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October 9, 2019

Diane Czarnecki  
Industrial Hygienist  
Facilities Management Division  
GSA Public Buildings Service - Heartland Region  
2300 Main Street, Kansas City, MO 64108

**RE: Goodfellow Federal Center – Bldg. # 105F Drinking Water Sampling  
Project # 919103**

Dear Ms. Czarnecki:

Thank you for the opportunity to provide the General Services Administration (GSA) with the above referenced environmental sampling activities. The following is our report.

**INTRODUCTION**

As requested, OCCU-TEC, Inc. (OCCU-TEC) conducted drinking water sampling for the presence of polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs) at Building #105F of the Goodfellow Federal Center (GFC) located at 4300 Goodfellow Federal Boulevard in St. Louis, Missouri. Sampling was completed in response to the ongoing environmental condition assessment at the GFC which is documented at the GFC Reading Room located at:  
<https://www.gsa.gov/portal/content/212361>.

Drinking water sampling was conducted to determine the current levels of PCBs and PAHs in representative sources throughout the complex. Drinking water sampling at Bldg. #105F was conducted on July 26, 2019 by Mr. Austin O’Byrne of OCCU-TEC.

**METHODOLOGY**

The samples were collected individually labeled dedicated laboratory provided one (1) liter (L) glass amber bottles and 44.7 milliliter (mL) volatile organic analysis (VOA) vials with Teflon septa lined screw caps. One (1) liter bottles were filled to the shoulder and capped. VOA vials were filled until a positive meniscus was achieved, and the cap was placed on the vial to prevent airspace. One (1) liter bottles and VOA vials were preserved with laboratory provided preservative and placed on ice for shipment. The samples were then

shipped overnight to Eurofins-Eaton Analytical in South Bend, Indiana for analysis. Eurofins-Eaton Analytical is certified by the State of Missouri Department of Natural Resources (MDNR) as an approved drinking water laboratory. Eurofins-Eaton Analytical's Missouri Certification number is 880.

Drinking water sampling for the presence of PCBs and PAHs was conducted at six (6) distinct locations within Building #105F. A total of seven (7) samples were obtained including duplicate samples.

PCB samples were analyzed as per EPA Method 505 "Analysis of Organohalide Pesticides and Commercial Polychlorinated Biphenyl Products in water by Microextraction and Gas Chromatography." PAH samples were analyzed by EPA Method 525.2 "Determination of Organic Compounds in Drinking Water by Liquid-Solid Extraction and Capillary Column Gas Chromatography/Mass Spectrometry."

## **RESULTS AND DISCUSSION**

A summary table of all sampling locations is included in Appendix A. The complete laboratory report for the drinking water sampling from Eurofins-Eaton Analytical is attached in Appendix B.

### *PCBs*

All samples were below the maximum containment level (MCL) and the minimum reporting level (MRL) for the analytical method used.

### *PAHs*

All samples were below the maximum containment level (MCL) and the minimum reporting level (MRL) for the analytical method used.

## **LIMITATIONS**

The scope of this assessment was limited in nature. OCCU-TEC collected samples from a select number of drinking water sources in an effort to minimize cost while providing a general overview of the drinking water quality at the site. Sample locations do not encompass every drinking water source at the site. Samples were only analyzed for PCBs and PAHs in accordance with the scope of services requested by GSA. OCCU-TEC is not responsible for potential contaminants not identified in this report.

This report was prepared for the sole use of GSA. Reliance by any party other than GSA is expressly forbidden without OCCU-TEC's written permission. Any parties relying on

the report, with OCCU-TEC's written permission, are bound by the terms and conditions outlined in the original proposal as if said proposal was prepared for them.

OCCU-TEC appreciates the opportunity to work with the GSA on this project. Please contact us if you have any questions regarding this report or if we may be of any additional service.

Sincerely,

(b) (6)

Jeff T. Smith  
Senior Project Manager

(b) (6)

Kevin Heriford  
Environmental Operations Manager (QA/QC)

#### **ATTACHMENTS**

Appendix A, Sample Summary by Location  
Appendix B, Water Sample Laboratory Report



<b>Goodfellow Federal Center - Building 105F</b>			
<b>Sample Number</b>	<b>Location</b>	<b>Water Source</b>	<b>Analyte</b>
105F-W-01	1st Floor Column M28 - Left Side	Halsey Taylor Drinking Fountain	PCBs ----- PAHs
105F-W-02	1st Floor Column M28 - Right Side	Elkay Drinking Fountain	PCBs ----- PAHs
105F-W-03	1st Floor Column M28 - Right Side	Elkay Drinking Fountain	PCBs ----- PAHs
105F-W-04	2nd Floor Column L35 - Left Side	Elkay Drinking Fountain	PCBs ----- PAHs
105F-W-05	2nd Floor Column L35 - Right Side	Halsey Taylor Drinking Fountain	PCBs ----- PAHs
105F-W-06	1st Floor Column O36	Sink	PCBs ----- PAHs
105F-W-07	1st Floor Column P34	Sink	PCBs ----- PAHs

## LABORATORY REPORT

If you have any questions concerning this report, please do not hesitate to call us at (800) 332-4345 or (574) 233-4777.

*This report may not be reproduced, except in full, without written approval from EEA.*

## STATE CERTIFICATION LIST

State	Certification	State	Certification
Alabama	40700	Missouri	880
Alaska	IN00035	Montana	CERT0026
Arizona	AZ0432	Nebraska	NE-OS-05-04
Arkansas	IN00035	Nevada	IN00035
California	2920	New Hampshire*	2124
Colorado	IN00035	New Jersey*	IN598
Colorado Radiochemistry	IN00035	New Mexico	IN00035
Connecticut	PH-0132	New York*	11398
Delaware	IN035	North Carolina	18700
Florida*	E87775	North Dakota	R-035
Georgia	929	Ohio	87775
Hawaii	IN035	Oklahoma	D9508
Idaho	IN00035	Oregon (Primary AB)*	4074
Illinois*	200001	Pennsylvania*	68-00466
Illinois Microbiology	17767	Puerto Rico	IN00035
Illinois Radiochemistry	IN00035	Rhode Island	LAO00343
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187-18-12
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA014	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	460275
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018-999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
EPA	IN00035		

\*NELAP/TNI Recognized Accreditation Bodies

110 South Hill Street  
 South Bend, IN 46617  
 Tel: (574) 233-4777  
 Fax: (574) 233-8207  
 1 800 332 4345

## Laboratory Report

Client: OCCU-TEC Inc.

Attn: Jeff Smith

2604 NE Industrial Drive

Suite 230

North Kansas City, MO 64117

Report: 463872

Priority: Standard Written

Status: Final

PWS ID: Not Supplied

Sample Information					
EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
4370107	105F-W-01	505	07/26/19 09:09	Client	07/31/19 08:30
4370108	105F-W-01	525.2	07/26/19 09:09	Client	07/31/19 08:30
4370109	105F-W-02	505	07/26/19 09:15	Client	07/31/19 08:30
4370110	105F-W-02	525.2	07/26/19 09:15	Client	07/31/19 08:30
4370111	105F-W-03	505	07/26/19 09:18	Client	07/31/19 08:30
4370112	105F-W-03	525.2	07/26/19 09:18	Client	07/31/19 08:30
4370113	105F-W-04	505	07/26/19 09:28	Client	07/31/19 08:30
4370114	105F-W-04	525.2	07/26/19 09:28	Client	07/31/19 08:30
4370115	105F-W-05	505	07/26/19 09:32	Client	07/31/19 08:30
4370116	105F-W-05	525.2	07/26/19 09:32	Client	07/31/19 08:30
4370117	105F-W-06	505	07/26/19 09:40	Client	07/31/19 08:30
4370118	105F-W-06	525.2	07/26/19 09:40	Client	07/31/19 08:30
4370119	105F-W-07	505	07/26/19 09:49	Client	07/31/19 08:30
4370120	105F-W-07	525.2	07/26/19 09:49	Client	07/31/19 08:30

### Report Summary

Note: In the Method 525.2 analysis, the Anthracene recovery in the LFB at 2.0 ug/L (35%) was outside the acceptance limits of 70-130%.

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Kelly Blackburn at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from EEA.

(b) (6)

ASM

09/19/2019

Authorized Signature

Title

Date

Client Name: OCCU-TEC Inc.

Report #: 463872

Sampling Point: 105F-W-01

PWS ID: Not Supplied

Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID #
12674-11-2	Aroclor 1016	505	---	0.08	< 0.08	ug/L	08/08/19 08:00	08/09/19 05:01	4370107
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/08/19 08:00	08/09/19 05:01	4370107
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/08/19 08:00	08/09/19 05:01	4370107
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/08/19 08:00	08/09/19 05:01	4370107
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 05:01	4370107
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 05:01	4370107
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/08/19 08:00	08/09/19 05:01	4370107
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 05:01	4370107
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/08/19 08:00	08/09/19 05:01	4370107
83-32-9	Acenaphthene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
206-44-0	Fluoranthene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
90-12-0	1-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
91-57-6	2-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
91-20-3	Naphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 08:25	4370108

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

\$ The state of origin does not offer certification for this parameter.



Sampling Point: 105F-W-02

PWS ID: Not Supplied

Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID #
12674-11-2	Aroclor 1016	505	---	0.08	< 0.08	ug/L	08/08/19 08:00	08/09/19 05:25	4370109
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/08/19 08:00	08/09/19 05:25	4370109
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/08/19 08:00	08/09/19 05:25	4370109
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/08/19 08:00	08/09/19 05:25	4370109
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 05:25	4370109
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 05:25	4370109
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/08/19 08:00	08/09/19 05:25	4370109
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 05:25	4370109
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/08/19 08:00	08/09/19 05:25	4370109
83-32-9	Acenaphthene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
206-44-0	Fluoranthene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
90-12-0	1-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
91-57-6	2-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
91-20-3	Naphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:06	4370110

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

\$ The state of origin does not offer certification for this parameter.

Sampling Point: 105F-W-03

PWS ID: Not Supplied

Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID #
12674-11-2	Aroclor 1016	505	---	0.08	< 0.08	ug/L	08/08/19 08:00	08/09/19 05:49	4370111
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/08/19 08:00	08/09/19 05:49	4370111
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/08/19 08:00	08/09/19 05:49	4370111
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/08/19 08:00	08/09/19 05:49	4370111
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 05:49	4370111
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 05:49	4370111
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/08/19 08:00	08/09/19 05:49	4370111
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 05:49	4370111
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/08/19 08:00	08/09/19 05:49	4370111
83-32-9	Acenaphthene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
206-44-0	Fluoranthene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
90-12-0	1-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
91-57-6	2-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
91-20-3	Naphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 09:47	4370112

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

\$ The state of origin does not offer certification for this parameter.

Sampling Point: 105F-W-04

PWS ID: Not Supplied

Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID #
12674-11-2	Aroclor 1016	505	---	0.08	< 0.08	ug/L	08/08/19 08:00	08/09/19 06:13	4370113
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/08/19 08:00	08/09/19 06:13	4370113
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/08/19 08:00	08/09/19 06:13	4370113
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/08/19 08:00	08/09/19 06:13	4370113
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 06:13	4370113
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 06:13	4370113
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/08/19 08:00	08/09/19 06:13	4370113
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/08/19 08:00	08/09/19 06:13	4370113
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/08/19 08:00	08/09/19 06:13	4370113
83-32-9	Acenaphthene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
206-44-0	Fluoranthene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
90-12-0	1-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
91-57-6	2-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
91-20-3	Naphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 11:09	4370114

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

\$ The state of origin does not offer certification for this parameter.

Sampling Point: 105F-W-05

PWS ID: Not Supplied

Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID #
12674-11-2	Aroclor 1016	505	---	0.08	< 0.08	ug/L	08/09/19 10:02	08/09/19 17:45	4370115
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/09/19 10:02	08/09/19 17:45	4370115
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/09/19 10:02	08/09/19 17:45	4370115
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/09/19 10:02	08/09/19 17:45	4370115
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/09/19 10:02	08/09/19 17:45	4370115
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/09/19 10:02	08/09/19 17:45	4370115
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/09/19 10:02	08/09/19 17:45	4370115
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/09/19 10:02	08/09/19 17:45	4370115
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/09/19 10:02	08/09/19 17:45	4370115
83-32-9	Acenaphthene §	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
206-44-0	Fluoranthene §	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
90-12-0	1-Methylnaphthalene §	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
91-57-6	2-Methylnaphthalene §	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
91-20-3	Naphthalene §	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 12:32	4370116

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

§ The state of origin does not offer certification for this parameter.

Sampling Point: 105F-W-06

PWS ID: Not Supplied

Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID #
12674-11-2	Aroclor 1016	505	---	0.08	< 0.08	ug/L	08/09/19 10:02	08/09/19 18:09	4370117
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/09/19 10:02	08/09/19 18:09	4370117
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/09/19 10:02	08/09/19 18:09	4370117
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/09/19 10:02	08/09/19 18:09	4370117
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/09/19 10:02	08/09/19 18:09	4370117
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/09/19 10:02	08/09/19 18:09	4370117
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/09/19 10:02	08/09/19 18:09	4370117
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/09/19 10:02	08/09/19 18:09	4370117
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/09/19 10:02	08/09/19 18:09	4370117
83-32-9	Acenaphthene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
206-44-0	Fluoranthene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
90-12-0	1-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
91-57-6	2-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
91-20-3	Naphthalene \$	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:13	4370118

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

\$ The state of origin does not offer certification for this parameter.

Sampling Point: 105F-W-07

PWS ID: Not Supplied

Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID #
12674-11-2	Aroclor 1016	505	---	0.08	< 0.08	ug/L	08/09/19 10:02	08/09/19 18:33	4370119
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/09/19 10:02	08/09/19 18:33	4370119
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/09/19 10:02	08/09/19 18:33	4370119
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/09/19 10:02	08/09/19 18:33	4370119
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/09/19 10:02	08/09/19 18:33	4370119
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/09/19 10:02	08/09/19 18:33	4370119
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/09/19 10:02	08/09/19 18:33	4370119
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/09/19 10:02	08/09/19 18:33	4370119
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/09/19 10:02	08/09/19 18:33	4370119
83-32-9	Acenaphthene §	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
206-44-0	Fluoranthene §	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
90-12-0	1-Methylnaphthalene §	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
91-57-6	2-Methylnaphthalene §	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
91-20-3	Naphthalene §	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	08/06/19 08:22	08/09/19 13:54	4370120

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

§ The state of origin does not offer certification for this parameter.

† EEA has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

## Lab Definitions

**Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC)** - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis. CCL, CCM, and CCH are the CCC standards at low, mid, and high concentration levels, respectively.

**Internal Standards (IS)** - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

**Laboratory Duplicate (LD)** - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

**Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS)** - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control. FBL, FBM, and FBH are the LFB samples at low, mid, and high concentration levels, respectively.

**Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB)** - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

**Laboratory Trip Blank (LTB) / Field Reagent Blank (FRB)** - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

**Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD)** - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

**Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM)** - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

**Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV)** - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

**Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS)** - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

**Surrogate Standard (SS) / Surrogate Analyte (SUR)** - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.



Eaton Analytical

110 S. Hill Street  
South Bend, IN 46617  
T: 1.800.332.4345  
F: 1.574.233.8207

Order # 376693  
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463  
872

www.EurofinsUS.com/Eaton

Shaded area for EEA use only

REPORT TO: Kevin Herford

BILL TO: khherford@accutec.com

### CHAIN OF CUSTODY RECORD

LAB Number	COLLECTION		SAMPLING SITE	COMPLIANCE MONITORING	SAMPLER (Signature)	PWS ID #	STATE (sample origin)		PROJECT NAME	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
	DATE	TIME					AM	PM					
1	7-24-19	9:07	X	105F-W-01	(b) (6)	1505	No	MO	919103	525	4	DW SW	
2	7-24-19	9:15	X	105F-W-02	(b) (6)	1505	X	DW	6FC	4370-108 109-118	4	DW SW	
3	7-24-19	9:18	X	105F-W-03	(b) (6)	111	X	N/A		112	4	DW SW	
4	7-24-19	9:28	X	105F-W-04	(b) (6)	113	X			114	4	DW SW	
5	7-24-19	9:32	X	105F-W-05	(b) (6)	115	X			116	4	DW SW	
6	7-24-19	9:40	X	105F-W-06	(b) (6)	117	X			118	3	DW SW	
7	7-24-19	9:49	X	105F-W-07	(b) (6)	119	X			120	4	DW SW	
8													
9													
10													
11													
12													
13													
14													

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

LAB COMMENTS: Did not receive one vial of 105F-W-06 method 505.

RECEIVED BY: (Signature) [Signature] TIME 1:00 PM DATE 7-30-19

RECEIVED BY: (Signature) [Signature] TIME 8:30 AM DATE 7/31/19

RECEIVED FOR LABORATORY BY: [Signature] TIME 8:30 AM DATE 7/31/19

CONDITIONS UPON RECEIPT (check one):  
 Ice/ Wet/Blue \_\_\_\_\_ Ambient 2.4°C Upon Receipt \_\_\_\_\_ N/A  
2.1°C

MATRIX CODES:  
 DW-DRINKING WATER  
 RW-REAGENT WATER  
 GW-GROUND WATER  
 EW-EXPOSURE WATER  
 SW-SURFACE WATER  
 PW-POOL WATER  
 WW-WASTE WATER

TURN-AROUND TIME (TAT) - SURCHARGES:  
 SW = Standard Written: (15 working days) 0%  
 RW = Rush Verbal: (5 working days) 50%  
 RW = Rush Written: (5 working days) 75%

IV\* = Immediate Verbal: (3 working days) 100%  
 IW\* = Immediate Written: (3 working days) 125%  
 SP\* = Weekend, Holiday CALL  
 STAT\* = Less than 48 hours CALL

\* Please call, expedited service not available for all testing

Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agreed to in writing by EEA.

06-LO-F0435 Issue 7.0 Effective Date: 2018-10-11

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.