/21/2022
Ethyl ether	*	5.0		44.3	50.00	0	88.6	74.6	120	04/21/2022
Ethyl methacrylate	*	5.0		44.1	50.00	0	88.2	81.4	116	04/21/2022
Ethylbenzene	*	2.0		44.5	50.00	0	89.1	78.2	114	04/21/2022
Ethyl-tert-butyl ether	*	2.0		43.9	50.00	0	87.7	74.6	124	04/21/2022
Hexachlorobutadiene	*	5.0		42.3	50.00	0	84.5	73.9	129	04/21/2022
Hexachloroethane	*	5.0		48.7	50.00	0	97.4	78.3	123	04/21/2022
Iodomethane	*	5.0		43.4	50.00	0	86.8	50	151	04/21/2022
Isopropylbenzene	*	2.0		45.3	50.00	0	90.7	79.3	115	04/21/2022
m,p-Xylenes	*	2.0		89.1	100.0	0	89.1	77.2	116	04/21/2022
Methacrylonitrile	*	5.0		45.5	50.00	0	91.0	73.9	127	04/21/2022
Methyl Methacrylate	*	5.0		42.2	50.00	0	84.3	70.7	129	04/21/2022
Methyl tert-butyl ether	*	2.0		45.5	50.00	0	91.0	80.3	122	04/21/2022
Methylacrylate	*	5.0		45.7	50.00	0	91.3	75.2	124	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190900		SampType: LCS		Units µg/L							Date
SampID: LCS-AM220421A-1											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Methylene chloride	*	2.0		42.2	50.00	0	84.3	71.8	115	04/21/2022	
Naphthalene	*	5.0		42.4	50.00	0	84.8	75.6	121	04/21/2022	
n-Butyl acetate	*	2.0		41.5	50.00	0	82.9	72.4	118	04/21/2022	
n-Butylbenzene	*	2.0		44.1	50.00	0	88.1	70.8	118	04/21/2022	
n-Heptane	*	5.0		49.1	50.00	0	98.2	50.4	143	04/21/2022	
n-Hexane	*	5.0		43.1	50.00	0	86.2	60.6	139	04/21/2022	
Nitrobenzene	*	50.0		402	500.0	0	80.4	49.4	129	04/21/2022	
n-Propylbenzene	*	2.0		44.6	50.00	0	89.2	74	119	04/21/2022	
o-Xylene	*	2.0		43.4	50.00	0	86.7	79.2	112	04/21/2022	
Pentachloroethane	*	5.0		46.8	50.00	0	93.6	71.8	124	04/21/2022	
p-Isopropyltoluene	*	2.0		43.9	50.00	0	87.9	74.4	119	04/21/2022	
Propionitrile	*	10.0		465	500.0	0	92.9	76.2	127	04/21/2022	
sec-Butylbenzene	*	2.0		45.1	50.00	0	90.2	74.4	119	04/21/2022	
Styrene	*	2.0		46.0	50.00	0	92.0	80.4	117	04/21/2022	
tert-Amyl methyl ether	*	2.0		44.8	50.00	0	89.7	80.8	125	04/21/2022	
tert-Butyl alcohol	*	10.0		186	250.0	0	74.5	64.9	118	04/21/2022	
tert-Butylbenzene	*	2.0		42.9	50.00	0	85.9	74	115	04/21/2022	
Tetrachloroethene	*	0.5		43.0	50.00	0	85.9	70.1	120	04/21/2022	
Tetrahydrofuran	*	5.0		39.5	50.00	0	79.0	63.5	122	04/21/2022	
Toluene	*	2.0		43.4	50.00	0	86.8	78.6	112	04/21/2022	
trans-1,2-Dichloroethene	*	2.0		44.2	50.00	0	88.3	75.7	130	04/21/2022	
trans-1,3-Dichloropropene	*	2.0		45.3	50.00	0	90.6	80.3	116	04/21/2022	
trans-1,4-Dichloro-2-butene	*	2.0		43.8	50.00	0	87.5	65.5	124	04/21/2022	
Trichloroethene	*	2.0		45.8	50.00	0	91.6	76.2	121	04/21/2022	
Trichlorofluoromethane	*	5.0		45.1	50.00	0	90.2	71.1	131	04/21/2022	
Vinyl acetate	*	5.0		47.0	50.00	0	94.1	79.8	129	04/21/2022	
Vinyl chloride	*	2.0		38.4	50.00	0	76.8	58.6	141	04/21/2022	
Xylenes, Total	*	4.0		132	150.0	0	88.3	78.3	114	04/21/2022	
1,2-Dichloroethene, Total	*	4.0		92.0	100.0	0	92.0	78.5	125	04/21/2022	
1,3-Dichloropropene, Total	*	4.0		94.3	100.0	0	94.3	82.3	117	04/21/2022	
1,4-Dichloro-2-butene, Total	*	4.0		89.5	100.0	0	89.5	65.9	126	04/21/2022	
Surr: 1,2-Dichloroethane-d4	*			48.7	50.00		97.5	80	120	04/21/2022	
Surr: 4-Bromofluorobenzene	*			48.7	50.00		97.3	80	120	04/21/2022	
Surr: Toluene-d8	*			48.1	50.00		96.2	80	120	04/21/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190900	SampType: LCSD	Units µg/L								RPD Limit 15.4	Date Analyzed
SampID: LCSD-AM220421A-1											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
1,1,1,2-Tetrachloroethane	*	2.0		46.7	50.00	0	93.4	46.30	0.88	04/21/2022	
1,1,1-Trichloroethane	*	2.0		45.5	50.00	0	91.0	44.81	1.48	04/21/2022	
1,1,2,2-Tetrachloroethane	*	2.0		42.1	50.00	0	84.2	42.64	1.32	04/21/2022	
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		46.6	50.00	0	93.1	45.43	2.46	04/21/2022	
1,1,2-Trichloroethane	*	0.5		43.4	50.00	0	86.9	43.95	1.17	04/21/2022	
1,1-Dichloro-2-propanone	*	30.0		104	125.0	0	82.9	103.1	0.55	04/21/2022	
1,1-Dichloroethane	*	2.0		44.7	50.00	0	89.4	44.13	1.33	04/21/2022	
1,1-Dichloroethene	*	2.0		44.2	50.00	0	88.4	42.59	3.69	04/21/2022	
1,1-Dichloropropene	*	2.0		46.2	50.00	0	92.5	45.01	2.72	04/21/2022	
1,2,3-Trichlorobenzene	*	2.0		42.8	50.00	0	85.7	43.29	1.04	04/21/2022	
1,2,3-Trichloropropane	*	2.0		41.4	50.00	0	82.8	41.53	0.34	04/21/2022	
1,2,3-Trimethylbenzene	*	2.0		43.7	50.00	0	87.5	43.74	0.02	04/21/2022	
1,2,4-Trichlorobenzene	*	2.0		42.0	50.00	0	83.9	42.10	0.36	04/21/2022	
1,2,4-Trimethylbenzene	*	2.0		44.2	50.00	0	88.4	43.86	0.79	04/21/2022	
1,2-Dibromo-3-chloropropane	*	5.0		40.3	50.00	0	80.7	40.42	0.20	04/21/2022	
1,2-Dibromoethane	*	2.0		44.3	50.00	0	88.5	44.58	0.70	04/21/2022	
1,2-Dichlorobenzene	*	2.0		43.6	50.00	0	87.2	43.49	0.28	04/21/2022	
1,2-Dichloroethane	*	2.0		43.3	50.00	0	86.5	44.20	2.15	04/21/2022	
1,2-Dichloropropane	*	2.0		46.0	50.00	0	92.1	46.06	0.07	04/21/2022	
1,3,5-Trimethylbenzene	*	2.0		44.3	50.00	0	88.7	43.91	0.97	04/21/2022	
1,3-Dichlorobenzene	*	2.0		44.2	50.00	0	88.3	44.19	0.07	04/21/2022	
1,3-Dichloropropane	*	2.0		43.6	50.00	0	87.2	44.20	1.39	04/21/2022	
1,4-Dichlorobenzene	*	2.0		44.3	50.00	0	88.6	44.23	0.16	04/21/2022	
1-Chlorobutane	*	5.0		46.5	50.00	0	93.0	45.45	2.26	04/21/2022	
2,2-Dichloropropane	*	2.0		43.5	50.00	0	87.1	42.19	3.13	04/21/2022	
2-Butanone	*	10.0		107	125.0	0	85.4	108.3	1.50	04/21/2022	
2-Chloroethyl vinyl ether	*	5.0		48.1	50.00	0	96.3	48.86	1.51	04/21/2022	
2-Chlorotoluene	*	2.0		43.6	50.00	0	87.2	43.17	0.95	04/21/2022	
2-Hexanone	*	10.0		103	125.0	0	82.2	103.1	0.36	04/21/2022	
2-Nitropropane	*	10.0		493	500.0	0	98.7	502.2	1.77	04/21/2022	
4-Chlorotoluene	*	2.0		42.1	50.00	0	84.1	46.30	9.57	04/21/2022	
4-Methyl-2-pentanone	*	10.0		105	125.0	0	84.1	105.5	0.32	04/21/2022	
Acetone	*	10.0		120	125.0	0	95.9	125.2	4.39	04/21/2022	
Acetonitrile	*	10.0		438	500.0	0	87.6	438.8	0.21	04/21/2022	
Acrolein	*	20.0	R	568	500.0	0	113.6	395.5	35.77	04/21/2022	
Acrylonitrile	*	5.0		42.2	50.00	0	84.5	43.42	2.76	04/21/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch	190900	SampType:	LCSD	Units µg/L				RPD Limit 15.4			Date		
SampID:		LCSD-AM220421A-1		Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Analyzed
Analyses													
Allyl chloride	*	5.0					47.1	50.00	0	94.3	46.71	0.92	04/21/2022
Benzene	*	0.5					46.3	50.00	0	92.6	45.84	1.04	04/21/2022
Bromobenzene	*	2.0					44.3	50.00	0	88.6	44.19	0.23	04/21/2022
Bromochloromethane	*	2.0					45.2	50.00	0	90.5	46.30	2.29	04/21/2022
Bromodichloromethane	*	2.0					49.0	50.00	0	98.1	49.54	1.01	04/21/2022
Bromoform	*	2.0					46.1	50.00	0	92.3	46.85	1.55	04/21/2022
Bromomethane	*	5.0					43.0	50.00	0	86.0	42.88	0.23	04/21/2022
Carbon disulfide	*	2.0					44.5	50.00	0	88.9	43.30	2.64	04/21/2022
Carbon tetrachloride	*	2.0					48.8	50.00	0	97.6	47.65	2.36	04/21/2022
Chlorobenzene	*	2.0					44.2	50.00	0	88.4	44.25	0.09	04/21/2022
Chloroethane	*	2.0					42.0	50.00	0	83.9	41.31	1.59	04/21/2022
Chloroform	*	2.0					46.4	50.00	0	92.8	46.45	0.11	04/21/2022
Chloromethane	*	5.0					32.9	50.00	0	65.8	31.89	3.06	04/21/2022
Chloroprene	*	5.0					44.4	50.00	0	88.8	43.56	1.91	04/21/2022
cis-1,2-Dichloroethene	*	2.0					47.9	50.00	0	95.8	47.87	0.04	04/21/2022
cis-1,3-Dichloropropene	*	2.0					48.2	50.00	0	96.4	48.98	1.63	04/21/2022
cis-1,4-Dichloro-2-butene	*	2.0					44.7	50.00	0	89.3	45.76	2.43	04/21/2022
Cyclohexanone	*	20.0					427	500.0	0	85.4	423.8	0.72	04/21/2022
Dibromochloromethane	*	2.0					46.4	50.00	0	92.7	46.67	0.67	04/21/2022
Dibromomethane	*	2.0					46.2	50.00	0	92.4	47.13	1.95	04/21/2022
Dichlorodifluoromethane	*	2.0					24.8	50.00	0	49.6	24.35	1.83	04/21/2022
Diisopropyl ether	*	2.0					45.0	50.00	0	90.0	45.25	0.51	04/21/2022
Ethyl acetate	*	10.0					42.9	50.00	0	85.8	43.44	1.20	04/21/2022
Ethyl ether	*	5.0					43.3	50.00	0	86.7	44.30	2.21	04/21/2022
Ethyl methacrylate	*	5.0					43.3	50.00	0	86.5	44.10	1.92	04/21/2022
Ethylbenzene	*	2.0					45.2	50.00	0	90.4	44.53	1.45	04/21/2022
Ethyl-tert-butyl ether	*	2.0					43.6	50.00	0	87.1	43.87	0.69	04/21/2022
Hexachlorobutadiene	*	5.0					43.3	50.00	0	86.5	42.27	2.34	04/21/2022
Hexachloroethane	*	5.0					49.1	50.00	0	98.2	48.68	0.86	04/21/2022
Iodomethane	*	5.0					46.7	50.00	0	93.3	43.38	7.31	04/21/2022
Isopropylbenzene	*	2.0					45.7	50.00	0	91.4	45.34	0.81	04/21/2022
m,p-Xylenes	*	2.0					90.1	100.0	0	90.1	89.09	1.15	04/21/2022
Methacrylonitrile	*	5.0					44.9	50.00	0	89.9	45.52	1.28	04/21/2022
Methyl Methacrylate	*	5.0					41.2	50.00	0	82.3	42.16	2.42	04/21/2022
Methyl tert-butyl ether	*	2.0					45.0	50.00	0	89.9	45.52	1.24	04/21/2022
Methylacrylate	*	5.0					45.2	50.00	0	90.3	45.67	1.12	04/21/2022

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch	190900	SampType:	LCSD	Units µg/L				RPD Limit 15.4			Date Analyzed
SampID:	LCSD-AM220421A-1										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Methylene chloride	*	2.0		42.5	50.00	0	85.1	42.15	0.90	04/21/2022	
Naphthalene	*	5.0		41.9	50.00	0	83.8	42.38	1.12	04/21/2022	
n-Butyl acetate	*	2.0		41.3	50.00	0	82.6	41.46	0.44	04/21/2022	
n-Butylbenzene	*	2.0		45.2	50.00	0	90.3	44.06	2.44	04/21/2022	
n-Heptane	*	5.0		50.4	50.00	0	100.7	49.11	2.51	04/21/2022	
n-Hexane	*	5.0		44.3	50.00	0	88.6	43.11	2.68	04/21/2022	
Nitrobenzene	*	50.0		406	500.0	0	81.2	401.8	1.07	04/21/2022	
n-Propylbenzene	*	2.0		45.3	50.00	0	90.7	44.58	1.69	04/21/2022	
o-Xylene	*	2.0		43.6	50.00	0	87.3	43.36	0.64	04/21/2022	
Pentachloroethane	*	5.0		46.7	50.00	0	93.4	46.78	0.21	04/21/2022	
p-Isopropyltoluene	*	2.0		42.9	50.00	0	85.7	43.94	2.49	04/21/2022	
Propionitrile	*	10.0		458	500.0	0	91.6	464.6	1.45	04/21/2022	
sec-Butylbenzene	*	2.0		46.2	50.00	0	92.3	45.09	2.35	04/21/2022	
Styrene	*	2.0		46.0	50.00	0	91.9	46.02	0.13	04/21/2022	
tert-Amyl methyl ether	*	2.0		43.9	50.00	0	87.9	44.85	2.07	04/21/2022	
tert-Butyl alcohol	*	10.0		187	250.0	0	74.8	186.2	0.41	04/21/2022	
tert-Butylbenzene	*	2.0		43.4	50.00	0	86.7	42.93	0.97	04/21/2022	
Tetrachloroethene	*	0.5		44.0	50.00	0	87.9	42.97	2.28	04/21/2022	
Tetrahydrofuran	*	5.0		40.2	50.00	0	80.4	39.50	1.78	04/21/2022	
Toluene	*	2.0		43.8	50.00	0	87.6	43.40	0.87	04/21/2022	
trans-1,2-Dichloroethene	*	2.0		44.8	50.00	0	89.6	44.16	1.48	04/21/2022	
trans-1,3-Dichloropropene	*	2.0		45.1	50.00	0	90.3	45.32	0.42	04/21/2022	
trans-1,4-Dichloro-2-butene	*	2.0		43.2	50.00	0	86.4	43.76	1.24	04/21/2022	
Trichloroethene	*	2.0		46.5	50.00	0	93.0	45.80	1.50	04/21/2022	
Trichlorofluoromethane	*	5.0		46.8	50.00	0	93.5	45.12	3.59	04/21/2022	
Vinyl acetate	*	5.0		46.1	50.00	0	92.1	47.04	2.08	04/21/2022	
Vinyl chloride	*	2.0		39.2	50.00	0	78.4	38.39	2.09	04/21/2022	
Xylenes, Total	*	4.0		134	150.0	0	89.2	132.4	0.98	04/21/2022	
1,2-Dichloroethene, Total	*	4.0		92.7	100.0	0	92.7	92.03	0.74	04/21/2022	
1,3-Dichloropropene, Total	*	4.0		93.3	100.0	0	93.3	94.30	1.04	04/21/2022	
1,4-Dichloro-2-butene, Total	*	4.0		87.9	100.0	0	87.9	89.52	1.85	04/21/2022	
Surr: 1,2-Dichloroethane-d4	*			48.8	50.00		97.7			04/21/2022	
Surr: 4-Bromofluorobenzene	*			48.8	50.00		97.5			04/21/2022	
Surr: Toluene-d8	*			48.3	50.00		96.6			04/21/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190900		SampType: LCSG		Units %REC						
SampID: LCSG-AM220421A-1										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 1,2-Dichloroethane-d4	*			48.4	50.00		96.7	80	120	04/21/2022
Surr: 4-Bromofluorobenzene	*			48.2	50.00		96.3	80	120	04/21/2022
Surr: Toluene-d8	*			47.7	50.00		95.5	80	120	04/21/2022

Batch 190900		SampType: LCSGD		Units %REC		RPD Limit 0				
SampID: LCSGD-AM220421A-1										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Surr: 1,2-Dichloroethane-d4	*			48.8	50.00		97.5			04/21/2022
Surr: 4-Bromofluorobenzene	*			48.4	50.00		96.8			04/21/2022
Surr: Toluene-d8	*			48.2	50.00		96.4			04/21/2022

Batch 190900		SampType: MS		Units µg/L						
SampID: 22041266-004eMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene		2.0		43.0	50.00	0	86.1	67.5	123	04/21/2022
Benzene		0.5		46.7	50.00	0	93.4	72	120	04/21/2022
Chlorobenzene		2.0		43.5	50.00	0	87.1	73.9	108	04/21/2022
Ethylbenzene		2.0		43.8	50.00	0	87.5	74.8	115	04/21/2022
m,p-Xylenes		2.0		44.4	50.00	0	88.9	69.7	115	04/21/2022
o-Xylene		2.0		42.5	50.00	0	85.0	72.9	111	04/21/2022
Toluene		2.0		43.4	50.00	0	86.7	70.6	109	04/21/2022
Trichloroethene		2.0		47.7	50.00	0	95.5	77.7	119	04/21/2022
Xylenes, Total		4.0		86.9	100.0	0	86.9	72.1	113	04/21/2022
Surr: 1,2-Dichloroethane-d4	*			48.9	50.00		97.8	80	120	04/21/2022
Surr: 4-Bromofluorobenzene	*			48.6	50.00		97.3	80	120	04/21/2022
Surr: Toluene-d8	*			46.9	50.00		93.8	80	120	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch	190900	SampType:	MSD	Units µg/L				RPD Limit 40			Date Analyzed
SampID:	22041266-004eMSD										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
1,1-Dichloroethene		2.0		42.2	50.00	0	84.5	43.05	1.92	04/21/2022	
Benzene		0.5		46.2	50.00	0	92.5	46.72	1.01	04/21/2022	
Chlorobenzene		2.0		43.4	50.00	0	86.8	43.54	0.37	04/21/2022	
Ethylbenzene		2.0		43.3	50.00	0	86.6	43.76	1.10	04/21/2022	
m,p-Xylenes		2.0		44.3	50.00	0	88.5	44.43	0.38	04/21/2022	
o-Xylene		2.0		42.2	50.00	0	84.4	42.48	0.66	04/21/2022	
Toluene		2.0		43.0	50.00	0	86.0	43.36	0.79	04/21/2022	
Trichloroethene		2.0		47.1	50.00	0	94.2	47.74	1.33	04/21/2022	
Xylenes, Total		4.0		86.5	100.0	0	86.5	86.91	0.52	04/21/2022	
Surr: 1,2-Dichloroethane-d4	*			48.6	50.00		97.2			04/21/2022	
Surr: 4-Bromofluorobenzene	*			48.2	50.00		96.4			04/21/2022	
Surr: Toluene-d8	*			46.7	50.00		93.4			04/21/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190922		SampType: MBLK		Units µg/L							
SampID: MBLK-AE220421A-1						Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Analyses	Cert	RL	Qual	Result							
1,1,1,2-Tetrachloroethane	*	2.0		ND							04/21/2022
1,1,1-Trichloroethane	*	2.0		ND							04/21/2022
1,1,2,2-Tetrachloroethane	*	2.0		ND							04/21/2022
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		ND							04/21/2022
1,1,2-Trichloroethane	*	0.5		ND							04/21/2022
1,1-Dichloro-2-propanone	*	30.0		ND							04/21/2022
1,1-Dichloroethane	*	2.0		ND							04/21/2022
1,1-Dichloroethene	*	2.0		ND							04/21/2022
1,1-Dichloropropene	*	2.0		ND							04/21/2022
1,2,3-Trichlorobenzene	*	2.0		ND							04/21/2022
1,2,3-Trichloropropane	*	2.0		ND							04/21/2022
1,2,3-Trimethylbenzene	*	2.0		ND							04/21/2022
1,2,4-Trichlorobenzene	*	2.0		ND							04/21/2022
1,2,4-Trimethylbenzene	*	2.0		ND							04/21/2022
1,2-Dibromo-3-chloropropane	*	5.0		ND							04/21/2022
1,2-Dibromoethane	*	2.0		ND							04/21/2022
1,2-Dichlorobenzene	*	2.0		ND							04/21/2022
1,2-Dichloroethane	*	2.0		ND							04/21/2022
1,2-Dichloropropane	*	2.0		ND							04/21/2022
1,3,5-Trimethylbenzene	*	2.0		ND							04/21/2022
1,3-Dichlorobenzene	*	2.0		ND							04/21/2022
1,3-Dichloropropane	*	2.0		ND							04/21/2022
1,4-Dichlorobenzene	*	2.0		ND							04/21/2022
1-Chlorobutane	*	5.0		ND							04/21/2022
2,2-Dichloropropane	*	2.0		ND							04/21/2022
2-Butanone	*	10.0		ND							04/21/2022
2-Chloroethyl vinyl ether	*	5.0		ND							04/21/2022
2-Chlorotoluene	*	2.0		ND							04/21/2022
2-Hexanone	*	10.0		ND							04/21/2022
2-Nitropropane	*	10.0		ND							04/21/2022
4-Chlorotoluene	*	2.0		ND							04/21/2022
4-Methyl-2-pentanone	*	10.0		ND							04/21/2022
Acetone	*	10.0		ND							04/21/2022
Acetonitrile	*	10.0		ND							04/21/2022
Acrolein	*	20.0		ND							04/21/2022
Acrylonitrile	*	5.0		ND							04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190922 **SampType:** MBLK **Units** µg/L
SampID: MBLK-AE220421A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Allyl chloride	*	5.0		ND						04/21/2022
Benzene	*	0.5		ND						04/21/2022
Bromobenzene	*	2.0		ND						04/21/2022
Bromochloromethane	*	2.0		ND						04/21/2022
Bromodichloromethane	*	2.0		ND						04/21/2022
Bromoform	*	2.0		ND						04/21/2022
Bromomethane	*	5.0		ND						04/21/2022
Carbon disulfide	*	2.0		ND						04/21/2022
Carbon tetrachloride	*	2.0		ND						04/21/2022
Chlorobenzene	*	2.0		ND						04/21/2022
Chloroethane	*	2.0		ND						04/21/2022
Chloroform	*	2.0		ND						04/21/2022
Chloromethane	*	5.0		ND						04/21/2022
Chloroprene	*	5.0		ND						04/21/2022
cis-1,2-Dichloroethene	*	2.0		ND						04/21/2022
cis-1,3-Dichloropropene	*	2.0		ND						04/21/2022
cis-1,4-Dichloro-2-butene	*	2.0		ND						04/21/2022
Cyclohexanone	*	20.0		ND						04/21/2022
Dibromochloromethane	*	2.0		ND						04/21/2022
Dibromomethane	*	2.0		ND						04/21/2022
Dichlorodifluoromethane	*	2.0		ND						04/21/2022
Diisopropyl ether	*	2.0		ND						04/21/2022
Ethyl acetate	*	10.0		ND						04/21/2022
Ethyl ether	*	5.0		ND						04/21/2022
Ethyl methacrylate	*	5.0		ND						04/21/2022
Ethylbenzene	*	2.0		ND						04/21/2022
Ethyl-tert-butyl ether	*	2.0		ND						04/21/2022
Hexachlorobutadiene	*	5.0		ND						04/21/2022
Hexachloroethane	*	5.0		ND						04/21/2022
Iodomethane	*	5.0		ND						04/21/2022
Isopropylbenzene	*	2.0		ND						04/21/2022
m,p-Xylenes	*	2.0		ND						04/21/2022
Methacrylonitrile	*	5.0		ND						04/21/2022
Methyl Methacrylate	*	5.0		ND						04/21/2022
Methyl tert-butyl ether	*	2.0		ND						04/21/2022
Methylacrylate	*	5.0		ND						04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190922 **SampType:** MBLK **Units** µg/L
SampID: MBLK-AE220421A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Methylene chloride	*	2.0		ND						04/21/2022
Naphthalene	*	5.0		ND						04/21/2022
n-Butyl acetate	*	2.0		ND						04/21/2022
n-Butylbenzene	*	2.0		ND						04/21/2022
n-Heptane	*	5.0		ND						04/21/2022
n-Hexane	*	5.0		ND						04/21/2022
Nitrobenzene	*	50.0		ND						04/21/2022
n-Propylbenzene	*	2.0		ND						04/21/2022
o-Xylene	*	2.0		ND						04/21/2022
Pentachloroethane	*	5.0		ND						04/21/2022
p-Isopropyltoluene	*	2.0		ND						04/21/2022
Propionitrile	*	10.0		ND						04/21/2022
sec-Butylbenzene	*	2.0		ND						04/21/2022
Styrene	*	2.0		ND						04/21/2022
tert-Amyl methyl ether	*	2.0		ND						04/21/2022
tert-Butyl alcohol	*	10.0		ND						04/21/2022
tert-Butylbenzene	*	2.0		ND						04/21/2022
Tetrachloroethene	*	0.5		ND						04/21/2022
Tetrahydrofuran	*	5.0		ND						04/21/2022
Toluene	*	2.0		ND						04/21/2022
trans-1,2-Dichloroethene	*	2.0		ND						04/21/2022
trans-1,3-Dichloropropene	*	2.0		ND						04/21/2022
trans-1,4-Dichloro-2-butene	*	2.0		ND						04/21/2022
Trichloroethene	*	2.0		ND						04/21/2022
Trichlorofluoromethane	*	5.0		ND						04/21/2022
Vinyl acetate	*	5.0		ND						04/21/2022
Vinyl chloride	*	2.0		ND						04/21/2022
Xylenes, Total	*	4.0		ND						04/21/2022
1,2-Dichloroethene, Total	*	4.0		ND						04/21/2022
1,3-Dichloropropene, Total	*	4.0		ND						04/21/2022
1,4-Dichloro-2-butene, Total	*	4.0		ND						04/21/2022
Surr: 1,2-Dichloroethane-d4	*			50.2	50.00		100.4	80	120	04/21/2022
Surr: 4-Bromofluorobenzene	*			48.6	50.00		97.1	80	120	04/21/2022
Surr: Toluene-d8	*			47.8	50.00		95.5	80	120	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190922 **SampType:** LCS

Units µg/L

SampID: LCS-AE220421A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	*	2.0		50.9	50.00	0	101.7	82	113	04/21/2022
1,1,1-Trichloroethane	*	2.0		55.3	50.00	0	110.6	76.9	128	04/21/2022
1,1,2,2-Tetrachloroethane	*	2.0		45.4	50.00	0	90.7	76.7	113	04/21/2022
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		57.0	50.00	0	114.0	69.5	127	04/21/2022
1,1,2-Trichloroethane	*	0.5		47.5	50.00	0	95.0	83.8	111	04/21/2022
1,1-Dichloro-2-propanone	*	30.0		114	125.0	0	91.5	74.9	117	04/21/2022
1,1-Dichloroethane	*	2.0		54.8	50.00	0	109.7	77	129	04/21/2022
1,1-Dichloroethene	*	2.0		55.5	50.00	0	110.9	69.4	127	04/21/2022
1,1-Dichloropropene	*	2.0		55.7	50.00	0	111.5	75.1	123	04/21/2022
1,2,3-Trichlorobenzene	*	2.0		47.1	50.00	0	94.1	77.3	121	04/21/2022
1,2,3-Trichloropropane	*	2.0		45.4	50.00	0	90.8	75.3	109	04/21/2022
1,2,3-Trimethylbenzene	*	2.0		47.4	50.00	0	94.7	77	115	04/21/2022
1,2,4-Trichlorobenzene	*	2.0		47.4	50.00	0	94.9	76.8	124	04/21/2022
1,2,4-Trimethylbenzene	*	2.0		48.2	50.00	0	96.5	75	115	04/21/2022
1,2-Dibromo-3-chloropropane	*	5.0		43.2	50.00	0	86.4	71.9	119	04/21/2022
1,2-Dibromoethane	*	2.0		47.9	50.00	0	95.8	83.6	110	04/21/2022
1,2-Dichlorobenzene	*	2.0		46.7	50.00	0	93.3	72.1	113	04/21/2022
1,2-Dichloroethane	*	2.0		49.1	50.00	0	98.2	72.3	117	04/21/2022
1,2-Dichloropropane	*	2.0		54.4	50.00	0	108.8	76.5	119	04/21/2022
1,3,5-Trimethylbenzene	*	2.0		48.7	50.00	0	97.4	75.2	117	04/21/2022
1,3-Dichlorobenzene	*	2.0		47.2	50.00	0	94.4	75.2	115	04/21/2022
1,3-Dichloropropane	*	2.0		48.2	50.00	0	96.5	80.9	110	04/21/2022
1,4-Dichlorobenzene	*	2.0		47.0	50.00	0	94.0	73.9	112	04/21/2022
1-Chlorobutane	*	5.0		57.0	50.00	0	114.0	74.9	130	04/21/2022
2,2-Dichloropropane	*	2.0		62.6	50.00	0	125.2	66.5	138	04/21/2022
2-Butanone	*	10.0		123	125.0	0	98.8	68.8	134	04/21/2022
2-Chloroethyl vinyl ether	*	5.0		54.4	50.00	0	108.8	17.8	163	04/21/2022
2-Chlorotoluene	*	2.0		47.9	50.00	0	95.8	74.9	115	04/21/2022
2-Hexanone	*	10.0		112	125.0	0	89.7	73.2	117	04/21/2022
2-Nitropropane	*	10.0		541	500.0	0	108.1	67.1	140	04/21/2022
4-Chlorotoluene	*	2.0		48.3	50.00	0	96.6	75.7	113	04/21/2022
4-Methyl-2-pentanone	*	10.0		113	125.0	0	90.2	77	113	04/21/2022
Acetone	*	10.0		143	125.0	0	114.1	61.4	130	04/21/2022
Acetonitrile	*	10.0		502	500.0	0	100.5	68.8	136	04/21/2022
Acrolein	*	20.0		278	500.0	0	55.6	28.4	168	04/21/2022
Acrylonitrile	*	5.0		50.8	50.00	0	101.5	77.9	124	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190922 **SampType:** LCS

Units µg/L

SampID: LCS-AE220421A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Allyl chloride	*	5.0		64.7	50.00	0	129.5	75.8	130	04/21/2022
Benzene	*	0.5		52.9	50.00	0	105.8	78.5	119	04/21/2022
Bromobenzene	*	2.0		48.8	50.00	0	97.6	77.5	113	04/21/2022
Bromochloromethane	*	2.0		52.9	50.00	0	105.7	71.5	123	04/21/2022
Bromodichloromethane	*	2.0		56.0	50.00	0	111.9	75.7	123	04/21/2022
Bromoform	*	2.0		49.3	50.00	0	98.6	78.9	121	04/21/2022
Bromomethane	*	5.0		58.0	50.00	0	116.0	30.5	192	04/21/2022
Carbon disulfide	*	2.0		52.1	50.00	0	104.1	66.7	121	04/21/2022
Carbon tetrachloride	*	2.0		59.0	50.00	0	118.0	70.9	127	04/21/2022
Chlorobenzene	*	2.0		48.8	50.00	0	97.6	80	111	04/21/2022
Chloroethane	*	2.0		52.3	50.00	0	104.7	69.6	135	04/21/2022
Chloroform	*	2.0		54.2	50.00	0	108.3	76.2	120	04/21/2022
Chloromethane	*	5.0		40.5	50.00	0	81.0	50.9	138	04/21/2022
Chloroprene	*	5.0		55.5	50.00	0	110.9	68.4	127	04/21/2022
cis-1,2-Dichloroethene	*	2.0		56.3	50.00	0	112.6	79.5	121	04/21/2022
cis-1,3-Dichloropropene	*	2.0		55.9	50.00	0	111.7	79.8	123	04/21/2022
cis-1,4-Dichloro-2-butene	*	2.0		48.9	50.00	0	97.9	64.6	130	04/21/2022
Cyclohexanone	*	20.0		449	500.0	0	89.9	70.5	114	04/21/2022
Dibromochloromethane	*	2.0		49.6	50.00	0	99.1	84.5	114	04/21/2022
Dibromomethane	*	2.0		53.3	50.00	0	106.5	76	119	04/21/2022
Dichlorodifluoromethane	*	2.0		33.3	50.00	0	66.6	46.6	142	04/21/2022
Diisopropyl ether	*	2.0		55.1	50.00	0	110.1	72	128	04/21/2022
Ethyl acetate	*	10.0		49.1	50.00	0	98.2	70.3	115	04/21/2022
Ethyl ether	*	5.0		52.4	50.00	0	104.9	74.6	120	04/21/2022
Ethyl methacrylate	*	5.0		48.7	50.00	0	97.4	81.4	116	04/21/2022
Ethylbenzene	*	2.0		49.5	50.00	0	99.0	78.2	114	04/21/2022
Ethyl-tert-butyl ether	*	2.0		55.3	50.00	0	110.5	74.6	124	04/21/2022
Hexachlorobutadiene	*	5.0		49.8	50.00	0	99.5	73.9	129	04/21/2022
Hexachloroethane	*	5.0		49.7	50.00	0	99.4	78.3	123	04/21/2022
Iodomethane	*	5.0		62.0	50.00	0	124.0	50	151	04/21/2022
Isopropylbenzene	*	2.0		51.1	50.00	0	102.1	79.3	115	04/21/2022
m,p-Xylenes	*	2.0		98.7	100.0	0	98.7	77.2	116	04/21/2022
Methacrylonitrile	*	5.0		51.8	50.00	0	103.7	73.9	127	04/21/2022
Methyl Methacrylate	*	5.0		51.5	50.00	0	103.1	70.7	129	04/21/2022
Methyl tert-butyl ether	*	2.0		54.8	50.00	0	109.6	80.3	122	04/21/2022
Methylacrylate	*	5.0		53.7	50.00	0	107.4	75.2	124	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190922 **SampType:** LCS

Units µg/L

SampID: LCS-AE220421A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Methylene chloride	*	2.0		49.8	50.00	0	99.7	71.8	115	04/21/2022
Naphthalene	*	5.0		44.0	50.00	0	88.0	75.6	121	04/21/2022
n-Butyl acetate	*	2.0		46.0	50.00	0	92.0	72.4	118	04/21/2022
n-Butylbenzene	*	2.0		48.4	50.00	0	96.8	70.8	118	04/21/2022
n-Heptane	*	5.0		66.5	50.00	0	132.9	50.4	143	04/21/2022
n-Hexane	*	5.0		58.1	50.00	0	116.2	60.6	139	04/21/2022
Nitrobenzene	*	50.0		404	500.0	0	80.8	49.4	129	04/21/2022
n-Propylbenzene	*	2.0		49.0	50.00	0	98.0	74	119	04/21/2022
o-Xylene	*	2.0		49.2	50.00	0	98.4	79.2	112	04/21/2022
Pentachloroethane	*	5.0		50.4	50.00	0	100.7	71.8	124	04/21/2022
p-Isopropyltoluene	*	2.0		47.5	50.00	0	95.1	74.4	119	04/21/2022
Propionitrile	*	10.0		506	500.0	0	101.1	76.2	127	04/21/2022
sec-Butylbenzene	*	2.0		50.5	50.00	0	101.0	74.4	119	04/21/2022
Styrene	*	2.0		50.1	50.00	0	100.2	80.4	117	04/21/2022
tert-Amyl methyl ether	*	2.0		53.8	50.00	0	107.6	80.8	125	04/21/2022
tert-Butyl alcohol	*	10.0		244	250.0	0	97.5	64.9	118	04/21/2022
tert-Butylbenzene	*	2.0		49.6	50.00	0	99.2	74	115	04/21/2022
Tetrachloroethene	*	0.5		49.3	50.00	0	98.7	70.1	120	04/21/2022
Tetrahydrofuran	*	5.0		45.9	50.00	0	91.8	63.5	122	04/21/2022
Toluene	*	2.0		49.5	50.00	0	99.0	78.6	112	04/21/2022
trans-1,2-Dichloroethene	*	2.0		54.5	50.00	0	109.0	75.7	130	04/21/2022
trans-1,3-Dichloropropene	*	2.0		51.7	50.00	0	103.4	80.3	116	04/21/2022
trans-1,4-Dichloro-2-butene	*	2.0		46.4	50.00	0	92.7	65.5	124	04/21/2022
Trichloroethene	*	2.0		55.6	50.00	0	111.3	76.2	121	04/21/2022
Trichlorofluoromethane	*	5.0		52.6	50.00	0	105.3	71.1	131	04/21/2022
Vinyl acetate	*	5.0		54.0	50.00	0	108.0	79.8	129	04/21/2022
Vinyl chloride	*	2.0		46.4	50.00	0	92.9	58.6	141	04/21/2022
Xylenes, Total	*	4.0		148	150.0	0	98.6	78.3	114	04/21/2022
1,2-Dichloroethene, Total	*	4.0		111	100.0	0	110.8	78.5	125	04/21/2022
1,3-Dichloropropene, Total	*	4.0		108	100.0	0	107.6	82.3	117	04/21/2022
1,4-Dichloro-2-butene, Total	*	4.0		95.3	100.0	0	95.3	65.9	126	04/21/2022
Surr: 1,2-Dichloroethane-d4	*			50.2	50.00		100.3	80	120	04/21/2022
Surr: 4-Bromofluorobenzene	*			49.4	50.00		98.9	80	120	04/21/2022
Surr: Toluene-d8	*			47.4	50.00		94.9	80	120	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch	SampType:	LCSD	Units µg/L				RPD Limit 15.4				Date Analyzed
SampID: LCSD-AE220421A-1											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
1,1,1,2-Tetrachloroethane	*	2.0		50.7	50.00	0	101.4	50.87	0.30	04/21/2022	
1,1,1-Trichloroethane	*	2.0		54.9	50.00	0	109.8	55.31	0.71	04/21/2022	
1,1,2,2-Tetrachloroethane	*	2.0		46.4	50.00	0	92.9	45.37	2.33	04/21/2022	
1,1,2-Trichloro-1,2,2-trifluoroethane	*	5.0		56.5	50.00	0	113.0	57.00	0.85	04/21/2022	
1,1,2-Trichloroethane	*	0.5		48.0	50.00	0	95.9	47.50	0.94	04/21/2022	
1,1-Dichloro-2-propanone	*	30.0		125	125.0	0	99.9	114.4	8.74	04/21/2022	
1,1-Dichloroethane	*	2.0		54.3	50.00	0	108.5	54.83	1.03	04/21/2022	
1,1-Dichloroethene	*	2.0		55.5	50.00	0	110.9	55.46	0.00	04/21/2022	
1,1-Dichloropropene	*	2.0		54.8	50.00	0	109.6	55.73	1.66	04/21/2022	
1,2,3-Trichlorobenzene	*	2.0		46.9	50.00	0	93.7	47.07	0.45	04/21/2022	
1,2,3-Trichloropropane	*	2.0		46.1	50.00	0	92.3	45.40	1.62	04/21/2022	
1,2,3-Trimethylbenzene	*	2.0		47.3	50.00	0	94.7	47.35	0.02	04/21/2022	
1,2,4-Trichlorobenzene	*	2.0		47.5	50.00	0	95.0	47.45	0.13	04/21/2022	
1,2,4-Trimethylbenzene	*	2.0		48.0	50.00	0	96.0	48.25	0.48	04/21/2022	
1,2-Dibromo-3-chloropropane	*	5.0		46.4	50.00	0	92.7	43.18	7.12	04/21/2022	
1,2-Dibromoethane	*	2.0		48.2	50.00	0	96.5	47.88	0.75	04/21/2022	
1,2-Dichlorobenzene	*	2.0		46.4	50.00	0	92.8	46.67	0.56	04/21/2022	
1,2-Dichloroethane	*	2.0		48.8	50.00	0	97.7	49.09	0.51	04/21/2022	
1,2-Dichloropropane	*	2.0		53.8	50.00	0	107.5	54.41	1.18	04/21/2022	
1,3,5-Trimethylbenzene	*	2.0		48.4	50.00	0	96.8	48.69	0.58	04/21/2022	
1,3-Dichlorobenzene	*	2.0		47.1	50.00	0	94.2	47.21	0.21	04/21/2022	
1,3-Dichloropropane	*	2.0		47.9	50.00	0	95.8	48.25	0.77	04/21/2022	
1,4-Dichlorobenzene	*	2.0		47.1	50.00	0	94.2	46.98	0.26	04/21/2022	
1-Chlorobutane	*	5.0		56.5	50.00	0	112.9	56.99	0.93	04/21/2022	
2,2-Dichloropropane	*	2.0		61.5	50.00	0	122.9	62.62	1.87	04/21/2022	
2-Butanone	*	10.0		129	125.0	0	102.9	123.5	4.09	04/21/2022	
2-Chloroethyl vinyl ether	*	5.0		55.3	50.00	0	110.7	54.41	1.68	04/21/2022	
2-Chlorotoluene	*	2.0		47.6	50.00	0	95.2	47.91	0.67	04/21/2022	
2-Hexanone	*	10.0		116	125.0	0	93.1	112.1	3.80	04/21/2022	
2-Nitropropane	*	10.0		563	500.0	0	112.6	540.6	4.03	04/21/2022	
4-Chlorotoluene	*	2.0		48.2	50.00	0	96.5	48.30	0.12	04/21/2022	
4-Methyl-2-pentanone	*	10.0		117	125.0	0	93.8	112.7	3.99	04/21/2022	
Acetone	*	10.0		144	125.0	0	114.8	142.7	0.62	04/21/2022	
Acetonitrile	*	10.0		541	500.0	0	108.1	502.3	7.36	04/21/2022	
Acrolein	*	20.0		291	500.0	0	58.1	277.8	4.46	04/21/2022	
Acrylonitrile	*	5.0		52.8	50.00	0	105.5	50.77	3.84	04/21/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch	SampType:	LCSD	Units µg/L				RPD Limit 15.4			
SampID: LCSD-AE220421A-1										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Allyl chloride	*	5.0		61.4	50.00	0	122.7	64.74	5.34	04/21/2022
Benzene	*	0.5		52.0	50.00	0	104.0	52.88	1.64	04/21/2022
Bromobenzene	*	2.0		49.1	50.00	0	98.3	48.81	0.67	04/21/2022
Bromochloromethane	*	2.0		51.4	50.00	0	102.8	52.86	2.80	04/21/2022
Bromodichloromethane	*	2.0		55.7	50.00	0	111.4	55.97	0.50	04/21/2022
Bromoform	*	2.0		49.7	50.00	0	99.4	49.29	0.83	04/21/2022
Bromomethane	*	5.0		57.5	50.00	0	114.9	58.01	0.94	04/21/2022
Carbon disulfide	*	2.0		51.0	50.00	0	102.0	52.06	2.02	04/21/2022
Carbon tetrachloride	*	2.0		58.1	50.00	0	116.2	58.98	1.47	04/21/2022
Chlorobenzene	*	2.0		48.4	50.00	0	96.8	48.82	0.91	04/21/2022
Chloroethane	*	2.0		51.7	50.00	0	103.4	52.33	1.25	04/21/2022
Chloroform	*	2.0		53.8	50.00	0	107.6	54.17	0.67	04/21/2022
Chloromethane	*	5.0		40.4	50.00	0	80.9	40.48	0.07	04/21/2022
Chloroprene	*	5.0		54.9	50.00	0	109.8	55.46	0.98	04/21/2022
cis-1,2-Dichloroethene	*	2.0		55.5	50.00	0	111.0	56.31	1.41	04/21/2022
cis-1,3-Dichloropropene	*	2.0		55.6	50.00	0	111.3	55.87	0.43	04/21/2022
cis-1,4-Dichloro-2-butene	*	2.0		50.3	50.00	0	100.7	48.93	2.84	04/21/2022
Cyclohexanone	*	20.0		485	500.0	0	97.0	449.5	7.65	04/21/2022
Dibromochloromethane	*	2.0		49.8	50.00	0	99.7	49.57	0.56	04/21/2022
Dibromomethane	*	2.0		53.3	50.00	0	106.6	53.27	0.02	04/21/2022
Dichlorodifluoromethane	*	2.0		33.0	50.00	0	65.9	33.28	1.00	04/21/2022
Diisopropyl ether	*	2.0		54.8	50.00	0	109.6	55.07	0.53	04/21/2022
Ethyl acetate	*	10.0		51.1	50.00	0	102.1	49.09	3.93	04/21/2022
Ethyl ether	*	5.0		51.9	50.00	0	103.8	52.43	0.98	04/21/2022
Ethyl methacrylate	*	5.0		49.1	50.00	0	98.1	48.72	0.72	04/21/2022
Ethylbenzene	*	2.0		49.4	50.00	0	98.8	49.49	0.18	04/21/2022
Ethyl-tert-butyl ether	*	2.0		55.0	50.00	0	109.9	55.26	0.53	04/21/2022
Hexachlorobutadiene	*	5.0		48.4	50.00	0	96.7	49.77	2.85	04/21/2022
Hexachloroethane	*	5.0		49.5	50.00	0	99.0	49.72	0.48	04/21/2022
Iodomethane	*	5.0		59.4	50.00	0	118.9	62.01	4.25	04/21/2022
Isopropylbenzene	*	2.0		50.2	50.00	0	100.3	51.07	1.78	04/21/2022
m,p-Xylenes	*	2.0		97.8	100.0	0	97.8	98.67	0.89	04/21/2022
Methacrylonitrile	*	5.0		53.3	50.00	0	106.7	51.83	2.87	04/21/2022
Methyl Methacrylate	*	5.0		52.4	50.00	0	104.8	51.54	1.62	04/21/2022
Methyl tert-butyl ether	*	2.0		55.0	50.00	0	110.0	54.81	0.35	04/21/2022
Methylacrylate	*	5.0		54.5	50.00	0	109.1	53.72	1.51	04/21/2022



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch	190922	SampType:	LCSD	Units µg/L				RPD Limit 15.4			Date
SampID:	LCSD-AE220421A-1									Analyzed	
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Methylene chloride	*	2.0		49.2	50.00	0	98.4	49.83	1.29	04/21/2022	
Naphthalene	*	5.0		45.4	50.00	0	90.8	44.01	3.13	04/21/2022	
n-Butyl acetate	*	2.0		47.5	50.00	0	94.9	46.01	3.10	04/21/2022	
n-Butylbenzene	*	2.0		47.7	50.00	0	95.3	48.41	1.56	04/21/2022	
n-Heptane	*	5.0		64.8	50.00	0	129.6	66.46	2.56	04/21/2022	
n-Hexane	*	5.0		57.0	50.00	0	114.0	58.08	1.89	04/21/2022	
Nitrobenzene	*	50.0		436	500.0	0	87.1	403.8	7.58	04/21/2022	
n-Propylbenzene	*	2.0		48.7	50.00	0	97.4	49.02	0.65	04/21/2022	
o-Xylene	*	2.0		48.7	50.00	0	97.4	49.20	0.98	04/21/2022	
Pentachloroethane	*	5.0		50.6	50.00	0	101.1	50.37	0.40	04/21/2022	
p-Isopropyltoluene	*	2.0		47.2	50.00	0	94.3	47.54	0.82	04/21/2022	
Propionitrile	*	10.0		534	500.0	0	106.8	505.7	5.45	04/21/2022	
sec-Butylbenzene	*	2.0		50.0	50.00	0	100.1	50.52	0.93	04/21/2022	
Styrene	*	2.0		49.5	50.00	0	99.1	50.12	1.18	04/21/2022	
tert-Amyl methyl ether	*	2.0		53.9	50.00	0	107.8	53.82	0.15	04/21/2022	
tert-Butyl alcohol	*	10.0		261	250.0	0	104.2	243.8	6.64	04/21/2022	
tert-Butylbenzene	*	2.0		49.1	50.00	0	98.3	49.62	0.97	04/21/2022	
Tetrachloroethene	*	0.5		49.0	50.00	0	98.1	49.34	0.59	04/21/2022	
Tetrahydrofuran	*	5.0		49.5	50.00	0	99.0	45.89	7.59	04/21/2022	
Toluene	*	2.0		49.2	50.00	0	98.4	49.52	0.67	04/21/2022	
trans-1,2-Dichloroethene	*	2.0		53.8	50.00	0	107.6	54.51	1.35	04/21/2022	
trans-1,3-Dichloropropene	*	2.0		51.7	50.00	0	103.4	51.72	0.00	04/21/2022	
trans-1,4-Dichloro-2-butene	*	2.0		48.5	50.00	0	97.0	46.36	4.53	04/21/2022	
Trichloroethene	*	2.0		55.0	50.00	0	109.9	55.63	1.19	04/21/2022	
Trichlorofluoromethane	*	5.0		52.4	50.00	0	104.8	52.63	0.48	04/21/2022	
Vinyl acetate	*	5.0		53.8	50.00	0	107.5	53.99	0.43	04/21/2022	
Vinyl chloride	*	2.0		45.9	50.00	0	91.8	46.44	1.13	04/21/2022	
Xylenes, Total	*	4.0		147	150.0	0	97.7	147.9	0.92	04/21/2022	
1,2-Dichloroethene, Total	*	4.0		109	100.0	0	109.3	110.8	1.38	04/21/2022	
1,3-Dichloropropene, Total	*	4.0		107	100.0	0	107.4	107.6	0.22	04/21/2022	
1,4-Dichloro-2-butene, Total	*	4.0		98.8	100.0	0	98.8	95.29	3.67	04/21/2022	
Surr: 1,2-Dichloroethane-d4	*			49.4	50.00		98.9			04/21/2022	
Surr: 4-Bromofluorobenzene	*			49.6	50.00		99.2			04/21/2022	
Surr: Toluene-d8	*			47.4	50.00		94.9			04/21/2022	



Quality Control Results

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 190922		SampType: LCSG		Units %REC						
SampID: LCSG-AE220421A-1										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 1,2-Dichloroethane-d4	*			49.7	50.00		99.4	80	120	04/21/2022
Surr: 4-Bromofluorobenzene	*			48.7	50.00		97.4	80	120	04/21/2022
Surr: Toluene-d8	*			48.4	50.00		96.8	80	120	04/21/2022

Batch 190922		SampType: LCSGD		Units %REC		RPD Limit 0				
SampID: LCSGD-AE220421A-1										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Surr: 1,2-Dichloroethane-d4	*			49.9	50.00		99.8			04/21/2022
Surr: 4-Bromofluorobenzene	*			48.5	50.00		97.1			04/21/2022
Surr: Toluene-d8	*			48.4	50.00		96.7			04/21/2022



Receiving Check List

<http://www.teklabinc.com/>

Client: Burns & McDonnell Waste Consultants

Work Order: 22041266

Client Project: 128487 GSA

Report Date: 28-Apr-22

Carrier: Ben Lockwood

Received By: PWR

Completed by: (b) (6)

Reviewed by: (b) (6)

On:

On:

20-Apr-22

20-Apr-22

Mary E. Kemp

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

- Shipping container/cooler in good condition? Yes No Not Present Temp °C **1.8**
- Type of thermal preservation? None Ice Blue Ice Dry Ice
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Reported field parameters measured: Field Lab NA
- Container/Temp Blank temperature in compliance? Yes No

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

- Water – at least one vial per sample has zero headspace? Yes No No VOA vials
- Water - TOX containers have zero headspace? Yes No No TOX containers
- Water - pH acceptable upon receipt? Yes No NA
- NPDES/CWA TCN interferences checked/treated in the field? Yes No NA

Any No responses must be detailed below or on the COC.

pH strip #78198. - PR/MKemp - 4/20/2022 1:30:02 PM

Trip Blank collection date and time will be reported as the received date and time (end of trip). - MKemp - 4/20/2022 1:30:06 PM

Burns & McDonnell Engineering
 425 South Woods Mill Road
 Chesterfield, Missouri 63017
 Phone: (314) 682-1500 Fax: (314) 682-1600
 Attention: JUSTIN CARTER
JCARTER@BURNSMCD.COM

Laboratory: TEL LAB
 Address: 5445 HANCOCK BLVD
 City/State/Zip: COLENSVILLE, MO 67234
 Telephone: _____

Document Control No: 128487-042022-001

Lab. Reference No. or Episode No.: _____

Project Number: 128487

Sample Type _____

Client Name: CSA

Matrix _____

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Liquid	Solid	Gas	Number of Containers	Analysis PWA's / TPH-DRO / ORO PEBS METALS (TOTAL) METALS (DISSOLVED) VOCs / TPH-GAO	Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time						
mw-01	04182022			2022			4/18	1058	X			5	X X X X	22041266-001
mw-02	04182022						4/18	1228	X			5	X X X X	002
mw-03	04182022						4/18	1325	X			5	X X X X	003
mw-04	04182022						4/18	1437	X			6	X X X X X	004
mw-04	04182022						4/18	1437	X			6	X X X X X	004
mw-04	04182022						4/18	1437	X			6	X X X X X	004
mw-05	04182022						4/18	1447	X			5	X X X X	005
mw-06	04182022						4/18	1625	X			5	X X X X	006
mw-07	04192022						4/19	1621	X			5	X X X X	007
mw-08	04192022						4/19	1531	X			5	X X X X	008
mw-09	04192022						4/19	1051	X			5	X X X X	009
mw-10	04192022						4/19	959	X			5	X X X X	010
mw-11	04182022						4/18	1627	X			5	X X X X	011
mw-12	04192022						4/19	1419	X			5	X X X X	012
mw-13	04192022						4/19	1411	X			6	X X X X X	013

Sampler (signature):
(b) (6)

Sampler (signature):
(b) (6)

Special Instructions: _____

Relinquished By (signature):
 1. (b) (6)

Date/Time:
4/20

Received By (signature):
(b) (6)

Date/Time:
4/20/22 12:13

Ice Present in Container:
 Yes No

Temperature Upon Receipt:
1.8°C LTG 5

Relinquished By (signature):
 2. _____

Date/Time: _____

Received By (signature): _____

Date/Time: _____

Laboratory Comments:
OHV 789X, OHS PR 4/20/22

Burns & McDonnell Engineering
 425 South Woods Mill Road
 Chesterfield, Missouri 63017
 Phone: (314) 682-1500 Fax: (314) 682-1600
 Attention: *Jordan Larson*
JLarson@burnsmcd.com

Laboratory: *TEXLAB Inc.*
 Address: *5415 Hangerway Lane RD*
 City/State/Zip: *COLUMBIANA, IL 62234*
 Telephone:

Document Control No: *128487-04202022-002*

Lab. Reference No. or Episode No.:

Project Number: *128487*

Sample Type

Client Name: *EPA*

Matrix

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Liquid	Solid	Gas	Number of Containers	Analysis <i>THAS / TPH-DRO / DRO</i> <i>TCDS</i> <i>Metals (Total)</i> <i>Metals (Dissolved)</i> <i>VOLs / TPH-GRO</i>	Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time						
<i>MW-14</i>	<i>04182022</i>			<i>2022</i>			<i>4/18</i>	<i>1729</i>	X			<i>6</i>	X X X X X	<i>22041266-014</i>
<i>MW-15</i>	<i>04192022</i>						<i>4/19</i>	<i>1421</i>	X			<i>6</i>	X X X X X	<i>015</i>
<i>MW-15</i>	<i>04192022 / 024</i>						<i>4/19</i>	<i>1421</i>	X			<i>6</i>	X X X X X	<i>016</i>
<i>MW-16</i>	<i>04192022</i>						<i>4/19</i>	<i>1246</i>	X			<i>5</i>	X X X X	<i>017</i>
<i>MW-17</i>	<i>04192022</i>						<i>4/19</i>	<i>852</i>	X			<i>5</i>	X X X X	<i>018</i>
<i>MW-18</i>	<i>04192022</i>						<i>4/19</i>	<i>906</i>	X			<i>5</i>	X X X X	<i>019</i>
<i>MW-19</i>	<i>04192022</i>						<i>4/19</i>	<i>1837</i>	X			<i>5</i>	X X X X	<i>020</i>
<i>TB-1</i>									X			<i>2</i>		<i>LAB PREPARED</i>
<i>TB-2</i>									X			<i>2</i>		
<i>TB-3</i>									X			<i>2</i>		
<i>TB-4</i>									X			<i>2</i>		
<i>TB-5</i>									X			<i>2</i>		
<i>TB-6</i>									X			<i>2</i>		
<i>ELB</i>	<i>04202022</i>						<i>4/20/22</i>	<i>845</i>						<i>027</i>

Sampler (signature): *[Signature]*
 (b) (6)

Sampler (signature): *[Signature]*
 (b) (6)

Special Instructions:

Relinquished By (signature):
 1. (b) (6)

Date/Time
4/20

Received By (signature):
 (b) (6)

Date/Time
4/20/22 12:13

Ice Present in Container:
 Yes No

Temperature Upon Receipt:
1.8°C LTGS

Relinquished By (signature):
 2.

Date/Time

Received By (signature):

Date/Time

Laboratory Comments:

Burns & McDonnell - KS

Sample Delivery Group: L1485108
Samples Received: 04/21/2022
Project Number: MW/128487-1ENS-KCM20
Description: GSA Goodfellow - St. Louis, MO

Report To: Justin Carter
9400 Ward Parkway
Kansas City, MO 64114

Entire Report Reviewed By:

(b) (6)

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	³ Ss
MW-08 04192022 L1485108-01	5	
MW-08 04192022/DUP L1485108-02	6	⁴ Cn
Qc: Quality Control Summary	7	⁵ Sr
Semi-Volatile Organic Compounds (HPLC) by Method 8330	7	
Gl: Glossary of Terms	9	⁶ Qc
Al: Accreditations & Locations	10	⁷ Gl
Sc: Sample Chain of Custody	11	⁸ Al
		⁹ Sc

SAMPLE SUMMARY

MW-08 04192022 L1485108-01 GW

Collected by Benjamin Lockwood Collected date/time 04/19/22 15:31 Received date/time 04/21/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (HPLC) by Method 8330	WG1854011	1	04/25/22 15:01	04/26/22 13:26	GKM	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

MW-08 04192022/DUP L1485108-02 GW

Collected by Benjamin Lockwood Collected date/time 04/19/22 15:31 Received date/time 04/21/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (HPLC) by Method 8330	WG1854011	1	04/25/22 15:01	04/26/22 13:53	GKM	Mt. Juliet, TN

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

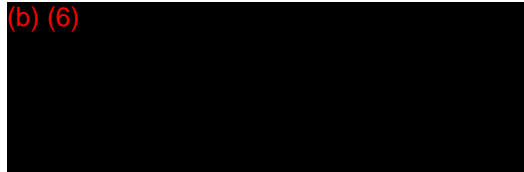
⁸ Al

⁹ Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

(b) (6)



Jeff Carr
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (HPLC) by Method 8330

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Tetryl	ND		0.000500	1	04/26/2022 13:26	WG1854011
2,4-Dinitrotoluene	ND		0.00200	1	04/26/2022 13:26	WG1854011
4-Nitrotoluene (4-NT)	ND		0.00200	1	04/26/2022 13:26	WG1854011
RDX	ND		0.00200	1	04/26/2022 13:26	WG1854011
Nitrobenzene	ND		0.000500	1	04/26/2022 13:26	WG1854011
2,6-Dinitrotoluene	ND		0.000500	1	04/26/2022 13:26	WG1854011
2-Nitrotoluene	ND		0.000500	1	04/26/2022 13:26	WG1854011
3-Nitrotoluene	ND		0.000500	1	04/26/2022 13:26	WG1854011
1,3,5-Trinitrobenzene	ND		0.000500	1	04/26/2022 13:26	WG1854011
1,3-Dinitrobenzene	ND		0.000500	1	04/26/2022 13:26	WG1854011
2,4,6-Trinitrotoluene	ND		0.000500	1	04/26/2022 13:26	WG1854011
4-Amino-2,6-Dinitrotoluene	ND		0.000500	1	04/26/2022 13:26	WG1854011
2-Amino-4,6-Dinitrotoluene	ND		0.000500	1	04/26/2022 13:26	WG1854011
HMX	ND		0.00200	1	04/26/2022 13:26	WG1854011
PETN	ND		0.000500	1	04/26/2022 13:26	WG1854011
Nitroglycerine	ND		0.000500	1	04/26/2022 13:26	WG1854011
(S) 1,3-Dimethyl-2-NB	88.9		57.0-120		04/26/2022 13:26	WG1854011

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Semi-Volatile Organic Compounds (HPLC) by Method 8330

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Tetryl	ND		0.000500	1	04/26/2022 13:53	WG1854011
2,4-Dinitrotoluene	ND		0.00200	1	04/26/2022 13:53	WG1854011
4-Nitrotoluene (4-NT)	ND		0.00200	1	04/26/2022 13:53	WG1854011
RDX	ND		0.00200	1	04/26/2022 13:53	WG1854011
Nitrobenzene	ND		0.000500	1	04/26/2022 13:53	WG1854011
2,6-Dinitrotoluene	ND		0.000500	1	04/26/2022 13:53	WG1854011
2-Nitrotoluene	ND		0.000500	1	04/26/2022 13:53	WG1854011
3-Nitrotoluene	ND		0.000500	1	04/26/2022 13:53	WG1854011
1,3,5-Trinitrobenzene	ND		0.000500	1	04/26/2022 13:53	WG1854011
1,3-Dinitrobenzene	ND		0.000500	1	04/26/2022 13:53	WG1854011
2,4,6-Trinitrotoluene	ND		0.000500	1	04/26/2022 13:53	WG1854011
4-Amino-2,6-Dinitrotoluene	ND		0.000500	1	04/26/2022 13:53	WG1854011
2-Amino-4,6-Dinitrotoluene	ND		0.000500	1	04/26/2022 13:53	WG1854011
HMX	ND		0.00200	1	04/26/2022 13:53	WG1854011
PETN	ND		0.000500	1	04/26/2022 13:53	WG1854011
Nitroglycerine	ND		0.000500	1	04/26/2022 13:53	WG1854011
(S) 1,3-Dimethyl-2-NB	88.1		57.0-120		04/26/2022 13:53	WG1854011

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

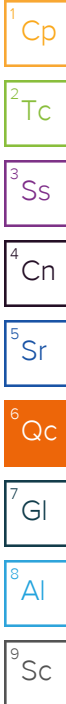
8
Al

9
Sc

Method Blank (MB)

(MB) R3785493-1 04/26/22 10:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetryl	U		0.000137	0.000500
2,4-Dinitrotoluene	U		0.000142	0.00200
4-Nitrotoluene (4-NT)	U		0.000125	0.00200
RDX	U		0.000165	0.00200
Nitrobenzene	U		0.000170	0.000500
2,6-Dinitrotoluene	U		0.000155	0.000500
2-Nitrotoluene	U		0.000140	0.000500
3-Nitrotoluene	U		0.000147	0.000500
1,3,5-Trinitrobenzene	U		0.0000979	0.000500
1,3-Dinitrobenzene	U		0.000177	0.000500
2,4,6-Trinitrotoluene	U		0.000195	0.000500
4-Amino-2,6-Dinitrotoluene	U		0.000140	0.000500
2-Amino-4,6-Dinitrotoluene	U		0.000129	0.000500
HMX	U		0.0000766	0.00200
PETN	U		0.000153	0.000500
Nitroglycerine	U		0.000153	0.000500
(S) 1,3-Dimethyl-2-NB	88.4			57.0-120



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3785493-2 04/26/22 11:11 • (LCSD) R3785493-3 04/26/22 11:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Tetryl	0.0200	0.0206	0.0206	103	103	80.0-120			0.000	20
2,4-Dinitrotoluene	0.0200	0.0189	0.0195	94.5	97.5	80.0-120			3.13	20
4-Nitrotoluene (4-NT)	0.0200	0.0180	0.0178	90.0	89.0	80.0-120			1.12	20
RDX	0.0200	0.0180	0.0177	90.0	88.5	79.0-120			1.68	20
Nitrobenzene	0.0200	0.0184	0.0187	92.0	93.5	80.0-120			1.62	20
2,6-Dinitrotoluene	0.0200	0.0177	0.0179	88.5	89.5	78.0-120			1.12	20
2-Nitrotoluene	0.0200	0.0180	0.0178	90.0	89.0	80.0-120			1.12	20
3-Nitrotoluene	0.0200	0.0179	0.0177	89.5	88.5	80.0-120			1.12	20
1,3,5-Trinitrobenzene	0.0200	0.0191	0.0190	95.5	95.0	80.0-120			0.525	20
1,3-Dinitrobenzene	0.0200	0.0183	0.0182	91.5	91.0	80.0-120			0.548	20
2,4,6-Trinitrotoluene	0.0200	0.0194	0.0194	97.0	97.0	80.0-120			0.000	20
4-Amino-2,6-Dinitrotoluene	0.0200	0.0181	0.0182	90.5	91.0	79.0-120			0.551	20
2-Amino-4,6-Dinitrotoluene	0.0200	0.0183	0.0181	91.5	90.5	80.0-122			1.10	20
HMX	0.0200	0.0178	0.0175	89.0	87.5	73.0-120			1.70	20
PETN	0.0200	0.0182	0.0182	91.0	91.0	80.0-120			0.000	20
Nitroglycerine	0.0200	0.0182	0.0186	91.0	93.0	70.0-120			2.17	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3785493-2 04/26/22 11:11 • (LCSD) R3785493-3 04/26/22 11:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
(S) 1,3-Dimethyl-2-NB				84.5	84.5	57.0-120				

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

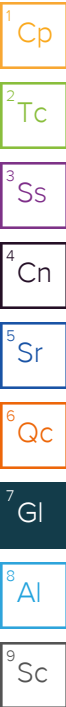
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Company Name/Address:
Burns & McDonnell - KS
 9400 Ward Parkway
 Kansas City, MO 64114

Billing Information:
 Accounts Payable
 9400 Ward Parkway
 Kansas City, MO 64114

Analysis / Container / Preservative

Chain of Custody Page ___ of ___



MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

Report to:
Justin Carter

Email To: jcarter@burnsmcd.com

Project Description:
GSA Goodfellow - St. Louis, MO

City/State Collected:

Please Circle:
 PT MT CT ET

Phone: **816-333-9400**

Client Project #
MW/128487-1ENS-KCM20

Lab Project #
BURNMCKC-GSA

Collected by (print):
Benjamin Labwood

Site/Facility ID #

P.O. #
183149

Collected by (Signature):
 (b) (6)

Rush? (Lab MUST Be Notified)
 Same Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #
STD TAT

Immediately Packed on Ice N Y

Date Results Needed
STD TAT

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Pres	Chk
MW-08 04192022		GW		4/19/22	1531	3	X	
MW-08 04192022/DJP		GW		4/19/22	1531	3	X	
		GW				2	X	

SV8330 1L-Amb NoPres

K188
1485108

Acctnum: **BURNMCKC**
 Template: **T190414**
 Prelogin: **P910927**
 PM: **206 - Jeff Carr**
 PB:
 Shipped Via: **FedEX Ground**

Remarks	Sample # (lab only)
	-01
	-02

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks:
 pH _____ Temp _____
 Flow _____ Other _____

Sample Receipt Checklist

COC Seal Present/Intact: <input type="checkbox"/> NP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
If Applicable	
VOA Zero Headpace: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Preservation Correct/Checked: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

Samples returned via:
 UPS FedEx Courier

Tracking # **5528059500031**

Relinquished by: (Signature)
 (b) (6)

Date: **4/20/22**
 Time: **15:08**

Received by: (Signature)
 (b) (6)

Trip Blank Received: Yes/No
 HCL/MeoH
 TBR

Relinquished by: (Signature)
 (b) (6)

Date: _____
 Time: _____

Received by: (Signature)
 (b) (6)

Temp: **13+0=13° C**
 Bottles Received: **6**

If preservation required by Login: Date/Time

Relinquished by: (Signature)
 (b) (6)

Date: _____
 Time: _____

Received for lab by: (Signature)
 (b) (6)

Date: **4-21-22**
 Time: **0930**

Hold: _____
 Condition: **NCF / OK**

APPENDIX F – DATA VALIDATION MEMORANDUM

Review of Analytical Data
Quarterly Groundwater Sampling Event - April 2022
Remedial Investigation for
Goodfellow Federal Complex
St. Louis, Missouri

Sample Delivery Groups (SDG[s]): 22041266 and L1485108

Groundwater samples were collected at the Goodfellow Federal Complex in St. Louis, Missouri during April 2022 as part of the quarterly groundwater monitoring program. The samples were analyzed by Teklab, Inc. in Collinsville, Illinois and Pace Analytical Services in Mt. Juliet, Tennessee.

This data validation report presents the data quality review for the methods and samples listed below. The analytical data were reviewed in accordance with the *Final Quality Assurance Project Plan, Goodfellow Federal Complex (QAPP)*, the *U.S. Environmental Protection Agency (USEPA) Contract Laboratory Program National Functional Guidelines for Organic and Inorganic Data Review*, and *Test Methods for Evaluating Solid Waste-Physical Chemical Methods (SW846)* which details the specifics of quality assurance (QA) and quality control (QC) with respect to data evaluation.

Level of Review: Level II – 100% of the data

Methods Reviewed:

- Volatile Organic Compounds (VOCs) by SW8260B
- Polycyclic Aromatic Hydrocarbons (PAHs) by SW8270C
- Polychlorinated Biphenyls (PCBs) by SW8082
- Total ICP Metals by SW6010B
- Dissolved ICP Metals by SW6010B
- Explosives by SW8330

Sample List:

SDG	Sample identification (ID)	Lab ID	Sample Date	6010B Total	6010B Diss	8082	8260B	8270C	8330
22041266	MW-01 04182022	22041266-001	4/18/22	X		X	X	X	
22041266	MW-02 04182022	22041266-002	4/18/22	X		X	X	X	
22041266	MW-03 04182022	22041266-003	4/18/22	X		X	X	X	
22041266	MW-04 04182022	22041266-004	4/18/22	X	X	X	X	X	
22041266	MW-05 04182022	22041266-005	4/18/22	X		X	X	X	
22041266	MW-06 04182022	22041266-006	4/18/22	X		X	X	X	
22041266	MW-07 04192022	22041266-007	4/19/22	X		X	X	X	
22041266	MW-08 04192022	22041266-008	4/19/22	X		X	X	X	
22041266	MW-09 04192022	22041266-009	4/19/22	X		X	X	X	
22041266	MW-10 04192022	22041266-010	4/19/22	X		X	X	X	
22041266	MW-11 04182022	22041266-011	4/18/22	X		X	X	X	
22041266	MW-12 04192022	22041266-012	4/19/22	X		X	X	X	
22041266	MW-13 04192022	22041266-013	4/19/22	X	X	X	X	X	
22041266	MW-14 04182022	22041266-014	4/18/22	X	X	X	X	X	

SDG	Sample identification (ID)	Lab ID	Sample Date	6010B Total	6010B Diss	8082	8260B	8270C	8330
22041266	MW-15 04192022	22041266-015	4/19/22	X	X	X	X	X	
22041266	MW-15 04192022/DUP	22041266-016	4/19/22	X	X	X	X	X	
22041266	MW-16 04192022	22041266-017	4/19/22	X		X	X	X	
22041266	MW-17 04192022	22041266-018	4/19/22	X		X	X	X	
22041266	MW-18 04192022	22041266-019	4/19/22	X		X	X	X	
22041266	MW-19 04192022	22041266-020	4/19/22	X		X	X	X	
22041266	ERB 04202022	22041266-027	4/20/22	X		X	X	X	
22041266	TB-1	22041266-021	4/20/22				X		
22041266	TB-2	22041266-022	4/20/22				X		
22041266	TB-3	22041266-023	4/20/22				X		
22041266	TB-4	22041266-024	4/20/22				X		
22041266	TB-5	22041266-025	4/20/22				X		
22041266	TB-6	22041266-026	4/20/22				X		
L1485108	MW-08 04192022	L1485108-01	4/19/22						X
L1485108	MW-08 04192022/DUP	L1485108-02	4/19/22						X

To evaluate the data quality, the results were compared to the *QAPP* and methods. The completeness of the hard copy data packages, i.e., hard copy data deliverables (HDDs), were checked to verify that the following items were included: Case Narrative, chain of custody (COC) documentation, field sample ID and laboratory ID cross reference, data summary sheets for the samples and field QC (matrix spike/matrix spike duplicate [MS/MSD] and field blanks), and data summary sheets for laboratory QC (e.g., method blanks, laboratory control sample/laboratory control sample duplicate [LCS/LCSD], etc.).

The results of the data review are discussed below. No data qualifiers were required as a result of this data review.

- Initial Sample Inspection and Chain-of-Custody (COC) Documentation** – The laboratory verified that COC forms were filled out properly, sample containers were not broken, custody seals were intact, the pH met method-specific criteria, and cooler temperatures were received at ≤ 6 degrees Celsius. The completed sample receipt forms and COCs are included in the laboratory analytical packages and were reviewed during the data review process. The samples were received in good condition.
- Requested Analyses Completed** – All analyses were completed as requested. Note: TPH-GRO, TPH-DRO, and TPH-ORO were requested on the COC, however, it was noted in the Case Narrative that TPH-GRO, TPH-DRO, and TPH-ORO should not be analyzed per Justin Carter.
- Holding Times** – The samples were extracted and/or analyzed within the *QAPP* and method-required holding times.
- Laboratory Method Blanks** – Method blanks are prepared and analyzed by the laboratory to assess the level of background interferences and possible contamination in the analytical system. No target analytes were detected at the reporting limits (RLs) in the method blanks.
- Rinsate Blanks** – Rinsate blanks (also referred to as equipment blanks) are collected by pouring distilled water into, over, or pumped through a sampling device or decontaminated drilling equipment to assess the potential introduction of contaminants during field procedures.

One rinsate blank was collected during the groundwater sampling event and analyzed for the same methods as the investigative groundwater samples in SDG 22041266. No target analytes were

detected at or above the RL in the rinsate blank (ERB 04202022). See Item 12 (Deviations from the QAPP) below regarding the QAPP-specified criteria for rinsate blanks.

6. **Trip Blanks** – Trip blanks are supplied by the laboratory to assess the potential introduction of contaminants from sample containers or during the sampling, transportation, and storage procedures. Six trip blanks were analyzed for this sampling event. No target analytes were detected at or above the RL in the trip blanks. See Item 12 (Deviations from the QAPP) below regarding the QAPP-specified criteria for trip blanks.
7. **Surrogates** – Surrogate spike compounds were added to investigative samples during organic analyses to assess the individual matrix effect of investigative samples and to monitor overall analytical system performance. The surrogate percent recoveries (%Rs) were compared to laboratory control limits. The surrogate %Rs met criteria.
8. **Laboratory Control Samples (LCS)/ Laboratory Control Sample Duplicates (LCSD)** – The Laboratory analyzed a LCS or LCS/LCSD pairs with each analytical batch of field samples to assess internal precision and accuracy. LCS/LCSDs consisted of analyte-free water spiked with selected target constituents of known concentration. For this sampling event, a LCS was analyzed for Method 6010B, and LCS/LCSD pairs were analyzed for Methods 8082, 8270C, 8260B, and 8330. The LCS/LCSD %Rs were compared to laboratory control limits. The LCS/LCSD RPDs were compared to the project QAPP-specified criteria of $\pm 25\%$. The LCS/LCSD %Rs and RPDs met criteria, with the following exception:
 - For the PAH LCS/LCSD in Batch 190900 associated with samples in SDG 22041266, the LCS/LCSD RPD for acrolein (35.77%) was above the 15.4% laboratory criteria and the 25% criteria specified in the QAPP. However, because acrolein was not detected in the associated samples, no data qualifiers were required.
9. **Matrix Spike/Matrix Spike Duplicates (MS/MSDs)** – MS and MSD samples are investigative samples spiked by the laboratory with known concentrations of target analytes. MS and MSD sample results are used to evaluate possible matrix interferences. Accuracy was assessed by calculating the MS and MSD %Rs of the concentrations of the target analytes added to the investigative sample. Precision was assessed by calculating the RPDs for the MS/MSD sample pairs.

Additional sample volume was collected for sample MW-04 04182022 (Lab ID 22041266-004) to be used for the MS/MSD for total and dissolved metals, PCBs, PAHs, and VOCs. However, no MS/MSD analysis was performed for the PAH target analytes and the VOCs MS/MSDs were analyzed for only nine of the 103 target analytes.

The following samples were used for batch MS/MSDs, selected by the laboratory:

- MW-18 04192022 (Lab ID 22041266-019) for total metals.
- ERB 04202022 (Lab ID 22041266-027) for total metals.

The MS/MSD %Rs and RPDs were compared to laboratory control limits. The MS/MSD analyses met criteria, with the following exceptions:

- The MS %R for surrogate nitrobenzene-d5 (131.6%) was above the 125% upper laboratory control limit, the MSD met criteria. Because nitrobenzene-d5 is a surrogate and the MS/MSDs for the target analytes met criteria, no qualifiers were required.

10. **Field Duplicates (FDs)** – FD samples are independent samples collected simultaneously or in immediate succession with the original investigative samples such that they are expected to be equally representative of the medium at the time of sampling. These samples provide precision

information for the entire measurement system, including sample collection, handling, shipping, storage, preparation, and analysis. The FD RPD criterion for waters for this project is $\pm 30\%$ for values \geq the LOQ in both samples, in accordance with the QAPP. One FD was collected for this sampling event. Sample MW-15 04192022/DUP (Lab ID 22041266-016) is the FD for parent sample MW-15 04192022 (Lab ID 22041266-015) for all methods except explosives; and MW-08 04192022/DUP (Lab ID L1485108-02) is the FD for parent sample MW-08 04192022 (Lab ID L1485108-01) for explosives.

Only lead was detected at or above the RL in parent sample MW-15 04192022 (Lab ID 22041266-015) and associated field duplicate sample MW-15 04192022/DUP (Lab ID 22041266-016) at concentrations of 0.0189 mg/L and 0.0216 mg/L, respectively. The FD RPD for lead (13.3%) met criteria.

11. **Detection and Quantitation Limits** – The method detection limit (MDL) is defined as the smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration with 99% confidence. The reporting limit (RL) is defined as the smallest concentration that produces a quantitative result with known and recorded precision and bias. The laboratory reported data at the RLs.
12. **Deviations from the QAPP** – The following nonconformances were noted during the data review.
 - As noted in Item 11 above, results were reported at the RL. Because detections between the MDL and RL were not reported, and therefore, could not be assessed, the reviewer could not determine if the trip blank and rinsate blank concentrations met the QAPP-specified criteria of $\leq \frac{1}{2}$ LOQ. However, because the RLs were at or below the project screening levels, data quality is not considered to be affected.
 - No MS/MSD analyses was performed for PAH target analytes, and a reduced list of target analytes were reported for VOCs.
13. **Conclusion** – Based on this review, the analytical data generated for this sampling event are acceptable and adequate to fulfill program objectives and may be used for the purpose for which it was intended.

REFERENCES

- Etegra, Inc., 2021. *Final Quality Assurance Project Plan, Goodfellow Federal Complex*. February.
- U.S. Environmental Protection Agency (USEPA). 1986. *Test Methods for Evaluating Solid Waste-Physical Chemical Methods*. Office of Solid Waste, Washington, D.C., SW-846, 3rd Edition, and Updates.
- USEPA, 2020a. *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*. November.
- USEPA, 2020b. *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*. November.



CREATE AMAZING.

Burns & McDonnell World Headquarters
9400 Ward Parkway
Kansas City, MO 64114
O 816-333-9400
F 816-333-3690
www.burnsmcd.com