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October 18, 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. # 107 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 #107 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. #107 was conducted on July 24, 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 #107. 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



Goodfellow Federal Center - Building 107

Sample Number	Location	Water Source	Analyte
107-W-01	1st Floor Column C12 - Left Side	Drinking Fountain	PCBs ----- PAHs
107-W-02	1st Floor Column C12 - Right Side	Drinking Fountain	PCBs ----- PAHs
107-W-03	1st Floor Column A9 - Breakroom	Sink	PCBs ----- PAHs
107-W-04	1st Floor Column A9 - Breakroom (Duplicate)	Sink	PCBs ----- PAHs
107-W-05	2nd Floor Drinking Fountain - Right Side	Drinking Fountain	PCBs ----- PAHs
107-W-06	2nd Floor Drinking Fountain - Left Side	Drinking Fountain	PCBs ----- PAHs
107-W-07	2nd Floor Breakroom	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.

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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: 459711
 Priority: Standard Written
 Status: Amended
 PWS ID: Not Supplied

Sample Information					
EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
4364944	107-W-01	505	07/24/19 09:03	Client	07/26/19 08:45
4365133	107-W-01	525.2	07/24/19 09:03	Client	07/26/19 08:45
4364945	107-W-02	505	07/24/19 09:10	Client	07/26/19 08:45
4365134	107-W-02	525.2	07/24/19 09:10	Client	07/26/19 08:45
4364946	107-W-03	505	07/24/19 09:17	Client	07/26/19 08:45
4365135	107-W-03	525.2	07/24/19 09:17	Client	07/26/19 08:45
4364947	107-W-04	505	07/24/19 09:25	Client	07/26/19 08:45
4365136	107-W-04	525.2	07/24/19 09:25	Client	07/26/19 08:45
4364948	107-W-05	505	07/24/19 09:44	Client	07/26/19 08:45
4365137	107-W-05	525.2	07/24/19 09:44	Client	07/26/19 08:45
4364949	107-W-06	505	07/24/19 09:50	Client	07/26/19 08:45
4365138	107-W-06	525.2	07/24/19 09:50	Client	07/26/19 08:45
4364950	107-W-07	505	07/24/19 09:56	Client	07/26/19 08:45
4365139	107-W-07	525.2	07/24/19 09:56	Client	07/26/19 08:45

Report Summary

Note: This report was amended on 09/04/2019 to create separate reports for each COC, at the request of the client.

Note: This report was further amended on 09/27/2019 to include both Methods on report, at the request of the client.

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

09/27/2019

Authorized Signature

Title

Date

Client Name: OCCU-TEC Inc.

Report #: 459711

Sampling Point: 107-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	08/02/19 14:13	08/03/19 01:22	4364944
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/02/19 14:13	08/03/19 01:22	4364944
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/02/19 14:13	08/03/19 01:22	4364944
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/02/19 14:13	08/03/19 01:22	4364944
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 01:22	4364944
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 01:22	4364944
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/02/19 14:13	08/03/19 01:22	4364944
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 01:22	4364944
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/02/19 14:13	08/03/19 01:22	4364944
83-32-9	Acenaphthene §	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
206-44-0	Fluoranthene §	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
90-12-0	1-Methylnaphthalene §	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
91-57-6	2-Methylnaphthalene §	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
91-20-3	Naphthalene §	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:14	4365133

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: 107-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	08/02/19 14:13	08/03/19 01:47	4364945
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/02/19 14:13	08/03/19 01:47	4364945
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/02/19 14:13	08/03/19 01:47	4364945
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/02/19 14:13	08/03/19 01:47	4364945
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 01:47	4364945
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 01:47	4364945
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/02/19 14:13	08/03/19 01:47	4364945
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 01:47	4364945
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/02/19 14:13	08/03/19 01:47	4364945
83-32-9	Acenaphthene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
206-44-0	Fluoranthene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
90-12-0	1-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
91-57-6	2-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
91-20-3	Naphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 12:55	4365134

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: 107-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	08/02/19 14:13	08/03/19 02:13	4364946
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/02/19 14:13	08/03/19 02:13	4364946
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/02/19 14:13	08/03/19 02:13	4364946
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/02/19 14:13	08/03/19 02:13	4364946
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 02:13	4364946
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 02:13	4364946
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/02/19 14:13	08/03/19 02:13	4364946
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 02:13	4364946
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/02/19 14:13	08/03/19 02:13	4364946
83-32-9	Acenaphthene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
206-44-0	Fluoranthene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
90-12-0	1-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
91-57-6	2-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
91-20-3	Naphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 13:36	4365135

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: 107-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	08/02/19 14:13	08/03/19 02:39	4364947
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/02/19 14:13	08/03/19 02:39	4364947
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/02/19 14:13	08/03/19 02:39	4364947
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/02/19 14:13	08/03/19 02:39	4364947
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 02:39	4364947
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 02:39	4364947
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/02/19 14:13	08/03/19 02:39	4364947
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 02:39	4364947
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/02/19 14:13	08/03/19 02:39	4364947
83-32-9	Acenaphthene §	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
206-44-0	Fluoranthene §	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
90-12-0	1-Methylnaphthalene §	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
91-57-6	2-Methylnaphthalene §	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
91-20-3	Naphthalene §	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:18	4365136

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: 107-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	08/02/19 14:13	08/03/19 03:32	4364948
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/02/19 14:13	08/03/19 03:32	4364948
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/02/19 14:13	08/03/19 03:32	4364948
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/02/19 14:13	08/03/19 03:32	4364948
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 03:32	4364948
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 03:32	4364948
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/02/19 14:13	08/03/19 03:32	4364948
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/02/19 14:13	08/03/19 03:32	4364948
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/02/19 14:13	08/03/19 03:32	4364948
83-32-9	Acenaphthene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
206-44-0	Fluoranthene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
90-12-0	1-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
91-57-6	2-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
91-20-3	Naphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 14:59	4365137

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: 107-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	08/05/19 16:15	08/05/19 21:51	4364949
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/05/19 16:15	08/05/19 21:51	4364949
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/05/19 16:15	08/05/19 21:51	4364949
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/05/19 16:15	08/05/19 21:51	4364949
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/05/19 16:15	08/05/19 21:51	4364949
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/05/19 16:15	08/05/19 21:51	4364949
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/05/19 16:15	08/05/19 21:51	4364949
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/05/19 16:15	08/05/19 21:51	4364949
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/05/19 16:15	08/05/19 21:51	4364949
83-32-9	Acenaphthene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
206-44-0	Fluoranthene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
90-12-0	1-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
91-57-6	2-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
91-20-3	Naphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 15:40	4365138

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: 107-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	08/05/19 16:15	08/05/19 22:39	4364950
11104-28-2	Aroclor 1221	505	---	0.19	< 0.19	ug/L	08/05/19 16:15	08/05/19 22:39	4364950
11141-16-5	Aroclor 1232	505	---	0.23	< 0.23	ug/L	08/05/19 16:15	08/05/19 22:39	4364950
53469-21-9	Aroclor 1242	505	---	0.26	< 0.26	ug/L	08/05/19 16:15	08/05/19 22:39	4364950
12672-29-6	Aroclor 1248	505	---	0.1	< 0.1	ug/L	08/05/19 16:15	08/05/19 22:39	4364950
11097-69-1	Aroclor 1254	505	---	0.1	< 0.1	ug/L	08/05/19 16:15	08/05/19 22:39	4364950
11096-82-5	Aroclor 1260	505	---	0.2	< 0.2	ug/L	08/05/19 16:15	08/05/19 22:39	4364950
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	08/05/19 16:15	08/05/19 22:39	4364950
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	08/05/19 16:15	08/05/19 22:39	4364950
83-32-9	Acenaphthene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
208-96-8	Acenaphthylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
120-12-7	Anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
56-55-3	Benzo(a)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
205-99-2	Benzo(b)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
207-08-9	Benzo(k)fluoranthene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
191-24-2	Benzo(g,h,i)perylene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
218-01-9	Chrysene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
53-70-3	Dibenzo(a,h)anthracene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
206-44-0	Fluoranthene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
86-73-7	Fluorene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
193-39-5	Indeno(1,2,3-cd)pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
90-12-0	1-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
91-57-6	2-Methylnaphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
91-20-3	Naphthalene \$	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
85-01-8	Phenanthrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139
129-00-0	Pyrene	525.2	---	0.1	< 0.1	ug/L	07/31/19 07:57	08/06/19 16:22	4365139

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

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CHAIN OF CUSTODY RECORD

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Shaded area for EEA use only

LAB Number	COLLECTION		SAMPLER (Signature)	COMPLIANCE MONITORING	Yes	No	POPULATION SERVED	STATE (sample origin)	PROJECT NAME	PO#	CHLORINATED		MATRIX CODE	TURNAROUND TIME
	DATE	TIME									AM	PM		
4305133	7/24	9:03	[Signature]				MO	GFL			X	X		
134		9:10			X		N/A				X	X		
135		9:17			X						X	X		
136		9:25			X						X	X		
137		9:44			X						X	X		
138		9:50			X						X	X		
139		9:56			X						X	X		

RELINQUISHED BY: (Signature)	[Signature]	DATE	7/25	TIME	1700	AM PM	PM	RECEIVED BY: (Signature)	[Signature]	DATE		TIME		AM PM		LAB COMMENTS	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT
RELINQUISHED BY: (Signature)	[Signature]	DATE		TIME		AM PM		RECEIVED BY: (Signature)	[Signature]	DATE		TIME		AM PM		LAB COMMENTS	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT
RELINQUISHED BY: (Signature)	[Signature]	DATE		TIME		AM PM		RECEIVED FOR LABORATORY BY:	[Signature]	DATE	7/26/19	TIME	845	AM PM	AM	LAB COMMENTS	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT
MATRIX CODES:		TURN-AROUND TIME (TAT) / SURCHARGES		SW = Standard Written: (15 working days) 0%		RV* = 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	
DW-DRINKING WATER		RW-REAGENT WATER		GW-GROUND WATER		EW-EXPOSURE WATER		SW-SURFACE WATER		PW-POOL WATER		WW-WASTE WATER		CONDITIONS UPON RECEIPT (check one):		Ice: <u>Wet/Blue</u> Ambient <u>3.2</u> °C Upon Receipt <u>N/A</u>	

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

* Please call, expedited service not available for all testing